## Addendum I

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

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

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

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

The following example illustrates the changes :-

**September 2002**

*NEIC **01** 18:45:41.7±1.7,21°.70S×179°.55W,h600km,mb4.6/6,*
*Error ellipse: s-maj=75.5km s-min=25.7km az=151.0*
*IDC **01** 18:45:46.3±2.6,21°.76S×179°.70W,h627km±37km,mb3.5/4,*
*mb1 3.7/4,mb1mx3.2/14,Error ellipse: s-maj=83.2km*
*s-min=20.6km az=159.0*
**ISC 01 18:45:43.1±2.7,22°.3S±0°.2×179°.6W±0°.3,h613km±42km,**
**n22,σ1s15/21,mb4.4/9,1C,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HBZ** | **Hicks Bay** | **15.41** | **186** | *e*P | | **P** | **18 48 53.1** | **-1.7** |
| **URZ** | **Urewera** | **16.21** | **189** | P | | **P** | **18 49 01.5** | **-0.9** |
| **MRZ** | **Mangatainoka R** | **18.81** | **192** | *e*P | | **P** | **18 49 26.7** | **0.0** |
| **DIW** | **D'Urville Isla** | **19.30** | **195** | *e*P | | **P** | **18 49 27.3** | **-3.9** |
| **CAW** | **Cannon Point** | **19.34** | **192** | *e*P | | **P** | **18 49 31.7** | **+0.1** |
| **OTW** | **Orongorongo Tu** | **19.52** | **192** | *e*P | | **P** | **18 49 33.0** | **-0.2** |
| **MOW** | **Moikau** | **19.61** | **192** | *e*P | | **P** | **18 49 35.5** | **+1.5** |
| **THZ** | **Tophouse** | **20.46** | **196** | *e*P | | **P** | **18 49 42.0** | **+0.2** |
| **KHZ** | **Kahutara** | **20.93** | **194** | P | | **P** | **18 49 46.2** | **+0.2** |
| **ARMA** | **Armidale** | **27.03** | **246** | *e*P | | **P** | **18 50 42.4** | **+2.3** |
| | 4.9nm,0.5s,mb4.4 | | | | | | | |
| **CTA** | **Charters Tower** | **31.93** | **267** | ĵ *i*P | | **P** | **18 51 22.3** | **+0.4** |
| | 13nm,0.5s,mb4.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.75** | **246** | *e*P | | **P** | **18 51 55.3** | **+1.8** |
| | 3.1nm,0.4s,mb4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.74** | **259** | P | | **P** | **18 52 50.1** | **+0.3** |
| | 9.8nm,0.5s,mb4.6,baz=92,slow=8.2,SNR=47 | | | | | | | |
| ASAR | | | | S | | **S** | **18 58 31.3** | **-0.1** |
| | 1.0nm,0.8s,baz=95,slow=15,SNR=5.7 | | | | | | | |
| **ASPA** | **Alice Springs** | **42.74** | **259** | *e*P | | **P** | **18 52 50.1** | **+0.2** |
| **WRA** | **Warramunga Arr** | **42.96** | **264** | P | | **P** | **18 52 51.0** | **-0.7** |
| | 1.8nm,0.3s,mb4.0,baz=96,slow=7.8,SNR=93 | | | | | | | |
| WRA | | | | S | | **S** | **18 58 33.0** | **-1.5** |
| | 0.3nm,0.9s,baz=99,slow=14,SNR=3.0 | | | | | | | |
| **KAKA** | **Kakadu** | **46.64** | **273** | *e*P | | **P** | **18 53 18.2** | **-1.8** |
| | 14nm,0.4s,mb4.8 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.39** | **264** | *e*P | | **P** | **18 53 54.3** | **-0.7** |
| | 12nm,0.3s,mb4.8 | | | | | | | |
| **MBWA** | **Marble Bar** | **56.08** | **259** | *e*P | | **P** | **18 54 27.1** | **-0.7** |
| | 11nm,0.6s,mb4.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.35** | **290** | P | | **P** | **18 57 38.1** | **+1.0** |
| | 1.3nm,0.8s,mb3.8,baz=135,slow=3.1,SNR=8.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.36** | **349** | PKP | | PKP | 19 03 43.7 | -0.5 |
| | 0.7nm,0.6s,baz=282,slow=4.2,SNR=3.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **137.02** | **342** | PKP | | PKP | 19 03 57.3 | +0.5 |
| | 3.7nm,1.1s,baz=158,slow=3.2,SNR=3.4 | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.85** | **324** | PKPbc | | PKP | 19 04 22.7 | +5.2 |
| | 0.2nm,0.7s,baz=1.2,slow=23,SNR=2.3 | | | | | | | |

*Epicentral Estimates*

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

*Observational Data*

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

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

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

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

## Addendum II

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

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

## Addendum III

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

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

**IDC 01 00:10:31.9±9.7, 54°25'S×135°08'W, h0km, mb3.5/2, mb1 3.7/2, mb1mx3.5/23, mbtmp3.5/2, Error ellipse: s-maj=402.9km s-min=136.6km az=134.0, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H03N3** | **Juan Fernandez** | **44.15** | **85** | T | T | 01 05 04.4 | |
| | baz=226,slow=72,SNR=74 | | | | | | |
| **H03N2** | **Juan Fernandez** | **44.16** | **85** | T | T | 01 05 02.1 | |
| | baz=226,slow=72,SNR=104 | | | | | | |
| **H03N1** | **Juan Fernandez** | **44.17** | **85** | T | T | 01 05 00.8 | |
| | baz=226,slow=72,SNR=39 | | | | | | |
| **ASAR** | **Alice Springs** | **71.72** | **255** | P | P | 00 21 55.9 | +0.1 |
| | 0.3nm,0.5s,baz=132,slow=7.7,SNR=2.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **73.14** | **233** | T | T | 01 43 44.4 | |
| | baz=145,slow=76,SNR=5.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **73.14** | **233** | T | T | 01 43 44.7 | |
| | baz=145,slow=76,SNR=7.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **73.15** | **233** | T | T | 01 43 41.8 | |
| | baz=145,slow=76,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **74.40** | **258** | P | P | 00 22 11.4 | -0.3 |
| | 0.3nm,0.6s,baz=144,slow=5.8,SNR=1.4 | | | | | | |
| **SONM** | **Songino Array** | **141.92** | **286** | PKP | PKPdf | 00 30 02.3 | -2.6 |
| | 0.3nm,0.6s,baz=112,slow=1.6,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **155.34** | **268** | PKPab | PKPab | 00 30 51.9 | +0.2 |
| | 0.2nm,0.7s,baz=109,slow=5.8,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **156.81** | **286** | PKPab | PKPab | 00 30 57.6 | -0.2 |
| | 0.3nm,0.3s,baz=110,slow=4.7,SNR=1.7 | | | | | | |

*IDC **01** 00:40:57.5±2.0,2.9°S×147.5°E,h0km,mb3.9/6, mb1 4.1/6,mb1mx3.8/31,mbtmp3.9/6,MS3.3/5,Ms1 3.3/5, ms1mx2.9/62,Error ellipse: s-maj=75.6km s-min=24.8km az=109.0*

*NEIC **01** 00:40:58.2±0.7,2.8°S±0.0°8×147.7°E±0.2,h10km±2km, mb4.2/9,Error ellipse: s-maj=32.3km s-min=12.8km az=86.0*

**ISC 01 00:41:01.9±1.1,2.9°S±0.10°×147.5°E±0.2, h32km, n26, σ0s73/20, mb4.0/10, MS3.3/3, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **0.85** | **352** | Pn | **Pn** | **00 41 17.4** | **-0.2** |
| **PMG** | **Port Moresby** | **6.48** | **183** | LR | LR | 00 45 03.7 | |
| | comp=Z,221nm,19.4s,baz=336,slow=38 | | | | | | |
| **JAY** | **Jayapura** | **6.79** | **273** | LR | LR | 00 44 36.2 | |
| | comp=Z,182nm,20.4s,baz=94,slow=32 | | | | | | |
| **COEN** | **Coen** | **11.80** | **201** | Pn | **Pn** | **00 43 48.5** | **+0.4** |
| **WB0** | **Warramunga Arr** | **21.10** | **216** | P | **P** | **00 45 43.3** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 00 45 58.6 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.16** | **216** | P | **P** | **00 45 43.8** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 00 45 45.3 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.25** | **216** | P | **P** | **00 45 45.2** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 00 45 48.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.26** | **216** | P | **P** | **00 45 45.2** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 00 45 47.1 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.27** | **216** | P | **P** | **00 45 44.7** | **-1.1** |
| | comp=Z,6.9nm,1.0s,baz=40,slow=11,SNR=17 | | | | | | |
| WRA | | | | LR | LR | 00 54 50.9 | |
| | comp=Z,107nm,18.5s,baz=194,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.27** | **216** | P | **P** | **00 45 45.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **24.48** | **211** | P | **P** | **00 46 18.4** | **+0.1** |
| | comp=Z,3.0nm,1.0s,baz=40,slow=8.2,SNR=14 | | | | | | |
| ASAR | | | | LR | LR | 00 55 06.0 | |
| | comp=Z,121nm,18.1s,baz=40,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **24.48** | **211** | P | **P** | **00 46 17.7** | **-0.7** |
| **MMRI** | **Maumere** | **25.76** | **256** | P | **P** | **00 46 29.7** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **26.21** | **233** | P | **P** | **00 46 34.2** | **+0.1** |
| | comp=Z,4.1nm,0.8s,baz=60,slow=8.1,SNR=2.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.44** | **41** | T | T | 01 17 05.0 | |
| | baz=222,slow=74,SNR=14 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.45** | **41** | T | T | 01 17 05.6 | |
| | baz=222,slow=74,SNR=6.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.46** | **41** | T | T | 01 17 06.2 | |
| | baz=222,slow=74,SNR=9.7 | | | | | | |
| **TPUB** | **Ta-pu** | **36.92** | **316** | P | **P** | **00 48 08.2** | **+0.1** |
| **JMN** | **Monobe** | **38.62** | **342** | P | **P** | **00 48 21.5** | **-0.8** |
| JMN | | | | IAmb | IAmb | 00 48 31.5 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **44.06** | **337** | LR | LR | 01 05 31.2 | |
| | comp=Z,18nm,19.9s,baz=110,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **61.96** | **330** | P | **P** | **00 51 20.7** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=123,slow=5.3,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **61.96** | **330** | P | **P** | **00 51 19.1** | **+0.2** |
| **MKAR** | **Makanchi Array** | **75.44** | **320** | P | **P** | **00 52 43.2** | **+0.4** |
| | comp=Z,0.6nm,0.8s,baz=106,slow=4.8,SNR=3.0 | | | | | | |
| **RSO** | **Redoubt South** | **78.12** | **26** | P | **P** | **00 52 57.0** | **-0.9** |
| **YKA** | **Yellowknife Ar** | **96.20** | **28** | P | **P** | **00 54 27.4** | **+0.8** |
| | comp=Z,0.0nm,0.4s,baz=275,slow=4.3,SNR=1.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.68** | **289** | PKP | **PKPdf** | **01 00 36.6** | **+0.1** |
| | comp=Z,1.7nm,0.9s,baz=90,slow=2.4,SNR=5.8 | | | | | | |

*IDC **01** 00:44:36.3±3.1,31.7°S×177.5°W,h0km,mb4.4/3, mb1 4.4/4,mb1mx4.0/30,mbtmp4.2/4,ML3.0/1,Error ellipse: s-maj=74.1km s-min=44.4km az=129.0*

*NEIC **01** 00:44:37.8±0.9,31.9°S±0.0°4×177.5°W±0.1,h10km±2km, mb4.4/11,Error ellipse: s-maj=20.6km s-min=7.3km az=88.0*

**ISC 01 00:44:37.8±0.8,31.92S±0.07°×177.5W±0.1, h18km, n20, σ0s65/20, mb4.5/8, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **2.69** | **351** | Pn | **Pn** | **00 45 20.6** | **+0.4** |
| **MXZ** | **Matakaoa Point** | **6.62** | **211** | Pn | **Pn** | **00 46 13.9** | **-0.3** |
| **URZ** | **Urewera** | **7.73** | **214** | Pn | **Pn** | **00 46 30.4** | **+0.9** |
| | 0.2nm,0.3s,baz=81,slow=15,SNR=1.1 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 47 55.5** | **-1.0** |
| | 0.2nm,0.3s,baz=245,slow=8.4,SNR=1.4 | | | | | | |
| **MSVF** | **Nonsavu** | **14.70** | **343** | | **Pn** | **00 48 04.3** | **-0.7** |
| **PINNC** | **Pines Island,** | **16.30** | **301** | Pn | **Pn** | **00 48 25.2** | **-0.6** |
| **AFI** | **Afiamalu** | **18.67** | **17** | P | **Pn** | **00 48 55.4** | **+0.1** |
| AFI | | | | IAmb | IAmb | 00 48 57.8 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **RAR** | **Rarotonga** | **19.05** | **60** | | **Pn** | **00 49 00.4** | **+0.5** |
| RAR | | | | IAmb | IAmb | 00 49 16.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **28.96** | **67** | P | **P** | **00 50 35.6** | **-0.8** |
| **STKA** | **Stephens Creek** | **34.62** | **259** | P | **P** | **00 51 27.4** | **+1.4** |
| | comp=Z,1.6nm,0.7s,baz=102,slow=13,SNR=3.6 | | | | | | |
| **COEN** | **Coen** | **40.15** | **287** | P | **P** | **00 52 12.3** | **-0.7** |
| COEN | | | | IAmb | IAmb | 00 52 30.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **43.51** | **268** | P | **P** | **00 52 40.9** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 00 52 41.2 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **43.52** | **268** | P | **P** | **00 52 40.9** | **+0.4** |
| | comp=Z,4.3nm,0.5s,baz=104,slow=7.4,SNR=53 | | | | | | |
| **ASAR** | **Alice Springs** | **43.52** | **268** | P | **P** | **00 52 40.7** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.46** | **273** | P | **P** | **00 52 48.1** | **0.0** |
| WR0 | | | | IAmb | IAmb | 00 52 48.3 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.63** | **273** | P | **P** | **00 52 49.4** | **0.0** |
| **WRAB** | **Tennant Creek** | **44.63** | **273** | P | **P** | **00 52 49.3** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 00 52 49.8 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **273** | P | **P** | **00 52 49.4** | **-0.2** |
| | comp=Z,3.3nm,0.3s,baz=113,slow=7.5,SNR=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **273** | IAmb | IAmb | 00 52 49.8 | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.67** | **274** | P | **P** | **00 52 49.6** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 00 52 50.0 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **146.73** | **340** | PKPbc | **PKPbc** | **01 04 18.1** | **+0.3** |
| | comp=Z,1.8nm,0.8s,baz=47,slow=3.4,SNR=7.0 | | | | | | |

**UPP 01 01:11:54.5±0.3, 67.85N×20.20E, h0km±5km, ML2.3, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.12** | **27** | P | Pg | 01 11 56.9 | +0.2 |
| KUA | | | | S | Sg | 01 11 58.4 | +0.2 |
| **KOVU** | **Salmi** | **0.37** | **358** | P | Pg | 01 12 01.6 | 0.0 |
| **NIKU** | **Nikkaluokta** | **0.44** | **272** | P | Pg | 01 12 02.9 | -0.1 |
| **SALU** | **Saltoluokta** | **0.80** | **235** | P | Pg | 01 12 09.6 | -0.3 |
| **PAJU** | **Pajala** | **1.40** | **125** | P | Pn | 01 12 19.9 | -1.4 |

*HEL **01** 01:12:02.6,67.87N×20.55E,h0km,ML2.0,Explosion*

**UPP 01 01:11:59.9±0.1, 67.86N×20.20E, h0km, ML2.4, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.11** | **30** | P | Pg | 01 12 02.1 | +0.2 |
| **KUA** | **Kurravaara** | **0.11** | **30** | *i* P | Pg | 01 12 02.1 | +0.2 |
| **KOVU** | **Salmi** | **0.36** | **358** | P | Pg | 01 12 06.8 | -0.1 |
| KOVU | | | | S | Sg | 01 12 12.0 | +0.5 |
| **KOVU** | **Salmi** | **0.36** | **358** | *i* P | Pg | 01 12 06.8 | -0.1 |
| KOVU | | | | *i* S | Sg | 01 12 12.0 | +0.5 |
| **NIKU** | **Nikkaluokta** | **0.44** | **271** | P | Pg | 01 12 08.4 | +0.1 |
| **NIKU** | **Nikkaluokta** | **0.44** | **271** | *i* P | Pg | 01 12 08.4 | +0.1 |
| **LANU** | **Lannavaara** | **0.70** | **74** | P | Pg | 01 12 13.3 | 0.0 |
| **LANU** | **Lannavaara** | **0.70** | **74** | *e*P | Pg | 01 12 13.1 | -0.2 |
| | baz=254 | | | | | | |
| LANU | | | | *e*PB | Pn | 01 12 16.9 | -0.2 |
| **DUNU** | **Dundret** | **0.76** | **169** | P | Pg | 01 12 14.0 | -0.4 |
| **DUNU** | **Dundret** | **0.76** | **169** | *i* P | Pg | 01 12 14.0 | -0.4 |
| **SALU** | **Saltoluokta** | **0.81** | **234** | P | Pg | 01 12 15.0 | -0.4 |
| **SALU** | **Saltoluokta** | **0.81** | **234** | *i* P | Pg | 01 12 15.0 | -0.4 |
| **KIF** | **Kilpisjarvi** | **1.17** | **11** | *e*P | Pg | 01 12 17.9 | -4.4 |
| **KIF** | **Kilpisjarvi** | **1.17** | **11** | *e*PN | Pn | 01 12 23.9 | +0.4 |
| KIF | | | | MSG | | 01 12 38.6 | |
| | comp=Z,20nm,0.2s | | | | | | |
| **PAJU** | **Pajala** | **1.41** | **125** | P | Pn | 01 12 25.2 | -1.5 |
| **PAJU** | **Pajala** | **1.41** | **125** | *e*P | Pn | 01 12 25.2 | -1.5 |
| **HEF** | **Hetta** | **1.41** | **65** | *e*P | Pn | 01 12 19.9 | -6.9 |
| **HEF** | **Hetta** | **1.41** | **65** | *e*PG | Pn | 01 12 25.9 | -0.9 |
| HEF | | | | MSG | | 01 12 41.5 | |
| | comp=Z,11nm,0.2s | | | | | | |
| HEF | | | | *e*SB | Sg | 01 12 45.0 | 0.0 |
| **KLF** | **Kolari** | **1.58** | **112** | *e*PG | Pn | 01 12 28.5 | -0.6 |
| | baz=296 | | | | | | |
| KLF | | | | *e*SN | Sg | 01 12 50.5 | 0.0 |
| **HARU** | **Harads** | **1.73** | **169** | P | Pn | 01 12 26.7 | -4.5 |
| **TOF** | **Tornio** | **2.42** | **136** | *e*PB | Pn | 01 12 41.8 | +1.3 |
| | baz=325 | | | | | | |
| TOF | | | | MSG | | 01 13 11.5 | |
| | comp=Z,7.9nm,0.2s | | | | | | |
| TOF | | | | *e*SG | Sb | 01 13 14.5 | +0.1 |
| **ARA0** | **ARCESS Array S** | **2.57** | **47** | *e*PB | Pb | 01 12 44.7 | -2.0 |
| | baz=225 | | | | | | |
| ARA0 | | | | *e*SG | Sb | 01 13 18.3 | -0.5 |
| **RNF** | **Rovaniemi** | **2.59** | **116** | *e*PB | Pn | 01 12 45.0 | +2.0 |
| RNF | | | | *e*S | Sn | 01 13 14.4 | -0.7 |
| **KEV** | **Kevo** | **3.12** | **49** | *e*S | Sn | 01 13 30.2 | +2.1 |
| KEV | | | | MSG | | 01 13 31.2 | |
| | comp=Z,5.4nm,0.2s | | | | | | |

*EAF **01** 01:28:38.3±0.8,26.39S×27.61E,h10km,MD3.4*

*BUL **01** 01:28:38.4±0.7,26.39S×27.59E,h10km,MD3.5*

**ISC 01 01:28:35.6±1.2, 26.29S±0.05°×27.53E±0.06, h5km, n10, σ1s68/20, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBTB** | **Lobatse** | **2.16** | **306** | *e*P | **Pg** | **01 29 16.3** | **-0.8** |
| LBTB | | | | *e*S | **Sb** | **01 29 42.3** | **-0.2** |
| **LBTB** | **Lobatse** | **2.16** | **306** | *e*P | **Pg** | **01 29 16.3** | **-0.8** |
| LBTB | | | | *e*S | **Sb** | **01 29 42.3** | **-0.2** |
| **BOSA** | **Boshof** | **3.07** | **221** | *e*P | **Pn** | **01 29 26.1** | **+1.2** |
| BOSA | | | | *e*S | **Sn** | **01 30 01.4** | **-0.8** |
| **BOSA** | **Boshof** | **3.07** | **221** | *e*P | **Pn** | **01 29 26.1** | **+1.2** |
| BOSA | | | | *e*S | **Sn** | **01 30 01.4** | **-0.8** |
| **MOPA** | **Mopani** | **4.47** | **53** | *e*P | **Pn** | **01 29 45.5** | **+1.4** |
| MOPA | | | | *e*S | **Sn** | **01 30 34.6** | **-1.9** |
| **MOPA** | **Mopani** | **4.47** | **53** | *e*P | **Pn** | **01 29 45.5** | **+1.4** |
| MOPA | | | | *e*S | **Sn** | **01 30 34.6** | **-1.9** |
| **MATP** | **Matopo** | **5.91** | **9** | *e*P | **Pn** | **01 30 06.8** | **+2.8** |
| MATP | | | | *e*S | **Sn** | **01 31 11.2** | **-1.0** |
| **MATP** | **Matopo** | **5.91** | **9** | *e*P | **Pn** | **01 30 06.8** | **+2.8** |
| MATP | | | | *e*S | **Sn** | **01 31 11.2** | **-1.0** |
| **BLWY** | **Bulawayo** | **6.21** | **9** | *e*P | **Pn** | **01 30 10.1** | **+2.0** |
| BLWY | | | | *e*S | **Sn** | **01 31 17.7** | **-1.8** |
| **BLWY** | **Bulawayo** | **6.21** | **9** | *e*P | **Pn** | **01 30 10.1** | **+2.0** |
| BLWY | | | | *e*S | **Sn** | **01 31 17.7** | **-1.8** |

*BGR **01** 01:41:17.6±0.0, 18.92S×173.28W,h33km*

*IDC **01** 01:41:34.5±2.4, 17.99S×174.73W,h145km±22km, mb4.2/17,mb1 4.4/18,mb1mx4.2/35,mbtmp4.6/18,MS2.7/1, Ms1 2.7/1,ms1mx2.4/60,Error ellipse: s-maj=24.6km s-min=11.3km az=145.0*

*NEIC **01** 01:41:35.8±2.4, 17.79S±0.10°×174.8W±0.1,h149km±5km, mb4.5/56,Error ellipse: s-maj=14.8km s-min=13.6km az=136.0*

*NOU **01** 01:41:39.0, 17.82S×174.38W,h191km,mb4.8/13,Tonga Islands*

**ISC 01 01:41:35.2±0.4, 17.84S±0.07°×174.76W±0.08, h150km, n228, σ1s06/225, mb4.4/47, 24C-13D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.75** | **106** | Pn | **Pn** | **01 42 46.3** | **+1.0** |
| **NIUE** | **Niue** | **4.75** | **106** | P | **Pn** | **01 42 46.4** | **+1.1** |
| **AFI** | **Afiamalu** | **4.85** | **37** | P | **Pn** | **01 42 47.6** | **+1.0** |
| | 187nm,0.3s,baz=161,slow=0.9,SNR=136 | | | | | | |
| AFI | | | | S | **Sn** | **01 43 39.1** | **-3.2** |
| | 166nm,0.3s,baz=47,slow=22,SNR=16 | | | | | | |
| AFI | | | | LR | LR | 01 44 08.7 | |
| | comp=Z,88nm,19.9s,baz=94,slow=31 | | | | | | |
| **AFI** | **Afiamalu** | **4.85** | **37** | P | **Pn** | **01 42 48.0** | **+1.3** |
| **MSVF** | **Nonsavu** | **6.85** | **270** | P | Pn | 01 43 22.0 | +8.7 |
| | 1.3nm,0.3s,baz=113,slow=16,SNR=32 | | | | | | |
| **MSVF** | **Nonsavu** | **6.85** | **270** | Pn | Pn | 01 43 21.8 | +8.4 |
| **MSVF** | **Nonsavu** | **6.85** | **270** | P | Pn | 01 43 22.6 | +9.3 |
| **FUNA** | **Funafuti** | **10.96** | **327** | Pn | **Pn** | **01 44 07.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **18.16** | **254** | P | **P** | **01 45 37.2** | **+0.8** |
| | 0.1nm,0.3s,baz=129,slow=22,SNR=3.1 | | | | | | |
| **OUZ** | **Omahuta** | **20.18** | **209** | P | Pn | 01 46 01.3 | -0.1 |
| | 35nm,1.8s | | | | | | |
| **MXZ** | **Matakaoa Point** | **20.57** | **196** | P | **P** | **01 46 03.9** | **+1.7** |
| **MXZ** | **Matakaoa Point** | **20.57** | **196** | P | **P** | **01 46 03.7** | **+1.5** |
| **WMGZ** | **Waiomatatini S** | **20.79** | **195** | P | **P** | **01 46 05.8** | **+1.3** |
| **HAZ** | **Te Kaha** | **20.90** | **197** | P | **P** | **01 46 05.0** | **-0.5** |
| **PKGZ** | **Pakihiroa** | **20.94** | **196** | P | **P** | **01 46 05.8** | **-0.4** |
| **PUZ** | **Puketiti** | **21.07** | **195** | P | **P** | **01 46 06.3** | **-1.2** |
| **RUGZ** | **Raukumara Rang** | **21.12** | **197** | P | **P** | **01 46 07.6** | **-0.6** |
| **TWGZ** | **Tauwhareparae** | **21.24** | **196** | P | **P** | **01 46 09.3** | **-0.1** |
| **OPRZ** | **Ohinepanea** | **21.34** | **199** | P | **P** | **01 46 10.9** | **+0.5** |
| **TKGZ** | **Te Karaka** | **21.52** | **196** | P | **P** | **01 46 12.4** | **+0.2** |
| **URZ** | **Urewera** | **21.55** | **198** | P | **P** | **01 46 10.5** | **-2.1** |
| | 60nm,0.6s,baz=346,slow=3.5,SNR=52 | | | | | | |
| URZ | | | | S | S | 01 49 51.7 | -10 |
| | 4.3nm,0.8s,baz=15,slow=4.0,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **21.55** | **198** | P | **P** | **01 46 10.8** | **-1.9** |
| **RAGZ** | **Rawiri** | **21.69** | **197** | P | **P** | **01 46 13.2** | **-1.0** |
| **HIZ** | **Hauiti** | **22.51** | **202** | P | **P** | **01 46 22.9** | **+0.6** |
| **HIZ** | **Hauiti** | **22.51** | **202** | P | **P** | **01 46 23.8** | **+1.5** |
| **BFZ** | **Birch Farm** | **24.05** | **197** | P | **P** | **01 46 36.9** | **+0.5** |
| **QRZ** | **Quartz Range** | **25.39** | **203** | P | **P** | **01 46 50.2** | **+1.6** |
| **QRZ** | **Quartz Range** | **25.39** | **203** | P | **P** | **01 46 50.3** | **+1.7** |
| **THZ** | **Tophouse** | **26.08** | **201** | P | **P** | **01 46 55.9** | **+1.1** |
| THZ | | | | IAmb | IAmb | 01 46 58.5 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **KHZ** | **Kahutara** | **26.45** | **200** | P | **P** | **01 46 59.0** | **+0.9** |
| KHZ | | | | IAmb | IAmb | 01 47 04.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **KHZ** | **Kahutara** | **26.45** | **200** | P | **P** | **01 46 59.4** | **+1.3** |
| **FOZ** | **Fox Glacier** | **28.75** | **204** | P | **P** | **01 47 18.1** | **-0.4** |
| FOZ | | | | IAmb | IAmb | 01 47 24.9 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MLZ** | **Mavora Lakes** | **30.95** | **204** | P | **P** | **01 47 37.1** | **-0.8** |
| MLZ | | | | IAmb | IAmb | 01 47 49.0 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **33.00** | **241** | P | **P** | **01 47 57.0** | **+0.8** |
| **CTA** | **Charters Tower** | **36.88** | **260** | P | **P** | **01 48 29.3** | **-0.2** |
| | comp=Z,3.6nm,0.4s,baz=108,slow=10,SNR=5.8 | | | | | | |
| **CTAO** | **Charters Tower** | **36.88** | **260** | P | **P** | **01 48 29.4** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 01 48 30.6 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **COEN** | **Coen** | **40.58** | **269** | P | **P** | **01 49 00.3** | **0.0** |
| COEN | | | | IAmb | IAmb | 01 49 02.5 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **41.72** | **242** | P | **P** | **01 49 08.8** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=66,slow=9.6,SNR=6.8 | | | | | | |
| **STKA** | **Stephens Creek** | **41.72** | **242** | P | **P** | **01 49 08.8** | **-0.7** |
| **BBOO** | **Buckleboo** | **46.49** | **241** | P | **P** | **01 49 46.1** | **-1.4** |
| **WR0** | **Warramunga Arr** | **47.87** | **259** | P | **P** | **01 49 57.5** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 01 50 01.6 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **48.03** | **259** | P | **P** | **01 49 58.6** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 01 49 59.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **48.05** | **259** | P | **P** | **01 49 58.8** | **-0.9** |
| **WRAB** | **Tennant Creek** | **48.05** | **259** | P | **P** | **01 49 58.8** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 01 49 59.4 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.06** | **259** | P | **P** | **01 49 58.8** | **-1.0** |
| | comp=Z,7.1nm,0.4s,baz=98,slow=7.3,SNR=226 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.06** | **259** | P | **P** | **01 49 58.2** | **-1.6** |
| **AS31** | **Alice Springs** | **48.15** | **254** | P | **P** | **01 50 00.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **48.15** | **254** | P | **P** | **01 50 00.1** | **-0.5** |
| | comp=Z,40nm,0.6s,baz=89,slow=8.6,SNR=400 | | | | | | |
| **MTN** | **Manton Dam** | **52.27** | **267** | P | **P** | **01 50 30.3** | **-1.3** |
| **KNRA** | **Kununurra** | **53.95** | **263** | P | **P** | **01 50 43.0** | **-0.8** |
| **SIJI** | **Sorong** | **55.62** | **282** | P | **P** | **01 50 56.5** | **+0.6** |
| | comp=Z,8.9nm,0.6s,baz=75,slow=10,SNR=4.0 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.29** | **255** | P | **P** | **01 51 34.0** | **-1.0** |
| **MBWA** | **Marble Bar** | **61.46** | **255** | P | **P** | **01 51 34.9** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **69.98** | **321** | P | **P** | **01 52 30.7** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=156,slow=6.6,SNR=4.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.98** | **321** | P | **P** | **01 52 28.8** | **-1.7** |
| **UGM** | **Wanagama** | **73.12** | **267** | P | **P** | **01 52 49.1** | **-0.7** |
| **PEA0B** | **Petropavlovsk-** | **74.56** | **343** | P | **P** | **01 52 58.1** | **+0.9** |
| PEA0B | | | | IAmb | IAmb | 01 53 11.0 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.56** | **343** | P | **P** | **01 52 56.9** | **-0.4** |
| | comp=Z,2.6nm,0.6s,baz=117,slow=9.1,SNR=11 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.56** | **343** | P | **P** | **01 52 57.1** | **-0.1** |
| **KMRM** | **Mail Ridge** | **74.77** | **38** | P | **P** | **01 52 57.5** | **-1.4** |
| **PFO** | **Pinyon Flats O** | **75.53** | **47** | P | **P** | **01 53 03.6** | **+0.2** |
| | comp=Z,3.2nm,0.3s,baz=237,slow=23,SNR=4.5 | | | | | | |
| **KSXB** | **Camp Six Broad** | **75.71** | **37** | P | **P** | **01 53 05.5** | **+1.3** |
| KSXB | | | | IAmb | IAmb | 01 53 10.7 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **77.00** | **317** | P | **P** | **01 53 13.5** | **+2.0** |
| | comp=Z,3.4nm,0.9s,baz=146,slow=6.4,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.00** | **42** | P | **P** | **01 53 12.7** | **+0.9** |
| | comp=Z,3.9nm,0.7s,baz=225,slow=9.1,SNR=20 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.00** | **42** | P | **P** | **01 53 12.5** | **+0.8** |
| **NV11** | **Mina Array Sit** | **77.10** | **42** | P | **P** | **01 53 12.6** | **+0.4** |
| NV11 | | | | IAmb | IAmb | 01 53 13.5 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **K05A** | **Summer Lake** | **77.99** | **37** | P | **P** | **01 53 18.1** | **+1.0** |
| K05A | | | | IAmb | IAmb | 01 53 18.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **H04A** | **Detroit Lake** | **78.49** | **35** | P | **P** | **01 53 19.8** | **+0.2** |
| H04A | | | | IAmb | IAmb | 01 53 24.2 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **PINE** | **Pine Mountain** | **78.62** | **37** | P | **P** | **01 53 21.6** | **+1.0** |
| PINE | | | | IAmb | IAmb | 01 53 22.8 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **79.14** | **39** | P | **P** | **01 53 24.0** | **+0.6** |
| WVOR | | | | IAmb | IAmb | 01 53 25.0 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **I07A** | **Izee** | **79.62** | **37** | P | **P** | **01 53 26.5** | **+0.6** |
| I07A | | | | IAmb | IAmb | 01 53 27.5 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **J08A** | **Circle Bar Ran** | **79.78** | **38** | P | **P** | **01 53 27.8** | **+1.0** |
| J08A | | | | IAmb | IAmb | 01 53 28.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **ELK** | **Elko** | **80.26** | **42** | P | **P** | **01 53 29.0** | **-0.6** |
| **NJ2** | **Nanjing** | **80.61** | **308** | *e*P | **P** | **01 53 33.4** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **SPU** | **Mount Spurr** | **80.83** | **11** | P | **P** | **01 53 30.9** | **-0.9** |
| **PMR** | **Palmer** | **81.76** | **12** | P | **P** | **01 53 36.5** | **-0.1** |
| **TTA** | **Tatalina** | **81.84** | **9** | P | **P** | **01 53 37.9** | **+0.7** |
| **F10A** | **Beach Ranch, E** | **82.04** | **36** | P | **P** | **01 53 38.3** | **-0.4** |
| F10A | | | | IAmb | IAmb | 01 53 39.5 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **PLID** | **Pearl Lake** | **82.24** | **38** | P | **P** | **01 53 39.3** | **-0.6** |
| **B08A** | **Colville Reser** | **82.32** | **34** | P | **P** | **01 53 39.6** | **-0.4** |
| B08A | | | | IAmb | IAmb | 01 53 40.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **HLID** | **Hailey** | **82.33** | **40** | P | **P** | **01 53 40.7** | **+0.3** |
| HLID | | | | IAmb | IAmb | 01 53 42.1 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **MNTX** | **Cornudas Mount** | **82.72** | **54** | P | **P** | **01 53 42.4** | **0.0** |
| **N25K** | **Chitina, Valde** | **82.75** | **14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CLL** | **Collm** | **146.04 351** | ⇓ *i* PKPbc | **PKPdf** | **02 00 57.2** | **+1.0** |
| | comp=Z,16nm,0.7s | | | | | | | |
| **CLL** | **Collm** | **146.04 351** | *e*PKPbc | **PKPbc** | **02 00 57.3** | **0.0** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **CLL** | **Collm** | **146.04 351** | PKPbc | **PKPdf** | **02 00 57.1** | **+1.0** |
| **BUR08** | **Bucovina Ar. S** | **146.07 336** | PKPbc | **PKPbc** | **02 00 58.3** | **+0.6** |
| **BURAR** | **Bucovina Array** | **146.09 336** | PKPbc | **PKPbc** | **02 00 58.0** | **+0.3** |
| **BNN** | **Bunyan** | **146.13 314** | PKPbc | **PKPbc** | **02 00 58.4** | **+0.2** |
| **GTTG** | **Gottingen** | **146.16 355** | *e*PKPbc | **PKPbc** | **02 00 57.5** | **-0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **OSTC** | **Ostas** | **146.20 347** ⇑ | *e*PKP | **PKPbc** | **02 00 58.4** | **+0.6** |
| **CHVC** | **Chvalec** | **146.20 348** ⇑ | *e*PKP | **PKPbc** | **02 00 58.4** | **+0.6** |
| **NIE** | **Niedzica** | **146.23 342** | *e*PKP | **PKPab** | **02 00 59.2** | **+0.3** |
| **VLDR** | **Vladesti** | **146.24 331** | ⇑P | **PKPbc** | **02 00 58.0** | **0.0** |
| **BRG** | **Berggiesshubel** | **146.32 350** | *i* PKP | **PKPbc** | **02 00 58.1** | **0.0** |
| BRG | | | Amp | | 02 00 59.2 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.32 350** | *e*PKPbc | **PKPbc** | **02 00 58.4** | **+0.3** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **146.33 341** | *e*PKP | **PKPab** | **02 00 59.4** | **+0.1** |
| **FBE** | **Freiberg** | **146.36 351** | *e*PKPbc | **PKPbc** | **02 00 58.4** | **+0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **146.37 347** ⇑ | *e*PKP | **PKPbc** | **02 00 59.1** | **+0.7** |
| **TESR** | **Tescani** | **146.37 333** | ⇑P | **PKPdf** | **02 00 53.9** | **-3.1** |
| **TLCR** | | **146.37 329** | ⇑P | **PKPbc** | **02 00 58.8** | **+0.3** |
| **GHRR** | | **146.38 332** | ⇑P | **PKPdf** | **02 00 56.0** | **-1.0** |
| **SCTR** | **Scanteiesti** | **146.40 331** | ⇑P | **PKPbc** | **02 00 58.9** | **+0.4** |
| **BUG** | **Bochum--Univer** | **146.43 358** | *e*PKPbc | **PKPbc** | **02 00 58.4** | **0.0** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **KRLC** | **Kraliky** | **146.53 346** ⇑ | *e*PKP | **PKPbc** | **02 00 59.3** | **+0.5** |
| **PVCC** | **Panska Ves** | **146.54 349** ⇑ | *e*PKP | **PKPbc** | **02 00 59.4** | **+0.6** |
| **MORC** | **Moravsky Berou** | **146.63 345** | *e*PKP | **PKPbc** | **02 00 59.4** | **+0.3** |
| **TRPA** | **Tarpa** | **146.65 339** | ⇓P | **PKPdf** | **02 00 55.1** | **-2.2** |
| **CFR** | **Carcaliu** | **146.71 330** | ⇑P | **PKPbc** | **02 00 58.9** | **-0.5** |
| **LANS** | **Liptovska Anna** | **146.71 343** | *e*PKP | **PKPbc** | **02 01 00.3** | **+0.9** |
| **TPGR** | **Topolog** | **146.81 329** | ⇓P | **PKPbc** | **02 01 00.2** | **+0.5** |
| **VRI** | **Vrincioaia** | **146.84 332** | ⇑P | **PKPdf** | **02 00 55.7** | **-2.1** |
| **MOX** | **Moxa** | **146.88 353** | *e*PKPbc | **PKPbc** | **02 00 59.9** | **+0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **TANN** | **Tannenbergstha** | **146.99 352** | *e*PKPbc | **PKPbc** | **02 01 00.3** | **+0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **GUNZ** | **Gunzen** | **147.06 352** | *e*PKPbc | **PKPbc** | **02 01 00.5** | **+0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **PRU** | **Pruhonice** | **147.06 349** ⇑ | *e*PKP | **PKPbc** | **02 01 00.6** | **+0.3** |
| **BISRR** | **Bisoca** | **147.09 332** | ⇑P | **PKPdf** | **02 00 57.9** | **-0.4** |
| **WERN** | **Wernitzgruen** | **147.12 352** | *e*PKPbc | **PKPbc** | **02 01 00.8** | **+0.3** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **BR131** | **Keskin Array S** | **147.14 317** | PKPbc | **PKPbc** | **02 01 01.2** | **+0.1** |
| **BRTR** | **Keskin Array B** | **147.14 317** | PKPbc | **PKPbc** | **02 01 01.0** | **0.0** |
| | comp=Z,2.8nm,0.7s,baz=130,slow=3.6,SNR=17 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.14 317** | PKPbc | **PKPbc** | **02 01 00.8** | **-0.2** |
| **HARR** | **Harsova** | **147.16 330** | ⇑P | **PKPbc** | **02 01 01.2** | **+0.5** |
| **LODK** | **Lodwar** | **147.19 248** | PKPbc | **PKPbc** | **02 01 01.4** | **-0.5** |
| **TLBR** | **Topalu** | **147.21 329** | ⇑P | **PKPbc** | **02 01 01.4** | **+0.5** |
| **VRAC** | **Vranov** | **147.29 346** | *e*PKP | **PKPbc** | **02 01 02.3** | **+1.3** |
| **DOPR** | **Dopca** | **147.34 334** | ⇓P | **PKPdf** | **02 00 54.6** | **-4.1** |
| **JAVC** | **Velka Javorina** | **147.45 345** | *e*PKP | **PKPbc** | **02 01 02.9** | **+1.4** |
| **MANZ** | **Manzenberg** | **147.46 352** | *e*PKPbc | **PKPbc** | **02 01 01.4** | **0.0** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **CJR** | **Cluj-Napoca** | **147.46 336** | ⇓P | **PKPdf** | **02 00 54.9** | **-4.0** |
| **VYHS** | **Vyhne** | **147.48 343** | *e*PKP | **PKPbc** | **02 01 01.4** | **-0.1** |
| **KRUC** | **Moravsky** | **147.47 346** | *e*PKP | **PKPbc** | **02 01 01.8** | **+0.1** |
| **TNS** | **Taunus Mts** | **147.59 356** | *e*PKPbc | **PKPbc** | **02 01 01.7** | **-0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **147.66 352** | *e*PKPbc | **PKPbc** | **02 01 02.0** | **0.0** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **DRGR** | | **147.72 337** | ⇓P | **PKPdf** | **02 00 57.0** | **-2.3** |
| **SMOL** | **Smolenice** | **147.83 345** | *e*PKP | **PKPbc** | **02 01 03.2** | **+0.8** |
| **VOIR** | | **147.91 333** | ⇑P | **PKPdf** | **02 00 59.0** | **-0.6** |
| **MODS** | **Modra-Piesok** | **148.00 345** | *e*PKP | **PKiKP** | **02 01 04.8** | **+0.2** |
| **KHC** | **Kasperske Hory** | **148.06 350** ⇑ | *e*PKP | **PKPbc** | **02 01 03.5** | **+0.4** |
| KHC | | | *e*PKPAB | **PKPab** | **02 01 06.9** | **+0.7** |
| **KHC** | **Kasperske Hory** | **148.06 350** | PKPbc | **PKPbc** | **02 01 03.2** | **+0.2** |
| **ARR** | **Arges** | **148.14 334** | ⇓P | **PKPdf** | **02 01 00.4** | **+0.4** |
| **CKRC** | **Cesky Krumlov** | **148.23 349** ⇑ | *e*PKP | **PKPbc** | **02 01 03.9** | **+0.4** |
| **WLF** | **Walferdange** | **148.24 359** | *e*PKPbc | **PKPbc** | **02 01 04.0** | **+0.5** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **GEC2** | **GERESS Array S** | **148.32 349** | *e*PKPbc | **PKPbc** | **02 01 03.9** | **+0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **GEC2** | **GERESS Array S** | **148.32 349** | PKPbc | **PKPbc** | **02 01 03.9** | **+0.1** |
| **GERES** | **GERESS Array B** | **148.32 349** | PKPbc | **PKPbc** | **02 01 03.9** | **+0.1** |
| | comp=Z,3.5nm,0.7s,baz=31,slow=2.8,SNR=14 | | | | | | | |
| **HUMR** | **Humele** | **148.65 332** | ⇑P | **PKPdf** | **02 01 02.6** | **+1.9** |
| **CONA** | **Conrad Observa** | **148.75 346** | *e*P | **PKPbc** | **02 01 04.9** | **0.0** |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **GZR** | **Gura Zlata** | **148.87 336** | ⇓P | **PKPdf** | **02 01 01.1** | **-0.1** |
| **BORA** | **Eskisehir** | **149.05 320** | PKPbc | **PKPbc** | **02 01 06.0** | **+0.1** |
| **BZS** | **Buzias** | **149.12 337** | ⇑P | **PKPdf** | **02 01 03.7** | **+2.1** |
| **ZIMR** | | **149.16 331** | ⇓P | **PKPbc** | **02 01 06.2** | **+0.3** |
| **MOA** | **Molln** | **149.17 348** | *e*P | **PKPbc** | **02 01 05.4** | **-0.5** |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **VLAD** | **Vladila** | **149.33 332** | ⇓P | **PKPbc** | **02 01 05.6** | **-0.8** |
| **HERR** | **Herculane** | **149.44 336** | ⇓P | **PKPdf** | **02 01 04.3** | **+2.2** |
| **BFO** | **Black Forest** | **149.48 356** | *e*PKPbc | **PKPbc** | **02 01 06.4** | **-0.3** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **RJOB** | **Jochberg** | **149.54 350** | *e*PKPbc | **PKPbc** | **02 01 06.7** | **-0.2** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **CSS** | **Mathiatis** | **149.75 310** | PKPbc | **PKPbc** | **02 01 07.3** | **-0.4** |
| **UBR** | **Ueberruh** | **149.97 353** | *e*PKPbc | **PKPbc** | **02 01 07.8** | **-0.1** |
| | baz=8.3,slow=2.7 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.08 349** | *i* P | **PKPbc** | **02 01 07.6** | **-0.8** |
| | comp=Z,3.9nm,0.5s,SNR=4.7 | | | | | | | |
| **RETA** | **Reutte** | **150.08 352** | *e*P | **PKPbc** | **02 01 07.6** | **-0.6** |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **150.12 346** | *i* P | **PKPbc** | **02 01 07.1** | **-1.2** |
| | comp=Z,4.0nm,0.9s,SNR=4.1 | | | | | | | |
| **WATA** | **Walderalm** | **150.12 351** | *i* P | **PKPbc** | **02 01 07.9** | **-0.5** |
| | comp=Z,4.5nm,0.5s,SNR=6.5 | | | | | | | |
| **FRGS** | **Fruska Gora** | **150.16 339** | ⇑P | **PKPbc** | **02 01 07.8** | **-0.6** |
| **MOTA** | **Moosalm** | **150.18 352** | *i* P | **PKPbc** | **02 01 08.2** | **-0.3** |
| | comp=Z,11nm,1.0s,SNR=5.0 | | | | | | | |
| **WTTA** | **Wattenberg** | **150.19 351** | *i* P | **PKPbc** | **02 01 08.5** | **-0.1** |
| | comp=Z,13nm,0.5s,SNR=6.0 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.29 352** | *e*P | **PKPbc** | **02 01 08.4** | **-0.4** |
| | comp=Z,6.6nm,0.6s | | | | | | | |
| **DAVA** | **Damuels** | **150.38 354** | *e*P | **PKiKP** | **02 01 10.2** | **+0.5** |
| | comp=Z,13nm,0.5s | | | | | | | |
| **OBKA** | **Obir** | **150.39 347** | *e*P | **PKPbc** | **02 01 07.6** | **-1.4** |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.46 348** | *i* P | **PKPbc** | **02 01 07.7** | **-1.4** |
| | comp=Z,5.9nm,0.5s,SNR=5.9 | | | | | | | |
| **FETA** | **Feichten** | **150.55 352** | *i* P | **PKPbc** | **02 01 09.5** | **+0.1** |
| | comp=Z,7.0nm,0.6s,SNR=7.8 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.55 350** | *i* P | **PKPbc** | **02 01 08.7** | **-0.6** |
| | comp=Z,13nm,0.6s,SNR=17 | | | | | | | |
| **VTS** | **Vitosha** | **150.94 332** | ⇑P | **PKPbc** | **02 01 10.0** | **-0.5** |
| **VTS** | **Vitosha** | **150.94 332** | PKPbc | **PKPbc** | **02 01 10.4** | **-0.1** |
| **STAL** | **STALIGIAL** | **150.99 349** | PKPbc | **PKPbc** | **02 01 09.3** | **-1.0** |
| **DIVS** | **Divibare** | **151.02 338** | | **PKPbc** | **02 01 10.4** | **-0.1** |
| **ELL** | **Elmali** | **151.24 316** | PKPbc | **PKPbc** | **02 01 11.1** | **-0.2** |
| **TUE** | **Stuetta** | **151.24 354** | PKPbc | **PKPbc** | **02 01 10.8** | **-0.4** |
| **BNI** | **Bardonecchia** | **152.84 358** | PKPbc | **PKPbc** | **02 01 14.7** | **0.0** |
| **FNA** | **Florina** | **153.24 332** | PKPbc | **PKPbc** | **02 01 14.7** | **-0.9** |
| **OSSC** | **Osservatorio P** | **153.90 350** | PKPbc | **PKPbc** | **02 01 14.2** | **-2.7** |
| **ESDC** | **Sonseca Array** | **156.82 18** | PKPab | **PKPab** | **02 01 43.8** | **+0.6** |
| | comp=Z,1.3nm,0.8s,baz=344,slow=4.2,SNR=7.8 | | | | | | | |
| **ESDC** | **Sonseca Array** | **156.82 18** | PKPdf | **PKPdf** | **02 01 12.0** | **-1.0** |
| ESDC | | | | **PKPab** | **02 01 42.2** | **-1.0** |

*IDC **01** 01:51:06.5±1.9, 14°.56S×71°.50W, h138km±20km, mb3.2/2, mb1 3.2/6, mb1mx3.1/27, mbtmp3.6/6, MS2.4/1, Ms1 2.4/1, ms1mx2.1/21, Error ellipse: s-maj=51.1km s-min=18.4km az=24.0*

**ISC 01 01:51:03.3±0.8, 15°.02S±0°.10×71°.79W±0°.08, h124km, n9, σ2s33/12, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **LPAZ** | **La Paz** | **3.74** | **110** | P | **Pn** | **01 52 03.0** | | **+3.0** |
| | 1.0nm,0.3s,baz=299,slow=9.3,SNR=21 | | | | | | | |
| LPAZ | | | | S | **Sn** | **01 52 47.3** | | **+3.3** |
| | 0.5nm,0.3s,baz=24,slow=24,SNR=7.3 | | | | | | | |
| **NNA** | **Nana** | **5.76** | **301** | P | **Pn** | **01 52 29.5** | | **+2.8** |
| | 0.6nm,0.3s,baz=125,slow=17,SNR=2.3 | | | | | | | |
| NNA | | | | S | **Sn** | **01 53 30.8** | | **-0.9** |
| | 2.3nm,0.3s,baz=40,slow=20,SNR=2.7 | | | | | | | |
| NNA | | | | LR | LR | 01 55 02.1 | | |
| | comp=Z,33nm,19.6s,baz=275,slow=41 | | | | | | | |
| **LVC** | **Limon Verde** | **8.02** | **161** | P | **Pn** | **01 52 58.7** | | **+1.3** |
| | 1.3nm,0.3s,baz=351,slow=8.1,SNR=16 | | | | | | | |
| LVC | | | | S | **Sn** | **01 54 25.5** | | **-1.3** |
| | 0.6nm,0.3s,baz=295,slow=22,SNR=8.7 | | | | | | | |
| **SIV** | **San Ignacio** | **10.38** | **97** | P | **Pn** | **01 53 27.8** | | **-1.1** |
| | 0.1nm,0.3s,baz=285,slow=13,SNR=1.4 | | | | | | | |
| **PTGA** | **Pitinga** | **18.39** | **41** | P | **P** | **01 55 05.7** | | **-3.1** |
| | 0.9nm,0.3s,baz=187,slow=17,SNR=14 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.92** | **73** | P | **P** | **02 02 46.0** | | **-2.2** |
| | 0.4nm,0.6s,baz=254,slow=5.1,SNR=1.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.20** | **342** | P | **P** | **02 03 20.9** | | **+0.6** |
| | 0.5nm,0.7s,baz=134,slow=5.2,SNR=10 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **145.75** | **314** | PKPbc | **PKPab** | **02 10 28.1** | | **-0.7** |
| | 2.6nm,0.7s,baz=44,slow=3.0,SNR=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **147.25** | **2** | PKPbc | **PKPbc** | **02 10 33.0** | | **+0.6** |
| | 0.5nm,0.7s,baz=327,slow=3.2,SNR=4.3 | | | | | | | |

*ATH **01** 02:19:57.0, 35°.37N×23°.57E, h12km±1km, ML3.1/11, Error ellipse: s-maj=2.0km s-min=0.8km az=50.0*
*THE **01** 02:19:57.2, 35°.39N×23°.58E, h2km±2km, ML3.0/12, Error ellipse: s-maj=2.3km s-min=0.4km az=237.0*
*IDC **01** 02:20:05.2±5.2, 35°.29N×23°.71E, h84km±53km, mb3.1/3, mb1 3.2/4, mb1mx3.0/31, mbtmp3.4/4, ML2.8/1, MS2.7/1, Ms1 2.7/1, ms1mx2.3/33, Error ellipse: s-maj=77.7km s-min=28.3km az=139.0*

**ISC 01 02:19:56.3±0.9, 35°.36N±0°.03×23°.51E±0°.03, h14km±6km, n46, σ1s98/68, mb3.4/3, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **KNDR** | **Palaiochora Ch** | **0.19** | **132** | P | **Pg** | **02 20 00.4** | | **-0.3** |
| KNDR | | | | S | **Sg** | **02 20 02.6** | | **-1.1** |
| | 9μm,0.2s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.40** | **76** | P | **Pg** | **02 20 03.9** | | **-0.4** |
| IMMV | | | | S | **Sg** | **02 20 09.5** | | **-0.2** |
| | 3μm,0.4s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.40** | **76** | P | **Pg** | **02 20 03.9** | | **-0.4** |
| IMMV | | | | S | **Sg** | **02 20 09.3** | | **-0.4** |
| IMMV | | | | AML | AML | 02 20 11.5 | | |
| | comp=N,5551μm,0.4s | | | | | | | |
| IMMV | | | | AML | AML | 02 20 17.4 | | |
| | comp=E,5195μm,0.4s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.53** | **341** | P | **Pb** | **02 20 07.7** | | **+0.3** |
| ANKY | | | | S | **Sg** | **02 20 14.8** | | **+0.9** |
| | comp=E,2μm,0.4s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.53** | **341** | P | **Pb** | **02 20 07.6** | | **+0.3** |
| ANKY | | | | S | **Sb** | **02 20 15.0** | | **+0.1** |
| ANKY | | | | AML | AML | 02 20 16.5 | | |
| | comp=N,4191μm,0.4s | | | | | | | |
| ANKY | | | | AML | AML | 02 20 16.8 | | |
| | comp=E,3450μm,0.4s | | | | | | | |
| **VAM** | **Vamos** | **0.56** | **85** | P | **Pg** | **02 20 06.8** | | **-0.6** |
| VAM | | | | S | **Sg** | **02 20 14.5** | | **-0.4** |
| | comp=E,4μm,0.4s | | | | | | | |
| **VAM** | **Vamos** | **0.56** | **85** | P | **Pg** | **02 20 06.8** | | **-0.6** |
| VAM | | | | S | **Sg** | **02 20 13.5** | | **-1.5** |
| VAM | | | | AML | AML | 02 20 16.1 | | |
| | comp=E,7133μm,0.5s | | | | | | | |
| VAM | | | | AML | AML | 02 20 17.1 | | |
| | comp=N,9326μm,0.3s | | | | | | | |
| **GVDS** | **Gavdos** | **0.70** | **137** | P | **Pg** | **02 20 09.4** | | **-0.6** |
| GVDS | | | | S | **Sb** | **02 20 19.9** | | **+0.1** |
| | comp=N,3μm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **0.70** | **138** | P | **Pb** | **02 20 10.1** | | **-0.2** |
| GVD | | | | S | **Sn** | **02 20 20.9** | | **-1.5** |
| | comp=N,3μm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **0.70** | **138** | P | **Pg** | **02 20 09.9** | | **-0.1** |
| GVD | | | | S | **Sg** | **02 20 18.6** | | **-0.7** |
| GVD | | | | AML | AML | 02 20 21.5 | | |
| | comp=E,5570μm,0.5s | | | | | | | |
| GVD | | | | AML | AML | 02 20 23.9 | | |
| | comp=N,6805μm,0.4s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **0.81** | **90** | P | **Pg** | **02 20 09.9** | | **-2.1** |
| PRNS | | | | S | **Sg** | **02 20 20.1** | | **-2.6** |
| | comp=N,648nm,0.4s | | | | | | | |
| **KTHA** | **Kythira Island** | **0.96** | **338** | P | **Pn** | **02 20 15.6** | | **+0.2** |
| KTHA | | | | S | **Sn** | **02 20 29.0** | | **+0.2** |
| | comp=N,860nm,0.4s | | | | | | | |
| **KTHA** | **Kythira Island** | **0.96** | **338** | P | **Pn** | **02 20 15.5** | | **+0.2** |
| KTHA | | | | S | **Sn** | **02 20 29.0** | | **+0.2** |
| KTHA | | | | AML | AML | 02 20 32.7 | | |
| | comp=E,2361μm,0.4s | | | | | | | |
| KTHA | | | | AML | AML | 02 20 39.9 | | |
| | comp=N,1070μm,0.5s | | | | | | | |
| **KTHR** | **Kythira** | **0.98** | **335** | P | **Pg** | **02 20 15.8** | | **+0.5** |
| KTHR | | | | S | **Sn** | **02 20 29.9** | | **+0.5** |
| | comp=N,972nm,0.5s | | | | | | | |
| **TMBK** | **Timbaki Herakl** | **1.07** | **105** | P | **Pb** | **02 20 15.7** | | **-0.8** |
| TMBK | | | | S | **Sn** | **02 20 31.4** | | **0.0** |
| | comp=N,865nm,0.4s | | | | | | | |
| **SIVA** | **Sivas** | **1.12** | **108** | P | **Pb** | **02 20 16.9** | | **-0.4** |
| SIVA | | | | S | **Sg** | **02 20 31.9** | | **-0.6** |
| SIVA | | | | AML | AML | 02 20 39.5 | | |
| | comp=E,3783μm,0.5s | | | | | | | |
| SIVA | | | | AML | AML | 02 20 42.0 | | |
| | comp=N,2746μm,0.6s | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **93** | LR | LR | 02 20 43.5 | | |
| | comp=N,60nm,19.1s,baz=134,slow=40 | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **93** | P | **Pb** | **02 20 16.5** | | **-1.1** |
| IDI | | | | S | **Sn** | **02 20 32.6** | | **-0.4** |
| | comp=N,632nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **93** | P | **Pb** | **02 20 16.3** | | **-1.3** |
| IDI | | | | S | **Sb** | **02 20 31.4** | | **-0.8** |
| IDI | | | | AML | AML | 02 20 34.8 | | |
| | comp=N,1568μm,0.5s | | | | | | | |
| IDI | | | | AML | AML | 02 20 39.9 | | |
| | comp=E,946μm,0.4s | | | | | | | |
| **KSTL** | **Kastelli Herak** | **1.28** | **92** | P | **Pg** | **02 20 23.7** | | **+2.8** |
| KSTL | | | | S | **Sg** | **02 20 42.9** | | **+5.4** |
| | comp=E,242nm,0.5s | | | | | | | |
| **HRKL** | **Herakleio** | **1.30** | **92** | P | **Pg** | **02 20 20.9** | | **-0.4** |
| **VLI** | **Veliai** | **1.43** | **341** | P | **Pb** | **02 20 23.5** | | **+0.8** |
| **VLI** | **Veliai** | **1.43** | **341** | P | **Pb** | **02 20 23.5** | | **+0.8** |
| VLI | | | | S | **Sg** | **02 20 42.5** | | **+0.1** |
| VLI | | | | AML | AML | 02 20 50.6 | | |
| | comp=N,680μm,0.7s | | | | | | | |
| VLI | | | | AML | AML | 02 20 51.0 | | |
| | comp=E,460μm,0.4s | | | | | | | |
| **MHLO** | **Agia Marina, M** | **1.51** | **28** | P | **Pb** | **02 20 24.4** | | **+0.4** |
| MHLO | | | | S | **Sb** | **02 20 43.0** | | **0.0** |
| MHLO | | | | AML | AML | 02 20 50.5 | | |
| | comp=N,3273μm,0.5s | | | | | | | |
| MHLO | | | | AML | AML | 02 20 52.1 | | |
| | comp=E,2565μm,0.5s | | | | | | | |
| **NPS** | **Neapolis** | **1.72** | **93** | P | **Pb** | **02 20 27.0** | | **-0.7** |
| **NPS** | **Neapolis** | **1.72** | **93** | P | **Pb** | **02 20 27.7** | | **+0.1** |
| NPS | | | | AML | AML | 02 20 57.0 | | |
| | comp=N,659μm,0.6s | | | | | | | |
| NPS | | | | AML | AML | 02 21 04.0 | | |
| | comp=E,694μm,0.8s | | | | | | | |
| **KRND** | **KRANIDI** | **2.04** | **352** | P | **Pb** | **02 20 32.9** | | **-0.1** |
| **PYL** | **PYLOS** | **2.10** | **317** | P | **Pb** | **02 20 33.8** | | **-0.2** |
| **ITM** | **Ithomi** | **2.22** | **325** | P | **Pb** | **02 20 36.4** | | **+0.3** |
| **ZKR** | **Zakros** | **2.23** | **96** | P | **Pb** | **02 20 36.3** | | **0.0** |
| ZKR | | | | AML | AML | 02 21 20.2 | | |
| | comp=E,400μm,0.9s | | | | | | | |
| ZKR | | | | AML | AML | 02 21 26.1 | | |
| | comp=N,162μm,0.6s | | | | | | | |
| **VLY** | **Voula,Athens** | **2.50** | **5** | P | **Pb** | **02 20 39.8** | | **-1.1** |
| **LTK** | **Loutraki** | **2.69** | **351** | P | **Pb** | **02 20 43.8** | | **-0.4** |
| **DRO** | **Drossia** | **2.96** | **331** | P | **Pb** | **02 20 48.0** | | **-0.8** |
| **CAEL** | **Denizli, Camel** | **5.01** | **68** | P | **Pn** | **02 21 16.6** | | **+5.5** |
| **AKAS** | **Kas** | **5.03** | **78** | P | **Pn** | **02 21 14.3** | | **+2.9** |
| **GOLH** | **Golhisar** | **5.23** | **67** | P | **Pn** | **02 21 17.4** | | **+3.3** |
| **STON** | **Ston** | **8.75** | **331** | *e*Pn | **Pn** | **02 22 01.6** | | **-0.7** |
| STON | | | | Sn | **Sn** | **02 23 34.2** | | **-6.4** |
| **LSTV** | **Lastovo** | **9.01** | **327** | *e*Pn | **Pn** | **02 22 05.5** | | **-0.2** |
| LSTV | | | | Sn | **Sn** | **02 23 41.0** | | **-6.0** |
| **BRTR** | **Keskin Array B** | **9.14** | **59** | P | Pn | 02 22 13.0 | | +5.2 |
| | comp=N,0.1nm,0.3s,baz=243,slow=14,SNR=5.4 | | | | | | | |
| **RICI** | **Ricice** | **9.50** | **331** | *e*Pn | **Pn** | **02 22 12.5** | | **-0.1** |
| RICI | | | | Sn | **Sn** | **02 23 53.0** | | **-6.1** |
| **MMAI** | **Mount Meron Ar** | **10.13** | **100** | LR | LR | 02 27 51.5 | | |
| | comp=N,38nm,18.2s,baz=25,slow=47 | | | | | | | |
| **KIJV** | **Kijevo** | **10.22** | **330** | *e*Pn | **Pn** | **02 22 23.0** | | **+0.6** |
| KIJV | | | | Sn | **Sn** | **02 24 12.1** | | **-4.5** |
| **MORI** | **Morici** | **10.40** | **327** | *e*Pn | **Pn** | **02 22 25.4** | | **+0.5** |
| MORI | | | | Sn | **Sn** | **02 24 16.4** | | **-4.8** |
| **TORD** | **Torodi Ar. Bea** | **29.61** | **227** | P | **P** | **02 26 03.1** | | **+2.0** |
| | comp=N,0.5nm,0.7s,baz=38,slow=9.3,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.79** | **57** | P | **P** | **02 28 09.6** | | **+0.2** |
| | comp=N,0.3nm,0.5s,baz=269,slow=6.3,SNR=5.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.83** | **341** | P | **P** | **02 31 48.2** | | **+0.9** |
| | comp=N,0.1nm,0.4s,baz=32,slow=5.2,SNR=3.0 | | | | | | | |

*ISK **01** 02:20:54.6, 35°.76N×31°.53E, h10km, ML2.4/22*

*NIC **01** 02:20:54.8±0.0, 35°.96N×31°.47E, h26km±9km, Ml2.7/2*
*DDA **01** 02:20:58.4±0.0, 35°.99N×31°.60E, h36km, ML2.2*

**ISC 01 02:20:56.6±1.2, 35°.79N±0°.03×31°.52E±0°.03, h25km±13km, n48, σ1s57/69, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **GAZI** | **Gazipasa** | **0.79** | **55** | PG | **Pb** | **02 21 11.0** | | **-0.6** |
| GAZI | | | | SG | **Sb** | **02 21 21.7** | | **-0.2** |
| **GAZI** | **Gazipasa** | **0.79** | **55** | P | **Pb** | **02 21 11.3** | | **-0.3** |
| GAZI | | | | S | **Sb** | **02 21 20.6** | | **-1.3** |
| **AKMS** | **Akamas** | **1.01** | **139** | P | **Pn** | **02 21 15.9** | | **+0.7** |
| AKMS | | | | S | **Sn** | **02 21 30.4** | | **+1.7** |
| AKMS | | | | AMI | | 02 21 35.2 | | |
| | 0.5nm,0.3s | | | | | | | |
| AKMS | | | | AMI | | 02 21 35.2 | | |
| | 0.5nm,0.3s | | | | | | | |
| AKMS | | | | AMI | | 02 21 37.5 | | |
| | 0.5nm,0.4s | | | | | | | |
| AKMS | | | | AMI | | 02 21 37.5 | | |
| | 0.5nm,0.4s | | | | | | | |
| **ALFC** | **Alefka** | **1.08** | **125** | P | **Pn** | **02 21 15.6** | | **-0.6** |
| ALFC | | | | S | **Sn** | **02 21 30.8** | | **+0.5** |
| ALFC | | | | AMI | | 02 21 37.3 | | |
| | 0.6nm,0.3s | | | | | | | |
| ALFC | | | | AMI | | 02 21 37.3 | | |
| | 0.6nm,0.3s | | | | | | | |
| ALFC | | | | AMI | | 02 21 38.3 | | |
| | 0.5nm,0.2s | | | | | | | |
| ALFC | | | | AMI | | 02 21 38.3 | | |
| | 0.5nm,0.2s | | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **1.09** | **300** | P | **Pb** | **02 21 18.4** | | **+1.6** |
| AKUM | | | | S | **Sn** | **02 21 34.5** | | **+3.9** |
| AKUM | | | | *i* AML | AML | 02 21 38.0 | | |
| | comp=N,75nm,0.6s | | | | | | | |
| AKUM | | | | *i* AML | AML | 02 21 39.0 | | |
| | comp=E,71nm,0.5s | | | | | | | |
| AKUM | | | | *i* AML | AML | 02 21 42.0 | | |
| | comp=Z,48nm,0.8s | | | | | | | |
| **KEPZ** | **Antalya-Kepez** | **1.12** | **4** | P | **Pn** | **02 21 15.9** | | **-0.8** |
| KEPZ | | | | S | **Sb** | **02 21 27.7** | | **-3.7** |
| **LEF** | **Lefka** | **1.30** | **120** | PN | **Pn** | **02 21 18.5** | | **-0.6** |
| **NATA** | **Nata** | **1.32** | **139** | S | **Sb** | **02 21 39.9** | | **+2.7** |
| **TEKE** | **Tekeli-Mersin** | **1.34** | **74** | PN | **Pn** | **02 21 19.9** | | **+0.2** |
| **HDMB** | **Hadim** | **1.41** | **33** | PN | **Pn** | **02 21 21.3** | | **+0.4** |
| HDMB | | | | SN | **Sb** | **02 21 40.6** | | **+0.6** |
| **ERMK** | **Ermenek** | **1.42** | **52** | P | **Pb** | **02 21 21.7** | | **-0.7** |
| ERMK | | | | S | **Sb** | **02 21 41.0** | | **+0.8** |
| **BERE** | **Bereket-Mersin** | **1.49** | **67** | PN | **Pn** | **02 21 22.1** | | **+0.2** |
| BERE | | | | SN | **Sn** | **02 21 41.2** | | **+0.6** |
| **KORT** | **Korkueli** | **1.54** | **322** | PN | **Pn** | **02 21 22.6** | | **+0.1** |
| **KORT** | **Korkueli** | **1.54** | **322** | P | **Pn** | **02 21 22.1** | | **-0.4** |
| KORT | | | | S | **Sb** | **02 21 44.5** | | **+1.0** |
| **AKAS** | **Kas** | **1.61** | **287** | S | **Sn** | **02 21 37.9** | | **-5.7** |
| **ELL** | **Elmali** | **1.62** | **307** | P | **Pn** | **02 21 19.6** | | **-4.0** |
| **SEYD** | **Seydisehir-KON** | **1.64** | **9** | PN | **Pn** | **02 21 24.6** | | **+0.7** |
| SEYD | | | | SN | **Sb** | **02 21 46.4** | | **0.0** |
| **SEDI** | **Konya, Seydise** | **1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MDT | | | S | **Sn** | **02 46 18.1** | **+2.0** |
| **PVAQ** | **Vaqueiros** | **3.71 301** | *e*Pn | **Pn** | **02 45 57.2** | **+2.0** |
| PVAQ | | | *e*Sn | **Sn** | **02 46 39.1** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **3.71 301** | P | **Pn** | **02 45 55.3** | **0.0** |
| PVAQ | | | S | **Sn** | **02 46 38.6** | **+0.1** |
| **MESJ** | **Messejana** | **4.28 304** | *e*Pn | **Pn** | **02 46 04.9** | **+1.9** |
| MESJ | | | *e*Sn | **Sn** | **02 46 55.0** | **+2.7** |
| MESJ | | | A | A | 02 47 01.0 | |
| | 2.7nm,0.5s | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63 305** | *e*Pn | **Pn** | **02 46 09.2** | **+1.4** |
| PNCL | | | *e*Sn | **Sn** | **02 47 01.7** | **+0.7** |

*DJA **01** 02:52:50.8±0.3, 1°N±3″×12°6E±°, h54km±6km, M4.2/12, mb4.5/6, mB4.7/2, MLv4.0/12, Mw(mB)4.0/2*
*NEIC **01** 02:52:51.8±2.5, 0°.9N±0°.1×126°.31E±0°.03, h61km±9km, mb4.3/19, Error ellipse: s-maj=14.7km s-min=4.1km az=182.0*
*IDC **01** 02:52:51.9±5.0, 0°.97N×126°.14E, h75km±49km, mb3.7/10, mb1 3.9/12, mb1mx3.7/32, mbtmp4.0/12, ML3.8/2, MS3.2/3, Ms1 3.2/3, ms1mx2.6/69, Error ellipse: s-maj=39.0km s-min=15.1km az=63.0*
**ISC 01 02:52:49.8±0.5, 0°.98N±0°.06×126°.32E±0°.06, h50km, n55, σ1§55/53, mb4.2/20, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.06 101** | | P | | **Pn** | **02 53 09.9** | **+1.5** |
| **TNTI** | **Ternate** | **1.06 101** | | | | **Pn** | **02 53 09.6** | **+1.2** |
| **LBMI** | **Labuha** | **1.99 144** | | P | | **Pn** | **02 53 22.1** | **+1.1** |
| **KMSI** | **Cibinong** | **2.38 260** | | P | | **Pn** | **02 53 26.0** | **-0.3** |
| **SGSI** | **Sangihe** | **2.80 344** | | P | | **Pn** | **02 53 33.9** | **+1.7** |
| **SANI** | **Sanana** | **3.03 186** | | P | | **Pn** | **02 53 35.5** | **+0.3** |
| **GTOI** | **Gorontalo** | **3.33 264** | | P | | **Pn** | **02 53 41.6** | **+2.2** |
| **MRSI** | **Marisa** | **4.41 264** | | P | | **Pn** | **02 53 55.6** | **+1.4** |
| **APSI** | **Ampana** | **5.04 248** | | P | | **Pn** | **02 54 05.5** | **+2.7** |
| | 0.4nm839nm69nm,0.9s | | | | | | | |
| **SIJI** | **Sorong** | **5.27 110** | | LR | | LR | 02 56 20.3 | |
| | comp=Z,118nm,21.7s,baz=219,slow=38 | | | | | | | |
| **TOLI2** | **Tolitoli** | **5.54 271** | | | | **Pn** | **02 54 10.1** | **+0.4** |
| **DAV** | **Davao City (W)** | **6.10 353** | | LR | | LR | 02 56 12.4 | |
| | comp=Z,31nm,20.6s,baz=328,slow=33 | | | | | | | |
| **MPSI** | **Mapaga** | **6.46 264** | | P | | **Pn** | **02 54 24.5** | **+2.2** |
| | 0.1nm731nm19nm,0.8s | | | | | | | |
| **TTSI** | **Tana Toraja** | **7.63 238** | | P | | **Pn** | **02 54 41.1** | **+2.7** |
| | 0.2nm34nm,0.5s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.86 298** | | Pn | | **Pn** | **02 54 58.1** | **+2.9** |
| **KAPI** | **Kappang** | **8.86 228** | | P | | **Pn** | **02 54 56.4** | **+1.1** |
| | 1.2nm,0.3s,baz=39,slow=13,SNR=5.5 | | | | | | | |
| KAPI | | | | LR | | LR | 02 59 24.4 | |
| | comp=Z,38nm,18.5s,baz=72,slow=45 | | | | | | | |
| **SBUM** | **Sibu** | **14.17 276** | | P | | **P** | **02 56 15.6** | **+1.6** |
| **MTN** | **Manton Dam** | **14.54 161** | | P | | **Pn** | **02 56 15.1** | **+2.4** |
| **FITZ** | **Fitzroy Crossi** | **18.97 182** | | P | | **P** | **02 57 07.1** | **0.0** |
| | 0.2nm,0.3s,baz=350,slow=6.1,SNR=1.5 | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.09 159** | | P | | **P** | **02 57 40.5** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 02 57 46.7 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.22 160** | | P | | **P** | **02 57 42.3** | **-0.1** |
| WRAB | | | | IAmb | | IAmb | 02 57 48.4 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.23 160** | | P | | **P** | **02 57 41.8** | **-0.6** |
| | comp=Z,4.6nm,0.5s,baz=338,slow=11,SNR=26 | | | | | | | |
| WRA | | | | S | | **S** | **03 01 39.2** | **-5.0** |
| | comp=Z,1.1nm,0.8s,baz=344,slow=15,SNR=2.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.23 160** | | P | | **P** | **02 57 40.9** | **-1.5** |
| **WB2** | **Warramunga Arr** | **22.23 160** | | P | | **P** | **02 57 41.8** | **-0.7** |
| WB2 | | | | IAmb | | IAmb | 02 57 48.4 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.32 159** | | P | | **P** | **02 57 42.8** | **-0.5** |
| WR0 | | | | IAmb | | IAmb | 02 58 02.1 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **COEN** | **Coen** | **22.34 132** | | P | | **P** | **02 57 44.6** | **+1.0** |
| COEN | | | | IAmb | | IAmb | 02 57 52.0 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **TPUB** | **Ta-pu** | **22.87 346** | | P | | **P** | **02 57 49.9** | **+0.8** |
| **MBWA** | **Marble Bar** | **22.93 196** | | P | | **P** | **02 57 49.4** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **23.29 195** | | P | | **P** | **02 57 53.1** | **-0.2** |
| PSA00 | | | | IAmb | | IAmb | 02 58 21.0 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **XMIS** | **Christmas Isla** | **23.51 241** | | P | | **P** | **02 57 54.3** | **-1.2** |
| **AS31** | **Alice Springs** | **25.58 164** | | P | | **P** | **02 58 14.7** | **+0.3** |
| **ASAR** | **Alice Springs** | **25.58 164** | | P | | **P** | **02 58 14.9** | **+0.5** |
| | comp=Z,1.6nm,0.4s,baz=346,slow=11,SNR=32 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.58 164** | | P | | **P** | **02 58 14.0** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **32.00 305** | | P | | **P** | **02 59 09.5** | **-2.1** |
| | comp=Z,0.6nm,0.3s,baz=104,slow=7.5,SNR=1.1 | | | | | | | |
| **BBOO** | **Buckleboo** | **34.84 166** | | P | | **P** | **02 59 36.3** | **+0.1** |
| **STKA** | **Stephens Creek** | **35.74 157** | | P | | **P** | **02 59 44.4** | **+0.5** |
| | comp=Z,3.0nm,0.7s,baz=344,slow=8.5,SNR=7.4 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.74 157** | | P | | **P** | **02 59 44.1** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **37.06 16** | | P | | **P** | **02 59 54.7** | **-0.4** |
| | comp=Z,1.6nm,0.5s,baz=180,slow=11,SNR=4.9 | | | | | | | |
| **JMM** | **Marumori** | **39.05 18** | | P | | **P** | **03 00 13.7** | **+1.9** |
| **SONM** | **Songino Array** | **49.77 342** | | P | | **P** | **03 01 38.1** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=158,slow=8.6,SNR=3.6 | | | | | | | |
| **SONM** | **Songino Array** | **49.77 342** | | P | | **P** | **03 01 38.2** | **+0.7** |
| SONM | | | | IAmb | | IAmb | 03 01 55.2 | |
| | comp=Z,2.5nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.59 326** | | P | | **P** | **03 02 47.2** | **-1.3** |
| MK31 | | | | IAmb | | IAmb | 03 02 51.1 | |
| | comp=Z,1.7nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.59 326** | | P | | **P** | **03 02 46.9** | **-1.6** |
| | comp=Z,0.9nm,0.4s,baz=121,slow=7.4,SNR=32 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.59 326** | | P | | **P** | **03 02 47.2** | **-1.3** |
| **MAKZ** | **Makanchi** | **59.77 326** | | P | | **P** | **03 02 48.6** | **-1.1** |
| MAKZ | | | | IAmb | | IAmb | 03 02 52.7 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.85 334** | | P | | **P** | **03 03 08.8** | **-1.6** |
| | comp=Z,0.6nm,0.5s,baz=152,slow=6.7,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.85 334** | | P | | **P** | **03 03 09.1** | **-1.3** |
| **KURK** | **Kurchatov** | **63.84 328** | | P | | **P** | **03 03 15.6** | **-1.4** |
| KURK | | | | IAmb | | IAmb | 03 03 20.1 | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **64.97 318** | | P | | **P** | **03 03 23.1** | **-1.5** |
| **ABKAR** | **Akbulak array** | **74.02 321** | | P | | **P** | **03 04 19.1** | **-1.2** |
| **TTA** | **Tatalina** | **83.52 27** | | P | | **P** | **03 05 14.5** | **+2.3** |
| TTA | | | | IAmb | | IAmb | 03 05 15.6 | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **KDAK** | **Kodiak Island** | **84.42 32** | | LR | | LR | 03 36 11.6 | |
| | comp=Z,83nm,21.5s,baz=230,slow=31 | | | | | | | |
| **ILAR** | **Eielson Array** | **87.75 25** | | P | | **P** | **03 05 33.2** | **+0.1** |
| | comp=Z,0.2nm,0.7s,baz=246,slow=7.8,SNR=1.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **91.45 310** | | P | | **P** | **03 05 49.2** | **-1.9** |
| | comp=Z,0.5nm,0.8s,baz=38,slow=4.7,SNR=3.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **123.58 53** | | PKP | | **PKPdf** | **03 11 42.1** | **-0.5** |
| | comp=Z,0.1nm,0.6s,baz=8.5,slow=1.8,SNR=1.4 | | | | | | | |

*CNRM **01** 02:57:52.6, 35°.61N×3°.76W, h15km, ml2.1*
*SFS **01** 02:57:56.0, 35°.50N×3°.60W, h31km, ML2.0, ALBORAN SUR*
**ISC 01 02:57:53.8±1.2, 35°.57N±0°.03×3°.77W±0°.03, h20km±4km, n18, σ1§28/29, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.38 202** | | P | | **Pn** | **02 58 07.0** | **+2.8** |
| **PALE** | **Palemas** | **0.38 202** | | P | | **Pg** | **02 58 01.2** | **-0.6** |
| PALE | | | | S | | **Sg** | **02 58 05.5** | **-1.7** |
| **GOG** | **Mont Gurugu** | **0.72 118** | | P | | **Pg** | **02 58 08.1** | **+0.1** |
| GOG | | | | S | | **Sn** | **02 58 20.4** | **+1.0** |
| **GOG** | **Mont Gurugu** | **0.72 118** | | P | | **Pg** | **02 58 07.8** | **-0.1** |
| GOG | | | | S | | **Sg** | **02 58 17.8** | **+0.3** |
| **AKLM** | **AKL** | **1.06 184** | | P | | **Pg** | **02 58 15.0** | **+0.6** |
| **AKLM** | **AKL** | **1.06 184** | | P | | **Pb** | **02 58 13.5** | **0.0** |
| AKLM | | | | S | | **Sn** | **02 58 28.5** | **+0.7** |
| **CHAS** | **Isla Isabel II** | **1.16 109** | | P | | **Pn** | **02 58 14.5** | **-0.3** |
| CHAS | | | | S | | **Sb** | **02 58 28.8** | **-0.8** |
| **EMAL** | **Malaga-Limoner** | **1.31 336** | | P | | **Pg** | **02 58 20.6** | **+1.4** |
| EMAL | | | | S | | **Sg** | **02 58 36.1** | **-0.2** |
| **SMIR** | **Smir Dam** | **1.32 276** | | P | | **Pn** | **02 58 15.1** | **-2.0** |
| SMIR | | | | S | | **Sg** | **02 58 37.5** | **+0.8** |
| **CEU** | **Ceuta** | **1.35 285** | | P | | **Pn** | **02 58 16.9** | **-0.6** |
| CEU | | | | S | | **Sn** | **02 58 35.0** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.37 251** | | P | | **Pn** | **02 58 17.8** | **-0.1** |
| CHEFC | | | | S | | **Sn** | **02 58 34.5** | **-1.0** |
| **JBK** | **JBK** | **1.57 141** | | P | | **Pn** | **02 58 21.0** | **+0.2** |
| **JBK** | **JBK** | **1.57 141** | | P | | **Pn** | **02 58 19.8** | **-1.0** |
| JBK | | | | S | | **Sn** | **02 58 39.1** | **-1.6** |
| **LCRM** | **LCR** | **2.08 206** | | P | | **Pg** | **02 58 33.0** | **-0.8** |
| **IFR** | **Ifrane** | **2.33 209** | | P | | **Pn** | **02 58 32.2** | **+0.9** |
| IFR | | | | S | | **Sn** | **02 58 58.3** | **-1.1** |
| **MDJ31** | **MD31** | **2.81 197** | | P | | **Pn** | **02 58 38.8** | **+1.0** |
| **MDT** | **MideIt** | **2.83 195** | | P | | **Pn** | **02 58 40.5** | **+2.4** |
| **MDT** | **MideIt** | **2.83 195** | | P | | **Pn** | **02 58 40.5** | **+2.4** |

*BJI **01** 03:17:42.4±0.0, 46°.59N×152°.84E, h61km, mb4.5/46, mB4.8/26, Ms4.1/10, Ms7 3.9/10*
*JMA **01** 03:17:43.9±0.9, 46°.74N×152°.53E, h30km, M5.0*
*MOS **01** 03:17:43.8±1.2, 46°.52N×152°.72E, h64km, mb4.8/32, MS3.2/5, Error ellipse: s-maj=6.5km s-min=5.0km az=87.7*
*SKHL **01** 03:17:44.1±0.4, 46°.50N×152°.80E, h67km±4km, mb5.1/9*
*NEIC **01** 03:17:45.5±1.6, 46°.71N±0°.09×152°.6E±0°.1, h53km±5km, mb4.7/77, Error ellipse: s-maj=15.4km s-min=9.9km az=142.0*
*IDC **01** 03:17:46.6±2.4, 46°.73N×152°.57E, h67km±20km, mb4.0/26, mb1 4.1/31, mb1mx4.0/54, mbtmp4.3/31, MS3.7/35, Ms1 3.7/35, ms1mx3.4/91, Error ellipse: s-maj=16.2km s-min=10.7km az=143.0*
*BGR **01** 03:18:01.8±0.0, 50°.03N×152°.32E, h33km, mb4.6*
**ISC 01 03:17:45.8±0.6, 46°.55N±0°.05×152°.63E±0°.05, h67km±4km, h67km:pP-P, n435, σ1§34/445, mb4.6/135, 43C-20D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.58 250** | | *e*PN | | **Pn** | **03 18 39.3** | **+0.4** |
| KUR | | | | *e*S | | **Sn** | **03 19 21.4** | **+1.5** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,293nm,0.6s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,1μm,0.9s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,863nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **3.58 250** | | *i* P | | **Pn** | **03 18 39.3** | **+0.4** |
| KUR | | | | AMB | | AMB | 03 18 39.8 | |
| | comp=N,290nm,0.5s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **03 19 20.3** | **+0.4** |
| KUR | | | | A | | A | 03 19 38.6 | |
| | comp=N,860nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 03 19 38.6 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.74 28** | | *e*PN | | **Pn** | **03 18 54.1** | **-0.5** |
| SKR | | | | pmax | | pmax | | |
| | comp=Z,52nm,0.4s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.74 28** | | *e*P | | **Pn** | **03 18 53.5** | **-1.1** |
| SKR | | | | AMB | | AMB | 03 19 02.0 | |
| | comp=Z,70nm,0.3s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **03 19 45.5** | **-2.6** |
| SKR | | | | A | | A | 03 19 49.1 | |
| | comp=Z,110nm,0.3s | | | | | | | |
| SKR | | | | A | | A | 03 19 49.1 | |
| | comp=Z,170nm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **4.90 239** | | *i* PN | | **Pn** | **03 18 55.3** | **-1.6** |
| SHO | | | | *e*S | | **Sn** | **03 19 51.4** | **-0.8** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,89nm,0.5s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=N,71nm,0.4s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=E,81nm,0.5s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,377nm,0.7s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,347nm,0.7s | | | | | | | |
| **SHO** | **Shikotan** | **4.90 239** | | *i* P | | **Pn** | **03 18 55.6** | **-1.3** |
| SHO | | | | AMB | | AMB | 03 19 04.7 | |
| | comp=E,70nm,0.4s | | | | | | | |
| SHO | | | | AMB | | AMB | 03 19 04.7 | |
| | comp=E,80nm,0.4s | | | | | | | |
| SHO | | | | AMB | | AMB | 03 19 04.7 | |
| | comp=E,90nm,0.4s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **03 19 51.1** | **-1.1** |
| SHO | | | | A | | A | 03 20 12.5 | |
| | comp=E,380nm,0.6s | | | | | | | |
| SHO | | | | A | | A | 03 20 12.5 | |
| | comp=E,350nm,0.6s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.40 245** | | *e*PN | | **Pn** | **03 19 03.9** | **+0.2** |
| YUK | | | | *e*S | | **Sn** | **03 20 05.6** | **+1.1** |
| YUK | | | | pmax | | pmax | | |
| | comp=N,58nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,67nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,262nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,299nm,0.6s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,289nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.40 245** | | *e*P | | **Pn** | **03 19 04.0** | **+0.2** |
| YUK | | | | AMB | | AMB | 03 19 05.2 | |
| | comp=E,260nm,0.5s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **03 20 04.2** | **-0.3** |
| YUK | | | | A | | A | 03 20 27.5 | |
| | comp=E,750nm,0.6s | | | | | | | |
| YUK | | | | A | | A | 03 20 27.5 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.40 245** | | *e*P | | **Pn** | **03 19 04.0** | **+0.2** |
| YUK | | | | AMB | | AMB | 03 19 05.2 | |
| | comp=E,260nm,0.5s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **03 20 04.2** | **-0.3** |
| YUK | | | | A | | A | 03 20 27.5 | |
| | comp=E,750nm,0.7s | | | | | | | |
| YUK | | | | A | | A | 03 20 27.5 | |
| | comp=E,1μm,0.7s | | | | | | | |
| **PAU** | **Pauzhetka** | **5.63 28** | | *e*P | | **Pn** | **03 19 05.3** | **-1.6** |
| PAU | | | | AMB | | AMB | 03 19 07.9 | |
| | comp=E,20nm,0.4s | | | | | | | |
| PAU | | | | *e*S | | **Sn** | **03 20 06.3** | **-3.8** |
| PAU | | | | A | | A | 03 20 32.5 | |
| | comp=E,300nm,0.4s | | | | | | | |
| PAU | | | | A | | A | 03 20 32.5 | |
| | comp=E,210nm,0.4s | | | | | | | |
| **RUSJ** | **Misakicho** | **5.75 247** | | PN | | **Pn** | **03 19 09.6** | **+1.0** |
| RUSJ | | | | S | | **Sn** | **03 20 15.2** | **+2.0** |
| **GLVR** | **Golovnino** | **5.76 243** | | *e*PN | | **Pn** | **03 19 08.8** | **+0.1** |
| GLVR | | | | *e*S | | **Sn** | **03 20 13.5** | **+0.1** |
| **GLVR** | **Golovnino** | **5.76 243** | | *e*P | | **Pn** | **03 19 08.8** | **+0.1** |
| GLVR | | | | *e*S | | **Sn** | **03 20 13.2** | **-0.2** |
| **NEM2** | **Nemuro 2** | **5.84 239** | | P | | **Pn** | **03 19 07.9** | **-1.8** |
| NEM2 | | | | *e*S | | **Sn** | **03 20 09.8** | **-5.4** |
| **NMR** | **Nemuro--Hokkai** | **5.84 239** | | *e*PN | | **Pn** | **03 19 08.0** | **-1.7** |
| **NMR** | **Nemuro--Hokkai** | **5.84 239** | | *i* P | | **Pn** | **03 19 08.1** | **-1.7** |
| NMR | | | | *e*S | | **Sn** | **03 20 13.6** | **-1.7** |
| **JRA** | **Rausu** | **5.91 246** | | P | | **Pn** | **03 19 11.7** | **+1.0** |
| **JNK** | **Nakash** | **6.34 245** | | P | | **Pn** | **03 19 17.0** | **+0.4** |
| **JAK** | **Akkeshi** | **6.67 241** | | P | | **Pn** | **03 19 19.4** | **-1.7** |
| **JTKR** | **Abashiri--Toko** | **6.68 250** | | P | | **Pn** | **03 19 22.2** | **+1.0** |
| **YSS** | **Yuzh-Sakhalins** | **6.80 277** | | *e*PN | | **Pn** | **03 19 24.6** | **+1.8** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,80nm,0.7s | | | | | | | |
| YSS | | | | pmax | | pmax | | |
| | comp=E,50nm,0.9s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,600nm,16.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=E,300nm,19.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **6.80 277** | | Pn | | **Pn** | **03 19 22.0** | **-0.8** |
| **YSS** | **Yuzh-Sakhalins** | **6.80 277** | | *e*P | | **Pn** | **03 19 24.6** | **+1.8** |
| YSS | | | | AMB | | AMB | 03 19 29.6 | |
| | comp=E,90nm,0.6s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **03 20 39.1** | **+0.3** |
| YSS | | | | A | | A | 03 20 42.7 | |
| | comp=E,20nm,0.9s | | | | | | | |
| **JMP** | **Maruseppu** | **7.02 252** | | P | | **Pn** | **03 19 27.2** | **+1.3** |
| **JAR** | **Ashorobuto** | **7.08 246** | | P | | **Pn** | **03 19 27.2** | **+0.4** |
| **JOB** | **Onbets** | **7.25 243** | | P | | **Pn** | **03 19 28.4** | **-0.6** |
| JOB | | | | *e*S | | **Sn** | **03 20 47.0** | **-2.8** |
| **PEA0B** | **Petropavlovsk-** | **7.33 25** | | *i* PN | | **Pn** | **03 19 29.0** | **-1.1** |
| **PEA0B** | **Petropavlovsk-** | **7.33 25** | | Pn | | Pn | 03 19 25.9 | -4.2 |
| **PETK** | **Petropavlovsk-** | **7.33 25** | | P | | **Pn** | **03 19 28.4** | **-1.7** |
| | comp=E,0.8nm,0.3s,baz=187,slow=12,SNR=15 | | | | | | | |
| PETK | | | | S | | **Sn** | **03 20 55.4** | **+3.6** |
| | baz=192,slow=14,SNR=1.2 | | | | | | | |
| PETK | | | | LR | | LR | 03 22 19.2 | |
| | comp=E,131nm,19.6s,baz=208,slow=38 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **7.33 25** | | Pn | | **Pn** | **03 19 26.6** | **-3.5** |
| **JKK2** | **Kamakawa 2** | **7.48 253** | | P | | **Pn** | **03 19 33.7** | **+1.5** |
| **JKA** | **Kamikawa-asahi** | **7.48 255** | | Pn | | **Pn** | **03 19 34.1** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **7.48 255** | | *e*P | | **Pn** | **03 19 34.4** | **+2.2** |
| **ASAJ** | **Asahikawa** | **7.48 255** | | P | | **Pn** | **03 19 34.4** | **+2.2** |
| | comp=E,2.0nm,0.3s,baz=76,slow=13,SNR=22 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **03 21 04.2** | **+8.7** |
| | baz=120,slow=28,SNR=1.2 | | | | | | | |
| ASAJ | | | | LR | | LR | 03 22 20.0 | |
| | comp=E,352nm,20.6s,baz=27,slow=36 | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.48 255** | | P | | **Pn** | **03 19 34.3** | **+2.1** |
| **UGL** | **Uglegorsk** | **7.55 293** | | *e*PN | | **Pn** | **03 19 35.9** | **+2.8** |
| UGL | | | | pmax | | pmax | | |
| | comp=Z,90nm,1.0s | | | | | | | |
| **UGL** | **Uglegorsk** | **7.55 293** | | *e*P | | **Pn** | **03 19 34.2** | **+1.1** |
| UGL | | | | AMB | | AMB | 03 19 36.3 | |
| | comp=Z,90nm,0.8s | | | | | | | |
| **PET** | **Petropavlovsk** | **7.56 29** | | *e*PN | | **Pn** | **03 19 36.9** | **+3.8** |
| PET | | | | MLR | | MLR | | |
| | comp=Z,500nm,14.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **7.56 29** | | *e*P | | **Pn** | **03 19 33.1** | **-0.1** |
| PET | | | | AMB | | AMB | 03 19 36.9 | |
| | comp=Z,50nm,0.4s | | | | | | | |
| PET | | | | *e*S | | **Sn** | **03 20 52.2** | **-5.0** |
| PET | | | | A | | A | 03 21 25.3 | |
| | comp=Z,120nm,0.4s | | | | | | | |
| PET | | | | A | | A | 03 21 25.3 | |
| | comp=Z,180nm,0.4s | | | | | | | |
| **PET** | **Petropavlovsk** | **7.56 29** | | *e*P | | **Pn** | **03 19 33.1** | **-0.1** |
| PET | | | | AMB | | AMB | 03 19 36.9 | |
| | comp=Z,50nm,0.4s | | | | | | | |
| PET | | | | *e*S | | **Sn** | **03 20 52.4** | **-4.8** |
| PET | | | | A | | A | 03 21 25.3 | |
| | comp=Z,120nm,0.4s | | | | | | | |
| PET | | | | A | | A | 03 21 25.3 | |
| | comp=Z,180nm,0.4s | | | | | | | |
| **JCH** | **Churui** | **7.70 243** | | P | | **Pn** | **03 19 34.0** | **-1.2** |
| JCH | | | | *e*S | | **Sn** | **03 20 56.0** | **-4.9** |
| **TYV** | **Tymovskoe** | **7.88 307** | | *e*PN | | **Pn** | **03 19 38.9** | **+1.3** |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,200nm,2.7s | | | | | | | |
| **TYV** | **Tymovskoe** | **7.88 307** | | *e*P | | **Pn** | **03 19 38.9** | **+1.3** |
| TYV | | | | AMB | | AMB | 03 19 39.5 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **03 21 04.1** | **-1.1** |
| TYV | | | | A | | A | 03 21 08.5 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| TYV | | | | A | | A | 03 21 08.5 | |
| | comp=Z,40nm,0.7s | | | | | | | |
| **TYV** | **Tymovskoe** | **7.88 307** | | *e*P | | **Pn** | **03 19 38.9** | **+1.3** |
| TYV | | | | AMB | | AMB | 03 19 39.5 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **03 21 04.2** | **-1.0** |
| TYV | | | | A | | A | 03 21 08.5 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| TYV | | | | A | | A | 03 21 08.5 | |
| | comp=Z,40nm,0.7s | | | | | | | |
| **ERM** | **Erimo** | **8.17 240** | | *i* PN | | **Pn** | **03 19 41.9** | **+0.3** |
| **ERM** | **Erimo** | **8.17 240** | | Pn | | **Pn** | **03 19 41.5** | **-0.1** |
| **JBT2** | **Biratori 2** | **8.23 246** | | P | | **Pn** | **03 19 42.1** | **-0.4** |
| **JNBK** | **Urakawa-nobuka** | **8.26 242** | | P | | **Pn** | **03 19 41.6** | **-1.2** |
| **JEW** | **Eniwo** | **8.79 249** | | P | | **Pn** | **03 19 50.6** | **+0.6** |
| **JNB** | **Noboribetsu** | **9.23 248** | | P | | **Pn** | **03 19 56.5** | **+0.4** |
| **OKH** | **Okha** | **9.37 322** | | *e*P | | **Pn** | **03 20 00.7** | **+2.7** |
| OKH | | | | AMB | | AMB | 03 20 01.9 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **JKB** | **Kayabe** | **9.54 245** | | P | | **Pn** | **03 19 59.4** | **-1.0** |
| JKB | | | | *e*S | | **Sn** | **03 21 39.9** | **-6.0** |
| **NKL** | **Nikolayevsk** | **10.15 315** | | *e*P | | **Pn** | **03 20 09.4** | **+0.8** |
| NKL | | | | AMB | | AMB | 03 20 12.7 | |
| | comp=Z,50nm,0.9s | | | | | | | |
| **JTM** | **Tenmabayashi** | **10.16 240** | | P | | **Pn** | **03 20 06.2** | **-2.7** |
| **JANG** | **Nango** | **10.17 237** | | P | | Pn | 03 20 05.6 | -3.3 |
| JANG | | | | *e*S | | Sn | 03 21 51.3 | -10 |
| **JTH** | **Tanohata** | **10.26 234** | | *e*S | | Sn | 03 21 52.7 | -11 |
| **OFUJ** | **Ofunato** | **10.97 231** | | *e*S | | Sn | 03 22 11.3 | -10 |
| **TEY** | **Ternei** | **11.30 268** | | *e*P | | **Pn** | **03 20 24.0** | **-0.3** |
| TEY | | | | AMB | | AMB | 03 20 31.0 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **JRG** | **Rokugo** | **11.32 235** | | P | | Pn | 03 20 21.8 | -2.9 |
| JRG | | | | *e*S | | Sn | 03 22 17.7 | -12 |
| **GRNR** | **Gornyy** | **11.52 297** | | *i* PN | | **Pn** | **03 20 31.0** | **+3.7** |
| GRNR | | | | *e*S | | Sn | 03 22 42.9 | +8.8 |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| GRNR | | | | smax | | smax | | |
| | comp=N,4.0nm,0.5s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=E,340nm,16.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=N,110nm,17.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=Z,360nm,15.0s | | | | | | | |
| **GRNR** | **Gornyy** | **11.52 297** | | *e*P | | **Pn** | **03 20 28.2** | **+0.9** |
| GRNR | | | | AMB | | AMB | 03 20 32.5 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **JIO** | **Ouri** | **11.60 230** | | *e*S | | Sn | 03 22 26.0 | -10 |
| **MA2** | **Magadan** | **13.09 356** | | PN | | **Pn** | **03 20 47.8** | **-0.9** |
| **MA2** | **Magadan** | **13.09 356** | | Pn | | **Pn** | **03 20 47.8** | **-0.9** |
| **OKHT** | **Okhotsk** | **14.00 340** | | *e*P | | **Pn** | **03 21 00.4** | **-0.3** |
| OKHT | | | | AMB | | AMB | 03 21 01.7 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **14.26 288** | | P | | **Pn** | **03 21 05.1** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=96,slow=15,SNR=9.0 | | | | | | | |
| KLR | | | | LR | | LR | 03 26 45.8 | |
| | comp=Z,266nm,18.7s,baz=74,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **14.26 288** | | *e*P | | **P** | **03 21 06.9** | **-2.7** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **KLR** | **

YAK *e* 03 26 30.9
YAK pmax pmax
comp=Z,33nm,0.9s
YAK pmax pmax
comp=E,8.0nm,1.0s
YAK pmax pmax
comp=N,9.0nm,1.1s
YAK pmax pmax
comp=Z,37nm,1.1s
YAK pmax pmax
comp=E,13nm,1.4s
YAK pmax pmax
comp=N,23nm,1.5s
YAK smax smax
comp=N,92nm,3.8s
YAK smax smax
comp=E,50nm,3.7s
**YAK Yakutsk 20.31 328** P **P** **03 22 15.8 -0.2**
**YAK Yakutsk 20.31 328** *eP* Pn 03 22 19.9 +1.3
**KSRS Korea Array 20.42 252** P **P** **03 22 18.9 +1.5**
comp=E,5.0nm,0.7s,baz=58,slow=10,SNR=11
KSRS LR LR 03 29 08.0
comp=E,106nm,20.1s,baz=50,slow=33
**JNU Nakatsue 21.34 239** P **P** **03 22 28.4 +1.1**
comp=E,15nm,1.0s,baz=231,slow=4.9,SNR=4.4
**JNU Nakatsue 21.34 239** P **P** **03 22 28.4 +1.1**
JNU IAmb IAmb 03 22 29.9
comp=Z,20nm,1.0s
**BILL Bilibino 22.66 13** *ceP* **P** **03 22 39.3 -1.9**
BILL *e* 03 23 08.0
BILL *eS* **S** **03 26 45.7 +1.6**
BILL pmax pmax
comp=Z,6.0nm,1.1s
BILL MLR MLR
comp=Z,74nm,19.0s
**BILL Bilibino 22.66 13** P **P** **03 22 40.5 -0.7**
**XLT XiLinHaoTe 25.74 277** *eP* **P** **03 23 11.1 +1.1**
XLT pmax pmax
comp=Z,14nm,0.7s
XLT pmax pmax
comp=Z,100nm,7.0s
XLT LR LR
comp=Z,300nm,17.1s
XLT LR LR
comp=Z,180nm,13.8s
**GAMB Gambell 26.17 36** P **P** **03 23 14.4 +0.8**
**TNA Tin City 28.38 34** P **P** **03 23 34.8 +1.4**
**H11N2 WAKE ISLAND Hy 29.20 152** T T 03 55 10.6
baz=340,slow=76,SNR=1485
**H11N1 WAKE ISLAND Hy 29.21 152** T T 03 55 11.3
baz=340,slow=76,SNR=1521
**H11N3 WAKE ISLAND Hy 29.22 152** T T 03 55 12.0
baz=340,slow=76,SNR=903
**NJ2 Nanjing 29.62 253** *eP* **P** **03 23 46.0 +1.3**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**HHC Hu-ho-hao-te 29.98 274** *eP* **P** **03 23 46.8 -1.1**
HHC pmax pmax
comp=Z,8.0nm,0.8s
HHC pmax pmax
comp=Z,130nm,6.5s
**H11S1 WAKE ISLAND Hy 30.28 153** T T 03 56 30.8
baz=340,slow=76,SNR=1386
**H11S3 WAKE ISLAND Hy 30.29 153** T T 03 56 31.9
baz=340,slow=76,SNR=1130
**H11S2 WAKE ISLAND Hy 30.30 153** T T 03 56 32.2
baz=340,slow=76,SNR=968
**ULN Ulaanbaatar 30.65 289** *ceP* **P** **03 23 54.2 +0.3**
ULN pmax pmax
comp=Z,10.0nm,1.3s
**ULN Ulaanbaatar 30.65 289** P **P** **03 23 52.9 -1.0**
**ULN Ulaanbaatar 30.65 289** *eP* **P** **03 23 54.2 +0.3**
**SONM Songino Array 31.09 290** P **P** **03 23 56.8 -0.8**
comp=Z,0.8nm,0.8s,baz=86,slow=20,SNR=6.0
SONM PcP **PcP** **03 26 52.5 +1.0**
comp=Z,0.9nm,0.7s,baz=156,slow=3.4,SNR=4.6
SONM LR LR 03 37 31.5
comp=Z,186nm,19.1s,baz=336,slow=38
**SONM Songino Array 31.09 290** P **P** **03 23 57.8 +0.1**
**ZAK Zakamensk 32.46 295** *eP* **P** **03 24 08.5 -1.2**
ZAK *e* 03 26 50.5
ZAK pmax pmax
comp=Z,4.0nm,1.2s
ZAK pmax pmax
comp=Z,3.0nm,1.1s
**TTA Tatalina 32.79 41** P **P** **03 24 13.0 +0.7**
TTA pmax pmax
comp=Z,7.0nm,1.1s
**TTA Tatalina 32.79 41** P **P** **03 24 13.0 +0.7**
**IMAR Indian Mountai 34.12 36** P **P** **03 24 23.7 -0.1**
**A21K Barrow 34.33 26** P **P** **03 24 25.8 +0.2**
**XAN Xi'an 35.17 265** P **P** **03 24 33.6 +0.4**
XAN pP pP 03 24 46.3 -2.5
XAN pmax pmax
comp=Z,10.0nm,0.8s
XAN pmax pmax
comp=Z,150nm,4.1s
**COLD Coldfoot 35.68 34** P **P** **03 24 36.9 -0.4**
**TOLK Toolik Lake Re 36.09 32** P **P** **03 24 41.1 +0.4**
TOLK IAmb IAmb 03 24 43.8
comp=Z,7.7nm,1.4s
**COLA College 36.50 38** *i* P **P** **03 24 44.8 +0.7**
COLA pmax pmax
comp=Z,33nm,3.0s
**IL31 36.91 38** P **P** **03 24 47.4 -0.2**
**ILAR Eielson Array 36.91 38** P **P** **03 24 47.1 -0.6**
comp=Z,2.0nm,0.9s,baz=268,slow=7.8,SNR=15
**ILAR Eielson Array 36.91 38** P **P** **03 24 47.6 -0.1**
**ILAR Eielson Array 36.91 38** P **P** **03 24 47.6 -0.1**
**M24K Tolsona, Glenn 37.34 43** P **P** **03 24 52.4 +1.0**
**LZH Lanzhou 37.56 272** *eP* **P** **03 24 55.6 +1.8**
LZH pP pP 03 25 12.2 +2.8
LZH sP sP 03 25 16.4 -0.5
LZH pmax pmax
comp=Z,13nm,1.0s
**BMAR Burnt Mountain 37.87 34** P **P** **03 24 56.8 +1.0**
**N25K Chitina, Valde 38.13 44** P **P** **03 24 57.4 -0.7**
N25K IAmb IAmb 03 24 59.6
comp=Z,6.5nm,1.1s
**DOT Dot Lake 38.19 40** P **P** **03 24 57.8 -0.8**
**GTA Gaotai 38.67 279** *eP* **P** **03 25 04.8 +1.8**
GTA sP sP 03 25 27.6 +1.1
GTA PcP **PcP** **03 27 15.5 +1.7**
GTA pmax pmax
comp=Z,4.0nm,1.1s
**NRIK Noril'sk 38.76 329** LR LR 03 43 00.2
comp=Z,77nm,18.6s,baz=140,slow=39
**BCAR Beaver Creek A 39.27 41** P **P** **03 25 08.6 +1.0**
**PCA Pinnacle 40.47 45** P **P** **03 25 17.4 -0.2**
PCA IAmb IAmb 03 25 21.8
comp=Z,20nm,1.4s
**GYA Guiyang 41.35 257** ||P **P** **03 25 26.3 +1.0**
GYA pmax pmax
comp=Z,9.0nm,1.3s
**INK Inuvik 41.99 32** P **P** **03 25 30.1 +0.2**
comp=Z,2.7nm,0.7s,baz=297,slow=6.7,SNR=15
**DGZ Jazzator, Alta 42.41 299** *i* P **P** **03 25 34.9 +1.2**
DGZ pmax pmax
comp=Z,4.0nm,1.5s
**ZALV Zalesovo Beam 42.46 306** P **P** **03 25 32.2 -1.7**
comp=Z,1.5nm,0.5s,baz=64,slow=6.7,SNR=7.6
ZALV PcP **PcP** **03 27 25.9 +0.3**
comp=Z,3.5nm,0.8s,baz=64,slow=3.4,SNR=13
ZALV LR LR 03 44 20.7
comp=Z,254nm,18.3s,baz=68,slow=38
**ZALV Zalesovo Beam 42.46 306** P **P** **03 25 31.7 -2.1**
**GOMU GeErMu 43.71 278** P **P** **03 25 45.1 +0.4**
GOMU pmax pmax
comp=Z,7.0nm,1.1s
**PZH PanZhiHua 44.66 262** P **P** **03 25 53.6 +1.6**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.2s
**WMQ Urumqi 44.69 291** *eP* **P** **03 25 54.5 +2.5**
**MK31 Makanchi Array 46.74 297** P **P** **03 26 07.3 -0.8**
MK31 pmax pmax
comp=Z,3.0nm,0.8s
**MK31 Makanchi Array 46.74 297** P **P** **03 26 07.3 -0.8**
**MKAR Makanchi Array 46.74 297** P **P** **03 26 07.0 -1.1**
comp=Z,2.1nm,0.6s,baz=65,slow=7.5,SNR=22
MKAR PcP **PcP** **03 27 40.8 +0.4**
comp=Z,2.2nm,0.8s,baz=58,slow=3.8,SNR=6.6
MKAR LR LR 03 46 55.8
comp=Z,233nm,18.6s,baz=60,slow=38

**MKAR Makanchi Array 46.74 297** P **P** **03 26 07.7 -0.4**
**MAKZ Makanchi 46.92 297** P **P** **03 26 09.8 +0.3**
MAKZ pmax pmax
comp=Z,2.0nm,0.9s
**MAKZ Makanchi 46.92 297** P **P** **03 26 09.8 +0.3**
**KURK Kurchatov 47.20 304** *ceP* **P** **03 26 10.3 -1.2**
KURK pmax pmax
comp=Z,9.0nm,1.7s
**KURK Kurchatov 47.20 304** P **P** **03 26 10.0 -1.5**
KURK IAmb IAmb 03 26 12.4
comp=Z,6.2nm,1.1s
**KURBB Kurchatov Arra 47.29 304** LR LR 03 46 56.6
comp=Z,144nm,18.5s,baz=47,slow=37
**BRVK Borovoye 50.77 309** *ceP* **P** **03 26 38.2 -0.6**
BRVK pmax pmax
comp=Z,9.0nm,2.5s
**BRVK Borovoye 50.77 309** P **P** **03 26 37.9 -0.9**
**RES Resolute Bay 51.13 18** P **P** **03 26 40.9 -0.3**
comp=Z,1.1nm,0.6s,baz=343,slow=11,SNR=5.4
**YKA Yellowknife Ar 51.28 36** P **P** **03 26 42.7 +0.2**
comp=Z,1.1nm,0.6s,baz=295,slow=7.0,SNR=16
YKA PcP **PcP** **03 27 56.9 +0.3**
comp=Z,1.4nm,0.9s,baz=306,slow=3.7,SNR=5.4
**YKA Yellowknife Ar 51.28 36** P **P** **03 26 41.5 -0.9**
**CHTO Chiang Mai 51.75 256** P **P** **03 26 47.6 +1.0**
CHTO pmax pmax
comp=Z,10.0nm,1.0s
**CHTO Chiang Mai 51.75 256** P **P** **03 26 47.6 +1.0**
CHTO IAmb IAmb 03 26 49.1
comp=Z,10nm,0.9s
**CMAR Chiang Mai Arr 52.00 256** P **P** **03 26 50.2 +1.7**
comp=Z,4.4nm,0.8s,baz=36,slow=7.8,SNR=19
CMAR PcP **PcP** **03 28 00.1 +0.1**
comp=Z,1.8nm,0.3s,baz=1.4,slow=3.6,SNR=2.3
CMAR LR LR 03 51 52.5
comp=Z,44nm,18.2s,baz=85,slow=39
**CMAR Chiang Mai Arr 52.00 256** P **P** **03 26 50.3 +1.8**
**SHL Shillong 52.03 268** P **P** **03 26 48.7 -0.2**
SHL pmax pmax
comp=Z,14nm,1.0s
**SHL Shillong 52.03 268** P **P** **03 26 48.7 -0.2**
**BOOM Boomskoye usch 52.80 295** P **P** **03 26 54.6 +0.2**
BOOM pmax pmax
comp=Z,6.0nm,1.2s
**BOOM Boomskoye usch 52.80 295** P **P** **03 26 54.5 +0.2**
BOOM IAmb IAmb 03 26 56.0
comp=Z,5.6nm,1.1s
**AAK Ala-Archa 53.62 296** LR LR 03 50 24.5
comp=Z,128nm,18.5s,baz=45,slow=37
**AAK Ala-Archa 53.62 296** *ceP* **P** **03 27 01.3 +0.9**
AAK pmax pmax
comp=Z,3.0nm,0.7s
**AAK Ala-Archa 53.62 296** P **P** **03 27 00.7 +0.3**
**AAK Ala-Archa 53.62 296** *eP* **P** **03 27 01.3 +0.9**
**KSH Kashi 54.42 292** P P 03 27 10.8 +4.6
KSH pP pP 03 27 24.9 +2.1
KSH sP sP 03 27 31.2 +1.1
KSH PcP **PcP** **03 28 09.7 +0.6**
KSH pmax pmax
comp=Z,3.0nm,0.5s
KSH LR LR
comp=Z,300nm,8.6s
KSH LR LR
comp=Z,220nm,8.2s
**GUN Gumba 54.69 275** *eP* **P** **03 27 09.5 +1.0**
comp=Z,16nm,0.6s
**ARU Arti 54.93 317** LR LR 03 52 16.5
comp=Z,131nm,18.3s,baz=174,slow=38
**ARU Arti 54.93 317** *c iP* **P** **03 27 09.8 +0.4**
ARU S **S** **03 34 45.3 -0.5**
ARU SS **SS** **03 38 25.1 -4.2**
ARU pmax pmax
comp=Z,8.0nm,1.4s
**ARU Arti 54.93 317** *eP* **P** **03 27 09.8 +0.4**
**KKN Kakani 55.18 275** *eP* **P** **03 27 13.5 +1.6**
**PKI Pukhoki 55.23 275** *eP* **P** **03 27 13.0 +0.6**
**PKIN Phulchoki 55.23 275** *eP* **P** **03 27 13.3 +1.0**
comp=Z,16nm,0.6s
**NEEM North Greenlan 55.40 6** *i* P **P** **03 27 10.8 -2.1**
NEEM IAmb IAmb 03 27 12.0
comp=Z,8.1nm,0.8s
**DMN Daman 55.41 275** *eP* **P** **03 27 14.8 +1.2**
comp=Z,56nm,0.8s
**GKN Gorkha 55.48 276** *eP* **P** **03 27 15.3 +1.3**
**KKAR Karatay Array 55.80 299** P **P** **03 27 15.2 -0.7**
**KKAR Karatay Array 55.80 299** P **P** **03 27 15.2 -0.7**
**DANN Dangsing 55.87 277** *eP* **P** **03 27 18.4 +1.5**
comp=Z,51nm,0.7s
**KOLN Koldanda 56.34 276** *eP* **P** **03 27 21.5 +1.3**
comp=Z,62nm,0.9s
**PYUN Piuthan 56.55 277** *eP* **P** **03 27 22.9 +1.2**
**PRGR Permogore 57.35 327** *eP* **P** **03 27 27.2 +0.6**
PRGR pmax pmax
comp=Z,8.0nm,1.0s
**ARCES ARCESS Array B 57.93 341** P **P** **03 27 30.0 -0.6**
comp=Z,3.6nm,1.1s,baz=16,slow=6.3,SNR=5.8
**ARCES ARCESS Array B 57.93 341** P **P** **03 27 30.0 -0.6**
**ABKAR Akbulak array 58.30 310** P **P** **03 27 32.8 -0.6**
**GAR Garm 58.30 295** P **P** **03 27 33.7 -0.1**
GAR IAmb IAmb 03 27 36.3
comp=Z,6.6nm,0.9s
**AKTO Aktyubinsk 58.61 312** LR LR 03 54 57.5
comp=Z,212nm,18.2s,baz=27,slow=38
**K05A Summer Lake 58.63 59** P **P** **03 27 36.9 +0.8**
**KAPI Kappang 59.03 219** LR LR 03 56 49.1
comp=Z,16nm,18.7s,baz=185,slow=40
**CHGR Chuyangaron 59.23 295** P **P** **03 27 40.0 -0.2**
**PLID Pearl Lake 60.06 55** P **P** **03 27 46.6 +0.6**
PLID IAmb IAmb 03 28 01.5
comp=Z,8.2nm,1.1s
**SUMG Summit 60.92 4** P **P** **03 27 51.4 -0.2**
SUMG pmax pmax
comp=Z,22nm,1.2s
**SUMG Summit 60.92 4** *i* P **P** **03 27 51.6 +0.1**
SUMG IAmb IAmb 03 27 51.9
comp=Z,5.2nm,0.6s
**SUMG Summit 60.92 4** P **P** **03 27 51.4 -0.2**
**FFC Flin Flon 61.10 40** P **P** **03 27 53.1 +0.5**
FFC pmax pmax
comp=Z,7.0nm,0.9s
**FFC Flin Flon 61.10 40** P **P** **03 27 53.1 +0.5**
FFC IAmb IAmb 03 27 54.0
comp=Z,6.5nm,0.9s
**KBL Kabul 61.83 291** P **P** **03 27 57.3 -0.8**
KBL pmax pmax
comp=Z,10.0nm,1.2s
**KBL Kabul 61.83 291** P **P** **03 27 57.2 -0.8**
KBL IAmb IAmb 03 27 58.9
comp=Z,10nm,1.2s
**BOZ Bozeman (W) 62.17 52** P **P** **03 28 00.8 +0.7**
BOZ pmax pmax
comp=Z,10.0nm,1.5s
**BOZ Bozeman (W) 62.17 52** P **P** **03 28 00.8 +0.7**
BOZ IAmb IAmb 03 28 15.9
comp=Z,10nm,1.4s
**NVAR Mina Array Bea 62.82 62** P **P** **03 28 05.4 +0.8**
comp=Z,0.7nm,0.7s,baz=297,slow=8.0,SNR=2.3
**NVAR Mina Array Bea 62.82 62** P **P** **03 28 04.6 0.0**
**LOHW Long Hollow 64.00 53** P **P** **03 28 11.2 -1.1**
**REDW Red Top Meadow 64.02 54** P **P** **03 28 12.4 -0.1**
REDW IAmb IAmb 03 28 29.0
comp=Z,9.7nm,1.2s
**FINES FINESS Array B 64.08 335** P **P** **03 28 11.3 -0.9**
comp=Z,6.0nm,0.6s,baz=32,slow=7.8,SNR=41
**FINES FINESS Array B 64.08 335** *i* P **P** **03 28 11.6 -0.6**
FINES pmax pmax
comp=Z,6.0nm,0.6s
**FINES FINESS Array B 64.08 335** P **P** **03 28 11.1 -1.1**
**ICESG Greenland Ices 64.32 5** *i* P **P** **03 28 12.6 -1.6**
ICESG IAmb IAmb 03 28 18.5
comp=Z,7.5nm,0.8s
**R11A Troy Canyon, C 64.51 61** P **P** **03 28 16.3 +0.6**
**PD31 Pinedale Array 65.13 54** P **P** **03 28 18.9 -0.9**
**PDAR Pinedale Array 65.13 54** P **P** **03 28 19.6 -0.2**
**OBN Obninsk 65.28 325** ||*eP* **P** **03 28 19.7 -0.5**
OBN *e* 03 30 45.6
OBN pmax pmax
comp=Z,60nm,4.7s
**OBN Obninsk 65.28 325** *eP* **P** **03 28 19.7 -0.5**
**FRB Frobisher Bay 65.34 19** LR LR 03 58 32.2
comp=Z,47nm,19.1s,baz=352,slow=38
**GEYT Alibeck 66.42 301** P **P** **03 28 28.5 +0.6**
comp=Z,2.1nm,0.5s,baz=200,slow=7.9,SNR=3.1
GEYT LR LR 04 00 06.6
comp=Z,99nm,18.5s,baz=58,slow=38

**ULM Lac du Bonnet 66.89 41** P **P** **03 28 29.9 -0.7**
comp=Z,2.3nm,0.7s,baz=335,slow=5.5,SNR=3.2
**RSSD Black Hills 67.20 49** P **P** **03 28 33.5 +0.5**
RSSD pmax pmax
comp=Z,11nm,1.3s
**RSSD Black Hills 67.20 49** P **P** **03 28 33.5 +0.5**
RSSD IAmb IAmb 03 28 48.1
comp=Z,11nm,1.3s
**MSVF Nonsavu 67.98 154** LR LR 03 53 41.6
comp=Z,50nm,21.3s,baz=357,slow=32
**WB0 Warramunga Arr 68.04 199** P **P** **03 28 38.2 +0.1**
WB0 IAmb IAmb 03 28 39.5
comp=Z,9.0nm,1.2s
**AFI Afiamalu 68.16 142** LR LR 03 53 10.1
comp=Z,45nm,21.5s,baz=318,slow=31
**WRA Warramunga Arr 68.22 199** P **P** **03 28 39.8 +0.6**
comp=Z,1.6nm,0.9s,baz=18,slow=6.9,SNR=5.1
**WRA Warramunga Arr 68.22 199** *i* P **P** **03 28 40.7 +1.5**
WRA pmax pmax
comp=Z,1.0nm,0.8s
**NB2 NORSAR Subarra 68.31 341** P **P** **03 28 39.1 -0.3**
comp=Z,2.7nm,0.6s,baz=26,slow=6.5
**NOA NORSAR Array B 68.31 341** P **P** **03 28 38.9 -0.6**
comp=Z,5.6nm,0.7s,baz=27,slow=6.4,SNR=15
NOA LR LR 04 01 10.6
comp=Z,33nm,18.2s,baz=350,slow=38
**MNK Minsk 69.00 329** *i* P **P** **03 28 41.6 -2.1**
MNK *i* *PP **pP** **03 29 00.2 -0.7**
MNK *i* 03 29 03.9
MNK *i* *SP **PcP** **03 29 08.2 +0.7**
MNK *i* 03 31 14.4
MNK *i* PPP PPP 03 32 55.1
MNK *i* S **S** **03 37 41.3 -1.7**
MNK *i* *SS **sS** **03 38 13.4 +1.1**
MNK *i* SS **SS** **03 42 08.9 +0.2**
MNK pmax pmax
comp=E,1.0nm,0.8s
MNK pmax pmax
comp=Z,12nm,0.8s
MNK pmax pmax
comp=N,3.0nm,0.8s
**MNK Minsk 69.00 329** *i* P **P** **03 28 41.7 -2.1**
comp=E,1.0nm,0.8s
MNK *i* P **P** **03 28 41.7 -2.1**
comp=N,3.0nm,0.8s
MNK *i* P **P** **03 28 41.7 -2.1**
comp=Z,12nm,0.8s,baz=37
MNK *i* pP **pP** **03 29 00.2 -0.6**
MNK *i* sP **PcP** **03 29 08.3 +0.8**
MNK *i* PP **PP** **03 31 14.5 -1.7**
MNK *i* PPP PPP 03 32 55.2
MNK *i* S **S** **03 37 41.3 -1.7**
MNK *i* sS **sS** **03 38 13.5 +1.2**
MNK *i* SS **SS** **03 42 09.0 +0.3**
MNK *i* SSS SSS 03 45 26.4
**NACGM Naroch 69.06 330** *i* P P 03 28 34.6 -10
**KIV Kislovodsk 70.70 314** *eP* **P** **03 28 55.5 +1.0**
KIV pmax pmax
comp=Z,8.0nm,1.1s
KIV MLR MLR
comp=Z,69nm,18.0s
**KIV Kislovodsk 70.70 314** *eP* **P** **03 28 55.5 +1.0**
**KBZ Khabaz 70.76 314** P **P** **03 28 55.5 +0.8**
comp=Z,3.7nm,0.8s,baz=300,slow=1.7,SNR=9.0
KBZ LR LR 04 04 49.0
comp=Z,87nm,20.0s,baz=7.0,slow=40
**KBZ Khabaz 70.76 314** *i* P **P** **03 28 56.3 +1.6**
KBZ pmax pmax
comp=Z,14nm,2.3s
**KBZ Khabaz 70.76 314** *eP* **P** **03 28 56.3 +1.6**
**SHA1 Shidzhatmaz 70.87 314** *i* P **P** **03 28 56.9 +1.2**
**ECSD EROS Data Cent 71.26 46** P **P** **03 28 57.9 +0.1**
ECSD IAmb IAmb 03 29 13.3
comp=Z,11nm,1.2s
**ONI Oni 71.31 313** P **P** **03 29 00.4 +2.2**
ONI pmax pmax
comp=Z,3.0nm,1.0s
**ONI Oni 71.31 313** P **P** **03 29 00.3 +2.2**
**AKASG Malin Array Be 71.53 326** P **P** **03 28 58.8 -0.5**
comp=Z,7.0nm,0.5s,baz=36,slow=6.2,SNR=45
AKASG LR LR 04 02 02.8
comp=Z,78nm,20.3s,baz=358,slow=37
**AKASG Malin Array Be 71.53 326** P **P** **03 28 58.4 -0.8**
**AKBB Malin Array Si 71.53 326** P **P** **03 28 58.7 -0.5**
AKBB pmax pmax
comp=Z,9.0nm,0.7s
**AKBB Malin Array Si 71.53 326** P **P** **03 28 58.7 -0.5**
AKBB IAmb IAmb 03 28 59.3
comp=Z,9.3nm,0.7s
**ASAR Alice Springs 71.92 198** P **P** **03 29 03.4 +1.6**
comp=Z,1.5nm,0.6s,baz=9.7,slow=5.1,SNR=19
**GNI Garni 72.41 310** LR LR 04 04 22.1
comp=Z,77nm,19.0s,baz=14,slow=39
**SCHQ Schefferville 73.62 23** P **P** **03 29 11.3 -0.3**
comp=Z,3.9nm,1.0s,baz=304,slow=7.3,SNR=3.0
**SORM Soroca 73.92 325** ||P **P** **03 29 13.1 -0.4**
**SORM Soroca 73.92 325** ||*P **P** **03 29 13.1 -0.4**
**PURM Purcari 74.59 323** ||*P **P** **03 29 17.6 +0.2**
**AMTX Amarillo 75.01 55** P **P** **03 29 20.2 +0.1**
AMTX IAmb IAmb 03 29 36.4
comp=Z,8.8nm,0.8s
**BUR08 Bucovina Ar. S 75.55 326** P **P** **03 29 23.3 +0.3**
BUR08 IAmb IAmb 03 29 24.0
comp=Z,9.3nm,0.6s
**BURAR Bucovina Array 75.57 326** ||P **P** **03 29 23.3 +0.2**
**BURAR Bucovina Array 75.57 326** ||P **P** **03 29 23.3 +0.2**
**BURAR Bucovina Array 75.57 326** P **P** **03 29 23.6 +0.5**
**CRVS Cervenica-Dubn 75.88 329** *eP* **P** **03 29 25.4 +0.6**
**CRVS Cervenica-Dubn 75.88 329** *eP* **P** **03 29 25.4 +0.6**
**VLDR Vladesti 75.88 324** ||P **P** **03 29 25.1 +0.3**
**TESR Tescani 75.92 325** ||P **P** **03 29 24.4 -0.7**
**GLMI Grayling 75.95 38** P **P** **03 29 26.3 +1.0**
**GHRR 75.98 324** ||*P **P** **03 29 25.1 -0.3**
**FLTG Flechtingen 76.09 337** *eP* **P** **03 29 25.6 -0.2**
comp=Z,8.0nm,0.9s,baz=25,slow=5.8
**TLCR 76.11 323** ||*P **P** **03 29 26.3 +0.2**
**TLCR 76.11 323** ||*P **P** **03 29 26.3 +0.2**
**WSAR Wadi Sarin 76.14 289** LR LR 04 06 50.2
comp=Z,58nm,19.1s,baz=70,slow=39
**TRPA Tarpa 76.14 328** ||*P **P** **03 29 26.1 -0.1**
**TRPA Tarpa 76.14 328** P **P** **03 29 26.8 +0.6**
**CHVC Chvalec 76.23 333** *eP* **P** **03 29 27.1 +0.3**
**NRDL Niedersach Rie 76.24 337** *eP* **P** **03 29 26.5 -0.1**
comp=Z,3.7nm,0.8s,baz=25,slow=5.8
**DPC Dobruska-Polom 76.35 333** *eP* **P** **03 29 28.0 +0.5**
**DPC Dobruska-Polom 76.35 333** *eP* **P** **03 29 28.0 +0.5**
**LANS Liptovska Anna 76.36 330** *eP* **P** **03 29 28.5 +1.0**
LANS pmax pmax
comp=Z,6.0nm,1.0s
**LANS Liptovska Anna 76.36 330** *eP* **P** **03 29 28.5 +1.0**
**CFR Carcaliu 76.40 323** ||*P **P** **03 29 27.8 0.0**
**CFR Carcaliu 76.40 323** ||*P **P** **03 29 27.8 0.0**
**VRI Vrincioaia 76.41 324** ||*P **P** **03 29 28.7 +0.8**
**VRI Vrincioaia 76.41 324** ||*P **P** **03 29 28.7 +0.8**
**MORC Moravsky Berou 76.46 332** ||*P **P** **03 29 25.9 -2.2**
**MORC Moravsky Berou 76.46 332** P **P** **03 29 28.4 +0.3**
MORC pmax pmax
comp=Z,7.0nm,0.9s
**MORC Moravsky Berou 76.46 332** *eP* **P** **03 29 27.9 -0.2**
**MORC Moravsky Berou 76.46 332** P **P** **03 29 28.4 +0.3**
MORC IAmb IAmb 03 29 29.2
comp=Z,6.5nm,0.9s
**UOSS Minazif 76.50 292** P **P** **03 29 29.6 +0.9**
**CLL Collm 76.51 335** *i* P **P** **03 29 27.4 -0.9**
CLL *e*PP **pP** **03 29 47.0 +1.3**
CLL pmax pmax
comp=Z,10.0nm,0.8s
**CLL Collm 76.51 335** *i* P **P** **03 29 27.4 -0.9**
comp=Z,10.0nm,0.8s
CLL *ep*P **pP** **03 29 47.0 +1.3**
**CLL Collm 76.51 335** *eP* **P** **03 29 28.4 +0.1**
comp=Z,8.1nm,0.8s,baz=25,slow=5.8
**CLL Collm 76.51 335** P **P** **03 29 28.4 +0.1**
CLL IAmb IAmb 03 29 28.8
comp=Z,8.8nm,0.7s
**TPGR Topolog 76.54 323** ||*P **P** **03 29 28.7 +0.1**
**MARD Mardin 76.58 310** P **P** **03 29 30.4 +1.3**
MARD IAmb IAmb 03 29 31.4
comp=Z,9.1nm,0.8s
**OZUR 76.60 325** ||*P **P** **03 29 28.0 -0.9**
**BRG Berggiesshubel 76.62 335** *eP* **P** **03 29 29.1 +0.2**
comp=Z,7.2nm,1.2s,baz=25,slow=5.8
**COVR Voineasa-Covas 76.64 325** ||*P **P** **03 29 29.3 +0.1**
**FBE Freiberg 76.75 335** *eP* **P** **03 29 29.7 +0.1**

comp=Z,5.8nm,1.0s,baz=25,slow=5.8
**CLZ Clausthal 76.76 337** *e*P **P 03 29 29.4 -0.4**
comp=Z,6.9nm,0.8s,baz=25,slow=5.8
**DOPR Dopca 76.86 325** ⇑P **P 03 29 31.2 +0.8**
**CBBR Cluj-Babes-Bol 76.91 327** ⇑P **P 03 29 29.8 -0.8**
**TLBR Topalu 76.95 323** ⇑P **P 03 29 31.1 +0.2**
**MLR Muntele Rosu 77.03 325** ⇑P **P 03 29 31.7 +0.2**
**MLR Muntele Rosu 77.03 325** LR LR 04 05 23.8
comp=Z,87nm,19.1s,baz=341,slow=37
**MLR Muntele Rosu 77.03 325** ⇑P **P 03 29 31.7 +0.2**
**VYHS Vyhne 77.14 330** *e*P **P 03 29 31.9 0.0**
**VYHS Vyhne 77.14 330** *e*P **P 03 29 31.9 0.0**
**GTTG Gottingen 77.14 337** *e*P **P 03 29 31.6 -0.2**
comp=Z,7.0nm,0.8s,baz=25,slow=5.8
**VRAC Vranov 77.17 332** ⇑P **P 03 29 30.1 -2.0**
**VRAC Vranov 77.17 332** LR LR 04 06 48.1
comp=Z,66nm,19.8s,baz=354,slow=38
**VRAC Vranov 77.17 332** ⇑P **P 03 29 30.1 -2.0**
**VRAC Vranov 77.17 332** *e*P **P 03 29 32.1 0.0**
**DRGR 77.20 327** ⇑P **P 03 29 32.4 0.0**
**DRGR 77.20 327** ⇑P **P 03 29 32.4 0.0**
**JAVC Velka Javorina 77.21 331** *e*P **P 03 29 33.5 +1.1**
**PRU Pruhonice 77.22 334** *e*P **P 03 29 32.9 +0.6**
**PRU Pruhonice 77.22 334** *e*P **P 03 29 32.9 +0.6**
**ILGA Ilgaz 77.23 317** P **P 03 29 34.2 +1.4**
**ICOR Ion Corvin 77.40 323** ⇑P **P 03 29 34.0 +0.6**
**VOIR 77.44 325** ⇓P **P 03 29 34.3 +0.6**
**VOIR 77.44 325** ⇓P **P 03 29 34.3 +0.6**
**KRUC Moravsky 77.45 332** *e*P **P 03 29 33.7 +0.1**
**TANN Tannenbergstha 77.46 335** *e*P **P 03 29 33.8 +0.1**
comp=Z,1.5nm,0.8s,baz=25,slow=5.8
**WERD Werda 77.47 335** *e*P **P 03 29 33.7 0.0**
comp=Z,5.7nm,0.9s,baz=25,slow=5.8
**MOX Moxa 77.50 336** *e*P **P 03 29 33.7 -0.2**
comp=Z,4.4nm,0.8s,baz=25,slow=5.8
**GUNZ Gunzen 77.54 335** *e*P **P 03 29 34.2 +0.1**
comp=Z,3.8nm,0.8s,baz=25,slow=5.8
**SMOL Smolenice 77.59 331** *e*P **P 03 29 35.4 +1.0**
SMOL pmax pmax
comp=Z,4.0nm,0.9s
**SMOL Smolenice 77.59 331** *e*P **P 03 29 35.4 +1.0**
**WERN Wernitzgruen 77.60 335** *e*P **P 03 29 34.7 +0.2**
comp=Z,6.0nm,0.8s,baz=25,slow=5.8
**ARR Arges 77.66 325** ⇓P **P 03 29 34.7 -0.2**
**MODS Modra-Piesok 77.76 331** *e*P **P 03 29 37.8 +2.4**
**MODS Modra-Piesok 77.76 331** *e*P **P 03 29 37.8 +2.4**
**TX31 Lajitas Ar. Si 77.88 60** P **P 03 29 37.1 +0.7**
**TX32 Lajitas Array 77.88 60** P **P 03 29 37.1 +0.6**
TX32 IAmb IAmb 03 29 52.3
comp=Z,5.6nm,0.8s
**TXAR Lajitas Array 77.88 60** P **P 03 29 37.1 +0.7**
comp=Z,0.9nm,0.6s,baz=301,slow=4.3,SNR=15
**TXAR Lajitas Array 77.88 60** P **P 03 29 36.9 +0.4**
**BNN Bunyan 77.92 315** P **P 03 29 37.4 +0.8**
**BUG Bochum--Univer 77.93 339** *e*P **P 03 29 36.0 -0.2**
comp=Z,7.2nm,0.9s,baz=25,slow=5.8
**BUD Budapest 77.94 330** P **P 03 29 37.8 +1.5**
**MANZ Manzenberg 77.94 335** *e*P **P 03 29 36.6 +0.2**
comp=Z,1.1nm,1.0s,baz=25,slow=5.8
**ROTZ Rotzenmuhle 78.11 335** *e*P **P 03 29 37.4 +0.1**
comp=Z,0.9nm,0.8s,baz=25,slow=5.8
**KHC Kasperske Hory 78.27 334** P **P 03 29 38.6 +0.4**
KHC pmax pmax
comp=Z,8.0nm,0.8s
**KHC Kasperske Hory 78.27 334** *e*P **P 03 29 38.6 +0.4**
**KHC Kasperske Hory 78.27 334** P **P 03 29 38.6 +0.4**
KHC IAmb IAmb 03 29 39.6
comp=Z,7.7nm,0.8s
**BR131 Keskin Array S 78.31 316** P **P 03 29 39.4 +0.7**
BR131 pmax pmax
comp=Z,9.0nm,1.0s
**BR131 Keskin Array S 78.31 316** P **P 03 29 39.4 +0.7**
BR131 IAmb IAmb 03 29 40.8
comp=Z,8.6nm,0.9s
**BRTR Keskin Array B 78.31 316** P **P 03 29 39.2 +0.5**
comp=Z,3.7nm,0.8s,baz=80,slow=4.1,SNR=23
**BRTR Keskin Array B 78.31 316** P **P 03 29 39.0 +0.2**
**CKRC Cesky Krumlov 78.32 333** *e*P **P 03 29 39.0 +0.5**
**GZR Gura Zlata 78.35 326** ⇑P **P 03 29 38.2 -0.6**
**GZR Gura Zlata 78.35 326** ⇑P **P 03 29 38.2 -0.6**
**GRF Grafenberg Arr 78.46 336** *e*P **P 03 29 39.6 +0.3**
comp=Z,1.1nm,0.8s,baz=25,slow=5.8
**WET Wettzell 78.47 334** *e*P **P 03 29 39.9 +0.5**
comp=Z,5.9nm,0.9s,baz=25,slow=5.8
**GEC2 GERESS Array S 78.49 334** *e*P **P 03 29 39.7 +0.2**
comp=Z,2.3nm,0.8s,baz=25,slow=5.8
**GERES GERESS Array B 78.49 334** P **P 03 29 39.7 +0.2**
comp=Z,3.1nm,0.7s,baz=38,slow=6.8,SNR=13
**GERES GERESS Array B 78.49 334** P **P 03 29 39.2 -0.3**
**GAZ Gaziantep 78.54 313** P **P 03 29 40.1 +0.1**
GAZ IAmb IAmb 03 29 40.7
comp=Z,15nm,1.4s
**ANTO Ankara 78.59 317** ⇑P **P 03 29 42.2 +2.0**
**ANTO Ankara 78.59 317** ⇑P **P 03 29 42.2 +2.0**
**ANTO Ankara 78.59 317** P **P 03 29 41.6 +1.3**
**BZS Buzias 78.60 327** ⇑P **P 03 29 39.3 -0.8**
**BZS Buzias 78.60 327** ⇑P **P 03 29 39.3 -0.8**
**CONA Conrad Observa 78.61 332** *i* P **P 03 29 41.1 +0.9**
comp=Z,6.6nm,0.7s,SNR=6.1
**STKA Stephens Creek 78.70 190** LR LR 04 05 55.6
comp=Z,25nm,19.2s,baz=25,slow=37
**HERR Herculane 78.92 326** ⇓P **P 03 29 40.8 -1.0**
**MEM Membach 79.01 339** *d*P **P 03 29 42.4 +0.2**
comp=Z,9.5nm,0.9s
**BSTI Sart Tilman 79.14 339** *d*P **P 03 29 44.6 +1.7**
**MOA Molln 79.19 333** *e*P **P 03 29 43.7 +0.4**
comp=Z,5.2nm,0.9s
**ARSA Arzberg 79.32 332** *e*P **P 03 29 44.6 +0.6**
comp=Z,4.6nm,1.1s
**BCLA Clavier 79.36 339** *d*P **P 03 29 44.1 0.0**
comp=Z,6.4nm,1.1s
**BGES Gesves 79.45 340** *d*P **P 03 29 43.8 -0.8**
**RCHB Rochefort 79.62 339** *d*P **P 03 29 45.7 +0.2**
**FRGS Fruska Gora 79.62 328** ⇓P **P 03 29 45.1 -0.7**
**RJOB Jochberg 79.75 334** *e*P **P 03 29 47.3 +0.9**
comp=Z,4.3nm,0.8s,baz=25,slow=5.8
**FUR Furstenfeldbru 79.82 335** *e*P **P 03 29 47.6 +0.8**
baz=25,slow=5.8
**DOU Dourbes 79.83 340** *d*P **P 03 29 46.9 +0.2**
comp=Z,5.8nm,1.2s
**SOKA Soboth 79.98 332** *i* P **P 03 29 48.1 +0.4**
comp=Z,10.0nm,1.0s,SNR=9.3
**RAR Rarotonga 79.98 136** LR LR 03 58 20.6
comp=Z,31nm,21.5s,baz=234,slow=30
**KBA Koelnbreinsper 80.17 333** *e*P **P 03 29 49.9 +1.1**
comp=Z,12nm,0.7s
**OBKA Obir 80.29 332** *e*P **P 03 29 49.4 +0.1**
comp=Z,3.3nm,0.7s
**MYKA Terra Mystica 80.47 333** *e*P **P 03 29 50.0 -0.3**
comp=Z,3.7nm,0.8s
**WATA Walderalm 80.48 334** *i* P **P 03 29 51.2 +0.8**
comp=Z,24nm,1.2s,SNR=8.0
**DIVS Divibare 80.50 327** P **P 03 29 50.2 -0.3**
DIVS IAmb IAmb 03 29 51.6
comp=Z,6.4nm,1.0s
**BFO Black Forest 80.50 337** *e*P **P 03 29 50.9 +0.5**
comp=Z,6.6nm,0.9s,baz=25,slow=5.8
**VTS Vitosha 80.51 325** ⇓P **P 03 29 51.1 +0.5**
**VTS Vitosha 80.51 325** P **P 03 29 51.7 +1.0**
VTS pmax pmax
comp=Z,14nm,0.9s
**VTS Vitosha 80.51 325** P **P 03 29 51.7 +1.0**
VTS IAmb IAmb 03 29 52.1
comp=Z,14nm,0.9s
**WTTA Wattenberg 80.52 334** *e*P **P 03 29 51.2 +0.5**
comp=Z,12nm,0.6s
**RETA Reutte 80.58 335** *e*P **P 03 29 51.6 +0.7**
comp=Z,8.0nm,0.9s
**MOTA Moosalm 80.61 335** *i* P **P 03 29 51.5 +0.3**
comp=Z,16nm,1.1s,SNR=5.4
**SQTA Sankt Quirin 80.69 334** *i* P **P 03 29 52.3 +0.8**
comp=Z,13nm,1.1s,SNR=6.2
**ABTA Abfaltersbach 80.72 333** *e*P **P 03 29 51.2 -0.5**
comp=Z,2.1nm,0.6s
**M54A Oil Creek Stat 80.75 37** P **P 03 29 51.6 -0.2**
M54A IAmb IAmb 03 29 52.3
comp=Z,10nm,1.0s
**NCB Newcomb 80.80 32** P **P 03 29 51.9 -0.2**
NCB IAmb IAmb 03 30 00.1
comp=Z,14nm,1.3s
**ECH Echery 80.92 337** P **P 03 29 53.2 +0.6**
ECH pmax pmax
comp=Z,9.0nm,0.9s
**ECH Echery 80.92 337** P **P 03 29 53.2 +0.6**
ECH IAmb IAmb 03 29 53.6
comp=Z,8.9nm,0.9s
**FETA Feichten 81.01 335** *i* P **P 03 29 53.9 +0.6**
comp=Z,8.5nm,1.1s,SNR=4.5
**DAVA Damuels 81.02 335** *e*P **P 03 29 54.1 +0.7**
comp=Z,9.8nm,1.1s
**N54A Moraine State 81.06 38** P **P 03 29 53.9 +0.4**
N54A IAmb IAmb 03 30 04.4
comp=Z,16nm,1.2s
**STAL STALIGIAL 81.09 333** P **P 03 29 52.6 -0.9**
STAL IAmb IAmb 03 29 53.3
comp=Z,6.7nm,0.9s
**DAVOX Davos/Dischmat 81.48 335** LR LR 04 13 20.7
comp=Z,92nm,18.2s,baz=233,slow=41
**KIJV Kijevo 81.87 330** P **P 03 29 57.5 -0.1**
**TUE Stuetta 81.91 335** P **P 03 29 59.2 +1.1**
TUE IAmb IAmb 03 30 02.1
comp=Z,12nm,0.9s
**RICI Ricice 82.06 329** P **P 03 29 58.0 -0.7**
**CLTN Cedars of Leba 82.17 44** P **P 03 29 59.6 +0.3**
CLTN IAmb IAmb 03 30 00.7
comp=Z,3.8nm,0.7s
**PDG Podgorica 82.21 327** ⇑P **P 03 29 58.1 -1.3**
**PDG Podgorica 82.21 327** P **P 03 29 59.5 +0.1**
**SSPA Standing Stone 82.21 36** P **P 03 29 59.5 0.0**
SSPA IAmb IAmb 03 30 03.4
comp=Z,5.7nm,1.0s
**CSS Mathiatis 82.22 314** P **P 03 30 00.3 +0.6**
CSS IAmb IAmb 03 30 01.0
comp=Z,9.0nm,0.7s
**MAKA Makarska 82.28 329** P **P 03 29 59.0 -0.8**
**ELL Elmali 82.45 317** P **P 03 30 01.3 +0.3**
ELL pmax pmax
comp=Z,23nm,0.8s
**ELL Elmali 82.45 317** P **P 03 30 01.3 +0.3**
**HVAR Hvar 82.58 329** P **P 03 30 00.3 -1.0**
**MMAI Mount Meron Ar 82.70 311** LR LR 04 11 48.7
comp=Z,72nm,18.0s,baz=221,slow=39
**TIR Tirane 82.91 326** ⇑P **P 03 30 03.6 +0.5**
**TIR Tirane 82.91 326** ⇑P **P 03 30 03.6 +0.5**
**TZTN Tazewell 83.12 42** P **P 03 30 04.9 +0.6**
TZTN IAmb IAmb 03 30 27.6
comp=Z,7.0nm,1.1s
**ZCCA Zocca 83.35 333** P **P 03 30 04.0 -1.4**
**BRYW Bryant College 83.56 32** P **P 03 30 06.5 0.0**
**TKL Tuckaleechee C 83.74 43** LR LR 04 07 53.3
comp=Z,32nm,21.8s,baz=330,slow=36
**NRCA Norcia 84.02 331** P **P 03 30 09.9 +1.0**
**SSB Saint Sauveur 84.33 338** P **P 03 30 10.6 +0.2**
SSB pmax pmax
comp=Z,6.0nm,0.9s
**SSB Saint Sauveur 84.33 338** P **P 03 30 10.6 +0.2**
SSB IAmb IAmb 03 30 12.0
comp=Z,5.9nm,0.9s
**ESDC Sonseca Array 91.64 342** P **P 03 30 45.1 -0.4**
comp=Z,1.1nm,0.9s,baz=358,slow=4.5,SNR=5.3
**MDT Midelt 98.37 341** LR LR 04 21 06.5
comp=Z,94nm,18.3s,baz=104,slow=39
**TORD Torodi Ar. Bea 115.09 329** PKP **PKiKP 03 36 19.0 -0.7**
comp=Z,0.5nm,0.8s,baz=53,slow=1.6,SNR=2.0
**H03N2 Juan Fernandez 139.08 90** T T 06 12 29.5
baz=308,slow=77,SNR=34
**H03N1 Juan Fernandez 139.10 90** T T 06 12 31.2
baz=308,slow=77,SNR=38
**H03N3 Juan Fernandez 139.10 90** T T 06 12 30.6
baz=308,slow=77,SNR=32
**BDFB Brasilia 144.69 36** PKP **PKPab 03 37 14.3 +0.3**
comp=Z,3.0nm,0.8s,baz=271,slow=6.0,SNR=4.5
**BDFB Brasilia 144.69 36** PKIKP **PKPab 03 37 14.5 +0.5**
**BDFB Brasilia 144.69 36** **PKPab 03 37 14.5 +0.5**
**BO01 Tunca 145.02 86** **PKPbc 03 37 15.5 +0.8**
**PLCA Paso Flores 148.52 95** PKPbc **PKPbc 03 37 25.2 +0.6**
comp=Z,2.6nm,0.9s,baz=215,slow=2.4,SNR=3.9
**PLCA Paso Flores 148.52 95** PKP2 **PKPbc 03 37 26.2 +1.6**
**PLCA Paso Flores 148.52 95** PKPbc **PKPbc 03 37 26.2 +1.6**
**CPUP Villa Florida 148.85 60** PKPbc **PKPbc 03 37 26.1 +0.4**
comp=Z,2.0nm,0.7s,baz=335,slow=5.4,SNR=5.3
**CPUP Villa Florida 148.85 60** PKPbc **PKPbc 03 37 25.5 -0.2**
**SNAA Sanae 152.27 196** PKIKP **PKPbc 03 37 32.9 +0.3**
**SNAA Sanae 152.27 196** PKPbc **PKPbc 03 37 32.9 +0.3**

*IDC **01** 03:17:42.2±2.6,62.69S×170.35E,h0km,mb4.0/2,*
*mb1 4.1/2,mb1mx3.4/32,mbtmp4.0/2,MS3.8/17,*
*Ms1 3.8/17,ms1mx3.6/45,Error ellipse: s-maj=120.1km*
*s-min=33.8km az=67.0*
*NEIC **01** 03:17:46.5±1.8,63.3S±0.1×168.4E±0.3,h10km±2km,*
*mb4.4/10,Error ellipse: s-maj=28.5km s-min=14.6km*
*az=141.0*
**ISC 01 03:17:46.3**±0.9,**63.26S**±0.08×**168.4E**±0.3,**h10km,n45,**
σ1§**66**/20,**mb4.2**/5,**MS3.8**/17,**Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **14.48** | **186** | | | **Pn** | **Pn** | **03 21 10.5** | **-0.4** |
| | 0.2nm,0.3s,baz=18,slow=12,SNR=8.5 | | | | | | | | |
| **VNDA** | **Vanda** | **14.48** | **186** | | | | **Pn** | **03 21 10.8** | **-0.1** |
| **DCZ** | **Deep Cove** | **17.85** | **357** | | | | **P** | **03 21 55.8** | **+0.7** |
| DCZ | | | | IAmb | IAmb | | IAmb | 03 21 58.3 | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **17.93** | **359** | | | | **Pn** | **03 21 56.1** | **+0.6** |
| **ODZ** | **Otahua Downs** | **18.30** | **5** | | | | **Pn** | **03 22 00.1** | **+0.1** |
| ODZ | | | | IAmb | IAmb | | IAmb | 03 22 02.1 | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| **LBZ** | **Lake Benmore** | **18.94** | **4** | | | | **Pn** | **03 22 08.8** | **+1.0** |
| LBZ | | | | IAmb | IAmb | | IAmb | 03 22 11.4 | |
| | comp=Z,56nm,1.4s | | | | | | | | |
| **THZ** | **Tophouse** | **21.70** | **9** | P | | | **P** | **03 22 37.2** | **0.0** |
| THZ | | | | IAmb | IAmb | | IAmb | 03 22 53.8 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **MSWZ** | **Moikau Station** | **22.25** | **14** | P | | | **P** | **03 22 45.7** | **+2.6** |
| **URZ** | **Urewera** | **25.59** | **16** | LR | | | LR | 03 31 24.1 | |
| | comp=Z,232nm,20.9s,baz=188,slow=33 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **26.83** | **180** | P | | | **P** | **03 23 29.6** | **+3.1** |
| | comp=Z,2.9nm,0.8s,baz=3.2,slow=7.8,SNR=3.9 | | | | | | | | |
| QSPA | | | | LR | | | LR | 03 32 42.0 | |
| | comp=Z,192nm,18.9s,baz=32,slow=33 | | | | | | | | |
| **CAN** | **Canberra** | **30.42** | **328** | P | | | **P** | **03 23 58.3** | **-0.3** |
| **STKA** | **Stephens Creek** | **35.68** | **319** | LR | | | LR | 03 37 27.5 | |
| | comp=Z,128nm,19.4s,baz=189,slow=33 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.19** | **357** | LR | | | LR | 03 39 31.7 | |
| | comp=Z,82nm,20.4s,baz=120,slow=32 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.19** | **357** | P | | | **P** | **03 25 30.4** | **-0.6** |
| DZM | | | | IAmb | IAmb | | IAmb | 03 25 36.5 | |
| | comp=Z,6.5nm,1.2s | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **43.50** | **284** | T | | | T | 04 13 19.0 | |
| | baz=147,slow=76,SNR=38 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **43.51** | **284** | T | | | T | 04 13 19.3 | |
| | baz=147,slow=76,SNR=40 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **43.52** | **284** | T | | | T | 04 13 20.2 | |
| | baz=147,slow=76,SNR=47 | | | | | | | | |
| **SNAA** | **Sanae** | **45.20** | **184** | LR | | | LR | 03 43 10.2 | |
| | comp=Z,223nm,18.4s,baz=176,slow=33 | | | | | | | | |
| **CTA** | **Charters Tower** | **45.70** | **330** | LR | | | LR | 03 42 37.2 | |
| | comp=Z,61nm,19.2s,baz=74,slow=33 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.73** | **314** | P | | | **P** | **03 26 07.5** | **0.0** |
| | comp=Z,1.6nm,1.0s,baz=155,slow=8.5,SNR=9.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.73** | **314** | P | | | **P** | **03 26 08.5** | **+1.0** |
| **MSVF** | **Nonsavu** | **45.98** | **13** | LR | | | LR | 03 42 46.4 | |
| | comp=Z,104nm,19.0s,baz=303,slow=33 | | | | | | | | |
| **RAR** | **Rarotonga** | **47.21** | **42** | LR | | | LR | 03 40 48.3 | |
| | comp=Z,60nm,20.2s,baz=212,slow=30 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **48.99** | **316** | P | | | **P** | **03 26 34.2** | **+1.3** |
| **WRA** | **Warramunga Arr** | **49.07** | **316** | LR | | | LR | 03 45 42.3 | |
| | comp=Z,73nm,18.7s,baz=78,slow=34 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.07** | **316** | P | | | **P** | **03 26 34.0** | **+0.5** |
| **WB0** | **Warramunga Arr** | **49.22** | **316** | P | | | **P** | **03 26 33.8** | **-0.8** |
| WB0 | | | | IAmb | IAmb | | IAmb | 03 26 44.9 | |
| | comp=Z,9.3nm,1.3s | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **69.58** | **125** | T | | | T | 04 44 48.8 | |
| | baz=208 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **69.58** | **125** | T | | | T | 04 44 49.5 | |
| | baz=208 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **69.60** | **125** | T | | | T | 04 44 47.7 | |
| | baz=208 | | | | | | | | |
| **SUR** | **Sutherland** | **81.24** | **207** | LR | | | LR | 04 04 15.7 | |
| | comp=Z,132nm,19.4s,baz=155,slow=34 | | | | | | | | |
| **PSI** | **Prapat** | **83.37** | **290** | LR | | | LR | 04 01 50.3 | |
| | comp=Z,63nm,21.4s,baz=296,slow=32 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **85.87** | **261** | T | | | T | 05 06 28.4 | |
| | baz=153,slow=76,SNR=23 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **85.88** | **261** | T | | | T | 05 06 25.3 | |
| | baz=153,slow=76,SNR=13 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **85.89** | **261** | T | | | T | 05 06 26.2 | |
| | baz=153,slow=76,SNR=31 | | | | | | | | |
| **LBTB** | **Lobatse** | **87.23** | **213** | LR | | | LR | 04 08 16.4 | |
comp=Z,42nm,18.7s,baz=168,slow=34
**NNA Nana 90.09 117** LR LR 04 01 26.1
comp=Z,52nm,20.9s,baz=247,slow=29
**ATAH Atahualpa 93.85 114** LR LR 04 03 47.0
comp=Z,85nm,19.2s,baz=248,slow=30
**TSUM Tsumeb 94.67 208** LR LR 04 11 24.8
comp=Z,125nm,21.2s,baz=152,slow=34
**LSZ Lusaka 95.84 218** LR LR 04 11 17.6
comp=Z,42nm,18.7s,baz=150,slow=33
**CMAR Chiang Mai Arr 97.45 296** LR LR 04 13 27.5
comp=Z,21nm,19.4s,baz=200,slow=34
**YKA Yellowknife Ar 137.97 43** PKP **PKPdf 03 37 04.4 -5.0**
comp=Z,0.2nm,0.8s,baz=224,slow=3.0,SNR=3.7
**KBZ Khabaz 143.57 264** PKP **PKPdf 03 37 19.9 -0.2**
comp=Z,1.6nm,0.9s,baz=117,slow=2.3,SNR=3.2
**BRTR Keskin Array B 144.41 250** PKPbc **PKPab 03 37 19.6 -0.6**
comp=Z,1.7nm,0.9s,baz=160,slow=4.6,SNR=9.5
**BRTR Keskin Array B 144.41 250** **PKPab 03 37 19.9 -0.3**

*GUC **01** 03:19:43.8±0.7,30.64S×71.24W,h60km±2km,ML3.7*
*NEIC **01** 03:19:44.5±1.1,30.66S±0.02×71.30W±0.08,h45km±17km,*
*ML3.7(GUC),Error ellipse: s-maj=10.3km s-min=2.4km*
*az=84.0*
**ISC 01 03:19:44.5**±1.3,**30.65S**±0.03×**71.28W**±0.06,**h48**km±12km,
**n40,**σ0§**64**/52,**3C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.31** | **266** | ⇑*i*P | | | **Pn** | **03 19 53.9** | **+0.4** |
| CO06 | | | | IAML | | | | 03 20 05.2 | |
| | comp=N,5μm,0.3s | | | | | | | | |
| **CO06** | **Fray Jorge** | **0.31** | **266** | Pn | | | **Pn** | **03 19 53.8** | **+0.2** |
| **CO03** | **El Pedregal** | **0.54** | **110** | ⇓*i*P | | | **Pn** | **03 19 56.0** | **-0.3** |
| CO03 | | | | *i* S | | | **Sn** | **03 20 04.7** | **0.0** |
| CO03 | | | | IAML | | | | 03 20 05.5 | |
| | comp=E,10μm,0.2s | | | | | | | | |
| **CO03** | **El Pedregal** | **0.54** | **110** | | | | **Pn** | **03 19 55.7** | **-0.5** |
| CO03 | | | | | | Sn | **Sn** | **03 20 04.5** | **-0.2** |
| **CO02** | **Combarbal** | **0.60** | **156** | ⇑*i*P | | | **Pn** | **03 19 56.8** | **-0.2** |
| CO02 | | | | *i* S | | | **Sn** | **03 20 06.3** | **+0.3** |
| CO02 | | | | IAML | | | | 03 20 07.3 | |
| | comp=E,15μm,0.4s | | | | | | | | |
| **CO02** | **Combarbal** | **0.60** | **156** | | | | **Pn** | **03 19 56.9** | **-0.2** |
| CO02 | | | | | | | **Sn** | **03 20 06.0** | **0.0** |
| **GO04** | **Tololo Observa** | **0.63** | **41** | *e*P | | | **Pn** | **03 19 57.3** | **-0.2** |
| GO04 | | | | *i* S | | | **Sn** | **03 20 07.3** | **+0.3** |
| **GO04** | **Tololo Observa** | **0.63** | **41** | Pn | | | **Pn** | **03 19 57.4** | **-0.2** |
| GO04 | | | | Sn | | | **Sn** | **03 20 07.1** | **+0.2** |
| **CO05** | **La Serena** | **0.73** | **3** | ⇑*i*P | | | **Pn** | **03 19 58.4** | **-0.2** |
| CO05 | | | | *i* S | | | **Sn** | **03 20 09.1** | **+0.3** |
| CO05 | | | | IAML | | | | 03 20 09.6 | |
| | comp=N,5μm,0.4s | | | | | | | | |
| **CO05** | **La Serena** | **0.73** | **3** | Pn | | | **Pn** | **03 19 58.3** | **-0.3** |
| CO05 | | | | Sn | | | **Sn** | **03 20 08.9** | **+0.1** |
| **LCO** | **Las Campanas** | **1.71** | **17** | *e*P | | | **Pn** | **03 20 11.6** | **-0.6** |
| LCO | | | | *i* S | | | **Sn** | **03 20 32.8** | **-0.2** |
| **LCO** | **Las Campanas** | **1.71** | **17** | Pn | | | **Pn** | **03 20 11.9** | **-0.3** |
| **VA06** | **Catapilco** | **1.90** | **180** | ⇓*i*P | | | **Pn** | **03 20 14.9** | **+0.3** |
| VA06 | | | | *i* S | | | **Sn** | **03 20 38.1** | **+0.8** |
| VA06 | | | | IAML | | | | 03 20 44.0 | |
| | comp=E,733nm,0.3s | | | | | | | | |
| **VA03** | **San Esteban** | **2.19** | **164** | *e*P | | | **Pn** | **03 20 19.0** | **+0.4** |
| VA03 | | | | IAML | | | | 03 20 51.5 | |
| | comp=E,650nm,0.1s | | | | | | | | |
| **VA03** | **San Esteban** | **2.19** | **164** | Pn | | | **Pn** | **03 20 18.7** | **+0.1** |
| **ROCH** | **El Roble** | **2.32** | **174** | *e*P | | | | 03 20 20.6 | |
| ROCH | | | | *e*P | | | **Pn** | **03 20 20.0** | **-0.5** |
| ROCH | | | | IAML | | | | 03 20 53.6 | |
| | comp=N,413nm,0.2s | | | | | | | | |
| ROCH | | | | IAML | | | | 03 20 54.9 | |
| | comp=N,272nm,0.3s | | | | | | | | |
| **ROC1** | **El Roble** | **2.33** | **174** | Pn | | | **Pn** | **03 20 20.2** | **-0.4** |
| **VA01** | **Torpederas** | **2.38** | **187** | Pn | | | **Pn** | **03 20 20.3** | **-0.8** |
| **AC04** | **Llanos de Chal** | **2.45** | **4** | *e*P | | | **Pn** | **03 20 22.0** | **0.0** |
| AC04 | | | | IAML | | | | 03 21 02.5 | |
| | comp=E,392nm,0.4s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.45** | **4** | Pn | | | **Pn** | **03 20 21.9** | **0.0** |
| **PEL** | **Peldehue** | **2.53** | **169** | *e*P | | | **Pn** | **03 20 23.5** | **+0.3** |
| PEL | | | | *i* S | | | **Sn** | **03 20 53.5** | **+0.6** |
| PEL | | | | IAML | | | | 03 21 00.7 | |
| | comp=E,231nm,0.1s | | | | | | | | |
| **PEL** | **Peldehue** | **2.53** | **169** | Pn | | | **Pn** | **03 20 22.6** | **-0.7** |
| **MT02** | **Curacav** | **2.60** | **177** | *e*P | | | **Pn** | **03 20 24.0** | **-0.1** |
| MT02 | | | | *i* S | | | **Sn** | **03 20 54.6** | **+0.1** |
| MT02 | | | | IAML | | | | 03 21 01.2 | |
| | comp=E,131nm,0.2s | | | | | | | | |
| **MT02** | **Curacav** | **2.60** | **177** | Pn | | | **Pn** | **03 20 23.9** | **-0.2** |
| **MT05** | **Renca** | **2.77** | **171** | IAML | | | | 03 21 17.4 | |
| | comp=E,378nm,0.5s | | | | | | | | |
| **MT05** | **Renca** | **2.77** | **171** | Pn | | | **Pn** | **03 20 27.3** | **+0.8** |
| **VA05** | **Santo Domingo** | **3.01** | **185** | *e*P | | | **Pn** | **03 20 29.0** | **-0.6** |
| VA05 | | | | IAML | | | | 03 21 15.1 | |
| | comp=N,285nm,0.1s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.01** | **185** | Pn | | | **Pn** | **03 20 29.1** | **-0.6** |
| **MT09** | **Talagante** | **3.12** | **176** | *e*P | | | **Pn** | **03 20 32.0** | **+0.6** |
| MT09 | | | | *i* S | | | **Sn** | **03 21 07.8** | **+0.2** |
| MT09 | | | | IAML | | | | 03 21 15.9 | |
| | comp=E,175nm,0.1s | | | | | | | | |
| **MT09** | **Talagante** | **3.12** | **176** | Pn | | | **Pn** | **03 20 31.6** | **+0.2** |
| **GO03** | **Copiap** | **3.18** | **17** | Pn | | | **Pn** | **03 20 32.8** | **+0.6** |
| **MT01** | **Popeta** | **3.20** | **180** | *e*P | | | **Pn** | **03 20 32.3** | **-0.1** |
| MT01 | | | | IAML | | | | 03 21 21.7 | |
| | comp=E,155nm,0.4s | | | | | | | | |
| **MT01** | **Popeta** | **3.20** | **180** | Pn | | | **Pn** | **03 20 32.2** | **-0.2** |
| **LMEL** | **Las Melosas** | **3.31** | **164** | *e*P | | | **Pn** | **03 20 35.5** | **+1.4** |
| LMEL | | | | IAML | | | | 03 21 18.9 | |
| | comp=N,156nm,0.2s | | | | | | | | |
| **BO01** | **Tunca** | **3.73** | **178** | Pn | | | **Pn** | **03 20 39.6** | **-0.1** |
| **BO02** | **Sierra Bellavi** | **4.15** | **174** | Pn | | | **Pn** | **03 20 46.5** | **+1.0** |
| **AC02** | **Maricunga** | **4.25** | **27** | Pn | | | **Pn** | **03 20 47.6** | **+0.4** |
| **GO05** | **Huala** | **4.38** | **187** | *e*P | | | **Pn** | **03 20 46.9** | **-1.7** |
| **GO05** | **Huala** | **4.38** | **187** | Pn | | | **Pn** | **03 20 47.0** | **-1.5** |
| **LC01** | **Cunco** | **8.24** | **183** | Pn | | | **Pn** | **03 21 39.3** | **-2.1** |

*MOS **01** 03:27:56.3±0.9,53.89N×158.65E,h171km,mb3.8/9,Error*
*ellipse: s-maj=12.5km s-min=5.0km az=79.8*
*KRSC **01** 03:27:56.2±1.0,53.79N×159.11E,h171km±10km,ML4.0*
*IDC **01** 03:27:57.4±0.7,54.01N×158.51E,h162km±8km,mb3.4/17,*
*mb1 3.6/18,mb1mx3.5/35,mbtmp3.8/18,Error ellipse:*
*s-maj=18.3km s-min=12.2km az=155.0*
**ISC 01 03:27:56.9**±0.6,**53.84N**±0.04×**158.95E**±0.05,**h168**km±5km,
**n108,**σ1§**25**/137,**mb3.5**/24,**5C-2D,Near east coast of**
**Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KII** | **Karymskiy** | **0.36** | **56** | PN | | | **Pn** | **03 28 20.1** | **+0.3** |
| KII | | | | S | | | **Sn** | **03 28 37.7** | **+0.3** |
| **KII** | **Karymskiy** | **0.36** | **56** | *e*P | | | **Pn** | **03 28 20.1** | **+0.3** |
| KII | | | | *e*S | | | **Sn** | **03 28 37.7** | **+0.3** |
| **KRER** | **Koryakskii** | **0.55** | **192** | PN | | | **Pn** | **03 28 21.3** | **+0.5** |
| **KRER** | **Koryakskii** | **0.55** | **192** | *e*P | | | **Pn** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PET** | **Petropavlovsk** | **0.83** | **192** | *e*P | | **Pn** | **03 28 22.6** | **+0.5** |
| PET | | | | *e*S | | **Sn** | **03 28 41.8** | **+0.3** |
| **SPN** | **Mys Shipunski** | **0.98** | **139** | PN | | **Pn** | **03 28 22.8** | **-0.4** |
| SPN | | | | S | | **Sn** | **03 28 41.9** | **-1.5** |
| **SPN** | **Mys Shipunski** | **0.98** | **139** | *e*P | | **Pn** | **03 28 22.8** | **-0.4** |
| SPN | | | | *e*S | | **Sn** | **03 28 41.9** | **-1.5** |
| **PEA0B** | **Petropavlovsk-** | **1.04** | **226** | *de*PN | | **Pn** | **03 28 23.9** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **1.04** | **226** | P | | **Pn** | **03 28 22.9** | **-0.8** |
| | comp=N,33nm,0.3s,baz=74,slow=30,SNR=397 | | | | | | | |
| PETK | | | | S | | **Sn** | **03 28 44.0** | **-0.3** |
| | comp=N,3.2nm,0.3s,baz=222,slow=50,SNR=1.8 | | | | | | | |
| **KRMR** | **Karymshinskiy** | **1.12** | **206** | PN | | **Pn** | **03 28 24.7** | **+0.4** |
| KRMR | | | | S | | **Sn** | **03 28 46.3** | **+0.9** |
| **KRMR** | **Karymshinskiy** | **1.12** | **206** | *e*P | | **Pn** | **03 28 24.7** | **+0.4** |
| KRMR | | | | *e*S | | **Sn** | **03 28 46.3** | **+0.9** |
| **GRL** | **Gorelyy** | **1.39** | **202** | PN | | **Pn** | **03 28 28.0** | **+1.1** |
| GRL | | | | S | | **Sn** | **03 28 52.2** | **+2.2** |
| **GRL** | **Gorelyy** | **1.39** | **202** | *e*P | | **Pn** | **03 28 28.0** | **+1.1** |
| GRL | | | | *e*S | | **Sn** | **03 28 52.2** | **+2.2** |
| **APC** | **Apacha** | **1.41** | **230** | PN | | **Pn** | **03 28 27.6** | **+0.7** |
| APC | | | | S | | **Sn** | **03 28 50.9** | **+0.9** |
| **APC** | **Apacha** | **1.41** | **230** | *e*P | | **Pn** | **03 28 27.6** | **+0.7** |
| APC | | | | *e*S | | **Sn** | **03 28 50.9** | **+0.9** |
| **RUS** | **Russkaya** | **1.43** | **191** | PN | | **Pn** | **03 28 27.1** | **0.0** |
| RUS | | | | S | | **Sn** | **03 28 49.4** | **-1.0** |
| **RUS** | **Russkaya** | **1.43** | **191** | *e*P | | **Pn** | **03 28 27.1** | **0.0** |
| RUS | | | | *e*S | | **Sn** | **03 28 49.4** | **-1.0** |
| **MTVR** | **Mutnovka** | **1.43** | **199** | PN | | **Pn** | **03 28 28.4** | **+1.0** |
| MTVR | | | | S | | **Sn** | **03 28 53.1** | **+2.4** |
| **MTVR** | **Mutnovka** | **1.43** | **199** | *e*P | | **Pn** | **03 28 28.4** | **+1.0** |
| MTVR | | | | *e*S | | **Sn** | **03 28 53.1** | **+2.4** |
| **TUMR** | **Tumrok** | **1.61** | **25** | PN | | **Pn** | **03 28 30.1** | **+1.1** |
| TUMR | | | | S | | **Sn** | **03 28 55.1** | **+1.3** |
| **TUMR** | **Tumrok** | **1.61** | **25** | *e*P | | **Pn** | **03 28 30.1** | **+1.1** |
| TUMR | | | | *e*S | | **Sn** | **03 28 55.1** | **+1.3** |
| **TUMD** | **Tumrok D** | **1.61** | **31** | *e*P | | **Pn** | **03 28 29.4** | **+0.5** |
| **KMNR** | **Kamenistaya** | **2.06** | **21** | PN | | **Pn** | **03 28 34.9** | **+1.1** |
| **KMNR** | **Kamenistaya** | **2.06** | **21** | *e*P | | **Pn** | **03 28 34.9** | **+1.1** |
| **ESO** | **Esso** | **2.10** | **356** | PN | | Pn | 03 28 38.1 | +4.0 |
| **ESO** | **Esso** | **2.10** | **356** | *e*P | | Pn | 03 28 38.1 | +4.0 |
| **KDTR** | **Khodutka, Kamc** | **2.10** | **195** | PN | | **Pn** | **03 28 33.8** | **-0.4** |
| KDTR | | | | S | | **Sn** | **03 29 01.7** | **-1.3** |
| **KDTR** | **Khodutka, Kamc** | **2.10** | **195** | *e*P | | **Pn** | **03 28 33.8** | **-0.4** |
| KDTR | | | | *e*S | | **Sn** | **03 29 01.7** | **-1.3** |
| **KPT** | **Kopyto** | **2.26** | **19** | PN | | **Pn** | **03 28 36.5** | **+0.5** |
| **KPT** | **Kopyto** | **2.26** | **19** | *e*P | | **Pn** | **03 28 36.5** | **+0.5** |
| **KIRR** | **Kirishev** | **2.27** | **20** | PN | | **Pn** | **03 28 36.8** | **+0.6** |
| **KIRR** | **Kirishev** | **2.27** | **20** | *e*P | | **Pn** | **03 28 36.8** | **+0.6** |
| **KOZ** | **Kozyrevsk** | **2.29** | **13** | PN | | **Pn** | **03 28 37.0** | **+0.7** |
| **KOZ** | **Kozyrevsk** | **2.29** | **13** | *e*P | | **Pn** | **03 28 37.0** | **+0.7** |
| **BZWR** | **Bezymyannyi-We** | **2.31** | **22** | PN | | **Pn** | **03 28 37.7** | **+0.9** |
| **BZWR** | **Bezymyannyi-We** | **2.31** | **22** | *e*P | | **Pn** | **03 28 37.7** | **+0.9** |
| **BZGR** | **Bezymyannyi-Gr** | **2.34** | **25** | PN | | **Pn** | **03 28 39.4** | **+2.4** |
| **BZGR** | **Bezymyannyi-Gr** | **2.34** | **25** | *e*P | | **Pn** | **03 28 39.4** | **+2.4** |
| **KRSR** | **Krestovskiy** | **2.56** | **21** | PN | | **Pn** | **03 28 40.2** | **+0.6** |
| **KRSR** | **Krestovskiy** | **2.56** | **21** | *e*P | | **Pn** | **03 28 40.2** | **+0.6** |
| **KLY** | **Klyuchi** | **2.67** | **21** | PN | | **Pn** | **03 28 42.4** | **+1.6** |
| **KLY** | **Klyuchi** | **2.67** | **21** | *e*P | | **Pn** | **03 28 42.4** | **+1.6** |
| **PAU** | **Pauzhetka** | **2.71** | **210** | PN | | **Pn** | **03 28 42.6** | **+1.2** |
| **PAU** | **Pauzhetka** | **2.71** | **210** | *e*P | | **Pn** | **03 28 42.6** | **+1.2** |
| **BDR** | **Baidarnaya** | **3.03** | **24** | PN | | **Pn** | **03 28 47.0** | **+1.7** |
| **BDR** | **Baidarnaya** | **3.03** | **24** | *e*P | | **Pn** | **03 28 47.0** | **+1.7** |
| **SRKR** | **Sorokina** | **3.10** | **23** | PN | | **Pn** | **03 28 47.3** | **+1.2** |
| **SRKR** | **Sorokina** | **3.10** | **23** | *e*P | | **Pn** | **03 28 47.3** | **+1.2** |
| **KBG** | **Krutoberegovo** | **3.25** | **40** | PN | | **Pn** | **03 28 48.1** | **+0.2** |
| KBG | | | | S | | **Sn** | **03 29 26.4** | **-1.3** |
| **KBG** | **Krutoberegovo** | **3.25** | **40** | *e*P | | **Pn** | **03 28 48.1** | **+0.2** |
| KBG | | | | *e*S | | **Sn** | **03 29 26.4** | **-1.3** |
| **KBTR** | **Krutoberegovo** | **3.26** | **42** | *e*P | | **Pn** | **03 28 48.2** | **+0.1** |
| KBTR | | | | *e*S | | **Sn** | **03 29 25.9** | **-2.1** |
| **SKR** | **Severo-Kuril's** | **3.61** | **210** | *i* PN | | **Pn** | **03 28 52.5** | **0.0** |
| **BKI** | **Bering** | **4.32** | **69** | PN | | **Pn** | **03 29 01.4** | **-0.2** |
| **BKI** | **Bering** | **4.32** | **69** | *e*P | | **Pn** | **03 29 01.4** | **-0.2** |
| BKI | | | | *e*S | | **Sn** | **03 29 47.9** | **-4.2** |
| **MA2** | **Magadan** | **7.30** | **325** | *i* PN | | **Pn** | **03 29 36.7** | **-4.0** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **ASAJ** | **Asahikawa** | **14.45** | **234** | P | | **Pn** | **03 31 11.2** | **-2.4** |
| | comp=Z,0.3nm,0.3s,baz=274,slow=12,SNR=0.8 | | | | | | | |
| **BILL** | **Bilibino** | **14.67** | **11** | *e*P | | **Pn** | **03 31 15.8** | **-0.2** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,2.0s | | | | | | | |
| **ERM** | **Erimo** | **15.83** | **228** | *i* P | | **Pn** | **03 31 28.3** | **-2.2** |
| **YAK** | **Yakutsk** | **17.43** | **310** | *i* P | | **Pn** | **03 31 47.3** | **-2.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **17.48** | **266** | *i* P | | **Pn** | **03 31 47.0** | **-3.3** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,2.5s | | | | | | | |
| **TIXI** | **Tiksi** | **22.11** | **335** | *ce*P | | **P** | **03 32 38.1** | **-0.2** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.50** | **228** | P | | **P** | **03 32 42.7** | **+0.4** |
| | comp=Z,0.7nm,0.4s,baz=43,slow=8.3,SNR=1.2 | | | | | | | |
| **HIA** | **Hailar** | **24.57** | **275** | *i* P | | **P** | **03 33 01.6** | **+0.5** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **28.79** | **46** | P | | **P** | **03 33 39.6** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=272,slow=10,SNR=7.6 | | | | | | | |
| **INK** | **Inuvik** | **33.70** | **38** | P | | **P** | **03 34 23.3** | **+1.8** |
| | comp=Z,1.5nm,0.3s,baz=293,slow=8.5,SNR=51 | | | | | | | |
| **NRIK** | **Noril'sk** | **34.90** | **324** | *i* P | | **P** | **03 34 33.0** | **+1.2** |
| NRIK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.80** | **301** | P | | **P** | **03 35 28.2** | **-1.3** |
| | comp=Z,0.4nm,0.3s,baz=60,slow=8.5,SNR=2.5 | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **42.73** | **295** | *i* P | | **P** | **03 35 36.5** | **-0.8** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **43.08** | **43** | P | | **P** | **03 35 41.2** | **+1.5** |
| | comp=Z,0.7nm,0.4s,baz=300,slow=7.3,SNR=16 | | | | | | | |
| **KURK** | **Kurchatov** | **46.76** | **301** | *i* P | | **P** | **03 36 07.7** | **-1.2** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **47.22** | **294** | *i* P | | **P** | **03 36 11.3** | **-1.3** |
| **MKAR** | **Makanchi Array** | **47.22** | **294** | P | | **P** | **03 36 11.4** | **-1.2** |
| | comp=Z,1.2nm,0.5s,baz=56,slow=7.2,SNR=20 | | | | | | | |
| **AAK** | **Ala-Archa** | **54.13** | **295** | *ce*P | | **P** | **03 37 03.5** | **-1.0** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,2.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.13** | **70** | P | | **P** | **03 37 21.6** | **+2.7** |
| | comp=Z,0.5nm,0.6s,baz=306,slow=7.7,SNR=2.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **57.76** | **61** | P | | **P** | **03 37 32.7** | **+2.4** |
| | comp=Z,1.1nm,0.6s,baz=329,slow=2.3,SNR=16 | | | | | | | |
| **FINES** | **FINESS Array B** | **59.16** | **336** | P | | **P** | **03 37 38.6** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=39,slow=6.8,SNR=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **59.16** | **336** | *ce*P | | **P** | **03 37 39.0** | **-0.4** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **OBN** | **Obninsk** | **61.51** | **326** | *e*P | | **P** | **03 37 55.3** | **-0.1** |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **NOA** | **NORSAR Array B** | **62.63** | **343** | P | | **P** | **03 38 02.3** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=35,slow=7.8,SNR=1.4 | | | | | | | |
| **SCHQ** | **Schefferville** | **65.30** | **27** | P | | **P** | **03 38 20.2** | **-0.1** |
| | comp=Z,1.4nm,0.9s,baz=95,slow=17,SNR=1.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **67.62** | **328** | P | | **P** | **03 38 34.0** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=32,slow=6.7,SNR=3.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **67.62** | **328** | P | | **P** | **03 38 34.0** | **-1.1** |
| **KIV** | **Kislovodsk** | **68.42** | **316** | *e*P | | **P** | **03 38 41.1** | **+0.8** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **68.52** | **316** | *ce*P | | **P** | **03 38 40.3** | **-0.5** |
| **TXAR** | **Lajitas Array** | **70.97** | **66** | P | | **P** | **03 38 57.8** | **+1.7** |
| | comp=Z,0.5nm,0.4s,baz=294,slow=5.3,SNR=26 | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.61** | **319** | P | | **P** | **03 39 22.8** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=20,slow=7.9,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.48** | **204** | P | | **P** | **03 39 29.1** | **+1.1** |
| | comp=Z,0.5nm,0.6s,baz=26,slow=6.4,SNR=5.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.48** | **204** | *ce*P | | **P** | **03 39 29.3** | **+1.3** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **80.17** | **203** | P | | **P** | **03 39 50.1** | **+2.0** |
| | comp=Z,0.5nm,0.6s,baz=15,slow=5.3,SNR=4.1 | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.70** | **347** | P | | **P** | **03 40 16.8** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=2.7,slow=5.2,SNR=6.6 | | | | | | | |
| **PLCA** | **Paso Flores** | **144.69** | **89** | PKP | | **PKiKP** | **03 47 14.3** | **-2.4** |
| | comp=Z,2.0nm,1.0s,baz=258,slow=9.8,SNR=3.1 | | | | | | | |

*SKHL **01** 03:36:02.6±0.6, 48°.30N×154°.20E, h74km±4km, mb4.2/8*
*KRSC **01** 03:36:02.3±2.1, 48°.11N×156°.33E, h16km±49km, ML4.4*



*MOS **01** 03:36:02.4±1.7, 48°.35N×154°.14E, h75km, mb4.1/2, Error ellipse: s-maj=16.9km s-min=4.9km az=68.6*
*NEIC **01** 03:36:03.1±1.6, 48°.3N±0°.1×154°.1E±0°.2, h65km±8km, mb4.4/12, Error ellipse: s-maj=21.5km s-min=12.8km az=131.0*
*IDC **01** 03:36:04.3±2.8, 48°.28N×154°.17E, h77km±25km, mb3.5/15, mb1 3.7/17, mb1mx3.5/47, mbtmp3.8/17, MS2.8/1, Ms1 2.8/1, ms1mx2.2/71, Error ellipse: s-maj=24.5km s-min=13.2km az=134.0*

**ISC 01 03:36:03.9±0.6, 48°.32N±0°.08×154°.25E±0°.08, h77km, n108, σ1§59/111, mb3.9/23, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.66** | **27** | *e*PN | | **Pn** | | **03 36 47.4** | **+2.9** |
| SKR | | | | *e*S | | **Sn** | | **03 37 14.5** | **-1.2** |
| SKR | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.4s | | | | | | | | |
| SKR | | | | smax | smax | | | | |
| | comp=N,143nm,0.3s | | | | | | | | |
| SKR | | | | smax | smax | | | | |
| | comp=E,60nm,0.3s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.66** | **27** | *e*P | | **Pn** | | **03 36 43.0** | **-1.5** |
| SKR | | | | AMB | AMB | | | 03 36 48.3 | |
| | comp=E,30nm,0.4s | | | | | | | | |
| SKR | | | | *e*S | | **Sn** | | **03 37 13.1** | **-2.6** |
| SKR | | | | A | A | | | 03 37 19.8 | |
| | comp=E,140nm,0.3s | | | | | | | | |
| SKR | | | | A | A | | | 03 37 19.8 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| **PAU** | **Pauzhetka** | **3.56** | **27** | *e*P | | **Pn** | | **03 36 56.2** | **-0.5** |
| PAU | | | | AMB | AMB | | | 03 36 58.2 | |
| | comp=E,30nm,0.6s | | | | | | | | |
| PAU | | | | *e*S | | **Sn** | | **03 37 37.0** | **-0.5** |
| PAU | | | | A | A | | | 03 37 42.3 | |
| | comp=E,130nm,0.4s | | | | | | | | |
| PAU | | | | A | A | | | 03 37 42.3 | |
| | comp=E,150nm,0.4s | | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.27** | **34** | PN | | **Pn** | | **03 37 04.1** | **-2.3** |
| KDTR | | | | S | | **Sn** | | **03 37 52.1** | **-2.9** |
| **KDTR** | **Khodutka, Kamc** | **4.27** | **34** | *e*P | | **Pn** | | **03 37 04.1** | **-2.3** |
| KDTR | | | | *e*S | | **Sn** | | **03 37 52.1** | **-2.9** |
| **MTVR** | **Mutnovka** | **4.87** | **30** | PN | | **Pn** | | **03 37 14.1** | **-0.5** |
| MTVR | | | | S | | **Sn** | | **03 38 09.1** | **-0.6** |
| **MTVR** | **Mutnovka** | **4.87** | **30** | *e*P | | **Pn** | | **03 37 14.1** | **-0.5** |
| MTVR | | | | *e*S | | **Sn** | | **03 38 09.1** | **-0.6** |
| **GRL** | **Gorelyy** | **4.89** | **29** | PN | | **Pn** | | **03 37 14.7** | **-0.2** |
| **GRL** | **Gorelyy** | **4.89** | **29** | *e*P | | **Pn** | | **03 37 14.7** | **-0.2** |
| **RUS** | **Russkaya** | **4.94** | **32** | PN | | **Pn** | | **03 37 13.3** | **-2.2** |
| RUS | | | | S | | **Sn** | | **03 38 08.5** | **-2.7** |
| **RUS** | **Russkaya** | **4.94** | **32** | *e*P | | **Pn** | | **03 37 13.3** | **-2.2** |
| RUS | | | | *e*S | | **Sn** | | **03 38 08.5** | **-2.7** |
| **RUS** | **Russkaya** | **4.94** | **32** | *e*P | | **Pn** | | **03 37 13.3** | **-2.2** |
| **KRMR** | **Karymshinskiy** | **5.14** | **27** | PN | | **Pn** | | **03 37 19.3** | **+1.0** |
| **KRMR** | **Karymshinskiy** | **5.14** | **27** | *e*P | | **Pn** | | **03 37 19.3** | **+1.0** |
| **PEA0B** | **Petropavlovsk-** | **5.27** | **23** | PN | | **Pn** | | **03 37 20.4** | **+0.4** |
| **PEA0B** | **Petropavlovsk-** | **5.27** | **23** | Pn | | **Pn** | | **03 37 20.4** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **5.27** | **23** | P | | **Pn** | | **03 37 19.8** | **-0.2** |
| | comp=E,1.1nm,0.3s,baz=186,slow=13,SNR=24 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.27** | **23** | Pn | | **Pn** | | **03 37 19.5** | **-0.6** |
| **KUR** | **Kuril'sk** | **5.36** | **237** | *e*PN | | **Pn** | | **03 37 23.5** | **+2.2** |
| KUR | | | | S | | **Sn** | | **03 38 24.5** | **+2.8** |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,68nm,0.4s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,79nm,0.6s | | | | | | | | |
| **KUR** | **Kuril'sk** | **5.36** | **237** | *e*P | | **Pn** | | **03 37 20.7** | **-0.6** |
| KUR | | | | AMB | AMB | | | 03 37 27.3 | |
| | comp=E,20nm,0.6s | | | | | | | | |
| KUR | | | | *e*S | | **Sn** | | **03 38 18.9** | **-2.8** |
| KUR | | | | A | A | | | 03 38 42.3 | |
| | comp=E,20nm,0.6s | | | | | | | | |
| KUR | | | | A | A | | | 03 38 42.3 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| **PET** | **Petropavlovsk** | **5.48** | **29** | *e*PN | | Pn | | 03 37 28.2 | +5.4 |
| PET | | | | *e*S | | **Sn** | | **03 38 23.3** | **-1.0** |
| PET | | | | smax | smax | | | | |
| | comp=E,76nm,0.7s | | | | | | | | |
| **PET** | **Petropavlovsk** | **5.48** | **29** | *e*S | | **Sn** | | **03 38 24.3** | **0.0** |
| **PET** | **Petropavlovsk** | **5.48** | **29** | *e*P | | **Pn** | | **03 37 22.7** | **-0.1** |
| PET | | | | AMB | AMB | | | 03 37 24.7 | |
| | comp=E,20nm,0.5s | | | | | | | | |
| PET | | | | *i* S | | **Sn** | | **03 38 22.7** | **-1.6** |
| PET | | | | A | A | | | 03 38 41.0 | |
| | comp=E,50nm,0.7s | | | | | | | | |
| PET | | | | A | A | | | 03 38 41.0 | |
| | comp=E,80nm,0.7s | | | | | | | | |
| **DALK** | **Dalny** | **5.51** | **30** | *e*S | | **Sn** | | **03 38 24.0** | **-1.3** |
| **UGLR** | **Uglovaya** | **5.69** | **29** | PN | | **Pn** | | **03 37 26.0** | **+0.2** |
| **UGLR** | **Uglovaya** | **5.69** | **29** | *e*P | | **Pn** | | **03 37 26.0** | **+0.2** |
| **KOK** | **Koryaka** | **5.70** | **28** | PN | | **Pn** | | **03 37 26.7** | **+0.7** |
| **KOK** | **Koryaka** | **5.70** | **28** | *e*P | | **Pn** | | **03 37 26.7** | **+0.7** |
| **KOK** | **Koryaka** | **5.70** | **28** | *e*P | | **Pn** | | **03 37 26.7** | **+0.7** |
| **AVH** | **Avacha** | **5.71** | **28** | PN | | **Pn** | | **03 37 27.1** | **+1.0** |
| **AVH** | **Avacha** | **5.71** | **28** | *e*P | | **Pn** | | **03 37 27.1** | **+1.0** |
| **SMAR** | **Somma** | **5.73** | **29** | PN | | **Pn** | | **03 37 27.1** | **+0.7** |
| **SMAR** | **Somma** | **5.73** | **29** | *e*P | | **Pn** | | **03 37 27.1** | **+0.7** |
| **SDLR** | **Sedlovina** | **5.76** | **29** | PN | | **Pn** | | **03 37 26.0** | **-0.9** |
| **SDLR** | **Sedlovina** | **5.76** | **29** | *e*P | | **Pn** | | **03 37 26.0** | **-0.9** |
| **NLC** | **Nalytchevo** | **5.83** | **32** | *e*S | | **Sn** | | **03 38 27.2** | **-5.8** |
| **GNL** | **Ganaly** | **5.86** | **22** | PN | | **Pn** | | **03 37 30.7** | **+2.5** |
| **GNL** | **Ganaly** | **5.86** | **22** | *e*P | | **Pn** | | **03 37 30.7** | **+2.5** |
| **SPN** | **Mys Shipunski** | **6.02** | **35** | PN | | **Pn** | | **03 37 28.5** | **-1.8** |
| **SPN** | **Mys Shipunski** | **6.02** | **35** | *e*P | | **Pn** | | **03 37 28.5** | **-1.8** |
| SPN | | | | *e*S | | **Sn** | | **03 38 33.6** | **-4.2** |
| **SHO** | **Shikotan** | **6.81** | **232** | PN | | **Pn** | | **03 37 37.4** | **-3.7** |
| **SHO** | **Shikotan** | **6.81** | **232** | *e*P | | **Pn** | | **03 37 39.5** | **-1.6** |
| SHO | | | | AMB | AMB | | | 03 37 41.1 | |
| | comp=E,20nm,0.5s | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | | **03 38 52.1** | **-5.0** |
| SHO | | | | A | A | | | 03 39 14.8 | |
| | comp=E,40nm,0.5s | | | | | | | | |
| SHO | | | | A | A | | | 03 39 14.8 | |
| | comp=E,40nm,0.5s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **7.23** | **237** | *e*P | | **Pn** | | **03 37 46.3** | **-0.5** |
| YUK | | | | AMB | AMB | | | 03 37 49.4 | |
| | comp=E,10.0nm,0.6s | | | | | | | | |
| **TYV** | **Tymovskoe** | **7.95** | **293** | *e*P | | **Pn** | | **03 37 55.6** | **-1.0** |
| TYV | | | | AMB | AMB | | | 03 37 59.6 | |
| | comp=E,10.0nm,0.5s | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **9.10** | **247** | Pn | | **Pn** | | **03 38 13.2** | **+0.9** |
| **JKA** | **Kamikawa-asahi** | **9.10** | **247** | *e*P | | **Pn** | | **03 38 13.3** | **+0.9** |
| **ASAJ** | **Asahikawa** | **9.11** | **247** | P | | **Pn** | | **03 38 13.3** | **+0.9** |
| | comp=E,1.3nm,0.3s,baz=65,slow=10,SNR=11 | | | | | | | | |
| **KBTR** | **Krutoberegovo** | **9.48** | **30** | PN | | **Pn** | | **03 38 16.4** | **-1.0** |
| **KBTR** | **Krutoberegovo** | **9.48** | **30** | *e*P | | **Pn** | | **03 38 16.4** | **-1.0** |
| **BKI** | **Bering** | **10.00** | **42** | S | | Sn | | 03 40 02.6 | -12 |
| **ERM** | **Erimo** | **10.05** | **235** | PN | | **Pn** | | **03 38 26.3** | **+1.0** |
| **ERM** | **Erimo** | **10.05** | **235** | Pn | | **Pn** | | **03 38 26.3** | **+1.0** |
| **MA2** | **Magadan** | **11.46** | **351** | PN | | **Pn** | | **03 38 42.8** | **-1.5** |
| **MA2** | **Magadan** | **11.46** | **351** | Pn | | **Pn** | | **03 38 42.8** | **-1.5** |
| **MA2** | **Magadan** | **11.46** | **351** | *e*P | | **Pn** | | **03 38 42.8** | **-1.5** |
| **KLR** | **Kul'dur** | **14.86** | **282** | LR | | LR | | 03 44 42.3 | |
| | comp=E,37nm,21.0s,baz=10.0,slow=35 | | | | | | | | |
| **KSRS** | **Korea Array** | **22.03** | **250** | P | | **P** | | **03 40 51.4** | **-0.5** |
| | comp=E,2.3nm,0.6s,baz=36,slow=9.7,SNR=6.8 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.30** | **156** | T | | T | | 04 14 27.8 | |
| | baz=343,slow=76,SNR=14 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.32** | **156** | T | | T | | 04 14 28.0 | |
| | baz=343,slow=76,SNR=22 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.32** | **156** | T | | T | | 04 14 29.5 | |
| | baz=343,slow=76,SNR=19 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.42** | **157** | T | | T | | 04 15 49.8 | |
| | baz=343,slow=76,SNR=95 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.43** | **157** | T | | T | | 04 15 51.5 | |
| | baz=343,slow=76,SNR=91 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.44** | **157** | T | | T | | 04 15 49.8 | |
| | baz=343,slow=76,SNR=56 | | | | | | | | |
| **IMAR** | **Indian Mountai** | **32.05** | **37** | P | | **P** | | **03 42 23.5** | **+0.7** |
| **TOLK** | **Toolik Lake Re** | **34.00** | **33** | P | | **P** | | **03 42 41.1** | **+1.2** |
| TOLK | | | | lAmb | lAmb | | | 03 42 44.6 | |
| | comp=Z,6.2nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **34.84** | **40** | P | | **P** | | **03 42 47.9** | **+0.8** |
| | comp=Z,0.7nm,1.1s,baz=246,slow=8.8,SNR=4.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **34.84** | **40** | P | | **P** | | **03 42 46.2** | **-0.9** |
| **BMAR** | **Burnt Mountain** | **35.79** | **35** | P | | **P** | | **03 42 56.1** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **37.21** | **43** | P | | **P** | | **03 43 09.3** | **+1.9** |
| **INK** | **Inuvik** | **39.91** | **33** | P | | **P** | | **03 43 31.2** | **+1.4** |
| | comp=Z,0.6nm,0.5s,baz=180,slow=1.5,SNR=4.4 | | | | | | | | |
| **MK31** | **Makanchi Array** | **46.91** | **297** | P | | **P** | | **03 44 26.1** | **-0.4** |
| MK31 | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.3s | | | | | | | | |
| **MK31** | **Makanchi Array** | **46.91** | **297** | P | | **P** | | **03 44 26.1** | **-0.4** |
| **MKAR** | **Makanchi Array** | **46.91** | **297** | P | | **P** | | **03 44 26.2** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=58,slow=6.7,SNR=5.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.91** | **297** | P | | **P** | | **03 44 26.1** | **-0.4** |
| **KURK** | **Kurchatov** | **47.14** | **303** | P | | **P** | | **03 44 26.2** | **-1.9** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **47.14** | **303** | P | | **P** | | **03 44 26.2** | **-1.9** |
| **RES** | **Resolute Bay** | **49.10** | **19** | P | | **P** | | **03 44 43.8** | **+1.0** |
| | comp=Z,0.7nm,0.6s,baz=317,slow=7.8,SNR=4.5 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.20** | **38** | P | | **P** | | **03 44 45.1** | **+1.3** |
| | comp=Z,0.8nm,0.8s,baz=299,slow=7.4,SNR=10 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.49** | **256** | P | | **P** | | **03 45 17.6** | **+1.2** |
| | comp=Z,1.2nm,0.3s,baz=35,slow=6.9,SNR=4.3 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.01** | **310** | P | | **P** | | **03 45 47.0** | **-1.4** |
| **PLID** | **Pearl Lake** | **58.15** | **57** | P | | **P** | | **03 45 51.2** | **+1.5** |
| PLID | | | | lAmb | lAmb | | | 03 46 11.4 | |
| | comp=Z,2.2nm,1.4s | | | | | | | | |
| **CHGR** | **Chuyangaron** | **59.47** | **295** | P | | **P** | | **03 45 59.7** | **+0.9** |
| CHGR | | | | lAmb | lAmb | | | 03 46 01.3 | |
| | comp=Z,3.1nm,0.7s | | | | | | | | |
| **FIA1** | **FINESS Array S** | **62.94** | **335** | P | | **P** | | **03 46 22.5** | **+0.8** |
| **FINES** | **FINESS Array B** | **62.94** | **335** | P | | **P** | | **03 46 21.8** | **+0.1** |
| | comp=Z,3.1nm,1.0s,baz=46,slow=8.2,SNR=5.3 | | | | | | | | |
| **FINES** | **FINESS Array B** | **62.94** | **335** | P | | **P** | | **03 46 22.0** | **+0.3** |
| **FINES** | **FINESS Array B** | **62.94** | **335** | P | | **P** | | **03 46 22.0** | **+0.3** |
| **WB0** | **Warramunga Arr** | **70.07** | **200** | P | | **P** | | **03 47 06.7** | **-0.9** |
| WB0 | | | | lAmb | lAmb | | | 03 47 16.9 | |
| | comp=Z,7.4nm,1.4s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **70.22** | **200** | P | | **P** | | **03 47 07.9** | **-0.6** |
| WR0 | | | | lAmb | lAmb | | | 03 47 30.3 | |
| | comp=Z,6.2nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **70.25** | **200** | P | | **P** | | **03 47 08.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **70.25** | **200** | P | | **P** | | **03 47 08.0** | **-0.7** |
| | comp=Z,1.5nm,0.7s,baz=16,slow=6.6,SNR=6.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.25** | **200** | P | | **P** | | **03 47 07.9** | **-0.7** |
| **AKASG** | **Malin Array Be** | **70.66** | **327** | P | | **P** | | **03 47 10.6** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=35,slow=6.3,SNR=2.2 | | | | | | | | |
| **SCHQ** | **Schefferville** | **71.56** | **24** | P | | **P** | | **03 47 17.0** | **+0.7** |
| | comp=Z,1.8nm,0.8s

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **1.33** | **195** | P | **Pn** | **03 45 58.1** | **+1.6** |
| WBSI | | | | S | **Sn** | **03 46 20.6** | **+1.2** |
| **BASI** | **Baing, Sumba** | **2.03** | **156** | P | **Pn** | **03 46 04.9** | **+1.2** |
| BASI | | | | S | **Sn** | **03 46 33.2** | **+1.0** |
| **BSSI** | **Bau Bau, Buton** | **2.31** | **19** | P | **Pn** | **03 46 07.9** | **+1.0** |
| **MMRI** | **Maumere** | **2.49** | **97** | P | **Pn** | **03 46 10.6** | **+1.7** |
| MMRI | | | | S | **Sn** | **03 46 44.1** | **+2.7** |
| **MMRI** | **Maumere** | **2.49** | **97** | P | **Pn** | **03 46 11.1** | **+2.2** |
| **BKSI** | **Bulukumba** | **3.03** | **7** | P | **Pn** | **03 46 16.2** | **+0.7** |
| **KAPI** | **Kappang** | **3.31** | **0** | P | **Pn** | **03 46 20.9** | **+1.9** |
| | 3.3nm,0.3s,baz=202,slow=8.8,SNR=12 | | | | | | |
| KAPI | | | | S | **Sn** | **03 47 02.2** | **+2.6** |
| | 1.3nm,0.3s,baz=266,slow=7.1,SNR=4.0 | | | | | | |
| **KAPI** | **Kappang** | **3.31** | **0** | P | **Pn** | **03 46 21.2** | **+2.2** |
| **BATI** | **Baumata** | **4.29** | **116** | P | **Pn** | **03 46 33.5** | **+2.1** |
| | 67nm,0.3s,baz=301,slow=1.3,SNR=30 | | | | | | |
| BATI | | | | S | **Sn** | **03 47 22.6** | **+0.6** |
| | 18nm,0.3s,baz=319,slow=22,SNR=1.9 | | | | | | |
| **BATI** | **Baumata** | **4.29** | **116** | P | **Pn** | **03 46 33.6** | **+2.1** |
| **IGBI** | **Denpasar** | **4.57** | **264** | P | **Pn** | **03 46 36.8** | **+1.8** |
| **SOEI** | **Soe** | **4.69** | **108** | P | **Pn** | **03 46 38.0** | **+1.3** |
| **SOEI** | **Soe** | **4.69** | **108** | P | **Pn** | **03 46 38.3** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **5.53** | **268** | P | **Pn** | **03 46 48.6** | **+1.0** |
| | 0.5nm|24nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.53** | **268** | P | **Pn** | **03 46 50.0** | **+2.4** |
| **PCJI** | **Pacitan** | **8.47** | **270** | P | **Pn** | **03 47 27.8** | **+1.2** |
| | 63nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **9.13** | **272** | P | **Pn** | **03 47 36.3** | **+1.0** |
| | 195nm,1.6s | | | | | | |
| **UGM** | **Wanagama** | **9.13** | **272** | P | **Pn** | **03 47 36.3** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **11.26** | **150** | P | **Pn** | **03 48 04.0** | **+0.9** |
| | baz=348,slow=11 | | | | | | |
| **MTN** | **Manton Dam** | **12.06** | **113** | P | **Pn** | **03 48 13.7** | **+0.3** |
| **FAKI** | **Fak Fak** | **13.56** | **67** | P | **Pn** | **03 48 31.3** | **-1.4** |
| **SIJI** | **Sorong** | **13.68** | **58** | P | **Pn** | **03 48 34.4** | **+0.3** |
| | 0.4nm,0.3s,baz=332,slow=4.4,SNR=4.1 | | | | | | |
| **MEEK** | **Meekatharra** | **18.22** | **183** | P | **Pn** | **03 49 30.0** | **+0.8** |
| **WRA** | **Warramunga Arr** | **18.24** | **131** | P | **P** | **03 49 27.6** | **+0.2** |
| | 0.5nm,0.3s,baz=304,slow=13,SNR=21 | | | | | | |
| WRA | | | | S | **S** | **03 52 45.4** | **-2.0** |
| | 0.3nm,0.3s,baz=309,slow=23,SNR=3.0 | | | | | | |
| **WRAB** | **Tennant Creek** | **18.24** | **131** | P | **P** | **03 49 28.2** | **+0.7** |
| **WRKA** | **Warakurna** | **18.50** | **155** | P | **Pn** | **03 49 32.2** | **-0.3** |
| **ASAR** | **Alice Springs** | **20.40** | **140** | P | **P** | **03 49 51.5** | **+0.8** |
| | 1.3nm,0.5s,baz=319,slow=10,SNR=22 | | | | | | |
| ASAR | | | | S | **S** | **03 53 27.2** | **-2.9** |
| | 1.2nm,0.7s,baz=323,slow=21,SNR=6.3 | | | | | | |
| **QIS** | **Mount Isa** | **22.71** | **124** | P | **P** | **03 50 15.1** | **+0.7** |
| **COEN** | **Coen** | **23.65** | **106** | P | **P** | **03 50 22.9** | **-0.1** |
| **STKA** | **Stephens Creek** | **31.00** | **142** | P | **P** | **03 51 29.3** | **+0.9** |
| | 1.9nm,0.4s,baz=324,slow=9.3,SNR=9.2 | | | | | | |
| **SONM** | **Songino Array** | **57.17** | **349** | P | **P** | **03 54 55.5** | **-0.6** |
| | 0.7nm,0.4s,baz=166,slow=9.2,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.22** | **332** | P | **P** | **03 55 42.2** | **-1.4** |
| | 0.5nm,0.4s,baz=152,slow=6.5,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.70** | **339** | P | **P** | **03 56 09.5** | **-2.3** |
| | 1.2nm,0.3s,baz=146,slow=5.0,SNR=9.3 | | | | | | |
| **VNDA** | **Vanda** | **72.51** | **171** | P | **P** | **03 56 34.5** | **-0.1** |
| | 2.3nm,0.9s,baz=333,slow=2.3,SNR=1.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **113.30** | **24** | PKiKP | **PKiKP** | **04 03 41.8** | **-2.3** |
| | 0.1nm,0.4s,baz=300,slow=1.9,SNR=6.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.06** | **280** | PKP | **PKPdf** | **04 03 54.7** | **-1.8** |
| | 0.5nm,0.8s,baz=92,slow=1.7,SNR=1.9 | | | | | | |

*IDC **01** 03:56:13.7±7.3,24.˚19S×179.˚53E,h568km±82km,mb3.0/5, mb1 3.2/6,mb1mx3.0/34,mbtmp4.0/6,Error ellipse: s-maj=107.9km s-min=37.6km az=157.0*

**ISC 01 03:56:11.8±1.7,24.˚5S±0.˚5×179.˚7E±0.˚2,h550km,n6, σ0.˚55/6,mb3.7/5,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **12.39** | **279** | P | **P** | **03 58 54.3** | **-0.2** |
| | 0.2nm,0.3s,baz=95,slow=18,SNR=4.1 | | | | | | |
| **CTA** | **Charters Tower** | **31.18** | **271** | P | **P** | **04 01 47.3** | **+0.7** |
| | 3.3nm,0.4s,baz=99,slow=9.9,SNR=9.2 | | | | | | |
| **STKA** | **Stephens Creek** | **34.22** | **249** | P | **P** | **04 02 12.1** | **0.0** |
| | 1.3nm,0.7s,baz=21,slow=8.6,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **41.64** | **261** | P | **P** | **04 03 12.4** | **-0.2** |
| | 0.5nm,0.4s,baz=95,slow=8.2,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.07** | **267** | P | **P** | **04 03 15.5** | **-0.5** |
| | 1.0nm,0.4s,baz=100,slow=8.2,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.00** | **58** | P | **P** | **04 08 17.9** | **0.0** |
| | 0.4nm,0.9s,baz=221,slow=8.1,SNR=3.6 | | | | | | |

*IDC **01** 04:05:39.8±1.1,4.˚12S×128.˚73E,h0km,mb3.8/5, mb1 4.0/7,mb1mx3.8/37,mbtmp3.8/7,ML3.6/2,MS2.9/1, Ms1 2.9/1,ms1mx2.3/69,Error ellipse: s-maj=38.4km s-min=21.4km az=86.0*

*DJA **01** 04:05:42.0±0.6,4.˚5±3.˚×12.˚9E±.˚,h13km±4km,M4.0/8, mb4.4/1,MLv3.8/8*

**ISC 01 04:05:44.4±0.8,4.˚14S±0.˚07×128.˚61E±0.˚06,h35km,n14, σ1.˚38/16,mb3.9/4,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **0.61** | **317** | P | **Pn** | **04 05 55.0** | **-1.6** |
| AAI | | | | S | **Sn** | **04 06 03.7** | **-1.5** |
| **MSAI** | **Masohi** | **0.85** | **22** | P | **Pn** | **04 05 57.9** | **-2.0** |
| MSAI | | | | S | **Sn** | **04 06 11.8** | **+0.7** |
| **SANI** | **Sanana** | **3.34** | **308** | P | **Pn** | **04 06 34.6** | **+0.5** |
| **FAKI** | **Fak Fak** | **3.83** | **72** | P | **Pn** | **04 06 40.4** | **-0.5** |
| **SIJI** | **Sorong** | **4.19** | **39** | Pn | **Pn** | **04 06 45.1** | **-0.8** |
| | 7.4nm,0.3s,baz=298,slow=23,SNR=7.2 | | | | | | |
| SIJI | | | | Sn | **Sn** | **04 07 33.8** | **+0.1** |
| | 3.9nm,0.3s,baz=200,slow=23,SNR=2.1 | | | | | | |
| **SWI** | **Sorong** | **4.20** | **39** | P | **Pn** | **04 06 46.2** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **14.18** | **192** | Pn | **Pn** | **04 09 02.2** | **-0.6** |
| | baz=4.4,slow=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.67** | **161** | Pn | **Pn** | **04 09 32.7** | **-2.7** |
| | 0.2nm,0.3s,baz=345,slow=13,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **20.08** | **166** | P | **P** | **04 10 16.4** | **+1.4** |
| | 2.5nm,0.6s,baz=347,slow=11,SNR=31 | | | | | | |
| **CTA** | **Charters Tower** | **23.39** | **134** | LR | LR | 04 19 45.7 | |
| | comp=Z,31nm,18.7s,baz=92,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **55.31** | **342** | P | **P** | **04 15 16.1** | **+1.5** |
| | 0.4nm,0.9s,baz=148,slow=8.4,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.09** | **327** | P | **P** | **04 16 23.0** | **+1.5** |
| | 1.1nm,0.5s,baz=124,slow=8.1,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.42** | **334** | P | **P** | **04 16 42.8** | **+0.3** |
| | 1.0nm,0.7s,baz=116,slow=6.6,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **91.36** | **25** | P | **P** | **04 18 45.7** | **-0.7** |
| | 0.2nm,0.6s,baz=241,slow=6.2,SNR=4.8 | | | | | | |

**IDC 01 04:11:14.7±2.1,1.˚50N×126.˚59E,h0km,mb3.6/3, mb1 3.8/3,mb1mx3.4/31,mbtmp3.6/3,Error ellipse: s-maj=178.6km s-min=25.3km az=66.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.62** | **161** | P | P | 04 16 16.8 | -0.5 |
| | 1.1nm,0.4s,baz=339,slow=11,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **26.01** | **165** | P | P | 04 16 50.0 | +0.4 |
| | 0.5nm,0.4s,baz=345,slow=12,SNR=9.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.31** | **326** | P | P | 04 21 18.4 | -0.1 |
| | 0.2nm,0.4s,baz=127,slow=8.0,SNR=5.9 | | | | | | |

**IDC 01 04:28:06.3±5.4,30.˚10S×178.˚48W,h0km,mb3.5/1, mb1 3.9/1,mb1mx2.7/29,mbtmp3.5/1,Error ellipse: s-maj=344.9km s-min=70.4km az=167.0,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.67** | **272** | P | P | 04 36 13.0 | -0.2 |
| | 0.8nm,0.9s,baz=112,slow=7.3,SNR=2.6 | | | | | | |
| **FINES** | **FINESS Array B** | **144.72** | **340** | PKP | PKPdf | 04 47 44.1 | -0.2 |
| | 2.2nm,0.6s,baz=42,slow=4.3,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.81** | **323** | PKPbc | PKPbc | 04 47 59.8 | -0.5 |
| | 0.3nm,0.4s,baz=43,slow=3.4,SNR=2.8 | | | | | | |

**WEL 01 04:29:48.7,40.˚5±10.˚×17.˚4E±1.˚9,h131km±37km,M2.2/12, MLv2.2/12,Error ellipse: s-maj=0.0km s-min=0.0km az=91.6,Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUWZ** | **D'Urville Isla** | **0.63** | **166** | P | Pn | 04 30 10.9 | +2.3 |
| **KHEZ** | **Kahui Hut** | **0.93** | **14** | P | Pn | 04 30 12.5 | +1.5 |
| **TKNZ** | **Takaka Hill** | **1.02** | **214** | P | Pn | 04 30 12.2 | +0.4 |
| **NNZ** | **Nelson** | **1.06** | **194** | P | Pn | 04 30 12.9 | +0.7 |
| **TCW** | **Tory Channel** | **1.10** | **158** | P | Pn | 04 30 14.3 | +1.7 |
| **QRZ** | **Quartz Range** | **1.11** | **235** | P | Pn | 04 30 12.5 | -0.1 |
| **KIW** | **Kapiti Island** | **1.13** | **127** | P | Pn | 04 30 14.4 | +1.5 |
| **TUWZ** | **Tuamarina** | **1.25** | **172** | P | Pn | 04 30 11.9 | -2.2 |
| **MRNZ** | **Matariki Terra** | **1.41** | **211** | P | Pn | 04 30 15.2 | -0.6 |
| **PKVZ** | **Pokaka** | **1.54** | **55** | P | Pn | 04 30 17.6 | +0.2 |
| **MTW** | **Mount Morrison** | **1.66** | **126** | P | Pn | 04 30 19.1 | +0.5 |
| **THZ** | **Tophouse** | **1.69** | **201** | P | Pn | 04 30 18.0 | -1.0 |
| **WNVZ** | **Wahianoa** | **1.69** | **60** | P | Pn | 04 30 19.2 | 0.0 |
| **TWVZ** | **Taurewa** | **1.74** | **50** | P | Pn | 04 30 19.0 | -0.6 |
| **TUVZ** | **Tukino** | **1.75** | **59** | P | Pn | 04 30 19.9 | 0.0 |
| **PRWZ** | **Pori Road** | **1.76** | **103** | P | Pn | 04 30 20.4 | +0.7 |
| **WTVZ** | **West Tongariro** | **1.80** | **54** | P | Pn | 04 30 20.0 | -0.4 |
| **NNVZ** | **North Ngauruho** | **1.81** | **55** | P | Pn | 04 30 20.1 | -0.4 |
| **OTVZ** | **Oturere** | **1.82** | **56** | P | Pn | 04 30 20.4 | -0.3 |
| **ETVZ** | **East Tongariro** | **1.86** | **56** | P | Pn | 04 30 21.0 | -0.2 |
| **TMVZ** | **Te Maari** | **1.87** | **56** | P | Pn | 04 30 21.1 | -0.2 |
| **BFZ** | **Birch Farm** | **1.99** | **105** | P | Pn | 04 30 22.4 | -0.1 |
| **DSZ** | **Denniston Nort** | **2.12** | **222** | P | Pn | 04 30 21.7 | -2.5 |
| **RIGZ** | **Rimuhau** | **3.46** | **66** | P | Pn | 04 30 38.7 | -2.7 |
| **TWGZ** | **Tauwhareparae** | **3.88** | **60** | P | Pn | 04 30 42.2 | -4.7 |

**MAN 01 04:33:33.6,17.˚90N×121.˚71E,h6km,mb4.1,ML2.9,MS2.6, 1C,Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APYP** | **Conner** | **0.45** | **266** | *i* P | Pg | 04 33 43.1 | +0.8 |
| APYP | | | | *i* S | Sb | 04 33 55.6 | +4.7 |

*ANF **01** 04:43:09.9±0.2,59.˚83N×152.˚87W,h103km±2km,ML4.0/49, ML4.0/50,Error ellipse: s-maj=1.9km s-min=1.3km az=118.0*

*NEIC **01** 04:43:10.3±0.9,59.˚86N±0.˚03×152.˚92W±0.˚05, h105km±4km,Error ellipse: s-maj=4.9km s-min=3.5km az=206.0*

*IDC **01** 04:43:10.0±1.2,59.˚78N×152.˚87W,h106km±15km,mb3.8/9, mb1 3.7/14,mb1mx3.5/44,mbtmp4.0/14,Error ellipse: s-maj=17.8km s-min=12.8km az=113.0*

*AEIC **01** 04:43:11±1.4,59.˚84N±0.˚03×152.˚89W±0.˚05,h100km±3km, ML3.7,mb4.2/14(NEIC),ML3.7/38(NEIC),Error ellipse: s-maj=4.9km s-min=3.4km az=200.0*

**ISC 01 04:43:10.2±0.6,59.˚84N±0.˚03×152.˚87W±0.˚03, h106km±4km,n265,σ0.˚85/312,mb4.1/16,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILSW** | **Iliamna Southw** | **0.20** | **318** | Pn | **Pn** | **04 43 24.9** | **-0.4** |
| ILSW | | | | | **Sn** | **04 43 35.6** | **-1.0** |
| **OPT** | **Oil Point** | **0.26** | **225** | | **Pn** | **04 43 25.4** | **0.0** |
| **O20K** | **Slope Mountain** | **0.28** | **27** | | **Pn** | **04 43 25.6** | **+0.1** |
| O20K | | | | | **Sn** | **04 43 37.1** | **+0.1** |
| **O20K** | **Slope Mountain** | **0.28** | **27** | P | **Pn** | **04 43 25.6** | **+0.1** |
| | baz=210,SNR=24 | | | | | | |
| O20K | | | | S | **Sn** | **04 43 36.9** | **-0.1** |
| | baz=210 | | | | | | |
| **AU22** | **Augustine Moun** | **0.53** | **208** | | **Pn** | **04 43 26.9** | **+0.1** |
| AU22 | | | | | **Sn** | **04 43 39.5** | **+0.3** |
| **AUL** | **Augustine Lava** | **0.54** | **212** | | **Pn** | **04 43 27.1** | **+0.2** |
| AUL | | | | | **Sn** | **04 43 39.2** | **-0.2** |
| **AGU** | **Augustine-Summ** | **0.56** | **211** | | **Pn** | **04 43 27.3** | **+0.1** |
| **AUQ** | **Augustine Qik'** | **0.56** | **210** | | **Pn** | **04 43 27.2** | **+0.1** |
| **RED** | **Redoubt Volcan** | **0.59** | **5** | | **Pn** | **04 43 27.2** | **-0.2** |
| RED | | | | | **Sn** | **04 43 39.5** | **-0.7** |
| **RSO** | **Redoubt South** | **0.63** | **5** | Pn | **Pn** | **04 43 27.6** | **-0.3** |
| **HOM** | **Homer** | **0.65** | **105** | | **Pn** | **04 43 28.1** | **+0.4** |
| **HOM** | **Homer** | **0.65** | **105** | P | **Pn** | **04 43 28.2** | **+0.4** |
| | baz=287,SNR=13 | | | | | | |
| HOM | | | | S | **Sn** | **04 43 41.6** | **+0.8** |
| | baz=287 | | | | | | |
| **RDWB** | **Redoubt West** | **0.65** | **1** | | **Pn** | **04 43 27.7** | **-0.3** |
| **NCT** | **North Crescent** | **0.73** | **358** | | **Pn** | **04 43 28.4** | **-0.2** |
| NCT | | | | | **Sn** | **04 43 41.7** | **-0.6** |
| **DFR** | **Drift River** | **0.76** | **7** | | **Pn** | **04 43 28.7** | **-0.2** |
| **RDT** | **Redoubt** | **0.78** | **17** | | **Pn** | **04 43 28.8** | **-0.2** |
| **O19K** | **Port Alsworth** | **0.81** | **297** | | **Pn** | **04 43 28.9** | **-0.2** |
| O19K | | | | Sn | **Sn** | **04 43 42.5** | **-0.9** |
| O19K | | | | IAML | | 04 43 43.4 | |
| | comp=N,3μm,0.5s | | | | | | |
| O19K | | | | IAML | | 04 43 45.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| **O19K** | **Port Alsworth** | **0.81** | **297** | P | **Pn** | **04 43 29.0** | **-0.2** |
| | baz=116,SNR=35 | | | | | | |
| O19K | | | | S | **Sn** | **04 43 42.8** | **-0.6** |
| | baz=116 | | | | | | |
| **CNPM** | **China Poot** | **0.89** | **110** | | **Pn** | **04 43 30.1** | **+0.2** |
| CNPM | | | | | **Sn** | **04 43 45.0** | **+0.2** |
| **Q19K** | **Cape Douglas,** | **0.99** | **204** | Pn | **Pn** | **04 43 30.9** | **-0.1** |
| Q19K | | | | IAML | | 04 43 50.4 | |
| | comp=E,2μm,0.6s | | | | | | |
| Q19K | | | | IAML | | 04 43 51.0 | |
| | comp=N,2μm,0.9s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.99** | **204** | P | **Pn** | **04 43 30.9** | **-0.1** |
| | baz=22,SNR=31 | | | | | | |
| Q19K | | | | S | **Sn** | **04 43 46.3** | **-0.4** |
| | baz=22 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.01** | **93** | | **Pn** | **04 43 31.4** | **+0.2** |
| BRLK | | | | | **Sn** | **04 43 46.8** | **-0.2** |
| **BRSE** | **Bradley Lake S** | **1.08** | **94** | | **Pn** | **04 43 32.2** | **+0.2** |
| **BRSE** | **Bradley Lake S** | **1.08** | **94** | P | **Pn** | **04 43 32.2** | **+0.2** |
| | baz=276,SNR=17 | | | | | | |
| BRSE | | | | S | **Sn** | **04 43 48.0** | **-0.4** |
| | baz=276 | | | | | | |
| **O18K** | **Koktuh Hills** | **1.18** | **272** | | **Pn** | **04 43 32.9** | **-0.1** |
| O18K | | | | IAML | | 04 43 50.0 | |
| | comp=N,708nm,0.4s | | | | | | |
| **O18K** | **Koktuh Hills** | **1.18** | **272** | P | **Pn** | **04 43 32.9** | **-0.1** |
| | baz=90,SNR=16 | | | | | | |
| O18K | | | | S | **Sn** | **04 43 49.2** | **-1.1** |
| | baz=90 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.27** | **321** | Pn | **Pn** | **04 43 33.8** | **-0.3** |
| N19K | | | | | **Sn** | **04 43 50.7** | **-1.5** |
| N19K | | | | IAML | | 04 43 51.6 | |
| | comp=E,511nm,1.0s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.27** | **321** | P | **Pn** | **04 43 34.0** | **-0.1** |
| | baz=140 | | | | | | |
| N19K | | | | S | **Sn** | **04 43 51.1** | **-1.1** |
| | baz=140 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.27** | **42** | | **Pn** | **04 43 35.9** | **+1.9** |
| **CAPN** | **Captain Cook N** | **1.27** | **42** | P | **Pn** | **04 43 35.8** | **+1.8** |
| | baz=224,SNR=14 | | | | | | |
| **P18K** | **Big Mountain,** | **1.28** | **251** | Pn | **Pn** | **04 43 33.7** | **-0.4** |
| P18K | | | | IAML | | 04 43 51.9 | |
| | comp=N,550nm,1.5s | | | | | | |
| **P18K** | **Big Mountain,** | **1.28** | **251** | P | **Pn** | **04 43 33.8** | **-0.4** |
| | baz=68 | | | | | | |
| P18K | | | | S | **Sn** | **04 43 51.0** | **-1.3** |
| | baz=68 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.41** | **13** | | **Pn** | **04 43 35.8** | **+0.1** |
| SPCR | | | | | **Sn** | **04 43 54.6** | **-0.5** |
| **SPCR** | **Spurr Chakacha** | **1.41** | **13** | P | **Pn** | **04 43 35.8** | **+0.1** |
| | baz=194,SNR=131 | | | | | | |
| SPCR | | | | S | **Sn** | **04 43 54.3** | **-0.8** |
| | baz=194 | | | | | | |
| **SPU** | **Mount Spurr** | **1.41** | **16** | | **Pn** | **04 43 35.6** | **-0.1** |
| **SPCN** | **Chakachatna No** | **1.44** | **13** | | **Pn** | **04 43 36.3** | **+0.3** |
| **SPBG** | **Spurr Blockage** | **1.45** | **10** | | **Pn** | **04 43 36.5** | **+0.3** |
| SPBG | | | | | **Sn** | **04 43 57.2** | **+1.2** |
| **SLKM** | **Skilak Lake** | **1.49** | **62** | | **Pn** | **04 43 36.8** | **+0.1** |
| **SPCG** | **Spurr Capps Gl** | **1.52** | **16** | | **Pn** | **04 43 37.3** | **+0.2** |
| **SPNN** | **North Nagishla** | **1.54** | **3** | | **Pn** | **04 43 37.6** | **+0.2** |
| SPNN | | | | | **Sn** | **04 43 57.6** | **-0.4** |
| **O22K** | **Cooper Landing** | **1.70** | **66** | | **Pn** | **04 43 39.4** | **+0.2** |
| **O22K** | **Cooper Landing** | **1.70** | **66** | P | **Pn** | **04 43 39.5** | **+0.3** |
| | baz=249,SNR=64 | | | | | | |
| O22K | | | | S | **Sn** | **04 43 60.0** | **-1.3** |
| | baz=249 | | | | | | |
| **SEW** | **Seward** | **1.74** | **80** | | **Pn** | **04 43 39.6** | **-0.1** |
| **SEW** | **Seward** | **1.74** | **80** | P | **Pn** | **04 43 39.6** | **-0.1** |
| | baz=263,SNR=28 | | | | | | |
| SEW | | | | S | **Sn** | **04 44 01.1** | **-1.0** |
| | baz=263 | | | | | | |
| **FIS** | **Fire Island** | **1.86** | **44** | | **Pn** | **04 43 42.5** | **+1.4** |
| **SUA** | **Susitna One** | **1.94** | **32** | | **Pn** | **04 43 42.8** | **+0.5** |
| SUA | | | | | **Sn** | **04 44 07.1** | **+0.3** |
| **SUA** | **Susitna One** | **1.94** | **32** | P | **Pn** | **04 43 42.9** | **+0.5** |
| | baz=214,SNR=160 | | | | | | |
| SUA | | | | S | **Sn** | **04 44 07.0** | **+0.2** |
| | baz=214 | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.00** | **50** | | **Pn** | **04 43 43.1** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **2.00** | **50** | P | **Pn** | **04 43 43.0** | **+0.1** |
| | baz=233,SNR=172 | | | | | | |
| RC01 | | | | S | **Sn** | **04 44 07.4** | **-0.6** |
| | baz=233 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.06** | **176** | P | **Pn** | **04 43 43.2** | **-0.6** |
| | comp=N,66nm,0.3s,baz=52,slow=8.4,SNR=248 | | | | | | |
| KDAK | | | | S | **Sn** | **04 44 08.4** | **-1.1** |
| | comp=N,100nm,0.3s,baz=335,slow=23,SNR=43 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.06** | **176** | Pn | **Pn** | **04 43 43.2** | **-0.6** |
| KDAK | | | | IAML | | 04 44 10.6 | |
| | comp=N,1μm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.06** | **176** | P | **Pn** | **04 43 43.2** | **-0.6** |
| | baz=356 | | | | | | |
| KDAK | | | | S | **Sn** | **04 44 09.1** | **-0.4** |
| | baz=356 | | | | | | |
| **M19K** | **Big River Lodg** | **2.20** | **341** | | **Pn** | **04 43 45.6** | **0.0** |
| **M19K** | **Big River Lodg** | **2.20** | **341** | P | **Pn** | **04 43 45.6** | **0.0** |
| | baz=160,SNR=39 | | | | | | |
| M19K | | | | S | **Sn** | **04 44 11.8** | **-0.9** |
| | baz=160 | | | | | | |
| **M22K** | **Willow** | **2.35** | **34** | | **Pn** | **04 43 48.0** | **+0.6** |
| M22K | | | | | **Sn** | **04 44 16.0** | **0.0** |
| **M22K** | **Willow** | **2.35** | **34** | P | **Pn** | **04 43 47.9** | **+0.5** |
| | baz=216,SNR=58 | | | | | | |
| M22K | | | | S | **Sn** | **04 44 16.1** | **+0.1** |
| | baz=216 | | | | | | |
| **PWL** | **Port Wells** | **2.48** | **64** | | **Pn** | **04 43 48.5** | **-0.7** |
| **PWL** | **Port Wells** | **2.48** | **64** | P | **Pn** | **04 43 48.4** | **-0.7** |
| | baz=248,SNR=106 | | | | | | |
| PWL | | | | S | **Sn** | **04 44 17.6** | **-1.5** |
| | baz=248 | | | | | | |
| **L19K** | **White Mountain** | **2.54** | **339** | Pn | **Pn** | **04 43 49.7** | **-0.3** |
| L19K | | | | IAML | | 04 44 21.5 | |
| | comp=E,150nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **2.54** | **339** | P | **Pn** | **04 43 49.9** | **-0.1** |
| | baz=157,SNR=55 | | | | | | |
| L19K | | | | S | **Sn** | **04 44 19.5** | **-1.1** |
| | baz=157 | | | | | | |
| **PMR** | **Palmer** | **2.55** | **45** | Pn | **Pn** | **04 43 49.3** | **-0.7** |
| PMR | | | | Sn | **Sn** | **04 44 18.7** | **-1.9** |
| PMR | | | | IAML | | 04 44 21.1 | |
| | comp=N,204nm,0.2s | | | | | | |
| PMR | | | | IAML | | 04 44 27.5 | |
| | comp=E,215nm,0.3s | | | | | | |
| **PMR** | **Palmer** | **2.55** | **45** | P | **Pn** | **04 43 49.3** | **-0.7** |
| | baz=228,SNR=102 | | | | | | |
| PMR | | | | S | **Sn** | **04 44 19.0** | **-1.6** |
| | baz=228 | | | | | | |
| **OHAK** | **Old Harbor** | **2.63** | **185** | Pn | **Pn** | **04 43 50.3** | **-0.8** |
| OHAK | | | | IAML | | 04 44 22.8 | |
| | comp=N,682nm,0.3s | | | | | | |
| **OHAK** | **Old Harbor** | **2.63** | **185** | P | **Pn** | **04 43 50.4** | **-0.8** |
| | baz=4.3,SNR=11 | | | | | | |
| OHAK | | | | S | **Sn** | **04 44 20.5** | **-2.0** |
| | baz=4.3 | | | | | | |
| **KNK** | **Knik Glacier** | **2.69** | **52** | | **Pn** | **04 43 51.3** | **-0.7** |
| **KNK** | **Knik Glacier** | **2.69** | **52** | P | **Pn** | **04 43 51.3** | **-0.7** |
| | baz=236,SNR=70 | | | | | | |
| KNK | | | | S | **Sn** | **04 44 22.4** | **-1.7** |
| | baz=236 | | | | | | |
| **L20K** | **Farewell, AK** | **2.70** | **350** | P | **Pn** | **04 43 52.4** | **+0.3** |
| | baz=169 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.74** | **43** | | **Pn** | **04 43 52.1** | **-0.6** |
| **PLK1** | **Peulik 1** | **2.82** | **225** | | **Pn** | **04 43 53.9** | **+0.3** |
| **CUT** | **Chulitna** | **2.87** | **25** | | **Pn** | **04 43 54.8** | **+0.5** |
| **CUT** | **Chulitna** | **2.87** | **25** | P | **Pn** | **04 43 54.3** | **+0.1** |
| | baz=208,SNR=20 | | | | | | |
| CUT | | | | S | **Sn** | **04 44 27.7** | **-0.5** |
| | baz=208 | | | | | | |
| **SML** | **Sawmill** | **2.98** | **46** | | **Pn** | **04 43 55.1** | **-0.7** |
| **SML** | **Sawmill** | **2.98** | **46** | P | **Pn** | **04 43 55.1** | **-0.7** |
| | baz=230,SNR=42 | | | | | | |
| SML | | | | S | **Sn** | **04 44 28.7** | **-2.1** |
| | baz=230 | | | | | | |
| **GLI** | **Glacier Island** | **3.06** | **67** | | **Pn** | **04 43 55.2** | **-1.6** |
| **GLI** | **Glacier Island** | **3.06** | **67** | P | **Pn** | **04 43 55.7** | **-1.0** |
| | baz=253 | | | | | | |
| GLI | | | | S | **Sn** | **04 44 30.3** | **-2.4** |
| | baz=253 | | | | | | |
| **PPLA** | **Purkeypile** | **3.09** | **6** | Pn | **Pn** | **04 43 58.5** | **+1.1** |
| **PPLA** | **Purkeypile** | **3.09** | **6** | P | **Pn** | **04 43 58.0** | **+0.7** |
| | baz=187 | | | | | | |
| **FID** | **Port Fidalgo** | **3.31** | **71** | | **Pn** | **04 43 58.4** | **-1.8** |
| **Q23K** | **Middleton Isla** | **3.34** | **94** | Pn | **Pn** | **04 44 00.7** | **+0.2** |
| **Q23K** | **Middleton Isla** | **3.34** | **94** | P | **Pn** | **04 44 00.9** | **+0.4** |
| | baz=280 | | | | | | |
| **JPK** | **Jack Peak** | **3.34** | **66** | | **Pn** | **04 43 59.5** | **-1.1** |
| **MID** | **Middleton Isla** | **3.34** | **94** | Pn | **Pn** | **04 44 00.1** | **-0.4** |
| **SII** | **Sitkinak Islan** | **3.36** | **192** | | **Pn** | **04 44 00.1** | **-0.7** |
| **SII** | **Sitkinak Islan** | **3.36** | **192** | P | **Pn** | **04 44 00.1** | **-0.7** |
| | baz=11 | | | | | | |
| SII | | | | S | **Sn** | **04 44 37.1** | **-2.9** |
| | baz=11 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.37** | **51** | | **Pn** | **04 44 00.5** | **-0.6** |
| **SCM** | **Sheep Creek Mo** | **3.37** | **51** | P | **Pn** | **04 44 00.5** | **-0.6** |
| | baz=236,SNR=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CHGN** | **Chignik** | **4.61** | **222** | Pn | | **Pn** | 04 44 17.8 | **+0.3** |
| CHGN | | | | IAML | | | 04 45 10.6 | |
| | comp=E,169nm,0.1s | | | | | | | |
| **CHGN** | **Chignik** | **4.61** | **222** | P | | **Pn** | 04 44 17.5 | **0.0** |
| | baz=37 | | | | | | | |
| **BERG** | **Berg Lake** | **4.62** | **79** | | | **Pn** | 04 44 17.8 | **0.0** |
| **BWN** | **Browne** | **4.64** | **19** | | | **Pn** | 04 44 18.3 | **+0.4** |
| **GLB** | **Gilahina Butte** | **4.74** | **66** | | | **Pn** | 04 44 18.9 | **-0.6** |
| **PAX** | **Paxson** | **4.75** | **45** | Pn | | **Pn** | 04 44 19.4 | **-0.1** |
| **PAX** | **Paxson** | **4.75** | **45** | P | | **Pn** | 04 44 19.1 | **-0.5** |
| | baz=232,SNR=58 | | | | | | | |
| **GRIN** | **Grindle Hills** | **4.81** | **81** | | | **Pn** | 04 44 20.6 | **+0.3** |
| **KHIT** | **Khitrov Hills** | **4.85** | **79** | | | **Pn** | 04 44 21.0 | **+0.1** |
| **VRDI** | **Verde Repeater** | **4.86** | **69** | | | **Pn** | 04 44 20.5 | **-0.6** |
| **PS10** | **TAPS Pump St10** | **4.94** | **40** | | | **Pn** | 04 44 22.4 | **+0.3** |
| **WAX** | **Waxell Ridge** | **5.05** | **79** | | | **Pn** | 04 44 23.4 | **-0.2** |
| **SNH** | **Sunshine Point** | **5.05** | **82** | | | **Pn** | 04 44 23.9 | **+0.3** |
| **NEA2** | **Nenana** | **5.09** | **19** | | | **Pn** | 04 44 23.8 | **-0.3** |
| **NEA2** | **Nenana** | **5.09** | **19** | P | | **Pn** | 04 44 23.6 | **-0.5** |
| | baz=202,SNR=8.6 | | | | | | | |
| **WRH** | **Wood River Hil** | **5.16** | **24** | | | **Pn** | 04 44 24.6 | **-0.4** |
| **GCSA** | **Galena City Sc** | **5.27** | **341** | P | | **Pn** | 04 44 26.3 | **-0.2** |
| | baz=158 | | | | | | | |
| **MLY** | **Manley** | **5.31** | **10** | | | **Pn** | 04 44 27.6 | **+0.5** |
| **MLY** | **Manley** | **5.31** | **10** | P | | **Pn** | 04 44 26.6 | **-0.4** |
| | baz=192,SNR=23 | | | | | | | |
| **ISLE** | **Juniper Island** | **5.31** | **77** | | | **Pn** | 04 44 27.6 | **+0.4** |
| **KIAG** | **Kiagna River** | **5.33** | **74** | | | **Pn** | 04 44 27.5 | **0.0** |
| **BALM** | **Baldy** | **5.35** | **72** | | | **Pn** | 04 44 27.8 | **0.0** |
| **HDA** | **Harding Lake** | **5.36** | **29** | | | **Pn** | 04 44 27.3 | **-0.5** |
| **HDA** | **Harding Lake** | **5.36** | **29** | P | | **Pn** | 04 44 27.1 | **-0.7** |
| | baz=214,SNR=16 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.38** | **24** | | | **Pn** | 04 44 27.5 | **-0.4** |
| **I21K** | **Tanana** | **5.38** | **4** | P | | **Pn** | 04 44 27.6 | **-0.4** |
| | baz=185 | | | | | | | |
| **MENT** | **Mentasta** | **5.39** | **51** | Pn | | **Pn** | 04 44 26.6 | **-1.5** |
| MENT | | | | IAML | | | 04 45 44.2 | |
| | comp=N,70nm,0.5s | | | | | | | |
| MENT | | | | IAML | | | 04 45 47.9 | |
| | comp=E,82nm,0.5s | | | | | | | |
| **BAGL** | **Bagley Icefiel** | **5.43** | **78** | | | **Pn** | 04 44 28.9 | **+0.3** |
| **M26K** | **Nabesna, AK** | **5.43** | **58** | | | **Pn** | 04 44 28.7 | **-0.1** |
| **M26K** | **Nabesna, AK** | **5.43** | **58** | P | | **Pn** | 04 44 28.2 | **-0.6** |
| | baz=246,SNR=75 | | | | | | | |
| **RIDG** | **Independent Ri** | **5.46** | **41** | | | **Pn** | 04 44 29.2 | **+0.1** |
| **RIDG** | **Independent Ri** | **5.46** | **41** | P | | **Pn** | 04 44 29.0 | **-0.1** |
| | baz=228,SNR=29 | | | | | | | |
| **MESA** | **MESA** | **5.49** | **82** | | | **Pn** | 04 44 30.0 | **+0.3** |
| **MESA** | **MESA** | **5.49** | **82** | P | | **Pn** | 04 44 29.2 | **-0.5** |
| | baz=271,SNR=13 | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.51** | **28** | | | **Pn** | 04 44 29.3 | **-0.3** |
| **TCOL** | **CIGO, UAF Yank** | **5.57** | **23** | | | **Pn** | 04 44 30.3 | **-0.2** |
| **TCOL** | **CIGO, UAF Yank** | **5.57** | **23** | P | | **Pn** | 04 44 30.2 | **-0.2** |
| | baz=207,SNR=21 | | | | | | | |
| **COLA** | **College** | **5.57** | **23** | | | **Pn** | 04 44 30.6 | **+0.1** |
| **COLA** | **College** | **5.57** | **23** | P | | **Pn** | 04 44 30.2 | **-0.3** |
| | baz=207 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.57** | **15** | | | **Pn** | 04 44 30.6 | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **5.57** | **15** | P | | **Pn** | 04 44 30.4 | **-0.2** |
| | baz=199,SNR=21 | | | | | | | |
| **MDM** | **Murphy Dome** | **5.58** | **21** | | | **Pn** | 04 44 30.5 | **-0.2** |
| **L26K** | **Log Cabin Wild** | **5.58** | **51** | P | | **Pn** | 04 44 30.4 | **-0.3** |
| | baz=239 | | | | | | | |
| **YAH** | **Yahtse** | **5.59** | **80** | | | **Pn** | 04 44 31.4 | **+0.3** |
| **DOT** | **Dot Lake** | **5.67** | **44** | | | **Pn** | 04 44 31.7 | **-0.2** |
| **IL31** | | **5.68** | **27** | | | **Pn** | 04 44 31.4 | **-0.6** |
| **ILAR** | **Eielson Array** | **5.68** | **27** | P | | **Pn** | 04 44 31.2 | **-0.8** |
| | comp=E,2.3nm,0.3s,baz=213,slow=14,SNR=112 | | | | | | | |
| ILAR | | | | S | | **Sn** | 04 45 32.2 | **-3.7** |
| | comp=E,6.6nm,0.3s,baz=114,slow=9.3,SNR=6.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **5.68** | **27** | Pn | | **Pn** | 04 44 31.6 | **-0.5** |
| **BARN** | **Barnard Glacie** | **5.69** | **73** | | | **Pn** | 04 44 32.5 | **+0.2** |
| **H21K** | **Melozitna Rive** | **5.84** | **0** | P | | **Pn** | 04 44 33.6 | **-0.7** |
| | baz=180 | | | | | | | |
| **POKR** | **Poker Plat Res** | **5.87** | **23** | | | **Pn** | 04 44 34.5 | **-0.1** |
| **POKR** | **Poker Plat Res** | **5.87** | **23** | P | | **Pn** | 04 44 34.1 | **-0.5** |
| | baz=208 | | | | | | | |
| **TABL** | **Table Mountain** | **5.89** | **79** | | | **Pn** | 04 44 34.8 | **-0.4** |
| **M27K** | **Edge Creek, AK** | **5.90** | **60** | P | | **Pn** | 04 44 34.9 | **-0.3** |
| | baz=250 | | | | | | | |
| **SCRK** | **Sand Creek** | **5.90** | **41** | | | **Pn** | 04 44 34.1 | **-1.1** |
| **SCRK** | **Sand Creek** | **5.90** | **41** | P | | **Pn** | 04 44 34.1 | **-1.1** |
| | baz=229,SNR=17 | | | | | | | |
| **CHX** | **Chaix Hills** | **5.91** | **83** | | | **Pn** | 04 44 35.2 | **-0.1** |
| **J25K** | **Salcha River,** | **5.94** | **33** | Pn | | **Pn** | 04 44 35.3 | **-0.3** |
| **J25K** | **Salcha River,** | **5.94** | **33** | P | | **Pn** | 04 44 35.1 | **-0.5** |
| | baz=220,SNR=31 | | | | | | | |
| **SDPT** | **Sand Point** | **6.08** | **226** | Pn | | **Pn** | 04 44 36.8 | **-0.7** |
| **SDPT** | **Sand Point** | **6.08** | **226** | P | | **Pn** | 04 44 37.0 | **-0.4** |
| | baz=39 | | | | | | | |
| **SAMH** | **Samovar Hills** | **6.08** | **82** | | | **Pn** | 04 44 38.9 | **+1.3** |
| **IMAR** | **Indian Mountai** | **6.18** | **357** | Pn | | **Pn** | 04 44 39.0 | **+0.2** |
| **CHNA** | **Chernabura Isl** | **6.20** | **219** | P | | **Pn** | 04 44 38.2 | **-0.8** |
| | baz=33 | | | | | | | |
| **YUK2** | **White River** | **6.20** | **66** | | | **Pn** | 04 44 39.4 | **+0.2** |
| **L27K** | **Beaver Creek,** | **6.20** | **54** | P | | **Pn** | 04 44 38.5 | **-0.7** |
| | baz=244 | | | | | | | |
| **PS06** | **TAPS Pump Stn6** | **6.21** | **12** | | | **Pn** | 04 44 39.4 | **+0.2** |
| **BCAR** | **Beaver Creek A** | **6.22** | **54** | Pn | | **Pn** | 04 44 38.9 | **-0.6** |
| **PCA** | **Pinnacle** | **6.34** | **82** | Pn | | **Pn** | 04 44 42.1 | **+1.0** |
| **PINM** | **Pinnacle** | **6.34** | **82** | P | | **Pn** | 04 44 41.2 | **0.0** |
| | baz=273,SNR=15 | | | | | | | |
| **BVCY** | **Beaver Creek** | **6.37** | **61** | | | **Pn** | 04 44 42.1 | **+0.7** |
| **BVCY** | **Beaver Creek** | **6.37** | **61** | P | | **Pn** | 04 44 41.2 | **-0.2** |
| | baz=252,SNR=34 | | | | | | | |
| **YUK3** | **Moose Creek** | **6.38** | **67** | | | **Pn** | 04 44 42.2 | **+0.5** |
| **YUK3** | **Moose Creek** | **6.38** | **67** | P | | **Pn** | 04 44 41.3 | **-0.5** |
| | baz=258,SNR=56 | | | | | | | |
| **J26L** | **Joseph Creek** | **6.39** | **39** | P | | **Pn** | 04 44 41.1 | **-0.7** |
| | baz=227 | | | | | | | |
| **H24K** | **Noodor Dome** | **6.44** | **19** | P | | **Pn** | 04 44 41.7 | **-0.7** |
| | baz=203 | | | | | | | |
| **PRP** | **Porcupine Dome** | **6.63** | **28** | | | **Pn** | 04 44 44.6 | **-0.3** |
| **PRP** | **Porcupine Dome** | **6.63** | **28** | P | | **Pn** | 04 44 44.3 | **-0.7** |
| | baz=214,SNR=14 | | | | | | | |
| **PNL** | **Peninsula** | **6.81** | **86** | | | **Pn** | 04 44 47.5 | **0.0** |
| **PNL** | **Peninsula** | **6.81** | **86** | P | | **Pn** | 04 44 47.2 | **-0.2** |
| | baz=277,SNR=22 | | | | | | | |
| **YUK4** | **Talbot Arm** | **7.17** | **72** | P | | **Pn** | 04 44 52.9 | **+0.5** |
| | baz=264,SNR=17 | | | | | | | |
| **YUK6** | **Outpost Mounta** | **7.28** | **75** | P | | **Pn** | 04 44 53.8 | **-0.1** |
| | baz=268,SNR=17 | | | | | | | |
| **EGAK** | **Eagle** | **7.37** | **43** | Pn | | **Pn** | 04 44 53.9 | **-1.0** |
| **EGAK** | **Eagle** | **7.37** | **43** | P | | **Pn** | 04 44 53.9 | **-1.0** |
| | baz=233,SNR=6.9 | | | | | | | |
| **COLD** | **Coldfoot** | **7.51** | **8** | Pn | | **Pn** | 04 44 56.5 | **-0.4** |
| **COLD** | **Coldfoot** | **7.51** | **8** | P | | **Pn** | 04 44 56.4 | **-0.5** |
| | baz=190,SNR=12 | | | | | | | |
| **DAWY** | **Dawson** | **7.63** | **51** | P | | **Pn** | 04 44 58.0 | **-0.6** |
| | baz=242,SNR=9.1 | | | | | | | |
| **HYT** | **Haines Junctio** | **7.69** | **76** | P | | **Pn** | 04 44 59.6 | **+0.2** |
| | baz=269,SNR=13 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **8.46** | **22** | Pn | | **Pn** | 04 45 08.4 | **-1.3** |
| **I29M** | **Ogilvie Camp,** | **8.69** | **44** | Pn | | **Pn** | 04 45 12.5 | **-0.4** |
| **SKAG** | **Skagway** | **8.89** | **85** | Pn | | **Pn** | 04 45 16.6 | **+1.0** |
| **TOLK** | **Toolik Lake Re** | **8.96** | **8** | Pn | | **Pn** | 04 45 17.5 | **+1.1** |
| **TOLK** | **Toolik Lake Re** | **8.96** | **8** | P | | **Pn** | 04 45 16.3 | **-0.2** |
| | baz=191,SNR=9.9 | | | | | | | |
| **TNA** | **Tin City** | **8.97** | **316** | Pn | | **Pn** | 04 44 17.6 | **+1.0** |
| **TNA** | **Tin City** | **8.97** | **316** | P | | **Pn** | 04 44 16.0 | **-0.6** |
| | baz=123 | | | | | | | |
| **AKUT** | **Akutan** | **9.06** | **237** | Pn | | **Pn** | 04 44 17.6 | **-0.3** |
| **M31M** | **Drury Creek, Y** | **9.27** | **67** | P | | **Pn** | 04 44 21.1 | **+0.3** |
| | baz=264,SNR=14 | | | | | | | |
| **BESE** | **Bessie Mountai** | **9.33** | **90** | Pn | | **Pn** | 04 44 22.8 | **+1.3** |
| **UNV** | **Unalaska Valle** | **9.57** | **237** | Pn | | **Pn** | 04 44 23.9 | **-0.9** |
| **UNV** | **Unalaska Valle** | **9.57** | **237** | P | | **Pn** | 04 44 24.0 | **-0.9** |
| | baz=46 | | | | | | | |
| **SIT** | **Sitka** | **9.61** | **99** | Pn | | **Pn** | 04 44 24.0 | **-1.3** |
| **GAMB** | **Gambell** | **9.73** | **302** | Pn | | **Pn** | 04 44 25.7 | **+0.6** |
| **P33M** | **Teslin, Yukon** | **10.04** | **79** | P | | **Pn** | 04 44 32.0 | **+0.8** |
| | baz=277,SNR=17 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **10.77** | **66** | P | | **Pn** | 04 44 41.4 | **+0.3** |
| | baz=265,SNR=8.7 | | | | | | | |
| **CRAG** | **Craig** | **11.43** | **104** | Pn | | **Pn** | 04 44 49.6 | **-0.3** |
| **A21K** | **Barrow** | **11.63** | **354** | Pn | | **Pn** | 04 44 49.9 | **-2.6** |
| **A21K** | **Barrow** | **11.63** | **354** | P | | **Pn** | 04 44 50.4 | **-2.1** |
| | baz=171 | | | | | | | |
| **DLBC** | **Dease Lake** | **11.80** | **87** | P | | **Pn** | 04 44 56.5 | **+1.5** |
| | comp=E,1.2nm,0.3s,baz=276,slow=10,SNR=20 | | | | | | | |
| DLBC | | | | S | | **Sn** | 04 48 01.7 | **-2.9** |
| | comp=E,0.6nm,0.3s,baz=143,slow=24,SNR=9.6 | | | | | | | |
| **INK** | **Inuvik** | **11.93** | **37** | P | | **Pn** | 04 44 56.4 | **-0.1** |
| | comp=E,0.2nm,0.3s,baz=238,slow=18,SNR=12 | | | | | | | |
| INK | | | | S | | **Sn** | 04 48 03.2 | **-4.2** |
| | comp=E,0.1nm,0.3s,baz=226,slow=5.8,SNR=1.8 | | | | | | | |
| **ADK** | **Adak** | **15.49** | **250** | Pn | | **Pn** | 04 46 43.3 | **+0.9** |
| **BBB** | **Bella Bella** | **15.75** | **108** | P | | **Pn** | 04 46 48.4 | **+1.0** |
| | comp=E,0.1nm,0.3s,baz=156,slow=14,SNR=1.0 | | | | | | | |
| **A36M** | **Sachs Harbour** | **16.36** | **31** | P | | **Pn** | 04 46 52.8 | **-0.4** |
| | baz=236,SNR=15 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.46** | **65** | P | | **Pn** | 04 47 18.3 | **-0.3** |
| | comp=E,0.2nm,0.3s,baz=277,slow=10,SNR=24 | | | | | | | |
| YKA | | | | PcP | | **PcP** | 04 51 40.7 | **-1.9** |
| | comp=E,0.1nm,0.3s,baz=295,slow=1.6,SNR=6.4 | | | | | | | |
| YKA | | | | ScP | | **ScP** | 04 55 08.1 | **+0.2** |
| | comp=E,0.0nm,0.3s,baz=278,slow=2.8,SNR=4.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.46** | **65** | P | | **P** | 04 47 17.0 | **-0.3** |
| **PETK** | **Petropavlovsk-** | **27.55** | **278** | P | | **P** | 04 48 47.0 | **+0.4** |
| | comp=E,5.4nm,1.2s,baz=77,slow=12,SNR=5.2 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **27.55** | **278** | P | | **P** | 04 48 47.4 | **+0.8** |
| **PDAR** | **Pinedale Array** | **31.29** | **103** | pP | | pP | 04 49 40.6 | **-3.1** |
| | comp=E,0.2nm,0.4s,baz=327,slow=3.5,SNR=5.0 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **33.03** | **81** | P | | **P** | 04 49 38.8 | **+3.8** |
| **EYMN** | **Ely** | **36.72** | **81** | P | | **P** | 04 50 08.1 | **+1.4** |
| EYMN | | | | IAmb | | IAmb | 04 50 09.7 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **SUMG** | **Summit** | **40.52** | **25** | P | | **P** | 04 50 38.6 | **0.0** |
| SUMG | | | | IAmb | | IAmb | 04 51 05.9 | |
| | comp=Z,1.8nm,0.9s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **42.08** | **3** | P | | **P** | 04 50 51.4 | **+0.6** |
| | comp=Z,3.4nm,0.4s,baz=131,slow=4.6,SNR=13 | | | | | | | |
| **SCHQ** | **Schefferville** | **43.60** | **57** | P | | **P** | 04 51 03.7 | **+0.4** |
| | comp=Z,1.5nm,0.5s,baz=299,slow=6.5,SNR=7.9 | | | | | | | |
| **SCHQ** | **Schefferville** | **43.60** | **57** | P | | **P** | 04 51 04.0 | **+0.6** |
| SCHQ | | | | IAmb | | IAmb | 04 51 22.0 | |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| **SSPA** | **Standing Stone** | **48.74** | **78** | P | | **P** | 04 51 45.3 | **+1.5** |
| SSPA | | | | IAmb | | IAmb | 04 52 02.0 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **54.94** | **306** | P | | **P** | 04 52 31.0 | **+1.2** |
| | comp=Z,1.2nm,0.5s,baz=50,slow=6.8,SNR=10.0 | | | | | | | |
| **SONM** | **Songino Array** | **54.94** | **306** | P | | **P** | 04 52 30.7 | **+0.9** |
| SONM | | | | IAmb | | IAmb | 04 52 31.6 | |
| | comp=Z,3.4nm,1.2s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.54** | **324** | P | | **P** | 04 52 48.1 | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **57.54** | **324** | P | | **P** | 04 52 48.2 | **+0.2** |
| | comp=Z,5.5nm,0.4s,baz=33,slow=7.1,SNR=29 | | | | | | | |
| **FINES** | **FINESS Array B** | **59.05** | **1** | P | | **P** | 04 52 58.7 | **+0.3** |
| | comp=Z,0.5nm,0.3s,baz=344,slow=6.3,SNR=6.1 | | | | | | | |
| **KURK** | **Kurchatov** | **62.20** | **326** | P | | **P** | 04 53 19.4 | **-0.5** |
| KURK | | | | IAmb | | IAmb | 04 53 20.7 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **62.24** | **332** | P | | **P** | 04 53 20.0 | **-0.1** |
| BRVK | | | | IAmb | | IAmb | 04 53 20.4 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **64.60** | **321** | P | | **P** | 04 53 35.6 | **-0.2** |
| **MKAR** | **Makanchi Array** | **64.60** | **321** | P | | **P** | 04 53 35.4 | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=42,slow=6.8,SNR=25 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.60** | **321** | P | | **P** | 04 53 35.6 | **-0.3** |
| **MAKZ** | **Makanchi** | **64.69** | **322** | P | | **P** | 04 53 35.9 | **-0.5** |
| MAKZ | | | | IAmb | | IAmb | 04 53 36.6 | |
| | comp=Z,2.2nm,1.0s | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.04** | **337** | P | | **P** | 04 53 57.1 | **-0.5** |
| **AKASG** | **Malin Array Be** | **69.81** | **359** | P | | **P** | 04 54 07.1 | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=8.5,slow=7.2,SNR=2.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.58** | **24** | P | | **P** | 04 54 54.3 | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=342,slow=5.4,SNR=4.7 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.58** | **24** | P | | **P** | 04 54 54.5 | **+0.3** |
| **BOSA** | **Boshof** | **148.76** | **3** | PKPbc | | **PKPbc** | 05 02 43.9 | **-0.8** |
| | comp=Z,0.6nm,0.4s,baz=351,slow=2.4,SNR=3.7 | | | | | | | |
| **BOSA** | **Boshof** | **148.76** | **3** | | | **PKPbc** | 05 02 44.2 | **-0.6** |

*RHSSO **01** 04:48:37.9±0.9, 41°.96N×20°.05E, h6$^{km}$±3$^{km}$, ML2.2/7*
*PDG **01** 04:48:39.9±0.0, 42°.11N×19°.90E, h12$^{km}$, ML2.1/10, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*TIR **01** 04:48:39.6, 42°.10N×20°.00E, h20$^{km}$±1$^{km}$, Md2.7, Ml2.0*
*BEO **01** 04:48:41.4±0.3, 42°.08N×19°.93E, h5$^{km}$±3$^{km}$, ML1.9/8*

**ISC 01 04:48:39.7±1.1, 42°.04N±0°.02×19°.92E±0°.02, h4$^{km}$±9$^{km}$, n43, σ1°24/79, 5C-3D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **BCI** | **Bajram Curri** | **0.34** | **19** | P | | **Pg** | **04 48** | **46.0** | | **-0.4** |
| | baz=11 | | | | | | | | | |
| BCI | | | | S | | **Sg** | **04 48** | **50.9** | | **+0.1** |
| | baz=11 | | | | | | | | | |
| BCI | | | | AMP | | | | | | |
| | comp=N,0.8nm,0.2s,baz=11 | | | | | | | | | |
| **ULC** | **Ulcinj** | **0.51** | **261** | *e*Pg | | **Pg** | **04 48** | **49.5** | | **0.0** |
| ULC | | | | *i* Sg | | **Sb** | **04 48** | **57.7** | | **-1.3** |
| **PHP** | **Peshkopia** | **0.53** | **132** | P | | **Pg** | **04 48** | **50.1** | | **+0.1** |
| | baz=141 | | | | | | | | | |
| PHP | | | | S | | **Sb** | **04 48** | **58.7** | | **-0.9** |
| | baz=141 | | | | | | | | | |
| PHP | | | | AMP | | | | | | |
| | comp=N,0.6nm,0.4s,baz=141 | | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.56** | **285** | *e*Pg | | **Pg** | **04 48** | **50.1** | | **-0.5** |
| DRME | | | | *e*Sg | | **Sb** | **04 49** | **00.2** | | **-0.4** |
| **DRME** | **Dracevica, Mon** | **0.56** | **285** | *e*Pg | | **Pg** | **04 48** | **50.1** | | **-0.5** |
| DRME | | | | *e*Sg | | **Sg** | **04 48** | **58.7** | | **+0.8** |
| **PDG** | **Podgorica** | **0.63** | **308** | *e*Pg | | **Pg** | **04 48** | **51.6** | | **-0.2** |
| PDG | | | | *e*Sg | | **Sg** | **04 49** | **00.4** | | **+0.5** |
| **PDG** | **Podgorica** | **0.63** | **308** | *e*Pg | | **Pg** | **04 48** | **50.8** | | **-1.0** |
| PDG | | | | *e*Sg | | **Sb** | **04 49** | **02.3** | | **0.0** |
| **TTG** | **Podgorica** | **0.63** | **308** | ⇓*i*Pg | | **Pg** | **04 48** | **50.8** | | **-1.0** |
| TTG | | | | *i* Sg | | **Sg** | **04 49** | **00.0** | | **+0.1** |
| **TIR** | **Tirane** | **0.70** | **183** | *e*Pg | | **Pb** | **04 48** | **54.6** | | **+0.2** |
| TIR | | | | *e*Sg | | **Sn** | **04 49** | **05.7** | | **-1.8** |
| **TIR** | **Tirane** | **0.70** | **183** | P | | **Pb** | **04 48** | **54.4** | | **0.0** |
| | baz=188 | | | | | | | | | |
| TIR | | | | S | | **Sn** | **04 49** | **06.1** | | **-1.4** |
| | baz=188 | | | | | | | | | |
| TIR | | | | AMP | | | | | | |
| | comp=N,0.1nm,0.3s,baz=188 | | | | | | | | | |
| **BUM** | **Brajici-Budva** | **0.80** | **289** | ⇓*i*Pg | | **Pg** | **04 48** | **54.3** | | **-0.9** |
| BUM | | | | *e*Sg | | **Sg** | **04 49** | **06.5** | | **+0.9** |
| **IVA** | **Berane** | **0.83** | **359** | *e*Pg | | **Pg** | **04 48** | **54.2** | | **-1.4** |
| IVA | | | | *i* Sg | | **Sg** | **04 49** | **06.2** | | **-0.2** |
| **CEME** | **Cevo** | **0.90** | **304** | ⇑*i*Pg | | **Pg** | **04 48** | **55.7** | | **-1.2** |
| CEME | | | | *i* Sg | | **Sg** | **04 49** | **09.2** | | **+0.6** |
| **NKME** | **Niksic** | **1.02** | **316** | ⇓*i*Pg | | **Pg** | **04 48** | **57.7** | | **-1.5** |
| NKME | | | | *e*Sg | | **Sg** | **04 49** | **13.0** | | **+0.6** |
| **HCY** | **Herceg Novi** | **1.13** | **291** | ⇑*i*Pg | | **Pb** | **04 49** | **00.6** | | **-1.2** |
| HCY | | | | *e*Sg | | **Sn** | **04 49** | **17.5** | | **-0.8** |
| **HCY** | **Herceg Novi** | **1.13** | **291** | *e*Pg | | **Pb** | **04 49** | **00.2** | | **-1.6** |
| HCY | | | | *i* Sg | | **Sn** | **04 49** | **17.5** | | **-0.8** |
| **SJES** | **Sjenica** | **1.22** | **2** | *e*Pg | | **Pn** | **04 49** | **02.4** | | **-1.2** |
| SJES | | | | *e*Sg | | **Sb** | **04 49** | **19.4** | | **-0.1** |
| **BRY** | **Bratogost** | **1.33** | **310** | ⇑*i*Pg | | **Pn** | **04 49** | **04.1** | | **-1.1** |
| BRY | | | | *e*Sg | | **Sg** | **04 49** | **24.8** | | **+2.2** |
| **BRY** | **Bratogost** | **1.33** | **310** | *e*Pg | | **Pn** | **04 49** | **03.5** | | **-1.7** |
| BRY | | | | *i* Sg | | **Sg** | **04 49** | **23.8** | | **+1.2** |
| **TREB** | **Trebinje** | **1.34** | **301** | *e*Pg | | **Pn** | **04 49** | **04.2** | | **-1.0** |
| TREB | | | | *e*Sg | | **Sg** | **04 49** | **24.8** | | **+1.9** |
| **TREB** | **Trebinje** | **1.34** | **301** | ⇑*i*Pg | | **Pn** | **04 49** | **04.3** | | **-1.0** |
| TREB | | | | *e*Sg | | **Sg** | **04 49** | **24.8** | | **+1.9** |
| **PLE** | **Pljevlja** | **1.34** | **343** | ⇑*i*Pg | | **Pn** | **04 49** | **03.6** | | **-1.8** |
| PLE | | | | *e*Sg | | **Sb** | **04 49** | **23.5** | | **+0.4** |
| **UPM** | **Unac-Piva** | **1.38** | **328** | *e*Sg | | **Sg** | **04 49** | **25.7** | | **+1.6** |
| **SELS** | **Selova** | **1.47** | **37** | *e*Pg | | **Pn** | **04 49** | **06.7** | | **-0.3** |
| SELS | | | | *e*Sg | | **Sg** | **04 49** | **27.9** | | **+0.9** |
| **IVAS** | **Ivanjica** | **1.54** | **6** | *e*Pg | | **Pb** | **04 49** | **09.3** | | **+0.4** |
| IVAS | | | | *e*Sg | | **Sb** | **04 49** | **29.0** | | **+0.2** |
| **RUDO** | **Rudo** | **1.62** | **346** | *e*Pn | | **Pn** | **04 49** | **08.7** | | **-0.4** |
| RUDO | | | | *e*Sn | | **Sb** | **04 49** | **31.0** | | **-0.1** |
| **PRVS** | **Prvonek** | **1.67** | **73** | *e*Pn | | **Pb** | **04 49** | **11.4** | | **+0.4** |
| PRVS | | | | *e*Sn | | **Sn** | **04 49** | **31.7** | | **+0.1** |
| **FNA** | **Florina** | **1.67** | **138** | P | | **Pb** | **04 49** | **10.7** | | **-0.3** |
| | baz=141 | | | | | | | | | |
| FNA | | | | S | | **Sg** | **04 49** | **34.7** | | **+1.3** |
| | baz=141 | | | | | | | | | |
| **STON** | **Ston** | **1.84** | **297** | *e*Pn | | **Pn** | **04 49** | **12.5** | | **+0.5** |
| STON | | | | *e*Sn | | **Sb** | **04 49** | **38.1** | | **+0.9** |
| **STON** | **Ston** | **1.84** | **297** | *e*Pn | | **Pn** | **04 49** | **11.7** | | **-0.3** |
| STON | | | | *e*Sn | | **Sb** | **04 49** | **36.6** | | **-0.6** |
| **STON** | **Ston** | **1.84** | **297** | *e*Pn | | **Pn** | **04 49** | **12.1** | | **+0.1** |
| STON | | | | Sn | | **Sg** | **04 49** | **39.8** | | **+1.0** |
| **BBLS** | **Lazići** | **1.86** | **348** | *e*Pn | | **Pn** | **04 49** | **11.6** | | **-0.8** |
| BBLS | | | | *e*Sn | | **Sn** | **04 49** | **36.9** | | **+0.5** |
| **DIVS** | **Divibare** | **2.05** | **1** | *e*Pn | | **Pn** | **04 49** | **15.8** | | **+0.7** |
| **DIVS** | **Divibare** | **2.05** | **1** | *e*Pn | | **Pn** | **04 49** | **14.6** | | **-0.5** |
| DIVS | | | | *e*Sn | | **Sn** | **04 49** | **40.6** | | **-0.6** |
| **LSTV** | **Lastovo** | **2.35** | **289** | *e*Pn | | **Pn** | **04 49** | **19.2** | | **+0.1** |
| **MAKA** | **Makarska** | **2.47** | **301** | *e*Pn | | **Pn** | **04 49** | **21.9** | | **+1.2** |
| MAKA | | | | Sn | | **Sb** | **04 49** | **54.6** | | **-0.9** |
| **RICI** | **Ricice** | **2.51** | **306** | *e*Pn | | **Pn** | **04 49** | **22.1** | | **+0.8** |
| **HVAR** | **Hvar** | **2.80** | **295** | *e*Pn | | **Pn** | **04 49** | **26.0** | | **+0.7** |
| **KIJV** | **Kijevo** | **3.24** | **308** | *e*Pn | | **Pn** | **04 49** | **32.8** | | **+1.5** |
| KIJV | | | | Sn | | **Sb** | **04 50** | **14.2** | | **-3.3** |
| **ZIRJ** | **Zirje** | **3.53** | **299** | *e*Pn | | **Pn** | **04 49** | **36.1** | | **+0.9** |
| ZIRJ | | | | Sn | | **Sn** | **04 50** | **19.6** | | **+2.1** |
| **MORI** | **Morici** | **3.59** | **302** | *e*Pn | | **Pn** | **04 49** | **37.9** | | **+1.8** |
| **UDBI** | **Udbina** | **3.92** | **311** | *e*Pn | | **Pn** | **04 49** | **43.4** | | **+2.7** |
| UDBI | | | | Sn | | **Sn** | **04 50** | **31.9** | | **+4.7** |
| **NVLJ** | **Novalja** | **4.46** | **306** | *e*Pn | | **Pn** | **04 49** | **48.8** | | **+0.8** |

*IDC **01** 05:06:35.0±1.2, 48°.98N×156°.97E, h0$^{km}$, mb3.8/17, mb1 4.0/19, mb1mx3.9/44, mbtmp3.8/19, ML3.7/2, MS3.1/2, Ms1 3.1/2, ms1mx2.4/93, Error ellipse: s-maj=30.5km s-min=16.9km az=162.0*
*MOS **01** 05:06:36.5±1.2, 48°.85N×157°.13E, h25$^{km}$, mb4.1/9, Error ellipse: s-maj=11.7km s-min=4.1km az=83.6*
*KRSC **01** 05:06:39.5±2.6, 49°.11N×158°.08E, h32$^{km}$±52$^{km}$, ML5.0*
*SKHL **01** 05:06:40.1±0.1, 48°.90N×157°.20E, h58$^{km}$±4$^{km}$, mb5.1/6*
*NEIC **01** 05:06:40.8±1.5, 49°.0N±0°.1×156°.9E±0°.2, h37$^{km}$±9$^{km}$, mb4.2/13, Error ellipse: s-maj=20.7km s-min=9.3km az=136.0*

**ISC 01 05:06:39.9±0.7, 48°.92N±0°.09×157°.13E±0°.07, h36$^{km}$±2$^{km}$, n140, σ1°44/158, mb4.0/26, 2C, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **SKR** | **Severo-Kuril's** | **1.89** | **340** | ⇑*i*PN | | **Pn** | **05 07** | **09.9** | | **+0.4** |
| SKR | | | | *e*S | | **Sn** | **05 07** | **31.7** | | **-0.3** |
| SKR | | | | pmax | | pmax | | | | |
| | comp=Z,362nm,0.4s | | | | | | | | | |
| SKR | | | | smax | | smax | | | | |
| | comp=N,1μm,0.2s | | | | | | | | | |
| SKR | | | | smax | | smax | | | | |
| | comp=E,3μm,0.6s | | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JKA** | **Kamikawa-asahi** | **11.10** | **250** | | Pn | **Pn** | **05 09 16.0** | **+0.1** |
| **JKA** | **Kamikawa-asahi** | **11.10** | **250** | *e*P | | **Pn** | **05 09 16.0** | **+0.1** |
| **ASAJ** | **Asahikawa** | **11.10** | **250** | Pn | | **Pn** | **05 09 15.7** | **-0.2** |
| | comp=Z,2.0nm,0.3s,baz=78,slow=16,SNR=5.5 | | | | | | | |
| **ASAJ** | **Asahikawa** | **11.10** | **250** | PN | | **Pn** | **05 09 16.0** | **+0.1** |
| **MA2** | **Magadan** | **11.30** | **343** | PN | | **Pn** | **05 09 19.3** | **+0.7** |
| **MA2** | **Magadan** | **11.30** | **343** | | | **Pn** | **05 09 19.3** | **+0.7** |
| **MA2** | **Magadan** | **11.30** | **343** | *e*P | | **Pn** | **05 09 19.3** | **+0.7** |
| **SHEM** | **Shemya Is, Ala** | **11.39** | **64** | LR | | LR | 05 13 36.7 | |
| | comp=Z,38nm,20.4s,baz=326,slow=37 | | | | | | | |
| **ERM** | **Erimo** | **11.98** | **240** | PN | | **Pn** | **05 09 26.7** | **-1.3** |
| **ERM** | **Erimo** | **11.98** | **240** | Pn | | **Pn** | **05 09 26.7** | **-1.3** |
| **JEW** | **Eniwo** | **12.49** | **247** | Pn | | **Pn** | **05 09 32.0** | **-3.0** |
| **TEY** | **Ternei** | **14.53** | **262** | *e*P | | **Pn** | **05 10 01.0** | **-1.7** |
| TEY | | | | | AMB | AMB | 05 10 02.6 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **16.61** | **281** | Pn | | **Pn** | **05 10 25.3** | **-4.4** |
| | comp=Z,0.1nm,0.3s,baz=324,slow=19,SNR=1.7 | | | | | | | |
| **KLR** | **Kul'dur** | **16.61** | **281** | *i* P | | **P** | **05 10 30.2** | **-1.7** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **16.61** | **281** | *e*P | | **Pn** | **05 10 27.6** | **-2.2** |
| **GRTR** | **Gornotajezhnoj** | **17.98** | **263** | *e*P | | **Pn** | **05 10 45.7** | **-1.1** |
| GRTR | | | | | AMB | AMB | 05 10 50.3 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **BILL** | **Bilibino** | **19.72** | **10** | *e*P | | **P** | **05 11 06.8** | **+0.9** |
| BILL | | | | *i* SS | | **Sn** | **05 14 49.4** | **+1.6** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,118nm,18.0s | | | | | | | |
| **BILL** | **Bilibino** | **19.72** | **10** | P | | **P** | **05 11 07.0** | **+1.1** |
| **KSRS** | **Korea Array** | **24.03** | **252** | P | | **P** | **05 11 52.2** | **+1.0** |
| | comp=Z,1.1nm,0.5s,baz=45,slow=11,SNR=2.2 | | | | | | | |
| **TIXI** | **Tiksi** | **26.25** | **340** | P | | **P** | **05 12 09.3** | **-1.8** |
| | comp=Z,3.8nm,0.5s,baz=127,slow=9.8,SNR=20 | | | | | | | |
| **TIXI** | **Tiksi** | **26.25** | **340** | *i* P | | **P** | **05 12 10.0** | **-1.1** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **TIXI** | **Tiksi** | **26.25** | **340** | P | | **P** | **05 12 09.2** | **-1.8** |
| TIXI | | | | | IAmb | IAmb | 05 12 10.9 | |
| | comp=Z,5.5nm,0.5s | | | | | | | |
| **TIXI** | **Tiksi** | **26.25** | **340** | *e*P | | **P** | **05 12 10.0** | **-1.1** |
| **H11N2** | **WAKE ISLAND Hy** | **30.16** | **161** | T | | T | 05 45 06.4 | |
| | baz=346,slow=74 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.18** | **161** | T | | T | 05 45 05.8 | |
| | baz=346,slow=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.18** | **161** | T | | T | 05 47 04.3 | |
| | baz=346 | | | | | | | |
| **IMAR** | **Indian Mountai** | **30.41** | **38** | P | | **P** | **05 12 48.5** | **+0.2** |
| **H11S1** | **WAKE ISLAND Hy** | **31.31** | **162** | T | | T | 05 47 29.1 | |
| | baz=347,slow=76,SNR=16 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.32** | **162** | T | | T | 05 47 26.0 | |
| | baz=347,slow=76,SNR=32 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.32** | **162** | T | | T | 05 47 29.9 | |
| | baz=347,slow=76,SNR=12 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **32.46** | **33** | P | | **P** | **05 13 07.2** | **+0.9** |
| TOLK | | | | | IAmb | IAmb | 05 13 20.5 | |
| | comp=Z,2.7nm,1.2s | | | | | | | |
| **COLA** | **College** | **32.75** | **40** | *i* P | | **P** | **05 13 10.6** | **+1.9** |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **33.16** | **41** | P | | **P** | **05 13 12.6** | **+0.2** |
| | comp=Z,0.3nm,0.9s,baz=253,slow=6.3,SNR=2.5 | | | | | | | |
| **SONM** | **Songino Array** | **33.21** | **288** | P | | **P** | **05 13 10.8** | **-2.4** |
| | comp=Z,0.1nm,0.4s,baz=93,slow=5.8,SNR=1.6 | | | | | | | |
| **SONM** | **Songino Array** | **33.21** | **288** | P | | **P** | **05 13 10.8** | **-2.4** |
| SONM | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.4s | | | | | | | |
| **N25K** | **Chitina, Valde** | **34.31** | **46** | P | | **P** | **05 13 24.4** | **+1.8** |
| N25K | | | | | IAmb | IAmb | 05 13 32.7 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **35.48** | **43** | P | | **P** | **05 13 34.4** | **+1.9** |
| **INK** | **Inuvik** | **38.35** | **34** | P | | **P** | **05 13 57.9** | **+1.2** |
| | comp=Z,0.7nm,0.7s,baz=232,slow=7.4,SNR=3.2 | | | | | | | |
| **INK** | **Inuvik** | **38.35** | **34** | P | | **P** | **05 13 58.0** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **43.56** | **305** | P | | **P** | **05 14 39.3** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=49,slow=8.9,SNR=4.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.56** | **305** | *i* P | | **P** | **05 14 40.9** | **+1.1** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.55** | **39** | P | | **P** | **05 15 12.2** | **+0.9** |
| | comp=Z,0.8nm,0.7s,baz=295,slow=7.5,SNR=9.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.55** | **39** | *i* P | | **P** | **05 15 12.8** | **+1.5** |
| YKA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **48.35** | **297** | P | | **P** | **05 15 16.8** | **-0.9** |
| MK31 | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | | |
| **MK31** | **Makanchi Array** | **48.35** | **297** | P | | **P** | **05 15 16.8** | **-0.9** |
| **MKAR** | **Makanchi Array** | **48.35** | **297** | P | | **P** | **05 15 17.0** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=60,slow=6.4,SNR=6.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.35** | **297** | *i* P | | **P** | **05 15 17.7** | **0.0** |
| **MKAR** | **Makanchi Array** | **48.35** | **297** | *i* P | | **P** | **05 15 17.7** | **0.0** |
| **BRVK** | **Borovoye** | **51.60** | **310** | P | | **P** | **05 15 42.5** | **+0.3** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **51.60** | **310** | P | | **P** | **05 15 42.5** | **+0.3** |
| BRVK | | | | | IAmb | IAmb | 05 15 42.9 | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **51.60** | **310** | *e*P | | **P** | **05 15 42.5** | **+0.3** |
| **JAY** | **Jayapura** | **53.17** | **201** | LR | | LR | 05 35 19.1 | |
| | comp=Z,53nm,21.7s,slow=32 | | | | | | | |
| **ARU** | **Arti** | **55.23** | **318***c* | *i* P | | **P** | **05 16 07.7** | **-1.1** |
| ARU | | | | | S | **S** | **05 23 49.2** | **-0.2** |
| ARU | | | | | pmax | pmax | | |
| | comp=Z,21nm,2.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.67** | **342** | P | | **P** | **05 16 17.8** | **-1.1** |
| | comp=Z,3.7nm,0.8s,baz=42,slow=8.5,SNR=7.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.67** | **342** | P | | **P** | **05 16 17.8** | **-1.1** |
| ARCES | | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **BCYI** | **Bear Canyon** | **58.16** | **58** | P | | **P** | **05 16 31.2** | **+1.1** |
| **ABKAR** | **Akbulak array** | **59.09** | **311** | P | | **P** | **05 16 36.5** | **+0.4** |
| **LAO** | **LASA Array** | **60.49** | **52** | P | | **P** | **05 16 47.6** | **+1.7** |
| **PDAR** | **Pinedale Array** | **61.29** | **57** | P | | **P** | **05 16 52.2** | **+0.5** |
| | comp=Z,0.2nm,0.6s,baz=352,slow=1.8,SNR=2.7 | | | | | | | |
| **FIA1** | **FINESS Array S** | **63.20** | **336** | P | | **P** | **05 17 04.1** | **+0.3** |
| **FINES** | **FINESS Array B** | **63.20** | **336** | P | | **P** | **05 17 03.8** | **+0.1** |
| | comp=Z,1.3nm,0.5s,baz=16,slow=7.1,SNR=16 | | | | | | | |
| **FINES** | **FINESS Array B** | **63.20** | **336** | P | | **P** | **05 17 04.2** | **+0.4** |
| **FINES** | **FINESS Array B** | **63.20** | **336** | P | | **P** | **05 17 04.2** | **+0.4** |
| **NB2** | **NORSAR Subarra** | **67.01** | **343** | P | | **P** | **05 17 29.0** | **+0.4** |
| | comp=Z,6.4nm,0.8s,baz=23,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.01** | **343** | P | | **P** | **05 17 28.9** | **+0.4** |
| | comp=Z,2.2nm,0.9s,baz=24,slow=6.5,SNR=5.8 | | | | | | | |
| **KIV** | **Kislovodsk** | **71.17** | **316** | *e*P | | **P** | **05 17 54.5** | **-0.3** |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **KIV** | **Kislovodsk** | **71.17** | **316** | *e*P | | **P** | **05 17 54.5** | **-0.3** |
| **AKASG** | **Malin Array Be** | **71.20** | **328** | P | | **P** | **05 17 53.5** | **-1.2** |
| | comp=Z,0.7nm,0.4s,baz=33,slow=6.7,SNR=7.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.20** | **328** | P | | **P** | **05 17 54.5** | **-0.1** |
| AKASG | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.20** | **328** | P | | **P** | **05 17 54.5** | **-0.1** |
| AKASG | | | | | IAmb | IAmb | 05 18 09.5 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **71.25** | **316** | P | | **P** | **05 17 55.8** | **+0.7** |
| | comp=Z,2.0nm,0.9s,baz=86,slow=5.3,SNR=5.3 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **74.09** | **64** | P | | **P** | **05 18 13.2** | **+0.8** |
| TX31 | | | | | IAmb | IAmb | 05 18 16.7 | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| **TX32** | **Lajitas Array** | **74.09** | **64** | P | | **P** | **05 18 13.0** | **+0.7** |
| TX32 | | | | | IAmb | IAmb | 05 18 16.7 | |
| | comp=Z,2.5nm,1.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **74.09** | **64** | P | | **P** | **05 18 12.8** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=295,slow=5.0,SNR=7.2 | | | | | | | |
| **CLL** | **Collm** | **75.55** | **338** | *e*P | | **P** | **05 18 20.0** | **-0.3** |
| **CLL** | **Collm** | **75.55** | **338** | *e*P | | **P** | **05 18 20.0** | **-0.3** |
| **GERES** | **GERESS Array B** | **77.63** | **336** | P | | **P** | **05 18 33.5** | **+1.3** |
| | comp=Z,0.5nm,0.5s,baz=27,slow=6.6,SNR=2.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.60** | **319** | P | | **P** | **05 18 38.4** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=35,slow=2.6,SNR=4.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.60** | **319** | *i* P | | **P** | **05 18 40.2** | **+2.4** |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |

*IDC **01** 05:16:40.4±0.8, 4.°35S×153.°05E, h0km, mb3.9/9, mb1 4.1/9, mb1mx3.9/31, mbtmp3.9/9, MS3.0/3, Ms1 3.0/3, ms1mx2.6/61, Error ellipse: s-maj=22.0km s-min=17.2km az=152.0*
*NEIC **01** 05:16:48.9±1.6, 4.°28S±0.°06×152.°83E±0.°10, h47km±8km, mb4.5/14, Error ellipse: s-maj=14.2km s-min=8.5km az=72.0*
**ISC 01 05:16:48.6**±0.6, **4.°31S**±0.°08×**152.°88E**±0.°08, **h55**km, **n34**, σ1§**28**/34, **mb4.1**/15, **New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.73** | **279** | | **Pn** | **05 17 01.7** | **-1.3** |
| **KRVT** | **Keravat (AS076** | **0.86** | **270** | Pn | **Pn** | **05 17 02.7** | **-1.9** |
| KRVT | | | | Sn | **Sn** | **05 17 16.8** | **+0.5** |
| **MANU** | **Manus Island** | **5.95** | **292** | Pn | **Pn** | **05 18 15.9** | **+1.6** |
| **PMG** | **Port Moresby** | **7.61** | **228** | Sn | **Sn** | **05 20 04.0** | **+2.0** |
| | 1.5nm,0.3s,baz=24,slow=5.3,SNR=1.7 | | | | | | |
| PMG | | | | LR | LR | 05 21 23.6 | |
| | comp=Z,68nm,20.5s,baz=162,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **7.61** | **228** | Pn | **Pn** | **05 18 37.4** | **+0.4** |
| **CTA** | **Charters Tower** | **16.96** | **202** | LR | LR | 05 25 33.7 | |
| | comp=Z,51nm,19.7s,baz=77,slow=31 | | | | | | |
| **SANVU** | **Saraoutou** | **17.91** | **129** | | **Pn** | **05 20 56.3** | **+2.2** |
| SANVU | | | | IAmb | IAmb | 05 21 14.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **20.64** | **273** | P | **P** | **05 21 23.5** | **-0.4** |
| FAKI | | | | IAmb | IAmb | 05 21 30.8 | |
| | comp=Z,53nm,1.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.02** | **145** | P | **P** | **05 21 35.1** | **-3.6** |
| | comp=Z,1.3nm,0.5s,baz=185,slow=19,SNR=1.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.02** | **145** | P | **P** | **05 21 39.2** | **+0.6** |
| **OUENC** | **Ouen Island, N** | **22.52** | **144** | P | **P** | **05 21 44.4** | **+0.5** |
| **WB0** | **Warramunga Arr** | **23.69** | **228** | P | **P** | **05 21 55.0** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 05 21 56.7 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.70** | **227** | P | **P** | **05 21 54.6** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 05 21 56.8 | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.82** | **228** | P | **P** | **05 21 56.6** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 05 21 58.5 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **05 21 56.7** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 05 21 58.6 | |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **05 21 56.6** | **-0.4** |
| | comp=Z,6.9nm,0.6s,baz=52,slow=9.9,SNR=50 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 25 38.0** | **-1.1** |
| | comp=Z,0.7nm,0.9s,baz=55,slow=2.8,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **05 21 55.6** | **-1.4** |
| **KNRA** | **Kununurra** | **26.27** | **243** | P | **P** | **05 22 20.9** | **+1.8** |
| KNRA | | | | IAmb | IAmb | 05 22 21.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **26.57** | **222** | P | **P** | **05 22 21.4** | **-0.4** |
| | comp=Z,1.4nm,0.5s,baz=56,slow=8.6,SNR=11 | | | | | | |
| **MSVF** | **Nonsavu** | **28.02** | **120** | LR | LR | 05 32 29.7 | |
| | comp=Z,48nm,19.2s,baz=28,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.97** | **241** | P | **P** | **05 22 52.1** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=60,slow=12,SNR=1.6 | | | | | | |
| **FORT** | **Forrest** | **35.22** | **219** | P | **P** | **05 23 36.8** | **-1.1** |
| **MBWA** | **Marble Bar** | **36.29** | **240** | P | **P** | **05 23 47.0** | **-0.1** |
| **PEA0B** | **Petropavlovsk-** | **57.34** | **3** | P | **P** | **05 26 32.5** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **57.34** | **3** | P | **P** | **05 26 31.9** | **+0.9** |
| | comp=Z,2.6nm,0.6s,baz=172,slow=7.3,SNR=6.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.34** | **3** | P | **P** | **05 26 32.0** | **+1.0** |
| **MA2** | **Magadan** | **63.71** | **359** | P | **P** | **05 27 14.6** | **+0.4** |
| MA2 | | | | IAmb | IAmb | 05 27 15.1 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **65.95** | **328** | P | **P** | **05 27 29.4** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=146,slow=5.8,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.01** | **319** | P | **P** | **05 28 52.8** | **+0.4** |
| | comp=Z,0.2nm,0.5s,baz=92,slow=6.1,SNR=3.7 | | | | | | |
| **ILAR** | **Eielson Array** | **81.67** | **22** | P | **P** | **05 28 58.5** | **-2.2** |
| | comp=Z,0.5nm,0.7s,baz=244,slow=6.8,SNR=7.3 | | | | | | |
| **ILAR** | **Eielson Array** | **81.67** | **22** | P | **P** | **05 29 01.1** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **94.95** | **28** | P | **P** | **05 30 04.8** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=268,slow=4.9,SNR=2.6 | | | | | | |
| **TORD** | **Tomodi Ar. Bea** | **150.23** | **289** | PKPbc | **PKPbc** | **05 36 33.9** | **-0.8** |
| | comp=Z,2.9nm,0.7s,baz=62,slow=2.6,SNR=16 | | | | | | |
| **BDFB** | **Brasilia** | **151.35** | **134** | PKPbc | **PKPbc** | **05 36 37.8** | **+0.3** |
| | comp=Z,2.8nm,0.6s,baz=298,slow=2.5,SNR=7.1 | | | | | | |

*SFS **01** 05:20:19.0, 35.°65N×3.°73W, ML2.3, ALBORAN SUR*
*CNRM **01** 05:20:19.2, 35.°75N×3.°54W, h23km, ml2.2*
*INMG **01** 05:20:20.1±1.3, 35.°69N×3.°70W, h0km, ML2.1, Error ellipse: s-maj=2.8km s-min=2.5km az=66.0*
*IGIL **01** 05:20:20.6, 35.°66N×3.°73W, h0km*
**ISC 01 05:20:17.9**±1.3, **35.°71N**±0.°03×**3.°65W**±0.°03, **h3**km±10km, **n31**, σ1§**50**/48, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.55** | **205** | S | **Sb** | **05 20 39.9** | **+1.4** |
| **GOG** | **Mont Gurugu** | **0.72** | **132** | P | **Pg** | **05 20 33.1** | **+1.3** |
| **GOG** | **Mont Gurugu** | **0.72** | **132** | P | **Pg** | **05 20 33.3** | **+1.5** |
| GOG | | | | S | **Sg** | **05 20 41.9** | **+0.6** |
| **CHAS** | **Isla Isabel II** | **1.13** | **118** | P | **Pg** | **05 20 38.5** | **-1.1** |
| CHAS | | | | S | **Sg** | **05 20 52.0** | **-2.2** |
| **AKLM** | **AKL** | **1.21** | **188** | P | **Pg** | **05 20 42.6** | **+1.4** |
| **AKLM** | **AKL** | **1.21** | **188** | P | **Pg** | **05 20 42.6** | **+1.4** |
| AKLM | | | | S | **Sg** | **05 20 58.2** | **+1.3** |
| **EMAL** | **Malaga-Limoner** | **1.22** | **329** | P | **Pg** | **05 20 42.5** | **+1.1** |
| EMAL | | | | S | **Sg** | **05 20 57.4** | **+0.2** |
| **SMIR** | **Smir Dam** | **1.41** | **269** | P | **Pg** | **05 20 44.0** | **-1.0** |
| **SMIR** | **Smir Dam** | **1.41** | **269** | P | **Pg** | **05 20 43.2** | **-1.8** |
| SMIR | | | | S | **Sn** | **05 21 06.1** | **+2.5** |
| **CEU** | **Ceuta** | **1.41** | **278** | P | **Pg** | **05 20 45.0** | **0.0** |
| CEU | | | | S | **Sg** | **05 20 58.3** | **-5.0** |
| **CHEFC** | **Chefchaouen** | **1.50** | **247** | P | **Pn** | **05 20 45.8** | **-0.1** |
| CHEFC | | | | S | **Sg** | **05 21 05.4** | **-0.9** |
| **JBK** | **JBK** | **1.64** | **147** | P | **Pn** | **05 20 47.0** | **-0.9** |
| **JBK** | **JBK** | **1.64** | **147** | P | **Pn** | **05 20 46.4** | **-1.4** |
| JBK | | | | S | **Sn** | **05 21 06.1** | **-3.4** |
| **IFR** | **Ifrane** | **2.50** | **209** | P | **Pn** | **05 21 00.3** | **+0.5** |
| IFR | | | | S | **Sn** | **05 21 30.1** | **-0.9** |
| **MD31** | **MD31** | **2.98** | **198** | P | **Pn** | **05 21 06.7** | **+0.5** |
| **MDT** | **Midelt** | **3.00** | **196** | P | **Pn** | **05 21 07.3** | **+0.9** |
| **MDT** | **Midelt** | **3.00** | **196** | P | **Pn** | **05 21 07.3** | **+0.9** |
| **PVAQ** | **Vaqueiros** | **3.68** | **298** | *e*Pn | **Pn** | **05 21 16.6** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **05 21 58.4** | **-1.3** |
| PVAQ | | | | A | A | 05 22 01.2 | |
| | 3.2nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.68** | **298** | P | **Pn** | **05 21 15.9** | **+0.1** |
| **PCVE** | **Castro Verde** | **4.01** | **300** | *e*Pn | **Pn** | **05 21 21.2** | **+0.9** |
| PCVE | | | | *e*Sn | **Sn** | **05 22 06.7** | **-1.2** |
| PCVE | | | | A | A | 05 22 08.8 | |
| | 3.8nm,0.4s | | | | | | |
| **PBEJ** | **Beja** | **4.09** | **306** | *e*Sn | **Sn** | **05 22 09.9** | **+0.1** |
| PBEJ | | | | A | A | 05 22 12.1 | |
| | 2.7nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.24** | **301** | *e*P | **Pn** | **05 21 24.2** | **+0.9** |
| **MESJ** | **Messejana** | **4.24** | **301** | *e*Pn | **Pn** | **05 21 24.3** | **+0.9** |
| MESJ | | | | *e*Sn | **Sn** | **05 22 13.5** | **+0.1** |
| MESJ | | | | A | A | 05 22 16.6 | |
| | 2.4nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.33** | **293** | *e*Sn | **Sn** | **05 22 15.6** | **-0.2** |
| MORF | | | | A | A | 05 22 21.3 | |
| | 2.7nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.41** | **290** | *e*Sn | **Sn** | **05 22 17.5** | **-0.1** |
| **PESTR** | **Estremoz** | **4.45** | **316** | *e*Pn | **Pn** | **05 21 27.7** | **+1.4** |
| PESTR | | | | *e*Sn | **Sn** | **05 22 17.9** | **-0.7** |
| PESTR | | | | A | A | 05 22 19.6 | |
| | 1.2nm,0.4s | | | | | | |
| **EVO** | **Evora** | **4.48** | **310** | *e*Pn | **Pn** | **05 21 28.1** | **+1.4** |
| EVO | | | | *e*Sn | **Sn** | **05 22 17.9** | **-1.5** |
| EVO | | | | A | A | 05 22 19.0 | |
| | 2.7nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.58** | **303** | *e*Pn | **Pn** | **05 21 29.1** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **05 22 20.6** | **-1.3** |
| PNCL | | | | A | A | 05 22 22.6 | |
| | 2.4nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **4.75** | **322** | *e*Pn | **Pn** | **05 21 32.6** | **+2.1** |
| PMRV | | | | *e*Sn | **Sn** | **05 22 25.6** | **-0.5** |
| PMRV | | | | A | A | 05 22 31.1 | |
| | 1.2nm,0.1s | | | | | | |
| **PMTG** | **Montargil** | **4.95** | **314** | *e*Pn | **Pn** | **05 21 35.3** | **+2.1** |
| PMTG | | | | *e*Sn | **Sn** | **05 22 30.2** | **-0.7** |
| PMTG | | | | A | A | 05 22 32.0 | |
| | 1.8nm,1.0s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.11** | **325** | *e*Sn | **Sn** | **05 22 33.7** | **-1.3** |
| PCBR | | | | A | A | 05 22 37.8 | |
| | 1.6nm,0.6s | | | | | | |

**IDC 01 05:39:28.1**±2.4, **1.°99N**×**128.°69E**, **h0**km, **mb3.3**/3, **mb1 3.5**/3, **mb1mx2.9**/35, **mbtmp3.3**/3, **Error ellipse: s-maj=165.6km s-min=26.4km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.49** | **166** | P | P | 05 44 27.5 | -1.8 |
| | 0.4nm,0.6s,baz=346,slow=11,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **26.00** | **169** | P | P | 05 45 04.2 | +1.3 |
| | 0.2nm,0.3s,baz=351,slow=11,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.09** | **325** | P | P | 05 49 37.2 | 0.0 |
| | 0.3nm,0.4s,baz=115,slow=8.7,SNR=9.8 | | | | | | |

*IDC **01** 05:53:38.0±2.0, 6.°91S×154.°47E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.7/26, mbtmp3.6/6, Error ellipse: s-maj=70.1km s-min=26.4km az=111.0*
**ISC 01 05:53:43.5**±1.6, **7.°0S**±0.°2×**154.°5E**±0.°4, **h39**km, **n6**, σ1§**24**/6, **mb3.5**/6, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.45** | **235** | P | **P** | **05 58 48.5** | **-1.2** |
| | 1.5nm,1.1s,baz=60,slow=9.4,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **25.84** | **228** | P | **P** | **05 59 10.8** | **-0.8** |
| | 0.4nm,0.6s,baz=54,slow=9.4,SNR=5.2 | | | | | | |
| **STKA** | **Stephens Creek** | **27.56** | **204** | P | **P** | **05 59 28.1** | **+1.2** |
| | 2.5nm,0.9s,baz=3.8,slow=15,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **69.07** | **328** | P | **P** | **06 04 45.6** | **0.0** |
| | 0.2nm,0.3s,baz=112,slow=6.3,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.08** | **319** | P | **P** | **06 06 06.2** | **+0.9** |
| | 0.3nm,0.7s,baz=112,slow=6.4,SNR=3.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.54** | **28** | P | **P** | **06 07 08.1** | **-0.7** |
| | 0.2nm,0.6s,baz=267,slow=4.5,SNR=3.0 | | | | | | |

*ISN **01** 06:19:19.9±2.0, 32.°70N×47.°60E, h25km, ML2.7*
*TEH **01** 06:19:20.7, 32.°70N×47.°58E, h8km, ML3.1*
**ISC 01 06:19:21.9**±1.2, **32.°77N**±0.°06×**47.°51E**±0.°04, **h15**km, **n29**, σ1§**34**/31, **Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKFM** | **Kafar-mosalman** | **0.81** | **20** | *e*Pg | **Pb** | **06 19 36.8** | **-0.8** |
| IKFM | | | | *e*Sg | **Sn** | **06 19 50.9** | **+0.4** |
| IKFM | | | | *e* | | 06 19 51.8 | |
| | comp=Z,13μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.16** | **28** | *e*Pg | **Pn** | **06 19 43.5** | **-0.3** |
| **IBDR** | **Badra** | **1.38** | **285** | *e*Pg | **Pn** | **06 19 45.0** | **-1.6** |
| | baz=106 | | | | | | |
| IBDR | | | | *e*Sg | **Sn** | **06 20 07.0** | **+2.5** |
| IBDR | | | | AML | AML | 06 20 18.0 | |
| | comp=N,137nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 06 20 24.2 | |
| | comp=E,130nm,0.8s | | | | | | |
| **BMDN** | **Meydan** | **1.42** | **50** | *e*Pg | **Pb** | **06 19 47.4** | **-0.9** |
| BMDN | | | | *e* | | 06 20 13.8 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.56** | **345** | *e*Pg | **Pg** | **06 19 52.7** | **+0.8** |
| KCHF | | | | *e* | | 06 20 17.3 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **KER** | **Kermanshah** | **1.65** | **349** | *e*Pg | **Pg** | **06 19 53.4** | **-0.2** |
| **HSAM** | **Samen** | **1.71** | **32** | *e*Pn | **Pg** | **06 19 53.5** | **-1.2** |
| **IBZA** | **Bozab** | **1.72** | **10** | *e*Pg | **Pg** | **06 19 54.3** | **-0.8** |
| IBZA | | | | *e* | | 06 19 57.7 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.75** | **333** | *e*Pn | **Pg** | **06 19 55.8** | **+0.3** |
| IGHG | | | | *e* | | 06 20 28.7 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **AMIS** | **Naft Sefid** | **1.86** | **126** | *e*Pn | **Pn** | **06 19 54.3** | **+1.0** |
| **IDHR** | **Dehrash** | **2.15** | **334** | *e*Pn | **Pb** | **06 19 59.9** | **-0.7** |
| IDHR | | | | *e* | | 06 20 06.2 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **IALM** | **Almabolaq** | **2.16** | **14** | *e*Pn | **Pb** | **06 19 59.9** | **-1.0** |
| **KHMZ** | **Khomeyn** | **2.27** | **64** | *e*Pn | **Pn** | **06 19 59.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KRHZ | Kereru | 1.94 | 183 | P | Pn | 06 28 12.2 | -0.1 |
| CKHZ | Cape Kidnapper | 2.00 | 167 | P | Pn | 06 28 13.4 | +0.5 |
| KAHZ | Kahuranaki | 2.11 | 172 | P | Pn | 06 28 14.6 | +0.5 |
| PNHZ | Pukenui | 2.22 | 186 | P | Pn | 06 28 15.2 | 0.0 |
| ANWZ | Angora Road | 2.76 | 181 | P | Pn | 06 28 21.1 | +0.1 |
| BFZ | Birch Farm | 2.98 | 184 | P | Pn | 06 28 23.6 | -0.2 |
| BFZ | Birch Farm | 2.98 | 184 | P | Pn | 06 28 24.8 | +1.0 |
| MRZ | Mangatainoka R | 3.04 | 194 | P | Pn | 06 28 24.4 | -0.1 |
| OGWZ | Otaki Gorge | 3.28 | 198 | P | Pn | 06 28 27.5 | +0.2 |
| HOWZ | Holdsworth Sta | 3.29 | 193 | P | Pn | 06 28 26.9 | -0.5 |
| KIW | Kapiti Island | 3.39 | 201 | P | Pn | 06 28 28.1 | -0.5 |
| MTW | Mount Morrison | 3.54 | 192 | P | Pn | 06 28 29.7 | -0.7 |
| CAW | Cannon Point | 3.58 | 198 | P | Pn | 06 28 30.5 | -0.4 |
| PLWZ | Palliser | 3.98 | 194 | P | Pn | 06 28 35.0 | -0.9 |
| KHZ | Kahutara | 5.23 | 205 | P | Pn | 06 28 51.4 | -0.2 |
| KHZ | Kahutara | 5.23 | 205 | P | Pn | 06 28 51.5 | -0.1 |

*IDC **01** 06:43:18.7±2.5,53°.61N×87°.00E, h0km, mb1 2.7/2, mb1mx2.7/43, mbtmp2.7/2, ML2.3/2, Error ellipse: s-maj=22.7km s-min=13.1km az=76.0*
*NNC **01** 06:43:18.0±6.4,53°.62N×86°.88E, h0km, mb2.7, mpv2.5, Error ellipse: s-maj=57.2km s-min=26.1km az=44.0, Suspected Mining explosion.*

**IDC 01 06:43:16.6±3.3, 53°.7N±0°.1×87°.1E±0°.2, h0km, n7, σ1s 66/10, 6C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.34 | 280 | *i* | | | | 06 54 05.3 | |
| | baz=102,slow=330,SNR=2.5 | | | | | | | | |
| ZAA0 | Zalesovo Array | 1.34 | 280 | ⇑P | | Pb | | 06 43 42.1 | -0.4 |
| | 0.6nm,0.7s | | | | | | | | |
| ZAA0 | | | | ⇑S | | Sg | | 06 43 58.9 | -0.7 |
| | 6.5nm,1.1s | | | | | | | | |
| ZALV | Zalesovo Beam | 1.34 | 280 | Pg | | Pn | | 06 43 42.4 | -0.1 |
| | 0.8nm,0.3s,baz=104,slow=16,SNR=19 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 06 44 01.1 | |
| | 1.8nm,0.3s,baz=108,slow=28,SNR=18 | | | | | | | | |
| KURBB | Kurchatov Arra | 6.09 | 243 | Pn | | Pn | | 06 44 50.1 | +2.3 |
| | 0.0nm,0.3s,baz=58,slow=13,SNR=5.2 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 06 46 29.3 | |
| | 0.0nm,0.3s,baz=62,slow=33,SNR=5.3 | | | | | | | | |
| KURBB | Kurchatov Arra | 6.09 | 243 | ⇑Pn | | Pn | | 06 44 49.5 | +1.7 |
| | 0.9nm,0.7s | | | | | | | | |
| KURBB | | | | ⇓Sn | | Sn | | 06 45 58.7 | +0.5 |
| | 1.5nm,0.7s | | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | | 06 46 26.0 | |
| | 4.2nm,0.8s | | | | | | | | |
| MK31 | Makanchi Array | 7.58 | 206 | ⇓Pn | | Pn | | 06 45 07.5 | -0.8 |
| | 0.5nm,0.6s,baz=28,slow=14,SNR=6.0 | | | | | | | | |
| MK31 | | | | ⇑Sn | | Sn | | 06 46 33.1 | -1.7 |
| | 0.4nm,0.6s,baz=289,slow=2.0,SNR=3.8 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | | 06 47 12.0 | |
| | 1.7nm,0.8s,baz=32,slow=30,SNR=5.0 | | | | | | | | |
| MKAR | Makanchi Array | 7.58 | 206 | Pn | | Pn | | 06 45 10.4 | +2.1 |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=6.8 | | | | | | | | |
| MKAR | | | | Sn | | Sn | | 06 46 33.5 | -1.4 |
| | 0.1nm,0.3s,baz=29,slow=28,SNR=3.6 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 06 47 14.5 | |
| | 0.0nm,0.3s,baz=25,slow=32,SNR=6.3 | | | | | | | | |

**IDC 01 06:46:22.0±1.4, 28°.10N×104°.96E, h0km, mb3.5/4, mb1 3.6/5, mb1mx3.3/44, mbtmp3.4/5, ML3.2/1, Error ellipse: s-maj=79.3km s-min=23.9km az=66.0, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SONM | Songino Array | 19.73 | 3 | P | | Pn | | 06 50 54.3 | -0.4 |
| | 0.1nm,0.3s,baz=179,slow=11,SNR=2.5 | | | | | | | | |
| MKAR | Makanchi Array | 25.77 | 322 | P | | P | | 06 51 54.2 | -0.3 |
| | 0.6nm,0.7s,baz=126,slow=12,SNR=5.5 | | | | | | | | |
| WRA | Warramunga Arr | 55.58 | 146 | P | | P | | 06 55 59.1 | -0.5 |
| | 0.4nm,0.4s,baz=336,slow=8.5,SNR=2.7 | | | | | | | | |
| ASAR | Alice Springs | 58.55 | 149 | P | | P | | 06 56 20.9 | +0.3 |
| | 0.3nm,0.4s,baz=335,slow=6.7,SNR=5.9 | | | | | | | | |
| YKA | Yellowknife Ar | 84.33 | 17 | P | | P | | 06 58 55.3 | -0.3 |
| | 0.2nm,0.6s,baz=332,slow=5.3,SNR=3.2 | | | | | | | | |

*IDC **01** 07:08:42.7±3.0,53°.60N×87°.67E, h0km, mb1 2.9/2, mb1mx2.9/45, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=26.5km s-min=16.4km az=48.0*
*NNC **01** 07:08:43.5±7.7,53°.51N×87°.63E, h0km, mb2.8, mpv2.5, Error ellipse: s-maj=88.0km s-min=37.5km az=36.0, Suspected Mining explosion.*

**IDC 01 07:08:42.6±3.4, 53°.7N±0°.2×87°.7E±0°.2, h0km, n8, σ0s 31/8, 5C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.71 | 280 | *i* | | | | 07 22 18.8 | |
| | baz=102,slow=335,SNR=4.6 | | | | | | | | |
| ZAA0 | Zalesovo Array | 1.71 | 280 | ⇓P | | Pb | | 07 09 14.8 | -0.1 |
| | 0.2nm,0.4s | | | | | | | | |
| ZAA0 | | | | ⇑S | | Sg | | 07 09 37.6 | -0.1 |
| | 5.7nm,0.8s | | | | | | | | |
| ZALV | Zalesovo Beam | 1.71 | 280 | Pg | | Pn | | 07 09 13.8 | +0.1 |
| | 1.1nm,0.3s,baz=101,slow=15,SNR=14 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 07 09 36.5 | |
| | 0.9nm,0.3s,baz=101,slow=26,SNR=11 | | | | | | | | |
| KURK | Kurchatov | 6.32 | 245 | ⇑Lg | | Lg | | 07 11 58.6 | |
| | 5.2nm,1.1s | | | | | | | | |
| KURBB | Kurchatov Arra | 6.42 | 245 | Pn | | Pn | | 07 10 18.4 | +0.1 |
| | 0.1nm,0.3s,baz=60,slow=14,SNR=5.8 | | | | | | | | |
| KURBB | | | | Sn | | Sn | | 07 11 32.0 | -0.1 |
| | 0.0nm,0.3s,baz=71,slow=17,SNR=1.3 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 07 12 02.4 | |
| | 0.0nm,0.3s,baz=63,slow=31,SNR=6.8 | | | | | | | | |
| KURBB | Kurchatov Arra | 6.42 | 245 | ⇓Pn | | Pn | | 07 10 18.9 | +0.6 |
| | 2.2nm,1.2s | | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | | 07 12 05.0 | |
| | 7.4nm,1.1s | | | | | | | | |
| MK31 | Makanchi Array | 7.72 | 209 | ⇑Pn | | Pn | | 07 10 36.3 | 0.0 |
| | 0.4nm,0.5s,baz=33,slow=15,SNR=4.3 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | | 07 12 40.2 | |
| | 8.8nm,1.2s,baz=34,slow=29,SNR=4.0 | | | | | | | | |
| MKAR | Makanchi Array | 7.72 | 209 | Pn | | Pn | | 07 10 36.2 | -0.1 |
| | 0.2nm,0.3s,baz=29,slow=15,SNR=7.3 | | | | | | | | |

**IDC 01 07:15:19.4±3.0, 53°.70N×86°.98E, h0km, mb1 2.7/1, mb1mx1.9/65, mbtmp2.7/1, ML2.1/2, Error ellipse: s-maj=28.7km s-min=17.0km az=71.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.31 | 282 | *i* | | | | 07 25 52.4 | |
| | baz=99,slow=332,SNR=3.5 | | | | | | | | |
| ZALV | Zalesovo Beam | 1.31 | 282 | Pg | | Pg | | 07 15 43.9 | -0.5 |
| | 0.4nm,0.3s,baz=101,slow=13,SNR=8.8 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 07 16 00.7 | |
| | 0.4nm,0.3s,baz=104,slow=28,SNR=4.1 | | | | | | | | |
| KURBB | Kurchatov Arra | 6.04 | 243 | Pn | | Pn | | 07 16 51.1 | +1.2 |
| | 0.0nm,0.3s,baz=58,slow=14,SNR=2.6 | | | | | | | | |
| MKAR | Makanchi Array | 7.54 | 205 | Pn | | Pn | | 07 17 11.5 | +1.1 |
| | 0.1nm,0.3s,baz=25,slow=13,SNR=1.6 | | | | | | | | |

*IDC **01** 07:20:13.8±0.8,54°.20N×161°.17E, h0km, mb3.3/9, mb1 3.6/10, mb1mx3.4/64, mbtmp3.3/10, ML2.9/1, Error ellipse: s-maj=30.8km s-min=16.9km az=154.0*
*KRSC **01** 07:20:14.3±1.2,54°.15N×161°.32E, h18km±22km, ML4.3*
*MOS **01** 07:20:14.9±0.6,54°.16N×161°.31E, h16km, mb3.4/1, Error ellipse: s-maj=8.7km s-min=4.2km az=77.3*

**IDC 01 07:20:13.4±2.8, 54°.18N±0°.02×161°.23E±0°.04, h0km±18km, n96, σ1s 02/149, mb3.4/10, 2C-3D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KII | Karymskiy | 1.06 | 263 | PN | | Pb | | 07 20 34.7 | +0.1 |
| KII | | | | *S* | | Sb | | 07 20 47.7 | -1.3 |
| KII | Karymskiy | 1.06 | 263 | *eP* | | Pb | | 07 20 34.7 | +0.1 |
| KII | | | | *eS* | | Sb | | 07 20 47.7 | -1.3 |
| TUMD | Tumrok D | 1.14 | 335 | *eP* | | Pn | | 07 20 35.7 | -0.9 |
| TUMD | | | | *eS* | | Sb | | 07 20 49.6 | -1.7 |
| TUMR | Tumrok | 1.27 | 331 | PN | | Pn | | 07 20 38.5 | -0.1 |
| TUMR | | | | S | | Sb | | 07 20 53.9 | -1.4 |
| TUMR | Tumrok | 1.27 | 331 | *eP* | | Pn | | 07 20 38.5 | -0.1 |
| TUMR | | | | *eS* | | Sb | | 07 20 53.9 | -1.4 |
| SPN | Mys Shipunski | 1.30 | 214 | PN | | Pn | | 07 20 38.2 | -0.6 |
| SPN | | | | S | | Sb | | 07 20 54.0 | -1.8 |
| SPN | Mys Shipunski | 1.30 | 214 | *eP* | | Pn | | 07 20 38.2 | -0.6 |
| SPN | | | | *eS* | | Sb | | 07 20 54.0 | -1.8 |
| NLC | Nalytchevo | 1.51 | 229 | PN | | Pn | | 07 21 01.0 | -0.9 |
| NLC | | | | S | | Sn | | 07 21 01.0 | -0.9 |
| NLC | Nalytchevo | 1.51 | 229 | *eP* | | Pn | | 07 21 41.3 | -0.3 |
| NLC | | | | *eS* | | Sn | | 07 21 01.0 | -0.9 |
| SDLR | Sedlovina | 1.66 | 238 | PN | | Pn | | 07 20 44.6 | +0.7 |
| SDLR | | | | S | | Sn | | 07 21 05.9 | 0.0 |
| SDLR | Sedlovina | 1.66 | 238 | *eP* | | Pn | | 07 20 44.6 | +0.7 |
| SDLR | | | | *eS* | | Sn | | 07 21 05.9 | 0.0 |
| KMNR | Kamenistaya | 1.68 | 341 | PN | | Pb | | 07 20 45.3 | 0.0 |
| KMNR | | | | S | | Sb | | 07 21 08.6 | +1.5 |
| KMNR | Kamenistaya | 1.68 | 341 | *eP* | | Pb | | 07 20 45.3 | 0.0 |
| KMNR | | | | *eS* | | Sb | | 07 21 08.6 | +1.5 |
| SMAR | Somma | 1.71 | 239 | PN | | Pn | | 07 20 45.4 | +0.8 |
| SMAR | | | | S | | Sn | | 07 21 07.0 | -0.3 |
| SMAR | Somma | 1.71 | 239 | *eP* | | Pn | | 07 20 45.4 | +0.8 |
| SMAR | | | | *eS* | | Sn | | 07 21 07.0 | -0.3 |
| KRER | Koryakskii | 1.71 | 240 | PN | | Pn | | 07 20 45.6 | +0.9 |
| KRER | | | | S | | Sn | | 07 21 06.8 | -0.5 |
| KRER | Koryakskii | 1.71 | 240 | *eP* | | Pn | | 07 20 45.6 | +0.9 |
| KRER | | | | *eS* | | Sn | | 07 21 06.8 | -0.5 |
| UGLR | Uglovaya | 1.73 | 237 | PN | | Pb | | 07 20 45.8 | -0.3 |
| UGLR | | | | S | | Sn | | 07 21 07.3 | -0.3 |
| UGLR | Uglovaya | 1.73 | 237 | *eP* | | Pb | | 07 20 45.8 | -0.3 |
| UGLR | | | | *eS* | | Sn | | 07 21 07.3 | -0.3 |
| AVH | Avacha | 1.74 | 239 | PN | | Pb | | 07 20 46.1 | -0.1 |
| AVH | | | | S | | Sb | | 07 21 08.3 | -0.3 |
| AVH | Avacha | 1.74 | 239 | *eP* | | Pb | | 07 20 46.1 | -0.1 |
| AVH | | | | *eS* | | Sb | | 07 21 08.3 | -0.3 |
| KOK | Koryaka | 1.78 | 241 | PN | | Pn | | 07 20 46.4 | +0.9 |
| KOK | | | | S | | Sn | | 07 21 09.0 | +0.2 |
| KOK | Koryaka | 1.78 | 241 | *eP* | | Pn | | 07 20 46.4 | +0.9 |
| KOK | | | | *eS* | | Sn | | 07 21 09.0 | +0.2 |
| BZGR | Bezymyannyi-Gr | 1.79 | 350 | PN | | Pb | | 07 20 47.8 | +0.6 |
| BZGR | | | | S | | Sb | | 07 21 10.6 | +0.3 |
| BZGR | Bezymyannyi-Gr | 1.79 | 350 | *eP* | | Pb | | 07 20 47.8 | +0.6 |
| BZGR | | | | *eS* | | Sb | | 07 21 10.6 | +0.3 |
| BZWR | Bezymyannyi-We | 1.84 | 347 | PN | | Pb | | 07 20 47.9 | -0.1 |
| BZWR | Bezymyannyi-We | 1.84 | 347 | *eP* | | Pb | | 07 20 47.9 | -0.1 |
| KIRR | Kirishev | 1.85 | 344 | PN | | Pn | | 07 20 47.6 | +1.0 |
| KIRR | | | | S | | Sb | | 07 21 12.2 | +0.2 |
| KIRR | Kirishev | 1.85 | 344 | *eP* | | Pn | | 07 20 47.6 | +1.0 |
| KIRR | | | | *eS* | | Sb | | 07 21 12.2 | +0.2 |
| ZLN | Zelenaya | 1.86 | 353 | PN | | Pb | | 07 20 48.0 | -0.4 |
| ZLN | | | | S | | Sb | | 07 21 12.1 | -0.1 |
| ZLN | Zelenaya | 1.86 | 353 | *eP* | | Pb | | 07 20 48.0 | -0.4 |
| ZLN | | | | *eS* | | Sb | | 07 21 12.1 | -0.1 |
| DALK | Dalny | 1.87 | 233 | PN | | Pn | | 07 20 47.3 | +0.7 |
| DALK | | | | S | | Sn | | 07 21 10.5 | -0.4 |
| DALK | Dalny | 1.87 | 233 | *eP* | | Pn | | 07 20 47.3 | +0.7 |
| DALK | | | | *eS* | | Sn | | 07 21 10.5 | -0.4 |
| KPT | Kopyto | 1.89 | 343 | PN | | Pn | | 07 20 47.6 | +0.6 |
| KPT | | | | S | | Sn | | 07 21 11.5 | 0.0 |
| KPT | Kopyto | 1.89 | 343 | *eP* | | Pn | | 07 20 47.6 | +0.6 |
| KPT | | | | *eS* | | Sn | | 07 21 11.5 | 0.0 |
| PET | Petropavlovsk | 1.92 | 234 | ⇓*i*PN | | Pn | | 07 20 48.3 | +0.9 |
| PET | | | | *eS* | | Sn | | 07 21 11.5 | -0.6 |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,140nm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=N,693nm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=E,581nm,0.5s | | | | | | | | |
| PET | Petropavlovsk | 1.92 | 234 | *eP* | | Pn | | 07 20 48.2 | +0.9 |
| PET | | | | *eS* | | Sn | | 07 21 11.7 | -0.4 |
| LGNR | Loginova | 1.94 | 351 | PN | | Pb | | 07 20 49.3 | -0.4 |
| LGNR | | | | S | | Sb | | 07 21 13.6 | -0.9 |
| LGNR | Loginova | 1.94 | 351 | *eP* | | Pb | | 07 20 49.3 | -0.4 |
| LGNR | | | | *eS* | | Sb | | 07 21 13.6 | -0.9 |
| CIRR | Tsirk | 1.96 | 352 | PN | | Pb | | 07 20 49.4 | -0.7 |
| CIRR | Tsirk | 1.96 | 352 | *eP* | | Pb | | 07 20 49.4 | -0.7 |
| GNL | Ganaly | 2.00 | 257 | PN | | Pn | | 07 20 49.1 | +0.5 |
| GNL | Ganaly | 2.00 | 257 | *eP* | | Pn | | 07 20 49.1 | +0.5 |
| KRSR | Krestovskiy | 2.08 | 350 | PN | | Pn | | 07 20 50.3 | +0.6 |
| KRSR | | | | S | | Sb | | 07 21 17.2 | -1.3 |
| KRSR | Krestovskiy | 2.08 | 350 | *eP* | | Pn | | 07 20 50.3 | +0.6 |
| KRSR | | | | *eS* | | Sb | | 07 21 17.2 | -1.3 |
| KLY | Klyuchi | 2.17 | 351 | PN | | Pn | | 07 20 51.7 | +1.0 |
| KLY | | | | S | | Sn | | 07 21 18.1 | -0.1 |
| KLY | Klyuchi | 2.17 | 351 | *eP* | | Pn | | 07 20 51.7 | +1.0 |
| KLY | | | | *eS* | | Sn | | 07 21 18.1 | -0.1 |
| KBTR | Krutoberegovo | 2.23 | 23 | PN | | Pn | | 07 20 52.1 | +0.5 |
| KBTR | Krutoberegovo | 2.23 | 23 | *eP* | | Pn | | 07 20 52.1 | +0.5 |
| KBG | Krutoberegovo | 2.25 | 21 | PN | | Pn | | 07 20 52.3 | +0.5 |
| KBG | | | | S | | Sn | | 07 21 18.9 | -1.3 |
| KBG | Krutoberegovo | 2.25 | 21 | *eP* | | Pn | | 07 20 52.3 | +0.5 |
| KBG | | | | *eS* | | Sn | | 07 21 18.9 | -1.3 |
| ESO | Esso | 2.28 | 321 | PN | | Pb | | 07 20 55.9 | +0.5 |
| ESO | Esso | 2.28 | 321 | *eP* | | Pb | | 07 20 55.9 | +0.5 |
| KRMR | Karymshinskiy | 2.29 | 235 | PN | | Pn | | 07 20 54.2 | +1.8 |
| KRMR | | | | S | | Sn | | 07 21 21.7 | +0.4 |
| KRMR | Karymshinskiy | 2.29 | 235 | *eP* | | Pn | | 07 20 54.2 | +1.8 |
| KRMR | | | | *eS* | | Sn | | 07 21 21.7 | +0.4 |
| PEA0B | Petropavlovsk- | 2.36 | 244 | *d*iPN | | Pn | | 07 20 54.5 | +1.1 |
| PETK | Petropavlovsk- | 2.36 | 244 | Pn | | Pn | | 07 20 53.9 | +0.5 |
| | comp=E,15nm,0.3s,baz=80,slow=20,SNR=67 | | | | | | | | |
| PETK | | | | Sn | | Sb | | 07 21 25.4 | -1.0 |
| | comp=E,17nm,0.3s,baz=47,slow=28,SNR=9.7 | | | | | | | | |
| RUS | Russkaya | 2.39 | 224 | PN | | Pn | | 07 20 54.2 | +0.5 |
| RUS | | | | S | | Sn | | 07 21 21.9 | -1.8 |
| RUS | Russkaya | 2.39 | 224 | *eP* | | Pn | | 07 20 54.2 | +0.5 |
| RUS | | | | *eS* | | Sn | | 07 21 21.9 | -1.8 |
| BDR | Baidarnaya | 2.40 | 360 | PN | | Pn | | 07 20 52.8 | -1.2 |
| BDR | Baidarnaya | 2.40 | 360 | *eP* | | Pn | | 07 20 52.8 | -1.2 |
| SMKR | Semkarok | 2.42 | 3 | PN | | Pn | | 07 20 55.1 | +0.9 |
| SMKR | | | | S | | Sn | | 07 21 25.1 | +0.6 |
| SMKR | Semkarok | 2.42 | 3 | *eP* | | Pn | | 07 20 55.1 | +0.9 |
| SMKR | | | | *eS* | | Sn | | 07 21 25.1 | +0.6 |
| SRKR | Sorokina | 2.48 | 359 | PN | | Pn | | 07 20 55.8 | +0.6 |
| SRKR | Sorokina | 2.48 | 359 | *eP* | | Pn | | 07 20 55.8 | +0.6 |
| MTVR | Mutnovka | 2.49 | 228 | PN | | Pn | | 07 20 56.5 | +1.2 |
| MTVR | | | | S | | Sn | | 07 21 26.6 | +0.1 |
| MTVR | Mutnovka | 2.49 | 228 | *eP* | | Pn | | 07 20 56.5 | +1.2 |
| MTVR | | | | *eS* | | Sn | | 07 21 26.6 | +0.1 |
| GRL | Gorelyy | 2.50 | 231 | PN | | Pn | | 07 20 57.1 | +1.8 |
| GRL | Gorelyy | 2.50 | 231 | *eP* | | Pn | | 07 20 57.1 | +1.8 |
| APC | Apacha | 2.73 | 244 | PN | | Pn | | 07 21 00.4 | +1.9 |
| APC | | | | S | | Sn | | 07 21 33.4 | +1.2 |
| APC | Apacha | 2.73 | 244 | *eP* | | Pn | | 07 21 00.4 | +1.9 |
| APC | | | | *eS* | | Sn | | 07 21 33.4 | +1.2 |
| BKI | Bering | 2.94 | 68 | PN | | Pn | | 07 21 02.9 | +1.6 |
| BKI | | | | S | | Sn | | 07 21 36.1 | -1.1 |
| BKI | Bering | 2.94 | 68 | *eP* | | Pn | | 07 21 02.9 | +1.6 |
| BKI | | | | *eS* | | Sn | | 07 21 36.1 | -1.1 |
| KDTR | Khodutka, Kamc | 3.04 | 220 | *eS* | | Sn | | 07 21 42.2 | +2.4 |
| PAU | Pauzhetka | 3.81 | 226 | PN | | Pn | | 07 21 16.3 | +3.0 |
| PAU | Pauzhetka | 3.81 | 226 | *eP* | | Pn | | 07 21 16.3 | +3.0 |
| ERM | Erimo | 17.08 | 232 | *ce*P | | P | | 07 24 15.3 | +0.1 |
| KLR | Kul'dur | 18.85 | 267 | ⇑*e*P | | P | | 07 24 32.8 | -1.9 |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| TIXI | Tiksi | 22.39 | 334 | ⇓*e*P | | P | | 07 25 10.7 | -2.2 |
| TIXI | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | | |
| ILAR | Eielson Array | 27.57 | 47 | P | | P | | 07 26 02.4 | +0.7 |
| | comp=Z,0.3nm,0.8s,baz=283,slow=8.0,SNR=2.1 | | | | | | | | |
| SONM | Songino Array | 34.32 | 282 | PcP | | PcP | | 07 29 38.1 | +0.7 |
| | comp=Z,0.3nm,0.8s,baz=96,slow=1.4,SNR=2.0 | | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.66 | 171 | T | | T | | 08 03 53.4 | |
| | baz=354,slow=76,SNR=2306 | | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.67 | 171 | T | | T | | 08 03 59.6 | |
| | baz=354,slow=76,SNR=1765 | | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.67 | 171 | T | | T | | 08 03 54.7 | |
| | baz=354,slow=76,SNR=2162 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.85 | 171 | T | | T | | 08 05 28.0 | |
| | baz=352,slow=76,SNR=33 | | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.86 | 171 | T | | T | | 08 05 28.9 | |
| | baz=352,slow=76,SNR=31 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.87 | 171 | T | | T | | 08 05 22.2 | |
| | baz=352,slow=76,SNR=28 | | | | | | | | |
| YKA | Yellowknife Ar | 41.91 | 44 | P | | P | | 07 28 04.8 | -0.3 |
| | comp=Z,0.1nm,0.5s,baz=300,slow=7.8,SNR=1.4 | | | | | | | | |
| KURK | Kurchatov | 47.74 | 302 | P | | P | | 07 28 52.9 | +1.3 |
| KURK | | | | | | | | 07 30 19.5 | |
| KURBB | Kurchatov Arra | 47.84 | 302 | P | | P | | 07 28 52.9 | +0.5 |
| | comp=Z,0.2nm,0.3s,baz=59,slow=7.7,SNR=4.2 | | | | | | | | |
| KURBB | | | | | PcP | PcP | | 07 30 19.5 | -1.6 |
| | comp=Z,0.3nm,0.5s,baz=50,slow=2.8,SNR=4.2 | | | | | | | | |
| MKAR | Makanchi Array | 48.30 | 295 | P | | P | | 07 28 56.3 | +0.2 |
| | comp=Z,0.1nm,0.5s,baz=56,slow=7.7,SNR=1.4 | | | | | | | | |
| MKAR | | | | | PcP | PcP | | 07 30 21.0 | -1.9 |
| | comp=Z,0.2nm,0.6s,baz=68,slow=3.9,SNR=2.0 | | | | | | | | |
| BVAR | Borovoye Array | 50.25 | 308 | P | | P | | 07 29 12.2 | +1.4 |
| | comp=Z,0.2nm,0.4s,baz=65,slow=8.1,SNR=1.6 | | | | | | | | |
| BVAR | | | | | PcP | PcP | | 07 30 28.5 | -1.3 |
| | comp=Z,0.3nm,0.4s,baz=95,slow=6.1,SNR=2.7 | | | | | | | | |
| PDAR | Pinedale Array | 56.41 | 62 | P | | P | | 07 29 57.2 | +0.6 |
| | comp=Z,0.3nm,0.8s,baz=339,slow=7.2,SNR=1.9 | | | | | | | | |
| TXAR | Lajitas Array | 69.60 | 68 | P | | P | | 07 31 25.8 | +1.5 |
| | comp=Z,0.5nm,0.8s,baz=294,slow=4.7,SNR=7.2 | | | | | | | | |
| WRA | Warramunga Arr | 77.35 | 206 | P | | P | | 07 32 09.9 | +0.1 |
| | comp=Z,0.2nm,0.5s,baz=22,slow=6.1,SNR=4.8 | | | | | | | | |
| ASAR | Alice Springs | 81.03 | 205 | P | | P | | 07 32 30.8 | +0.9 |
| | comp=Z,0.4nm,0.7s,baz=17,slow=5.7,SNR=5.2 | | | | | | | | |

*IDC **01** 07:28:53.2±6.8, 14°.67S×167°.37E, h114km±68km, mb3.7/6, mb1 3.8/7, mb1mx3.3/42, mbtmp4.1/7, Error ellipse: s-maj=55.6km s-min=33.4km az=154.0*

**ISC 01 07:28:56.6±1.6, 14°.9S±0°.1×167°.5E±0°.2, h150km, n7, σ0s 98/8, mb4.0/5, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 7.24 | 188 | P | | P | Pn | 07 30 39.5 | -0.3 |
| | 2.3nm,0.3s,baz=54,slow=17,SNR=12 | | | | | | | | |
| DZM | | | | S | | Sn | | 07 32 00.8 | -0.1 |
| | 1.1nm,0.3s,baz=296,slow=22,SNR=1.9 | | | | | | | | |
| CTA | Charters Tower | 20.89 | 253 | P | | P | | 07 33 27.2 | +0.1 |
| | 3.6nm,0.8s,baz=66,slow=13,SNR=5.1 | | | | | | | | |
| STKA | Stephens Creek | 29.06 | 230 | P | | P | | 07 34 44.1 | +1.3 |
| | 3.2nm,0.5s,baz=59,slow=10,SNR=13 | | | | | | | | |
| WRA | Warramunga Arr | 31.98 | 256 | P | | P | | 07 35 07.3 | -1.5 |
| | 1.1nm,0.9s,baz=85,slow=8.8,SNR=5.0 | | | | | | | | |
| ASAR | Alice Springs | 32.81 | 249 | P | | P | | 07 35 15.0 | -1.0 |
| | 1.7nm,0.5s,baz=78,slow=9.2,SNR=32 | | | | | | | | |
| FITZ | Fitzroy Crossi | 40.18 | 259 | P | | P | | 07 36 18.6 | +0.1 |
| | 3.7nm,0.8s,baz=84,slow=6.1 | | | | | | | | |
| ILAR | Eielson Array | 86.59 | 18 | P | | P | | 07 41 22.5 | 0.0 |
| | 0.3nm,0.8s,baz=238,slow=5.2,SNR=2.3 | | | | | | | | |

**IDC 01 07:29:33.9±3.9, 13°.59S×167°.74E, h0km, mb3.7/3, mb1 3.8/3, mb1mx3.2/43, mbtmp3.7/3, Error ellipse: s-maj=137.8km s-min=58.5km az=136.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 32.56 | 254 | P | | P | | 07 36 07.0 | -0.2 |
| | 0.2nm,0.4s,baz=84,slow=8.4,SNR=1.6 | | | | | | | | |
| ASAR | Alice Springs | 33.52 | 248 | P | | P | | 07 36 15.6 | +0.1 |
| | 0.5nm,0.4s,baz=74,slow=9.5,SNR=7.1 | | | | | | | | |
| ASAR | | | | | PcP | PcP | | 07 38 55.8 | -0.8 |
| | 0.4nm,1.0s,baz=87,slow=2.0,SNR=1.6 | | | | | | | | |
| MKAR | Makanchi Array | 96.70 | 316 | P | | P | | 07 43 06.6 | +0.3 |
| | 0.2nm,0.5s,baz=93,slow=6.1,SNR=2.7 | | | | | | | | |

*DJA **01** 07:38:41.6±0.4, 1°.S±4°×9°.9E±°, h32km±10km, M3.5/7, MLv3.5/7*
*IDC **01** 07:38:45.5±3.8, 0°.37S×100°.17E, h55km±10km, mb3.0/4, mb1 3.2/4, mb1mx2.7/49, mbtmp3.3/4, Error ellipse: s-maj=146.2km s-min=20.5km az=61.0*

**ISC 01 07:38:41.8±0.8, 0°.80S±0°.05×99°.21E±0°.06, h50km, n13, σ0s 85/18, mb3.4/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SISI | Saibi | 0.54 | 193 | P | | Pn | | 07 38 53.6 | +0.1 |
| SISI | | | | S | | Sn | | 07 39 02.2 | +0.2 |
| PBSI | Pulau Batu | 1.19 | 308 | P | | Pn | | 07 39 02.2 | +0.1 |
| PBSI | | | | S | | Sn | | 07 39 17.8 | +0.6 |
| PPI | Padang Panjang | 1.23 | 74 | P | | Pn | | 07 39 03.1 | +0.5 |
| MNSI | Mandailing Nat | 1.62 | 13 | P | | Pn | | 07 39 08.6 | +0.6 |
| PPSI | Pulau Pagai | 2.11 | 158 | P | | Pn | | 07 39 14.9 | +0.3 |
| SBSI | Sibolga | 2.35 | 352 | P | | Pn | | 07 39 16.3 | -1.7 |
| KRJI | Kerinci | 2.59 | 120 | P | | Pn | | 07 39 21.3 | 0.0 |
| GSI | Gunungsitoli | 2.65 | 322 | P | | Pn | | 07 39 22.1 | 0.0 |
| LHSI | Lahat | 5.25 | 125 | P | | Pn | | 07 39 57.9 | +0.1 |
| WRA | Warramunga Arr | 39.28 | 121 | P | | P | | 07 46 04.5 | -1.6 |
| | 0.3nm,0.8s,baz=300,slow=10,SNR=1.5 | | | | | | | | |
| WRA | | | | | pP | pP | | 07 46 18.2 | -0.6 |
| | 0.5nm,0.8s,baz=304,slow=9.0,SNR=1.5 | | | | | | | | |
| ASAR | Alice Springs | 40.59 | 127 | P | | P | | 07 46 15.7 | -1.3 |
| | 0.2nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,5.8nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.11** | **251** | P | **P** | 07 55 29.3 | **-0.3** |
| WB0 | | | | IAmb | IAmb | 07 55 30.1 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.18** | **250** | P | **P** | 07 55 29.0 | **-1.2** |
| WRAB | | | | IAmb | IAmb | 07 55 42.3 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.18** | **250** | P | **P** | 07 55 29.9 | **-0.3** |
| WB2 | | | | IAmb | IAmb | 07 55 36.3 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.19** | **250** | P | **P** | 07 55 29.5 | **-0.9** |
| | comp=Z,2.8nm,0.7s,baz=84,slow=9.1,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.19** | **250** | P | **P** | 07 55 28.6 | **-1.7** |
| **TOO** | **Toolangi** | **32.40** | **212** | P | **P** | 07 55 32.8 | **+0.8** |
| TOO | | | | IAmb | IAmb | 07 55 37.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **33.45** | **244** | P | **P** | 07 55 40.0 | **-1.3** |
| | comp=Z,2.2nm,0.7s,baz=76,slow=9.3,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | 07 58 21.4 | **+0.9** |
| | comp=Z,0.7nm,0.8s,baz=77,slow=2.0,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **33.45** | **244** | | **PcP** | 07 58 20.3 | **-0.2** |
| **BBOO** | **Buckleboo** | **35.34** | **228** | P | **P** | 07 55 57.5 | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **45.84** | **251** | P | **P** | 07 57 24.3 | **+0.3** |
| **MBWA** | **Marble Bar** | **45.91** | **251** | P | **P** | 07 57 25.9 | **+1.3** |
| **MORW** | **Morawa** | **50.27** | **241** | P | **P** | 07 57 59.4 | **+1.3** |
| **MKAR** | **Makanchi Array** | **94.13** | **317** | P | **P** | 08 02 20.8 | **+1.7** |
| | comp=Z,0.7nm,0.7s,baz=109,slow=6.7,SNR=7.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.19** | **61** | P | **P** | 08 02 22.7 | **-1.7** |
| | comp=Z,0.1nm,0.8s,baz=270,slow=2.7,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **116.63** | **346** | PKP | **PKiKP** | 08 07 44.9 | **+1.4** |
| | comp=Z,2.9nm,0.9s,baz=57,slow=3.3,SNR=1.9 | | | | | | |

*NNC **01** 07:49:12.6±1.9,54.°20N×86.°98E,h0km,mb3.1,mpv3.0, Error ellipse: s-maj=17.3km s-min=9.6km az=5.0, Suspected Mining explosion.*
*IDC **01** 07:49:13.6±2.6,54.°21N×87.°03E,h0km,mb1 3.1/3, mb1mx2.6/51,mbtmp3.1/3,ML2.8/3, Error ellipse: s-maj=22.5km s-min=14.2km az=72.0*
**ISC 01 07:49:17.6±1.8,54.°13N±0.°10×86.°6E±0.°1,h0km,n10, σ1§14/14,8C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.05** | **261** | *i* | | | 07 59 42.4 | |
| | baz=79,slow=335,SNR=7.0 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.05** | **261** | ⇑P | **Pg** | | **07 49 36.5** | **-1.2** |
| ZAA0 | 1.1nm,0.6s | | | ⇑S | **Sn** | | **07 49 54.8** | **0.0** |
| | 10nm,1.2s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.05** | **261** | Pg | **Pg** | | **07 49 36.7** | **-0.9** |
| | 2.5nm,0.3s,baz=75,slow=17,SNR=32 | | | | | | | |
| ZALV | | | | Lg | Lg | | 07 49 55.8 | |
| | 1.9nm,0.3s,baz=75,slow=27,SNR=14 | | | | | | | |
| **KURK** | **Kurchatov** | **5.94** | **238** | ⇓Pn | **Pn** | | **07 50 46.4** | **-0.4** |
| | 1.9nm,0.9s | | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | | **07 51 57.5** | **+2.0** |
| | 2.3nm,0.8s | | | | | | | |
| KURK | | | | ⇑Lg | Lg | | 07 52 30.0 | |
| | 7.5nm,1.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.05** | **238** | Pn | **Pn** | | **07 50 48.7** | **+0.5** |
| | 0.2nm,0.3s,baz=54,slow=14,SNR=25 | | | | | | | |
| KURBB | | | | Sn | **Sn** | | **07 51 59.9** | **+1.8** |
| | 0.0nm,0.3s,baz=56,slow=17,SNR=0.9 | | | | | | | |
| KURBB | | | | Lg | Lg | | 07 52 36.9 | |
| | 0.1nm,0.3s,baz=51,slow=31,SNR=6.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.05** | **238** | ⇑Pn | **Pn** | | **07 50 48.9** | **+0.7** |
| | 3.0nm,0.6s,baz=54,slow=14 | | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | | **07 51 59.1** | **+1.1** |
| | 3.1nm,0.6s | | | | | | | |
| KURBB | | | | ⇑Lg | Lg | | 07 52 34.4 | |
| | 7.4nm,0.8s,baz=53,slow=29 | | | | | | | |
| **MK31** | **Makanchi Array** | **7.83** | **202** | ⇑Sn | **Sn** | | **07 52 42.2** | **+0.1** |
| | 0.6nm,0.7s | | | | | | | |
| MK31 | | | | ⇑Lg | Lg | | 07 53 24.7 | |
| | 2.3nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.83** | **202** | Pn | **Pn** | | **07 51 13.0** | **+0.3** |
| | 0.1nm,0.3s,baz=24,slow=12,SNR=3.6 | | | | | | | |
| MKAR | | | | Sn | **Sn** | | **07 52 41.2** | **-0.9** |
| | 0.1nm,0.3s,baz=25,slow=27,SNR=4.4 | | | | | | | |
| MKAR | | | | Lg | Lg | | 07 53 24.3 | |
| | 0.1nm,0.3s,baz=23,slow=27,SNR=3.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **9.69** | **270** | Pn | **Pn** | | **07 51 37.3** | **-0.9** |
| | 0.2nm,0.3s,baz=63,slow=23,SNR=3.1 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **54.99** | **341** | *i* P | **P** | | **07 58 50.9** | **+0.9** |

**IDC 01 08:18:17.6±3.0,54.°32N×86.°97E,h0km,mb1 2.8/2, mb1mx2.7/36,mbtmp2.8/2,ML1.8/2,Error ellipse: s-maj=24.2km s-min=17.9km az=60.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.32** | **254** | *i* | | | 08 28 30.0 | |
| | baz=75,slow=326,SNR=2.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.32** | **254** | Pg | Pg | | 08 18 40.8 | -2.0 |
| | 0.7nm,0.3s,baz=70,slow=15,SNR=6.2 | | | | | | | |
| ZALV | | | | Lg | Lg | | 08 19 00.0 | |
| | 0.7nm,0.3s,baz=71,slow=28,SNR=6.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.34** | **238** | Pn | Pn | | 08 19 53.6 | +1.3 |
| | 0.0nm,0.3s,baz=54,slow=14,SNR=12 | | | | | | | |
| KURBB | | | | Sn | Sn | | 08 21 03.0 | -2.3 |
| | 0.0nm,0.3s,baz=36,slow=17,SNR=1.5 | | | | | | | |
| KURBB | | | | Lg | Lg | | 08 21 40.1 | |
| | 0.0nm,0.3s,baz=54,slow=29,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.10** | **203** | Pn | Pn | | 08 20 17.6 | +1.1 |
| | 0.0nm,0.3s,baz=21,slow=14,SNR=1.7 | | | | | | | |
| MKAR | | | | Lg | Lg | | 08 22 36.1 | |
| | 0.1nm,0.3s,baz=27,slow=26,SNR=3.9 | | | | | | | |

*ATH **01** 08:31:41.2,37.°27N×20.°21E,h10km±4km,ML2.5/1, Error ellipse: s-maj=8.1km s-min=2.2km az=49.0*
*THE **01** 08:31:43.0,37.°33N×20.°34E,h4km±3km,ML2.6/3,Error ellipse: s-maj=4.5km s-min=1.3km az=299.0*
**ISC 01 08:31:37.1±1.7,37.°17N±0.°08×19.°96E±0.°06,h11km,n34, σ1§87/42,Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LTHK** | **Lithakia** | **0.88** | **52** | P | **Pg** | | **08 31 52.9** | **-1.1** |
| **LTHK** | **Lithakia** | **0.88** | **52** | P | **Pg** | | **08 31 53.1** | **-0.9** |
| **PSDA** | **Pessada-Kefalo** | **1.06** | **27** | P | **Pg** | | **08 31 57.7** | **+0.2** |
| **KEF3** | **Kipouria, Keph** | **1.07** | **16** | P | **Pb** | | **08 31 59.5** | **+1.8** |
| KEF3 | | | | S | **Sb** | | **08 32 12.2** | **+0.5** |
| | 1µm,0.6s | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **1.07** | **16** | P | **Pg** | | **08 31 59.1** | **+1.4** |
| **DMLN** | **Damoulianata-K** | **1.11** | **17** | P | **Pg** | | **08 31 59.3** | **+0.8** |
| **VLS** | **Valsamata** | **1.12** | **26** | P | **Pg** | | **08 31 58.9** | **+0.3** |
| VLS | | | | S | **Sg** | | **08 32 11.2** | **-2.0** |
| | 285nm,0.5s | | | | | | | |
| **VLS** | **Valsamata** | **1.12** | **26** | P | **Pg** | | **08 31 59.2** | **+0.6** |
| VLS | | | | AML | AML | | 08 32 17.8 | |
| | comp=E,472µm,0.4s | | | | | | | |
| VLS | | | | AML | AML | | 08 32 18.8 | |
| | comp=N,586µm,0.6s | | | | | | | |
| **VTN** | **Vitineika** | **1.22** | **52** | P | **Pb** | | **08 32 01.0** | **+0.8** |
| **FSK** | **Fiskardo** | **1.37** | **20** | P | **Pn** | | **08 32 04.1** | **+2.0** |
| FSK | | | | S | **Sn** | | **08 32 21.8** | **+1.5** |
| **FSK** | **Fiskardo** | **1.37** | **20** | P | **Pn** | | **08 32 03.9** | **+1.7** |
| **PYL** | **PYLOS** | **1.45** | **100** | P | **Pn** | | **08 32 04.7** | **+1.5** |
| **RLS** | **Riolos of Patr** | **1.49** | **53** | P | **Pn** | | **08 32 04.7** | **+1.0** |
| **RLS** | **Riolos of Patr** | **1.49** | **53** | P | **Pn** | | **08 32 04.5** | **+0.8** |
| **EVGI** | **Lefkada island** | **1.55** | **21** | P | **Pn** | | **08 32 05.8** | **+1.2** |
| **EVGI** | **Lefkada island** | **1.55** | **21** | P | **Pn** | | **08 32 05.8** | **+1.2** |
| **ITM** | **Ithomi** | **1.57** | **89** | P | **Pb** | | **08 32 06.6** | **+0.5** |
| ITM | | | | S | **Sn** | | **08 32 24.5** | **-0.7** |
| | comp=N,168nm,0.5s | | | | | | | |
| **ITM** | **Ithomi** | **1.57** | **89** | P | **Pn** | | **08 32 06.3** | **+1.4** |
| **DRO** | **Drossia** | **1.59** | **60** | P | **Pb** | | **08 32 06.8** | **+0.2** |
| **DRO** | **Drossia** | **1.59** | **60** | P | **Pb** | | **08 32 06.7** | **+0.2** |
| **LKD2** | **Lefkada island** | **1.71** | **19** | P | **Pb** | | **08 32 10.1** | **+1.6** |
| **LAKA** | **Lakka** | **1.92** | **56** | P | **Pb** | | **08 32 12.0** | **-0.2** |
| **LAKA** | **Lakka** | **1.92** | **56** | P | **Pb** | | **08 32 12.0** | **-0.2** |
| **KLV** | **Kalavryta, Ach** | **1.94** | **63** | P | **Pn** | | **08 32 11.3** | **+1.2** |
| **KLV** | **Kalavryta, Ach** | **1.94** | **63** | P | **Pn** | | **08 32 11.4** | **+1.3** |
| **EFP** | **Efpalio** | **1.98** | **50** | P | **Pb** | | **08 32 12.9** | **-0.2** |
| **ANX** | **Ano Chora** | **2.10** | **47** | P | **Pn** | | **08 32 14.7** | **+2.4** |
| **ANX** | **Ano Chora** | **2.10** | **47** | P | **Pn** | | **08 32 14.6** | **+2.4** |
| **STON** | **Ston** | **5.95** | **344** | *e*Pn | **Pn** | | **08 33 07.0** | **+1.9** |
| STON | | | | Sn | **Sn** | | **08 34 08.9** | **-4.3** |
| **RICI** | **Ricice** | **6.68** | **342** | *e*Pn | **Pn** | | **08 33 16.8** | **+1.7** |
| RICI | | | | Sn | Sn | | 08 34 25.1 | -6.0 |
| **ZIRJ** | **Zirje** | **7.26** | **334** | *e*Pn | **Pn** | | **08 33 26.0** | **+2.9** |
| ZIRJ | | | | Sn | Sn | | 08 34 39.9 | -5.7 |
| **KIJV** | **Kijevo** | **7.34** | **339** | *e*Pn | **Pn** | | **08 33 26.3** | **+2.1** |
| KIJV | | | | Sn | **Sn** | | **08 34 43.7** | **-3.8** |
| **MORI** | **Morici** | **7.43** | **335** | *e*Pn | **Pn** | | **08 33 27.0** | **+1.6** |
| MORI | | | | Sn | **Sn** | | **08 34 46.1** | **-3.5** |
| **DUGI** | **Dugi Otok** | **7.77** | **333** | *e*Pn | **Pn** | | **08 33 30.5** | **+0.5** |
| DUGI | | | | Sn | **Sn** | | **08 34 53.5** | **-4.5** |

*IDC **01** 08:37:00.1±2.6,53.°54N×87.°87E,h0km,mb1 3.2/2, mb1mx3.0/48,mbtmp3.2/2,ML3.0/2,Error ellipse: s-maj=22.4km s-min=15.0km az=65.0*
*NNC **01** 08:37:02.2±1.9,53.°46N×87.°61E,h0km,mb3.2,mpv2.9, Error ellipse: s-maj=14.6km s-min=7.5km az=58.0, Suspected Mining explosion.*
**ISC 01 08:37:02.0±3.5,53.°6N±0.°1×87.°6E±0.°2,h0km,n8,σ0§62/13, 7C-4D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.70** | **284** | *i* | | | 08 51 21.4 | |
| | baz=99,slow=332,SNR=8.2 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.70** | **284** | ⇑P | **Pn** | | **08 37 32.7** | **-0.1** |
| ZAA0 | 0.7nm,0.4s | | | ⇑S | **Sg** | | **08 37 57.0** | **+0.5** |
| | 8.5nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.70** | **284** | Pn | **Pn** | | **08 37 32.6** | **-0.2** |
| | 3.9nm,0.3s,baz=105,slow=14,SNR=38 | | | | | | | |
| ZALV | | | | Lg | Lg | | 08 37 59.0 | |
| | 4.3nm,0.3s,baz=104,slow=25,SNR=25 | | | | | | | |
| **KURK** | **Kurchatov** | **6.23** | **246** | ⇓Pn | **Pn** | | **08 38 35.8** | **+0.7** |
| | 3.2nm,1.3s | | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | | **08 39 46.0** | **-0.9** |
| | 4.7nm,1.4s | | | | | | | |
| KURK | | | | ⇑Lg | Lg | | 08 40 20.4 | |
| | 8.1nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.32** | **246** | Pn | **Pn** | | **08 38 36.7** | **+0.4** |
| | 0.3nm,0.3s,baz=64,slow=15,SNR=8.3 | | | | | | | |
| KURBB | | | | Sn | **Sn** | | **08 39 49.7** | **+0.5** |
| | 0.0nm,0.3s,baz=61,slow=26,SNR=2.1 | | | | | | | |
| KURBB | | | | Lg | Lg | | 08 40 24.6 | |
| | 0.0nm,0.3s,baz=64,slow=31,SNR=7.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.32** | **246** | ⇓Pn | **Pn** | | **08 38 36.6** | **+0.2** |
| | 1.4nm,0.3s | | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | | **08 39 48.0** | **-1.2** |
| | 4.6nm,0.7s | | | | | | | |
| KURBB | | | | ⇓Lg | Lg | | 08 40 23.4 | |
| | 15nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **7.59** | **209** | ⇑Pn | **Pn** | | **08 38 53.9** | **+0.1** |
| | 0.4nm,0.6s,baz=28,slow=12,SNR=9.5 | | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | | **08 40 20.4** | **-0.2** |
| | 0.8nm,0.7s,baz=32,slow=22,SNR=4.3 | | | | | | | |
| MK31 | | | | ⇑Lg | Lg | | 08 41 01.3 | |
| | 8.1nm,1.2s,baz=348,slow=39,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.59** | **209** | Pn | **Pn** | | **08 38 54.0** | **+0.2** |
| | 0.3nm,0.3s,baz=29,slow=14,SNR=9.3 | | | | | | | |
| MKAR | | | | Sn | **Sn** | | **08 40 20.1** | **-0.4** |
| | 0.1nm,0.3s,baz=30,slow=24,SNR=6.1 | | | | | | | |
| MKAR | | | | Lg | Lg | | 08 41 00.7 | |
| | 0.1nm,0.3s,baz=26,slow=30,SNR=6.9 | | | | | | | |

*TIR **01** 08:39:47.2,40.°56N×19.°93E,h8km,Md3.0,Ml2.8*
*THE **01** 08:39:48.0,40.°33N×19.°54E,h2km±1km,ML2.7/9,Error ellipse: s-maj=1.5km s-min=0.7km az=153.0*
**ISC 01 08:39:45.7±1.4,40.°34N±0.°04×19.°35E±0.°04,h12km±11km, n29,σ1§22/51,Albania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SRN** | **Sarande** | **0.67** | **132** | P | **Pg** | | **08 39 58.5** | **-0.3** |
| **SRN** | **Sarande** | **0.67** | **132** | P | **Pg** | | **08 39 58.4** | **-0.3** |
| | baz=141 | | | | | | | |
| SRN | | | | S | **Sb** | | **08 40 08.8** | **+0.2** |
| | baz=141 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=E,0.7nm,0.4s,baz=141 | | | | | | | |
| **KEK** | **Kerkira** | **0.71** | **151** | P | **Pb** | | **08 40 00.2** | **+0.2** |
| KEK | | | | S | **Sb** | | **08 40 09.6** | **-0.2** |
| | comp=E,655nm,0.2s | | | | | | | |
| **LSK** | **Leskovik** | **0.97** | **101** | P | **Pb** | | **08 40 02.5** | **-2.0** |
| LSK | | | | S | **Sb** | | **08 40 15.6** | **-1.8** |
| | comp=E,425nm,0.6s | | | | | | | |
| **LSK** | **Leskovik** | **0.97** | **101** | P | **Pb** | | **08 40 02.1** | **-2.4** |
| | baz=102 | | | | | | | |
| LSK | | | | S | **Sb** | | **08 40 16.2** | **-1.2** |
| | baz=102 | | | | | | | |
| LSK | | | | AMP | | | | |
| | comp=E,1.3nm,0.7s,baz=102 | | | | | | | |
| **TIR** | **Tirane** | **1.08** | **21** | P | **Pb** | | **08 40 07.6** | **+1.3** |
| TIR | | | | S | **Sn** | | **08 40 23.5** | **+1.8** |
| | comp=E,255nm,0.4s | | | | | | | |
| **IGT** | **Igoumenitsa** | **1.10** | **137** | P | **Pb** | | **08 40 06.5** | **-0.2** |
| IGT | | | | S | **Sg** | | **08 40 21.6** | **+0.4** |
| | comp=E,182nm,0.4s | | | | | | | |
| **IGT** | **Igoumenitsa** | **1.10** | **137** | P | **Pb** | | **08 40 06.5** | **-0.2** |
| | baz=142 | | | | | | | |
| IGT | | | | S | **Sg** | | **08 40 21.2** | **+0.1** |
| | baz=142 | | | | | | | |
| **KBN** | **Korca** | **1.13** | **75** | P | **Pb** | | **08 40 06.4** | **-0.8** |
| KBN | | | | S | **Sb** | | **08 40 20.9** | **-1.0** |
| | comp=E,512nm,0.7s | | | | | | | |
| **NEST** | **Nestorio** | **1.30** | **86** | P | **Pn** | | **08 40 10.1** | **+0.3** |
| NEST | | | | S | **Sb** | | **08 40 26.5** | **-0.3** |
| | comp=E,352nm,0.6s | | | | | | | |
| **JAN** | **Janina** | **1.34** | **120** | P | **Pn** | | **08 40 10.3** | **+0.1** |
| JAN | | | | S | **Sb** | | **08 40 27.9** | **+0.1** |
| | comp=E,532nm,0.3s | | | | | | | |
| **PENT** | **Pentalofos** | **1.37** | **95** | P | **Pn** | | **08 40 11.3** | **+0.5** |
| PENT | | | | S | **Sn** | | **08 40 28.9** | **-0.1** |
| **PHP** | **Peshkopia** | **1.58** | **31** | P | **Pn** | | **08 40 14.8** | **+1.2** |
| PHP | | | | S | **Sn** | | **08 40 35.7** | **+1.7** |
| **KPRO** | **Kipourio** | **1.59** | **103** | P | **Pn** | | **08 40 14.4** | **+0.7** |
| KPRO | | | | S | **Sn** | | **08 40 34.9** | **+0.7** |
| | comp=E,315nm,0.5s | | | | | | | |
| **FNA** | **Florina** | **1.60** | **73** | P | **Pn** | | **08 40 14.7** | **+0.8** |
| FNA | | | | S | **Sn** | | **08 40 35.7** | **+1.1** |
| | comp=E,418nm,0.5s | | | | | | | |
| **LKD2** | **Lefkada island** | **1.85** | **146** | P | **Pn** | | **08 40 18.4** | **+1.1** |
| | baz=150 | | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **2.52** | **121** | P | **Pn** | | **08 40 28.5** | **+2.0** |
| **ANX** | **Ano Chora** | **2.64** | **130** | P | **Pn** | | **08 40 29.9** | **+1.7** |
| **STON** | **Ston** | **2.82** | **334** | *e*Pn | **Pn** | | **08 40 31.0** | **+0.5** |
| STON | | | | Sn | **Sn** | | **08 41 02.7** | **-1.8** |
| **LSTV** | **Lastovo** | **3.05** | **324** | *e*Pn | **Pn** | | **08 40 35.0** | **+1.2** |
| **MAKA** | **Makarska** | **3.42** | **330** | *e*Pn | **Pn** | | **08 40 39.9** | **+1.0** |
| MAKA | | | | Sn | **Sn** | | **08 41 18.7** | **-0.7** |
| **RICI** | **Ricice** | **3.56** | **333** | *e*Pn | **Pn** | | **08 40 41.9** | **+1.0** |
| RICI | | | | Sn | **Sn** | | **08 41 22.4** | **-0.5** |
| **HVAR** | **Hvar** | **3.57** | **324** | *e*Pn | **Pn** | | **08 40 41.9** | **+1.0** |
| HVAR | | | | Sn | **Sn** | | **08 41 21.8** | **-1.3** |
| **KIJV** | **Kijevo** | **4.27** | **330** | *e*Pn | **Pn** | | **08 40 52.1** | **+1.6** |
| KIJV | | | | Sn | **Sn** | | **08 41 38.5** | **-1.8** |
| **ZIRJ** | **Zirje** | **4.32** | **321** | *e*Pn | **Pn** | | **08 40 52.1** | **+1.0** |
| ZIRJ | | | | Sn | **Sn** | | **08 41 39.2** | **-2.2** |
| **MORI** | **Morici** | **4.45** | **324** | *e*Pn | **Pn** | | **08 40 54.4** | **+1.4** |
| MORI | | | | Sn | **Sn** | | **08 41 44.8** | **+0.1** |
| **DUGI** | **Dugi Otok** | **4.85** | **320** | *e*Pn | **Pn** | | **08 41 00.1** | **+1.6** |
| DUGI | | | | Sn | **Sn** | | **08 41 53.9** | **-0.7** |
| **NVLJ** | **Novalja** | **5.37** | **323** | Sn | **Sn** | | **08 42 05.4** | **-1.9** |
| **BRJN** | **Brijuni** | **6.16** | **320** | *e*Pn | **Pn** | | **08 41 17.8** | **+1.4** |

*ATH **01** 08:42:55.6,37.°29N×20.°21E,h10km±5km,ML2.8/1, Error ellipse: s-maj=6.6km s-min=1.8km az=269.0*
*THE **01** 08:42:56.2,37.°32N×20.°28E,h2km±2km,ML2.9/4, Error ellipse: s-maj=3.7km s-min=1.0km az=57.0*
**ISC 01 08:42:54.3±2.0,37.°27N±0.°07×20.°06E±0.°07,h25km±15km, n36,σ1§81/50,Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LTHK** | **Lithakia** | **0.76** | **54** | P | **Pb** | | **08 43 07.5** | **-1.4** |
| **LTHK** | **Lithakia** | **0.76** | **54** | P | **Pb** | | **08 43 07.6** | **-1.4** |
| **PSDA** | **Pessada-Kefalo** | **0.94** | **26** | P | **Pn** | | **08 43 11.2** | **-0.7** |
| **KEF3** | **Kipouria, Keph** | **0.96** | **14** | P | **Pn** | | **08 43 12.9** | **+0.7** |
| KEF3 | | | | S | **Sn** | | **08 43 26.1** | **+1.1** |
| | 2µm,0.7s | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.96** | **14** | P | **Pn** | | **08 43 12.8** | **+0.6** |
| **DMLN** | **Damoulianata-K** | **1.00** | **14** | P | **Pn** | | **08 43 13.4** | **+0.7** |
| **VLS** | **Valsamata** | **1.00** | **25** | P | **Pn** | | **08 43 12.3** | **-0.4** |
| VLS | | | | S | **Sn** | | **08 43 26.0** | **0.0** |
| | 600nm,0.7s | | | | | | | |
| **VTN** | **Vitineika** | **1.10** | **54** | P | **Pb** | | **08 43 14.8** | **+0.1** |
| **FSK** | **Fiskardo** | **1.25** | **18** | P | **Pb** | | **08 43 17.7** | **+0.4** |
| FSK | | | | S | **Sb** | | **08 43 34.1** | **+1.1** |
| | 472nm,0.7s | | | | | | | |
| **RLS** | **Riolos of Patr** | **1.37** | **54** | P | **Pn** | | **08 43 18.7** | **+1.0** |
| **PYL** | **PYLOS** | **1.40** | **105** | P | **Pn** | | **08 43 19.1** | **+0.9** |
| PYL | | | | S | **Sb** | | **08 43 37.1** | **-0.1** |
| **PYL** | **PYLOS** | **1.40** | **105** | P | **Pn** | | **08 43 19.1** | **+0.9** |
| PYL | | | | S | **Sn** | | **08 43 36.5** | **+0.7** |
| **EVGI** | **Lefkada island** | **1.43** | **19** | P | **Pn** | | **08 43 20.1** | **+1.5** |
| **DRO** | **Drossia** | **1.48** | **62** | P | **Pb** | | **08 43 20.7** | **-0.4** |
| **DRO** | **Drossia** | **1.48** | **62** | P | **Pn** | | **08 43 20.6** | **+1.2** |
| **ITM** | **Ithomi** | **1.50** | **93** | P | **Pn** | | **08 43 21.1** | **+1.6** |
| ITM | | | | S | **Sb** | | **08 43 39.3** | **-0.7** |
| | 358nm,0.5s | | | | | | | |
| **ITM** | **Ithomi** | **1.50** | **93** | P | **Pn** | | **08 43 21.1** | **+1.6** |
| ITM | | | | S | **Sb** | | **08 43 38.7** | **-1.3** |
| ITM | | | | AML | AML | | 08 43 40.4 | |
| | comp=N,793µm,0.3s | | | | | | | |
| ITM | | | | AML | AML | | 08 43 40.6 | |
| | comp=E,588µm,0.6s | | | | | | | |
| **LKD2** | **Lefkada island** | **1.59** | **17** | P | **Pb** | | **08 43 23.8** | **+0.8** |
| **TSLK** | **Tsoukalades, L** | **1.62** | **17** | P | **Pb** | | **08 43 24.7** | **+1.1** |
| **LAKA** | **Lakka** | **1.81** | **57** | P | **Pb** | | **08 43 26.4** | **-0.3** |
| **LAKA** | **Lakka** | **1.81** | **57** | P | **Pb** | | **08 43 26.6** | **-0.1** |
| **KLV** | **Kalavryta, Ach** | **1.83** | **64** | P | **Pn** | | **08 43 25.8** | **+1.6** |
| **SERG** | **Sergoula** | **1.95** | **54** | P | **Pb** | | **08 43 28.3** | **-0.9** |
| **ANX** | **Ano Chora** | **1.98** | **48** | P | **Pb** | | **08 43 28.8** | **-0.9** |
| **ANX** | **Ano Chora** | **1.98** | **48** | P | **Pb** | | **08 43 29.1** | **-0.6** |
| **EVR** | **Evrytania** | **2.15** | **40** | P | **Pb** | | **08 43 31.8** | **-0.8** |
| **THL** | **Klokotos Trika** | **2.76** | **33** | P | **Pn** | | **08 43 39.8** | **+2.9** |
| **KPRO** | **Kipourio** | **2.87** | **20** | P | **Pn** | | **08 43 42.0** | **+3.5** |
| **STON** | **Ston** | **5.88** | **343** | *e*Pn | **Pn** | | **08 44 20.5** | **+0.8** |
| STON | | | | Sn | **Sn** | | **08 45 23.5** | **-2.8** |
| **LSTV** | **Lastovo** | **6.00** | **337** | *e*Pn | **Pn** | | **08 44 23.2** | **+1.7** |
| LSTV | | | | Sn | **Sn** | | **08 45 25.6** | **-3.7** |
| **MAKA** | **Makarska** | **6.44** | **340** | *e*Pn | **Pn** | | **08 44 29.6** | **+2.1** |
| MAKA | | | | Sn | **Sn** | | **08 45 36.9** | **-3.3** |
| **RICI** | **Ricice** | **6.61** | **341** | *e*Pn | **Pn** | | **08 44 32.2** | **+2.4** |
| RICI | | | | Sn | **Sn** | | **08 45 42.5** | **-1.7** |
| **ZIRJ** | **Zirje** | **7.21** | **334** | *e*Pn | **Pn** | | **08 44 40.4** | **+2.4** |
| ZIRJ | | | | Sn | **Sn** | | **08 45 55.3** | **-3.7** |
| **KIJV** | **Kijevo** | **7.28** | **339** | *e*Pn | **Pn** | | **08 44 41.8** | **+2.9** |
| KIJV | | | | Sn | **Sn** | | **08 45 57.9** | **-2.8** |
| **MORI** | **Morici** | **7.37** | **335** | Sn | **Sn** | | **08 46 00.3** | **-2.7** |
| **DUGI** | **Dugi Otok** | **7.71** | **332** | *e*Pn | **Pn** | | **08 44 47.8** | **+2.8** |
| DUGI | | | | Sn | **Sn** | | **08 46 10.6** | **-0.9** |

*KRNET **01** 08:55:25.6±0.1,43.°72N×69.°43E,mb3.0*
*SOME **01** 08:55:27.5,43.°37N×69.°83E*
*NNC **01** 08:55:28.0±0.5,43.°28N×69.°86E,h0km,mb3.6,mpv3.2, Error ellipse: s-maj=7.4km s-min=2.3km az=22.0, Suspected Mining explosion.*
**ISC 01 08:55:30.8±2.4,43.°42N±0.°05×70.°0E±0.°1,h0km,n32, σ1§74/52,24C-20D,Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KK09** | **Karatay Array** | **0.47** | **128** | ⇓P | **Pg** | | **08 55 37.5** | **-2.3** |
| | 4.3nm,0.3s | | | | | | | |
| KK09 | | | | ⇓S | **Sg** | | **08 55 44.6** | **-1.4** |
| | 18nm,0.3s | | | | | | | |
| **KK08** | **Karatay Array** | **0.48** | **131** | ⇑P | **Pg** | | **08 55 37.7** | **-2.2** |
| KK08 | | | | ⇓S | **Sg** | | **08 55 44.7** | **-1.4** |
| **KK04** | **Karatay Array** | **0.48** | **129** | ⇑P | **Pg** | | **08 55 37.9** | **-2.1** |
| KK04 | | | | ⇑S | **Sg** | | **08 55 45.3** | **-1.0** |
| **KK03** | **Karatay Array** | **0.48** | **130** | ⇓P | **Pg** | | **08 55 38.0** | **-2.1** |
| KK03 | | | | ⇓S | **Sg** | | **08 55 45.4** | **-1.0** |
| **KK01** | **Karatay Array** | **0.49** | **130** | ⇓P | **Pg** | | **08 55 37.8** | **-2.3** |
| KK01 | | | | ⇓S | **Sg** | | **08 55 45.3** | **-1.2** |
| **KK05** | **Karatay Array** | **0.49** | **128** | ⇓P | **Pg** | | **08 55 38.1** | **-2.1** |
| KK05 | | | | ⇑S | **Sg** | | **08 55 45.6** | **-0.9** |
| **KK02** | **Karatay Array** | **0.49** | **129** | ⇑P | **Pg** | | **08 55 38.0** | **-2.3** |
| KK02 | | | | ⇓S | **Sg** | | **08 55 45.4** | **-1.1** |
| **KK07** | **Karatay Array** | **0.49** | **131** | ⇑P | **Pg** | | **08 55 37.9** | **-2.4** |
| KK07 | | | | ⇑S | **Sg** | | **08 55 45.1** | **-1.6** |
| **KK06** | **Karatay Array** | **0.50** | **130** | ⇑P | **Pg** | | **08 55 38.4** | **-2.0** |
| KK06 | | | | ⇓S | **Sg** | | **08 55 46.0** | **-1.0** |
| **MNAS** | **Manas** | **2.06** | **116** | ⇑*i*P | **Pn** | | **08 56 06.6** | **-0.3** |
| | baz=18 | | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | | **08 56 36.7** | **+1.2

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TNSS | | | | | Lg | Lg | 08 58 11.5 | | | | |
| | 3.2nm,0.4s | | | | | | | | | | |
| **ARXS** | **Arharly** | **5.72** | **79** | | Pg | **Pg** | **08 57 16.2** | **-4.3** | | | |
| | 1.3nm,0.6s | | | | | | | | | | |
| ARXS | | | | | Lg | Lg | 08 58 33.0 | | | | |
| | 3.8nm,0.8s | | | | | | | | | | |

**IDC 01 09:02:50.0±3.8, 5°62S×151°73E, h0km, mb3.9/4, mb1 4.0/5, mb1mx3.6/37, mbtmp3.9/5, ML1.7/1, MS3.0/2, Ms1 3.0/2, ms1mx2.3/59, Error ellipse: s-maj=102.1km s-min=30.2km az=113.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **PMG** | **Port Moresby** | **5.89** | **230** | Pn | | Pn | 09 04 20.1 | | +1.5 |
| | 1.4nm,0.3s,baz=356,slow=3.9,SNR=5.1 | | | | | | | | |
| PMG | | | | Sn | | Sn | 09 05 28.0 | | +1.0 |
| | 1.9nm,0.3s,baz=269,slow=21,SNR=3.5 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.68** | **140** | LR | | LR | 09 15 26.3 | | |
| | comp=Z,61nm,18.4s,baz=220,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.11** | **228** | P | | P | 09 07 47.0 | | -0.2 |
| | 1.7nm,0.5s,baz=53,slow=9.8,SNR=20 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.84** | **222** | P | | P | 09 08 14.8 | | +0.4 |
| | 1.2nm,0.5s,baz=58,slow=8.8,SNR=19 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.34** | **242** | P | | P | 09 08 44.6 | | -1.3 |
| | 3.9nm,0.8s,baz=52,slow=12,SNR=2.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **48.26** | **334** | LR | | LR | 09 30 31.3 | | |
| | comp=Z,7.9nm,19.2s,baz=5.0,slow=34 | | | | | | | | |
| **SONM** | **Songino Array** | **66.45** | **328** | P | | P | 09 13 41.6 | | +0.2 |
| | 0.6nm,0.9s,baz=122,slow=7.0,SNR=2.9 | | | | | | | | |

*IDC **01** 09:05:39.4±1.2, 30°10S×72°83W, h0km, mb3.8/1, mb1 3.9/4, mb1mx3.6/32, mbtmp3.8/4, ML3.9/3, Error ellipse: s-maj=73.4km s-min=31.0km az=109.0*
*GUC **01** 09:05:43.6±0.6, 30°16S×72°53W, h38km±3km, ML3.6*
**ISC 01 09:05:40.4±3.2, 30°11S±0°05×72°73W±0°05, h13km±21km, n26, σ1s95/30, 9C-3D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **CO06** | **Fray Jorge** | **1.10** | **121** | ⇑*iP* | | **Pb** | **09 06 00.7** | | **-0.6** |
| CO06 | | | | *i* S | | **Sb** | **09 06 12.9** | | **-2.6** |
| **CO05** | **La Serena** | **1.31** | **82** | ⇑*iP* | | Pn | 09 06 03.5 | | -0.8 |
| CO05 | | | | *i* S | | **Sb** | **09 06 19.0** | | **-2.4** |
| CO05 | | | | IAML | | | 09 06 20.4 | | |
| | comp=N,2μm,0.5s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.67** | **93** | *eP* | | Pn | 09 06 09.7 | | +0.1 |
| GO04 | | | | *i* S | | **Sn** | **09 06 29.7** | | **-1.3** |
| GO04 | | | | IAML | | | 09 06 32.8 | | |
| | comp=N,4μm,0.5s | | | | | | | | |
| **CO02** | **Combarbal** | **1.84** | **127** | ⇑*iP* | | **Pn** | **09 06 12.4** | | **+0.6** |
| CO02 | | | | *i* S | | **Sn** | **09 06 34.2** | | **-0.9** |
| **CO03** | **El Pedregal** | **1.90** | **113** | ⇑*iP* | | Pn | 09 06 13.1 | | +0.5 |
| CO03 | | | | *i* S | | **Sn** | **09 06 35.1** | | **-1.4** |
| CO03 | | | | IAML | | | 09 06 37.1 | | |
| | comp=N,626nm,0.4s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.39** | **38** | ⇓*iP* | | Pn | 09 06 17.2 | | -2.0 |
| AC04 | | | | *eS* | | **Sn** | **09 06 43.2** | | **-5.1** |
| AC04 | | | | IAML | | | 09 06 48.2 | | |
| | comp=N,159nm,0.6s | | | | | | | | |
| **VA06** | **Catapilco** | **2.73** | **154** | ⇑*iP* | | **Pn** | **09 06 24.4** | | **+0.4** |
| VA06 | | | | *i* S | | **Sn** | **09 06 53.5** | | **-3.3** |
| VA06 | | | | IAML | | | 09 06 56.9 | | |
| | comp=N,313nm,0.4s | | | | | | | | |
| **ROCH** | **El Roble** | **3.21** | **153** | ⇑*iP* | | | 09 06 31.3 | | |
| ROCH | | | | ⇑*iP* | | Pn | 09 06 30.2 | | -0.4 |
| ROCH | | | | *eS* | | **Sn** | **09 07 05.2** | | **-3.7** |
| ROCH | | | | *i* S | | | 09 07 06.7 | | |
| ROCH | | | | IAML | | | 09 07 16.6 | | |
| | comp=N,143nm,0.4s | | | | | | | | |
| ROCH | | | | IAML | | | 09 07 17.7 | | |
| | comp=N,186nm,0.6s | | | | | | | | |
| **VA03** | **San Esteban** | **3.23** | **145** | ⇑*iP* | | **Pn** | **09 06 32.2** | | **+1.3** |
| VA03 | | | | *i* S | | **Sn** | **09 07 08.7** | | **-0.6** |
| VA03 | | | | IAML | | | 09 07 16.1 | | |
| | comp=N,214nm,0.5s | | | | | | | | |
| **PEL** | **Peldehue** | **3.49** | **151** | ⇓*iP* | | **Pn** | **09 06 35.7** | | **+1.3** |
| PEL | | | | *i* S | | **Sn** | **09 07 13.2** | | **-2.4** |
| PEL | | | | IAML | | | 09 07 22.2 | | |
| | comp=N,96nm,0.6s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.66** | **165** | *eP* | | **Pn** | **09 06 37.1** | | **+0.5** |
| **MT09** | **Talagante** | **3.94** | **158** | ⇓*iP* | | **Pn** | **09 06 42.7** | | **+1.9** |
| MT09 | | | | *i* S | | Sn | 09 07 22.6 | | -4.3 |
| MT09 | | | | IAML | | | 09 07 26.8 | | |
| | comp=E,82nm,0.5s | | | | | | | | |
| **MT01** | **Popeta** | **3.95** | **162** | ⇑*iP* | | **Pn** | **09 06 41.4** | | **+0.7** |
| MT01 | | | | *i* S | | Sn | 09 07 21.4 | | -5.4 |
| MT01 | | | | IAML | | | 09 07 24.8 | | |
| | comp=E,61nm,0.4s | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **6.22** | **236** | Pn | | **Pn** | **09 07 10.7** | | **-1.0** |
| | baz=71,slow=14,SNR=26 | | | | | | | | |
| H03N1 | | | | Sn | | Sn | 09 08 12.7 | | -10 |
| | baz=119,slow=71,SNR=4.7 | | | | | | | | |
| H03N1 | | | | T | | T | 09 13 34.9 | | |
| | baz=62,slow=70,SNR=4.3 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.24** | **236** | Pn | | **Pn** | **09 07 10.5** | | **-1.4** |
| | baz=71,slow=14,SNR=19 | | | | | | | | |
| H03N2 | | | | Sn | | Sn | 09 08 13.5 | | -9.3 |
| | baz=119,slow=71,SNR=6.6 | | | | | | | | |
| H03N2 | | | | T | | T | 09 13 33.9 | | |
| | baz=62,slow=70,SNR=3.9 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.24** | **236** | Pn | | **Pn** | **09 07 10.2** | | **-1.7** |
| | baz=71,slow=14,SNR=28 | | | | | | | | |
| H03N3 | | | | Sn | | Sn | 09 08 13.3 | | -10 |
| | baz=119,slow=71,SNR=7.1 | | | | | | | | |
| H03N3 | | | | T | | T | 09 13 30.1 | | |
| | baz=62,slow=70,SNR=4.5 | | | | | | | | |
| **LVC** | **Limon Verde** | **8.22** | **26** | Pn | | Pn | 09 07 37.2 | | -2.5 |
| | comp=E,0.2nm,0.3s,baz=246,slow=18,SNR=2.0 | | | | | | | | |
| LVC | | | | Sn | | Sn | 09 09 02.4 | | -10 |
| | comp=E,0.1nm,0.3s,baz=42,slow=11,SNR=1.3 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.74** | **171** | Pn | | **Pn** | **09 08 15.5** | | **+1.5** |
| | comp=E,0.3nm,0.3s,baz=327,slow=10,SNR=17 | | | | | | | | |
| **LPAZ** | **La Paz** | **14.39** | **18** | Pn | | **Pn** | **09 09 05.4** | | **+0.9** |
| | comp=E,0.1nm,0.3s,baz=186,slow=7.5,SNR=6.2 | | | | | | | | |
| **SIV** | **San Ignacio** | **17.66** | **40** | P | | **Pn** | **09 09 47.1** | | **+0.9** |
| | comp=E,0.3nm,0.3s,baz=224,slow=11,SNR=13 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.46** | **71** | P | | **P** | **09 18 09.5** | | **+1.4** |
| | comp=E,0.6nm,0.6s,baz=270,slow=4.1,SNR=1.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **120.73** | **209** | PKP | | **PKiKP** | **09 24 33.6** | | **+0.7** |
| | comp=E,0.3nm,0.8s,baz=163,slow=1.0,SNR=1.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.82** | **211** | PKP | | **PKPdf** | **09 24 39.1** | | **+0.4** |
| | comp=E,0.3nm,0.5s,baz=148,slow=1.6,SNR=6.1 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **144.73** | **39** | PKP | | **PKPdf** | **09 25 17.9** | | **+1.5** |
| | comp=E,0.7nm,0.6s,baz=20,slow=4.7,SNR=5.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **150.98** | **55** | PKPbc | | **PKiKP** | **09 25 34.3** | | **+0.6** |
| | comp=E,1.3nm,0.7s,baz=231,slow=7.1,SNR=3.9 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.16** | **28** | PKPbc | | **PKiKP** | **09 25 34.6** | | **+1.2** |
| | comp=E,1.5nm,0.7s,baz=303,slow=5.5,SNR=6.6 | | | | | | | | |

**IDC 01 09:05:46.5±1.3, 9°42N×40°42W, h0km, mb3.9/4, mb1 4.0/4, mb1mx3.5/54, mbtmp3.9/4, MS3.4/8, Ms1 3.4/8, ms1mx3.0/87, Error ellipse: s-maj=57.8km s-min=25.6km az=173.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **MDP** | **Montagnes des** | **12.86** | **251** | LR | | LR | 09 12 37.0 | | |
| | comp=Z,154nm,20.9s,baz=134,slow=32 | | | | | | | | |
| **PTGA** | **Pitinga** | **21.92** | **244** | LR | | LR | 09 18 59.4 | | |
| | comp=Z,85nm,19.1s,baz=70,slow=36 | | | | | | | | |
| **SDV** | **Santo Domingo** | **29.83** | **271** | P | | P | 09 11 55.2 | | -0.7 |
| | 2.5nm,1.1s,baz=70,slow=9.0,SNR=3.2 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **31.00** | **123** | T | | T | 09 44 39.3 | | |
| | baz=302 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **31.00** | **123** | T | | T | 09 44 37.2 | | |
| | baz=302 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **31.02** | **123** | T | | T | 09 44 39.0 | | |
| | baz=302 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **31.48** | **125** | T | | T | 09 44 44.1 | | |
| | baz=20 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **31.50** | **125** | T | | T | 09 45 20.6 | | |
| | baz=200 | | | | | | | | |
| **SIV** | **San Ignacio** | **32.49** | **219** | LR | | LR | 09 24 33.7 | | |
| | comp=Z,56nm,18.4s,baz=104,slow=35 | | | | | | | | |
| **ROSC** | **El Rosal** | **33.93** | **265** | LR | | LR | 09 26 14.6 | | |
| | comp=Z,87nm,19.2s,baz=84,slow=36 | | | | | | | | |
| **DBIC** | **Dimbokro** | **35.31** | **92** | LR | | LR | 09 24 04.0 | | |
| | comp=Z,36nm,18.5s,baz=340,slow=31 | | | | | | | | |
| **LPAZ** | **La Paz** | **37.48** | **227** | P | | P | 09 13 03.0 | | +0.1 |
| | 0.9nm,0.8s,baz=44,slow=18,SNR=2.5 | | | | | | | | |
| **MDT** | **Midelt** | **40.41** | **49** | LR | | LR | 09 26 40.8 | | |
| | comp=Z,38nm,21.4s,baz=198,slow=31 | | | | | | | | |
| **ATAH** | **Atahualpa** | **41.25** | **248** | LR | | LR | 09 30 20.6 | | |
| | comp=Z,60nm,19.0s,baz=306,slow=36 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **41.43** | **81** | P | | P | 09 13 35.1 | | -0.2 |
| | 2.8nm,0.7s,baz=273,slow=8.9,SNR=11 | | | | | | | | |
| **NNA** | **Nana** | **41.98** | **240** | LR | | LR | 09 30 16.5 | | |
| | comp=Z,45nm,19.3s,baz=344,slow=35 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **62.15** | **298** | P | | P | 09 16 10.4 | | +0.4 |
| | 0.4nm,0.7s,baz=98,slow=6.6,SNR=5.9 | | | | | | | | |

**IDC 01 09:09:37.4±4.6, 8°76N×40°57W, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/50, mbtmp3.4/3, Error ellipse: s-maj=199.3km s-min=35.9km az=10.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **41.69** | **80** | P | | P | 09 17 28.2 | | -0.2 |
| | 1.5nm,1.0s,baz=274,slow=9.2,SNR=3.5 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **62.34** | **298** | P | | P | 09 20 02.4 | | +0.2 |
| | 0.2nm,0.6s,baz=102,slow=7.5,SNR=3.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.92** | **332** | P | | P | 09 21 19.9 | | -0.1 |
| | 0.1nm,0.6s,baz=106,slow=6.5,SNR=1.6 | | | | | | | | |

*IPEC **01** 09:11:09.6±0.2, 50°23N×18°97E, h1km±1km, ML2.2/3, Error ellipse: s-maj=2.4km s-min=1.1km az=168.0*
*PRU **01** 09:11:10.2±0.0, 50°25N×18°94E, h0km*
*IDC **01** 09:11:11.1±2.1, 50°25N×18°85E, h0km, mb1 4.0/2, mb1mx3.1/37, mbtmp3.9/2, ML2.5/3, Error ellipse: s-maj=38.7km s-min=9.9km az=132.0*
**ISC 01 09:11:09.1±0.8, 50°21N±0°04×18°94E±0°02, h0km, n29, σ1s02/46, 8C-1D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **OJC** | **Ojcow** | **0.55** | **88** | *e*Pg | | **Pg** | **09 11 19.6** | | **0.0** |
| OJC | | | | *e*Sg | | **Sg** | **09 11 26.7** | | **0.0** |
| **OKC** | **Ostrava-Krasne** | **0.63** | **235** | *e*PG | | **Pb** | **09 11 23.3** | | **+0.3** |
| OKC | | | | *e*SG | | **Sb** | **09 11 32.7** | | **+0.3** |
| | comp=Z,32nm,0.4s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.00** | **245** | ⇑P | | **Pb** | **09 11 29.0** | | **-0.3** |
| MORC | | | | ⇑S | | **Sb** | **09 11 43.3** | | **+0.2** |
| **MORC** | **Moravsky Berou** | **1.00** | **245** | *e*Pg | | **Pb** | **09 11 29.4** | | **+0.1** |
| | baz=63 | | | | | | | | |
| MORC | | | | *e*Sg | | **Sg** | **09 11 42.0** | | **+0.8** |
| | 42nm,0.4s,baz=63 | | | | | | | | |
| **LANS** | **Liptovska Anna** | **1.11** | **162** | *e*PG | | **Pb** | **09 11 31.2** | | **0.0** |
| LANS | | | | *e*SG | | **Sb** | **09 11 46.7** | | **+0.5** |
| LANS | | | | *e*LG | | Lg | 09 11 51.9 | | |
| **NIE** | **Niedzica** | **1.18** | **131** | *e*Pg | | **Pn** | **09 11 33.1** | | **+0.2** |
| NIE | | | | *e*Sg | | **Sn** | **09 11 49.6** | | **-0.1** |
| **KRLC** | **Kraliky** | **1.40** | **265** | *e*PG | | **Pg** | **09 11 35.7** | | **-0.1** |
| KRLC | | | | *e*SG | | **Sg** | **09 11 54.0** | | **+0.1** |
| | comp=Z,30nm,0.3s | | | | | | | | |
| **JAVC** | **Velka Javorina** | **1.58** | **212** | *e*Pn | | **Pb** | **09 11 39.3** | | **+0.1** |
| | baz=31 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.69** | **276** | *e*PG | | **Pn** | **09 11 40.4** | | **+0.5** |
| DPC | | | | *e*SG | | **Sb** | **09 12 03.3** | | **+0.5** |
| | comp=Z,25nm,0.6s | | | | | | | | |
| **VYHS** | **Vyhne** | **1.71** | **182** | *e*PN | | **Pn** | **09 11 40.3** | | **+0.1** |
| VYHS | | | | *e*SN | | **Sn** | **09 12 03.1** | | **+0.3** |
| VYHS | | | | *e*LG | | Lg | 09 12 08.1 | | |
| **VRAC** | **Vranov** | **1.77** | **240** | ⇑P | | **Pn** | **09 11 40.3** | | **-0.6** |
| VRAC | | | | ⇑S | | **Sn** | **09 12 04.4** | | **+0.3** |
| **VRAC** | **Vranov** | **1.77** | **240** | Pn | | **Pn** | **09 11 41.6** | | **+0.6** |
| | 2.3nm,0.3s,baz=55,slow=14,SNR=7.1 | | | | | | | | |
| VRAC | | | | Lg | | Lg | 09 12 05.3 | | |
| | 6.8nm,0.3s,baz=303,slow=22,SNR=16 | | | | | | | | |
| **VRAC** | **Vranov** | **1.77** | **240** | *e*Pn | | **Pb** | **09 11 42.1** | | **-0.3** |
| | baz=58 | | | | | | | | |
| VRAC | | | | *e*Sg | | **Sb** | **09 12 05.5** | | **+0.4** |
| | 22nm,0.4s,baz=58 | | | | | | | | |
| **KSP** | **Ksiaz** | **1.81** | **292** | *e*Pg | | **Pg** | **09 11 44.8** | | **+1.1** |
| KSP | | | | *e*Sg | | **Sg** | **09 12 08.5** | | **+1.4** |
| **UPC** | **Upice** | **1.90** | **280** | *e*SG | | **Sg** | **09 12 12.0** | | **+1.9** |
| | 32nm,0.4s | | | | | | | | |
| **KRUC** | **Moravsky** | **2.01** | **236** | *e*Pn | | **Pn** | **09 11 44.8** | | **+0.5** |
| | baz=54 | | | | | | | | |
| KRUC | | | | *e*Sg | | **Sg** | **09 12 13.4** | | **-0.3** |
| | 13nm,0.3s,baz=54 | | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **2.10** | **128** | *e*PN | | **Pb** | **09 11 48.3** | | **+0.3** |
| **PSZ** | **Piszkesteto** | **2.37** | **164** | ⇑P | | **Pn** | **09 11 51.1** | | **+1.8** |
| PSZ | | | | ⇑S | | **Sg** | **09 12 25.1** | | **-0.2** |
| **PVCC** | **Panska Ves** | **2.82** | **278** | *e*SG | | **Sg** | **09 12 39.8** | | **+0.2** |
| | comp=Z,21nm,0.3s | | | | | | | | |
| **PRU** | **Pruhonice** | **2.84** | **267** | *e*SG | | **Sg** | **09 12 40.0** | | **-0.3** |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **3.26** | **284** | Pg | | **Pg** | **09 12 11.7** | | **+0.2** |
| BRG | | | | Sg | | **Sg** | **09 12 54.2** | | **+0.4** |
| BRG | | | | Amp | | | 09 13 11.8 | | |
| | comp=Z,4.9nm,0.5s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.32** | **247** | *e*SG | | **Sg** | **09 12 55.8** | | **0.0** |
| | comp=Z,7.8nm,0.5s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **3.65** | **255** | *e*PG | | **Pb** | **09 12 14.4** | | **0.0** |
| KHC | | | | *e*SG | | **Sg** | **09 13 05.7** | | **-0.5** |
| | comp=Z,43nm,1.3s | | | | | | | | |
| **GERES** | **GERESS Array B** | **3.68** | **250** | Pn | | **Pn** | **09 12 08.4** | | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=65,slow=21,SNR=1.4 | | | | | | | | |
| GERES | | | | Pg | | **Pg** | **09 12 17.9** | | **-1.6** |
| | comp=Z,0.7nm,0.3s,baz=69,slow=19,SNR=9.8 | | | | | | | | |
| GERES | | | | Lg | | Lg | 09 13 04.7 | | |
| | comp=Z,2.9nm,0.3s,baz=65,slow=28,SNR=15 | | | | | | | | |
| **DRGR** | | **4.24** | **142** | ⇑P | | **Pn** | **09 12 18.8** | | **+3.8** |
| **BURAR** | **Bucovina Array** | **4.88** | **120** | ⇑P | | **Pn** | **09 12 24.2** | | **+0.4** |
| **GZR** | **Gura Zlata** | **5.46** | **150** | ⇓P | | **Pn** | **09 12 32.0** | | **+0.3** |
| **FINES** | **FINESS Array B** | **11.95** | **17** | Pn | | **Pn** | **09 13 57.0** | | **-3.4** |
| | comp=Z,0.2nm,0.3s,baz=197,slow=18,SNR=2.0 | | | | | | | | |
| FINES | | | | Sn | | Sn | 09 16 02.2 | | -12 |
| | comp=Z,0.1nm,0.3s,baz=198,slow=25,SNR=1.5 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.65** | **7** | P | | **Pn** | **09 15 40.8** | | **+0.5** |
| | baz=183,slow=14,SNR=1.9 | | | | | | | | |

*IDC **01** 09:27:25.8±0.7, 9°14N×40°43W, h0km, mb4.1/14, mb1 4.2/14, mb1mx4.0/40, mbtmp4.1/14, MS3.7/51, Ms1 3.7/51, ms1mx3.6/86, Error ellipse: s-maj=24.2km s-min=16.1km az=161.0*
*NEIC **01** 09:27:28.3±1.2, 9°2N±0°2×40°53W±0°08, h10km±1km, mb4.4/7, Error ellipse: s-maj=26.5km s-min=12.6km az=163.0*
**ISC 01 09:27:27.4±0.7, 9°1N±0°2×40°46W±0°10, h10km, n65, σ0s64/17, mb4.1/16, MS3.7/50, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **MDP** | **Montagnes des** | **12.73** | **253** | LR | | LR | 09 34 39.0 | | |
| | comp=Z,366nm,20.2s,baz=78,slow=34 | | | | | | | | |
| **SACV** | **Santiago Islan** | **17.47** | **69** | | | **P** | **09 31 33.6** | | **+1.1** |
| SACV | | | | IAmb | | IAmb | 09 31 36.9 | | |
| | comp=Z,62nm,1.3s | | | | | | | | |
| **BOAV** | **Boa Vista** | **21.04** | **253** | P | | **P** | **09 32 11.0** | | **-0.7** |
| BOAV | | | | IAmb | | IAmb | 09 32 19.8 | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **PTGA** | **Pitinga** | **21.76** | **244** | P | | **P** | **09 32 18.7** | | **-0.7** |
| | comp=Z,8.4nm,1.1s,baz=80,slow=12,SNR=5.1 | | | | | | | | |
| PTGA | | | | LR | | LR | 09 40 29.0 | | |
| | comp=Z,259nm,19.7s,baz=68,slow=36 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.72** | **197** | P | | **P** | **09 32 58.7** | | **+0.4** |
| | comp=Z,2.5nm,0.7s,baz=38,slow=7.1,SNR=3.7 | | | | | | | | |
| BDFB | | | | LR | | LR | 09 42 34.5 | | |
| | comp=Z,75nm,20.9s,baz=129,slow=35 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.72** | **197** | IAmb | | IAmb | 09 33 01.0 | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **SDV** | **Santo Domingo** | **29.80** | **272** | P | | **P** | **09 33 35.4** | | **+0.4** |
| | comp=Z,3.3nm,0.9s,baz=100,slow=4.8,SNR=3.0 | | | | | | | | |
| SDV | | | | LR | | LR | 09 45 59.7 | | |
| | comp=Z,104nm,20.1s,baz=90,slow=37 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **30.87** | **122** | T | | T | 10 06 22.3 | | |
| | baz=302 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **30.88** | **122** | T | | T | 10 06 29.4 | | |
| | baz=302 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **30.89** | **122** | T | | T | 10 06 22.8 | | |
| | baz=302 | | | | | | | | |
| **SIV** | **San Ignacio** | **32.24** | **219** | LR | | LR | 09 46 45.2 | | |
| | comp=Z,140nm,19.2s,baz=90,slow=36 | | | | | | | | |
| **ROSC** | **El Rosal** | **33.87** | **265** | LR | | LR | 09 48 06.6 | | |
| | comp=Z,350nm,19.9s,baz=106,slow=37 | | | | | | | | |
| **DBIC** | **Dimbokro** | **35.34** | **91** | P | | **P** | **09 34 22.4** | | **-0.9** |
| | comp=Z,6.5nm,0.9s,baz=295,slow=7.8,SNR=6.6 | | | | | | | | |
| DBIC | | | | LR | | LR | 09 46 24.1 | | |
| | comp=Z,156nm,19.1s,baz=284,slow=32 | | | | | | | | |
| **DBIC** | **Dimbokro** | **35.34** | **91** | IAmb | | IAmb | 09 34 24.2 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,9.2nm,0.9s | | | | | | | | |
| **LPAZ** | **La Paz** | **37.25** | **227** | P | | **P** | **09 34 40.6** | | **+0.4** |
| | comp=Z,1.2nm,0.8s,baz=26,slow=7.9,SNR=5.0 | | | | | | | | |
| LPAZ | | | | LR | | LR | 09 51 47.1 | | |
| | comp=Z,81nm,18.7s,baz=52,slow=39 | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.87** | **205** | LR | | LR | 09 51 22.3 | | |
| | comp=Z,146nm,18.1s,baz=16,slow=37 | | | | | | | | |
| **MDT** | **Midelt** | **40.62** | **49** | P | | **P** | **09 35 07.8** | | **-0.1** |
| | comp=Z,2.2nm,0.8s,baz=277,slow=7.7,SNR=4.1 | | | | | | | | |
| MDT | | | | LR | | LR | 09 48 10.7 | | |
| | comp=Z,118nm,20.4s,baz=246,slow=31 | | | | | | | | |
| **ATAH** | **Atahualpa** | **41.11** | **248** | LR | | LR | 09 52 24.4 | | |
| | comp=Z,90nm,21.0s,baz=61,slow=36 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **41.52** | **81** | P | | **P** | **09 35 14.9** | | **-0.4** |
| | comp=Z,4.9nm,0.8s,baz=281,slow=6.8,SNR=17 | | | | | | | | |
| **NNA** | **Nana** | **41.81** | **241** | LR | | LR | 09 52 30.5 | | |
| | comp=Z,116nm,20.6s,baz=38,slow=36 | | | | | | | | |
| **LVC** | **Limon Verde** | **42.09** | **221** | LR | | LR | 09 53 34.9 | | |
| | comp=Z,67nm,18.8s,baz=16,slow=37 | | | | | | | | |
| **JTS** | **Las Juntas de** | **43.84** | **275** | LR | | LR | 09 54 50.7 | | |
| | comp=Z,58nm,18.8s,baz=202,slow=38 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **44.53** | **41** | LR | | LR | 09 50 18.3 | | |
| | comp=Z,107nm,19.6s,baz=242,slow=31 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **47.42** | **311** | LR | | LR | 09 51 52.6 | | |
| | comp=Z,122nm,21.8s,baz=138,slow=31 | | | | | | | | |
| **SADO** | **Sadowa** | **48.72** | **324** | LR | | LR | 09 52 19.9 | | |
| | comp=Z,69nm,21.6s,baz=166,slow=31 | | | | | | | | |
| **APG** | **El Apazote** | **49.16** | **282** | LR | | LR | 09 56 38.2 | | |
| | comp=Z,48nm,21.5s,baz=84,slow=36 | | | | | | | | |
| **KEST** | **Kesra** | **52.40** | **52** | LR | | LR | 09 58 42.8 | | |
| | comp=Z,85nm,19.0s,baz=260,slow=36 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **56.80** | **39** | LR | | LR | 09 58 19.0 | | |
| | comp=Z,62nm,21.0s,baz=264,slow=33 | | | | | | | | |
| **VAE** | **Valguarnera** | **56.80** | **51** | LR | | LR | 10 04 07.3 | | |
| | comp=Z,75nm,18.0s,baz=335,slow=39 | | | | | | | | |
| **PLCA** | **Paso Flores** | **56.85** | **207** | LR | | LR | 10 01 16.8 | | |
| | comp=Z,67nm,18.6s,baz=34,slow=36 | | | | | | | | |
| **FRB** | **Frobisher Bay** | **58.09** | **346** | LR | | LR | 09 59 21.9 | | |
| | comp=Z,39nm,19.1s,baz=183,slow=33 | | | | | | | | |
| **GERES** | **GERESS Array B** | **59.98** | **38** | LR | | LR | 10 03 15.9 | | |
| | comp=Z,56nm,18.0s,baz=302,slow=36 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **61.27** | **323** | P | | **P** | **09 37 42.9** | | **0.0** |
| | comp=Z,2.4nm,0.6s,baz=85,slow=4.9,SNR=3.6 | | | | | | | | |
| ULM | | | | LR | | LR | 09 59 44.2 | | |
| | comp=Z,63nm,21.7s,baz=114,slow=32 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **61.27** | **323** | IAmb | | IAmb | 09 37 44.8 | | |
| | comp=Z,7.3nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **62.26** | **298** | P | | **P** | **09 37 50.4** | | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=105,slow=7.0,SNR=4.7 | | | | | | | | |
| TXAR | | | | LR | | LR | 10 08 21.8 | | |
| | comp=Z,17nm,18.4s,baz=91,slow=39 | | | | | | | | |
| **TSUM** | **Tsumeb** | **63.74** | **117** | LR | | LR | 09 59 11.7 | | |
| | comp=Z,219nm,19.7s,baz=327,slow=30 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.17** | **25** | LR | | LR | 10 01 45.4 | | |
| | comp=Z,45nm,19.8s,baz=0.0,slow=32 | | | | | | | | |
| **IDI** | **Anoyia** | **64.69** | **55** | LR | | LR | 10 07 39.4 | | |
| | comp=Z,40nm,18.8s,baz=222,slow=37 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **64.76** | **307** | P | | **P** | **09 38 05.8** | | **-0.8** |
| SDCO | | | | IAmb | | IAmb | 09 38 06.5 | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | |
| **ANMO** | **Albuquerque** | **65.17** | **304** | LR | | LR | 10 03 27.8 | | |
| | comp=Z,96nm,21.1s,baz=96,slow=33 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **68.53** | **312** | LR | | LR | 10 04 39.5 | | |
| | comp=Z,115nm,21.7s,baz=115,slow=33 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.14** | **39** | P | | **P** | **09 38 39.7** | | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=264,slow=5.0,SNR=3.6 | | | | | | | | |
| **FINES** | **FINESS Array B** | **70.91** | **28** | LR | | LR | 10 06 34.5 | | |
| | comp=Z,34nm,19.2s,baz=272,slow=33 | | | | | | | | |
| **SUR** | **Sutherland** | **71.48** | **129** | LR | | LR | 10 02 58.8 | | |
| | comp=Z,85nm,19.4s,baz=329,slow=30 | | | | | | | | |
| **MBAR** | **Mbarara** | **71.54** | **94** | LR | | LR | 10 07 16.7 | | |
| | comp=Z,49nm,18.2s,baz=280,slow=33 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **72.00** | **51** | P | | **P** | **09 38 52.8** | | **+0.9** |
| | comp=Z,1.1nm,0.9s,baz=257,slow=5.2,SNR=3.9 | | | | | | | | |
| BRTR | | | | LR | | LR | 10 11 06.7 | | |
| | comp=Z,34nm,20

comp=Z,4.9nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| POPC | Popayan, Colom | 6.74 | 120 | eP | | Pn | 09 52 16.1 | -1.2 |
| GCUF | Volcan Galeras | 6.96 | 132 | eP | | Pn | 09 52 21.4 | +0.8 |
| HELC | Santa Helena | 6.98 | 87 | eP | | Pn | 09 52 22.9 | +2.1 |
| HELC | | | | eS | | Sn | 09 53 37.7 | -2.3 |
| HELC | | | | i | | | 09 53 47.0 | |

comp=Z,6.1nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SOTA | Rioblanco | 7.00 | 122 | eP | | Pn | 09 52 22.2 | +1.0 |
| PCON | Cinco Dias | 7.09 | 120 | eP | | Pn | 09 52 24.7 | +2.3 |
| GUY2C | Guyana, Caldas | 7.18 | 95 | eP | | Pn | 09 52 26.8 | +3.3 |
| GUY2C | | | | eS | | Sn | 09 53 42.0 | -3.0 |
| GUY2C | | | | i | | | 09 53 56.7 | |

comp=Z,5.5nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UREC | San Jos de Ur | 7.20 | 75 | eP | | Pn | 09 52 26.9 | +3.5 |
| UREC | | | | eS | | Sn | 09 53 40.5 | -4.4 |
| UREC | | | | i | | | 09 53 54.2 | |

comp=Z,7.9nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ANIL | Santa Ana | 7.25 | 101 | eP | | Pn | 09 52 25.9 | +1.5 |
| ANIL | | | | i | | | 09 53 59.7 | |

comp=Z,19nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MOTC | Monteria, Cord | 7.39 | 67 | eP | | Pn | 09 52 30.7 | +4.6 |
| ORTC | Ortega, Tolima | 7.54 | 105 | eP | | Pn | 09 52 30.8 | +2.7 |
| NORC | Norcasia | 7.64 | 92 | eP | | Pn | 09 52 33.7 | +4.1 |
| ZARC | Zaragoza, Cauc | 7.79 | 78 | eP | | Pn | 09 52 35.3 | +3.7 |
| PTBC | PUERTO BERRIO, | 8.06 | 85 | eP | | Pn | 09 52 40.1 | +4.8 |
| PTBC | | | | eS | | Sn | 09 54 07.5 | +1.2 |
| PTBC | | | | i | | | 09 54 19.2 | |

comp=Z,2.9nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FLOC | Florencia | 8.11 | 122 | eP | | Pn | 09 52 36.7 | +0.8 |
| CHIC | Chingaza | 8.87 | 98 | eP | | Pn | 09 52 51.5 | +4.9 |
| MACC | Macarena, Meta | 9.44 | 113 | eP | | Pn | 09 52 55.3 | +1.0 |

*IDC **01** 09:51:28.6±2.1,59˚.75N×153˚.17W,h98km±33km,mb3.6/1, mb1 3.6/4,mb1mx2.9/45,mbtmp3.7/4,Error ellipse: s-maj=37.0km s-min=20.0km az=112.0*

*ANF **01** 09:51:28.9±0.2,59˚.79N×153˚.04W,h99km±3km,ML3.6/31, Error ellipse: s-maj=2.3km s-min=2.0km az=95.0*

*NEIC **01** 09:51:28.9±0.8,59˚.80N±0˚.02×153˚.11W±0˚.09, h104km±6km,Error ellipse: s-maj=6.8km s-min=2.9km az=85.0*

*AEIC **01** 09:51:29±1.2,59˚.79N±0˚.03×153˚.1W±0˚.1,h99km±4km, ML3.1,ML3.1/28(NEIC),Error ellipse: s-maj=7.7km s-min=4.7km az=97.0*

**ISC 01 09:51:28.5±0.9,59.79N±0˚.03×153.06W±0˚.03, h108km±5km,n182,σ0s80/207,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| OPT | Oil Point | 0.16 | 213 | | | Pn | 09 51 43.5 | -0.1 |
| ILSW | Iliamna Southw | 0.20 | 348 | | | Pn | 09 51 43.4 | -0.4 |
| ILSW | | | | | | Sn | 09 51 54.1 | -1.1 |
| O20K | Slope Mountain | 0.36 | 37 | | | Pn | 09 51 44.3 | -0.1 |
| O20K | | | | | | Sn | 09 51 55.9 | -0.5 |
| O20K | Slope Mountain baz=218,SNR=5.5 | 0.36 | 37 | P | | Pn | 09 51 44.3 | -0.1 |
| O20K | baz=218 | | | S | | Sn | 09 51 55.6 | -0.7 |
| AUL | Augustine Lava | 0.45 | 205 | | | Pn | 09 51 45.0 | +0.2 |
| AUL | | | | | | Sn | 09 51 57.0 | 0.0 |
| AUQ | Augustine Qik' | 0.47 | 203 | | | Pn | 09 51 45.1 | +0.1 |
| RED | Redoubt Volcan | 0.65 | 13 | | | Pn | 09 51 46.1 | -0.2 |
| RSD | Redoubt South | 0.69 | 13 | | | Pn | 09 51 46.8 | 0.0 |
| RDWB | Redoubt West | 0.71 | 9 | | | Pn | 09 51 46.6 | -0.3 |
| RDWB | | | | | | Sn | 09 51 59.7 | -1.0 |
| HOM | Homer | 0.73 | 100 | | | Pn | 09 51 47.2 | +0.4 |
| HOM | Homer baz=281 | 0.73 | 100 | P | | Pn | 09 51 47.2 | +0.4 |
| HOM | baz=281 | | | S | | Sn | 09 52 00.9 | +0.3 |
| O19K | Port Alsworth | 0.75 | 303 | | | Pn | 09 51 46.9 | -0.1 |
| O19K | Port Alsworth baz=122,SNR=20 | 0.75 | 303 | P | | Pn | 09 51 47.0 | -0.1 |
| O19K | baz=122 | | | S | | Sn | 09 52 00.2 | -0.8 |
| NCT | North Crescent | 0.78 | 5 | | | Pn | 09 51 47.3 | -0.1 |
| NCT | | | | | | Sn | 09 52 01.0 | -0.7 |
| DFR | Drift River | 0.83 | 13 | | | Pn | 09 51 47.8 | -0.1 |
| RDT | Redoubt | 0.85 | 22 | | | Pn | 09 51 48.0 | -0.1 |
| Q19K | Cape Douglas, | 0.91 | 199 | | | Pn | 09 51 48.7 | 0.0 |
| Q19K | | | | | | Sn | 09 52 03.8 | -0.1 |
| Q19K | Cape Douglas, comp=E,317nm,0.7s | 0.91 | 199 | IAML | | | 09 52 05.2 | |
| Q19K | comp=N,343nm,0.7s | | | IAML | | | 09 52 06.5 | |
| Q19K | Cape Douglas, baz=19 | 0.91 | 199 | P | | Pn | 09 51 48.7 | 0.0 |
| Q19K | baz=19 | | | S | | Sn | 09 52 03.5 | -0.4 |
| CNPM | China Poot | 0.96 | 105 | | | Pn | 09 51 49.2 | 0.0 |
| BRLK | Bradley Lake | 1.10 | 90 | | | Pn | 09 51 50.5 | -0.1 |
| BRSE | Bradley Lake S | 1.17 | 91 | | | Pn | 09 51 51.5 | +0.1 |
| BRSE | Bradley Lake S baz=273 | 1.17 | 91 | P | | Pn | 09 51 51.2 | -0.2 |
| BRSE | baz=273 | | | S | | Sn | 09 52 07.9 | -0.8 |
| P18K | Big Mountain, | 1.17 | 251 | | | Pn | 09 51 51.1 | -0.3 |
| P18K | | | | | | Sn | 09 52 07.9 | -0.9 |
| P18K | Big Mountain, baz=69 | 1.17 | 251 | P | | Pn | 09 51 51.1 | -0.3 |
| P18K | baz=69 | | | S | | Sn | 09 52 07.3 | -1.4 |
| N19K | Bonanza Creek | 1.25 | 326 | | | Pn | 09 51 52.3 | 0.0 |
| N19K | Bonanza Creek baz=145 | 1.25 | 326 | P | | Pn | 09 51 52.4 | 0.0 |
| N19K | baz=145 | | | S | | Sn | 09 52 09.5 | -0.8 |
| CAPN | Captain Cook N | 1.36 | 43 | | | Pn | 09 51 55.7 | +2.2 |
| SPCR | Spurr Chakacha | 1.48 | 16 | | | Pn | 09 51 55.1 | +0.1 |
| SPCR | Spurr Chakacha baz=197,SNR=12 | 1.48 | 16 | P | | Pn | 09 51 55.1 | +0.1 |
| SPCR | baz=197 | | | S | | Sn | 09 52 14.3 | -0.7 |
| SPU | Mount Spurr | 1.48 | 19 | | | Pn | 09 51 54.7 | -0.3 |
| SPBG | Spurr Blockage | 1.51 | 13 | | | Pn | 09 51 55.9 | +0.4 |
| SLKM | Skilak Lake | 1.59 | 62 | | | Pn | 09 51 56.6 | +0.3 |
| SPCG | Spurr Capps Gl | 1.59 | 18 | | | Pn | 09 51 56.7 | +0.3 |
| SPCG | | | | | | Sn | 09 52 18.0 | +0.4 |
| O22K | Cooper Landing | 1.81 | 66 | | | Pn | 09 51 59.1 | +0.2 |
| O22K | Cooper Landing baz=249,SNR=10.0 | 1.81 | 66 | P | | Pn | 09 51 59.0 | +0.2 |
| O22K | baz=249 | | | S | | Sn | 09 52 21.3 | -0.7 |
| SEW | Seward | 1.84 | 79 | | | Pn | 09 51 59.3 | -0.1 |
| SEW | | | | | | Sn | 09 52 22.5 | -0.3 |
| SEW | Seward baz=262 | 1.84 | 79 | P | | Pn | 09 51 59.1 | -0.2 |
| SEW | baz=262 | | | S | | Sn | 09 52 22.0 | -0.8 |
| KDAK | Kodiak Island comp=N,21nm,0.3s,baz=50,slow=6.9,SNR=190 | 2.03 | 173 | P | | Pn | 09 52 01.4 | -0.3 |
| KDAK | comp=N,26nm,0.3s,baz=319,slow=22,SNR=35 | | | S | | Sn | 09 52 26.1 | -0.9 |
| KDAK | Kodiak Island | 2.03 | 173 | | | Pn | 09 52 01.6 | -0.1 |
| KDAK | Kodiak Island comp=N,279nm,0.3s | 2.03 | 173 | IAML | | | 09 52 28.1 | |
| KDAK | comp=N,283nm,0.4s | | | IAML | | | 09 52 28.3 | |
| KDAK | Kodiak Island baz=353 | 2.03 | 173 | P | | Pn | 09 52 01.5 | -0.3 |
| KDAK | baz=353 | | | S | | Sn | 09 52 26.6 | -0.4 |
| SUA | Susitna One | 2.03 | 33 | | | Pn | 09 52 02.7 | +0.8 |
| SUA | Susitna One baz=215,SNR=7.1 | 2.03 | 33 | P | | Pn | 09 52 02.5 | +0.7 |
| SUA | baz=215 | | | S | | Sn | 09 52 27.7 | +0.4 |
| ANCK | Angle Creek | 2.03 | 219 | | | Pn | 09 52 02.7 | +0.8 |
| RC01 | Rabbit Creek A | 2.10 | 50 | | | Pn | 09 52 03.0 | +0.4 |
| RC01 | Rabbit Creek A baz=233,SNR=13 | 2.10 | 50 | P | | Pn | 09 52 03.0 | +0.4 |
| RC01 | baz=233 | | | S | | Sn | 09 52 28.1 | -0.7 |
| M19K | Big River Lodg | 2.22 | 343 | | | Pn | 09 52 04.1 | -0.1 |
| M19K | comp=E,42nm,4.0s | | | IAML | | | 09 53 23.2 | |
| M19K | Big River Lodg baz=162 | 2.22 | 343 | P | | Pn | 09 52 04.4 | +0.2 |
| M22K | Willow | 2.44 | 35 | | | Pn | 09 52 08.0 | +1.0 |
| M22K | Willow baz=218,SNR=6.9 | 2.44 | 35 | P | | Pn | 09 52 07.7 | +0.7 |
| M22K | baz=218 | | | S | | Sn | 09 52 36.8 | +0.3 |
| L19K | White Mountain | 2.56 | 341 | | | Pn | 09 52 08.7 | +0.1 |
| L19K | White Mountain comp=N,34nm,3.3s | 2.56 | 341 | IAML | | | 09 52 39.9 | |
| L19K | comp=E,40nm,3.9s | | | IAML | | | 09 52 58.6 | |
| L19K | White Mountain baz=159,SNR=24 | 2.56 | 341 | P | | Pn | 09 52 08.7 | +0.1 |
| OHAK | Old Harbor | 2.58 | 183 | | | Pn | 09 52 08.2 | -0.6 |
| OHAK | | | | | | Sn | 09 52 38.5 | -1.3 |
| OHAK | Old Harbor comp=N,89nm,0.2s | 2.58 | 183 | IAML | | | 09 52 40.2 | |
| OHAK | comp=E,84nm,2.2s | | | IAML | | | 09 52 51.8 | |
| OHAK | Old Harbor baz=2.5 | 2.58 | 183 | P | | Pn | 09 52 08.2 | -0.6 |
| OHAK | baz=2.5 | | | S | | Sn | 09 52 38.0 | -1.7 |
| PWL | Port Wells | 2.58 | 63 | | | Pn | 09 52 08.2 | -0.7 |
| PWL | Port Wells baz=248,SNR=7.8 | 2.58 | 63 | P | | Pn | 09 52 08.2 | -0.7 |
| PWL | baz=248 | | | S | | Sn | 09 52 38.0 | -2.0 |
| PMR | Palmer | 2.65 | 45 | | | Pn | 09 52 09.4 | -0.2 |
| PMR | Palmer comp=N,172nm,0.2s | 2.65 | 45 | IAML | | | 09 52 41.8 | |
| PMR | Palmer baz=229 | 2.65 | 45 | P | | Pn | 09 52 09.3 | -0.4 |
| PMR | baz=229 | | | S | | Sn | 09 52 39.5 | -1.9 |
| L20K | Farewell, AK | 2.73 | 352 | | | Pn | 09 52 11.4 | +0.6 |
| L20K | Farewell, AK baz=171,SNR=13 | 2.73 | 352 | P | | Pn | 09 52 11.4 | +0.6 |
| KNK | Knik Glacier | 2.79 | 52 | | | Pn | 09 52 11.1 | -0.6 |
| KNK | | | | | | Sn | 09 52 43.0 | -1.9 |
| KNK | Knik Glacier baz=236 | 2.79 | 52 | P | | Pn | 09 52 11.1 | -0.6 |
| KNK | baz=236 | | | S | | Sn | 09 52 43.0 | -1.9 |
| CUT | Chulitna | 2.95 | 26 | | | Pn | 09 52 14.5 | +0.8 |
| SML | Sawmill | 3.08 | 47 | | | Pn | 09 52 15.0 | -0.4 |
| SML | Sawmill baz=231 | 3.08 | 47 | P | | Pn | 09 52 14.9 | -0.6 |
| SML | baz=231 | | | S | | Sn | 09 52 49.1 | -2.5 |
| PPLA | Purkeypile | 3.15 | 7 | | | Pn | 09 52 17.8 | +1.3 |
| PPLA | Purkeypile baz=188,SNR=5.5 | 3.15 | 7 | P | | Pn | 09 52 17.5 | +1.0 |
| GLI | Glacier Island | 3.16 | 67 | | | Pn | 09 52 16.2 | -0.3 |
| GLI | Glacier Island baz=252 | 3.16 | 67 | S | | Sn | 09 52 50.5 | -3.1 |
| SII | Sitkinak Islan baz=9.8 | 3.29 | 191 | P | | Pn | 09 52 17.6 | -0.8 |
| FID | Port Fidalgo | 3.42 | 71 | | | Pn | 09 52 18.2 | -1.7 |
| Q23K | Middleton Isla baz=279 | 3.43 | 93 | P | | Pn | 09 52 19.9 | -0.2 |
| TT01 | Tatalina | 3.44 | 337 | | | Pn | 09 52 20.2 | 0.0 |
| JPK | Jack Peak | 3.44 | 66 | | | Pn | 09 52 20.1 | -0.3 |
| TTA | Tatalina | 3.46 | 337 | | | Pn | 09 52 20.4 | -0.1 |
| TTA | Tatalina comp=E,25nm,4.6s | 3.46 | 337 | IAML | | | 09 53 21.5 | |
| TTA | comp=N,22nm,4.5s | | | IAML | | | 09 54 22.3 | |
| TTA | Tatalina baz=154,SNR=9.1 | 3.46 | 337 | P | | Pn | 09 52 20.3 | -0.2 |
| SCM | Sheep Creek Mo | 3.48 | 51 | | | Pn | 09 52 20.5 | -0.3 |
| SCM | Sheep Creek Mo baz=236 | 3.48 | 51 | P | | Pn | 09 52 20.5 | -0.3 |
| K20K | Telida baz=172 | 3.61 | 353 | P | | Pn | 09 52 22.5 | 0.0 |
| CAST | Castle Rocks baz=188,SNR=17 | 3.67 | 7 | P | | Pn | 09 52 24.2 | +0.8 |
| EYAK | Cordova Ski Ar | 3.73 | 75 | | | Pn | 09 52 23.1 | -0.9 |
| EYAK | Cordova Ski Ar baz=261 | 3.73 | 75 | P | | Pn | 09 52 23.1 | -0.9 |
| DIV | Divide | 3.85 | 66 | | | Pn | 09 52 26.0 | +0.2 |
| TRF | Thorofare Moun | 3.90 | 19 | | | Pn | 09 52 27.0 | +0.4 |
| TRF | Thorofare Moun baz=201 | 3.90 | 19 | P | | Pn | 09 52 26.8 | +0.2 |
| KLU | Klutina | 3.91 | 61 | | | Pn | 09 52 25.9 | -0.7 |
| KLU | Klutina baz=247,SNR=5.8 | 3.91 | 61 | P | | Pn | 09 52 25.9 | -0.7 |
| KTH | Kantishna Hill | 3.91 | 14 | | | Pn | 09 52 27.1 | +0.5 |
| M24K | Tolsona, Glenn | 4.08 | 52 | | | Pn | 09 52 28.8 | -0.1 |
| M24K | Tolsona, Glenn baz=238 | 4.08 | 52 | P | | Pn | 09 52 28.8 | -0.1 |
| CHUM | Lake Minchumin | 4.12 | 5 | | | Pn | 09 52 30.4 | +1.0 |
| CHUM | Lake Minchumin baz=185,SNR=8.2 | 4.12 | 5 | P | | Pn | 09 52 30.3 | +1.0 |
| RND | Reindeer | 4.15 | 27 | | | Pn | 09 52 30.3 | +0.5 |
| BMRM | Bremner River | 4.36 | 71 | | | Pn | 09 52 32.5 | -0.1 |
| BMRM | Bremner River baz=258 | 4.36 | 71 | P | | Pn | 09 52 32.2 | -0.4 |
| KAIM | Kayak Island baz=272 | 4.36 | 84 | P | | Pn | 09 52 33.0 | +0.4 |
| MCK | McKinley | 4.41 | 25 | | | Pn | 09 52 34.1 | +0.8 |
| MCK | McKinley baz=208,SNR=5.6 | 4.41 | 25 | P | | Pn | 09 52 33.8 | +0.5 |
| J20K | Nowinta River baz=173 | 4.43 | 354 | P | | Pn | 09 52 33.9 | +0.4 |
| BPAW | Bear Paw Mtn. | 4.43 | 12 | | | Pn | 09 52 34.1 | +0.5 |
| BPAW | Bear Paw Mtn. baz=194 | 4.43 | 12 | P | | Pn | 09 52 33.8 | +0.2 |
| N25K | Chitina, Valde | 4.54 | 63 | | | Pn | 09 52 34.5 | -0.5 |
| N25K | Chitina, Valde comp=E,37nm,0.6s | 4.54 | 63 | IAML | | | 09 53 26.9 | |
| N25K | comp=N,37nm,0.5s | | | IAML | | | 09 53 27.0 | |
| N25K | Chitina, Valde baz=250,SNR=8.0 | 4.54 | 63 | P | | Pn | 09 52 34.4 | -0.7 |
| NICHA | Nichawak Mount | 4.58 | 80 | | | Pn | 09 52 35.8 | +0.2 |
| HARP | HAARP baz=239 | 4.64 | 52 | P | | Pn | 09 52 36.2 | -0.1 |
| BERG | Berg Lake | 4.72 | 79 | | | Pn | 09 52 37.8 | +0.3 |
| PAX | Paxson | 4.85 | 46 | | | Pn | 09 52 39.4 | +0.2 |
| PAX | Paxson baz=232 | 4.85 | 46 | P | | Pn | 09 52 39.2 | 0.0 |
| GLB | Gilahina Butte | 4.85 | 66 | | | Pn | 09 52 39.9 | +0.6 |
| GRIN | Grindle Hills | 4.91 | 80 | | | Pn | 09 52 40.5 | +0.5 |
| KHIT | Khitrov Hills | 4.95 | 78 | | | Pn | 09 52 40.5 | -0.1 |
| VRDI | Verde Repeater | 4.96 | 69 | | | Pn | 09 52 41.4 | +0.5 |
| NEA2 | Nenana baz=203,SNR=8.2 | 5.17 | 19 | P | | Pn | 09 52 43.2 | -0.3 |
| WRH | Wood River Hil | 5.24 | 24 | | | Pn | 09 52 44.5 | 0.0 |
| GCSA | Galena City Sc baz=159 | 5.28 | 342 | P | | Pn | 09 52 45.0 | 0.0 |
| MLY | Manley | 5.37 | 11 | | | Pn | 09 52 46.6 | +0.4 |
| MLY | Manley baz=193,SNR=7.8 | 5.37 | 11 | P | | Pn | 09 52 46.5 | +0.3 |
| ISLE | Juniper Island | 5.41 | 77 | | | Pn | 09 52 47.1 | +0.2 |
| KIAG | Kiagna River | 5.43 | 73 | | | Pn | 09 52 47.6 | +0.4 |
| I21K | Tanana baz=186 | 5.43 | 5 | P | | Pn | 09 52 47.2 | +0.1 |
| HDA | Harding Lake | 5.45 | 29 | | | Pn | 09 52 47.9 | +0.6 |
| HDA | Harding Lake baz=214,SNR=9.9 | 5.45 | 29 | P | | Pn | 09 52 47.2 | -0.1 |
| BALM | Baldy | 5.46 | 72 | | | Pn | 09 52 47.6 | +0.2 |
| CCB | Clear Creek Bu | 5.46 | 24 | | | Pn | 09 52 47.3 | 0.0 |
| BAGL | Bagley Icefiel | 5.53 | 78 | | | Pn | 09 52 49.1 | +0.8 |
| M26K | Nabesna, AK baz=246 | 5.54 | 57 | P | | Pn | 09 52 49.2 | +0.7 |
| RIDG | Independent Ri | 5.56 | 41 | | | Pn | 09 52 49.8 | +1.0 |
| RIDG | Independent Ri baz=228 | 5.56 | 41 | P | | Pn | 09 52 49.8 | +1.0 |
| MESA | MESA | 5.59 | 81 | | | Pn | 09 52 49.9 | +0.5 |
| MESA | MESA baz=271 | 5.59 | 81 | P | | Pn | 09 52 49.8 | +0.4 |
| I23K | Minto, Yukon-K | 5.64 | 16 | | | Pn | 09 52 50.1 | +0.2 |
| I23K | Minto, Yukon-K baz=199,SNR=8.2 | 5.64 | 16 | P | | Pn | 09 52 50.1 | +0.2 |
| TCOL | CIGO, UAF Yank | 5.65 | 23 | | | Pn | 09 52 50.0 | +0.1 |
| TCOL | CIGO, UAF Yank baz=208 | 5.65 | 23 | P | | Pn | 09 52 49.7 | -0.2 |
| COLA | College | 5.65 | 23 | | | Pn | 09 52 50.1 | +0.2 |
| COLA | College baz=208 | 5.65 | 23 | P | | Pn | 09 52 49.9 | 0.0 |
| MDM | Murphy Dome | 5.65 | 21 | | | Pn | 09 52 50.5 | +0.5 |
| YAH | Yahtse | 5.69 | 79 | | | Pn | 09 52 51.1 | +0.3 |
| IL31 | | 5.77 | 27 | | | Pn | 09 52 51.3 | -0.2 |
| ILAR | Eielson Array comp=N,1.5nm,0.3s,baz=214,slow=14,SNR=48 | 5.77 | 27 | P | | Pn | 09 52 51.4 | -0.2 |
| ILAR | comp=N,1.3nm,0.3s,baz=218,slow=14,SNR=2.5 | | | S | | Sn | 09 53 51.2 | -5.1 |
| ILAR | Eielson Array | 5.77 | 27 | | | Pn | 09 52 50.9 | -0.7 |
| BARN | Barnard Glacie | 5.79 | 72 | | | Pn | 09 52 52.9 | +0.8 |
| H21K | Melozitna Rive | 5.89 | 1 | P | | Pn | 09 52 53.6 | +0.3 |
| POKR | Poker Plat Res baz=181 | 5.95 | 24 | | | Pn | 09 52 54.7 | +0.7 |
| POKR | Poker Plat Res baz=209 | 5.95 | 24 | P | | Pn | 09 52 54.4 | +0.4 |
| TABL | Table Mountain | 5.99 | 79 | | | Pn | 09 52 55.5 | +0.7 |
| SCRK | Sand Creek | 6.00 | 42 | | | Pn | 09 52 54.8 | -0.1 |
| SCRK | Sand Creek baz=230 | 6.00 | 42 | P | | Pn | 09 52 54.8 | -0.1 |
| M27K | Edge Creek, AK baz=250 | 6.00 | 60 | P | | Pn | 09 52 55.7 | +0.8 |
| J25K | Salcha River, | 6.03 | 33 | | | Pn | 09 52 56.0 | +0.9 |
| J25K | Salcha River, baz=220 | 6.03 | 33 | P | | Pn | 09 52 55.1 | 0.0 |
| IM03 | | 6.23 | 357 | | | Pn | 09 52 58.8 | +1.0 |
| IMAR | Indian Mountai | 6.23 | 357 | Pn | | Pn | 09 52 58.4 | +0.6 |
| YUK2 | White River | 6.31 | 66 | | | Pn | 09 53 00.0 | +1.0 |
| PCA | Pinnacle | 6.44 | 82 | | | Pn | 09 53 01.5 | +0.7 |
| PINM | Pinnacle baz=273 | 6.44 | 82 | P | | Pn | 09 53 01.6 | +0.7 |
| BVCY | Beaver Creek baz=251 | 6.47 | 61 | P | | Pn | 09 53 01.8 | +0.6 |
| YUK3 | Moose Creek | 6.48 | 67 | | | Pn | 09 53 02.5 | +1.0 |
| YUK3 | Moose Creek baz=258 | 6.48 | 67 | P | | Pn | 09 53 02.2 | +0.7 |
| J26L | Joseph Creek baz=228 | 6.49 | 39 | P | | Pn | 09 53 01.4 | 0.0 |
| H24K | Noodor Dome baz=204 | 6.51 | 19 | P | | Pn | 09 53 01.8 | +0.1 |
| PRP | Porcupine Dome baz=215,SNR=12 | 6.71 | 28 | P | | Pn | 09 53 05.2 | +0.7 |
| BCPM | Bancas Point | 6.76 | 83 | | | Pn | 09 53 05.8 | +0.7 |
| PNL | Peninsula | 6.91 | 85 | | | Pn | 09 53 07.2 | +0.1 |
| PNL | Peninsula baz=277,SNR=7.1 | 6.91 | 85 | P | | Pn | 09 53 07.2 | +0.1 |
| YUK4 | Talbot Arm baz=263 | 7.27 | 71 | P | | Pn | 09 53 13.0 | +0.9 |
| YUK6 | Outpost Mounta baz=267 | 7.38 | 75 | P | | Pn | 09 53 14.2 | +0.6 |
| EGAK | Eagle baz=233 | 7.46 | 43 | P | | Pn | 09 53 14.6 | +0.1 |
| HYT | Haines Junctio baz=269 | 7.79 | 76 | P | | Pn | 09 53 20.1 | +1.0 |
| P33M | Teslin, Yukon baz=276 | 10.14 | 79 | P | | Pn | 09 53 51.9 | +0.9 |
| MMPY | Sheldon Lake, baz=265 | 10.87 | 66 | P | | Pn | 09 54 01.8 | +1.0 |
| DLBC | Dease Lake comp=N,1.4nm,0.3s,baz=267,slow=7.2,SNR=40 | 11.90 | 87 | P | | Pn | 09 54 16.6 | +2.0 |
| YKA | Yellowknife Ar comp=N,0.1nm,0.3s,baz=278,slow=9.8,SNR=9.7 | 18.57 | 65 | P | | Pn | 09 55 38.0 | -0.2 |
| ARVC | Arvin baz=329,SNR=178 | 33.19 | 123 | P | | P | 09 57 54.4 | -0.2 |
| OSI | Osito Audit: C baz=329,SNR=20 | 33.67 | 123 | P | | P | 09 58 00.3 | +1.3 |
| ZALV | Zalesovo Beam comp=N,0.6nm,0.4s,baz=32,slow=8.5,SNR=2.9 | 57.53 | 324 | P | | P | 10 01 07.0 | +0.9 |

*KRSC **01** 10:14:27.4±0.8,55˚.53N×161˚.74E,h81km±15km,ML4.0*

*IDC **01** 10:14:29.9±3.0,55˚.56N×161˚.46E,h90km±30km,mb3.3/11, mb1 3.5/12,mb1mx3.3/43,mbtmp3.6/12,Error ellipse: s-maj=22.7km s-min=19.3km az=141.0*

**ISC 01 10:14:28.6±0.8,55˚.54N±0˚.03×161˚.75E±0˚.03,h75km±7km, n51,σ1s30/83,mb3.5/11,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| ZLN | Zelenaya | 0.71 | 312 | eP | | Pn | 10 14 44.0 | -0.2 |
| ZLN | | | | eS | | Sn | 10 14 55.9 | +0.2 |
| BZGR | Bezymyannyi-Gr | 0.72 | 304 | eP | | Pn | 10 14 45.2 | +1.0 |
| BZGR | | | | eS | | Sn | 10 14 56.1 | +0.4 |
| CIRR | Tsirk | 0.81 | 316 | eP | | Pn | 10 14 45.3 | +0.1 |
| CIRR | | | | eS | | Sn | 10 14 58.4 | +0.9 |
| LGNR | Loginova | 0.81 | 313 | eP | | Pn | 10 14 45.7 | +0.3 |
| LGNR | | | | eS | | Sn | 10 14 58.8 | +1.0 |
| BZWR | Bezymyannyi-We | 0.82 | 301 | eP | | Pn | 10 14 45.3 | -0.1 |
| BZWR | | | | eS | | Sn | 10 14 58.8 | +0.9 |
| TUMD | Tumrok D | 0.84 | 247 | eP | | Pn | 10 14 44.9 | -0.6 |
| TUMD | | | | eS | | Sn | 10 14 57.1 | -0.9 |
| KMNR | Kamenistaya | 0.88 | 285 | eP | | Pn | 10 14 46.0 | 0.0 |
| KMNR | | | | eS | | Sn | 10 14 59.3 | +0.3 |
| KBG | Krutoberegovo | 0.90 | 37 | eP | | Pn | 10 14 46.7 | +0.6 |
| KBG | | | | eS | | Sn | 10 15 01.2 | +2.1 |
| KIRR | Kirishev | 0.90 | 298 | eP | | Pn | 10 14 46.0 | -0.2 |
| KIRR | | | | eS | | Sn | 10 14 58.9 | -0.5 |
| KBTR | Krutoberegovo | 0.90 | 42 | eP | | Pn | 10 14 47.0 | +0.9 |
| KBTR | | | | eS | | Sn | 10 15 00.9 | +1.7 |
| TUMR | Tumrok | 0.95 | 255 | eP | | Pn | 10 14 46.9 | +0.1 |
| TUMR | | | | eS | | Sn | 10 15 00.4 | 0.0 |
| KRSR | Krestovskiy | 0.95 | 316 | eP | | Pn | 10 14 46.6 | -0.2 |
| KRSR | | | | eS | | Sn | 10 15 00.2 | -0.2 |
| KPT | Kopyto | 0.96 | 297 | eP | | Pn | 10 14 46.6 | -0.4 |
| KPT | | | | eS | | Sn | 10 15 00.4 | -0.3 |
| MKZ | Mys Kozlova | 0.99 | 181 | eP | | Pn | 10 14 46.8 | -0.4 |
| MKZ | | | | eS | | Sn | 10 15 01.2 | +0.2 |
| KLY | Klyuchi | 0.99 | 322 | eP | | Pn | 10 14 46.3 | -0.9 |
| KLY | | | | eS | | Sn | 10 15 01.1 | 0.0 |
| SMKR | Semkarok | 1.05 | 352 | eP | | Pn | 10 14 48.4 | +0.3 |
| BDR | Baidarnaya | 1.07 | 344 | eP | | Pn | 10 14 48.9 | +0.6 |
| BDR | | | | eS | | Sn | 10 15 04.5 | +1.4 |
| SRKR | Sorokina | 1.16 | 344 | eP | | Pn | 10 14 49.6 | +0.2 |
| SRKR | | | | eS | | Sn | 10 15 07.7 | +2.7 |
| ESO | Esso | 1.77 | 284 | eP | | Pn | 10 15 00.5 | +3.3 |
| ESO | | | | eS | | Sn | 10 15 20.5 | +1.6 |
| KII | Karymskiy | 2.01 | 222 | eP | | Pn | 10 15 01.8 | +1.2 |
| BKI | Bering | 2.44 | 96 | eP | | Pn | 10 15 06.5 | +0.4 |
| BKI | | | | eS | | Sn | 10 15 34.0 | -0.9 |
| SPN | Mys Shipunski | 2.65 | 203 | eP | | Pn | 10 15 08.3 | -0.7 |
| SPN | | | | eS | | Sn | 10 15 37.6 | -2.5 |
| NLC | Nalytchevo | 2.76 | 212 | eP | | Pn | 10 15 11.0 | +0.5 |
| NLC | | | | eS | | Sn | 10 15 43.7 | +0.9 |
| SDLR | Sedlovina | 2.82 | 218 | eP | | Pn | 10 15 12.1 | +0.6 |
| KRER | Koryakskii | 2.84 | 219 | eP | | Pn | 10 15 12.8 | +0.9 |
| KRER | | | | eS | | Sn | 10 15 47.8 | +2.6 |
| SMAR | Somma | 2.86 | 218 | eP | | Pn | 10 15 12.9 | +0.8 |
| SMAR | | | | eS | | Sn | 10 15 46.9 | +1.3 |
| AVH | Avacha | 2.88 | 219 | eP | | Pn | 10 15 13.5 | +1.2 |
| AVH | | | | eS | | Sn | 10 15 46.2 | +0.3 |
| GNL | Ganaly | 2.88 | 232 | eP | | Pn | 10 15 13.2 | +0.9 |
| KOK | Koryaka | 2.90 | 220 | eP | | Pn | 10 15 13.9 | +1.4 |
| KOK | | | | eS | | Sn | 10 15 49.2 | +2.9 |
| UGLR | Uglovaya | 2.90 | 217 | eP | | Pn | 10 15 13.5 | +1.0 |
| UGLR | | | | eS | | Sn | 10 15 48.9 | +2.6 |
| DALK | Dalny | 3.07 | 216 | eP | | Pn | 10 15 15.1 | +0.4 |
| DALK | | | | eS | | Sn | 10 15 50.5 | +0.3 |
| PET | Petropavlovsk | 3.11 | 217 | eP | | Pn | 10 15 16.2 | +1.0 |
| PET | | | | eS | | Sn | 10 15 53.5 | +2.3 |
| PETK | Petropavlovsk- 2.3nm,0.3s,baz=71,slow=33,SNR=51 | 3.40 | 226 | P | | Pn | 10 15 19.3 | 0.0 |
| PETK | | | | S | | Sn | 10 16 06.9 | +8.5 |
| KRMR | 2.4nm,0.3s,baz=68,slow=28,SNR=2.6 Karymshinskiy | 3.45 | 220 | eS | | Sn | 10 16 02.1 | +2.5 |
| RUS | Russkaya | 3.65 | 213 | eP | | Pn | 10 15 23.7 | +1.0 |
| RUS | | | | eS | | Sn | 10 16 04.0 | -0.5 |
| GRL | Gorelyy | 3.70 | 217 | eP | | Pn | 10 15 25.8 | +2.4 |
| MTVR | Mutnovka | 3.72 | 216 | eP | | Pn | 10 15 26.0 | +2.3 |
| MTVR | | | | eS | | Sn | 10 16 08.9 | +2.6 |
| OSSR | Ossora | 3.79 | 10 | eP | | Pn | 10 15 25.2 | +0.8 |
| OSSR | | | | eS | | Sn | 10 16 06.0 | -1.7 |
| KDTR | Khodutka, Kamc | 4.33 | 212 | eP | | Pn | 10 15 32.1 | +0.2 |
| TILK | Tilichiki | 5.45 | 24 | eP | | Pn | 10 15 49.0 | +2.0 |
| TILK | | | | eS | | Sn | 10 16 50.2 | +2.0 |
| TIXI | Tiksi 1.4nm,0.6s,baz=104,slow=8.6,SNR=7.3 | 21.32 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **82.39** | **206** | P | | **P** | **10 26 41.9** | **-0.2** |
| | 0.5nm,1.0s,baz=19,slow=5.2,SNR=2.0 | | | | | | | |

**IDC 01 10:29:36.7±7.2, 20.78S×179.32W, h557km±47km, mb2.4/2, mb1 2.8/3, mb1mx2.6/20, mbtmp3.5/3, Error ellipse: s-maj=179.9km s-min=37.4km az=146.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.92** | **320** | P | P | 10 30 58.7 | 0.0 |
| | 3.1nm,0.3s,baz=157,slow=6.6,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **43.25** | **257** | P | P | 10 36 49.4 | -0.3 |
| | 0.5nm,0.8s,baz=92,slow=8.3,SNR=8.8 | | | | | | |
| ASAR | | | | PcP | PcP | 10 38 26.4 | +0.1 |
| | 0.4nm,0.6s,baz=109,slow=3.8,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.34** | **263** | P | P | 10 36 50.2 | -0.2 |
| | 0.5nm,0.8s,baz=96,slow=8.1,SNR=9.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.65** | **330** | PKP | PKPdf | 10 48 03.9 | -2.7 |
| | 0.4nm,0.5s,baz=41,slow=3.9,SNR=7.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.10** | **311** | PKPbc | PKPbc | 10 48 15.7 | +0.5 |
| | 0.5nm,0.6s,baz=100,slow=2.4,SNR=2.8 | | | | | | |

*IDC **01** 10:52:17.9±1.1, 31.30S×72.93W, h0km, mb3.8/3, mb1 4.1/7, mb1mx3.9/25, mbtmp3.9/7, ML4.0/4, MS3.0/3, Ms1 3.0/3, ms1mx2.7/53, Error ellipse: s-maj=35.2km s-min=23.3km az=126.0*

*GUC **01** 10:52:23.3±0.6, 31.14S×71.26W, h115km±7km, ML3.8*

**ISC 01 10:52:20.6±2.0, 31.27S±0.05×72.75W±0.2, h78km±22km, n29, σ1.971/27, mb3.7/3, 5C-8D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.97** | **53** | *i* P | **Pn** | **10 52 40.1** | **+0.9** |
| CO06 | | | | *i* S | **Sn** | **10 52 53.9** | **+0.9** |
| **CO02** | **Combarbal** | **1.31** | **88↑** | *i* P | Pn | 10 52 45.4 | +1.8 |
| CO02 | | | | *i* S | Sn | 10 53 03.7 | +2.9 |
| CO02 | | | | IAML | | 10 53 05.9 | |
| | comp=N,7μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **1.64** | **75↑** | *i* P | Pn | 10 52 50.7 | +2.9 |
| CO03 | | | | *i* S | Sn | 10 53 13.4 | +5.1 |
| CO03 | | | | IAML | | 10 53 14.7 | |
| | comp=N,2μm,0.4s | | | | | | |
| **VA06** | **Catapilco** | **1.66** | **141↓** | *i* P | **Pn** | **10 52 49.0** | **+1.0** |
| VA06 | | | | *i* S | **Sn** | **10 53 08.4** | **-0.3** |
| VA06 | | | | IAML | | 10 53 10.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **CO05** | **La Serena** | **1.75** | **40** | *e*S | Sn | 10 53 04.3 | -6.3 |
| **GO04** | **Tololo Observa** | **1.85** | **54** | *e*P | Pn | 10 52 53.5 | +2.8 |
| GO04 | | | | *i* S | Sn | 10 53 14.7 | +1.3 |
| GO04 | | | | IAML | | 10 53 23.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **ROCH** | **El Roble** | **2.13** | **143↓** | *i* P | | 10 52 55.8 | |
| ROCH | | | | *i* P | **Pn** | **10 52 54.8** | **+0.3** |
| ROCH | | | | *i* S | **Sn** | **10 53 18.3** | **-2.0** |
| ROCH | | | | *i* S | | 10 53 18.4 | |
| ROCH | | | | IAML | | 10 53 23.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| ROCH | | | | IAML | | 10 53 24.1 | |
| | comp=N,1μm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.25** | **132↓** | *i* P | Pn | 10 52 58.4 | +2.5 |
| VA03 | | | | *i* S | **Sn** | **10 53 23.6** | **+0.7** |
| VA03 | | | | IAML | | 10 53 32.5 | |
| | comp=E,1μm,0.4s | | | | | | |
| **MT02** | **Curacav** | **2.31** | **150↓** | *i* P | **Pn** | **10 52 57.6** | **+0.9** |
| MT02 | | | | *e*S | **Sn** | **10 53 23.8** | **-0.5** |
| **PEL** | **Peldehue** | **2.44** | **141↓** | *i* P | **Pn** | **10 53 00.4** | **+2.0** |
| PEL | | | | *i* S | **Sn** | **10 53 23.2** | **-4.2** |
| PEL | | | | IAML | | 10 53 32.5 | |
| | comp=E,332nm,0.5s | | | | | | |
| **VA05** | **Santo Domingo** | **2.51** | **162↑** | *i* P | **Pn** | **10 52 59.5** | **+0.3** |
| VA05 | | | | *i* S | **Sn** | **10 53 27.2** | **-1.6** |
| VA05 | | | | IAML | | 10 53 31.6 | |
| | comp=E,557nm,0.3s | | | | | | |
| **MT05** | **Renca** | **2.61** | **145** | *e*P | **Pn** | **10 53 02.4** | **+1.7** |
| MT05 | | | | *e*S | **Sn** | **10 53 28.0** | **-3.4** |
| MT05 | | | | IAML | | 10 53 36.1 | |
| | comp=E,550nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **2.81** | **158↓** | *i* P | **Pn** | **10 53 03.8** | **+0.4** |
| MT01 | | | | *i* S | **Sn** | **10 53 34.6** | **-1.6** |
| MT01 | | | | IAML | | 10 53 36.6 | |
| | comp=E,169nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **2.82** | **153↑** | *i* P | **Pn** | **10 53 05.1** | **+1.4** |
| MT09 | | | | *e*S | **Sn** | **10 53 36.2** | **-0.5** |
| **BO04** | **La Punta** | **3.16** | **150↓** | *i* P | **Pn** | **10 53 10.3** | **+2.1** |
| BO04 | | | | *i* S | **Sn** | **10 53 45.2** | **+0.3** |
| BO04 | | | | IAML | | 10 53 50.9 | |
| | comp=E,240nm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.30** | **23↑** | *i* P | **Pn** | **10 53 11.3** | **+1.2** |
| AC04 | | | | *i* S | **Sn** | **10 53 48.9** | **+0.6** |
| AC04 | | | | IAML | | 10 53 51.3 | |
| | comp=E,310nm,0.2s | | | | | | |
| **H03N1** | **Juan Fernandez** | **5.82** | **246** | Pn | Pn | 10 53 40.8 | -3.3 |
| | baz=357,slow=72,SNR=69 | | | | | | |
| H03N1 | | | | Sn | Sn | 10 54 40.0 | -9.3 |
| | baz=358 | | | | | | |
| H03N1 | | | | T | T | 10 59 21.3 | |
| | baz=73,slow=71,SNR=16 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.83** | **246** | Pn | Pn | 10 53 40.3 | -4.0 |
| | baz=357,slow=72,SNR=48 | | | | | | |
| H03N3 | | | | Sn | Sn | 10 54 36.8 | -13 |
| | baz=358 | | | | | | |
| H03N3 | | | | T | T | 10 59 24.6 | |
| | baz=73,slow=71,SNR=14 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.83** | **247** | Pn | Pn | 10 53 40.6 | -3.7 |
| | baz=357,slow=72,SNR=48 | | | | | | |
| H03N2 | | | | Sn | Sn | 10 54 38.9 | -11 |
| | baz=358 | | | | | | |
| H03N2 | | | | T | T | 10 59 17.8 | |
| | baz=73,slow=71,SNR=16 | | | | | | |
| **LVC** | **Limon Verde** | **9.21** | **21** | Pn | Pn | 10 54 33.5 | +2.5 |
| | comp=E,0.4nm,0.3s,baz=183,slow=8.0,SNR=3.5 | | | | | | |
| LVC | | | | Sn | **Sn** | **10 56 10.7** | **-2.4** |
| | comp=E,0.4nm,0.3s,baz=322,slow=17,SNR=1.6 | | | | | | |
| LVC | | | | LR | LR | 10 58 19.3 | |
| | comp=E,60nm,18.8s,baz=214,slow=39 | | | | | | |
| **PLCA** | **Paso Flores** | **9.58** | **171** | Pn | **Pn** | **10 54 37.4** | **+1.6** |
| | comp=E,0.8nm,0.3s,baz=335,slow=12,SNR=31 | | | | | | |
| **CPUP** | **Villa Florida** | **14.20** | **74** | LR | LR | 11 01 35.2 | |
| | comp=E,42nm,21.2s,baz=264,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **15.44** | **16** | Pn | **P** | **10 55 57.7** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=184,slow=7.0,SNR=10 | | | | | | |
| **SIV** | **San Ignacio** | **18.45** | **37** | P | Pn | 10 56 37.8 | +6.6 |
| | comp=E,0.5nm,0.3s,baz=218,slow=12,SNR=10 | | | | | | |
| SIV | | | | LR | LR | 11 03 59.8 | |
| | comp=E,74nm,18.1s,baz=294,slow=38 | | | | | | |
| **BDFB** | **Brasilia** | **27.25** | **61** | P | P | 10 58 07.3 | +10 |
| | comp=E,1.7nm,0.4s,baz=216,slow=8.7,SNR=2.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.15** | **331** | P | P | 11 03 13.2 | +6.9 |
| | comp=E,0.2nm,0.6s,baz=150,slow=7.9,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.68** | **71** | P | P | 11 04 50.4 | +9.3 |
| | comp=E,0.6nm,0.7s,baz=262,slow=5.2,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.92** | **210** | PKP | PKiKP | 11 11 15.6 | +6.9 |
| | comp=E,0.3nm,0.6s,baz=154,slow=1.6,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.09** | **29** | PKPbc | **PKPab** | **11 12 15.5** | **-0.8** |
| | comp=E,1.6nm,0.7s,baz=281,slow=3.1,SNR=7.1 | | | | | | |

*NOU **01** 11:05:02.0, 38.45S×175.23E, h324km, MLv4.6/6, North Island, New Zealand*

*NEIC **01** 11:05:06.5±1.6, 38.60S±0.09×175.4E±0.1, h289km±7km, mb4.2/21, Error ellipse: s-maj=13.6km s-min=11.7km az=180.0*

*IDC **01** 11:05:06.2±1.2, 38.18S×175.62E, h298km±11km, mb3.7/8, mb1 3.8/8, mb1mx3.6/25, mbtmp4.3/8, Error ellipse: s-maj=27.6km s-min=14.1km az=35.0*

*WEL **01** 11:05:09.4±0.8, 39°S±7'×17°5E±', h258km±6km, M4.1/142, ML3.5/8, MLv4.1/142, Error ellipse: s-maj=0.0km s-min=0.0km az=142.4*

**ISC 01 11:05:05.7±0.6, 38.65S±0.06×175.30E±0.06, h291km±5km, n234, σ0.994/243, mb4.2/18, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATZ** | **Wairara** | **0.35** | **100** | P | **Pn** | **11 05 43.5** | **+0.6** |
| **TLZ** | **Tolley Road** | **0.37** | **31** | P | **Pn** | **11 05 43.1** | **+0.1** |
| **HIZ** | **Hauiti** | **0.37** | **291** | P | **Pn** | **11 05 43.4** | **+0.4** |
| **HIZ** | **Hauiti** | **0.37** | **291** | Pn | **Pn** | **11 05 43.4** | **+0.4** |
| **HIZ** | **Hauiti** | **0.37** | **291** | P | **Pn** | **11 05 43.5** | **+0.5** |
| **RATZ** | **Rangitukua** | **0.43** | **121** | P | **Pn** | **11 05 43.4** | **+0.4** |
| **TWVZ** | **Taurewa** | **0.44** | **166** | P | **Pn** | **11 05 43.6** | **+0.5** |
| TWVZ | | | | S | **S** | **11 06 10.8** | **-2.0** |
| **KUTZ** | **Kaahu Road** | **0.44** | **69** | P | **Pn** | **11 05 43.5** | **+0.4** |
| **KATZ** | **Kakaramea** | **0.45** | **137** | P | **Pn** | **11 05 43.8** | **+0.6** |
| **WHTZ** | **Whakaora** | **0.52** | **92** | P | **Pn** | **11 05 44.0** | **+0.7** |
| **WTVZ** | **West Tongariro** | **0.52** | **154** | P | **Pn** | **11 05 43.9** | **+0.6** |
| WTVZ | | | | S | **S** | **11 06 11.6** | **-1.7** |
| **KRVZ** | **Karewarewa** | **0.52** | **149** | P | **Pn** | **11 05 44.1** | **+0.7** |
| KRVZ | | | | S | **S** | **11 06 11.5** | **-1.8** |
| **NTVZ** | **North Tongariro** | **0.54** | **147** | P | **Pn** | **11 05 44.2** | **+0.8** |
| **NNVZ** | **North Ngauruho** | **0.54** | **153** | P | **Pn** | **11 05 44.0** | **+0.5** |
| NNVZ | | | | S | **S** | **11 06 11.5** | **-2.0** |
| **RITZ** | **Rihia Road** | **0.55** | **127** | P | **Pn** | **11 05 44.1** | **+0.8** |
| **TMVZ** | **Te Maari** | **0.56** | **146** | P | **Pn** | **11 05 44.0** | **+0.5** |
| TMVZ | | | | S | **S** | **11 06 11.6** | **-2.0** |
| **NGZ** | **Ngauruhoe** | **0.58** | **156** | P | **Pn** | **11 05 44.1** | **+0.5** |
| **ETVZ** | **East Tongariro** | **0.58** | **147** | P | **Pn** | **11 05 44.0** | **+0.5** |
| ETVZ | | | | S | **S** | **11 06 11.8** | **-1.8** |
| **OTVZ** | **Oturere** | **0.59** | **151** | P | **Pn** | **11 05 44.0** | **+0.4** |
| OTVZ | | | | S | **S** | **11 06 13.6** | **-0.1** |
| **SNVZ** | **South Ngauruho** | **0.60** | **154** | P | **Pn** | **11 05 44.2** | **+0.5** |
| **VRZ** | **Vera Road** | **0.64** | **221** | P | **Pn** | **11 05 43.9** | **+0.4** |
| **FWVZ** | **Far West T-bar** | **0.64** | **162** | P | **Pn** | **11 05 44.5** | **+0.6** |
| **PKVZ** | **Pokaka** | **0.64** | **177** | P | **Pn** | **11 05 44.2** | **+0.6** |
| **DRZ** | **Dome Shelter** | **0.66** | **162** | P | **Pn** | **11 05 44.8** | **+0.8** |
| **HATZ** | **Hinemaiaia** | **0.67** | **112** | P | **Pn** | **11 05 44.0** | **+0.3** |
| **WHVZ** | **Whangaehu Hut** | **0.67** | **160** | P | **Pn** | **11 05 44.7** | **+0.8** |
| **TRVZ** | **Turoa** | **0.68** | **163** | P | **Pn** | **11 05 44.6** | **+0.7** |
| **TUVZ** | **Tukino** | **0.68** | **156** | P | **Pn** | **11 05 44.6** | **+0.7** |
| **WPRZ** | **Whakapapatarin** | **0.69** | **80** | P | **Pn** | **11 05 44.1** | **+0.2** |
| **GRRZ** | **Galatos Road** | **0.70** | **65** | P | **Pn** | **11 05 44.3** | **+0.4** |
| **WNVZ** | **Wahianoa** | **0.72** | **161** | P | **Pn** | **11 05 44.7** | **+0.7** |
| **MTVZ** | **Mangateitei** | **0.75** | **170** | P | **Pn** | **11 05 44.7** | **+0.7** |
| **HRRZ** | **Handcock Road** | **0.81** | **72** | P | **Pn** | **11 05 44.5** | **+0.2** |
| **HSRZ** | **Hossack Road** | **0.82** | **66** | P | **Pn** | **11 05 44.6** | **+0.3** |
| **ALRZ** | **Allen Road** | **0.82** | **84** | P | **Pn** | **11 05 44.4** | **+0.1** |
| **MOVZ** | **Moawhango** | **0.84** | **155** | P | **Pn** | **11 05 44.8** | **+0.4** |
| **UTU** | **Utuhina** | **0.85** | **57** | P | **Pn** | **11 05 44.7** | **+0.3** |
| **PRRZ** | **Plateau Road** | **0.87** | **81** | P | **Pn** | **11 05 44.4** | **-0.1** |
| **MHEZ** | **Mangahewa** | **0.87** | **240** | P | **Pn** | **11 05 45.6** | **+1.2** |
| **NGRZ** | **Ngongotaha** | **0.89** | **52** | P | **Pn** | **11 05 44.8** | **+0.2** |
| **MRHZ** | **Matea Rd** | **0.90** | **102** | P | **Pn** | **11 05 44.7** | **+0.1** |
| **HLRZ** | **Highlands Stat** | **0.92** | **65** | P | **Pn** | **11 05 45.5** | **+0.7** |
| **TOZ** | **Tahuroa Road** | **0.93** | **10** | P | **Pn** | **11 05 44.9** | **+0.1** |
| **KMRZ** | **Kaimai** | **0.95** | **33** | P | **Pn** | **11 05 44.8** | **-0.1** |
| **KARZ** | **Kaharoa** | **0.97** | **50** | P | **Pn** | **11 05 45.0** | **0.0** |
| **OMRZ** | **Omania** | **1.00** | **58** | P | **Pn** | **11 05 45.1** | **0.0** |
| **RRRZ** | **Republican Roa** | **1.00** | **73** | P | **Pn** | **11 05 45.1** | **0.0** |
| **DREZ** | **Durham Road** | **1.01** | **237** | P | **Pn** | **11 05 45.9** | **+0.9** |
| **BHHZ** | **Black Hill Sta** | **1.03** | **145** | P | **Pn** | **11 05 45.8** | **+0.6** |
| **TARZ** | **Mount Tarawera** | **1.03** | **67** | P | **Pn** | **11 05 45.6** | **+0.2** |
| **MKRZ** | **Makatiti** | **1.05** | **61** | P | **Pn** | **11 05 46.0** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **1.07** | **119** | P | **Pn** | **11 05 45.9** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **1.07** | **119** | Pn | **Pn** | **11 05 45.9** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **1.07** | **119** | P | **Pn** | **11 05 46.1** | **+0.7** |
| **LIRZ** | **Lichensteins R** | **1.07** | **53** | P | **Pn** | **11 05 45.2** | **-0.2** |
| **LREZ** | **Lake Rotokare** | **1.07** | **220** | P | **Pn** | **11 05 46.3** | **+1.0** |
| **NEZ** | **North Egmont** | **1.12** | **236** | P | **Pn** | **11 05 46.6** | **+0.9** |
| **PREZ** | **Palmer Road** | **1.13** | **232** | P | **Pn** | **11 05 46.6** | **+0.9** |
| **WAZ** | **Wanganui** | **1.13** | **192** | P | **Pn** | **11 05 46.7** | **+1.0** |
| **PKE** | **Pukeiti** | **1.16** | **241** | P | **Pn** | **11 05 46.7** | **+0.9** |
| **MUGZ** | **Murupara** | **1.17** | **82** | P | **Pn** | **11 05 45.8** | **-0.1** |
| **KWHZ** | **Kaweka Forest** | **1.17** | **132** | P | **Pn** | **11 05 46.9** | **+0.9** |
| **TGRZ** | **Tauranga** | **1.19** | **40** | P | **Pn** | **11 05 45.8** | **-0.3** |
| **KHEZ** | **Kahui Hut** | **1.19** | **237** | P | **Pn** | **11 05 47.0** | **+0.9** |
| **MTHZ** | **Maungataniwha** | **1.22** | **100** | P | **Pn** | **11 05 46.7** | **+0.5** |
| **EDRZ** | **Edgecumbe** | **1.25** | **65** | P | **Pn** | **11 05 46.4** | **-0.1** |
| **NMHZ** | **Naumai** | **1.26** | **111** | P | **Pn** | **11 05 47.8** | **+1.3** |
| **MARZ** | **Manawahe** | **1.27** | **59** | P | **Pn** | **11 05 46.6** | **0.0** |
| **OPRZ** | **Ohinepanea** | **1.27** | **51** | P | **Pn** | **11 05 46.2** | **-0.3** |
| **NBEZ** | **Newall Road No** | **1.28** | **240** | P | **Pn** | **11 05 47.4** | **+1.0** |
| **KRHZ** | **Kereru** | **1.30** | **140** | P | **Pn** | **11 05 47.3** | **+0.7** |
| **RTZ** | **Ruatahuna** | **1.32** | **89** | P | **Pn** | **11 05 47.0** | **+0.1** |
| **NMEZ** | **Namu Road** | **1.34** | **235** | P | **Pn** | **11 05 47.8** | **+1.0** |
| **MCHZ** | **McNeill Hill** | **1.35** | **127** | P | **Pn** | **11 05 48.3** | **+1.4** |
| **PNHZ** | **Pukenui** | **1.45** | **151** | P | **Pn** | **11 05 48.2** | **+0.7** |
| **ARHZ** | **Aropaoanui** | **1.46** | **115** | P | **Pn** | **11 05 48.7** | **+1.1** |
| **URZ** | **Urewera** | **1.48** | **75** | P | **Pn** | **11 05 46.8** | **-0.9** |
| | 209nm,0.3s,baz=250,slow=5.2,SNR=1940 | | | | | | |
| URZ | | | | S | **S** | **11 06 16.8** | **-4.4** |
| | 226nm,0.3s,baz=21,slow=22,SNR=32 | | | | | | |
| **URZ** | **Urewera** | **1.48** | **75** | P | **Pn** | **11 05 47.2** | **-0.5** |
| **URZ** | **Urewera** | **1.48** | **75** | | **Pn** | **11 05 47.3** | **-0.5** |
| **URZ** | **Urewera** | **1.48** | **75** | P | **Pn** | **11 05 47.4** | **-0.3** |
| **TSZ** | **Takapari Road** | **1.50** | **160** | P | **Pn** | **11 05 48.6** | **+0.7** |
| **WHRZ** | **Whale Island** | **1.54** | **60** | P | **Pn** | **11 05 48.2** | **0.0** |
| **MYRZ** | **Mayor Island** | **1.56** | **29** | P | **Pn** | **11 05 48.5** | **+0.1** |
| **OHWZ** | **Ohakea** | **1.56** | **180** | P | **Pn** | **11 05 49.7** | **+1.5** |
| **SNGZ** | **Shannon Statio** | **1.60** | **95** | P | **Pn** | **11 05 49.2** | **+0.6** |
| **AWAZ** | **Awhitu Peninsu** | **1.66** | **342** | P | **Pn** | **11 05 49.5** | **+0.4** |
| **RAGZ** | **Rawiri** | **1.67** | **85** | P | **Pn** | **11 05 49.5** | **+0.4** |
| **WPHZ** | **Waipukurau** | **1.67** | **148** | P | **Pn** | **11 05 49.9** | **+0.9** |
| **KAHZ** | **Kahuranaki** | **1.68** | **134** | P | **Pn** | **11 05 50.3** | **+1.2** |
| **CKHZ** | **Cape Kidnapper** | **1.71** | **127** | P | **Pn** | **11 05 50.5** | **+1.2** |
| **ETAZ** | **East Tamaki Re** | **1.72** | **350** | P | **Pn** | **11 05 49.6** | **+0.1** |
| **MWZ** | **Matawai** | **1.78** | **81** | P | **Pn** | **11 05 50.0** | **+0.1** |
| **POWZ** | **Post Office Ro** | **1.78** | **168** | P | **Pn** | **11 05 50.4** | **+0.6** |
| **DVHZ** | **Dannevirke** | **1.78** | **158** | P | **Pn** | **11 05 50.4** | **+0.5** |
| **WTAZ** | **Waiatarua** | **1.81** | **341** | P | **Pn** | **11 05 50.8** | **+0.6** |
| **EPAZ** | **Eden Park BICE** | **1.82** | **346** | P | **Pn** | **11 05 50.6** | **+0.4** |
| **PXZ** | **Hawanui** | **1.84** | **139** | P | **Pn** | **11 05 51.1** | **+0.9** |
| **HBAZ** | **Herne Bay Bore** | **1.85** | **346** | P | **Pn** | **11 05 50.8** | **+0.4** |
| **WIAZ** | **Waiheke Island** | **1.85** | **356** | P | **Pn** | **11 05 50.6** | **0.0** |
| **WIZ** | **White Island** | **1.86** | **54** | P | **Pn** | **11 05 49.9** | **-0.7** |
| **KNZ** | **Kokohu** | **1.89** | **102** | P | **Pn** | **11 05 51.2** | **+0.6** |
| **MBAZ** | **Motutapu North** | **1.90** | **350** | P | **Pn** | **11 05 51.1** | **+0.2** |
| **PRHZ** | **Porangahau** | **1.92** | **148** | P | **Pn** | **11 05 51.8** | **+0.9** |
| **KUZ** | **Kuaotunu** | **1.93** | **10** | P | **Pn** | **11 05 50.8** | **-0.2** |
| **RIGZ** | **Rimuhau** | **1.93** | **93** | P | **Pn** | **11 05 51.7** | **+0.6** |
| **RVAZ** | **Riverhead Bore** | **1.96** | **343** | P | **Pn** | **11 05 51.7** | **+0.3** |
| **PRWZ** | **Pori Road** | **1.98** | **165** | P | **Pn** | **11 05 52.2** | **+0.9** |
| **RUGZ** | **Raukumara Rang** | **1.99** | **71** | P | **Pn** | **11 05 50.5** | **-1.1** |
| **TKGZ** | **Te Karaka** | **2.01** | **85** | P | **Pn** | **11 05 52.3** | **+0.7** |
| **MRZ** | **Mangatainoka R** | **2.02** | **174** | P | **Pn** | **11 05 52.0** | **+0.3** |
| **ANWZ** | **Angora Road** | **2.03** | **154** | P | **Pn** | **11 05 52.7** | **+1.0** |
| **PRGZ** | **Paritu Road** | **2.04** | **99** | P | **Pn** | **11 05 52.4** | **+0.5** |
| **ABAZ** | **Army Bay** | **2.08** | **358** | P | **Pn** | **11 05 52.7** | **+0.4** |
| **HAZ** | **Te Kaha** | **2.15** | **66** | P | **Pn** | **11 05 51.8** | **-1.0** |
| **TWGZ** | **Tauwhareparae** | **2.16** | **78** | P | **Pn** | **11 05 53.4** | **+0.4** |
| **BFZ** | **Birch Farm** | **2.16** | **160** | P | **Pn** | **11 05 53.4** | **+0.5** |
| **BFZ** | **Birch Farm** | **2.16** | **160** | Pn | **Pn** | **11 05 53.4** | **+0.5** |
| **BFZ** | **Birch Farm** | **2.16** | **160** | P | **Pn** | **11 05 53.6** | **+0.8** |
| **OGWZ** | **Otaki Gorge** | **2.17** | **183** | P | **Pn** | **11 05 53.5** | **+0.6** |
| **TIWZ** | **Tintock** | **2.17** | **168** | P | **Pn** | **11 05 53.7** | **+0.7** |
| **KIW** | **Kapiti Island** | **2.23** | **188** | P | **Pn** | **11 05 53.7** | **+0.2** |
| **HOWZ** | **Holdsworth Sta** | **2.25** | **176** | P | **Pn** | **11 05 53.8** | **+0.1** |
| **CNGZ** | **Carnagh Statio** | **2.29** | **87** | P | **Pn** | **11 05 54.7** | **+0.7** |
| **PKGZ** | **Pakihiroa** | **2.31** | **72** | P | **Pn** | **11 05 54.2** | **-0.1** |
| **CPWZ** | **Castlepoint** | **2.37** | **163** | P | **Pn** | **11 05 55.8** | **+1.2** |
| **GRZ** | **Great Barrier** | **2.40** | **3** | P | **Pn** | **11 05 55.1** | **0.0** |
| **PUZ** | **Puketiti** | **2.40** | **77** | P | **Pn** | **11 05 54.9** | **-0.1** |
| **DUWZ** | **D'Urville Isla** | **2.40** | **206** | P | **Pn** | **11 05 55.4** | **+0.4** |
| **CAW** | **Cannon Point** | **2.46** | **184** | P | **Pn** | **11 05 55.9** | **+0.4** |
| **TMWZ** | **Te Maipa** | **2.50** | **170** | P | **Pn** | **11 05 56.3** | **+0.4** |
| **MTWZ** | **Mount Morrison** | **2.51** | **176** | P | **Pn** | **11 05 56.1** | **+0.2** |
| **WMGZ** | **Waiomatatini S** | **2.59** | **72** | P | **Pn** | **11 05 56.7** | **+0.6** |
| **MXZ** | **Matakaoa Point** | **2.61** | **66** | P | **Pn** | **11 05 56.8** | **-0.2** |
| **MXZ** | **Matakaoa Point** | **2.61** | **66** | | **Pn** | **11 05 57.1** | **+0.1** |
| **WEL** | **Wellington** | **2.67** | **189** | P | **Pn** | **11 05 57.7** | **+0.4** |
| **TCW** | **Tory Channel** | **2.68** | **197** | P | **Pn** | **11 05 57.9** | **+0.4** |
| **SNZO** | **South Karori** | **2.70** | **190** | | **Pn** | **11 05 58.0** | **+0.3** |
| **PAWZ** | **Paruwai Farm** | **2.73** | **178** | P | **Pn** | **11 05 58.5** | **+0.4** |
| **TRWZ** | **Traveller** | **2.76** | **174** | P | **Pn** | **11 05 59.0** | **+0.7** |
| **MSWZ** | **Moikau Station** | **2.77** | **181** | P | **Pn** | **11 05 58.7** | **+0.3** |
| **MSWZ** | **Moikau Station** | **2.77** | **181** | | **Pn** | **11 05 58.4** | **0.0** |
| **BHW** | **Baring Head** | **2.78** | **187** | P | **Pn** | **11 05 58.7** | **+0.3** |
| **BHW** | **Baring Head** | **2.78** | **187** | | **Pn** | **11 05 58.0** | **-0.4** |
| **PLWZ** | **Palliser** | **2.92** | **181** | P | **Pn** | **11 06 00.2** | **+0.3** |
| **NNZ** | **Nelson** | **2.96** | **209** | P | **Pn** | **11 06 00.3** | **+0.1** |
| **TUWZ** | **Tuamarina** | **2.97** | **200** | P | **Pn** | **11 06 00.7** | **+0.4** |
| **TKNZ** | **Takaka Hill** | **2.99** | **216** | P | **Pn** | **11 06 00.1** | **-0.5** |
| **QRZ** | **Quartz Range** | **3.05** | **224** | P | **Pn** | **11 06 00.3** | **-0.9** |
| **QRZ** | **Quartz Range** | **3.05** | **224** | P | **Pn** | **11 06 00.6** | **-0.6** |
| **CMWZ** | **Cape Campbell** | **3.21** | **195** | P | **Pn** | **11 06 03.8** | **+1.0** |
| **BSWZ** | **Blackbirch Sta** | **3.25** | **199** | P | **Pn** | **11 06 03.8** | **+0.6** |
| **MRNZ** | **Matariki Terra** | **3.37** | **215** | P | **Pn** | **11 06 04.0** | **-0.5** |
| **THZ** | **Tophouse** | **3.61** | **210** | P | **Pn** | **11 06 07.0** | **-0.1** |
| **KHZ** | **Kahutara** | **4.00** | **199** | P | **Pn** | **11 06 11.5** | **+0.3** |
| **KHZ** | **Kahutara** | **4.00** | **199** | Pn | **Pn** | **11 06 11.5** | **+0.3** |
| **KHZ** | **Kahutara** | **4.00** | **199** | P | **Pn** | **11 06 11.6** | **+0.4** |
| **DSZ** | **Denniston Nort** | **4.09** | **220** | P | **Pn** | **11 06 11.5** | **-0.9** |
| **GVZ** | **Greta Valley S** | **4.64** | **201** | P | **Pn** | **11 06 18.4** | **-0.2** |
| **LTZ** | **Lake Taylor** | **4.73** | **208** | P | **Pn** | **11 06 19.0** | **-0.6** |
| **AMCZ** | **Amberley** | **4.95** | **203** | P | **Pn** | **11 06 21.8** | **-0.2** |
| **INZ** | **Inchbonnie** | **5.02** | **214** | P | **Pn** | **11 06 21.8** | **-1.1** |
| **OXZ** | **Oxford** | **5.28** | **207** | P | **Pn** | **11 06 24.9** | **-1.1** |
| **OKCZ** | **Okains Bay** | **5.34** | **198** | P | **Pn** | **11 06 26.6** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **5.43** | **201** | P | **Pn** | **11 06 26.9** | **-0.9** |
| **AKCZ** | **Akaroa Harbour** | **5.52** | **198** | P | **Pn** | **11 06 28.5** | **-0.4** |
| **RACZ** | **Rakaia** | **5.61** | **204** | P | **Pn** | **11 06 29.1** | **-0.7** |
| **WVZ** | **Waitaha Valley** | **5.61** | **217** | P | **Pn** | **11 06 28.3** | **-1.6** |
| **MHCZ** | **Mount Hutt** | **5.63** | **209** | P | **Pn** | **11 06 29.2** | **-1.0** |
| **WACZ** | **Wakanui South** | **5.90** | **205** | P | **Pn** | **11 06 32.8** | **-0.5** |
| **RPZ** | **Rata Peaks** | **5.99** | **211** | P | **Pn** | **11 06 33.3** | **-1.2** |
| **GCSZ** | **Gaunt Creek Bo** | **5.99** | **217** | P | **Pn** | **11 06 33.3** | **-1.2** |
| **ARCZ** | **Arundel** | **6.14** | **209** | P | **Pn** | **11 06 35.3** | **-1.0** |
| **FOZ** | **Fox Glacier** | **6.40** | **219** | P | **Pn** | **11 06 37.4** | **-1.9** |
| **TMZ** | **Timaru** | **6.57** | **208** | P | **Pn** | **11 06 41.1** | **-0.4** |
| **LBZ** | **Lake Benmore** | **6.90** | **212** | P | **Pn** | **11 06 44.6** | **-0.9** |
| **ODZ** | **Otahua Downs** | **7.27** | **207** | P | **Pn** | **11 06 49.9** | **-0.2** |
| **JCZ** | **Jackson Bay** | **7.30** | **220** | P | **Pn** | **11 06 48.3** | **-2.2** |
| **WKZ** | **Wanaka** | **7.75** | **215** | P | **Pn** | **11 06 53.7** | **-2.3** |
| **EAZ** | **Earnscleugh** | **7.95** | **212** | P | **Pn** | **11 06 56.0** | **-2.3** |
| **HHSZ** | **Highcliff Hill** | **8.03** | **204** | P | **Pn** | **11 07 00.5** | **+1.2** |
| **MSZ** | **Milford Sound** | **8.16** | **220** | P | **Pn** | **11 06 59.4** | **-1.6** |
| **TUZ** | **Tuapeka** | **8.42** | **208** | P | **Pn** | **11 07 04.7** | **+0.5** |
| **MLZ** | **Mavora Lakes** | **8.58** | **216** | P | **Pn** | **11 07 04.8** | **-1.3** |
| **WHZ** | **Wether Hill Ro** | **9.06** | **215** | P | **Pn** | **11 07 10.1** | **-1.9** |
| **SYZ** | **Scrubby Hill** | **9.10** | **208** | P | **Pn** | **11 07 13.2** | **+0.8** |
| **DCZ** | **Deep Cove** | **9.11** | **219** | P | **Pn** | **11 07 12.2** | **-0.5** |
| **APZ** | **The Paps** | **9.78** | **211** | P | **Pn** | **11 07 20.5** | **-0.5** |
| **PYZ** | **Puysegur Point** | **9.85** | **218** | P | **Pn** | **11 07 21.5** | **-0.4** |
| **DZM** | **Mont Dzumac** | **18.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **29.23** | **229** | P | **P** | **11** | **15** | **38.8 +0.9** |
| | comp=Z,1.4nm,0.4s,baz=72,slow=7.6,SNR=6.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.23** | **229** | P | **P** | **11** | **15** | **38.9 +1.0** |
| **TOO** | **Toolangi** | **30.08** | **216** | P | **P** | **11** | **15** | **47.1 +1.7** |
| TOO | | | | IAmb | IAmb | 11 | 16 | 09.1 |
| | comp=Z,16nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **31.97** | **256** | P | **P** | **11** | **16** | **02.3 0.0** |
| WB0 | | | | IAmb | IAmb | 11 | 16 | 20.6 |
| | comp=Z,13nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.04** | **256** | P | **P** | **11** | **16** | **01.5 -1.4** |
| | comp=Z,0.4nm,0.6s,baz=86,slow=9.3,SNR=2.4 | | | | | | | |
| **AS31** | **Alice Springs** | **32.89** | **249** | P | **P** | **11** | **16** | **10.0 -0.3** |
| **ASAR** | **Alice Springs** | **32.90** | **249** | P | **P** | **11** | **16** | **09.0 -1.3** |
| | comp=Z,0.6nm,0.5s,baz=78,slow=9.0,SNR=12 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **11** | **18** | **50.8 -0.1** |
| | comp=Z,0.4nm,0.8s,baz=93,slow=2.9,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.90** | **249** | P | **P** | **11** | **16** | **09.7 -0.6** |
| **BBOO** | **Buckleboo** | **33.81** | **232** | P | **P** | **11** | **16** | **18.4 +0.4** |
| **VNDA** | **Vanda** | **63.01** | **181** | P | **P** | **11** | **19** | **60.0 -0.3** |
| | comp=Z,3.6nm,1.0s,baz=26,slow=7.2,SNR=1.8 | | | | | | | |
| **VNDA** | **Vanda** | **63.01** | **181** | P | **P** | **11** | **20** | **00.5 +0.2** |
| **QSPA** | **South Pole Qui** | **75.44** | **180** | P | **P** | **11** | **21** | **16.7 -0.4** |
| **IMAR** | **Indian Mountai** | **85.38** | **15** | P | **P** | **11** | **22** | **11.6 +1.9** |
| **ILAR** | **Eielson Array** | **86.33** | **18** | P | **P** | **11** | **22** | **14.1 -0.3** |
| | comp=Z,0.5nm,0.7s,baz=240,slow=4.7,SNR=6.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.33** | **18** | P | **P** | **11** | **22** | **15.0 +0.6** |
| **MKAR** | **Makanchi Array** | **97.22** | **316** | P | Pdif | 11 | 23 | 06.3 +0.8 |
| | comp=Z,0.5nm,0.7s,baz=86,slow=5.3,SNR=7.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.16** | **345** | PKP | **PKPdf** | **11** | **28** | **22.0 -0.1** |
| | comp=Z,3.0nm,1.0s,baz=73,slow=1.6,SNR=5.2 | | | | | | | |

*IDC **01** 12:02:03.5±1.6, 60.39N×152.63W, h88km±28km, mb3.7/3, mb1 3.5/8, mb1mx3.0/47, mbtmpg3.7/8, Error ellipse: s-maj=37.6km s-min=9.8km az=110.0*
*NEIC **01** 12:02:05.5±1.0, 60.37N±0.03×152.41W±0.07, h105km±1km, Error ellipse: s-maj=5.0km s-min=4.5km az=102.0*
*ANF **01** 12:02:05.0±0.2, 60.34N×152.39W, h106km±3km, ML3.5/50, Error ellipse: s-maj=2.1km s-min=1.7km az=148.0*
*AEIC **01** 12:02:06±0.9, 60.34N±0.03×152.39W±0.06, h104km±4km, ML3.2, ML3.3/40(NEIC), Error ellipse: s-maj=4.8km s-min=4.2km az=45.0*

**ISC 01 12:02:04.9±0.8, 60.34N±0.03×152.39W±0.03, h111km±5km, n217, σ0.83/251, mb4.1/3, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RED** | **Redoubt Volcan** | **0.21** | **293** | | **Pn** | **12 02 20.1** | **-0.5** |
| RED | | | | | **Sn** | **12 02 30.7** | **-1.7** |
| **RSO** | **Redoubt South** | **0.22** | **304** | | **Pn** | **12 02 20.5** | **-0.3** |
| **RDT** | **Redoubt** | **0.24** | **358** | | **Pn** | **12 02 20.3** | **-0.4** |
| RDT | | | | | **Sn** | **12 02 31.3** | **-1.2** |
| **O20K** | **Slope Mountain** | **0.28** | **205** | | **Pn** | **12 02 20.9** | **+0.1** |
| O20K | | | | | **Sn** | **12 02 32.5** | **-0.3** |
| **O20K** | **Slope Mountain** | **0.28** | **205** | P | **Pn** | **12 02 20.9** | **+0.1** |
| | baz=24,SNR=48 | | | | | | |
| O20K | | | | S | **Sn** | **12 02 32.5** | **-0.3** |
| | baz=24 | | | | | | |
| **DFR** | **Drift River** | **0.29** | **330** | | **Pn** | **12 02 20.4** | **-0.5** |
| DFR | | | | | **Sn** | **12 02 31.6** | **-1.4** |
| **NCT** | **North Crescent** | **0.35** | **310** | | **Pn** | **12 02 20.5** | **-0.7** |
| **ILSW** | **Iliamna Southw** | **0.52** | **227** | | **Pn** | **12 02 21.7** | **-0.5** |
| **ILSW** | **Iliamna Southw** | **0.52** | **227** | | **Sn** | **12 02 35.0** | **-0.1** |
| **ILSW** | **Iliamna Southw** | **0.52** | **227** | IAML | | 12 02 23.2 | |
| | comp=N,152nm,0.3s | | | | | | |
| **CAPN** | **Captain Cook N** | **0.75** | **54** | | **Pn** | **12 02 25.5** | **+1.8** |
| **CAPN** | **Captain Cook N** | **0.75** | **54** | P | **Pn** | **12 02 25.5** | **+1.8** |
| | baz=235 | | | | | | |
| CAPN | | | | S | **Sn** | **12 02 41.2** | **+3.3** |
| | baz=235 | | | | | | |
| **HOM** | **Homer** | **0.78** | **151** | | **Pn** | **12 02 24.6** | **+0.6** |
| HOM | | | | | **Sn** | **12 02 39.6** | **+1.1** |
| **HOM** | **Homer** | **0.78** | **151** | P | **Pn** | **12 02 24.7** | **+0.6** |
| | baz=332,SNR=6.2 | | | | | | |
| HOM | | | | S | **Sn** | **12 02 39.3** | **+0.9** |
| | baz=332 | | | | | | |
| **OPT** | **Oil Point** | **0.81** | **212** | | **Pn** | **12 02 24.7** | **+0.3** |
| **SPU** | **Mount Spurr** | **0.86** | **11** | | **Pn** | **12 02 24.8** | **-0.1** |
| **SPCR** | **Spurr Chakacha** | **0.87** | **6** | | **Pn** | **12 02 24.8** | **-0.2** |
| SPCR | | | | | **Sn** | **12 02 39.0** | **-1.1** |
| **SPCR** | **Spurr Chakacha** | **0.87** | **6** | P | **Pn** | **12 02 24.8** | **-0.2** |
| | baz=186,SNR=52 | | | | | | |
| SPCR | | | | S | **Sn** | **12 02 38.9** | **-1.2** |
| | baz=186 | | | | | | |
| **SPCN** | **Chakachatna No** | **0.90** | **6** | | **Pn** | **12 02 25.2** | **0.0** |
| **SPBG** | **Spurr Blockage** | **0.92** | **1** | | **Pn** | **12 02 25.6** | **0.0** |
| **BRLK** | **Bradley Lake** | **0.95** | **127** | | **Pn** | **12 02 25.6** | **-0.1** |
| BRLK | | | | | **Sn** | **12 02 41.1** | **-0.3** |
| **SPCG** | **Spurr Capps Gl** | **0.97** | **10** | | **Pn** | **12 02 26.0** | **0.0** |
| **O19K** | **Port Alsworth** | **0.97** | **262** | | **Pn** | **12 02 25.6** | **-0.3** |
| **O19K** | **Port Alsworth** | **0.97** | **262** | IAML | | 12 02 45.5 | |
| | comp=E,553nm,0.5s | | | | | | |
| O19K | | | | IAML | | 12 02 53.8 | |
| | comp=N,465nm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.97** | **262** | P | **Pn** | **12 02 25.6** | **-0.3** |
| | baz=80,SNR=11 | | | | | | |
| O19K | | | | S | **Sn** | **12 02 40.7** | **-1.0** |
| | baz=80 | | | | | | |
| **CNPM** | **China Poot** | **1.00** | **144** | | **Pn** | **12 02 26.5** | **+0.3** |
| CNPM | | | | | **Sn** | **12 02 42.0** | **-0.3** |
| **BRSE** | **Bradley Lake S** | **1.02** | **125** | | **Pn** | **12 02 26.5** | **0.0** |
| BRSE | | | | | **Sn** | **12 02 42.3** | **-0.4** |
| **BRSE** | **Bradley Lake S** | **1.02** | **125** | P | **Pn** | **12 02 26.4** | **0.0** |
| | baz=307,SNR=20 | | | | | | |
| BRSE | | | | S | **Sn** | **12 02 42.2** | **-0.4** |
| | baz=307 | | | | | | |
| **SPNN** | **North Nagishla** | **1.04** | **352** | | **Pn** | **12 02 26.7** | **-0.1** |
| **AU22** | **Augustine Moun** | **1.09** | **207** | | **Pn** | **12 02 27.4** | **+0.4** |
| **SLKM** | **Skilak Lake** | **1.09** | **80** | | **Pn** | **12 02 27.3** | **+0.1** |
| **AUL** | **Augustine Lava** | **1.10** | **209** | | **Pn** | **12 02 27.7** | **+0.5** |
| **AUH** | **Augustine H** | **1.11** | **209** | | **Sn** | **12 02 45.5** | **+1.0** |
| **AUQ** | **Augustine Qik'** | **1.11** | **208** | | **Pn** | **12 02 28.0** | **+0.6** |
| **N19K** | **Bonanza Creek** | **1.14** | **296** | Pn | **Pn** | **12 02 27.1** | **-0.6** |
| N19K | | | | IAML | | 12 02 44.2 | |
| | comp=N,421nm,0.7s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.14** | **296** | | **Sn** | **12 02 43.6** | **-1.4** |
| **N19K** | **Bonanza Creek** | **1.14** | **296** | P | **Pn** | **12 02 27.4** | **-0.4** |
| | baz=114 | | | | | | |
| N19K | | | | S | **Sn** | **12 02 43.5** | **-1.4** |
| | baz=114 | | | | | | |
| **STLK** | **Strandline Lak** | **1.20** | **13** | | **Pn** | **12 02 28.4** | **+0.1** |
| **O22K** | **Cooper Landing** | **1.33** | **83** | | **Pn** | **12 02 30.1** | **+0.3** |
| O22K | | | | | **Sn** | **12 02 48.5** | **-0.1** |
| **O22K** | **Cooper Landing** | **1.33** | **83** | P | **Pn** | **12 02 29.9** | **+0.2** |
| | baz=265,SNR=46 | | | | | | |
| O22K | | | | S | **Sn** | **12 02 48.1** | **-0.5** |
| | baz=265 | | | | | | |
| **FIS** | **Fire Island** | **1.34** | **52** | | **Pn** | **12 02 31.4** | **+1.6** |
| **SUA** | **Susitna One** | **1.39** | **35** | | **Pn** | **12 02 31.1** | **+0.6** |
| **SUA** | **Susitna One** | **1.39** | **35** | P | **Pn** | **12 02 31.1** | **+0.6** |
| | baz=216,SNR=66 | | | | | | |
| SUA | | | | S | **Sn** | **12 02 50.5** | **+0.5** |
| | baz=216 | | | | | | |
| **SEW** | **Seward** | **1.48** | **98** | | **Pn** | **12 02 31.5** | **0.0** |
| SEW | | | | | **Sn** | **12 02 51.2** | **-0.5** |
| **SEW** | **Seward** | **1.48** | **98** | P | **Pn** | **12 02 31.7** | **+0.1** |
| | baz=280,SNR=18 | | | | | | |
| SEW | | | | S | **Sn** | **12 02 50.9** | **-0.9** |
| | baz=280 | | | | | | |
| **O18K** | **Koktuh Hills** | **1.49** | **252** | | **Pn** | **12 02 31.5** | **-0.2** |
| **O18K** | **Koktuh Hills** | **1.49** | **252** | P | **Pn** | **12 02 31.6** | **-0.2** |
| | baz=70 | | | | | | |
| O18K | | | | S | **Sn** | **12 02 51.0** | **-1.1** |
| | baz=70 | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.50** | **59** | | **Pn** | **12 02 32.2** | **+0.4** |
| **RC01** | **Rabbit Creek A** | **1.50** | **59** | P | **Pn** | **12 02 32.2** | **+0.4** |
| | baz=241,SNR=10 | | | | | | |
| RC01 | | | | S | **Sn** | **12 02 51.8** | **-0.5** |
| | baz=241 | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.55** | **205** | | **Pn** | **12 02 32.5** | **+0.1** |
| Q19K | | | | | **Sn** | **12 02 52.9** | **-0.5** |
| **Q19K** | **Cape Douglas,** | **1.55** | **205** | IAML | | 12 02 55.4 | |
| | comp=N,325nm,0.6s | | | | | | |
| Q19K | | | | IAML | | 12 03 03.1 | |
| | comp=E,418nm,2.2s | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.55** | **205** | P | **Pn** | **12 02 32.5** | **+0.1** |
| | baz=24,SNR=7.7 | | | | | | |
| Q19K | | | | S | **Sn** | **12 02 53.1** | **-0.3** |
| | baz=24 | | | | | | |
| **P18K** | **Big Mountain,** | **1.72** | **238** | Pn | **Pn** | **12 02 34.5** | **0.0** |
| **P18K** | **Big Mountain,** | **1.72** | **238** | P | **Pn** | **12 02 34.5** | **0.0** |
| | baz=55 | | | | | | |
| P18K | | | | S | **Sn** | **12 02 56.1** | **-0.8** |
| | baz=55 | | | | | | |
| **M22K** | **Willow** | **1.80** | **37** | | **Pn** | **12 02 36.1** | **+0.8** |
| **M22K** | **Willow** | **1.80** | **37** | P | **Pn** | **12 02 36.0** | **+0.7** |
| | baz=219,SNR=20 | | | | | | |
| M22K | | | | S | **Sn** | **12 02 59.3** | **+0.8** |
| | baz=219 | | | | | | |
| **M19K** | **Big River Lodg** | **1.85** | **329** | | **Pn** | **12 02 36.2** | **+0.2** |
| M19K | | | | | **Sn** | **12 02 59.6** | **-0.2** |
| **M19K** | **Big River Lodg** | **1.85** | **329** | IAML | | 12 02 60.0 | |
| | comp=E,179nm,0.8s | | | | | | |
| **M19K** | **Big River Lodg** | **1.85** | **329** | P | **Pn** | **12 02 36.2** | **+0.2** |
| | baz=147 | | | | | | |
| M19K | | | | S | **Sn** | **12 02 59.2** | **-0.5** |
| | baz=147 | | | | | | |
| **PMR** | **Palmer** | **2.03** | **50** | | **Pn** | **12 02 38.0** | **-0.2** |
| **PMR** | **Palmer** | **2.03** | **50** | IAML | | 12 03 03.1 | |
| | comp=N,192nm,0.3s | | | | | | |
| PMR | | | | IAML | | 12 03 03.2 | |
| | comp=E,222nm,0.5s | | | | | | |
| **PMR** | **Palmer** | **2.03** | **50** | P | **Pn** | **12 02 38.0** | **-0.2** |
| | baz=233 | | | | | | |
| PMR | | | | S | **Sn** | **12 03 01.8** | **-1.8** |
| | baz=233 | | | | | | |
| **PWL** | **Port Wells** | **2.07** | **74** | | **Pn** | **12 02 38.1** | **-0.6** |
| **PWL** | **Port Wells** | **2.07** | **74** | P | **Pn** | **12 02 38.3** | **-0.5** |
| | baz=257,SNR=18 | | | | | | |
| PWL | | | | S | **Sn** | **12 03 03.9** | **-0.8** |
| | baz=257 | | | | | | |
| **L19K** | **White Mountain** | **2.20** | **328** | | **Pn** | **12 02 40.8** | **+0.3** |
| L19K | | | | | **Sn** | **12 03 07.7** | **0.0** |
| **L19K** | **White Mountain** | **2.20** | **328** | P | **Pn** | **12 02 40.8** | **+0.3** |
| | baz=146,SNR=62 | | | | | | |
| L19K | | | | S | **Sn** | **12 03 07.3** | **-0.4** |
| | baz=146 | | | | | | |
| **KNK** | **Knik Glacier** | **2.20** | **59** | | **Pn** | **12 02 40.3** | **-0.2** |
| **KNK** | **Knik Glacier** | **2.20** | **59** | P | **Pn** | **12 02 40.3** | **-0.2** |
| | baz=242 | | | | | | |
| KNK | | | | S | **Sn** | **12 03 06.6** | **-1.2** |
| | baz=242 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.21** | **48** | | **Pn** | **12 02 40.6** | **-0.1** |
| **L20K** | **Farewell, AK** | **2.26** | **342** | | **Pn** | **12 02 41.8** | **+0.4** |
| **L20K** | **Farewell, AK** | **2.26** | **342** | P | **Pn** | **12 02 41.7** | **+0.4** |
| | baz=161,SNR=34 | | | | | | |
| **CUT** | **Chulitna** | **2.31** | **25** | | **Pn** | **12 02 42.7** | **+0.8** |
| **CUT** | **Chulitna** | **2.31** | **25** | P | **Pn** | **12 02 41.9** | **0.0** |
| | baz=207,SNR=19 | | | | | | |
| CUT | | | | S | **Sn** | **12 03 09.9** | **-0.3** |
| | baz=207 | | | | | | |
| **SML** | **Sawmill** | **2.46** | **51** | | **Pn** | **12 02 43.7** | **-0.2** |
| **SML** | **Sawmill** | **2.46** | **51** | P | **Pn** | **12 02 43.6** | **-0.2** |
| | baz=235 | | | | | | |
| SML | | | | S | **Sn** | **12 03 12.1** | **-1.6** |
| | baz=235 | | | | | | |
| **KABU** | **Katmai Buttres** | **2.55** | **217** | | **Pn** | **12 02 45.9** | **+0.8** |
| **KDAK** | **Kodiak Island** | **2.57** | **182** | P | **Pn** | **12 02 44.3** | **-0.8** |
| | comp=E,8.3nm,0.3s,baz=60,slow=13,SNR=155 | | | | | | |
| KDAK | | | | S | **Sn** | **12 03 15.1** | **-1.0** |
| | comp=E,23nm,0.3s,baz=220,slow=21,SNR=18 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.57** | **182** | Pn | **Pn** | **12 02 45.1** | **-0.1** |
| KDAK | | | | IAML | | 12 03 16.5 | |
| | comp=E,117nm,0.7s | | | | | | |
| KDAK | | | | IAML | | 12 03 16.7 | |
| | comp=E,148nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.57** | **182** | P | **Pn** | **12 02 44.4** | **-0.8** |
| | baz=2.1 | | | | | | |
| KDAK | | | | S | **Sn** | **12 03 14.9** | **-1.2** |
| | baz=2.1 | | | | | | |
| **PPLA** | **Purkeypile** | **2.57** | **2** | | **Pn** | **12 02 46.1** | **+0.8** |
| **PPLA** | **Purkeypile** | **2.57** | **2** | P | **Pn** | **12 02 46.1** | **+0.8** |
| | baz=182,SNR=14 | | | | | | |
| **GLI** | **Glacier Island** | **2.67** | **76** | | **Pn** | **12 02 44.9** | **-1.7** |
| **GLI** | **Glacier Island** | **2.67** | **76** | P | **Pn** | **12 02 44.8** | **-1.7** |
| | baz=261 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **2.88** | **56** | | **Pn** | **12 02 49.5** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **2.88** | **56** | P | **Pn** | **12 02 49.4** | **0.0** |
| | baz=241 | | | | | | |
| **JPK** | **Jack Peak** | **2.94** | **73** | | **Pn** | **12 02 49.5** | **-0.6** |
| **FID** | **Port Fidalgo** | **2.95** | **79** | | **Pn** | **12 02 48.4** | **-1.8** |
| **CAST** | **Castle Rocks** | **3.10** | **3** | P | **Pn** | **12 02 52.3** | **+0.1** |
| | baz=183,SNR=21 | | | | | | |
| **TT01** | **Tatalina** | **3.11** | **328** | | **Pn** | **12 02 52.4** | **+0.1** |
| **TTA** | **Tatalina** | **3.12** | **328** | | **Pn** | **12 02 52.5** | **-0.1** |
| **TTA** | **Tatalina** | **3.12** | **328** | IAML | | 12 03 30.3 | |
| | comp=E,36nm,1.4s | | | | | | |
| **TTA** | **Tatalina** | **3.12** | **328** | P | **Pn** | **12 02 52.4** | **-0.1** |
| | baz=145,SNR=5.6 | | | | | | |
| **K20K** | **Telida** | **3.13** | **346** | P | **Pn** | **12 02 53.0** | **+0.4** |
| | baz=164 | | | | | | |
| **OHAK** | **Old Harbor** | **3.16** | **189** | Pn | **Pn** | **12 02 51.7** | **-1.3** |
| OHAK | | | | IAML | | 12 03 29.1 | |
| | comp=E,97nm,2.2s | | | | | | |
| OHAK | | | | IAML | | 12 03 51.3 | |
| | comp=N,99nm,2.9s | | | | | | |
| **OHAK** | **Old Harbor** | **3.16** | **189** | P | **Pn** | **12 02 51.7** | **-1.3** |
| | baz=8.1 | | | | | | |
| **Q23K** | **Middleton Isla** | **3.18** | **104** | P | **Pn** | **12 02 53.9** | **+0.7** |
| | baz=289 | | | | | | |
| **TRF** | **Thorofare Moun** | **3.28** | **17** | | **Pn** | **12 02 54.6** | **-0.1** |
| **TRF** | **Thorofare Moun** | **3.28** | **17** | P | **Pn** | **12 02 54.6** | **-0.1** |
| | baz=199,SNR=12 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.30** | **83** | Pn | **Pn** | **12 02 55.6** | **+0.9** |
| **EYAK** | **Cordova Ski Ar** | **3.30** | **83** | P | **Pn** | **12 02 53.9** | **-0.9** |
| | baz=269 | | | | | | |
| **KTH** | **Kantishna Hill** | **3.30** | **11** | | **Pn** | **12 02 55.0** | **+0.1** |
| **DIV** | **Divide** | **3.34** | **73** | | **Pn** | **12 02 54.6** | **-0.9** |
| **KLU** | **Klutina** | **3.36** | **67** | | **Pn** | **12 02 55.2** | **-0.5** |
| **KLU** | **Klutina** | **3.36** | **67** | P | **Pn** | **12 02 55.3** | **-0.5** |
| | baz=253,SNR=6.5 | | | | | | |
| KLU | | | | S | **Sn** | **12 03 33.1** | **-1.9** |
| | baz=253 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **3.49** | **57** | | **Pn** | **12 02 57.9** | **+0.5** |
| **M24K** | **Tolsona, Glenn** | **3.49** | **57** | IAML | | 12 03 40.3 | |
| | comp=N,132nm,0.9s | | | | | | |
| M24K | | | | IAML | | 12 03 42.0 | |
| | comp=E,135nm,0.4s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **3.49** | **57** | P | **Pn** | **12 02 57.7** | **+0.3** |
| | baz=242 | | | | | | |
| **RND** | **Reindeer** | **3.50** | **27** | | **Pn** | **12 02 57.9** | **+0.3** |
| **CHUM** | **Lake Minchumin** | **3.56** | **1** | | **Pn** | **12 02 58.4** | **+0.1** |
| **CHUM** | **Lake Minchumin** | **3.56** | **1** | P | **Pn** | **12 02 58.1** | **-0.1** |
| | baz=181,SNR=8.3 | | | | | | |
| **MCK** | **McKinley** | **3.77** | **24** | | **Pn** | **12 03 01.9** | **+0.7** |
| **MCK** | **McKinley** | **3.77** | **24** | P | **Pn** | **12 03 01.6** | **+0.4** |
| | baz=207,SNR=6.1 | | | | | | |
| **RAGM** | **Ragged Mountai** | **3.83** | **86** | | **Pn** | **12 03 02.1** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **3.83** | **9** | | **Pn** | **12 03 02.1** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **3.83** | **9** | P | **Pn** | **12 03 02.0** | **0.0** |
| | baz=190 | | | | | | |
| **BMRM** | **Bremner River** | **3.88** | **77** | | **Pn** | **12 03 02.6** | **-0.1** |
| **BMRM** | **Bremner River** | **3.88** | **77** | P | **Pn** | **12 03 01.7** | **-1.0** |
| | baz=264 | | | | | | |
| **SII** | **Sitkinak Islan** | **3.91** | **195** | P | **Pn** | **12 03 01.9** | **-1.1** |
| | baz=13 | | | | | | |
| **J20K** | **Nowinta River** | **3.94** | **349** | P | **Pn** | **12 03 03.6** | **+0.3** |
| | baz=167 | | | | | | |
| **N25K** | **Chitina, Valde** | **4.00** | **68** | Pn | **Pn** | **12 03 04.2** | **-0.1** |
| N25K | | | | IAML | | 12 03 51.1 | |
| | comp=E,46nm,0.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.00** | **68** | P | **Pn** | **12 03 03.8** | **-0.5** |
| | baz=255 | | | | | | |
| **KAIM** | **Kayak Island** | **4.01** | **92** | P | **Pn** | **12 03 04.8** | **+0.5** |
| | baz=279 | | | | | | |
| **HARP** | **HAARP** | **4.05** | **56** | | **Pn** | **12 03 05.3** | **+0.5** |
| **HARP** | **HAARP** | **4.05** | **56** | P | **Pn** | **12 03 05.1** | **+0.2** |
| | baz=242 | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.19** | **88** | | **Pn** | **12 03 07.1** | **+0.3** |
| **PAX** | **Paxson** | **4.22** | **48** | | **Pn** | **12 03 08.0** | **+0.7** |
| **PAX** | **Paxson** | **4.22** | **48** | P | **Pn** | **12 03 07.7** | **+0.4** |
| | baz=234,SNR=6.0 | | | | | | |
| **BERG** | **Berg Lake** | **4.31** | **86** | | **Pn** | **12 03 08.6** | **+0.2** |
| **GLB** | **Gilahina Butte** | **4.33** | **71** | | **Pn** | **12 03 08.5** | **-0.2** |
| **KHIT** | **Khitrov Hills** | **4.54** | **85** | | **Pn** | **12 03 11.5** | **0.0** |
| **NEA2** | **Nenana** | **4.54** | **18** | | **Pn** | **12 03 11.9** | **+0.4** |
| **NEA2** | **Nenana** | **4.54** | **18** | P | **Pn** | **12 03 11.3** | **-0.1** |
| | baz=201 | | | | | | |
| **WRH** | **Wood River Hil** | **4.60** | **24** | | **Pn** | **12 03 12.5** | **+0.2** |
| **MLY** | **Manley** | **4.77** | **8** | | **Pn** | **12 03 15.1** | **+0.5** |
| **MLY** | **Manley** | **4.77** | **8** | P | **Pn** | **12 03 14.6** | **0.0** |
| | baz=190,SNR=11 | | | | | | |
| **HDA** | **Harding Lake** | **4.80** | **29** | | **Pn** | **12 03 15.4** | **+0.4** |
| **HDA** | **Harding Lake** | **4.80** | **29** | P | **Pn** | **12 03 15.1** | **+0.1** |
| | baz=214,SNR=12 | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.82** | **24** | | **Pn** | **12 03 15.4** | **+0.3** |
| **I21K** | **Tanana** | **4.86** | **2** | P | **Pn** | **12 03 15.8** | **+0.1** |
| | baz=182 | | | | | | |
| **GCSA** | **Galena City Sc** | **4.89** | **337** | P | **Pn** | **12 03 16.4** | **+0.3** |
| | baz=153,SNR=13 | | | | | | |
| **RIDG** | **Independent Ri** | **4.92** | **43** | | **Pn** | **12 03 17.4** | **+0.8** |
| **RIDG** | **Independent Ri** | **4.92** | **43** | P | **Pn** | **12 03 17.5** | **+0.8** |
| | baz=230,SNR=11 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **4.95** | **29** | | **Pn** | **12 03 17.0** | **+0.1** |
| **M26K** | **Nabesna, AK** | **4.97** | **61** | | **Pn** | **12 03 17.3** | **+0.1** |
| **M26K** | **Nabesna, AK** | **4.97** | **61** | P | **Pn** | **12 03 17.1** | **-0.1** |
| | baz=250 | | | | | | |
| **KIAG** | **Kiagna River** | **4.97** | **79** | | **Pn** | **12 03 17.8** | **+0.3** |
| **ISLE** | **Juniper Island** | **4.98** | **83** | | **Pn** | **12 03 18.1** | **+0.5** |
| **BALM** | **Baldy** | **4.99** | **78** | | **Pn** | **12 03 17.5** | **-0.1** |
| **TCOL** | **CIGO, UAF Yank** | **5.01** | **23** | | **Pn** | **12 03 17.9** | **+0.2** |
| **TCOL** | **CIGO, UAF Yank** | **5.01** | **23** | P | **Pn** | **12 03 17.9** | **+0.2** |
| | baz=207,SNR=11 | | | | | | |
| **COLA** | **College** | **5.01** | **23** | | **Pn** | **12 03 17.9** | **+0.1** |
| **COLA** | **College** | **5.01** | **23** | P | **Pn** | **12 03 17.7** | **0.0** |
| | baz=207 | | | | | | |
| **MDM** | **Murphy Dome** | **5.02** | **21** | | **Pn** | **12 03 18.2** | **+0.3** |
| **I23K** | **Minto, Yukon-K** | **5.02** | **15** | | **Pn** | **12 03 19.1** | **+1.1** |
| I23K | | | | IAML | | 12 05 42.7 | |
| | comp=N,24nm,4.7s | | | | | | |
| I23K | | | | IAML | | 12 06 38.1 | |
| | comp=E,18nm,3.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.02** | **15** | P | **Pn** | **12 03 18.5** | **+0.6** |
| | baz=198,SNR=36 | | | | | | |
| **BAGL** | **Bagley Icefiel** | **5.11** | **84** | | **Pn** | **12 03 20.0** | **+0.9** |
| **IL31** | | **5.12** | **27** | | **Pn** | **12 03 19.3** | **+0.1** |
| **ILAR** | **Eielson Array** | **5.12** | **27** | P | **Pn** | **12 03 19.2** | **-0.1** |
| | comp=E,3.4nm,0.3s,baz=212,slow=13,SNR=117 | | | | | | |
| ILAR | | | | S | **Sn** | **12 04 15.3** | **-1.8** |
| | comp=E,3.1nm,0.3s,baz=17,slow=12,SNR=8.6 | | | | | | |
| **ILAR** | **Eielson Array** | **5.12** | **27** | Pn | **Pn** | **12 03 19.4** | **+0.1** |
| **DOT** | **Dot Lake** | **5.14** | **46** | Pn | **Pn** | **12 03 20.5** | **+1.0** |
| **CHGN** | **Chignik** | **5.14** | **221** | Pn | **Pn** | **12 03 19.8** | **+0.2** |
| **MESA** | **MESA** | **5.20** | **87** | | **Pn** | **12 03 21.4** | **+0.9** |
| **MESA** | **MESA** | **5.20** | **87** | P | **Pn** | **12 03 21.3** | **+0.7** |
| | baz=276 | | | | | | |
| **YAH** | **Yahtse** | **5.29** | **85** | | **Pn** | **12 03 22.8** | **+1.0** |
| **POKR** | **Poker Plat Res** | **5.31** | **23** | | **Pn** | **12 03 22.2** | **+0.4** |
| **POKR** | **Poker Plat Res** | **5.31** | **23** | P | **Pn** | **12 03 21.3** | **-0.5** |
| | baz=208 | | | | | | |
| **BARN** | **Barnard Glacie** | **5.32** | **78** | | **Pn** | **12 03 22.6** | **+0.5** |
| **H21K** | **Melozitna Rive** | **5.34** | **358** | | **Pn** | **12 03 22.6** | **+0.3** |
| **H21K** | **Melozitna Rive** | **5.34** | **358** | P | **Pn** | **12 03 22.0** | **-0.3** |
| | baz=178 | | | | | | |
| **SCRK** | **Sand Creek** | **5.37** | **44** | | **Pn** | **12 03 22.6** | **-0.2** |
| **SCRK** | **Sand Creek** | **5.37** | **44** | P | **Pn** | **12 03 22.5** | **-0.2** |
| | baz=231,SNR=5.7 | | | | | | |
| **J25K** | **Salcha River,** | **5.38** | **34** | | **Pn** | **12 03 23.2** | **+0.4** |
| **J25K** | **Salcha River,** | **5.38** | **34** | IAML | | 12 04 24.9 | |
| | comp=N,28nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **5.38** | **34** | P | **Pn** | **12 03 23.3** | **+0.4** |
| | baz=220,SNR=17 | | | | | | |
| **TABL** | **Table Mountain** | **5.58** | **84** | | **Pn** | **12 03 26.2** | **+0.6** |
| **IM03** | | **5.70** | **354** | | **Pn** | **12 03 27.2** | **+0.2** |
| **IMAR** | **Indian Mountai** | **5.70** | **354** | Pn | **Pn** | **12 03 27.9** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **5.74** | **57** | Pn | **Pn** | **12 03 28.1** | **+0.4** |
| **SAMH** | **Samovar Hills** | **5.79** | **87** | | **Pn** | **12 03 29.7** | **+1.4** |
| **YUK2** | **White River** | **5.79** | **70** | | **Pn** | **12 03 29.4** | **+1.0** |
| **J26L** | **Joseph Creek** | **5.85** | **41** | P | **Pn** | **12 03 29.5** | **+0.3** |
| | baz=228 | | | | | | |
| **H24K** | **Noodor Dome** | **5.89** | **18** | P | **Pn** | **12 03 29.4** | **-0.2** |
| | baz=202 | | | | | | |
| **YUK3** | **Moose Creek** | **5.97** | **71** | | **Pn** | **12 03 31.8** | **+0.9** |
| **YUK3** | **Moose Creek** | **5.97** | **71** | P | **Pn** | **12 03 31.0** | **+0.1** |
| | baz=261 | | | | | | |
| **PCA** | **Pinnacle** | **6.05** | **87** | | **Pn** | **12 03 32.8** | **+0.8** |
| **PINM** | **Pinnacle** | **6.05** | **87** | P | **Pn** | **12 03 32.7** | **+0.7** |
| | baz=278,SNR=6.8 | | | | | | |
| **PRP** | **Porcupine Dome** | **6.07** | **28** | | **Pn** | **12 03 32.6** | **+0.4** |
| **PRP** | **Porcupine Dome** | **6.07** | **28** | P | **Pn** | **12 03 32.6** | **+0.4** |
| | baz=214,SNR=27 | | | | | | |
| **PNL** | **Peninsula** | **6.55** | **90** | | **Pn** | **12 03 39.1** | **+0.4** |
| **PNL** | **Peninsula** | **6.55** | **90** | P | **Pn** | **12 03 38.9** | **+0.2** |
| | baz=282 | | | | | | |
| **EGAK** | **Eagle** | **6.83** | **45** | | **Pn** | **12 03 42.5** | **+0.1** |
| **EGAK** | **Eagle** | **6.83** | **45** | P | **Pn** | **12 03 42.3** | **-0.1** |
| | baz=234 | | | | | | |
| **YUK6** | **Outpost Mounta** | **6.92** | **79** | P | **Pn** | **12 03 44.4** | **+0.5** |
| | baz=271 | | | | | | |
| **COLD** | **Coldfoot** | **6.98** | **7** | Pn | **Pn** | **12 03 46.

**ISC 01 12:30:35.5±0.4,3°81N±0.05×127°07E±0.06,h36km,n72,**
**σ1§25/73,mb4.4/21,MS3.2/4,1C,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGSI** | **Sangihe** | **1.54** | **265** | P | **Pn** | **12 31 00.5** | **0.0** |
| SGSI | | | | S | **Sn** | **12 31 22.7** | **+3.4** |
| **TNTI** | **Ternate** | **3.03** | **174** | P | **Pn** | **12 31 22.4** | **+1.4** |
| **TNTI** | **Ternate** | **3.03** | **174** | | **Pn** | **12 31 21.7** | **+0.8** |
| **TNTI** | **Ternate** | **3.03** | **174** | P | **Pn** | **12 31 22.7** | **+1.7** |
| **GSPH** | **General Santos** | **3.10** | **317** | *e*P | Pn | 12 31 26.4 | +4.4 |
| **DAV** | **Davao City (W)** | **3.56** | **335** | Pn | **Pn** | **12 31 26.7** | **-1.5** |
| | 36nm,0.3s,baz=335,slow=7.0,SNR=1.4 | | | | | | |
| DAV | | | | Sn | **Sn** | **12 32 13.2** | **+4.0** |
| | 25nm,0.3s,baz=83,slow=20,SNR=1.4 | | | | | | |
| **KCP** | **Kidapawan** | **3.74** | **328** | *e*P | Pn | 12 31 38.2 | +7.4 |
| KCP | | | | *i* S | Sn | 12 32 35.6 | +22 |
| **LBMI** | **Labuha** | **4.44** | **174** | P | **Pn** | **12 31 41.2** | **+0.9** |
| **KMSI** | **Cibinong** | **4.46** | **224** | P | **Pn** | **12 31 39.8** | **-0.8** |
| **GTOI** | **Gorontalo** | **5.14** | **232** | P | **Pn** | **12 31 51.3** | **+1.4** |
| | 0.0nm10nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **5.92** | **191** | P | **Pn** | **12 32 02.0** | **+1.3** |
| | 0.1nm14nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **5.92** | **191** | P | **Pn** | **12 32 01.1** | **+0.4** |
| **MRSI** | **Marisa** | **6.10** | **237** | P | **Pn** | **12 32 04.6** | **+1.4** |
| | 0.1nm38nm,1.0s | | | | | | |
| **SWI** | **Sorong** | **6.25** | **138** | P | **Pn** | **12 32 05.5** | **+0.3** |
| | 0.1nm24nm,0.5s | | | | | | |
| **SIJI** | **Sorong** | **6.26** | **138** | Pn | **Pn** | **12 32 05.0** | **-0.3** |
| | 3.8nm,0.3s,baz=320,slow=14,SNR=12 | | | | | | |
| SIJI | | | | Sn | **Sn** | **12 33 18.4** | **+2.7** |
| | 0.4nm,0.3s,baz=287,slow=24,SNR=0.9 | | | | | | |
| SIJI | | | | LR | LR | 12 34 41.5 | |
| | comp=Z,196nm,20.7s,baz=246,slow=40 | | | | | | |
| **APSI** | **Ampana** | **7.17** | **229** | P | **Pn** | **12 32 19.1** | **+1.3** |
| | 0.1nm53nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **8.45** | **142** | P | **Pn** | **12 32 35.2** | **-0.3** |
| | 15nm,1.4s | | | | | | |
| **FAKI** | **Fak Fak** | **8.45** | **142** | Pn | **Pn** | **12 32 37.9** | **+2.4** |
| **FAKI** | **Fak Fak** | **8.45** | **142** | P | **Pn** | **12 32 37.9** | **+2.4** |
| **MYLDM** | **Lahad Datu** | **8.65** | **279** | Pn | **Pn** | **12 32 39.2** | **+1.0** |
| **DRS** | **Darwin Rock St** | **16.58** | **167** | P | **P** | **12 34 26.6** | **-0.9** |
| **MTN** | **Manton Dam** | **17.03** | **166** | P | **Pn** | **12 34 28.8** | **-2.1** |
| MTN | | | | IAmb | IAmb | 12 34 30.6 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **KDU** | **Kakadu** | **17.25** | **162** | P | **P** | **12 34 34.9** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **17.74** | **227** | P | Pn | 12 34 31.6 | -8.3 |
| | comp=Z,35nm,2.5s | | | | | | |
| **KNRA** | **Kununurra** | **19.43** | **175** | P | **P** | **12 34 58.5** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 12 35 04.8 | |
| | comp=Z,57nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **19.43** | **175** | P | **P** | **12 34 59.0** | **+0.1** |
| **TPUB** | **Ta-pu** | **20.35** | **343** | P | **P** | **12 35 07.2** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **21.82** | **184** | P | **P** | **12 35 23.4** | **-1.3** |
| | comp=Z,1.9nm,0.4s,baz=5.2,slow=9.9,SNR=10 | | | | | | |
| **WRAB** | **Tennant Creek** | **24.66** | **163** | P | **P** | **12 35 52.4** | **-0.6** |
| **WRA** | **Warramunga Arr** | **24.66** | **163** | P | **P** | **12 35 51.9** | **-1.2** |
| | comp=Z,10nm,0.7s,baz=344,slow=11,SNR=63 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 39 30.1** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=343,slow=2.4,SNR=1.9 | | | | | | |
| **AS31** | **Alice Springs** | **28.11** | **167** | P | **P** | **12 36 23.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **28.11** | **167** | P | **P** | **12 36 23.2** | **-1.0** |
| | comp=Z,0.8nm,0.4s,baz=345,slow=6.8,SNR=36 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 39 38.3** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=348,slow=2.8,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **28.11** | **167** | P | **P** | **12 36 24.1** | **-0.1** |
| **GSI** | **Gunungsitoli** | **29.57** | **266** | P | **P** | **12 36 37.9** | **+0.7** |
| GSI | | | | IAmb | IAmb | 12 36 55.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.13** | **300** | P | **P** | **12 36 49.9** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=121,slow=7.4,SNR=4.7 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **31.49** | **21** | LR | LR | 12 49 51.2 | |
| | comp=Z,36nm,18.7s,baz=166,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **33.49** | **1** | P | **P** | **12 37 11.5** | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=173,slow=12,SNR=3.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.15** | **16** | LR | LR | 12 51 40.8 | |
| | comp=Z,59nm,18.9s,baz=192,slow=37 | | | | | | |
| **MORW** | **Morawa** | **34.36** | **197** | P | **P** | **12 37 19.0** | **-0.1** |
| **FORT** | **Forrest** | **34.41** | **178** | P | **P** | **12 37 19.4** | **0.0** |
| **XAN** | **Xi'an** | **34.50** | **333** | P | **P** | **12 37 19.0** | **-1.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **35.30** | **112** | LR | LR | 12 50 28.0 | |
| | comp=Z,36nm,20.5s,baz=212,slow=34 | | | | | | |
| **BJT** | **Baijiatuau** | **37.37** | **346** | P | **P** | **12 37 44.8** | **+0.1** |
| BJT | | | | IAmb | IAmb | 12 37 46.2 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **37.41** | **167** | P | **P** | **12 37 44.6** | **-0.5** |
| **STKA** | **Stephens Creek** | **38.09** | **160** | P | **P** | **12 37 50.3** | **-0.6** |
| | comp=Z,4.8nm,0.6s,baz=338,slow=8.4,SNR=14 | | | | | | |
| **STKA** | **Stephens Creek** | **38.09** | **160** | P | **P** | **12 37 50.5** | **-0.4** |
| **SHL** | **Shillong** | **40.10** | **306** | P | **P** | **12 38 06.7** | **-1.5** |
| SHL | | | | IAmb | IAmb | 12 38 18.0 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **41.35** | **147** | P | **P** | **12 38 18.9** | **+0.7** |
| **ULN** | **Ulaanbaatar** | **47.15** | **342** | | **P** | **12 39 04.6** | **+0.2** |
| ULN | | | | IAmb | IAmb | 12 39 08.5 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **47.33** | **341** | P | **P** | **12 39 05.4** | **-0.5** |
| SONM | | | | PcP | **PcP** | **12 40 37.3** | **+0.9** |
| | comp=Z,0.5nm,0.6s,baz=184,slow=4.3,SNR=2.7 | | | | | | |
| SONM | | | | LR | LR | 13 02 57.8 | |
| | comp=Z,60nm,18.3s,baz=121,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **47.33** | **341** | P | **P** | **12 39 06.9** | **+1.0** |
| SONM | | | | IAmb | IAmb | 12 39 26.1 | |
| | comp=Z,4.3nm,1.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.23** | **22** | P | **P** | **12 40 05.4** | **+0.6** |
| | comp=Z,3.7nm,0.8s,baz=186,slow=4.3,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.23** | **22** | P | **P** | **12 40 05.9** | **+1.1** |
| **MK31** | **Makanchi Array** | **57.68** | **325** | P | **P** | **12 40 22.2** | **-0.3** |
| **MKAR** | **Makanchi Array** | **57.68** | **325** | P | **P** | **12 40 22.1** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=118,slow=8.0,SNR=32 | | | | | | |
| MKAR | | | | PcP | **PcP** | **12 41 15.4** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=105,slow=4.8,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.68** | **325** | P | **P** | **12 40 21.9** | **-0.6** |
| **MAKZ** | **Makanchi** | **57.87** | **325** | P | **P** | **12 40 23.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **60.67** | **333** | P | **P** | **12 40 41.6** | **-1.3** |
| | comp=Z,1.0nm,0.7s,baz=94,slow=6.4,SNR=2.5 | | | | | | |
| **KURK** | **Kurchatov** | **61.86** | **327** | P | **P** | **12 40 50.1** | **-0.9** |
| KURK | | | | IAmb | IAmb | 12 40 56.9 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **67.51** | **327** | P | **P** | **12 41 27.9** | **0.0** |
| BRVK | | | | IAmb | IAmb | 12 41 33.3 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **NRIK** | **Noril'sk** | **70.43** | **346** | P | **P** | **12 41 45.5** | **-0.2** |
| | comp=Z,1.9nm,0.6s,baz=141,slow=11,SNR=4.7 | | | | | | |
| **NRIK** | **Noril'sk** | **70.43** | **346** | P | **P** | **12 41 46.2** | **+0.5** |
| NRIK | | | | IAmb | IAmb | 12 41 54.3 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.30** | **321** | P | **P** | **12 41 57.9** | **+0.5** |
| **IMAR** | **Indian Mountai** | **82.13** | **24** | P | **P** | **12 42 54.5** | **+2.3** |
| **VNDA** | **Vanda** | **83.46** | **173** | P | **P** | **12 42 57.4** | **-1.4** |
| **TOLK** | **Toolik Lake Re** | **84.05** | **21** | P | **P** | **12 43 03.5** | **+1.4** |
| TOLK | | | | IAmb | IAmb | 12 43 11.2 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KLMR** | **Klimovskoe** | **85.50** | **331** | *e*P | **P** | **12 43 09.6** | **+0.1** |
| KLMR | | | | AMP | | 12 43 28.6 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.87** | **23** | P | **P** | **12 43 13.3** | **+2.0** |
| **ARCES** | **ARCESS Array B** | **90.49** | **340** | P | **P** | **12 43 32.0** | **-1.2** |
| | comp=Z,1.7nm,0.7s,baz=67,slow=4.1,SNR=5.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **90.49** | **340** | P | **P** | **12 43 32.9** | **-0.4** |
| ARCES | | | | IAmb | IAmb | 12 43 37.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **92.05** | **321** | P | **P** | **12 43 39.7** | **-1.1** |
| | comp=Z,1.8nm,0.8s,baz=78,slow=3.5,SNR=5.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **93.72** | **180** | | **P** | **12 43 48.2** | **-0.2** |

*SFS **01** 12:34:18.0,35°.50N×3°.75W,h2km,ML2.2,ALBORAN SUR*

*CNRM **01** 12:34:21.0,35°.56N×3°.63W,h29km,ml2.5*

**ISC 01 12:34:20.6±1.1,35°52N±0°.04×3°70W±0°.03,h32km±11km,**
**n21,σ2§22/33,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.36** | **214** | P | **Pb** | **12 34 28.2** | **-0.8** |
| **PALE** | **Palemas** | **0.36** | **214** | P | **Pn** | **12 34 29.7** | **0.0** |
| PALE | | | | S | **Sn** | **12 34 36.2** | **+0.5** |
| **GOG** | **Mont Gurugu** | **0.64** | **117** | P | Pn | 12 34 39.0 | +5.3 |
| **GOG** | **Mont Gurugu** | **0.64** | **117** | P | Pn | 12 34 39.0 | +5.3 |
| **CHAS** | **Isla Isabel II** | **1.09** | **107** | P | **Pn** | **12 34 38.1** | **-1.5** |
| CHAS | | | | S | **Sn** | **12 34 51.3** | **-2.3** |
| **TAF** | **Taforalt** | **1.26** | **123** | P | **Pb** | **12 34 47.0** | **+3.1** |
| **TAF** | **Taforalt** | **1.26** | **123** | P | **Pn** | **12 34 42.1** | **-0.1** |
| TAF | | | | S | **Sb** | **12 35 00.4** | **+0.6** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **335** | P | **Pn** | **12 34 43.2** | **-0.5** |
| EMAL | | | | S | **Sb** | **12 35 03.2** | **+0.1** |
| **SMIR** | **Smir Dam** | **1.38** | **277** | P | **Pn** | **12 34 43.4** | **-0.3** |
| SMIR | | | | S | **Sb** | **12 35 03.1** | **-0.1** |
| **CHEFC** | **Chefchaouen** | **1.40** | **254** | P | **Pb** | **12 34 46.7** | **+0.4** |
| CHEFC | | | | S | **Sb** | **12 35 06.3** | **+2.4** |
| **CEU** | **Ceuta** | **1.42** | **286** | P | **Pn** | **12 34 41.6** | **-2.6** |
| CEU | | | | S | **Sn** | **12 34 55.0** | **-6.7** |
| **JBK** | **JBK** | **1.50** | **141** | P | **Pn** | **12 34 44.6** | **-0.9** |
| **JBK** | **JBK** | **1.50** | **141** | P | **Pn** | **12 34 45.4** | **-0.2** |
| JBK | | | | S | **Sn** | **12 35 04.4** | **+0.3** |
| **MD31** | **MD31** | **2.78** | **199** | P | **Pb** | **12 35 07.0** | **-2.8** |
| MD31 | | | | S | **Sb** | **12 35 41.0** | **-2.4** |
| **MDT** | **Midelt** | **2.80** | **196** | P | **Pb** | **12 35 08.3** | **-1.7** |
| MDT | | | | S | **Sn** | **12 35 39.7** | **+3.7** |
| **TDRA** | **Tendrara** | **2.83** | **150** | P | **Pn** | **12 35 03.7** | **-0.1** |
| TDRA | | | | S | **Sn** | **12 35 36.5** | **-0.5** |
| **ZHG** | **ZHG** | **3.19** | **231** | P | **Pn** | **12 35 10.9** | **+2.2** |
| ZHG | | | | S | **Sn** | **12 35 49.6** | **+3.9** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | *e*Pn | **Pn** | **12 35 17.5** | **+1.2** |
| PVAQ | | | | *e*Sn | **Sn** | **12 35 59.8** | **+0.5** |
| PVAQ | | | | A | A | 12 36 05.9 | |
| | 2.4nm,0.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **12 35 18.1** | **+1.8** |
| PVAQ | | | | S | **Sn** | **12 36 01.3** | **+2.0** |
| **PCVE** | **Castro Verde** | **4.08** | **302** | *e*Pn | **Pn** | **12 35 22.5** | **+1.6** |
| **ZGR** | **Zagora** | **5.62** | **197** | S | **Sb** | **12 37 03.2** | **-1.7** |

*IDC **01** 13:05:15.9±1.4,3°.88N×127°.34E,h0km,mb3.8/5,*
*mb1 4.0/5,mb1mx3.4/44,mbtmp3.8/5,MS2.2/1,Ms1 2.2/1,*
*ms1mx2.0/77,Error ellipse: s-maj=95.0km s-min=22.9km*
*az=69.0*

*NEIC **01** 13:05:18±0.5,3°.8N±0°.1×127°.1E±0°.2,h10km±2km,*
*mb4.3/12, Error ellipse: s-maj=41.1km s-min=23.5km*
*az=78.0*

**ISC 01 13:05:17.3±0.9,3°8N±0°.1×127°2E±0°.2,h10km,n19,**
**σ0§79/19,mb4.0/10,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.21** | **139** | LR | LR | 13 08 36.0 | |
| | comp=Z,23nm,21.8s,baz=60,slow=33 | | | | | | |
| **KNRA** | **Kununurra** | **19.45** | **175** | P | **P** | **13 09 44.4** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 13 09 58.2 | |
| | comp=Z,41nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.85** | **184** | P | **P** | **13 10 12.1** | **+1.9** |
| | comp=Z,4.5nm,1.0s,baz=7.6,slow=12,SNR=2.4 | | | | | | |
| **WB0** | **Warramunga Arr** | **24.51** | **163** | P | **P** | **13 10 36.2** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 13 10 37.6 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.65** | **164** | P | **P** | **13 10 38.0** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 13 10 49.1 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.66** | **164** | P | **P** | **13 10 38.1** | **-0.4** |
| | comp=Z,2.9nm,0.7s,baz=344,slow=11,SNR=40 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 14 16.7** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=333,slow=2.1,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.66** | **164** | P | **P** | **13 10 37.2** | **-1.3** |
| **WB2** | **Warramunga Arr** | **24.66** | **164** | P | **P** | **13 10 38.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 13 10 49.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.73** | **163** | P | **P** | **13 10 38.9** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 13 10 40.6 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **28.11** | **167** | P | **P** | **13 11 09.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **28.11** | **167** | P | **P** | **13 11 09.3** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=338,slow=8.4,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 14 24.7** | **+0.6** |
| | comp=Z,0.5nm,0.6s,baz=357,slow=2.8,SNR=6.0 | | | | | | |
| **COCO** | **West Island** | **34.11** | **242** | P | **P** | **13 12 01.5** | **-1.0** |
| **BBOO** | **Buckleboo** | **37.41** | **168** | P | **P** | **13 12 29.7** | **-1.0** |
| **STKA** | **Stephens Creek** | **38.08** | **160** | P | **P** | **13 12 36.0** | **-0.3** |
| | comp=Z,1.4nm,0.6s,baz=339,slow=7.0,SNR=5.7 | | | | | | |
| **STKA** | **Stephens Creek** | **38.08** | **160** | IAmb | IAmb | 13 12 39.4 | |
| | comp=Z,1.2nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **57.72** | **325** | P | **P** | **13 15 08.4** | **0.0** |
| MK31 | | | | IAmb | IAmb | 13 15 17.4 | |
| | comp=Z,0.9nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.72** | **325** | P | **P** | **13 15 08.6** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=122,slow=8.2,SNR=7.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.72** | **325** | P | **P** | **13 15 08.3** | **-0.1** |
| **YAK** | **Yakutsk** | **58.09** | **1** | P | **P** | **13 15 11.0** | **+0.4** |

*CNRM **01** 13:08:21.4,35°.67N×3°.59W,h31km,ml2.6*

**ISC 01 13:08:21.5±1.4,35°66N±0°.05×3°49W±0°.04,h25km±14km,**
**n13,σ1§27/24,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.58** | **220** | P | **Pb** | **13 08 33.1** | **+0.1** |
| PALE | | | | S | **Sb** | **13 08 40.9** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.60** | **137** | P | **Pb** | **13 08 33.1** | **-0.3** |
| GOG | | | | S | **Sn** | **13 08 42.7** | **-0.7** |
| **CHAS** | **Isla Isabel II** | **0.99** | **119** | P | **Pn** | **13 08 39.5** | **-0.3** |
| CHAS | | | | S | **Sn** | **13 08 52.8** | **-0.2** |
| **TAF** | **Taforalt** | **1.22** | **134** | P | **Pb** | **13 08 43.6** | **-0.3** |
| TAF | | | | S | **Sb** | **13 08 59.7** | **+0.4** |
| **JBK** | **JBK** | **1.52** | **150** | P | **Pn** | **13 08 46.7** | **-0.7** |
| JBK | | | | S | **Sn** | **13 09 06.9** | **+0.3** |
| **SMIR** | **Smir Dam** | **1.54** | **271** | P | Pn | 13 08 45.5 | -1.9 |
| SMIR | | | | S | **Sn** | **13 09 03.1** | **-3.5** |
| **CHEFC** | **Chefchaouen** | **1.61** | **250** | P | **Pn** | **13 08 48.3** | **-0.2** |
| CHEFC | | | | S | Sn | 13 09 02.5 | -6.0 |
| **MD31** | **MD31** | **2.98** | **201** | P | **Pn** | **13 09 07.8** | **+0.5** |
| MD31 | | | | S | **Sn** | **13 09 44.3** | **+2.0** |
| **MDT** | **Midelt** | **2.99** | **198** | P | **Pn** | **13 09 07.2** | **-0.3** |
| MDT | | | | S | **Sn** | **13 09 45.0** | **+2.4** |
| **ZHG** | **ZHG** | **3.42** | **231** | P | **Pn** | **13 09 12.4** | **-0.8** |
| ZHG | | | | S | **Sn** | **13 09 51.8** | **-1.2** |
| **PVAQ** | **Vaqueiros** | **3.82** | **298** | *e*Pn | **Pn** | **13 09 20.2** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **13 10 02.5** | **-0.4** |
| PVAQ | | | | A | A | 13 10 09.5 | |
| | 1.8nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.82** | **298** | P | **Pn** | **13 09 18.9** | **+0.1** |
| PVAQ | | | | S | **Sn** | **13 10 02.6** | **-0.4** |
| **PNCL** | **Nicolau / Gran** | **4.72** | **303** | *e*Pn | **Pn** | **13 09 33.1** | **+2.0** |
| PNCL | | | | *e*Sn | **Sn** | **13 10 24.9** | **-0.2** |

**SSNC 01 13:30:56.6±2.1,19°85N×76°06W,h3km±12km,MD2.2,**
**ML1.8,MW2.2,1D,Cuba region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCC** | **Rio Carpintero** | **0.37** | **67** | *e*P | Pg | 13 31 02.9 | -0.8 |
| RCC | | | | *e*S | Sg | 13 31 07.7 | -0.8 |
| RCC | | | | IAML | | 13 31 07.9 | |
| | comp=E,48nm,0.1s | | | | | | |
| RCC | | | | IAML | | 13 31 08.2 | |
| | comp=N,59nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **0.37** | **67** | *i*P | Pg | 13 31 02.9 | -0.8 |
| RCC | | | | *e*S | Sg | 13 31 07.6 | -0.9 |
| RCC | | | | IAML | | 13 31 07.9 | |
| | comp=E,50nm,0.1s | | | | | | |
| RCC | | | | IAML | | 13 31 08.2 | |
| | comp=N,53nm,0.1s | | | | | | |
| **GTMO** | **Guantanamo** | **0.89** | **75** | *e*P | Pg | 13 31 13.2 | -0.5 |
| GTMO | | | | *e*S | Sb | 13 31 26.2 | -0.7 |
| **GTMO** | **Guantanamo** | **0.89** | **75** | *e*P | Pg | 13 31 13.1 | -0.6 |
| GTMO | | | | *e*S | Sb | 13 31 26.3 | -0.6 |
| GTMO | | | | IAML | | 13 31 27.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| GTMO | | | | IAML | | 13 31 27.4 | |
| | comp=E,871nm,0.2s | | | | | | |
| **LMGC** | **Las Mercedes** | **0.92** | **284** | *e*P | Pg | 13 31 12.9 | -1.4 |
| LMGC | | | | *e*S | Sg | 13 31 24.8 | -1.4 |
| LMGC | | | | IAML | | 13 31 25.1 | |
| | comp=E,62nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 13 31 25.6 | |
| | comp=N,77nm,0.1s | | | | | | |
| **HLGC** | **Holguin** | **1.04** | **360** | *e*P | Pb | 13 31 17.2 | 0.0 |
| HLGC | | | | *e*S | Sb | 13 31 31.5 | +0.3 |
| HLGC | | | | IAML | | 13 31 34.1 | |
| | comp=E,11nm,0.2s | | | | | | |
| HLGC | | | | IAML | | 13 31 35.2 | |
| | comp=N,4.1nm,0.1s | | | | | | |
| **MASC** | **Masc** | **1.75** | **79** | *e*P | Pn | 13 31 26.7 | -1.0 |
| MASC | | | | *e*S | Sn | 13 31 46.4 | -4.1 |
| MASC | | | | IAML | | 13 31 52.7 | |
| | comp=E,6.2nm,0.2s | | | | | | |
| MASC | | | | IAML | | 13 31 53.7 | |
| | comp=N,3.9nm,0.2s | | | | | | |
| **CCCC** | **Cccc** | **2.09** | **310** | *e*P | Pn | 13 31 28.9 | -3.7 |
| CCCC | | | | *e*S | Sn | 13 31 52.2 | -6.9 |
| CCCC | | | | IAML | | 13 31 55.3 | |
| | comp=E,2.2nm,0.2s | | | | | | |
| CCCC | | | | IAML | | 13 31 57.5 | |
| | comp=N,2.0nm,0.3s | | | | | | |

*TEH **01** 13:46:30.5,32°.46N×55°.46E,h6km,ML4.4*

*IDC **01** 13:46:31.7±0.7,32°.37N×55°.51E,h0km,mb4.0/20,*
*mb1 4.1/27,mb1mx3.9/62,mbtmp4.0/27,ML3.8/7,MS3.4/10,*
*Ms1 3.5/10,ms1mx3.1/83,Error ellipse: s-maj=16.9km*
*s-min=12.3km az=167.0*

*MOS **01** 13:46:32.2±1.7,32°.16N×55°.43E,h13km,mb4.3/10,Error ellipse: s-maj=8.2km s-min=7.3km az=75.4*

*NEIC **01** 13:46:33.7±2.2,32°.43N±0°.04×55°.53E±0°.09,h10km±1km,*
*mb4.3/21,ML4.2(CSEM),Error ellipse: s-maj=12.3km*
*s-min=7.5km az=92.0*

*OMAN **01** 13:46:38.5±1.6,32°.09N×55°.01E,h12km±58km,mb5.6/11,*
*ms2.6/2,Error ellipse: s-maj=108.1km s-min=9.5km az=6.0*

**ISC 01 13:46:32.6±0.3,32°40N±0°.02×55°48E±0°.02,h10km,n211,**
**σ1§69/194,mb4.2/42,MS3.6/5,9C-5D,Northern and**
**central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YZKH** | **Yazd** | **0.75** | **269** | *e*Pg | **Pn** | **13 46 46.7** | **-2.7** |
| **IBAF** | **Bafgh** | **0.81** | **175** | *e*Pg | **Pn** | **13 46 48.9** | **-1.4** |
| IBAF | | | | *e*Sg | **Sb** | **13 47 00.5** | **+0.5** |
| IBAF | | | | *e* | | 13 47 03.6 | |
| | comp=Z,15μm,0.1s | | | | | | |
| **ICHK** | **Chekchek** | **0.92** | **261** | *e*Pg | **Pn** | **13 46 49.5** | **-2.4** |
| ICHK | | | | *e*Sg | **Sb** | **13 47 01.8** | **-1.4** |
| **TPRV** | **Parvadeh(Tabas** | **1.20** | **58** | *e*Pg | **Pg** | **13 46 53.7** | **-1.9** |
| TPRV | | | | *e* | | 13 47 16.1 | |
| | comp=Z,95μm,0.6s | | | | | | |
| **IMEH** | **Mehriz** | **1.25** | **216** | *e*Pg | **Pg** | **13 46 56.3** | **-0.3** |
| IMEH | | | | *e* | | 13 47 15.8 | |
| | comp=Z,44μm,0.2s | | | | | | |
| **ISAD** | **Sadrabad** | **1.60** | **253** | *e*Pn | **Pg** | **13 47 02.7** | **-0.6** |
| ISAD | | | | *e*Sg | **Sg** | **13 47 24.2** | **+0.2** |
| **ANAR** | **Anarak** | **1.67** | **299** | *e*Pg | **Pg** | **13 47 02.2** | **-2.5** |
| **TNSJ** | **Nastanj** | **1.82** | **31** | *e*Pn | **Pb** | **13 47 03.6** | **-2.6** |
| TNSJ | | | | *e* | | 13 47 38.1 | |
| | comp=Z,50μm,0.5s | | | | | | |
| **TKDS** | **Koohdasht(Taba** | **1.84** | **48** | *e* | | 13 47 09.1 | |
| | comp=Z,39μm,0.2s | | | | | | |
| TKDS | | | | *e*Pn | **Pb** | **13 47 04.0** | **-2.4** |
| **TABS** | **Tabas** | **1.86** | **47** | *e*Pn | **Pb** | **13 47 04.4** | **-2.3** |
| **KHGB** | **Koh Gabri** | **2.19** | **157** | *e*Pn | **Pb** | **13 47 12.4** | **-0.1** |
| **NASN** | **Na'in** | **2.29** | **281** | *e*Pn | **Pb** | **13 47 11.7** | **-2.5** |
| **TVBK** | **TV Kerman** | **2.65** | **155** | *e*Pn | **Pb** | **13 47 18.6** | **-1.7** |
| **KRBR** | **Kerman** | **2.65** | **155** | *e*Pn | **Pb** | **13 47 18.4** | **-2.0** |
| **IRAM** | **Ramesheh** | **2.69** | **258** | *e*Pn | **Pb** | **13 47 18.3** | **-2.8** |
| IRAM | | | | *e* | | 13 48 08.7 | |
| | comp=Z,8μm,0.6s | | | | | | |
| **IZEF** | **Zefreh** | **2.70** | **281** | *e*Pn | **Pb** | **13 47 18.0** | **-3.2** |
| IZEF | | | | *e* | | 13 48 03.9 | |
| | comp=Z,9μm,0.6s | | | | | | |
| **ITEG** | **Tejag** | **2.80** | **79** | *e*Pn | **Pb** | **13 47 18.8** | **-4.1** |
| **NGRK** | **Negar Kerman** | **2.95** | **158** | *e*Pn | **Pb** | **13 47 22.8** | **-2.7** |
| **IKOO** | **Kooshah** | **2.98** | **89** | *e*Pn | Pb | 13 47 21.5 | -4.5 |
| IKOO | | | | *e* | | 13 48 19.1 | |
| | comp=Z,20μm,0.4s | | | | | | |
| **CHMN** | **Cheshme madani** | **3.09** | **145** | *e*Pn | **Pb** | **13 47 24.2** | **-3.7** |
| CHMN | | | | *e* | | 13 48 26.6 | |
| | comp=Z,15μm,0.6s | | | | | | |
| **BSRN** | **Basiran** | **3.12** | **97** | *e*Pn | **Pn** | **13 47 23.2** | **+1.1** |
| **AFRZ** | **Afriz** | **3.15** | **70** | *e*Pn | **Pn** | **13 47 22.9** | **+0.5** |
| **KRSH** | **Karshahi** | **3.21** | **300** | *e*Pn | Pb | 13 47 24.4 | -5.5 |
| **IANJ** | **Anjilo** | **3.32** | **337** | *e*Pn | Pb | 13 47 25.4 | -6.4 |
| IANJ | | | | *e* | | 13 48 26.6 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **ISFB** | **Sefidab** | **3.34** | **307** | *e*Pn | **Pn** | **13 47 25.5** | **+0.6** |
| ISFB | | | | *e* | | 13 48 17.1 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **IKLH** | **Kolahrood** | **3.41** | **287** | *e*Pn | Pb | 13 47 27.9 | -5.4 |
| IKLH | | | | *e* | | 13 48 26.1 | |
| | comp=Z,5μm,0.5s | | | | | | |
| **KLNJ** | **Kolanjah** | **3.59** | **248** | *

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GEYT** | **Alibeck** | **5.92** | **21** | Pn | | **Pn** | **13 48 01.2 +0.8** |
| | comp=Z,5.2nm,0.3s,baz=199,slow=15,SNR=42 | | | | | | |
| GEYT | | | | Sn | | **Sn** | **13 49 06.5 -1.9** |
| | comp=Z,0.7nm,0.3s,baz=206,slow=30,SNR=1.5 | | | | | | |
| GEYT | | | | LR | | LR | 13 50 09.7 |
| | comp=Z,113nm,19.0s,baz=194,slow=37 | | | | | | |
| **GEYT** | **Alibeck** | **5.92** | **21** | Pn | | **Pn** | **13 48 01.0 +0.5** |
| **GYA0B** | **ALIBECK ARRAY** | **5.92** | **21** | Pn | | **Pn** | **13 48 00.9 +0.5** |
| **HRA** | **Herat** | **6.00** | **69** | | | **Pn** | **13 48 01.7 +0.1** |
| **HSAM** | **Samen** | **6.03** | **289** | *e*Pn | | Pn | 13 48 04.8 +2.6 |
| **IDOB** | **Doab** | **6.28** | **285** | *e*Pn | | **Pn** | **13 48 06.8 +1.2** |
| **JIR1** | **Jirandeh** | **6.36** | **314** | *e*Pn | | **Pn** | **13 48 07.4 +0.9** |
| **SHME** | **Shamm** | **6.36** | **175** | P | | Pn | 13 48 12.1 +5.7 |
| **BANOM** | **Banah** | **6.49** | **173** | P | | **Pn** | **13 48 11.6 +3.3** |
| BANOM | | | | S | | **Sn** | **13 49 24.9 +2.4** |
| **IKFM** | **Kafar-mosalman** | **6.51** | **282** | *e*Pn | | **Pn** | **13 48 09.7 +1.2** |
| **MASF** | **Masafi** | **7.03** | **175** | P | | **Pn** | **13 48 18.8 +3.1** |
| | SNR=6.8 | | | | | | |
| MASF | | | | S | | **Sn** | **13 49 37.5 +1.8** |
| **ZNJK** | **Zanjan** | **7.04** | **309** | *e*Pn | | **Pn** | **13 48 17.1 +1.1** |
| **SNGE** | **Sanandaj** | **7.29** | **294** | *e*Pn | | **Pn** | **13 48 20.3 +1.0** |
| **UOSS** | **Minazif** | **7.46** | **175** | P | | **Pn** | **13 48 24.1 +2.6** |
| UOSS | | | | S | | **Sn** | **13 49 47.1 +0.9** |
| **UOSS** | **Minazif** | **7.46** | **175** | Pn | | **Pn** | **13 48 22.5 +1.0** |
| **HATD** | **Hatta, Dubai** | **7.57** | **175** | P | | **Pn** | **13 48 24.8 +1.8** |
| HATD | | | | S | | **Sn** | **13 49 50.0 +1.0** |
| **FAQ** | **Al Faqa, Dubai** | **7.63** | **179** | P | | **Pn** | **13 48 27.1 +3.2** |
| | SNR=5.9 | | | | | | |
| FAQ | | | | S | | **Sn** | **13 49 49.6 -0.8** |
| **ASHO** | **Ashiyiah** | **7.71** | **176** | P | | **Pn** | **13 48 27.8 +2.9** |
| | SNR=13 | | | | | | |
| ASHO | | | | S | | **Sn** | **13 49 52.8 +0.5** |
| **SAKB** | **Bahrain** | **7.72** | **215** | P | | **Pn** | **13 48 24.5 -0.6** |
| **SRVN** | **Saravan** | **7.80** | **128** | *e*Pn | | Pn | 13 48 29.9 +3.5 |
| **ISRB** | **Sarab** | **8.38** | **312** | *e*Pn | | **Pn** | **13 48 35.8 +1.5** |
| **TRNA** | **Turayna** | **8.51** | **207** | P | | **Pn** | **13 48 35.4 -0.6** |
| **IBST** | **Bostanabad** | **8.80** | **309** | *e*Pn | | **Pn** | **13 48 40.4 +0.3** |
| **GRMI** | **Germi** | **8.89** | **318** | *e*Pn | | **Pn** | **13 48 42.5 +1.3** |
| **HOQ** | **Hoqain** | **8.93** | **169** | P | | **Pn** | **13 48 45.0 +3.2** |
| HOQ | | | | P | | Pn | **13 48 45.0 +3.2** |
| **SLWR** | **Sila** | **8.95** | **203** | P | | **Pn** | **13 48 42.6 +0.6** |
| SLWR | | | | S | | **Sn** | **13 50 19.1 -3.6** |
| **WSAR** | **Wadi Sarin** | **9.54** | **162** | Pn | | **Pn** | **13 48 51.0 +0.9** |
| | comp=Z,1.2nm,0.3s,baz=9.6,slow=11,SNR=11 | | | | | | |
| WSAR | | | | Sn | | **Sn** | **13 50 37.4 -0.1** |
| | comp=Z,0.5nm,0.3s,baz=216,slow=14,SNR=1.6 | | | | | | |
| **WSAR** | **Wadi Sarin** | **9.54** | **162** | P | | **Pn** | **13 48 52.2 +2.0** |
| **SMDO** | **Samad** | **9.58** | **166** | P | | **Pn** | **13 48 53.7 +2.9** |
| SMDO | | | | P | | **Pn** | **13 48 53.7 +2.9** |
| **UMZA** | **Um Al Zommool** | **9.65** | **182** | P | | **Pn** | **13 48 52.9 +1.2** |
| **BSY** | **Bisya** | **9.74** | **171** | P | | Pn | 13 48 57.3 +4.5 |
| **WBK** | **Wadi Bani Khal** | **10.23** | **162** | P | | **Pn** | **13 49 01.8 +2.1** |
| **JLN** | **Jalan Bani Buh** | **10.79** | **160** | P | | **Pn** | **13 49 08.9 +1.7** |
| **GNI** | **Garni** | **11.61** | **315** | LR | | LR | 13 53 05.5 |
| | comp=Z,81nm,21.0s,baz=76,slow=34 | | | | | | |
| **RAYN** | **Ar Rayn** | **12.48** | **227** | P | | **Pn** | **13 49 31.1 +0.7** |
| **RAYN** | **Ar Rayn** | **12.48** | **227** | Pn | | **Pn** | **13 49 31.1 +0.7** |
| **DOK** | **Doka** | **13.78** | **185** | P | | **Pn** | **13 49 47.7 -0.4** |
| **BTK** | **Batken** | **14.54** | **54** | P | | **P** | **13 50 05.1 0.0** |
| **BTK** | **Batken** | **14.54** | **54** | P | | **P** | **13 50 05.1 0.0** |
| **KBZ** | **Khabaz** | **15.02** | **322**‖ | *e*P | | **P** | **13 50 10.4 +0.1** |
| **KIV** | **Kislovodsk** | **15.28** | **323** | *e*P | | **P** | **13 50 13.1 -0.3** |
| KIV | | | | pmax | | pmax | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ASF** | **Jabal al Asfar** | **15.72** | **274** | Pn | | **Pn** | **13 50 13.2 -1.0** |
| | comp=Z,0.6nm,0.3s,baz=101,slow=10,SNR=2.5 | | | | | | |
| **KKAR** | **Karatay Array** | **15.96** | **44** | P | | **Pn** | **13 50 14.9 -2.3** |
| **KKAR** | **Karatay Array** | **15.96** | **44** | Pn | | **Pn** | **13 50 14.9 -2.3** |
| **MMAI** | **Mount Meron Ar** | **16.91** | **277** | Pn | | **P** | **13 50 30.1 -1.4** |
| | comp=Z,0.6nm,0.3s,baz=96,slow=15,SNR=1.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **17.17** | **10** | Pn | | **P** | **13 50 30.6 -3.5** |
| **KSH** | **Kashi** | **18.03** | **61** | P | | **P** | **13 50 42.1 -1.8** |
| KSH | | | | pP | | sP | 13 50 47.0 -1.5 |
| KSH | | | | sP | | pP | 13 50 49.8 +2.8 |
| KSH | | | | PP | | **PnPn** | **13 50 56.1 +1.8** |
| KSH | | | | pmax | | pmax | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| KSH | | | | LR | | LR | |
| | comp=N,380nm,7.2s | | | | | | |
| KSH | | | | LR | | LR | |
| | comp=E,230nm,7.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.12** | **5** | P | | **P** | **13 50 43.2 -1.4** |
| | comp=E,0.2nm,0.3s,baz=173,slow=14,SNR=8.0 | | | | | | |
| AKTO | | | | LR | | LR | 13 58 51.5 |
| | comp=E,165nm,19.7s,baz=334,slow=41 | | | | | | |
| **AAK** | **Ala-Archa** | **18.18** | **50** | P | | **P** | **13 50 46.4 +0.8** |
| | comp=E,0.1nm,0.3s,baz=243,slow=6.5,SNR=6.7 | | | | | | |
| AAK | | | | LR | | LR | 13 59 12.1 |
| | comp=E,126nm,18.2s,baz=271,slow=42 | | | | | | |
| **AAK** | **Ala-Archa** | **18.18** | **50** | *de*P | | **P** | **13 50 47.5 +1.9** |
| AAK | | | | pmax | | pmax | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| **AAK** | **Ala-Archa** | **18.18** | **50** | | | **P** | **13 50 46.3 +0.8** |
| **BOOM** | **Boomskoye usch** | **19.07** | **52** | P | | **Pn** | **13 50 56.4 +0.3** |
| BOOM | | | | pmax | | pmax | |
| | comp=Z,16nm,1.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **19.07** | **52** | P | | **Pn** | **13 50 56.4 +0.3** |
| BOOM | | | | IAmb | | IAmb | 13 51 17.8 |
| | comp=Z,16nm,1.2s | | | | | | |
| **BR131** | **Keskin Array S** | **19.08** | **299** | *d* iP | | **Pn** | **13 50 56.8 +0.5** |
| **BR131** | **Keskin Array S** | **19.08** | **299** | P | | **Pn** | **13 50 56.6 +0.4** |
| **BRTR** | **Keskin Array B** | **19.08** | **299** | P | | **Pn** | **13 50 57.1 +0.8** |
| | comp=Z,0.2nm,0.3s,baz=115,slow=13,SNR=13 | | | | | | |
| BRTR | | | | LR | | LR | 13 59 15.7 |
| | comp=Z,167nm,20.3s,baz=326,slow=40 | | | | | | |
| **BRTR** | **Keskin Array B** | **19.08** | **299** | *i* P | | **Pn** | **13 50 59.5 +3.2** |
| BRTR | | | | pmax | | pmax | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **19.08** | **299** | P | | **Pn** | **13 50 57.7 +1.4** |
| **BZK** | **Bozkurt** | **19.55** | **305** | P | | **Pn** | **13 51 00.8 -0.8** |
| **SOCY** | **Socotra** | **20.16** | **184** | P | | **P** | **13 51 03.1 -4.3** |
| SOCY | | | | IAmb | | IAmb | 13 51 18.6 |
| | comp=Z,46nm,1.2s | | | | | | |
| **ELL** | **Elmali** | **21.47** | **289** | P | | **P** | **13 51 23.9 +2.4** |
| ELL | | | | pmax | | pmax | |
| | comp=Z,35nm,0.8s | | | | | | |
| **ELL** | **Elmali** | **21.47** | **289** | P | | **P** | **13 51 23.9 +2.4** |
| **BRVK** | **Borovoye** | **23.25** | **23**‖ | *e*P | | **P** | **13 51 41.8 +1.9** |
| BRVK | | | | pmax | | pmax | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **BRVK** | **Borovoye** | **23.25** | **23** | P | | **P** | **13 51 40.3 +0.3** |
| **BVAR** | **Borovoye Array** | **23.25** | **23** | P | | **P** | **13 51 40.5 +0.5** |
| | comp=Z,1.1nm,0.7s,baz=188,slow=4.2,SNR=7.3 | | | | | | |
| **PYUN** | **Piuthan** | **24.12** | **93** | *e*P | | **P** | **13 51 49.4 +0.5** |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **ARU** | **Arti** | **24.12** | **4** | P | | **P** | **13 51 49.9 +1.5** |
| | comp=Z,0.3nm,0.3s,baz=172,slow=14,SNR=1.4 | | | | | | |
| **ARU** | **Arti** | **24.12** | **4** | P | | P | 13 51 59.0 +11 |
| ARU | | | | | | | 13 52 25.1 |
| ARU | | | | SS | | | 13 57 11.4 |
| **DANN** | **Dangsing** | **24.70** | **92** | *e*P | | **P** | **13 51 55.5 +1.2** |
| | comp=Z,28nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **24.73** | **93** | *e*P | | **P** | **13 51 55.2 +0.7** |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **24.83** | **47** | P | | **P** | **13 51 55.6 +0.6** |
| MAKZ | | | | pmax | | pmax | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **MAKZ** | **Makanchi** | **24.83** | **47** | P | | **P** | **13 51 55.6 +0.6** |
| MAKZ | | | | IAmb | | IAmb | 13 52 04.5 |
| | comp=Z,10nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.92** | **36** | P | | **P** | **13 51 57.1 +1.4** |
| | comp=Z,3.2nm,1.1s,baz=236,slow=9.9,SNR=10 | | | | | | |
| **ALN** | **Alexandroupoli** | **25.00** | **298** | P | | **P** | **13 51 58.1 +1.5** |
| ALN | | | | pmax | | pmax | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **ALN** | **Alexandroupoli** | **25.00** | **298** | P | | **P** | **13 51 58.1 +1.5** |
| ALN | | | | IAmb | | IAmb | 13 52 05.6 |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **25.01** | **47** | *d* iP | | **P** | **13 52 00.4 +3.7** |
| **MK31** | **Makanchi Array** | **25.01** | **47** | P | | **P** | **13 51 57.5 +0.9** |
| MK31 | | | | IAmb | | IAmb | 13 52 01.6 |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **25.01** | **47** | P | | **P** | **13 51 57.8 +1.1** |
| | comp=Z,1.6nm,0.9s,baz=234,slow=7.2,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **25.01** | **47** | *ce*P | | **P** | **13 52 00.6 +3.9** |
| MKAR | | | | pmax | | pmax | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **25.01** | **47** | P | | **P** | **13 51 57.5 +0.8** |
| **KURK** | **Kurchatov** | **25.02** | **36**‖ | *e*P | | **P** | **13 51 59.8 +3.2** |
| KURK | | | | pmax | | pmax | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **25.02** | **36** | P | | **P** | **13 51 58.0 +1.4** |
| KURK | | | | IAmb | | IAmb | 13 52 06.4 |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **IDI** | **Anoyia** | **25.52** | **285** | P | | **P** | **13 52 03.4 +2.0** |
| | comp=Z,16nm,0.9s,baz=31,slow=7.1,SNR=4.9 | | | | | | |
| **GKN** | **Gorkha** | **25.54** | **92** | *e*P | | **P** | **13 52 02.9 +1.1** |
| | comp=Z,25nm,0.7s | | | | | | |
| **DMN** | **Daman** | **26.05** | **93** | *e*P | | **P** | **13 52 07.4 +0.8** |
| **KKN** | **Kakani** | **26.15** | **92** | *e*P | | **P** | **13 52 08.2 +0.8** |
| **MLR** | **Muntele Rosu** | **26.26** | **308** | P | | **P** | **13 52 10.4 +2.2** |
| | comp=Z,7.0nm,0.8s,baz=191,slow=20,SNR=5.8 | | | | | | |
| **PKIN** | **Phulchoki** | **26.31** | **93** | *e*P | | **P** | **13 52 09.7 +0.8** |
| **PKI** | **Pulchoki** | **26.32** | **93** | *e*P | | **P** | **13 52 09.9 +0.8** |
| | comp=Z,40nm,1.1s | | | | | | |
| **KIRV** | **Kirov** | **26.51** | **353**‖ | *e*P | | P | 13 52 14.8 +4.8 |
| **GUN** | **Gumba** | **26.62** | **92** | *e*P | | **P** | **13 52 12.6 +0.8** |
| **AKASG** | **Malin Array Be** | **26.62** | **321** | P | | **P** | **13 52 10.9 -0.2** |
| | comp=Z,1.2nm,0.7s,baz=124,slow=8.8,SNR=8.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **26.62** | **321** | IAmb | | IAmb | 13 52 13.9 |
| | comp=Z,1.0nm,1.2s | | | | | | |
| **AKBB** | **Malin Array Si** | **26.62** | **321**‖ | *e*P | | **P** | **13 52 12.8 +1.7** |
| **AKBB** | **Malin Array Si** | **26.62** | **321** | P | | **P** | **13 52 11.0 -0.1** |
| AKBB | | | | IAmb | | IAmb | 13 52 16.1 |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **JIRN** | **Jiri** | **26.95** | **92** | *e*P | | **P** | **13 52 15.6 +0.8** |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **27.63** | **56** | *e*P | | **P** | **13 52 23.5 +3.1** |
| **DGZ** | **Jazzator, Alta** | **29.35** | **45**‖ | *e*P | | P | 13 52 40.7 +4.9 |
| DGZ | | | | pmax | | pmax | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **TIR** | **Tirane** | **29.69** | **298** | P | | **P** | **13 52 39.1 +0.5** |
| TIR | | | | pmax | | pmax | |
| | comp=Z,21nm,0.4s | | | | | | |
| **TIR** | **Tirane** | **29.69** | **298** | P | | **P** | **13 52 39.1 +0.5** |
| **ZALV** | **Zasovo Beam** | **30.00** | **35** | P | | **P** | **13 52 41.4 +0.2** |
| | comp=Z,0.7nm,0.5s,baz=254,slow=10,SNR=2.7 | | | | | | |
| ZALV | | | | LR | | LR | 14 06 45.3 |
| | comp=Z,143nm,18.1s,baz=302,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.00** | **35** | *i* P | | P | 13 52 45.5 +4.3 |
| ZALV | | | | pmax | | pmax | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **NACGM** | **Naroch** | **30.24** | **327** | *i* P | | P | 13 52 29.1 -14 |
| **GEC2** | **GERESS Array S** | **35.21** | **310** | P | | P | 13 53 29.3 +2.3 |
| GEC2 | | | | IAmb | | IAmb | 13 53 30.6 |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **35.21** | **310** | P | | P | 13 53 29.5 +2.5 |
| | comp=Z,2.1nm,0.7s,baz=116,slow=9.1,SNR=4.0 | | | | | | |
| **CLL** | **Collm** | **36.22** | **314** | *e*P | | P | 13 53 39.0 +3.5 |
| **CLL** | **Collm** | **36.22** | **314** | *e*P | | P | 13 53 39.0 +3.5 |
| **GTA** | **Gaotai** | **36.30** | **66** | *e*P | | **P** | **13 53 38.2 +1.7** |
| GTA | | | | pP | | sP | 13 53 41.5 +0.1 |
| GTA | | | | sP | | pP | 13 53 44.1 +4.1 |
| GTA | | | | pmax | | pmax | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KEST** | **Kesra** | **38.09** | **288** | P | | **P** | **13 53 52.7 +1.0** |
| | comp=Z,7.9nm,0.9s,baz=69,slow=14,SNR=4.5 | | | | | | |
| **MBAR** | **Mbarara** | **40.30** | **220** | P | | **P** | **13 54 11.3 +0.9** |
| | comp=Z,2.6nm,0.2s,baz=2.5,slow=16,SNR=5.6 | | | | | | |
| MBAR | | | | LR | | LR | 14 10 32.8 |
| | comp=Z,62nm,19.4s,baz=7.5,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **40.48** | **328** | P | | **P** | **13 54 12.6 +1.4** |
| | comp=Z,1.2nm,0.8s,baz=119,slow=7.4,SNR=2.3 | | | | | | |
| **SONM** | **Songino Array** | **41.12** | **53** | P | | **P** | **13 54 18.2 +1.4** |
| | comp=Z,0.3nm,0.6s,baz=270,slow=8.8,SNR=2.3 | | | | | | |
| **NRIK** | **Noril'sk** | **41.15** | **17**‖ | *e*P | | P | 13 54 20.0 +3.3 |
| NRIK | | | | pmax | | pmax | |
| | comp=Z,20nm,4.6s | | | | | | |
| **CHTO** | **Chiang Mai** | **41.19** | **98** | P | | **P** | **13 54 17.4 -0.2** |
| CHTO | | | | pmax | | pmax | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **41.19** | **98** | P | | **P** | **13 54 17.4 -0.2** |
| CHTO | | | | IAmb | | IAmb | 13 54 22.1 |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Ar** | **41.36** | **99** | P | | **P** | **13 54 19.6 +0.5** |
| | comp=Z,2.5nm,0.9s,baz=291,slow=7.9,SNR=15 | | | | | | |
| CMAR | | | | LR | | LR | 14 15 53.6 |
| | comp=Z,35nm,21.5s,baz=195,slow=43 | | | | | | |
| **ULN** | **Ulaanbaatar** | **41.56** | **53**‖ | *e*P | | **P** | **13 54 22.6 +2.1** |
| ULN | | | | pmax | | pmax | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.13** | **63** | *e*P | | **P** | **13 54 47.6 -1.8** |
| **HHC** | **Hu-ho-hao-te** | **45.13** | **63** | *e*P | | **P** | **13 54 49.2 -0.2** |
| HHC | | | | pmax | | pmax | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| HHC | | | | pmax | | pmax | |
| | comp=Z,580nm,7.9s | | | | | | |
| HHC | | | | pmax | | pmax | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| HHC | | | | pmax | | pmax | |
| | comp=Z,580nm,6.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **46.43** | **318** | P | | **P** | **13 54 60.0 +0.7** |
| | comp=Z,3.2nm,0.7s,baz=94,slow=8.6,SNR=2.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **46.43** | **318** | P | | **P** | **13 55 00.0 +0.7** |
| **ESDC** | **Sonseca Array** | **47.85** | **296** | P | | **P** | **13 55 11.0 +0.2** |
| | comp=Z,1.0nm,0.9s,baz=71,slow=8.1,SNR=5.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **52.60** | **262** | P | | **P** | **13 55 46.4 -0.4** |
| | comp=Z,4.9nm,0.8s,baz=55,slow=7.4,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **52.60** | **262** | P | | **P** | **13 55 46.5 -0.4** |
| TORD | | | | IAmb | | IAmb | 13 55 47.2 |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **54.63** | **34** | LR | | LR | 14 21 47.1 |
| | comp=Z,78nm,20.6s,baz=261,slow=39 | | | | | | |
| **SCO** | **Scoresbysund** | **55.66** | **337** | P | | **P** | **13 56 09.3 +0.9** |
| SCO | | | | pmax | | pmax | |
| | comp=Z,50nm,1.4s | | | | | | |
| **SCO** | **Scoresbysund** | **55.66** | **337** | P | | **P** | **13 56 09.3 +0.9** |
| **KLR** | **Kul'dur** | **57.70** | **49** | LR | | LR | 14 23 25.3 |
| | comp=Z,62nm,19.2s,baz=242,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **58.27** | **63** | P | | **P** | **13 56 26.8 -0.7** |
| | comp=Z,1.2nm,0.7s,baz=278,slow=7.5,SNR=3.3 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **65.42** | **49** | *ce*P | | P | 13 57 18.4 +3.0 |
| YSS | | | | pmax | | pmax | |
| | comp=Z,16nm,2.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **77.56** | **9** | P | | **P** | **13 58 29.2 +0.8** |
| TOLK | | | | IAmb | | IAmb | 13 58 51.8 |
| | comp=Z,4.2nm,1.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **79.33** | **8** | P | | **P** | **13 58 39.4 +1.2** |
| **IMAR** | **Indian Mountai** | **79.37** | **12** | P | | **P** | **13 58 38.2 -0.2** |
| **ILAR** | **Eielson Array** | **81.57** | **9** | P | | **P** | **13 58 49.9 -0.3** |
| | comp=Z,0.3nm,0.8s,baz=321,slow=4.7,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.10** | **355** | P | | **P** | **13 59 08.3 -0.1** |
| | comp=Z,1.6nm,0.9s,baz=0.8,slow=4.8,SNR=14 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.10** | **355** | *ce*P | | P | 13 59 12.3 +3.9 |
| YKA | | | | pmax | | pmax | |
| | comp=Z,2.0nm,0.9s | | | | | | |

*IDC **01** 13:54:06.5±1.2, 7.°02S×155.°42E, h0km, mb3.9/9, mb1 4.0/10, mb1mx3.8/38, mbtmp3.9/10, ML1.8/1, MS3.4/3, Ms1 3.4/3, ms1mx2.7/58, Error ellipse: s-maj=38.0km s-min=20.7km az=132.0*

**ISC 01 13:54:12.3±0.9, 6.°9S±0.°1×155.°3E±0.°1, h35km, n18, σ0s74/15, mb3.8/9, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **4.15** | **309** | Pn | **Pn** | **13 55 14.2** | **+1.0** |
| | baz=197,slow=20 | | | | | | |
| KRVT | | | | Sn | **Sn** | **13 55 59.3** | **-1.2** |
| | baz=218,slow=19 | | | | | | |
| **HNR** | **Honiara** | **5.26** | **118** | Pn | Pn | 13 55 37.3 | +8.8 |
| | 8.2nm,0.3s,baz=108,slow=10,SNR=5.5 | | | | | | |
| HNR | | | | LR | LR | 13 57 31.5 | |
| | comp=Z,119nm,21.4s,baz=242,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **8.38** | **252** | Pn | **Pn** | **13 56 11.3** | **-0.1** |
| | 0.6nm,0.3s,baz=288,slow=10,SNR=2.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **13 57 45.2** | **+0.2** |
| | 1.4nm,0.3s,baz=82,slow=21,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.06** | **235** | P | **P** | **13 59 24.2** | **-0.4** |
| | 1.1nm,0.6s,baz=59,slow=9.2,SNR=9.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 03 06.1** | **+0.3** |
| | 0.4nm,0.5s,baz=61,slow=2.4,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **26.40** | **229** | P | **P** | **13 59 45.7** | **-0.2** |
| | 0.6nm,0.6s,baz=60,slow=9.1,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.68** | **24** | T | T | 14 28 19.9 | |
| | baz=203,slow=76,SNR=9.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.68** | **24** | T | T | 14 28 19.0 | |
| | baz=203,slow=76,SNR=7.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.69** | **24** | T | T | 14 28 23.1 | |
| | baz=203,slow=76,SNR=4.0 | | | | | | |
| **BATI** | **Baumata** | **31.40** | **262** | LR | LR | 14 14 40.5 | |
| | comp=Z,95nm,20.9s,baz=359,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.86** | **2** | P | **P** | **14 04 14.8** | **+0.5** |
| | 3.7nm,1.0s,baz=172,slow=3.8,SNR=1.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.00** | **295** | P | **P** | **14 04 24.1** | **+1.3** |
| | 1.6nm,0.7s,baz=118,slow=5.2,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **69.43** | **327** | P | **P** | **14 05 16.0** | **-1.1** |
| | 0.3nm,0.5s,baz=119,slow=8.2,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **83.23** | **21** | P | **P** | **14 06 34.2** | **-0.7** |
| | 0.7nm,0.9s,baz=248,slow=5.5,SNR=8.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.54** | **319** | P | **P** | **14 06 36.5** | **-0.4** |
| | 0.5nm,0.7s,baz=100,slow=6.8,SNR=5.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **86.98** | **322** | LR | LR | 14 47 15.6 | |
| | comp=Z,50nm,18.0s,baz=277,slow=37 | | | | | | |
| **INK** | **Inuvik** | **89.58** | **21** | P | **P** | **14 07 06.0** | **+0.1** |
| | 0.4nm,0.6s,baz=267,slow=4.7,SNR=4.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.17** | **28** | P | **P** | **14 07 36.3** | **-0.1** |
| | 0.5nm,0.9s,baz=272,slow=5.3,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.26** | **285** | PKPbc | **PKPbc** | **14 14 07.8** | **0.0** |
| | 0.3nm,0.3s,baz=58,slow=2.5,SNR=1.9 | | | | | | |

**IDC 01 13:54:24.0±1.9, 7.°22S×129.°25E, h0km, mb3.5/1, mb1 3.4/4, mb1mx3.3/43, mbtmp3.3/4, ML3.2/3, Error ellipse: s-maj=75.8km s-min=29.8km az=79.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.62** | **18** | Pn | Pn | 13 56 02.4 | -0.4 |
| | 0.4nm,0.3s,baz=136,slow=22,SNR=8.1 | | | | | | |
| SIJI | | | | Sn | Sn | 13 57 09.3 | -10 |
| | 0.6nm,0.3s,baz=242,slow=23,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.58** | **159** | Pn | Pn | 13 57 37.9 | -0.2 |
| | 0.2nm,0.3s,baz=335,slow=15,SNR=1.9 | | | | | | |
| WRA | | | | Sn | Sn | 13 59 59.8 | -10 |
| | 0.1nm,0.3s,baz=18,slow=30,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **16.96** | **165** | Pn | Pn | 13 58 22.9 | +0.1 |
| | 0.1nm,0.3s,baz=338,slow=8.7,SNR=11 | | | | | | |
| ASAR | | | | Sn | Sn | 14 01 25.6 | -6.5 |
| | 0.0nm,0.3s,baz=2.0,slow=29,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | P | 14 05 25.3 | +0.1 |
| | 0.4nm,0.7s,baz=147,slow=7.0,SNR=4.5 | | | | | | |

*IDC **01** 14:02:58.4±1.2, 3.°37N×126.°86E, h0km, mb3.7/6, mb1 3.8/7, mb1mx3.4/47, mbtmp3.7/7, ML3.5/1, Error ellipse: s-maj=69.1km s-min=19.0km az=68.0*

**ISC 01 14:03:04.6±1.0, 3.°4N±0.°2×126.°9E±0.°3, h48km, n7, σ1s08/7, mb3.7/6, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.06** | **134** | Pn | **Pn** | **14 04 32.0** | **+0.3** |
| | 1.2nm,0.3s,baz=31,slow=13,SNR=4.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.39** | **183** | P | **P** | **14 07 48.1** | **-0.2** |
| | 5.2nm,1.1s,baz=0.0,slow=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.30** | **163** | P | **P** | **14 08 17.3** | **-0.5** |
| | 2.5nm,1.0s,baz=343,slow=10,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **27.74** | **166** | P | **P** | **14 08 48.4** | **-0.4** |
| | 0.2nm,0.5s,baz=349,slow=8.7,SNR=10.0 | | | | | | |
| **STKA** | **Stephens Creek** | **37.74** | **159** | P | **P** | **14 10 16.1** | **+0.1** |
| | 3.1nm,0.9s,baz=2.4,slow=10,SNR=5.9 | | | | | | |
| **SONM** | **Songino Array** | **47.68** | **341** | P | **P** | **14 11 35.1** | **-1.4** |
| | 0.3nm,0.6s,baz=152,slow=9.4,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.95** | **325** | P | **P** | **14 12 53.6** | **+1.5** |
| | 0.4nm,0.6s,baz=124,slow=8.0,SNR=5.1 | | | | | | |

**IDC 01 14:05:26.5±437.0, 59.°17N×30.°65E, h0km, Error ellipse: s-maj=129.3km s-min=41.3km az=152.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.28** | **122** | *i* | | 14 32 40.0 | |
| | baz=306,slow=368,SNR=6.0 | | | | | | |
| **I37NO** | **I37NO** | **11.21** | **337** | *i* | | 15 15 00.0 | |
| | baz=146,slow=327,SNR=1.1 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **17.95** | **107** | *i* | | 15 58 10.0 | |
| | baz=314,slow=312,SNR=0.6 | | | | | | |

**IDC 01 14:06:36.4±1.5, 5.°17S×108.°56E, h0km, mb3.3/3, mb1 3.5/3, mb1mx2.9/39, mbtmp3.3/3, MS3.4/1, Ms1 3.4/1, ms1mx2.5/27, Error ellipse: s-maj=36.6km s-min=28.8km az=71.0, Java Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CVTR** | **Volcan Turrial** | **0.88** | **232** | | **Pb** | **14 26 05.9** | **-1.1** |
| CVTR | | | | Sg | **Sb** | **14 26 16.7** | **-1.9** |
| **RIMA** | **Rio Macho** | **1.12** | **225** | ‖ *eP* | **Pn** | **14 26 09.6** | **-0.4** |
| **RIMA** | **Rio Macho** | **1.12** | **225** | | **Pn** | **14 26 09.5** | **-0.4** |
| RIMA | | | | Sg | **Sb** | **14 26 23.4** | **-1.8** |
| **HDC** | **Heredia** | **1.18** | **242** | ‖ *eP* | **Pn** | **14 26 11.1** | **+0.4** |
| HDC | | | | *eS* | **Sb** | **14 26 24.5** | **-2.4** |
| **HDC** | **Heredia** | **1.18** | **242** | | **Pn** | **14 26 11.1** | **+0.4** |
| **HDC** | **Heredia** | **1.18** | **242** | ‖ *iP* | **Pn** | **14 26 11.1** | **+0.4** |
| HDC | | | | *eS* | **Sb** | **14 26 25.3** | **-1.6** |
| **LCR2** | **La Lucha 2** | **1.24** | **229** | ‖ *eP* | **Pn** | **14 26 11.7** | **+0.1** |
| **CNI2** | **El Empalme, Bo** | **1.27** | **153** | *eP* | **Pn** | **14 26 11.9** | **+0.2** |
| CNI2 | | | | *eS* | **Sn** | **14 26 27.6** | **-0.2** |
| **DRK0** | **Durika** | **1.30** | **188** | | **Pn** | **14 26 12.2** | **+0.2** |
| **DRK0** | **Durika** | **1.30** | **188** | *eP* | **Pn** | **14 26 12.7** | **+0.3** |
| DRK0 | | | | *eS* | **Sn** | **14 26 28.1** | **-0.8** |
| **PEZE** | **Perez Zeledon,** | **1.32** | **208** | | **Pn** | **14 26 12.5** | **-0.1** |
| **COVE** | **Coope Vega, Sa** | **1.33** | **277** | ⇑ *eP* | **Pn** | **14 26 13.1** | **+0.3** |
| COVE | | | | *eS* | **Sn** | **14 26 29.1** | **-0.3** |
| **COVE** | **Coope Vega, Sa** | **1.33** | **277** | | **Pn** | **14 26 12.8** | **+0.1** |
| **SRBA** | **San Rafael, Bu** | **1.35** | **193** | ‖ *eP* | **Pn** | **14 26 13.2** | **+0.1** |
| SRBA | | | | *eS* | **Sn** | **14 26 29.8** | **-0.3** |
| **SRBA** | **San Rafael, Bu** | **1.35** | **193** | | **Pn** | **14 26 13.0** | **-0.1** |
| **EDBA** | **Buenos Aires** | **1.40** | **189** | *eP* | **Pn** | **14 26 14.5** | **+0.8** |
| EDBA | | | | *eS* | **Sb** | **14 26 32.5** | **-0.7** |
| **EDDO** | **Dominical** | **1.52** | **212** | ‖ *eP* | **Pb** | **14 26 16.9** | **-0.8** |
| EDDO | | | | *eS* | **Sb** | **14 26 36.6** | **0.0** |
| **FORC** | **Fortuna** | **1.59** | **267** | *iP* | **Pb** | **14 26 18.1** | **-0.8** |
| FORC | | | | *iS* | **Sb** | **14 26 38.6** | **0.0** |
| **CEDE** | **Laguna Cedeo** | **1.62** | **268** | *iP* | **Pb** | **14 26 18.6** | **-0.8** |
| CEDE | | | | *iS* | **Sb** | **14 26 38.6** | **-0.9** |
| **EDDN** | **Palmar Norte** | **1.63** | **194** | *eP* | **Pb** | **14 26 18.9** | **-0.7** |
| EDPN | | | | *eS* | **Sb** | **14 26 40.5** | **+0.7** |
| **ARE1** | **Arenal 1** | **1.64** | **267** | *eP* | **Pb** | **14 26 18.4** | **-1.3** |
| **BRU2** | **Volcan** | **1.79** | **168** | | **Pn** | **14 26 17.8** | **-1.3** |
| **BRU2** | **Volcan** | **1.79** | **168** | *eP* | **Pb** | **14 26 25.0** | **+2.7** |
| BRU2 | | | | *eS* | **Sn** | **14 26 42.5** | **+1.5** |
| **JACO** | **JACO, Garabito** | **1.81** | **241** | ‖ *eP* | **Pb** | **14 26 21.0** | **-1.7** |
| JACO | | | | *eS* | **Sb** | **14 26 43.4** | **-1.6** |
| **JACO** | **JACO, Garabito** | **1.81** | **241** | Pn | **Pn** | **14 26 20.8** | **+1.5** |
| **CHGR2** | **Aguacate** | **1.84** | **151** | *eP* | **Pn** | **14 26 19.7** | **0.0** |
| CHGR2 | | | | *eS* | **Sn** | **14 26 41.8** | **-0.3** |
| **JTS** | **Las Juntas de** | **1.89** | **262** | Pg | **Pn** | **14 26 21.4** | **+1.1** |
| | 42nm,0.3s,baz=112,slow=14,SNR=87 | | | | | | |
| JTS | | | | Lg | Lg | 14 26 45.1 | |
| | 107nm,0.3s,baz=133,slow=21,SNR=6.7 | | | | | | |
| **JTS** | **Las Juntas de** | **1.89** | **262** | *eP* | **Pn** | **14 26 21.7** | **+1.3** |
| **JTS** | **Las Juntas de** | **1.89** | **262** | Pn | **Pn** | **14 26 21.5** | **+1.2** |
| **JTS** | **Las Juntas de** | **1.89** | **262** | *eP* | **Pn** | **14 26 21.5** | **+1.1** |
| JTS | | | | *eS* | **Sb** | **14 26 45.4** | **-1.7** |
| **BCO2** | **Palmira** | **1.90** | **164** | *eP* | **Pn** | **14 26 21.9** | **+1.2** |
| BCO2 | | | | *eS* | **Sn** | **14 26 44.3** | **+0.6** |
| **ACAL** | **Aguas Claras** | **1.95** | **272** | *iP* | **Pn** | **14 26 22.2** | **+1.0** |
| **LAFE** | **Finca La Fe, P** | **1.97** | **248** | *eP* | **Pn** | **14 26 23.2** | **+1.7** |
| **CDITO** | **Canoas** | **1.98** | **175** | Pn | **Pn** | **14 26 22.8** | **+1.2** |
| **CDITO** | **Canoas** | **1.98** | **175** | *eP* | Pb | 14 26 29.9 | +4.4 |
| CDITO | | | | *eS* | **Sb** | **14 26 49.3** | **-0.5** |
| **PTJ1** | **Puerto Jimnez** | **2.02** | **187** | *eS* | **Sn** | **14 26 47.2** | **+0.7** |
| **ESPN** | **Las Esperanzas** | **2.03** | **323** | | **Pn** | **14 26 22.2** | **-0.1** |
| **CUI** | **Cuipilapa** | **2.08** | **273** | *iP* | **Pn** | **14 26 23.8** | **+0.8** |
| **COLC** | **Colonia** | **2.12** | **273** | *iP* | **Pn** | **14 26 24.3** | **+0.8** |
| **PIRO** | **Carate, Puerto** | **2.16** | **187** | ⇑ *eP* | **Pn** | **14 26 26.0** | **+1.9** |
| **PIRO** | **Carate, Puerto** | **2.16** | **187** | *eP* | **Pn** | **14 26 26.0** | **+1.9** |
| PIRO | | | | *eS* | **Sb** | **14 26 54.8** | **-0.1** |
| **DVD** | **David** | **2.19** | **164** | *eS* | **Sb** | **14 26 54.4** | **-1.4** |
| **CAO2** | **Cobano, Puntar** | **2.20** | **247** | | **Pn** | **14 26 26.5** | **+1.9** |
| **LOMA3** | **Las Lomas, Chi** | **2.21** | **163** | *eS* | **Sb** | **14 26 54.0** | **-2.5** |
| **CHIR3** | **Chiriqui UPA,** | **2.27** | **162** | *eP* | **Pb** | **14 26 28.1** | **-2.3** |
| CHIR3 | | | | *eS* | **Sn** | **14 26 54.7** | **+2.2** |
| **PTPM** | **Petroterminale** | **2.34** | **176** | *eS* | **Sb** | **14 26 59.3** | **-1.0** |
| **ORTG** | **Ortega, Santa** | **2.37** | **266** | | **Pn** | **14 26 28.1** | **+1.0** |
| **GUAI** | **GUAI** | **2.43** | **263** | *iP* | **Pn** | **14 26 29.3** | **+1.4** |
| **DUNO** | **Dulce Nombre,** | **2.45** | **259** | | **Pn** | **14 26 28.6** | **+0.5** |
| **LIMO3** | **Limones** | **2.45** | **176** | *eP* | Pn | 14 26 16.6 | -11 |
| **HZTE** | **Horizontes, Gu** | **2.50** | **274** | ⇑ *eP* | **Pn** | **14 26 30.0** | **+1.2** |
| **HZTE** | **Horizontes, Gu** | **2.50** | **274** | Pn | **Pn** | **14 26 29.8** | **+1.0** |
| **INDI** | **Punta indio, G** | **2.50** | **254** | *eP* | **Pn** | **14 26 30.9** | **+2.1** |
| **ACON** | **Acoyapa** | **2.51** | **304** | | **Pn** | **14 26 29.3** | **+0.4** |
| **SAJU** | **San Juanillo,** | **2.66** | **260** | *eP* | **Pn** | **14 26 32.9** | **+1.9** |
| **BOAB** | **BOACO BROADBAN** | **3.17** | **307** | Pn | **Pn** | **14 26 38.3** | **+0.3** |
| **PRVC** | **Isla de Provid** | **3.25** | **30** | *eP* | **Pn** | **14 26 39.4** | **+0.3** |
| PRVC | | | | *eS* | **Sn** | **14 27 19.9** | **+3.0** |
| **PRVC** | **Isla de Provid** | **3.25** | **30** | Pn | **Pn** | **14 26 39.5** | **+0.3** |
| **PRVC** | **Isla de Provid** | **3.25** | **30** | *eP* | **Pn** | **14 26 40.5** | **+1.4** |
| PRVC | | | | *eS* | **Sn** | **14 27 18.9** | **+2.0** |
| **BCIP** | **Isla Barro Col** | **3.46** | **113** | *eP* | **Pn** | **14 26 42.1** | **+0.1** |
| BCIP | | | | *eS* | **Sn** | **14 27 18.9** | **-3.1** |
| **BCIP** | **Isla Barro Col** | **3.46** | **113** | Pn | **Pn** | **14 26 41.9** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **3.46** | **113** | *eP* | **Pn** | **14 26 42.2** | **+0.2** |
| BCIP | | | | *eS* | **Sn** | **14 27 18.9** | **-3.1** |
| **MATN** | **Matagalpa** | **3.67** | **310** | | **Pn** | **14 26 45.5** | **+0.5** |
| **CACAO** | **El Cacao, Vera** | **3.86** | **146** | *eP* | **Pn** | **14 26 50.1** | **+2.6** |
| **CNGN** | **Cerro Negro** | **4.06** | **299** | | **Pn** | **14 26 50.6** | **+0.3** |
| **CHPO** | **Chepo, Panama** | **4.12** | **109** | *eS* | **Sn** | **14 27 36.2** | **-2.0** |
| **CRIN** | **San Cristobal** | **4.46** | **299** | | **Pn** | **14 26 55.6** | **-0.2** |
| **TGUH** | **Tegucigalpa,Un** | **5.39** | **311** | Pn | **Pn** | **14 27 08.4** | **-0.3** |
| **MTO3** | **Montecristo** | **7.24** | **302** | Pn | **Pn** | **14 27 34.5** | **+0.3** |
| **MOTC** | **Monteria, Cord** | **7.50** | **103** | *eP* | **Pn** | **14 27 38.8** | **+1.3** |
| **MOTC** | **Monteria, Cord** | **7.50** | **103** | | **Pn** | **14 27 38.4** | **+0.9** |
| **SJCC** | **San Jacinto, C** | **7.78** | **94** | Pn | **Pn** | **14 27 42.1** | **+0.6** |
| **ZARC** | **Zaragoza, Cauc** | **8.65** | **110** | Pn | **Pn** | **14 27 54.3** | **+0.9** |
| **GTBY** | **Guantanamo Bay** | **12.06** | **38** | Pn | **Pn** | **14 28 42.2** | **+2.2** |
| **SOR** | **Soroa** | **12.17** | **0** | Pn | **Pn** | **14 28 43.5** | **+2.0** |
| **SDV** | **Santo Domingo** | **12.36** | **97** | Pn | **Pn** | **14 28 44.4** | **+0.1** |
| | 0.7nm,0.3s,baz=280,slow=12,SNR=9.2 | | | | | | |
| SDV | | | | Sn | **Sn** | **14 30 56.3** | **-4.9** |
| | 1.6nm,0.3s,baz=348,slow=16,SNR=4.2 | | | | | | |
| **SDV** | **Santo Domingo** | **12.36** | **97** | Pn | **Pn** | **14 28 45.1** | **+0.8** |
| **BAUV** | **El Baul** | **14.88** | **95** | Pn | **Pn** | **14 29 17.0** | **-1.7** |
| **MLPR** | **Magueyes Islan** | **17.17** | **63** | P | **P** | **14 29 49.3** | **0.0** |
| MLPR | | | | IAmb | IAmb | 14 29 57.5 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **26.83** | **317** | pP | pP | 14 31 39.1 | +2.7 |
| | comp=Z,0.9nm,0.9s,baz=133,slow=11,SNR=6.2 | | | | | | |
| **CBKS** | **Cedar Bluff** | **31.84** | **335** | P | **P** | **14 32 11.7** | **-0.8** |
| CBKS | | | | IAmb | IAmb | 14 32 12.6 | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| **BNM** | **Barren Site** | **31.88** | **321** | P | **P** | **14 32 12.1** | **-1.0** |
| **PDAR** | **Pinedale Array** | **39.54** | **329** | P | **P** | **14 33 20.1** | **+1.3** |
| | comp=Z,0.3nm,0.8s,baz=138,slow=9.6,SNR=2.5 | | | | | | |
| PDAR | | | | pP | **sP** | **14 33 30.9** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=134,slow=10,SNR=5.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.61** | **343** | P | **P** | **14 35 31.0** | **+1.0** |
| | comp=Z,0.5nm,0.8s,baz=137,slow=7.2,SNR=7.7 | | | | | | |
| YKA | | | | pP | **sP** | **14 35 42.3** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=136,slow=7.2,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **69.49** | **336** | P | **P** | **14 36 55.3** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=144,slow=6.5,SNR=2.5 | | | | | | |
| ILAR | | | | pP | **sP** | **14 37 08.0** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=144,slow=6.3,SNR=2.7 | | | | | | |
| **PZH** | **PanZhiHua** | **142.87** | **353** | PKP | **PKPdf** | **14 45 21.6** | **-0.2** |

*BER **01** 14:35:36.1±2.0, 80.04N×20.41E, h23km±9km, ML2.4, ML2.7(NAO), Confirmed Earthquake*
*NAO **01** 14:35:36.3±3.2, 79.86N×20.25E, h16km±14km, ML2.7*
*IEPN **01** 14:35:38.0, 79.96N×20.87E, h10km*

**ISC 01 14:35:34.6±1.2, 79.97N±0.07×20.70E±0.05, h10km, n17, σ1§96/31, 1D, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **1.92** | **241** | Pn | **Pn** | **14 36 06.4** | **-0.8** |
| KBS | | | | Pg | **Pb** | **14 36 10.2** | **+0.6** |
| KBS | | | | Lg | Lg | 14 36 34.1 | |
| **KBS** | **Kingsbay** | **1.92** | **241** | *eP* | **Pn** | **14 36 06.2** | **-1.1** |
| KBS | | | | *ePg* | **Pb** | **14 36 09.8** | **+0.2** |
| KBS | | | | *eSg* | **Sn** | **14 36 33.4** | **+2.0** |
| KBS | | | | IAML | | 14 36 37.8 | |
| | comp=Z,69nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **1.92** | **241** | *eP* | **Pb** | **14 36 10.0** | **+0.4** |
| KBS | | | | *eS* | **Sn** | **14 36 33.6** | **+2.2** |
| **SPA0** | **Spitsbergen Ar** | **1.98** | **207** | Pn | **Pn** | **14 36 06.4** | **-1.7** |
| | baz=27,slow=14 | | | | | | |
| SPA0 | | | | Pg | **Pb** | **14 36 09.9** | **-0.7** |
| | baz=26,slow=16 | | | | | | |
| SPA0 | | | | Lg | Lg | 14 36 34.5 | |
| | baz=15,slow=37 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.98** | **207** | Pn | **Pn** | **14 36 06.4** | **-1.7** |
| | baz=27,slow=14 | | | | | | |
| SPA0 | | | | Pg | **Pb** | **14 36 09.9** | **-0.7** |
| | baz=26,slow=16 | | | | | | |
| SPA0 | | | | *eSg* | **Sn** | **14 36 34.5** | **+1.6** |
| **SPA0** | **Spitsbergen Ar** | **1.98** | **207** | ‖ *iP* | **Pn** | **14 36 06.3** | **-1.7** |
| SPA0 | | | | *eS* | **Sn** | **14 36 30.2** | **-2.7** |
| **BRBB** | **Barentsburg B** | **2.25** | **217** | Pn | **Pn** | **14 36 10.3** | **-1.5** |
| BRBB | | | | Sn | **Sn** | **14 36 36.5** | **-3.1** |
| BRBB | | | | Lg | Lg | 14 36 44.7 | |
| **BRBB** | **Barentsburg B** | **2.25** | **217** | *eP* | **Pn** | **14 36 10.5** | **-1.3** |
| BRBB | | | | *eS* | **Sn** | **14 36 36.5** | **-3.1** |
| BRBB | | | | *eSg* | **Sb** | **14 36 44.3** | **+1.2** |
| **BRBA** | **Barentsburg A** | **2.28** | **216** | Pn | **Pn** | **14 36 11.2** | **-1.1** |
| BRBA | | | | Lg | Lg | 14 36 45.4 | |
| **BRBA** | **Barentsburg A** | **2.28** | **216** | *eP* | **Pn** | **14 36 10.9** | **-1.3** |
| BRBA | | | | *eS* | **Sn** | **14 36 37.1** | **-3.2** |
| BRBA | | | | *eSg* | **Sb** | **14 36 45.5** | **+1.5** |
| BRBA | | | | IAML | | 14 36 50.2 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.15** | **202** | Pn | **Pn** | **14 36 24.4** | **+0.2** |
| HSPB | | | | Lg | Lg | 14 37 11.5 | |
| **HSPB** | **Hornsund (broa** | **3.15** | **202** | *ePg* | **Pb** | **14 36 31.3** | **+0.7** |
| HSPB | | | | *eSg* | **Sb** | **14 37 11.3** | **+2.2** |
| HSPB | | | | IAML | | 14 37 13.2 | |
| | comp=Z,19nm,0.4s | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.15** | **202** | *eP* | **Pb** | **14 36 31.0** | **+0.4** |
| HSPB | | | | *eS* | **Sb** | **14 37 10.1** | **+1.1** |
| **HOPEN** | **Hopen** | **3.59** | **164** | *eSg* | **Sb** | **14 37 25.9** | **+4.4** |
| HOPEN | | | | IAML | | 14 37 45.1 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **ZFI** | **Zemlya Franca-** | **4.57** | **66** | *eP* | **Pn** | **14 36 44.3** | **+0.8** |
| ZFI | | | | *eS* | **Sn** | **14 37 33.3** | **-3.2** |
| | comp=Z,20nm,1.7s | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.56** | **171** | Pn | Pn | 14 38 03.3 | -2.4 |
| | baz=355,slow=11 | | | | | | |
| ARA0 | | | | Sn | Sn | 14 39 54.4 | -9.4 |
| | baz=360,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.56** | **171** | Pn | Pn | 14 38 03.3 | -2.4 |
| | baz=355,slow=11 | | | | | | |
| ARA0 | | | | Sn | Sn | 14 39 54.4 | -9.4 |
| | baz=360,slow=22 | | | | | | |

**IDC 01 14:36:39.1±9.4, 20.65N×142.17E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.2/37, mbtmp3.3/3, Error ellipse: s-maj=364.1km s-min=31.5km az=74.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **41.06** | **191** | P | P | 14 44 25.6 | +1.0 |
| | 0.5nm,0.5s,baz=12,slow=8.2,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.78** | **191** | P | P | 14 44 53.4 | -1.3 |
| | 0.3nm,0.9s,baz=9.2,slow=8.5,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.71** | **313** | P | P | 14 46 10.3 | 0.0 |
| | 0.1nm,0.3s,baz=82,slow=6.6,SNR=5.3 | | | | | | |

*SFS **01** 14:50:13.0, 35.34N×3.00W, h11km, ML2.7, ALBORAN SUR*
*CNRM **01** 14:50:18.0, 35.34N×3.63W, h0km, ml3.4*
*MDD **01** 14:50:18.3±0.6, 35.48N×3.70W, h11km, mbLg2.7/9, Error ellipse: s-maj=5.9km s-min=3.4km az=15.0*
*INMG **01** 14:50:19.4±1.3, 35.51N×3.65W, h19km±4km, ML2.8, Error ellipse: s-maj=3.2km s-min=2.4km az=158.0*
*LDG **01** 14:50:19.4±0.2, 35.49N×3.64W, h10km, Ml2.6/3, Error ellipse: s-maj=5.0km s-min=3.1km az=174.0*
*IGIL **01** 14:50:19.8, 35.48N×3.70W, h11km, ML2.8*

**ISC 01 14:50:16.9±1.0, 35.52N±0.02×3.62W±0.02, h16km±8km, n101, σ1§89/174, 1C, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.40** | **221** | P | **Pg** | **14 50 23.4** | **-1.6** |
| **PALE** | **Palemas** | **0.40** | **221** | P | **Pb** | **14 50 26.7** | **+1.0** |
| PALE | | | | S | **Sb** | **14 50 32.4** | **+0.8** |
| **PALE** | **Palemas** | **0.40** | **221** | P | **Pg** | **14 50 23.4** | **-1.6** |
| **EMEL** | **Melilla** | **0.58** | **112** | Pg | **Pn** | **14 50 30.2** | **-0.4** |
| | 717nm,0.3s,SNR=70 | | | | | | |
| EMEL | | | | Lg | Lg | 14 50 38.0 | |
| | 5µm,0.5s,SNR=39 | | | | | | |
| **GOG** | **Mont Gurugu** | **0.59** | **120** | P | **Pg** | **14 50 28.0** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.59** | **120** | P | **Pn** | **14 50 30.0** | **-0.8** |
| GOG | | | | S | **Sb** | **14 50 37.4** | **+0.3** |
| **GOG** | **Mont Gurugu** | **0.59** | **120** | P | **Pg** | **14 50 28.0** | **-0.6** |
| **EALB** | **Alboran** | **0.63** | **49** | Pg | **Pn** | **14 50 31.8** | **+0.5** |
| | 247nm,0.3s,SNR=25 | | | | | | |
| EALB | | | | Lg | Lg | 14 50 41.9 | |
| | 608nm,0.3s,SNR=19 | | | | | | |
| **CHAS** | **Isla Isabel II** | **1.03** | **109** | P | **Pb** | **14 50 34.2** | **-2.2** |
| CHAS | | | | S | **Sg** | **14 50 50.0** | **-0.3** |
| **TAF** | **Taforalt** | **1.21** | **125** | P | **Pg** | **14 50 40.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.21** | **125** | P | **Pg** | **14 50 39.9** | **-0.4** |
| TAF | | | | S | **Sg** | **14 50 56.7** | **+0.6** |
| **TAF** | **Taforalt** | **1.21** | **125** | P | **Pg** | **14 50 40.0** | **-0.4** |
| **ELGU** | **Los Guajares,** | **1.34** | **360** | Pn | **Pb** | **14 50 41.9** | **+0.1** |
| | 77nm,0.4s,SNR=7.9 | | | | | | |
| ELGU | | | | Sn | **Sb** | **14 50 59.7** | **+0.9** |
| | 412nm,0.3s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **1.40** | **318** | Pn | **Pb** | **14 50 42.4** | **-0.3** |
| | 20nm,0.3s,SNR=28 | | | | | | |
| EMIJ | | | | Sn | **Sb** | **14 51 00.5** | **+0.1** |
| | 172nm,0.4s,SNR=5.0 | | | | | | |
| **SMIR** | **Smir Dam** | **1.44** | **277** | P | **Pn** | **14 50 40.7** | **-1.7** |
| SMIR | | | | S | **Sn** | **14 50 59.8** | **-1.2** |
| **JBK** | **JBK** | **1.47** | **144** | P | **Pn** | **14 50 43.0** | **+0.1** |
| **JBK** | **JBK** | **1.47** | **144** | P | **Pn** | **14 50 43.2** | **+0.3** |
| JBK | | | | S | **Sb** | **14 51 02.3** | **-0.2** |
| **JBK** | **JBK** | **1.47** | **144** | P | **Pn** | **14 50 43.0** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.47** | **254** | P | **Pg** | **14 50 45.0** | **-0.1** |
| **CHEFC** | **Chefchaouen** | **1.47** | **254** | P | **Pg** | **14 50 44.6** | **-0.5** |
| CHEFC | | | | S | **Sg** | **14 51 03.4** | **-0.8** |
| **CEU** | **Ceuta** | **1.48** | **285** | P | **Pn** | **14 50 40.4** | **-2.4** |
| CEU | | | | S | **Sn** | **14 50 55.9** | **-5.9** |
| **ECEU** | **Ceuta** | **1.48** | **285** | Pn | **Pn** | **14 50 43.1** | **+0.2** |
| | 18nm,0.3s,SNR=12 | | | | | | |
| ECEU | | | | Sn | **Sn** | **14 51 01.4** | **-0.6** |
| | 36nm,0.3s,SNR=6.4 | | | | | | |
| **EBER** | **Berja** | **1.50** | **23** | Pn | **Pb** | **14 50 44.4** | **0.0** |
| | 20nm,0.3s,SNR=24 | | | | | | |
| EBER | | | | Sn | **Sb** | **14 51 03.8** | **+0.5** |
| | 104nm,0.4s,SNR=160 | | | | | | |
| **EGOR** | **Sierra Gorda,** | **1.64** | **346** | Pn | **Pb** | **14 50 46.9** | **+0.1** |
| | 16nm,0.2s,SNR=7.9 | | | | | | |
| EGOR | | | | Sn | **Sg** | **14 51 09.9** | **+0.3** |
| | 67nm,0.7s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **1.69** | **5** | Pg | **Pg** | **14 50 48.7** | **-0.7** |
| | 27nm,0.3s,SNR=46 | | | | | | |
| EQUE | | | | Sn | **Sb** | **14 51 08.5** | **-0.2** |
| | 54nm,0.4s,SNR=5.0 | | | | | | |
| **EJIF** | **Jimena Fronter** | **1.76** | **302** | Pg | **Pb** | **14 50 48.7** | **-0.2** |
| | 262µm,0.4s,SNR=7.9 | | | | | | |
| EJIF | | | | Lg | Lg | 14 51 12.7 | |
| | 397µm,0.5s,SNR=7.9 | | | | | | |
| **ENIJ** | **Nijar** | **1.84** | **38** | Pn | **Pn** | **14 50 48.8** | **+0.8** |
| | 17nm,0.4s,SNR=7.9 | | | | | | |
| ENIJ | | | | Sn | **Sn** | **14 51 11.8** | **+0.8** |
| | 91nm,0.3s,SNR=7.9 | | | | | | |
| **SICH** | **Sidi Chahed** | **1.99** | **225** | P | **Pb** | **14 50 52.1** | **-0.6** |
| SICH | | | | S | **Sg** | **14 51 20.2** | **-0.6** |
| **SICH** | **Sidi Chahed** | **1.99** | **225** | S | Sn | 14 51 03.0 | -12 |
| **LIJA** | **Lijar** | **2.00** | **314** | P | **Pb** | **14 50 54.0** | **+1.1** |
| LIJA | | | | S | **Sn** | **14 51 12.0** | **-2.9** |
| **LCRM** | **LCR** | **2.10** | **210** | P | **Pg** | **14 50 58.0** | **+0.8** |
| **LCRM** | **LCR** | **2.10** | **210** | P | **Pg** | **14 50 58.0** | **+0.8** |
| LCRM | | | | S | **Sg** | **14 51 30.6** | **+6.3** |
| **EQES** | **Quesada** | **2.32** | **11** | Pn | **Pn** | **14 50 55.0** | **+0.5** |
| | 29nm,0.4s,SNR=11 | | | | | | |
| EQES | | | | Pg | **Pb** | **14 50 58.8** | **+0.3** |
| | 19nm,0.4s,SNR=50 | | | | | | |
| EQES | | | | Sn | **Sb** | **14 51 25.2** | **-1.7** |
| | 149nm,0.6s,SNR=5.0 | | | | | | |
| **IFR** | **Ifrane** | **2.35** | **212** | P | **Pb** | **14 50 57.5** | **-1.6** |
| IFR | | | | S | **Sn** | **14 51 24.2** | **+0.4** |
| **EADA** | **Adamuz** | **2.75** | **344** | Pn | **Pn** | **14 51 01.0** | **+0.6** |
| | 12nm,0.3s,SNR=34 | | | | | | |
| EADA | | | | Pg | **Pb** | **14 51 07.1** | **+1.4** |
| | 19nm,0.4s,SNR=9.1 | | | | | | |
| EADA | | | | Sn | **Sn** | **14 51 33.3** | **-0.1** |
| | 10nm,0.7s,SNR=4.5 | | | | | | |
| EADA | | | | Lg | Lg | 14 51 41.8 | |
| | 24nm,0.4s,SNR=5.0 | | | | | | |
| **TDRA** | **Tendrara** | **2.80** | **152** | P | **Pn** | **14 51 03.5** | **+2.2** |
| **MD31** | **MD31** | **2.81** | **200** | P | **Pn** | **14 51 03.2** | **+1.9** |
| MD31 | | | | S | **Sn** | **14 51 34.9** | **0.0** |
| **EZAR** | **Zarzadilla de** | **2.81** | **33** | Pn | **Pn** | **14 51 02.8** | **+1.4** |
| | 0.4nm,0.4s,SNR=7.9 | | | | | | |
| EZAR | | | | Pg | **Pg** | **14 51 10.3** | **-0.6** |
| | 2.7nm,0.3s,SNR=7.9 | | | | | | |
| EZAR | | | | Sn | **Sn** | **14 51 36.4** | **+1.3** |
| | 82nm,0.7s,SNR=7.9 | | | | | | |
| **MDT** | **Midelt** | **2.82** | **197** | P | **Pb** | **14 51 06.1** | **-0.9** |
| **MDT** | **Midelt** | **2.82** | **197** | P | **Pb** | **14 51 06.1** | **-0.9** |
| MDT | | | | S | **Sn** | **14 51 34.9** | **-0.3** |
| **ECAB** | **El Cabril** | **2.93** | **331** | Pn | **Pn** | **14 51 03.4** | **+0.5** |
| | 3.5nm,0.3s,SNR=19 | | | | | | |
| ECAB | | | | Pg | **Pb** | **14 51 10.8** | **+2.0** |
| | 6.7nm,0.3s,SNR=11 | | | | | | |
| ECAB | | | | Sn | **Sn** | **14 51 37.0** | **-0.8** |
| | 6.6nm,0.3s,SNR=6.2 | | | | | | |
| ECAB | | | | Lg | Lg | 14 51 50.6 | |
| | 15nm,0.4s,SNR=5.8 | | | | | | |
| **CART** | **Cartagena** | **2.95** | **45** | P | **Pb** | **14 51 08.9** | **-0.2** |
| CART | | | | S | **Sn** | **14 51 36.9** | **-1.3** |
| **CART** | **Cartagena** | **2.95** | **45** | P | **Pn** | **14 51 03.9** | **+0.8** |
| CART | | | | S | **Sn** | **14 51 37.4** | **-0.8** |
| **EMUR** | **La Murta** | **3.00** | **39** | Pn | **Pn** | **14 51 05.2** | **+1.2** |
| | 4.0nm,0.3s,SNR=4.8 | | | | | | |
| EMUR | | | | Pg | **Pg** | **14 51 12.8** | **-1.6** |
| | 5.0nm,0.6s,SNR=7.9 | | | | | | |
| EMUR | | | | Sn | **Sn** | **14 51 40.0** | **+0.4** |
| | 12nm,0.3s,SNR=4.5 | | | | | | |
| **ZHG** | **ZHG** | **3.24** | **231** | P | **Pn** | **14 51 08.9** | **+1.7** |
| ZHG | | | | S | **Sn** | **14 51 45.9** | **+0.4** |
| **ZHG** | **ZHG** | **3.24** | **231** | P | **Pb** | **14 51 11.0** | **-3.2** |
| **EMIN** | **Mina Concepcio** | **3.33** | **313** | ⇑ Pn | **Pn** | **14 51 09.0** | **+0.8** |
| | 6.3nm,0.4s,SNR=18 | | | | | | |
| EMIN | | | | Sn | **Sn** | **14 51 46.9** | **-0.6** |
| | 8.4nm,0.5s,SNR=5.0 | | | | | | |
| **ETOB** | **Tobarra** | **3.53** | **27** | Pn | **Pn** | **14 51 13.6** | **+2.4** |
| | 6.7nm,0.2s,SNR=28 | | | | | | |
| ETOB | | | | Sn | **Sn** | **14 51 54.8** | **+2.1** |
| | 20nm,0.6s,SNR=6.7 | | | | | | |
| **EGRO** | **El Granado** | **3.70** | **304** | Pn | **Pn** | **14 51 14.6** | **+1.1** |
| | 19nm,0.3s,SNR=49 | | | | | | |
| EGRO | | | | Sn | **Sn** | **14 51 55.5** | **-1.3** |
| | 14nm,0.6s,SNR=5.0 | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.80** | **301** | *ePn* | **Pn** | **14 51 16.2** | **+1.4** |
| PVAQ | | | | *eSn* | **Sn** | **14 51 58.5** | **-0.7** |
| PVAQ | | | | A | A | 14 52 04.0 | |
| | 18nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.80** | **301** | P | **Pn** | **14 51 16.2** | **+1.4** |
| **PVAQ** | **Vaqueiros** | **3.80** | **301** | P | **Pn** | **14 51 16.2** | **+1.4** |
| **PBDV** | **Barranco-do-Ve** | **3.88** | **298** | *ePn* | **Pn** | **14 51 17.3** | **+1.4** |
| PBDV | | | | *eSn* | **Sn** | **14 52 00.8** | **-0.4** |
| PBDV | | | | A | A | 14 52 12.6 | |
| | 12nm,0.7s | | | | | | |
| **FIGM** | **Figuig** | **3.91** | **149** | P | **Pn** | **14 51 18.3** | **+1.9** |
| **PAB** | **San Pablo** | **4.06** | **352** | Pn | **Pn** | **14 51 20.6** | **+2.1** |
| | 16nm,0.3s,SNR=7.9 | | | | | | |
| PAB | | | | Sn | **Sn** | **14 52 04.9** | **-0.8** |
| | 7.6nm,0.6s,SNR=7.9 | | | | | | |
| PAB | | | | Lg | Lg | 14 52 27.2 | |
| | 4.9nm,0.7s,SNR=7.9 | | | | | | |
| **PCVE** | **Castro Verde** | **4.13** | **302** | *ePn* | **Pn** | **14 51 20.8** | **+1.4** |
| PCVE | | | | A | A | 14 52 14.5 | |
| | 16nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.16** | **356** | Pn | **Pn** | **14 51 22.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MVO** | **Moncorvo** | **6.24** | **336** | *e*Pn | | **Pn** | **14 51 51.6** | **+3.2** |
| MVO | | | | *e*Sn | | **Sn** | **14 52 57.9** | **-1.5** |
| MVO | | | | A | | A | 14 53 02.5 | |
| | comp=N,6.4nm,0.8s | | | | | | | |
| **MVO** | **Moncorvo** | **6.24** | **336** | Pn | | **Pn** | **14 51 50.0** | **+1.6** |
| | comp=N,10nm,0.4s,SNR=6.9 | | | | | | | |
| MVO | | | | Pg | | Pb | 14 52 10.8 | +5.6 |
| | comp=N,4.7nm,0.3s,SNR=6.6 | | | | | | | |
| MVO | | | | Sn | | **Sn** | **14 52 56.7** | **-2.8** |
| | comp=N,4.8nm,0.8s,SNR=7.9 | | | | | | | |
| MVO | | | | Lg | | Lg | 14 53 36.0 | |
| | comp=N,26nm,1.4s,SNR=7.9 | | | | | | | |
| **ERTA** | **Horta de San J** | **6.25** | **29** | Pn | | **Pn** | **14 51 51.0** | **+2.5** |
| | comp=N,1.0nm,0.3s,SNR=7.9 | | | | | | | |
| **PVRL** | **Vila Real** | **6.58** | **332** | *e*Pn | | **Pn** | **14 51 55.5** | **+2.4** |
| **ETOS** | **Mallorca** | **6.63** | **48** | Pn | | **Pn** | **14 51 56.5** | **+2.8** |
| | comp=N,19nm,1.0s,SNR=5.8 | | | | | | | |
| ETOS | | | | Sn | | **Sn** | **14 53 07.8** | **-1.3** |
| | comp=N,4.7nm,1.1s,SNR=7.9 | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.70** | **332** | *e*Pn | | **Pn** | **14 51 57.5** | **+2.8** |
| POLO | | | | *e*Sn | | **Sn** | **14 53 09.7** | **-1.1** |
| POLO | | | | A | | A | 14 53 14.8 | |
| | comp=N,2.0nm,1.1s | | | | | | | |
| **PBRG** | **Braganca** | **6.73** | **340** | *e*Pn | | **Pn** | **14 51 57.7** | **+2.6** |
| **PCAB** | **Cabril** | **7.08** | **332** | *e*Pn | | **Pn** | **14 52 02.7** | **+2.8** |
| **ELOB** | **Lobios** | **7.22** | **333** | Pn | | **Pn** | **14 52 03.1** | **+1.2** |
| | comp=N,0.4nm,0.4s,SNR=4.9 | | | | | | | |
| ELOB | | | | Sn | | **Sn** | **14 53 19.6** | **-4.1** |
| | comp=N,2.3nm,0.3s,SNR=5.7 | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.39** | **332** | *e*Pn | | **Pn** | **14 52 07.4** | **+3.2** |
| **ELAN** | **Lanestosa** | **7.70** | **1** | Pn | | **Pn** | **14 52 10.6** | **+2.1** |
| | comp=N,0.8nm,0.6s,SNR=7.9 | | | | | | | |
| ELAN | | | | Sn | | **Sn** | **14 53 33.1** | **-2.3** |
| | comp=N,9.2nm,1.1s,SNR=7.9 | | | | | | | |
| **ETSF** | **Etsaut** | **7.74** | **17** | *e*Pn | | **Pn** | **14 52 13.7** | **+4.7** |
| ETSF | | | | *e*Sn | | **Sn** | **14 53 31.3** | **-5.1** |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **CSOR** | **Sort** | **7.78** | **27** | Pn | | **Pn** | **14 52 11.5** | **+1.9** |
| | comp=N,0.7nm,0.6s,SNR=7.9 | | | | | | | |
| **SJPF** | **Ste Jean** | **7.81** | **13** | *e*Pn | | **Pn** | **14 52 14.5** | **+4.7** |
| SJPF | | | | *e*Sn | | **Sn** | **14 53 35.4** | **-2.5** |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **EALK** | **Alkurruntz** | **7.86** | **11** | Pn | | **Pn** | **14 52 11.8** | **+1.2** |
| | comp=N,2.1nm,0.8s,SNR=4.7 | | | | | | | |
| EALK | | | | Sn | | **Sn** | **14 53 36.4** | **-2.9** |
| | comp=N,17nm,1.5s,SNR=7.9 | | | | | | | |
| **EARI** | **Arriondas** | **7.87** | **351** | Pn | | **Pn** | **14 52 12.3** | **+1.6** |
| | comp=N,0.5nm,0.5s,SNR=7.9 | | | | | | | |
| **EPF** | **Esparros** | **8.10** | **21** | *e*Sn | | **Sn** | **14 53 40.2** | **-5.1** |
| | comp=N,0.5nm,0.2s | | | | | | | |

**ANF 01 14:57:31.8±2.3, 41°21N×126°92W, h0km, ML3.5/4, Error ellipse: s-maj=25.8km s-min=13.2km az=34.0, Off coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **L02E** | **Cave Junction** | **2.66** | **68** | P | Pn | 14 58 15.4 | -0.5 |
| | baz=250,SNR=12 | | | | | | |
| L02E | | | | S | Sn | 14 58 50.2 | +1.2 |
| | baz=250 | | | | | | |
| **K02D** | **Willamette Mer** | **2.85** | **57** | P | Pn | 14 58 18.0 | -0.6 |
| | baz=240,SNR=16 | | | | | | |
| **M02C** | **Callahan** | **3.07** | **85** | P | Pn | 14 58 21.2 | -0.4 |
| | baz=268,SNR=17 | | | | | | |
| M02C | | | | S | Sn | 14 58 59.5 | +0.4 |
| | baz=268 | | | | | | |
| **N02D** | **Trinity Center** | **3.20** | **93** | P | Pn | 14 58 22.8 | -0.5 |
| | baz=276,SNR=5.3 | | | | | | |
| N02D | | | | S | Sn | 14 59 03.3 | +1.1 |
| | baz=276 | | | | | | |
| **L04D** | **Klamath Falls** | **3.60** | **72** | P | Pn | 14 58 30.0 | +1.1 |
| | baz=255,SNR=10 | | | | | | |
| **I03D** | **Drain, OR** | **3.63** | **46** | P | Pn | 14 58 29.0 | -0.2 |
| | baz=228,SNR=5.5 | | | | | | |
| **M04C** | **Macdoel** | **3.86** | **80** | P | Pn | 14 58 33.1 | +0.6 |
| | baz=263,SNR=7.2 | | | | | | |
| **J04D** | **Umpqua Nationa** | **4.11** | **59** | P | Pn | 14 58 36.7 | +0.7 |
| | baz=242 | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.71** | **62** | P | Pn | 14 58 44.4 | +0.2 |
| | baz=246,SNR=6.4 | | | | | | |

**IDC 01 15:02:11.5±446.0, 59°20N×30°53E, h0km, Error ellipse: s-maj=156.7km s-min=50.9km az=155.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **4.35** | **122** | *i* | | 15 30 00.0 | |
| | baz=303,slow=301,SNR=5.4 | | | | | | |
| **I37NO** | **I37NO** | **11.16** | **337** | *i* | | 16 10 50.0 | |
| | baz=147,slow=319,SNR=0.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **18.02** | **107** | *i* | | 16 55 40.0 | |
| | baz=314,slow=312,SNR=0.4 | | | | | | |

*DMN **01** 15:15:43.4±6.1, 38°12N×69°46E, h10km, Mb3.8/6, Error ellipse: s-maj=185.5km s-min=31.6km az=96.0*
*NNC **01** 15:16:25.8±8.6, 37°87N×71°86E, h0km, mb3.6, mpv3.1, Error ellipse: s-maj=67.7km s-min=51.5km az=173.0*
**ISC 01 15:16:17.7±2.1, 37°1N±0°1×71°8E±0°2, h100km, n9, σ1s59/11, 2C-2D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **5.87** | **20** | ⇓P | Pn | **15 17 44.5** | **+2.1** |
| | 4.8nm,1.3s | | | | | | |
| AAK | | | | ⇑S | Sn | **15 18 47.2** | **-1.1** |
| | 6.3nm,1.1s | | | | | | |
| **KK09** | **Karatay Array** | **6.06** | **351** | ⇑Pn | Pn | **15 17 46.6** | **+1.8** |
| | 0.9nm,0.4s,baz=167,slow=12 | | | | | | |
| KK09 | | | | ⇓Sn | Sn | **15 18 49.7** | **-3.0** |
| | 6.4nm,0.5s,baz=165,slow=23 | | | | | | |
| **PYUN** | **Piuthan** | **13.04** | **130** | *e*P | Pn | **15 19 18.8** | **-0.6** |
| | 3.3nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **13.34** | **128** | *e*P | Pn | **15 19 23.0** | **-0.4** |
| | 4.3nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.14** | **126** | *e*P | Pn | **15 19 32.6** | **-1.0** |
| | 4.0nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **14.70** | **125** | *e*P | Pn | **15 19 40.3** | **-0.6** |
| **PKIN** | **Phulchoki** | **14.92** | **126** | *e*P | Pn | **15 19 43.4** | **-0.3** |
| | 5.2nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.94** | **126** | *e*P | Pn | **15 19 43.4** | **-0.5** |
| | 4.4nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **15.39** | **124** | *e*P | Pn | **15 19 49.4** | **-0.3** |
| | 8.6nm,0.3s | | | | | | |

**NNC 01 15:16:30.9±2.0, 42°41N×75°04E, h0km, mb4.8, mpv2.8, 4D, Error ellipse: s-maj=16.1km s-min=3.6km az=170.0, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **0.46** | **299** | ⇓P | Pg | 15 16 39.9 | +0.1 |
| | 1.1nm,0.8s | | | | | | |
| AAK | | | | ⇓S | Sg | 15 16 46.7 | +0.9 |
| | 2.4nm,1.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.65** | **39** | ⇓P | Pg | 15 16 43.6 | +0.1 |
| | 5.1nm,1.4s | | | | | | |
| TKM2 | | | | ⇓S | Sg | 15 16 53.0 | +1.0 |
| | 0.9nm,0.7s | | | | | | |
| **SATY** | **Saty** | **2.56** | **74** | Pg | Pg | 15 17 22.1 | +2.0 |
| | 0.8nm,0.1s | | | | | | |
| SATY | | | | Lg | Lg | 15 17 49.8 | |
| | 5.3nm,0.3s | | | | | | |
| **IUG** | **Iuzhnay** | **3.73** | **268** | Pg | Pb | 15 17 36.6 | -1.0 |
| | 33nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 15 18 30.7 | |
| | 43nm,0.4s | | | | | | |

**SOME 01 15:16:43.8, 42°32N×81°00E, h5km, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UZB** | **Uzynbulak** | **1.68** | **300** | *e*P | Pb | 15 17 15.5 | +0.3 |
| | 2.3nm,0.4s | | | | | | |
| UZB | | | | *e*S | Sg | 15 17 38.0 | +0.3 |
| | 4.6nm,0.3s | | | | | | |
| **SATY** | **Saty** | **2.05** | **292** | *e*P | Pb | 15 17 21.2 | -0.4 |
| | 1.5nm,0.3s | | | | | | |
| SATY | | | | *e*S | Sb | 15 17 48.4 | +0.9 |
| | 5.3nm,0.3s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **2.20** | **337** | *e*P | | Pb | 15 17 24.7 | +0.6 |
| | 0.3nm,0.2s | | | | | | | |
| DJR | | | | *e*S | | Sg | 15 17 53.9 | -0.6 |
| | 2.3nm,0.6s | | | | | | | |
| **BLB** | **Baldybastay** | **2.56** | **315** | *e*P | | Pb | 15 17 30.5 | +0.2 |
| | 2.0nm,0.2s | | | | | | | |
| BLB | | | | *e*S | | Sb | 15 18 04.0 | +1.9 |
| | 6.1nm,0.2s | | | | | | | |
| **BLB** | **Baldybastay** | **2.56** | **315** | Pg | | Pb | 15 17 30.5 | +0.2 |
| | 2.0nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 15 18 04.0 | |
| | 6.1nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.00** | **289** | *e*P | | Pb | 15 17 39.0 | +1.2 |
| | 1.2nm,0.3s | | | | | | | |
| KOTS | | | | *e*S | | Sg | 15 18 19.2 | -1.2 |
| | 8.7nm,0.4s | | | | | | | |

*EAF **01** 15:22:52.2±1.1, 25°98S×29°12E, h6km±16km, MD3.4*
**BUL 01 15:22:52.6±1.0, 25°91S×29°05E, h0km±12km, MD3.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **3.20** | **42** | *e*P | Pn | 15 23 42.0 | -2.2 |
| MOPA | | | | *e*S | Sn | 15 24 19.9 | -3.2 |
| **MOPA** | **Mopani** | **3.20** | **42** | *e*P | Pn | 15 23 42.0 | -2.2 |
| MOPA | | | | *e*S | Sn | 15 24 19.9 | -3.2 |
| **LBTB** | **Lobatse** | **3.25** | **285** | *e*P | Pn | 15 23 44.7 | -0.2 |
| LBTB | | | | *e*S | Sn | 15 24 22.3 | -2.0 |
| **LBTB** | **Lobatse** | **3.25** | **285** | *e*P | Pn | 15 23 44.7 | -0.2 |
| LBTB | | | | *e*S | Sn | 15 24 22.3 | -2.0 |
| **MSNA** | **Messina** | **3.66** | **14** | *e*P | Pn | 15 23 49.7 | -0.8 |
| MSNA | | | | *e*S | Sn | 15 24 32.5 | -2.0 |
| **MSNA** | **Messina** | **3.66** | **14** | *e*P | Pn | 15 23 49.7 | -0.8 |
| MSNA | | | | *e*S | Sn | 15 24 32.5 | -2.0 |
| **MATP** | **Matopo** | **5.48** | **355** | *e*P | Pn | 15 24 15.2 | -0.5 |
| MATP | | | | *e*S | Sn | 15 25 14.3 | -5.3 |
| **MATP** | **Matopo** | **5.48** | **355** | *e*P | Pn | 15 24 15.2 | -0.5 |
| MATP | | | | *e*S | Sn | 15 25 14.3 | -5.3 |
| **BLWY** | **Bulawayo** | **5.76** | **356** | *e*P | Pn | 15 24 18.3 | -1.2 |
| BLWY | | | | *e*S | Sn | 15 25 21.1 | -5.3 |
| **BLWY** | **Bulawayo** | **5.76** | **356** | *e*P | Pn | 15 24 18.3 | -1.2 |
| BLWY | | | | *e*S | Sn | 15 25 21.1 | -5.3 |

*CNRM **01** 15:44:42.4, 35°55N×3°84W, h23km, ml3.0*
*INMG **01** 15:44:43.2±1.1, 35°49N×3°82W, h0km, ML2.3, Error ellipse: s-maj=2.4km s-min=2.1km az=15.0*
*SFS **01** 15:44:43.0, 35°50N×3°80W, ML2.8, ALBORAN SUR*
**ISC 01 15:44:42.6±1.1, 35°53N±0°03×3°76W±0°03, h17km±8km, n30, σ1s59/51, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.35** | **205** | P | **Pg** | **15 44 49.5** | **-0.4** |
| PALE | | | | S | **Sg** | **15 44 53.9** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.70** | **116** | P | **Pg** | **15 44 56.6** | **+0.2** |
| GOG | | | | S | **Sb** | **15 45 06.7** | **+0.9** |
| **GOG** | **Mont Gurugu** | **0.70** | **116** | P | **Pg** | **15 44 56.3** | **-0.1** |
| **CHAS** | **Isla Isabel II** | **1.14** | **107** | P | **Pn** | **15 45 03.1** | **-0.7** |
| CHAS | | | | S | **Sb** | **15 45 17.7** | **-0.8** |
| **SMIR** | **Smir Dam** | **1.33** | **277** | P | **Pn** | **15 45 04.4** | **-2.0** |
| SMIR | | | | S | **Sn** | **15 45 22.4** | **-1.3** |
| **CHEFC** | **Chefchaouen** | **1.36** | **252** | P | **Pn** | **15 45 08.0** | **+1.0** |
| **CHEFC** | **Chefchaouen** | **1.36** | **252** | P | **Pg** | **15 45 11.0** | **+2.1** |
| **CEU** | **Ceuta** | **1.36** | **286** | P | **Pn** | **15 45 04.5** | **-2.4** |
| CEU | | | | S | **Sn** | **15 45 18.1** | **-6.4** |
| **JBK** | **JBK** | **1.55** | **140** | P | **Pn** | **15 45 10.1** | **+0.5** |
| JBK | | | | S | **Sn** | **15 45 28.5** | **-0.9** |
| **JBK** | **JBK** | **1.55** | **140** | P | **Pn** | **15 45 10.0** | **+0.3** |
| **LIJA** | **Lijar** | **1.91** | **316** | P | **Pb** | **15 45 17.2** | **+0.2** |
| LIJA | | | | S | **Sn** | **15 45 38.0** | **-0.2** |
| **LCRM** | **LCR** | **2.05** | **206** | P | **Pg** | **15 45 22.0** | **-0.1** |
| **LCRM** | **LCR** | **2.05** | **206** | P | **Pg** | **15 45 22.0** | **-0.1** |
| **IFR** | **Ifrane** | **2.31** | **210** | P | **Pn** | **15 45 22.1** | **+2.1** |
| IFR | | | | S | **Sn** | **15 45 45.8** | **-2.4** |
| **MD31** | **MD31** | **2.79** | **198** | P | **Pn** | **15 45 27.3** | **+0.7** |
| MD31 | | | | S | **Sn** | **15 45 58.5** | **-1.4** |
| **MDT** | **Midelt** | **2.80** | **195** | P | **Pn** | **15 45 27.8** | **+1.0** |
| MDT | | | | S | **Sn** | **15 46 01.9** | **+1.6** |
| **TDRA** | **Tendrara** | **2.87** | **150** | P | **Pn** | **15 45 28.5** | **+0.7** |
| TDRA | | | | S | **Sn** | **15 46 02.3** | **+0.1** |
| **CART** | **Cartagena** | **3.02** | **47** | P | **Pn** | **15 45 30.8** | **+1.1** |
| CART | | | | S | **Sn** | **15 46 03.7** | **-1.8** |
| **ZHG** | **ZHG** | **3.16** | **230** | P | **Pn** | **15 45 32.7** | **+0.9** |
| ZHG | | | | S | **Sn** | **15 46 06.9** | **-2.2** |
| **PVAQ** | **Vaqueiros** | **3.69** | **301** | *e*Pn | **Pn** | **15 45 39.5** | **+0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **15 46 21.6** | **-0.5** |
| PVAQ | | | | A | A | 15 46 26.8 | |
| | 5.4nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **301** | P | **Pn** | **15 45 39.4** | **+0.5** |
| PVAQ | | | | S | **Sn** | **15 46 18.6** | **-3.5** |
| **PVAQ** | **Vaqueiros** | **3.69** | **301** | P | **Pn** | **15 45 39.4** | **+0.5** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **298** | *e*Pn | **Pn** | **15 45 40.7** | **+0.6** |
| PBDV | | | | *e*Sn | **Sn** | **15 46 23.9** | **-0.2** |
| PBDV | | | | A | A | 15 46 30.9 | |
| | 5.3nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | **Pn** | **15 45 45.4** | **+1.8** |
| PCVE | | | | *e*Sn | **Sn** | **15 46 30.7** | **+0.3** |
| PCVE | | | | A | A | 15 46 33.4 | |
| | 3.9nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*Pn | **Pn** | **15 45 48.2** | **+1.5** |
| MESJ | | | | *e*Sn | **Sn** | **15 46 35.3** | **-0.7** |
| MESJ | | | | A | A | 15 46 41.9 | |
| | 4.6nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **296** | *e*Sn | **Sn** | **15 46 37.8** | **+0.1** |
| MORF | | | | A | A | 15 46 47.3 | |
| | 2.9nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.39** | **293** | *e*Pn | **Pn** | **15 45 50.4** | **+1.9** |
| PFVI | | | | *e*Sn | **Sn** | **15 46 39.4** | **+0.1** |
| **PTEO** | **Sao Teotonio** | **4.47** | **298** | *e*Pn | **Pn** | **15 45 51.0** | **+1.4** |
| PTEO | | | | *e*Sn | **Sn** | **15 46 42.3** | **+1.0** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **305** | *e*Pn | **Pn** | **15 45 52.7** | **+1.2** |
| PNCL | | | | *e*Sn | **Sn** | **15 46 44.4** | **-0.3** |
| PNCL | | | | A | A | 15 46 49.0 | |
| | 2.4nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **316** | *e*Pn | **Pn** | **15 45 58.7** | **+1.6** |

*KRNET **01** 15:50:20.2±0.1, 42°95N×80°63E, mb3.5*
*SOME **01** 15:50:21.5, 42°88N×80°48E, h10km*
*NNC **01** 15:50:21.4±0.6, 42°85N×80°54E, h0km, mb4.1, mpv4.0, Error ellipse: s-maj=4.0km s-min=3.1km az=150.0*
**ISC 01 15:50:22.3±1.4, 42°90N±0°04×80°48E±0°06, h10km, n57, σ1s57/89, 24C-8D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **0.56** | **350** | *e*P | **Pb** | **15 50 34.1** | **-0.2** |
| | 236nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **15 50 43.1** | **+0.7** |
| | 1µm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **0.56** | **350** | P | **Pb** | **15 50 34.1** | **-0.2** |
| | 236nm,0.2s | | | | | | |
| KTMS | | | | S | **Sb** | **15 50 43.1** | **+0.7** |
| | 1µm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **0.84** | **301** | ⇑P | **Pb** | **15 50 39.1** | **-0.1** |
| | 41nm,0.3s | | | | | | |
| PDGK | | | | ⇑S | **Sn** | **15 50 52.0** | **-1.0** |
| | 331nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.10** | **284** | *e*P | **Pn** | **15 50 43.5** | **-0.5** |
| | 167nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sn** | **15 50 59.3** | **0.0** |
| | 755nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.10** | **284** | P | **Pn** | **15 50 43.5** | **-0.5** |
| | 167nm,0.2s | | | | | | |
| UZB | | | | S | **Sn** | **15 50 59.3** | **0.0** |
| | 755nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **1.52** | **341** | *e*P | **Pg** | **15 50 50.6** | **-0.9** |
| | 56nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | **15 51 11.6** | **+0.4** |
| | 548nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **1.52** | **341** | P | **Pg** | **15 50 50.6** | **-0.9** |
| | 56nm,0.1s | | | | | | |
| DJR | | | | S | **Sg** | **15 51 11.6** | **+0.4** |
| | 548nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **1.52** | **281** | *e*P | **Pb** | **15 50 50.5** | **-0.3** |
| | 542nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **15 51 12.0** | **+0.7** |
| | 2µm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.52** | **281** | P | **Pb** | **15 50 50.5** | **-0.3** |
| | 542nm,0.2s | | | | | | |
| ZHN | | | | S | **Sg** | **15 51 12.0** | **+0.7** |
| | 2µm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.53** | **277** | *e*P | **Pb** | **15 50 50.5** | **-0.4** |
| | 136nm,0.4s | | | | | | |
| SATY | | | | *e*S | **Sg** | **15 51 11.9** | **+0.4** |
| | 1µm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.53** | **277** | P | **Pb** | **15 50 50.5** | **-0.4** |
| | 136nm,0.4s | | | | | | |
| SATY | | | | S | **Sg** | **15 51 11.9** | **+0.4** |
| | 1µm,0.2s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.59** | **256** | ⇑iP | **Pg** | **15 50 51.7** | **-1.1** |
| | baz=55 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sg** | **15 51 14.5** | **+1.1** |
| | baz=55 | | | | | | |
| **KURS** | **Kuram** | **1.79** | **290** | *e*P | **Pb** | **15 50 55.2** | **0.0** |
| | 33nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sg** | **15 51 19.7** | **-0.1** |
| | 184nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **1.89** | **310** | *e*P | **Pb** | **15 50 56.6** | **-0.3** |
| | 64nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sg** | **15 51 22.3** | **-0.7** |
| | 477nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **1.89** | **310** | Pg | **Pb** | **15 50 56.6** | **-0.3** |
| | 64nm,0.1s | | | | | | |
| BLB | | | | Lg | Lg | 15 51 22.3 | |
| | 477nm,0.2s | | | | | | |
| **ANVS** | **Anan'yevo** | **2.07** | **268** | ⇑eP | **Pb** | **15 50 58.8** | **-1.3** |
| | baz=67 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sb** | **15 51 27.4** | **+1.4** |
| | baz=67 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.30** | **240** | ⇑iP | **Pb** | **15 51 02.5** | **-1.7** |
| | baz=41 | | | | | | |
| TARG | | | | ⇑*i*S | **Sb** | **15 51 33.1** | **+0.3** |
| | baz=41 | | | | | | |
| **ARXS** | **Arharly** | **2.33** | **305** | *e*P | **Pb** | **15 51 04.5** | **0.0** |
| | 13nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **15 51 35.2** | **+1.8** |
| | 138nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.49** | **279** | *e*P | **Pb** | **15 51 07.8** | **+0.6** |
| | 25nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **15 51 41.1** | **-1.3** |
| | 402nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.49** | **279** | Pg | **Pb** | **15 51 07.8** | **+0.6** |
| | 25nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 15 51 41.1 | |
| | 402nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.52** | **342** | *e*P | **Pb** | **15 51 07.1** | **-0.6** |
| | 12nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sb** | **15 51 39.9** | **+1.1** |
| | 150nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.52** | **342** | Pg | **Pb** | **15 51 07.1** | **-0.6** |
| | 12nm,0.2s | | | | | | |
| KAPS | | | | Lg | Lg | 15 51 39.9 | |
| | 150nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **2.53** | **277** | *e*P | **Pb** | **15 51 08.6** | **+0.7** |
| | 12nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **15 51 42.4** | **-1.2** |
| | 142nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **2.53** | **277** | Pg | **Pb** | **15 51 08.6** | **+0.7** |
| | 12nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 15 51 42.4 | |
| | 142nm,0.5s | | | | | | |
| **KDJ** | **Kajisay** | **2.56** | **254** | ⇑iP | **Pn** | **15 51 05.3** | **+1.3** |
| | baz=53 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sb** | **15 51 38.4** | **-1.5** |
| | baz=53 | | | | | | |
| **TDK** | **Taldyqorghan** | **2.58** | **325** | *e*P | **Pb** | **15 51 08.7** | **0.0** |
| | 14nm,0.1s | | | | | | |
| TDK | | | | *e*S | **Sb** | **15 51 42.6** | **+2.0** |
| | 82nm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **2.58** | **325** | Pg | **Pb** | **15 51 08.7** | **0.0** |
| | 14nm,0.1s | | | | | | |
| TDK | | | | Lg | Lg | 15 51 42.6 | |
| | 82nm,0.4s | | | | | | |
| **KNDC** | **Almaty** | **2.59** | **278** | ⇑Pg | **Pb** | **15 51 08.0** | **-1.0** |
| | 40nm,0.5s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 15 51 45.1 | |
| | 110nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.60** | **274** | *e*P | **Pb** | **15 51 09.8** | **+0.6** |
| | 20nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **15 51 44.5** | **-1.2** |
| | 77nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.60** | **274** | Pg | **Pb** | **15 51 09.8** | **+0.6** |
| | 20nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 15 51 44.5 | |
| | 77nm,0.4s | | | | | | |
| **AAA** | **Alma-Ata** | **2.63** | **278** | *e*P | **Pb** | **15 51 10.0** | **+0.4** |
| | 36nm,0.2s | | | | | | |
| AAA | | | | *e*S | **Sg** | **15 51 45.0** | **-1.8** |
| | 185nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **2.63** | **278** | Pg | **Pb** | **15 51 10.0** | **+0.4** |
| | 36nm,0.2s | | | | | | |
| AAA | | | | Lg | Lg | 15 51 45.0 | |
| | 185nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **2.89** | **288** | *e*P | **Pb** | **15 51 14.5** | **+0.6** |
| | 16nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **15 51 52.2** | **+2.8** |
| | 130nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **2.89** | **288** | Pg | **Pb** | **15 51 14.5** | **+0.6** |
| | 16nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 15 51 52.2 | |
| | 130nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.98** | **276** | *e*P | **Pb** | **15 51 15.9** | **+0.4** |
| | 10nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **15 51 55.1** | **+3.1** |
| | 107nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.98** | **276** | Pg | **Pb** | **15 51 15.9** | **+0.4** |
| | 10nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 15 51 55.1 | |
| | 107nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.18** | **290** | *e*P | **Pb** | **15 51 19.0** | **+0.2** |
| | 15nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sb** | **15 52 00.1** | **+2.5** |
| | 94nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.18** | **290** | Pg | **Pb** | **15 51 19.0** | **+0.2** |
| | 15nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 15 52 00.1 | |
| | 94nm,0.4s | | | | | | |
| **ULHL** | **Ulahol** | **3.20** | **260** | ⇑iP | **Pn** | **15 51 14.7** | **+1.9** |
| | baz=59 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sn** | **15 51 54.5** | **+3.4** |
| | baz=59 | | | | | | |
| **KST** | **Kastek** | **3.32** | **274** | *e*P | **Pb** | **15 51 22.9** | **+1.5** |
| | 28nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sg** | **15 52 06.9** | **-2.0** |
| | 75nm,0.4s | | | | | | |
| **KST** | **Kastek** | **3.32** | **274** | Pg | **Pb** | **15 51 22.9** | **+1.5** |
| | 28nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 15 52 06.9 | |
| | 75nm,0.4s | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.37** | **265** | ⇑iP | **Pn** | **15 51 17.0** | **+1.8** |
| | baz=64 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **15 51 58.6** | **+3.3** |
| | baz=64 | | | | | | |
| **DGS** | **Degeres** | **3.47** | **277** | *e*P | **Pb** | **15 51 25.0** | **+1.2** |
| | 18nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sg** | **15 52 10.6** | **-3.0** |
| | 99nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **3.47** | **277** | Pg | **Pb** | **15 51 25.0** | **+1.2** |
| | 18nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 15 52 10.6 | |
| | 99nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.59** | **272** | ⇑Pn | **Pn** | **15 51 19.9** | **+1.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.41** | **269** | ⇓Pg | | **Pg** | **15 51 44.2** | **-2.7** |
| | 4.5nm,0.6s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 15 52 44.5 | |
| | 15nm,0.5s | | | | | | | |
| **BTLS** | **Baital** | **5.11** | **297** | *eP* | | **Pg** | **15 51 56.4** | **-3.9** |
| BTLS | | | | *eS* | | **Sg** | **15 53 04.0** | **-2.4** |
| **BTLS** | **Baital** | **5.11** | **297** | Pg | | **Pg** | **15 51 56.4** | **-3.9** |
| BTLS | | | | Lg | | Lg | 15 53 04.0 | |
| **KK09** | **Karatay Array** | **7.32** | **275** | ⇑Pg | | **Pg** | **15 52 37.7** | **-4.7** |
| | 1.4nm,0.6s | | | | | | | |
| KK09 | | | | ⇑Lg | | Lg | 15 54 16.5 | |
| | 5.1nm,0.5s | | | | | | | |
| **OTUK** | **Ortayu** | **7.82** | **316** | ⇑Lg | | Lg | 15 54 32.0 | |
| | 10nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.84** | **351** | ⇑Lg | | Lg | 15 54 32.9 | |
| | 19nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **7.92** | **351** | ⇓Lg | | Lg | 15 54 33.1 | |
| | 15nm,0.9s | | | | | | | |

**WEL 01 15:53:09.4,46˚S±16˚×16˚7E±1˚,h15km±17km,M3.1/10, mB4.4/1,ML3.5/21,MLv3.1/10,Mw(mB)3.5/1,Error ellipse: s-maj=0.0km s-min=0.0km az=55.1,Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DCZ** | **Deep Cove** | **0.19** | **61** | P | Pb | 15 53 15.0 | +0.5 |
| **PYZ** | **Puysegur Point** | **0.64** | **195** | P | Pg | 15 53 21.5 | -0.4 |
| **WHZ** | **Wether Hill Ro** | **0.79** | **116** | P | Pn | 15 53 26.4 | +0.3 |
| **MLZ** | **Mavora Lakes** | **0.86** | **78** | P | Pg | 15 53 27.6 | +0.4 |
| **MSZ** | **Milford Sound** | **1.13** | **39** | P | Pb | 15 53 27.5 | -3.1 |
| **APZ** | **The Paps** | **1.48** | **150** | P | Pg | 15 53 37.3 | -0.6 |
| **WKZ** | **Wanaka** | **1.65** | **65** | P | Pn | 15 53 38.6 | +0.7 |
| **EAZ** | **Earnscleugh** | **1.71** | **80** | P | Pb | 15 53 40.1 | -0.5 |
| **SYZ** | **Scrubby Hill** | **1.83** | **123** | P | Pb | 15 53 42.6 | 0.0 |
| **TUZ** | **Tuapeka** | **1.94** | **103** | P | Pb | 15 53 44.1 | -0.4 |
| **JCZ** | **Jackson Bay** | **1.99** | **43** | P | Pn | 15 53 43.0 | +0.4 |
| **LBZ** | **Lake Benmore** | **2.59** | **64** | P | Pn | 15 53 50.8 | 0.0 |
| **HHSZ** | **Highcliff Hill** | **2.60** | **99** | P | Pn | 15 53 52.8 | +2.0 |
| **ODZ** | **Otahua Downs** | **2.68** | **80** | P | Pn | 15 53 52.4 | +0.5 |
| **FOZ** | **Fox Glacier** | **2.89** | **47** | P | Pn | 15 53 55.4 | +0.6 |
| **TMZ** | **Timaru** | **3.13** | **69** | P | Pn | 15 53 57.6 | -0.6 |
| **ARCZ** | **Arundel** | **3.43** | **64** | P | Pn | 15 54 01.4 | -1.0 |
| **RPZ** | **Rata Peaks** | **3.48** | **60** | P | Pn | 15 54 01.9 | -1.1 |
| **WACZ** | **Wakanui South** | **3.86** | **67** | P | Pn | 15 54 10.0 | +1.9 |
| **OXZ** | **Oxford** | **4.29** | **61** | P | Pn | 15 54 13.4 | -0.7 |
| **MQZ** | **McQueen's Vall** | **4.49** | **68** | P | Pn | 15 54 15.6 | -1.3 |
| **LTZ** | **Lake Taylor** | **4.74** | **56** | P | Pn | 15 54 19.1 | -1.3 |
| **OKCZ** | **Okains Bay** | **4.75** | **69** | P | Pn | 15 54 22.6 | +2.2 |
| **DSZ** | **Denniston Nort** | **5.20** | **45** | P | Pn | 15 54 26.1 | -0.5 |
| **THZ** | **Tophouse** | **5.76** | **51** | P | Pn | 15 54 35.4 | +1.1 |
| **MRNZ** | **Matariki Terra** | **5.94** | **48** | P | Pn | 15 54 37.3 | +0.5 |
| **QRZ** | **Quartz Range** | **6.25** | **43** | P | Pn | 15 54 40.2 | -0.9 |
| **TKNZ** | **Takaka Hill** | **6.31** | **46** | P | Pn | 15 54 42.3 | +0.5 |

**IDC 01 15:53:10.4±4.5,22˚81N×11˚83W,h0km,mb3.5/1, mb1 3.5/2,mb1mx3.2/50,mbtmp3.5/2,ML3.3/1,Error ellipse: s-maj=142.2km s-min=64.6km az=67.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **16.05** | **124** | Pn | Pn | 15 56 57.6 | 0.0 |
| | 0.1nm,0.3s,baz=306,slow=12,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.44** | **45** | P | P | 16 05 02.1 | 0.0 |
| | 0.2nm,0.5s,baz=290,slow=5.6,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **148.55** | **98** | PKPbc | PKPbc | 16 12 59.4 | -0.6 |
| | 0.4nm,1.0s,baz=278,slow=2.8,SNR=4.6 | | | | | | |

*IDC **01** 15:53:28.4±2.8, 10˚62N×126˚93E, h0km, mb3.5/3, mb1 3.6/3, mb1mx3.3/46, mbtmp3.5/3, Error ellipse: s-maj=230.9km s-min=27.3km az=66.0*
*MAN **01** 15:53:31.0, 10˚69N×126˚92E, h34km, mb4.4, ML3.2, MS3.0*
**ISC 01 15:53:33.6±1.4,10˚6N±0˚2×126˚8E±0˚1,h35km,n5, σ0s96/8,mb3.5/3,1C-1D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **1.56** | **238** | ⇓*eP* | **Pn** | **15 53 58.8** | **0.0** |
| SCPH | | | | *eS* | **Sn** | **15 54 19.2** | **+1.4** |
| **MSLP** | **Maasin** | **2.00** | **256** | ⇑*iP* | **Pn** | **15 54 04.9** | **0.0** |
| MSLP | | | | *i* S | **Sn** | **15 54 27.2** | **-1.4** |
| **WRA** | **Warramunga Arr** | **31.26** | **166** | P | **P** | **15 59 49.7** | **-0.6** |
| | 0.4nm,0.9s,baz=348,slow=9.5,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **34.77** | **160** | P | **P** | **16 00 20.8** | **-0.2** |
| | 0.5nm,0.9s,baz=351,slow=7.4,SNR=8.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 02 54.2** | **+0.1** |
| | 0.3nm,0.5s,baz=352,slow=3.0,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.08** | **322** | P | **P** | **16 02 40.7** | **+0.5** |
| | 0.8nm,0.8s,baz=114,slow=7.8,SNR=6.7 | | | | | | |

*KRNET **01** 16:08:42.2±0.1, 42˚96N×80˚61E, mb3.1*
*NNC **01** 16:08:43.0±0.9, 42˚86N×80˚57E, h0km, mb3.5, mpv3.3, Error ellipse: s-maj=5.6km s-min=3.9km az=153.0*
*SOME **01** 16:08:44.4, 42˚93N×80˚47E, h5km*
**ISC 01 16:08:44.0±2.1,42˚94N±0˚06×80˚58E±0˚06,h0km±11km, n46,σ0s73/76,20C-7D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **0.54** | **342** | *eP* | **Pb** | **16 08 56.0** | **-0.4** |
| | 92nm,0.1s | | | | | | |
| KTMS | | | | *eS* | **Sb** | **16 09 04.9** | **+0.1** |
| | 224nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **0.54** | **342** | P | **Pb** | **16 08 56.0** | **-0.4** |
| | 92nm,0.1s | | | | | | |
| KTMS | | | | S | **Sb** | **16 09 04.5** | **-0.2** |
| | 224nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **0.89** | **297** | ⇑P | **Pg** | **16 09 01.1** | **+0.1** |
| | 7.2nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **16 09 14.0** | **+1.4** |
| | 54nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.16** | **281** | *eP* | **Pg** | **16 09 05.9** | **-0.3** |
| | 24nm,0.1s | | | | | | |
| UZB | | | | *eS* | **Sg** | **16 09 21.3** | **0.0** |
| | 227nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.16** | **281** | P | **Pg** | **16 09 05.9** | **-0.3** |
| | 24nm,0.1s | | | | | | |
| UZB | | | | S | **Sg** | **16 09 21.3** | **0.0** |
| | 227nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.51** | **338** | *eP* | **Pb** | **16 09 12.8** | **-0.2** |
| | 8.1nm,0.1s | | | | | | |
| DJR | | | | *eS* | **Sg** | **16 09 33.4** | **+0.9** |
| | 77nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **1.51** | **338** | P | **Pb** | **16 09 12.8** | **-0.2** |
| | 8.1nm,0.1s | | | | | | |
| DJR | | | | S | **Sg** | **16 09 33.4** | **+0.9** |
| | 77nm,0.6s | | | | | | |
| **ZHN** | **Zhinishke** | **1.59** | **279** | *eP* | **Pn** | **16 09 12.5** | **-0.9** |
| | 92nm,0.2s | | | | | | |
| ZHN | | | | *eS* | **Sn** | **16 09 33.3** | **-1.4** |
| | 250nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.59** | **279** | P | **Pn** | **16 09 12.5** | **-0.9** |
| | 92nm,0.2s | | | | | | |
| ZHN | | | | S | **Sn** | **16 09 33.3** | **-1.4** |
| | 250nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.60** | **275** | *eP* | **Pn** | **16 09 13.5** | **-0.1** |
| | 27nm,0.1s | | | | | | |
| SATY | | | | *eS* | **Sn** | **16 09 34.3** | **-0.7** |
| | 141nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.60** | **275** | P | **Pn** | **16 09 13.5** | **-0.1** |
| | 27nm,0.1s | | | | | | |
| SATY | | | | S | **Sn** | **16 09 34.3** | **-0.7** |
| | 141nm,0.1s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.67** | **255** | ⇑*iP* | **Pn** | **16 09 13.8** | **-0.8** |
| | baz=55 | | | | | | |
| PRZ | | | | ⇑*iS* | **Sn** | **16 09 36.6** | **-0.2** |
| | baz=55 | | | | | | |
| **KURS** | **Kuram** | **1.84** | **288** | *eP* | **Pb** | **16 09 18.1** | **-0.5** |
| | 3.7nm,0.5s | | | | | | |
| KURS | | | | *eS* | **Sb** | **16 09 42.4** | **+0.1** |
| | 40nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **1.92** | **308** | *eP* | **Pb** | **16 09 19.2** | **-0.7** |
| | 10nm,0.1s | | | | | | |
| BLB | | | | *eS* | **Sn** | **16 09 44.2** | **+1.2** |
| | 86nm,0.2s | | | | | | |
| **ANVS** | **Anan'yevo** | **2.15** | **267** | ⇑*iP* | **Pn** | **16 09 21.2** | **0.0** |
| | baz=66 | | | | | | |
| ANVS | | | | ⇑*iS* | **Sn** | **16 09 50.1** | **+1.5** |
| | baz=66 | | | | | | |
| **ARXS** | **Arharly** | **2.37** | **304** | *eP* | **Pb** | **16 09 26.9** | **-0.8** |
| | 1.5nm,0.1s | | | | | | |
| ARXS | | | | *eS* | **Sb** | **16 09 57.4** | **-0.1** |
| | 20nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.37** | **304** | Pg | **Pb** | **16 09 26.9** | **-0.8** |
| | 1.5nm,0.1s | | | | | | |
| ARXS | | | | Lg | Lg | 16 09 57.4 | |
| | 20nm,0.3s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.38** | **241** | ⇑*iP* | **Pn** | **16 09 24.7** | **+0.1** |
| | baz=40 | | | | | | |
| TARG | | | | ⇑*iS* | **Sn** | **16 09 56.1** | **+1.4** |
| | baz=40 | | | | | | |
| **KAPS** | **Kapalarasan** | **2.51** | **340** | *eP* | **Pb** | **16 09 29.2** | **-0.7** |
| | 2.8nm,0.3s | | | | | | |
| KAPS | | | | *eS* | **Sb** | **16 10 01.4** | **0.0** |
| | 14nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.51** | **340** | Pg | **Pb** | **16 09 29.2** | **-0.7** |
| | 2.8nm,0.3s | | | | | | |
| KAPS | | | | Lg | Lg | 16 10 01.4 | |
| | 14nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.56** | **278** | *eP* | **Pb** | **16 09 30.1** | **-0.7** |
| | 5.0nm,0.2s | | | | | | |
| KOTS | | | | *eS* | **Sb** | **16 10 02.7** | **-0.2** |
| | 70nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.56** | **278** | Pg | **Pb** | **16 09 30.1** | **-0.7** |
| | 5.0nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 16 10 02.7 | |
| | 70nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **2.60** | **276** | *eP* | **Pb** | **16 09 30.8** | **-0.7** |
| | 1.6nm,0.2s | | | | | | |
| MDOK | | | | *eS* | **Sb** | **16 10 03.9** | **-0.1** |
| | 22nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.60** | **276** | Pg | **Pb** | **16 09 30.8** | **-0.7** |
| | 1.6nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 16 10 03.9 | |
| | 22nm,0.4s | | | | | | |
| **KDJ** | **Kajisay** | **2.64** | **253** | ⇑*iP* | **Pn** | **16 09 28.2** | **+0.3** |
| | baz=53 | | | | | | |
| KDJ | | | | ⇑*iS* | **Sn** | **16 10 01.3** | **+0.6** |
| | baz=53 | | | | | | |
| **KNDC** | **Almaty** | **2.66** | **277** | ⇑Pg | **Pb** | **16 09 31.7** | **-0.8** |
| | 6.9nm,0.3s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 16 10 06.2 | |
| | 25nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.67** | **273** | *eP* | **Pb** | **16 09 31.9** | **-0.9** |
| | 4.7nm,0.2s | | | | | | |
| TNSS | | | | *eS* | **Sb** | **16 10 05.9** | **-0.3** |
| | 15nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.67** | **273** | Pg | **Pb** | **16 09 31.9** | **-0.9** |
| | 4.7nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 16 10 05.9 | |
| | 15nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **2.95** | **287** | *eP* | **Pb** | **16 09 36.3** | **-1.1** |
| | 1.0nm,0.1s | | | | | | |
| KTBS | | | | *eS* | **Sb** | **16 10 13.5** | **-0.4** |
| | 32nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **2.95** | **287** | Pg | **Pb** | **16 09 36.3** | **-1.1** |
| | 1.0nm,0.1s | | | | | | |
| KTBS | | | | Lg | Lg | 16 10 13.5 | |
| | 32nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.23** | **289** | *eP* | **Pb** | **16 09 41.4** | **-0.9** |
| | 1.3nm,0.2s | | | | | | |
| KUU | | | | *eS* | **Sb** | **16 10 22.1** | **-0.1** |
| | 14nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.23** | **289** | Pg | **Pb** | **16 09 41.4** | **-0.9** |
| | 1.3nm,0.2s | | | | | | |
| KUU | | | | Lg | Lg | 16 10 22.1 | |
| | 14nm,0.4s | | | | | | |
| **ULHL** | **Ulahol** | **3.27** | **259** | ⇑*eP* | **Pn** | **16 09 37.0** | **+0.3** |
| | baz=59 | | | | | | |
| ULHL | | | | ⇑*iS* | **Sn** | **16 10 17.2** | **+0.7** |
| | baz=59 | | | | | | |
| **KST** | **Kastek** | **3.39** | **273** | *eP* | **Pb** | **16 09 44.5** | **-0.4** |
| | 4.3nm,0.3s | | | | | | |
| KST | | | | *eS* | **Sb** | **16 10 27.8** | **+1.1** |
| | 11nm,0.3s | | | | | | |
| **KST** | **Kastek** | **3.39** | **273** | Pg | **Pb** | **16 09 44.5** | **-0.4** |
| | 4.3nm,0.3s | | | | | | |
| KST | | | | Lg | Lg | 16 10 27.8 | |
| | 11nm,0.3s | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.45** | **264** | ⇓*iP* | **Pn** | **16 09 39.5** | **+0.4** |
| BOOM | baz=64 | | | ⇓*iS* | **Sn** | **16 10 21.2** | **+0.5** |
| | baz=64 | | | | | | |
| **DGS** | **Degeres** | **3.53** | **277** | *eP* | **Pb** | **16 09 46.9** | **-0.5** |
| | 2.0nm,0.3s | | | | | | |
| DGS | | | | *eS* | **Sb** | **16 10 31.9** | **+1.0** |
| | 21nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.53** | **277** | Pg | **Pb** | **16 09 46.9** | **-0.5** |
| | 2.0nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 16 10 31.9 | |
| | 21nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.66** | **284** | *eP* | **Pb** | **16 09 49.3** | **-0.2** |
| | 2.3nm,0.3s | | | | | | |
| KRBS | | | | *eS* | **Sb** | **16 10 35.7** | **+1.3** |
| | 12nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.66** | **284** | Pg | **Pb** | **16 09 49.3** | **-0.2** |
| | 2.3nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 16 10 35.7 | |
| | 12nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.66** | **271** | ⇓Pg | **Pb** | **16 09 49.1** | **-0.5** |
| | 4.6nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 16 10 38.4 | |
| | 3.8nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.66** | **271** | ⇑*iP* | **Pn** | **16 09 42.5** | **+0.5** |
| | baz=71 | | | | | | |
| TKM2 | | | | ⇑*iS* | **Sn** | **16 10 26.5** | **+0.6** |
| | baz=71 | | | | | | |
| **MAKZ** | **Makanchi** | **4.00** | **14** | ⇑Pn | **Pn** | **16 09 47.1** | **+0.6** |
| | 3.3nm,1.0s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 16 10 52.5 | |
| | 4.5nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **4.05** | **17** | ⇑Pn | **Pn** | **16 09 47.0** | **-0.2** |
| | 0.1nm,0.2s,baz=203,slow=13,SNR=34 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **16 10 34.5** | **-0.8** |
| | 0.1nm,0.2s,baz=200,slow=22,SNR=4.2 | | | | | | |
| MK31 | | | | Lg | Lg | 16 10 53.0 | |
| | 2.0nm,0.6s,baz=194,slow=26,SNR=5.8 | | | | | | |
| **AAK** | **Ala-Archa** | **4.49** | **268** | ⇑Pg | **Pb** | **16 10 03.0** | **-0.7** |
| | 2.1nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 16 11 06.3 | |
| | 3.3nm,0.5s | | | | | | |
| **KK08** | **Karatay Array** | **7.40** | **275** | ⇑Lg | Lg | 16 12 38.0 | |
| | 1.0nm,0.6s | | | | | | |

*NEIC **01** 16:10:49.4±1.4, 1˚37N±0˚06×126˚47E±0˚03, h44km±8km, mb4.4/27, Error ellipse: s-maj=8.6km s-min=4.1km az=174.0*
*IDC **01** 16:10:51.0±3.0, 1˚25N×126˚29E, h61km±28km, mb3.7/14, mb1 3.9/17, mb1mx3.8/33, mbtmp4.0/17, ML3.6/3, MS2.9/4, Ms1 2.9/4, ms1mx2.6/76, Error ellipse: s-maj=25.9km s-min=14.0km az=72.0*
*DJA **01** 16:10:50.3±0.2, 1˚N±2˚×12˚6E±˚, h40km±26km, M4.1/19, mb4.2/14, mB4.9/3, MLv4.0/19, Mw(mB)4.2/3, MwMwp5.3/1, Mwp5.5/1*
**ISC 01 16:10:50.3±0.9,1˚32N±0˚04×126˚43E±0˚04,h55km±9km, n95,σ1s13/104,mb4.3/30,1D,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.09** | **120** | P | **Pn** | **16 11 08.2** | **-1.1** |
| TNTI | | | | S | **Sn** | **16 11 23.2** | **-0.2** |
| **TNTI** | **Ternate** | **1.09** | **120** | Pn | **Pn** | **16 11 08.0** | **-1.3** |
| TNTI | | | | Sn | **Sn** | **16 11 21.4** | **-2.0** |
| **TNTI** | **Ternate** | **1.09** | **120** | P | **Pn** | **16 11 08.4** | **-0.9** |
| **LBMI** | **Labuha** | **2.22** | **151** | P | **Pn** | **16 11 24.7** | **-0.1** |
| LBMI | | | | S | **Sn** | **16 11 53.0** | **+1.9** |
| **SGSI** | **Sangihe** | **2.51** | **339** | P | **Pn** | **16 11 28.6** | **-0.1** |
| SGSI | | | | S | **Sn** | **16 11 58.3** | **+0.1** |
| **KMSI** | **Cibinong** | **2.56** | **253** | P | **Pn** | **16 11 29.5** | **+0.2** |
| KMSI | | | | S | **Sn** | **16 11 59.7** | **+0.4** |
| **SANI** | **Sanana** | **3.38** | **187** | P | **Pn** | **16 11 40.1** | **-0.5** |
| SANI | | | | S | **Sn** | **16 12 18.4** | **-1.1** |
| **SANI** | **Sanana** | **3.38** | **187** | P | **Pn** | **16 11 40.1** | **-0.5** |
| **GTOI** | **Gorontalo** | **3.48** | **259** | P | **Pn** | **16 11 43.0** | **+1.0** |
| GTOI | | | | S | **Sn** | **16 12 21.9** | **-0.2** |
| **MRSI** | **Marisa** | **4.56** | **259** | P | **Pn** | **16 11 57.4** | **+0.6** |
| MRSI | | | | S | **Sn** | **16 12 48.7** | **+0.1** |
| **MSAI** | **Masohi** | **5.27** | **152** | P | **Pn** | **16 12 07.5** | **+1.0** |
| | 0.1nm638nm4.7nm,0.4s | | | | | | |
| **APSI** | **Ampana** | **5.27** | **245** | P | **Pn** | **16 12 06.6** | **+0.1** |
| | 0.3nm968nm62nm,0.5s | | | | | | |
| **AAI** | **Ambon** | **5.28** | **160** | P | **Pn** | **16 12 08.6** | **+1.9** |
| | 0.1nm23nm,0.7s | | | | | | |
| **SWI** | **Sorong** | **5.30** | **114** | P | **Pn** | **16 12 07.3** | **+0.4** |
| | 0.1nm15nm,0.9s | | | | | | |
| **SIJI** | **Sorong** | **5.30** | **114** | P | **Pn** | **16 12 08.7** | **+1.7** |
| | 0.7nm,0.3s,baz=298,slow=3.9,SNR=5.2 | | | | | | |
| SIJI | | | | LR | LR | 16 14 39.2 | |
| | comp=Z,103nm,19.0s,baz=100,slow=42 | | | | | | |
| **TOLI2** | **Tolitoli** | **5.65** | **268** | Pn | **Pn** | **16 12 10.8** | **-1.0** |
| **TOLI2** | **Tolitoli** | **5.65** | **268** | P | **Pn** | **16 12 10.7** | **-1.0** |
| **DAV** | **Davao City (W)** | **5.77** | **352** | Pn | **Pn** | **16 12 11.7** | **-1.7** |
| **KCP** | **Kidapawan** | **5.80** | **347** | ⇓*eP* | **Pn** | **16 12 17.4** | **+3.5** |
| KCP | | | | *eS* | **Sn** | **16 13 19.9** | **+0.7** |
| **MPSI** | **Mapaga** | **6.60** | **262** | P | **Pn** | **16 12 25.8** | **+1.0** |
| | 0.1nm24nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **7.18** | **126** | P | **Pn** | **16 12 32.5** | **-0.3** |
| | 0.1nm13nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **7.18** | **126** | P | **Pn** | **16 12 34.6** | **+1.8** |
| **BBSI** | **Bau Bau** | **7.79** | **210** | P | **Pn** | **16 12 42.1** | **+1.1** |
| | 0.0nm3.3nm,0.6s | | | | | | |
| **TTSI** | **Tana Toraja** | **7.91** | **237** | P | **Pn** | **16 12 42.8** | **+0.2** |
| **SPSI** | **Sidrap Palu** | **8.48** | **232** | P | **Pn** | **16 12 50.2** | **-0.3** |
| | 25nm,0.8s | | | | | | |
| **BNSI** | **Bone** | **8.50** | **228** | P | **Pn** | **16 12 51.4** | **+0.6** |
| | 11µm23nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.79** | **296** | Pn | **Pn** | **16 12 54.4** | **-0.4** |
| **BKSI** | **Bulukumba** | **9.12** | **224** | P | **Pn** | **16 13 01.1** | **+1.7** |
| | 17nm,1.6s | | | | | | |
| **KAPI** | **Kappang** | **9.17** | **227** | P | **Pn** | **16 13 00.2** | **+0.2** |
| | 1.1nm,0.3s,baz=67,slow=13,SNR=1.5 | | | | | | |
| KAPI | | | | LR | LR | 16 16 49.9 | |
| | comp=Z,36nm,20.1s,baz=236,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **9.17** | **227** | Pn | **Pn** | **16 13 00.9** | **+0.9** |
| **SOEI** | **Soe** | **11.21** | **191** | Pn | **Pn** | **16 13 27.0** | **-1.1** |
| **KKM** | **Kota Kinabalu** | **11.22** | **295** | Pn | **Pn** | **16 13 27.0** | **-1.1** |
| **KKM** | **Kota Kinabalu** | **11.22** | **295** | P | **Pn** | **16 13 27.0** | **-1.1** |
| **SBUM** | **Sibu** | **14.24** | **275** | Pn | **Pn** | **16 14 08.3** | **-0.9** |
| **JAY** | **Jayapura** | **14.77** | **105** | LR | LR | 16 19 27.5 | |
| | comp=Z,62nm,20.5s,baz=30,slow=35 | | | | | | |
| **JAY** | **Jayapura** | **14.77** | **105** | P | **Pn** | **16 14 16.8** | **+0.6** |
| **MTN** | **Manton Dam** | **14.83** | **162** | Pn | **Pn** | **16 14 16.3** | **-0.5** |
| **MTN** | **Manton Dam** | **14.83** | **162** | P | **Pn** | **16 14 18.6** | **+1.7** |
| **STKI** | **Sintang** | **15.00** | **265** | P | **Pn** | **16 14 18.3** | **-0.8** |
| **KDU** | **Kakadu** | **15.16** | **157** | P | **Pn** | **16 14 21.7** | **+0.6** |
| **KSM** | **Kuching** | **16.12** | **271** | P | **P** | **16 14 35.9** | **0.0** |
| **KNRA** | **Kununurra** | **17.05** | **172** | | **Pn** | **16 14 45.2** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 16 15 12.8 | |
| | comp=Z,34nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **17.05** | **172** | P | **P** | **16 14 46.7** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **19.32** | **182** | P | **P** | **16 15 09.7** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=336,slow=9.1,SNR=5.7 | | | | | | |
| **WB0** | **Warramunga Arr** | **22.37** | **160** | P | **P** | **16 15 43.4** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 16 15 46.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **COEN** | **Coen** | **22.49** | **133** | P | **P** | **16 15 45.7** | **+0.3** |
| COEN | | | | IAmb | IAmb | 16 16 13.4 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **COEN** | **Coen** | **22.49** | **133** | P | **P** | **16 15 46.5** | **+1.1** |
| **WRAB** | **Tennant Creek** | **22.51** | **160** | P | **P** | **16 15 44.9** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 16 15 47.7 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.51** | **160** | P | **P** | **16 15 45.1** | **-0.5** |
| | comp=Z,7.4nm,0.6s,baz=337,slow=11,SNR=91 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 19 37.6** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=343,slow=2.1,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.51** | **160** | P | **P** | **16 15 44.2** | **-1.4** |
| **WB2** | **Warramunga Arr** | **22.52** | **160** | P | **P** | **16 15 44.8** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 16 15 47.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **22.56** | **346** | P | **P** | **16 15 45.1** | **-1.0** |
| TPUB | | | | IAmb | IAmb | 16 16 01.5 | |
| | comp=Z,67nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **22.56** | **346** | P | **P** | **16 15 46.2** | **+0.1** |
| **WR0** | **Warramunga Arr** | **22.60** | **160** | P | **P** | **16 15 45.8** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 16 15 48.5 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **PMG** | **Port Moresby** | **23.24** | **118** | LR | LR | 16 28 48.3 | |
| | comp=Z,38nm,18.1s,baz=304,slow=46 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **23.65** | **195** | P | **P** | **16 15 56.0** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 16 16 11.2 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **UBPT** | **Khong Chiam** | **24.90** | **305** | P | **P** | **16 16 08.5** | **+0.1** |
| UBPT | | | | IAmb | IAmb | 16 16 35.7 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **QIS** | **Mount Isa** | **25.29** | **150** | P | **P** | **16 16 14.7** | **+2.9** |
| **AS31** | **Alice Springs** | **25.88** | **164** | P | **P** | **16 16 17.4** | **+0.2** |
| **ASAR** | **Alice Springs** | **25.88** | **164** | P | **P** | **16 16 17.2** | **0.0** |
| | comp=Z,1.8nm,0.4s,baz=339,slow=7.6,SNR=50 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 19 46.2** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=349,slow=2.1,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.88** | **164** | P | **P** | **16 16 17.5** | **+0.3** |
| **WRKA** | **Warakurna** | **26.27** | **176** | P | **P** | **16 16 23.1** | **+2.4** |
| **CMAR** | **Chiang Mai Arr** | **31.89** | **304** | P | **P** | **16 17 09.3** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=132,slow=6.7,SNR=2.5 | | | | | | |
| **CHTO** | **Chiang Mai** | **32.06** | **305** | P | **P** | **16 17 12.3** | **+0.1** |
| **COCO** | **West Island** | **32.31** | **245** | P | **P** | **16 17 15.2** | **+0.8** |
| **JTU** | **Tsushima** | **33.15** | **4** | P | **P** | **16 17 19.5** | **-1.9** |
| **PZH** | **PanZhiHua** | **34.49** | **319** | P | **P** | **16 17 35.8** | **+2.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,6.5s | | | | | | |
| **BBOO** | **Buckleboo** | **35.15** | **166** | P | **P** | **16 17 39.4** | **+0.5** |
| **STKA** | **Stephens Creek** | **36.02** | **158** | P | **P** | **16 17 46.8** | **+0.5** |
| | comp=Z,2.5nm,0.8s,baz=338,slow=6.3,SNR=7.7 | | | | | | |
| **STKA** | **Stephens Creek** | **36.02** | **158** | P | **P** | **16 17 46.9** | **+0.5** |
| **XAN** | **Xi'an** | **36.44** | **335** | P | **P** | **16 17 48.3** | **-1.7** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **JMM** | **Marumori** | **38.69** | **18** | P | **P**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GOG | **Mont Gurugu** | **0.70** | **112** | P | **Pb** | **16 31 51.4** | **-0.1** |
| GOG | | | | S | **Sb** | **16 32 00.4** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **1.15** | **105** | P | **Pn** | **16 31 58.4** | **0.0** |
| CHAS | | | | S | **Sb** | **16 32 13.5** | **0.0** |
| **SMIR** | **Smir Dam** | **1.32** | **279** | P | **Pb** | **16 32 00.5** | **-1.4** |
| SMIR | | | | S | **Sn** | **16 32 15.3** | **-2.3** |
| **JBK** | **JBK** | **1.52** | **139** | P | **Pb** | **16 32 05.7** | **+0.1** |
| JBK | | | | S | **Sb** | **16 32 24.3** | **-0.3** |
| **MD31** | **MD31** | **2.73** | **197** | P | **Pn** | **16 32 21.8** | **+1.4** |
| MD31 | | | | S | **Sn** | **16 32 51.1** | **-1.6** |
| **MDT** | **Midelt** | **2.75** | **195** | P | **Pn** | **16 32 22.5** | **+1.9** |
| MDT | | | | S | **Sn** | **16 32 51.4** | **-1.7** |
| **ZHG** | **ZHG** | **3.12** | **230** | P | **Pn** | **16 32 26.9** | **+1.3** |
| ZHG | | | | S | **Sn** | **16 33 02.1** | **0.0** |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | *e*Pn | **Pn** | **16 32 36.2** | **+2.6** |
| PVAQ | | | | *e*Sn | **Sn** | **16 33 17.5** | **+1.0** |
| PVAQ | | | | A | A | 16 33 21.9 | |
| | 1.6nm,0.9s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | P | **Pn** | **16 32 33.8** | **+0.2** |
| PVAQ | | | | S | **Sn** | **16 33 14.8** | **-1.7** |
| **PNCL** | **Nicolau / Gran** | **4.62** | **306** | *e*Pn | **Pn** | **16 32 48.3** | **+2.1** |

*NEIC **01** 16:35:16.3±2.3,25°.4S±0°.1×179°.9E±0°.1,h486km±7km, mb4.5/36,Error ellipse: s-maj=17.0km s-min=14.8km az=82.0*

*IDC **01** 16:35:18.8±1.0,25°.47S×179°.61E,h504km±9km,mb3.6/17, mb1 3.7/19,mb1mx3.6/37,mbtmp4.5/19,Error ellipse: s-maj=12.7km s-min=12.1km az=24.0*

*NOU **01** 16:35:19.0,25°.33S×179°.94E,h565km, mb4.4/15,South of Fiji Islands*

**ISC 01 16:35:17.2±0.4,25°.38S±0°.05×179°.84E±0°.07,h500km, n165,σ1§78/166,mb4.2/32,1D,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **4.34** | **153** | P | **P** | **16 36 41.2** | **+2.9** |
| | 122nm,0.3s,baz=242,slow=1.8,SNR=5.0 | | | | | | |
| **RAO** | **Raoul Island** | **4.34** | **153** | P | **P** | **16 36 38.1** | **-0.2** |
| **MSVF** | **Nonsavu** | **7.79** | **347** | P | **P** | **16 37 13.7** | **+2.1** |
| | 7.9nm,0.3s,baz=277,slow=23,SNR=44 | | | | | | |
| MSVF | | | | S | **S** | **16 38 47.9** | **+2.5** |
| | baz=160,slow=19,SNR=5.5 | | | | | | |
| **MSVF** | **Nonsavu** | **7.79** | **347** | P | **P** | **16 37 11.9** | **+0.3** |
| **MSVF** | **Nonsavu** | **7.79** | **347** | P | **P** | **16 37 13.7** | **+2.1** |
| **TAVE** | **Taveuni** | **8.63** | **2** | P | **P** | **16 37 24.1** | **+3.8** |
| **DGTI** | **Dogotuki** | **9.04** | **359** | P | **P** | **16 37 27.7** | **+3.2** |
| **NIUE** | **Niue** | **11.37** | **59** | P | **P** | **16 37 47.7** | **-1.5** |
| **MARNC** | **Mare, Loyalty** | **11.51** | **287** | P | **P** | **16 37 52.7** | **+2.1** |
| **MARNC** | **Mare, Loyalty** | **11.51** | **287** | P | **P** | **16 37 53.0** | **+2.4** |
| **PINNC** | **Pines Island,** | **11.66** | **281** | P | **P** | **16 37 54.7** | **+2.6** |
| **PINNC** | **Pines Island,** | **11.66** | **281** | P | **P** | **16 37 54.9** | **+2.8** |
| **MXZ** | **Matakaoa Point** | **12.21** | **186** | P | **P** | **16 37 57.8** | **-0.1** |
| **OUENC** | **Ouen Island, N** | **12.25** | **281** | P | **P** | **16 38 00.7** | **+2.3** |
| **OUENC** | **Ouen Island, N** | **12.25** | **281** | P | **P** | **16 38 01.1** | **+2.7** |
| **YATNC** | **Mamie plateau,** | **12.31** | **283** | P | **P** | **16 38 01.9** | **+2.8** |
| **HAZ** | **Te Kaha** | **12.46** | **188** | P | **P** | **16 38 01.8** | **+1.4** |
| **LIFNC** | **LIFOU** | **12.46** | **289** | P | **P** | **16 38 02.0** | **+1.2** |
| **PKGZ** | **Pakihiroa** | **12.56** | **186** | P | **P** | **16 38 02.7** | **+1.1** |
| **ONTNC** | **Ouen Toro** | **12.62** | **281** | P | **P** | **16 38 03.8** | **+1.4** |
| **RUGZ** | **Raukumara Rang** | **12.68** | **188** | P | **P** | **16 38 03.1** | **+0.2** |
| **DZM** | **Mont Dzumac** | **12.70** | **282** | P | **P** | **16 38 05.9** | **+2.6** |
| | 0.9nm,0.3s,baz=94,slow=14,SNR=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **12.70** | **282** | *e*P | **P** | **16 38 05.8** | **+2.4** |
| | 84nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **12.70** | **282** | P | **P** | **16 38 05.4** | **+2.1** |
| **DZM** | **Mont Dzumac** | **12.70** | **282** | P | **P** | **16 38 05.8** | **+2.4** |
| **NOUC** | **Port Laguerre** | **12.82** | **282** | P | **P** | **16 38 06.9** | **+2.4** |
| **TOZ** | **Tahuroa Road** | **12.85** | **196** | P | P | 16 38 11.7 | +7.1 |
| **TWGZ** | **Tauwhareparae** | **12.86** | **187** | P | **P** | **16 38 06.3** | **+1.6** |
| **KMRZ** | **Kaimai** | **12.86** | **194** | P | **P** | **16 38 09.0** | **+4.3** |
| **URZ** | **Urewera** | **13.05** | **190** | P | **P** | **16 38 05.7** | **-0.9** |
| | 2.4nm,0.3s,baz=63,slow=1.1,SNR=16 | | | | | | |
| URZ | | | | S | **S** | **16 40 23.5** | **-2.9** |
| | 1.7nm,0.3s,baz=40,slow=23,SNR=4.0 | | | | | | |
| **URZ** | **Urewera** | **13.05** | **190** | P | **P** | **16 38 04.8** | **-1.8** |
| **URZ** | **Urewera** | **13.05** | **190** | P | **P** | **16 38 04.4** | **-2.2** |
| **MWZ** | **Matawai** | **13.06** | **188** | P | **P** | **16 38 06.1** | **-0.7** |
| **CNGZ** | **Carnagh Statio** | **13.14** | **186** | P | **P** | **16 38 09.6** | **+2.0** |
| **RAGZ** | **Rawiri** | **13.24** | **188** | P | **P** | **16 38 09.7** | **+1.0** |
| **RIGZ** | **Rimuhau** | **13.40** | **187** | P | **P** | **16 38 10.1** | **-0.4** |
| **TLZ** | **Tolley Road** | **13.41** | **195** | P | **P** | **16 38 12.1** | **+1.5** |
| **RTZ** | **Ruatahuna** | **13.41** | **190** | P | **P** | **16 38 11.6** | **+0.9** |
| **SNGZ** | **Shannon Statio** | **13.53** | **188** | P | **P** | **16 38 12.1** | **+0.3** |
| **MTHZ** | **Maungataniwha** | **13.67** | **190** | P | **P** | **16 38 13.5** | **+0.3** |
| **MRHZ** | **Matea Rd** | **13.72** | **191** | P | **P** | **16 38 15.1** | **+1.3** |
| **HIZ** | **Hauiti** | **13.76** | **197** | P | **P** | **16 38 13.8** | **-0.4** |
| **HIZ** | **Hauiti** | **13.76** | **197** | P | **P** | **16 38 13.6** | **-0.6** |
| **AFI** | **Afiamalu** | **13.87** | **36** | P | **P** | **16 38 14.3** | **-1.5** |
| | 3.3nm,0.3s,baz=214,slow=4.4,SNR=6.0 | | | | | | |
| AFI | | | | S | **S** | **16 40 36.0** | **-7.0** |
| | 1.0nm,0.3s,baz=25,slow=23,SNR=1.9 | | | | | | |
| **AFI** | **Afiamalu** | **13.87** | **36** | P | **P** | **16 38 12.8** | **-3.0** |
| **RATZ** | **Rangitukua** | **13.88** | **193** | P | **P** | **16 38 17.4** | **+1.9** |
| **NMHZ** | **Naumai** | **13.91** | **190** | P | **P** | **16 38 20.0** | **+4.1** |
| **BKZ** | **Black Stump Fm** | **14.03** | **191** | P | **P** | **16 38 16.0** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **14.03** | **191** | P | **P** | **16 38 19.9** | **+2.8** |
| **ARHZ** | **Aropaoanui** | **14.05** | **189** | P | **P** | **16 38 16.8** | **-0.4** |
| **NTVZ** | **North Tongarir** | **14.12** | **193** | P | **P** | **16 38 19.9** | **+1.8** |
| **TMVZ** | **Te Maari** | **14.13** | **193** | P | **P** | **16 38 19.1** | **+0.8** |
| **TWVZ** | **Taurewa** | **14.14** | **194** | P | **P** | **16 38 18.8** | **+0.4** |
| **ETVZ** | **East Tongariro** | **14.15** | **193** | P | **P** | **16 38 18.5** | **+0.1** |
| **WTVZ** | **West Tongariro** | **14.15** | **194** | P | **P** | **16 38 20.5** | **+2.0** |
| **NNVZ** | **North Ngauruho** | **14.16** | **194** | P | **P** | **16 38 20.8** | **+2.2** |
| **OTVZ** | **Oturere** | **14.19** | **193** | P | **P** | **16 38 17.4** | **-1.5** |
| **NGZ** | **Ngauruhoe** | **14.21** | **194** | P | **P** | **16 38 21.2** | **+2.1** |
| **SNVZ** | **South Ngauruho** | **14.21** | **193** | P | **P** | **16 38 19.1** | **0.0** |
| **MCHZ** | **McNeill Hill** | **14.27** | **190** | P | **P** | **16 38 19.2** | **-0.3** |
| **TUVZ** | **Tukino** | **14.29** | **193** | P | **P** | **16 38 20.2** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **14.29** | **191** | P | **P** | **16 38 21.6** | **+1.7** |
| **TRVZ** | **Turoa** | **14.34** | **194** | P | **P** | **16 38 22.5** | **+1.9** |
| **VRZ** | **Vera Road** | **14.36** | **196** | P | **P** | **16 38 23.9** | **+3.4** |
| **WNVZ** | **Wahianoa** | **14.36** | **193** | P | **P** | **16 38 19.2** | **-1.4** |
| **PKVZ** | **Pokaka** | **14.38** | **194** | P | **P** | **16 38 22.6** | **+1.9** |
| **MOVZ** | **Moawhango** | **14.40** | **193** | P | **P** | **16 38 21.9** | **+0.8** |
| **BHHZ** | **Black Hill Sta** | **14.42** | **192** | P | **P** | **16 38 19.9** | **-1.3** |
| **CKHZ** | **Cape Kidnapper** | **14.43** | **189** | P | **P** | **16 38 21.9** | **+0.7** |
| **KRHZ** | **Kereru** | **14.52** | **191** | P | **P** | **16 38 23.3** | **+1.1** |
| **KAHZ** | **Kahuranaki** | **14.59** | **189** | P | **P** | **16 38 23.0** | **0.0** |
| **NEZ** | **North Egmont** | **14.67** | **198** | P | P | 16 38 28.9 | +5.1 |
| **KHEZ** | **Kahui Hut** | **14.71** | **198** | P | P | 16 38 30.0 | +5.7 |
| **PREZ** | **Palmer Road** | **14.72** | **198** | P | **P** | **16 38 29.0** | **+4.7** |
| **PNHZ** | **Pukenui** | **14.81** | **191** | P | **P** | **16 38 24.3** | **-0.9** |
| **PXZ** | **Pawanui** | **14.82** | **189** | P | **P** | **16 38 23.5** | **-1.8** |
| **NMEZ** | **Namu Road** | **14.86** | **198** | P | P | 16 38 30.8 | +5.1 |
| **WAZ** | **Wanganui** | **14.90** | **195** | P | **P** | **16 38 27.0** | **+0.8** |
| **WPHZ** | **Waipukurau** | **14.92** | **190** | P | **P** | **16 38 28.1** | **+1.8** |
| **TSZ** | **Takapari Road** | **14.99** | **192** | P | **P** | **16 38 25.6** | **-1.6** |
| **PRHZ** | **Porangahau** | **15.08** | **189** | P | **P** | **16 38 29.9** | **+1.8** |
| **KOUNC** | **Koumac, New Ca** | **15.10** | **285** | P | **P** | **16 38 30.5** | **+1.9** |
| **DVHZ** | **Dannevirke** | **15.19** | **191** | P | **P** | **16 38 29.8** | **+0.6** |
| **SANVU** | **Saraoutou** | **15.41** | **307** | P | **P** | **16 38 31.0** | **-0.8** |
| SANVU | | | | IAmb | IAmb | 16 38 33.9 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **PRWZ** | **Pori Road** | **15.47** | **191** | P | **P** | **16 38 33.0** | **+0.9** |
| **BFZ** | **Birch Farm** | **15.55** | **190** | P | **P** | **16 38 32.5** | **-0.4** |
| **BFZ** | **Birch Farm** | **15.55** | **190** | P | **P** | **16 38 31.2** | **-1.8** |
| **MRZ** | **Mangatainoka R** | **15.65** | **192** | P | **P** | **16 38 30.1** | **-3.8** |
| **HOWZ** | **Holdsworth Sta** | **15.89** | **192** | P | **P** | **16 38 35.5** | **-1.0** |
| **TMWZ** | **Te Maipa** | **16.02** | **191** | P | **P** | **16 38 37.6** | **-0.3** |
| **QRZ** | **Quartz Range** | **16.56** | **200** | P | **P** | **16 38 42.3** | **-1.2** |
| **NNZ** | **Nelson** | **16.68** | **197** | P | **P** | **16 38 43.0** | **-1.7** |
| **CMWZ** | **Cape Campbell** | **16.98** | **195** | P | **P** | **16 38 46.4** | **-1.3** |
| **THZ** | **Tophouse** | **17.32** | **198** | P | **P** | **16 38 49.1** | **-2.0** |
| **KHZ** | **Kahutara** | **17.77** | **195** | P | **P** | **16 38 53.6** | **-1.6** |
| **LTZ** | **Lake Taylor** | **18.44** | **198** | P | **P** | **16 38 59.4** | **-2.1** |
| **MQZ** | **McQueen's Vall** | **19.20** | **196** | P | **P** | **16 39 06.4** | **-1.9** |
| MQZ | | | | IAmb | IAmb | 16 39 12.1 | |
| | comp=Z,17nm,0.5s | | | | | | |
| **RPZ** | **Rata Peaks** | **19.65** | **199** | P | **P** | **16 39 10.9** | **-1.6** |
| RPZ | | | | IAmb | IAmb | 16 39 14.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **19.65** | **199** | P | **P** | **16 39 11.1** | **-1.3** |
| **FOZ** | **Fox Glacier** | **19.88** | **202** | P | **P** | **16 39 12.9** | **-1.5** |
| FOZ | | | | IAmb | IAmb | 16 39 15.3 | |
| | comp=Z,61nm,1.5s | | | | | | |
| **ODZ** | **Otahua Downs** | **20.98** | **198** | P | **P** | **16 39 22.7** | **-1.8** |
| **HNR** | **Honiara** | **24.68** | **306** | P | **P** | **16 39 57.5** | **-0.5** |
| | comp=Z,28nm,0.5s,baz=205,slow=4.3,SNR=4.2 | | | | | | |
| **HNR** | **Honiara** | **24.68** | **306** | P | **P** | **16 39 56.2** | **-1.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CAN** | **Canberra** | **28.30** | **242** | P | **P** | **16 40 30.8** | **+1.0** |
| CAN | | | | IAmb | IAmb | 16 40 58.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **31.36** | **273** | P | **P** | **16 40 57.3** | **+0.8** |
| | comp=Z,5.3nm,0.5s,baz=95,slow=9.7,SNR=18 | | | | | | |
| **CTAO** | **Charters Tower** | **31.36** | **273** | P | **P** | **16 40 56.7** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 16 40 57.7 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **31.54** | **239** | P | **P** | **16 40 58.4** | **+0.6** |
| **TAU** | **Tasmania Unive** | **31.83** | **228** | P | **P** | **16 41 00.8** | **+0.7** |
| TAU | | | | IAmb | IAmb | 16 41 25.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **34.06** | **250** | P | **P** | **16 41 19.1** | **-0.1** |
| | comp=Z,0.7nm,0.4s,baz=79,slow=12,SNR=3.9 | | | | | | |
| **STKA** | **Stephens Creek** | **34.06** | **250** | P | **P** | **16 41 19.1** | **-0.1** |
| **PMG** | **Port Moresby** | **34.86** | **291** | P | **P** | **16 41 24.5** | **-1.6** |
| | comp=Z,8.7nm,0.8s,baz=134,slow=8.0,SNR=5.0 | | | | | | |
| **PMG** | **Port Moresby** | **34.86** | **291** | P | **P** | **16 41 23.5** | **-2.6** |
| PMG | | | | IAmb | IAmb | 16 41 27.3 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **COEN** | **Coen** | **36.23** | **281** | P | **P** | **16 41 35.7** | **-1.8** |
| COEN | | | | IAmb | IAmb | 16 41 39.2 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **38.75** | **249** | P | **P** | **16 41 57.2** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 16 42 01.8 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **41.67** | **262** | P | **P** | **16 42 21.0** | **-0.6** |
| **ASAR** | **Alice Springs** | **41.67** | **262** | P | **P** | **16 42 21.5** | **-0.1** |
| | comp=Z,0.8nm,0.3s,baz=91,slow=7.0,SNR=51 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 44 06.6** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=104,slow=4.8,SNR=2.8 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 47 09.6** | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=110,slow=4.0,SNR=3.2 | | | | | | |
| ASAR | | | | S | **S** | **16 47 58.4** | **-3.5** |
| | comp=Z,1.0nm,0.9s,baz=97,slow=14,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **41.67** | **262** | P | **P** | **16 42 20.8** | **-0.8** |
| **WR0** | **Warramunga Arr** | **41.99** | **268** | P | **P** | **16 42 23.5** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 16 42 46.5 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.17** | **268** | P | **P** | **16 42 24.8** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 16 42 47.6 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.17** | **268** | P | **P** | **16 42 24.9** | **-0.7** |
| **WB0** | **Warramunga Arr** | **42.18** | **268** | P | **P** | **16 42 24.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **42.18** | **268** | P | **P** | **16 42 25.1** | **-0.6** |
| | comp=Z,2.8nm,0.6s,baz=103,slow=7.9,SNR=25 | | | | | | |
| WRA | | | | ScP | **ScP** | **16 47 12.3** | **+1.0** |
| | comp=Z,1.7nm,1.1s,baz=104,slow=3.5,SNR=4.9 | | | | | | |
| WRA | | | | S | **S** | **16 48 04.3** | **-5.0** |
| | comp=Z,2.4nm,1.1s,baz=105,slow=13,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.18** | **268** | P | **P** | **16 42 25.0** | **-0.7** |
| **FORT** | **Forrest** | **45.67** | **251** | P | **P** | **16 42 51.7** | **-1.0** |
| FORT | | | | IAmb | IAmb | 16 43 01.4 | |
| | comp=Z,47nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **48.55** | **271** | P | **P** | **16 43 14.5** | **0.0** |
| KNRA | | | | IAmb | IAmb | 16 43 35.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.58** | **267** | P | **P** | **16 43 30.2** | **+0.7** |
| | comp=Z,1.9nm,0.5s,baz=90,slow=5.9,SNR=11 | | | | | | |
| **SIJI** | **Sorong** | **52.78** | **290** | P | **P** | **16 43 45.5** | **0.0** |
| | comp=Z,20nm,0.7s,baz=117,slow=4.6,SNR=16 | | | | | | |
| **VNDA** | **Vanda** | **52.90** | **185** | P | **P** | **16 43 45.1** | **-0.2** |
| | comp=Z,4.7nm,0.8s,baz=21,slow=5.6,SNR=8.2 | | | | | | |
| **VNDA** | **Vanda** | **52.90** | **185** | P | **P** | **16 43 44.2** | **-1.1** |
| **MBWA** | **Marble Bar** | **54.98** | **261** | P | **P** | **16 44 00.2** | **-0.8** |
| **MORW** | **Morawa** | **56.24** | **251** | P | **P** | **16 44 09.1** | **-0.6** |
| MORW | | | | IAmb | IAmb | 16 44 31.9 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **CASY** | **Casey** | **58.72** | **206** | P | **P** | **16 44 25.5** | **-0.5** |
| CASY | | | | IAmb | IAmb | 16 44 26.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **73.03** | **326** | P | **P** | **16 45 56.2** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=154,slow=5.2,SNR=6.7 | | | | | | |
| **MJAR** | **Mashiro Arr** | **73.03** | **326** | IAmb | IAmb | 16 45 56.9 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **MAT** | **Matsushiro** | **73.03** | **326** | P | **P** | **16 45 56.0** | **+0.2** |
| **JSU** | **Suzuyama** | **73.66** | **317** | P | **P** | **16 45 59.8** | **+0.2** |
| **MAW** | **Mawson** | **76.32** | **201** | P | **P** | **16 46 14.5** | **+0.8** |
| | comp=Z,9.5nm,0.6s,baz=267,slow=7.4,SNR=1.7 | | | | | | |
| **MAW** | **Mawson** | **76.32** | **201** | P | **P** | **16 46 14.1** | **+0.3** |
| MAW | | | | IAmb | IAmb | 16 46 33.5 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **PMSA** | **Palmer Station** | **77.61** | **157** | P | **P** | **16 46 21.2** | **+0.3** |
| **KSRS** | **Korea Array** | **79.28** | **320** | P | **P** | **16 46 31.7** | **+1.4** |
| | comp=Z,2.0nm,0.7s,baz=141,slow=6.0,SNR=6.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.50** | **347** | P | **P** | **16 46 37.6** | **+1.3** |
| | comp=Z,1.7nm,0.6s,baz=159,slow=5.9,SNR=6.3 | | | | | | |
| **NJ2** | **Nanjing** | **81.52** | **311** | *e*P | **P** | **16 46 42.2** | **+0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **SYO** | **Syowa Base** | **81.54** | **193** | *e*P | **P** | **16 46 41.4** | **-0.2** |
| **TROLL** | **Troll, Antarti** | **82.86** | **181** | P | **P** | **16 46 48.8** | **+0.3** |
| **SNAA** | **Sanae** | **83.19** | **179** | P | **P** | **16 46 50.0** | **0.0** |
| **VNA3** | **Neumayer Olymp** | **83.41** | **177** | P | **P** | **16 46 51.1** | **0.0** |
| **VNA2** | **Neumayer--Watz** | **83.83** | **178** | P | **P** | **16 46 53.3** | **+0.2** |
| | baz=187,slow=5.4 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **84.06** | **177** | P | **P** | **16 46 54.6** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **85.92** | **44** | P | **P** | **16 47 06.5** | **+2.4** |
| | comp=Z,1.4nm,0.6s,baz=217,slow=9.1,SNR=7.7 | | | | | | |
| **PLCA** | **Paso Flores** | **87.34** | **134** | P | **P** | **16 47 13.0** | **+2.2** |
| | comp=Z,2.3nm,0.9s,baz=226,slow=5.2,SNR=5.7 | | | | | | |
| **PLCA** | **Paso Flores** | **87.34** | **134** | IAmb | IAmb | 16 47 35.4 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.90** | **290** | P | **P** | **16 47 25.2** | **+2.3** |
| | comp=Z,0.3nm,0.4s,baz=251,slow=1.2,SNR=1.9 | | | | | | |
| **XLT** | **XiLinHaoTe** | **90.31** | **320** | *e*P | **P** | **16 47 23.9** | **-0.4** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,200nm,6.7s | | | | | | |
| **PZH** | **PanZhiHua** | **91.26** | **299** | P | **P** | **16 47 28.6** | **-0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.34** | **58** | P | **P** | **16 47 31.8** | **+2.4** |
| | comp=Z,1.5nm,0.8s,baz=221,slow=5.0,SNR=8.3 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.36** | **315** | *e*P | **P** | **16 47 26.9** | **-2.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,400nm,7.0s | | | | | | |
| **CD2** | **Chengdu** | **91.77** | **303** | *e*P | **P** | **16 47 29.0** | **-2.3** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **113.04** | **312** | PKKPbc | PKKPbc | 17 03 46.0 | +0.2 |
| | comp=Z,0.5nm,0.6s,baz=278,slow=3.4,SNR=5.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.30** | **348** | PKP | **PKPdf** | **16 53 36.2** | **+1.1** |
| | comp=Z,1.7nm,0.8s,baz=66,slow=2.8,SNR=9.7 | | | | | | |
| ARCES | | | | SKPbc | **SKPbc** | **16 56 15.9** | **-0.4** |
| | comp=Z,5.3nm,0.9s,baz=346,slow=2.5,SNR=9.5 | | | | | | |
| **FINES** | **FINESS Array B** | **139.79** | **341** | PKhKP | PKPpre | 16 53 41.6 | |
| | comp=Z,0.7nm,0.5s,baz=114,slow=2.3,SNR=5.6 | | | | | | |
| FINES | | | | PKP | **PKiKP** | **16 53 49.5** | **-0.3** |
| | comp=Z,2.4nm,0.9s,baz=75,slow=1.6,SNR=5.3 | | | | | | |
| FINES | | | | SKPbc | **SKPbc** | **16 56 36.5** | **+0.8** |
| | comp=Z,4.8nm,0.8s,baz=20,slow=2.8,SNR=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.51** | **351** | PKP | PKPab | 16 53 52.5 | +0.1 |
| | comp=Z,0.8nm,0.5s,baz=15,slow=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.51** | **351** | PKP | PKPab | 16 53 52.6 | +0.2 |
| | comp=Z,0.4nm,0.4s,baz=16,slow=4.1,SNR=6.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.12** | **326** | PKPbc | **PKPdf** | **16 54 00.3** | **+1.6** |
| | comp=Z,0.8nm,0.4s,baz=44,slow=3.8,SNR=6.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.33** | **305** | PKPbc | **PKPbc** | **16 54 07.2** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=142,slow=3.8,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.71** | **189** | PKPab | **PKPab** | **16 55 35.3** | **-0.8** |
| | comp=Z,2.0nm,0.6s,baz=167,slow=3.7,SNR=8.5 | | | | | | |

**WEL 01 16:40:06.1,38°.5±57°.×17°.8E±4°.3,h5km±40km,M2.5/7, ML2.7/8,MLv2.5/7,Error ellipse: s-maj=0.1km s-min=0.1km az=178.1,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **0.04** | **164** | P | Pg | 16 40 07.8 | +0.4 |
| **WMGZ** | **Waiomatatini S** | **0.32** | **162** | P | Pb | 16 40 13.9 | -0.3 |
| **PUZ** | **Puketiti** | **0.55** | **183** | P | Pg | 16 40 14.3 | -2.5 |
| **RUGZ** | **Raukumara Rang** | **0.66** | **227** | P | Pn | 16 40 21.5 | -0.7 |
| **TWGZ** | **Tauwhareparae** | **0.70** | **200** | P | Pn | 16 40 21.8 | -0.9 |
| **TKGZ** | **Te Karaka** | **0.98** | **201** | P | Pn | 16 40 26.8 | +0.3 |
| **MWZ** | **Matawai** | **1.01** | **216** | P | Pb | 16 40 26.3 | +0.2 |
| **URZ** | **Urewera** | **1.19** | **231** | P | Pg | 16 40 26.7 | -2.2 |
| **RAGZ** | **Rawiri** | **1.20** | **215** | P | Pn | 16 40 31.2 | +1.7 |
| **RIGZ** | **Rimuhau** | **1.26** | **199** | P | Pn | 16 40 35.6 | +5.3 |
| **SNGZ** | **Shannon Statio** | **1.47** | **210** | P | Pg | 16 40 34.8 | +0.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RTZ** | **Ruatahuna** | **1.51** | **223** | P | Pn | 16 40 33.5 | -0.3 |
| **KNZ** | **Kokohu** | **1.58** | **198** | P | Pg | 16 40 46.8 | +10 |
| **MTHZ** | **Maungataniwha** | **1.75** | **220** | P | Pg | 16 40 41.9 | +2.2 |
| **ARHZ** | **Aropaoanui** | **2.02** | **210** | P | Pg | 16 40 47.2 | +2.4 |
| **MCHZ** | **McNeill Hill** | **2.29** | **213** | P | Pb | 16 40 46.8 | -1.1 |
| **KWHZ** | **Kaweka Forest** | **2.40** | **217** | P | Pb | 16 40 50.9 | +1.0 |
| **KAHZ** | **Kahuranaki** | **2.53** | **206** | P | Pg | 16 40 56.2 | +1.7 |
| **ETVZ** | **East Tongariro** | **2.59** | **231** | P | Pn | 16 40 50.3 | +1.5 |
| **KRHZ** | **Kereru** | **2.60** | **215** | P | Pb | 16 40 52.1 | -1.1 |
| **OTVZ** | **Oturere** | **2.64** | **231** | P | Pn | 16 40 49.6 | +0.2 |
| **PNHZ** | **Pukenui** | **2.90** | **214** | P | Pb | 16 40 59.3 | +1.0 |
| **WPHZ** | **Waipukurau** | **2.92** | **209** | P | Pb | 16 40 58.9 | +0.2 |
| **PRHZ** | **Porangahau** | **3.03** | **205** | P | Pb | 16 41 00.9 | +0.4 |
| **TSZ** | **Takapari Road** | **3.12** | **215** | P | Pb | 16 41 02.4 | +0.4 |
| **DVHZ** | **Dannevirke** | **3.23** | **210** | P | Pb | 16 41 03.5 | -0.4 |
| **ANWZ** | **Angora Road** | **3.26** | **205** | P | Pb | 16 41 05.9 | +1.5 |
| **WAZ** | **Wanganui** | **3.42** | **228** | P | Pn | 16 40 59.2 | -0.8 |
| **POWZ** | **Post Office Ro** | **3.48** | **214** | P | Pb | 16 41 08.5 | +0.4 |
| **BFZ** | **Birch Farm** | **3.54** | **206** | P | Pg | 16 41 13.0 | -0.8 |

*GCG **01** 16:45:24.9±0.3,13°.48N×89°.93W,h147km±29km,MD4.3*

*SNET **01** 16:45:28.6±0.8,13°.84N×90°.08W,h126km±4km,ML4.4*

*UCR **01** 16:45:28.4±1.0,13°.85N×90°.10W,h127km±4km,ML4.3, mb4.5(NEIC)*

*NEIC **01** 16:45:30.5±1.6,13°.99N±0°.09×89°.94W±0°.07,h131km±6km, mb4.5/113,Md4.1(SNET),Error ellipse: s-maj=13.7km s-min=8.5km az=209.0*

*IDC **01** 16:45:30.4±1.0,14°.08N×89°.78W,h134km±6km,mb3.6/10, mb1 3.9/13,mb1mx3.7/37,mbtmp4.1/13,MS3.6/1, Ms1 3.6/1,ms1mx2.8/68,Error ellipse: s-maj=23.1km s-min=14.5km az=58.0*

*INET **01** 16:45:31.2±1.4,13°.79N×89°.93W,h15km±10km,ML4.2*

**ISC 01 16:45:28.7±0.7,13°.88N±0°.06×89°.99W±0°.05,h129km±5km, n240,σ1§05/247,mb4.5/53,12C-14D,El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NUBE** | **Las Nubes** | **0.20** | **85** | *e*P | **Pn** | **16 45 46.6** | **0.0** |
| NUBE | | | | *e*S | **Sn** | **16 46 00.2** | **-0.1** |
| **NUBE** | **Las Nubes** | **0.20** | **85** | *e*P | **Pn** | **16 45 46.6** | **0.0** |
| NUBE | | | | *e*S | **Sn** | **16

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| COVE | Coope Vega, Sa | 6.30 | 119 | | | Pn | 16 47 00.2 | +0.9 |
| CAO2 | Cobano, Puntar | 6.34 | 131 | | | Pn | 16 47 01.1 | +1.2 |
| JACO | JACO, Garabito | 6.70 | 128 | | Pn | Pn | 16 47 06.0 | +1.4 |
| CVTR | Volcan Turrial | 7.20 | 122 | | Pn | Pn | 16 47 12.4 | +0.5 |
| RIMA | Rio Macho | 7.26 | 124 | | | Pn | 16 47 14.2 | +1.8 |
| PEZE | Perez Zeledon, | 7.63 | 125 | | | Pn | 16 47 19.3 | +2.0 |
| SRBA | San Rafael, Bu | 7.97 | 125 | | | Pn | 16 47 23.2 | +1.2 |
| MTDJ | Mount Denham | 12.72 | 69 | | P | P | 16 48 32.0 | +0.8 |
| 833A | Chaparral WMA, | 16.82 | 330 | | P | Pn | 16 49 18.2 | +1.6 |
| 342A | Flagon Creek P | 17.54 | 353 | | P | P | 16 49 25.0 | +0.7 |
| 342A | | | | | IAmb | IAmb | 16 49 30.6 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| URIC | Uribia, Colomb | 17.68 | 95 | | P | Pn | 16 49 27.0 | 0.0 |
| URIC | | | | | IAmb | IAmb | 16 49 43.5 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| JCT | Junction City | 18.83 | 333 | | P | P | 16 49 38.9 | +0.3 |
| JCT | | | | | IAmb | IAmb | 16 49 43.8 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| WHTX | Lake Whitney, | 19.28 | 340 | | | P | 16 49 44.8 | +1.4 |
| 152A | Waverly Hall | 19.31 | 14 | | P | P | 16 49 44.7 | +1.0 |
| 152A | | | | | IAmb | IAmb | 16 49 47.0 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| Z38A | Mt. Pleasant | 19.82 | 348 | | P | P | 16 49 49.7 | +0.5 |
| Z38A | | | | | IAmb | IAmb | 16 49 51.2 | |
| | comp=Z,14nm,0.5s | | | | | | | |
| TX31 | Lajitas Ar. Si | 19.92 | 323 | | P | Pn | 16 49 52.8 | -0.6 |
| TX31 | | | | | IAmb | IAmb | 16 49 54.5 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| TX32 | Lajitas Array | 19.92 | 323 | | P | Pn | 16 49 52.6 | -0.8 |
| TXAR | Lajitas Array | 19.92 | 323 | | P | Pn | 16 49 53.4 | 0.0 |
| | comp=Z,0.9nm,0.3s,baz=147,slow=10,SNR=27 | | | | | | | |
| TXAR | Lajitas Array | 19.92 | 323 | | P | Pn | 16 49 52.9 | -0.5 |
| Y49A | Blount Mountai | 20.15 | 9 | | P | P | 16 49 54.6 | +1.9 |
| Y49A | | | | | IAmb | IAmb | 16 49 56.0 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| Z35A | Perchaven, San | 20.46 | 342 | | P | P | 16 49 56.4 | +0.4 |
| Z35A | | | | | IAmb | IAmb | 16 49 57.6 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| ABTX | Abilene, Hawle | 20.63 | 336 | | P | P | 16 49 57.9 | -0.1 |
| ABTX | | | | | IAmb | IAmb | 16 50 02.1 | |
| | comp=Z,9.5nm,0.7s | | | | | | | |
| X48A | Hartselle | 20.65 | 7 | | P | P | 16 49 58.9 | +0.8 |
| X48A | | | | | IAmb | IAmb | 16 50 05.8 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| MIAR | Mount Ida | 20.83 | 352 | | P | P | 16 50 00.5 | +0.5 |
| MIAR | | | | | IAmb | IAmb | 16 50 04.6 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| FPAL | Fort Paine | 20.95 | 10 | | P | P | 16 50 02.1 | +0.8 |
| FPAL | | | | | IAmb | IAmb | 16 50 03.7 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| LOOK | Love County | 21.06 | 343 | | | P | 16 50 03.4 | +0.9 |
| X37A | Clayton | 21.18 | 348 | | P | P | 16 50 04.8 | +0.9 |
| X37A | | | | | IAmb | IAmb | 16 50 13.4 | |
| | comp=P,19nm,1.3s | | | | | | | |
| W41B | Gary Mavity, V | 21.30 | 355 | | P | P | 16 50 06.0 | +0.9 |
| HODGE | Hodges | 21.44 | 18 | | P | P | 16 50 07.4 | +0.8 |
| SWET | Sewanee | 21.55 | 9 | | P | P | 16 50 08.6 | +0.7 |
| W50A | Signal Mountai | 21.64 | 10 | | P | P | 16 50 09.0 | +0.2 |
| X34A | Smith Ranch, M | 21.81 | 342 | | | P | 16 50 11.4 | +0.8 |
| X34A | | | | | IAmb | IAmb | 16 50 12.5 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| V48A | Smith Brothers | 21.95 | 7 | | P | P | 16 50 12.7 | +0.7 |
| CPCT | Cooper Cave | 22.03 | 12 | | P | P | 16 50 13.6 | +0.8 |
| CPCT | | | | | IAmb | IAmb | 16 50 14.4 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| W35A | Tecumseh | 22.07 | 345 | | | P | 16 50 12.6 | -0.6 |
| W35A | | | | | IAmb | IAmb | 16 50 13.6 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| LCAR | Lake Charles | 22.12 | 357 | | P | P | 16 50 13.4 | -0.3 |
| LCAR | | | | | IAmb | IAmb | 16 50 15.8 | |
| | comp=Z,8.8nm,0.5s | | | | | | | |
| WMOK | Wichita Mounta | 22.23 | 341 | | P | P | 16 50 14.3 | -0.6 |
| WMOK | | | | | IAmb | IAmb | 16 50 16.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| WVT | Waverly | 22.24 | 5 | | P | P | 16 50 15.9 | +1.0 |
| WVT | | | | | IAmb | IAmb | 16 50 16.9 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| FNO | Franklin | 22.31 | 344 | | | P | 16 50 15.5 | -0.1 |
| CLTN | Cedars of Leba | 22.36 | 8 | | P | P | 16 50 17.5 | +1.4 |
| CLTN | | | | | IAmb | IAmb | 16 50 18.3 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| TKL | Tuckaleechee C | 22.39 | 13 | | P | P | 16 50 17.2 | +0.8 |
| | comp=Z,9.7nm,0.8s,baz=169,slow=11,SNR=8.7 | | | | | | | |
| TKL | Tuckaleechee C | 22.39 | 13 | | P | P | 16 50 17.3 | +0.8 |
| TKL | | | | | IAmb | IAmb | 16 50 19.2 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| V51A | Loudon | 22.41 | 12 | | P | P | 16 50 17.3 | +0.7 |
| V51A | | | | | IAmb | IAmb | 16 50 18.7 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| OK025 | Westminster Rd | 22.60 | 344 | | P | P | 16 50 18.2 | -0.3 |
| V52A | Sevierville | 22.61 | 14 | | P | P | 16 50 19.3 | +0.7 |
| V53A | Saluda | 22.64 | 15 | | P | P | 16 50 19.5 | +0.7 |
| OK029 | Liberty Lake | 22.83 | 344 | | | P | 16 50 19.7 | -1.0 |
| U49A | Red Boiling Sp | 22.85 | 9 | | P | P | 16 50 21.2 | +0.4 |
| U49A | | | | | IAmb | IAmb | 16 50 23.0 | |
| | comp=Z,31nm,1.1s | | | | | | | |
| MSTX | Muleshoe | 23.12 | 332 | | P | P | 16 50 23.4 | -0.1 |
| T47A | Sharon Grove | 23.15 | 6 | | P | P | 16 50 23.9 | +0.2 |
| V55A | Taylorsville | 23.25 | 18 | | P | P | 16 50 25.3 | +0.6 |
| V55A | | | | | IAmb | IAmb | 16 50 42.8 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| MGMO | Mountain Grove | 23.26 | 355 | | P | P | 16 50 25.1 | +0.4 |
| TZTN | Tazewell | 23.29 | 13 | | P | P | 16 50 25.5 | +0.5 |
| TZTN | | | | | IAmb | IAmb | 16 50 27.6 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| AMTX | Amarillo | 23.43 | 335 | | P | P | 16 50 27.0 | +0.6 |
| AMTX | | | | | IAmb | IAmb | 16 50 27.5 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| T50A | Nancy | 23.50 | 10 | | P | P | 16 50 26.7 | -0.1 |
| U54A | Nelsons Funny | 23.70 | 17 | | P | P | 16 50 29.4 | +0.6 |
| U54A | | | | | IAmb | IAmb | 16 50 31.7 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| S44A | Carbondale | 23.72 | 1 | | P | P | 16 50 29.7 | +0.8 |
| ATAH | Atahualpa | 23.84 | 150 | | P | P | 16 50 33.2 | +2.6 |
| | comp=Z,2.0nm,0.5s,baz=0.0,slow=9.1,SNR=1.7 | | | | | | | |
| S39A | Bolivar | 23.90 | 353 | | P | P | 16 50 30.6 | +0.2 |
| S39A | | | | | IAmb | IAmb | 16 50 31.7 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| FVM | French Village | 24.01 | 359 | | P | P | 16 50 31.5 | +0.1 |
| CCM | Cathedral Cave | 24.10 | 358 | | P | P | 16 50 32.4 | +0.1 |
| CCM | | | | | IAmb | IAmb | 16 50 34.6 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| KAN06 | Argonia West S | 24.31 | 345 | | P | P | 16 50 34.6 | +0.4 |
| S51A | Beattyville | 24.34 | 12 | | P | P | 16 50 34.6 | +0.2 |
| R40A | Maddies Statio | 24.39 | 356 | | P | P | 16 50 35.1 | +0.2 |
| R40A | | | | | IAmb | IAmb | 16 50 37.1 | |
| | comp=Z,20nm,1.5s | | | | | | | |
| R49A | Shelbyville | 24.68 | 9 | | P | P | 16 50 37.8 | +0.2 |
| R49A | | | | | IAmb | IAmb | 16 50 38.2 | |
| | comp=Z,7.5nm,0.5s | | | | | | | |
| R50A | Paris | 24.82 | 11 | | P | P | 16 50 38.8 | 0.0 |
| T59A | Double "B" Far | 25.54 | 24 | | P | P | 16 50 45.5 | +0.2 |
| P40A | Paris | 25.61 | 356 | | P | P | 16 50 45.5 | -0.5 |
| P40A | | | | | IAmb | IAmb | 16 50 46.4 | |
| | comp=Z,8.4nm,0.6s | | | | | | | |
| ANMO | Albuquerque | 25.71 | 328 | | P | P | 16 50 47.8 | +0.7 |
| | comp=Z,0.7nm,0.5s,baz=114,slow=10.0,SNR=2.4 | | | | | | | |
| P46A | Rosedale | 25.75 | 5 | | P | P | 16 50 47.5 | +0.2 |
| P46A | | | | | IAmb | IAmb | 16 50 52.5 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| P48A | Milroy | 25.79 | 8 | | P | P | 16 50 47.6 | -0.1 |
| P48A | | | | | IAmb | IAmb | 16 50 49.7 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| P38A | Dawn | 25.83 | 354 | | P | P | 16 50 48.1 | +0.1 |
| P38A | | | | | IAmb | IAmb | 16 50 48.8 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| P49A | Miami Univ. Ec | 25.97 | 9 | | P | P | 16 50 49.0 | -0.2 |
| Q54A | Coxs Mills | 26.28 | 16 | | P | P | 16 50 52.2 | +0.2 |
| Q54A | | | | | IAmb | IAmb | 16 51 10.6 | |
| | comp=Z,17nm,1.5s | | | | | | | |
| T25A | Trinidad | 26.50 | 334 | | P | P | 16 50 55.3 | +1.0 |
| N38A | Joes South For | 26.96 | 355 | | P | P | 16 50 58.6 | +0.5 |
| N38A | | | | | IAmb | IAmb | 16 51 00.7 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| N47A | Urbana | 27.16 | 7 | | P | P | 16 50 59.9 | 0.0 |
| N47A | | | | | IAmb | IAmb | 16 51 15.2 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| M50A | Fremont | 28.08 | 11 | | P | P | 16 51 08.2 | +0.2 |
| L40A | Anamosa | 28.10 | 358 | | P | P | 16 51 08.5 | +0.3 |
| L40A | | | | | IAmb | IAmb | 16 51 37.3 | |
| | comp=Z,9.2nm,1.0s | | | | | | | |
| L48A | N Adams | 28.37 | 9 | | P | P | 16 51 09.8 | -0.8 |
| L48A | | | | | IAmb | IAmb | 16 51 29.7 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| L34A | Svendsen Farm, | 28.53 | 350 | | P | P | 16 51 12.2 | +0.1 |
| L34A | | | | | IAmb | IAmb | 16 51 13.8 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| ISCO | Idaho Springs | 29.24 | 335 | | P | P | 16 51 18.8 | 0.0 |
| L56A | Greenwood | 30.14 | 19 | | P | P | 16 51 26.3 | -0.1 |
| L56A | | | | | IAmb | IAmb | 16 51 37.2 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| I37A | Lemond, Waseca | 30.17 | 355 | | P | P | 16 51 27.3 | +0.7 |
| ECSD | EROS Data Cent | 30.29 | 350 | | P | P | 16 51 27.3 | -0.3 |
| ECSD | | | | | IAmb | IAmb | 16 51 28.3 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| N23A | Red Feather La | 30.30 | 336 | | P | P | 16 51 29.3 | +1.2 |
| H43A | Windswept, Lux | 30.54 | 3 | | P | P | 16 51 29.4 | -0.4 |
| I49A | Point Hope | 30.58 | 10 | | P | P | 16 51 29.6 | -0.5 |
| BINY | Binghamton | 30.71 | 21 | | P | P | 16 51 31.3 | -0.1 |
| BINY | | | | | IAmb | IAmb | 16 51 38.7 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| G45A | Suttons Bay | 31.27 | 6 | | P | P | 16 51 36.2 | 0.0 |
| G40A | Rib Lake | 31.28 | 360 | | P | P | 16 51 36.4 | 0.0 |
| G40A | | | | | IAmb | IAmb | 16 51 41.0 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| SUSD | Miller | 31.40 | 348 | | P | P | 16 51 37.8 | +0.4 |
| J57A | Williamstown | 31.79 | 20 | | P | P | 16 51 40.2 | -0.5 |
| J58A | Remsen | 31.98 | 20 | | P | P | 16 51 42.4 | -0.1 |
| F36A | Milaca | 32.02 | 355 | | P | P | 16 51 41.9 | -0.8 |
| F33A | 5 Mile Ranch, | 32.30 | 352 | | P | P | 16 51 44.5 | -0.7 |
| F33A | | | | | IAmb | IAmb | 16 51 45.3 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| DELO | Deloro Mine | 32.30 | 17 | | P | P | 16 51 45.0 | -0.3 |
| DELO | | | | | IAmb | IAmb | 16 51 55.5 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| J59A | Piesco | 32.34 | 21 | | P | P | 16 51 45.6 | -0.1 |
| J59A | | | | | IAmb | IAmb | 16 52 12.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| RSSD | Black Hills | 32.44 | 341 | | P | P | 16 51 47.1 | +0.4 |
| E43A | Lone Tree Farm | 32.49 | 4 | | P | P | 16 51 46.8 | 0.0 |
| E38A | The Farm, Brul | 32.65 | 358 | | P | P | 16 51 48.1 | -0.2 |
| NCB | Newcomb | 32.88 | 21 | | P | P | 16 51 50.8 | +0.4 |
| D41A | Chassel | 33.10 | 2 | | P | P | 16 51 51.5 | -0.7 |
| PDAR | Pinedale Array | 33.37 | 333 | | P | P | 16 51 55.8 | +0.9 |
| | comp=Z,0.3nm,0.5s,baz=130,slow=11,SNR=5.2 | | | | | | | |
| PDAR | Pinedale Array | 33.37 | 333 | | P | P | 16 51 54.6 | -0.2 |
| D32A | Dogwood Acres, | 33.67 | 351 | | P | P | 16 51 56.7 | -0.4 |
| EYMN | Ely | 33.98 | 358 | | P | P | 16 51 59.1 | -0.8 |
| EYMN | | | | | IAmb | IAmb | 16 51 59.4 | |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| REDW | Red Top Meadow | 34.41 | 333 | | P | P | 16 52 05.1 | +1.2 |
| REDW | | | | | IAmb | IAmb | 16 52 06.5 | |
| | comp=Z,7.4nm,0.6s | | | | | | | |
| B35A | Bob, Littlefor | 34.52 | 356 | | P | P | 16 52 04.1 | -0.3 |
| B35A | | | | | IAmb | IAmb | 16 52 06.0 | |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| AGMN | Agassiz Nation | 34.66 | 353 | | P | P | 16 52 05.2 | -0.4 |
| MOOW | Moose Ponds | 34.67 | 333 | | P | P | 16 52 07.1 | +0.9 |
| ELK | Elko | 34.67 | 325 | | LR | LR | 17 09 32.4 | |
| | comp=Z,89nm,18.4s,baz=56,slow=42 | | | | | | | |
| MDND | Maddock | 34.80 | 349 | | P | P | 16 52 07.1 | +0.2 |
| NVAR | Mina Array Bea | 35.01 | 320 | | P | P | 16 52 10.8 | +1.7 |
| | comp=Z,1.5nm,0.8s,baz=133,slow=8.7,SNR=4.2 | | | | | | | |
| NVAR | | | | | PcP | PcP | 16 54 39.4 | +0.9 |
| | comp=Z,0.8nm,0.6s,baz=101,slow=4.1,SNR=4.2 | | | | | | | |
| RLMT | Red Lodge | 35.17 | 336 | | P | P | 16 52 11.4 | +1.0 |
| GCMT | Greycliff | 35.89 | 336 | | P | P | 16 52 16.4 | 0.0 |
| BCYI | Bear Canyon | 36.32 | 331 | | P | P | 16 52 19.8 | -0.4 |
| DGMT | Dagmar | 36.44 | 344 | | P | P | 16 52 21.6 | +0.7 |
| MCMT | McKenzie Canyo | 36.46 | 332 | | P | P | 16 52 22.8 | +1.4 |
| BOZ | Bozeman (W) | 36.53 | 334 | | P | P | 16 52 23.2 | +1.4 |
| ULM | Lac du Bonnet | 36.58 | 354 | | P | P | 16 52 21.1 | -0.9 |
| | comp=Z,10nm,0.6s,baz=175,slow=9.2,SNR=14 | | | | | | | |
| ULM | Lac du Bonnet | 36.58 | 354 | | P | P | 16 52 20.8 | -1.3 |
| LRM | Limekiln Ridge | 37.06 | 334 | | P | P | 16 52 27.3 | +0.8 |
| EGMT | Eagleton | 37.79 | 338 | | P | P | 16 52 33.4 | +1.0 |
| EGMT | | | | | IAmb | IAmb | 16 52 34.3 | |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| PLID | Pearl Lake | 38.13 | 330 | | P | P | 16 52 36.0 | +0.5 |
| FFC | Flin Flon | 41.82 | 350 | | P | P | 16 53 05.8 | +0.3 |
| EDM | Edmonton | 43.40 | 340 | | P | P | 16 53 18.5 | +0.2 |
| EDM | | | | | IAmb | IAmb | 16 53 19.9 | |
| | comp=Z,8.6nm,0.5s | | | | | | | |
| DRLN | Deer Lake | 44.20 | 30 | | P | P | 16 53 23.3 | -1.5 |
| DRLN | | | | | IAmb | IAmb | 16 53 45.9 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| SCHQ | Schefferville | 44.68 | 19 | | P | P | 16 53 27.9 | -0.6 |
| | comp=Z,9.2nm,0.5s,baz=218,slow=6.6,SNR=49 | | | | | | | |
| SCHQ | Schefferville | 44.68 | 19 | | P | P | 16 53 27.7 | -0.7 |
| SCHQ | | | | | IAmb | IAmb | 16 53 28.4 | |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| FCC | Fort Churchill | 44.90 | 357 | | P | P | 16 53 29.3 | -0.8 |
| FCC | | | | | IAmb | IAmb | 16 53 30.2 | |
| | comp=Z,4.6nm,0.5s | | | | | | | |
| YKA | Yellowknife Ar | 51.60 | 346 | | P | P | 16 54 21.3 | -0.2 |
| | comp=Z,1.4nm,0.5s,baz=135,slow=7.3,SNR=33 | | | | | | | |
| YKA | Yellowknife Ar | 51.60 | 346 | | P | P | 16 54 20.9 | -0.6 |
| RES | Resolute Bay | 60.86 | 359 | | P | P | 16 55 25.8 | -1.1 |
| RES | | | | | IAmb | IAmb | 16 55 27.1 | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| INK | Inuvik | 61.11 | 343 | | P | P | 16 55 28.3 | -0.5 |
| ILAR | Eielson Array | 63.72 | 336 | | P | P | 16 55 45.7 | -0.5 |
| | comp=Z,0.4nm,0.8s,baz=171,slow=6.3,SNR=3.4 | | | | | | | |
| BMAR | Burnt Mountain | 64.08 | 340 | | P | P | 16 55 48.2 | -0.4 |
| ESDC | Sonseca Array | 78.26 | 52 | | P | P | 16 57 12.5 | -2.0 |
| | comp=Z,0.2nm,0.4s,baz=297,slow=5.6,SNR=2.0 | | | | | | | |
| STKA | Stephens Creek | 129.69 | 240 | | PKP | PKiKP | 17 04 24.3 | +0.4 |
| | comp=Z,1.5nm,0.8s,baz=117,slow=2.3,SNR=2.2 | | | | | | | |
| WRA | Warramunga Arr | 137.26 | 256 | | PKhKP | PKPpre | 17 04 29.9 | |
| | comp=Z,0.3nm,0.8s,baz=91,slow=3.3,SNR=4.9 | | | | | | | |
| WRA | | | | | PKP | PKiKP | 17 04 39.1 | -0.4 |
| | comp=Z,1.2nm,0.7s,baz=87,slow=3.0,SNR=13 | | | | | | | |
| ASAR | Alice Springs | 137.46 | 250 | | PKhKP | PKPpre | 17 04 30.4 | |
| | comp=Z,0.1nm,0.4s,baz=104,slow=4.3,SNR=8.4 | | | | | | | |
| ASAR | | | | | PKP | PKiKP | 17 04 38.2 | -1.7 |
| | comp=Z,0.6nm,0.8s,baz=93,slow=2.1,SNR=6.5 | | | | | | | |
| PZH | PanZhiHua | 138.27 | 344 | | PKP | PKPdf | 17 04 38.7 | -0.8 |
| FITZ | Fitzroy Crossi | 145.53 | 258 | | PKPbc | PKiKP | 17 04 53.8 | -2.7 |
| | comp=Z,2.5nm,0.4s,baz=22,slow=3.5,SNR=23 | | | | | | | |
| CMAR | Chiang Mai Arr | 146.68 | 344 | | PKPbc | PKPbc | 17 04 55.2 | -1.0 |
| | comp=Z,1.3nm,0.5s,baz=339,slow=3.1,SNR=15 | | | | | | | |
| BATI | Baumata | 146.90 | 273 | | PKPbc | PKiKP | 17 04 59.5 | 0.0 |
| | comp=Z,6.4nm,0.5s,baz=90,slow=2.0,SNR=1.8 | | | | | | | |

*MAN **01** 17:01:22.9, 10.79N× 127.02E, h26km, mb4.8, ML3.7, MS3.6*
*IDC **01** 17:01:22.9±0.7, 10.67N× 126.60E, h0km, mb3.8/14, mb1 3.9/14, mb1mx3.8/36, mbtmp3.8/14, MS2.9/4, Ms1 2.9/4, ms1mx2.6/81, Error ellipse: s-maj=42.9km s-min=14.4km az=71.0*
*NEIC **01** 17:01:24.0±1.5, 10.36N±0.10× 126.5E±0.1, h10km±1km, mb4.5/12, Error ellipse: s-maj=26.6km s-min=10.7km az=58.0*

**ISC 01 17:01:23.2±0.6, 10.72N±0.05× 127.01E±0.06, h10km, n50, σ1°91/49, mb4.0/19, 4C-7D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GLSP | General Luna, | 1.27 | 223 | ↓eP | Pn | 17 01 45.2 | -1.8 |
| GLSP | | | | eS | Sb | 17 02 02.5 | -1.2 |
| SCPH | Surigao | 1.76 | 238 | ↓eP | Pn | 17 01 52.9 | -0.9 |
| BESP | Borongan | 1.77 | 300 | ↓eP | Pn | 17 01 51.5 | -2.5 |
| MSLP | Maasin | 2.19 | 255 | ↓iP | Pn | 17 01 59.1 | -0.6 |
| BUTP | Butuan | 2.21 | 218 | ↑eP | Pn | 17 02 00.7 | +0.7 |
| BUTP | | | | eS | Sn | 17 02 21.1 | -6.3 |
| OCLP | Ormoc | 2.38 | 278 | ↑iP | Pn | 17 02 02.4 | +0.1 |
| BIPH | Bislig | 2.60 | 194 | ↓eP | Pn | 17 02 04.8 | -0.6 |
| BIPH | | | | eS | Sn | 17 02 25.8 | -11 |
| LLP | Lapu-Lapu | 3.02 | 263 | ↓eP | Pn | 17 02 13.4 | +2.3 |
| LLP | | | | eS | Sg | 17 03 06.7 | +6.6 |
| TBP | Tagbilaran | 3.26 | 252 | eP | Pn | 17 02 18.0 | +3.6 |
| TBP | | | | i S | Sn | 17 02 51.1 | -2.2 |
| DAV | Davao City (W) | 3.89 | 201 | | Pn | 17 02 16.3 | -6.8 |
| KCP | Kidapawan | 4.14 | 207 | ↑eP | Pn | 17 02 30.3 | +3.7 |
| CNOP | Candoni, Negro | 4.39 | 259 | ↓eP | Pn | 17 02 29.5 | -0.4 |
| CTH | Cotabato--PC H | 4.42 | 218 | ↑eP | Pb | 17 02 39.9 | -1.0 |
| TOLI2 | Tolitoli | 11.37 | 213 | Pn | Pn | 17 03 57.4 | -8.5 |
| KKM | Kota Kinabalu | 11.64 | 247 | Pn | Pn | 17 04 02.3 | -7.4 |
| SIJI | Sorong | 12.27 | 160 | LR | LR | 17 10 16.0 | |
| | comp=Z,28nm,19.0s,baz=221,slow=43 | | | | | | |
| YULB | Yu-li | 13.73 | 337 | Pn | Pn | 17 04 36.3 | -1.8 |
| YOJ | Yonaguni jima | 14.19 | 345 | Pn | Pn | 17 04 44.1 | -0.2 |
| GUMO | Guam | 17.69 | 79 | LR | LR | 17 12 27.9 | |
| | comp=Z,51nm,19.2s,baz=91,slow=37 | | | | | | |
| KSRS | Korea Array | 26.63 | 2 | LR | LR | 17 19 09.2 | |
| | comp=Z,20nm,18.8s,baz=30,slow=40 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 28.20 | 289 | | P | P | 17 07 14.1 | -2.2 |
| | 0.3nm,0.6s,baz=95,slow=6.5,SNR=2.0 | | | | | | | |
| FITZ | Fitzroy Crossi | 28.66 | 183 | | P | P | 17 07 20.6 | +0.2 |
| | 2.5nm,0.8s,baz=15,slow=12 | | | | | | | |
| WB0 | Warramunga Arr | 31.16 | 166 | | P | P | 17 07 41.2 | -1.3 |
| WB0 | | | | | IAmb | IAmb | 17 07 57.8 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| WRA | Warramunga Arr | 31.31 | 167 | | P | P | 17 07 45.2 | +1.3 |
| | comp=Z,0.4nm,0.6s,baz=348,slow=9.0,SNR=1.9 | | | | | | | |
| WRA | | | | | PcP | PcP | 17 10 39.6 | +1.5 |
| | comp=Z,0.4nm,0.6s,baz=332,slow=3.0,SNR=5.6 | | | | | | | |
| ASAR | Alice Springs | 34.83 | 169 | | P | P | 17 08 15.8 | +1.1 |
| | comp=Z,0.5nm,0.7s,baz=351,slow=6.7,SNR=11 | | | | | | | |
| ASAR | | | | | PcP | PcP | 17 10 49.5 | +1.6 |
| | comp=Z,0.4nm,0.6s,baz=349,slow=2.8,SNR=7.1 | | | | | | | |
| ASAR | | | | | LR | LR | 17 27 35.5 | |
| | comp=Z,28nm,18.3s,baz=306,slow=45 | | | | | | | |
| KLR | Kul'dur | 38.59 | 5 | | P | P | 17 08 48.0 | +1.6 |
| | comp=Z,0.7nm,0.6s,baz=191,slow=10,SNR=2.2 | | | | | | | |
| SONM | Songino Array | 40.86 | 339 | | P | P | 17 09 06.3 | +0.8 |
| | comp=Z,0.3nm,0.3s,baz=152,slow=6.5,SNR=1.4 | | | | | | | |
| STKA | Stephens Creek | 44.60 | 162 | | P | P | 17 09 37.8 | +2.0 |
| | comp=Z,1.2nm,0.5s,baz=337,slow=7.7,SNR=5.4 | | | | | | | |
| STKA | Stephens Creek | 44.60 | 162 | | P | P | 17 09 35.2 | -0.5 |
| MK31 | Makanchi Array | 52.11 | 322 | | P | P | 17 10 33.3 | -0.4 |
| MKAR | Makanchi Array | 52.11 | 322 | | P | P | 17 10 34.4 | +0.7 |
| | comp=Z,1.1nm,0.6s,baz=120,slow=8.1,SNR=15 | | | | | | | |
| MAKZ | Makanchi | 52.31 | 322 | | P | P | 17 10 35.7 | +0.6 |
| ZALV | Zalesovo Beam | 54.59 | 331 | | P | P | 17 10 51.8 | +0.1 |
| | comp=Z,1.1nm,0.7s,baz=115,slow=8.6,SNR=4.6 | | | | | | | |
| KURK | Kurchatov | 56.11 | 325 | | P | P | 17 11 03.4 | +0.6 |
| KURK | | | | | IAmb | IAmb | 17 11 04.9 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| BTK | Batken | 57.44 | 311 | | P | P | 17 11 11.5 | -1.0 |
| GAR | Garm | 57.56 | 310 | | P | P | 17 11 13.5 | +0.1 |
| CHGR | Chuyangaron | 58.37 | 309 | | P | P | 17 11 19.3 | +0.3 |
| CHGR | | | | | IAmb | IAmb | 17 11 22.2 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| KKAR | Karatay Array | 58.46 | 314 | | P | P | 17 11 18.9 | -0.6 |
| BRVK | Borovoye | 61.78 | 325 | | P | P | 17 11 42.6 | +0.5 |
| BRVK | | | | | IAmb | IAmb | 17 11 45.2 | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| ABKAR | Akbulak array | 67.01 | 319 | | P | P | 17 12 16.6 | +0.2 |
| ABKAR | | | | | IAmb | IAmb | 17 12 16.8 | |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| ARCES | ARCESS Array B | 84.03 | 340 | | P | P | 17 13 54.3 | +0.6 |
| | comp=Z,3.3nm,1.0s,baz=79,slow=4.9,SNR=2.1 | | | | | | | |
| BRTR | Keskin Array B | 85.81 | 309 | | P | P | 17 14 02.9 | -0.5 |
| | comp=Z,0.5nm,0.6s,baz=91,slow=4.5,SNR=3.6 | | | | | | | |
| BRTR | Keskin Array B | 85.81 | 309 | | P | P | 17 14 02.8 | -0.7 |
| FINES | FINESS Array B | 85.84 | 332 | | P | P | 17 14 03.0 | +0.1 |
| | comp=Z,1.1nm,0.7s,baz=56,slow=4.9,SNR=5.8 | | | | | | | |
| FINES | FINESS Array B | 85.84 | 332 | | P | P | 17 14 02.0 | -0.9 |
| AKASG | Malin Array Be | 86.68 | 321 | | P | P | 17 14 06.9 | -0.3 |
| | comp=Z,0.3nm,0.4s,baz=67,slow=4.8,SNR=5.2 | | | | | | | |
| AKASG | Malin Array Be | 86.68 | 321 | | IAmb | IAmb | 17 14 31.4 | |
| | comp=Z,2.8nm,1.4s | | | | | | | |
| YKA | Yellowknife Ar | 93.06 | 24 | | P | P | 17 14 38.4 | +1.4 |
| | comp=Z,0.2nm,0.7s,baz=300,slow=4.9,SNR=3.6 | | | | | | | |
| PLCA | Paso Flores | 146.32 | 156 | | PKPbc | PKiKP | 17 21 07.2 | -0.6 |
| | comp=Z,1.2nm,0.8s,baz=264,slow=5.3,SNR=3.3 | | | | | | | |
| PLCA | Paso Flores | 146.32 | 156 | | | PKPdf | 17 21 01.9 | -1.6 |

*JMA **01** 17:22:50.2±0.1, 24.66N× 121.86E, h75km±2km, M2.8*
*TAP **01** 17:22:50.2, 24.69N× 121.84E, h76km, ML3.5, B*

**ISC 01 17:22:50.0±1.3, 24.71N±0.03× 121.85E±0.03, h81km±5km, n98, σ0°76/167, 1C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWC | Suao | 0.10 | 179 | P | Pn | 17 23 02.0 | +0.4 |
| | baz=156 | | | | | | |
| TWC | | | | eS | Sn | 17 23 10.8 | +0.5 |
| | baz=156 | | | | | | |
| ILA | Ilan | 0.11 | 302 | P | Pn | 17 23 02.4 | +0.8 |
| | baz=329 | | | | | | |
| ILA | | | | eS | Sn | 17 23 11.4 | +1.1 |
| | baz=329 | | | | | | |
| NTC | Toucheng | 0.14 | 354 | P | Pn | 17 23 02.1 | +0.3 |
| | baz=7.0 | | | | | | |
| NTC | | | | eS | Sn | 17 23 10.1 | -0.3 |
| | baz=7.0 | | | | | | |
| TWE | Neicheng | 0.16 | 274 | P | Pn | 17 23 02.3 | +0.5 |
| | baz=291 | | | | | | |
| TWE | | | | eS | Sn | 17 23 11.0 | +0.5 |
| | baz=291 | | | | | | |
| FUSB | Fushanzhiwuyua | 0.24 | 282 | *i* P | Pn | 17 23 02.3 | +0.1 |
| | baz=288 | | | | | | |
| FUSB | | | | eS | Sn | 17 23 10.3 | -1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ANP** | **Anpu** | **0.56 328** | P | **Pn** | **17 23 04.6** | **0.0** |
| | baz=330 | | | | | |
| ANP | | | *e*S | **Sn** | 17 23 15.2 | -0.1 |
| | baz=330 | | | | | |
| **NTST** | **Danshui** | **0.58 322** | *e*P | **Pn** | **17 23 04.9** | **+0.3** |
| | baz=330 | | | | | |
| NTST | | | *e*S | **Sn** | 17 23 16.2 | +0.8 |
| | baz=330 | | | | | |
| **NACB** | **Ninganchiao** | **0.58 203** | P | **Pn** | **17 23 03.9** | **-0.7** |
| | baz=213 | | | | | |
| NACB | | | *e*S | **Sn** | 17 23 14.5 | -1.0 |
| | baz=213 | | | | | |
| **ETL** | **Fush Village** | **0.58 201** | P | **Pn** | **17 23 04.2** | **-0.5** |
| | baz=210 | | | | | |
| ETL | | | *e*S | **Sn** | 17 23 14.2 | -1.4 |
| | baz=210 | | | | | |
| **NCU** | **National Centr** | **0.65 294** | P | **Pn** | **17 23 05.6** | **+0.3** |
| | baz=287 | | | | | |
| NCU | | | S | **Sn** | 17 23 17.0 | +0.3 |
| | baz=287 | | | | | |
| **NCUH** | **Zhongli** | **0.66 293** | P | **Pn** | **17 23 05.6** | **+0.3** |
| | baz=288 | | | | | |
| NCUH | | | *e*S | **Sn** | 17 23 17.1 | +0.4 |
| | baz=288 | | | | | |
| **TWD** | **Chiawan** | **0.67 200** | P | **Pn** | **17 23 04.9** | **-0.5** |
| | baz=208 | | | | | |
| TWD | | | *e*S | **Sn** | 17 23 16.0 | -0.9 |
| | baz=208 | | | | | |
| **NFF** | **Wufeng Townshi** | **0.67 264** | P | **Pn** | **17 23 05.7** | **+0.1** |
| | baz=274 | | | | | |
| NFF | | | S | **Sn** | 17 23 16.4 | -0.7 |
| | baz=274 | | | | | |
| **FUSS** | **Fushou** | **0.72 230** | P | **Pn** | **17 23 06.7** | **+0.5** |
| | baz=223 | | | | | |
| FUSS | | | *e*S | **Sn** | 17 23 18.0 | -0.2 |
| | baz=223 | | | | | |
| **LIOB** | **Emei** | **0.76 265** | *i* P | **Pn** | **17 23 06.7** | **+0.2** |
| | baz=266 | | | | | |
| LIOB | | | *e*S | **Sn** | 17 23 18.6 | -0.1 |
| | baz=266 | | | | | |
| **HWA** | **Hwalien** | **0.76 197** | *e*P | **Pn** | **17 23 06.3** | **-0.1** |
| | baz=206 | | | | | |
| HWA | | | *e*S | **Sn** | 17 23 18.8 | +0.1 |
| | baz=206 | | | | | |
| **TWT** | **Tachien** | **0.76 234** | *e*P | **Pn** | **17 23 07.5** | **+0.9** |
| | baz=228 | | | | | |
| TWT | | | *e*S | **Sn** | 17 23 19.4 | +0.4 |
| | baz=228 | | | | | |
| **NSTT** | **Nanjuang** | **0.77 264** | P | **Pn** | **17 23 06.7** | **+0.2** |
| | baz=265 | | | | | |
| NSTT | | | *e*S | **Sn** | 17 23 18.2 | -0.7 |
| | baz=265 | | | | | |
| **TDCB** | **Techi** | **0.78 234** | P | **Pn** | **17 23 07.5** | **+0.7** |
| | baz=229 | | | | | |
| TDCB | | | *e*S | **Sn** | 17 23 19.3 | +0.2 |
| | baz=229 | | | | | |
| **SBCB** | **Hsinchu** | **0.79 276** | *e*P | **Pn** | **17 23 06.8** | **+0.1** |
| | baz=277 | | | | | |
| SBCB | | | *e*S | **Sn** | 17 23 18.9 | -0.2 |
| | baz=277 | | | | | |
| **HSN** | **Hsinchu** | **0.80 277** | *e*P | **Pn** | **17 23 06.8** | **-0.1** |
| | baz=281 | | | | | |
| HSN | | | *e*S | **Sn** | 17 23 18.6 | -0.9 |
| | baz=281 | | | | | |
| **CHGB** | **Renai** | **0.89 224** | P | **Pn** | **17 23 08.9** | **+0.8** |
| | baz=217 | | | | | |
| CHGB | | | *e*S | **Sn** | 17 23 21.8 | +0.2 |
| | baz=217 | | | | | |
| **WHP** | **Taichung City** | **0.93 243** | P | **Pn** | **17 23 09.4** | **+1.1** |
| | baz=252 | | | | | |
| WHP | | | *e*S | **Sn** | 17 23 22.4 | +0.3 |
| | baz=252 | | | | | |
| **ESL** | **Shilin** | **0.97 203** | *e*P | **Pn** | **17 23 07.8** | **-1.0** |
| | baz=202 | | | | | |
| **NMLH** | **Miaoli** | **0.98 260** | *e*P | **Pn** | **17 23 09.2** | **+0.3** |
| | baz=260 | | | | | |
| NMLH | | | *e*S | **Sn** | 17 23 22.9 | -0.1 |
| | baz=260 | | | | | |
| **WUSB** | **Renai** | **0.98 223** | P | **Pn** | **17 23 09.7** | **+0.7** |
| | baz=217 | | | | | |
| WUSB | | | *e*S | **Sn** | 17 23 23.1 | -0.1 |
| | baz=217 | | | | | |
| **NSY** | **Sanyi** | **1.03 254** | P | **Pn** | **17 23 10.2** | **+0.7** |
| | baz=253 | | | | | |
| NSY | | | *e*S | **Sn** | 17 23 25.0 | +0.8 |
| | baz=253 | | | | | |
| **WCS** | **Beigang Elemen** | **1.07 233** | *e*P | **Pn** | **17 23 10.9** | **+0.9** |
| | baz=241 | | | | | |
| WCS | | | *e*S | **Sn** | 17 23 24.3 | -0.7 |
| | baz=241 | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09 103** | P | **Pn** | **17 23 10.0** | **-0.2** |
| **EGFH** | **Guangfu** | **1.10 200** | *e*P | **Pn** | **17 23 09.7** | **-0.8** |
| | baz=204 | | | | | |
| **VWDT** | **VWDT** | **1.15 214** | P | **Pn** | **17 23 11.5** | **+0.6** |
| | baz=208 | | | | | |
| VWDT | | | *e*S | **Sn** | 17 23 27.3 | +0.7 |
| | baz=208 | | | | | |
| **WDJ** | **Dajia District** | **1.16 252** | *e*P | **Pn** | **17 23 11.8** | **+0.8** |
| | baz=252 | | | | | |
| WDJ | | | *e*S | **Sn** | 17 23 26.8 | 0.0 |
| | baz=252 | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.19 227** | P | **Pn** | **17 23 12.5** | **+0.8** |
| | baz=234 | | | | | |
| SMLT | | | *e*S | **Sn** | 17 23 28.8 | +1.0 |
| | baz=234 | | | | | |
| **TCU** | **Taichung** | **1.21 243** | *e*P | **Pn** | **17 23 12.4** | **+0.7** |
| | baz=250 | | | | | |
| TCU | | | *e*S | **Sn** | 17 23 27.0 | -0.9 |
| | baz=250 | | | | | |
| **TYC** | **Yuchr** | **1.21 229** | P | **Pn** | **17 23 12.5** | **+0.8** |
| | baz=235 | | | | | |
| TYC | | | *e*S | **Sn** | 17 23 29.2 | +1.3 |
| | baz=235 | | | | | |
| **SSLB** | **Suanglung** | **1.23 222** | P | **Pn** | **17 23 12.8** | **+0.8** |
| | baz=232 | | | | | |
| SSLB | | | S | **Sn** | 17 23 29.3 | +0.8 |
| | baz=232 | | | | | |
| **HGSD** | **Ruisui** | **1.27 198** | *e*P | **Pn** | **17 23 12.0** | **-0.5** |
| | baz=205 | | | | | |
| **EHY** | **Hungye** | **1.29 202** | *e*P | **Pn** | **17 23 11.2** | **-1.6** |
| | baz=200 | | | | | |
| EHY | | | *e*S | **Sn** | 17 23 27.4 | -2.5 |
| | baz=200 | | | | | |
| **WCHH** | **Zhanghua** | **1.33 242** | *e*P | **Pn** | **17 23 13.0** | **-0.2** |
| | baz=250 | | | | | |
| WCHH | | | *e*S | **Sn** | 17 23 30.1 | -0.6 |
| | baz=250 | | | | | |
| **WNT** | **Mingjian** | **1.35 232** | *e*P | **Pn** | **17 23 14.0** | **+0.6** |
| | baz=241 | | | | | |
| WNT | | | *e*S | **Sn** | 17 23 31.9 | +0.8 |
| | baz=241 | | | | | |
| **WJS** | **Zhushan** | **1.35 229** | *e*P | **Pn** | **17 23 14.0** | **+0.5** |
| | baz=239 | | | | | |
| WJS | | | *e*S | **Sn** | 17 23 31.2 | 0.0 |
| | baz=239 | | | | | |
| **YULB** | **Yu-li** | **1.40 201** | P | **Pn** | **17 23 13.1** | **-1.1** |
| | baz=200 | | | | | |
| **EYUL** | **Yuli** | **1.44 200** | *e*P | **Pn** | **17 23 13.8** | **-0.8** |
| | baz=204 | | | | | |
| **ALS** | **Alishan** | **1.53 219** | *e*P | **Pn** | **17 23 17.1** | **+1.1** |
| | baz=227 | | | | | |
| ALS | | | *e*S | **Sn** | 17 23 37.5 | +1.9 |
| | baz=227 | | | | | |
| **CHN5** | **Tsauling** | **1.54 224** | P | **Pn** | **17 23 16.9** | **+0.9** |
| | baz=232 | | | | | |
| CHN5 | | | *e*S | **Sn** | 17 23 35.6 | 0.0 |
| | baz=232 | | | | | |
| **WRL** | **Guolierlin Hig** | **1.56 239** | *e*P | **Pn** | **17 23 16.5** | **+0.3** |
| | baz=238 | | | | | |
| WRL | | | *e*S | **Sn** | 17 23 35.6 | -0.4 |
| | baz=238 | | | | | |
| **WDLH** | **Douliu** | **1.57 230** | *e*P | **Pn** | **17 23 16.9** | **+0.6** |
| | baz=239 | | | | | |
| WDLH | | | *e*S | **Sn** | 17 23 36.5 | +0.4 |
| | baz=239 | | | | | |
| **FULB** | **Fuli** | **1.59 199** | *e*P | **Pn** | **17 23 16.5** | **0.0** |
| | baz=202 | | | | | |
| **CHKT** | **Chengkung** | **1.66 195** | *e*P | **Pn** | **17 23 16.3** | **-1.2** |
| | baz=186 | | | | | |
| **WTK** | **Tuku** | **1.68 233** | *e*P | **Pn** | **17 23 17.5** | **-0.1** |
| | baz=231 | | | | | |
| WTK | | | *e*S | **Sn** | 17 23 38.4 | -0.2 |
| | baz=231 | | | | | |
| **ELDTW** | **Lidau** | **1.69 207** | *e*P | **Pn** | **17 23 18.1** | **+0.1** |
| | baz=198 | | | | | |
| ELDTW | | | *e*S | **Sn** | 17 23 38.1 | -1.2 |
| | baz=198 | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.75 102** | P | **Pn** | **17 23 18.6** | **-0.1** |
| IRIF | | | *e*S | **Sn** | 17 23 39.9 | -0.6 |
| **CHY** | **Chiayi** | **1.77 227** | P | **Pn** | **17 23 18.8** | **-0.2** |
| | baz=234 | | | | | |
| CHY | | | *e*S | **Sn** | 17 23 40.9 | 0.0 |
| | baz=234 | | | | | |
| **TPUB** | **Ta-pu** | **1.79 219** | P | **Pn** | **17 23 19.8** | **+0.6** |
| | baz=217 | | | | | |
| TPUB | | | *e*S | **Sn** | 17 23 42.3 | +0.9 |
| | baz=217 | | | | | |
| **EDH** | **Donghe** | **1.80 196** | *e*P | **Pn** | **17 23 18.1** | **-1.2** |
| | baz=195 | | | | | |
| EDH | | | *e*S | **Sn** | 17 23 39.3 | -2.2 |
| | baz=195 | | | | | |
| **WTP** | **Ta-pu** | **1.84 218** | P | **Pn** | **17 23 20.6** | **+0.7** |
| | baz=228 | | | | | |
| **WSL** | **Shuilin Townsh** | **1.89 232** | *e*P | **Pn** | **17 23 20.5** | **0.0** |
| | baz=239 | | | | | |
| **LONT** | **Longtian** | **1.91 200** | *e*P | **Pn** | **17 23 21.2** | **+0.4** |
| | baz=190 | | | | | |
| **ICHU** | **Yijhu** | **1.96 227** | *e*P | **Pn** | **17 23 22.1** | **+0.6** |
| | baz=227 | | | | | |
| **SGST** | **Jiashian** | **1.99 216** | *e*P | **Pn** | **17 23 21.6** | **-0.2** |
| | baz=225 | | | | | |
| **TWGBT** | **Beinan** | **2.01 201** | *e*P | **Pn** | **17 23 20.8** | **-1.3** |
| | baz=190 | | | | | |
| **JKRS** | **Kuro-shima** | **2.02 103** | P | **Pn** | **17 23 22.6** | **+0.3** |
| **TTN** | **Taitung** | **2.05 198** | *e*P | **Pn** | **17 23 23.2** | **+0.6** |
| | baz=189 | | | | | |
| **JIJ** | **Ishigaki jima** | **2.12 99** | P | **Pn** | **17 23 23.4** | **-0.1** |
| JIJ | | | *e*S | **Sn** | 17 23 48.8 | -0.3 |
| **MATB** | **Ma-tsu** | **2.24 310** | *e*P | **Pn** | **17 23 24.4** | **-0.8** |
| | baz=309 | | | | | |
| **JISG** | **Ishigakijimahi** | **2.25 93** | P | **Pn** | **17 23 25.6** | **+0.4** |
| JISG | | | *e*S | **Sn** | 17 23 53.0 | +0.9 |
| **SSD** | **Sandimen** | **2.25 210** | *e*P | **Pn** | **17 23 26.8** | **+1.5** |
| | baz=221 | | | | | |
| **ECL** | **Taimali** | **2.26 201** | *e*P | **Pn** | **17 23 23.9** | **-1.5** |
| | baz=193 | | | | | |
| **TSMG** | **Majia** | **2.28 209** | *e*P | **Pn** | **17 23 27.9** | **+2.2** |
| | baz=220 | | | | | |
| **TWM1** | **Shoushan** | **2.29 215** | *e*P | **Pn** | **17 23 27.1** | **+1.3** |
| | baz=214 | | | | | |
| **MASBT** | **Mashibuluo** | **2.37 208** | *e*P | **Pn** | **17 23 27.8** | **+0.9** |
| | baz=220 | | | | | |
| **SNJT** | **Kaohsiung City** | **2.39 216** | *e*P | **Pn** | **17 23 28.7** | **+1.5** |
| | baz=215 | | | | | |
| **EAST** | **Anshuo** | **2.49 202** | *e*P | **Pn** | **17 23 30.2** | **+1.7** |
| | baz=193 | | | | | |
| **SCZT** | **Fangliau** | **2.58 206** | *e*P | **Pn** | **17 23 30.2** | **+0.5** |
| | baz=217 | | | | | |
| **JTJ** | **Tarama** | **2.60 91** | P | **Pn** | **17 23 31.5** | **+1.6** |
| JTJ | | | *e*S | **Sn** | 17 24 01.7 | +1.1 |
| **LYJJ** | **Jianjiangzhen** | **2.63 315** | *e*P | **Pn** | **17 23 29.1** | **-1.2** |
| | baz=314 | | | | | |
| **XPSS** | **Dashiqiu** | **2.67 326** | *e*P | **Pn** | **17 23 30.5** | **-0.4** |
| | baz=326 | | | | | |
| **MHZQ** | **Yeshan** | **2.90 299** | *e*P | **Pn** | **17 23 33.2** | **-0.8** |
| | baz=298 | | | | | |
| **AXDP** | **Jialang** | **3.53 274** | *e*P | **Pn** | **17 23 41.7** | **-0.8** |
| | baz=272 | | | | | |

*PDG **01** 17:51:32.4±0.1,43.˚40N×17.˚72E,h9km,ML2.6/10,Error ellipse: s-maj=0.2km s-min=0.4km az=0.0*
*RHSSO **01** 17:51:33.2±0.2,43.˚41N×17.˚72E,h4km±2km,ML2.7/13*
*BEO **01** 17:51:33.4±0.4,43.˚41N×17.˚63E,h4km±3km,ML2.5/10*

**ISC 01 17:51:32.5**±1.1,**43.˚42N**±0.˚02×**17.˚73E**±0.˚02,**h1**km±10km, **n66**,σ0**.84**/123,**5C-13D**,**Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **RICI** | **Ricice** | **0.44** | **280** | *e*Pg | | **Pg** | **17 51 41.0** | **+0.1** |
| RICI | | | | Sg | | **Sg** | **17 51 48.6** | **+1.9** |
| **MAKA** | **Makarska** | **0.53** | **256** | *e*Pg | | **Pg** | **17 51 42.3** | **-0.4** |
| MAKA | | | | Sg | | **Sg** | **17 51 50.9** | **+1.3** |
| **STON** | **Ston** | **0.55** | **182** | *e*Pg | | **Pg** | **17 51 42.9** | **0.0** |
| STON | | | | *e*Sg | | **Sb** | **17 51 51.8** | **-1.4** |
| **STON** | **Ston** | **0.55** | **182** | ⇓*i*Pg | | **Pg** | **17 51 42.4** | **-0.5** |
| STON | | | | *e*Sg | | **Sg** | **17 51 51.0** | **+1.0** |
| **STON** | **Ston** | **0.55** | **182** | *e*Pg | | **Pg** | **17 51 42.2** | **-0.8** |
| STON | | | | Sg | | **Sg** | **17 51 50.6** | **+0.6** |
| **BRY** | **Bratogost** | **0.79** | **131** | *e*Pg | | **Pg** | **17 51 46.6** | **-0.9** |
| BRY | | | | *e*Sg | | **Sg** | **17 51 58.7** | **+1.0** |
| **BRY** | **Bratogost** | **0.79** | **131** | ⇓*i*Pg | | **Pg** | **17 51 46.7** | **-0.8** |
| BRY | | | | *i* Sg | | **Sg** | **17 51 59.2** | **+1.5** |
| **TREB** | **Trebinje** | **0.84** | **147** | *e*Pg | | **Pg** | **17 51 48.0** | **-0.5** |
| TREB | | | | *e*Sg | | **Sb** | **17 52 01.4** | **-0.2** |
| **TREB** | **Trebinje** | **0.84** | **147** | ⇓*i*Pg | | **Pg** | **17 51 47.7** | **-0.8** |
| TREB | | | | *e*Sg | | **Sg** | **17 52 00.4** | **+1.1** |
| **UPM** | **Unac-Piva** | **0.89** | **104** | ⇓*i*Pg | | **Pg** | **17 51 49.0** | **-0.5** |
| UPM | | | | *e*Sg | | **Sg** | **17 52 02.1** | **+1.2** |
| **UPM** | **Unac-Piva** | **0.89** | **104** | *e*Pg | | **Pg** | **17 51 48.9** | **-0.5** |
| UPM | | | | *i* Sg | | **Sg** | **17 52 02.7** | **+1.8** |
| **LSTV** | **Lastovo** | **0.89** | **224** | *e*Pg | | **Pg** | **17 51 48.4** | **-1.2** |
| LSTV | | | | Sg | | **Sg** | **17 52 01.5** | **+0.3** |
| **HVAR** | **Hvar** | **0.96** | **256** | *e*Pg | | **Pg** | **17 51 49.9** | **-1.0** |
| HVAR | | | | Sg | | **Sb** | **17 52 05.0** | **-0.3** |
| **MGRS** | **Mrkonjic Grad** | **1.10** | **335** | *e*Pg | | **Pg** | **17 51 53.5** | **-0.1** |
| MGRS | | | | *e*Sg | | **Sg** | **17 52 08.4** | **+0.5** |
| **NKME** | **Niksic** | **1.11** | **126** | ⇓*i*Pg | | **Pg** | **17 51 52.7** | **-1.0** |
| NKME | | | | *i* Sg | | **Sb** | **17 52 10.0** | **+0.5** |
| **HCY** | **Herceg Novi** | **1.12** | **150** | ⇑*i*Pg | | **Pg** | **17 51 52.6** | **-1.4** |
| HCY | | | | *e*Sg | | **Sg** | **17 52 08.9** | **+0.4** |
| **HCY** | **Herceg Novi** | **1.12** | **150** | ⇓*i*Pg | | **Pg** | **17 51 52.8** | **-1.2** |
| HCY | | | | *i* Sg | | **Sb** | **17 52 10.2** | **+0.4** |
| **KUV** | **Kijevo** | **1.12** | **302** | *e*Pg | | **Pg** | **17 51 53.4** | **-0.6** |
| KUV | | | | Sg | | **Sn** | **17 52 11.6** | **0.0** |
| **RUDO** | **Rudo** | **1.21** | **80** | ⇓*i*Pg | | **Pg** | **17 51 54.1** | **-1.6** |
| RUDO | | | | *e*Sg | | **Sg** | **17 52 11.8** | **+0.4** |
| **PLE** | **Pljevlja** | **1.21** | **94** | ⇓*i*Pg | | **Pg** | **17 51 55.0** | **-0.8** |
| PLE | | | | *i* Sg | | **Sn** | **17 52 14.1** | **+0.2** |
| **BBLS** | **Lazići** | **1.30** | **69** | *e*Pg | | **Pn** | **17 51 56.8** | **-1.1** |
| BBLS | | | | *e*Sg | | **Sn** | **17 52 16.5** | **+0.6** |
| **BBLS** | **Lazići** | **1.30** | **69** | ⇑*i*Pg | | **Pn** | **17 51 56.8** | **-1.1** |
| BBLS | | | | *e*Sg | | **Sg** | **17 52 15.0** | **+0.8** |
| **BLY** | **Banja Luka** | **1.39** | **344** | *e*Pg | | **Pn** | **17 51 59.1** | **0.0** |
| BLY | | | | *e*Sg | | **Sn** | **17 52 19.3** | **+1.2** |
| **BLY** | **Banja Luka** | **1.39** | **344** | ⇑*i*Pg | | **Pn** | **17 51 59.0** | **0.0** |
| BLY | | | | *e*Sg | | **Sb** | **17 52 17.3** | **-0.2** |
| **BUM** | **Brajici-Budva** | **1.41** | **142** | ⇓*i*Pg | | **Pn** | **17 51 58.2** | **-1.2** |
| BUM | | | | *i* Sg | | **Sn** | **17 52 20.2** | **+1.6** |
| **PDG** | **Podgorica** | **1.49** | **131** | *e*Pg | | **Pn** | **17 52 00.8** | **+0.3** |
| PDG | | | | *e*Sg | | **Sg** | **17 52 23.6** | **+3.1** |
| **PDG** | **Podgorica** | **1.49** | **131** | ⇑*i*Pg | | **Pn** | **17 52 00.2** | **-0.3** |
| PDG | | | | *e*Sg | | **Sb** | **17 52 20.7** | **+0.2** |
| **TTG** | **Podgorica** | **1.49** | **131** | ⇓*i*Pg | | **Pn** | **17 51 59.9** | **-0.6** |
| TTG | | | | *e*Sg | | **Sg** | **17 52 22.1** | **+1.6** |
| **MORI** | **Morici** | **1.53** | **288** | *e*Pn | | **Pn** | **17 52 00.0** | **-1.0** |
| MORI | | | | Sg | | **Sg** | **17 52 23.5** | **+1.7** |
| **ZIRJ** | **Zirje** | **1.53** | **280** | *e*Pn | | **Pn** | **17 51 59.9** | **-1.1** |
| ZIRJ | | | | Sg | | **Sg** | **17 52 22.3** | **+0.5** |
| **DRME** | **Dracevica, Mon** | **1.63** | **138** | ⇑*i*Pn | | **Pn** | **17 52 02.6** | **+0.2** |
| DRME | | | | *e*Sn | | **Sb** | **17 52 24.6** | **+0.1** |
| **DRME** | **Dracevica, Mon** | **1.63** | **138** | *e*Pn | | **Pn** | **17 52 02.5** | **+0.2** |
| DRME | | | | *e*Sn | | **Sg** | **17 52 25.8** | **+0.9** |
| **SJES** | **Sjenica** | **1.65** | **95** | *e*Pn | | **Pn** | **17 52 03.4** | **+0.7** |
| SJES | | | | *e*Sn | | **Sg** | **17 52 26.8** | **+1.5** |
| **IVA** | **Berane** | **1.68** | **108** | ⇓*i*Pn | | **Pn** | **17 52 03.0** | **-0.1** |
| IVA | | | | *i* Sn | | **Sg** | **17 52 27.2** | **+0.9** |
| **MRAK** | **Mrakovica** | **1.70** | **340** | ⇓*i*Pn | | **Pn** | **17 52 03.2** | **-0.2** |
| MRAK | | | | *e*Sn | | **Sn** | **17 52 26.2** | **+0.3** |
| **TEKS** | **Tekeris** | **1.72** | **48** | *e*Pn | | **Pn** | **17 52 04.0** | **+0.3** |
| TEKS | | | | *e*Sn | | **Sn** | **17 52 26.2** | **-0.2** |
| **IVAS** | **Ivanjica** | **1.77** | **84** | *e*Pn | | **Pn** | **17 52 04.4** | **0.0** |
| IVAS | | | | *e*Sn | | **Sg** | **17 52 30.0** | **+0.6** |
| **DIVS** | **Divibare** | **1.77** | **67** | *e*Pn | | **Pn** | **17 52 04.8** | **+0.3** |
| DIVS | | | | *e*Sn | | **Sg** | **17 52 30.4** | **+0.9** |
| **DIVS** | **Divibare** | **1.77** | **67** | *e*Pn | | **Pn** | **17 52 04.0** | **-0.5** |
| DIVS | | | | *e*Sn | | **Sn** | **17 52 27.7** | **0.0** |
| **UDBI** | **Udbina** | **1.80** | **309** | *e*Pn | | **Pn** | **17 52 05.2** | **+0.4** |
| **PVY** | **Plav** | **1.83** | **116** | ⇓*i*Pn | | **Pn** | **17 52 05.1** | **-0.2** |
| PVY | | | | *i* Sn | | **Sb** | **17 52 30.8** | **+0.4** |
| **ULC** | **Ulcinj** | **1.83** | **142** | *e*Pn | | **Pn** | **17 52 05.0** | **-0.2** |
| ULC | | | | *i* Sn | | **Sb** | **17 52 30.7** | **+0.4** |
| **A251A** | **Rujevac** | **2.01** | **329** | *e*Pn | | **Pn** | **17 52 06.9** | **-0.6** |
| **A252A** | **Venje** | **2.02** | **2** | *e*Pn | | **Pn** | **17 52 06.5** | **-1.2** |
| **DUGI** | **Dugi Otok** | **2.02** | **287** | *e*Pn | | **Pn** | **17 52 08.3** | **+0.6** |
| DUGI | | | | Sn | | **Sb** | **17 52 36.3** | **+0.6** |
| **TRUS** | **Trudelj** | **2.10** | **67** | *e*Pn | | **Pn** | **17 52 09.0** | **+0.2** |
| TRUS | | | | *e*Sn | | **Sn** | **17 52 36.9** | **+1.3** |
| **PLIT** | **Plitvice** | **2.10** | **315** | *e*Pn | | **Pn** | **17 52 09.9** | **+1.0** |
| PLIT | | | | Sn | | **Sb** | **17 52 38.5** | **+0.3** |
| **GRUS** | **Gruza** | **2.22** | **77** | *e*Pn | | **Pb** | **17 52 12.5** | **-0.9** |
| GRUS | | | | *e*Sn | | **Sb** | **17 52 41.2** | **-0.2** |
| **FRGS** | **Fruska Gora** | **2.29** | **40** | *e*Pn | | **Pn** | **17 52 12.1** | **+0.6** |
| FRGS | | | | *e*Sn | | **Sn** | **17 52 40.9** | **+0.5** |
| **NVLJ** | **Novalja** | **2.36** | **300** | *e*Pn | | **Pn** | **17 52 12.6** | **+0.2** |
| NVLJ | | | | Sn | | **Sb** | **17 52 44.0** | **-1.4** |
| **OZLJ** | **Ozalj** | **2.73** | **324** | *e*Pn | | **Pn** | **17 52 18.7** | **+1.2** |
| **PTJ** | **Puntijarka** | **2.79** | **334** | *e*Pn | | **Pn** | **17 52 17.9** | **-0.5** |
| **KALN** | **Kalnik** | **2.86** | **342** | *e*Pn | | **Pn** | **17 52 18.6** | **-0.8** |
| **MORH** | **Mrgy, Hungar** | **2.87** | **13** | *e*Pn | | **Pn** | **17 52 19.8** | **+0.4** |
| MORH | | | | *e*Sn | | **Sn** | **17 52 54.4** | **-0.2** |
| **CRES** | **Cresnjev** | **2.90** | **327** | *e*Pn | | **Pn** | **17 52 20.1** | **+0.2** |
| CRES | | | | *e*Sn | | **Sn** | **17 52 56.1** | **+0.6** |
| **RIY** | **Rijeka** | **3.01** | **310** | *e*Sn | | **Sn** | **17 52 58.1** | **+0.1** |
| **SMRN** | **Sveta Marina** | **3.04** | **303** | *e*Pn | | **Pn** | **17 52 22.2** | **+0.5** |
| **BRJN** | **Brijuni** | **3.23** | **299** | *e*Pn | | **Pn** | **17 52 25.0** | **+0.7** |
| **CEY** | **Cerknica** | **3.31** | **316** | *e*Pn | | **Pn** | **17 52 25.4** | **-0.1** |
| CEY | | | | *e*Sn | | **Sn** | **17 53 04.7** | **-0.8** |
| **SOKA** | **Soboth** | **3.78** | **331** | *e*Pn | | **Pn** | **17 52 32.0** | **0.0** |
| | 0.9nm,0.3s | | | | | | | |
| SOKA | | | | *e*Sn | | **Sn** | **17 53 16.3** | **-0.8** |
| | 0.4nm,0.3s | | | | | | | |
| **OBKA** | **Obir** | **3.83** | **325** | *e*Pn | | **Pn** | **17 52 32.9** | **+0.3** |
| | 0.2nm,0.1s | | | | | | | |
| OBKA | | | | *e*Sn | | **Sn** | **17 53 18.0** | **-0.4** |
| | 0.8nm,0.2s | | | | | | | |
| **ARSA** | **Arzberg** | **4.14** | **339** | *e*Pn | | **Pn** | **17 52 36.3** | **-0.6** |
| | 2.8nm,0.4s | | | | | | | |
| ARSA | | | | *e*Sn | | **Sn** | **17 53 25.7** | **-0.1** |
| | 0.5nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **4.97** | **314** | *e*Pn | | **Pn** | **17 52 49.0** | **+0.6** |
| | 0.2nm,0.1s | | | | | | | |
| ABTA | | | | *e*Sn | | **Sn** | **17 53 47.7** | **+1.1** |
| | 2.0nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **5.76** | **314** | *e*Pn | | **Pn** | **17 52 59.3** | **-0.1** |
| | 1.2nm,0.2s | | | | | | | |
| WTTA | | | | *e*Sn | | **Sn** | **17 54 05.6** | **-0.6** |
| | 2.0nm,0.4s | | | | | | | |
| **WATA** | **Walderalm** | **5.84** | **314** | *e*Pn | | **Pn** | **17 53 00.7** | **+0.3** |
| | 0.7nm,0.1s | | | | | | | |
| WATA | | | | *e*Sn | | **Sn** | **17 54 09.1** | **+1.1** |
| | 3.7nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **6.10** | **312** | *e*Pn | | **Pn** | **17 53 03.8** | **-0.1** |
| | 0.4nm,0.2s | | | | | | | |
| MOTA | | | | *e*Sn | | **Sn** | **17 54 14.8** | **+0.5** |
| | 1.8nm,0.4s | | | | | | | |

*NOU **01** 17:52:05.9,23.˚84S×176.˚86W,h269km,ML5.0/92,South of Fiji Islands*
*BJI **01** 17:52:05.3±0.0,23.˚27S×177.˚31W,h225km,mb4.7/41, mB5.2/13*
*NEIC **01** 17:52:06.3±1.5,23.˚69S±0.˚08×177.˚7W±0.˚1,h217km±5km, mb4.9/213,Error ellipse: s-maj=14.5km s-min=11.7km az=117.0*
*IDC **01** 17:52:07.5±1.1,23.˚62S×177.˚71W,h229km±9km,mb4.5/33, mb1 4.6/35,mb1mx4.6/45,mbtmp5.1/35,Error ellipse: s-maj=10.1km s-min=8.6km az=0.0*
*BGR **01** 17:52:09.0±0.0,23.˚77S×177.˚35W,h257km±2km*
*GCMT **01** 17:52:11.3±0.3,23.˚70S±0.˚02×177.˚49W±0.˚02, h255km±1km,MW5.3/104,Moment Tensor Solution. s84,c107; s104,c154; Duration: 1s0 Moment tensor: Scale 10¹⁷Nm; Mrr0.14±.02; Mθθ-0.87±.02; Mφφ0.73±.02; Mrθ0.08±.02; Mθφ0.16±.02; Mφr-0.52±.02; Best double couple: M₀0.97300×10¹⁷ NP1:φs235.00000°,δ63.00000°, λ16.00000°. NP2:φs137.00000°,δ75.00000°,λ152.00000°. Principal axes: T 1.0380, Plg30.0000°, Azm93.0000°; N -0.1310, Plg59.0000°, Azm292.0000°; P -0.9070, Plg8.0000°, Azm188.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 01 17:52:05.4**±0.2,**23.˚72S**±0.˚04×**177.˚55W**±0.˚04,**h217**km, **n669**,σ1**673**/672,**mb4.9**/175,**57C-66D**,**Fault plane solution: NP1:**φs258.53476°,δ45.71045°,λ30.45957°. **NP2:**φs146.20886°,δ68.72339°,λ131.46489°. **Principal axes:** T Plg48.6207°, Azm101.3061°; N Plg38.0994°, Azm308.4307°; P Plg13.7198°, Azm207.3947°; **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **RIZ** | **Raoul Island** | **5.51** | **183** | P | | **Pn** | **17 53 28.8** | **+2.1** |
| RIZ | | | | S | | **S** | **17 54 32.8** | **+1.7** |
| **RAO** | **Raoul Island** | **5.52** | **183** | P | | **Pn** | **17 53 28.8** | **+2.1** |
| | 141nm,0.3s,baz=77,slow=18,SNR=8.2 | | | | | | | |
| RAO | | | | S | | **S** | **17 54 32.0** | **+0.8** |
| | 583nm,0.3s,baz=275,slow=23,SNR=9.0 | | | | | | | |
| **RAO** | **Raoul Island** | **5.52** | **183** | Pn | | **Pn** | **17 53 28.5** | **+1.7** |
| **RAO** | **Raoul Island** | **5.52** | **183** | P | | **Pn** | **17 53 28.9** | **+2.1** |
| **GLKZ** | **Green Lake** | **5.53** | **183** | P | | **Pn** | **17 53 28.0** | **+1.1** |
| GLKZ | | | | S | | **S** | **17 54 32.4** | **+1.0** |
| **MSVF** | **Nonsavu** | **7.24** | **325** | P | | Pn | 17 53 54.3 | +5.3 |
| | 31nm,0.3s,baz=148,slow=11,SNR=421 | | | | | | | |
| MSVF | | | | S | | **S** | **17 55 17.4** | **+5.9** |
| | baz=69,slow=22,SNR=6.5 | | | | | | | |
| **MSVF** | **Nonsavu** | **7.24** | **325** | Pn | | Pn | 17 53 54.4 | +5.4 |
| **MSVF** | **Nonsavu** | **7.24** | **325** | P | | Pn | 17 53 54.7 | +5.7 |
| **TAVE** | **Taveuni** | **7.32** | **342** | P | | Pn | 17 53 55.3 | +5.4 |
| **DGTI** | **Dogotuki** | **7.81** | **340** | P | | Pn | 17 54 02.3 | +6.0 |
| **NIUE** | **Niue** | **8.47** | **58** | P | | **Pn** | **17 54 05.6** | **+0.8** |
| | baz=8.4,SNR=131 | | | | | | | |
| NIUE | | | | S | | **S** | **17 55 36.6** | **-3.8** |
| | baz=8.4 | | | | | | | |
| **NIUE** | **Niue** | **8.47** | **58** | Pn | | **Pn** | **17 54 05.5** | **+0.8** |
| **AFI** | **Afiamalu** | **11.18** | **30** | P | | Pn | 17 54 35.8 | -3.9 |
| | 37nm,0.3s,baz=199,slow=17,SNR=55 | | | | | | | |
| AFI | | | | S | | S | 17 56 27.8 | -16 |
| | 16n

FUNA Funafuti 15.42 348 P Pn 17 55 33.1 +1.0
HRRZ Handcock Road 15.54 198 P Pn 17 55 34.4 +0.9
RTZ Ruatahuna 15.56 196 P P 17 55 27.7 -5.7
RTZ S S 17 58 12.1 -14
TLZ Tolley Road 15.71 200 P Pn 17 55 37.4 +1.9
KNZ Kokohu 15.79 194 P P 17 55 32.5 -3.3
HIZ Hauiti 16.11 202 P Pn 17 55 42.0 +1.9
HIZ Hauiti 16.11 202 17 55 39.0 -0.3
RATZ Rangitukua 16.14 199 P P 17 55 39.1 -0.6
BKZ Black Stump Fm 16.21 197 P P 17 55 35.7 -4.8
BKZ Black Stump Fm 16.21 197 P P 17 55 37.6 -2.9
RITZ Rihia Road 16.21 199 P P 17 55 40.2 -0.3
NTVZ North Tongariro 16.38 199 P P 17 55 41.2 -1.3
KRVZ Karewarewa 16.38 199 P P 17 55 41.4 -1.1
TMVZ Te Maari 16.39 199 P P 17 55 40.4 -2.1
ETVZ East Tongariro 16.40 199 P P 17 55 40.9 -1.9
WTVZ West Tongariro 16.42 199 P P 17 55 41.8 -1.1
TWVZ Taurewa 16.43 200 P P 17 55 42.3 -0.6
NNVZ North Ngauruho 16.43 199 P P 17 55 41.8 -1.2
OTVZ Oturere 16.44 199 P P 17 55 39.3 -3.8
SNVZ South Ngauruho 16.47 199 P P 17 55 40.3 -3.2
NGZ Ngauruhoe 16.47 199 P P 17 55 42.3 -1.2
CKHZ Cape Kidnapper 16.53 195 P P 17 55 42.1 -1.8
TUVZ Tukino 16.54 199 P P 17 55 41.7 -2.5
SANVU Saraoutou 16.54 297 P Pn 17 55 47.9 +2.4
SANVU Saraoutou 16.54 297 P Pn 17 55 48.6 +3.1
FWVZ Far West T-bar 16.56 199 P P 17 55 42.9 -1.6
WHVZ Whangaehu Hut 16.57 199 P P 17 55 43.1 -1.6
TRVZ Turoa 16.60 199 P P 17 55 43.4 -1.6
WNVZ Wahianoa 16.61 199 P P 17 55 40.8 -4.3
RAR Rarotonga 16.62 85 P P 17 55 47.5 +2.4
3.1nm,0.3s,baz=239,slow=6.7,SNR=25
RAR Rarotonga 16.62 85 P P 17 55 45.7 +0.6
BHHZ Black Hill Sta 16.63 198 P P 17 55 40.7 -4.5
MOVZ Moawhango 16.64 198 P P 17 55 42.6 -2.6
PKVZ Pokaka 16.65 200 P P 17 55 44.0 -1.4
KRHZ Kereru 16.69 197 P P 17 55 43.2 -2.6
VRZ Vera Road 16.69 201 P P 17 55 46.2 +0.4
MTVZ Mangateitei 16.70 199 P P 17 55 43.8 -2.1
KAHZ Kahuranaki 16.71 195 P P 17 55 42.8 -3.1
PXZ Pawanui 16.93 195 P P 17 55 46.6 -1.8
PNHZ Pukenui 16.99 197 P P 17 55 45.6 -3.4
PKE Pukeiti 17.02 203 P Pn 17 55 51.0 0.0
NEZ North Egmont 17.05 203 P Pn 17 55 52.3 +0.9
WPHZ Waipukurau 17.07 196 P P 17 55 48.7 -1.2
PREZ Palmer Road 17.09 202 P P 17 55 50.1 -0.1
KEHZ Kahui Hut 17.10 203 P P 17 55 51.7 +1.4
NBEZ Newall Road No 17.13 203 P Pn 17 55 53.1 +0.9
TSZ Takapari Road 17.19 197 P P 17 55 48.2 -3.0
PRHZ Porangahau 17.21 195 P P 17 55 48.9 -2.6
NMEZ Namu Road 17.25 203 P P 17 55 53.2 +1.3
DVHZ Dannevirke 17.36 196 P P 17 55 50.5 -2.6
ANWZ Angora Road 17.43 195 P P 17 55 52.1 -1.7
POWZ Post Office Ro 17.55 197 P P 17 55 53.4 -1.7
PRWZ Pori Road 17.65 196 P P 17 55 54.7 -1.5
BFZ Birch Farm 17.70 196 P P 17 55 54.7 -2.0
BFZ Birch Farm 17.70 196 P P 17 55 53.9 -2.8
BFZ Birch Farm 17.70 196 P P 17 55 54.9 -1.9
MRZ Mangatainoka R 17.86 197 P P 17 55 54.9 -3.5
TIWZ Tintock 17.88 196 P P 17 55 57.0 -1.8
CPWZ Castlepoint 17.93 196 P P 17 55 57.9 -1.3
HOWZ Holdsworth Sta 18.09 197 P P 17 55 58.3 -2.8
OGWZ Otaki Gorge 18.11 198 P P 17 55 57.5 -3.7
TMWZ Te Maipa 18.19 196 P P 17 56 00.0 -2.1
KIW Kapiti Island 18.23 199 P P 17 55 59.2 -3.3
MTW Mount Hutt 18.34 197 P P 17 56 01.0 -2.7
CAW Cannon Point 18.41 198 P P 17 56 02.3 -2.1
TRWZ Traveller 18.52 196 P P 17 56 02.8 -2.8
PAWZ Paruwai Farm 18.57 197 P P 17 56 04.0 -2.2
MSWZ Moikau Station 18.65 197 P P 17 56 03.6 -3.4
MSWZ Moikau Station 18.65 197 P P 17 56 03.4 -3.6
SNZO South Karori 18.70 198 P P 17 56 04.0 -3.5
SNZO IAmb IAmb 17 56 12.1
comp=Z,75nm,1.0s
SNZO South Karori 18.70 198 P P 17 56 04.4 -3.2
PLWZ Palliser 18.79 197 P P 17 56 05.7 -2.9
PLWZ Palliser 18.79 197 P P 17 56 05.0 -3.6
QRZ Quartz Range 18.98 204 P P 17 56 07.7 -3.0
QRZ Quartz Range 18.98 204 P P 17 56 08.2 -2.5
NNZ Nelson 19.03 201 P P 17 56 07.0 -4.2
NNZ IAmb IAmb 17 56 18.9
comp=Z,46nm,0.6s
TUWZ Tuamarina 19.04 200 P P 17 56 07.2 -4.1
CMWZ Cape Campbell 19.25 199 P P 17 56 08.8 -4.7
BSWZ Blackbirch Sta 19.32 200 P P 17 56 11.2 -3.1
THZ Tophouse 19.68 202 P P 17 56 14.8 -3.4
KHZ Kahutara 20.06 200 P P 17 56 18.2 -4.0
KHZ Kahutara 20.06 200 P P 17 56 19.1 -3.1
LTZ Lake Taylor 20.80 201 P P 17 56 25.3 -4.8
OXZ Oxford 21.36 201 P P 17 56 30.8 -5.0
MQZ McQueen's Vall 21.51 200 P P 17 56 33.0 -4.2
MQZ IAmb IAmb 17 56 45.9
comp=Z,24nm,0.5s
MQZ S 18 00 17.8 -3.1
RPZ Rata Peaks 22.04 202 P P 17 56 38.7 -3.8
RPZ Rata Peaks 22.04 202 P P 17 56 39.7 -2.8
FOZ Fox Glacier 22.34 205 P P 17 56 42.5 -2.7
LBZ Lake Benmore 22.93 203 P P 17 56 48.0 -2.6
LBZ IAmb IAmb 17 56 49.5
comp=Z,32nm,0.7s
ODZ Otahua Downs 23.35 201 P P 17 56 53.1 -1.2
ODZ IAmb IAmb 17 56 54.7
comp=Z,40nm,0.8s
ODZ Otahua Downs 23.35 201 P P 17 56 52.8 -1.5
WKZ Wanaka 23.74 204 P P 17 56 55.8 -2.1
MLZ Mavora Lakes 24.54 205 P P 17 57 03.7 -1.5
DCZ Deep Cove 25.00 206 P P 17 57 07.9 -1.4
DCZ IAmb IAmb 17 57 10.5
comp=Z,40nm,0.7s
WHZ Wether Hill Ro 25.05 204 P P 17 57 08.6 -1.1
PYZ Puysegur Point 25.76 206 P P 17 57 16.2 0.0
HNR Honiara 25.77 300 P P 17 57 15.2 -1.3
comp=Z,46nm,0.6s,baz=172,slow=2.0,SNR=7.2
HNR Honiara 25.77 300 P P 17 57 14.7 -1.8
TARA Tarawa 26.59 338 P P 17 57 23.8 0.0
PAE Paea 26.82 82 eP P 17 57 25.7 -0.2
comp=Z,29nm,1.3s
PPT2 Papeete2 26.85 82 eP P 17 57 26.5 +0.2
comp=Z,98nm,1.2s
PPT Papeete 26.86 82 P P 17 57 27.4 +1.2
comp=Z,95nm,1.1s,baz=299,slow=7.0,SNR=4.1
TIAR Tiarei 27.07 82 eP P 17 57 28.3 +0.2
comp=Z,1.5nm,0.9s
ARMA Armidale 28.19 250 P P 17 57 38.7 +0.7
baz=28,SNR=26
ARMA Armidale 28.19 250 P P 17 57 39.5 +1.4
ARMA Armidale 28.19 250 P P 17 57 39.6 +1.5
EIDS Eidsvold 28.55 260 P P 17 57 42.0 +0.8
baz=28,SNR=18
EIDS Eidsvold 28.55 260 P P 17 57 40.7 -0.5
EIDS Eidsvold 28.55 260 P P 17 57 42.2 +1.0
MGCD Mangrove Creek 29.04 244 P P 17 57 47.2 +1.8
baz=29,SNR=27
MGCD Mangrove Creek 29.04 244 P P 17 57 47.2 +1.8
RK1H Rockhampton Ha 29.26 264 P P 17 57 48.6 +1.1
RMQ Roma 30.58 258 P P 17 58 00.7 +1.6
baz=31,SNR=66
RMQ Roma 30.58 258 P P 17 58 00.9 +1.7
CNB Canberra Magne 30.89 240 P P 17 58 03.0 +1.3
baz=31,SNR=5.9
CNB Canberra Magne 30.89 240 P P 17 58 03.4 +1.6
CAN Canberra 31.18 241 P P 17 58 03.1 -1.3
CAN IAmb IAmb 17 58 06.6
comp=Z,30nm,0.9s
CAN Canberra 31.18 241 P P 17 58 05.5 +1.2
MILA Mila 31.48 237 P P 17 58 08.7 +1.8
baz=32,SNR=7.8
CMSA Cobar Meteorol 33.37 248 P P 17 58 23.4 +0.1
baz=33,SNR=78
CMSA Cobar Meteorol 33.37 248 P P 17 58 23.7 +0.4
GLAD Gladstone 33.53 231 P P 17 58 24.9 +0.3
CTA Charters Tower 33.72 269 P P 17 58 27.0 +0.5
comp=Z,83nm,0.4s,baz=94,slow=10,SNR=426
CTA Charters Tower 33.72 269 P P 17 58 27.4 +0.9
CTAO Charters Tower 33.72 269 P P 17 58 26.9 +0.4
CTAO Charters Tower 33.72 269 P P 17 58 27.4 +0.9
TOO Toolangi 34.43 238 P P 17 58 33.0 +0.5
baz=34,SNR=28
TOO Toolangi 34.43 238 P P 17 58 31.6 -0.9
TOO IAmb IAmb 17 58 34.4
comp=Z,34nm,0.8s
TOO Toolangi 34.43 238 P P 17 58 32.7 +0.2

QLP Quilpie 34.63 257 P P 17 58 34.6 +0.4
baz=35,SNR=26
QLP Quilpie 34.63 257 P P 17 58 34.9 +0.7
TAU Tasmania Unive 34.71 228 P P 17 58 34.5 -0.2
TAU Tasmania Unive 34.71 228 P P 17 58 35.1 +0.4
RABL Rabaul 35.08 299 P P 17 58 37.7 -0.5
RABL IAmb IAmb 17 58 53.5
comp=Z,30nm,0.7s
MCQ Macquarie Isla 35.40 204 P P 17 58 41.6 +1.3
baz=36,SNR=4.9
MCQ Macquarie Isla 35.40 204 P P 17 58 40.4 +0.1
MTSU Mount Surprise 35.97 272 P P 17 58 46.5 +0.7
baz=36,SNR=135
MTSU Mount Surprise 35.97 272 P P 17 58 46.6 +0.8
PMG Port Moresby 36.57 287 P P 17 58 51.0 +0.1
comp=Z,281nm,0.8s,baz=88,slow=5.4,SNR=164
PMG ScP ScP 18 04 34.9 -0.4
comp=Z,6.7nm,0.9s,baz=131,slow=4.4,SNR=3.2
PMG Port Moresby 36.57 287 P P 17 58 51.0 +0.1
PMG Port Moresby 36.57 287 P P 17 58 51.3 +0.4
STKA Stephens Creek 36.87 248 P P 17 58 53.5 +0.3
comp=Z,36nm,0.6s,baz=93,slow=10,SNR=124
STKA Stephens Creek 36.87 248 P P 17 58 53.3 +0.1
baz=37,SNR=104
STKA Stephens Creek 36.87 248 P P 17 58 53.1 -0.1
STKA Stephens Creek 36.87 248 P P 17 58 53.5 +0.3
ARPS Mount Arapiles 37.15 240 P P 17 58 55.2 -0.3
baz=37,SNR=26
ARPS Mount Arapiles 37.15 240 P P 17 58 55.4 -0.1
INKA Innaminka 37.66 255 P P 17 59 00.7 +0.9
COEN Coen 38.31 278 P P 17 59 06.1 +0.6
COEN IAmb IAmb 17 59 07.2
comp=Z,72nm,1.4s
COEN Coen 38.31 278 P P 17 59 06.1 +0.6
PATS Pohnpei 38.44 319 P P 17 59 06.7 +0.2
TAOE Nuku Hiva Isla 38.68 74 P P 17 59 10.4 +1.8
HTT Hallett 39.19 246 P P 17 59 12.1 -0.5
baz=39,SNR=59
HTT Hallett 39.19 246 P P 17 59 12.1 -0.5
TWOA Tennyson Woods 39.58 243 P P 17 59 15.0 -0.7
QIS Mount Isa 39.70 266 P P 17 59 16.4 -0.5
baz=40,SNR=20
QIS Mount Isa 39.70 266 P P 17 59 17.0 0.0
LCRK Leigh Creek 39.76 250 P P 17 59 16.9 -0.4
NAPP Napperby 39.83 246 P P 17 59 18.0 +0.2
BBOO Buckleboo 41.58 247 P P 17 59 31.0 -1.1
baz=42,SNR=32
BBOO Buckleboo 41.58 247 P P 17 59 31.1 -1.1
BBOO IAmb IAmb 17 59 32.5
comp=Z,56nm,0.8s
BBOO Buckleboo 41.58 247 P P 17 59 31.0 -1.1
OOD Oodnadatta 42.12 254 P P 17 59 36.8 +0.3
MMPI Merauke 42.98 284 P P 17 59 43.9 +0.3
comp=Z,399nm,0.8s
MULG Mulgathing 43.35 250 P P 17 59 45.4 -1.0
AS31 Alice Springs 44.27 260 P P 17 59 53.4 -0.6
ASAR Alice Springs 44.27 260 P P 17 59 53.2 -0.7
comp=Z,71nm,0.9s,baz=93,slow=8.2,SNR=192
ASAR PcP PcP 18 01 34.3 -0.1
comp=Z,12nm,0.7s,baz=108,slow=3.9,SNR=9.6
ASAR ScP ScP 18 05 04.8 -0.8
comp=Z,1.1nm,0.8s,baz=103,slow=3.4,SNR=2.6
ASAR S S 18 06 04.3 -7.0
comp=Z,2.7nm,0.8s,baz=95,slow=16,SNR=6.3
ASAR Alice Springs 44.27 260 P P 17 59 53.4 -0.6
WR0 Warramunga Arr 44.47 265 P P 17 59 54.3 -1.1
WR0 IAmb IAmb 17 59 56.2
comp=Z,30nm,0.8s
WB2 Warramunga Arr 44.65 265 P P 17 59 55.6 -1.2
WB2 IAmb IAmb 17 59 58.2
comp=Z,54nm,0.8s
WRAB Tennant Creek 44.65 265 P P 17 59 55.7 -1.1
WRAB IAmb IAmb 17 59 57.7
comp=Z,73nm,1.1s
WRAB Tennant Creek 44.65 265 P P 17 59 55.9 -1.0
WB0 Warramunga Arr 44.65 265 P P 17 59 55.8 -1.1
WRA Warramunga Arr 44.66 265 P P 17 59 55.7 -1.3
comp=Z,31nm,0.5s,baz=104,slow=8.1,SNR=212
WRA PcP PcP 18 01 35.6 -0.1
comp=Z,14nm,0.9s,baz=96,slow=3.8,SNR=8.3
WRA ScP ScP 18 05 06.7 -0.5
comp=Z,1.6nm,0.9s,baz=99,slow=4.4,SNR=4.1
WRA S S 18 06 08.1 -8.7
comp=Z,3.4nm,0.9s,baz=104,slow=14,SNR=7.5
WRA Warramunga Arr 44.66 265 P P 17 59 54.4 -2.5
JAY Jayapura 45.52 291 P P 18 00 03.3 -0.5
comp=Z,52nm,1.0s
GENI Genyem 45.94 291 P P 18 00 06.8 -0.2
comp=Z,2µmcomp=Z,140nm,0.9s
FORT Forrest 48.47 249 P P 18 00 24.9 -1.5
baz=48,SNR=46
FORT Forrest 48.47 249 P P 18 00 24.9 -1.5
FORT Forrest 48.47 249 P P 18 00 24.8 -1.5
KDU Kakadu 48.51 274 P P 18 00 25.9 -0.9
baz=48,SNR=29
KDU Kakadu 48.51 274 P P 18 00 26.1 -0.7
WRKA Warakurna 49.06 257 P P 18 00 29.9 -1.1
baz=49,SNR=51
WRKA Warakurna 49.06 257 P P 18 00 29.9 -1.1
MTN Manton Dam 49.68 273 P P 18 00 34.4 -1.2
baz=50,SNR=9.2
MTN Manton Dam 49.68 273 P P 18 00 34.5 -1.2
MTN IAmb IAmb 18 00 36.7
comp=Z,18nm,0.6s
MTN Manton Dam 49.68 273 P P 18 00 34.9 -0.8
SRPI Serui, Papua 49.69 289 P P 18 00 34.7 -1.1
comp=Z,61nm,1.2s
KNRA Kununurra 50.93 269 P P 18 00 44.4 -0.7
baz=51,SNR=18
KNRA Kununurra 50.93 269 P P 18 00 44.2 -0.8
KNRA IAmb IAmb 18 00 46.5
comp=Z,36nm,0.7s
KNRA Kununurra 50.93 269 P P 18 00 44.5 -0.5
SAUI Saumlaki 51.35 279 P P 18 00 49.6 +1.4
comp=Z,226nm,1.1s
SAUI Saumlaki 51.35 279 P P 18 00 47.6 -0.6
FAKI Fak Fak 52.69 285 P P 18 00 56.3 -1.8
comp=Z,65nm,1.1s
FAKI Fak Fak 52.69 285 P P 18 00 56.6 -1.5
FAKI IAmb IAmb 18 00 58.0
comp=Z,47nm,0.8s
FAKI Fak Fak 52.69 285 P P 18 00 57.3 -0.8
FITZ Fitzroy Crossi 53.08 265 P P 18 00 59.9 -1.0
comp=Z,28nm,0.6s,baz=83,slow=2.4,SNR=59
BNDI Bandanaira 54.05 282 P P 18 01 07.5 -0.5
SIJI Sorong 54.52 287 P P 18 01 10.5 -0.8
comp=Z,215nm,0.8s,baz=94,slow=4.5,SNR=156
SWI Sorong 54.52 287 P P 18 01 10.6 -0.8
comp=Z,3µmcomp=Z,392nm,0.8s
VNDA Vanda 54.76 185 P P 18 01 14.7 +2.6
comp=Z,6.8nm,0.7s,baz=11,slow=6.7,SNR=12
VNDA Vanda 54.76 185 P P 18 01 14.5 +2.4
MSAI Masohi 55.45 283 P P 18 01 17.8 -0.2
comp=Z,384nmcomp=Z,12nm,0.7s
AAI Ambon 55.95 282 P P 18 01 20.4 -1.2
comp=Z,1µmcomp=Z,90nm,0.6s
SOEI Soe 57.07 274 P P 18 01 30.4 +0.8
comp=Z,143nm,0.8s
SOEI Soe 57.07 274 P P 18 01 29.8 +0.3
SOEI Soe 57.07 274 P P 18 01 30.3 +0.7
KLBR Kellerberrin 57.12 247 P P 18 01 28.3 -1.4
baz=57,SNR=16
KLBR Kellerberrin 57.12 247 P P 18 01 28.2 -1.4
MEEK Meekatharra 57.31 253 P P 18 01 29.4 -1.6
baz=57,SNR=9.5
MEEK Meekatharra 57.31 253 P P 18 01 29.5 -1.5
RKGY Rocky Gully 57.32 243 P P 18 01 30.2 -0.7
baz=57,SNR=5.4
NWAO Narrogin (SRO) 57.35 245 P P 18 01 29.6 -1.6
NWAO IAmb IAmb 18 01 45.1
comp=Z,24nm,1.1s
NWAO Narrogin (SRO) 57.35 245 P P 18 01 30.2 -1.0
PSA00 Pilbara Seismi 57.40 259 P P 18 01 30.5 -1.1
PSA00 IAmb IAmb 18 01 37.2
comp=Z,20nm,1.1s
PSA00 Pilbara Seismi 57.40 259 P P 18 01 30.6 -1.1
BATI Baumata 57.45 273 P P 18 01 32.9 +0.7
comp=Z,102nm,0.5s,baz=153,slow=1.5,SNR=57
BATI Baumata 57.45 273 P P 18 01 33.0 +0.8
comp=Z,919nmcomp=Z,75nm,0.6s
MBWA Marble Bar 57.61 259 P P 18 01 31.9 -1.3
MBWA Marble Bar 57.61 259 P P 18 01 31.9 -1.3
LBMI Labuha 57.94 285 P P 18 01 35.0 -0.5
comp=Z,627nmcomp=Z,60nm,0.7s
BLDU Ballidu 58.17 248 P P 18 01 35.6 -1.3
baz=58,SNR=28
BLDU Ballidu 58.17 248 P P 18 01 35.4 -1.5
MUN Mundaring 58.36 246 P P 18 01 37.2 -1.0
baz=58,SNR=6.8
MUN Mundaring 58.36 246 P P 18 01 37.2 -1.0
SANI Sanana 58.65 283 P P 18 01 39.0 -1.4
comp=Z,56nm,0.6s
SANI Sanana 58.65 283 P P 18 01 39.3 -1.1
TNTI Ternate 58.72 286 P P 18 01 40.1 -0.8
comp=Z,841nmcomp=Z,57nm,1.1s
TNTI Ternate 58.72 286 P P 18 01 39.7 -1.2
MORW Morawa 59.04 249 P P 18 01 41.7 -1.2
baz=59,SNR=22
MORW Morawa 59.04 249 P P 18 01 41.7 -1.2
MORW IAmb IAmb 18 01 42.4
comp=Z,26nm,0.7s
MORW Morawa 59.04 249 P P 18 01 41.8 -1.1
MMRI Maumere 59.34 274 P P 18 01 43.7 -1.5
MMRI Maumere 59.34 274 P P 18 01 44.4 -0.8
BBSI Bau Bau 60.27 277 P P 18 01 55.0 +3.5
comp=Z,5.5nm,0.7s
RPN Rapa Nui 61.02 109 P P 18 01 57.9 +1.5
comp=Z,42nm,0.3s,baz=284,slow=4.2,SNR=5.8
CASY Casey 61.26 206 P P 18 01 57.7 +0.4
WBSI Waikabubak, Su 61.57 272 P P 18 02 02.7 +2.4
comp=Z,86nm,1.0s
GIRL Giralia 62.14 256 P P 18 02 04.3 +0.4
GTOI Gorontalo 62.51 284 P P 18 02 07.1 +0.6
comp=Z,303nmcomp=Z,35nm,0.7s
BKSI Bulukumba 62.57 277 P P 18 02 05.9 -1.0
comp=Z,699nmcomp=Z,68nm,0.8s
BNSI Bone 62.95 277 P P 18 02 10.4 +1.0
comp=Z,33nm,0.8s
KAPI Kappang 63.03 277 P P 18 02 09.6 -0.3
comp=Z,15nm,0.8s,baz=175,slow=12,SNR=2.6
KAPI Kappang 63.03 277 IAmb IAmb 18 02 24.0
comp=Z,43nm,1.1s
APSI Ampana 63.04 282 P P 18 02 11.2 +1.2
comp=Z,34nm,0.6s
MRSI Marisa 63.39 283 P P 18 02 11.2 -1.1
comp=Z,21nm,0.6s
TOLI2 Tolitoli 64.71 283 P P 18 02 19.2 -1.7
TOLI2 Tolitoli 64.71 283 P P 18 02 19.5 -1.4
MPSI Mapaga 65.16 282 P P 18 02 22.5 -1.2
comp=Z,66nm,0.7s
QSPA South Pole Qui 66.37 180 P P 18 02 32.2 +1.4
comp=Z,27nm,0.5s,baz=32,slow=2.2,SNR=82
QSPA South Pole Qui 66.37 180 P P 18 02 31.8 +1.1
JAGI Jajag, Banyuwa 66.81 271 P P 18 02 32.1 -2.1
KBKI Kotabaru 66.99 277 P P 18 02 36.2 +0.8
comp=Z,985nmcomp=Z,29nm,0.8s
BBKI Banjar Baru 68.13 276 P P 18 02 47.6 +5.1
comp=Z,39nm,1.9s
MTKI Muara Teweh, K 69.12 278 P P 18 02 48.3 -0.4
comp=Z,916nmcomp=Z,17nm,0.8s
UGM Wanagama 70.34 270 P P 18 02 56.4 +0.2
KKM Kota Kinabalu 71.00 286 P P 18 02 59.1 -1.1
KKM IAmb IAmb 18 03 14.7
comp=Z,34nm,1.2s
KKM Kota Kinabalu 71.00 286 P P 18 02 59.6 -0.6
JYT Yasato 71.75 325 P P 18 03 03.8 -0.2
JYT IAmb IAmb 18 03 18.5
comp=Z,38nm,1.3s
MJAR Matsushiro Arr 73.04 324 P P 18 03 10.3 -1.3
comp=Z,6.3nm,0.6s,baz=158,slow=5.8,SNR=14
MJAR Matsushiro Arr 73.04 324 P P 18 03 10.8 -0.9
MAJO Matsushiro 73.04 324 P P 18 03 11.1 -0.6
MAT Matsushiro 73.04 324 P P 18 03 10.5 -1.2
MJB9 Matsu-Tunnel 73.05 324 P P 18 03 11.1 -0.6
KSM Kuching 74.29 279 P P 18 03 17.8 -1.7
KSM IAmb IAmb 18 03 20.6
comp=Z,24nm,0.8s
KSM Kuching 74.29 279 P P 18 03 18.7 -0.7
JNU Nakatsue 74.90 317 P P 18 03 21.9 -0.6
comp=Z,11nm,0.8s,baz=87,slow=5.6,SNR=2.9
JNU Nakatsue 74.90 317 P P 18 03 22.5 0.0
KIWB Kanaga Island 75.24 0 P P 18 03 24.4 +0.4
ADK Adak 75.28 1 P P 18 03 23.9 -0.2
TWG Pinlang 75.47 303 P P 18 03 23.7 -2.2
NACB Ninganchiao 75.83 305 P P 18 03 26.6 -1.4
NACB IAmb IAmb 18 03 41.0
comp=Z,43nm,1.1s
TPUB Ta-pu 76.08 303 P P 18 03 27.9 -1.5
TPUB Ta-pu 76.08 303 P P 18 03 28.0 -1.4
SSLB Suanglung 76.10 304 P P 18 03 27.7 -1.8
SSLB IAmb IAmb 18 03 33.7
comp=Z,21nm,0.8s
SSLB Suanglung 76.10 304 P P 18 03 28.1 -1.4
NIKH Nikolski High 76.74 5 P P 18 03 32.9 +0.5
JKA Kamikawa-asahi 76.74 332 P P 18 03 34.0 +1.3
JKA Kamikawa-asahi 76.74 332 IAmb IAmb 18 03 34.8
comp=Z,13nm,0.8s
ASAJ Asahikawa 76.74 332 P P 18 03 34.0 +1.3
comp=Z,11nm,0.8s,baz=227,slow=9.3,SNR=8.0
KASI Kota Agung 76.78 270 P P 18 03 35.0 +1.4
comp=Z,47nm,1.1s
MDSI Maura Dua 77.48 271 P P 18 03 37.1 -0.4
UNV Unalaska Valle 77.83 7 P P 18 03 38.4 0.0
MAW Mawson 78.69 200 P P 18 03 44.5 +1.3
comp=Z,19nm,0.6s,baz=134,slow=7.3,SNR=7.2
MAW Mawson 78.69 200 IAmb IAmb 18 03 47.8
comp=Z,26nm,1.5s
YSS Yuzh-Sakhalins 78.95 334 P P 18 03 45.4 +0.7
PETK Petropavlovsk- 79.47 345 P P 18 03 46.4 -1.0
comp=Z,4.1nm,0.6s,baz=210,slow=2.1,SNR=26
PETK Petropavlovsk- 79.47 345 P P 18 03 47.1 -0.3
KSRS Korea Array 79.57 319 P P 18 03 48.9 +0.6
comp=Z,4.6nm,0.8s,baz=135,slow=6.2,SNR=16
KSAR Wonju Array Be 79.58 319 P P 18 03 47.5 -0.9
ISA Isabella, Lake 81.29 45 P P 18 03 59.5 +1.8
ISA IAmb IAmb 18 04 00.6
comp=Z,26nm,0.9s
CMB Columbia Colle 81.55 42 P P 18 04 00.3 +1.5
ORV Oroville 81.83 40 P P 18 04 01.6 +1.3
USRK Ussuriysk Ar. 81.85 326 P P 18 04 00.8 +0.6
comp=Z,5.2nm,0.7s,baz=127,slow=4.1,SNR=8.3
USRK Ussuriysk Ar. 81.85 326 P P 18 04 00.2 0.0
WDC Whiskeytown Da 81.89 39 P P 18 04 02.5 +2.0
WDC IAmb IAmb 18 04 03.7
comp=Z,26nm,1.2s
N02D Trinity Center 82.05 39 P P 18 04 03.4 +1.9
N02D IAmb IAmb 18 04 05.0
comp=Z,29nm,1.4s
GLA Glamis 82.20 49 P P 18 04 04.3 +1.9
GLA IAmb IAmb 18 04 05.8
comp=Z,38nm,1.1s
M02C Callahan 82.24 38 P P 18 04 03.8 +1.3
M02C IAmb IAmb 18 04 06.9
comp=Z,42nm,1.5s
NJ2 Nanjing 82.25 310 eP P 18 04 03.3 +0.7
NJ2 pmax pmax
comp=Z,14nm,0.8s
YBH Yreka Blue Hor 82.54 38 P P 18 04 05.7 +1.7
comp=Z,7.1nm,0.9s,baz=144,slow=2.1,SNR=12
YBH Yreka Blue Hor 82.54 38 P P 18 04 06.0 +2.0
LCH Last Change Ra 82.77 44 P P 18 04 06.0 +0.6
GWY Greenwater Val 82.78 45 P P 18 04 06.5 +1.0
113A Mohawk Valley, 82.78 50 P P 18 04 06.5 +1.2
113A IAmb IAmb 18 04 08.3
comp=Z,20nm,0.9s
VCNR Virginia City 82.78 41 P P 18 04 06.9 +1.4
VCNR IAmb IAmb 18 04 08.2
comp=Z,19nm,0.9s
YERR Yerington 82.84 42 P P 18 04 06.9 +1.1
YERR IAmb IAmb 18 04 08.3
comp=Z,21nm,0.9s
LHV Little Huntoon 82.85 43 P P 18 04 07.3 +1.8
LHV IAmb IAmb 18 04 08.6
comp=Z,22nm,1.0s
HUMO Hull Mountain 82.98 37 P P 18 04 07.8 +1.7
M04C Macdoel 83.07 38 P P 18 04 08.3 +1.5
NVAR Mina Array Bea 83.08 43 P P 18 04 08.4 +1.4
comp=Z,14nm,0.7s,baz=222,slow=9.0,SNR=62
NVAR Mina Array Bea 83.08 43 P P 18 04 08.2 +1.2
L04D Klamath Falls 83.09 38 P P 18 04 08.3 +1.4
L04D IAmb IAmb 18 04 09.7
comp=Z,28nm,1.1s
NV11 Mina Array Sit 83.17 43 P P 18 04 07.8 +0.3
NV11 IAmb IAmb 18 04 09.7
comp=Z,21nm,0.9s
PAHR Pah Rah Range 83.20 41 P P 18 04 08.7 +1.2
PAHR IAmb IAmb 18 04 10.2
comp=Z,21nm,1.0s
COYC Coyhaique 83.51 137 P P 18 04 10.3 +1.3
COYC IAmb IAmb 18 04 11.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,25nm,1.2s | | | | | | | |
| TPH | **Tonopah** | 83.54 | 44 | P | | **P** | **18 04 11.0** | **+1.6** |
| KVN | **Kaiserville** | 83.58 | 42 | P | | **P** | **18 04 10.7** | **+1.1** |
| KVN | | | | IAmb | | IAmb | 18 04 11.9 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| SYO | **Syowa Base** | 83.69 | 193 | ⇓*e*PcP | | **PcP** | **18 04 14.0** | **+0.9** |
| MNSI | **Mandailing Nat** | 83.78 | 274 | P | | **P** | **18 04 10.8** | **-0.1** |
| H03S2 | **Juan Fernandez** | 83.84 | 124 | T | | T | 19 36 55.9 | |
| | SNR=6.3 | | | | | | | |
| H03S1 | **Juan Fernandez** | 83.86 | 124 | T | | T | 19 37 00.7 | |
| | SNR=6.1 | | | | | | | |
| H03S3 | **Juan Fernandez** | 83.86 | 124 | T | | T | 19 36 57.6 | |
| | SNR=4.8 | | | | | | | |
| J04D | **Umpqua Nationa** | 83.86 | 37 | P | | **P** | **18 04 12.7** | **+1.9** |
| J04D | | | | IAmb | | IAmb | 18 04 23.3 | |
| | comp=Z,36nm,0.9s | | | | | | | |
| SHPR | **Sheep Range** | 83.95 | 46 | P | | **P** | **18 04 12.7** | **+1.3** |
| IPM | **Ipoh** | 83.96 | 278 | P | | **P** | **18 04 10.9** | **-0.9** |
| IPM | | | | IAmb | | IAmb | 18 04 12.1 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| Y14A | **Wickenburg** | 83.96 | 49 | P | | **P** | **18 04 13.2** | **+1.7** |
| Y14A | | | | IAmb | | IAmb | 18 04 14.3 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| H03N2 | **Juan Fernandez** | 84.00 | 124 | T | | T | 19 37 22.1 | |
| | baz=250,slow=72,SNR=26 | | | | | | | |
| H03N3 | **Juan Fernandez** | 84.00 | 124 | T | | T | 19 37 09.0 | |
| | baz=250,slow=72,SNR=18 | | | | | | | |
| W13A | **Hualapai Mount** | 84.00 | 48 | P | | **P** | **18 04 13.4** | **+1.6** |
| H03N1 | **Juan Fernandez** | 84.02 | 124 | T | | T | 19 37 03.4 | |
| | baz=250,slow=72,SNR=28 | | | | | | | |
| Q09A | **Carvers** | 84.02 | 43 | P | | **P** | **18 04 13.3** | **+1.5** |
| MOD | **Modoc Plateau** | 84.03 | 39 | P | | **P** | **18 04 12.9** | **+1.2** |
| MOD | | | | IAmb | | IAmb | 18 04 14.2 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| K05A | **Summer Lake** | 84.21 | 38 | P | | **P** | **18 04 14.1** | **+1.4** |
| K05A | | | | IAmb | | IAmb | 18 04 15.6 | |
| | comp=Z,28nm,1.0s | | | | | | | |
| TROLL | **Troll, Antarti** | 84.53 | 180 | P | | **P** | **18 04 14.2** | **+0.4** |
| PRN | **Pahroc Range** | 84.55 | 45 | P | | **P** | **18 04 16.2** | **+1.8** |
| PRN | | | | IAmb | | IAmb | 18 04 17.5 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| TUC | **Tucson** | 84.64 | 51 | P | | **P** | **18 04 16.7** | **+1.8** |
| TUC | | | | IAmb | | IAmb | 18 04 18.4 | |
| | comp=Z,28nm,1.0s | | | | | | | |
| R11A | **Troy Canyon, C** | 84.75 | 44 | P | | **P** | **18 04 16.5** | **+1.1** |
| H04A | **Detroit Lake** | 84.76 | 36 | P | | **P** | **18 04 16.5** | **+1.4** |
| H04A | | | | IAmb | | IAmb | 18 04 16.9 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| SNAA | **Sanae** | 84.80 | 178 | P | | **P** | **18 04 15.3** | **+0.2** |
| SNAA | **Sanae** | 84.80 | 178 | pP | | pP | 18 05 14.2 | +7.0 |
| SNAA | **Sanae** | 84.80 | 178 | P | | **P** | **18 04 15.1** | **+0.1** |
| PINE | **Pine Mountain** | 84.87 | 37 | P | | **P** | **18 04 17.5** | **+1.6** |
| PINE | | | | IAmb | | IAmb | 18 04 19.0 | |
| | comp=Z,30nm,1.2s | | | | | | | |
| VNA3 | **Neumayer Olymp** | 84.92 | 176 | P | | **P** | **18 04 15.8** | **+0.2** |
| VNA3 | **Neumayer Olymp** | 84.92 | 176 | pP | | pP | 18 05 14.9 | +7.3 |
| CN2 | **Changchun** | 85.09 | 322 | *e*P | | **P** | **18 04 16.9** | **+0.2** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| RPSI | **Rantau Prapat** | 85.15 | 275 | P | | **P** | **18 04 16.3** | **-1.4** |
| PSI | **Prapat** | 85.19 | 275 | P | | **P** | **18 04 16.3** | **-1.8** |
| | comp=Z,5.5nm,0.8s,baz=75,slow=3.1,SNR=4.7 | | | | | | | |
| 319A | **Douglas** | 85.24 | 53 | P | | **P** | **18 04 19.4** | **+1.5** |
| 319A | | | | IAmb | | IAmb | 18 04 21.3 | |
| | comp=Z,29nm,1.1s | | | | | | | |
| X16A | **Lo Mia Camp, P** | 85.31 | 49 | P | | **P** | **18 04 20.3** | **+2.0** |
| X16A | | | | IAmb | | IAmb | 18 04 21.6 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| WVOR | **Wild Horse Val** | 85.33 | 40 | P | | **P** | **18 04 19.4** | **+1.2** |
| WVOR | | | | IAmb | | IAmb | 18 04 20.8 | |
| | comp=Z,21nm,1.3s | | | | | | | |
| VNA2 | **Neumayer--Watz** | 85.36 | 177 | P | | **P** | **18 04 18.1** | **+0.3** |
| | baz=175,slow=4.0 | | | | | | | |
| VNA2 | **Neumayer--Watz** | 85.36 | 177 | pP | | pP | 18 05 17.2 | +7.3 |
| | baz=138,slow=5.8 | | | | | | | |
| LL04 | **Puerto Octay** | 85.44 | 133 | P | | **P** | **18 04 19.3** | **+0.5** |
| KLR | **Kul'dur** | 85.50 | 329 | P | | **P** | **18 04 18.4** | **-0.2** |
| | comp=Z,3.8nm,0.9s,baz=104,slow=3.4,SNR=12 | | | | | | | |
| LCMT | **Little Creek M** | 85.51 | 46 | P | | **P** | **18 04 20.6** | **+1.4** |
| LCMT | | | | IAmb | | IAmb | 18 04 22.0 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| VNA1 | **Neumayer--Stat** | 85.59 | 176 | P | | **P** | **18 04 18.7** | **-0.2** |
| CCUT | **Cedar City** | 85.73 | 46 | P | | **P** | **18 04 21.6** | **+1.3** |
| CCUT | | | | IAmb | | IAmb | 18 04 23.5 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| O19K | **Port Alsworth** | 85.74 | 11 | P | | **P** | **18 04 20.1** | **+0.6** |
| TIA | **Tai'an** | 85.75 | 313 | ⇓P | | **P** | **18 04 19.7** | **-0.5** |
| TIA | | | | pmax | | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| U15A | **North Rim** | 85.82 | 47 | P | | **P** | **18 04 23.1** | **+2.2** |
| U15A | | | | IAmb | | IAmb | 18 04 24.0 | |
| | comp=Z,23nm,1.0s | | | | | | | |
| GSI | **Gunungsitoli** | 85.82 | 273 | P | | **P** | **18 04 25.7** | **+4.6** |
| I07A | **Izee** | 85.86 | 38 | P | | **P** | **18 04 22.1** | **+1.4** |
| SPR3 | **Spring Creek 3** | 85.92 | 44 | P | | **P** | **18 04 22.0** | **+0.6** |
| SZCU | **Shurtz Canyon** | 85.94 | 46 | P | | **P** | **18 04 23.2** | **+1.8** |
| SZCU | | | | IAmb | | IAmb | 18 04 24.4 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| WUAZ | **Wupatki** | 85.95 | 48 | P | | **P** | **18 04 21.0** | **-0.4** |
| WUAZ | | | | IAmb | | IAmb | 18 04 24.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| PSUT | **Pine Spring** | 85.96 | 45 | P | | **P** | **18 04 22.8** | **+1.3** |
| ELK | **Elko** | 86.36 | 42 | P | | **P** | **18 04 24.3** | **+0.9** |
| LC01 | **Cunco** | 86.74 | 131 | P | | **P** | **18 04 25.5** | **+0.3** |
| LC01 | | | | IAmb | | IAmb | 18 04 26.9 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| PLCA | **Paso Flores** | 86.77 | 133 | P | | **P** | **18 04 26.9** | **+1.5** |
| | comp=Z,6.6nm,1.1s,baz=227,slow=6.2,SNR=6.8 | | | | | | | |
| PLCA | **Paso Flores** | 86.77 | 133 | P | | **P** | **18 04 26.1** | **+0.8** |
| MTPU | **Mount Pierson** | 86.78 | 46 | P | | **P** | **18 04 27.7** | **+2.0** |
| MTPU | | | | IAmb | | IAmb | 18 04 29.0 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| G08A | **Pilot Rock** | 86.91 | 37 | P | | **P** | **18 04 27.2** | **+1.4** |
| G08A | | | | IAmb | | IAmb | 18 04 28.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| 121A | **Cookes Peak, D** | 86.92 | 53 | P | | **P** | **18 04 27.6** | **+1.3** |
| 121A | | | | IAmb | | IAmb | 18 04 33.0 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| MA2 | **Magadan** | 86.98 | 344 | P | | **P** | **18 04 24.7** | **-0.9** |
| MA2 | | | | IAmb | | IAmb | 18 04 26.4 | |
| | comp=Z,37nm,1.3s | | | | | | | |
| MSU | **Marysvale** | 87.04 | 46 | P | | **P** | **18 04 28.0** | **+1.2** |
| E07A | **Sunnyside** | 87.22 | 36 | P | | **P** | **18 04 28.9** | **+1.8** |
| E07A | | | | IAmb | | IAmb | 18 04 29.9 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| HAWA | **Hanford** | 87.29 | 36 | P | | **P** | **18 04 28.8** | **+1.4** |
| HAWA | | | | IAmb | | IAmb | 18 04 30.2 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| L19K | **White Mountain** | 87.51 | 10 | P | | **P** | **18 04 29.3** | **+1.2** |
| L19K | | | | IAmb | | IAmb | 18 04 31.1 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| BMO | **Blue Mountains** | 87.57 | 38 | P | | **P** | **18 04 29.5** | **+0.6** |
| E08A | **Dider Farm, El** | 87.61 | 36 | P | | **P** | **18 04 30.3** | **+1.4** |
| NLU | **North Lily Min** | 87.90 | 44 | P | | **P** | **18 04 30.8** | **0.0** |
| Q16A | **Castle Valley** | 87.92 | 46 | P | | **P** | **18 04 31.6** | **+0.7** |
| HNS | **HongShan** | 88.02 | 312 | ⇑P | | **P** | **18 04 31.9** | **+0.9** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| D08A | **Wollman Farm,** | 88.03 | 36 | P | | **P** | **18 04 32.0** | **+1.1** |
| D08A | | | | IAmb | | IAmb | 18 04 33.7 | |
| | comp=Z,35nm,1.3s | | | | | | | |
| LYN | **LuoYang** | 88.10 | 309 | *e*P | | **P** | **18 04 32.1** | **+0.6** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| TMUT | **Trail Mountain** | 88.11 | 45 | P | | **P** | **18 04 33.0** | **+1.1** |
| E09A | **Wood Farm, Sta** | 88.12 | 36 | P | | **P** | **18 04 32.0** | **+0.7** |
| E09A | | | | IAmb | | IAmb | 18 04 33.7 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| ENH | **Enshi** | 88.18 | 304 | P | | **P** | **18 04 31.5** | **-0.5** |
| ENH | | | | IAmb | | IAmb | 18 04 33.3 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| GHO | **Glory Hole Cre** | 88.25 | 13 | P | | **P** | **18 04 32.4** | **+0.8** |
| F10A | **Beach Ranch, E** | 88.29 | 37 | P | | **P** | **18 04 33.1** | **+0.9** |
| F10A | | | | IAmb | | IAmb | 18 04 34.2 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| TX31 | **Lajitas Ar. Si** | 88.44 | 57 | P | | **P** | **18 04 34.2** | **+0.8** |
| TX31 | | | | IAmb | | IAmb | 18 04 37.2 | |
| | comp=Z,38nm,1.2s | | | | | | | |
| TX32 | **Lajitas Array** | 88.44 | 57 | P | | **P** | **18 04 34.7** | **+1.4** |
| TXAR | **Lajitas Array** | 88.44 | 57 | P | | **P** | **18 04 34.7** | **+1.3** |
| | comp=Z,2.9nm,0.8s,baz=216,slow=6.2,SNR=24 | | | | | | | |
| TXAR | **Lajitas Array** | 88.44 | 57 | P | | **P** | **18 04 34.9** | **+1.5** |
| SRU | **San Rafael Swe** | 88.45 | 46 | P | | **P** | **18 04 34.2** | **+0.9** |
| SRU | | | | IAmb | | IAmb | 18 04 35.6 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| PLID | **Pearl Lake** | 88.45 | 39 | P | | **P** | **18 04 33.6** | **+0.4** |
| PLID | | | | IAmb | | IAmb | 18 04 35.5 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| BJT | **Baijiatuau** | 88.45 | 315 | P | | **P** | **18 04 33.3** | **+0.3** |
| BJI | **Beijing** | 88.46 | 315 | P | | **P** | **18 04 33.2** | **+0.2** |
| BJI | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| HLID | **Hailey** | 88.49 | 40 | P | | **P** | **18 04 34.6** | **+1.3** |
| P17A | **Butcher Ranch,** | 88.50 | 45 | P | | **P** | **18 04 34.7** | **+1.2** |
| P17A | | | | IAmb | | IAmb | 18 04 36.2 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| CTU | **Camp Tracy** | 88.52 | 44 | P | | **P** | **18 04 33.8** | **+0.2** |
| B08A | **Colville Reser** | 88.63 | 35 | P | | **P** | **18 04 34.3** | **+0.6** |
| LLLB | **Lillooet** | 88.79 | 32 | P | | **P** | **18 04 35.3** | **+0.9** |
| C09A | **Chrisman Ranch** | 88.84 | 35 | P | | **P** | **18 04 35.8** | **+1.1** |
| C09A | | | | IAmb | | IAmb | 18 04 37.0 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| P18A | **Preston Nutter** | 88.91 | 45 | P | | **P** | **18 04 36.7** | **+1.1** |
| TABL | **Table Mountain** | 88.94 | 17 | P | | **P** | **18 04 36.4** | **+1.3** |
| N25K | **Chitina, Valde** | 89.07 | 15 | P | | **P** | **18 04 36.7** | **+1.2** |
| N25K | | | | IAmb | | IAmb | 18 04 37.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| ANMO | **Albuquerque** | 89.09 | 51 | P | | **P** | **18 04 37.6** | **+1.2** |
| ANMO | | | | IAmb | | IAmb | 18 04 38.9 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| GLB | **Gilahina Butte** | 89.11 | 15 | P | | **P** | **18 04 36.6** | **+1.0** |
| GLB | | | | IAmb | | IAmb | 18 04 48.1 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| CAST | **Castle Rocks** | 89.14 | 11 | P | | **P** | **18 04 35.2** | **-0.5** |
| CAST | | | | IAmb | | IAmb | 18 04 37.1 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| TNA | **Tin City** | 89.30 | 4 | P | | **P** | **18 04 37.1** | **+0.8** |
| TNA | | | | IAmb | | IAmb | 18 04 38.3 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| BARN | **Barnard Glacie** | 89.33 | 17 | P | | **P** | **18 04 38.1** | **+1.2** |
| BARN | | | | IAmb | | IAmb | 18 04 43.0 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| KTH | **Kantishna Hill** | 89.47 | 12 | P | | **P** | **18 04 37.7** | **+0.4** |
| KTH | | | | IAmb | | IAmb | 18 04 39.3 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| J20K | **Nowinta River** | 89.50 | 10 | P | | **P** | **18 04 38.5** | **+1.2** |
| TRF | **Thorofare Moun** | 89.50 | 12 | P | | **P** | **18 04 37.5** | **0.0** |
| TRF | | | | IAmb | | IAmb | 18 04 39.5 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| BCYI | **Bear Canyon** | 89.51 | 40 | P | | **P** | **18 04 39.3** | **+1.1** |
| MT01 | **Popeta** | 89.55 | 127 | P | | **P** | **18 04 38.4** | **-0.2** |
| MT01 | | | | IAmb | | IAmb | 18 04 39.9 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| SEY | **Seymchan** | 89.59 | 347 | P | | **P** | **18 04 38.0** | **+0.2** |
| | comp=Z,24nm,0.8s,baz=150,slow=5.1,SNR=130 | | | | | | | |
| NEW | **Newport** | 89.73 | 36 | P | | **P** | **18 04 40.4** | **+1.5** |
| | comp=Z,2.2nm,0.7s,baz=165,slow=3.7,SNR=4.4 | | | | | | | |
| RND | **Reindeer** | 89.73 | 12 | P | | **P** | **18 04 39.5** | **+0.9** |
| RND | | | | IAmb | | IAmb | 18 04 40.8 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| MCK | **McKinley** | 90.01 | 12 | P | | **P** | **18 04 40.9** | **+1.1** |
| MCK | | | | IAmb | | IAmb | 18 04 50.0 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| AHID | **Auburn Hatcher** | 90.05 | 42 | P | | **P** | **18 04 41.4** | **+0.7** |
| AHID | | | | IAmb | | IAmb | 18 04 43.3 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| MCMT | **McKenzie Canyo** | 90.13 | 40 | P | | **P** | **18 04 42.3** | **+1.2** |
| S22A | **4UR Ranch, Cre** | 90.23 | 48 | P | | **P** | **18 04 43.0** | **+1.3** |
| S22A | | | | IAmb | | IAmb | 18 04 44.4 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| M27K | **Edge Creek, AK** | 90.38 | 16 | P | | **P** | **18 04 42.6** | **+1.0** |
| M27K | | | | IAmb | | IAmb | 18 04 50.4 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| XAN | **Xi'an** | 90.40 | 307 | P | | **P** | **18 04 42.8** | **+0.4** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,340nm,5.3s | | | | | | | |
| REDW | **Red Top Meadow** | 90.53 | 42 | P | | **P** | **18 04 43.9** | **+0.9** |
| REDW | | | | IAmb | | IAmb | 18 04 45.4 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| DLMT | **Dillon** | 90.58 | 40 | P | | **P** | **18 04 44.1** | **+1.0** |
| DLMT | | | | IAmb | | IAmb | 18 04 45.6 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| XLT | **XiLinHaoTe** | 90.62 | 319 | *e*P | | **P** | **18 04 42.8** | **-0.4** |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,410nm,9.4s | | | | | | | |
| MOOW | **Moose Ponds** | 90.80 | 42 | P | | **P** | **18 04 44.9** | **+0.6** |
| LOHW | **Long Hollow** | 90.82 | 42 | P | | **P** | **18 04 45.0** | **+0.8** |
| DLBC | **Dease Lake** | 90.84 | 23 | P | | **P** | **18 04 45.5** | **+1.6** |
| | comp=Z,1.1nm,0.4s,baz=207,slow=14,SNR=1.6 | | | | | | | |
| WRH | **Wood River Hil** | 90.84 | 12 | P | | **P** | **18 04 43.4** | **-0.2** |
| WRH | | | | IAmb | | IAmb | 18 04 52.7 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| SMCO | **Snowmass** | 90.85 | 47 | P | | **P** | **18 04 45.6** | **+0.9** |
| LRM | **Limekiln Ridge** | 90.92 | 39 | P | | **P** | **18 04 45.9** | **+1.2** |
| DOT | **Dot Lake** | 90.96 | 14 | P | | **P** | **18 04 45.1** | **+0.9** |
| QLMT | **Earthquake Lak** | 90.98 | 41 | P | | **P** | **18 04 47.0** | **+2.0** |
| HDA | **Harding Lake** | 91.01 | 13 | P | | **P** | **18 04 45.3** | **+0.9** |
| BW06 | **Boulder Array** | 91.01 | 43 | P | | **P** | **18 04 45.6** | **+0.3** |
| BW06 | | | | IAmb | | IAmb | 18 04 47.0 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| PD31 | **Pinedale Array** | 91.01 | 43 | P | | **P** | **18 04 46.1** | **+0.9** |
| PD31 | | | | IAmb | | IAmb | 18 04 47.0 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| PDAR | **Pinedale Array** | 91.01 | 43 | P | | **P** | **18 04 45.9** | **+0.7** |
| | comp=Z,8.1nm,0.9s,baz=205,slow=3.1,SNR=42 | | | | | | | |
| PDAR | **Pinedale Array** | 91.01 | 43 | P | | **P** | **18 04 45.3** | **+0.1** |
| CCB | **Clear Creek Bu** | 91.05 | 12 | P | | **P** | **18 04 44.2** | **-0.3** |
| CCB | | | | IAmb | | IAmb | 18 04 46.8 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| H21K | **Melozitna Rive** | 91.09 | 10 | P | | **P** | **18 04 46.0** | **+1.3** |
| SDCO | **Great Sand Dun** | 91.14 | 49 | P | | **P** | **18 04 46.9** | **+0.8** |
| YMR | **Madison River** | 91.17 | 41 | P | | **P** | **18 04 46.9** | **+1.1** |
| YMR | | | | IAmb | | IAmb | 18 04 49.0 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| KMI | **Kunming** | 91.17 | 297 | ⇓P | | **P** | **18 04 47.1** | **+0.7** |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| IMAR | **Indian Mountai** | 91.24 | 10 | P | | **P** | **18 04 46.0** | **+0.6** |
| MDM | **Murphy Dome** | 91.25 | 12 | P | | **P** | **18 04 46.2** | **+0.7** |
| H17A | **Grant Village** | 91.25 | 41 | P | | **P** | **18 04 48.6** | **+2.2** |
| H17A | | | | IAmb | | IAmb | 18 04 49.9 | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| BOZ | **Bozeman (W)** | 91.28 | 40 | P | | **P** | **18 04 47.4** | **+1.2** |
| BOZ | | | | IAmb | | IAmb | 18 04 48.8 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| YHH | **Holmes Hill** | 91.30 | 41 | P | | **P** | **18 04 48.2** | **+1.7** |
| YHH | | | | IAmb | | IAmb | 18 04 50.5 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| ILAR | **Eielson Array** | 91.35 | 13 | P | | **P** | **18 04 45.7** | **-0.2** |
| | comp=Z,3.8nm,1.0s,baz=224,slow=5.9,SNR=10 | | | | | | | |
| ILAR | | | | PP | | **PP** | **18 08 24.5** | **-2.5** |
| | comp=Z,1.5nm,0.9s,baz=224,slow=7.4,SNR=4.1 | | | | | | | |
| J25K | **Salcha River,** | 91.52 | 13 | P | | **P** | **18 04 48.3** | **+1.5** |
| CM31 | **Chiang Mai Arr** | 91.57 | 289 | P | | **P** | **18 04 48.1** | **+0.1** |
| CM31 | | | | IAmb | | IAmb | 18 04 50.2 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| CMAR | **Chiang Mai Arr** | 91.57 | 289 | P | | **P** | **18 04 49.1** | **+1.0** |
| | comp=Z,8.7nm,0.8s,baz=136,slow=3.4,SNR=71 | | | | | | | |
| CMAR | | | | PP | | **PP** | **18 08 29.9** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=131,slow=6.3,SNR=4.2 | | | | | | | |
| CMAR | | | | PKKPbc | | **PKKPdf** | **18 22 06.3** | **+2.3** |
| | comp=Z,0.5nm,0.9s,baz=298,slow=4.0,SNR=4.6 | | | | | | | |
| CMAR | **Chiang Mai Arr** | 91.57 | 289 | P | | **P** | **18 04 48.5** | **+0.5** |
| T25A | **Trinidad** | 91.61 | 50 | P | | **P** | **18 04 48.9** | **+0.8** |
| CHTO | **Chiang Mai** | 91.72 | 290 | P | | **P** | **18 04 48.8** | **+0.1** |
| CHTO | | | | IAmb | | IAmb | 18 04 50.5 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| HRY | **Holter Researc** | 91.77 | 39 | P | | **P** | **18 04 48.9** | **+0.4** |
| J26L | **Joseph Creek** | 91.81 | 14 | P | | **P** | **18 04 49.4** | **+1.2** |
| J26L | | | | IAmb | | IAmb | 18 05 01.8 | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| HHC | **Hu-ho-hao-te** | 91.89 | 314 | *e*P | | **P** | **18 04 49.6** | **+0.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| Q24A | **Divide** | 91.97 | 48 | P | | **P** | **18 04 50.7** | **+0.8** |
| ISCO | **Idaho Springs** | 92.07 | 47 | P | | **P** | **18 04 50.9** | **+0.6** |
| RDOG | **Red Dog Mine** | 92.14 | 5 | P | | **P** | **18 04 50.3** | **+0.7** |
| RDOG | | | | IAmb | | IAmb | 18 04 51.6 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| BILL | **Bilibino** | 92.26 | 354 | P | | **P** | **18 04 50.6** | **+0.5** |
| DAWY | **Dawson** | 92.43 | 16 | P | | **P** | **18 04 52.0** | **+1.0** |
| PZH | **PanZhiHua** | 92.57 | 298 | P | | **P** | **18 04 53.3** | **+0.6** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,6.2s | | | | | | | |
| PHWY | **Pilot Hill** | 92.90 | 46 | P | | **P** | **18 04 55.1** | **+1.0** |
| COLD | **Coldfoot** | 92.95 | 10 | P | | **P** | **18 04 55.7** | **+2.4** |
| ABTX | **Abilene, Hawle** | 93.02 | 56 | P | | **P** | **18 04 55.5** | **+1.1** |
| ABTX | | | | IAmb | | IAmb | 18 04 57.0 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| LZH | **Lanzhou** | 95.04 | 307 | *e*P | | **P** | **18 05 04.3** | **+0.5** |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.6s | | | | | | | |
| RSSD | **Black Hills** | 95.17 | 44 | P | | **P** | **18 05 03.4** | **-0.9** |
| RSSD | | | | IAmb | | IAmb | 18 05 06.0 | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| YAK | **Yakutsk** | 95.24 | 338 | P | | **P** | **18 05 02.6** | **-1.2** |
| INK | **Inuvik** | 97.25 | 15 | P | | **P** | **18 05 13.1** | **+0.2** |
| | baz=222,slow=7.5 | | | | | | | |
| K31A | **O'Neill** | 97.96 | 47 | P | | **P** | **18 05 17.4** | **+0.7** |
| SONM | **Songino Array** | 98.44 | 319 | P | | **P** | **18 05 18.2** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=134,slow=5.6,SNR=3.0 | | | | | | | |
| SONM | | | | PP | | **PP** | **18 09 24.6** | **+2.2** |
| | comp=Z,0.9nm,0.9s,baz=101,slow=7.5,SNR=4.4 | | | | | | | |
| YKA | **Yellowknife Ar** | 99.25 | 25 | P | | **Pdif** | **18 05 21.1** | **-0.8** |
| | comp=Z,0.2nm,0.6s,baz=241,slow=4.7,SNR=2.9 | | | | | | | |
| YKA | | | | PP | | **PP** | **18 09 26.3** | **-1.7** |
| | comp=Z,0.4nm,0.8s,baz=228,slow=7.7,SNR=3.8 | | | | | | | |
| GTA | **Gaotai** | 99.32 | 309 | *e*P | | **Pdif** | **18 05 23.2** | **+0.2** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| LPAZ | **La Paz** | 100.44 | 113 | PKKPbc | | PKKPbc | 18 21 43.2 | -0.1 |
| | comp=Z,0.9nm,0.7s,baz=63,slow=4.5,SNR=3.5 | | | | | | | |
| ZALV | **Zalesovo Beam** | 113.24 | 320 | PKiKP | | **PKiKP** | **18 10 15.2** | **-1.6** |
| | comp=Z,1.0nm,0.6s,baz=84,slow=0.6,SNR=6.1 | | | | | | | |
| MKAR | **Makanchi Array** | 113.68 | 312 | Pdiff | | **Pdif** | **18 06 28.1** | **+1.5** |
| | comp=Z,0.2nm,0.6s,baz=90,slow=6.0,SNR=2.5 | | | | | | | |
| MKAR | | | | PKiKP | | **PKiKP** | **18 10 16.1** | **-1.8** |
| | comp=Z,0.8nm,0.8s,baz=118,slow=0.8,SNR=10.0 | | | | | | | |
| MKAR | | | | SKP | | | 18 13 29.7 | |
| | comp=Z,0.3nm,0.6s,baz=51,slow=1.8,SNR=2.9 | | | | | | | |
| MKAR | | | | PKKPbc | | **PKKPbc** | **18 21 01.2** | **-1.5** |
| | comp=Z,0.7nm,0.7s,baz=282,slow=3.1,SNR=6.8 | | | | | | | |
| MKAR | **Makanchi Array** | 113.68 | 312 | | | **PKiKP** | **18 10 15.6** | **-2.2** |
| MKAR | | | | | | **PKKPbc** | **18 20 59.6** | **-3.1** |
| KSH | **Kashi** | 117.04 | 304 | PKP | | **PKiKP** | **18 10 26.3** | **+1.6** |
| BOSA | **Boshof** | 123.52 | 204 | PKP | | **PKPdf** | **18 10 37.6** | **0.0** |
| | comp=Z,4.0nm,0.9s,baz=191,slow=5.6,SNR=5.7 | | | | | | | |
| GEYT | **Alibeck** | 130.81 | 300 | SKPbc | | **SKPbc** | **18 13 53.3** | **-1.4** |
| | comp=Z,3.5nm,0.7s,baz=120,slow=4.4,SNR=5.9 | | | | | | | |
| GEYT | **Alibeck** | 130.81 | 300 | | | **SKPbc** | **18 13 53.2** | **-1.5** |
| ARCES | **ARCESS Array B** | 132.15 | 349 | PKhKP | | PKPpre | 18 10 42.3 | |
| | comp=Z,1.5nm,0.8s,baz=82,slow=1.9,SNR=3.9 | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | **18 10 52.5** | **-0.1** |
| | comp=Z,3.2nm,0.8s,baz=11,slow=0.9,SNR=7.3 | | | | | | | |
| ARCES | | | | SKPbc | | **SKPbc** | **18 13 57.0** | **-1.4** |
| | comp=Z,6.3nm,1.0s,baz=54,slow=4.6,SNR=5.3 | | | | | | | |
| FINES | **FINESS Array B** | 138.96 | 343 | PKhKP | | PKPpre | 18 10 56.8 | |
| | comp=Z,2.6nm,0.6s,baz=72,slow=4.5,SNR=11 | | | | | | | |
| FINES | | | | PKP | | **PKPdf** | **18 11 06.5** | **+1.1** |
| | comp=Z,6.4nm,0.5s,baz=47,slow=4.0,SNR=14 | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **18 14 17.6** | **-2.2** |
| | comp=Z,1.4nm,0.7s,baz=116,slow=3.2,SNR=4.3 | | | | | | | |
| FINES | | | | SKPab | | **SKPab** | **18 14 28.6** | **-1.1** |
| | comp=Z,3.6nm,0.8s,baz=29,slow=3.5,SNR=3.8 | | | | | | | |
| VSU | **Vasula** | 141.20 | 340 | *e*P | | **PKPdf** | **18 11 02.9** | **-6.6** |
| KBZ | **Khabaz** | 141.36 | 311 | PKhKP | | PKPpre | 18 11 04.3 | |
| | comp=Z,2.9nm,0.8s,baz=54,slow=5.5,SNR=5.5 | | | | | | | |
| AKH | **Akhalkalaki** | 141.58 | 307 | ⇑P | | **PKPdf** | **18 11 06.4** | **-4.7** |
| MTSE | **Matsula** | 141.87 | 342 | *e*P | | **PKPdf** | **18 11 05.8** | **-4.9** |
| NB2 | **NORSAR Subarra** | 142.21 | 353 | PKP | | **PKPdf** | **18 11 07.0** | **-4.4** |
| | comp=Z,6.5nm,0.8s,baz=29,slow=4.1 | | | | | | | |
| NOA | **NORSAR Array B** | 142.21 | 353 | PKhKP | | PKPpre | 18 11 05.8 | |
| | comp=Z,0.7nm,0.5s,baz=9.2,slow=2.3,SNR=10 | | | | | | | |
| CHVG | **Ch'k'valeri** | 142.24 | 310 | ⇓P | | **PKPdf** | **18 11 08

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BRG** | **Berggiesshubel** | **151.46** | **345** | *e*PKP | | **PKPbc** | **18 11 33.6** | **+0.3** |
| BRG | | | | Amp | | | 18 11 35.6 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| BRG | | | | *ex* | | x | 18 11 42.8 | |
| BRG | | | | Amp | | | 18 11 43.6 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| BRG | | | | *ex* | | x | 18 12 40.9 | |
| BRG | | | | Amp | | | 18 12 45.5 | |
| | comp=Z,8.4nm,1.1s | | | | | | | |
| **SULR** | | **151.46** | **323** | ⇓P | | **PKiKP** | **18 11 35.7** | **+1.8** |
| **VOIR** | | **151.62** | **325** | ⇑P | | **PKPbc** | **18 11 33.9** | **-0.1** |
| **ARR** | **Arges** | **151.88** | **326** | ⇑P | | **PKPbc** | **18 11 35.4** | **+0.8** |
| **PRU** | **Pruhonice** | **152.12** | **343** | *e*PKP | | **PKiKP** | **18 11 36.5** | **+1.4** |
| PRU | | | | *e*PKPAB | | **PKPab** | **18 11 46.0** | **+0.8** |
| **VRAC** | **Vranov** | **152.14** | **340** | ⇑P | | **PKPab** | **18 11 46.4** | **+1.1** |
| **VRAC** | **Vranov** | **152.14** | **340** | *e*PKP | | **PKPbc** | **18 11 35.6** | **+0.7** |
| VRAC | | | | *e* | | | 18 11 46.0 | |
| **PSZ** | **Piszkesteto** | **152.14** | **334** | ⇑P | | **PKPbc** | **18 11 35.3** | **+0.2** |
| **PSZ** | **Piszkesteto** | **152.14** | **334** | PKPDF | | **PKPbc** | **18 11 34.4** | **-0.7** |
| **KOLL** | **Kolacno** | **152.16** | **337** | *e*PKP | | **PKiKP** | **18 11 36.2** | **+1.0** |
| KOLL | | | | *e* | | | 18 11 46.0 | |
| **JAVC** | **Velka Javorina** | **152.18** | **338** | *e*PKP | | **PKPbc** | **18 11 35.7** | **+0.6** |
| JAVC | | | | *e* | | | 18 11 47.0 | |
| **HUMR** | **Humele** | **152.26** | **324** | ⇓P | | **PKPbc** | **18 11 35.1** | **-0.3** |
| **LOT** | **Lotru** | **152.26** | **327** | ⇑P | | **PKPbc** | **18 11 35.6** | **+0.1** |
| **NKC** | **Novy Kostel** | **152.41** | **346** | *e*PKPAB | | **PKPab** | **18 11 46.9** | **+0.4** |
| **KRUC** | **Moravsky** | **152.42** | **340** | *e*PKP | | **PKPbc** | **18 11 35.8** | **+0.3** |
| KRUC | | | | *e* | | | 18 11 47.1 | |
| **PBCC** | **Pribram** | **152.54** | **344** | *e*PKPAB | | **PKPab** | **18 11 47.7** | **+0.6** |
| **SIRR** | **Siria** | **152.68** | **330** | ⇓P | | **PKPdf** | **18 11 32.1** | **+3.1** |
| **GZR** | **Gura Zlata** | **152.80** | **328** | ⇑P | | **PKPbc** | **18 11 36.2** | **-0.3** |
| **MEM** | **Membach** | **153.01** | **355** | *d*PKPab | | **PKPab** | **18 11 49.2** | **+0.3** |
| **BSTI** | **Sart Tilman** | **153.07** | **356** | *d*PKPab | | **PKPab** | **18 11 49.7** | **+0.5** |
| **KHC** | **Kasperske Hory** | **153.16** | **344** | *e*PKP | | **PKiKP** | **18 11 39.3** | **+2.0** |
| KHC | | | | *e*PKPAB | | **PKPab** | **18 11 50.7** | **+1.0** |
| **BZS** | **Buzias** | **153.19** | **329** | ⇑P | | **PKPbc** | **18 11 37.4** | **0.0** |
| **BCLA** | **Clavier** | **153.25** | **356** | *d*PKPab | | **PKPab** | **18 11 49.5** | **-0.5** |
| **BHOU** | **Houvegnez** | **153.27** | **355** | *d*PKPdf | | **PKPdf** | **18 11 29.5** | **-0.2** |
| BHOU | | | | *d*PKPab | | **PKPab** | **18 11 50.6** | **+0.5** |
| **BGES** | **Gesves** | **153.30** | **356** | *d*PKPab | | **PKPab** | **18 11 49.5** | **-0.7** |
| **HERR** | **Herculane** | **153.34** | **327** | ⇑P | | **PKPbc** | **18 11 37.9** | **+0.2** |
| **GERES** | **GERESS Array B** | **153.39** | **343** | PKPbc | | **PKPbc** | **18 11 37.7** | **-0.1** |
| | comp=Z,1.7nm,0.6s,baz=48,slow=1.6,SNR=4.6 | | | | | | | |
| GERES | | | | PKPab | | **PKPab** | **18 11 50.0** | **-0.8** |
| | comp=Z,6.3nm,0.8s,baz=27,slow=4.5,SNR=11 | | | | | | | |
| **BMRD** | **Maredsous** | **153.40** | **357** | *d*PKPab | | **PKPab** | **18 11 50.5** | **-0.1** |
| **PUNG** | **Punghina** | **153.51** | **326** | ⇓P | | **PKPdf** | **18 11 23.6** | **-6.6** |
| **RCHB** | **Rochefort** | **153.52** | **356** | *d*PKPab | | **PKPab** | **18 11 51.1** | **0.0** |
| **CONA** | **Conrad Observa** | **153.58** | **339** | *i* P | | **PKPab** | **18 11 52.1** | **+0.5** |
| | comp=Z,14nm,0.7s,SNR=5.7 | | | | | | | |
| **DOU** | **Dourbes** | **153.62** | **357** | *d*PKPab | | **PKPab** | **18 11 51.4** | **-0.2** |
| **WLF** | **Walferdange** | **153.94** | **355** | *d*PKPab | | **PKPab** | **18 11 53.1** | **+0.2** |
| **MORH** | **Mrgy, Hungar** | **154.03** | **334** | ⇑P | | **PKPbc** | **18 11 39.0** | **-0.1** |
| **MORH** | **Mrgy, Hungar** | **154.03** | **334** | PKPDF | | **PKPbc** | **18 11 39.4** | **+0.4** |
| **MOA** | **Molln** | **154.14** | **342** | *e*P | | **PKPab** | **18 11 54.6** | **+0.7** |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ARSA** | **Arzberg** | **154.29** | **339** | *e*P | | **PKPab** | **18 11 55.0** | **+0.4** |
| | comp=Z,7.8nm,0.9s | | | | | | | |
| **KOVH** | **Kovagotottos** | **154.35** | **334** | PKPDF | | **PKiKP** | **18 11 41.0** | **+1.2** |
| **VTS** | **Vitosha** | **154.47** | **323** | ⇑P | | **PKPab** | **18 11 56.4** | **+0.7** |
| **KOGS** | **Kog** | **154.74** | **337** | *i* PKPbc | | **PKPab** | **18 11 56.3** | **-0.1** |
| **SOKA** | **Soboth** | **154.95** | **339** | *i* P | | **PKPab** | **18 11 57.7** | **+0.2** |
| | comp=Z,14nm,1.0s,SNR=5.5 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **155.10** | **342** | *e*P | | **PKPab** | **18 11 59.3** | **+1.1** |
| | comp=Z,8.5nm,0.6s | | | | | | | |
| **OBKA** | **Obir** | **155.26** | **340** | *e*P | | **PKPab** | **18 11 58.8** | **0.0** |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **WATA** | **Walderalm** | **155.32** | **345** | *i* P | | **PKPab** | **18 11 59.5** | **+0.4** |
| | comp=Z,29nm,1.1s,SNR=6.0 | | | | | | | |
| **RETA** | **Reutte** | **155.37** | **346** | *e*P | | **PKPab** | **18 11 59.6** | **+0.4** |
| | comp=Z,12nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **155.38** | **345** | *i* P | | **PKPab** | **18 12 00.0** | **+0.6** |
| | comp=Z,30nm,1.0s,SNR=5.3 | | | | | | | |
| **MOTA** | **Moosalm** | **155.43** | **346** | *i* P | | **PKPab** | **18 11 59.9** | **+0.3** |
| | comp=Z,28nm,1.1s,SNR=6.1 | | | | | | | |
| **MYKA** | **Terra Mystica** | **155.43** | **341** | *e*P | | **PKPab** | **18 11 59.1** | **-0.4** |
| | comp=Z,8.7nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **155.52** | **345** | *e*P | | **PKPab** | **18 12 00.5** | **+0.5** |
| | comp=Z,14nm,1.0s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **155.64** | **343** | *i* P | | **PKPab** | **18 12 00.2** | **-0.2** |
| | comp=Z,18nm,0.7s,SNR=5.2 | | | | | | | |
| **DAVA** | **Damuels** | **155.74** | **348** | *e*P | | **PKPab** | **18 12 01.1** | **+0.2** |
| | comp=Z,12nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **155.82** | **346** | *e*P | | **PKPab** | **18 12 01.7** | **+0.4** |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **CEY** | **Cerknica** | **155.98** | **339** | *i* PKPbc | | **PKPab** | **18 12 01.6** | **-0.2** |
| **PDG** | **Podgorica** | **156.70** | **327** | ⇓P | | **PKPab** | **18 12 04.7** | **-0.3** |
| **DBIC** | **Dimbokro** | **161.65** | **156** | PKPab | | **PKPab** | **18 12 27.5** | **+0.3** |
| | comp=Z,2.6nm,0.7s,baz=195,slow=4.0,SNR=2.1 | | | | | | | |
| **ESDC** | **Sonseca Array** | **163.19** | **17** | PKPab | | **PKPab** | **18 12 34.2** | **+0.8** |
| | comp=Z,1.5nm,1.0s,baz=330,slow=3.7,SNR=6.7 | | | | | | | |
| **KEST** | **Kesra** | **166.62** | **335** | PKPab | | **PKPab** | **18 12 48.9** | **+0.2** |
| | comp=Z,9.3nm,1.0s,baz=7.7,slow=1.2,SNR=8.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.46** | **176** | PKP | | **PKPdf** | **18 11 47.0** | **-0.5** |
| | comp=Z,1.3nm,0.8s,baz=272,slow=2.3,SNR=4.2 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **18 13 01.6** | **+0.1** |
| | comp=Z,1.6nm,0.6s,baz=184,slow=3.5,SNR=7.3 | | | | | | | |

*TUL **01** 18:05:16.7±1.6,36.78N±0.01×98.01W±0.02,h6km±3km, ML2.7,mb_Lg2.3/4(NEIC) Error ellipse: s-maj=2.6km s-min=1.6km az=47.0*

**NEIC 01 18:05:16.7±1.9,36.759N±0.007×98.00W±0.01,h5km±1km, Error ellipse: s-maj=2.9km s-min=1.7km az=34.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GC02** | **Grant County #** | **0.14** | **50** | Pg | Pg | 18 05 19.9 | +0.3 |
| GC02 | | | | Sg | Sg | 18 05 22.2 | +0.6 |
| **OK032** | **Salt Plains WL** | **0.18** | **285** | Pg | Pg | 18 05 20.3 | +0.2 |
| OK032 | | | | Sg | Sg | 18 05 23.1 | +0.6 |
| **KAN14** | **Manchester OK** | **0.20** | **8** | | Pg | 18 05 20.6 | 0.0 |
| KAN14 | | | | Sg | Sg | 18 05 23.6 | +0.3 |
| **CROK** | **Carrier** | **0.25** | **177** | Pg | Pg | 18 05 22.3 | +0.7 |
| CROK | | | | Sg | Sg | 18 05 26.4 | +1.5 |
| **KAN10** | **Anthony SW Sta** | **0.37** | **348** | | Pg | 18 05 23.1 | -0.8 |
| **KAN06** | **Argonia West S** | **0.50** | **13** | | Pg | 18 05 26.2 | -0.1 |
| **U32A** | **Winter Ranch,** | **0.89** | **245** | | Pg | 18 05 33.5 | -0.3 |
| **OK029** | **Liberty Lake** | **1.06** | **155** | Pg | Pg | 18 05 35.9 | -1.1 |
| **OK033** | **Mehan** | **1.11** | **130** | Pg | Pg | 18 05 38.1 | 0.0 |
| **QUOK** | **Quay** | **1.19** | **119** | Pn | Pg | 18 05 39.0 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.20** | **82** | Pn | Pg | 18 05 39.2 | -0.6 |
| **OK025** | **Westminster Rd** | **1.29** | **155** | Pn | Pn | 18 05 40.9 | -0.5 |
| **R32A** | **Long Quarter,** | **1.75** | **341** | | Pn | 18 05 45.6 | -2.2 |
| **W35A** | **Tecumseh** | **1.84** | **150** | | Pn | 18 05 47.2 | -1.8 |
| **HHAR** | **Hobbs** | **3.30** | **97** | IAmb_Lg | | 18 07 02.3 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **W39A** | **Magazine** | **3.76** | **113** | IAmb_Lg | | 18 07 20.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.82** | **99** | | Pn | 18 06 23.8 | -6.1 |

*IDC **01** 18:08:48.3±1.0,5.82S×152.18E,h33km±5km, mb3.7/10, mb1 4.0/11,mb1mx3.6/49,mbtmp4.0/11,ML2.4/1,MS3.3/1, Ms1 3.3/1,ms1mx2.6/63,Error ellipse: s-maj=25.9km s-min=13.8km az=113.0*

*NEIC **01** 18:08:51.6±1.3,5.5S±0.1×151.7E±0.1,h48km±8km, mb4.3/12,Error ellipse: s-maj=22.2km s-min=7.7km az=131.0*

**ISC 01 18:08:49.9±0.7,5.68S±0.07×151.9E±0.1,h45km,n29, σ19.35/33,mb4.1/16,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **1.37** | **4** | Pn | **Pn** | **18 09 13.9** | **+1.3** |
| | baz=232,slow=19 | | | | | | |
| KRVT | | | | Sn | **Sn** | **18 09 30.9** | **+1.3** |
| | baz=218,slow=19 | | | | | | |
| **RABL** | **Rabaul** | **1.50** | **9** | Pn | **Pn** | **18 09 14.4** | **0.0** |
| **MANU** | **Manus Island** | **5.82** | **308** | Pn | **Pn** | **18 10 10.9** | **-2.8** |
| **PMG** | **Port Moresby** | **6.01** | **232** | Pn | **Pn** | **18 10 18.2** | **+1.8** |
| | 6.1nm,0.3s,baz=48,slow=8.9,SNR=51 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 11 25.4** | **+1.4** |
| | 2.6nm,0.3s,baz=332,slow=22,SNR=1.9 | | | | | | |
| **PMG** | **Port Moresby** | **6.01** | **232** | | **Pn** | **18 10 16.6** | **+0.2** |
| **DZM** | **Mont Dzumac** | **21.50** | **141** | P | **P** | **18 13 32.1** | **-3.1** |
| | 3.1nm,0.9s,baz=319,slow=20,SNR=2.0 | | | | | | |
| **WB0** | **Warramunga Arr** | **22.08** | **229** | P | **P** | **18 13 42.3** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 18 13 46.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.08** | **228** | P | **P** | **18 13 42.2** | **+0.8** |
| **WRAB** | **Tennant Creek** | **22.21** | **229** | P | **P** | **18 13 42.6** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 18 13 58.1 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.21** | **229** | P | **P** | **18 13 43.0** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 18 13 58.6 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.22** | **229** | P | **P** | **18 13 42.9** | **-0.1** |
| | comp=Z,2.2nm,0.7s,baz=52,slow=10,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.22** | **229** | P | **P** | **18 13 42.1** | **-0.9** |
| **KNRA** | **Kununurra** | **24.82** | **245** | P | **P** | **18 14 07.8** | **-0.3** |
| **AS31** | **Alice Springs** | **24.92** | **222** | P | **P** | **18 14 09.4** | **+0.3** |
| **ASAR** | **Alice Springs** | **24.93** | **222** | P | **P** | **18 14 08.9** | **-0.2** |
| | comp=Z,6.5nm,0.9s,baz=60,slow=8.7,SNR=48 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.49** | **242** | P | **P** | **18 14 41.6** | **+0.4** |
| | comp=Z,1.6nm,0.5s,baz=59,slow=12,SNR=1.7 | | | | | | |
| FITZ | | | | pP | **pP** | **18 14 52.2** | **+0.2** |
| | comp=Z,3.5nm,0.6s,baz=59,slow=9.2,SNR=1.9 | | | | | | |
| **DAV** | **Davao City (W)** | **29.20** | **295** | LR | LR | 18 24 05.6 | |
| | comp=Z,63nm,21.6s,baz=329,slow=31 | | | | | | |
| **XMIS** | **Christmas Isla** | **46.04** | **261** | P | **P** | **18 17 07.4** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **57.48** | **296** | P | **P** | **18 18 36.3** | **+1.3** |
| | comp=Z,0.5nm,0.8s,baz=101,slow=4.7,SNR=1.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.77** | **4** | P | **P** | **18 18 43.7** | **+0.4** |
| | comp=Z,3.2nm,0.9s,baz=202,slow=6.2,SNR=1.4 | | | | | | |
| **SONM** | **Songino Array** | **66.61** | **328** | P | **P** | **18 19 37.5** | **+1.6** |
| | comp=Z,0.5nm,0.5s,baz=143,slow=4.8,SNR=6.7 | | | | | | |
| SONM | | | | pP | **pP** | **18 19 47.4** | **-1.3** |
| | comp=Z,0.8nm,0.5s,baz=146,slow=5.6,SNR=6.3 | | | | | | |
| **BILL** | **Bilibino** | **74.24** | **6** | P | **P** | **18 20 22.2** | **+0.4** |
| BILL | | | | IAmb | IAmb | 18 20 34.7 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.42** | **319** | P | **P** | **18 20 58.7** | **+1.7** |
| | comp=Z,0.4nm,0.7s,baz=101,slow=4.9,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.41** | **327** | P | **P** | **18 21 01.9** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=101,slow=6.5,SNR=3.8 | | | | | | |
| **MLY** | **Manley** | **82.01** | **21** | P | **P** | **18 21 05.9** | **+0.9** |
| **IL31** | | **83.29** | **22** | P | **P** | **18 21 11.4** | **-0.2** |
| IL31 | | | | IAmb | IAmb | 18 21 22.4 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.29** | **22** | P | **P** | **18 21 11.7** | **+0.1** |
| | comp=Z,1.4nm,0.7s,baz=250,slow=5.3,SNR=18 | | | | | | |
| ILAR | | | | pP | **pP** | **18 21 21.9** | **-2.9** |
| | comp=Z,3.4nm,0.7s,baz=247,slow=5.2,SNR=15 | | | | | | |
| **J25K** | **Salcha River,** | **83.80** | **23** | P | **P** | **18 21 15.5** | **+1.2** |
| J25K | | | | IAmb | IAmb | 18 21 25.9 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.75** | **286** | PKPbc | **PKPbc** | **18 28 36.2** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=75,slow=3.1,SNR=3.1 | | | | | | |

**IDC 01 18:12:13.6±14.0,21.88S×114.78W,h0km,mb3.5/1, mb1 3.9/1,mb1mx3.5/33,mbtmp3.5/1,MS3.7/4,Ms1 3.7/4, ms1mx3.3/40,Error ellipse: s-maj=899.4km s-min=89.6km az=118.0,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **7.20** | **138** | LR | LR | 18 15 26.7 | |
| | comp=Z,296nm,20.7s,baz=274,slow=27 | | | | | | |
| **H03N2** | **Juan Fernandez** | **33.61** | **118** | T | T | 18 53 25.4 | |
| | baz=283,slow=75,SNR=5.3 | | | | | | |
| **H03N3** | **Juan Fernandez** | **33.62** | **118** | T | T | 18 53 23.5 | |
| | baz=283,slow=75,SNR=7.8 | | | | | | |
| **H03N1** | **Juan Fernandez** | **33.63** | **118** | T | T | 18 53 29.7 | |
| | baz=283,slow=75,SNR=6.0 | | | | | | |
| **PLCA** | **Paso Flores** | **41.70** | **127** | LR | LR | 18 32 36.0 | |
| | comp=Z,127nm,18.7s,baz=246,slow=29 | | | | | | |
| **CMIG** | **Matias Romero** | **43.36** | **28** | LR | LR | 18 34 37.1 | |
| | comp=Z,123nm,19.7s,baz=20,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **52.27** | **107** | LR | LR | 18 38 37.8 | |
| | comp=Z,65nm,21.8s,baz=299,slow=30 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.08** | **0** | P | P | 18 24 45.8 | +0.1 |
| | 0.1nm,0.5s,baz=173,slow=5.6,SNR=4.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **86.64** | **291** | T | T | 20 01 24.2 | |
| | baz=116,slow=75,SNR=8.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **86.65** | **291** | T | T | 20 01 18.0 | |
| | baz=116,slow=75,SNR=8.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **86.65** | **291** | T | T | 20 01 19.5 | |
| | baz=116,slow=75,SNR=8.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **86.96** | **293** | T | T | 20 01 46.0 | |
| | baz=118,slow=74 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **86.98** | **292** | T | T | 20 01 44.2 | |
| | baz=118 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **86.98** | **293** | T | T | 20 01 51.9 | |
| | baz=118,slow=74 | | | | | | |
| **SONM** | **Songino Array** | **138.15** | **318** | PKP | PKPdf | 18 31 40.1 | -0.6 |
| | 0.4nm,0.6s,baz=89,slow=1.9,SNR=2.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **148.20** | **270** | PKPbc | PKPbc | 18 32 01.6 | -0.7 |
| | 0.1nm,0.4s,baz=98,slow=1.8,SNR=4.1 | | | | | | |

*IDC **01** 18:12:21.8±1.8,59.80N×153.26W,h98km±24km,mb3.5/8, mb1 3.7/13,mb1mx3.3/54,mbtmp3.9/13,MS3.2/2, Ms1 3.2/2,ms1mx2.7/64,Error ellipse: s-maj=28.7km s-min=16.0km az=149.0*

*NEIC **01** 18:12:22.3±1.2,59.75N±0.03×153.13W±0.06, h111km±2km,Error ellipse: s-maj=5.0km s-min=4.6km az=145.0*

*AEIC **01** 18:12:23±1.3,59.73N±0.03×153.09W±0.07,h107km±3km, ML3.7,mb4.1/3(NEIC),ML3.9/109(NEIC),Error ellipse: s-maj=4.9km s-min=4.5km az=124.0*

**ISC 01 18:12:22.4±0.7,59.73N±0.03×153.08W±0.03, h115km±5km,n266,σ0.994/271,mb3.8/8,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.11** | **225** | | **Pn** | **18 12 37.7** | **-0.5** |
| **ILSW** | **Iliamna Southw** | **0.26** | **352** | | **Pn** | **18 12 37.8** | **-0.9** |
| ILSW | | | | | **Sn** | **18 12 49.3** | **-1.7** |
| **AU22** | **Augustine Moun** | **0.39** | **202** | | **Pn** | **18 12 38.7** | **-0.4** |
| AU22 | | | | | **Sn** | **18 12 50.7** | **-0.9** |
| **AUL** | **Augustine Lava** | **0.40** | **208** | | **Pn** | **18 12 39.0** | **-0.2** |
| AUL | | | | | **Sn** | **18 12 50.9** | **-0.8** |
| **AUQ** | **Augustine Qik'** | **0.42** | **205** | | **Pn** | **18 12 39.0** | **-0.3** |
| **O20K** | **Slope Mountain** | **0.42** | **33** | | **Pn** | **18 12 38.9** | **-0.5** |
| **O20K** | **Slope Mountain** | **0.42** | **33** | P | **Pn** | **18 12 38.9** | **-0.5** |
| | baz=214,SNR=29 | | | | | | |
| O20K | | | | S | **Sn** | **18 12 51.2** | **-0.9** |
| | baz=214 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.71** | **12** | | **Pn** | **18 12 40.8** | **-0.6** |
| RED | | | | | **Sn** | **18 12 54.1** | **-1.6** |
| **HOM** | **Homer** | **0.73** | **95** | | **Pn** | **18 12 41.5** | **+0.1** |
| HOM | | | | | **Sn** | **18 12 56.0** | **+0.2** |
| **HOM** | **Homer** | **0.73** | **95** | IAML | | 18 12 57.2 | |
| | comp=N,8μm,0.5s | | | | | | |
| HOM | | | | IAML | | 18 12 57.3 | |
| | comp=E,7μm,0.5s | | | | | | |
| **HOM** | **Homer** | **0.73** | **95** | P | **Pn** | **18 12 41.5** | **+0.1** |
| | baz=276,SNR=9.4 | | | | | | |
| HOM | | | | S | **Sn** | **18 12 55.8** | **0.0** |
| | baz=276 | | | | | | |
| **RSO** | **Redoubt South** | **0.75** | **12** | | **Pn** | **18 12 41.3** | **-0.6** |
| **O19K** | **Port Alsworth** | **0.78** | **307** | | **Pn** | **18 12 41.2** | **-0.7** |
| O19K | | | | | **Sn** | **18 12 54.9** | **-1.7** |
| **O19K** | **Port Alsworth** | **0.78** | **307** | IAML | | 18 12 55.4 | |
| | comp=E,3μm,0.5s | | | | | | |
| O19K | | | | IAML | | 18 12 55.8 | |
| | comp=N,4μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.78** | **307** | P | **Pn** | **18 12 41.2** | **-0.7** |
| | baz=127,SNR=55 | | | | | | |
| O19K | | | | S | **Sn** | **18 12 55.1** | **-1.4** |
| | baz=127 | | | | | | |
| **NCT** | **North Crescent** | **0.84** | **5** | | **Pn** | **18 12 42.1** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.86** | **200** | | **Pn** | **18 12 42.3** | **-0.3** |
| **Q19K** | **Cape Douglas,** | **0.86** | **200** | IAML | | 18 12 59.2 | |
| | comp=E,2μm,0.8s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.86** | **200** | P | **Pn** | **18 12 42.3** | **-0.3** |
| | baz=19,SNR=36 | | | | | | |
| Q19K | | | | S | **Sn** | **18 12 56.9** | **-0.9** |
| | baz=19 | | | | | | |
| **DFR** | **Drift River** | **0.89** | **13** | | **Pn** | **18 12 42.5** | **-0.4** |
| DFR | | | | | **Sn** | **18 12 57.2** | **-1.2** |
| **RDT** | **Redoubt** | **0.91** | **21** | | **Pn** | **18 12 42.6** | **-0.5** |
| **CNPM** | **China Poot** | **0.96** | **102** | | **Pn** | **18 12 43.3** | **-0.3** |
| CNPM | | | | | **Sn** | **18 12 58.6** | **-0.9** |
| **CNPM** | **China Poot** | **0.96** | **102** | IAML | | 18 12 59.2 | |
| | comp=N,5μm,0.5s | | | | | | |
| **Q18K** | **Koktuh Hills** | **1.08** | **277** | | **Pn** | **18 12 44.1** | **-0.7** |
| **BRLK** | **Bradley Lake** | **1.11** | **87** | | **Pn** | **18 12 44.6** | **-0.5** |
| **BRLK** | **Bradley Lake** | **1.11** | **87** | IAML | | 18 13 01.7 | |
| | comp=N,2μm,0.4s | | | | | | |
| BRLK | | | | IAML | | 18 13 06.2 | |
| | comp=E,2μm,0.1s | | | | | | |
| **P18K** | **Big Mountain,** | **1.15** | **254** | | **Pn** | **18 12 44.6** | **-0.9** |
| P18K | | | | | **Sn** | **18 13 00.9** | **-2.1** |
| **P18K** | **Big Mountain,** | **1.15** | **254** | P | **Pn** | **18 12 44.7** | **-0.9** |
| | baz=72,SNR=6.3 | | | | | | |
| P18K | | | | S | **Sn** | **18 13 00.9** | **-2.1** |
| | baz=72 | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.18** | **89** | | **Pn** | **18 12 45.5** | **-0.4** |
| **BRSE** | **Bradley Lake S** | **1.18** | **89** | P | **Pn** | **18 12 45.5** | **-0.4** |
| | baz=270,SNR=20 | | | | | | |
| BRSE | | | | S | **Sn** | **18 13 02.8** | **-0.8** |
| | baz=270 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.29** | **328** | | **Pn** | **18 12 46.6** | **-0.5** |
| **CAPN** | **Captain Cook N** | **1.41** | **42** | | **Pn** | **18 12 50.0** | **+1.6** |
| CAPN | | | | | **Sn** | **18 13 08.8** | **+0.5** |
| **CAPN** | **Captain Cook N** | **1.41** | **42** | P | **Pn** | **18 12 50.0** | **+1.6** |
| | baz=224 | | | | | | |
| CAPN | | | | S | **Sn** | **18 13 08.7** | **+0.5** |
| | baz=224 | | | | | | |
| **CKL** | **Chakachamna La** | **1.52** | **14** | | **Pn** | **18 12 49.6** | **-0.2** |
| **SPCR** | **Spurr Chakacha** | **1.54** | **16** | | **Pn** | **18 12 49.7** | **-0.2** |
| **SPCR** | **Spurr Chakacha** | **1.54** | **16** | P | **Pn** | **18 12 49.7** | **-0.2** |
| | baz=197,SNR=32 | | | | | | |
| SPCR | | | | S | **Sn** | **18 13 10.4** | **-0.5** |
| | baz=197 | | | | | | |
| **SPU** | **Mount Spurr** | **1.54** | **19** | | **Pn** | **18 12 49.5** | **-0.5** |
| **SPCN** | **Chakachatna No** | **1.56** | **16** | | **Pn** | **18 12 50.1** | **-0.1** |
| **SPBG** | **Spurr Blockage** | **1.57** | **13** | | **Pn** | **18 12 50.4** | **0.0** |
| SPBG | | | | | **Sn** | **18 13 11.4** | **-0.3** |
| **BGL** | **Barrier Glacie** | **1.57** | **12** | | **Pn** | **18 12 50.6** | **+0.1** |
| **SPCP** | **Crater Peak Br** | **1.61** | **16** | | **Pn** | **18 12 50.8** | **-0.1** |
| **SLKM** | **Skilak Lake** | **1.63** | **60** | | **Pn** | **18 12 50.5** | **-0.5** |
| SLKM | | | | | **Sn** | **18 13 11.8** | **-1.0** |
| **SPCG** | **Spurr Capps Gl** | **1.65** | **18** | | **Pn** | **18 12 51.2** | **-0.1** |
| **SPNN** | **North Nagishla** | **1.65** | **6** | | **Pn** | **18 12 51.1** | **-0.3** |
| **KCG** | **Knife Ck. Glac** | **1.77** | **217** | | **Pn** | **18 12 52.8** | **0.0** |
| **O22K** | **Cooper Landing** | **1.84** | **64** | | **Pn** | **18 12 53.6** | **+0.1** |
| O22K | | | | | **Sn** | **18 13 16.0** | **-1.3** |
| **O22K** | **Cooper Landing** | **1.84** | **64** | P | **Pn** | **18 12 53.7** | **+0.1** |
| | baz=247,SNR=56 | | | | | | |
| O22K | | | | S | **Sn** | **18 13 16.1** | **-1.1** |
| | baz=247 | | | | | | |
| **SEW** | **Seward** | **1.86** | **77** | | **Pn** | **18 12 53.6** | **-0.2** |
| **SEW** | **Seward** | **1.86** | **77** | P | **Pn** | **18 12 53.4** | **-0.4** |
| | baz=260,SNR=23 | | | | | | |
| SEW | | | | S | **Sn** | **18 13 17.3** | **-0.5** |
| | baz=260 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.97** | **172** | P | **Pn** | **18 12 54.4** | **-0.8** |
| | comp=E,116nm,0.3s,baz=37,slow=8.6,SNR=575 | | | | | | |
| KDAK | | | | S | **Sn** | **18 13 19.4** | **-0.8** |
| | comp=E,73nm,0.3s,baz=125,slow=23,SNR=20 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.97** | **172** | | **Pn** | **18 12 54.6** | **-0.6** |
| **KDAK** | **Kodiak Island** | **1.97** | **172** | IAML | | 18 13 21.2 | |
| | comp=E,697nm,0.3s | | | | | | |
| KDAK | | | | IAML | | 18 13 21.2 | |
| | comp=E,595nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.97** | **172** | S | **Sn** | **18 13 19.8** | **-0.5** |
| | baz=352 | | | | | | |
| **FIS** | **Fire Island** | **2.00** | **44** | | **Pn** | **18 12 56.6** | **+1.0** |
| FIS | | | | IAML | | 18 13 26.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| FIS | | | | IAML | | 18 13 30.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CAHL** | **Cahill** | **2.04** | **215** | | **Pn** | **18 12 56.5** | **+0.3** |
| **SUA** | **Susitna One** | **2.08** | **32** | | **Pn** | **18 12 57.3** | **+0.6** |
| SUA | | | | | **Sn** | **18 13 22.8** | **-0.2** |
| **SUA** | **Susitna One** | **2.08** | **32** | IAML | | 18 13 25.1 | |
| | comp=N,1μm,0.8s | | | | | | |
| **SUA** | **Susitna One** | **2.08** | **32** | P | **Pn** | **18 12 57.0** | **+0.3** |
| | baz=215,SNR=21 | | | | | | |
| SUA | | | | S | **Sn** | **18 13 22.7** | **-0.3** |
| | baz=215 | | | | | | |
| **KJL** | **Kejulik**

baz=260,SNR=5.5
DIV Divide 3.88 66 Pn 18 13 19.5 -0.7
KLU Klutina 3.94 60 Pn 18 13 20.3 -0.8
KLU Klutina 3.94 60 P Pn 18 13 20.3 -0.8
baz=246,SNR=50
TRF Thorofare Moun 3.96 18 Pn 18 13 20.5 -0.9
TRF Thorofare Moun 3.96 18 IAML 18 14 07.4
comp=N,133nm,0.4s
TRF IAML 18 14 07.8
comp=E,89nm,0.5s
TRF Thorofare Moun 3.96 18 P Pn 18 13 20.6 -0.7
baz=201,SNR=36
KTH Kantishna Hill 3.97 14 Pn 18 13 20.9 -0.5
KTH Kantishna Hill 3.97 14 IAML 18 14 31.2
comp=N,82nm,0.8s
KTH IAML 18 14 32.8
comp=E,83nm,0.8s
M24K Tolsona, Glenn 4.12 52 Pn 18 13 23.4 -0.1
M24K Tolsona, Glenn 4.12 52 IAML 18 14 20.5
comp=E,236nm,0.6s
M24K Tolsona, Glenn 4.12 52 P Pn 18 13 23.3 -0.2
baz=238,SNR=5.0
CHIR Chirikof Islan 4.15 200 Pn 18 13 22.5 -1.3
CHIR Chirikof Islan 4.15 200 IAML 18 15 12.5
comp=N,233nm,2.3s
CHIR IAML 18 15 29.6
comp=E,158nm,2.4s
CHIR Chirikof Islan 4.15 200 P Pn 18 13 22.4 -1.3
baz=18
CHUM Lake Minchumin 4.18 5 Pn 18 13 24.4 +0.3
CHUM Lake Minchumin 4.18 5 P Pn 18 13 23.4 -0.8
baz=186,SNR=24
RND Reindeer 4.20 27 Pn 18 13 24.4 -0.2
RND Reindeer 4.20 27 IAML 18 14 12.5
comp=E,96nm,0.4s
RND IAML 18 14 13.1
comp=N,81nm,0.8s
RAGM Ragged Mountai 4.26 78 Pn 18 13 24.6 -0.7
RAGM IAML 18 14 15.6
comp=E,216nm,0.4s
KAIM Kayak Island 4.37 84 Pn 18 13 27.0 +0.2
KAIM Kayak Island 4.37 84 IAML 18 14 31.3
comp=N,169nm,2.4s
KAIM Kayak Island 4.37 84 P Pn 18 13 26.9 +0.1
baz=271
BMRM Bremner River 4.39 70 Pn 18 13 26.5 -0.5
BMRM Bremner River 4.39 70 IAML 18 14 16.8
comp=E,150nm,0.3s
BMRM IAML 18 14 26.9
comp=N,110nm,0.6s
BMRM Bremner River 4.39 70 P Pn 18 13 25.8 -1.2
baz=257,SNR=30
PS11 TAPS Pump St11 4.40 54 Pn 18 13 26.8 -0.2
CHGN Chignik 4.46 222 P Pn 18 13 28.0 +0.1
baz=37
HMT Hamilton 4.46 78 Pn 18 13 27.9 -0.1
HMT Hamilton 4.46 78 IAML 18 14 19.2
comp=N,168nm,0.5s
MCK McKinley 4.47 24 Pn 18 13 28.2 +0.1
MCK McKinley 4.47 24 IAML 18 14 21.9
comp=N,72nm,0.5s
MCK IAML 18 14 22.2
comp=E,60nm,0.4s
MCK McKinley 4.47 24 P Pn 18 13 28.1 +0.1
baz=208
J20K Nowinta River 4.49 354 Pn 18 13 28.0 -0.3
BPAW Bear Paw Mtn. 4.49 12 Pn 18 13 27.7 -0.7
BPAW Bear Paw Mtn. 4.49 12 P Pn 18 13 27.5 -0.8
baz=194,SNR=15
N25K Chitina, Valde 4.57 62 Pn 18 13 28.8 -0.7
N25K Chitina, Valde 4.57 62 IAML 18 14 23.7
comp=N,157nm,0.5s
N25K Chitina, Valde 4.57 62 P Pn 18 13 28.9 -0.7
baz=250
NICHA Nichawak Mount 4.60 80 Pn 18 13 29.3 -0.6
HARP HAARP 4.69 52 Pn 18 13 30.8 -0.1
HARP HAARP 4.69 52 P Pn 18 13 30.8 -0.1
baz=239
SUCK Suckling Hills 4.70 82 Pn 18 13 31.2 +0.1
SUCK Suckling Hills 4.70 82 IAML 18 14 41.8
comp=N,122nm,3.0s
SUCK IAML 18 16 12.8
comp=E,84nm,2.1s
BERG Berg Lake 4.74 78 Pn 18 13 31.5 -0.3
BERG IAML 18 14 25.2
comp=E,148nm,0.5s
BERG IAML 18 14 25.9
comp=N,117nm,0.5s
BWN Browne 4.77 19 Pn 18 13 31.9 -0.1
BWN IAML 18 15 04.0
comp=E,73nm,1.1s
BWN IAML 18 15 06.2
comp=N,79nm,0.9s
GLB Gilahina Butte 4.88 65 Pn 18 13 32.8 -0.8
GLB Gilahina Butte 4.88 65 IAML 18 14 29.7
comp=E,110nm,0.6s
PAX Paxson 4.89 45 Pn 18 13 33.9 +0.1
PAX Paxson 4.89 45 P Pn 18 13 33.5 -0.3
baz=232,SNR=18
GRIN Grindle Hills 4.93 79 Pn 18 13 34.4 +0.2
KHIT Khitrov Hills 4.97 78 Pn 18 13 34.5 -0.4
VRDI Verde Repeater 4.99 68 Pn 18 13 34.6 -0.6
VRDI Verde Repeater 4.99 68 IAML 18 14 31.9
comp=N,92nm,0.5s
VRDI IAML 18 14 34.3
comp=E,57nm,0.3s
PS10 TAPS Pump St10 5.09 40 Pn 18 13 37.1 +0.7
SNH Sunshine Point 5.17 81 Pn 18 13 37.7 +0.2
SNH Sunshine Point 5.17 81 IAML 18 14 22.0
comp=N,102nm,2.0s
SNH IAML 18 15 00.9
comp=E,79nm,2.2s
WAX Waxell Ridge 5.17 78 Pn 18 13 37.5 0.0
WAX Waxell Ridge 5.17 78 IAML 18 14 37.3
comp=E,113nm,0.5s
NEA2 Nenana 5.23 19 Pn 18 13 37.5 -0.7
NEA2 Nenana 5.23 19 P Pn 18 13 37.3 -0.9
baz=203,SNR=67
WRH Wood River Hil 5.30 24 Pn 18 13 38.4 -0.8
WRH Wood River Hil 5.30 24 IAML 18 14 37.6
comp=E,34nm,0.5s
WRH IAML 18 14 39.2
comp=N,30nm,0.5s
GCSA Galena City Sc 5.34 342 P Pn 18 13 38.5 -1.1
baz=159,SNR=10
MLY Manley 5.43 11 Pn 18 13 40.0 -0.9
MLY Manley 5.43 11 P Pn 18 13 40.1 -0.9
baz=193,SNR=42
ISLE Juniper Island 5.43 76 Pn 18 13 40.8 -0.3
KIAG Kiagna River 5.46 73 Pn 18 13 41.4 -0.1
BALM Baldy 5.48 72 Pn 18 13 41.5 -0.3
I21K Tanana 5.49 5 Pn 18 13 41.2 -0.5
HDA Harding Lake 5.50 29 Pn 18 13 41.3 -0.7
HDA Harding Lake 5.50 29 P Pn 18 13 41.3 -0.7
baz=214,SNR=27
CCB Clear Creek Bu 5.51 24 Pn 18 13 41.2 -0.9
MENT Mentasta 5.53 50 Pn 18 13 42.6 +0.2
BAGL Bagley Icefiel 5.55 77 Pn 18 13 42.7 +0.2
M26K Nabesna, AK 5.58 57 Pn 18 13 43.1 +0.1
RIDG Independent Ri 5.61 41 Pn 18 13 43.2 -0.2
RIDG Independent Ri 5.61 41 P Pn 18 13 43.2 -0.2
baz=228,SNR=23
MESA MESA 5.61 81 Pn 18 13 43.7 +0.1
MESA MESA 5.61 81 P Pn 18 13 44.1 +0.5
baz=270,SNR=14
PS08 TAPS Pump Stn8 5.65 29 Pn 18 13 43.1 -0.7
I23K Minto, Yukon-K 5.70 16 Pn 18 13 44.0 -0.6
I23K Minto, Yukon-K 5.70 16 P Pn 18 13 44.1 -0.6
baz=199,SNR=53
TCOL CIGO, UAF Yank 5.70 23 Pn 18 13 44.1 -0.5
TCOL CIGO, UAF Yank 5.70 23 P Pn 18 13 44.1 -0.5
baz=208,SNR=12
COLA College 5.71 23 Pn 18 13 43.9 -0.7
MDM Murphy Dome 5.71 21 Pn 18 13 44.0 -0.7
YAH Yahtse 5.71 79 Pn 18 13 45.0 -0.1
BARN Barnard Glacie 5.81 72 Pn 18 13 46.5 +0.2
DOT Dot Lake 5.81 44 Pn 18 13 46.4 +0.2
IL31 5.82 27 Pn 18 13 45.1 -1.1
ILAR Eielson Array 5.82 27 P Pn 18 13 45.1 -1.1
comp=N,11nm,0.3s,baz=214,slow=13,SNR=287
ILAR S Sn 18 14 44.9 -6.7
comp=N,8.4nm,0.3s,baz=214,slow=23,SNR=10
H21K Melozitna Rive 5.95 1 Pn 18 13 47.6 -0.4
H21K Melozitna Rive 5.95 1 P Pn 18 13 47.4 -0.6
baz=182
POKR Poker Plat Res 6.00 23 Pn 18 13 48.4 -0.3
POKR Poker Plat Res 6.00 23 P Pn 18 13 48.2 -0.5
baz=208,SNR=11
TABL Table Mountain 6.01 78 Pn 18 13 48.7 -0.4
M27K Edge Creek, AK 6.04 59 Pn 18 13 50.1 +0.7
SCRK Sand Creek 6.05 41 Pn 18 13 48.6 -0.8
SCRK Sand Creek 6.05 41 P Pn 18 13 48.9 -0.5
baz=229,SNR=12
J25K Salcha River, 6.08 33 Pn 18 13 49.0 -0.7
J25K Salcha River, 6.08 33 P Pn 18 13 49.1 -0.7
baz=220,SNR=31
IMAR Indian Mountai 6.28 357 Pn 18 13 51.9 -0.6
PS06 TAPS Pump Stn6 6.33 13 Pn 18 13 53.1 0.0
L27K Beaver Creek, 6.35 53 Pn 18 13 53.8 +0.4
BCAR Beaver Creek A 6.37 54 Pn Pn 18 13 54.3 +0.6
PCA Pinnacle 6.46 81 Pn 18 13 55.3 +0.3
PINM Pinnacle 6.46 81 P Pn 18 13 55.4 +0.4
baz=272,SNR=12
BVCY Beaver Creek 6.51 60 P Pn 18 13 54.5 -1.0
baz=251
YUK3 Moose Creek 6.51 66 P Pn 18 13 56.2 +0.4
baz=257,SNR=5.4
J26L Joseph Creek 6.54 39 Pn 18 13 55.1 -0.9
H24K Noodor Dome 6.57 19 Pn 18 13 55.6 -0.8
PRP Porcupine Dome 6.77 28 Pn 18 13 59.1 -0.1
PRP Porcupine Dome 6.77 28 P Pn 18 13 58.8 -0.3
baz=214,SNR=42
BCPM Bancas Point 6.78 82 Pn 18 13 59.5 +0.3
PNL Peninsula 6.92 85 P Pn 18 14 01.2 0.0
baz=276,SNR=48
PS05 TAPS Pump Stn5 7.19 8 Pn 18 14 04.0 -0.7
YUK6 Outpost Mounta 7.40 74 P Pn 18 14 08.3 +0.5
baz=267,SNR=10
EGAK Eagle 7.51 43 Pn 18 14 08.2 -0.9
COLD Coldfoot 7.63 8 Pn 18 14 10.4 -0.3
COLD Coldfoot 7.63 8 P Pn 18 14 10.1 -0.6
baz=191,SNR=19
FYU Fort Yukon 7.72 24 Pn 18 14 10.9 -0.9
DAWY Dawson 7.78 50 Pn 18 13 55.5 +0.8
DAWY Dawson 7.78 50 P Pn 18 14 12.6 -0.2
baz=242
HYT Haines Junctio 7.82 75 Pn Pn 18 14 14.1 +0.7
HYT Haines Junctio 7.82 75 P Pn 18 14 13.7 +0.3
baz=269,SNR=12
BMAR Burnt Mountain 8.59 22 Pn Pn 18 14 21.8 -2.0
N31M Braeburn, Yuko 8.68 71 Pn 18 14 25.4 +0.4
N31M Braeburn, Yuko 8.68 71 P Pn 18 14 25.8 +0.8
baz=266,SNR=14
I29M Ogilvie Camp, 8.84 44 Pn 18 14 26.9 -0.1
SKAG Skagway 9.00 84 P Pn 18 14 30.3 +1.1
baz=279,SNR=7.1
TOLK Toolik Lake Re 9.07 8 Pn Pn 18 14 30.8 +0.6
TOLK Toolik Lake Re 9.07 8 P Pn 18 14 30.6 +0.4
baz=191,SNR=16
M31M Drury Creek, Y 9.41 67 Pn 18 14 35.1 +0.4
M31M Drury Creek, Y 9.41 67 P Pn 18 14 35.6 +0.8
baz=263,SNR=11
UNV Unalaska Valle 9.43 237 P Pn 18 14 34.6 -0.5
baz=46
BESE Bessie Mountai 9.43 89 Pn Pn 18 14 35.9 +0.8
JIS Juneau Island 9.75 90 Pn 18 14 40.5 +1.2
EPYK Eagle Plains 9.94 41 Pn 18 14 42.4 +0.4
P33M Teslin, Yukon 10.16 79 Pn Pn 18 14 46.1 +1.2
P33M Teslin, Yukon 10.16 79 P Pn 18 14 45.2 +0.2
baz=276,SNR=10
MMPY Sheldon Lake, 10.90 65 P Pn 18 14 55.4 +0.5
baz=264,SNR=7.7
DLBC Dease Lake, 11.91 86 P Pn 18 15 10.9 +2.5
comp=N,2.8nm,0.3s,baz=279,slow=6.3,SNR=16
INK Inuvik 12.08 36 P Pn 18 15 10.5 +0.1
comp=N,0.3nm,0.3s,baz=238,slow=22,SNR=11
INK LR LR 18 20 07.7
comp=N,109nm,20.1s,baz=68,slow=39
INK Inuvik 12.08 36 Pn Pn 18 15 09.5 -0.9
INK Inuvik 12.08 36 P Pn 18 15 09.3 -1.1
baz=234
A36M Sachs Harbour 16.51 31 P Pn 18 16 06.5 -0.2
A36M IAmb IAmb 18 16 09.3
comp=Z,9.6nm,0.8s
A36M Sachs Harbour 16.51 31 P Pn 18 16 06.4 -0.4
baz=236,SNR=6.0
YKA Yellowknife Ar 18.60 65 P Pn 18 16 31.9 -0.1
comp=Z,0.3nm,0.3s,baz=277,slow=9.9,SNR=20
RES Resolute Bay 25.55 32 P P 18 17 40.1 +0.1
comp=Z,0.7nm,0.7s,baz=292,slow=5.4,SNR=3.2
PETK Petropavlovsk- 27.46 278 P P 18 17 57.0 -0.3
comp=Z,3.3nm,0.9s,baz=75,slow=13,SNR=9.8
ELK Elko 30.17 112 LR LR 18 29 19.6
comp=Z,55nm,19.7s,baz=58,slow=34
SCHQ Schefferville 43.74 57 P P 18 20 16.9 +1.1
comp=Z,1.7nm,0.5s,baz=314,slow=8.9,SNR=6.5
SCHQ Schefferville 43.74 57 IAmb IAmb 18 20 40.8
comp=Z,4.4nm,1.0s
KSRS Korea Array 53.20 283 P P 18 21 29.5 +1.1
comp=Z,1.2nm,0.5s,baz=40,slow=6.9,SNR=7.8
SONM Songino Array 54.92 306 P P 18 21 42.4 +1.4
comp=Z,0.2nm,0.6s,baz=30,slow=8.3,SNR=4.6
SONM Songino Array 54.92 306 IAmb IAmb 18 22 07.0
comp=Z,2.3nm,1.3s
ZALV Zalesovo Beam 57.57 324 P P 18 21 59.6 +0.1
comp=Z,1.3nm,0.5s,baz=35,slow=7.9,SNR=6.6
MKAR Makanchi Array 64.62 321 P P 18 22 46.9 -0.4
comp=Z,0.2nm,0.6s,baz=28,slow=4.6,SNR=4.0
CMAR Chiang Mai Arr 82.94 295 P P 18 24 35.0 +0.5
comp=Z,0.2nm,0.5s,baz=8.0,slow=5.8,SNR=2.1

*IDC **01** 18:20:51.6±1.4,6°.24S×151°.87E,h58km±13km,mb3.9/9, mb1 4.1/11,mb1mx3.8/29,mbtmp4.3/11,MS3.2/3, Ms1 3.2/3,ms1mx2.7/59,Error ellipse: s-maj=16.4km s-min=9.1km az=112.0*
*NEIC **01** 18:20:51.2±1.0,6°.19S±0°.07×151°.83E±0°.09,h48km±8km, mb4.5/13,Error ellipse: s-maj=14.2km s-min=9.0km az=122.0*
**ISC 01 18:20:50.0±0.6,6°.21S±0°.06×151°.81E±0°.07,h36km,n34, σ1s33/36,mb4.3/18,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KRVT | Keravat (AS076 | 1.91 | 6 | P | Pn | 18 21 21.2 | +1.3 |
| | baz=197,slow=19 | | | | | | |
| KRVT | | | | S | Sn | 18 21 45.9 | +3.2 |
| | baz=197,slow=19 | | | | | | |
| RABL | Rabaul | 2.04 | 10 | Pn | Pn | 18 21 22.3 | +0.5 |
| PMG | Port Moresby | 5.60 | 235 | P | Pn | 18 22 12.9 | +2.2 |
| | 7.3nm,0.3s,baz=55,slow=7.1,SNR=43 | | | | | | |
| PMG | | | | S | Sn | 18 23 16.9 | +3.1 |
| | 8.4nm,0.3s,baz=30,slow=20,SNR=4.3 | | | | | | |
| PMG | | | | LR | LR | 18 24 27.9 | |
| | comp=Z,141nm,20.4s,baz=340,slow=38 | | | | | | |
| PMG | Port Moresby | 5.60 | 235 | | Pn | 18 22 11.7 | +1.0 |
| MANU | Manus Island | 6.07 | 313 | | Pn | 18 22 23.5 | +6.3 |
| HNR | Honiara | 8.67 | 112 | P | Pn | 18 22 53.7 | +0.8 |
| | 9.8nm,0.3s,baz=9.9,slow=7.0,SNR=6.8 | | | | | | |
| HNR | | | | S | Sn | 18 24 31.3 | +1.8 |
| | 1.1nm,0.3s,baz=60,slow=21,SNR=1.4 | | | | | | |
| HNR | | | | LR | LR | 18 25 43.7 | |
| | comp=Z,126nm,21.5s,baz=247,slow=34 | | | | | | |
| DZM | Mont Dzumac | 21.18 | 140 | LR | LR | 18 31 58.6 | |
| | comp=Z,114nm,20.8s,baz=298,slow=32 | | | | | | |
| SIJI | Sorong | 21.18 | 284 | P | P | 18 25 33.8 | +1.3 |
| | 6.4nm,0.7s,baz=60,slow=7.3,SNR=5.3 | | | | | | |
| MTN | Manton Dam | 21.42 | 251 | P | P | 18 25 35.0 | 0.0 |
| WB0 | Warramunga Arr | 21.64 | 230 | P | P | 18 25 37.1 | -0.2 |
| WB0 | | | | IAmb | IAmb | 18 25 40.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 21.64 | 229 | P | P | 18 25 37.4 | 0.0 |
| WR0 | | | | IAmb | IAmb | 18 25 40.7 | |
| | comp=Z,13nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 21.77 | 230 | P | P | 18 25 38.0 | -0.7 |
| WRAB | | | | IAmb | IAmb | 18 25 41.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| WB2 | Warramunga Arr | 21.77 | 230 | P | P | 18 25 37.9 | -0.9 |
| WB2 | | | | IAmb | IAmb | 18 25 41.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 21.78 | 230 | P | P | 18 25 37.8 | -1.1 |
| | comp=Z,8.4nm,0.5s,baz=55,slow=9.9,SNR=73 | | | | | | |
| WRA | | | | pP | pwP | 18 25 53.4 | -1.3 |
| | comp=Z,1.5nm,0.6s,baz=50,slow=10,SNR=4.0 | | | | | | |
| WRA | | | | PcP | PcP | 18 29 38.3 | -0.3 |
| | comp=Z,1.1nm,0.6s,baz=52,slow=2.3,SNR=6.1 | | | | | | |
| WRA | Warramunga Arr | 21.78 | 230 | P | P | 18 25 37.5 | -1.4 |
| AS31 | Alice Springs | 24.45 | 223 | P | P | 18 26 05.1 | -0.6 |
| ASAR | Alice Springs | 24.45 | 223 | P | P | 18 26 05.4 | -0.3 |
| | comp=Z,6.7nm,0.7s,baz=56,slow=9.4,SNR=74 | | | | | | |
| ASAR | Alice Springs | 24.45 | 223 | P | P | 18 26 05.2 | -0.5 |
| KNRA | Kununurra | 24.48 | 246 | P | P | 18 26 06.1 | +0.1 |
| KNRA | | | | IAmb | IAmb | 18 26 14.9 | |
| | comp=Z,16nm,0.6s | | | | | | |
| STKA | Stephens Creek | 27.26 | 199 | P | P | 18 26 30.2 | -0.7 |
| | comp=Z,1.0nm,0.6s,baz=13,slow=14,SNR=2.8 | | | | | | |
| STKA | Stephens Creek | 27.26 | 199 | P | P | 18 26 29.3 | -1.7 |
| SOEI | Soe | 27.50 | 261 | P | P | 18 26 31.8 | -1.7 |
| SOEI | | | | IAmb | IAmb | 18 26 50.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| FITZ | Fitzroy Crossi | 28.13 | 243 | P | P | 18 26 38.7 | -0.2 |
| | comp=Z,23nm,0.5s,baz=52,slow=8.5,SNR=79 | | | | | | |
| BATI | Baumata | 28.14 | 260 | P | P | 18 26 39.9 | +0.9 |
| | comp=Z,14nm,0.8s,baz=63,slow=1.5,SNR=2.9 | | | | | | |
| MMRI | Maumere | 29.42 | 263 | P | P | 18 26 49.4 | -1.0 |
| FORT | Forrest | 33.08 | 219 | P | P | 18 27 21.9 | -0.5 |
| PSA00 | Pilbara Seismi | 34.48 | 241 | P | P | 18 27 33.9 | -0.9 |
| PSA00 | | | | IAmb | IAmb | 18 27 38.2 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 57.60 | 296 | P | P | 18 30 37.0 | +0.3 |
| | comp=Z,0.3nm,0.4s,baz=124,slow=5.3,SNR=5.9 | | | | | | |
| SONM | Songino Array | 67.00 | 329 | pP | pP | 18 31 55.1 | +6.9 |
| | comp=Z,0.3nm,0.6s,baz=134,slow=6.2,SNR=2.3 | | | | | | |
| MKAR | Makanchi Array | 80.74 | 319 | P | P | 18 32 59.0 | -0.7 |
| | comp=Z,0.3nm,0.6s,baz=98,slow=6.4,SNR=6.5 | | | | | | |
| ZALV | Zalesovo Beam | 81.78 | 327 | P | P | 18 33 04.2 | -0.8 |
| | comp=Z,1.7nm,0.4s,baz=124,slow=5.8,SNR=11 | | | | | | |
| ILAR | Eielson Array | 83.83 | 22 | P | P | 18 33 13.7 | -1.7 |
| | comp=Z,1.1nm,0.7s,baz=242,slow=5.2,SNR=9.1 | | | | | | |
| TORD | Torodi Ar. Bea | 149.77 | 285 | PKPbc | PKPbc | 18 40 36.0 | -1.2 |
| | comp=Z,0.9nm,0.6s,baz=96,slow=2.4,SNR=5.1 | | | | | | |
| TORD | Torodi Ar. Bea | 149.77 | 285 | | PKPbc | 18 40 35.2 | -2.0 |

**NNC 01 18:24:20.2±2.0,54°.35N×86°.07E,h0km,mb3.5,mpv2.8, 6C-5D,Error ellipse: s-maj=24.8km s-min=9.7km az=161.0,Suspected Mining explosion.,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ZAA0 | Zalesovo Array | 0.84 | 242 | ⇓P | Pg | 18 24 36.2 | 0.0 |
| | 0.3nm,0.4s | | | | | | |
| ZAA0 | | | | ⇑S | Sg | 18 24 48.2 | +1.1 |
| | 11nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 5.93 | 234 | ⇑Pn | Pn | 18 25 51.7 | +2.6 |
| | 0.9nm,0.3s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 18 26 56.1 | -1.6 |
| | 3.5nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 18 27 31.1 | |
| | 6.0nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 7.94 | 199 | ⇑Pn | Pn | 18 26 19.2 | +2.5 |
| | 0.5nm,0.5s,baz=26,slow=13,SNR=14 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 18 27 47.9 | +0.7 |
| | 0.3nm,0.5s,baz=27,slow=26,SNR=3.7 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 18 28 32.0 | |
| | 1.5nm,0.7s,baz=26,slow=30,SNR=5.5 | | | | | | |
| MAKZ | Makanchi | 7.99 | 201 | ⇑Pn | Pn | 18 26 17.8 | +0.4 |
| | 1.4nm,1.0s | | | | | | |
| MAKZ | | | | ⇑Sn | Sn | 18 27 49.4 | +1.0 |
| | 1.2nm,0.8s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 18 28 31.0 | |
| | 1.1nm,0.8s | | | | | | |

**IDC 01 18:27:28.3±5.2,37°.44N×101°.80E,h0km,mb3.2/2, mb1 3.4/4,mb1mx3.2/38,mbtmp3.3/4,ML2.8/2,MS3.0/1, Ms1 3.0/1,ms1mx2.6/42,Error ellipse: s-maj=95.2km s-min=55.4km az=7.0,Qinghai**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SONM | Songino Array | 10.93 | 17 | Pn | Pn | 18 30 06.3 | +0.3 |
| | 0.1nm,0.3s,baz=201,slow=14,SNR=5.9 | | | | | | |
| SONM | | | | Lg | Lg | 18 33 11.1 | |
| | 0.2nm,0.3s,baz=188,slow=29,SNR=4.2 | | | | | | |
| SONM | | | | LR | LR | 18 33 51.5 | |
| | comp=Z,78nm,21.9s,baz=20,slow=35 | | | | | | |
| MKAR | Makanchi Array | 17.19 | 309 | P | P | 18 31 31.2 | -0.3 |
| | 0.0nm,0.3s,baz=115,slow=13,SNR=3.4 | | | | | | |
| ZALV | Zalesovo Beam | 20.24 | 330 | P | P | 18 32 03.9 | -1.0 |
| | 0.6nm,0.7s,baz=152,slow=11,SNR=2.6 | | | | | | |
| YKA | Yellowknife Ar | 76.19 | 16 | P | P | 18 39 18.0 | +0.1 |
| | 0.4nm,0.7s,baz=330,slow=4.9,SNR=3.7 | | | | | | |

*TUL **01** 18:30:44.5±2.1,36°.48N±0°.02×98°.74W±0°.03,h7km±4km, ML2.9,mb_Lg2.6/24(NEIC),Error ellipse: s-maj=4.0km s-min=2.2km az=145.0*
**NEIC 01 18:30:44.5±1.8,36°.43N±0°.02×98°.70W±0°.02,h5km±1km, Error ellipse: s-maj=3.6km s-min=2.4km az=327.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| U32A | Winter Ranch, | 0.25 | 258 | Pg | Pg | 18 30 49.3 | -0.1 |
| U32A | | | | Sg | Sg | 18 30 53.0 | +0.3 |
| OK035 | E0210 Rd and N | 0.28 | 358 | Pg | Pg | 18 30 49.8 | -0.2 |
| OK032 | Salt Plains WL | 0.54 | 46 | Sg | Sg | 18 31 02.4 | +0.4 |
| CROK | Carrier | 0.58 | 83 | Pg | Pg | 18 30 56.0 | +0.3 |
| KAN14 | Manchester OK | 0.79 | 48 | Pg | Pg | 18 30 58.8 | -0.9 |
| GC02 | Grant County # | 0.79 | 58 | Pg | Pg | 18 30 59.8 | 0.0 |
| KAN12 | Harper NE Stat | 1.03 | 33 | Pg | Pg | 18 31 02.8 | -1.5 |
| KAN06 | Argonia West S | 1.06 | 39 | Pg | Pg | 18 31 03.7 | -1.2 |
| BCOK | Bluff Creek, N | 1.17 | 131 | | Pg | 18 31 06.6 | -0.5 |
| OK029 | Liberty Lake | 1.19 | 122 | | Pg | 18 31 06.9 | -0.5 |
| OK029 | | | | | Sn | 18 31 24.3 | -0.1 |
| BLOK | Blackwell | 1.24 | 74 | | Pg | 18 31 07.8 | -0.5 |
| OK025 | Westminster Rd | 1.39 | 127 | Pn | Pn | 18 31 09.9 | -0.7 |
| OK033 | Mehan | 1.47 | 105 | Pn | Pn | 18 31 11.2 | -0.6 |
| FNO | Franklin | 1.58 | 138 | Pn | Pn | 18 31 11.7 | -1.5 |
| OK031 | S. Brethren Rd | 1.58 | 107 | | Pn | 18 31 12.0 | -1.2 |
| QUOK | Quay | 1.63 | 99 | Pn | Pn | 18 31 14.1 | +0.2 |
| OK034 | N. Norfolk Rd. | 1.66 | 104 | Pn | Pn | 18 31 14.8 | +0.5 |
| WMOK | Wichita Mounta | 1.69 | 182 | Pn | Pn | 18 31 14.8 | 0.0 |
| T35A | Sooner Cattle | 1.82 | 74 | | Pb | 18 31 17.6 | -0.8 |
| W35A | Tecumseh | 1.96 | 130 | | Pb | 18 31 20.0 | -0.7 |
| X34A | Smith Ranch, M | 1.96 | 159 | | Pb | 18 31 20.1 | -0.6 |
| X34A | | | | IAmb_Lg | | 18 31 51.2 | |
| | comp=Z,41nm,0.9s | | | | | | |
| R32A | Long Quarter, | 1.99 | 360 | | Pn | 18 31 19.6 | +0.7 |
| LOOK | Love County | 2.73 | 153 | IAmb_Lg | | 18 32 20.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| AMTX | Amarillo | 2.88 | 238 | IAmb_Lg | | 18 32 16.0 | |
| | comp=Z,31nm,0.9s | | | | | | |
| X37A | Clayton | 3.28 | 123 | IAmb_Lg | | 18 32 38.1 | |
| | comp=Z,27nm,1.0s | | | | | | |
| U38A | Gravette | 3.48 | 89 | IAmb_Lg | | 18 32 34.8 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| S39A | Bolivar | 4.48 | 72 | IAmb_Lg | | 18 33 17.8 | |
| | comp=Z,10nm,1.1s | | | | | | |
| T25A | Trinidad | 4.64 | 280 | IAmb_Lg | | 18 33 09.6 | |
| | comp=Z,12nm,1.0s | | | | | | |
| U40A | Yellville | 4.72 | 89 | IAmb_Lg | | 18 33 11.0 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 5.16 | 110 | IAmb_Lg | | 18 33 39.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| Q24A | Divide | 5.71 | 298 | IAmb_Lg | | 18 33 43.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| JCT | Junction City | 6.01 | 189 | IAmb_Lg | | 18 34 13.2 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 6.66 | 85 | IAmb_Lg | | 18 34 16.3 | |
| | comp=Z,6.6nm,0.8s | | | | | | |

**IDC 01 18:34:58.2±2.1,32°.10S×67°.49W,h0km,Error ellipse: s-maj=760.6km s-min=83.0km az=124.0,Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ASAR | Alice Springs | 120.89 | 203 | PKP | PKPdf | 18 53 52.7 | -0.5 |
| | 0.2nm,0.8s,baz=149,slow=1.5,SNR=2.1 | | | | | | |
| WRA | Warramunga Arr | 124.18 | 205 | PKP | PKPdf | 18 53 59.5 | -0.1 |
| | 0.3nm,0.4s,baz=153,slow=1.8,SNR=8.6 | | | | | | |
| ZALV | Zalesovo Beam | 150.55 | 34 | PKPbc | PKPbc | 18 54 51.6 | +0.1 |
| | 0.6nm,0.5s,baz=285,slow=2.4,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 152.64 | 49 | PKPbc | PKPbc | 18 54 56.1 | -0.5 |
| | 0.4nm,0.6s,baz=282,slow=2.3,SNR=7.3 | | | | | | |

*CNRM **01** 18:44:26.9,35°.70N×3°.59W,h36km,ml2.5*
*INMG **01** 18:44:27.6±1.4,35°.40N×3°.83W,h21km±4km,ML2.3,Error ellipse: s-maj=3.2km s-min=2.3km az=20.0*
*IGIL **01** 18:44:27.5,35°.49N×3°.82W,h7km,ML2.4*

*SFS **01** 18:44:27.0, 35°.40N×3°.80W, h7km, ML2.3, ALBORAN SUR*

**ISC 01 18:44:26.0**±1.2, **35°.51N**±0°.03×**3°.78W**±0°.03, **h19**km±3km, **n37**, σ1**§50**/58, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.32** | **204** | P | **Pg** | **18 44 32.7** | **-0.4** |
| PALE | | | | S | **Sg** | **18 44 37.1** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.70** | **114** | P | **Pg** | **18 44 40.0** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.70** | **114** | P | **Pg** | **18 44 40.3** | **+0.3** |
| GOG | | | | S | **Sg** | **18 44 49.0** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.15** | **106** | P | **Pn** | **18 44 46.7** | **-0.4** |
| CHAS | | | | S | **Sb** | **18 45 00.9** | **-1.0** |
| **SMIR** | **Smir Dam** | **1.31** | **278** | P | **Pg** | **18 44 51.0** | **-0.4** |
| **SMIR** | **Smir Dam** | **1.31** | **278** | P | **Pn** | **18 44 47.6** | **-1.7** |
| SMIR | | | | S | **Sn** | **18 45 05.7** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.34** | **253** | P | **Pg** | **18 44 52.0** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.34** | **253** | P | **Pb** | **18 44 50.6** | **0.0** |
| CHEFC | | | | S | **Sn** | **18 45 07.1** | **0.0** |
| **CEU** | **Ceuta** | **1.35** | **287** | P | **Pn** | **18 44 48.0** | **-1.8** |
| CEU | | | | S | **Sn** | **18 45 02.3** | **-5.0** |
| **JBK** | **JBK** | **1.54** | **139** | P | **Pn** | **18 44 52.4** | **-0.3** |
| **JBK** | **JBK** | **1.54** | **139** | P | **Pn** | **18 44 52.3** | **-0.4** |
| JBK | | | | S | **Sn** | **18 45 11.0** | **-1.3** |
| **SICH** | **Sidi Chahed** | **1.89** | **222** | P | **Pb** | **18 44 59.5** | **-0.4** |
| **LIJA** | **Lijar** | **1.91** | **317** | P | **Pb** | **18 45 00.0** | **-0.3** |
| LIJA | | | | S | **Sb** | **18 45 25.0** | **+1.1** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pg** | **18 45 05.0** | **0.0** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pb** | **18 45 02.8** | **+0.5** |
| LCRM | | | | S | **Sb** | **18 45 27.8** | **+0.5** |
| **IFR** | **Ifrane** | **2.28** | **210** | P | **Pn** | **18 45 03.2** | **+0.4** |
| IFR | | | | S | **Sn** | **18 45 30.4** | **0.0** |
| **MD31** | **MD31** | **2.76** | **197** | P | **Pn** | **18 45 10.7** | **+1.4** |
| **MDT** | **Midelt** | **2.78** | **194** | P | **Pn** | **18 45 12.1** | **+2.5** |
| **MDT** | **Midelt** | **2.78** | **194** | P | **Pn** | **18 45 12.1** | **+2.5** |
| **TDRA** | **Tendrara** | **2.86** | **149** | P | **Pn** | **18 45 12.3** | **+1.5** |
| **ZHG** | **ZHG** | **3.13** | **230** | P | **Pn** | **18 45 15.0** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.69** | **302** | *e*Pn | **Pn** | **18 45 23.0** | **+1.0** |
| PVAQ | | | | *e*Sn | **Sn** | **18 46 04.3** | **-0.7** |
| PVAQ | | | | A | A | 18 46 05.8 | |
| | 10nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **302** | P | **Pn** | **18 45 22.7** | **+0.6** |
| PVAQ | | | | S | **Sn** | **18 46 04.0** | **-1.0** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **298** | *e*Pn | **Pn** | **18 45 24.1** | **+1.0** |
| PBDV | | | | *e*Sn | **Sn** | **18 46 06.1** | **-0.9** |
| PBDV | | | | A | A | 18 46 14.0 | |
| | 4.0nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | **Pn** | **18 45 28.9** | **+2.2** |
| PCVE | | | | *e*Sn | **Sn** | **18 46 12.7** | **-0.6** |
| PCVE | | | | A | A | 18 46 18.6 | |
| | 3.4nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*P | **Pn** | **18 45 30.6** | **+0.8** |
| MESJ | | | | *e*S | **Sn** | **18 46 17.0** | **-2.0** |
| MESJ | | | | IAML | | 18 46 19.7 | |
| | comp=N,7.8nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*Pn | **Pn** | **18 45 30.8** | **+1.0** |
| MESJ | | | | *e*Sn | **Sn** | **18 46 18.5** | **-0.5** |
| MESJ | | | | A | A | 18 46 20.0 | |
| | comp=N,3.2nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **296** | *e*S | **Sn** | **18 46 18.4** | **-2.2** |
| MORF | | | | IAML | | 18 46 24.2 | |
| | comp=N,8.8nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **296** | *e*Pn | **Pn** | **18 45 32.3** | **+1.6** |
| MORF | | | | *e*Sn | **Sn** | **18 46 19.8** | **-0.7** |
| MORF | | | | A | A | 18 46 27.4 | |
| | comp=N,3.6nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.38** | **293** | *e*Sn | **Sn** | **18 46 21.3** | **-0.8** |
| PFVI | | | | A | A | 18 46 22.4 | |
| | comp=N,6.4nm,0.6s | | | | | | |
| **EVO** | **Evora** | **4.53** | **313** | P | **Pn** | **18 45 35.2** | **+1.6** |
| EVO | | | | S | **Sn** | **18 46 23.5** | **-2.2** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **306** | *e*Pn | **Pn** | **18 45 35.9** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **18 46 26.9** | **-0.7** |
| PNCL | | | | A | A | 18 46 28.0 | |
| | comp=N,2.3nm,1.2s | | | | | | |
| **PMRV** | **Marv??o** | **4.85** | **325** | *e*Pn | **Pn** | **18 45 40.0** | **+2.0** |
| PMRV | | | | *e*Sn | **Sn** | **18 46 33.4** | **-0.2** |
| PMRV | | | | A | A | 18 46 50.8 | |
| | comp=N,2.3nm,0.7s | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **316** | *e*Pn | **Pn** | **18 45 41.9** | **+1.7** |
| PMTG | | | | *e*Sn | **Sn** | **18 46 37.3** | **-0.4** |
| PMTG | | | | A | A | 18 46 38.7 | |
| | comp=N,3.3nm,0.6s | | | | | | |
| **PSBE** | **So Bento** | **5.64** | **317** | *e*Pn | **Pn** | **18 45 52.2** | **+3.3** |
| **MVO** | **Moncorvo** | **6.19** | **337** | *e*Pn | **Pn** | **18 45 59.1** | **+2.6** |
| **POLO** | **Lamas de Olo** | **6.64** | **333** | *e*Pn | **Pn** | **18 46 05.6** | **+2.9** |

*IDC **01** 18:46:02.6±1.5, 6°.62S×154°.99E, h83km±15km, mb3.6/5, mb1 3.8/7, mb1mx3.4/40, mbtmp3.9/7, MS3.0/1, Ms1 3.0/1, ms1mx2.5/56, Error ellipse: s-maj=21.3km s-min=11.4km az=32.0*

**ISC 01 18:45:57.7**±1.4, **6°.7S**±0°.1×**155°.3E**±0°.1, **h50**km, **n8**, σ0**§62**/10, **mb3.8/5**, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **4.00** | **305** | P | **Pn** | **18 46 56.8** | **+0.3** |
| | baz=73,slow=19 | | | | | | |
| KRVT | | | | S | **Sn** | **18 47 41.8** | **-0.3** |
| | baz=143,slow=20 | | | | | | |
| **HNR** | **Honiara** | **5.38** | **121** | P | Pn | 18 47 23.1 | +7.7 |
| | 5.3nm,0.3s,baz=288,slow=6.4,SNR=2.1 | | | | | | |
| HNR | | | | S | Sn | 18 48 29.6 | +13 |
| | 4.0nm,0.3s,baz=186,slow=1.3,SNR=1.4 | | | | | | |
| HNR | | | | LR | LR | 18 49 35.6 | |
| | comp=Z,142nm,18.2s,baz=201,slow=38 | | | | | | |
| **PMG** | **Port Moresby** | **8.50** | **251** | P | **Pn** | **18 47 59.0** | **+0.7** |
| | 1.2nm,0.3s,baz=85,slow=9.3,SNR=5.9 | | | | | | |
| PMG | | | | S | **Sn** | **18 49 33.0** | **+0.1** |
| | 0.8nm,0.3s,baz=311,slow=19,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.25** | **235** | P | **P** | **18 51 09.7** | **-0.6** |
| | 0.9nm,0.4s,baz=59,slow=10,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 54 49.6** | **-0.1** |
| | 0.4nm,1.1s,baz=60,slow=2.0,SNR=1.5 | | | | | | |
| **SIJI** | **Sorong** | **24.64** | **282** | P | **P** | **18 51 13.3** | **-0.5** |
| | 5.5nm,0.6s,baz=84,slow=9.2,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **26.62** | **228** | P | **P** | **18 51 30.7** | **-1.0** |
| | 0.9nm,0.6s,baz=59,slow=9.3,SNR=19 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.90** | **295** | P | **P** | **18 56 06.2** | **+0.3** |
| | 1.4nm,0.7s,baz=124,slow=5.4,SNR=16 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.90** | **28** | P | **P** | **18 59 19.1** | **+0.4** |
| | 0.1nm,0.3s,baz=278,slow=4.2,SNR=2.1 | | | | | | |

*IDC **01** 18:54:25.4±0.7, 3°.58N×128°.71E, h0km, mb3.9/10, mb1 4.1/11, mb1mx3.8/44, mbtmp4.0/11, ML3.6/1, MS2.4/1, Ms1 2.4/1, ms1mx2.3/75, Error ellipse: s-maj=42.5km s-min=13.7km az=72.0*

*NEIC **01** 18:54:26.4±1.5, 3°.72N±0°.08×128°.9E±0°.1, h7km±4km, mb4.6/26, Error ellipse: s-maj=18.2km s-min=10.7km az=68.0*

*DJA **01** 18:54:31.2±0.4, 4°.N±3°.×12°.9E±°, h61km±20km, M4.2/12, mb4.3/11, mB4.7/6, MLv4.3/12, Mw(mB)3.9/6*

**ISC 01 18:54:30.3**±0.5, **3°.66N**±0°.05×**128°.89E**±0°.06, **h35**km, **n67**, σ1**§15**/73, **mb4.3**/20, **1C**, **North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **3.25** | **208** | P | **Pn** | **18 55 18.9** | **+0.2** |
| TNTI | | | | S | **Sn** | **18 55 57.8** | **+1.6** |
| **TNTI** | **Ternate** | **3.25** | **208** | P | **Pn** | **18 55 18.8** | **0.0** |
| **TNTI** | **Ternate** | **3.25** | **208** | P | **Pn** | **18 55 19.3** | **+0.6** |
| **SGSI** | **Sangihe** | **3.36** | **271** | P | **Pn** | **18 55 19.8** | **-0.5** |
| SGSI | | | | S | **Sn** | **18 55 58.0** | **-1.0** |
| **LBMI** | **Labuha** | **4.49** | **198** | P | **Pn** | **18 55 37.6** | **+1.8** |
| **DAV** | **Davao City (W)** | **4.73** | **316** | LR | LR | 18 57 57.7 | |
| | comp=Z,41nm,19.4s,baz=34,slow=46 | | | | | | |
| **KCP** | **Kidapawan** | **5.04** | **311** | ⇑/*e*P | **Pn** | **18 55 43.2** | **-0.3** |
| **SWI** | **Sorong** | **5.07** | **152** | P | **Pn** | **18 55 45.6** | **+1.7** |
| | 0.1nm12nm,0.6s | | | | | | |
| SWI | | | | S | **Sn** | **18 56 39.3** | **-2.0** |
| | 0.1nm12nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **5.08** | **152** | Pn | **Pn** | **18 55 44.7** | **+0.7** |
| | 2.2nm,0.3s,baz=168,slow=23,SNR=37 | | | | | | |
| SIJI | | | | Sn | **Sn** | **18 56 39.5** | **-2.0** |
| | 1.5nm,0.3s,baz=223,slow=22,SNR=6.8 | | | | | | |
| **KMSI** | **Cibinong** | **5.79** | **238** | P | **Pn** | **18 55 55.3** | **+1.6** |
| KMSI | | | | S | **Sn** | **18 56 58.8** | **0.0** |
| **SANI** | **Sanana** | **6.37** | **207** | P | **Pn** | **18 56 01.5** | **-0.2** |
| | 0.1nm24nm,0.7s | | | | | | |
| SANI | | | | S | **Sn** | **18 57 09.8** | **-3.4** |
| | 0.1nm24nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **6.37** | **207** | P | **Pn** | **18 56 02.1** | **+0.4** |
| **GTOI** | **Gorontalo** | **6.60** | **243** | P | **Pn** | **18 56 05.4** | **+0.5** |
| | 0.1nm292nm20nm,0.6s | | | | | | |
| **AAI** | **Ambon** | **7.33** | **185** | P | **Pn** | **18 56 14.2** | **-0.7** |
| | 0.1nm15nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **7.34** | **153** | P | **Pn** | **18 56 16.3** | **+1.2** |
| | 0.1nm14nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **7.34** | **153** | Pn | **Pn** | **18 56 14.6** | **-0.5** |
| **FAKI** | **Fak Fak** | **7.34** | **153** | P | **Pn** | **18 56 16.2** | **+1.2** |
| **MRSI** | **Marisa** | **7.63** | **246** | P | **Pn** | **18 56 20.1** | **+1.1** |
| | 0.3nm695nm74nm,0.6s | | | | | | |
| **TOLI2** | **Tolitoli** | **8.49** | **253** | | **Pn** | **18 56 29.9** | **-1.0** |
| **TOLI2** | **Tolitoli** | **8.49** | **253** | P | **Pn** | **18 56 30.2** | **-0.6** |
| **APSI** | **Ampana** | **8.54** | **238** | P | **Pn** | **18 56 32.1** | **+0.5** |
| | 615nm31nm,0.5s | | | | | | |
| **MPSI** | **Mapaga** | **9.57** | **250** | P | **Pn** | **18 56 46.7** | **+1.0** |
| | 9.3nm,0.7s | | | | | | |
| **BBSI** | **Bau Bau** | **11.06** | **215** | P | **Pn** | **18 57 07.6** | **+1.5** |
| | 3.7nm,1.3s | | | | | | |
| **BNSI** | **Bone** | **11.88** | **228** | P | **Pn** | **18 57 16.3** | **-1.0** |
| **KAPI** | **Kappang** | **12.55** | **227** | P | **Pn** | **18 57 27.4** | **+0.9** |
| **MTN** | **Manton Dam** | **16.54** | **172** | Pn | **Pn** | **18 58 19.4** | **-0.4** |
| MTN | | | | IAmb | IAmb | 18 58 38.9 | |
| | comp=Z,47nm,1.5s | | | | | | |
| **MTN** | **Manton Dam** | **16.54** | **172** | P | **P** | **18 58 22.9** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **19.01** | **231** | P | **Pn** | **18 58 51.3** | **+1.2** |
| JAGI | | | | IAmb | IAmb | 18 59 18.3 | |
| | comp=Z,47nm,1.3s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **19.01** | **231** | P | **Pn** | **18 58 51.1** | **+1.0** |
| **KNRA** | **Kununurra** | **19.21** | **180** | Pn | **P** | **18 58 52.2** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 18 59 08.9 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **19.21** | **180** | P | **P** | **18 58 52.2** | **+0.8** |
| **YULB** | **Yu-li** | **20.95** | **340** | P | **P** | **18 59 07.3** | **-3.0** |
| YULB | | | | IAmb | IAmb | 18 59 14.9 | |
| | comp=Z,44nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **21.10** | **338** | P | **P** | **18 59 09.1** | **-2.9** |
| **TPUB** | **Ta-pu** | **21.10** | **338** | P | **P** | **18 59 10.6** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **21.85** | **188** | P | **P** | **18 59 18.4** | **-1.6** |
| | comp=Z,2.1nm,0.5s,baz=11,slow=8.1,SNR=35 | | | | | | |
| **YHNB** | **Yeheng** | **22.11** | **342** | P | **P** | **18 59 21.1** | **-1.7** |
| YHNB | | | | IAmb | IAmb | 18 59 29.5 | |
| | comp=Z,43nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.90** | **167** | P | **P** | **18 59 40.5** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 18 59 54.2 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.05** | **167** | P | **P** | **18 59 40.6** | **-1.8** |
| **WRA** | **Warramunga Arr** | **24.05** | **167** | P | **P** | **18 59 41.9** | **-0.5** |
| | comp=Z,2.3nm,0.5s,baz=345,slow=10,SNR=57 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.05** | **167** | P | **P** | **18 59 41.3** | **-1.1** |
| **WB2** | **Warramunga Arr** | **24.06** | **167** | P | **P** | **18 59 41.9** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 18 59 55.5 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.11** | **167** | P | **P** | **18 59 42.4** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 18 59 56.0 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **26.59** | **199** | P | **P** | **19 00 04.1** | **-1.3** |
| PSA00 | | | | IAmb | IAmb | 19 00 08.7 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **AS31** | **Alice Springs** | **27.59** | **170** | P | **P** | **19 00 13.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **27.59** | **170** | P | **P** | **19 00 13.8** | **-0.6** |
| | comp=Z,0.4nm,0.3s,baz=349,slow=7.3,SNR=45 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 03 32.4** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=355,slow=8.3,SNR=8.5 | | | | | | |
| **GIRL** | **Giralia** | **29.80** | **208** | P | **P** | **19 00 34.3** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **32.78** | **299** | P | **P** | **19 01 00.2** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=101,slow=6.7,SNR=5.6 | | | | | | |
| **MORW** | **Morawa** | **34.80** | **200** | P | **P** | **19 01 16.9** | **-0.9** |
| MORW | | | | IAmb | IAmb | 19 01 45.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **36.90** | **170** | P | **P** | **19 01 35.2** | **-0.5** |
| **STKA** | **Stephens Creek** | **37.34** | **162** | P | **P** | **19 01 39.7** | **+0.1** |
| | comp=Z,1.8nm,0.3s,baz=349,slow=8.4,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **37.34** | **162** | IAmb | IAmb | 19 01 40.5 | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **45.47** | **3** | P | **P** | **19 02 47.5** | **+1.6** |
| | comp=Z,1.0nm,0.8s,baz=153,slow=4.5,SNR=3.9 | | | | | | |
| **ULN** | **Ulaanbaatar** | **47.89** | **340** | P | **P** | **19 03 05.0** | **-0.1** |
| ULN | | | | IAmb | IAmb | 19 03 06.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **48.09** | **340** | P | **P** | **19 03 07.2** | **+0.6** |
| | comp=Z,1.7nm,1.2s,baz=153,slow=8.6,SNR=3.3 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 04 35.2** | **+1.2** |
| | comp=Z,0.6nm,0.8s,baz=149,slow=3.4,SNR=2.9 | | | | | | |
| **MK31** | **Makanchi Array** | **58.86** | **324** | P | **P** | **19 04 25.9** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 19 04 26.9 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.86** | **324** | P | **P** | **19 04 26.1** | **+0.4** |
| | comp=Z,3.6nm,0.3s,baz=111,slow=7.8,SNR=227 | | | | | | |
| **MAKZ** | **Makanchi** | **59.05** | **324** | P | **P** | **19 04 27.2** | **+0.3** |
| MAKZ | | | | IAmb | IAmb | 19 04 28.1 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **61.65** | **332** | P | **P** | **19 04 44.0** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **61.65** | **332** | P | **P** | **19 04 43.5** | **-1.0** |
| | comp=Z,1.1nm,0.4s,baz=122,slow=7.0,SNR=8.5 | | | | | | |
| **KURK** | **Kurchatov** | **62.98** | **327** | P | **P** | **19 04 53.5** | **+0.1** |
| **GAR** | **Garm** | **63.57** | **312** | P | **P** | **19 04 57.6** | **-0.1** |
| **KKAR** | **Karatay Array** | **64.77** | **316** | P | **P** | **19 05 05.3** | **-0.1** |
| **BRVK** | **Borovoye** | **68.64** | **326** | P | **P** | **19 05 30.1** | **+0.3** |
| BRVK | | | | IAmb | IAmb | 19 05 30.8 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **CASY** | **Casey** | **71.02** | **188** | P | **P** | **19 05 45.0** | **+0.9** |
| **ABKAR** | **Akbulak array** | **73.58** | **320** | P | **P** | **19 05 59.3** | **-0.6** |
| **ABKAR** | **Akbulak array** | **73.58** | **320** | P | **P** | **19 05 59.2** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 19 06 00.8 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **84.24** | **25** | P | **P** | **19 06 58.9** | **+0.8** |
| | comp=Z,0.3nm,0.7s,baz=262,slow=4.8,SNR=2.6 | | | | | | |

*IPEC **01** 18:58:19.3±0.3, 51°.50N×16°.23E, h0km±1km, ML2.0/3, Error ellipse: s-maj=2.3km s-min=1.1km az=24.0*

*PRU **01** 18:58:20.1±0.0, 51°.48N×16°.14E, h0km*

**ISC 01 18:58:20.3**±1.8, **51°.46N**±0°.08×**16°.12E**±0°.05, **h0**km, **n14**, σ0**§74**/31, **Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.63** | **170** | *e*Pg | **Pg** | **18 58 32.5** | **+0.1** |
| KSP | | | | *e*Sg | **Sg** | **18 58 40.9** | **+0.4** |
| **CHVC** | **Chvalec** | **0.88** | **183** | *e*Pg | **Pg** | **18 58 37.3** | **+0.2** |
| CHVC | | | | *e*Sg | **Sg** | **18 58 49.8** | **+1.4** |
| | comp=Z,13nm,0.3s | | | | | | |
| **OSTC** | **Ostas** | **0.91** | **176** | *e*PG | **Pg** | **18 58 37.9** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | **18 58 50.5** | **+1.1** |
| **UPC** | **Upice** | **0.96** | **184** | *e*PG | **Pg** | **18 58 38.6** | **0.0** |
| UPC | | | | *e*SG | **Sg** | **18 58 51.6** | **+0.6** |
| | comp=Z,41nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.12** | **174** | *e*PG | **Pg** | **18 58 41.3** | **-0.4** |
| DPC | | | | *e*SG | **Sg** | **18 58 55.9** | **-0.3** |
| | comp=Z,8.5nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **227** | *e*PG | **Pn** | **18 58 46.0** | **-0.5** |
| PVCC | | | | *e*SG | **Sg** | **18 59 04.4** | **+0.6** |
| | comp=Z,55nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **248** | Pg | **Pn** | **18 58 48.3** | **-0.1** |
| BRG | | | | Sg | **Sn** | **18 59 08.5** | **-0.1** |
| BRG | | | | Amp | | 18 59 09.3 | |
| | comp=Z,17nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.79** | **215** | *e*PN | **Pn** | **18 58 51.2** | **-1.2** |
| PRU | | | | *e*PG | **Pb** | **18 58 52.7** | **-1.2** |
| PRU | | | | *e*SG | **Sb** | **18 59 16.9** | **+0.1** |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.91** | **151** | *e*Pn | **Pn** | **18 58 53.3** | **-0.9** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **18 59 19.3** | **+0.3** |
| | comp=Z,10nm,0.5s,baz=335 | | | | | | |
| **MORC** | **Moravsky Berou** | **1.91** | **151** | *e*PN | **Pn** | **18 58 53.4** | **-0.8** |
| MORC | | | | *e*SG | **Sn** | **18 59 19.4** | **+0.4** |
| **CLL** | **Collm** | **1.96** | **267** | *e*Pg | **Pb** | **18 58 57.0** | **+0.1** |
| CLL | | | | *e*Sg | **Sb** | **18 59 23.0** | **+1.1** |
| **VRAC** | **Vranov** | **2.18** | **172** | *e*Pn | **Pn** | **18 58 57.5** | **-0.3** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **18 59 28.3** | **+0.2** |
| | comp=Z,7.5nm,0.5s,baz=354 | | | | | | |
| **KRUC** | **Moravsky** | **2.41** | **176** | *e*Pn | **Pn** | **18 59 00.5** | **-0.5** |
| | baz=358 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **18 59 36.1** | **+1.4** |
| | comp=Z,6.3nm,0.5s,baz=358 | | | | | | |
| **KHC** | **Kasperske Hory** | **2.85** | **216** | *e*PN | **Pn** | **18 59 06.7** | **-0.3** |
| KHC | | | | *e*PG | **Pb** | **18 59 12.6** | **+0.6** |
| KHC | | | | *e*SN | **Sn** | **18 59 40.5** | **-1.5** |
| KHC | | | | *e*SG | **Sg** | **18 59 51.5** | **-0.2** |

*MOS **01** 19:00:44.1±0.9, 30°.74S×179°.95E, h381km, mb5.8/15, Error ellipse: s-maj=7.6km s-min=6.3km az=101.9*

*IDC **01** 19:00:45.8±0.4, 30°.73S×179°.92W, h389km±3km, mb5.2/31, mb1 5.3/33, mb1mx5.3/34, mbtmp6.0/33, Error ellipse: s-maj=8.4km s-min=7.0km az=14.0*

*NEIC **01** 19:00:46.3, 30°.76S×179°.96W, h391km, Moment Tensor Solution. Moment tensor: Scale $10^{18}$Nm; $M_{rr}$=-1.43; $M_{\theta\theta}$=-0.25; $M_{\phi\phi}$ 1.68; $M_{r\theta}$=-1.28; $M_{\theta\phi}$=-0.86; $M_{\phi r}$=-2.12; Fault plane solution: $M_0$3.05000×$10^{18}$ NP1:$\phi_s$16.11000°, δ75.37000°,λ-63.11000°. NP2:$\phi_s$132.58000°,δ30.35000°, λ-150.01000°. Principal axes: T 2.7634, Plg26.0000°, Azm85.0000°; N 0.5151, Plg26.0000°, Azm189.0000°; P -3.2786, Plg52.0000°, Azm317.0000°;*

*NEIC **01** 19:00:46.3±2.1, 30°.75S±0°.08×179°.95W±0°.09, h391km±1km, mb5.6/373, Mwb6.3/73, Mwc6.2/84, Mww6.2 Error ellipse: s-maj=14.5km s-min=12.0km az=143.0*

*NOU **01** 19:00:46.0, 30°.87S×179°.75W, h395km, ML5.9/168, Kermadec Islands Region*

*NEIC **01** 19:00:49, 30°.79S×179°.81W, h390km, Moment Tensor Solution. Duration: 10s0 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-1.06; $M_{\theta\theta}$ 1.02; $M_{\phi\phi}$2.09; $M_{r\theta}$-1.16; $M_{\theta\phi}$-0.48; $M_{\phi r}$-1.41; Fault plane solution: $M_0$2.61000×$10^{18}$ NP1: $\phi_s$136.00000°,δ40.00000°,λ-155.00000°. NP2: $\phi_s$27.00000°,δ75.00000°,λ-52.00000°. Principal axes: T 2.6248, Plg21.0000°, Azm89.0000°; N -0.0222, Plg36.0000°, Azm195.0000°; P -2.6026, Plg47.0000°, Azm336.0000°;*

*GCMT **01** 19:00:50.3±0.1, 30°.81S±0°.01×179°.82W±0°.01, h391km, MW6.2/166, Moment Tensor Solution. s166,c401; s154,c230; Duration: 3s3 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-1.21±.01; $M_{\theta\theta}$-1.04±.02; $M_{\phi\phi}$2.25±.02; $M_{r\theta}$-1.07±.01; $M_{\theta\phi}$-0.60±.02; $M_{\phi r}$-1.91±.01; Best double couple: $M_0$2.98600×$10^{18}$ NP1:$\phi_s$134.00000°,δ35.00000°, λ-154.00000°. NP2:$\phi_s$23.00000°,δ75.00000°, λ-58.00000°. Principal axes: T 3.1000, Plg24.0000°, Azm88.0000°; N -0.2290, Plg31.0000°, Azm193.0000°; P -2.8720, Plg49.0000°, Azm328.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to mantle waves, cutoff=125s. Triangular moment-rate function*

*NEIC **01** 19:01:04.2, 30°.97S×179°.85W, h405km, Moment Tensor Solution. Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-1.49; $M_{\theta\theta}$-0.87; $M_{\phi\phi}$2.36; $M_{r\theta}$-0.82; $M_{\theta\phi}$-0.34; $M_{\phi r}$-1.79; Fault plane solution: $M_0$2.85000×$10^{18}$ NP1:$\phi_s$143.06000°, δ32.27000°,λ-141.88000°. NP2:$\phi_s$19.49000°,δ70.76000°, λ-63.58000°. Principal axes: T 3.0630, Plg21.0000°, Azm90.0000°; N -0.4241, Plg25.0000°, Azm190.0000°; P -2.6390, Plg56.0000°, Azm324.0000°;*

**ISC 01 19:00:45.5**±0.2, **30°.80S**±0°.03×**179°.89W**±0°.03, **h391**km±1km, **h391**km:**pP-P**, **n2055**, σ1**§57**/2273, **mb5.6**/306, **153C-186D**, **Fault plane solution: NP1**:$\phi_s$349.28919°, δ66.82780°,λ-74.31673°. **NP2**:$\phi_s$133.78008°,δ27.73611°, λ-122.27439°. **Principal axes:** T Plg20.3416°, Azm67.5265°; N Plg14.3895°, Azm162.9846°; P Plg64.7029°, Azm285.8610°; **Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **2.29** | **49** | P | **Pn** | **19 01 41.0** | **-1.6** |
| GLKZ | | | | S | **S** | **19 02 21.8** | **-6.9** |
| **RIZ** | **Raoul Island** | **2.30** | **48** | P | **Pn** | **19 01 43.1** | **+0.4** |
| RIZ | | | | S | **S** | **19 02 22.0** | **-6.8** |
| **RAO** | **Raoul Island** | **2.30** | **48** | P | **Pn** | **19 01 41.6** | **-1.1** |
| | 8µm,0.3s,baz=138,slow=2.2,SNR=204 | | | | | | |
| RAO | | | | S | **S** | **19 02 23.3** | **-5.5** |
| | 11µm,0.3s,baz=225,slow=22,SNR=14 | | | | | | |
| **RAO** | **Raoul Island** | **2.30** | **48** | | **Pn** | **19 01 41.3** | **-1.4** |
| **RAO** | **Raoul Island** | **2.30** | **48** | P | **Pn** | **19 01 42.3** | **-0.4** |
| **RAO** | **Raoul Island** | **2.30** | **48** | P | **Pn** | **19 01 41.5** | **-1.2** |
| **GRZ** | **Great Barrier** | **6.68** | **214** | P | **P** | **19 02 27.2** | **+1.1** |
| **MXZ** | **Matakaoa Point** | **6.91** | **192** | P | **Pn** | **19 02 23.7** | **-4.1** |
| MXZ | | | | S | **S** | **19 03 45.0** | **-6.3** |
| **MXZ** | **Matakaoa Point** | **6.91** | **192** | | **Pn** | **19 02 23.5** | **-4.3** |
| **KUZ** | **Kuaotunu** | **6.97** | **210** | P | **P** | **19 02 29.8** | **+0.6** |
| **OUZ** | **Omahuta** | **7.03** | **229** | P | **P** | **19 02 31.1** | **+1.2** |
| **OUZ** | **Omahuta** | **7.03** | **229** | | **P** | **19 02 30.8** | **+0.9** |
| **OUZ** | **Omahuta** | **7.03** | **229** | P | **P** | **19 02 31.6** | **+1.7

KAHZ **Kahuranaki** 9.36 196 P Pn 19 02 51.1 -4.8
MHEZ **Mangahewa** 9.53 208 P P **19 03 02.1 +4.2**
WPHZ **Waipukurau** 9.72 197 P P 19 02 55.5 -4.6
BFZ **Birch Farm** 10.35 197 P P 19 03 02.2 -4.9
BFZ **Birch Farm** 10.35 197 P P **19 03 05.1 -2.0**
NFK **Norfolk Island** 10.71 276 P Pn **19 03 14.3 +2.6**
baz=11,SNR=36
NFK **Norfolk Island** 10.71 276 ⇑P Pn **19 03 14.1 +2.3**
NFK **Norfolk Island** 10.71 276 P Pn 19 03 14.9 +3.1
MSWZ **Moikau Station** 11.30 199 P P **19 03 12.9 -4.7**
SNZO **South Karori** 11.36 201 P P **19 03 13.5 -4.7**
SNZO **South Karori** 11.36 201 P P **19 03 16.8 -1.5**
SNZO **South Karori** 11.36 201 P P **19 03 15.4 -2.9**
BHW **Baring Head** 11.40 200 P P 19 03 13.2 -5.5
PLWZ **Palliser** 11.44 199 P P 19 03 14.0 -5.2
TUWZ **Tuamarina** 11.72 203 P P **19 03 17.4 -4.8**
NNZ **Nelson** 11.73 206 P P **19 03 17.9 -4.5**
QRZ **Quartz Range** 11.74 209 P P **19 03 18.2 -4.3**
QRZ **Quartz Range** 11.74 209 P P **19 03 19.6 -2.9**
CMWZ **Cape Campbell** 11.92 202 P P **19 03 20.3 -4.1**
BSWZ **Blackbirch Sta** 12.00 203 P P **19 03 21.2 -4.1**
THZ **Tophouse** 12.38 206 P P **19 03 25.6 -4.1**
LKBA **Tubou, Lakemba** 12.55 5 P P **19 03 31.7 +0.1**
KHZ **Kahutara** 12.73 203 P P **19 03 29.2 -4.2**
KHZ **Kahutara** 12.73 203 P P **19 03 31.0 -2.4**
MSVF **Nonsavu** 13.14 351 P P **19 03 38.4 +0.2**
57nm,0.3s,baz=146,slow=12,SNR=463
MSVF S **S** **19 05 57.7 -3.5**
baz=166,slow=9.8,SNR=1.1
MSVF ScP **ScP** **19 11 35.4 +2.1**
0.8nm,0.3s,baz=144,slow=13,SNR=10
MSVF **Nonsavu** 13.14 351 ⇓P P **19 03 38.0 -0.3**
MSVF **Nonsavu** 13.14 351 P P **19 03 37.9 -0.3**
MSVF **Nonsavu** 13.14 351 P P **19 03 39.0 +0.7**
MSVF **Nonsavu** 13.14 351 P P **19 03 38.8 +0.6**
LTZ **Lake Taylor** 13.50 205 P P **19 03 38.1 -3.8**
PINNC **Pines Island,** 13.94 303 P P **19 03 47.7 +0.9**
PINNC **Pines Island,** 13.94 303 P Pn **19 03 49.7 +0.3**
TAVE **Taveuni** 14.03 360 P Pn **19 03 49.3 -0.9**
OXZ **Oxford** 14.06 205 P P **19 03 44.2 -3.7**
MQZ **McQueen's Vall** 14.18 203 P P **19 03 45.6 -3.5**
MARNC **Mare, Loyalty** 14.26 308 ⇓P Pn **19 03 52.4 -0.4**
MARNC **Mare, Loyalty** 14.26 308 P P **19 03 51.2 +0.8**
MARNC **Mare, Loyalty** 14.26 308 P Pn **19 03 52.8 0.0**
DGTI **Dogotuki** 14.44 359 P P **19 03 53.2 +0.9**
OUENC **Ouen Island, N** 14.50 302 P Pn **19 03 55.1 -0.4**
OUENC **Ouen Island, N** 14.50 302 P Pn **19 03 55.9 +0.4**
YATNC **Mamie plateau,** 14.69 303 P Pn **19 03 57.8 +0.2**
NIUE **Niue** 14.75 40 P P **19 03 55.7 +0.1**
baz=15,SNR=36
NIUE **Niue** 14.75 40 ⇓P P **19 03 55.8 +0.1**
NIUE ⇑S **S** **19 06 37.9 +4.8**
NIUE **Niue** 14.75 40 P P **19 03 55.3 -0.4**
NIUE **Niue** 14.75 40 P P **19 03 55.8 +0.1**
RPZ **Rata Peaks** 14.76 207 P P **19 03 52.5 -3.1**
RPZ **Rata Peaks** 14.76 207 P P **19 03 54.9 -0.7**
ONTNC **Ouen Toro** 14.85 301 P Pn **19 03 58.9 -0.7**
ONTNC **Ouen Toro** 14.85 301 P Pn **19 03 59.4 -0.1**
DZM **Mont Dzumac** 15.00 302 P Pn **19 04 00.5 -0.8**
12nm,0.3s,baz=126,slow=11,SNR=190
DZM S **S** **19 06 39.4 +1.0**
0.7nm,0.3s,baz=105,slow=22,SNR=0.8
DZM ScP **ScP** **19 11 39.1 +2.6**
1.0nm,0.3s,baz=26,slow=21,SNR=11
DZM **Mont Dzumac** 15.00 302 *eP* Pn **19 04 00.8 -0.5**
3µm,1.2s
DZM **Mont Dzumac** 15.00 302 ⇓P Pn **19 04 00.8 -0.5**
DZM **Mont Dzumac** 15.00 302 P Pn **19 04 00.7 -0.7**
DZM **Mont Dzumac** 15.00 302 P Pn **19 04 01.1 -0.2**
DZM **Mont Dzumac** 15.00 302 P Pn **19 04 00.8 -0.5**
NOUC **Port Laguerre** 15.09 302 P Pn **19 04 01.9 -0.3**
NOUC **Port Laguerre** 15.09 302 P Pn **19 04 01.6 -0.6**
NOUC pP P 19 04 09.8 +10
FOZ **Fox Glacier** 15.11 210 P P **19 03 56.4 -3.0**
FOZ IAmb IAmb 19 04 42.8
comp=Z,475nm,0.8s
LIFNC **LIFOU** 15.28 308 P P **19 04 02.6 +1.1**
LIFNC **LIFOU** 15.28 308 P Pn **19 04 03.8 -0.6**
LBZ **Lake Benmore** 15.66 207 P P **19 04 02.3 -3.0**
LBZ IAmb IAmb 19 04 40.6
comp=Z,228nm,1.0s
ODZ **Otahua Downs** 16.05 205 ⇑S S **19 07 01.9 +3.6**
ODZ **Otahua Downs** 16.05 205 P P **19 04 07.3 -2.1**
ODZ IAmb IAmb 19 04 41.5
comp=Z,236nm,0.7s
ODZ **Otahua Downs** 16.05 205 P P **19 04 10.2 +0.8**
WKZ **Wanaka** 16.50 209 P P **19 04 11.7 -2.6**
WKZ IAmb IAmb 19 04 57.8
comp=Z,245nm,0.6s
RTV **Rentapao** 16.75 318 P P **19 04 19.0 +1.7**
DVP **Devils Point** 16.94 317 P P **19 04 20.6 +1.3**
MLZ **Mavora Lakes** 17.31 209 P P **19 04 20.5 -2.5**
MLZ IAmb IAmb 19 05 03.5
comp=Z,205nm,0.8s
KOUNC **Koumac, New Ca** 17.52 302 ⇓P P **19 04 26.9 +1.5**
KOUNC **Koumac, New Ca** 17.52 302 P P **19 04 27.4 +2.0**
WHZ **Wether Hill Ro** 17.80 209 P P **19 04 26.0 -2.2**
WHZ IAmb IAmb 19 05 11.7
comp=Z,182nm,0.9s
DCZ **Deep Cove** 17.81 211 P P **19 04 25.4 -2.8**
LHI **Lord Howe Isla** 18.03 262 P P **19 04 31.0 +0.3**
baz=18,SNR=12
LHI **Lord Howe Isla** 18.03 262 ⇓P P **19 04 34.8 +4.0**
LHI **Lord Howe Isla** 18.03 262 P P **19 04 29.8 -0.9**
LHI IAmb IAmb 19 04 38.2
comp=Z,560nm,0.8s
LHI **Lord Howe Isla** 18.03 262 P P **19 04 34.7 +4.0**
AFI **Afiamalu** 18.39 26 P P **19 04 34.6 -0.2**
comp=Z,83nm,0.3s,baz=216,slow=5.0,SNR=162
AFI S **S** **19 07 43.3 -1.0**
comp=Z,36nm,0.3s,baz=39,slow=23,SNR=6.7
AFI **Afiamalu** 18.39 26 P P **19 04 34.7 -0.2**
AFI pmax pmax
comp=Z,3µm,1.0s
AFI **Afiamalu** 18.39 26 ⇓P P **19 04 35.1 +0.2**
AFI **Afiamalu** 18.39 26 P P **19 04 34.6 -0.2**
AFI **Afiamalu** 18.39 26 P P **19 04 35.4 +0.5**
AFI **Afiamalu** 18.39 26 P P **19 04 34.6 -0.2**
SANVU **Saraoutou** 19.32 319 ⇓P P **19 04 43.0 -1.3**
SANVU **Saraoutou** 19.32 319 P P **19 04 44.7 +0.4**
SANVU **Saraoutou** 19.32 319 P P **19 04 45.2 +0.9**
SANVU **Saraoutou** 19.32 319 P P **19 04 42.7 -1.5**
RAR **Rarotonga** 20.42 67 P P **19 04 54.7 +0.2**
comp=Z,128nm,0.6s,baz=228,slow=8.9,SNR=17
RAR ScP **ScP** **19 11 49.3 +1.4**
comp=Z,140nm,0.9s,baz=227,slow=5.3,SNR=9.7
RAR **Rarotonga** 20.42 67 ⇑P P **19 04 54.7 +0.2**
RAR **Rarotonga** 20.42 67 P P **19 04 54.8 +0.2**
RAR IAmb IAmb 19 04 57.2
comp=Z,668nm,1.4s
RAR **ScP** **19 11 48.1 +0.2**
RAR **Rarotonga** 20.42 67 P P **19 04 57.3 +2.8**
RAR **Rarotonga** 20.42 67 P P **19 04 54.6 +0.2**
FUNA **Funafuti** 22.17 358 P P **19 05 10.1 -0.4**
NTLH **Newcastle Hard** 24.20 258 P P **19 05 33.3 +4.7**
ARMA **Armidale** 24.49 264 P P **19 05 33.9 +2.4**
baz=24,SNR=94
ARMA **Armidale** 24.49 264 ⇑P P **19 05 34.1 +2.7**
ARMA **Armidale** 24.49 264 P P **19 05 33.3 +1.9**
ARMA IAmb IAmb 19 05 36.4
comp=Z,123nm,0.8s
ARMA **Armidale** 24.49 264 P P **19 05 34.2 +2.7**
RIV **Riverview** 24.62 255 P P **19 05 34.7 +2.3**
baz=25,SNR=9.8
RIV **Riverview** 24.62 255 ⇑P P **19 05 35.5 +3.1**
MGCD **Mangrove Creek** 24.68 257 P P **19 05 35.4 +2.5**
baz=25,SNR=56
MGCD **Mangrove Creek** 24.68 257 P P **19 05 36.0 +3.1**
SYDH **Sydney Hard Ro** 24.97 255 P P **19 05 38.9 +3.4**
CNB **Canberra Magne** 26.11 252 P P **19 05 48.0 +2.3**
baz=26,SNR=57
CNB **Canberra Magne** 26.11 252 P P **19 05 47.3 +1.6**
EIDS **Eidsvold** 26.14 275 P P **19 05 47.8 +1.8**
baz=26,SNR=78
EIDS **Eidsvold** 26.14 275 ⇑P P **19 05 46.5 +0.5**
EIDS **Eidsvold** 26.14 275 P P **19 05 45.8 -0.2**
EIDS IAmb IAmb 19 05 49.7
comp=Z,299nm,0.9s
EIDS **Eidsvold** 26.14 275 P P **19 05 47.2 +1.2**
MILA **Mila** 26.36 248 P P **19 05 50.3 +2.4**
baz=26,SNR=34
MILA **Mila** 26.36 248 ⇓P P **19 05 50.1 +2.2**
CAN **Canberra** 26.40 252 P P **19 05 47.8 -0.5**

CAN pmax pmax
comp=Z,139nm,0.7s
CAN **Canberra** 26.40 252 ⇑P P **19 05 50.2 +1.9**
CAN **Canberra** 26.40 252 P P **19 05 47.8 -0.5**
CAN IAmb IAmb 19 05 53.4
comp=Z,139nm,0.7s
CAN **Canberra** 26.40 252 P P **19 05 50.6 +2.3**
CAN **Canberra** 26.40 252 P P **19 05 50.9 +2.6**
CAN pP **PP** **19 06 58.1 +0.2**
RK1H **Rockhampton Ha** 27.32 278 P P **19 05 58.0 +1.5**
GLAD **Gladstone** 27.79 240 P P **19 06 02.4 +2.0**
RMQ **Roma** 27.80 271 P P **19 06 02.7 +2.0**
baz=28,SNR=167
RMQ **Roma** 27.80 271 P P **19 06 02.7 +2.0**
HNR **Honiara** 28.37 314 P P **19 06 05.3 -0.5**
comp=Z,982nm,0.9s,baz=197,slow=3.2,SNR=76
HNR S **S** **19 10 20.7 -2.9**
comp=Z,51nm,0.7s,baz=88,slow=22,SNR=1.6
HNR ScP **ScP** **19 12 11.8 +1.6**
comp=Z,154nm,0.9s,baz=215,slow=4.0,SNR=4.6
HNR **Honiara** 28.37 314 ⇓P P **19 06 05.0 -0.7**
HNR **Honiara** 28.37 314 P P **19 06 05.4 -0.4**
HNR **Honiara** 28.37 314 P P **19 06 04.9 -0.8**
HNR **Honiara** 28.37 314 P P **19 06 04.9 -0.8**
CORO **Coronation Par** 28.52 239 P P **19 06 10.5 +3.7**
comp=Z,234nm,1.2s
MOO **Moorlands** 28.69 237 P P **19 06 11.5 +3.1**
baz=29,SNR=10
MOO **Moorlands** 28.69 237 P P **19 06 11.4 +3.1**
TAU **Tasmania Unive** 28.71 236 P P **19 06 08.4 -0.1**
TAU pmax pmax
comp=Z,462nm,1.1s
TAU **Tasmania Unive** 28.71 236 ⇓P P **19 06 10.4 +1.9**
TAU **Tasmania Unive** 28.71 236 P P **19 06 08.4 -0.1**
TAU IAmb IAmb 19 06 12.7
comp=Z,462nm,1.1s
TAU **Tasmania Unive** 28.71 236 P P **19 06 10.9 +2.5**
TAU **Tasmania Unive** 28.71 236 P P **19 06 10.1 +1.7**
TAU pP **pwP** **19 07 26.2 +2.8**
KNTN **Kanton** 28.92 17 P P **19 06 10.7 0.0**
TOO **Toolangi** 29.31 247 P P **19 06 15.9 +2.0**
baz=29,SNR=182
TOO **Toolangi** 29.31 247 P P **19 06 15.1 +1.2**
TOO pmax pmax
comp=Z,263nm,1.0s
TOO **Toolangi** 29.31 247 ⇑P P **19 06 14.9 +1.0**
TOO **Toolangi** 29.31 247 P P **19 06 15.1 +1.2**
TOO IAmb IAmb 19 06 18.4
comp=Z,263nm,0.9s
TOO **Toolangi** 29.31 247 P P **19 06 15.9 +2.0**
CMSA **Cobar Meteorol** 29.39 260 P P **19 06 15.7 +1.1**
baz=29,SNR=251
CMSA **Cobar Meteorol** 29.39 260 P P **19 06 16.6 +2.0**
MLBS **Spotswood, Mel** 29.80 247 P P **19 06 22.0 +4.0**
comp=Z,388nm,0.9s
GEXS **Deakin Univers** 30.29 246 P P **19 06 26.1 +3.7**
PAE **Paea** 30.47 72 *eP* P **19 06 24.1 0.0**
comp=Z,141nm,1.0s
PPT2 **Papeete2** 30.51 72 *eP* P **19 06 24.9 +0.3**
comp=Z,607nm,1.1s
PPTF **Pamatai, Papee** 30.52 72 ⇓P P **19 06 25.2 +0.6**
PPTF **Pamatai, Papee** 30.52 72 P P **19 06 24.7 +0.1**
PPTF IAmb IAmb 19 06 29.5
comp=Z,589nm,1.0s
PPTF **Pamatai, Papee** 30.52 72 P P **19 06 25.0 +0.4**
PPT **Papeete** 30.52 71 P P **19 06 25.2 +0.6**
comp=Z,444nm,0.9s,baz=266,slow=2.6,SNR=17
PPT ScP **ScP** **19 12 19.2 +2.0**
comp=Z,132nm,0.9s,baz=15,slow=0.5,SNR=8.7
BRAT **Ballarat** 30.55 247 P P **19 06 27.2 +2.6**
TIAR **Tiarei** 30.71 72 *eP* P **19 06 26.3 0.0**
MEH **Mehetia** 31.60 73 *eP* P **19 06 34.3 +0.3**
comp=Z,144nm,1.2s
QLP **Quilpie** 31.67 269 P P **19 06 35.0 +0.6**
baz=32,SNR=65
QLP **Quilpie** 31.67 269 ⇑P P **19 06 34.0 -0.5**
QLP **Quilpie** 31.67 269 P P **19 06 35.8 +1.3**
ARPS **Mount Arapiles** 32.21 249 P P **19 06 40.4 +1.4**
baz=32,SNR=143
ARPS **Mount Arapiles** 32.21 249 P P **19 06 40.1 +1.1**
CTA **Charters Tower** 32.27 281 P P **19 06 41.1 +1.4**
comp=Z,554nm,0.8s,baz=107,slow=9.5,SNR=294
CTA S **S** **19 11 25.4 +1.2**
comp=Z,40nm,1.1s,baz=82,slow=11,SNR=2.5
CTA ScP **ScP** **19 12 24.1 +1.1**
comp=Z,140nm,0.8s,baz=122,slow=3.4,SNR=15
CTA **Charters Tower** 32.27 281 P P **19 06 41.2 +1.4**
CTAO **Charters Tower** 32.27 281 P P **19 06 40.3 +0.6**
CTAO pmax pmax
comp=Z,504nm,0.7s
CTAO **Charters Tower** 32.27 281 ⇓P P **19 06 40.5 +0.8**
CTAO **Charters Tower** 32.27 281 P P **19 06 40.3 +0.6**
CTAO IAmb IAmb 19 06 43.7
comp=Z,504nm,0.7s
CTAO **Charters Tower** 32.27 281 P P **19 06 41.3 +1.6**
CTAO **Charters Tower** 32.27 281 P P **19 06 41.1 +1.4**
CTAO pP **pP** **19 07 53.1 +2.5**
TARA **Tarawa** 32.70 347 ⇓P P **19 06 43.0 -0.5**
TARA **Tarawa** 32.70 347 P P **19 06 43.1 -0.3**
TARA **Tarawa** 32.70 347 P P **19 06 43.6 +0.2**
TARA **Tarawa** 32.70 347 P P **19 06 42.9 -0.5**
STKA **Stephens Creek** 32.80 258 P P **19 06 45.2 +1.0**
comp=Z,105nm,0.6s,baz=101,slow=11,SNR=229
STKA S **S** **19 11 30.8 -1.4**
comp=Z,23nm,1.0s,baz=16,slow=23,SNR=1.7
STKA ScP **ScP** **19 12 24.6 -0.2**
comp=Z,42nm,0.8s,baz=88,slow=5.0,SNR=6.0
STKA **Stephens Creek** 32.80 258 P P **19 06 45.2 +1.0**
baz=33,SNR=290
STKA **Stephens Creek** 32.80 258 P P **19 06 44.7 +0.5**
STKA **Stephens Creek** 32.80 258 P P **19 06 45.5 +1.3**
PMOR **Pomariorio Ree** 33.25 69 *eP* P **19 06 48.7 +0.5**
comp=Z,685nm,1.5s
VAH **Vaihoa** 33.34 70 *eP* P **19 06 48.9 0.0**
comp=Z,494nm,1.0s
INKA **Innaminka** 34.36 265 P P **19 06 59.9 +2.4**
MTSU **Mount Surprise** 34.78 283 P P **19 07 02.0 +0.8**
baz=35,SNR=385
MTSU **Mount Surprise** 34.78 283 P P **19 07 02.5 +1.3**
HTT **Hallett** 34.83 255 P P **19 07 01.9 +0.4**
baz=35,SNR=382
HTT **Hallett** 34.83 255 ⇓P P **19 07 01.9 +0.4**
HTT ⇑S **S** **19 12 04.5 +1.4**
HTT **Hallett** 34.83 255 P P **19 07 02.5 +1.0**
GHSS **Government Hou** 34.93 252 P P **19 07 05.5 +3.3**
TWOA **Tennyson Woods** 34.94 252 P P **19 07 03.1 +0.8**
NAPP **Napperby** 35.50 255 P P **19 07 08.0 +0.9**
PTPS **Port Pirie** 35.63 255 P P **19 07 10.7 +2.5**
LCRK **Leigh Creek** 35.90 260 P P **19 07 11.1 +0.6**
WHYH **Whyalla** 36.00 255 P P **19 07 12.9 +1.6**
BBOO **Buckleboo** 37.29 255 P P **19 07 21.7 -0.4**
baz=37,SNR=282
BBOO **Buckleboo** 37.29 255 P P **19 07 21.3 -0.8**
BBOO IAmb IAmb 19 07 24.8
comp=Z,895nm,1.1s
BBOO S **S** **19 12 36.1 -4.0**
BBOO **Buckleboo** 37.29 255 P P **19 07 23.0 +0.9**
PMG **Port Moresby** 37.33 298 P P **19 07 22.8 +0.3**
comp=Z,109nm,0.7s,baz=124,slow=4.4,SNR=47
PMG S **S** **19 12 39.1 -1.8**
comp=Z,19nm,0.8s,baz=128,slow=1.1,SNR=1.2
PMG **Port Moresby** 37.33 298 P P **19 07 23.1 +0.6**
PMG pmax pmax
comp=Z,936nm,1.7s
PMG **Port Moresby** 37.33 298 P P **19 07 23.1 +0.6**
PMG IAmb IAmb 19 07 26.3
comp=Z,936nm,1.6s
PMG **Port Moresby** 37.33 298 P P **19 07 24.3 +1.8**
PMG **Port Moresby** 37.33 298 P P **19 07 22.4 -0.1**
RABL **Rabaul** 37.33 310 ⇓P P **19 07 21.4 -1.3**
RABL **Rabaul** 37.33 310 P P **19 07 22.3 -0.3**
RABL **Rabaul** 37.33 310 P P **19 07 22.9 +0.3**
QIS **Mount Isa** 37.73 276 P P **19 07 25.0 -0.8**
baz=38,SNR=58
QIS **Mount Isa** 37.73 276 P P **19 07 25.9 +0.1**
COEN **Coen** 37.83 288 ⇑P P **19 07 26.8 +0.1**
COEN **Coen** 37.83 288 P P **19 07 26.9 +0.2**
COEN IAmb IAmb 19 07 31.0
comp=Z,297nm,1.1s
COEN **Coen** 37.83 288 P P **19 07 27.4 +0.7**
OOD **Oodnadatta** 38.67 263 P P **19 07 34.2 +0.7**
XMAS **Kiritimati** 39.03 37 P P **19 07 37.8 +1.3**
XMAS IAmb IAmb 19 07 41.1
comp=Z,334nm,1.4s

MULG **Mulgathing** 39.45 259 P P **19 07 40.5 +0.7**
comp=Z,434nm,1.2s
AS31 **Alice Springs** 41.46 268 P P **19 07 55.3 -1.0**
ASAR **Alice Springs** 41.47 268 P P **19 07 55.5 -0.8**
comp=Z,87nm,0.6s,baz=104,slow=7.0,SNR=255
ASAR pP **pP** **19 09 12.5 +1.9**
comp=Z,82nm,0.9s,baz=111,slow=7.8,SNR=3.0
ASAR ScP **ScP** **19 12 59.0 +1.4**
comp=Z,127nm,0.8s,baz=119,slow=4.4,SNR=20
ASAR S **S** **19 13 41.0 -1.0**
comp=Z,46nm,1.0s,baz=108,slow=15,SNR=8.7
ASAR P3KPbc 19 37 20.6
comp=Z,0.7nm,0.6s,baz=284,slow=3.7,SNR=5.9
ASAR P4KPbc 19 45 54.0
comp=Z,0.3nm,0.4s,baz=110,slow=3.8,SNR=9.5
ASAR **Alice Springs** 41.47 268 P P **19 07 54.9 -1.4**
MANU **Manus Island** 42.16 306 P P **19 08 01.6 -0.2**
WR0 **Warramunga Arr** 42.31 274 P P **19 08 01.7 -1.4**
WR0 IAmb IAmb 19 08 05.8
comp=Z,547nm,1.4s
WB2 **Warramunga Arr** 42.48 274 P P **19 08 02.9 -1.5**
WB2 IAmb IAmb 19 08 07.1
comp=Z,313nm,0.6s
WRAB **Tennant Creek** 42.48 274 *d* iP P **19 08 03.6 -0.8**
WRAB pmax pmax
comp=Z,600nm,1.7s
WRAB **Tennant Creek** 42.48 274 ⇓P P **19 08 03.5 -0.8**
WRAB **Tennant Creek** 42.48 274 P P **19 08 03.1 -1.3**
WRAB IAmb IAmb 19 08 07.1
comp=Z,246nm,0.7s
WRAB **Tennant Creek** 42.48 274 P P **19 08 04.0 -0.4**
WRAB **Tennant Creek** 42.48 274 P P **19 08 04.3 -0.1**
WRAB pP **pP** **19 09 21.2 +2.0**
WRA **Warramunga Arr** 42.49 274 P P **19 08 03.6 -0.8**
comp=Z,159nm,0.4s,baz=110,slow=8.1,SNR=453
WRA pP **pP** **19 09 21.8 +2.5**
comp=Z,134nm,1.0s,baz=111,slow=8.1,SNR=2.9
WRA ScP **ScP** **19 13 03.1 +1.5**
comp=Z,40nm,0.9s,baz=116,slow=3.9,SNR=6.1
WRA S **S** **19 13 51.8 -5.2**
comp=Z,32nm,0.9s,baz=112,slow=13,SNR=7.4
WRA PKiKP **PKiKP** **19 16 50.3 -2.3**
comp=Z,3.4nm,1.0s,baz=98,slow=0.2,SNR=4.7
WRA ScS **ScS** **19 17 21.6 -0.4**
comp=Z,9.2nm,0.8s,baz=129,slow=4.6,SNR=4.7
WRA P4KPbc 19 45 58.7
comp=Z,1.2nm,0.6s,baz=103,slow=4.2,SNR=16
WRA **Warramunga Arr** 42.49 274 P P **19 08 03.9 -0.5**
WRA *PP **pP** **19 09 19.8 +0.6**
WRA pmax pmax
comp=Z,28nm,0.7s
WRA **Warramunga Arr** 42.49 274 P P **19 08 03.9 -0.5**
WRA **pP** **19 09 19.8 +0.6**
WB0 **Warramunga Arr** 42.52 274 P P **19 08 03.4 -1.2**
WB0 IAmb IAmb 19 08 07.3
comp=Z,289nm,0.6s
PATS **Pohnpei** 42.85 327 P P **19 08 09.4 +2.2**
baz=43,SNR=4.9
PATS **Pohnpei** 42.85 327 P P **19 08 06.5 -0.8**
PATS IAmb IAmb 19 08 09.8
comp=Z,804nm,1.2s
PATS **Pohnpei** 42.85 327 P P **19 08 06.6 -0.7**
TAOE **Nuku Hiva Isla** 42.96 68 ⇑P P **19 08 09.9 +1.6**
TAOE **Nuku Hiva Isla** 42.96 68 P P **19 08 09.9 +1.6**
TAOE IAmb IAmb 19 08 12.6
comp=Z,810nm,1.4s
TAOE **Nuku Hiva Isla** 42.96 68 P P **19 08 09.8 +1.6**
DRV **Dumont d'Urvil** 43.16 202 P P **19 08 08.9 -0.1**
MMPI **Merauke** 43.18 292 P P **19 08 11.4 +1.5**
comp=Z,11µmcomp=Z,416nm,0.9s
FORT **Forrest** 44.37 256 P P **19 08 18.2 -0.8**
baz=44,SNR=283
FORT **Forrest** 44.37 256 ⇓P P **19 08 17.9 -1.3**
FORT **Forrest** 44.37 256 P P **19 08 17.5 -1.6**
FORT **Forrest** 44.37 256 P P **19 08 18.3 -0.8**
WRKA **Warakurna** 45.82 264 P P **19 08 29.0 -1.4**
baz=46,SNR=352
WRKA **Warakurna** 45.82 264 ⇓P P **19 08 28.9 -1.5**
WRKA **Warakurna** 45.82 264 P P **19 08 29.2 -1.3**
JAY **Jayapura** 46.65 299 P P **19 08 36.9 -0.1**
comp=Z,240nm,1.0s,baz=162,slow=2.3,SNR=60
JAY ScP **ScP** **19 13 20.6 +1.7**
comp=Z,63nm,0.9s,baz=180,slow=1.9,SNR=5.2
JAY **Jayapura** 46.65 299 P P **19 08 37.3 +0.3**
comp=Z,5µmcomp=Z,6µmcomp=Z,267nm,1.4s
GENI **Genyem** 47.00 299 ⇓P P **19 08 39.6 0.0**
GENI **Genyem** 47.00 299 P P **19 08 39.8 +0.2**
comp=Z,13µmcomp=Z,18µmcomp=Z,956nm,1.4s
GENI **Genyem** 47.00 299 P P **19 08 40.2 +0.6**
KDU **Kakadu** 47.39 282 P P **19 08 41.6 -0.9**
baz=47,SNR=128
KDU **Kakadu** 47.39 282 ⇑P P **19 08 41.5 -0.9**
KDU **Kakadu** 47.39 282 P P **19 08 41.7 -0.9**
SBA **Scott Base** 47.53 184 P P **19 08 45.6 +2.9**
SBA pmax pmax
comp=Z,173nm,1.1s
SBA **Scott Base** 47.53 184 P P **19 08 45.6 +2.9**
VNDA **Vanda** 47.54 185 P P **19 08 43.9 +1.1**
comp=Z,10nm,0.5s,baz=7.0,slow=7.5,SNR=36
VNDA PcP **PcP** **19 10 06.9 +1.3**
comp=Z,12nm,0.7s,baz=27,slow=5.4,SNR=4.0
VNDA ScP **ScP** **19 13 23.1 +1.6**
comp=Z,75nm,0.7s,baz=347,slow=4.6,SNR=26
VNDA **Vanda** 47.54 185 P P **19 08 43.7 +0.9**
VNDA ScP **ScP** **19 13 23.1 +1.6**
JOHN **Johnston Islan** 48.30 13 P P **19 08 50.5 +1.2**
JOHN IAmb IAmb 19 08 53.8
comp=Z,569nm,1.0s
JOHN **Johnston Islan** 48.30 13 P P **19 08 52.0 +2.8**
MTN **Manton Dam** 48.44 280 P P **19 08 49.4 -1.1**
baz=48,SNR=117
MTN **Manton Dam** 48.44 280 ⇑P P **19 08 49.7 -0.8**
MTN **Manton Dam** 48.44 280 P P **19 08 49.7 -0.8**
MTN IAmb IAmb 19 08 53.0
comp=Z,1µm,1.7s
MTN **Manton Dam** 48.44 280 P P **19 08 49.9 -0.6**
SMPI **Sarmi** 48.50 298 P P **19 08 51.7 +0.8**
DRS **Darwin Rock St** 48.85 281 P P **19 08 53.8 +0.3**
KNRA **Kununurra** 49.12 276 P P **19 08 55.0 -0.5**
baz=49,SNR=84
KNRA **Kununurra** 49.12 276 P P **19 08 55.0 -0.5**
KNRA IAmb IAmb 19 08 57.8
comp=Z,442nm,1.4s
KNRA **Kununurra** 49.12 276 P P **19 08 55.6 0.0**
SRPI **Serui, Papua** 50.47 296 P P **19 09 05.9 +0.3**
comp=Z,7µmcomp=Z,5µmcomp=Z,305nm,1.6s
FITZ **Fitzroy Crossi** 50.73 271 P P **19 09 08.4 +0.8**
comp=Z,254nm,0.7s,baz=127,slow=5.4,SNR=198
FITZ pP **pP** **19 10 28.0 +2.5**
comp=Z,64nm,0.8s,baz=118,slow=7.7,SNR=3.2
FITZ ScP **ScP** **19 13 38.8 +2.5**
comp=Z,24nm,0.7s,baz=160,slow=5.5,SNR=3.1
FITZ S **S** **19 15 49.9 -2.8**
comp=Z,13nm,1.0s,baz=252,slow=20,SNR=19
SAUI **Saumlaki** 50.84 286 ⇓P P **19 09 08.6 +0.2**
SAUI **Saumlaki** 50.84 286 P P **19 09 10.2 +1.8**
comp=Z,13µmcomp=Z,20µmcomp=Z,1µm,1.4s
SAUI **Saumlaki** 50.84 286 P P **19 09 09.0 +0.7**
SAUI **Saumlaki** 50.84 286 P P **19 09 10.5 +2.1**
BAKI **Biak** 51.00 297 P P **19 09 09.4 -0.1**
WAKE **Wake Island** 51.45 344 ⇑P P **19 09 12.8 +0.1**
WAKE **Wake Island** 51.45 344 P P **19 09 12.4 -0.1**
WAKE **Wake Island** 51.45 344 P P **19 09 12.7 +0.1**
CCD **Concordia, Ant** 52.12 196 P P **19 09 16.2 -1.1**
CCD pP PcP 19 10 07.7 -15
RKGY **Rocky Gully** 52.50 248 P P **19 09 20.7 +0.4**
baz=52,SNR=16
RKGY **Rocky Gully** 52.50 248 P P **19 09 20.6 +0.4**
KLBR **Kellerberrin** 52.68 252 P P **19 09 20.3 -1.3**
baz=53,SNR=130
KLBR **Kellerberrin** 52.68 252 P P **19 09 20.7 -0.9**
NWAO **Narrogin (SRO)** 52.73 250 P P **19 09 21.4 -0.6**
NWAO pmax pmax
comp=Z,282nm,1.3s
NWAO **Narrogin (SRO)** 52.73 250 P P **19 09 21.4 -0.6**
NWAO IAmb IAmb 19 09 23.6
comp=Z,282nm,1.2s
NWAO **Narrogin (SRO)** 52.73 250 P P **19 09 21.2 -0.8**
FAKI **Fak Fak** 52.96 292 ⇑P P **19 09 22.9 -1.0**
FAKI **Fak Fak** 52.96 292 P P **19 09 23.5 -0.3**
comp=Z,10µmcomp=Z,10µmcomp=Z,598nm,1.3s
FAKI **Fak Fak** 52.96 292 P P **19 09 22.9 -1.0**
FAKI **Fak Fak** 52.96 292 P P **19 09 23.2 -0.6**
MEEK **Meekatharra** 53.51 258 P P **19 09 26.9 -0.8**
baz=53,SNR=127

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MEEK | Meekatharra | 53.51 | 258 | P | | P | 19 09 26.7 | -1.0 |
| BLDU | Ballidu | 53.82 | 253 | P | | P | 19 09 28.4 | -1.5 |
| | baz=54,SNR=105 | | | | | | | |
| BLDU | Ballidu | 53.82 | 253 | P | | P | 19 09 28.5 | -1.3 |
| MUN | Mundaring | 53.83 | 251 | P | | P | 19 09 28.9 | -1.0 |
| | baz=54,SNR=56 | | | | | | | |
| MUN | Mundaring | 53.83 | 251 | P | | P | 19 09 29.1 | -0.8 |
| BNDI | Bandanaira | 53.92 | 289 | ⇓P | | P | 19 09 29.8 | -0.9 |
| BNDI | Bandanaira | 53.92 | 289 | P | | P | 19 09 29.9 | -0.8 |
| CASY | Casey | 54.03 | 208 | ⇓P | | P | 19 09 30.1 | -0.6 |
| CASY | Casey | 54.03 | 208 | P | | P | 19 09 29.9 | -0.8 |
| CASY | | | | IAmb | | IAmb | 19 09 32.6 | |
| | comp=Z,343nm,0.8s | | | | | | | |
| CASY | Casey | 54.03 | 208 | P | | P | 19 09 30.1 | -0.6 |
| MTKN | Mount Kenneth | 54.20 | 251 | P | | P | 19 09 34.5 | +2.0 |
| PSA00 | Pilbara Seismi | 54.30 | 264 | P | | P | 19 09 32.5 | -0.9 |
| PSA00 | | | | IAmb | | IAmb | 19 11 02.4 | |
| | comp=Z,236nm,1.1s | | | | | | | |
| PSA00 | Pilbara Seismi | 54.30 | 264 | P | | P | 19 09 32.1 | -1.3 |
| PSA00 | | | | IAmb | | IAmb | 19 11 02.4 | |
| | comp=Z,164nm,1.2s | | | | | | | |
| PSA00 | Pilbara Seismi | 54.30 | 264 | P | | P | 19 09 32.3 | -1.1 |
| MBWA | Marble Bar | 54.56 | 265 | P | | P | 19 09 34.0 | -1.3 |
| MBWA | Marble Bar | 54.56 | 265 | P | | P | 19 09 34.3 | -0.9 |
| MBWA | Marble Bar | 54.56 | 265 | P | | P | 19 09 34.4 | -0.9 |
| MBWA | | | | pP | | PcP | 19 10 40.1 | +7.2 |
| MORW | Morawa | 54.86 | 254 | P | | P | 19 09 35.7 | -1.5 |
| | baz=55,SNR=57 | | | | | | | |
| MORW | Morawa | 54.86 | 254 | ⇑P | | P | 19 09 35.8 | -1.5 |
| MORW | Morawa | 54.86 | 254 | P | | P | 19 09 35.2 | -2.0 |
| MORW | | | | IAmb | | IAmb | 19 09 39.0 | |
| | comp=Z,339nm,1.1s | | | | | | | |
| MORW | Morawa | 54.86 | 254 | P | | P | 19 09 36.4 | -0.8 |
| SWI | Sorong | 54.99 | 293 | P | | P | 19 09 38.3 | 0.0 |
| | comp=Z,12µmcomp=Z,13µmcomp=Z,656nm,1.4s | | | | | | | |
| KHLU | Kahalu`u | 55.16 | 28 | P | | P | 19 09 40.7 | +1.3 |
| KHLU | | | | IAmb | | IAmb | 19 09 46.1 | |
| | comp=Z,125nm,0.7s | | | | | | | |
| MWH | Moku'aweowe | 55.18 | 28 | P | | P | 19 09 40.4 | +0.4 |
| MLOA | Mauna Loa Obse | 55.23 | 28 | P | | P | 19 09 41.6 | +1.3 |
| PUH | Pauahi | 55.23 | 29 | P | | P | 19 09 40.4 | +0.5 |
| PUH | | | | IAmb | | IAmb | 19 09 44.3 | |
| | comp=Z,310nm,0.8s | | | | | | | |
| HUH | Hualalai | 55.26 | 28 | P | | P | 19 09 41.7 | +1.4 |
| MLH | Mauna Loa | 55.27 | 28 | P | | P | 19 09 41.8 | +1.4 |
| MLH | | | | IAmb | | IAmb | 19 09 44.7 | |
| | comp=Z,278nm,0.8s | | | | | | | |
| HMH | Humu'ula Sheep | 55.33 | 28 | P | | P | 19 09 42.5 | +1.6 |
| HMH | | | | IAmb | | IAmb | 19 09 45.5 | |
| | comp=Z,370nm,0.8s | | | | | | | |
| MSAI | Masohi | 55.39 | 289 | P | | P | 19 09 41.4 | +0.3 |
| | comp=Z,646nmcomp=Z,57nm,1.0s | | | | | | | |
| POHA | Pohakuloa | 55.45 | 28 | ⇑P | | P | 19 09 43.2 | +1.5 |
| POHA | Pohakuloa | 55.45 | 28 | P | | P | 19 09 42.9 | +1.3 |
| POHA | | | | IAmb | | IAmb | 19 09 45.2 | |
| | comp=Z,115nm,0.7s | | | | | | | |
| POHA | Pohakuloa | 55.45 | 28 | P | | P | 19 09 44.2 | +2.6 |
| HPAH | Hawaii Prepara | 55.63 | 28 | P | | P | 19 09 43.7 | +1.0 |
| HPAH | | | | IAmb | | IAmb | 19 09 46.6 | |
| | comp=Z,301nm,0.7s | | | | | | | |
| GUMO | Guam | 55.64 | 317 | P | | P | 19 09 42.7 | 0.0 |
| | comp=Z,665nm,0.8s,baz=186,slow=9.8,SNR=16 | | | | | | | |
| GUMO | Guam | 55.64 | 317 | ⇑P | | P | 19 09 42.3 | -0.5 |
| GUMO | Guam | 55.64 | 317 | P | | P | 19 09 41.9 | -0.8 |
| GUMO | Guam | 55.64 | 317 | P | | P | 19 09 42.3 | -0.5 |
| GUMO | Guam | 55.64 | 317 | P | | P | 19 09 42.1 | -0.7 |
| AAI | Ambon | 55.79 | 288 | P | | P | 19 09 43.8 | -0.2 |
| | comp=Z,7µmcomp=Z,6µmcomp=Z,314nm,1.5s | | | | | | | |
| SOEI | Soe | 55.81 | 280 | ⇓P | | P | 19 09 44.7 | +0.5 |
| SOEI | Soe | 55.81 | 280 | P | | P | 19 09 46.0 | +1.8 |
| | comp=Z,11µmcomp=Z,3µmcomp=Z,819nm,1.1s | | | | | | | |
| SOEI | Soe | 55.81 | 280 | P | | P | 19 09 45.4 | +1.2 |
| SOEI | Soe | 55.81 | 280 | P | | P | 19 09 45.6 | +1.4 |
| HON | Honolulu | 55.92 | 25 | P | | P | 19 09 46.1 | +1.5 |
| HON | | | | pmax | | pmax | | |
| | comp=Z,162nm,0.8s | | | | | | | |
| HON | Honolulu | 55.92 | 25 | P | | P | 19 09 46.1 | +1.5 |
| HON | | | | IAmb | | IAmb | 19 09 48.2 | |
| | comp=Z,162nm,0.8s | | | | | | | |
| KEKH | Kekaha | 55.94 | 23 | P | | P | 19 09 45.8 | +1.1 |
| KEKH | | | | IAmb | | IAmb | 19 09 48.2 | |
| | comp=Z,189nm,0.8s | | | | | | | |
| KIP | Kipapa | 56.01 | 25 | ⇑*e*P | | P | 19 09 46.9 | +1.7 |
| KIP | | | | pmax | | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | | |
| BATI | Baumata | 56.09 | 279 | P | | P | 19 09 47.6 | +1.5 |
| | comp=Z,5µmcomp=Z,5µmcomp=Z,278nm,1.4s | | | | | | | |
| MMRI | Maumere | 58.10 | 279 | ⇓P | | P | 19 09 59.4 | -0.5 |
| MMRI | Maumere | 58.10 | 279 | P | | P | 19 10 00.6 | +0.6 |
| | comp=Z,9µmcomp=Z,16µmcomp=Z,1µm,1.3s | | | | | | | |
| MMRI | Maumere | 58.10 | 279 | P | | P | 19 09 59.8 | -0.2 |
| MMRI | Maumere | 58.10 | 279 | P | | P | 19 10 00.4 | +0.4 |
| LBMI | Labuha | 58.12 | 291 | P | | P | 19 10 00.7 | +0.6 |
| | comp=Z,5µmcomp=Z,4µmcomp=Z,234nm,1.1s | | | | | | | |
| SANI | Sanana | 58.53 | 288 | ⇓P | | P | 19 10 01.6 | -1.3 |
| SANI | Sanana | 58.53 | 288 | P | | P | 19 10 01.9 | -1.0 |
| SANI | Sanana | 58.53 | 288 | P | | P | 19 10 02.1 | -0.8 |
| GIRL | Giralia | 58.67 | 261 | P | | P | 19 10 05.3 | +1.6 |
| | baz=59,SNR=36 | | | | | | | |
| GIRL | Giralia | 58.67 | 261 | ⇓P | | P | 19 10 04.2 | +0.4 |
| GIRL | Giralia | 58.67 | 261 | P | | P | 19 10 04.8 | +1.0 |
| GIRL | Giralia | 58.67 | 261 | P | | P | 19 10 04.5 | +0.7 |
| BASI | Baing, Sumba | 58.72 | 277 | P | | P | 19 10 05.7 | +1.5 |
| | comp=Z,5µmcomp=Z,11µmcomp=Z,734nm,0.9s | | | | | | | |
| MIDW | Midway | 58.73 | 3 | P | | P | 19 10 04.3 | +0.4 |
| TNTI | Ternate | 59.07 | 292 | ⇓P | | P | 19 10 05.5 | -1.1 |
| TNTI | Ternate | 59.07 | 292 | P | | P | 19 10 06.5 | 0.0 |
| | comp=Z,4µmcomp=Z,5µmcomp=Z,287nm,1.3s | | | | | | | |
| TNTI | Ternate | 59.07 | 292 | P | | P | 19 10 05.3 | -1.2 |
| TNTI | | | | IAmb | | IAmb | 19 10 08.8 | |
| | comp=Z,352nm,1.2s | | | | | | | |
| TNTI | Ternate | 59.07 | 292 | P | | P | 19 10 07.1 | +0.6 |
| QSPA | South Pole Qui | 59.31 | 180 | P | | P | 19 10 08.7 | +1.1 |
| | comp=Z,440nm,0.8s,baz=24,slow=1.6,SNR=358 | | | | | | | |
| QSPA | | | | pP | | pP | 19 11 30.6 | +1.6 |
| | comp=Z,96nm,0.8s,baz=357,slow=2.4,SNR=2.6 | | | | | | | |
| QSPA | | | | S | | S | 19 17 43.7 | -0.7 |
| | comp=Z,11nm,1.0s,baz=26,slow=1.4,SNR=10 | | | | | | | |
| QSPA | | | | ScS | | ScS | 19 19 18.5 | +1.4 |
| | comp=Z,23nm,1.1s,baz=222,slow=21,SNR=9.0 | | | | | | | |
| QSPA | South Pole Qui | 59.31 | 180 | IAmb | | IAmb | 19 10 12.1 | |
| | comp=Z,469nm,0.8s | | | | | | | |
| QSPA | South Pole Qui | 59.31 | 180 | P | | P | 19 10 09.0 | +1.4 |
| QSPA | | | | pP | | pP | 19 11 29.6 | +0.6 |
| BBSI | Bau Bau | 59.46 | 283 | P | | P | 19 10 10.2 | +1.0 |
| | comp=Z,458nmcomp=Z,46nm,1.1s | | | | | | | |
| WBSI | Waikabubak, Su | 60.08 | 277 | P | | P | 19 10 13.8 | +0.8 |
| | comp=Z,8µmcomp=Z,571nm,1.5s | | | | | | | |
| BSSI | Bau Bau, Buton | 60.87 | 281 | P | | P | 19 10 18.2 | -0.5 |
| | comp=Z,4µmcomp=Z,3µmcomp=Z,149nm,1.4s | | | | | | | |
| RPN | Rapa Nui | 60.90 | 106 | P | | P | 19 10 21.1 | +2.4 |
| | comp=Z,119nm,0.7s,baz=328,slow=8.1,SNR=4.5 | | | | | | | |
| BKSI | Bulukumba | 61.61 | 281 | P | | P | 19 10 23.6 | 0.0 |
| KMSI | Cibinong | 61.68 | 289 | P | | P | 19 10 24.4 | +0.4 |
| KAPI | Kappang | 62.08 | 282 | P | | P | 19 10 26.1 | -0.6 |
| KAPI | | | | pmax | | pmax | | |
| | comp=Z,709nm,1.5s | | | | | | | |
| KAPI | Kappang | 62.08 | 282 | ⇓P | | P | 19 10 26.6 | -0.1 |
| KAPI | Kappang | 62.08 | 282 | P | | P | 19 10 26.1 | -0.6 |
| KAPI | Kappang | 62.08 | 282 | P | | P | 19 10 27.7 | +1.0 |
| KAPI | Kappang | 62.08 | 282 | P | | P | 19 10 26.8 | +0.1 |
| BNSI | Bone | 62.11 | 282 | P | | P | 19 10 27.6 | +0.7 |
| | comp=Z,9µmcomp=Z,585nm,1.4s | | | | | | | |
| GTOI | Gorontalo | 62.50 | 289 | P | | P | 19 10 30.1 | +0.7 |
| | comp=Z,4µmcomp=Z,2µmcomp=Z,158nm,1.1s | | | | | | | |
| SPSI | Sidrap Palu | 62.63 | 283 | P | | P | 19 10 29.4 | -0.9 |
| | comp=Z,6µmcomp=Z,4µmcomp=Z,290nm,1.2s | | | | | | | |
| APSI | Ampana | 62.74 | 287 | P | | P | 19 10 32.1 | +1.1 |
| | comp=Z,4µmcomp=Z,6µmcomp=Z,392nm,1.5s | | | | | | | |
| TTSI | Tana Toraja | 63.08 | 283 | P | | P | 19 10 32.8 | -0.4 |
| | comp=Z,5µmcomp=Z,5µmcomp=Z,358nm,1.3s | | | | | | | |
| MRSI | Marisa | 63.28 | 288 | P | | P | 19 10 33.4 | -1.1 |
| | comp=Z,6µmcomp=Z,3µmcomp=Z,150nm,1.5s | | | | | | | |
| IGBI | Denpasar | 64.06 | 275 | P | | P | 19 10 40.5 | +1.0 |
| | comp=Z,5µmcomp=Z,14µmcomp=Z,1µm,1.0s | | | | | | | |
| DNP | Denpasar | 64.07 | 275 | P | | P | 19 10 41.3 | +1.7 |
| | comp=Z,23µmcomp=Z,1µm,1.3s | | | | | | | |
| DAV | Davao City (W) | 64.33 | 296 | P | | P | 19 10 41.1 | -0.1 |
| DAV | Davao City (W) | 64.33 | 296 | P | | P | 19 10 42.6 | +1.4 |
| | comp=Z,924nm,0.9s | | | | | | | |
| SRBI | Singaraja | 64.36 | 276 | P | | P | 19 10 41.6 | +0.1 |
| TOLI2 | Tolitoli | 64.59 | 288 | P | | P | 19 10 41.1 | -1.8 |
| TOLI2 | | | | IAmb | | IAmb | 19 10 45.6 | |
| | comp=Z,428nm,1.5s | | | | | | | |
| TOLI2 | Tolitoli | 64.59 | 288 | P | | P | 19 10 42.5 | -0.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MPSI | Mapaga | 64.88 | 287 | P | | P | 19 10 43.9 | -0.9 |
| JAGI | Jajag, Banyuwa | 65.08 | 275 | ⇓P | | P | 19 10 44.8 | -1.3 |
| JAGI | Jajag, Banyuwa | 65.08 | 275 | P | | P | 19 10 45.3 | -0.8 |
| JAGI | Jajag, Banyuwa | 65.08 | 275 | P | | P | 19 10 44.5 | -1.6 |
| JAGI | Jajag, Banyuwa | 65.08 | 275 | P | | P | 19 10 45.8 | -0.3 |
| ABJI | Asem Bagus | 65.35 | 276 | P | | P | 19 10 48.2 | +0.4 |
| GMJI | Gumukmas | 65.79 | 275 | P | | P | 19 10 50.2 | -0.3 |
| BLJI | Banyuglugur | 65.92 | 275 | P | | P | 19 10 51.2 | -0.2 |
| KMMI | Kalianget | 65.95 | 276 | P | | P | 19 10 51.7 | +0.1 |
| KBKI | Kotabaru | 66.02 | 281 | P | | P | 19 10 52.3 | +0.3 |
| SMKI | Samarinda | 66.68 | 284 | P | | P | 19 10 59.1 | +2.9 |
| | comp=Z,9µmcomp=Z,8µmcomp=Z,663nm,1.2s | | | | | | | |
| BBKI | Banjar Baru | 67.05 | 280 | P | | P | 19 10 58.9 | +0.4 |
| PCJI | Pacitan | 67.77 | 274 | P | | P | 19 11 03.0 | +0.1 |
| JCJ | Chichijima | 68.02 | 324 | P | | P | 19 11 02.1 | -2.0 |
| JCJ | Chichijima | 68.02 | 324 | P | | P | 19 11 03.2 | -0.9 |
| MTKI | Muara Teweh, K | 68.35 | 282 | P | | P | 19 11 06.5 | 0.0 |
| UGM | Wanagama | 68.47 | 274 | P | | P | 19 11 08.0 | +0.7 |
| UGM | Wanagama | 68.47 | 274 | P | | P | 19 11 05.8 | -1.5 |
| UGM | Wanagama | 68.47 | 274 | P | | P | 19 11 07.3 | 0.0 |
| YOGI | Yogyakarta | 68.72 | 274 | P | | P | 19 11 09.0 | +0.3 |
| MYLDM | Lahad Datu | 68.79 | 290 | ⇓P | | P | 19 11 10.8 | +1.7 |
| MYLDM | Lahad Datu | 68.79 | 290 | P | | P | 19 11 07.9 | -1.2 |
| UWJI | Ujung Watu | 68.85 | 275 | P | | P | 19 11 10.8 | +1.2 |
| | comp=Z,12µmcomp=Z,1µm,1.3s | | | | | | | |
| SMRI | Semarang | 68.97 | 274 | ⇓P | | P | 19 11 10.4 | +0.1 |
| SMRI | Semarang | 68.97 | 274 | P | | P | 19 11 12.3 | +2.0 |
| | comp=Z,10µmcomp=Z,505nm,1.1s | | | | | | | |
| SMRI | Semarang | 68.97 | 274 | P | | P | 19 11 08.4 | -1.9 |
| SMRI | Semarang | 68.97 | 274 | P | | P | 19 11 11.5 | +1.2 |
| SMAI | San Martin Ant | 69.67 | 158 | P | | P | 19 11 15.8 | +2.2 |
| PBKI | Pangkalan Bun | 70.14 | 279 | P | | P | 19 11 17.7 | +0.3 |
| CMJI | Cimerak | 70.32 | 273 | P | | P | 19 11 17.8 | -0.6 |
| KKM | Kota Kinabalu | 71.14 | 289 | ⇑P | | P | 19 11 23.0 | -0.5 |
| KKM | | | | ⇑P | | P | 19 11 23.1 | -0.3 |
| KKM | Kota Kinabalu | 71.14 | 289 | P | | P | 19 11 22.9 | -0.5 |
| KKM | Kota Kinabalu | 71.14 | 289 | P | | P | 19 11 23.3 | -0.1 |
| MAW | Mawson | 71.36 | 201 | P | | P | 19 11 23.9 | +0.2 |
| | comp=Z,28nm,0.5s,baz=142,slow=6.0,SNR=19 | | | | | | | |
| MAW | Mawson | 71.36 | 201 | P | | P | 19 11 24.4 | +0.7 |
| | baz=71,SNR=15 | | | | | | | |
| MAW | Mawson | 71.36 | 201 | P | | P | 19 11 24.2 | +0.5 |
| MAW | | | | pmax | | pmax | | |
| | comp=Z,37nm,1.3s | | | | | | | |
| MAW | Mawson | 71.36 | 201 | P | | P | 19 11 24.2 | +0.5 |
| XMI | Christmas Isla | 71.39 | 269 | ⇑P | | P | 19 11 24.6 | -0.2 |
| XMI | Christmas Isla | 71.39 | 269 | P | | P | 19 11 24.5 | -0.3 |
| XMIS | Christmas Isla | 71.41 | 269 | P | | P | 19 11 24.1 | -0.9 |
| XMIS | Christmas Isla | 71.41 | 269 | P | | P | 19 11 24.7 | -0.2 |
| LEM | Lembang | 71.51 | 273 | P | | P | 19 11 25.5 | -0.2 |
| | comp=Z,508nm,0.9s,baz=99,slow=4.8,SNR=69 | | | | | | | |
| CNJI | Cibinong | 71.69 | 272 | P | | P | 19 11 25.9 | -0.6 |
| STKI | Sintang | 71.77 | 281 | P | | P | 19 11 27.2 | +0.2 |
| SKJI | Sukabumi | 72.33 | 272 | P | | P | 19 11 30.6 | +0.3 |
| CBJI | Citeko | 72.37 | 273 | P | | P | 19 11 29.3 | -1.2 |
| DBJI | Dramaga | 72.39 | 273 | P | | P | 19 11 30.2 | -0.5 |
| SBUM | Sibu | 72.43 | 284 | ⇓P | | P | 19 11 30.8 | -0.1 |
| SBUM | | | | ⇓P | | P | 19 11 30.8 | -0.1 |
| SBUM | Sibu | 72.43 | 284 | P | | P | 19 11 30.2 | -0.6 |
| SBUM | | | | IAmb | | IAmb | 19 11 34.0 | |
| | comp=Z,361nm,1.4s | | | | | | | |
| TNG | Tangerang | 72.67 | 273 | P | | P | 19 11 36.6 | +4.3 |
| | comp=Z,714nm,1.4s | | | | | | | |
| TNG | | | | P | | P | 19 11 34.3 | +2.0 |
| | comp=Z,8µmcomp=Z,1µm,1.4s | | | | | | | |
| CGJI | Cibinong | 73.27 | 272 | P | | P | 19 11 34.6 | -1.2 |
| KSM | Kuching | 73.50 | 282 | ⇓P | | P | 19 11 36.5 | -0.6 |
| KSM | Kuching | 73.50 | 282 | P | | P | 19 11 35.2 | -1.9 |
| KSM | Kuching | 73.50 | 282 | P | | P | 19 11 37.1 | 0.0 |
| JHJ2 | Mitsune | 74.11 | 326 | ⇑P | | P | 19 11 39.9 | -0.2 |
| JHJ2 | | | | ⇓P | | P | 19 11 40.2 | +0.2 |
| JHJ2 | Mitsune | 74.11 | 326 | P | | P | 19 11 39.5 | -0.5 |
| JHJ2 | Mitsune | 74.11 | 326 | P | | P | 19 11 41.0 | +0.9 |
| BLSI | Bandar Lampung | 74.28 | 273 | P | | P | 19 11 40.1 | -1.5 |
| KASI | Kota Agung | 74.84 | 273 | P | | P | 19 11 43.9 | -0.9 |
| KLI | Kotabumi | 74.86 | 273 | P | | P | 19 11 43.3 | -1.6 |
| KLSI | | 75.06 | 273 | P | | P | 19 11 44.5 | -1.5 |
| PPBI | Pangkal Pinang | 75.14 | 276 | P | | P | 19 11 47.0 | +0.5 |
| LWLI | Liwa | 75.47 | 273 | P | | P | 19 11 47.8 | -0.7 |
| MDSI | Maura Dua | 75.64 | 273 | P | | P | 19 11 47.3 | -1.9 |
| JOW | Kunigami | 75.74 | 314 | ⇑P | | P | 19 11 49.9 | +0.4 |
| JOW | Kunigami | 75.74 | 314 | P | | P | 19 11 49.7 | +0.2 |
| JOW | Kunigami | 75.74 | 314 | P | | P | 19 11 51.0 | +1.5 |
| ESPZ | Base Esperanza | 75.85 | 157 | P | | P | 19 11 50.4 | +0.9 |
| ESPZ | | | | IAmb | | IAmb | 19 11 53.2 | |
| | comp=Z,192nm,0.9s | | | | | | | |
| PMBI | Palembang | 75.92 | 275 | P | | P | 19 11 52.1 | +1.3 |
| PMBI | Palembang | 75.92 | 275 | P | | P | 19 11 49.9 | -1.0 |
| PMBI | Palembang | 75.92 | 275 | P | | P | 19 11 52.7 | +1.9 |
| MG04 | Isla Riesco | 76.05 | 144 | P | | P | 19 11 49.4 | -1.5 |
| GO10 | Punta Arenas | 76.15 | 144 | ⇓P | | P | 19 11 54.1 | +2.6 |
| GO10 | | | | ⇑P | | P | 19 11 54.5 | +3.0 |
| GO10 | Punta Arenas | 76.15 | 144 | P | | P | 19 11 53.3 | +1.7 |
| JSG | Sagara | 76.16 | 325 | ⇑P | | P | 19 11 52.4 | +0.7 |
| JSG | | | | ⇑P | | P | 19 11 52.4 | +0.7 |
| JSG | Sagara | 76.16 | 325 | P | | P | 19 11 51.6 | -0.1 |
| MG05 | Puerto Natales | 76.20 | 142 | P | | P | 19 11 51.2 | -0.5 |
| MG05 | | | | IAmb | | IAmb | 19 11 55.2 | |
| | comp=Z,185nm,0.8s | | | | | | | |
| SYO | Syowa Base | 76.35 | 194 | ⇓*e*P | | P | 19 11 51.0 | -1.3 |
| SYO | Syowa Base | 76.35 | 194 | ⇓*e*PcP | | PcP | 19 12 02.0 | -0.2 |
| SYO | Syowa Base | 76.35 | 194 | ⇑*e*pP | | pP | 19 13 19.8 | +1.4 |
| JYT | Yasato | 76.48 | 328 | ⇑P | | P | 19 11 53.2 | -0.1 |
| JYT | | | | ⇑P | | P | 19 11 53.5 | +0.2 |
| JYT | Yasato | 76.48 | 328 | P | | P | 19 11 53.5 | +0.2 |
| USHA | Ushuaia | 76.50 | 146 | P | | P | 19 11 54.0 | +0.7 |
| | comp=Z,41nm,0.9s,baz=235,slow=8.6,SNR=4.3 | | | | | | | |
| MNAI | Manna | 76.75 | 273 | P | | P | 19 11 54.1 | -1.4 |
| MG01 | Puerto William | 76.82 | 147 | P | | P | 19 11 58.2 | +3.1 |
| MG01 | | | | IAmb | | IAmb | 19 11 59.3 | |
| | comp=Z,311nm,1.2s | | | | | | | |
| DSPA | Despedida | 77.08 | 146 | P | | P | 19 11 57.7 | +1.1 |
| INU | Inuyama | 77.28 | 325 | ⇓P | | P | 19 11 57.6 | -0.2 |
| INU | Inuyama | 77.28 | 325 | P | | P | 19 11 57.4 | -0.4 |
| INU | | | | IAmb | | IAmb | 19 12 01.6 | |
| | comp=Z,275nm,1.0s | | | | | | | |
| INU | Inuyama | 77.28 | 325 | P | | P | 19 11 58.0 | +0.2 |
| INU | Inuyama | 77.28 | 325 | P | | P | 19 11 57.4 | -0.4 |
| MG02 | Cerro Sombrero | 77.28 | 144 | P | | P | 19 11 58.7 | +1.0 |
| JGF | Kuroka | 77.31 | 325 | ⇑P | | P | 19 11 57.8 | -0.3 |
| JGF | | | | ⇑P | | P | 19 11 57.9 | -0.3 |
| JGF | Kuroka | 77.31 | 325 | P | | P | 19 11 58.2 | +0.1 |
| JGF | | | | IAmb | | IAmb | 19 12 00.9 | |
| | comp=Z,184nm,1.0s | | | | | | | |
| DSRI | Dabo | 77.34 | 277 | P | | P | 19 11 59.2 | +0.5 |
| TROLL | Troll, Antarti | 77.46 | 181 | P | | P | 19 11 58.6 | 0.0 |
| TROLL | Troll, Antarti | 77.46 | 181 | pP | | pP | 19 13 27.8 | +2.8 |
| YOJ | Yonaguni jima | 77.52 | 308 | P | | P | 19 11 58.3 | -1.1 |
| YOJ | | | | pmax | | pmax | | |
| | comp=Z,2µm,1.7s | | | | | | | |
| YOJ | Yonaguni jima | 77.52 | 308 | ⇑P | | P | 19 12 00.1 | +0.8 |
| YOJ | Yonaguni jima | 77.52 | 308 | P | | P | 19 11 58.3 | -1.1 |
| YOJ | Yonaguni jima | 77.52 | 308 | P | | P | 19 12 00.7 | +1.3 |
| | comp=Z,618nm,1.4s | | | | | | | |
| JMBI | JAMBI | 77.55 | 276 | P | | P | 19 12 02.0 | +2.2 |
| | comp=Z,3µmcomp=Z,183nm,1.0s | | | | | | | |
| JMM | Marumori | 77.56 | 329 | ⇑P | | P | 19 11 59.4 | +0.2 |
| JMM | | | | ⇑P | | P | 19 11 59.5 | +0.2 |
| JMM | Marumori | 77.56 | 329 | P | | P | 19 11 58.9 | -0.4 |
| JMN | Monobe | 77.61 | 322 | ⇑P | | P | 19 12 00.3 | +0.6 |
| JMN | | | | ⇑P | | P | 19 12 00.3 | +0.6 |
| JMN | Monobe | 77.61 | 322 | P | | P | 19 11 60.0 | +0.2 |
| MJAR | Matsushiro Arr | 77.66 | 327 | P | | P | 19 11 59.2 | -0.7 |
| | comp=Z,135nm,0.9s,baz=159,slow=5.0,SNR=128 | | | | | | | |
| MJAR | Matsushiro Arr | 77.66 | 327 | P | | P | 19 11 59.4 | -0.5 |
| MJAR | | | | pmax | | pmax | | |
| | comp=Z,1µm,2.0s | | | | | | | |
| MJAR | Matsushiro Arr | 77.66 | 327 | P | | P | 19 11 59.4 | -0.5 |
| MAJO | Matsushiro | 77.66 | 327 | *d*iP | | P | 19 11 59.2 | -0.7 |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,580nm,2.0s | | | | | | | |
| MAJO | Matsushiro | 77.66 | 327 | ⇑P | | P | 19 11 59.4 | -0.5 |
| MAJO | Matsushiro | 77.66 | 327 | P | | P | 19 11 59.0 | -0.9 |
| MAJO | | | | IAmb | | IAmb | 19 12 02.0 | |
| | comp=Z,277nm,1.1s | | | | | | | |
| MAJO | Matsushiro | 77.66 | 327 | P | | P | 19 12 00.5 | +0.6 |
| MAJO | Matsushiro | 77.66 | 327 | P | | P | 19 11 59.7 | -0.2 |
| MAT | Matsushiro | 77.66 | 327 | P | | P | 19 11 59.2 | -0.7 |
| MAT | | | | *e*S | | S | 19 21 18.2 | -0.5 |
| MJB9 | Matsu-Tunnel | 77.66 | 327 | P | | P | 19 11 59.7 | -0.2 |
| MJB9 | | | | IAmb | | IAmb | 19 12 01.9 | |
| | comp=Z,261nm,1.0s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TWG | Pinlang | 77.76 | 306 | P | | P | 19 11 57.6 | -3.1 |
| TWG | | | | IAmb | | IAmb | 19 12 01.6 | |
| | comp=Z,214nm,0.8s | | | | | | | |
| SNAA | Sanae | 77.80 | 179 | P | | P | 19 12 00.0 | -0.3 |
| SNAA | Sanae | 77.80 | 179 | pP | | pP | 19 13 29.6 | +2.6 |
| SNAA | Sanae | 77.80 | 179 | *de*P | | P | 19 11 59.8 | -0.5 |
| SNAA | | | | *i* *PP | | pP | 19 13 28.1 | +1.2 |
| SNAA | Sanae | 77.80 | 179 | ⇑P | | P | 19 11 59.7 | -0.5 |
| SNAA | Sanae | 77.80 | 179 | P | | P | 19 11 59.2 | -1.1 |
| SNAA | | | | IAmb | | IAmb | 19 13 32.0 | |
| | comp=Z,284nm,1.3s | | | | | | | |
| JSU | Suzuyama | 77.83 | 318 | ⇓P | | P | 19 12 00.8 | -0.2 |
| JSU | | | | ⇑P | | P | 19 12 01.1 | +0.1 |
| JSU | Suzuyama | 77.83 | 318 | P | | P | 19 12 00.4 | -0.6 |
| GO08 | Villa O'Higgin | 77.90 | 139 | P | | P | 19 12 01.1 | -0.1 |
| GO08 | | | | IAmb | | IAmb | 19 12 05.1 | |
| | comp=Z,94nm,0.9s | | | | | | | |
| MASI | Maura Aman, Be | 77.98 | 274 | P | | P | 19 12 01.1 | -1.2 |
| YULB | Yu-li | 77.98 | 307 | P | | P | 19 11 59.8 | -2.2 |
| YULB | | | | IAmb | | IAmb | 19 12 02.9 | |
| | comp=Z,149nm,0.9s | | | | | | | |
| VNA3 | Neumayer Olymp | 78.01 | 177 | P | | P | 19 12 01.1 | -0.3 |
| VNA3 | Neumayer Olymp | 78.01 | 177 | pP | | pP | 19 13 33.1 | +5.1 |
| TPRI | Tanjung Pinang | 78.11 | 278 | P | | P | 19 12 03.6 | +0.7 |
| COCO | West Island | 78.15 | 263 | P | | P | 19 12 03.4 | +0.3 |
| COCO | | | | pmax | | pmax | | |
| | comp=Z,699nm,1.4s | | | | | | | |
| COCO | West Island | 78.15 | 263 | P | | P | 19 12 03.4 | +0.3 |
| NACB | Ninganchiao | 78.29 | 307 | P | | P | 19 12 02.7 | -0.9 |
| NVL | N'lazarevskaya | 78.38 | 184 | *e*P | | P | 19 12 10.4 | +7.0 |
| NVL | | | | pmax | | pmax | | |
| | comp=Z,98nm,0.7s | | | | | | | |
| TPUB | Ta-pu | 78.38 | 306 | P | | P | 19 12 02.5 | -1.7 |
| TPUB | Ta-pu | 78.38 | 306 | P | | P | 19 12 02.8 | -1.4 |
| VNA2 | Neumayer--Watz | 78.42 | 177 | P | | P | 19 12 03.7 | 0.0 |
| | baz=191,slow=4.6 | | | | | | | |
| VNA2 | Neumayer--Watz | 78.42 | 177 | pP | | pP | 19 13 33.4 | +3.0 |
| | baz=177,slow=6.0 | | | | | | | |
| SSLB | Suanglung | 78.48 | 307 | P | | P | 19 12 02.6 | -2.1 |
| SSLB | Suanglung | 78.48 | 307 | P | | P | 19 12 03.5 | -1.2 |
| VNA1 | Neumayer--Stat | 78.66 | 177 | P | | P | 19 12 05.1 | +0.2 |
| VNA1 | Neumayer--Stat | 78.66 | 177 | pP | | pP | 19 13 34.8 | +3.1 |
| YHNB | Yeheng | 78.77 | 308 | P | | P | 19 12 05.5 | -0.7 |
| YHNB | | | | IAmb | | IAmb | 19 12 09.3 | |
| | comp=Z,402nm,1.6s | | | | | | | |
| YHNB | Yeheng | 78.77 | 308 | P | | P | 19 12 06.5 | +0.2 |
| JNU | Nakatsue | 78.79 | 320 | P | | P | 19 12 05.9 | -0.3 |
| | comp=Z,352nm,0.8s,baz=98,slow=4.1,SNR=81 | | | | | | | |
| JNU | Nakatsue | 78.79 | 320 | ⇓P | | P | 19 12 05.8 | -0.3 |
| JNU | | | | ⇑P | | P | 19 12 06.1 | 0.0 |
| JNU | Nakatsue | 78.79 | 320 | P | | P | 19 12 05.7 | -0.4 |
| JNU | Nakatsue | 78.79 | 320 | P | | P | 19 12 06.2 | +0.1 |
| PAF | Port-aux-Franc | 78.82 | 219 | ⇓P | | P | 19 12 08.5 | +2.4 |
| JSD | Sado | 78.84 | 328 | ⇑P | | P | 19 12 06.6 | +0.4 |
| JSD | | | | ⇓P | | P | 19 12 06.8 | +0.6 |
| JSD | Sado | 78.84 | 328 | P | | P | 19 12 06.4 | +0.2 |
| JSD | | | | IAmb | | IAmb | 19 12 10.6 | |
| | comp=Z,307nm,1.1s | | | | | | | |
| TATO | Taipei | 78.89 | 308 | P | | P | 19 12 06.6 | -0.2 |
| JHS | Saijyo | 78.99 | 322 | ⇓P | | P | 19 12 07.5 | +0.3 |
| JHS | | | | ⇑P | | P | 19 12 07.7 | +0.5 |
| JHS | Saijyo | 78.99 | 322 | P | | P | 19 12 07.7 | +0.5 |
| MYKOM | Kota Tinggi | 79.14 | 279 | P | | P | 19 12 07.3 | -1.2 |
| MYKOM | | | | | | pP | 19 13 36.8 | +1.6 |
| KRJI | Kerinci | 79.18 | 274 | P | | P | 19 12 06.7 | -1.1 |
| COYC | Coyhaique | 79.76 | 137 | ⇑P | | P | 19 12 12.8 | +1.5 |
| COYC | Coyhaique | 79.76 | 137 | P | | P | 19 12 11.4 | +0.2 

EFI pmax pmax
comp=Z,95nm,1.3s
**EFI East Falkland 83.33 148** P **P** **19 12 30.8 +1.2**
EFI IAmb IAmb 19 14 09.6
comp=Z,246nm,1.2s
**SMY Shemya 83.34 356** P **P** **19 12 28.9 -0.4**
SMY pmax pmax
comp=Z,499nm,1.1s
**SMY Shemya 83.34 356** ⇓P **P** **19 12 29.9 +0.6**
SMY ⇑P **P** **19 12 30.1 +0.8**
**SMY Shemya 83.34 356** P **P** **19 12 28.9 -0.4**
**PLCA Paso Flores 83.42 134** P **P** **19 12 31.9 +1.6**
comp=Z,90nm,0.9s,baz=233,slow=5.0,SNR=115
PLCA pP **pP** **19 13 59.3 +0.9**
comp=Z,59nm,1.1s,baz=228,slow=6.0,SNR=6.3
PLCA S **S** **19 22 14.3 -3.9**
comp=Z,1.2nm,0.9s,baz=62,slow=13,SNR=3.1
PLCA PKKPbc **PKKPbc** **19 30 46.0 -0.2**
comp=Z,3.7nm,0.8s,baz=43,slow=1.9,SNR=9.0
PLCA PKP2bc 19 38 29.2
comp=Z,1.8nm,1.0s,baz=66,slow=3.7,SNR=2.9
**PLCA Paso Flores 83.42 134** *e*P **P** **19 12 33.5 +3.1**
**PLCA Paso Flores 83.42 134** P **P** **19 12 31.4 +1.0**
PLCA IAmb IAmb 19 12 34.6
comp=Z,128nm,0.9s
**GZH Guangzhou 83.46 302** P **P** **19 12 32.6 +2.0**
GZH sP **sP** **19 14 41.1 +2.3**
GZH S **S** **19 22 18.0 -0.7**
GZH pmax pmax
comp=Z,3μm,5.7s
**KSRS Korea Array 83.61 321** P **P** **19 12 31.8 +0.7**
comp=Z,72nm,0.8s,baz=142,slow=5.5,SNR=107
**KSAR Wonju Array Be 83.62 321** P **P** **19 12 31.6 +0.5**
**KSAR Wonju Array Be 83.62 321** P **P** **19 12 31.6 +0.5**
**LC01 Cunco 83.63 132** P **P** **19 12 31.8 +0.4**
LC01 IAmb IAmb 19 12 35.1
comp=Z,204nm,0.8s
**KS19 Wonju Array Si 83.67 321** P **P** **19 12 31.8 +0.4**
KS19 IAmb IAmb 19 12 35.4
comp=Z,214nm,1.1s
**KULM Kulim 83.68 280** P **P** **19 12 30.8 -1.2**
**QIZ Qiongzhong 83.70 296** P **P** **19 12 33.0 +1.0**
QIZ sP **sP** **19 14 40.8 +0.6**
QIZ S **S** **19 22 18.9 -2.4**
QIZ pmax pmax
comp=Z,120nm,0.8s
QIZ pmax pmax
comp=Z,2μm,4.7s
**QIZ Qiongzhong 83.70 296** P **P** **19 12 32.9 +1.0**
QIZ IAmb IAmb 19 12 35.8
comp=Z,167nm,1.0s
**QIZ Qiongzhong 83.70 296** P **P** **19 12 32.9 +1.0**
**SKR Severo-Kuril's 83.86 345** *e*P **P** **19 12 32.1 +0.2**
SKR *e**PP **sP** **19 14 36.9 -3.7**
SKR *e*S **S** **19 22 17.3 -4.1**
SKR *e**SS pS 19 23 37.5 -31
SKR pmax pmax
comp=Z,1μm,2.9s
SKR pmax pmax
comp=Z,164nm,1.4s
SKR pmax pmax
comp=Z,700nm,6.9s
**PSI Prapat 83.86 277** P **P** **19 12 31.1 -1.9**
comp=Z,121nm,1.0s,baz=178,slow=6.5,SNR=72
**NIKH Nikolski High 83.97 7** P **P** **19 12 32.8 +0.4**
NIKH IAmb IAmb 19 12 34.9
comp=Z,291nm,1.0s
**NIKH Nikolski High 83.97 7** P **P** **19 12 31.5 -0.9**
baz=190
**GSI Gunungsitoli 84.25 275** ⇓P **P** **19 12 34.9 +0.1**
GSI ⇓P **P** **19 12 35.0 +0.1**
**GSI Gunungsitoli 84.25 275** P **P** **19 12 34.9 +0.1**
**GSI Gunungsitoli 84.25 275** P **P** **19 12 34.3 -0.6**
**GSI Gunungsitoli 84.25 275** P **P** **19 12 35.2 +0.3**
**INCN Inchon 84.34 320** P **P** **19 12 34.9 +0.2**
INCN pmax pmax
comp=Z,569nm,1.9s
**INCN Inchon 84.34 320** ⇓P **P** **19 12 35.6 +0.9**
INCN ⇑P **P** **19 12 36.5 +1.8**
**INCN Inchon 84.34 320** P **P** **19 12 34.9 +0.2**
**INCN Inchon 84.34 320** P **P** **19 12 36.5 +1.8**
comp=Z,89nm,1.0s
**YSS Yuzh-Sakhalins 84.41 335** *e*P **P** **19 12 36.5 +1.7**
YSS *e**PP **pwP** **19 14 08.9 +2.2**
YSS *e**SP **sP** **19 14 45.7 +2.1**
YSS *e* 19 15 57.5
YSS *e* 19 22 19.8
YSS *e*S **S** **19 22 28.5 +1.5**
YSS *e*PS **PS** **19 24 12.8 -6.2**
YSS pmax pmax
comp=Z,740nm,0.9s
YSS pmax pmax
comp=Z,4μm,3.8s
YSS pmax pmax
comp=N,1μm,2.7s
YSS MLR MLR
comp=Z,700nm,20.0s
**YSS Yuzh-Sakhalins 84.41 335** ⇓P **P** **19 12 36.3 +1.5**
YSS ⇓P **P** **19 12 36.4 +1.7**
**YSS Yuzh-Sakhalins 84.41 335** P **P** **19 12 35.6 +0.9**
**YSS Yuzh-Sakhalins 84.41 335** P **P** **19 12 36.5 +1.7**
**YSS Yuzh-Sakhalins 84.41 335** P **P** **19 12 36.3 +1.5**
**TSI Tuntungan 84.53 277** P **P** **19 12 36.4 +0.2**
**UBPT Khong Chiam 85.04 291** ⇑P **P** **19 12 39.3 +0.7**
UBPT ⇑P **P** **19 12 39.6 +1.0**
**UBPT Khong Chiam 85.04 291** P **P** **19 12 39.5 +0.9**
**UNV Unalaska Valle 85.09 8** P **P** **19 12 38.2 +0.3**
UNV IAmb IAmb 19 14 09.2
comp=Z,258nm,1.8s
**UNV Unalaska Valle 85.09 8** P **P** **19 12 38.3 +0.4**
baz=192
**KCSI Kotacane, Aceh 85.22 277** P **P** **19 12 38.4 -1.2**
**TEY Ternei 85.22 331** ⇑*e*P **P** **19 12 39.4 +0.6**
TEY *e* 19 14 47.8
TEY *e* 19 22 21.5
TEY pmax pmax
comp=E,10.0nm,1.0s
TEY pmax pmax
comp=N,10.0nm,0.9s
TEY pmax pmax
comp=Z,40nm,0.6s
TEY pmax pmax
comp=E,100nm,6.0s
TEY pmax pmax
comp=Z,100nm,9.9s
**HJU Haeju 85.24 320** P **P** **19 12 40.4 +1.3**
HJU pP **pP** **19 14 06.1 -1.3**
HJU S S 19 22 49.4 +14
HJU AmB
comp=Z,279nm,0.9s
HJU AMS AMS
comp=N,652nm,2.9s
HJU AMS AMS
comp=E,495nm,2.2s
HJU AMS AMS
comp=Z,629nm,2.8s
**NJ2 Nanjing 85.28 312** ⇓*i*P **P** **19 12 40.1 +0.7**
NJ2 pP **pP** **19 14 08.2 +0.4**
NJ2 sP **sP** **19 14 46.3 -1.6**
NJ2 PP **PP** **19 16 03.2 -0.9**
NJ2 SKS **SKSac** **19 22 26.8 +0.6**
NJ2 S **S** **19 22 36.4 +0.2**
NJ2 sS **sS** **19 25 16.8 +3.7**
NJ2 pmax pmax
comp=Z,120nm,0.9s
NJ2 pmax pmax
comp=Z,4μm,4.5s
**PET Petropavlovsk 85.54 347** *d i*P **P** **19 12 40.4 +0.2**
PET *e**PP **pwP** **19 14 12.8 +0.5**
PET *e**SP **sP** **19 14 48.1 -1.1**
PET *e* 19 16 05.2
PET *e*PPP PPP 19 18 01.7
PET *e* 19 22 23.6
PET *i* S **S** **19 22 40.2 +2.5**
PET *e* 19 23 36.4
PET *e*SPP SPP 19 24 28.5
PET *e*SS **SS** **19 28 23.7 -1.2**
PET pmax pmax
comp=Z,3μm,4.1s
PET pmax pmax
comp=Z,174nm,1.1s
PET pmax pmax
comp=Z,2μm,14.8s
**PET Petropavlovsk 85.54 347** P **P** **19 12 40.0 -0.2**
PET IAmb IAmb 19 12 43.7
comp=Z,175nm,1.2s
**PET Petropavlovsk 85.54 347** P **P** **19 12 41.0 +0.8**
**PET Petropavlovsk 85.54 347** P **P** **19 12 40.8 +0.6**
**HHU Hamhung 85.62 322** P **P** **19 12 40.8 -0.2**
HHU pP pP 19 14 01.0 -8.4
HHU S **S** **19 22 41.5 +2.3**
HHU AmB
comp=Z,860nm,3.1s
HHU AMS AMS
comp=N,312nm,3.6s
HHU AMS AMS
comp=E,172nm,2.0s
HHU AMS AMS
comp=Z,369nm,4.3s
**ML02 Panimavida 85.72 129** P **P** **19 12 40.0 -1.8**
ML02 IAmb IAmb 19 12 45.2
comp=Z,158nm,0.9s
**MSHR Mys Shultsa 85.76 326** *de*P **P** **19 12 42.5 +1.0**
MSHR pmax pmax
comp=Z,176nm,0.9s
**GO05 Huala 85.80 128** P **P** **19 12 43.5 +1.3**
GO05 IAmb IAmb 19 12 45.7
comp=Z,290nm,1.4s
**PEA0B Petropavlovsk- 85.81 347** *d i*P **P** **19 12 42.0 +0.4**
**PEA0B Petropavlovsk- 85.81 347** P **P** **19 12 41.9 +0.4**
**PETK Petropavlovsk- 85.81 347** P **P** **19 12 41.2 -0.3**
comp=Z,83nm,0.9s,baz=147,slow=7.2,SNR=90
**VLA Vladivostok 85.83 327** *d i*P **P** **19 12 42.6 +0.8**
VLA pmax pmax
comp=Z,128nm,0.9s
**SNSI Sinabang, Aceh 85.88 275** P **P** **19 12 45.7 +2.8**
comp=Z,381nm,1.4s
**PYAG Pyongyang 85.94 321** P **P** **19 12 43.3 +0.9**
**SLBS Sierra La Lagu 86.16 60** ⇑P **P** **19 12 47.1 +3.1**
SLBS ⇑P **P** **19 12 47.1 +3.1**
**SLBS Sierra La Lagu 86.16 60** P **P** **19 12 45.6 +1.5**
SLBS IAmb IAmb 19 12 48.9
comp=Z,82nm,0.9s
**SBC Santa Barbara 86.17 46** P **P** **19 12 44.1 +0.4**
baz=228
**CIS Catalina Islan 86.30 47** P **P** **19 12 44.8 +0.4**
baz=229
**PKM Mcpherson Peak 86.40 46** P **P** **19 12 45.2 +0.1**
baz=228
**UGL Uglegorsk 86.46 336** ⇓*i*P **P** **19 12 46.0 +1.3**
UGL *e* 19 14 54.3
UGL *e*S **SKSac** **19 22 30.1 -2.5**
UGL pmax pmax
comp=Z,500nm,1.0s
UGL pmax pmax
comp=Z,4μm,4.4s
UGL smax smax
comp=N,4μm,6.3s
UGL smax smax
comp=E,2μm,6.3s
**FALS False Pass 86.48 9** P **P** **19 12 44.9 +0.3**
FALS IAmb IAmb 19 12 48.4
comp=Z,128nm,0.9s
**FALS False Pass 86.48 9** P **P** **19 12 45.2 +0.5**
baz=194
**FALS False Pass 86.48 9** P **P** **19 12 46.8 +2.2**
comp=Z,228nm,1.0s
**USA0B Ussuriysk Arra 86.61 328** P **P** **19 12 46.2 +0.6**
USA0B pmax pmax
comp=Z,159nm,0.9s
**USA0B Ussuriysk Arra 86.61 328** P **P** **19 12 46.2 +0.6**
USA0B IAmb IAmb 19 12 48.5
comp=Z,159nm,0.8s
**USRK Ussuriysk Ar. 86.61 328** P **P** **19 12 46.5 +0.9**
comp=Z,145nm,0.9s,baz=139,slow=3.3,SNR=97
**USRK Ussuriysk Ar. 86.61 328** P **P** **19 12 46.4 +0.8**
**PAGB Antelope Grade 86.69 45** P **P** **19 12 50.1 +3.8**
PAGB IAmb IAmb 19 12 53.0
comp=Z,392nm,2.0s
**BO02 Sierra Bellavi 86.70 129** P **P** **19 12 47.3 +0.7**
BO02 IAmb IAmb 19 12 50.2
comp=Z,173nm,0.8s
BO02 pP **pwP** **19 14 17.5 -1.6**
**BO01 Tunca 86.73 128** P **P** **19 12 47.4 +0.8**
BO01 IAmb IAmb 19 12 50.0
comp=Z,72nm,1.1s
**VA05 Santo Domingo 86.79 128** P **P** **19 12 46.8 -0.1**
VA05 IAmb IAmb 19 12 50.2
comp=Z,233nm,1.4s
VA05 **pP** **19 14 16.4 +0.8**
**LHMI Lhok Sumawe 86.80 278** P **P** **19 12 47.8 +0.6**
**LHMI Lhok Sumawe 86.80 278** P **P** **19 12 46.5 -0.8**
**LHMI Lhok Sumawe 86.80 278** P **P** **19 12 48.4 +1.2**
**109C Camp Elliot, M 86.80 49** P **P** **19 12 47.0 +0.2**
baz=230
**CNSH ChangSha 86.83 305** ⇓P **P** **19 12 43.6 -3.4**
CNSH pmax pmax
comp=Z,75nm,1.4s
CNSH LR LR
comp=Z,2μm,21.7s
CNSH LR LR
comp=Z,2μm,19.0s
CNSH LR LR
comp=Z,2μm,21.1s
**OSI Osito Audit: C 86.89 46** P **P** **19 12 46.5 -0.8**
OSI IAmb IAmb 19 12 52.1
comp=Z,97nm,1.1s
**OSI Osito Audit: C 86.89 46** P **P** **19 12 46.8 -0.5**
baz=229
**DECC Green Verdugo 86.90 47** P **P** **19 12 47.4 +0.1**
baz=229
**MT01 Popeta 86.92 128** P **P** **19 12 47.4 -0.2**
**TKX Tecate 86.92 49** P **P** **19 12 48.2 +0.8**
TKX IAmb IAmb 19 12 52.3
comp=Z,89nm,0.9s
**PASC Pasadena Art C 86.94 47** P **P** **19 12 47.9 +0.5**
PASC IAmb IAmb 19 12 52.5
comp=Z,125nm,1.6s
**GULI GuiLin 86.95 302** ⇑P **P** **19 12 48.1 +0.4**
GULI sP **sP** **19 14 56.9 +0.4**
GULI sS **sS** **19 25 32.1 +2.1**
GULI pmax pmax
comp=Z,200nm,1.4s
GULI LR LR
comp=Z,920nm,14.1s
GULI LR LR
comp=Z,1μm,17.9s
GULI LR LR
comp=Z,1μm,27.6s
**CNBA Chernabura Isl 87.04 12** P **P** **19 12 48.1 +0.8**
CNBA IAmb IAmb 19 12 52.4
comp=Z,192nm,1.1s
**CHNA Chernabura Isl 87.05 12** P **P** **19 12 47.9 +0.5**
baz=197
**MWC Mount Wilson 87.06 47** P **P** **19 12 48.5 +0.3**
MWC pmax pmax
comp=Z,129nm,1.4s
**MWC Mount Wilson 87.06 47** P **P** **19 12 48.5 +0.3**
MWC IAmb IAmb 19 12 52.6
comp=Z,129nm,1.4s
**VA01 Torpederas 87.13 127** P **P** **19 12 49.0 +0.4**
VA01 IAmb IAmb 19 12 52.7
comp=Z,207nm,0.9s
VA01 pP **pP** **19 14 19.0 +1.7**
**MT09 Talagante 87.15 128** P **P** **19 12 48.6 -0.2**
MT09 IAmb IAmb 19 12 52.1
comp=Z,112nm,0.8s
MT09 **pP** **19 14 18.1 +0.3**
**ARVC Arvin 87.16 46** P **P** **19 12 49.2 +0.7**
baz=229,SNR=8.9
**MURC Murrieta 87.20 48** P **P** **19 12 48.6 -0.1**
baz=230,SNR=10
**MONP2 Monument Peak 87.25 49** P **P** **19 12 49.6 +0.5**
baz=230,SNR=14
**HOPS Hopland Field 87.26 41** P **P** **19 12 52.3 +3.5**
HOPS IAmb IAmb 19 12 53.6
comp=Z,76nm,1.1s
**GDXM Geysers 87.29 41** P **P** **19 12 50.8 +1.8**
**IKP In-Ko-Pah, Jac 87.30 49** P **P** **19 12 49.7 +0.5**
baz=230,SNR=7.2
**WHN Wuhan 87.30 308** ⇓P **P** **19 12 49.6 +0.4**
WHN pP **pwP** **19 14 21.7 -1.0**
WHN sP **sP** **19 14 59.1 +1.0**
WHN PP **PP** **19 16 19.5 -0.8**
WHN SKS **SKSac** **19 22 35.1 -3.5**
WHN S **S** **19 22 57.3 +1.8**
WHN pmax pmax
comp=Z,340nm,1.0s
WHN pmax pmax
comp=Z,4μm,5.0s
WHN LR LR
comp=Z,4μm,27.0s
**MT02 Curacav 87.34 127** P **P** **19 12 50.5 +0.9**
MT02 IAmb IAmb 19 12 53.2
comp=Z,207nm,1.4s
**SUJ Sinuiju 87.37 321** P **P** **19 12 50.1 +0.8**
SUJ pP **pP** **19 14 15.5 -2.7**
SUJ S **S** **19 22 50.5 -5.3**
SUJ AmB
comp=Z,997nm,2.9s
SUJ AMS AMS
comp=N,269nm,2.9s
SUJ AMS AMS
comp=E,309nm,3.3s
SUJ AMS AMS
comp=Z,362nm,3.8s
**SDPT Sand Point 87.40 11** P **P** **19 12 49.6 +0.6**
**SDPT Sand Point 87.40 11** P **P** **19 12 49.3 +0.3**
baz=197
**VES Vestal, Richgr 87.47 45** P **P** **19 12 50.5 +0.6**
baz=229,SNR=12
**EDW2 Edwards Air Fo 87.52 47** P **P** **19 12 50.1 -0.1**
baz=229,SNR=19
**MT05 Renca 87.54 128** P **P** **19 12 52.2 +1.7**
MT05 **pwP** **19 14 21.9 -1.4**
**ROC1 El Roble 87.59 127** P **P** **19 12 50.3 -0.8**
ROC1 IAmb IAmb 19 14 33.4
comp=Z,84nm,1.0s
**LMEL Las Melosas 87.64 128** P **P** **19 12 51.3 +0.1**
LMEL IAmb IAmb 19 12 58.5
comp=Z,72nm,0.9s
**KMPM Mount Pierce 87.68 39** P **P** **19 12 53.7 +2.9**
KMPM IAmb IAmb 19 13 00.3
comp=Z,93nm,1.0s
**PFO Pinyon Flats O 87.68 48** P **P** **19 12 52.7 +1.6**
PFO pmax pmax
comp=Z,67nm,1.0s
**PFO Pinyon Flats O 87.68 48** P **P** **19 12 52.6 +1.6**
PFO IAmb IAmb 19 12 56.0
comp=Z,67nm,1.0s
**PFO Pinyon Flats O 87.68 48** P **P** **19 12 51.2 +0.1**
baz=230,SNR=7.3
**TPFO Pinon Flats 87.68 48** P **P** **19 12 51.3 +0.2**
baz=230,SNR=8.2
**SWSC Sam W. Stewart 87.68 49** P **P** **19 12 51.3 +0.4**
baz=231,SNR=6.5
**PEL Peldehue 87.72 128** P **P** **19 12 51.6 +0.2**
PEL pmax pmax
comp=Z,178nm,1.0s
**PEL Peldehue 87.72 128** ⇑P **P** **19 12 52.6 +1.2**
PEL ⇑P **PcP** **19 12 53.6 +0.7**
**PEL Peldehue 87.72 128** P **P** **19 12 51.6 +0.2**
PEL IAmb IAmb 19 12 55.3
comp=Z,178nm,1.0s
**ISA Isabella, Lake 87.73 46** P **P** **19 12 52.6 +1.4**
ISA pmax pmax
comp=Z,89nm,1.0s
**ISA Isabella, Lake 87.73 46** P **P** **19 12 52.6 +1.4**
ISA IAmb IAmb 19 12 56.0
comp=Z,89nm,0.9s
**ISA Isabella, Lake 87.73 46** P **P** **19 12 52.0 +0.8**
baz=229,SNR=32
**KMRM Mail Ridge 87.76 40** P **P** **19 12 53.1 +1.9**
KMRM IAmb IAmb 19 12 57.6
comp=Z,52nm,1.0s
**TYV Tymovskoe 87.78 337** *e*P **P** **19 12 52.6 +1.7**
TYV *e*S **S** **19 22 56.1 -3.0**
TYV pmax pmax
comp=Z,348nm,0.7s
TYV pmax pmax
comp=Z,3μm,2.9s
TYV smax smax
comp=N,17nm,1.9s
TYV smax smax
comp=E,24nm,1.9s
TYV smax smax
comp=N,6μm,6.6s
TYV smax smax
comp=E,3μm,6.6s
**SPIA Saint Paul Isl 88.01 5** P **P** **19 12 53.4 +1.5**
**SPIA Saint Paul Isl 88.01 5** P **P** **19 12 53.7 +1.9**
baz=188
**SPIA Saint Paul Isl 88.01 5** P **P** **19 12 52.5 +0.7**
**VA03 San Esteban 88.03 127** P **P** **19 12 53.9 +0.9**
**MDJ Mudanjiang 88.04 327** P **P** **19 12 53.3 +1.0**
MDJ pP pP 19 14 21.0 -0.6
MDJ pmax pmax
comp=E,49nm,0.9s
MDJ pmax pmax
comp=E,4μm,6.1s
**MDJ Mudanjiang 88.04 327** P **P** **19 12 53.0 +0.6**
MDJ IAmb IAmb 19 12 55.2
comp=Z,117nm,0.8s
**MDJ Mudanjiang 88.04 327** P **P** **19 12 53.5 +1.1**
**MDJ Mudanjiang 88.04 327** P **P** **19 12 53.5 +1.1**
**LRMC Laurel Mtn Rad 88.10 46** P **P** **19 12 54.4 +1.4**
baz=230
**RRX Edison Barstow 88.14 47** P **P** **19 12 55.0 +1.9**
baz=230
**DL2 Dalian 88.15 318** P **P** **19 12 54.0 +1.0**
DL2 sP **sP** **19 15 05.0 +2.9**
DL2 PP **PP** **19 16 25.4 -1.5**
DL2 SKS **SKSac** **19 22 42.3 -1.0**
DL2 S **S** **19 23 05.0 +1.9**
DL2 pmax pmax
comp=Z,140nm,0.9s
DL2 pmax pmax
comp=Z,2μm,4.6s
**CMB Columbia Colle 88.15 43** P **P** **19 12 54.2 +1.1**
CMB pmax pmax
comp=Z,41nm,0.9s
**CMB Columbia Colle 88.15 43** P **P** **19 12 54.2 +1.1**
**KHMM Horse Mountain 88.21 39** P **P** **19 12 54.0 +0.6**
KHMM IAmb IAmb 19 12 58.4
comp=Z,48nm,0.9s
**BELC Belle Mtn. Jos 88.22 48** P **P** **19 12 55.5 +1.8**
baz=231,SNR=10
**KRPM Rodgers 88.25 39** P **P** **19 12 55.0 +1.6**
KRPM IAmb IAmb 19 12 59.3
comp=Z,156nm,1.2s
**BC3 Big Chuckawall 88.36 49** P **P** **19 12 55.5 +1.2**
baz=231,SNR=14
**GLA Glamis 88.39 50** P **P** **19 12 56.5 +2.2**
GLA pmax pmax
comp=Z,191nm,0.8s
**GLA Glamis 88.39 50** P **P** **19 12 56.5 +2.2**
**GLA Glamis 88.39 50** P **P** **19 12 55.4 +1.1**
baz=231,SNR=47
**CWC Cottonwood Cre 88.48 45** P **P** **19 12 55.9 +1.0**
baz=229
**CO06 Fray Jorge 88.49 125** P **P** **19 12 56.3 +1.3**
CO06 **pwP** **19 14 26.1 -2.5**
**HEC Hector,Ludlow 88.53 47** P **P** **19 12 55.7 +0.7**
baz=230,SNR=21
**ORV Oroville 88.53 41** P **P** **19 12 56.0 +1.2**
**ORV Oroville 88.53 41** P **P** **19 12 56.0 +1.2**
**GSC Goldstone, Bar 88.54 47** P **P** **19 12 56.4 +1.4**
GSC pmax pmax
comp=Z,65nm,1.1s
**GSC Goldstone, Bar 88.54 47** P **P** **19 12 56.4 +1.4**
GSC IAmb IAmb 19 12 59.7
comp=Z,65nm,1.1s
**GSC Goldstone, Bar 88.54 47** P **P** **19 12 56.4 +1.4**
baz=230,SNR=16
**MPMC Manual Prospec 88.60 46** P **P** **19 12 56.3 +0.9**
baz=230,SNR=12
**CO02 Combarbal 88.63 126** P **P** **19 12 56.7 +0.9**
CO02 **pP** **19 14 26.5 +1.3**
**WDC Whiskeytown Da 88.65 40** P **P** **19 12 56.7 +1.4**
WDC pmax pmax
comp=Z,70nm,1.1s
**WDC Whiskeytown Da 88.65 40** P **P** **19 12 56.7 +1.4**
WDC IAmb IAmb 19 13 00.5
comp=Z,70nm,1.1s
**CHGN Chignik 88.66 12** P **P** **19 12 55.4 +0.5**
CHGN IAmb IAmb 19 12 59.1
comp=Z,151nm,0.8s
**CHGN Chignik 88.66 12** P **P** **19 12 55.8 +0.9**
baz=198
**KSXB Camp Six Broad 88.80 38** P **P** **19 12 58.8 +2.8**
KSXB IAmb IAmb 19 13 01.7
comp=Z,78nm,1.1s
**N02D Trinity Center 88.83 40** P **P** **19 12 57.9 +1.7**
N02D IAmb IAmb 19 13 02.0

comp=Z,112nm,1.4s
**N02D Trinity Center 88.83 40 P P 19 12 56.6 +0.4**
baz=226,SNR=18
**IRM Iron Mountain 88.87 49 P P 19 12 57.2 +0.7**
baz=231,SNR=23
**113A Mohawk Valley, 88.91 50 P P 19 12 58.4 +1.7**
113A IAmb IAmb 19 13 02.5
comp=Z,129nm,1.2s
**QSM Queen of Sheba 88.92 46 P P 19 12 58.2 +1.5**
**GMRC Granite Mounta 88.93 48 P P 19 12 57.4 +0.5**
baz=231,SNR=12
**M02C Callahan 89.04 39 P P 19 12 58.5 +1.3**
M02C IAmb IAmb 19 13 03.0
comp=Z,116nm,1.4s
**M02C Callahan 89.04 39 P P 19 12 58.2 +1.0**
baz=226,SNR=27
**214A Organ Pipe Nat 89.05 52 P P 19 12 58.3 +0.8**
214A IAmb IAmb 19 13 02.8
comp=Z,104nm,1.1s
**214A Organ Pipe Nat 89.05 52 P P 19 12 58.2 +0.8**
baz=232
**CO03 El Pedregal 89.06 126 P P 19 12 57.8 0.0**
**TIA Tai'an 89.06 314** ⇓P **P 19 12 58.2 +0.9**
TIA pmax pmax
comp=Z,150nm,1.1s
TIA pmax pmax
comp=Z,3μm,6.9s
TIA LR LR
comp=Z,860nm,22.8s
TIA LR LR
comp=Z,1μm,19.0s
TIA LR LR
comp=Z,2μm,22.1s
**SNY Shenyang 89.07 321** ⇓P **P 19 12 57.3 +0.1**
SNY sP **sP 19 15 08.6 +2.1**
SNY PP **PP 19 16 32.0 -2.2**
SNY pmax pmax
comp=Z,69nm,0.9s
SNY pmax pmax
comp=Z,2μm,5.0s
SNY LR LR
comp=Z,620nm,12.5s
SNY LR LR
comp=Z,950nm,18.7s
SNY LR LR
comp=Z,1μm,19.6s
**L02E Cave Junction 89.17 38 P P 19 12 58.7 +1.0**
**L02E Cave Junction 89.17 38 P P 19 12 58.9 +1.2**
baz=226,SNR=7.3
**GWY Greenwater Val 89.19 46 P P 19 13 00.8 +2.7**
**CO05 La Serena 89.20 125 P P 19 12 58.8 +0.5**
**MPK Martis Peak 89.20 42 P P 19 12 59.2 +0.9**
MPK IAmb IAmb 19 13 03.3
comp=Z,91nm,1.1s
**FURC Furnace Creek, 89.25 46 P P 19 12 58.8 +0.7**
baz=230
**LCH Last Change Ra 89.26 45 P P 19 12 59.4 +1.0**
**KEBM Edson Butte 89.29 37 P P 19 13 00.3 +2.0**
KEBM IAmb IAmb 19 13 03.9
comp=Z,142nm,1.0s
**PNTR Pine Nut 89.31 43 P P 19 12 59.8 +1.0**
PNTR IAmb IAmb 19 13 03.0
comp=Z,65nm,1.0s
**PAYG Puerto Ayora 89.32 90 P P 19 13 02.2 +3.1**
**YBH Yreka Blue Hor 89.36 39 P P 19 12 59.2 +0.5**
comp=Z,37nm,1.1s,baz=41,slow=0.7,SNR=31
**YBH Yreka Blue Hor 89.36 39 P P 19 12 59.1 +0.5**
YBH IAmb IAmb 19 13 04.1
comp=Z,80nm,1.4s
**GO04 Tololo Observa 89.36 125 P P 19 12 58.7 -0.7**
GO04 IAmb IAmb 19 13 03.0
comp=Z,119nm,0.7s
**LHV Little Huntoon 89.41 44 P P 19 13 00.6 +1.8**
LHV IAmb IAmb 19 13 03.5
comp=Z,49nm,0.9s
**VCNR Virginia City 89.42 42 P P 19 12 59.4 +0.2**
**YERR Yerington 89.45 43 P P 19 13 00.0 +0.7**
**CN2 Changchun 89.49 324** *eP* **P 19 12 58.9 -0.2**
CN2 PP **PP 19 16 37.2 -0.2**
CN2 pmax pmax
comp=Z,60nm,1.3s
CN2 pmax pmax
comp=Z,2μm,4.2s
CN2 LR LR
comp=Z,700nm,18.0s
CN2 LR LR
comp=Z,400nm,18.0s
CN2 LR LR
comp=Z,700nm,18.0s
**K02D Willamette Mer 89.51 38 P P 19 13 00.1 +0.7**
baz=226,SNR=12
**HOPE Hope Point 89.56 160 P P 19 13 02.0 +2.5**
HOPE pmax pmax
comp=Z,138nm,1.1s
**HOPE Hope Point 89.56 160 P P 19 13 02.0 +2.5**
HOPE IAmb IAmb 19 13 03.5
comp=Z,138nm,1.1s
**NEE2 Needles Airpor 89.59 48 P P 19 12 59.9 +0.1**
baz=231
**SLVN Son La 89.60 295 P P 19 13 00.5 +0.2**
SLVN IAmb IAmb 19 13 04.9
comp=Z,311nm,1.7s
**PDMCI Parker Dam,Lak 89.61 49 P P 19 12 59.9 -0.1**
baz=232,SNR=16
**RYN Ryan 89.64 43 P P 19 13 01.3 +1.1**
**NVAR Mina Array Bea 89.64 44 P P 19 13 01.1 +0.8**
comp=Z,25nm,0.9s,baz=220,slow=7.0,SNR=54
NVAR pP **pwP 19 14 31.7 -1.0**
comp=Z,5.5nm,0.9s,baz=219,slow=7.0,SNR=2.5
NVAR PKKPbc **PKKPbc 19 30 33.4 +0.7**
comp=Z,1.0nm,0.6s,baz=65,slow=2.9,SNR=5.3
NVAR SKKPbc SKKPbc 19 33 32.4 -3.1
comp=Z,1.8nm,0.7s,baz=76,slow=3.1,SNR=7.7
**J01E Myrtle Point 89.70 37 P P 19 13 01.0 +0.9**
J01E IAmb IAmb 19 13 04.9
comp=Z,83nm,0.8s
**J01E Myrtle Point 89.70 37 P P 19 13 00.5 +0.4**
baz=225
**SII Sitkinak Islan 89.71 14 P P 19 13 00.2 +0.4**
baz=202
**NV11 Mina Array Sit 89.73 44 P P 19 13 00.8 +0.2**
**HUMO Hull Mountain 89.83 38 P P 19 13 02.3 +1.5**
HUMO IAmb IAmb 19 13 06.6
comp=Z,65nm,1.0s
**PAHR Pah Rah Range 89.85 42 P P 19 13 01.7 +0.6**
**M04C Macdoel 89.86 39 P P 19 13 02.4 +1.3**
M04C IAmb IAmb 19 13 05.6
comp=Z,51nm,0.9s
**M04C Macdoel 89.86 39 P P 19 13 01.2 +0.1**
baz=227,SNR=16
**L04D Klamath Falls 89.91 39 P P 19 13 02.4 +1.1**
L04D IAmb IAmb 19 13 05.7
comp=Z,96nm,0.9s
**L04D Klamath Falls 89.91 39 P P 19 13 01.6 +0.3**
baz=227,SNR=19
**GRNR Gornyy 89.91 334** ⇓*iP* **P 19 13 02.5 +1.6**
GRNR *eS* **S 19 23 18.8 -0.1**
GRNR pmax pmax
comp=E,8.0nm,1.1s
GRNR pmax pmax
comp=N,10.0nm,0.9s
GRNR pmax pmax
comp=Z,50nm,1.0s
GRNR smax smax
comp=N,1.0nm,0.6s
GRNR MLR MLR
comp=E,140nm,14.0s
GRNR MLR MLR
comp=N,390nm,18.0s
GRNR MLR MLR
comp=Z,380nm,17.0s
**BNX BinXian 89.92 326** ⇑P **P 19 13 01.0 0.0**
BNX S **S 19 23 23.7 +4.6**
BNX pmax pmax
comp=Z,390nm,0.9s
BNX pmax pmax
comp=Z,2μm,6.6s
BNX LR LR
comp=Z,920nm,8.6s
BNX LR LR
comp=Z,1μm,11.2s
BNX LR LR
comp=Z,1μm,16.6s
**TPNV Topopah Spring 89.93 46 P P 19 13 02.7 +1.1**
TPNV pmax pmax
comp=Z,21nm,0.9s
**TPNV Topopah Spring 89.93 46 P P 19 13 02.6 +1.1**
**TPNV Topopah Spring 89.93 46 P P 19 13 01.6 0.0**
baz=230
**DBO Dodson Butte 90.03 38 P P 19 13 03.1 +1.3**
DBO IAmb IAmb 19 13 06.6
comp=Z,59nm,1.0s
**TPH Tonopah 90.06 45 P P 19 13 03.2 +1.0**
TPH pmax pmax
comp=Z,202nm,0.8s
**TPH Tonopah 90.06 45 P P 19 13 03.2 +1.0**
**LCO Las Campanas 90.11 124 P P 19 13 03.7 +0.8**
**Y14A Wickenburg 90.13 50 P P 19 13 03.6 +1.1**
Y14A IAmb IAmb 19 13 07.3
comp=Z,46nm,0.9s
**KVN Kaiserville 90.17 43 P P 19 13 02.8 +0.1**
KVN pmax pmax
comp=Z,23nm,0.8s
**KVN Kaiserville 90.17 43 P P 19 13 02.8 +0.1**
**AC04 Llanos de Chal 90.31 123 P P 19 13 06.4 +2.9**
AC04 IAmb IAmb 19 13 07.7
comp=Z,127nm,1.3s
**SHPR Sheep Range 90.33 47 P P 19 13 04.8 +1.3**
**GYA Guiyang 90.34 301** ⇑P **P 19 13 04.6 +0.9**
GYA sP sP 19 15 13.2 +0.3
GYA PP **PP 19 16 45.6 +0.9**
GYA SKS **SKSac 19 22 56.9 -0.1**
GYA S **S 19 23 25.3 +1.2**
GYA SS **SS 19 29 37.6 +2.0**
GYA pmax pmax
comp=Z,38nm,0.8s
GYA pmax pmax
comp=Z,2μm,8.2s
GYA LR LR
comp=Z,390nm,4.4s
GYA LR LR
comp=Z,310nm,4.8s
GYA LR LR
comp=Z,340nm,5.2s
**NKL Nikolayevsk 90.36 338** *eP* **P 19 13 01.9 -1.0**
NKL *e* 19 16 42.9
NKL *eS* **SKSac 19 22 55.0 -0.5**
NKL pmax pmax
comp=E,4.0nm,0.7s
NKL pmax pmax
comp=Z,124nm,1.0s
NKL smax smax
comp=E,3.0nm,1.0s
NKL smax smax
comp=N,2μm,1.2s
**I03D Drain, OR 90.38 37 P P 19 13 04.4 +1.2**
baz=226,SNR=6.5
**K04D Chiloquin, OR 90.48 39 P P 19 13 03.9 0.0**
baz=227,SNR=11
**ENH Enshi 90.49 305 P P 19 13 03.9 -0.3**
**ENH Enshi 90.49 305 P P 19 13 04.7 +0.5**
**OHAK Old Harbor 90.51 14 P P 19 13 03.9 +0.4**
OHAK IAmb IAmb 19 13 07.6
comp=Z,50nm,0.9s
**OHAK Old Harbor 90.51 14 P P 19 13 04.7 +1.2**
baz=203
**KLR Kul'dur 90.57 331** PKKPbc PKKPbc 19 30 28.8 -1.8
comp=Z,2.4nm,0.9s,baz=322,slow=2.8,SNR=6.3
KLR SKKPbc SKKPbc 19 33 30.3 -4.0
comp=Z,3.0nm,1.0s,baz=354,slow=3.4,SNR=5.0
**KLR Kul'dur 90.57 331** *d iP* **P 19 13 04.8 +0.8**
KLR pmax pmax
comp=Z,110nm,0.9s
**Q09A Carvers 90.57 44 P P 19 13 04.5 0.0**
**TUC Tucson 90.64 52 P P 19 13 06.9 +2.1**
TUC pmax pmax
comp=Z,72nm,1.0s
**TUC Tucson 90.64 52 P P 19 13 06.9 +2.1**
TUC IAmb IAmb 19 13 10.3
comp=Z,72nm,0.9s
**TUC Tucson 90.64 52 P P 19 13 05.9 +1.0**
baz=233
**TUC Tucson 90.64 52 P P 19 13 07.0 +2.1**
**MOIG Morelia 90.67 68 P P 19 13 06.8 +1.4**
MOIG IAmb IAmb 19 13 10.4
comp=Z,122nm,1.1s
**S11A Rachel 90.68 46 P P 19 13 05.0 0.0**
S11A IAmb IAmb 19 15 25.2
comp=Z,62nm,0.3s
**J04D Umpqua Nationa 90.72 38 P P 19 13 06.5 +1.4**
**J04D Umpqua Nationa 90.72 38 P P 19 13 05.4 +0.3**
baz=227,SNR=33
**MOD Modoc Plateau 90.79 40 P P 19 13 05.9 +0.5**
MOD IAmb IAmb 19 13 09.6
comp=Z,54nm,0.8s
**I04A Tendick Farm, 90.94 38 P P 19 13 06.2 +0.3**
baz=226,SNR=7.4
**PRN Pahroc Range 90.96 46 P P 19 13 06.7 +0.4**
PRN IAmb IAmb 19 13 11.3
comp=Z,37nm,0.9s
**LYN LuoYang 91.00 310** ⇓*iP* **P 19 13 07.3 +0.9**
LYN PP **PP 19 16 48.3 -1.2**
LYN SKS **SKSac 19 22 57.9 -2.1**
LYN S **ScS 19 23 31.1 -0.5**
LYN sS sS 19 26 08.3 -0.3
LYN pmax pmax
comp=Z,50nm,0.8s
LYN pmax pmax
comp=Z,1μm,6.7s
**K05A Summer Lake 91.02 39 P P 19 13 07.5 +1.0**
K05A IAmb IAmb 19 13 11.1
comp=Z,83nm,0.9s
**319A Douglas 91.12 54 P P 19 13 08.6 +1.4**
319A IAmb IAmb 19 13 12.3
comp=Z,56nm,1.1s
**KDAK Kodiak Island 91.18 14 P P 19 13 07.4 +0.8**
comp=Z,28nm,0.8s,baz=240,slow=5.6,SNR=6.7
**J05D Fort Rock, OR 91.21 39 P P 19 13 07.3 0.0**
baz=227,SNR=29
**R11A Troy Canyon, C 91.23 45 P P 19 13 08.1 +0.5**
**R11A Troy Canyon, C 91.23 45 P P 19 13 07.8 +0.2**
baz=231,SNR=12
**ZAIG Zacatecas 91.25 64 P P 19 13 09.2 +1.1**
ZAIG IAmb IAmb 19 13 13.1
comp=Z,45nm,1.1s
**GO03 Copiap 91.27 123 P P 19 13 09.4 +1.4**
GO03 IAmb IAmb 19 13 11.7
comp=Z,57nm,0.9s
GO03 pP **pP 19 14 37.8 +0.1**
**H04D Lebanon 91.27 37 P P 19 13 09.7 +2.4**
H04D IAmb IAmb 19 13 12.7
comp=Z,52nm,0.9s
**H04D Lebanon 91.27 37 P P 19 13 07.8 +0.5**
baz=226,SNR=5.4
**HNS HongShan 91.31 314** ⇓P **P 19 13 08.8 +1.1**
HNS pP **pP 19 14 33.9 -3.2**
HNS sP **sP 19 15 21.2 +4.1**
HNS PP **PP 19 16 47.7 -4.2**
HNS SKS **SKSac 19 23 02.4 +0.8**
HNS S **ScS 19 23 36.0 +2.0**
HNS pmax pmax
comp=Z,120nm,1.3s
HNS LR LR
comp=Z,970nm,13.4s
HNS LR LR
comp=Z,600nm,14.3s
HNS LR LR
comp=Z,1μm,21.8s
**X16A Lo Mia Camp, P 91.45 50 P P 19 13 10.4 +1.7**
**H04A Detroit Lake 91.66 37 P P 19 13 09.9 +0.7**
**PINE Pine Mountain 91.71 38 P P 19 13 10.6 +0.9**
PINE IAmb IAmb 19 13 14.4
comp=Z,106nm,0.8s
**LCMT Little Creek M 91.85 47 P P 19 13 11.7 +1.2**
**I05D Terrebonne, OR 91.87 38 P P 19 13 10.3 +0.1**
baz=227,SNR=7.1
**CM31 Chiang Mai Arr 92.00 290 P P 19 13 11.3 -0.1**
CM31 IAmb IAmb 19 13 15.5
comp=Z,80nm,1.1s
**CMAR Chiang Mai Arr 92.00 290 P P 19 13 12.1 +0.7**
comp=Z,30nm,0.8s,baz=147,slow=3.6,SNR=93
CMAR pP **pP 19 14 41.9 +1.1**
comp=Z,7.1nm,0.9s,baz=164,slow=4.1,SNR=2.1
CMAR PP **PP 19 16 56.6 -1.0**
comp=Z,13nm,1.1s,baz=133,slow=5.7,SNR=5.0
CMAR PKKPbc **PKKPbc 19 30 28.7 +3.3**
comp=Z,5.1nm,0.6s,baz=285,slow=4.2,SNR=31
CMAR SKKPbc SKKPbc 19 33 27.6 +0.4
comp=Z,2.9nm,0.9s,baz=288,slow=4.0,SNR=6.5
CMAR PKPPKP **P'P'df 19 38 34.0 -1.5**
comp=Z,0.4nm,0.7s,baz=300,slow=3.6,SNR=4.4
**CMAR Chiang Mai Arr 92.00 290 P P 19 13 11.8 +0.5**
**BJT Baijiatuau 92.06 316 P P 19 13 11.1 0.0**
BJT pmax pmax
comp=Z,51nm,0.7s
**BJT Baijiatuau 92.06 316 P P 19 13 11.1 0.0**
BJT IAmb IAmb 19 13 13.6
comp=Z,51nm,0.7s
**BJT Baijiatuau 92.06 316 P P 19 13 11.8 +0.6**
**WVOR Wild Horse Val 92.07 41 P P 19 13 12.0 +0.7**
WVOR pmax pmax
comp=Z,30nm,1.1s
**WVOR Wild Horse Val 92.07 41 P P 19 13 11.9 +0.7**
**BJI Beijing 92.08 316 P P 19 13 11.5 +0.4**
BJI PP **PP 19 16 56.4 -1.4**
BJI SKS **SKSac 19 23 04.9 -0.8**
BJI S **ScS 19 23 40.7 +0.4**
BJI sS **sS 19 26 17.8 -0.7**
BJI pmax pmax
comp=Z,70nm,0.9s
BJI pmax pmax
comp=Z,1μm,4.4s
**U15A North Rim 92.10 48 P P 19 13 12.7 +0.9**
U15A IAmb IAmb 19 13 16.7
comp=Z,35nm,0.9s
**CCUT Cedar City 92.11 47 P P 19 13 12.4 +0.7**
**WUAZ Wupatki 92.15 49 P P 19 13 12.1 +0.2**
WUAZ IAmb IAmb 19 13 16.6
comp=Z,41nm,1.1s
**WUAZ Wupatki 92.15 49 P P 19 13 11.4 -0.5**
baz=233
**P18K Big Mountain, 92.15 12 P P 19 13 11.3 +0.2**
baz=201
**CHTO Chiang Mai 92.19 290 P P 19 13 11.8 -0.4**
CHTO pmax pmax
comp=Z,102nm,1.1s
**CHTO Chiang Mai 92.19 290 P P 19 13 11.8 -0.4**
CHTO IAmb IAmb 19 13 16.1
comp=Z,102nm,1.1s
**CHTO Chiang Mai 92.19 290 P P 19 13 14.4 +2.2**
**CHTO Chiang Mai 92.19 290 P P 19 13 13.4 +1.2**
**SPR3 Spring Creek 3 92.40 45 P P 19 13 13.6 +0.5**
**F04A Amboy 92.40 36 P P 19 13 13.6 +1.1**
F04A IAmb IAmb 19 13 16.5
comp=Z,28nm,0.8s
**PSUT Pine Spring 92.40 46 P P 19 13 12.1 -0.9**
**G05D Wamic, OR 92.50 37 P P 19 13 13.0 -0.1**
baz=227
**AC02 Maricunga 92.51 123 P P 19 13 15.6 +1.3**
AC02 IAmb IAmb 19 14 50.0
comp=Z,62nm,1.2s
**X18A Snowflake 92.51 51 P P 19 13 14.1 +0.6**
**KMI Kunming 92.56 298** ⇓P **P 19 13 15.1 +1.1**
KMI pP pwP 19 14 46.8 -1.5
KMI sP sP 19 15 27.0 +3.6
KMI PP **PP 19 17 02.4 +0.3**
KMI SKS **SKSac 19 23 11.0 +1.4**
KMI S **S 19 23 44.3 +0.2**
KMI pmax pmax
comp=Z,130nm,1.4s
KMI pmax pmax
comp=Z,1μm,8.3s
KMI LR LR
comp=Z,2μm,19.3s
KMI LR LR
comp=Z,930nm,20.4s
KMI LR LR
comp=Z,2μm,30.6s
**KMI Kunming 92.56 298 P P 19 13 15.9 +1.8**
**O18K Koktuh Hills 92.59 12 P P 19 13 12.7 -0.4**
O18K IAmb IAmb 19 13 17.6
comp=Z,61nm,0.9s
**I07A Izee 92.68 39 P P 19 13 14.7 +0.7**
I07A IAmb IAmb 19 13 18.4
comp=Z,34nm,1.0s
**E04D Cinebar 92.76 36 P P 19 13 15.1 +0.9**
**E04D Cinebar 92.76 36 P P 19 13 14.0 -0.2**
baz=226
**J08A Circle Bar Ran 92.76 40 P P 19 13 15.4 +1.0**
J08A IAmb IAmb 19 13 19.2
comp=Z,44nm,1.1s
**121A Cookes Peak, D 92.83 54 P P 19 13 15.5 +0.4**
**121A Cookes Peak, D 92.83 54 P P 19 13 14.6 -0.5**
baz=235
**PB14 IPOC Station P 92.87 121 P P 19 13 14.8 -1.0**
PB14 IAmb IAmb 19 14 49.9
comp=Z,113nm,1.3s
**TIY Taiyuan 92.93 313** ⇓P **P 19 13 18.0 +2.7**
TIY PP **PP 19 17 02.9 -1.7**
TIY SKS **SKSac 19 23 11.5 +0.7**
TIY S **S 19 23 46.5 0.0**
TIY pmax pmax
comp=Z,81nm,0.7s
TIY pmax pmax
comp=Z,1μm,4.7s
**ELK Elko 92.94 43 P P 19 13 16.1 +0.6**
ELK pmax pmax
comp=Z,16nm,0.9s
**ELK Elko 92.94 43 P P 19 13 16.1 +0.6**
**XAN Xi'an 93.06 308 P P 19 13 17.0 +1.0**
XAN pP pP 19 14 46.5 +1.0
XAN sP sP 19 15 24.3 -1.1
XAN PP **PP 19 17 03.6 -2.1**
XAN SKS **SKSac 19 23 10.8 -0.9**
XAN S **ScS 19 23 50.6 +1.6**
XAN sS sS 19 26 21.8 -6.1
XAN SS **SS 19 30 10.4 -3.7**
XAN pmax pmax
comp=Z,28nm,1.0s
XAN pmax pmax
comp=Z,2μm,5.8s
XAN LR LR
comp=Z,1μm,18.5s
XAN LR LR
comp=Z,1μm,21.5s
XAN LR LR
comp=Z,2μm,19.9s
**XAN Xi'an 93.06 308 P P 19 13 16.7 +0.7**
**O19K Port Alsworth 93.07 12 P P 19 13 15.3 +0.1**
O19K IAmb IAmb 19 13 19.2
comp=Z,96nm,1.2s
**O19K Port Alsworth 93.07 12 P P 19 13 14.6 -0.6**
baz=202
**ILSW Iliamna Southw 93.10 13 P P 19 13 15.3 -0.3**
ILSW IAmb IAmb 19 13 19.3
comp=Z,98nm,1.3s
**MTPU Mount Pierson 93.14 47 P P 19 13 18.7 +2.1**
MTPU IAmb IAmb 19 13 21.8
comp=Z,53nm,1.6s
**D03D Eldon 93.17 35 P P 19 13 16.5 +0.4**
baz=226
**MA2 Magadan 93.26 346** *d iP* **P 19 13 15.2 -0.9**
MA2 pmax pmax
comp=Z,30nm,1.0s
**MA2 Magadan 93.26 346 P P 19 13 15.1 -0.9**
MA2 IAmb IAmb 19 13 21.4
comp=Z,40nm,1.1s
**MA2 Magadan 93.26 346 P P 19 13 15.7 -0.4**
comp=Z,32nm,1.1s
**MA2 Magadan 93.26 346 P P 19 13 15.3 -0.9**
**MSU Marysvale 93.43 47 P P 19 13 17.6 -0.2**
**MSU Marysvale 93.43 47 P P 19 13 17.6 -0.2**
**D05A Enumclaw 93.48 35 P P 19 13 16.2 -1.3**
D05A IAmb IAmb 19 13 22.6
comp=Z,43nm,1.0s
**RSO Redoubt South 93.62 13 P P 19 13 18.9 +0.9**
**G08A Pilot Rock 93.77 38 P P 19 13 19.3 +0.3**
**CBB Campbell River 93.86 32 P P 19 13 19.0 -0.1**
CBB IAmb IAmb 19 13 25.1
comp=Z,69nm,1.6s
**TX32 Lajitas Array 93.98 58 P P 19 13 20.8 +0.5**
**TX31 Lajitas Ar. Si 93.98 58 P P 19 13 20.4 0.0**
TX31 IAmb IAmb 19 13 24.6
comp=Z,87nm,1.4s
**TXAR Lajitas Array 93.98 58 P P 19 13 21.6 +1.2**
comp=Z,6.7nm,0.9s,baz=205,slow=7.0,SNR=22
TXAR PKKPbc **PKKPbc 19 30 22.2 +1.3**
comp=Z,0.6nm,0.6s,baz=93,slow=5.0,SNR=3.5
**TXAR Lajitas Array 93.98 58 P P 19 13 20.8 +0.5**
TXAR *PP **pP 19 14 50.4 -0.1**
**TXAR Lajitas Array 93.98 58 P P 19 13 20.8 +0.5**
TXAR pP **pP 19 14 50.4 -0.1**
**MNTX Cornudas Mount 94.04 55 P P 19 13 22.0 +1.6**
**PZH PanZhiHua 94.05 298** ⇓P **P 19 13 21.2 +0.4**
PZH sP **sP 19 15 32.8 +2.7**

PZH SKS **SKSac** **19 23 17.0 -0.5**
PZH S **ScS** **19 23 59.0 +1.3**
PZH pmax pmax
comp=Z,40nm,1.6s
PZH pmax pmax
comp=Z,480nm,4.8s
PZH LR LR
comp=Z,2μm,20.0s
PZH LR LR
comp=Z,3μm,22.1s
PZH LR LR
comp=Z,3μm,21.3s
**DUG** **Dugway, Tooele** **94.06 45** P **P** **19 13 22.1 +1.6**
DUG pmax pmax
comp=Z,17nm,1.5s
**DUG** **Dugway, Tooele** **94.06 45** P **P** **19 13 22.1 +1.6**
**DUG** **Dugway, Tooele** **94.06 45** P **P** **19 13 20.0 -0.5**
baz=233
**E07A** **Sunnyside** **94.14 37** P **P** **19 13 21.7 +1.2**
E07A IAmb IAmb 19 13 26.2
comp=Z,28nm,0.9s
**B05A** **Bryant** **94.16 35** P **P** **19 13 21.7 +1.2**
baz=227
**LTY** **Liberty** **94.19 36** P **P** **19 13 21.0 +0.2**
**HAWA** **Hanford** **94.19 37** P **P** **19 13 21.5 +0.7**
**DGPR** **DIGLIPUR** **94.25 283** *e*P **P** **19 13 24.7 +3.0**
DGPR IAmb IAmb 19 13 26.3
comp=Z,170nm,1.2s
**O22K** **Cooper Landing** **94.25 14** P **P** **19 13 21.2 +0.6**
O22K IAmb IAmb 19 13 29.9
comp=Z,66nm,0.8s
**O22K** **Cooper Landing** **94.25 14** P **P** **19 13 21.9 +1.2**
baz=206
**MFID** **Camas Ranch** **94.28 41** P **P** **19 13 20.3 -1.1**
**Q16A** **Castle Valley** **94.31 47** P **P** **19 13 20.9 -0.8**
**NLU** **North Lily Min** **94.36 46** P **P** **19 13 22.3 +0.3**
**BMO** **Blue Mountains** **94.37 39** P **P** **19 13 21.4 -0.3**
BMO pmax pmax
comp=Z,12nm,1.3s
**BMO** **Blue Mountains** **94.37 39** P **P** **19 13 21.4 -0.3**
**PB15** **IPOC Station P** **94.39 120** P **P** **19 13 23.5 +0.9**
PB15 IAmb IAmb 19 13 27.0
comp=Z,54nm,1.1s
**PB04** **IPOC Station P** **94.39 119** P **P** **19 13 22.4 -0.2**
PB04 IAmb IAmb 19 13 26.8
comp=Z,77nm,1.1s
**SPCR** **Spurr Chakacha** **94.40 13** P **P** **19 13 22.1 +0.6**
baz=204
**TMUT** **Trail Mountain** **94.51 46** P **P** **19 13 22.3 -0.5**
TMUT IAmb IAmb 19 13 29.6
comp=Z,49nm,1.4s
**XLT** **XiLinHaoTe** **94.57 319** *e*P **P** **19 13 22.3 -0.3**
XLT pP pP 19 14 54.3 +2.1
XLT sP sP 19 15 29.1 -3.0
XLT SKS **SKSac** **19 23 16.7 -2.7**
XLT S **S** **19 23 56.1 -4.4**
XLT sS sS 19 26 36.0 -5.2
XLT pmax pmax
comp=Z,24nm,1.6s
XLT pmax pmax
comp=Z,950nm,8.9s
XLT LR LR
comp=Z,1μm,13.9s
XLT LR LR
comp=Z,1μm,18.7s
XLT LR LR
comp=Z,1μm,22.4s
**PB06** **IPOC Station P** **94.61 120** P **P** **19 13 22.9 -0.6**
PB06 IAmb IAmb 19 13 27.7
comp=Z,57nm,1.2s
**M19K** **Big River Lodg** **94.65 12** P **P** **19 13 22.5 0.0**
M19K IAmb IAmb 19 13 48.6
comp=Z,56nm,1.9s
**RC01** **Rabbit Creek A** **94.80 14** P **P** **19 13 22.8 -0.3**
baz=206
**SRU** **San Rafael Swe** **94.83 47** P **P** **19 13 24.0 -0.1**
SRU pmax pmax
comp=Z,14nm,0.9s
**SRU** **San Rafael Swe** **94.83 47** P **P** **19 13 24.0 -0.1**
**L19K** **White Mountain** **94.83 11** P **P** **19 13 23.3 0.0**
L19K IAmb IAmb 19 13 25.9
comp=Z,49nm,1.3s
**L19K** **White Mountain** **94.83 11** P **P** **19 13 24.1 +0.8**
baz=202
**PB03** **IPOC Station P** **94.86 119** P **P** **19 13 24.5 -0.2**
PB03 IAmb IAmb 19 13 29.0
comp=Z,46nm,1.1s
**NNA** **Nana** **94.87 107** *ce*P **P** **19 13 28.6 +3.9**
NNA pmax pmax
comp=Z,67nm,1.7s
**NNA** **Nana** **94.87 107** P **P** **19 13 24.9 +0.1**
NNA IAmb IAmb 19 13 29.0
comp=Z,38nm,0.9s
**PWL** **Port Wells** **94.90 15** P **P** **19 13 24.3 +0.6**
baz=207
**P17A** **Butche Ranch,** **94.91 47** P **P** **19 13 24.1 -0.3**
**CD2** **Chengdu** **94.93 303** P **P** **19 13 27.0 +2.4**
CD2 sP sP 19 15 35.6 +1.6
CD2 PP **PP** **19 17 20.6 +0.5**
CD2 SKS **SKSac** **19 23 21.3 -0.5**
CD2 S **ScS** **19 24 07.7 +3.0**
CD2 pmax pmax
comp=Z,40nm,0.8s
CD2 LR LR
comp=Z,90nm,12.7s
CD2 LR LR
comp=Z,670nm,12.7s
CD2 LR LR
comp=Z,830nm,15.2s
**SUA** **Susitna One** **94.93 14** P **P** **19 13 24.3 +0.4**
baz=205
**PB07** **IPOC Station P** **94.94 119** P **P** **19 13 23.8 -1.4**
PB07 IAmb IAmb 19 13 29.4
comp=Z,33nm,0.9s
**D08A** **Wollman Farm,** **94.95 37** P **P** **19 13 24.7 +0.5**
D08A IAmb IAmb 19 13 28.2
comp=Z,23nm,0.9s
**E09A** **Wood Farm, Sta** **95.00 38** P **P** **19 13 24.7 +0.3**
**MVCO** **Mesa Verde** **95.02 49** P **P** **19 13 24.2 -0.9**
baz=235
**HVU** **Hansel Valley** **95.04 44** P **P** **19 13 25.2 +0.2**
HVU pmax pmax
comp=Z,24nm,0.8s
**HVU** **Hansel Valley** **95.04 44** P **P** **19 13 25.2 +0.2**
HVU IAmb IAmb 19 13 29.0
comp=Z,24nm,0.8s
**ANMO** **Albuquerque** **95.10 52**⇓ *e*P **P** **19 13 28.4 +3.0**
ANMO pmax pmax
comp=Z,11nm,1.1s
**ANMO** **Albuquerque** **95.10 52** P **P** **19 13 25.5 0.0**
**ANMO** **Albuquerque** **95.10 52** P **P** **19 13 24.8 -0.6**
baz=236
**ANMO** **Albuquerque** **95.10 52** P **P** **19 13 28.2 +2.7**
**F10A** **Beach Ranch, E** **95.14 38** P **P** **19 13 23.5 -1.7**
**LVC** **Limon Verde** **95.16 120** S **SKSac** **19 23 25.9 +1.5**
comp=Z,1.5nm,0.4s,baz=224,slow=23,SNR=10
**LVC** **Limon Verde** **95.16 120** P **P** **19 13 28.4 +2.1**
LVC pmax pmax
comp=Z,44nm,1.1s
**LVC** **Limon Verde** **95.16 120** *eP* **P** **19 13 30.1 +3.8**
**LVC** **Limon Verde** **95.16 120** P **P** **19 13 28.4 +2.1**
LVC IAmb IAmb 19 13 31.2
comp=Z,44nm,1.1s
**PB02** **IPOC Station P** **95.17 118** P **P** **19 13 24.1 -1.9**
PB02 IAmb IAmb 19 13 29.7
comp=Z,31nm,1.2s
**HLID** **Hailey** **95.17 42** P **P** **19 13 26.0 +0.5**
**HLID** **Hailey** **95.17 42** P **P** **19 13 26.0 +0.5**
baz=232
**GLI** **Glacier Island** **95.19 15** P **P** **19 13 24.3 -0.6**
GLI IAmb IAmb 19 13 28.5
comp=Z,51nm,1.0s
**GLI** **Glacier Island** **95.19 15** P **P** **19 13 25.4 +0.4**
baz=208
**EYAK** **Cordova Ski Ar** **95.22 16** P **P** **19 13 25.2 +0.2**
baz=209
**PLID** **Pearl Lake** **95.24 40** P **P** **19 13 25.4 -0.5**
**L20K** **Farewell, AK** **95.27 12** P **P** **19 13 25.3 0.0**
baz=202
**P18A** **Preston Nutter** **95.31 47** P **P** **19 13 24.5 -1.9**
**M22K** **Willow** **95.32 14** P **P** **19 13 24.8 -0.6**
baz=205
**TTA** **Tatalina** **95.34 11** P **P** **19 13 24.9 -0.7**
TTA pmax pmax
comp=Z,35nm,1.5s
**TTA** **Tatalina** **95.34 11** P **P** **19 13 24.9 -0.7**
**TTA** **Tatalina** **95.34 11** P **P** **19 13 25.4 -0.3**
baz=200
**HHC** **Hu-ho-hao-te** **95.35 315** *e*P **P** **19 13 27.2 +0.9**
HHC SKS **SKSac** **19 23 24.4 +0.7**
HHC S **S** **19 24 06.9 -0.5**
HHC pmax pmax
comp=Z,19nm,1.0s
**KNK** **Knik Glacier** **95.36 15** P **P** **19 13 25.1 -0.7**
KNK IAmb IAmb 19 17 02.9
comp=Z,67nm,1.5s
**KNK** **Knik Glacier** **95.36 15** P **P** **19 13 25.0 -0.7**
baz=207
**PMR** **Palmer** **95.38 14** P **P** **19 13 25.7 -0.1**
baz=206
**PB09** **IPOC Station P** **95.39 119** P **P** **19 13 29.2 +2.1**
PB09 IAmb IAmb 19 13 32.1
comp=Z,40nm,1.0s
**PV23** **Carpenter Ridg** **95.40 48** P **P** **19 13 28.9 +2.1**
**GHO** **Glory Hole Cre** **95.59 14** P **P** **19 13 26.8 0.0**
GHO IAmb IAmb 19 13 34.1
comp=Z,20nm,0.8s
**B08A** **Colville Reser** **95.59 36** P **P** **19 13 26.5 -0.6**
**TA02** **Huaiquique** **95.60 117** P **P** **19 13 25.9 -2.0**
TA02 IAmb IAmb 19 13 31.3
comp=Z,119nm,1.6s
**PB01** **IPOC Station P** **95.64 118** P **P** **19 13 28.3 +0.1**
**DIV** **Divide** **95.72 16** P **P** **19 13 28.1 +0.7**
DIV IAmb IAmb 19 13 31.8
comp=Z,36nm,1.1s
**C09A** **Chrisman Ranch** **95.77 37** P **P** **19 13 26.6 -1.3**
**WRAK** **Wrangell Islan** **95.78 24** P **P** **19 13 26.1 -1.5**
**ZEA** **Zeya** **95.81 332** *de*P **P** **19 13 27.9 0.0**
ZEA *e**PP **pP** **19 14 56.1 -1.6**
ZEA *e**SP **sP** **19 15 37.5 -0.1**
ZEA *e* 19 17 22.7
ZEA *e* 19 19 35.8
ZEA *e* 19 23 26.6
ZEA *e*S **S** **19 24 12.8 +2.3**
ZEA *e*SP **SP** **19 25 31.7 -1.0**
ZEA *e*PS **PS** **19 26 22.9 -0.4**
ZEA pmax pmax
comp=N,20nm,1.4s
ZEA pmax pmax
comp=Z,30nm,1.3s
ZEA pmax pmax
comp=E,200nm,4.0s
ZEA pmax pmax
comp=N,200nm,4.5s
ZEA pmax pmax
comp=Z,200nm,8.9s
ZEA pmax pmax
comp=Z,300nm,8.4s
ZEA smax smax
comp=N,500nm,15.8s
**MESA** **MESA** **95.86 18** P **P** **19 13 29.7 +1.4**
**BMRM** **Bremner River** **95.86 16** P **P** **19 13 28.7 +0.7**
BMRM IAmb IAmb 19 17 08.0
comp=Z,35nm,1.3s
**BMRM** **Bremner River** **95.86 16** P **P** **19 13 28.4 +0.4**
baz=210
**CUT** **Chulitna** **95.88 13** P **P** **19 13 28.2 +0.2**
baz=205
**PPLA** **Purkeypile** **95.96 12** P **P** **19 13 28.1 -0.5**
baz=204
**SCM** **Sheep Creek Mo** **95.99 15** P **P** **19 13 29.5 +0.9**
SCM pmax pmax
comp=Z,52nm,1.2s
**SCM** **Sheep Creek Mo** **95.99 15** P **P** **19 13 29.5 +0.9**
SCM IAmb IAmb 19 13 32.4
comp=Z,52nm,1.2s
**SCM** **Sheep Creek Mo** **95.99 15** P **P** **19 13 28.5 -0.1**
baz=208
**SEY** **Seymchan** **96.00 348** S **SKSac** **19 23 25.9 +0.2**
comp=Z,2.5nm,0.8s,baz=25,slow=23,SNR=14
SEY PKKPbc PKKPbc 19 30 15.9 -1.1
comp=Z,1.9nm,0.6s,baz=132,slow=1.6,SNR=5.5
SEY SKKPbc **SKKPbc** **19 33 17.9 -4.1**
comp=Z,4.2nm,0.8s,baz=276,slow=3.6,SNR=11
**SEY** **Seymchan** **96.00 348**⇓ *e*P **P** **19 13 28.0 -0.5**
**KLU** **Klutina** **96.00 16** P **P** **19 13 29.3 +0.6**
baz=209
**K20K** **Telida** **96.06 11** P **P** **19 13 28.2 -0.6**
K20K IAmb IAmb 19 17 23.4
comp=Z,59nm,1.4s
**K20K** **Telida** **96.06 11** P **P** **19 13 28.9 +0.1**
baz=202
**YAH** **Yahtse** **96.07 18** P **P** **19 13 29.9 +0.7**
**HIA** **Hailar** **96.10 325** P **P** **19 13 28.0 -1.4**
HIA pmax pmax
comp=Z,13nm,0.9s
**HIA** **Hailar** **96.10 325** P **P** **19 13 28.0 -1.4**
**ISLE** **Juniper Island** **96.12 18** P **P** **19 13 30.6 +1.2**
**PB11** **IPOC Station P** **96.26 117** P **P** **19 13 31.3 +0.2**
PB11 IAmb IAmb 19 13 35.6
comp=Z,37nm,0.9s
**N25K** **Chitina, Valde** **96.42 16** P **P** **19 13 30.7 +0.1**
baz=210
**S22A** **4UR Ranch, Cre** **96.42 50** P **P** **19 13 34.0 +2.5**
**S22A** **4UR Ranch, Cre** **96.42 50** P **P** **19 13 31.0 -0.4**
baz=236
**PB08** **IPOC Station P** **96.42 118** P **P** **19 13 30.9 -1.1**
**CAST** **Castle Rocks** **96.46 12** P **P** **19 13 29.3 -1.3**
**CAST** **Castle Rocks** **96.46 12** P **P** **19 13 30.0 -0.7**
baz=204
**GLB** **Gilahina Butte** **96.47 17** P **P** **19 13 30.7 0.0**
**M24K** **Tolsona, Glenn** **96.49 15** P **P** **19 13 31.6 +0.7**
baz=209
**TNA** **Tin City** **96.49 5** P **P** **19 13 31.5 +0.8**
**TNA** **Tin City** **96.49 5** P **P** **19 13 30.6 -0.1**
baz=190
**AHID** **Auburn Hatcher** **96.63 44** P **P** **19 13 33.3 +1.1**
AHID IAmb IAmb 19 13 36.8
comp=Z,34nm,1.4s
**NEW** **Newport** **96.66 37** P **P** **19 13 35.7 +3.8**
NEW pmax pmax
comp=Z,5.0nm,1.0s
**NEW** **Newport** **96.66 37** P **P** **19 13 35.7 +3.8**
**NEW** **Newport** **96.66 37** P **P** **19 13 32.8 +0.9**
baz=230
**GO01** **Chusmiza** **96.67 117** P **P** **19 13 33.3 0.0**
**MNMC** **Minye Minye** **96.67 117** P **P** **19 13 33.3 +0.2**
MNMC IAmb IAmb 19 13 37.6
comp=Z,40nm,0.7s
**BARN** **Barnard Glacie** **96.68 18** P **P** **19 13 33.1 +1.2**
**KTH** **Kantishna Hill** **96.80 13** P **P** **19 13 31.9 -0.3**
KTH IAmb IAmb 19 17 31.1
comp=Z,53nm,1.6s
**J20K** **Nowinta River** **96.81 11** P **P** **19 13 32.0 -0.2**
J20K IAmb IAmb 19 17 33.4
comp=Z,31nm,1.4s
**TRF** **Thorofare Moun** **96.83 13** P **P** **19 13 31.7 -0.8**
TRF IAmb IAmb 19 13 36.7
comp=Z,17nm,0.7s
**TRF** **Thorofare Moun** **96.83 13** P **P** **19 13 31.7 -0.8**
baz=205
**MCMT** **McKenzie Canyo** **96.84 41** P **P** **19 13 33.8 +0.7**
**CHUM** **Lake Minchumin** **96.85 12** P **P** **19 13 32.8 +0.4**
baz=204
**RND** **Reindeer** **97.07 14** P Pdif 19 13 33.7 +0.2
RND pmax pmax
comp=Z,15nm,0.8s
**RND** **Reindeer** **97.07 14** P Pdif 19 13 33.7 +0.2
**MSTX** **Muleshoe** **97.12 55** P **P** **19 13 33.8 -0.7**
baz=238
**REDW** **Red Top Meadow** **97.12 43** P **P** **19 13 33.9 -0.6**
**SMCO** **Snowmass** **97.12 48** P **P** **19 13 33.6 -1.1**
**PB16** **IPOC Station P** **97.20 116** P Pdif 19 13 36.5 +0.6
**SDCO** **Great Sand Dun** **97.30 50** P Pdif 19 13 37.4 +2.0
**SDCO** **Great Sand Dun** **97.30 50** P **P** **19 13 34.4 -0.9**
baz=237
**DLMT** **Dillon** **97.30 41** P **P** **19 13 33.7 -1.4**
**MCK** **McKinley** **97.35 13** P **P** **19 13 34.5 -0.1**
MCK pmax pmax
comp=Z,95nm,1.8s
**MCK** **McKinley** **97.35 13** P **P** **19 13 34.5 -0.1**
MCK IAmb IAmb 19 17 37.5
comp=Z,95nm,1.8s
**MCK** **McKinley** **97.35 13** P Pdif 19 13 34.8 +0.2
baz=206
**PAX** **Paxson** **97.40 15** P **P** **19 13 34.5 -0.5**
PAX pmax pmax
comp=Z,8.0nm,1.0s
**PAX** **Paxson** **97.40 15** P **P** **19 13 34.5 -0.5**
**PAX** **Paxson** **97.40 15** P **P** **19 13 34.7 -0.3**
baz=209
**MOOW** **Moose Ponds** **97.41 43** P Pdif 19 13 37.9 +2.2
**LOHW** **Long Hollow** **97.42 43** P Pdif 19 13 37.1 +1.4
**JCT** **Junction City** **97.42 59** P **P** **19 13 34.5 -1.3**
baz=239
**M26K** **Nabesna, AK** **97.49 16** P Pdif 19 13 36.0 +0.7
M26K IAmb IAmb 19 15 13.1
comp=Z,48nm,1.8s
**BW06** **Boulder Array** **97.55 44** P Pdif 19 13 37.4 +1.1
**BW06** **Boulder Array** **97.55 44** P **P** **19 13 35.7 -0.6**
baz=235
**PD31** **Pinedale Array** **97.55 44** P **P** **19 13 36.3 0.0**
**PDAR** **Pinedale Array** **97.55 44** P **P** **19 13 36.1 -0.2**
comp=Z,3.7nm,0.8s,baz=224,slow=4.1,SNR=25
PDAR PP **PP** **19 17 37.6 -2.6**
comp=Z,3.1nm,0.9s,baz=226,slow=4.7,SNR=4.4
PDAR PKKPbc **PKKPbc** **19 30 11.7 -0.4**
comp=Z,2.5nm,0.7s,baz=90,slow=5.0,SNR=15
PDAR SKKPbc SKKPbc 19 33 13.3 -3.0
comp=Z,2.1nm,0.7s,baz=82,slow=4.4,SNR=7.9
**PDAR** **Pinedale Array** **97.55 44** P **P** **19 13 36.3 0.0**
PDAR **PKKPbc** **19 30 10.9 -1.2**
**YUK3** **Moose Creek** **97.60 18** P **P** **19 13 35.5 -0.6**
baz=214
**HYT** **Haines Junctio** **97.62 19** P Pdif 19 13 37.1 +1.0
baz=216
**LZH** **Lanzhou** **97.66 307**⇓ P Pdif 19 13 40.0 +3.1
LZH pP pP 19 15 06.3 -0.4
LZH sP sP 19 15 45.6 -1.0
LZH PP **PP** **19 17 40.8 -0.3**
LZH SKS **SKSac** **19 23 36.0 +0.1**
LZH *e*S **S** **19 24 21.0 -6.4**
LZH SS **SS** **19 31 18.2 -0.7**
LZH pmax pmax
comp=Z,31nm,1.2s
LZH pmax pmax
comp=Z,860nm,5.4s
**T25A** **Trinidad** **97.69 51** P Pdif 19 13 37.3 +0.2
baz=237
**M27K** **Edge Creek, AK** **97.73 17** P Pdif 19 13 36.7 +0.2
M27K IAmb IAmb 19 16 39.8
comp=Z,25nm,1.4s
**MENT** **Mentasta** **97.78 16** P **P** **19 13 35.5 -1.1**
**YMR** **Madison River** **97.82 42** P **P** **19 13 37.4 -0.1**
YMR IAmb IAmb 19 15 35.6
comp=Z,48nm,1.9s
**H17A** **Grant Village** **97.89 43** P Pdif 19 13 41.2 +3.4
**H17A** **Grant Village** **97.89 43** P Pdif 19 13 41.4 +3.5
baz=234
**L26K** **Log Cabin Wild** **97.94 16** P **P** **19 13 37.5 +0.2**
baz=211
**YHH** **Holmes Hill** **97.96 42** P Pdif 19 13 40.8 +2.6
**BOZ** **Bozeman (W)** **97.99 41** P **P** **19 13 38.5 +0.4**
BOZ pmax pmax
comp=Z,8.0nm,1.0s
**BOZ** **Bozeman (W)** **97.99 41** P **P** **19 13 38.5 +0.4**
**BOZ** **Bozeman (W)** **97.99 41** P Pdif 19 13 37.6 -0.5
baz=234
**BVCY** **Beaver Creek** **98.03 17** P Pdif 19 13 37.4 -0.3
baz=213
**NEA2** **Nenana** **98.09 13** P Pdif 19 13 37.6 -0.3
baz=206
**I21K** **Tanana** **98.10 12** P **P** **19 13 38.4 +0.5**
I21K IAmb IAmb 19 17 35.6
comp=Z,25nm,1.3s
**I21K** **Tanana** **98.10 12** P Pdif 19 13 37.7 -0.2
baz=204
**WRH** **Wood River Hil** **98.18 13** P **P** **19 13 39.6 +1.3**
**MLY** **Manley** **98.18 12** P **P** **19 13 38.8 +0.4**
**MLY** **Manley** **98.18 12** P Pdif 19 13 38.1 -0.3
baz=205
**RIDG** **Independent Ri** **98.21 15** P **P** **19 13 38.7 +0.2**
RIDG IAmb IAmb 19 17 07.6
comp=Z,43nm,1.6s
**RIDG** **Independent Ri** **98.21 15** P Pdif 19 13 38.1 -0.4
baz=210
**DOT** **Dot Lake** **98.31 15** P Pdif 19 13 38.8 -0.1
DOT IAmb IAmb 19 16 21.5
comp=Z,32nm,1.7s
**HDA** **Harding Lake** **98.35 14** P Pdif 19 13 38.8 -0.3
baz=208
**H21K** **Melozitna Rive** **98.40 11** P Pdif 19 13 38.9 -0.3
baz=203
**IMAR** **Indian Mountai** **98.55 11** Pdif Pdif 19 13 39.9 0.0
**P33M** **Teslin, Yukon** **98.56 22** P Pdif 19 13 40.0 -0.2
baz=220
**COLA** **College** **98.58 13**⇑ *e*P **P** **19 13 41.2 +1.2**
COLA pmax pmax
comp=Z,5.0nm,0.7s
**SCRK** **Sand Creek** **98.61 15** P Pdif 19 13 40.2 -0.2
baz=211
**ILAR** **Eielson Array** **98.69 14** P Pdif 19 13 40.0 -0.6
comp=Z,2.7nm,0.7s,baz=214,slow=5.1,SNR=18
ILAR PP **PP** **19 17 41.9 -6.2**
comp=Z,4.3nm,0.9s,baz=229,slow=6.4,SNR=4.1
ILAR PKiKP **PKiKP** **19 18 08.6 -0.9**
comp=Z,2.6nm,0.8s,baz=299,slow=2.3,SNR=7.0
ILAR S **SKSac** **19 23 38.3 -1.0**
comp=Z,2.9nm,0.9s,baz=207,slow=11,SNR=9.2
ILAR PKKPbc **PKKPbc** **19 30 07.8 -1.9**
comp=Z,2.5nm,0.7s,baz=355,slow=2.3,SNR=6.7
**ILAR** **Eielson Array** **98.69 14** P Pdif 19 13 40.2 -0.3
**ILAR** **Eielson Array** **98.69 14** Pdif Pdif 19 13 40.2 -0.3
**N23A** **Red Feather La** **98.73 47** P Pdif 19 13 40.9 -0.8
baz=237
**J25K** **Salcha River,** **98.86 14** P Pdif 19 13 41.1 -0.4
baz=210
**POKR** **Poker Plat Res** **98.88 13** P **P** **19 13 41.9 +0.5**
baz=208
**LKP** **Lekhapani** **98.99 296** *e*P **P** **19 13 43.5 +0.7**
LKP IAmb IAmb 19 13 48.3
comp=Z,24nm,0.6s
**RLMT** **Red Lodge** **99.07 43** P **Pdif** **19 13 41.9 -1.1**
baz=235
**BILL** **Bilibino** **99.08 355**⇑ *i*P **Pdif** **19 13 44.2 +2.0**
BILL *i* *PP **pP** **19 15 12.3 -0.6**
BILL *i* 19 17 48.6
BILL *i* S **SKSac** **19 23 42.1 +0.9**
BILL *i* SS **SS** **19 31 36.7 -0.3**
BILL pmax pmax
comp=Z,21nm,0.9s
**JTS** **Las Juntas de** **99.40 84**⇑ *e*P **Pdif** **19 13 46.7 +1.7**
JTS pmax pmax
comp=Z,5.0nm,0.9s
**H24K** **Noodor Dome** **99.44 13** P **Pdif** **19 13 44.0 +0.1**
baz=208
**LPAZ** **La Paz** **99.46 115** P **Pdif** **19 13 48.1 +2.1**
comp=Z,6.1nm,0.6s,baz=243,slow=1.4,SNR=15
LPAZ pP **pP** **19 15 15.2 -0.8**
comp=Z,4.0nm,0.7s,baz=323,slow=4.2,SNR=2.2
LPAZ S **SKSac** **19 23 46.8 -0.1**
comp=Z,3.8nm,1.0s,baz=314,slow=1.0,SNR=3.8
**LPAZ** **La Paz** **99.46 115** *e*P **Pdif** **19 13 49.1 +3.2**
**KOHI** **KOHIMA** **99.54 294** *e*P **Pdif** **19 13 45.5 0.0**
KOHI IAmb IAmb 19 14 04.9
comp=Z,32nm,1.1s
**M31M** **Drury Creek, Y** **99.63 20** P **Pdif** **19 13 44.8 0.0**
baz=218
**DIBR** **DIBRUGARH** **99.78 296** *e*P **Pdif** **19 13 49.0 +2.7**
**DAWY** **Dawson** **99.78 17** P **Pdif** **19 13 46.2 +0.7**
baz=215
**COLD** **Coldfoot** **100.27 11** P **Pdif** **19 13 49.1 +1.5**
baz=206
**WMOK** **Wichita Mounta** **100.34 56** P **Pdif** **19 13 47.7 -1.0**
baz=240
**EGMT** **Eagleton** **100.45 40** P **Pdif** **19 13 49.2 +0.3**
baz=235
**BELO** **BELONIA** **100.46 291** *e*P **Pdif** **19 13 49.7 +0.3**
**ITAN** **ITANAGAR** **100.54 295** *e*P **Pdif** **19 13 51.9 +2.2**
ITAN IAmb IAmb 19 14 04.6
comp=Z,90nm,1.2s
**MMPY** **Sheldon Lake,** **100.88 21** P **Pdif** **19 13 51.4 +0.9**
baz=221
**CIT** **Chita** **100.90 325** *e*P **Pdif** **19 13 53.0 +2.3**
CIT pmax pmax
comp=Z,82nm,4.7s
**CPUP** **Villa Florida** **101.00 130** P **Pdif** **19 13 54.8 +2.9**
comp=Z,2.9nm,0.7s,baz=45,slow=16,SNR=3.9
CPUP PKKPbc **PKKPbc** **19 30 00.3 -0.9**
comp=Z,6.9nm,0.9s,baz=25,slow=1.4,SNR=11
**YAK** **Yakutsk** **101.00 338** *e*P **Pdif** **19 13 50.8 -0.1**
YAK *e* 19 18 10.9
YAK *e* 19 23 47.0
YAK *e* 19 24 54.8
YAK pmax pmax
comp=Z,39nm,1.0s

YAK pmax pmax
comp=E,5.0nm,1.4s
YAK pmax pmax
comp=N,7.0nm,1.1s
**I29M Ogilvie Camp,** 101.11 16 P **Pdif** 19 13 52.0 +0.7
baz=216
**TOLK Toolik Lake Re** 101.65 11 P **Pdif** 19 13 54.5 +0.8
baz=206
**RSSD Black Hills** 101.65 45 P **Pdif** 19 13 55.6 +1.1
baz=238
**GUWA GUWAHATI** 101.67 293 *e*P **Pdif** 19 13 54.7 -0.1
GUWA IAmb IAmb 19 13 59.4
comp=Z,12nm,0.8s
**LAO LASA Array** 101.71 42 P **Pdif** 19 13 55.0 +0.5
baz=238
**GTA Gaotai** 102.11 309 *e*P **Pdif** 19 13 57.2 +0.6
GTA PP **PKiKP** 19 18 16.6 0.0
GTA SKS 19 23 53.7
GTA pmax pmax
comp=Z,14nm,1.0s
GTA pmax pmax
comp=Z,480nm,5.3s
**EPYK Eagle Plains** 102.31 16 P **Pdif** 19 13 57.4 +0.7
baz=217
**SONM Songino Array** 102.35 319 P **Pdif** 19 13 57.2 -0.2
comp=Z,4.2nm,0.9s,baz=125,slow=4.1,SNR=22
SONM PP **PP** 19 18 08.4 -7.6
comp=Z,4.6nm,0.9s,baz=133,slow=5.4,SNR=3.7
SONM PKiKP **PKiKP** 19 18 16.4 -0.4
comp=Z,20nm,1.1s,baz=76,slow=0.9,SNR=6.6
SONM PKKPbc **PKKPbc** 19 29 59.1 +0.6
comp=Z,3.6nm,0.6s,baz=278,slow=3.4,SNR=19
SONM SKKPbc SKKPbc 19 33 02.8 -1.2
comp=Z,2.7nm,0.9s,baz=266,slow=4.4,SNR=4.7
**SONM Songino Array** 102.35 319 Pdif **Pdif** 19 13 56.4 -1.0
SONM **PKKPbc** 19 29 59.2 +0.6
**BOD Bodaibo** 104.11 330 *e*P **Pdif** 19 14 01.7 -3.1
BOD pmax pmax
comp=Z,9.0nm,1.7s
**CHLP Challavanipeta** 104.29 283 *e*Pdif **Pdif** 19 14 08.6 +2.0
**INK Inuvik** 104.61 16 Pdiff **Pdif** 19 14 07.1 +0.3
comp=Z,2.4nm,0.9s,baz=205,slow=5.8,SNR=6.0
INK PKiKP **PKiKP** 19 18 19.8 -0.3
comp=Z,9.1nm,0.9s,baz=184,slow=3.1,SNR=11
INK S **SKSac** 19 24 06.8 -0.3
comp=Z,2.4nm,0.8s,baz=339,slow=33,SNR=8.5
INK PKKP **PKKPab** 19 30 06.1 -1.4
comp=Z,3.9nm,1.0s,baz=7.5,slow=6.7,SNR=4.4
**SIV San Ignacio** 105.04 119 PKiKP **PKiKP** 19 18 24.5 +1.9
comp=Z,1.2nm,0.5s,baz=251,slow=8.1,SNR=1.7
SIV S **SKSac** 19 24 12.6 +0.8
comp=Z,0.9nm,0.4s,baz=221,slow=23,SNR=7.0
SIV PKKPbc **PKKPbc** 19 29 49.4 0.0
comp=Z,2.3nm,0.5s,baz=52,slow=6.4,SNR=8.3
**W41B Gary Mavity, V** 105.26 58 P **PKiKP** 19 18 20.9 -1.4
baz=243
**U40A Yellville** 105.35 57 P **PKiKP** 19 18 21.5 -1.1
baz=243
**ZAK Zakamensk** 105.42 320 *e*P **Pdif** 19 14 10.5 -0.5
ZAK pmax pmax
comp=Z,12nm,1.2s
**SKHT Srikalahasti** 105.74 277 *e*Pdif **Pdif** 19 14 15.7 +2.6
**PVM Polavaram** 105.75 281 *e*Pdif **Pdif** 19 14 14.9 +1.9
**MYLAV Mylavaram** 106.36 280 *e*Pdif **Pdif** 19 14 13.9 -1.9
**ADKI Addanki** 106.50 279 *e*Pdif **Pdif** 19 14 18.2 +1.7
**YKA Yellowknife Ar** 106.51 26 Pdiff **Pdif** 19 14 16.1 +0.7
comp=Z,1.5nm,1.0s,baz=236,slow=4.3,SNR=8.9
YKA PKiKP **PKiKP** 19 18 22.9 -0.9
comp=Z,4.6nm,0.8s,baz=258,slow=1.6,SNR=16
YKA SKKPbc SKKPbc 19 32 47.5 -5.9
comp=Z,1.6nm,0.7s,baz=44,slow=2.6,SNR=5.6
YKA PKPPKP 19 38 07.5
comp=Z,1.1nm,0.9s,baz=37,slow=2.0,SNR=8.9
**JIRN Jiri** 106.71 292 *e*P **PKiKP** 19 18 25.6 -0.1
comp=Z,7.3nm,0.4s
**GUN Gumba** 107.06 293 *e*P **PKiKP** 19 18 26.2 -0.2
**CCM Cathedral Cave** 107.26 56 P **PKiKP** 19 18 24.5 -1.4
baz=244
**PKI Pulchoki** 107.29 292 *e*P **PKiKP** 19 18 26.2 -0.6
**PKIN Phulchoki** 107.30 292 *e*P **PKiKP** 19 18 27.1 +0.4
**MOY Mondy** 107.30 320 *e*P **Pdif** 19 14 27.4 +8.1
**NJS Nagarjunasagar** 107.40 279 *e*Pdif **Pdif** 19 14 22.8 +2.4
**KKN Kakani** 107.49 292 *e*P **PKiKP** 19 18 27.5 +0.5
**SRLM Srisailam** 107.54 279 *e*Pdif **Pdif** 19 14 22.8 +1.7
**C36M Paulatuk** 107.75 18 P **PKiKP** 19 18 24.8 -1.1
baz=228
**CUPL Choutuppal** 108.06 280 *e*Pdif **Pdif** 19 14 25.2 +1.8
**GKN Gorkha** 108.09 292 *e*P **PKiKP** 19 18 27.4 -0.7
**TIXI Tiksi** 108.22 345 PKiKP **PKiKP** 19 18 25.3 -1.4
comp=Z,6.4nm,0.6s,baz=52,slow=2.4,SNR=3.2
TIXI S **SKSac** 19 24 23.1 +0.3
comp=Z,6.7nm,0.9s,baz=296,slow=22,SNR=20
**LRAL Lakeview Retre** 108.23 62 P **PKiKP** 19 18 26.1 -1.9
baz=245
**URV Uravakonda** 108.40 277 *e*Pdif **Pdif** 19 14 27.0 +2.1
**HYBB Hyderabad (bro** 108.43 280 *e*Pdif **Pdif** 19 14 24.9 -0.1
HYBB *e*PP **PP** 19 19 00.9 0.0
HYBB *ep*PKiKP pPKiKP 19 20 01.4 -2.6
HYBB *e*SKSac **SKSac** 19 24 26.4 +0.1
**AGMN Agassiz Nation** 108.63 44 P **PKiKP** 19 18 27.1 -1.1
baz=245
**KOLN Koldanda** 108.82 292 *e*P **PKiKP** 19 18 28.5 -1.0
comp=Z,28nm,0.8s
**WVT Waverly** 108.91 59 P **PKiKP** 19 18 27.3 -1.8
baz=245
**DANN Dangsing** 108.94 292 *e*P **PKiKP** 19 18 28.1 -1.7
comp=Z,31nm,0.8s
**A36M Sachs Harbour** 109.22 16 P **PKiKP** 19 18 27.6 -1.0
baz=228
**PYUN Piuthan** 109.45 292 *e*P **PKiKP** 19 18 30.0 -0.7
comp=Z,44nm,1.1s
**ULM Lac du Bonnet** 109.45 43 PKiKP **PKiKP** 19 18 27.8 -1.9
comp=Z,3.2nm,0.6s,baz=220,slow=5.8,SNR=5.7
ULM SKP 19 21 26.3
comp=Z,8.3nm,1.1s,baz=237,slow=0.8,SNR=3.6
ULM PKKPbc **PKKPbc** 19 29 35.8 -0.9
comp=Z,2.5nm,0.7s,baz=102,slow=5.5,SNR=3.0
ULM PKKPab **PKKPab** 19 29 46.2 -0.6
comp=Z,7.8nm,0.7s,baz=81,slow=4.2,SNR=9.0
**JFWS Jewell Farm** 109.98 51 P **PKiKP** 19 18 30.0 -1.0
baz=246
**KLRI Killari** 110.39 279 *e*Pdif **Pdif** 19 14 34.1 +0.4
**WCI Wyandotte Cave** 110.88 57 P **PKiKP** 19 18 31.6 -1.2
baz=247
**GOGA Godfrey** 111.08 63 P **PKiKP** 19 18 31.4 -1.9
baz=246
**SFIN Lafayette** 111.15 55 P **PKiKP** 19 18 31.3 -1.9
baz=247
**EYMN Ely** 111.16 46 P **PKiKP** 19 18 32.1 -0.9
baz=247
**WMQ Urumqi** 112.20 309 PKP **PKiKP** 19 18 34.4 -0.8
WMQ PP **PP** 19 19 26.7 -0.7
WMQ SKKS 19 25 44.8
WMQ AMB AMB
comp=Z,2μm,4.7s
**TZTN Tazewell** 112.24 60 P **PKiKP** 19 18 33.8 -1.7
baz=248
**O48B Farmland** 112.47 56 P **PKiKP** 19 18 34.1 -1.7
baz=248
**P49A Miami Univ. Ec** 112.52 56 P **PKiKP** 19 18 34.3 -1.6
baz=248
**KMSC Kings Mountain** 113.38 62 P **PKiKP** 19 18 36.4 -1.2
baz=248
**ACSO Alum Creek Sta** 114.02 56 P PKPdf 19 18 37.5 -1.2
baz=249
**P52A Corning** 114.42 57 P PKPdf 19 18 37.9 -1.6
baz=249
**DGZ Jazzator, Alta** 114.43 315⇑ *i*PKiKP PKPdf 19 18 38.6 -0.8
**BDFB Brasilia** 114.64 128 PKP **PKiKP** 19 18 40.4 -0.5
comp=Z,8.0nm,0.7s,baz=188,slow=2.6,SNR=11
BDFB SKP 19 21 38.4
comp=Z,10nm,0.9s,baz=311,slow=2.1,SNR=5.5
BDFB PKKPbc **PKKPbc** 19 29 19.9 +0.8
comp=Z,7.0nm,0.8s,baz=109,slow=2.3,SNR=9.3
**BLA Blacksburg** 114.82 60 PKiKP PKPdf 19 18 39.3 -1.1
**BLA Blacksburg** 114.82 60 PKPdf PKPdf 19 18 39.3 -1.1
**BLA Blacksburg** 114.82 60 P PKPdf 19 18 38.3 -2.2
baz=249
**PTGA Pitinga** 115.01 107 PKP **PKPdf** 19 18 41.2 -0.2
comp=Z,4.6nm,0.8s,baz=284,slow=1.5,SNR=7.3
PTGA SKP 19 21 38.7
comp=Z,10nm,0.8s,baz=204,slow=3.6,SNR=8.3
**SDDR Presa de Saban** 115.12 82 **PKiKP** 19 18 42.5 +1.0
**Q54A Coxs Mills** 115.13 58 **PKiKP** 19 18 42.0 +1.1
Q54A SKPdf **SKiKP** 19 21 38.6 +0.1
**O53A New Philadelph** 115.29 57 P **PKiKP** 19 18 41.8 +0.7
baz=250
**ZSN Zaisan** 115.31 312 *e*PKiKP **PKPdf** 19 18 39.5 -1.5
ZSN *e* 19 19 46.4
**ZSN Zaisan** 115.31 312 *e*PKP **PKPdf** 19 18 39.5 -1.5
baz=312
ZSN *e*PP **PP** 19 19 46.4 -2.7
baz=312
**R55A Marlinton** 115.42 59 **PKiKP** 19 18 42.4 +0.8
**BIRV Birongo** 115.54 93 PKPdf **PKPdf** 19 18 42.3 -0.1
BIRV PP **PP** 19 19 51.2 +0.1
**T57A Hurt** 115.62 61 **PKiKP** 19 18 41.9 0.0
**N53A Lisbon** 115.75 56 **PKPdf** 19 18 41.6 -0.4
**O54A Avella** 115.87 57 **PKiKP** 19 18 43.1 +0.8
**M53A WI Miller and** 116.07 56 P **PKPdf** 19 18 41.2 -1.5
baz=251
**MCWV Mont Chateau** 116.08 58 P **PKPdf** 19 18 41.3 -1.4
baz=251
**BOSA Boshof** 116.24 205 PKP **PKPdf** 19 18 43.0 -0.6
comp=Z,12nm,0.7s,baz=157,slow=2.3,SNR=26
BOSA SKP 19 21 41.0
comp=Z,5.3nm,0.7s,baz=181,slow=2.2,SNR=5.0
BOSA PKKPbc **PKKPbc** 19 29 15.2 +1.0
comp=Z,5.2nm,0.9s,baz=349,slow=4.4,SNR=7.4
**BOSA Boshof** 116.24 205 PKPdf **PKPdf** 19 18 43.2 -0.4
**BOAV Boa Vista** 116.28 104 **PKiKP** 19 18 44.0 +0.1
**Q56A Snyder Ridge,** 116.36 59 **PKiKP** 19 18 44.3 +1.0
**N54A Moraine State** 116.41 56 P **PKPdf** 19 18 41.1 -2.2
baz=251
**ERPA Erie** 116.77 55 P **PKPdf** 19 18 41.7 -2.2
baz=252
**MK31 Makanchi Array** 116.78 310 PKiKP **PKPdf** 19 18 42.6 -1.2
**MK31 Makanchi Array** 116.78 310 **PKPdf** 19 18 42.6 -1.2
**MKAR Makanchi Array** 116.78 310 Pdiff **Pdif** 19 15 06.1 +4.6
comp=Z,2.8nm,0.8s,baz=97,slow=5.5,SNR=24
MKAR PKP **PKPdf** 19 18 42.6 -1.3
comp=Z,31nm,0.8s,baz=106,slow=0.9,SNR=58
MKAR SKP 19 21 42.9
comp=Z,14nm,0.9s,baz=66,slow=3.0,SNR=4.4
MKAR S **SKSac** 19 24 58.0 +0.1
comp=Z,6.5nm,1.1s,baz=108,slow=7.8,SNR=3.6
MKAR PKKPbc **PKKPab** 19 29 13.6 -1.3
comp=Z,7.8nm,0.5s,baz=276,slow=3.4,SNR=47
MKAR SKKPbc **SKKPbc** 19 32 20.3 -1.2
comp=Z,7.8nm,0.9s,baz=291,slow=3.4,SNR=11
**MKAR Makanchi Array** 116.78 310 **Pdif** 19 15 03.7 +2.2
MKAR PKPdf **PKPdf** 19 18 42.9 -1.0
**M54A Oil Creek Stat** 116.81 56 P **PKPdf** 19 18 42.1 -1.9
baz=252
**JSRW J. Sargeant Re** 116.89 60 PKPdf **PKPdf** 19 18 43.5 -0.7
**R58B Mineral** 116.97 60 **PKiKP** 19 18 44.7 +0.2
**MAKZ Makanchi** 116.99 310 PKiKP **PKPdf** 19 18 42.5 -1.8
**MAKZ Makanchi** 116.99 310 PKPdf **PKPdf** 19 18 42.5 -1.8
**O56A Blue Knob Stat** 117.21 58 **PKPdf** 19 18 44.4 -0.5
**O56A Blue Knob Stat** 117.21 58 P **PKPdf** 19 18 42.7 -2.2
baz=252
**ZAA0 Zalesovo Array** 117.25 319 PKPdf **PKPdf** 19 18 43.0 -1.4
**ZALV Zalesovo Beam** 117.25 319 Pdiff **Pdif** 19 15 07.5 +4.1
comp=Z,0.3nm,0.6s,baz=99,slow=6.4,SNR=2.2
ZALV PKP **PKPdf** 19 18 42.8 -1.7
comp=Z,13nm,0.6s,baz=150,slow=1.3,SNR=29
ZALV PP **PP** 19 19 56.1 -6.1
comp=Z,4.8nm,0.8s,baz=100,slow=4.5,SNR=3.6
ZALV PKKPbc **PKKPab** 19 29 13.4 +1.0
comp=Z,1.6nm,0.7s,baz=299,slow=6.1,SNR=3.6
**ZALV Zalesovo Beam** 117.25 319 **Pdif** 19 15 02.6 -0.7
ZALV PKPdf **PKPdf** 19 18 42.8 -1.7
**P57A Homestead Farm** 117.37 59 **PKPdf** 19 18 44.0 -1.1
**M55A Ridgway** 117.44 56 **PKiKP** 19 18 45.7 +0.4
**PDGK Podgornoye** 117.65 306 PKiKP **PKPdf** 19 18 43.7 -2.1
**SSPA Standing Stone** 117.82 57 P **PKPdf** 19 18 43.8 -2.2
baz=252
**UZB Uzynbulak** 117.92 306 *e*PKiKP **PKPdf** 19 18 44.9 -1.4
**UZB Uzynbulak** 117.92 306 *e*PKP **PKPdf** 19 18 45.0 -1.4
baz=306
**RES Resolute Bay** 118.11 17 PKP **PKPdf** 19 18 44.3 -1.2
comp=Z,25nm,0.8s
RES SKP 19 21 44.1
comp=Z,16nm,1.0s,baz=248,slow=2.2,SNR=5.1
**SADO Sadowa** 118.16 53 **PKiKP** 19 18 46.8 +0.2
**PRZ Przheval'sk** 118.17 305 PKiKP **PKPdf** 19 18 45.4 -1.5
**PRZ Przheval'sk** 118.17 305 PKPdf **PKPdf** 19 18 45.4 -1.5
**CRPR Cabo Rojo, PR** 118.27 85 **PKPdf** 19 18 46.6 -0.9
**SATY Saty** 118.33 305 *e*PKiKP **PKPdf** 19 18 45.9 -1.2
**SATY Saty** 118.33 305 *e*PKP **PKPdf** 19 18 46.0 -1.2
baz=305
**ZHN Zhinishke** 118.34 306 *e*PKiKP **PKPdf** 19 18 45.7 -1.4
**ZHN Zhinishke** 118.34 306 *e*PKP **PKPdf** 19 18 45.8 -1.4
baz=306
**TARG Taragay, Kyrgy** 118.37 304 **PKPdf** 19 18 46.5 -1.1
**L56A Greenwood** 118.50 56 **PKPdf** 19 18 46.4 -1.0
**PAGS Pennsylvania G** 118.54 58 **PKPdf** 19 18 47.1 -0.2
**M57A Sunshine Farm,** 118.58 57 **PKPdf** 19 18 46.0 -1.5
**OBIP Obispado Ponce** 118.71 85 PKPdf **PKPdf** 19 18 47.5 -0.9
**AOPR Arecibo Observ** 118.72 85 **PKPdf** 19 18 47.5 -0.9
**N58A Sunbury** 118.73 57 **PKPdf** 19 18 46.9 -0.8
**MVL Millersville** 118.75 58 PKPdf **PKPdf** 19 18 47.0 -0.8
**CELP Cerrillos** 118.75 85 **PKPdf** 19 18 47.5 -0.9
**TDK Taldyqorghan** 118.88 308 *e*PKiKP **PKPdf** 19 18 46.3 -1.6
**TDK Taldyqorghan** 118.88 308 *e*PKP **PKPdf** 19 18 46.3 -1.6
baz=308
**KSH Kashi** 119.04 301 PKP **PKiKP** 19 18 49.2 +0.6
KSH SKKS 19 26 34.3
**ARXS Arharly** 119.06 307 *e*PKiKP **PKPdf** 19 18 47.0 -1.4
**SJG San Juan** 119.14 85 PKiKP **PKiKP** 19 18 49.8 +0.6
**SJG San Juan** 119.14 85 **PKiKP** 19 18 49.8 +0.6
**PDPR Patillas Dam,** 119.20 86 PKPdf **PKiKP** 19 18 49.6 +0.3
**NIL Nilore** 119.29 294 PKiKP **PKPdf** 19 18 47.4 -1.7
**NIL Nilore** 119.29 294 **PKPdf** 19 18 47.4 -1.7
**MDOK Medeo** 119.31 305 *e*PKiKP **PKPdf** 19 18 47.5 -1.5
**MDOK Medeo** 119.31 305 *e*PKP **PKPdf** 19 18 47.5 -1.5
baz=305
**NRIK Noril'sk** 119.33 336 PKP **PKPdf** 19 18 47.2 -0.8
comp=Z,25nm,0.6s,baz=90,slow=2.6,SNR=36
NRIK PP **PP** 19 20 12.7 -3.4
comp=Z,18nm,1.0s,baz=118,slow=5.5,SNR=6.6
NRIK S **SKSac** 19 25 08.1 +2.1
comp=Z,2.8nm,0.7s,baz=227,slow=21,SNR=5.6
**LBTB Lobatse** 119.37 207 PKiKP **PKPdf** 19 18 48.9 -0.9
**LBTB Lobatse** 119.37 207 PKPdf **PKPdf** 19 18 48.9 -0.9
**KNDC Almaty** 119.39 305 PKiKP **PKPdf** 19 18 47.7 -1.3
**K57A Scipio Center** 119.41 55 **PKiKP** 19 18 49.4 +0.2
**AAA Alma-Ata** 119.42 305 *e*PKiKP **PKPdf** 19 18 47.8 -1.3
**AAA Alma-Ata** 119.42 305 *e*PKP **PKPdf** 19 18 47.8 -1.3
baz=305
**N59A State Game Lan** 119.44 58 P **PKPdf** 19 18 46.8 -2.3
baz=253
**KSPA Keystone Colle** 119.62 57 **PKPdf** 19 18 49.2 -0.2
**ULHL Ulahol** 119.63 304 P **PKiKP** 19 18 50.1 +0.3
SNR=5.3
**LUPA Lehigh Univers** 119.64 58 **PKPdf** 19 18 49.4 -0.1
**BINY Binghamton** 119.64 56 PKPdf **PKiKP** 19 18 50.2 +0.6
**BINY Binghamton** 119.64 56 P **PKPdf** 19 18 47.7 -1.8
baz=254
**BOOM Boomskoye usch** 119.91 304 PKiKP **PKPdf** 19 18 49.1 -1.1
**BOOM Boomskoye usch** 119.91 304 **PKPdf** 19 18 49.1 -1.1
**J57A Williamstown** 119.96 55 **PKPdf** 19 18 49.3 -0.7
**KUU Kurty** 120.01 306 *e*PKiKP **PKPdf** 19 18 48.2 -1.9
**KUU Kurty** 120.01 306 *e*PKP **PKPdf** 19 18 48.2 -1.9
baz=306
**KURK Kurchatov** 120.15 314 *d i*PKiKP **PKPdf** 19 18 48.9 -1.2
KURK pmax pmax
comp=Z,70nm,0.8s
**KURK Kurchatov** 120.15 314 PKPdf **PKPdf** 19 18 48.2 -2.0
**VLDQ Val d'Or** 120.15 49 PKPdf **PKPdf** 19 18 49.0 -1.2
**KURBB Kurchatov Arra** 120.18 314 PKKPbc PKKPbc 19 29 01.9 +1.9
comp=Z,6.1nm,0.9s,baz=277,slow=5.1,SNR=15
KURBB SKKPbc SKKPbc 19 32 10.4 -0.5
comp=Z,5.2nm,0.9s,baz=285,slow=3.7,SNR=12
**KURBB Kurchatov Arra** 120.18 314 PKiKP **PKPdf** 19 18 49.0 -1.2
**TKM2 Tokmak 2** 120.27 305 P **PKPdf** 19 18 49.9 -1.1
SNR=35
**L59A Walton** 120.31 56 **PKiKP** 19 18 51.2 +0.3
**ODNJ Ogdensburg** 120.33 58 PKPdf **PKPdf** 19 18 50.3 -0.5
**J58A Remsen** 120.45 55 **PKiKP** 19 18 51.5 +0.4
**KBK Karagaybulak** 120.66 304 P **PKPdf** 19 18 51.0 -0.7
SNR=43
**PAL Palisades** 120.82 58 PKiKP **PKPdf** 19 18 51.5 -0.2
**PAL Palisades** 120.82 58 **PKPdf** 19 18 51.5 -0.2
**UCH Uchtor** 120.86 304 P **PKPdf** 19 18 52.4 -0.1
SNR=57
**CHMS Chumysh** 120.89 304 P **PKPdf** 19 18 51.1 -0.8
SNR=47
**FRU1 Bishkek** 120.93 304 PKIKP **PKPdf** 19 18 51.2 -0.8
**FRU1 Bishkek** 120.93 304 **PKPdf** 19 18 51.2 -0.8
**AAK Ala-Archa** 120.98 304 PKKPbc PKKPbc 19 28 59.6 +2.6
comp=Z,8.0nm,0.6s,baz=203,slow=1.5,SNR=13
**AAK Ala-Archa** 120.98 304 P **PKPdf** 19 18 51.6 -0.7
SNR=27
**AAK Ala-Archa** 120.98 304 PKIKP **PKPdf** 19 18 51.4 -0.9
**AAK Ala-Archa** 120.98 304 PKPdf **PKPdf** 19 18 51.4 -0.9
**AAK Ala-Archa** 120.98 304 *i* PKPdf **PKPdf** 19 18 51.6 -0.7
SNR=28
**J59A Piesco** 121.03 55 **PKPdf** 19 18 51.4 -0.8
**SGDS Sogindy** 121.09 305 *e*PKiKP **PKPdf** 19 18 50.7 -1.6
**SGDS Sogindy** 121.09 305 *e*PKP **PKPdf** 19 18 50.8 -1.6
baz=305
**USP Ospenovka** 121.14 305 P **PKPdf** 19 18 51.6 -0.8
SNR=39
**LONY Lake Ozonia** 121.25 54 **PKPdf** 19 18 52.2 -0.3
**LONY Lake Ozonia** 121.25 54 P **PKPdf** 19 18 51.0 -1.5
baz=256
**KSCT Kent School, K** 121.31 57 **PKPdf** 19 18 52.0 -0.6
**NCB Newcomb** 121.35 54 PKPdf **PKPdf** 19 18 52.5 -0.2
**AML Almayashu** 121.43 303 P **PKPdf** 19 18 52.9 -0.5
SNR=40
**AML Almayashu** 121.43 303 *i* PKPdf **PKPdf** 19 18 53.2 -0.2
SNR=40
**EKS2 Erkin-Say** 121.50 304 P **PKPdf** 19 18 52.7 -0.5
SNR=28
**GDU01 Guandu, BA** 121.56 133 *e*P **PKiKP** 19 18 55.9 +1.7
**SMRT St. Maarten** 121.75 87 **PKiKP** 19 18 54.5 +0.1
**BTLS Baital** 121.88 307 *e*PKiKP **PKPdf** 19 18 52.4 -1.2
**BTLS Baital** 121.88 307 *e*PKP **PKPdf** 19 18 52.5 -1.2
baz=307
**BIM Bigot** 121.91 92 PKPdf **PKiKP** 19 18 55.5 +0.7
**L61B Northampton** 122.07 57 P **PKPdf** 19 18 53.4 -0.7
baz=256
**KBL Kabul** 122.88 293 PKIKP **PKPdf** 19 18 55.7 -0.5
**KBL Kabul** 122.88 293 PKPdf **PKPdf** 19 18 55.7 -0.5
**HRV Adam Dziewonsk** 122.89 57 P **PKPdf** 19 18 54.0 -1.7
baz=257
**BTK Batken** 123.01 300 PKIKP **PKPdf** 19 18 55.1 -1.0
**BTK Batken** 123.01 300 **PKPdf** 19 18 55.1 -1.0
**LBNH Lisbon** 123.02 55 P **PKPdf** 19 18 54.1 -1.9
baz=258
**GAR Garm** 123.12 299 **PKPdf** 19 18 55.6 -0.8
**DZA Taraz** 123.31 304 *e*PKiKP **PKPdf** 19 18 55.4 -1.1
**DZA Taraz** 123.31 304 *e*PKP **PKPdf** 19 18 55.4 -1.1
baz=304
**H62A Milan** 123.63 54 **PKiKP** 19 18 58.1 +0.8
**OTUK Ortayu** 123.68 310 PKIKP **PKPdf** 19 18 56.2 -0.9
**BRZS Berezniki** 123.75 312 *e*PKiKP **PKPdf** 19 18 55.4 -1.7
**BRZS Berezniki** 123.75 312 *e*PKP **PKPdf** 19 18 55.4 -1.7
baz=312
**CHGR Chuyangaron** 123.91 298 PKPdf **PKPdf** 19 18 57.5 -0.4
**KKAR Karatay Array** 123.94 304 PKIKP **PKPdf** 19 18 56.9 -0.8
**KKAR Karatay Array** 123.94 304 PKPdf **PKPdf** 19 18 56.9 -0.8
**IUG luzhnay** 124.08 303 *e*PKiKP **PKPdf** 19 18 57.2 -0.9
**IUG luzhnay** 124.08 303 *e*PKP **PKPdf** 19 18 57.2 -0.9
baz=302
**G62A West of Eustis** 124.19 54 **PKPdf** 19 18 57.6 -0.6
**MDP Montagnes des** 124.32 106 PKP **PKPdf** 19 18 59.0 -0.3
comp=Z,17nm,0.8s,baz=262,slow=4.7,SNR=6.1
**BRLS Boroday** 124.41 304 *e*PKiKP **PKPdf** 19 18 57.3 -1.3
**BRLS Boroday** 124.41 304 *e*PKP **PKPdf** 19 18 57.4 -1.3
baz=303
**TAS Tashkent** 124.43 301 PKIKP **PKPdf** 19 18 57.9 -0.8
**TAS Tashkent** 124.43 301 PKPdf **PKPdf** 19 18 57.9 -0.8
**WIN Windhoek** 124.49 199 PKIKP **PKPdf** 19 18 59.9 +0.2
**WIN Windhoek** 124.49 199 **PKPdf** 19 18 59.9 +0.2
**TULEG Thule** 124.59 15 *i* P **PKPdf** 19 18 57.0 -1.0
**TULEG Thule** 124.59 15 **PKPdf** 19 18 57.1 -0.8
**WVL Waterville** 124.68 55 **PKiKP** 19 19 00.6 +1.2
**LMQ La Malbaie** 124.75 51 **PKPdf** 19 18 57.9 -1.2
**PKME Peaks-Kenny Pk** 125.06 54 PKPdf **PKPdf** 19 18 59.6 -0.1
**PKME Peaks-Kenny Pk** 125.06 54 P **PKPdf** 19 18 58.8 -0.9
baz=260
**E62A Clayton Lake** 125.14 52 **PKPdf** 19 18 59.1 -0.8
**F63A Nahmakanta, Br** 125.27 53 **PKiKP** 19 19 00.5 -0.1
**D62A Allapoint, All** 125.53 52 PKPdf **PKPdf** 19 18 59.4 -1.1
**BVAR Borovoye Array** 125.55 316 SKKPbc SKKPbc 19 31 52.9 -0.3
comp=Z,5.4nm,0.9s,baz=29,slow=3.4,SNR=8.9
**BRVK Borovoye** 125.62 316 PKIKP **PKPdf** 19 19 00.2 -0.4
**BRVK Borovoye** 125.62 316 PKPdf **PKPdf** 19 19 00.2 -0.4
**F64A Sherman** 125.82 53 **PKPdf** 19 19 00.8 -0.4
**PQI Presque Isle** 126.17 52 PKPdf **PKPdf** 19 19 01.1 -0.7
**G65A Princeton** 126.26 54 **PKPdf** 19 19 01.8 -0.2
**JLN Jalan Bani Buh** 126.75 276 P SKPbc 19 21 42.4
**GGN Saint George** 126.75 54 **PKiKP** 19 19 03.4 -0.1
**LSZ Lusaka** 126.82 215 PKIKP **PKPdf** 19 19 03.3 -1.0
**LSZ Lusaka** 126.82 215 **PKPdf** 19 19 03.2 -1.0
**WBK Wadi Bani Khal** 127.30 276 P SKPbc 19 21 49.9
**TSUM Tsumeb** 127.53 201 PKPdf **PKPdf** 19 19 05.0 -0.5
**BATG Bathurst New B** 127.58 52 PKPdf **PKPdf** 19 19 03.7 -0.8
**SCHQ Schefferville** 127.62 42 PKP **PKPdf** 19 19 03.9 -0.5
comp=Z,29nm,0.9s,baz=282,slow=2.7,SNR=21
SCHQ SKPbc SKPbc 19 21 44.8
comp=Z,35nm,1.0s,baz=347,slow=2.8,SNR=6.0
SCHQ SKKPbc **SKKPbc** 19 31 43.5 -2.7
comp=Z,2.8nm,0.8s,baz=49,slow=7.8,SNR=4.3
**SCHQ Schefferville** 127.62 42 PKPdf **PKPdf** 19 19 03.1 -1.3
**WSAR Wadi Sarin** 127.82 277 P SKPbc 19 21 49.5
**JMDO Jabal Madar** 127.95 276 P SKPbc 19 21 49.8
**NEEM North Greenlan** 127.96 12 *i* P **PKPdf** 19 19 04.7 -0.1
**HRA Herat** 128.25 291 PKPdf **PKPdf** 19 19 06.2 -0.3
**SMDO Samad** 128.25 276 P SKPbc 19 21 51.0
**LMN Caledonia Moun** 128.27 54 **PKPdf** 19 19 04.9 -1.0
**SHAO Shalim** 128.34 269 P SKPbc 19 21 50.3
**BIDO Bidbid** 128.36 277 P SKPbc 19 21 50.4
**NOR Nord** 128.69 3 *i* P **PKiKP** 19 19 06.4 0.0
**BSY Bisya** 128.86 276 P SKPbc 19 21 52.7
**UPNV Upernavik** 128.96 19 *i* P **PKPdf** 19 19 06.3 -0.1
**HOQ Hoqain** 129.07 277 P SKPbc 19 21 53.3 +1.4
**RBK Rabkut** 129.34 268 P SKPbc 19 21 53.6 +0.6
**RCBR Riachuelo** 129.87 130 PKIKP **PKiKP** 19 19 11.4 +0.5
**RCBR Riachuelo** 129.87 130 *e*P **PKiKP** 19 19 12.7 +1.9
**RCBR Riachuelo** 129.87 130 PKPdf **PKiKP** 19 19 11.3 +0.5
**NUUG Nuugaatsiaq** 130.29 20 *i* P **PKPdf** 19 19 07.3 -1.6
**UOSS Minazif** 130.50 278 P **SKPbc** 19 21 57.6 +0.5
**UOSS Minazif** 130.50 278 PKPdf **PKPdf** 19 19 09.8 -1.0
**UOSS Minazif** 130.50 278 *i* PKPdf **PKPdf** 19 19 10.2 -0.6
SNR=5.9
**GBN Guysborough** 130.52 55 PKPdf **PKiKP** 19 19 10.9 -0.1
**HATD Hatta, Dubai** 130.52 278 *i* PKPdf **PKPdf** 19 19 09.7 -1.1
SNR=7.0
**ASHO Ashiyiah** 130.53 277 *i* PKPdf **PKPdf** 19 19 10.2 -0.7
SNR=6.1
**ALNE Al Ain** 130.58 276 *i* PKPdf **PKPdf** 19 19 10.5 -0.4
SNR=6.6
**UMZA Um Al Zommool** 130.60 275 P **SKPbc** 19 21 58.1 +0.7
**MSFE Esma-Masafi** 130.68 278 *i* PKPdf **PKPdf** 19 19 11.1 0.0
SNR=6.5
**BANOM Banah** 130.75 279 PKPdf **PKPdf** 19 19 10.9 -0.4
**FAQ Al Faqa, Dubai** 130.95 277 PKPdf **PKPdf** 19 19 10.3 -1.3
**KIBK Kibwezi** 131.11 235 PKPdf **PKPdf** 19 19 12.7 +0.3
**UMQ Umm Al-Quwin** 131.16 278 P **SKPbc** 19 22 01.2 +1.8
**SVE Sverdlovsk** 131.17 321 *e*PKiKP **PKiKP** 19 19 11.6 -0.4
SVE pmax pmax
comp=Z,47nm,1.0s
**KBS Kingsbay** 131.50 357⇓ *i*PKiKP **PKPdf** 19 19 11.6 +0.5
KBS pmax pmax
comp=Z,105nm,2.5s
**KBS Kingsbay** 131.50 357 *i* P **PKPdf** 19 19 11.2 +0.1
**KBS Kingsbay** 131.50 357 *e*PKPdf **PKiKP** 19 19 11.9 -0.3
**AB31 Akbulak array** 131.93 310 *i* PKiKP **PKiKP** 19 19 13.3 -0.5
**ABKAR Akbulak array** 131.93 310 PKPpre 19 18 58.9
ABKAR PKPdf **PKPdf** 19 19 12.8 +0.1
**ABKAR Akbulak array** 131.93 310 PKPpre 19 18 57.5
ABKAR PKPdf **PKPdf** 19 19 12.9 +0.2
**ILULI Ilulissat** 131.94 22 *i* P **PKPdf** 19 19 10.4 -1.7
**SPA0 Spitsbergen Ar** 131.98 356 *e*PKPdf **PKPdf** 19 19 11.3 -0.7
SPA0 *e*SP SP 19 31 16.7 +3.3
**SPITS Spitsbergen Ar** 131.98 356 PKIKP **PKPdf** 19 19 12.4 +0.3
**SPB2 Spitsbergen Ar** 131.98 356 PKPdf **PKPdf** 19 19 11.4 -0.6
**GEYT Alibeck** 132.25 295 PKP **PKPdf** 19 19 13.1 -0.7
comp=Z,24nm,0.8s,baz=212,slow=5.3,SNR=22
GEYT SKPbc **SKPbc** 19 22 03.5 +0.5
comp=Z,104nm,0.8s,baz=189,slow=3.8,SNR=28
**GEYT Alibeck** 132.25 295 PKPpre 19 19 01.0
GEYT PKPdf **PKPdf** 19 19 13.0 -0.8
**GYA0B ALIBECK 

ARU 19 21 40.5
**ARU Arti 132.36 320** PKPpre 19 19 00.7
ARU PKPdf **PKPdf 19 19 12.6 -0.6**
ARU **SKPbc 19 22 02.9 +0.2**
**KMBO Kilima Mbogo 132.52 235** PKP **PKPdf 19 19 15.8 +0.4**
comp=Z,7.8nm,0.8s,baz=62,slow=1.6,SNR=13
KMBO SKPbc **SKPbc 19 22 05.7 +0.8**
comp=Z,95nm,1.0s,baz=98,slow=3.9,SNR=41
**KMBO Kilima Mbogo 132.52 235** P **SKPbc 19 22 05.9 +0.9**
**KMBO Kilima Mbogo 132.52 235** PKPdf **PKPdf 19 19 15.4 +0.2**
**KMBO Kilima Mbogo 132.52 235** *i* PKiKP **PKPdf 19 19 15.7 +0.4**
SNR=6.8
**GHWR Ruwais 133.01 275** P **SKPbc 19 22 07.2 +1.3**
**SFJD Kangerlussuaq 133.04 25** *i* P **PKPdf 19 19 12.8 -1.5**
**HSPB Hornsund (broa 133.16 355** *e*PKPdf **PKiKP 19 19 15.8 +0.3**
**AKTO Aktyubinsk 133.16 312** PKP **PKPdf 19 19 15.2 +0.2**
AKTO SKPbc **SKPbc 19 22 06.5 +0.9**
comp=Z,118nm,0.9s,baz=93,slow=4.5,SNR=20
AKTO SKKPbc **SKKPbc 19 31 24.9 -1.3**
comp=Z,5.2nm,0.9s,baz=267,slow=3.1,SNR=6.3
**DRLN Deer Lake 133.38 50** PKPdf **PKPdf 19 19 13.8 -1.6**
**SUMG Summit 133.51 15** PKHKP PKPpre 19 19 05.5
**SUMG Summit 133.51 15** *i* P **PKPdf 19 19 16.1 +0.6**
**SUMG Summit 133.51 15** PKPpre 19 19 05.5
**NUUK Nuuk 133.70 28** *i* P **PKPdf 19 19 15.3 -0.2**
**SLWR Sila 134.06 275** P **SKPbc 19 22 08.2 -1.1**
**TRNA Turayna 134.70 275** P **SKPbc 19 22 10.4 -0.9**
**KHOR Al-Khor Airpor 134.73 277** P **SKPbc 19 22 10.4 -1.0**
**DY2G Dye2 134.82 24** *i* P **PKPdf 19 19 16.1 -1.8**
**DBG Daneborg 135.22 8** *i* P **PKPdf 19 19 16.1 -2.0**
**SHMA Al-Shehemyia 135.27 277** P 19 22 11.8
**ICESG Greenland Ices 135.48 19** *i* P **PKPdf 19 19 19.7 +0.5**
**SAKB Bahrain 135.68 277** P 19 22 12.7
**IVI Ivigtut 136.30 32** *i* P **PKPdf 19 19 17.9 -2.5**
**IVI Ivigtut 136.30 32** PKPdf **PKPdf 19 19 14.8 -5.6**
**KIRV Kirov 136.71 325** PKP **PKPdf 19 19 21.4 +0.1**
comp=Z,62nm,0.8s
KIRV SKPbc **SKPbc 19 22 15.9 -0.4**
comp=Z,116nm,0.9s,baz=193,slow=1.8,SNR=11
KIRV SKKPbc **SKKPbc 19 31 13.8 +0.4**
comp=Z,22nm,0.8s,baz=70,slow=2.9,SNR=5.9
**MBAR Mbarara 137.32 229** ⇑*i* PKiKP **PKiKP 19 19 27.2 +1.1**
**PRGR Permogore 137.35 330** *e*PKiKP **PKPdf 19 19 18.0 -4.4**
PRGR *e* 19 22 18.1
PRGR pmax pmax
comp=Z,10.0nm,0.8s
**NRS Narsarsuaq 137.55 31** PKiKP **PKPdf 19 19 19.8 -3.0**
**NRS Narsarsuaq 137.55 31** *i* P PKPpre 19 19 14.8
**NRS Narsarsuaq 137.55 31** **PKPdf 19 19 19.8 -3.0**
**LVZ Lovozero 137.72 341** ⇑*i* PKiKP **PKPdf 19 19 24.0 +1.0**
**LVZ Lovozero 137.72 341** **PKPdf 19 19 20.9 -2.1**
**ISOG Isortoq, Green 137.84 23** *i* P **PKPdf 19 19 21.8 -1.4**
**HAMF Hammerfest 138.01 349** *e*PKPdf **PKPdf 19 19 23.4 0.0**
HAMF *e*SKPdf **SKPdf 19 22 21.7 +1.3**
HAMF *e*SKSac **SKSac 19 26 02.2 +2.4**
**KEV Kevo 138.13 346** PKHKP PKPpre 19 19 15.2
**KEV Kevo 138.13 346** PKPpre 19 19 15.2
**ANGG Ammassalik, Gr 138.24 22** *i* P **PKPdf 19 19 23.6 -0.3**
**APA Apatity 138.29 342** ⇓*i* PKiKP **PKPdf 19 19 20.7 -3.3**
APA pmax pmax
comp=Z,39nm,0.8s
**SCO Scoresbysund 138.40 11** *i* P **PKPdf 19 19 23.6 -0.5**
**ARA0 ARCESS Array S 138.62 347** *e* PKPpre 19 19 16.3
**ARCES ARCESS Array B 138.62 347** PKhKP PKPpre 19 19 15.9
comp=Z,7.2nm,0.3s,baz=37,slow=2.3,SNR=57
ARCES SKPbc **SKPbc 19 22 21.7 +0.1**
comp=Z,55nm,0.8s,baz=40,slow=2.1,SNR=10
ARCES SKKPbc **SKKPbc 19 31 04.2 -2.5**
comp=Z,12nm,0.7s,baz=210,slow=4.1,SNR=15
**ARCES ARCESS Array B 138.62 347** PKHKP PKPpre 19 19 14.7
**ARCES ARCESS Array B 138.62 347** PKPpre 19 19 14.7
**RAYN Ar Rayn 139.19 271** PKHKP PKPpre 19 19 16.0
**RAYN Ar Rayn 139.19 271** P **SKPdf 19 22 20.6 -3.4**
**RAYN Ar Rayn 139.19 271** PKPpre 19 19 16.0
**KTK1 Kautokeino 139.50 347** *e* PKPpre 19 19 18.0
KTK1 *e*SKPdf **SKPbc 19 22 24.5 +0.5**
**JETT Jettan, Norway 139.51 349** *e* PKPpre 19 19 18.9
JETT *e*PP **PP 19 22 27.6 +1.7**
**TRO Tromso 139.67 350** *e*PKPdf **PKPdf 19 19 24.7 -1.7**
TRO IVmB_BB 19 19 28.7
comp=Z,2μm,3.8s
TRO *e*pPKPdf **pPKPdf 19 20 58.3 -3.3**
**KLMR Klimovskoe 140.33 331** *e*PKiKP **PKPdf 19 19 26.9 -1.0**
KLMR *e* 19 22 27.1
KLMR pmax pmax
comp=Z,58nm,0.9s
**KLMR Klimovskoe 140.33 331** *e*PKPdf **PKPdf 19 19 26.9 -1.0**
KLMR AMP 19 19 29.2
comp=Z,58nm,0.9s
KLMR *e*PP **PP 19 22 27.1 -4.1**
KLMR *e*SKKPbc SKKPbc 19 30 56.6 -3.0
**MAK Makhachkala 140.68 302** *ce*P **Pdif 19 16 42.5 -5.3**
MAK *i* 19 19 30.8
MAK *e* 19 21 03.3
MAK *e* 19 22 30.6
MAK *e*PPP PPP 19 25 39.1
MAK *e* 19 26 06.7
MAK *e*SS SS 19 40 25.9 -2.1
MAK *e*SSS SSS 19 45 46.3
MAK pmax pmax
comp=Z,138nm,1.0s
**STEI Steigen 141.78 351** *e*PKPdf **PKPdf 19 19 26.3 -4.0**
**LOF Lofoten 141.81 352** *e*PKPdf **PKPdf 19 19 26.3 -4.0**
LOF *e*SKSac **SKSac 19 26 10.2 +1.8**
LOF *e*SS **SS 19 40 42.3 +3.6**
**GROC Groznyy 141.91 302** *e*PKHKP PKPpre 19 19 26.0
GROC *e* 19 25 54.2
GROC pmax pmax
comp=Z,152nm,1.4s
**FAUS Fauske 142.28 350** *e* **PKPdf 19 19 26.8 -4.4**
FAUS *e*SKPdf **SKPbc 19 22 29.1 -2.1**
**GNI Garni 142.81 297** PKP **PKPdf 19 19 31.0 -2.2**
comp=Z,103nm,1.1s,baz=156,slow=1.4,SNR=22
GNI SKKPbc SKKPbc 19 30 52.3 +3.7
comp=Z,12nm,0.9s,baz=197,slow=20,SNR=3.0
**GNI Garni 142.81 297** PKPdf **PKPdf 19 19 27.3 -6.0**
**GNI Garni 142.81 297** PKPdf **PKPdf 19 19 30.8 -2.4**
**VRH Novokhopyorsk 143.20 316** *e*PKiKP PKPab 19 19 30.7 +0.2
VRH pmax pmax
comp=Z,120nm,0.7s
**ZEI Tsey 143.33 301** *i* PKiKP PKPbc 19 19 31.9 -0.1
ZEI pmax pmax
comp=Z,74nm,1.4s
**KONS Konsvik 143.41 351** *e*PKPdf PKPab 19 19 31.0 +0.2
**BORG Borgarnes 143.49 15** PKP PKPbc 19 19 32.5 +0.9
comp=Z,70nm,1.1s,baz=311,slow=4.4,SNR=5.5
**MOR8 Moi Rana 143.54 350** *e*PKPdf PKPab 19 19 30.2 -1.1
**ONI Oni 143.68 301** PKiKP PKPbc 19 19 33.7 +0.8
**ONI Oni 143.68 301** PKPbc 19 19 33.7 +0.8
**GOF Gofitskoye 143.70 305** ⇑*e*PKiKP PKPbc 19 19 33.3 +0.4
GOF pmax pmax
comp=Z,582nm,1.2s
**AKH Akhalkalaki 143.72 299** ⇑P PKPbc 19 19 33.5 +0.2
**KBZ Khabaz 143.97 303** PKP PKPab 19 19 33.4 -0.2
comp=Z,159nm,0.9s,baz=114,slow=2.1,SNR=135
KBZ SKKPbc SKKPbc 19 30 47.4 +3.6
comp=Z,14nm,0.9s,baz=268,slow=4.0,SNR=12
**KARS Kars 144.06 298** PKiKP PKPbc 19 19 34.7 +0.3
**KARS Kars 144.06 298** PKPbc 19 19 34.7 +0.3
**KVAR Kislovodsk Arr 144.09 304** PKP **PKPab 19 19 34.5 +0.2**
comp=Z,62nm,1.1s,baz=90,slow=20,SNR=22
**GEVA Gevas 144.10 294** PKPdf **PKPab 19 19 34.7 +0.1**
**KIV Kislovodsk 144.10 304** ⇓P PKPbc 19 19 34.1 -0.2
**KIV Kislovodsk 144.10 304** *e*PKHKP PKPpre 19 19 30.1
KIV *i* 19 19 33.7
KIV *e* 19 22 48.5
KIV *e*PPP PPP 19 26 03.5
KIV *e*SSS SSS 19 46 31.5
KIV pmax pmax
comp=Z,213nm,1.0s
**KIV Kislovodsk 144.10 304** PKPdf PKPbc 19 19 33.8 -0.5
**KIV Kislovodsk 144.10 304** *i* PKPbc PKPbc 19 19 33.5 -0.8
SNR=43
**LPSR Galich'ya Gora 144.36 319** *e*PKiKP PKPbc 19 19 34.3 -0.4
LPSR pmax pmax
comp=Z,800nm,0.9s
**VORR Voronezh 144.54 317** *e*PKiKP PKPbc 19 19 35.4 +0.1
VORR pmax pmax
comp=Z,740nm,0.7s
**OBN Obninsk 144.55 324** ⇓P PKPbc 19 19 35.1 0.0
**OBN Obninsk 144.55 324** PKP PKPbc 19 19 34.8 -0.4
comp=Z,134nm,0.7s,baz=75,slow=1.0,SNR=108
OBN SKPbc **SKiKP 19 22 38.0 +0.5**
comp=Z,15nm,0.7s,baz=22,slow=23,SNR=3.4
**OBN Obninsk 144.55 324** *di* PKiKP PKPbc 19 19 34.7 -0.5
OBN *e* 19 21 07.8
OBN pmax pmax
comp=Z,2μm,1.6s
**SIRT Sirnak 144.57 293** PKPbc 19 19 35.2 -0.8
**CHVG Ch'k'valeri 144.67 302** ⇑P **PKPab 19 19 36.4 +0.1**
**CHVG Ch'k'valeri 144.67 302** ⇑PKiKP **PKPab 19 19 36.4 +0.1**
**VORD Divnogorie 144.73 316** *e*PKiKP PKPbc 19 19 35.5 -0.4
VORD pmax pmax
comp=Z,620nm,0.8s
**GURO Guroymak-BITLI 144.91 294** **PKPdf 19 19 36.8 -0.1**
**FIA1 FINESS Array S 144.94 339** PKPdf **PKPdf 19 19 35.3 -0.7**
**FINES FINESS Array B 144.94 339** PKP **PKPdf 19 19 35.5 -0.5**
comp=Z,314nm,0.4s,baz=47,slow=3.6,SNR=811
FINES PP **PP 19 22 59.4 +0.8**
comp=Z,78nm,0.8s,baz=64,slow=6.6,SNR=4.3
FINES SKKPbc SKKPbc 19 30 40.5 -0.6
comp=Z,18nm,0.9s,baz=187,slow=3.3,SNR=11
FINES PKPPKP 19 36 48.7
comp=Z,5.4nm,0.8s,baz=141,slow=3.9,SNR=6.4
**BATM Batumi 145.06 300** ⇓P **PKPdf 19 19 36.9 0.0**
**BATM Batumi 145.06 300** ⇓PKiKP **PKPdf 19 19 36.9 0.0**
**MQOL MQOL 145.37 262** *i* P **PKPbc 19 19 39.2 +0.4**
MQOL *i* 19 19 43.5
baz=246,slow=18
MQOL *i* S 19 21 15.6
**NSS Namsos 145.44 351** *e*PKPdf **PKPdf 19 19 37.1 +0.3**
**MARD Mardin 145.88 292** **PKPbc 19 19 39.5 -0.6**
**SOC Sochi 146.28 303** *e*PKHKP PKPpre 19 19 36.7
SOC *i* 19 19 40.4
SOC *e*PPP PPP 19 26 22.5
SOC pmax pmax
comp=Z,23nm,0.8s
SOC pmax pmax
comp=Z,174nm,0.9s
**KTUT Trabzon 146.55 299** ⇑P **PKPbc 19 19 41.2 -0.4**
**TBLU Trondheim 146.89 352** *e*PKPbc **PKPbc 19 19 41.2 -0.6**
TBLU *e*SKPdf **SKPbc 19 22 36.5 -5.5**
**VSU Vasula 146.90 334** *di* PKP2 **PKPbc 19 19 41.6 -0.4**
**VSU Vasula 146.90 334** *e*P **PKPbc 19 19 42.1 +0.1**
**MTSE Matsula 147.75 337** *e*P **PKPbc 19 19 44.5 +0.2**
**MOL Molde 147.85 354** *e*PKPbc **PKPbc 19 19 43.3 -1.0**
**DOMB Dombas 148.20 352** *e*PKPbc **PKPbc 19 19 44.7 -0.7**
**AKN Aaknes 148.29 354** *e*PKPbc **PKPbc 19 19 45.8 +0.2**
AKN *e*PKSdf **PP 19 23 17.1 -0.8**
**UPP Uppsala 148.64 343** *e*P **PKPbc 19 19 45.8 -0.6**
**ASF Jabal al Asfar 148.69 282** PKPbc **PKPbc 19 19 47.4 -0.2**
comp=Z,39nm,0.6s,baz=74,slow=1.1,SNR=4.7
ASF PKPPKP 19 36 41.1
comp=Z,1.9nm,0.4s,baz=20,slow=14,SNR=7.8
**GAZ Gaziantep 148.73 292** PKPdf **PKPdf 19 19 42.0 -1.3**
**NB2 NORSAR Subarra 148.87 350** PKP **PKPbc 19 19 46.5 -0.6**
comp=Z,78nm,0.7s,baz=18,slow=4.3
**NB2 NORSAR Subarra 148.87 350** PKPab **PKPbc 19 19 46.5 -0.6**
baz=18,slow=4.3
**NOA NORSAR Array B 148.87 350** PKPbc **PKPbc 19 19 46.4 -0.6**
comp=Z,24nm,0.6s,baz=49,slow=1.8,SNR=107
NOA SKKPbc 19 30 23.4
comp=Z,2.2nm,0.8s,baz=194,slow=4.1,SNR=3.3
**FOO Floro 149.02 355** *e*PKPbc **PKPbc 19 19 47.5 +0.2**
**MNK Minsk 149.08 328** *i* PKHKP PKPpre 19 19 46.4
MNK *i* SS SS 19 42 08.2 +6.5
MNK pmax pmax
comp=N,82nm,1.0s
MNK pmax pmax
comp=E,9.0nm,1.0s
MNK pmax pmax
comp=Z,395nm,1.0s
**MNK Minsk 149.08 328** *i* PKP **PKPbc 19 19 46.5 -1.2**
comp=E,9.0nm,1.0s
MNK *i* PKP **PKPbc 19 19 46.5 -1.2**
comp=N,82nm,1.0s
MNK *i* PKP **PKPbc 19 19 46.5 -1.2**
comp=Z,395nm,1.0s,baz=51
MNK *i* pPKP **pPKPdf 19 21 20.0 +1.4**
MNK *i* SKP 19 22 26.8
MNK *i* PKS PKSdf 19 22 45.5 -32
MNK *i* PP **PP 19 23 15.2 -7.8**
MNK *i* PPP PPP 19 26 31.8
MNK *i* SKS SKSdf 19 26 35.0 +22
MNK *i* SKKS **SKKSac 19 29 30.6 -3.2**
MNK *i* SS **SS 19 42 08.2 +6.5**
MNK *i* SSS SSS 19 47 32.8
**NC602 NORSAR Array S 149.11 349** *e*PKPbc **PKPbc 19 19 47.2 -0.4**
**TOKA Tokat 149.11 298** **PKPdf 19 19 41.8 -1.9**
**NACGM Naroch 149.32 329** *i* PKP **PKPdf 19 19 43.5 +0.1**
**SUE Sulen 149.58 356** *e*PKPbc **PKPbc 19 19 48.6 -0.1**
SUE *e*PKPab **PKPab 19 19 56.4 +1.1**
**SKAR Skarslia 149.62 352** *e*PKPbc **PKPbc 19 19 49.0 +0.1**
SKAR *e*PKSdf **PKSdf 19 23 13.1 -5.3**
**GHAJ Ghor Haditha 149.70 280** **PKPdf 19 19 45.3 +0.5**
**BNN Bunyan 149.73 295** PKPdf **PKPdf 19 19 45.8 +1.0**
**SHBL Chebaa 149.79 284** *e*P **PKPdf 19 19 46.0 +0.9**
**SNOP Sinop 149.81 302** **PKPbc 19 19 50.0 +0.1**
**BHL Bhannes 149.91 285** *e*P **PKPdf 19 19 44.7 -0.5**
**SIM Simferopol' 149.91 308** *di* PKHKP PKPpre 19 19 49.1
SIM *i* 19 19 56.7
SIM *e* 19 23 23.0
SIM pmax pmax
comp=Z,239nm,1.1s
**EIL Elat 149.95 277** PKPbc **PKPbc 19 19 50.6 0.0**
baz=124,slow=1.7
EIL pPKPbc **pPKPbc 19 21 25.4 +0.6**
comp=Z,11nm,0.8s,baz=39,slow=18,SNR=1.0
EIL SKKPbc 19 30 20.4
comp=Z,2.4nm,0.8s,baz=296,slow=3.0,SNR=3.7
**OSL Oslo 150.00 349** *e*PKPbc **PKPbc 19 19 50.0 +0.2**
**MMAI Mount Meron Ar 150.04 284** PKPbc **PKPbc 19 19 51.0 +0.2**
comp=Z,47nm,0.4s,baz=69,slow=4.8,SNR=12
**VIKU Vikbolandet 150.06 343** *e*P **PKPbc 19 19 50.0 +0.1**
**PABE Paberze 150.08 333** *e*P **PKPbc 19 19 50.4 +0.3**
**PABE Paberze 150.08 333** **PKPbc 19 19 49.7 -0.3**
**ASK Askoy 150.12 355** *e*PKPbc **PKPbc 19 19 49.9 -0.1**
ASK *e*PKSdf PP 19 23 19.8 -8.5
**BER Bergen 150.20 355** *e*PKPbc **PKPbc 19 19 50.0 -0.2**
BER *e*PP **PP 19 23 30.6 +1.8**
**KONO Kongsberg 150.44 350** PKiKP **PKPbc 19 19 50.1 -0.7**
**KONO Kongsberg 150.44 350** *e*PKPbc **PKPbc 19 19 50.4 -0.4**
**KONO Kongsberg 150.44 350** **PKPbc 19 19 50.1 -0.7**
**PBUR Paburge 150.47 335** *e*P **PKiKP 19 19 51.6 +0.1**
**ODD1 Odda 150.56 353** *e*PKPbc **PKPbc 19 19 51.3 +0.1**
ODD1 *e*PKSdf **PKSdf 19 23 20.3 +0.6**
**AKASG Malin Array Be 150.60 321** PKP **PKPdf 19 19 45.0 -0.6**
comp=Z,2.9nm,0.9s,baz=65,slow=1.3,SNR=5.5
AKASG PKPbc **PKPbc 19 19 50.8 -0.7**
comp=Z,139nm,0.7s,baz=55,slow=2.7,SNR=16
AKASG pPKPbc **pPKPbc 19 21 27.0 +1.2**
comp=Z,27nm,0.8s,baz=47,slow=3.4,SNR=2.2
AKASG SKKPbc 19 30 19.2
comp=Z,3.6nm,0.9s,baz=253,slow=4.2,SNR=4.6
**AKASG Malin Array Be 150.60 321** PKiKP **PKPdf 19 19 45.0 -0.6**
**AKBB Malin Array Si 150.60 321** PKiKP **PKPdf 19 19 45.5 -0.1**
**AKBB Malin Array Si 150.60 321** **PKPdf 19 19 45.5 -0.1**
**BZK Bozkurt 150.71 302** ⇑P **PKPbc 19 19 51.9 -0.1**
**BZK Bozkurt 150.71 302** PKPbc **PKPbc 19 19 51.8 -0.1**
**BLS5 Blasjo 151.05 353** *e*PKPbc **PKPbc 19 19 52.4 +0.2**
**ILGA Ilgaz 151.08 300** **PKPbc 19 19 52.4 -0.8**
**BR131 Keskin Array S 151.34 297** PKiKP **PKPdf 19 19 46.4 -0.9**
**BR131 Keskin Array S 151.34 297** PKPdf **PKPdf 19 19 46.4 -0.9**
**BRTR Keskin Array B 151.34 297** PKP **PKPdf 19 19 47.9 +0.5**
comp=Z,5.0nm,1.0s,baz=141,slow=2.3,SNR=12
BRTR PKPbc **PKPbc 19 19 52.8 -1.0**
comp=Z,65nm,0.6s,baz=133,slow=3.8,SNR=107
BRTR pPKPab **pPKPab 19 21 33.7 -0.7**
comp=Z,18nm,0.9s,baz=122,slow=1.9,SNR=3.4
BRTR SKKPbc 19 30 13.2
comp=Z,2.7nm,1.0s,baz=215,slow=4.1,SNR=3.9
**BRTR Keskin Array B 151.34 297** PKPdf **PKPdf 19 19 45.7 -1.6**
**KMY Karmoy 151.37 354** *e*PKPbc **PKiKP 19 19 53.2 -0.1**
**SUW Suwalki 151.46 331** *e*PKPbc **PKiKP 19 19 53.8 +0.1**
SUW *e*PKPab **PKPab 19 20 03.6 +0.2**
**SUW Suwalki 151.46 331** PKiKP **PKPbc 19 19 52.8 -0.5**
**SUW Suwalki 151.46 331** *e*P **PKPbc 19 19 53.5 +0.2**
**SUW Suwalki 151.46 331** **PKPbc 19 19 52.8 -0.5**
**CSS Mathiatis 151.87 287** **PKPbc 19 19 53.4 -1.6**
**HOMB Homborsund 151.93 351** *e*PKPbc **PKPbc 19 19 54.2 0.0**
**ANTO Ankara 151.97 298** PKiKP **PKPdf 19 19 46.4 -1.7**
**ANTO Ankara 151.97 298** PKPdf **PKPdf 19 19 46.4 -1.7**
**SNART Snartemo 152.03 352** *e*PKPbc **PKPbc 19 19 54.5 +0.1**
**PURM Purcari 152.16 313** ⇑P **PKPbc 19 19 54.9 -0.2**
**LEF Lefka 152.23 288** ⇓P **PKPbc 19 19 55.2 -0.4**
**SORM Soroca 152.38 317** ⇓P **PKPbc 19 19 54.7 -0.8**
**SORM Soroca 152.38 317** ⇓PKiKP **PKPbc 19 19 54.7 -0.8**
**DEL Delary 152.58 343** *e*P **PKPbc 19 19 55.7 0.0**
**KIS Kishinev 152.62 314** *e*PKP **PKPbc 19 19 56.0 -0.1**
**KIS Kishinev 152.62 314** ⇓P **PKPbc 19 19 55.8 -0.3**
**KIS Kishinev 152.62 314** *e*PKiKP **PKPbc 19 19 56.0 -0.1**
**MILM Milestii Mici 152.66 314** ⇓*i* PKP **PKPbc 19 19 55.4 -0.8**
comp=Z,320nm,1.0s
**MILM Milestii Mici 152.66 314** ⇑P **PKPbc 19 19 55.9 -0.3**
**MILM Milestii Mici 152.66 314** *di* PKiKP **PKPbc 19 19 55.4 -0.8**
MILM *e* 19 20 09.0
MILM pmax pmax
comp=Z,300nm,1.0s
**MDUB Mudurnu 153.07 300** **PKPbc 19 19 55.8 -1.7**
**LEOM Leova 153.21 314** ⇓P **PKiKP 19 19 58.0 +0.5**
**LEOM Leova 153.21 314** ⇓PKiKP **PKiKP 19 19 58.0 +0.5**
**TLCR 153.37 311** ⇑P **PKPbc 19 19 57.7 -0.1**
**TLCR 153.37 311** ⇑PKiKP **PKPbc 19 19 57.7 -0.1**
**VASR Vaslui 153.41 314** ⇑P **PKPbc 19 19 56.1 -1.8**
**JURR Jurilovca 153.49 310** ⇓P **PKPab 19 20 12.8 +0.5**
**BSD Bornholm Skovb 153.50 341** *i* P **PKPbc 19 19 56.4 -1.3**
**BSD Bornholm Skovb 153.50 341** *e*P **PKPab 19 20 12.8 +0.9**
**VLDR Vladesti 153.58 313** ⇑P **PKiKP 19 19 58.5 +0.2**
**COP Copenhagen 153.63 344** *i* P **PKiKP 19 19 58.5 +0.4**
**BIR Birlad 153.68 314** ⇑P **PKPab 19 20 14.2 +1.1**
**BIR Birlad 153.68 314** ⇑PKP2 **PKPab 19 20 14.2 +1.1**
**TATR Tatarca 153.70 312** ⇓P **PKPab 19 20 14.3 +1.1**
**VARL Varlezi 153.70 313** ⇑P **PKPab 19 20 14.8 +1.6**
**SCTT Scanteiesti 153.71 312** ⇓P **PKiKP 19 19 58.8 +0.2**
**BORA Eskisehir 153.74 299** PKPdf **PKPdf 19 19 48.1 -2.7**
**TPGR Topolog 153.76 310** ⇓P **PKiKP 19 19 59.1 +0.4**
**CFR Carcaliu 153.82 311** ⇓P **PKPbc 19 19 58.6 -0.1**
**CFR Carcaliu 153.82 311** ⇓PKiKP **PKPbc 19 19 58.6 -0.1**
**LVV L'vov 153.85 323** *e*PKiKP **PKiKP 19 19 59.7 +1.0**
LVV *e* 19 20 14.2
**SCHL Schela 153.88 312** ⇑P **PKPbc 19 19 57.3 -1.5**
**SLCR Slobozia Conac 153.88 312** ⇓P **PKPbc 19 19 58.8 -0.1**
**IZVR Izvoarele 153.91 312** ⇑P **PKiKP 19 19 59.0 0.0**
**GHRR 153.91 313** ⇓P **PKiKP 19 19 59.3 +0.3**
**TIRR Tirgusor 153.92 309** PKiKP **PKPdf 19 19 49.2 -1.4**
**TIRR Tirgusor 153.92 309** **PKPdf 19 19 49.2 -1.4**
**ISP Isparta 154.00 294** PKP2 **PKPab 19 20 14.3 -0.6**
**ISP Isparta 154.00 294** PKPab **PKPab 19 20 14.3 -0.6**
**PRAR RASCA 154.01 317** ⇑P **PKPab 19 20 14.0 -0.5**
**MANR Mangalia 154.03 308** ⇑P **PKiKP 19 19 59.8 +0.5**
**BEL Belsk 154.03 330** *e*PKPbc **PKiKP 19 20 00.1 +1.1**
BEL *e*PKPab **PKPab 19 20 15.5 +1.1**
**TLBR Topalu 154.12 310** ⇓P **PKiKP 19 19 59.5 0.0**
**HARR Harsova 154.15 310** ⇑P **PKPab 19 20 15.9 +0.7**
**HARR Harsova 154.15 310** ⇑PKP2 **PKPab 19 20 15.9 +0.7**
**PANC Panciu 154.16 313** ⇑P **PKPab 19 20 15.5 +0.4**
**TESR Tescani 154.17 315** ⇑P **PKPab 19 20 15.4 +0.1**
**ODBI Odobesti 154.26 313** ⇑P **PKPab 19 20 16.6 +1.0**
**GKP Gorka Klasztor 154.32 336** *e*PKPab **PKPab 19 20 16.3 +0.8**
**GKP Gorka Klasztor 154.32 336** *e*P **PKPab 19 20 16.2 +0.6**
**PSN Preselentsi 154.35 308** *i* P **PKPab 19 20 18.0 +1.9**
**VRI Vrincioaia 154.42 314** ⇓P **PKPab 19 20 17.0 +0.7**
**VRI Vrincioaia 154.42 314** ⇓PKP2 **PKPab 19 20 17.0 +0.7**
**ICOR Ion Corvin 154.45 309** ⇓P **PKPab 19 20 16.9 +0.4**
**BURAR Bucovina Array 154.47 318** ⇓P **PKPab 19 20 16.9 +0.3**
**BURAR Bucovina Array 154.47 318** PKPdf **PKPdf 19 19 53.1 +1.6**
BURAR PKPbc **PKPbc 19 20 01.0 +0.7**
BURAR PKPab **PKPab 19 20 16.7 +0.1**
**PLOR Plostina 154.48 314** ⇓P **PKPab 19 20 14.5 -2.1**
**PLOR Plostina 154.48 314** ⇓PKP2 **PKPab 19 20 14.5 -2.1**
**GRER 154.48 312** ⇑P **PKPab 19 20 19.0 +2.4**
**AMRR Amara 154.57 310** ⇑P **PKPab 19 20 18.0 +1.1**
**AMRR Amara 154.57 310** ⇑PKP2 **PKPab 19 20 18.0 +1.1**
**BISRR Bisoca 154.57 313** ⇑P **PKPab 19 20 18.6 +1.5**
**ELL Elmali 154.59 292** PKiKP **PKPdf 19 19 51.8 -0.3**
**ELL Elmali 154.59 292** **PKPdf 19 19 51.8 -0.3**
**KWP Kalwaria Pacla 154.64 324** *e*PKPab **PKPab 19 20 18.5 +1.4**
**PGOR Pogoanele 154.67 311** ⇑P **PKPab 19 20 18.4 +1.0**
**COVR Voineasa-Covas 154.76 314** ⇑P **PKPab 19 20 18.2 +0.4**
**RASA Rasa 154.85 310** ⇑P **PKPbc 19 20 02.7 +1.8**
**ISR Istrita 154.87 312** ⇑P **PKPab 19 20 17.2 -1.1**
**ISR Istrita 154.87 312** ⇑PKP2 **PKPab 19 20 17.2 -1.1**
**AKAS Kas 154.87 290** **PKiKP 19 19 59.9 -1.6**
**NEHR Nehoiu 154.89 313** ⇑P **PKiKP 19 19 56.8 -4.3**
**OZUR 154.90 315** ⇑P **PKPab 19 20 19.0 +0.6**
**LEHL Lehliu 154.96 311** ⇓P **PKPbc 19 20 01.8 +0.6**
**PRID Provadia 155.06 307** *i* P **PKPab 19 20 20.3 +1.5**
**MLR Muntele Rosu 155.08 313** ⇑P **PKPab 19 20 18.2 +1.1**
**MLR Muntele Rosu 155.08 313** PKP **PKPdf 19 19 52.7 +0.3**
comp=Z,4.7nm,0.6s,baz=132,slow=10,SNR=3.2
MLR PKPab **PKPab 19 20 18.1 -1.1**
comp=Z,50nm,0.8s,baz=18,slow=3.4,SNR=14
**MLR Muntele Rosu 155.08 313** PKPdf **PKPdf 19 19 52.2 -0.2**
**LIC Lamto 155.08 168** *e*PKiKP **PKPdf 19 19 53.2 0.0**
comp=Z,116nm,0.9s
**LIC Lamto 155.08 168** *e*PKP2 19 21 38.6
comp=Z,217nm,1.0s
**LIC Lamto 155.08 168** **PKPdf 19 19 53.2 0.0**
**DOPR Dopca 155.20 315** ⇑P **PKPab 19 20 19.6 -0.1**
**SECR 155.21 312** ⇑P **PKPab 19 20 20.3 +0.5**
**SULR 155.24 311** ⇑P **PKPab 19 20 20.9 +1.1**
**ARCR ARCALIA 155.25 318** ⇓P **PKPab 19 20 20.9 +1.1**
**KIC Kosan Boka 155.27 168** *e*PKiKP **PKPdf 19 19 53.4 -0.1**
comp=Z,39nm,0.7s
**KIC Kosan Boka 155.27 168** **PKPdf 19 19 53.4 -0.1**
**PLAR PLOIESTI 155.29 312** ⇓P **PKPab 19 20 20.7 +0.7**
**BMR Baia Mare 155.41 320** ⇑P **PKPab 19 20 21.3 +0.9**
**BMR Baia Mare 155.41 320** ⇑PKP2 **PKPab 19 20 21.3 +0.9**
**TGMR Targu Mures 155.44 317** ⇑P **PKPab 19 20 22.6 +1.9**
**UZH Uzhgorod 155.48 323** *e*PKiKP **PKPdf 19 19 51.1 -1.6**
UZH *i* 19 20 21.4
**TIC Toumodi 155.50 168** *e*PKiKP **PKPdf 19 19 53.8 0.0**
**TIC Toumodi 155.50 168** *e*PKP2 19 21 40.3
**TIC Toumodi 155.50 168** PKiKP **PKPdf 19 19 53.8 0.0**
**TIC Toumodi 155.50 168** **PKPdf 19 19 53.8 0.0**
**RAZG Razgrad 155.53 309** ⇑P PKPdf 19 20 02.6 +10
**DBIC Dimbokro 155.55 168** PKP **PKPdf 19 19 53.6 -0.2**
comp=Z,38nm,0.9s,baz=204,slow=1.2,SNR=39
DBIC PKPbc PKPdf 19 20 04.2 +10
comp=Z,14nm,0.5s,baz=164,slow=2.5,SNR=14
DBIC PKPab **PKPab 19 20 22.1 +0.3**
comp=Z,30nm,0.6s,baz=186,slow=3.9,SNR=8.9
DBIC pPKP **pPKPdf 19 21 30.4 +1.4**
comp=Z,32nm,0.9s,baz=170,slow=4.1,SNR=4.1
**DBIC Dimbokro 155.55 168** PKPdf **PKPdf 19 19 53.3 -0.6**
**OJC Ojcow 155.63 328** *e*PKPab **PKPab 19 20 21.8 +0.4**
OJC *e*PP **PP 19 23 59.6 -0.2**
**OJC Ojcow 155.63 328** PKiKP **PKPdf 19 19 50.5 -2.4**
**OJC Ojcow 155.63 328** **PKPdf 19 19 50.5 -2.4**
**TRPA Tarpa 155.66 322** ⇓P **PKPab 19 20 22.0 +0.5**
**VOIR 155.66 314** ⇓P PKPdf 19 20 03.7 +11
**MDB Medias 155.72 316** ⇓P PKPdf 19 20 04.7 +12
**BSEG Bad Segeberg 155.73 345** *e*PKPbc **PKPab 19 20 21.7 +0.2**
baz=27,slow=4.5
**CRVS Cervenica-Dubn 155.73 324** *e*PKiKP **PKPdf 19 19 53.0 0.0**
CRVS *e* 19 20 22.4
**CRVS Cervenica-Dubn 155.73 324** *e*PKP **PKPdf 19 19 53.0 0.0**
CRVS *e* 19 20 03.1
CRVS *e* 19 22 23.3
**MTUR Matau 155.75 313** ⇓P **PKPab 19 20 23.3 +1.1**
**MTUR Matau 155.75 313** ⇑PKP2 **PKPab 19 20 23.3 +1.1**
**CBBR Cluj-Babes-Bol 155.88 318** ⇓P **PKPab 19 20 24.1 +1.6**
**CJR Cluj-Napoca 155.88 318** ⇓P **PKPab 19 20 23.6 +1.0**
**CJR Cluj-Napoca 155.88 318** ⇓PKP2 **PKPab 19 20 23.6 +1.0**
**ARR Arges 155.96 314** ⇑P **PKPab 19 20 24.1 +1.1**
**NIE Niedzica 155.96 326** *e*PKPab **PKPab 19 20 23.6 +0.8**
**MESR Meseseni 156.01 319** ⇓P **PKPab 

**DEV Deva 156.74 317** ⇓P **PKPab 19 20 27.2 +0.9**
**DEV Deva 156.74 317** ⇓PKP2 **PKPab 19 20 27.2 +0.9**
**ALN Alexandroupoli 156.76 303** PKP2 **PKPab 19 20 25.8 -0.7**
**ALN Alexandroupoli 156.76 303** PKPab **PKPab 19 20 25.8 -0.7**
**IZAB Izabela 156.82 326** *e*PKP2 **PKPab 19 20 27.4 +0.9**
**OSTC Ostas 156.88 333** *e*PKPAB **PKPab 19 20 28.1 +1.4**
**CHVC Chvalec 156.92 333** *e*PKPAB **PKPab 19 20 27.2 +0.3**
**MORC Moravsky Berou 156.94 330** ⇓P **PKPab 19 20 27.4 +0.3**
**MORC Moravsky Berou 156.94 330** PKIKP **PKPdf 19 19 54.4 -0.2**
**MORC Moravsky Berou 156.94 330** *e*PKP **PKPdf 19 19 55.2 +0.6**
MORC *e* 19 20 27.1
**MORC Moravsky Berou 156.94 330** PKPdf **PKPdf 19 19 54.4 -0.2**
MORC PKPab **PKPab 19 20 25.1 -2.0**
**FLTG Flechtingen 156.98 342** *e*PKPbc **PKPab 19 20 26.7 -0.3**
baz=27,slow=4.5
**UPC Upice 157.00 333** *e*PKP2 **PKPab 19 20 27.6 +0.4**
**UPC Upice 157.00 333** *e*PKPAB **PKPab 19 20 27.6 +0.4**
**DPC Dobruska-Polom 157.00 333** *e*PKP2 **PKPab 19 20 27.9 +0.6**
**DPC Dobruska-Polom 157.00 333** *e*PKPAB **PKPab 19 20 27.9 +0.6**
**NRDL Niedersach Rie 157.11 344** *e*PKPbc **PKPab 19 20 27.4 -0.1**
baz=27,slow=4.5
**PSZ Piszkesteto 157.17 324** ⇑P **PKPab 19 20 29.2 +1.1**
**SRE Strehaia 157.18 314** ⇑P **PKPab 19 20 29.2 +1.0**
**SRE Strehaia 157.18 314** ⇑PKP2 **PKPab 19 20 29.2 +1.0**
**SIRR Siria 157.24 319** ⇓P **PKPab 19 20 26.3 -2.1**
**VYHS Vyhne 157.29 326** *e*PKP2 **PKPab 19 20 29.1 +0.5**
**ASSE Asse, Remlinge 157.31 343** *e*PKPbc **PKPab 19 20 28.4 +0.1**
baz=27,slow=4.5
**CLL Collm 157.38 339** *e*PKIKP **PKPdf 19 19 56.0 +1.0**
CLL *e* 19 22 08.0
CLL pmax pmax
comp=Z,463nm,1.7s
**CLL Collm 157.38 339** *e*PKPdf **PKPdf 19 19 56.0 +1.0**
CLL *e*PKPdif PKPdf 19 20 08.0 +13
CLL *i* PKPab **PKPab 19 20 28.4 -0.4**
comp=Z,463nm,1.7s
CLL *e*pPKPabm 19 22 08.0
CLL *es*PKPab **sPKPab 19 22 37.0 -2.4**
CLL *e*PP **PP 19 24 08.0 -1.1**
CLL *es*PP 19 26 18.0
CLL *es*PSKS 19 36 44.0
CLL *e*PPS PPS 19 37 42.0
CLL *e*SS SS 19 43 36.0 +4.8
CLL *es*SSS 19 52 18.0
CLL *e*SSSS 19 54 12.0
**CLL Collm 157.38 339** *e*PKPbc **PKPab 19 20 28.6 -0.2**
baz=27,slow=4.5
**CLL Collm 157.38 339** PKPdf **PKPdf 19 19 53.9 -1.2**
CLL PKPab **PKPab 19 20 28.4 -0.4**
**BAIL Bailesti 157.40 312** ⇓P **PKPab 19 20 29.9 +0.7**
**MPEP Malo Peshtene 157.45 310** P **PKPab 19 20 30.1 +0.6**
**BRG Berggiesshubel 157.45 337** *e*PKIKP **PKPdf 19 19 57.1 +2.0**
BRG 19 22 09.6
BRG pmax pmax
comp=Z,14nm,1.2s
BRG pmax pmax
comp=Z,15nm,1.1s
BRG pmax pmax
comp=Z,177nm,1.3s
BRG pmax pmax
comp=Z,62nm,1.7s
**BRG Berggiesshubel 157.45 337** *e*PKPbc **PKPab 19 20 29.6 +0.4**
baz=27,slow=4.5
**BRG Berggiesshubel 157.45 337** ⇓*e*PKPf 19 19 57.1
**BRG Berggiesshubel 157.45 337** Amp 19 19 58.3
comp=Z,14nm,1.2s
**BRG Berggiesshubel 157.45 337** *ex* x 19 20 15.1
**BRG Berggiesshubel 157.45 337** Amp 19 20 16.2
comp=Z,15nm,1.1s
**BRG Berggiesshubel 157.45 337** PKPab **PKPab 19 20 29.5 +0.4**
**BRG Berggiesshubel 157.45 337** Amp 19 20 33.0
comp=Z,177nm,1.2s
**BRG Berggiesshubel 157.45 337** pPKPab pPKPab 19 22 09.7 +10
**BRG Berggiesshubel 157.45 337** Amp 19 22 16.7
comp=Z,62nm,1.7s
**PVCC Panska Ves 157.52 335** *e*PKP2 **PKPab 19 20 30.2 +0.8**
**PVCC Panska Ves 157.52 335** *e*PKPAB **PKPab 19 20 30.2 +0.8**
**PUNG Punghina 157.54 313** ⇑P **PKPab 19 20 30.8 +1.0**
**HERR Herculane 157.56 315** ⇑P **PKPab 19 20 30.4 +0.6**
**JAVC Velka Javorina 157.57 329** *e*PKP **PKPdf 19 19 57.1 +1.6**
JAVC *e* 19 20 31.1
**DJES Djerdap 157.60 314** ⇓P **PKPab 19 20 30.7 +0.7**
**FBE Freiberg 157.60 338** *e*PKPbc **PKPab 19 20 30.0 +0.3**
baz=27,slow=4.5
**BZS Buzias 157.64 317** ⇑P **PKPab 19 20 29.9 -0.3**
**BZS Buzias 157.64 317** ⇑PKP2 **PKPab 19 20 29.9 -0.3**
**CLZ Clausthal 157.65 343** *e*PKPbc **PKPab 19 20 30.3 +0.3**
baz=27,slow=4.5
**VRAC Vranov 157.70 331** ⇓P **PKPab 19 20 30.7 +0.4**
**VRAC Vranov 157.70 331** PKPab **PKPab 19 20 30.4 +0.1**
comp=Z,59nm,0.8s,baz=59,slow=3.3,SNR=36
**VRAC Vranov 157.70 331** ⇓PKP2 **PKPab 19 20 30.7 +0.4**
**VRAC Vranov 157.70 331** *e*PKP **PKPdf 19 19 56.4 +0.9**
VRAC *e* 19 20 30.5
**AMBH Ambrzfalva 157.72 320** ⇓P **PKPab 19 20 32.4 +2.0**
**IBBN Ibbenburen 157.78 348** *e*PKPbc **PKPab 19 20 31.0 +0.5**
baz=27,slow=4.5
**NEUB Neuenburg 157.84 340** *e*PKPbc **PKPab 19 20 30.8 0.0**
baz=27,slow=4.5
**SMOL Smolenice 157.93 328** *e*PKIKP **PKPdf 19 19 57.0 +1.2**
SMOL *e* 19 20 32.0
**SMOL Smolenice 157.93 328** *e*PKP **PKPdf 19 19 57.0 +1.2**
SMOL *e* 19 20 32.0
**PRU Pruhonice 157.97 335** *e*PKP2 **PKPab 19 20 32.4 +1.0**
**PRU Pruhonice 157.97 335** *e*PKPAB **PKPab 19 20 32.4 +1.0**
**KRUC Moravsky 157.98 331** *e*PKP **PKPdf 19 19 56.4 +0.5**
KRUC *e* 19 20 31.1
**GTTG Gottingen 158.02 343** *e*PKPbc **PKPab 19 20 31.4 -0.1**
baz=27,slow=4.5
**MDVR Moldovita 158.04 315** ⇓P **PKPab 19 20 32.3 +0.3**
**BANR Banloc 158.05 317** ⇑P **PKPab 19 20 33.1 +1.2**
**VTS Vitosha 158.10 309** ⇑P **PKPab 19 20 32.5 0.0**
**VTS Vitosha 158.10 309** PKIKP **PKPdf 19 19 54.9 -1.5**
**VTS Vitosha 158.10 309** PKPdf **PKPdf 19 19 54.9 -1.5**
**VTS Vitosha 158.10 309** P **PKPab 19 20 36.5 +4.0**
**MODS Modra-Piesok 158.10 328** *e*PKIKP **PKPdf 19 19 57.0 +0.9**
MODS *e* 19 20 34.1
**MODS Modra-Piesok 158.10 328** *e*PKP **PKPdf 19 19 57.0 +0.9**
MODS *e* 19 20 34.1
**TREC Trest 158.17 332** *e*PKP2 **PKPab 19 20 32.5 +0.2**
**TREC Trest 158.17 332** *e*PKPAB **PKPab 19 20 32.5 +0.2**
**MMB Musomiste 158.18 306** P **PKPab 19 20 33.5 +0.8**
**ZST Bratislava 158.31 328** *e*PKIKP **PKPdf 19 19 56.9 +0.6**
ZST *e* 19 20 33.5
**ZST Bratislava 158.31 328** *e*PKP **PKPdf 19 19 56.9 +0.6**
ZST *e* 19 20 33.5
**TANN Tannenbergstha 158.33 338** *e*PKPbc **PKPab 19 20 33.1 +0.1**
baz=27,slow=4.5
**WERD Werda 158.35 339** *e*PKPbc **PKPab 19 20 32.9 -0.2**
baz=27,slow=4.5
**MOX Moxa 158.39 340** *e*PKPbc **PKPab 19 20 33.0 -0.2**
baz=27,slow=4.5
**GUNZ Gunzen 158.42 338** *e*PKPbc **PKPab 19 20 33.2 -0.1**
baz=27,slow=4.5
**PBCC Pribram 158.43 335** *e*PKPAB **PKPab 19 20 33.7 +0.3**
**WERN Wernitzgruen 158.47 338** *e*PKPbc **PKPab 19 20 33.8 +0.2**
baz=27,slow=4.5
**NKC Novy Kostel 158.49 338** *e*PKP2 **PKPab 19 20 34.2 +0.5**
NKC 20 19 57.0
**NKC Novy Kostel 158.49 338** *e*PKPAB **PKPab 19 20 34.2 +0.5**
**KKB Krupnik 158.51 307** P **PKPab 19 20 34.8 +0.7**
**BOVS Bovan 158.63 313** ⇓P **PKPab 19 20 34.4 -0.1**
**UBBA Unterbreizbach 158.68 343** *e*PKPbc **PKPab 19 20 34.6 +0.3**
baz=27,slow=4.5
**BUG Bochum--Univer 158.70 348** *e*PKPbc **PKPab 19 20 35.4 +0.9**
baz=27,slow=4.5
**IDI Anoyia 158.77 289** PKPab **PKPab 19 20 35.7 +0.1**
comp=Z,60nm,0.7s,baz=51,slow=8.0,SNR=22
**MANZ Manzenberg 158.82 338** *e*PKPbc **PKPab 19 20 35.0 -0.2**
baz=27,slow=4.5
**MORH Mrgy, Hungar 158.93 322** ⇓P **PKPab 19 20 36.0 +0.3**
**MORH Mrgy, Hungar 158.93 322** *e*P **PKPab 19 20 35.4 -0.3**
**FRGS Fruska Gora 158.94 318** ⇓P **PKPab 19 20 35.5 -0.5**
**FRGS Fruska Gora 158.94 318** ⇑P **PKPab 19 20 35.4 -0.5**
**ROTZ Rotzenmuhle 158.97 338** *e*PKPbc **PKPab 19 20 36.0 +0.2**
baz=27,slow=4.5
**CKRC Cesky Krumlov 159.01 333** *e*PKPAB **PKPab 19 20 36.6 +0.6**
**KHC Kasperske Hory 159.04 335** *e*PKIKP PKPdf 19 19 46.5 -11
KHC *e* 19 20 36.6
**KHC Kasperske Hory 159.04 335** *e*PKPDF **PKPdf 19 19 56.0 -1.2**
KHC *e*PKPAB **PKPab 19 20 36.6 +0.5**
**KHC Kasperske Hory 159.04 335** **PKPdf 19 19 57.0 -0.2**
KHC PKPab **PKPab 19 20 36.1 -0.1**

**CONA Conrad Observa 159.07 329** *e*P **PKPdf 19 19 56.6 -0.7**
comp=Z,7.9nm,0.9s
CONA *i* P **PKPab 19 20 36.8 +0.4**
comp=Z,70nm,1.0s,SNR=15
CONA *e*P **PP 19 24 19.5 +0.9**
comp=Z,26nm,1.2s
**VAY Valandovo 159.08 306** *i* P **PKPab 19 20 36.0 -0.6**
**STIP Stip 159.20 308** *i* P **PKPab 19 20 36.6 -0.5**
**GEC2 GERESS Array S 159.23 334** *e*PKPbc **PKPab 19 20 37.5 +0.4**
baz=27,slow=4.5
**GEC2 GERESS Array S 159.23 334** **PKPdf 19 19 57.9 +0.4**
GEC2 **PKPab 19 20 36.3 -0.7**
**GERES GERESS Array B 159.23 334** PKP **PKPdf 19 19 58.2 +0.7**
comp=Z,4.8nm,0.9s,baz=64,slow=3.1,SNR=5.8
GERES PKPab **PKPab 19 20 37.0 -0.1**
comp=Z,42nm,0.8s,baz=35,slow=4.9,SNR=31
**GERES GERESS Array B 159.23 334** PKP2 **PKPab 19 20 36.1 -1.0**
GERES 20 19 55.2
**GERES GERESS Array B 159.23 334** PKPdf **PKPdf 19 19 55.1 -2.3**
GERES PKPab **PKPab 19 20 36.1 -1.0**
**WET Wettzell 159.28 336** *e*PKPbc **PKPab 19 20 38.0 +0.8**
baz=27,slow=4.5
**GRA1 Grafenberg Arr 159.35 339** **PKPab 19 20 36.7 -0.8**
**GRF Grafenberg Arr 159.35 339** PKP2 **PKPab 19 20 36.7 -0.8**
**GRF Grafenberg Arr 159.35 339** *e*PKPbc **PKPab 19 20 37.4 -0.1**
baz=27,slow=4.5
**GRFO Grafenberg 159.35 339** PKP2 **PKPab 19 20 37.3 -0.1**
**GRFO Grafenberg 159.35 339** PKPab **PKPab 19 20 37.3 -0.1**
**DIVS Divibare 159.44 316** ⇑*i* P **PKPab 19 20 38.6 +0.4**
**DIVS Divibare 159.44 316** PKPdf **PKPdf 19 19 55.6 -2.3**
DIVS PKPab **PKPab 19 20 38.1 -0.1**
**TEKS Tekeris 159.46 317** *e*P **PKPab 19 20 37.5 -0.7**
**SKO Skopje 159.58 309** *i* P **PKPab 19 20 40.1 +1.3**
**LIT Litokhoron 159.59 303** PKIKP **PKPdf 19 19 56.7 -1.4**
LIT 19 20 37.6
**LIT Litokhoron 159.59 303** PKPdf **PKPdf 19 19 56.7 -1.4**
LIT PKPab **PKPab 19 20 37.6 -1.3**
**BEBN Eben Emael 159.59 350** *d*PKPab **PKPab 19 20 37.9 -0.5**
**AHRW Bad Neuenahr-A 159.60 347** *e*PKPbc **PKPab 19 20 39.6 +1.2**
baz=27,slow=4.5
**TNS Taunus Mts 159.61 344** *e*PKPbc **PKPab 19 20 39.2 +0.6**
baz=27,slow=4.5
**BEHE Becsehely 159.71 325** *e*P **PKPab 19 20 35.6 -3.5**
**MEM Membach 159.72 349** *d*PKPab **PKPab 19 20 38.6 -0.3**
**BTNL Ternell 159.72 349** *d*PKPab **PKPab 19 20 38.7 -0.4**
**ARSA Arzberg 159.73 328** *e*P **PKPdf 19 19 57.8 -0.2**
comp=Z,4.5nm,0.8s
ARSA *i* P **PKPab 19 20 39.2 0.0**
comp=Z,59nm,1.2s,SNR=17
ARSA *e*P **PP 19 24 24.9 +2.8**
comp=Z,25nm,1.4s
**MOA Molln 159.81 331** *i* P **PKPab 19 20 39.6 +0.1**
comp=Z,52nm,1.0s,SNR=9.5
MOA *e*P **PP 19 24 24.8 +2.4**
comp=Z,8.4nm,0.8s
**BSTI Sart Tilman 159.82 350** *d*PKPab **PKPab 19 20 39.4 +0.1**
**BBLS Lazići 159.92 316** *e*P **PKPab 19 20 41.1 +0.8**
**BHOU Houvegnez 159.97 349** *d*PKPab **PKPab 19 20 40.0 0.0**
**BCLA Clavier 160.01 350** *d*PKPab **PKPab 19 20 39.8 -0.5**
**AGG Agios Georgios 160.05 300** PKIKP **PKPdf 19 19 57.4 -1.2**
**AGG Agios Georgios 160.05 300** PKPdf **PKPdf 19 19 57.4 -1.2**
**SNF Seneffe 160.06 352** *d*PKPab **PKPab 19 20 40.1 -0.3**
**BGES Gesves 160.08 351** *d*PKPab **PKPab 19 20 39.9 -0.6**
**RUDO Rudo 160.08 315** *e*P **PKPab 19 20 40.6 -0.3**
**KALN Kalnik 160.11 325** P **PKPab 19 20 40.3 -0.6**
**FNA Florina 160.12 306** PKIKP **PKPdf 19 19 56.6 -2.1**
**FNA Florina 160.12 306** PKPdf **PKPdf 19 19 56.6 -2.1**
**BMRD Maredsous 160.20 351** *d*PKPab **PKPab 19 20 40.6 -0.5**
**RCHB Rochefort 160.28 350** *d*PKPab **PKPab 19 20 40.9 -0.5**
**PERS Pernice 160.38 328** *i* PKPdf **PKPdf 19 19 57.3 -1.4**
PERS *i* PKPab **PKPab 19 20 41.8 -0.3**
**SOKA Soboth 160.38 328** *e*P **PKPdf 19 19 58.5 -0.3**
comp=Z,10.0nm,1.0s
SOKA *i* P **PKPab 19 20 42.4 +0.3**
comp=Z,72nm,0.9s,SNR=16
SOKA *e*P **PP 19 24 28.2 +2.5**
comp=Z,17nm,1.1s
**DOU Dourbes 160.43 351** *d*PKPab **PKPab 19 20 41.5 -0.6**
**RJOB Jochberg 160.48 334** *e*PKPbc **PKPab 19 20 43.0 +0.5**
baz=27,slow=4.5
**PTJ Puntijarka 160.50 325** P **PKPab 19 20 41.9 -0.8**
**UPM Unac-Piva 160.59 315** *e*P **PKPab 19 20 42.2 -1.2**
**KBN Korca 160.60 306** PKIKP **PKPdf 19 19 58.7 -0.5**
KBN 19 20 41.5
**KBN Korca 160.60 306** PKPdf **PKPdf 19 19 58.7 -0.5**
KBN **PKPab 19 20 41.5 -1.9**
**WLF Walferdange 160.61 348** *e*PKPbc **PKPab 19 20 44.1 +1.2**
baz=27,slow=4.5
**WLF Walferdange 160.61 348** *d*PKPab **PKPab 19 20 43.2 +0.3**
**MRAK Mrakovica 160.64 322** *e*P **PKPab 19 20 43.6 +0.2**
**BLY Banja Luka 160.66 321** *e*P **PKPab 19 20 43.3 -0.1**
**FUR Furstenfeldbru 160.67 337** *e*PKPbc **PKPab 19 20 43.4 +0.2**
baz=27,slow=4.5
**OBKA Obir 160.73 329** *e*P **PKPdf 19 19 57.1 -2.1**
comp=Z,2.7nm,0.9s
OBKA *i* P **PKPab 19 20 43.1 -0.6**
comp=Z,33nm,0.9s,SNR=7.1
OBKA *e*P **PP 19 24 27.2 -0.3**
comp=Z,8.1nm,1.0s
**PDG Podgorica 160.79 312** ⇓P **PKPab 19 20 44.1 +0.1**
**PDG Podgorica 160.79 312** ⇑*i* P **PKPab 19 20 44.1 +0.1**
**PDG Podgorica 160.79 312** PKPab **PKPab 19 20 43.5 -0.5**
**KBA Koelnbreinsper 160.80 332** *e*P **PKPdf 19 19 58.7 -0.7**
comp=Z,5.2nm,1.0s
KBA *e*P **PKPab 19 20 43.2 -0.9**
comp=Z,29nm,0.8s
KBA *e*P **PP 19 24 28.7 +0.8**
comp=Z,22nm,1.2s
**CRES Cresnjev 160.81 326** *e*P **PKPab 19 20 43.3 -0.7**
**ITM Ithomi 160.84 295** PKPab **PKPab 19 20 42.4 -2.1**
**MGRS Mrkonjic Grad 160.93 320** *e*P **PKPab 19 20 44.2 -0.4**
**DRME Dracevica, Mon 160.96 312** *e*P **PKPab 19 20 42.6 -2.2**
**OZLJ Ozalj 160.96 325** P **PKPab 19 20 43.1 -1.4**
**BRY Bratogost 160.98 315** *e*P **PKPab 19 20 44.9 -0.1**
**MYKA Terra Mystica 161.03 330** *e*P **PKPdf 19 19 59.7 +0.2**
comp=Z,6.1nm,1.1s
MYKA *i* P **PKPab 19 20 43.5 -1.5**
comp=Z,19nm,0.6s,SNR=15
MYKA *e*P **PP 19 24 29.4 +0.3**
comp=Z,23nm,1.4s
**LJU Ljubljana 161.09 328** *e*P **PKPab 19 20 44.1 -1.1**
**LJU Ljubljana 161.09 328** *i* PKPdf **PKPdf 19 19 58.8 -0.7**
LJU *i* PKPab **PKPab 19 20 44.6 -0.6**
**TREB Trebinje 161.20 314** *e*P **PKPab 19 20 45.6 -0.2**
**HCY Herceg Novi 161.26 313** *e*P **PKPab 19 20 45.8 -0.3**
**WATA Walderalm 161.27 335** *e*P **PKPdf 19 20 00.2 +0.4**
comp=Z,13nm,1.1s
WATA *i* P **PKPab 19 20 46.2 +0.1**
comp=Z,48nm,0.7s,SNR=12
WATA *e*P **PP 19 24 30.3 0.0**
comp=Z,38nm,1.8s
**WTTA Wattenberg 161.31 335** *e*P **PKPdf 19 19 59.7 -0.2**
comp=Z,14nm,1.3s
WTTA *i* P **PKPab 19 20 46.3 0.0**
comp=Z,58nm,0.9s,SNR=7.5
WTTA *e*P **PP 19 24 31.2 +0.6**
comp=Z,26nm,1.4s
**CEY Cerknica 161.37 327** *e*P **PKPab 19 20 45.7 -0.7**
**BFO Black Forest 161.40 343** PKP2 **PKPab 19 20 46.0 -0.4**
**BFO Black Forest 161.40 343** *e*PKPbc **PKPab 19 20 46.5 0.0**
baz=27,slow=4.5
**BFO Black Forest 161.40 343** PKPab **PKPab 19 20 46.0 -0.4**
**PLIT Plitvice 161.40 323** P **PKPab 19 20 45.6 -1.0**
**ABTA Abfaltersbach 161.41 332** *e*P **PKPdf 19 19 59.5 -0.4**
comp=Z,13nm,1.1s
ABTA *i* P **PKPab 19 20 45.9 -0.7**
comp=Z,85nm,0.9s,SNR=14
ABTA *e*P **PP 19 24 31.0 +0.1**
comp=Z,15nm,1.5s
**RETA Reutte 161.43 337** *e*P **PKPdf 19 20 00.3 +0.4**
comp=Z,5.1nm,0.8s
RETA *i* P **PKPab 19 20 46.9 +0.2**
comp=Z,96nm,0.9s,SNR=28
RETA *e*P **PP 19 24 30.6 -0.3**
comp=Z,18nm,1.2s
**MOTA Moosalm 161.43 336** *i* P **PKPdf 19 19 59.0 -1.1**
comp=Z,17nm,1.0s,SNR=7.1
MOTA *i* P **PKPab 19 20 46.7 -0.1**
comp=Z,101nm,0.9s,SNR=19
MOTA *e*P **PP 19 24 31.3 +0.2**
comp=Z,27nm,1.3s
**UBR Ueberruh 161.47 338** *e*PKPbc **PKPab 19 20 47.5 +0.6**
baz=27,slow=4.5
**RICI Ricice 161.48 318** P **PKPab 19 20 45.4 -1.6**

**SQTA Sankt Quirin 161.50 336** *e*P **PKPdf 19 19 59.2 -0.8**
comp=Z,13nm,1.1s
SQTA *i* P **PKPab 19 20 47.2 +0.1**
comp=Z,73nm,1.0s,SNR=15
SQTA *e*P **PP 19 24 31.6 +0.1**
comp=Z,30nm,1.4s
**STON Ston 161.51 316** *e*P **PKPab 19 20 45.7 -1.4**
**STON Ston 161.51 316** P **PKPab 19 20 45.5 -1.6**
**UDBI Udbina 161.57 322** P **PKPab 19 20 46.5 -0.9**
**KIJV Kijevo 161.57 320** P **PKPab 19 20 46.8 -0.6**
**RIY Rijeka 161.65 326** *e*P **PKPab 19 20 46.3 -1.3**
**RIY Rijeka 161.65 326** P **PKPab 19 20 47.1 -0.5**
**MAKA Makarska 161.67 318** P **PKPab 19 20 46.3 -1.5**
**STAL STALIGIAL 161.72 331** PKPdf **PKPdf 19 19 58.3 -1.9**
STAL PKPab **PKPab 19 20 45.9 -2.1**
**ECH Echery 161.79 345** PKIKP **PKPdf 19 19 59.1 -1.1**
ECH 19 20 46.9
**ECH Echery 161.79 345** PKPdf **PKPdf 19 19 59.1 -1.1**
ECH PKPab **PKPab 19 20 46.9 -1.3**
**FETA Feichten 161.84 336** *i* P **PKPdf 19 19 59.8 -0.7**
comp=Z,12nm,0.9s,SNR=9.4
FETA *i* P **PKPab 19 20 49.0 +0.4**
comp=Z,76nm,0.9s,SNR=15
FETA *e*P **PP 19 24 33.1 -0.2**
comp=Z,17nm,1.3s
**DAVA Damuels 161.90 338** *e*P **PKPdf 19 20 02.5 +2.0**
comp=Z,9.5nm,1.2s
DAVA *i* P **PKPab 19 20 49.1 +0.3**
comp=Z,126nm,1.0s,SNR=23
DAVA *e*P **PP 19 24 33.4 -0.1**
comp=Z,37nm,1.8s
**SMRN Sveta Marina 162.02 326** P **PKPab 19 20 47.8 -1.4**
**MORI Morici 162.04 321** P **PKPab 19 20 48.2 -1.2**
**LSTV Lastovo 162.06 316** P **PKPab 19 20 48.7 -0.8**
**HVAR Hvar 162.07 318** P **PKPab 19 20 47.5 -2.0**
**ZIRJ Zirje 162.21 320** P **PKPab 19 20 48.0 -2.2**
**DUGI Dugi Otok 162.30 322** P **PKPab 19 20 49.4 -1.2**
**BRJN Brijuni 162.31 327** P **PKPab 19 20 47.4 -3.1**
**CTI Castel Tesino 162.32 333** PKP2 **PKPab 19 20 49.0 -1.7**
CTI 20 20 00.1
**CTI Castel Tesino 162.32 333** PKPdf **PKPdf 19 20 00.1 -0.8**
CTI PKPab **PKPab 19 20 49.0 -1.7**
**DAVOX Davos/Dischmat 162.34 337** PKPab **PKPab 19 20 51.3 +0.5**
baz=28,slow=3.5
**TORD Torodi Ar. Bea 162.37 185** PKP **PKPdf 19 20 01.2 -0.5**
comp=Z,20nm,0.9s,baz=142,slow=0.2,SNR=51
TORD PKPab **PKPab 19 20 51.6 +0.2**
comp=Z,33nm,0.6s,baz=173,slow=3.6,SNR=33
TORD pPKP **pPKPdf 19 21 38.4 +1.3**
comp=Z,32nm,1.1s,baz=285,slow=0.5,SNR=3.3
TORD pPKPab **pPKPab 19 22 21.2 -0.4**
comp=Z,44nm,1.0s,baz=178,slow=2.4,SNR=6.0
TORD SKKPab 19 29 45.9
comp=Z,4.5nm,1.0s,baz=331,slow=3.6,SNR=4.1
**TORD Torodi Ar. Bea 162.37 185** **PKPdf 19 20 00.2 -1.5**
**SCTE Santa Cesarea 162.44 307** PKPdf **PKPdf 19 20 01.1 +0.1**
**CLF Chambon-Foret 162.72 355** **PKPab 19 20 59.6 -1.5**
CLF PKPab **PKPab 19 20 51.7 -0.4**
**TUE Stuetta 162.79 338** **PKPdf 19 20 00.5 -0.9**
TUE PKPab **PKPab 19 20 52.7 -0.2**
**TEOL Teolo 162.88 331** **PKPdf 19 20 01.5 +0.2**
TEOL PKPab **PKPab 19 20 52.5 -0.5**
**SALO Salr 163.11 334** PKPab **PKPab 19 20 53.0 -1.1**
**SGRT San Giovanni R 163.34 315** **PKPdf 19 19 59.9 -2.1**
SGRT PKPab **PKPab 19 20 54.3 -1.0**
**SENIN Lac Senin/Sane 163.49 342** PKPab **PKPab 19 20 55.4 -0.5**
**PRMA PARMA 163.91 333** **PKPab 19 20 57.7 +0.1**
**TIP Timpagrande 164.02 306** ⇑P **PKPab 19 20 59.1 +0.7**
**TIP Timpagrande 164.02 306** **PKPdf 19 20 01.9 -0.8**
TIP PKPab **PKPab 19 20 58.1 -0.3**
**NRCA Norcia 164.13 323** **PKPdf 19 20 00.4 -2.3**
**AQU L'Aquila 164.31 321** *e*P **PKPab 19 20 58.8 -0.7**
**VLC Villacollemand 164.38 332** **PKPab 19 20 56.2 -3.5**
**PAOL Paolisi 164.48 315** **PKPab 19 20 59.7 -0.7**
**OSSC Osservatorio P 164.52 328** PKPdf **PKPdf 19 19 58.5 -4.4**
OSSC **PKPab 19 20 57.0 -3.4**
**BNI Bardonecchia 164.86 342** PKIKP **PKPdf 19 20 01.1 -2.2**
BNI 19 21 01.9
**BNI Bardonecchia 164.86 342** **PKPdf 19 20 01.1 -2.2**
BNI PKPab **PKPab 19 21 01.9 0.0**
**SSB Saint Sauveur 165.13 348** PKP2 **PKPab 19 21 02.3 -0.6**
**SSB Saint Sauveur 165.13 348** PKPab **PKPab 19 21 02.3 -0.6**
**VAE Valguarnera 166.42 303** PKPab **PKPab 19 21 10.2 +1.2**
comp=Z,37nm,1.0s,baz=90,slow=2.0,SNR=4.7
**PGAV Gavieira, Arco 166.98 29** *e*PKPdf **PKPdf 19 20 06.1 +1.1**
**PGAV Gavieira, Arco 166.98 29** *e*PKPab **PKPab 19 21 13.2 +1.9**
**PCAB Cabril 167.29 29** *e*PKPdf **PKPdf 19 20 06.3 +1.1**
**PCAB Cabril 167.29 29** *e*PKPab **PKPab 19 21 14.4 +1.8**
**POLO Lamas de Olo 167.67 29** *e*PKPdf **PKPdf 19 20 06.7 +1.2**
**POLO Lamas de Olo 167.67 29** *e*PKPab **PKPab 19 21 14.9 +0.5**
**PBRG Braganca 167.71 25** *e*PKPdf **PKPdf 19 20 08.6 +3.1**
**PBRG Braganca 167.71 25** *e*PKPab **PKPab 19 21 15.5 +1.0**
**PVRL Vila Real 167.78 29** *e*PKPdf **PKPdf 19 20 06.0 +0.4**
**PVRL Vila Real 167.78 29** *e*PKPab **PKPab 19 21 15.1 +0.3**
**MVO Moncorvo 168.15 27** *e*PKPdf **PKPdf 19 20 06.6 +0.8**
**MVO Moncorvo 168.15 27** *e*PKPab **PKPab 19 21 18.5 +2.0**
**PVIS Viseu 168.16 31** *e*PKPdf **PKPdf 19 20 06.9 +1.1**
**PVIS Viseu 168.16 31** *e*PKPab **PKPab 19 21 18.6 +2.0**
**PCAS Casmilo, Conde 168.41 35** *e*PKPdf **PKPdf 19 20 08.0 +2.0**
**PCAS Casmilo, Conde 168.41 35** *e*PKPab **PKPab 19 21 19.6 +2.0**
**MTE Manteigas 168.58 31** *e*PKPdf **PKPdf 19 20 07.1 +1.0**
**MTE Manteigas 168.58 31** *e*PKPab **PKPab 19 21 18.5 +1.0**
**MTE Manteigas 168.58 31** **PKPdf 19 20 06.7 +0.5**
**PCBR Castelo Branco 169.06 32** *e*PKPdf **PKPdf 19 20 07.2 +0.8**
**PMTG Montargil 169.28 37** *e*PKPdf **PKPdf 19 20 07.3 +0.8**
**PMTG Montargil 169.28 37** *e*PKPab **PKPab 19 21 23.1 +1.6**
**PMRV Marv??o 169.43 33** *e*PKPdf **PKPdf 19 20 08.0 +1.4**
**PMRV Marv??o 169.43 33** *e*PKPab **PKPab 19 21 23.3 +1.1**
**PESTR Estremoz 169.76 36** *e*PKPdf **PKPdf 19 20 08.1 +1.3**
**PESTR Estremoz 169.76 36** *e*PKPab **PKPab 19 21 25.4 +1.7**
**PNCL Nicolau / Gran 169.80 42** *e*PKPdf **PKPdf 19 20 07.9 +1.1**
**PNCL Nicolau / Gran 169.80 42** *e*PKPab **PKPab 19 21 26.0 +2.2**
**PTEO Sao Teotonio 170.06 45** *e*PKPdf **PKPdf 19 20 08.8 +1.8**
**MESJ Messejana 170.16 42** *e*PKPdf **PKPdf 19 20 07.8 +0.7**
**MESJ Messejana 170.16 42** *e*PKPdf **PKPdf 19 20 08.0 +0.9**
**PBEJ Beja 170.24 40** *e*PKPdf **PKPdf 19 20 08.5 +1.4**
**PFVI Vila Bisbo 170.25 47** *e*PKPdf **PKPdf 19 20 08.2 +1.1**
**MORF Marmelete 170.26 46** *e*PKPdf **PKPdf 19 20 07.9 +0.7**
**MORF Marmelete 170.26 46** *e*PKPdf **PKPdf 19 20 08.2 +1.0**
**PCVE Castro Verde 170.41 43** *e*PKPdf **PKPdf 19 20 08.1 +0.9**
**PCVE Castro Verde 170.41 43** *e*PKPab **PKPab 19 21 28.6 +2.0**
**ESBB Sonseca Array 170.54 19** **PKPdf 19 20 06.6 -0.7**
**ESDC Sonseca Array 170.54 19** PKP **PKPdf 19 20 07.7 +0.4**
comp=Z,9.4nm,1.0s,baz=349,slow=2.8,SNR=39
ESDC PKPab **PKPab 19 21 27.3 +0.2**
comp=Z,7.7nm,0.9s,baz=332,slow=4.3,SNR=10
ESDC PP **PP 19 25 20.6 +3.1**
comp=Z,2.5nm,1.0s,baz=303,slow=0.8,SNR=3.7
ESDC SKKPab 19 29 30.9
comp=Z,5.6nm,1.0s,baz=142,slow=1.6,SNR=8.8
**ESDC Sonseca Array 170.54 19** **PKPdf 19 20 06.9 -0.4**
**PAB San Pablo 170.54 21** PKIKP **PKPdf 19 20 07.6 +0.2**
**PAB San Pablo 170.54 21** **PKPdf 19 20 07.6 +0.2**
**PAB San Pablo 170.54 21** P **PKPab 19 20 09.2 +1.9**
**PBDV Barranco-do-Ve 170.74 44** *e*PKPdf **PKPdf 19 20 09.0 +1.5**
**PBDV Barranco-do-Ve 170.74 44** *e*PKPab **PKPab 19 21 27.7 -0.4**
**PVAQ Vaqueiros 170.75 42** *e*PKPdf **PKPdf 19 20 08.0 +0.6**
**PVAQ Vaqueiros 170.75 42** *e*PKPab **PKPab 19 21 30.2 +2.1**
**PVAQ Vaqueiros 170.75 42** P **PKPdf 19 20 09.7 +2.3**
**KEST Kesra 170.84 305** PKP **PKPdf 19 20 07.8 +0.1**
comp=Z,11nm,0.9s,baz=327,slow=0.9,SNR=8.3
KEST PKPab **PKPab 19 21 29.0 +0.3**
comp=Z,31nm,1.0s,baz=210,slow=0.5,SNR=14
**KEST Kesra 170.84 305** **PKPdf 19 20 07.6 0.0**
**TTIG Tnine Tigouga, 172.63 90** P **PKPdf 19 20 11.0 +2.3**
**TTIG Tnine Tigouga, 172.63 90** P **PKPdf 19 20 11.0 +2.3**
**SRHM Skhour des Reh 172.97 74** P **PKPdf 19 20 11.0 +2.3**
**SRHM Skhour des Reh 172.97 74** P **PKPdf 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MDT | | | | | PKPab | **PKPab** | **19 21 50.5** | **+0.8** |
| | comp=Z,14nm,1.0s,baz=67,slow=1.8,SNR=6.5 | | | | | | | | |
| **MDT** | **Midelt** | **175.51** | **62** | | P | **PKPdf** | **19 20 12.8** | **+3.3** |
| **GOLM** | **Goulmima** | **175.57** | **77** | | P | **PKPdf** | **19 20 13.0** | **+3.3** |
| **GOLM** | **Goulmima** | **175.57** | **77** | | P | **PKPdf** | **19 20 13.0** | **+3.3** |
| **JBK** | **JBK** | **175.81** | **32** | | P | **PKPdf** | **19 20 11.0** | **+1.3** |
| **JBK** | **JBK** | **175.81** | **32** | | P | **PKPdf** | **19 20 13.0** | **+3.3** |
| **TDRA** | **Tendrara** | **177.12** | **39** | | P | **PKPdf** | **19 20 12.0** | **+2.0** |
| **TDRA** | **Tendrara** | **177.12** | **39** | | P | **PKPdf** | **19 20 14.0** | **+4.0** |
| **FIGM** | **Figuig** | **178.22** | **41** | | P | **PKPdf** | **19 20 12.0** | **+1.9** |
| **FIGM** | **Figuig** | **178.22** | **41** | | P | **PKPdf** | **19 20 14.0** | **+3.9** |

*IDC **01** 19:17:04.8±0.8,52°.10N×169°.62W,h0km,mb4.2/25, mb1 4.4/27,mb1mx4.1/82,mbtmp4.2/27,ML4.1/2 Error ellipse: s-maj=21.4km s-min=14.6km az=159.0*
*NEIC **01** 19:17:05.7±2.3,51°.89N±0°.02×169°.36W±0°.07,h10km±1km, mb4.1/37,ML4.1/6,ML3.8(AEIC),Error ellipse: s-maj=7.7km s-min=3.7km az=254.0*
*AEIC **01** 19:17:07±2.8,51°.91N±0°.05×169°.45W±0°.07,h20km±5km, Error ellipse: s-maj=8.1km s-min=6.2km az=154.0*

**ISC 01 19:17:05.6±0.6,51°.91N±0°.05×169°.42W±0°.04,h10km, n131,σ1$27/123,mb4.5/34,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CLCO** | **Concord Point,** | **0.90** | **348** | | **Pb** | **19 17 23.6** | **+0.4** |
| CLCO | | | | | **Sg** | **19 17 35.2** | **+0.6** |
| **CLES** | **Cleveland East** | **0.96** | **342** | | **Pg** | **19 17 24.3** | **+0.2** |
| **CLES** | **Cleveland East** | **0.96** | **342** | | **Sn** | **19 17 38.9** | **0.0** |
| **CLES** | **Cleveland East** | **0.96** | **342** | IAML | | 19 17 43.7 | |
| | comp=N,13μm,0.4s | | | | | | |
| CLES | | | | IAML | | 19 17 45.4 | |
| | comp=E,13μm,0.5s | | | | | | |
| **NIKH** | **Nikolski High** | **1.12** | **18** | | **Sg** | **19 17 42.1** | **+0.5** |
| **NIKH** | **Nikolski High** | **1.12** | **18** | | **Pg** | **19 17 27.3** | **+0.2** |
| **OKSP** | **Okmok Steeple** | **1.51** | **27** | | **Pn** | **19 17 33.1** | **+0.4** |
| **OKCE** | **Okmok Cone E** | **1.70** | **26** | | **Pb** | **19 17 36.4** | **-0.5** |
| **OKNC** | **Okmok New Cone** | **1.74** | **26** | | **Pb** | **19 17 37.2** | **-0.4** |
| OKNC | | | | | **Sb** | **19 17 59.3** | **-0.2** |
| **MSW** | **Makushin Switc** | **2.57** | **37** | | **Pn** | **19 17 48.6** | **+1.4** |
| **UNV** | **Unalaska Valle** | **2.62** | **41** | | **Sn** | **19 18 21.4** | **+1.7** |
| **UNV** | **Unalaska Valle** | **2.62** | **41** | Pn | **Pn** | **19 17 48.2** | **+0.3** |
| **MTBL** | **Makushin Table** | **2.65** | **38** | | **Pn** | **19 17 49.8** | **+1.4** |
| **KOFP** | **Korovin Flat P** | **2.91** | **279** | | **Pn** | **19 17 53.0** | **+1.1** |
| **ATKA** | **Atka Island** | **2.96** | **278** | | **Pn** | **19 17 53.2** | **+0.6** |
| ATKA | | | | | **Sn** | **19 18 28.1** | **-0.1** |
| **KOKL** | **Mount Kliuchef** | **2.98** | **280** | | **Pn** | **19 17 54.2** | **+1.3** |
| **AKUT** | **Akutan** | **3.13** | **43** | | **Pn** | **19 17 56.0** | **+1.1** |
| AKUT | | | | IAML | | 19 18 47.0 | |
| | comp=E,437nm,4.1s | | | | | | |
| **GSMY** | **Great Sitkin M** | **4.11** | **275** | | **Pn** | **19 18 09.7** | **+1.4** |
| **GSTR** | **Great Sitkin T** | **4.11** | **275** | | **Pn** | **19 18 09.1** | **+0.7** |
| **GSTD** | **Great Sitkin T** | **4.16** | **275** | | **Pn** | **19 18 10.3** | **+1.2** |
| **ADK** | **Adak** | **4.50** | **273** | | **Pn** | **19 18 14.8** | **+1.0** |
| ADK | | | | IAML | | 19 19 36.8 | |
| | comp=E,150nm,1.1s | | | | | | |
| ADK | | | | IAML | | 19 19 36.8 | |
| | comp=E,125nm,1.6s | | | | | | |
| **FALS** | **False Pass** | **4.65** | **48** | | **Pn** | **19 18 18.8** | **+3.0** |
| **KIWB** | **Kanaga Island** | **4.79** | **272** | | **Pn** | **19 18 18.1** | **+0.3** |
| **KIKV** | **Kanaga Island** | **4.80** | **273** | | **Pn** | **19 18 19.4** | **+1.6** |
| **KIMD** | **Kanaga Island** | **4.85** | **271** | | **Pn** | **19 18 19.6** | **+1.1** |
| **SPIA** | **Saint Paul Isl** | **5.30** | **355** | Pn | **Pn** | **19 18 26.8** | **+2.1** |
| **TAFP** | **Tanaga Falls P** | **5.30** | **273** | | **Pn** | **19 18 26.4** | **+1.6** |
| **TASE** | **Tanaga Southea** | **5.34** | **273** | | **Pn** | **19 18 27.1** | **+1.8** |
| **GAEA** | **Gareloi East** | **5.79** | **272** | | **Pn** | **19 18 33.8** | **+2.5** |
| **GALAA** | **Gareloi Lava P** | **5.80** | **272** | | **Pn** | **19 18 34.2** | **+2.6** |
| **OHAK** | **Old Harbor** | **10.76** | **54** | Pn | **Pn** | **19 19 38.0** | **-1.5** |
| **KDAK** | **Kodiak Island** | **11.33** | **52** | Pn | **Pn** | **19 19 46.7** | **-0.6** |
| | comp=E,0.8nm,0.3s,baz=241,slow=5.6,SNR=10 | | | | | | |
| **RSO** | **Redoubt South** | **12.60** | **41** | Pn | **Pn** | **19 20 07.2** | **+2.4** |
| **CNPM** | **China Poot** | **12.74** | **46** | Pn | **Pn** | **19 20 07.5** | **+0.8** |
| **M19K** | **Big River Lodg** | **12.91** | **33** | Pn | **Pn** | **19 20 13.2** | **+4.3** |
| **L19K** | **White Mountain** | **12.96** | **32** | Pn | **Pn** | **19 20 12.3** | **+2.7** |
| **BRLK** | **Bradley Lake** | **13.02** | **46** | Pn | **Pn** | **19 20 11.6** | **+1.2** |
| **SEW** | **Seward** | **13.81** | **46** | Pn | **Pn** | **19 20 21.3** | **+0.2** |
| **O22K** | **Cooper Landing** | **13.87** | **44** | Pn | **Pn** | **19 20 22.0** | **0.0** |
| **RC01** | **Rabbit Creek A** | **14.18** | **42** | Pn | **Pn** | **19 20 25.8** | **-0.4** |
| **PPLA** | **Purkeypile** | **14.34** | **33** | P | **P** | **19 20 35.9** | **+0.1** |
| **PWL** | **Port Wells** | **14.66** | **44** | Pn | **Pn** | **19 20 31.4** | **-1.4** |
| **CAST** | **Castle Rocks** | **14.73** | **32** | P | **P** | **19 20 39.7** | **-0.2** |
| **GHO** | **Glory Hole Cre** | **14.87** | **40** | Pn | **Pn** | **19 20 34.9** | **-0.8** |
| **KTH** | **Kantishna Hill** | **15.21** | **33** | | **Pn** | **19 20 40.8** | **+0.6** |
| **SCM** | **Sheep Creek Mo** | **15.55** | **42** | Pn | **Pn** | **19 20 43.8** | **-1.0** |
| **BPAW** | **Bear Paw Mtn.** | **15.56** | **31** | P | **P** | **19 20 47.4** | **-1.6** |
| BPAW | | | | IAmb | IAmb | 19 20 49.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **DIV** | **Divide** | **15.89** | **45** | Pn | **Pn** | **19 20 47.9** | **-1.2** |
| **KLU** | **Klutina** | **15.99** | **44** | Pn | **Pn** | **19 20 48.7** | **-1.6** |
| KLU | | | | IAmb | IAmb | 19 21 00.3 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **RAGM** | **Ragged Mountai** | **16.10** | **49** | Pn | **Pn** | **19 20 50.8** | **-1.0** |
| RAGM | | | | IAmb | IAmb | 19 21 14.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **16.16** | **42** | | **Pn** | **19 20 52.0** | **-0.6** |
| **HMT** | **Hamilton** | **16.28** | **49** | Pn | **Pn** | **19 20 54.2** | **+0.2** |
| **MLY** | **Manley** | **16.29** | **29** | Pn | **Pn** | **19 20 54.2** | **+0.1** |
| MLY | | | | IAmb | IAmb | 19 21 09.6 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **BMRM** | **Bremner River** | **16.35** | **47** | Pn | **Pn** | **19 20 53.3** | **-1.7** |
| BMRM | | | | IAmb | IAmb | 19 21 06.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **16.61** | **45** | Pn | **Pn** | **19 20 57.0** | **-1.3** |
| N25K | | | | IAmb | IAmb | 19 21 07.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **16.76** | **33** | Pn | **Pn** | **19 21 00.3** | **+0.2** |
| **GLB** | **Gilahina Butte** | **16.89** | **46** | Pn | **Pn** | **19 21 00.9** | **-0.9** |
| GLB | | | | IAmb | IAmb | 19 21 30.0 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **16.96** | **33** | Pn | **Pn** | **19 21 02.1** | **-0.5** |
| **VRDI** | **Verde Repeater** | **16.97** | **47** | Pn | **Pn** | **19 21 01.6** | **-1.3** |
| **WAX** | **Waxell Ridge** | **16.98** | **49** | Pn | **Pn** | **19 21 02.6** | **-0.3** |
| WAX | | | | IAmb | IAmb | 19 21 23.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **17.02** | **32** | Pn | **Pn** | **19 21 03.0** | **-0.4** |
| **ISLE** | **Juniper Island** | **17.26** | **49** | Pn | **Pn** | **19 21 06.4** | **-0.2** |
| ISLE | | | | IAmb | IAmb | 19 21 32.2 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **17.35** | **33** | P | **Pn** | **19 21 06.5** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=218,slow=11,SNR=10 | | | | | | |
| **RIDG** | **Independent Ri** | **17.51** | **38** | Pn | **Pn** | **19 21 08.6** | **-0.9** |
| RIDG | | | | IAmb | IAmb | 19 21 31.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **M26K** | **Nabesna, AK** | **17.63** | **43** | Pn | **Pn** | **19 21 10.0** | **-1.0** |
| M26K | | | | IAmb | IAmb | 19 21 15.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **17.71** | **30** | | **Pn** | **19 21 12.5** | **+0.5** |
| **BARN** | **Barnard Glacie** | **17.73** | **48** | | **P** | **19 21 13.1** | **-0.1** |
| BARN | | | | IAmb | IAmb | 19 21 30.2 | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **DOT** | **Dot Lake** | **17.76** | **39** | | **Pn** | **19 21 12.4** | **-0.3** |
| DOT | | | | IAmb | IAmb | 19 21 40.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **17.79** | **35** | | **Pn** | **19 21 12.5** | **-0.5** |
| J25K | | | | IAmb | IAmb | 19 21 34.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **17.96** | **38** | P | **Pn** | **19 21 14.3** | **-0.9** |
| **M27K** | **Edge Creek, AK** | **18.09** | **44** | P | **P** | **19 21 17.0** | **-0.2** |
| M27K | | | | IAmb | IAmb | 19 21 43.2 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **18.39** | **37** | P | **Pn** | **19 21 19.6** | **-0.7** |
| **HYT** | **Haines Junctio** | **19.61** | **50** | | **Pn** | **19 21 37.7** | **+2.4** |
| **BMAR** | **Burnt Mountain** | **19.75** | **29** | P | **P** | **19 21 35.6** | **+0.4** |
| **DAWY** | **Dawson** | **19.80** | **41** | P | **P** | **19 21 35.4** | **-0.4** |
| DAWY | | | | IAmb | IAmb | 19 21 43.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.96** | **286** | P | **P** | **19 21 37.1** | **-0.5** |
| | comp=Z,6.2nm,0.3s,baz=90,slow=13,SNR=148 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **20.57** | **49** | P | Pn | 19 21 45.8 | -0.7 |
| **I29M** | **Ogilvie Camp,** | **20.77** | **38** | P | **P** | **19 21 45.1** | **-1.2** |
| **WHY** | **Whitehorse** | **20.85** | **52** | P | **P** | **19 21 46.7** | **-0.6** |
| WHY | | | | IAmb | IAmb | 19 21 53.5 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **21.38** | **48** | P | **P** | **19 21 53.6** | **+0.7** |
| **EPYK** | **Eagle Plains** | **21.79** | **36** | P | **P** | **19 21 56.2** | **-1.1** |
| **P33M** | **Teslin, Yukon** | **21.80** | **53** | P | **P** | **19 21 55.6** | **-1.9** |
| P33M | | | | IAmb | IAmb | 19 22 05.8 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **22.96** | **314** | P | **P** | **19 22 08.8** | **-0.9** |
| | comp=Z,3.1nm,0.6s,baz=67,slow=16,SNR=5.7 | | | | | | |
| **INK** | **Inuvik** | **23.75** | **33** | P | **P** | **19 22 16.1** | **-1.4** |
| | comp=Z,4.2nm,0.5s,baz=250,slow=8.2,SNR=12 | | | | | | |
| **INK** | **Inuvik** | **23.75** | **33** | P | **P** | **19 22 15.9** | **-1.7** |
| INK | | | | IAmb | IAmb | 19 22 18.4 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.57** | **48** | P | **P** | **19 23 20.4** | **+1.5** |
| | comp=Z,1.1nm,0.5s,baz=275,slow=7.5,SNR=6.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.57** | **48** | P | **P** | **19 23 17.2** | **-1.8** |
| **H11N2** | **WAKE ISLAND Hy** | **37.07** | **219** | T | T | 20 04 11.3 | |
| | baz=24,slow=75,SNR=5.9 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.08** | **219** | T | T | 20 04 13.5 | |
| | baz=24,slow=75,SNR=9.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.09** | **219** | T | T | 20 04 12.4 | |
| | baz=24,slow=75,SNR=7.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.26** | **218** | T | T | 20 05 43.5 | |
| | baz=23,slow=76,SNR=82 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.27** | **218** | T | T | 20 05 41.5 | |
| | baz=23,slow=76,SNR=59 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.28** | **218** | T | T | 20 05 39.2 | |
| | baz=23,slow=76,SNR=64 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.52** | **79** | P | **P** | **19 24 47.7** | **+2.9** |
| | comp=Z,0.6nm,0.6s,baz=307,slow=3.0,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **45.43** | **277** | P | **P** | **19 25 25.1** | **+0.7** |
| | comp=Z,3.8nm,0.8s,baz=52,slow=7.8,SNR=9.8 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.13** | **358** | P | **P** | **19 25 59.6** | **-0.7** |
| | comp=Z,5.6nm,0.8s,baz=20,slow=4.6,SNR=6.6 | | | | | | |
| **SONM** | **Songino Array** | **51.51** | **301** | P | **P** | **19 26 10.8** | **-0.4** |
| | comp=Z,1.4nm,0.8s,baz=51,slow=5.6,SNR=6.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.79** | **89** | P | **P** | **19 26 22.1** | **+1.2** |
| | comp=Z,1.0nm,0.7s,baz=295,slow=6.2,SNR=4.4 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **53.06** | **291** | *eP* | P | 19 26 14.5 | -8.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,440nm,5.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.74** | **318** | P | **P** | **19 26 54.7** | **-1.4** |
| | comp=Z,1.3nm,0.6s,baz=39,slow=6.3,SNR=1.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.38** | **354** | P | **P** | **19 26 58.9** | **-1.5** |
| | comp=Z,0.6nm,0.3s,baz=19,slow=6.6,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.81** | **318** | P | **P** | **19 27 30.3** | **-0.5** |
| | comp=Z,3.0nm,0.6s,baz=45,slow=8.1,SNR=36 | | | | | | |
| **WMQ** | **Urumqi** | **63.79** | **308** | *eP* | **P** | **19 27 33.6** | **-4.0** |
| **BVAR** | **Borovoye Array** | **64.06** | **325** | P | **P** | **19 27 39.1** | **-0.1** |
| | comp=Z,7.2nm,0.6s,baz=58,slow=11,SNR=22 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.10** | **314** | P | **P** | **19 27 38.1** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=41,slow=6.5,SNR=20 | | | | | | |
| **FINES** | **FINESS Array B** | **66.32** | **352** | P | **P** | **19 27 53.2** | **-0.5** |
| | comp=Z,5.5nm,0.7s,baz=7.5,slow=7.9,SNR=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.40** | **360** | P | **P** | **19 28 00.4** | **-0.2** |
| | comp=Z,7.9nm,0.9s,baz=0.5,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.40** | **360** | P | **P** | **19 28 00.3** | **-0.3** |
| | comp=Z,1.8nm,0.7s,baz=360,slow=6.3,SNR=4.7 | | | | | | |
| **HFS** | **Hagfors** | **68.28** | **358** | P | **P** | **19 28 05.7** | **-0.4** |
| | comp=Z,4.4nm,0.5s,baz=13,slow=2.5,SNR=15 | | | | | | |
| **PZH** | **PanZhiHua** | **68.92** | **286** | P | P | 19 28 02.6 | -8.2 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **70.40** | **330** | P | **P** | **19 28 18.5** | **-0.8** |
| | comp=Z,4.0nm,0.8s,baz=54,slow=9.8,SNR=4.6 | | | | | | |
| **AAK** | **Ala-Archa** | **70.81** | **315** | P | **P** | **19 28 22.4** | **+0.2** |
| | comp=Z,3.8nm,0.7s,baz=45,slow=6.2,SNR=5.7 | | | | | | |
| **SIJI** | **Sorong** | **72.29** | **245** | P | **P** | **19 28 31.2** | **0.0** |
| | comp=Z,3.1nm,0.9s,baz=1.8,slow=7.1,SNR=5.4 | | | | | | |
| **KSH** | **Kashi** | **72.67** | **313** | P | P | 19 28 26.4 | -7.0 |
| KSH | | | | sP | pP | 19 28 34.5 | -1.0 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.55** | **348** | P | **P** | **19 28 54.3** | **-1.3** |
| | comp=Z,1.3nm,0.5s,baz=17,slow=6.0,SNR=4.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.69** | **283** | P | **P** | **19 28 57.5** | **+0.6** |
| | comp=Z,1.0nm,0.7s,baz=27,slow=7.0,SNR=11 | | | | | | |
| **GUN** | **Gumba** | **76.92** | **299** | *eP* | **P** | **19 28 59.3** | **+0.8** |
| | comp=Z,7.1nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **76.94** | **298** | *eP* | **P** | **19 28 59.0** | **+0.4** |
| | comp=Z,4.2nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **77.28** | **297** | *eP* | **P** | **19 28 58.0** | **-2.4** |
| **KKN** | **Kakani** | **77.34** | **299** | *eP* | **P** | **19 29 01.1** | **+0.4** |
| | comp=Z,5.7nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **77.44** | **299** | *eP* | **P** | **19 29 00.3** | **-1.1** |
| **PKIN** | **Phulchoki** | **77.44** | **299** | *eP* | **P** | **19 29 01.3** | **0.0** |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **77.52** | **299** | *eP* | **P** | **19 29 01.9** | **+0.3** |
| | comp=Z,5.9nm,0.4s | | | | | | |
| **DMN** | **Daman** | **77.57** | **299** | *eP* | **P** | **19 29 01.6** | **-0.4** |
| **DANN** | **Dadgsing** | **77.71** | **300** | *eP* | **P** | **19 29 03.3** | **+0.4** |
| **KOLN** | **Koldanda** | **78.26** | **300** | *eP* | **P** | **19 29 03.9** | **-1.9** |
| **PYUN** | **Piuthan** | **78.32** | **301** | *eP* | **P** | **19 29 04.3** | **-1.8** |
| **GERES** | **GERESS Array B** | **79.59** | **358** | P | **P** | **19 29 12.8** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=343,slow=1.0,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **86.69** | **232** | P | **P** | **19 29 49.4** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=33,slow=5.6,SNR=5.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **87.92** | **11** | P | **P** | **19 29 56.3** | **+1.0** |
| | comp=Z,2.1nm,1.0s,baz=357,slow=4.7,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **90.08** | **230** | P | **P** | **19 30 06.4** | **+1.0** |
| | comp=Z,2.9nm,0.8s,baz=28,slow=5.0,SNR=23 | | | | | | |

*IDC **01** 19:27:42.5±1.7,7°.41S×128°.84E,h126km±25km,mb3.4/1, mb1 3.4/6,mb1mx3.1/49,mbtmp3.8/6,Error ellipse: s-maj=26.6km s-min=14.2km az=120.0*

**ISC 01 19:27:41.8±0.9,7°.60S±0°.06×129°.04E±0°.10,h131km,n6, σ3$36/11,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.91** | **244** | P | **Pn** | **19 29 08.5** | **+1.4** |
| | 19nm,0.3s,baz=67,slow=5.1,SNR=32 | | | | | | |
| BATI | | | | S | **Sn** | **19 30 12.1** | **-1.7** |
| | 6.5nm,0.3s,baz=61,slow=20,SNR=6.3 | | | | | | |
| **SIJI** | **Sorong** | **7.04** | **19** | P | **Pn** | **19 29 21.7** | **-0.7** |
| | 0.5nm,0.3s,baz=268,slow=23,SNR=8.5 | | | | | | |
| SIJI | | | | S | **Sn** | **19 30 39.1** | **-2.0** |
| | 0.2nm,0.3s,baz=202,slow=22,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.95** | **197** | P | **Pn** | **19 30 16.3** | **+1.5** |
| | 0.3nm,0.3s,baz=22,slow=11,SNR=2.4 | | | | | | |
| FITZ | | | | S | **Sn** | **19 32 10.8** | **-4.9** |
| | 0.4nm,0.3s,baz=90,slow=20,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.31** | **158** | P | **Pn** | **19 30 48.2** | **+2.5** |
| | 0.3nm,0.3s,baz=327,slow=14,SNR=12 | | | | | | |
| WRA | | | | S | **Sn** | **19 33 08.5** | **-4.2** |
| | 0.5nm,0.3s,baz=334,slow=22,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **16.65** | **164** | P | **P** | **19 31 32.5** | **+4.8** |
| | 0.3nm,0.3s,baz=338,slow=9.7,SNR=20 | | | | | | |
| ASAR | | | | S | **Sn** | **19 34 30.3** | **-2.8** |
| | 0.1nm,0.3s,baz=341,slow=23,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.20** | **327** | P | **P** | **19 38 27.8** | **-0.4** |
| | 0.5nm,0.5s,baz=112,slow=6.0,SNR=1.5 | | | | | | |

*KRNET **01** 19:33:18.1±0.1,40°.93N×74°.05E,h16km,mb3.5*
*SOME **01** 19:33:18.8,40°.92N×74°.08E,h15km*
*KNET **01** 19:33:21.0±0.5,41°.08N×74°.13E,h3km±3km,ml3.3,Error ellipse: s-maj=3.6km s-min=2.6km az=68.0*
*NNC **01** 19:33:20.4±0.9,40°.99N×74°.10E,h0km,mb4.2,mpv3.8, Error ellipse: s-maj=6.2km s-min=4.8km az=175.0*

**ISC 01 19:33:19.3±0.8,40°.93N±0°.03×74°.06E±0°.02,h10km,n90, σ1$99/134,39C-31D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARLS** | **Aral** | **0.95** | **12** | ⇓*iP* | **Pg** | **19 33 36.0** | **-1.6** |
| | baz=13 | | | | | | |
| ARLS | | | | ⇓*iS* | **Sg** | **19 33 48.9** | **-1.1** |
| | baz=13 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.01** | **205** | ⇓*eP* | **Pg** | **19 33 36.8** | **-1.9** |
| | baz=5.0 | | | | | | |
| SFK | | | | ⇓*eS* | **Sg** | **19 33 51.1** | **-0.8** |
| | baz=5.0 | | | | | | |
| **OHH** | **Osh** | **1.05** | **248** | ⇓*iP* | **Pg** | **19 33 37.9** | **-1.6** |
| | baz=47 | | | | | | |
| OHH | | | | ⇓*iS* | **Sg** | **19 33 52.2** | **-1.0** |
| | baz=47 | | | | | | |
| **AML** | **Almayashu** | **1.23** | **347** | ⇓P | **Pb** | **19 33 41.9** | **-1.0** |
| | 52nm,0.2s,SNR=81 | | | | | | |
| AML | | | | ⇑S | **Sb** | **19 33 58.7** | **-0.3** |
| | 149nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **1.34** | **14** | ⇓P | **Pn** | **19 33 44.0** | **-0.5** |
| | 28nm,0.3s,SNR=66 | | | | | | |
| UCH | | | | ⇑S | **Sb** | **19 34 02.1** | **0.0** |
| | 355nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **1.34** | **14** | ⇑*iP* | **Pn** | **19 33 43.6** | **-0.9** |
| | baz=15 | | | | | | |
| UCH | | | | ⇑*iS* | **Sb** | **19 34 01.8** | **-0.4** |
| | baz=15 | | | | | | |
| **AAK** | **Ala-Archa** | **1.74** | **11** | ⇓P | **Pb** | **19 33 51.0** | **-0.3** |
| | 35nm,0.3s,SNR=19 | | | | | | |
| AAK | | | | ⇓S | **Sg** | **19 34 07.7** | **-0.7** |
| | 108nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **1.74** | **11** | ⇓P | **Pb** | **19 33 51.1** | **-0.3** |
| | 17nm,0.3s | | | | | | |
| AAK | | | | ⇓S | **Sb** | **19 34 13.9** | **+0.6** |
| | 106nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **1.74** | **11** | ⇑*iP* | **Pn** | **19 33 50.3** | **+0.6** |
| | baz=11 | | | | | | |
| AAK | | | | ⇑*iS* | **Sb** | **19 34 13.5** | **+0.2** |
| | baz=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.74** | **353** | ⇑P | **Pb** | **19 33 51.2** | **-0.3** |
| | 15nm,0.2s,SNR=32 | | | | | | |
| EKS2 | | | | ⇑S | **Sg** | **19 34 14.9** | **-0.5** |
| | 78nm,0.4s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.74** | **353** | ⇑*iP* | **Pn** | **19 33 50.4** | **+0.7** |
| | baz=53 | | | | | | |
| EKS2 | | | | ⇑*iS* | **Sb** | **19 34 14.2** | **+0.8** |
| | baz=53 | | | | | | |
| **ARK** | **Arkit** | **1.80** | **299** | ⇑*iP* | **Pn** | **19 33 51.5** | **-0.9** |
| | baz=0.0 | | | | | | |
| ARK | | | | ⇑*iS* | **Sb** | **19 34 15.1** | **0.0** |
| | baz=0.0 | | | | | | |
| **KBK** | **Karagaybulak** | **1.85** | **21** | ⇑P | **Pb** | **19 33 53.4** | **+0.2** |
| | 42nm,0.3s,SNR=70 | | | | | | |
| KBK | | | | ⇑S | **Sb** | **19 34 17.5** | **+1.0** |
| | 564nm,0.4s | | | | | | |
| **KBK** | **Karagaybulak** | **1.85** | **21** | ⇓*eP* | **Pb** | **19 33 52.3** | **-1.0** |
| | baz=21 | | | | | | |
| KBK | | | | ⇓*iS* | **Sb** | **19 34 17.3** | **+0.8** |
| | baz=21 | | | | | | |
| **MRKS** | **Merke** | **1.92** | **341** | *eP* | **Pb** | **19 33 55.1** | **+0.7** |
| | 99nm,0.4s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **19 34 20.9** | **0.0** |
| | 162nm,0.5s | | | | | | |
| **FRU1** | **Bishkek** | **1.93** | **13** | ⇓*iP* | **Pb** | **19 33 54.1** | **-0.4** |
| | baz=12 | | | | | | |
| FRU1 | | | | ⇓*iS* | **Sg** | **19 34 20.2** | **-1.0** |
| | baz=12 | | | | | | |
| **ULHL** | **Ulahol** | **2.10** | **50** | ⇑P | **Pb** | **19 33 56.9** | **-0.6** |
| | 33nm,0.3s,SNR=54 | | | | | | |
| ULHL | | | | ⇓S | **Sg** | **19 34 25.4** | **-1.3** |
| | 68nm,0.3s | | | | | | |
| **ULHL** | **Ulahol** | **2.10** | **50** | ⇑*iP* | **Pb** | **19 33 56.2** | **-1.3** |
| | baz=51 | | | | | | |
| ULHL | | | | ⇑*iS* | **Sb** | **19 34 23.9** | **+0.2** |
| | baz=51 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.10** | **41** | ⇑*iP* | **Pb** | **19 33 56.6** | **-0.9** |
| | baz=42 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sb** | **19 34 24.2** | **+0.5** |
| | baz=42 | | | | | | |
| **CHMS** | **Chumysh** | **2.13** | **14** | ⇓P | **Pb** | **19 33 57.6** | **-0.4** |
| | 31nm,0.4s,SNR=12 | | | | | | |
| CHMS | | | | ⇑S | **Sb** | **19 34 26.0** | **+1.6** |
| | 117nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **2.13** | **14** | ⇑*iP* | **Pb** | **19 33 56.8** | **-1.2** |
| | baz=14 | | | | | | |
| CHMS | | | | ⇑*iS* | **Sb** | **19 34 24.4** | **-0.1** |
| | baz=14 | | | | | | |
| **DRK** | **Karamyk** | **2.26** | **231** | ⇑*iP* | **Pb** | **19 33 58.7** | **-1.6** |
| | baz=31 | | | | | | |
| DRK | | | | ⇑*iS* | **Sb** | **19 34 27.6** | **-0.8** |
| | baz=31 | | | | | | |
| **TRKS** | **Terek-Say** | **2.28** | **286** | ⇓*iP* | **Pn** | **19 33 58.1** | **+0.9** |
| | baz=85 | | | | | | |
| TRKS | | | | ⇓*iS* | **Sn** | **19 34 26.8** | **+1.3** |
| | baz=85 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.29** | **29** | ⇑P | **Pb** | **19 34 00.9** | **0.0** |
| | 41nm,0.3s,SNR=36 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.29** | **29** | ⇑Pn | **Pb** | **19 34 00.7** | **-0.2** |
| | 17nm,0.3s | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ANVS** | **Anan'yevo** | **3.27** | **54** | ⇓*iP* | | **Pn** | **19 34 12.2** | **+1.5** |
| | baz=54 | | | | | | | | |
| ANVS | | | | ⇓*iS* | | **Sn** | **19 34 52.1** | **+2.3** |
| | baz=54 | | | | | | | | |
| **KTBS** | **Karatobe** | **3.39** | **34** | *eP* | | **Pb** | **19 34 20.4** | **+1.0** |
| | 8.7nm,0.4s | | | | | | | | |
| KTBS | | | | *eS* | | **Sb** | **19 35 04.5** | **+3.7** |
| | 124nm,0.7s | | | | | | | | |
| **KTBS** | **Karatobe** | **3.39** | **34** | Pg | | **Pb** | **19 34 20.5** | **+1.0** |
| | 8.7nm,0.4s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 19 35 04.5 | | |
| | 124nm,0.7s | | | | | | | | |
| **KUU** | **Kurty** | **3.41** | **29** | *eP* | | **Pb** | **19 34 21.0** | **+1.3** |
| | 12nm,0.8s | | | | | | | | |
| KUU | | | | *eS* | | **Sg** | **19 35 05.1** | **-3.6** |
| | 120nm,0.6s | | | | | | | | |
| **KUU** | **Kurty** | **3.41** | **29** | *i* Pg | | **Pb** | **19 34 20.8** | **+1.1** |
| | baz=29 | | | | | | | | |
| **KUU** | **Kurty** | **3.41** | **29** | Pg | | **Pb** | **19 34 21.0** | **+1.3** |
| | 12nm,0.8s | | | | | | | | |
| KUU | | | | Lg | | Lg | 19 35 05.1 | | |
| | 120nm,0.6s | | | | | | | | |
| **KK09** | **Karatay Array** | **3.44** | **311** | ⇓Pg | | **Pb** | **19 34 20.8** | **+0.5** |
| | 7.0nm,0.6s | | | | | | | | |
| KK09 | | | | ⇑Lg | | Lg | 19 35 07.2 | | |
| | 36nm,0.6s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **3.60** | **63** | ⇓*iP* | | **Pn** | **19 34 16.7** | **+1.4** |
| | baz=63 | | | | | | | | |
| PRZ | | | | ⇓*iS* | | **Sn** | **19 35 00.2** | **+2.3** |
| | baz=63 | | | | | | | | |
| **BRLS** | **Borolday** | **3.79** | **305** | *eP* | | **Pb** | **19 34 27.6** | **+1.4** |
| | 17nm,0.8s | | | | | | | | |
| BRLS | | | | *eS* | | **Sg** | **19 35 16.6** | **-4.2** |
| | 56nm,1.2s | | | | | | | | |
| **BRLS** | **Borolday** | **3.79** | **305** | *i* Pg | | **Pb** | **19 34 27.3** | **+1.1** |
| | baz=300 | | | | | | | | |
| **BRLS** | **Borolday** | **3.79** | **305** | Pg | | **Pb** | **19 34 27.6** | **+1.4** |
| | 17nm,0.8s | | | | | | | | |
| BRLS | | | | Lg | | Lg | 19 35 16.6 | | |
| | 56nm,1.2s | | | | | | | | |
| **SATY** | **Saty** | **3.87** | **55** | *eP* | | **Pb** | **19 34 29.4** | **+1.7** |
| | 26nm,0.7s | | | | | | | | |
| SATY | | | | *eS* | | **Sg** | **19 35 19.4** | **-4.2** |
| | 48nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **3.87** | **55** | *i* Pg | | **Pb** | **19 34 27.8** | **+0.1** |
| | baz=56 | | | | | | | | |
| **SATY** | **Saty** | **3.87** | **55** | Pg | | **Pb** | **19 34 29.4** | **+1.7** |
| | 26nm,0.7s | | | | | | | | |
| SATY | | | | Lg | | Lg | 19 35 19.4 | | |
| | 48nm,0.7s | | | | | | | | |
| **ZHN** | **Zhinishke** | **3.95** | **54** | *eP* | | **Pb** | **19 34 30.9** | **+1.9** |
| | 12nm,0.4s | | | | | | | | |
| ZHN | | | | *eS* | | **Sg** | **19 35 22.3** | **-3.8** |
| | 22nm,0.6s | | | | | | | | |
| **ZHN** | **Zhinishke** | **3.95** | **54** | *i* Pg | | **Pb** | **19 34 29.7** | **+0.6** |
| | baz=55 | | | | | | | | |
| **ZHN** | **Zhinishke** | **3.95** | **54** | Pg | | **Pb** | **19 34 30.9** | **+1.9** |
| | 12nm,0.4s | | | | | | | | |
| ZHN | | | | Lg | | Lg | 19 35 22.3 | | |
| | 22nm,0.6s | | | | | | | | |
| **KURS** | **Kuram** | **3.98** | **49** | *eP* | | **Pb** | **19 34 31.9** | **+2.4** |
| | 15nm,0.8s | | | | | | | | |
| KURS | | | | *eS* | | **Sg** | **19 35 24.0** | **-3.0** |
| | 22nm,0.6s | | | | | | | | |
| **KURS** | **Kuram** | **3.98** | **49** | Pg | | **Pb** | **19 34 31.9** | **+2.4** |
| | 15nm,0.8s | | | | | | | | |
| KURS | | | | Lg | | Lg | 19 35 24.0 | | |
| | 22nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **4.11** | **360** | *eP* | | **Pb** | **19 34 33.3** | **+1.6** |
| | 2.7nm,0.6s | | | | | | | | |
| BTLS | | | | *eS* | | **Sg** | **19 35 26.3** | **-4.9** |
| | 28nm,1.1s | | | | | | | | |
| **BTLS** | **Baital** | **4.11** | **360** | Pg | | **Pb** | **19 34 34.4** | **+2.8** |
| | 4.7nm,0.9s | | | | | | | | |
| BTLS | | | | Lg | | Lg | 19 35 27.6 | | |
| | 28nm,1.1s | | | | | | | | |
| **ARXS** | **Arharly** | **4.30** | **39** | *eP* | | **Pb** | **19 34 36.6** | **+1.6** |
| | 31nm,0.7s | | | | | | | | |
| ARXS | | | | *eS* | | **Sg** | **19 35 32.6** | **-4.7** |
| | 44nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **4.30** | **39** | Pg | | **Pb** | **19 34 37.1** | **+2.1** |
| | 31nm,0.7s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 19 35 32.6 | | |
| | 44nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.31** | **57** | *eP* | | **Pb** | **19 34 36.7** | **+1.6** |
| | 13nm,0.6s | | | | | | | | |
| UZB | | | | *eS* | | **Sg** | **19 35 33.0** | **-4.6** |
| | 25nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.31** | **57** | Pg | | **Pb** | **19 34 37.5** | **+2.3** |
| | 13nm,0.6s | | | | | | | | |
| UZB | | | | Lg | | Lg | 19 35 33.0 | | |
| | 25nm,0.8s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.55** | **44** | *eP* | | **Pb** | **19 34 41.5** | **+2.3** |
| | 13nm,0.5s | | | | | | | | |
| BLB | | | | *eS* | | **Sg** | **19 35 40.4** | **-4.8** |
| | 43nm,1.1s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.55** | **44** | Pg | | **Pb** | **19 34 41.5** | **+2.3** |
| | 13nm,0.5s | | | | | | | | |
| BLB | | | | Lg | | Lg | 19 35 40.4 | | |
| | 43nm,1.1s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.69** | **58** | ⇑Pg | | **Pb** | **19 34 44.1** | **+2.4** |
| | 16nm,0.8s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 19 35 49.7 | | |
| | 32nm,0.8s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **5.17** | **37** | *i* Pg | | **Pb** | **19 34 52.8** | **+3.1** |
| | 4.3nm,0.7s,baz=37 | | | | | | | | |
| **DJR** | **Jarkent** | **5.42** | **49** | *eP* | | **Pb** | **19 34 56.8** | **+2.7** |
| | 7.5nm,0.7s | | | | | | | | |
| DJR | | | | *eS* | | **Sg** | **19 36 07.8** | **-5.5** |
| | 27nm,1.1s | | | | | | | | |
| **DJR** | **Jarkent** | **5.42** | **49** | Pg | | **Pb** | **19 34 57.7** | **+3.6** |
| | 7.5nm,0.7s | | | | | | | | |
| DJR | | | | Lg | | Lg | 19 36 07.8 | | |
| | 27nm,1.1s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **5.83** | **40** | *eP* | | **Pb** | **19 35 04.8** | **+3.8** |
| KAPS | | | | *eS* | | **Sg** | **19 36 20.5** | **-5.7** |
| **KAPS** | **Kapalarasan** | **5.83** | **40** | Pg | | **Pb** | **19 35 04.8** | **+3.8** |
| KAPS | | | | Lg | | Lg | 19 36 20.5 | | |
| **OTUK** | **Ortayu** | **7.42** | **351** | ⇑Lg | | Lg | 19 37 11.5 | | |
| | 6.4nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **8.20** | **42** | ⇓Lg | | Lg | 19 37 42.0 | | |
| | 5.3nm,1.1s | | | | | | | | |
| **MK31** | **Makanchi Array** | **8.35** | **43** | ⇑Pn | | Pn | 19 35 25.2 | +4.9 | |
| | 0.8nm,0.6s,baz=223,slow=14,SNR=11 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 19 37 43.3 | | |
| | 4.0nm,0.9s,baz=214,slow=27,SNR=4.3 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.18** | **16** | ⇓Lg | | Lg | 19 38 42.2 | | |
| | 21nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **10.29** | **16** | ⇑Lg | | Lg | 19 38 44.9 | | |
| | 11nm,1.0s | | | | | | | | |

*IDC **01** 19:41:30.4±1.4,38.78N×110.43E,h0km,mb3.5/5, mb1 3.7/6,mb1mx3.3/69,mbtmp3.5/6,ML2.7/1,Error ellipse: s-maj=46.9km s-min=20.9km az=58.0*

**ISC 01 19:41:35.4**±1.4,**38.8N**±0.1×**110.4E**±0.3,**h35**km,**n6,** σ0§**64**/**6,mb3.5**/5,**Western Nei Mongol**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **9.48** | **344** | Pn | **Pn** | **19 43 49.1** | **-0.3** |
| SONM | 0.1nm,0.3s,baz=161,slow=9.4,SNR=4.2 | | | Lg | Lg | 19 46 27.2 | |
| | 0.1nm,0.3s,baz=162,slow=28,SNR=7.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **22.00** | **300** | P | **P** | **19 46 26.1** | **-0.3** |
| | 1.6nm,0.8s,baz=101,slow=12,SNR=16 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.57** | **209** | P | **P** | **19 46 32.5** | **-0.2** |
| | 1.6nm,0.9s,baz=12,slow=9.2,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **25.31** | **308** | P | **P** | **19 46 59.5** | **+1.0** |
| | 0.4nm,0.8s,baz=107,slow=10,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **62.61** | **154** | P | **P** | **19 51 56.2** | **0.0** |
| | 1.1nm,0.9s,baz=348,slow=7.3,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **65.94** | **156** | P | **P** | **19 52 17.9** | **0.0** |
| | 0.6nm,0.8s,baz=345,slow=6.9,SNR=5.6 | | | | | | |

*NDI **01** 19:48:36.5±3.2,23.89N×93.81E,h20km,ML3.7*
*IDC **01** 19:48:38.3±2.8,23.75N×93.83E,h72km±32km,mb3.4/6, mb1 3.5/7,mb1mx3.2/61,mbtmp3.6/7,ML3.7/1,Error ellipse: s-maj=24.4km s-min=15.6km az=60.0*

**ISC 01 19:48:36.6**±1.0,**23.83N**±0.05×**93.76E**±0.06,**h66**km±14km, **n28,** σ2§**49**/**38,mb3.5**/6,**2C,Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SILR** | **SILCHAR** | **1.29** | **318** | *eP* | **Pn** | **19 49 02.4** | **+3.7** |
| SILR | | | | *eS* | **Sn** | **19 49 18.4** | **+3.2** |
| SILR | | | | IAML | | 19 49 25.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| SILR | | | | IAML | | 19 49 25.9 | |
| | comp=E,2μm,0.3s | | | | | | |
| **KOHI** | **KOHIMA** | **1.91** | **10** | *eP* | **Pn** | **19 49 08.0** | **+0.9** |
| KOHI | | | | ⇑*eS* | **Sn** | **19 49 31.3** | **+1.0** |
| KOHI | | | | IAML | | 19 49 32.4 | |
| | comp=E,641nm,0.4s | | | | | | |
| **BELO** | **BELONIA** | **2.20** | **255** | *eP* | **Pn** | **19 49 12.1** | **+1.2** |
| BELO | | | | *eS* | **Sn** | **19 49 40.2** | **+3.2** |
| **BRDH** | **Bariadhala** | **2.26** | **240** | P | **Pn** | **19 49 14.1** | **+2.4** |
| | comp=E,0.3nm,0.3s,baz=180,slow=24,SNR=1.5 | | | | | | |
| BRDH | | | | S | **Sn** | **19 49 41.6** | **+3.1** |
| | comp=E,1.4nm,0.3s,baz=0.0,slow=24,SNR=22 | | | | | | |
| **AGT** | **Agartala** | **2.30** | **272** | ⇑*eS* | **Sn** | **19 49 42.6** | **+3.2** |
| **SHL** | **Shillong** | **2.43** | **316** | *eP* | **Pn** | **19 49 16.2** | **+2.0** |
| SHL | | | | *eS* | **Sn** | **19 49 43.2** | **+0.3** |
| SHL | | | | IAML | | 19 49 45.7 | |
| | comp=E,299nm,0.1s | | | | | | |
| **GUWA** | **GUWAHATI** | **3.01** | **322** | *eS* | **Sn** | **19 49 54.2** | **-2.6** |
| **ITAN** | **ITANAGAR** | **3.30** | **359** | *eP* | **Pn** | **19 49 26.3** | **+0.3** |
| ITAN | | | | *eS* | **Sn** | **19 50 01.7** | **-2.2** |
| ITAN | | | | IAML | | 19 50 04.2 | |
| | comp=N,302nm,0.2s | | | | | | |
| **LKP** | **Lekhapani** | **3.96** | **28** | *eP* | **Pn** | **19 49 35.4** | **+0.4** |
| LKP | | | | *eS* | **Sn** | **19 50 17.5** | **-2.7** |
| **BOK** | **Bokaro** | **7.21** | **271** | *eP* | **Pn** | **19 50 20.3** | **+0.9** |
| BOK | | | | *eS* | **Sn** | **19 51 36.5** | **-3.4** |
| **CMAR** | **Chiang Mai Arr** | **7.21** | **137** | P | **Pn** | **19 50 19.6** | **+0.1** |
| | comp=N,0.3nm,0.3s,baz=313,slow=14,SNR=11 | | | | | | |
| CMAR | | | | S | **Sn** | **19 51 35.9** | **-4.1** |
| | baz=311,slow=15,SNR=1.1 | | | | | | |
| **JIRN** | **Jiri** | **7.82** | **301** | *eP* | **Pn** | **19 50 28.8** | **+0.8** |
| | comp=N,31nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **8.18** | **301** | *eP* | **Pn** | **19 50 33.3** | **+0.4** |
| | comp=N,19nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **8.40** | **298** | *eP* | **Pn** | **19 50 36.7** | **+0.7** |
| | comp=N,18nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **8.41** | **298** | *eP* | **Pn** | **19 50 36.5** | **+0.4** |
| | comp=N,32nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **8.60** | **299** | *eP* | **Pn** | **19 50 39.1** | **+0.5** |
| | comp=N,11nm,0.2s | | | | | | |
| **DMN** | **Daman** | **8.66** | **298** | *eP* | **Pn** | **19 50 40.6** | **+1.1** |
| | comp=N,11nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **9.20** | **299** | *eP* | **Pn** | **19 50 46.6** | **-0.2** |
| | comp=N,27nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **9.96** | **295** | *eP* | **Pn** | **19 50 56.4** | **-0.8** |
| | comp=N,27nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **10.05** | **299** | *eP* | **Pn** | **19 50 56.9** | **-1.6** |
| | comp=N,22nm,0.4s | | | | | | |
| **PYUN** | **Piuthan** | **10.58** | **296** | *eP* | **Pn** | **19 51 04.3** | **-1.4** |
| | comp=N,8.4nm,0.2s | | | | | | |
| **BHPL** | **Bhopal** | **14.99** | **271** | *eP* | **Pn** | **19 52 03.7** | **-1.2** |
| BHPL | | | | *eS* | **Sn** | **19 54 41.4** | **-8.6** |
| **MKAR** | **Makanchi Array** | **24.70** | **341** | P | **P** | **19 53 53.9** | **+2.4** |
| | comp=N,0.8nm,0.6s,baz=151,slow=7.9,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **25.98** | **20** | P | **P** | **19 54 04.9** | **+1.6** |
| | comp=N,0.4nm,0.6s,baz=208,slow=9.4,SNR=2.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.25** | **340** | P | **P** | **19 54 33.9** | **+1.6** |
| | comp=N,0.3nm,0.7s,baz=145,slow=8.1,SNR=3.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.82** | **350** | P | **P** | **19 54 47.3** | **+1.2** |
| | comp=N,0.5nm,0.4s,baz=169,slow=8.1,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.80** | **134** | P | **P** | **19 58 28.4** | **0.0** |
| | comp=N,0.8nm,0.4s,baz=324,slow=7.3,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **61.22** | **138** | P | **P** | **19 58 45.4** | **+0.4** |
| | comp=N,1.1nm,0.5s,baz=319,slow=6.7,SNR=23 | | | | | | |

**IDC 01 19:49:06.5**±12.0,**17.75S**×**178.26W**,**h524**km±24km, **mb3.2**/3,**mb1 3.3**/5,**mb1mx2.9**/45,**mbtmp4.1**/5,**Error ellipse: s-maj=221.0km s-min=122.1km az=94.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.52** | **270** | P | P | 19 50 23.0 | 0.0 |
| | 2.3nm,0.3s,baz=132,slow=10,SNR=29 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.02** | **251** | P | P | 19 52 16.4 | -0.3 |
| | 0.1nm,0.3s,baz=170,slow=5.3,SNR=2.9 | | | | | | |
| **STKA** | **Stephens Creek** | **38.84** | **241** | P | P | 19 55 46.5 | 0.0 |
| | 3.9nm,0.9s,baz=95,slow=14,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.80** | **259** | P | P | 19 56 33.0 | -0.8 |
| | 0.4nm,0.5s,baz=97,slow=7.0,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | P | 19 56 35.4 | +0.2 |
| | 4.6nm,0.7s,baz=89,slow=8.3,SNR=59 | | | | | | |

*IDC **01** 19:49:41.6±2.7,6.74S×129.53E,h149km±39km,mb2.8/1, mb1 3.0/5,mb1mx2.8/43,mbtmp3.4/5,Error ellipse: s-maj=66.3km s-min=17.3km az=92.0*

**ISC 01 19:49:41.6**±1.1,**6.78S**±0.09×**129.6E**±0.3,**h150**km,**n5,** σ1§**40**/**6,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.12** | **16** | P | **Pn** | **19 51 11.4** | **+1.5** |
| | 0.3nm,0.3s,baz=223,slow=19,SNR=16 | | | | | | |
| SIJI | | | | S | **Sn** | **19 52 17.2** | **-1.8** |
| | 0.4nm,0.3s,baz=205,slow=16,SNR=6.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.88** | **198** | P | **Pn** | **19 52 26.2** | **-0.2** |
| | 0.0nm,0.3s,baz=14,slow=12,SNR=2.0 | | | | | | |
| FITZ | | | | S | Sn | 19 54 27.5 | -10 |
| | 0.1nm,0.3s,baz=20,slow=15,SNR=1.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.89** | **161** | P | **Pn** | **19 52 52.1** | **-0.1** |
| | 0.1nm,0.3s,baz=344,slow=13,SNR=7.3 | | | | | | |
| WRA | | | | S | Sn | 19 55 16.8 | -9.3 |
| | 0.1nm,0.3s,baz=334,slow=22,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **17.30** | **166** | P | **Pn** | **19 53 34.0** | **-0.3** |
| | 0.1nm,0.3s,baz=345,slow=9.8,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.80** | **327** | P | **P** | **20 00 23.1** | **-0.2** |
| | 0.1nm,0.5s,baz=133,slow=6.3,SNR=2.0 | | | | | | |

**IDC 01 19:58:54.7**±1.6,**11.14S**×**165.43E**,**h0**km,**mb3.6**/4, **mb1 3.9**/5,**mb1mx3.7**/35,**mbtmp3.7**/5,**ML4.2**/1,**Error ellipse: s-maj=51.4km s-min=30.7km az=123.0,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **10.91** | **175** | Pn | Pn | 20 01 32.2 | -0.1 |
| | 1.9nm,0.3s,baz=3.6,slow=19,SNR=22 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.16** | **250** | P | P | 20 05 16.1 | +0.4 |
| | 1.9nm,0.9s,baz=80,slow=9.1,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **32.48** | **243** | P | P | 20 05 26.4 | -0.8 |
| | 0.2nm,0.6s,baz=62,slow=9.8,SNR=2.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.70** | **19** | P | P | 20 11 24.9 | -0.2 |
| | 0.3nm,0.6s,baz=235,slow=5.3,SNR=7.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **93.38** | **317** | P | P | 20 12 12.5 | +0.5 |
| | 0.2nm,0.8s,baz=113,slow=6.6,SNR=1.6 | | | | | | |

*NEIC **01** 20:04:23.2±2.4,15.76S±0.2×177.21W±0.09,h410km±13km, mb4.1/13,Error ellipse: s-maj=22.1km s-min=13.0km az=187.0*
*IDC **01** 20:04:26.4±4.2,15.54S×177.47W,h438km±28km,mb3.1/4, mb1 3.3/5,mb1mx3.0/39,mbtmp3.9/5,Error ellipse: s-maj=162.2km s-min=29.9km az=139.0*

**ISC 01 20:04:22.0**±1.5,**15.6S**±0.2×**177.4W**±0.2,**h400**km,**n21,** σ1§**28**/**20,mb3.9**/11,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.87** | **243** | P | Pn | 20 05 48.6 | +5.8 |
| | 3.6nm,0.3s,baz=108,slow=18,SNR=17 | | | | | | |
| **MSVF** | **Nonsavu** | **4.87** | **243** | | **Pn** | **20 05 44.4** | **+1.6** |
| **RAO** | **Raoul Island** | **13.63** | **182** | P | **P** | **20 07 20.0** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **22.24** | **189** | P | **P** | **20 08 44.2** | **-2.5** |
| **LTZ** | **Lake Taylor** | **28.54** | **196** | P | **P** | **20 09 43.4** | **+0.5** |
| LTZ | | | | IAmb | IAmb | 20 09 51.1 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **FOZ** | **Fox Glacier** | **29.93** | **199** | P | **P** | **20 09 52.9** | **-2.2** |
| **COEN** | **Coen** | **38.13** | **267** | P | **P** | **20 11 03.9** | **-1.2** |
| COEN | | | | IAmb | IAmb | 20 11 18.9 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **40.63** | **239** | P | **P** | **20 11 26.0** | **+0.7** |
| | comp=Z,2.0nm,1.0s,baz=99,slow=13,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **40.63** | **239** | P | **P** | **20 11 24.6** | **-0.7** |
| **BBOO** | **Buckleboo** | **45.41** | **239** | P | **P** | **20 12 03.4** | **+0.4** |
| BBOO | | | | IAmb | IAmb | 20 12 13.3 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.87** | **257** | P | **P** | **20 12 07.7** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 20 12 34.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.01** | **257** | P | **P** | **20 12 08.4** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 20 12 32.9 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.04** | **257** | P | **P** | **20 12 08.5** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 20 12 29.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **46.05** | **257** | P | **P** | **20 12 08.9** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 20 12 19.6 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.05** | **257** | P | **P** | **20 12 08.8** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=90,slow=6.3,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.05** | **257** | P | **P** | **20 12 08.3** | **+0.1** |
| **AS31** | **Alice Springs** | **46.40** | **252** | P | **P** | **20 12 12.0** | **+1.2** |
| **ASAR** | **Alice Springs** | **46.40** | **252** | P | **P** | **20 12 11.9** | **+1.1** |
| | comp=Z,3.4nm,0.6s,baz=84,slow=7.7,SNR=59 | | | | | | |
| **ASAR** | **Alice Springs** | **46.40** | **252** | P | **P** | **20 12 11.7** | **+0.9** |
| **NWAO** | **Narrogin (SRO)** | **61.18** | **241** | P | **P** | **20 13 54.1** | **-2.2** |
| **ILAR** | **Eielson Array** | **83.40** | **13** | P | **P** | **20 16 05.9** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=228,slow=5.3,SNR=7.1 | | | | | | |

*IDC **01** 20:10:29.4±1.0,13.16N×120.21E,h0km,mb3.4/8, mb1 3.5/8,mb1mx3.4/52,mbtmp3.4/8,MS3.9/1,Ms1 3.9/1, ms1mx3.0/42,Error ellipse: s-maj=19.9km s-min=12.8km az=122.0*
*MAN **01** 20:10:34.0,13.32N×120.41E,h20km,mb4.3,ML3.2, MS2.9*
*NEIC **01** 20:10:36.3±2.0,13.34N±0.08×120.4E±0.2,h49km±14km, mb4.2/5,Error ellipse: s-maj=28.1km s-min=4.3km az=112.0*

**ISC 01 20:10:30.8**±2.0,**13.33N**±0.05×**120.32E**±0.06,**h9**km±13km, **n26,** σ2§**07**/**32,mb3.6**/10,**1C-8D,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PGP** | **Puerto Galera** | **0.64** | **75** | ⇓*eP* | **Pn** | **20 10 45.1** | **-1.0** |
| PGP | | | | *iS* | **Sb** | **20 10 52.3** | **-1.0** |
| **TGY** | **Tagaytay City** | **0.97** | **38** | Pg | **Pn** | **20 10 52.5** | **+1.8** |
| | 452nm,0.3s,baz=158,slow=1.0,SNR=20 | | | | | | |
| TGY | | | | Lg | Lg | 20 11 07.7 | |
| | 587nm,0.3s,baz=6.9,slow=23,SNR=10 | | | | | | |
| **TGY** | **Tagaytay City** | **0.97** | **38** | ⇑*eP* | **Pn** | **20 10 52.4** | **+1.7** |
| TGY | | | | *iS* | **Sn** | **20 11 07.9** | **+3.2** |
| **MACP** | **Maragondon, Ca** | **1.00** | **23** | ⇓*eP* | **Pn** | **20 10 52.1** | **+1.1** |
| MACP | | | | *eS* | **Sn** | **20 11 07.4** | **+2.1** |
| **BOAC** | **Boac** | **1.49** | **85** | ⇓*eP* | **Pg** | **20 10 59.1** | **-0.4** |
| BOAC | | | | *eS* | **Sg** | **20 11 22.1** | **+3.2** |
| **PCPH** | **Palayan** | **2.34** | **19** | ⇓*eP* | **Pb** | **20 11 11.3** | **-1.9** |
| PCPH | | | | *eS* | **Sb** | **20 11 40.4** | **-1.8** |
| **JCNP** | **Jose Panganiba** | **2.50** | **67** | ⇓*eP* | **Pb** | **20 11 13.6** | **-2.4** |
| JCNP | | | | *eS* | **Sb** | **20 11 43.2** | **-3.5** |
| **BALP** | **Baler** | **2.69** | **27** | ⇓*eP* | **Pb** | **20 11 17.8** | **-1.3** |
| BALP | | | | *eS* | **Sb** | **20 11 52.6** | **+0.4** |
| **SMPP** | **San Manuel, Pa** | **2.82** | **7** | ⇓*eP* | **Pb** | **20 11 18.9** | **-2.5** |
| SMPP | | | | *eS* | **Sb** | **20 11 54.2** | **-1.9** |
| **SAMP** | **Sagada Mountai** | **3.77** | **9** | ⇓*eP* | **Pn** | **20 11 32.7** | **+3.5** |
| **MYLDM** | **Lahad Datu** | **8.30** | **193** | Pn | **Pn** | **20 12 35.2** | **+3.8** |
| **CMAR** | **Chiang Mai Arr** | **21.17** | **287** | P | **P** | **20 15 17.4** | **+0.8** |
| | 0.6nm,0.5s,baz=82,slow=7.2,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.83** | **157** | P | **P** | **20 17 29.1** | **-1.8** |
| | 0.3nm,0.6s,baz=335,slow=9.7,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.83** | **157** | P | **P** | **20 17 29.3** | **-1.6** |
| **WB2** | **Warramunga Arr** | **35.83** | **157** | P | **P** | **20 17 28.6** | **-2.3** |
| **WR0** | **Warramunga Arr** | **35.92** | **157** | P | **P** | **20 17 30.4** | **-1.3** |
| WR0 | | | | IAmb | IAmb | 20 17 49.5 | |
| | comp=Z,6.9nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **36.30** | **344** | P | **P** | **20 17 35.0** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=167,slow=8.2,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **36.30** | **344** | P | **P** | **20 17 32.5** | **-2.3** |
| SONM | | | | IAmb | IAmb | 20 18 00.2 | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **39.10** | **160** | P | **P** | **20 17 57.9** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=337,slow=7.0,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.11** | **324** | P | **P** | **20 18 56.2** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=112,slow=8.5,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.21** | **333** | P | **P** | **20 19 18.9** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=124,slow=6.9,SNR=2.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.29** | **327** | P | **P** | **20 19 28.1** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=131,slow=7.9,SNR=6.5 | | | | | | |
| **KURK** | **Kurchatov** | **50.29** | **327** | P | **P** | **20 19 28.1** | **+0.6** |
| **KURK** | **Kurchatov** | **50.29** | **327** | IAmb | IAmb | 20 19 33.8 | |
| | comp=Z,3.4nm,1.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **55.87** | **326** | P | **P** | **20 20 09.4** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=82,slow=5.1,SNR=2.4 | | | | | | |
| **WSAR** | **Wadi Sarin** | **59.03** | **289** | LR | LR | 20 50 38.6 | |
| | comp=Z,98nm,18.1s,baz=298,slow=41 | | | | | | |

*KRNET **01** 20:19:15.3±0.1,39.96N×73.02E,h15km,mb2.9*
*ISU **01** 20:19:17,40.00N×72.70E,h5km*
*SOME **01** 20:19:19.1,40.25N×73.05E,h5km*
*NNC **01** 20:19:30.4±5.8,40.56N×73.49E,h0km,mb3.6,mpv3.2, Error ellipse: s-maj=45.5km s-min=32.0km az=160.0*

**ISC 01 20:19:12.0**±1.3,**39.95N**±0.04×**73.10E**±0.02,**h4**km±11km, **n36,** σ1§**12**/**60,21C-9D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | IS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IUG | | | | *eS* | **Sg** | **20 20 53.7** | **-1.0** |
| | 15nm,0.3s | | | | | | | |
| **IUG** | **luzhnay** | **3.20** | **314** | Pg | **Pg** | **20 20 13.8** | **+0.5** |
| | 93nm,0.3s | | | | | | | |
| IUG | | | | Lg | Lg | 20 20 53.7 | |
| | 15nm,0.3s | | | | | | | |
| **ULHL** | **Ulahol** | **3.30** | **45** | ⇑*eP* | **Pb** | **20 20 10.4** | **-0.9** |
| | baz=46 | | | | | | | |
| ULHL | | | | ⇑*iS* | **Sb** | **20 20 49.9** | **-2.1** |
| | baz=46 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.52** | **31** | ⇓Pn | **Pg** | **20 20 18.1** | **-1.2** |
| | 5.0nm,1.1s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 20 20 59.1 | |
| | 4.8nm,0.9s | | | | | | | |
| **KK08** | **Karatay Array** | **3.72** | **329** | ⇑Pg | Pg | 20 20 30.8 | +7.6 |
| | 1.1nm,0.6s,baz=120,slow=16 | | | | | | | |
| KK08 | | | | ⇓Lg | Lg | 20 21 15.1 | |
| | 3.5nm,0.5s,baz=124,slow=28 | | | | | | | |
| **KST** | **Kastek** | **3.77** | **34** | *eP* | **Pg** | **20 20 24.3** | **+0.1** |
| | 3.1nm,0.7s | | | | | | | |
| KST | | | | *eS* | **Sg** | **20 21 11.8** | **-1.2** |
| | 6.2nm,0.5s | | | | | | | |
| **KST** | **Kastek** | **3.77** | **34** | Pg | **Pg** | **20 20 24.3** | **+0.1** |
| | 3.1nm,0.7s | | | | | | | |
| KST | | | | Lg | Lg | 20 21 11.8 | |
| | 6.2nm,0.5s | | | | | | | |
| **BRLS** | **Borolday** | **3.94** | **323** | *eP* | **Pg** | **20 20 26.2** | **-1.2** |
| | 1.3nm,0.2s | | | | | | | |
| BRLS | | | | *eS* | **Sg** | **20 21 15.0** | **-3.5** |
| | 4.5nm,0.4s | | | | | | | |
| **BRLS** | **Borolday** | **3.94** | **323** | Pg | **Pg** | **20 20 26.2** | **-1.2** |
| | 1.3nm,0.2s | | | | | | | |
| BRLS | | | | Lg | Lg | 20 21 15.0 | |
| | 4.5nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **4.21** | **26** | *eP* | **Pg** | **20 20 33.1** | **+0.4** |
| | 2.7nm,0.5s | | | | | | | |
| KRBS | | | | *eS* | **Sg** | **20 21 27.1** | **-0.2** |
| | 2.3nm,0.5s | | | | | | | |
| **KRBS** | **Karabastau** | **4.21** | **26** | Pg | **Pg** | **20 20 33.1** | **+0.4** |
| | 2.7nm,0.5s | | | | | | | |
| KRBS | | | | Lg | Lg | 20 21 27.1 | |
| | 2.3nm,0.5s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.23** | **42** | *eP* | **Pg** | **20 20 34.3** | **+1.3** |
| | 1.5nm,0.2s | | | | | | | |
| TNSS | | | | *eS* | **Sg** | **20 21 28.7** | **+0.9** |
| | 3.2nm,0.5s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.23** | **42** | Pg | **Pg** | **20 20 34.3** | **+1.3** |
| | 1.5nm,0.2s | | | | | | | |
| TNSS | | | | Lg | Lg | 20 21 28.7 | |
| | 3.2nm,0.5s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.45** | **41** | *eP* | **Pg** | **20 20 38.9** | **+1.6** |
| | 3.1nm,0.6s | | | | | | | |
| KOTS | | | | *eS* | **Sg** | **20 21 36.9** | **+1.9** |
| | 11nm,0.7s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.45** | **41** | Pg | **Pg** | **20 20 38.9** | **+1.6** |
| | 3.1nm,0.6s | | | | | | | |
| KOTS | | | | Lg | Lg | 20 21 36.9 | |
| | 11nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **4.62** | **34** | *eP* | **Pg** | **20 20 41.0** | **+0.6** |
| | 1.6nm,0.5s | | | | | | | |
| KTBS | | | | *eS* | **Sg** | **20 21 40.4** | **+0.1** |
| | 4.4nm,0.8s | | | | | | | |
| **KTBS** | **Karatobe** | **4.62** | **34** | Pg | **Pg** | **20 20 41.0** | **+0.6** |
| | 1.6nm,0.5s | | | | | | | |
| KTBS | | | | Lg | Lg | 20 21 40.4 | |
| | 4.4nm,0.8s | | | | | | | |

*IDC **01** 20:21:05.9±2.7,6°.14S×129°.33E,h190km±39km, mb2.9/1, mb1 2.9/5, mb1mx2.6/43, mbtmp3.4/5, Error ellipse: s-maj=64.0km s-min=19.9km az=88.0*

**ISC 01 20:21:02.6±1.1,6°.27S±0°.09×128°.9E±0°.2,h150km,n5, σ0s47/6,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.86** | **24** | P | **Pn** | **20 22 27.2** | **-0.2** |
| | 0.3nm,0.3s,baz=285,slow=20,SNR=8.6 | | | | | | |
| SIJI | | | | S | Sn | 20 23 25.5 | -8.3 |
| | 1.1nm,0.3s,baz=124,slow=23,SNR=8.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.19** | **195** | P | **P** | **20 23 57.2** | **-0.4** |
| | 0.0nm,0.3s,baz=21,slow=14,SNR=1.7 | | | | | | |
| FITZ | | | | S | **Sn** | **20 26 06.0** | **-0.1** |
| | 0.1nm,0.3s,baz=114,slow=18,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.59** | **159** | P | **Pn** | **20 24 21.9** | **-0.1** |
| | 0.2nm,0.3s,baz=338,slow=11,SNR=14 | | | | | | |
| WRA | | | | S | Sn | 20 26 47.5 | -16 |
| | 0.1nm,0.3s,baz=0.3,slow=18,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.96** | **165** | P | **P** | **20 25 02.1** | **+0.6** |
| | 0.1nm,0.3s,baz=342,slow=9.5,SNR=9.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.02** | **327** | P | **P** | **20 31 39.7** | **+0.3** |
| | 0.2nm,0.4s,baz=131,slow=5.9,SNR=2.6 | | | | | | |

*FUNV **01** 20:33:10.4,8°.36N×71°.07W, h2km, MW3.0*

**ISC 01 20:33:10.6±1.1,8°.38N±0°.09×71°.07W±0°.04,h11km±11km, n9,σ0s94/17,Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.23** | **113** | *eP* | **Pg** | **20 33 15.4** | **0.0** |
| SOCV | | | | *eS* | **Sg** | **20 33 19.1** | **+0.5** |
| **SOCV** | **Socops** | **0.23** | **113** | *eP* | **Pg** | **20 33 14.9** | **-0.5** |
| SOCV | | | | *eS* | **Sg** | **20 33 18.1** | **-0.6** |
| **CAPV** | **Capacho** | **1.33** | **248** | *eP* | **Pg** | **20 33 35.0** | **-1.2** |
| CAPV | | | | *eS* | **Sg** | **20 33 53.1** | **-0.5** |
| **PAMC** | **Pamplona, Colo** | **1.92** | **238** | *eP* | **Pg** | **20 33 47.1** | **-0.3** |
| PAMC | | | | *eS* | **Sb** | **20 34 09.8** | **-0.2** |
| PAMC | | | | *i* | | 20 34 14.0 | |
| | comp=Z,19nm,0.3s | | | | | | |
| **SIQV** | **Siquisique** | **2.58** | **29** | *eS* | **Sn** | **20 34 24.1** | **+0.3** |
| **MAPV** | **Macapo** | **2.96** | **61** | *eP* | **Pn** | **20 33 57.0** | **-0.5** |
| MAPV | | | | *eS* | **Sn** | **20 34 32.3** | **-0.7** |
| **SMLC** | **San Martn de** | **3.00** | **278** | *eP* | **Pb** | **20 34 05.2** | **+1.1** |
| SMLC | | | | *eS* | **Sb** | **20 34 42.6** | **+1.8** |
| SMLC | | | | *i* | | 20 34 44.5 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **BAUV** | **El Baul** | **3.05** | **79** | *eP* | **Pn** | **20 33 59.2** | **+0.5** |
| BAUV | | | | *eS* | **Sn** | **20 34 34.7** | **-0.5** |
| **MONV** | **Montecano** | **3.72** | **17** | *eP* | **Pn** | **20 34 07.8** | **-0.1** |
| MONV | | | | *eS* | **Sn** | **20 34 50.2** | **-1.7** |

*ECGS **01** 20:51:51.4,0°.98S±0°.04×29°.25E±0°.02,h0km±4km, ML2.7, Error ellipse: s-maj=6.7km s-min=3.0km az=160.9, smi:local/f705c709-fc75-4498-ae9e-b8553f9e464b Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX 26.5315 Y 58.8299 Z 5.84697 CovXX 5.57332 XY -4.77683 XZ -0.243805 YY 17.7553 YZ 2.36206 ZZ 22.6015 EllAz1 250.696 Dip1 1.6876 Len1 3.71405 Az2 339.814 Dip2 -27.5836 Len2 8.01466 Len3 9.170848e+00*

**ISC 01 20:51:49.5±1.1,0°.93S±0°.05×29°.17E±0°.06,h10km,n22, σ0s57/25,Zaire**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGO** | **Tongo** | **0.30** | **160** | *i* P | **Pg** | **20 51 56.2** | **+0.5** |
| **KTSH** | **Kitshanga** | **0.33** | **201** | *i* P | **Pg** | **20 51 56.4** | **+0.1** |
| **KTSH** | **Kitshanga** | **0.33** | **201** | *i* S | **Sg** | **20 52 01.5** | **+0.7** |
| **RGB** | **Rumangabo** | **0.46** | **155** | *i* P | **Pg** | **20 51 59.1** | **+0.5** |
| **RGB** | **Rumangabo** | **0.46** | **155** | *i* S | **Sg** | **20 52 04.6** | **-0.1** |
| **RSY** | **Rusayo** | **0.65** | **179** | *i* P | **Pg** | **20 52 02.8** | **+0.7** |
| **BUTK** | **Butaka** | **0.65** | **160** | *i* P | **Pg** | **20 52 02.7** | **+0.5** |
| **BUTK** | **Butaka** | **0.65** | **160** | *i* S | **Sg** | **20 52 10.5** | **-0.3** |
| **KBTI** | **Kibati** | **0.65** | **171** | *i* P | **Pg** | **20 52 02.5** | **+0.3** |
| **SAHA** | **Sahara** | **0.73** | **149** | *i* P | **Pg** | **20 52 03.6** | **-0.1** |
| **SAHA** | **Sahara** | **0.73** | **149** | *i* S | **Sg** | **20 52 12.4** | **-0.9** |
| **GOM** | **Goma** | **0.75** | **176** | *i* P | **Pg** | **20 52 04.5** | **+0.3** |
| **GOM** | **Goma** | **0.75** | **176** | *i* S | **Sg** | **20 52 14.9** | **+0.8** |
| **BOBN** | **Bobandana** | **0.79** | **192** | *i* P | **Pg** | **20 52 03.9** | **-1.0** |
| **BOBN** | **Bobandana** | **0.79** | **192** | *i* S | **Sg** | **20 52 14.5** | **-0.8** |
| **IDJ** | **Idjwi** | **1.14** | **186** | *i* P | **Pb** | **20 52 10.7** | **-0.7** |
| **LWI** | **Lwiro** | **1.36** | **196** | *i* S | **Sb** | **20 52 33.1** | **+0.4** |
| **LWI** | **Lwiro** | **1.36** | **196** | *i* P | **Pn** | **20 52 15.4** | **+0.6** |
| **KIL** | **Kilembe** | **1.40** | **37** | *eP* | **Pb** | **20 52 15.7** | **-0.1** |
| KIL | | | | *eS* | **Sn** | **20 52 33.7** | **-0.1** |
| **MBAR** | **Mbarara** | **1.60** | **78** | *i* P | **Pn** | **20 52 18.6** | **+0.5** |
| **MBAR** | **Mbarara** | **1.60** | **78** | *eP* | **Pn** | **20 52 18.5** | **+0.5** |
| MBAR | | | | *eS* | **Sb** | **20 52 39.9** | **+0.2** |
| **TEBE** | **Entebbe** | **3.44** | **74** | *eP* | **Pn** | **20 52 43.1** | **-0.3** |
| TEBE | | | | *eS* | **Sn** | **20 53 23.7** | **-0.6** |

**JMA 01 21:22:33.5±0.1,36°.41N×137°.64E,h1km±2km,M0.8, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTT** | **Ttatey** | **0.32** | **308** | P | Pg | 21 22 40.5 | +1.0 |
| **JGN** | **Niukaw** | **0.32** | **235** | P | Pg | 21 22 40.1 | +0.4 |
| JGN | | | | S | Sg | 21 22 44.6 | +0.8 |
| **JNG** | **Nsakai** | **0.37** | **90** | P | Pg | 21 22 41.1 | +0.5 |
| **MAT** | **Matsushiro** | **0.48** | **74** | P | Pg | 21 22 42.7 | +0.1 |
| **MAT** | **Matsushiro** | **0.48** | **74** | P | Pg | 21 22 42.8 | +0.2 |

**JMA 01 21:22:35.1,36°.41N×137°.64E,h3km,M1.0,Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTT** | **Ttatey** | **0.32** | **308** | P | Pg | 21 22 41.8 | +0.6 |
| **JGN** | **Niukaw** | **0.32** | **235** | P | Pg | 21 22 41.5 | +0.2 |
| JGN | | | | S | Sg | 21 22 45.8 | +0.3 |
| **MAT** | **Matsushiro** | **0.48** | **74** | P | Pg | 21 22 44.2 | 0.0 |
| MAT | | | | S | Sg | 21 22 50.5 | +0.1 |
| **MAT** | **Matsushiro** | **0.48** | **74** | S | Sg | 21 22 50.5 | +0.1 |

*NEIC **01** 21:27:28.0±2.1,20°.18S±0°.03×70°.59W±0°.06,h22km±2km, mb4.7/14, Mwr4.2/51, ML4.3(GUC), Error ellipse: s-maj=7.7km s-min=4.3km az=92.0*

*NEIC **01** 21:27:28.6,20°.16S×70°.55W,h28km, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr1.37; Mθθ0.12; Mθθ-1.49; Mrθ0.62; Mθθ-0.11; Mθr-2.18; Fault plane solution: M0 2.68000×10^15^ NP1:φs167.37000°, δ74.47000°, λ80.20000°. NP2:φs20.20000°, δ18.30000°, λ121.49000°. Principal axes: T 2.6847, Plg59.0000°, Azm64.0000°; N -0.0023, Plg9.0000°, Azm170.0000°; P -2.6824, Plg29.0000°, Azm265.0000°;*

*IDC **01** 21:27:29.7±0.8,19°.99S×70°.34W,h32km±4km, mb3.8/8, mb1 4.1/10, mb1mx3.9/27, mbtmp4.1/10, ML4.2/2, MS3.7/8, Ms1 3.7/8, ms1mx3.4/63 Error ellipse: s-maj=25.7km s-min=18.2km az=65.0*

*GUC **01** 21:27:29.6±0.6,20°.16S×70°.49W, h36km±2km, ML4.3*

*VAO **01** 21:27:44.8±1.5,19°.61S×69°.66W, h115km±8km, mb4.2*

**ISC 01 21:27:27.5±0.7,20°.21S±0°.02×70°.55W±0°.05,h23km±4km, n118,σ1s43/122,mb4.6/13,MS4.2/3,2C-8D,Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TA02** | **Huaiquique** | **0.40** | **99** | ⇓*iP* | **Pn** | **21 27 37.3** | **-0.6** |
| TA02 | | | | *i* S | **Sn** | **21 27 43.4** | **-1.2** |
| **TA02** | **Huaiquique** | **0.40** | **99** | | **Pn** | **21 27 37.3** | **-0.6** |
| TA02 | | | | Sg | **Sn** | **21 27 43.6** | **-1.0** |
| **TA01** | **Diego Aracena** | **0.50** | **136** | ⇓*iP* | **Pn** | **21 27 39.2** | **-0.1** |
| TA01 | | | | *eS* | **Sn** | **21 27 46.1** | **-1.0** |
| **TA01** | **Diego Aracena** | **0.50** | **136** | | **Pn** | **21 27 39.1** | **-0.1** |
| TA01 | | | | Sg | **Sn** | **21 27 46.1** | **-1.0** |
| **PB11** | **IPOC Station P** | **0.95** | **62** | ⇓*iP* | **Pb** | **21 27 45.2** | **-0.2** |
| PB11 | | | | *i* S | **Sb** | **21 27 57.2** | **-0.4** |
| PB11 | | | | IAML | | 21 28 02.4 | |
| | comp=N,7μm,0.5s | | | | | | |
| **PB11** | **IPOC Station P** | **0.95** | **62** | Pn | **Pb** | **21 27 45.2** | **-0.2** |
| PB11 | | | | Sn | **Sb** | **21 27 57.3** | **-0.4** |
| **PB02** | **IPOC Station P** | **1.27** | **151** | ⇓*iP* | **Pb** | **21 27 51.3** | **+0.5** |
| PB02 | | | | *eS* | **Sb** | **21 28 08.0** | **+1.3** |
| PB02 | | | | IAML | | 21 28 10.3 | |
| | comp=E,24μm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **1.27** | **151** | | **Pb** | **21 27 51.1** | **+0.3** |
| PB02 | | | | Sn | **Sb** | **21 28 08.3** | **+1.5** |
| **PB01** | **IPOC Station P** | **1.30** | **130** | ⇓*iP* | **Pb** | **21 27 51.4** | **+0.1** |
| PB01 | | | | *eS* | **Sb** | **21 28 07.7** | **+0.1** |
| PB01 | | | | IAML | | 21 28 11.9 | |
| | comp=E,12μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **1.30** | **130** | | **Pb** | **21 27 50.9** | **-0.4** |
| **PB08** | **IPOC Station P** | **1.31** | **87** | ⇓*iP* | **Pb** | **21 27 51.5** | **-0.2** |
| PB08 | | | | *i* S | **Sb** | **21 28 08.3** | **0.0** |
| **PB08** | **IPOC Station P** | **1.31** | **87** | | **Pb** | **21 27 51.4** | **-0.4** |
| **GO01** | **Chusmiza** | **1.38** | **67** | ⇓*iP* | **Pb** | **21 27 52.5** | **-0.5** |
| GO01 | | | | *eS* | **Sb** | **21 28 09.7** | **-0.7** |
| GO01 | | | | IAML | | 21 28 13.9 | |
| | comp=N,8μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.38** | **67** | Pn | **Pb** | **21 27 52.6** | **-0.3** |
| **MNMC** | **Minye Minye** | **1.40** | **40** | ⇓*iP* | **Pn** | **21 27 52.2** | **+0.4** |
| MNMC | | | | *eS* | **Sn** | **21 28 09.4** | **-0.3** |
| MNMC | | | | IAML | | 21 28 14.9 | |
| | comp=E,9μm,0.2s | | | | | | |
| **MNMC** | **Minye Minye** | **1.40** | **40** | | **Pn** | **21 27 52.0** | **+0.1** |
| **PB12** | **IPOC Station P** | **1.60** | **8** | *i* P | **Pn** | **21 27 54.4** | **0.0** |
| PB12 | | | | *eS* | **Sn** | **21 28 13.4** | **-1.0** |
| PB12 | | | | IAML | | 21 28 21.8 | |
| | comp=N,3μm,0.6s | | | | | | |
| **PB12** | **IPOC Station P** | **1.60** | **8** | | **Pn** | **21 27 54.5** | **0.0** |
| **PB07** | **IPOC Station P** | **1.64** | **158** | *eP* | **Pb** | **21 27 56.6** | **-0.5** |
| PB07 | | | | *eS* | **Sb** | **21 28 17.7** | **+0.2** |
| PB07 | | | | IAML | | 21 28 26.9 | |
| | comp=E,7μm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **1.64** | **158** | | **Pb** | **21 27 57.0** | **-0.1** |
| **AP01** | **Chacalluta** | **1.83** | **6** | *eP* | **Pn** | **21 27 58.5** | **+1.0** |
| **AP01** | **Chacalluta** | **1.83** | **6** | Pn | **Pn** | **21 27 58.6** | **+1.0** |
| **PB03** | **IPOC Station P** | **1.98** | **158** | *eP* | **Pn** | **21 28 01.2** | **+1.5** |
| PB03 | | | | IAML | | 21 28 36.1 | |
| | comp=E,3μm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **1.98** | **158** | Pn | **Pb** | **21 28 01.5** | **-1.5** |
| **PB09** | **IPOC Station P** | **2.00** | **143** | ⇓*iP* | **Pb** | **21 28 03.0** | **-0.3** |
| PB09 | | | | IAML | | 21 28 44.0 | |
| | comp=N,4μm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **2.00** | **143** | Pn | **Pb** | **21 28 02.7** | **-0.6** |
| **PB16** | **IPOC Station P** | **2.10** | **28** | *eP* | **Pn** | **21 28 02.7** | **+0.8** |
| PB16 | | | | *eS* | **Sn** | **21 28 29.0** | **+1.4** |
| PB16 | | | | IAML | | 21 28 43.2 | |
| | comp=E,2μm,0.7s | | | | | | |
| **PB16** | **IPOC Station P** | **2.10** | **28** | Pn | **Pn** | **21 28 02.3** | **+0.4** |
| **PB04** | **IPOC Station P** | **2.15** | **170** | *eP* | **Pn** | **21 28 02.9** | **+0.7** |
| PB04 | | | | IAML | | 21 28 40.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **2.15** | **170** | Pn | **Pn** | **21 28 02.7** | **+0.6** |
| **PB06** | **IPOC Station P** | **2.65** | **160** | *eP* | **Pn** | **21 28 10.0** | **+0.9** |
| PB06 | | | | IAML | | 21 29 00.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| **PB06** | **IPOC Station P** | **2.65** | **160** | | **Pn** | **21 28 09.9** | **+0.9** |
| **LVC** | **Limon Verde** | **2.84** | **148** | Pn | **Pb** | **21 28 14.9** | **-2.9** |
| | comp=N,78nm,0.3s,baz=344,slow=8.1,SNR=206 | | | | | | |
| LVC | | | | Sn | **Sb** | **21 28 50.6** | **-1.6** |
| | comp=N,202nm,0.3s,baz=90,slow=21,SNR=13 | | | | | | |
| LVC | | | | LR | LR | 21 29 33.9 | |
| | comp=N,758nm,20.2s,baz=336,slow=42 | | | | | | |
| **LVC** | **Limon Verde** | **2.84** | **148** | ⇓*iP* | **Pb** | **21 28 14.9** | **-2.9** |
| **LVC** | **Limon Verde** | **2.84** | **148** | Pn | **Pb** | **21 28 14.8** | **-3.0** |
| **PB15** | **IPOC Station P** | **3.15** | **162** | *eP* | **Pn** | **21 28 16.7** | **+0.7** |
| **PB15** | **IPOC Station P** | **3.15** | **162** | Pn | **Pn** | **21 28 16.9** | **+1.0** |
| **PB10** | **IPOC Station P** | **3.29** | **180** | *eP* | **Pn** | **21 28 17.6** | **-0.1** |
| **PB10** | **IPOC Station P** | **3.29** | **180** | Pn | **Pn** | **21 28 17.7** | **-0.1** |
| **PB14** | **IPOC Station P** | **4.40** | **178** | Pn | **Pn** | **21 28 32.5** | **-0.7** |
| **LPAZ** | **La Paz** | **4.52** | **31** | Pn | **Pn** | **21 28 39.6** | **+4.5** |
| | comp=N,4.1nm,0.3s,baz=224,slow=6.7,SNR=44 | | | | | | |
| LPAZ | | | | LR | LR | 21 30 39.4 | |
| | comp=N,770nm,18.3s,baz=227,slow=45 | | | | | | |
| **LPAZ** | **La Paz** | **4.52** | **31** | *eP* | **Pn** | **21 28 39.1** | **+3.9** |
| **LPAZ** | **La Paz** | **4.52** | **31** | Pn | **Pn** | **21 28 39.5** | **+4.3** |
| **SIV** | **San Ignacio** | **9.94** | **67** | Pn | **Pn** | **21 29 49.5** | **+0.5** |
| | comp=N,5.4nm,0.3s,baz=265,slow=8.5,SNR=43 | | | | | | |
| SIV | | | | LR | LR | 21 34 26.6 | |
| | comp=N,413nm,18.4s,baz=288,slow=43 | | | | | | |
| **NNA** | **Nana** | **10.16** | **323** | LR | LR | 21 33 38.7 | |
| | comp=N,108nm,21.8s,baz=181,slow=36 | | | | | | |
| **ETMB** | **Extrema** | **11.14** | **23** | Pn | **Pn** | **21 30 06.6** | **+1.1** |
| **PTLB** | **Pontes e Lacer** | **11.85** | **68** | *eP* | **Pn** | **21 30 15.9** | **+0.7** |
| **PTLB** | **Pontes e Lacer** | **11.85** | **68** | Pn | **Pn** | **21 30 17.6** | **+2.4** |
| **VILB** | **Vilhena** | **12.26** | **56** | *eP* | **Pn** | **21 30 21.8** | **+0.9** |
| **VILB** | **Vilhena** | **12.26** | **56** | Pn | **Pn** | **21 30 22.3** | **+1.5** |
| **CPUP** | **Villa Florida** | **13.59** | **119** | Pn | **Pn** | **21 30 40.9** | **+2.0** |
| | comp=N,0.2nm,0.3s,baz=297,slow=6.8,SNR=1.3 | | | | | | |
| CPUP | | | | LR | LR | 21 37 07.8 | |
| | comp=N,184nm,18.2s,baz=324,slow=43 | | | | | | |
| **AQDB** | **Aquidauana** | **13.93** | **94** | *eP* | **Pn** | **21 30 46.1** | **+2.5** |
| **AQDB** | **Aquidauana** | **13.93** | **94** | Pn | **Pn** | **21 30 45.0** | **+1.4** |
| **SALV** | **Santo Antonio** | **14.76** | **76** | *eP* | **Pn** | **21 30 56.9** | **+1.9** |
| **H03N1** | **Juan Fernandez** | **15.14** | **208** | T | T | 21 46 33.0 | |
| | baz=33,slow=72,SNR=286 | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.15** | **208** | T | T | 21 46 32.7 | |
| | baz=33,slow=72,SNR=204 | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.16** | **208** | T | T | 21 46 30.5 | |
| | baz=33,slow=72,SNR=228 | | | | | | |
| **ITQB** | **Itaqui** | **15.74** | **129** | *eP* | **P** | **21 31 17.8** | **+6.2** |
| **PDRB** | **Porto dos Gac** | **15.79** | **59** | *eP* | **Pn** | **21 31 08.8** | **+0.2** |
| **CLDB** | **Colider** | **16.96** | **59** | *eP* | **Pn** | **21 31 23.4** | **-0.1** |
| **PTGB** | **Pitanga** | **17.66** | **108** | *eP* | **P** | **21 31 35.6** | **+2.6** |
| **NPGB** | **Novo Progresso** | **19.70** | **50** | *eP* | **P** | **21 31 54.3** | **-1.1** |
| **SNDB** | **Serra Nova Dou** | **20.21** | **69** | *eP* | **P** | **21 31 59.4** | **-1.6** |
| **PLCA** | **Paso Flores** | **20.46** | **180** | P | Pn | 21 32 06.8 | +1.0 |
| | comp=N,2.7nm,0.8s,baz=354,slow=10.0,SNR=8.9 | | | | | | |
| **PLCA** | **Paso Flores** | **20.46** | **180** | | Pn | 21 32 06.7 | +0.9 |
| **BB19B** | **Bebedouro** | **20.63** | **96** | *eP* | **P** | **21 32 05.5** | **0.0** |
| **ITTB** | **Itaituba** | **21.35** | **44** | *eP* | **P** | **21 32 11.2** | **-2.1** |
| **RCLB** | **Rio Claro- Sao** | **21.55** | **100** | *eP* | **P** | **21 32 18.5** | **+3.0** |
| **BDFB** | **Brasilia** | **21.91** | **82** | P | **P** | **21 32 18.4** | **-1.0** |
| | comp=N,2.4nm,0.5s,baz=250,slow=10,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **21.91** | **82** | P | **P** | **21 32 18.9** | **-0.6** |
| **PTGA** | **Pitinga** | **21.95** | **29** | P | **P** | **21 32 17.8** | **-1.9** |
| | comp=N,4.7nm,0.4s,baz=202,slow=15,SNR=17 | | | | | | |
| **VAO** | **Valinhos** | **22.10** | **101** | *eP* | **P** | **21 32 24.6** | **+3.2** |
| **PEXB** | **Peixe** | **22.82** | **73** | *eP* | **P** | **21 32 29.1** | **+0.1** |
| **MALB** | **Monte Alegre** | **24.20** | **43** | *eP* | **P** | **21 32 42.5** | **-0.1** |
| **PRPB** | **Parauapebas** | **24.49** | **58** | *eP* | **P** | **21 32 45.1** | **-0.2** |
| **BOAV** | **Boa Vista** | **24.52** | **25** | *eP* | **P** | **21 32 44.9** | **-0.6** |
| **BOAV** | **Boa Vista** | **24.52** | **25** | P | **P** | **21 32 45.1** | **-0.3** |
| BOAV | | | | IAmb | IAmb | 21 32 46.0 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SMTB** | **Santa Maria do** | **24.88** | **66** | *eP* | **P** | **21 32 48.8** | **0.0** |
| **JANB** | **Januaria** | **25.51** | **83** | *eP* | **P** | **21 32 52.9** | **-1.6** |
| **MCPB** | **Macapa, AP** | **26.77** | **45** | *eP* | **P** | **21 33 04.9** | **-0.9** |
| **ZARC** | **Zaragoza, Cauc** | **27.85** | **351** | P | **P** | **21 33 13.8** | **-1.7** |
| **BAUV** | **El Baul** | **29.07** | **5** | P | **P** | **21 33 25.5** | **-0.9** |
| BAUV | | | | IAmb | IAmb | 21 33 35.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **SJCC** | **San Jacinto, C** | **30.26** | **351** | P | **P** | **21 33 36.3** | **-0.7** |
| **BCIP** | **Isla Barro Col** | **30.59** | **342** | P | **P** | **21 33 39.0** | **-0.7** |
| **MDP** | **Montagnes des** | **30.70** | **37** | LR | LR | 21 46 32.3 | |
| | comp=Z,160nm,21.9s,baz=230,slow=38 | | | | | | |
| **BIRV** | **Birongo** | **30.78** | **8** | P | **P** | **21 33 41.0** | **-0.5** |
| BIRV | | | | IAmb | IAmb | 21 33 53.9 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **RCBR** | **Riachuelo** | **36.55** | **72** | P | **P** | **21 34 31.1** | **-0.7** |
| **PDPR** | **Patillas Dam,** | **38.24** | **7** | P | **P** | **21 34 44.2** | **-1.7** |
| PDPR | | | | IAmb | IAmb | 21 34 51.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **T50A** | **Nancy** | **58.49** | **347** | P | **P** | **21 37 20.9** | **-0.9** |
| T50A | | | | IAmb | IAmb | 21 37 36.2 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **64.00** | **161** | P | **P** | **21 38 00.1** | **+1.3** |
| SNAA | | | | IAmb | IAmb | 21 38 01.7 | |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **DBIC** | **Dimbokro** | **69.85** | **75** | P | **P** | **21 38 35.3** | **-1.6** |
| | comp=Z,2.0nm,0.6s,baz=334,slow=5.6,SNR=3.0 | | | | | | |
| **DBIC** | **Dimbokro** | **69.85** | **75** | P | **P** | **21 38 35.0** | **-1.9** |
| DBIC | | | | IAmb | IAmb | 21 38 55.7 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **PDAR** | **Pinedale Array** | **72.23** | **331** | P | **P** | **21 38 52.1** | **+1.0** |
| | comp=Z,0.2nm,0.7s,baz=134,slow=7.6,SNR=2.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.54** | **323** | P | **P** | **21 38 59.9** | **+1.0** |
| | comp=Z,0.9nm,0.9s,baz=172,slow=6.9,SNR=2.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.38** | **71** | P | **P** | **21 39 25.2** | **-1.5** |
| | comp=Z,5.3nm,0.9s,baz=256,slow=5.1,SNR=19 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.38** | **71** | P | **P** | **21 39 25.7** | **-1.1** |
| TORD | | | | IAmb | IAmb | 21 39 26.5 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **BOSA** | **Boshof** | **85.41** | **119** | LR | LR | 22 15 46.9 | |
| | comp=Z,97nm,18.5s,baz=347,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.47** | **341** | P | **P** | **21 40 22.4** | **+0.2** |
| | comp=Z,2.0nm,0.8s,baz=136,slow=4.7,SNR=31 | | | | | | |
| YKA | | | | pP | **sP** | **21 40 31.5** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=137,slow=4.9,SNR=4.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.47** | **341** | P | **P** | **21 40 22.6** | **+0.4** |
| **LSZ** | **Lusaka** | **92.74** | **107** | LR | LR | 22 19 55.4 | |
| | comp=Z,106nm,18.8s,baz=334,slow=34 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **26.18** | **279** | T | T | 00 05 53.1 | |
| | baz=101,slow=74,SNR=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **26.19** | **279** | T | T | 00 05 50.3 | |
| | baz=101,slow=74,SNR=39 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **26.20** | **279** | T | T | 00 05 45.1 | |
| | baz=101,slow=74,SNR=43 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **26.23** | **280** | T | T | 00 05 54.9 | |
| | baz=102,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KAN10** | **Anthony SW Sta** | **0.55** | **322** | Pg | Pg | 21 45 41.1 | -0.3 |
| KAN10 | | | | Sg | Sg | 21 45 48.8 | +0.2 |
| **KAN06** | **Argonia West S** | **0.58** | **345** | Pg | Pg | 21 45 41.5 | -0.3 |
| KAN06 | | | | Sg | Sg | 21 45 49.4 | 0.0 |
| **KAN08** | **Anthony NE Sta** | **0.59** | **336** | Pg | Pg | 21 45 41.8 | -0.3 |
| KAN08 | | | | Sg | Sg | 21 45 50.0 | +0.2 |
| **KAN16** | **Harper SW Stat** | **0.62** | **330** | Pg | Pg | 21 45 42.5 | -0.2 |
| KAN16 | | | | Sg | Sg | 21 45 50.8 | 0.0 |
| **KAN12** | **Harper NE Stat** | **0.66** | **337** | Pg | Pg | 21 45 43.3 | -0.1 |
| KAN12 | | | | Sg | Sg | 21 45 52.1 | 0.0 |
| **OK035** | **E0210 Rd and N** | **0.84** | **272** | Pg | Pg | 21 45 46.1 | -0.6 |
| **OK033** | **Mehan** | **0.87** | **137** | Pg | Pg | 21 45 47.3 | 0.0 |
| **OK029** | **Liberty Lake** | **0.91** | **169** | Pg | Pg | 21 45 47.7 | -0.4 |
| **QUOK** | **Quay** | **0.93** | **123** | Pg | Pg | 21 45 48.2 | -0.3 |
| QUOK | | | | Sg | Sg | 21 46 00.6 | +0.1 |
| **T35A** | **Sooner Cattle** | **0.96** | **76** | Pg | Pg | 21 45 48.3 | -0.7 |
| T35A | | | | Sg | Sg | 21 46 01.2 | -0.2 |
| **OK031** | **S. Brethren Rd** | **0.99** | **137** | Pg | Pg | 21 45 49.2 | -0.5 |
| OK031 | | | | Sg | Sg | 21 46 02.8 | +0.2 |
| **OK034** | **N. Norfolk Rd.** | **1.02** | **131** | Pg | Pg | 21 45 50.0 | -0.4 |
| **BCOK** | **Bluff Creek, N** | **1.03** | **177** | Pg | Pg | 21 45 49.9 | -0.5 |
| BCOK | | | | Sg | Sg | 21 46 04.2 | +0.5 |
| **OK030** | **Cody Creek RV** | **1.04** | **136** | Pg | Pg | 21 45 50.4 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.12** | **254** | Pg | Pg | 21 45 51.1 | -0.9 |
| **OK025** | **Westminster Rd** | **1.14** | **166** | Pg | Pg | 21 45 51.6 | -0.8 |
| **FNO** | **Franklin** | **1.44** | **171** | | Pn | 21 45 57.0 | -0.5 |
| **W35A** | **Tecumseh** | **1.66** | **157** | Pn | Pn | 21 46 00.7 | +0.2 |
| **TUL1** | **Leonard** | **1.70** | **117** | Pn | Pn | 21 46 00.9 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.09** | **184** | Pn | Pn | 21 46 06.8 | +0.5 |
| **WMOK** | **Wichita Mounta** | **2.15** | **205** | Pn | Pn | 21 46 07.2 | +0.1 |
| **S39A** | **Bolivar** | **3.61** | **73** | Pn | Pn | 21 46 27.3 | 0.0 |
| **AMTX** | **Amarillo** | **3.73** | **242** | IAmb_Lg | | 21 47 37.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.38** | **47** | IAmb_Lg | | 21 47 50.6 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.58** | **68** | Pn | Pn | 21 46 41.3 | +0.7 |
| **BGNE** | **Belgrade** | **4.73** | **356** | Pn | Pn | 21 46 43.0 | +0.3 |

*SJA **01** 21:45:56.6±0.5,22.°57S×66.°13W,h277km±3km,ML4.6, MW4.2*
*IDC **01** 21:45:57.0±0.7,22.°52S×65.°97W,h245km±6km,mb3.7/13, mb1 3.9/20,mb1mx3.7/45,mbtmp4.4/20,Error ellipse: s-maj=11.6km s-min=10.3km az=159.0*
*NEIC **01** 21:45:57.7±2.1,22.°56S±0.°07×66.°05W±0.°08,h246km±6km, mb4.5/13,Md4.5(SJA),Error ellipse: s-maj=11.4km s-min=10.3km az=87.0*
*VAO **01** 21:45:58.3±0.3,22.°51S×66.°16W,h273km±4km,mb4.5*

**ISC 01 21:45:57.1±0.3,22.°57S±0.°04×66.°11W±0.°04,h251km, n199,σ1°41/236,mb4.1/16,8C,Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YJA** | **Yavi** | **0.68** | **55** | *e*P | **Pn** | **21 46 34.2** | **+3.0** |
| YJA | | | | *e*S | **S** | **21 46 55.6** | **-2.4** |
| YJA | | | | *e*S | S | 21 47 02.1 | +4.1 |
| YJA | | | | IAML | | 21 47 02.4 | |
| | comp=Z,500nm,0.5s | | | | | | |
| **SLA** | **San Lorenzo** | **2.21** | **166** | *e*P | **Pn** | **21 46 45.0** | **+3.2** |
| SLA | | | | *e*P | | 21 46 45.6 | |
| SLA | | | | *e*S | **S** | **21 47 16.6** | **-0.5** |
| SLA | | | | IAML | | 21 48 13.2 | |
| | comp=Z,53nm,1.3s | | | | | | |
| **LVC** | **Limon Verde** | **2.59** | **269** | P | **Pn** | **21 46 47.6** | **+1.9** |
| | comp=Z,156nm,0.3s,baz=88,slow=5.7,SNR=738 | | | | | | |
| LVC | | | | S | **S** | **21 47 25.0** | **+0.9** |
| | comp=Z,93nm,0.3s,baz=1.6,slow=23,SNR=36 | | | | | | |
| **LVC** | **Limon Verde** | **2.59** | **269** | *e*P | **Pn** | **21 46 47.9** | **+2.1** |
| **PB09** | **IPOC Station P** | **3.00** | **284** | ⇑*i*P | **Pn** | **21 46 51.9** | **+2.0** |
| PB09 | | | | *i* S | **S** | **21 47 31.7** | **+0.1** |
| PB09 | | | | IAML | | 21 47 35.3 | |
| | comp=E,541nm,0.7s | | | | | | |
| **PB09** | **IPOC Station P** | **3.00** | **284** | Pn | **Pn** | **21 46 51.7** | **+1.8** |
| **PB15** | **IPOC Station P** | **3.17** | **258** | *e*P | **Pn** | **21 46 53.2** | **+1.5** |
| PB15 | | | | *i* S | **S** | **21 47 34.6** | **-0.2** |
| **PB15** | **IPOC Station P** | **3.17** | **258** | | **Pn** | **21 46 53.1** | **+1.5** |
| **PB15** | **IPOC Station P** | **3.17** | **258** | *e*P | **Pn** | **21 46 53.0** | **+1.3** |
| PB15 | | | | *e*S | **S** | **21 47 35.4** | **+0.6** |
| PB15 | | | | IAML | | 21 47 39.0 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **PB06** | **IPOC Station P** | **3.20** | **267** | ⇑*i*P | **Pn** | **21 46 53.3** | **+1.3** |
| PB06 | | | | *i* S | **S** | **21 47 34.7** | **-0.8** |
| PB06 | | | | IAML | | 21 47 37.4 | |
| | comp=E,1μm,0.5s | | | | | | |
| **PB06** | **IPOC Station P** | **3.20** | **267** | Pn | **Pn** | **21 46 53.1** | **+1.1** |
| **PB03** | **IPOC Station P** | **3.42** | **278** | ⇑*i*P | **Pn** | **21 46 55.5** | **+1.1** |
| PB03 | | | | *i* S | **S** | **21 47 38.4** | **-1.4** |
| PB03 | | | | IAML | | 21 47 39.5 | |
| | comp=N,2μm,0.7s | | | | | | |
| **PB03** | **IPOC Station P** | **3.42** | **278** | Pn | **Pn** | **21 46 55.5** | **+1.1** |
| **PB01** | **IPOC Station P** | **3.49** | **295** | ⇑*i*P | **Pn** | **21 46 56.2** | **+1.1** |
| PB01 | | | | *i* S | **S** | **21 47 40.3** | **-0.9** |
| PB01 | | | | IAML | | 21 47 42.6 | |
| | comp=N,4μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **3.49** | **295** | Pn | **Pn** | **21 46 56.2** | **+1.1** |
| **PB01** | **IPOC Station P** | **3.49** | **295** | *e*P | **Pn** | **21 46 56.3** | **+1.1** |
| PB01 | | | | *e*S | **S** | **21 47 40.4** | **-0.7** |
| PB01 | | | | IAML | | 21 47 42.3 | |
| | comp=Z,594nm,0.3s | | | | | | |
| **FSA** | **Cafayete** | **3.53** | **178** | *e*P | **Pn** | **21 46 58.0** | **+2.3** |
| FSA | | | | *e*S | **S** | **21 47 44.0** | **+1.9** |
| **PB07** | **IPOC Station P** | **3.60** | **283** | ⇑*i*P | **Pn** | **21 46 57.6** | **+1.1** |
| PB07 | | | | *i* S | **S** | **21 47 41.8** | **-1.9** |
| PB07 | | | | IAML | | 21 47 44.2 | |
| | comp=E,1μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **3.60** | **283** | | **Pn** | **21 46 57.4** | **+0.9** |
| **PB08** | **IPOC Station P** | **3.73** | **310** | ⇑*i*P | **Pn** | **21 47 00.0** | **+1.8** |
| PB08 | | | | *i* S | **S** | **21 47 46.0** | **-0.6** |
| PB08 | | | | IAML | | 21 47 49.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| **PB08** | **IPOC Station P** | **3.73** | **310** | | **Pn** | **21 47 00.0** | **+1.8** |
| **PB02** | **IPOC Station P** | **3.73** | **289** | | **Pn** | **21 46 58.7** | **+0.7** |
| **PB02** | **IPOC Station P** | **3.73** | **289** | *e*P | **Pn** | **21 46 58.8** | **+0.9** |
| PB02 | | | | *e*S | **S** | **21 47 45.1** | **-1.1** |
| PB02 | | | | IAML | | 21 47 51.1 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **3.75** | **273** | | **Pn** | **21 46 59.0** | **+0.9** |
| **PB04** | **IPOC Station P** | **3.75** | **273** | *e*P | **Pn** | **21 46 59.2** | **+1.1** |
| PB04 | | | | *e*S | **S** | **21 47 45.4** | **-1.2** |
| PB04 | | | | IAML | | 21 47 48.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **GO01** | **Chusmiza** | **4.08** | **314** | | **Pn** | **21 47 03.6** | **+1.2** |
| **GO01** | **Chusmiza** | **4.08** | **314** | *e*P | **Pn** | **21 47 03.6** | **+1.2** |
| GO01 | | | | *e*S | **S** | **21 47 54.4** | **+0.2** |
| **PB10** | **IPOC Station P** | **4.20** | **256** | | **Pn** | **21 47 03.8** | **+0.5** |
| **PB10** | **IPOC Station P** | **4.20** | **256** | *e*P | **Pn** | **21 47 04.3** | **+1.0** |
| PB10 | | | | *e*S | **S** | **21 47 54.0** | **-1.9** |
| PB10 | | | | IAML | | 21 47 56.0 | |
| | comp=Z,913nm,0.3s | | | | | | |
| **AHML** | **Horco Molle** | **4.25** | **171** | *e*P | **Pn** | **21 47 06.0** | **+2.0** |
| AHML | | | | *e*S | **S** | **21 47 55.6** | **-1.6** |
| AHML | | | | IAML | | 21 48 00.7 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **TA01** | **Diego Aracena** | **4.28** | **297** | ⇑*i*P | **Pn** | **21 47 04.3** | **0.0** |
| TA01 | | | | *i* S | **S** | **21 47 54.3** | **-3.4** |
| **TA01** | **Diego Aracena** | **4.28** | **297** | | **Pn** | **21 47 04.4** | **0.0** |
| **TA01** | **Diego Aracena** | **4.28** | **297** | *e*P | **Pn** | **21 47 04.5** | **+0.2** |
| TA01 | | | | IAML | | 21 48 00.0 | |
| | comp=Z,355nm,0.5s | | | | | | |
| **PB11** | **IPOC Station P** | **4.33** | **310** | | **Pn** | **21 47 05.2** | **+0.1** |
| **PB11** | **IPOC Station P** | **4.33** | **310** | *e*P | **Pn** | **21 47 05.3** | **+0.2** |
| PB11 | | | | *e*S | **S** | **21 47 56.9** | **-2.2** |
| PB11 | | | | *e*S | S | 21 47 58.0 | -1.2 |
| PB11 | | | | IAML | | 21 48 00.7 | |
| | comp=Z,769nm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **4.39** | **301** | *e*P | **Pn** | **21 47 05.5** | **0.0** |
| TA02 | | | | *i* S | **S** | **21 47 57.5** | **-2.6** |
| **TA02** | **Huaiquique** | **4.39** | **301** | Pn | **Pn** | **21 47 05.4** | **-0.2** |
| **TA02** | **Huaiquique** | **4.39** | **301** | *e*P | **Pn** | **21 47 06.0** | **+0.4** |
| TA02 | | | | *e*S | **S** | **21 47 59.0** | **-1.1** |
| TA02 | | | | IAML | | 21 48 02.1 | |
| | comp=Z,586nm,0.1s | | | | | | |
| **PB14** | **IPOC Station P** | **4.44** | **242** | | **Pn** | **21 47 07.4** | **+0.9** |
| **PB14** | **IPOC Station P** | **4.44** | **242** | *e*P | **Pn** | **21 47 07.6** | **+1.2** |
| PB14 | | | | *e*S | **S** | **21 47 59.9** | **-1.7** |
| PB14 | | | | IAML | | 21 48 02.5 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **MNMC** | **Minye Minye** | **4.73** | **316** | | **Pn** | **21 47 10.2** | **+0.2** |
| **MNMCX** | **Minye Minye** | **4.73** | **316** | *e*P | **Pn** | **21 47 10.6** | **+0.7** |
| MNMCX | | | | *e*P | | 21 47 10.8 | |
| MNMCX | | | | *e*P | **P** | **21 47 10.8** | **+0.9** |
| MNMCX | | | | *e*P | **P** | **21 47 10.8** | **+0.9** |
| MNMCX | | | | IAML | | 21 48 09.8 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **AC02** | **Maricunga** | **5.06** | **212** | Pn | **Pn** | **21 47 15.7** | **+1.6** |
| **AC02** | **Maricunga** | **5.06** | **212** | *e*P | **Pn** | **21 47 15.7** | **+1.6** |
| AC02 | | | | *e*S | **S** | **21 48 10.6** | **-4.8** |
| AC02 | | | | IAML | | 21 48 21.9 | |
| | comp=Z,117nm,0.4s | | | | | | |
| **PB16** | **IPOC Station P** | **5.28** | **322** | ⇑*i*P | **Pn** | **21 47 18.2** | **+1.3** |
| PB16 | | | | *i* S | **S** | **21 48 18.8** | **-1.8** |
| **PB16** | **IPOC Station P** | **5.28** | **322** | Pn | **Pn** | **21 47 18.3** | **+1.3** |
| **PB16** | **IPOC Station P** | **5.28** | **322** | *e*P | **Pn** | **21 47 18.0** | **+1.0** |
| PB16 | | | | *e*S | **S** | **21 48 17.6** | **-3.0** |
| PB16 | | | | IAML | | 21 48 23.1 | |
| | comp=Z,573nm,0.5s | | | | | | |
| **PB12** | **IPOC Station P** | **5.58** | **314** | Pn | **Pn** | **21 47 18.7** | **-1.4** |
| **PB12** | **IPOC Station P** | **5.58** | **314** | *e*P | Pn | 21 47 10.8 | -9.3 |
| PB12 | | | | *e*P | | 21 47 18.0 | |
| PB12 | | | | *e*P | | 21 47 18.8 | |
| PB12 | | | | *e*S | S | 21 48 17.6 | -8.9 |
| PB12 | | | | *e*S | S | 21 48 22.6 | -3.9 |
| PB12 | | | | IAML | | 21 48 25.8 | |
| | comp=Z,506nm,0.3s | | | | | | |
| **AP01** | **Chacalluta** | **5.76** | **316** | Pn | **Pn** | **21 47 22.1** | **-0.3** |
| **GO03** | **Copiap** | **6.25** | **216** | Pn | **Pn** | **21 47 28.3** | **-0.1** |
| **GO03** | **Copiap** | **6.25** | **216** | *e*P | **Pn** | **21 47 28.7** | **+0.3** |
| GO03 | | | | *e*S | **S** | **21 48 36.6** | **-4.8** |
| **VCA** | **Vinchina** | **6.43** | **197** | *e*P | **Pn** | **21 47 32.0** | **+1.3** |
| VCA | | | | *e*P | | 21 47 33.0 | |
| VCA | | | | *e*S | **S** | **21 48 45.6** | **0.0** |
| VCA | | | | IAML | | 21 48 51.0 | |
| | comp=Z,63nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **6.53** | **343** | P | **Pn** | **21 47 33.5** | **+0.9** |
| | comp=Z,4.5nm,0.3s,baz=121,slow=6.2,SNR=51 | | | | | | |
| LPAZ | | | | S | **S** | **21 48 48.0** | **-1.1** |
| | comp=Z,2.8nm,0.3s,baz=312,slow=16,SNR=18 | | | | | | |
| **LPAZ** | **La Paz** | **6.53** | **343** | *e*P | **Pn** | **21 47 33.6** | **+0.9** |
| **LPAZ** | **La Paz** | **6.53** | **343** | Pn | **Pn** | **21 47 33.2** | **+0.6** |
| **LPAZ** | **La Paz** | **6.53** | **343** | *e*P | **Pn** | **21 47 33.0** | **+0.4** |
| **AC04** | **Llanos de Chal** | **7.19** | **218** | Pn | **Pn** | **21 47 39.5** | **-0.5** |
| **LCO** | **Las Campanas** | **7.63** | **212** | Pn | **Pn** | **21 47 45.5** | **-0.5** |
| **SIV** | **San Ignacio** | **8.09** | **37** | P | **Pn** | **21 47 51.1** | **-0.5** |
| | comp=Z,16nm,0.3s,baz=236,slow=9.6,SNR=193 | | | | | | |
| **ACCO** | **Cerro Coronel** | **8.41** | **198** | *e*P | **Pn** | **21 47 56.2** | **+0.3** |
| ACCO | | | | *e*S | **S** | **21 49 24.6** | **-7.0** |
| ACCO | | | | IAML | | 21 49 31.4 | |
| | comp=Z,44nm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **8.66** | **208** | Pn | **Pn** | **21 47 58.5** | **-0.4** |
| **CPUP** | **Villa Florida** | **8.83** | **117** | P | **Pn** | **21 48 00.0** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=308,slow=8.4,SNR=6.7 | | | | | | |
| **CPUP** | **Villa Florida** | **8.83** | **117** | *e*P | **Pn** | **21 48 00.1** | **-0.8** |
| **TCA** | **Tanti** | **8.84** | **172** | *e*P | Pn | 21 47 55.6 | -5.4 |
| TCA | | | | *e*P | P | 21 48 01.6 | -6.6 |
| TCA | | | | *e*S | **S** | **21 49 33.6** | **-7.5** |
| **CO03** | **El Pedregal** | **9.20** | **205** | | **Pn** | **21 48 05.5** | **-0.1** |
| **CO03** | **El Pedregal** | **9.20** | **205** | *e*P | **Pn** | **21 48 05.8** | **+0.3** |
| CO03 | | | | *e*S | S | 21 49 37.8 | -12 |
| **CO06** | **Fray Jorge** | **9.46** | **210** | Pn | **Pn** | **21 48 08.1** | **-0.7** |
| **CO02** | **Combarbal** | **9.64** | **206** | Pn | **Pn** | **21 48 11.9** | **+0.7** |
| **PTLB** | **Pontes e Lacer** | **9.67** | **44** | *e*P | **Pn** | **21 48 11.3** | **-0.3** |
| **PTLB** | **Pontes e Lacer** | **9.67** | **44** | Pn | **Pn** | **21 48 11.1** | **-0.5** |
| **AQDB** | **Aquidauana** | **9.91** | **80** | *e*P | **Pn** | **21 48 15.8** | **+1.3** |
| **AQDB** | **Aquidauana** | **9.91** | **80** | Pn | **Pn** | **21 48 15.6** | **+1.0** |
| **ASAL** | **Salagasta** | **10.27** | **193** | *e*P | **Pn** | **21 48 19.1** | **0.0** |
| **AAGR** | **Agrelo** | **10.75** | **192** | *e*P | **Pn** | **21 48 26.0** | **+1.0** |
| **VA03** | **San Esteban** | **10.89** | **200** | | **Pn** | **21 48 27.8** | **+1.8** |
| **VA03** | **San Esteban** | **10.89** | **200** | *e*P | **Pn** | **21 48 29.0** | **+2.1** |
| **ITQB** | **Itaqui** | **11.07** | **132** | *e*P | **Pn** | **21 48 30.4** | **+1.4** |
| **ITQB** | **Itaqui** | **11.07** | **132** | Pn | **Pn** | **21 48 30.6** | **+1.6** |
| **VILB** | **Vilhena** | **11.09** | **31** | *e*P | **Pn** | **21 48 30.4** | **+0.9** |
| **VILB** | **Vilhena** | **11.09** | **31** | Pn | **Pn** | **21 48 30.2** | **+0.7** |
| **ROC1** | **El Roble** | **11.24** | **202** | | **Pn** | **21 48 30.3** | **-1.1** |
| **PEL** | **Peldehue** | **11.28** | **200** | Pn | **Pn** | **21 48 32.1** | **+0.4** |
| **MT05** | **Renca** | **11.53** | **200** | | **Pn** | **21 48 36.9** | **+2.1** |
| **MT02** | **Curacav** | **11.54** | **202** | Pn | **Pn** | **21 48 35.5** | **+0.7** |
| **PP1B** | **Ponte de Pedra** | **11.65** | **67** | *e*P | **P** | **21 48 41.3** | **+1.5** |
| **LMEL** | **Las Melosas** | **11.80** | **197** | Pn | **Pn** | **21 48 39.8** | **+1.5** |
| **SALV** | **Santo Antonio** | **11.86** | **58** | *e*P | **Pn** | **21 48 39.5** | **+0.5** |
| **MT09** | **Talagante** | **11.96** | **200** | | **Pn** | **21 48 40.6** | **+0.3** |
| **MT01** | **Popeta** | **12.13** | **201** | | **Pn** | **21 48 42.5** | **+0.3** |
| **BO01** | **Tunca** | **12.56** | **199** | | **Pn** | **21 48 47.7** | **+0.2** |
| **ETMB** | **Extrema** | **12.68** | **360** | *e*P | **Pn** | **21 48 48.9** | **-0.3** |
| **ETMB** | **Extrema** | **12.68** | **360** | P | **Pn** | **21 48 49.3** | **+0.1** |
| **BO02** | **Sierra Bellavi** | **12.85** | **198** | P | **Pn** | **21 48 52.3** | **+1.2** |
| **PTGB** | **Pitanga** | **13.05** | **102** | *e*P | **P** | **21 48 55.3** | **0.0** |
| **GO05** | **Hualia** | **13.40** | **201** | P | **Pn** | **21 48 58.1** | **+0.3** |
| **ITAB** | **Concordia** | **13.51** | **113** | *e*P | **P** | **21 49 00.7** | **+0.4** |
| **ITAB** | **Concordia** | **13.51** | **113** | P | **P** | **21 49 00.6** | **+0.4** |
| **CPSB** | **Cacapava Do Su** | **13.76** | **127** | *e*P | **P** | **21 49 03.2** | **+0.1** |
| **PCMB** | **Pacaembu** | **13.80** | **89** | *e*P | **P** | **21 49 03.3** | **-0.4** |
| **ML02** | **Panimavida** | **13.94** | **198** | P | **P** | **21 49 05.9** | **+0.9** |
| **PDRB** | **Porto dos Gac** | **14.10** | **41** | *e*P | **Pn** | **21 49 06.4** | **-0.2** |
| **PLTB** | **Pedras Altas** | **14.40** | **132** | *e*P | **P** | **21 49 10.7** | **+0.4** |
| **PLTB** | **Pedras Altas** | **14.40** | **132** | P | **P** | **21 49 10.6** | **+0.4** |
| **NNA** | **Nana** | **14.68** | **314** | P | **P** | **21 49 13.8** | **+0.3** |
| | comp=Z,1.1nm,0.3s,baz=172,slow=9.1,SNR=5.3 | | | | | | |
| **ITRB** | **Iturama** | **14.97** | **82** | *e*P | **Pn** | **21 49 17.3** | **+0.4** |
| **CLDB** | **Colider** | **15.25** | **42** | *e*P | **Pn** | **21 49 20.4** | **0.0** |
| **TIJ01** | **Guaruva-PR** | **15.88** | **103** | *e*P | **P** | **21 49 27.3** | **+0.7** |
| **CZSB** | **Cruzeiro do Su** | **16.06** | **336** | *e*P | **P** | **21 49 27.5** | **-1.1** |
| **BB19B** | **Benedouro** | **16.39** | **88** | *e*P | **P** | **21 49 32.8** | **+0.5** |
| **TER01** | **Tubaro-SC** | **16.43** | **115** | *e*P | **P** | **21 49 33.0** | **+0.5** |
| **LC01** | **Cunco** | **17.01** | **196** | P | **P** | **21 49 39.9** | **+1.2** |
| LC01 | | | | IAmb | IAmb | 21 49 43.8 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **17.17** | **93** | *e*P | **P** | **21 49 41.4** | **+0.6** |
| **PET01** | **Itanhaem-SP** | **17.37** | **99** | *e*P | **P** | **21 49 43.7** | **+0.9** |
| **IPMB** | **Ipameri, GO** | **17.39** | **78** | *e*P | **P** | **21 49 44.2** | **+0.9** |
| **SNDB** | **Serra Nova Dou** | **17.62** | **56** | *e*P | **P** | **21 49 45.5** | **-0.2** |
| **VAO** | **Valinhos** | **17.66** | **95** | *e*P | **P** | **21 49 46.5** | **+0.4** |
| **BDFB** | **Brasilia** | **18.43** | **71** | P | **P** | **21 49 55.3** | **+0.8** |
| | comp=Z,2.4nm,0.3s,baz=243,slow=12,SNR=61 | | | | | | |
| **BDFB** | **Brasilia** | **18.43** | **71** | P | **P** | **21 49 55.5** | **+1.0** |
| **PLCA** | **Paso Flores** | **18.49** | **191** | P | **P** | **21 49 56.3** | **+1.4** |
| | comp=Z,1.0nm,0.3s,baz=10,slow=11,SNR=28 | | | | | | |
| **PLCA** | **Paso Flores** | **18.49** | **191** | *e*P | **P** | **21 49 56.0** | **+1.0** |
| **PLCA** | **Paso Flores** | **18.49** | **191** | P | **P** | **21 49 56.3** | **+1.4** |
| PLCA | | | | IAmb | IAmb | 21 49 57.3 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **NPGB** | **Novo Progresso** | **18.59** | **36** | *e*P | **P** | **21 49 54.6** | **-1.6** |
| **PARB** | **Paraibuna** | **18.88** | **96** | *e*P | **P** | **21 49 59.5** | **+0.2** |
| **LL04** | **Puerto Octay** | **19.04** | **195** | P | **P** | **21 50 01.1** | **+0.4** |
| **BSCB** | **Bom Sucesso** | **19.87** | **90** | *e*P | **P** | **21 50 10.3** | **+0.5** |
| **PEXB** | **Peixe** | **19.91** | **61** | *e*P | **P** | **21 50 09.8** | **-0.4** |
| **MAN01** | **Angra dos Reis** | **20.43** | **95** | *e*P | **P** | **21 50 15.8** | **0.0** |
| **ITTB** | **Itaituba** | **20.70** | **31** | *e*P | **P** | **21 50 16.9** | **-1.7** |
| **GO07** | **Milladeo Hill,** | **21.43** | **195** | P | **P** | **21 50 25.8** | **+0.3** |
| **DIAM** | **Diamantina, MG** | **21.44** | **83** | *e*P | **P** | **21 50 26.1** | **0.0** |
| **JANB** | **Januaria** | **21.93** | **74** | *e*P | **P** | **21 50 29.8** | **-0.8** |
| **DUB01** | **Friburgo-RJ** | **21.96** | **93** | *e*P | **P** | **21 50 31.0** | **+0.2** |
| **SMTB** | **Santa Maria do** | **22.40** | **55** | *e*P | **P** | **21 50 34.4** | **-0.5** |
| **PTGA** | **Pitinga** | **22.52** | **16** | P | **P** | **21 50 34.0** | **-1.9** |
| | comp=Z,1.5nm,0.3s,baz=192,slow=8.1,SNR=5.8 | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **22.58** | **67** | *e*P | **P** | **21 50 35.8** | **-0.7** |
| **CAM01** | **Campos-RJ** | **22.65** | **93** | *e*P | **P** | **21 50 37.1** | **+0.1** |
| **PRPB** | **Parauapebas** | **22.65** | **46** | *e*P | **P** | **21 50 35.8** | **-1.3** |
| **MALB** | **Monte Alegre** | **23.59** | **31** | *e*P | **P** | **21 50 44.4** | **-1.2** |
| **SJMB** | **Sao Joao De Ma** | **23.63** | **85** | *e*P | **P** | **21 50 45.5** | **-0.4** |
| **ALF01** | **Guarapari-ES** | **23.67** | **90** | *e*P | **P** | **21 50 46.3** | **0.0** |
| **RIB01** | **Linhares ES** | **24.22** | **87** | *e*P | **P** | **21 50 51.1** | **-0.2** |
| **GUA01** | **Guaratinga, BA** | **25.47** | **81** | *e*P | **P** | **21 51 02.1** | **-0.5** |
| **MCPB** | **Macapa, AP** | **25.97** | **34** | *e*P | **P** | **21 51 06.4** | **-0.7** |
| **CMC01** | **Camacan, BA** | **26.12** | **79** | *e*P | **P** | **21 51 08.1** | **-0.4** |
| **GDU01** | **Guandu, BA** | **26.67** | **75** | *e*P | **P** | **21 51 12.1** | **-1.3** |
| **USHA** | **Ushuaia** | **32.26** | **183** | P | **P** | **21 52 03.8** | **+1.7** |
| | comp=Z,6.6nm,1.0s,baz=342,slow=9.6,SNR=1.6 | | | | | | |
| **RCBR** | **Riachuelo** | **33.57** | **65** | *e*P | **P** | **21 52 14.2** | **+0.2** |
| **RCBR** | **Riachuelo** | **33.57** | **65** | P | **P** | **21 52 13.7** | **-0.3** |
| RCBR | | | | IAmb | IAmb | 21 52 14.6 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **CMIG** | **Matias Romero** | **48.44** | **322** | P | **P** | **21 54 15.6** | **+1.0** |
| | comp=Z,1.1nm,0.6s,baz=153,slow=11,SNR=1.9 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **58.79** | **161** | P | **P** | **21 55 31.0** | **+2.2** |
| | baz=303,slow=7.1 | | | | | | |
| **SNAA** | **Sanae** | **60.43** | **161** | P | **P** | **21 55 42.0** | **+2.0** |
| **SNAA** | **Sanae** | **60.43** | **161** | P | **P** | **21 55 40.1** | **+0.2** |
| SNAA | | | | IAmb | IAmb | 21 55 42.4 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **62.14** | **161** | P | **P** | **21 55 53.8** | **+2.3** |
| **TXAR** | **Lajitas Array** | **63.01** | **323** | P | **P** | **21 55 60.0** | **+2.2** |
| | comp=Z,0.9nm,0.6s,baz=140,slow=5.8,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.01** | **323** | P | **P** | **21 55 58.5** | **+0.8** |
| **DBIC** | **Dimbokro** | **66.57** | **72** | P | **P** | **21 56 20.0** | **-0.9** |
| | comp=Z,6.4nm,0.7s,baz=227,slow=6.7,SNR=9.4 | | | | | | |
| **DBIC** | **Dimbokro** | **66.57** | **72** | P | **P** | **21 56 19.8** | **-1.1** |
| DBIC | | | | IAmb | IAmb | 21 56 20.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KOWA** | **Kowa** | **71.09** | **65** | P | **P** | **21 56 47.7** | **-0.9** |
| | comp=Z,2.8nm,0.5s,baz=241,slow=6.0,SNR=12 | | | | | | |
| **KOWA** | **Kowa** | **71.09** | **65** | P | **P** | **21 56 47.1** | **-1.5** |
| **TORD** | **Torodi Ar. Bea** | **75.29** | **69** | P | **P** | **21 57 12.2** | **-0.9** |
| | comp=Z,7.1nm,0.4s,baz=256,slow=5.8,SNR=111 | | | | | | |
| TORD | | | | pP | **pP** | **21 58 13.0** | **-0.1** |
| | comp=Z,7.0nm,0.8s,baz=256,slow=5.9,SNR=8.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.35** | **329** | P | **P** | **21 57 19.9** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=142,slow=7.5,SNR=3.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.35** | **329** | P | **P** | **21 57 19.7** | **+0.8** |
| **TSUM** | **Tsumeb** | **77.25** | **106** | P | **P** | **21 57 23.9** | **-0.4** |
| TSUM | | | | IAmb | IAmb | 21 57 25.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **ELK** | **Elko** | **77.80** | **324** | P | **P** | **21 57 27.2** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=179,slow=14,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.95** | **321** | P | **P** | **21 57 29.4** | **+1.6** |
| | comp=Z,0.6nm,0.8s,baz=163,slow=6.6,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.95** | **321** | P | **P** | **21 57 28.9** | **+1.1** |
| **BOSA** | **Boshof** | **80.65** | **117** | P | **P** | **21 57 42.2** | **-0.4** |
| | comp=Z,1.9nm,0.5s,baz=288,slow=2.9,SNR=14 | | | | | | |
| **BOSA** | **Boshof** | **80.65** | **117** | P | **P** | **21 57 42.2** | **-0.4** |
| BOSA | | | | IAmb | IAmb | 21 57 58.6 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **LBTB** | **Lobatse** | **82.21** | **114** | P | **P** | **21 57 50.7** | **-0.1** |
| **ESDC** | **Sonseca Array** | **84.80** | **43** | P | **P** | **21 58 03.5** | **+0.1** |
| | comp=Z,2.8nm,1.0s,baz=243,slow=5.0,SNR=15 | | | | | | |
| **ESDC** | **Sonseca Array** | **84.80** | **43** | P | **P** | **21 58 03.2** | **-0.2** |
| **YKA** | **Yellowknife Ar** | **93.07** | **340** | P | **P** | **21 58 42.5** | **+0.7** |
| | comp=Z,0.7nm,0.6s,baz=130,slow=4.6,SNR=12 | | | | | | |
| YKA | | | | pP | **pP** | **21 59 42.8** | **-1.3** |
| | comp=Z,0.2nm,0.5s,baz=135,slow=5.3,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **130.09** | **204** | PKP | **PKPdf** | **22 04 38.5** | **+0.6** |
| | comp=Z,1.0nm,0.7s,baz=166,slow=3.5,SNR=7.9 | | | | | | |
| ASAR | | | | SKPbc | **SKPbc** | **22 07 36.4** | **-0.5** |
| | comp=Z,1.4nm,0.9s,baz=130,slow=4.3,SNR=6.5 | | | | | | |
| **ASAR** |

*JMA* ***01*** *22:24:50.1±0.3,32.0′06N×138.0′28E,h376km,M3.4*
*IDC* ***01*** *22:24:51.6±2.5,32.0′06N×138.0′32E,h374km±31km,mb2.8/4, mb1 2.9/5,mb1mx2.6/41,mbtmp3.5/5,Error ellipse: s-maj=68.1km s-min=25.3km az=70.0*
**ISC 01 22:24:51.3±1.1,32.1N±0.1×138.2E±0.0,h368km,n17, σ1§14/19,mb2.9/4,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ2** | **Mitsune** | **1.63** | **53** | P | **Pn** | **22 25 42.4** | **+0.5** |
| **JIE** | **Ise** | **2.60** | **330** | P | **Pn** | **22 25 49.5** | **+0.9** |
| **JKN2** | **Miekihoku** | **2.68** | **322** | P | **Pn** | **22 25 49.6** | **+0.4** |
| **JTNC** | **Tanabenakahech** | **2.79** | **308** | P | **Pn** | **22 25 50.1** | **-0.1** |
| **JWY** | **Kouya** | **3.05** | **313** | P | **Pn** | **22 25 53.1** | **+0.6** |
| **JOD2** | **Odawara 2** | **3.19** | **12** | P | **Pn** | **22 25 55.0** | **+1.4** |
| **BSO3** | **Boso 3** | **3.25** | **35** | P | **Pn** | **22 25 54.3** | **+0.5** |
| **BSO1** | **Boso 1** | **3.38** | **41** | P | **Pn** | **22 25 55.4** | **+0.7** |
| BSO1 | | | | *e*S | **S** | **22 26 46.8** | **+0.8** |
| **JAI** | **Aioi** | **3.61** | **298** | P | **Pn** | **22 25 57.1** | **-0.4** |
| **JYT** | **Yasato** | **4.38** | **21** | P | **Pn** | **22 26 04.8** | **-0.3** |
| JYT | | | | S | **S** | **22 27 01.4** | **-3.4** |
| **JAG** | **Ashikaga** | **4.39** | **13** | P | **Pn** | **22 26 05.4** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **4.39** | **359** | P | **Pn** | **22 26 06.5** | **+1.2** |
| | 0.2nm,0.3s,baz=178,slow=11,SNR=5.1 | | | | | | |
| **JHO** | **Hitachi** | **4.85** | **22** | P | **Pn** | **22 26 10.0** | **0.0** |
| **SONM** | **Songino Array** | **28.76** | **312** | P | **P** | **22 30 17.7** | **+1.2** |
| | 0.3nm,0.6s,baz=121,slow=6.2,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.70** | **306** | P | **P** | **22 32 29.0** | **-0.2** |
| | 0.6nm,0.6s,baz=89,slow=9.6,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.92** | **185** | P | **P** | **22 33 23.0** | **-0.9** |
| | 0.1nm,0.3s,baz=4.1,slow=7.5,SNR=0.9 | | | | | | |
| **FINES** | **FINESS Array B** | **71.92** | **332** | P | **P** | **22 35 35.3** | **+0.2** |
| | 1.9nm,0.8s,baz=77,slow=6.1,SNR=7.2 | | | | | | |

*NAO* ***01*** *22:34:44.1±1.8,71.78N×1.56W,ML4.2*
*IDC* ***01*** *22:34:45.8±0.5,71.80N×1.34W,h0km,mb4.1/23, mb1 4.3/28,mb1mx4.2/43,mbtmp4.2/28,ML3.7/4,MS4.2/57, Ms1 4.2/57,ms1mx4.0/95,Error ellipse: s-maj=14.0km s-min=10.2km az=38.0*
*IEPN* ***01*** *22:34:45.0,71.64N×1.67W,h10km*
*GCMT* ***01*** *22:34:47.5±0.2,71.82N±0.03×1.45W±0.07,h12km, MW5.0/88,Moment Tensor Solution. s8,c8; s88,c129; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-2.23±.11; Mθθ1.12±.10; Mϕϕ1.11±.10; Mrθ-1.59±.52; Mϕθ2.23±.09; Mϕr-0.09±.35; Best double couple: M◎3.31700×10^16 NP1:ϕs197.00000°,δ41.00000°,λ-135.00000°. NP2: ϕs70.00000°,δ62.00000°,λ-59.00000°. Principal axes: T 3.5970, Plg12.0000°, Azm138.0000°; N -0.5600, Plg27.0000°, Azm234.0000°; P -3.0370, Plg60.0000°, Azm26.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DNK* ***01*** *22:34:47.3±4.5,71.95N×1.77W,h0km±999km*
*NEIC* ***01*** *22:34:47.5±1.9,71.87N±0.07×1.5W±0.2,h10km±1km, mb4.6/77,Error ellipse: s-maj=11.7km s-min=11.0km az=198.0*
*BER* ***01*** *22:34:50.0±2.1,71.88N×0.92W,h12km±20km,ML3.2, MW3.4,ML4.2(NAO),Confirmed Earthquake*
**ISC 01 22:34:47.0±0.3,71.85N±0.05×1.12W±0.04,h10km,n318, σ2§51/316,mb4.5/82,MS4.2/53,10C-6D,Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBG** | **Daneborg** | **6.08** | **303** | Pn | Pn | 22 36 11.8 | -5.1 |
| **DBG** | **Daneborg** | **6.08** | **303** | *i* P | Pn | 22 36 11.5 | -5.3 |
| DBG | | | | IAmb | IAmb | 22 36 13.0 | |
| | comp=Z,9.4nm,0.1s | | | | | | |
| **DBG** | **Daneborg** | **6.08** | **303** | *e*P | **Pn** | **22 36 18.1** | **+1.3** |
| **LOF** | **Lofoten** | **6.25** | **119** | Pn | **Pn** | **22 36 18.5** | **-0.6** |
| LOF | | | | Sn | **Sn** | **22 37 27.0** | **-3.5** |
| **LOF** | **Lofoten** | **6.25** | **119** | *e*P | **Pn** | **22 36 19.1** | **-0.1** |
| LOF | | | | *e*S | **Sn** | **22 37 24.9** | **-5.6** |
| LOF | | | | IAML | | 22 37 29.3 | |
| | comp=Z,48nm,0.6s | | | | | | |
| LOF | | | | IAML | | 22 37 29.4 | |
| | comp=Z,50nm,0.5s | | | | | | |
| **N2SV** | **S¸rv¥gen** | **6.28** | **122** | *e*P | **Pn** | **22 36 19.1** | **-0.4** |
| N2SV | | | | *e*S | **Sn** | **22 37 25.1** | **-6.0** |
| N2SV | | | | IAML | | 22 37 29.9 | |
| | comp=Z,23nm,0.6s | | | | | | |
| N2SV | | | | IAML | | 22 37 30.0 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **N2VI** | **Vinje** | **6.30** | **117** | *e*P | **Pn** | **22 36 19.5** | **-0.3** |
| N2VI | | | | *e*S | **Sn** | **22 37 26.8** | **-5.0** |
| N2VI | | | | IAML | | 22 37 28.8 | |
| | comp=Z,92nm,0.6s | | | | | | |
| N2VI | | | | IAML | | 22 37 28.9 | |
| | comp=Z,95nm,0.5s | | | | | | |
| **N2VA** | **Vr¸y** | **6.36** | **125** | *e*P | **Pn** | **22 36 20.4** | **-0.2** |
| N2VA | | | | *e*S | **Sn** | **22 37 27.5** | **-5.7** |
| **BJO1** | **Bjornoya** | **6.40** | **56** | Pn | **Pn** | **22 36 21.6** | **+0.5** |
| **BJO1** | **Bjornoya** | **6.40** | **56** | *e*P | **Pn** | **22 36 21.8** | **+0.6** |
| BJO1 | | | | IAML | | 22 38 52.3 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **HSPB** | **Hornsund (broa** | **6.82** | **33** | *e*P | **Pn** | **22 36 27.2** | **+0.3** |
| **HSPB** | **Hornsund (broa** | **6.82** | **33** | Pn | **Pn** | **22 36 28.0** | **+1.1** |
| **HSPB** | **Hornsund (broa** | **6.82** | **33** | *e*P | **Pn** | **22 36 27.1** | **+0.3** |
| HSPB | | | | IAML | | 22 38 52.1 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **STEI** | **Steigen** | **6.86** | **117** | *e*P | **Pn** | **22 36 27.6** | **+0.1** |
| STEI | | | | *e*S | **Sn** | **22 37 40.2** | **-5.3** |
| STEI | | | | IAML | | 22 37 44.7 | |
| | comp=Z,47nm,0.9s | | | | | | |
| STEI | | | | IAML | | 22 37 45.3 | |
| | comp=Z,69nm,0.8s | | | | | | |
| **SCO** | **Scoresbysund** | **6.87** | **269** | *i* P | **Pn** | **22 36 24.3** | **-3.3** |
| SCO | | | | IAmb | IAmb | 22 36 26.2 | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **SCO** | **Scoresbysund** | **6.87** | **269** | Pn | **Pn** | **22 36 23.9** | **-3.7** |
| **TRO** | **Tromso** | **6.98** | **99** | Pn | **Pn** | **22 36 28.1** | **-1.0** |
| TRO | | | | Sn | **Sn** | **22 37 41.6** | **-6.8** |
| **TRO** | **Tromso** | **6.98** | **99** | *e*P | **Pn** | **22 36 29.1** | **+0.1** |
| TRO | | | | *e*S | **Sn** | **22 37 41.6** | **-6.8** |
| TRO | | | | IAML | | 22 37 44.8 | |
| | comp=Z,35nm,0.6s | | | | | | |
| TRO | | | | IAML | | 22 37 44.9 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **NBB08** | **Skaug oppvekst** | **7.07** | **121** | *e*P | **Pn** | **22 36 30.1** | **-0.3** |
| **NBB08** | **Skaug oppvekst** | **7.07** | **121** | *e*S | **Sn** | **22 37 44.8** | **-6.0** |
| **NBB08** | **Skaug oppvekst** | **7.07** | **121** | IAML | | 22 37 48.3 | |
| | comp=Z,43nm,0.6s | | | | | | |
| **NBB30** | **Finnes** | **7.15** | **126** | *e*P | **Pn** | **22 36 31.7** | **+0.2** |
| NBB30 | | | | *e*S | **Sn** | **22 37 45.2** | **-7.3** |
| NBB30 | | | | IAML | | 22 37 52.7 | |
| | comp=Z,56nm,0.5s | | | | | | |
| NBB30 | | | | IAML | | 22 37 52.8 | |
| | comp=Z,54nm,0.7s | | | | | | |
| **NBB28** | **Valnes** | **7.17** | **123** | *e*P | **Pn** | **22 36 31.7** | **0.0** |
| NBB28 | | | | *e*S | **Sn** | **22 37 46.3** | **-6.8** |
| NBB28 | | | | IAML | | 22 37 50.4 | |
| | comp=Z,35nm,0.4s | | | | | | |
| NBB28 | | | | IAML | | 22 37 50.5 | |
| | comp=Z,33nm,0.4s | | | | | | |
| **NBB05** | **Inndyr** | **7.18** | **125** | *e*P | **Pn** | **22 36 31.9** | **+0.1** |
| **NBB05** | **Inndyr** | **7.18** | **125** | *e*S | **Sn** | **22 37 46.0** | **-7.2** |
| **NBB05** | **Inndyr** | **7.18** | **125** | IAML | | 22 37 49.0 | |
| | comp=Z,52nm,0.5s | | | | | | |
| **FAUS** | **Fauske** | **7.25** | **120** | *e*P | **Pn** | **22 36 32.5** | **-0.4** |
| FAUS | | | | *e*S | **Sn** | **22 37 47.8** | **-7.4** |
| FAUS | | | | IAML | | 22 37 56.4 | |
| | comp=Z,29nm,0.5s | | | | | | |
| FAUS | | | | IAML | | 22 37 56.4 | |
| | comp=Z,30nm,0.5s | | | | | | |
| **NBB17** | **Glomfjord B¥r** | **7.33** | **126** | *e*P | **Pn** | **22 36 34.2** | **+0.4** |
| NBB17 | | | | *e*S | **Sn** | **22 37 50.9** | **-6.0** |
| **NBB40** | **Tonnes** | **7.33** | **130** | *e*P | **Pn** | **22 36 33.5** | **-0.4** |
| NBB40 | | | | *e*S | **Sn** | **22 37 49.9** | **-7.1** |
| NBB40 | | | | IAML | | 22 37 52.2 | |
| | comp=Z,29nm,0.3s | | | | | | |
| NBB40 | | | | IAML | | 22 37 52.3 | |
| | comp=Z,29nm,0.3s | | | | | | |
| **N2ST** | **Straumen** | **7.36** | **120** | *e*P | **Pn** | **22 36 34.6** | **+0.3** |
| N2ST | | | | IAML | | 22 38 47.6 | |
| | comp=Z,26nm,0.1s | | | | | | |
| **KONS** | **Konsvik** | **7.37** | **130** | *e*P | **Pn** | **22 36 33.8** | **-0.6** |
| KONS | | | | *e*S | **Sn** | **22 37 50.4** | **-7.6** |
| KONS | | | | IAML | | 22 37 54.8 | |
| | comp=Z,41nm,0.4s | | | | | | |
| KONS | | | | IAML | | 22 37 56.0 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **BRBA** | **Barentsburg A** | **7.37** | **25** | Pn | **Pn** | **22 36 35.7** | **+1.2** |
| **BRBA** | **Barentsburg A** | **7.37** | **25** | *e*P | **Pn** | **22 36 34.3** | **-0.2** |
| BRBA | | | | IAML | | 22 38 56.3 | |
| | comp=Z,5.7nm,0.4s | | | | | | |
| **BRBB** | **Barentsburg B** | **7.40** | **25** | Pn | **Pn** | **22 36 35.9** | **+1.1** |
| **BRBB** | **Barentsburg B** | **7.40** | **25** | *e*P | **Pn** | **22 36 35.6** | **+0.8** |
| **JETT** | **Jettan, Norway** | **7.47** | **97** | Pn | **Pn** | **22 36 35.5** | **-0.4** |
| JETT | | | | Sn | **Sn** | **22 37 55.0** | **-5.6** |
| JETT | | | | IAML | | 22 37 58.3 | |
| | comp=Z,94nm,0.6s | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **7.76** | **27** | Pn | **Pn** | **22 36 40.7** | **+0.8** |
| | baz=219,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **7.76** | **27** | Pn | **Pn** | **22 36 40.7** | **+0.8** |
| | baz=219,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **7.76** | **27** | ⇑*i*P | **Pn** | **22 36 40.6** | **+0.8** |
| SPA0 | | | | *e*S | **Sn** | **22 38 07.7** | **+0.1** |
| **SPB2** | **Spitsbergen Ar** | **7.76** | **27** | Pn | **Pn** | **22 36 40.8** | **+0.9** |
| **SPITS** | **Spitsbergen Ar** | **7.76** | **27** | Pn | **Pn** | **22 36 40.7** | **+0.8** |
| | baz=209,slow=13,SNR=504 | | | | | | |
| **KBS** | **Kingsbay** | **7.81** | **19** | Pn | **Pn** | **22 36 39.3** | **-1.2** |
| **KBS** | **Kingsbay** | **7.81** | **19** | *i* P | **Pn** | **22 36 39.3** | **-1.2** |
| **KBS** | **Kingsbay** | **7.81** | **19** | *e*P | **Pn** | **22 36 39.3** | **-1.2** |
| KBS | | | | IAML | | 22 39 26.1 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **KBS** | **Kingsbay** | **7.81** | **19** | Pn | **Pn** | **22 36 39.3** | **-1.2** |
| **KIF** | **Kilpisjarvi** | **7.87** | **101** | Pn | **Pn** | **22 36 41.2** | **-0.1** |
| KIF | | | | Sn | **Sn** | **22 38 04.7** | **-5.5** |
| **KIF** | **Kilpisjarvi** | **7.87** | **101** | *e*P | **Pn** | **22 36 41.0** | **-0.3** |
| KIF | | | | *e*S | **Sn** | **22 38 04.5** | **-5.6** |
| **MOR8** | **Moi Rana** | **7.95** | **128** | *e*P | **Pn** | **22 36 43.5** | **+1.0** |
| MOR8 | | | | *e*S | **Sn** | **22 38 06.7** | **-5.8** |
| MOR8 | | | | IAML | | 22 38 11.1 | |
| | comp=Z,43nm,0.4s | | | | | | |
| MOR8 | | | | IAML | | 22 38 11.2 | |
| | comp=Z,42nm,0.4s | | | | | | |
| **HAMF** | **Hammerfest** | **8.06** | **87** | Pn | **Pn** | **22 36 42.0** | **-1.9** |
| HAMF | | | | Sn | **Sn** | **22 38 09.0** | **-5.8** |
| **HAMF** | **Hammerfest** | **8.06** | **87** | *e*P | **Pn** | **22 36 42.1** | **-1.7** |
| HAMF | | | | *e*S | **Sn** | **22 38 07.1** | **-7.7** |
| HAMF | | | | IAML | | 22 38 16.2 | |
| | comp=Z,11nm,0.4s | | | | | | |
| HAMF | | | | IAML | | 22 38 16.3 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **SALU** | **Saltoluokta** | **8.15** | **114** | *e*P | **Pn** | **22 36 45.5** | **+0.2** |
| SALU | | | | *e*S | **Sn** | **22 38 12.8** | **-4.6** |
| **KTK1** | **Kautokeino** | **8.62** | **97** | *e*P | **Pn** | **22 36 51.8** | **+0.2** |
| KTK1 | | | | *e*S | **Sn** | **22 38 21.1** | **-6.6** |
| KTK1 | | | | IAML | | 22 38 42.2 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **NSS** | **Namsos** | **8.79** | **140** | *e*P | **Pn** | **22 36 54.2** | **+0.3** |
| NSS | | | | *e*S | **Sn** | **22 38 26.9** | **-6.0** |
| NSS | | | | IAML | | 22 38 32.2 | |
| | comp=Z,30nm,0.5s | | | | | | |
| NSS | | | | IAML | | 22 38 32.3 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **HEF** | **Hetta** | **9.07** | **100** | *e*P | **Pn** | **22 36 57.3** | **-0.5** |
| HEF | | | | *e*S | **Sn** | **22 38 32.3** | **-7.5** |
| **ARA0** | **ARCESS Array S** | **9.07** | **92** | Pn | **Pn** | **22 36 57.5** | **-0.4** |
| | baz=294,slow=10 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **22 38 33.2** | **-6.7** |
| | baz=286,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.07** | **92** | *e*P | **Pn** | **22 36 57.4** | **-0.4** |
| ARA0 | | | | Pn | Pn | 22 36 57.5 | -0.4 |
| | baz=294,slow=10 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **22 38 33.2** | **-6.7** |
| | baz=286,slow=22 | | | | | | |
| ARA0 | | | | IAML | | 22 38 46.7 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.07** | **92** | Pn | **Pn** | **22 36 57.5** | **-0.4** |
| | baz=295,slow=12,SNR=199 | | | | | | |
| ARCES | | | | Sn | **Sn** | **22 38 32.8** | **-7.1** |
| | baz=315,slow=22,SNR=1.1 | | | | | | |
| ARCES | | | | LR | LR | 22 40 10.4 | |
| | comp=Z,685nm,21.3s,baz=288,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.07** | **92** | Pn | **Pn** | **22 36 57.1** | **-0.7** |
| **KEV** | **Kevo** | **9.45** | **89** | Pn | **Pn** | **22 37 01.9** | **-1.0** |
| **KEV** | **Kevo** | **9.45** | **89** | *e*P | **Pn** | **22 37 02.2** | **-0.7** |
| **KEV** | **Kevo** | **9.45** | **89** | Pn | **Pn** | **22 37 01.9** | **-1.0** |
| **TBLU** | **Trondheim** | **9.64** | **148** | *e*P | **Pn** | **22 37 05.4** | **-0.2** |
| **AKN** | **Aaknes** | **10.20** | **158** | Pn | **Pn** | **22 37 13.5** | **+0.2** |
| **AKN** | **Aaknes** | **10.20** | **158** | Pn | **Pn** | **22 37 13.5** | **+0.2** |
| **BORG** | **Borgarnes** | **10.27** | **236** | LR | LR | 22 40 17.0 | |
| | comp=Z,867nm,21.7s,baz=343,slow=32 | | | | | | |
| **NOD** | **Norderasen** | **10.35** | **136** | *e*P | **Pn** | **22 37 16.0** | **+0.6** |
| **NOR** | **Nord** | **10.37** | **347** | Pn | **Pn** | **22 37 12.1** | **-3.4** |
| **NOR** | **Nord** | **10.37** | **347** | *i* P | **Pn** | **22 37 12.0** | **-3.4** |
| NOR | | | | IAmb | IAmb | 22 37 16.3 | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **NOR** | **Nord** | **10.37** | **347** | *e*P | **Pn** | **22 37 12.0** | **-3.4** |
| NOR | | | | *e*S | Sn | 22 38 58.1 | -13 |
| **DOMB** | **Dombas** | **10.60** | **153** | *e*P | **Pn** | **22 37 18.9** | **+0.1** |
| **SUMG** | **Summit** | **11.31** | **291** | *i* P | **Pn** | **22 37 26.2** | **-2.5** |
| SUMG | | | | IAmb | IAmb | 22 37 30.1 | |
| | comp=Z,0.5nm,0.2s | | | | | | |
| **SUMG** | **Summit** | **11.31** | **291** | Pn | **Pn** | **22 37 26.3** | **-2.5** |
| **SKAR** | **Skarslia** | **11.81** | **157** | *e*P | **Pn** | **22 37 35.6** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **11.88** | **150** | Pn | **Pn** | **22 37 36.8** | **+0.5** |
| | baz=342,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **11.88** | **150** | Pn | **Pn** | **22 37 36.8** | **+0.5** |
| | baz=342,slow=14 | | | | | | |
| **NOA** | **NORSAR Array B** | **11.88** | **150** | Pn | **Pn** | **22 37 35.9** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=335,slow=11,SNR=17 | | | | | | |
| NOA | | | | LR | LR | 22 42 00.8 | |
| | comp=Z,1μm,20.3s,baz=340,slow=37 | | | | | | |
| **NC602** | **NORSAR Array S** | **12.22** | **149** | *e*P | **Pn** | **22 37 39.8** | **-1.1** |
| **NRA0** | **NORESS Array S** | **12.22** | **149** | Pn | **Pn** | **22 37 40.8** | **-0.1** |
| | baz=338,slow=16 | | | | | | |
| **NRA0** | **NORESS Array S** | **12.22** | **149** | Pn | **Pn** | **22 37 40.8** | **-0.1** |
| | baz=338,slow=16 | | | | | | |
| **APA0** | **Apatity Array** | **12.43** | **93** | Pn | **Pn** | **22 37 42.0** | **-1.7** |
| | baz=322,slow=14 | | | | | | |
| APA0 | | | | Sn | **Sn** | **22 39 53.5** | **-8.4** |
| | baz=312,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **12.43** | **93** | Pn | **Pn** | **22 37 42.0** | **-1.7** |
| | baz=322,slow=14 | | | | | | |
| APA0 | | | | Sn | **Sn** | **22 39 53.5** | **-8.4** |
| | baz=312,slow=28 | | | | | | |
| **LVZ** | **Lovozero** | **12.78** | **90** | Pn | **Pn** | **22 37 46.2** | **-2.4** |
| **KONO** | **Kongsberg** | **12.98** | **155** | *e*P | Pn | 22 37 43.4 | -7.8 |
| **KONO** | **Kongsberg** | **12.98** | **155** | Pn | **Pn** | **22 37 51.8** | **+0.5** |
| **HFS** | **Hagfors** | **13.15** | **146** | Pn | **Pn** | **22 37 53.8** | **+0.2** |
| | comp=Z,2.7nm,0.3s,baz=342,slow=9.3,SNR=70 | | | | | | |
| HFS | | | | Sn | **Sn** | **22 40 13.6** | **-6.0** |
| | comp=Z,1.0nm,0.3s,baz=351,slow=24,SNR=3.2 | | | | | | |
| HFS | | | | LR | LR | 22 42 39.7 | |
| | comp=Z,1μm,21.0s,baz=301,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **13.15** | **146** | Pn | **Pn** | **22 37 53.0** | **-0.5** |
| | baz=341,slow=11 | | | | | | |
| **HFS** | **Hagfors** | **13.15** | **146** | Pn | **Pn** | **22 37 53.0** | **-0.5** |
| | baz=341,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **14.81** | **121** | P | **Pn** | **22 38 15.5** | **-0.7** |
| | baz=334,slow=14 | | | | | | |
| **FIA0** | **FINESS Array S** | **14.81** | **121** | P | **Pn** | **22 38 15.5** | **-0.7** |
| | baz=334,slow=14 | | | | | | |
| **FIA1** | **FINESS Array S** | **14.81** | **121** | Pn | **Pn** | **22 38 15.3** | **-0.9** |
| **FINES** | **FINESS Array B** | **14.81** | **121** | Pn | **Pn** | **22 38 15.5** | **-0.7** |
| | comp=Z,1.3nm,0.3s,baz=334,slow=12,SNR=42 | | | | | | |
| FINES | | | | LR | LR | 22 43 27.8 | |
| | comp=Z,2μm,18.8s,baz=310,slow=35 | | | | | | |
| **SLVR** | **Solovky** | **14.91** | **99** | *e*P | **Pn** | **22 38 13.4** | **-4.1** |
| | comp=Z,49nm,1.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.60** | **184** | Pn | **P** | **22 38 42.9** | **+0.9** |
| | baz=7.5,slow=12,SNR=3.8 | | | | | | |
| **SLIT** | **Slitere, Latvi** | **17.21** | **134** | *e*P | **P** | **22 38 50.5** | **+1.9** |
| SLIT | | | | IAmb | IAmb | 22 39 34.1 | |
| | comp=Z,448nm,1.2s | | | | | | |
| **VSU** | **Vasula** | **17.54** | **125** | *e*P | **Pn** | **22 38 51.0** | **-0.2** |
| **SFJD** | **Kangerlussuaq** | **17.60** | **279** | LR | LR | 22 44 49.0 | |
| | comp=Z,945nm,20.2s,baz=56,slow=34 | | | | | | |
| **TULEG** | **Thule** | **18.00** | **315** | P | **Pn** | **22 38 51.1** | **-5.8** |
| TULEG | | | | IAmb | IAmb | 22 38 53.5 | |
| | comp=Z,75nm,0.9s | | | | | | |
| **LSH** | **Leshukonskoye** | **18.15** | **89** | *e*P | **Pn** | **22 38 56.4** | **-2.3** |
| | comp=Z,58nm,1.5s | | | | | | |
| LSH | | | | *e*S | Sn | 22 42 08.3 | -13 |
| **KLMR** | **Klimovskoe** | **19.18** | **104** | *e*P | **Pn** | **22 39 10.8** | **-0.4** |
| | comp=Z,152nm,1.3s | | | | | | |
| KLMR | | | | *e*S | Sn | 22 42 32.3 | -14 |
| **KLMR** | **Klimovskoe** | **19.18** | **104** | *e*Pn | **Pn** | **22 39 11.0** | **-0.3** |
| KLMR | | | | AMP | | 22 39 13.5 | |
| | comp=Z,152nm,1.3s | | | | | | |
| KLMR | | | | *e*Sn | **S** | **22 42 47.4** | **0.0** |
| KLMR | | | | *e*Sn | **S** | **22 42 47.4** | **0.0** |
| **PABE** | **Paberze** | **19.53** | **134** | *e*P | **Pn** | **22 39 15.7** | **+0.2** |
| PABE | | | | IAmb | IAmb | 22 39 28.1 | |
| | comp=Z,318nm,1.7s | | | | | | |
| **PABE** | **Paberze** | **19.53** | **134** | P | **Pn** | **22 39 15.4** | **0.0** |
| **PRGR** | **Permogore** | **20.46** | **96** | *e*P | **P** | **22 39 25.2** | **+0.8** |
| **NACGM** | **Naroch** | **20.74** | **130** | *i* P | **P** | **22 39 28.0** | **+0.7** |
| **SUW** | **Suwalki** | **20.74** | **137** | *e*P | **P** | **22 39 28.3** | **+0.9** |
| **SUW** | **Suwalki** | **20.74** | **137** | *e*P | Pn | 22 39 28.7 | -1.1 |
| **SUW** | **Suwalki** | **20.74** | **137** | P | **P** | **22 39 27.1** | **-0.2** |
| **MNK** | **Minsk** | **21.37** | **129** | *i* P | **P** | **22 39 34.0** | **-0.1** |
| | comp=E,7.0nm,1.0s | | | | | | |
| MNK | | | | *i* P | **P** | **22 39 34.0** | **-0.1** |
| | comp=N,96nm,1.0s | | | | | | |
| MNK | | | | *i* P | **P** | **22 39 34.0** | **-0.1** |
| | comp=Z,133nm,1.0s,baz=336 | | | | | | |
| MNK | | | | *i* PP | PnPn | 22 40 04.8 | +11 |
| MNK | | | | *i* S | **S** | **22 43 33.5** | **+2.4** |
| MNK | | | | *i* SS | **SnSn** | **22 43 58.3** | **+5.1** |
| MNK | | | | *i* LR | LR | 22 46 04.6 | |
| MNK | | | | *i* LRM | MLR | 22 46 56.0 | |
| | comp=E,39nm,16.4s | | | | | | |
| MNK | | | | *i* LRM | MLR | 22 46 59.6 | |
| | comp=N,872nm,16.4s | | | | | | |
| MNK | | | | *i* LRM | MLR | 22 47 00.1 | |
| | comp=Z,1μm,16.4s | | | | | | |
| **CLL** | **Collm** | **21.56** | **155** | *i* P | **P** | **22 39 37.3** | **+1.1** |
| | comp=Z,80nm,2.0s | | | | | | |
| **CLL** | **Collm** | **21.56** | **155** | P | **P** | **22 39 36.7** | **+0.5** |
| **BTNL** | **Ternell** | **21.58** | **167** | *d*P | **P** | **22 39 37.5** | **+1.0** |
| **BRG** | **Berggiesshubel** | **22.11** | **154** | *e*P | **P** | **22 39 43.2** | **+1.0** |
| BRG | | | | Amp | | 22 39 44.9 | |
| | comp=Z,169nm,2.6s | | | | | | |
| **BEL** | **Belsk** | **22.31** | **142** | *e*P | **P** | **22 39 46.0** | **+1.8** |
| **NKC** | **Novy Kostel** | **22.54** | **157** | *e*P | **P** | **22 39 49.3** | **+2.5** |
| **CHVC** | **Chvalec** | **22.69** | **151** | *e*P | **P** | **22 39 49.7** | **+1.3** |
| **OSTC** | **Ostas** | **22.75** | **151** | *e*P | **P** | **22 39 50.6** | **+1.6** |
| **UPC** | **Upice** | **22.77** | **151** | *e*P | **P** | **22 39 50.2** | **+1.1** |
| **DPC** | **Dobruska-Polom** | **22.97** | **151** | *e*P | **P** | **22 39 52.1** | **+0.8** |
| **PRU** | **Pruhonice** | **23.06** | **154** | *e*P | **P** | **22 39 54.0** | **+1.8** |
| **OBN** | **Obninsk** | **23.11** | **117** | P | **P** | **22 39 54.0** | **+1.3** |
| | comp=Z,9.4nm,0.9s,baz=70,slow=6.1,SNR=11 | | | | | | |
| OBN | | | | LR | LR | 22 48 27.8 | |
| | comp=Z,381nm,20.0s,baz=332,slow=36 | | | | | | |
| **OBN** | **Obninsk** | **23.11** | **117** | P | **P** | **22 39 52.8** | **+0.1** |
| **OJC** | **Ojcow** | **23.67** | **145** | *e*P | **P** | **22 39 59.8** | **+1.4** |
| **OJC** | **Ojcow** | **23.67** | **145** | P | **P** | **22 39 59.0** | **+0.7** |
| **MORC** | **Moravsky Berou** | **23.72** | **149** | *e*P | **P** | **22 40 00.3** | **+1.5** |
| **MORC** | **Moravsky Berou** | **23.72** | **149** | P | **P** | **22 39 59.8** | **+1.0** |
| **KHC** | **Kasperske Hory** | **23.77** | **156** | *e*P | **P** | **22 40 03.7** | **+4.4** |
| **KHC** | **Kasperske Hory** | **23.77** | **156** | P | **P** | **22 40 00.2** | **+0.9** |
| **TREC** | **Trest** | **23.87** | **152** | *e*P | **P** | **22 40 01.9** | **+1.6** |
| **VRAC** | **Vranov** | **24.02** | **151** | ⇑P | **P** | **22 40 03.1** | **+1.4** |
| **VRAC** | **Vranov** | **24.02** | **151** | *e*P | **P** | **22 40 02.2** | **+0.5** |
| **GEC2** | **GERESS Array S** | **24.06** | **156** | P | **P** | **22 40 04.3** | **+2.1** |
| GEC2 | | | | IAmb | IAmb | 22 40 20.6 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **GERES** | **GERESS Array B** | **24.06** | **156** | P | **P** | **22 40 03.7** | **+1.5** |
| | comp=Z,1.6nm,0.6s,baz=3.6,slow=6.2,SNR=3.5 | | | | | | |
| GERES | | | | LR | LR | 22 49 11.7 | |
| | comp=Z,870nm,19.2s,baz=311,slow=36 | | | | | | |
| **KRUC** | **Moravsky** | **24.23** | **151** | *e*P | **P** | **22 40 04.1** | **+0.5** |
| **RES** | **Resolute Bay** | **24.50** | **320** | P | **P** | **22 40 07.9** | **+2.1** |
| | comp=Z,1.1nm,0.8s,baz=49,slow=11,SNR=4.8 | | | | | | |
| RES | | | | LR | LR | 22 49 23.8 | |
| | comp=Z,1μm,18.8s,baz=74,slow=36 | | | | | | |
| **LANS** | **Liptovska Anna** | **24.64** | **146** | *e*P | **P** | **22 40 09.5** | **+2.1** |
| **KOLL** | **Kolacno** | **25.02** | **148** | *e*P | **P** | **22 40 12.4** | **+1.7** |
| **MODS** | **Modra-Piesok** | **25.04** | **150** | *e*P | **P** | **22 40 14.7** | **+3.8** |
| **DAVA** | **Damuels** | **25.17** | **162** | *e*P | **P** | **22 40 14.6** | **+2.3** |
| | comp=Z,13nm,1.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **25.19** | **131** | P | **P** | **22 40 12.0** | **-0.3** |
| | comp=Z,8.2nm,0.8s,baz=335,slow=10,SNR=18 | | | | | | |
| AKASG | | | | LR | LR | 22 49 42.2 | |
| | comp=Z,1μm,18.1s,baz=328,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **25.19** | **131** | P | **P** | **22 40 12.4** | **+0.2** |
| **MOTA** | **Moosalm** | **25.24** | **160** | *e*P | **P** | **22 40 14.8** | **+1.9** |
| | comp=Z,13nm,1.4s | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **25.24** | **144** | *e*P | **P** | **22 40 15.6** | **+2.8** |
| **CONA** | **Conrad Observa** | **25.26** | **153** | *e*P | **P** | **22 40 15.0** | **+2.0** |
| | comp=Z,20nm,1.7s | | | | | | |
| **WATA** | **Walderalm** | **25.30** | **160** | *e*P | **P** | **22 40 15.1** | **+1.6** |
| | comp=Z,7.9nm,1.2s | | | | | | |
| **FRB** | **Frobisher Bay** | **25.31** | **286** | P | **P** | **22 40 14.4** | **+1.2** |

**KBN Korca 33.15 149 P P 22 41 22.7 -0.5**
KBN IAmb IAmb 22 41 26.7
comp=Z,13nm,1.0s
**AKTO Aktyubinsk 33.60 97 LR LR**
comp=Z,322nm,21.3s,baz=333,slow=36 22 54 54.3
**TIP Timpagrande 33.97 155 P P 22 41 31.7 +1.4**
TIP IAmb IAmb 22 41 51.8
comp=Z,14nm,1.3s
**KIV Kislovodsk 34.90 119 P P 22 41 39.6 +1.2**
KIV IAmb IAmb 22 41 56.2
comp=Z,6.9nm,0.7s
**AGG Agios Georgios 34.97 147 P P 22 41 39.9 +0.9**
AGG IAmb IAmb 22 41 40.8
comp=Z,8.9nm,0.9s
**KBZ Khabaz 35.16 119 P P 22 41 41.5 +0.9**
comp=Z,5.7nm,0.8s,baz=180,slow=5.4,SNR=10
KBZ LR LR 22 55 58.1
comp=Z,492nm,18.8s,baz=340,slow=36
**BRVK Borovoye 35.17 83 P P 22 41 41.8 +1.3**
BRVK IAmb IAmb 22 41 43.4
comp=Z,11nm,1.5s
**ABKAR Akbulak array 35.24 96 P P 22 41 42.2 +1.1**
**VAE Valguarnera 35.35 158 LR LR** 22 55 04.4
comp=Z,552nm,21.4s,baz=26,slow=34
**BR131 Keskin Array S 36.57 132 P P 22 41 54.6 +1.7**
**BRTR Keskin Array B 36.57 132 P P 22 41 54.7 +1.9**
comp=Z,1.4nm,0.7s,baz=338,slow=5.3,SNR=5.6
BRTR LR LR 22 59 07.6
comp=Z,434nm,18.0s,baz=346,slow=40
**BRTR Keskin Array B 36.57 132 P P 22 41 55.2 +2.3**
**INK Inuvik 36.59 333 LR LR** 22 58 03.9
comp=Z,195nm,18.5s,baz=18,slow=38
**INK Inuvik 36.59 333 P P 22 41 51.5 -1.0**
INK IAmb IAmb 22 41 59.2
comp=Z,14nm,1.1s
**KEST Kesra 36.59 166 LR LR** 22 57 10.0
comp=Z,409nm,19.1s,baz=284,slow=37
**TOLK Toolik Lake Re 38.21 342 P P 22 42 06.5 +0.1**
TOLK IAmb IAmb 22 42 14.9
comp=Z,17nm,1.5s
**YKA Yellowknife Ar 38.46 317 P P 22 42 08.7 +0.4**
comp=Z,1.7nm,0.8s,baz=30,slow=8.7,SNR=18
YKA PcP **PcP 22 44 20.9 -0.1**
comp=Z,1.6nm,0.8s,baz=22,slow=2.8,SNR=17
YKA LR LR 22 57 21.0
comp=Z,358nm,20.6s,baz=71,slow=35
**YKA Yellowknife Ar 38.46 317 P P 22 42 07.7 -0.7**
**ELL Elmali 38.61 138 P P 22 42 11.8 +1.7**
**ZAA0 Zalesovo Array 38.83 70 P P 22 42 12.1 +0.6**
**ZALV Zalesovo Beam 38.83 70 P P 22 42 12.8 +1.3**
comp=Z,1.8nm,0.8s,baz=318,slow=8.7,SNR=8.4
ZALV PP **PnPn 22 43 44.2 +1.9**
comp=Z,0.5nm,0.6s,baz=306,slow=13,SNR=3.7
ZALV PcP **PcP 22 44 22.8 +0.4**
comp=Z,0.6nm,0.5s,baz=299,slow=1.5,SNR=2.7
**ZALV Zalesovo Beam 38.83 70 P P 22 42 11.4 -0.1**
**BMAR Burnt Mountain 38.85 339 P P 22 42 12.7 +1.0**
**EPYK Eagle Plains 38.85 333 P P 22 42 11.4 -0.3**
EPYK IAmb IAmb 22 42 18.4
comp=Z,14nm,1.1s
**GNI Garni 38.99 119 LR LR** 22 58 29.0
comp=Z,331nm,18.1s,baz=343,slow=36
**GNI Garni 38.99 119 P P 22 42 15.2 +1.8**
**IDI Anoyia 39.05 145 LR LR** 22 59 28.6
comp=Z,272nm,19.7s,baz=329,slow=38
**MDT Midelt 39.14 185 LR LR** 22 56 48.2
comp=Z,215nm,20.9s,baz=10,slow=34
**KURK Kurchatov 39.78 78 P P 22 42 20.1 +0.6**
KURK IAmb IAmb 22 42 21.9
comp=Z,11nm,1.0s
**KURBB Kurchatov Arra 39.83 78 LR LR** 23 01 50.1
comp=Z,194nm,18.2s,baz=291,slow=41
**BILL Bilibino 40.11 7 P P 22 42 22.1 0.0**
**PRP Porcupine Dome 40.80 338 P P 22 42 29.1 +1.1**
**SIRT Sirnak 40.86 123 P P 22 42 30.1 +1.3**
**CSS Mathiatis 41.06 135 P P 22 42 31.7 +1.4**
CSS IAmb IAmb 22 42 53.2
comp=Z,25nm,1.3s
**DAWY Dawson 41.41 334 P P 22 42 34.2 +1.3**
**J25K Salcha River, 41.66 338 P P 22 42 36.7 +1.8**
**ILAR Eielson Array 41.68 339 P P 22 42 35.0 0.0**
comp=Z,1.9nm,0.8s,baz=8.4,slow=6.3,SNR=15
ILAR PcP **PcP 22 44 31.1 -0.3**
comp=Z,0.8nm,0.8s,baz=314,slow=2.7,SNR=4.8
ILAR LR LR 23 03 15.9
comp=Z,123nm,19.0s,baz=356,slow=41
**ILAR Eielson Array 41.68 339 P P 22 42 36.8 +1.7**
**CCB Clear Creek Bu 41.90 339 P P 22 42 38.4 +1.5**
CCB IAmb IAmb 22 42 45.3
comp=Z,11nm,1.1s
**SCRK Sand Creek 42.10 337 P P 22 42 40.3 +1.6**
**FFC Flin Flon 42.33 302 P P 22 42 39.5 -1.0**
FFC IAmb IAmb 22 42 47.4
comp=Z,9.5nm,1.0s
**DOT Dot Lake 42.42 337 P P 22 42 40.0 -1.2**
DOT IAmb IAmb 22 42 49.3
comp=Z,11nm,1.2s
**BCAR Beaver Creek A 42.69 335 P P 22 42 44.2 +0.8**
**MCK McKinley 42.91 340 P P 22 42 47.2 +2.0**
MCK IAmb IAmb 22 42 50.9
comp=Z,13nm,1.3s
**MMAI Mount Meron Ar 43.40 133 LR LR** 23 02 03.2
comp=Z,153nm,21.2s,baz=181,slow=38
**CAST Castle Rocks 43.55 342 P P 22 42 50.6 +0.3**
CAST IAmb IAmb 22 42 58.4
comp=Z,10nm,1.2s
**KKAR Karatay Array 44.04 90 P P 22 42 56.4 +1.9**
**MAKZ Makanchi 44.27 78 P P 22 42 57.9 +1.6**
**MK31 Makanchi Array 44.38 77 P P 22 42 58.6 +1.4**
MK31 IAmb IAmb 22 42 59.6
comp=Z,10.0nm,1.4s
**MKAR Makanchi Array 44.38 77 P P 22 42 58.0 +0.8**
comp=Z,4.5nm,0.9s,baz=342,slow=6.1,SNR=32
MKAR PP **PcP 22 44 41.3 +0.5**
comp=Z,0.5nm,0.7s,baz=332,slow=7.4,SNR=3.6
**MKAR Makanchi Array 44.38 77 P P 22 42 58.2 +1.0**
**N25K Chitina, Valde 44.47 336 P P 22 42 56.2 -1.5**
N25K IAmb IAmb 22 43 00.6
comp=Z,11nm,1.2s
**SADO Sadowa 44.53 277 LR LR** 23 00 25.4
comp=Z,247nm,18.1s,baz=26,slow=35
**ULM Lac du Bonnet 44.65 294 P P 22 42 59.1 -0.2**
comp=Z,1.7nm,0.6s,baz=12,slow=6.6,SNR=3.1
ULM LR LR 23 00 23.6
comp=Z,297nm,21.2s,baz=34,slow=34
**GEYT Alibeck 44.92 106 LR LR** 23 03 52.9
comp=Z,353nm,18.4s,baz=346,slow=39
**DLBC Dease Lake 45.24 325 LR LR** 23 02 15.5
comp=Z,367nm,18.2s,baz=348,slow=36
**AAK Ala-Archa 45.71 87 LR LR** 23 01 39.8
comp=Z,265nm,18.7s,baz=332,slow=35
**AAK Ala-Archa 45.71 87 P P 22 43 09.5 +1.6**
AAK IAmb IAmb 22 43 27.2
comp=Z,9.2nm,1.5s
**EIL Elat 46.51 135 LR LR** 23 02 37.3
comp=Z,122nm,21.8s,baz=346,slow=36
**BTK Batken 46.90 92 P P 22 43 18.1 +0.9**
BTK IAmb IAmb 22 43 25.4
comp=Z,3.8nm,0.8s
**CHGR Chuyangaron 47.66 94 P P 22 43 24.9 +1.7**
**GAR Garm 47.71 93 P P 22 43 25.3 +1.7**
GAR IAmb IAmb 22 43 35.6
comp=Z,7.5nm,0.8s
**DRK Karamyk 47.73 91 P P 22 43 25.6 +1.6**
**WMQ Urumqi 48.71 74** *eP* **P 22 43 33.7 +2.5**
WMQ sP pwP 22 43 44.2 +7.4
WMQ pmax pmax
comp=Z,15nm,1.1s
**KSH Kashi 49.01 87** P P 22 43 39.1 +5.5
KSH sP pwP 22 43 45.3 +6.0
KSH pmax pmax
comp=Z,5.0nm,0.8s
**SONM Songino Array 50.35 57 P P 22 43 45.2 +1.5**
comp=Z,2.7nm,1.0s,baz=330,slow=6.8,SNR=14
SONM PcP **PcP 22 45 02.7 +0.6**
comp=Z,1.0nm,1.0s,baz=303,slow=4.0,SNR=3.1
**SONM Songino Array 50.35 57 P P 22 43 44.5 +0.8**
SONM IAmb IAmb 22 43 46.0
comp=Z,6.8nm,1.2s
**EGMT Eagleton 50.46 304 P P 22 43 43.8 -0.7**
EGMT IAmb IAmb 22 43 46.5
comp=Z,11nm,0.9s
**ULN Ulaanbaatar 50.49 56 P P 22 43 44.6 -0.2**
ULN IAmb IAmb 22 43 47.4
comp=Z,7.0nm,1.2s
**BBB Bella Bella 50.79 321 LR LR** 23 07 07.9
comp=Z,295nm,18.7s,baz=25,slow=38
**NEW Newport 52.07 310 LR LR** 23 05 53.0
comp=Z,316nm,18.5s,baz=12,slow=36
**GCMT Greycliff 52.51 303 P P 22 43 59.4 -0.5**
**H17A Grant Village 54.04 303 P P 22 44 12.0 +0.7**
H17A IAmb IAmb 22 44 15.3
comp=Z,6.0nm,1.1s
**S44A Carbondale 54.11 282 P P 22 44 11.2 -0.4**
**TKL Tuckaleechee C 54.28 276 LR LR** 23 05 00.9
comp=Z,274nm,20.3s,baz=36,slow=34
**CCM Cathedral Cave 54.38 284 P P 22 44 12.2 -1.4**
CCM IAmb IAmb 22 44 19.5
comp=Z,7.8nm,1.0s
**PETK Petropavlovsk- 54.45 16 LR LR** 23 07 26.6
comp=Z,122nm,18.4s,baz=5.6,slow=36
**RAYN Ar Rayn 54.94 125 P P 22 44 20.1 +2.3**
**PD31 Pinedale Array 55.29 302 P P 22 44 19.9 -0.5**
**PDAR Pinedale Array 55.29 302 P P 22 44 18.6 -1.8**
comp=Z,1.2nm,0.9s,baz=43,slow=6.7,SNR=6.2
PDAR LR LR 23 07 23.8
comp=Z,195nm,20.9s,baz=24,slow=35
**PDAR Pinedale Array 55.29 302 P P 22 44 20.1 -0.3**
**PBMO Poplar Bluff 55.31 282 P P 22 44 19.8 -0.5**
PBMO IAmb IAmb 22 44 27.1
comp=Z,11nm,1.1s
**MGMO Mountain Grove 55.52 284 P P 22 44 20.9 -1.0**
**SHEM Shemya Is, Ala 55.68 4 LR LR** 23 06 59.5
comp=Z,41nm,19.4s,baz=17,slow=35
**HLID Hailey 55.81 306 P P 22 44 22.9 -1.1**
**GTA Gaotai 56.33 66** ⇑P **P 22 44 29.2 +1.4**
GTA pP pwP 22 44 35.0 +1.5
GTA sP sP 22 44 38.6 +7.5
GTA pmax pmax
comp=Z,7.0nm,1.8s
**BNX BinXian 57.24 41** ⇑P **P 22 44 34.4 +0.4**
BNX pmax pmax
comp=Z,18nm,1.0s
BNX pmax pmax
comp=Z,450nm,5.5s
**KOWA Kowa 57.35 183 LR LR** 23 11 57.8
comp=Z,169nm,18.2s,baz=20,slow=39
**O20A White River Ci 57.39 300 P P 22 44 35.6 +0.3**
**GOMU GeErMu 57.85 72 P P 22 44 38.2 -0.6**
GOMU sP pP 22 44 40.4 -0.8
GOMU pmax pmax
comp=Z,8.0nm,1.1s
**HHC Hu-ho-hao-te 58.20 55** *eP* **P 22 44 41.7 +0.8**
HHC pmax pmax
comp=Z,9.0nm,1.1s
HHC pmax pmax
comp=Z,220nm,5.5s
**ELK Elko 58.66 306 LR LR** 23 10 11.4
comp=Z,287nm,18.9s,baz=32,slow=36
**CN2 Changchun 58.69 43** *eP* **P 22 44 44.5 +0.4**
CN2 eS **S 22 52 45.0 -3.2**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=N,500nm,10.0s
CN2 LR LR
comp=E,500nm,10.0s
CN2 LR LR
comp=Z,500nm,12.0s
**TORD Torodi Ar. Bea 58.69 177 P P 22 44 44.9 +0.4**
comp=Z,3.7nm,0.8s,baz=352,slow=7.0,SNR=12
**TORD Torodi Ar. Bea 58.69 177 P P 22 44 44.1 -0.4**
TORD IAmb IAmb 22 44 48.8
comp=Z,7.6nm,1.4s
**WSAR Wadi Sarin 58.81 112 LR LR** 23 13 20.8
comp=Z,75nm,21.1s,baz=348,slow=39
**S22A 4UR Ranch, Cre 59.23 297 P P 22 44 48.3 0.0**
S22A IAmb IAmb 22 44 56.5
comp=Z,8.9nm,1.4s
**PV13 Radium Mtn., P 59.39 299 P P 22 44 49.3 -0.1**
**YBH Yreka Blue Hor 59.55 312 LR LR** 23 10 00.1
comp=Z,317nm,20.1s,baz=22,slow=36
**USRK Ussuriysk Ar. 59.63 37 P P 22 44 51.2 +0.6**
comp=Z,1.6nm,0.5s,baz=352,slow=6.6,SNR=8.4
USRK PcP **PcP 22 45 37.0 -0.7**
comp=Z,1.8nm,0.8s,baz=346,slow=6.9,SNR=4.3
**BJI Beijing 60.12 52 P P 22 44 55.6 +1.5**
BJI pmax pmax
comp=Z,5.0nm,1.1s
**MVCO Mesa Verde 60.19 299 P P 22 44 55.5 +0.5**
**LZH Lanzhou 60.57 64** *eP* **P 22 44 58.4 +0.9**
LZH pP pwP 22 45 02.4 -0.7
LZH sP sP 22 45 05.2 +4.4
LZH pmax pmax
comp=Z,9.0nm,1.2s
**NVAR Mina Array Bea 61.62 307 LR LR** 23 12 15.9
comp=Z,250nm,18.4s,baz=27,slow=37
**ANMO Albuquerque 61.75 296 LR LR** 23 11 52.4
comp=Z,434nm,18.2s,baz=32,slow=36
**ABTX Abilene, Hawle 61.95 289 P P 22 45 06.8 +0.2**
**LSA Lhasa 62.79 78 P P 22 45 15.6 +2.8**
LSA LR LR
comp=N,360nm,7.0s
LSA LR LR
comp=E,230nm,6.4s
**XAN Xi'an 63.90 60 P P 22 45 19.9 +0.3**
XAN pmax pmax
comp=Z,6.0nm,1.2s
**DBIC Dimbokro 65.15 184 LR LR** 23 16 34.2
comp=Z,127nm,18.6s,baz=14,slow=38
**SJG San Juan 65.21 252 LR LR** 23 12 10.0
comp=Z,50nm,18.9s,baz=36,slow=34
**KSRS Korea Array 65.30 43 P P 22 45 29.2 +0.6**
comp=Z,1.5nm,0.6s,baz=352,slow=5.9,SNR=3.9
**ATD Arta Tunnel 65.81 132 LR LR** 23 15 01.5
comp=Z,86nm,19.1s,baz=322,slow=37
**TXAR Lajitas Array 66.21 291 LR LR** 23 14 58.6
comp=Z,230nm,18.2s,baz=21,slow=36
**MAT Matsushiro 68.19 34 P P 22 45 46.9 -0.2**
**MJAR Matsushiro Arr 68.19 34 P P 22 45 47.7 +0.5**
comp=Z,11nm,1.0s,baz=344,slow=7.3,SNR=14
**MJAR Matsushiro Arr 68.19 34 P P 22 45 47.6 +0.5**
**NJ2 Nanjing 68.38 52** *eP* **P 22 45 48.2 -0.1**
NJ2 pmax pmax
comp=Z,6.0nm,0.6s
**PZH PanZhiHua 68.97 69 P P 22 45 53.6 +1.4**
PZH pmax pmax
comp=Z,8.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,4.5s
**LPIG La Paz 73.05 296 LR LR** 23 18 32.9
comp=Z,173nm,18.2s,baz=19,slow=36
**MDP Montagnes des 73.85 234 LR LR** 23 11 39.3
comp=Z,82nm,18.1s,baz=46,slow=30
**MBAR Mbarara 75.15 147 LR LR** 23 21 54.1
comp=Z,142nm,19.7s,baz=330,slow=38
**APG El Apazote 75.65 274 LR LR** 23 18 55.7
comp=Z,173nm,21.5s,baz=34,slow=35
**CMAR Chiang Mai Arr 75.71 75 P P 22 46 33.5 +1.0**
comp=Z,1.0nm,0.3s,baz=324,slow=7.0,SNR=10.0
CMAR PP **PP 22 49 23.6 +1.9**
comp=Z,0.4nm,0.3s,baz=338,slow=9.3,SNR=4.4
**CMAR Chiang Mai Arr 75.71 75 P P 22 46 33.7 +1.3**
**JTS Las Juntas de 78.36 267 LR LR** 23 22 12.9
comp=Z,70nm,19.3s,baz=140,slow=36
**TSUM Tsumeb 91.71 162 LR LR** 23 33 11.6
comp=Z,146nm,18.5s,baz=343,slow=38
**LBTB Lobatse 98.35 156 LR LR** 23 35 13.9
comp=Z,91nm,18.5s,baz=348,slow=37
**ASAR Alice Springs 125.62 53 PKP PKPdf 22 53 46.8 -1.2**
comp=Z,0.5nm,0.6s,baz=354,slow=2.5,SNR=4.5
**ASAR Alice Springs 125.62 53 PKPdf 22 53 48.1 +0.1**

*IDC **01** 22:42:12.4±2.7,7.7°13S×155.33E,h0km,mb3.6/4, mb1 3.9/5,mb1mx3.4/35,mbtmp3.7/5,ML1.9/1,MS3.6/3, Ms1 3.6/3,ms1mx2.8/56,Error ellipse: s-maj=74.1km s-min=35.8km az=119.0*

**ISC 01 22:42:18.5±1.9,7.2S±0.3×155.2E±0.2,h35km,n9,σ0s51/7, mb3.5/4,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **8.22** | **254** | Pn | **Pn** | **22 44 15.5** | **+0.1** |
| | 0.9nm,0.3s,baz=86,slow=6.5,SNR=3.1 | | | | | | |
| PMG | | | | Sn | **Sn** | **22 45 47.0** | **-0.2** |
| | 1.0nm,0.3s,baz=43,slow=22,SNR=4.5 | | | | | | |
| **CTA** | **Charters Tower** | **15.46** | **213** | LR | LR | 22 52 04.1 | |
| | comp=Z,68nm,18.7s,baz=84,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.84** | **236** | P | **P** | **22 47 28.3** | **-0.5** |
| | 1.0nm,0.7s,baz=57,slow=8.8,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **26.17** | **229** | P | **P** | **22 47 50.2** | **+0.3** |
| | 0.6nm,0.5s,baz=62,slow=8.5,SNR=4.9 | | | | | | |
| **JNU** | **Nakatsue** | **46.27** | **331** | LR | LR | 23 05 56.3 | |
| | comp=Z,169nm,22.0s,baz=344,slow=31 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.03** | **296** | P | **P** | **22 52 29.8** | **+0.6** |
| | 0.5nm,0.3s,baz=125,slow=5.4,SNR=4.7 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.84** | **13** | LR | LR | 23 16 11.2 | |
| | comp=Z,53nm,20.4s,baz=18,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.67** | **319** | P | **P** | **22 54 43.1** | **-0.6** |
| | 0.3nm,0.8s,baz=101,slow=6.0,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.24** | **285** | PKPbc | **PKPbc** | **23 02 14.0** | **+0.1** |
| | 1.0nm,0.8s,baz=53,slow=2.2,SNR=4.6 | | | | | | |

*KRSC **01** 22:47:47.9±0.8,54.99N×162.37E,h45km±20km,ML5.4*
*BGR **01** 22:47:48.5±0.0,55.60N×167.78E,h33km,mb5.0*
*MOS **01** 22:47:49.7±1.1,55.05N×162.26E,h51km,mb4.9/15,Error ellipse: s-maj=6.2km s-min=3.5km az=81.2*
*IDC **01** 22:47:49.9±0.5,55.19N×161.96E,h33km±4km,mb4.3/29, mb1 4.5/33,mb1mx4.5/40,mbtmp4.5/33,ML3.9/4,MS4.0/34, Ms1 4.0/34,ms1mx3.7/95,Error ellipse: s-maj=12.8km s-min=8.7km az=149.0*
*NEIC **01** 22:47:51.3±2.4,55.09N±0.06×162.2E±0.1,h49km±6km, mb4.7/180,Error ellipse: s-maj=10.9km s-min=6.1km az=139.0*
*BJI **01** 22:47:51.3±0.0,55.35N×161.76E,h63km,mb4.4/34, mB5.1/16,Ms4.5/3,Ms7 4.4/3*

**ISC 01 22:47:50.8±0.4,55.04N±0.03×162.24E±0.03,h49km±4km, h49km:pP-P,n575,σ1s35/567,mb4.7/161,MS4.1/30, 16C-18D,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **0.57** | **211** | PN | **Pn** | **22 48 01.0** | **-1.8** |
| **MKZ** | **Mys Kozlova** | **0.57** | **211** | *eP* | **Pn** | **22 48 01.0** | **-1.8** |
| **TUMD** | **Tumrok D** | **1.07** | **279** | *eP* | **Pn** | **22 48 08.7** | **-0.7** |
| TUMD | | | | *eS* | **Sn** | **22 48 21.4** | **-1.8** |
| **KBTR** | **Krutoberegovo** | **1.21** | **15** | PN | **Pn** | **22 48 10.1** | **-1.2** |
| **KBTR** | **Krutoberegovo** | **1.21** | **15** | *eP* | **Pn** | **22 48 10.1** | **-1.2** |
| **TUMR** | **Tumrok** | **1.23** | **282** | PN | **Pn** | **22 48 08.7** | **-2.9** |
| TUMR | | | | S | **Sn** | **22 48 21.4** | **-5.7** |
| **TUMR** | **Tumrok** | **1.23** | **282** | *eP* | **Pn** | **22 48 11.6** | **0.0** |
| **KBG** | **Krutoberegovo** | **1.24** | **12** | PN | **Pn** | **22 48 10.5** | **-1.2** |
| KBG | | | | S | **Sn** | **22 48 27.8** | **+0.5** |
| **KBG** | **Krutoberegovo** | **1.24** | **12** | *eP* | **Pn** | **22 48 10.5** | **-1.2** |
| KBG | | | | *eS* | **Sn** | **22 48 27.8** | **+0.5** |
| **ZLN** | **Zelenaya** | **1.27** | **321** | PN | **Pn** | **22 48 12.5** | **+0.3** |
| **ZLN** | **Zelenaya** | **1.27** | **321** | *eP* | **Pn** | **22 48 12.5** | **+0.3** |
| **KMNR** | **Kamenistaya** | **1.35** | **303** | PN | **Pn** | **22 48 13.3** | **0.0** |
| **KMNR** | **Kamenistaya** | **1.35** | **303** | *eP* | **Pn** | **22 48 13.3** | **0.0** |
| **BZWR** | **Bezymyannyi-We** | **1.36** | **314** | PN | **Pn** | **22 48 13.4** | **0.0** |
| **BZWR** | **Bezymyannyi-We** | **1.36** | **314** | *eP* | **Pn** | **22 48 13.4** | **0.0** |
| **LGNR** | **Loginova** | **1.36** | **320** | PN | **Pn** | **22 48 14.2** | **+0.5** |
| **LGNR** | **Loginova** | **1.36** | **320** | *eP* | **Pn** | **22 48 14.2** | **+0.5** |
| **CIRR** | **Tsirk** | **1.37** | **322** | PN | **Pn** | **22 48 13.8** | **+0.2** |
| **CIRR** | **Tsirk** | **1.37** | **322** | *eP* | **Pn** | **22 48 13.8** | **+0.2** |
| **KIRR** | **Kirishev** | **1.41** | **311** | PN | **Pn** | **22 48 14.1** | **-0.1** |
| **KIRR** | **Kirishev** | **1.41** | **311** | *eP* | **Pn** | **22 48 14.1** | **-0.1** |
| **KPT** | **Kopyto** | **1.48** | **310** | PN | **Pn** | **22 48 15.0** | **0.0** |
| **KPT** | **Kopyto** | **1.48** | **310** | *eP* | **Pn** | **22 48 15.0** | **0.0** |
| **KRSR** | **Krestovskiy** | **1.51** | **322** | PN | **Pn** | **22 48 15.3** | **-0.2** |
| KRSR | | | | S | **Sn** | **22 48 34.6** | **+0.5** |
| **KRSR** | **Krestovskiy** | **1.51** | **322** | *eP* | **Pn** | **22 48 15.3** | **-0.2** |
| KRSR | | | | *eS* | **Sn** | **22 48 34.6** | **+0.5** |
| **KLY** | **Klyuchi** | **1.56** | **325** | PN | **Pn** | **22 48 14.8** | **-1.2** |
| KLY | | | | S | **Sn** | **22 48 34.4** | **-0.6** |
| **KLY** | **Klyuchi** | **1.56** | **325** | *eP* | **Pn** | **22 48 14.8** | **-1.2** |
| KLY | | | | *eS* | **Sn** | **22 48 34.4** | **-0.6** |
| **SMKR** | **Semkarok** | **1.60** | **345** | PN | **Pn** | **22 48 16.9** | **+0.2** |
| **SMKR** | **Semkarok** | **1.60** | **345** | *eP* | **Pn** | **22 48 16.9** | **+0.2** |
| **BDR** | **Baidarnaya** | **1.64** | **340** | PN | **Pn** | **22 48 17.6** | **+0.4** |
| **BDR** | **Baidarnaya** | **1.64** | **340** | *eP* | **Pn** | **22 48 17.6** | **+0.4** |
| **SRKR** | **Sorokina** | **1.73** | **340** | PN | **Pn** | **22 48 18.7** | **+0.3** |
| **SRKR** | **Sorokina** | **1.73** | **340** | *eP* | **Pn** | **22 48 18.7** | **+0.3** |
| **KII** | **Karymskiy** | **1.91** | **239** | PN | **Pn** | **22 48 21.1** | **+0.2** |
| **KII** | **Karymskiy** | **1.91** | **239** | *eP* | **Pn** | **22 48 21.1** | **+0.2** |
| **BKI** | **Bering** | **2.15** | **84** | PN | **Pn** | **22 48 23.1** | **-1.0** |
| BKI | | | | S | **Sn** | **22 48 47.6** | **-1.9** |
| **BKI** | **Bering** | **2.15** | **84** | *eP* | **Pn** | **22 48 23.1** | **-1.0** |
| BKI | | | | *eS* | **Sn** | **22 48 47.6** | **-1.9** |
| **ESO** | **Esso** | **2.20** | **295** | PN | **Pn** | **22 48 28.7** | **+3.9** |
| **ESO** | **Esso** | **2.20** | **295** | *eP* | **Pn** | **22 48 28.7** | **+3.9** |
| **SPN** | **Mys Shipunski** | **2.34** | **215** | PN | **Pn** | **22 48 25.4** | **-1.4** |
| SPN | | | | S | **Sn** | **22 48 51.7** | **-2.6** |
| **SPN** | **Mys Shipunski** | **2.34** | **215** | *eP* | **Pn** | **22 48 25.4** | **-1.4** |
| SPN | | | | *eS* | **Sn** | **22 48 51.7** | **-2.6** |
| **NLC** | **Nalytchevo** | **2.53** | **223** | PN | **Pn** | **22 48 29.4** | **+0.1** |
| NLC | | | | S | **Sn** | **22 48 58.9** | **1.0** |
| **NLC** | **Nalytchevo** | **2.53** | **223** | *eP* | **Pn** | **22 48 29.4** | **+0.1** |
| NLC | | | | *eS* | **Sn** | **22 48 58.9** | **0.0** |
| **SDLR** | **Sedlovina** | **2.65** | **230** | PN | **Pn** | **22 48 31.8** | **+0.7** |
| SDLR | | | | S | **Sn** | **22 49 03.1** | **+1.1** |
| **SDLR** | **Sedlovina** | **2.65** | **230** | *eP* | **Pn** | **22 48 31.8** | **+0.7** |
| SDLR | | | | *eS* | **Sn** | **22 49 03.1** | **+1.1** |
| **KRER** | **Koryakskii** | **2.69** | **231** | PN | **Pn** | **22 48 32.7** | **+1.0** |
| KRER | | | | S | **Sn** | **22 49 05.9** | **+2.8** |
| **KRER** | **Koryakskii** | **2.69** | **231** | *eP* | **Pn** | **22 48 32.7** | **+1.0** |
| KRER | | | | *eS* | **Sn** | **22 49 05.9** | **+2.8** |
| **SMAR** | **Somma** | **2.70** | **230** | PN | **Pn** | **22 48 32.5** | **+0.7** |
| SMAR | | | | S | **Sn** | **22 49 04.0** | **+0.7** |
| **SMAR** | **Somma** | **2.70** | **230** | *eP* | **Pn** | **22 48 32.5** | **+0.7** |
| SMAR | | | | *eS* | **Sn** | **22 49 04.0** | **+0.7** |
| **AVH** | **Avacha** | **2.72** | **231** | PN | **Pn** | **22 48 32.9** | **+0.9** |
| AVH | | | | S | **Sn** | **22 49 06.5** | **+2.8** |
| **AVH** | **Avacha** | **2.72** | **231** | *eP* | **Pn** | **22 48 32.9** | **+0.9** |
| AVH | | | | *eS* | **Sn** | **22 49 06.5** | **+2.8** |
| **UGLR** | **Uglovaya** | **2.72** | **229** | PN | **Pn** | **22 48 32.9** | **+0.8** |
| UGLR | | | | S | **Sn** | **22 49 05.8** | **+2.0** |
| **UGLR** | **Uglovaya** | **2.72** | **229** | *eP* | **Pn** | **22 48 32.9** | **+0.8** |
| UGLR | | | | *eS* | **Sn** | **22 49 05.8** | **+2.0** |
| **KOK** | **Koryaka** | **2.75** | **232** | PN | **Pn** | **22 48 33.1** | **+0.7** |
| KOK | | | | S | **Sn** | **22 49 07.0** | **+2.6** |
| **KOK** | **Koryaka** | **2.75** | **232** | *eP* | **Pn** | **22 48 33.1** | **+0.7** |
| KOK | | | | *eS* | **Sn** | **22 49 07.0** | **+2.6** |
| **GNL** | **Ganaly** | **2.85** | **244** | PN | **Pn** | **22 48 34.9** | **+1.0** |
| **GNL** | **Ganaly** | **2.85** | **244** | *eP* | **Pn** | **22 48 34.9** | **+1.0** |
| **DALK** | **Dalny** | **2.88** | **227** | PN | **Pn** | **22 48 34.7** | **+0.6** |
| DALK | | | | S | **Sn** | **22 49 07.6** | **+0.2** |
| **DALK** | **Dalny** | **2.88** | **227** | *eP* | **Pn** | **22 48 34.7** | **+0.6** |
| DALK | | | | *eS* | **Sn** | **22 49 07.6** | **+0.2** |
| **PET** | **Petropavlovsk** | **2.93** | **228** | *k iPN* | **Pn** | **22 48 35.4** | **+0.7** |
| PET | | | | *eS* | **Sn** | **22 49 09.5** | **+0.9** |
| PET | | | | pmax | pmax | | |
| | comp=Z,700nm,0.3s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,763nm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,4μm,1.1s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,3μm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,4μm,0.7s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,1μm,11.0s | | | | | | |
| **PET** | **Petropavlovsk** | **2.93** | **228** | | **Pn** | **22 48 35.2** | **+0.5** |
| **PET** | **Petropavlovsk** | **2.93** | **228** | *eP* | **Pn** | **22 48 36.0** | **+1.3** |
| **KRMR** | **Karymshinskiy** | **3.29** | **229** | PN | **Pn** | **22 48 41.2** | **+1.5** |
| KRMR | | | | S | **Sn** | **22 49 20.8** | **+3.3** |
| **KRMR** | **Karymshinskiy** | **3.29** | **229** | *eP* | **Pn** | **22 48 41.2** | **+1.5** |
| KRMR | | | | *eS* | **Sn** | **22 49 20.8** | **+3.3** |
| **PEA0B** | **Petropavlovsk-** | **3.30** | **236** | PN | **Pn** | **22 48 40.4** | **+0.5** |
| **PEA0B** | **Petropavlovsk-** | **3.30** | **236** | Pn | **Pn** | **22 48 40.4** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **3.30** | **236** | Pn | **Pn** | **22 48 40.5** | **+0.6** |
| | comp=Z,19nm,0.3s,baz=66,slow=15,SNR=95 | | | | | | |
| PETK | | | | Sn | **Sn** | **22 49 20.7** | **+2.8** |
| | comp=Z,21nm,0.3s,baz=91,slow=21,SNR=5.8 | | | | | | |
| PETK | | | | LR | LR | 22 50 09.1 | |
| | comp=Z,1μm,19.8s,baz=52,slow=43 | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.30** | **236** | Pn | **Pn** | **22 48 40.3** | **+0.4** |
| **RUS** | **Russkaya** | **3.42** | **222** | PN | **Pn** | **22 48 41.6** | **0.0** |
| RUS | | | | S | **Sn** | **22 49 20.6** | **-0.2** |
| **RUS** | **Russkaya** | **3.42** | **222** | *eP* | **Pn** | **22 48 41.6** | **0.0** |
| RUS | | | | *eS* | **Sn** | **22 49 20.6** | **-0.2** |
| **GRL** | **Gorelyy** | **3.51** | **226** | PN | **Pn** | **22 48 44.5** | **+1.6** |
| **GRL** | **Gorelyy** | **3.51** | **226** | *eP* | **Pn** | **22 48 44.5** | **+1.6** |
| **MTVR** | **Mutnovka** | **3.52** | **225** | PN | **Pn** | **22 48 43.6** | **+0.6** |
| MTVR | | | | S | **Sn** | **22 49 25.2** | **+1.8** |
| **MTVR** | **Mutnovka** | **3.52** | **225** | *eP* | **Pn** | **22 48 43.6** | **+0.6** |
| MTVR | | | | *eS* | **Sn** | **22 49 25.2** | **+1.8** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **APC** | **Apacha** | **3.67** | **237** | | PN | **Pn** | **22 48 46.9** | **+1.9** |
| **APC** | **Apacha** | **3.67** | **237** | *e* | P | **Pn** | **22 48 46.9** | **+1.9** |
| **KDTR** | **Khodutka, Kamc** | **4.08** | **219** | | PN | **Pn** | **22 48 52.4** | **+1.8** |
| KDTR | | | | | S | **Sn** | **22 49 37.2** | **+0.1** |
| **KDTR** | **Khodutka, Kamc** | **4.08** | **219** | *e* | P | **Pn** | **22 48 52.4** | **+1.8** |
| KDTR | | | | *e* | S | **Sn** | **22 49 37.2** | **+0.1** |
| **OSSR** | **Ossora** | **4.24** | **6** | | PN | **Pn** | **22 48 52.7** | **0.0** |
| **OSSR** | **Ossora** | **4.24** | **6** | *e* | P | **Pn** | **22 48 52.7** | **0.0** |
| **PALN** | **Palana** | **4.24** | **344** | | PN | **Pn** | **22 48 56.8** | **+4.1** |
| **PALN** | **Palana** | **4.24** | **344** | *e* | P | **Pn** | **22 48 56.8** | **+4.1** |
| **SKR** | **Severo-Kuril's** | **5.73** | **223** | *e* | PN | **Pn** | **22 49 15.9** | **+2.8** |
| SKR | comp=Z,61nm,0.7s | | | | pmax | pmax | | |
| SKR | comp=Z,400nm,15.0s | | | | MLR | MLR | | |
| **TILK** | **Tilichiki** | **5.81** | **19** | | PN | **Pn** | **22 49 15.5** | **+1.3** |
| **TILK** | **Tilichiki** | **5.81** | **19** | *e* | P | **Pn** | **22 49 15.5** | **+1.3** |
| **SHEM** | **Shemya Is, Ala** | **7.38** | **103** | | Pn | **Pn** | **22 49 35.8** | **0.0** |
| SHEM | comp=Z,25nm,0.3s,baz=121,slow=2.1,SNR=20 | | | | Sn | **Sn** | **22 50 53.0** | **-5.1** |
| SHEM | comp=Z,2.0nm,0.3s,baz=321,slow=18,SNR=1.9 | | | | LR | LR | 22 52 53.3 | |
| | comp=Z,572nm,18.9s,baz=290,slow=40 | | | | | | | |
| **SMY** | **Shemya** | **7.38** | **103** | | PN | **Pn** | **22 49 35.2** | **-0.6** |
| **SMY** | **Shemya** | **7.38** | **103** | | Pn | **Pn** | **22 49 35.2** | **-0.6** |
| **MA2** | **Magadan** | **7.69** | **311** | *i* | PN | **Pn** | **22 49 42.8** | **+2.8** |
| **MA2** | **Magadan** | **7.69** | **311** | | Pn | **Pn** | **22 49 41.9** | **+1.8** |
| **SEY** | **Seymchan** | **9.40** | **331** | | Pn | **Pn** | **22 50 00.5** | **-2.8** |
| | comp=Z,1.4nm,0.3s,baz=107,slow=0.7,SNR=22 | | | | | | | |
| **SEY** | **Seymchan** | **9.40** | **331** | *e* | PN | **Pn** | **22 50 05.8** | **+2.5** |
| **KIWB** | **Kanaga Island** | **12.68** | **96** | | Pn | **Pn** | **22 50 48.6** | **+0.4** |
| **ADK** | **Adak** | **12.94** | **95** | | PN | **Pn** | **22 50 50.4** | **-1.3** |
| **ADK** | **Adak** | **12.94** | **95** | | Pn | **Pn** | **22 50 50.4** | **-1.3** |
| **BILL** | **Bilibino** | **13.18** | **7** | *d* | PN | **Pn** | **22 50 58.3** | **+3.4** |
| BILL | | | | *e* | S | **Sn** | **22 53 25.1** | **+5.4** |
| BILL | comp=Z,17nm,1.0s | | | | pmax | pmax | | |
| **BILL** | **Bilibino** | **13.18** | **7** | | Pn | **Pn** | **22 50 56.9** | **+2.0** |
| **GSTR** | **Great Sitkin T** | **13.22** | **94** | | Pn | **Pn** | **22 50 55.7** | **+0.2** |
| **YSS** | **Yuzh-Sakhalins** | **14.66** | **245** | *e* | P | **Pn** | **22 51 16.1** | **+1.2** |
| YSS | comp=Z,30nm,1.0s | | | | pmax | pmax | | |
| YSS | comp=Z,400nm,15.0s | | | | MLR | MLR | | |
| **JKA** | **Kamikawa-asahi** | **16.72** | **237** | | | **Pn** | **22 51 43.0** | **+1.6** |
| **ASAJ** | **Asahikawa** | **16.72** | **237** | | Pn | **Pn** | **22 51 42.4** | **+1.1** |
| ASAJ | comp=Z,1.0nm,0.3s,baz=60,slow=6.9,SNR=12 | | | | LR | LR | 22 57 25.8 | |
| | comp=Z,391nm,21.8s,baz=37,slow=34 | | | | | | | |
| **ASAJ** | **Asahikawa** | **16.72** | **237** | | P | **Pn** | **22 51 43.0** | **+1.6** |
| ASAJ | comp=Z,35nm,1.0s | | | | pmax | pmax | | |
| **NIKH** | **Nikolski High** | **17.06** | **85** | | P | **P** | **22 51 47.4** | **+0.7** |
| **NIKH** | **Nikolski High** baz=289 | **17.06** | **85** | | P | **Pn** | **22 51 43.6** | **-1.9** |
| **TNA** | **Tin City** | **17.95** | **42** | | P | **Pn** | **22 51 57.9** | **+1.6** |
| **TNA** | **Tin City** baz=248 | **17.95** | **42** | | P | **P** | **22 51 55.2** | **-1.2** |
| **ERM** | **Erimo** | **18.07** | **232** | ⇑*e* | P | **P** | **22 51 57.4** | **-0.5** |
| ERM | comp=Z,20nm,0.8s | | | | pmax | pmax | | |
| **ERM** | **Erimo** | **18.07** | **232** | | P | **P** | **22 51 56.5** | **-1.4** |
| **UNV** | **Unalaska Valle** | **18.14** | **81** | | P | **Pn** | **22 52 00.4** | **+1.6** |
| UNV | comp=Z,58nm,1.1s | | | | IAmb | IAmb | 22 52 17.0 | |
| **UNV** | **Unalaska Valle** baz=287 | **18.14** | **81** | | P | **P** | **22 51 57.4** | **-1.2** |
| **YAK** | **Yakutsk** baz=26,slow=1.7,SNR=8.7 | **18.22** | **306** | | P | **P** | **22 51 58.7** | **-0.6** |
| **YAK** | **Yakutsk** | **18.22** | **306** | *e* | P | **P** | **22 51 58.8** | **-0.6** |
| YAK | | | | *e* | S | **Sn** | **22 55 20.8** | **-1.0** |
| YAK | comp=Z,42nm,1.1s | | | | pmax | pmax | | |
| YAK | comp=E,22nm,1.3s | | | | pmax | pmax | | |
| YAK | comp=N,6.0nm,1.3s | | | | pmax | pmax | | |
| YAK | comp=E,45nm,3.2s | | | | smax | smax | | |
| YAK | comp=N,33nm,2.3s | | | | smax | smax | | |
| **YAK** | **Yakutsk** | **18.22** | **306** | | P | **Pn** | **22 52 00.3** | **+0.7** |
| YAK | comp=Z,32nm,0.7s | | | | IAmb | IAmb | 22 52 01.5 | |
| **ANM** | **Nome** | **18.65** | **46** | | P | **Pn** | **22 52 05.9** | **+1.0** |
| ANM | comp=Z,11nm,1.1s | | | | pmax | pmax | | |
| **ANM** | **Nome** | **18.65** | **46** | | | **Pn** | **22 52 05.9** | **+1.0** |
| **KLR** | **Kul'dur** | **19.50** | **265** | | P | **P** | **22 52 14.1** | **+0.6** |
| KLR | comp=Z,0.6nm,0.3s,baz=75,slow=8.8,SNR=19 | | | | PcP | **PcP** | **22 56 33.0** | **+0.8** |
| KLR | comp=Z,0.1nm,0.3s,baz=69,slow=6.6,SNR=3.2 | | | | LR | LR | 23 01 05.5 | |
| | comp=Z,334nm,18.3s,baz=41,slow=41 | | | | | | | |
| **FALS** | **False Pass** baz=285 | **19.61** | **76** | | P | **P** | **22 52 13.5** | **-1.1** |
| **ZEA** | **Zeya** | **20.29** | **281** | *e* | P | Pn | 22 52 28.6 | +4.2 |
| ZEA | comp=Z,10.0nm,1.0s | | | | pmax | pmax | | |
| **RDOG** | **Red Dog Mine** | **20.72** | **37** | | P | **P** | **22 52 27.0** | **+0.4** |
| RDOG | comp=Z,34nm,1.2s | | | | IAmb | IAmb | 22 52 32.3 | |
| **RDOG** | **Red Dog Mine** baz=248 | **20.72** | **37** | | P | **P** | **22 52 26.0** | **-0.6** |
| **CHNA** | **Chernabura Isl** baz=286 | **21.75** | **75** | | P | **P** | **22 52 36.3** | **-1.4** |
| **TIXI** | **Tiksi** | **21.89** | **332** | | P | **P** | **22 52 38.8** | **-0.2** |
| TIXI | comp=Z,26nm,1.0s,baz=118,slow=9.5,SNR=18 | | | | PcP | **PcP** | **22 56 36.9** | **+0.6** |
| TIXI | comp=Z,2.7nm,0.6s,baz=15,slow=0.7,SNR=3.1 | | | | LR | LR | 23 01 55.1 | |
| | comp=Z,309nm,21.4s,baz=156,slow=39 | | | | | | | |
| **TIXI** | **Tiksi** | **21.89** | **332** | | P | **P** | **22 52 39.0** | **0.0** |
| TIXI | comp=Z,30nm,0.7s | | | | IAmb | IAmb | 22 52 45.3 | |
| **CHGN** | **Chignik** baz=284 | **22.02** | **70** | | P | **P** | **22 52 39.6** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **22.22** | **253** | | P | **P** | **22 52 42.7** | **-0.2** |
| USRK | comp=Z,1.9nm,0.8s,baz=41,slow=12,SNR=3.9 | | | | PcP | **PcP** | **22 56 38.1** | **+0.6** |
| USRK | comp=Z,0.7nm,0.6s,baz=263,slow=0.9,SNR=4.7 | | | | LR | LR | 23 00 46.3 | |
| | comp=Z,260nm,21.7s,baz=43,slow=35 | | | | | | | |
| **GCSA** | **Galena City Sc** baz=264 | **22.28** | **48** | | P | **P** | **22 52 42.8** | **-0.4** |
| **JMM** | **Marumori** | **22.51** | **229** | | P | **P** | **22 52 46.3** | **+0.3** |
| JMM | comp=Z,45nm,1.0s | | | | IAmb | IAmb | 22 52 48.3 | |
| **TTA** | **Tatalina** | **22.54** | **53** | | P | **P** | **22 52 47.7** | **+1.5** |
| TTA | comp=Z,10.0nm,0.7s | | | | pmax | pmax | | |
| **TTA** | **Tatalina** | **22.54** | **53** | | P | **P** | **22 52 47.7** | **+1.5** |
| **TTA** | **Tatalina** baz=269 | **22.54** | **53** | | P | **P** | **22 52 45.5** | **-0.8** |
| **L19K** | **White Mountain** | **23.08** | **55** | | P | **P** | **22 52 53.1** | **+1.3** |
| **L19K** | **White Mountain** baz=272 | **23.08** | **55** | | P | **P** | **22 52 50.6** | **-1.2** |
| **J20K** | **Nowinta River** | **23.41** | **49** | | IAmb | IAmb | 22 52 57.2 | |
| **J20K** | comp=Z,37nm,1.2s **Nowinta River** baz=268 | **23.41** | **49** | | P | **P** | **22 52 55.2** | **+0.3** |
| **K20K** | **Telida** baz=270 | **23.43** | **52** | | P | **P** | **22 52 55.1** | **0.0** |
| **IMAR** | **Indian Mountai** | **23.72** | **45** | | P | **P** | **22 52 58.6** | **+0.8** |
| **BNX** | **BinXian** | **23.85** | **262** | ⇑ | P | **P** | **22 52 58.8** | **-0.4** |
| BNX | comp=Z,17nm,1.2s | | | | pmax | pmax | | |
| BNX | comp=Z,420nm,5.2s | | | | pmax | pmax | | |
| **A21K** | **Barrow** | **23.96** | **31** | | P | **P** | **22 53 00.4** | **+0.4** |
| **A21K** | **Barrow** baz=249 | **23.96** | **31** | | P | **P** | **22 52 59.5** | **-0.5** |
| **Q19K** | **Cape Douglas,** baz=280 | **24.01** | **63** | | P | **P** | **22 52 59.5** | **-1.1** |
| **H21K** | **Melozitna Rive** baz=266,SNR=7.2 | **24.07** | **46** | | P | **P** | **22 53 01.2** | **+0.1** |
| **CHUM** | **Lake Minchumin** baz=270 | **24.21** | **50** | | P | **P** | **22 53 02.5** | **+0.1** |
| **RSO** | **Redoubt South** | **24.22** | **59** | | P | **P** | **22 53 05.6** | **+2.9** |
| **PPLA** | **Purkeypile** | **24.29** | **53** | | P | **P** | **22 53 04.5** | **+1.3** |
| PPLA | comp=Z,36nm,1.2s | | | | IAmb | IAmb | 22 53 11.4 | |
| **PPLA** | **Purkeypile** baz=272 | **24.29** | **53** | | P | **P** | **22 53 02.8** | **-0.4** |
| **CAST** | **Castle Rocks** | **24.32** | **51** | | P | **P** | **22 53 04.9** | **+1.5** |
| CAST | comp=Z,21nm,0.8s | | | | IAmb | IAmb | 22 53 06.7 | |
| **CAST** | **Castle Rocks** baz=271,SNR=11 | **24.32** | **51** | | P | **P** | **22 53 02.7** | **-0.7** |
| **I21K** | **Tanana** baz=268 | **24.39** | **47** | | P | **P** | **22 53 03.9** | **0.0** |
| **SPCR** | **Spurr Chakacha** baz=276 | **24.40** | **57** | | P | **P** | **22 53 04.0** | **-0.2** |
| **OHAK** | **Old Harbor** baz=284 | **24.55** | **67** | | P | **P** | **22 53 06.0** | **+0.5** |
| **MJB9** | **Matsu-Tunnel** comp=Z,25nm,0.7s | **24.75** | **232** | | IAmb | IAmb | 22 53 18.8 | |
| **MAJO** | **Matsushiro** | **24.75** | **232** | | P | **P** | **22 53 08.3** | **+0.8** |
| MAJO | comp=Z,25nm,0.7s | | | | pmax | pmax | | |
| **MAJO** | **Matsushiro** | **24.75** | **232** | | P | **P** | **22 53 08.3** | **+0.8** |
| MAJO | comp=Z,25nm,0.7s | | | | IAmb | IAmb | 22 53 19.2 | |
| **MAT** | **Matsushiro** | **24.75** | **232** | | P | **P** | **22 53 08.2** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **24.75** | **232** | | P | **P** | **22 53 08.5** | **+1.0** |
| MJAR | comp=Z,17nm,0.8s,baz=20,slow=8.7,SNR=31 | | | | LR | LR | 23 03 07.1 | |
| | comp=Z,203nm,21.6s,baz=29,slow=37 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.75** | **232** | | P | **P** | **22 53 07.1** | **-0.4** |
| MJAR | comp=Z,30nm,1.4s | | | | IAmb | IAmb | 22 53 20.1 | |
| **KDAK** | **Kodiak Island** comp=Z,13nm,0.7s,baz=325,slow=3.7,SNR=11 | **24.79** | **65** | | P | **P** | **22 53 08.6** | **+1.1** |
| **KDAK** | **Kodiak Island** baz=283 | **24.79** | **65** | | P | **P** | **22 53 08.3** | **+0.7** |
| **MLY** | **Manley** | **24.91** | **48** | | P | **P** | **22 53 09.2** | **+0.5** |
| **MLY** | **Manley** baz=269 | **24.91** | **48** | | P | **P** | **22 53 09.0** | **+0.3** |
| **TRF** | **Thorofare Moun** comp=Z,18nm,1.0s | **25.13** | **51** | | IAmb | IAmb | 22 53 32.5 | |
| **TRF** | **Thorofare Moun** baz=273 | **25.13** | **51** | | P | **P** | **22 53 10.2** | **-0.7** |
| **COLD** | **Coldfoot** comp=Z,14nm,0.8s | **25.25** | **42** | | IAmb | IAmb | 22 53 15.1 | |
| **COLD** | **Coldfoot** baz=265,SNR=13 | **25.25** | **42** | | P | **P** | **22 53 12.4** | **+0.7** |
| **I23K** | **Minto, Yukon-K** comp=Z,16nm,0.8s | **25.49** | **47** | | IAmb | IAmb | 22 53 29.4 | |
| **I23K** | **Minto, Yukon-K** baz=270 | **25.49** | **47** | | P | **P** | **22 53 14.5** | **+0.6** |
| **NEA2** | **Nenana** baz=272 | **25.62** | **49** | | P | **P** | **22 53 15.8** | **+0.7** |
| **TOLK** | **Toolik Lake Re** | **25.65** | **39** | | P | **P** | **22 53 15.0** | **-0.4** |
| **TOLK** | **Toolik Lake Re** baz=262,SNR=23 | **25.65** | **39** | | P | **P** | **22 53 15.9** | **+0.5** |
| **MCK** | **McKinley** baz=273 | **25.72** | **51** | | P | **P** | **22 53 16.2** | **+0.1** |
| **GHO** | **Glory Hole Cre** | **25.90** | **55** | | P | **P** | **22 53 18.8** | **+1.1** |
| GHO | comp=Z,29nm,1.5s | | | | IAmb | IAmb | 22 53 28.5 | |
| **WRH** | **Wood River Hil** comp=Z,22nm,0.8s | **26.05** | **49** | | IAmb | IAmb | 22 53 32.0 | |
| **H24K** | **Nodor Dome** baz=270 | **26.11** | **46** | | P | **P** | **22 53 19.4** | **-0.2** |
| **COLA** | **College** | **26.14** | **48** | ⇑*e* | P | **P** | **22 53 20.4** | **+0.7** |
| COLA | comp=Z,44nm,2.9s | | | | pmax | pmax | | |
| **COLA** | **College** baz=272 | **26.14** | **48** | | P | **P** | **22 53 20.3** | **+0.5** |
| **KNK** | **Knik Glacier** | **26.17** | **56** | | P | **P** | **22 53 20.7** | **+0.6** |
| KNK | comp=Z,24nm,1.0s | | | | IAmb | IAmb | 22 53 33.6 | |
| **KNK** | **Knik Glacier** baz=278 | **26.17** | **56** | | P | **P** | **22 53 20.6** | **+0.5** |
| **SML** | **Sawmill** | **26.18** | **55** | | P | **P** | **22 53 20.4** | **+0.1** |
| SML | comp=Z,22nm,0.8s | | | | IAmb | IAmb | 22 53 41.5 | |
| **SML** | **Sawmill** baz=278 | **26.18** | **55** | | P | **P** | **22 53 20.7** | **+0.4** |
| **PWL** | **Port Wells** baz=280 | **26.32** | **57** | | P | **P** | **22 53 22.1** | **+0.6** |
| **BOD** | **Bodaibo** | **26.37** | **296** | *e* | P | **P** | **22 53 22.3** | **+0.4** |
| BOD | comp=Z,19nm,1.4s | | | | pmax | pmax | | |
| **HIA** | **Hailar** | **26.38** | **275** | ⇓*e* | P | **P** | **22 53 21.2** | **-1.0** |
| HIA | comp=Z,3.0nm,0.7s | | | | pmax | pmax | | |
| **HDA** | **Harding Lake** baz=274 | **26.55** | **49** | | P | **P** | **22 53 23.7** | **+0.2** |
| **ILAR** | **Eielson Array** comp=Z,3.8nm,0.8s,baz=268,slow=8.4,SNR=37 | **26.55** | **48** | | P | **P** | **22 53 23.9** | **+0.3** |
| ILAR | comp=Z,0.9nm,0.8s,baz=268,slow=3.8,SNR=2.3 | | | | PcP | **PcP** | **22 56 46.9** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **26.64** | **55** | | P | **P** | **22 53 25.4** | **+0.9** |
| SCM | comp=Z,28nm,0.8s | | | | pmax | pmax | | |
| **SCM** | **Sheep Creek Mo** | **26.64** | **55** | | P | **P** | **22 53 25.4** | **+0.9** |
| SCM | comp=Z,28nm,0.8s | | | | IAmb | IAmb | 22 53 38.9 | |
| **SCM** | **Sheep Creek Mo** baz=278 | **26.64** | **55** | | P | **P** | **22 53 24.5** | **0.0** |
| **PRP** | **Porcupine Dome** | **27.09** | **46** | | P | **P** | **22 53 29.2** | **+0.7** |
| PRP | comp=Z,16nm,1.0s | | | | IAmb | IAmb | 22 53 42.1 | |
| **PRP** | **Porcupine Dome** baz=273 | **27.09** | **46** | | P | **P** | **22 53 29.0** | **+0.4** |
| **M24K** | **Tolsona, Glenn** | **27.14** | **54** | | P | **P** | **22 53 30.4** | **+1.5** |
| **M24K** | **Tolsona, Glenn** baz=279 | **27.14** | **54** | | P | **P** | **22 53 28.8** | **-0.2** |
| **FYU** | **Fort Yukon** comp=Z,41nm,1.4s | **27.18** | **44** | | IAmb | IAmb | 22 53 31.6 | |
| **J25K** | **Salcha River,** baz=275 | **27.21** | **48** | | P | **P** | **22 53 29.5** | **-0.1** |
| **PAX** | **Paxson** baz=278 | **27.34** | **52** | | P | **P** | **22 53 30.8** | **0.0** |
| **KLU** | **Klutina** baz=280 | **27.36** | **55** | | P | **P** | **22 53 30.7** | **-0.2** |
| **RIDG** | **Independent Ri** baz=277 | **27.53** | **50** | | P | **P** | **22 53 31.8** | **-0.5** |
| **HARP** | **HAARP** baz=279 | **27.57** | **53** | | P | **P** | **22 53 33.1** | **+0.4** |
| **Q23K** | **Milleton Isla** baz=284 | **27.58** | **60** | | P | **P** | **22 53 32.9** | **+0.2** |
| **SCRK** | **Sand Creek** baz=277 | **27.88** | **50** | | P | **P** | **22 53 35.7** | **+0.2** |
| **N25K** | **Chitina, Valde** baz=281 | **27.96** | **55** | | P | **P** | **22 53 36.9** | **+0.5** |
| **J26L** | **Joseph Creek** | **28.00** | **48** | | P | **P** | **22 53 36.7** | **+0.1** |
| **J26L** | **Joseph Creek** baz=276 | **28.00** | **48** | | P | **P** | **22 53 36.8** | **+0.1** |
| **BMRM** | **Bremner River** | **28.09** | **56** | | P | **P** | **22 53 38.5** | **+1.0** |
| BMRM | comp=Z,37nm,1.3s | | | | IAmb | IAmb | 22 53 51.0 | |
| **BMRM** | **Bremner River** baz=282 | **28.09** | **56** | | P | **P** | **22 53 38.4** | **+1.0** |
| **L26K** | **Log Cabin Wild** baz=279 | **28.29** | **51** | | P | **P** | **22 53 40.4** | **+1.2** |
| **L27K** | **Beaver Creek,** baz=280 | **28.97** | **51** | | P | **P** | **22 53 46.0** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **28.99** | **51** | | P | **P** | **22 53 46.9** | **+1.5** |
| **EGAK** | **Eagle** baz=278 | **29.00** | **48** | | P | **P** | **22 53 45.3** | **0.0** |
| **M27K** | **Edge Creek, AK** comp=Z,13nm,0.8s | **29.08** | **53** | | IAmb | IAmb | 22 54 01.9 | |
| **M27K** | **Edge Creek, AK** baz=282 | **29.08** | **53** | | P | **P** | **22 53 46.4** | **+0.1** |
| **KSRS** | **Korea Array** comp=Z,1.1nm,0.6s,baz=124,slow=47,SNR=2.5 | **29.13** | **247** | | P | **P** | **22 53 47.5** | **+0.7** |
| KSRS | comp=Z,121nm,19.7s,baz=90,slow=35 | | | | LR | LR | 23 04 52.7 | |
| **BARN** | **Barnard Glacie** | **29.47** | **55** | | P | **P** | **22 53 51.2** | **+1.5** |
| **BVCY** | **Beaver Creek** baz=282 | **29.53** | **52** | | P | **P** | **22 53 50.7** | **+0.6** |
| **YUK3** | **Moose Creek** baz=284 | **29.86** | **53** | | P | **P** | **22 53 53.1** | **-0.1** |
| **DAWY** | **Dawson** baz=280 | **29.87** | **49** | | P | **P** | **22 53 53.9** | **+0.8** |
| **I29M** | **Ogilvie Camp,** baz=279 | **30.11** | **46** | | P | **P** | **22 53 55.8** | **+0.6** |
| **EPYK** | **Eagle Plains** baz=279 | **30.60** | **44** | | P | **P** | **22 54 00.6** | **+1.0** |
| **YUK4** | **Talbot Arm** baz=285 | **30.81** | **54** | | P | **P** | **22 54 02.5** | **+0.8** |
| **PNL** | **Peninsula** baz=288 | **30.93** | **57** | | P | **P** | **22 54 03.3** | **+0.8** |
| **YUK6** | **Outpost Mounta** baz=286 | **31.05** | **55** | | P | **P** | **22 54 04.7** | **+0.9** |
| **HYT** | **Haines Junctio** | **31.48** | **55** | | P | **P** | **22 54 09.8** | **+2.3** |
| **HYT** | **Haines Junctio** baz=287 | **31.48** | **55** | | P | **P** | **22 54 09.4** | **+1.9** |
| **INK** | **Inuvik** comp=Z,9.2nm,0.7s,baz=294,slow=7.3,SNR=43 | **31.55** | **40** | | P | **P** | **22 54 09.1** | **+1.3** |
| INK | comp=Z,2.0nm,0.7s,baz=231,slow=2.4,SNR=4.2 | | | | PcP | **PcP** | **22 57 00.1** | **+1.0** |
| **INK** | **Inuvik** comp=Z,10.0nm,0.8s | **31.55** | **40** | | P | **P** | **22 54 08.1** | **+0.2** |
| INK | | | | | IAmb | IAmb | 22 54 10.0 | |
| **INK** | **Inuvik** baz=278,SNR=13 | **31.55** | **40** | | P | **P** | **22 54 08.8** | **+1.0** |
| **N31M** | **Braeburn, Yuko** baz=287 | **32.09** | **53** | | P | **P** | **22 54 14.2** | **+1.5** |
| **M31M** | **Drury Creek, Y** baz=287 | **32.51** | **51** | | P | **P** | **22 54 18.2** | **+1.9** |
| **WHY** | **Whitehorse** comp=Z,11nm,1.1s | **32.76** | **54** | | IAmb | IAmb | 22 54 22.2 | |
| **WHY** | **Whitehorse** baz=289,SNR=5.4 | **32.76** | **54** | | P | **P** | **22 54 20.2** | **+1.6** |
| **SKAG** | **Skagway** baz=290 | **32.95** | **56** | | P | **P** | **22 54 22.7** | **+2.5** |
| **FARO** | **Faro, Yukon** baz=288 | **32.97** | **51** | | P | **P** | **22 54 21.8** | **+1.4** |
| **MMPY** | **Sheldon Lake,** baz=288 | **33.77** | **50** | | P | **P** | **22 54 29.1** | **+1.7** |
| **A36M** | **Sachs Harbour** | **33.80** | **32** | | P | **P** | **22 54 28.6** | **+1.2** |
| **A36M** | **Sachs Harbour** baz=279,SNR=15 | **33.80** | **32** | | P | **P** | **22 54 28.8** | **+1.4** |
| **P33M** | **Teslin, Yukon** baz=291 | **33.88** | **54** | | P | **P** | **22 54 30.3** | **+1.9** |
| **SONM** | **Songino Array** comp=Z,0.7nm,0.7s,baz=78,slow=7.5,SNR=4.1 | **34.71** | **282** | | P | **P** | **22 54 34.4** | **-1.4** |
| SONM | comp=Z,2.8nm,0.8s,baz=83,slow=2.1,SNR=13 | | | | PcP | **PcP** | **22 57 09.2** | **+0.7** |
| SONM | comp=Z,193nm,18.2s,baz=5.0,slow=36 | | | | LR | LR | 23 08 40.0 | |
| **SONM** | **Songino Array** | **34.71** | **282** | | P | **P** | **22 54 37.4** | **+1.6** |
| SONM | comp=Z,1.0nm,0.8s | | | | pmax | pmax | | |
| **SONM** | **Songino Array** | **34.71** | **282** | | P | **P** | **22 54 37.4** | **+1.6** |
| **C36M** | **Paulatuk** baz=284,SNR=52 | **34.72** | **37** | | P | **P** | **22 54 36.3** | **+0.9** |
| **NRIK** | **Noril'sk** comp=Z,140nm,19.6s,baz=320,slow=41 | **35.07** | **323** | | LR | LR | 23 11 38.9 | |
| **ZAK** | **Zakamensk** | **35.09** | **287** | *e* | P | **P** | **22 54 37.0** | **-2.0** |
| ZAK | comp=Z,4.0nm,1.4s | | | | pmax | pmax | | |
| **H11N2** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=858 | **35.43** | **172** | | T | T | 23 32 04.2 | |
| **H11N3** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=1145 | **35.44** | **172** | | T | T | 23 32 06.9 | |
| **H11N1** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=1647 | **35.45** | **172** | | T | T | 23 32 07.1 | |
| **HHC** | **Hu-ho-hao-te** | **35.95** | **268** | *e* | P | **P** | **22 54 47.8** | **+1.3** |
| HHC | comp=Z,10.0nm,1.1s | | | | pmax | pmax | | |
| HHC | comp=Z,210nm,6.9s | | | | pmax | pmax | | |
| **H11S1** | **WAKE ISLAND Hy** baz=353,slow=75,SNR=14 | **36.63** | **173** | | T | T | 23 33 29.5 | |
| **H11S3** | **WAKE ISLAND Hy** baz=353,slow=75,SNR=19 | **36.64** | **173** | | T | T | 23 33 37.3 | |
| **H11S2** | **WAKE ISLAND Hy** baz=353,slow=75,SNR=13 | **36.65** | **173** | | T | T | 23 33 39.5 | |
| **NJ2** | **Nanjing** | **38.09** | **251** | *e* | P | **P** | **22 55 04.2** | **-0.3** |
| NJ2 | comp=Z,7.0nm,0.6s | | | | pmax | pmax | | |
| **YKA** | **Yellowknife Ar** comp=Z,13nm,0.6s,baz=299,slow=7.9,SNR=151 | **40.88** | **45** | | P | **P** | **22 55 28.6** | **+1.2** |
| YKA | comp=Z,5.9nm,0.6s,baz=299,slow=7.9,SNR=13 | | | | pP | **pP** | **22 55 39.8** | **+0.4** |
| YKA | comp=Z,1.2nm,0.7s,baz=311,slow=2.9,SNR=5.5 | | | | PcP | **PcP** | **22 57 28.3** | **+1.2** |
| **RES** | **Resolute Bay** | **41.03** | **23** | | P | **P** | **22 55 29.5** | **+1.0** |
| RES | comp=Z,7.0nm,0.7s | | | | pmax | pmax | | |
| **RES** | **Resolute Bay** | **41.03** | **23** | | P | **P** | **22 55 29.4** | **+1.0** |
| **ZALV** | **Zalesovo Beam** comp=Z,0.8nm,0.7s,baz=54,slow=8.4,SNR=2.7 | **42.80** | **302** | | P | **P** | **22 55 43.2** | **0.0** |
| ZALV | comp=Z,3.3nm,0.8s,baz=56,slow=5.4,SNR=8.7 | | | | PcP | **PcP** | **22 57 32.9** | **-0.7** |
| ZALV | comp=Z,262nm,18.1s,baz=326,slow=37 | | | | LR | LR | 23 14 12.8 | |
| **GUMO** | **Guam** comp=Z,50nm,19.1s,baz=94,slow=36 | **43.53** | **205** | | LR | LR | 23 13 36.1 | |
| **LZH** | **Lanzhou** | **43.62** | **269** | *e* | P | **P** | **22 55 49.4** | **-0.9** |
| LZH | comp=Z,11nm,1.2s | | | | pmax | pmax | | |
| **GTA** | **Gaotai** | **43.66** | **276** | *e* | P | **P** | **22 55 49.2** | **-1.2** |
| GTA | | | | | sP | sP | 22 56 14.2 | +4.8 |
| GTA | | | | | PcP | **PcP** | **22 57 38.2** | **+1.3** |
| GTA | comp=Z,3.0nm,1.0s | | | | pmax | pmax | | |
| **DGZ** | **Jazzator, Alta** | **43.96** | **295** | ⇓*i* | P | **P** | **22 55 51.3** | **-1.5** |
| DGZ | comp=Z,2.0nm,0.8s | | | | pmax | pmax | | |
| **TULEG** | **Thule** | **44.74** | **15** | | P | **P** | **22 55 58.5** | **0.0** |
| **SPITS** | **Spitsbergen Ar** | **45.42** | **351** | | P | **P** | **22 56 03.0** | **-0.9** |
| SPITS | comp=Z,44nm,1.0s | | | | pmax | pmax | | |
| **NEEM** | **North Greenlan** | **46.16** | **10** | *i* | P | **P** | **22 56 08.3** | **-1.7** |
| NEEM | comp=Z,11nm,0.7s | | | | IAmb | IAmb | 22 56 10.2 | |
| **EDM** | **Edmonton** | **46.60** | **55** | | P | **P** | **22 56 15.8** | **+2.3** |
| EDM | comp=Z,11nm,0.7s | | | | pmax | pmax | | |
| **EDM** | **Edmonton** | **46.60** | **55** | | P | **P** | **22 56 15.8** | **+2.3** |
| EDM | comp=Z,11nm,0.7s | | | | IAmb | IAmb | 22 56 16.0 | |
| **CD2** | **Chengdu** | **47.42** | **264** | *e* | P | **P** | **22 56 20.0** | **-0.2** |
| **WMQ** | **Urumqi** | **47.53** | **289** | *e* | P | **P** | **22 56 20.0** | **-0.9** |
| WMQ | | | | | pP | pP | 22 56 34.8 | +0.6 |
| WMQ | | | | | sP | sP | 22 56 43.1 | +3.2 |
| WMQ | comp=Z,15nm,0.7s | | | | pmax | pmax | | |
| **KURK** | **Kurchatov** | **47.79** | **301** | | P | **P** | **22 56 20.2** | **-2.5** |
| KURK | comp=Z,10.0nm,0.7s | | | | pmax | pmax | | |
| **KURK** | **Kurchatov** | **47.79** | **301** | | P | **P** | **22 56 20.2** | **-2.5** |
| **NEW** | **Newport** baz=310 | **47.86** | **63** | | P | **P** | **22 56 24.2** | **+0.9** |
| **KURBB** | **Kurchatov Arra** comp=Z,161nm,22.0s,baz=323,slow=39 | **47.89** | **301** | | LR | LR | 23 19 10.1 | |
| **K02D** | **Willamette Mer** baz=312 | **48.03** | **72** | | P | **P** | **22 56 25.0** | **+0.2** |
| **MK31** | **Makanchi Array** | **48.46** | **295** | | P | **P** | **22 56 26.3** | **-1.7** |
| MK31 | comp=Z,4.0nm,1.3s | | | | pmax | pmax | | |
| **MK31** | **Makanchi Array** | **48.46** | **295** | | P | **P** | **22 56 26.3** | **-1.7** |
| **MKAR** | **Makanchi Array** comp=Z,2.2nm,0.7s,baz=53,slow=6.0,SNR=13 | **48.46** | **295** | | P | **P** | **22 56 25.6** | **-2.4** |
| MKAR | comp=Z,1.1nm,0.7s,baz=59,slow=4.5,SNR=2.3 | | | | PcP | **PcP** | **22 57 52.5** | **-1.0** |
| MKAR | comp=Z,209nm,18.5s,baz=338,slow=38 | | | | LR | LR | 23 18 18.2 | |
| **J04D** | **Umpqua Nationa** baz=312 | **48.51** | **71** | | P | **P** | **22 56 30.6** | **+1.9** |
| **MAKZ** | **Makanchi** | **48.61** | **296** | | P | **P** | **22 56 27.6** | **-1.6** |
| MAKZ | comp=Z,13nm,1.5s | | | | pmax | pmax | | |
| **MAKZ** | **Makanchi** | **48.61** | **296** | | P | **P** | **22 56 27.6** | **-1.6** |
| MAKZ | comp=Z,13nm,1.5s | | | | IAmb | IAmb | 22 56 33.8 | |
| **GOMU** | **GeErMu** | **48.73** | **276** | | P | **P** | **22 56 29.0** | **-1.6** |
| GOMU | | | | | pP | pP | 22 56 43.7 | -0.3 |
| GOMU | | | | | sP | sP | 22 56 53.4 | +3.7 |
| GOMU | comp=Z,2.0nm,0.9s | | | | pmax | pmax | | |
| **J05D** | **Fort Rock, OR** baz=312 | **48.96** | **70** | | P | **P** | **22 56 33.4** | **+1.4** |
| **WALA** | **Waterton Lakes** comp=Z,6.2nm,0.8s | **48.97** | **60** | | IAmb | IAmb | 22 56 34.5 | |
| **L04D** | **

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HRY | Holter Researc | 51.58 | 61 | P | | P | | 22 56 54.3 | +2.6 | |
| EGMT | Eagleton | 51.72 | 59 | P | | P | | 22 56 54.0 | +1.3 | |
| | baz=313 | | | | | | | | | |
| ARCES | ARCESS Array B | 51.82 | 342 | P | | P | | 22 56 51.6 | -1.5 | |
| | comp=Z,1.4nm,0.5s,baz=28,slow=9.0,SNR=9.5 | | | | | | | | | |
| ARCES | | | | PcP | | PcP | | 22 58 05.2 | -0.2 | |
| | comp=Z,1.3nm,0.6s,baz=36,slow=4.5,SNR=5.8 | | | | | | | | | |
| ARCES | | | | LR | | LR | | 23 23 57.7 | | |
| | comp=Z,332nm,19.1s,baz=267,slow=42 | | | | | | | | | |
| ARCES | ARCESS Array B | 51.82 | 342 | P | | P | | 22 56 51.6 | -1.5 | |
| ARCES | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| ARCES | ARCESS Array B | 51.82 | 342 | IAmb | | IAmb | | 22 57 11.5 | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| SUMG | Summit | 51.86 | 8 | P | | P | | 22 56 53.7 | -0.1 | |
| SUMG | Summit | 51.86 | 8 | *i* P | | P | | 22 56 52.1 | -1.7 | |
| SUMG | | | | IAmb | | IAmb | | 22 56 54.2 | | |
| | comp=Z,6.1nm,0.8s | | | | | | | | | |
| SUMG | Summit | 51.86 | 8 | P | | P | | 22 56 53.7 | -0.1 | |
| PZH | PanZhiHua | 51.91 | 262 | P | | P | | 22 56 55.9 | +1.5 | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,110nm,6.2s | | | | | | | | | |
| HLID | Hailey | 52.41 | 66 | P | | P | | 22 56 60.0 | +1.9 | |
| | baz=314 | | | | | | | | | |
| BOZ | Bozeman (W) | 52.44 | 62 | P | | P | | 22 56 59.9 | +1.7 | |
| | baz=314,SNR=6.5 | | | | | | | | | |
| ARU | Arti | 52.82 | 317 | LR | | LR | | 23 22 18.6 | | |
| | comp=Z,280nm,20.9s,baz=32,slow=39 | | | | | | | | | |
| ARU | Arti | 52.82 | 317 | *d i* P | | P | | 22 56 58.8 | -1.8 | |
| ARU | | | | | | | | 22 58 08.1 | | |
| ARU | | | | S | | S | | 23 04 23.6 | -1.6 | |
| ARU | | | | SS | | SS | | 23 07 58.5 | -5.1 | |
| ARU | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | | |
| ARU | Arti | 52.82 | 317 | P | | P | | 22 56 58.9 | -1.7 | |
| ARU | | | | IAmb | | IAmb | | 22 56 59.4 | | |
| | comp=Z,7.5nm,0.7s | | | | | | | | | |
| YHH | Holmes Hill | 53.40 | 62 | IAmb | | IAmb | | 22 57 08.9 | | |
| | comp=Z,5.7nm,1.0s | | | | | | | | | |
| PRGR | Permogore | 53.46 | 328 | *e*P | | P | | 22 57 03.9 | -1.3 | |
| PRGR | | | | *e**SP | | sP | | 22 57 24.3 | +0.1 | |
| PRGR | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| KVN | Kaiserville | 53.59 | 72 | P | | P | | 22 57 08.5 | +1.7 | |
| KVN | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | | |
| KVN | Kaiserville | 53.59 | 72 | P | | P | | 22 57 08.5 | +1.7 | |
| KVN | | | | IAmb | | IAmb | | 22 57 21.4 | | |
| | comp=Z,8.3nm,1.3s | | | | | | | | | |
| ILULI | Ilulissat | 53.69 | 14 | P | | P | | 22 57 06.4 | -0.4 | |
| ILULI | | | | pmax | | pmax | | | | |
| | comp=Z,33nm,1.4s | | | | | | | | | |
| ILULI | Ilulissat | 53.69 | 14 | P | | P | | 22 57 06.3 | -0.4 | |
| LKWY | Lake | 53.78 | 62 | IAmb | | IAmb | | 22 57 12.9 | | |
| | comp=Z,8.2nm,0.9s | | | | | | | | | |
| YMP | Mirror Lake Pl | 53.79 | 62 | IAmb | | IAmb | | 22 57 11.6 | | |
| | comp=Z,7.4nm,0.9s | | | | | | | | | |
| H17A | Grant Village | 53.81 | 63 | IAmb | | IAmb | | 22 57 12.9 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | | |
| H17A | Grant Village | 53.81 | 63 | P | | P | | 22 57 11.8 | +3.3 | |
| | baz=315,SNR=9.0 | | | | | | | | | |
| NVAR | Mina Array Bea | 53.92 | 73 | P | | P | | 22 57 11.5 | +2.3 | |
| | comp=Z,2.2nm,0.8s,baz=295,slow=6.8,SNR=9.4 | | | | | | | | | |
| NVAR | | | | pP | | pP | | 22 57 20.5 | -1.1 | |
| | comp=Z,3.3nm,0.8s,baz=293,slow=7.3,SNR=9.3 | | | | | | | | | |
| ELK | Elko | 53.94 | 69 | P | | P | | 22 57 11.3 | +1.9 | |
| ELK | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| ELK | Elko | 53.94 | 69 | P | | P | | 22 57 11.3 | +1.9 | |
| RLMT | Red Lodge | 53.97 | 61 | P | | P | | 22 57 11.6 | +2.1 | |
| | baz=315,SNR=18 | | | | | | | | | |
| DGMT | Dagmar | 54.09 | 55 | P | | P | | 22 57 11.3 | +1.2 | |
| | baz=315 | | | | | | | | | |
| LOHW | Long Hollow | 54.35 | 63 | IAmb | | IAmb | | 22 57 15.7 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | | |
| LAO | LASA Array | 54.37 | 58 | P | | P | | 22 57 14.1 | +1.8 | |
| LAO | LASA Array | 54.37 | 58 | P | | P | | 22 57 14.3 | +2.1 | |
| | baz=315,SNR=5.5 | | | | | | | | | |
| KIRV | Kirov | 54.57 | 324 | ⇑*i* P | | P | | 22 57 12.4 | -1.0 | |
| ICESG | Greenland Ices | 55.14 | 9 | *i* P | | P | | 22 57 16.9 | -1.0 | |
| ICESG | | | | IAmb | | IAmb | | 22 57 17.9 | | |
| | comp=Z,12nm,0.6s | | | | | | | | | |
| AAK | Ala-Archa | 55.35 | 296 | LR | | LR | | 23 21 52.0 | | |
| | comp=Z,294nm,19.8s,baz=339,slow=37 | | | | | | | | | |
| AAK | Ala-Archa | 55.35 | 296 | ⇑*i* P | | P | | 22 57 18.9 | -0.6 | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| AAK | Ala-Archa | 55.35 | 296 | P | | P | | 22 57 18.3 | -1.2 | |
| AAK | | | | IAmb | | IAmb | | 22 57 24.1 | | |
| | comp=Z,6.7nm,0.8s | | | | | | | | | |
| R11A | Troy Canyon, C | 55.47 | 71 | P | | P | | 22 57 22.8 | +2.4 | |
| | baz=316 | | | | | | | | | |
| CWC | Cottonwood Cre | 55.48 | 74 | P | | P | | 22 57 22.7 | +2.2 | |
| | baz=317 | | | | | | | | | |
| BW06 | Boulder Array | 55.49 | 63 | IAmb | | IAmb | | 22 57 23.6 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | | |
| BW06 | Boulder Array | 55.49 | 63 | P | | P | | 22 57 22.6 | +2.1 | |
| | baz=316,SNR=9.4 | | | | | | | | | |
| PD31 | Pinedale Array | 55.49 | 63 | IAmb | | IAmb | | 22 57 23.6 | | |
| | comp=Z,6.7nm,0.8s | | | | | | | | | |
| PDAR | Pinedale Array | 55.49 | 63 | P | | P | | 22 57 22.6 | +2.1 | |
| | comp=Z,5.0nm,0.7s,baz=330,slow=2.3,SNR=52 | | | | | | | | | |
| PDAR | Pinedale Array | 55.49 | 63 | P | | P | | 22 57 22.2 | +1.6 | |
| DUG | Dugway, Tooele | 55.63 | 68 | IAmb | | IAmb | | 22 57 25.1 | | |
| | comp=Z,7.3nm,0.8s | | | | | | | | | |
| DUG | Dugway, Tooele | 55.63 | 68 | P | | P | | 22 57 23.9 | +2.4 | |
| | baz=316,SNR=6.3 | | | | | | | | | |
| SPR3 | Spring Creek 3 | 55.68 | 70 | P | | P | | 22 57 23.4 | +1.3 | |
| SPR3 | | | | IAmb | | IAmb | | 22 57 26.4 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | | |
| ISA | Isabella, Lake | 55.82 | 75 | P | | P | | 22 57 25.4 | +2.5 | |
| | baz=317 | | | | | | | | | |
| KLMR | Klimovskoe | 55.89 | 330 | *e*P | | P | | 22 57 20.1 | -2.8 | |
| KLMR | | | | pmax | | pmax | | | | |
| | comp=Z,19nm,1.5s | | | | | | | | | |
| KLMR | Klimovskoe | 55.89 | 330 | *e*P | | P | | 22 57 20.2 | -2.7 | |
| KLMR | | | | AMP | | | | 22 57 21.2 | | |
| | comp=Z,19nm,1.5s | | | | | | | | | |
| TPNV | Topopah Spring | 56.12 | 73 | P | | P | | 22 57 27.3 | +2.2 | |
| | baz=317 | | | | | | | | | |
| NLU | North Lily Min | 56.20 | 67 | IAmb | | IAmb | | 22 57 29.1 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| ULM | Lac du Bonnet | 56.57 | 49 | P | | P | | 22 57 28.9 | +1.0 | |
| | comp=Z,6.3nm,0.5s,baz=316,slow=7.9,SNR=11 | | | | | | | | | |
| MDND | Maddock | 56.67 | 53 | P | | P | | 22 57 30.7 | +2.1 | |
| | baz=317,SNR=7.2 | | | | | | | | | |
| KSH | Kashi | 56.82 | 293 | P | | P | | 22 57 33.4 | +3.4 | |
| KSH | | | | PcP | | PcP | | 22 58 26.5 | +1.3 | |
| KSH | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | | |
| DY2G | Dye2 | 56.91 | 13 | *i* P | | P | | 22 57 29.0 | -1.4 | |
| DY2G | | | | IAmb | | IAmb | | 22 57 29.8 | | |
| | comp=Z,9.8nm,0.7s | | | | | | | | | |
| K22A | Casper | 57.12 | 61 | P | | P | | 22 57 33.7 | +1.6 | |
| | baz=317 | | | | | | | | | |
| TMUT | Trail Mountain | 57.13 | 67 | IAmb | | IAmb | | 22 57 35.9 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | | | |
| RSSD | Black Hills | 57.29 | 59 | P | | P | | 22 57 34.8 | +1.5 | |
| RSSD | | | | pmax | | pmax | | | | |
| | comp=Z,15nm,0.9s | | | | | | | | | |
| RSSD | Black Hills | 57.29 | 59 | P | | P | | 22 57 34.8 | +1.5 | |
| RSSD | Black Hills | 57.29 | 59 | P | | P | | 22 57 35.0 | +1.7 | |
| | baz=317 | | | | | | | | | |
| P18A | Preston Nutter | 57.40 | 66 | IAmb | | IAmb | | 22 57 39.6 | | |
| | comp=Z,7.3nm,1.2s | | | | | | | | | |
| AKTO | Aktyubinsk | 57.44 | 313 | LR | | LR | | 23 26 28.4 | | |
| | comp=Z,238nm,19.1s,baz=319,slow=40 | | | | | | | | | |
| ABKAR | Akbulak array | 57.49 | 311 | IAmb | | IAmb | | 22 57 38.9 | | |
| | comp=Z,4.8nm,0.6s | | | | | | | | | |
| HEC | Hector,Ludlow | 57.62 | 74 | P | | P | | 22 57 37.3 | +1.7 | |
| | baz=318 | | | | | | | | | |
| SRU | San Rafael Swe | 57.63 | 67 | P | | P | | 22 57 37.1 | +1.3 | |
| SRU | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | | |
| SRU | San Rafael Swe | 57.63 | 67 | P | | P | | 22 57 37.1 | +1.3 | |
| SRU | | | | IAmb | | IAmb | | 22 57 39.1 | | |
| | comp=Z,8.3nm,0.7s | | | | | | | | | |
| AGMN | Agassiz Nation | 58.03 | 50 | IAmb | | IAmb | | 22 57 40.4 | | |
| | comp=Z,6.6nm,0.8s | | | | | | | | | |
| AGMN | Agassiz Nation | 58.03 | 50 | P | | P | | 22 57 39.4 | +1.2 | |
| | baz=319,SNR=5.9 | | | | | | | | | |
| O20A | White River Ci | 58.08 | 65 | P | | P | | 22 57 40.6 | +1.6 | |
| | baz=318,SNR=5.4 | | | | | | | | | |
| D32A | Dogwood Acres, | 58.38 | 52 | | | P | | 22 57 40.6 | -0.1 | |
| N23A | Red Feather La | 58.70 | 62 | P | | P | | 22 57 44.7 | +1.4 | |
| | baz=318,SNR=11 | | | | | | | | | |
| FINES | FINESS Array B | 58.82 | 337 | P | | P | | 22 57 42.8 | -0.7 | |
| | comp=Z,3.8nm,0.5s,baz=36,slow=8.0,SNR=37 | | | | | | | | | |
| FINES | | | | LR | | LR | | 23 26 53.1 | | |
| | comp=Z,425nm,18.8s,baz=278,slow=40 | | | | | | | | | |
| B35A | Bob, Littlefor | 58.92 | 49 | IAmb | | IAmb | | 22 57 46.3 | | |
| | comp=Z,8.5nm,1.1s | | | | | | | | | |
| BC3 | Big Chuckawall | 58.98 | 75 | P | | P | | 22 57 47.1 | +1.9 | |
| | baz=318 | | | | | | | | | |
| MONP2 | Monument Peak | 59.01 | 76 | P | | P | | 22 57 47.5 | +2.0 | |
| | baz=319 | | | | | | | | | |
| PV15 | Paradox Valley | 59.28 | 66 | IAmb | | IAmb | | 22 57 49.9 | | |
| | comp=Z,6.9nm,0.7s | | | | | | | | | |
| SMCO | Snowmass | 59.44 | 64 | IAmb | | IAmb | | 22 57 51.8 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | | |
| CHTO | Chiang Mai | 59.53 | 259 | P | | P | | 22 57 48.5 | -0.5 | |
| CHTO | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| CHTO | Chiang Mai | 59.53 | 259 | P | | P | | 22 57 48.5 | -0.5 | |
| CHTO | | | | IAmb | | IAmb | | 22 57 50.1 | | |
| | comp=Z,4.9nm,0.8s | | | | | | | | | |
| ISCO | Idaho Springs | 59.68 | 63 | IAmb | | IAmb | | 22 57 53.9 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | | |
| ISCO | Idaho Springs | 59.68 | 63 | P | | P | | 22 57 51.3 | +1.1 | |
| | baz=318,SNR=7.0 | | | | | | | | | |
| CM31 | Chiang Mai Arr | 59.81 | 259 | P | | P | | 22 57 51.7 | +0.8 | |
| CM31 | | | | IAmb | | IAmb | | 22 57 52.4 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | | |
| CMAR | Chiang Mai Arr | 59.81 | 259 | P | | P | | 22 57 51.1 | +0.2 | |
| | comp=Z,4.5nm,0.8s,baz=24,slow=6.5,SNR=26 | | | | | | | | | |
| CMAR | | | | PcP | | PcP | | 22 58 38.2 | +1.1 | |
| | comp=Z,2.5nm,0.7s,baz=0.4,slow=3.1,SNR=7.2 | | | | | | | | | |
| CMAR | Chiang Mai Arr | 59.81 | 259 | P | | P | | 22 57 50.2 | -0.8 | |
| WUAZ | Wupatki | 59.83 | 70 | P | | P | | 22 57 52.7 | +1.7 | |
| | baz=319 | | | | | | | | | |
| GUN | Gumba | 59.94 | 276 | *e*P | | P | | 22 57 51.6 | -0.5 | |
| MVCO | Mesa Verde | 60.11 | 67 | P | | P | | 22 57 53.5 | +0.5 | |
| | baz=319 | | | | | | | | | |
| EYMN | Ely | 60.20 | 48 | P | | P | | 22 57 53.7 | +0.5 | |
| EYMN | Ely | 60.20 | 48 | P | | P | | 22 57 53.6 | +0.3 | |
| | baz=321,SNR=6.6 | | | | | | | | | |
| KKN | Kakani | 60.38 | 277 | *e*P | | P | | 22 57 54.3 | -0.7 | |
| PKI | Pulchoki | 60.47 | 277 | *e*P | | P | | 22 57 54.2 | -1.5 | |
| PKIN | Phulchoki | 60.47 | 277 | *e*P | | P | | 22 57 54.8 | -0.9 | |
| | comp=Z,10.0nm,0.6s | | | | | | | | | |
| Q24A | Divide | 60.55 | 63 | P | | P | | 22 57 56.6 | +0.5 | |
| | baz=319 | | | | | | | | | |
| GKN | Gorkha | 60.58 | 277 | *e*P | | P | | 22 57 55.7 | -0.6 | |
| | comp=Z,2.5nm,0.3s | | | | | | | | | |
| S22A | 4UR Ranch, Cre | 60.59 | 65 | IAmb | | IAmb | | 22 58 00.1 | | |
| | comp=Z,4.5nm,0.9s | | | | | | | | | |
| S22A | 4UR Ranch, Cre | 60.59 | 65 | P | | P | | 22 57 56.6 | +0.2 | |
| | baz=319 | | | | | | | | | |
| ECSD | EROS Data Cent | 61.14 | 54 | IAmb | | IAmb | | 22 58 01.2 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | | |
| ECSD | EROS Data Cent | 61.14 | 54 | P | | P | | 22 58 00.8 | +1.1 | |
| | baz=320 | | | | | | | | | |
| E38A | The Farm, Brul | 61.21 | 49 | IAmb | | IAmb | | 22 58 02.3 | | |
| | comp=Z,7.7nm,0.9s | | | | | | | | | |
| SDCO | Great Sand Dun | 61.28 | 65 | P | | P | | 22 58 01.8 | +0.8 | |
| | baz=319 | | | | | | | | | |
| KOLN | Koldanda | 61.35 | 278 | *e*Pg | | P | | 22 57 59.8 | -1.8 | |
| PYUN | Piuthan | 61.45 | 279 | *e*P | | P | | 22 58 00.6 | -1.6 | |
| | comp=Z,24nm,0.7s | | | | | | | | | |
| OBN | Obninsk | 61.54 | 328 | LR | | LR | | 23 27 28.0 | | |
| | comp=Z,41nm,21.9s,baz=318,slow=39 | | | | | | | | | |
| OBN | Obninsk | 61.54 | 328 | ⇓*e*P | | P | | 22 58 02.1 | -0.1 | |
| OBN | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| NB2 | NORSAR Subarra | 62.01 | 345 | P | | P | | 22 58 04.0 | -1.3 | |
| | comp=Z,1.9nm,0.5s,baz=19,slow=6.9 | | | | | | | | | |
| NOA | NORSAR Array B | 62.01 | 345 | P | | P | | 22 58 04.4 | -0.9 | |
| | comp=Z,3.4nm,0.6s,baz=19,slow=6.8,SNR=12 | | | | | | | | | |
| BGNE | Belgrade | 62.19 | 57 | P | | P | | 22 58 07.2 | +0.4 | |
| BGNE | Belgrade | 62.19 | 57 | P | | P | | 22 58 08.7 | +1.9 | |
| | baz=320 | | | | | | | | | |
| T25A | Trinidad | 62.31 | 64 | P | | P | | 22 58 09.8 | +1.9 | |
| | baz=320 | | | | | | | | | |
| L34A | Svendsen Farm, | 62.61 | 55 | P | | P | | 22 58 09.8 | +0.2 | |
| ANMO | Albuquerque | 62.90 | 67 | ⇓*e*P | | P | | 22 58 13.3 | +1.4 | |
| ANMO | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | | |
| ANMO | Albuquerque | 62.90 | 67 | P | | P | | 22 58 13.2 | +1.3 | |
| ANMO | Albuquerque | 62.90 | 67 | P | | P | | 22 58 14.1 | +2.2 | |
| | baz=320 | | | | | | | | | |
| SCHQ | Schefferville | 63.33 | 29 | P | | P | | 22 58 14.4 | +0.3 | |
| | comp=Z,7.7nm,0.7s,baz=349,slow=6.2,SNR=20 | | | | | | | | | |
| SCHQ | | | | LR | | LR | | 23 28 40.9 | | |
| | comp=Z,212nm,18.1s,baz=80,slow=39 | | | | | | | | | |
| VORR | Voronezh | 63.61 | 324 | *e*P | | P | | 22 58 07.5 | -8.5 | |
| VORR | | | | pmax | | pmax | | | | |
| | comp=Z,70nm,0.5s | | | | | | | | | |
| 121A | Cookes Peak, D | 64.03 | 70 | P | | P | | 22 58 21.8 | +2.5 | |
| | baz=320 | | | | | | | | | |
| SCIA | State Center | 64.13 | 53 | P | | P | | 22 58 20.3 | +0.6 | |
| SCIA | State Center | 64.13 | 53 | P | | P | | 22 58 21.1 | +1.4 | |
| | baz=322 | | | | | | | | | |
| KBL | Kabul | 64.21 | 294 | P | | P | | 22 58 18.0 | -2.5 | |
| KBL | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| KBL | Kabul | 64.21 | 294 | P | | P | | 22 58 18.0 | -2.5 | |
| KBL | | | | IAmb | | IAmb | | 22 58 24.7 | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| HNR | Honiara | 64.26 | 183 | LR | | LR | | 23 22 39.4 | | |
| | comp=Z,189nm,18.9s,baz=330,slow=32 | | | | | | | | | |
| NACGM | Naroch | 64.49 | 333 | *i* P | | P | | 22 58 22.9 | +1.2 | |
| JFWS | Jewell Farm | 64.69 | 51 | P | | P | | 22 58 24.3 | +1.1 | |
| | baz=323 | | | | | | | | | |
| GLMI | Grayling | 65.57 | 46 | P | | P | | 22 58 29.0 | 0.0 | |
| | baz=325 | | | | | | | | | |
| MSTX | Muleshoe | 65.59 | 65 | P | | P | | 22 58 30.9 | +1.5 | |
| | baz=321 | | | | | | | | | |
| VLDQ | Val d'Or | 65.65 | 39 | P | | P | | 22 58 27.4 | -2.0 | |
| P38A | Dawn | 65.78 | 55 | IAmb | | IAmb | | 22 58 31.9 | | |
| | comp=Z,8.3nm,0.8s | | | | | | | | | |
| MNTX | Cornudas Mount | 65.97 | 69 | P | | P | | 22 58 32.8 | +1.1 | |
| | baz=321 | | | | | | | | | |
| SBUM | Sibu | 66.16 | 237 | P | | P | | 22 58 33.7 | +0.6 | |
| SBUM | | | | IAmb | | IAmb | | 22 58 38.3 | | |
| | comp=Z,15nm,1.3s | | | | | | | | | |
| N41A | Harden Midland | 66.17 | 53 | IAmb | | IAmb | | 22 58 34.2 | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| P40A | Paris | 66.56 | 54 | IAmb | | IAmb | | 22 58 37.0 | | |
| | comp=Z,8.5nm,0.9s | | | | | | | | | |
| HDIL | Hopedale | 67.00 | 52 | P | | P | | 22 58 38.8 | +0.7 | |
| | baz=324 | | | | | | | | | |
| WMOK | Wichita Mounta | 67.05 | 62 | P | | P | | 22 58 39.4 | +0.8 | |
| | baz=322,SNR=5.9 | | | | | | | | | |
| GEYT | Alibeck | 67.08 | 304 | P | | P | | 22 58 38.2 | -0.6 | |
| | comp=Z,3.2nm,0.6s,baz=232,slow=7.3,SNR=4.0 | | | | | | | | | |
| GEYT | | | | LR | | LR | | 23 31 26.2 | | |
| | comp=Z,189nm,20.5s,baz=337,slow=39 | | | | | | | | | |
| GEYT | Alibeck | 67.08 | 304 | IAmb | | IAmb | | 22 58 39.4 | | |
| | comp=Z,4.6nm,0.7s | | | | | | | | | |
| R40A | Maddies Statio | 67.44 | 55 | IAmb | | IAmb | | 22 58 42.3 | | |
| | comp=Z,8.6nm,0.7s | | | | | | | | | |
| AKASG | Malin Array Be | 67.58 | 330 | P | | P | | 22 58 40.1 | -1.6 | |
| | comp=Z,40nm,0.9s,baz=28,slow=6.9,SNR=11 | | | | | | | | | |
| AKASG | Malin Array Be | 67.58 | 330 | *i* P | | P | | 22 58 44.5 | +2.9 | |
| AKASG | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.4s | | | | | | | | | |
| TUL1 | Leonard | 67.63 | 59 | P | | P | | 22 58 42.5 | +0.3 | |
| | baz=323 | | | | | | | | | |
| HRA | Herat | 67.84 | 298 | P | | P | | 22 58 42.4 | -1.4 | |
| HRA | | | | IAmb | | IAmb | | 22 59 10.5 | | |
| | comp=Z,4.3nm,0.7s | | | | | | | | | |
| CCM | Cathedral Cave | 68.11 | 55 | P | | P | | 22 58 44.1 | -1.1 | |
| CCM | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | | |
| CCM | Cathedral Cave | 68.11 | 55 | P | | P | | 22 58 44.1 | -1.1 | |
| CCM | | | | IAmb | | IAmb | | 22 58 46.6 | | |
| | comp=Z,7.6nm,1.1s | | | | | | | | | |
| CCM | Cathedral Cave | 68.11 | 55 | P | | P | | 22 58 45.6 | +0.4 | |
| | baz=324 | | | | | | | | | |
| CHLP | Challavanipeta | 68.29 | 271 | *e*P | | P | | 22 58 45.9 | -0.7 | |
| FVM | French Village | 68.55 | 54 | IAmb | | IAmb | | 22 58 49.5 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | | |
| LMQ | La Malbaie | 68.62 | 35 | P | | P | | 22 58 48.6 | +0.3 | |
| LMQ | | | | IAmb | | IAmb | | 22 58 49.0 | | |
| | comp=Z,8.7nm,0.7s | | | | | | | | | |
| U40A | Yellville | 68.71 | 57 | IAmb | | IAmb | | 22 59 10.6 | | |
| | comp=Z,14nm,1.4s | | | | | | | | | |
| U40A | Yellville | 68.71 | 57 | P | | P | | 22 58 49.3 | +0.3 | |
| | baz=324 | | | | | | | | | |
| TX32 | Lajitas Array | 68.73 | 69 | P | | P | | 22 58 50.7 | +1.4 | |
| TX32 | | | | IAmb | | IAmb | | 22 58 52.1 | | |
| | comp=Z,5.6nm,0.7s | | | | | | | | | |
| TXAR | Lajitas Array | 68.73 | 69 | P | | P | | 22 58 51.0 | +1.7 | |
| | comp=Z,5.0nm,0.7s,baz=303,slow=5.0,SNR=17 | | | | | | | | | |
| TXAR | | | | pP | | pP | | 22 59 00.0 | -2.2 | |
| | comp=Z,2.7nm,0.7s,baz=306,slow=5.5,SNR=6.6 | | | | | | | | | |
| KVAR | Kislovodsk Arr | 68.86 | 318 | LR | | LR | | 23 31 01.9 | | |
| | comp=Z,215nm,18.4s,baz=309,slow=38 | | | | | | | | | |
| NCK | Nalchik | 68.89 | 317 | ⇑*e*P | | P | | 22 58 50.8 | +0.8 | |
| NCK | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | | |
| KBZ | Khabaz | 68.97 | 317 | P | | P | | 22 58 50.2 | -0.2 | |
| | comp=Z,6.0nm,0.9s,baz=176,slow=1.6,SNR=9.7 | | | | | | | | | |
| KBZ | | | | LR | | LR | | 23 30 49.5 | | |
| | comp=Z,150nm,21.1s,baz=340,slow=38 | | | | | | | | | |
| KBZ | Khabaz | 68.97 | 317 | *d i* P | | P | | 22 58 50.9 | +0.5 | |
| KBZ | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| O48B | Farmland | 69.08 | 49 | P | | P | | 22 58 51.2 | 0.0 | |
| | baz=326 | | | | | | | | | |
| W39A | Magazine | 69.18 | 58 | P | | P | | 22 58 52.7 | +0.8 | |
| | baz=324 | | | | | | | | | |
| S44A | Carbondale | 69.33 | 54 | IAmb | | IAmb | | 22 58 54.2 | | |
| | comp=Z,9.6nm,0.8s | | | | | | | | | |
| PBMO | Poplar Bluff | 69.52 | 55 | P | | P | | 22 58 54.7 | +0.7 | |
| PBMO | | | | IAmb | | IAmb | | 22 58 55.2 | | |
| | comp=Z,6.6nm,0.8s | | | | | | | | | |
| LONY | Lake Ozonia | 69.67 | 40 | P | | P | | 22 58 54.6 | -0.1 | |
| | baz=329 | | | | | | | | | |
| ERPA | Erie | 69.70 | 45 | P | | P | | 22 58 55.1 | +0.1 | |
| | baz=327 | | | | | | | | | |
| MIAR | Mount Ida | 69.81 | 59 | P | | P | | 22 58 55.9 | +0.1 | |
| | baz=324 | | | | | | | | | |
| P49A | Miami Univ. Ec | 69.86 | 49 | P | | P | | 22 58 56.3 | +0.3 | |
| | baz=326 | | | | | | | | | |
| JCT | Junction City | 69.88 | 66 | P | | P | | 22 58 56.4 | 0.0 | |
| JCT | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| JCT | Junction City | 69.88 | 66 | P | | P | | 22 58 56.4 | 0.0 | |
| JCT | | | | IAmb | | IAmb | | 22 58 58.4 | | |
| | comp=Z,8.6nm,0.9s | | | | | | | | | |
| JCT | Junction City | 69.88 | 66 | P | | P | | 22 58 56.9 | +0.5 | |
| | baz=323 | | | | | | | | | |
| W41B | Gary Mavity, V | 69.95 | 57 | P | | P | | 22 58 57.4 | +0.8 | |
| | baz=324 | | | | | | | | | |
| M53A | WI Miller and | 69.99 | 45 | P | | P | | 22 58 56.9 | +0.1 | |
| | baz=327 | | | | | | | | | |
| ACSO | Alum Creek Sta | 70.04 | 48 | P | | P | | 22 58 56.4 | -0.7 | |
| | baz=326 | | | | | | | | | |
| X40A | Basin Creek Fa | 70.22 | 58 | P | | P | | 22 58 58.3 | 0.0 | |
| | baz=324 | | | | | | | | | |
| WCI | Wyandotte Cave | 70.24 | 51 | P | | P | | 22 58 59.3 | +1.0 | |
| | baz=326 | | | | | | | | | |
| M54A | Oil Creek Stat | 70.35 | 45 | P | | P | | 22 58 59.0 | 0.0 | |
| | baz=328 | | | | | | | | | |
| O52A | Adamsville | 70.62 | 47 | IAmb | | IAmb | | 22 59 01.8 | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| N54A | Moraine State | 70.67 | 45 | P | | P | | 22 59 01.0 | 0.0 | |
| | baz=328 | | | | | | | | | |
| PVM | Polavaram | 70.69 | 273 | *e*P | | P | | 22 59 00.4 | -1.0 | |
| RPR | Rampur | 70.75 | 275 | *e*P | | P | | 22 59 00.3 | -1.4 | |
| T47A | Sharon Grove | 70.89 | 52 | P | | P | | 22 59 02.6 | +0.3 | |
| T47A | | | | IAmb | | IAmb | | 22 59 04.2 | | |
| | comp=Z,8.2nm,0.8s | | | | | | | | | |
| P52A | Corning | 70.89 | 47 | P | | P | | 22 59 02.6 | +0.3 | |
| | baz=327 | | | | | | | | | |
| CLL | Collm | 70.97 | 340 | *i* P | | P | | 22 59 02.1 | -0.4 | |
| CLL | | | | *e**PP | | pP | | 22 59 17.0 | +0.7 | |
| CLL | | | | pmax | | pmax | | | | |
| | comp=Z,24nm,1.3s | | | | | | | | | |
| CLL | Collm | 70.97 | 340 | *i* P | | P | | 22 59 02.1 | -0.4 | |
| | comp=Z,24nm,1.3s | | | | | | | | | |
| CLL | | | | *e*pP | | pP | | 22 59 17.0 | +0.7 | |
| CLL | Collm | 70.97 | 340 | IAmb | | IAmb | | 22 59 03.8 | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| DPC | Dobruska-Polom | 71.18 | 338 | *e*P | | P | | 22 59 04.5 | +0.5 | |
| DPC | Dobruska-Polom | 71.18 | 338 | *e*P | | P | | 22 59 04.5 | +0.5 | |
| BRG | Berggiesshubel | 71.19 | 339 | *e*P | | P | | 22 59 03.4 | -0.6 | |
| BRG | | | | Amp | | | | 22 59 05.4 | | |
| | comp=Z,7.4nm,1.1s | | | | | | | | | |
| BRG | Berggiesshubel | 71.19 | 339 | *e*P | | P | | 22 59 03.3 | -0.6 | |
| BRG | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| SRSP | Sriramsagar | 71.24 | 276 | *e*P | | P | | 22 59 02.8 | -2.0 | |
| GNI | Garni | 71.25 | 314 | LR | | LR | | 23 34 09.5 | | |
| | comp=Z,199nm,18.5s,baz=348,slow=39 | | | | | | | | | |
| WVT | Waverly | 71.26 | 53 | P | | P | | 22 59 04.9 | +0.3 | |
| WVT | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| WVT | Waverly | 71.26 | 53 | P | | P | | 22 59 04.9 | +0.3 | |
| WVT | Waverly | 71.26 | 53 | P | | P | | 22 59 05.5 | +0.9 | |
| | baz=325 | | | | | | | | | |
| MORC | Moravsky Berou | 71.45 | 337 | ⇑P | | P | | 22 59 05.8 | +0.2 | |
| MORC | Moravsky Berou | 71.45 | 337 | *e*P | | P | | 22 59 04.9 | -0.7 | |
| BURAR | Bucovina Array | 71.50 | 331 | ⇑P | | P | | 22 59 05.6 | -0.4 | |
| BURAR | Bucovina Array | 71.50 | 331 | P | | P | | 22 59 04.9 | -1.1 | |
| LANS | Liptovska Anna | 71.58 | 335 | *e*P | | P | | 22 59 07.5 | +1.1 | |
| LANS | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| LANS | Li

baz=328
**WATA Walderalm** 75.04 340 *e*P P 22 59 27.3 +0.4
comp=Z,15nm,1.3s
**RETA Reutte** 75.05 340 *e*P P 22 59 27.2 +0.4
comp=Z,2.6nm,0.6s
**WTTA Wattenberg** 75.09 340 *e*P P 22 59 27.3 +0.1
comp=Z,20nm,1.6s
**MOTA Moosalm** 75.12 340 *i* P P 22 59 27.5 +0.1
comp=Z,12nm,1.0s,SNR=7.0
**OBKA Obir** 75.20 338 *i* P P 22 59 28.0 +0.2
comp=Z,9.1nm,0.9s,SNR=13
**SQTA Sankt Quirin** 75.22 340 *i* P P 22 59 28.1 +0.2
comp=Z,11nm,0.9s,SNR=7.5
**MARD Mardin** 75.28 315 IAmb IAmb 22 59 29.6
comp=Z,6.8nm,0.5s
**MYKA Terra Mystica** 75.28 338 *e*P P 22 59 28.4 +0.2
comp=Z,3.4nm,0.9s
**ABTA Abfaltersbach** 75.41 339 *e*P P 22 59 29.0 0.0
comp=Z,12nm,1.2s
**FETA Feichten** 75.50 340 *e*P P 22 59 29.8 +0.2
comp=Z,11nm,1.0s
**GOGA Godfrey** 75.52 52 P P 22 59 31.0 +1.4
baz=327
**BR131 Keskin Array S** 75.90 322 *d* P P 22 59 31.9 -0.1
**BRTR Keskin Array B** 75.90 322 P P 22 59 31.5 -0.5
comp=Z,2.7nm,0.6s,baz=51,slow=3.7,SNR=11
**BRTR Keskin Array B** 75.90 322 P P 22 59 31.3 -0.6
**CTI Castel Tesino** 76.25 339 IAmb IAmb 22 59 47.8
comp=Z,12nm,1.3s
**TUE Stuetta** 76.30 341 IAmb IAmb 22 59 37.5
comp=Z,10nm,1.0s
**DZM Mont Dzumac** 76.88 176 LR LR 23 27 07.3
comp=Z,79nm,19.6s,baz=109,slow=31
**PDG Podgorica** 77.91 333 ⇑P P 22 59 42.2 -0.8
**PDG Podgorica** 77.91 333 IAmb IAmb 22 59 47.7
comp=Z,6.5nm,0.8s
**WB0 Warramunga Arr** 78.21 207 P P 22 59 45.4 +0.6
**WRAB Tennant Creek** 78.38 207 ⇑*i*P P 22 59 46.4 +0.7
WRAB pmax pmax
comp=Z,5.0nm,1.0s
**WB2 Warramunga Arr** 78.39 207 P P 22 59 46.8 +1.0
**WRA Warramunga Arr** 78.39 207 P P 22 59 46.8 +1.0
comp=Z,3.9nm,0.8s,baz=20,slow=6.0,SNR=24
WRA pP **PcP** 22 59 57.2 +2.3
comp=Z,8.7nm,0.8s,baz=19,slow=6.0,SNR=23
WRA LR LR 23 33 15.9
comp=Z,20nm,21.2s,baz=188,slow=35
**UOSS Minazif** 78.54 297 P P 22 59 45.1 -1.7
UOSS IAmb IAmb 22 59 56.2
comp=Z,14nm,1.2s
**WSAR Wadi Sarin** 78.68 294 LR LR 23 38 03.3
comp=Z,96nm,18.2s,baz=345,slow=38
**MURB Monte Urbino** 78.73 338 P P 22 59 47.6 0.0
**OSSC Osservatorio P** 78.75 339 IAmb IAmb 22 59 48.5
comp=Z,9.1nm,0.9s
**NRCA Norcia** 79.01 337 P P 22 59 49.4 +0.2
**ASAR Alice Springs** 82.06 206 P P 23 00 07.1 +1.6
comp=Z,7.5nm,0.8s,baz=14,slow=5.4,SNR=47
ASAR pP **pP** 23 00 17.2 -2.6
comp=Z,10nm,0.7s,baz=16,slow=4.8,SNR=28
ASAR LR LR 23 33 52.0
comp=Z,40nm,21.7s,baz=340,slow=34
**ASAR Alice Springs** 82.06 206 P P 23 00 06.2 +0.6
**EIL Elat** 84.30 316 LR LR 23 42 18.8
comp=Z,50nm,18.9s,baz=33,slow=39
**ESDC Sonseca Array** 84.92 349 P P 23 00 21.1 +0.8
comp=Z,11nm,0.8s,baz=360,slow=4.4,SNR=88
**ESDC Sonseca Array** 84.92 349 P P 23 00 20.5 +0.3
**RAYN Ar Rayn** 85.02 305 P P 23 00 19.9 -1.1
RAYN pmax pmax
comp=Z,8.0nm,0.9s
**RAYN Ar Rayn** 85.02 305 P P 23 00 19.9 -1.1
RAYN IAmb IAmb 23 00 20.9
comp=Z,8.0nm,0.8s
**PAB San Pablo** 85.08 350 P P 23 00 21.3 +0.2
PAB pmax pmax
comp=Z,12nm,1.0s
**PAB San Pablo** 85.08 350 P P 23 00 21.2 +0.2
**KEST Kesra** 86.64 338 P P 23 00 27.6 -1.3
comp=Z,2.2nm,0.5s,baz=304,slow=3.4,SNR=14
**STKA Stephens Creek** 88.37 197 P P 23 00 37.0 +0.3
comp=Z,1.7nm,0.7s,baz=358,slow=14,SNR=3.4
STKA LR LR 23 35 16.0
comp=Z,61nm,20.1s,baz=19,slow=32
**ATD Arta Tunnel** 96.57 301 LR LR 23 50 04.0
comp=Z,100nm,19.6s,baz=48,slow=39
**BOSA Boshof** 139.43 293 PKP **PKPdf** 23 07 13.2 +1.0
comp=Z,2.3nm,0.6s,baz=69,slow=3.6,SNR=6.2
**BOSA Boshof** 139.43 293 PKIKP **PKiKP** 23 07 13.9 -0.7
**BOSA Boshof** 139.43 293 **PKiKP** 23 07 13.9 -0.7
**PLCA Paso Flores** 142.75 90 PKP **PKPdf** 23 07 19.4 +1.5
comp=Z,2.0nm,0.9s,baz=209,slow=8.8,SNR=3.3
**QSPA South Pole Qui** 144.79 180 PKP **PKPab** 23 07 19.7 0.0
comp=Z,12nm,0.7s,baz=298,slow=1.1,SNR=25

**JMA 01 23:17:47.1, 42°54N×144°89E, h45km±1km, M2.6, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAK** | **Akkeshi** | **0.48** | **343** | P | Pn | 23 17 57.6 | -0.2 |
| JAK | | | | *e*S | Sn | 23 18 05.2 | -0.2 |
| **JKHN** | **Kushirohamanak** | **0.58** | **20** | P | Pn | 23 17 59.3 | +0.2 |
| JKHN | | | | *e*S | Sn | 23 18 08.5 | +0.9 |
| **JOB** | **Onbets** | **0.86** | **295** | P | Pn | 23 18 03.1 | +0.3 |
| JOB | | | | *e*S | Sn | 23 18 15.1 | +0.9 |
| **NEM2** | **Nemuro 2** | **1.03** | **37** | P | Pn | 23 18 05.0 | -0.2 |
| NEM2 | | | | *e*S | Sn | 23 18 18.3 | -0.2 |
| **JNK** | **Nakash** | **1.05** | **353** | P | Pn | 23 18 05.2 | -0.2 |
| JNK | | | | *e*S | Sn | 23 18 18.5 | -0.5 |
| **JAR** | **Ashorobuto** | **1.12** | **313** | P | Pn | 23 18 06.4 | +0.1 |
| **JCH** | **Churui** | **1.13** | **274** | P | Pn | 23 18 07.0 | +0.5 |
| JCH | | | | *e*S | Sn | 23 18 22.0 | +1.2 |
| **JTHR** | **Tokachihiroo** | **1.20** | **259** | P | Pn | 23 18 08.3 | +0.8 |
| **JRA** | **Rausu** | **1.41** | **7** | P | Pn | 23 18 10.5 | +0.2 |
| JRA | | | | *e*S | Sn | 23 18 27.9 | +0.3 |
| **JTKR** | **Abashiri--Toko** | **1.60** | **334** | P | Pn | 23 18 14.5 | +1.6 |
| JTKR | | | | *e*S | Sn | 23 18 34.9 | +2.6 |

*TEH **01** 23:21:35.5, 26°48N×62°25E, h24km, ML3.7*
*DSN **01** 23:21:43.8±2.4, 26°55N×61°64E, h20km, ML3.4/9, Error ellipse: s-maj=45.0km s-min=16.1km az=8.0*
**ISC 01 23:21:39.2±2.0, 26°53N±0°09×62°1E±0°1, h35km, n42, σ1§47/42, Southwestern Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRVN** | **Saravan** | **0.91** | **17** | *e*Pg | **Pn** | **23 21 55.9** | **+0.2** |
| SRVN | | | | *e*Sg | **Sn** | **23 22 08.2** | **+0.5** |
| **NGCH** | **Negor - Chabah** | **1.45** | **217** | *e*Pg | **Pn** | **23 22 04.3** | **+1.3** |
| **CHBR** | **Chabahar** | **1.73** | **238** | *e*Pn | **Pn** | **23 22 08.4** | **+1.6** |
| **ZHDN** | **Zahedan** | **3.08** | **339** | *e*Pn | **Pn** | **23 22 26.9** | **+1.4** |
| **ZHSF** | **Zahedan** | **3.29** | **339** | *e*Pn | **Pn** | **23 22 29.5** | **+1.1** |
| **KBAM** | **BAM** | **4.15** | **310** | *e*Pn | **Pn** | **23 22 41.7** | **+1.6** |
| KBAM | | | | *e* | | 23 23 30.4 | |
| | comp=Z,506nm,0.2s | | | | | | |
| **KHNJ** | **Kahnooj** | **4.16** | **291** | *e*Pn | **Pn** | **23 22 42.3** | **+2.0** |
| **BIDO** | **Bidbid** | **4.69** | **231** | *e*Pn | **Pn** | **23 22 48.5** | **+1.0** |
| **NHDN** | **Nehbandan** | **5.17** | **340** | *e*Pn | **Pn** | **23 22 54.8** | **+0.6** |
| **CHMN** | **Cheshme madani** | **5.22** | **311** | *e*Pn | **Pn** | **23 22 56.9** | **+1.8** |
| CHMN | | | | *e* | | 23 22 57.5 | |
| | comp=Z,244nm,0.2s | | | | | | |
| **BANOM** | **Banah** | **5.25** | **265** | *e*Pn | **Pn** | **23 22 56.0** | **+0.8** |
| **BANOM** | **Banah** | **5.25** | **265** | *i* P | **Pn** | **23 22 55.6** | **+0.4** |
| | SNR=49 | | | | | | |
| BANOM | | | | S | **Sn** | **23 23 51.8** | **-2.7** |
| **GENO** | **Geno** | **5.36** | **281** | *e*Pn | **Pn** | **23 22 59.7** | **+2.8** |
| GENO | | | | *e* | | 23 23 58.2 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **SHME** | **Shamm** | **5.37** | **266** | *e*Pn | **Pn** | **23 22 59.0** | **+2.1** |
| **SHME** | **Shamm** | **5.37** | **266** | *i* P | **Pn** | **23 22 58.6** | **+1.7** |
| | SNR=15 | | | | | | |
| **MSFE** | **Esma-Masafi** | **5.47** | **259** | *e*Pn | **Pn** | **23 22 58.6** | **+0.3** |
| **MSFE** | **Esma-Masafi** | **5.47** | **259** | *i* P | **Pn** | **23 22 58.2** | **-0.1** |
| | SNR=7.3 | | | | | | |
| **UOSS** | **Minazif** | **5.55** | **255** | *e*Pn | **Pn** | **23 22 59.2** | **-0.1** |
| **UOSS** | **Minazif** | **5.55** | **255** | *i* P | **Pn** | **23 22 59.0** | **-0.3** |
| | SNR=11 | | | | | | |
| **HATD** | **Hatta, Dubai** | **5.64** | **254** | *e*Pn | **Pn** | **23 23 01.2** | **+0.5** |
| **HATD** | **Hatta, Dubai** | **5.64** | **254** | *i* P | **Pn** | **23 23 00.1** | **-0.5** |
| | SNR=12 | | | | | | |
| **NGRK** | **Negar Kerman** | **5.67** | **304** | *e*Pn | **Pn** | **23 23 04.2** | **+2.9** |
| NGRK | | | | *e* | | 23 24 15.8 | |
| | comp=Z,433nm,0.3s | | | | | | |
| **ASHO** | **Ashiyiah** | **5.75** | **253** | *e*Pn | **Pn** | **23 23 02.5** | **+0.3** |
| **ASHO** | **Ashiyiah** | **5.75** | **253** | *i* P | **Pn** | **23 23 03.0** | **+0.8** |
| | SNR=20 | | | | | | |
| **BSRN** | **Basiran** | **6.01** | **335** | *e*Pn | **Pn** | **23 23 06.5** | **+0.7** |
| **FAQ** | **Al Faqa, Dubai** | **6.14** | **255** | *e*Pn | Pn | 23 23 10.2 | +2.8 |
| **FAQ** | **Al Faqa, Dubai** | **6.14** | **255** | *i* P | **Pn** | **23 23 09.5** | **+2.1** |
| | SNR=26 | | | | | | |
| **ALNE** | **Al Ain** | **6.25** | **248** | *e*Pn | **Pn** | **23 23 11.4** | **+2.4** |
| **ALNE** | **Al Ain** | **6.25** | **248** | *i* P | **Pn** | **23 23 10.9** | **+1.9** |
| | SNR=8.5 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **6.40** | **254** | *e*Pn | Pn | 23 23 14.8 | +3.8 |
| **ASUD** | **Al Ashush, Dub** | **6.40** | **254** | *i* P | **Pn** | **23 23 12.9** | **+1.8** |
| | SNR=19 | | | | | | |
| **IKOO** | **Kooshah** | **6.47** | **336** | *e*Pn | **Pn** | **23 23 12.7** | **+0.5** |
| **IDAH** | **Dahanechah** | **6.49** | **343** | *e*Pn | **Pn** | **23 23 13.5** | **+1.0** |
| IDAH | | | | *e* | | 23 23 15.1 | |
| | comp=N,159nm,0.3s | | | | | | |
| **IMON** | **Monand** | **6.97** | **343** | *e*Pn | **Pn** | **23 23 19.5** | **+0.4** |
| IMON | | | | *e* | | 23 23 20.2 | |
| | comp=Z,254nm,0.2s | | | | | | |
| **LAR1** | **LAR** | **6.98** | **281** | *e*Pn | **Pn** | **23 23 21.1** | **+2.0** |
| **ITEG** | **Tejag** | **6.98** | **336** | *e*Pn | **Pn** | **23 23 19.6** | **+0.4** |
| **SHRT** | **Shahrakht** | **7.27** | **348** | *e*Pn | **Pn** | **23 23 22.6** | **-0.4** |
| **UMZA** | **Um Al Zommool** | **7.37** | **240** | *e*Pn | **Pn** | **23 23 25.5** | **+1.2** |
| **GHIR** | **Ghir-Karzin** | **8.29** | **284** | *e*Pn | **Pn** | **23 23 37.0** | **-0.1** |
| **TABS** | **Tabas** | **8.30** | **330** | *e*Pn | **Pn** | **23 23 38.1** | **+0.8** |
| **KLNJ** | **Kolanjah** | **10.24** | **298** | *e*Pn | **Pn** | **23 24 06.0** | **+1.9** |
| **RAYN** | **Ar Rayn** | **15.34** | **262** | *i* P | **Pn** | **23 25 11.4** | **-1.8** |
| | SNR=6.6 | | | | | | |

**WEL 01 23:31:04.6±0.6, 39°S±7°×17°5E±°, h194km±4km, M3.7/111, ML3.2/8, MLv3.7/111, Error ellipse: s-maj=0.0km s-min=0.0km az=170.7, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VRZ** | **Vera Road** | **0.15** | **229** | P | Pn | 23 31 30.4 | +0.3 |
| **TWVZ** | **Taurewa** | **0.42** | **97** | P | Pn | 23 31 31.3 | +0.5 |
| TWVZ | | | | S | Sn | 23 31 52.5 | +1.3 |
| **PKVZ** | **Pokaka** | **0.43** | **128** | P | Pn | 23 31 31.5 | +0.6 |
| PKVZ | | | | S | Sn | 23 31 52.5 | +1.3 |
| **HIZ** | **Hauiti** | **0.51** | **355** | P | Pn | 23 31 31.5 | +0.3 |
| **WTVZ** | **West Tongariro** | **0.54** | **100** | P | Pn | 23 31 32.0 | +0.6 |
| WTVZ | | | | S | Sn | 23 31 53.4 | +1.4 |
| **FWVZ** | **Far West T-bar** | **0.55** | **115** | P | Pn | 23 31 32.2 | +0.6 |
| FWVZ | | | | S | Sn | 23 31 53.5 | +1.1 |
| **NGZ** | **Ngauruhoe** | **0.56** | **106** | P | Pn | 23 31 32.2 | +0.7 |
| NGZ | | | | S | Sn | 23 31 53.9 | +1.7 |
| **NNVZ** | **North Ngauruho** | **0.56** | **101** | P | Pn | 23 31 32.1 | +0.6 |
| **MTVZ** | **Mangateitei** | **0.57** | **130** | P | Pn | 23 31 32.0 | +0.6 |
| MTVZ | | | | S | Sn | 23 31 53.6 | +1.4 |
| **DRZ** | **Dome Shelter** | **0.57** | **117** | P | Pn | 23 31 32.4 | +0.7 |
| **TRVZ** | **Turoa** | **0.57** | **119** | P | Pn | 23 31 32.3 | +0.7 |
| TRVZ | | | | S | Sn | 23 31 53.7 | +1.2 |
| **DREZ** | **Durham Road** | **0.57** | **253** | P | Pn | 23 31 32.0 | +0.7 |
| **KRVZ** | **Karewarewa** | **0.58** | **97** | P | Pn | 23 31 32.2 | +0.7 |
| KRVZ | | | | S | Sn | 23 31 54.0 | +1.7 |
| **LREZ** | **Lake Rotokare** | **0.59** | **222** | P | Pn | 23 31 32.1 | +0.8 |
| LREZ | | | | S | Sn | 23 31 56.0 | +3.8 |
| **WHVZ** | **Whangaehu Hut** | **0.59** | **116** | P | Pn | 23 31 32.4 | +0.7 |
| **SNVZ** | **South Ngauruho** | **0.59** | **106** | P | Pn | 23 31 32.5 | +0.8 |
| **NTVZ** | **North Tongarir** | **0.60** | **97** | P | Pn | 23 31 32.4 | +0.7 |
| **OTVZ** | **Oturere** | **0.61** | **104** | P | Pn | 23 31 32.4 | +0.7 |
| **KATZ** | **Kakaramea** | **0.61** | **86** | P | Pn | 23 31 32.2 | +0.5 |
| KATZ | | | | S | Sn | 23 31 54.3 | +1.7 |
| **WNVZ** | **Wahianoa** | **0.62** | **120** | P | Pn | 23 31 32.3 | +0.6 |
| **TMVZ** | **Te Maari** | **0.63** | **99** | P | Pn | 23 31 32.4 | +0.7 |
| **TUVZ** | **Tukino** | **0.63** | **113** | P | Pn | 23 31 32.6 | +0.8 |
| **ETVZ** | **East Tongariro** | **0.64** | **101** | P | Pn | 23 31 32.7 | +0.9 |
| **PREZ** | **Palmer Road** | **0.66** | **241** | P | Pn | 23 31 32.5 | +0.7 |
| **NEZ** | **North Egmont** | **0.68** | **248** | P | Pn | 23 31 32.6 | +0.6 |
| **RATZ** | **Rangitukua** | **0.69** | **77** | P | Pn | 23 31 32.3 | +0.3 |
| **WATZ** | **Wairara** | **0.72** | **64** | P | Pn | 23 31 32.8 | +0.7 |
| **WAZ** | **Wanganui** | **0.73** | **175** | P | Pn | 23 31 32.9 | +0.8 |
| **PKE** | **Pukeiti** | **0.74** | **256** | P | Pn | 23 31 32.7 | +0.5 |
| **RITZ** | **Rihia Road** | **0.74** | **87** | P | Pn | 23 31 32.9 | +0.7 |
| **KHEZ** | **Kahui Hut** | **0.75** | **248** | P | Pn | 23 31 32.6 | +0.4 |
| **MOVZ** | **Moawhango** | **0.76** | **121** | P | Pn | 23 31 32.6 | +0.2 |
| MOVZ | | | | S | Sn | 23 31 53.6 | +1.3 |
| **NBEZ** | **Newall Road No** | **0.84** | **253** | P | Pn | 23 31 31.9 | -0.8 |
| **NMEZ** | **Namu Road** | **0.89** | **244** | P | Pn | 23 31 33.6 | +0.6 |
| **KUTZ** | **Kaahu Road** | **0.89** | **54** | P | Pn | 23 31 33.8 | +0.7 |
| **BHHZ** | **Black Hill Sta** | **1.01** | **118** | P | Pn | 23 31 34.0 | +0.1 |
| BHHZ | | | | S | Sn | 23 31 56.1 | -0.6 |
| **MRHZ** | **Matea Rd** | **1.19** | **81** | P | Pn | 23 31 35.0 | -0.3 |
| **OHWZ** | **Ohakea** | **1.22** | **165** | P | Pn | 23 31 36.1 | +0.7 |
| **BKZ** | **Black Stump Fm** | **1.24** | **97** | P | Pn | 23 31 35.6 | 0.0 |
| **KWHZ** | **Kaweka Forest** | **1.24** | **109** | P | Pn | 23 31 36.2 | +0.5 |
| KWHZ | | | | S | Sn | 23 32 00.6 | +0.9 |
| **HRRZ** | **Handcock Road** | **1.25** | **60** | P | Pn | 23 31 36.0 | +0.3 |
| **HSRZ** | **Hossack Road** | **1.27** | **56** | P | Pn | 23 31 36.0 | +0.2 |
| **KRHZ** | **Kereru** | **1.29** | **119** | P | Pn | 23 31 36.3 | +0.3 |
| **TSZ** | **Takapari Road** | **1.32** | **142** | P | Pn | 23 31 36.5 | +0.3 |
| **PNHZ** | **Pukenui** | **1.34** | **132** | P | Pn | 23 31 36.6 | +0.2 |
| **RRRZ** | **Republican Roa** | **1.43** | **62** | P | Pn | 23 31 37.1 | -0.2 |
| **MCHZ** | **McNeill Hill** | **1.45** | **107** | P | Pn | 23 31 38.3 | +1.0 |
| **OMRZ** | **Omania** | **1.47** | **52** | P | Pn | 23 31 37.5 | -0.1 |
| **TARZ** | **Mount Tarawera** | **1.48** | **58** | P | Pn | 23 31 37.7 | 0.0 |
| **NMHZ** | **Naumai** | **1.48** | **93** | P | Pn | 23 31 38.5 | +0.8 |
| **MTHZ** | **Maungataniwha** | **1.52** | **84** | P | Pn | 23 31 37.7 | -0.3 |
| **POWZ** | **Post Office Ro** | **1.52** | **154** | P | Pn | 23 31 37.7 | -0.2 |
| **MUGZ** | **Murupara** | **1.56** | **70** | P | Pn | 23 31 37.6 | -0.7 |
| **WPHZ** | **Waipukurau** | **1.58** | **132** | P | Pn | 23 31 38.7 | +0.2 |
| **DVHZ** | **Dannevirke** | **1.60** | **143** | P | Pn | 23 31 38.5 | -0.2 |
| **ARHZ** | **Aropaoanui** | **1.64** | **99** | P | Pn | 23 31 39.5 | +0.4 |
| **RTZ** | **Ruatahuna** | **1.67** | **77** | P | Pn | 23 31 38.9 | -0.5 |
| **KAHZ** | **Kahuranaki** | **1.71** | **117** | P | Pn | 23 31 40.2 | +0.4 |
| **MRZ** | **Mangatainoka R** | **1.72** | **163** | P | Pn | 23 31 39.1 | -0.6 |
| **MARZ** | **Manawahe** | **1.73** | **54** | P | Pn | 23 31 39.8 | -0.2 |
| **PRWZ** | **Pori Road** | **1.74** | **152** | P | Pn | 23 31 39.8 | -0.2 |
| **OPRZ** | **Ohinepanea** | **1.75** | **48** | P | Pn | 23 31 39.8 | -0.4 |
| **CKHZ** | **Cape Kidnapper** | **1.80** | **111** | P | Pn | 23 31 41.0 | +0.4 |
| **OGWZ** | **Otaki Gorge** | **1.80** | **174** | P | Pn | 23 31 40.2 | -0.5 |
| **PXZ** | **Pawanui** | **1.82** | **124** | P | Pn | 23 31 40.8 | 0.0 |
| **PRHZ** | **Porangahau** | **1.82** | **134** | P | Pn | 23 31 40.8 | -0.1 |
| **KIW** | **Kapiti Island** | **1.84** | **180** | P | Pn | 23 31 40.1 | -0.9 |
| **ANWZ** | **Angora Road** | **1.88** | **140** | P | Pn | 23 31 41.2 | -0.1 |
| **URZ** | **Urewera** | **1.89** | **67** | P | Pn | 23 31 40.3 | -1.2 |
| **TIWZ** | **Tintock** | **1.91** | **157** | P | Pn | 23 31 41.0 | -0.7 |
| **SNGZ** | **Shannon Statio** | **1.91** | **84** | P | Pn | 23 31 41.6 | -0.2 |
| **HOWZ** | **Holdsworth Sta** | **1.93** | **166** | P | Pn | 23 31 40.9 | -1.0 |
| **DUWZ** | **D'Urville Isla** | **1.93** | **203** | P | Pn | 23 31 40.9 | -1.0 |
| **BFZ** | **Birch Farm** | **1.95** | **149** | P | Pn | 23 31 41.3 | -0.8 |
| **RAGZ** | **Rawiri** | **2.03** | **76** | P | Pn | 23 31 42.4 | -0.7 |
| **CAW** | **Cannon Point** | **2.09** | **177** | P | Pn | 23 31 42.5 | -1.1 |
| **CPWZ** | **Castlepoint** | **2.13** | **153** | P | Pn | 23 31 43.6 | -0.4 |
| **KNZ** | **Kokohu** | **2.15** | **91** | P | Pn | 23 31 43.7 | -0.5 |
| **MWZ** | **Matawai** | **2.16** | **72** | P | Pn | 23 31 43.4 | -1.1 |
| **MTW** | **Mount Morrison** | **2.18** | **168** | P | Pn | 23 31 43.1 | -1.4 |
| **TMWZ** | **Te Maipa** | **2.21** | **160** | P | Pn | 23 31 43.7 | -1.2 |
| **TCW** | **Tory Channel** | **2.24** | **192** | P | Pn | 23 31 44.1 | -1.1 |
| **RIGZ** | **Rimuhau** | **2.25** | **83** | P | Pn | 23 31 44.9 | -0.5 |
| **WEL** | **Wellington** | **2.26** | **183** | P | Pn | 23 31 44.0 | -1.4 |
| **PRGZ** | **Paritu Road** | **2.32** | **88** | P | Pn | 23 31 45.6 | -0.6 |
| **MHGZ** | **Mahia Peninsul** | **2.34** | **94** | P | Pn | 23 31 46.0 | -0.3 |
| **TKGZ** | **Te Karaka** | **2.37** | **77** | P | Pn | 23 31 46.1 | -0.6 |
| **BHW** | **Baring Head** | **2.38** | **181** | P | Pn | 23 31 45.0 | -1.7 |
| **PAWZ** | **Paruwai Farm** | **2.39** | **171** | P | Pn | 23 31 45.3 | -1.6 |
| **MSWZ** | **Moikau Station** | **2.41** | **174** | P | Pn | 23 31 45.3 | -1.7 |
| **RUGZ** | **Raukumara Rang** | **2.42** | **65** | P | Pn | 23 31 45.2 | -2.2 |
| **TRWZ** | **Traveller** | **2.45** | **166** | P | Pn | 23 31 45.9 | -1.5 |
| **NNZ** | **Nelson** | **2.49** | **208** | P | Pn | 23 31 46.1 | -1.8 |
| **TKNZ** | **Takaka Hill** | **2.50** | **216** | P | Pn | 23 31 45.8 | -2.4 |
| **TUWZ** | **Tuamarina** | **2.52** | **197** | P | Pn | 23 31 46.7 | -1.5 |
| **TWGZ** | **Tauwhareparae** | **2.55** | **72** | P | Pn | 23 31 47.9 | -0.8 |
| **PLWZ** | **Palliser** | **2.56** | **174** | P | Pn | 23 31 46.8 | -1.9 |
| **QRZ** | **Quartz Range** | **2.57** | **225** | P | Pn | 23 31 46.3 | -2.5 |
| **HAZ** | **Te Kaha** | **2.59** | **62** | P | Pn | 23 31 47.0 | -2.1 |
| **CNGZ** | **Carnagh Statio** | **2.63** | **79** | P | Pn | 23 31 49.0 | -0.7 |
| **PKGZ** | **Pakihiroa** | **2.73** | **67** | P | Pn | 23 31 49.3 | -1.6 |
| **CMWZ** | **Cape Campbell** | **2.77** | **191** | P | Pn | 23 31 50.0 | -1.2 |
| **PUZ** | **Puketiti** | **2.79** | **71** | P | Pn | 23 31 49.8 | -1.7 |
| **BSWZ** | **Blackbirch Sta** | **2.80** | **196** | P | Pn | 23 31 49.9 | -1.6 |
| **MRNZ** | **Matariki Terra** | **2.89** | **214** | P | Pn | 23 31 49.9 | -2.7 |
| **WMGZ** | **Waiomatatini S** | **3.00** | **68** | P | Pn | 23 31 52.1 | -1.9 |
| **MXZ** | **Matakaoa Point** | **3.05** | **62** | P | Pn | 23 31 52.7 | -1.7 |
| **THZ** | **Tophouse** | **3.13** | **209** | P | Pn | 23 31 53.0 | -2.6 |
| **KHZ** | **Kahutara** | **3.55** | **197** | P | Pn | 23 31 57.9 | -2.6 |
| **DSZ** | **Denniston Nort** | **3.61** | **220** | P | Pn | 23 31 58.0 | -3.2 |
| **GVZ** | **Greta Valley S** | **4.19** | **199** | P | Pn | 23 32 05.2 | -3.2 |
| **LTZ** | **Lake Taylor** | **4.25** | **207** | P | Pn | 23 32 06.0 | -3.3 |
| **AMCZ** | **Amberley** | **4.49** | **202** | P | Pn | 23 32 08.7 | -3.5 |
| **OKCZ** | **Okains Bay** | **4.90** | **196** | P | Pn | 23 32 13.6 | -3.8 |
| **MQZ** | **McQueen's Vall** | **4.98** | **199** | P | Pn | 23 32 13.8 | -4.6 |
| **AKCZ** | **Akaroa Harbour** | **5.07** | **197** | P | Pn | 23 32 15.4 | -4.3 |
| **WVZ** | **Waitaha Valley** | **5.13** | **217** | P | Pn | 23 32 16.6 | -3.8 |
| **MHCZ** | **Mount Hutt** | **5.16** | **208** | P | Pn | 23 32 16.8 | -4.0 |
| **WACZ** | **Wakanui South** | **5.43** | **204** | P | Pn | 23 32 20.2 | -4.0 |
| **RPZ** | **Rata Peaks** | **5.51** | **210** | P | Pn | 23 32 20.9 | -4.5 |
| **ARCZ** | **Arundel** | **5.66** | **208** | P | Pn | 23 32 22.9 | -4.4 |
| **FOZ** | **Fox Glacier** | **5.92** | **219** | P | Pn | 23 32 25.2 | -5.4 |
| **TMZ** | **Timaru** | **6.10** | **207** | P | Pn | 23 32 28.8 | -4.2 |
| **LBZ** | **Lake Benmore** | **6.42** | **212** | P | Pn | 23 32 32.2 | -4.9 |
| **ODZ** | **Otahua Downs** | **6.80** | **206** | P | Pn | 23 32 38.0 | -4.1 |
| **JCZ** | **Jackson Bay** | **6.82** | **220** | P | Pn | 23 32 36.7 | -5.7 |
| **WKZ** | **Wanaka** | **7.27** | **215** | P | Pn | 23 32 41.5 | -6.7 |
| **MLZ** | **Mavora Lakes** | **8.10** | **216** | P | Pn | 23 32 54.0 | -5.1 |
| **APZ** | **The Paps** | **9.31** | **211** | P | Pn | 23 33 08.8 | -6.0 |

**IDC 01 23:46:21.4±1.7, 2°93S×142°01E, h0km, mb3.3/2, mb1 3.8/3, mb1mx3.1/31, mbtmp3.5/3, ML3.7/1, Error ellipse: s-maj=30.2km s-min=18.1km az=25.0, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.37** | **288** | Pg | Pg | 23 46 46.9 | -0.8 |
| | 11nm,0.3s,baz=129,slow=5.4,SNR=18 | | | | | | |
| JAY | | | | Lg | Lg | 23 47 05.5 | |
| | 20nm,0.3s,baz=63,slow=23,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.49** | **203** | P | Pn | 23 50 40.1 | +0.8 |
| | 0.2nm,0.3s,baz=21,slow=13,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **22.05** | **200** | P | P | 23 51 17.4 | -0.6 |
| | 0.3nm,0.5s,baz=24,slow=12,SNR=4.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.23** | **46** | T | T | 00 28 03.2 | |
| | baz=229,slow=76,SNR=19 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.24** | **46** | T | T | 00 28 03.1 | |
| | baz=229,slow=76,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.24** | **46** | T | T | 00 28 04.3 | |
| | baz=229,slow=76,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **84.68** | **24** | P | P | 23 58 56.9 | 0.0 |
| | 0.4nm,0.6s,baz=260,slow=4.9,SNR=5.7 | | | | | | |

**NDI 01 23:49:31.6±2.2, 26°51N×93°29E, h33km, ML3.6, Northeastern India**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ITAN** | **ITANAGAR** | **0.74** | **31** | *e*P | Pb | 23 49 46.3 | +0.2 |
| ITAN | | | | *e*S | Sb | 23 49 57.1 | +1.1 |
| ITAN | | | | IAML | | 23 49 58.0 | |
| | comp=E,6μm,0.2s | | | | | | |
| **KOHI** | **KOHIMA** | **1.08** | **137** | *e*P | Pb | 23 49 51.2 | -0.7 |
| KOHI | | | | *e*S | Sb | 23 50 05.4 | -0.3 |
| KOHI | | | | IAML | | 23 50 06.5 | |
| | comp=N,2μm,0.3s | | | | | | |
| **GUWA** | **GUWAHATI** | **1.47** | **258** | *e*P | Pn | 23 49 55.9 | +0.1 |
| GUWA | | | | *e*S | Sn | 23 50 13.3 | -0.6 |
| GUWA | | | | IAML | | 23 50 13.7 | |
| | comp=E,718nm,0.1s | | | | | | |
| **SHL** | **Shillong** | **1.58** | **234** | *e*P | Pn | 23 49 57.3 | -0.2 |
| SHL | | | | *e*S | Sn | 23 50 15.8 | -1.1 |
| **LKP** | **Lekhapani** | **2.42** | **70** | *e*S | Sn | 23 50 35.7 | -1.7 |
| LKP | | | | IAML | | 23 50 39.2 | |
| | comp=N,344nm,0.4s | | | | | | |
| **AGT** | **Agartala** | **3.21** | **216** | *e*S | Sn | 23 50 56.4 | -0.3 |
| AGT | | | | IAML | | 23 51 01.5 | |
| | comp=E,155nm,0.3s | | | | | | |
| **BOK** | **Bokaro** | **7.23** | **250** | *e*S | Sn | 23 52 31.5 | -4.6 |

*IDC **01** 23:50:46.9±0.8, 35°50N×3°88W, h0km, mb4.0/11, mb1 4.1/16, mb1mx3.9/50, mbtmp3.9/16, ML4.1/4, MS3.7/3, Ms1 3.7/3, ms1mx3.1/96, Error ellipse: s-maj=23.9km s-min=11.7km az=100.0*
*CNRM **01** 23:50:46.0, 35°49N×3°84W, h0km, ml4.0*
*NEIC **01** 23:50:48.9±1.7, 35°46N±0°09×3°85W±0°07, h10km±1km, mb4.2/12, Error ellipse: s-maj=15.9km s-min=10.0km az=182.0*
*CRAAG **01** 23:50:48.0, 35°52N×3°81W, Ml3.7*
*SFS **01** 23:50:48.0, 35°50N×3°80W, ML3.7, ALBORAN SUR*
*MDD **01** 23:50:49.0±0.6, 35°53N×3°81W, h0km, mb

LIJA S Sn 23 51 41.0 -4.1
**ENIJ Nijar** 1.93 40 Pg Pn 23 51 20.7 -0.5
56nm,0.4s,SNR=7.9
ENIJ Lg Lg 23 51 43.7
731nm,0.4s,SNR=7.9
**LCRM LCR** 2.03 207 P Pn 23 51 23.0 +0.3
**LCRM LCR** 2.03 207 P Pn 23 51 22.3 -0.3
**LCRM LCR** 2.03 207 P Pn 23 51 22.2 -0.4
**LCRM LCR** 2.03 207 P Pn 23 51 22.2 -0.4
**CNIL Conil** 2.04 295 P Pb 23 51 25.0 -0.6
CNIL S Sn 23 51 48.0 0.0
**SFS San Fernando** 2.19 296 P Pb 23 51 27.1 -1.1
SFS S Sb 23 51 54.7 -0.5
**SFS San Fernando** 2.19 296 Pn 23 51 23.7 -1.0
**IFR Ifrane** 2.28 210 P Pn 23 51 25.5 -0.7
IFR S Sn 23 51 52.4 -1.7
**EQES Quesada** 2.36 14 Pn Pb 23 51 29.6 -1.4
153nm,0.4s,SNR=10
EQES Sn Sb 23 51 58.0 -2.0
329nm,0.5s
**OTSS Djebel Tessala** 2.44 94 P Pb 23 51 33.0 +0.5
**USTO Oran** 2.63 84 P Pg 23 51 44.0 +4.8
**TLOR Lorca, Murcia** 2.72 37 Pn Pb 23 51 34.4 -2.8
SNR=7.9
TLOR Sn Sn 23 52 04.9 +0.2
SNR=7.9
**EADA Adamuz** 2.73 346 Pn Pn 23 51 33.7 +1.5
26nm,0.3s,SNR=105
EADA Sn Sn 23 52 05.0 0.0
137nm,0.5s
**MD31 MD31** 2.76 198 P Pn 23 51 32.7 0.0
**MDT Midelt** 2.78 195 Pn Pn 23 51 32.6 -0.3
6.0nm,0.3s,baz=219,slow=8.6,SNR=182
MDT Sn Sn 23 52 05.8 -0.5
13nm,0.3s,baz=28,slow=17,SNR=4.4
MDT Lg Lg 23 52 12.8
16nm,0.3s,baz=294,slow=23,SNR=5.1
**MDT Midelt** 2.78 195 P Pn 23 51 33.8 +0.9
**MDT Midelt** 2.78 195 P Pn 23 51 33.8 +0.9
**MDT Midelt** 2.78 195 P Pn 23 51 33.8 +0.9
**TDRA Tendrara** 2.85 149 P Pn 23 51 34.7 +0.7
**TDRA Tendrara** 2.85 149 P Pn 23 51 35.0 +0.9
**TDRA Tendrara** 2.85 149 P Pn 23 51 35.0 +0.9
**ECAB El Cabril** 2.88 333 Pn Pn 23 51 35.4 +1.2
11nm,0.4s,SNR=42
ECAB Sn Sn 23 52 10.2 +1.4
53nm,0.5s,SNR=6.3
**EZAR Zarzadilla de** 2.89 35 Pn Pn 23 51 34.7 +0.3
94nm,3.1s,SNR=7.9
EZAR Sn Sn 23 52 09.2 +0.2
288nm,6.7s,SNR=7.9
**ODJA Bouhanifia** 2.96 92 P Pg 23 51 50.0 +4.5
**CART Cartagena** 3.04 46 P Pn 23 51 35.0 -1.4
CART S Sn 23 52 08.6 -4.0
**CART Cartagena** 3.04 46 Pn Pn 23 51 35.4 -1.1
**CART Cartagena** 3.04 46 P Pn 23 51 36.3 -0.2
**CART Cartagena** 3.04 46 P Pn 23 51 36.3 -0.2
CART S Sn 23 52 09.9 -2.8
**CART Cartagena** 3.04 46 P Pn 23 51 36.3 -0.2
**CART Cartagena** 3.04 46 P Pn 23 51 38.4 +1.9
**CART Cartagena** 3.04 46 P Pn 23 51 38.4 +1.9
**CART Cartagena** 3.04 46 P Pb 23 51 39.7 -3.0
**EMUR La Murta** 3.09 40 Pn Pn 23 51 37.6 +0.5
25nm,0.4s,SNR=24
EMUR Sn Sn 23 52 11.9 -2.0
336nm,0.8s,SNR=26
**ZHG ZHG** 3.14 230 P Pn 23 51 38.1 +0.2
**ZHG ZHG** 3.14 230 P Pn 23 51 38.1 +0.2
**EMIN Mina Concepcio** 3.25 315 Pn Pn 23 51 39.6 +0.3
20nm,0.4s,SNR=48
EMIN Sn Sn 23 52 17.5 -0.1
46nm,0.5s,SNR=7.1
**OJBR Djebel Berber** 3.35 88 P Pg 23 51 55.0 +1.9
**ETRV Los Montesinos** 3.48 43 Pn Pn 23 51 42.8 +0.4
56nm,4.2s,SNR=7.9
ETRV Sn Sn 23 52 21.4 -1.9
32nm,4.3s,SNR=7.9
**ETOB Tobarra** 3.60 29 Pn Pn 23 51 46.0 +1.9
59nm,0.3s,SNR=442
ETOB Sn Sn 23 52 27.2 +0.7
199nm,0.8s,SNR=10
**EGRO El Granado** 3.61 305 Pn Pn 23 51 44.6 +0.4
38nm,0.3s,SNR=89
EGRO Sn Sn 23 52 25.4 -1.2
80nm,0.4s,SNR=12
**OKGL Djebel Kef Gue** 3.63 80 P Pb 23 51 55.0 +2.4
**PVAQ Vaqueiros** 3.70 302 *e*Pn Pn 23 51 45.6 +0.1
PVAQ *e*Sn Sn 23 52 27.8 -1.1
PVAQ A A 23 52 29.1
188nm,0.6s
**PVAQ Vaqueiros** 3.70 302 Pn Pn 23 51 46.0 +0.5
**PVAQ Vaqueiros** 3.70 302 P Pn 23 51 45.6 +0.1
PVAQ S Sn 23 52 28.4 -0.5
**PVAQ Vaqueiros** 3.70 302 P Pn 23 51 45.7 +0.1
**PVAQ Vaqueiros** 3.70 302 P Pn 23 51 45.6 +0.1
PVAQ S Sn 23 52 28.4 -0.5
**AVE Averroes** 3.73 235 P Pn 23 51 43.5 -2.4
AVE S Sn 23 52 34.2 +4.5
**PBDV Barranco-do-Ve** 3.78 298 *e*Pn Pn 23 51 46.8 +0.2
PBDV *e*Sn Sn 23 52 28.5 -2.3
PBDV A A 23 52 33.5
79nm,0.4s
**FIGM Figuig** 3.96 148 P Pn 23 51 49.9 +0.7
**FIGM Figuig** 3.96 148 P Pn 23 51 52.0 +2.8
**PCVE Castro Verde** 4.04 303 *e*Pn Pn 23 51 50.4 +0.3
PCVE *e*Sn Sn 23 52 36.2 -1.0
PCVE A A 23 52 38.6
69nm,0.5s
**PAB San Pablo** 4.05 354 Pn Pn 23 51 52.1 +1.6
**PAB San Pablo** 4.05 354 Pn Pn 23 51 51.6 +1.1
29nm,6.8s,SNR=7.9
PAB Sn Sn 23 52 36.1 -1.6
61nm,6.3s,SNR=7.9
**PAB San Pablo** 4.05 354 P Pn 23 51 52.0 +1.6
**AFON Font Roja** 4.07 38 Pn Pn 23 51 51.3 +0.6
15nm,0.4s,SNR=11
AFON Sn Sn 23 52 38.2 0.0
60nm,0.9s
**PBEJ Beja** 4.14 309 *e*Pn Pn 23 51 52.8 +1.3
PBEJ *e*Sn Sn 23 52 38.5 -1.2
PBEJ A A 23 52 44.0
49nm,0.4s
**EBAD Badajoz** 4.15 322 Pn Pn 23 51 52.4 +0.7
11nm,0.3s,SNR=68
EBAD Sn Sn 23 52 39.0 -1.0
34nm,0.5s,SNR=5.8
**ESDC Sonseca Array** 4.16 358 Pn Pn 23 51 53.6 +1.7
3.3nm,0.3s,baz=176,slow=12,SNR=194
ESDC Lg Lg 23 52 58.2
2.9nm,0.3s,baz=178,slow=27,SNR=5.0
**ESDC Sonseca Array** 4.16 358 Pn Pn 23 51 53.2 +1.4
**ESDC Sonseca Array** 4.16 358 Pn Pn 23 51 53.5 +1.7
7.6nm,0.3s,baz=173,slow=12,SNR=309
**ESBB Sonseca Array** 4.16 358 Pn Pn 23 51 53.9 +2.0
**MESJ Messejana** 4.27 304 *e*P Pn 23 51 53.4 +0.1
MESJ *e*S Sn 23 52 40.3 -2.6
MESJ IAML 23 52 47.2
comp=N,122nm,0.4s
**MESJ Messejana** 4.27 304 *e*Pn Pn 23 51 53.6 +0.3
MESJ *e*Sn Sn 23 52 41.5 -1.3
MESJ A A 23 52 46.0
comp=N,70nm,0.8s
**MORF Marmelete** 4.33 296 *e*P Pn 23 51 54.2 0.0
MORF *e*S Sn 23 52 41.4 -3.0
MORF IAML 23 52 46.6
comp=N,179nm,0.2s
**MORF Marmelete** 4.33 296 *e*Pn Pn 23 51 54.5 +0.4
MORF *e*Sn Sn 23 52 42.5 -1.9
MORF A A 23 52 46.9
comp=N,69nm,0.2s
**PFVI Vila Bisbo** 4.39 293 *e*Pn Pn 23 51 55.1 +0.1
PFVI *e*Sn Sn 23 52 43.2 -2.8
PFVI A A 23 52 51.5
comp=N,78nm,0.5s
**PFVI Vila Bisbo** 4.39 293 Pn Pn 23 51 54.6 -0.4
**PFVI Vila Bisbo** 4.39 293 Pn Pn 23 51 56.1 +1.1
comp=N,20nm,0.3s,SNR=24
PFVI Sn Sn 23 52 43.6 -2.3
comp=N,35nm,0.4s,SNR=14
**PFVI Vila Bisbo** 4.39 293 P Pn 23 51 54.9 -0.1
**PFVI Vila Bisbo** 4.39 293 P Pn 23 51 54.9 -0.1
**PTEO Sao Teotonio** 4.48 298 *e*Pn Pn 23 51 56.7 +0.5
PTEO *e*Sn Sn 23 52 46.7 -1.3
PTEO A A 23 52 48.5
comp=N,69nm,0.3s
**PESTR Estremoz** 4.53 319 *e*Pn Pn 23 51 57.8 +0.9
PESTR *e*Sn Sn 23 52 48.7 -0.7
PESTR A A 23 53 00.9
comp=N,41nm,0.5s
**PESTR Estremoz** 4.53 319 Pn Pn 23 51 56.6 -0.3
**PESTR Estremoz** 4.53 319 P Pn 23 51 57.8 +0.9
**EVO Evora** 4.54 313 P Pn 23 51 57.4 +0.3
EVO S Sn 23 52 47.6 -2.0
**SRHM Skhour des Reh** 4.58 230 P Pn 23 51 57.7 +0.1
**PNCL Nicolau / Gran** 4.62 306 *e*Pn Pn 23 51 58.4 +0.3
PNCL *e*Sn Sn 23 52 50.3 -1.2
PNCL A A 23 52 52.7
comp=N,44nm,0.4s
**ECHE Chera** 4.64 28 Pn Pn 23 51 59.9 +1.4
comp=N,20nm,5.4s,SNR=7.9
**UCM Universidad Co** 4.81 5 P Pn 23 52 01.0 +0.3
UCM S Sn 23 52 59.4 +3.2
**PMRV Marv??o** 4.86 325 *e*Pn Pn 23 52 02.6 +1.2
PMRV *e*Sn Sn 23 52 55.9 -1.5
PMRV A A 23 53 12.1
comp=N,39nm,0.6s
**EPLA Plasencia** 4.90 339 Sn Sn 23 52 58.2 -0.3
comp=N,31nm,4.3s,SNR=7.9
**TZRR Tazzarine** 4.95 198 P Pn 23 52 03.4 +0.6
**TZRR Tazzarine** 4.95 198 P Pn 23 52 03.7 +0.9
**TZRR Tazzarine** 4.95 198 P Pn 23 52 03.7 +0.9
**PMTG Montargil** 5.02 316 *e*Pn Pn 23 52 04.4 +0.7
PMTG *e*Sn Sn 23 53 00.3 -1.2
PMTG A A 23 53 01.6
comp=N,38nm,0.5s
**GUD Guadarrama** 5.13 357 Pn Pn 23 52 07.0 +1.7
comp=N,5.5nm,0.3s,SNR=14
**OUZM OUZ** 5.23 209 P Pn 23 52 07.0 +0.4
**OUZM OUZ** 5.23 209 P Pn 23 52 06.8 +0.2
**OUZM OUZ** 5.23 209 P Pn 23 52 07.0 +0.4
**OUZM OUZ** 5.23 209 P Pn 23 52 07.0 +0.4
**PCBR Castelo Branco** 5.23 327 *e*Pn Pn 23 52 07.8 +1.3
PCBR *e*Sn Sn 23 53 05.5 -1.0
PCBR A A 23 53 11.5
comp=N,25nm,0.4s
**LIS Lisbon** 5.36 308 *e*Pn Pn 23 52 09.7 +1.4
**EIBI Ibiza** 5.38 48 Pn Pn 23 52 09.4 +0.8
comp=N,20nm,0.6s,SNR=28
EIBI Sn Sn 23 53 07.6 -2.7
comp=N,10nm,0.4s,SNR=5.7
**PMST Lisbon--Monsan** 5.39 308 *e*Pn Pn 23 52 09.7 +1.0
PMST *e*Sn Sn 23 53 09.4 -1.2
**ETOR Torete** 5.47 14 Pn Pn 23 52 12.1 +2.2
comp=N,21nm,0.4s,SNR=37
**OUK Oukaimeden** 5.49 220 P Pn 23 52 09.3 -1.2
**OUK Oukaimeden** 5.49 220 P Pn 23 52 11.1 +0.7
**EMOS Mosqueruela** 5.50 27 Pn Pn 23 52 12.3 +1.9
comp=N,5.1nm,0.3s,SNR=32
EMOS Sn Sn 23 53 10.8 -2.7
comp=N,10nm,0.5s,SNR=6.2
**PMAFR Mafra** 5.58 310 *e*Pn Pn 23 52 12.3 +0.9
PMAFR *e*Sn Sn 23 53 13.3 -2.0
PMAFR A A 23 53 18.5
comp=N,47nm,0.5s
**PMAFR Mafra** 5.58 310 Pn Pn 23 52 11.8 +0.4
comp=N,29nm,0.4s,SNR=7.2
PMAFR Sn Sn 23 53 10.8 -4.5
comp=N,98nm,0.6s,SNR=7.4
**ZGR Zagora** 5.60 197 P Pn 23 52 11.8 +0.1
**PSBE So Bento** 5.65 317 *e*Pn Pn 23 52 13.5 +1.2
PSBE *e*Sn Sn 23 53 15.2 -1.8
PSBE A A 23 53 27.1
comp=N,30nm,0.6s
**MTE Manteigas** 5.72 330 *e*Pn Pn 23 52 14.8 +1.5
MTE *e*Sn Sn 23 53 18.1 -0.7
MTE A A 23 54 01.7
comp=N,46nm,0.7s
**MTE Manteigas** 5.72 330 Pn Pn 23 52 13.8 +0.5
**PCAS Casmilo, Conde** 5.88 322 *e*Pn Pn 23 52 16.3 +0.8
PCAS *e*Sn Sn 23 53 21.0 -1.6
PCAS A A 23 53 47.8
comp=N,36nm,0.8s
**COI Coimbra** 5.96 323 *e*Sn Sn 23 53 23.9 -0.6
**COI Coimbra** 5.96 323 Pn Pn 23 52 18.3 +1.8
**PVIS Viseu** 6.13 329 *e*Pn Pn 23 52 20.4 +1.5
PVIS *e*Sn Sn 23 53 27.0 -1.8
PVIS A A 23 53 36.3
comp=N,22nm,0.5s
**MVO Moncorvo** 6.20 337 *e*Pn Pn 23 52 21.5 +1.6
MVO *e*Sn Sn 23 53 30.0 -0.6
MVO A A 23 53 43.1
comp=N,43nm,0.6s
**MVO Moncorvo** 6.20 337 Pn Pn 23 52 21.7 +1.8
comp=N,18nm,0.3s,SNR=40
MVO Sn Sn 23 53 27.2 -3.4
comp=N,35nm,0.7s,SNR=5.0
**TTIG Tnine Tigouga,** 6.32 220 P Pn 23 52 19.1 -2.5
**ERTA Horta de San J** 6.32 29 Pn Pn 23 52 23.9 +2.3
comp=N,12nm,0.4s,SNR=33
ERTA Sn Sn 23 53 30.1 -3.4
comp=N,16nm,0.9s,SNR=5.0
**PVRL Vila Real** 6.54 333 *e*Pn Pn 23 52 25.8 +1.3
PVRL *e*Sn Sn 23 53 36.3 -2.6
PVRL A A 23 53 43.7
comp=N,28nm,0.3s
**POLO Lamas de Olo** 6.65 333 *e*Pn Pn 23 52 27.5 +1.4
POLO *e*Sn Sn 23 53 39.0 -2.7
POLO A A 23 53 48.2
comp=N,12nm,0.5s
**PBRG Braganca** 6.70 341 *e*Pn Pn 23 52 28.2 +1.4
PBRG *e*Sn Sn 23 53 42.3 -0.6
PBRG A A 23 53 50.3
comp=N,14nm,0.2s
**ETOS Mallorca** 6.73 49 Pn Pn 23 52 28.2 +1.1
comp=N,11nm,0.4s,SNR=28
ETOS Sn Sn 23 53 40.6 -3.0
comp=N,112nm,1.9s,SNR=5.0
**PTO Porto** 6.78 327 *e*Pn Pn 23 52 28.9 +1.1
PTO *e*Sn Sn 23 53 42.9 -1.9
PTO A A 23 53 55.1
comp=N,19nm,0.9s
**EPOB Poblet** 6.96 32 Pn Pn 23 52 32.7 +2.4
comp=N,2.0nm,0.4s,SNR=6.4
EPOB Sn Sn 23 53 45.8 -3.6
comp=N,68nm,1.9s,SNR=5.0
**PCAB Cabril** 7.03 333 *e*Pn Pn 23 52 32.5 +1.2
PCAB *e*Sn Sn 23 53 49.1 -1.9
PCAB A A 23 54 26.9
comp=N,19nm,0.5s
**ELOB Lobios** 7.18 333 Pn Pn 23 52 33.7 +0.3
comp=N,8.3nm,0.5s,SNR=10
ELOB Sn Sn 23 53 51.2 -3.5
comp=N,16nm,0.5s,SNR=5.0
**PGAV Gavieira, Arco** 7.34 333 *e*Pn Pn 23 52 37.1 +1.5
PGAV *e*Sn Sn 23 53 56.5 -2.2
PGAV A A 23 54 44.4
comp=N,17nm,0.6s
**EORO Oroz-Betelu** 7.62 14 Pn Pn 23 52 40.1 +0.8
comp=N,3.0nm,5.2s,SNR=7.9
**ELAN Lanestosa** 7.72 2 Pn Pn 23 52 43.1 +2.5
comp=N,9.3nm,0.7s,SNR=26
**ETSF Etsaut** 7.79 18 *e*Pn Pn 23 52 43.4 +1.7
**ETSF Etsaut** 7.79 18 *e*P Pn 23 52 48.0 +6.3
ETSF *e*Sn Sn 23 54 07.9 -1.7
comp=N,5.1nm,0.6s
**SJPF Ste Jean** 7.84 14 *e*Pn Pn 23 52 44.2 +1.8
**SJPF Ste Jean** 7.84 14 *e*P Pn 23 52 47.9 +5.5
SJPF *e*Sn Sn 23 54 09.0 -2.0
comp=N,1.7nm,0.5s
**CSOR Sort** 7.85 28 Pn Pn 23 52 44.7 +2.1
comp=N,17nm,5.2s,SNR=7.9
**EARI Arriondas** 7.86 352 Pn Pn 23 52 43.8 +1.1
comp=N,6.6nm,0.5s,SNR=12
**EALK Alkurruntz** 7.90 12 Pn Pn 23 52 45.5 +2.3
comp=N,62nm,0.4s,SNR=31
**CFON Fontmartina** 7.91 36 Pn Pn 23 52 44.2 +0.9
comp=N,24nm,5.7s,SNR=7.9
**ATE Arette** 7.93 17 Pn Pn 23 52 45.4 +1.8
comp=N,11nm,4.7s,SNR=7.9
**EAGO Agolada(Pontev** 8.02 337 Pn Pn 23 52 45.2 +0.4
comp=N,9.1nm,2.6s,SNR=5.9
**EPF Esparros** 8.16 22 *e*Pn Pn 23 52 48.2 +1.5
**EPF Esparros** 8.16 22 *e*P Pn 23 52 52.7 +6.0
EPF *e*Sn Sn 23 54 16.1 -2.6
comp=N,3.8nm,0.4s
**EPON Pontenova** 8.23 343 Pn Pn 23 52 48.4 +0.7
comp=N,4.9nm,3.3s,SNR=7.9
**CLLI Llivia** 8.27 31 Pn Pn 23 52 50.3 +1.9
comp=N,0.7nm,4.9s,SNR=7.9
**MTLF Montolieu** 9.09 29 *e*Pn Pn 23 52 59.2 -0.2
**MTLF Montolieu** 9.09 29 *e*P Pn 23 53 03.8 +4.4
**LFF La Frestale** 10.03 19 *e*Pn Pn 23 53 13.4 +1.1
**LFF La Frestale** 10.03 19 *e*P Pn 23 53 18.7 +6.4
**LASF Ste Croix** 10.37 32 *e*Pn Pn 23 53 17.5 +0.5
**CAF Calviac** 10.40 24 *e*Pn Pn 23 53 18.1 +0.6
**CAF Calviac** 10.40 24 *e*P Pn 23 53 23.6 +6.1
**RJF Les Rejaudoux** 10.58 21 *e*Pn Pn 23 53 20.0 +0.2
**KEST Kesra** 10.68 85 Pn Pn 23 53 23.2 +1.8
comp=N,0.1nm,0.3s,baz=66,slow=23,SNR=2.0
**LMR La Mourre** 11.14 42 *e*P Pn 23 53 32.6 +5.1
LMR *e*Sn Sn 23 55 25.5 -6.3
comp=N,2.7nm,0.5s
**MFF Saint Martin d** 11.41 13 *e*Pn Pn 23 53 31.7 +0.5
**MFF Saint Martin d** 11.41 13 *e*P Pn 23 53 37.1 +5.9
**TCF Toulx Ste Croi** 11.67 21 *e*Pn Pn 23 53 35.0 +0.1
**TCF Toulx Ste Croi** 11.67 21 *e*P Pn 23 53 41.0 +6.1
**ORIF Oris-en-Rattie** 11.94 35 *e*P Pn 23 53 43.9 +5.4
**SBF Sospel** 11.99 43 *e*P Pn 23 53 44.5 +5.2
SBF *e*Sn Sn 23 55 46.3 -6.5
comp=N,2.0nm,0.6s
**BGF Bois d'Agland** 12.11 22 *e*Pn Pn 23 53 41.0 +0.2
**PGF Pioggiola** 12.16 51 *e*P Pn 23 53 45.2 +3.7
PGF *e*Sn Sn 23 55 50.0 -6.9
comp=N,5.1nm,0.6s
**QUIF Quistinic** 12.40 2 *e*Pn Pn 23 53 45.6 +0.8
**SGMF Saint Gilles** 12.77 4 *e*Pn Pn 23 53 50.6 +0.9
**SGMF Saint Gilles** 12.77 4 *e*P P 23 53 55.2 -5.6
**ROSF Rostrenen** 12.82 1 *e*Pn Pn 23 53 51.7 +1.2
**ROSF Rostrenen** 12.82 1 *e*P P 23 53 56.7 -4.7
**GRR Gorron** 13.05 9 *e*Pn Pn 23 53 54.8 +1.2
**GRR Gorron** 13.05 9 *e*P P 23 53 59.3 -4.6
**LDF La Druitiere** 13.35 11 *e*Pn Pn 23 53 58.8 +1.1
**FLN La Foliniere** 13.46 9 *e*Pn Pn 23 53 59.9 +0.7
baz=187
**DAVOX Davos/Dischmat** 15.22 38 LR LR 23 59 30.6
comp=N,482nm,19.1s,baz=298,slow=34
**GERES GERESS Array B** 18.52 39 P Pn 23 55 05.9 +1.1
comp=N,0.3nm,0.3s,baz=213,slow=11,SNR=2.2
**PDG Podgorica** 19.16 62 P Pn 23 55 17.6 +5.1
PDG IAmb IAmb 23 55 22.7
comp=Z,12nm,1.3s
**EKA Eskdalemuir Ar** 19.83 1 P Pn 23 55 20.9 +0.5
baz=171,slow=11,SNR=4.2
**CLL Collm** 19.87 32 *i* P Pn 23 55 21.6 +0.7
comp=Z,12nm,1.0s
CLL *e*PPP PPP 23 55 46.0
**BRG Berggiesshubel** 19.98 34 *e*P Pn 23 55 23.4 +1.1
BRG Amp 23 55 24.8
comp=Z,5.3nm,1.1s
**MODS Modra-Piesok** 20.17 44 *e*P Pn 23 55 26.0 +1.4
**FNA Florina** 20.43 68 P Pn 23 55 30.9 +3.1
**HERR Herculane** 22.00 57 P P 23 55 46.5 +4.1
**VTS Vitosha** 22.08 63 ⇑P P 23 55 46.1 +2.7
**DRGR** 22.79 52 ⇓P P 23 55 52.5 +1.6
**TORD Torodi Ar. Bea** 22.80 166 P P 23 55 52.4 +1.3
comp=Z,1.6nm,0.9s,baz=342,slow=9.1,SNR=5.6
**TORD Torodi Ar. Bea** 22.80 166 IAmb IAmb 23 55 55.9
comp=Z,3.1nm,0.7s
**TRPA Tarpa** 23.18 49 P P 23 55 55.9 +1.0
**VOIR** 23.95 57 ⇓P P 23 56 05.1 +2.6
**MLR Muntele Rosu** 24.57 57 P P 23 56 10.1 +1.9
comp=Z,3.6nm,0.8s,baz=290,slow=10,SNR=3.1
**MLR Muntele Rosu** 24.57 57 P P 23 56 11.3 +3.0
**BUR08 Bucovina Ar. S** 24.68 52 P P 23 56 10.2 +1.0
BUR08 IAmb IAmb 23 56 15.6
comp=Z,11nm,1.4s
**BURAR Bucovina Array** 24.68 52 ⇓P P 23 56 10.4 +1.2
**BURAR Bucovina Array** 24.68 52 P P 23 56 10.3 +1.2
**HFS Hagfors** 27.11 19 P P 23 56 31.3 +0.4
comp=Z,4.4nm,0.9s,baz=198,slow=9.2,SNR=5.0
**NOA NORSAR Array B** 27.29 16 P P 23 56 32.7 +0.1
comp=Z,1.6nm,0.8s,baz=205,slow=8.9,SNR=3.4
**FINES FINESS Array B** 32.10 27 P P 23 57 14.7 -0.4
comp=Z,3.9nm,1.0s,baz=234,slow=6.4,SNR=4.0
**ARCES ARCESS Array B** 37.66 16 P P 23 58 02.7 -0.4
comp=Z,1.4nm,0.8s,baz=214,slow=8.4,SNR=7.0
**ARCES ARCESS Array B** 37.66 16 IAmb IAmb 23 58 23.8
comp=Z,7.2nm,1.2s
**ABKAR Akbulak array** 47.66 53 P P 23 59 26.0 +1.6
ABKAR IAmb IAmb 23 59 26.4
comp=Z,7.7nm,0.8s
**ABKAR Akbulak array** 47.66 53 P P 23 59 25.4 +1.0
**ATD Arta Tunnel** 48.39 108 LR LR 00 20 41.4
comp=Z,52nm,20.1s,baz=104,slow=37
**MDP Montagnes des** 54.16 248 LR LR 00 20 13.6
comp=Z,68nm,18.8s,baz=56,slow=33
**ZALV Zalesovo Beam** 61.42 42 P P 00 01 04.8 +0.5
comp=Z,0.8nm,0.5s,baz=296,slow=8.0,SNR=4.3
**TARG Taragay, Kyrgy** 61.77 57 P P 00 01 08.7 +1.3
**MAKZ Makanchi** 62.49 51 P P 00 01 11.9 +0.3
**MK31 Makanchi Array** 62.70 50 P P 00 01 14.0 +0.9
MK31 IAmb IAmb 00 01 14.6
comp=Z,2.0nm,0.9s
**MKAR Makanchi Array** 62.70 50 P P 00 01 14.2 +1.1
comp=Z,2.2nm,0.8s,baz=296,slow=5.5,SNR=18
**MKAR Makanchi Array** 62.70 50 P P 00 01 13.7 +0.7
**YKA Yellowknife Ar** 67.83 332 P P 00 01 46.6 +0.7
comp=Z,2.1nm,0.8s,baz=60,slow=6.5,SNR=21
**SONM Songino Array** 76.24 41 P P 00 02 37.5 +0.6
comp=Z,0.8nm,0.9s,baz=305,slow=5.2,SNR=6.7
**SONM Songino Array** 76.24 41 IAmb IAmb 00 02 43.1
comp=Z,1.2nm,0.9s
**PDAR Pinedale Array** 76.84 313 P P 00 02 40.6 +0.2
comp=Z,0.9nm,0.7s,baz=64,slow=7.5,SNR=11

*IDC **02** 00:04:52.2±1.8, 25°.96N×128°.42E, h0km, mb3.5/3, mb1 3.6/4, mb1mx3.4/37, mbtmp3.6/4, ML3.3/1, Error ellipse: s-maj=55.8km s-min=19.7km az=85.0*
*JMA **02** 00:04:54.5±0.3, 25°.95N×128°.60E, h42km±5km, M3.6*
**ISC 02 00:04:54.4**±0.9, **25°.93N**±0°.05×**128°.57E**±0°.04, **h27**km, **n16,**
**σ1s35/28, mb3.4/3, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JJT3 | **Tamagusuku3** | **0.74** | **287** | P | | **Pn** | **00 05 09.0** | **0.0** |
| JJT3 | | | | eS | | **Sn** | **00 05 19.3** | **-0.1** |
| **JNTH** | **Nagotoyohara** | **0.76** | **320** | P | | **Pn** | **00 05 08.4** | **-1.0** |
| JNTH | | | | eS | | **Sn** | **00 05 19.4** | **-0.6** |
| **JOW** | **Kunigami** | **0.94** | **344** | Pn | | **Pb** | **00 05 11.4** | **-0.7** |
| 161nm,0.3s,baz=151,slow=20,SNR=208 | | | | | | | | |
| JOW | | | | Sn | | **Sn** | **00 05 26.7** | **+2.4** |
| 309nm,0.3s,baz=122,slow=25,SNR=8.2 | | | | | | | | |
| **JOW** | **Kunigami** | **0.94** | **344** | P | | **Pb** | **00 05 11.3** | **-0.7** |
| JOW | | | | eS | | **Sn** | **00 05 23.8** | **-0.5** |
| **JYRO** | **Yoronjima** | **1.09** | **355** | P | | **Pb** | **00 05 13.5** | **-1.2** |
| JYRO | | | | eS | | **Sb** | **00 05 27.3** | **-1.3** |
| **JIH** | **Iheya** | **1.23** | **334** | P | | **Pb** | **00 05 15.7** | **-1.2** |
| JIH | | | | S | | **Sb** | **00 05 31.1** | **-1.2** |
| **JAGN** | **Aguni-jima** | **1.36** | **299** | P | | **Pb** | **00 05 18.0** | **-1.1** |
| JAGN | | | | eS | | **Sb** | **00 05 35.5** | **-0.6** |
| **JOKE** | **Okinoerabujima** | **1.43** | **0** | P | | **Pn** | **00 05 18.5** | **0.0** |
| JOKE | | | | eS | | **Sn** | **00 05 35.7** | **-0.7** |
| **JKE** | **Kume jima 2** | **1.65** | **284** | P | | **Pn** | **00 05 21.4** | **-0.2** |
| JKE | | | | S | | **Sb** | **00 05 41.5** | **-3.0** |
| **JTK** | **Tokunoshima** | **1.88** | **10** | P | | **Pn** | **00 05 24.8** | **+0.1** |
| JTK | | | | eS | | **Sn** | **00 05 46.8** | **-0.8** |
| **JMZ** | **Minamidaito 2** | **2.39** | **92** | P | | **Pn** | **00 05 31.5** | **-0.3** |
| JMZ | | | | eS | | **Sn** | **00 05 58.0** | **-2.2** |
| **JKDJ** | **Kitadaitoujima** | **2.46** | **89** | P | | **Pn** | **00 05 32.6** | **-0.1** |
| JKDJ | | | | S | | **Sn** | **00 06 00.2** | **-1.6** |
| **JNU** | **Nakatsue** | **7.44** | **15** | Pn | | **Pn** | **00 06 42.6** | **+1.4** |
| 0.4nm,0.3s,baz=341,slow=23,SNR=5.9 | | | | | | | | |
| **SONM** | **Songino Array** | **27.97** | **327** | P | | **P** | **00 10 45.1** | **+2.4** |
| 0.6nm,0.7s,baz=144,slow=10,SNR=6.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.96** | **312** | P | | **P** | **00 12 43.0** | **0.0** |
| 0.4nm,0.5s,baz=90,slow=11,SNR=12 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.94** | **172** | P | | **P** | **00 13 17.2** | **+2.2** |
| 0.9nm,1.1s,baz=354,slow=8.6,SNR=2.4 | | | | | | | | |

*IDC **02** 00:17:55.4±1.2, 25°.93N×128°.40E, h0km, mb3.7/8, mb1 3.8/9, mb1mx3.6/42, mbtmp3.7/9, ML3.2/1, Error ellipse: s-maj=51.1km s-min=17.8km az=79.0*
*JMA **02** 00:17:58.3±0.3, 25°.99N×128°.56E, h40km±5km, M3.2*
**ISC 02 00:17:56.1**±3.3, **25°.94N**±0°.05×**128°.59E**±0°.04, **h11**km±21km, **n21,σ1s40/31, mb3.7/8, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JJT3** | **Tamagusuku3** | **0.76** | **286** | P | | **Pn** | **00 18 12.2** | **-0.6** |
| JJT3 | | | | eS | | **Sb** | **00 18 22.3** | **+0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JNTH** | **Nagotoyohara** | **0.77** | **318** | P | | **Pn** | **00 18 11.6** | **-1.3** |
| JNTH | | | | *e*S | | **Sb** | **00 18 21.6** | **-0.4** |
| **JOW** | **Kunigami** | **0.93** | **342** | Pn | | **Pn** | **00 18 14.6** | **-0.6** |
| | 82nm,0.3s,baz=148,slow=18,SNR=66 | | | | | | | |
| **JOW** | **Kunigami** | **0.93** | **342** | P | | **Pn** | **00 18 14.5** | **-0.6** |
| JOW | | | | S | | **Sb** | **00 18 25.8** | **-0.9** |
| **JYRO** | **Yoronjima** | **1.08** | **353** | P | | **Pn** | **00 18 16.8** | **-0.5** |
| JYRO | | | | *e*S | | **Sn** | **00 18 30.6** | **-1.7** |
| **JIH** | **Iheya** | **1.22** | **333** | P | | **Pn** | **00 18 19.0** | **-0.2** |
| **JAGN** | **Aguni-jima** | **1.37** | **298** | P | | **Pb** | **00 18 21.3** | **-0.5** |
| JAGN | | | | *e*S | | **Sn** | **00 18 38.8** | **-0.6** |
| **JOKE** | **Okinoerabujima** | **1.41** | **359** | P | | **Pb** | **00 18 21.7** | **-0.8** |
| JOKE | | | | S | | **Sn** | **00 18 39.6** | **-0.8** |
| **JKE** | **Kume jima 2** | **1.67** | **284** | P | | **Pn** | **00 18 24.6** | **-0.7** |
| JKE | | | | *e*S | | **Sn** | **00 18 44.3** | **-2.4** |
| **JTK** | **Tokunoshima** | **1.86** | **10** | P | | **Pn** | **00 18 28.0** | **0.0** |
| JTK | | | | *e*S | | **Sn** | **00 18 49.7** | **-1.8** |
| **JMZ** | **Minamidaito 2** | **2.37** | **92** | P | | **Pn** | **00 18 34.7** | **-0.3** |
| JMZ | | | | S | | **Sn** | **00 19 00.8** | **-3.2** |
| **JKDJ** | **Kitadaitoujima** | **2.43** | **89** | P | | **Pn** | **00 18 35.8** | **0.0** |
| JKDJ | | | | S | | **Sn** | **00 19 03.0** | **-2.6** |
| **JNU** | **Nakatsue** | **7.42** | **15** | Pn | | **Pn** | **00 19 47.4** | **+2.9** |
| | 0.3nm,0.3s,baz=196,slow=1.3,SNR=2.7 | | | | | | | |
| **SONM** | **Songino Array** | **27.97** | **327** | P | | **P** | **00 23 48.9** | **+2.1** |
| | 0.8nm,0.7s,baz=135,slow=9.5,SNR=6.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.97** | **312** | P | | **P** | **00 25 46.5** | **-0.6** |
| | 0.4nm,0.5s,baz=97,slow=10.0,SNR=8.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.67** | **323** | P | | **P** | **00 25 52.3** | **-0.4** |
| | 0.3nm,0.4s,baz=122,slow=10,SNR=1.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.95** | **172** | P | | **P** | **00 26 19.8** | **+0.5** |
| | 0.6nm,0.6s,baz=353,slow=8.5,SNR=4.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.58** | **174** | P | | **P** | **00 26 48.8** | **+1.3** |
| | 0.1nm,0.3s,baz=16,slow=12,SNR=1.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **73.27** | **331** | P | | **P** | **00 29 28.0** | **+0.7** |
| | 1.4nm,0.8s,baz=42,slow=4.3,SNR=1.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.96** | **320** | P | | **P** | **00 29 43.2** | **+0.2** |
| | 0.5nm,0.5s,baz=72,slow=3.0,SNR=1.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.47** | **308** | P | | **P** | **00 29 52.5** | **+0.6** |
| | 1.0nm,0.8s,baz=46,slow=8.3,SNR=4.1 | | | | | | | |

*BEO* ***02*** *00:22:58.2±0.4,44.02N×17.33E,h0km,ML2.4/8*
*RHSSO* ***02*** *00:22:58.4±0.2,44.04N×17.48E,h3km±1km,ML2.5/15*
**ISC 02 00:22:57.1**±1.1**,44.03N**±0.02×**17.44E**±0.02**,h7**km±9km**,**
**n60,**σ1**9**24/107**,8C-1D,Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MGRS** | **Mrkonjic Grad** | **0.46** | **326** | ⇑*i*P*g* | **Pb** | **00 23 07.2** | **-0.5** |
| MGRS | | | | *e*S*g* | **Sb** | **00 23 13.7** | **-1.1** |
| **RICI** | **Ricice** | **0.58** | **203** | *e*P*g* | **Pg** | **00 23 08.3** | **-0.1** |
| RICI | | | | S*g* | **Sb** | **00 23 16.8** | **-1.3** |
| **BLY** | **Banja Luka** | **0.74** | **346** | *e*P*g* | **Pb** | **00 23 12.4** | **0.0** |
| BLY | | | | *e*S*g* | **Sb** | **00 23 22.5** | **-0.2** |
| **BLY** | **Banja Luka** | **0.74** | **346** | ⇑*i*P*g* | **Pb** | **00 23 12.2** | **-0.2** |
| BLY | | | | *e*S*g* | **Sb** | **00 23 22.2** | **-0.5** |
| **KIJV** | **Kijevo** | **0.75** | **268** | *e*P*g* | **Pg** | **00 23 11.7** | **+0.2** |
| KIJV | | | | S*g* | **Sb** | **00 23 22.7** | **-0.3** |
| **MAKA** | **Makarska** | **0.81** | **203** | *e*P*g* | **Pg** | **00 23 12.3** | **-0.2** |
| MAKA | | | | S*g* | **Sb** | **00 23 24.2** | **-0.3** |
| **DOB** | **Doboj** | **0.84** | **34** | *e*P*g* | **Pg** | **00 23 13.1** | **-0.2** |
| DOB | | | | *e*S*g* | **Sg** | **00 23 24.0** | **-0.3** |
| **MRAK** | **Mrakovica** | **1.05** | **339** | ⇑*i*P*g* | **Pn** | **00 23 18.0** | **-0.4** |
| MRAK | | | | *e*S*g* | **Sn** | **00 23 32.6** | **-0.8** |
| **PRIJ** | **Prijedor** | **1.08** | **331** | ⇑*i*P*g* | **Pn** | **00 23 18.3** | **-0.4** |
| PRIJ | | | | *e*S*g* | **Sb** | **00 23 32.2** | **-0.2** |
| **HVAR** | **Hvar** | **1.12** | **221** | *e*P*g* | **Pg** | **00 23 17.5** | **-1.0** |
| **STON** | **Ston** | **1.18** | **171** | *e*P*g* | **Pb** | **00 23 18.8** | **-0.9** |
| STON | | | | *e*S*g* | **Sn** | **00 23 36.0** | **-0.2** |
| **STON** | **Ston** | **1.18** | **171** | *e*P*g* | **Pb** | **00 23 18.8** | **-0.9** |
| STON | | | | *e*S*g* | **Sn** | **00 23 36.1** | **-0.2** |
| **STON** | **Ston** | **1.18** | **171** | *e*P*g* | **Pb** | **00 23 18.3** | **-1.5** |
| STON | | | | S*g* | **Sb** | **00 23 35.3** | **+0.2** |
| **MORI** | **Morici** | **1.26** | **263** | *e*P*g* | **Pg** | **00 23 21.2** | **-0.1** |
| MORI | | | | S*g* | **Sn** | **00 23 40.1** | **+1.7** |
| **UDBI** | **Udbina** | **1.30** | **293** | *e*P*g* | **Pn** | **00 23 21.3** | **-0.5** |
| **LSTV** | **Lastovo** | **1.32** | **198** | *e*P*g* | **Pn** | **00 23 21.2** | **-0.8** |
| LSTV | | | | S*g* | **Sn** | **00 23 40.8** | **+0.9** |
| **UPM** | **Unac-Piva** | **1.35** | **127** | ⇑*i*P*g* | **Pn** | **00 23 22.1** | **-0.4** |
| UPM | | | | *e*S*g* | **Sn** | **00 23 41.0** | **+0.2** |
| **ZIRJ** | **Zirje** | **1.35** | **254** | *e*P*g* | **Pb** | **00 23 22.5** | **-0.3** |
| ZIRJ | | | | S*g* | **Sg** | **00 23 41.7** | **+1.1** |
| **BRY** | **Bratogost** | **1.38** | **144** | ⇑*i*P*g* | **Pn** | **00 23 22.6** | **-0.4** |
| BRY | | | | *e*S*g* | **Sg** | **00 23 42.4** | **+0.8** |
| **BBLS** | **Lazići** | **1.43** | **96** | *e*P*g* | **Pb** | **00 23 24.0** | **-0.1** |
| BBLS | | | | *e*S*g* | **Sg** | **00 23 45.1** | **+2.1** |
| **BBLS** | **Lazići** | **1.43** | **96** | *e*P*g* | **Pb** | **00 23 24.0** | **-0.1** |
| BBLS | | | | *e*S*g* | **Sg** | **00 23 43.5** | **+0.5** |
| **RUDO** | **Rudo** | **1.46** | **106** | ⇓*i*P*g* | **Pn** | **00 23 23.1** | **-0.8** |
| RUDO | | | | *e*S*g* | **Sn** | **00 23 43.0** | **-0.2** |
| **TREB** | **Trebinje** | **1.47** | **153** | *e*P*g* | **Pb** | **00 23 24.4** | **-0.4** |
| TREB | | | | *e*S*g* | **Sg** | **00 23 46.8** | **+2.4** |
| **TREB** | **Trebinje** | **1.47** | **153** | ⇑*i*P*g* | **Pb** | **00 23 24.6** | **-0.2** |
| TREB | | | | *e*S*g* | **Sg** | **00 23 45.1** | **+0.7** |
| **BLJ** | **Bijeljina** | **1.51** | **60** | *e*P*g* | **Pn** | **00 23 23.2** | **-1.4** |
| BLJ | | | | *e*S*g* | **Sn** | **00 23 43.8** | **-0.7** |
| **PLIT** | **Plitvice** | **1.55** | **304** | *e*P*n* | **Pn** | **00 23 25.4** | **-0.1** |
| **TEKS** | **Tekeris** | **1.58** | **70** | *e*P*g* | **Pn** | **00 23 26.0** | **+0.3** |
| TEKS | | | | *e*S*g* | **Sb** | **00 23 47.7** | **+0.7** |
| **MOSL** | **Moslavina** | **1.66** | **343** | *e*P*n* | **Pb** | **00 23 27.8** | **-0.2** |
| **DUGI** | **Dugi Otok** | **1.72** | **269** | *e*P*n* | **Pg** | **00 23 29.4** | **-0.7** |
| DUGI | | | | S*g* | **Sg** | **00 23 53.9** | **+1.5** |
| **HCY** | **Herceg Novi** | **1.76** | **154** | ⇑*i*P*n* | **Pb** | **00 23 29.6** | **-0.1** |
| HCY | | | | *e*S*n* | **Sb** | **00 23 52.2** | **+0.2** |
| **DIVS** | **Divibare** | **1.84** | **87** | *e*P*n* | **Pg** | **00 23 32.4** | **+0.1** |
| **DIVS** | **Divibare** | **1.84** | **87** | *e*P*n* | **Pb** | **00 23 30.5** | **-0.6** |
| DIVS | | | | *e*S*n* | **Sb** | **00 23 54.0** | **-0.4** |
| **NVLJ** | **Novalja** | **1.92** | **287** | *e*P*n* | **Pb** | **00 23 32.7** | **+0.2** |
| NVLJ | | | | S*n* | **Sg** | **00 23 58.8** | **0.0** |
| **SJES** | **Sjenica** | **1.99** | **112** | *e*P*n* | **Pb** | **00 23 32.7** | **-1.1** |
| SJES | | | | *e*S*n* | **Sg** | **00 24 00.4** | **-0.7** |
| **IVAS** | **Ivanjica** | **2.01** | **102** | *e*P*n* | **Pb** | **00 23 33.7** | **-0.4** |
| IVAS | | | | *e*S*n* | **Sg** | **00 24 01.0** | **-0.8** |
| **FRGS** | **Fruska Gora** | **2.03** | **56** | *e*P*n* | **Pb** | **00 23 34.5** | **+0.1** |
| FRGS | | | | *e*S*n* | **Sg** | **00 24 02.7** | **+0.3** |
| **FRGS** | **Fruska Gora** | **2.03** | **56** | *e*P*n* | **Pn** | **00 23 32.9** | **+1.1** |
| FRGS | | | | *e*S*n* | **Sb** | **00 23 58.8** | **-1.1** |
| **PDG** | **Podgorica** | **2.08** | **140** | *e*P*n* | **Pb** | **00 23 35.3** | **+0.2** |
| PDG | | | | *e*S*n* | **Sg** | **00 24 03.0** | **-0.8** |
| **PDG** | **Podgorica** | **2.08** | **140** | *e*P*n* | **Pn** | **00 23 33.6** | **+1.2** |
| PDG | | | | *e*S*n* | **Sb** | **00 24 00.1** | **-1.1** |
| **KOVH** | **Kovagototos** | **2.11** | **13** | PN | **Pb** | **00 23 34.3** | **-1.3** |
| KOVH | | | | SN | **Sn** | **00 23 58.4** | **-0.9** |
| **OZLJ** | **Ozalj** | **2.12** | **319** | *e*P*n* | **Pb** | **00 23 34.3** | **-1.5** |
| **TRUS** | **Trudelj** | **2.14** | **84** | *e*P*n* | **Pb** | **00 23 36.9** | **+0.6** |
| **DRME** | **Dracevica, Mon** | **2.24** | **145** | *e*P*n* | **Pb** | **00 23 36.9** | **-1.1** |
| DRME | | | | *e*S*n* | **Sb** | **00 24 04.6** | **-1.3** |
| **CRES** | **Cresnjev** | **2.28** | **323** | *e*P*n* | **Pn** | **00 23 36.6** | **+1.4** |
| CRES | | | | *e*S*n* | **Sb** | **00 24 05.7** | **-1.4** |
| **MORH** | **Mrgy, Hungar** | **2.34** | **21** | *e*P*n* | **Pn** | **00 23 37.4** | **+1.4** |
| MORH | | | | *e*S*n* | **Sb** | **00 24 07.1** | **-1.7** |
| **MORH** | **Mrgy, Hungar** | **2.34** | **21** | PN | **Pn** | **00 23 36.3** | **+0.3** |
| **GRUS** | **Gruza** | **2.37** | **92** | *e*P*n* | **Pb** | **00 23 40.0** | **-0.1** |
| **RIY** | **Rijeka** | **2.48** | **303** | *e*P*n* | **Pb** | **00 23 40.5** | **-1.4** |
| RIY | | | | *e*S*n* | **Sb** | **00 24 10.3** | **-2.3** |
| **RIY** | **Rijeka** | **2.48** | **303** | *e*P*n* | **Pb** | **00 23 40.0** | **-1.9** |
| **SMRN** | **Sveta Marina** | **2.56** | **294** | *e*P*n* | **Pb** | **00 23 41.3** | **-2.0** |
| **CEY** | **Cerknica** | **2.74** | **310** | *e*P*n* | **Pn** | **00 23 43.1** | **+1.6** |
| CEY | | | | *e*S*n* | **Sb** | **00 24 17.3** | **-3.0** |
| **BRJN** | **Brijuni** | **2.78** | **290** | *e*P*n* | **Pn** | **00 23 43.4** | **+1.3** |
| **SELS** | **Selova** | **2.79** | **106** | *e*P*n* | **Pn** | **00 23 44.4** | **+2.2** |
| **SOKA** | **Soboth** | **3.14** | **328** | *e*P*n* | **Pn** | **00 23 48.9** | **+1.7** |
| | 0.4nm,0.2s | | | | | | |
| SOKA | | | | *e*S*n* | **Sn** | **00 24 25.3** | **+0.3** |
| | 0.9nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **3.21** | **321** | *e*P*n* | **Pn** | **00 23 50.7** | **+2.6** |
| | 1.1nm,0.2s | | | | | | |
| OBKA | | | | *e*S*n* | **Sn** | **00 24 26.5** | **-0.1** |
| | 2.0nm,0.6s | | | | | | |
| **ARSA** | **Arzberg** | **3.49** | **338** | *e*P*n* | **Pn** | **00 23 53.6** | **+1.7** |
| | 1.7nm,0.3s | | | | | | |
| ARSA | | | | *e*S*n* | **Sn** | **00 24 33.1** | **-0.3** |
| | 1.0nm,0.3s | | | | | | |
| **CONA** | **Conrad Observa** | **4.05** | **345** | *e*P*n* | **Pn** | **00 24 01.5** | **+1.9** |
| | 0.6nm,0.3s | | | | | | |
| CONA | | | | *e*S*n* | **Sn** | **00 24 48.6** | **+1.3** |
| | 1.6nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.19** | **318** | *e*P*n* | **Pn** | **00 24 04.6** | **+3.0** |
| | 0.4nm,0.3s | | | | | | |
| KBA | | | | *e*S*n* | **Sb** | **00 24 58.9** | **-3.2** |
| | 0.3nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **4.41** | **310** | *e*P*n* | **Pn** | **00 24 08.2** | **+3.6** |
| | 0.2nm,0.2s | | | | | | |
| ABTA | | | | *e*S*n* | **Sn** | **00 24 58.6** | **+2.4** |
| | 0.5nm,0.4s | | | | | | |
| **MOA** | **Molln** | **4.41** | **331** | *e*P*n* | **Pn** | **00 24 07.7** | **+3.2** |
| | 1.6nm,0.3s | | | | | | |
| MOA | | | | *e*S*n* | **Sn** | **00 24 56.4** | **+0.2** |
| | 1.3nm,0.4s | | | | | | |

*IDC* ***02*** *00:24:47.8±1.4,52.29N×32.43W,h0km,mb3.9/14,*
*mb1 4.0/14,mb1mx3.7/60,mbtmp3.9/14,Error ellipse:*
*s-maj=43.6km s-min=16.8km az=11.0*
*NEIC* ***02*** *00:24:49.4±1.7,52.3N±0.1×32.6W±0.2,h10km±2km,*
*mb4.3/32,Error ellipse: s-maj=22.2km s-min=16.5km*
*az=197.0*
**ISC 02 00:24:48.9**±0.8**,52.3N**±0.2×**32.61W**±0.08**,h10**km**,n51,**
**σ**0**96/50,mb4.1/26,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IVI** | **Ivigtut** | **12.34** | **323** | Pn | **Pn** | **00 27 41.9** | **-2.5** |
| **FRB** | **Frobisher Bay** | **21.89** | **316** | P | **P** | **00 29 41.9** | **+0.1** |
| | 3.6nm,1.0s,baz=96,slow=11,SNR=5.7 | | | | | | |
| **UCC** | **Uccle** | **22.89** | **79** | P | **P** | **00 29 52.3** | **-0.1** |
| **L64A** | **Middleborough** | **27.69** | **263** | P | **P** | **00 30 37.3** | **+0.3** |
| **VLDQ** | **Val d'Or** | **28.65** | **280** | P | **P** | **00 30 47.7** | **+2.2** |
| **MSSA** | **Maissana** | **28.79** | **89** | P | **P** | **00 30 45.9** | **-0.9** |
| **KHC** | **Kasperske Hory** | **29.04** | **78** | P | **P** | **00 30 50.1** | **+1.1** |
| **STAL** | **STALIGIAL** | **29.78** | **83** | P | **P** | **00 30 56.1** | **+0.6** |
| **SSPA** | **Standing Stone** | **32.77** | **267** | P | **P** | **00 31 21.4** | **-0.5** |
| SSPA | | | | IAmb | IAmb | 00 31 39.5 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **M55A** | **Ridgway** | **32.82** | **269** | P | **P** | **00 31 21.6** | **-0.8** |
| M55A | | | | IAmb | IAmb | 00 31 32.8 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **P57A** | **Homestead Farm** | **33.54** | **266** | P | **P** | **00 31 28.8** | **+0.2** |
| P57A | | | | IAmb | IAmb | 00 31 42.0 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **KEST** | **Kesra** | **33.85** | **102** | P | **P** | **00 31 30.5** | **-0.9** |
| | comp=Z,6.6nm,1.0s,baz=24,slow=3.3,SNR=4.5 | | | | | | |
| **KEST** | **Kesra** | **33.85** | **102** | IAmb | IAmb | 00 31 35.2 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **N54A** | **Moraine State** | **33.87** | **270** | P | **P** | **00 31 30.1** | **-1.4** |
| **T59A** | **Double "B" Far** | **34.84** | **262** | P | **P** | **00 31 39.1** | **-0.8** |
| T59A | | | | IAmb | IAmb | 00 31 57.1 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **O49A** | **Covington** | **36.99** | **272** | P | **P** | **00 31 59.2** | **+0.9** |
| O49A | | | | IAmb | IAmb | 00 32 14.2 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **Q51A** | **Peebles** | **37.09** | **270** | P | **P** | **00 31 59.2** | **0.0** |
| Q51A | | | | IAmb | IAmb | 00 32 18.7 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **I42A** | **Draeger Farm,** | **37.67** | **280** | P | **P** | **00 32 04.6** | **+0.5** |
| I42A | | | | IAmb | IAmb | 00 32 10.6 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **V55A** | **Taylorsville** | **37.80** | **264** | P | **P** | **00 32 05.5** | **+0.2** |
| V55A | | | | IAmb | IAmb | 00 32 07.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **VTS** | **Vitosha** | **38.10** | **82** | P | **P** | **00 32 06.8** | **-1.1** |
| **Y58A** | **Scranton** | **38.16** | **260** | P | **P** | **00 32 08.8** | **+0.6** |
| **B35A** | **Bob, Littlefor** | **38.20** | **289** | P | **P** | **00 32 06.2** | **-2.3** |
| B35A | | | | IAmb | IAmb | 00 32 07.0 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **257A** | **Skidaway Islan** | **40.33** | **259** | P | **P** | **00 32 26.1** | **-0.3** |
| **A36M** | **Sachs Harbour** | **42.19** | **332** | P | **P** | **00 32 42.6** | **+1.4** |
| **YKA** | **Yellowknife Ar** | **42.40** | **317** | P | **P** | **00 32 43.5** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=58,slow=8.9,SNR=4.9 | | | | | | |
| YKA | | | | PcP | **PcP** | **00 34 36.4** | **+0.4** |
| | comp=Z,0.2nm,0.6s,baz=65,slow=3.6,SNR=7.0 | | | | | | |
| **BR131** | **Keskin Array S** | **46.13** | **78** | P | **P** | **00 33 13.5** | **+0.1** |
| **BRTR** | **Keskin Array B** | **46.13** | **79** | P | **P** | **00 33 14.0** | **+0.6** |
| | comp=Z,1.7nm,0.8s,baz=296,slow=6.7,SNR=7.0 | | | | | | |
| **INK** | **Inuvik** | **46.44** | **330** | P | **P** | **00 33 16.4** | **+1.1** |
| | comp=Z,1.4nm,0.7s,baz=43,slow=9.0,SNR=5.8 | | | | | | |
| **INK** | **Inuvik** | **46.44** | **330** | IAmb | IAmb | 00 33 25.4 | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **47.23** | **281** | P | **P** | **00 33 22.9** | **+1.0** |
| **ARU** | **Arti** | **49.54** | **47** | P | **P** | **00 33 39.0** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=334,slow=10,SNR=4.7 | | | | | | |
| **ARU** | **Arti** | **49.54** | **47** | P | **P** | **00 33 40.0** | **+0.6** |
| ARU | | | | IAmb | IAmb | 00 33 42.5 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **50.28** | **332** | P | **P** | **00 33 46.2** | **+1.2** |
| **PD31** | **Pinedale Array** | **50.51** | **292** | P | **P** | **00 33 47.0** | **-0.3** |
| **PDAR** | **Pinedale Array** | **50.51** | **292** | P | **P** | **00 33 48.1** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=53,slow=7.9,SNR=7.1 | | | | | | |
| **O20A** | **White River Ci** | **51.43** | **288** | P | **P** | **00 33 54.3** | **+0.1** |
| **BCAR** | **Beaver Creek A** | **52.38** | **327** | P | **P** | **00 34 02.2** | **+1.5** |
| **IL31** | | **52.81** | **331** | P | **P** | **00 34 04.5** | **+0.8** |
| IL31 | | | | IAmb | IAmb | 00 34 06.1 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **52.81** | **331** | P | **P** | **00 34 05.1** | **+1.3** |
| | comp=Z,1.2nm,0.8s,baz=42,slow=5.8,SNR=13 | | | | | | |
| ILAR | | | | PcP | **PcP** | **00 35 13.6** | **+0.5** |
| | comp=Z,0.6nm,0.8s,baz=60,slow=0.8,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **52.81** | **331** | P | **P** | **00 34 04.4** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **52.97** | **53** | P | **P** | **00 34 04.6** | **-0.7** |
| | comp=Z,1.7nm,0.9s,baz=304,slow=7.3,SNR=3.5 | | | | | | |
| **TIXI** | **Tiksi** | **55.69** | **7** | P | **P** | **00 34 25.8** | **+1.1** |
| TIXI | | | | IAmb | IAmb | 00 34 30.4 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **56.96** | **45** | P | **P** | **00 34 33.9** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=356,slow=9.5,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.03** | **36** | P | **P** | **00 35 09.1** | **+0.1** |
| | comp=Z,0.9nm,0.7s,baz=323,slow=9.3,SNR=3.7 | | | | | | |
| **KURK** | **Kurchatov** | **62.13** | **42** | P | **P** | **00 35 09.2** | **-0.5** |
| **KURK** | **Kurchatov** | **62.13** | **42** | IAmb | IAmb | 00 35 11.6 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.16** | **42** | P | **P** | **00 35 09.2** | **-0.7** |
| | comp=Z,1.0nm,0.8s,baz=323,slow=7.4,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.71** | **43** | P | **P** | **00 35 38.9** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=329,slow=6.0,SNR=9.5 | | | | | | |
| **SONM** | **Songino Array** | **74.31** | **27** | P | **P** | **00 36 26.1** | **-0.2** |
| | comp=Z,1.7nm,0.9s,baz=337,slow=8.5,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **146.17** | **22** | PKPbc | **PKPdf** | **00 44 28.9** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=345,slow=2.9,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **149.63** | **25** | PKPbc | **PKPbc** | **00 44 38.1** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=4.3,slow=3.0,SNR=7.9 | | | | | | |

*IDC* ***02*** *00:32:05.4±4.2,36.42N×71.25E,h149km±28km,mb3.4/6,*
*mb1 3.4/13,mb1mx3.0/64,mbtmp3.8/13,Error ellipse:*
*s-maj=47.1km s-min=20.5km az=146.0*
*NEIC* ***02*** *00:32:10.5±1.1,36.70N±0.04×71.24E±0.09,h186km±6km,*
*mb4.1/4,Error ellipse: s-maj=10.2km s-min=6.0km*
*az=81.0*
*NNC* ***02*** *00:32:15.0±2.3,37.14N×71.21E,h192km±29km,mb2.9,*
*mpv3.9,Error ellipse: s-maj=22.1km s-min=12.2km*
*az=25.0*
**ISC 02 00:32:10.5**±0.7**,36.78N**±0.06×**71.29E**±0.07**,h200**km**,n70,**
**σ**1**77/75,mb3.5/6,9C-3D,Afghanistan-Tajikistan border**
**region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAR** | **Garm** | **2.34** | **341** | | **Pn** | **00 32 52.6** | **-0.1** |
| **CHGR** | **Chuyangaron** | **2.52** | **318** | Pn | **Pn** | **00 32 54.0** | **-0.7** |
| **DRK** | **Karamyk** | **2.72** | **8** | | **Pn** | **00 32 57.8** | **+0.6** |
| **KBL** | **Kabul** | **2.89** | **220** | Pn | **Pn** | **00 32 57.2** | **-1.9** |
| **BTK** | **Batken** | **3.29** | **354** | | **Pn** | **00 33 04.7** | **+1.1** |
| **NIL** | **Nilore** | **3.51** | **152** | | **Pn** | **00 33 05.2** | **-1.1** |
| **AML** | **Almayashu** | **5.65** | **18** | P | **Pn** | **00 33 33.8** | **+0.2** |
| | SNR=157 | | | | | | |
| **UCH** | **Uchtor** | **5.98** | **24** | P | **Pn** | **00 33 38.1** | **+0.3** |
| | SNR=17 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.17** | **17** | P | **Pn** | **00 33 41.0** | **+1.0** |
| | SNR=13 | | | | | | |
| **KK02** | **Karatay Array** | **6.34** | **355** | ⇑P | **Pn** | **00 33 42.2** | **+0.1** |
| | 4.0nm,0.3s | | | | | | |
| KK02 | | | | ⇓S | **Sn** | **00 34 50.7** | **-4.0** |
| | 11nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **6.34** | **355** | Pn | **Pn** | **00 33 42.5** | **+0.5** |
| KKAR | | | | Sn | **Sn** | **00 34 51.3** | **-3.4** |
| **AAK** | **Ala-Archa** | **6.34** | **22** | P | **Pn** | **00 33 43.1** | **+0.9** |
| | 3.9nm,0.3s,baz=194,slow=8.0,SNR=62 | | | | | | |
| AAK | | | | S | **Sn** | **00 34 54.2** | **-0.7** |
| | 1.6nm,0.3s,baz=153,slow=23,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.34** | **22** | P | **Pn** | **00 33 43.0** | **+0.8** |
| | SNR=18 | | | | | | |
| **AAK** | **Ala-Archa** | **6.34** | **22** | ⇑P | **Pn** | **00 33 42.9** | **+0.6** |
| | 7.3nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **00 34 52.5** | **-2.5** |
| | 18nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.34** | **22** | Pn | **Pn** | **00 33 42.8** | **+0.5** |
| **KBK** | **Karagaybulak** | **6.51** | **25** | P | **Pn** | **00 33 45.7** | **+1.4** |
| | SNR=9.1 | | | | | | |
| **FRU1** | **Bishkek** | **6.54** | **22** | Pn | **Pn** | **00 33 45.5** | **+0.8** |
| **BOOM** | **Boomskoye usch** | **6.73** | **31** | Pn | **Pn** | **00 33 48.0** | **+0.7** |
| **CHMS** | **Chumysh** | **6.75** | **22** | P | **Pn** | **00 33 47.6** | **+0.2** |
| | SNR=12 | | | | | | |
| **USP** | **Ospenovka** | **6.93** | **20** | P | **Pn** | **00 33 50.4** | **+0.7** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.96** | **27** | P | **Pn** | **00 33 51.8** | **+1.4** |
| | SNR=5.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.96** | **27** | ⇑P | **Pn** | **00 33 51.0** | **+0.7** |
| | 2.3nm,0.4s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **00 35 08.3** | **-1.4** |
| | 7.2nm,0.8s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **7.06** | **44** | | **Pn** | **00 33 51.8** | **0.0** |
| **KST** | **Kastek** | **7.21** | **28** | Lg | Lg | 00 35 10.4 | |
| | 7.7nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **7.31** | **27** | P | **Pn** | **00 33 55.4** | **+0.7** |
| | 5.0nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **7.46** | **30** | P | **Pn** | **00 33 57.4** | **+0.7** |
| | 3.8nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **7.67** | **25** | P | **Pn** | **00 34 00.0** | **+0.6** |
| | 3.3nm,0.3s | | | | | | |
| **HRA** | **Herat** | **7.75** | **255** | Pn | **Pn** | **00 34 00.1** | **-0.6** |
| **MDOK** | **Medeo** | **7.75** | **33** | P | **Pn** | **00 34 00.9** | **+0.4** |
| | 6.3nm,0.8s | | | | | | |
| **BTLS** | **Baital** | **8.51** | **13** | P | **Pn** | **00 34 12.6** | **+2.4** |
| | 1.8nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **9.06** | **41** | ⇑P | **Pn** | **00 34 17.9** | **+0.3** |
| | 2.0nm,0.7s | | | | | | |
| **GEYT** | **Alibeck** | **10.55** | **280** | P | **Pn** | **00 34 33.0** | **-3.8** |
| | 0.9nm,0.3s,baz=104,slow=12,SNR=7.8 | | | | | | |
| **GEYT** | **Alibeck** | **10.55** | **280** | | **Pn** | **00 34 35.3** | **-1.5** |
| **GYA0B** | **ALIBECK ARRAY** | **10.55** | **280** | Pn | **Pn** | **00 34 36.1** | **-0.7** |
| **MAKZ** | **Makanchi** | **12.79** | **35** | ⇑P | **Pn** | **00 35 06.8** | **+1.6** |
| | 1.0nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **12.79** | **35** | Pn | **Pn** | **00 35 06.7** | **+1.6** |
| **MK31** | **Makanchi Array** | **12.92** | **36** | ⇑P | **Pn** | **00 35 08.3** | **+1.4** |
| | 0.3nm,0.5s,baz=213,slow=9.6,SNR=9.8 | | | | | | |
| **MK31** | **Makanchi Array** | **12.92** | **36** | Pn | **P** | **00 35 08.8** | **-1.3** |
| **MKAR** | **Makanchi Array** | **12.92** | **36** | P | **P** | **00 35 08.7** | **-1.5** |
| | 0.1nm,0.3s,baz=205,slow=12,SNR=8.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.92** | **36** | Pn | **Pn** | **00 35 08.1** | **+1.3** |
| **PYUN** | **Piuthan** | **13.13** | **128** | *e*P | **Pn** | **00 35 06.4** | **-3.4** |
| | 16nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **13.45** | **125** | *e*P | **Pn** | **00 35 11.9** | **-2.0** |
| | 16nm,0.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LCRM | LCR | 2.07 209 | P | | Pg | 00 55 34.1 | -0.1 |
| IFR | Ifrane | 2.33 212 | P | | Pn | 00 55 32.8 | +0.8 |
| IFR | | | S | | Sn | 00 56 00.6 | +0.4 |
| MDT | Midelt | 2.80 197 | P | | Pn | 00 55 39.6 | +1.3 |
| MDT | Midelt | 2.80 197 | P | | Pn | 00 55 39.6 | +1.3 |
| TDRA | Tendrara | 2.81 151 | P | | Pb | 00 55 42.1 | -1.9 |
| TDRA | | | S | | Sn | 00 56 12.9 | +0.9 |
| ZHG | ZHG | 3.21 231 | P | | Pn | 00 55 46.0 | +2.0 |
| ZHG | ZHG | 3.21 231 | P | | Pn | 00 55 46.0 | +2.0 |
| ZHG | | | S | | Sn | 00 56 23.4 | +1.6 |
| PVAQ | Vaqueiros | 3.78 301 | ePn | | Pn | 00 55 52.8 | +1.1 |
| PVAQ | | | eSn | | Sn | 00 56 35.5 | -0.2 |
| PVAQ | | | A | | A | 00 56 39.6 | |
| | 3.3nm,0.6s | | | | | | |
| PVAQ | Vaqueiros | 3.78 301 | P | | Pn | 00 55 52.5 | +0.8 |
| PVAQ | | | S | | Sn | 00 56 33.2 | -2.4 |
| PBDV | Barranco-do-Ve | 3.86 298 | ePn | | Pn | 00 55 53.8 | +1.0 |
| PBDV | | | eSn | | Sn | 00 56 37.7 | 0.0 |
| PBDV | | | A | | A | 00 56 43.4 | |
| | 3.6nm,0.8s | | | | | | |
| PAB | San Pablo | 4.07 352 | P | | Pn | 00 55 58.6 | +2.9 |
| PCVE | Castro Verde | 4.12 302 | ePn | | Pn | 00 55 58.7 | +2.4 |
| PCVE | | | eSn | | Sn | 00 56 42.8 | -1.1 |
| PCVE | | | A | | A | 00 56 49.3 | |
| | 2.8nm,0.5s | | | | | | |
| MESJ | Messejana | 4.34 304 | ePn | | Pn | 00 56 01.3 | +1.9 |
| MESJ | | | eSn | | Sn | 00 56 49.8 | +0.2 |
| MESJ | | | A | | A | 00 56 50.9 | |
| | 3.4nm,0.3s | | | | | | |
| MORF | Marmelete | 4.41 295 | ePn | | Pn | 00 56 02.3 | +1.9 |
| MORF | | | eSn | | Sn | 00 56 50.6 | -0.7 |
| MORF | | | A | | A | 00 56 53.7 | |
| | 2.9nm,0.6s | | | | | | |
| PFVI | Vila Bisbo | 4.48 293 | ePn | | Pn | 00 56 03.0 | +1.7 |
| PFVI | | | eSn | | Sn | 00 56 52.5 | -0.4 |
| PTEO | Sao Teotonio | 4.56 298 | eSn | | Sn | 00 56 55.7 | +0.8 |
| EVO | Evora | 4.61 312 | P | | Pn | 00 56 04.8 | +1.8 |
| EVO | | | S | | Sn | 00 56 54.6 | -1.6 |
| PNCL | Nicolau / Gran | 4.69 305 | ePn | | Pn | 00 56 05.5 | +1.3 |
| PNCL | | | eSn | | Sn | 00 56 57.3 | -0.9 |
| PNCL | | | A | | A | 00 56 57.9 | |
| | 2.4nm,0.3s | | | | | | |
| PMRV | Marv??o | 4.91 324 | ePn | | Pn | 00 56 09.6 | +2.4 |
| PMTG | Montargil | 5.09 316 | ePn | | Pn | 00 56 11.8 | +2.2 |
| PMTG | | | eSn | | Sn | 00 57 07.7 | -0.2 |
| PMTG | | | A | | A | 00 57 15.2 | |
| | 2.0nm,0.6s | | | | | | |
| OUK | Oukaimeden | 5.55 221 | P | | Pn | 00 56 16.4 | 0.0 |
| TTIG | Tnine Tigouga, | 6.38 220 | P | | Pn | 00 56 27.7 | +0.2 |

*NEIC* ***02*** *01:14:53.9±1.9, 6°.86N±0°.05×73°.10W±0°.07, h149km±7km, mb4.0/8, ML3.6(RSNC), Error ellipse: s-maj=9.5km s-min=7.2km az=89.0*

*IDC* ***02*** *01:14:53.4±0.7, 6°.77N×72°.98W, h162km±10km, mb3.3/5, mb1 3.7/8, mb1mx3.3/36, mbtmp4.0/8, Error ellipse: s-maj=29.4km s-min=7.9km az=132.0*

*RSNC* ***02*** *01:14:54.4±1.0, 6°.81N×73°.14W, h147km±5km, ML3.6, Mw4.0*

**ISC 02 01:14:53.3±0.6, 6°.85N±0°.03×73°.12W±0°.03, h153km±5km, n71, σ1§72/107, mb3.9/7, 9C-4D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| BARC | Barichara | 0.26 | 195 | ⇓iP | | Pn | 01 15 14.6 | +0.2 |
| BARC | | | | eS | | Sn | 01 15 29.3 | -1.2 |
| BARC | | | | i | | | 01 15 30.9 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| PAMC | Pamplona, Colo | 0.64 | 40 | ⇑iP | | Pn | 01 15 17.5 | +1.1 |
| PAMC | | | | eS | | Sn | 01 15 34.3 | +0.4 |
| PAMC | | | | i | | | 01 15 36.9 | |
| | comp=Z,824nm,0.5s | | | | | | | |
| RUSC | La Rusia | 0.95 | 178 | ⇓iP | | Pn | 01 15 18.5 | 0.0 |
| RUSC | | | | eS | | Sn | 01 15 37.4 | -0.4 |
| RUSC | | | | i | | | 01 15 38.9 | |
| | comp=Z,427nm,0.4s | | | | | | | |
| PTBC | PUERTO BERRIO, | 1.37 | 257 | ⇑eP | | Pn | 01 15 21.1 | -0.6 |
| PTBC | | | | eS | | Sn | 01 15 42.1 | -1.4 |
| PTBC | | | | i | | | 01 15 48.8 | |
| | comp=Z,271nm,0.3s | | | | | | | |
| TAMC | Tame, Arauca | 1.38 | 107 | ⇑iP | | Pn | 01 15 23.1 | +1.2 |
| TAMC | | | | eS | | Sn | 01 15 43.3 | -0.4 |
| TAMC | | | | i | | | 01 15 46.5 | |
| | comp=Z,315nm,0.5s | | | | | | | |
| OCAC | Ocana | 1.40 | 352 | ⇑eP | | Pn | 01 15 22.7 | +0.4 |
| OCAC | | | | eS | | Sn | 01 15 45.1 | +0.6 |
| OCAC | | | | i | | | 01 15 53.4 | |
| | comp=Z,879nm,0.3s | | | | | | | |
| OCAC | Ocana | 1.40 | 352 | | | Pn | 01 15 21.8 | -0.4 |
| OCAC | | | | | Sn | Sn | 01 15 45.0 | +0.5 |
| SPBC | San Pablo de B | 1.52 | 219 | eP | | Pn | 01 15 23.6 | +0.2 |
| SPBC | | | | eS | | Sn | 01 15 44.6 | -1.9 |
| SPBC | | | | i | | | 01 15 50.4 | |
| | comp=Z,622nm,0.3s | | | | | | | |
| ZARC | Zaragoza, Cauc | 1.84 | 290 | eP | | Pn | 01 15 26.8 | -0.1 |
| ZARC | | | | eS | | Sn | 01 15 52.5 | -0.1 |
| ZARC | | | | i | | | 01 15 57.9 | |
| | comp=Z,448nm,0.4s | | | | | | | |
| ZARC | Zaragoza, Cauc | 1.84 | 290 | Pn | | Pn | 01 15 25.9 | -0.9 |
| ZARC | | | | Sn | | Sn | 01 15 52.6 | +0.1 |
| NORC | Norcasia | 2.16 | 234 | ⇑eP | | Sn | 01 15 30.5 | -0.1 |
| NORC | | | | eS | | Sn | 01 15 58.1 | -1.1 |
| NORC | | | | i | | | 01 16 08.5 | |
| | comp=Z,231nm,0.6s | | | | | | | |
| SMLC | San Martn de | 2.16 | 334 | eP | | Pn | 01 15 30.7 | +0.2 |
| SMLC | | | | eS | | Sn | 01 15 59.2 | 0.0 |
| SMLC | | | | i | | | 01 16 02.0 | |
| | comp=Z,308nm,0.1s | | | | | | | |
| CHIC | Chingaza | 2.29 | 196 | ⇓eP | | Pn | 01 15 32.5 | +0.1 |
| CHIC | | | | eS | | Sn | 01 16 01.3 | -1.2 |
| CHIC | | | | i | | | 01 16 05.7 | |
| | comp=Z,360nm,0.6s | | | | | | | |
| ROSC | El Rosal | 2.33 | 211 | P | | Pn | 01 15 34.5 | +1.6 |
| | comp=Z,61nm,0.3s,baz=232,slow=5.5,SNR=87 | | | | | | | |
| ROSC | | | | S | | Sn | 01 16 04.9 | +1.6 |
| | comp=Z,66nm,0.3s,baz=97,slow=14,SNR=8.5 | | | | | | | |
| ROSC | El Rosal | 2.33 | 211 | eP | | Pn | 01 15 34.4 | +1.6 |
| ROSC | | | | eS | | Sn | 01 16 02.1 | -1.2 |
| ROSC | | | | i | | | 01 16 09.6 | |
| | comp=Z,876nm,0.5s | | | | | | | |
| ROSC | El Rosal | 2.33 | 211 | Pn | | Pn | 01 15 33.5 | +0.7 |
| ROSC | | | | Sn | | Sn | 01 16 04.0 | +0.7 |
| HELC | Santa Helena | 2.48 | 255 | eP | | Pn | 01 15 35.9 | +1.2 |
| HELC | | | | eS | | Sn | 01 16 05.7 | -1.0 |
| HELC | | | | i | | | 01 16 12.8 | |
| | comp=Z,141nm,0.3s | | | | | | | |
| UREC | San Jos de Ur | 2.56 | 291 | eP | | Pn | 01 15 34.4 | -0.9 |
| UREC | | | | eS | | Sn | 01 16 05.8 | -2.0 |
| UREC | | | | i | | | 01 16 18.4 | |
| | comp=Z,285nm,0.2s | | | | | | | |
| SOCV | Socops | 2.66 | 57 | ⇑iP | | Pn | 01 15 36.4 | -0.1 |
| SOCV | | | | eS | | Sn | 01 16 07.6 | -2.3 |
| LL1C | La Loma 1 Cana | 2.71 | 351 | eP | | Pn | 01 15 39.6 | +2.4 |
| LL1C | | | | eS | | Sn | 01 16 14.8 | +3.5 |
| LL1C | | | | i | | | 01 16 22.3 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| GUY2C | Guyana, Caldas | 2.76 | 234 | eP | | Pn | 01 15 38.7 | +0.4 |
| GUY2C | | | | eS | | Sn | 01 16 12.1 | -0.7 |
| GUY2C | | | | i | | | 01 16 22.1 | |
| | comp=Z,238nm,0.4s | | | | | | | |
| LL6C | La Loma 6 Bece | 2.88 | 357 | ⇑eP | | Pn | 01 15 39.2 | -0.1 |
| LL6C | | | | eS | | Sn | 01 16 14.8 | 0.0 |
| LL6C | | | | i | | | 01 16 21.7 | |
| | comp=Z,146nm,0.5s | | | | | | | |
| CBOC | Ciudad Bolivar | 3.04 | 251 | eP | | Pn | 01 15 42.5 | +1.0 |
| CBOC | | | | eS | | Sn | 01 16 17.6 | -1.0 |
| CBOC | | | | i | | | 01 16 27.8 | |
| | comp=Z,62nm,0.6s | | | | | | | |
| MOTC | Monteria, Cord | 3.17 | 307 | eP | | Pn | 01 15 41.6 | -1.4 |
| MOTC | | | | eS | | Sn | 01 16 20.0 | -1.5 |
| MOTC | | | | i | | | 01 16 35.6 | |
| | comp=Z,159nm,0.5s | | | | | | | |
| MOTC | Monteria, Cord | 3.17 | 307 | Pn | | Pn | 01 15 41.5 | -1.4 |
| SDV | Santo Domingo | 3.19 | 50 | P | | Pn | 01 15 44.1 | +0.7 |
| | comp=Z,53nm,0.3s,baz=256,slow=20,SNR=335 | | | | | | | |
| SDV | | | | S | | Sn | 01 16 21.4 | -0.7 |
| | comp=Z,21nm,0.3s,baz=254,slow=20,SNR=9.4 | | | | | | | |
| SDV | Santo Domingo | 3.19 | 50 | | | Pn | 01 15 43.0 | -0.4 |
| ANIL | Santa Ana | 3.26 | 224 | eP | | Pn | 01 15 45.0 | +0.5 |
| ANIL | | | | eS | | Sn | 01 16 23.3 | -0.8 |
| ANIL | | | | i | | | 01 16 34.8 | |
| | comp=Z,692nm,0.4s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PRAC | Prado | 3.58 | 210 | eP | | Pn | 01 15 47.4 | -0.8 |
| PRAC | | | | eS | | Sn | 01 16 29.4 | -1.4 |
| PRAC | | | | i | | | 01 16 35.5 | |
| | comp=Z,296nm,0.3s | | | | | | | |
| ORTC | Ortega, Tolima | 3.61 | 216 | ⇑eP | | Pn | 01 15 48.5 | -0.1 |
| ORTC | | | | eS | | Sn | 01 16 31.6 | 0.0 |
| ORTC | | | | i | | | 01 16 36.1 | |
| | comp=Z,147nm,0.3s | | | | | | | |
| SJCC | San Jacinto, C | 3.66 | 326 | ⇓eP | | Pn | 01 15 48.3 | -0.9 |
| SJCC | | | | eS | | Sn | 01 16 29.8 | -2.9 |
| SJCC | | | | i | | | 01 16 38.9 | |
| | comp=Z,108nm,0.5s | | | | | | | |
| SJCC | San Jacinto, C | 3.66 | 326 | Pn | | Pn | 01 15 47.9 | -1.3 |
| PLMC | San Jos del P | 3.69 | 239 | ⇑eP | | Pn | 01 15 50.1 | +0.3 |
| PLMC | | | | eS | | Sn | 01 16 31.7 | -1.8 |
| PLMC | | | | i | | | 01 16 43.8 | |
| | comp=Z,46nm,0.4s | | | | | | | |
| CRJC | Cerrejon, Guaj | 4.15 | 3 | eP | | Pn | 01 15 55.0 | -0.8 |
| CRJC | | | | eS | | Sn | 01 16 41.3 | -3.1 |
| CRJC | | | | i | | | 01 16 50.1 | |
| | comp=Z,124nm,0.3s | | | | | | | |
| YOTC | Yotoco, Valle | 4.29 | 229 | eP | | Pn | 01 15 57.1 | -0.5 |
| YOTC | | | | eS | | Sn | 01 16 47.0 | -0.7 |
| YOTC | | | | i | | | 01 17 00.2 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| SMRC | Santa Marta, M | 4.43 | 346 | eP | | Pn | 01 15 59.0 | -0.2 |
| SMRC | | | | eS | | Sn | 01 16 47.5 | -3.1 |
| SMRC | | | | i | | | 01 16 55.6 | |
| | comp=Z,59nm,0.3s | | | | | | | |
| MACC | Macarena, Meta | 4.73 | 189 | eS | | Sn | 01 16 51.6 | -6.2 |
| MACC | | | | i | | | 01 16 59.1 | |
| | comp=Z,82nm,0.8s | | | | | | | |
| DABV | Dabajuro | 4.73 | 31 | eP | | Pn | 01 16 03.8 | +0.5 |
| DABV | | | | eS | | Sn | 01 16 51.4 | -6.5 |
| URIC | Uribia, Colomb | 4.95 | 13 | eP | | Pn | 01 16 04.9 | -1.2 |
| URIC | | | | eS | | Sn | 01 16 59.9 | -3.1 |
| URIC | | | | i | | | 01 17 07.7 | |
| | comp=Z,26nm,0.2s | | | | | | | |
| URIC | Uribia, Colomb | 4.95 | 13 | Pn | | Pn | 01 16 05.1 | -1.1 |
| BAUV | El Baul | 5.44 | 67 | | | Pn | 01 16 10.8 | -1.9 |
| PCON | Cinco Dias | 5.55 | 216 | eP | | Pn | 01 16 15.7 | +1.0 |
| PCON | | | | eS | | Sn | 01 17 09.7 | -8.5 |
| PCON | | | | i | | | 01 17 24.7 | |
| | comp=Z,19nm,0.5s | | | | | | | |
| POPC | Popayan, Colom | 5.56 | 220 | eP | | Pn | 01 16 14.0 | -0.4 |
| POPC | | | | eS | | Sn | 01 17 08.1 | -10 |
| POPC | | | | i | | | 01 17 23.5 | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| SOTA | Rioblanco | 5.83 | 217 | eP | | Pn | 01 16 19.9 | +1.6 |
| SOTA | | | | i | | | 01 17 34.4 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| BIRV | Birongo | 7.67 | 61 | Pn | | Pn | 01 16 40.4 | -1.9 |
| OTAV | Otavalo | 8.45 | 219 | Pn | | Pn | 01 16 52.8 | -0.4 |
| PCRV | Puerto La Cruz | 9.02 | 68 | P | | Pn | 01 17 01.0 | +0.7 |
| | comp=Z,0.9nm,0.3s,baz=223,slow=4.9,SNR=2.2 | | | | | | | |
| PLCV | Puerto La Cruz | 9.05 | 68 | | | Pn | 01 17 01.0 | +0.2 |
| TBTG | Tabatinga, AM | 11.42 | 164 | Pn | | Pn | 01 17 33.0 | +1.0 |
| MTDJ | Mount Denham | 12.10 | 340 | Pn | | Pn | 01 17 43.9 | +2.9 |
| DR12 | Loma Pena Alta | 12.41 | 17 | Pn | | Pn | 01 17 45.0 | 0.0 |
| GTBY | Guantanamo Bay | 13.15 | 352 | | | P | 01 17 58.2 | -0.5 |
| BOAV | Boa Vista | 13.31 | 109 | Pn | | Pn | 01 17 54.7 | -1.7 |
| MTO3 | Montecristo | 17.63 | 297 | Pn | | Pn | 01 18 51.1 | +1.2 |
| ETMB | Extrema | 17.92 | 157 | P | | P | 01 18 50.9 | -0.7 |
| ETMB | | | | IAmb | | IAmb | 01 18 51.8 | |
| | comp=Z,3.1nm,0.7s | | | | | | | |
| VILB | Vilhena | 23.49 | 147 | P | | P | 01 19 50.8 | +1.3 |
| VILB | | | | IAmb | | IAmb | 01 19 57.5 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| WVT | Waverly | 32.11 | 337 | P | | P | 01 21 07.1 | +1.1 |
| WVT | | | | IAmb | | IAmb | 01 21 09.0 | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| U40A | Yellville | 34.48 | 331 | P | | P | 01 21 26.8 | +0.2 |
| TXAR | Lajitas Array | 36.45 | 312 | P | | P | 01 21 44.4 | +0.7 |
| | comp=Z,0.6nm,0.6s,baz=121,slow=8.7,SNR=6.7 | | | | | | | |
| TXAR | Lajitas Array | 36.45 | 312 | P | | P | 01 21 44.1 | +0.4 |
| ULM | Lac du Bonnet | 47.26 | 340 | P | | P | 01 23 10.4 | -0.5 |
| | comp=Z,1.9nm,0.4s,baz=156,slow=8.6,SNR=2.8 | | | | | | | |
| ULM | Lac du Bonnet | 47.26 | 340 | P | | P | 01 23 10.7 | -0.3 |
| ULM | | | | IAmb | | IAmb | 01 23 11.7 | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| PDAR | Pinedale Array | 48.06 | 324 | P | | P | 01 23 17.4 | -0.2 |
| | comp=Z,0.3nm,0.5s,baz=121,slow=11,SNR=4.3 | | | | | | | |
| PDAR | Pinedale Array | 48.06 | 324 | P | | P | 01 23 17.9 | +0.3 |
| COR | Corvallis | 57.51 | 319 | P | | P | 01 24 26.8 | +0.2 |
| YKA | Yellowknife Ar | 63.24 | 340 | P | | P | 01 25 05.1 | -0.1 |
| | comp=Z,1.0nm,0.5s,baz=132,slow=6.8,SNR=28 | | | | | | | |
| YKA | Yellowknife Ar | 63.24 | 340 | P | | P | 01 25 05.9 | +0.8 |
| INK | Inuvik | 73.01 | 340 | P | | P | 01 26 06.4 | +0.5 |
| | comp=Z,0.4nm,0.5s,baz=109,slow=6.4,SNR=4.5 | | | | | | | |
| INK | Inuvik | 73.01 | 340 | P | | P | 01 26 06.7 | +0.8 |
| ASAR | Alice Springs | 149.13 | 234 | PKPbc | | PKPbc | 01 34 22.9 | -1.5 |
| | comp=Z,0.6nm,0.7s,baz=115,slow=3.3,SNR=5.5 | | | | | | | |
| WRA | Warramunga Arr | 150.35 | 241 | PKPbc | | PKPbc | 01 34 26.0 | -1.5 |
| | comp=Z,0.3nm,0.4s,baz=105,slow=2.9,SNR=14 | | | | | | | |

*CNRM* ***02*** *01:19:10.1, 35°.57N×3°.78W, h0km, ml2.5*

*INMG* ***02*** *01:19:10.9±1.4, 35°.55N×3°.75W, h14km±8km, ML2.2, Error ellipse: s-maj=6.5km s-min=4.0km az=61.0*

*SFS* ***02*** *01:19:11.0, 35°.42N×3°.74W, h32km, ML1.8, ALBORAN SUR*

**ISC 02 01:19:10.4±1.2, 35°.47N±0°.06×3°.77W±0°.04, h31km±9km, n17, σ1§49/26, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.28 | 209 | P | | Pb | 01 19 17.8 | 0.0 |
| PALE | | | | S | | Sb | 01 19 21.7 | -1.1 |
| GOG | Mont Gurugu | 0.68 | 111 | P | | Pn | 01 19 24.8 | +0.9 |
| GOG | | | | S | | Sn | 01 19 33.1 | -0.4 |
| AKLM | AKL | 0.96 | 185 | P | | Pb | 01 19 29.7 | +1.2 |
| CHAS | Isla Isabel II | 1.13 | 104 | P | | Pn | 01 19 30.0 | 0.0 |
| CHAS | | | | S | | Sn | 01 19 44.5 | 0.0 |
| CHEFC | Chefchaouen | 1.33 | 255 | P | | Pb | 01 19 35.7 | +0.9 |
| CHEFC | | | | S | | Sb | 01 19 53.1 | +1.5 |
| CEU | Ceuta | 1.37 | 289 | P | | Pn | 01 19 32.8 | -0.6 |
| CEU | | | | S | | Sn | 01 19 47.1 | -3.4 |
| EMAL | Malaga-Limoner | 1.40 | 338 | P | | Pn | 01 19 33.8 | +0.1 |
| EMAL | | | | S | | Sn | 01 19 50.7 | -0.4 |
| JBK | JBK | 1.50 | 138 | P | | Pb | 01 19 36.7 | -1.0 |
| LCRM | LCR | 1.99 | 207 | P | | Pb | 01 19 52.3 | +6.3 |
| IFR | Ifrane | 2.25 | 210 | P | | Pb | 01 19 48.9 | -1.4 |
| IFR | | | | S | | Sn | 01 20 13.2 | +0.9 |
| MDT | Midelt | 2.74 | 195 | P | | Pb | 01 19 58.8 | +0.1 |
| ZHG | ZHG | 3.11 | 230 | P | | Pb | 01 20 02.1 | -2.9 |
| PVAQ | Vaqueiros | 3.72 | 302 | ePn | | Pn | 01 20 07.3 | +1.6 |
| PVAQ | | | | eSn | | Sn | 01 20 47.9 | -0.6 |
| PVAQ | | | | A | | A | 01 20 48.8 | |
| | 10nm,0.7s | | | | | | | |
| PVAQ | Vaqueiros | 3.72 | 302 | P | | Pn | 01 20 08.1 | +2.4 |
| PBDV | Barranco-do-Ve | 3.80 | 299 | ePn | | Pn | 01 20 08.0 | +1.3 |
| PBDV | | | | eSn | | Sn | 01 20 50.0 | -0.4 |
| PBDV | | | | A | | A | 01 20 51.6 | |
| | 7.6nm,0.6s | | | | | | | |
| MESJ | Messejana | 4.29 | 305 | ePn | | Pn | 01 20 15.7 | +2.2 |
| PNCL | Nicolau / Gran | 4.64 | 306 | ePn | | Pn | 01 20 19.7 | +1.4 |
| PNCL | | | | eSn | | Sn | 01 21 10.5 | -0.6 |
| PNCL | | | | A | | A | 01 21 12.2 | |
| | 6.6nm,0.7s | | | | | | | |

*KRNET* ***02*** *01:31:58.9±0.1, 39°.26N×78°.31E, mb2.5*

**SOME 02 01:31:53.6, 42°.37N×81°.08E, h10km, 7C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| UZB | Uzunybulak | 1.71 | 298 | eP | | Pb | 01 32 24.6 | -0.5 |
| | 4.3nm,0.2s | | | | | | | |
| UZB | | | | eS | | Sb | 01 32 47.0 | +0.2 |
| | 4.6nm,0.2s | | | | | | | |
| SATY | Saty | 2.09 | 290 | eP | | Pb | 01 32 32.2 | +0.5 |
| | 1.2nm,0.3s | | | | | | | |
| SATY | | | | ⇑iS | | Sg | 01 33 00.0 | -0.8 |
| | 5.2nm,0.3s | | | | | | | |
| TARG | Taragay, Kyrgy | 2.52 | 256 | ⇑iP | | Pb | 01 32 40.0 | +0.8 |
| | baz=51 | | | | | | | |
| TARG | | | | ⇑iS | | Sb | 01 33 09.8 | -0.7 |
| | baz=51 | | | | | | | |
| ANVS | Anan'yevo | 2.56 | 281 | ⇑eP | | Pg | 01 32 54.4 | +12 |
| | baz=52 | | | | | | | |
| ANVS | | | | ⇑eS | | Sg | 01 33 34.8 | +19 |
| | baz=52 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BLB | Baldybastay | 2.57 | 313 | eP | | Pb | 01 32 40.4 | +0.5 |
| | 2.5nm,0.1s | | | | | | | |
| BLB | | | | eS | | Sg | 01 33 14.1 | -2.1 |
| | 6.7nm,0.3s | | | | | | | |
| KDJ | Kajisay | 2.91 | 267 | ⇓iP | | Pb | 01 32 46.5 | +0.9 |
| | baz=44 | | | | | | | |
| KDJ | | | | ⇓iS | | Sb | 01 33 21.7 | +0.4 |
| | baz=44 | | | | | | | |
| KOTS | Kotyrbulak | 3.05 | 288 | eP | | Pb | 01 32 49.0 | +0.9 |
| | 1.5nm,0.3s | | | | | | | |
| KOTS | | | | eS | | Sg | 01 33 28.8 | -2.7 |
| | 8.1nm,0.4s | | | | | | | |
| BOOM | Boomskoye usch | 3.81 | 274 | ⇑iP | | Pb | 01 32 56.8 | -4.2 |
| | baz=32 | | | | | | | |
| BOOM | | | | ⇑iS | | Sn | 01 33 38.6 | +1.2 |
| | baz=32 | | | | | | | |

*KRNET* ***02*** *02:02:37.6±0.1, 39°.25N×78°.43E, mb2.5*

**SOME 02 02:02:36.6, 42°.37N×81°.08E, h10km, 4C-4D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| UZB | Uzunybulak | 1.71 | 298 | eP | | Pg | 02 03 09.3 | -0.1 |
| | 3.2nm,0.2s | | | | | | | |
| UZB | | | | eS | | Sg | 02 03 32.9 | +1.4 |
| | 4.1nm,0.1s | | | | | | | |
| TARG | Taragay, Kyrgy | 2.52 | 256 | ⇓iP | | Pb | 02 03 22.0 | -0.2 |
| | baz=49 | | | | | | | |
| TARG | | | | ⇓iS | | Sb | 02 03 54.4 | +0.9 |
| | baz=49 | | | | | | | |
| ANVS | Anan'yevo | 2.56 | 281 | ⇑iP | | Pg | 02 03 36.4 | +11 |
| | baz=51 | | | | | | | |
| ANVS | | | | ⇑iS | | Sg | 02 04 19.3 | +21 |
| | baz=51 | | | | | | | |
| BLB | Baldybastay | 2.57 | 313 | eP | | Pb | 02 03 23.7 | +0.8 |
| | 2.5nm,0.1s | | | | | | | |
| BLB | | | | eS | | Sg | 02 03 57.8 | -1.4 |
| | 8.2nm,0.3s | | | | | | | |
| KDJ | Kajisay | 2.91 | 267 | ⇑eP | | Pb | 02 03 28.9 | +0.3 |
| | baz=42 | | | | | | | |
| KDJ | | | | ⇑eS | | Sb | 02 04 06.4 | +2.1 |
| | baz=42 | | | | | | | |
| ARXS | Arharly | 3.01 | 309 | eP | | Pb | 02 03 31.1 | +0.7 |
| | 1.3nm,0.3s | | | | | | | |
| ARXS | | | | eS | | Sg | 02 04 10.3 | -2.9 |
| | 2.8nm,0.3s | | | | | | | |
| KOTS | Kotyrbulak | 3.05 | 288 | eP | | Pb | 02 03 32.3 | +1.2 |
| | 1.4nm,0.3s | | | | | | | |
| KOTS | | | | eS | | Sg | 02 04 12.5 | -2.0 |
| | 7.0nm,0.5s | | | | | | | |
| BOOM | Boomskoye usch | 3.81 | 274 | ⇓iP | | Pn | 02 03 39.1 | +3.6 |
| | baz=31 | | | | | | | |
| BOOM | | | | ⇓iS | | Sn | 02 04 23.8 | +3.4 |
| | baz=31 | | | | | | | |

**IDC 02 02:03:44.9±2.1, 2°.21N×126°.75E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.2/33, mbtmp3.5/3, Error ellipse: s-maj=184.4km s-min=24.5km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.24 | 162 | P | | P | 02 08 54.0 | 0.0 |
| | 0.8nm,0.5s,baz=340,slow=11,SNR=8.4 | | | | | | | |
| ASAR | Alice Springs | 26.65 | 165 | P | | P | 02 09 25.8 | +0.2 |
| | 0.4nm,0.3s,baz=348,slow=13,SNR=6.9 | | | | | | | |
| MKAR | Makanchi Array | 58.81 | 326 | P | | P | 02 13 45.0 | -0.2 |
| | 0.4nm,0.5s,baz=123,slow=7.3,SNR=9.4 | | | | | | | |

*SOME* ***02*** *02:05:22.2, 44°.73N×87°.78E, h10km*

*NNC* ***02*** *02:05:31.0±2.2, 43°.41N×87°.17E, h13km±8km, mb3.6, mpv3.4, Error ellipse: s-maj=14.8km s-min=12.2km az=121.0*

**ISC 02 02:05:30.9±2.9, 43°.3N±0°.1×87°.2E±0°.1, h10km, n13, σ2§51/15, 7C-3D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ZSN | Zaisan | 4.43 | 339 | eP | | Pn | 02 06 28.6 | -10 |
| | 3.3nm,0.2s | | | | | | | |
| ZSN | | | | eS | | Sn | 02 07 15.3 | -14 |
| | 3.4nm,0.4s | | | | | | | |
| ZSN | Zaisan | 4.43 | 339 | Pg | | Pn | 02 06 39.4 | +1.2 |
| | 3.3nm,0.2s | | | | | | | |
| ZSN | | | | Lg | | Lg | 02 07 29.9 | |
| | 3.4nm,0.4s | | | | | | | |
| MK31 | Makanchi Array | 4.91 | 316 | ⇑Pn | | Pn | 02 06 43.0 | -1.7 |
| | 0.8nm,0.5s,baz=235,slow=10,SNR=27 | | | | | | | |
| MK31 | | | | ⇓Sn | | Sn | 02 07 41.4 | -0.1 |
| | 0.2nm,0.2s,baz=39,slow=12,SNR=4.6 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 02 08 02.4 | |
| | 2.3nm,0.5s | | | | | | | |
| KTMS | Ketmen | 5.00 | 274 | eP | | Pg | 02 07 04.0 | -2.7 |
| | 3.2nm,0.4s | | | | | | | |
| KTMS | | | | eS | | Sg | 02 08 16.4 | +4.9 |
| | 6.6nm,0.4s | | | | | | | |
| KTMS | Ketmen | 5.00 | 274 | Pg | | Pg | 02 07 04.0 | -2.7 |
| | 3.2nm,0.4s | | | | | | | |
| KTMS | | | | Lg | | Lg | 02 08 12.1 | |
| | 4.9nm,0.2s | | | | | | | |
| MAKZ | Makanchi | 5.07 | 315 | ⇓Pn | | Pn | 02 06 45.4 | -1.6 |
| | 2.2nm,0.9s | | | | | | | |
| MAKZ | | | | ⇑Sn | | Sn | 02 07 44.9 | -0.8 |
| | 2.5nm,0.7s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 02 08 07.5 | |
| | 2.3nm,0.8s | | | | | | | |
| DJR | Jarkent | 5.46 | 283 | eP | | Pb | 02 07 09.8 | +3.4 |
| | 1.7nm,0.3s | | | | | | | |
| DJR | | | | eS | | Sg | 02 08 25.9 | -0.2 |
| | 3.2nm,0.6s | | | | | | | |
| DJR | Jarkent | 5.46 | 283 | Pg | | Pb | 02 07 09.8 | +3.4 |
| | 1.7nm,0.3s | | | | | | | |
| DJR | | | | Lg | | Lg | 02 08 22.3 | |
| | 6.0nm,0.4s | | | | | | | |
| PDGK | Podgornoye | 5.63 | 273 | ⇓Pn | | Pn | 02 06 54.0 | -0.8 |
| | 2.6nm,1.1s | | | | | | | |
| PDGK | | | | ⇑Sn | | Sn | 02 07 58.7 | -0.9 |
| | 3.1nm,0.7s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 02 08 27.4 | |
| | 6.1nm,0.7s | | | | | | | |
| BLB | Baldybastay | 6.37 | 280 | eP | | Pb | 02 07 26.3 | +4.3 |
| | 2.4nm,0.2s | | | | | | | |
| BLB | | | | eS | | Sg | 02 08 54.1 | -1.3 |
| | 2.5nm,0.3s | | | | | | | |
| BLB | Baldybastay | 6.37 | 280 | Pg | | Pb | 02 07 26.3 | +4.3 |
| | 2.4nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 02 08 50.4 | |
| | 2.5nm,0.3s | | | | | | | |
| KTBS | Karatobe | 7.66 | 276 | Pg | | Pg | 02 07 51.7 | -5.8 |
| | 0.8nm,0.3s | | | | | | | |
| KTBS | | | | Lg | | Lg | 02 09 34.1 | |
| | 2.7nm,0.4s | | | | | | | |
| KURK | Kurchatov | 9.42 | 325 | ⇑Pn | | Pn | 02 07 45.2 | -1.4 |
| | 0.3nm,0.4s | | | | | | | |

*CNRM* ***02*** *02:07:38.7, 35°.45N×3°.72W, h17km, ml2.4*

*INMG* ***02*** *02:07:40.5±1.6, 35°.71N×3°.60W, h23km±12km, ML2.0, Error ellipse: s-maj=8.9km s-min=4.3km az=69.0*

*SFS* ***02*** *02:07:40.0, 35°.50N×3°.64W, h34km, ML1.9, ALBORAN SUR*

**ISC 02 02:07:37.0±1.1, 35°.52N

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CEU | | | S | Sn | 02 08 15.2 | -4.5 |
| **JBK** | **JBK** | **1.52 141** | P | Pn | 02 08 03.6 | -0.1 |
| **JBK** | **JBK** | **1.52 141** | P | Pn | 02 08 03.6 | -0.1 |
| JBK | | | S | Sn | 02 08 20.6 | -2.7 |
| **LCRM** | **LCR** | **2.05 207** | P | Pg | 02 08 16.0 | -0.4 |
| **LCRM** | **LCR** | **2.05 207** | P | Pg | 02 08 16.0 | -0.4 |
| **IFR** | **Ifrane** | **2.31 210** | P | Pn | 02 08 14.9 | +0.3 |
| IFR | | | S | Sn | 02 08 40.3 | -2.4 |
| **MDT** | **Midelt** | **2.79 195** | P | Pn | 02 08 23.5 | +2.3 |
| **MDT** | **Midelt** | **2.79 195** | P | Pn | 02 08 23.5 | +2.3 |
| **TDRA** | **Tendrara** | **2.85 150** | P | Pn | 02 08 23.5 | +1.5 |
| **PVAQ** | **Vaqueiros** | **3.72 302** | *e*Pn | Pn | 02 08 35.9 | +2.1 |
| PVAQ | | | *e*Sn | Sn | 02 09 17.7 | +0.4 |
| PVAQ | | | A | A | 02 09 19.4 | |
| | 3.7nm,0.6s | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72 302** | P | Pn | 02 08 36.2 | +2.3 |
| **PBDV** | **Barranco-do-Ve** | **3.80 298** | *e*Pn | Pn | 02 08 36.5 | +1.6 |
| PBDV | | | *e*Sn | Sn | 02 09 19.3 | 0.0 |
| PBDV | | | A | A | 02 09 24.8 | |
| | 3.1nm,0.7s | | | | | |
| **MESJ** | **Messejana** | **4.29 304** | *e*Pn | Pn | 02 08 44.5 | +2.9 |
| MESJ | | | *e*Sn | Sn | 02 09 32.0 | +0.7 |
| MESJ | | | A | A | 02 09 33.6 | |
| | 3.0nm,0.7s | | | | | |
| **MORF** | **Marmelete** | **4.35 296** | *e*Sn | Sn | 02 09 32.5 | -0.4 |
| MORF | | | A | A | 02 09 36.8 | |
| | 2.3nm,0.8s | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64 305** | *e*Pn | Pn | 02 08 47.8 | +1.4 |

*IDC* ***02*** *02:08:29.0±8.0,6˙44S×128˚58E,h250km±85km, mb2.9/1, mb1 3.2/5,mb1mx2.8/32, mbtmp3.8/5, Error ellipse: s-maj=98.2km s-min=25.1km az=51.0*
*NEIC* ***02*** *02:08:31.4±1.3,6˙6S±0˙2×128˚4E±0˚1, h280km±15km, mb4.0/3, Error ellipse: s-maj=23.5km s-min=13.6km az=205.0*

**ISC 02 02:08:32.6**±1.2,**6˙8S**±0˚1×**128˚4E**±0˚1,**h300km,n15,** σ0**64**/15,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **5.02** | **234** | Pn | **Pn** | **02 09 49.6** | **-0.9** |
| **BATI** | **Baumata** | **5.76** | **234** | P | **Pn** | **02 09 58.6** | **-0.5** |
| | 11nm,0.3s,baz=108,slow=2.9,SNR=4.1 | | | | | | |
| **MTN** | **Manton Dam** | **6.59** | **156** | Pn | **Pn** | **02 10 08.9** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **11.54** | **193** | P | **Pn** | **02 11 10.7** | **+1.1** |
| | 0.1nm,0.3s,baz=9.5,slow=12,SNR=1.3 | | | | | | |
| **WB0** | **Warramunga Arr** | **14.15** | **156** | P | **P** | **02 11 40.8** | **+0.4** |
| **WRA** | **Warramunga Arr** | **14.29** | **157** | P | **P** | **02 11 42.5** | **+0.6** |
| | 0.3nm,0.3s,baz=338,slow=12,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.29** | **157** | P | **Pn** | **02 11 42.9** | **+0.1** |
| **WB2** | **Warramunga Arr** | **14.30** | **157** | P | **P** | **02 11 42.5** | **+0.6** |
| **COEN** | **Coen** | **16.20** | **117** | Pn | **Pn** | **02 12 04.6** | **-0.5** |
| COEN | | | | IAmb | IAmb | 02 12 19.4 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **17.59** | **163** | P | **Pn** | **02 12 21.0** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 02 12 21.2 | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **17.59** | **163** | P | **Pn** | **02 12 21.0** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=343,slow=11,SNR=26 | | | | | | |
| **ASAR** | **Alice Springs** | **17.59** | **163** | P | **Pn** | **02 12 20.4** | **-1.1** |
| **FOZ** | **Fox Glacier** | **51.53** | **142** | P | **P** | **02 17 08.5** | **+0.1** |
| FOZ | | | | IAmb | IAmb | 02 17 19.6 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.18** | **328** | P | **P** | **02 18 55.2** | **+0.4** |
| | comp=Z,0.2nm,0.4s,baz=119,slow=8.3,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.18** | **328** | P | **P** | **02 18 55.0** | **+0.2** |

*MAN* ***02*** *02:27:01.7, 10˙87N×126˚97E, h15km, mb4.7, ML3.6, MS3.6*
*NEIC* ***02*** *02:27:01.4±1.5, 10˙66N±0˙08×126˚6E±0˚2, h25km±6km, mb4.6/20, Error ellipse: s-maj=23.3km s-min=11.5km az=79.0*
*IDC* ***02*** *02:27:02.6±0.6, 10˙67N×126˚72E, h36km±4km, mb4.0/14, mb1 4.1/14,mb1mx3.9/33, mbtmp4.2/14, MS3.2/10, Ms1 3.2/10,ms1mx3.0/80, Error ellipse: s-maj=24.9km s-min=10.7km az=76.0*

**ISC 02 02:26:58.6**±0.5,**10˙78N**±0˙06×**126˚83E**±0˙08,**h10km,n57,** σ1**24**/50,**mb4.5/23,MS3.1/6,5C-2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLSP** | **General Luna,** | **1.21** | **215** | *e*P | Pn | 02 27 20.1 | -1.5 |
| **BESP** | **Borongan** | **1.59** | **301** | *e*P | **Pn** | **02 27 26.2** | **-0.7** |
| **SCPH** | **Surigao** | **1.65** | **233** | *e*P | Pn | 02 27 27.6 | -0.1 |
| SCPH | | | | eS | **Sn** | **02 27 47.4** | **-1.6** |
| **MSLP** | **Maasin** | **2.04** | **252** | *i*P | **Pn** | **02 27 33.7** | **+0.6** |
| **LLP** | **Lapu-Lapu** | **2.85** | **261** | *e*P | **Pn** | **02 27 45.5** | **+1.3** |
| LLP | | | | eS | Sn | 02 28 15.7 | -3.0 |
| **TBP** | **Tagbilaran** | **3.11** | **250** | *e*P | **Pn** | **02 27 49.0** | **+1.1** |
| TBP | | | | *i* S | **Sn** | **02 28 29.4** | **+4.2** |
| **DAV** | **Davao City (W)** | **3.88** | **199** | LR | LR | 02 30 04.2 | |
| | comp=Z,504nm,18.8s,baz=339,slow=48 | | | | | | |
| **RCP** | **Roxas** | **4.08** | **281** | *e*P | **Pn** | **02 28 02.7** | **+1.5** |
| **CNOP** | **Candoni, Negro** | **4.23** | **257** | *e*P | **Pn** | **02 28 04.4** | **+1.2** |
| **TNTI** | **Ternate** | **9.95** | **177** | Pn | Pn | 02 29 21.3 | -0.6 |
| TNTI | | | | Sn | Sn | 02 31 09.1 | -4.6 |
| **SBUM** | **Sibu** | **16.69** | **241** | | **Pn** | **02 30 51.8** | **-1.0** |
| **KAPI** | **Kappang** | **17.20** | **205** | LR | LR | 02 39 33.8 | |
| | comp=Z,52nm,18.5s,baz=26,slow=44 | | | | | | |
| **GUMO** | **Guam** | **17.85** | **79** | LR | LR | 02 37 39.2 | |
| | comp=Z,62nm,19.6s,baz=88,slow=35 | | | | | | |
| **DLV** | **T Lat** | **18.02** | **275** | | **Pn** | **02 31 07.1** | **-2.5** |
| DLV | | | | IAmb | IAmb | 02 31 16.4 | |
| | comp=Z,65nm,1.3s | | | | | | |
| **JAY** | **Jayapura** | **19.11** | **133** | LR | LR | 02 37 23.6 | |
| | comp=Z,63nm,21.3s,baz=344,slow=32 | | | | | | |
| **BATI** | **Baumata** | **21.08** | **189** | P | **P** | **02 31 44.4** | **+1.0** |
| | comp=Z,31nm,0.5s,baz=225,slow=2.4,SNR=6.7 | | | | | | |
| **MTN** | **Manton Dam** | **23.85** | **170** | P | **P** | **02 32 11.8** | **-0.5** |
| MTN | | | | IAmb | IAmb | 02 32 13.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **PBKT** | **Sadao Pong** | **25.76** | **286** | P | **P** | **02 32 27.4** | **-2.4** |
| **LEM** | **Lembang** | **25.91** | **228** | P | **P** | **02 32 32.1** | **+0.7** |
| | comp=Z,33nm,0.6s,baz=311,slow=15,SNR=4.7 | | | | | | |
| LEM | | | | LR | LR | 02 43 19.7 | |
| | comp=Z,56nm,18.8s,baz=230,slow=38 | | | | | | |
| **KNRA** | **Kununurra** | **26.35** | **176** | P | **P** | **02 32 34.2** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 02 32 49.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **26.58** | **2** | LR | LR | 02 42 01.4 | |
| | comp=Z,30nm,21.1s,baz=195,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.02** | **289** | P | P | 02 32 48.5 | -1.6 |
| | comp=Z,1.0nm,0.4s,baz=104,slow=6.8,SNR=5.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.02** | **289** | P | P | 02 32 48.7 | -1.4 |
| **WB0** | **Warramunga Arr** | **31.25** | **166** | P | P | 02 33 17.1 | -1.7 |
| WB0 | | | | IAmb | IAmb | 02 33 19.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **166** | P | P | 02 33 18.2 | -1.9 |
| | comp=Z,0.8nm,0.5s,baz=348,slow=9.2,SNR=8.8 | | | | | | |
| WRA | | | | pP | pwP | 02 33 29.3 | -0.1 |
| | comp=Z,1.0nm,0.8s,baz=348,slow=8.9,SNR=3.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 36 13.7** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=341,slow=3.0,SNR=11 | | | | | | |
| WRA | | | | pPcP | | 02 36 24.6 | |
| | comp=Z,0.8nm,0.6s,baz=350,slow=3.0,SNR=6.5 | | | | | | |
| WRA | | | | LR | LR | 02 47 18.5 | |
| | comp=Z,45nm,21.8s,baz=278,slow=39 | | | | | | |
| **WB2** | **Warramunga Arr** | **31.41** | **166** | P | P | 02 33 18.1 | -2.1 |
| WB2 | | | | IAmb | IAmb | 02 33 24.1 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **34.92** | **169** | P | **P** | **02 33 49.9** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=349,slow=6.6,SNR=12 | | | | | | |
| ASAR | | | | pP | **pwP** | **02 34 01.0** | **+0.9** |
| | comp=Z,0.9nm,0.5s,baz=352,slow=7.1,SNR=5.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 36 23.1** | **-0.4** |
| | comp=Z,1.3nm,0.5s,baz=351,slow=2.9,SNR=12 | | | | | | |
| ASAR | | | | pPcP | | 02 36 34.5 | |
| | comp=Z,0.8nm,0.5s,baz=342,slow=2.6,SNR=7.9 | | | | | | |
| ASAR | | | | LR | LR | 02 53 40.7 | |
| | comp=Z,29nm,18.0s,baz=315,slow=46 | | | | | | |
| **ASAR** | **Alice Springs** | **34.92** | **169** | P | P | 02 33 49.5 | -1.4 |
| ASAR | | | | PcP | **PcP** | **02 36 22.9** | **-0.7** |
| **ASAJ** | **Asahikawa** | **35.91** | **19** | LR | LR | 02 47 01.8 | |
| | comp=Z,73nm,21.5s,baz=14,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **38.55** | **5** | P | **P** | **02 34 22.9** | **+1.5** |
| KLR | | | | pP | **pwP** | **02 34 33.3** | **+2.3** |
| | comp=Z,1.9nm,0.6s,baz=200,slow=3.2,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **40.74** | **339** | P | **P** | **02 34 40.7** | **+0.8** |
| | comp=Z,0.5nm,0.5s,baz=166,slow=12,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **40.74** | **339** | P | **P** | **02 34 40.0** | **+0.1** |
| **STKA** | **Stephens Creek** | **44.71** | **162** | P | **P** | **02 35 11.8** | **-0.3** |
| | comp=Z,4.6nm,0.5s,baz=336,slow=8.6,SNR=16 | | | | | | |
| STKA | | | | pP | **pwP** | **02 35 22.4** | **+1.0** |
| | comp=Z,3.2nm,0.7s,baz=331,slow=12,SNR=2.9 | | | | | | |
| **STKA** | **Stephens Creek** | **44.71** | **162** | P | **P** | **02 35 11.8** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **48.95** | **24** | P | **P** | **02 35 47.0** | **+2.0** |
| | comp=Z,1.4nm,0.5s,baz=226,slow=7.5,SNR=6.3 | | | | | | |
| PETK | | | | LR | LR | 02 57 42.4 | |
| | comp=Z,30nm,18.7s,baz=302,slow=38 | | | | | | |
| **PETK** | **Petropavlovsk-** | **48.95** | **24** | P | **P** | **02 35 45.7** | **+0.6** |
| **MK31** | **Makanchi Array** | **51.96** | **322** | P | **P** | **02 36 08.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **51.96** | **322** | P | **P** | **02 36 09.0** | **+1.0** |
| | comp=Z,3.8nm,0.7s,baz=116,slow=8.3,SNR=42 | | | | | | |
| MKAR | | | | pP | **pwP** | **02 36 20.2** | **+1.7** |
| | comp=Z,2.2nm,0.8s,baz=117,slow=7.5,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.96** | **322** | P | **P** | **02 36 08.6** | **+0.6** |
| **MAKZ** | **Makanchi** | **52.16** | **322** | P | **P** | **02 36 09.3** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 02 36 12.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **NIL** | **Nilore** | **53.91** | **304** | P | P | 02 36 21.1 | -1.5 |
| **ZALV** | **Zalesovo Beam** | **54.45** | **331** | P | **P** | **02 36 25.9** | **-0.2** |
| | comp=Z,1.8nm,0.8s,baz=132,slow=6.6,SNR=5.4 | | | | | | |
| **KURK** | **Kurchatov** | **55.97** | **325** | P | **P** | **02 36 37.1** | **0.0** |
| KURK | | | | IAmb | IAmb | 02 36 39.1 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **GAR** | **Garm** | **57.39** | **310** | P | **P** | **02 36 47.4** | **-0.3** |
| **CHGR** | **Chuyangaron** | **58.20** | **309** | P | **P** | **02 36 52.4** | **-1.0** |
| **KKAR** | **Karatay Array** | **58.29** | **314** | P | **P** | **02 36 52.5** | **-1.4** |
| **BRVK** | **Borovoye** | **61.64** | **325** | P | **P** | **02 37 16.7** | **+0.1** |
| BRVK | | | | IAmb | IAmb | 02 37 17.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **66.85** | **319** | P | **P** | **02 37 49.8** | **-1.1** |
| **SIRT** | **Sirnak** | **79.11** | **306** | P | P | 02 39 00.9 | -2.9 |
| **ARCES** | **ARCESS Array B** | **83.91** | **340** | P | **P** | **02 39 28.2** | **-0.4** |
| | comp=Z,2.6nm,0.8s,baz=70,slow=7.9,SNR=4.7 | | | | | | |
| **BR131** | **Keskin Array S** | **85.64** | **309** | P | P | 02 39 35.8 | -2.2 |
| BR131 | | | | IAmb | IAmb | 02 39 52.6 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.64** | **309** | P | **P** | **02 39 37.2** | **-0.8** |
| | comp=Z,1.6nm,0.7s,baz=118,slow=4.3,SNR=9.8 | | | | | | |
| BRTR | | | | pP | **pwP** | **02 39 48.1** | **-0.5** |
| | comp=Z,1.1nm,0.8s,baz=133,slow=4.6,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **85.71** | **332** | P | **P** | **02 39 37.3** | **-0.4** |
| | comp=Z,1.1nm,0.4s,baz=92,slow=5.5,SNR=9.8 | | | | | | |
| FINES | | | | pP | **pwP** | **02 39 48.3** | **0.0** |
| | comp=Z,2.4nm,0.8s,baz=34,slow=4.8,SNR=2.2 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **89.83** | **319** | P | **P** | **02 39 57.3** | **-0.7** |
| BUR08 | | | | IAmb | IAmb | 02 40 07.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.07** | **24** | P | **P** | **02 40 12.6** | **+0.1** |
| | comp=Z,0.6nm,1.0s,baz=304,slow=4.5,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.59** | **292** | PKP | **PKPdf** | **02 45 50.9** | **-0.8** |
| | comp=Z,0.7nm,0.7s,baz=55,slow=1.4,SNR=4.5 | | | | | | |
| **PLCA** | **Paso Flores** | **146.44** | **156** | PKPbc | **PKPdf** | **02 46 40.3** | **+1.1** |
| | comp=Z,3.6nm,0.9s,baz=190,slow=2.9,SNR=5.6 | | | | | | |

*UCR* ***02*** *02:27:36.4±1.2,8˙12N×83˚38W, h7km±4km, MW3.7*
*UPA* ***02*** *02:27:37.4±0.8,8˙16N×83˚36W, h23km±5km, MW4.2*

**ISC 02 02:27:36.6**±1.8,**8˙13N**±0˙07×**83˚36W**±0˚05,**h16km**±10km, **n30,** σ0**68**/43,**4C-3D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PIRO** | **Carate, Puerto** | **0.27** | **6** | *e*P | **Pb** | **02 27 43.0** | **-0.1** |
| PIRO | | | | *e*S | **Sb** | **02 27 47.3** | **-0.2** |
| **PTJ1** | **Puerto Jimnez** | **0.40** | **9** | *e*P | **Pg** | **02 27 45.2** | **+0.4** |
| PTJ1 | | | | *e*S | **Sb** | **02 27 52.5** | **+1.0** |
| **PTJ1** | **Puerto Jimnez** | **0.40** | **9** | *i*P | **Pg** | **02 27 45.3** | **+0.4** |
| PTJ1 | | | | *e*S | **Sb** | **02 27 52.0** | **+0.6** |
| **CCOL** | **Caracol de Cor** | **0.47** | **55** | *e*P | **Pg** | **02 27 46.2** | **+0.1** |
| CCOL | | | | *e*S | **Sb** | **02 27 54.2** | **+0.8** |
| **PTPM** | **Petroterminale** | **0.48** | **82** | *i*P | **Pg** | **02 27 46.7** | **+0.3** |
| PTPM | | | | *e*S | **Sb** | **02 27 54.7** | **+0.9** |
| **CDITO** | **Canoas** | **0.65** | **48** | *e*P | **Pg** | **02 27 48.9** | **-0.6** |
| CDITO | | | | *e*S | **Sg** | **02 27 58.1** | **0.0** |
| **EDSV** | **San Vito** | **0.78** | **30** | *e*P | **Pg** | **02 27 51.8** | **-0.1** |
| EDSV | | | | *e*S | **Sb** | **02 28 03.6** | **+1.1** |
| **EDPN** | **Palmar Norte** | **0.83** | **354** | *i*P | **Pb** | **02 27 52.4** | **-0.3** |
| EDPN | | | | *e*S | **Sb** | **02 28 04.4** | **+0.8** |
| **BRU2** | **Volcan** | **0.93** | **45** | *e*P | **Pb** | **02 27 53.9** | **-0.8** |
| **BRU2** | **Volcan** | **0.93** | **45** | *i*P | **Pb** | **02 27 54.0** | **-0.7** |
| BRU2 | | | | *e*S | **Sb** | **02 28 06.7** | **-0.2** |
| **DVD** | **David** | **0.95** | **72** | *e*P | **Pb** | **02 27 54.6** | **-0.2** |
| DVD | | | | *e*S | **Sb** | **02 28 06.3** | **-0.9** |
| **BC3P** | **Paso Ancho** | **1.01** | **48** | *i*P | **Pb** | **02 27 55.0** | **-0.9** |
| BC3P | | | | *e*S | **Sb** | **02 28 09.0** | **0.0** |
| **BCO2** | **Palmira** | **1.01** | **55** | *i*P | **Pb** | **02 27 55.4** | **-0.5** |
| BCO2 | | | | *e*S | **Sb** | **02 28 08.8** | **-0.3** |
| **EDBA** | **Buenos Aires** | **1.03** | **5** | *e*P | **Pb** | **02 27 55.7** | **-0.4** |
| **SRBA** | **San Rafael, Bu** | **1.09** | **0** | *e*P | **Pb** | **02 27 56.4** | **-0.9** |
| **DRK0** | **Durika** | **1.13** | **6** | *e*P | **Pb** | **02 27 57.0** | **-0.9** |
| **DRK0** | **Durika** | **1.13** | **6** | *i*P | **Pb** | **02 27 57.0** | **-0.9** |
| DRK0 | | | | *e*S | **Sb** | **02 28 10.9** | **-1.5** |
| **PEZE** | **Perez Zeledon,** | **1.28** | **346** | *e*P | **Pn** | **02 27 59.6** | **-0.5** |
| **CDM** | **Cerro de Muert** | **1.47** | **344** | *e*P | **Pn** | **02 28 02.7** | **-0.2** |
| **CNI2** | **El Empalme, Bo** | **1.56** | **34** | *e*S | **Sn** | **02 28 24.0** | **+0.4** |
| **MRVA** | **Moravia de Chi** | **1.68** | **357** | *e*P | **Pn** | **02 28 05.7** | **+0.1** |
| **RIMA** | **Rio Macho** | **1.70** | **343** | *e*P | **Pn** | **02 28 06.0** | **+0.1** |
| **LCR2** | **La Lucha 2** | **1.72** | **338** | *e*P | **Pn** | **02 28 06.6** | **+0.4** |
| **OCM** | **Ochomogo** | **1.85** | **341** | *e*P | **Pn** | **02 28 08.7** | **+0.7** |
| **VTCV** | **VTCV, Calle Va** | **1.87** | **349** | *e*P | **Pn** | **02 28 09.1** | **+0.8** |
| **BATAN** | **Batan** | **1.95** | **360** | *e*P | **Pn** | **02 28 10.4** | **+1.2** |
| **JACO** | **JACO, Garabito** | **1.99** | **320** | *e*P | **Pn** | **02 28 09.0** | **-0.6** |
| **GRZA** | **Playa Garza** | **2.86** | **308** | *e*P | **Pn** | **02 28 21.9** | **+0.2** |
| **PLVR** | **Palo Verde** | **2.95** | **318** | *e*P | **Pn** | **02 28 23.7** | **+0.6** |
| **SAJU** | **San Juanillo,** | **3.01** | **310** | *e*P | **Pn** | **02 28 23.9** | **+0.2** |

*TUL* ***02*** *02:29:57.6±1.2,36˙48N±0˙03×98˙74W±0˙05, h7km±7km, ML3.6,mb_Lg3.3/74(NEIC), Error ellipse: s-maj=5.7km s-min=3.3km az=109.0*
*ANF* ***02*** *02:29:57.9±0.3,36˙45N×98˙74W, h5km, ML4.3/15, Error ellipse: s-maj=3.5km s-min=3.2km az=59.0*
*NEIC* ***02*** *02:29:58.3±1.6,36˙47N±0˙03×98˙71W±0˙05, h12km±7km, Error ellipse: s-maj=5.8km s-min=3.6km az=112.0*

**ISC 02 02:29:58.0**±1.1,**36˙47N**±0˙03×**98˙71W**±0˙03,**h6km**±10km, **n113,** σ0**87**/107,**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.23** | **359** | Pg | **Pg** | **02 30 02.8** | **+0.1** |
| OK035 | | | | Sg | **Sg** | **02 30 06.3** | **+0.5** |
| **U32A** | **Winter Ranch,** | **0.26** | **249** | Pg | **Pg** | **02 30 02.5** | **-0.5** |
| U32A | | | | Sg | **Sg** | **02 30 06.2** | **-0.2** |
| **OK032** | **Salt Plains WL** | **0.52** | **50** | | **Pg** | **02 30 08.1** | **+0.1** |
| OK032 | | | | Sg | **Sg** | **02 30 15.6** | **+0.8** |
| **CROK** | **Carrier** | **0.58** | **87** | | **Pg** | **02 30 09.4** | **+0.2** |
| CROK | | | | Sg | **Sg** | **02 30 18.0** | **+1.2** |
| **KAN14** | **Manchester OK** | **0.77** | **51** | Pg | **Pg** | **02 30 12.6** | **-0.1** |
| KAN14 | | | | Sg | **Sg** | **02 30 23.1** | **+0.3** |
| **GC02** | **Grant County #** | **0.78** | **61** | | **Pg** | **02 30 12.6** | **-0.4** |
| GC02 | | | | Sg | **Sg** | **02 30 23.8** | **+0.7** |
| **KAN10** | **Anthony SW Sta** | **0.81** | **37** | | **Pg** | **02 30 13.4** | **-0.2** |
| KAN10 | | | | Sg | **Sg** | **02 30 25.0** | **+0.8** |
| **KAN16** | **Harper SW Stat** | **0.91** | **34** | | **Pg** | **02 30 14.9** | **-0.5** |
| KAN16 | | | | Sg | **Sg** | **02 30 27.7** | **+0.4** |
| **KAN05** | **Bluff City Nor** | **0.92** | **46** | | **Pg** | **02 30 15.6** | **-0.1** |
| KAN05 | | | | Sg | **Sg** | **02 30 28.1** | **+0.4** |
| **KAN17** | **Caldwell West** | **0.95** | **53** | | **Pg** | **02 30 15.9** | **-0.3** |
| **KAN08** | **Anthony NE Sta** | **0.96** | **38** | | **Pg** | **02 30 15.7** | **-0.7** |
| **KAN12** | **Harper NE Stat** | **1.00** | **34** | | **Pg** | **02 30 16.8** | **-0.4** |
| **KAN01** | **Argonia South** | **1.02** | **48** | | **Pg** | **02 30 17.2** | **-0.3** |
| **KAN06** | **Argonia West S** | **1.03** | **41** | | **Pg** | **02 30 17.2** | **-0.5** |
| **KAN13** | **South Haven SW** | **1.12** | **61** | Pg | **Pg** | **02 30 18.9** | **-0.6** |
| **BCOK** | **Bluff Creek, N** | **1.21** | **132** | Pn | **Pb** | **02 30 20.3** | **-1.0** |
| **OK029** | **Liberty Lake** | **1.22** | **123** | Pn | **Pb** | **02 30 20.3** | **-1.1** |
| **BLOK** | **Blackwell** | **1.23** | **76** | Pn | **Pn** | **02 30 20.8** | **-1.0** |
| **OK009** | **Oakdale Elemen** | **1.37** | **130** | Pn | **Pn** | **02 30 23.1** | **-0.6** |
| **OK025** | **Westminster Rd** | **1.42** | **128** | | **Pn** | **02 30 24.1** | **-0.3** |
| **OKCFA** | **Oklahoma City** | **1.47** | **136** | | **Pn** | **02 30 24.0** | **-1.0** |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **136** | | **Pn** | **02 30 24.3** | **-0.9** |
| **OK033** | **Mehan** | **1.49** | **106** | | **Pn** | **02 30 25.2** | **-0.2** |
| **OK031** | **S. Brethren Rd** | **1.60** | **108** | | **Pn** | **02 30 26.8** | **0.0** |
| **FNO** | **Franklin** | **1.61** | **138** | | **Pn** | **02 30 27.2** | **+0.2** |
| **QUOK** | **Quay** | **1.64** | **100** | | **Pn** | **02 30 27.7** | **+0.3** |
| **OK030** | **Cody Creek RV** | **1.65** | **109** | | **Pn** | **02 30 27.1** | **-0.4** |
| **OK034** | **N. Norfolk Rd.** | **1.68** | **105** | | **Pn** | **02 30 27.2** | **-0.7** |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | | **Pn** | **02 30 27.7** | **-1.0** |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | P | **Pn** | **02 30 28.0** | **-0.7** |
| | baz=1.4,SNR=40 | | | | | | |
| WMOK | | | | S | **Sb** | **02 30 51.8** | **-0.5** |
| | baz=1.4 | | | | | | |
| **T35A** | **Sooner Cattle** | **1.82** | **75** | | **Pn** | **02 30 29.2** | **-0.7** |
| **R32A** | **Long Quarter,** | **1.95** | **360** | Pn | **Pn** | **02 30 31.1** | **-0.6** |
| **W35A** | **Tecumseh** | **1.99** | **131** | | **Pn** | **02 30 32.0** | **-0.2** |
| **X34A** | **Smith Ranch, M** | **2.00** | **159** | | **Pn** | **02 30 33.2** | **+0.9** |
| **TUL1** | **Leonard** | **2.42** | **103** | Pn | **Pn** | **02 30 37.4** | **-0.8** |
| TUL1 | | | | IAmb_Lg | | 02 31 16.3 | |
| | comp=Z,138nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.42** | **103** | P | **Pn** | **02 30 38.4** | **+0.2** |
| | baz=284,SNR=36 | | | | | | |
| TUL1 | | | | S | **Sb** | **02 31 12.6** | **+0.4** |
| | baz=284 | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **341** | Pn | **Pn** | **02 30 38.5** | **-0.5** |
| CBKS | | | | IAmb_Lg | | 02 31 16.1 | |
| | comp=Z,98nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **341** | P | **Pn** | **02 30 39.8** | **+0.9** |
| | baz=161 | | | | | | |
| CBKS | | | | S | **Sb** | **02 31 13.4** | **-0.3** |
| | baz=161 | | | | | | |
| **LOOK** | **Love County** | **2.77** | **153** | Pn | **Pn** | **02 30 43.4** | **+0.4** |
| **AMTX** | **Amarillo** | **2.90** | **238** | Pn | **Pn** | **02 30 45.1** | **+0.4** |
| **AMTX** | **Amarillo** | **2.90** | **238** | P | **Pn** | **02 30 45.1** | **+0.4** |
| | baz=56 | | | | | | |
| AMTX | | | | Sb | **Sb** | **02 31 26.9** | **+1.1** |
| | baz=56 | | | | | | |
| **KSU1** | **Kansas State U** | **3.10** | **32** | Pn | **Pn** | **02 30 47.0** | **-0.6** |
| KSU1 | | | | IAmb_Lg | | 02 31 42.3 | |
| | comp=Z,81nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.10** | **32** | P | **Pn** | **02 30 48.3** | **+0.7** |
| | baz=213,SNR=8.7 | | | | | | |
| **X37A** | **Clayton** | **3.31** | **124** | Pn | **Pn** | **02 30 50.3** | **0.0** |
| X37A | | | | IAmb_Lg | | 02 31 50.4 | |
| | comp=Z,77nm,1.0s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.35** | **159** | | **Pn** | **02 30 51.5** | **+0.5** |
| **U38A** | **Gravette** | **3.48** | **89** | | **Pn** | **02 30 52.6** | **-0.1** |
| U38A | | | | IAmb_Lg | | 02 31 55.6 | |
| | comp=Z,94nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.92** | **192** | Pn | **Pn** | **02 30 58.6** | **-0.1** |
| **ABTX** | **Abilene, Hawle** | **3.92** | **192** | P | **Pn** | **02 30 58.4** | **-0.3** |
| | baz=11,SNR=7.8 | | | | | | |
| ABTX | | | | Sb | **Sb** | **02 31 57.9** | **+2.7** |
| | baz=11 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.01** | **310** | Pn | **Pn** | **02 30 59.0** | **-1.2** |
| **KSCO** | **Kaye Shedlock'** | **4.01** | **310** | Sb | **Sb** | **02 32 00.5** | **+2.5** |
| | baz=128 | | | | | | |
| **MSTX** | **Muleshoe** | **4.16** | **234** | IAmb_Lg | | 02 32 10.8 | |
| | comp=Z,68nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.16** | **234** | Sb | **Sb** | **02 32 05.3** | **+3.0** |
| | baz=52 | | | | | | |
| **W39A** | **Magazine** | **4.20** | **106** | | **Pn** | **02 31 03.5** | **+0.9** |
| **W39A** | **Magazine** | **4.20** | **106** | P | **Pn** | **02 31 03.2** | **+0.6** |
| | baz=289 | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.37** | **13** | Pn | **Pn** | **02 31 04.1** | **-0.9** |
| N33A | | | | IAmb_Lg | | 02 32 28.5 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.43** | **135** | IAmb_Lg | | 02 32 21.1 | |
| | comp=Z,102nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.47** | **73** | | **Pn** | **02 31 06.5** | **+0.2** |
| **WHTX** | **Lake Whitney,** | **4.59** | **167** | | **Pn** | **02 31 07.8** | **-0.2** |
| **WHTX** | **Lake Whitney,** | **4.59** | **167** | P | **Pn** | **02 31 07.8** | **-0.2** |
| | baz=347 | | | | | | |
| **MIAR** | **Mount Ida** | **4.60** | **113** | | **Pn** | **02 31 08.7** | **+0.5** |
| MIAR | | | | IAmb_Lg | | 

| | | | | | | |
|---|---|---|---|---|---|---|
| **K22A** | **Casper** | **8.63** | **318** | lAmb_Lg | | 02 34 44.0 |
| | comp=Z,36nm,0.9s | | | | | |
| **JFWS** | **Jewell Farm** | **9.15** | **43** | lAmb_Lg | | 02 35 13.3 |
| | comp=Z,32nm,0.7s | | | | | |
| **I40A** | **Norwalk** | **9.65** | **37** | lAmb_Lg | | 02 35 10.8 |
| | comp=Z,21nm,0.7s | | | | | |
| **SPMN** | **Marine on St.** | **9.82** | **25** | lAmb_Lg | | 02 35 06.9 |
| | comp=Z,20nm,1.1s | | | | | |

**NOU 02 02:41:47.4, 14°.61S×167°.50E, h142km, mb3.9/11, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.88** | **199** | P | Pn | 02 42 10.6 | +0.2 |
| **DVP** | **Devils Point** | **3.17** | **168** | P | Pn | 02 42 36.9 | +0.3 |
| **KOUNC** | **Koumac, New Ca** | **6.66** | **207** | P | Pn | 02 43 22.7 | -0.1 |
| **YATNC** | **Mamie plateau,** | **7.43** | **184** | P | Pn | 02 43 31.9 | -1.3 |
| **DZM** | **Mont Dzumac** | **7.49** | **188** | P | Pn | 02 43 34.5 | +0.4 |
| **NOUC** | **Port Laguerre** | **7.54** | **188** | P | Pn | 02 43 35.2 | +0.6 |
| **OUENC** | **Ouen Island, N** | **7.79** | **184** | P | Pn | 02 43 38.4 | +0.4 |

*IDC **02** 02:54:10.0±0.6, 62°.98S×168°.73E, h0km, mb4.4/10, mb1 4.6/11, mb1mx4.4/23, mbtmp4.5/11, ML4.4/1, MS4.4/29, Ms1 4.4/29, ms1mx4.3/42, Error ellipse: s-maj=28.3km s-min=16.8km az=66.0*

*NEIC **02** 02:54:11.3±1.7, 63°.34S±0°.09×168°.2E±0°.4, h10km±1km, mb4.9/25, Error ellipse: s-maj=30.9km s-min=15.1km az=89.0*

*GCMT **02** 02:54:13.3±0.2, 63°.08S±0°.01×169°.89E±0°.03, h12km, MW5.2/103, Moment Tensor Solution. s51,c59; s103,c167; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=2.38±.14; Mθθ 5.86±.11; Mφφ -3.48±.14; Mrθ -4.00±.34; Mθφ -3.08±.11; Mφr -1.44±.41; Best double couple: Mo 7.19900×10^16 NP1:φs 329.00000°, δ 48.00000°, λ -16.00000°. NP2: φs 69.00000°, δ 78.00000°, λ -137.00000°. Principal axes: T 7.9720, Plg 19.0000°, Azm 193.0000°; N -1.5450, Plg 46.0000°, Azm 82.0000°; P -6.4260, Plg 38.0000°, Azm 298.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 02 02:54:11.7±0.4, 63°.25S±0°.06×168°.3E±0°.1, h10km, n107, σ1§52/64, mb4.7/13, MS4.4/31, 3C-2D, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **14.48** | **186** | Pn | **Pn** | **02 57 38.0** | **+1.6** |
| | 1.5nm,0.3s,baz=28,slow=16,SNR=27 | | | | | | |
| VNDA | | | | LR | LR | 03 02 03.2 | |
| | comp=Z,4μm,21.5s,baz=16,slow=32 | | | | | | |
| **VNDA** | **Vanda** | **14.48** | **186** | | **Pn** | **02 57 35.5** | **-0.8** |
| **WHZ** | **Wether Hill Ro** | **17.40** | **359** | | **Pn** | **02 58 15.0** | **+0.7** |
| **DCZ** | **Deep Cove** | **17.84** | **357** | | **P** | **02 58 21.0** | **+0.7** |
| DCZ | | | | lAmb | lAmb | 02 58 25.8 | |
| | comp=Z,62nm,0.7s | | | | | | |
| **MLZ** | **Mavora Lakes** | **17.92** | **360** | | **P** | **02 58 21.7** | **+0.3** |
| **ODZ** | **Otahua Downs** | **18.30** | **5** | P | **P** | **02 58 26.2** | **+0.7** |
| **WKZ** | **Wanaka** | **18.47** | **2** | P | **Pn** | **02 58 28.4** | **+0.9** |
| WKZ | | | | lAmb | lAmb | 02 58 33.1 | |
| | comp=Z,152nm,1.2s | | | | | | |
| **LBZ** | **Lake Benmore** | **18.94** | **4** | Pn | **Pn** | **02 58 34.4** | **+1.3** |
| LBZ | | | | lAmb | lAmb | 02 58 37.9 | |
| | comp=Z,117nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **19.64** | **6** | P | **Pn** | **02 58 41.8** | **+0.2** |
| RPZ | | | | lAmb | lAmb | 02 58 47.1 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **MQZ** | **McQueen's Vall** | **19.75** | **9** | P | **P** | **02 58 41.5** | **+0.1** |
| MQZ | | | | lAmb | lAmb | 02 58 47.9 | |
| | comp=Z,98nm,1.5s | | | | | | |
| **FOZ** | **Fox Glacier** | **19.78** | **3** | | **P** | **02 58 42.7** | **+1.0** |
| FOZ | | | | lAmb | lAmb | 02 58 59.4 | |
| | comp=Z,52nm,1.2s | | | | | | |
| **MSWZ** | **Moikau Station** | **22.26** | **14** | P | **P** | **02 59 08.0** | **-0.5** |
| **NNZ** | **Nelson** | **22.28** | **10** | P | **P** | **02 59 08.3** | **-0.4** |
| **QRZ** | **Quartz Range** | **22.60** | **8** | | **P** | **02 59 12.5** | **+0.3** |
| **BFZ** | **Birch Farm** | **23.10** | **16** | P | **P** | **02 59 16.3** | **-1.0** |
| **CASY** | **Casey** | **24.03** | **237** | P | **P** | **02 59 24.4** | **-1.9** |
| **BKZ** | **Black Stump Fm** | **24.62** | **16** | | **P** | **02 59 32.0** | **0.0** |
| **HIZ** | **Hauiti** | **25.09** | **12** | P | **P** | **02 59 35.1** | **-1.1** |
| HIZ | | | | lAmb | lAmb | 02 59 49.0 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **25.59** | **16** | P | **P** | **02 59 37.2** | **-3.5** |
| | comp=Z,25nm,1.0s,baz=210,slow=5.8,SNR=12 | | | | | | |
| URZ | | | | LR | LR | 03 08 01.9 | |
| | comp=Z,2μm,21.5s,baz=184,slow=33 | | | | | | |
| **URZ** | **Urewera** | **25.59** | **16** | | **P** | **02 59 40.3** | **-0.4** |
| **QSPA** | **South Pole Qui** | **26.84** | **180** | P | **P** | **02 59 53.5** | **+1.4** |
| | comp=Z,6.3nm,0.9s,baz=18,slow=5.9,SNR=6.3 | | | | | | |
| QSPA | | | | LR | LR | 03 08 49.9 | |
| | comp=Z,1μm,19.9s,baz=28,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **26.84** | **180** | P | **P** | **02 59 51.4** | **-0.6** |
| QSPA | | | | lAmb | lAmb | 03 00 02.4 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **RAO** | **Raoul Island** | **35.16** | **21** | LR | LR | 03 12 41.8 | |
| | comp=Z,358nm,21.4s,baz=144,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **35.64** | **319** | P | **P** | **03 01 09.1** | **-0.4** |
| | comp=Z,1.8nm,0.7s,baz=170,slow=8.8,SNR=2.4 | | | | | | |
| STKA | | | | LR | LR | 03 13 55.4 | |
| | comp=Z,631nm,18.7s,baz=154,slow=33 | | | | | | |
| **MAW** | **Mawson** | **38.95** | **216** | LR | LR | 03 17 50.3 | |
| | comp=Z,2μm,19.3s,baz=126,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **41.18** | **357** | *e*P | **P** | **03 01 56.2** | **0.0** |
| DZM | | | | *e*S | **S** | **03 08 10.4** | **+1.0** |
| | comp=Z,69nm,1.9s | | | | | | |
| DZM | | | | *e*LR | LR | 03 13 14.4 | |
| | comp=Z,223nm,23.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **41.18** | **357** | P | **P** | **03 01 56.5** | **+0.3** |
| DZM | | | | lAmb | lAmb | 03 01 59.3 | |
| | comp=Z,1μm,24.6s | | | | | | |
| **SYO** | **Syowa Base** | **43.11** | **204** | ↑*e*pP | **P** | **03 02 13.1** | **+1.7** |
| **H01W1** | **Cape Leeuwin H** | **43.46** | **284** | T | T | 03 49 35.6 | |
| | baz=147,slow=76,SNR=176 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **43.46** | **284** | T | T | 03 49 35.9 | |
| | baz=147,slow=76,SNR=221 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **43.47** | **284** | T | T | 03 49 36.8 | |
| | baz=147,slow=76,SNR=146 | | | | | | |
| **SNAA** | **Sanae** | **45.21** | **184** | P | **P** | **03 02 25.5** | **-2.8** |
| **SNAA** | **Sanae** | **45.21** | **184** | LR | LR | 03 20 44.5 | |
| | comp=Z,1μm,18.2s,baz=176,slow=35 | | | | | | |
| **SNAA** | **Sanae** | **45.21** | **184** | P | **P** | **03 02 27.6** | **-0.7** |
| **CTA** | **Charters Tower** | **45.67** | **331** | LR | LR | 03 19 24.7 | |
| | comp=Z,397nm,19.3s,baz=147,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **45.69** | **314** | P | **P** | **03 02 33.1** | **+0.6** |
| | comp=Z,1.9nm,0.9s,baz=159,slow=7.7,SNR=9.2 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 04 10.1** | **-0.3** |
| | comp=Z,1.4nm,0.9s,baz=142,slow=3.6,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **45.69** | **314** | P | **P** | **03 02 32.6** | **0.0** |
| **AS31** | **Alice Springs** | **45.70** | **314** | P | **P** | **03 02 32.2** | **-0.4** |
| **VNA3** | **Neumayer Olymp** | **45.77** | **181** | P | P | 03 02 26.6 | -6.0 |
| **MSVF** | **Nonsavu** | **45.98** | **13** | LR | LR | 03 20 11.1 | |
| | comp=Z,533nm,18.1s,baz=198,slow=34 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **46.06** | **182** | P | **P** | **03 02 31.3** | **-3.6** |
| | baz=169,slow=5.7 | | | | | | |
| **PMSA** | **Palmer Station** | **46.59** | **152** | LR | LR | 03 18 48.4 | |
| | comp=Z,409nm,19.2s,baz=186,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **47.24** | **42** | LR | LR | 03 17 17.4 | |
| | comp=Z,421nm,21.2s,baz=206,slow=30 | | | | | | |
| **WB2** | **Warramunga Arr** | **49.03** | **316** | P | **P** | **03 02 57.2** | **-1.3** |
| WB2 | | | | lAmb | lAmb | 03 03 14.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.03** | **316** | P | **P** | **03 02 58.3** | **-0.2** |
| | comp=Z,1.6nm,0.9s,baz=162,slow=6.4,SNR=6.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 04 21.4** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=152,slow=3.5,SNR=5.2 | | | | | | |
| WRA | | | | LR | LR | 03 21 08.2 | |
| | comp=Z,308nm,19.4s,baz=172,slow=33 | | | | | | |
| **WB0** | **Warramunga Arr** | **49.18** | **316** | P | **P** | **03 02 59.0** | **-0.7** |
| **AFI** | **Afiamalu** | **51.24** | **25** | LR | LR | 03 21 07.2 | |
| | comp=Z,185nm,21.6s,baz=183,slow=32 | | | | | | |
| **PAE** | **Paea** | **53.94** | **52** | *e*T | T | 04 00 38.6 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **PPT2** | **Papeete2** | **54.00** | **52** | *e*S | **S** | **03 11 11.8** | **+0.2** |
| PPT2 | | | | *e*LQ | LQ | 03 16 08.7 | |
| | comp=Z,752nm,24.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 03 18 43.1 | |
| | comp=Z,972nm,27.0s,baz=202 | | | | | | |
| **PPT2** | **Papeete2** | **54.00** | **52** | *e*T | T | 04 00 43.1 | |
| | comp=Z,9.6nm,0.3s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **54.02** | **52** | LR | LR | 03 21 21.7 |
| | comp=Z,285nm,18.6s,baz=200,slow=30 | | | | | |
| **HNR** | **Honiara** | **54.06** | **350** | LR | LR | 03 23 22.2 |
| | comp=Z,325nm,20.0s,baz=158,slow=32 | | | | | |
| **MEH** | **Mehetia** | **54.29** | **54** | *e*T | T | 04 01 00.1 |
| | comp=Z,34nm,0.3s | | | | | |
| **PMG** | **Port Moresby** | **55.85** | **335** | LR | LR | 03 24 15.4 |
| | comp=Z,316nm,20.2s,baz=135,slow=32 | | | | | |
| **VAH** | **Vaihoa** | **56.88** | **53** | *e*T | T | 04 04 18.8 |
| | comp=Z,218nm,0.3s | | | | | |
| **BATI** | **Baumata** | **61.69** | **308** | LR | LR | 03 29 18.5 |
| | comp=Z,214nm,20.1s,baz=168,slow=34 | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **65.53** | **58** | *e*LR | LR | 03 23 52.7 |
| | comp=Z,548nm,28.3s,baz=217 | | | | | |
| **PLCA** | **Paso Flores** | **66.33** | **135** | P | **P** | **03 05 01.0** | **+0.9** |
| | comp=Z,8.8nm,1.3s,baz=190,slow=7.3,SNR=4.0 | | | | | |
| **KAPI** | **Kappang** | **67.91** | **306** | LR | LR | 03 33 46.9 | |
| | comp=Z,115nm,18.9s,baz=174,slow=35 | | | | | |
| **SIJI** | **Sorong** | **67.99** | **320** | LR | LR | 03 35 14.1 | |
| | comp=Z,202nm,18.7s,baz=56,slow=36 | | | | | |
| **H03S2** | **Juan Fernandez** | **69.62** | **125** | T | T | 04 21 17.2 | |
| | SNR=21 | | | | | |
| **H03S1** | **Juan Fernandez** | **69.63** | **125** | T | T | 04 21 18.5 | |
| | SNR=21 | | | | | |
| **H03S3** | **Juan Fernandez** | **69.64** | **125** | T | T | 04 21 18.5 | |
| | SNR=19 | | | | | |
| **H03N3** | **Juan Fernandez** | **69.97** | **125** | T | T | 04 21 40.2 | |
| | baz=207,slow=79,SNR=8.9 | | | | | |
| **H03N2** | **Juan Fernandez** | **69.98** | **125** | T | T | 04 21 43.7 | |
| | baz=207,slow=79,SNR=23 | | | | | |
| **H03N1** | **Juan Fernandez** | **69.98** | **125** | T | T | 04 21 44.9 | |
| | baz=207,slow=79,SNR=9.1 | | | | | |
| **DAV** | **Davao City (W)** | **77.22** | **316** | LR | LR | 03 40 24.0 | |
| | comp=Z,85nm,19.4s,baz=164,slow=36 | | | | | |
| **SUR** | **Sutherland** | **81.22** | **207** | LR | LR | 03 40 34.8 | |
| | comp=Z,993nm,19.8s,baz=170,slow=34 | | | | | |
| **LVC** | **Limon Verde** | **83.44** | **129** | P | **P** | **03 06 40.1** | **+0.5** |
| | comp=Z,12nm,1.1s,baz=197,slow=8.8,SNR=3.2 | | | | | |
| **LVC** | **Limon Verde** | **83.44** | **129** | P | **P** | **03 06 38.7** | **-1.0** |
| LVC | | | | lAmb | lAmb | 03 06 43.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **83.73** | **140** | P | **P** | **03 06 41.2** | **+0.6** |
| | comp=Z,4.4nm,0.9s,baz=203,slow=5.8,SNR=4.3 | | | | | | |
| **CPUP** | **Villa Florida** | **83.73** | **140** | P | **P** | **03 06 39.8** | **-0.8** |
| CPUP | | | | lAmb | lAmb | 03 06 45.0 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **BOSA** | **Boshof** | **83.85** | **212** | P | **P** | **03 06 43.4** | **+2.0** |
| | comp=Z,2.0nm,0.7s,baz=80,slow=9.9,SNR=2.5 | | | | | | |
| BOSA | | | | LR | LR | 03 42 37.9 | |
| | comp=Z,112nm,20.1s,baz=164,slow=34 | | | | | | |
| **H08S2** | **Diego Garcia H** | **85.82** | **261** | T | T | 04 43 02.5 | |
| | baz=153,slow=76,SNR=267 | | | | | | |
| **H08S1** | **Diego Garcia H** | **85.83** | **261** | T | T | 04 42 51.8 | |
| | baz=153,slow=76,SNR=87 | | | | | | |
| **H08S3** | **Diego Garcia H** | **85.84** | **261** | T | T | 04 43 03.1 | |
| | baz=153,slow=76,SNR=387 | | | | | | |
| **LBTB** | **Lobatse** | **87.21** | **213** | LR | LR | 03 42 53.2 | |
| | comp=Z,330nm,21.4s,baz=160,slow=33 | | | | | | |
| **LPAZ** | **La Paz** | **89.54** | **127** | P | **P** | **03 07 10.8** | **+0.9** |
| | comp=Z,3.6nm,1.0s,baz=218,slow=12,SNR=6.1 | | | | | | |
| **LPAZ** | **La Paz** | **89.54** | **127** | P | **P** | **03 07 07.9** | **-2.0** |
| LPAZ | | | | lAmb | lAmb | 03 07 13.4 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **MATP** | **Matopo** | **90.83** | **217** | LR | LR | 03 44 04.9 | |
| | comp=Z,189nm,21.2s,baz=162,slow=33 | | | | | | |
| **TSUM** | **Tsumeb** | **94.66** | **208** | LR | LR | 03 47 32.3 | |
| | comp=Z,1μm,21.8s,baz=146,slow=34 | | | | | | |
| **JOW** | **Kunigami** | **95.19** | **325** | LR | LR | 03 49 59.0 | |
| | comp=Z,70nm,18.7s,baz=340,slow=35 | | | | | | |
| **LSZ** | **Lusaka** | **95.82** | **219** | LR | LR | 03 48 17.9 | |
| | comp=Z,358nm,19.7s,baz=170,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **97.41** | **296** | LR | LR | 03 49 36.9 | |
| | comp=Z,85nm,19.8s,baz=170,slow=34 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **98.69** | **336** | LR | LR | 03 50 03.1 | |
| | comp=Z,56nm,18.6s,baz=360,slow=34 | | | | | | |
| **H06S1** | **SOCORRO T** | **102.48** | **73** | T | T | 05 01 44.1 | |
| | SNR=17 | | | | | | |
| **H06E1** | **SOCORRO T-PHASE** | **102.53** | **73** | T | T | 05 01 45.6 | |
| | SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **128.76** | **298** | PKP | **PKPdf** | **03 13 18.1** | **0.0** |
| | comp=Z,0.3nm,1.0s,baz=115,slow=2.1,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **128.76** | **298** | | **PKPdf** | **03 13 17.4** | **-0.6** |
| **ILAR** | **Eielson Array** | **131.93** | **24** | PKP | **PKPdf** | **03 13 20.5** | **-3.0** |
| | comp=Z,14nm,0.8s,baz=234,slow=2.7,SNR=9.0 | | | | | | |
| **ILAR** | **Eielson Array** | **131.93** | **24** | | **PKPdf** | **03 13 23.1** | **-0.4** |
| **YKA** | **Yellowknife Ar** | **137.99** | **43** | PKhKP | PKPpre | 03 13 27.4 | |
| | comp=Z,0.4nm,0.8s,baz=213,slow=3.1,SNR=5.2 | | | | | | |
| **KBZ** | **Khabaz** | **143.52** | **264** | PKP | PKPbc | 03 13 44.0 | +1.2 |
| | comp=Z,4.0nm,0.8s,baz=173,slow=2.6,SNR=6.2 | | | | | | |
| **NRIK** | **Noril'sk** | **143.88** | **324** | PKP | PKPbc | 03 13 44.2 | +1.1 |
| | comp=Z,4.1nm,0.8s,baz=214,slow=2.0,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.37** | **250** | PKP | **PKPab** | **03 13 45.0** | **-0.4** |
| | comp=Z,3.7nm,0.9s,baz=179,slow=7.0,SNR=10 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.37** | **250** | | **PKPab** | **03 13 45.2** | **-0.2** |
| **TIRR** | **Tirgusor** | **150.47** | **250** | P | **PKPbc** | **03 14 01.5** | **-0.8** |
| **RES** | **Resolute Bay** | **150.93** | **33** | PKPbc | **PKPbc** | **03 14 01.2** | **-1.3** |
| | comp=Z,4.0nm,0.9s,baz=296,slow=1.5,SNR=11 | | | | | | |
| **RES** | **Resolute Bay** | **150.93** | **33** | PKPdf | **PKPdf** | **03 13 58.2** | **+1.4** |
| **CFR** | **Carcaliu** | **151.16** | **250** | ⇑P | **PKPbc** | **03 14 02.3** | **-1.6** |
| **SCHQ** | **Schefferville** | **151.31** | **81** | PKPbc | **PKPbc** | **03 14 02.9** | **-1.1** |
| | comp=Z,8.6nm,0.9s,baz=265,slow=3.9,SNR=4.6 | | | | | | |
| **SCHQ** | **Schefferville** | **151.31** | **81** | PKPdf | **PKPdf** | **03 13 59.1** | **+1.1** |
| **VRI** | **Vrincioaia** | **152.31** | **249** | ⇑P | **PKPab** | **03 14 13.3** | **-3.3** |
| **PLOR** | **Plostina** | **152.33** | **249** | ⇓P | **PKiKP** | **03 14 09.9** | **+3.0** |
| **MLR** | **Muntele Rosu** | **152.34** | **248** | ⇓P | **PKiKP** | **03 14 12.2** | **+5.1** |
| **ESDC** | **Sonseca Array** | **155.93** | **195** | PKPab | **PKPab** | **03 14 33.5** | **+1.2** |
| | comp=Z,0.7nm,0.8s,baz=175,slow=4.4,SNR=5.9 | | | | | | |
| **GERES** | **GERESS Array B** | **159.95** | **236** | PKPab | **PKPab** | **03 14 50.9** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=72,slow=3.2,SNR=3.5 | | | | | | |

*NEIC **02** 03:01:40.5±1.6, 24°.36S±0°.07×67°.38W±0°.04, h180km±7km, mb4.4/6, Md3.6(SJA), Error ellipse: s-maj=9.7km s-min=4.4km az=166.0*

*VAO **02** 03:01:40.7±0.6, 24°.30S×67°.59W, h226km±5km, mb3.9*

*IDC **02** 03:01:41.6±1.6, 24°.13S×67°.25W, h185km±16km, mb3.7/2, mb1 3.6/7, mb1mx3.4/30, mbtmp4.1/7, Error ellipse: s-maj=32.7km s-min=20.8km az=15.0*

**ISC 02 03:01:39.5±0.6, 24°.32S±0°.06×67°.34W±0°.06, h175km, n75, σ1§43/79, mb4.2/4, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **2.23** | **319** | P | **Pn** | **03 02 21.3** | **+2.1** |
| | 43nm,0.3s,baz=155,slow=6.0,SNR=409 | | | | | | |
| LVC | | | | S | **Sn** | **03 02 51.6** | **+1.7** |
| | 78nm,0.3s,baz=25,slow=21,SNR=49 | | | | | | |
| **LVC** | **Limon Verde** | **2.23** | **319** | *e*P | **Pn** | **03 02 21.3** | **+2.1** |
| **PB15** | **IPOC Station P** | **2.24** | **299** | | **Pn** | **03 02 21.4** | **+2.2** |
| PB15 | | | | Sn | **Sn** | **03 02 52.2** | **+2.3** |
| **PB06** | **IPOC Station P** | **2.60** | **308** | | **Pn** | **03 02 25.2** | **+1.9** |
| PB06 | | | | Sn | **Sn** | **03 02 58.1** | **+0.8** |
| **PB14** | **IPOC Station P** | **2.81** | **263** | Pn | **Pn** | **03 02 27.4** | **+1.4** |
| PB14 | | | | Sn | **Sn** | **03 03 01.9** | **-0.1** |
| **AC02** | **Maricunga** | **2.98** | **212** | Pn | **Pn** | **03 02 29.8** | **+1.6** |
| **PB10** | **IPOC Station P** | **3.05** | **285** | Pn | **Pn** | **03 02 30.5** | **+1.9** |
| **PB09** | **IPOC Station P** | **3.06** | **315** | | **Pn** | **03 02 30.7** | **+1.8** |
| **PB03** | **IPOC Station P** | **3.17** | **315** | | **Pn** | **03 02 31.8** | **+1.6** |
| **PB04** | **IPOC Station P** | **3.25** | **307** | | **Pn** | **03 02 32.6** | **+1.4** |
| **PB07** | **IPOC Station P** | **3.49** | **317** | | **Pn** | **03 02 35.3** | **+1.1** |
| **PB02** | **IPOC Station P** | **3.80** | **321** | | **Pn** | **03 02 39.0** | **+0.9** |
| **PB01** | **IPOC Station P** | **3.81** | **328** | | **Pn** | **03 02 39.2** | **+0.9** |
| **GO03** | **Copiap** | **4.18** | **218** | Pn | **Pn** | **03 02 42.9** | **+0.2** |
| **PB08** | **IPOC Station P** | **4.48** | **338** | | **Pn** | **03 02 48.5** | **+1.4** |
| **TA01** | **Diego Aracena** | **4.57** | **324** | | **Pn** | **03 02 48.3** | **+0.5** |
| **TA02** | **Huaiquique** | **4.79** | **327** | Pn | **Pn** | **03 02 51.5** | **+0.9** |
| **GO01** | **Chusmiza** | **4.94** | **339** | | **Pn** | **03 02 52.8** | **-0.3** |
| **PB11** | **IPOC Station P** | **5.02** | **334** | Pn | **Pn** | **03 02 53.7** | **-0.1** |
| **AC04** | **Llanos de Chal** | **5.12** | **220** | Pn | **Pn** | **03 02 54.7** | **-0.3** |
| **MNMC** | **Minye Minye** | **5.57** | **337** | | **Pn** | **03 03 01.4** | **+0.3** |
| **PB16** | **IPOC Station P** | **6.29** | **341** | | **Pn** | **03 03 11.3** | **+0.5** |
| **PB12** | **IPOC Station P** | **6.32** | **333** | Pn | **Pn** | **03 03 11.1** | **+0.2** |
| **CO03** | **El Pedregal** | **7.14** | **204** | Pn | **Pn** | **03 03 21.7** | **+0.1** |
| **LPAZ** | **La Paz** | **8.02** | **355** | P | **Pn** | **03 03 34.2** | **+0.4** |
| | 1.0nm,0.3s,baz=136,slow=6.4,SNR=22 | | | | | | |
| **LPAZ** | **La Paz** | **8.02** | **355** | *e*P | **Pn** | **03 03 34.9** | **+1.1** |
| **LPAZ** | **La Paz** | **8.02** | **355** | | **Pn** | **03 03 34.7** | **+0.9** |
| **CPUP** | **Villa Florida** | **9.28** | **105** | P | **Pn** | **03 03 53.1** | **+3.4** |
| | 0.4nm,0.3s,baz=285,slow=16,SNR=3.6 | | | | | | |
| **CPUP** | **Villa Florida** | **9.28** | **105** | *e*P | **Pn** | **03 03 53.7** | **+4.0** |
| **CPUP** | **Villa Florida** | **9.28** | **105** | | **Pn** | **03 03 51.0** | **+1.3** |
| **SIV** | **San Ignacio** | **10.16** | **37** | P | **Pn** | **03 04 00.5** | **-0.8** |
| | 1.0nm,0.3s,baz=228,slow=11,SNR=15 | | | | | | |
| **AQDB** | **Aquidauana** | **11.43** | **73** | *e*P | **Pn** | **03 04 20.3** | **+2.6** |
| **PTLB** | **Pontes e Lacer** | **11.72** | **43** | *e*P | **Pn** | **03 04 23.3** | **+1.8** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **PTLB** | **Pontes e Lacer** | **11.72** | **43** | Pn | **Pn** | **03 04 23.7** | **+2.2** |
| **CPSB** | **Cacapava Do Su** | **13.76** | **119** | *e*P | **Pn** | **03 04 49.3** | **+1.9** |
| **SALV** | **Santo Antonio** | **13.77** | **55** | *e*P | **Pn** | **03 04 49.1** | **+1.4** |
| **PTGB** | **Pitanga** | **13.91** | **95** | *e*P | **P** | **03 04 52.6** | **+0.5** |
| **PLTB** | **Pedras Altas** | **14.21** | **125** | Pn | **Pn** | **03 04 53.8** | **+0.8** |
| **PCMB** | **Pacaembu** | **15.05** | **83** | *e*P | **P** | **03 05 05.3** | **+0.6** |
| **PDRB** | **Porto dos Gac** | **16.16** | **40** | *e*P | **P** | **03 05 16.0** | **-1.0** |
| **ITRB** | **Iturama** | **16.40** | **77** | *e*P | **P** | **03 05 20.3** | **+0.7** |
| **TER01** | **Tubaro-SC** | **16.84** | **108** | *e*P | **P** | **03 05 23.9** | **-0.5** |
| **CLDB** | **Colider** | **17.30** | **41** | *e*P | **P** | **03 05 28.6** | **-1.0** |
| **BB19B** | **Bebedouro** | **17.66** | **83** | *e*P | **P** | **03 05 33.6** | **+0.1** |
| **RCLB** | **Rio Claro- Sao** | **18.29** | **88** | *e*P | **P** | **03 05 40.9** | **+0.6** |
| **VAO** | **Valinhos** | **18.71** | **90** | *e*P | **P** | **03 05 44.0** | **-0.9** |
| **IPMB** | **Ipameri, GO** | **18.91** | **74** | *e*P | **P** | **03 05 46.6** | **-0.6** |
| **SNDB** | **Serra Nova Dou** | **19.55** | **54** | *e*P | **P** | **03 05 52.7** | **-1.3** |
| **BDFB** | **Brasilia** | **20.09** | **68** | P | **P** | **03 05 59.1** | **-0.9** |
| | 0.9nm,0.3s,baz=251,slow=8.2,SNR=13 | | | | | | |
| **BDFB** | **Brasilia** | **20.09** | **68** | P | P | **03 05 59.0** | **-0.9** |
| BDFB | | | | lAmb | lAmb | 03 06 00.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BSCB** | **Bom Sucesso** | **21.08** | **85** | *e*P | **P** | **03 06 09.8** | **-0.6** |
| **PEXB** | **Peixe** | **21.75** | **59** | *e*P | **P** | **03 06 15.8** | **-1.7** |
| **DIAM** | **Diamantina, MG** | **22.83** | **79** | *e*P | **P** | **03 06 27.2** | **-0.7** |
| **DUB01** | **Friburgo-RJ** | **23.05** | **90** | *e*P | **P** | **03 06 28.6** | **-1.0** |
| **JANB** | **Januaria** | **23.53** | **71** | *e*P | **P** | **03 06 32.9** | **-1.2** |
| **CAM01** | **Campos-RJ** | **23.75** | **89** | *e*P | **P** | **03 06 34.8** | **-1.2** |
| **SDBA** | **SAO DESIDERIO** | **24.32** | **65** | *e*P | **P** | **03 06 40.0** | **-1.3** |
| **SMTB** | **Santa Maria do** | **24.33** | **54** | *e*P | **P** | **03 06 39.9** | **-1.4** |
| **ALF01** | **Guarapari-ES** | **24.85** | **87** | *e*P | **P** | **03 06 44.6** | **-1.4** |
| **SJMB** | **Sao Joao De Ma** | **24.95** | **82** | *e*P | **P** | **03 06 45.1** | **-1.8** |
| **RIB01** | **Linhares ES** | **25.49** | **84** | *e*P | **P** | **03 06 50.2** | **-1.5** |
| **NAN01** | **Guarapari, ES** | **26.17** | **81** | *e*P | **P** | **03 06 56.1** | **-1.8** |
| **GUA01** | **Guaratinga, BA** | **26.89** | **79** | *e*P | **P** | **03 07 03.1** | **-1.3** |
| **BOAV** | **Boa Vista** | **27.37** | **15** | P | **P** | **03 07 08.5** | **-0.1** |
| BOAV | | | | lAmb | lAmb | 03 07 21.2 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **SDV** | **Santo Domingo** | **33.16** | **354** | *e*P | **P** | **03 07 55.6** | **-4.1** |
| **SNAA** | **Sanae** | **59.16** | **161** | P | **P** | **03 11 22.1** | **+0.6** |
| **Y57A** | **Sumter** | **59.33** | **347** | P | **P** | **03 11 23.6** | **+0.6** |
| **QSPA** | **South Pole Qui** | **65.89** | **180** | P | **P** | **03 12 04.7** | **-1.6** |
| QSPA | | | | lAmb | lAmb | 03 12 19.2 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.97** | **69** | P | **P** | **03 13 13.2** | **-0.1** |
| | comp=Z,1.7nm,0.8s,baz=245,slow=4.3,SNR=16 | | | | | | |
| **BOSA** | **Boshof** | **80.86** | **117** | P | **P** | **03 13 35.1** | **+0.5** |
| | comp=Z,1.2nm,0.4s,baz=252,slow=3.2,SNR=12 | | | | | | |
| **BOSA** | **Boshof** | **80.86** | **117** | P | **P** | **03 13 34.3** | **-0.2** |
| BOSA | | | | lAmb | lAmb | 03 13 37.4 | |
| | comp=Z,9.8nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.82** | **28** | PKP | **PKPdf** | **03 20 52.9** | **-0.6** |
| | comp=Z,0.8nm,0.4s,baz=292,slow=4.7,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.82** | **28** | | **PKPdf** | **03 20 53.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **146.97** | **40** | PKPbc | **PKPbc** | **03 21 02.1** | **+0.7** |
| | comp=Z,1.8nm,0.5s,baz=303,slow=3.4,SNR=25 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.97** | **40** | PKPbc | **PKPbc** | **03 21 01.1** | **-0.3** |

**IDC 02 03:04:04.0±1.7, 6°.16S×151°.29E, h0km, mb3.6/2, mb1 4.0/2, mb1mx3.5/27, mbtmp3.7/2, Error ellip

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **26.72** | **59** | P | | **P** | **03 20 04.2** | **-0.1** |
| **MNMC** | **Minye Minye** | **28.39** | **54** | P | | **P** | **03 20 19.1** | **-0.3** |
| MNMC | | | | IAmb | IAmb | | 03 20 21.3 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **PB16** | **IPOC Station P** | **29.03** | **53** | P | | **P** | **03 20 23.9** | **-1.5** |
| PB16 | | | | IAmb | IAmb | | 03 20 31.7 | |
| | comp=Z,24nm,1.7s | | | | | | | |
| **NNA** | **Nana** | **30.28** | **34** | LR | | LR | 03 29 26.4 | |
| | comp=Z,659nm,20.8s,baz=176,slow=30 | | | | | | | |
| **LPAZ** | **La Paz** | **31.43** | **53** | P | | **P** | **03 20 46.1** | **-0.6** |
| | comp=Z,3.8nm,0.7s,baz=184,slow=6.6,SNR=9.5 | | | | | | | |
| LPAZ | | | | LR | | LR | 03 30 36.3 | |
| | comp=Z,206nm,18.9s,baz=216,slow=31 | | | | | | | |
| **LPAZ** | **La Paz** | **31.43** | **53** | *eP* | | **P** | **03 20 47.0** | **+0.2** |
| **LPAZ** | **La Paz** | **31.43** | **53** | P | | **P** | **03 20 46.1** | **-0.6** |
| **ITQB** | **Itaqui** | **31.75** | **85** | *eP* | | **P** | **03 20 51.3** | **+2.6** |
| **CPUP** | **Villa Florida** | **32.78** | **79** | P | | **P** | **03 20 55.7** | **-2.1** |
| | comp=Z,1.8nm,0.7s,baz=289,slow=9.0,SNR=4.7 | | | | | | | |
| CPUP | | | | LR | | LR | 03 33 08.0 | |
| | comp=Z,227nm,18.7s,baz=238,slow=34 | | | | | | | |
| **ATAH** | **Atahualpa** | **34.05** | **28** | P | | **P** | **03 21 08.4** | **-0.9** |
| | comp=Z,20nm,1.0s,baz=77,slow=24,SNR=7.6 | | | | | | | |
| ATAH | | | | LR | | LR | 03 31 32.8 | |
| | comp=Z,592nm,19.9s,baz=234,slow=30 | | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **35.92** | **37** | *eP* | | **P** | **03 21 26.9** | **+1.8** |
| **SIV** | **San Ignacio** | **36.30** | **61** | P | | **P** | **03 21 26.9** | **-1.5** |
| | comp=Z,1.8nm,0.6s,baz=204,slow=5.0,SNR=10 | | | | | | | |
| SIV | | | | LR | | LR | 03 34 50.6 | |
| | comp=Z,154nm,19.9s,baz=254,slow=34 | | | | | | | |
| **AQDB** | **Aquidauana** | **37.27** | **72** | P | | **P** | **03 21 37.0** | **+0.4** |
| **ETMB** | **Extrema** | **37.63** | **48** | *eP* | | **P** | **03 21 39.4** | **-0.2** |
| **ETMB** | **Extrema** | **37.63** | **48** | P | | **P** | **03 21 40.0** | **+0.3** |
| **PTGB** | **Pitanga** | **37.68** | **81** | *eP* | | **P** | **03 21 39.8** | **-0.4** |
| **PTLB** | **Pontes e Lacer** | **38.01** | **63** | *eP* | | **P** | **03 21 44.0** | **+1.1** |
| **PTLB** | **Pontes e Lacer** | **38.01** | **63** | P | | **P** | **03 21 42.5** | **-0.4** |
| **VILB** | **Vilhena** | **39.04** | **59** | *eP* | | **P** | **03 21 52.9** | **+1.3** |
| **PCMB** | **Pacaembu** | **39.98** | **78** | *eP* | | **P** | **03 21 59.1** | **-0.3** |
| **SALV** | **Santo Antonio** | **40.15** | **67** | *eP* | | **P** | **03 22 01.8** | **+1.0** |
| **OTAV** | **Otavalo** | **40.91** | **24** | *eP* | | **P** | **03 22 08.7** | **+1.1** |
| **OTAV** | **Otavalo** | **40.91** | **24** | P | | **P** | **03 22 07.3** | **-0.3** |
| **ITRB** | **Iturama** | **41.77** | **76** | *eP* | | **P** | **03 22 15.2** | **+1.1** |
| **PDRB** | **Porto dos Gac** | **42.36** | **61** | *eP* | | **P** | **03 22 18.6** | **-0.3** |
| **BB19B** | **Bebedouro** | **42.39** | **79** | *eP* | | **P** | **03 22 20.4** | **+1.1** |
| **VAO** | **Valinhos** | **42.55** | **83** | *eP* | | **P** | **03 22 21.5** | **+0.9** |
| **SNDB** | **Serra Nova Dou** | **45.94** | **67** | *eP* | | **P** | **03 22 47.2** | **-0.5** |
| **MACA** | **Manacapuru-AM** | **46.21** | **49** | *eP* | | **P** | **03 22 51.0** | **+1.2** |
| **MACA** | **Manacapuru-AM** | **46.21** | **49** | P | | **P** | **03 22 49.1** | **-0.7** |
| **NPGB** | **Nova Progresso** | **46.59** | **58** | *eP* | | **P** | **03 22 52.7** | **-0.1** |
| **ROSC** | **El Rosal** | **46.61** | **27** | LR | | LR | 03 40 22.7 | |
| | comp=Z,384nm,18.9s,baz=218,slow=34 | | | | | | | |
| **PEXB** | **Peixe** | **48.03** | **69** | *eP* | | **P** | **03 23 05.7** | **+1.6** |
| **SRBA** | **San Rafael, Bu** | **48.34** | **14** | P | | **P** | **03 23 07.2** | **+0.8** |
| SRBA | | | | IAmb | IAmb | | 03 23 08.6 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **ITTB** | **Itaituba** | **48.34** | **55** | *eP* | | **P** | **03 23 06.1** | **-0.3** |
| **PTGA** | **Pitinga** | **48.59** | **48** | LR | | LR | 03 41 15.5 | |
| | comp=Z,352nm,18.6s,baz=225,slow=33 | | | | | | | |
| **ALF01** | **Guarapari-ES** | **48.71** | **84** | *eP* | | **P** | **03 23 11.9** | **+2.7** |
| **ZARC** | **Zaragoza, Cauc** | **48.89** | **25** | P | | **P** | **03 23 10.9** | **+0.3** |
| **JANB** | **Januaria** | **49.16** | **76** | *eP* | | **P** | **03 23 12.8** | **+0.1** |
| **SJMB** | **Sao Joao De Ma** | **49.42** | **82** | *eP* | | **P** | **03 23 16.3** | **+1.6** |
| **RIB01** | **Linhares ES** | **49.69** | **83** | *eP* | | **P** | **03 23 18.6** | **+1.8** |
| **OCAC** | **Ocana** | **50.12** | **27** | P | | **P** | **03 23 19.1** | **-0.9** |
| **SDBA** | **SAO DESIDERIO** | **50.37** | **73** | *eP* | | **P** | **03 23 23.3** | **+1.3** |
| **SMTB** | **Santa Maria do** | **50.72** | **67** | *eP* | | **P** | **03 23 26.1** | **+1.5** |
| **NAN01** | **Guarapari, ES** | **50.73** | **82** | *eP* | | **P** | **03 23 27.8** | **+3.2** |
| **BOAV** | **Boa Vista** | **50.83** | **45** | *eP* | | **P** | **03 23 27.2** | **+1.9** |
| **PRPB** | **Parauapebas** | **51.00** | **62** | *eP* | | **P** | **03 23 27.5** | **+0.8** |
| **MALB** | **Monte Alegre** | **51.20** | **55** | *eP* | | **P** | **03 23 29.4** | **+1.3** |
| **SDV** | **Santo Domingo** | **51.71** | **30** | P | | **P** | **03 23 30.3** | **-1.8** |
| | comp=Z,2.4nm,0.6s,baz=256,slow=5.5,SNR=3.6 | | | | | | | |
| **SDV** | **Santo Domingo** | **51.71** | **30** | P | | **P** | **03 23 30.6** | **-1.5** |
| **VNA3** | **Neumayer Olymp** | **52.30** | **156** | P | | **P** | **03 23 37.7** | **+2.0** |
| **VNA2** | **Neumayer--Watz** | **53.08** | **156** | P | | **P** | **03 23 42.6** | **+1.1** |
| | baz=269,slow=7.5 | | | | | | | |
| **SNAA** | **Sanae** | **54.35** | **157** | P | | **P** | **03 23 52.0** | **+1.2** |
| **SYO** | **Syowa Base** | **67.50** | **164** | *eP* | | P | 03 25 14.0 | -6.1 |
| **SYO** | **Syowa Base** | **67.50** | **164** | *eX* | | P | 03 25 27.4 | +7.3 |
| **TX31** | **Lajitas Ar. Si** | **68.01** | **351** | P | | **P** | **03 25 24.7** | **+0.9** |
| **TX32** | **Lajitas Array** | **68.01** | **351** | P | | **P** | **03 25 24.8** | **+0.9** |
| TX32 | | | | IAmb | IAmb | | 03 25 25.4 | |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| **TXAR** | **Lajitas Array** | **68.01** | **351** | P | | **P** | **03 25 24.8** | **+1.0** |
| | comp=Z,2.7nm,0.8s,baz=171,slow=7.0,SNR=24 | | | | | | | |
| TXAR | | | | LR | | LR | 03 49 43.2 | |
| | comp=Z,165nm,19.0s,baz=0.0,slow=31 | | | | | | | |
| **TXAR** | **Lajitas Array** | **68.01** | **351** | P | | **P** | **03 25 24.9** | **+1.1** |
| **MNTX** | **Cornudas Mount** | **70.57** | **349** | P | | **P** | **03 25 39.4** | **-0.1** |
| MNTX | | | | IAmb | IAmb | | 03 25 40.2 | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| **143A** | **Socs Landing,** | **70.75** | **2** | P | | **P** | **03 25 40.9** | **+0.3** |
| **319A** | **Douglas** | **70.91** | **346** | P | | **P** | **03 25 42.1** | **+0.3** |
| 319A | | | | IAmb | IAmb | | 03 25 44.2 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **152A** | **Waverly Hall** | **71.18** | **8** | P | | **P** | **03 25 43.0** | **-0.2** |
| **TUC** | **Tucson** | **72.11** | **345** | P | | **P** | **03 25 49.0** | **0.0** |
| TUC | | | | IAmb | IAmb | | 03 25 51.4 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **MSTX** | **Muleshoe** | **72.48** | **352** | P | | **P** | **03 25 51.3** | **+0.1** |
| **MIAR** | **Mount Ida** | **72.56** | **0** | P | | **P** | **03 25 51.6** | **+0.1** |
| MIAR | | | | IAmb | IAmb | | 03 26 06.1 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **W39A** | **Magazine** | **73.21** | **360** | P | | **P** | **03 25 55.5** | **+0.2** |
| W39A | | | | IAmb | IAmb | | 03 25 56.2 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **AMTX** | **Amarillo** | **73.27** | **353** | P | | **P** | **03 25 55.2** | **-0.7** |
| **W52A** | **Murphy** | **73.67** | **8** | P | | **P** | **03 25 57.5** | **-0.6** |
| W52A | | | | IAmb | IAmb | | 03 25 59.0 | |
| | comp=Z,9.5nm,0.9s | | | | | | | |
| **ANMO** | **Albuquerque** | **73.91** | **349** | P | | **P** | **03 26 00.1** | **+0.4** |
| | comp=Z,3.0nm,1.0s,baz=171,slow=7.6,SNR=8.0 | | | | | | | |
| **ANMO** | **Albuquerque** | **73.91** | **349** | P | | **P** | **03 25 60.0** | **+0.3** |
| **V48A** | **Smith Brothers** | **74.03** | **6** | P | | **P** | **03 25 59.3** | **-0.8** |
| V48A | | | | IAmb | IAmb | | 03 26 08.2 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **KMSC** | **Kings Mountain** | **74.05** | **11** | P | | **P** | **03 26 00.1** | **-0.1** |
| KMSC | | | | IAmb | IAmb | | 03 26 01.1 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **X18A** | **Snowflake** | **74.10** | **346** | P | | **P** | **03 26 00.2** | **-0.6** |
| X18A | | | | IAmb | IAmb | | 03 26 03.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **Y14A** | **Wickenburg** | **74.16** | **343** | P | | **P** | **03 25 59.8** | **-1.2** |
| **X16A** | **Lo Mia Camp, P** | **74.28** | **345** | P | | **P** | **03 26 01.6** | **-0.3** |
| **WVT** | **Waverly** | **74.34** | **5** | P | | **P** | **03 26 01.1** | **-0.8** |
| WVT | | | | IAmb | IAmb | | 03 26 02.0 | |
| | comp=Z,9.7nm,1.2s | | | | | | | |
| **V53A** | **Saluda** | **74.37** | **9** | P | | **P** | **03 26 01.4** | **-0.8** |
| V53A | | | | IAmb | IAmb | | 03 26 02.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **U38A** | **Gravette** | **74.45** | **359** | P | | **P** | **03 26 02.0** | **-0.6** |
| U38A | | | | IAmb | IAmb | | 03 26 03.5 | |
| | comp=Z,9.7nm,1.0s | | | | | | | |
| **U49A** | **Red Boiling Sp** | **74.88** | **7** | P | | **P** | **03 26 04.4** | **-0.7** |
| U49A | | | | IAmb | IAmb | | 03 26 05.5 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **TZTN** | **Tazewell** | **75.14** | **8** | P | | **P** | **03 26 05.9** | **-0.7** |
| **MGMO** | **Mountain Grove** | **75.17** | **1** | P | | **P** | **03 26 06.5** | **-0.3** |
| MGMO | | | | IAmb | IAmb | | 03 26 07.5 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **T47A** | **Sharon Grove** | **75.24** | **5** | P | | **P** | **03 26 06.2** | **-0.9** |
| T47A | | | | IAmb | IAmb | | 03 26 07.3 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **KAN01** | **Argonia South** | **75.26** | **357** | P | | **P** | **03 26 07.6** | **+0.4** |
| **W13A** | **Hualapai Mount** | **75.47** | **343** | P | | **P** | **03 26 08.9** | **+0.2** |
| **S39A** | **Bolivar** | **75.70** | **0** | P | | **P** | **03 26 09.9** | **+0.2** |
| S39A | | | | IAmb | IAmb | | 03 26 10.6 | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **T25A** | **Trinidad** | **75.80** | **351** | P | | **P** | **03 26 10.3** | **-0.3** |
| T25A | | | | IAmb | IAmb | | 03 26 13.0 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **CCM** | **Cathedral Cave** | **76.10** | **2** | P | | **P** | **03 26 11.5** | **-0.5** |
| CCM | | | | IAmb | IAmb | | 03 26 12.9 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **S51A** | **Beattyville** | **76.22** | **8** | P | | **P** | **03 26 12.3** | **-0.4** |
| S51A | | | | IAmb | IAmb | | 03 26 13.2 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **U15A** | **North Rim** | **76.40** | **345** | P | | **P** | **03 26 15.0** | **+0.9** |
| U15A | | | | IAmb | IAmb | | 03 26 17.0 | |
| | comp=Z,18nm,1.7s | | | | | | | |
| **MVCO** | **Mesa Verde** | **76.45** | **348** | P | | **P** | **03 26 15.4** | **+1.1** |
| **R50A** | **Paris** | **76.77** | **8** | P | | **P** | **03 26 15.4** | **-0.4** |
| R50A | | | | IAmb | IAmb | | 03 26 16.0 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **77.03** | **4** | P | | **P** | **03 26 17.0** | **-0.2** |
| **KNB** | **Kanab** | **77.08** | **344** | P | | **P** | **03 26 18.5** | **+0.6** |
| KNB | | | | IAmb | IAmb | | 03 26 20.6 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **SHPR** | **Sheep Range** | **77.11** | **342** | P | | **P** | **03 26 17.6** | **-0.4** |
| SHPR | | | | IAmb | IAmb | | 03 26 21.1 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **PV13** | **Radium Mtn., P** | **77.43** | **348** | P | | **P** | **03 26 20.9** | **+1.0** |
| PV13 | | | | IAmb | IAmb | | 03 26 22.0 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **77.58** | **348** | P | | **P** | **03 26 21.0** | **+0.4** |
| PV11 | | | | IAmb | IAmb | | 03 26 23.5 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **Q51A** | **Peebles** | **77.62** | **8** | P | | **P** | **03 26 20.5** | **-0.1** |
| **Q24A** | **Divide** | **77.69** | **351** | P | | **P** | **03 26 21.6** | **+0.2** |
| Q24A | | | | IAmb | IAmb | | 03 26 24.5 | |
| | comp=Z,8.7nm,1.2s | | | | | | | |
| **CCUT** | **Cedar City** | **77.71** | **344** | P | | **P** | **03 26 21.0** | **-0.4** |
| CCUT | | | | IAmb | IAmb | | 03 26 24.4 | |
| | comp=Z,9.1nm,0.9s | | | | | | | |
| **PRN** | **Pahroc Range** | **77.95** | **343** | P | | **P** | **03 26 21.7** | **-0.9** |
| **SMCO** | **Snowmass** | **78.14** | **349** | P | | **P** | **03 26 24.5** | **+0.5** |
| SMCO | | | | IAmb | IAmb | | 03 26 29.1 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **P52A** | **Corning** | **78.36** | **9** | P | | **P** | **03 26 23.6** | **-1.0** |
| **LCH** | **Last Change Ra** | **78.42** | **341** | P | | **P** | **03 26 24.7** | **-0.6** |
| LCH | | | | IAmb | IAmb | | 03 26 28.3 | |
| | comp=Z,9.5nm,1.0s | | | | | | | |
| **Q16A** | **Castle Valley** | **78.58** | **346** | P | | **P** | **03 26 26.7** | **+0.5** |
| Q16A | | | | IAmb | IAmb | | 03 26 28.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **SRU** | **San Rafael Swe** | **78.65** | **347** | P | | **P** | **03 26 25.9** | **-0.6** |
| **O49A** | **Covington** | **78.66** | **7** | P | | **P** | **03 26 25.6** | **-0.8** |
| O49A | | | | IAmb | IAmb | | 03 26 34.3 | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **O52A** | **Adamsville** | **78.87** | **9** | P | | **P** | **03 26 26.6** | **-0.9** |
| **TMUT** | **Trail Mountain** | **78.96** | **346** | P | | **P** | **03 26 28.2** | **-0.2** |
| TMUT | | | | IAmb | IAmb | | 03 26 30.9 | |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **78.97** | **343** | P | | **P** | **03 26 28.3** | **0.0** |
| **P17A** | **Butcher Ranch,** | **79.04** | **347** | P | | **P** | **03 26 28.9** | **+0.2** |
| P17A | | | | IAmb | IAmb | | 03 26 30.7 | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **P18A** | **Preston Nutter** | **79.11** | **347** | P | | **P** | **03 26 29.1** | **-0.1** |
| P18A | | | | IAmb | IAmb | | 03 26 33.3 | |
| | comp=Z,17nm,1.7s | | | | | | | |
| **TPH** | **Tonopah** | **79.11** | **341** | P | | **P** | **03 26 29.6** | **+0.5** |
| **N47A** | **Urbana** | **79.22** | **6** | P | | **P** | **03 26 28.1** | **-1.3** |
| N47A | | | | IAmb | IAmb | | 03 26 29.2 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **O20A** | **White River Ci** | **79.27** | **349** | P | | **P** | **03 26 29.2** | **-0.7** |
| O20A | | | | IAmb | IAmb | | 03 26 32.3 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **SPR3** | **Spring Creek 3** | **79.31** | **344** | P | | **P** | **03 26 30.4** | **+0.1** |
| **LHV** | **Little Huntoon** | **79.61** | **340** | P | | **P** | **03 26 32.3** | **+0.8** |
| LHV | | | | IAmb | IAmb | | 03 26 34.9 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **NV11** | **Mina Array Sit** | **79.69** | **341** | P | | **P** | **03 26 31.3** | **-0.8** |
| **N23A** | **Red Feather La** | **79.69** | **351** | P | | **P** | **03 26 31.8** | **-0.5** |
| N23A | | | | IAmb | IAmb | | 03 26 42.8 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.72** | **341** | P | | **P** | **03 26 34.2** | **+1.8** |
| | comp=Z,7.2nm,0.8s,baz=172,slow=5.8,SNR=54 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.72** | **341** | P | | **P** | **03 26 32.6** | **+0.2** |
| **NLU** | **North Lily Min** | **79.76** | **346** | P | | **P** | **03 26 32.4** | **-0.3** |
| **N54A** | **Moraine State** | **79.95** | **10** | P | | **P** | **03 26 33.1** | **-0.3** |
| **DUG** | **Dugway, Tooele** | **80.14** | **345** | P | | **P** | **03 26 35.3** | **+0.7** |
| DUG | | | | IAmb | IAmb | | 03 26 37.2 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **KVN** | **Kaiserville** | **80.25** | **341** | P | | **P** | **03 26 36.3** | **+1.0** |
| **YERR** | **Yerington** | **80.49** | **340** | P | | **P** | **03 26 35.6** | **-0.9** |
| YERR | | | | IAmb | IAmb | | 03 26 39.6 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **PNTR** | **Pine Nut** | **80.69** | **340** | P | | **P** | **03 26 36.3** | **-1.4** |
| PNTR | | | | IAmb | IAmb | | 03 26 40.1 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **K31A** | **O'Neill** | **80.76** | **356** | P | | **P** | **03 26 36.9** | **-0.8** |
| **MPK** | **Martis Peak** | **81.00** | **340** | P | | **P** | **03 26 40.9** | **+1.6** |
| **ELK** | **Elko** | **81.18** | **344** | P | | **P** | **03 26 40.4** | **+0.1** |
| **PAHR** | **Pah Rah Range** | **81.21** | **340** | P | | **P** | **03 26 40.9** | **+0.6** |
| **K22A** | **Casper** | **81.49** | **350** | P | | **P** | **03 26 40.2** | **-1.6** |
| K22A | | | | IAmb | IAmb | | 03 26 44.3 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **81.78** | **358** | P | | **P** | **03 26 41.6** | **-1.4** |
| **I37A** | **Lemond, Waseca** | **82.02** | **0** | P | | **P** | **03 26 43.3** | **-1.0** |
| **BW06** | **Boulder Array** | **82.05** | **348** | P | | **P** | **03 26 44.2** | **-0.6** |
| BW06 | | | | IAmb | IAmb | | 03 26 46.6 | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| **PD31** | **Pinedale Array** | **82.05** | **348** | P | | **P** | **03 26 44.0** | **-0.8** |
| PD31 | | | | IAmb | IAmb | | 03 26 46.6 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.05** | **348** | P | | **P** | **03 26 45.4** | **+0.6** |
| | comp=Z,4.8nm,0.7s,baz=162,slow=6.2,SNR=54 | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.05** | **348** | P | | **P** | **03 26 43.1** | **-1.7** |
| **RSSD** | **Black Hills** | **82.66** | **353** | P | | **P** | **03 26 47.2** | **-0.7** |
| RSSD | | | | IAmb | IAmb | | 03 26 49.9 | |
| | comp=Z,9.6nm,1.2s | | | | | | | |
| **REDW** | **Red Top Meadow** | **82.84** | **347** | P | | **P** | **03 26 48.6** | **-0.3** |
| REDW | | | | IAmb | IAmb | | 03 26 51.7 | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **82.90** | **338** | P | | **P** | **03 26 48.5** | **-0.5** |
| **LOHW** | **Long Hollow** | **83.04** | **348** | P | | **P** | **03 26 48.4** | **-1.5** |
| LOHW | | | | IAmb | IAmb | | 03 26 51.9 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **MOOW** | **Moose Ponds** | **83.20** | **348** | P | | **P** | **03 26 49.8** | **-1.0** |
| **SPMN** | **Marine on St.** | **83.23** | **1** | P | | **P** | **03 26 49.8** | **-0.8** |
| **N02D** | **Trinity Center** | **83.31** | **338** | P | | **P** | **03 26 50.9** | **-0.3** |
| **G40A** | **Rib Lake** | **83.33** | **2** | P | | **P** | **03 26 48.9** | **-2.2** |
| G40A | | | | IAmb | IAmb | | 03 26 51.9 | |
| | comp=Z,9.2nm,1.0s | | | | | | | |
| **MOD** | **Modoc Plateau** | **83.50** | **340** | P | | **P** | **03 26 50.7** | **-1.5** |
| **WVOR** | **Wild Horse Val** | **83.58** | **342** | P | | **P** | **03 26 52.5** | **-0.2** |
| WVOR | | | | IAmb | IAmb | | 03 26 59.3 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **HLID** | **Hailey** | **83.70** | **345** | P | | **P** | **03 26 52.5** | **-0.7** |
| HLID | | | | IAmb | IAmb | | 03 26 56.0 | |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| **M04C** | **Macdoel** | **83.81** | **339** | P | | **P** | **03 26 53.3** | **-0.6** |
| **F36A** | **Milaca** | **83.86** | **0** | P | | **P** | **03 26 53.6** | **-0.2** |
| F36A | | | | IAmb | IAmb | | 03 26 54.5 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **83.87** | **358** | P | | **P** | **03 26 53.4** | **-0.5** |
| F33A | | | | IAmb | IAmb | | 03 26 54.4 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **84.01** | **339** | P | | **P** | **03 26 54.9** | **+0.1** |
| | comp=Z,2.4nm,0.8s,baz=129,slow=3.8,SNR=5.9 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **84.01** | **339** | P | | **P** | **03 26 54.0** | **-0.8** |
| **YMR** | **Madison River** | **84.13** | **348** | P | | **P** | **03 26 53.8** | **-1.7** |
| YMR | | | | IAmb | IAmb | | 03 27 06.5 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **BCYI** | **Bear Canyon** | **84.22** | **346** | P | | **P** | **03 26 54.1** | **-1.9** |
| **YHH** | **Holmes Hill** | **84.23** | **348** | P | | **P** | **03 26 54.1** | **-2.0** |
| **RLMT** | **Red Lodge** | **84.30** | **349** | P | | **P** | **03 26 54.9** | **-1.4** |
| RLMT | | | | IAmb | IAmb | | 03 26 58.7 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **84.41** | **342** | P | | **P** | **03 26 56.1** | **-0.7** |
| **E28A** | **Huff** | **84.81** | **355** | P | | **P** | **03 26 57.4** | **-1.2** |
| **BOZ** | **Bozeman (W)** | **85.14** | **347** | P | | **P** | **03 26 58.9** | **-1.6** |
| **I07A** | **Izee** | **85.34** | **342** | P | | **P** | **03 27 00.8** | **-0.6** |
| **LAO** | **LASA Array** | **85.43** | **351** | P | | **P** | **03 26 59.9** | **-1.9** |
| LAO | | | | IAmb | IAmb | | 03 27 04.1 | |
| | comp=Z,7.4nm,0.9s | | | | | | | |
| **PLID** | **Pearl Lake** | **85.49** | **344** | P | | **P** | **03 27 00.8** | **-1.6** |
| PLID | | | | IAmb | IAmb | | 03 27 04.7 | |
| | comp=Z,9.3nm,1.6s | | | | | | | |
| **AGMN** | **Agassiz Nation** | **86.32** | **359** | P | | **P** | **03 27 04.6** | **-1.5** |
| AGMN | | | | IAmb | IAmb | | 03 27 06.9 | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| **G08A** | **Pilot Rock** | **86.35** | **342** | P | | **P** | **03 27 05.3** | **-1.2** |
| G08A | | | | IAmb | IAmb | | 03 27 09.3 | |
| | comp=Z,8.7nm,1.1s | | | | | | | |
| **B35A** | **Bob, Littlefor** | **86.36** | **360** | P | | **P** | **03 27 05.2** | **-1.1** |
| B35A | | | | IAmb | IAmb | | 03 27 07.2 | |
| | comp=Z,8.7nm,1.2s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **86.60** | **344** | P | | **P** | **03 27 06.5** | **-1.1** |
| F10A | | | | IAmb | IAmb | | 03 27 09.5 | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **EGMT** | **Eagleton** | **87.21** | **349** | P | | **P** | **03 27 06.4** | **-4.1** |
| **ULM** | **Lac du Bonnet** | **88.28** | **359** | LR | | LR | 04 05 21.4 | |
| | comp=Z,173nm,20.4s,baz=39,slow=35 | | | | | | | |
| **STKA** | **Stephens Creek** | **93.20** | **224** | LR | | LR | 04 03 30.4 | |
| | comp=Z,95nm,18.1s,baz=200,slow=32 | | | | | | | |
| **DAVA** | **Damuels** | **125.34** | **54** | *eP* | | **PKiKP** | **03 33 27.6** | **+2.0** |
| | comp=Z,0.1nm,0.1s | | | | | | | |
| **FETA** | **Feichten** | **125.79** | **55** | *eP* | | **PKiKP** | **03 33 26.8** | **+0.4** |
| **RETA** | **Reutte** | **125.97** | **54** | *eP* | | **PKiKP** | **03 33 27.1** | **+0.4** |
| | comp=Z,0.1nm,0.2s | | | | | | | |
| **MOTA** | **Moosalm** | **126.14** | **55** | *eP* | | **PKiKP** | **03 33 27.1** | **-0.1** |
| **SQTA** | **Sankt Quirin** | **126.17** | **55** | *eP* | | **PKiKP** | **03 33 26.9** | **-0.3** |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **126.46** | **55** | *eP* | | **PKiKP** | **03 33 28.7** | **+0.9** |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **126.85** | **56** | *eP* | | **PKiKP** | **03 33 28.8** | **+0.3** |
| **KBA** | **Koelnbreinsper** | **127.50** | **55** | *eP* | | **PKiKP** | **03 33 30.5** | **+0.6** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **MYKA** | **Terra Mystica** | **127.55** | **56** | *eP* | | **PKiKP** | **03 33 30.6** | **+0.7** |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **OBKA** | **Obir** | **128.10** | **56** | *eP* | | **PKiKP** | **03 33 32.0** | **+1.0** |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **128.27** | **53** | PKP | | **PKPdf** | **03 33 30.2** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=151,slow=3.0,SNR=6.1 | | | | | | | |
| **ARSA** | **Arzberg** | **128.96** | **56** | *eP* | | **PKiKP** | **03 33 33.3** | **+0.7** |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| **MODS** | **Modra-Piesok** | **130.42** | **55** | *e*PDIFF | | **Pdif** | **03 30 32.0** | **+7.4** |
| **CRVS** | **Cervenica-Dubn** | **133.24** | **55** | *e*PDIFF | | **Pdif** | **03 30 43.5** | **+6.4** |
| **AKASG** | **Malin Array Be** | **138.48** | **54** | PKP | | **PKPdf** | **03 33 49.5** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=273,slow=2.5,SNR=6.2 | | | | | | | |
| **YAK** | **Yakutsk** | **144.55** | **326** | PKP | | PKPbc | 03 33 58.7 | -0.1 |
| | comp=Z,21nm,0.7s,baz=214,slow=0.6,SNR=11 | | | | | | | |
| **YAK** | **Yakutsk** | **144.55** | **326** | PKPdf | | **PKPab** | **03 33 58.5** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **145.54** | **295** | PKPbc | | **PKPdf** | **03 34 01.9** | **-0.5** |
| | comp=Z,9.0nm,0.9s,baz=122,slow=2.9,SNR=13 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **145.54** | **295** | PKPdf | | **PKPab** | **03 34 02.8** | **-0.1** |
| **KBZ** | **Khabaz** | **147.12** | **67** | PKPbc | | **PKPbc** | **03 34 07.0** | **-0.3** |
| | comp=Z,5.0nm,0.9s,baz=154,slow=0.6,SNR=5.8 | | | | | | | |
| **KSRS** | **Korea Array** | **147.36** | **282** | PKPbc | | **PKPbc** | **03 34 08.2** | **+0.1** |
| | comp=Z,0.7nm,0.5s,baz=108,slow=4.1,SNR=4.4 | | | | | | | |
| **NRIK** | **Noril'sk** | **148.97** | **359** | PKPbc | | **PKPbc** | **03 34 11.4** | **-0.1** |
| | comp=Z,3.1nm,0.6s,baz=348,slow=3.5,SNR=5.8 | | | | | | | |
| **BVAR** | **Borovoye Array** | **161.68** | **32** | PKPab | | **PKPab** | **03 35 09.9** | **-0.3** |
| | comp=Z,2.1nm,0.8s,baz=20,slow=4.9,SNR=10 | | | | | | | |
| **SONM** | **Songino Array** | **162.60** | **309** | PKPab | | **PKPab** | **03 35 14.9** | **+0.3** |
| | comp=Z,1.7nm,1.0s,baz=51,slow=3.5,SNR=7.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **166.57** | **22** | PKP | | **PKPdf** | **03 34 28.4** | **-1.0** |
| | comp=Z,1.4nm,1.1s,baz=28,slow=2.3,SNR=5.0 | | | | | | | |
| KURBB | | | | PKPab | | **PKPab** | **03 35 31.6** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=337,slow=5.1,SNR=8.0 | | | | | | | |

*MAN **02** 03:16:19.1, 10.°73N× 126.°80E, h19km, mb4.5, ML3.3, MS3.2*
*IDC **02** 03:16:19

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **95.63** | **52** | P | | **P** | **03 34 37.9** | **+1.0** |
| | 0.4nm,0.7s,baz=250,slow=3.9,SNR=3.9 | | | | | | | |
| **SNAA** | **Sanae** | **96.66** | **188** | LR | | LR | 04 16 46.7 | |
| | comp=Z,110nm,19.3s,baz=173,slow=34 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.27** | **279** | PKPbc | | **PKiKP** | **03 41 06.1** | **+0.3** |
| | 1.4nm,0.8s,baz=60,slow=2.4,SNR=6.6 | | | | | | | |

*IDC **02** 03:21:54.4±2.0, 15°.97N×94°.52W, h75km±12km, mb3.8/7, mb1 4.0/9, mb1mx3.6/50, mbtmp4.2/9, MS3.9/2, Ms1 3.8/2, ms1mx3.1/66, Error ellipse: s-maj=36.4km s-min=8.7km az=42.0*

*GCG **02** 03:21:54.5±1.7, 16°.65N×94°.28W, h35km±999km, MD4.7*

*NEIC **02** 03:21:55.0±1.6, 15°.98N±0°.06×94°.50W±0°.04, h61km±9km, mb4.4/10, Md4.4/70(MEX), Error ellipse: s-maj=9.2km s-min=5.5km az=200.0*

*MEX **02** 03:21:55.8±1.0, 15°.97N×94°.48W, h73km±20km, MD4.4*

*UCR **02** 03:21:58.6±1.1, 14°.76N×94°.62W, h68km±117km, ML3.8, mb4.4(NEIC)*

*SNET **02** 03:21:58.6±1.0, 14°.77N×94°.61W, h72km±75km, ML4.3*

**ISC 02 03:21:54.3**±0.8**, 15°.94N**±0°.04×**94°.52W**±0°.02**, h62**km±10km**, n122**, σ1§**46**/171**, mb4.3**/9**, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMIG** | **Matias Romero** | **1.20** | **343** | P | **Pn** | **03 22 15.2** | **+0.2** |
| | 106nm,0.3s,baz=177,slow=12,SNR=1094 | | | | | | |
| CMIG | | | | S | **Sn** | **03 22 30.8** | **+0.3** |
| | 500nm,0.3s,baz=301,slow=20,SNR=29 | | | | | | |
| **CMIG** | **Matias Romero** | **1.20** | **343** | *e*P | **Pn** | **03 22 15.4** | **+0.4** |
| CMIG | | | | *e*S | **Sn** | **03 22 30.7** | **+0.3** |
| **PCIG** | | **1.27** | **100** | | **Pn** | **03 22 15.9** | **-0.1** |
| PCIG | | | | | **Sn** | **03 22 32.2** | **-0.1** |
| **PCIG** | | **1.27** | **100** | *e*P | **Pn** | **03 22 15.9** | **-0.1** |
| PCIG | | | | *e*S | **Sn** | **03 22 32.2** | **-0.1** |
| **HUIG** | **Huatulco** | **1.54** | **264** | | **Pn** | **03 22 18.7** | **-0.8** |
| HUIG | | | | | **Sn** | **03 22 36.2** | **-2.4** |
| **HUIG** | **Huatulco** | **1.54** | **264** | *e*P | **Pn** | **03 22 18.7** | **-0.8** |
| HUIG | | | | *i* S | **Sn** | **03 22 36.5** | **-2.1** |
| **TGIG** | | **1.58** | **58** | | **Pn** | **03 22 19.9** | **-0.3** |
| TGIG | | | | | **Sn** | **03 22 38.2** | **-1.5** |
| **TGIG** | | **1.58** | **58** | *e*P | **Pn** | **03 22 19.9** | **-0.3** |
| TGIG | | | | *e*S | **Sn** | **03 22 38.2** | **-1.5** |
| **TGBT** | **Tuxtla Gutierr** | **1.61** | **59** | | **Pn** | **03 22 20.2** | **-0.2** |
| TGBT | | | | | **Sn** | **03 22 39.1** | **-1.1** |
| **TGBT** | **Tuxtla Gutierr** | **1.61** | **59** | *i* P | **Pn** | **03 22 20.2** | **-0.2** |
| TGBT | | | | *i* S | **Sn** | **03 22 39.1** | **-1.1** |
| **TUIG** | **Tuzandepetl** | **2.08** | **3** | | **Pn** | **03 22 27.6** | **+0.7** |
| TUIG | | | | | **Sn** | **03 22 51.8** | **0.0** |
| **TUIG** | **Tuzandepetl** | **2.08** | **3** | *i* P | **Pn** | **03 22 27.6** | **+0.7** |
| TUIG | | | | *i* S | **Sn** | **03 22 51.8** | **0.0** |
| **NEUV** | **Arroyo Zacate** | **2.15** | **325** | *e*P | **Pn** | **03 22 28.1** | **+0.3** |
| NEUV | | | | *e*S | **Sn** | **03 22 53.5** | **+0.1** |
| **CCIG** | **Comitan** | **2.32** | **81** | | **Pn** | **03 22 30.1** | **-0.1** |
| CCIG | | | | | **Sn** | **03 22 57.4** | **-0.3** |
| **CCIG** | **Comitan** | **2.32** | **81** | *e*P | **Pn** | **03 22 30.1** | **-0.1** |
| CCIG | | | | *i* S | **Sn** | **03 22 57.4** | **-0.3** |
| **PATR** | **El Naranjo** | **2.35** | **110** | *e*P | **Pn** | **03 22 30.8** | **0.0** |
| PATR | | | | *e*S | **Sn** | **03 22 57.9** | **-0.8** |
| **OXLC** | **Oaxaca** | **2.37** | **298** | *e*P | **Pn** | **03 22 32.4** | **+1.3** |
| OXLC | | | | *e*S | **Sn** | **03 22 59.1** | **-0.1** |
| **PAVE** | **Pavencul** | **2.38** | **108** | *e*P | **Pn** | **03 22 31.8** | **+0.7** |
| PAVE | | | | *e*S | **Sn** | **03 22 58.3** | **-1.1** |
| **OXBJ** | **Oaxaca** | **2.39** | **298** | | **Pn** | **03 22 32.0** | **+0.7** |
| OXBJ | | | | | **Sn** | **03 23 00.3** | **+0.7** |
| **OXBJ** | **Oaxaca** | **2.39** | **298** | *e*P | **Pn** | **03 22 32.0** | **+0.7** |
| OXBJ | | | | *e*S | **Sn** | **03 23 00.3** | **+0.7** |
| **VHO** | **Vista Hermosa** | **2.40** | **298** | *e*P | **Pn** | **03 22 32.2** | **+0.8** |
| VHO | | | | *e*S | **Sn** | **03 23 00.5** | **+0.6** |
| **THIG** | | **2.41** | **115** | | **Pn** | **03 22 31.0** | **-0.3** |
| THIG | | | | | **Sn** | **03 22 59.2** | **-0.5** |
| **THIG** | | **2.41** | **115** | *e*P | **Pn** | **03 22 31.0** | **-0.3** |
| THIG | | | | *e*S | **Sn** | **03 22 59.2** | **-0.5** |
| **CHUJ** | **Union Juarez** | **2.47** | **110** | *e*P | **Pn** | **03 22 33.0** | **+0.6** |
| CHUJ | | | | *e*S | **Sn** | **03 22 59.6** | **-2.0** |
| **PEIG** | **Puerto Escondi** | **2.53** | **272** | *i* P | **Pn** | **03 22 32.3** | **-0.7** |
| PEIG | | | | *e*S | **Sn** | **03 22 59.2** | **-3.5** |
| **HUEH** | **Huehuetenango** | **2.97** | **102** | *e*P | **Pn** | **03 22 40.6** | **+1.3** |
| HUEH | | | | *e*S | **Sn** | **03 23 17.1** | **+3.2** |
| **HUEH** | **Huehuetenango** | **2.97** | **102** | | **Pn** | **03 22 39.6** | **+0.4** |
| **HUEH** | **Huehuetenango** | **2.97** | **102** | *e*P | **Pn** | **03 22 40.6** | **+1.3** |
| HUEH | | | | *e*S | **Sn** | **03 23 17.1** | **+3.2** |
| **YOIG** | **Yosondua** | **3.04** | **288** | *e*P | **Pn** | **03 22 41.4** | **+1.1** |
| YOIG | | | | *e*S | **Sn** | **03 23 16.6** | **+0.9** |
| **RTAL** | **Retalhuleu** | **3.07** | **117** | | **Pn** | **03 22 41.5** | **+1.1** |
| **RTAL** | **Retalhuleu** | **3.07** | **117** | *e*P | **Pn** | **03 22 41.2** | **+0.8** |
| RTAL | | | | *e*S | **Sn** | **03 23 16.5** | **+0.5** |
| **TOIG** | **Toxpalan** | **3.24** | **312** | *e*P | **Pn** | **03 22 43.3** | **+0.4** |
| TOIG | | | | *e*S | **Sn** | **03 23 21.4** | **+1.0** |
| **TXIG** | **Tlaxiaco** | **3.38** | **293** | *e*P | **Pn** | **03 22 46.6** | **+1.8** |
| TXIG | | | | *e*S | **Sn** | **03 23 24.6** | **+0.8** |
| **PNIG** | **Pinotepa** | **3.49** | **278** | | **Pn** | **03 22 46.1** | **-0.1** |
| PNIG | | | | | **Sn** | **03 23 26.1** | **-0.3** |
| **PNIG** | **Pinotepa** | **3.49** | **278** | *e*P | **Pn** | **03 22 46.1** | **-0.1** |
| PNIG | | | | *e*S | **Sn** | **03 23 26.1** | **-0.3** |
| **HLIG** | **Huajuapan de L** | **3.66** | **301** | *e*P | **Pn** | **03 22 49.8** | **+1.1** |
| HLIG | | | | *e*S | **Sn** | **03 23 31.6** | **+0.9** |
| **FUG** | **Fuego 3** | **3.85** | **112** | *e*P | **Pn** | **03 22 53.9** | **+2.7** |
| FUG | | | | *e*S | **Sn** | **03 23 37.1** | **+1.8** |
| **FTIG** | **Fresnillo de T** | **3.97** | **300** | *e*P | **Pn** | **03 22 54.4** | **+1.6** |
| FTIG | | | | *e*S | **Sn** | **03 23 38.8** | **+0.6** |
| **APG** | **El Apazote** | **4.02** | **103** | P | **Pn** | **03 22 54.5** | **+0.8** |
| | 9.6nm,0.3s,baz=316,slow=14,SNR=152 | | | | | | |
| APG | | | | S | **Sn** | **03 23 40.2** | **+0.6** |
| | 28nm,0.3s,baz=37,slow=18,SNR=11 | | | | | | |
| **JAUV** | **Jalcomulco** | **4.04** | **328** | *e*P | **Pn** | **03 22 53.4** | **-0.4** |
| JAUV | | | | *e*S | **Sn** | **03 23 39.2** | **-0.7** |
| **MGIG** | **Malinaltepec** | **4.15** | **289** | *e*P | **Pn** | **03 22 56.9** | **+1.6** |
| MGIG | | | | *i* S | **Sn** | **03 23 42.7** | **0.0** |
| **LVIG** | **Laguna Verde** | **4.17** | **335** | | **Pn** | **03 22 53.1** | **-2.3** |
| **LVIG** | **Laguna Verde** | **4.17** | **335** | *e*P | **Pn** | **03 22 53.1** | **-2.3** |
| LVIG | | | | *e* | | 03 23 37.5 | |
| **NBG** | **Las Nubes** | **4.25** | **108** | *e*P | **Pn** | **03 22 58.6** | **+1.9** |
| NBG | | | | *e*S | Sn | 03 23 54.5 | +9.2 |
| **SCIG** | **Sabancuy** | **4.38** | **46** | | **Pn** | **03 22 57.9** | **-0.5** |
| SCIG | | | | | **Sn** | **03 23 45.6** | **-2.5** |
| **SCIG** | **Sabancuy** | **4.38** | **46** | *i* P | **Pn** | **03 22 58.2** | **-0.1** |
| SCIG | | | | *e*S | **Sn** | **03 23 45.6** | **-2.5** |
| **CRIG** | **Cruz Grande** | **4.50** | **281** | | **Pn** | **03 23 00.1** | **+0.1** |
| **CRIG** | **Cruz Grande** | **4.50** | **281** | *e*P | **Pn** | **03 23 00.1** | **+0.1** |
| CRIG | | | | *e* | | 03 23 44.3 | |
| **PETF** | **Flores** | **4.57** | **77** | | **Pn** | **03 23 01.4** | **+0.5** |
| PETF | | | | Sn | **Sn** | **03 23 53.1** | **+0.3** |
| **MRL** | **Marmol** | **4.74** | **100** | *e*P | **Pn** | **03 23 04.2** | **+0.7** |
| MRL | | | | *e*S | **Sn** | **03 23 56.2** | **-1.1** |
| **SLOZ** | **Alcaldia de Sa** | **4.96** | **112** | *e*P | **Pn** | **03 23 07.9** | **+1.6** |
| SLOZ | | | | *e*S | **Sn** | **03 24 02.6** | **+0.2** |
| **NUBE** | **Las Nubes** | **5.01** | **113** | *e*P | **Pn** | **03 23 08.7** | **+1.6** |
| NUBE | | | | *e*S | **Sn** | **03 24 02.9** | **-0.9** |
| **NUBE** | **Las Nubes** | **5.01** | **113** | *e*P | **Pn** | **03 23 08.7** | **+1.6** |
| NUBE | | | | *e*S | **Sn** | **03 24 02.9** | **-0.9** |
| **DAIG** | **Los Arroyos** | **5.04** | **283** | | **Pn** | **03 23 07.8** | **+0.4** |
| **DAIG** | **Los Arroyos** | **5.04** | **283** | *e*P | **Pn** | **03 23 07.8** | **+0.4** |
| DAIG | | | | *e* | | 03 23 56.5 | |
| **SBLS** | **San Blas** | **5.17** | **113** | *e*P | **Pn** | **03 23 12.1** | **+2.6** |
| **SBLS** | **San Blas** | **5.17** | **113** | *e*P | **Pn** | **03 23 12.1** | **+2.6** |
| **CEVE** | **Cerro Verde** | **5.18** | **113** | *e*P | **Pn** | **03 23 11.6** | **+2.1** |
| CEVE | | | | *e*S | **Sn** | **03 24 09.0** | **+0.9** |
| CEVE | | | | IAML | | 03 24 22.7 | |
| | comp=Z,457nm,0.5s | | | | | | |
| **CEVE** | **Cerro Verde** | **5.18** | **113** | *e*P | **Pn** | **03 23 11.6** | **+2.1** |
| CEVE | | | | *e*S | **Sn** | **03 24 09.0** | **+0.9** |
| CEVE | | | | IAML | | 03 24 22.7 | |
| | comp=Z,457nm,0.5s | | | | | | |
| **SNJE** | **San Jose** | **5.18** | **113** | *e*P | **Pn** | **03 23 12.2** | **+2.7** |
| **SNJE** | **San Jose** | **5.18** | **113** | *e*P | **Pn** | **03 23 12.2** | **+2.7** |
| **MTO3** | **Montecristo** | **5.21** | **106** | | **Pn** | **03 23 09.4** | **-0.5** |
| **YAIG** | **Yautepec** | **5.22** | **304** | | **Pn** | **03 23 12.8** | **+2.8** |
| YAIG | | | | | **Sn** | **03 24 08.1** | **-0.9** |
| **YAIG** | **Yautepec** | **5.22** | **304** | *e*P | **Pn** | **03 23 12.8** | **+2.8** |
| YAIG | | | | *e*S | **Sn** | **03 24 08.1** | **-0.9** |
| **MEIG** | **Mezcala** | **5.26** | **293** | | **Pn** | **03 23 12.8** | **+2.3** |
| MEIG | | | | | **Sn** | **03 24 10.7** | **+0.8** |
| **MEIG** | **Mezcala** | **5.26** | **293** | *e*P | **Pn** | **03 23 12.8** | **+2.3** |
| MEIG | | | | *e*S | **Sn** | **03 24 10.7** | **+0.8** |
| **PLIG** | **Platanillo** | **5.35** | **298** | | **Pn** | **03 23 14.4** | **+2.7** |
| **PLIG** | **Platanillo** | **5.35** | **298** | *e*P | **Pn** | **03 23 14.4** | **+2.7** |
| PLIG | | | | *e* | | 03 24 10.1 | |
| **TACO** | **Tacachico** | **5.36** | **111** | *e*P | **Pn** | **03 23 14.4** | **+2.6** |
| **TACO** | **Tacachico** | **5.36** | **111** | *e*P | **Pn** | **03 23 14.4** | **+2.6** |
| **JAYA** | **Jayaque - finc** | **5.41** | **114** | *e*P | **Pn** | **03 23 12.9** | **+0.4** |
| JAYA | | | | *e*S | **Sn** | **03 24 11.7** | **-1.8** |
| JAYA | | | | IAML | | 03 24 20.3 | |
| | comp=Z,162nm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **5.41** | **114** | *e*P | **Pn** | **03 23 12.9** | **+0.4** |
| JAYA | | | | *e*S | **Sn** | **03 24 11.7** | **-1.8** |
| JAYA | | | | IAML | | 03 24 20.3 | |
| | comp=Z,162nm,0.3s | | | | | | |
| **LALI** | **Alcalda de L** | **5.59** | **115** | *e*P | **Pn** | **03 23 16.2** | **+1.4** |
| LALI | | | | IAML | | 03 24 24.4 | |
| | comp=Z,77nm,0.5s | | | | | | |
| **LALI** | **Alcalda de L** | **5.59** | **115** | *e*P | **Pn** | **03 23 16.2** | **+1.4** |
| LALI | | | | IAML | | 03 24 24.4 | |
| | comp=Z,77nm,0.5s | | | | | | |
| **MAVM** | **Malinalco, Edo** | **5.62** | **303** | *e*P | **Pn** | **03 23 18.3** | **+2.8** |
| **CAIG** | **El Cayaco** | **5.62** | **282** | | **Pn** | **03 23 14.0** | **-1.3** |
| **CAIG** | **El Cayaco** | **5.62** | **282** | *e*P | **Pn** | **03 23 14.0** | **-1.3** |
| CAIG | | | | *e* | | 03 24 10.1 | |
| **MHVM** | **Bosque de Chap** | **5.64** | **308** | *e*S | **Sn** | **03 24 13.3** | **-6.2** |
| **LFRS** | **El Faro** | **5.76** | **113** | *e*P | **Pn** | **03 23 19.6** | **+2.2** |
| LFRS | | | | *e*S | **Sn** | **03 24 21.9** | **-0.3** |
| **LFRS** | **El Faro** | **5.76** | **113** | *e*P | **Pn** | **03 23 19.6** | **+2.2** |
| LFRS | | | | *e*S | **Sn** | **03 24 21.9** | **-0.3** |
| **SJTE** | **Alcalda de S** | **5.81** | **113** | *e*P | **Pn** | **03 23 20.1** | **+2.1** |
| **SJTE** | **Alcalda de S** | **5.81** | **113** | *e*P | **Pn** | **03 23 20.1** | **+2.1** |
| **ARIG** | **Puente Sto Nin** | **6.04** | **294** | | **Pn** | **03 23 23.6** | **+2.5** |
| **ARIG** | **Puente Sto Nin** | **6.04** | **294** | *e*P | **Pn** | **03 23 23.6** | **+2.5** |
| ARIG | | | | *e* | | 03 24 26.7 | |
| **MYIG** | **Mrida** | **6.74** | **42** | | **Pn** | **03 23 29.3** | **-1.4** |
| **MYIG** | **Mrida** | **6.74** | **42** | *e*P | **Pn** | **03 23 29.3** | **-1.4** |
| MYIG | | | | *e* | | 03 24 39.2 | |
| **ZIIG** | **Zihuatanejo** | **6.86** | **285** | | **Pn** | **03 23 33.4** | **+1.2** |
| **ZIIG** | **Zihuatanejo** | **6.86** | **285** | *e*P | **Pn** | **03 23 33.4** | **+1.2** |
| ZIIG | | | | *e* | | 03 24 41.9 | |
| **TGUH** | **Tegucigalpa,Un** | **7.25** | **104** | Pn | **Pn** | **03 23 37.9** | **+0.1** |
| **MOIG** | **Morelia** | **7.36** | **301** | | **Pn** | **03 23 41.3** | **+2.0** |
| **CRIN** | **San Cristobal** | **7.92** | **113** | Pn | **Pn** | **03 23 47.3** | **+0.4** |
| **CNGN** | **Cerro Negro** | **8.32** | **113** | Pn | **Pn** | **03 23 53.2** | **+0.9** |
| **BOAB** | **BOACO BROADBAN** | **10.26** | **111** | Pn | **Pn** | **03 24 05.3** | **+0.2** |
| **HZTE** | **Horizontes, Gu** | **10.12** | **120** | Pn | **Pn** | **03 24 17.8** | **+0.8** |
| **ORTG** | **Ortega, Santa** | **10.42** | **121** | | **Pn** | **03 24 22.2** | **+1.1** |
| **JTS** | **Las Juntas de** | **10.88** | **120** | P | **Pn** | **03 24 29.0** | **+1.7** |
| | comp=Z,2.8nm,0.3s,baz=357,slow=21,SNR=14 | | | | | | |
| **JTS** | **Las Juntas de** | **10.88** | **120** | | **Pn** | **03 24 28.3** | **+1.0** |
| **RIMA** | **Rio Macho** | **12.06** | **119** | | **Pn** | **03 24 43.8** | **+0.1** |
| **PEZE** | **Perez Zeledon,** | **12.42** | **120** | | **Pn** | **03 24 48.8** | **+0.3** |
| **SRBA** | **San Rafael, Bu** | **12.77** | **120** | | **Pn** | **03 24 53.5** | **+0.3** |
| **DRK0** | **Durika** | **12.85** | **120** | | **Pn** | **03 24 55.0** | **+0.6** |
| **833A** | **Chaparral WMA,** | **13.12** | **341** | | **Pn** | **03 24 56.9** | **-0.9** |
| **435B** | **Jarrell** | **15.04** | **350** | Pn | **Pn** | **03 25 24.1** | **+0.9** |
| **JCT** | **Junction City** | **15.26** | **342** | Pn | **Pn** | **03 25 24.8** | **-1.2** |
| **146A** | **Union** | **17.35** | **16** | P | **Pn** | **03 25 51.5** | **-0.6** |
| 146A | | | | IAmb | IAmb | 03 26 00.6 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **FNO** | **Franklin** | **19.41** | **353** | P | **P** | **03 26 15.5** | **+0.2** |
| FNO | | | | IAmb | IAmb | 03 26 21.6 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **KAN17** | **Caldwell West** | **21.22** | **353** | P | **P** | **03 26 33.3** | **-1.6** |
| **PLID** | **Pearl Lake** | **34.23** | **333** | P | **P** | **03 28 35.5** | **+1.2** |
| PLID | | | | IAmb | IAmb | 03 28 51.4 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **34.24** | **358** | P | P | 03 28 31.3 | -2.7 |
| | comp=Z,1.6nm,0.5s,baz=161,slow=6.7,SNR=2.2 | | | | | | |
| ULM | | | | LR | LR | 03 44 57.9 | |
| | comp=Z,119nm,19.0s,baz=47,slow=40 | | | | | | |
| **KCPM** | **Cahto Peak** | **34.66** | **319** | P | **P** | **03 28 38.0** | **0.0** |
| **BOAV** | **Boa Vista** | **36.08** | **108** | P | **P** | **03 28 49.6** | **-0.7** |
| BOAV | | | | IAmb | IAmb | 03 28 57.3 | |
| | comp=Z,7.9nm,1.5s | | | | | | |
| **PTGA** | **Pitinga** | **37.93** | **113** | P | P | 03 29 04.2 | -1.8 |
| | comp=Z,3.5nm,0.8s,baz=294,slow=10,SNR=5.8 | | | | | | |
| **SIV** | **San Ignacio** | **45.79** | **132** | P | P | 03 30 08.6 | -1.5 |
| | comp=Z,0.7nm,0.2s,baz=301,slow=9.7,SNR=2.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.60** | **348** | P | P | 03 30 29.9 | -1.5 |
| | comp=Z,0.6nm,0.5s,baz=153,slow=7.4,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.60** | **348** | P | **P** | **03 30 32.1** | **+0.7** |
| **BDFB** | **Brasilia** | **55.61** | **122** | P | P | 03 31 23.5 | -0.7 |
| | comp=Z,3.1nm,0.7s,baz=296,slow=7.2,SNR=7.8 | | | | | | |
| **BDFB** | **Brasilia** | **55.61** | **122** | P | **P** | **03 31 24.1** | **-0.1** |
| BDFB | | | | IAmb | IAmb | 03 31 24.9 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **57.91** | **344** | P | **P** | **03 31 39.2** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=130,slow=6.1,SNR=7.4 | | | | | | |
| **INK** | **Inuvik** | **57.91** | **344** | P | **P** | **03 31 39.7** | **+0.1** |
| INK | | | | IAmb | IAmb | 03 31 52.5 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **80.42** | **52** | P | P | 03 33 57.8 | -1.7 |
| | comp=Z,0.7nm,0.8s,baz=292,slow=4.9,SNR=5.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **80.42** | **52** | P | **P** | **03 33 59.0** | **-0.5** |
| **PMSA** | **Palmer Station** | **83.76** | **167** | LR | LR | 04 02 01.4 | |
| | comp=Z,82nm,19.6s,baz=104,slow=29 | | | | | | |

*IDC **02** 03:29:21.2±0.6, 35°.24N×26°.72E, h0km, mb3.6/8, mb1 3.7/8, mb1mx3.5/44, mbtmp3.6/8, Error ellipse: s-maj=22.3km s-min=9.0km az=146.0*

*NIC **02** 03:29:22.5±0.0, 34°.82N×26°.88E, h14km±6km, Ml3.6/3*

*ISK **02** 03:29:22.8, 35°.11N×26°.94E, h5km, ML3.0/18*

*DDA **02** 03:29:23.0±0.0, 34°.79N×26°.93E, h93km±69km, ML2.8*

*THE **02** 03:29:24.7, 35°.06N×26°.84E, h0km±1km, ML2.6/4, Error ellipse: s-maj=8.3km s-min=1.1km az=159.0*

*ATH **02** 03:29:26.6, 35°.26N×26°.79E, h9km±5km, ML2.7/4, Error ellipse: s-maj=6.2km s-min=1.2km az=179.0*

**ISC 02 03:29:23.2**±1.2**, 35°.07N**±0°.05×**26°.92E**±0°.02**, h17**km±8km**, n69**, σ1§**47**/86**, mb3.6**/8**, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **0.58** | **275** | P | **Pb** | **03 29 35.1** | **+0.2** |
| ZKR | | | | S | **Sb** | **03 29 43.6** | **+0.9** |
| | 882nm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.58** | **275** | P | **Pb** | **03 29 35.3** | **+0.5** |
| ZKR | | | | S | **Sb** | **03 29 42.9** | **+0.2** |
| ZKR | | | | AML | AML | 03 29 48.7 | |
| | comp=N,1251μm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 03 29 52.7 | |
| | comp=E,2762μm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.58** | **275** | PG | **Pb** | **03 29 35.1** | **+0.2** |
| ZKR | | | | SG | **Sn** | **03 29 44.6** | **-1.1** |
| **ZKR** | **Zakros** | **0.58** | **275** | P | **Pg** | **03 29 34.2** | **-0.5** |
| ZKR | | | | S | **Sn** | **03 29 44.6** | **-1.1** |
| **FRMA** | **Ierapetra Chan** | **0.97** | **267** | P | **Pg** | **03 29 40.1** | **-2.0** |
| FRMA | | | | S | **Sb** | **03 29 54.4** | **+0.3** |
| | comp=E,215nm,0.4s | | | | | | |
| **NPS** | **Neapolis** | **1.09** | **281** | P | **Pn** | **03 29 44.4** | **+0.7** |
| NPS | | | | S | **Sn** | **03 29 59.5** | **+1.2** |
| | comp=E,565nm,0.6s | | | | | | |
| **NPS** | **Neapolis** | **1.09** | **281** | P | **Pn** | **03 29 44.6** | **+1.0** |
| NPS | | | | S | **Sb** | **03 29 57.9** | **+0.5** |
| NPS | | | | AML | AML | 03 30 10.9 | |
| | comp=E,1209μm,0.4s | | | | | | |
| NPS | | | | AML | AML | 03 30 11.2 | |
| | comp=N,1046μm,0.6s | | | | | | |
| **ARG** | **Arkhangelos** | **1.51** | **40** | P | **Pg** | **03 29 53.0** | **+0.7** |
| ARG | | | | S | **Sg** | **03 30 14.1** | **+2.1** |
| | comp=N,230nm,0.4s | | | | | | |
| **ARG** | **Arkhangelos** | **1.51** | **40** | P | **Pg** | **03 29 52.6** | **+0.3** |
| ARG | | | | S | **Sg** | **03 30 12.4** | **+0.4** |
| ARG | | | | AML | AML | 03 30 19.1 | |
| | comp=E,571μm,0.3s | | | | | | |
| ARG | | | | AML | AML | 03 30 22.0 | |
| | comp=N,408μm,0.3s | | | | | | |
| **ARG** | **Arkhangelos** | **1.51** | **40** | P | **Pg** | **03 29 52.8** | **+0.4** |
| ARG | | | | S | **Sg** | **03 30 14.3** | **+2.3** |
| **NISR** | **Nisiros** | **1.55** | **6** | P | **Pb** | **03 29 51.6** | **+0.2** |
| **NISR** | **Nisiros** | **1.55** | **6** | P | **Pb** | **03 29 51.6** | **+0.2** |
| **IDI** | **Anoyia** | **1.67** | **278** | P | **Pg** | **03 29 55.4** | **-0.1** |
| IDI | | | | AML | AML | 03 30 26.1 | |
| | comp=E,261μm,0.7s | | | | | | |
| IDI | | | | AML | AML | 03 30 26.4 | |
| | comp=N,346μm,0.8s | | | | | | |
| **KOSK** | **Kos Island** | **1.68** | **2** | PN | **Pb** | **03 29 53.9** | **+0.2** |
| KOSK | | | | SN | **Sg** | **03 30 16.5** | **-0.9** |
| **SIVA** | **Sivas** | **1.73** | **269** | P | **Pg** | **03 29 56.6** | **+0.1** |
| **DAT** | **Datca** | **1.74** | **18** | P | **Pb** | **03 29 54.7** | **-0.1** |
| **DAT** | **Datca** | **1.74** | **18** | PN | **Pb** | **03 29 54.6** | **-0.2** |
| DAT | | | | SN | **Sg** | **03 30 17.9** | **-1.5** |
| **SNT5** | **Nea Kammeni, S** | **1.82** | **318** | P | **Pb** | **03 29 55.3** | **-0.8** |
| **THT2** | **Imerovigli** | **1.83** | **319** | P | **Pb** | **03 29 55.8** | **-0.4** |
| **CMBO** | **Columbo, Santo** | **1.86** | **319** | P | **Pb** | **03 29 56.3** | **-0.5** |
| **CMBO** | **Columbo, Santo** | **1.86** | **319** | P | **Pb** | **03 29 56.3** | **-0.5** |
| **BODT** | **Bodrum** | **2.02** | **9** | PN | **Pb** | **03 29 58.6** | **-0.8** |
| **BODT** | **Bodrum** | **2.02** | **9** | P | **Pb** | **03 29 58.8** | **-0.6** |
| **TURN** | **Turunc** | **2.02** | **32** | PN | **Pb** | **03 29 58.8** | **-0.6** |
| **TURN** | **Turunc** | **2.02** | **32** | P | **Pb** | **03 29 59.2** | **-0.2** |
| TURN | | | | S | **Sg** | **03 30 26.9** | **-1.3** |
| TURN | | | | *i* AML | AML | 03 30 34.0 | |
| | comp=N,47nm,0.4s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **2.24** | **38** | PN | **Pb** | **03 30 02.3** | **-1.0** |
| **VAM** | **Vamos** | **2.25** | **279** | P | **Pb** | **03 30 03.8** | **+0.4** |
| **MLSB** | **Milas** | **2.33** | **17** | PN | **Pb** | **03 30 03.4** | **-1.4** |
| **MLSB** | **Milas** | **2.33** | **17** | P | **Pb** | **03 30 03.4** | **-1.4** |
| **GVD** | **Gavdhos** | **2.33** | **265** | PN | **Pb** | **03 30 04.4** | **-0.5** |
| **YER** | **Yerkesik** | **2.34** | **28** | PN | **Pb** | **03 30 03.2** | **+2.2** |
| **YER** | **Yerkesik** | **2.34** | **28** | P | **Pb** | **03 30 03.6** | **-1.4** |
| YER | | | | S | **Sb** | **03 30 34.1** | **+0.5** |
| **FETY** | **Fethiye** | **2.35** | **48** | PN | **Pn** | **03 30 03.1** | **+2.0** |
| **DDIM** | **Aydin, Didim** | **2.40** | **6** | P | **Pb** | **03 30 04.4** | **-1.5** |
| **KSL** | **Kastellorizon** | **2.43** | **63** | P | **Pn** | **03 30 04.1** | **+2.0** |
| KSL | | | | AMI | | 03 30 30.4 | |
| | comp=N,0.1nm,1.9s | | | | | | |
| KSL | | | | AMI | | 03 30 30.4 | |
| | comp=N,0.1nm,1.9s | | | | | | |
| KSL | | | | S | **Sb** | **03 30 36.4** | **+0.4** |
| KSL | | | | AMI | | 03 30 47.6 | |
| | comp=N,0.1nm,1.4s | | | | | | |
| KSL | | | | AMI | | 03 30 47.6 | |
| | comp=N,0.1nm,1.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.43** | **280** | PN | **Pb** | **03 30 05.6** | **-0.9** |
| **MULA** | **Mugla, Merkez-** | **2.46** | **27** | P | **Pb** | **03 30 05.4** | **-1.7** |
| **AKAS** | **Kas** | **2.48** | **61** | PN | **Pn** | **03 30 05.2** | **+2.3** |
| **AKAS** | **Kas** | **2.48** | **61** | P | **Pn** | **03 30 02.8** | **-0.2** |
| AKAS | | | | S | **Sn** | **03 30 30.1** | **-2.7** |
| AKAS | | | | *i* AML | AML | 03 30 36.0 | |
| | comp=N,56nm,0.4s | | | | | | |
| **GCAM** | **G?zelcaml?** | **2.64** | **5** | PN | **Pb** | **03 30 07.6** | **-2.4** |
| **CAME** | **Cameli-Denizli** | **2.69** | **45** | PN | **Pn** | **03 30 08.3** | **+2.4** |
| **CAEL** | **Denizli, Camel** | **2.83** | **43** | P | **Pn** | **03 30 10.6** | **+2.9** |
| **TAVA** | **DENIZLI_Tavas** | **2.88** | **33** | P | **Pn** | **03 30 10.9** | **+2.4** |
| **ELL** | **Elmali** | **2.95** | **55** | PN | **Pn** | **03 30 12.1** | **+2.7** |
| **ELL** | **Elmali** | **2.95** | **55** | P | **Pn** | **03 30 11.8** | **+2.4** |
| **ELL** | **Elmali** | **2.95** | **55** | P | **Pn** | **03 30 11.5** | **+2.1** |
| **GOLH** | **Golhisar** | **3.04** | **44** | P | **Pn** | **03 30 13.7** | **+3.0** |
| **AKUM** | **Antalya-Kumluc** | **3.06** | **65** | P | **Pn** | **03 30 11.0** | **+0.2** |
| AKUM | | | | S | **Sn** | **03 30 43.8** | **-3.1** |
| **URLA** | **Izmir** | **3.29** | **356** | PN | **Pn** | **03 30 16.4** | **+2.3** |
| **KORT** | **Korkueli** | **3.38** | **54** | PN | **Pn** | **03 30 18.3** | **+2.9** |
| **KORT** | **Korkueli** | **3.38** | **54** | P | **Pn** | **03 30 17.0** | **+1.6** |
| **KULA** | **Kula-Manisa** | **3.71** | **22** | P | **Pn** | **03 30 18.6** | **-1.2** |
| **OSC1** | **CSNet OBS 1** | **3.93** | **112** | S | **Sn** | **03 31 08.6** | **+0.1** |
| **AKMS** | **Akamas** | **4.45** | **89** | P | **Pn** | **03 30 29.7** | **-0.2** |
| AKMS | | | | AMI | | 03 31 22.9 | |
| | comp=N,0.2nm,0.4s | | | | | | |
| AKMS | | | | AMI | | 03 31 23.6 | |
| | comp=N,0.2nm,0.3s | | | | | | |
| **ITM** | **Ithomi** | **4.55** | **299** | PN | **Pn** | **03 30 35.4** | **+4.0** |

GYA pmax pmax
comp=Z,75nm,1.1s
**MKAR Makanchi Array 17.64 340** P **Pn** **03 35 12.3 -1.1**
comp=Z,0.1nm,0.3s,baz=157,slow=12,SNR=2.4
**SONM Songino Array 21.05 30** P **P** **03 35 51.0 -0.4**
comp=Z,2.9nm,0.9s,baz=213,slow=12,SNR=13
SONM LR LR 03 43 17.4
comp=Z,103nm,19.3s,baz=276,slow=35
**KURBB Kurchatov Arra 22.19 339** P **P** **03 36 04.1 +0.6**
comp=Z,1.1nm,0.8s,baz=152,slow=9.8,SNR=6.8
**AKASG Malin Array Be 49.49 313** P **P** **03 39 58.0 +0.8**
comp=Z,0.3nm,0.4s,baz=83,slow=5.9,SNR=4.1
**FINES FINESS Array B 51.79 326** P **P** **03 40 14.6 +0.2**
comp=Z,4.3nm,1.0s,baz=105,slow=11,SNR=4.2
**WRA Warramunga Arr 65.22 135** P **P** **03 41 48.5 -0.1**
comp=Z,1.9nm,0.9s,baz=326,slow=6.2,SNR=9.4
**ASAR Alice Springs 67.80 138** P **P** **03 42 05.5 +0.5**
comp=Z,1.0nm,0.8s,baz=325,slow=7.0,SNR=8.1
**CTA Charters Tower 73.18 126** P **P** **03 42 38.9 +1.0**
comp=Z,2.2nm,0.7s,baz=326,slow=7.3,SNR=3.7
**ESDC Sonseca Array 74.69 307** P **P** **03 42 46.5 -0.1**
comp=Z,0.3nm,0.9s,baz=59,slow=7.6,SNR=4.4
ESDC LR LR 04 20 35.9
comp=Z,309nm,18.1s,baz=106,slow=40
**YKA Yellowknife Ar 85.15 12** P **P** **03 43 41.8 -0.9**
comp=Z,0.2nm,0.7s,baz=326,slow=5.2,SNR=5.3

*NOU **02** 03:35:16.9,35°.38S×179°.20W,h269km,mb4.4/6,East of North Island, N.Z.*
*WEL **02** 03:36:00.5±0.7,37°.5±5°×17°.8E±°,h84km±7km,M3.2/32, ML3.6/30,MLv3.2/32,Error ellipse: s-maj=0.0km s-min=0.0km az=71.2*
**ISC 02 03:35:58.1±2.5,37°.31S±0°.09×177°.94E±0°.07, h122km±12km,n108,σ1§22/108,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **0.38** | **131** | P | **Pn** | **03 36 15.9** | **+0.2** |
| **HAZ** | **Te Kaha** | **0.46** | **196** | P | **Pn** | **03 36 15.8** | **-0.2** |
| HAZ | | | | S | **Sn** | **03 36 27.7** | **-1.9** |
| **PKGZ** | **Pakihiroa** | **0.59** | **169** | P | **Pn** | **03 36 17.4** | **+0.5** |
| **WMGZ** | **Waiomatatini S** | **0.63** | **144** | P | **Pn** | **03 36 18.0** | **+0.9** |
| WMGZ | | | | S | **Sn** | **03 36 32.1** | **+0.5** |
| **WIZ** | **White Island** | **0.64** | **250** | P | **Pn** | **03 36 16.6** | **-0.6** |
| WIZ | | | | S | **Sn** | **03 36 29.5** | **-2.0** |
| **WSRZ** | **White Island S** | **0.64** | **251** | P | **Pn** | **03 36 17.5** | **+0.2** |
| **RUGZ** | **Raukumara Rang** | **0.69** | **198** | P | **Pn** | **03 36 17.4** | **-0.3** |
| **PUZ** | **Puketiti** | **0.80** | **162** | P | **Pn** | **03 36 19.2** | **+0.7** |
| **TWGZ** | **Tauwhareparae** | **0.86** | **178** | P | **Pn** | **03 36 20.6** | **+1.5** |
| TWGZ | | | | S | **Sn** | **03 36 36.5** | **+1.5** |
| **WHRZ** | **Whale Island** | **0.94** | **234** | P | **Pn** | **03 36 19.0** | **-0.8** |
| **MWZ** | **Matawai** | **1.07** | **198** | P | **Pn** | **03 36 21.9** | **+0.8** |
| MWZ | | | | S | **Sn** | **03 36 37.8** | **-0.7** |
| **TKGZ** | **Te Karaka** | **1.13** | **184** | P | **Pn** | **03 36 22.8** | **+1.2** |
| TKGZ | | | | S | **Sn** | **03 36 40.1** | **+0.6** |
| **URZ** | **Urewera** | **1.15** | **215** | P | **Pn** | **03 36 22.1** | **+0.3** |
| URZ | | | | S | **Sn** | **03 36 38.8** | **-1.0** |
| **URZ** | **Urewera** | **1.15** | **215** | P | **Pn** | **03 36 22.2** | **+0.4** |
| **CNGZ** | **Carnagh Statio** | **1.19** | **170** | P | **Pn** | **03 36 23.9** | **+1.7** |
| **MARZ** | **Manawahe** | **1.21** | **236** | P | **Pn** | **03 36 22.5** | **0.0** |
| MARZ | | | | S | **Sn** | **03 36 40.0** | **-1.0** |
| **OPRZ** | **Ohinepanea** | **1.22** | **244** | P | **Pn** | **03 36 22.7** | **+0.1** |
| **EDRZ** | **Edgecumbe** | **1.24** | **230** | P | **Pn** | **03 36 23.3** | **+0.4** |
| **RAGZ** | **Rawiri** | **1.25** | **199** | P | **Pn** | **03 36 24.5** | **+1.5** |
| RAGZ | | | | S | **Sn** | **03 36 43.1** | **+1.2** |
| **MYRZ** | **Mayor Island** | **1.36** | **271** | P | **Pn** | **03 36 24.9** | **+0.8** |
| **RIGZ** | **Rimuhau** | **1.40** | **186** | P | **Pn** | **03 36 25.8** | **+1.2** |
| RIGZ | | | | S | **Sn** | **03 36 45.8** | **+1.1** |
| **TGRZ** | **Tauranga** | **1.40** | **252** | P | **Pn** | **03 36 24.9** | **+0.4** |
| **MKRZ** | **Makatiti** | **1.43** | **234** | P | **Pn** | **03 36 26.1** | **+1.2** |
| **TARZ** | **Mount Tarawera** | **1.46** | **231** | P | **Pn** | **03 36 26.4** | **+1.0** |
| **MUGZ** | **Murupara** | **1.49** | **218** | P | **Pn** | **03 36 26.1** | **+0.6** |
| MUGZ | | | | S | **Sn** | **03 36 45.8** | **-0.6** |
| **RTZ** | **Ruatahuna** | **1.51** | **210** | P | **Pn** | **03 36 26.4** | **+0.6** |
| RTZ | | | | S | **Sn** | **03 36 46.7** | **-0.3** |
| **SNGZ** | **Shannon Statio** | **1.54** | **198** | P | **Pn** | **03 36 26.8** | **+0.6** |
| SNGZ | | | | S | **Sn** | **03 36 48.9** | **+1.3** |
| **HLRZ** | **Highlands Stat** | **1.57** | **233** | P | **Pn** | **03 36 27.4** | **+0.9** |
| **PRGZ** | **Paritu Road** | **1.61** | **182** | P | **Pn** | **03 36 28.1** | **+1.1** |
| **HSRZ** | **Hossack Road** | **1.67** | **233** | P | **Pn** | **03 36 29.3** | **+1.6** |
| **HRRZ** | **Handcock Road** | **1.70** | **230** | P | **Pn** | **03 36 29.4** | **+1.4** |
| **PRRZ** | **Plateau Road** | **1.70** | **225** | P | **Pn** | **03 36 28.9** | **+0.8** |
| **KNZ** | **Kokohu** | **1.72** | **187** | P | **Pn** | **03 36 29.1** | **+0.9** |
| **MTHZ** | **Maungataniwha** | **1.77** | **209** | P | **Pn** | **03 36 29.4** | **+0.5** |
| **ALRZ** | **Allen Road** | **1.78** | **225** | P | **Pn** | **03 36 30.1** | **+1.1** |
| **MHGZ** | **Mahia Peninsul** | **1.84** | **181** | P | **Pn** | **03 36 31.0** | **+1.3** |
| **KUZ** | **Kuaotunu** | **1.86** | **287** | P | **Pn** | **03 36 30.1** | **+0.1** |
| **MRHZ** | **Matea Rd** | **1.94** | **218** | P | **Pn** | **03 36 31.8** | **+0.8** |
| **NMHZ** | **Naumai** | **1.99** | **206** | P | **Pn** | **03 36 33.0** | **+1.3** |
| **KUTZ** | **Kaahu Road** | **2.05** | **234** | P | **Pn** | **03 36 33.6** | **+1.3** |
| **WHTZ** | **Whakaora** | **2.07** | **229** | P | **Pn** | **03 36 34.3** | **+1.7** |
| **ARHZ** | **Aropaoanui** | **2.09** | **201** | P | **Pn** | **03 36 33.7** | **+1.0** |
| **TLZ** | **Tolley Road** | **2.16** | **241** | P | **Pn** | **03 36 35.1** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **2.17** | **211** | P | **Pn** | **03 36 34.5** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **2.17** | **211** | P | **Pn** | **03 36 34.3** | **+0.4** |
| **WATZ** | **Wairara** | **2.23** | **231** | P | **Pn** | **03 36 36.0** | **+1.4** |
| **RATZ** | **Rangitukua** | **2.31** | **227** | P | **Pn** | **03 36 36.9** | **+1.3** |
| **RITZ** | **Rihia Road** | **2.34** | **224** | P | **Pn** | **03 36 37.4** | **+1.4** |
| **MCHZ** | **McNeill Hill** | **2.34** | **204** | P | **Pn** | **03 36 36.8** | **+0.8** |
| **KWHZ** | **Kaweka Forest** | **2.42** | **209** | P | **Pn** | **03 36 37.5** | **+0.4** |
| **KATZ** | **Kakaramea** | **2.43** | **226** | P | **Pn** | **03 36 38.3** | **+1.1** |
| **CKHZ** | **Cape Kidnapper** | **2.44** | **196** | P | **Pn** | **03 36 37.5** | **+0.3** |
| **TMVZ** | **Te Maari** | **2.52** | **224** | P | **Pn** | **03 36 39.4** | **+1.1** |
| **NTVZ** | **North Tongarir** | **2.52** | **224** | P | **Pn** | **03 36 39.6** | **+1.2** |
| **OTVZ** | **Oturere** | **2.58** | **223** | P | **Pn** | **03 36 39.8** | **+0.7** |
| **NNVZ** | **North Ngauruho** | **2.58** | **225** | P | **Pn** | **03 36 40.4** | **+1.3** |
| **WTVZ** | **West Tongariro** | **2.58** | **225** | P | **Pn** | **03 36 40.2** | **+1.0** |
| **SNVZ** | **South Ngauruho** | **2.60** | **223** | P | **Pn** | **03 36 40.4** | **+0.9** |
| **KAHZ** | **Kahuranaki** | **2.62** | **198** | P | **Pn** | **03 36 39.8** | **+0.3** |
| **NGZ** | **Ngauruhoe** | **2.62** | **224** | P | **Pn** | **03 36 40.6** | **+1.0** |
| **BHHZ** | **Black Hill Sta** | **2.63** | **214** | P | **Pn** | **03 36 40.1** | **+0.4** |
| **KRHZ** | **Kereru** | **2.63** | **207** | P | **Pn** | **03 36 39.6** | **-0.1** |
| **TWVZ** | **Taurewa** | **2.64** | **228** | P | **Pn** | **03 36 40.9** | **+1.0** |
| **TUVZ** | **Tukino** | **2.66** | **222** | P | **Pn** | **03 36 40.9** | **+0.7** |
| **FWVZ** | **Far West T-bar** | **2.70** | **223** | P | **Pn** | **03 36 41.8** | **+1.0** |
| **MOVZ** | **Moawhango** | **2.71** | **219** | P | **Pn** | **03 36 40.8** | **0.0** |
| **HIZ** | **Hauiti** | **2.72** | **243** | P | **Pn** | **03 36 42.7** | **+1.9** |
| **HIZ** | **Hauiti** | **2.72** | **243** | P | **Pn** | **03 36 42.8** | **+2.0** |
| **WNVZ** | **Wahianoa** | **2.73** | **222** | P | **Pn** | **03 36 41.5** | **+0.4** |
| **TRVZ** | **Turoa** | **2.73** | **223** | P | **Pn** | **03 36 42.0** | **+0.8** |
| **MTVZ** | **Mangateitei** | **2.84** | **222** | P | **Pn** | **03 36 42.9** | **+0.5** |
| **PKVZ** | **Pokaka** | **2.84** | **225** | P | **Pn** | **03 36 43.4** | **+0.9** |
| **PXZ** | **Pawanui** | **2.84** | **197** | P | **Pn** | **03 36 41.8** | **-0.6** |
| **PNHZ** | **Pukenui** | **2.93** | **207** | P | **Pn** | **03 36 43.0** | **-0.6** |
| **WPHZ** | **Waipukurau** | **2.99** | **203** | P | **Pn** | **03 36 43.7** | **-0.6** |
| **VRZ** | **Vera Road** | **3.09** | **233** | P | **Pn** | **03 36 47.9** | **+2.2** |
| **PRHZ** | **Porangahau** | **3.12** | **199** | P | **Pn** | **03 36 45.4** | **-0.6** |
| **TSZ** | **Takapari Road** | **3.15** | **209** | P | **Pn** | **03 36 45.7** | **-0.8** |
| **DVHZ** | **Dannevirke** | **3.29** | **204** | P | **Pn** | **03 36 47.0** | **-1.3** |
| **ANWZ** | **Angora Road** | **3.34** | **200** | P | **Pn** | **03 36 48.1** | **-0.8** |
| **WAZ** | **Wanganui** | **3.37** | **223** | P | **Pn** | **03 36 50.3** | **+1.0** |
| **POWZ** | **Post Office Ro** | **3.51** | **208** | P | **Pn** | **03 36 50.7** | **-0.5** |
| **PRWZ** | **Pori Road** | **3.58** | **205** | P | **Pn** | **03 36 51.6** | **-0.5** |
| **NEZ** | **North Egmont** | **3.60** | **236** | P | **Pn** | **03 36 56.2** | **+3.8** |
| **BFZ** | **Birch Farm** | **3.62** | **201** | P | **Pn** | **03 36 51.1** | **-1.5** |
| **BFZ** | **Birch Farm** | **3.62** | **201** | P | **Pn** | **03 36 51.2** | **-1.4** |
| **KHEZ** | **Kahui Hut** | **3.67** | **236** | P | **Pn** | **03 36 57.2** | **+3.8** |
| **TIWZ** | **Tintock** | **3.81** | **204** | P | **Pn** | **03 36 53.9** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **3.82** | **208** | P | **Pn** | **03 36 53.7** | **-1.6** |
| **HOWZ** | **Holdsworth Sta** | **4.05** | **207** | P | **Pn** | **03 36 56.2** | **-2.1** |
| **OGWZ** | **Otaki Gorge** | **4.11** | **211** | P | **Pn** | **03 36 57.4** | **-1.7** |
| **TMWZ** | **Te Maipa** | **4.11** | **202** | P | **Pn** | **03 36 57.2** | **-1.9** |
| **KIW** | **Kapiti Island** | **4.26** | **213** | P | **Pn** | **03 36 59.3** | **-1.8** |
| **MTW** | **Mount Morrison** | **4.28** | **205** | P | Pn | 03 36 59.1 | -2.3 |
| **CAW** | **Cannon Point** | **4.40** | **210** | P | Pn | 03 37 00.8 | -2.2 |
| **TRWZ** | **Traveller** | **4.44** | **202** | P | Pn | 03 37 01.1 | -2.4 |
| **PAWZ** | **Paruwai Farm** | **4.51** | **205** | P | Pn | 03 37 02.2 | -2.3 |
| **MSWZ** | **Moikau Station** | **4.60** | **206** | P | Pn | 03 37 03.1 | -2.6 |
| **DUWZ** | **D'Urville Isla** | **4.68** | **221** | P | **Pn** | **03 37 04.8** | **-2.1** |
| **PLWZ** | **Palliser** | **4.73** | **205** | P | Pn | 03 37 04.5 | -3.0 |
| **TCW** | **Tory Channel** | **4.82** | **215** | P | Pn | 03 37 06.2 | -2.4 |
| **BSWZ** | **Blackbirch Sta** | **5.41** | **214** | P | Pn | 03 37 13.7 | -2.8 |
| **QRZ** | **Quartz Range** | **5.48** | **229** | P | Pn | 03 37 15.4 | -2.1 |
| **QRZ** | **Quartz Range** | **5.48** | **229** | P | **Pn** | **03 37 15.6** | **-1.9** |
| **THZ** | **Tophouse** | **5.91** | **220** | P | Pn | 03 37 20.7 | -2.6 |
| **KHZ** | **Kahutara** | **6.12** | **212** | P | Pn | 03 37 22.8 | -3.3 |
| **AKCZ** | **Akaroa Harbour** | **7.59** | **209** | P | Pn | 03 37 42.6 | -3.3 |
| **ODZ** | **Otahua Downs** | **9.48** | **213** | P | Pn | 03 38 07.8 | -3.6 |

*IDC **02** 03:39:05.8±0.8,1°.84N×128°.65E,h0km,mb4.1/10, mb1 4.2/12,mb1mx3.9/49,mbtmp4.1/12,ML4.0/2,MS3.6/1, Ms1 3.6/1,ms1mx2.7/69,Error ellipse: s-maj=39.2km s-min=14.3km az=71.0*
*NEIC **02** 03:39:07.8±1.1,1°.79N±0°.10×128°.72E±0°.07,h10km±1km, mb4.0/12,Error ellipse: s-maj=16.7km s-min=11.7km az=10.0*
**ISC 02 03:39:07.2±0.7,1°.82N±0°.08×128°.7E±0°.1,h10km,n36, σ0§67/29,mb4.1/14,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.72** | **233** | | **Pn** | **03 39 37.5** | **+0.3** |
| **SIJI** | **Sorong** | **3.67** | **137** | Pn | **Pn** | **03 40 05.1** | **+0.9** |
| | 22nm,0.3s,baz=198,slow=22,SNR=16 | | | | | | |
| **FAKI** | **Fak Fak** | **5.87** | **143** | | **Pn** | **03 40 35.0** | **+0.6** |
| **TOLI2** | **Tolitoli** | **7.99** | **265** | Pn | **Pn** | **03 41 04.3** | **+0.8** |
| **KAPI** | **Kappang** | **11.26** | **233** | Pn | **Pn** | **03 41 48.9** | **+0.7** |
| | 0.7nm,0.3s,baz=53,slow=10,SNR=1.8 | | | | | | |
| **KAPI** | **Kappang** | **11.26** | **233** | | **Pn** | **03 41 49.0** | **+0.7** |
| **KNRA** | **Kununurra** | **17.38** | **180** | Pn | **Pn** | **03 43 08.2** | **-1.9** |
| KNRA | | | | IAmb | IAmb | 03 43 21.9 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.16** | **166** | P | **P** | **03 44 03.1** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 03 44 10.4 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.31** | **166** | P | **P** | **03 44 05.3** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=345,slow=11,SNR=25 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.31** | **166** | P | **P** | **03 44 03.9** | **-1.3** |
| **WB2** | **Warramunga Arr** | **22.31** | **166** | P | **P** | **03 44 04.8** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 03 44 07.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.38** | **166** | P | **P** | **03 44 05.7** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 03 44 14.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.82** | **169** | P | **P** | **03 44 39.5** | **+0.6** |
| | comp=Z,17nm,0.9s,baz=352,slow=12,SNR=14 | | | | | | |
| **MJAR** | **Mushiro Arr** | **35.65** | **13** | P | **P** | **03 46 06.2** | **+0.7** |
| | comp=Z,1.2nm,0.4s,baz=185,slow=10.0,SNR=4.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.65** | **13** | P | **P** | **03 46 05.9** | **+0.3** |
| MJAR | | | | IAmb | IAmb | 03 46 17.3 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **35.66** | **161** | P | **P** | **03 46 05.9** | **+0.2** |
| | comp=Z,4.2nm,0.7s,baz=343,slow=8.9,SNR=6.2 | | | | | | |
| **STKA** | **Stephens Creek** | **35.66** | **161** | P | **P** | **03 46 05.7** | **0.0** |
| **H11S3** | **WAKE ISLAND Hy** | **40.72** | **63** | T | T | 04 30 20.4 | |
| | baz=250,slow=75,SNR=10 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.73** | **63** | T | T | 04 30 14.1 | |
| | baz=250,slow=75,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.74** | **63** | T | T | 04 30 15.5 | |
| | baz=250,slow=75,SNR=8.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.32** | **62** | T | T | 04 31 09.7 | |
| | baz=249,slow=75,SNR=6.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.33** | **62** | T | T | 04 31 10.1 | |
| | baz=249,slow=75,SNR=5.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.34** | **62** | T | T | 04 31 07.8 | |
| | baz=249,slow=75,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **49.75** | **340** | P | **P** | **03 47 59.5** | **-0.5** |
| | comp=Z,0.7nm,0.7s,baz=156,slow=7.1,SNR=6.0 | | | | | | |
| **SONM** | **Songino Array** | **49.75** | **340** | P | **P** | **03 47 59.6** | **-0.4** |
| **URZ** | **Urewera** | **59.78** | **137** | LR | LR | 04 13 35.8 | |
| | comp=Z,51nm,21.5s,baz=267,slow=35 | | | | | | |
| **MK31** | **Makanchi Array** | **60.26** | **325** | P | **P** | **03 49 15.6** | **-0.4** |
| MK31 | | | | IAmb | IAmb | 03 49 25.3 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.26** | **325** | P | **P** | **03 49 15.2** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=115,slow=8.1,SNR=21 | | | | | | |
| **MAKZ** | **Makanchi** | **60.45** | **325** | P | **P** | **03 49 17.1** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **63.20** | **333** | P | **P** | **03 49 35.2** | **-0.3** |
| | comp=Z,0.5nm,0.3s,baz=93,slow=10,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.20** | **333** | P | **P** | **03 49 35.5** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **64.42** | **327** | P | **P** | **03 49 42.9** | **-0.8** |
| | comp=Z,2.0nm,0.5s,baz=128,slow=6.1,SNR=22 | | | | | | |
| **KURK** | **Kurchatov** | **64.42** | **327** | P | **P** | **03 49 43.5** | **-0.2** |
| **BVAR** | **Borovoye Array** | **70.01** | **327** | P | **P** | **03 50 19.1** | **0.0** |
| | comp=Z,1.4nm,0.6s,baz=108,slow=9.6,SNR=7.4 | | | | | | |
| **BRVK** | **Borovoye** | **70.08** | **327** | P | **P** | **03 50 19.4** | **-0.2** |
| **ARCES** | **ARCESS Array B** | **92.92** | **340** | P | **P** | **03 52 20.4** | **0.0** |
| | comp=Z,3.0nm,1.0s,baz=85,slow=5.1,SNR=4.5 | | | | | | |

*IDC **02** 03:46:30.5±3.5,28°.07N×84°.57E,h0km,mb3.5/7, mb1 3.7/8,mb1mx3.4/58,mbtmp3.6/8,ML4.0/1,MS3.9/2, Ms1 3.9/2,ms1mx3.0/79,Error ellipse: s-maj=70.6km s-min=49.0km az=11.0*
**ISC 02 03:46:36.2±3.4,28°.2N±0°.5×84°.6E±0°.3,h35km,n10, σ1§11/8,mb3.4/7,Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **18.70** | **355** | P | **P** | **03 50 51.5** | **0.0** |
| | 0.4nm,0.3s,baz=175,slow=11,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **22.91** | **350** | P | **P** | **03 51 37.0** | **+0.2** |
| | 0.3nm,0.5s,baz=180,slow=9.3,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.77** | **0** | P | **P** | **03 52 02.8** | **-0.8** |
| | 0.4nm,0.4s,baz=168,slow=7.4,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **25.95** | **35** | P | **P** | **03 52 05.2** | **-0.2** |
| | 0.1nm,0.3s,baz=238,slow=8.3,SNR=2.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **47.05** | **314** | LR | LR | 04 16 48.6 | |
| | 0.4nm,0.2nm,21.4s,baz=322,slow=39 | | | | | | |
| **FINES** | **FINESS Array B** | **50.71** | **328** | P | **P** | **03 55 32.4** | **+0.3** |
| | 3.5nm,0.9s,baz=116,slow=4.4,SNR=6.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.20** | **338** | P | **P** | **03 55 50.3** | **-0.3** |
| | 1.6nm,0.8s,baz=100,slow=7.7,SNR=11 | | | | | | |
| **SIJI** | **Sorong** | **53.23** | **115** | LR | LR | 04 19 40.5 | |
| | comp=Z,106nm,21.5s,baz=122,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **79.14** | **20** | P | **P** | **03 58 38.8** | **+1.8** |
| | 0.2nm,0.4s,baz=301,slow=6.8,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.37** | **9** | P | **P** | **03 59 22.6** | **-1.5** |
| | 0.1nm,0.6s,baz=345,slow=4.5,SNR=2.4 | | | | | | |

*IDC **02** 04:20:03.5±0.7,34°.83N×89°.70E,h0km,mb4.2/13, mb1 4.4/18,mb1mx4.1/53,mbtmp4.2/18,ML3.1/4,MS3.7/15, Ms1 3.7/15,ms1mx3.4/92,Error ellipse: s-maj=23.6km s-min=14.3km az=53.0*
*MOS **02** 04:20:04.1±1.3,34°.80N×89°.79E,h12km,mb4.6/9,Error ellipse: s-maj=11.8km s-min=6.0km az=102.1*
*NEIC **02** 04:20:05.0±1.6,34°.85N±0°.08×89°.7E±0°.1,h11km±4km, mb4.2/20,Error ellipse: s-maj=18.2km s-min=6.8km az=58.0*
*BJI **02** 04:20:05.6±0.0,35°.01N×89°.70E,h6km,mb4.1/17, mB4.8/3,Ms4.1/13,Ms7 3.9/11*
**ISC 02 04:20:05.4±0.4,34°.83N±0°.05×89°.71E±0°.05,h10km,n120, σ1§51/100,mb4.3/25,MS3.7/12,12C-7D,Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GOMU** | **GeErMu** | **4.38** | **70** | Pn | **Pn** | **04 21 11.5** | **-0.8** |
| GOMU | | | | Sn | **Sn** | **04 22 03.5** | **-0.2** |
| GOMU | | | | LR | LR | | |
| | comp=N,4μm,6.8s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,2μm,7.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,2μm,7.4s | | | | | | |
| **LSA** | **Lhasa** | **5.26** | **166** | Pn | Pb | 04 21 31.2 | -6.5 |
| LSA | | | | LR | LR | | |
| | comp=N,1μm,9.8s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,3μm,7.7s | | | | | | |
| **GUN** | **Gumba** | **7.64** | **206** | *e*P | Pn | 04 22 03.9 | +6.9 |
| | 35nm,0.9s | | | | | | |
| **JIRN** | **Jiri** | **7.76** | **204** | *e*P | Pn | 04 22 05.1 | +6.4 |
| | 32nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **8.07** | **214** | *e*P | Pn | 04 22 09.0 | +6.2 |
| **PKI** | **Pulchoki** | **8.12** | **208** | *e*P | Pn | 04 22 08.7 | +5.1 |
| | 18nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **8.12** | **208** | *e*P | Pn | 04 22 08.1 | +4.5 |
| | 22nm,0.9s | | | | | | |
| **DMN** | **Daman** | **8.21** | **210** | *e*P | Pn | 04 22 09.8 | +5.0 |
| | 20nm,0.7s | | | | | | |
| **PYUN** | **Piuthan** | **8.83** | **222** | *e*P | **Pn** | **04 22 15.7** | **+2.5** |
| | 22nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **9.11** | **351** | *e*P | **Pn** | **04 22 16.3** | **-0.6** |
| **GTA** | **Gaotai** | **9.27** | **58** | *e*P | **Pn** | **04 22 22.3** | **+3.1** |
| GTA | | | | pP | | 04 22 27.2 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,890nm,16.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,530nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,440nm,14.9s | | | | | | |
| **SHL** | **Shillong** | **9.43** | **168** | P | **Pn** | **04 22 19.9** | **-1.5** |
| **SHL** | **Shillong** | **9.43** | **168** | Pn | **Pn** | **04 22 19.9** | **-1.5** |
| **LZH** | **Lanzhou** | **11.60** | **80** | *e*P | Pn | 04 22 37.0 | -14 |
| LZH | | | | pP | | 04 22 41.5 | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **KSH** | **Kashi** | **11.91** | **297** | P | Pn | 04 23 00.0 | +4.7 |
| **MK31** | **Makanchi Array** | **13.19** | **337**§ | *e*P | **Pn** | **04 23 14.7** | **+2.0** |
| **MK31** | **Makanchi Array** | **13.19** | **337** | | **Pn** | **04 23 11.5** | **-1.3** |
| **MKAR** | **Makanchi Array** | **13.19** | **337** | Pn | **Pn** | **04 23 10.8** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=141,slow=15,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.19** | **337** | *i* P | **Pn** | **04 23 15.8** | **+3.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.19** | **337** | | **Pn** | **04 23 11.6** | **-1.2** |
| **MAKZ** | **Makanchi** | **13.31** | **336** | P | **Pn** | **04 23 13.2** | **-1.1** |
| **MAKZ** | **Makanchi** | **13.31** | **336** | Pn | **Pn** | **04 23 13.2** | **-1.1** |
| **AAK** | **Ala-Archa** | **14.19** | **308** | LR | LR | 04 30 11.7 | |
| | comp=Z,321nm,19.1s,baz=110,slow=43 | | | | | | |
| **AAK** | **Ala-Archa** | **14.19** | **308**§ | *e*P | **P** | **04 23 29.5** | **-4.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **14.95** | **354**§ | *i* P | **Pn** | **04 23 38.2** | **+1.4** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **BTK** | **Batken** | **15.88** | **295** | P | **Pn** | **04 23 48.8** | **-0.2** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **BTK** | **Batken** | **15.88** | **295** | P | **Pn** | **04 23 48.8** | **-0.2** |
| **XAN** | **Xi'an** | **15.88** | **87** | P | **P** | **04 23 52.1** | **-0.6** |
| XAN | | | | pP | sP | 04 23 59.4 | +0.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **GAR** | **Garm** | **16.05** | **291** | P | **Pn** | **04 23 49.7** | **-1.6** |
| GAR | | | | IAmb | IAmb | 04 23 59.1 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **GYA** | **Guiyang** | **16.80** | **115** | §P | **Pn** | **04 24 01.8** | **+1.0** |
| GYA | | | | S | **Sn** | **04 27 10.2** | **+2.7** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,300nm,6.3s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,410nm,4.4s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,390nm,6.7s | | | | | | |
| **CHGR** | **Chuyangaron** | **16.90** | **289** | | **Pn** | **04 24 01.4** | **-0.6** |
| CHGR | | | | IAmb | IAmb | 04 24 16.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **CHLP** | **Challavanipeta** | **17.02** | **199** | *e*P | **P** | **04 24 05.5** | **+0.2** |
| **KURBB** | **Kurchatov Arra** | **17.75** | **336** | P | **Pn** | **04 24 10.6** | **-1.9** |
| | comp=Z,0.0nm,0.3s,baz=144,slow=12,SNR=37 | | | | | | |
| KURBB | | | | LR | LR | 04 31 57.7 | |
| | comp=Z,211nm,21.3s,baz=269,slow=40 | | | | | | |
| **KURK** | **Kurchatov** | **17.80** | **336**§ | *e*P | **P** | **04 24 13.5** | **-0.4** |
| **KURK** | **Kurchatov** | **17.80** | **336** | | **Pn** | **04 24 11.1** | **-2.0** |
| **SONM** | **Songino Array** | **18.00** | **39** | P | **P** | **04 24 15.9** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=222,slow=12,SNR=23 | | | | | | |
| **SONM** | **Songino Array** | **18.00** | **39** | | **Pn** | **04 24 14.8** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **18.26** | **151** | P | **Pn** | **04 24 18.6** | **-0.4** |
| | comp=Z,0.6nm,0.3s,baz=331,slow=11,SNR=21 | | | | | | |
| CMAR | | | | LR | LR | 04 31 33.1 | |
| | comp=Z,98nm,19.5s,baz=355,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.26** | **151** | *ce*P | **P** | **04 24 20.3** | **+1.2** |
| CMAR | | | | pmax | p

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AKASG | Malin Array Be | 45.85 | 310 | ce | P | P | 04 28 30.7 +3.2 |
| EIL | Elat | 46.12 | 280 | LR | LR | | 04 50 23.9 |
| | comp=Z,98nm,20.4s,baz=14,slow=40 | | | | | | |
| MA2 | Magadan | 46.21 | 38 | le | P | P | 04 28 30.7 +0.5 |
| MA2 | | | | pmax | pmax | | |
| | comp=E,18nm,1.7s | | | | | | |
| SEY | Seymchan | 47.28 | 34 | | P | P | 04 28 38.8 +0.2 |
| GUMO | Guam | 53.87 | 99 | LR | LR | | 04 53 15.1 |
| | comp=Z,40nm,19.6s,baz=103,slow=37 | | | | | | |
| NOA | NORSAR Array B | 54.79 | 324 | P | | P | 04 29 36.5 +1.4 |
| | comp=Z,1.1nm,0.8s,baz=80,slow=7.2,SNR=3.3 | | | | | | |
| GERES | GERESS Array B | 56.06 | 309 | P | | P | 04 29 43.7 -0.8 |
| | comp=Z,2.4nm,1.0s,baz=72,slow=5.7,SNR=6.7 | | | | | | |
| GERES | GERESS Array B | 56.06 | 309 | P | | P | 04 29 43.2 -1.4 |
| SHEM | Shemya Is, Ala | 59.98 | 44 | LR | LR | | 04 57 13.8 |
| | comp=Z,60nm,20.7s,baz=313,slow=37 | | | | | | |
| EUNU | Eureka | 65.34 | 359 | P | | P | 04 30 47.0 -0.2 |
| EUNU | | | | IAmb | IAmb | | 04 31 01.4 |
| | comp=Z,2.1nm,1.1s | | | | | | |
| IMAR | Indian Mountai | 68.39 | 23 | P | | P | 04 31 05.8 -0.9 |
| WB0 | Warramunga Arr | 68.92 | 135 | P | | P | 04 31 10.1 -0.5 |
| WRAB | Tennant Creek | 69.03 | 135 | le | P | P | 04 31 11.6 +0.3 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | |
| WRA | Warramunga Arr | 69.03 | 135 | P | | P | 04 31 11.4 +0.1 |
| | comp=Z,4.9nm,0.9s,baz=328,slow=6.3,SNR=21 | | | | | | |
| WRA | Warramunga Arr | 69.03 | 135 | P | | P | 04 31 10.1 -1.3 |
| WB2 | Warramunga Arr | 69.03 | 135 | P | | P | 04 31 11.2 -0.1 |
| COLA | College | 70.99 | 22 | le | P | P | 04 31 21.4 -1.4 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ESDC | Sonseca Array | 71.28 | 306 | P | | P | 04 31 24.9 -0.2 |
| | comp=Z,1.2nm,0.9s,baz=53,slow=5.7,SNR=6.5 | | | | | | |
| ESDC | | | | LR | LR | | 05 08 28.1 |
| | comp=Z,266nm,20.9s,baz=338,slow=41 | | | | | | |
| ESDC | Sonseca Array | 71.28 | 306 | P | | P | 04 31 24.5 -0.6 |
| ESDC | | | | IAmb | IAmb | | 04 31 28.2 |
| | comp=Z,4.4nm,1.3s | | | | | | |
| ILAR | Eielson Array | 71.36 | 22 | P | | P | 04 31 24.1 -1.0 |
| | comp=Z,2.3nm,0.8s,baz=301,slow=5.4,SNR=17 | | | | | | |
| ILAR | Eielson Array | 71.36 | 22 | P | | P | 04 31 24.6 -0.5 |
| ILAR | Eielson Array | 71.36 | 22 | P | | P | 04 31 24.6 -0.5 |
| ASAR | Alice Springs | 71.71 | 138 | P | | P | 04 31 28.1 +0.3 |
| | comp=Z,2.6nm,0.7s,baz=323,slow=5.7,SNR=21 | | | | | | |
| ASAR | Alice Springs | 71.71 | 138 | P | | P | 04 31 27.3 -0.4 |
| CTA | Charters Tower | 76.58 | 126 | LR | LR | | 05 08 59.9 |
| | comp=Z,48nm,18.5s,baz=263,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 81.01 | 280 | P | | P | 04 32 20.6 -0.1 |
| | comp=Z,4.4nm,1.1s,baz=46,slow=4.7,SNR=12 | | | | | | |
| TORD | Torodi Ar. Bea | 81.01 | 280 | P | | P | 04 32 19.7 -1.1 |
| YKA | Yellowknife Ar | 81.05 | 11 | P | | P | 04 32 19.5 -0.7 |
| | comp=Z,2.0nm,0.8s,baz=334,slow=5.0,SNR=19 | | | | | | |
| YKA | Yellowknife Ar | 81.05 | 11 | P | | P | 04 32 19.3 -0.8 |
| DLBC | Dease Lake | 81.32 | 20 | P | | P | 04 32 22.1 +0.3 |
| | comp=Z,2.7nm,0.9s,baz=351,slow=4.0,SNR=4.3 | | | | | | |
| DLBC | Dease Lake | 81.32 | 20 | P | | P | 04 32 20.8 -1.0 |
| DLBC | | | | IAmb | IAmb | | 04 32 37.5 |
| | comp=Z,6.8nm,1.4s | | | | | | |
| CPUP | Villa Florida | 150.49 | 278 | PKPbc | | PKPbc | 04 39 55.9 -1.7 |
| | comp=Z,3.4nm,1.0s,baz=44,slow=3.3,SNR=5.1 | | | | | | |

*MAN* ***02*** *04:35:15.8, 6.°01N×126.°43E, h122km, mb4.5, ML3.4, MS3.2*

*IDC* ***02*** *04:35:19.9±2.7, 6.°31N×126.°31E, h142km±16km, mb3.3/4, mb1 3.5/4, mb1mx3.1/46, mbtmp3.7/4, Error ellipse: s-maj=143.3km s-min=19.3km az=66.0*

**ISC 02 04:35:19.8±1.1, 6.°3N±0.°1×126.°1E±0.°2, h150km, n9, σ2s10/12, mb3.3/4, 1C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| MATI | Mati | 0.70 | 10 | le | P | Pn | 04 35 38.3 | -4.2 |
| DAV | Davao City (W) | 0.99 | 326 | P | | Pn | 04 35 42.4 | -2.1 |
| | 58nm,0.3s,baz=50,slow=4.9,SNR=1.6 | | | | | | | |
| DAV | | | | S | | Sn | 04 36 03.4 | 0.0 |
| | 134nm,0.3s,baz=95,slow=23,SNR=11 | | | | | | | |
| KCP | Kidapawan | 1.28 | 306 | le | P | Pn | 04 35 45.0 | -2.3 |
| KCP | | | | i | S | Sn | 04 36 06.1 | -2.2 |
| BUKP | Musuan | 1.94 | 327 | li | P | Pn | 04 35 54.2 | -0.2 |
| GLSP | General Luna, | 3.51 | 360 | le | P | Pn | 04 36 13.3 | -0.5 |
| WRA | Warramunga Arr | 27.25 | 163 | P | | P | 04 40 52.2 | +2.0 |
| | 0.4nm,0.8s,baz=342,slow=10,SNR=4.5 | | | | | | | |
| ASAR | Alice Springs | 30.68 | 166 | P | | P | 04 41 20.7 | +0.2 |
| | 0.2nm,0.5s,baz=333,slow=7.3,SNR=2.0 | | | | | | | |
| MKAR | Makanchi Array | 55.17 | 325 | P | | P | 04 44 38.2 | +1.3 |
| | 0.2nm,0.3s,baz=116,slow=7.1,SNR=9.2 | | | | | | | |
| MKAR | | | | PcP | | PcP | 04 45 37.0 | +0.9 |
| | 0.2nm,0.6s,baz=132,slow=2.1,SNR=4.0 | | | | | | | |
| ARCES | ARCESS Array B | 87.90 | 340 | P | | P | 04 47 53.1 | +1.0 |
| | 4.1nm,1.0s,baz=81,slow=7.9,SNR=3.6 | | | | | | | |

*IDC* ***02*** *04:44:04.0±1.6, 15.°24S×175.°83W, h336km±21km, mb3.5/4, mb1 3.7/6, mb1mx3.3/4, mbtmp4.2/6, Error ellipse: s-maj=88.7km s-min=17.0km az=148.0*

**ISC 02 04:44:04.2±1.1, 15.°4S±0.°4×175.°7W±0.°2, h350km, n9, σ0s67/9, mb3.4/4, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| AFI | Afiamalu | 4.04 | 69 | P | | Pn | 04 45 13.2 | -0.5 |
| | 33nm,0.3s,baz=199,slow=2.1,SNR=40 | | | | | | | |
| MSVF | Nonsavu | 6.47 | 248 | P | | Pn | 04 45 40.2 | -0.3 |
| | 0.8nm,0.3s,baz=93,slow=9.9,SNR=7.9 | | | | | | | |
| STKA | Stephens Creek | 42.15 | 239 | P | | P | 04 51 24.2 | +0.4 |
| | 1.4nm,0.5s,baz=82,slow=11,SNR=7.2 | | | | | | | |
| WRA | Warramunga Arr | 47.73 | 257 | P | | P | 04 52 06.5 | -1.0 |
| | 1.2nm,0.7s,baz=87,slow=8.0,SNR=21 | | | | | | | |
| ASAR | Alice Springs | 48.34 | 252 | P | | P | 04 52 09.9 | +0.1 |
| | 12nm,0.5s,baz=87,slow=8.1,SNR=155 | | | | | | | |
| ILAR | Eielson Array | 82.90 | 12 | P | | P | 04 55 50.2 | +0.2 |
| | 0.3nm,0.5s,baz=209,slow=5.2,SNR=4.5 | | | | | | | |
| ARCES | ARCESS Array B | 124.32 | 351 | PKP | | PKiKP | 05 02 21.9 | +0.4 |
| | 2.1nm,0.9s,baz=345,slow=4.3,SNR=5.5 | | | | | | | |
| BRTR | Keskin Array B | 144.78 | 319 | PKP | | PKPdf | 05 03 01.2 | +1.0 |
| | 2.0nm,0.9s,baz=90,slow=3.7,SNR=7.0 | | | | | | | |
| GERES | GERESS Array B | 145.80 | 349 | PKPbc | | PKPab | 05 03 03.6 | -0.3 |
| | 0.3nm,0.5s,baz=347,slow=3.1,SNR=1.6 | | | | | | | |

*IDC* ***02*** *05:04:18.9±1.1, 58.°41N×152.°58W, h42km±23km, mb3.3/3, mb1 3.6/6, mb1mx3.0/46, mbtmp3.5/6, ML3.2/3, MS3.4/1, Ms1 3.4/1, ms1mx2.8/45, Error ellipse: s-maj=38.8km s-min=13.9km az=114.0*

*NEIC* ***02*** *05:04:20.3±0.9, 58.°33N±0.°04×152.°42W±0.°09, h61km±10km, Error ellipse: s-maj=7.0km s-min=5.2km az=96.0*

*AEIC* ***02*** *05:04:21±1.1, 58.°34N±0.°03×152.°43W±0.°08, h55km±6km, ML3.1, ML3.3/60(NEIC), Error ellipse: s-maj=6.7km s-min=3.8km az=76.0*

**ISC 02 05:04:20.2±0.9, 58.°34N±0.°03×152.°43W±0.°04, h61km±9km, n114, σ0s72/107, mb3.8/3, Kodiak Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| KDAK | Kodiak Island | 0.56 | 188 | P | | Pn | 05 04 32.8 | -0.1 |
| | 41nm,0.3s,baz=54,slow=8.7,SNR=716 | | | | | | | |
| KDAK | | | | S | | Sn | 05 04 41.8 | -0.4 |
| | 239nm,0.3s,baz=288,slow=21,SNR=71 | | | | | | | |
| KDAK | Kodiak Island | 0.56 | 188 | IAML | | | 05 04 42.6 | |
| | 2µm,1.0s | | | | | | | |
| KDAK | Kodiak Island | 0.56 | 188 | P | | Pn | 05 04 32.8 | -0.1 |
| | baz=8.5 | | | | | | | |
| KDAK | | | | S | | Sn | 05 04 42.0 | -0.2 |
| | baz=8.5 | | | | | | | |
| Q19K | Cape Douglas, | 0.87 | 313 | | | Pn | 05 04 36.0 | -0.6 |
| Q19K | | | | | | Sn | 05 04 48.0 | -0.7 |
| Q19K | Cape Douglas, | 0.87 | 313 | IAML | | | 05 04 57.0 | |
| | comp=N,1µm,0.8s | | | | | | | |
| Q19K | Cape Douglas, | 0.87 | 313 | P | | Pn | 05 04 36.0 | -0.6 |
| | baz=133 | | | | | | | |
| Q19K | | | | S | | Sn | 05 04 48.0 | -0.7 |
| | baz=133 | | | | | | | |
| AUQ | Augustine Qik' | 1.14 | 334 | | | Pn | 05 04 40.6 | +0.5 |
| AUQ | | | | | | Sn | 05 04 55.9 | +1.0 |
| AUL | Augustine Lava | 1.17 | 334 | | | Pn | 05 04 41.1 | +0.6 |
| OHAK | Old Harbor | 1.21 | 203 | | | Pn | 05 04 41.1 | +0.1 |
| OHAK | | | | | | Sn | 05 04 56.2 | -0.3 |
| OHAK | Old Harbor | 1.21 | 203 | P | | Pn | 05 04 41.1 | +0.1 |
| | baz=22 | | | | | | | |
| OHAK | | | | S | | Sn | 05 04 56.2 | -0.3 |
| | baz=22 | | | | | | | |
| CNPM | China Poot | 1.34 | 27 | | | Pn | 05 04 43.4 | +0.7 |
| | comp=E,310nm,0.8s | | | | | | | |
| OPT | Oil Point | 1.38 | 343 | | | Pn | 05 04 44.2 | +0.9 |
| OPT | Oil Point | 1.38 | 343 | P | | Pn | 05 04 44.2 | +0.9 |
| | baz=162 | | | | | | | |
| BRLK | Bradley Lake | 1.64 | 29 | | | Pn | 05 04 46.9 | +0.2 |
| BRLK | | | | | | Sn | 05 05 06.2 | -0.6 |
| BRLK | Bradley Lake | 1.64 | 29 | IAML | | | 05 05 16.6 | |
| | comp=E,217nm,0.5s | | | | | | | |
| BRSE | Bradley Lake S | 1.65 | 31 | | | Pn | 05 04 47.3 | +0.3 |
| BRSE | Bradley Lake S | 1.65 | 31 | P | | Pn | 05 04 47.3 | +0.3 |
| | baz=212 | | | | | | | |
| ILSW | Iliamna Southw | 1.69 | 348 | Pn | | Pn | 05 04 47.7 | +0.2 |
| ILSW | | | | IAML | | | 05 05 10.0 | |
| | comp=E,213nm,0.6s | | | | | | | |
| ILSW | | | | IAML | | | 05 05 11.0 | |
| | comp=N,206nm,0.6s | | | | | | | |
| O20K | Slope Mountain | 1.75 | 357 | | | Pn | 05 04 49.2 | +0.9 |
| O20K | Slope Mountain | 1.75 | 357 | P | | Pn | 05 04 49.2 | +0.9 |
| | baz=177 | | | | | | | |
| P18K | Big Mountain, | 1.80 | 307 | | | Pn | 05 04 48.4 | -0.4 |
| P18K | Big Mountain, | 1.80 | 307 | P | | Pn | 05 04 48.4 | -0.4 |
| | baz=125 | | | | | | | |
| SII | Sitkinak Islan | 2.02 | 209 | | | Pn | 05 04 52.3 | +0.4 |
| SII | Sitkinak Islan | 2.02 | 209 | IAML | | | 05 05 04.5 | |
| | comp=E,209nm,3.9s | | | | | | | |
| SII | | | | IAML | | | 05 05 36.8 | |
| | comp=N,219nm,0.7s | | | | | | | |
| SII | Sitkinak Islan | 2.02 | 209 | P | | Pn | 05 04 52.3 | +0.4 |
| | baz=27 | | | | | | | |
| RED | Redoubt Volcan | 2.09 | 355 | | | Pn | 05 04 53.3 | +0.3 |
| RSO | Redoubt South | 2.13 | 356 | | | Pn | 05 04 54.3 | +0.7 |
| RDT | Redoubt | 2.24 | 0 | | | Pn | 05 04 55.3 | +0.4 |
| NCT | North Crescent | 2.24 | 354 | | | Pn | 05 04 55.4 | +0.4 |
| DFR | Drift River | 2.26 | 357 | | | Pn | 05 04 55.8 | +0.5 |
| SEW | Seward | 2.34 | 40 | | | Pn | 05 04 55.9 | -0.3 |
| SEW | Seward | 2.34 | 40 | P | | Pn | 05 04 55.9 | -0.3 |
| | baz=222 | | | | | | | |
| SLKM | Skilak Lake | 2.45 | 27 | | | Pn | 05 04 57.8 | 0.0 |
| N19K | Bonanza Creek | 2.69 | 338 | | | Pn | 05 05 01.4 | +0.3 |
| N19K | Bonanza Creek | 2.69 | 338 | P | | Pn | 05 05 01.4 | +0.3 |
| | baz=156 | | | | | | | |
| SPCN | Chakachatna No | 2.90 | 2 | | | Pn | 05 04 58.8 | +1.0 |
| SPCG | Spurr Capps Gl | 2.97 | 4 | | | Pn | 05 05 06.1 | +1.2 |
| SPNN | North Nagishla | 3.04 | 358 | | | Pn | 05 05 06.9 | +1.0 |
| RC01 | Rabbit Creek A | 3.08 | 25 | | | Pn | 05 05 06.5 | +0.2 |
| RC01 | Rabbit Creek A | 3.08 | 25 | P | | Pn | 05 05 06.5 | +0.2 |
| | baz=207 | | | | | | | |
| PWL | Port Wells | 3.27 | 38 | | | Pn | 05 05 09.0 | 0.0 |
| PWL | Port Wells | 3.27 | 38 | IAML | | | 05 06 10.3 | |
| | comp=E,50nm,0.8s | | | | | | | |
| PWL | | | | IAML | | | 05 06 11.6 | |
| | comp=N,62nm,0.6s | | | | | | | |
| PMR | Palmer | 3.66 | 26 | Pn | | Pn | 05 05 13.6 | -0.6 |
| KNK | Knik Glacier | 3.67 | 31 | | | Pn | 05 05 14.3 | -0.2 |
| KNK | Knik Glacier | 3.67 | 31 | IAML | | | 05 06 13.9 | |
| | comp=E,43nm,0.8s | | | | | | | |
| KNK | | | | IAML | | | 05 06 19.9 | |
| | comp=N,37nm,0.7s | | | | | | | |
| KNK | Knik Glacier | 3.67 | 31 | P | | Pn | 05 05 14.3 | -0.2 |
| | baz=215 | | | | | | | |
| M19K | Big River Lodg | 3.71 | 345 | | | Pn | 05 05 15.4 | +0.5 |
| GLI | Glacier Island | 3.72 | 45 | | | Pn | 05 05 14.5 | -0.5 |
| GLI | Glacier Island | 3.72 | 45 | IAML | | | 05 06 08.2 | |
| | comp=E,45nm,2.2s | | | | | | | |
| GLI | | | | IAML | | | 05 06 26.6 | |
| | comp=N,44nm,1.4s | | | | | | | |
| GLI | Glacier Island | 3.72 | 45 | P | | Pn | 05 05 14.5 | -0.5 |
| | baz=229 | | | | | | | |
| GHO | Glory Hole Cre | 3.87 | 26 | | | Pn | 05 05 16.9 | -0.2 |
| GHO | Glory Hole Cre | 3.87 | 26 | IAML | | | 05 06 29.5 | |
| | comp=E,48nm,1.5s | | | | | | | |
| GHO | | | | IAML | | | 05 06 29.9 | |
| | comp=N,43nm,1.7s | | | | | | | |
| FID | Port Fidalgo | 3.88 | 49 | | | Pn | 05 05 16.5 | -0.7 |
| FID | Port Fidalgo | 3.88 | 49 | IAML | | | 05 05 59.7 | |
| | comp=N,55nm,2.8s | | | | | | | |
| FID | | | | IAML | | | 05 07 47.5 | |
| | comp=E,49nm,3.3s | | | | | | | |
| JPK | Jack Peak | 4.02 | 45 | | | Pn | 05 05 19.1 | -0.1 |
| L19K | White Mountain | 4.04 | 344 | | | Pn | 05 05 19.8 | +0.4 |
| L19K | White Mountain | 4.04 | 344 | IAML | | | 05 06 10.3 | |
| | comp=N,40nm,3.9s | | | | | | | |
| L19K | | | | IAML | | | 05 06 38.2 | |
| | comp=E,33nm,1.6s | | | | | | | |
| L19K | White Mountain | 4.04 | 344 | P | | Pn | 05 05 19.8 | +0.4 |
| | baz=162 | | | | | | | |
| EYAK | Cordova Ski Ar | 4.07 | 54 | | | Pn | 05 05 19.9 | +0.1 |
| EYAK | Cordova Ski Ar | 4.07 | 54 | P | | Pn | 05 05 19.9 | +0.1 |
| | baz=240 | | | | | | | |
| SCM | Sheep Creek Mo | 4.34 | 34 | | | Pn | 05 05 24.1 | +0.5 |
| SCM | Sheep Creek Mo | 4.34 | 34 | IAML | | | 05 07 52.2 | |
| | comp=N,36nm,3.6s | | | | | | | |
| DIV | Divide | 4.38 | 47 | | | Pn | 05 05 24.3 | +0.2 |
| KLU | Klutina | 4.55 | 43 | | | Pn | 05 05 26.9 | +0.4 |
| KLU | Klutina | 4.55 | 43 | IAML | | | 05 06 10.5 | |
| | comp=E,21nm,4.4s | | | | | | | |
| KLU | Klutina | 4.55 | 43 | P | | Pn | 05 05 26.9 | +0.4 |
| | baz=229 | | | | | | | |
| BMRM | Bremner River | 4.76 | 53 | | | Pn | 05 05 29.4 | 0.0 |
| BMRM | Bremner River | 4.76 | 53 | P | | Pn | 05 05 29.4 | 0.0 |
| | baz=240 | | | | | | | |
| M24K | Tolsona, Glenn | 4.90 | 37 | | | Pn | 05 05 31.9 | +0.7 |
| M24K | Tolsona, Glenn | 4.90 | 37 | P | | Pn | 05 05 31.9 | +0.7 |
| | baz=222 | | | | | | | |
| TT01 | Tatalina | 4.91 | 340 | | | Pn | 05 05 31.5 | +0.2 |
| TTA | Tatalina | 4.93 | 341 | | | Pn | 05 05 31.8 | +0.2 |
| TTA | Tatalina | 4.93 | 341 | P | | Pn | 05 05 31.8 | +0.2 |
| | baz=158 | | | | | | | |
| K20K | Telida | 5.10 | 352 | | | Pn | 05 05 35.1 | +1.2 |
| K20K | | | | IAML | | | 05 07 13.1 | |
| | comp=N,22nm,5.0s | | | | | | | |
| K20K | | | | IAML | | | 05 07 13.8 | |
| | comp=E,18nm,3.4s | | | | | | | |
| CAST | Castle Rocks | 5.10 | 2 | | | Pn | 05 05 33.8 | -0.1 |
| CAST | | | | IAML | | | 05 06 14.4 | |
| | comp=N,14nm,4.2s | | | | | | | |
| CAST | | | | IAML | | | 05 07 49.2 | |
| | comp=E,17nm,4.9s | | | | | | | |
| N25K | Chitina, Valde | 5.12 | 47 | | | Pn | 05 05 34.6 | +0.3 |
| N25K | Chitina, Valde | 5.12 | 47 | IAML | | | 05 06 22.6 | |
| | comp=E,18nm,3.5s | | | | | | | |
| N25K | | | | IAML | | | 05 06 52.3 | |
| | comp=N,21nm,3.5s | | | | | | | |
| N25K | Chitina, Valde | 5.12 | 47 | P | | Pn | 05 05 34.6 | +0.3 |
| | baz=234 | | | | | | | |
| KHIT | Khitrov Hills | 5.14 | 62 | | | Pn | 05 05 35.2 | +0.6 |
| TRF | Thorofare Moun | 5.23 | 11 | | | Pn | 05 05 36.7 | +0.8 |
| TRF | Thorofare Moun | 5.23 | 11 | P | | Pn | 05 05 36.7 | +0.8 |
| | baz=192 | | | | | | | |
| KTH | Kantishna Hill | 5.28 | 7 | | | Pn | 05 05 37.2 | +0.7 |
| GLB | Gilahina Butte | 5.34 | 51 | | | Pn | 05 05 37.6 | +0.3 |
| GLB | Gilahina Butte | 5.34 | 51 | IAML | | | 05 07 31.8 | |
| | comp=E,17nm,3.7s | | | | | | | |
| RND | Reindeer | 5.37 | 17 | | | Pn | 05 05 37.7 | 0.0 |
| HARP | HAARP | 5.44 | 38 | | | Pn | 05 05 39.2 | +0.6 |
| HARP | HAARP | 5.44 | 38 | P | | Pn | 05 05 39.2 | +0.6 |
| | baz=225 | | | | | | | |
| ISLE | Juniper Island | 5.62 | 62 | | | Pn | 05 05 42.0 | +0.8 |
| MCK | McKinley | 5.67 | 16 | | | Pn | 05 05 42.5 | +0.7 |
| MCK | McKinley | 5.67 | 16 | P | | Pn | 05 05 42.5 | +0.7 |
| | baz=199 | | | | | | | |
| KIAG | Kiagna River | 5.73 | 59 | | | Pn | 05 05 43.5 | +0.8 |
| PAX | Paxson | 5.77 | 33 | Pn | | Pn | 05 05 42.3 | -0.8 |
| BALM | Baldy | 5.78 | 58 | | | Pn | 05 05 43.6 | +0.3 |
| YAH | Yahtse | 5.83 | 65 | | | Pn | 05 05 45.2 | +1.1 |
| J20K | Nowinta River | 5.92 | 353 | | | Pn | 05 05 46.0 | +1.0 |
| BWN | Browne | 6.02 | 12 | Pn | | Pn | 05 05 47.2 | +0.7 |
| TABL | Table Mountain | 6.14 | 65 | | | Pn | 05 05 49.5 | +1.2 |
| L26K | Log Cabin Wild | 6.48 | 40 | Pn | | Pn | 05 05 53.8 | +1.0 |
| HDA | Harding Lake | 6.63 | 21 | | | Pn | 05 05 55.4 | +0.5 |
| CCB | Clear Creek Bu | 6.70 | 17 | Pn | | Pn | 05 05 55.4 | -0.4 |
| YUK3 | Moose Creek | 6.91 | 55 | | | Pn | 05 06 00.1 | +1.2 |
| YUK3 | Moose Creek | 6.91 | 55 | P | | Pn | 05 06 00.0 | +1.2 |
| | baz=245 | | | | | | | |
| IL31 | | 6.97 | 20 | | | Pn | 05 05 59.5 | +0.1 |
| ILAR | Eielson Array | 6.97 | 20 | P | | Pn | 05 05 58.4 | -1.1 |
| | comp=E,0.6nm,0.3s,baz=198,slow=11,SNR=23 | | | | | | | |
| ILAR | | | | S | | Sn | 05 07 13.1 | -4.1 |
| | comp=E,0.4nm,0.3s,baz=202,slow=23,SNR=5.5 | | | | | | | |
| J25K | Salcha River, | 7.14 | 25 | | | Pn | 05 06 02.2 | +0.3 |
| J25K | Salcha River, | 7.14 | 25 | P | | Pn | 05 06 02.2 | +0.3 |
| | baz=211 | | | | | | | |
| IM03 | | 7.70 | 356 | | | Pn | 05 06 10.2 | +0.8 |
| INK | Inuvik | 13.04 | 32 | P | | Pn | 05 07 22.4 | +0.2 |
| | comp=E,0.0nm,0.3s,baz=205,slow=15,SNR=3.6 | | | | | | | |
| YKA | Yellowknife Ar | 18.93 | 61 | P | | Pn | 05 08 37.7 | +0.8 |
| | comp=E,0.1nm,0.3s,baz=273,slow=9.8,SNR=31 | | | | | | | |
| NVAR | Mina Array Bea | 29.68 | 117 | LR | | LR | 05 21 05.8 | |
| | comp=E,76nm,21.5s,baz=9.0,slow=34 | | | | | | | |
| KLR | Kul'dur | 43.42 | 292 | P | | P | 05 12 15.9 | -0.6 |
| | comp=E,0.9nm,0.6s,baz=72,slow=9.6,SNR=4.4 | | | | | | | |
| BVAR | Borovoye Array | 63.68 | 333 | P | | P | 05 14 45.1 | +0.6 |
| | comp=E,0.5nm,0.5s,baz=62,slow=10.0,SNR=1.7 | | | | | | | |
| MKAR | Makanchi Array | 65.92 | 322 | P | | P | 05 14 59.0 | -0.2 |
| | comp=E,0.1nm,0.4s,baz=18,slow=7.4,SNR=5.3 | | | | | | | |

*TUL* ***02*** *05:21:06.8±0.9, 35.°99N±0.°01×97.°42W±0.°02, h5km±1km, ML2.5, mb_Lg2.1/10(NEIC), Error ellipse: s-maj=2.4km s-min=2.0km az=108.0*

**NEIC 02 05:21:06.8±0.6, 35.°99N±0.°01×97.°44W±0.°01, h6km±7km, Error ellipse: s-maj=2.2km s-min=1.2km az=153.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| OK029 | Liberty Lake | 0.20 | 184 | Pg | | Pg | 05 21 10.9 | +0.1 |
| BCOK | Bluff Creek, N | 0.36 | 203 | Pg | | Pg | 05 21 14.3 | +0.4 |
| BCOK | | | | Sg | | Sg | 05 21 18.7 | 0.0 |
| OK033 | Mehan | 0.41 | 83 | Pg | | Pg | 05 21 14.8 | +0.1 |
| OK025 | Westminster Rd | 0.42 | 169 | Pg | | Pg | 05 21 14.9 | -0.1 |
| OK031 | S. Brethren Rd | 0.49 | 95 | Pg | | Pg | 05 21 16.2 | 0.0 |
| OK030 | Cody Creek RV | 0.53 | 97 | Pg | | Pg | 05 21 17.1 | 0.0 |
| OKCFA | Oklahoma City | 0.58 | 181 | | | Pg | 05 21 17.8 | -0.1 |
| OK034 | N. Norfolk Rd. | 0.59 | 88 | | | Pg | 05 21 18.0 | -0.1 |
| OK034 | | | | IAmb_Lg | | | 05 21 25.2 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| OKCSW | OKLAHOMA CITY | 0.59 | 180 | Pg | | Pg | 05 21 18.1 | 0.0 |
| QUOK | Quay | 0.62 | 73 | Pg | | Pg | 05 21 18.7 | 0.0 |
| CROK | Carrier | 0.68 | 319 | Pg | | Pg | 05 21 20.0 | +0.2 |
| FNO | Franklin | 0.74 | 178 | Pg | | Pg | 05 21 20.8 | -0.2 |
| GC02 | Grant County # | 0.92 | 338 | Pg | | Pg | 05 21 24.2 | -0.4 |
| W35A | Tecumseh | 0.96 | 151 | Pg | | Pg | 05 21 23.8 | -1.4 |
| OK032 | Salt Plains WL | 1.02 | 323 | Pg | | Pg | 05 21 26.1 | -0.3 |
| KAN17 | Caldwell West | 1.08 | 346 | Pg | | Pg | 05 21 27.4 | -0.1 |
| T35A | Sooner Cattle | 1.18 | 39 | Pg | | Pg | 05 21 29.1 | -0.5 |
| T35A | | | | IAmb_Lg | | | 05 21 45.1 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| KAN01 | Argonia South | 1.19 | 347 | Pg | | Pg | 05 21 29.3 | -0.3 |
| KAN06 | Argonia West S | 1.30 | 345 | | | Pn | 05 21 31.1 | -0.4 |
| U32A | Winter Ranch, | 1.32 | 287 | Pn | | Pn | 05 21 31.6 | -0.3 |
| TUL1 | Leonard | 1.34 | 93 | Pn | | Pn | 05 21 30.7 | -1.4 |
| X34A | Smith Ranch, M | 1.43 | 193 | | | Pn | 05 21 33.5 | +0.1 |
| WMOK | Wichita Mounta | 1.67 | 222 | | | Pn | 05 21 37.1 | +0.5 |
| LOOK | Love County | 2.01 | 174 | Pn | | Pn | 05 21 42.3 | +1.0 |
| X37A | Clayton | 2.19 | 129 | Pn | | Pn | 05 21 44.4 | +0.5 |
| U38A | Gravette | 2.51 | 79 | Pn | | Pn | 05 21 49.8 | +1.6 |
| U38A | | | | IAmb_Lg | | | 05 22 32.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| KSU1 | Kansas State U | 3.17 | 12 | IAmb_Lg | | | 05 22 55.1 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| JCT | Junction City | 5.84 | 200 | IAmb_Lg | | | 05 24 18.3 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| RSSD | Black Hills | 9.56 | 330 | IAmb_Lg | | | 05 26 26.4 | |
| | comp=Z,0.9nm,0.8s | | | | | | | |

*BJI* ***02*** *05:31:45.1±0.0, 39.°52N×142.°82E, h17km, mb5.4/90, mB5.3/62, Ms5.3/96, Ms7 5.1/89*

*MOS* ***02*** *05:31:45.8±1.0, 39.°73N×142.°81E, h10km, mb5.7/67, MS4.8/18, Error ellipse: s-maj=5.3km s-min=3.5km az=104.1*

*IDC* ***02*** *05:31:45.7±0.3, 39.°63N×142.°85E, h0km, mb5.2/47, mb1 5.3/56, mb1mx5.1/68, mbtmp5.3/56, ML4.6/9, MS4.6/80, Ms1 4.6/80, ms1mx4.6/94, Error ellipse: s-maj=9.8km s-min=7.6km az=105.0*

*JMA* ***02*** *05:31:46.8±0.1, 39.°68N×142.°91E, h22km±2km, M5.6*

*JMA Felt IV J1.*

*NIED* ***02*** *05:31:46.8, 39.°68N×142.°91E, h22km, MW5.3, Moment Tensor Solution. s3 Moment tensor: Scale 10^16 Nm; Mrr-6.09; Mθθ 6.79; Mφφ-0.70; Mrθ 4.00; Mrφ 3.62; Mθφ-2.23; Fault plane solution: Mo 8.71000×10^16 NP1: φs 274.00000°, δ 62.00000°, λ -59.00000°. NP2: φs 41.00000°, δ 41.00000°, λ -135.00000°.*

*NEIC* ***02*** *05:31:47.8±2.6, 39.°71N±0.°04×142.°95E±0.°09, h12km±2km, mb5.6/580, Ms_20 4.8/47, Mwr5.2/36, Mww5.3 Error ellipse: s-maj=9.9km s-min=5.1km az=101.0*

*KEA* ***02*** *05:31:47.3, 38.°83N×143.°11E, h20km, MS4.5/3*

*GCMT* ***02*** *05:31:48.6±0.1, 39.°73N±0.°01×142.°79E±0.°01, h12km, MW5.2/136, Moment Tensor Solution. s100,c144; s136,c231; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr-0.66±.01; Mθθ 0.66±.01; Mφφ 0.00±.01; Mrθ 0.50±.03; Mrφ 0.39±.01; Mθr-0.04±.04; Best double couple: Mo 0.91400×10^17 NP1: φs 45.00000°, δ 33.00000°, λ -124.00000°. NP2: φs 263.00000°, δ 63.00000°, λ -70.00000°. Principal axes: T 0.9660, Plg16.0000°, Azm339.0000°; N -0.1040, Plg18.0000°, Azm74.0000°; P -0.8620, Plg66.0000°, Azm210.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***02*** *05:31:48.9, 39.°68N×142.°89E, h15km, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr-5.49; Mθθ 5.81; Mφφ-0.31; Mrθ 0.59; Mrφ 3.22; Mθr-1.55; Fault plane solution: Mo 6.72000×10^16 NP1: φs 266.16000°, δ 48.26000°, λ -61.90000°. NP2: φs 47.43000°, δ 48.83000°, λ -117.83000°. Principal axes: T 7.1923, Plg0.0000°, Azm157.0000°; N -1.0766, Plg21.0000°, Azm67.0000°; P -6.1157, Plg69.0000°, Azm248.0000°;*

*NEIC* ***02*** *05:31:49, 39.°67N×142.°82E, h14km, Moment Tensor Solution. Duration: 2s0 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JSD** | **Sado** | **3.94** | **247** | | P | **Pn** | **05 32 48.6** | **+0.6** |
| **JSD** | **Sado** | **3.94** | **247** | | | **Pn** | **05 32 48.6** | **+0.6** |
| **JYT** | **Yasato** | **4.05** | **212** | Pn | | **Pn** | **05 32 48.5** | **-1.0** |
| **JAG** | **Ashikaga** | **4.22** | **220** | ⇓ | P | **Pn** | **05 32 52.3** | **+0.4** |
| **NMR** | **Nemuro--Hokkai** | **4.26** | **30** | ⇑ | *i*P | **Pn** | **05 32 50.8** | **-1.6** |
| NMR | | | | | *i* S | **Sn** | **05 33 37.1** | **-4.6** |
| **JKA** | **Kamikawa-asahi** | **4.42** | **358** | | | **Pn** | **05 32 55.3** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **4.42** | **358** | | | **Sb** | **05 33 56.9** | **-1.6** |
| **ASAJ** | **Asahikawa** | **4.42** | **358** | Pn | | **Pn** | **05 32 55.4** | **+0.8** |
| | 27nm,0.3s,baz=212,slow=15,SNR=60 | | | | | | | |
| ASAJ | | | | | Sn | **Sb** | **05 33 56.9** | **-1.6** |
| | 33nm,0.3s,baz=190,slow=32,SNR=1.4 | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.42** | **358** | P | | **Pn** | **05 32 55.3** | **+0.7** |
| **JJN** | **Nakama** | **4.49** | **236** | P | | **Pn** | **05 32 57.8** | **+2.2** |
| **GLVR** | **Golovnino** | **4.51** | **26** | ⇓ | *i*P | **Pn** | **05 32 54.9** | **-0.9** |
| GLVR | | | | | *e*S | **Sn** | **05 33 45.1** | **-2.7** |
| GLVR | | | | | pmax | pmax | | |
| | comp=Z,3µm,0.5s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=N,391nm,0.3s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=E,459nm,0.3s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=Z,4µm,1.3s | | | | | | | |
| GLVR | | | | | smax | smax | | |
| | comp=E,5µm,0.3s | | | | | | | |
| GLVR | | | | | smax | smax | | |
| | comp=N,4µm,0.5s | | | | | | | |
| **RUSJ** | **Misakicho** | **4.75** | **21** | ⇑ | *i*P | **Pn** | **05 32 58.5** | **-0.7** |
| RUSJ | | | | | *e*S | **Sn** | **05 33 52.2** | **-1.7** |
| **JRY** | **Ryogami san** | **4.82** | **221** | ⇓ | P | **Pn** | **05 33 00.6** | **+0.5** |
| **MAJO** | **Matsushiro** | **4.82** | **231** | | P | **Pn** | **05 33 02.2** | **+2.0** |
| **MAJO** | **Matsushiro** | **4.82** | **231** | | | **Pn** | **05 33 02.2** | **+2.0** |
| **MAJO** | **Matsushiro** | **4.82** | **231** | P | | **Pn** | **05 33 02.9** | **+2.7** |
| **MAT** | **Matsushiro** | **4.82** | **231** | P | | **Pn** | **05 33 01.9** | **+1.7** |
| MAT | | | | S | | **Sn** | **05 33 58.8** | **+3.2** |
| **MJAR** | **Matsushiro Arr** | **4.82** | **231** | Pn | | **Pn** | **05 33 00.6** | **+0.5** |
| | comp=N,33nm,0.3s,baz=33,slow=13,SNR=2224 | | | | | | | |
| MJAR | | | | | LR | LR | 05 34 59.3 | |
| | comp=N,16µm,18.1s,baz=41,slow=40 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.82** | **231** | P | | **Pn** | **05 33 02.2** | **+2.0** |
| **MJAR** | **Matsushiro Arr** | **4.82** | **231** | Pn | | **Pn** | **05 33 02.2** | **+2.0** |
| **MJB9** | **Matsu-Tunnel** | **4.82** | **231** | | | **Pn** | **05 33 02.3** | **+2.1** |
| **YUK** | **Yuzh-Kuril'sk** | **4.88** | **27** | *e*P | | **Pn** | **05 33 00.2** | **-0.8** |
| YUK | | | | | *e*S | **Sn** | **05 33 54.0** | **-3.1** |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,2µm,0.6s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=E,834nm,0.4s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=N,673nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,4µm,1.0s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,4µm,0.6s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,5µm,0.3s | | | | | | | |
| **JNG** | **Nsakai** | **4.98** | **230** | ⇓ | P | **Pn** | **05 33 04.3** | **+1.9** |
| **JSGW** | **Sagamiharawaka** | **5.00** | **216** | | P | **Pn** | **05 33 02.1** | **-0.5** |
| **SHO** | **Shikotan** | **5.13** | **34***c* | *i*P | | **Pn** | **05 33 01.8** | **-2.5** |
| SHO | | | | | *e*S | **Sn** | **05 33 56.5** | **-6.5** |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,757nm,0.4s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,389nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=N,93nm,0.4s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,983nm,1.0s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,1µm,0.4s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,2µm,0.3s | | | | | | | |
| **BSO3** | **Boso 3** | **5.23** | **202** | | P | **Pn** | **05 33 03.8** | **-1.7** |
| **JNT** | **Takato** | **5.33** | **226** | | P | **Pn** | **05 33 08.5** | **+1.2** |
| **JGN** | **Niukaw** | **5.57** | **233** | | P | **Pn** | **05 33 12.9** | **+2.3** |
| **JIZS** | **Izushimoda** | **5.89** | **214** | | P | **Pn** | **05 33 13.7** | **-1.1** |
| **SHZ3** | **Shizuoka 3** | **5.91** | **220** | | P | **Pn** | **05 33 16.0** | **+0.8** |
| **JGF** | **Kuroka** | **5.97** | **228** | | P | **Pn** | **05 33 17.6** | **+1.6** |
| **JGF** | **Kuroka** | **5.97** | **228** | Pn | | **Pn** | **05 33 17.6** | **+1.6** |
| **JSG** | **Sagara** | **6.24** | **218** | Pn | | **Pn** | **05 33 20.5** | **+0.8** |
| **JYTA** | **Yamagatataniai** | **6.34** | **232** | P | | **Pn** | **05 33 22.9** | **+1.9** |
| **INU** | **Inuyama** | **6.34** | **229** | Pn | | **Pn** | **05 33 21.8** | **+0.8** |
| **INU** | **Inuyama** | **6.34** | **229** | P | | **Pn** | **05 33 23.3** | **+2.2** |
| **KUR** | **Kuril'sk** | **6.66** | **32** | *e*P | | **Pn** | **05 33 24.0** | **-1.4** |
| KUR | | | | | *e*S | **Sn** | **05 34 36.3** | **-4.6** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,1µm,0.8s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,333nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,496nm,0.5s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,917nm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,267nm,0.2s | | | | | | | |
| KUR | | | | | MLR | MLR | | |
| | comp=Z,5µm,14.0s | | | | | | | |
| **JFM** | **Mihama** | **6.85** | **235** | ⇓ | P | **Pn** | **05 33 30.7** | **+2.7** |
| **JHJ2** | **Mitsune** | **7.01** | **201** | Pn | | **Pn** | **05 33 28.8** | **-1.5** |
| **JHJ2** | **Mitsune** | **7.01** | **201** | P | | **Pn** | **05 33 30.5** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **7.01** | **201** | Pn | | **Pn** | **05 33 28.3** | **-2.0** |
| | comp=Z,146nm,0.3s,baz=232,slow=6.1,SNR=7.2 | | | | | | | |
| JHJ | | | | | Sn | **Sn** | **05 34 43.0** | **-6.6** |
| | comp=Z,71nm,0.3s,baz=129,slow=22,SNR=2.0 | | | | | | | |
| JHJ | | | | | LR | LR | 05 36 03.0 | |
| | comp=Z,5µm,19.1s,baz=62,slow=37 | | | | | | | |
| **TEY** | **Ternei** | **7.05** | **321** | ⇑ | *e*P | **Pn** | **05 33 31.3** | **+0.6** |
| TEY | | | | | pmax | pmax | | |
| | comp=N,130nm,0.7s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=Z,130nm,0.7s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=E,90nm,0.7s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=Z,500nm,2.3s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=E,500nm,2.2s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=N,500nm,2.1s | | | | | | | |
| TEY | | | | | MLR | MLR | | |
| | comp=E,200nm,14.0s | | | | | | | |
| TEY | | | | | MLR | MLR | | |
| | comp=N,200nm,16.0s | | | | | | | |
| TEY | | | | | MLR | MLR | | |
| | comp=Z,300nm,15.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.25** | **360***c* | *i*P | | **Pn** | **05 33 34.2** | **+0.7** |
| YSS | | | | | *e*S | **Sn** | **05 34 52.1** | **-3.3** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,2µm,3.3s | | | | | | | |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,440nm,0.9s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=Z,10µm,16.0s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=N,7µm,13.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.25** | **360** | Pn | | **Pn** | **05 33 33.8** | **+0.3** |
| **YSS** | **Yuzh-Sakhalins** | **7.25** | **360** | P | | **Pn** | **05 33 35.2** | **+1.7** |
| **VLA** | **Vladivostok** | **8.91** | **296***d* | *e*P | | **Pn** | **05 33 57.6** | **+1.4** |
| VLA | | | | | pmax | pmax | | |
| | comp=Z,193nm,0.7s | | | | | | | |
| **JHS** | **Saijyo** | **9.05** | **242** | Pn | | **Pn** | **05 33 59.7** | **+1.5** |
| **USA0B** | **Ussuriysk Arra** | **9.25** | **303** | P | | **Pn** | **05 34 03.3** | **+2.4** |
| **USA0B** | **Ussuriysk Arra** | **9.25** | **303** | Pn | | **Pn** | **05 34 03.3** | **+2.4** |
| **USRK** | **Ussuriysk Ar.** | **9.25** | **303** | Pn | | **Pn** | **05 34 01.5** | **+0.7** |
| | baz=110,slow=18,SNR=190 | | | | | | | |
| USRK | | | | | LR | LR | 05 37 08.5 | |
| | comp=Z,3µm,21.6s,baz=118,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.25** | **303** | P | | **Pn** | **05 34 03.1** | **+2.2** |
| **USRK** | **Ussuriysk Ar.** | **9.25** | **303** | Pn | | **Pn** | **05 34 03.1** | **+2.2** |
| **MSHR** | **Mys Shultsa** | **9.27** | **292** | ⇓ | *e*P | **Pn** | **05 34 02.4** | **+1.2** |
| MSHR | | | | | pmax | pmax | | |
| | comp=Z,142nm,0.6s | | | | | | | |
| **JMN** | **Monobe** | **9.34** | **233** | | | **Pn** | **05 34 02.4** | **+0.3** |
| **UGL** | **Uglegorsk** | **9.39** | **357** | *e*P | | **Pn** | **05 34 03.4** | **+0.6** |
| UGL | | | | | *e*S | **Sn** | **05 35 48.4** | **+0.4** |
| UGL | | | | | pmax | pmax | | |
| | comp=Z,160nm,0.9s | | | | | | | |
| UGL | | | | | smax | smax | | |
| | comp=E,2µm,4.4s | | | | | | | |
| UGL | | | | | smax | smax | | |
| | comp=N,1µm,5.8s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=E,9µm,16.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=N,12µm,20.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=Z,11µm,16.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **10.99** | **301** | | P | **Pn** | **05 34 28.6** | **+3.9** |
| MDJ | | | | | S | **Sn** | **05 36 32.4** | **+5.3** |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,93nm,1.1s | | | | | | | |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,1µm,3.7s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,12µm,14.6s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,8µm,17.7s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,14µm,15.6s | | | | | | | |
| **MDJ** | **Mudanjiang** | **10.99** | **301** | | | **Pn** | **05 34 28.0** | **+3.3** |
| **TYV** | **Tymovskoe** | **11.16** | **359** | *e*P | | **Pn** | **05 34 27.6** | **+0.5** |
| TYV | | | | | *e*S | **Sn** | **05 36 33.1** | **+1.7** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,800nm,3.1s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,157nm,1.1s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=N,27nm,1.3s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,27nm,1.3s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=N,600nm,3.8s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,900nm,3.8s | | | | | | | |
| TYV | | | | | MLR | MLR | | |
| | comp=N,8µm,15.0s | | | | | | | |
| TYV | | | | | MLR | MLR | | |
| | comp=Z,9µm,15.0s | | | | | | | |
| **JNU** | **Nakatsue** | **11.65** | **239** | Pn | | **Pn** | **05 34 34.8** | **+0.9** |
| | comp=Z,5.4nm,0.3s,baz=56,slow=8.9,SNR=38 | | | | | | | |
| JNU | | | | | LR | LR | 05 39 35.5 | |
| | comp=Z,7µm,18.0s,baz=50,slow=40 | | | | | | | |
| **JNU** | **Nakatsue** | **11.65** | **239** | Pn | | **Pn** | **05 34 34.6** | **+0.7** |
| **JNU** | **Nakatsue** | **11.65** | **239** | P | | **Pn** | **05 34 36.0** | **+2.1** |
| **HHU** | **Hamhung** | **11.78** | **276** | P | | **Pn** | **05 34 37.5** | **+2.0** |
| HHU | | | | | sP | | 05 34 48.1 | |
| HHU | | | | | S | Sn | 05 36 57.7 | +11 |
| HHU | | | | | AMS | AMS | | |
| | comp=N,2µm,12.9s | | | | | | | |
| HHU | | | | | AMS | AMS | | |
| | comp=E,523nm,3.5s | | | | | | | |
| HHU | | | | | AMS | AMS | | |
| | comp=Z,650nm,4.3s | | | | | | | |
| **KSRS** | **Korea Array** | **11.89** | **264** | Pn | | **Pn** | **05 34 39.0** | **+2.0** |
| | comp=Z,7.7nm,0.3s,baz=80,slow=13,SNR=131 | | | | | | | |
| KSRS | | | | | Sn | **Sn** | **05 36 56.7** | **+7.5** |
| | comp=Z,4.6nm,0.3s,baz=71,slow=23,SNR=9.3 | | | | | | | |
| KSRS | | | | | LR | LR | 05 39 02.7 | |
| | comp=Z,3µm,18.2s,baz=90,slow=37 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **11.92** | **264** | P | | **Pn** | **05 34 39.4** | **+1.9** |
| **KSAR** | **Wonju Array Be** | **11.92** | **264** | Pn | | **Pn** | **05 34 39.4** | **+1.9** |
| **GRNR** | **Gornyy** | **11.95** | **340** | ⇓ | *i*P | **Pn** | **05 34 39.0** | **+1.1** |
| GRNR | | | | | *e*S | **Sn** | **05 36 54.0** | **+3.3** |
| GRNR | | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | | |
| GRNR | | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | | |
| GRNR | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| GRNR | | | | | smax | smax | | |
| | comp=N,4.0nm,0.8s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=E,1µm,15.0s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=N,3µm,13.0s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=Z,820nm,14.0s | | | | | | | |
| **KLR** | **Kul'dur** | **12.38** | **324** | Pn | | **Pn** | **05 34 45.0** | **+1.3** |
| | comp=Z,1.0nm,0.3s,baz=133,slow=13,SNR=82 | | | | | | | |
| KLR | | | | | LR | LR | 05 39 36.9 | |
| | comp=Z,2µm,21.6s,baz=138,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **12.38** | **324** | P | | **Pn** | **05 34 45.0** | **+1.3** |
| **JCJ** | **Chichijima** | **12.58** | **183** | P | | **Pn** | **05 34 46.9** | **+0.3** |
| **TJN** | **Taejon** | **12.64** | **260** | *d* | *i*P | **Pn** | **05 34 49.6** | **+2.3** |
| **TJN** | **Taejon** | **12.64** | **260** | Pn | | **Pn** | **05 34 49.0** | **+1.7** |
| **TJN** | **Taejon** | **12.64** | **260** | P | | **Pn** | **05 34 49.6** | **+2.3** |
| **BNX** | **BinXian** | **12.85** | **303** | ⇓ | P | **Pn** | **05 34 51.7** | **+1.6** |
| BNX | | | | | pP | P | 05 34 54.3 | -6.6 |
| BNX | | | | | sP | | 05 34 56.4 | |
| BNX | | | | | PP | **PnPn** | **05 35 00.8** | **+3.0** |
| BNX | | | | | S | **Sn** | **05 37 14.1** | **+1.5** |
| BNX | | | | | sS | | 05 37 20.5 | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,65nm,0.9s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,1µm,3.7s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,27µm,16.3s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,7µm,13.7s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,20µm,13.6s | | | | | | | |
| **INCN** | **Inchon** | **12.87** | **265** | P | | **Pn** | **05 34 52.0** | **+1.5** |
| **INCN** | **Inchon** | **12.87** | **265** | Pn | | **Pn** | **05 34 52.0** | **+1.5** |
| **INCN** | **Inchon** | **12.87** | **265** | P | | **Pn** | **05 34 52.3** | **+1.8** |
| **JSU** | **Suzuyama** | **12.96** | **235** | Pn | | **Pn** | **05 34 50.8** | **-1.0** |
| **PYAG** | **Pyongyang** | **13.23** | **273** | P | | **Pn** | **05 34 57.2** | **+1.8** |
| PYAG | | | | | pP | P | 05 34 60.0 | -5.2 |
| PYAG | | | | | S | **Sn** | **05 37 24.2** | **+2.1** |
| PYAG | | | | | AMS | AMS | | |
| | comp=N,2µm,14.2s | | | | | | | |
| PYAG | | | | | AMS | AMS | | |
| | comp=E,1µm,7.9s | | | | | | | |
| PYAG | | | | | AMS | AMS | | |
| | comp=Z,376nm,2.4s | | | | | | | |
| **NKL** | **Nikolayevsk** | **13.54** | **354** | *e*P | | **Pn** | **05 34 57.9** | **-1.5** |
| NKL | | | | | *e*S | **Sn** | **05 37 35.7** | **+6.4** |
| NKL | | | | | pmax | pmax | | |
| | comp=N,648nm,1.0s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=Z,72nm,1.3s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.2s | | | | | | | |
| NKL | | | | | smax | smax | | |
| | comp=N,870nm,3.5s | | | | | | | |
| NKL | | | | | smax | smax | | |
| | comp=E,3.0nm,3.3s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=E,83nm,12.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=N,18µm,17.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=Z,4µm,15.0s | | | | | | | |
| **CN2** | **Changchun** | **13.61** | **293** | *e*P | | **Pn** | **05 35 01.4** | **+0.8** |
| CN2 | | | | | *es*P | P | 05 35 09.6 | +0.2 |
| CN2 | | | | | *e*PP | **PnPn** | **05 35 12.5** | **+4.2** |
| CN2 | | | | | *e*S | **Sn** | **05 37 33.1** | **+1.8** |
| CN2 | | | | | *es*S | S | 05 37 40.0 | -14 |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,50nm,1.4s | | | | | | | |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,190nm,4.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,4µm,14.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,4µm,14.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,4µm,16.0s | | | | | | | |
| **OKH** | **Okha** | **13.86** | **0** | *de*P | | **Pn** | **05 35 01.4** | **-2.4** |
| OKH | | | | | pmax | pmax | | |
| | comp=Z,300nm,12.0s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=Z,6µm,14.0s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=N,7µm,15.0s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=E,4µm,14.0s | | | | | | | |
| **SUJ** | **Sinuiju** | **14.09** | **278** | P | | **Pn** | **05 35 08.6** | **+1.5** |
| SUJ | | | | | pP | **P** | **05 35 12.9** | **-1.8** |
| SUJ | | | | | S | **Sn** | **05 37 47.2** | **+4.1** |
| SUJ | | | | | AMS | AMS | | |
| | comp=N,587nm,13.7s | | | | | | | |
| SUJ | | | | | AMS | AMS | | |
| | comp=E,64nm,1.5s | | | | | | | |
| SUJ | | | | | AMS | AMS | | |
| | comp=Z,78nm,1.8s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **14.41** | **36** | *e*P | | **Pn** | **05 35 07.9** | **-3.5** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,280nm,0.4s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,4µm,15.0s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,4µm,15.0s | | | | | | | |
| **SNY** | **Shenyang** | **14.75** | **284** | ⇑ | P | **Pn** | **05 35 16.9** | **+0.8** |
| SNY | | | | | S | **Sn** | **05 38 04.3** | **+5.2** |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,470nm,7.0s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,4µm,12.4s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,6µm,15.9s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,8µm,14.1s | | | | | | | |
| **DL2** | **Dalian** | **16.44** | **274** | | P | **Pn** | **05 35 37.9** | **-0.2** |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,160nm,0.9s | | | | | | | |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,610nm,3.5s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,2µm,14.6s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,3µm,19.2s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **16.83** | **32** | ⇓ | *e*P | **P** | **05 35 44.0** | **-1.1** |
| **PEA0B** | **Petropavlovsk-** | **16.83** | **32** | Pn | | **Pn** | **05 35 40.9** | **-2.2** |
| **PETK** | **Petropavlovsk-** | **16.83** | **32** | Pn | | **P** | **05 35 44.2** | **-0.9** |
| | comp=Z,1.3nm,0.3s,baz=204,slow=11,SNR=12 | | | | | | | |
| PETK | | | | | LR | LR | 05 42 50.3 | |
| | comp=Z,1µm,19.4s,baz=224,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.83** | **32** | Pn | | **Pn** | **05 35 40.1** | **-3.0** |
| **PET** | **Petropavlovsk** | **17.17** | **34** | *e*P | | **P** | **05 35 49.5** | **+0.7** |
| PET | | | | | *e*S | **Sn** | **05 38 57.4** | **-0.3** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,700nm,6.9s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,2µm,5.0s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,372nm,1.1s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,4µm,16.0s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,4µm,18.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **17.17** | **34** | P | | **P** | **05 35 48.5** | **-0.3** |
| PET | | | | IAmb | | IAmb | 05 35 58.7 | |
| | comp=Z,574nm,1.4s | | | | | | | |
| **PET** | **Petropavlovsk** | **17.17** | **34** | P | | **P** | **05 35 49.9** | **+1.1** |
| | comp=Z,1µm,1.3s | | | | | | | |
| **ZEA** | **Zeya** | **17.59** | **328** | *e*P | | **Pn** | **05 35 50.3** | **-2.2** |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,300nm,2.2s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,290nm,0.7s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=E,4µm,14.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=Z,3µm,13.0s | | | | | | | |
| **JOW** | **Kunigami** | **17.66** | **228** | P | | **Pn** | **05 35 52.0** | **-1.5** |
| | comp=Z,4.1nm,0.3s,baz=64,slow=15,SNR=7.1 | | | | | | | |
| JOW | | | | | LR | LR | 05 43 51.4 | |
| | comp=Z,3µm,18.2s,baz=61,slow=41 | | | | | | | |
| **JOW** | **Kunigami** | **17.66** | **228** | P | | **Pn** | **05 35 52.2** | **-1.3** |
| **JOW** | **Kunigami** | **17.66** | **228** | P | | **P** | **05 35 56.1** | **+1.7** |
| **SSE** | **Sheshan** | **19.59** | **251** | P | | **P** | **05 36 15.9** | **+0.3** |
| SSE | | | | | S | **Sn** | **05 39 58.1** | **+1.6** |
| SSE | | | | | pmax | pmax | | |
| | comp=Z,89nm,0.8s | | | | | | | |
| SSE | | | | | pmax | pmax | | |
| | comp=Z,240nm,3.5s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=Z,1µm,15.5s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=Z,1µm,13.1s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.35** | **291** | ⇓ | *i*P | **P** | **05 36 21.7** | **-2.2** |
| XLT | | | | | pP | Pn | 05 36 27.0 | +1.0 |
| XLT | | | | | sP | sP | 05 36 30.0 | -0.5 |
| XLT | | | | | S | **S** | **05 40 06.3** | **-5.0** |
| XLT | | | | | sS | Sn | 05 40 12.1 | -2.6 |
| XLT | | | | | SS | | 05 40 31.7 | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,190nm,1.0s | | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,530nm,3.8s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,4µm,15.2s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,3µm,17.5s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,3µm,17.1s | | | | | | | |
| **BJI** | **Beijing** | **20.45** | **280** | P | | **P** | **05 36 22.5** | **-2.3** |
| BJI | | | | | sP | **sP** | **05 36 30.9** | **-0.6** |
| BJI | | | | | S | **S** | **05 40 03.1** | **-10** |
| BJI | | | | | pmax | pmax | | |
| | comp=Z,61nm,1.0s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=Z,4µm,16.3s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=Z,1µm,17.1s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=Z,4µm,15.9s | | | | | | | |
| **MA2** | **Magadan** | **20.52** | **12** | P | | **P** | **05 36 25.6** | **+0.1** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,168nm,0.9s | | | | | | | |
| MA2 | | | | | MLR | MLR | | |
| | comp=Z,3µm,19.0s | | | | | | | |
| **MA2** | **Magadan** | **20.52** | **12** | P | | **P** | **05 36 25.6** | **+0.1** |
| **MA2** | **Magadan** | **20.52** | **12** | P | | **P** | **05 36 26.4** | **+0.9** |
| **TIA** | **Tai'an** | **20.55** | **268** | ⇑ | P | **P** | **05 36 24.0** | **-2.0** |
| TIA | | | | | S | **S** | **05 40 06.8** | **-8.4** |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,230nm,1.1s | | | | | | | |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,520nm,3.5s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,3µm,12.4s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,4µm,11.5s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,6µm,15.7s | | | | | | | |
| **NJ2** | **Nanjing** | **20.84** | **256** | ⇓ | P | **P** | **05 36 26.6** | **-2.6** |
| NJ2 | | | | | pP | Pn | 05 36 30.6 | -1.1 |
| NJ2 | | | | | PP | **PnPn** | **05 36 49.2** | **+1.6** |
| NJ2 | | | | | S | Sn | 05 40 24.3 | -2.3 |
| NJ2 | | | | | sS | **sS** | **05 40 29.1** | **+0.8** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,120nm,1.0s | | | | | | | |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,800nm,3.6s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=Z,5µm,15.6s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=Z,3µm,11.4s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=Z,3µm,16.1s | | | | | | | |
| **HNS** | **HongShan** | **22.09** | **273** | ⇑ | P | **P** | **05 36 39.4** | **-3.1** |
| HNS | | | | | S | **S** | **05 40 44.6** | **-0.7** |
| HNS | | | | | pmax | pmax | | |
| | comp=Z,42nm,0.9s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,6µm,15.5s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,1µm,13.9s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,5µm,13.1s | | | | | | | |
| **TATO** | **Taipei** | **23.18** | **237** | P | | **P** | **05 36 52.9** | **-1.3** |
| **YHNB** | **Yeheng** | **23.46** | **237** | IAMs_20 | | IAMs_20 | 05 46 19.1 | |
| | comp=Z,3µm,19.0s | | | | | | | |
| **YHNB** | **Yeheng** | **23.46** | **237** | P | | **P** | **05 36 56.4** | **-0.7** |
| **CIT** | **Chita** | **23.65** | **311** | *e*P | | **P** | **05 36 55.4** | **-3.3** |
| CIT | | | | | *e* | | 05 37 36.5 | |
| CIT | | | | | *e*S | **S** | **05 41 06.1** | **-6.4** |
| CIT | | | | | pmax | pmax | | |
| | comp=Z,528nm,1.6s | | | | | | | |
| **NACB** | **Ninganchiao** | **23.67** | **236** | | IAMs_20 | IAMs_20 | 05 46 37.6 | |
| | comp=Z,3µm,20.0s | | | | | | | |
| **TIY** | **Taiyuan** | **23.76** | **275** | *e*P | | **P** | **05 36 59.0** | **-0.9** |
| TIY | | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,2µm,13.3s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,3µm,14.3s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,3µm,15.9s | | | | | | | |

**YAK Yakutsk 23.76 345** P **P** **05 36 58.5 -1.0**
comp=Z,154nm,0.7s,baz=350,slow=3.8,SNR=31
**YAK Yakutsk 23.76 345** ⇑*i*P **P** **05 36 57.2 -2.3**
YAK *e*PPP PPP 05 37 33.6
YAK *e* 05 40 39.3
YAK *e*S **S** **05 41 11.5 -2.4**
YAK *e*SS Sn 05 41 53.0 +17
YAK *e* 05 48 01.0
YAK pmax pmax
comp=Z,279nm,0.9s
YAK pmax pmax
comp=N,156nm,1.0s
YAK pmax pmax
comp=E,40nm,1.0s
YAK pmax pmax
comp=Z,191nm,1.3s
YAK pmax pmax
comp=N,213nm,1.5s
YAK pmax pmax
comp=E,205nm,1.3s
YAK smax smax
comp=N,997nm,2.0s
YAK smax smax
comp=E,621nm,2.2s
YAK MLR MLR
comp=Z,3µm,19.0s
YAK MLR MLR
comp=N,1µm,18.0s
YAK MLR MLR
comp=E,886nm,18.0s
**YAK Yakutsk 23.76 345** P **P** **05 36 58.4 -1.0**
**HHC Hu-ho-hao-te 23.83 283** ⇑P **P** **05 36 58.1 -2.5**
HHC sP pP 05 37 06.2 +0.8
HHC S **S** **05 41 08.1 -7.6**
HHC sS pS 05 41 21.7 +0.7
HHC pmax pmax
comp=E,43nm,1.1s
HHC pmax pmax
comp=E,340nm,4.4s
HHC LR LR
comp=E,1µm,15.3s
HHC LR LR
comp=E,5µm,15.6s
HHC LR LR
comp=E,7µm,15.4s
**SEY Seymchan 23.96 11** P **P** **05 37 01.1 -0.4**
comp=E,176nm,1.0s,baz=194,slow=7.1,SNR=111
SEY LR LR 05 47 46.3
comp=E,2µm,18.8s,baz=200,slow=40
**SEY Seymchan 23.96 11***de*P **P** **05 37 01.9 +0.4**
**SSLB Suanglung 24.36 236** P **P** **05 37 01.5 -4.0**
SSLB IAmb IAmb 05 37 07.7
comp=Z,118nm,0.7s
SSLB IAMs_20 IAMs_20 05 46 59.8
comp=Z,4µm,20.0s
**YULB Yu-li 24.42 235** IAmb IAmb 05 37 10.1
comp=Z,127nm,0.8s
YULB IAMs_20 IAMs_20 05 48 09.5
comp=Z,3µm,19.0s
**LYN LuoYang 24.69 268** ⇑*i*P **P** **05 37 05.0 -3.4**
LYN PP **PnPn** **05 37 41.8 +1.6**
LYN S **S** **05 41 27.3 -2.0**
LYN pmax pmax
comp=Z,40nm,0.6s
LYN pmax pmax
comp=Z,270nm,8.0s
LYN LR LR
comp=Z,6µm,16.7s
LYN LR LR
comp=Z,3µm,17.2s
LYN LR LR
comp=Z,5µm,12.7s
**TPUB Ta-pu 24.91 236** P **P** **05 37 08.1 -2.5**
TPUB IAmb IAmb 05 37 17.9
comp=Z,147nm,0.8s
**TPUB Ta-pu 24.91 236** P **P** **05 37 11.1 +0.6**
**WHN Wuhan 24.94 257** ⇑P **P** **05 37 09.2 -1.5**
WHN pP **pP** **05 37 14.3 -1.3**
WHN sP **sP** **05 37 16.4 -1.2**
WHN S **S** **05 41 29.9 -3.6**
WHN pmax pmax
comp=Z,520nm,0.9s
WHN LR LR
comp=Z,10µm,13.1s
WHN LR LR
comp=Z,10µm,16.8s
WHN LR LR
comp=Z,8µm,17.1s
**BTO Baotou 25.02 283** *e*P **P** **05 37 10.2 -1.3**
BTO S **S** **05 41 33.5 -1.4**
BTO LR LR
comp=Z,19µm,17.7s
BTO LR LR
comp=Z,17µm,16.2s
**SHEM Shemya Is, Ala 25.03 48** P P 05 37 21.6 +10
comp=Z,84nm,1.0s,baz=302,slow=9.0,SNR=3.5
SHEM LR LR 05 46 05.7
comp=Z,477nm,21.8s,baz=265,slow=34
**QZH Quanzhou 25.12 241** ⇓*i*P **P** **05 37 10.6 -1.7**
QZH S **S** **05 41 36.0 -0.3**
QZH pmax pmax
comp=Z,82nm,1.1s
QZH LR LR
comp=Z,3µm,18.0s
QZH LR LR
comp=Z,1µm,15.2s
QZH LR LR
comp=Z,2µm,13.3s
**KNMB Chin-men Tao 25.58 241** P **P** **05 37 15.6 -0.9**
KNMB IAmb IAmb 05 37 17.2
comp=Z,194nm,0.9s
**BOD Bodaibo 25.95 324** ⇓*i*P **P** **05 37 19.4 -0.3**
BOD pmax pmax
comp=Z,274nm,0.9s
**GUMO Guam 26.07 176** LR LR 05 46 14.6
comp=Z,1µm,21.7s,baz=14,slow=33
**ULN Ulaanbaatar 26.90 300***ce*P **P** **05 37 28.9 +0.4**
ULN pmax pmax
comp=Z,92nm,1.3s
**ULN Ulaanbaatar 26.90 300** P **P** **05 37 27.9 -0.6**
**SONM Songino Array 27.34 299** P **P** **05 37 32.9 +0.5**
comp=Z,31nm,0.6s,baz=108,slow=8.2,SNR=161
SONM LR LR 05 48 51.0
comp=Z,4µm,18.6s,baz=91,slow=37
**SONM Songino Array 27.34 299** P **P** **05 37 31.5 -0.9**
**XAN Xi'an 27.61 269** P **P** **05 37 33.8 -1.1**
XAN pP pP 05 37 38.6 -1.2
XAN sP sP 05 37 41.1 -0.6
XAN PP PP 05 38 25.4 -12
XAN S **S** **05 42 15.0 -0.7**
XAN sS pS 05 42 22.4 +1.0
XAN SS **SnSn** **05 43 34.6 +7.6**
XAN pmax pmax
comp=Z,37nm,0.7s
XAN pmax pmax
comp=Z,490nm,5.0s
XAN LR LR
comp=Z,3µm,14.8s
XAN LR LR
comp=Z,4µm,15.3s
XAN LR LR
comp=Z,4µm,15.5s
**H11N2 WAKE ISLAND Hy 28.70 127** T T 06 08 23.9
baz=318,slow=75
**H11N1 WAKE ISLAND Hy 28.71 127** T T 06 08 24.6
baz=318,slow=75
**H11N3 WAKE ISLAND Hy 28.72 127** T T 06 08 24.3
baz=318,slow=75
**ENH Enshi 28.76 261** IAMs_20 IAMs_20 05 49 42.2
comp=Z,2µm,21.0s
**IRK Irkutsk 29.23 308** *e*P **P** **05 37 49.4 +0.3**
IRK pmax pmax
comp=Z,82nm,0.5s
**H11S1 WAKE ISLAND Hy 29.51 129** T T 06 09 20.7
baz=318,slow=75,SNR=1180
**H11S3 WAKE ISLAND Hy 29.51 129** T T 06 09 31.4
baz=318,slow=75,SNR=1310
**H11S2 WAKE ISLAND Hy 29.53 129** T T 06 09 30.4
baz=318,slow=75,SNR=721
**ZAK Zakamensk 29.59 304** *e*P **P** **05 37 52.6 +0.2**
ZAK pmax pmax
comp=Z,153nm,1.4s
**HKPS Hong Kong Po S 29.93 243** IAMs_20 IAMs_20 05 50 44.4
comp=Z,2µm,19.0s
**GULI GuiLin 30.73 252** ⇓P **P** **05 38 01.7 -0.9**
**LZH Lanzhou 30.82 276** ⇑P **P** **05 38 02.9 -0.6**
LZH pP pP 05 38 07.3 -1.2
LZH sP sP 05 38 10.3 -0.1
LZH pmax pmax
comp=Z,76nm,1.2s
LZH pmax pmax
comp=Z,660nm,4.9s
LZH LR LR
comp=Z,2µm,10.8s
LZH LR LR
comp=Z,4µm,13.6s
LZH LR LR
comp=Z,4µm,14.9s
**BILL Bilibino 31.16 17***d i*P **P** **05 38 05.9 0.0**
BILL *i* *PP **sP** **05 38 11.7 -1.1**
BILL 05 39 12.0
BILL PPP PPP 05 39 21.0
BILL 05 41 02.0
BILL *e*S **S** **05 43 10.8 +0.1**
BILL SS **SnSn** **05 44 50.0 -2.6**
BILL pmax pmax
comp=Z,96nm,1.7s
BILL MLR MLR
comp=Z,923nm,16.0s
**BILL Bilibino 31.16 17** P **P** **05 38 05.6 -0.3**
BILL IAmb IAmb 05 38 33.5
comp=Z,69nm,1.0s
**MOY Mondy 31.16 307** *e*P **P** **05 38 06.2 -0.1**
MOY pmax pmax
comp=Z,100nm,2.1s
**ATKA Atka Island 31.91 53** P **P** **05 38 13.4 +0.7**
**TIXI Tiksi 32.80 352** LR LR 05 53 41.0
comp=Z,2µm,18.6s,baz=181,slow=40
**TIXI Tiksi 32.80 352**⇓*e*P **P** **05 38 20.0 -0.2**
TIXI pmax pmax
comp=Z,38nm,1.7s
TIXI MLR MLR
comp=Z,2µm,18.0s
**TIXI Tiksi 32.80 352** P **P** **05 38 19.2 -1.0**
TIXI IAmb IAmb 05 38 32.4
comp=Z,114nm,1.5s
TIXI IAMs_20 IAMs_20 05 53 29.7
comp=Z,2µm,18.0s
**GYA Guiyang 32.83 257**⇓*i*P **P** **05 38 20.5 -0.7**
GYA pP sP 05 38 27.5 -0.6
GYA PcP **PcP** **05 41 06.5 +0.6**
GYA S **S** **05 43 35.8 -2.1**
GYA sS sS 05 43 48.4 +2.3
GYA pmax pmax
comp=Z,480nm,1.0s
GYA pmax pmax
comp=Z,860nm,3.5s
GYA LR LR
comp=Z,2µm,14.8s
GYA LR LR
comp=Z,2µm,14.7s
GYA LR LR
comp=Z,2µm,15.9s
**CD2 Chengdu 32.86 267** P **P** **05 38 20.3 -1.1**
CD2 S **S** **05 43 38.0 -0.2**
CD2 pmax pmax
comp=Z,100nm,0.6s
CD2 pmax pmax
comp=Z,330nm,5.0s
CD2 LR LR
comp=Z,480nm,13.1s
CD2 LR LR
comp=Z,3µm,13.9s
CD2 LR LR
comp=Z,3µm,13.9s
**GTA Gaotai 32.94 284** ⇑P **P** **05 38 21.9 -0.1**
GTA pP pP 05 38 27.2 +0.2
GTA sP sP 05 38 30.3 +1.3
GTA PcP **PcP** **05 41 07.2 +1.2**
GTA S **S** **05 43 37.7 -1.7**
GTA PcS **PcS** **05 44 51.9 +0.4**
GTA pmax pmax
comp=Z,52nm,0.9s
GTA pmax pmax
comp=Z,230nm,5.3s
GTA LR LR
comp=Z,3µm,18.9s
GTA LR LR
comp=Z,4µm,17.1s
GTA LR LR
comp=Z,5µm,17.1s
**SPIA Saint Paul Isl 34.85 44** P **P** **05 38 37.7 -0.6**
baz=260
**QIZ Qiongzhong 35.08 244** P **P** **05 38 41.1 +0.5**
QIZ LR LR
comp=Z,2µm,13.6s
QIZ LR LR
comp=Z,2µm,13.9s
QIZ LR LR
comp=Z,2µm,13.5s
**QIZ Qiongzhong 35.08 244** IAMs_20 IAMs_20 05 53 42.9
comp=Z,2µm,18.0s
**NIKH Nikolski High 35.21 52** P **P** **05 38 40.1 -1.3**
baz=268
**GAMB Gambell 35.87 33** P **P** **05 38 45.9 -1.0**
baz=250
**DAV Davao City (W) 36.00 210** LR LR 05 53 29.3
comp=Z,2µm,19.8s,baz=50,slow=36
**KMI Kunming 36.52 259** ⇓P **P** **05 38 52.8 -0.5**
KMI sP sP 05 39 02.2 +2.0
KMI S **S** **05 44 35.1 +0.1**
KMI pmax pmax
comp=Z,300nm,1.1s
KMI pmax pmax
comp=Z,740nm,3.5s
KMI LR LR
comp=Z,2µm,13.7s
KMI LR LR
comp=Z,3µm,15.5s
KMI LR LR
comp=Z,3µm,15.5s
**PZH PanZhiHua 36.54 262** ⇓P **P** **05 38 52.6 -0.7**
PZH pP **pP** **05 38 54.1 -4.2**
PZH sP **sP** **05 39 03.5 +3.3**
PZH S **S** **05 44 34.3 -0.8**
PZH PcS **PcS** **05 45 05.3 +0.5**
PZH pmax pmax
comp=Z,140nm,0.8s
PZH pmax pmax
comp=Z,240nm,5.6s
PZH LR LR
comp=Z,6µm,16.1s
PZH LR LR
comp=Z,4µm,15.5s
PZH LR LR
comp=Z,5µm,16.3s
**GOMU GeErMu 37.68 280** P **P** **05 39 02.8 -0.3**
GOMU pP pP 05 39 07.6 -0.6
GOMU PcP **PcP** **05 41 21.0 +0.7**
GOMU S **S** **05 44 54.6 +1.9**
GOMU pmax pmax
comp=Z,190nm,0.9s
GOMU LR LR
comp=Z,1µm,14.0s
GOMU LR LR
comp=Z,870nm,14.4s
GOMU LR LR
comp=Z,1µm,15.2s
**SLVN Son La 37.85 253** P **P** **05 39 04.5 +0.1**
SLVN IAmb IAmb 05 39 05.6
comp=Z,72nm,0.9s
SLVN IAMs_20 IAMs_20 05 56 29.2
comp=Z,2µm,21.0s
**TNA Tin City 37.99 31** P **P** **05 39 06.1 +1.2**
TNA IAmb IAmb 05 39 22.0
comp=Z,86nm,1.0s
**TNA Tin City 37.99 31** P **P** **05 39 05.7 +0.7**
baz=252,SNR=41
**ANM Nome 38.75 33** P **P** **05 39 12.8 +1.4**
baz=255
**DGZ Jazzator, Alta 39.80 303***d i*P **P** **05 39 21.6 +1.1**
DGZ pmax pmax
comp=Z,86nm,1.1s
**RDOG Red Dog Mine 40.63 28** IAMs_20 IAMs_20 05 56 38.8
comp=Z,1µm,21.0s
**RDOG Red Dog Mine 40.63 28** P **P** **05 39 27.8 +0.8**
baz=254
**LKP Lekhapani 40.65 267** *e*P **P** **05 39 28.6 +1.0**
**UBPT Khong Chiam 40.68 244** IAmb IAmb 05 39 29.5
comp=Z,130nm,1.2s
**CHNA Chernabura Isl 40.69 49** P **P** **05 39 26.6 -1.0**
baz=273
**WMQ Urumqi 40.70 294** *e*P **P** **05 39 29.1 +1.2**
WMQ pP sP 05 39 35.6 +0.7
WMQ S **S** **05 45 37.2 -0.2**
WMQ sS sS 05 45 46.0 +0.3
WMQ SS **SS** **05 48 36.2 -1.6**
WMQ pmax pmax
comp=Z,220nm,0.9s
WMQ pmax pmax
comp=Z,530nm,6.7s
WMQ LR LR
comp=Z,2µm,12.1s
WMQ LR LR
comp=Z,1µm,10.9s
WMQ LR LR
comp=Z,670nm,20.3s
**MYLDM Lahad Datu 40.78 219** IAMs_20 IAMs_20 05 54 54.3
comp=Z,1µm,20.0s
**ZAA0 Zalesovo Array 41.00 310** P **P** **05 39 29.9 -0.2**
ZAA0 IAmb IAmb 05 39 39.0
comp=Z,77nm,0.7s
**ZALV Zalesovo Beam 41.00 310** P **P** **05 39 30.5 +0.3**
comp=Z,35nm,0.5s,baz=89,slow=8.0,SNR=138
ZALV PcP **PcP** **05 41 30.4 +0.4**
comp=Z,19nm,0.8s,baz=93,slow=3.9,SNR=3.6
ZALV LR LR 05 56 39.7
comp=Z,549nm,19.1s,baz=82,slow=36
**ZALV Zalesovo Beam 41.00 310** P **P** **05 39 30.3 +0.1**
**DLV T Lat 41.05 237** IAmb IAmb 05 39 33.0
comp=Z,139nm,1.0s
DLV IAMs_20 IAMs_20 05 56 58.9
comp=Z,975nm,19.0s
**DLV T Lat 41.05 237** P **P** **05 39 32.5 +1.3**
**KKM Kota Kinabalu 41.19 223** P **P** **05 39 31.9 -0.4**
KKM IAmb IAmb 05 39 34.3
comp=Z,141nm,1.1s
KKM IAMs_20 IAMs_20 05 58 26.2
comp=Z,1µm,20.0s
**KKM Kota Kinabalu 41.19 223** P **P** **05 39 33.2 +0.9**
**TNTI Ternate 41.24 204** P **P** **05 39 34.6 +2.1**
**NRIK Noril'sk 41.34 334** P **P** **05 39 33.1 +0.2**
comp=Z,43nm,0.8s,baz=108,slow=12,SNR=26
NRIK LR LR 05 57 12.8
comp=Z,1µm,20.0s,baz=95,slow=37
**NRIK Noril'sk 41.34 334***de*P **P** **05 39 33.2 +0.4**
NRIK pmax pmax
comp=Z,135nm,1.0s
**NRIK Noril'sk 41.34 334** P **P** **05 39 32.9 +0.1**
NRIK IAmb IAmb 05 39 41.4
comp=Z,102nm,0.9s
**SWI Sorong 41.74 198** P **P** **05 39 36.6 0.0**
comp=Z,56nm,0.9s
**SIJI Sorong 41.74 198** P **P** **05 39 36.5 -0.1**
comp=Z,47nm,0.8s,baz=11,slow=9.8,SNR=15
SIJI LR LR 05 54 03.6
comp=Z,1µm,21.6s,baz=22,slow=32
**ZSN Zaisan 41.84 300** *e*P **P** **05 39 36.1 -1.2**
ZSN *e*S **S** **05 45 52.9 -1.3**
**ZSN Zaisan 41.84 300** *e*P **P** **05 39 36.1 -1.2**
baz=300
ZSN *e*S **S** **05 45 53.0 -1.3**
baz=300
**JAY Jayapura 42.05 183** P **P** **05 39 39.0 -0.2**
comp=Z,44nm,1.0s,baz=354,slow=5.1,SNR=8.4
JAY LR LR 05 58 32.8
comp=Z,388nm,19.4s,baz=10.0,slow=38
**GCSA Galena City Sc 42.37 34** P **P** **05 39 41.9 +0.7**
baz=264,SNR=6.4
**ITAN ITANAGAR 42.38 268** *e*P **P** **05 39 42.5 +0.7**
ITAN IAmb IAmb 05 39 44.1
comp=Z,383nm,0.8s
**KMSI Cibinong 42.57 209** P **P** **05 39 44.3 +0.9**
comp=Z,191nm,0.7s
**TTA Tatalina 42.60 36** P **P** **05 39 43.7 +0.4**
TTA pmax pmax
comp=Z,38nm,1.0s
**TTA Tatalina 42.60 36** P **P** **05 39 43.7 +0.4**
**TTA Tatalina 42.60 36** P **P** **05 39 44.3 +1.0**
baz=266,SNR=7.6
**KOHI KOHIMA 42.81 266** *e*P **P** **05 39 45.2 -0.3**
KOHI IAmb IAmb 05 39 47.2
comp=Z,384nm,0.4s
**GTOI Gorontalo 42.88 210** P **P** **05 39 45.1 -0.8**
comp=Z,890nmcomp=Z,44nm,0.9s
**P18K Big Mountain, 42.92 42** P **P** **05 39 46.0 +0.2**
P18K IAmb IAmb 05 39 55.8
comp=Z,250nm,2.0s
**P18K Big Mountain, 42.92 42** P **P** **05 39 46.4 +0.6**
baz=271
**CHTO Chiang Mai 43.06 254** P **P** **05 39 47.3 -0.2**
CHTO pmax pmax
comp=Z,80nm,0.9s
CHTO MLR MLR
comp=Z,900nm,18.0s
**CHTO Chiang Mai 43.06 254** P **P** **05 39 47.3 -0.2**
CHTO IAmb IAmb 05 39 48.7
comp=Z,80nm,0.9s
**CHTO Chiang Mai 43.06 254** IAMs_20 IAMs_20 05 59 23.3
comp=Z,943nm,18.0s
**CHTO Chiang Mai 43.06 254** P **P** **05 39 48.0 +0.5**
**L19K White Mountain 43.11 37** P **P** **05 39 48.7 +1.3**
**L19K White Mountain 43.11 37** P **P** **05 39 48.6 +1.3**
baz=268,SNR=13
**N19K Bonanza Creek 43.27 39** P **P** **05 39 49.7 +0.9**
baz=270
**CM31 Chiang Mai Arr 43.29 254** P **P** **05 39 49.0 -0.3**
**CMAR Chiang Mai Arr 43.29 254** P **P** **05 39 49.5 +0.3**
comp=Z,25nm,0.8s,baz=45,slow=6.5,SNR=146
CMAR PcP **PcP** **05 41 39.0 +0.9**
comp=Z,8.5nm,0.9s,baz=354,slow=3.1,SNR=5.2
CMAR LR LR 05 58 34.9
comp=Z,542nm,20.8s,baz=35,slow=37
**CMAR Chiang Mai Arr 43.29 254** P **P** **05 39 49.2 0.0**
**M19K Big River Lodg 43.32 38** P **P** **05 39 50.4 +1.4**
baz=269
**TOLI2 Tolitoli 43.35 213** P **P** **05 39 48.5 -1.2**
**TOLI2 Tolitoli 43.35 213** P **P** **05 39 49.3 -0.4**
comp=Z,72nm,1.8s
**IMP Imphal 43.40 265** *e*P **P** **05 39 50.6 +0.4**
IMP IAmb IAmb 05 39 51.6
comp=Z,75nm,1.0s
**K20K Telida 43.51 36** P **P** **05 39 52.2 +1.6**
baz=268
**J20K Nowinta River 43.51 35** P **P** **05 39 51.6 +1.1**
baz=267,SNR=25
**FAKI Fak Fak 43.51 195** P **P** **05 39 50.6 -0.4**
comp=Z,1µmcomp=Z,76nm,0.8s
**FAKI Fak Fak 43.51 195** P **P** **05 39 49.1 -1.9**
FAKI IAMs_20 IAMs_20 05 54 38.4
comp=Z,2µm,20.0s
**FAKI Fak Fak 43.51 195** P **P** **05 39 51.3 +0.3**
**L20K Farewell, AK 43.57 37** P **P** **05 39 52.3 +1.3**
baz=269
**A21K Barrow 43.57 24** IAmb IAmb 05 40 06.0
comp=Z,220nm,1.2s
A21K IAMs_20 IAMs_20 05 58 17.7
comp=Z,1µm,21.0s
**A21K Barrow 43.57 24** P **P** **05 39 51.6 +0.7**
baz=257
**MK31 Makanchi Array 43.70 300** P **P** **05 39 51.9 -0.5**
MK31 pmax pmax
comp=Z,46nm,0.7s
**MK31 Makanchi Array 43.70 300** P **P** **05 39 51.9 -0.5**
**MKAR Makanchi Array 43.70 300** P **P** **05 39 52.7 +0.3**
comp=Z,42nm,0.6s,baz=84,slow=9.6,SNR=385
MKAR S **S** **05 46 21.7 +0.1**
comp=Z,6.9nm,1.1s,baz=81,slow=22,SNR=5.8
MKAR LR LR 05 58 57.4
comp=Z,2µm,18.2s,baz=76,slow=37
**Q19K Cape Douglas, 43.75 42** P **P** **05 39 53.2 +0.7**
baz=273
**MAKZ Makanchi 43.91 300** P **P** **05 39 53.6 -0.4**
**MAKZ Makanchi 43.91 300** P **P** **05 39 53.2 -0.8**
MAKZ IAmb IAmb 05 40 11.0
comp=Z,76nm,0.9s
**OHAK Old Harbor 44.06 45** P **P** **05 39 54.6 -0.4**
OHAK IAmb IAmb 05 40 22.8
comp=Z,225nm,1.8s
**OHAK Old Harbor 44.06 45** P **P** **05 39 54.4 -0.5**
baz=275
**H21K Melozitna Rive 44.16 32** P **P** **05 39 57.0 +1.3**
baz=267
**CHUM Lake Minchumin 44.30 35** P **P** **05 39 58.5 +1.6**
baz=269
**SANI Sanana 44.33 204** P **P** **05 39 56.6 -1.0**
comp=Z,2µmcomp=Z,196nm,0.9s
**SANI Sanana 44.33 204** P **P** **05 39 57.6 0.0**

PPLA **Purkeypile** 44.35 36 P P 05 39 58.0 +0.5
baz=270,SNR=12
KDAK **Kodiak Island** 44.39 44 LR LR 05 57 46.9
comp=Z,831nm,21.2s,baz=266,slow=35
KDAK **Kodiak Island** 44.39 44 P P 05 39 56.9 -0.7
KDAK pmax pmax
comp=Z,83nm,1.1s
KDAK **Kodiak Island** 44.39 44 P P 05 39 56.9 -0.7
KDAK IAmb IAmb 05 39 59.5
comp=Z,83nm,1.1s
KDAK **Kodiak Island** 44.39 44 P P 05 39 57.5 -0.1
baz=275
CAST **Castle Rocks** 44.40 36 P P 05 39 58.8 +1.0
baz=270,SNR=22
MPSI **Mapaga** 44.42 214 P P 05 39 58.6 +0.3
comp=Z,85nm,0.8s
GUWA **GUWAHATI** 44.42 268 *e*P P 05 39 58.0 -0.3
GUWA IAmb IAmb 05 39 59.5
comp=Z,106nm,0.9s
I21K **Tanana** 44.48 33 IAmb IAmb 05 40 23.4
comp=Z,100nm,1.4s
I21K **Tanana** 44.48 33 P P 05 39 59.7 +1.4
baz=268
SHL **Shillong** 44.60 267 *e*P P 05 39 59.2 -0.7
SHL IAmb IAmb 05 40 01.8
comp=Z,47nm,1.0s
SHL **Shillong** 44.60 267 IAmb IAmb 05 40 28.9
comp=Z,57nm,0.9s
APSI **Ampana** 44.83 211 P P 05 40 01.4 -0.2
comp=Z,2µmcomp=Z,124nm,1.4s
BPAW **Bear Paw Mtn.** 44.89 35 P P 05 40 02.8 +1.2
baz=270,SNR=8.3
KTH **Kantishna Hill** 44.92 35 IAmb IAmb 05 40 17.6
comp=Z,111nm,1.0s
MLY **Manley** 45.01 33 P P 05 40 03.9 +1.4
baz=269
SUA **Susitna One** 45.07 38 P P 05 40 04.0 +0.9
baz=273
BRSE **Bradley Lake S** 45.18 41 P P 05 40 04.7 +0.7
baz=274
TRF **Thorofare Moun** 45.21 36 P P 05 40 04.9 +0.6
baz=271,SNR=9.5
KURK **Kurchatov** 45.22 306 P P 05 40 04.9 +0.6
KURK **Kurchatov** 45.22 306 P P 05 40 03.7 -0.6
CUT **Chulitna** 45.25 37 IAmb IAmb 05 40 37.2
comp=Z,117nm,1.3s
CUT **Chulitna** 45.25 37 P P 05 40 04.6 +0.2
baz=272
COLD **Coldfoot** 45.29 30 P P 05 40 04.3 -0.4
baz=267,SNR=21
KURBB **Kurchatov Arra** 45.29 306 P P 05 40 04.9 0.0
baz=80,slow=8.7
KURBB S S 05 46 45.0 +0.6
comp=Z,5.0nm,0.9s,baz=88,slow=16,SNR=5.7
KURBB **Kurchatov Arra** 45.29 306 P P 05 40 04.6 -0.3
M22K **Willow** 45.35 38 IAmb IAmb 05 40 46.9
comp=Z,54nm,1.0s
M22K **Willow** 45.35 38 P P 05 40 05.1 -0.1
baz=273
RC01 **Rabbit Creek A** 45.58 39 IAmb IAmb 05 40 15.8
comp=Z,50nm,0.8s
RC01 **Rabbit Creek A** 45.58 39 P P 05 40 07.3 +0.3
baz=274,SNR=9.9
BNDI **Bandanaira** 45.59 198 P P 05 40 09.9 +2.3
I23K **Minto, Yukon-K** 45.59 33 IAmb IAmb 05 40 19.9
comp=Z,60nm,1.1s
I23K **Minto, Yukon-K** 45.59 33 P P 05 40 07.1 0.0
baz=270,SNR=22
TOLK **Toolik Lake Re** 45.59 28 IAmb IAmb 05 40 24.9
comp=Z,85nm,1.2s
TOLK **Toolik Lake Re** 45.59 28 P P 05 40 08.0 +0.8
baz=267,SNR=34
O22K **Cooper Landing** 45.63 40 P P 05 40 07.1 -0.4
baz=274
NEA2 **Nenana** 45.72 34 IAmb IAmb 05 40 21.4
comp=Z,68nm,1.0s
NEA2 **Nenana** 45.72 34 P P 05 40 08.3 +0.2
baz=271,SNR=14
SEW **Seward** 45.80 40 P P 05 40 08.4 -0.4
baz=275
MCK **McKinley** 45.81 35 IAmb IAmb 05 40 23.2
comp=Z,86nm,1.3s
MCK **McKinley** 45.81 35 P P 05 40 09.2 +0.3
baz=272,SNR=18
DHUB **DHUBRI** 45.82 269 *e*P P 05 40 08.5 -0.9
PMR **Palmer** 45.83 38 P P 05 40 09.4 +0.4
PMR pmax pmax
comp=Z,45nm,1.0s
PMR **Palmer** 45.83 38 P P 05 40 09.4 +0.4
PMR **Palmer** 45.83 38 P P 05 40 09.0 0.0
baz=274,SNR=8.5
RND **Reindeer** 45.86 36 IAmb IAmb 05 40 23.3
comp=Z,56nm,1.0s
GHO **Glory Hole Cre** 45.92 38 IAmb IAmb 05 40 36.5
comp=Z,85nm,1.0s
GHO IAMs_20 IAMs_20 05 59 17.5
comp=Z,988nm,21.0s
MDM **Murphy Dome** 46.07 33 IAmb IAmb 05 40 24.1
comp=Z,58nm,1.0s
SML **Sawmill** 46.20 38 P P 05 40 12.4 +0.3
baz=274,SNR=5.7
H24K **Noodor Dome** 46.20 32 IAmb IAmb 05 40 39.8
comp=Z,44nm,0.9s
H24K **Noodor Dome** 46.20 32 P P 05 40 12.9 +0.9
baz=271
TCOL **CIGO, UAF Yank** 46.23 34 IAmb IAmb 05 40 27.6
comp=Z,56nm,0.9s
TCOL **CIGO, UAF Yank** 46.23 34 P P 05 40 13.3 +1.1
baz=272
COLA **College** 46.24 34 *de*P P 05 40 13.5 +1.3
COLA pmax pmax
comp=Z,91nm,2.3s
COLA **College** 46.24 34 P P 05 40 12.7 +0.5
COLA IAmb IAmb 05 40 27.6
comp=Z,59nm,0.9s
COLA **College** 46.24 34 P P 05 40 13.1 +1.0
baz=272
CCB **Clear Creek Bu** 46.27 34 IAmb IAmb 05 40 23.5
comp=Z,78nm,1.5s
PWL **Port Wells** 46.28 39 IAmb IAmb 05 40 14.7
comp=Z,60nm,1.1s
PWL **Port Wells** 46.28 39 P P 05 40 13.3 +0.7
baz=275,SNR=7.0
SMKI **Samarinda** 46.32 217 P P 05 40 13.7 +0.3
comp=Z,281nm,1.0s
POKR **Poker Plat Res** 46.41 33 IAmb IAmb 05 40 17.1
comp=Z,84nm,0.9s
POKR **Poker Plat Res** 46.41 33 P P 05 40 15.2 +1.6
baz=272,SNR=22
PDGK **Podgornoye** 46.56 296 P P 05 40 14.2 -1.1
HDA **Harding Lake** 46.65 34 IAmb IAmb 05 40 24.2
comp=Z,36nm,0.8s
HDA **Harding Lake** 46.65 34 P P 05 40 16.0 +0.6
baz=273,SNR=20
IL31 46.65 34 IAmb IAmb 05 40 24.5
comp=Z,48nm,0.8s
ILAR **Eielson Array** 46.65 34 P P 05 40 16.3 +0.8
comp=Z,25nm,0.8s,baz=266,slow=6.0,SNR=141
ILAR LR LR 06 02 14.7
comp=Z,513nm,18.1s,baz=292,slow=39
SCM **Sheep Creek Mo** 46.67 38 P P 05 40 16.0 +0.3
baz=275,SNR=5.6
TDK **Taldyqorghan** 46.80 299 *e*P P 05 40 16.1 -0.8
TDK *e*S S 05 47 04.8 -1.5
TDK pmax pmax
comp=Z,78nm,0.9s
TDK **Taldyqorghan** 46.80 299 *e*P P 05 40 16.2 -0.8
comp=Z,78nm,0.9s,baz=298
TDK *e*S S 05 47 04.8 -1.5
baz=298
GLI **Glacier Island** 46.88 39 P P 05 40 17.6 +0.3
baz=276
UZB **Uzynbulak** 46.95 296 *e*P P 05 40 17.4 -0.8
UZB *e*S S 05 47 07.0 -1.7
UZB **Uzynbulak** 46.95 296 *e*P P 05 40 17.5 -0.8
baz=296
UZB *e*S S 05 47 07.0 -1.7
baz=296
M24K **Tolsona, Glenn** 47.18 37 IAmb IAmb 05 41 43.1
comp=Z,95nm,1.1s
M24K **Tolsona, Glenn** 47.18 37 P P 05 40 20.0 +0.2
baz=276
PRP **Porcupine Dome** 47.19 33 IAmb IAmb 05 40 39.2
comp=Z,46nm,0.8s
PRP **Porcupine Dome** 47.19 33 P P 05 40 20.9 +1.1
baz=273,SNR=9.5
J25K **Salcha River,** 47.31 34 P P 05 40 20.1 -0.6
baz=274,SNR=8.0
ZHN **Zhinishke** 47.34 296 *e*P P 05 40 20.0 -1.3
ZHN **Zhinishke** 47.34 296 *e*P P 05 40 20.1 -1.3
baz=296
KLU **Klutina** 47.37 38 IAmb IAmb 05 40 45.6
comp=Z,58nm,0.9s
KLU **Klutina** 47.37 38 P P 05 40 22.2 +1.0
baz=277,SNR=8.9
SATY **Saty** 47.40 296 *e*P P 05 40 21.4 -0.4
SATY **Saty** 47.40 296 *e*P P 05 40 21.4 -0.4
baz=296
PAX **Paxson** 47.42 36 P P 05 40 22.9 +1.3
baz=276,SNR=6.0
ARXS **Arharly** 47.43 298 *e*P P 05 40 22.1 +0.2
BMAR **Burnt Mountain** 47.46 30 P P 05 40 23.6 +1.7
EYAK **Cordova Ski Ar** 47.58 39 IAmb IAmb 05 40 35.6
comp=Z,62nm,1.0s
EYAK **Cordova Ski Ar** 47.58 39 P P 05 40 22.3 -0.4
baz=278
RIDG **Independent Ri** 47.62 35 IAmb IAmb 05 40 37.2
comp=Z,50nm,1.1s
RIDG **Independent Ri** 47.62 35 P P 05 40 23.5 +0.4
baz=276,SNR=5.4
HARP **HAARP** 47.62 37 P P 05 40 24.6 +1.5
baz=276,SNR=6.7
MTKI **Muara Teweh, K** 47.85 219 P P 05 40 26.0 +0.7
comp=Z,175nm,1.7s
JIRN **Jiri** 47.93 274 *e*P P 05 40 26.6 +0.2
comp=Z,128nm,0.5s
JIRN **Jiri** 47.93 274 *e*P S 05 47 21.1 -2.4
comp=Z,27nm,0.9s
SCRK **Sand Creek** 47.97 35 IAmb IAmb 05 40 34.9
comp=Z,48nm,0.8s
SCRK **Sand Creek** 47.97 35 P P 05 40 26.2 +0.3
baz=276,SNR=42
N25K **Chitina, Valde** 47.98 38 P P 05 40 26.2 +0.2
baz=278
GUN **Gumma** 48.05 274 *e*P P 05 40 27.5 +0.3
comp=Z,710nm,0.6s
GUN **Gumba** 48.05 274 *e*P P 05 40 27.6 +0.3
comp=Z,1µm,0.6s
GUN **Gumba** 48.05 274 *e*P S 05 47 24.1 -1.0
comp=Z,93nm,1.2s
BMRM **Bremner River** 48.07 39 IAmb IAmb 05 40 45.1
comp=Z,104nm,1.2s
BMRM **Bremner River** 48.07 39 P P 05 40 27.7 +1.1
baz=278,SNR=7.1
J26L **Joseph Creek** 48.10 34 P P 05 40 27.2 +0.3
baz=276
KSM **Kuching** 48.20 226 P P 05 40 29.1 +1.0
MENT **Mentasta** 48.22 36 IAmb IAmb 05 40 45.1
comp=Z,64nm,1.0s
TARG **Taragay, Kyrgy** 48.27 295 IAmb IAmb 05 40 35.9
comp=Z,57nm,0.7s
MDOK **Medeo** 48.30 297 *e*P P 05 40 28.0 -0.8
MDOK **Medeo** 48.30 297 *e*P P 05 40 28.1 -0.8
baz=296
SPSI **Sidrap Palu** 48.36 212 P P 05 40 27.6 -1.6
comp=Z,1µmcomp=Z,64nm,1.2s
L26K **Log Cabin Wild** 48.37 36 IAmb IAmb 05 40 39.1
comp=Z,57nm,0.8s
L26K **Log Cabin Wild** 48.37 36 P P 05 40 30.7 +1.7
baz=278,SNR=36
AAA **Alma-Ata** 48.38 297 *e*P P 05 40 29.2 -0.1
AAA **Alma-Ata** 48.38 297 *e*P P 05 40 29.2 -0.1
baz=297
GLB **Gilahina Butte** 48.38 38 P P 05 40 30.0 +1.0
TNSS **Tian-Shan** 48.42 297 *e*P P 05 40 29.5 -0.5
TNSS **Tian-Shan** 48.42 297 *e*P P 05 40 29.6 -0.5
baz=296
KUU **Kurty** 48.55 298 *e*P P 05 40 29.4 -1.1
KUU *e*S S 05 47 29.4 -1.8
KUU pmax pmax
comp=Z,66nm,0.8s
KUU **Kurty** 48.55 298 *e*P P 05 40 29.4 -1.1
comp=Z,66nm,0.8s,baz=298
KUU *e*S S 05 47 29.4 -1.8
baz=298
KDJ **Kajisay** 48.57 295 IAmb IAmb 05 40 39.8
comp=Z,41nm,0.8s
KKN **Kakani** 48.57 274 *e*P P 05 40 31.4 +0.3
comp=Z,514nm,0.6s
KKN **Kakani** 48.57 274 *e*P S 05 47 29.7 -2.5
PKI **Pulchoki** 48.58 274 *e*P P 05 40 31.0 -0.3
comp=Z,202nm,0.7s
PKI **Pulchoki** 48.58 274 *e*P S 05 47 30.1 -2.5
comp=Z,33nm,1.0s
PKIN **Phulchoki** 48.58 274 *e*P P 05 40 31.1 -0.2
comp=Z,156nm,0.6s
PKIN **Phulchoki** 48.58 274 *e*P S 05 47 29.8 -2.7
comp=Z,26nm,0.8s
VRDI **Verde Repeater** 48.59 38 IAmb IAmb 05 40 54.5
comp=Z,40nm,1.0s
BNSI **Bone** 48.62 211 P P 05 40 31.4 +0.1
comp=Z,1µmcomp=Z,132nm,1.1s
M26K **Nabesna, AK** 48.62 37 IAmb IAmb 05 40 43.8
comp=Z,57nm,1.1s
M26K **Nabesna, AK** 48.62 37 P P 05 40 32.4 +1.6
baz=278,SNR=21
BBSI **Bau Bau** 48.70 207 P P 05 40 31.3 -0.6
comp=Z,12nm,0.8s
STKI **Sintang** 48.74 224 P P 05 40 33.0 +0.8
DMN **Daman** 48.79 274 *e*P P 05 40 33.0 +0.1
comp=Z,253nm,0.9s
DMN **Daman** 48.79 274 *e*P S 05 47 32.8 -2.6
comp=Z,58nm,1.1s
GKN **Gorkha** 48.96 275 *e*P P 05 40 34.0 0.0
comp=Z,240nm,0.6s
L27K **Beaver Creek,** 49.05 36 IAmb IAmb 05 40 38.3
comp=Z,69nm,1.1s
L27K **Beaver Creek,** 49.05 36 P P 05 40 35.6 +1.5
baz=279
BRZS **Berezniki** 49.09 307 *e*P P 05 40 33.5 -1.0
BRZS pmax pmax
comp=Z,19nm,0.8s
BRZS **Berezniki** 49.09 307 *e*P P 05 40 33.5 -1.0
comp=Z,19nm,0.8s,baz=306
EGAK **Eagle** 49.10 33 IAmb IAmb 05 40 53.9
comp=Z,67nm,1.0s
EGAK **Eagle** 49.10 33 P P 05 40 34.6 +0.2
baz=278,SNR=20
M27K **Edge Creek, AK** 49.14 37 IAmb IAmb 05 41 08.3
comp=Z,49nm,0.9s
M27K **Edge Creek, AK** 49.14 37 P P 05 40 36.4 +1.5
baz=279
ISLE **Juniper Island** 49.23 39 IAmb IAmb 05 40 58.2
comp=Z,89nm,1.0s
BOOM **Boomskoye usch** 49.30 296 IAmb IAmb 05 40 47.5
comp=Z,94nm,0.9s
KBKI **Kotabaru** 49.31 216 P P 05 40 36.2 -0.4
comp=Z,59nm,0.9s
KAPI **Kappang** 49.32 211 P P 05 40 36.0 -0.6
comp=Z,25nm,0.7s,baz=31,slow=6.3,SNR=15
KAPI LR LR 06 00 38.6
comp=Z,254nm,21.8s,baz=50,slow=35
KAPI **Kappang** 49.32 211 P P 05 40 36.0 -0.6
KAPI pmax pmax
comp=Z,113nm,1.1s
KAPI **Kappang** 49.32 211 P P 05 40 36.0 -0.6
KAPI IAmb IAmb 05 40 38.2
comp=Z,113nm,1.1s
KAPI **Kappang** 49.32 211 P P 05 40 39.2 +2.6
TKM2 **Tokmak 2** 49.39 297 P P 05 40 38.0 +0.8
SNR=97
TKM2 **Tokmak 2** 49.39 297 P P 05 40 37.0 -0.2
BKSI **Bulukumba** 49.46 210 P P 05 40 37.2 -0.5
comp=Z,697nmcomp=Z,62nm,1.0s
DANN **Dangsing** 49.46 276 *e*P P 05 40 38.7 +0.7
comp=Z,1µm,0.7s
DANN **Dangsing** 49.46 276 *e*P S 05 47 43.9 -1.0
comp=Z,66nm,1.0s
BARN **Barnard Glacie** 49.47 38 IAmb IAmb 05 40 47.4
comp=Z,62nm,1.2s
MESA **MESA** 49.50 39 P P 05 40 38.8 +1.0
baz=281
YAH **Yahtse** 49.56 39 IAmb IAmb 05 40 48.2
comp=Z,60nm,0.9s
BVCY **Beaver Creek** 49.60 36 P P 05 40 39.1 +0.8
baz=280,SNR=7.5
BRVK **Borovoye** 49.69 311 *d i*P P 05 40 39.1 0.0
BRVK pmax pmax
comp=Z,37nm,0.9s
BRVK **Borovoye** 49.69 311 P P 05 40 38.6 -0.5
BRVK IAmb IAmb 05 40 48.8
comp=Z,68nm,0.8s
BTLS **Baital** 49.72 300 *e*P P 05 40 38.5 -0.9
BTLS **Baital** 49.72 300 *e*P P 05 40 38.6 -0.9
baz=300
OTUK **Ortayu** 49.81 304 P P 05 40 39.2 -0.9
SGDS **Sogindy** 49.87 298 *e*P P 05 40 39.5 -1.2
SGDS pmax pmax
comp=Z,20nm,1.0s
SGDS **Sogindy** 49.87 298 *e*P P 05 40 39.5 -1.2
comp=Z,20nm,1.0s,baz=298
KOLN **Koldanda** 49.87 275 *e*P P 05 40 41.2 +0.1
comp=Z,596nm,1.2s
KOLN **Koldanda** 49.87 275 *e*P S 05 47 48.6 -1.9
YUK3 **Moose Creek** 49.90 37 P P 05 40 42.0 +1.1
baz=281,SNR=10
KBK **Karagaybulak** 49.93 297 P P 05 40 41.8 +0.5
SNR=69
CHMS **Chumysh** 49.94 297 P P 05 40 41.6 +0.4
SNR=12
DAWY **Dawson** 49.97 34 P P 05 40 41.9 +0.8
baz=280
USP **Ospenovka** 50.02 298 P P 05 40 42.3 +0.5
SNR=22
BBKI **Banjar Baru** 50.07 218 P P 05 40 42.0 -0.4
comp=Z,5µmcomp=Z,124nm,1.4s
FRU1 **Bishkek** 50.09 297 IAmb IAmb 05 40 51.4
comp=Z,67nm,0.8s
BOK **Bokaro** 50.16 269 *e*P P 05 40 42.2 -0.8
BOK IAmb IAmb 05 40 45.2
comp=Z,71nm,1.1s
PYUN **Piuthan** 50.17 276 *e*P P 05 40 43.6 +0.2
comp=Z,640nm,1.1s
PYUN **Piuthan** 50.17 276 *e*P S 05 47 54.3 -0.4
comp=Z,36nm,1.0s
I29M **Ogilvie Camp,** 50.20 32 IAmb IAmb 05 40 52.7
comp=Z,56nm,0.8s
I29M **Ogilvie Camp,** 50.20 32 P P 05 40 43.9 +1.1
baz=280,SNR=28
AAK **Ala-Archa** 50.25 297 LR LR 06 03 03.4
comp=Z,2µm,18.3s,baz=69,slow=37
AAK **Ala-Archa** 50.25 297 P P 05 40 44.0 +0.3
SNR=16
AAK **Ala-Archa** 50.25 297 *d i*P P 05 40 43.6 -0.1
AAK pmax pmax
comp=Z,33nm,1.0s
AAK **Ala-Archa** 50.25 297 P P 05 40 42.9 -0.8
AAK IAmb IAmb 05 40 52.3
comp=Z,41nm,0.8s
AAK **Ala-Archa** 50.25 297 *i* P P 05 40 43.9 +0.2
SNR=7.3
KSH **Kashi** 50.38 293 P P 05 40 49.0 +4.3
KSH pP sP 05 40 55.1 +3.3
KSH sP pP 05 40 58.3 +8.5
KSH ScS ScS 05 50 37.1 +2.0
KSH pmax pmax
comp=Z,29nm,1.2s
KSH pmax pmax
comp=Z,460nm,4.0s
KSH LR LR
comp=Z,2µm,15.1s
KSH LR LR
comp=Z,2µm,15.1s
KSH LR LR
comp=Z,3µm,16.8s
UCH **Uchtor** 50.38 296 P P 05 40 46.2 +1.1
SNR=15
J29M **Klondike Camp** 50.40 34 P P 05 40 46.0 +1.6
baz=281
EPYK **Eagle Plains** 50.66 31 IAmb IAmb 05 40 56.6
comp=Z,119nm,1.1s
EPYK **Eagle Plains** 50.66 31 P P 05 40 47.3 +1.0
baz=280,SNR=39
EKS2 **Erkin-Say** 50.73 297 P P 05 40 47.7 +0.4
SNR=28
YUK4 **Talbot Arm** 50.84 38 P P 05 40 49.6 +1.6
baz=283
PNL **Peninsula** 50.86 40 P P 05 40 49.0 +1.0
baz=284
PBKI **Pangkalan Bun** 50.98 222 P P 05 40 48.9 -0.3
comp=Z,115nm,0.9s
AML **Almayashu** 50.98 297 P P 05 40 50.2 +0.6
SNR=48
AML **Almayashu** 50.98 297 *i* P P 05 40 50.0 +0.5
SNR=51
YUK6 **Outpost Mounta** 51.07 38 P P 05 40 51.5 +1.8
baz=283,SNR=5.6
DGPR **DIGLIPUR** 51.09 253 *e*P P 05 40 50.6 +0.5
DGPR IAmb IAmb 05 40 52.7
comp=Z,175nm,1.0s
KULM **Kulim** 51.13 239 IAmb IAmb 05 40 52.0
comp=Z,62nm,0.9s
KULM IAMs_20 IAMs_20 06 03 29.8
comp=Z,707nm,19.0s
HNR **Honiara** 51.40 158 LR LR 06 02 24.8
comp=Z,523nm,19.6s,baz=328,slow=36
HNR **Honiara** 51.40 158 IAMs_20 IAMs_20 06 02 04.0
comp=Z,854nm,18.0s
IPM **Ipoh** 51.49 238 IAmb IAmb 05 41 47.4
comp=Z,61nm,0.7s
IPM IAMs_20 IAMs_20 06 04 45.3
comp=Z,1µm,18.0s
IPM **Ipoh** 51.49 238 P P 05 40 53.2 +0.1
HYT **Haines Junctio** 51.50 38 P P 05 40 54.8 +2.0
baz=284,SNR=59
INK **Inuvik** 51.51 28 LR LR 06 04 28.1
comp=Z,774nm,21.1s,baz=274,slow=38
INK **Inuvik** 51.51 28 P P 05 40 53.7 +1.1
baz=282,SNR=34
MAYO **Mayo, Yukon** 51.58 34 P P 05 40 54.8 +1.6
baz=283,SNR=12
MMRI **Maumere** 51.74 206 P P 05 40 54.6 -0.3
comp=Z,208nm,1.3s
MMRI **Maumere** 51.74 206 P P 05 40 55.6 +0.7
SOEI **Soe** 52.13 203 P P 05 40 57.2 -0.8
comp=Z,2µmcomp=Z,167nm,1.0s
SOEI **Soe** 52.13 203 P P 05 40 58.6 +0.6
N31M **Braeburn, Yuko** 52.15 37 IAmb IAmb 05 41 10.6
comp=Z,70nm,0.9s
N31M **Braeburn, Yuko** 52.15 37 P P 05 40 58.8 +1.3
baz=285,SNR=30
DZA **Taraz** 52.32 298 *e*P P 05 40 58.3 -0.7
DZA *e*S S 05 48 22.0 -1.6
DZA pmax pmax
comp=Z,52nm,0.9s
DZA **Taraz** 52.32 298 *e*P P 05 40 58.3 -0.7
comp=Z,52nm,0.9s,baz=298
DZA *e*S S 05 48 22.1 -1.6
baz=298
M31M **Drury Creek, Y** 52.59 36 P P 05 41 02.3 +1.5
baz=285,SNR=17
BATI **Baumata** 52.75 204 P P 05 41 02.0 -0.4
comp=Z,52nm,0.9s,baz=340,slow=11,SNR=6.3
BATI LR LR 06 02 49.1
comp=Z,332nm,21.8s,baz=42,slow=35
WHY **Whitehorse** 52.79 38 IAmb IAmb 05 41 12.8
comp=Z,154nm,1.8s
WHY **Whitehorse** 52.79 38 P P 05 41 04.0 +1.6
baz=286,SNR=14
SKAG **Skagway** 52.92 39 P P 05 41 05.4 +2.2
baz=287,SNR=5.2
KDU **Kakadu** 53.00 193 P P 05 41 04.5 +0.3
FARO **Faro, Yukon** 53.05 36 P P 05 41 05.3 +1.1
baz=286,SNR=21
SMLA **Simla** 53.14 282 *e*P P 05 41 05.3 +0.1
SMLA IAmb IAmb 05 41 09.1
comp=Z,215nm,0.8s
TPI **Tanjungpandan** 53.17 226 P P 05 41 06.1 +0.6
DHRM **DHARAMSHALA** 53.26 284 *e*P P 05 41 06.0 -0.4
DHRM IAmb IAmb 05 41 18.4
comp=Z,166nm,0.9s
BRLS **Borolday** 53.27 299 *e*P P 05 41 07.0 +0.9
BRLS **Borolday** 53.27 299 *e*P P 05 41 07.0 +0.9
baz=299
DRK **Karamyk** 53.35 294 IAmb IAmb 05 41 13.5
comp=Z,55nm,0.7s
A36M **Sachs Harbour** 53.37 23 IAmb IAmb 05 41 27.3
comp=Z,94nm,0.8s
A36M **Sachs Harbour** 53.37 23 P P 05 41 08.2 +1.9
baz=286,SNR=52
MTN **Manton Dam** 53.40 194 IAmb IAmb 05 41 07.6
comp=Z,151nm,1.4s
MTN **Manton Dam** 53.40 194 P P 05 41 07.6 +0.5
BESE **Bessie Mountai** 53.41 40 IAmb IAmb 05 41 17.3
comp=Z,126nm,1.6s
IUG **Iuzhnay** 53.49 298 *e*P P 05 41 06.1 -1.7
IUG **Iuzhnay** 53.49 298 *e*P P 05 41 06.2 -1.7
baz=298
PPBI **Pangkal Pinang** 53.54 228 P P 05 41 09.1 +0.8
comp=Z,30µmcomp=Z,110nm,1.6s
JIS **Juneau Island** 53.74 41 IAmb IAmb 05 41 19.8

comp=Z,81nm,1.4s
**BTK Batken 53.80 295** IAmb IAmb 05 41 24.6
comp=Z,45nm,0.8s
**MMPY Sheldon Lake, 53.87 35** P **P** **05 41 12.1 +1.8**
baz=288,SNR=15
**P33M Teslin, Yukon 53.90 38** IAmb IAmb 05 41 21.1
comp=Z,112nm,1.4s
**P33M Teslin, Yukon 53.90 38** P **P** **05 41 11.9 +1.4**
baz=288,SNR=32
**SVE Sverdlovsk 53.91 318** *de*P **P** **05 41 11.9 +1.4**
SVE *e*S **S** **05 48 45.2 +0.3**
SVE pmax pmax
comp=Z,232nm,0.9s
SVE MLR MLR
comp=Z,4μm,15.0s
**SRBI Singaraja 53.99 215** P **P** **05 41 11.3 -0.2**
comp=Z,2μmcomp=Z,114nm,1.4s
**PSI Prapat 54.12 239** P **P** **05 41 12.9 +0.1**
comp=Z,38nm,0.8s,baz=20,slow=5.2,SNR=42
PSI LR LR 06 07 18.3
comp=Z,583nm,18.1s,baz=46,slow=39
**NDI New Delhi 54.30 280** *e*P **P** **05 41 14.5 +0.7**
**CHLP Challavanipeta 54.54 265** *e*P **P** **05 41 15.9 +0.4**
CHLP IVmB_BB 05 41 16.5
comp=Z,500nm,2.4s
**C36M Paulatuk 54.55 26** IAmb IAmb 05 41 23.9
comp=Z,44nm,0.8s
**C36M Paulatuk 54.55 26** P **P** **05 41 15.7 +0.8**
baz=289,SNR=32
**BKNI Bangkinang 54.64 235** IAMs_20 IAMs_20 06 07 20.7
comp=Z,745nm,18.0s
**BKNI Bangkinang 54.64 235** P **P** **05 41 17.2 +0.9**
comp=Z,266nm,1.3s
**NIL Nilore 54.87 287** P **P** **05 41 18.9 +0.9**
NIL pmax pmax
comp=Z,115nm,0.7s
**NIL Nilore 54.87 287** P **P** **05 41 18.9 +0.9**
**JBP Jabalpur 55.05 272** *e*P **P** **05 41 18.4 -0.8**
**ARU Arti 55.13 318** LR LR 06 07 16.3
comp=Z,1μm,19.4s,baz=64,slow=39
**ARU Arti 55.13 318** *d* *i*P **P** **05 41 19.6 +0.2**
ARU 05 42 18.5
ARU 05 43 23.5
ARU S **S** **05 49 02.8 +1.6**
ARU SS **SS** **05 52 42.5 -2.1**
ARU pmax pmax
comp=Z,170nm,1.4s
ARU MLR MLR
comp=Z,4μm,16.0s
**ARU Arti 55.13 318** P **P** **05 41 18.7 -0.7**
**MNSI Mandailing Nat 55.21 237** P **P** **05 41 19.3 -1.1**
comp=Z,35nm,0.8s
**CRAG Craig 55.35 44** P **P** **05 41 22.3 +1.4**
baz=291
**WRAK Wrangell Islan 55.41 42** P **P** **05 41 22.4 +1.0**
baz=291
**VIS Vishakhapatnam 55.56 265** *e*P **P** **05 41 22.8 -0.2**
VIS IAmb IAmb 05 41 26.9
comp=Z,31nm,0.8s
**DLBC Dease Lake 55.85 39** LR LR 06 06 45.7
comp=Z,167nm,20.7s,baz=314,slow=38
**UGM Wanagama 56.02 220** P **P** **05 41 25.0 -1.3**
comp=Z,255nm,1.3s
**UGM Wanagama 56.02 220** P **P** **05 41 26.2 -0.1**
comp=Z,256nm,1.3s
**GSI Gunungsitoli 56.13 239** P **P** **05 41 27.1 0.0**
comp=Z,3μmcomp=Z,234nm,1.2s
**GSI Gunungsitoli 56.13 239** P **P** **05 41 28.0 +0.9**
**LHSI Lahat 56.40 229** P **P** **05 41 29.7 +0.8**
comp=Z,3μmcomp=Z,205nm,1.2s
**KLSI 56.40 228** P **P** **05 41 28.8 -0.2**
comp=Z,1μmcomp=Z,87nm,1.1s
**KLI Kotabumi 56.47 227** P **P** **05 41 28.8 -0.6**
comp=Z,5μmcomp=Z,402nm,1.0s
**MDSI Maura Dua 56.55 228** P **P** **05 41 29.5 -0.5**
comp=Z,84nm,1.6s
**LEM Lembang 56.58 223** P **P** **05 41 29.8 -0.7**
comp=Z,172nm,0.9s,baz=69,slow=7.5,SNR=19
LEM LR LR 06 07 15.8
comp=Z,304nm,19.5s,baz=358,slow=38
**LEM Lembang 56.58 223** P **P** **05 41 30.0 -0.4**
comp=Z,1μmcomp=Z,128nm,1.1s
**MASI Maura Aman, Be 56.61 231** P **P** **05 41 30.9 +0.4**
comp=Z,154nm,1.1s
**KNRA Kununurra 56.63 196** P **P** **05 41 30.3 -0.2**
**CBJI Citeko 56.65 224** P **P** **05 41 30.8 +0.1**
**BLSI Bandar Lampung 56.66 227** P **P** **05 41 30.1 -0.7**
comp=Z,98nm,0.4s
**BHPL Bhopal 56.98 274** *e*P **P** **05 41 31.6 -1.5**
BHPL IAmb IAmb 05 41 33.8
comp=Z,80nm,1.0s
**WRGLY Wrigley 57.00 33** P **P** **05 41 34.2 +1.6**
baz=293,SNR=21
**LWLI Liwa 57.05 228** P **P** **05 41 32.4 -1.3**
comp=Z,111nm,0.6s
**AB31 Akbulak array 57.10 309** *i*P **P** **05 41 33.6 0.0**
**PVM Polavaram 57.14 266** *e*P **P** **05 41 34.5 +0.3**
PVM IVmB_BB 05 41 34.9
comp=Z,344nm,1.3s
**KASI Kota Agung 57.21 227** P **P** **05 41 32.5 -2.2**
comp=Z,70nm,1.1s
**KBL Kabul 57.53 290** P **P** **05 41 35.9 -1.2**
KBL pmax pmax
comp=Z,136nm,0.9s
**KBL Kabul 57.53 290** P **P** **05 41 35.9 -1.2**
**MTSU Mount Surprise 57.55 178** P **P** **05 41 36.9 -0.1**
**GRNB Grenville Isla 57.67 44** IAmb IAmb 05 41 47.7
comp=Z,110nm,1.6s
**AKTO Aktyubinsk 57.75 311** P **P** **05 41 38.3 +0.2**
comp=Z,39nm,0.9s
AKTO LR LR 06 07 47.7
comp=Z,1μm,18.4s,baz=62,slow=37
**SPA0 Spitsbergen Ar 58.13 349** *e*P **P** **05 41 41.2 +0.8**
**SPITS Spitsbergen Ar 58.13 349** LR LR 06 10 02.9
comp=Z,810nm,18.8s,baz=288,slow=40
**MYLAV Mylavaram 58.20 266** *e*P **P** **05 41 42.2 +0.5**
MYLAV IVmB_BB 05 41 42.8
comp=Z,635nm,1.0s
**KBS Kingsbay 58.23 350**⇑ *e*P **P** **05 41 42.5 +1.4**
KBS pmax pmax
comp=Z,27nm,1.0s
**KBS Kingsbay 58.23 350** *e*P **P** **05 41 42.4 +1.4**
**NOR Nord 58.47 357** *i*P **P** **05 41 42.4 -0.3**
NOR IAmb IAmb 05 41 52.5
comp=Z,16nm,0.8s
**SRSP Sriramsagar 58.69 269** *e*P **P** **05 41 44.9 -0.3**
SRSP IVmB_BB 05 41 45.6
comp=Z,399nm,1.0s
**KIRV Kirov 58.81 322** LR LR 06 12 13.5
comp=Z,990nm,19.1s,baz=1,9,slow=41
**KIRV Kirov 58.81 322** *c* *i*P **P** **05 41 46.2 +0.8**
**HSPB Hornsund (broa 59.08 348** *e*P **P** **05 41 48.7 +1.7**
**PRGR Permogore 59.15 327** *e*P **P** **05 41 48.0 +0.3**
PRGR *e**PP **sP** **05 41 55.2 +0.4**
PRGR *e* 05 44 00.4
PRGR *e*S **S** **05 49 52.2 -1.8**
PRGR pmax pmax
comp=Z,57nm,1.1s
**CUPL Choutuppal 59.20 267** *e*P **P** **05 41 48.5 -0.3**
CUPL IVmB_BB 05 41 48.9
comp=Z,559nm,0.9s
**ADKI Addanki 59.25 265** *e*P **P** **05 41 49.8 +0.8**
ADKI IVmB_BB 05 41 49.9
comp=Z,311nm,1.3s
**NJS Nagarjunasagar 59.34 266** *e*P **P** **05 41 49.2 -0.5**
NJS IVmB_BB 05 41 49.8
comp=Z,234nm,1.2s
**SANVU Saraoutou 59.38 152** P **P** **05 41 49.1 -0.7**
**SANVU Saraoutou 59.38 152** P **P** **05 41 50.4 +0.6**
**BBB Bella Bella 59.39 46** LR LR 06 12 23.0
comp=Z,104nm,18.1s,baz=298,slow=41
**HYBB Hyderabad (bro 59.41 268** *e*P **P** **05 41 49.6 -0.6**
HYBB IVmBBB 05 41 50.6
comp=Z,326nm,0.8s
**HYB Hyderabad 59.41 268** *e*P **P** **05 41 49.6 -0.6**
HYB IAmb IAmb 05 41 51.0
comp=Z,48nm,0.8s
**CTA Charters Tower 59.56 176** P **P** **05 41 50.0 -1.0**
comp=Z,10nm,0.8s,baz=344,slow=4.3,SNR=6.1
**CTA Charters Tower 59.56 176** P **P** **05 41 50.0 -1.0**
**CTA Charters Tower 59.56 176** P **P** **05 41 51.5 +0.5**
**CTAO Charters Tower 59.56 176** P **P** **05 41 51.5 +0.5**
**FITZ Fitzroy Crossi 59.70 199** P **P** **05 41 51.7 -0.2**
comp=Z,75nm,1.0s,baz=19,slow=8.3,SNR=58
**RES Resolute Bay 59.74 15** LR LR 06 08 58.9
comp=Z,266nm,20.7s,baz=310,slow=37
**RES Resolute Bay 59.74 15** IAmb IAmb 05 42 00.6
comp=Z,60nm,0.9s
**WRAB Tennant Creek 59.85 189** *i*P **P** **05 41 51.3 -1.7**
**WRAB Tennant Creek 59.85 189** P **P** **05 41 51.0 -2.0**
**WRAB Tennant Creek 59.85 189** P **P** **05 41 53.7 +0.7**
**WB2 Warramunga Arr 59.86 189** P **P** **05 41 50.5 -2.5**
**WRA Warramunga Arr 59.86 189** P **P** **05 41 50.6 -2.4**
comp=Z,55nm,0.9s,baz=8.1,slow=7.3,SNR=129
WRA S **S** **05 50 06.7 +2.7**
comp=Z,1.3nm,1.0s,baz=10,slow=13,SNR=4.8
WRA LR LR 06 06 25.6
comp=Z,630nm,21.6s,baz=20,slow=35
WRA PKPPKP 06 11 30.8
comp=Z,3.1nm,1.0s,baz=206,slow=2.2,SNR=8.4
**WRA Warramunga Arr 59.86 189** *i*P **P** **05 41 50.7 -2.4**
WRA pmax pmax
comp=Z,56nm,0.9s
**SRLM Srisailam 59.93 266** *e*P **P** **05 41 53.3 -0.5**
SRLM IVmB_BB 05 41 53.6
comp=Z,283nm,1.2s
**QIS Mount Isa 60.02 183** P **P** **05 41 54.0 -0.1**
**RCLA Racherla 60.26 266** *e*P **P** **05 41 55.9 -0.2**
RCLA IVmB_BB 05 41 56.4
comp=Z,682nm,1.0s
**KLRI Killari 60.54 270** *e*P **P** **05 41 57.4 -0.6**
KLRI IVmB_BB 05 41 57.7
comp=Z,688nm,1.3s
**SKHT Srikalahasti 60.72 264** *e*P **P** **05 41 59.6 +0.5**
SKHT IVmB_BB 05 42 00.1
comp=Z,502nm,1.4s
**APA Apatity 60.73 335**⇓ *i*P **P** **05 41 57.5 -0.9**
APA *i*S **S** **05 50 06.0 -8.1**
APA pmax pmax
comp=Z,24nm,0.7s
APA MLR MLR
comp=Z,2μm,17.0s
**YKA Yellowknife Ar 60.95 31** P **P** **05 42 00.6 +0.5**
comp=Z,17nm,0.9s,baz=299,slow=6.6,SNR=146
YKA PKPPKP 06 11 19.6
comp=Z,1.1nm,0.8s,baz=126,slow=2.3,SNR=5.3
YKA LR LR 06 13 02.8
comp=Z,308nm,18.1s,baz=297,slow=41
**YKA Yellowknife Ar 60.95 31** P **P** **05 41 59.9 -0.2**
**KEV Kevo 61.35 339** P **P** **05 42 03.0 +0.3**
KEV pmax pmax
comp=Z,39nm,0.8s
**KEV Kevo 61.35 339** P **P** **05 42 03.0 +0.3**
KEV IAmb IAmb 05 42 13.2
comp=Z,39nm,0.8s
**HAMF Hammerfest 61.67 341** *e*P **P** **05 42 05.1 +0.3**
**URV Uravakonda 61.87 266** *e*P **P** **05 42 06.2 -0.8**
URV IVmB_BB 05 42 07.7
comp=Z,173nm,1.2s
**ARA0 ARCESS Array S 61.90 339** *e*P **P** **05 42 06.6 +0.2**
**ARCES ARCESS Array B 61.90 339** P **P** **05 42 06.9 +0.5**
comp=Z,5.3nm,0.6s,baz=36,slow=6.3,SNR=29
ARCES PP **PP** **05 44 26.4 +4.2**
comp=Z,10nm,0.9s,baz=54,slow=11,SNR=3.6
ARCES LR LR 06 11 41.4
comp=Z,1μm,19.9s,baz=38,slow=39
**ARCES ARCESS Array B 61.90 339** P **P** **05 42 06.7 +0.3**
ARCES IAmb IAmb 05 42 22.6
comp=Z,87nm,1.6s
**KLMR Klimovskoe 62.11 327** *e*P **P** **05 42 07.0 -0.9**
KLMR *e* 05 42 45.3
KLMR *e* 05 44 25.4
KLMR pmax pmax
comp=Z,125nm,1.3s
**KLMR Klimovskoe 62.11 327** *e*P **P** **05 42 07.0 -0.9**
KLMR AMP 05 42 21.8
comp=Z,125nm,1.3s
KLMR *e*PcP **PcP** **05 42 45.3 -2.7**
KLMR *e*PP **PP** **05 44 25.5 +1.4**
KLMR LQ LQ 06 04 04.6
KLMR LQ LQ 06 04 04.6
KLMR LR LR 06 09 32.7
**TULEG Thule 62.31 8** *i*P **P** **05 42 08.2 -0.8**
TULEG IAmb IAmb 05 42 26.2
comp=Z,36nm,0.8s
**POO Poona 62.39 272** *e*P **P** **05 42 08.0 -2.5**
comp=Z,190nm,1.0s
**HRA Herat 62.49 293** P **P** **05 42 11.9 +0.8**
HRA IAmb IAmb 05 42 12.8
comp=Z,31nm,0.8s
**NEEM North Greenlan 62.81 3** *i*P **P** **05 42 12.5 -0.2**
NEEM IAmb IAmb 05 42 31.2
comp=Z,54nm,0.9s
**KTK1 Kautokeino 62.86 339** *e*P **P** **05 42 13.5 +0.7**
**RK1H Rockhampton Ha 63.16 172** P **P** **05 42 15.4 +0.1**
comp=Z,41nm,1.1s
**KOUNC Koumac, New Ca 63.20 157** P **P** **05 42 17.1 +1.6**
**JETT Jettan, Norway 63.24 341** *e*P **P** **05 42 16.9 +1.5**
**GEYT Alibeck 63.54 298** P **P** **05 42 18.0 +0.1**
comp=Z,49nm,0.9s,baz=62,slow=3.5,SNR=21
GEYT LR LR 06 11 50.5
comp=Z,467nm,18.9s,baz=70,slow=38
**GEYT Alibeck 63.54 298** IAmb IAmb 05 42 21.7
comp=Z,52nm,0.8s
**TRO Tromso 63.56 341** *e*P **P** **05 42 17.1 -0.2**
**AS31 Alice Springs 63.58 189** P **P** **05 42 16.9 -1.3**
**ASAR Alice Springs 63.59 189** P **P** **05 42 17.2 -0.9**
comp=Z,26nm,0.8s,baz=11,slow=6.2,SNR=192
ASAR LR LR 06 08 41.1
comp=Z,730nm,21.9s,baz=359,slow=35
ASAR PKPPKP 06 11 20.8
comp=Z,2.0nm,1.0s,baz=167,slow=1.5,SNR=8.8
**ASAR Alice Springs 63.59 189** P **P** **05 42 16.9 -1.3**
**PALK Pallekele 64.04 257** P **P** **05 42 21.6 +0.2**
comp=Z,14nm,0.8s,baz=188,slow=6.6,SNR=4.8
PALK LR LR 06 11 16.9
comp=Z,402nm,19.7s,baz=143,slow=37
**A04D Lummi Island 64.09 47** P **P** **05 42 22.5 +1.3**
baz=301
**NLWA Neilton Lookou 64.11 49** IAmb IAmb 05 42 31.9
comp=Z,46nm,1.1s
**GOA Goa 64.20 269** *e*P **P** **05 42 22.5 +0.1**
**MBWA Marble Bar 64.28 204** P **P** **05 42 21.2 -1.4**
**MBWA Marble Bar 64.28 204** P **P** **05 42 22.0 -0.7**
**LIFNC LIFOU 64.34 155** P **P** **05 42 23.6 +0.5**
**LIFNC LIFOU 64.34 155** P **P** **05 42 24.7 +1.7**
**D03D Eldon 64.48 48** P **P** **05 42 25.2 +1.3**
baz=302,SNR=8.0
**PSA00 Pilbara Seismi 64.63 204** P **P** **05 42 23.7 -1.3**
**PSA00 Pilbara Seismi 64.63 204** P **P** **05 42 24.8 -0.2**
**B05A Bryant 64.67 47** P **P** **05 42 26.2 +1.1**
baz=302,SNR=7.6
**E03A Lebam 64.73 50** pP 05 42 28.4 -2.2
**D04E Lakebay 64.86 49** P **P** **05 42 26.7 +0.5**
baz=302
**EIDS Eidsvold 65.19 172** IAmb IAmb 05 42 29.0
comp=Z,32nm,1.0s
**EIDS Eidsvold 65.19 172** P **P** **05 42 29.1 +0.6**
**MARNC Mare, Loyalty 65.25 154** P **P** **05 42 28.7 -0.3**
**MARNC Mare, Loyalty 65.25 154** P **P** **05 42 30.6 +1.6**
**NOUC Port Laguerre 65.27 156** P **P** **05 42 30.3 +1.2**
**DZM Mont Dzumac 65.29 156** P **P** **05 42 29.6 +0.2**
comp=Z,68nm,1.0s,baz=19,slow=7.8,SNR=47
**DZM Mont Dzumac 65.29 156** *e*LR LR 06 01 57.6
comp=Z,550nm,20.8s
**DZM Mont Dzumac 65.29 156** P **P** **05 42 31.3 +2.0**
**E04D Cinebar 65.30 49** IAmb IAmb 05 42 39.8
comp=Z,81nm,1.3s
**E04D Cinebar 65.30 49** P **P** **05 42 30.2 +1.0**
baz=302,SNR=8.5
**YATNC Mamie plateau, 65.42 155** P **P** **05 42 32.7 +2.6**
**DGTI Dogotuki 65.48 141** P **P** **05 42 32.1 +1.5**
**ONTNC Ouen Toro 65.51 156** P **P** **05 42 29.0 -1.6**
**ONTNC Ouen Toro 65.51 156** P **P** **05 42 33.0 +2.3**
**C06D Leavenworth 65.53 47** P **P** **05 42 32.2 +1.4**
baz=303
**G03D McMinnville, O 65.61 51** P **P** **05 42 32.8 +1.6**
baz=302
**STEI Steigen 65.72 341** *e*P **P** **05 42 31.6 +0.1**
**F04A Amboy 65.72 50** IAmb IAmb 05 42 41.9
comp=Z,52nm,1.1s
**WRKA Warakurna 65.82 194** P **P** **05 42 32.4 -0.3**
**I02E Swisshome, OR 65.85 52** P **P** **05 42 34.3 +1.6**
baz=302
**MSVF Nonsavu 65.91 143** P **P** **05 42 33.8 +0.4**
comp=Z,14nm,0.9s,baz=308,slow=4.6,SNR=7.7
MSVF LR LR 06 10 55.2
comp=Z,417nm,18.1s,baz=4.4,slow=36
**MSVF Nonsavu 65.91 143** *d* *i*P **P** **05 42 34.7 +1.3**
MSVF pmax pmax
comp=Z,23nm,1.1s
**MSVF Nonsavu 65.91 143** P **P** **05 42 33.9 +0.4**
MSVF IAmb IAmb 05 44 47.3
comp=Z,28nm,0.8s
**MSVF Nonsavu 65.91 143** P **P** **05 42 36.4 +3.0**
**QLP Quilpie 65.95 179** P **P** **05 42 35.9 +2.5**
**LOF Lofoten 66.00 341** *e*P **P** **05 42 33.8 +0.5**
**RMQ Roma 66.07 174** P **P** **05 42 35.7 +1.5**
**PINNC Pines Island, 66.11 155** P **P** **05 42 36.2 +1.7**
**FAUS Fauske 66.12 340** *e*P **P** **05 42 34.7 +0.6**
**B08A Colville Reser 66.17 46** P **P** **05 42 35.4 +0.5**
B08A IAmb IAmb 05 42 44.6
comp=Z,103nm,1.8s
**H04D Lebanon 66.30 51** P **P** **05 42 37.1 +1.4**
baz=303
**J01E Myrtle Point 66.31 53** P **P** **05 42 37.3 +1.6**
baz=303
**F05D White Salmon 66.31 49** P **P** **05 42 37.0 +1.2**
baz=303
**VRH Novokhopyorsk 66.36 318** *e*P **P** **05 42 35.5 -0.4**
VRH pmax pmax
comp=Z,70nm,0.8s
**I03D Drain, OR 66.38 52** P **P** **05 42 38.1 +1.9**
baz=303,SNR=6.6
**H04A Detroit Lake 66.54 51** IAmb IAmb 05 42 47.1
comp=Z,69nm,1.0s
**OBN Obninsk 66.64 323**⇑ P **P** **05 42 38.3 +0.7**
**OBN Obninsk 66.64 323** *d* *i*P **P** **05 42 37.6 0.0**
OBN *i**PP **sP** **05 42 44.0 -0.8**
OBN *e* 05 43 09.8
OBN *i*S **S** **05 51 26.9 -1.1**
OBN *e*PS **PnS** **05 51 46.8 -2.3**
OBN *e*PPS PPS 05 52 05.1
OBN *e* 05 52 25.0
OBN *e*SS **SS** **05 55 46.6 +2.0**
OBN pmax pmax
comp=Z,128nm,1.3s
OBN MLR MLR
comp=Z,3μm,15.0s
**OBN Obninsk 66.64 323** P **P** **05 42 37.7 0.0**
**K02D Willamette Mer 66.72 53** P **P** **05 42 39.7 +1.2**
baz=303
**G05D Wamic, OR 66.75 50** P **P** **05 42 39.9 +1.3**
baz=303
**E07A Sunnyside 66.87 48** IAmb IAmb 05 42 49.4
comp=Z,42nm,1.1s
**I04A Tendick Farm, 66.89 52** P **P** **05 42 40.7 +1.1**
baz=303,SNR=7.5
**LPSR Galich'ya Gora 66.98 320** *e*P **P** **05 42 39.8 0.0**
LPSR pmax pmax
comp=Z,110nm,0.8s
**FINES FINESS Array B 66.98 332** P **P** **05 42 40.2 +0.5**
comp=Z,23nm,0.7s,baz=45,slow=7.7,SNR=56
FINES LR LR 06 15 06.5
comp=Z,1μm,18.9s,baz=26,slow=39
**UPNV Upernavik 67.04 6** *i*P **P** **05 42 39.5 -0.4**
UPNV IAmb IAmb 05 42 57.6
comp=Z,15nm,0.9s
**L02E Cave Junction 67.06 54** P **P** **05 42 41.6 +1.1**
baz=303
**C09A Chrisman Ranch 67.08 46** IAmb IAmb 05 42 50.1
comp=Z,35nm,0.9s
**INKA Innaminka 67.12 182** P **P** **05 42 41.8 +0.9**
**D08A Wollman Farm, 67.13 47** P **P** **05 42 41.4 +0.5**
D08A IAmb IAmb 05 42 49.9
comp=Z,27nm,0.9s
**HAWA Hanford 67.15 48** P **P** **05 42 41.7 +0.6**
HAWA IAmb IAmb 05 42 51.0
comp=Z,35nm,1.1s
**F07A Phinny Hill Vi 67.20 49** IAmb IAmb 05 42 51.4
comp=Z,47nm,0.9s
**HUMO Hull Mountain 67.21 53** IAmb IAmb 05 42 52.3
comp=Z,50nm,1.6s
**I05D Terrebonne, OR 67.23 51** P **P** **05 42 43.2 +1.5**
baz=304,SNR=6.4
**MOR8 Moi Rana 67.25 340** *e*P **P** **05 42 40.2 -1.2**
**KONS Konsvik 67.35 340** *e*P **P** **05 42 42.4 +0.5**
**J04D Umpqua Nationa 67.38 52** P **P** **05 42 44.2 +1.4**
baz=304
**VORR Voronezh 67.38 319** *e*P **P** **05 42 43.9 +1.5**
VORR pmax pmax
comp=Z,110nm,0.6s
**NEW Newport 67.45 45** P **P** **05 42 43.2 +0.2**
comp=Z,16nm,1.0s,baz=307,slow=5.4,SNR=25
**NEW Newport 67.45 45** IAmb IAmb 05 42 52.6
comp=Z,111nm,1.7s
**NEW Newport 67.45 45** P **P** **05 42 43.7 +0.7**
baz=305,SNR=19
**OOD Oodnadatta 67.48 187** P **P** **05 42 44.6 +1.5**
**KHMM Horse Mountain 67.68 55** pP 05 42 47.7 -2.2
**MAK Makhachkala 67.70 308** *e*P **P** **05 42 43.0 -1.6**
MAK *e* 05 45 11.2
MAK *e*S **S** **05 51 39.5 -1.7**
MAK pmax pmax
comp=Z,597nm,2.0s
MAK MLR MLR
comp=Z,752nm,11.0s
**JMIC Jan Mayen 67.72 350** LR LR 06 12 11.6
comp=Z,396nm,21.4s,baz=63,slow=36
**VORD Divnogorie 67.75 318** *e*P **P** **05 42 45.0 +0.2**
VORD pmax pmax
comp=Z,40nm,0.7s
**L04D Klamath Falls 67.83 53** P **P** **05 42 46.5 +0.9**
baz=304,SNR=15
**YBH Yreka Blue Hor 67.85 54** LR LR 06 08 44.1
comp=Z,106nm,21.2s,baz=330,slow=33
**E09A Wood Farm, Sta 67.88 47** IAmb IAmb 05 42 55.5
comp=Z,68nm,1.2s
**J05D Fort Rock, OR 67.89 52** P **P** **05 42 47.4 +1.5**
baz=304,SNR=14
**K04D Chiloquin, OR 67.94 52** P **P** **05 42 47.5 +1.2**
baz=304
**M02C Callahan 67.95 54** IAmb IAmb 05 42 57.0
comp=Z,71nm,1.4s
**M02C Callahan 67.95 54** P **P** **05 42 47.4 +1.1**
baz=304,SNR=6.9
**SUMG Summit 68.02 0** P **P** **05 42 47.3 +0.7**
SUMG pmax pmax
comp=Z,79nm,1.0s
**SUMG Summit 68.02 0** *i*P **P** **05 42 47.0 +0.4**
SUMG IAmb IAmb 05 42 51.1
comp=Z,28nm,0.7s
**SUMG Summit 68.02 0** P **P** **05 42 47.3 +0.7**
**AFI Afiamalu 68.03 132** LR LR 06 08 03.2
comp=Z,278nm,19.9s,baz=334,slow=32
**N02D Trinity Center 68.27 54** P **P** **05 42 49.8 +1.4**
baz=304,SNR=8.8
**M04C Macdoel 68.36 53** P **P** **05 42 50.4 +1.5**
baz=304,SNR=14
**KCPM Cahto Peak 68.44 56** IAmb IAmb 05 42 59.2
comp=Z,26nm,0.7s
**NUUG Nuugaatsiaq 68.48 5** *i*P **P** **05 42 49.0 0.0**
NUUG IAmb IAmb 05 43 13.5
comp=Z,14nm,0.8s
**WDC Whiskeytown Da 68.60 55** IAmb IAmb 05 43 00.3
comp=Z,29nm,1.0s
**GROC Groznyy 68.60 309** *e*P **P** **05 42 50.2 -0.1**
GROC *e* 05 43 15.7
GROC *e* 05 45 22.1
GROC pmax pmax
comp=Z,57nm,0.7s
**VSU Vasula 68.73 330**⇑ *e*P **P** **05 42 51.4 +0.7**
VSU pmax pmax
comp=Z,111nm,0.9s
**VSU Vasula 68.73 330** *e*P **P** **05 42 51.6 +0.9**
**GOF Gofitskoye 69.16 312**⇑ *e*P **P** **05 42 54.0 +0.3**
GOF pmax pmax
comp=Z,159nm,0.8s
**NSS Namsos 69.18 340** *e*P **P** **05 42 53.6 +0.1**
**MOD Modoc Plateau 69.23 52** IAmb IAmb 05 43 04.4
comp=Z,122nm,1.9s
**J08A Circle Bar Ran 69.50 50** IAmb IAmb 05 43 06.1
comp=Z,47nm,1.0s
**NCK Nalchik 69.75 310**⇑ *i*P **P** **05 42 58.2 +0.8**
NCK pmax pmax
comp=Z,95nm,1.0s
**MEEK Meekatharra 69.75 203** P **P** **05 42 57.4 -0.1**
**LCRK Leigh Creek 69.92 184** P **P** **05 42 59.6 +1.3**
**PLID Pearl Lake 69.93 48** IAmb IAmb 05 43 08.2
comp=Z,61nm,1.7s
**ZEI Tsey 69.98 309** *e*P **P** **05 42 58.4 -0.7**
ZEI pmax pmax
comp=Z,19nm,0.9s
**KIV Kislovodsk 70.01 311**⇑ *i*P **P** **05 43 00.5 +1.4**
**KIV Kislovodsk 70.01 311** *e*P **P** **05 42 59.7 +0.6**
KIV *e* 05 45 34.8

KIV eS S 05 52 08.3 -0.5
KIV eSS SS 05 56 40.8 +3.4
KIV pmax pmax
comp=Z,228nm,1.0s
KIV pmax pmax
comp=Z,129nm,4.3s
**KIV Kislovodsk 70.01 311** P P 05 42 59.6 +0.6
**KIV Kislovodsk 70.01 311** *i* P P 05 42 59.8 +0.7
SNR=22
**KBZ Khabaz 70.02 311** P P 05 42 60.0 +1.0
comp=Z,65nm,0.9s,baz=44,slow=3.5,SNR=67
**KBZ Khabaz 70.02 311** P P 05 43 00.0 +1.0
**MSO Missoula 70.04 45** IAmb IAmb 05 43 08.7
comp=Z,59nm,1.4s
**MSO Missoula 70.04 45** P P 05 42 59.8 +0.5
baz=307,SNR=24
**MULG Mulgathing 70.10 188** P P 05 42 59.4 0.0
**ARMA Armidale 70.24 172** IAmb IAmb 05 43 02.0
comp=Z,77nm,1.1s
**ARMA Armidale 70.24 172** P P 05 43 01.3 +0.9
**IDID Didziasalis 70.85 327** *eP* P 05 43 05.5 +1.6
**FFC Flin Flon 70.87 34** P P 05 43 04.8 +0.8
FFC pmax pmax
comp=Z,58nm,1.0s
**FFC Flin Flon 70.87 34** P P 05 43 04.8 +0.8
FFC IAmb IAmb 05 43 13.1
comp=Z,58nm,0.9s
**ILULI Ilulissat 70.92 5** *i* P P 05 43 03.4 -0.6
ILULI IAmb IAmb 05 43 17.3
comp=Z,23nm,0.9s
**ILULI Ilulissat 70.92 5** IAmb IAmb 05 43 18.0
comp=Z,68nm,1.0s
**MPK Martis Peak 70.92 55** IAmb IAmb 05 43 14.8
comp=Z,53nm,1.1s
**MNK Minsk 70.92 326** *i* P P 05 43 05.6 +1.3
MNK *i* 05 43 24.7
MNK *i* PPP PPP 05 47 28.7
MNK *i* S S 05 52 18.5 -0.3
MNK *i* SSS SSS 06 00 01.5
MNK pmax pmax
comp=Z,76nm,0.8s
MNK pmax pmax
comp=N,56nm,1.3s
MNK pmax pmax
comp=E,5.0nm,0.8s
MNK MLR MLR
comp=E,163nm,17.0s
MNK MLR MLR
comp=N,1μm,21.0s
MNK MLR MLR
comp=Z,1μm,19.0s
**MNK Minsk 70.92 326** *i* P P 05 43 05.6 +1.3
comp=E,5.0nm,0.8s
MNK *i* P P 05 43 05.6 +1.3
comp=N,56nm,1.2s
MNK *i* P P 05 43 05.6 +1.3
comp=Z,76nm,0.8s,baz=228
MNK *i* PcP PcP 05 43 24.8 0.0
MNK *i* PP PP 05 45 33.3 -7.6
MNK *i* PPP PPP 05 47 28.7
MNK *i* S S 05 52 18.6 -0.3
MNK *i* SS SS 05 57 02.4 +12
MNK *i* SSS SSS 06 00 01.6
MNK *i* LQ LQ 06 08 08.2
MNK *i* LR LR 06 12 38.9
MNK *i* LRM MLR 06 14 37.8
comp=E,163nm,16.9s
MNK *i* LRM MLR 06 14 53.9
comp=N,1μm,21.3s
MNK *i* LRM MLR 06 17 03.5
comp=Z,1μm,19.0s
**CMSA Cobar Meteorol 70.93 177** P P 05 43 05.3 +0.8
**ISAL Salakas 70.93 328** *eP* P 05 43 06.2 +1.8
**GNI Garni 71.01 307** LR LR 06 17 17.0
comp=Z,975nm,18.0s,baz=54,slow=38
**GNI Garni 71.01 307** *deP* P 05 43 06.4 +1.0
GNI pmax pmax
comp=Z,71nm,1.3s
**GNI Garni 71.01 307** P P 05 43 04.7 -0.7
**GNI Garni 71.01 307** P P 05 43 06.6 +1.2
**AKH Akhalkalaki 71.03 308** ⇓P P 05 43 07.0 +1.5
**IIGN Ignalina 71.04 327** *eP* P 05 43 06.6 +1.6
**UPP Uppsala 71.05 334** *eP* P 05 43 06.0 +1.0
**EMB Emerald Bay 71.06 55** IAmb IAmb 05 43 18.2
comp=Z,36nm,0.9s
**PAHR Pah Rah Range 71.08 54** IAmb IAmb 05 43 15.6
comp=Z,53nm,1.2s
**CHVG Ch'k'valeri 71.10 310** ⇓P P 05 43 07.3 +1.6
**NACGM Naroch 71.11 327** *i* P P 05 43 06.3 +0.8
**FCC Fort Churchill 71.12 27** IAmb IAmb 05 43 14.4
comp=Z,68nm,1.2s
**STKA Stephens Creek 71.22 181** P P 05 43 05.8 -0.4
comp=Z,20nm,0.9s,baz=346,slow=7.9,SNR=18
STKA LR LR 06 21 08.2
comp=Z,141nm,18.4s,baz=12,slow=42
**STKA Stephens Creek 71.22 181** P P 05 43 06.4 +0.1
**WSAR Wadi Sarin 71.26 285** P P 05 43 07.5 +0.6
comp=Z,36nm,1.0s,baz=82,slow=5.3,SNR=18
WSAR LR LR 06 18 36.6
comp=Z,373nm,18.4s,baz=100,slow=39
**PNTR Pine Nut 71.31 55** IAmb IAmb 05 43 17.3
comp=Z,32nm,0.8s
**BANOM Banah 71.42 289** *i* P P 05 43 07.9 0.0
SNR=12
**CMB Columbia Colle 71.43 56** IAmb IAmb 05 43 17.6
comp=Z,107nm,1.7s
**FORT Forrest 71.45 193** P P 05 43 06.9 -0.7
**FORT Forrest 71.45 193** P P 05 43 07.6 -0.1
comp=Z,206nm,1.0s
**SHME Shamm 71.47 289** *i* P P 05 43 08.1 0.0
SNR=20
**ICESG Greenland Ices 71.51 1** *i* P P 05 43 08.2 +0.1
ICESG IAmb IAmb 05 43 17.9
comp=Z,43nm,0.8s
**EGMT Eagleton 71.54 42** IAmb IAmb 05 43 17.8
comp=Z,90nm,1.1s
**EGMT Eagleton 71.54 42** P P 05 43 08.9 +0.6
baz=309,SNR=20
**YERR Yerington 71.59 54** IAmb IAmb 05 43 18.9
comp=Z,43nm,0.9s
**DLMT Dillon 71.67 46** IAmb IAmb 05 43 18.9
comp=Z,37nm,0.8s
**HLID Hailey 71.75 48** P P 05 43 11.4 +1.6
baz=308,SNR=16
**MSFE Esma-Masafi 71.85 288** *i* P P 05 43 10.3 -0.2
SNR=14
**PABE Paberze 71.86 328** *eP* P 05 43 11.3 +1.3
**MOL Molde 71.94 340** *eP* P 05 43 11.9 +1.6
**SOC Sochi 71.95 312** *eP* P 05 43 09.8 -1.0
SOC *e*PP sP 05 43 17.5 -0.5
SOC *e* 05 45 47.9
SOC *e*PPP PPP 05 47 30.1
SOC *e*S S 05 52 30.6 -0.5
SOC pmax pmax
comp=Z,72nm,1.0s
SOC MLR MLR
comp=Z,794nm,19.0s
**DOMB Dombas 71.97 339** *eP* P 05 43 10.8 +0.3
**UOSS Minazif 72.06 288** P P 05 43 11.2 -0.5
**UOSS Minazif 72.06 288** *i* P P 05 43 11.2 -0.5
SNR=7.8
**BOZ Bozeman (W) 72.06 45** IAmb IAmb 05 43 21.1
comp=Z,26nm,0.7s
**BOZ Bozeman (W) 72.06 45** P P 05 43 12.4 +0.8
baz=309,SNR=42
**HFS Hagfors 72.12 336** LR LR 06 17 09.4
comp=Z,905nm,18.3s,baz=17,slow=38
**NB2 NORSAR Subarra 72.16 338** P P 05 43 12.1 +0.3
comp=Z,11nm,0.7s,baz=38,slow=6.2
**NB2 NORSAR Subarra 72.16 338** P P 05 43 12.1 +0.3
baz=38,slow=6.2
**NOA NORSAR Array B 72.16 338** P P 05 43 11.9 +0.1
comp=Z,27nm,0.9s,baz=38,slow=6.0,SNR=40
NOA PP PP 05 45 57.0 +5.5
comp=Z,4.1nm,0.8s,baz=43,slow=8.4,SNR=3.5
NOA LR LR 06 20 22.6
comp=Z,784nm,18.4s,baz=30,slow=40
**HATD Hatta, Dubai 72.19 288** *i* P P 05 43 12.5 0.0
SNR=29
**KVN Kaiserville 72.27 54** IAmb IAmb 05 43 22.9
comp=Z,58nm,1.1s
**SOHO SOHO 72.30 287** *i* P P 05 43 12.6 -0.5
SNR=21
**PBUR Paburge 72.30 330** *eP* P 05 43 13.2 +0.6
**NC602 NORSAR Array S 72.31 337** *eP* P 05 43 12.9 +0.3
**ASHO Ashiyiah 72.32 288** *i* P P 05 43 13.3 0.0
SNR=28
**VIKU Vikbolandet 72.39 334** *eP* P 05 43 13.8 +0.8
**AKN Aaknes 72.41 340** *eP* P 05 43 13.9 +0.7
**BBOO Buckleboo 72.42 186** P P 05 43 13.5 +0.1
comp=Z,160nm,1.3s
**NAZ Nazwa, Dubai 72.44 288** *i* P P 05 43 14.1 +0.2
SNR=6.4
**LHV Little Huntoon 72.49 55** IAmb IAmb 05 43 24.7
comp=Z,70nm,0.9s
**NVAR Mina Array Bea 72.51 54** P P 05 43 15.6 +1.1
comp=Z,14nm,0.8s,baz=286,slow=6.4,SNR=82
NVAR LR LR 06 14 50.3
comp=Z,98nm,18.4s,baz=330,slow=36
**WHYH Whyalla 72.53 185** P P 05 43 14.6 +0.6
comp=Z,93nm,1.0s
**FAQ Al Faqa, Dubai 72.63 288** *i* P P 05 43 15.0 -0.1
SNR=13
**NAPP Napperby 72.65 184** P P 05 43 15.3 +0.5
comp=Z,187nm,0.9s
**MLAC Mammoth, Mammo 72.66 55** P P 05 43 16.8 +1.4
baz=307
**MORW Morawa 72.82 204** IAmb IAmb 05 43 16.5
comp=Z,82nm,1.0s
**MORW Morawa 72.82 204** P P 05 43 16.3 +0.4
**HTT Hallett 72.85 183** P P 05 43 16.9 +0.8
**AKASG Malin Array Be 72.87 322** P P 05 43 16.5 +0.4
comp=Z,25nm,0.6s,baz=45,slow=6.1,SNR=165
AKASG LR LR 06 20 03.9
comp=Z,1μm,19.3s,baz=36,slow=40
**AKBB Malin Array Si 72.87 322** *deP* P 05 43 16.0 -0.1
**AKBB Malin Array Si 72.87 322** IAmb IAmb 05 43 17.2
comp=Z,56nm,0.8s
**PAGB Antelope Grade 72.88 58** IAmb IAmb 05 43 26.5
comp=Z,54nm,0.9s
**ASUD Al Ashush, Dub 72.89 288** *i* P P 05 43 17.0 +0.3
SNR=26
**ALNE Al Ain 72.92 287** *i* P P 05 43 17.1 +0.2
SNR=12
**ELK Elko 72.99 51** P P 05 43 18.1 +0.8
comp=Z,4.9nm,0.9s,baz=308,slow=5.2,SNR=12
ELK LR LR 06 09 32.6
comp=Z,84nm,21.9s,baz=357,slow=31
**SFJD Kangerlussuaq 73.14 5** P P 05 43 18.0 +0.6
comp=Z,28nm,0.8s,baz=5.3,slow=5.8,SNR=11
SFJD LR LR 06 18 07.1
comp=Z,640nm,18.2s,baz=342,slow=38
**SFJD Kangerlussuaq 73.14 5** P P 05 43 18.0 +0.6
**SFJD Kangerlussuaq 73.14 5** *i* P P 05 43 16.9 -0.4
SFJD IAmb IAmb 05 43 26.9
comp=Z,13nm,0.8s
**SFJD Kangerlussuaq 73.14 5** P P 05 43 17.9 +0.6
SFJD IAmb IAmb 05 43 27.8
comp=Z,48nm,1.0s
**YNR Norris Junctio 73.14 46** IAmb IAmb 05 43 32.0
comp=Z,68nm,1.8s
**GEVA Gevas 73.16 306** P P 05 43 18.7 +0.5
**SUW Suwalki 73.24 328** *eP* P 05 43 19.1 +0.9
**SKAR Skarsila 73.29 339** *eP* P 05 43 20.0 +1.5
**SMMC Sinmler 73.30 58** P P 05 43 20.1 +1.1
baz=307
**TIN Tinemaha, Big 73.39 56** P P 05 43 21.0 +1.4
baz=307
**H17A Grant Village 73.40 46** P P 05 43 22.2 +2.5
baz=310,SNR=18
**SYDH Sydney Hard Ro 73.46 173** P P 05 43 21.3 +1.8
comp=Z,23nm,1.2s
**VES Vestal, Richgr 73.57 57** P P 05 43 20.4 -0.1
baz=307,SNR=9.9
**RLMT Red Lodge 73.65 45** IAmb IAmb 05 43 31.2
comp=Z,104nm,1.8s
**GURO Guroymak-BITLI 73.65 307** IAmb IAmb 05 43 31.8
comp=Z,46nm,0.8s
**PKM Mcpherson Peak 73.67 58** P P 05 43 22.0 +0.7
baz=307
**KONO Kongsberg 73.76 337** *eP* P 05 43 21.6 +0.4
**CWC Cottonwood Cre 73.86 56** P P 05 43 22.7 +0.3
baz=308
**FRB Frobisher Bay 73.92 14** P P 05 43 22.6 +0.5
comp=Z,39nm,0.9s,baz=333,slow=6.3,SNR=96
FRB LR LR 06 21 01.2
comp=Z,820nm,18.0s,baz=342,slow=40
**DY2G Dye2 73.92 4** *i* P P 05 43 21.9 -0.5
DY2G IAmb IAmb 05 43 31.2
comp=Z,36nm,0.7s
**SBC Santa Barbara 74.01 58** P P 05 43 23.7 +0.6
baz=307
**BLDU Ballidu 74.05 203** P P 05 43 22.7 -0.4
comp=Z,94nm,1.2s
**DGMT Dagmar 74.07 40** IAmb IAmb 05 43 32.5
comp=Z,69nm,1.1s
**DGMT Dagmar 74.07 40** P P 05 43 23.1 -0.1
baz=312,SNR=8.9
**ISA Isabella, Lake 74.08 57** P P 05 43 23.4 -0.2
baz=308,SNR=6.6
**ARVC Arvin 74.17 57** P P 05 43 24.4 +0.3
baz=308
**SIM Simferopol' 74.21 316** *eP* P 05 43 23.8 -0.3
SIM 05 43 31.0
SIM S S 05 52 59.0 +2.2
SIM pmax pmax
comp=Z,100nm,0.9s
**LAO LASA Array 74.24 42** P P 05 43 24.1 -0.2
baz=312,SNR=11
**R11A Troy Canyon, C 74.25 53** P P 05 43 24.6 -0.1
baz=308,SNR=26
**KAAM Kaadhehdhoo 74.26 257** P P 05 43 24.6 -0.2
**ASK Askoy 74.31 340** *ep*P pP 05 43 32.1 +2.5
**TWOA Tennyson Woods 74.47 184** P P 05 43 28.0 +2.6
comp=Z,40nm,1.1s
**MPMC Manual Prospec 74.47 56** P P 05 43 25.8 -0.3
baz=308,SNR=11
**FURC Furnace Creek, 74.61 55** P P 05 43 27.4 +0.8
baz=308,SNR=15
**SPR3 Spring Creek 3 74.62 52** IAmb IAmb 05 43 37.5
comp=Z,112nm,1.8s
**KLBR Kellerberrin 74.66 202** P P 05 43 27.2 +0.6
**LRMC Laurel Mtn Rad 74.70 57** P P 05 43 27.6 +0.3
baz=308
**TPNV Topopah Spring 74.71 55** P P 05 43 27.7 +0.3
baz=308,SNR=11
**DUG Dugway, Tooele 74.78 50** P P 05 43 28.5 +0.8
baz=309,SNR=21
**EDW2 Edwards Air Fo 74.86 57** P P 05 43 28.9 +0.7
baz=308,SNR=7.7
**CAN Canberra 74.87 175** IAmb IAmb 05 43 29.2
comp=Z,63nm,1.3s
**CAN Canberra 74.87 175** P P 05 43 28.5 +0.7
comp=Z,58nm,1.4s
**CNB Canberra Magne 74.89 174** P P 05 43 29.0 +1.0
**GWY Greenwater Val 74.91 55** IAmb IAmb 05 43 38.1
comp=Z,40nm,0.9s
**QSM Queen of Sheba 74.92 56** IAmb IAmb 05 43 38.1
comp=Z,64nm,1.0s
**BW06 Boulder Array 75.01 47** P P 05 43 29.3 +0.1
baz=310,SNR=15
**PDAR Pinedale Array 75.01 47** P P 05 43 29.4 +0.3
comp=Z,5.2nm,0.7s,baz=265,slow=2.2,SNR=56
**ANGG Ammassalik, Gr 75.02 0** *i* P P 05 43 27.7 -0.7
ANGG IAmb IAmb 05 43 35.7
comp=Z,29nm,0.8s
**ANGG Ammassalik, Gr 75.02 0** IAmb IAmb 05 43 36.4
comp=Z,75nm,1.0s
**SORM Soroca 75.04 321** ⇑P P 05 43 29.0 +0.2
**BORG Borgarnes 75.15 353** LR LR 06 16 37.2
comp=Z,258nm,19.1s,baz=97,slow=36
**SHOC Shoshone, Teco 75.34 56** P P 05 43 31.0 +0.2
baz=308
**GSC Goldstone, Bar 75.37 56** P P 05 43 31.6 +0.5
baz=308,SNR=6.2
**PURM Purcari 75.38 319** ⇑P P 05 43 31.0 +0.2
**KIS Kishinev 75.59 320** *eP* P 05 43 31.0 -1.0
comp=Z,80nm,0.5s
KIS LRM MLR 06 22 15.0
comp=Z,800nm,12.0s
**KIS Kishinev 75.59 320** *eP* P 05 43 31.0 -1.0
KIS pmax pmax
comp=Z,80nm,0.5s
**BSD Bornholm Skovb 75.62 332** *i* P P 05 43 29.6 -2.5
**MILM Milestii Mici 75.65 320** ⇓*i* P P 05 43 31.7 -0.6
comp=Z,80nm,0.9s
MILM *e*LR LR 06 19 13.0
comp=Z,1μm,13.0s
**MILM Milestii Mici 75.65 320** *i* P P 05 43 31.7 -0.6
MILM *e* 05 43 39.0
MILM *e* 05 43 45.0
MILM pmax pmax
comp=Z,80nm,0.9s
**NUUK Nuuk 75.82 7** *i* P P 05 43 33.2 +0.2
NUUK IAmb IAmb 05 43 43.4
comp=Z,25nm,0.8s
**TUQ Turquoise Moun 75.85 56** P P 05 43 34.4 +0.5
baz=309
**TOKA Tokat 75.88 311** IAmb IAmb 05 43 44.5
comp=Z,64nm,1.2s
**LVV L'vov 75.88 324** *eP* P 05 43 34.1 +0.4
LVV *e*PPP PPP 05 48 17.0
LVV eS S 05 53 16.1 +0.9
LVV *e*PS PnS 05 53 55.0 +2.9
LVV *e*SS SS 05 58 08.5 +2.1
LVV *e*SSS SSS 06 01 26.0
LVV pmax pmax
comp=Z,110nm,1.5s
**HEC Hector,Ludlow 75.97 56** P P 05 43 35.2 +0.7
baz=309
**NWAO Narrogin (SRO) 76.06 202** P P 05 43 33.9 -0.8
NWAO pmax pmax
comp=Z,108nm,1.1s
**NWAO Narrogin (SRO) 76.06 202** P P 05 43 33.9 -0.8
**ARPS Mount Arapiles 76.10 181** P P 05 43 37.5 +2.7
**CCUT Cedar City 76.12 53** IAmb IAmb 05 43 45.7
comp=Z,76nm,1.6s
**MURC Murrieta 76.17 58** P P 05 43 36.0 +0.3
baz=309
**VASR Vaslui 76.34 320** ⇑P P 05 43 37.2 +0.8
**GMRC Granite Mounta 76.43 56** P P 05 43 37.8 +0.6
baz=309,SNR=6.5
**RDMU Red Mountain 76.44 48** IAmb IAmb 05 43 47.1
comp=Z,65nm,1.0s
**P17A Butcher Ranch, 76.47 50** IAmb IAmb 05 43 47.4
comp=Z,101nm,1.4s
**LCMT Little Creek M 76.54 53** IAmb IAmb 05 43 48.0
comp=Z,34nm,0.9s
**Q16A Castle Valley 76.57 50** IAmb IAmb 05 43 48.4
comp=Z,112nm,1.7s
**PRAR RASCA 76.61 321** ⇑P P 05 43 38.4 +0.6
**SHAO Shalim 76.62 282** P P 05 43 38.2 -0.2
**RGN Rugen 76.64 332** *eP* P 05 43 39.8 +2.0
baz=36,slow=5.2
**PFO Pinyon Flats O 76.65 57** P P 05 43 38.1 -0.4
comp=Z,13nm,1.1s,baz=217,slow=1.8,SNR=4.1
PFO LR LR 06 09 42.9
comp=Z,306nm,21.6s,baz=321,slow=30
**PFO Pinyon Flats O 76.65 57** P P 05 43 38.2 -0.3
PFO pmax pmax
comp=Z,37nm,1.4s
**PFO Pinyon Flats O 76.65 57** P P 05 43 38.2 -0.3
**PFO Pinyon Flats O 76.65 57** P P 05 43 38.7 +0.2
baz=309
**TPFO Pinon Flats 76.65 57** P P 05 43 38.9 +0.4
baz=309
**P18A Preston Nutter 76.66 49** IAmb IAmb 05 43 48.7
comp=Z,60nm,1.3s
**ULM Lac du Bonnet 76.67 34** P P 05 43 37.9 -0.3
comp=Z,16nm,1.1s,baz=314,slow=7.9,SNR=11
ULM LR LR 06 20 29.3
comp=Z,342nm,18.6s,baz=340,slow=38
**ULM Lac du Bonnet 76.67 34** IAmb IAmb 05 43 46.8
comp=Z,150nm,1.9s
**MDND Maddock 76.72 38** P P 05 43 39.3 +0.8
baz=315
**VLDR Vladesti 76.75 319** ⇑P P 05 43 39.9 +1.2
**K22A Casper 76.77 45** IAmb IAmb 05 43 49.5
comp=Z,144nm,1.8s
**K22A Casper 76.77 45** P P 05 43 39.2 +0.1
baz=312,SNR=7.1
**SRU San Rafael Swe 76.83 50** IAmb IAmb 05 43 49.1
comp=Z,40nm,0.9s
**TLCR 76.84 318** ⇑P P 05 43 39.6 +0.5
**BRAT Ballarat 76.88 179** P P 05 43 40.7 +1.6
comp=Z,10nm,1.5s
**BUR08 Bucovina Ar. S 76.90 322** IAmb IAmb 05 43 52.2
comp=Z,58nm,0.9s
**BURAR Bucovina Array 76.91 322** ⇑P P 05 43 40.9 +1.2
**BURAR Bucovina Array 76.91 322** IAmb IAmb 05 43 50.5
comp=Z,41nm,0.8s
**SCTR Scanteiesti 76.92 319** ⇑P P 05 43 40.7 +1.2
**TOO Toolangi 76.93 178** IAmb IAmb 05 43 41.3
comp=Z,126nm,1.9s
**TOO Toolangi 76.93 178** P P 05 43 40.3 +0.8
comp=Z,27nm,1.6s
**GHRR 76.94 320** ⇓P P 05 43 40.1 +0.4
**TATR Tatarca 76.94 319** ⇑P P 05 43 40.9 +1.2
**TESR Tescani 77.00 321** ⇑P P 05 43 40.4 +0.4
**JURR Jurilovca 77.10 318** ⇑P P 05 43 41.7 +1.1
**RSSD Black Hills 77.11 43** P P 05 43 40.4 -0.6
RSSD pmax pmax
comp=Z,35nm,1.2s
**RSSD Black Hills 77.11 43** P P 05 43 40.4 -0.6
**RSSD Black Hills 77.11 43** P P 05 43 41.2 +0.2
baz=313
**IRM Iron Mountain 77.15 56** P P 05 43 41.7 +0.5
baz=309,SNR=6.8
**CFR Carcaliu 77.19 319** ⇑P P 05 43 41.8 +0.7
**PANC Panciu 77.20 320** ⇑P P 05 43 43.2 +2.0
**TPGR Topolog 77.27 318** ⇑P P 05 43 42.5 +0.9
**BC3 Big Chuckawall 77.27 57** P P 05 43 41.9 0.0
baz=309
**ODBI Odobesti 77.32 320** ⇑P P 05 43 43.7 +1.8
**VRI Vrincioaia 77.42 320** ⇑P P 05 43 42.7 +0.3
**OJC Ojcow 77.44 327** IAmb IAmb 05 43 52.7
comp=Z,87nm,1.0s
**PLOR Plostina 77.46 320** ⇑P P 05 43 43.6 +0.9
**GAZ Gaziantep 77.48 308** IAmb IAmb 05 43 44.0
comp=Z,79nm,1.1s
**O20A White River Ci 77.49 48** P P 05 43 43.6 +0.4
baz=312,SNR=10
**U15A North Rim 77.50 53** IAmb IAmb 05 43 53.7
comp=Z,52nm,1.0s
**UZH Uzhgorod 77.53 324** *eP* P 05 43 43.7 +0.7
UZH *e* 05 43 49.1
UZH *e* 05 43 54.3
**TIRR Tirgusor 77.55 318** ⇓P P 05 43 43.7 +0.6
**HARR Harsova 77.63 319** ⇑P P 05 43 44.4 +0.7
**BISRR Bisoca 77.65 320** ⇑P P 05 43 45.4 +1.6
**BMR Baia Mare 77.68 323** ⇑P P 05 43 44.8 +1.0
**TLBR Topalu 77.68 318** ⇓P P 05 43 45.1 +1.2
**COVR Voineasa-Covas 77.69 320** ⇑P P 05 43 44.9 +0.9
**EFOR EFORIE 77.70 318** ⇑P P 05 43 44.8 +0.8
**ARCR ARCALIA 77.70 322** ⇑P P 05 43 45.5 +1.6
**PDMCI Parker Dam,Lak 77.70 56** P P 05 43 44.6 +0.4
baz=310,SNR=7.2
**CRVS Cervenica-Dubn 77.70 325** *eP* P 05 43 44.9 +0.9
CRVS pmax pmax
comp=Z,52nm,1.3s
**CRVS Cervenica-Dubn 77.70 325** *eP* P 05 43 44.9 +0.9
CRVS *e*PP PP 05 46 36.3 -2.3
**OZUR 77.72 321** ⇑P P 05 43 45.0 +0.9
**TRPA Tarpa 77.78 324** ⇑P P 05 43 44.9 +0.5
**TRPA Tarpa 77.78 324** P P 05 43 45.4 +1.0
**BR131 Keskin Array S 77.92 312** *di* P P 05 43 45.6 +0.1
**BR131 Keskin Array S 77.92 312** IAmb IAmb 05 43 47.2
comp=Z,94nm,1.4s
**BRTR Keskin Array B 77.92 312** P P 05 43 46.0 +0.5
comp=Z,21nm,1.1s,baz=94,slow=3.7,SNR=50
BRTR PP PP 05 46 46.2 +5.3
comp=Z,5.0nm,0.8s,baz=57,slow=4.6,SNR=4.6
BRTR LR LR 06 22 35.2
comp=Z,502nm,18.8s,baz=21,slow=39
**BRTR Keskin Array B 77.92 312** P P 05 43 46.0 +0.5
**DOPR Dopca 78.00 321** ⇑P P 05 43 46.9 +1.2
**GLA Glamis 78.06 57** P P 05 43 46.8 +0.5
baz=310
**MLR Muntele Rosu 78.07 320** LR LR 06 22 01.3
comp=Z,733nm,19.5s,baz=44,slow=39
**MLR Muntele Rosu 78.07 320** IAmb IAmb 05 43 56.5
comp=Z,59nm,1.2s
**ICOR Ion Corvin 78.10 318** ⇓P P 05 43 47.9 +1.7
**RUE Ruedersdorf 78.11 331** *eP* P 05 43 47.5 +1.4
baz=36,slow=5.2
**AGMN Agassiz Nation 78.12 36** IAmb IAmb 05 43 54.7
comp=Z,58nm,1.3s
**AGMN Agassiz Nation 78.12 36** P P 05 43 46.0 -0.3
baz=318,SNR=14
**BSEG Bad Segeberg 78.18 334** *eP* P 05 43 47.8 +1.3
baz=36,slow=5.2
**PHWY Pilot Hill 78.27 46** IAmb IAmb 05 43 57.1
comp=Z,61nm,1.6s
**N23A Red Feather La 78.27 46** IAmb IAmb 05 43 57.7
comp=Z,47nm,1.1s
**N23A Red Feather La 78.27 46** P P 05 43 48.8 +1.1
baz=313,SNR=20
**KALB Balgarevo 78.28 317** ⇑P P 05 43 48.8 +1.5

**ANTO Ankara 78.30 312 P P 05 43 47.7 +0.1**
ANTO pmax pmax
comp=Z,77nm,0.9s
**ANTO Ankara 78.30 312 P P 05 43 47.7 +0.1**
ANTO IAmb IAmb 05 43 49.5
comp=Z,77nm,0.9s
**CJR Cluj-Napoca 78.33 322 ⇑P P 05 43 49.2 +1.7**
**SECR 78.33 320 ⇑P P 05 43 49.0 +1.5**
**BR231 Keskin MP Arra 78.33 312** IAmb IAmb 05 43 49.7
comp=Z,67nm,0.8s
**LANS Liptovska Anna 78.39 326** *eP* **P 05 43 49.6 +1.8**
LANS pmax pmax
comp=Z,21nm,1.1s
**LANS Liptovska Anna 78.39 326** *eP* **P 05 43 49.6 +1.8**
LANS *e*PP **PP 05 46 41.1 -3.3**
**OKC Ostrava-Krasne 78.43 327** *eP* **P 05 43 48.9 +0.9**
**OKC Ostrava-Krasne 78.43 327** *eP* **P 05 43 48.9 +0.9**
**D32A Dogwood Acres, 78.44 37** IAmb IAmb 05 43 56.6
comp=Z,51nm,1.1s
**SULR 78.49 319 ⇑P P 05 43 48.9 +0.5**
**VOIR 78.55 321 ⇑P P 05 43 49.7 +0.9**
**WUAZ Wupatki 78.66 53** P **P 05 43 50.3 +0.6**
baz=311
**OSTC Ostas 78.67 329** *eP* **P 05 43 50.5 +1.2**
**DRGR 78.69 323 ⇓P P 05 43 50.4 +0.9**
**CHVC Chvalec 78.71 329** *eP* **P 05 43 50.2 +0.6**
**IZAB Izabela 78.72 325** *eP* **P 05 43 50.8 +1.2**
**MORC Moravsky Berou 78.73 327 ⇑P P 05 43 50.4 +0.8**
**MORC Moravsky Berou 78.73 327** *eP* **P 05 43 50.9 +1.2**
**DPC Dobruska-Polom 78.79 328** *eP* **P 05 43 51.3 +1.3**
**DPC Dobruska-Polom 78.79 328** *eP* **P 05 43 51.3 +1.3**
**UPC Upice 78.79 329** *eP* **P 05 43 51.1 +1.1**
**UPC Upice 78.79 329** *eP* **P 05 43 51.1 +1.1**
**HLG Helgoland 78.79 335** *eP* **P 05 43 50.9 +1.1**
baz=36,slow=5.2
**ARR Arges 78.80 321 ⇑P P 05 43 51.3 +1.1**
**KRLC Kraliky 78.81 328** *eP* **P 05 43 50.9 +0.7**
**KRLC Kraliky 78.81 328** *eP* **P 05 43 50.9 +0.7**
**B35A Bob, Littlefor 79.02 35** IAmb IAmb 05 43 59.9
comp=Z,44nm,1.1s
**PSZ Piszkesteto 79.13 325 ⇑P P 05 43 53.2 +1.3**
**PSZ Piszkesteto 79.13 325** IAmb IAmb 05 44 01.8
comp=Z,181nm,1.8s
**PSZ Piszkesteto 79.13 325** P **P 05 43 53.3 +1.3**
**RAZG Razgrad 79.15 318 ⇑P P 05 43 53.1 +1.0**
**VYHS Vyhne 79.16 326** *eP* **P 05 43 53.4 +1.4**
VYHS pmax pmax
comp=Z,35nm,1.2s
**VYHS Vyhne 79.16 326** *eP* **P 05 43 53.4 +1.4**
**FLTG Flechtingen 79.17 332** *eP* **P 05 43 52.9 +1.0**
comp=Z,26nm,0.9s,baz=36,slow=5.2
**ISCO Idaho Springs 79.20 47** IAmb IAmb 05 44 02.9
comp=Z,92nm,1.9s
**ISCO Idaho Springs 79.20 47** P **P 05 43 53.7 +0.9**
baz=313,SNR=13
**HUMR Humele 79.23 320 ⇓P P 05 43 53.3 +0.8**
**MVCO Mesa Verde 79.28 50** IAmb IAmb 05 44 03.0
comp=Z,163nm,1.9s
**MVCO Mesa Verde 79.28 50** P **P 05 43 53.6 +0.4**
baz=312,SNR=11
**KOLL Kolacno 79.28 326** *eP* **P 05 43 54.1 +1.4**
**BRG Berggiesshubel 79.32 330** *eP* **P 05 43 53.8 +1.0**
BRG Amp 05 43 55.1
comp=Z,24nm,1.0s
BRG *ex* x 05 44 01.2
BRG Amp 05 44 03.1
comp=Z,17nm,1.0s
**BRG Berggiesshubel 79.32 330** *eP* **P 05 43 53.8 +1.0**
BRG *e* 05 44 01.1
BRG pmax pmax
comp=Z,24nm,1.0s
BRG pmax pmax
comp=Z,17nm,1.0s
**BRG Berggiesshubel 79.32 330** *eP* **P 05 43 53.6 +0.8**
comp=Z,12nm,0.8s,baz=36,slow=5.2
**CLL Collm 79.34 331** ⇓*i*P **P 05 43 53.1 +0.2**
CLL *i* 05 44 00.2
CLL pmax pmax
comp=Z,44nm,1.0s
**CLL Collm 79.34 331** ⇓*i*P **P 05 43 53.1 +0.2**
comp=Z,44nm,1.0s
CLL *i* sP **sP 05 44 00.2 +0.1**
CLL *e*(PP) 05 46 42.0
**CLL Collm 79.34 331** *eP* **P 05 43 53.6 +0.7**
comp=Z,24nm,0.8s,baz=36,slow=5.2
**PVCC Panska Ves 79.35 329** *eP* **P 05 43 54.2 +1.2**
**PVCC Panska Ves 79.35 329** *eP* **P 05 43 54.2 +1.2**
**JAVC Velka Javorina 79.38 327** *eP* **P 05 43 55.4 +2.1**
**NRDL Niedersach Rie 79.43 333** *eP* **P 05 43 54.1 +0.8**
baz=36,slow=5.2
**SUSD Miller 79.47 40** IAmb IAmb 05 44 02.7
comp=Z,94nm,0.9s
**SUSD Miller 79.47 40** P **P 05 43 53.7 -0.1**
baz=316,SNR=13
**VRAC Vranov 79.49 328 ⇑P P 05 43 54.6 +0.8**
**VRAC Vranov 79.49 328** *eP* **P 05 43 55.1 +1.3**
**FBE Freiberg 79.51 330** *eP* **P 05 43 54.8 +1.0**
comp=Z,19nm,0.8s,baz=36,slow=5.2
**ASSE Asse, Remlinge 79.53 332** *eP* **P 05 43 54.5 +0.7**
comp=Z,7.7nm,0.8s,baz=36,slow=5.2
**SZH Strazhica 79.66 319** P **P 05 43 55.2 +0.4**
**GZR Gura Zlata 79.68 322 ⇓P P 05 43 54.9 -0.1**
**F33A 5 Mile Ranch, 79.73 38** IAmb IAmb 05 44 04.2
comp=Z,51nm,1.1s
**SMOL Smolenice 79.75 327** *eP* **P 05 43 56.9 +1.7**
SMOL pmax pmax
comp=Z,20nm,1.1s
**SMOL Smolenice 79.75 327** *eP* **P 05 43 56.9 +1.7**
**KPL Plockton 79.75 343** *eP* **P 05 43 56.2 +1.2**
**KRUC Moravsky 79.76 327** *eP* **P 05 43 56.4 +1.1**
**PRU Pruhonice 79.79 329** *eP* **P 05 43 56.5 +1.1**
**PRU Pruhonice 79.79 329** *eP* **P 05 43 56.5 +1.1**
**CLZ Clausthal 79.87 332** *eP* **P 05 43 56.6 +0.8**
comp=Z,30nm,1.0s,baz=36,slow=5.2
**NEUB Neuenburg 79.88 331** *eP* **P 05 43 56.5 +0.7**
baz=36,slow=5.2
**JMB Yambol 79.89 318** P P 05 43 48.3 -7.8
**DGAR Diego Garcia 79.90 252** *ceP* **P 05 43 56.8 +0.3**
DGAR pmax pmax
comp=Z,264nm,1.7s
**DGAR Diego Garcia 79.90 252** P **P 05 43 56.1 -0.4**
**S22A 4UR Ranch, Cre 79.90 49** P **P 05 43 57.4 +0.8**
baz=313,SNR=19
**VLAD Vladila 79.90 320 ⇑P P 05 43 57.0 +0.9**
**SRO Srobarova 79.91 326** *eP* **P 05 43 57.9 +1.9**
SRO pmax pmax
comp=Z,44nm,0.9s
**SRO Srobarova 79.91 326** *eP* **P 05 43 57.9 +1.9**
**MODS Modra-Piesok 79.92 327** *eP* **P 05 43 59.1 +2.9**
MODS pmax pmax
comp=Z,46nm,1.2s
**MODS Modra-Piesok 79.92 327** *eP* **P 05 43 59.1 +2.9**
MODS *e*PP **PP 05 46 53.0 -4.1**
**W18A Petrified Fore 79.93 53** P **P 05 43 57.0 +0.3**
baz=312
**TREC Trest 79.95 328** *eP* **P 05 43 57.6 +1.3**
**TREC Trest 79.95 328** *eP* **P 05 43 57.6 +1.3**
**Q24A Divide 80.04 47** P **P 05 43 57.3 -0.1**
baz=314,SNR=12
**214A Organ Pipe Nat 80.06 57** P **P 05 43 57.9 +0.7**
baz=311
**BZS Buzias 80.07 322 ⇑P P 05 43 56.6 -0.4**
**ZST Bratislava 80.13 327** *eP* **P 05 43 58.6 +1.3**
**ZST Bratislava 80.13 327** *eP* **P 05 43 58.6 +1.3**
**HERR Herculane 80.23 322 ⇑P P 05 43 57.8 0.0**
**PBCC Pribram 80.24 329** *eP* **P 05 43 58.6 +0.7**
**TANN Tannenbergstha 80.26 330** *eP* **P 05 43 58.5 +0.5**
comp=Z,9.7nm,1.2s,baz=36,slow=5.2
**GTTG Gottingen 80.26 332** *eP* **P 05 43 58.5 +0.6**
comp=Z,17nm,0.9s,baz=36,slow=5.2
**WERD Werda 80.29 330** *eP* **P 05 43 58.9 +0.8**
comp=Z,10nm,1.1s,baz=36,slow=5.2
**EYMN Ely 80.30 34** IAmb IAmb 05 44 06.9
comp=Z,70nm,1.4s
**EYMN Ely 80.30 34** P **P 05 43 57.8 -0.4**
baz=320,SNR=9.7
**GUNZ Gunzen 80.35 330** *eP* **P 05 43 59.0 +0.5**
comp=Z,11nm,0.8s,baz=36,slow=5.2
**OGNE Ogallala 80.38 44** IAmb IAmb 05 44 08.2
comp=Z,94nm,1.1s
**OGNE Ogallala 80.38 44** P **P 05 43 59.2 +0.3**
baz=315
**MOX Moxa 80.39 331** *eP* **P 05 43 59.1 +0.5**
comp=Z,14nm,1.0s,baz=36,slow=5.2
**WERN Wernitzgruen 80.39 330** *eP* **P 05 43 59.1 +0.4**
comp=Z,14nm,0.9s,baz=36,slow=5.2
**IBBN Ibbenburen 80.40 334** *eP* **P 05 43 59.4 +0.8**
comp=Z,19nm,0.8s,baz=36,slow=5.2
**NKC Novy Kostel 80.41 330** *eP* **P 05 43 59.3 +0.5**
**NKC Novy Kostel 80.41 330** *eP* **P 05 43 59.3 +0.5**
**GLAD Gladstone 80.44 176** P **P 05 43 59.9 +1.2**
comp=Z,41nm,1.0s
**EGYH Egyhazaskeszo 80.64 326** P **P 05 44 02.1 +2.1**
**MDVR Moldovita 80.64 322 ⇑P P 05 44 00.5 +0.3**
**RAYN Ar Rayn 80.67 293** P **P 05 44 00.1 -0.6**
RAYN pmax pmax
comp=Z,39nm,0.9s
RAYN MLR MLR
comp=Z,400nm,21.0s
**RAYN Ar Rayn 80.67 293** P **P 05 44 00.1 -0.6**
RAYN IAmb IAmb 05 44 01.7
comp=Z,39nm,0.9s
**RAYN Ar Rayn 80.67 293** IAMs_20 IAMs_20 06 18 42.0
comp=Z,351nm,21.0s
**RAYN Ar Rayn 80.67 293** *i* P **P 05 44 00.6 -0.1**
SNR=29
**SDCO Great Sand Dun 80.67 48** P **P 05 44 01.2 +0.4**
baz=313,SNR=9.7
**MPEP Malo Peshtene 80.70 320** P **P 05 44 01.6 +1.1**
**MANZ Manzenberg 80.74 330** *eP* **P 05 44 00.9 +0.4**
comp=Z,3.0nm,0.8s,baz=36,slow=5.2
**SOP Sopron 80.76 327** P **P 05 44 02.3 +1.7**
**TIH Tihany 80.79 325** P **P 05 44 00.9 +0.1**
**CKRC Cesky Krumlov 80.80 328** *eP* **P 05 44 01.5 +0.6**
**UBBA Unterbirzbach 80.84 332** *eP* **P 05 44 01.9 +0.9**
baz=36,slow=5.2
**RAR Rarotonga 80.85 127** LR LR 06 16 05.6
comp=Z,329nm,19.4s,baz=322,slow=33
**KHC Kasperske Hory 80.85 329** *eP* **P 05 44 02.2 +1.0**
KHC *e* 05 44 09.5
**KHC Kasperske Hory 80.85 329** *eP* **P 05 44 02.2 +1.0**
KHC *ex* x 05 44 09.5
**CONA Conrad Observa 80.87 327** *i* P **P 05 44 02.8 +1.5**
comp=Z,24nm,0.9s,SNR=9.5
**CORO Coronation Par 80.87 177** P **P 05 44 03.0 +2.1**
comp=Z,29nm,1.0s
**ROTZ Rotzenmuhle 80.88 330** *eP* **P 05 44 01.9 +0.6**
comp=Z,2.8nm,0.9s,baz=36,slow=5.2
**MORH Mrgy, Hungar 80.98 324** ⇑*i*P **P 05 44 02.0 +0.1**
**EKA Eskdalemuir Ar 80.99 341** LR LR 06 27 30.5
comp=Z,517nm,18.2s,baz=16,slow=41
**GEC2 GERESS Array S 81.03 329** *eP* **P 05 44 02.6 +0.4**
comp=Z,7.4nm,0.8s,baz=36,slow=5.2
**GERES GERESS Array B 81.03 329** P **P 05 44 02.9 +0.6**
comp=Z,11nm,0.9s,baz=28,slow=5.1,SNR=37
GERES PP **PP 05 47 03.2 -3.1**
comp=Z,3.5nm,0.9s,baz=33,slow=10,SNR=3.9
GERES LR LR 06 25 00.1
comp=Z,651nm,18.0s,baz=12,slow=39
**WET Wettzell 81.12 329** *eP* **P 05 44 03.7 +1.1**
comp=Z,19nm,1.0s,baz=36,slow=5.2
**TUC Tucson 81.13 55** P **P 05 44 03.2 +0.1**
**TUC Tucson 81.13 55** P **P 05 44 03.1 +0.1**
**TUC Tucson 81.13 55** P **P 05 44 03.3 +0.3**
baz=312
**ECSD EROS Data Cent 81.14 39** IAmb IAmb 05 44 11.7
comp=Z,42nm,1.0s
**ECSD EROS Data Cent 81.14 39** P **P 05 44 02.7 -0.1**
baz=318,SNR=24
**FRGS Fruska Gora 81.25 323 ⇑P P 05 44 03.3 -0.1**
**FRGS Fruska Gora 81.25 323** ⇑*i*P **P 05 44 03.2 -0.1**
**BUG Bochum--Univer 81.29 334** *eP* **P 05 44 04.0 +0.6**
baz=36,slow=5.2
**CSS Mathiatis 81.30 308** IAmb IAmb 05 44 13.2
comp=Z,41nm,0.9s
**ALN Alexandroupoli 81.30 317** IAmb IAmb 05 44 13.9
comp=Z,104nm,1.8s
**E38A The Farm, Brul 81.31 35** IAmb IAmb 05 44 12.0
comp=Z,53nm,1.1s
**GRA1 Grafenberg Arr 81.31 331** IAmb IAmb 05 44 14.1
comp=Z,67nm,1.0s
**GRF Grafenberg Arr 81.31 331** *eP* **P 05 44 04.3 +0.7**
comp=Z,36nm,0.9s,baz=36,slow=5.2
**GRFO Grafenberg 81.31 331** P **P 05 44 03.9 +0.3**
GRFO pmax pmax
comp=Z,60nm,1.0s
**GRFO Grafenberg 81.31 331** P **P 05 44 03.9 +0.3**
GRFO IAmb IAmb 05 44 14.1
comp=Z,60nm,1.0s
**KOVH Kovagotottos 81.32 325** P **P 05 44 03.8 +0.1**
**MMAI Mount Meron Ar 81.33 306** LR LR 06 24 17.0
comp=Z,896nm,18.4s,baz=205,slow=39
**KSCO Kaye Shedlock' 81.42 46** IAmb IAmb 05 44 13.8
comp=Z,123nm,1.6s
**KSCO Kaye Shedlock' 81.42 46** P **P 05 44 04.7 +0.2**
baz=315
**RZN Rozhen 81.42 318** P **P 05 44 05.6 +1.1**
**SOCY Socotra 81.45 279** P **P 05 44 02.2 -2.7**
**VTS Vitosha 81.50 320 ⇑P P 05 44 06.2 +1.3**
**VTS Vitosha 81.50 320** IAmb IAmb 05 44 07.1
comp=Z,43nm,0.9s
**VTS Vitosha 81.50 320** P **P 05 44 06.0 +1.1**
**BOVS Bovan 81.50 321 ⇑P P 05 44 04.7 +0.1**
**ARSA Arzberg 81.54 327** *i* P **P 05 44 05.9 +1.0**
comp=Z,32nm,1.7s,SNR=5.5
**MOA Molln 81.59 328** *eP* **P 05 44 06.0 +0.9**
comp=Z,19nm,1.2s
**T25A Trinidad 81.72 48** P **P 05 44 06.4 +0.2**
baz=314,SNR=14
**GAL1 Galloway 81.79 342** *eP* **P 05 44 07.0 +1.0**
GAL1 IAmb IAmb 05 44 07.8
comp=Z,57nm,0.8s
**SPMN Marine on St. 81.81 36** IAmb IAmb 05 44 15.0
comp=Z,62nm,1.6s
**SPMN Marine on St. 81.81 36** P **P 05 44 05.8 -0.5**
baz=320,SNR=5.4
**TNS Tanus Mts 81.90 332** *eP* **P 05 44 06.9 +0.2**
comp=Z,9.9nm,0.9s,baz=36,slow=5.2
**CLGH Cloghs, Cushen 81.92 343** *eP* **P 05 44 08.0 +1.3**
**A252A Venje 81.94 324** P **P 05 44 07.1 +0.2**
**DIVS Divibare 81.97 322** ⇑*i*P **P 05 44 07.7 +0.4**
**DIVS Divibare 81.97 322** IAmb IAmb 05 44 17.3
comp=Z,74nm,1.5s
**MMB Musomiste 82.00 319** P **P 05 44 08.1 +0.7**
**KALN Kalnik 82.01 326** P **P 05 44 07.0 -0.4**
**ANMO Albuquerque 82.03 51** P **P 05 44 08.4 +0.5**
comp=Z,14nm,1.1s,baz=312,slow=6.8,SNR=29
**ANMO Albuquerque 82.03 51** *deP* **P 05 44 09.0 +1.1**
ANMO pmax pmax
comp=Z,27nm,1.3s
**ANMO Albuquerque 82.03 51** P **P 05 44 08.2 +0.3**
**ANMO Albuquerque 82.03 51** P **P 05 44 08.7 +0.8**
baz=313
**BGNE Belgrade 82.08 42** P **P 05 44 07.9 +0.1**
baz=317,SNR=7.5
**AHRW Bad Neuenahr-A 82.11 333** *eP* **P 05 44 08.0 +0.2**
comp=Z,13nm,0.8s,baz=36,slow=5.2
**GROS Grobnik 82.17 326** *eP* **P 05 44 08.2 -0.1**
**PERS Pernice 82.19 327** *eP* **P 05 44 08.7 +0.3**
**SOKA Soroth 82.20 327** *i* P **P 05 44 08.9 +0.5**
comp=Z,60nm,1.1s,SNR=22
**D41A Chassel 82.23 33** IAmb IAmb 05 44 17.5
comp=Z,97nm,1.6s
**RJOB Jochberg 82.28 329** *eP* **P 05 44 09.5 +0.7**
comp=Z,18nm,0.9s,baz=36,slow=5.2
**TAU Tasmania Unive 82.33 177** P **P 05 44 09.3 +0.7**
TAU pmax pmax
comp=Z,63nm,1.2s
**TAU Tasmania Unive 82.33 177** P **P 05 44 09.3 +0.7**
TAU IAmb IAmb 05 44 10.5
comp=Z,63nm,1.1s
**TAU Tasmania Unive 82.33 177** P **P 05 44 10.5 +1.9**
comp=Z,57nm,1.3s
**LBWR Ladybower, Pea 82.35 339** *eP* **P 05 44 09.6 +0.7**
LBWR IAmb IAmb 05 44 13.0
comp=Z,237nm,1.6s
**BTNL Ternell 82.40 334** *bP* **P 05 44 09.8 +0.4**
comp=Z,14nm,1.0s
**BBLS Lazići 82.42 322** ⇑*i*P **P 05 44 10.5 +0.9**
**MEM Membach 82.42 334** *k*P **P 05 44 10.2 +0.8**
comp=Z,17nm,1.0s
**SCHQ Schefferville 82.47 17** P **P 05 44 10.5 +0.9**
comp=Z,11nm,0.8s,baz=360,slow=7.1,SNR=11
SCHQ LR LR 06 25 53.1
comp=Z,463nm,18.2s,baz=306,slow=39
**FUR Furstenfeldbru 82.53 330** *eP* **P 05 44 10.5 +0.5**
comp=Z,32nm,0.8s,baz=36,slow=5.2
**OBKA Obir 82.53 327** *i* P **P 05 44 10.7 +0.5**
comp=Z,14nm,0.8s,SNR=7.8
**L34A Svendsen Farm, 82.57 40** IAmb IAmb 05 44 18.9
comp=Z,53nm,1.0s
**KBA Koelnbreinsper 82.58 328** *i* P **P 05 44 11.2 +0.6**
comp=Z,28nm,0.9s,SNR=17
**AKAS Kas 82.63 311** IAmb IAmb 05 44 19.6
comp=Z,65nm,0.9s
**RUDO Rudo 82.63 322** ⇑*i*P **P 05 44 10.8 +0.2**
**BHOU Houvegnez 82.64 334** *k*P **P 05 44 11.7 +1.1**
**CRES Cresnjev 82.69 326** ⇑*i*P **P 05 44 11.1 +0.2**
**CRES Cresnjev 82.69 326** *i* P **P 05 44 10.8 0.0**
**MRAK Mrakovica 82.69 325** *eP* **P 05 44 09.9 -1.1**
**STIP Stip 82.70 319** *i* P **P 05 44 10.7 -0.4**
**319A Douglas 82.70 55** IAmb IAmb 05 44 21.1
comp=Z,43nm,1.0s
**COWI Conover 82.75 34** IAmb IAmb 05 44 19.8
comp=Z,86nm,1.9s
**BLY Banja Luka 82.77 324** ⇑*i*P **P 05 44 11.8 +0.5**
**VAY Valandovo 82.78 319** *i* P **P 05 44 12.2 +0.7**
**MYKA Terra Mystica 82.82 327** *i* P **P 05 44 11.8 +0.2**
comp=Z,20nm,0.9s,SNR=12
**BCLA Clavier 82.82 334** *k*P **P 05 44 12.4 +0.9**
**CWF Charnwood Fore 82.83 339** *eP* **P 05 44 11.8 +0.3**
CWF IAmb IAmb 05 44 13.2
comp=Z,31nm,1.1s
**PLE Pljevlja 82.84 322** ⇑*i*P **P 05 44 13.1 +1.2**
**121A Cookes Peak, D 82.86 53** IAmb IAmb 05 44 22.4
comp=Z,36nm,1.1s
**121A Cookes Peak, D 82.86 53** P **P 05 44 13.1 +0.8**
baz=313,SNR=8.0
**SKO Skopje 82.87 320** *i* P **P 05 44 13.0 +1.1**
**A251A Rujevac 82.88 325** P **P 05 44 11.8 -0.1**
**LJU Ljubljana 82.91 327** ⇑*i*P **P 05 44 12.1 0.0**
**BGES Gesves 82.92 334** *k*P **P 05 44 12.7 +0.7**
**IVA Berane 82.94 322** ⇑*i*P **P 05 44 13.5 +1.1**
**MGRS Mrkonjic Grad 83.07 324** ⇑*i*P **P 05 44 13.7 +0.8**
**RCHB Rochefort 83.07 334** *bP* **P 05 44 13.0 +0.2**
comp=Z,12nm,1.2s
**WATA Walderalm 83.09 329** *i* P **P 05 44 13.8 +0.7**
comp=Z,32nm,1.4s,SNR=10
**BMRD Maredsous 83.10 334** *bP* **P 05 44 13.4 +0.5**
comp=Z,20nm,1.1s
**WTTA Wattenberg 83.12 329** *i* P **P 05 44 14.1 +0.7**
comp=Z,38nm,1.4s,SNR=7.7
**CBKS Cedar Bluff 83.14 44** IAmb IAmb 05 44 21.8
comp=Z,35nm,0.9s
**CBKS Cedar Bluff 83.14 44** P **P 05 44 13.2 -0.2**
baz=316
**UPM Unac-Piva 83.16 322** ⇑*i*P **P 05 44 13.7 +0.1**
**UPM Unac-Piva 83.16 322** ⇑*i*P **P 05 44 13.8 +0.1**
**ABTA Abfaltersbach 83.19 328** *i* P **P 05 44 13.1 -0.5**
comp=Z,24nm,1.2s,SNR=8.7
**VOJS Vojsko 83.19 327** *eP* **P 05 44 12.6 -1.0**
**CEY Cerknica 83.20 326** ⇑*i*P **P 05 44 13.6 0.0**
**FOEL Foel Wylfa 83.20 340** *eP* **P 05 44 14.7 +1.2**
FOEL IAmb IAmb 05 44 16.6
comp=Z,40nm,0.7s
**MOTA Moosalm 83.27 329** *i* P **P 05 44 14.8 +0.7**
comp=Z,59nm,1.1s,SNR=16
**RETA Reutte 83.29 330** *i* P **P 05 44 14.4 +0.3**
comp=Z,57nm,1.4s,SNR=16
**SQTA Sankt Quirin 83.33 329** *i* P **P 05 44 15.2 +0.8**
comp=Z,39nm,1.4s,SNR=9.1
**DOU Dourbes 83.34 334** *k*P **P 05 44 13.8 -0.3**
**PLIT Plitvice 83.36 325** P **P 05 44 13.9 -0.5**
**UBR Ueberruh 83.38 330** *eP* **P 05 44 14.9 +0.4**
baz=36,slow=5.2
**NKME Niksic 83.47 322** ⇑*i*P **P 05 44 15.2 +0.1**
**STAL STALIGIAL 83.50 328** IAmb IAmb 05 44 22.7
comp=Z,34nm,0.7s
**BFO Black Forest 83.52 331** P **P 05 44 14.6 -0.6**
BFO pmax pmax
comp=Z,84nm,1.6s
**BFO Black Forest 83.52 331** *eP* **P 05 44 15.9 +0.8**
comp=Z,9.3nm,0.8s,baz=36,slow=5.2
**BFO Black Forest 83.52 331** P **P 05 44 14.6 -0.6**
BFO IAmb IAmb 05 44 23.7
comp=Z,84nm,1.6s
**BRY Bratogost 83.56 322** ⇑*i*P **P 05 44 15.3 -0.4**
**BRY Bratogost 83.56 322** ⇑*i*P **P 05 44 15.5 -0.2**
**PDG Podgorica 83.58 322 ⇓P P 05 44 16.0 +0.5**
**PDG Podgorica 83.58 322** ⇑*i*P **P 05 44 15.9 +0.3**
**TTG Podgorica 83.58 322** ⇑*i*P **P 05 44 16.2 +0.6**
**FETA Feichten 83.68 329** *i* P **P 05 44 16.7 +0.5**
comp=Z,34nm,1.2s,SNR=12
**KIJV Kijevo 83.69 324** P **P 05 44 15.8 -0.3**
**URZ Urewera 83.71 154** P **P 05 44 14.3 -1.6**
comp=Z,7.7nm,0.8s,baz=277,slow=6.8,SNR=5.2
URZ LR LR 06 18 06.1
comp=Z,319nm,18.9s,baz=334,slow=33
**URZ Urewera 83.71 154** P **P 05 44 17.2 +1.3**
comp=Z,90nm,1.3s
**RICI Ricice 83.76 324** P **P 05 44 15.5 -1.0**
**DAVA Damuels 83.80 330** *i* P **P 05 44 17.4 +0.6**
comp=Z,54nm,1.1s,SNR=14
**DRME Dracevica, Mon 83.80 322** ⇑*i*P **P 05 44 17.2 +0.5**
**DRME Dracevica, Mon 83.80 322** ⇑*i*P **P 05 44 17.7 +1.0**
**OHR Ohrid 83.83 320** *i* P **P 05 44 16.7 -0.3**
**I40A Norwalk 83.83 36** IAmb IAmb 05 44 25.4
comp=Z,28nm,1.0s
**EIL Eiat 83.85 304** LR LR 06 25 54.7
comp=Z,355nm,19.4s,baz=82,slow=39
**BUM Brajici-Budva 83.86 322** ⇑*i*P **P 05 44 17.4 +0.3**
**SMRN Sveta Marina 83.87 326** P **P 05 44 16.2 -0.8**
**STRD Stroud 83.92 339** *eP* **P 05 44 18.4 +1.3**
STRD IAmb IAmb 05 44 19.0
comp=Z,57nm,0.8s
**HCY Herceg Novi 83.93 322** ⇑*i*P **P 05 44 16.8 -0.6**
**HCY Herceg Novi 83.93 322** ⇑*i*P **P 05 44 17.2 -0.2**
**ULC Ulcinj 83.95 321** ⇑*i*P **P 05 44 17.7 +0.2**
**MCH1 Michaelchurch 83.95 340** *eP* **P 05 44 18.1 +0.8**
MCH1 IAmb IAmb 05 44 21.5
comp=Z,325nm,1.9s
**MAKA Makarska 83.97 323** P **P 05 44 16.4 -1.1**
**STON Ston 83.98 323** ⇑*i*P **P 05 44 16.8 -0.8**
**ECH Echery 84.04 332** IAmb IAmb 05 44 27.7
comp=Z,30nm,1.1s
**TIR Tirane 84.11 321** IAmb IAmb 05 44 33.8
comp=Z,41nm,0.8s
**MORI Morici 84.12 325** P **P 05 44 17.2 -1.1**
**BRJN Brijuni 84.15 326** P **P 05 44 17.1 -1.3**
**SCIA State Center 84.16 38** P **P 05 44 18.5 0.0**
baz=320,SNR=7.8
**DAVOX Davos/Dischmat 84.21 330** LR LR 06 25 54.7
comp=Z,910nm,20.6s,baz=21,slow=39
**PMOR Pomariorio Ree 84.25 115** *eT* T 07 17 01.0
comp=Z,82nm,0.2s
**DUGI Dugi Otok 84.31 325** P **P 05 44 18.7 -0.5**
**ZIRJ Zirje 84.31 324** P **P 05 44 17.4 -1.9**
**BKZ Black Stump Fm 84.31 154** IAmb IAmb 05 44 21.1
comp=Z,46nm,1.6s
BKZ IAMs_20 IAMs_20 06 11 53.7
comp=Z,542nm,21.0s
**LSTV Lastovo 84.44 323** P **P 05 44 18.0 -1.9**
**E46A Sault Ste Mari 84.51 31** IAmb IAmb 05 44 28.8
comp=Z,85nm,1.4s
**KSU1 Kansas State U 84.58 42** IAmb IAmb 05 44 29.2
comp=Z,41nm,1.1s
**KSU1 Kansas State U 84.58 42** P **P 05 44 20.6 -0.1**
baz=318
**I42A Draeger Farm, 84.59 35** IAmb IAmb 05 44 29.5
comp=Z,47nm,1.0s
**TEOL Teolo 84.66 328** IAmb IAmb 05 44 28.9
comp=Z,60nm,1.2s
**JFWS Jewell Farm 84.77 36** P **P 05 44 21.5 -0.1**
baz=322,SNR=6.8
**PPT Papeete 84.85 118** LR LR 06 21 44.0
comp=Z,282nm,18.8s,baz=305,slow=35
**PPT2 Papeete2 84.86 118** *e*LQ LQ 06 07 07.0
comp=Z,807nm,30.0s
PPT2 *e*LR LR 06 10 34.1
comp=Z,518nm,22.2s
**PPT2 Papeete2 84.86 118** *eT* T 07 17 47.2
comp=Z,24nm,0.3s
**AMTX Amarillo 84.88 48** IAmb IAmb 05 44 32.1
comp=Z,41nm,1.0s
**AMTX Amarillo 84.88 48** P **P 05 44 23.3 +0.9**
baz=316
**MSTX Muleshoe 84.89 49** IAmb IAmb 05 44 31.7
comp=Z,39nm,1.1s
**MSTX Muleshoe 84.89 49** P **P 05 44 22.6 +0.1**
baz=315
**PAE Paea 84.91 118** *eT* T 07 17 50.0
comp=Z,3.8nm,0.3s
**MNTX Cornudas Mount 84.91 53** IAmb IAmb 05 44 32.1
comp=Z,72nm,1.7s
**MNTX Cornudas Mount 84.91 53** P **P 05 44 22.7 +0.1**
baz=314,SNR=16

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L40A | **Anamosa** | **84.98** | **37** | IAmb | IAmb | 05 44 31.2 | | |
| | comp=Z,50nm,0.9s | | | | | | | |
| TIAR | **Tiarei** | **85.00** | **118** | *e*T | T | 07 17 56.6 | | |
| | comp=Z,5.1nm,0.2s | | | | | | | |
| N38A | **Joes South For** | **85.00** | **39** | IAmb | IAmb | 05 44 31.7 | | |
| | comp=Z,53nm,0.8s | | | | | | | |
| G45A | **Suttons Bay** | **85.06** | **32** | IAmb | IAmb | 05 44 31.8 | | |
| | comp=Z,50nm,1.0s | | | | | | | |
| TVO | **Taravao** | **85.22** | **118** | *e*T | T | 07 18 13.2 | | |
| OK035 | **E0210 Rd and N** | **85.22** | **45** | IAmb | IAmb | 05 44 33.3 | | |
| | comp=Z,46nm,0.9s | | | | | | | |
| U32A | **Winter Ranch,** | **85.30** | **46** | IAmb | IAmb | 05 44 33.3 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| VLDQ | **Val d'Or** | **85.54** | **26** | IAmb | IAmb | 05 44 33.2 | | |
| | comp=Z,55nm,1.0s | | | | | | | |
| GLMI | **Grayling** | **85.66** | **32** | P | **P** | **05 44 26.1** | **+0.1** | |
| | baz=325,SNR=7.7 | | | | | | | |
| L42A | **Oliver, Polo** | **85.75** | **36** | IAmb | IAmb | 05 44 34.8 | | |
| | comp=Z,37nm,1.0s | | | | | | | |
| P38A | **Dawn** | **85.75** | **40** | IAmb | IAmb | 05 44 35.7 | | |
| | comp=Z,76nm,1.3s | | | | | | | |
| TAOE | **Nuku Hiva Isla** | **85.75** | **105** | *e*LR | LR | 06 11 25.6 | | |
| | comp=Z,506nm,21.0s | | | | | | | |
| TAOE | **Nuku Hiva Isla** | **85.75** | **105** | *e*T | T | 07 18 55.4 | | |
| | comp=Z,33nm,0.3s | | | | | | | |
| SGRT | **San Giovanni R** | **85.76** | **323** | IAmb | IAmb | 05 44 39.3 | | |
| | comp=Z,57nm,1.1s | | | | | | | |
| K43A | **Burlington** | **85.80** | **35** | IAmb | IAmb | 05 44 42.3 | | |
| | comp=Z,31nm,1.1s | | | | | | | |
| IDI | **Anoyia** | **85.98** | **314** | LR | LR | 06 29 48.0 | | |
| | comp=Z,249nm,18.0s,baz=9.0,slow=40 | | | | | | | |
| BLOK | **Blackwell** | **86.00** | **44** | IAmb | IAmb | 05 44 37.1 | | |
| | comp=Z,44nm,1.1s | | | | | | | |
| NRCA | **Norcia** | **86.08** | **325** | IAmb | IAmb | 05 44 41.6 | | |
| | comp=Z,63nm,1.1s | | | | | | | |
| MEH | **Mehetia** | **86.10** | **117** | *e*T | T | 07 19 18.9 | | |
| | comp=Z,151nm,0.3s | | | | | | | |
| MATE | **Matera** | **86.17** | **322** | ⇓P | **P** | **05 44 28.6** | **0.0** | |
| N41A | **Harden Midland** | **86.21** | **38** | IAmb | IAmb | 05 44 37.8 | | |
| | comp=Z,84nm,1.4s | | | | | | | |
| T35A | **Sooner Cattle** | **86.26** | **44** | IAmb | IAmb | 05 44 38.5 | | |
| | comp=Z,81nm,1.4s | | | | | | | |
| AQU | **L'Aquila** | **86.34** | **325** | IAmb | IAmb | 05 44 39.6 | | |
| | comp=Z,52nm,1.1s | | | | | | | |
| FOZ | **Fox Glacier** | **86.36** | **161** | IAmb | IAmb | 05 44 39.5 | | |
| | comp=Z,42nm,1.2s | | | | | | | |
| L44A | **Lake County Fo** | **86.40** | **35** | P | **P** | **05 44 29.7** | **0.0** | |
| | baz=323 | | | | | | | |
| OK029 | **Liberty Lake** | **86.58** | **45** | IAmb | IAmb | 05 44 41.2 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| BCOK | **Bluff Creek, N** | **86.60** | **45** | IAmb | IAmb | 05 44 40.4 | | |
| | comp=Z,102nm,1.5s | | | | | | | |
| WMOK | **Wichita Mounta** | **86.63** | **47** | P | **P** | **05 44 31.2** | **+0.2** | |
| | baz=317,SNR=15 | | | | | | | |
| OK033 | **Mehan** | **86.68** | **45** | IAmb | IAmb | 05 44 40.4 | | |
| | comp=Z,51nm,1.2s | | | | | | | |
| OXZ | **Oxford** | **86.76** | **159** | IAmb | IAmb | 05 44 40.8 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| OK031 | **S. Brethren Rd** | **86.80** | **45** | IAmb | IAmb | 05 44 41.2 | | |
| | comp=Z,112nm,1.7s | | | | | | | |
| OK031 | | | | IAMs_20 | IAMs_20 | 06 16 22.0 | | |
| | comp=Z,486nm,18.0s | | | | | | | |
| OK025 | **Westminster Rd** | **86.80** | **45** | IAmb | IAmb | 05 44 41.1 | | |
| | comp=Z,57nm,1.2s | | | | | | | |
| OK034 | **N. Norfolk Rd.** | **86.82** | **44** | IAmb | IAmb | 05 44 42.5 | | |
| | comp=Z,74nm,1.6s | | | | | | | |
| J47A | **Sunmer** | **86.88** | **33** | IAmb | IAmb | 05 44 41.5 | | |
| | comp=Z,60nm,1.1s | | | | | | | |
| BNI | **Bardonecchia** | **86.89** | **331** | IAmb | IAmb | 05 44 57.1 | | |
| | comp=Z,56nm,1.4s | | | | | | | |
| LPIG | **La Paz** | **86.91** | **61** | LR | LR | 06 20 02.8 | | |
| | comp=Z,101nm,18.1s,baz=340,slow=33 | | | | | | | |
| HDIL | **Hopedale** | **87.06** | **37** | IAmb | IAmb | 05 44 41.9 | | |
| | comp=Z,60nm,1.0s | | | | | | | |
| HDIL | **Hopedale** | **87.06** | **37** | P | **P** | **05 44 33.0** | **0.0** | |
| | baz=322,SNR=7.1 | | | | | | | |
| X34A | **Smith Ranch, M** | **87.25** | **46** | IAmb | IAmb | 05 44 43.8 | | |
| | comp=Z,69nm,1.4s | | | | | | | |
| LBZ | **Lake Benmore** | **87.26** | **161** | IAmb | IAmb | 05 44 43.6 | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| TIP | **Timpagrande** | **87.30** | **321** | ⇑P | **P** | **05 44 34.6** | **+0.4** | |
| TIP | **Timpagrande** | **87.30** | **321** | IAmb | IAmb | 05 44 43.2 | | |
| | comp=Z,64nm,1.6s | | | | | | | |
| S39A | **Bolivar** | **87.33** | **41** | IAmb | IAmb | 05 44 42.6 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| TUL1 | **Leonard** | **87.39** | **44** | P | **P** | **05 44 34.6** | **-0.1** | |
| | baz=319 | | | | | | | |
| R40A | **Maddies Statio** | **87.40** | **40** | IAmb | IAmb | 05 44 35.9 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| TX31 | **Lajitas Ar. Si** | **87.62** | **53** | IAmb | IAmb | 05 44 44.7 | | |
| | comp=Z,47nm,1.0s | | | | | | | |
| TXAR | **Lajitas Array** | **87.62** | **53** | P | **P** | **05 44 36.3** | **+0.3** | |
| | comp=Z,3.3nm,0.7s,baz=292,slow=3.7,SNR=49 | | | | | | | |
| TXAR | | | | PP | **PP** | **05 48 05.3** | **+4.6** | |
| | comp=Z,3.6nm,1.1s,baz=292,slow=3.9,SNR=4.4 | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **06 02 24.2** | **+1.6** | |
| | comp=Z,0.6nm,0.9s,baz=160,slow=4.0,SNR=3.9 | | | | | | | |
| TXAR | | | | LR | LR | 06 17 09.8 | | |
| | comp=Z,130nm,21.8s,baz=338,slow=31 | | | | | | | |
| ABTX | **Abilene, Hawle** | **87.68** | **49** | IAmb | IAmb | 05 44 45.6 | | |
| | comp=Z,47nm,1.2s | | | | | | | |
| ABTX | **Abilene, Hawle** | **87.68** | **49** | P | **P** | **05 44 36.1** | **0.0** | |
| | baz=317 | | | | | | | |
| P43A | **Skaggs, Pawnee** | **87.68** | **38** | IAmb | IAmb | 05 44 45.0 | | |
| | comp=Z,52nm,1.2s | | | | | | | |
| U38A | **Gravette** | **87.74** | **43** | IAmb | IAmb | 05 44 47.7 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| SADO | **Sadowa** | **87.82** | **28** | LR | LR | 06 24 57.3 | | |
| | comp=Z,337nm,21.8s,baz=1.5,slow=36 | | | | | | | |
| CCM | **Cathedral Cave** | **88.09** | **40** | P | **P** | **05 44 37.4** | **-0.6** | |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,54nm,0.9s | | | | | | | |
| CCM | **Cathedral Cave** | **88.09** | **40** | P | **P** | **05 44 37.4** | **-0.6** | |
| CCM | **Cathedral Cave** | **88.09** | **40** | P | **P** | **05 44 38.1** | **+0.1** | |
| | baz=321 | | | | | | | |
| AAM | **Ann Arbor** | **88.13** | **33** | IAmb | IAmb | 05 44 47.3 | | |
| | comp=Z,58nm,1.2s | | | | | | | |
| AAM | **Ann Arbor** | **88.13** | **33** | P | **P** | **05 44 38.1** | **0.0** | |
| | baz=326 | | | | | | | |
| SFIN | **Lafayette** | **88.21** | **36** | IAmb | IAmb | 05 44 47.5 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| SFIN | **Lafayette** | **88.21** | **36** | P | **P** | **05 44 37.6** | **-0.9** | |
| | baz=324,SNR=8.3 | | | | | | | |
| MGMO | **Mountain Grove** | **88.28** | **41** | IAmb | IAmb | 05 44 47.5 | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| FVM | **French Village** | **88.55** | **39** | IAmb | IAmb | 05 44 48.6 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| DELO | **Deloro Mine** | **88.59** | **28** | IAmb | IAmb | 05 44 49.0 | | |
| | comp=Z,50nm,1.2s | | | | | | | |
| U40A | **Yellville** | **88.60** | **42** | P | **P** | **05 44 40.2** | **-0.3** | |
| | baz=320,SNR=24 | | | | | | | |
| P46A | **Rosedale** | **88.78** | **36** | IAmb | IAmb | 05 44 50.3 | | |
| | comp=Z,44nm,0.8s | | | | | | | |
| W39A | **Magazine** | **89.00** | **43** | IAmb | IAmb | 05 44 51.3 | | |
| | comp=Z,37nm,1.6s | | | | | | | |
| W39A | **Magazine** | **89.00** | **43** | P | **P** | **05 44 42.3** | **0.0** | |
| | baz=320,SNR=6.6 | | | | | | | |
| N49A | **Columbus Grove** | **89.05** | **34** | IAmb | IAmb | 05 44 51.5 | | |
| | comp=Z,39nm,0.9s | | | | | | | |
| OLIL | **Olney** | **89.07** | **37** | IAmb | IAmb | 05 44 51.9 | | |
| | comp=Z,47nm,0.9s | | | | | | | |
| MNTQ | **Montreal, Queb** | **89.09** | **25** | IAmb | IAmb | 05 44 51.4 | | |
| | comp=Z,43nm,1.2s | | | | | | | |
| JCT | **Junction City** | **89.14** | **50** | P | **P** | **05 44 43.3** | **+0.2** | |
| | baz=317 | | | | | | | |
| O48B | **Farmland** | **89.17** | **35** | P | **P** | **05 44 43.1** | **0.0** | |
| | baz=325 | | | | | | | |
| S44A | **Carbondale** | **89.35** | **39** | IAmb | IAmb | 05 44 53.1 | | |
| | comp=Z,54nm,0.9s | | | | | | | |
| WHTX | **Lake Whitney,** | **89.39** | **48** | P | **P** | **05 44 44.5** | **+0.2** | |
| | baz=318 | | | | | | | |
| BLO | **Bloomington** | **89.45** | **36** | IAmb | IAmb | 05 44 53.6 | | |
| | comp=Z,65nm,1.6s | | | | | | | |
| PBMO | **Poplar Bluff** | **89.50** | **40** | IAmb | IAmb | 05 44 53.8 | | |
| | comp=Z,60nm,1.1s | | | | | | | |
| LONY | **Lake Ozonia** | **89.56** | **26** | P | **P** | **05 44 45.0** | **+0.2** | |
| | baz=332 | | | | | | | |
| O49A | **Covington** | **89.59** | **34** | IAmb | IAmb | 05 44 54.0 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| MIAR | **Mount Ida** | **89.61** | **43** | IAmb | IAmb | 05 44 54.5 | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| MIAR | **Mount Ida** | **89.61** | **43** | P | **P** | **05 44 45.4** | **+0.2** | |
| | baz=320,SNR=12 | | | | | | | |
| ERPA | **Erie** | **89.77** | **30** | P | **P** | **05 44 46.0** | **+0.2** | |
| | baz=328,SNR=8.2 | | | | | | | |
| VAE | **Valguarnera** | **89.77** | **321** | LR | LR | 06 27 37.5 | | |
| | comp=Z,712nm,18.4s,baz=88,slow=37 | | | | | | | |
| N51A | **Ashland** | **89.82** | **33** | IAmb | IAmb | 05 44 55.1 | | |
| | comp=Z,53nm,1.2s | | | | | | | |
| W41B | **Gary Mavity, V** | **89.82** | **42** | P | **P** | **05 44 46.3** | **+0.1** | |
| | baz=321,SNR=8.1 | | | | | | | |
| Z38A | **Mt. Pleasant** | **89.83** | **45** | IAmb | IAmb | 05 44 55.4 | | |
| | comp=Z,52nm,1.2s | | | | | | | |
| P49A | **Miami Univ. Ec** | **89.96** | **35** | IAmb | IAmb | 05 44 55.7 | | |
| | comp=Z,68nm,1.1s | | | | | | | |
| P49A | **Miami Univ. Ec** | **89.96** | **35** | P | **P** | **05 44 46.7** | **0.0** | |
| | baz=325,SNR=14 | | | | | | | |
| MMNY | **Mt. Morris Dam** | **90.03** | **29** | IAmb | IAmb | 05 44 56.0 | | |
| | comp=Z,56nm,0.9s | | | | | | | |
| X40A | **Basin Creek Fa** | **90.05** | **43** | IAmb | IAmb | 05 44 56.6 | | |
| | comp=Z,51nm,1.4s | | | | | | | |
| X40A | **Basin Creek Fa** | **90.05** | **43** | P | **P** | **05 44 47.1** | **-0.1** | |
| | baz=320,SNR=7.9 | | | | | | | |
| M53A | **Wi Miller and** | **90.07** | **31** | P | **P** | **05 44 47.1** | **-0.1** | |
| | baz=328,SNR=7.8 | | | | | | | |
| J57A | **Williamstown** | **90.13** | **27** | IAmb | IAmb | 05 44 56.5 | | |
| | comp=Z,62nm,1.1s | | | | | | | |
| ACSO | **Alum Creek Sta** | **90.13** | **33** | IAmb | IAmb | 05 44 56.7 | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| ACSO | **Alum Creek Sta** | **90.13** | **33** | P | **P** | **05 44 48.2** | **+0.7** | |
| | baz=326 | | | | | | | |
| 435B | **Jarrell** | **90.22** | **48** | P | **P** | **05 44 48.7** | **+0.6** | |
| | baz=318 | | | | | | | |
| NCB | **Newcomb** | **90.25** | **26** | IAmb | IAmb | 05 44 57.1 | | |
| | comp=Z,50nm,1.2s | | | | | | | |
| ATD | **Arta Tunnel** | **90.28** | **285** | LR | LR | 06 28 08.7 | | |
| | comp=Z,95nm,21.4s,baz=30,slow=38 | | | | | | | |
| ATD | **Arta Tunnel** | **90.28** | **285** | IAmb | IAmb | 05 44 50.9 | | |
| | comp=Z,46nm,1.0s | | | | | | | |
| WCI | **Wyandotte Cave** | **90.32** | **37** | P | **P** | **05 44 48.7** | **+0.3** | |
| WCI | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| WCI | **Wyandotte Cave** | **90.32** | **37** | P | **P** | **05 44 48.7** | **+0.3** | |
| WCI | | | | IAmb | IAmb | 05 44 57.0 | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| WCI | **Wyandotte Cave** | **90.32** | **37** | P | **P** | **05 44 49.3** | **+0.9** | |
| | baz=324 | | | | | | | |
| M54A | **Oil Creek Stat** | **90.41** | **30** | IAmb | IAmb | 05 44 58.2 | | |
| | comp=Z,74nm,1.2s | | | | | | | |
| M54A | **Oil Creek Stat** | **90.41** | **30** | P | **P** | **05 44 49.0** | **+0.2** | |
| | baz=329,SNR=9.7 | | | | | | | |
| J58A | **Remsen** | **90.42** | **27** | IAmb | IAmb | 05 44 57.8 | | |
| | comp=Z,40nm,0.9s | | | | | | | |
| K57A | **Scipio Center** | **90.54** | **28** | IAmb | IAmb | 05 44 58.4 | | |
| | comp=Z,48nm,1.1s | | | | | | | |
| J59A | **Piesco** | **90.60** | **26** | IAmb | IAmb | 05 44 58.7 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| PKME | **Peaks-Kenny Pk** | **90.63** | **22** | P | **P** | **05 44 50.4** | **+0.7** | |
| | baz=336 | | | | | | | |
| O52A | **Adamsville** | **90.71** | **33** | IAmb | IAmb | 05 44 59.4 | | |
| | comp=Z,47nm,1.2s | | | | | | | |
| P51A | **Williamsport** | **90.72** | **34** | IAmb | IAmb | 05 44 59.1 | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| N54A | **Moraine State** | **90.75** | **31** | P | **P** | **05 44 50.8** | **+0.4** | |
| | baz=328,SNR=6.9 | | | | | | | |
| LBNH | **Lisbon** | **90.76** | **24** | P | **P** | **05 44 51.2** | **+0.8** | |
| | baz=334 | | | | | | | |
| R49A | **Shelbyville** | **90.78** | **36** | IAmb | IAmb | 05 44 59.3 | | |
| | comp=Z,77nm,1.9s | | | | | | | |
| O53A | **New Philadelph** | **90.86** | **32** | IAmb | IAmb | 05 45 00.1 | | |
| | comp=Z,53nm,1.2s | | | | | | | |
| O53A | **New Philadelph** | **90.86** | **32** | P | **P** | **05 44 51.9** | **+1.0** | |
| | baz=328 | | | | | | | |
| 833A | **Chaparral WMA,** | **90.95** | **51** | P | **P** | **05 44 52.5** | **+0.9** | |
| | baz=317 | | | | | | | |
| ACCN | **Adirondack Com** | **90.95** | **26** | IAmb | IAmb | 05 45 00.6 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| Q51A | **Peebles** | **90.98** | **34** | IAmb | IAmb | 05 45 00.7 | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| P52A | **Corning** | **90.99** | **33** | IAmb | IAmb | 05 45 00.4 | | |
| | comp=Z,50nm,1.4s | | | | | | | |
| P52A | **Corning** | **90.99** | **33** | P | **P** | **05 44 52.2** | **+0.6** | |
| | baz=327 | | | | | | | |
| Z41A | **Richland Creek** | **91.01** | **44** | P | **P** | **05 44 52.3** | **+0.6** | |
| | baz=320 | | | | | | | |
| R50A | **Paris** | **91.16** | **35** | IAmb | IAmb | 05 45 01.6 | | |
| | comp=Z,44nm,1.4s | | | | | | | |
| BINY | **Binghamton** | **91.19** | **28** | P | **P** | **05 44 52.6** | **+0.2** | |
| | baz=331,SNR=6.4 | | | | | | | |
| WVT | **Waverly** | **91.28** | **39** | P | **P** | **05 44 53.0** | **0.0** | |
| WVT | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| WVT | **Waverly** | **91.28** | **39** | P | **P** | **05 44 53.0** | **0.0** | |
| WVT | **Waverly** | **91.28** | **39** | P | **P** | **05 44 53.2** | **+0.2** | |
| | baz=323 | | | | | | | |
| W45A | **Hickory Valley** | **91.39** | **40** | IAmb | IAmb | 05 45 02.4 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| P53A | **Whipple** | **91.43** | **33** | IAmb | IAmb | 05 45 02.8 | | |
| | comp=Z,65nm,1.5s | | | | | | | |
| OXF | **Oxford** | **91.79** | **41** | IAmb | IAmb | 05 45 04.2 | | |
| | comp=Z,42nm,0.9s | | | | | | | |
| OXF | **Oxford** | **91.79** | **41** | P | **P** | **05 44 55.3** | **0.0** | |
| | baz=322,SNR=7.4 | | | | | | | |
| KSPA | **Keystone Colle** | **91.84** | **28** | IAmb | IAmb | 05 44 57.0 | | |
| | comp=Z,32nm,1.0s | | | | | | | |
| HKT | **Hockley** | **91.84** | **48** | P | **P** | **05 44 55.6** | **0.0** | |
| HKT | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.9s | | | | | | | |
| HKT | **Hockley** | **91.84** | **48** | P | **P** | **05 44 55.5** | **0.0** | |
| HKT | | | | IAmb | IAmb | 05 45 06.2 | | |
| | comp=Z,49nm,1.9s | | | | | | | |
| SSPA | **Standing Stone** | **91.85** | **30** | P | **P** | **05 44 56.0** | **+0.5** | |
| SSPA | | | | IAmb | IAmb | 05 45 05.0 | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| SSPA | **Standing Stone** | **91.85** | **30** | P | **P** | **05 44 55.8** | **+0.3** | |
| | baz=330 | | | | | | | |
| O56A | **Blue Knob Stat** | **91.90** | **30** | P | **P** | **05 44 55.3** | **-0.6** | |
| | baz=329 | | | | | | | |
| MCWV | **Mont Chateau** | **91.91** | **32** | P | **P** | **05 44 56.1** | **+0.3** | |
| | baz=328 | | | | | | | |
| S51A | **Beattyville** | **92.02** | **35** | IAmb | IAmb | 05 45 04.6 | | |
| | comp=Z,24nm,1.2s | | | | | | | |
| L61B | **Northampton** | **92.12** | **25** | P | **P** | **05 44 57.1** | **+0.4** | |
| | baz=333 | | | | | | | |
| 143A | **Socs Landing,** | **92.18** | **43** | IAmb | IAmb | 05 45 06.8 | | |
| | comp=Z,28nm,1.1s | | | | | | | |
| N59A | **State Game Lan** | **92.39** | **28** | P | **P** | **05 44 58.0** | **-0.1** | |
| | baz=331,SNR=5.2 | | | | | | | |
| HRV | **Adam Dziewonsk** | **92.43** | **25** | P | **P** | **05 44 57.9** | **-0.3** | |
| | baz=334 | | | | | | | |
| S54A | **Dingess, Beckl** | **92.88** | **34** | IAmb | IAmb | 05 45 01.8 | | |
| | comp=Z,27nm,1.3s | | | | | | | |
| TZTN | **Tazewell** | **92.95** | **36** | P | **P** | **05 45 00.9** | **+0.2** | |
| | baz=326 | | | | | | | |
| R55A | **Marlinton** | **92.97** | **32** | IAmb | IAmb | 05 45 10.0 | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| PAL | **Palisades** | **92.98** | **27** | P | **P** | **05 45 01.2** | **+0.5** | |
| | baz=332 | | | | | | | |
| VBMS | **Vicksburg** | **93.02** | **43** | P | **P** | **05 45 01.7** | **+0.7** | |
| | baz=322 | | | | | | | |
| KEST | **Kesra** | **93.56** | **324** | LR | LR | 06 30 31.4 | | |
| | comp=Z,432nm,19.3s,baz=3.5,slow=38 | | | | | | | |
| TKL | **Tuckaleechee C** | **93.58** | **36** | LR | LR | 06 28 59.8 | | |
| | comp=Z,378nm,21.3s,baz=341,slow=37 | | | | | | | |
| BLA | **Blacksburg** | **93.75** | **33** | P | **P** | **05 45 04.2** | **-0.3** | |
| | baz=328 | | | | | | | |
| LRAL | **Lakeview Retre** | **94.17** | **40** | P | **P** | **05 45 05.7** | **-0.6** | |
| | baz=324 | | | | | | | |
| Z51A | **Franklin** | **94.84** | **39** | IAmb | IAmb | 05 45 17.7 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| KMSC | **Kings Mountain** | **95.10** | **35** | P | **P** | **05 45 10.0** | **-0.6** | |
| | baz=327 | | | | | | | |
| ESDC | **Sonseca Array** | **95.38** | **335** | P | **P** | **05 45 12.0** | **+0.2** | |
| | comp=Z,2.6nm,0.8s,baz=13,slow=4.6,SNR=16 | | | | | | | |
| ESDC | | | | PP | **PP** | **05 49 07.7** | **+6.4** | |
| | comp=Z,10nm,1.2s,baz=24,slow=7.5,SNR=8.8 | | | | | | | |
| ESDC | | | | LR | LR | 06 32 51.9 | | |
| | comp=Z,575nm,18.8s,baz=13,slow=38 | | | | | | | |
| 250A | **Grady** | **95.39** | **40** | IAmb | IAmb | 05 45 20.9 | | |
| | comp=Z,43nm,1.4s | | | | | | | |
| TORD | **Torodi Ar. Bea** | **116.20** | **317** | PKP | **PKPdf** | **05 50 30.1** | **-1.0** | |
| | comp=Z,1.5nm,0.8s,baz=13,slow=1.9,SNR=7.7 | | | | | | | |
| TORD | | | | PP | PP | 05 51 43.7 | +8.1 | |
| | comp=Z,2.6nm,0.7s,baz=42,slow=5.7,SNR=3.7 | | | | | | | |
| BCIP | **Isla Barro Col** | **117.35** | **49** | IAMs_20 | IAMs_20 | 06 47 13.6 | | |
| | comp=Z,339nm,22.0s | | | | | | | |
| OCAC | **Ocana** | **121.74** | **43** | *e*P | **PKPdf** | **05 50 37.2** | **-4.8** | |
| CBOC | **Ciudad Bolivar** | **122.22** | **48** | *e*P | **PKPdf** | **05 50 42.7** | **-0.3** | |
| PTBC | **PUERTO BERRIO** | **122.54** | **46** | *e*P | **PKPdf** | **05 50 42.3** | **-1.1** | |
| SDV | **Santo Domingo** | **122.57** | **40** | PKP | **PKPdf** | **05 50 43.0** | **-0.7** | |
| | comp=Z,18nm,0.9s,baz=342,slow=1.2,SNR=22 | | | | | | | |
| SDV | **Santo Domingo** | **122.57** | **40** | *e*P | **PKPdf** | **05 50 43.8** | **+0.1** | |
| PLMC | **San Jos del P** | **122.84** | **48** | *e*P | **PKiKP** | **05 50 45.1** | **+0.8** | |
| SOCV | **Socops** | **122.97** | **41** | *e*P | **PKPdf** | **05 50 42.9** | **-1.4** | |
| GUY2C | **Guyana, Caldas** | **123.11** | **47** | *e*P | **PKPdf** | **05 50 44.1** | **-1.0** | |
| BAUV | **El Baul** | **123.78** | **38** | PKPdf | **PKPdf** | **05 50 44.0** | **-1.8** | |
| RUSC | **La Rusia** | **123.83** | **45** | *e*P | **PKPdf** | **05 50 42.5** | **-4.0** | |
| ROSC | **El Rosal** | **124.01** | **47** | PKP | **PKiKP** | **05 50 47.0** | **0.0** | |
| | comp=Z,3.5nm,0.4s,baz=330,slow=3.4,SNR=4.9 | | | | | | | |
| ORTC | **Ortega, Tolima** | **124.25** | **48** | *e*P | **PKPdf** | **05 50 45.9** | **-0.8** | |
| CHIC | **Chingaza** | **124.52** | **46** | *e*P | **PKPdf** | **05 50 46.6** | **-1.1** | |
| DBIC | **Dimbokro** | **125.05** | **320** | PKP | **PKPdf** | **05 50 47.4** | **-0.9** | |
| | comp=Z,2.3nm,0.6s,baz=15,slow=1.8,SNR=4.3 | | | | | | | |
| DBIC | | | | PP | **PP** | **05 52 34.5** | **-1.7** | |
| | comp=Z,5.0nm,0.8s,baz=30,slow=5.4,SNR=3.3 | | | | | | | |
| OTAV | **Otavalo** | **125.25** | **54** | *e*P | **PKiKP** | **05 50 49.4** | **-0.2** | |
| LBTB | **Lobatse** | **126.01** | **266** | PKIKP | **PKPdf** | **05 50 49.6** | **-0.2** | |
| LBTB | **Lobatse** | **126.01** | **266** | PKPdf | **PKPdf** | **05 50 49.6** | **-0.2** | |
| BOSA | **Boshof** | **128.11** | **262** | PKP | **PKPdf** | **05 50 53.4** | **-0.4** | |
| | comp=Z,6.2nm,1.0s,baz=7.9,slow=2.4,SNR=4.8 | | | | | | | |
| BOSA | | | | PP | **PP** | **05 52 58.4** | **+0.7** | |
| | comp=Z,6.6nm,1.2s,baz=99,slow=3.7,SNR=3.5 | | | | | | | |
| ATAH | **Atahualpa** | **130.87** | **60** | PKP | **PKPdf** | **05 50 59.9** | **+0.1** | |
| | comp=Z,11nm,0.9s,baz=328,slow=3.9,SNR=7.5 | | | | | | | |
| BOAV | **Boa Vista** | **132.94** | **33** | *e*P | **PKPdf** | **05 51 03.7** | **+0.5** | |
| CZSB | **Cruzeiro do Su** | **135.00** | **55** | *e*P | **PKPdf** | **05 51 07.6** | **+0.6** | |
| PTGA | **Pitinga** | **135.99** | **34** | PKP | **PKPdf** | **05 51 08.8** | **-0.2** | |
| | comp=Z,6.6nm,0.8s,baz=99,slow=2.5,SNR=12 | | | | | | | |
| MACA | **Manacapuru-AM** | **137.83** | **36** | *e*P | **PKPdf** | **05 51 12.3** | **0.0** | |
| MCPB | **Macapa, AP** | **138.55** | **23** | *e*P | **PKPdf** | **05 51 14.6** | **+0.9** | |
| MALB | **Monte Alegre** | **139.24** | **27** | *e*P | **PKPdf** | **05 51 15.3** | **+0.4** | |
| TMAB | **Tom-Au,PA,Br** | **141.54** | **18** | *e*P | **PKPdf** | **05 51 19.4** | **+0.3** | |
| ROSB | **Rosrio** | **142.82** | **12** | *e*P | **PKPdf** | **05 51 21.6** | **+0.2** | |
| NPGB | **Novo Progresso** | **143.61** | **31** | *e*P | PKPbc | 05 51 21.1 | +1.0 | |
| SNAA | **Sanae** | **143.62** | **198** | PKP | PKPab | 05 51 17.6 | -0.1 | |
| LPAZ | **La Paz** | **144.36** | **58** | PKP | PKPbc | 05 51 23.2 | +0.2 | |
| | comp=Z,12nm,0.9s,baz=7.2,slow=4.0,SNR=31 | | | | | | | |
| LPAZ | **La Paz** | **144.36** | **58** | *e*P | PKPbc | 05 51 23.5 | +0.5 | |
| PRPB | **Parauapebas** | **144.73** | **22** | *e*P | PKPbc | 05 51 23.7 | +0.1 | |
| VNA2 | **Neumayer--Watz** | **145.19** | **197** | PKP | **PKPbc** | **05 51 22.6** | **-0.8** | |
| | baz=125,slow=3.2 | | | | | | | |
| VNA3 | **Neumayer Olymp** | **145.43** | **195** | PKP | **PKPdf** | **05 51 23.3** | **-0.9** | |
| VNA1 | **Neumayer--Stat** | **145.59** | **197** | PKP | **PKPdf** | **05 51 24.0** | **-0.3** | |
| RCBR | **Riachuelo** | **146.26** | **358** | *e*P | **PKPbc** | **05 51 28.6** | **+0.2** | |
| VILB | **Vilhena** | **146.50** | **44** | *e*P | **PKPbc** | **05 51 28.5** | **-0.6** | |
| CLDB | **Colider** | **146.86** | **35** | *e*P | **PKPdf** | **05 51 29.1** | **+0.8** | |
| PDRB | **Porto dos Gac** | **147.09** | **37** | *e*P | **PKPdf** | **05 51 29.4** | **+0.7** | |
| SMTB | **Santa Maria do** | **147.91** | **20** | *e*P | **PKPdf** | **05 51 30.6** | **+0.5** | |
| LVC | **Limon Verde** | **148.15** | **67** | PKPbc | **PKiKP** | **05 51 34.8** | **-0.9** | |
| | comp=Z,32nm,1.0s,baz=276,slow=1.7,SNR=18 | | | | | | | |
| LVC | **Limon Verde** | **148.15** | **67** | *e*P | **PKPdf** | **05 51 30.6** | **-0.1** | |
| LVC | **Limon Verde** | **148.15** | **67** | | **PKPdf** | **05 51 31.9** | **+1.2** | |
| SIV | **San Ignacio** | **148.49** | **48** | PKPbc | **PKPbc** | **05 51 35.1** | **+0.6** | |
| | comp=Z,38nm,0.9s,baz=197,slow=0.7,SNR=26 | | | | | | | |
| PTLB | **Pontes e Lacer** | **149.13** | **45** | *e*P | **PKPdf** | **05 51 32.1** | **+0.2** | |
| SNDB | **Serra Nova Dou** | **149.68** | **28** | *e*P | **PKPdf** | **05 51 33.6** | **+0.7** | |
| PMSA | **Palmer Station** | **150.43** | **157** | *e*P | **PKPdf** | **05 51 33.3** | **+0.9** | |
| PEXB | **Peixe** | **150.80** | **23** | *e*P | **PKPdf** | **05 51 35.6** | **+0.9** | |
| SALV | **Santo Antonio** | **151.29** | **40** | *e*P | **PKPdf** | **05 51 35.8** | **+0.4** | |
| SDBA | **SAO DESIDERIO** | **151.97** | **16** | *e*P | **PKPdf** | **05 51 37.0** | **+0.5** | |
| ARAG | **Araguaiana, MT** | **152.88** | **32** | *e*P | **PKPdf** | **05 51 38.3** | **+0.6** | |
| PP1B | **Ponte de Pedra** | **153.15** | **40** | *e*P | **PKPdf** | **05 51 38.9** | **+0.8** | |
| GDU01 | **Guandu, BA** | **154.03** | **5** | *e*P | **PKPdf** | **05 51 40.2** | **+0.8** | |
| BDFB | **Brasilia** | **154.22** | **25** | PKP | **PKPdf** | **05 51 39.6** | **-0.1** | |
| | comp=Z,3.4nm,1.0s,baz=154,slow=7.2,SNR=4.4 | | | | | | | |
| BDFB | | | | PKPbc | **PKiKP** | **05 51 48.0** | **0.0** | |
| | comp=Z,7.2nm,0.8s,baz=192,slow=3.7,SNR=9.0 | | | | | | | |
| BDFB | **Brasilia** | **154.22** | **25** | | **PKPdf** | **05 51 40.1** | **+0.4** | |
| PLCA | **Paso Flores** | **154.57** | **103** | PKPbc | **PKiKP** | **05 51 48.2** | **+0.2** | |
| | comp=Z,3.5nm,0.8s,baz=215,slow=6.3,SNR=8.7 | | | | | | | |
| PLCA | **Paso Flores** | **154.57** | **103** | *e*P | **PKPdf** | **05 51 42.1** | **+2.6** | |
| JANB | **Januaria** | **154.66** | **16** | *e*P | **PKPdf** | **05 51 40.8** | **+0.5** | |
| AQDB | **Aquidauana** | **155.10** | **45** | *e*P | **PKPdf

comp=Z,33nm,0.7s,baz=64,slow=6.9,SNR=21
**STKA Stephens Creek 26.62 195** P **P** 05 44 06.7 -0.4
comp=Z,9.2nm,0.8s,baz=354,slow=10,SNR=2.4
STKA LR LR 05 54 52.0
comp=Z,250nm,21.1s,baz=8.2,slow=37
**STKA Stephens Creek 26.62 195** IAmb IAmb 05 44 10.5
comp=Z,2.5nm,0.9s
**FORT Forrest 31.71 217** P **P** 05 44 52.1 -0.2
**MBWA Marble Bar 32.48 240** P **P** 05 44 58.2 -1.0
**PSA00 Pilbara Seismi 32.54 239** P **P** 05 44 58.0 -1.7
**PSA00 Pilbara Seismi 32.54 239** P **P** 05 44 59.0 -0.8
PSA00 IAmb IAmb 05 45 12.6
comp=Z,27nm,0.9s
**JOW Kunigami 38.76 329** LR LR 05 59 53.4
comp=Z,234nm,19.0s,baz=116,slow=33
**MORW Morawa 38.97 230** P **P** 05 45 54.4 -0.4
MORW IAmb IAmb 05 46 04.5
comp=Z,22nm,1.1s
**YULB Yu-li 40.32 318** P **P** 05 46 05.7 -0.4
**NACB Ninganchiao 40.67 319** P **P** 05 46 09.3 +0.5
NACB IAmb IAmb 05 46 10.8
comp=Z,26nm,0.9s
**TPUB Ta-pu 40.71 317** P **P** 05 46 08.5 -0.8
**SSLB Suanglung 40.82 318** P **P** 05 46 09.8 -0.4
**YHNB Yeheng 41.15 319** P **P** 05 46 13.9 +0.9
YHNB IAmb IAmb 05 46 37.4
comp=Z,132nm,1.4s
**TUWZ Tuamarina 41.28 152** P **P** 05 46 15.9 +2.2
**BFZ Birch Farm 41.84 149** P **P** 05 46 19.4 +1.1
BFZ IAmb IAmb 05 46 23.1
comp=Z,13nm,0.9s
**RPZ Rata Peaks 41.88 157** P **P** 05 46 20.5 +1.9
**PLWZ Palliser 42.01 151** P **P** 05 46 20.5 +0.7
**JNU Nakatsue 42.93 337** P **P** 05 46 26.9 -0.3
comp=Z,16nm,0.9s,baz=178,slow=3.8,SNR=5.1
**KNMB Chin-men Tao 43.01 316** P **P** 05 46 28.4 +0.4
**MJAR Matsushiro Arr 43.81 347** P **P** 05 46 32.1 -2.2
comp=Z,3.3nm,0.7s,baz=163,slow=8.9,SNR=5.7
**KSRS Korea Array 47.88 337** P **P** 05 47 05.5 -0.7
comp=Z,3.4nm,0.6s,baz=154,slow=8.2,SNR=12
**NJ2 Nanjing 47.98 324** *eP* **P** 05 47 09.0 +1.9
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**ASAJ Asahikawa 50.46 354** P **P** 05 47 24.9 -1.0
comp=Z,8.0nm,0.6s,baz=181,slow=8.8,SNR=6.7
**USRK Ussuriysk Ar. 52.60 344** P **P** 05 47 41.8 -0.1
comp=Z,3.4nm,0.6s,baz=180,slow=24,SNR=2.4
**GYA Guiyang 52.73 310** ⇓P **P** 05 47 44.5 +1.2
GYA pmax pmax
comp=Z,12nm,0.9s
**BNX BinXian 55.35 341** ⇑P **P** 05 48 04.2 +2.3
BNX pmax pmax
comp=Z,15nm,0.6s
BNX pmax pmax
comp=Z,570nm,8.5s
**CMAR Chiang Mai Arr 55.58 297** P **P** 05 48 05.0 +0.9
comp=Z,1.0nm,0.3s,baz=126,slow=6.2,SNR=4.7
**PZH PanZhiHua 56.57 307** P **P** 05 48 13.8 +2.6
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,120nm,4.9s
**KLR Kul'dur 57.34 346** P **P** 05 48 14.9 -1.0
comp=Z,3.0nm,0.6s,baz=182,slow=5.4,SNR=12
**XLT XiLinHaoTe 58.29 332** *eP* **P** 05 48 24.5 +1.6
XLT pP pP 05 48 39.3 +0.7
XLT pmax pmax
comp=Z,9.0nm,0.7s
XLT pmax pmax
comp=Z,2μm,10.3s
**HHC Hu-ho-hao-tao 58.35 327** *eP* **P** 05 48 26.4 +3.0
HHC pmax pmax
comp=Z,6.0nm,1.0s
HHC pmax pmax
comp=Z,470nm,5.6s
**PETK Petropavlovsk- 59.48 6** P **P** 05 48 30.0 -0.9
comp=Z,15nm,0.5s,baz=179,slow=8.2,SNR=37
**PETK Petropavlovsk- 59.48 6** P **P** 05 48 29.2 -1.7
**LZH Lanzhou 60.02 318** *eP* **P** 05 48 39.4 +4.2
LZH pP pP 05 48 48.1 -2.7
LZH pmax pmax
comp=Z,11nm,1.0s
**HIA Hailar 61.04 338** P **P** 05 48 42.1 +0.4
**SHEM Shemya Is, Ala 62.29 17** LR LR 06 12 27.1
comp=Z,60nm,20.6s,baz=268,slow=33
**GTA Gaotai 64.53 319** *eP* **P** 05 49 06.1 +0.9
GTA pP pP 05 49 22.3 +1.3
GTA sP sP 05 49 30.8 +3.3
GTA pmax pmax
comp=Z,2.0nm,1.2s
**SONM Songino Array 65.82 330** P **P** 05 49 13.7 +0.3
comp=Z,2.4nm,0.5s,baz=148,slow=5.1,SNR=18
**SEY Seymchan 68.96 1** P **P** 05 49 32.0 -0.7
comp=Z,1.1nm,0.4s,baz=162,slow=8.4,SNR=7.4
**VNDA Vanda 71.59 177** P **P** 05 49 49.2 +0.5
comp=Z,7.8nm,0.8s,baz=324,slow=5.4,SNR=11
**WMQ Urumqi 74.60 319** *eP* **P** 05 50 08.7 +1.6
**MKAR Makanchi Array 79.27 320** P **P** 05 50 31.2 -2.0
comp=Z,0.8nm,0.5s,baz=98,slow=8.2,SNR=15
MKAR PKKPbc **PKKPbc** 06 09 24.0 -1.7
comp=Z,0.4nm,0.7s,baz=321,slow=1.7,SNR=5.5
**ZAA0 Zalesovo Array 80.53 327** P **P** 05 50 39.1 -0.8
ZAA0 IAmb IAmb 05 50 41.2
comp=Z,3.8nm,0.6s
**ZALV Zalesovo Beam 80.53 327** P **P** 05 50 37.9 -2.0
comp=Z,4.2nm,0.6s,baz=112,slow=6.1,SNR=16
**ZALV Zalesovo Beam 80.53 327** P **P** 05 50 38.8 -1.1
**RND Reindeer 83.27 23** P **P** 05 50 52.6 -1.5
RND IAmb IAmb 05 50 55.8
comp=Z,7.0nm,0.7s
**AAK Ala-Archa 83.28 314** LR LR 06 28 58.1
comp=Z,217nm,19.9s,baz=338,slow=36
**MLY Manley 83.35 22** P **P** 05 50 54.1 -0.4
MLY IAmb IAmb 05 50 55.6
comp=Z,5.3nm,0.8s
**MCK McKinley 83.39 23** P **P** 05 50 53.4 -1.3
MCK IAmb IAmb 05 50 56.0
comp=Z,8.3nm,0.8s
**CCB Clear Creek Bu 84.26 23** P **P** 05 50 58.0 -1.1
**IL31 84.67 23** P **P** 05 50 59.6 -1.5
IL31 IAmb IAmb 05 51 01.6
comp=Z,4.5nm,0.8s
**ILAR Eielson Array 84.67 23** P **P** 05 50 59.5 -1.6
comp=Z,4.6nm,0.8s,baz=250,slow=5.0,SNR=32
**J25K Salcha River, 85.18 23** P **P** 05 51 02.8 -1.1
J25K IAmb IAmb 05 51 04.8
comp=Z,5.8nm,0.7s
**HYT Haines Junctio 87.16 28** P **P** 05 51 14.0 +0.3
HYT IAmb IAmb 05 51 44.4
comp=Z,10nm,1.4s
**SYO Syowa Base 91.28 200** ⇓*eP* **P** 05 51 32.3 -0.5
**YBH Yreka Blue Hor 92.39 48** LR LR 06 25 04.4
comp=Z,124nm,21.8s,baz=348,slow=30
**NVAR Mina Array Bea 95.48 52** P **P** 05 51 54.8 +1.7
comp=Z,0.3nm,0.6s,baz=256,slow=7.3,SNR=2.7
**ARU Arti 95.66 326** LR LR 06 38 36.5
comp=Z,141nm,18.0s,baz=310,slow=38
**PFO Pinyon Flats O 96.71 57** LR LR 06 29 32.4
comp=Z,128nm,19.3s,baz=333,slow=32
**YKA Yellowknife Ar 98.16 28** P Pdif 05 52 05.5 +1.2
comp=Z,0.2nm,0.6s,baz=270,slow=4.8,SNR=4.8
YKA PKKPbc **PKKPbc** 06 08 35.3 -3.9
comp=Z,0.3nm,0.7s,baz=88,slow=2.9,SNR=7.2
**PDAR Pinedale Array 102.17 48** P **Pdif** 05 52 23.6 +0.5
comp=Z,0.5nm,0.9s,baz=218,slow=1.7,SNR=3.5
**ARCES ARCESS Array B 107.22 342** Pdiff **Pdif** 05 52 44.6 0.0
comp=Z,2.6nm,0.9s,baz=66,slow=5.9,SNR=5.7
**AKASG Malin Array Be 113.69 323** PKKPbc PKKPbc 06 07 50.0 -0.9
comp=Z,0.2nm,0.4s,baz=266,slow=3.5,SNR=4.3
**PLCA Paso Flores 120.55 145** PKP **PKPdf** 05 57 18.8 -0.9
comp=Z,2.9nm,0.8s,baz=281,slow=0.7,SNR=7.7
**GERES GERESS Array B 123.48 327** PKP **PKPdf** 05 57 24.5 -0.5
comp=Z,1.0nm,0.7s,baz=22,slow=4.3,SNR=6.1
**LPAZ La Paz 136.54 121** PKP **PKPdf** 05 57 51.8 +0.5
comp=Z,3.6nm,0.8s,baz=11,slow=4.9,SNR=8.3
**CPUP Villa Florida 138.47 142** PKP **PKPdf** 05 57 54.5 +0.7
comp=Z,3.5nm,0.8s,baz=222,slow=1.5,SNR=6.6
**SDV Santo Domingo 140.09 84** PKP **PKPdf** 05 57 55.6 -1.8
comp=Z,5.9nm,0.8s,baz=284,slow=2.6,SNR=8.0
**SIV San Ignacio 142.52 126** PKhKP PKPpre 05 57 57.2
comp=Z,5.0nm,0.7s,baz=222,slow=3.1,SNR=16
**TORD Torodi Ar. Bea 147.59 285** PKPbc **PKPbc** 05 58 11.7 -1.2
comp=Z,4.3nm,0.5s,baz=58,slow=3.2,SNR=36
**PTGA Pitinga 149.75 102** PKPbc **PKPbc** 05 58 18.4 -0.1
comp=Z,16nm,0.7s,baz=248,slow=3.7,SNR=26
**BDFB Brasilia 152.20 141** PKP **PKPdf** 05 58 17.6 0.0
comp=Z,33.6nm,0.8s,baz=110,slow=5.1,SNR=4.7
BDFB PKPbc **PKPbc** 05 58 24.6 +0.3
comp=Z,30nm,0.7s,baz=197,slow=1.3,SNR=38
**DBIC Dimbokro 154.56 273** PKPbc **PKPbc** 05 58 28.1 -1.2
comp=Z,2.3nm,0.9s,baz=113,slow=4.9,SNR=3.7

*IDC **02** 05:47:51.2±1.2, 22°.27S×179°.65W, h560km±13km, mb3.8/14, mb1 4.0/17, mb1mx3.6/43, mbtmp4.7/17, Error ellipse: s-maj=17.2km s-min=13.6km az=178.0*
*NEIC **02** 05:47:52.0±1.8, 22°.4S±0°.1×179°.64W±0°.07, h569km±8km, mb4.6/27, Error ellipse: s-maj=17.8km s-min=7.3km az=156.0*
*NOU **02** 05:48:15.7, 19°.85S×179°.22E, h524km, MLv3.7/4, South of Fiji Islands*
**ISC 02 05:47:52.3±0.5, 22°.40S±0°.08×179°.68W±0°.07, h579km, n65, σ1§16/68, mb4.6/32, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.11** | **335** | P | **P** | | **05 49 23.7** | **-1.3** |
| | 56nm,0.3s,baz=205,slow=7.4,SNR=217 | | | | | | | |
| **MSVF** | **Nonsavu** | **5.11** | **335** | | **P** | | **05 49 24.6** | **-0.4** |
| **MSVF** | **Nonsavu** | **5.11** | **335** | P | **P** | | **05 49 25.0** | **0.0** |
| **TAVE** | **Taveuni** | **5.66** | **358** | P | **P** | | **05 49 30.3** | **+0.7** |
| **DGTI** | **Dogotuki** | **6.09** | **355** | P | **P** | | **05 49 32.6** | **-0.7** |
| **RAO** | **Raoul Island** | **7.01** | **167** | P | **P** | | **05 49 39.8** | **-1.6** |
| | 191nm,0.3s,baz=42,slow=10.0,SNR=8.1 | | | | | | | |
| **RAO** | **Raoul Island** | **7.01** | **167** | P | **P** | | **05 49 39.6** | **-1.7** |
| **NIUE** | **Niue** | **9.70** | **72** | P | **P** | | **05 50 05.6** | **-2.1** |
| **MARNC** | **Mare, Loyalty** | **11.45** | **272** | P | **P** | | **05 50 25.1** | **-0.3** |
| **DZM** | **Mont Dzumac** | **12.86** | **269** | P | **P** | | **05 50 40.0** | **+0.1** |
| | 0.7nm,0.3s,baz=76,slow=18,SNR=4.5 | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.86** | **269** | P | **P** | | **05 50 39.8** | **-0.1** |
| **URZ** | **Urewera** | **16.05** | **189** | P | **P** | | **05 51 10.2** | **-0.7** |
| | 1.0nm,0.3s,baz=275,slow=4.0,SNR=8.2 | | | | | | | |
| URZ | | | | S | **S** | | **05 53 50.2** | **-2.5** |
| | 0.7nm,0.3s,baz=292,slow=23,SNR=6.7 | | | | | | | |
| **URZ** | **Urewera** | **16.05** | **189** | P | **P** | | **05 51 09.0** | **-1.8** |
| **MSWZ** | **Moikau Station** | **19.44** | **192** | P | **P** | | **05 51 42.7** | **+1.0** |
| **QRZ** | **Quartz Range** | **19.52** | **198** | P | **P** | | **05 51 42.0** | **-0.5** |
| QRZ | | | | IAmb | IAmb | | 05 52 04.4 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **ARMA** | **Armidale** | **26.86** | **247** | P | **P** | | **05 52 49.0** | **+0.9** |
| ARMA | | | | IAmb | IAmb | | 05 53 18.1 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **EIDS** | **Eidsvold** | **26.88** | **258** | P | **P** | | **05 52 48.6** | **+0.4** |
| EIDS | | | | IAmb | IAmb | | 05 52 49.9 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **CAN** | **Canberra** | **30.17** | **238** | P | **P** | | **05 53 17.5** | **+0.8** |
| **CTA** | **Charters Tower** | **31.80** | **268** | P | **P** | | **05 53 31.0** | **+0.3** |
| | baz=98,slow=12 | | | | | | | |
| **TOO** | **Toolangi** | **33.53** | **235** | P | **P** | | **05 53 45.7** | **+0.6** |
| TOO | | | | IAmb | IAmb | | 05 53 47.0 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **34.32** | **287** | P | **P** | | **05 53 52.3** | **+0.4** |
| | comp=Z,29nm,0.6s,baz=93,slow=5.1,SNR=11 | | | | | | | |
| **PMG** | **Port Moresby** | **34.32** | **287** | P | **P** | | **05 53 52.3** | **+0.4** |
| **STKA** | **Stephens Creek** | **35.58** | **246** | P | **P** | | **05 54 03.3** | **+1.1** |
| | comp=Z,10nm,0.5s,baz=95,slow=11,SNR=27 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.58** | **246** | P | **P** | | **05 54 01.9** | **-0.3** |
| **COEN** | **Coen** | **36.20** | **277** | P | **P** | | **05 54 07.9** | **+0.4** |
| COEN | | | | IAmb | IAmb | | 05 54 09.3 | |
| | comp=Z,20nm,1.3s | | | | | | | |
| **BBOO** | **Buckleboo** | **40.32** | **245** | P | **P** | | **05 54 41.0** | **+0.4** |
| **AS31** | **Alice Springs** | **42.59** | **259** | P | **P** | | **05 54 58.6** | **-0.1** |
| AS31 | | | | IAmb | IAmb | | 05 54 59.8 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.59** | **259** | P | **P** | | **05 54 59.0** | **+0.3** |
| | comp=Z,24nm,0.8s,baz=94,slow=8.1,SNR=153 | | | | | | | |
| ASAR | | | | ScP | **ScP** | | **05 59 37.2** | **+3.5** |
| | comp=Z,0.8nm,0.8s,baz=93,slow=3.1,SNR=4.3 | | | | | | | |
| ASAR | | | | S | **S** | | **06 00 39.4** | **-1.2** |
| | comp=Z,1.1nm,0.9s,baz=97,slow=15,SNR=6.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.59** | **259** | P | **P** | | **05 54 58.6** | **-0.1** |
| **WR0** | **Warramunga Arr** | **42.64** | **264** | P | **P** | | **05 54 58.4** | **-0.7** |
| WR0 | | | | IAmb | IAmb | | 05 54 59.6 | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **42.81** | **265** | P | **P** | | **05 55 00.0** | **-0.4** |
| WB0 | | | | IAmb | IAmb | | 05 55 00.9 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **42.82** | **264** | P | **P** | | **05 54 59.8** | **-0.7** |
| WB2 | | | | IAmb | IAmb | | 05 55 01.1 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.83** | **264** | P | **P** | | **05 55 00.2** | **-0.4** |
| | comp=Z,10nm,0.6s,baz=96,slow=7.9,SNR=162 | | | | | | | |
| WRA | | | | ScP | **ScP** | | **05 59 38.2** | **+3.5** |
| | comp=Z,2.3nm,0.9s,baz=95,slow=4.3,SNR=8.3 | | | | | | | |
| **JAY** | **Jayapura** | **43.22** | **292** | P | **P** | | **05 55 02.9** | **-0.8** |
| | comp=Z,26nm,0.6s,baz=133,slow=4.2,SNR=7.0 | | | | | | | |
| **JAY** | **Jayapura** | **43.22** | **292** | P | **P** | | **05 55 03.8** | **+0.1** |
| | comp=Z,24nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **47.13** | **248** | P | **P** | | **05 55 33.1** | **-0.2** |
| **MTN** | **Manton Dam** | **47.66** | **273** | P | **P** | | **05 55 36.7** | **-0.7** |
| MTN | | | | IAmb | IAmb | | 05 55 37.8 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **49.01** | **268** | P | **P** | | **05 55 47.3** | **-0.1** |
| **SIJI** | **Sorong** | **52.26** | **287** | P | **P** | | **05 56 10.9** | **-0.2** |
| | comp=Z,59nm,0.7s,baz=60,slow=7.0,SNR=11 | | | | | | | |
| **SWI** | **Sorong** | **52.27** | **287** | P | **P** | | **05 56 10.8** | **-0.3** |
| | comp=Z,99nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **55.03** | **274** | P | **P** | | **05 56 30.4** | **-0.3** |
| | comp=Z,54nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **55.74** | **259** | P | **P** | | **05 56 34.8** | **-0.6** |
| **VNDA** | **Vanda** | **55.90** | **185** | P | **P** | | **05 56 37.8** | **+2.2** |
| | comp=Z,6.3nm,1.1s,baz=35,slow=9.6,SNR=2.2 | | | | | | | |
| **VNDA** | **Vanda** | **55.90** | **185** | P | **P** | | **05 56 37.4** | **+1.9** |
| VNDA | | | | IAmb | IAmb | | 05 56 50.5 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| **MBWA** | **Marble Bar** | **55.94** | **259** | P | **P** | | **05 56 36.3** | **-0.5** |
| MBWA | | | | IAmb | IAmb | | 05 56 37.4 | |
| | comp=Z,24nm,0.7s | | | | | | | |
| **SANI** | **Sanana** | **56.45** | **283** | P | **P** | | **05 56 39.8** | **-0.6** |
| | comp=Z,20nm,1.2s | | | | | | | |
| **MORW** | **Morawa** | **57.68** | **249** | P | **P** | | **05 56 48.5** | **-0.1** |
| MORW | | | | IAmb | IAmb | | 05 56 59.2 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| **KAPI** | **Kappang** | **60.93** | **277** | P | **P** | | **05 57 10.1** | **-0.4** |
| | comp=Z,2.0nm,0.3s,baz=266,slow=20,SNR=1.8 | | | | | | | |
| **MPSI** | **Mapaga** | **62.97** | **282** | P | **P** | | **05 57 22.2** | **-1.4** |
| | comp=Z,19nm,0.9s | | | | | | | |
| MPSI | | | | S | **S** | | **06 05 07.0** | **-2.9** |
| | comp=Z,19nm,0.9s | | | | | | | |
| **BWJI** | **Bawean** | **67.16** | **273** | S | **S** | | **06 06 00.4** | **+0.6** |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | **P** | | **05 57 53.1** | **+0.7** |
| QSPA | | | | IAmb | IAmb | | 05 57 54.1 | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **YOGI** | **Yogyakarta** | **68.63** | **270** | P | **P** | | **05 57 59.1** | **+0.2** |
| | comp=Z,85nm,1.5s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.84** | **325** | P | **P** | | **05 58 10.9** | **-0.6** |
| | comp=Z,1.8nm,0.3s,baz=155,slow=6.4,SNR=5.1 | | | | | | | |
| **JHS** | **Saijyo** | **72.55** | **321** | P | **P** | | **05 58 22.6** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **77.72** | **346** | P | **P** | | **05 58 49.3** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **83.47** | **44** | P | **P** | | **05 59 20.2** | **+0.1** |
| | comp=Z,1.7nm,0.9s,baz=224,slow=8.7,SNR=8.5 | | | | | | | |
| **TUC** | **Tucson** | **85.37** | **52** | P | **P** | | **05 59 30.3** | **+0.9** |
| **PLCA** | **Paso Flores** | **89.09** | **134** | P | **P** | | **05 59 47.8** | **+1.0** |
| | comp=Z,3.1nm,1.1s,baz=198,slow=8.4,SNR=3.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.29** | **290** | P | **P** | | **05 59 50.1** | **+2.2** |
| | comp=Z,3.3nm,0.7s,baz=131,slow=2.9,SNR=16 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **89.38** | **58** | P | **P** | | **05 59 49.0** | **+0.7** |
| TX31 | | | | IAmb | IAmb | | 05 59 49.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.39** | **58** | P | **P** | | **05 59 49.0** | **+0.6** |
| | comp=Z,1.7nm,0.9s,baz=214,slow=5.5,SNR=15 | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.41** | **44** | P | **P** | | **05 59 57.3** | **-0.2** |
| | comp=Z,0.7nm,0.9s,baz=182,slow=4.2,SNR=5.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.86** | **329** | PKP | PKPbc | | 06 06 20.2 | -1.2 |
| | comp=Z,1.3nm,0.4s,baz=44,slow=4.2,SNR=17 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.86** | **329** | | PKPbc | | 06 06 19.8 | -1.5 |
| **BRTR** | **Keskin Array B** | **146.89** | **309** | PKPbc | **PKPbc** | | **06 06 30.2** | **-0.5** |
| | comp=Z,1.1nm,0.6s,baz=129,slow=5.0,SNR=5.3 | | | | | | | |

*IDC **02** 06:20:06.7±1.6, 23°.81S×179°.02E, h535km±17km, mb3.4/7, mb1 3.6/9, mb1mx3.2/32, mbtmp4.3/9, Error ellipse: s-maj=24.8km s-min=17.8km az=160.0*
*NOU **02** 06:20:07.4, 24°.06S×178°.22E, h439km, mb4.7/6, South of Fiji Islands*
**ISC 02 06:20:07.5±0.8, 23°.9S±0°.1×179°.0E±0°.1, h550km, n15, σ1§16/17, mb4.0/7, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LKBA** | **Tubou, Lakemba** | **5.95** | **20** | P | **P** | | **06 21 46.2** | **+0.5** |
| **MSVF** | **Nonsavu** | **6.16** | **351** | P | **P** | | **06 21 47.0** | **-0.8** |
| | 1.5nm,0.3s,baz=271,slow=2.1,SNR=5.3 | | | | | | | |
| **TAVE** | **Taveuni** | **7.18** | **8** | P | **P** | | **06 21 58.1** | **+0.8** |
| **DGTI** | **Dogotuki** | **7.55** | **5** | P | **P** | | **06 22 00.9** | **0.0** |
| **URZ** | **Urewera** | **14.45** | **186** | P | **P** | | **06 23 09.2** | **-1.8** |
| | 1.6nm,0.3s,baz=3.2,slow=2.5,SNR=12 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **15.41** | **187** | P | **P** | | **06 23 19.8** | **-1.3** |
| **QRZ** | **Quartz Range** | **17.78** | **196** | P | **P** | | **06 23 44.4** | **+1.3** |
| **CTA** | **Charters Tower** | **30.59** | **271** | P | **P** | | **06 25 37.5** | **+0.3** |
| | 13nm,0.3s,baz=94,slow=10.0,SNR=42 | | | | | | | |
| **STKA** | **Stephens Creek** | **33.92** | **248** | P | **P** | | **06 26 05.9** | **+0.6** |
| | 4.1nm,0.6s,baz=97,slow=11,SNR=8.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **41.17** | **261** | P | **P** | | **06 27 04.3** | **-0.3** |
| | 3.4nm,0.6s,baz=93,slow=8.4,SNR=36 | | | | | | | |
| ASAR | | | | ScP | **ScP** | | **06 31 49.9** | **+1.5** |
| | 0.3nm,0.7s,baz=110,slow=4.1,SNR=5.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.52** | **266** | P | **P** | | **06 27 06.3** | **-1.1** |
| | 5.0nm,0.7s,baz=91,slow=5.9,SNR=97 | | | | | | | |
| WRA | | | | ScP | **ScP** | | **06 31 51.5** | **+1.7** |
| | 1.2nm,0.8s,baz=100,slow=3.9,SNR=6.4 | | | | | | | |
| **QSPA** | **South Pole Qui** | **66.23** | **180** | P | **P** | | **06 30 02.4** | **+1.5** |
| | 0.2nm,0.5s,baz=70,slow=1.0,SNR=5.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.34** | **44** | P | **P** | | **06 31 46.5** | **-0.6** |
| | 0.7nm,0.6s,baz=233,slow=9.1,SNR=5.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.16** | **58** | P | **P** | | **06 32 14.1** | **-0.3** |
| | 0.6nm,0.9s,baz=211,slow=7.0,SNR=6.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.84** | **307** | PKPbc | **PKPab** | | **06 38 50.4** | **-1.3** |
| | 0.4nm,0.5s,baz=72,slow=2.9,SNR=2.2 | | | | | | | |

**FUNV 02 06:20:22.4, 9°.08N×71°.07W, h5km, MW3.5, Lake Maracaibo**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.82** | **165** | *eP* | Pg | | 06 20 37.5 | -0.7 |
| SOCV | | | | *eS* | Sg | | 06 20 48.4 | -0.4 |
| **CURV** | **Curarigua** | **1.43** | **50** | *eS* | Sb | | 06 21 08.1 | -0.2 |
| **SANV** | **Sanarito** | **1.57** | **74** | *eP* | Pn | | 06 20 50.5 | -0.6 |
| SANV | | | | *eS* | Sn | | 06 21 11.1 | -0.8 |
| **CAPV** | **Capacho** | **1.72** | **226** | *eP* | Pn | | 06 20 52.7 | -0.6 |
| CAPV | | | | *eS* | Sn | | 06 21 15.5 | -0.3 |
| **MCQV** | **Machiques** | **1.73** | **304** | *eP* | Pn | | 06 20 52.1 | -1.2 |
| MCQV | | | | *eS* | Sn | | 06 21 15.2 | -0.6 |
| **DABV** | **Dabajuro** | **1.88** | **13** | *eP* | Pn | | 06 20 53.5 | -1.7 |
| DABV | | | | *eS* | Sn | | 06 21 18.4 | -0.9 |
| **SIQV** | **Siquisique** | **1.99** | **39** | *eP* | Pn | | 06 20 56.3 | -0.6 |
| SIQV | | | | *eS* | Sn | | 06 21 22.4 | +0.2 |
| **ELOV** | **Elorza** | **2.60** | **143** | *eP* | Pn | | 06 21 04.8 | -0.3 |
| ELOV | | | | *eS* | Sn | | 06 21 36.0 | -1.1 |
| **MAPV** | **Macapo** | **2.68** | **74** | *eP* | Pn | | 06 21 05.4 | -0.9 |
| MAPV | | | | *eS* | Sn | | 06 21 37.5 | -1.8 |
| **JACV** | **Jacura** | **2.97** | **48** | *eP* | Pn | | 06 21 08.7 | -1.6 |
| JACV | | | | *eS* | Sn | | 06 21 44.4 | -2.0 |
| **BAUV** | **El Baul** | **3.00** | **92** | *eP* | Pn | | 06 21 09.3 | -1.3 |
| BAUV | | | | *eS* | Sn | | 06 21 44.9 | -2.0 |
| **TURV** | **Turiamo** | **3.46** | **67** | *eP* | Pn | | 06 21 15.8 | -1.2 |
| TURV | | | | *eS* | Sn | | 06 21 55.6 | -2.9 |
| **BENV** | **Beln** | **3.54** | **75** | *eP* | Pn | | 06 21 17.1 | -1.0 |
| BENV | | | | *eS* | Sn | | 06 21 57.7 | -2.6 |
| **MERV** | **Las Mercedes** | **4.72** | **88** | *eP* | Pn | | 06 21 32.9 | -1.4 |
| MERV | | | | *eS* | Sn | | 06 22 25.1 | -4.3 |
| **CACV** | **CAICARA DEL OR** | **4.73** | **108** | *eP* | Pn | | 06 21 40.0 | +5.5 |
| CACV | | | | *eS* | Sb | | 06 22 38.3 | -4.9 |
| **BIRV** | **Birongo** | **4.93** | **73** | *eS* | Sn | | 06 22 30.0 | -4.7 |

*SOME **02** 06:25:07.5, 40°.48N×76°.93E, h10km*
*NNC **02** 06:25:08.9±0.8, 40°.48N×77°.12E, h0km, mb4.0, mpv3.8, Error ellipse: s-maj=6.2km s-min=4.4km az=160.0*
*KRNET **02** 06:25:09.2±0.1, 40°.53N×77°.07E, h21km, mb3.5*
**ISC 02 06:25:10.8±1.5, 40°.58N±0°.07×77°.09E±0°.03, h10km, n71, σ1§80/105, 24C-14D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **1.27** | **25** | ⇑*iP* | | **Pn** | **06 25 34.1** | **-0.8** |
| | baz=24 | | | | | | | |
| TARG | | | | ⇑*iS* | | **Sn** | **06 25 52.1** | **-0.1** |
| | baz=24 | | | | | | | |
| **KDJ** | **Kajisay** | **1.55** | **2** | ⇑*eP* | | **Pn** | **06 25 38.6** | **0.0** |
| | baz=3.0 | | | | | | | |
| KDJ | | | | ⇑*iS* | | **Sg** | **06 26 00.4** | **-0.2** |
| | baz=3.0 | | | | | | | |
| **ULHL** | **Ulahol** | **1.78** | **339** | P | | **Pb** | **06 25 43.6** | **-0.1** |
| | SNR=32 | | | | | | | |
| **ULHL** | **Ulahol** | **1.78** | **339** | ⇓*iP* | | **Pb** | **06 25 42.7** | **-0.9** |
| | baz=40 | | | | | | | |
| ULHL | | | | ⇓*iS* | | **Sg** | **06 26 07.3** | **-0.7** |
| | baz=40 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.09** | **336** | ⇑*eP* | | **Pb** | **06 25 47.6** | **-1.3** |
| | baz=37 | | | | | | | |
| BOOM | | | | ⇑*iS* | | **Sb** | **06 26 15.2** | **+0.2** |
| | baz=37 | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.14** | **27** | ⇑*eP* | | **Pb** | **06 25 48.2** | **-1.5** |
| | baz=26 | | | | | | | |
| PRZ | | | | ⇑*iS* | | **Sb** | **06 26 16.8** | **+0.4** |
| | baz=26 | | | | | | | |
| **ANVS** | **Anan'yevo** | **2.24** | **11** | ⇑*iP* | | **Pb** | **06 25 49.8** | **-1.7** |
| | baz=11 | | | | | | | |
| ANVS | | | | ⇑*iS* | | **Sb** | **06 26 19.4** | **+0.1** |
| | baz=11 | | | | | | | |
| **ARLS** | **Aral** | **2.45** | **302** | ⇓*eP* | | **Pn** | **06 25 51.9** | **+0.9** |
| | baz=4.0 | | | | | | | |
| ARLS | | | | ⇓*iS* | | **Sn** | **06 26 23.0** | **+2.0** |
| | baz=4.0 | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.45** | **358** | *eP* | | **Pb** | **06 25 56.0** | **+0.7** |
| | 46nm,0.2s | | | | | | | |
| TNSS | | | | *eS* | | **Sg** | **06 26 31.5** | **+1.8** |
| | 21nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.45** | **358** | Pg | | **Pb** | **06 25 55.2** | **0.0** |
| | 46nm,0.2s | | | | | | | |
| TNSS | | | | Lg | | Lg | 06 26 31.9 | |
| | 21nm,0.4s | | | | | | | |
| **UCH** | **Uchtor** | **2.54** | **311** | P | | **Pb** | **06 25 54.7** | **-2.0** |
| | SNR=16 | | | | | | | |
| **UC

baz=24
**KOTS Kotyrbulak 2.65 0** *e*P **Pg** **06 25 59.9 -1.7**
39nm,0.2s
KOTS *e*S **Sg** **06 26 38.0 +2.1**
67nm,0.5s
**KOTS Kotyrbulak 2.65 0** Pg **Pb** **06 25 58.4 -0.1**
39nm,0.2s
KOTS Lg Lg 06 26 37.1
67nm,0.5s
**SATY Saty 2.66 21** *e*P **Pb** **06 25 59.1 +0.5**
9.1nm,0.2s
SATY *e*S **Sg** **06 26 36.8 +0.5**
44nm,0.4s
**SATY Saty 2.66 21** Pg **Pb** **06 25 58.2 -0.5**
9.1nm,0.2s
SATY Lg Lg 06 26 36.9
44nm,0.4s
**ZHN Zhinishke 2.77 21** *e*P **Pb** **06 26 01.2 +0.7**
18nm,0.1s
ZHN *e*S **Sg** **06 26 40.3 +0.5**
32nm,0.4s
**ZHN Zhinishke 2.77 21** Pg **Pb** **06 26 00.5 +0.1**
18nm,0.1s
ZHN Lg Lg 06 26 40.6
32nm,0.4s
**AAK Ala-Archa 2.83 317** P **Pb** **06 26 01.7 +0.2**
SNR=8.5
**AAK Ala-Archa 2.83 317** ⇑Pn **Pn** **06 25 58.4 +2.2**
13nm,0.5s
AAK ⇑Lg Lg 06 26 42.0
43nm,0.5s
**AAK Ala-Archa 2.83 317** ⇓*i*P **Pn** **06 25 57.4 +1.2**
baz=18
AAK ⇓*i*S **Sn** **06 26 32.6 +2.2**
baz=18
**DGS Degeres 2.83 340** *e*P **Pb** **06 26 02.4 +0.9**
25nm,0.3s
DGS *e*S **Sg** **06 26 42.6 +0.8**
30nm,0.2s
**DGS Degeres 2.83 340** Pg **Pb** **06 26 01.8 +0.2**
25nm,0.3s
DGS Lg Lg 06 26 43.3
30nm,0.2s
**UZB Uzynbulak 2.94 29** *e*P **Pb** **06 26 04.2 +0.8**
12nm,0.2s
UZB *e*S **Sg** **06 26 45.5 +0.3**
34nm,0.3s
**UZB Uzynbulak 2.94 29** Pg **Pb** **06 26 02.8 -0.6**
12nm,0.2s
UZB Lg Lg 06 26 44.9
34nm,0.3s
**CHMS Chumysh 2.98 325** P **Pb** **06 26 00.9 -3.1**
SNR=9.5
**AML Almayashu 2.99 302** P **Pn** **06 26 00.8 +2.2**
SNR=11
**KURS Kuram 3.01 15** *e*P **Pb** **06 26 05.4 +0.9**
10nm,0.6s
KURS *e*S **Sg** **06 26 47.4 -0.1**
20nm,0.6s
**KURS Kuram 3.01 15** Pg **Pb** **06 26 04.7 +0.2**
10nm,0.6s
KURS Lg Lg 06 26 48.2
20nm,0.6s
**KTBS Karatobe 3.14 355** *e*P **Pb** **06 26 07.3 +0.6**
18nm,0.2s
KTBS *e*S **Sg** **06 26 51.0 -0.6**
53nm,0.2s
**KTBS Karatobe 3.14 355** Pg **Pb** **06 26 07.4 +0.6**
18nm,0.2s
KTBS Lg Lg 06 26 52.6
53nm,0.2s
**PDGK Podgornoye 3.27 32** ⇓Pn **Pn** **06 26 03.9 +1.6**
1.4nm,0.5s
PDGK ⇑Pg **Pb** **06 26 09.8 +0.7**
8.4nm,0.7s
PDGK ⇑Lg Lg 06 26 54.4
96nm,0.8s
**KRBS Karabastau 3.28 342** *e*P **Pb** **06 26 10.6 +1.4**
11nm,0.3s
KRBS *e*S **Sg** **06 26 56.2 0.0**
34nm,0.4s
**KRBS Karabastau 3.28 342** Pg **Pb** **06 26 09.7 +0.5**
11nm,0.3s
KRBS Lg Lg 06 26 56.6
34nm,0.4s
**USP Ospenovka 3.31 325** P **Pb** **06 26 05.8 -3.7**
SNR=7.2
**KUU Kurty 3.35 351** *e*P **Pb** **06 26 10.6 +0.2**
5.8nm,0.6s
KUU *e*S **Sg** **06 26 56.6 -1.9**
34nm,0.4s
**KUU Kurty 3.35 351** Pg **Pb** **06 26 10.7 +0.3**
5.2nm,0.3s
KUU Lg Lg 06 26 58.4
34nm,0.4s
**MRKS Merke 3.61 308** *e*P **Pb** **06 26 14.4 -0.3**
5.1nm,0.4s
MRKS *e*S **Sb** **06 27 02.8 +4.1**
20nm,0.3s
**MRKS Merke 3.61 308** Pg **Pb** **06 26 13.8 -1.0**
5.1nm,0.4s
MRKS Lg Lg 06 27 03.8
20nm,0.3s
**BLB Baldybastay 3.66 16** *e*P **Pb** **06 26 17.0 +1.4**
15nm,0.2s
BLB *e*S **Sg** **06 27 07.2 -1.1**
31nm,0.2s
**BLB Baldybastay 3.66 16** Pg **Pb** **06 26 16.0 +0.3**
15nm,0.2s
BLB Lg Lg 06 27 07.5
31nm,0.2s
**ARXS Arharly 3.67 8** *e*P **Pb** **06 26 17.4 +1.7**
9.5nm,0.5s
ARXS *e*S **Sg** **06 27 08.1 -0.4**
19nm,0.2s
**ARXS Arharly 3.67 8** Pg **Pb** **06 26 16.7 +1.0**
9.5nm,0.5s
ARXS Lg Lg 06 27 09.0
19nm,0.2s
**DJR Jarkent 4.25 27** *e*P **Pb** **06 26 26.7 +1.1**
4.6nm,0.3s
DJR *e*S **Sg** **06 27 23.7 -3.4**
15nm,0.2s
**DJR Jarkent 4.25 27** Pg **Pb** **06 26 27.0 +1.5**
4.6nm,0.3s
DJR Lg Lg 06 27 26.3
15nm,0.2s
**TDK Taldyqorghan 4.52 12** *e*P **Pb** **06 26 31.7 +1.5**
28nm,0.2s
TDK *e*S **Sg** **06 27 32.6 -3.3**
24nm,0.7s
**TDK Taldyqorghan 4.52 12** Pg **Pb** **06 26 32.9 +2.7**
28nm,0.2s
TDK Lg Lg 06 27 36.2
24nm,0.7s
**KAPS Kapalarasan 4.98 19** *e*P **Pg** **06 26 42.5 -3.8**
5.8nm,0.6s
KAPS *e*S **Sg** **06 27 50.8 0.0**
6.6nm,0.3s
**KAPS Kapalarasan 4.98 19** Pg **Pg** **06 26 42.4 -3.8**
5.8nm,0.6s
KAPS Lg Lg 06 27 52.9
6.6nm,0.3s
**BTLS Baital 4.99 334** *e*P **Pb** **06 26 40.5 +2.3**
3.2nm,0.7s
BTLS *e*S **Sg** **06 27 47.2 -3.6**
9.6nm,0.4s
**BTLS Baital 4.99 334** Pg **Pb** **06 26 41.2 +3.0**
3.2nm,0.7s
BTLS Lg Lg 06 27 50.6
9.6nm,0.4s
**KK02 Karatay Array 5.52 299** ⇑Pg **Pg** **06 26 51.9 -4.6**
1.7nm,0.7s
KK02 ⇓Lg Lg 06 28 07.4
4.2nm,0.7s
**IUG Iuzhnay 5.54 289** *e*P **Pb** **06 26 50.8 +3.2**
99nm,0.5s
IUG *e*S **Sg** **06 28 05.0 -3.6**
18nm,0.5s
**IUG Iuzhnay 5.54 289** Pg **Pb** **06 26 49.2 +1.6**
99nm,0.5s
IUG Lg Lg 06 28 04.3
18nm,0.5s
**BRLS Boroldaу 5.95 297** *e*P **Pb** **06 26 58.2 +3.7**
2.2nm,0.3s
BRLS *e*S **Sg** **06 28 17.7 -3.9**
5.5nm,0.5s
**BRLS Boroldaу 5.95 297** Pg **Pb** **06 26 57.8 +3.2**
2.2nm,0.3s
BRLS Lg Lg 06 28 19.0
5.5nm,0.5s
**MAKZ Makanchi 7.16 28** ⇓Lg Lg 06 28 57.9
2.8nm,1.0s
**MK31 Makanchi Array 7.26 30** ⇑Pn **Pn** **06 26 58.4 +1.5**
1.1nm,0.9s,baz=198,slow=12,SNR=8.7
MK31 ⇓Sn **Sn** **06 28 21.8 +2.4**
0.9nm,0.6s,baz=211,slow=23,SNR=4.4
MK31 ⇑Lg Lg 06 29 01.1
1.5nm,0.7s,baz=209,slow=28,SNR=4.6
**OTUK Ortayu 8.38 338** ⇓Lg Lg 06 29 36.8
9.6nm,0.9s

**IDC 02 06:33:28.5±4.1, 47.71N×108.37E, h0km, mb1 3.4/2, mb1mx2.7/41, mbtmp3.4/2, ML2.8/2, Error ellipse: s-maj=31.6km s-min=20.8km az=97.0, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I34MN** | **SONGINO INFRAS** | **1.32** | **275** | *i* | | 06 43 49.3 | |
| | baz=94,slow=334,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **1.33** | **276** | Pg | Pg | 06 33 53.3 | -0.8 |
| | 45nm,0.3s,baz=96,slow=18,SNR=241 | | | | | | |
| SONM | | | | Lg | Lg | 06 34 11.2 | |
| | 25nm,0.3s,baz=92,slow=27,SNR=22 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **16.77** | **93** | *i* | | 08 11 10.0 | |
| | baz=290,slow=329,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **17.70** | **277** | P | P | 06 37 37.2 | -0.1 |
| | 0.0nm,0.3s,baz=84,slow=13,SNR=3.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **19.66** | **290** | P | Pn | 06 37 59.8 | -0.3 |
| | 0.0nm,0.3s,baz=88,slow=13,SNR=1.6 | | | | | | |

**IDC 02 06:42:07.7±2.8, 53.44N×87.58E, h0km, mb1 2.6/2, mb1mx2.1/49, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=25.8km s-min=16.3km az=65.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.72** | **288** | *i* | | 06 55 38.3 | |
| | baz=106,slow=338,SNR=7.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.72** | **288** | Pn | Pn | 06 42 37.3 | -1.6 |
| | 0.5nm,0.3s,baz=109,slow=16,SNR=7.2 | | | | | | |
| ZALV | | | | Lg | Lg | 06 43 02.7 | |
| | 0.6nm,0.3s,baz=104,slow=27,SNR=7.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.26** | **247** | Pn | Pn | 06 43 42.2 | +1.0 |
| | 0.1nm,0.3s,baz=60,slow=14,SNR=2.4 | | | | | | |
| KURBB | | | | Lg | Lg | 06 45 24.2 | |
| | 0.1nm,0.3s,baz=64,slow=32,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.47** | **209** | Pn | Pn | 06 43 59.5 | +1.6 |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=5.5 | | | | | | |
| MKAR | | | | Lg | Lg | 06 46 02.7 | |
| | 0.1nm,0.3s,baz=24,slow=28,SNR=6.3 | | | | | | |

**MEX 02 06:42:35.7±0.8, 18.12N×103.32W, h10km±3km, MD3.7, Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **MMIG** | **Aquila** | **0.17** | **353** | *i* | P Pg | 06 42 38.8 | -0.5 |
| MMIG | | | | *i* | S Sg | 06 42 41.3 | -0.4 |
| **MMIG** | **Aquila** | **0.17** | **353** | *i* | P Pg | 06 42 38.8 | -0.5 |
| MMIG | | | | *i* | S Sg | 06 42 41.4 | -0.3 |
| **CDAR** | **Ciudad de Arme** | **1.04** | **321** | *e* | P Pg | 06 42 52.5 | -3.3 |
| CDAR | | | | *e* | S Sg | 06 43 06.0 | -3.3 |
| **COIG** | **Colima** | **1.11** | **342** | *e* | P Pg | 06 42 52.8 | -4.2 |
| COIG | | | | *e* | S Sg | 06 43 06.4 | -5.0 |
| **R15V** | | **1.21** | **329** | *e* | P Pb | 06 42 55.2 | -3.6 |
| R15V | | | | *e* | S Sb | 06 43 10.3 | -4.3 |
| **MNGA** | **Volcan de Coli** | **1.36** | **348** | *e* | P Pn | 06 42 57.5 | -3.7 |
| MNGA | | | | *e* | S Sb | 06 43 14.7 | -4.5 |
| **JUBC** | **Volcan de Coli** | **1.40** | **350** | *e* | P Pn | 06 42 58.0 | -3.6 |
| JUBC | | | | *e* | S Sb | 06 43 15.6 | -4.7 |
| **INCO** | **Volcan de Coli** | **1.42** | **349** | *e* | P Pn | 06 42 58.3 | -3.7 |
| INCO | | | | *e* | S Sb | 06 43 15.4 | -5.5 |

*NAO **02** 06:56:16.1±2.5, 71.54N×2.86W, ML3.9*
*IDC **02** 06:56:18.4±0.6, 71.65N×2.53W, h0km, mb3.9/14, mb1 4.1/20, mb1mx3.9/63, mbtmp3.9/20, ML3.6/6, MS3.7/12, Ms1 3.7/12, ms1mx3.3/94, Error ellipse: s-maj=18.1km s-min=11.0km az=44.0*
*NEIC **02** 06:56:19.7±2.2, 71.70N±0.04×2.4W±0.2, h10km±1km, mb4.4/11, Error ellipse: s-maj=13.5km s-min=3.3km az=236.0*
*BER **02** 06:56:23.2±2.9, 71.73N×2.58W, h31km±49km, ML3.0, MW3.3, ML3.9(NAO), Confirmed Earthquake*

**ISC 02 06:56:19.7±0.4, 71.64N±0.06×2.21W±0.05, h10km, n108, σ2s48/113, mb4.2/30, MS3.7/9, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **DBG** | **Daneborg** | **5.91** | **305** | Pn | Pn | **06 57 42.5** | **-4.5** |
| **DBG** | **Daneborg** | **5.91** | **305** | *i* | P Pn | 06 57 42.2 | -4.9 |
| DBG | | | | | IAML | 06 57 42.7 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| **DBG** | **Daneborg** | **5.91** | **305** | *e* | P Pn | **06 57 42.5** | **-4.5** |
| DBG | | | | *e* | S Sn | 06 58 42.7 | -12 |
| **LOF** | **Lofoten** | **6.46** | **115** | *e* | P Pn | **06 57 55.4** | **+0.8** |
| LOF | | | | *e* | S Sn | **06 59 04.4** | **-4.0** |
| LOF | | | | | IAML | 06 59 15.1 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **SCO** | **Scoresbysund** | **6.52** | **269** | *i* | P Pn | **06 57 53.0** | **-2.4** |
| SCO | | | | | IAML | 06 57 58.0 | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **SCO** | **Scoresbysund** | **6.52** | **269** | | Pn Pn | **06 57 52.8** | **-2.6** |
| **N2VI** | **Vinje** | **6.53** | **113** | *e* | P Pn | **06 57 56.3** | **+0.7** |
| N2VI | | | | *e* | S Sn | **06 59 06.1** | **-4.0** |
| N2VI | | | | | IAML | 06 59 10.6 | |
| | comp=Z,41nm,0.5s | | | | | | |
| N2VI | | | | | IAML | 06 59 10.8 | |
| | comp=Z,39nm,0.5s | | | | | | |
| **N2VA** | **Vr,y** | **6.54** | **120** | *e* | P Pn | **06 57 55.8** | **+0.1** |
| N2VA | | | | | IAML | 07 00 06.8 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **STEI** | **Steigen** | **7.08** | **113** | *e* | P Pn | **06 58 03.5** | **+0.4** |
| STEI | | | | *e* | S Sn | **06 59 20.4** | **-3.1** |
| STEI | | | | | IAML | 06 59 21.1 | |
| | comp=Z,21nm,0.5s | | | | | | |
| STEI | | | | | IAML | 06 59 22.8 | |
| | comp=Z,23nm,0.5s | | | | | | |
| **HSPB** | **Hornsund (broa** | **7.18** | **34** | Pn | Pn | **06 58 04.8** | **+0.4** |
| **HSPB** | **Hornsund (broa** | **7.18** | **34** | *e* | P Pn | **06 58 04.6** | **+0.2** |
| HSPB | | | | | IAML | 07 00 27.4 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **TRO** | **Tromso** | **7.29** | **96** | *e* | P Pn | **06 58 05.8** | **-0.2** |
| **NBB30** | **Finnes** | **7.32** | **122** | *e* | P Pn | **06 58 06.6** | **+0.2** |
| NBB30 | | | | *e* | S Sn | **06 59 23.9** | **-5.5** |
| NBB30 | | | | | IAML | 06 59 28.7 | |
| | comp=Z,22nm,0.5s | | | | | | |
| **FAUS** | **Fauske** | **7.46** | **116** | *e* | P Pn | **06 58 08.9** | **+0.6** |
| FAUS | | | | *e* | S Sn | **06 59 28.2** | **-4.6** |
| FAUS | | | | | IAML | 06 59 30.4 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| FAUS | | | | | IAML | 06 59 35.5 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **NBB13** | **Alf Garage** | **7.47** | **125** | *e* | P Pn | **06 58 08.7** | **+0.3** |
| **NBB13** | **Alf Garage** | **7.47** | **125** | *e* | S Sn | **06 59 28.0** | **-5.1** |
| **NBB13** | **Alf Garage** | **7.47** | **125** | | IAML | 06 59 31.1 | |
| | comp=Z,37nm,0.7s | | | | | | |
| **NBB17** | **Glomfjord BYr** | **7.50** | **122** | *e* | P Pn | **06 58 09.7** | **+0.8** |
| **NBB17** | **Glomfjord BYr** | **7.50** | **122** | *e* | S Sn | **06 59 29.0** | **-4.7** |
| **NBB17** | **Glomfjord BYr** | **7.50** | **122** | | IAML | 06 59 32.1 | |
| | comp=Z,38nm,0.2s | | | | | | |
| **KONS** | **Konsvik** | **7.51** | **126** | *e* | P Pn | **06 58 09.2** | **+0.1** |
| KONS | | | | *e* | S Sn | **06 59 28.3** | **-5.9** |
| KONS | | | | | IAML | 06 59 31.1 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **BRBB** | **Barentsburg B** | **7.73** | **26** | Pn | Pn | **06 58 12.4** | **+0.4** |
| **BRBB** | **Barentsburg B** | **7.73** | **26** | *e* | Pn | **06 58 13.3** | **+1.3** |
| **JETT** | **Jettan, Norway** | **7.79** | **95** | Pn | Pn | **06 58 13.1** | **+0.2** |
| JETT | | | | | Sn | **06 59 35.2** | **-5.9** |
| **SPA0** | **Spitsbergen Ar** | **8.10** | **28** | Pn | Pn | **06 58 17.6** | **+0.5** |
| | baz=218,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.10** | **28** | *e* | P Pn | **06 58 17.6** | **+0.5** |
| **SPB2** | **Spitsbergen Ar** | **8.10** | **28** | Pn | Pn | **06 58 17.3** | **+0.2** |
| **SPITS** | **Spitsbergen Ar** | **8.10** | **28** | Pn | Pn | **06 58 16.8** | **-0.3** |
| | baz=207,slow=13,SNR=34 | | | | | | |
| **MOR8** | **Moi Rana** | **8.11** | **124** | *e* | P Pn | **06 58 19.2** | **+1.9** |
| MOR8 | | | | *e* | S Sn | **06 59 44.5** | **-4.3** |
| MOR8 | | | | | IAML | 06 59 46.5 | |
| | comp=Z,23nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **8.12** | **20** | Pn | Pn | **06 58 18.1** | **+0.8** |
| **KBS** | **Kingsbay** | **8.12** | **20** | *e* | P Pn | **06 58 17.1** | **-0.2** |
| **KBS** | **Kingsbay** | **8.12** | **20** | Pn | Pn | **06 58 14.4** | **-2.9** |
| **KIF** | **Kilpisjarvi** | **8.17** | **98** | Pn | Pn | **06 58 18.4** | **+0.3** |
| KIF | | | | | Sn | **06 59 45.3** | **-5.0** |
| **KIF** | **Kilpisjarvi** | **8.17** | **98** | *e* | P Pn | **06 58 19.0** | **+0.9** |
| KIF | | | | *e* | S Sn | **06 59 45.8** | **-4.6** |
| **HAMF** | **Hammerfest** | **8.41** | **84** | *e* | P Pn | **06 58 19.7** | **-1.7** |
| **NSS** | **Namsos** | **8.87** | **137** | *e* | P Pn | **06 58 29.1** | **+1.5** |
| NSS | | | | *e* | S Sn | 06 59 59.1 | -8.2 |
| NSS | | | | | IAML | 07 00 08.1 | |
| | comp=Z,22nm,0.6s | | | | | | |
| **KTK1** | **Kautokeino** | **8.94** | **95** | *e* | P Pn | **06 58 28.9** | **+0.3** |
| **HEF** | **Hetta** | **9.38** | **98** | *e* | P Pn | **06 58 34.6** | **0.0** |
| **ARA0** | **ARCESS Array S** | **9.41** | **90** | Pn | Pn | **06 58 35.1** | **0.0** |
| | baz=296,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.41** | **90** | Pn | Pn | **06 58 35.1** | **0.0** |
| | baz=296,slow=12 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.41** | **90** | Pn | Pn | **06 58 35.2** | **+0.1** |
| | baz=296,slow=12,SNR=53 | | | | | | |
| ARCES | | | | | Sn | **07 00 18.0** | **-2.8** |
| | baz=310,slow=24,SNR=1.3 | | | | | | |
| ARCES | | | | | LR LR | 07 01 52.4 | |
| | comp=Z,351nm,19.5s,baz=252,slow=35 | | | | | | |
| **KEV** | **Kevo** | **9.80** | **87** | Pn | Pn | **06 58 39.3** | **-1.0** |
| **NOR** | **Nord** | **10.49** | **348** | Pn | Pn | **06 58 47.0** | **-2.8** |
| NOR | | | | | Sn | 07 00 35.6 | -11 |
| **NOR** | **Nord** | **10.49** | **348** | *i* | P Pn | **06 58 47.4** | **-2.4** |
| NOR | | | | | IAML | 06 58 51.8 | |
| | comp=Z,0.1nm,0.2s | | | | | | |
| **NOR** | **Nord** | **10.49** | **348** | *e* | P Pn | **06 58 46.0** | **-3.8** |
| NOR | | | | *e* | S Sn | 07 00 29.9 | -17 |
| **SUMG** | **Summit** | **11.07** | **292** | *e* | P Pn | **06 58 55.5** | **-2.6** |
| SUMG | | | | | IAML | 06 59 00.6 | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **SUMG** | **Summit** | **11.07** | **292** | | Pn Pn | **06 58 57.2** | **-0.8** |
| **NC204** | **NORSAR Array S** | **11.59** | **147** | | Pn Pn | **06 59 06.8** | **+1.9** |
| **NC303** | **NORSAR Array S** | **11.74** | **146** | | Pn Pn | **06 59 08.4** | **+1.5** |
| **NOA** | **NORSAR Array B** | **11.89** | **147** | | Pn Pn | **06 59 09.7** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=339,slow=13,SNR=5.9 | | | | | | |
| NOA | | | | | Sn | **07 01 18.1** | **-3.4** |
| | comp=Z,0.0nm,0.3s,baz=330,slow=22,SNR=4.2 | | | | | | |
| NOA | | | | | LR LR | 07 03 54.6 | |
| | comp=Z,302nm,18.4s,baz=290,slow=38 | | | | | | |
| **NB201** | **NORSAR Array S** | **11.89** | **147** | | Pn Pn | **06 59 11.3** | **+2.3** |
| **NC405** | **NORSAR Array S** | **11.91** | **145** | | Pn Pn | **06 59 10.4** | **+1.2** |
| **APA0** | **Apatity Array** | **12.76** | **91** | Pn | Pn | **06 59 20.3** | **-0.5** |
| | baz=328,slow=12 | | | | | | |
| **APA0** | **Apatity Array** | **12.76** | **91** | Pn | Pn | **06 59 20.3** | **-0.5** |
| | baz=328,slow=12 | | | | | | |
| **HFS** | **Hagfors** | **13.19** | **143** | Pn | Pn | **06 59 27.3** | **+0.6** |
| | comp=Z,1.7nm,0.3s,baz=354,slow=13,SNR=30 | | | | | | |
| HFS | | | | | Sn | **07 01 47.5** | **-5.6** |
| | comp=Z,0.5nm,0.3s,baz=358,slow=22,SNR=4.7 | | | | | | |
| **HFS** | **Hagfors** | **13.19** | **143** | Pn | Pn | **06 59 27.2** | **+0.6** |
| | baz=332,slow=16 | | | | | | |
| **HFS** | **Hagfors** | **13.19** | **143** | Pn | Pn | **06 59 27.2** | **+0.6** |
| | baz=332,slow=16 | | | | | | |
| **FIA1** | **FINESS Array S** | **15.01** | **118** | Pn | Pn | **06 59 51.8** | **+0.3** |
| **FIA0** | **FINESS Array S** | **15.01** | **118** | P | Pn | **06 59 51.6** | **+0.1** |
| | baz=330,slow=12 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.01** | **118** | P | Pn | **06 59 51.6** | **+0.1** |
| | baz=330,slow=12 | | | | | | |
| **FINES** | **FINESS Array B** | **15.01** | **118** | Pn | Pn | **06 59 51.6** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=330,slow=12,SNR=18 | | | | | | |
| FINES | | | | | Sn | **07 02 30.0** | **-7.5** |
| | comp=Z,0.4nm,0.3s,baz=326,slow=24,SNR=4.9 | | | | | | |
| FINES | | | | | LR LR | 07 05 17.2 | |
| | comp=Z,327nm,20.6s,baz=281,slow=36 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.38** | **182** | Pn | Pn | **07 00 09.5** | **+0.2** |
| | baz=357,slow=11,SNR=2.2 | | | | | | |
| **EUNU** | **Eureka** | **20.02** | **330** | | P | **07 00 51.4** | **-0.7** |
| **CLL** | **Collm** | **21.52** | **153** | *e* | P | **07 01 10.0** | **+1.6** |
| CLL | | | | *i* | x x | 07 01 14.5 | |
| | comp=Z,41nm,1.7s | | | | | | |
| **BRG** | **Berggiesshubel** | **22.08** | **152** | *ex* | x | 07 01 17.4 | |
| BRG | | | | | Amp | 07 01 19.9 | |
| | comp=Z,20nm,1.6s | | | | | | |
| **GERES** | **GERESS Array B** | **24.03** | **154** | P | P | **07 01 35.8** | **+1.4** |
| | comp=Z,1.7nm,0.8s,baz=354,slow=11,SNR=6.5 | | | | | | |
| **RES** | **Resolute Bay** | **24.44** | **320** | LR | LR | 07 10 17.8 | |
| | comp=Z,173nm,18.9s,baz=93,slow=34 | | | | | | |
| **RETA** | **Reutte** | **24.99** | **159** | *e*P | P | **07 01 47.4** | **+4.2** |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **FRB** | **Frobisher Bay** | **25.03** | **286** | P | P | **07 01 43.6** | **+0.3** |
| | comp=Z,1.8nm,0.9s,baz=44,slow=17,SNR=2.5 | | | | | | |
| FRB | | | | | LR LR | 07 11 06.3 | |
| | comp=Z,68nm,20.6s,baz=24,slow=36 | | | | | | |
| **MOA** | **Molln** | **25.08** | **153** | *e*P | P | **07 01 47.3** | **+3.4** |
| | comp=Z,9.8nm,1.6s | | | | | | |
| **DAVA** | **Damuels** | **25.09** | **160** | *e*P | P | **07 01 46.6** | **+2.4** |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **MOTA** | **Moosalm** | **25.17** | **158** | *e*P | P | **07 01 48.3** | **+3.4** |
| | comp=Z,15nm,1.3s | | | | | | |
| **WATA** | **Walderalm** | **25.23** | **158** | *e*P | P | **07 01 48.2** | **+2.7** |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **CONA** | **Conrad Observa** | **25.24** | **151** | *e*P | P | **07 01 47.6** | **+2.1** |
| | comp=Z,14nm,1.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **25.30** | **158** | *e*P | P | **07 01 50.4** | **+4.3** |
| | comp=Z,8.8nm,1.2s | | | | | | |
| **WTTA** | **Wattenberg** | **25.31** | **158** | *e*P | P | **07 01 50.5** | **+4.3** |
| | comp=Z,14nm,1.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **25.32** | **129** | P | P | **07 01 47.0** | **+0.9** |
| | comp=Z,2.7nm,0.6s,baz=338,slow=9.9,SNR=11 | | | | | | |
| AKASG | | | | | LR LR | 07 11 26.5 | |
| | comp=Z,317nm,18.4s,baz=296,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **25.32** | **129** | P | P | **07 01 45.7** | **-0.3** |
| AKASG | | | | | IAmb IAmb | 07 01 48.7 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **25.32** | **129** | P | P | **07 01 46.5** | **+0.5** |
| AKBB | | | | | IAmb IAmb | 07 01 51.8 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **FETA** | **Feichten** | **25.44** | **159** | *e*P | P | **07 01 48.7** | **+1.3** |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **KBA** | **Koelnbreinsper** | **25.71** | **155** | *e*P | P | **07 01 54.3** | **+4.5** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **25.76** | **165** | P | P | **07 01 52.0** | **+1.6** |
| SENIN | | | | | IAmb IAmb | 07 01 56.5 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **TUE** | **Stuetta** | **25.84** | **161** | P | P | **07 01 52.1** | **+1.1** |
| TUE | | | | | IAmb IAmb | 07 01 56.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **SOKA** | **Soboth** | **26.34** | **153** | *e*P | P | **07 01 57.4** | **+2.0** |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **SCHQ** | **Schefferville** | **31.55** | **273** | LR | LR | 07 13 38.7 | |
| | comp=Z,134nm,18.4s,baz=90,slow=33 | | | | | | |
| **ESDC** | **Sonseca Array** | **32.05** | **183** | P | P | **07 02 46.3** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=9.0,slow=9.5,SNR=7.3 | | | | | | |
| **FNA** | **Florina** | **33.11** | **146** | P | P | **07 02 55.8** | **+0.4** |
| **VAE** | **Valguarnera** | **35.29** | **157** | LR | LR | 07 17 13.1 | |
| | comp=Z,77nm,19.1s,baz=156,slow=36 | | | | | | |
| **BVAR** | **Borovoye Array** | **35.60** | **82** | P | P | **07 03 19.0** | **+2.1** |
| | comp=Z,1.6nm,0.7s,baz=356,slow=9.5,SNR=10 | | | | | | |
| **INK** | **Inuvik** | **36.61** | **332** | P | P | **07 03 24.0** | **-1.3** |
| | comp=Z,1.8nm,0.9s,baz=18,slow=14,SNR=7.4 | | | | | | |
| **INK** | **Inuvik** | **36.61** | **332** | IAmb | IAmb | 07 03 25.7 | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **36.70** | **131** | P | P | **07 03 27.6** | **+1.2** |
| | comp=Z,2.0nm,0.7s,baz=340,slow=5.7,SNR=7.3 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **38.30** | **341** | P | P | **07 03 39.8** | **+0.1** |
| TOLK | | | | | IAmb IAmb | 07 03 41.3 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.37** | **316** | P | P | **07 03 39.6** | **-0.6** |
| | comp=Z,0.9nm,0.8s,baz=28,slow=8.8,SNR=14 | | | | | | |
| YKA | | | | | PcP PcP | **07 05 53.8** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=23,slow=2.7,SNR=19 | | | | | | |
| YKA | | | | | LR LR | 07 18 47.4 | |
| | comp=Z,166nm,18.1s,baz=54,slow=35 | | | | | | |
| **EPYK** | **Eagle Plains** | **38.88** | **333** | P | P | **07 03 44.3** | **-0.3** |
| EPYK | | | | | IAmb IAmb | 07 03 44.6 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **38.91** | **338** | P | P | **07 03 46.0** | **+1.2** |
| **ILAR** | **Eielson Array** | **41.74** | **338** | P | P | **07 04 08.0** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=12,slow=7.0,SNR=20 | | | | | | |
| ILAR | | | | | PcP PcP | **07 06 04.7** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=291,slow=2.6,SNR=4.2 | | | | | | |
| **FFC** | **Flin Flon** | **42.15** | **302** | P | P | **07 04 11.3** | **-0.3** |
| **MMAI** | **Mount Meron Ar** | **43.51** | **132** | LR | LR | 07 24 45.0 | |
| | comp=Z,89nm,18.2s,baz=193,slow=39 | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.42** | **294** | P | P | **07 04 29.9** | **-0.1** |
| | comp=Z,2.9nm,0.8s,baz=32,slow=6.7,SNR=3.7 | | | | | | |
| **DLBC** | **Dease Lake** | **45.21** | **324** | LR | LR | 07 25 12.1 | |
| | comp=Z,132nm,19.1s,baz=338,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **50.74** | **56** | P | P | **07 05 20.8** | **+1.4** |
| | comp=Z,0.9nm,0.9s,baz=323,slow=9.6,SNR=4.7 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NEW** | **Newport** | **51.94** | **310** | LR | LR | 07 27 31.0 | |
| | comp=Z,93nm,18.7s,baz=10,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **55.10** | **301** | P | **P** | **07 05 50.3** | **-1.3** |
| | comp=Z,0.6nm,0.8s,baz=46,slow=4.3,SNR=6.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **58.51** | **176** | P | **P** | **07 06 16.1** | **+0.3** |
| | comp=Z,1.6nm,0.8s,baz=352,slow=7.1,SNR=6.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **65.96** | **290** | P | **P** | **07 07 05.4** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=39,slow=4.8,SNR=3.5 | | | | | | |
| **WHN** | **Wuhan** | **69.06** | **56** | P | **P** | **07 07 29.4** | **+4.2** |
| **ASAR** | **Alice Springs** | **126.01** | **52** | PKP | **PKPdf** | **07 15 20.9** | **-0.4** |
| | comp=Z,0.6nm,0.7s,baz=9.3,slow=1.1,SNR=4.8 | | | | | | |

*THE **02** 06:57:05.7, 35°.35N, 023°.63E, h16$^{km}_{\pm 1km}$, ML2.3/4, Error ellipse: s-maj=1.1km s-min=0.4km az=231.0*
*ATH **02** 06:57:05.9, 35°.34N, 023°.63E, h14$^{km}_{\pm 2km}$, ML2.5/6, Error ellipse: s-maj=2.9km s-min=1.1km az=57.0*
**ISC 02 06:57:05.7±1.0, 35°.35N±0°.03, 23°.67E±0°.04, h13$^{km}_{\pm 9km}$, n17, σ0°.38/26, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.11** | **175** | P | **Pb** | **06 57 09.2** | **-0.5** |
| KNDR | | | | S | **Sg** | **06 57 11.6** | **+0.6** |
| | 1μm,0.1s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.28** | **66** | P | **Pb** | **06 57 12.3** | **-0.1** |
| IMMV | | | | S | **Sb** | **06 57 17.1** | **+0.1** |
| **IMMV** | **Iera Moni Meta** | **0.28** | **66** | P | **Pb** | **06 57 12.4** | **0.0** |
| IMMV | | | | S | **Sb** | **06 57 17.1** | **+0.1** |
| IMMV | | | | AML | AML | 06 57 17.3 | |
| | comp=N,4477μm,0.2s | | | | | | |
| IMMV | | | | AML | AML | 06 57 17.4 | |
| | comp=E,3877μm,0.2s | | | | | | |
| **VAM** | **Vamos** | **0.43** | **82** | P | **Pb** | **06 57 14.9** | **-0.2** |
| VAM | | | | S | **Sb** | **06 57 21.9** | **+0.3** |
| | comp=E,635nm,0.2s | | | | | | |
| **VAM** | **Vamos** | **0.43** | **82** | P | **Pb** | **06 57 15.1** | **-0.1** |
| VAM | | | | AML | AML | 06 57 22.5 | |
| | comp=E,874μm,0.3s | | | | | | |
| VAM | | | | AML | AML | 06 57 24.3 | |
| | comp=N,1655μm,0.2s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.60** | **330** | P | **Pg** | **06 57 17.2** | **-0.2** |
| ANKY | | | | S | **Sg** | **06 57 25.5** | **+0.1** |
| | comp=N,238nm,0.2s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.60** | **330** | P | **Pg** | **06 57 17.2** | **-0.2** |
| ANKY | | | | S | **Sg** | **06 57 25.5** | **+0.1** |
| ANKY | | | | AML | AML | 06 57 26.4 | |
| | comp=N,475μm,0.3s | | | | | | |
| ANKY | | | | AML | AML | 06 57 28.4 | |
| | comp=E,470μm,0.2s | | | | | | |
| **GVDS** | **Gavdos** | **0.61** | **146** | P | **Pg** | **06 57 17.4** | **-0.1** |
| GVDS | | | | S | **Sb** | **06 57 27.0** | **+0.5** |
| **GVD** | **Gavdhos** | **0.61** | **146** | P | **Pb** | **06 57 17.6** | **-0.5** |
| GVD | | | | S | **Sb** | **06 57 27.1** | **+0.5** |
| | comp=E,692nm,0.3s | | | | | | |
| **GVD** | **Gavdhos** | **0.61** | **146** | P | **Pb** | **06 57 17.6** | **-0.5** |
| GVD | | | | S | **Sb** | **06 57 27.0** | **+0.4** |
| GVD | | | | AML | AML | 06 57 32.3 | |
| | comp=E,1312μm,0.3s | | | | | | |
| GVD | | | | AML | AML | 06 57 34.4 | |
| | comp=N,1444μm,0.4s | | | | | | |
| **PRNS** | **Prines Rethymn** | **0.68** | **88** | P | **Pg** | **06 57 18.2** | **-0.6** |
| **SIVA** | **Sivas** | **0.99** | **109** | P | **Pb** | **06 57 24.7** | **+0.2** |
| **IDI** | **Anoyia** | **1.00** | **93** | P | **Pg** | **06 57 24.4** | **-0.5** |
| **KTHA** | **Kythira Island** | **1.03** | **331** | P | **Pb** | **06 57 25.1** | **-0.3** |
| KTHA | | | | AML | AML | 06 57 41.9 | |
| | comp=N,287μm,0.4s | | | | | | |
| KTHA | | | | AML | AML | 06 57 49.6 | |
| | comp=E,465μm,0.6s | | | | | | |
| **VLI** | **Velíai** | **1.49** | **337** | P | **Pn** | **06 57 32.5** | **+0.3** |
| **NPS** | **Neapolis** | **1.59** | **92** | P | **Pg** | **06 57 35.7** | **-0.5** |
| **SNT5** | **Nea Kammeni, S** | **1.75** | **52** | P | **Pb** | **06 57 37.5** | **-0.1** |
| SNT5 | | | | AML | AML | 06 58 08.5 | |
| | comp=E,410μm,0.3s | | | | | | |
| SNT5 | | | | AML | AML | 06 58 09.9 | |
| | comp=N,182μm,0.2s | | | | | | |

*BJI **02** 07:00:57.9±0.0, 40°.04N, 077°.72E, h8$^{km}$, mb4.5/38, mB4.9/24, ML4.9/9, Ms4.2/17, MS7 4.1/15*
*IDC **02** 07:00:57.5±0.5, 39°.97N, 077°.69E, h0$^{km}$, mb4.4/29, mb1 4.5/36, mb1mx4.4/64, mbtmp4.4/36, ML3.9/7, MS3.9/12, Ms1 3.9/12, ms1mx3.4/89, Error ellipse: s-maj=12.3km s-min=9.7km az=39.0*
*MOS **02** 07:00:57.8±2.1, 39°.93N, 077°.69E, h10$^{km}$, mb4.8/15, Error ellipse: s-maj=7.1km s-min=3.6km az=98.6*
*SOME **02** 07:00:58.5, 40°.18N, 077°.63E, h5$^{km}$, MS4.2*
*KRNET **02** 07:00:59.2±0.1, 40°.12N, 077°.84E, mb5.1*
*NEIC **02** 07:01:00.6±1.6, 40°.04N±0°.06, 077°.69E±0°.08, h14$^{km}_{\pm 4km}$, mb4.7/39, Error ellipse: s-maj=9.2km s-min=8.2km az=140.0*
*NNC **02** 07:01:02.0±0.7, 40°.24N, 077°.65E, h0$^{km}$, mb5.5, mpv5.3, Error ellipse: s-maj=5.4km s-min=4.4km az=144.0*
**ISC 02 07:00:59.1±0.6, 40°.01N±0°.03, 77°.76E±0°.03, h8$^{km}_{\pm 3km}$, n353, σ1°.83/392, mb4.5/73, MS4.0/11, 38C-26D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **1.47** | **251** | Pg | Pg | 07 01 34.1 | +6.9 |
| KSH | | | | Sg | Sg | 07 02 01.7 | +15 |
| KSH | | | | smax | smax | | |
| | comp=N,16μm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,14μm,0.7s | | | | | | |
| **KDJ** | **Kajisay** | **2.16** | **348** | PN | **Pn** | **07 01 37.3** | **+1.7** |
| **KDJ** | **Kajisay** | **2.16** | **348** | *i* P | **Pn** | **07 01 37.2** | **+1.7** |
| | baz=47 | | | | | | |
| KDJ | | | | *i* S | **Sb** | **07 02 05.0** | **-0.6** |
| | baz=47 | | | | | | |
| **KDJ** | **Kajisay** | **2.16** | **348** | | **Pn** | **07 01 37.3** | **+1.7** |
| **ULHL** | **Ulahol** | **2.51** | **333** | P | **Pn** | **07 01 42.9** | **+2.5** |
| | SNR=246 | | | | | | |
| **ULHL** | **Ulahol** | **2.51** | **333** | ⇑*i*P | **Pn** | **07 01 42.5** | **+2.1** |
| | baz=31 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **07 02 14.2** | **-1.5** |
| | baz=31 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.52** | **11** | PN | **Pb** | **07 01 44.0** | **-0.6** |
| **PRZ** | **Przheval'sk** | **2.52** | **11** | ⇑*i*P | **Pn** | **07 01 42.1** | **+1.6** |
| | baz=10.0 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sn** | **07 02 13.5** | **+2.1** |
| | baz=10.0 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.52** | **11** | | **Pb** | **07 01 44.0** | **-0.6** |
| **ANVS** | **Anan'yevo** | **2.77** | **359** | ⇑*i*P | **Pn** | **07 01 45.6** | **+1.6** |
| | baz=57 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sn** | **07 02 19.5** | **+1.8** |
| | baz=57 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.83** | **332** | PN | **Pn** | **07 01 47.3** | **+2.5** |
| **BOOM** | **Boomskoye usch** | **2.83** | **332** | ⇑*e*P | **Pn** | **07 01 47.0** | **+2.2** |
| | baz=29 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **07 02 21.9** | **+2.7** |
| | baz=29 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.83** | **332** | | **Pn** | **07 01 47.3** | **+2.5** |
| **SATY** | **Saty** | **3.08** | **9** | *e*PN | **Pb** | **07 01 54.6** | **+0.4** |
| **SATY** | **Saty** | **3.08** | **9** | *e*P | **Pb** | **07 01 54.6** | **+0.4** |
| | 2μm,0.7s | | | | | | |
| SATY | | | | *e*S | **Sb** | **07 02 34.9** | **+2.9** |
| | 2μm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.08** | **9** | *e*Pg | **Pb** | **07 01 54.7** | **+0.4** |
| | baz=9.4 | | | | | | |
| **SATY** | **Saty** | **3.08** | **9** | Pg | **Pb** | **07 01 54.5** | **+0.2** |
| | 2μm,0.7s | | | | | | |
| SATY | | | | Lg | Lg | 07 02 35.0 | |
| | 2μm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.08** | **349** | *e*PN | **Pb** | **07 01 54.4** | **0.0** |
| **TNSS** | **Tian-Shan** | **3.08** | **349** | *e*P | **Pb** | **07 01 54.1** | **-0.4** |
| | 3μm,0.8s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **07 02 34.2** | **+1.9** |
| | 908nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.08** | **349** | *e*Pg | **Pb** | **07 01 54.5** | **0.0** |
| | baz=349 | | | | | | |
| **TNSS** | **Tian-Shan** | **3.08** | **349** | Pg | **Pb** | **07 01 54.2** | **-0.2** |
| | 3μm,0.5s | | | | | | |
| TNSS | | | | Lg | Lg | 07 02 34.7 | |
| | 3μm,0.5s | | | | | | |
| **ARLS** | **Aral** | **3.19** | **306** | ⇑*e*P | **Pn** | **07 01 52.7** | **+2.9** |
| | baz=4.0 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **07 02 31.4** | **+3.3** |
| | baz=4.0 | | | | | | |
| **MDOK** | **Medeo** | **3.19** | **351** | *i* PN | **Pb** | **07 01 56.2** | **+0.1** |
| **MDOK** | **Medeo** | **3.19** | **351** | *e*P | **Pb** | **07 01 56.3** | **+0.1** |
| | 2μm,0.5s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **07 02 37.8** | **+2.5** |
| | 3μm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **3.19** | **351** | *i* Pg | **Pb** | **07 01 56.3** | **+0.1** |
| | baz=351 | | | | | | |
| **MDOK** | **Medeo** | **3.19** | **351** | ⇓Pn | **Pn** | **07 01 51.6** | **+1.8** |
| | 2μm,0.6s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 07 02 36.3 | |
| | 4μm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.19** | **351** | Pg | **Pb** | **07 01 56.5** | **+0.3** |
| | 2μm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 07 02 37.9 | |
| | 4μm,0.8s | | | | | | |
| **ZHN** | **Zhinishke** | **3.19** | **9** | *e*P | **Pb** | **07 01 56.5** | **+0.3** |
| | 320nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **07 02 38.1** | **+2.8** |
| | 3μm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **3.19** | **9** | Pg | **Pb** | **07 01 56.2** | **+0.1** |
| | 320nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 07 02 37.9 | |
| | 3μm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.26** | **352** | *e*P | **Pb** | **07 01 57.6** | **+0.4** |
| | 2μm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **07 02 40.1** | **+3.0** |
| | 3μm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.26** | **352** | Pg | **Pb** | **07 01 56.7** | **-0.6** |
| | 2μm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 07 02 38.1 | |
| | 3μm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **3.26** | **349** | *e*PN | **Pb** | **07 01 57.9** | **+0.7** |
| **AAA** | **Alma-Ata** | **3.26** | **349** | *e*P | **Pb** | **07 01 57.9** | **+0.7** |
| | 6μm,0.2s | | | | | | |
| AAA | | | | *e*S | **Sb** | **07 02 40.6** | **+3.6** |
| | 4μm,0.7s | | | | | | |
| **AAA** | **Alma-Ata** | **3.26** | **349** | *e*Pg | **Pb** | **07 01 58.0** | **+0.7** |
| | baz=350 | | | | | | |
| **AAA** | **Alma-Ata** | **3.26** | **349** | Pg | **Pb** | **07 01 56.9** | **-0.3** |
| | 6μm,0.2s | | | | | | |
| AAA | | | | Lg | Lg | 07 02 38.8 | |
| | 4μm,0.7s | | | | | | |
| **KNDC** | **Almaty** | **3.26** | **350** | PN | **Pn** | **07 01 53.4** | **+2.8** |
| KNDC | | | | | | 07 02 39.9 | |
| **KNDC** | **Almaty** | **3.26** | **350** | ⇑Pn | **Pn** | **07 01 51.7** | **+1.2** |
| | 2μm,0.6s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 07 02 38.5 | |
| | 7μm,0.8s | | | | | | |
| **MTBS** | **Maitube** | **3.27** | **343** | *e*P | **Pb** | **07 01 57.3** | **-0.2** |
| | 524nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **07 02 39.5** | **+2.0** |
| | 1μm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **3.27** | **343** | Pg | **Pb** | **07 01 56.4** | **-1.1** |
| | 524nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 07 02 38.0 | |
| | 1μm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **3.27** | **16** | *e*PN | **Pb** | **07 01 57.5** | **0.0** |
| **UZB** | **Uzynbulak** | **3.27** | **16** | *e*P | **Pb** | **07 01 57.4** | **-0.1** |
| | 634nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sb** | **07 02 39.8** | **+2.3** |
| | 1μm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **3.27** | **16** | *e*Pg | **Pb** | **07 01 57.6** | **0.0** |
| | baz=17 | | | | | | |
| **UZB** | **Uzynbulak** | **3.27** | **16** | Pg | **Pb** | **07 01 57.5** | **0.0** |
| | 634nm,0.5s | | | | | | |
| UZB | | | | Lg | Lg | 07 02 39.8 | |
| | 1μm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **3.31** | **313** | P | **Pn** | **07 01 53.4** | **+1.9** |
| | SNR=101 | | | | | | |
| **UCH** | **Uchtor** | **3.31** | **313** | ⇑*e*P | **Pn** | **07 01 54.1** | **+2.5** |
| | baz=11 | | | | | | |
| UCH | | | | ⇑*i*S | **Sn** | **07 02 34.4** | **+3.2** |
| | baz=11 | | | | | | |
| **KST** | **Kastek** | **3.32** | **337** | *e*P | **Pb** | **07 01 59.2** | **+1.0** |
| | 638nm,0.3s | | | | | | |
| KST | | | | *e*S | **Sb** | **07 02 42.7** | **+3.9** |
| | 2μm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.32** | **337** | Pg | **Pb** | **07 01 57.1** | **-1.1** |
| | 638nm,0.3s | | | | | | |
| KST | | | | Lg | Lg | 07 02 39.0 | |
| | 2μm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.33** | **331** | P | **Pn** | **07 01 54.2** | **+2.5** |
| | SNR=50 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.33** | **331** | PN | **Pn** | **07 01 53.7** | **+2.0** |
| TKM2 | | | | | | 07 02 42.3 | |
| **TKM2** | **Tokmak 2** | **3.33** | **331** | ⇓Pn | **Pn** | **07 01 53.7** | **+2.0** |
| | 507nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 07 02 40.7 | |
| | 2μm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.33** | **331** | ⇓*e*P | **Pn** | **07 01 53.9** | **+2.2** |
| | baz=30 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sn** | **07 02 33.9** | **+2.3** |
| | baz=30 | | | | | | |
| **KBK** | **Karagaybulak** | **3.39** | **322** | P | **Pn** | **07 01 55.1** | **+2.6** |
| | SNR=128 | | | | | | |
| **KBK** | **Karagaybulak** | **3.39** | **322** | ⇓*e*P | **Pn** | **07 01 55.0** | **+2.6** |
| | baz=20 | | | | | | |
| KBK | | | | ⇓*i*S | **Sn** | **07 02 35.8** | **+2.9** |
| | baz=20 | | | | | | |
| **KURS** | **Kuram** | **3.49** | **5** | *e*P | **Pb** | **07 02 01.1** | **0.0** |
| | 544nm,0.8s | | | | | | |
| KURS | | | | *e*S | **Sb** | **07 02 46.3** | **+2.7** |
| | 1μm,0.6s | | | | | | |
| **KURS** | **Kuram** | **3.49** | **5** | Pg | **Pb** | **07 02 01.1** | **0.0** |
| | 544nm,0.8s | | | | | | |
| KURS | | | | Lg | Lg | 07 02 46.3 | |
| | 1μm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.56** | **336** | *e*P | **Pb** | **07 02 02.1** | **-0.2** |
| | 543nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sb** | **07 02 48.3** | **+2.6** |
| | 2μm,0.4s | | | | | | |
| **DGS** | **Degeres** | **3.56** | **336** | Pg | **Pb** | **07 02 01.5** | **-0.8** |
| | 543nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 07 02 46.8 | |
| | 2μm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **3.56** | **21** | PN | **Pn** | **07 01 57.3** | **+2.6** |
| PDGK | | | | | | 07 02 42.7 | |
| **PDGK** | **Podgornoye** | **3.56** | **21** | ⇑Pn | **Pn** | **07 01 57.4** | **+2.6** |
| | 405nm,0.6s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 07 02 48.0 | |
| | 2μm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.60** | **318** | Pn | **Pn** | **07 01 57.7** | **+2.3** |
| | 13nm,0.3s,baz=134,slow=7.9,SNR=156 | | | | | | |
| AAK | | | | Pg | **Pb** | **07 02 03.6** | **+0.6** |
| | 34nm,0.3s,baz=146,slow=12,SNR=35 | | | | | | |
| AAK | | | | Lg | Lg | 07 02 50.4 | |
| | 55nm,0.3s,baz=345,slow=18,SNR=11 | | | | | | |
| AAK | | | | LR | LR | 07 03 32.6 | |
| | comp=Z,969nm,20.8s,baz=94,slow=43 | | | | | | |
| **AAK** | **Ala-Archa** | **3.60** | **318** | P | **Pn** | **07 01 57.6** | **+2.3** |
| | SNR=64 | | | | | | |
| **AAK** | **Ala-Archa** | **3.60** | **318** | ⇑Pn | **Pn** | **07 01 57.4** | **+2.1** |
| | 394nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 07 02 49.3 | |
| | 2μm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **3.60** | **318** | ⇓*e*P | **Pn** | **07 01 58.0** | **+2.7** |
| | baz=16 | | | | | | |
| AAK | | | | ⇓*i*S | **Sn** | **07 02 40.7** | **+2.7** |
| | baz=16 | | | | | | |
| **AAK** | **Ala-Archa** | **3.60** | **318** | | **Pn** | **07 01 57.6** | **+2.3** |
| **FRU1** | **Bishkek** | **3.66** | **321** | PN | **Pn** | **07 01 58.5** | **+2.5** |
| **FRU1** | **Bishkek** | **3.66** | **321** | ⇑*e*P | **Pn** | **07 01 59.1** | **+3.1** |
| | baz=19 | | | | | | |
| FRU1 | | | | ⇑*i*S | **Sn** | **07 02 42.9** | **+3.5** |
| | baz=19 | | | | | | |
| **FRU1** | **Bishkek** | **3.66** | **321** | | **Pn** | **07 01 58.5** | **+2.5** |
| **AML** | **Almayashu** | **3.73** | **306** | P | **Pn** | **07 01 59.7** | **+2.3** |
| | SNR=243 | | | | | | |
| **CHMS** | **Chumysh** | **3.74** | **324** | P | **Pn** | **07 01 59.7** | **+2.5** |
| | SNR=145 | | | | | | |
| **CHMS** | **Chumysh** | **3.74** | **324** | ⇑*i*P | **Pn** | **07 01 59.9** | **+2.7** |
| | baz=22 | | | | | | |
| CHMS | | | | ⇑*e*S | **Sn** | **07 02 44.2** | **+2.7** |
| | baz=22 | | | | | | |
| **KTBS** | **Karatobe** | **3.78** | **348** | *e*P | **Pb** | **07 02 06.7** | **+0.5** |
| | 546nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **07 02 55.6** | **+3.5** |
| | 2μm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.78** | **348** | Pg | **Pb** | **07 02 06.3** | **+0.1** |
| | 546nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 07 02 54.7 | |
| | 2μm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.00** | **338** | *e*P | **Pb** | **07 02 09.7** | **-0.1** |
| | 283nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **07 03 01.1** | **+2.7** |
| | 569nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **4.00** | **338** | Pg | **Pb** | **07 02 09.8** | **0.0** |
| | 283nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 07 03 01.2 | |
| | 569nm,0.4s | | | | | | |
| **EKS2** | **Erkin-Say** | **4.00** | **313** | P | **Pn** | **07 02 03.6** | **+2.7** |
| | SNR=102 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.00** | **313** | ⇑*e*P | **Pn** | **07 02 03.8** | **+3.0** |
| | baz=11 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **07 02 51.0** | **+3.1** |
| | baz=11 | | | | | | |
| **KUU** | **Kurty** | **4.02** | **345** | *e*P | **Pb** | **07 02 10.0** | **-0.2** |
| | 302nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sb** | **07 03 01.7** | **+2.7** |
| | 662nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **4.02** | **345** | Pg | **Pb** | **07 02 10.6** | **+0.4** |
| | 302nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 07 03 02.3 | |
| | 662nm,0.4s | | | | | | |
| **USP** | **Ospenovka** | **4.07** | **324** | P | **Pn** | **07 02 04.1** | **+2.5** |
| | SNR=14 | | | | | | |
| **USP** | **Ospenovka** | **4.07** | **324** | ⇑*e*P | **Pn** | **07 02 04.4** | **+2.7** |
| | baz=23 | | | | | | |
| USP | | | | ⇑*i*S | **Sn** | **07 02 52.0** | **+2.5** |
| | baz=23 | | | | | | |
| **BLB** | **Baldybastay** | **4.12** | **7** | *e*P | **Pb** | **07 02 13.2** | **+1.3** |
| | 2μm,0.3s | | | | | | |
| BLB | | | | *e*S | **Sb** | **07 03 06.5** | **+4.7** |
| | 880nm,0.7s | | | | | | |
| **BLB** | **Baldybastay** | **4.12** | **7** | Pg | **Pb** | **07 02 13.1** | **+1.2** |
| | 2μm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 07 03 06.5 | |
| | 880nm,0.7s | | | | | | |
| **SGDS** | **Sogindy** | **4.16** | **327** | *e*PN | **Pn** | **07 02 02.5** | **-0.4** |
| **SGDS** | **Sogindy** | **4.16** | **327** | *e*Pn | **Pn** | **07 02 02.6** | **-0.4** |
| | baz=327 | | | | | | |
| **ARXS** | **Arharly** | **4.20** | **1** | *e*PN | **Pn** | **07 02 05.7** | **+2.2** |
| **ARXS** | **Arharly** | **4.20** | **1** | *e*P | **Pb** | **07 02 14.0** | **+0.8** |
| | 586nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **07 03 08.1** | **+3.9** |
| | 964nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.20** | **1** | Pg | **Pb** | **07 02 14.6** | **+1.3** |
| | 586nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 07 03 09.1 | |
| | 964nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **4.37** | **310** | *e*P | **Pb** | **07 02 18.1** | **+2.0** |
| | 260nm,0.5s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **07 03 15.5** | **-3.9** |
| | 574nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **4.37** | **310** | Pg | **Pb** | **07 02 16.3** | **+0.2** |
| | 260nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 07 03 12.1 | |
| | 574nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **4.57** | **19** | *e*P | **Pb** | **07 02 20.8** | **+1.1** |
| | 202nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sb** | **07 03 19.8** | **+4.9** |
| | 614nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **4.57** | **19** | Pg | **Pb** | **07 02 22.0** | **+2.3** |
| | 202nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 07 03 21.5 | |
| | 614nm,0.4s | | | | | | |
| **DRK** | **Karamyk** | **4.63** | **265** | Pn | **Pn** | **07 02 09.8** | **+0.3** |
| **TDK** | **Taldyqorghan** | **5.01** | **5** | *e*PN | **Pn** | **07 02 14.6** | **+0.1** |
| TDK | | | | *e* | | 07 02 30.2 | |
| **TDK** | **Taldyqorghan** | **5.01** | **5** | *e*P | **Pb** | **07 02 28.4** | **+1.4** |
| | 952nm,0.8s | | | | | | |
| TDK | | | | *e*S | **Sb** | **07 03 33.2** | **+5.8** |
| | 1μm,0.5s | | | | | | |
| **TDK** | **Taldyqorghan** | **5.01** | **5** | *e*Pn | **Pn** | **07 02 14.7** | **+0.1** |
| | baz=5.6 | | | | | | |
| TDK | | | | *e*Pg | **Pb** | **07 02 30.2** | **+3.2** |
| | baz=5.6 | | | | | | |
| **TDK** | **Taldyqorghan** | **5.01** | **5** | Pg | **Pb** | **07 02 29.1** | **+2.1** |
| | 950nm,0.7s | | | | | | |
| TDK | | | | Lg | Lg | 07 03 34.5 | |
| | 1μm,0.5s | | | | | | |
| **BTK** | **Batken** | **5.33** | **273** | PN | **Pn** | **07 02 19.1** | **0.0** |
| **BTK** | **Batken** | **5.33** | **273** | | **Pn** | **07 02 19.1** | **0.0** |
| **KAPS** | **Kapalarasan** | **5.40** | **12** | *e*P | **Pb** | **07 02 35.7** | **+2.0** |
| | 246nm,1.0s | | | | | | |
| KAPS | | | | *e*S | **Sb** | **07 03 45.5** | **+6.8** |
| | 491nm,1.0s | | | | | | |
| **KAPS** | **Kapalarasan** | **5.40** | **12** | Pg | **Pb** | **07 02 37.7** | **+4.0** |
| | 246nm,1.0s | | | | | | |
| KAPS | | | | Lg | Lg | 07 03 48.1 | |
| | 491nm,1.0s | | | | | | |
| **DZA** | **Taraz** | **5.62** | **303** | *e*P | **Pb** | **07 02 41.9** | **+4.4** |
| | 124nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **07 03 56.3** | **-3.3** |
| | 423nm,0.7s | | | | | | |
| **DZA** | **Taraz** | **5.62** | **303** | Pg | **Pb** | **07 02 41.9** | **+4.4** |
| | 124nm,0.1s | | | | | | |
| DZA | | | | Lg | Lg | 07 03 56.8 | |
| | 423nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **5.73** | **333** | *e*PN | **Pn** | **07 02 24.0** | **-0.4** |
| **BTLS** | **Baital** | **5.73** | **333** | *e*P | **Pb** | **07 02 41.0** | **+1.8** |
| | 171nm,0.5s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **07 03 55.2** | **+7.2** |
| | 352nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **5.73** | **333** | *e*Pn | **Pn** | **07 02 24.1** | **-0.4** |
| | baz=333 | | | | | | |
| **BTLS** | **Baital** | **5.73** | **333** | Pg | **Pb** | **07 02 43.8** | **+4.6** |
| | 171nm,0.5s | | | | | | |
| BTLS | | | | Lg | Lg | 07 03 59.6 | |
| | 37nm,0.4s | | | | | | |
| **GAR** | **Garm** | **5.85** | **262** | | **Pn** | **07 02 26.7** | **+0.5** |
| **IUG** | **Iuzhnay** | **6.22** | **293** | *e*PN | **Pn** | **07 02 33.1** | **+1.8** |
| **IUG** | **Iuzhnay** | **6.22** | **293** | *e*P | Pb | 07 02 53.0 | +5.4 |
| | 2μm,0.4s | | | | | | |
| IUG | | | | *e*S | **Sg** | **07 04 15.5** | **-3.2** |
| | 600nm,0.9s | | | | | | |
| **IUG** | **Iuzhnay** | **6.22** | **293** | *e*Pg | **Pb** | **07 02 52.1** | **+4.4** |
| | baz=292 | | | | | | |
| **IUG** | **Iuzhnay** | **6.22** | **293** | Pg | **Pb** | **07 02 52.2** | **+4.5** |
| | 2μm,0.4s | | | | | | |
| IUG | | | | Lg | Lg | 07 04 14.2 | |
| | 600nm,0.9s | | | | | | |
| **KK02** | **Karatay Array** | **6.25** | **302** | ⇓Pn | **Pn** | **07 02 32.9** | **+1.2** |
| | 12nm,0.7s | | | | | | |
| KK02 | | | | ⇓Pg | **Pb** | **07 02 52.8** | **+4.5** |
| | 77nm,0.8s | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 07 04 15.7 | |
| | 211nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **6.25** | **302** | PN | **Pn** | **07 02 33.0** | **+1.4** |
| **KKAR** | **Karatay Array** | **6.25** | **302** | Pn | **Pn** | **07 02 33.0** | **+1.4** |
| **TAS** | **Tashkent** | **6.57** | **284** | PN | **Pn** | **07 02 35.7** | **-0.3** |
| **TAS** | **Tashkent** | **6.57** | **284** | | **Pn** | **07 02 35.7** | **-0.3** |
| **CHM** | **Chimkent** | **6.57** | **293** | *e*P | **Pg** | **07 03 02.0** | **-3.0** |
| | 6.6nm,0.6s | | | | | | |
| CHM | | | | *e*S | **Sg** | **07 04 30.8** | **+0.7** |
| | 707nm,0.7s | | | | | | |
| **BRLS** | **Boroldday** | **6.67** | **299** | *e*P | **Pb** | **07 02 59.8** | **+4.6** |
| | 98nm,0.9s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **07 04 26.5** | **-6.6** |
| | 176nm,0.9s | | | | | | |
| **BRLS** | **Boroldday** | **6.67** | **299** | *e*Pg | Pb | 07 03 00.1 | +4.8 |
| | baz=297 | | | | | | |
| **BRLS** | **Boroldday** | **6.67** | **299** | Pg | Pb | 07 03 00.8 | +5.5 |
| | 98nm,0.9s | | | | | | |
| BRLS | | | | Lg | Lg | 07 04 28.2 | |
| | 176nm,0.9s | | | | | | |
| **CHGR** | **Chuyangaron** | **6.80** | **261** | Pn | **Pn** | **07 02 38.8** | **-0.5** |
| **

**THW Thamme Wali 8.68 216** P **Pn** **07 03 07.5 +2.5**
**KBL Kabul 8.84 235** P **Pn** **07 03 08.1 +0.8**
**KBL Kabul 8.84 235** Pn **Pn** **07 03 08.1 +0.8**
**ZSN Zaisan 9.04 32** *e*Pg Pn 07 03 44.1 +34
baz=32
**ZSN Zaisan 9.04 32** Pg Pn 07 03 43.9 +34
20nm,0.4s
ZSN Lg Lg 07 05 43.2
88nm,0.5s
**OTUK Ortayu 9.11 336** ⇑Pn **Pn** **07 03 11.3 +0.6**
19nm,1.1s
OTUK ⇑Lg Lg 07 05 42.4
525nm,1.0s
**BRZS Berezniki 10.60 342** *e*P **Pn** **07 03 31.6 +0.4**
**BRZS Berezniki 10.60 342** *e*Pn **Pn** **07 03 30.9 -0.3**
baz=342
BRZS *e*Pg 07 04 12.1
baz=342
**BRZS Berezniki 10.60 342** Pg Pn 07 04 13.4 +42
15nm,0.5s
BRZS Lg Lg 07 06 33.4
7.9nm,0.8s
**KURBB Kurchatov Arra 10.62 3** Pn **Pn** **07 03 31.4 -0.1**
0.5nm,0.3s,baz=191,slow=12,SNR=86
KURBB Lg Lg 07 06 31.3
0.5nm,0.3s,baz=193,slow=33,SNR=9.8
KURBB LR LR 07 07 50.9
comp=Z,627nm,21.7s,baz=186,slow=39
**KURBB Kurchatov Arra 10.62 3** P **Pn** **07 03 30.8 -0.7**
**KURBB Kurchatov Arra 10.62 3** ⇑Pn **Pn** **07 03 32.4 +0.9**
21nm,0.7s
KURBB ⇓Lg Lg 07 06 33.0
349nm,1.0s
**KURK Kurchatov 10.72 3** P **Pn** **07 03 32.7 -0.1**
**KURK Kurchatov 10.72 3** ⇑Pn **Pn** **07 03 31.9 -0.9**
54nm,1.0s
KURK ⇓Lg Lg 07 06 34.5
213nm,1.0s
**KURK Kurchatov 10.72 3** Pn **Pn** **07 03 32.7 -0.1**
**DGZ Jazzator, Alta 11.86 32** *i* P **Pn** **07 03 49.4 +0.8**
**DANN Dangsing 12.64 155** *e*P **Pn** **07 03 57.1 -2.4**
47nm,0.5s
**PYUN Piuthan 12.64 158** *e*P **Pn** **07 03 56.6 -2.8**
76nm,0.6s
**KOLN Koldanda 13.13 157** *e*P **Pn** **07 04 03.2 -2.9**
**GKN Gorkha 13.26 153** *e*P **Pn** **07 04 05.6 -2.2**
20nm,0.3s
**HRA Herat 13.58 250** Pn **Pn** **07 04 10.3 -1.9**
**KKN Kakani 13.69 151** *e*P **Pn** **07 04 11.3 -2.4**
52nm,0.5s
**DMN Daman 13.79 152** *e*P **Pn** **07 04 13.2 -1.9**
19nm,0.4s
**GUN Gumba 13.81 148** *e*P **Pn** **07 04 14.0 -1.5**
98nm,0.6s
**PKIN Phulchoki 13.92 151** *e*P **Pn** **07 04 14.9 -2.1**
126nm,0.6s
**PKI Pulchoki 13.93 151** *e*P **Pn** **07 04 14.7 -2.5**
78nm,0.6s
**GOMU GeErMu 13.96 100** P **Pn** **07 04 15.1 -2.4**
GOMU pmax pmax
comp=Z,39nm,0.9s
GOMU pmax pmax
comp=Z,190nm,6.0s
**BVAR Borovoye Array 13.96 341** Pn **Pn** **07 04 15.6 -1.5**
1.0nm,0.3s,baz=123,slow=16,SNR=25
BVAR Lg Lg 07 08 11.5
0.5nm,0.3s,baz=132,slow=27,SNR=8.5
**BRVK Borovoye 14.02 341** P **Pn** **07 04 16.3 -1.5**
**BRVK Borovoye 14.02 341** ⇑Pn **Pn** **07 04 16.1 -1.8**
26nm,1.1s
BRVK ⇑Lg Lg 07 08 21.3
340nm,1.4s
**BRVK Borovoye 14.02 341** Pn **Pn** **07 04 16.3 -1.5**
**JIRN Jiri 14.16 148** *e*P **Pn** **07 04 18.2 -2.1**
91nm,0.7s
**ZAA0 Zalesovo Array 14.74 17** ⇑Pn **Pn** **07 04 26.2 -1.5**
6.3nm,1.0s
**ZAA0 Zalesovo Array 14.74 17** Pn **Pn** **07 04 26.5 -1.2**
**ZALV Zalesovo Beam 14.74 17** Pn **Pn** **07 04 26.2 -1.5**
0.7nm,0.3s,baz=204,slow=12,SNR=30
ZALV LR LR 07 10 15.0
comp=Z,290nm,18.8s,baz=271,slow=38
**ZALV Zalesovo Beam 14.74 17** *i* P **Pn** **07 04 26.2 -1.5**
ZALV pmax pmax
comp=Z,27nm,0.9s
**ZALV Zalesovo Beam 14.74 17** Pn **Pn** **07 04 25.9 -1.8**
**GEYT Alibeck 15.42 269** Pn **Pn** **07 04 36.3 -0.7**
comp=Z,0.4nm,0.3s,baz=63,slow=45,SNR=2.0
**GEYT Alibeck 15.42 269** **Pn** **07 04 33.6 -3.4**
**AB31 Akbulak array 15.66 312** Pn **Pn** **07 04 38.2 -1.8**
comp=Z,19nm,0.7s,baz=110,slow=13,SNR=124
**ABKAR Akbulak array 15.66 312** Pn **Pn** **07 04 37.8 -2.2**
**ABKAR Akbulak array 15.66 312** Pn **Pn** **07 04 38.3 -1.7**
ABKAR IAmb IAmb 07 04 45.1
comp=Z,25nm,0.8s
**JBP Jabalpur 16.90 173** *e*P **Pn** **07 04 51.7 -4.3**
JBP *e*S Sn 07 07 49.2 -15
**GTA Gaotai 16.98 85** ⇓P **Pn** **07 04 55.5 -1.5**
GTA pP P 07 05 01.0 +2.0
GTA sP pP 07 05 03.6 +1.9
GTA pmax pmax
comp=Z,9.0nm,0.9s
GTA pmax pmax
comp=Z,86nm,4.2s
GTA LR LR
comp=Z,240nm,15.3s
GTA LR LR
comp=Z,340nm,13.5s
GTA LR LR
comp=Z,320nm,15.3s
**AKTO Aktyubinsk 17.33 313** P **Pn** **07 05 00.1 -1.1**
comp=Z,0.6nm,0.3s,baz=97,slow=9.9,SNR=20
AKTO LR LR 07 11 57.3
comp=Z,393nm,19.2s,baz=343,slow=38
**AKTO Aktyubinsk 17.33 313** ⇓Pn **Pn** **07 04 59.1 -2.1**
comp=Z,30nm,1.0s
**SHL Shillong 18.63 136** P **P** **07 05 16.5 -0.8**
SHL pmax pmax
comp=Z,43nm,0.9s
**SHL Shillong 18.63 136** P **P** **07 05 16.5 -0.8**
SHL IAmb IAmb 07 05 20.5
comp=Z,43nm,0.9s
**SVE Sverdlovsk 20.21 332** *e*P **P** **07 05 34.6 +0.5**
**ZAK Zakamensk 20.66 51** *e*P **P** **07 05 39.8 +0.6**
ZAK pmax pmax
comp=Z,17nm,1.3s
**ARU Arti 20.70 329** P **P** **07 05 39.2 -0.3**
comp=Z,11nm,0.6s,baz=150,slow=4.7,SNR=4.6
**ARU Arti 20.70 329** *d i* P **P** **07 05 39.7 +0.2**
ARU 07 05 56.8
ARU S **S** **07 09 32.6 +1.9**
ARU SS **SnSn** **07 09 51.6 +1.6**
ARU pmax pmax
comp=Z,32nm,0.7s
**ARU Arti 20.70 329** P **P** **07 05 38.7 -0.8**
ARU IAmb IAmb 07 05 44.2
comp=Z,33nm,0.6s
**LZH Lanzhou 20.88 92** *e*P Pn 07 05 44.7 +0.4
LZH pP sP 07 05 48.8 +2.9
LZH sP pP 07 05 51.3 +6.7
LZH pmax pmax
comp=Z,12nm,1.0s
**SRSP Sriramsagar 21.02 178** *e*P **P** **07 05 43.1 -0.1**
**RPR Rampur 21.12 176** *e*P **P** **07 05 46.2 +1.9**
**KLRI Killari 21.89 163** *e*P **P** **07 05 52.6 0.0**
**SONM Songino Array 21.96 60** P **P** **07 05 55.1 +1.7**
comp=Z,3.3nm,0.7s,baz=261,slow=9.9,SNR=13
**SONM Songino Array 21.96 60** P **P** **07 05 55.2 +1.8**
SONM pmax pmax
comp=Z,8.0nm,0.8s
**SONM Songino Array 21.96 60** P **P** **07 05 55.2 +1.8**
**CHLP Challavanipeta 22.11 164** *e*P **P** **07 05 55.4 +0.5**
**ULN Ulaanbaatar 22.41 60** *ce*P **P** **07 06 00.8 +2.7**
ULN pmax pmax
comp=Z,13nm,1.0s
**ULN Ulaanbaatar 22.41 60** P **P** **07 06 00.5 +2.4**
**HYBB Hyderabad (bro 22.52 178** *e*P **P** **07 05 58.9 -0.6**
**CUPL Choutuppal 22.66 177** *e*P **P** **07 06 00.4 -0.4**
**PVM Polavaram 22.93 170** *e*P **P** **07 06 04.6 +1.0**
**WSAR Wadi Sarin 23.26 230** P **P** **07 06 05.6 -1.5**
comp=Z,6.9nm,0.9s,baz=65,slow=6.1,SNR=3.9
WSAR LR LR 07 17 42.5
comp=Z,79nm,20.4s,baz=48,slow=43
**MYLAV Mylavaram 23.31 173** *e*P **P** **07 06 08.1 +0.6**
**NJS Nagarjunasagar 23.41 176** *e*P **P** **07 06 09.5 +0.9**
**SRLM Srisailam 23.84 177** *e*P **P** **07 06 11.9 -0.9**

**PZH PanZhiHua 24.07 117** P **P** **07 06 16.4 +1.4**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.8s
**ADKI Addanki 24.16 175** *e*P **P** **07 06 15.7 0.0**
**RCLA Racherla 24.49 177** *e*P **P** **07 06 19.2 +0.4**
**URV Uravakonda 24.98 181** *e*P **P** **07 06 23.5 +0.3**
**XAN Xi'an 25.50 94** P **P** **07 06 28.8 +0.9**
XAN pP pP 07 06 32.2 +1.3
XAN pmax pmax
comp=Z,18nm,0.7s
XAN LR LR
comp=Z,560nm,9.4s
XAN LR LR
comp=Z,350nm,10.5s
**KMI Kunming 25.64 118** ⇑P **P** **07 06 31.3 +1.8**
KMI pmax pmax
comp=Z,20nm,0.9s
**HHC Hu-ho-hao-te 25.66 77** *e*P **P** **07 06 30.1 +0.7**
HHC pmax pmax
comp=Z,5.0nm,0.9s
HHC pmax pmax
comp=Z,360nm,7.4s
**KIRV Kirov 25.90 325** P **P** **07 06 31.3 +0.1**
comp=Z,28nm,0.7s,baz=172,slow=1.0,SNR=8.7
**SKHT Srikalahasti 26.23 176** *e*P **P** **07 06 34.5 -0.1**
**KIV Kislovodsk 26.25 290** *e*P **P** **07 06 33.5 -1.2**
KIV pmax pmax
comp=Z,9.0nm,1.1s
**GYA Guiyang 27.56 111** ⇓P **P** **07 06 48.6 +1.9**
GYA pP sP 07 06 52.4 +1.6
GYA S **S** **07 11 26.9 -1.3**
GYA ScS **ScS** **07 17 40.5 +3.2**
GYA pmax pmax
comp=Z,13nm,1.0s
GYA pmax pmax
comp=Z,270nm,5.0s
GYA LR LR
comp=Z,410nm,5.1s
GYA LR LR
comp=Z,190nm,4.8s
GYA LR LR
comp=Z,120nm,4.8s
**CMAR Chiang Mai Arr 28.20 133** P **P** **07 06 52.2 -0.1**
comp=Z,1.1nm,0.3s,baz=303,slow=8.5,SNR=6.0
**CMAR Chiang Mai Arr 28.20 133** P **P** **07 06 54.5 +2.2**
**CMAR Chiang Mai Arr 28.20 133** P **P** **07 06 54.5 +2.2**
**VORR Voronezh 28.94 307** *e*P **P** **07 07 00.4 +1.8**
VORR pmax pmax
comp=Z,150nm,0.4s
**PRGR Permogore 29.16 329** *e*P **P** **07 06 59.4 -1.0**
PRGR pmax pmax
comp=Z,19nm,0.7s
**PRGR Permogore 29.16 329** *e*P **P** **07 06 59.5 -1.0**
**NRIK Noril'sk 29.85 7** P **P** **07 07 05.5 -0.9**
comp=Z,2.5nm,0.5s,baz=198,slow=7.1,SNR=5.1
**NRIK Noril'sk 29.85 7** P **P** **07 07 06.6 +0.1**
NRIK pmax pmax
comp=Z,5.0nm,0.8s
**NRIK Noril'sk 29.85 7** P **P** **07 07 06.6 +0.1**
**LSH Leshukonskoye 31.01 334** P **P** **07 07 14.0 -2.7**
comp=Z,132nm,4.7s
**OBN Obninsk 31.11 313** ⇓*e*P **P** **07 07 19.2 +1.5**
OBN *PP **pP** **07 07 21.0 +0.3**
OBN *SP **sP** **07 07 23.0 +1.0**
OBN pmax pmax
comp=Z,6.0nm,1.0s
OBN MLR MLR
comp=Z,378nm,16.0s
**KLMR Klimovskoe 31.38 324** *e*P **P** **07 07 18.9 -1.2**
KLMR pmax pmax
comp=Z,21nm,1.1s
**KLMR Klimovskoe 31.38 324** *e*P **P** **07 07 18.9 -1.2**
comp=Z,21nm,1.1s
**KLMR Klimovskoe 31.38 324** *e*P **P** **07 07 18.9 -1.2**
KLMR AMP 07 07 20.3
comp=Z,21nm,1.1s
**RAYN Ar Rayn 31.75 249** P **P** **07 07 23.6 -0.2**
RAYN pmax pmax
comp=Z,7.0nm,0.8s
**RAYN Ar Rayn 31.75 249** P **P** **07 07 23.6 -0.2**
RAYN IAmb IAmb 07 07 28.4
comp=Z,6.5nm,0.8s
**PALK Pallekele 32.70 175** LR LR 07 19 44.4
comp=Z,67nm,18.3s,baz=123,slow=34
**BR131 Keskin Array S 33.61 284** *i* P **P** **07 07 39.7 -0.3**
**BRTR Keskin Array B 33.61 284** P **P** **07 07 40.1 +0.1**
comp=Z,2.9nm,0.8s,baz=86,slow=8.8,SNR=7.8
**NJ2 Nanjing 33.93 90** *e*P **P** **07 07 43.7 +1.0**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**AKASG Malin Array Be 35.15 304** P **P** **07 07 52.4 -0.6**
comp=Z,2.1nm,0.9s,baz=81,slow=8.3,SNR=6.9
AKASG LR LR 07 25 39.8
comp=Z,340nm,18.8s,baz=340,slow=42
**AKASG Malin Array Be 35.15 304** *ce*P **P** **07 07 55.5 +2.4**
AKASG pmax pmax
comp=Z,1.0nm,0.7s
**AKASG Malin Array Be 35.15 304** P **P** **07 07 53.2 +0.1**
**LVZ Lovozero 36.39 334** P **P** **07 08 03.6 0.0**
LVZ pmax pmax
comp=Z,32nm,0.9s
**LVZ Lovozero 36.39 334** P **P** **07 08 03.6 0.0**
**FIA1 FINESS Array S 37.77 322** P **P** **07 08 14.9 -0.4**
FIA1 IAmb IAmb 07 08 22.2
comp=Z,32nm,1.4s
**FINES FINESS Array B 37.77 322** P **P** **07 08 15.2 -0.1**
comp=Z,5.5nm,0.6s,baz=108,slow=8.7,SNR=31
**MLR Muntele Rosu 37.89 296** P **P** **07 08 16.9 +0.2**
comp=Z,5.1nm,0.8s,baz=116,slow=7.4,SNR=5.5
**MLR Muntele Rosu 37.89 296** P **P** **07 08 16.1 -0.6**
MLR IAmb IAmb 07 08 21.5
comp=Z,6.5nm,0.8s
**BURAR Bucovina Array 38.04 299** P **P** **07 08 17.1 -0.8**
**BUR08 Bucovina Ar. S 38.05 299** P **P** **07 08 17.8 -0.2**
**KLR Kul'dur 38.77 58** P **P** **07 08 24.3 +0.4**
comp=Z,1.4nm,0.6s,baz=248,slow=6.5,SNR=5.5
**KLR Kul'dur 38.77 58** *ce*P **P** **07 08 26.6 +2.7**
KLR pmax pmax
comp=Z,11nm,2.5s
**KSRS Korea Array 38.80 77** P **P** **07 08 25.0 +0.8**
comp=Z,0.6nm,0.3s,baz=262,slow=6.0,SNR=2.3
**KEV Kevo 39.69 335** P **P** **07 08 31.5 +0.2**
KEV pmax pmax
comp=Z,66nm,1.5s
**KEV Kevo 39.69 335** P **P** **07 08 31.5 +0.2**
**TRPA Tarpa 39.74 301** P **P** **07 08 32.2 +0.2**
**ARA0 ARCESS Array S 40.11 334** *e*P **P** **07 08 35.1 +0.3**
**ARCES ARCESS Array B 40.11 334** P **P** **07 08 34.9 +0.2**
comp=Z,17nm,0.6s,baz=103,slow=8.9,SNR=80
**ARCES ARCESS Array B 40.11 334** P **P** **07 08 35.0 +0.2**
ARCES pmax pmax
comp=Z,19nm,0.8s
**ARCES ARCESS Array B 40.11 334** P **P** **07 08 35.0 +0.2**
ARCES IAmb IAmb 07 08 35.8
comp=Z,19nm,0.8s
**TIXI Tiksi 40.52 22** P **P** **07 08 37.8 -0.3**
comp=Z,5.3nm,0.5s,baz=91,slow=22,SNR=12
**TIXI Tiksi 40.52 22** P **P** **07 08 37.3 -0.8**
TIXI IAmb IAmb 07 08 45.3
comp=Z,7.4nm,0.8s
**KTK1 Kautokeino 40.71 333** *e*P **P** **07 08 39.6 -0.2**
**HAMF Hammerfest 41.06 336** *e*P **P** **07 08 43.0 +0.4**
**VYHS Vyhne 42.11 302** *e*PP PP 07 10 21.1 -7.7
**DIVS Divibare 42.34 295** P **P** **07 08 52.5 -1.0**
DIVS IAmb IAmb 07 08 57.4
comp=Z,7.4nm,1.0s
**TRO Tromso 42.35 334** *e*P **P** **07 08 53.5 +0.3**
**MORH Mrgy, Hungar 42.73 299** P **P** **07 08 57.2 +0.6**
**MPLH Magyarpolny 43.24 300** P P 07 09 05.9 +5.2
**FAUS Fauske 43.29 330** *e*P **P** **07 09 00.8 -0.1**
**STEI Steigen 43.38 331** *e*P **P** **07 09 02.2 +0.7**
**HFS Hagfors 43.74 319** P **P** **07 09 03.6 -0.9**
comp=Z,7.2nm,0.8s,baz=96,slow=9.1,SNR=8.3
HFS LR LR 07 28 40.8
comp=Z,626nm,19.9s,baz=286,slow=38
**CONA Conrad Observa 44.17 302** *e*P **P** **07 09 08.2 -0.1**
comp=Z,6.8nm,1.2s
**ARSA Arzberg 44.56 301** *e*P **P** **07 09 11.0 -0.3**
comp=Z,3.2nm,0.7s
**NC405 NORSAR Array S 44.66 321** P **P** **07 09 10.9 -1.0**
**NC602 NORSAR Array S 44.77 320** *e*P **P** **07 09 12.7 -0.1**
**NB2 NORSAR Subarra 44.91 321** P **P** **07 09 12.9 -1.1**
comp=Z,6.1nm,0.7s,baz=87,slow=7.9

**NB2 NORSAR Subarra 44.91 321** P **P** **07 09 12.9 -1.1**
baz=87,slow=7.9
**NOA NORSAR Array B 44.91 321** P **P** **07 09 13.2 -0.8**
comp=Z,3.7nm,0.7s,baz=88,slow=7.8,SNR=8.0
NOA LR LR 07 27 53.8
comp=Z,203nm,20.1s,baz=285,slow=36
**SOKA Soboth 45.03 300** *e*P **P** **07 09 15.1 -0.1**
comp=Z,8.9nm,1.4s
**MOA Molln 45.23 302** *e*P **P** **07 09 16.4 -0.3**
comp=Z,7.8nm,1.4s
**GEC2 GERESS Array S 45.35 303** P **P** **07 09 17.4 -0.3**
GEC2 IAmb IAmb 07 09 18.9
comp=Z,7.8nm,1.0s
**GERES GERESS Array B 45.35 303** P **P** **07 09 17.8 0.0**
comp=Z,4.1nm,0.8s,baz=77,slow=8.4,SNR=16
**GERES GERESS Array B 45.35 303** P **P** **07 09 17.2 -0.6**
**OBKA Obir 45.40 300** *e*P **P** **07 09 18.1 0.0**
comp=Z,4.5nm,0.9s
**DOMB Dombas 45.87 322** *e*P **P** **07 09 21.2 -0.3**
**KBA Koelnbreinsper 46.04 301** *e*P **P** **07 09 22.6 -0.7**
comp=Z,2.8nm,0.9s
**ABTA Abfaltersbach 46.68 301** *e*P **P** **07 09 27.2 -1.0**
comp=Z,1.7nm,0.6s
**WTTA Wattenberg 47.11 302** *e*P **P** **07 09 31.1 -0.5**
comp=Z,3.7nm,0.6s
**MOTA Moosalm 47.43 302** *e*P **P** **07 09 33.5 -0.7**
comp=Z,2.8nm,0.9s
**NRCA Norcia 47.49 296** P **P** **07 09 34.1 -0.4**
NRCA IAmb IAmb 07 09 35.7
comp=Z,6.8nm,0.9s
**RETA Reutte 47.61 302** *e*P **P** **07 09 35.0 -0.5**
comp=Z,9.9nm,1.2s
**TEOL Teolo 47.65 299** P **P** **07 09 35.4 -0.3**
**MURB Monte Urbino 47.75 296** P **P** **07 09 37.3 +0.7**
**FETA Feichten 47.77 302** *e*P **P** **07 09 33.8 -3.0**
comp=Z,6.0nm,1.6s
**DAVA Damuels 48.24 302** *e*P **P** **07 09 38.6 -1.9**
comp=Z,6.8nm,0.8s
**DAVOX Davos/Dischmat 48.40 302** P **P** **07 09 40.7 -1.0**
comp=Z,3.3nm,0.7s,baz=122,slow=10,SNR=5.5
DAVOX LR LR 07 34 12.4
comp=Z,187nm,21.4s,baz=332,slow=41
**SEY Seymchan 48.50 36** LR LR 07 31 56.3
comp=Z,70nm,18.9s,baz=316,slow=38
**BMRD Maredsous 50.55 307** κP **P** **07 09 56.7 -1.1**
**BNI Bardonecchia 51.08 300** P **P** **07 10 01.5 -0.6**
BNI pmax pmax
comp=Z,11nm,1.1s
**BNI Bardonecchia 51.08 300** P **P** **07 10 01.5 -0.6**
BNI IAmb IAmb 07 10 11.5
comp=Z,11nm,1.1s
**NOR Nord 51.34 349** *i* P **P** **07 10 02.0 -1.4**
NOR IAmb IAmb 07 10 03.7
comp=Z,1.7nm,0.6s
**BILL Bilibino 53.07 28** ⇑*i*P **P** **07 10 17.0 +0.7**
BILL *PP **sP** **07 10 22.6 +2.0**
BILL 07 11 25.0
BILL 07 12 15.0
BILL pmax pmax
comp=Z,5.0nm,1.1s
BILL MLR MLR
comp=Z,99nm,17.0s
**BILL Bilibino 53.07 28** P **P** **07 10 17.1 +0.8**
BILL IAmb IAmb 07 10 18.9
comp=Z,5.2nm,1.1s
**EKA Eskdalemuir Ar 53.50 315** P **P** **07 10 18.9 -0.8**
comp=Z,3.2nm,0.8s,baz=82,slow=8.7,SNR=4.7
**NEEM North Greenlan 58.70 348** *i* P **P** **07 10 54.4 -2.5**
NEEM IAmb IAmb 07 11 05.0
comp=Z,5.9nm,0.7s
**SUMG Summit 59.44 342** P **P** **07 11 01.8 -0.4**
SUMG pmax pmax
comp=Z,11nm,1.0s
**SUMG Summit 59.44 342** *i* P **P** **07 11 01.6 -0.7**
SUMG IAmb IAmb 07 11 05.5
comp=Z,4.3nm,0.7s
**SUMG Summit 59.44 342** P **P** **07 11 01.8 -0.4**
SUMG IAmb IAmb 07 11 03.5
comp=Z,11nm,1.0s
**TNTI Ternate 59.59 118** P **P** **07 11 03.5 0.0**
**EUNU Eureka 59.86 357** P **P** **07 11 05.1 +0.5**
EUNU IAmb IAmb 07 11 05.7
comp=Z,2.8nm,0.8s
**ESDC Sonseca Array 60.49 299** P **P** **07 11 08.7 -0.9**
comp=Z,3.6nm,0.8s,baz=54,slow=7.5,SNR=25
**ESDC Sonseca Array 60.49 299** P **P** **07 11 08.5 -1.1**
**ICESG Greenland Ices 61.91 339** *i* P **P** **07 11 18.7 -0.4**
ICESG IAmb IAmb 07 11 19.4
comp=Z,16nm,0.7s
**RES Resolute Bay 65.48 358** P **P** **07 11 41.3 -0.8**
comp=Z,0.8nm,0.6s,baz=22,slow=10,SNR=2.7
**DY2G Dye2 65.54 339** *i* P **P** **07 11 41.1 -1.8**
DY2G IAmb IAmb 07 11 43.1
comp=Z,10nm,0.7s
**SFJD Kangerlussuaq 66.33 340** P **P** **07 11 46.9 -0.7**
baz=63,slow=9.0
**COLD Coldfoot 67.06 18** P **P** **07 11 51.9 -0.5**
baz=322
**A36M Sachs Harbour 67.13 8** P **P** **07 11 51.8 -0.9**
baz=341,SNR=5.4
**SPIA Saint Paul Isl 67.64 33** P **P** **07 11 56.0 -0.2**
baz=310
**VOI Vohitsoka 68.04 211** P **P** **07 11 59.1 -0.1**
**INK Inuvik 69.48 12** P **P** **07 12 07.8 +0.3**
INK pmax pmax
comp=Z,4.0nm,1.0s
**INK Inuvik 69.48 12** P **P** **07 12 07.8 +0.3**
INK IAmb IAmb 07 12 08.1
comp=Z,4.3nm,1.0s
**INK Inuvik 69.48 12** P **P** **07 12 06.7 -0.7**
baz=335
**C36M Paulatuk 69.77 8** P **P** **07 12 08.3 -0.9**
C36M IAmb IAmb 07 12 08.9
comp=Z,9.8nm,1.1s
**C36M Paulatuk 69.77 8** P **P** **07 12 08.0 -1.2**
baz=342
**ILAR Eielson Array 69.85 19** P **P** **07 12 09.4 -0.5**
comp=Z,2.2nm,1.1s,baz=322,slow=5.7,SNR=1.7
**TORD Torodi Ar. Bea 71.04 271** P **P** **07 12 17.2 -0.7**
comp=Z,13nm,0.8s,baz=48,slow=5.4,SNR=51
**P18K Big Mountain, 71.72 25** P **P** **07 12 22.3 +0.9**
baz=320
**SML Sawmill 71.90 21** P **P** **07 12 23.0 +0.5**
baz=324
**PSA00 Pilbara Seismi 72.75 139** P **P** **07 12 28.3 +0.4**
**PSA00 Pilbara Seismi 72.75 139** P **P** **07 12 28.0 +0.2**
PSA00 IAmb IAmb 07 12 28.9
comp=Z,5.8nm,0.8s
**KNRA Kununurra 72.93 128** P **P** **07 12 29.9 +0.9**
**FITZ Fitzroy Crossi 73.01 132** P **P** **07 12 29.7 +0.3**
comp=Z,3.5nm,0.9s,baz=81,slow=5.0,SNR=5.0
**FRB Frobisher Bay 73.18 345** P **P** **07 12 28.6 -1.3**
comp=Z,2.3nm,1.0s,baz=312,slow=9.0,SNR=3.6
**EYAK Cordova Ski Ar 73.65 21** P **P** **07 12 33.2 +0.5**
baz=327
**WRGLY Wrigley 75.72 10** P **P** **07 12 44.4 -0.3**
baz=343
**YKA Yellowknife Ar 77.36 6** P **P** **07 12 53.2 -0.8**
comp=Z,2.8nm,0.6s,baz=345,slow=5.5,SNR=52
**YKA Yellowknife Ar 77.36 6** P **P** **07 12 54.1 +0.1**
**YKA Yellowknife Ar 77.36 6** P **P** **07 12 54.1 +0.1**
**WB0 Warramunga Arr 79.48 127** P **P** **07 13 05.8 -0.5**
WB0 IAmb IAmb 07 13 24.4
comp=Z,13nm,1.4s
**WRAB Tennant Creek 79.58 127** P **P** **07 13 06.7 -0.1**
WRAB pmax pmax
comp=Z,10.0nm,0.7s
**WRAB Tennant Creek 79.58 127** P **P** **07 13 06.7 -0.1**
WRAB IAmb IAmb 07 13 07.3
comp=Z,10nm,0.7s
**WRA Warramunga Arr 79.58 127** P **P** **07 13 06.7 -0.1**
comp=Z,2.1nm,0.7s,baz=325,slow=5.7,SNR=20
**WRA Warramunga Arr 79.58 127** P **P** **07 13 06.3 -0.5**
**WB2 Warramunga Arr 79.59 127** P **P** **07 13 06.6 -0.2**
WB2 IAmb IAmb 07 13 07.3
comp=Z,4.6nm,0.8s
**AS31 Alice Springs 82.14 130** P **P** **07 13 20.3 -0.2**
**ASAR Alice Springs 82.14 130** P **P** **07 13 20.1 -0.3**
comp=Z,4.5nm,0.7s,baz=320,slow=5.4,SNR=32
**FFC Flin Flon 85.63 360** P **P** **07 13 37.6 -0.3**
FFC pmax pmax
comp=Z,14nm,1.5s
**FFC Flin Flon 85.63 360** P **P** **07 13 37.6 -0.3**
**BOZ Bozeman (W) 94.36 7** P **P** **07 14 18.2 -1.2**
baz=353
**N59A State Game Lan 95.92 340** P **P** **07 14 24.8 -1.7**

baz=20
**YBH Yreka Blue Hor 96.54 15** LR LR 08 01 42.9
comp=Z,68nm,20.8s,baz=61,slow=38
**PDAR Pinedale Array 97.34 5** P **P** **07 14 32.0 -1.1**
comp=Z,0.3nm,0.8s,baz=353,slow=3.6,SNR=1.9
**DUG Dugway, Tooele 99.59 8** P **Pdif** **07 14 41.4 -1.8**
baz=352
**WMOK Wichita Mounta 105.55 357** P **PKiKP** **07 19 22.7 -0.2**
baz=2.8
**LVC Limon Verde 146.91 292** PKPbc **PKPbc** **07 20 42.5 -0.2**
comp=Z,4.0nm,0.7s,baz=67,slow=4.2,SNR=3.6

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*DJA **02** 07:03:30.6±0.2, 1°N±3°×12°1E±°, h10km, M4.5/17, mb4.6/7, mB5.0/2, MLv4.5/17, Mw(mB)4.3/2*
*NEIC **02** 07:03:32.6±1.9, 0°.76N±0°.04×120°.7E±0°.1, h12km±5km, mb4.4/10, Error ellipse: s-maj=17.5km s-min=5.6km az=84.0*
*IDC **02** 07:03:39.2-3.6, 0°.53N×120°.71E, h88km±35km, mb3.7/8, mb1 3.8/10, mb1mx3.6/51, mbtmp4.0/10, MS3.5/3, Ms1 3.5/3, ms1mx2.8/76, Error ellipse: s-maj=40.9km s-min=14.3km az=66.0*

**ISC 02 07:03:30.8±0.5, 0.71N±0°.05×120.70E±0°.05, h10km, n46, σ1§47/48, mb4.2/11, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOLI2** | **Tolitoli** | **0.40** | **12** | | **Pg** | **07 03 39.0** | **+0.2** |
| **MPSI** | **Mapaga** | **0.88** | **245** | P | **Pg** | **07 03 46.0** | **-1.8** |
| MPSI | | | | S | **Sg** | **07 03 58.3** | **-1.1** |
| **MRSI** | **Marisa** | **1.27** | **101** | P | **Pn** | **07 03 53.0** | **-1.6** |
| **APSI** | **Ampana** | **1.87** | **149** | P | **Pn** | **07 04 03.3** | **+0.4** |
| **GTOI** | **Gorontalo** | **2.31** | **92** | P | **Pn** | **07 04 07.8** | **-1.2** |
| GTOI | | | | S | **Sn** | **07 04 36.9** | **-0.6** |
| **KMSI** | **Cibinong** | **3.29** | **92** | P | **Pn** | **07 04 23.9** | **+1.5** |
| **TTSI** | **Tana Toraja** | **3.83** | **193** | P | **Pn** | **07 04 29.8** | **-0.1** |
| **SPSI** | **Sidrap Palu** | **4.74** | **191** | P | **Pn** | **07 04 43.1** | **+0.7** |
| **BNSI** | **Bone** | **5.11** | **187** | P | **Pn** | **07 04 48.6** | **+1.1** |
| | 0.3nm88nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **5.77** | **189** | P | **Pn** | **07 04 58.4** | **+1.9** |
| | 2.8nm,0.3s,baz=20,slow=3.8,SNR=19 | | | | | | |
| KAPI | | | | S | **Sn** | **07 06 05.1** | **+2.3** |
| | baz=62,slow=22,SNR=0.9 | | | | | | |
| KAPI | | | | LR | LR | 07 07 24.7 | |
| | comp=Z,100nm,18.1s,baz=38,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **5.77** | **189** | | **Pn** | **07 04 58.8** | **+2.2** |
| **SANI** | **Sanana** | **5.96** | **117** | P | **Pn** | **07 04 59.6** | **+0.4** |
| | 0.2nm28nm,0.5s | | | | | | |
| **BKSI** | **Bulukumba** | **6.02** | **185** | P | **Pn** | **07 05 00.4** | **+0.4** |
| | 0.1nm42nm,0.7s | | | | | | |
| **KBKI** | **Kotabaru** | **6.03** | **229** | P | **Pn** | **07 05 00.4** | **+0.2** |
| | 0.2nm38nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **6.93** | **320** | Pn | **Pn** | **07 05 14.7** | **+2.1** |
| **LBMI** | **Labuha** | **6.93** | **101** | P | **Pn** | **07 05 13.6** | **+1.0** |
| | 0.3nm989nm86nm,0.6s | | | | | | |
| **BATI** | **Baumata** | **11.24** | **165** | LR | LR | 07 11 04.7 | |
| | comp=Z,139nm,20.4s,baz=32,slow=40 | | | | | | |
| **FAKI** | **Fak Fak** | **12.10** | **107** | Pn | **Pn** | **07 06 24.0** | **+0.6** |
| **MTN** | **Manton Dam** | **16.99** | **143** | P | **P** | **07 07 31.8** | **+1.2** |
| MTN | | | | IAmb | IAmb | 07 07 37.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **18.13** | **154** | P | **Pn** | **07 07 44.9** | **+2.0** |
| KNRA | | | | IAmb | IAmb | 07 07 56.0 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.32** | **166** | P | **P** | **07 07 55.5** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=18,slow=7.7,SNR=9.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.50** | **148** | P | **P** | **07 08 48.8** | **-1.7** |
| | comp=Z,4.6nm,0.8s,baz=332,slow=10,SNR=19 | | | | | | |
| **COEN** | **Coen** | **26.61** | **124** | P | **P** | **07 09 10.8** | **+1.1** |
| COEN | | | | IAmb | IAmb | 07 09 33.6 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **27.42** | **153** | P | **P** | **07 09 16.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **27.42** | **153** | P | **P** | **07 09 15.4** | **-1.5** |
| | comp=Z,1.0nm,0.8s,baz=345,slow=13,SNR=13 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 12 32.5** | **-3.4** |
| | comp=Z,0.3nm,0.5s,baz=352,slow=2.4,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **27.42** | **153** | P | **P** | **07 09 18.8** | **+1.8** |
| **KSRS** | **Korea Array** | **37.16** | **10** | P | **P** | **07 10 43.5** | **+1.5** |
| | comp=Z,1.5nm,0.7s,baz=195,slow=8.7,SNR=4.9 | | | | | | |
| **STKA** | **Stephens Creek** | **37.98** | **150** | P | **P** | **07 10 46.9** | **-2.2** |
| | comp=Z,2.1nm,0.7s,baz=337,slow=9.2,SNR=3.6 | | | | | | |
| **STKA** | **Stephens Creek** | **37.98** | **150** | P | **P** | **07 10 47.5** | **-1.5** |
| **SONM** | **Songino Array** | **48.55** | **347** | P | **P** | **07 12 15.4** | **+1.0** |
| | comp=Z,1.6nm,0.9s,baz=158,slow=4.7,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **48.55** | **347** | P | **P** | **07 12 14.7** | **+0.3** |
| SONM | | | | IAmb | IAmb | 07 12 19.4 | |
| | comp=Z,5.9nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **56.81** | **329** | P | **P** | **07 13 15.6** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 07 13 21.1 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.81** | **329** | P | **P** | **07 13 16.0** | **+0.5** |
| | comp=Z,0.9nm,0.5s,baz=129,slow=9.0,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.81** | **329** | P | **P** | **07 13 15.6** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **60.73** | **337** | P | **P** | **07 13 41.0** | **-1.5** |
| | comp=Z,1.0nm,0.6s,baz=132,slow=6.0,SNR=3.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.21** | **331** | P | **P** | **07 13 46.0** | **+0.2** |
| | baz=135,slow=6.5 | | | | | | |
| **KURK** | **Kurchatov** | **61.23** | **331** | P | **P** | **07 13 45.6** | **-0.3** |
| KURK | | | | IAmb | IAmb | 07 13 46.9 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **70.77** | **323** | P | **P** | **07 14 50.2** | **+2.9** |
| **VOI** | **Vohitsoka** | **75.35** | **247** | P | **P** | **07 15 16.4** | **+1.1** |
| **VNDA** | **Vanda** | **81.27** | **172** | P | **P** | **07 15 45.9** | **-0.9** |
| **AKASG** | **Malin Array Be** | **90.39** | **321** | P | **P** | **07 16 30.7** | **-1.7** |
| | comp=Z,0.4nm,0.4s,baz=76,slow=4.1,SNR=6.6 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **92.23** | **348** | LR | LR | 08 02 47.4 | |
| | comp=Z,116nm,18.6s,baz=94,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **117.54** | **40** | PKP | **PKPdf** | **07 22 15.3** | **-2.4** |
| | comp=Z,0.2nm,0.5s,baz=322,slow=2.8,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.00** | **285** | PKP | **PKPdf** | **07 22 17.3** | **-1.7** |
| | comp=Z,0.7nm,0.8s,baz=64,slow=5.5,SNR=2.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **128.18** | **51** | PKP | **PKPdf** | **07 22 37.1** | **-1.2** |
| | comp=Z,0.1nm,0.4s,baz=345,slow=5.7,SNR=4.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **128.18** | **51** | | **PKPdf** | **07 22 38.0** | **-0.4** |

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*ANF **02** 07:08:28.9±0.2, 62°.14N×151°.16W, h67km±3km, ML3.5/55, Error ellipse: s-maj=1.7km s-min=1.4km az=58.0*
*NEIC **02** 07:08:28.9±0.9, 62°.13N±0°.02×151°.18W±0°.06, h72km±7km, Error ellipse: s-maj=4.8km s-min=2.7km az=120.0*
*AEIC **02** 07:08:29±1.1, 62°.12N±0°.03×151°.15W±0°.07, h70km±6km, ML3.1, ML3.4/147(NEIC), Error ellipse: s-maj=4.6km s-min=4.3km az=224.0*

**ISC 02 07:08:28.8±1.2, 62°.14N±0°.02×151°.17W±0°.03, h73km±8km, n196, σ0§67/203, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CUT** | **Chulitna** | **0.50** | **57** | | **Pn** | **07 08 41.8** | **0.0** |
| CUT | | | | | **Sn** | **07 08 51.9** | **+0.4** |
| **CUT** | **Chulitna** | **0.50** | **57** | IAML | | 07 08 52.3 | |
| | comp=E,4μm,0.6s | | | | | | |
| CUT | | | | IAML | | 07 08 52.4 | |
| | comp=N,3μm,0.5s | | | | | | |
| **CUT** | **Chulitna** | **0.50** | **57** | P | **Pn** | **07 08 41.8** | **0.0** |
| | baz=235,SNR=6.8 | | | | | | |
| CUT | | | | S | **Sn** | **07 08 51.8** | **+0.4** |
| | baz=235 | | | | | | |
| **M22K** | **Willow** | **0.63** | **128** | | **Pn** | **07 08 42.5** | **-0.5** |
| M22K | | | | | **Sn** | **07 08 53.9** | **+0.3** |
| **M22K** | **Willow** | **0.63** | **128** | IAML | | 07 08 57.2 | |
| | comp=E,2μm,0.5s | | | | | | |
| **M22K** | **Willow** | **0.63** | **128** | P | **Pn** | **07 08 42.6** | **-0.5** |
| | baz=308,SNR=40 | | | | | | |
| M22K | | | | S | **Sn** | **07 08 53.6** | **-0.1** |
| | baz=308 | | | | | | |
| **SUA** | **Susitna One** | **0.71** | **163** | | **Pn** | **07 08 43.8** | **-0.3** |
| SUA | | | | | **Sn** | **07 08 55.2** | **-0.2** |
| **SUA** | **Susitna One** | **0.71** | **163** | P | **Pn** | **07 08 43.8** | **-0.3** |
| | baz=344 | | | | | | |
| SUA | | | | S | **Sn** | **07 08 55.1** | **-0.2** |
| | baz=344 | | | | | | |
| **PPLA** | **Purkeypile** | **0.90** | **329** | | **Pn** | **07 08 45.9** | **-0.4** |
| **PPLA** | **Purkeypile** | **0.90** | **329** | P | **Pn** | **07 08 46.4** | **+0.1** |
| | baz=148,SNR=82 | | | | | | |
| PPLA | | | | S | **Sn** | **07 08 59.1** | **-0.2** |
| | baz=148 | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **0.94** | **206** | | **Pn** | **07 08 46.6** | **-0.2** |
| SPCG | | | | | **Sn** | **07 09 00.0** | **-0.2** |
| **SPCN** | **Chakachatna No** | **1.04** | **208** | | **Pn** | **07 08 48.2** | **+0.3** |
| **SPU** | **Mount Spurr** | **1.05** | **204** | | **Pn** | **07 08 47.8** | **-0.3** |
| **SPNN** | **North Nagishla** | **1.06** | **224** | | **Pn** | **07 08 48.6** | **+0.2** |
| **FIS** | **Fire Island** | **1.10** | **155** | | **Pn** | **07 08 49.6** | **+1.1** |
| **PMR** | **Palmer** | **1.11** | **119** | Pn | **Pn** | **07 08 48.0** | **-0.7** |
| PMR | | | | | IAML | 07 09 05.8 | |
| | comp=E,514nm,0.5s | | | | | | |
| **PMR** | **Palmer** | **1.11** | **119** | P | **Pn** | **07 08 48.4** | **-0.4** |
| | baz=300,SNR=64 | | | | | | |
| PMR | | | | S | **Sn** | **07 09 03.6** | **0.0** |
| | baz=300 | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.12** | **108** | | **Pn** | **07 08 49.0** | **0.0** |
| GHO | | | | | **Sn** | **07 09 04.5** | **+0.3** |
| **GHO** | **Glory Hole Cre** | **1.12** | **108** | IAML | | 07 09 05.8 | |
| | comp=N,912nm,0.6s | | | | | | |
| GHO | | | | IAML | | 07 09 06.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.26** | **146** | | **Pn** | **07 08 50.2** | **-0.4** |
| RC01 | | | | | **Sn** | **07 09 07.7** | **+0.7** |
| **RC01** | **Rabbit Creek A** | **1.26** | **146** | IAML | | 07 09 08.6 | |
| | comp=N,491nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 07 09 09.8 | |
| | comp=E,552nm,0.5s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.26** | **146** | P | **Pn** | **07 08 50.3** | **-0.4** |
| | baz=328,SNR=41 | | | | | | |
| RC01 | | | | S | **Sn** | **07 09 07.2** | **+0.1** |
| | baz=328 | | | | | | |
| **L20K** | **Farewell, AK** | **1.31** | **286** | | **Pn** | **07 08 51.3** | **-0.1** |
| L20K | | | | | **Sn** | **07 09 08.2** | **-0.1** |
| **L20K** | **Farewell, AK** | **1.31** | **286** | P | **Pn** | **07 08 51.3** | **-0.1** |
| | baz=105 | | | | | | |
| L20K | | | | S | **Sn** | **07 09 07.9** | **-0.4** |
| | baz=105 | | | | | | |
| **CAST** | **Castle Rocks** | **1.35** | **342** | | **Pn** | **07 08 52.0** | **+0.1** |
| **CAST** | **Castle Rocks** | **1.35** | **342** | P | **Pn** | **07 08 52.0** | **+0.1** |
| | baz=161,SNR=66 | | | | | | |
| CAST | | | | S | **Sn** | **07 09 08.8** | **-0.5** |
| | baz=161 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.38** | **180** | | **Pn** | **07 08 53.3** | **+1.2** |
| **CAPN** | **Captain Cook N** | **1.38** | **180** | P | **Pn** | **07 08 53.8** | **+1.7** |
| | baz=0.3 | | | | | | |
| **TRF** | **Thorofare Moun** | **1.38** | **17** | | **Pn** | **07 08 52.7** | **+0.4** |
| **TRF** | **Thorofare Moun** | **1.38** | **17** | IAML | | 07 09 10.9 | |
| | comp=N,890nm,0.5s | | | | | | |
| TRF | | | | IAML | | 07 09 10.9 | |
| | comp=E,664nm,0.5s | | | | | | |
| **TRF** | **Thorofare Moun** | **1.38** | **17** | P | **Pn** | **07 08 52.7** | **+0.4** |
| | baz=197,SNR=57 | | | | | | |
| TRF | | | | S | **Sn** | **07 09 10.5** | **+0.4** |
| | baz=197 | | | | | | |
| **SML** | **Sawmill** | **1.38** | **103** | | **Pn** | **07 08 52.1** | **-0.1** |
| **SML** | **Sawmill** | **1.38** | **103** | IAML | | 07 09 13.7 | |
| | comp=E,849nm,0.9s | | | | | | |
| SML | | | | IAML | | 07 09 14.6 | |
| | comp=N,613nm,0.5s | | | | | | |
| **SML** | **Sawmill** | **1.38** | **103** | P | **Pn** | **07 08 52.2** | **-0.1** |
| | baz=284,SNR=53 | | | | | | |
| SML | | | | S | **Sn** | **07 09 10.3** | **+0.3** |
| | baz=284 | | | | | | |
| **KTH** | **Kantishna Hill** | **1.42** | **4** | | **Pn** | **07 08 53.5** | **+0.6** |
| KTH | | | | | **Sn** | **07 09 11.3** | **+0.3** |
| **KTH** | **Kantishna Hill** | **1.42** | **4** | IAML | | 07 09 12.5 | |
| | comp=E,678nm,0.7s | | | | | | |
| KTH | | | | IAML | | 07 09 14.3 | |
| | comp=N,378nm,0.6s | | | | | | |
| **KNK** | **Knik Glacier** | **1.48** | **118** | | **Pn** | **07 08 53.2** | **-0.4** |
| **KNK** | **Knik Glacier** | **1.48** | **118** | IAML | | 07 09 13.4 | |
| | comp=N,568nm,0.6s | | | | | | |
| KNK | | | | IAML | | 07 09 13.6 | |
| | comp=E,666nm,0.4s | | | | | | |
| **KNK** | **Knik Glacier** | **1.48** | **118** | P | **Pn** | **07 08 53.2** | **-0.4** |
| | baz=300,SNR=29 | | | | | | |
| KNK | | | | S | **Sn** | **07 09 12.1** | **-0.2** |
| | baz=300 | | | | | | |
| **M19K** | **Big River Lodg** | **1.54** | **263** | | **Pn** | **07 08 53.8** | **-0.5** |
| **M19K** | **Big River Lodg** | **1.54** | **263** | P | **Pn** | **07 08 54.0** | **-0.3** |
| | baz=81 | | | | | | |
| M19K | | | | S | **Sn** | **07 09 13.2** | **-0.4** |
| | baz=81 | | | | | | |
| **RND** | **Reindeer** | **1.66** | **39** | | **Pn** | **07 08 56.2** | **+0.3** |
| **RDT** | **Redoubt** | **1.68** | **201** | | **Pn** | **07 08 56.3** | **0.0** |
| **SLKM** | **Skilak Lake** | **1.70** | **164** | | **Pn** | **07 08 56.2** | **-0.3** |
| SLKM | | | | | **Sn** | **07 09 16.8** | **-0.6** |
| **DFR** | **Drift River** | **1.72** | **206** | | **Pn** | **07 08 57.0** | **+0.2** |
| **L19K** | **White Mountain** | **1.73** | **273** | | **Pn** | **07 08 57.0** | **+0.1** |
| **L19K** | **White Mountain** | **1.73** | **273** | IAML | | 07 09 19.3 | |
| | comp=E,505nm,0.5s | | | | | | |
| L19K | | | | IAML | | 07 09 19.4 | |
| | comp=N,264nm,0.6s | | | | | | |
| **L19K** | **White Mountain** | **1.73** | **273** | P | **Pn** | **07 08 57.0** | **+0.1** |
| | baz=91,SNR=63 | | | | | | |
| L19K | | | | S | **Sn** | **07 09 17.9** | **-0.2** |
| | baz=91 | | | | | | |
| **NCT** | **North Crescent** | **1.80** | **209** | | **Pn** | **07 08 58.1** | **+0.3** |
| **O22K** | **Cooper Landing** | **1.80** | **157** | | **Pn** | **07 08 59.1** | **+1.3** |
| **O22K** | **Cooper Landing** | **1.80** | **157** | P | **Pn** | **07 08 58.0** | **+0.2** |
| | baz=338,SNR=15 | | | | | | |
| O22K | | | | S | **Sn** | **07 09 18.8** | **-1.1** |
| | baz=338 | | | | | | |
| **K20K** | **Telida** | **1.81** | **314** | | **Pn** | **07 08 58.1** | **+0.1** |
| **K20K** | **Telida** | **1.81** | **314** | IAML | | 07 09 19.9 | |
| | comp=E,270nm,0.5s | | | | | | |
| **K20K** | **Telida** | **1.81** | **314** | P | **Pn** | **07 08 58.1** | **+0.1** |
| | baz=131 | | | | | | |
| K20K | | | | S | **Sn** | **07 09 19.3** | **-0.8** |
| | baz=131 | | | | | | |
| **CHUM** | **Lake Minchumin** | **1.83** | **344** | | **Pn** | **07 08 58.5** | **+0.4** |
| **CHUM** | **Lake Minchumin** | **1.83** | **344** | P | **Pn** | **07 08 58.5** | **+0.4** |
| | baz=163,SNR=40 | | | | | | |
| CHUM | | | | S | **Sn** | **07 09 20.1** | **-0.3** |
| | baz=163 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.84** | **98** | | **Pn** | **07 08 58.1** | **-0.4** |
| SCM | | | | IAML | | 07 09 25.0 | |
| | comp=E,435nm,0.5s | | | | | | |
| SCM | | | | IAML | | 07 09 27.7 | |
| | comp=N,300nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.84** | **98** | P | **Pn** | **07 08 58.0** | **-0.4** |
| | baz=281,SNR=25 | | | | | | |
| SCM | | | | S | **Sn** | **07 09 21.1** | **+0.3** |
| | baz=281 | | | | | | |
| **RSO** | **Redoubt South** | **1.85** | **205** | | **Pn** | **07 08 59.1** | **+0.5** |
| **PWL** | **Port Wells** | **1.87** | **132** | | **Pn** | **07 08 57.6** | **-1.2** |
| **PWL** | **Port Wells** | **1.87** | **132** | IAML | | 07 09 26.2 | |
| | comp=E,370nm,0.6s | | | | | | |
| PWL | | | | IAML | | 07 09 30.5 | |
| | comp=N,336nm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **1.87** | **132** | P | **Pn** | **07 08 57.6** | **-1.2** |
| | baz=314,SNR=22 | | | | | | |
| PWL | | | | S | **Sn** | **07 09 20.4** | **-1.0** |
| | baz=314 | | | | | | |
| **RED** | **Redoubt Volcan** | **1.89** | **205** | | **Pn** | **07 08 59.2** | **+0.1** |
| **MCK** | **McKinley** | **1.90** | **32** | | **Pn** | **07 08 59.5** | **+0.4** |
| **MCK** | **McKinley** | **1.90** | **32** | IAML | | 07 09 25.3 | |
| | comp=E,145nm,0.5s | | | | | | |
| **MCK** | **McKinley** | **1.90** | **32** | P | **Pn** | **07 08 59.4** | **+0.3** |
| | baz=213,SNR=17 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.97** | **2** | | **Pn** | **07 09 00.1** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **1.97** | **2** | IAML | | 07 09 23.9 | |
| | comp=E,382nm,0.4s | | | | | | |
| BPAW | | | | IAML | | 07 09 25.1 | |
| | comp=N,209nm,0.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.97** | **2** | P | **Pn** | **07 09 00.1** | **0.0** |
| | baz=182,SNR=11 | | | | | | |
| **N19K** | **Bonanza Creek** | **2.07** | **232** | | **Pn** | **07 09 01.6** | **0.0** |
| **N19K** | **Bonanza Creek** | **2.07** | **232** | P | **Pn** | **07 09 01.4** | **-0.1** |
| | baz=49 | | | | | | |
| **O20K** | **Slope Mountain** | **2.18** | **200** | P | **Pn** | **07 09 03.1** | **+0.2** |
| | baz=19 | | | | | | |
| **BWN** | **Browne** | **2.18** | **20** | | **Pn** | **07 09 04.5** | **+1.6** |
| BWN | | | | IAML | | 07 09 51.9 | |
| | comp=E,118nm,1.2s | | | | | | |
| BWN | | | | IAML | | 07 09 55.8 | |
| | comp=N,154nm,1.0s | | | | | | |
| **SEW** | **Seward** | **2.21** | **157** | | **Pn** | **07 09 05.4** | **+2.2** |
| **SEW** | **Seward** | **2.21** | **157** | P | **Pn** | **07 09 04.2** | **+1.1** |
| | baz=339 | | | | | | |
| **GLI** | **Glacier Island** | **2.33** | **121** | | **Pn** | **07 09 03.9** | **-1.0** |
| GLI | | | | IAML | | 07 09 44.2 | |
| | comp=E,315nm,0.5s | | | | | | |
| GLI | | | | IAML | | 07 09 44.2 | |
| | comp=N,221nm,0.5s | | | | | | |
| **GLI** | **Glacier Island** | **2.33** | **121** | P | **Pn** | **07 09 03.2** | **-1.7** |
| | baz=304 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **2.35** | **89** | | **Pn** | **07 09 05.2** | **+0.1** |
| **M24K** | **Tolsona, Glenn** | **2.35** | **89** | P | **Pn** | **07 09 05.3** | **+0.1** |
| | baz=272,SNR=29 | | | | | | |
| **ILSW** | **Iliamna Southw** | **2.37** | **205** | Pn | **Pn** | **07 09 05.7** | **+0.2** |
| **TT01** | **Tatalina** | **2.38** | **291** | | **Pn** | **07 09 05.5** | **0.0** |
| **TTA** | **Tatalina** | **2.38** | **292** | | **Pn** | **07 09 05.4** | **-0.2** |
| **TTA** | **Tatalina** | **2.38** | **292** | IAML | | 07 09 33.8 | |
| | comp=E,97nm,0.6s | | | | | | |
| **TTA** | **Tatalina** | **2.38** | **292** | P | **Pn** | **07 09 05.5** | **-0.2** |
| | baz=108,SNR=13 | | | | | | |
| TTA | | | | S | **Sn** | **07 09 32.8** | **-1.1** |
| | baz=108 | | | | | | |
| **BRLK** | **Bradley Lake** | **2.39** | **177** | Pn | **Pn** | **07 09 07.4** | **+1.7** |
| BRLK | | | | IAML | | 07 09 40.8 | |
| | comp=N,177nm,0.5s | | | | | | |
| BRLK | | | | IAML | | 07 09 41.1 | |
| | comp=E,113nm,0.5s | | | | | | |
| **BRSE** | **Bradley Lake S** | **2.42** | **175** | P | **Pn** | **07 09 06.5** | **+0.4** |
| | baz=356 | | | | | | |
| **JPK** | **Jack Peak** | **2.44** | **114** | | **Pn** | **07 09 05.4** | **-1.0** |
| **J20K** | **Nowinta River** | **2.45** | **328** | | **Pn** | **07 09 06.4** | **0.0** |
| J20K | | | | IAML | | 07 09 36.9 | |
| | comp=E,176nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **2.45** | **328** | P | **Pn** | **07 09 06.5** | **0.0** |
| | baz=145 | | | | | | |
| **HOM** | **Homer** | **2.50** | **186** | Pn | **Pn** | **07 09 09.4** | **+2.2** |
| **KLU** | **Klutina** | **2.57** | **102** | | **Pn** | **07 09 07.3** | **-0.9** |
| **KLU** | **Klutina** | **2.57** | **102** | IAML | | 07 09 47.2 | |
| | comp=E,162nm,0.5s | | | | | | |
| KLU | | | | IAML | | 07 09 47.7 | |
| | comp=N,249nm,0.3s | | | | | | |
| **KLU** | **Klutina** | **2.57** | **102** | P | **Pn** | **07 09 07.3** | **-0.9** |
| | baz=286,SNR=22 | | | | | | |
| **CNPM** | **China Poot** | **2.62** | **181** | | **Pn** | **07 09 10.0** | **+1.2** |
| CNPM | | | | IAML | | 07 09 47.9 | |
| | comp=E,182nm,0.8s | | | | | | |
| CNPM | | | | IAML | | 07 09 48.9 | |
| | comp=N,170nm,0.5s | | | | | | |
| **NEA2** | **Nenana** | **2.64** | **20** | | **Pn** | **07 09 08.8** | **-0.3** |
| **NEA2** | **Nenana** | **2.64** | **20** | P | **Pn** | **07 09 08.8** | **-0.3** |
| | baz=201,SNR=8.8 | | | | | | |
| **FID** | **Port Fidalgo** | **2.65** | **120** | | **Pn** | **07 09 08.7** | **-0.5** |
| FID | | | | IAML | | 07 09 52.5 | |
| | comp=N,219nm,0.4s | | | | | | |
| **PS11** | **TAPS Pump St11** | **2.68** | **89** | | **Pn** | **07 09 09.8** | **+0.2** |
| **WRH** | **Wood River Hil** | **2.72** | **29** | | **Pn** | **07 09 10.2** | **0.0** |
| **PAX** | **Paxson** | **2.77** | **70** | | **Pn** | **07 09 11.1** | **+0.2** |
| **PAX** | **Paxson** | **2.77** | **70** | P | **Pn** | **07 09 11.0** | **+0.2** |
| | baz=254,SNR=25 | | | | | | |
| **DIV** | **Divide** | **2.77** | **109** | Pn | **Pn** | **07 09 10.0** | **-0.9** |
| **HARP** | **HAARP** | **2.82** | **82** | | **Pn** | **07 09 11.9** | **+0.3** |
| **HARP** | **HAARP** | **2.82** | **82** | P | **Pn** | **07 09 11.8** | **+0.3** |
| | baz=267,SNR=13 | | | | | | |
| **MLY** | **Manley** | **2.91** | **4** | | **Pn** | **07 09 13.0** | **+0.2** |
| **MLY** | **Manley** | **2.91** | **4** | P | **Pn** | **07 09 12.9** | **+0.2** |
| | baz=184 | | | | | | |
| **CCB** | **Clear Creek Bu** | **2.94** | **30** | | **Pn** | **07 09 13.0** | **-0.1** |
| **HDA** | **Harding Lake** | **2.97** | **38** | | **Pn** | **07 09 13.8** | **+0.2** |
| **HDA** | **Harding Lake** | **2.97** | **38** | IAML | | 07 09 55.9 | |
| | comp=E,80nm,0.5s | | | | | | |
| HDA | | | | IAML | | 07 10 09.1 | |
| | comp=N,90nm,0.6s | | | | | | |
| **HDA** | **Harding Lake** | **2.97** | **38** | P | **Pn** | **07 09 13.8** | **+0.2** |
| | baz=221,SNR=11 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.06** | **119** | | **Pn** | **07 09 15.5** | **+0.7** |
| **EYAK** | **Cordova Ski Ar** | **3.06** | **119** | P | **Pn** | **07 09 14.7** | **0.0** |
| | baz=304,SNR=12 | | | | | | |
| **I21K** | **Tanana** | **3.08** | **354** | | **Pn** | **07 09 14.8** | **-0.1** |
| **I21K** | **Tanana** | **3.08** | **354** | P | **Pn** | **07 09 14.8** | **-0.1** |
| | baz=173 | | | | | | |
| I21K | | | | S | **Sn** | **07 09 49.1** | **-1.5** |
| | baz=173 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **3.12** | **27** | | **Pn** | **07 09 15.9** | **+0.4** |
| **TCOL** | **CIGO, UAF Yank** | **3.12** | **27** | IAML | | 07 09 57.3 | |
| | comp=N,149nm,0.4s | | | | | | |
| TCOL | | | | IAML | | 07 09 58.7 | |
| | comp=E,132nm,0.5s | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **3.12** | **27** | P | **Pn** | **07 09 15.8** | **+0.3** |
| | baz=209,SNR=9.9 | | | | | | |
| **COLA** | **College** | **3.12** | **27** | | **Pn** | **07 09 15.7** | **+0.1** |
| **COLA** | **College** | **3.12** | **27** | IAML | | 07 09 53.1 | |
| | comp=E,144nm,0.3s | | | | | | |
| COLA | | | | IAML | | 07 10 09.0 | |
| | comp=E,154nm,0.5s | | | | | | |
| **COLA** | **College** | **3.12** | **27** | P | **Pn** | **07 09 16.0** | **+0.4** |
| | baz=209 | | | | | | |
| **MDM** | **Murphy Dome** | **3.12** | **24** | | **Pn** | **07 09 15.5** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **3.13** | **14** | | **Pn** | **07 09 15.8** | **+0.2** |
| **I23K** | **Minto, Yukon-K** | **3.13** | **14** | P | **Pn** | **07 09 15.7** | **0.0** |
| | baz=195,SNR=13 | | | | | | |
| **N25K** | **Chitina, Valde** | **3.16** | **97** | | **Pn** | **07 09 15.5** | **-0.7** |
| **N25K** | **Chitina, Valde** | **3.16** | **97** | IAML | | 07 10 03.1 | |
| | comp=N,106nm,0.7s | | | | | | |
| N25K | | | | IAML | | 07 10 05.2 | |
| | comp=E,73nm,0.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **3.16** | **97** | P | **Pn** | **07 09 15.5** | **-0.7** |
| | baz=282,SNR=7.5 | | | | | | |
| **IL31** | | **3.27** | **34** | | **Pn** | **07 09 17.7** | **+0.2** |
| **ILAR** | **Eielson Array** | **3.27** | **34** | | **Pn** | **07 09 17.6** | **0.0** |
| **RIDG** | **Independent Ri** | **3.31** | **58** | | **Pn** | **07 09 19.1** | **+0.9** |
| **RIDG** | **Independent Ri** | **3.31** | **58** | P | **Pn** | **07 09 18.9** | **+0.7** |
| | baz=243,SNR=14 | | | | | | |
| **BMRM** | **Bremner River** | **3.35** | **108** | | **Pn** | **07 09 18.2** | **-0.6** |
| BMRM | | | | IAML | | 07 10 09.8 | |
| | comp=E,87nm,0.8s | | | | | | |
| BMRM | | | | IAML | | 07 10 12.3 | |
| | comp=N,93nm,0.5s | | | | | | |
| **BMRM** | **Bremner River** | **3.35** | **108** | P | **Pn** | **07 09 17.6** | **-1.3** |
| | baz=293 | | | | | | |
| **P18K** | **Big Mountain,** | **3.40** | **218** | Pn | **Pn** | **07 09 20.1** | **+0.7** |
| P18K | | | | IAML | | 07 10 06.1 | |
| | comp=N,38nm,4.0s | | | | | | |
| P18K | | | | IAML | | 07 10 14.3 | |
| | comp=E,37nm,3.0s | | | | | | |
| **P18K** | **Big Mountain,** | **3.40** | **218** | P | **Pn** | **07 09 19.6** | **+0.2** |
| | baz=34 | | | | | | |
| **POKR** | **Poker Plat Res** | **3.42** | **27** | Pn | **Pn** | **07 09 20.3** | **+0.6** |
| **POKR** | **Poker Plat Res** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J26L** | **Joseph Creek** | **4.17** | **52** | P | | **Pn** | **07 09 30.3** | **+0.4** |
| | baz=238 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **4.35** | **83** | | | **Pn** | **07 09 32.5** | **0.0** |
| M27K | | | | IAML | | | 07 10 42.7 | |
| | comp=E,24nm,0.8s | | | | | | | |
| M27K | | | | IAML | | | 07 10 50.0 | |
| | comp=N,29nm,1.2s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **4.35** | **83** | P | | **Pn** | **07 09 32.4** | **0.0** |
| | baz=271 | | | | | | | |
| **WAX** | **Waxell Ridge** | **4.36** | **109** | Pn | | **Pn** | **07 09 32.9** | **+0.4** |
| **BALM** | **Baldy** | **4.36** | **101** | | | **Pn** | **07 09 31.4** | **-1.2** |
| **KIAG** | **Kiagna River** | **4.39** | **102** | | | **Pn** | **07 09 31.7** | **-1.3** |
| **L27K** | **Beaver Creek,** | **4.42** | **74** | | | **Pn** | **07 09 32.8** | **-0.5** |
| L27K | | | | IAML | | | 07 10 45.0 | |
| | comp=N,21nm,1.1s | | | | | | | |
| **KDAK** | **Kodiak Island** | **4.43** | **190** | Pn | | **Pn** | **07 09 34.8** | **+1.4** |
| **BC03** | | **4.44** | **74** | | | **Pn** | **07 09 33.0** | **-0.5** |
| **BCAR** | **Beaver Creek A** | **4.44** | **74** | Pn | | **Pn** | **07 09 33.5** | **0.0** |
| **ISLE** | **Juniper Island** | **4.52** | **106** | Pn | | **Pn** | **07 09 34.5** | **-0.3** |
| ISLE | | | | IAML | | | 07 10 51.2 | |
| | comp=E,47nm,0.8s | | | | | | | |
| **BARN** | **Barnard Glacie** | **4.67** | **99** | Pn | | **Pn** | **07 09 37.4** | **+0.5** |
| BARN | | | | IAML | | | 07 10 47.2 | |
| | comp=N,38nm,1.0s | | | | | | | |
| BARN | | | | IAML | | | 07 10 50.4 | |
| | comp=E,36nm,0.5s | | | | | | | |
| **BVCY** | **Beaver Creek** | **4.82** | **82** | P | | **Pn** | **07 09 38.6** | **-0.2** |
| | baz=271 | | | | | | | |
| **MESA** | **MESA** | **4.88** | **110** | Pn | | **Pn** | **07 09 40.0** | **+0.3** |
| **MESA** | **MESA** | **4.88** | **110** | P | | **Pn** | **07 09 39.3** | **-0.4** |
| | baz=298 | | | | | | | |
| **YAH** | **Yahtse** | **4.89** | **107** | | | **Pn** | **07 09 39.5** | **-0.3** |
| YAH | | | | IAML | | | 07 11 02.0 | |
| | comp=N,42nm,2.4s | | | | | | | |
| YAH | | | | IAML | | | 07 11 09.0 | |
| | comp=E,41nm,2.7s | | | | | | | |
| **OHAK** | **Old Harbor** | **5.05** | **193** | Pn | | **Pn** | **07 09 42.2** | **+0.4** |
| **YUK3** | **Moose Creek** | **5.07** | **89** | P | | **Pn** | **07 09 41.6** | **-0.8** |
| | baz=279 | | | | | | | |
| **COLD** | **Coldfoot** | **5.13** | **4** | | | **Pn** | **07 09 43.9** | **+1.0** |
| **COLD** | **Coldfoot** | **5.13** | **4** | P | | **Pn** | **07 09 43.7** | **+0.8** |
| | baz=185,SNR=8.6 | | | | | | | |
| **TABL** | **Table Mountain** | **5.13** | **105** | Pn | | **Pn** | **07 09 43.2** | **+0.1** |
| TABL | | | | IAML | | | 07 12 00.3 | |
| | comp=N,30nm,3.0s | | | | | | | |
| **FYU** | **Fort Yukon** | **5.14** | **28** | | | **Pn** | **07 09 43.7** | **+0.7** |
| **EGAK** | **Eagle** | **5.21** | **55** | | | **Pn** | **07 09 43.8** | **-0.3** |
| **EGAK** | **Eagle** | **5.21** | **55** | IAML | | | 07 11 16.5 | |
| | comp=N,29nm,0.9s | | | | | | | |
| EGAK | | | | IAML | | | 07 11 16.8 | |
| | comp=N,25nm,1.4s | | | | | | | |
| **EGAK** | **Eagle** | **5.21** | **55** | P | | **Pn** | **07 09 43.7** | **-0.3** |
| | baz=244 | | | | | | | |
| **PCA** | **Pinnacle** | **5.67** | **106** | Pn | | **Pn** | **07 09 51.0** | **+0.5** |
| **DAWY** | **Dawson** | **5.69** | **65** | | | **Pn** | **07 09 50.7** | **+0.1** |
| **DAWY** | **Dawson** | **5.69** | **65** | P | | **Pn** | **07 09 50.2** | **-0.4** |
| | baz=255,SNR=6.1 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **6.01** | **25** | Pn | | **Pn** | **07 09 54.8** | **-0.2** |
| **TOLK** | **Toolik Lake Re** | **6.56** | **5** | Pn | | **Pn** | **07 10 05.3** | **+2.7** |
| **TOLK** | **Toolik Lake Re** | **6.56** | **5** | P | | **Pn** | **07 10 04.8** | **+2.2** |
| | baz=186,SNR=11 | | | | | | | |
| **ANM** | **Nome** | **6.83** | **297** | Pn | | **Pn** | **07 10 07.0** | **+0.8** |
| **EPYK** | **Eagle Plains** | **7.58** | **50** | Pn | | **Pn** | **07 10 17.1** | **+0.7** |
| **TNA** | **Tin City** | **8.15** | **302** | Pn | | **Pn** | **07 10 25.2** | **+1.2** |

*IDC **02** 07:13:40.6±1.7, 18°.06S×178°.42W, h558km±20km, mb3.0/7, mb1 3.2/9, mb1mx3.1/30, mbtmp3.9/9, Error ellipse: s-maj=28.6km s-min=18.2km az=145.0*
*NEIC **02** 07:13:40.9±1.4, 18°.0S±0°.2×178°.4W±0°.1, h560km±6km, mb4.4/10, Error ellipse: s-maj=29.7km s-min=19.7km az=169.0*

**ISC 02 07:13:41.6±0.7, 18°.0S±0°.2×178°.5W±0°.1, h579km, n25, σ1°34/25, mb4.0/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.31** | **274** | P | **P** | **07 14 59.1** | **-1.9** |
| | 3.1nm,0.3s,baz=111,slow=5.1,SNR=24 | | | | | | |
| **MSVF** | **Nonsavu** | **3.31** | **274** | P | **P** | **07 14 58.9** | **-2.1** |
| **NIUE** | **Niue** | **8.19** | **99** | P | **P** | **07 15 39.8** | **-2.3** |
| **DZM** | **Mont Dzumac** | **14.74** | **251** | P | **P** | **07 16 46.7** | **-1.3** |
| | 0.2nm,0.3s,baz=136,slow=18,SNR=1.9 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.74** | **251** | P | **P** | **07 16 46.3** | **-1.7** |
| **URZ** | **Urewera** | **20.57** | **190** | P | **P** | **07 17 40.3** | **-0.9** |
| | 5.4nm,0.5s,baz=290,slow=2.5,SNR=11 | | | | | | |
| **URZ** | **Urewera** | **20.57** | **190** | P | **P** | **07 17 40.5** | **-0.7** |
| URZ | | | | IAmb | IAmb | 07 17 46.5 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.33** | **199** | P | **P** | **07 18 41.5** | **+0.4** |
| FOZ | | | | IAmb | IAmb | 07 18 44.4 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **29.84** | **240** | P | **P** | **07 19 04.2** | **+1.0** |
| **COEN** | **Coen** | **37.03** | **271** | P | **P** | **07 20 03.9** | **+0.3** |
| COEN | | | | IAmb | IAmb | 07 20 29.6 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **TOO** | **Toolangi** | **37.07** | **231** | P | **P** | **07 20 06.3** | **+2.6** |
| TOO | | | | IAmb | IAmb | 07 20 06.6 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.53** | **241** | P | **P** | **07 20 17.2** | **+1.6** |
| | comp=Z,1.1nm,0.4s,baz=114,slow=10,SNR=4.6 | | | | | | |
| **STKA** | **Stephens Creek** | **38.53** | **241** | P | **P** | **07 20 16.8** | **+1.2** |
| **BBOO** | **Buckleboo** | **43.31** | **241** | P | **P** | **07 20 54.7** | **+1.3** |
| **WB0** | **Warramunga Arr** | **44.51** | **260** | P | **P** | **07 21 02.3** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.55** | **260** | P | **P** | **07 21 03.1** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=87,slow=6.8,SNR=7.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.55** | **260** | P | **P** | **07 21 03.4** | **+0.2** |
| **ASAR** | **Alice Springs** | **44.70** | **254** | P | **P** | **07 21 05.0** | **+0.7** |
| | comp=Z,2.0nm,0.5s,baz=88,slow=8.1,SNR=48 | | | | | | |
| **ASAR** | **Alice Springs** | **44.70** | **254** | P | **P** | **07 21 04.1** | **-0.2** |
| **KNRA** | **Kununurra** | **50.41** | **264** | P | **P** | **07 21 47.3** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 07 21 56.5 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.52** | **44** | P | **P** | **07 24 49.9** | **+0.5** |
| | comp=Z,0.6nm,0.8s,baz=230,slow=9.3,SNR=4.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.09** | **58** | P | **P** | **07 25 24.1** | **+1.8** |
| | comp=Z,0.5nm,0.7s,baz=210,slow=6.3,SNR=5.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.45** | **43** | P | **P** | **07 25 29.1** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=220,slow=2.4,SNR=4.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.45** | **43** | P | **P** | **07 25 29.0** | **+0.5** |
| **SNAA** | **Sanae** | **90.53** | **179** | | **P** | **07 25 43.6** | **+1.4** |
| SNAA | | | | IAmb | IAmb | 07 26 03.9 | |
| | comp=Z,8.2nm,1.5s | | | | | | |

*CNRM **02** 07:14:01.6, 35°.69N×3°.62W, h9km, ml2.7*
*SFS **02** 07:14:03.0, 35°.40N×3°.80W, ML2.6, ALBORAN SUR*
*INMG **02** 07:14:04.2±1.5, 35°.51N×3°.86W, h4km±5km, ML2.3, Error ellipse: s-maj=3.3km s-min=3.3km az=68.0*

**ISC 02 07:14:02.3±0.8, 35°.49N±0°.03×3°.80W±0°.03, h10km, n37, σ1°88/45, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.29** | **203** | P | **Pb** | **07 14 12.0** | **+2.3** |
| **PALE** | **Palemas** | **0.29** | **203** | P | **Pg** | **07 14 09.4** | **+1.1** |
| PALE | | | | S | **Sg** | **07 14 13.0** | **+0.8** |
| **AKLM** | **AKL** | **0.98** | **183** | P | **Pn** | **07 14 23.0** | **+0.8** |
| **AKLM** | **AKL** | **0.98** | **183** | P | **Pn** | **07 14 23.0** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.16** | **105** | P | **Pb** | **07 14 24.1** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.16** | **105** | S | **Sb** | **07 14 38.8** | **-0.8** |
| **SMIR** | **Smir Dam** | **1.30** | **279** | P | **Pg** | **07 14 28.0** | **+0.7** |
| **SMIR** | **Smir Dam** | **1.30** | **279** | P | **Pn** | **07 14 25.6** | **-0.9** |
| **CHEFC** | **Chefchaouen** | **1.32** | **254** | P | **Pg** | **07 14 29.0** | **+1.4** |
| **CHEFC** | **Chefchaouen** | **1.32** | **254** | P | **Pb** | **07 14 28.1** | **+0.9** |
| **CEU** | **Ceuta** | **1.34** | **288** | P | **Pn** | **07 14 25.9** | **-1.2** |
| **CEU** | **Ceuta** | **1.34** | **288** | S | **Sb** | **07 14 39.2** | **-5.6** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **338** | P | **Pg** | **07 14 30.0** | **+1.5** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **338** | S | **Sn** | **07 14 45.5** | **-0.1** |
| **JBK** | **JBK** | **1.54** | **138** | P | **Pn** | **07 14 30.0** | **0.0** |
| **JBK** | **JBK** | **1.54** | **138** | P | **Pn** | **07 14 29.5** | **-0.5** |
| JBK | | | | S | **Sn** | **07 14 46.7** | **-3.3** |
| **LIJA** | **Lijar** | **1.92** | **318** | P | **Pb** | **07 14 38.0** | **+0.6** |
| **LIJA** | **Lijar** | **1.92** | **318** | S | **Sg** | **07 15 03.0** | **-1.0** |
| **LCRM** | **LCR** | **2.00** | **206** | P | **Pg** | **07 14 41.0** | **+0.3** |
| **LCRM** | **LCR** | **2.00** | **206** | P | **Pn** | **07 14 37.7** | **+1.4** |
| LCRM | | | | S | **Sn** | **07 15 03.1** | **+1.6** |
| **IFR** | **Ifrane** | **2.25** | **209** | P | **Pn** | **07 14 40.5** | **+0.8** |
| **IFR** | **Ifrane** | **2.25** | **209** | S | **Sn** | **07 15 06.3** | **-1.4** |
| **MD31** | **MD31** | **2.73** | **197** | P | **Pn** | **07 14 47.8** | **+1.4** |
| MD31 | | | | S | **Sn** | **07 15 17.5** | **-1.9** |
| **MDT** | **Midelt** | **2.75** | **194** | P | **Pn** | **07 14 49.2** | **+2.6** |
| **PVAQ** | **Vaqueiros** | **3.69** | **302** | *e*Pn | **Pn** | **07 15 00.0** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **07 15 41.4** | **-1.5** |
| PVAQ | | | | A | A | 07 15 52.3 | |
| | 5.6nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **302** | P | **Pn** | **07 14 59.4** | **+0.1** |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | **Pn** | **07 15 06.4** | **+2.4** |
| PCVE | | | | *e*Sn | **Sn** | **07 15 51.1** | **-0.1** |
| PCVE | | | | A | A | 07 15 54.9 | |
| | 4.0nm,1.0s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **305** | *e*Pn | **Pn** | **07 15 08.9** | **+1.7** |
| MESJ | | | | *e*Sn | **Sn** | **07 15 57.1** | **+0.2** |
| MESJ | | | | A | A | 07 16 02.0 | |
| | 2.9nm,0.7s | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*Sn | **Sn** | **07 15 57.8** | **-0.6** |
| **PTEO** | **Sao Teotonio** | **4.46** | **299** | *e*Sn | **Sn** | **07 16 01.0** | **-1.0** |
| **PESTR** | **Estremoz** | **4.53** | **319** | *e*Sn | **Sn** | **07 16 02.2** | **-1.5** |
| **EVO** | **Evora** | **4.54** | **313** | P | **Pn** | **07 15 12.4** | **+1.3** |
| **EVO** | **Evora** | **4.54** | **313** | S | **Sn** | **07 16 00.7** | **-3.2** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **306** | *e*Pn | **Pn** | **07 15 13.1** | **+1.1** |
| PNCL | | | | *e*Sn | **Sn** | **07 16 04.0** | **-1.6** |
| PNCL | | | | A | A | 07 16 11.4 | |
| | 3.4nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **4.86** | **325** | *e*Pn | **Pn** | **07 15 19.6** | **+4.1** |
| **PMTG** | **Montargil** | **5.02** | **317** | *e*Pn | **Pn** | **07 15 21.6** | **+3.9** |
| **OUK** | **Oukaimeden** | **5.46** | **220** | P | **Pn** | **07 15 22.0** | **-2.1** |

*TRN **02** 07:18:33.1, 14°.99N×60°.54W, h45km, MD4.9*
*TRN Felt in Martinique MMI IV, Saint Lucia III and Dominica III.*
*IDC **02** 07:18:34.6±2.4, 14°.97N×60°.55W, h57km±22km, mb4.2/27, mb1 4.4/31, mb1mx4.4/39, mbtmp4.6/31, ML4.1/4, MS3.9/43, Ms1 3.9/43, ms1mx3.8/80, Error ellipse: s-maj=12.6km s-min=10.0km az=77.0*
*NEIC **02** 07:18:34.7±1.7, 14°.93N±0°.05×60°.57W±0°.06, h47km±5km, mb4.9/122, Error ellipse: s-maj=8.5km s-min=6.5km az=68.0*
*GCMT **02** 07:18:37.7±0.4, 15°.08N±0°.03×60°.57W±0°.03, h44km±1km, MW4.9/62, Moment Tensor Solution. s31,c31; s62,c84; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$2.12±.17; $M_{\theta\theta}$0.21±.11; $M_{\phi\phi}$-2.33±.11; $M_{r\theta}$-0.65±.08; $M_{r\phi}$0.02±.10; $M_{\theta\phi}$1.28±.08; Best double couple: $M_0$2.65300×$10^{16}$ NP1:$\phi_s$194.00000°, δ32.00000°, λ115.00000°. NP2: $\phi_s$345.00000°, δ62.00000°, λ75.00000°. Principal axes: T 2.6220, Plg70.0000°, Azm224.0000°; N 0.0600, Plg13.0000°, Azm352.0000°; P -2.6840, Plg15.0000°, Azm86.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 02 07:18:34.1±0.8, 14°.96N±0°.03×60°.54W±0°.04, h53km±7km, n551, σ0°99/555, mb4.8/100, MS3.9/38, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILAM** | **Ilet Lapin Mar** | **0.37** | **240** | *e*P | **Pn** | **07 18 43.9** | **-0.3** |
| ILAM | | | | *e*S | **Sn** | **07 18 52.4** | **+0.7** |
| **ILAM** | **Ilet Lapin Mar** | **0.37** | **240** | | **Pn** | **07 18 43.9** | **-0.3** |
| **MVM** | **Montagne Vaucl** | **0.53** | **220** | *e*P | **Pn** | **07 18 45.9** | **-0.1** |
| **LPMF** | **Morne Lapointe** | **0.56** | **227** | *e*P | **Pn** | **07 18 46.1** | **-0.2** |
| **MPOM** | **Morne Pois Mar** | **0.60** | **211** | *e*P | **Pn** | **07 18 46.5** | **-0.3** |
| MPOM | | | | *e*S | **Sn** | **07 18 56.1** | **+0.3** |
| **MPOM** | **Morne Pois Mar** | **0.60** | **211** | | **Pn** | **07 18 45.9** | **-0.8** |
| **BAMF** | **Morne Balai** | **0.60** | **256** | *e*P | **Pn** | **07 18 47.3** | **+0.4** |
| **H05S1** | **Guadeloupe/Mar** | **0.60** | **208** | P | **Pn** | **07 18 47.0** | **+0.2** |
| H05S1 | | | | S | **Sn** | **07 18 56.3** | **+0.4** |
| **ZAM** | **Aeronautique** | **0.61** | **231** | *e*P | **Pn** | **07 18 46.8** | **0.0** |
| **SVN** | **Savane Anatole** | **0.61** | **259** | *e*P | **Pn** | **07 18 47.4** | **+0.4** |
| **SVN** | **Savane Anatole** | **0.61** | **259** | | **Pn** | **07 18 46.9** | **-0.1** |
| **GBMF** | **Grand Be** | **0.62** | **255** | *e*P | **Pn** | **07 18 47.5** | **+0.3** |
| **FDF** | **Fort de France** | **0.63** | **249** | *e*P | **Pn** | **07 18 47.3** | **+0.1** |
| FDF | | | | *e*S | **Sn** | **07 18 57.7** | **+1.1** |
| **FDF** | **Fort de France** | **0.63** | **249** | | **Pn** | **07 18 47.3** | **+0.1** |
| **PML** | **Morne Lenard** | **0.64** | **254** | *e*P | **Pn** | **07 18 47.8** | **+0.4** |
| **TRMF** | **Trois Ilets** | **0.65** | **229** | *e*P | **Pn** | **07 18 47.4** | **0.0** |
| **PCM** | **Pelee Case Pet** | **0.66** | **258** | *e*P | **Pn** | **07 18 48.0** | **+0.4** |
| **BIM** | **Bigot** | **0.67** | **229** | *e*P | **Pn** | **07 18 48.0** | **+0.3** |
| BIM | | | | *e*S | **Sn** | **07 18 59.5** | **+1.9** |
| **BIM** | **Bigot** | **0.67** | **229** | Pn | **Pn** | **07 18 47.7** | **0.0** |
| **DLPL** | **La Plaine** | **0.77** | **299** | *e*P | **Pn** | **07 18 49.3** | **+0.3** |
| DLPL | | | | *e*S | **Sn** | **07 19 01.5** | **+1.6** |
| **DLPL** | **La Plaine** | **0.77** | **299** | | **Pn** | **07 18 49.0** | **0.0** |
| **MDN** | **Morne-Daniel** | **0.89** | **294** | *e*P | **Pn** | **07 18 51.7** | **+1.2** |
| MDN | | | | *e*S | **Sn** | **07 19 03.6** | **+1.0** |
| **DSLB** | **Salisbury** | **0.97** | **299** | *e*P | **Pn** | **07 18 52.3** | **+0.7** |
| DSLB | | | | *e*S | **Sn** | **07 19 05.7** | **+1.2** |
| **SLBI** | **Saint Lucia, B** | **1.02** | **204** | *e*P | **Pn** | **07 18 52.9** | **+0.7** |
| SLBI | | | | *e*S | **Sn** | **07 19 06.6** | **+1.1** |
| **SLCP** | **Castries, St.** | **1.04** | **205** | *e*P | **Pn** | **07 18 52.3** | **-0.2** |
| SLCP | | | | *e*S | **Sn** | **07 19 07.1** | **+1.1** |
| **MDVC** | **Dominica, Viel** | **1.06** | **308** | *e*P | **Pn** | **07 18 52.7** | **0.0** |
| MDVC | | | | *e*S | **Sn** | **07 19 09.3** | **+0.5** |
| **MDCT** | **Cottage Hill,** | **1.10** | **307** | *e*P | **Pn** | **07 18 53.4** | **+0.1** |
| MDCT | | | | *e*S | **Sn** | **07 19 07.6** | **0.0** |
| **MAGL** | **Barre de l'ile** | **1.22** | **324** | *e*P | **Pn** | **07 18 54.6** | **-0.2** |
| MAGL | | | | *e*S | **Sn** | **07 19 09.9** | **-0.4** |
| **MCLT** | **Moule a Chique** | **1.30** | **197** | *e*P | **Pn** | **07 18 56.3** | **+0.3** |
| **MCLT** | **Moule a Chique** | **1.30** | **197** | Pn | **Pn** | **07 18 53.9** | **-2.1** |
| **TDBA** | **Terre de Bas,** | **1.38** | **310** | *e*P | **Pn** | **07 18 57.5** | **+0.4** |
| TDBA | | | | *e*S | **Sn** | **07 19 14.8** | **+0.6** |
| **TBG** | **Guadaloupe-3** | **1.39** | **310** | *e*P | **Pn** | **07 18 57.5** | **+0.3** |
| **H05N1** | **Guadeloupe/Mar** | **1.44** | **340** | P | **Pn** | **07 18 56.5** | **-1.4** |
| H05N1 | | | | S | **Sn** | **07 19 15.4** | **-0.3** |
| **CBE** | **Ff, Capester** | **1.51** | **317** | *e*P | **Pn** | **07 18 58.7** | **-0.2** |
| CBE | | | | *e*S | **Sn** | **07 19 17.9** | **+0.5** |
| **SVV** | **Soufriere Volc** | **1.76** | **202** | *e*P | **Pn** | **07 19 04.1** | **+1.9** |
| SVV | | | | *e*S | **Sn** | **07 19 24.4** | **+0.9** |
| **ABD** | **La Joyeuse, An** | **1.76** | **329** | *e*P | **Pn** | **07 19 02.4** | **+0.1** |
| ABD | | | | *e*S | **Sn** | **07 19 23.3** | **-0.2** |
| **SVB** | **Belmont** | **1.81** | **202** | *e*P | **Pn** | **07 19 03.4** | **+0.4** |
| SVB | | | | *e*S | **Sn** | **07 19 26.5** | **+1.7** |
| **SVB** | **Belmont** | **1.81** | **202** | Pn | **Pn** | **07 19 03.6** | **+0.6** |
| **SVOC** | **Richmond Hill,** | **1.91** | **200** | *e*P | **Pn** | **07 19 04.6** | **+0.3** |
| SVOC | | | | *e*S | **Sn** | **07 19 28.1** | **+0.9** |
| **BCHC** | **Barbados, Cave** | **2.02** | **154** | *e*P | **Pn** | **07 19 07.2** | **+1.4** |
| BCHC | | | | *e*S | **Sn** | **07 19 31.1** | **+1.2** |
| **BBGH** | **Gun Hill** | **2.04** | **152** | *e*P | **Pn** | **07 19 07.5** | **+1.4** |
| BBGH | | | | *e*S | **Sn** | **07 19 32.4** | **+1.9** |
| **BBGH** | **Gun Hill** | **2.04** | **152** | | **Pn** | **07 19 07.5** | **+1.4** |
| **BBSP** | **Saint Philip** | **2.12** | **150** | *e*P | **Pn** | **07 19 08.5** | **+1.3** |
| **ANBD** | **Bethesda, Anti** | **2.39** | **331** | *e*P | **Pn** | **07 19 10.7** | **-0.1** |
| ANBD | | | | *e*S | **Sn** | **07 19 39.8** | **+0.9** |
| **ANDO** | **Antigua, Disas** | **2.47** | **330** | *e*P | **Pn** | **07 19 12.0** | **0.0** |
| ANDO | | | | *e*S | **Sn** | **07 19 41.2** | **+0.3** |
| **GCMP** | **Grenada, Carri** | **2.60** | **199** | *e*P | **Pn** | **07 19 14.3** | **+0.5** |
| GCMP | | | | *e*S | **Sn** | **07 19 45.8** | **+1.5** |
| **NVDO** | **Nevis, Disaste** | **2.93** | **317** | *e*P | **Pn** | **07 19 19.5** | **+1.2** |
| **ANWB** | **Willy Bob** | **2.95** | **336** | *e*P | **Pn** | **07 19 19.0** | **+0.6** |
| ANWB | | | | *e*S | **Sn** | **07 19 52.4** | **-0.2** |
| **ANWB** | **Willy Bob** | **2.95** | **336** | Pn | **Pn** | **07 19 19.4** | **+1.0** |
| **GRGR** | **Grenville** | **3.01** | **201** | *e*P | **Pn** | **07 19 20.2** | **+0.8** |
| GRGR | | | | *e*S | **Sn** | **07 19 56.2** | **+1.9** |
| **GRGR** | **Grenville** | **3.01** | **201** | Pn | **Pn** | **07 19 20.2** | **+0.8** |
| **GRFF** | **Grenada Fort F** | **3.12** | **202** | *e*P | **Pn** | **07 19 21.7** | **+0.9** |
| GRFF | | | | *e*S | **Sn** | **07 19 58.1** | **+1.2** |
| **SKOC** | **St. Kitts, UWI** | **3.13** | **318** | *e*P | **Pn** | **07 19 21.9** | **+0.9** |
| SKOC | | | | *e*S | **Sn** | **07 19 57.8** | **+0.6** |
| **TOSP** | **Speyside** | **3.64** | **180** | *e*P | **Pn** | **07 19 30.1** | **+2.1** |
| TOSP | | | | *e*S | **Sn** | **07 20 10.9** | **+1.2** |
| **TOSP** | **Speyside** | **3.64** | **180** | Pn | **Pn** | **07 19 29.5** | **+1.5** |
| **SMRT** | **St. Maarten** | **3.92** | **322** | *e*P | **Pn** | **07 19 32.1** | **+0.3** |
| SMRT | | | | *e*S | **Sn** | **07 20 15.1** | **-1.5** |
| **SMRT** | **St. Maarten** | **3.92** | **322** | Pn | **Pn** | **07 19 33.1** | **+1.3** |
| **TRN** | **Trinidad (W)** | **4.37** | **191** | *e*P | **Pn** | **07 19 39.1** | **+1.2** |
| **TRN** | **Trinidad (W)** | **4.37** | **191** | *e*S | **Sn** | **07 20 27.5** | **0.0** |
| **TBH** | **Brigand Hill** | **4.48** | **187** | *e*P | **Pn** | **07 19 41.1** | **+1.6** |
| **TPP** | **Pointe-a-Pierr** | **4.70** | **191** | *e*P | **Pn** | **07 19 43.4** | **+0.8** |
| **STVI** | **Saint Thomas** | **5.41** | **309** | Pn | **Pn** | **07 19 52.8** | **+0.6** |
| **CUPR** | **Culebra, Puert** | **5.63** | **307** | Pn | **Pn** | **07 19 56.5** | **+1.2** |
| **HUMP** | **Col San Antoni** | **5.99** | **303** | | **Pn** | **07 20 01.5** | **+1.2** |
| **CBYP** | **Canovanas** | **6.07** | **304** | | **Pn** | **07 20 03.0** | **+1.6** |
| **PDPR** | **Patillas Dam,** | **6.07** | **301** | Pn | **Pn** | **07 20 01.6** | **+0.3** |
| **PCRV** | **Puerto La Cruz** | **6.21** | **221** | P | **Pn** | **07 20 04.5** | **+1.1** |
| | 7.1nm,0.3s,baz=48,slow=2.9,SNR=39 | | | | | | |
| PCRV | | | | S | **Sn** | **07 21 09.8** | **-3.3** |
| | 3.4nm,0.3s,baz=355,slow=12,SNR=0.9 | | | | | | |
| **SJG** | **San Juan** | **6.22** | **301** | P | **Pn** | **07 20 04.2** | **+0.7** |
| | 17nm,0.3s,baz=149,slow=18,SNR=52 | | | | | | |
| SJG | | | | S | **Sn** | **07 21 12.6** | **-0.6** |
| | 12nm,0.3s,baz=21,slow=22,SNR=1.4 | | | | | | |
| SJG | | | | LR | LR | 07 22 42.7 | |
| | comp=Z,771nm,19.6s,baz=124,slow=40 | | | | | | |
| **SJG** | **San Juan** | **6.22** | **301** | | **Pn** | **07 20 04.7** | **+1.3** |
| **GCPR** | **Guaynabo City** | **6.27** | **303** | Pn | **Pn** | **07 20 05.7** | **+1.7** |
| **ICMP** | **Isla Caja de M** | **6.44** | **298** | Pn | **Pn** | **07 20 07.4** | **+1.0** |
| **CELP** | **Cerrillos** | **6.56** | **299** | | **Pn** | **07 20 09.0** | **+0.8** |
| **OBIP** | **Obispado Ponce** | **6.57** | **299** | | **Pn** | **07 20 08.6** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **6.72** | **302** | | **Pn** | **07 20 12.7** | **+2.4** |
| **AOPR** | **Arecibo Observ** | **6.84** | **300** | *e*P | **Pn** | **07 20 13.5** | **+1.5** |
| **AOPR** | **Arecibo Observ** | **6.84** | **300** | *e*S | **Sn** | **07 21 26.4** | **-2.0** |
| **AOPR** | **Arecibo Observ** | **6.84** | **300** | | **Pn** | **07 20 13.3** | **+1.3** |
| **MLPR** | **Magueyes Islan** | **6.92** | **297** | Pn | **Pn** | **07 20 12.6** | **-0.4** |
| **CRPR** | **Cabo Rojo, PR** | **6.99** | **297** | Pn | **Pn** | **07 20 14.8** | **+0.9** |
| **PRSN** | **Puerto Rico Se** | **7.11** | **298** | | **Pn** | **07 20 17.1** | **+1.6** |
| **BIRV** | **Birongo** | **7.14** | **232** | Pn | **Pn** | **07 20 15.9** | **-0.2** |
| **AGPR** | **Aguadilla, PR** | **7.19** | **300** | | **Pn** | **07 20 18.4** | **+1.7** |
| **DR12** | **Loma Pena Alta** | **9.28** | **295** | | **Pn** | **07 20 46.6** | **+1.2** |
| **BAUV** | **El Baul** | **9.46** | **232** | *e*P | **Pn** | **07 20 48.2** | **+0.3** |
| **BAUV** | **El Baul** | **9.46** | **232** | *e*S | **Sn** | **07 22 29.6** | **-3.3** |
| **BAUV** | **El Baul** | **9.46** | **232** | Pn | **Pn** | **07 20 47.6** | **-0.2** |
| **BANI** | **BANI** | **10.00** | **291** | | **Pn** | **07 20 57.5** | **+2.1** |
| **DABV** | **Dabajuro** | **10.62** | **249** | *e*P | **Pn** | **07 21 02.7** | **-1.1** |
| **SC01** | **Santiago de lo** | **10.70** | **296** | | **Pn** | **07 21 07.1** | **+2.4** |
| **SDDR** | **Presa de Saban** | **11.03** | **293** | *e*P | **Pn** | **07 21 13.4** | **+4.1** |
| **SDDR** | **Presa de Saban** | **11.03** | **293** | | **Pn** | **07 21 11.9** | **+2.6** |
| **SDV** | **Santo Domingo** | **11.57** | **240** | P | **Pn** | **07 21 17.5** | **+0.7** |
| | 7.8nm,0.3s,baz=56,slow=9.8,SNR=46 | | | | | | |
| SDV | | | | LR | LR | 07 26 03.7 | |
| | comp=Z,891nm,21.0s,baz=74,slow=39 | | | | | | |
| **SDV** | **Santo Domingo** | **11.57** | **240** | *e*P | **Pn** | **07 21 17.9** | **+1.1** |
| **SDV** | **Santo Domingo** | **11.57** | **240** | Pn | **Pn** | **07 21 17.9** | **+1.1** |
| **ELOV** | **Elorza** | **11.81** | **229** | *e*P | **Pn** | **07 21 21.2** | **+1.2** |
| **LGNH** | **Logne** | **12.08** | **289** | Pn | **Pn** | **07 21 27.9** | **+4.2** |
| **BOAV** | **Boa Vista** | **12.48** | **180** | *e*P | Pn | 07 21 25.1 | -4.1 |
| **BOAV** | **Boa Vista** | **12.48** | **180** | Pn | **Pn** | **07 21 27.9** | **-1.3** |
| **MDP** | **Montagnes des** | **12.48** | **151** | P | Pn | 07 21 22.5 | -6.9 |
| | 1.3nm,0.3s,baz=321,slow=14,SNR=9.9 | | | | | | |
| MDP | | | | S | Sn | 07 23 32.8 | -15 |
| | 8.8nm,0.3s,baz=227,slow=4.4,SNR=15 | | | | | | |
| MDP | | | | LR | LR | 07 26 46.9 | |
| | comp=Z,121nm,20.7s,baz=338,slow=39 | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **12.64** | **253** | *e*P | Pn | 07 21 27.0 | -4.4 |
| **PAMC** | **Pamplona, Colo** | **14.12** | **239** | *e*P | **Pn** | **07 21 52.7** | **+0.8** |
| **OCAC** | **Ocana** | **14.18** | **243** | *e*P | **Pn** | **07 21 53.6** | **+1.2** |
| **OCAC** | **Ocana** | **14.18** | **243** | | **Pn** | **07 21 51.8** | **-0.6** |
| **ARGC** |

baz=143
**LRAL Lakeview Retre 30.00 312** P **P** 07 24 38.0 +0.2
baz=121
**BINY Binghamton 30.24 337** P **P** 07 24 41.2 +1.3
baz=149
**PTLB Pontes e Lacer 30.25 177** *e*P **P** 07 24 41.1 +1.0
**PTLB Pontes e Lacer 30.25 177** P **P** 07 24 41.1 +1.0
**CCIG Comitan 30.44 277** P **P** 07 24 42.3 +0.2
**SIV San Ignacio 30.76 181** LR LR 07 38 13.5
comp=Z,137nm,18.0s,baz=330,slow=38
**X48A Hartselle 30.77 314** P **P** 07 24 44.8 +0.2
**T50A Nancy 30.81 320** P **P** 07 24 45.8 +0.8
**Z47A Carrollton 30.86 311** P **P** 07 24 46.2 +0.7
**P52A Corning 31.02 327** P **P** 07 24 47.0 +0.2
baz=136
**SALV Santo Antonio 31.04 171** *e*P **P** 07 24 47.1 0.0
**NNA Nana 31.26 212** LR LR 07 38 57.8
comp=Z,246nm,18.3s,baz=14,slow=39
**SDBA SAO DESIDERIO 31.29 150** *e*P **P** 07 24 49.6 +0.1
**ARAG Araguaiana, MT 31.67 164** *e*P **P** 07 24 53.4 +0.7
**PLAL Pickwick Lake 31.77 314** P **P** 07 24 53.7 +0.3
PLAL IAmb IAmb 07 24 54.8
comp=Z,15nm,0.8s
**LPAZ La Paz 31.94 194** P **P** 07 24 56.0 +0.2
comp=Z,4.7nm,0.6s,baz=16,slow=9.3,SNR=18
LPAZ LR LR 07 38 42.5
comp=Z,164nm,19.8s,baz=358,slow=38
**LPAZ La Paz 31.94 194** *e*P **P** 07 24 56.0 +0.2
**LPAZ La Paz 31.94 194** P **P** 07 24 56.0 +0.2
LPAZ IAmb IAmb 07 25 21.1
comp=Z,14nm,1.0s
**RCBR Riachuelo 31.99 128** *e*P **P** 07 24 55.8 +0.2
**WVT Waverly 32.22 316** P **P** 07 24 57.6 +0.1
**WVT Waverly 32.22 316** P **P** 07 24 57.2 -0.2
baz=124
**Y45A Yeager Farm, C 32.26 311** P **P** 07 24 58.6 +0.9
Y45A IAmb IAmb 07 25 18.1
comp=Z,20nm,0.9s
**P49A Miami Univ. Ec 32.38 324** P **P** 07 24 59.5 +0.8
P49A IAmb IAmb 07 25 19.4
comp=Z,26nm,1.2s
**P49A Miami Univ. Ec 32.38 324** P **P** 07 24 58.8 +0.1
baz=132
**WCI Wyandotte Cave 32.47 320** P **P** 07 25 00.2 +0.7
baz=129
**OXF Oxford 32.47 312** P **P** 07 25 00.1 +0.5
**OXF Oxford 32.47 312** P **P** 07 24 59.6 -0.1
baz=120
**W45A Hickory Valley 32.64 313** P **P** 07 25 01.6 +0.6
W45A IAmb IAmb 07 25 03.1
comp=Z,16nm,0.8s
**BDFB Brasilia 32.83 157** P **P** 07 25 03.3 +0.3
comp=Z,5.1nm,1.0s,baz=302,slow=5.2,SNR=4.1
**BDFB Brasilia 32.83 157** P **P** 07 25 02.9 -0.1
**CMIG Matias Romero 33.05 278** LR LR 07 40 19.2
comp=Z,152nm,18.5s,baz=78,slow=40
**O48B Farmland 33.11 324** P **P** 07 25 05.1 -0.1
baz=133
**TRQ Mont Tremblant 33.31 342** P **P** 07 25 07.9 +1.0
TRQ IAmb IAmb 07 25 09.0
comp=Z,23nm,1.1s
**JANB Januaria 33.87 151** *e*P **P** 07 25 11.4 -0.6
**OLIL Olney 33.90 320** P **P** 07 25 12.9 +0.9
OLIL IAmb IAmb 07 25 32.8
comp=Z,18nm,1.1s
**S44A Carbondale 34.04 317** P **P** 07 25 13.9 +0.6
S44A IAmb IAmb 07 25 14.6
comp=Z,15nm,0.8s
**PB16 IPOC Station P 34.24 195** P **P** 07 25 14.6 -1.2
PB16 IAmb IAmb 07 25 15.4
comp=Z,12nm,0.8s
**PBMO Poplar Bluff 34.34 315** P **P** 07 25 15.8 -0.1
**Z41A Richland Creek 34.42 308** P **P** 07 25 16.4 -0.2
baz=114
**PB12 IPOC Station P 34.73 196** P **P** 07 25 17.4 -2.0
**W41B Gary Mavity, V 34.84 311** P **P** 07 25 19.8 -0.4
W41B IAmb IAmb 07 25 40.0
comp=Z,14nm,0.9s
**W41B Gary Mavity, V 34.84 311** P **P** 07 25 20.3 +0.1
baz=117,SNR=8.3
**IPMB Ipameri, GO 34.92 159** *e*P **P** 07 25 20.8 -0.3
**X40A Basin Creek Fa 34.97 310** P **P** 07 25 21.3 0.0
X40A IAmb IAmb 07 25 22.5
comp=Z,9.8nm,0.8s
**X40A Basin Creek Fa 34.97 310** P **P** 07 25 21.3 0.0
baz=116,SNR=7.4
**GDU01 Guandu, BA 35.25 143** *e*P **P** 07 25 23.9 0.0
**NATX Nacogdoches 35.31 304** P **P** 07 25 24.3 0.0
baz=110
**P43A Skaggs, Pawnee 35.33 320** P **P** 07 25 24.9 +0.6
**GO01 Chusmiza 35.45 194** P **P** 07 25 24.6 -1.5
GO01 IAmb IAmb 07 25 26.6
comp=Z,17nm,0.8s
**AQDB Aquidauana 35.53 172** *e*P **P** 07 25 27.0 +0.8
**AQDB Aquidauana 35.53 172** P **P** 07 25 27.9 +1.6
AQDB IAmb IAmb 07 25 28.6
comp=Z,16nm,1.3s
**MIAR Mount Ida 35.54 309** P **P** 07 25 26.2 -0.1
baz=115
**CCM Cathedral Cave 35.56 316** P **P** 07 25 26.3 -0.1
CCM IAmb IAmb 07 25 27.0
comp=Z,8.6nm,0.8s
**CCM Cathedral Cave 35.56 316** P **P** 07 25 26.1 -0.3
baz=122
**PB11 IPOC Station P 35.65 195** P **P** 07 25 25.8 -1.6
**HDIL Hopedale 35.73 321** P **P** 07 25 27.9 +0.1
baz=127
**MGMO Mountain Grove 35.80 314** P **P** 07 25 28.4 0.0
MGMO IAmb IAmb 07 25 29.9
comp=Z,8.1nm,0.8s
**U40A Yellville 35.82 313** P **P** 07 25 27.9 -0.8
U40A IAmb IAmb 07 25 48.2
comp=Z,14nm,1.1s
**U40A Yellville 35.82 313** P **P** 07 25 28.3 -0.4
baz=118
**W39A Magazine 35.98 310** P **P** 07 25 30.7 +0.7
W39A IAmb IAmb 07 25 52.1
comp=Z,16nm,1.1s
**W39A Magazine 35.98 310** P **P** 07 25 30.6 +0.7
baz=116,SNR=7.4
**GLMI Grayling 36.08 330** P **P** 07 25 31.7 +1.0
**GLMI Grayling 36.08 330** P **P** 07 25 31.1 +0.4
baz=138
**CMC01 Camacan, BA 36.60 145** *e*P **P** 07 25 35.1 -0.3
**S39A Bolivar 36.79 314** P **P** 07 25 36.8 -0.1
S39A IAmb IAmb 07 25 37.4
comp=Z,12nm,0.8s
**L42A Oliver, Polo 36.84 323** P **P** 07 25 37.7 +0.5
**DIAM Diamantina, MG 36.99 153** *e*P **P** 07 25 38.6 -0.3
**PB02 IPOC Station P 37.20 195** P **P** 07 25 39.6 -1.0
**435B Jarrell 37.38 301** P **P** 07 25 41.4 -0.6
baz=107
**GUA01 Guaratinga, BA 37.44 146** *e*P **P** 07 25 42.5 0.0
**WHTX Lake Whitney, 37.63 303** P **P** 07 25 43.9 -0.3
WHTX IAmb IAmb 07 25 44.9
comp=Z,10nm,0.7s
**WHTX Lake Whitney, 37.63 303** P **P** 07 25 43.7 -0.4
baz=108,SNR=6.0
**JFWS Jewell Farm 37.74 324** P **P** 07 25 44.8 -0.1
baz=129
**TUL1 Leonard 37.76 310** P **P** 07 25 45.0 -0.2
TUL1 IAmb IAmb 07 25 46.0
comp=Z,18nm,0.8s
**TUL1 Leonard 37.76 310** P **P** 07 25 45.0 -0.2
baz=114,SNR=8.6
**LVC Limon Verde 38.23 193** P **P** 07 25 49.0 -0.6
comp=Z,12nm,0.5s,baz=36,slow=6.5,SNR=21
LVC LR LR 07 42 45.5
comp=Z,201nm,19.9s,baz=339,slow=38
**LVC Limon Verde 38.23 193** *e*P **P** 07 25 48.9 -0.6
**LVC Limon Verde 38.23 193** P **P** 07 25 49.0 -0.6
**833A Chaparral WMA, 38.31 297** P **P** 07 25 49.0 -0.9
baz=102
**NAN01 Guarapari, ES 38.31 148** *e*P **P** 07 25 49.8 -0.1
**SJMB Sao Joao De Ma 38.50 150** *e*P **P** 07 25 51.4 -0.1
**JCT Junction City 39.15 300** P **P** 07 25 56.6 -0.3
JCT IAmb IAmb 07 25 57.3
comp=Z,16nm,0.8s
**JCT Junction City 39.15 300** P **P** 07 25 56.3 -0.6
baz=104,SNR=9.7
**WMOK Wichita Mounta 39.58 307** P **P** 07 25 59.3 -1.1
baz=110,SNR=8.6
**ABTX Abilene, Hawle 39.59 303** P **P** 07 25 59.7 -0.9
ABTX IAmb IAmb 07 26 01.0
comp=Z,16nm,0.8s

**ABTX Abilene, Hawle 39.59 303** P **P** 07 25 59.6 -0.9
baz=107,SNR=7.5
**KSU1 Kansas State U 39.73 314** P **P** 07 26 00.5 -1.2
baz=117,SNR=6.3
**SCHQ Schefferville 40.09 354** P **P** 07 26 04.5 +0.2
comp=Z,11nm,1.1s,baz=168,slow=7.2,SNR=5.9
SCHQ LR LR 07 40 43.4
comp=Z,120nm,20.2s,baz=86,slow=33
**SCHQ Schefferville 40.09 354** P **P** 07 26 04.9 +0.6
SCHQ IAmb IAmb 07 26 21.3
comp=Z,26nm,1.2s
**PTGB Pitanga 40.29 168** *e*P **P** 07 26 06.8 +0.3
**ZAIG Zacatecas 40.41 288** P **P** 07 26 08.4 +0.6
**R32A Long Quarter, 40.92 312** P **P** 07 26 11.6 +0.1
R32A IAmb IAmb 07 26 12.2
comp=Z,27nm,1.1s
**L34A Svendsen Farm, 40.95 318** P **P** 07 26 11.8 +0.1
**CPUP Villa Florida 41.16 176** P **P** 07 26 12.9 -0.5
comp=Z,7.1nm,0.8s,baz=1.6,slow=7.9,SNR=13
CPUP LR LR 07 43 44.0
comp=Z,91nm,19.8s,baz=4.5,slow=37
**CPUP Villa Florida 41.16 176** *e*P **P** 07 26 12.9 -0.5
**CPUP Villa Florida 41.16 176** P **P** 07 26 13.0 -0.5
**CBKS Cedar Bluff 41.81 312** P **P** 07 26 18.8 0.0
CBKS IAmb IAmb 07 26 19.4
comp=Z,26nm,1.0s
**CBKS Cedar Bluff 41.81 312** P **P** 07 26 18.2 -0.7
baz=114
**BGNE Belgrade 41.84 317** P **P** 07 26 18.9 -0.1
**BGNE Belgrade 41.84 317** P **P** 07 26 18.2 -0.8
baz=118,SNR=5.9
**AMTX Amarillo 41.88 306** P **P** 07 26 19.0 -0.6
baz=108
**ECSD EROS Data Cent 42.01 320** P **P** 07 26 19.9 -0.5
baz=122,SNR=7.4
**TXAR Lajitas Array 42.18 297** P **P** 07 26 21.6 -0.4
comp=Z,1.1nm,0.5s,baz=116,slow=8.2,SNR=19
TXAR PcP **PcP** 07 28 17.0 +1.4
comp=Z,3.0nm,0.6s,baz=120,slow=6.1,SNR=12
TXAR LR LR 07 46 47.4
comp=Z,98nm,21.4s,baz=52,slow=40
**AC02 Maricunga 42.37 191** P **P** 07 26 23.5 -0.5
**MSTX Muleshoe 42.48 304** P **P** 07 26 24.2 -0.3
MSTX IAmb IAmb 07 26 24.9
comp=Z,35nm,1.0s
**MSTX Muleshoe 42.48 304** P **P** 07 26 23.8 -0.7
baz=106,SNR=10
**GO03 Copiap 43.33 193** P **P** 07 26 30.5 -0.7
GO03 IAmb IAmb 07 26 31.7
comp=Z,37nm,1.0s
**SUSD Miller 43.82 320** P **P** 07 26 34.6 -0.4
baz=120
**KSCO Kaye Shedlock' 43.97 311** P **P** 07 26 35.6 -0.8
baz=111
**MNTX Cornudas Mount 44.08 300** P **P** 07 26 37.2 -0.1
MNTX IAmb IAmb 07 26 38.4
comp=Z,27nm,1.1s
**MNTX Cornudas Mount 44.08 300** P **P** 07 26 37.0 -0.2
baz=102,SNR=19
**AGMN Agassiz Nation 44.15 326** P **P** 07 26 36.6 -0.9
**AGMN Agassiz Nation 44.15 326** P **P** 07 26 36.8 -0.7
baz=127,SNR=7.6
**T25A Trinidad 44.68 308** P **P** 07 26 42.1 -0.1
T25A IAmb IAmb 07 26 43.1
comp=Z,15nm,0.9s
**T25A Trinidad 44.68 308** P **P** 07 26 41.8 -0.4
baz=108,SNR=8.9
**ULM Lac du Bonnet 45.34 329** P **P** 07 26 45.5 -1.4
comp=Z,7.1nm,0.7s,baz=127,slow=9.5,SNR=9.4
ULM LR LR 07 44 16.2
comp=Z,112nm,22.0s,baz=68,slow=34
**ULM Lac du Bonnet 45.34 329** P **P** 07 26 46.3 -0.6
**BNM Barren Site 45.63 303** P **P** 07 26 50.4 +0.6
**ANMO Albuquerque 45.68 304** P **P** 07 26 50.3 +0.1
comp=Z,5.6nm,0.9s,baz=113,slow=8.6,SNR=16
**ANMO Albuquerque 45.68 304** P **P** 07 26 50.2 +0.1
**ANMO Albuquerque 45.68 304** P **P** 07 26 50.2 +0.1
baz=104
**SDCO Great Sand Dun 45.69 308** P **P** 07 26 50.5 +0.1
SDCO IAmb IAmb 07 26 51.1
comp=Z,10nm,0.9s
**SDCO Great Sand Dun 45.69 308** P **P** 07 26 50.4 +0.1
baz=108,SNR=19
**Q24A Divide 45.80 310** P **P** 07 26 51.4 +0.2
baz=109
**121A Cookes Peak, D 46.24 301** P **P** 07 26 55.8 +1.1
121A IAmb IAmb 07 26 56.8
comp=Z,21nm,1.0s
**121A Cookes Peak, D 46.24 301** P **P** 07 26 55.5 +0.9
baz=101,SNR=13
**ISCO Idaho Springs 46.41 311** P **P** 07 26 56.5 +0.5
**ISCO Idaho Springs 46.41 311** P **P** 07 26 56.1 +0.1
baz=109,SNR=12
**S22A 4UR Ranch, Cre 46.70 308** P **P** 07 26 57.9 -0.4
baz=106,SNR=13
**RSSD Black Hills 46.92 317** P **P** 07 26 59.7 -0.1
baz=114
**N23A Red Feather La 47.02 312** P **P** 07 27 01.9 +1.3
baz=110,SNR=6.1
**LPIG La Paz 47.57 289** LR LR 07 47 51.9
comp=Z,98nm,21.3s,baz=41,slow=37
**MVCO Mesa Verde 47.84 307** P **P** 07 27 07.9 +0.9
baz=105
**K22A Casper 48.03 314** P **P** 07 27 08.2 -0.1
baz=111
**W18A Petrified Fore 48.34 304** P **P** 07 27 11.1 +0.2
baz=102
**O20A White River Ci 48.44 311** P **P** 07 27 11.5 -0.1
baz=107
**TUC Tucson 48.71 300** P **P** 07 27 14.6 +1.0
TUC IAmb IAmb 07 27 15.2
comp=Z,14nm,0.9s
**TUC Tucson 48.71 300** P **P** 07 27 14.0 +0.3
baz=99
**DGMT Dagmar 48.94 322** P **P** 07 27 15.4 +0.4
baz=118
**FRB Frobisher Bay 49.05 355** LR LR 07 47 50.1
comp=Z,103nm,19.6s,baz=148,slow=36
**LAO LASA Array 49.39 320** P **P** 07 27 19.0 +0.5
baz=114,SNR=5.4
**X16A Lo Mia Camp, P 49.59 303** P **P** 07 27 21.4 +0.9
X16A IAmb IAmb 07 27 22.5
comp=Z,9.3nm,0.9s
**WUAZ Wupatki 49.73 304** P **P** 07 27 22.3 +0.8
baz=101,SNR=6.6
**SRU San Rafael Swe 49.85 309** P **P** 07 27 22.5 +0.1
SRU IAmb IAmb 07 27 23.7
comp=Z,11nm,0.8s
**BW06 Boulder Array 50.18 314** P **P** 07 27 24.8 -0.1
**BW06 Boulder Array 50.18 314** P **P** 07 27 24.7 -0.1
baz=108,SNR=27
**PD31 Pinedale Array 50.18 314** P **P** 07 27 24.9 -0.1
**PDAR Pinedale Array 50.18 314** P **P** 07 27 24.8 -0.1
comp=Z,16nm,0.7s,baz=116,slow=9.2,SNR=169
PDAR LR LR 07 49 31.1
comp=Z,86nm,21.2s,baz=46,slow=37
**PDAR Pinedale Array 50.18 314** P **P** 07 27 24.6 -0.3
**Q16A Castle Valley 50.30 308** P **P** 07 27 26.5 +0.7
Q16A IAmb IAmb 07 27 28.3
comp=Z,8.9nm,0.9s
**RLMT Red Lodge 50.76 317** P **P** 07 27 29.9 +0.7
RLMT IAmb IAmb 07 27 30.6
comp=Z,18nm,0.9s
**H10N3 ASCENSION HYDR 50.95 113** T T 08 22 46.8
baz=296,slow=76,SNR=438
**H10N2 ASCENSION HYDR 50.96 113** T T 08 22 47.3
baz=296,slow=76,SNR=440
**H10N1 ASCENSION HYDR 50.98 113** T T 08 22 44.8
baz=296,slow=76,SNR=312
**CTU Camp Tracy 51.17 310** P **P** 07 27 33.0 +0.7
**NLU North Lily Min 51.23 309** P **P** 07 27 33.4 +0.6
NLU IAmb IAmb 07 27 34.2
comp=Z,7.9nm,0.9s
**AHID Auburn Hatcher 51.26 313** P **P** 07 27 33.3 +0.3
**REDW Red Top Meadow 51.27 314** P **P** 07 27 33.4 +0.4
REDW IAmb IAmb 07 27 53.9
comp=Z,14nm,1.1s
**H10S3 ASCENSION HYDR 51.31 115** T T 08 23 13.9
baz=295,slow=75,SNR=161
**H10S2 ASCENSION HYDR 51.33 115** T T 08 23 15.3
baz=285,slow=75,SNR=113
**H17A Grant Village 51.40 315** P **P** 07 27 35.1 +1.1
baz=109
**PDMCI Parker Dam,Lak 51.78 302** P **P** 07 27 37.3 +0.6
baz=98
**DUG Dugway, Tooele 51.83 310** P **P** 07 27 37.3 0.0
baz=104,SNR=21

**EGMT Eagleton 52.12 320** P **P** 07 27 39.8 +0.7
**EGMT Eagleton 52.12 320** P **P** 07 27 39.7 +0.5
baz=112,SNR=16
**SFJD Kangerlussuaq 52.41 5** LR LR 07 49 39.5
comp=Z,89nm,19.2s,baz=92,slow=36
**BOZ Bozeman (W) 52.49 316** P **P** 07 27 42.2 +0.2
baz=109,SNR=15
**IRM Iron Mountain 52.58 302** P **P** 07 27 43.4 +0.7
baz=97,SNR=11
**BC3 Big Chuckawall 52.77 301** P **P** 07 27 44.7 +0.4
baz=97
**GMRC Granite Mounta 53.08 302** P **P** 07 27 47.3 +0.7
baz=98
**BELC Belle Mtn. Jos 53.27 301** P **P** 07 27 48.4 +0.5
baz=97
**TUQ Turquoise Moun 53.38 303** P **P** 07 27 49.7 +1.0
baz=98
**MONP2 Monument Peak 53.50 300** P **P** 07 27 50.4 +0.6
baz=96
**MDT Midelt 53.54 60** LR LR 07 47 50.3
comp=Z,212nm,19.9s,baz=26,slow=33
**R11A Troy Canyon, C 53.56 307** P **P** 07 27 50.6 +0.5
baz=100,SNR=9.9
**TPFO Pinon Flats 53.60 301** P **P** 07 27 50.9 +0.5
baz=96
**PFO Pinyon Flats O 53.60 301** LR LR 07 56 26.7
comp=Z,54nm,18.2s,baz=51,slow=42
**PFO Pinyon Flats O 53.60 301** P **P** 07 27 50.6 +0.2
baz=96
**HEC Hector,Ludlow 53.64 302** P **P** 07 27 51.3 +0.7
baz=97,SNR=5.5
**SHOC Shoshone, Teco 53.73 304** P **P** 07 27 52.1 +0.9
baz=98
**HLID Hailey 53.81 313** P **P** 07 27 52.1 +0.3
baz=105,SNR=19
**TPNV Topopah Spring 53.86 305** P **P** 07 27 53.0 +0.8
baz=99,SNR=12
**GSC Goldstone, Bar 54.08 303** P **P** 07 27 54.2 +0.4
baz=97
**MURC Murrieta 54.21 301** P **P** 07 27 55.0 +0.3
baz=96
**FURC Furnace Creek, 54.28 304** P **P** 07 27 55.5 +0.5
baz=98
**MSO Missoula 54.39 317** P **P** 07 27 56.3 +0.4
baz=108
**KOWA Kowa 54.54 83** LR LR 07 49 30.2
comp=Z,96nm,18.2s,baz=16,slow=34
**KOWA Kowa 54.54 83** P **P** 07 27 56.5 -0.8
KOWA IAmb IAmb 07 28 20.7
comp=Z,7.9nm,0.8s
**MPMC Manual Prospec 54.73 304** P **P** 07 27 58.9 +0.3
baz=97,SNR=5.1
**LRMC Laurel Mtn Rad 54.81 303** P **P** 07 27 59.6 +0.4
baz=97
**ESDC Sonseca Array 54.97 52** P **P** 07 28 00.9 +0.7
comp=Z,0.6nm,0.7s,baz=260,slow=8.4,SNR=4.2
ESDC LR LR 07 45 38.7
comp=Z,126nm,22.0s,baz=360,slow=30
**EDW2 Edwards Air Fo 55.00 302** P **P** 07 28 00.9 +0.5
baz=96
**DBIC Dimbokro 55.19 92** P **P** 07 28 01.8 -0.3
comp=Z,4.2nm,0.9s,baz=325,slow=6.0,SNR=2.5
**CIS Catalina Islan 55.21 300** P **P** 07 28 03.1 +1.1
baz=95
**CWC Cottonwood Cre 55.25 304** P **P** 07 28 03.3 +0.9
baz=97
**ISA Isabella, Lake 55.47 303** P **P** 07 28 04.6 +0.7
baz=96
**NV11 Mina Array Sit 55.57 306** P **P** 07 28 05.4 +0.8
**NVAR Mina Array Bea 55.68 306** P **P** 07 28 06.2 +0.7
comp=Z,11nm,0.7s,baz=103,slow=6.5,SNR=93
**ICESG Greenland Ices 55.70 9** *i* P **P** 07 28 03.5 -1.7
ICESG IAmb IAmb 07 28 05.6
comp=Z,6.0nm,0.7s
**ARVC Arvin 55.71 302** P **P** 07 28 06.0 +0.6
baz=96
**VES Vestal, Richgr 55.99 303** P **P** 07 28 07.8 +0.4
baz=96
**MLAC Mammoth, Mammo 55.99 305** P **P** 07 28 08.2 +0.4
baz=97
**PLCA Paso Flores 56.18 189** P **P** 07 28 09.0 +0.3
comp=Z,15nm,1.0s,baz=13,slow=8.3,SNR=23
**PLCA Paso Flores 56.18 189** *e*P **P** 07 28 09.0 +0.3
**PLCA Paso Flores 56.18 189** P **P** 07 28 08.9 +0.2
PLCA IAmb IAmb 07 28 10.1
comp=Z,13nm,0.9s
**EDM Edmonton 56.20 325** P **P** 07 28 08.6 -0.2
**F10A Beach Ranch, E 56.35 316** P **P** 07 28 09.5 -0.5
**BORG Borgarnes 56.43 19** LR LR 07 49 36.1
comp=Z,81nm,18.1s,baz=117,slow=33
**YERR Yerington 56.49 307** P **P** 07 28 10.2 -1.0
**NUUG Nuugaatsiaq 56.73 3** *i* P P 07 28 06.6 -5.5
NUUG IAmb IAmb 07 28 07.8
comp=Z,8.9nm,0.3s
**NEW Newport 56.87 318** P **P** 07 28 13.2 -0.3
baz=106,SNR=22
**I07A Izee 57.52 313** P **P** 07 28 18.7 +0.4
I07A IAmb IAmb 07 28 19.4
comp=Z,13nm,0.8s
**J05D Fort Rock, OR 58.62 312** P **P** 07 28 26.5 +0.4
baz=99,SNR=8.4
**M04C Macdoel 58.84 310** P **P** 07 28 27.8 +0.2
baz=98,SNR=8.7
**I05D Terrebonne, OR 58.86 313** P **P** 07 28 28.5 +0.9
baz=100
**G05D Wamic, OR 59.01 314** P **P** 07 28 29.7 +1.1
baz=100
**SUMG Summit 59.04 8** *i* P **P** 07 28 28.0 -0.8
SUMG IAmb IAmb 07 28 30.3
comp=Z,8.6nm,0.9s
**SUMG Summit 59.04 8** P **P** 07 28 29.4 +0.7
SUMG IAmb IAmb 07 28 56.3
comp=Z,16nm,1.2s
**F05D White Salmon 59.22 315** P **P** 07 28 31.3 +1.3
baz=101
**L04D Klamath Falls 59.24 310** P **P** 07 28 30.6 +0.2
**L04D Klamath Falls 59.24 310** P **P** 07 28 30.2 -0.2
baz=98
**J04D Umpqua Nationa 59.24 312** P **P** 07 28 30.2 -0.3
baz=98,SNR=6.1
**N02D Trinity Center 59.38 309** P **P** 07 28 30.9 -0.4
baz=97
**I04A Tendick Farm, 59.54 312** P **P** 07 28 31.4 -0.9
baz=99
**M02C Callahan 59.54 309** P **P** 07 28 31.0 -1.4
baz=97,SNR=5.6
**H04D Lebanon 59.88 313** P **P** 07 28 34.1 -0.5
baz=99
**KMRM Mail Ridge 60.06 308** P **P** 07 28 37.0 +1.0
**B05A Bryant 60.10 317** P **P** 07 28 34.9 -1.1
baz=102
**L02E Cave Junction 60.19 310** P **P** 07 28 36.2 -0.6
baz=97
**I03D Drain, OR 60.20 312** P **P** 07 28 36.9 +0.2
baz=98
**TORD Torodi Ar. Bea 60.23 83** P **P** 07 28 36.4 -1.1
comp=Z,2.4nm,0.7s,baz=274,slow=6.0,SNR=11
**K02D Willamette Mer 60.30 311** P **P** 07 28 37.4 -0.2
baz=97
**G03D McMinnville, O 60.36 314** P **P** 07 28 38.2 +0.4
baz=99
**LLLB Lillooet 60.46 320** P **P** 07 28 39.0 +0.5
**YKA Yellowknife Ar 60.62 334** P **P** 07 28 38.3 -0.9
comp=Z,5.5nm,0.6s,baz=107,slow=7.5,SNR=89
YKA LR LR 07 56 48.5
comp=Z,57nm,18.7s,baz=3.0,slow=38
**YKA Yellowknife Ar 60.62 334** P **P** 07 28 38.6 -0.7
**COYC Coyhaique 61.15 189** P **P** 07 28 42.8 -0.1
**RES Resolute Bay 62.66 350** LR LR 07 53 53.6
comp=Z,80nm,21.8s,baz=90,slow=34
**NEEM North Greenlan 62.69 2** *i* P **P** 07 28 51.7 -1.7
NEEM IAmb IAmb 07 28 53.9
comp=Z,7.0nm,0.7s
**BBB Bella Bella 64.58 321** LR LR 07 59 21.9
comp=Z,77nm,18.4s,baz=76,slow=38
**WRGLY Wrigley 64.66 334** P **P** 07 29 06.7 +0.6
baz=108
**KEST Kesra 65.20 57** P **P** 07 29 11.8 +1.4
comp=Z,8.7nm,0.8s,baz=273,slow=4.0,SNR=9.4
**KEST Kesra 65.20 57** P **P** 07 29 11.5 +1.2
KEST IAmb IAmb 07 29 38.5
comp=Z,21nm,1.2s
**DAVOX Davos/Dischmat 65.86 45** LR LR 07 53 38.1
comp=Z,164nm,18.8s,baz=322,slow=32
**DAVA Damuels 65.90 45** *e*P **P** 07 29 14.1 -0.6
comp=Z,7.2nm,0.8s
**FETA Feichten 66.46 45** *e*P **P** 07 29 18.6 +0.3

comp=Z,12nm,0.8s
RETA Reutte 66.51 44 eP P 07 29 19.6 +1.1
comp=Z,11nm,1.2s
DLBC Dease Lake 66.65 328 LR LR 07 59 29.9
comp=Z,72nm,21.3s,baz=71,slow=37
DLBC Dease Lake 66.65 328 P P 07 29 20.5 +1.3
MOTA Moosalm 66.73 45 eP P 07 29 20.0 0.0
comp=Z,7.5nm,0.9s
SQTA Sankt Quirin 66.80 45 eP P 07 29 21.0 +0.6
comp=Z,10nm,0.8s
WTTA Wattenberg 67.09 45 eP P 07 29 22.8 +0.5
comp=Z,9.2nm,1.2s
ABTA Abfaltersbach 67.67 45 eP P 07 29 25.9 0.0
comp=Z,3.2nm,0.7s
MMPY Sheldon Lake, 67.97 332 P P 07 29 28.2 +0.7
baz=100
A36M Sachs Harbour 68.14 342 P P 07 29 27.5 -0.7
baz=110,SNR=7.4
CLL Collm 68.19 40 eP P 07 29 29.0 0.0
comp=Z,6.0nm,1.0s
NOA NORSAR Array B 68.20 30 P P 07 29 29.4 +0.5
comp=Z,3.1nm,0.9s,baz=262,slow=6.2,SNR=5.2
KBA Koelnbreinsper 68.25 45 eP P 07 29 29.7 0.0
comp=Z,8.7nm,1.0s
P33M Teslin, Yukon 68.33 329 P P 07 29 30.4 +0.5
baz=98,SNR=10
MYKA Terra Mystica 68.44 45 eP P 07 29 30.7 0.0
comp=Z,6.1nm,1.0s
GERES GERESS Array B 68.53 43 P P 07 29 31.0 -0.3
comp=Z,3.0nm,0.8s,baz=267,slow=5.3,SNR=11
GERES LR LR 07 53 33.3
comp=Z,168nm,19.8s,baz=296,slow=31
FARO Faro, Yukon 68.87 331 P P 07 29 33.7 +0.6
baz=98,SNR=12
MOA Moln 68.89 44 eP P 07 29 34.2 +0.8
comp=Z,4.8nm,1.0s
OBKA Obir 69.07 46 eP P 07 29 34.7 0.0
comp=Z,10.0nm,0.9s
M31M Drury Creek, Y 69.35 331 P P 07 29 37.5 +1.4
M31M Drury Creek, Y 69.35 331 P P 07 29 37.1 +1.1
baz=97,SNR=23
SOKA Soboth 69.40 45 eP P 07 29 36.2 -0.5
comp=Z,3.5nm,0.8s
WHY Whitehorse 69.40 330 P P 07 29 37.0 +0.5
baz=96
ARSA Arzberg 69.74 45 eP P 07 29 38.5 -0.2
comp=Z,5.9nm,0.8s
INK Inuvik 69.92 338 P P 07 29 38.6 -0.7
baz=100,SNR=10
N31M Braeburn, Yuko 69.92 330 P P 07 29 40.3 +0.7
baz=96,SNR=10
CONA Conrad Observa 69.96 44 eP P 07 29 40.1 -0.1
comp=Z,5.0nm,1.3s
MAYO Mayo, Yukon 70.20 333 P P 07 29 42.2 +1.0
baz=96
HYT Haines Junctio 70.70 330 P P 07 29 46.0 +1.5
baz=94,SNR=9.4
EPYK Eagle Plains 70.86 336 P P 07 29 45.9 +0.7
baz=97
MODS Modra-Piesok 70.91 44 eP P 07 29 47.0 +1.2
YUK6 Outpost Mounta 71.13 330 P P 07 29 48.3 +1.1
baz=93
YUK4 Talbot Arm 71.29 330 P P 07 29 48.7 +0.6
baz=93,SNR=5.5
J29M Klondike Camp 71.30 333 P P 07 29 49.5 +1.5
baz=95
DAWY Dawson 71.78 333 P P 07 29 51.6 +0.8
DAWY IAmb IAmb 07 29 52.4
comp=Z,14nm,0.9s
DAWY Dawson 71.78 333 P P 07 29 51.2 +0.3
baz=93,SNR=13
YUK3 Moose Creek 72.17 331 P P 07 29 54.0 +0.6
baz=92
BVCY Beaver Creek 72.38 331 P P 07 29 54.8 +0.4
baz=92,SNR=6.8
EGAK Eagle 72.58 334 P P 07 29 56.0 +0.4
EGAK IAmb IAmb 07 29 56.8
comp=Z,16nm,1.2s
EGAK Eagle 72.58 334 P P 07 29 55.5 0.0
baz=92,SNR=6.7
PDG Podgorica 72.59 50 P P 07 29 56.4 +0.4
BCAR Beaver Creek A 72.82 332 P P 07 29 57.8 +0.7
L27K Beaver Creek, 72.84 332 P P 07 29 57.9 +0.7
baz=91
M27K Edge Creek, AK 72.85 331 P P 07 29 58.0 +0.6
baz=91
M26K Nabesna, AK 73.37 331 P P 07 30 00.5 +0.2
baz=90
L26K Log Cabin Wild 73.53 332 P P 07 30 01.6 +0.3
baz=90,SNR=14
J26L Joseph Creek 73.61 333 P P 07 30 01.9 +0.1
baz=90
CRVS Cervenica-Dubn 73.65 43 eP P 07 30 03.6 +1.4
SCRK Sand Creek 73.81 333 P P 07 30 03.3 +0.4
baz=89
BMAR Burnt Mountain 74.01 336 P P 07 30 05.1 +1.1
N25K Chitina, Valde 74.15 330 P P 07 30 05.4 +0.5
baz=88
BMRM Bremner River 74.17 330 P P 07 30 05.5 +0.5
baz=88
RIDG Independent Ri 74.19 333 P P 07 30 05.7 +0.6
baz=88
HARP HAARP 74.38 331 P P 07 30 06.6 +0.4
baz=88
J25K Salcha River, 74.39 334 P P 07 30 05.9 -0.4
baz=88
PRP Porcupine Dome 74.43 334 P P 07 30 06.6 +0.1
baz=88
PAX Paxson 74.50 332 P P 07 30 06.8 -0.2
baz=88,SNR=5.8
ARCES ARCESS Array B 74.72 21 P P 07 30 08.0 0.0
comp=Z,10nm,1.0s,baz=264,slow=6.0,SNR=9.7
ARCES ARCESS Array B 74.72 21 P P 07 30 08.1 +0.1
KLU Klutina 74.79 330 P P 07 30 08.7 +0.1
baz=87
IL31 75.04 334 P P 07 30 10.4 +0.5
ILAR Eielson Array 75.04 334 P P 07 30 09.6 -0.3
comp=Z,3.8nm,0.8s,baz=98,slow=4.6,SNR=31
ILAR LR LR 08 05 30.7
comp=Z,57nm,18.9s,baz=84,slow=38
ILAR Eielson Array 75.04 334 P P 07 30 10.4 +0.5
POKR Poker Plat Res 75.25 334 P P 07 30 11.4 +0.3
baz=86
FINES FINESS Array B 75.38 30 P P 07 30 12.0 +0.1
comp=Z,5.7nm,0.9s,baz=273,slow=7.4,SNR=6.0
FINES LR LR 07 59 18.6
comp=Z,273nm,20.0s,baz=277,slow=32
FINES FINESS Array B 75.38 30 P P 07 30 12.7 +0.7
H24K Noodor Dome 75.39 335 P P 07 30 12.1 +0.2
baz=86
GLI Glacier Island 75.39 330 P P 07 30 12.7 +0.7
baz=86
SCM Sheep Creek Mo 75.43 331 P P 07 30 12.3 0.0
baz=86
COLA College 75.44 334 P P 07 30 12.4 +0.2
COLA IAmb IAmb 07 30 13.1
comp=Z,33nm,1.5s
COLA College 75.44 334 P P 07 30 12.1 -0.1
baz=86
TCOL CIGO, UAF Yank 75.45 334 P P 07 30 12.8 +0.5
TCOL IAmb IAmb 07 30 13.2
comp=Z,28nm,1.4s
TCOL CIGO, UAF Yank 75.45 334 P P 07 30 12.1 -0.2
baz=86
MDM Murphy Dome 75.60 334 P P 07 30 13.6 +0.4
TOLK Toolik Lake Re 75.84 338 P P 07 30 14.2 -0.3
baz=85
SML Sawmill 75.91 331 P P 07 30 15.1 +0.1
baz=85
NEA2 Nenana 75.99 334 P P 07 30 15.0 -0.4
baz=85,SNR=7.3
PWL Port Wells 76.00 330 P P 07 30 16.0 +0.5
baz=84
KNK Knik Glacier 76.01 330 P P 07 30 15.6 0.0
baz=84
MCK McKinley 76.01 333 P P 07 30 15.8 +0.3
baz=85
I23K Minto, Yukon-K 76.06 334 P P 07 30 15.6 -0.1
baz=85,SNR=5.8
COLD Coldfoot 76.20 336 P P 07 30 17.2 +0.7
baz=84
BUR08 Bucovina Ar. S 76.26 44 P P 07 30 18.6 +1.2
BUR08 IAmb IAmb 07 30 19.8
comp=Z,12nm,0.9s
BURAR Bucovina Array 76.28 44 P P 07 30 18.5 +1.1
BURAR IAmb IAmb 07 30 20.1
comp=Z,12nm,0.8s
PMR Palmer 76.31 331 P P 07 30 17.7 +0.5
baz=84
NACGM Naroch 76.38 36 i P P 07 30 16.4 -1.4
SEW Seward 76.63 329 P P 07 30 19.3 +0.2
baz=83
TRF Thorofare Moun 76.64 332 P P 07 30 19.3 0.0
baz=84,SNR=11
MLY Manley 76.65 334 P P 07 30 18.9 -0.3
baz=83
RC01 Rabbit Creek A 76.66 330 P P 07 30 19.3 +0.1
baz=83
BPAW Bear Paw Mtn. 76.87 333 P P 07 30 20.1 -0.3
baz=83
MLR Muntele Rosu 77.06 46 LR LR 08 00 12.0
comp=Z,172nm,20.1s,baz=345,slow=32
MLR Muntele Rosu 77.06 46 P P 07 30 22.9 +1.0
MLR IAmb IAmb 07 30 24.0
comp=Z,14nm,1.1s
I21K Tanana 77.16 334 P P 07 30 22.4 +0.5
baz=82
H21K Melozitna Rive 77.43 335 P P 07 30 23.3 -0.2
baz=82
CAST Castle Rocks 77.44 333 P P 07 30 23.4 -0.2
baz=82
CHUM Lake Minchumin 77.48 333 P P 07 30 23.3 -0.5
baz=82
PPLA Purkeypile 77.57 332 P P 07 30 24.1 -0.4
baz=82
J20K Nowinta River 78.23 333 P P 07 30 28.3 +0.4
baz=80
K20K Telida 78.34 333 P P 07 30 28.8 +0.2
baz=80
L20K Farewell, AK 78.40 332 P P 07 30 28.8 -0.2
baz=80
AKASG Malin Array Be 78.44 40 P P 07 30 28.8 -0.6
comp=Z,3.2nm,1.0s,baz=268,slow=4.4,SNR=12
KDAK Kodiak Island 78.57 327 LR LR 08 06 17.2
comp=Z,71nm,20.5s,baz=70,slow=36
KDAK Kodiak Island 78.57 327 P P 07 30 29.7 -0.2
baz=80
M19K Big River Lodg 78.74 331 P P 07 30 30.8 0.0
baz=80
L19K White Mountain 78.90 332 P P 07 30 31.8 0.0
baz=79
N19K Bonanza Creek 78.99 330 P P 07 30 32.4 +0.1
baz=79
OHAK Old Harbor 79.04 326 P P 07 30 32.8 +0.3
baz=80
GCSA Galena City Sc 79.28 334 P P 07 30 33.9 +0.3
baz=78
P18K Big Mountain, 79.63 329 P P 07 30 35.7 -0.1
baz=78
RDOG Red Dog Mine 80.80 338 P P 07 30 42.1 +0.2
baz=73
KLMR Klimovskoe 81.89 29 eP P 07 30 46.5 -1.2
KLMR AMP 07 30 49.6
comp=Z,12nm,1.1s
CHGN Chignik 82.00 326 P P 07 30 48.8 +0.5
baz=75
ANM Nome 82.85 335 P P 07 30 53.2 +0.6
baz=70
TNA Tin City 83.50 336 P P 07 30 57.1 +1.1
baz=68,SNR=7.0
BRTR Keskin Array B 83.75 51 P P 07 30 58.0 0.0
comp=Z,3.8nm,0.9s,baz=265,slow=4.6,SNR=7.7
BRTR Keskin Array B 83.75 51 P P 07 30 58.2 +0.2
TSUM Tsumeb 84.03 112 LR LR 08 00 23.7
comp=Z,77nm,21.7s,baz=328,slow=30
UNV Unalaska Valle 87.18 325 P P 07 31 15.6 +1.0
baz=68
SUR Sutherland 90.79 123 LR LR 08 08 50.3
comp=Z,56nm,18.3s,baz=348,slow=33
MBAR Mbarara 91.39 90 LR LR 08 10 08.5
comp=Z,47nm,21.2s,baz=299,slow=34
ARU Arti 92.75 29 LR LR 08 08 33.3
comp=Z,156nm,20.9s,baz=304,slow=32
LBTB Lobatse 92.80 115 LR LR 08 06 52.4
comp=Z,53nm,19.9s,baz=314,slow=31
NRIK Noril'sk 92.95 11 P P 07 31 40.1 -1.1
comp=Z,1.1nm,0.5s,baz=358,slow=12,SNR=1.9
BOSA Boshof 93.44 119 LR LR 08 09 18.2
comp=Z,63nm,18.4s,baz=338,slow=33
SHEM Shemya Is, Ala 97.85 330 LR LR 08 16 25.6
comp=Z,39nm,21.6s,baz=32,slow=36
CD2 Chengdu 131.96 18 PKP PKPdf 07 37 41.3 -1.1
PZH PanZhiHua 135.33 23 PKP PKPdf 07 37 48.6 -0.4
CMAR Chiang Mai Arr 141.13 32 PKP PKPdf 07 37 59.3 -0.3
comp=Z,1.0nm,0.3s,baz=306,slow=2.1,SNR=4.2
ASAR Alice Springs 163.86 235 PKP PKPdf 07 38 31.6 -0.6
comp=Z,1.8nm,1.0s,baz=143,slow=2.8,SNR=8.6
ASAR PKPab PKPab 07 39 24.0 -0.9
comp=Z,1.0nm,0.8s,baz=121,slow=4.2,SNR=6.3
ASAR Alice Springs 163.86 235 PKPdf PKPdf 07 38 32.2 0.0
WRA Warramunga Arr 164.98 249 PKP PKPdf 07 38 32.2 -1.0
comp=Z,1.9nm,1.1s,baz=53,slow=1.0,SNR=6.6
WRA PKPab PKPab 07 39 29.9 0.0
comp=Z,3.9nm,0.9s,baz=98,slow=4.4,SNR=16

*IDC **02** 07:29:45.5±0.8, 16°.89N×85°.63W, h0km, mb3.8/9, mb1 4.1/14, mb1mx3.8/43, mbtmp3.9/14, ML3.7/5, MS3.4/2, Ms1 3.4/2, ms1mx2.9/63, Error ellipse: s-maj=20.3km s-min=15.0km az=69.0*
*UCR **02** 07:29:48.6±0.7, 17°.00N×85°.69W, h35km, mb4.4(NEIC)*
*NEIC **02** 07:29:50.3±2.0, 16°.91N±0°.07×85°.64W±0°.07, h35km±6km, mb4.4/44, Error ellipse: s-maj=10.6km s-min=9.7km az=147.0*

**ISC 02 07:29:49.8**±0.5, **16°.92N**±0°.06×**85°.71W**±0°.05, **h35**km, **n96**, σ1°.**18**/93, **mb4.4**/21, **North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| TGUH | Tegucigalpa,Un | 3.22 | 208 | eP | Pn | | 07 30 38.1 | 0.0 |
| TGUH | Tegucigalpa,Un | 3.22 | 208 | Pn | Pn | | 07 30 37.9 | -0.1 |
| TGUH | Tegucigalpa,Un | 3.22 | 208 | eP | Pn | | 07 30 38.1 | 0.0 |
| MATN | Matagalpa | 3.97 | 183 | | Pn | | 07 30 48.3 | -0.1 |
| PETF | Flores | 3.98 | 271 | eP | Pn | | 07 30 47.9 | -0.5 |
| PETF | Flores | 3.98 | 271 | Pn | Pn | | 07 30 48.3 | -0.1 |
| PETF | Flores | 3.98 | 271 | eP | Pn | | 07 30 47.9 | -0.5 |
| ESQI | Esquipulas | 4.21 | 237 | Pn | Pn | | 07 30 52.6 | +1.0 |
| ESQI | Esquipulas | 4.21 | 237 | eP | Pn | | 07 30 52.0 | +0.3 |
| MTO3 | Montecristo | 4.32 | 235 | eP | Pn | | 07 30 53.3 | +0.1 |
| MTO3 | Montecristo | 4.32 | 235 | Pn | Pn | | 07 30 53.9 | +0.6 |
| MTO3 | Montecristo | 4.32 | 235 | eP | Pn | | 07 30 53.3 | +0.1 |
| MTO3 | | | | IAML | | | 07 32 01.6 | |
| | comp=Z,30nm,0.4s | | | | | | | |
| CRIN | San Cristobal | 4.39 | 197 | | Pn | | 07 30 54.8 | +0.6 |
| BOAB | BOACO BROADBAN | 4.45 | 179 | Pn | Pn | | 07 30 54.2 | -0.5 |
| TACO | Tacachico | 4.58 | 231 | eP | Pn | | 07 30 56.8 | +0.2 |
| TACO | Tacachico | 4.58 | 231 | eP | Pn | | 07 30 56.8 | +0.2 |
| TACO | | | | IAML | | | 07 32 17.9 | |
| | comp=Z,38nm,0.6s | | | | | | | |
| JAYA | Jayaque - finc | 4.86 | 229 | eP | Pn | | 07 31 01.3 | +0.8 |
| JAYA | Jayaque - finc | 4.86 | 229 | eP | Pn | | 07 31 01.3 | +0.8 |
| JAYA | | | | IAML | | | 07 32 20.6 | |
| | comp=Z,32nm,0.5s | | | | | | | |
| ESPN | Las Esperanzas | 4.89 | 164 | Pn | Pn | | 07 31 01.2 | +0.3 |
| ACON | Acoyapa | 4.95 | 174 | Pn | Pn | | 07 31 01.8 | 0.0 |
| APG | El Apazote | 4.96 | 248 | Pn | Pn | | 07 31 01.7 | -0.3 |
| | comp=Z,2.7nm,0.3s,baz=68,slow=14,SNR=9.4 | | | | | | | |
| APG | | | | Sn | Sn | | 07 31 59.5 | +1.2 |
| | comp=Z,4.7nm,0.3s,baz=21,slow=22,SNR=2.1 | | | | | | | |
| APG | | | | Lg | Lg | | 07 32 19.0 | |
| | comp=Z,6.3nm,0.3s,baz=8.1,slow=23,SNR=3.5 | | | | | | | |
| PRVC | Isla de Provid | 5.48 | 129 | Pn | Pn | | 07 31 07.5 | -1.5 |
| HUEH | Huehuetenango | 5.79 | 255 | Pn | Pn | | 07 31 14.0 | +0.5 |
| LCCY | Blossom Villag | 6.00 | 62 | Pn | Pn | | 07 31 14.7 | -1.5 |
| CCIG | Comitan | 6.20 | 265 | Pn | Pn | | 07 31 19.4 | +0.4 |
| SOR | Soroa | 6.37 | 23 | Pn | Pn | | 07 31 21.7 | +0.4 |
| JTS | Las Juntas de | 6.63 | 174 | Pn | Pn | | 07 31 24.9 | 0.0 |
| | comp=Z,3.1nm,0.3s,baz=50,slow=15,SNR=16 | | | | | | | |
| JTS | | | | Sn | Sn | | 07 32 37.2 | -2.0 |
| | comp=Z,3.1nm,0.3s,baz=308,slow=19,SNR=6.7 | | | | | | | |
| JTS | | | | Lg | Lg | | 07 33 12.0 | |
| | comp=Z,2.0nm,0.3s,baz=219,slow=19,SNR=5.8 | | | | | | | |
| JACO | JACO, Garabito | 7.29 | 172 | Pn | Pn | | 07 31 33.8 | 0.0 |
| RIMA | Rio Macho | 7.33 | 166 | Pn | Pn | | 07 31 34.1 | -0.6 |
| MTDJ | Mount Denham | 7.90 | 79 | Pn | Pn | | 07 31 40.7 | -1.7 |
| CMIG | Matias Romero | 8.78 | 272 | Pn | Pn | | 07 31 54.4 | +0.1 |
| | comp=Z,0.7nm,0.3s,baz=108,slow=9.9,SNR=13 | | | | | | | |
| CMIG | | | | Sn | Sn | | 07 33 29.1 | -3.1 |
| | comp=Z,1.4nm,0.3s,baz=358,slow=9.1,SNR=2.0 | | | | | | | |
| GTBY | Guantanamo Bay | 10.49 | 72 | Pn | Pn | | 07 32 17.1 | -0.7 |
| DWPF | Disney Wildern | 11.81 | 19 | Pn | Pn | | 07 32 34.8 | -1.0 |
| 656A | Willston | 12.73 | 13 | Pn | Pn | | 07 32 46.6 | -1.7 |
| 553A | Crawfordville | 13.26 | 5 | Pn | Pn | | 07 32 54.5 | -1.1 |
| 451A | Vernon | 13.63 | 360 | Pn | Pn | | 07 32 59.7 | -1.0 |
| 250A | Grady | 15.00 | 358 | Pn | Pn | | 07 33 19.4 | +0.2 |
| 255A | Hazlehurst | 15.22 | 11 | Pn | Pn | | 07 33 22.1 | -0.1 |
| HKT | Hockley | 15.94 | 326 | Pn | Pn | | 07 33 32.0 | +0.6 |
| LRAL | Lakeview Retre | 16.09 | 356 | | Pn | | 07 33 32.8 | -0.5 |
| Z47A | Carrollton | 16.35 | 353 | | P | | 07 33 37.5 | -1.7 |
| Z47A | | | | IAmb | IAmb | | 07 33 40.4 | |
| | comp=Z,26nm,0.6s | | | | | | | |
| GOGA | Godfrey | 16.54 | 7 | | Pn | | 07 33 38.3 | -0.8 |
| SDV | Santo Domingo | 16.71 | 117 | Pn | Pn | | 07 33 41.1 | -0.5 |
| | comp=Z,0.3nm,0.3s,baz=310,slow=12,SNR=2.6 | | | | | | | |
| SDV | | | | LR | LR | | 07 39 47.0 | |
| | comp=Z,121nm,20.5s,baz=154,slow=36 | | | | | | | |
| NHSC | New Hope | 16.87 | 16 | | Pn | | 07 33 42.4 | -0.9 |
| NHSC | | | | IAmb | IAmb | | 07 33 54.4 | |
| | comp=Z,29nm,0.7s | | | | | | | |
| Y49A | Blount Mountai | 16.88 | 358 | | Pn | | 07 33 43.0 | -0.4 |
| 833A | Chaparral WMA, | 16.96 | 314 | Pn | P | | 07 33 45.1 | -1.0 |
| X48A | Hartselle | 17.50 | 356 | P | P | | 07 33 52.2 | +0.3 |
| 435B | Jarrell | 17.54 | 324 | P | P | | 07 33 53.1 | +0.7 |
| 237A | Washetta, Mont | 17.59 | 330 | P | P | | 07 33 54.0 | +1.1 |
| 237A | | | | IAmb | IAmb | | 07 33 58.3 | |
| | comp=Z,30nm,1.1s | | | | | | | |
| OXF | Oxford | 17.83 | 350 | P | P | | 07 33 56.1 | +0.5 |
| OXF | | | | IAmb | IAmb | | 07 34 23.4 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| KMSC | Kings Mountain | 18.56 | 11 | P | P | | 07 34 03.1 | -0.5 |
| KMSC | | | | IAmb | IAmb | | 07 34 15.5 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| TKL | Tuckaleechee C | 18.74 | 5 | P | Pn | | 07 34 05.6 | -0.6 |
| | comp=Z,0.9nm,0.3s,baz=170,slow=16,SNR=13 | | | | | | | |
| TKL | | | | S | Sn | | 07 37 21.3 | -14 |
| | comp=Z,0.6nm,0.3s,baz=82,slow=12,SNR=3.8 | | | | | | | |
| TKL | Tuckaleechee C | 18.74 | 5 | P | Pn | | 07 34 06.8 | +0.6 |
| V52A | Sevierville | 18.94 | 5 | P | P | | 07 34 07.2 | -0.6 |
| WVT | Waverly | 19.23 | 355 | | Pn | | 07 34 12.9 | +0.8 |
| Z35A | Perchaven, San | 19.37 | 330 | P | Pn | | 07 34 12.8 | -1.1 |
| Z35A | | | | IAmb | IAmb | | 07 34 22.8 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| T47A | Sharon Grove | 20.03 | 357 | P | Pn | | 07 34 20.7 | -0.9 |
| T47A | | | | IAmb | IAmb | | 07 34 31.5 | |
| | comp=Z,13nm,0.5s | | | | | | | |
| ABTX | Abilene, Hawle | 20.08 | 324 | P | Pn | | 07 34 22.1 | -0.1 |
| TX31 | Lajitas Ar. Si | 20.59 | 310 | P | Pn | | 07 34 28.7 | +0.3 |
| TX31 | | | | IAmb | IAmb | | 07 34 42.1 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| TX32 | Lajitas Array | 20.59 | 310 | P | Pn | | 07 34 28.6 | +0.2 |
| TXAR | Lajitas Array | 20.59 | 310 | P | Pn | | 07 34 28.4 | +0.1 |
| | comp=Z,2.5nm,0.6s,baz=130,slow=11,SNR=25 | | | | | | | |
| TXAR | | | | S | S | | 07 38 07.5 | -7.0 |
| | comp=Z,0.5nm,0.5s,baz=114,slow=16,SNR=2.7 | | | | | | | |
| TXAR | Lajitas Array | 20.59 | 310 | P | Pn | | 07 34 29.2 | +0.8 |
| WCI | Wyandotte Cave | 21.23 | 359 | | P | | 07 34 34.1 | +1.4 |
| WCI | | | | IAmb | IAmb | | 07 34 35.6 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| R50A | Paris | 21.32 | 3 | P | P | | 07 34 35.0 | +1.4 |
| R50A | | | | IAmb | IAmb | | 07 34 39.9 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| OLIL | Olney | 21.83 | 355 | P | P | | 07 34 39.0 | -0.1 |
| OLIL | | | | IAmb | IAmb | | 07 34 41.7 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| R55A | Marlinton | 21.84 | 12 | P | P | | 07 34 40.0 | +0.7 |
| R55A | | | | IAmb | IAmb | | 07 34 44.8 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| Q51A | Peebles | 22.12 | 5 | P | P | | 07 34 42.3 | 0.0 |
| Q51A | | | | IAmb | IAmb | | 07 34 52.6 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| Q52A | Bidwell | 22.17 | 7 | P | P | | 07 34 42.7 | -0.1 |
| Q52A | | | | IAmb | IAmb | | 07 34 52.2 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| BLO | Bloomington | 22.18 | 358 | P | P | | 07 34 42.7 | -0.2 |
| BLO | | | | IAmb | IAmb | | 07 34 45.2 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| Q54A | Coxs Mills | 22.39 | 10 | P | P | | 07 34 44.2 | -0.9 |
| Q56A | Snyder Ridge, | 22.76 | 13 | P | P | | 07 34 49.4 | +0.3 |
| Q56A | | | | IAmb | IAmb | | 07 34 54.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| P52A | Corning | 22.84 | 7 | P | P | | 07 34 51.4 | +1.4 |
| P52A | | | | IAmb | IAmb | | 07 34 53.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| MNTX | Cornudas Mount | 23.14 | 313 | P | P | | 07 34 53.0 | 0.0 |
| O54A | Avella | 23.64 | 10 | P | P | | 07 34 57.1 | -0.7 |
| O54A | | | | IAmb | IAmb | | 07 35 01.2 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| M50A | Fremont | 24.51 | 5 | P | P | | 07 35 07.5 | +1.6 |
| M53A | WI Miller and | 24.82 | 9 | P | P | | 07 35 09.3 | +0.6 |
| 121A | Cookes Peak, D | 25.29 | 312 | P | P | | 07 35 13.7 | +0.4 |
| 121A | | | | IAmb | IAmb | | 07 35 28.8 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| ERPA | Erie | 25.59 | 10 | P | P | | 07 35 16.5 | +0.8 |
| ANMO | Albuquerque | 25.80 | 318 | P | P | | 07 35 19.4 | +1.4 |
| | comp=Z,0.4nm,0.6s,baz=159,slow=13,SNR=2.2 | | | | | | | |
| L56A | Greenwood | 26.08 | 14 | P | P | | 07 35 19.3 | -0.9 |
| SADO | Sadowa | 28.31 | 10 | P | P | | 07 35 40.8 | +0.7 |
| | comp=Z,5.4nm,0.6s,baz=242,slow=4.6,SNR=7.6 | | | | | | | |
| SADO | Sadowa | 28.31 | 10 | P | P | | 07 35 39.1 | -1.0 |
| MDP | Montagnes des | 34.45 | 106 | LR | LR | | 07 52 00.4 | |
| | comp=Z,68nm,18.8s,baz=246,slow=39 | | | | | | | |
| NVAR | Mina Array Bea | 35.66 | 313 | P | P | | 07 36 47.4 | +2.4 |
| | comp=Z,0.5nm,0.6s,baz=119,slow=9.4,SNR=4.7 | | | | | | | |
| SCHQ | Schefferville | 40.54 | 17 | P | P | | 07 37 26.4 | +0.9 |
| | comp=Z,2.4nm,0.4s,baz=220,slow=6.8,SNR=11 | | | | | | | |
| SCHQ | Schefferville | 40.54 | 17 | P | P | | 07 37 26.4 | +0.9 |
| SCHQ | | | | IAmb | IAmb | | 07 37 41.2 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| SIV | San Ignacio | 40.74 | 142 | P | P | | 07 37 28.4 | +0.8 |
| | comp=Z,1.8nm,0.9s,baz=321,slow=22,SNR=8.2 | | | | | | | |
| FCC | Fort Churchill | 42.23 | 354 | P | P | | 07 37 40.2 | +0.9 |
| YKA | Yellowknife Ar | 49.81 | 343 | P | P | | 07 38 39.2 | +0.2 |
| | comp=Z,0.2nm,0.6s,baz=138,slow=8.0,SNR=7.1 | | | | | | | |
| INK | Inuvik | 59.50 | 341 | P | P | | 07 39 50.8 | +1.7 |
| INK | | | | IAmb | IAmb | | 07 39 51.1 | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| SUMG | Summit | 61.86 | 15 | i P | P | | 07 40 05.0 | -0.6 |
| IL31 | | 62.67 | 335 | P | P | | 07 40 10.8 | +0.2 |
| IL31 | | | | IAmb | IAmb | | 07 40 32.4 | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| ILAR | Eielson Array | 62.67 | 335 | P | P | | 07 40 12.0 | +1.3 |
| | comp=Z,1.0nm,0.6s,baz=115,slow=5.3,SNR=17 | | | | | | | |
| ILAR | Eielson Array | 62.67 | 335 | P | P | | 07 40 10.7 | 0.0 |
| BMAR | Burnt Mountain | 62.75 | 338 | P | P | | 07 40 12.0 | +0.8 |
| TORD | Torodi Ar. Bea | 83.82 | 78 | P | P | | 07 42 16.3 | -0.1 |
| | comp=Z,0.7nm,1.0s,baz=308,slow=6.8,SNR=1.3 | | | | | | | |

*SSNC **02** 07:38:57.5±2.0, 19°.55N×73°.64W, h10km, MD2.9, ML2.2, MW3.1*
*OSPL **02** 07:38:58.4±0.9, 19°.86N×73°.71W, h45km±320km, ML2.2*

**ISC 02 07:38:56.1**±1.2, **19°.53N**±0°.08×**73°.72W**±0°.06, **h12**km±11km, **n11**, σ1°.**63**/18, **Haiti region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| MASC | Masc | 0.80 | 323 | eP | Pg | | 07 39 11.4 | -0.1 |
| MASC | | | | eS | Sg | | 07 39 21.1 | -0.9 |
| MASC | | | | IAML | | | 07 39 21.6 | |
| | comp=E,68nm,0.1s | | | | | | | |
| MASC | | | | IAML | | | 07 39 22.3 | |
| | comp=N,86nm,0.1s | | | | | | | |
| GTBY | Guantanamo Bay | 1.37 | 287 | eP | Pn | | 07 39 21.3 | +0.3 |
| GTMO | Guantanamo | 1.44 | 292 | eP | Pn | | 07 39 20.6 | -1.5 |
| LGNH | Logne | 1.47 | 134 | i P | Pg | | 07 39 24.7 | +0.5 |
| LGNH | | | | eS | Sg | | 07 39 43.8 | +0.6 |
| LGNH | | | | IAML | | | 07 39 46.9 | |
| | comp=Z,25nm,1.3s | | | | | | | |
| MOAC | Moa | 1.62 | 314 | eP | Pn | | 07 39 24.1 | -0.3 |
| MOAC | | | | eS | Sn | | 07 39 44.3 | -0.9 |
| MOAC | | | | IAML | | | 07 39 45.4 | |
| | comp=E,50nm,0.3s | | | | | | | |
| MOAC | | | | IAML | | | 07 39 45.5 | |
| | comp=N,34nm,0.3s | | | | | | | |
| PAPH | Port-au-Prince | 1.68 | 127 | i P | Pb | | 07 39 27.1 | +0.2 |
| PAPH | | | | eS | Sg | | 07 39 49.3 | -0.8 |
| PAPH | | | | IAML | | | 07 39 52.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| RCC | Rio Carpintero | 1.92 | 284 | eP | Pn | | 07 39 28.7 | +0.2 |
| RCC | | | | eS | Sn | | 07 39 52.1 | -0.5 |
| RCC | | | | IAML | | | 07 39 53.0 | |
| | comp=E,19nm,0.2s | | | | | | | |
| RCC | | | | IAML | | | 07 39 53.8 | |
| | comp=N,28nm,0.1s | | | | | | | |
| SDDR | Presa de Saban | 2.36 | 103 | i P | Pn | | 07 39 35.2 | +0.4 |
| SDDR | | | | eS | Sn | | 07 40 01.8 | -1.9 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SDDR | | | IAML | | | 07 40 06.4 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **HLGC** | **Holguin** | **2.58 302** | *eP* | | **Pn** | **07 39 40.3** | **+2.6** |
| HLGC | | | *eS* | | **Sn** | **07 40 13.0** | **+4.0** |
| HLGC | | | IAML | | | 07 40 14.0 | |
| | comp=N,2.2nm,0.1s | | | | | | |
| HLGC | | | IAML | | | 07 40 16.4 | |
| | comp=E,2.5nm,0.2s | | | | | | |
| **LMGC** | **Las Mercedes** | **3.14 280** | *eP* | | **Pn** | **07 39 45.0** | **-0.4** |
| LMGC | | | *eS* | | **Sn** | **07 40 20.6** | **-2.2** |
| LMGC | | | IAML | | | 07 40 21.8 | |
| | comp=E,12nm,0.2s | | | | | | |
| LMGC | | | IAML | | | 07 40 22.1 | |
| | comp=N,15nm,0.1s | | | | | | |
| **CCCC** | **Cccc** | **4.14 294** | *eP* | | Pn | 07 39 54.8 | -4.4 |
| CCCC | | | *eS* | | Sn | 07 40 38.8 | -8.7 |
| CCCC | | | IAML | | | 07 40 39.5 | |
| | comp=N,0.8nm,0.2s | | | | | | |
| CCCC | | | IAML | | | 07 40 40.9 | |
| | comp=E,0.9nm,0.2s | | | | | | |

*IDC* ***02*** *07:42:06.3±1.4,20°.81S×178°.64W,h594km±15km, mb3.5/16,mb1 3.7/19,mb1mx3.4/45,mbtmp4.4/19,Error ellipse: s-maj=22.1km s-min=11.9km az=147.0*
*NEIC* ***02*** *07:42:06.8±2.0,20°.8S±0°.2×178°.5W±0°.1,h598km±10km, mb4.3/23,Error ellipse: s-maj=24.5km s-min=17.2km az=145.0*

**ISC 02 07:42:06.4±0.4,20°.81S±0°.07×178°.56W±0°.07,h600km, n78,σ1°89/87,mb4.2/28,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.42** | **313** | P | **P** | **07 43 35.0** | **-0.1** |
| | 4.4nm,0.3s,baz=146,slow=8.2,SNR=12 | | | | | | |
| MSVF | | | | S | **S** | **07 44 47.2** | **0.0** |
| | 0.5nm,0.3s,baz=81,slow=22,SNR=0.9 | | | | | | |
| **MSVF** | **Nonsavu** | **4.42** | **313** | P | **P** | **07 43 35.5** | **+0.4** |
| **GLKZ** | **Green Lake** | **8.44** | **176** | S | **S** | **07 45 53.5** | **+2.5** |
| **AFI** | **Afiamalu** | **9.43** | **44** | P | **P** | **07 44 18.2** | **-1.6** |
| | 3.9nm,0.3s,baz=146,slow=2.1,SNR=7.3 | | | | | | |
| AFI | | | | S | **S** | **07 46 03.7** | **-5.4** |
| | 2.4nm,0.3s,baz=213,slow=23,SNR=6.6 | | | | | | |
| **AFI** | **Afiamalu** | **9.43** | **44** | P | **P** | **07 44 18.9** | **-0.9** |
| **DZM** | **Mont Dzumac** | **14.02** | **262** | P | **P** | **07 45 05.9** | **+0.2** |
| | 0.6nm,0.3s,baz=97,slow=18,SNR=13 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.02** | **262** | P | **P** | **07 45 07.2** | **+1.6** |
| **OUZ** | **Omahuta** | **15.93** | **204** | P | **P** | **07 45 26.0** | **+3.0** |
| **OUZ** | **Omahuta** | **15.93** | **204** | P | **P** | **07 45 26.3** | **+3.4** |
| **WCZ** | **Waipu Caves** | **16.31** | **201** | P | **P** | **07 45 29.7** | **+3.3** |
| **WIAZ** | **Waiheke Island** | **16.85** | **198** | P | **P** | **07 45 34.5** | **+3.1** |
| **MBAZ** | **Motutapu North** | **16.90** | **198** | P | **P** | **07 45 35.5** | **+3.7** |
| **MXZ** | **Matakaoa Point** | **16.92** | **189** | P | **P** | **07 45 31.8** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **17.16** | **188** | P | **P** | **07 45 35.7** | **+1.6** |
| **HAZ** | **Te Kaha** | **17.19** | **190** | P | **P** | **07 45 34.9** | **+0.5** |
| HAZ | | | | S | **S** | **07 48 18.1** | **-5.5** |
| **AWAZ** | **Awhitu Peninsu** | **17.25** | **199** | P | **P** | **07 45 38.1** | **+3.2** |
| **RUGZ** | **Raukumara Rang** | **17.41** | **190** | P | **P** | **07 45 36.3** | **-0.3** |
| RUGZ | | | | S | **S** | **07 48 24.4** | **-3.0** |
| **PUZ** | **Puketiti** | **17.43** | **188** | P | **P** | **07 45 38.1** | **+1.5** |
| **TWGZ** | **Tauwhareparae** | **17.57** | **189** | P | **P** | **07 45 39.9** | **+2.0** |
| **URZ** | **Urewera** | **17.79** | **191** | P | **P** | **07 45 38.6** | **-1.3** |
| | 1.5nm,0.3s,baz=255,slow=2.6,SNR=12 | | | | | | |
| URZ | | | | S | **S** | **07 48 27.9** | **-5.5** |
| | 0.4nm,0.3s,baz=7.1,slow=23,SNR=1.6 | | | | | | |
| **URZ** | **Urewera** | **17.79** | **191** | P | **P** | **07 45 37.0** | **-2.9** |
| URZ | | | | S | **S** | **07 48 28.0** | **-5.4** |
| **URZ** | **Urewera** | **17.79** | **191** | | **P** | **07 45 39.3** | **-0.6** |
| URZ | | | | IAmb | IAmb | 07 45 40.6 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **28.46** | **244** | P | **P** | **07 47 16.0** | **+0.9** |
| **COEN** | **Coen** | **37.08** | **274** | P | **P** | **07 48 27.6** | **+0.1** |
| COEN | | | | IAmb | IAmb | 07 48 28.3 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **37.18** | **244** | P | **P** | **07 48 28.2** | **0.0** |
| | comp=Z,1.6nm,0.5s,baz=90,slow=10,SNR=6.9 | | | | | | |
| **STKA** | **Stephens Creek** | **37.18** | **244** | P | **P** | **07 48 28.4** | **+0.2** |
| **BBOO** | **Buckleboo** | **41.94** | **244** | P | **P** | **07 49 06.4** | **+0.2** |
| **JAY** | **Jayapura** | **43.64** | **289** | P | **P** | **07 49 20.0** | **+0.2** |
| | comp=Z,12nm,0.5s,baz=157,slow=5.1,SNR=6.3 | | | | | | |
| **WR0** | **Warramunga Arr** | **43.85** | **262** | P | **P** | **07 49 20.2** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 07 49 21.6 | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **43.94** | **257** | P | **P** | **07 49 21.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **43.94** | **257** | P | **P** | **07 49 21.9** | **-0.1** |
| | comp=Z,9.4nm,0.5s,baz=97,slow=7.5,SNR=191 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 50 54.5** | **+0.2** |
| | comp=Z,1.6nm,0.6s,baz=99,slow=3.9,SNR=9.6 | | | | | | |
| ASAR | | | | S | **S** | **07 55 08.2** | **-3.2** |
| | comp=Z,1.3nm,0.8s,baz=91,slow=16,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **43.94** | **257** | P | **P** | **07 49 21.4** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.02** | **263** | P | **P** | **07 49 22.0** | **-0.5** |
| **WB2** | **Warramunga Arr** | **44.03** | **262** | P | **P** | **07 49 22.0** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 07 49 22.9 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.04** | **262** | P | **P** | **07 49 21.9** | **-0.8** |
| | comp=Z,4.9nm,0.5s,baz=98,slow=7.8,SNR=83 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 50 54.9** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=99,slow=2.8,SNR=3.0 | | | | | | |
| WRA | | | | S | **S** | **07 55 09.2** | **-3.6** |
| | comp=Z,0.7nm,0.8s,baz=98,slow=14,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.04** | **262** | P | **P** | **07 49 20.8** | **-1.9** |
| **MTN** | **Manton Dam** | **48.64** | **271** | P | **P** | **07 49 56.4** | **-1.0** |
| **KNRA** | **Kununurra** | **50.11** | **267** | P | **P** | **07 50 08.0** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 07 50 21.3 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.47** | **263** | P | **P** | **07 50 25.0** | **-0.1** |
| | comp=Z,3.1nm,0.5s,baz=129,slow=5.0,SNR=12 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.09** | **257** | P | **P** | **07 50 56.5** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **57.09** | **257** | P | **P** | **07 50 57.1** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 07 50 57.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **57.27** | **258** | P | **P** | **07 50 58.4** | **-0.1** |
| MBWA | | | | IAmb | IAmb | 07 50 58.7 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **59.23** | **248** | P | **P** | **07 51 11.3** | **-0.2** |
| MORW | | | | IAmb | IAmb | 07 51 12.7 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.26** | **180** | P | **P** | **07 52 15.6** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **70.14** | **324** | P | **P** | **07 52 19.6** | **-0.2** |
| | comp=Z,1.9nm,0.5s,baz=166,slow=5.9,SNR=2.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.43** | **346** | P | **P** | **07 52 55.6** | **+0.5** |
| | comp=Z,2.0nm,0.6s,baz=156,slow=7.4,SNR=2.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.92** | **326** | P | **P** | **07 53 08.1** | **-0.7** |
| | comp=Z,2.2nm,0.8s,baz=103,slow=6.0,SNR=5.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.61** | **44** | P | **P** | **07 53 25.0** | **+1.8** |
| | comp=Z,1.4nm,0.6s,baz=226,slow=8.0,SNR=14 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.61** | **44** | P | **P** | **07 53 24.9** | **+1.8** |
| **KLR** | **Kul'dur** | **82.52** | **330** | P | **P** | **07 53 26.3** | **-0.9** |
| | comp=Z,0.9nm,0.7s,baz=277,slow=1.7,SNR=3.6 | | | | | | |
| **K05A** | **Summer Lake** | **82.53** | **39** | P | **P** | **07 53 29.5** | **+1.9** |
| K05A | | | | IAmb | IAmb | 07 53 30.3 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **PINE** | **Pine Mountain** | **83.15** | **38** | P | **P** | **07 53 32.8** | **+2.1** |
| PINE | | | | IAmb | IAmb | 07 53 33.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **U15A** | **North Rim** | **84.56** | **48** | P | **P** | **07 53 40.0** | **+2.1** |
| U15A | | | | IAmb | IAmb | 07 53 40.9 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **86.55** | **347** | P | **P** | **07 53 46.5** | **+0.1** |
| | comp=Z,1.4nm,0.4s,baz=148,slow=6.3,SNR=9.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.66** | **58** | P | **P** | **07 53 54.7** | **+2.1** |
| | comp=Z,1.6nm,0.8s,baz=212,slow=6.8,SNR=12 | | | | | | |
| **BCAR** | **Beaver Creek A** | **88.46** | **16** | P | **P** | **07 53 56.4** | **+0.9** |
| **IMAR** | **Indian Mountai** | **88.55** | **10** | P | **P** | **07 53 56.1** | **+0.4** |
| **ILAR** | **Eielson Array** | **88.73** | **13** | P | **P** | **07 53 56.3** | **-0.3** |
| | comp=Z,1.5nm,0.8s,baz=223,slow=5.2,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **88.73** | **13** | P | **P** | **07 53 56.1** | **-0.5** |
| **J25K** | **Salcha River,** | **88.92** | **14** | P | **P** | **07 53 57.2** | **-0.4** |
| J25K | | | | IAmb | IAmb | 07 53 58.4 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **89.54** | **43** | P | **P** | **07 54 02.4** | **+1.1** |
| | comp=Z,1.2nm,0.6s,baz=216,slow=3.8,SNR=15 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.72** | **290** | P | **P** | **07 54 03.8** | **+1.5** |
| | comp=Z,1.1nm,0.3s,baz=119,slow=2.5,SNR=9.4 | | | | | | |
| **DAWY** | **Dawson** | **89.90** | **16** | P | **P** | **07 54 02.2** | **+0.1** |
| DAWY | | | | IAmb | IAmb | 07 54 03.7 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.01** | **25** | P | **P** | **07 54 34.7** | **+0.3** |
| | comp=Z,0.1nm,0.5s,baz=243,slow=3.9,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **110.40** | **321** | PKiKP | **PKiKP** | **07 59 29.9** | **-1.2** |
| | comp=Z,0.6nm,0.4s,baz=105,slow=3.3,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.02** | **313** | PKiKP | **PKiKP** | **07 59 31.3** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=141,slow=0.6,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **113.91** | **317** | PKiKP | **PKiKP** | **07 59 36.5** | **-1.3** |
| | comp=Z,0.2nm,0.4s,baz=86,slow=1.4,SNR=4.5 | | | | | | |
| **ARU** | **Arti** | **125.15** | **325** | PKP | **PKPdf** | **07 59 58.9** | **-0.4** |
| | comp=Z,1.5nm,0.4s,baz=353,slow=12,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.12** | **349** | PKP | **PKPdf** | **08 00 06.4** | **-0.1** |
| | comp=Z,1.7nm,0.6s,baz=0.0,slow=1.2,SNR=10 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.12** | **349** | | **PKPdf** | **08 00 07.0** | **+0.5** |
| **FINES** | **FINESS Array B** | **135.91** | **343** | PKP | **PKPdf** | **08 00 17.7** | **-1.8** |
| | comp=Z,4.2nm,1.1s,baz=108,slow=3.1,SNR=4.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.02** | **330** | PKhKP | PKPpre | 08 00 29.8 | |
| | comp=Z,4.4nm,0.4s,baz=43,slow=4.2,SNR=33 | | | | | | |
| **ASF** | **Jabal al Asfar** | **146.45** | **297** | PKPbc | **PKPbc** | **08 00 42.1** | **+0.3** |
| | comp=Z,1.2nm,0.4s,baz=67,slow=3.2,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.65** | **312** | PKPbc | **PKPdf** | **08 00 41.0** | **+1.6** |
| | comp=Z,1.7nm,0.6s,baz=112,slow=4.7,SNR=3.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.50** | **299** | PKPbc | **PKPbc** | **08 00 45.5** | **+0.9** |
| | comp=Z,4.6nm,0.5s,baz=63,slow=4.1,SNR=9.1 | | | | | | |
| **CLL** | **Collm** | **148.24** | **346** | *i* PKPbc | **PKPbc** | **08 00 45.9** | **+0.2** |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B** | **150.35** | **344** | PKPbc | **PKPbc** | **08 00 51.3** | **+0.3** |
| | comp=Z,1.7nm,0.7s,baz=58,slow=3.3,SNR=7.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.38** | **182** | PKP | **PKPdf** | **08 01 08.1** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=150,slow=2.3,SNR=2.1 | | | | | | |

*IDC* ***02*** *07:44:07.9±1.5,0°.41S×98°.14E,h0km,mb4.2/10, mb1 4.2/12,mb1mx3.8/60,mbtmp4.2/12,ML4.7/1,MS3.5/7, Ms1 3.6/7,ms1mx3.2/85,Error ellipse: s-maj=48.8km s-min=18.1km az=70.0*
*DJA* ***02*** *07:44:08.9±1.4,0°.S±4°×9°.8E±°,h20km±15km,M4.7/11, mb5.0/3,MLv4.5/11*

**ISC 02 07:44:11.2±0.8,0°.39S±0°.05×98°.00E±0°.08,h27km,n34, σ1°00/29,mb4.3/11,MS3.5/3,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SISI** | **Saibi** | **1.43** | **131** | P | **Pn** | **07 44 34.6** | **-0.9** |
| SISI | | | | S | **Sb** | **07 44 54.4** | **-0.8** |
| **GSI** | **Gunungsitoli** | **1.73** | **346** | P | **Pn** | **07 44 38.0** | **-1.6** |
| GSI | | | | S | **Sn** | **07 45 01.3** | **+0.5** |
| **MNSI** | **Mandailing Nat** | **1.96** | **53** | P | **Pn** | **07 44 42.9** | **+0.1** |
| MNSI | | | | S | **Sb** | **07 45 09.9** | **-0.5** |
| **SBSI** | **Sibolga** | **2.12** | **25** | P | **Pb** | **07 44 47.9** | **-1.1** |
| **PPI** | **Padang Panjang** | **2.39** | **92** | P | **Pn** | **07 44 48.5** | **-0.2** |
| **PPSI** | **Pulau Pagai** | **3.10** | **140** | P | **Pn** | **07 44 57.1** | **-1.3** |
| **PSI** | **Prapat** | **3.29** | **16** | Pn | **Pn** | **07 44 59.7** | **-1.5** |
| | 1.3nm,0.3s,baz=172,slow=12,SNR=7.3 | | | | | | |
| PSI | | | | LR | LR | 07 46 35.5 | |
| | comp=Z,974nm,18.7s,baz=240,slow=46 | | | | | | |
| **KRJI** | **Kerinci** | **3.85** | **116** | P | **Pn** | **07 45 08.7** | **-0.1** |
| **KCSI** | **Kotacane, Aceh** | **3.89** | **357** | P | **Pn** | **07 45 09.5** | **+0.2** |
| **MASI** | **Maura Aman, Be** | **5.04** | **123** | P | **Pn** | **07 45 25.0** | **-0.2** |
| | 1.0nm145nm,1.0s | | | | | | |
| **MNAI** | **Manna** | **6.33** | **129** | P | **Pn** | **07 45 41.8** | **-1.1** |
| | 1.7nm220nm,1.0s | | | | | | |
| **LEM** | **Lembang** | **11.53** | **124** | LR | LR | 07 51 56.4 | |
| | comp=Z,160nm,19.4s,baz=203,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.75** | **3** | P | **Pn** | **07 48 28.7** | **-0.1** |
| | 1.0nm,0.3s,baz=191,slow=9.5,SNR=4.2 | | | | | | |
| CMAR | | | | LR | LR | 07 56 35.9 | |
| | comp=Z,175nm,20.0s,baz=180,slow=40 | | | | | | |
| **PALK** | **Pallekele** | **18.86** | **294** | LR | LR | 07 55 27.0 | |
| | comp=Z,97nm,18.1s,baz=225,slow=36 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.43** | **254** | T | T | 08 17 15.4 | |
| | baz=75,slow=75,SNR=251 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.44** | **254** | T | T | 08 17 23.3 | |
| | baz=75,slow=75,SNR=259 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.45** | **254** | T | T | 08 17 24.2 | |
| | baz=75,slow=75,SNR=209 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **37.48** | **158** | T | T | 08 31 34.9 | |
| | baz=334,slow=76,SNR=11 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **37.50** | **158** | T | T | 08 31 36.1 | |
| | baz=334,slow=76,SNR=8.1 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **37.50** | **158** | T | T | 08 31 35.1 | |
| | baz=334,slow=76,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.53** | **121** | P | **P** | **07 51 46.8** | **-1.7** |
| | 1.0nm,0.8s,baz=302,slow=9.1,SNR=4.9 | | | | | | |
| WRA | | | | LR | LR | 08 09 40.9 | |
| | comp=Z,73nm,20.4s,baz=222,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **41.81** | **126** | P | **P** | **07 51 58.3** | **-0.7** |
| | 1.1nm,0.8s,baz=303,slow=7.7,SNR=6.1 | | | | | | |
| ASAR | | | | LR | LR | 08 11 36.5 | |
| | comp=Z,118nm,19.7s,baz=296,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **46.71** | **33** | P | **P** | **07 52 37.5** | **-0.4** |
| | 2.8nm,1.0s,baz=220,slow=8.3,SNR=6.7 | | | | | | |
| KSRS | | | | LR | LR | 08 14 57.9 | |
| | comp=Z,46nm,18.2s,baz=345,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **48.58** | **8** | P | **P** | **07 52 53.8** | **+1.3** |
| | 2.5nm,0.7s,baz=207,slow=9.3,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.96** | **346** | P | **P** | **07 52 56.4** | **+1.1** |
| | 2.4nm,0.7s,baz=152,slow=8.5,SNR=3.7 | | | | | | |
| **CN2** | **Changchun** | **50.36** | **26** | *eP* | **P** | **07 53 04.0** | **-2.0** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **51.71** | **132** | P | **P** | **07 53 17.9** | **+1.6** |
| | comp=Z,2.8nm,0.8s,baz=205,slow=3.1,SNR=4.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.72** | **30** | P | **P** | **07 53 31.5** | **+0.5** |
| | comp=Z,11nm,0.9s,baz=232,slow=6.3,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.24** | **351** | P | **P** | **07 53 42.7** | **+0.8** |
| | comp=Z,4.1nm,0.8s,baz=158,slow=7.0,SNR=4.0 | | | | | | |
| **KLR** | **Kul'dur** | **57.31** | **26** | P | **P** | **07 53 57.4** | **+0.7** |
| | comp=Z,12nm,0.9s,baz=236,slow=7.2,SNR=26 | | | | | | |
| **SEY** | **Seymchan** | **74.90** | **23** | P | **P** | **07 55 50.0** | **+0.6** |
| | comp=Z,1.9nm,0.8s,baz=266,slow=8.3,SNR=5.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **131.10** | **27** | PKP | **PKiKP** | **08 03 23.1** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=284,slow=3.6,SNR=2.0 | | | | | | |
| **CPUP** | **Villa Florida** | **144.35** | **220** | PKP | **PKPdf** | **08 03 45.4** | **-0.4** |
| | comp=Z,3.0nm,0.9s,baz=139,slow=8.9,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.56** | **34** | PKP | **PKPdf** | **08 03 46.0** | **-0.3** |
| | comp=Z,1.3nm,0.9s,baz=293,slow=1.0,SNR=7.4 | | | | | | |

*IDC* ***02*** *07:47:47.1±3.3,53°.70N×90°.78E,h0km,mb1 3.4/3, mb1mx2.8/74,mbtmp3.4/3,ML3.4/2,Error ellipse: s-maj=28.3km s-min=23.3km az=41.0*
*NNC* ***02*** *07:47:54.2±1.4,53°.43N×90°.28E,h8km±7km,mb3.8, mpv3.5,Error ellipse: s-maj=8.3km s-min=7.6km az=77.0, Suspected Mining explosion.*

**ISC 02 07:47:51.9±4.1,53°.5N±0°.1×90°.4E±0°.2,h0km,n9,σ0°.92/14, 6C-7D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **3.33** | **279** | ⇑Pn | **Pn** | **07 48 46.4** | **+1.2** |
| | 2.2nm,0.6s | | | | | | |
| ZAA0 | | | | ⇑Lg | Lg | 07 49 38.5 | |
| | 40nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.33** | **279** | Pn | **Pn** | **07 48 44.4** | **-0.7** |
| | 0.3nm,0.3s,baz=93,slow=14,SNR=5.1 | | | | | | |
| ZALV | | | | Lg | Lg | 07 49 38.6 | |
| | 6.5nm,0.3s,baz=90,slow=24,SNR=10 | | | | | | |
| **KURK** | **Kurchatov** | **7.77** | **253** | ⇓Pn | **Pn** | **07 49 46.5** | **+0.4** |
| | 6.6nm,1.1s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **07 51 14.6** | **0.0** |
| | 20nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 07 51 59.6 | |
| | 47nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.86** | **253** | Pn | **Pn** | **07 49 46.3** | **-1.0** |
| | 0.3nm,0.3s,baz=64,slow=14,SNR=7.2 | | | | | | |
| KURBB | | | | Sn | **Sn** | **07 51 17.3** | **+0.4** |
| | 0.2nm,0.3s,baz=66,slow=25,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 07 52 05.2 | |
| | baz=64,slow=30,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.86** | **253** | ⇓Pn | **Pn** | **07 49 46.3** | **-1.0** |
| | 10nm,1.1s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **07 51 16.5** | **-0.4** |
| | 64nm,0.9s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 52 02.5 | |
| | 147nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **8.51** | **221** | Pn | **Pn** | **07 49 55.9** | **-0.4** |
| | 0.9nm,0.4s,baz=31,slow=12,SNR=42 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **07 51 32.8** | **-0.1** |
| | 6.3nm,0.9s,baz=42,slow=27,SNR=4.4 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 52 20.8 | |
| | 4.6nm,1.0s,baz=40,slow=22,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.51** | **221** | Pn | **Pn** | **07 49 55.9** | **-0.3** |
| | 0.6nm,0.3s,baz=36,slow=12,SNR=30 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 51 35.0** | **+2.0** |
| | 0.3nm,0.3s,baz=38,slow=26,SNR=4.6 | | | | | | |
| MKAR | | | | Lg | Lg | 07 52 23.7 | |
| | 0.1nm,0.3s,baz=38,slow=24,SNR=3.6 | | | | | | |
| **MAKZ** | **Makanchi** | **8.62** | **222** | ⇑Pn | **Pn** | **07 49 57.8** | **0.0** |
| | 0.9nm,0.7s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | **07 51 35.4** | **-0.3** |
| | 11nm,1.2s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 07 52 24.9 | |
| | 20nm,1.2s | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **11.67** | **113** | *i* | | 08 54 35.0 | |
| | baz=310,slow=336,SNR=2.6 | | | | | | |

*PGC* ***02*** *07:56:44.9±1.4,50°.07N×130°.16W,h10km,MLSn2.9/15, Mw3.5/15,207km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC* ***02*** *07:56:45.9±2.5,50°.23N×130°.09W,h0km,mb3.4/2, mb1 3.6/7,mb1mx3.2/67,mbtmp3.4/7,ML3.2/5,MS3.8/1, Ms1 3.8/1,ms1mx2.7/43,Error ellipse: s-maj=34.5km s-min=15.2km az=78.0*

**ISC 02 07:56:45.2±1.2,50°.13N±0°.06×130°.09W±0°.06,h12km,n44, σ1°62/56,Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.35** | **67** | Pn | **Pn** | **07 57 08.8** | **-1.1** |
| HOLB | | | | Sn | **Sn** | **07 57 25.7** | **-2.1** |
| **PACB** | **Port Alice, BC** | **1.69** | **79** | Pn | **Pn** | **07 57 13.2** | **-1.3** |
| PACB | | | | Sn | **Sn** | **07 57 33.2** | **-2.8** |
| **PHC** | **Port Hardy** | **1.79** | **70** | Pn | **Pn** | **07 57 15.2** | **-0.7** |
| PHC | | | | Sn | **Sn** | **07 57 35.9** | **-2.6** |
| **MAYB** | **Maynard** | **1.89** | **81** | Pn | **Pn** | **07 57 16.1** | **-1.3** |
| **EDB** | **Eliza Dome** | **1.93** | **96** | Pn | **Pn** | **07 57 16.0** | **-1.8** |
| **TLCB** | **Telegraph Cove** | **2.12** | **77** | Pn | **Pn** | **07 57 20.1** | **-0.4** |
| TLCB | | | | Sn | **Sn** | **07 57 44.7** | **-2.0** |
| **WOSB** | **Woss** | **2.26** | **88** | Pn | **Pn** | **07 57 21.5** | **-0.9** |
| **HG4B** | **Hotspring** | **2.28** | **343** | Pn | **Pn** | **07 57 20.3** | **-2.3** |
| HG4B | | | | Sn | **Sn** | **07 57 47.6** | **-2.9** |
| **BBB** | **Bella Bella** | **2.40** | **30** | Pn | **Pn** | **07 57 24.4** | **+0.1** |
| | 11nm,0.3s,baz=228,slow=14,SNR=550 | | | | | | |
| BBB | | | | Sn | **Sn** | **07 57 52.4** | **-1.2** |
| | 14nm,0.3s,baz=315,slow=22,SNR=16 | | | | | | |
| **BBB** | **Bella Bella** | **2.40** | **30** | Pn | **Pn** | **07 57 24.4** | **+0.1** |
| BBB | | | | Sn | **Sn** | **07 57 51.9** | **-1.8** |
| **NCRB** | **Newcastle Ridg** | **2.60** | **82** | Pn | **Pn** | **07 57 27.1** | **-0.1** |
| NCRB | | | | Sn | **Sn** | **07 57 56.3** | **-2.4** |
| **GDR** | **Gold River** | **2.64** | **96** | Pn | **Pn** | **07 57 26.8** | **-0.7** |
| **BNB** | **Barry Inlet** | **2.66** | **338** | Pn | **Pn** | **07 57 26.0** | **-1.9** |
| **SPLB** | **Strathcona Par** | **2.87** | **93** | Pn | **Pn** | **07 57 30.5** | **-0.2** |
| **BTB** | **Buttle Lake** | **3.03** | **101** | Pn | **Pn** | **07 57 32.5** | **-0.6** |
| **CBB** | **Campbell River** | **3.04** | **90** | Pn | **Pn** | **07 57 32.8** | **-0.2** |
| CBB | | | | Sn | **Sn** | **07 58 06.7** | **-2.7** |
| **BUTB** | **Butedale** | **3.11** | **18** | Pn | **Pn** | **07 57 34.6** | **+0.6** |
| BUTB | | | | Sn | **Sn** | **07 58 09.8** | **-1.4** |
| **BNKB** | **Banks Island** | **3.21** | **2** | Pn | **Pn** | **07 57 34.4** | **-1.0** |
| BNKB | | | | Sn | **Sn** | **07 58 11.1** | **-2.4** |
| **MOBC** | **Moresby Island** | **3.24** | **339** | Pn | **Pn** | **07 57 34.8** | **-1.0** |
| **BNAB** | **Bonilla** | **3.39** | **354** | Pn | **Pn** | **07 57 37.1** | **-0.7** |
| **DIB** | **Dawson Inlet,** | **3.42** | **335** | Pn | **Pn** | **07 57 36.9** | **-1.3** |
| **H02S1** | **DAWSON INLET T** | **3.42** | **335** | Pn | **Pn** | **07 57 37.3** | **-1.0** |
| | SNR=8.5 | | | | | | |
| H02S1 | | | | Sn | **Sn** | **07 58 17.2** | **-1.5** |
| **HWKB** | **Hawksbury Isla** | **3.52** | **9** | Pn | **Pn** | **07 57 39.2** | **-0.5** |
| HWKB | | | | Sn | **Sn** | **07 58 19.3** | **-2.0** |
| **TXB** | **Texada** | **3.68** | **95** | Pn | **Pn** | **07 57 42.3** | **+0.5** |
| **MGB** | **Mount Grey** | **3.69** | **106** | Pn | **Pn** | **07 57 42.7** | **+0.6** |
| **GRNB** | **Grenville Isla** | **3.72** | **1** | Pn | **Pn** | **07 57 41.9** | **-0.6** |
| GRNB | | | | Sn | **Sn** | **07 58 24.8** | **-1.4** |
| **SHB** | **Sechelt** | **4.05** | **95** | Pn | **Pn** | **07 57 48.0** | **+0.9** |
| **KITB** | **Kitimat** | **4.05** | **12** | Pn | **Pn** | **07 57 47.1** | **+

KNRA IAmb IAmb 08 07 10.9
comp=Z,41nm,1.6s
**FITZ Fitzroy Crossi 52.23 263** P **P** **08 07 23.2 +0.8**
comp=Z,3.3nm,1.1s,baz=136,slow=16,SNR=2.3
**SIJI Sorong 52.85 286** P **P** **08 07 26.4 -0.5**
comp=Z,5.3nm,0.6s,baz=30,slow=12,SNR=4.7
**MBWA Marble Bar 56.98 258** P **P** **08 07 55.4 -0.1**
MBWA IAmb IAmb 08 08 02.9
comp=Z,33nm,1.7s
**QSPA South Pole Qui 68.57 180** P **P** **08 09 08.9 -0.3**
QSPA IAmb IAmb 08 10 07.2
comp=Z,25nm,2.0s
**IMAR Indian Mountai 89.26 10** P **P** **08 10 59.8 +1.8**
**AKASG Malin Array Be 143.55 330** PKP PKPbc 08 17 32.1 +0.6
comp=Z,1.5nm,0.5s,baz=43,slow=4.4,SNR=13

**IDC 02 08:06:24.1±3.1, 54°19N×87°33E, h0km, mb1 2.8/2, mb1mx2.2/55, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=26.0km s-min=18.0km az=49.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.50** | **262** | *i* | | 08 18 30.0 | |
| | baz=85,slow=324,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.50** | **262** | Pg | Pn | 08 06 50.5 | -1.8 |
| | 1.3nm,0.3s,baz=77,slow=15,SNR=25 | | | | | | |
| ZALV | | | | Lg | Lg | 08 07 11.6 | |
| | 1.1nm,0.3s,baz=80,slow=25,SNR=7.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.46** | **240** | Pn | Pn | 08 08 00.7 | +0.3 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=3.5 | | | | | | |
| KURBB | | | | Sn | Sn | 08 09 14.3 | -0.4 |
| | 0.0nm,0.3s,baz=53,slow=22,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.07** | **205** | Pn | Pn | 08 08 24.1 | +1.6 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=7.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 10 43.1 | |
| | 0.0nm,0.3s,baz=26,slow=32,SNR=1.7 | | | | | | |

**IDC 02 08:07:19.1±10.0, 3°22S×146°29E, h0km, mb3.3/4, mb1 3.5/4, mb1mx2.9/32, mbtmp3.4/4, Error ellipse: s-maj=345.8km s-min=28.7km az=98.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.30** | **214** | P | P | 08 11 56.9 | +0.1 |
| | 1.8nm,1.0s,baz=38,slow=12,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **23.59** | **209** | P | P | 08 12 31.9 | +0.1 |
| | 0.7nm,0.8s,baz=41,slow=8.6,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **61.64** | **331** | P | P | 08 17 40.2 | +1.3 |
| | 0.3nm,0.5s,baz=92,slow=7.5,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.91** | **320** | P | P | 08 19 00.8 | -1.2 |
| | 0.1nm,0.5s,baz=104,slow=6.1,SNR=4.1 | | | | | | |

*RSNC **02** 08:18:10.7±1.0, 6°63N×78°03W, h6km±4km, ML3.2, Mw3.7, Fault plane solution: NP1:φs=44.00000°, δ=38.00000°, λ=58.00000°.*
*IDC **02** 08:18:13.3±2.4, 7°60N×77°31W, h0km, mb3.7/4, mb1 3.9/5, mb1mx3.6/25, mbtmp3.7/5, ML2.2/1, MS3.4/2, Ms1 3.4/2, ms1mx2.8/66, Error ellipse: s-maj=98.4km s-min=22.8km az=41.0*
**ISC 02 08:18:10.0±1.5, 6°70N±0°03×78°01W±0°03, h6km±10km, n38, σ1°94/60, mb3.9/4, 3C-5D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTAC** | **Punta Ardita,** | **0.49** | **24** | ⇓*iP* | **Pg** | **08 18 20.8** | **+1.4** |
| PTAC | | | | *eS* | **Sb** | **08 18 28.4** | **0.0** |
| PTAC | | | | *i* | | 08 18 30.5 | |
| | comp=Z,14μm,0.1s | | | | | | |
| **SOLC** | **Bahia Solano** | **0.76** | **128** | *eP* | **Pg** | **08 18 23.5** | **-1.1** |
| SOLC | | | | *eS* | **Sg** | **08 18 33.9** | **-0.5** |
| SOLC | | | | *i* | | 08 18 37.4 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **DBBC** | **Dabeiba** | **1.81** | **80** | ⇑*eP* | Pn | 08 18 39.8 | -2.0 |
| DBBC | | | | *eS* | **Sn** | **08 19 05.0** | **-0.2** |
| DBBC | | | | *i* | | 08 19 11.8 | |
| | comp=Z,224nm,0.5s | | | | | | |
| **UPD2** | **Meteti** | **1.84** | **360** | ⇓*eP* | **Pn** | **08 18 43.0** | **+0.9** |
| UPD2 | | | | *eS* | **Sn** | **08 19 06.3** | **+0.6** |
| UPD2 | | | | *i* | | 08 19 17.7 | |
| | comp=Z,406nm,0.3s | | | | | | |
| **CAPC** | **Capurgana** | **2.03** | **19** | *eP* | **Pn** | **08 18 46.0** | **+1.2** |
| CAPC | | | | *eS* | **Sb** | **08 19 12.8** | **0.0** |
| CAPC | | | | *i* | | 08 19 16.9 | |
| | comp=Z,200nm,0.4s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.15** | **113** | *eP* | Pn | 08 18 43.6 | -3.0 |
| CBOC | | | | *eS* | **Sn** | **08 19 13.1** | **-0.6** |
| CBOC | | | | *i* | | 08 19 19.1 | |
| | comp=Z,107nm,0.6s | | | | | | |
| **PLMC** | **San Jos del P** | **2.47** | **136** | *eP* | **Pn** | **08 18 49.7** | **-1.3** |
| PLMC | | | | *eS* | **Sb** | **08 19 24.4** | **-1.3** |
| PLMC | | | | *i* | | 08 19 32.2 | |
| | comp=Z,48nm,0.3s | | | | | | |
| **AZU** | **Azuero** | **2.50** | **296** | ⇓*eP* | **Pn** | **08 18 52.2** | **+0.9** |
| AZU | | | | *eS* | **Sn** | **08 19 21.2** | **-0.9** |
| AZU | | | | *i* | | 08 19 24.1 | |
| | comp=Z,79nm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.51** | **101** | ⇑*eP* | **Pn** | **08 18 50.3** | **-1.4** |
| HELC | | | | *eS* | **Sn** | **08 19 23.6** | **+0.7** |
| HELC | | | | *i* | | 08 19 29.7 | |
| | comp=Z,78nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.67** | **67** | ⇑*eP* | **Pn** | **08 18 52.9** | **-0.7** |
| UREC | | | | *eS* | **Sn** | **08 19 27.2** | **+0.9** |
| UREC | | | | *i* | | 08 19 32.1 | |
| | comp=Z,135nm,0.7s | | | | | | |
| **LCBC** | **Los crdobas,** | **2.69** | **37** | *eP* | **Pn** | **08 18 56.3** | **+2.4** |
| LCBC | | | | *eS* | **Sb** | **08 19 29.9** | **-1.9** |
| **CACAO** | **El Cacao, Vera** | **2.91** | **283** | *eP* | **Pn** | **08 18 57.4** | **+0.6** |
| CACAO | | | | *eS* | **Sn** | **08 19 29.4** | **-2.8** |
| CACAO | | | | *i* | | 08 19 35.9 | |
| | comp=Z,19nm,0.3s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **3.01** | **119** | ⇓*eP* | **Pn** | **08 18 58.2** | **-0.4** |
| GUY2C | | | | *i* | | 08 19 48.5 | |
| | comp=Z,70nm,0.6s | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.05** | **324** | *eP* | **Pn** | **08 18 58.5** | **-0.4** |
| **MOTC** | **Monteria, Cord** | **3.11** | **48** | ⇓*eP* | **Pn** | **08 18 59.6** | **-0.1** |
| MOTC | | | | *eS* | **Sn** | **08 19 37.3** | **+0.3** |
| MOTC | | | | *i* | | 08 19 41.1 | |
| | comp=Z,26nm,0.4s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **3.16** | **148** | *eP* | **Pn** | **08 19 00.1** | **-0.5** |
| YOTC | | | | *eS* | **Sn** | **08 19 37.8** | **-0.9** |
| YOTC | | | | *i* | | 08 19 56.0 | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **3.22** | **76** | *eP* | **Pn** | **08 19 00.4** | **-0.8** |
| ZARC | | | | *eS* | **Sn** | **08 19 40.5** | **+0.5** |
| ZARC | | | | *i* | | 08 19 42.9 | |
| | comp=Z,95nm,0.6s | | | | | | |
| **NORC** | **Norcasia** | **3.32** | **110** | *eP* | **Pn** | **08 19 02.4** | **-0.2** |
| NORC | | | | *eS* | **Sn** | **08 19 44.6** | **+2.3** |
| NORC | | | | *i* | | 08 19 49.1 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **GMAL** | **Guarumal, Vera** | **3.37** | **288** | *eP* | **Pn** | **08 19 05.5** | **+2.3** |
| GMAL | | | | *eS* | **Sn** | **08 19 45.2** | **+1.6** |
| GMAL | | | | *i* | | 08 19 50.5 | |
| | comp=Z,56nm,0.3s | | | | | | |
| **ANIL** | **Santa Ana** | **3.39** | **130** | *eP* | **Pn** | **08 19 06.9** | **+3.1** |
| ANIL | | | | *eS* | **Sn** | **08 19 49.2** | **+4.6** |
| ANIL | | | | *i* | | 08 19 51.8 | |
| | comp=Z,41nm,0.5s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **3.53** | **92** | *eP* | **Pn** | **08 19 05.5** | **0.0** |
| PTBC | | | | *eS* | **Sn** | **08 19 52.1** | **+4.6** |
| PTBC | | | | *i* | | 08 20 01.9 | |
| | comp=Z,54nm,0.5s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.90** | **135** | *eP* | **Pn** | **08 19 13.2** | **+2.6** |
| ORTC | | | | *eS* | **Sn** | **08 19 54.3** | **-2.5** |
| ORTC | | | | *i* | | 08 20 09.1 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **SPBC** | **San Pablo de B** | **4.05** | **105** | *eP* | **Pn** | **08 19 13.7** | **+1.1** |
| SPBC | | | | *eS* | **Sn** | **08 20 06.0** | **+5.5** |
| SPBC | | | | *i* | | 08 20 15.2 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **ROSC** | **El Rosal** | **4.11** | **117** | Pn | **Pn** | **08 19 17.1** | **+3.4** |
| | comp=Z,3.2nm,0.3s,baz=315,slow=4.2,SNR=5.0 | | | | | | |
| ROSC | | | | Sn | **Sn** | **08 20 04.8** | **+2.5** |
| | baz=6.0,slow=19,SNR=2.0 | | | | | | |
| **ROSC** | **El Rosal** | **4.11** | **117** | *eP* | **Pn** | **08 19 17.3** | **+3.5** |
| **SJCC** | **San Jacinto, C** | **4.23** | **41** | *eP* | **Pn** | **08 19 15.4** | **+0.2** |
| SJCC | | | | *eS* | **Sn** | **08 20 06.7** | **+1.7** |
| SJCC | | | | *i* | | 08 20 12.6 | |
| | comp=Z,22nm,0.4s | | | | | | |
| **PRAC** | **Prado** | **4.29** | **134** | *eP* | Pb | 08 19 22.2 | -3.8 |
| PRAC | | | | *eS* | **Sb** | **08 20 15.9** | **-2.3** |
| PRAC | | | | *i* | | 08 20 20.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **POPC** | **Popayan, Colom** | **4.34** | **162** | *eP* | **Pn** | **08 19 18.1** | **+1.3** |
| **SMLC** | **San Martn de** | **4.42** | **62** | *eP* | **Pn** | **08 19 17.7** | **0.0** |
| SMLC | | | | *eS* | **Sn** | **08 20 09.1** | **-0.5** |
| SMLC | | | | *i* | | 08 20 14.8 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **OCAC** | **Ocana** | **4.89** | **71** | *eP* | **Pn** | **08 19 24.1** | **-0.2** |
| OCAC | | | | *eS* | **Sn** | **08 20 21.9** | **+0.5** |
| OCAC | | | | *i* | | 08 20 25.8 | |
| | comp=Z,80nm,0.5s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **5.57** | **57** | *eP* | **Pn** | **08 19 33.5** | **-0.1** |
| LL6C | | | | *eS* | **Sn** | **08 20 34.9** | **-3.1** |
| LL6C | | | | *i* | | 08 20 45.1 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **6.64** | **49** | *eP* | **Pn** | **08 19 47.3** | **-1.0** |
| CRJC | | | | *i* | | 08 19 50.0 | |
| | comp=Z,23nm,0.3s | | | | | | |
| CRJC | | | | *eS* | **Sn** | **08 21 00.5** | **-3.9** |
| **JTS** | **Las Juntas de** | **7.74** | **298** | LR | LR | 08 23 49.1 | |
| | comp=Z,90nm,20.6s,baz=118,slow=42 | | | | | | |
| **TXAR** | **Lajitas Array** | **33.05** | **316** | P | P | 08 24 48.3 | +1.7 |
| | comp=Z,0.2nm,0.5s,baz=125,slow=8.5,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **61.78** | **342** | P | **P** | **08 28 29.8** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=129,slow=7.3,SNR=17 | | | | | | |
| **DBIC** | **Dimbokro** | **72.58** | **85** | P | **P** | **08 29 38.4** | **-0.4** |
| | comp=Z,1.4nm,0.6s,baz=323,slow=6.0,SNR=1.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.51** | **78** | P | **P** | **08 30 12.6** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=282,slow=7.1,SNR=2.1 | | | | | | |
| **IDI** | **Anoyia** | **96.59** | **53** | LR | LR | 09 15 16.4 | |
| | comp=Z,55nm,18.5s,baz=310,slow=36 | | | | | | |

**IDC 02 08:20:00.0±2.3, 1°27S×128°07E, h0km, mb3.1/2, mb1 3.3/3, mb1mx3.1/36, mbtmp3.1/3, ML3.3/1, Error ellipse: s-maj=173.9km s-min=28.3km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.54** | **162** | P | P | 08 24 29.8 | +0.4 |
| | 0.1nm,0.3s,baz=342,slow=12,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **22.97** | **166** | P | P | 08 25 06.1 | -0.2 |
| | 0.2nm,0.4s,baz=346,slow=12,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.42** | **326** | P | P | 08 30 24.9 | 0.0 |
| | 0.1nm,0.6s,baz=118,slow=6.6,SNR=4.0 | | | | | | |

*TUL **02** 08:20:34.6±1.5, 36°48N±0°03×98°74W±0°04, h10km±4km, ML2.8,mb_Lg2.6/15(NEIC), Error ellipse: s-maj=4.8km s-min=3.6km az=106.0*
**NEIC 02 08:20:35.6±1.2, 36°471N±0°010×98°66W±0°03, h6km±7km, Error ellipse: s-maj=3.8km s-min=1.5km az=84.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.24** | **350** | Pg | Pg | 08 20 39.6 | -0.7 |
| OK035 | | | | Sg | Sg | 08 20 43.5 | 0.0 |
| **U32A** | **Winter Ranch,** | **0.29** | **252** | Pg | Pg | 08 20 39.5 | -1.8 |
| U32A | | | | Sg | Sg | 08 20 43.0 | -2.1 |
| **OK032** | **Salt Plains WL** | **0.49** | **47** | Pg | Pg | 08 20 45.0 | -0.1 |
| **CROK** | **Carrier** | **0.55** | **86** | Pg | Pg | 08 20 46.3 | +0.2 |
| CROK | | | | Sg | Sb | 08 20 54.6 | -1.1 |
| **KAN14** | **Manchester OK** | **0.74** | **49** | | Pg | 08 20 49.5 | -0.2 |
| KAN14 | | | | Sg | Sg | 08 21 00.2 | +0.8 |
| **GC02** | **Grant County #** | **0.75** | **59** | Pg | Pg | 08 20 49.6 | -0.3 |
| GC02 | | | | Sg | Sb | 08 21 00.7 | -0.8 |
| **KAN10** | **Anthony SW Sta** | **0.79** | **35** | Pg | Pg | 08 20 50.3 | -0.5 |
| KAN10 | | | | Sg | Sg | 08 21 01.3 | +0.2 |
| **KAN16** | **Harper SW Stat** | **0.89** | **32** | Pg | Pg | 08 20 52.2 | -0.5 |
| KAN16 | | | | Sg | Sg | 08 21 04.3 | 0.0 |
| **KAN05** | **Bluff City Nor** | **0.90** | **45** | | Pg | 08 20 52.4 | -0.4 |
| KAN05 | | | | Sg | Sg | 08 21 04.9 | +0.5 |
| **KAN08** | **Anthony NE Sta** | **0.93** | **36** | | Pg | 08 20 52.8 | -0.7 |
| KAN08 | | | | Sg | Sg | 08 21 06.1 | +0.5 |
| **KAN12** | **Harper NE Stat** | **0.98** | **33** | Pg | Pg | 08 20 53.7 | -0.6 |
| KAN12 | | | | Sg | Sg | 08 21 07.2 | +0.1 |
| **KAN01** | **Argonia South** | **0.99** | **46** | Pg | Pg | 08 20 54.1 | -0.5 |
| KAN01 | | | | Sg | Sg | 08 21 07.8 | +0.3 |
| **KAN06** | **Argonia West S** | **1.01** | **39** | | Pg | 08 20 54.3 | -0.6 |
| KAN06 | | | | Sg | Sg | 08 21 07.7 | -0.3 |
| **KAN13** | **South Haven SW** | **1.09** | **60** | | Pg | 08 20 55.8 | -0.7 |
| KAN13 | | | | Sg | Sg | 08 21 10.7 | 0.0 |
| **BCOK** | **Bluff Creek, N** | **1.18** | **133** | | Pb | 08 20 58.4 | +0.1 |
| BCOK | | | | Sg | Sg | 08 21 13.3 | -0.1 |
| **OK029** | **Liberty Lake** | **1.19** | **124** | Pg | Pg | 08 20 57.7 | -0.8 |
| OK029 | | | | Sg | Sb | 08 21 14.2 | +0.1 |
| **BLOK** | **Blackwell** | **1.20** | **76** | | Pg | 08 20 57.7 | -0.8 |
| BLOK | | | | | Sn | 08 21 15.0 | -0.5 |
| **OK025** | **Westminster Rd** | **1.39** | **129** | | Pn | 08 21 01.0 | -0.5 |
| **OKCFA** | **Oklahoma City** | **1.44** | **137** | | Pn | 08 21 02.2 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **1.45** | **137** | | Pn | 08 21 02.3 | -0.1 |
| **OK033** | **Mehan** | **1.46** | **107** | | Pn | 08 21 02.2 | -0.2 |
| **OK031** | **S. Brethren Rd** | **1.56** | **109** | | Pn | 08 21 03.6 | -0.2 |
| **FNO** | **Franklin** | **1.58** | **139** | Pn | Pn | 08 21 04.2 | 0.0 |
| **QUOK** | **Quay** | **1.60** | **100** | Pn | Pb | 08 21 05.1 | -0.5 |
| **OK030** | **Cody Creek RV** | **1.61** | **109** | | Pn | 08 21 04.9 | +0.3 |
| **OK034** | **N. Norfolk Rd.** | **1.64** | **106** | | Pn | 08 21 05.0 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.73** | **183** | | Pn | 08 21 05.2 | -1.0 |
| **T35A** | **Sooner Cattle** | **1.78** | **75** | | Pn | 08 21 07.7 | +0.7 |
| **R32A** | **Long Quarter,** | **1.95** | **359** | | Pn | 08 21 09.4 | +0.1 |
| **W35A** | **Tecumseh** | **1.96** | **132** | | Pn | 08 21 09.7 | +0.4 |
| **X34A** | **Smith Ranch, M** | **1.98** | **160** | | Pn | 08 21 10.5 | +0.8 |
| X34A | | | | IAmb_Lg | | 08 21 43.1 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.39** | **103** | | Pn | 08 21 15.0 | -0.2 |
| **CBKS** | **Cedar Bluff** | **2.49** | **340** | | Pn | 08 21 16.6 | -0.1 |
| **LOOK** | **Love County** | **2.75** | **153** | | Pn | 08 21 20.4 | +0.1 |
| **AMTX** | **Amarillo** | **2.93** | **238** | Pn | Pn | 08 21 25.2 | +2.5 |
| AMTX | | | | IAmb_Lg | | 08 22 09.7 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.09** | **31** | IAmb_Lg | | 08 22 14.3 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **3.27** | **124** | | Pn | 08 21 27.6 | +0.2 |
| **U38A** | **Gravette** | **3.44** | **89** | | Pn | 08 21 29.6 | -0.2 |
| **ABTX** | **Abilene, Hawle** | **3.92** | **192** | Pn | Pn | 08 21 37.3 | +0.9 |
| **KSCO** | **Kaye Shedlock'** | **4.04** | **310** | IAmb_Lg | | 08 22 48.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.16** | **106** | | Pn | 08 21 41.1 | +1.6 |
| W39A | | | | IAmb_Lg | | 08 22 58.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.19** | **235** | | Pn | 08 21 42.0 | +1.9 |
| MSTX | | | | IAmb_Lg | | 08 22 55.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.44** | **72** | | Pn | 08 21 42.8 | -0.6 |
| **MIAR** | **Mount Ida** | **4.57** | **113** | Pn | Pn | 08 21 45.2 | 0.0 |
| **WHTX** | **Lake Whitney,** | **4.58** | **167** | Pn | Pn | 08 21 44.7 | -1.1 |
| **T25A** | **Trinidad** | **4.66** | **280** | Pn | Pn | 08 21 46.6 | -0.2 |
| T25A | | | | IAmb_Lg | | 08 23 01.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **U40A** | **Yellville** | **4.68** | **90** | | Pn | 08 21 46.4 | -0.4 |
| **P38A** | **Dawn** | **5.13** | **51** | | Pn | 08 21 52.4 | -0.5 |
| **X40A** | **Basin Creek Fa** | **5.15** | **111** | | Pn | 08 21 53.1 | -0.1 |
| **W41B** | **Gary Mavity, V** | **5.37** | **102** | Pn | Pn | 08 21 55.5 | -0.7 |
| **R40A** | **Maddies Statio** | **5.40** | **68** | Pn | Pn | 08 21 58.6 | +1.9 |
| **SDCO** | **Great Sand Dun** | **5.61** | **285** | Pn | Pn | 08 21 59.3 | -0.5 |
| **L34A** | **Svendsen Farm,** | **5.77** | **17** | IAmb_Lg | | 08 23 40.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **P40A** | **Paris** | **6.05** | **58** | IAmb_Lg | | 08 23 52.8 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.05** | **189** | Pn | Pn | 08 22 07.8 | +2.1 |
| **CCM** | **Cathedral Cave** | **6.12** | **73** | Pn | Pn | 08 22 07.4 | +0.9 |
| **ISCO** | **Idaho Springs** | **6.41** | **303** | Pn | Pn | 08 22 13.1 | +2.3 |
| **ANMO** | **Albuquerque** | **6.53** | **259** | Pn | Pn | 08 22 11.8 | -0.5 |
| **FVM** | **French Village** | **6.74** | **75** | Pn | Pn | 08 22 14.9 | -0.2 |
| **N23A** | **Red Feather La** | **7.21** | **310** | Pn | Pn | 08 22 22.9 | +1.2 |

*CNRM **02** 08:41:33.3, 35°66N×3°77W, h3km, ml2.8*
*SFS **02** 08:41:34.0, 35°51N×3°80W, ML2.4, ALBORAN SUR*
*INMG **02** 08:41:34.4±1.3, 35°49N×3°82W, h0km, ML2.3, Error ellipse: s-maj=3.6km s-min=2.8km az=22.0*
**ISC 02 08:41:33.4±1.1, 35°52N±0°03×3°81W±0°03, h14km±9km, n26, σ1°85/42, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.32** | **200** | P | **Pb** | **08 41 42.0** | **+1.1** |
| **PALE** | **Palemas** | **0.32** | **200** | P | **Pg** | **08 41 39.8** | **-0.3** |
| PALE | | | | S | **Sg** | **08 41 44.9** | **+0.2** |
| **AKLM** | **AKL** | **1.01** | **183** | P | **Pn** | **08 41 54.0** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.17** | **106** | P | **Pb** | **08 41 53.8** | **-1.6** |
| CHAS | | | | S | **Sb** | **08 42 08.6** | **-1.8** |
| **CHEFC** | **Chefchaouen** | **1.32** | **252** | P | **Pb** | **08 41 57.9** | **-0.1** |
| CHEFC | | | | S | **Sg** | **08 42 17.8** | **+1.7** |
| **CEU** | **Ceuta** | **1.33** | **287** | P | **Pn** | **08 41 54.9** | **-2.6** |
| CEU | | | | S | **Sb** | **08 42 09.3** | **-5.6** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **338** | P | **Pg** | **08 41 58.6** | **-0.5** |
| EMAL | | | | S | **Sb** | **08 42 14.4** | **-0.7** |
| **TAF** | **Taforalt** | **1.34** | **121** | P | **Pb** | **08 41 57.9** | **-0.3** |
| TAF | | | | S | **Sg** | **08 42 17.3** | **+0.6** |
| **JBK** | **JBK** | **1.56** | **139** | P | **Pg** | **08 42 03.0** | **-0.4** |
| **JBK** | **JBK** | **1.56** | **139** | P | **Pb** | **08 42 01.4** | **-0.7** |
| JBK | | | | S | **Sn** | **08 42 20.9** | **-0.1** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pg** | **08 42 12.0** | **-0.3** |
| **IFR** | **Ifrane** | **2.28** | **209** | P | **Pb** | **08 42 13.2** | **-1.1** |
| IFR | | | | S | **Sn** | **08 42 36.5** | **-2.1** |
| **MD31** | **MD31** | **2.76** | **197** | P | **Pn** | **08 42 18.7** | **+1.5** |
| MD31 | | | | S | **Sn** | **08 42 51.1** | **+0.6** |
| **MDT** | **Midelt** | **2.78** | **194** | P | **Pn** | **08 42 20.0** | **+2.5** |
| MDT | | | | S | **Sn** | **08 42 52.4** | **+1.5** |
| **TDRA** | **Tendrara** | **2.88** | **149** | P | **Pn** | **08 42 20.4** | **+1.4** |
| **PVAQ** | **Vaqueiros** | **3.67** | **302** | *e*Pn | **Pn** | **08 42 31.5** | **+1.9** |
| PVAQ | | | | *e*Sn | **Sn** | **08 43 11.2** | **-1.5** |
| PVAQ | | | | A | A | 08 43 18.4 | |
| | 4.0nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.67** | **302** | P | **Pn** | **08 42 30.2** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.67** | **302** | P | **Pn** | **08 42 30.2** | **+0.6** |
| PVAQ | | | | S | **Sn** | **08 43 12.3** | **-0.4** |
| **PCVE** | **Castro Verde** | **4.00** | **303** | *e*Pn | **Pn** | **08 42 36.2** | **+1.9** |
| PCVE | | | | *e*Sn | **Sn** | **08 43 21.9** | **+0.9** |
| PCVE | | | | A | A | 08 43 25.0 | |
| | 4.5nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.24** | **304** | *e*Pn | **Pn** | **08 42 39.7** | **+2.3** |
| MESJ | | | | *e*Sn | **Sn** | **08 43 27.2** | **+0.6** |
| **MORF** | **Marmelete** | **4.29** | **296** | *e*Pn | **Pn** | **08 42 40.1** | **+1.8** |
| **PFVI** | **Vila Bisbo** | **4.36** | **293** | *e*Pn | **Pn** | **08 42 42.3** | **+3.1** |
| **PESTR** | **Estremoz** | **4.50** | **319** | *e*Pn | **Pn** | **08 42 45.0** | **+3.9** |
| PESTR | | | | *e*Sn | **Sn** | **08 43 35.0** | **+1.7** |
| **PNCL** | **Nicolau / Gran** | **4.59** | **306** | *e*Pn | **Pn** | **08 42 43.8** | **+1.6** |
| PNCL | | | | *e*Sn | **Sn** | **08 43 36.1** | **+0.8** |
| PNCL | | | | A | A | 08 43 45.0 | |
| | 4.0nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **316** | *e*Pn | **Pn** | **08 42 50.5** | **+2.7** |
| **OUK** | **Oukaimeden** | **5.48** | **219** | P | **Pn** | **08 42 56.4** | **+1.5** |

*IDC **02** 08:41:49.9±0.8, 21°41S×68°21W, h113km±11km, mb3.4/5, mb1 3.6/10, mb1mx3.5/32, mbtmp3.8/10, Error ellipse: s-maj=21.4km s-min=12.7km az=129.0*
*VAO **02** 08:41:49.8±0.7, 21°26S×68°66W, h130km±6km, mb4.2*
*NEIC **02** 08:41:50.8±2.0, 21°40S±0°06×68°5W±0°1, h119km±11km, Error ellipse: s-maj=16.0km s-min=8.5km az=90.0*
*GUC **02** 08:41:51.3±0.7, 21°41S×68°58W, h126km±4km, ML4.0*
**ISC 02 08:41:50.1±0.6, 21°35S±0°04×68°47W±0°06, h120km±7km, n68, σ1°946/85, mb3.8/6, 12C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.85** | **238** | ⇑*iP* | **Pn** | **08 42 11.6** | **+0.7** |
| PB09 | | | | *i* S | **Sn** | **08 42 27.5** | **+0.9** |
| PB09 | | | | IAML | | 08 42 29.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **0.85** | **238** | | **Pn** | **08 42 11.5** | **+0.6** |
| **PB01** | **IPOC Station P** | **1.00** | **288** | ⇑*iP* | **Pn** | **08 42 12.4** | **+0.1** |
| PB01 | | | | *i* S | **Sn** | **08 42 28.6** | **-0.4** |
| PB01 | | | | IAML | | 08 42 30.4 | |
| | comp=E,7μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.32** | **198** | P | **Pn** | **08 42 16.4** | **+0.6** |
| | comp=E,92nm,0.3s,baz=22,slow=9.5,SNR=745 | | | | | | |
| LVC | | | | S | **Sn** | **08 42 34.8** | **-0.5** |
| | comp=E,92nm,0.3s,baz=287,slow=19,SNR=36 | | | | | | |
| **LVC** | **Limon Verde** | **1.32** | **198** | ⇑*iP* | **Pn** | **08 42 16.3** | **+0.4** |
| LVC | | | | *i* S | **Sn** | **08 42 35.4** | **0.0** |
| **LVC** | **Limon Verde** | **1.32** | **198** | *eP* | **Pn** | **08 42 16.5** | **+0.6** |
| **PB02** | **IPOC Station P** | **1.33** | **271** | ⇑*iP* | **Pn** | **08 42 15.7** | **-0.1** |
| PB02 | | | | *i* S | **Sn** | **08 42 34.3** | **-0.9** |
| PB02 | | | | IAML | | 08 42 35.3 | |
| | comp=N,5μm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **1.37** | **332** | ⇑*iP* | **Pn** | **08 42 17.7** | **+1.2** |
| PB08 | | | | *i* S | **Sn** | **08 42 38.0** | **+1.7** |
| PB08 | | | | IAML | | 08 42 40.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.37** | **254** | ⇑*iP* | **Pn** | **08 42 16.1** | **-0.2** |
| PB07 | | | | *i* S | **Sn** | **08 42 35.3** | **-0.8** |
| PB07 | | | | IAML | | 08 42 37.2 | |
| | comp=N,3μm,0.3s | | | | | | |
| **PB03** | **IPOC Station P** | **1.38** | **240** | ⇑*iP* | **Pn** | **08 42 16.2** | **-0.1** |
| PB03 | | | | *i* S | **Sn** | **08 42 35.2** | **-1.0** |
| PB03 | | | | IAML | | 08 42 36.4 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.69** | **217** | ⇑*iP* | **Pn** | **08 42 20.1** | **+0.1** |
| PB06 | | | | *i* S | **Sn** | **08 42 42.0** | **-0.7** |
| PB06 | | | | IAML | | 08 42 42.9 | |
| | comp=E,2μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.79** | **296** | ⇑*iP* | **Pn** | **08 42 20.5** | **-0.4** |
| TA01 | | | | *i* S | **Sn** | **08 42 43.1** | **-1.3** |
| TA01 | | | | I

comp=Z,1.7nm,0.3s,baz=256,slow=5.6,SNR=8.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **20.20** | **77** | P | | **P** | **08 46 15.3** | **-0.4** |
| BDFB | | | | IAmb | | IAmb | 08 46 19.6 | |

comp=Z,5.6nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ITTB** | **Itaituba** | **20.93** | **38** | *eP* | | **P** | **08 46 22.2** | **-1.3** |
| **PARB** | **Paraibuna** | **21.22** | **100** | *eP* | | **P** | **08 46 26.4** | **-0.2** |
| **PEXB** | **Peixe** | **21.37** | **68** | *eP* | | **P** | **08 46 27.9** | **-0.3** |
| **PTGA** | **Pitinga** | **22.11** | **23** | P | | **P** | **08 46 34.1** | **-1.9** |

comp=Z,1.2nm,0.3s,baz=189,slow=19,SNR=14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAN01** | **Angra dos Reis** | **22.75** | **98** | *eP* | | **P** | **08 46 42.7** | **+0.3** |
| **SMTB** | **Santa Maria do** | **23.64** | **61** | *eP* | | **P** | **08 46 50.8** | **+0.1** |
| **JANB** | **Januaria** | **23.77** | **79** | *eP* | | **P** | **08 46 51.6** | **-0.3** |
| **MALB** | **Monte Alegre** | **23.82** | **37** | *eP* | | **P** | **08 46 51.9** | **-0.4** |
| **SDBA** | **SAO DESIDERIO** | **24.21** | **72** | *eP* | | **P** | **08 46 55.8** | **-0.2** |
| **BOAV** | **Boa Vista** | **24.85** | **19** | P | | **P** | **08 47 02.1** | **+0.5** |
| BOAV | | | | IAmb | | IAmb | 08 47 30.2 | |

comp=Z,8.2nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NAN01** | **Guarapari, ES** | **26.91** | **88** | *eP* | | **P** | **08 47 20.5** | **+0.3** |
| **GUA01** | **Guaratinga, BA** | **27.50** | **85** | *eP* | | **P** | **08 47 26.0** | **+0.5** |
| **QSPA** | **South Pole Qui** | **68.84** | **180** | P | | **P** | **08 52 42.7** | **+1.2** |
| **PDAR** | **Pinedale Array** | **74.19** | **330** | P | | **P** | **08 53 15.2** | **+1.2** |

comp=Z,0.1nm,0.5s,baz=133,slow=5.0,SNR=1.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **75.63** | **322** | P | | **P** | **08 53 25.3** | **+2.9** |

comp=Z,0.4nm,0.8s,baz=134,slow=7.7,SNR=2.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **76.92** | **70** | P | | **P** | **08 53 29.2** | **-0.6** |

comp=Z,1.9nm,0.6s,baz=259,slow=5.3,SNR=14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **91.19** | **340** | P | | **P** | **08 54 41.6** | **+0.5** |

comp=Z,0.3nm,0.4s,baz=132,slow=4.7,SNR=14

*IDC **02** 08:44:16.6±1.4,0°.81N×122°.93E,h0km,mb3.7/4, mb1 3.9/6,mb1mx3.6/51,mbtmp3.7/6,ML3.5/2,Error ellipse: s-maj=45.0km s-min=22.9km az=71.0*
*DJA **02** 08:44:26.1±0.3,1°.1N±4°×12°.3E±°,h43km±5km,M4.1/12, mb4.1/5,MLv4.0/12*
**ISC 02 08:44:24.5±1.0,0°.75N±0°.09×122°.87E±0°.05,h56km±8km, n15,σ1°68/20,mb3.7/4,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **0.18** | **129** | P | **Pn** | **08 44 33.7** | **+0.3** |
| GTOI | | | | S | **Sn** | **08 44 38.8** | **-0.9** |
| **MRSI** | **Marisa** | **0.97** | **254** | P | **Pn** | **08 44 42.7** | **+0.7** |
| MRSI | | | | S | **Sn** | **08 44 55.3** | **+0.4** |
| **KMSI** | **Cibinong** | **1.12** | **99** | P | **Pn** | **08 44 46.9** | **+2.9** |
| **APSI** | **Ampana** | **2.05** | **217** | P | **Pn** | **08 44 58.5** | **+1.9** |
| APSI | | | | S | **Sn** | **08 45 22.6** | **+1.5** |
| **MPSI** | **Mapaga** | **3.00** | **262** | P | **Pn** | **08 45 11.1** | **+1.5** |
| **SANI** | **Sanana** | **4.17** | **132** | P | **Pn** | **08 45 26.6** | **+0.9** |
| **TTSI** | **Tana Toraja** | **4.85** | **219** | P | **Pn** | **08 45 36.9** | **+2.0** |
| **BNSI** | **Bone** | **5.81** | **208** | P | **Pn** | **08 45 50.1** | **+1.9** |

0.1nm17nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **6.52** | **209** | Pn | | **Pn** | **08 45 54.6** | **-3.3** |

0.3nm,0.3s,baz=68,slow=19,SNR=1.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAPI | | | | Sn | | **Sn** | **08 47 11.9** | **+1.0** |

0.6nm,0.3s,baz=95,slow=21,SNR=2.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BKSI** | **Bulukumba** | **6.62** | **204** | P | | **Pn** | **08 46 00.8** | **+1.5** |
| **FITZ** | **Fitzroy Crossi** | **18.92** | **172** | P | | **P** | **08 48 40.4** | **-0.5** |

0.3nm,0.3s,baz=0.2,slow=9.3,SNR=7.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.43** | **152** | P | | **P** | **08 49 27.6** | **-1.4** |

2.0nm,0.5s,baz=328,slow=10,SNR=2.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **26.53** | **157** | P | | **P** | **08 49 56.8** | **-0.4** |

0.6nm,0.7s,baz=332,slow=7.6,SNR=7.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | | **PcP** | **08 53 19.2** | **-1.7** |

0.3nm,0.6s,baz=333,slow=1.4,SNR=2.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.98** | **153** | P | | **P** | **08 51 28.3** | **-0.3** |

2.2nm,0.6s,baz=337,slow=7.0,SNR=7.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **57.92** | **328** | P | | **P** | **08 54 11.0** | **0.0** |

0.2nm,0.5s,baz=138,slow=8.4,SNR=4.9

*IDC **02** 08:48:12.9±1.4,20°.51S×178°.46W,h602km±15km, mb3.5/11,mb1 3.7/14,mb1mx3.5/33,mbtmp4.4/14,Error ellipse: s-maj=17.5km s-min=10.9km az=153.0*
*NEIC **02** 08:48:13.6±1.3,20°.3S±0°.2×178°.50W±0°.05,h598km±12km, mb4.2/19,Error ellipse: s-maj=24.9km s-min=5.6km az=171.0*
*NOU **02** 08:48:54.1,18°.28S×179°.93W,h307km,MLv3.3/4,Fiji Islands Region*
**ISC 02 08:48:12.3±0.6,20°.4S±0°.1×178°.48W±0°.08,h587km,n45, σ1°43/50,mb4.2/20,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAVE** | **Taveuni** | **3.92** | **340** | P | **P** | **08 49 38.5** | **+2.1** |
| **MSVF** | **Nonsavu** | **4.23** | **308** | P | **P** | **08 49 41.2** | **+2.6** |

13nm,0.3s,baz=149,slow=5.9,SNR=42

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.23** | **308** | P | | **P** | **08 49 41.5** | **+2.9** |
| **DGTI** | **Dogotuki** | **4.43** | **337** | P | | **P** | **08 49 41.5** | **+1.5** |
| **NIUE** | **Niue** | **8.16** | **82** | P | | **P** | **08 50 14.8** | **+2.0** |
| **MARNC** | **Mare, Loyalty** | **12.65** | **263** | P | | **P** | **08 50 58.3** | **+0.6** |
| **PINNC** | **Pines Island,** | **13.28** | **258** | P | | **P** | **08 51 05.1** | **+1.0** |
| **DZM** | **Mont Dzumac** | **14.16** | **261** | P | | **P** | **08 51 14.8** | **+1.8** |

1.2nm,0.3s,baz=93,slow=19,SNR=26

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.16** | **261** | P | | **P** | **08 51 15.9** | **+2.8** |
| **URZ** | **Urewera** | **18.19** | **191** | P | | **P** | **08 51 50.4** | **+0.3** |

1.0nm,0.3s,baz=291,slow=1.8,SNR=8.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| URZ | | | | S | | **S** | **08 54 43.4** | **-3.5** |

0.1nm,0.3s,baz=17,slow=23,SNR=1.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **18.19** | **191** | P | | **P** | **08 51 50.9** | **+0.8** |
| URZ | | | | IAmb | | IAmb | 08 51 52.3 | |

comp=Z,4.7nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **34.88** | **283** | P | | **P** | **08 54 15.6** | **-0.6** |

comp=Z,20nm,0.8s,baz=82,slow=7.4,SNR=6.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **34.88** | **283** | P | | **P** | **08 54 15.7** | **-0.5** |
| **COEN** | **Coen** | **37.13** | **274** | P | | **P** | **08 54 34.5** | **-0.2** |
| **BBOO** | **Buckleboo** | **42.19** | **243** | P | | **P** | **08 55 14.8** | **0.0** |
| **JAY** | **Jayapura** | **43.59** | **289** | P | | **P** | **08 55 25.2** | **-0.8** |

comp=Z,23nm,0.6s,baz=145,slow=4.1,SNR=9.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **44.10** | **257** | P | | **P** | **08 55 29.9** | **0.0** |
| **ASAR** | **Alice Springs** | **44.10** | **257** | P | | **P** | **08 55 30.2** | **+0.3** |

comp=Z,6.5nm,0.8s,baz=88,slow=7.9,SNR=73

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | ScP | | **ScP** | **08 59 58.4** | **-0.2** |

comp=Z,0.4nm,0.9s,baz=88,slow=4.7,SNR=4.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | S | | **S** | **09 01 18.8** | **-2.3** |

comp=Z,1.0nm,0.8s,baz=94,slow=17,SNR=7.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **44.10** | **257** | P | | **P** | **08 55 29.7** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.15** | **262** | P | | **P** | **08 55 29.1** | **-1.2** |
| WB0 | | | | IAmb | | IAmb | 08 55 30.1 | |

comp=Z,7.7nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WB2** | **Warramunga Arr** | **44.16** | **262** | P | | **P** | **08 55 29.8** | **-0.5** |
| WB2 | | | | IAmb | | IAmb | 08 55 30.3 | |

comp=Z,4.9nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRAB** | **Tennant Creek** | **44.16** | **262** | P | | **P** | **08 55 30.0** | **-0.4** |
| WRAB | | | | IAmb | | IAmb | 08 55 30.5 | |

comp=Z,9.3nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.17** | **262** | P | | **P** | **08 55 29.7** | **-0.7** |

comp=Z,3.4nm,0.5s,baz=97,slow=8.5,SNR=38

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | S | | **S** | **09 01 24.0** | **+1.9** |

comp=Z,0.9nm,0.9s,baz=124,slow=16,SNR=5.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.17** | **262** | P | | **P** | **08 55 29.7** | **-0.7** |
| **MTN** | **Manton Dam** | **48.71** | **271** | P | | **P** | **08 56 04.4** | **-0.3** |
| **KNRA** | **Kununurra** | **50.22** | **266** | P | | **P** | **08 56 15.3** | **-0.4** |
| KNRA | | | | IAmb | | IAmb | 08 56 44.2 | |

comp=Z,20nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **52.59** | **262** | P | | **P** | **08 56 32.5** | **-0.3** |

comp=Z,1.2nm,0.5s,baz=54,slow=2.9,SNR=9.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | | **P** | **08 58 25.8** | **+2.2** |
| QSPA | | | | IAmb | | IAmb | 08 58 26.5 | |

comp=Z,4.0nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **76.53** | **319** | P | | **P** | **08 59 01.8** | **-1.2** |

comp=Z,0.7nm,0.5s,baz=116,slow=5.3,SNR=1.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YBH** | **Yreka Blue Hor** | **80.50** | **39** | P | | **P** | **08 59 24.7** | **+0.5** |
| **PNTR** | **Pine Nut** | **80.82** | **42** | P | | **P** | **08 59 26.2** | **+0.1** |
| PNTR | | | | IAmb | | IAmb | 08 59 27.0 | |

comp=Z,8.0nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **81.27** | **44** | P | | **P** | **08 59 28.3** | **-0.1** |

comp=Z,1.9nm,0.7s,baz=223,slow=8.5,SNR=13

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **81.27** | **44** | P | | **P** | **08 59 27.4** | **-1.0** |
| **F10A** | **Beach Ranch, E** | **86.21** | **38** | P | | **P** | **08 59 51.4** | **-1.0** |
| F10A | | | | IAmb | | IAmb | 08 59 52.5 | |

comp=Z,5.8nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PLID** | **Pearl Lake** | **86.43** | **39** | P | | **P** | **08 59 52.8** | **-0.8** |
| **HLID** | **Hailey** | **86.55** | **41** | P | | **P** | **08 59 53.6** | **-0.6** |
| HLID | | | | IAmb | | IAmb | 08 59 55.0 | |

comp=Z,1.9nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **87.39** | **58** | P | | **P** | **08 59 59.2** | **+0.8** |

comp=Z,2.6nm,0.8s,baz=218,slow=6.7,SNR=22

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **87.39** | **58** | P | | **P** | **08 59 58.3** | **0.0** |
| **REDW** | **Red Top Meadow** | **88.67** | **42** | P | | **P** | **09 00 03.6** | **-0.5** |
| REDW | | | | IAmb | | IAmb | 09 00 04.8 | |

comp=Z,6.0nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PD31** | **Pinedale Array** | **89.20** | **43** | P | | **P** | **09 00 05.8** | **-0.9** |
| PD31 | | | | IAmb | | IAmb | 09 00 07.3 | |

comp=Z,4.9nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **89.20** | **43** | P | | **P** | **09 00 06.0** | **-0.6** |

comp=Z,1.2nm,0.6s,baz=204,slow=3.1,SNR=15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **89.66** | **290** | P | | **P** | **09 00 10.3** | **+1.2** |

comp=Z,1.0nm,0.4s,baz=79,slow=5.6,SNR=1.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **96.62** | **25** | P | | **P** | **09 00 38.0** | **-1.7** |

comp=Z,0.1nm,0.6s,baz=224,slow=5.2,SNR=2.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARCES** | **ARCESS Array B** | **128.75** | **349** | PKP | | **PKPdf** | **09 06 11.5** | **-1.6** |

comp=Z,1.7nm,0.8s,baz=36,slow=3.4,SNR=5.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GERES** | **GERESS Array B** | **149.99** | **344** | PKP | | **PKPdf** | **09 06 48.7** | **-3.0** |

comp=Z,0.2nm,0.3s,baz=359,slow=5.4,SNR=1.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GERES | | | | PKPbc | | **PKPbc** | **09 06 55.4** | **-1.9** |

comp=Z,0.2nm,0.4s,baz=4.8,slow=1.6,SNR=4.0

*IDC **02** 08:54:15.8±1.1,39°.73N×70°.43E,h0km,mb3.9/7, mb1 3.9/13,mb1mx3.7/44,mbtmp3.7/13,ML3.2/6,MS4.3/1, Ms1 4.3/1,ms1mx2.8/95,Error ellipse: s-maj=20.3km s-min=13.0km az=149.0*
*KRNET **02** 08:54:16.3±0.1,39°.75N×70°.37E,h14km,mb3.9*
*SOME **02** 08:54:17.1,39°.97N×70°.52E,h5km*
*ISU **02** 08:54:17,39°.76N×70°.44E,h5km*
*NNC **02** 08:54:20.0±1.1,39°.96N×70°.42E,h0km,mb4.3,mpv3.9, Error ellipse: s-maj=8.7km s-min=5.4km az=15.0*
**ISC 02 08:54:16.9±1.3,39°.68N±0°.04×70°.32E±0°.02,h3km±8km, n84,σ2°37/125,mb3.7/7,27C-8D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTK** | **Batken** | **0.54** | **45** | P | **Pg** | **08 54 25.0** | **-2.3** |
| BTK | | | | S | **Sg** | **08 54 32.0** | **-2.3** |
| **BTK** | **Batken** | **0.54** | **45** | ⇑*i*P | **Pg** | **08 54 25.2** | **-2.1** |

baz=48

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BTK | | | | ⇑*i*S | **Sg** | **08 54 31.9** | **-2.3** |

baz=48

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **1.16** | **99** | ⇑*i*P | **Pg** | **08 54 37.9** | **-1.3** |

baz=3.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DRK | | | | ⇑*i*S | **Sg** | **08 54 53.5** | **-0.8** |

baz=3.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FRG** | **Fergana** | **1.32** | **58** | P | **Pn** | **08 54 40.0** | **-2.3** |
| FRG | | | | S | **Sg** | **08 54 57.0** | **-2.4** |
| **NAM** | **Namangan** | **1.66** | **38** | *i*P | **Pn** | **08 54 48.0** | **+1.1** |
| NAM | | | | S | **Sg** | **08 55 13.0** | **+2.7** |
| **YBZ** | **Yangibazar** | **1.71** | **341** | P | **Pn** | **08 54 48.0** | **+0.4** |
| YBZ | | | | S | **Sn** | **08 55 12.0** | **+1.9** |
| **TAS** | **Tashkent** | **1.82** | **335** | *i*P | **Pn** | **08 54 50.0** | **+0.9** |
| TAS | | | | S | **Sb** | **08 55 16.0** | **+2.0** |
| **TAS** | **Tashkent** | **1.82** | **335** | ⇑*i*P | **Pn** | **08 54 49.1** | **0.0** |

baz=33

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TAS | | | | ⇑*i*S | **Sn** | **08 55 13.1** | **+0.5** |

baz=33

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TGS** | **TashGRES** | **1.84** | **341** | *i*P | **Pn** | **08 54 50.0** | **+0.6** |
| TGS | | | | S | **Sn** | **08 55 14.0** | **+0.8** |
| **CHMG** | **Chimgan** | **1.88** | **353** | *i*P | **Pn** | **08 54 51.0** | **+0.9** |
| CHMG | | | | *e*S | **Sn** | **08 55 15.0** | **+0.6** |
| **TSTA** | **Tashata** | **1.88** | **61** | P | **Pn** | **08 54 52.0** | **+2.0** |
| TSTA | | | | S | **Sn** | **08 55 16.0** | **+1.8** |
| **TRKS** | **Terek-Say** | **1.95** | **18** | ⇓*i*P | **Pn** | **08 54 50.0** | **-1.0** |

baz=19

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TRKS | | | | ⇓*i*S | **Sn** | **08 55 14.5** | **-1.6** |

baz=19

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DZI** | **Dzhizak** | **1.97** | **284** | *i*P | **Pg** | **08 54 54.0** | **-0.7** |
| DZI | | | | S | **Sg** | **08 55 23.0** | **+2.8** |
| **CHRV** | **Charvak** | **1.98** | **352** | *i*P | **Pn** | **08 54 52.0** | **+0.7** |
| CHRV | | | | S | **Sn** | **08 55 18.0** | **+1.4** |
| **OHH** | **Osh** | **2.07** | **65** | ⇑*i*P | **Pn** | **08 54 53.0** | **+0.4** |

baz=67

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OHH | | | | ⇑*i*S | **Sn** | **08 55 19.7** | **+0.7** |

baz=67

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **2.46** | **30** | P | **Pn** | **08 55 00.0** | **+2.0** |
| ARK | | | | S | **Sn** | **08 55 30.0** | **+1.5** |
| **ARK** | **Arkit** | **2.46** | **30** | ⇑*i*P | **Pn** | **08 54 58.3** | **+0.3** |

baz=30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARK | | | | ⇑*i*S | **Sn** | **08 55 28.9** | **+0.4** |

baz=30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IUG** | **luzhnay** | **2.47** | **355** | *e*P | **Pn** | **08 54 59.8** | **+1.6** |

5μm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IUG | | | | *e*S | **Sn** | **08 55 30.3** | **+1.4** |

1μm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IUG** | **luzhnay** | **2.47** | **355** | Pg | **Pn** | **08 54 59.8** | **+1.6** |

5μm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IUG | | | | Lg | Lg | 08 55 30.3 | |

1μm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **2.48** | **81** | ⇑*e*P | **Pn** | **08 54 59.0** | **+0.7** |

baz=83

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SFK | | | | ⇑*e*S | **Sn** | **08 55 30.0** | **+0.9** |

baz=83

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHM** | **Chimkent** | **2.69** | **349** | *e*P | **Pb** | **08 55 05.7** | **+0.1** |

63nm,0.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CHM | | | | *e*S | **Sb** | **08 55 40.2** | **+1.1** |

943nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MNAS** | **Manas** | **3.25** | **30** | ⇑*e*P | **Pn** | **08 55 09.3** | **+0.4** |

baz=30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MNAS | | | | ⇑*i*S | **Sn** | **08 55 48.1** | **-0.1** |

baz=30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DZA** | **Taraz** | **3.30** | **13** | *e*P | **Pb** | **08 55 16.7** | **+0.7** |

60nm,0.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DZA | | | | *e*S | **Sb** | **08 55 58.8** | **+2.3** |

245nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRLS** | **Borolday** | **3.37** | **354** | *e*P | **Pn** | **08 55 12.4** | **+2.0** |

16nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRLS | | | | *e*S | **Sn** | **08 55 51.6** | **+0.8** |

110nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRLS** | **Borolday** | **3.37** | **354** | Pg | **Pn** | **08 55 12.4** | **+2.0** |

16nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRLS | | | | Lg | Lg | 08 55 51.6 | |

110nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KK02** | **Karatay Array** | **3.42** | **2** | ⇓Pn | **Pn** | **08 55 11.4** | **+0.2** |

17nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KK02 | | | | ⇑Lg | Lg | 08 56 00.2 | |

92nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **3.54** | **45** | P | **Pn** | **08 55 15.1** | **+2.0** |

SNR=36

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NUT** | **Nurota** | **3.66** | **285** | P | **Pn** | **08 55 16.0** | **+1.6** |
| NUT | | | | S | **Sg** | **08 56 16.0** | **+1.5** |
| **ARLS** | **Aral** | **3.74** | **53** | ⇑*i*P | **Pn** | **08 55 16.0** | **+0.4** |

baz=54

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARLS | | | | ⇑*i*S | **Sn** | **08 55 59.4** | **-0.9** |

baz=54

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **3.77** | **35** | *e*P | **Pb** | **08 55 24.1** | **+0.1** |

19nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MRKS | | | | *e*S | **Sb** | **08 56 12.4** | **+2.3** |

50nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **3.77** | **35** | Pg | **Pb** | **08 55 24.1** | **+0.1** |

19nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MRKS | | | | Lg | Lg | 08 56 12.4 | |

50nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EKS2** | **Erkin-Say** | **3.96** | **40** | P | **Pn** | **08 55 19.4** | **+0.6** |

SNR=10

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EKS2** | **Erkin-Say** | **3.96** | **40** | ⇑*e*P | **Pn** | **08 55 19.1** | **+0.5** |

baz=40

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EKS2 | | | | ⇑*i*S | **Sn** | **08 56 04.9** | **-0.7** |

baz=40

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UCH** | **Uchtor** | **4.07** | **50** | P | **Pn** | **08 55 21.6** | **-2.0** |

SNR=15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UCH** | **Uchtor** | **4.07** | **50** | ⇑*e*P | **Pn** | **08 55 20.9** | **+0.5** |

baz=50

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UCH | | | | ⇑*i*S | **Sn** | **08 56 08.0** | **-0.8** |

baz=50

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.32** | **46** | Pn | **Pn** | **08 55 24.1** | **+0.5** |

3.7nm,0.3s,baz=220,slow=7.0,SNR=31

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AAK | | | | Lg | Lg | 08 56 29.4 | |

2.3nm,0.3s,baz=222,slow=14,SNR=1.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.32** | **46** | P | **Pn** | **08 55 25.7** | **+2.1** |

SNR=24

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.32** | **46** | Pn | **Pn** | **08 55 24.6** | **+1.0** |

10.0nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AAK | | | | ⇓Lg | Lg | 08 56 30.4 | |

26nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.32** | **46** | ⇓*e*P | **Pn** | **08 55 24.1** | **+0.5** |

baz=46

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AAK | | | | ⇓*i*S | **Sn** | **08 56 13.7** | **-0.8** |

baz=46

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **4.59** | **48** | P | **Pn** | **08 55 29.3** | **+2.0** |

SNR=36

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHMS** | **Chumysh** | **4.70** | **44** | P | **Pn** | **08 55 29.8** | **+1.0** |

SNR=7.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **USP** | **Ospenovka** | **4.76** | **40** | P | **Pb** | **08 55 30.3** | **+0.8** |

SNR=11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TMD** | **Tamdy-Bulak** | **4.78** | **297** | *e*P | **Pn** | **08 55 31.0** | **+1.2** |
| TMD | | | | *e*S | **Sg** | **08 56 51.0** | **+0.5** |
| **TKM2** | **Tokmak 2** | **5.13** | **49** | P | **Pn** | **08 55 36.1** | **+1.4** |

SNR=14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TKM2** | **Tokmak 2** | **5.13** | **49** | ⇑Pn | **Pn** | **08 55 35.4** | **+0.7** |

13nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TKM2 | | | | ⇑Sn | **Sn** | **08 56 34.2** | **-0.2** |

13nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TKM2 | | | | ⇑Lg | Lg | 08 56 56.4 | |

22nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KST** | **Kastek** | **5.42** | **50** | *e*P | **Pb** | **08 55 54.4** | **+2.2** |

9.7nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KST | | | | *e*S | **Sb** | **08 57 03.8** | **+6.2** |

19nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KST** | **Kastek** | **5.42** | **50** | Pg | **Pb** | **08 55 54.4** | **+2.2** |

9.7nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KST | | | | Lg | Lg | 08 57 03.8 | |

19nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DGS** | **Degeres** | **5.43** | **47** | *e*P | **Pb** | **08 55 54.5** | **+2.1** |

6.5nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DGS | | | | *e*S | **Sb** | **08 57 03.6** | **+5.7** |

18nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DGS** | **Degeres** | **5.43** | **47** | Pg | **Pb** | **08 55 54.4** | **+2.1** |

6.5nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DGS | | | | Lg | Lg | 08 57 03.6 | |

18nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KRBS** | **Karabastau** | **5.67** | **43** | *e*P | **Pb** | **08 55 56.6** | **+0.1** |

3.2nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KRBS | | | | *e*S | **Sb** | **08 57 08.3** | **+3.5** |

9.7nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KRBS** | **Karabastau** | **5.67** | **43** | Pg | **Pb** | **08 55 57.3** | **+0.8** |

3.2nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|

241nm,0.3s,baz=248,slow=23,SNR=27
**SOCV Socops 0.87 170** *e*P **Pb 09 24 51.7 -1.3**
SOCV *e*S **Sb 09 25 03.2 -1.3**
**SOCV Socops 0.87 170** *e*P **Pb 09 24 51.9 -1.1**
SOCV *e*S **Sb 09 25 02.9 -1.6**
**CURV Curarigua 1.35 50** *e*S **Sg 09 25 21.5 +1.6**
**SANV Sanarito 1.50 76** *e*P **Pb 09 25 05.1 +1.2**
SANV *e*S **Sb 09 25 24.7 +1.9**
**MCQV Machiques 1.75 301** *e*P **Pb 09 25 07.6 -0.4**
MCQV *e*S **Sb 09 25 29.4 -0.2**
**DABV Dabajuro 1.80 12** *e*P **Pb 09 25 07.9 -1.0**
**DABV Dabajuro 1.80 12** *e*S **Sg 09 25 32.0 -2.3**
**CAPV Capacho 1.81 225** *e*P **Pb 09 25 08.2 +1.2**
CAPV *e*S **Sn 09 25 29.7 0.0**
**SIQV Siquisique 1.91 38** *e*P **Pb 09 25 10.0 -0.7**
SIQV *e*S **Sb 09 25 34.7 +0.3**
**OCAC Ocana 2.45 249** *e*P **Pn 09 25 17.7 +1.9**
OCAC *e*S **Sn 09 25 47.9 +2.4**
OCAC *i* 09 25 54.8
comp=Z,430nm,0.3s
**PAMC Pamplona, Colo 2.45 223** *e*P **Pn 09 25 17.9 +1.9**
PAMC *e*S **Sn 09 25 47.8 +1.8**
PAMC *i* 09 25 56.6
comp=Z,118nm,0.2s
**MAPV Macapo 2.61 75** *e*S **Sn 09 25 50.9 +1.6**
**CRJC Cerrejon, Guaj 2.62 316** *e*P **Pn 09 25 18.2 +0.2**
**URIC Uribia, Colomb 2.71 339** *e*P **Pb 09 25 23.3 -1.1**
**JACV Jacura 2.89 48** *e*P **Pn 09 25 22.9 +1.2**
JACV *e*S **Sn 09 25 57.0 +0.8**
**BAUV El Baul 2.94 94** *e*P **Pn 09 25 23.9 +1.5**
BAUV *e*S **Sn 09 25 58.3 +0.8**
**MONV Montecano 2.97 20** *e*P **Pn 09 25 23.6 +0.7**
MONV *e*S **Sn 09 25 58.4 +0.2**
**SMLC San Martn de 3.04 264** *e*P **Pn 09 25 24.4 +0.7**
**ARGC Ariguani, Magd 3.26 283** *e*P **Pn 09 25 28.4 +1.6**
**BENV Beln 3.47 76** *e*P **Pn 09 25 31.3 +1.7**
BENV *e*S **Sn 09 26 10.5 0.0**
**RUSC La Rusia 3.83 213** *e*P **Pn 09 25 36.7 +1.7**
**ZARC Zaragoza, Cauc 4.14 247** *e*P **Pn 09 25 40.3 +1.4**
**SJCC San Jacinto, C 4.17 281** *e*P **Pn 09 25 41.3 +1.9**
**PTBC PUERTO BERRIO, 4.28 233** *e*P **Pn 09 25 41.6 +0.7**
PTBC *e*S **Sn 09 26 28.9 -1.6**
**MOTC Monteria, Cord 4.61 266** *e*P **Pn 09 25 46.3 +1.0**
MOTC *e*S **Sn 09 26 38.7 +0.2**
**SPBC San Pablo de B 4.61 221** *e*P **Pn 09 25 47.4 +2.0**
SPBC *e*S **Sn 09 26 37.8 -0.9**
**MERV Las Mercedes 4.66 88** *e*P **Pn 09 25 47.9 +1.9**
MERV *e*S **Sn 09 26 37.8 -2.1**
**UREC San Jos de Ur 4.68 253** *e*P **Pn 09 25 48.6 +2.3**
**CACV CAICARA DEL OR 4.70 109** *e*P Pb 09 25 54.9 -3.4
CACV *e*S **Sb 09 26 50.7 -4.0**
**BIRV Birongo 4.86 74** *e*P **Pn 09 25 49.7 +0.9**
BIRV *e*S **Sn 09 26 43.3 -1.6**
**CHIC Chingaza 5.24 211** *e*P **Pn 09 25 55.5 +1.2**
**HELC Santa Helena 5.35 237** *e*P **Pn 09 25 58.5 +2.7**
**ROSC El Rosal 5.39 218** Pn **Pn 09 25 58.6 +2.2**
comp=Z,1.6nm,0.3s,baz=62,slow=18,SNR=2.2
**GUY2C Guyana, Caldas 5.81 228** *e*P **Pn 09 26 05.5 +3.2**
**CBOC Ciudad Bolivar 5.93 237** *e*P **Pn 09 26 07.1 +3.4**
**ANIL Santa Ana 6.35 224** *e*P **Pn 09 26 11.9 +2.4**
**PCRV Puerto La Cruz 6.37 80** Pn **Pn 09 26 11.6 +2.0**
comp=Z,0.8nm,0.3s,baz=280,slow=4.7,SNR=2.0
PCRV Sn **Sn 09 27 25.3 +3.2**
comp=Z,3.0nm,0.3s,baz=272,slow=22,SNR=12
**PRAC Prado 6.63 216** *e*P **Pn 09 26 15.1 +1.9**
**ORTC Ortega, Tolima 6.69 219** *e*P **Pn 09 26 16.1 +2.1**
**PLMC San Jos del P 6.71 231** *e*P **Pn 09 26 17.9 +3.6**
**PDAR Pinedale Array 47.50 322** P **P 09 33 10.6 -0.5**
comp=Z,0.2nm,0.5s,baz=123,slow=11,SNR=4.6
**YKA Yellowknife Ar 61.84 339** P **P 09 34 53.1 -1.2**
comp=Z,0.2nm,0.6s,baz=125,slow=7.7,SNR=3.2
**ASAR Alice Springs 152.14 236** PKPbc **PKPbc 09 44 30.8 -1.2**
comp=Z,0.2nm,0.6s,baz=122,slow=3.5,SNR=1.5

**NNC 02 09:27:12.3±2.0, 53.50N×87.81E, h0km, mb3.8, mpv3.4, 8C-4D, Error ellipse: s-maj=15.6km s-min=8.0km az=64.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **1.83** | **285** | ⇑Pn | Pn | 09 27 44.3 | -0.7 |
| ZAA0 | 4.9nm,0.8s | | | ⇓Pn | Sb | 09 28 10.2 | +0.1 |
| | 13nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **6.31** | **247** | ⇑Pn | Pn | 09 28 47.7 | +1.2 |
| KURK | 2.2nm,0.7s | | | ⇑Sn | Sn | 09 29 59.0 | -0.3 |
| | 3.3nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 30 32.4 | |
| | 42nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.41** | **247** | ⇑Pn | Pn | 09 28 49.3 | +1.5 |
| KURBB | 4.1nm,0.3s | | | ⇑Sn | Sn | 09 30 01.0 | -0.6 |
| | 12nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 30 36.4 | |
| | 48nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **7.59** | **210** | Pn | Pn | 09 29 04.7 | +0.5 |
| MK31 | 1.3nm,0.2s,baz=28,slow=14,SNR=55 | | | Sn | Sn | 09 30 33.5 | +2.6 |
| | 0.9nm,0.5s,baz=74,slow=32,SNR=9.3 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 31 14.8 | |
| | 4.4nm,0.7s,baz=30,slow=30,SNR=4.1 | | | | | | |
| **MAKZ** | **Makanchi** | **7.68** | **212** | ⇓Pn | Pn | 09 29 04.8 | -0.5 |
| MAKZ | | | | ⇑Sn | Sn | 09 30 34.5 | +1.6 |
| | 6.2nm,1.3s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 09 31 15.1 | |
| | 16nm,1.2s | | | | | | |

*JMA **02** 09:53:39.4, 38.35N×141.64E, h62km±1km, M3.8 Broadband fault plane solution: P waves. NP1: φs53.00000°, δ34.00000°, λ111.00000°. NP2: φs208.00000°, δ58.00000°, λ76.00000°. Principal axes: T Plg73.0000°, Azm84.0000°; N Plg11.0000°, Azm216.0000°; P Plg12.0000°, Azm308.0000°;*
*JMA Felt II J1.*
*IDC **02** 09:53:41.5±2.0, 38.47N×141.74E, h80km±18km, mb3.3/11, mb1 3.5/16, mb1mx3.3/36, mbtmp3.6/16, MS3.0/1, Ms1 3.0/1, ms1mx2.3/37 Error ellipse: s-maj=23.3km s-min=11.7km az=123.0*
**ISC 02 09:53:39.2±0.9, 38.36N±0.04×141.75E±0.07, h60km±6km, n40, σ1s28/50, mb3.5/11, 7C-5D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.23** | **258** | ⇑P | Pn | 09 53 48.9 | 0.0 |
| JIKH | | | | S | Sn | 09 53 55.6 | -0.3 |
| **JIO** | **Ouri** | **0.33** | **287** | ⇑P | Pn | 09 53 49.5 | -0.1 |
| JIO | | | | S | Sn | 09 53 56.6 | -0.5 |
| **JKMT** | **Kesennumamotoy** | **0.50** | **334** | ⇑P | Pn | 09 53 51.4 | +0.2 |
| JKMT | | | | *i* S | Sn | 09 53 59.8 | -0.2 |
| **JOFO** | **Osakifurukawao** | **0.70** | **291** | P | Pn | 09 53 53.2 | -0.3 |
| JOFO | | | | S | Sn | 09 54 03.5 | -0.5 |
| **OFUJ** | **Ofunato** | **0.72** | **355** | ⇑P | Pn | 09 53 54.1 | +0.3 |
| OFUJ | | | | S | Sn | 09 54 04.6 | +0.1 |
| **JMK** | **Ichinoseki** | **0.72** | **325** | ⇓P | Pn | 09 53 53.8 | 0.0 |
| JMK | | | | S | Sn | 09 54 04.2 | -0.3 |
| **JOU** | **Okura** | **0.86** | **271** | ⇑P | Pn | 09 53 54.8 | -0.7 |
| JOU | | | | S | Sn | 09 54 06.0 | -1.4 |
| **JMM** | **Marumori** | **0.90** | **237** | ⇑P | Pn | 09 53 55.2 | -0.8 |
| JMM | | | | S | Sn | 09 54 06.6 | -1.8 |
| **JOM** | **Ohasama** | **1.17** | **342** | ⇓P | Pn | 09 53 59.6 | +0.1 |
| JOM | | | | S | Sn | 09 54 15.3 | +0.7 |
| **JFK** | **Kawauchi** | **1.21** | **215** | ⇑P | Pn | 09 53 59.7 | -0.4 |
| JFK | | | | S | Sn | 09 54 14.5 | -1.1 |
| **JYK** | **Kaneyama** | **1.23** | **298** | ⇓P | Pn | 09 53 59.8 | -0.5 |
| JYK | | | | S | Sn | 09 54 15.4 | -0.6 |
| **JYS** | **Shirataka** | **1.33** | **265** | P | Pn | 09 54 01.2 | -0.5 |
| JYS | | | | S | Sn | 09 54 17.7 | -0.9 |
| **JRG** | **Rokugo** | **1.36** | **320** | ⇓P | Pn | 09 54 02.1 | +0.1 |
| **JFT** | **Otama** | **1.40** | **234** | P | Pn | 09 54 02.3 | -0.3 |
| JFT | | | | S | Sn | 09 54 18.9 | -1.2 |
| **JYA** | **Atsumi** | **1.62** | **279** | ⇓P | Pn | 09 54 05.0 | -0.5 |
| JYA | | | | S | Sn | 09 54 25.0 | -0.3 |
| **MAT** | **Matsushiro** | **3.35** | **238** | P | Pn | 09 54 30.5 | +1.3 |
| MAT | | | | eS | Sn | 09 55 09.2 | +1.4 |
| **MJAR** | **Matsushiro Arr** | **3.35** | **238** | P | Pn | 09 54 30.4 | +1.3 |
| | 1.6nm,0.3s,baz=41,slow=12,SNR=55 | | | | | | |
| MJAR | | | | S | Sn | 09 55 13.2 | +5.4 |
| | 0.4nm,0.3s,baz=22,slow=24,SNR=4.1 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **5.47** | **198** | S | Sn | 09 55 59.7 | 0.0 |
| | 14nm,0.3s,baz=229,slow=23,SNR=1.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.79** | **6** | P | Pn | 09 55 02.3 | -0.2 |
| | 0.9nm,0.3s,baz=200,slow=15,SNR=1.8 | | | | | | |
| ASAJ | | | | S | Sn | 09 56 06.8 | -0.6 |
| | 0.7nm,0.3s,baz=188,slow=27,SNR=1.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.38** | **312** | P | Pn | 09 55 52.3 | +0.7 |
| | baz=125,slow=14,SNR=28 | | | | | | |
| **JNU** | **Nakatsue** | **10.26** | **243** | P | Pn | 09 56 06.9 | +3.1 |
| | 0.2nm,0.3s,baz=56,slow=15,SNR=0.8 | | | | | | |
| **KSRS** | **Korea Array** | **10.97** | **270** | P | Pn | 09 56 16.6 | +3.3 |
| | 0.2nm,0.3s,baz=79,slow=13,SNR=2.2 | | | | | | |
| **KLR** | **Kul'dur** | **13.04** | **330** | LR | LR | 10 01 01.6 | |
| | comp=Z,63nm,18.1s,baz=12,slow=34 | | | | | | |
| **SEY** | **Seymchan** | **25.44** | **11** | P | **P** | **09 59 01.4** | **+0.4** |
| | 0.3nm,0.3s,baz=240,slow=11,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **27.29** | **302** | P | **P** | **09 59 18.7** | **+0.6** |
| | 0.2nm,0.4s,baz=106,slow=11,SNR=2.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.62** | **123** | T | T | 10 29 45.8 | |
| | baz=316,slow=75,SNR=42 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.63** | **123** | T | T | 10 29 46.4 | |
| | baz=316,slow=75,SNR=59 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.64** | **123** | T | T | 10 29 47.1 | |
| | baz=316,slow=75,SNR=73 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.38** | **125** | T | T | 10 30 45.3 | |
| | baz=318,slow=76,SNR=42 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.38** | **125** | T | T | 10 30 49.4 | |
| | baz=318,slow=76,SNR=59 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.39** | **125** | T | T | 10 30 46.2 | |
| | baz=318,slow=76,SNR=41 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.23** | **311** | P | **P** | **10 01 16.5** | **-1.5** |
| | 0.5nm,0.3s,baz=90,slow=5.8,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.66** | **301** | P | **P** | **10 01 37.2** | **-0.6** |
| | 0.2nm,0.3s,baz=85,slow=9.1,SNR=9.1 | | | | | | |
| **ILAR** | **Eielson Array** | **48.24** | **33** | P | **P** | **10 02 13.7** | **+0.1** |
| | 0.5nm,0.8s,baz=236,slow=6.4,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.41** | **188** | P | **P** | **10 03 27.6** | **-1.0** |
| | 0.3nm,0.4s,baz=3.8,slow=7.1,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.53** | **31** | P | **P** | **10 03 56.0** | **-0.2** |
| | 0.4nm,0.7s,baz=301,slow=6.6,SNR=6.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.42** | **322** | P | **P** | **10 05 03.6** | **-1.1** |
| | 0.2nm,0.3s,baz=43,slow=6.2,SNR=2.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.98** | **54** | P | **P** | **10 05 07.8** | **-0.7** |
| | 0.5nm,0.7s,baz=294,slow=0.9,SNR=3.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.55** | **46** | P | **P** | **10 05 23.8** | **+0.5** |
| | 0.5nm,0.6s,baz=264,slow=1.8,SNR=8.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.10** | **53** | P | **P** | **10 06 28.6** | **+0.3** |
| | 0.4nm,0.6s,baz=305,slow=2.3,SNR=5.7 | | | | | | |

**IDC 02 10:01:17.4±2.4, 0.86N×27.62W, h0km, mb4.1/3, mb1 4.1/3, mb1mx3.6/37, mbtmp4.1/3, MS3.7/4, Ms1 3.7/4, ms1mx3.2/86, Error ellipse: s-maj=97.3km s-min=48.9km az=131.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **15.68** | **124** | T | T | 10 21 14.0 | |
| | baz=303,slow=74,SNR=17 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **15.69** | **124** | T | T | 10 21 12.2 | |
| | baz=303,slow=74,SNR=16 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **15.70** | **124** | T | T | 10 21 12.7 | |
| | baz=303,slow=74,SNR=18 | | | | | | |
| **KOWA** | **Kowa** | **26.98** | **59** | P | P | 10 07 01.6 | +0.4 |
| | 0.9nm,0.4s,baz=260,slow=8.2,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.50** | **66** | P | P | 10 07 41.0 | -0.3 |
| | 1.1nm,0.9s,baz=247,slow=8.3,SNR=5.2 | | | | | | |
| **SIV** | **San Ignacio** | **37.03** | **242** | LR | LR | 10 23 14.4 | |
| | comp=Z,99nm,18.2s,baz=94,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **39.39** | **224** | LR | LR | 10 23 43.8 | |
| | comp=Z,86nm,20.6s,baz=32,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **43.45** | **245** | LR | LR | 10 26 49.9 | |
| | comp=Z,105nm,19.8s,baz=345,slow=35 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **67.10** | **54** | LR | LR | 10 41 26.7 | |
| | comp=Z,63nm,19.9s,baz=188,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.95** | **35** | P | P | 10 12 24.3 | 0.0 |
| | 3.0nm,0.9s,baz=242,slow=6.4,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **151.10** | **143** | PKPbc | PKPbc | 10 21 13.3 | -0.2 |
| | 1.1nm,0.9s,baz=197,slow=2.9,SNR=5.6 | | | | | | |

**NOU 02 10:03:21.0, 14.58S×167.50E, h143km, MLv4.3/10, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.91** | **198** | P | Pn | 10 03 44.4 | +0.1 |
| **DVP** | **Devils Point** | **3.20** | **168** | P | Pn | 10 04 11.1 | +0.5 |
| **KOUNC** | **Koumac, New Ca** | **6.68** | **207** | P | Pn | 10 04 57.1 | +0.3 |
| **YATNC** | **Mamie plateau,** | **7.46** | **184** | P | Pn | 10 05 07.0 | -0.2 |
| **DZM** | **Mont Dzumac** | **7.52** | **188** | P | Pn | 10 05 07.8 | -0.3 |
| **PINNC** | **Pines Island,** | **7.99** | **180** | P | Pn | 10 05 14.3 | 0.0 |

*IDC **02** 10:38:26.7±3.7, 31.28N×131.79E, h0km, mb3.5/4, mb1 3.5/6, mb1mx3.4/30, mbtmp3.4/6, ML3.0/2, MS2.9/1, Ms1 2.9/1, ms1mx2.3/65, Error ellipse: s-maj=80.3km s-min=34.9km az=176.0*
*NIED **02** 10:38:35.0, 32.11N×132.10E, h16km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$1.81; $M_{\theta\theta}$2.47; $M_{\phi\phi}$-4.28; $M_{r\theta}$4.34; $M_{\theta\phi}$-1.29; $M_{\phi r}$2.91; Fault plane solution: $M_0$6.54000×$10^{14}$ NP1:φs49.00000°, δ80.00000°, λ123.00000°. NP2:φs153.00000°, δ34.00000°, λ17.00000°.*
*JMA **02** 10:38:34.9±0.2, 32.11N×132.10E, h16km±3km, M3.7 Broadband fault plane solution: P waves. NP1: φs234.00000°, δ29.00000°, λ103.00000°. NP2: φs40.00000°, δ62.00000°, λ83.00000°. Principal axes: T Plg72.0000°, Azm294.0000°; N Plg6.0000°, Azm43.0000°; P Plg17.0000°, Azm135.0000°;*
*JMA Felt I J1.*
**ISC 02 10:38:33.3±1.7, 32.05N±0.06×132.14E±0.06, h17km±8km, n19, σ0s98/23, mb3.5/4, 3C-5D, Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTSN** | **Tsuno** | **0.57** | **290** | ⇓P | **Pg** | **10 38 44.7** | **0.0** |
| JTSN | | | | S | **Sg** | **10 38 51.9** | **-0.5** |
| **JHHC** | **Hyugahichiya** | **0.58** | **313** | ⇓P | **Pg** | **10 38 45.1** | **+0.3** |
| JHHC | | | | eS | **Sg** | **10 38 52.2** | **-0.3** |
| **JSKE** | **Saikikamae** | **0.77** | **345** | ⇓P | **Pb** | **10 38 48.9** | **+0.7** |
| JSKE | | | | S | **Sg** | **10 38 59.1** | **+0.5** |
| **JKIT** | **Kitakata** | **0.81** | **315** | ⇓P | **Pg** | **10 38 49.3** | **+0.1** |
| JKIT | | | | eS | **Sg** | **10 38 58.5** | **-1.5** |
| **JNAR** | **Kushima--Naru** | **0.91** | **235** | ⇑P | **Pn** | **10 38 52.1** | **+0.9** |
| JNAR | | | | eS | **Sn** | **10 39 05.2** | **+1.4** |
| **JTZ** | **Takazaki** | **0.91** | **261** | ⇑P | **Pn** | **10 38 51.4** | **+0.2** |
| JTZ | | | | eS | **Sn** | **10 39 04.5** | **+0.6** |
| **JTO** | **Tosashimizu** | **0.98** | **35** | P | **Pg** | **10 38 52.2** | **-0.1** |
| **JUS** | **Usuki** | **1.06** | **342** | P | **Pg** | **10 38 54.1** | **+0.2** |
| JUS | | | | S | **Sg** | **10 39 07.6** | **-0.2** |
| **JIU3** | **Izumi3** | **1.23** | **294** | ⇓P | **Pn** | **10 38 56.2** | **+0.5** |
| **UWA2** | **Uwa jima 2** | **1.23** | **19** | ⇑P | **Pn** | **10 38 56.1** | **+0.4** |
| **KSRS** | **Korea Array** | **6.41** | **328** | Pn | **Pn** | **10 40 08.6** | **+1.8** |
| | 0.3nm,0.3s,baz=147,slow=15,SNR=5.3 | | | | | | |
| KSRS | | | | Sn | **Sn** | **10 41 19.7** | **+0.1** |
| | baz=283,slow=38,SNR=0.9 | | | | | | |
| KSRS | | | | LR | LR | 10 42 45.2 | |
| | comp=Z,104nm,21.4s,baz=110,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.73** | **47** | Pn | Pn | 10 40 18.2 | +6.9 |
| | 0.2nm,0.3s,baz=204,slow=10.0,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **25.10** | **316** | P | **P** | **10 43 56.8** | **-0.3** |
| | 1.5nm,0.8s,baz=125,slow=9.5,SNR=7.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.44** | **103** | T | T | 11 20 43.4 | |
| | baz=299 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.45** | **103** | T | T | 11 20 42.3 | |
| | baz=299 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.46** | **103** | T | T | 11 20 48.9 | |
| | baz=299 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.54** | **306** | P | **P** | **10 46 10.4** | **-1.1** |
| | 0.3nm,0.8s,baz=98,slow=6.5,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **71.81** | **27** | P | **P** | **10 49 55.8** | **+1.2** |
| | 0.3nm,0.8s,baz=304,slow=5.8,SNR=4.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.33** | **320** | P | **P** | **10 50 01.4** | **-2.3** |
| | 0.4nm,0.5s,baz=53,slow=6.1,SNR=4.2 | | | | | | |

*OSPL **02** 10:58:34.4±2.9, 18.56N×68.99W, h137km±20km, ML3.5*
*NEIC **02** 10:58:34.0±1.4, 18.63N±0.08×68.96W±0.07, h119km±18km, Error ellipse: s-maj=13.7km s-min=7.4km az=212.0*

*RSPR **02** 10:58:35.0, 18.65N×68.93W, h113km±3km, MD3.9/14*
**ISC 02 10:58:32.4±1.1, 18.68N±0.07×68.99W±0.03, h133km±9km, n97, σ1s57/111, 16C, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DR12** | **Loma Pena Alta** | **0.39** | **286** | | **Pn** | **10 58 51.1** | **-0.1** |
| **PCDR** | **Punta Cana, DR** | **0.60** | **106** | ⇑*e*P | **Pn** | **10 58 52.7** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **0.60** | **106** | *e*S | **Sn** | **10 59 05.8** | **-1.6** |
| **PCDR** | **Punta Cana, DR** | **0.60** | **106** | | **Pn** | **10 58 52.7** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **0.60** | **106** | | **Sn** | **10 59 05.4** | **-2.0** |
| **PCDR** | **Punta Cana, DR** | **0.60** | **106** | *i* P | **Pn** | **10 58 52.6** | **+0.3** |
| PCDR | | | | *e*S | **Sn** | **10 59 07.7** | **+0.2** |
| PCDR | | | | IAML | | 10 59 11.6 | |
| | comp=E,588nm,0.6s | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **1.08** | **310** | *i* P | **Pn** | **10 58 57.4** | **+1.1** |
| LONA1 | | | | *e*S | **Sn** | **10 59 15.4** | **+0.9** |
| LONA1 | | | | IAML | | 10 59 18.7 | |
| | comp=Z,1μm,1.1s | | | | | | |
| **BANI** | **BANI** | **1.33** | **258** | | **Pn** | **10 58 59.9** | **+0.9** |
| **BANI** | **BANI** | **1.33** | **258** | *i* P | **Pn** | **10 58 59.6** | **+0.6** |
| BANI | | | | IAML | | 10 59 30.0 | |
| | comp=Z,305nm,1.5s | | | | | | |
| **IDE** | **Isla Desecheo** | **1.47** | **101** | ⇑*e*P | **Pn** | **10 59 00.7** | **+0.4** |
| **IDE** | **Isla Desecheo** | **1.47** | **101** | *e*S | **Sn** | **10 59 19.8** | **-1.8** |
| **AGPR** | **Aguadilla, PR** | **1.79** | **96** | ⇑*e*P | **Pn** | **10 59 05.4** | **+1.4** |
| **AGPR** | **Aguadilla, PR** | **1.79** | **96** | *e*S | **Sn** | **10 59 27.2** | **-1.0** |
| **AGPR** | **Aguadilla, PR** | **1.79** | **96** | | **Pn** | **10 59 04.3** | **+0.3** |
| **AGPR** | **Aguadilla, PR** | **1.79** | **96** | | **Sn** | **10 59 27.2** | **-1.0** |
| **AGPR** | **Aguadilla, PR** | **1.79** | **96** | *i* P | **Pn** | **10 59 05.3** | **+1.4** |
| AGPR | | | | *e*S | **Sn** | **10 59 28.9** | **+0.7** |
| AGPR | | | | IAML | | 10 59 36.2 | |
| | comp=Z,554nm,0.2s | | | | | | |
| **SC01** | **Santiago de lo** | **1.81** | **295** | | **Pn** | **10 59 06.0** | **+1.7** |
| SC01 | | | | IAML | | 10 59 36.8 | |
| | comp=E,1μm,0.5s | | | | | | |
| SC01 | | | | IAML | | 10 59 38.0 | |
| | comp=N,768nm,0.7s | | | | | | |
| **SC01** | **Santiago de lo** | **1.81** | **295** | *i* P | **Pn** | **10 59 05.8** | **+1.6** |
| SC01 | | | | IAML | | 10 59 35.3 | |
| | comp=Z,451nm,0.3s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **1.81** | **104** | Pn | **Pn** | **10 59 05.5** | **+1.3** |
| **LSP** | **Las Mesas** | **1.87** | **105** | ⇑*e*P | **Pn** | **10 59 06.3** | **+1.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.91** | **110** | ⇑*e*P | **Pn** | **10 59 06.0** | **+0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.91** | **110** | *e*S | **Sn** | **10 59 29.3** | **-1.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.91** | **110** | | **Pn** | **10 59 05.8** | **+0.4** |
| CRPR | | | | | **Sn** | **10 59 31.4** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **1.91** | **110** | *i* P | **Pn** | **10 59 05.9** | **+0.6** |
| CRPR | | | | *i* P | | 10 59 06.0 | |
| CRPR | | | | IAML | | 10 59 38.4 | |
| | comp=N,289nm,0.5s | | | | | | |
| CRPR | | | | IAML | | 10 59 39.5 | |
| | comp=Z,247nm,0.2s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.98** | **111** | ⇑*e*P | **Pn** | **10 59 05.9** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **1.98** | **111** | *e*S | **Sn** | **10 59 30.1** | **-1.9** |
| **MLPR** | **Magueyes Islan** | **1.98** | **111** | | **Pn** | **10 59 05.7** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **1.98** | **111** | | **Sn** | **10 59 30.1** | **-1.9** |
| **LOBA2** | **Hotel Casa Bon** | **2.09** | **254** | *i* P | **Pn** | **10 59 07.2** | **-0.4** |
| LOBA2 | | | | *e*S | **Sn** | **10 59 31.5** | **-3.0** |
| LOBA2 | | | | IAML | | 10 59 36.8 | |
| | comp=Z,90nm,0.6s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **2.12** | **109** | ⇑*e*P | **Pn** | **10 59 09.2** | **+1.2** |
| **GBPR** | **Guanica, Bosqu** | **2.12** | **109** | *e*S | **Sn** | **10 59 35.6** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **2.15** | **98** | ⇑*e*P | **Pn** | **10 59 08.9** | **+0.6** |
| **AOPR** | **Arecibo Observ** | **2.15** | **98** | *e*S | **Sn** | **10 59 35.6** | **-0.3** |
| **AOPR** | **Arecibo Observ** | **2.15** | **98** | *e*P | **Pn** | **10 59 09.1** | **+0.8** |
| AOPR | | | | *e*S | **Sn** | **10 59 34.8** | **-1.0** |
| **AOPR** | **Arecibo Observ** | **2.15** | **98** | | **Pn** | **10 59 09.2** | **+0.8** |
| AOPR | | | | | **Sn** | **10 59 34.8** | **-1.0** |
| **UUPR** | **Utuado, UPR, P** | **2.19** | **101** | ⇑*e*P | **Pn** | **10 59 10.0** | **+1.1** |
| **UUPR** | **Utuado, UPR, P** | **2.19** | **101** | *e*S | **Sn** | **10 59 38.7** | **+1.8** |
| **UUPR** | **Utuado, UPR, P** | **2.19** | **101** | | **Pn** | **10 59 10.0** | **+1.1** |
| UUPR | | | | | **Sn** | **10 59 38.7** | **+1.8** |
| **SDDR** | **Presa de Saban** | **2.20** | **278** | ⇑*e*P | **Pn** | **10 59 10.9** | **+1.9** |
| **SDDR** | **Presa de Saban** | **2.20** | **278** | | **Pn** | **10 59 10.3** | **+1.2** |
| SDDR | | | | IAML | | 10 59 42.0 | |
| | comp=Z,456nm,0.6s | | | | | | |
| SDDR | | | | IAML | | 10 59 43.4 | |
| | comp=Z,417nm,0.8s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.20** | **278** | *i* P | **Pn** | **10 59 10.6** | **+1.6** |
| **SDDR** | **Presa de Saban** | **2.20** | **278** | *e*P | **Pn** | **10 59 10.9** | **+1.9** |
| SDDR | | | | *e*S | **Sn** | **10 59 39.2** | **+2.2** |
| **SDDR** | **Presa de Saban** | **2.20** | **278** | *i* P | **Pn** | **10 59 10.8** | **+1.7** |
| SDDR | | | | *e*S | **Sn** | **10 59 38.9** | **+1.8** |
| SDDR | | | | IAML | | 10 59 44.1 | |
| | comp=Z,175nm,0.9s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **2.34** | **95** | ⇑*e*P | **Pn** | **10 59 11.2** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **2.34** | **95** | *e*S | **Sn** | **10 59 39.7** | **-0.4** |
| **EMPR** | **Esperanza - Ma** | **2.34** | **95** | | **Pn** | **10 59 11.2** | **+0.5** |
| EMPR | | | | | **Sn** | **10 59 39.7** | **-0.4** |
| **OBIP** | **Obispado Ponce** | **2.35** | **105** | ⇑*e*P | **Pn** | **10 59 11.9** | **+1.1** |
| **OBIP** | **Obispado Ponce** | **2.35** | **105** | *e*S | **Sn** | **10 59 39.7** | **-0.6** |
| **OBIP** | **Obispado Ponce** | **2.35** | **105** | | **Pn** | **10 59 11.9** | **+1.1** |
| **OBIP** | **Obispado Ponce** | **2.35** | **105** | | **Sn** | **10 59 39.3** | **-1.0** |
| OBIP | | | | IAML | | 10 59 48.1 | |
| | comp=N,209nm,0.7s | | | | | | |
| **CELP** | **Cerrillos** | **2.37** | **104** | ⇑*e*P | **

| | | | | | | |
|---|---|---|---|---|---|---|
| **GTBY** | **Guantanamo Bay** | **5.91** | **283** | *e*P | **Pn** | **10 59 56.4 -1.4** |
| GTBY | | | | *e*S | **Sn** | **11 01 00.6 -3.9** |
| **GTBY** | **Guantanamo Bay** | **5.91** | **283** | *e*P | **Pn** | **10 59 57.0 -0.8** |
| **AUA1** | **Aruba** | **6.22** | **189** | Pn | **Pn** | **11 00 01.8 -0.1** |
| **HATO** | **Hato, Curacao** | **6.46** | **180** | Pn | **Pn** | **11 00 05.6 +0.4** |
| **RCC** | **Rio Carpintero** | **6.47** | **283** | *e*P | Pn | 11 00 02.5 -2.8 |
| RCC | | | | *e*S | Sn | 11 01 10.4 -7.4 |
| **RCC** | **Rio Carpintero** | **6.47** | **283** | *e*P | **Pn** | **11 00 04.3 -1.0** |
| RCC | | | | *e*S | Sn | 11 01 10.2 -7.6 |
| **ANWB** | **Willy Bob** | **6.92** | **97** | *e*P | Pn | 11 00 07.0 -4.3 |
| **ANWB** | **Willy Bob** | **6.92** | **97** | *e*S | **Sn** | **11 01 26.8 -1.9** |
| **ANBD** | **Bethesda, Anti** | **7.07** | **102** | *e*P | **Pn** | **11 00 11.7 -1.7** |
| **ANBD** | **Bethesda, Anti** | **7.07** | **102** | *e*S | **Sn** | **11 01 29.8 -2.5** |
| **URIC** | **Uribia, Colomb** | **7.52** | **203** | Pn | **Pn** | **11 00 20.2 +0.8** |
| **BIRV** | **Birongo** | **8.57** | **162** | Pn | **Pn** | **11 00 32.4 -1.2** |
| **BIM** | **Bigot** | **8.64** | **117** | Pn | **Pn** | **11 00 35.8 +1.2** |
| **BAUV** | **El Baul** | **9.72** | **174** | | **Pn** | **11 00 50.2 +1.2** |
| **SDV** | **Santo Domingo** | **9.86** | **190** | Pn | **Pn** | **11 00 52.5 +1.4** |
| **ZARC** | **Zaragoza, Cauc** | **12.50** | **208** | Pn | **Pn** | **11 01 28.1 +2.3** |

*UPP* ***02*** *10:58:43.3±2.8, 64°.68N×30°.76E, h0km, ML2.0, Suspected explosion*

*KOLA* ***02*** *10:58:43.5, 64°.74N×30°.70E, h0km, ML2.6*

**ISC 02 10:58:44.3**±2.6,**64°.8N**±0°.1×**30°.81E**±0°.08,**h10**km,**n15,**
**σ0°88/21,Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APA0** | **Apatity Array** | **2.97** | **16** | P | **Pn** | **10 59 32.6** | **+1.2** |
| APA0 | | | | S | **Sn** | **11 00 08.5** | **+1.5** |
| **KALU** | **Kalix** | **3.31** | **292** | P | **Pn** | **10 59 36.3** | **+0.3** |
| **LVZ** | **Lovozero** | **3.49** | **25** | P | **Pn** | **10 59 38.2** | **-0.3** |
| **PAJU** | **Pajala** | **3.88** | **309** | P | **Pn** | **10 59 44.0** | **+0.2** |
| PAJU | | | | S | **Sn** | **11 00 30.2** | **+0.8** |
| **SJUU** | **Sjulsmark** | **3.95** | **285** | P | **Pn** | **10 59 44.7** | **-0.2** |
| **ERTU** | **Ertsjaerv** | **3.99** | **300** | P | **Pn** | **10 59 45.7** | **+0.4** |
| ERTU | | | | S | **Sn** | **11 00 33.4** | **+1.4** |
| **HARU** | **Harads** | **4.33** | **293** | P | **Pn** | **10 59 49.7** | **-0.3** |
| **MASU** | **Masugnsbyn** | **4.47** | **311** | P | **Pn** | **10 59 52.6** | **+0.5** |
| **LILU** | **Lilltraesk** | **4.67** | **281** | P | **Pn** | **10 59 54.4** | **-0.3** |
| **TERR** | **Teriberka** | **4.75** | **19** | P | **Pn** | **10 59 56.3** | **+0.6** |
| TERR | | | | S | **Sn** | **11 00 50.0** | **-0.8** |
| **DUNU** | **Dundret** | **4.80** | **304** | P | **Pn** | **10 59 56.7** | **+0.1** |
| **LANU** | **Lannavaara** | **4.83** | **317** | P | **Pn** | **10 59 57.0** | **+0.2** |
| **SVU** | **Svanoeiden** | **4.84** | **272** | P | **Pn** | **10 59 56.4** | **-0.7** |
| **PRVG** | **Vayda Guba** | **5.01** | **5** | P | **Pn** | **10 59 59.0** | **-0.5** |
| PRVG | | | | S | **Sn** | **11 00 56.1** | **-1.2** |
| **ARCES** | **ARCESS Array B** | **5.20** | **339** | P | **Pn** | **11 00 01.5** | **-0.5** |
| ARCES | | | | S | **Sn** | **11 00 60.0** | **-2.0** |

*NIED* ***02*** *11:14:32.3, 32°.11N×132°.10E, h16km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr2.56; Mθθ-0.04; Mφφ-2.53; Mrθ2.15; Mrφ-1.61; Mθφ2.04; Fault plane solution: Mo4.20000×10¹⁴ NP1:φs42.00000°, δ69.00000°, λ105.00000°. NP2:φs186.00000°, δ26.00000°, λ57.00000°.*

**JMA 02 11:14:32.2**±0.2,**32°.11N×132°.10E,h16**km±3km,**M3.5,**
**5C-5D,Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHHC** | **Hyugahichiya** | **0.51** | **310** | ⇓P | Pg | 11 14 42.4 | 0.0 |
| JHHC | | | | S | Sg | 11 14 49.7 | +0.3 |
| **JTSN** | **Tsuno** | **0.52** | **285** | ⇓P | Pg | 11 14 42.1 | -0.5 |
| JTSN | | | | S | Sg | 11 14 49.5 | -0.1 |
| **JSKE** | **Saikikamae** | **0.71** | **346** | ⇓P | Pb | 11 14 46.2 | +0.1 |
| JSKE | | | | S | Sb | 11 14 56.4 | +0.8 |
| **JKIT** | **Kitakata** | **0.75** | **313** | ⇓P | Pg | 11 14 46.6 | -0.3 |
| **JNKG** | **Nichinankitago** | **0.76** | **234** | ⇑P | Pg | 11 14 47.0 | 0.0 |
| JNKG | | | | *e*S | Sb | 11 14 57.6 | +0.4 |
| **JTZ** | **Takazaki** | **0.89** | **257** | ⇑P | Pb | 11 14 48.7 | -0.5 |
| JTZ | | | | *e*S | Sg | 11 15 01.1 | +0.1 |
| **JNAR** | **Kushima--Naru** | **0.91** | **231** | ⇑P | Pb | 11 14 49.5 | -0.2 |
| **JTO** | **Tosashimizu** | **0.95** | **38** | P | Pb | 11 14 49.5 | -0.9 |
| **JUS** | **Usuki** | **1.00** | **343** | ⇓P | Pg | 11 14 51.4 | -0.1 |
| JUS | | | | *e*S | Sg | 11 15 04.8 | +0.2 |
| **JIU3** | **Izumi3** | **1.17** | **292** | ⇑P | Pn | 11 14 53.8 | -0.2 |
| **UWA2** | **Uwa jima 2** | **1.19** | **22** | ⇑P | Pn | 11 14 53.3 | -0.9 |

*NEIC* ***02*** *11:23:32±1.9, 9°.16N±0°.09×126°.7E±0°.2, h35km±2km, mb4.3/13, Error ellipse: s-maj=27.9km s-min=14.2km az=279.0*

*IDC* ***02*** *11:23:36.9±5.3, 8°.96N×126°.49E, h85km±45km, mb3.6/8, mb1 3.8/9, mb1mx3.3/49, mbtmp3.9/9, ML4.0/1, MS2.9/2, Ms1 2.9/2, ms1mx2.5/70, Error ellipse: s-maj=55.8km s-min=17.3km az=62.0*

*MAN* ***02*** *11:23:36.7, 8°.87N×126°.40E, h47km, mb4.6, ML3.5, MS3.4*

**ISC 02 11:23:36.7**±1.0,**8°.93N**±0°.05×**126°.46E**±0°.08,**h79**km±8km,
**n38,σ0°92/43,mb4.1/15,3C-6D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **0.74** | **187** | ⇑*i*P | **Pn** | **11 23 54.0** | **+1.3** |
| BIPH | | | | *i* S | **Sn** | **11 24 04.0** | **-0.5** |
| **GLSP** | **General Luna,** | **0.91** | **339** | ‖*e*P | **Pn** | **11 23 54.1** | **-0.5** |
| **SCPH** | **Surigao** | **1.28** | **312** | ‖*e*P | **Pn** | **11 23 58.7** | **-0.4** |
| SCPH | | | | *e*S | **Sn** | **11 24 15.4** | **-0.5** |
| **BUKP** | **Musuan** | **1.73** | **233** | ‖*e*P | **Pn** | **11 24 04.1** | **-0.8** |
| **MATI** | **Mati** | **1.98** | **186** | ⇑*e*P | **Pn** | **11 24 07.5** | **-0.7** |
| **MSLP** | **Maasin** | **1.98** | **307** | ‖*i*P | **Pn** | **11 24 09.2** | **+1.0** |
| **DAV** | **Davao City (W)** | **2.04** | **205** | P | **Pn** | **11 24 09.9** | **+0.9** |
| DAV | 54nm,0.3s,baz=50,slow=6.3,SNR=1.6 | | | LR | LR | 11 24 32.4 | |
| | comp=Z,84nm,21.9s,baz=338,slow=27 | | | | | | |
| DAV | | | | S | **Sn** | **11 24 35.9** | **+2.2** |
| | 107nm,0.3s,baz=252,slow=22,SNR=20 | | | | | | |
| **DAV** | **Davao City (W)** | **2.04** | **205** | | **Pn** | **11 24 08.1** | **-1.0** |
| **KCP** | **Kidapawan** | **2.33** | **215** | ‖*i*P | **Pn** | **11 24 12.2** | **-0.9** |
| KCP | | | | *i* S | **Sn** | **11 24 39.3** | **-1.7** |
| **TBP** | **Tagbilaran** | **2.67** | **287** | *e*P | **Pn** | **11 24 17.8** | **+0.3** |
| TBP | | | | *i* S | **Sn** | **11 24 48.0** | **-0.9** |
| **LLP** | **Lapu-Lapu** | **2.82** | **300** | ‖*e*P | **Pn** | **11 24 21.8** | **+2.3** |
| LLP | | | | *e*S | **Sn** | **11 24 53.1** | **+0.6** |
| **PAGZ** | **Pagadian** | **3.22** | **251** | ‖*i*P | **Pn** | **11 24 25.9** | **+0.8** |
| **MTN** | **Manton Dam** | **22.12** | **168** | P | **P** | **11 28 25.8** | **0.0** |
| MTN | | | | IAmb | IAmb | 11 28 35.7 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **24.55** | **175** | P | **P** | **11 28 49.7** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 11 28 49.9 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.86** | **182** | P | **P** | **11 29 09.9** | **-0.2** |
| | comp=Z,2.7nm,0.6s,baz=7.0,slow=11,SNR=8.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **29.56** | **165** | P | **P** | **11 29 33.2** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 11 29 52.4 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **29.71** | **165** | P | **P** | **11 29 35.0** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 11 29 52.7 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.72** | **165** | P | **P** | **11 29 34.3** | **-1.2** |
| | comp=Z,1.0nm,0.6s,baz=345,slow=8.9,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 32 38.1** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=332,slow=2.3,SNR=2.5 | | | | | | |
| **WB2** | **Warramunga Arr** | **29.72** | **165** | P | **P** | **11 29 34.9** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 11 29 55.8 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **29.79** | **165** | P | **P** | **11 29 35.5** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 11 30 03.0 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **33.20** | **167** | P | **P** | **11 30 05.7** | **-0.5** |
| **ASAR** | **Alice Springs** | **33.20** | **167** | P | **P** | **11 30 05.2** | **-1.0** |
| | comp=Z,1.0nm,0.3s,baz=349,slow=7.2,SNR=47 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 32 47.4** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=343,slow=1.9,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **33.20** | **167** | P | **P** | **11 30 06.0** | **-0.2** |
| ASAR | | | | | **PcP** | **11 32 47.7** | **+0.3** |
| **CTA** | **Charters Tower** | **34.80** | **146** | P | **P** | **11 30 20.6** | **+0.5** |
| | comp=Z,1.2nm,0.6s,baz=354,slow=9.2 | | | | | | |
| **FORT** | **Forrest** | **39.51** | **178** | P | **P** | **11 31 00.4** | **+0.7** |
| **H11S3** | **WAKE ISLAND Hy** | **40.14** | **72** | T | T | 12 14 09.0 | |
| | baz=266,slow=79,SNR=40 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.16** | **72** | T | T | 12 14 17.6 | |
| | baz=266,slow=79,SNR=26 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.16** | **72** | T | T | 12 14 11.9 | |
| | baz=266,slow=79,SNR=18 | | | | | | |
| **BBOO** | **Buckleboo** | **42.50** | **168** | P | **P** | **11 31 24.8** | **+0.5** |
| **STKA** | **Stephens Creek** | **43.08** | **161** | P | **P** | **11 31 28.9** | **-0.1** |
| | comp=Z,3.2nm,0.9s,baz=344,slow=7.4,SNR=7.4 | | | | | | |
| STKA | | | | LR | LR | 11 52 24.4 | |
| | comp=Z,64nm,20.1s,baz=4.2,slow=40 | | | | | | |
| **STKA** | **Stephens Creek** | **43.08** | **161** | P | **P** | **11 31 29.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **53.20** | **323** | P | **P** | **11 32 46.7** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=106,slow=9.2,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **57.27** | **326** | P | **P** | **11 33 15.4** | **-0.7** |
| **KURK** | **Kurchatov** | **57.27** | **326** | IAmb | IAmb | 11 33 37.4 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.28** | **326** | P | **P** | **11 33 15.4** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=122,slow=7.8,SNR=2.4 | | | | | | |
| **RPZ** | **Rata Peaks** | **66.17** | **146** | P | **P** | **11 34 17.3** | **+1.3** |
| **ABKAR** | **Akbulak array** | **68.01** | **320** | P | **P** | **11 34 27.3** | **-0.3** |
| **FINES** | **FINESS Array B** | **87.15** | **332** | P | **P** | **11 36 12.5** | **-1.4** |
| | comp=Z,0.9nm,0.5s,baz=86,slow=6.3,SNR=0.9 | | | | | | |

*IDC* ***02*** *11:31:45.3±1.2, 3°.40S×146°.40E, h0km, mb4.0/9, mb1 4.2/11, mb1mx4.0/33, mbtmp4.1/11, ML1.7/1, MS3.4/16, Ms1 3.4/16, ms1mx3.2/61, Error ellipse: s-maj=31.4km s-min=18.1km az=96.0*

**ISC 02 11:31:49.0**±0.8,**3°.30S**±0°.08×**146°.4E**±0°.1,**h20**km,**n20,**
**σ1s90/14,mb3.7/9,MS3.3/10,Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **5.77** | **278** | LR | LR | 11 35 13.8 | |
| | comp=Z,222nm,20.4s,baz=22,slow=36 | | | | | | |
| **PMG** | **Port Moresby** | **6.11** | **173** | Pn | **Pn** | **11 33 17.7** | **-0.5** |
| | 1.3nm,0.3s,baz=13,slow=19,SNR=6.0 | | | | | | |
| PMG | | | | Sn | **Sn** | **11 34 27.4** | **-0.2** |
| | baz=169,slow=5.0,SNR=1.2 | | | | | | |
| PMG | | | | LR | LR | 11 35 48.9 | |
| | comp=Z,526nm,18.2s,baz=348,slow=40 | | | | | | |
| **HNR** | **Honiara** | **14.75** | **115** | Pn | **Pn** | **11 35 16.1** | **-0.5** |
| | 6.7nm,0.3s,baz=297,slow=6.8,SNR=2.5 | | | | | | |
| HNR | | | | LR | LR | 11 41 08.3 | |
| | comp=Z,73nm,18.0s,baz=297,slow=38 | | | | | | |
| **SIJI** | **Sorong** | **15.34** | **279** | LR | LR | 11 41 56.0 | |
| | comp=Z,37nm,18.3s,baz=142,slow=40 | | | | | | |
| **CTA** | **Charters Tower** | **16.69** | **181** | Pn | **P** | **11 35 44.5** | **+0.4** |
| | 0.1nm,0.3s,baz=9.2,slow=14,SNR=1.5 | | | | | | |
| CTA | | | | LR | LR | 11 42 01.4 | |
| | comp=Z,61nm,19.6s,baz=16,slow=37 | | | | | | |
| **GUMO** | **Guam** | **16.85** | **355** | LR | LR | 11 40 37.9 | |
| | comp=Z,84nm,18.6s,baz=141,slow=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.32** | **215** | P | **P** | **11 36 21.5** | **-2.4** |
| | 13nm,0.9s,baz=37,slow=11,SNR=67 | | | | | | |
| WRA | | | | LR | LR | 11 44 57.7 | |
| | comp=Z,184nm,20.4s,baz=47,slow=39 | | | | | | |
| **DAV** | **Davao City (W)** | **23.22** | **296** | LR | LR | 11 44 01.8 | |
| | comp=Z,68nm,21.2s,baz=354,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **23.59** | **210** | P | **P** | **11 36 56.8** | **-1.9** |
| | 8.0nm,0.8s,baz=45,slow=8.0,SNR=78 | | | | | | |
| ASAR | | | | LR | LR | 11 47 08.0 | |
| | comp=Z,64nm,21.6s,baz=32,slow=39 | | | | | | |
| **BATI** | **Baumata** | **23.61** | **252** | P | **P** | **11 36 57.0** | **-2.0** |
| | 30nm,0.8s,baz=254,slow=6.1,SNR=4.3 | | | | | | |
| BATI | | | | LR | LR | 11 45 50.7 | |
| | comp=Z,123nm,21.4s,baz=55,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.12** | **233** | P | **P** | **11 37 11.2** | **-1.6** |
| | 9.1nm,0.8s,baz=64,slow=9.3,SNR=13 | | | | | | |
| FITZ | | | | LR | LR | 11 48 19.1 | |
| | comp=Z,90nm,18.3s,baz=44,slow=40 | | | | | | |
| **DZM** | **Mont Dzumac** | **26.94** | **136** | LR | LR | 11 46 43.9 | |
| | comp=Z,147nm,18.8s,baz=354,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **28.79** | **189** | P | **P** | **11 37 49.8** | **+4.1** |
| | 2.5nm,1.0s,baz=358,slow=13,SNR=3.9 | | | | | | |
| **MSVF** | **Nonsavu** | **34.15** | **117** | LR | LR | 11 52 35.6 | |
| | comp=Z,59nm,18.9s,baz=308,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **44.04** | **339** | P | **P** | **11 39 55.0** | **-0.5** |
| | 1.2nm,0.9s,baz=162,slow=9.0,SNR=3.6 | | | | | | |
| KSRS | | | | LR | LR | 11 56 46.5 | |
| | comp=Z,28nm,20.6s,baz=345,slow=34 | | | | | | |
| **URZ** | **Urewera** | **44.67** | **145** | LR | LR | 11 55 58.6 | |
| | comp=Z,82nm,21.9s,baz=324,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **51.51** | **297** | P | **P** | **11 40 54.5** | **+0.7** |
| | 0.2nm,0.3s,baz=119,slow=5.2,SNR=1.5 | | | | | | |
| **SONM** | **Songino Array** | **61.78** | **331** | P | **P** | **11 42 08.2** | **+1.7** |
| | 0.4nm,0.8s,baz=158,slow=6.8,SNR=2.5 | | | | | | |
| SONM | | | | LR | LR | 12 09 17.8 | |
| | comp=Z,100nm,18.9s,baz=306,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.07** | **320** | P | **P** | **11 43 29.8** | **+0.3** |
| | 0.5nm,0.8s,baz=103,slow=6.2,SNR=3.9 | | | | | | |
| **ILAR** | **Eielson Array** | **83.24** | **23** | P | **P** | **11 44 12.2** | **-1.6** |
| | 0.5nm,1.0s,baz=243,slow=6.0,SNR=2.2 | | | | | | |

*EAF* ***02*** *11:32:16.5±1.7, 25°.63S×30°.17E, h9km±15km, MD3.5*

*BUL* ***02*** *11:32:16.5±1.2, 25°.68S×30°.12E, h9km±10km, MD3.6*

**ISC 02 11:32:14.2**±1.1,**25°.65S**±0°.06×**30°.16E**±0°.05,**h10**km,**n12,**
**σ1s66/24,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **1.93** | **110** | *i* P | **Pb** | **11 32 48.9** | **-0.6** |
| CNG | | | | *i* S | **Sb** | **11 33 13.7** | **+0.1** |
| **CNG** | **Changalane** | **1.93** | **110** | *i* P | **Pb** | **11 32 48.9** | **-0.6** |
| CNG | | | | *i* S | **Sb** | **11 33 13.7** | **+0.1** |
| **MOPA** | **Mopani** | **2.41** | **28** | *i* P | **Pn** | **11 32 54.8** | **+1.1** |
| MOPA | | | | *i* S | **Sn** | **11 33 22.1** | **-1.2** |
| **MOPA** | **Mopani** | **2.41** | **28** | *i* P | **Pn** | **11 32 54.8** | **+1.1** |
| MOPA | | | | *i* S | **Sn** | **11 33 22.1** | **-1.2** |
| **MSNA** | **Messina** | **3.30** | **358** | *e*P | **Pn** | **11 33 07.9** | **+1.9** |
| MSNA | | | | *e*S | **Sn** | **11 33 45.2** | **0.0** |
| **MSNA** | **Messina** | **3.30** | **358** | *e*P | **Pn** | **11 33 07.9** | **+1.9** |
| MSNA | | | | *e*S | **Sn** | **11 33 45.2** | **0.0** |
| **LBTB** | **Lobatse** | **4.18** | **278** | *i* P | **Pn** | **11 33 19.4** | **+1.3** |
| LBTB | | | | *i* S | **Sn** | **11 34 06.0** | **-1.2** |
| **LBTB** | **Lobatse** | **4.18** | **278** | *i* P | **Pn** | **11 33 19.4** | **+1.3** |
| LBTB | | | | *i* S | **Sn** | **11 34 06.0** | **-1.2** |
| **MATP** | **Matopo** | **5.42** | **343** | *e*P | **Pn** | **11 33 36.8** | **+1.5** |
| MATP | | | | *e*S | **Sn** | **11 34 36.0** | **-1.9** |
| **MATP** | **Matopo** | **5.42** | **343** | *e*P | **Pn** | **11 33 36.8** | **+1.5** |
| MATP | | | | *e*S | **Sn** | **11 34 36.0** | **-1.9** |
| **BLWY** | **Bulawayo** | **5.67** | **345** | *e*P | **Pn** | **11 33 41.1** | **+2.3** |
| BLWY | | | | *e*S | **Sn** | **11 34 41.2** | **-2.8** |
| **BLWY** | **Bulawayo** | **5.67** | **345** | *e*P | **Pn** | **11 33 41.1** | **+2.3** |
| BLWY | | | | *e*S | **Sn** | **11 34 41.2** | **-2.8** |

*OTT* ***02*** *11:56:22.5±0.2, 44°.85N×66°.89W, h2km, MN3.6/27*

*OTT 30km southeast from Saint Andrews, Nb. Felt Northern Appalachians Seismic Zone. Felt at Wilson"s beavh, Digdeguash, Nb.*

*NEIC* ***02*** *11:56:24.5±1.4, 44°.97N±0°.05×66°.97W±0°.04, h16km±5km, Error ellipse: s-maj=7.7km s-min=3.8km az=186.0*

**ISC 02 11:56:22.9**±1.0,**44°.93N**±0°.04×**66°.90W**±0°.02,**h13**km±6km,
**n84,σ0°96/116,1D,Nova Scotia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GGN** | **Saint George** | **0.19** | **13** | | **Pg** | **11 56 27.5** | **+0.2** |
| GGN | | | | Sg | **Sg** | **11 56 30.0** | **-0.3** |
| **GGN** | **Saint George** | **0.19** | **13** | ‖PG | **Pg** | **11 56 27.5** | **+0.2** |
| GGN | | | | SG | **Sg** | **11 56 30.2** | **-0.1** |
| GGN | | | | Trac | | 11 56 30.5 | |
| | comp=Z,2µm,0.1s | | | | | | |
| **G65A** | **Princeton** | **0.54** | **300** | | **Pb** | **11 56 34.2** | **+0.1** |
| G65A | | | | Sg | **Sb** | **11 56 41.4** | **-0.4** |
| **HANN** | **Hanwell** | **0.95** | **6** | PG | **Pb** | **11 56 41.3** | **0.0** |
| HANN | | | | SG | **Sg** | **11 56 53.5** | **-0.4** |
| HANN | | | | Trac | | 11 56 55.0 | |
| | comp=Z,584nm,0.1s | | | | | | |
| **WCNB** | **Wards Creek** | **1.22** | **54** | PG | **Pn** | **11 56 44.9** | **-0.7** |
| WCNB | | | | SG | **Sb** | **11 57 01.4** | **0.0** |
| WCNB | | | | Trac | | 11 57 02.7 | |
| | comp=Z,423nm,0.2s | | | | | | |
| **SRNB** | **Snider Mountai** | **1.27** | **44** | PG | **Pn** | **11 56 45.8** | **-0.5** |
| SRNB | | | | SG | **Sg** | **11 57 04.0** | **+0.1** |
| SRNB | | | | Trac | | 11 57 06.1 | |
| | comp=Z,475nm,0.2s | | | | | | |
| **F64A** | **Sherman** | **1.38** | **313** | | **Pb** | **11 56 48.3** | **-0.2** |
| **HKNB** | **Havelock Quarr** | **1.50** | **45** | PG | **Pn** | **11 56 50.0** | **+0.5** |
| HKNB | | | | SG | **Sb** | **11 57 10.3** | **+0.8** |
| HKNB | | | | Trac | | 11 57 12.3 | |
| | comp=Z,956nm,0.2s | | | | | | |
| **ELNB** | **Elgin, New Bru** | **1.54** | **53** | PG | **Pn** | **11 56 50.7** | **+0.7** |
| ELNB | | | | SG | **Sb** | **11 57 11.4** | **+0.7** |
| ELNB | | | | Trac | | 11 57 12.1 | |
| | comp=Z,200nm,0.4s | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **1.72** | **282** | Pn | **Pb** | **11 56 53.5** | **-0.9** |
| **PKME** | **Peaks-Kenny Pk** | **1.72** | **282** | PN | **Pb** | **11 56 53.6** | **-0.8** |
| PKME | | | | SN | **Sb** | **11 57 16.5** | **+0.6** |
| PKME | | | | Trac | | 11 57 19.2 | |
| | comp=Z,559nm,0.2s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **F63A** | **Nahmakanta, Br** | **1.73** | **297** | | **Pb** | **11 56 53.5 -1.0** |
| **LMN** | **Caledonia Moun** | **1.74** | **57** | | **Pn** | **11 56 53.8 +0.9** |
| LMN | | | | IAmb_Lg | | 11 57 19.2 |
| | comp=Z,158nm,0.7s | | | | | |
| **LMN** | **Caledonia Moun** | **1.74** | **57** | PN | **Pn** | **11 56 53.6 +0.8** |
| LMN | | | | SN | **Sb** | **11 57 16.2 -0.2** |
| LMN | | | | Trac | | 11 57 17.1 |
| | comp=Z,246nm,0.3s | | | | | |
| **SVNB** | **Stilesville Qu** | **1.88** | **48** | PN | **Pb** | **11 56 56.3 -0.8** |
| SVNB | | | | SN | **Sb** | **11 57 20.1 -0.5** |
| SVNB | | | | Trac | | 11 57 23.9 |
| | comp=Z,491nm,0.2s | | | | | |
| **PQI** | **Presque Isle** | **1.91** | **336** | Pn | **Pn** | **11 56 55.5 +0.4** |
| PQI | | | | IAmb_Lg | | 11 57 28.3 |
| | comp=Z,114nm,0.7s | | | | | |
| **WVL** | **Waterville** | **2.00** | **260** | | **Pn** | **11 56 57.3 +1.0** |
| WVL | | | | | **Sn** | **11 57 21.5 +0.5** |
| WVL | | | | IAmb_Lg | | 11 57 31.0 |
| | comp=Z,101nm,0.7s | | | | | |
| **HAL** | **Halifax** | **2.38** | **96** | | **Pn** | **11 57 02.9 +1.4** |
| HAL | | | | IAmb_Lg | | 11 57 40.8 |
| | comp=Z,136nm,0.9s | | | | | |
| **HAL** | **Halifax** | **2.38** | **96** | PN | **Pn** | **11 57 03.2 +1.7** |
| HAL | | | | SN | **Sn** | **11 57 30.9 +0.5** |
| HAL | | | | LG | Lg | 11 57 35.6 |
| HAL | | | | Trac | | 11 57 37.9 |
| | comp=Z,88nm,0.2s | | | | | |
| **BATG** | **Bathurst New B** | **2.42** | **14** | | **Pn** | **11 57 01.9 -0.2** |
| **BATG** | **Bathurst New B** | **2.42** | **14** | PN | **Pn** | **11 57 02.1 0.0** |
| BATG | | | | SN | **Sn** | **11 57 33.4 +1.9** |
| BATG | | | | LG | Lg | 11 57 39.5 |
| BATG | | | | Trac | | 11 57 45.1 |
| | comp=Z,189nm,0.3s | | | | | |
| **E62A** | **Clayton Lake** | **2.49** | **314** | | **Pn** | **11 57 04.0 +0.8** |
| **G62A** | **West of Eustis** | **2.59** | **278** | | **Pn** | **11 57 05.4 +0.9** |
| **D62A** | **Allapoint, All** | **2.62** | **326** | | **Pn** | **11 57 05.3 +0.4** |
| **I63A** | **Otisfield** | **2.77** | **253** | | **Pn** | **11 57 07.8 +0.8** |
| **H62A** | **Milan** | **3.05** | **265** | | **Pn** | **11 57 11.9 +1.1** |
| **A11** | **Saint Roch-des** | **3.25** | **316** | PN | **Pn** | **11 57 14.7 +1.1** |
| A11 | | | | SN | **Sn** | **11 57 54.3 +2.2** |
| A11 | | | | Trac | | 11 58 10.6 |
| | comp=Z,35nm,0.2s | | | | | |
| **A16** | **Riviere Ouelle** | **3.33** | **321** | PN | **Pn** | **11 57 15.8 +1.2** |
| A16 | | | | SN | **Sn** | **11 57 55.0 +1.0** |
| A16 | | | | Trac | | 11 57 56.8 |
| | comp=Z,28nm,0.2s | | | | | |
| A16 | | | | LG | Lg | 11 58 07.8 |
| **I62A** | **Tamworth** | **3.35** | **253** | | **Pn** | **11 57 16.1 +1.2** |
| I62A | | | | IAmb_Lg | | 11 58 08.3 |
| | comp=Z,68nm,0.8s | | | | | |
| **A21** | **Saint Andre** | **3.38** | **326** | PN | **Pn** | **11 57 16.1 +0.9** |
| A21 | | | | SN | **Sn** | **11 57 56.5 +1.4** |
| A21 | | | | LG | Lg | 11 58 09.7 |
| A21 | | | | Trac | | 11 58 19.5 |
| | comp=Z,120nm,0.4s | | | | | |
| **A54** | **Misere** | **3.51** | **317** | PN | **Pn** | **11 57 18.1 +1.0** |
| A54 | | | | SN | **Sn** | **11 57 59.1 +0.6** |
| A54 | | | | Trac | | 11 58 01.9 |
| | comp=Z,9.9nm,0.1s | | | | | |
| A54 | | | | LG | Lg | 11 58 14.8 |
| **LMQ** | **La Malbaie** | **3.53** | **319** | | **Pn** | **11 57 18.1 +0.6** |
| **LMQ** | **La Malbaie** | **3.53** | **319** | PN | **Pn** | **11 57 18.3 +0.8** |
| LMQ | | | | SN | **Sn** | **11 58 00.2 +1.1** |
| LMQ | | | | Trac | | 11 58 17.4 |
| | comp=Z,45nm,0.2s | | | | | |
| **A61** | **Sainte Mathild** | **3.54** | **322** | PN | **Pn** | **11 57 18.2 +0.8** |
| A61 | | | | SN | **Sn** | **11 57 59.3 +0.2** |
| A61 | | | | Trac | | 11 58 02.4 |
| | comp=Z,19nm,0.2s | | | | | |
| A61 | | | | LG | Lg | 11 58 14.8 |
| **A64** | **Saint Simeon** | **3.56** | **326** | PN | **Pn** | **11 57 18.5 +0.8** |
| A64 | | | | SN | **Sn** | **11 58 00.7 +1.1** |
| A64 | | | | Trac | | 11 58 01.8 |
| | comp=Z,21nm,0.2s | | | | | |
| A64 | | | | LG | Lg | 11 58 14.4 |
| **QCQ** | **Quebec** | **3.57** | **303** | PN | **Pn** | **11 57 19.2 +1.3** |
| QCQ | | | | SN | **Sn** | **11 58 01.8 +1.9** |
| QCQ | | | | Trac | | 11 58 23.0 |
| | comp=Z,49nm,0.3s | | | | | |
| **BCLQ** | **Boischatel** | **3.58** | **305** | PN | **Pn** | **11 57 19.1 +1.0** |
| BCLQ | | | | SN | **Sn** | **11 58 01.3 +1.1** |
| BCLQ | | | | LG | Lg | 11 58 14.0 |
| BCLQ | | | | Trac | | 11 58 19.4 |
| | comp=Z,35nm,0.2s | | | | | |
| **LBNH** | **Lisbon** | **3.65** | **261** | Pn | **Pn** | **11 57 20.0 +0.9** |
| **LBNH** | **Lisbon** | **3.65** | **261** | PN | **Pn** | **11 57 20.2 +1.2** |
| LBNH | | | | SN | **Sn** | **11 58 02.1 +0.1** |
| LBNH | | | | LG | Lg | 11 58 20.1 |
| **FFD** | **Franklin Falls** | **3.71** | **249** | | **Pn** | **11 57 21.1 +1.2** |
| **BSCQ** | **Baie-

comp=Z,48nm,0.7s
**M63A Gales Ferry 5.15 229 Pn Pn 11 57 39.6 -0.1**
**SMQ Clarke City 5.30 1 PN Pn 11 57 42.1 +0.4**
SMQ SN Sn 11 58 40.8 -1.6
SMQ Trac 11 59 16.5
comp=Z,22nm,0.3s
**NCB Newcomb 5.33 262 Pn 11 57 42.2 +0.1**
**TRY Troy 5.36 248** IAmb_Lg 11 59 23.9
comp=Z,60nm,0.8s
**LONY Lake Ozonia 5.48 269 Pn 11 57 44.4 +0.3**
LONY IAmb_Lg 11 59 20.2
comp=Z,55nm,0.7s
**TRQ Mont Tremblant 5.53 286** Pn **Pn 11 57 44.8 0.0**
**J59A Piesco 5.66 258 Pn 11 57 46.8 +0.2**
J59A IAmb_Lg 11 59 23.2
comp=Z,40nm,0.8s
**KSCT Kent School, K 5.77 239** Pn **Pn 11 57 48.1 0.0**
**WBO Williamsburg 5.94 274** PN **Pn 11 57 50.9 +0.4**
WBO SN **Sn 11 58 54.6 -3.7**
WBO Trac 11 59 38.9
comp=Z,17nm,0.4s
**WSPT Westport, CT 6.02 234** Pn **Pn 11 57 50.9 -0.7**
WSPT IAmb_Lg 11 59 44.9
comp=Z,45nm,0.7s
**GAC Glen Almond 6.10 280** PN **Pn 11 57 52.6 +0.1**
GAC PN **Pn 11 57 53.2 +0.6**
GAC SN **Sn 11 58 59.2 -2.9**
GAC LG Lg 11 59 35.0
GAC Trac 11 59 43.1
comp=Z,12nm,0.3s
GAC Trac 11 59 46.4
comp=Z,55nm,0.8s
**J58A Remsen 6.23 258** Pn **Pn 11 57 52.8 -1.7**
**PAL Palisades 6.46 235** IAmb_Lg 11 59 54.9
comp=Z,48nm,0.8s
**L59A Walton 6.52 248** Pn **Pn 11 57 59.1 +0.7**
**J57A Williamstown 6.71 260** IAmb_Lg 12 00 00.5
comp=Z,44nm,0.8s
**BINY Binghamton 7.14 251** IAmb_Lg 12 00 18.6
comp=Z,32nm,0.7s
**KSPA Keystone Colle 7.30 246** IAmb_Lg 12 00 17.4
comp=Z,33nm,0.8s
**DRLN Deer Lake 7.74 53** Pn **Pn 11 58 15.2 +0.1**
**SCHQ Schefferville 9.91 0** IAmb_Lg 12 01 34.0
comp=Z,18nm,1.1s

*IDC **02** 12:03:52.2±0.7, 41°.16N×29°.30W, h0km, mb3.7/14, mb1 3.9/15, mb1mx3.6/62, mbtmp3.7/15, ML3.5/1, Error ellipse: s-maj=24.6km s-min=15.9km az=21.0*
**ISC 02 12:03:53.8±0.7, 41°.2N±0°.1×29°.3W±0°.1, h10km, n16, σ1s04/16, mb3.7/14, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **19.33** | **86** | P | **Pn** | **12 08 19.0** | **-1.3** |
| | 0.0nm,0.3s,baz=273,slow=4.5,SNR=2.5 | | | | | | |
| **MDT** | **Midelt** | **21.36** | **105** | P | **P** | **12 08 42.5** | **+1.3** |
| | 1.6nm,0.6s,baz=354,slow=9.1,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.85** | **127** | P | **P** | **12 11 19.0** | **-0.3** |
| | 1.7nm,1.0s,baz=321,slow=6.7,SNR=5.4 | | | | | | |
| **DBIC** | **Dimbokro** | **40.67** | **141** | P | **P** | **12 11 35.6** | **+1.3** |
| | 3.3nm,0.8s,baz=16,slow=17,SNR=3.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **40.82** | **56** | P | **P** | **12 11 35.6** | **+0.4** |
| | 0.3nm,0.3s,baz=288,slow=6.7,SNR=3.6 | | | | | | |
| **RES** | **Resolute Bay** | **44.36** | **340** | P | **P** | **12 12 04.5** | **+0.8** |
| | 1.1nm,0.7s,baz=67,slow=4.7,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.46** | **324** | P | **P** | **12 13 07.2** | **+0.9** |
| | 0.5nm,0.8s,baz=70,slow=7.1,SNR=7.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **57.48** | **301** | P | **P** | **12 13 42.6** | **-0.6** |
| | 0.5nm,0.9s,baz=58,slow=14,SNR=3.6 | | | | | | |
| **NEW** | **Newport** | **59.54** | **309** | P | **P** | **12 13 57.6** | **+0.4** |
| | 2.0nm,1.0s,baz=12,slow=3.0,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.19** | **284** | P | **P** | **12 14 01.1** | **-0.9** |
| | 0.6nm,0.8s,baz=79,slow=6.5,SNR=7.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.41** | **300** | P | **P** | **12 14 38.6** | **+1.7** |
| | 0.4nm,0.9s,baz=51,slow=5.9,SNR=3.6 | | | | | | |
| **LPAZ** | **La Paz** | **67.53** | **221** | P | **P** | **12 14 50.0** | **-1.0** |
| | 0.7nm,0.7s,baz=120,slow=7.0,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.73** | **35** | P | **P** | **12 15 03.1** | **-0.5** |
| | 0.2nm,0.3s,baz=309,slow=9.1,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.41** | **42** | P | **P** | **12 15 25.1** | **-0.8** |
| | 0.9nm,0.7s,baz=328,slow=5.4,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **83.08** | **28** | P | **P** | **12 16 19.2** | **-0.4** |
| | 0.4nm,0.7s,baz=336,slow=3.3,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **157.59** | **44** | PKPab | **PKPab** | **12 24 21.5** | **-1.0** |
| | 1.0nm,1.1s,baz=352,slow=5.6,SNR=4.9 | | | | | | |

*IDC **02** 12:04:46.1±0.9, 41°.46N×29°.36W, h0km, mb3.8/12, mb1 3.9/13, mb1mx3.6/63, mbtmp3.8/13, ML3.9/1, MS4.0/4, Ms1 4.0/4, ms1mx3.4/82, Error ellipse: s-maj=30.9km s-min=17.2km az=26.0*
*NEIC **02** 12:04:48.6±0.9, 41°.5N±0°.2×29°.39W±0°.04, h10km±2km, mb4.6/8, Error ellipse: s-maj=41.6km s-min=4.6km az=178.0*
**ISC 02 12:04:47.8±0.7, 41°.5N±0°.2×29°.37W±0°.10, h12km, n27, σ0s95/21, mb4.0/15, MS4.0/4, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **19.36** | **87** | P | **Pn** | **12 09 14.0** | **-0.5** |
| | 0.1nm,0.3s,baz=293,slow=12,SNR=2.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **19.36** | **87** | IAmb | IAmb | 12 09 17.7 | |
| | comp=Z,1.7nm,1.4s | | | | | | |
| **MDT** | **Midelt** | **21.49** | **106** | P | **P** | **12 09 38.4** | **+1.9** |
| | comp=Z,0.9nm,0.4s,baz=11,slow=13,SNR=1.4 | | | | | | |
| **BBSR** | **BB Station** | **29.50** | **264** | P | **P** | **12 10 52.2** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** | **39.08** | **127** | P | **P** | **12 12 14.0** | **-0.9** |
| | comp=Z,2.9nm,1.1s,baz=322,slow=9.1,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.69** | **27** | LR | LR | 12 27 33.5 | |
| | comp=Z,360nm,18.3s,baz=244,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **40.70** | **56** | P | **P** | **12 12 27.4** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=292,slow=7.5,SNR=1.0 | | | | | | |
| **DBIC** | **Dimbokro** | **40.94** | **141** | P | **P** | **12 12 29.4** | **-0.8** |
| | comp=Z,4.0nm,0.9s,baz=350,slow=8.8,SNR=3.4 | | | | | | |
| **RES** | **Resolute Bay** | **44.06** | **340** | P | **P** | **12 12 53.5** | **-1.6** |
| | comp=Z,0.7nm,0.7s,baz=156,slow=12,SNR=1.8 | | | | | | |
| **U40A** | **Yellville** | **48.69** | **286** | P | **P** | **12 13 32.6** | **+0.7** |
| **U38A** | **Gravette** | **49.76** | **287** | P | **P** | **12 13 38.6** | **-1.5** |
| U38A | | | | IAmb | IAmb | 12 13 42.7 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.18** | **324** | P | **P** | **12 13 57.6** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=70,slow=8.0,SNR=3.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **57.28** | **300** | P | **P** | **12 14 35.9** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=58,slow=11,SNR=3.5 | | | | | | |
| **NEW** | **Newport** | **59.31** | **309** | P | **P** | **12 14 50.3** | **+0.9** |
| | comp=Z,1.6nm,0.8s,baz=37,slow=7.3,SNR=3.9 | | | | | | |
| **NEW** | **Newport** | **59.31** | **309** | IAmb | IAmb | 12 15 00.2 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.06** | **284** | P | **P** | **12 14 55.5** | **+0.6** |
| | comp=Z,1.5nm,0.9s,baz=62,slow=5.8,SNR=6.4 | | | | | | |
| **BRVK** | **Borovoye** | **63.27** | **42** | P | **P** | **12 15 15.9** | **-0.1** |
| BRVK | | | | IAmb | IAmb | 12 15 18.9 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **BBB** | **Bella Bella** | **63.30** | **317** | LR | LR | 12 40 57.3 | |
| | comp=Z,65nm,20.9s,baz=56,slow=34 | | | | | | |
| **KURK** | **Kurchatov** | **68.80** | **40** | P | **P** | **12 15 52.5** | **+0.9** |
| KURK | | | | IAmb | IAmb | 12 15 53.8 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.51** | **35** | P | **P** | **12 15 56.5** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=282,slow=6.8,SNR=4.1 | | | | | | |
| **MK31** | **Makanchi Array** | **73.22** | **42** | P | **P** | **12 16 19.2** | **+0.6** |
| **MKAR** | **Makanchi Array** | **73.22** | **42** | P | **P** | **12 16 18.9** | **+0.3** |
| | comp=Z,1.1nm,0.7s,baz=320,slow=5.3,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.22** | **42** | P | **P** | **12 16 19.8** | **+1.2** |
| **SONM** | **Songino Array** | **82.84** | **28** | P | **P** | **12 17 12.7** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=347,slow=3.3,SNR=2.8 | | | | | | |
| **SUR** | **Sutherland** | **86.80** | **139** | LR | LR | 12 52 41.4 | |
| | comp=Z,66nm,20.0s,baz=358,slow=33 | | | | | | |
| **PLCA** | **Paso Flores** | **89.94** | **210** | LR | LR | 12 56 00.5 | |
| | comp=Z,50nm,18.4s,baz=24,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **157.41** | **43** | PKPab | **PKPab** | **12 25 15.7** | **+0.3** |
| | comp=Z,0.7nm,1.0s,baz=351,slow=4.2,SNR=4.4 | | | | | | |

*IDC **02** 12:07:30.3±0.7, 41°.40N×29°.10W, h0km, mb3.8/14, mb1 3.9/15, mb1mx3.8/63, mbtmp3.8/15, ML4.0/1, MS4.1/32, Ms1 4.1/32, ms1mx3.8/85, Error ellipse: s-maj=23.5km s-min=15.5km az=30.0*
*SVSA **02** 12:07:31.7±1.2, 41°.38N×29°.21W, h10km, ML3.9(INMG), Error ellipse: s-maj=9.6km s-min=7.7km az=14.0*
*NEIC **02** 12:07:32.3±1.9, 41°.47N±0°.09×29°.1W±0°.2, h10km±1km, mb4.6/11, Error ellipse: s-maj=23.5km s-min=13.7km az=247.0*
**ISC 02 12:07:31.0±0.6, 41°.14N±0°.07×29°.20W±0°.07, h10km, n56, σ1s45/33, mb4.0/18, MS4.1/31, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H07S1** | **FLORES T-PHASE** | **2.33** | **222** | *e*P | **Pn** | **12 08 08.4** | **-1.0** |
| H07S1 | | | | *e*S | **Sn** | **12 08 35.0** | **-3.1** |
| H07S1 | | | | A | A | 12 08 37.6 | |
| | 54nm,0.5s | | | | | | |
| **CALA** | **Caldeira** | **2.58** | **171** | *e*S | **Sn** | **12 08 43.1** | **-1.3** |
| CALA | | | | A | A | 12 08 45.0 | |
| | 83nm,0.5s | | | | | | |
| **HOR** | **Horta** | **2.65** | **170** | *e*P | **Pn** | **12 08 13.5** | **-0.2** |
| HOR | | | | *e*S | **Sn** | **12 08 44.8** | **-1.0** |
| HOR | | | | A | A | 12 08 47.0 | |
| | 96nm,0.1s | | | | | | |
| **PAGU** | **Agualva, Azore** | **2.83** | **146** | *e*P | **Pn** | **12 08 15.5** | **-0.7** |
| PAGU | | | | *e*S | **Sn** | **12 08 47.8** | **-2.6** |
| PAGU | | | | A | A | 12 08 53.6 | |
| | 93nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **2.91** | **148** | *e*P | **Pn** | **12 08 16.0** | **-1.2** |
| **ESDC** | **Sonseca Array** | **19.26** | **86** | P | **Pn** | **12 11 56.7** | **+0.1** |
| | 0.1nm,0.3s,baz=285,slow=13,SNR=1.8 | | | | | | |
| ESDC | | | | LR | LR | 12 18 18.3 | |
| | comp=Z,607nm,18.3s,baz=310,slow=34 | | | | | | |
| **MDT** | **Midelt** | **21.28** | **105** | P | **P** | **12 12 19.2** | **+1.5** |
| | 1.5nm,0.9s,baz=334,slow=9.2,SNR=1.9 | | | | | | |
| MDT | | | | LR | LR | 12 18 38.9 | |
| | comp=Z,403nm,22.0s,baz=357,slow=31 | | | | | | |
| **KEST** | **Kesra** | **30.50** | **88** | LR | LR | 12 25 36.6 | |
| | comp=Z,515nm,18.4s,baz=244,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **30.96** | **61** | LR | LR | 12 24 56.8 | |
| | comp=Z,348nm,18.8s,baz=284,slow=34 | | | | | | |
| **JMIC** | **Jan Mayen** | **31.71** | **13** | LR | LR | 12 23 09.0 | |
| | comp=Z,334nm,21.9s,baz=56,slow=30 | | | | | | |
| **FRB** | **Frobisher Bay** | **32.14** | **328** | P | **P** | **12 13 57.5** | **-0.7** |
| | 2.4nm,0.9s,baz=107,slow=13,SNR=3.6 | | | | | | |
| **VRAC** | **Vranov** | **32.84** | **60** | LR | LR | 12 26 18.3 | |
| | comp=Z,243nm,18.1s,baz=334,slow=35 | | | | | | |
| **VAE** | **Valguarnera** | **33.68** | **82** | LR | LR | 12 26 34.7 | |
| | comp=Z,309nm,20.1s,baz=279,slow=34 | | | | | | |
| **KOWA** | **Kowa** | **34.41** | **133** | P | **P** | **12 14 19.7** | **+1.2** |
| | 0.5nm,0.3s,baz=344,slow=7.4,SNR=2.2 | | | | | | |
| KOWA | | | | LR | LR | 12 24 58.0 | |
| | comp=Z,223nm,21.8s,baz=21,slow=30 | | | | | | |
| **SADO** | **Sadowa** | **36.27** | **293** | LR | LR | 12 28 20.3 | |
| | comp=Z,436nm,19.6s,baz=31,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.79** | **127** | P | **P** | **12 14 56.8** | **+0.9** |
| | 2.5nm,1.0s,baz=322,slow=7.2,SNR=6.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.79** | **127** | IAmb | IAmb | 12 15 09.7 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **SJG** | **San Juan** | **39.05** | **245** | LR | LR | 12 27 11.0 | |
| | comp=Z,94nm,19.9s,baz=58,slow=30 | | | | | | |
| **DBIC** | **Dimbokro** | **40.61** | **141** | P | **P** | **12 15 12.7** | **+1.7** |
| | comp=Z,5.3nm,1.0s,baz=265,slow=3.9,SNR=4.4 | | | | | | |
| DBIC | | | | LR | LR | 12 30 58.8 | |
| | comp=Z,160nm,18.1s,baz=2.0,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **40.61** | **141** | IAmb | IAmb | 12 15 14.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **40.77** | **56** | P | **P** | **12 15 10.6** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=275,slow=9.9,SNR=1.1 | | | | | | |
| AKASG | | | | LR | LR | 12 32 00.1 | |
| | comp=Z,442nm,18.2s,baz=326,slow=36 | | | | | | |
| **IDI** | **Anoyia** | **42.33** | **80** | LR | LR | 12 30 36.0 | |
| | comp=Z,211nm,22.0s,baz=297,slow=33 | | | | | | |
| **SDV** | **Santo Domingo** | **48.69** | **241** | LR | LR | 12 34 47.2 | |
| | comp=Z,65nm,20.7s,baz=231,slow=34 | | | | | | |
| **PTGA** | **Pitinga** | **50.16** | **222** | LR | LR | 12 33 35.7 | |
| | comp=Z,191nm,21.2s,baz=64,slow=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.52** | **324** | P | **P** | **12 16 41.9** | **-2.0** |
| | comp=Z,0.7nm,1.0s,baz=72,slow=7.0,SNR=4.0 | | | | | | |
| **ROSC** | **El Rosal** | **54.12** | **241** | LR | LR | 12 37 08.9 | |
| | comp=Z,117nm,21.6s,baz=49,slow=33 | | | | | | |
| **GNI** | **Garni** | **54.48** | **65** | LR | LR | 12 44 04.8 | |
| | comp=Z,132nm,19.1s,baz=334,slow=40 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **55.60** | **285** | P | **P** | **12 17 08.4** | **+1.6** |
| ABTX | | | | IAmb | IAmb | 12 17 15.1 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **ARU** | **Arti** | **55.85** | **42** | LR | LR | 12 38 46.5 | |
| | comp=Z,318nm,18.5s,baz=294,slow=34 | | | | | | |
| **AMTX** | **Amarillo** | **55.94** | **289** | P | **P** | **12 17 11.6** | **+2.2** |
| **PDAR** | **Pinedale Array** | **57.55** | **301** | P | **P** | **12 17 22.9** | **+2.0** |
| | comp=Z,1.0nm,1.0s,baz=69,slow=8.4,SNR=5.3 | | | | | | |
| PDAR | | | | LR | LR | 12 41 54.5 | |
| | comp=Z,238nm,18.1s,baz=36,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **57.55** | **301** | P | **P** | **12 17 20.2** | **-0.7** |
| **JTS** | **Las Juntas de** | **57.68** | **254** | LR | LR | 12 37 50.7 | |
| | comp=Z,137nm,21.6s,baz=112,slow=32 | | | | | | |
| **APG** | **El Apazote** | **58.70** | **263** | LR | LR | 12 38 34.2 | |
| | comp=Z,136nm,19.6s,baz=84,slow=32 | | | | | | |
| **ANMO** | **Albuquerque** | **59.30** | **291** | LR | LR | 12 40 57.8 | |
| | comp=Z,166nm,21.7s,baz=59,slow=34 | | | | | | |
| **NEW** | **Newport** | **59.61** | **309** | P | **P** | **12 17 35.2** | **+0.3** |
| | comp=Z,1.7nm,0.8s,baz=59,slow=4.3,SNR=3.8 | | | | | | |
| NEW | | | | LR | LR | 12 42 07.7 | |
| | comp=Z,200nm,18.4s,baz=52,slow=35 | | | | | | |
| **NEW** | **Newport** | **59.61** | **309** | P | **P** | **12 17 35.2** | **+0.3** |
| NEW | | | | IAmb | IAmb | 12 17 42.9 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **60.26** | **284** | P | **P** | **12 17 40.2** | **+0.5** |
| TX31 | | | | IAmb | IAmb | 12 17 58.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **TX32** | **Lajitas Array** | **60.26** | **284** | P | **P** | **12 17 40.2** | **+0.5** |
| TX32 | | | | IAmb | IAmb | 12 17 58.1 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.26** | **284** | P | **P** | **12 17 39.8** | **+0.1** |
| | comp=Z,1.2nm,0.9s,baz=78,slow=6.5,SNR=6.5 | | | | | | |
| **PLID** | **Pearl Lake** | **60.50** | **306** | P | **P** | **12 17 41.6** | **+0.4** |
| PLID | | | | IAmb | IAmb | 12 17 49.0 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **CMIG** | **Matias Romero** | **60.73** | **268** | LR | LR | 12 42 51.8 | |
| | comp=Z,152nm,18.5s,baz=46,slow=35 | | | | | | |
| **ELK** | **Elko** | **62.24** | **301** | LR | LR | 12 45 04.1 | |
| | comp=Z,235nm,18.2s,baz=42,slow=36 | | | | | | |
| **J08A** | **Circle Bar Ran** | **62.91** | **305** | P | **P** | **12 17 58.0** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **65.48** | **300** | LR | LR | 12 47 17.3 | |
| | comp=Z,195nm,18.6s,baz=15,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **67.57** | **221** | P | **P** | **12 18 31.7** | **+3.3** |
| | comp=Z,1.2nm,0.8s,baz=332,slow=6.7,SNR=5.0 | | | | | | |
| LPAZ | | | | LR | LR | 12 44 35.3 | |
| | comp=Z,138nm,22.0s,baz=9.0,slow=33 | | | | | | |
| **MBAR** | **Mbarara** | **68.19** | **111** | LR | LR | 12 46 03.7 | |
| | comp=Z,140nm,19.9s,baz=296,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.70** | **35** | P | **P** | **12 18 40.7** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=329,slow=13,SNR=1.2 | | | | | | |
| **LVC** | **Limon Verde** | **73.36** | **218** | LR | LR | 12 47 19.8 | |
| | comp=Z,95nm,21.3s,baz=345,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.38** | **42** | P | **P** | **12 19 02.7** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=347,slow=5.0,SNR=6.2 | | | | | | |
| MKAR | | | | LR | LR | 12 52 33.7 | |
| | comp=Z,148nm,18.6s,baz=302,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.38** | **42** | P | **P** | **12 19 01.7** | **-1.3** |
| **WSAR** | **Wadi Sarin** | **73.54** | **73** | LR | LR | 12 54 00.5 | |
| | comp=Z,56nm,20.7s,baz=334,slow=38 | | | | | | |
| **LSZ** | **Lusaka** | **77.22** | **124** | LR | LR | 12 53 58.7 | |
| | comp=Z,303nm,18.1s,baz=321,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **83.06** | **28** | P | **P** | **12 19 55.8** | **-0.9** |
| | comp=Z,0.3nm,0.7s,baz=333,slow=5.5,SNR=1.8 | | | | | | |
| **SONM** | **Songino Array** | **83.06** | **28** | IAmb | IAmb | 12 20 02.2 | |
| | comp=Z,1.2nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **157.55** | **44** | PKPab | **PKPab** | **12 27 59.0** | **-0.5** |
| | comp=Z,0.3nm,1.0s,baz=346,slow=6.7,SNR=2.0 | | | | | | |

**IDC 02 12:08:15.1±777.0, 49°.04N×52°.37E, h0km, Error ellipse: s-maj=374.0km s-min=85.9km az=67.0, Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **3.92** | **67** | *i* | | 12 32 10.0 | |
| | baz=253,slow=324,SNR=1.7 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **20.68** | **64** | *i* | | 14 15 50.0 | |
| | baz=270,slow=336,SNR=1.6 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **35.25** | **71** | *i* | | 15 44 40.0 | |
| | baz=286,slow=340,SNR=0.9 | | | | | | |

*IDC **02** 12:37:18.9±1.1, 14°.78S×173°.16W, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.7/33, mbtmp3.8/6, MS3.7/7, Ms1 3.7/7, ms1mx3.2/70, Error ellipse: s-maj=53.9km s-min=18.6km az=143.0*
*NEIC **02** 12:37:24.3±1.0, 14°.99S±0°.09×172°.8W±0°.1, h41km±8km, mb4.2/8, Error ellipse: s-maj=22.2km s-min=10.5km az=115.0*
**ISC 02 12:37:22.6±0.8, 14°.9S±0°.1×172°.9W±0°.1, h29km, n30, σ1s00/17, mb4.1/9, MS3.8/6, Samoa Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.47** | **46** | P | **Pb** | **12 37 48.7** | **-0.6** |
| | 74nm,0.3s,baz=211,slow=3.0,SNR=130 | | | | | | |
| AFI | | | | Sn | **Sn** | **12 38 04.9** | **-0.6** |
| | 1µm,0.3s,baz=218,slow=23,SNR=31 | | | | | | |
| AFI | | | | LR | LR | 12 38 20.3 | |
| | comp=Z,272nm,20.5s,baz=234,slow=38 | | | | | | |
| **AFI** | **Afiamalu** | **1.47** | **46** | | **Pb** | **12 37 49.0** | **-0.3** |
| **NIUE** | **Niue** | **4.99** | **146** | | **Pn** | **12 38 35.0** | **-0.5** |
| **MSVF** | **Nonsavu** | **9.15** | **251** | LR | LR | 12 42 36.4 | |
| | comp=Z,189nm,19.7s,baz=162,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.85** | **247** | LR | LR | 12 48 01.8 | |
| | comp=Z,86nm,18.3s,baz=60,slow=31 | | | | | | |
| **URZ** | **Urewera** | **24.86** | **199** | P | **P** | **12 42 42.9** | **+0.2** |
| | 2.8nm,0.4s,baz=86,slow=7.0,SNR=2.4 | | | | | | |
| URZ | | | | LR | LR | 12 51 04.5 | |
| | comp=Z,106nm,21.6s,baz=14,slow=33 | | | | | | |
| **URZ** | **Urewera** | **24.86** | **199** | IAmb | IAmb | 12 42 46.6 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.89** | **199** | P | **P** | **12 42 52.9** | **+0.9** |
| BKZ | | | | IAmb | IAmb | 12 43 12.4 | |
| | comp=Z,6.3nm,1.3s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.84** | **328** | T | T | 13 25 24.2 | |
| | baz=147,slow=75,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.85** | **328** | T | T | 13 25 25.3 | |
| | baz=147,slow=75,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.85** | **328** | T | T | 13 25 26.8 | |
| | baz=147,slow=75,SNR=8.3 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.77** | **329** | T | T | 13 26 37.2 | |
| | baz=147,slow=76,SNR=4.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.77** | **329** | T | T | 13 26 37.1 | |
| | baz=147,slow=76,SNR=3.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.79** | **329** | T | T | 13 26 37.3 | |
| | baz=147,slow=76,SNR=3.1 | | | | | | |
| **STKA** | **Stephens Creek** | **44.71** | **240** | P | **P** | **12 45 32.9** | **-0.4** |
| | comp=Z,1.7nm,0.7s,baz=84,slow=11,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **44.71** | **240** | IAmb | IAmb | 12 45 42.4 | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **50.26** | **256** | P | **P** | **12 46 16.6** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 12 46 35.6 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **50.41** | **257** | P | **P** | **12 46 17.8** | **0.0** |
| **WB2** | **Warramunga Arr** | **50.44** | **256** | P | **P** | **12 46 18.1** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 12 46 18.3 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.45** | **256** | P | **P** | **12 46 17.2** | **-1.0** |
| | comp=Z,0.6nm,0.7s,baz=92,slow=6.8,SNR=9.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.45** | **256** | P | **P** | **12 46 17.6** | **-0.5** |
| **AS31** | **Alice Springs** | **50.74** | **252** | P | **P** | **12 46 19.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **50.74** | **252** | P | **P** | **12 46 19.5** | **-0.8** |
| | comp=Z,1.5nm,0.6s,baz=90,slow=7.4,SNR=40 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.32** | **352** | LR | LR | 13 11 03.6 | |
| | comp=Z,54nm,21.9s,baz=319,slow=30 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.92** | **319** | LR | LR | 13 12 39.5 | |
| | comp=Z,103nm,21.3s,baz=329,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.64** | **42** | P | **P** | **12 48 56.6** | **+2.8** |
| | comp=Z,0.2nm,0.5s,baz=225,slow=9.8,SNR=1.7 | | | | | | |
| **KDAK** | **Kodiak Island** | **74.37** | **11** | LR | LR | 13 15 00.6 | |
| | comp=Z,65nm,18.9s,baz=128,slow=30 | | | | | | |
| **DLBC** | **Dease Lake** | **81.08** | **21** | LR | LR | 13 19 46.4 | |
| | comp=Z,122nm,19.4s,baz=32,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **81.89** | **11** | P | **P** | **12 49 37.5** | **-1.4** |
| | comp=Z,0.1nm,0.5s,baz=196,slow=5.7,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **81.89** | **11** | P | **P** | **12 49 38.7** | **-0.2** |

*DDA **02** 12:41:25.2±0.0, 36°.57N×25°.56E, h10km±4km, ML2.5*
*ISK **02** 12:41:26.7, 36°.55N×25°.70E, h10km, ML2.5/8*
*ATH **02** 12:41:27.8, 36°.66N×25°.38E, h21km±5km, ML2.5/2, Error ellipse: s-maj=21.9km s-min=2.0km az=272.0*
*THE **02** 12:41:30.3, 36°.69N×25°.63E, h24km±6km, ML2.6/2, Error ellipse: s-maj=6.7km s-min=1.3km az=202.0*
**ISC 02 12:41:27.4±1.0, 36°.63N±0°.03×25°.65E±0°.03, h13km±8km, n24, σ0s79/37, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THT2** | **Imerovigli** | **0.27** | **223** | P | **Pb** | **12 41 34.0** | **-0.1** |
| THT2 | | | | S | **Sg** | **12 41 36.7** | **-0.1** |
| **SNT5** | **Nea Kammeni, S** | **0.30** | **222** | P | **Pg** | **12 41 33.1** | **-0.5** |
| SNT5 | | | | S | **Sg** | **12 41 38.3** | **+0.5** |
| SNT5 | | | | AML | AML | 12 41 39.5 | |
| | comp=E,3648µm,0.2s | | | | | | |
| SNT5 | | | | AML | AML | 12 41 41.7 | |
| | comp=N,1885µm,0.2s | | | | | | |
| **MHLO** | **Agia Marina, M** | **1.00** | **274** | P | **Pn** | **12 41 47.8** | **+0.6** |
| MHLO | | | | S | **Sn** | **12 42 01.4** | **+0.2** |
| | comp=N,500nm,0.5s | | | | | | |
| **NISR** | **Nisiros** | **1.19** | **90** | P | **Pg** | **12 41 51.3** | **+1.0** |
| NISR | | | | S | **Sn** | **12 42 06.7** | **+0.9** |
| **NPS** | **Neapolis** | **1.36** | **181** | P | **Pn** | **12 41 52.5** | **+0.3** |
| **NPS** | **Neapolis** | **1.36** | **181** | P | **Pb** | **12 41 52.8** | **0.0** |
| NPS | | | | S | **Sg** | **12 42 11.3** | **-0.1** |
| NPS | | | | AML | AML | 12 42 11.9 | |
| | comp=E,439µm,0.7s | | | | | | |
| NPS | | | | AML | AML | 12 42 12.2 | |
| | comp=N,275µm,0.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LIT** | **Litokhoron** | **0.57** | **122** | P | **Pg** | **12 42 25.2** | **0.0** |
| LIT | | | | S | **Sb** | **12 42 34.5** | **-1.3** |
| | comp=N,205nm,0.5s | | | | | | |
| **LIT** | **Litokhoron** | **0.57** | **122** | P | **Pg** | **12 42 25.2** | **0.0** |
| LIT | | | | AML | AML | 12 42 40.4 | |
| | comp=N,376μm,0.5s | | | | | | |
| LIT | | | | AML | AML | 12 42 42.0 | |
| | comp=E,447μm,0.5s | | | | | | |
| **LIT** | **Litokhoron** | **0.57** | **122** | *i* AML | AML | 12 42 41.0 | |
| | comp=E,57nm,0.4s | | | | | | |
| **LIT** | **Litokhoron** | **0.57** | **122** | P | **Pg** | **12 42 25.4** | **+0.2** |
| **LIT** | **Litokhoron** | **0.57** | **122** | S | **Sb** | **12 42 37.9** | **+2.1** |
| **KPRO** | **Kipourio** | **0.58** | **220** | P | **Pg** | **12 42 25.6** | **+0.2** |
| KPRO | | | | S | **Sb** | **12 42 35.1** | **-1.1** |
| | comp=E,170nm,1.2s | | | | | | |
| **KPRO** | **Kipourio** | **0.58** | **220** | P | **Pg** | **12 42 25.7** | **+0.2** |
| **PENT** | **Pentalofos** | **0.58** | **250** | P | **Pg** | **12 42 25.9** | **+0.5** |
| **PENT** | **Pentalofos** | **0.58** | **250** | P | **Pg** | **12 42 26.0** | **+0.5** |
| **NEST** | **Nestorio** | **0.61** | **271** | P | **Pg** | **12 42 26.5** | **+0.5** |
| NEST | | | | S | **Sg** | **12 42 35.2** | **+1.3** |
| | comp=E,105nm,0.5s | | | | | | |
| **NEST** | **Nestorio** | **0.61** | **271** | P | **Pg** | **12 42 26.9** | **+0.9** |
| **TYRN** | **Tyrnavos** | **0.75** | **157** | P | **Pg** | **12 42 28.6** | **0.0** |
| TYRN | | | | S | **Sb** | **12 42 40.8** | **-0.1** |
| | comp=E,158nm,0.6s | | | | | | |
| **THL** | **Klokotos Trika** | **0.85** | **172** | P | **Pg** | **12 42 30.8** | **+0.4** |
| THL | | | | S | **Sb** | **12 42 42.8** | **-0.8** |
| | comp=E,108nm,0.7s | | | | | | |
| **THL** | **Klokotos Trika** | **0.85** | **172** | P | **Pg** | **12 42 30.9** | **+0.4** |
| THL | | | | AML | AML | 12 42 51.3 | |
| | comp=N,217μm,0.7s | | | | | | |
| THL | | | | AML | AML | 12 42 57.5 | |
| | comp=E,208μm,0.7s | | | | | | |
| **PLG** | **Polygyros** | **1.22** | **91** | P | **Pn** | **12 42 38.7** | **+0.2** |
| PLG | | | | AML | AML | 12 42 59.1 | |
| | comp=E,96μm,0.7s | | | | | | |
| PLG | | | | AML | AML | 12 43 04.4 | |
| | comp=N,87μm,0.8s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **1.40** | **171** | P | **Pn** | **12 42 39.7** | **-1.4** |
| MAKR | | | | AML | AML | 12 43 26.7 | |
| | comp=E,182μm,1.4s | | | | | | |
| MAKR | | | | AML | AML | 12 43 29.1 | |
| | comp=N,267μm,1.9s | | | | | | |

**IDC 02 12:47:30.8±5.3, 21°.43S×179°.17E, h593$^{km}$±31$^{km}$, mb2.8/4, mb1 3.1/5, mb1mx2.8/30, mbtmp3.8/5, Error ellipse: s-maj=139.7km s-min=29.2km az=140.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.82** | **344** | P | P | 12 48 54.8 | 0.0 |
| | 5.9nm,0.3s,baz=117,slow=12,SNR=17 | | | | | | |
| **STKA** | **Stephens Creek** | **35.00** | **245** | P | P | 12 53 34.2 | -1.0 |
| | 0.5nm,0.3s,baz=158,slow=19,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **41.73** | **258** | P | P | 12 54 29.7 | +0.1 |
| | 1.4nm,0.7s,baz=94,slow=8.8,SNR=29 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.86** | **264** | P | P | 12 54 30.6 | 0.0 |
| | 0.6nm,0.5s,baz=96,slow=7.8,SNR=13 | | | | | | |
| **ILAR** | **Eielson Array** | **89.82** | **14** | P | P | 12 59 26.5 | -0.2 |
| | 0.4nm,0.9s,baz=195,slow=5.6,SNR=2.2 | | | | | | |

**IDC 02 12:57:12.6±999.0, 53°.06N×40°.06E, h0$^{km}$, Error ellipse: s-maj=1127.0km s-min=214.9km az=90.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **11.46** | **96** | *i* | | 14 07 40.0 | |
| | baz=290,slow=333,SNR=2.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **26.30** | **70** | *i* | | 15 37 30.0 | |
| | baz=289,slow=336,SNR=1.4 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **41.23** | **70** | *i* | | 17 11 10.0 | |
| | baz=299,slow=340,SNR=0.7 | | | | | | |

*SFS **02** 12:57:57.0, 35°.40N×3°.80W, ML3.4, ALBORAN SUR*
*CNRM **02** 12:57:57.7, 35°.58N×3°.77W, h20$^{km}$, ml3.6*
*INMG **02** 12:57:58.6±1.3, 35°.47N×3°.79W, h6$^{km}$±6$^{km}$, ML3.1, Error ellipse: s-maj=3.1km s-min=3.1km az=34.0*
*IGIL **02** 12:57:58.8, 35°.47N×3°.83W, h0$^{km}$, ML3.0*
*IDC **02** 12:57:59.3±0.9, 35°.52N×3°.68W, h0$^{km}$, mb3.6/6, mb1 3.7/8, mb1mx3.5/62, mbtmp3.6/8, ML3.4/2, MS4.2/4, Ms1 4.2/4, ms1mx3.2/90, Error ellipse: s-maj=32.8km s-min=14.7km az=104.0*
*LDG **02** 12:58:00.1±0.3, 35°.44N×3°.74W, h10$^{km}$, Ml3.1/4, Error ellipse: s-maj=6.3km s-min=3.7km az=177.0*

**ISC 02 12:57:59.2±1.1, 35°.53N±0°.03×3°.68W±0°.02, h10$^{km}$±8$^{km}$, n88, σ2°59/124, mb3.8/6, MS4.2/4, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.38** | **214** | P | **Pg** | **12 58 05.2** | **-1.3** |
| **PALE** | **Palemas** | **0.38** | **214** | P | **Pg** | **12 58 05.3** | **-1.3** |
| PALE | | | | S | **Sg** | **12 58 10.1** | **-1.4** |
| **GOG** | **Mont Gurugu** | **0.64** | **118** | P | **Pg** | **12 58 11.4** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.64** | **118** | P | **Pg** | **12 58 11.3** | **-0.3** |
| GOG | | | | S | **Sg** | **12 58 20.7** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.08** | **108** | P | **Pb** | **12 58 18.1** | **-1.8** |
| CHAS | | | | S | **Sb** | **12 58 32.8** | **-1.2** |
| **TAF** | **Taforalt** | **1.26** | **124** | P | **Pn** | **12 58 22.1** | **-0.8** |
| **TAF** | **Taforalt** | **1.26** | **124** | P | **Pn** | **12 58 21.1** | **-1.8** |
| TAF | | | | S | **Sb** | **12 58 39.5** | **+0.2** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **334** | P | **Pn** | **12 58 22.2** | **-2.2** |
| EMAL | | | | S | **Sn** | **12 58 38.0** | **-4.6** |
| **SMIR** | **Smir Dam** | **1.39** | **277** | P | **Pn** | **12 58 24.0** | **-0.6** |
| **SMIR** | **Smir Dam** | **1.39** | **277** | P | Pn | 12 58 19.2 | -5.4 |
| SMIR | | | | S | **Sn** | **12 58 35.8** | **-7.3** |
| **CHEFC** | **Chefchaouen** | **1.42** | **253** | P | **Pg** | **12 58 27.0** | **+0.6** |
| **CHEFC** | **Chefchaouen** | **1.42** | **253** | P | **Pn** | **12 58 23.1** | **-2.0** |
| CHEFC | | | | S | **Sn** | **12 58 40.4** | **-3.5** |
| **CEU** | **Ceuta** | **1.43** | **286** | P | Pn | 12 58 19.9 | -5.1 |
| CEU | | | | S | **Sn** | **12 58 36.2** | **-7.6** |
| **JBK** | **JBK** | **1.50** | **142** | P | **Pn** | **12 58 25.5** | **-0.8** |
| **JBK** | **JBK** | **1.50** | **142** | P | **Pn** | **12 58 24.3** | **-2.1** |
| JBK | | | | S | **Sn** | **12 58 44.6** | **-1.4** |
| **ALJ** | **Aljibe** | **1.88** | **303** | P | **Pb** | **12 58 33.7** | **+0.1** |
| ALJ | | | | S | **Sb** | **12 58 57.3** | **+0.1** |
| **LIJA** | **Lijar** | **1.96** | **315** | P | **Pb** | **12 58 34.7** | **-0.3** |
| LIJA | | | | S | **Sg** | **12 59 06.7** | **+4.7** |
| **SICH** | **Sidi Chahed** | **1.96** | **224** | S | Sn | 12 58 46.0 | -11 |
| **LCRM** | **LCR** | **2.08** | **208** | P | **Pb** | **12 58 37.0** | **-0.1** |
| **LCRM** | **LCR** | **2.08** | **208** | P | **Pn** | **12 58 35.0** | **+0.8** |
| LCRM | | | | S | **Sb** | **12 59 01.4** | **-1.6** |
| **CNIL** | **Conil** | **2.10** | **294** | P | **Pb** | **12 58 37.4** | **0.0** |
| CNIL | | | | S | **Sg** | **12 59 09.1** | **+2.4** |
| **IFR** | **Ifrane** | **2.33** | **211** | P | **Pn** | **12 58 36.0** | **-1.7** |
| IFR | | | | S | **Sn** | **12 59 02.7** | **-3.8** |
| **MD31** | **MD31** | **2.80** | **199** | P | **Pn** | **12 58 43.1** | **-1.0** |
| **MDT** | **Midelt** | **2.81** | **196** | Pn | **Pn** | **12 58 44.0** | **-0.3** |
| | 3.0nm,0.3s,baz=338,slow=13,SNR=21 | | | | | | |
| MDT | | | | Sn | **Sn** | **12 59 17.6** | **-0.7** |
| | 6.3nm,0.3s,baz=342,slow=6.4,SNR=6.0 | | | | | | |
| MDT | | | | Lg | Lg | 12 59 28.4 | |
| | 14nm,0.3s,baz=59,slow=23,SNR=7.1 | | | | | | |
| **MDT** | **Midelt** | **2.81** | **196** | P | **Pn** | **12 58 45.3** | **+1.0** |
| **MDT** | **Midelt** | **2.81** | **196** | P | **Pn** | **12 58 43.3** | **-1.0** |
| **TDRA** | **Tendrara** | **2.83** | **151** | P | **Pn** | **12 58 44.5** | **-0.1** |
| **CART** | **Cartagena** | **2.98** | **46** | P | **Pn** | **12 58 46.1** | **-0.3** |
| CART | | | | S | **Sn** | **12 59 15.4** | **-6.8** |
| **CART** | **Cartagena** | **2.98** | **46** | P | **Pn** | **12 58 45.4** | **-1.1** |
| CART | | | | S | **Sn** | **12 59 18.5** | **-3.7** |
| **ZHG** | **ZHG** | **3.21** | **230** | P | **Pn** | **12 58 50.0** | **+0.3** |
| **ZHG** | **ZHG** | **3.21** | **230** | P | **Pn** | **12 58 47.6** | **-2.1** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | *e*Pn | **Pn** | **12 58 55.3** | **-1.8** |
| PVAQ | | | | *e*Sn | **Sn** | **12 59 37.2** | **-4.1** |
| PVAQ | | | | A | A | 12 59 44.8 | |
| | 49nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **12 58 55.1** | **-1.9** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **12 58 55.1** | **-1.9** |
| PVAQ | | | | S | **Sn** | **12 59 36.3** | **-5.0** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **298** | *e*Pn | **Pn** | **12 58 56.3** | **-1.9** |
| PBDV | | | | *e*Sn | **Sn** | **12 59 39.3** | **-4.0** |
| PBDV | | | | A | A | 12 59 48.4 | |
| | 20nm,0.3s | | | | | | |
| **FIGM** | **Figuig** | **3.94** | **149** | P | **Pn** | **12 59 00.4** | **+0.6** |
| **PAB** | **San Pablo** | **4.04** | **353** | P | **Pn** | **12 59 02.2** | **+1.0** |
| **PCVE** | **Castro Verde** | **4.09** | **302** | *e*Pn | **Pn** | **12 58 59.9** | **-1.8** |
| PCVE | | | | *e*Sn | **Sn** | **12 59 45.0** | **-4.5** |
| PCVE | | | | A | A | 12 59 58.2 | |
| | 22nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.14** | **357** | Pn | **Pn** | **12 59 03.1** | **+0.6** |
| | 1.4nm,0.3s,baz=180,slow=12,SNR=36 | | | | | | |
| ESDC | | | | Sn | **Sn** | **12 59 49.7** | **-1.4** |
| | 1.1nm,0.3s,baz=189,slow=16,SNR=1.3 | | | | | | |
| ESDC | | | | Lg | Lg | 13 00 07.8 | |
| | 2.0nm,0.3s,baz=187,slow=28,SNR=2.2 | | | | | | |
| **PBEJ** | **Beja** | **4.18** | **308** | *e*Pn | **Pn** | **12 59 01.6** | **-1.4** |
| PBEJ | | | | *e*Sn | **Sn** | **12 59 48.4** | **-3.5** |
| PBEJ | | | | A | A | 13 00 00.9 | |
| | 18nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **304** | *e*P | **Pn** | **12 59 02.9** | **-1.9** |
| MESJ | | | | *e*S | **Sn** | **12 59 49.5** | **-5.7** |
| MESJ | | | | IAML | | 12 59 55.9 | |
| | comp=N,28nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **304** | *e*Pn | **Pn** | **12 59 03.4** | **-1.4** |
| MESJ | | | | *e*Sn | **Sn** | **12 59 51.5** | **-3.7** |
| MESJ | | | | A | A | 12 59 57.2 | |
| | comp=N,30nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **295** | *e*P | **Pn** | **12 59 03.6** | **-2.2** |
| MORF | | | | *e*S | **Sn** | **12 59 51.0** | **-5.9** |
| MORF | | | | IAML | | 13 00 01.1 | |
| | comp=N,35nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **295** | *e*Pn | **Pn** | **12 59 04.1** | **-1.7** |
| MORF | | | | *e*Sn | **Sn** | **12 59 53.4** | **-3.5** |
| MORF | | | | A | A | 12 59 58.9 | |
| | comp=N,17nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.45** | **293** | *e*Pn | **Pn** | **12 59 07.3** | **+0.6** |
| PFVI | | | | *e*Sn | **Sn** | **12 59 54.4** | **-4.1** |
| PFVI | | | | A | A | 13 00 00.8 | |
| | comp=N,23nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.45** | **293** | P | **Pn** | **12 59 05.0** | **-1.7** |
| **PESTR** | **Estremoz** | **4.56** | **318** | *e*Pn | **Pn** | **12 59 08.0** | **-0.3** |
| PESTR | | | | *e*Sn | **Sn** | **12 59 58.3** | **-3.1** |
| **PESTR** | **Estremoz** | **4.56** | **318** | P | **Pn** | **12 59 08.0** | **-0.3** |
| **PESTR** | **Estremoz** | **4.56** | **318** | P | **Pn** | **12 59 08.0** | **-0.3** |
| **EVO** | **Evora** | **4.58** | **312** | P | **Pn** | **12 59 07.6** | **-0.9** |
| EVO | | | | S | **Sn** | **12 59 57.9** | **-3.9** |
| **PNCL** | **Nicolau / Gran** | **4.67** | **305** | *e*Pn | **Pn** | **12 59 07.9** | **-1.7** |
| PNCL | | | | *e*Sn | **Sn** | **12 59 59.3** | **-4.5** |
| PNCL | | | | A | A | 13 00 05.8 | |
| | comp=N,17nm,0.9s | | | | | | |
| **UCM** | **Universidad Co** | **4.78** | **4** | P | **Pn** | **12 59 10.7** | **-0.6** |
| UCM | | | | S | **Sn** | **13 00 02.8** | **-4.0** |
| **PMRV** | **Marv??o** | **4.88** | **324** | *e*Pn | **Pn** | **12 59 11.8** | **-0.9** |
| PMRV | | | | *e*Sn | **Sn** | **13 00 06.2** | **-3.0** |
| **PMTG** | **Montargil** | **5.06** | **316** | *e*Pn | **Pn** | **12 59 14.0** | **-1.0** |
| PMTG | | | | *e*Sn | **Sn** | **13 00 10.2** | **-3.3** |
| PMTG | | | | A | A | 13 00 17.3 | |
| | comp=N,18nm,0.7s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.25** | **326** | *e*Pn | **Pn** | **12 59 17.4** | **-0.3** |
| **OUZM** | **OUZ** | **5.28** | **210** | P | **Pn** | **12 59 20.1** | **+1.9** |
| **OUZM** | **OUZ** | **5.28** | **210** | P | **Pn** | **12 59 19.0** | **+0.8** |
| **OUK** | **Oukaimeden** | **5.55** | **220** | P | **Pn** | **12 59 20.8** | **-1.4** |
| **PMAFR** | **Mafra** | **5.63** | **309** | *e*Pn | **Pn** | **12 59 23.7** | **+0.9** |
| PMAFR | | | | *e*Sn | **Sn** | **13 00 23.6** | **-3.9** |
| **PSBE** | **So Bento** | **5.69** | **316** | *e*Pn | **Pn** | **12 59 23.2** | **-0.5** |
| **PCAS** | **Casmilo, Conde** | **5.91** | **321** | *e*Pn | **Pn** | **12 59 26.9** | **+0.2** |
| PCAS | | | | *e*Sn | **Sn** | **13 00 31.3** | **-3.2** |
| PCAS | | | | A | A | 13 00 38.6 | |
| | comp=N,15nm,0.6s | | | | | | |
| **PVIS** | **Viseu** | **6.15** | **329** | *e*Pn | **Pn** | **12 59 30.3** | **+0.2** |
| PVIS | | | | *e*Sn | **Sn** | **13 00 37.3** | **-3.2** |
| PVIS | | | | A | A | 13 00 46.8 | |
| | comp=N,16nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **6.21** | **336** | *e*Pn | **Pn** | **12 59 31.1** | **+0.2** |
| MVO | | | | *e*Sn | **Sn** | **13 00 39.4** | **-2.6** |
| **PVRL** | **Vila Real** | **6.55** | **332** | *e*Pn | **Pn** | **12 59 35.5** | **-0.1** |
| PVRL | | | | *e*Sn | **Sn** | **13 00 47.0** | **-3.4** |
| **POLO** | **Lamas de Olo** | **6.67** | **332** | *e*Pn | **Pn** | **12 59 37.2** | **0.0** |
| POLO | | | | *e*Sn | **Sn** | **13 00 49.0** | **-4.3** |
| POLO | | | | A | A | 13 00 58.8 | |
| | comp=N,6.4nm,0.6s | | | | | | |
| **PBRG** | **Braganca** | **6.71** | **340** | *e*Pn | **Pn** | **12 59 37.9** | **+0.2** |
| PBRG | | | | *e*Sn | **Sn** | **13 00 52.3** | **-1.9** |
| PBRG | | | | A | A | 13 00 59.1 | |
| | comp=N,7.8nm,1.0s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.36** | **332** | *e*Pn | **Pn** | **12 59 46.6** | **-0.1** |
| **ETSF** | **Etsaut** | **7.75** | **17** | *e*Pn | **Pn** | **12 59 53.3** | **+1.3** |
| ETSF | | | | *e*Sn | **Sn** | **13 01 17.0** | **-2.8** |
| | comp=N,1.1nm,0.3s | | | | | | |
| **SJPF** | **Ste Jean** | **7.81** | **13** | *e*Pn | **Pn** | **12 59 53.3** | **+0.5** |
| SJPF | | | | *e*Sn | **Sn** | **13 01 18.5** | **-2.8** |
| | comp=N,1.2nm,0.3s | | | | | | |
| SJPF | | | | *e*Sg | **Sg** | **13 02 05.8** | **-3.9** |
| | comp=N,2.9nm,0.5s | | | | | | |
| **EPF** | **Esparros** | **8.11** | **21** | *e*Pn | **Pn** | **12 59 58.0** | **+1.0** |
| **MTLF** | **Montolieu** | **9.04** | **29** | *e*P | **Pn** | **13 00 13.5** | **+3.9** |
| **RJF** | **Les Rejaudoux** | **10.54** | **20** | *e*Pn | **Pn** | **13 00 29.0** | **-1.2** |
| RJF | | | | *e*Sn | **Sn** | **13 02 23.0** | **-5.2** |
| | comp=N,1.9nm,0.3s | | | | | | |
| RJF | | | | *e*Sg | | 13 03 32.2 | |
| **LMR** | **La Mourre** | **11.08** | **42** | *e*Pn | **Pn** | **13 00 37.5** | **-0.1** |
| **TCF** | **Toulx Ste Croi** | **11.63** | **21** | *e*P | Pn | 13 00 50.7 | +5.5 |
| **PGF** | **Pioggiola** | **12.09** | **51** | *e*Pn | **Pn** | **13 00 52.0** | **+0.5** |
| **QUIF** | **Quistinic** | **12.38** | **2** | *e*Pn | **Pn** | **13 00 54.8** | **-0.6** |
| **SSF** | **Saint Saulge** | **12.72** | **23** | *e*P | Pn | 13 01 05.1 | +5.1 |
| **VYHS** | **Vyhne** | **21.07** | **45** | *e*P | **P** | **13 02 44.2** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** | **22.81** | **166** | P | **P** | **13 03 04.5** | **+2.3** |
| | comp=N,0.6nm,0.7s,baz=334,slow=13,SNR=5.3 | | | | | | |
| **KIRV** | **Kiruna** | **41.47** | **39** | LR | LR | 13 22 18.9 | |
| | comp=N,287nm,19.5s,baz=305,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.91** | **47** | P | **P** | **13 07 59.3** | **+1.1** |
| | comp=N,1.4nm,0.7s,baz=292,slow=7.7,SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **59.09** | **57** | LR | LR | 13 36 04.1 | |
| | comp=N,159nm,18.7s,baz=339,slow=39 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.36** | **42** | P | **P** | **13 08 17.3** | **+2.3** |
| | comp=N,0.6nm,0.5s,baz=318,slow=6.2,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.63** | **51** | P | **P** | **13 08 25.6** | **+1.9** |
| | comp=N,0.8nm,0.7s,baz=289,slow=6.1,SNR=11 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.84** | **332** | P | **P** | **13 08 59.1** | **+2.0** |
| | comp=N,0.3nm,0.7s,baz=62,slow=6.3,SNR=5.3 | | | | | | |
| **DLBC** | **Dease Lake** | **76.25** | **334** | LR | LR | 13 41 38.6 | |
| | comp=N,95nm,18.1s,baz=54,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.87** | **313** | P | **P** | **13 09 54.2** | **+2.5** |
| | comp=N,0.2nm,0.8s,baz=41,slow=6.0,SNR=2.4 | | | | | | |
| **JTS** | **Las Juntas de** | **77.03** | **273** | LR | LR | 13 39 50.4 | |
| | comp=N,242nm,20.8s,baz=8.5,slow=33 | | | | | | |

*JMA **02** 13:03:04.6±0.2, 24°.26N×121°.83E, h52$^{km}$±2$^{km}$, M2.6*
*TAP **02** 13:03:05.5, 24°.40N×121°.92E, h20$^{km}$, ML3.2, B*

**ISC 02 13:03:05.8±1.0, 24°.39N±0°.02×121°.94E±0°.02, h19$^{km}$±2$^{km}$, n101, σ0°47/142, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.16** | **291** | P | **Pg** | **13 03 10.3** | **0.0** |
| | baz=288 | | | | | | |
| EWUT | | | | S | **Sg** | **13 03 13.7** | **+0.4** |
| | baz=288 | | | | | | |
| **ENA** | **Nanau** | **0.19** | **282** | P | **Pg** | **13 03 10.6** | **0.0** |
| | baz=279 | | | | | | |
| ENA | | | | *e*S | **Sg** | **13 03 14.3** | **+0.4** |
| | baz=279 | | | | | | |
| **EHP** | **Heping Village** | **0.20** | **247** | P | **Pg** | **13 03 10.9** | **0.0** |
| | baz=238 | | | | | | |
| EHP | | | | *e*S | **Sg** | **13 03 15.2** | **+1.0** |
| | baz=238 | | | | | | |
| **NDS** | **Dongshan** | **0.32** | **320** | P | **Pg** | **13 03 12.7** | **-0.1** |
| | baz=321 | | | | | | |
| NDS | | | | *e*S | **Sg** | **13 03 17.4** | **0.0** |
| | baz=321 | | | | | | |
| **ETL** | **Fush Village** | **0.37** | **232** | *e*P | **Pg** | **13 03 13.5** | **-0.1** |
| | baz=227 | | | | | | |
| **NACB** | **Ninganchiao** | **0.38** | **236** | *e*P | **Pg** | **13 03 13.3** | **-0.5** |
| | baz=232 | | | | | | |
| NACB | | | | S | **Sb** | **13 03 20.1** | **+0.5** |
| | baz=232 | | | | | | |
| **LATG** | **Datong** | **0.40** | **291** | P | **Pg** | **13 03 14.0** | **-0.3** |
| | baz=290 | | | | | | |
| LATG | | | | *e*S | **Sb** | **13 03 20.6** | **+0.2** |
| | baz=290 | | | | | | |
| **ILA** | **Ilan** | **0.41** | **335** | *e*P | **Pb** | **13 03 14.6** | **0.0** |
| | baz=338 | | | | | | |
| ILA | | | | *e*S | **Sb** | **13 03 21.1** | **+0.6** |
| | baz=338 | | | | | | |
| **TWE** | **Neicheng** | **0.41** | **323** | *e*P | **Pg** | **13 03 14.4** | **0.0** |
| | baz=326 | | | | | | |
| TWE | | | | S | **Sg** | **13 03 20.3** | **+0.1** |
| | baz=326 | | | | | | |
| **ENTT** | **Nioudou** | **0.42** | **306** | P | **Pg** | **13 03 14.4** | **-0.2** |
| | baz=306 | | | | | | |
| ENTT | | | | S | **Sb** | **13 03 20.6** | **-0.2** |
| | baz=306 | | | | | | |
| **TWD** | **Chiawan** | **0.44** | **226** | *e*P | **Pg** | **13 03 14.7** | **-0.2** |
| | baz=221 | | | | | | |
| TWD | | | | *e*S | **Sb** | **13 03 22.1** | **+0.8** |
| | baz=221 | | | | | | |
| **NDT** | **Datong Townshi** | **0.44** | **299** | P | **Pg** | **13 03 14.8** | **-0.1** |
| | baz=298 | | | | | | |
| NDT | | | | S | **Sb** | **13 03 21.5** | **+0.1** |
| | baz=298 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.46** | **247** | *e*P | **Pg** | **13 03 14.7** | **-0.5** |
| | baz=243 | | | | | | |
| ETLH | | | | S | **Sb** | **13 03 22.1** | **+0.3** |
| | baz=243 | | | | | | |
| **NTC** | **Toucheng** | **0.47** | **348** | P | **Pg** | **13 03 15.4** | **-0.1** |
| | baz=350 | | | | | | |
| NTC | | | | *e*S | **Sb** | **13 03 22.1** | **-0.1** |
| | baz=350 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.49** | **319** | P | **Pg** | **13 03 15.7** | **-0.1** |
| | baz=319 | | | | | | |
| FUSB | | | | *e*S | **Sb** | **13 03 22.6** | **-0.1** |
| | baz=319 | | | | | | |
| **NNSB** | **Datong** | **0.51** | **275** | P | **Pg** | **13 03 15.9** | **-0.2** |
| | baz=273 | | | | | | |
| NNSB | | | | S | **Sb** | **13 03 23.4** | **+0.2** |
| | baz=273 | | | | | | |
| **HWA** | **Hwalien** | **0.51** | **217** | *e*P | **Pb** | **13 03 16.6** | **+0.4** |
| | baz=213 | | | | | | |
| **NNS** | **Nan Shan** | **0.52** | **276** | P | **Pg** | **13 03 16.0** | **-0.3** |
| | baz=274 | | | | | | |
| NNS | | | | *e*S | **Sg** | **13 03 23.2** | **-0.2** |
| | baz=274 | | | | | | |
| **NWLT** | **Wulai** | **0.56** | **314** | P | **Pg** | **13 03 16.6** | **-0.4** |
| | baz=314 | | | | | | |
| NWLT | | | | *e*S | **Sb** | **13 03 24.7** | **+0.2** |
| | baz=314 | | | | | | |
| **YHNB** | **Yeheng** | **0.58** | **299** | P | **Pb** | **13 03 17.1** | **-0.3** |
| | baz=298 | | | | | | |
| YHNB | | | | *e*S | **Sb** | **13 03 25.4** | **+0.1** |
| | baz=298 | | | | | | |
| **ETM** | **Tongmen** | **0.59** | **224** | *e*P | **Pb** | **13 03 17.1** | **-0.2** |
| | baz=221 | | | | | | |
| **TIPB** | **Shuangxi** | **0.59** | **350** | P | **Pb** | **13 03 17.5** | **0.0** |
| | baz=351 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **13 03 25.6** | **+0.2** |
| | baz=351 | | | | | | |
| **NSK** | **Sanguang** | **0.60** | **298** | P | **Pb** | **13 03 17.3** | **-0.4** |
| | baz=298 | | | | | | |
| NSK | | | | *e*S | **Sg** | **13 03 25.6** | **-0.3** |
| | baz=298 | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.61** | **211** | *e*P | **Pb** | **13 03 17.7** | **0.0** |
| | baz=210 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.62** | **4** | P | **Pb** | **13 03 17.9** | **0.0** |
| | baz=6.0 | | | | | | |
| TWB1 | | | | *e*S | **Sg** | **13 03 26.4** | **0.0** |
| | baz=6.0 | | | | | | |
| **FUSS** | **Fushou** | **0.65** | **258** | P | **Pb** | **13 03 18.6** | **0.0** |
| | baz=255 | | | | | | |
| FUSS | | | | *e*S | **Sg** | **13 03 27.7** | **+0.1** |
| | baz=255 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.66** | **249** | P | **Pb** | **13 03 18.5** | **-0.4** |
| | baz=246 | | | | | | |
| WHF | | | | S | **Sb** | **13 03 28.3** | **+0.4** |
| | baz=246 | | | | | | |
| **TWA** | **Mucha** | **0.67** | **331** | *e*P | **Pg** | **13 03 19.0** | **-0.1** |
| | baz=332 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.69** | **327** | *e*P | **Pg** | **13 03 19.3** | **0.0** |
| | baz=327 | | | | | | |
| NHDH | | | | *e*S | **Sg** | **13 03 28.6** | **+0.1** |
| | baz=327 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.69** | **348** | *e*P | **Pg** | **13 03 19.6** | **+0.1** |
| | baz=349 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.69** | **348** | *e*P | **Pg** | **13 03 19.6** | **+0.1** |
| | baz=349 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.70** | **355** | *e*P | **Pg** | **13 03 19.7** | **0.0** |
| | baz=356 | | | | | | |
| SXI1 | | | | *e*S | **Sg** | **13 03 29.7** | **+0.5** |
| | baz=356 | | | | | | |
| **TWT** | **Tachien** | **0.71** | **259** | P | **Pg** | **13 03 19.8** | **-0.1** |
| | baz=257 | | | | | | |
| TWT | | | | *e*S | **Sg** | **13 03 30.0** | **+0.6** |
| | baz=257 | | | | | | |
| **TATO** | **Taipei** | **0.71** | **325** | *e*P | **Pb** | **13 03 19.7** | **0.0** |
| | baz=326 | | | | | | |
| TATO | | | | *e*S | **Sg** | **13 03 29.4** | **0.0** |
| | baz=326 | | | | | | |
| **TDCB** | **Techi** | **0.73** | **259** | *e*P | **Pb** | **13 03 20.0** | **+0.1** |
| | baz=257 | | | | | | |
| TDCB | | | | *e*S | **Sg** | **13 03 30.1** | **+0.2** |
| | baz=257 | | | | | | |
| **ESL** | **Shilin** | **0.74** | **219** | *e*P | **Pb** | **13 03 19.6** | **-0.5** |
| | baz=216 | | | | | | |
| **TAP** | **Taipei** | **0.76** | **329** | *e*P | **Pb** | **13 03 20.4** | **0.0** |
| | baz=329 | | | | | | |
| **CHGB** | **Renai** | **0.77** | **245** | P | **Pb** | **13 03 20.5** | **-0.2** |
| | baz=243 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **13 03 32.5** | **-0.6** |
| | baz=243 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.79** | **288** | *e*P | **Pb** | **13 03 20.9** | **0.0** |
| | baz=287 | | | | | | |
| NFF | | | | *e*S | **Sg** | **13 03 32.2** | **+0.4** |
| | baz=287 | | | | | | |
| **WUSB** | **Renai** | **0.85** | **242** | *e*P | **Pb** | **13 03 21.7** | **-0.3** |
| | baz=240 | | | | | | |
| WUSB | | | | *e*S | **Sg** | **13 03 34.0** | **+0.3** |
| | baz=240 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.85** | **326** | *e*P | **Pg** | **13 03 22.6** | **+0.1** |
| | baz=327 | | | | | | |
| **EGFH** | **Guangfu** | **0.86** | **213** | *e*P | **Pb** | **13 03 22.0** | **0.0** |
| | baz=211 | | | | | | |
| **YM08** | **YM08** | **0.86** | **338** | *e*P | **Pg** | **13 03 22.4** | **-0.2** |
| | baz=339 | | | | | | |
| **LIOB** | **Emei** | **0.88** | **287** | *e*P | **Pg** | **13 03 22.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WDJ** | **Dajia District** baz=267 | **1.19** | **268** | *eP* | **Pn** | **13 03 27.6** | **+0.2** |
| **TWF1** | **Yuli** baz=208 | **1.19** | **210** | *eP* | **Pn** | **13 03 26.3** | **-1.1** |
| **WJS** | **Zhushan** baz=241 | **1.24** | **243** | *eP* | **Pb** | **13 03 28.4** | **-0.2** |
| **WNT** | **Mingjian** baz=244 | **1.25** | **246** | *eP* | **Pb** | **13 03 28.7** | **-0.2** |
| **FULB** | **Fuli** baz=205 | **1.32** | **207** | *eP* | **Pn** | **13 03 28.9** | **-0.4** |
| **ALS** | **Alishan** baz=228 | **1.36** | **230** | *eP* | **Pn** | **13 03 29.9** | **-0.1** |
| **CHN5** | **Tsauling** baz=234 | **1.40** | **236** | *eP* | **Pb** | **13 03 31.1** | **-0.3** |
| **WDLH** | **Douliu** baz=240 | **1.46** | **242** | *eP* | **Pb** | **13 03 32.0** | **-0.3** |
| **ELDTW** | **Lidau** baz=214 | **1.46** | **215** | *eP* | **Pn** | **13 03 30.9** | **-0.4** |
| **WRL** | **Guolierlin Hig** baz=250 | **1.51** | **252** | *eP* | **Pn** | **13 03 32.4** | **+0.6** |
| **STYH** | **Taoyuan** baz=220 | **1.61** | **222** | *eP* | **Pn** | **13 03 33.4** | **+0.1** |
| **TPUB** | **Ta-pu** baz=227 | **1.62** | **228** | *eP* | **Pn** | **13 03 34.1** | **+0.8** |
| **IRIF** | **Iriomote-Funau** | **1.63** | **92** | P | **Pn** | **13 03 33.1** | **-0.4** |
| IRIF | | | | *eS* | **Sn** | **13 03 53.9** | **-0.1** |
| **LONT** | **Longtian** baz=205 | **1.65** | **207** | *eP* | **Pn** | **13 03 33.5** | **-0.3** |
| **WTP** | **Ta-pu** baz=225 | **1.66** | **227** | *eP* | **Pb** | **13 03 35.1** | **-0.7** |
| **TWK** | **Hsinying** baz=228 | **1.74** | **230** | *eP* | **Pb** | **13 03 36.1** | **-1.0** |
| **CHN1** | **Nanshi** baz=226 | **1.76** | **227** | *eP* | **Pb** | **13 03 36.5** | **-1.0** |
| **WSL** | **Shuilin Townsh** baz=240 | **1.79** | **242** | *eP* | **Pn** | **13 03 36.3** | **+0.6** |
| **SGST** | **Jiashian** baz=222 | **1.80** | **224** | *eP* | **Pn** | **13 03 35.9** | **0.0** |
| **JKRS** | **Kuro-shima** | **1.89** | **94** | P | **Pn** | **13 03 37.6** | **+0.5** |
| JKRS | | | | *eS* | **Sn** | **13 04 01.1** | **+0.7** |
| **JIJ** | **Ishigaki jima** | **2.01** | **90** | P | **Pn** | **13 03 38.8** | **+0.1** |
| JIJ | | | | *eS* | **Sn** | **13 04 02.5** | **-0.8** |
| **SSD** | **Sandimen** baz=215 | **2.03** | **217** | *eP* | **Pn** | **13 03 39.5** | **+0.5** |
| **TSMG** | **Majia** baz=214 | **2.06** | **216** | *eP* | **Pn** | **13 03 40.4** | **+1.1** |
| **MASBT** | **Mashibuluo** baz=213 | **2.14** | **214** | *eP* | **Pn** | **13 03 41.3** | **+0.8** |
| **JISG** | **Ishigakijimahi** | **2.17** | **84** | P | **Pn** | **13 03 40.5** | **-0.4** |
| JISG | | | | *eS* | **Sn** | **13 04 06.8** | **-0.4** |
| **EAST** | **Anshuo** baz=205 | **2.23** | **207** | *eP* | **Pn** | **13 03 43.4** | **+1.5** |
| **PHUB** | **P'eng-hu** baz=247 | **2.33** | **249** | *eP* | **Pn** | **13 03 43.4** | **+0.2** |
| PHUB | baz=247 | | | *eS* | **Sn** | **13 04 11.3** | **-0.1** |
| **SLIU** | **Shizi** baz=205 | **2.40** | **206** | *eP* | **Pn** | **13 03 45.9** | **+1.7** |
| **PTMZ** | **Houxiangcun** baz=284 | **2.65** | **285** | *eP* | **Pn** | **13 03 47.3** | **-0.1** |
| **LYJJ** | **Jianjiangzhen** baz=317 | **2.92** | **318** | *eP* | **Pn** | **13 03 50.8** | **-0.4** |
| **XPSS** | **Dashiqiu** baz=328 | **2.98** | **328** | *eP* | **Pn** | **13 03 51.6** | **-0.5** |
| **MHZQ** | **Yeshan** baz=302 | **3.14** | **303** | *eP* | **Pn** | **13 03 54.0** | **-0.2** |
| **KNMB** | **Chin-men Tao** baz=271 | **3.24** | **272** | *eP* | **Pn** | **13 03 55.7** | **+0.1** |

*IDC **02** 13:03:18.8±0.5, 13°.70N×120°.93E, h118km±3km, mb3.7/19, mb1 3.8/19, mb1mx3.6/50, mbtmp4.1/19, MS3.9/2, Ms1 3.9/2, ms1mx2.8/87, Error ellipse: s-maj=21.8km s-min=9.9km az=70.0*

*NEIC **02** 13:03:19.9±1.6, 13°.76N±0°.08×120°.91E±0°.09, h122km±4km, mb4.6/41, Error ellipse: s-maj=12.7km s-min=11.3km az=48.0*

*MAN **02** 13:03:19.7, 13°.71N×120°.56E, h101km, mb4.6, ML3.3, MS3.5*

**ISC 02 13:03:17.8±0.4, 13°.69N±0°.04×120°.68E±0°.06, h100km, n89, σ2s05/92, mb4.6/44, 10C-5D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.33** | **125** | *eP* | **Pn** | **13 03 35.1** | **+2.5** |
| PGP | | | | *i* S | **Sn** | **13 03 48.0** | **+4.3** |
| **LUBP** | **Lubang** | **0.42** | **276** | *iP* | **Pn** | **13 03 36.1** | **+3.1** |
| LUBP | | | | *i* S | **Sn** | **13 03 47.7** | **+3.3** |
| **TGY** | **Tagaytay City** 818nm,0.3s,baz=234,slow=1.8,SNR=38 | **0.48** | **32** | P | **Pn** | **13 03 37.5** | **+4.0** |
| TGY | 2μm,0.3s,baz=162,slow=23,SNR=13 | | | S | **Sn** | **13 03 50.5** | **+5.2** |
| **TGY** | **Tagaytay City** | **0.48** | **32** | *eP* | **Pn** | **13 03 37.5** | **+4.0** |
| TGY | | | | *eS* | **Sn** | **13 03 51.2** | **+5.9** |
| **MACP** | **Maragondon, Ca** | **0.57** | **4** | *eP* | **Pn** | **13 03 37.2** | **+3.1** |
| **SJMP** | **San Jose** | **1.30** | **161** | *eP* | **Pn** | **13 03 44.8** | **+3.1** |
| **PCPH** | **Palayan** | **1.90** | **12** | *eP* | **Pn** | **13 03 51.3** | **+2.2** |
| **JCNP** | **Jose Panganiba** | **2.05** | **73** | *eP* | **Pn** | **13 03 55.0** | **+3.9** |
| **SMPP** | **San Manuel, Pa** | **2.44** | **0** | *eP* | **Pn** | **13 03 58.3** | **+2.1** |
| **ENPP** | **El Nido** | **2.76** | **206** | *eP* | **Pn** | **13 04 02.8** | **+2.4** |
| **RCP** | **Roxas** | **2.93** | **136** | *eP* | **Pn** | **13 04 06.0** | **+3.3** |
| **JAP** | **San Jose, Anti** | **3.18** | **157** | *eP* | **Pn** | **13 04 09.5** | **+3.4** |
| **SAMP** | **Sagada Mountai** | **3.37** | **4** | *eP* | **Pn** | **13 04 11.2** | **+2.6** |
| **APYP** | **Conner** | **4.18** | **7** | *eP* | **Pn** | **13 04 23.2** | **+3.7** |
| **PPR** | **Puerto Princes** | **4.33** | **206** | *iP* | **Pn** | **13 04 24.6** | **+3.0** |
| PPR | | | | *i* S | **Sn** | **13 05 12.8** | **+1.7** |
| **GLSP** | **General Luna,** | **6.60** | **125** | *eP* | Pn | 13 04 44.8 | -7.6 |
| **MYLDM** | **Lahad Datu** | **8.73** | **194** | Pn | Pn | 13 05 28.0 | +6.7 |
| **SBUM** | **Sibu** | **13.95** | **218** | P | **P** | **13 06 38.9** | **+2.9** |
| **CM31** | **Chiang Mai Arr** | **21.41** | **286** | P | **P** | **13 07 59.9** | **+2.1** |
| **CMAR** | **Chiang Mai Arr** 4.6nm,0.8s,baz=95,slow=7.5,SNR=36 | **21.41** | **286** | P | **P** | **13 07 60.0** | **+2.2** |
| **CMAR** | **Chiang Mai Arr** | **21.41** | **286** | P | **P** | **13 07 59.6** | **+1.9** |
| **JMN** | **Monobe** | **23.28** | **29** | P | **P** | **13 08 17.0** | **+0.2** |
| **GUMO** | **Guam** | **23.51** | **87** | P | **P** | **13 08 17.4** | **-1.7** |
| **KSRS** | **Korea Array** 2.2nm,1.1s,baz=240,slow=13,SNR=4.3 | **24.53** | **14** | P | **P** | **13 08 28.0** | **0.0** |
| **MBWA** | **Marble Bar** | **34.65** | **182** | P | **P** | **13 09 56.7** | **-1.1** |
| MBWA | comp=Z,25nm,1.4s | | | IAmb | IAmb | 13 10 36.8 | |
| **JIRN** | **Jiri** comp=Z,19nm,0.7s | **34.99** | **299** | *eP* | **P** | **13 10 01.8** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **35.06** | **181** | P | **P** | **13 10 00.2** | **-1.0** |
| **GUN** | **Gumba** comp=Z,6.2nm,0.3s | **35.33** | **299** | *eP* | **P** | **13 10 04.2** | **+0.1** |
| **PKI** | **Pulchoki** comp=Z,3.2nm,0.2s | **35.63** | **298** | *eP* | **P** | **13 10 06.7** | **0.0** |
| **PKIN** | **Phulchoki** comp=Z,9.4nm,0.6s | **35.65** | **298** | *eP* | **P** | **13 10 06.9** | **+0.2** |
| **KKN** | **Kakani** | **35.80** | **299** | *eP* | **P** | **13 10 07.7** | **-0.3** |
| **WB0** | **Warramunga Arr** | **35.89** | **158** | P | **P** | **13 10 06.3** | **-2.1** |
| WB0 | comp=Z,24nm,1.9s | | | IAmb | IAmb | 13 10 15.7 | |
| **DMN** | **Daman** comp=Z,11nm,0.2s | **35.90** | **298** | *eP* | **P** | **13 10 09.0** | **+0.1** |
| **WRAB** | **Tennant Creek** | **36.02** | **158** | P | **P** | **13 10 07.7** | **-1.9** |
| WRAB | comp=Z,7.7nm,1.2s | | | IAmb | IAmb | 13 10 28.3 | |
| **WRA** | **Warramunga Arr** comp=Z,0.5nm,0.6s,baz=332,slow=10.0,SNR=7.7 | **36.03** | **158** | P | **P** | **13 10 07.3** | **-2.3** |
| WRA | comp=Z,1.1nm,0.6s,baz=339,slow=9.2,SNR=4.2 | | | pP | **pP** | **13 10 32.8** | **0.0** |
| **WB2** | **Warramunga Arr** | **36.03** | **158** | P | **P** | **13 10 07.4** | **-2.3** |
| WB2 | comp=Z,19nm,1.7s | | | IAmb | IAmb | 13 11 13.6 | |
| **SONM** | **Songino Array** comp=Z,2.2nm,0.6s,baz=162,slow=11,SNR=18 | **36.06** | **344** | P | **P** | **13 10 09.5** | **-0.2** |
| **SONM** | **Songino Array** comp=Z,1.5nm,0.7s | **36.06** | **344** | IAmb | IAmb | 13 10 10.5 | |
| **WR0** | **Warramunga Arr** | **36.12** | **158** | P | **P** | **13 10 08.4** | **-2.0** |
| WR0 | comp=Z,22nm,1.8s | | | IAmb | IAmb | 13 11 09.8 | |
| **DANN** | **Dangsing** comp=Z,8.4nm,0.5s | **37.25** | **299** | *eP* | **P** | **13 10 19.4** | **-0.9** |
| **PYUN** | **Piuthan** | **37.84** | **298** | *eP* | **P** | **13 10 24.7** | **-0.6** |
| **AS31** | **Alice Springs** | **39.32** | **161** | P | **P** | **13 10 35.9** | **-1.5** |
| **ASAR** | **Alice Springs** comp=Z,0.3nm,0.5s,baz=337,slow=7.5,SNR=14 | **39.32** | **161** | P | **P** | **13 10 36.0** | **-1.4** |
| ASAR | comp=Z,1.4nm,0.7s,baz=339,slow=7.2,SNR=8.5 | | | pP | **pP** | **13 11 03.0** | **+2.4** |
| **MK31** | **Makanchi Array** | **46.02** | **324** | P | **P** | **13 11 31.6** | **+0.2** |
| **MKAR** | **Makanchi Array** comp=Z,3.6nm,0.5s,baz=132,slow=8.9,SNR=48 | **46.02** | **324** | P | **P** | **13 11 31.9** | **+0.5** |
| **MKAR** | **Makanchi Array** | **46.02** | **324** | P | **P** | **13 11 31.5** | **+0.2** |
| **MAKZ** | **Makanchi** | **46.21** | **323** | P | **P** | **13 11 33.1** | **+0.3** |
| **TARG** | **Taragay, Kyrgy** | **46.44** | **315** | P | **P** | **13 11 36.7** | **+1.5** |
| **NIL** | **Nilore** | **47.29** | **303** | P | **P** | **13 11 41.3** | **-0.2** |
| NIL | comp=Z,7.5nm,0.7s | | | IAmb | IAmb | 13 11 42.1 | |
| **BOOM** | **Boomskoye usch** | **48.01** | **316** | P | **P** | **13 11 47.5** | **+0.4** |
| BOOM | comp=Z,20nm,1.3s | | | IAmb | IAmb | 13 12 03.6 | |
| **ZAA0** | **Zalesovo Array** | **49.05** | **333** | P | **P** | **13 11 53.8** | **-0.8** |
| ZAA0 | comp=Z,5.7nm,0.3s | | | IAmb | IAmb | 13 11 54.2 | |
| **ZALV** | **Zalesovo Beam** comp=Z,4.1nm,0.3s,baz=122,slow=6.5,SNR=17 | **49.05** | **333** | P | **P** | **13 11 54.0** | **-0.7** |
| ZALV | comp=Z,146nm,18.4s,baz=313,slow=36 | | | LR | LR | 13 32 39.1 | |
| **ZALV** | **Zalesovo Beam** | **49.05** | **333** | P | **P** | **13 11 53.7** | **-0.9** |
| **AAK** | **Ala-Archa** comp=Z,0.9nm,0.4s,baz=117,slow=10,SNR=4.7 | **49.05** | **315** | P | **P** | **13 11 55.7** | **+0.7** |
| **AAK** | **Ala-Archa** comp=Z,9.5nm,1.4s | **49.05** | **315** | IAmb | IAmb | 13 12 00.2 | |
| **STKA** | **Sthens Creek** comp=Z,0.7nm,0.4s,baz=342,slow=16,SNR=1.6 | **49.55** | **156** | P | **P** | **13 11 57.8** | **-0.8** |
| **DRK** | **Karamyk** | **49.93** | **310** | P | **P** | **13 12 02.2** | **+0.2** |
| **KURBB** | **Kurchatov Arra** comp=Z,7.9nm,0.6s,baz=131,slow=7.8,SNR=99 | **50.18** | **326** | P | **P** | **13 12 03.5** | **+0.3** |
| KURBB | comp=Z,0.2nm,0.4s,baz=126,slow=7.6,SNR=1.6 | | | pP | **pP** | **13 12 32.3** | **+5.2** |
| **KURK** | **Kurchatov** | **50.18** | **326** | P | **P** | **13 12 03.3** | **0.0** |
| **KBL** | **Kabul** | **50.89** | **303** | P | **P** | **13 12 08.7** | **-0.4** |
| KBL | comp=Z,4.6nm,0.7s | | | IAmb | IAmb | 13 12 09.7 | |
| **GAR** | **Garm** | **50.91** | **309** | P | **P** | **13 12 08.9** | **-0.2** |
| GAR | comp=Z,15nm,1.1s | | | IAmb | IAmb | 13 12 10.1 | |
| **CHGR** | **Chuyangaron** comp=Z,13nm,0.8s | **51.69** | **309** | P | **P** | **13 12 14.7** | **-0.2** |
| CHGR | | | | IAmb | IAmb | 13 12 16.5 | |
| **KKAR** | **Karatay Array** | **51.96** | **314** | P | **P** | **13 12 16.7** | **-0.1** |
| **SEY** | **Seymchan** comp=Z,0.3nm,0.3s,baz=245,slow=9.5,SNR=4.8 | **54.02** | **17** | P | **P** | **13 12 30.6** | **-0.9** |
| **BVAR** | **Borovoye Array** comp=Z,2.5nm,0.6s,baz=90,slow=15,SNR=12 | **55.77** | **326** | P | **P** | **13 12 43.8** | **-0.4** |
| **BRVK** | **Borovoye** comp=Z,5.4nm,0.8s | **55.84** | **326** | P | **P** | **13 12 44.6** | **-0.2** |
| BRVK | | | | IAmb | IAmb | 13 12 45.2 | |
| **SMY** | **Shemya** | **57.39** | **35** | P | **P** | **13 12 53.2** | **-2.5** |
| **NRIK** | **Noril'sk** comp=Z,3.4nm,0.7s,baz=135,slow=8.0,SNR=6.3 | **59.41** | **347** | P | **P** | **13 13 08.7** | **-0.8** |
| **NRIK** | **Noril'sk** comp=Z,3.7nm,0.8s | **59.41** | **347** | P | **P** | **13 13 08.2** | **-1.3** |
| NRIK | | | | IAmb | IAmb | 13 13 09.5 | |
| **GEYT** | **Alibeck** comp=Z,2.8nm,0.6s,baz=45,slow=4.3,SNR=2.6 | **60.12** | **306** | P | **P** | **13 13 15.7** | **+0.7** |
| **GEYT** | **Alibeck** comp=Z,3.6nm,0.8s | **60.12** | **306** | IAmb | IAmb | 13 13 22.3 | |
| **ABKAR** | **Akbulak array** | **60.72** | **319** | P | **P** | **13 13 18.1** | **-0.7** |
| ABKAR | comp=Z,4.8nm,0.6s | | | IAmb | IAmb | 13 13 19.2 | |
| **BILL** | **Bilibino** | **61.72** | **18** | P | **P** | **13 13 24.4** | **-0.9** |
| **ARU** | **Arti** | **63.38** | **327** | P | **P** | **13 13 35.0** | **-1.4** |
| ARU | comp=Z,6.5nm,0.8s | | | IAmb | IAmb | 13 13 35.9 | |
| **RAYN** | **Ar Rayn** | **71.24** | **290** | P | **P** | **13 14 26.2** | **-0.6** |
| RAYN | comp=Z,5.7nm,0.9s | | | IAmb | IAmb | 13 14 27.5 | |
| **TTA** | **Tatalina** | **74.87** | **28** | P | **P** | **13 14 46.3** | **-1.1** |
| TTA | comp=Z,24nm,1.8s | | | IAmb | IAmb | 13 17 32.5 | |
| **IMAR** | **Indian Mountai** | **75.80** | **25** | P | **P** | **13 14 52.4** | **-0.2** |
| **LVZ** | **Lovozero** | **75.92** | **337** | P | **P** | **13 14 51.1** | **-2.2** |
| **H21K** | **Melozitna Rive** | **76.20** | **25** | P | **P** | **13 14 55.2** | **+0.2** |
| **RND** | **Reindeer** | **78.08** | **27** | P | **P** | **13 15 03.7** | **-1.9** |
| RND | comp=Z,35nm,2.0s | | | IAmb | IAmb | 13 15 47.8 | |
| **H24K** | **Noodor Dome** comp=Z,7.4nm,1.1s | **78.21** | **25** | P | **P** | **13 15 06.2** | **0.0** |
| H24K | | | | IAmb | IAmb | 13 16 34.0 | |
| **ILAR** | **Eielson Array** comp=Z,0.3nm,0.7s,baz=252,slow=2.1,SNR=2.3 | **78.77** | **26** | P | **P** | **13 15 07.7** | **-1.5** |
| **ARCES** | **ARCESS Array B** comp=Z,0.8nm,0.5s,baz=80,slow=6.0,SNR=12 | **79.08** | **339** | P | **P** | **13 15 09.6** | **-1.3** |
| **BMAR** | **Burnt Mountain** | **79.28** | **23** | P | **P** | **13 15 12.5** | **+0.5** |
| **SPITS** | **Spitsbergen Ar** comp=Z,23nm,1.1s,baz=160,slow=5.2,SNR=2.1 | **79.59** | **348** | P | **P** | **13 15 12.4** | **-1.1** |
| **FINES** | **FINESS Array B** comp=Z,5.4nm,1.0s,baz=82,slow=4.0,SNR=5.5 | **80.28** | **331** | P | **P** | **13 15 15.8** | **-1.6** |
| **KMBO** | **Kilima Mbogo** comp=Z,0.9nm,0.4s,baz=18,slow=9.9,SNR=3.1 | **83.88** | **267** | P | **P** | **13 15 38.4** | **+0.8** |
| KMBO | comp=Z,46nm,18.1s,baz=88,slow=36 | | | LR | LR | 13 53 42.2 | |
| **YKA** | **Yellowknife Ar** comp=Z,0.4nm,0.6s,baz=308,slow=4.6,SNR=6.6 | **92.79** | **22** | P | **P** | **13 16 17.2** | **-1.6** |
| **TXAR** | **Lajitas Array** comp=Z,0.2nm,0.6s,baz=316,slow=1.9,SNR=3.2 | **119.49** | **45** | PKP | **PKPdf** | **13 21 54.7** | **-1.9** |

*IDC **02** 13:04:43.7±0.9, 13°.68N×120°.88E, h116km±6km, mb3.4/11, mb1 3.6/11, mb1mx3.4/50, mbtmp3.8/11, MS3.7/1, Ms1 3.7/1, ms1mx2.6/48, Error ellipse: s-maj=34.5km s-min=16.3km az=63.0*

*MAN **02** 13:04:44.8, 13°.69N×120°.54E, h97km, mb4.5, ML3.4, MS3.2*

*NEIC **02** 13:04:45.0±1.4, 13°.9N±0°.1×121°.1E±0°.2, h120km±5km, mb4.2/9, Error ellipse: s-maj=29.2km s-min=11.3km az=67.0*

**ISC 02 13:04:43.1±0.6, 13°.68N±0°.06×120°.61E±0°.08, h100km, n36, σ2s08/37, mb3.9/15, 3C-4D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.38** | **118** | *eP* | **Pn** | **13 05 00.4** | **+2.2** |
| PGP | | | | *i* S | **Sn** | **13 05 13.1** | **+3.7** |
| **TGY** | **Tagaytay City** baz=144,slow=8.7,SNR=0.5 | **0.53** | **37** | P | **Pn** | **13 05 02.4** | **+3.2** |
| TGY | 1μm,0.3s,baz=210,slow=16,SNR=3.7 | | | S | **Sn** | **13 05 15.3** | **+4.1** |
| **MACP** | **Maragondon, Ca** | **0.59** | **11** | *eP* | **Pn** | **13 05 02.3** | **+2.7** |
| **LQP** | **Lukban** | **1.00** | **64** | *eP* | **Pn** | **13 05 06.9** | **+3.1** |
| **SJMP** | **San Jose** | **1.31** | **158** | *eP* | **Pn** | **13 05 09.9** | **+2.8** |
| **PCPH** | **Palayan** | **1.93** | **14** | *eP* | **Pn** | **13 05 17.2** | **+2.4** |
| **JCNP** | **Jose Panganiba** | **2.12** | **73** | *eP* | **Pn** | **13 05 20.1** | **+2.9** |
| **ENPP** | **El Nido** | **2.72** | **205** | *eP* | **Pn** | **13 05 27.7** | **+2.6** |
| **DAV** | **Davao City (W)** | **8.19** | **143** | Pn | **Pn** | **13 06 40.9** | **+1.7** |
| **MYLDM** | **Lahad Datu** | **8.70** | **194** | Pn | Pn | 13 06 53.2 | +7.0 |
| **SBUM** | **Sibu** | **13.90** | **217** | Pn | **P** | **13 08 04.0** | **+3.2** |
| **CMAR** | **Chiang Mai Arr** 0.3nm,0.3s,baz=93,slow=9.2,SNR=1.8 | **21.35** | **286** | P | **P** | **13 09 25.2** | **+2.8** |
| **WRA** | **Warramunga Arr** 0.3nm,0.6s,baz=341,slow=9.2,SNR=1.6 | **36.04** | **158** | P | **P** | **13 11 32.4** | **-2.7** |
| **SONM** | **Songino Array** 0.7nm,0.5s,baz=164,slow=11,SNR=4.6 | **36.05** | **344** | P | **P** | **13 11 34.7** | **-0.3** |
| **SONM** | **Songino Array** comp=Z,0.8nm,0.8s | **36.05** | **344** | IAmb | IAmb | 13 11 35.2 | |
| **ASAR** | **Alice Springs** comp=Z,0.3nm,0.5s,baz=336,slow=7.5,SNR=1.4 | **39.33** | **161** | P | **P** | **13 12 00.9** | **-1.8** |
| ASAR | comp=Z,0.4nm,1.0s,baz=354,slow=3.3,SNR=2.4 | | | PcP | **PcP** | **13 14 07.6** | **-2.0** |
| **MK31** | **Makanchi Array** | **45.99** | **324** | P | **P** | **13 12 57.0** | **+0.5** |
| **MKAR** | **Makanchi Array** comp=Z,0.8nm,0.4s,baz=107,slow=7.9,SNR=7.5 | **45.99** | **324** | P | **P** | **13 12 56.9** | **+0.5** |
| MKAR | comp=Z,0.5nm,0.4s,baz=180,slow=0.3,SNR=7.3 | | | PcP | **PcP** | **13 14 31.5** | **0.0** |
| **MAKZ** | **Makanchi** | **46.18** | **324** | P | **P** | **13 12 58.1** | **+0.2** |
| MAKZ | comp=Z,1.4nm,0.7s | | | IAmb | IAmb | 13 12 58.9 | |
| **ZAA0** | **Zalesovo Array** comp=Z,2.3nm,0.3s | **49.03** | **333** | P | **P** | **13 13 18.8** | **-1.0** |
| ZAA0 | | | | IAmb | IAmb | 13 13 19.3 | |
| **ZALV** | **Zalesovo Beam** comp=Z,2.2nm,0.4s,baz=121,slow=6.6,SNR=6.6 | **49.03** | **333** | P | **P** | **13 13 18.7** | **-1.0** |
| **KURBB** | **Kurchatov Arra** comp=Z,5.0nm,0.6s,baz=130,slow=8.0,SNR=18 | **50.16** | **326** | P | **P** | **13 13 28.2** | **-0.2** |
| **KURK** | **Kurchatov** | **50.16** | **326** | P | **P** | **13 13 28.4** | **+0.1** |
| **KKAR** | **Karatay Array** | **51.93** | **314** | P | **P** | **13 13 41.9** | **+0.1** |
| **SEY** | **Seymchan** comp=Z,0.6nm,0.6s,baz=229,slow=14,SNR=3.7 | **54.06** | **17** | P | **P** | **13 13 56.2** | **-0.8** |
| **BVAR** | **Borovoye Array** comp=Z,0.7nm,0.5s,baz=71,slow=14,SNR=2.4 | **55.74** | **326** | P | **P** | **13 14 08.8** | **-0.6** |
| **BRVK** | **Borovoye** comp=Z,3.4nm,0.9s | **55.81** | **326** | P | **P** | **13 14 09.6** | **-0.3** |
| BRVK | | | | IAmb | IAmb | 13 14 10.8 | |
| **TOO** | **Toolangi** | **56.09** | **156** | P | **P** | **13 14 10.9** | **-1.1** |
| **WSAR** | **Wadi Sarin** comp=Z,58nm,20.1s,baz=256,slow=38 | **59.19** | **289** | LR | LR | 13 42 35.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ABKAR** | **Akbulak array** | **60.69** | **319** | P | **P** | **13 14 43.5** | **-0.5** |
| **ARU** | **Arti** | **63.35** | **327** | P | **P** | **13 15 00.1** | **-1.5** |
| ARU | comp=Z,4.6nm,1.2s | | | IAmb | IAmb | 13 15 05.4 | |
| **ARCES** | **ARCESS Array B** comp=Z,4.0nm,1.1s,baz=57,slow=4.9,SNR=4.5 | **79.07** | **339** | P | **P** | **13 16 33.6** | **-2.5** |
| **ARCES** | **ARCESS Array B** | **79.07** | **339** | P | **P** | **13 16 35.0** | **-1.1** |
| ARCES | comp=Z,5.7nm,1.3s | | | IAmb | IAmb | 13 16 55.6 | |
| **BMAR** | **Burnt Mountain** | **79.32** | **23** | P | **P** | **13 16 37.2** | **-0.3** |
| **YKA** | **Yellowknife Ar** comp=Z,0.1nm,0.4s,baz=304,slow=4.2,SNR=2.2 | **92.83** | **22** | P | **P** | **13 17 42.3** | **-2.1** |
| **TXAR** | **Lajitas Array** comp=Z,0.1nm,0.6s,baz=20,slow=4.0,SNR=1.8 | **119.55** | **44** | PKP | **PKPdf** | **13 23 20.8** | **-1.2** |

**KRSC 02 13:14:12.8±1.5, 49°.96N×156°.87E, h22km±22km, ML3.5, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.87** | **327** | P | Pb | 13 14 28.4 | -0.8 |
| SKR | | | | S | Sb | 13 14 40.0 | -0.5 |
| **PAU** | **Pauzhetka** | **1.51** | **359** | P | Pb | 13 14 40.0 | -0.1 |
| PAU | | | | S | Sb | 13 14 59.6 | +0.8 |
| **KDTR** | **Khodutka, Kamc** | **2.01** | **22** | P | Pb | 13 14 47.1 | -1.4 |
| KDTR | | | | S | Sb | 13 15 11.8 | -1.2 |
| **MTVR** | **Mutnovka** | **2.66** | **18** | P | Pn | 13 14 56.5 | +2.0 |
| MTVR | | | | S | Sb | 13 15 30.0 | -2.0 |
| **RUS** | **Russkaya** | **2.69** | **22** | P | Pn | 13 14 56.9 | +2.2 |
| RUS | | | | S | Sn | 13 15 29.0 | +2.5 |
| **GRL** | **Gorelyy** | **2.71** | **16** | S | Sn | 13 15 30.0 | +2.8 |
| **KRMR** | **Karymshinskiy** | **2.98** | **15** | P | Pb | 13 15 02.6 | -2.6 |
| KRMR | | | | S | Sb | 13 15 38.4 | -2.7 |
| **PET** | **Petropavlovsk** | **3.27** | **19** | S | Sb | 13 15 45.5 | -3.8 |
| **DALK** | **Dalny** | **3.30** | **20** | P | Pn | 13 15 05.0 | +1.9 |
| DALK | | | | S | Sn | 13 15 45.8 | +4.3 |
| **UGLR** | **Uglovaya** | **3.48** | **20** | P | Pb | 13 15 10.6 | -3.1 |
| **AVH** | **Avacha** | **3.51** | **19** | P | Pb | 13 15 10.4 | -3.8 |
| **KOK** | **Koryaka** | **3.52** | **18** | P | Pb | 13 15 10.3 | -4.0 |
| **SMAR** | **Somma** | **3.52** | **19** | P | Pb | 13 15 11.5 | -3.0 |
| **SDLR** | **Sedlovina** | **3.56** | **20** | P | Pn | 13 15 10.6 | +3.9 |
| **SPN** | **Mys Shipunski** | **3.71** | **31** | P | Pn | 13 15 13.1 | +4.3 |
| SPN | | | | S | Sn | 13 15 56.6 | +4.8 |
| **MKZ** | **Mys Kozlova** | **5.49** | **31** | P | Pn | 13 15 36.7 | +3.6 |
| MKZ | | | | S | Sn | 13 16 40.2 | +4.7 |

*IDC **02** 13:20:34.8±1.0, 34°.72N×89°.38E, h0km, mb3.8/7, mb1 3.9/12, mb1mx3.7/63, mbtmp3.7/12, ML2.8/2, MS3.7/2, Ms1 3.7/2, ms1mx2.9/91, Error ellipse: s-maj=38.1km s-min=16.6km az=66.0*

*NEIC **02** 13:20:36.8±1.4, 34°.8N±0°.1×89°.2E±0°.2, h12km±5km, mb4.5/21, Error ellipse: s-maj=30.2km s-min=16.2km az=63.0*

**ISC 02 13:20:36.6±0.6, 34°.82N±0°.06×89°.22E±0°.09, h10km, n46, σ1s22/43, mb4.4/17, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOMU** | **GeErMu** | **4.77** | **72** | P | **Pn** | **13 21 49.9** | **+1.0** |
| GOMU | | | | S | **Sn** | **13 22 44.0** | **-0.4** |
| GOMU | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| GOMU | comp=N,1μm,7.3s | | | LR | LR | | |
| GOMU | comp=E,440nm,7.0s | | | LR | LR | | |
| GOMU | comp=Z,370nm,6.8s | | | LR | LR | | |
| **LSA** | **Lhasa** | **5.36** | **162** | P | **Pb** | **13 22 08.5** | **-2.1** |
| LSA | | | | S | **Sg** | **13 23 33.4** | **+4.7** |
| LSA | comp=N,160nm,6.5s | | | LR | LR | | |
| LSA | comp=E,680nm,7.3s | | | LR | LR | | |
| **WMQ** | **Urumqi** | **9.07** | **353** | *eP* | **Pn** | **13 22 47.1** | **-0.5** |
| WMQ | comp=N,6.0nm,1.1s | | | smax | smax | | |
| WMQ | comp=E,13nm,1.3s | | | smax | smax | | |
| **GTA** | **Gaotai** | **9.62** | **58** | *eP* | **Pn** | **13 22 56.4** | **+1.1** |
| GTA | | | | pP | | 13 23 02.8 | |
| GTA | comp=Z,1.0nm,1.3s | | | pmax | pmax | | |
| **MKAR** | **Makanchi Array** comp=Z,0.1nm,0.3s,baz=156,slow=15,SNR=2.3 | **13.06** | **338** | Pn | **Pn** | **13 23 40.9** | **-1.2** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.0nm,0.3s,baz=145,slow=12,SNR=23 | **17.61** | **337** | P | **Pn** | **13 24 42.5** | **+0.6** |
| **KURK** | **Kurchatov** | **17.66** | **337** | P | **Pn** | **13 24 42.5** | **-0.1** |
| **KURK** | **Kurchatov** comp=Z,2.4nm,1.0s | **17.66** | **337** | IAmb | IAmb | 13 24 46.6 | |
| **SONM** | **Songino Array** baz=237,slow=10,SNR=7.7 | **18.27** | **39** | P | **Pn** | **13 24 49.5** | **-0.7** |
| **SONM** | **Songino Array** comp=Z,2.1nm,1.2s | **18.27** | **39** | IAmb | IAmb | 13 24 55.7 | |
| **CMAR** | **Chiang Mai Arr** baz=332,slow=12,SNR=12 | **18.45** | **150** | P | **Pn** | **13 24 49.5** | **-3.0** |
| **ZAA0** | **Zalesovo Array** | **19.38** | **352** | P | **P** | **13 25 02.7** | **+0.3** |
| **ZALV** | **Zalesovo Beam** baz=165,slow=11,SNR=12 | **19.38** | **352** | P | **P** | **13 25 03.1** | **+0.8** |
| **ZALV** | **Zalesovo Beam** | **19.38** | **352** | P | **P** | **13 25 02.7** | **+0.3** |
| **BVAR** | **Borovoye Array** comp=Z,0.5nm,0.4s,baz=128,slow=4.0,SNR=4.8 | **22.58** | **329** | P | **P** | **13 25 38.6** | **+1.6** |
| **NRIK** | **Noril'sk** comp=Z,2.5nm,0.7s,baz=156,slow=6.3,SNR=4.9 | **34.59** | **359** | P | **P** | **13 27 26.4** | **+1.1** |
| **NRIK** | **Noril'sk** comp=Z,3.4nm,0.8s | **34.59** | **359** | IAmb | IAmb | 13 27 29.6 | |
| **DAV** | **Davao City (W)** comp=Z,

*KRSZO **02** 13:25:04.2±0.9,45°.62N×18°.19E, h8km±6km, ML3.3/27, Error ellipse: s-maj=2.2km s-min=2.0km az=84.0*
*PRU **02** 13:25:06.2±0.0,45°.74N×18°.14E, h0km*
*RHSSO **02** 13:25:06.1±0.3,45°.60N×18°.22E, h10km±1km, ML3.0/16*
*BEO **02** 13:25:07.4±0.6,45°.60N×18°.26E, h0km, ML2.7/9*

**ISC 02 13:25:04.9±1.0, 45°.66N±0'.01×18°.19E±0'.02, h10km±8km, n117, σ1§03/185, 2C-8D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **A252A** | **Venje** | **0.33** | **228** | *e*Pg | **Pg** | **Pg** | **13 25 10.9** | **-0.6** |
| A252A | | | | Sg | | **Sg** | **13 25 15.0** | **-0.9** |
| **KOVH** | **Kovagotottos** | **0.44** | **351** | Pb | | **Pg** | **13 25 14.1** | **+0.6** |
| | comp=Z,0.7nm,SNR=8.0 | | | | | | | |
| KOVH | | | | Lg | Lg | Lg | 13 25 20.7 | |
| **KOVH** | **Kovagotottos** | **0.44** | **351** | PG | | **Pg** | **13 25 14.1** | **+0.6** |
| KOVH | | | | LG | Lg | Lg | 13 25 20.7 | |
| **MORH** | **Mrgy, Hungar** | **0.64** | **29** | ⇓P | | **Pb** | **13 25 18.1** | **-0.1** |
| MORH | | | | ⇑S | | **Sb** | **13 25 26.8** | **-0.5** |
| **MORH** | **Mrgy, Hungar** | **0.64** | **29** | ⇓*i*Pg | | **Pb** | **13 25 17.9** | **-0.3** |
| MORH | | | | *e*Sg | | **Sn** | **13 25 29.0** | **-1.3** |
| **MORH** | **Mrgy, Hungar** | **0.64** | **29** | Pb | | **Pb** | **13 25 17.9** | **-0.3** |
| | comp=Z,6.3nm,SNR=30 | | | | | | | |
| MORH | | | | Sg | | **Sb** | **13 25 26.7** | **-0.5** |
| **MORH** | **Mrgy, Hungar** | **0.64** | **29** | PG | | **Pb** | **13 25 17.9** | **-0.3** |
| MORH | | | | LG | Lg | Lg | 13 25 26.7 | |
| **A264A** | **Tarany** | **0.81** | **309** | Pn | | **Pn** | **13 25 22.0** | **-0.3** |
| | comp=Z,1.7nm,SNR=8.6 | | | | | | | |
| A264A | | | | Sn | | **Sn** | **13 25 34.8** | **+0.5** |
| **A265A** | **Kaposfured** | **0.82** | **340** | Pn | | **Pn** | **13 25 22.1** | **-0.4** |
| | comp=Z,3.6nm,SNR=26 | | | | | | | |
| **A266A** | **Gyulaj** | **0.87** | **3** | Pn | | **Pn** | **13 25 23.1** | **-0.1** |
| | comp=Z,3.5nm,SNR=21 | | | | | | | |
| A266A | | | | Sn | | **Sn** | **13 25 37.6** | **+1.6** |
| **DOB** | **Doboj** | **0.92** | **184** | *e*Pg | | **Pb** | **13 25 21.6** | **-1.4** |
| DOB | | | | Sg | | **Sg** | **13 25 34.6** | **-0.1** |
| **MOSL** | **Moslavina** | **1.01** | **268** | *e*Pg | | **Pb** | **13 25 23.8** | **-0.7** |
| MOSL | | | | Sg | | **Sb** | **13 25 36.3** | **+1.6** |
| **MRAK** | **Mrakovica** | **1.11** | **235** | *e*Pg | | **Pb** | **13 25 25.4** | **-0.9** |
| MRAK | | | | *e*Sg | | **Sb** | **13 25 40.5** | **-0.4** |
| **BLY** | **Banja Luka** | **1.15** | **219** | *e*Pg | | **Pn** | **13 25 26.9** | **-0.2** |
| BLY | | | | *e*Sg | | **Sn** | **13 25 43.1** | **+0.2** |
| **BLY** | **Banja Luka** | **1.15** | **219** | *e*Pg | | **Pn** | **13 25 26.3** | **-0.8** |
| BLY | | | | *e*Sg | | **Sb** | **13 25 42.2** | **+0.3** |
| **BLY** | **Banja Luka** | **1.15** | **219** | Pn | | **Pn** | **13 25 26.4** | **-0.6** |
| | comp=Z,0.9nm,SNR=12 | | | | | | | |
| BLY | | | | Lg | Lg | Lg | 13 25 42.1 | |
| **BLJ** | **Bijeljina** | **1.16** | **139** | *e*Pg | | **Pb** | **13 25 25.5** | **-1.4** |
| BLJ | | | | *e*Sg | | **Sb** | **13 25 40.7** | **-1.3** |
| **A263A** | **Hollad** | **1.16** | **329** | Pg | | **Pg** | **13 25 28.9** | **+1.7** |
| | comp=Z,1.3nm,SNR=10 | | | | | | | |
| A263A | | | | Lg | Lg | Lg | 13 25 46.1 | |
| **FRGS** | **Fruska Gora** | **1.24** | **113** | *e*Pg | | **Pb** | **13 25 28.1** | **-0.4** |
| FRGS | | | | *e*Sg | | **Sg** | **13 25 45.4** | **+0.5** |
| **FRGS** | **Fruska Gora** | **1.24** | **113** | *e*Pg | | **Pn** | **13 25 27.8** | **-0.5** |
| FRGS | | | | *e*Sg | | **Sg** | **13 25 44.9** | **0.0** |
| **PRIJ** | **Prijedor** | **1.24** | **237** | *e*Pg | | **Pn** | **13 25 27.6** | **-0.7** |
| PRIJ | | | | *e*Sg | | **Sn** | **13 25 45.5** | **+0.4** |
| **TIH** | **Tihany** | **1.26** | **351** | Pg | | **Pn** | **13 25 27.5** | **-1.1** |
| | comp=Z,2.4nm,SNR=15 | | | | | | | |
| TIH | | | | Sn | | **Sb** | **13 25 43.9** | **-1.2** |
| **TIH** | **Tihany** | **1.26** | **351** | PN | | **Pn** | **13 25 27.5** | **-1.1** |
| TIH | | | | SN | | **Sb** | **13 25 43.9** | **-1.2** |
| **KALN** | **Kalnik** | **1.30** | **292** | *e*Pg | | **Pn** | **13 25 27.9** | **-1.3** |
| KALN | | | | Sg | | **Sb** | **13 25 44.5** | **-1.8** |
| **A267A** | **Kaloz** | **1.31** | **9** | Pg | | **Pg** | **13 25 31.5** | **+1.5** |
| | comp=Z,0.8nm,SNR=5.6 | | | | | | | |
| A267A | | | | Lg | Lg | Lg | 13 25 50.4 | |
| **TEKS** | **Tekeris** | **1.46** | **139** | *e*Pg | | **Pn** | **13 25 31.3** | **0.0** |
| TEKS | | | | *e*Sg | | **Sb** | **13 25 50.3** | **-0.3** |
| **TEKS** | **Tekeris** | **1.46** | **139** | *e*Pg | | **Pn** | **13 25 31.3** | **0.0** |
| TEKS | | | | *e*Sg | | **Sb** | **13 25 50.1** | **-0.5** |
| **A251A** | **Rujevac** | **1.46** | **249** | *e*Pn | | **Pn** | **13 25 31.8** | **+0.6** |
| A251A | | | | Sg | | **Sb** | **13 25 51.2** | **+0.6** |
| **MGRS** | **Mrkonjic Grad** | **1.47** | **213** | *e*Pg | | **Pb** | **13 25 32.4** | **+0.1** |
| MGRS | | | | *e*Sg | | **Sb** | **13 25 51.5** | **+0.5** |
| **A261A** | **Ohid** | **1.49** | **331** | Pn | | **Pb** | **13 25 32.3** | **-0.3** |
| | comp=Z,0.5nm,SNR=4.8 | | | | | | | |
| **ZAG** | **Zagreb** | **1.55** | **277** | *e*Pn | | **Pb** | **13 25 34.5** | **+0.7** |
| ZAG | | | | *e*Sn | | **Sb** | **13 25 54.6** | **+1.1** |
| **KOGS** | **Kog** | **1.57** | **301** | *i* Pn | | **Pn** | **13 25 32.2** | **-0.6** |
| **KOGS** | **Kog** | **1.57** | **301** | Pn | | **Pn** | **13 25 32.2** | **-0.6** |
| | comp=Z,1.2nm,SNR=6.9 | | | | | | | |
| **PTJ** | **Puntijarka** | **1.58** | **280** | *e*Pn | | **Pn** | **13 25 31.6** | **-1.4** |
| **PTJ** | **Puntijarka** | **1.58** | **280** | Pg | | **Pg** | **13 25 36.1** | **+0.9** |
| **MPLH** | **Magyarpolny** | **1.58** | **344** | Pg | | **Pn** | **13 25 33.6** | **+0.6** |
| | comp=Z,0.6nm,SNR=4.1 | | | | | | | |
| **MPLH** | **Magyarpolny** | **1.58** | **344** | PN | | **Pn** | **13 25 33.6** | **+0.6** |
| **A262A** | **Szaknyer** | **1.67** | **317** | Pn | | **Pn** | **13 25 34.8** | **+0.6** |
| | comp=Z,0.6nm,SNR=4.0 | | | | | | | |
| **CSKK** | **Cskako** | **1.71** | **2** | Pn | | **Pn** | **13 25 35.1** | **+0.4** |
| | comp=Z,0.2nm,SNR=3.6 | | | | | | | |
| **CSKK** | **Cskako** | **1.71** | **2** | PN | | **Pn** | **13 25 35.1** | **+0.4** |
| **GCIS** | **Gornji Cirnik** | **1.81** | **278** | *i* Pn | | **Pb** | **13 25 35.2** | **-0.9** |
| **GOLS** | **Golise** | **1.83** | **282** | *i* Pn | | **Pn** | **13 25 36.0** | **-0.5** |
| **EGYH** | **Egyhazaskeszo** | **1.86** | **342** | Pn | | **Pn** | **13 25 37.8** | **+1.0** |
| | comp=Z,0.3nm,SNR=2.7 | | | | | | | |
| **EGYH** | **Egyhazaskeszo** | **1.86** | **342** | PN | | **Pn** | **13 25 37.8** | **+1.0** |
| **CRES** | **Cresnjev** | **1.92** | **276** | *e*Pn | | **Pn** | **13 25 38.9** | **+1.2** |
| CRES | | | | *e*Sn | | **Sb** | **13 26 03.4** | **-0.7** |
| **CRES** | **Cresnjev** | **1.92** | **276** | Pn | | **Pn** | **13 25 37.1** | **-0.6** |
| | comp=Z,1.3nm,SNR=5.5 | | | | | | | |
| **A260A** | **Vassurany** | **1.93** | **328** | Pn | | **Pn** | **13 25 37.7** | **0.0** |
| | comp=Z,0.5nm,SNR=3.4 | | | | | | | |
| **PLIT** | **Plitvice** | **1.97** | **248** | *e*Pn | | **Pn** | **13 25 39.2** | **+0.8** |
| PLIT | | | | Sn | | **Sb** | **13 26 05.3** | **-0.3** |
| **BBLS** | **Lazići** | **1.99** | **154** | *e*Pg | | **Pb** | **13 25 41.0** | **-0.2** |
| BBLS | | | | *e*Sg | | **Sg** | **13 26 07.7** | **-1.0** |
| **BBLS** | **Lazići** | **1.99** | **154** | *e*Pn | | **Pn** | **13 25 39.3** | **+0.7** |
| BBLS | | | | *e*Sn | | **Sn** | **13 26 03.1** | **-0.4** |
| **DIVS** | **Divibare** | **2.01** | **140** | *e*Pn | | **Pb** | **13 25 42.2** | **+0.5** |
| DIVS | | | | *e*Sn | | **Sb** | **13 26 06.7** | **-0.1** |
| **DIVS** | **Divibare** | **2.01** | **140** | *e*Pn | | **Pn** | **13 25 39.3** | **+0.3** |
| DIVS | | | | *e*Sn | | **Sn** | **13 26 03.5** | **-0.8** |
| **GROS** | **Grobnik** | **2.04** | **294** | *i* Pn | | **Pn** | **13 25 38.5** | **-0.8** |
| GROS | | | | *e*Sn | | **Sn** | **13 26 02.6** | **-2.2** |
| **KIJV** | **Kijevo** | **2.08** | **218** | *e*Pn | | **Pn** | **13 25 39.3** | **-0.6** |
| **TRUS** | **Trudelj** | **2.13** | **132** | *e*Pn | | **Pb** | **13 25 43.4** | **-0.1** |
| TRUS | | | | *e*Sn | | **Sb** | **13 26 09.9** | **0.0** |
| **SRO** | **Srobarova** | **2.16** | **2** | Pn | | **Pn** | **13 25 42.2** | **+1.3** |
| | comp=Z,1.1nm,SNR=2.5 | | | | | | | |
| **SRO** | **Srobarova** | **2.16** | **2** | *e*PN | | **Pn** | **13 25 42.2** | **+1.3** |
| **RUDO** | **Rudo** | **2.20** | **157** | *e*Pn | | **Pn** | **13 25 41.5** | **0.0** |
| RUDO | | | | *e*Sn | | **Sn** | **13 26 08.4** | **-0.4** |
| **RICI** | **Ricice** | **2.29** | **200** | *e*Pn | | **Pn** | **13 25 42.7** | **0.0** |
| **SOP** | **Sopron** | **2.32** | **332** | Pn | | **Pn** | **13 25 43.7** | **+0.6** |
| **SOP** | **Sopron** | **2.32** | **332** | PN | | **Pn** | **13 25 43.7** | **+0.6** |
| **PERS** | **Pernice** | **2.35** | **296** | *i* Pn | | **Pn** | **13 25 42.9** | **-0.7** |
| **BZS** | **Buzias** | **2.40** | **90** | ⇓P | | **Pb** | **13 25 48.4** | **+0.2** |
| BZS | | | | ⇓S | | **Sg** | **13 26 21.4** | **-0.7** |
| **BZS** | **Buzias** | **2.40** | **90** | *e*Pn | | **Pb** | **13 25 47.7** | **-0.5** |
| BZS | | | | *e*Sn | | **Sb** | **13 26 17.0** | **-0.9** |
| **BZS** | **Buzias** | **2.40** | **90** | Pn | | **Pn** | **13 25 44.4** | **+0.2** |
| | comp=Z,0.1nm,SNR=2.6 | | | | | | | |
| **SOKA** | **Soboth** | **2.42** | **296** | *e*Pn | | **Pn** | **13 25 43.8** | **-0.8** |
| | comp=Z,4.7nm,0.2s,SNR=6.5 | | | | | | | |
| SOKA | | | | *e*Sn | | **Sn** | **13 26 12.2** | **-2.1** |
| | comp=Z,5.7nm,0.3s | | | | | | | |
| **ARSA** | **Arzberg** | **2.44** | **312** | *e*Pn | | **Pn** | **13 25 44.9** | **0.0** |
| | comp=Z,3.4nm,0.2s,SNR=8.6 | | | | | | | |
| **ARSA** | **Arzberg** | **2.44** | **312** | Pn | | **Pn** | **13 25 44.3** | **-0.5** |
| | comp=Z,0.1nm,SNR=1.5 | | | | | | | |
| **SIRR** | **Siria** | **2.49** | **75** | Pg | | **Pg** | **13 25 56.4** | **+3.7** |
| **IVAS** | **Ivanjica** | **2.50** | **145** | *e*Pn | | **Pn** | **13 25 47.3** | **+1.6** |
| IVAS | | | | *e*Sn | | **Sb** | **13 26 18.8** | **-2.1** |
| **MAKA** | **Makarska** | **2.51** | **200** | *e*Pn | | **Pn** | **13 25 46.4** | **+0.7** |
| MAKA | | | | Sn | | **Sn** | **13 26 18.3** | **+2.0** |
| **MORI** | **Morici** | **2.52** | **226** | *e*Pn | | **Pn** | **13 25 46.1** | **+0.3** |
| MORI | | | | Sn | | **Sn** | **13 26 17.4** | **+0.9** |
| **GRUS** | **Gruza** | **2.52** | **134** | *e*Pn | | **Pb** | **13 25 48.2** | **-2.0** |
| GRUS | | | | *e*Sn | | **Sb** | **13 26 20.4** | **-0.8** |
| **PSZ** | **Piszkesteto** | **2.55** | **27** | ⇓P | | **Pn** | **13 25 46.9** | **+0.6** |
| PSZ | | | | ⇓S | | **Sb** | **13 26 21.2** | **-0.9** |
| **PSZ** | **Piszkesteto** | **2.55** | **27** | Pn | | **Pn** | **13 25 45.7** | **-0.6** |
| | comp=Z,1.0nm,SNR=2.1 | | | | | | | |
| **PSZ** | **Piszkesteto** | **2.55** | **27** | PN | | **Pn** | **13 25 45.7** | **-0.6** |
| **LJU** | **Ljubljana** | **2.59** | **280** | *e*Sn | | **Sn** | **13 26 20.6** | **+2.2** |
| **NVLJ** | **Novalja** | **2.59** | **246** | *e*Pn | | **Pn** | **13 25 47.7** | **+0.9** |
| NVLJ | | | | Sn | | **Sn** | **13 26 18.8** | **+0.4** |
| **RIY** | **Rijeka** | **2.63** | **264** | *e*Pn | | **Pn** | **13 25 48.5** | **+1.1** |
| RIY | | | | *e*Sn | | **Sn** | **13 26 21.0** | **+1.7** |
| **MDVR** | **Moldovita** | **2.64** | **108** | ⇓P | | **Pb** | **13 25 51.8** | **-0.4** |
| MDVR | | | | ⇑S | | **Sg** | **13 26 28.0** | **-1.6** |
| **CEY** | **Cerknica** | **2.64** | **273** | *e*Pn | | **Pn** | **13 25 49.7** | **+2.1** |
| CEY | | | | *e*Sn | | **Sn** | **13 26 22.1** | **+2.5** |
| **ZST** | **Bratislava** | **2.65** | **344** | Pn | | **Pn** | **13 25 48.1** | **+0.4** |
| | comp=Z,2.6nm,SNR=1.2 | | | | | | | |
| **ZST** | **Bratislava** | **2.65** | **344** | *e*PN | | **Pn** | **13 25 48.2** | **+0.5** |
| ZST | | | | *e*SN | | **Sn** | **13 26 17.9** | **-1.9** |
| **OBKA** | **Obir** | **2.68** | **290** | *e*Pn | | **Pn** | **13 25 48.0** | **-0.1** |
| OBKA | comp=Z,0.8nm,0.1s | | | | | | | |
| | | | | Sn | | **Sn** | **13 26 20.0** | **-0.6** |
| | comp=Z,15nm,0.5s | | | | | | | |
| **ZIRJ** | **Zirje** | **2.70** | **223** | *e*Pn | | **Pn** | **13 25 48.4** | **0.0** |
| **HVAR** | **Hvar** | **2.77** | **207** | *e*Pn | | **Pn** | **13 25 49.5** | **+0.1** |
| HVAR | | | | Sn | | **Sn** | **13 26 23.7** | **+0.8** |
| **CONA** | **Conrad Observa** | **2.78** | **326** | *e*Pn | | **Pn** | **13 25 49.8** | **+0.2** |
| | comp=Z,4.9nm,0.2s,SNR=23 | | | | | | | |
| CONA | | | | Sn | | **Sn** | **13 26 25.0** | **+1.8** |
| | comp=Z,3.1nm,0.2s | | | | | | | |
| **CONA** | **Conrad Observa** | **2.78** | **326** | Pn | | **Pn** | **13 25 49.8** | **+0.2** |
| | comp=Z,0.2nm,SNR=1.4 | | | | | | | |
| **DUGI** | **Dugi Otok** | **2.78** | **234** | *e*Pn | | **Pn** | **13 25 49.9** | **+0.4** |
| DUGI | | | | Sn | | **Sn** | **13 26 23.6** | **+0.5** |
| **MODS** | **Modra-Piesok** | **2.79** | **347** | Pn | | **Pn** | **13 25 51.5** | **+1.9** |
| | comp=Z,2.3nm,SNR=2.7 | | | | | | | |
| **MODS** | **Modra-Piesok** | **2.79** | **347** | *e*PN | | **Pn** | **13 25 51.5** | **+1.9** |
| MODS | | | | *e*SN | | **Sn** | **13 26 23.1** | **-0.2** |
| **STON** | **Ston** | **2.81** | **187** | *e*Pn | | **Pb** | **13 25 53.1** | **-2.0** |
| STON | | | | *e*Sn | | **Sb** | **13 26 27.8** | **-1.6** |
| **STON** | **Ston** | **2.81** | **187** | *e*Pn | | **Pn** | **13 25 50.6** | **+0.8** |
| STON | | | | *e*Sn | | **Sn** | **13 26 23.7** | **+0.1** |
| **STON** | **Ston** | **2.81** | **187** | *e*Pn | | **Pn** | **13 25 51.0** | **+1.2** |
| STON | | | | Sn | | **Sn** | **13 26 24.9** | **+1.3** |
| **VYHS** | **Vyhne** | **2.87** | **9** | Pn | | **Pn** | **13 25 51.2** | **+0.5** |
| | comp=Z,0.1nm,SNR=2.0 | | | | | | | |
| **VYHS** | **Vyhne** | **2.87** | **9** | *e*PN | | **Pn** | **13 25 51.2** | **+0.5** |
| VYHS | | | | *e*SN | | **Sn** | **13 26 23.9** | **-1.5** |
| **SMOL** | **Smolenice** | **2.91** | **350** | *e*PN | | **Pn** | **13 25 51.5** | **+0.3** |
| SMOL | | | | *e*SN | | **Sn** | **13 26 24.7** | **-1.5** |
| **SMRN** | **Sveta Marina** | **2.91** | **259** | *e*Pn | | **Pn** | **13 25 51.5** | **+0.2** |
| SMRN | | | | Sn | | **Sn** | **13 26 25.3** | **-1.0** |
| **KOLL** | **Kolacno** | **2.93** | **3** | *e*PN | | **Pn** | **13 25 52.2** | **+0.7** |
| KOLL | | | | *e*SN | | **Sn** | **13 26 25.2** | **-1.5** |
| **TREB** | **Trebinje** | **2.94** | **178** | *e*Pn | | **Pn** | **13 25 52.7** | **+1.1** |
| TREB | | | | *e*Sn | | **Sn** | **13 26 26.5** | **-0.5** |
| **LSTV** | **Lastovo** | **3.03** | **198** | *e*Pn | | **Pn** | **13 25 53.2** | **+0.3** |
| LSTV | | | | Sn | | **Sn** | **13 26 28.8** | **-0.5** |
| **SELS** | **Selova** | **3.21** | **138** | *e*Pn | | **Pn** | **13 25 56.7** | **+1.3** |
| **BRJN** | **Brijuni** | **3.22** | **258** | *e*Pn | | **Pn** | **13 25 55.9** | **+0.3** |
| BRJN | | | | Sn | | **Sn** | **13 26 33.9** | **0.0** |
| **JAVC** | **Velka Javorina** | **3.23** | **354** | *e*PN | | **Pn** | **13 25 56.5** | **+0.9** |
| **JAVC** | **Velka Javorina** | **3.23** | **354** | Pn | | **Pn** | **13 25 56.5** | **+0.9** |
| | comp=Z,0.2nm,SNR=1.7 | | | | | | | |
| **GZR** | **Gura Zlata** | **3.23** | **93** | Pg | | Pg | 13 26 12.0 | +5.2 |
| **DRGR** | | **3.34** | **68** | Pn | | **Pn** | **13 25 57.0** | **-0.1** |
| | comp=Z,0.1nm,SNR=1.7 | | | | | | | |
| **MOA** | **Molln** | **3.48** | **311** | *i* Pn | | **Pn** | **13 25 59.9** | **+0.8** |
| | comp=Z,1.9nm,0.2s,SNR=6.1 | | | | | | | |
| MOA | | | | *e*Sn | | **Sn** | **13 26 42.1** | **+1.8** |
| | comp=Z,3.9nm,0.3s | | | | | | | |
| **DRME** | **Dracevica, Mon** | **3.54** | **168** | *e*Pn | | **Pn** | **13 26 00.6** | **+0.7** |
| DRME | | | | *e*Sn | | **Sn** | **13 26 40.7** | **-1.1** |
| **KRUC** | **Moravsky** | **3.62** | **341** | *e*PN | | **Pn** | **13 26 01.2** | **+0.2** |
| KRUC | | | | *e*SN | | **Sn** | **13 26 42.3** | **-1.5** |
| **KBA** | **Koelnbreinsper** | **3.65** | **295** | *e*Pn | | **Pn** | **13 26 04.3** | **+2.7** |
| | comp=Z,0.6nm,0.2s | | | | | | | |
| KBA | | | | *e*Sn | | **Sn** | **13 26 44.1** | **-0.5** |
| | comp=Z,1.6nm,0.2s | | | | | | | |
| **VRAC** | **Vranov** | **3.81** | **344** | *e*PN | | **Pn** | **13 26 03.7** | **0.0** |
| VRAC | | | | *e*SN | | **Sn** | **13 26 47.1** | **-1.4** |
| **MORC** | **Moravsky Berou** | **4.15** | **354** | ⇓P | | **Pn** | **13 26 08.6** | **+0.3** |
| **MORC** | **Moravsky Berou** | **4.15** | **354** | *e*PN | | **Pn** | **13 26 09.1** | **+0.8** |
| MORC | | | | *e*SN | | **Sn** | **13 26 55.2** | **-1.6** |
| **KRLC** | **Kraliky** | **4.52** | **348** | *e*Pn | | **Pn** | **13 26 14.5** | **+1.0** |
| KRLC | | | | *e*SN | | **Sn** | **13 27 05.5** | **-0.6** |
| **KHC** | **Kasperske Hory** | **4.68** | **320** | *e*Pn | | **Pn** | **13 26 16.5** | **+0.9** |
| KHC | | | | *e*SN | | **Sn** | **13 27 08.3** | **-1.6** |
| **DPC** | **Dobruska-Polom** | **4.86** | **346** | *e*PN | | **Pn** | **13 26 18.7** | **+0.6** |
| DPC | | | | *e*SN | | **Sn** | **13 27 13.1** | **-1.3** |

*SFS **02** 13:26:06.0,35°.50N×3°.80W, ML2.6, ALBORAN SUR*
*INMG **02** 13:26:07.5±1.3,35°.55N×3°.82W, h3km±3km, ML2.5, Error ellipse: s-maj=3.2km s-min=2.4km az=5.0*
*IGIL **02** 13:26:07.7,35°.52N×3°.82W, h0km*
*CNRM **02** 13:26:09.5,35°.33N×3°.63W, h8km, ml2.8*

**ISC 02 13:26:05.9±1.1, 35°.57N±0'.03×3°.69W±0'.03, h12km±9km, n36, σ1§36/57, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.41** | **210** | P | | **Pb** | **13 26 15.0** | **-0.1** |
| **PALE** | **Palemas** | **0.41** | **210** | P | | **Pg** | **13 26 13.5** | **-0.5** |
| PALE | | | | S | | **Sg** | **13 26 18.2** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.66** | **121** | P | | **Pn** | **13 26 19.6** | **+0.2** |
| GOG | | | | S | | **Sg** | **13 26 25.0** | **-2.6** |
| **GOG** | **Mont Gurugu** | **0.66** | **121** | P | | **Pb** | **13 26 19.7** | **+0.2** |
| GOG | | | | S | | **Sb** | **13 26 29.9** | **+1.3** |
| **CHAS** | **Isla Isabel II** | **1.10** | **110** | P | | **Pb** | **13 26 26.5** | **-0.3** |
| CHAS | | | | S | | **Sb** | **13 26 40.9** | **-0.2** |
| **TAF** | **Taforalt** | **1.29** | **126** | P | | **Pg** | **13 26 31.0** | **+0.3** |
| **TAF** | **Taforalt** | **1.29** | **126** | P | | **Pn** | **13 26 29.6** | **-0.1** |
| TAF | | | | S | | **Sg** | **13 26 47.8** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.33** | **333** | P | | **Pn** | **13 26 30.3** | **0.0** |
| EMAL | | | | S | | **Sb** | **13 26 47.2** | **-0.5** |
| **SMIR** | **Smir Dam** | **1.38** | **275** | S | | **Sn** | **13 26 47.2** | **-2.0** |
| **CHEFC** | **Chefchaouen** | **1.43** | **252** | P | | **Pg** | **13 26 35.0** | **+1.7** |
| **CHEFC** | **Chefchaouen** | **1.43** | **252** | P | | **Pn** | **13 26 31.6** | **0.0** |
| CHEFC | | | | S | | **Sn** | **13 26 45.7** | **-4.8** |
| **JBK** | **JBK** | **1.54** | **143** | P | | **Pb** | **13 26 34.0** | **-0.5** |
| **JBK** | **JBK** | **1.54** | **143** | P | | **Pn** | **13 26 33.5** | **+0.2** |
| JBK | | | | S | | **Sg** | **13 26 51.0** | **-0.5** |
| **LIJA** | **Lijar** | **1.92** | **314** | P | | **Pn** | **13 26 27.8** | **-11** |
| **LCRM** | **LCR** | **2.11** | **207** | P | | **Pb** | **13 26 45.0** | **+0.8** |
| **IFR** | **Ifrane** | **2.37** | **210** | P | | **Pn** | **13 26 45.3** | **+0.6** |
| IFR | | | | S | | **Sn** | **13 27 11.9** | **-1.8** |
| **MD31** | **MD31** | **2.84** | **199** | P | | **Pn** | **13 26 51.7** | **+0.6** |
| MD31 | | | | S | | **Sn** | **13 27 25.5** | **+0.2** |
| **MDT** | **Midelt** | **2.85** | **196** | P | | **Pn** | **13 26 53.0** | **+1.7** |
| MDT | | | | S | | **Sn** | **13 27 26.0** | **+0.3** |
| **TDRA** | **Tendrara** | **2.87** | **151** | P | | **Pn** | **13 26 53.2** | **+1.5** |
| TDRA | | | | S | | **Sn** | **13 27 26.9** | **+0.6** |
| **ZHG** | **ZHG** | **3.23** | **230** | P | | **Pn** | **13 26 57.7** | **+1.2** |
| ZHG | | | | S | | **Sn** | **13 27 34.6** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | *e*Pn | | **Pn** | **13 27 03.5** | **+0.3** |
| PVAQ | | | | *e*Sn | | **Sn** | **13 27 45.6** | **-1.4** |
| PVAQ | | | | A | A | | 13 27 50.9 | |
| | 11nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | P | | **Pn** | **13 27 03.0** | **-0.2** |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **297** | *e*Pn | | **Pn** | **13 27 04.6** | **+0.2** |
| PBDV | | | | *e*Sn | | **Sn** | **13 27 47.3** | **-1.8** |
| PBDV | | | | A | A | | 13 27 53.9 | |
| | 7.0nm,1.1s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.06** | **302** | *e*Pn | | **Pn** | **13 27 08.5** | **+0.7** |
| PCVE | | | | *e*Sn | | **Sn** | **13 27 54.6** | **-0.7** |
| PCVE | | | | A | A | | 13 27 57.9 | |
| | 6.2nm,0.5s | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **303** | *e*P | | **Pn** | **13 27 11.4** | **+0.5** |
| **MESJ** | **Messejana** | **4.29** | **303** | *e*Pn | | **Pn** | **13 27 11.9** | **+1.0** |
| MESJ | | | | *e*Sn | | **Sn** | **13 28 00.0** | **-0.9** |
| MESJ | | | | A | A | | 13 28 05.6 | |
| | 6.4nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.36** | **295** | *e*Sn | | **Sn** | **13 28 01.1** | **-1.6** |
| MORF | | | | A | A | | 13 28 03.8 | |
| | 4.4nm,0.7s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **292** | P | | **Pn** | **13 27 13.2** | **+0.3** |
| **PESTR** | **Estremoz** | **4.53** | **318** | *e*Sn | | **Sn** | **13 28 06.2** | **-0.7** |
| PESTR | | | | A | A | | 13 28 14.5 | |
| | 4.1nm,0.4s | | | | | | | |
| **PESTR** | **Estremoz** | **4.53** | **318** | P | | **Pn** | **13 27 15.2** | **+0.9** |
| **EVO** | **Evora** | **4.55** | **312** | P | | **Pn** | **13 27 16.1** | **+1.6** |
| EVO | | | | S | | **Sn** | **13 28 04.8** | **-2.5** |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | | **Pn** | **13 27 16.6** | **+0.9** |
| PNCL | | | | *e*Sn | | **Sn** | **13 28 07.8** | **-1.7** |
| PNCL | | | | A | A | | 13 28 14.4 | |
| | 5.1nm,0.4s | | | | | | | |
| **PMRV** | **Marv??o** | **4.85** | **324** | *e*Pn | | **Pn** | **13 27 21.7** | **+3.1** |
| PMRV | | | | *e*Sn | | **Sn** | **13 28 14.0** | **-0.7** |
| PMRV | | | | A | A | | 13 28 21.6 | |
| | 3.8nm,0.7s | | | | | | | |
| **PMTG** | **Montargil** | **5.03** | **315** | *e*Pn | | **Pn** | **13 27 22.6** | **+1.5** |
| PMTG | | | | *e*Sn | | **Sn** | **13 28 18.4** | **-0.7** |
| PMTG | | | | A | A | | 13 28 20.6 | |
| | 3.9nm,0.7s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.21** | **326** | *e*Sn | | **Sn** | **13 28 22.8** | **-0.9** |
| PCBR | | | | A | A | | 13 28 31.1 | |
| | 3.9nm,0.8s | | | | | | | |
| **MVO** | **Moncorvo** | **6.17** | **336** | *e*Pn | | **Pn** | **13 27 39.7** | **+2.8** |
| MVO | | | | *e*Sn | | **Sn** | **13 28 47.6** | **+0.2** |
| MVO | | | | A | A | | 13 28 51.2 | |
| | 3.0nm,0.6s | | | | | | | |

*SOME **02** 13:27:38.2,39°.30N×72°.97E, h10km*
*NEIC **02** 13:27:39.5±1.2,38°.53N±0°.04×73°.3E±0°.1, h112km±8km, mb4.4/4, Error ellipse: s-maj=13.1km s-min=2.3km az=117.0*
*IDC **02** 13:27:41.3±3.5,38°.61N×73°.30E, h126km±29km, mb3.2/4, mb1 3.1/10, mb1mx2.9/68, mbtmp3.5/10, MS3.9/1, Ms1 3.9/1, ms1mx2.8/48, Error ellipse: s-maj=33.2km s-min=23.8km az=146.0*
*NNC **02** 13:27:42.6±2.0,38°.94N×73°.04E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=16.0km s-min=11.5km az=162.0*

**ISC 02 13:27:39.1±0.9, 38°.46N±0'.07×73°.17E±0'.07, h103km, n34, σ1§85/37, mb3.6/5, 2C-3D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **1.47** | **314** | Pn | | **Pn** | **13 28 07.7** | **+2.2** |
| **GAR** | **Garm** | **2.29** | **284** | | | **Pn** | **13 28 17.2** | **+1.5** |
| **BTK** | **Batken** | **2.42** | **312** | | | **Pn** | **13 28 17.2** | **-0.1** |
| **CHGR** | **Chuyangaron** | **3.15** | **275** | | | **Pn** | **13 28 28.1** | **+1.1** |
| **MRKS** | **Merke** | **4.28** | **1** | *e*P | | **Pn** | **13 28 44.0** | **+1.8** |
| | 16nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sn** | **13 29 31.2** | **+0.1** |
| | 18nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **13** | P | | **Pn** | **13 28 43.4** | **+1.0** |
| | 0.8nm,0.3s,baz=194,slow=4.5,SNR=9.9 | | | | | | | |
| AAK | | | | S | | **Sn** | **13 29 30.3** | **-1.1** |
| | 1.6nm,0.3s,baz=230,slow=18,SNR=9.6 | | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **13** | ⇑P | | **Pn** | **13 28 43.2** | **+0.8** |
| | 2.9nm,0.5s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **13 29 30.5** | **-1.0** |
| | 8.3nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **13** | | | **Pn** | **13 28 42.1** | **-0.3** |
| **IUG** | **Iuzhnay** | **4.39** | **328**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KAHZ** | **Kahuranaki** | **8.25** | **195** | P | Pn | 13 31 24.9 | -2.1 |
| KAHZ | | | | S | S | 13 32 57.6 | -2.8 |
| **PXZ** | **Pawanui** | **8.48** | **195** | P | Pn | 13 31 24.4 | -5.5 |
| PXZ | | | | S | S | 13 32 59.5 | -6.2 |
| **PNHZ** | **Pukenui** | **8.53** | **198** | P | Pn | 13 31 26.9 | -3.7 |
| PNHZ | | | | S | S | 13 33 01.6 | -5.4 |
| **TSZ** | **Takapari Road** | **8.73** | **199** | P | Pn | 13 31 29.3 | -3.9 |
| TSZ | | | | S | S | 13 33 05.5 | -6.1 |
| **PRHZ** | **Porangahau** | **8.76** | **195** | P | Pn | 13 31 30.5 | -3.0 |
| PRHZ | | | | S | S | 13 33 05.8 | -6.4 |
| **ANWZ** | **Angora Road** | **8.98** | **196** | P | Pn | 13 31 32.9 | -3.4 |
| ANWZ | | | | S | S | 13 33 13.8 | -3.6 |
| **BFZ** | **Birch Farm** | **9.24** | **196** | P | Pn | 13 31 33.7 | -6.0 |
| BFZ | | | | S | S | 13 33 17.5 | -6.2 |
| **MRZ** | **Mangatainoka R** | **9.40** | **199** | P | Pn | 13 31 36.3 | -5.4 |
| MRZ | | | | S | S | 13 33 18.5 | -8.8 |
| **TIWZ** | **Tintock** | **9.42** | **198** | P | Pn | 13 31 37.8 | -4.3 |
| TIWZ | | | | S | S | 13 33 20.9 | -7.1 |
| **HOWZ** | **Holdsworth Sta** | **9.64** | **199** | P | Pn | 13 31 39.6 | -5.2 |
| HOWZ | | | | S | S | 13 33 23.5 | -9.4 |

*BUL **02** 13:29:44.8±1.3,26˚.06S×29˚.33E, h10km, MD3.5*
*EAF **02** 13:29:44.6±1.7,26˚.05S×29˚.35E, h10km, MD3.4*
**ISC 02 13:29:42.2**±1.1,**26˚.07S**±0˚.05×**29˚.39E**±0˚.04,**h10**km,**n14,**
**σ1§82/28,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.52** | **96** | *eP* | **Pn** | **13 30 24.9** | **+1.7** |
| CNG | | | | *eS* | **Sb** | **13 30 57.8** | **-0.8** |
| **CNG** | **Changalane** | **2.52** | **96** | *eP* | **Pn** | **13 30 24.9** | **+1.7** |
| CNG | | | | *eS* | **Sb** | **13 30 57.8** | **-0.8** |
| **MOPA** | **Mopani** | **3.12** | **36** | *eP* | **Pn** | **13 30 33.0** | **+1.5** |
| MOPA | | | | *eS* | **Sn** | **13 31 08.2** | **-0.7** |
| **MOPA** | **Mopani** | **3.12** | **36** | *eP* | **Pn** | **13 30 33.0** | **+1.5** |
| MOPA | | | | *eS* | **Sn** | **13 31 08.2** | **-0.7** |
| **LBTB** | **Lobatse** | **3.59** | **286** | *eP* | **Pn** | **13 30 40.2** | **+2.2** |
| LBTB | | | | *eS* | **Sn** | **13 31 20.0** | **-0.5** |
| **LBTB** | **Lobatse** | **3.59** | **286** | *eP* | **Pn** | **13 30 40.2** | **+2.2** |
| LBTB | | | | *eS* | **Sn** | **13 31 20.0** | **-0.5** |
| **MSNA** | **Messina** | **3.75** | **9** | *eP* | **Pn** | **13 30 42.1** | **+2.0** |
| MSNA | | | | *eS* | **Sn** | **13 31 23.8** | **-0.6** |
| **MSNA** | **Messina** | **3.75** | **9** | *eP* | **Pn** | **13 30 42.1** | **+2.0** |
| MSNA | | | | *eS* | **Sn** | **13 31 23.8** | **-0.6** |
| **BOSA** | **Boshof** | **4.47** | **234** | *eP* | **Pn** | **13 30 51.6** | **+1.5** |
| BOSA | | | | *eS* | **Sn** | **13 31 39.9** | **-2.4** |
| **BOSA** | **Boshof** | **4.47** | **234** | *eP* | **Pn** | **13 30 51.6** | **+1.5** |
| BOSA | | | | *eS* | **Sn** | **13 31 39.9** | **-2.4** |
| **MATP** | **Matopo** | **5.67** | **351** | *eP* | **Pn** | **13 31 08.0** | **+1.3** |
| MATP | | | | *eS* | **Sn** | **13 32 09.8** | **-2.2** |
| **MATP** | **Matopo** | **5.67** | **351** | *eP* | **Pn** | **13 31 08.0** | **+1.3** |
| MATP | | | | *eS* | **Sn** | **13 32 09.8** | **-2.2** |
| **BLWY** | **Bulawayo** | **5.94** | **353** | *eP* | **Pn** | **13 31 11.8** | **+1.4** |
| BLWY | | | | *eS* | **Sn** | **13 32 15.7** | **-3.0** |
| **BLWY** | **Bulawayo** | **5.94** | **353** | *eP* | **Pn** | **13 31 11.8** | **+1.4** |
| BLWY | | | | *eS* | **Sn** | **13 32 15.7** | **-3.0** |

*TUL **02** 13:32:25.5±0.9,36˚.48N±0˚.02×98˚.74W±0˚.02, h7km±7km, ML3.4, mb_Lg3.2/66(NEIC), Error ellipse: s-maj=3.2km s-min=2.2km az=148.0*
**NEIC 02 13:32:25.7**±1.4,**36˚.48N**±0˚.02×**98˚.72W**±0˚.03,**h11**km±6km,
**Error ellipse: s-maj=3.4km s-min=2.2km az=88.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.23** | **3** | Pg | Pg | 13 32 30.5 | -0.1 |
| **U32A** | **Winter Ranch,** | **0.24** | **247** | Pg | Pg | 13 32 30.3 | -0.4 |
| U32A | | | | Sg | Sg | 13 32 34.1 | -0.1 |
| **CROK** | **Carrier** | **0.60** | **87** | Pg | Pg | 13 32 37.2 | -0.1 |
| CROK | | | | Sg | Sg | 13 32 44.4 | -0.8 |
| **KAN14** | **Manchester OK** | **0.78** | **52** | | Pg | 13 32 40.2 | -0.5 |
| KAN14 | | | | Sg | Sg | 13 32 50.0 | -0.9 |
| **GC02** | **Grant County #** | **0.79** | **61** | Pg | Pg | 13 32 40.5 | -0.4 |
| **KAN10** | **Anthony SW Sta** | **0.82** | **38** | Pg | Pg | 13 32 41.4 | -0.1 |
| KAN10 | | | | Sg | Sg | 13 32 51.6 | -0.7 |
| **KAN16** | **Harper SW Stat** | **0.92** | **35** | Pg | Pg | 13 32 42.9 | -0.5 |
| KAN16 | | | | Sg | Sg | 13 32 54.9 | -0.5 |
| **KAN05** | **Bluff City Nor** | **0.93** | **47** | | Pg | 13 32 43.3 | -0.3 |
| **KAN17** | **Caldwell West** | **0.96** | **53** | Pg | Pg | 13 32 43.6 | -0.5 |
| KAN17 | | | | Sg | Sg | 13 32 56.4 | -0.2 |
| **KAN08** | **Anthony NE Sta** | **0.96** | **39** | Pg | Pg | 13 32 43.8 | -0.5 |
| **KAN12** | **Harper NE Stat** | **1.01** | **35** | | Pg | 13 32 44.4 | -0.7 |
| **KAN01** | **Argonia South** | **1.03** | **49** | | Pb | 13 32 45.0 | -0.5 |
| **KAN06** | **Argonia West S** | **1.04** | **42** | Pg | Pb | 13 32 45.2 | -0.4 |
| **KAN13** | **South Haven SW** | **1.14** | **61** | | Pb | 13 32 46.8 | -0.5 |
| **BCOK** | **Bluff Creek, N** | **1.22** | **132** | | Pn | 13 32 48.0 | -0.6 |
| **OK029** | **Liberty Lake** | **1.23** | **123** | | Pn | 13 32 47.8 | -0.9 |
| **BLOK** | **Blackwell** | **1.25** | **76** | | Pn | 13 32 48.7 | -0.3 |
| **OK025** | **Westminster Rd** | **1.43** | **128** | | Pn | 13 32 51.9 | +0.3 |
| **OK001** | **Jones High Sch** | **1.48** | **128** | Pn | Pn | 13 32 52.6 | +0.4 |
| **OKCFA** | **Oklahoma City** | **1.48** | **135** | | Pn | 13 32 52.5 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **135** | | Pn | 13 32 52.7 | +0.3 |
| **OK033** | **Mehan** | **1.51** | **106** | | Pb | 13 32 53.1 | -0.5 |
| **OK031** | **S. Brethren Rd** | **1.61** | **108** | | Pn | 13 32 54.4 | +0.4 |
| **FNO** | **Franklin** | **1.62** | **138** | | Pn | 13 32 54.8 | +0.6 |
| **QUOK** | **Quay** | **1.66** | **100** | | Pn | 13 32 55.3 | +0.7 |
| **OK030** | **Cody Creek RV** | **1.66** | **109** | | Pn | 13 32 55.3 | +0.6 |
| **OK034** | **N. Norfolk Rd.** | **1.69** | **105** | | Pn | 13 32 55.7 | +0.7 |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | | Pn | 13 32 55.7 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.83** | **75** | | Pn | 13 32 57.7 | +0.7 |
| T35A | | | | IAmb_Lg | | 13 33 24.1 | |
| | comp=Z,127nm,0.9s | | | | | | |
| **OK011** | **Prague** | **1.93** | **120** | Pn | Pn | 13 32 58.8 | +0.5 |
| **R32A** | **Long Quarter,** | **1.94** | **0** | Pn | Pn | 13 32 59.7 | +1.1 |
| **W35A** | **Tecumseh** | **2.00** | **131** | | Pn | 13 32 59.9 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.01** | **159** | | Pn | 13 32 59.8 | +0.4 |
| **TUL1** | **Leonard** | **2.44** | **102** | | Pn | 13 33 05.8 | +0.5 |
| TUL1 | | | | IAmb_Lg | | 13 33 43.8 | |
| | comp=Z,83nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **2.78** | **153** | Pn | Pn | 13 33 10.3 | +0.3 |
| LOOK | | | | IAmb_Lg | | 13 33 52.0 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.32** | **124** | | Pn | 13 33 18.0 | +0.5 |
| **U38A** | **Gravette** | **3.50** | **89** | Pn | Pn | 13 33 19.6 | -0.4 |
| U38A | | | | IAmb_Lg | | 13 34 23.5 | |
| | comp=Z,56nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.92** | **191** | | Pn | 13 33 25.4 | -0.3 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **310** | IAmb_Lg | | 13 34 41.4 | |
| | comp=Z,81nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.15** | **234** | IAmb_Lg | | 13 34 44.9 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | IAmb_Lg | | 13 34 45.7 | |
| | comp=Z,72nm,0.9s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.37** | **13** | IAmb_Lg | | 13 34 55.5 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.44** | **135** | IAmb_Lg | | 13 34 51.3 | |
| | comp=Z,64nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.59** | **166** | | Pn | 13 33 35.2 | +0.2 |
| **T25A** | **Trinidad** | **4.61** | **280** | | Pn | 13 33 36.0 | +0.5 |
| T25A | | | | IAmb_Lg | | 13 34 50.7 | |
| | comp=Z,53nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **4.62** | **113** | IAmb_Lg | | 13 35 00.6 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.74** | **90** | IAmb_Lg | | 13 35 00.5 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.95** | **5** | IAmb_Lg | | 13 35 06.3 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.16** | **51** | IAmb_Lg | | 13 35 23.8 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.20** | **111** | Pn | Pn | 13 33 43.6 | +0.3 |
| X40A | | | | IAmb_Lg | | 13 35 17.4 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.22** | **81** | | Pn | 13 33 44.2 | +0.5 |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | IAmb_Lg | | 13 35 19.4 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.56** | **285** | IAmb_Lg | | 13 35 29.9 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.67** | **298** | IAmb_Lg | | 13 35 32.8 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.76** | **170** | IAmb_Lg | | 13 35 42.0 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **NATX** | **Nacogdoches** | **5.79** | **143** | IAmb_Lg | | 13 35 40.6 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **5.83** | **122** | IAmb_Lg | | 13 35 46.1 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.05** | **189** | IAmb_Lg | | 13 35 54.2 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.14** | **360** | IAmb_Lg | | 13 35 43.7 | |
| | comp=Z,39nm,0.8s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CCM** | **Cathedral Cave** | **6.17** | **73** | | Pn | 13 33 58.5 | +1.9 |
| CCM | | | | IAmb_Lg | | 13 35 52.6 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.68** | **85** | IAmb_Lg | | 13 35 59.2 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **FVM** | **French Village** | **6.79** | **75** | IAmb_Lg | | 13 36 00.0 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **SLM** | **Saint Louis** | **7.08** | **70** | IAmb_Lg | | 13 36 11.9 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.13** | **315** | IAmb_Lg | | 13 36 11.5 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.29** | **231** | IAmb_Lg | | 13 36 25.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.43** | **12** | Pn | Pn | 13 34 13.7 | -0.2 |
| **N41A** | **Harden Midland** | **7.47** | **53** | Pn | Pn | 13 34 15.2 | +0.7 |
| **TX31** | **Lajitas Ar. Si** | **8.24** | **212** | | Pn | 13 34 25.2 | -0.1 |
| **TXAR** | **Lajitas Array** | **8.24** | **212** | Pn | Pn | 13 34 25.7 | +0.4 |
| **TX32** | **Lajitas Array** | **8.24** | **212** | | Pn | 13 34 25.1 | -0.1 |
| **PV11** | **David Mesa, Pa** | **8.28** | **286** | Pn | Pn | 13 34 24.6 | -1.2 |
| **RWWY** | **Rawlins** | **8.40** | **311** | IAmb_Lg | | 13 36 55.0 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.56** | **27** | IAmb_Lg | | 13 37 19.5 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **K22A** | **Casper** | **8.62** | **318** | IAmb_Lg | | 13 37 05.3 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **8.65** | **334** | Pn | Pn | 13 34 31.2 | +0.4 |
| RSSD | | | | IAmb_Lg | | 13 37 05.5 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.16** | **43** | IAmb_Lg | | 13 37 22.6 | |
| | comp=Z,16nm,0.7s | | | | | | |

*IDC **02** 13:32:51.8±0.6, 13˚.09N×89˚.37W, h0km, mb4.2/19, mb1 4.5/22, mb1mx4.3/50, mbtmp4.3/22, ML3.3/4, MS3.7/10, Ms1 3.7/10, ms1mx3.4/69, Error ellipse: s-maj=24.9km s-min=12.9km az=55.0*
*NEIC **02** 13:32:52.3±3.0, 12˚.71N±0˚.08×89˚.88W±0˚.06, h10km±1km, mb4.6/107, Md4.5(SNET), Error ellipse: s-maj=14.0km s-min=7.9km az=207.0*
*UCR **02** 13:32:56.3±1.0, 12˚.82N×89˚.93W, h23km±8km, ML3.9, mb4.6(NEIC)*
*INET **02** 13:33:02.6±0.6, 13˚.11N×89˚.42W, h15km, ML3.7*
*GCG **02** 13:33:11.2±0.3, 13˚.84N×90˚.55W, h64km±12km, MD4.2*
**ISC 02 13:32:55.3**±0.4,**12˚.86N**±0˚.05×**89˚.87W**±0˚.05,**h29**km,**n232,**
**σ1§39/230,mb4.6/63,MS3.6/10,11C,Off coast of central**
**America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **0.83** | **41** | *eP* | **Pb** | **13 33 13.1** | **+1.9** |
| **LALI** | **Alcalda de L** | **0.83** | **41** | *eP* | **Pb** | **13 33 13.1** | **+1.9** |
| **JAYA** | **Jayaque - finc** | **0.89** | **28** | *eP* | **Pb** | **13 33 13.8** | **+1.5** |
| JAYA | | | | IAML | | 13 33 34.6 | |
| | comp=Z,4µm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.89** | **28** | *eP* | **Pb** | **13 33 13.8** | **+1.5** |
| JAYA | | | | IAML | | 13 33 34.6 | |
| | comp=Z,4µm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.99** | **14** | *eP* | **Pb** | **13 33 15.5** | **+1.4** |
| CEVE | | | | IAML | | 13 33 38.0 | |
| | comp=Z,11µm,0.4s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.99** | **14** | *eP* | **Pb** | **13 33 15.5** | **+1.4** |
| CEVE | | | | IAML | | 13 33 38.0 | |
| | comp=Z,11µm,0.4s | | | | | | |
| **SBLS** | **San Blas** | **1.01** | **14** | *eP* | **Pb** | **13 33 15.8** | **+1.5** |
| **SBLS** | **San Blas** | **1.01** | **14** | *eP* | **Pb** | **13 33 15.8** | **+1.5** |
| **SNET** | **Serv Nac Est T** | **1.03** | **37** | Pn | **Pb** | **13 33 15.8** | **+1.1** |
| **SNJE** | **San Jose** | **1.04** | **14** | *eP* | **Pb** | **13 33 16.2** | **+1.4** |
| **SNJE** | **San Jose** | **1.04** | **14** | *eP* | **Pb** | **13 33 16.2** | **+1.4** |
| **NUBE** | **Las Nubes** | **1.04** | **5** | *eP* | **Pb** | **13 33 15.9** | **+1.1** |
| **NUBE** | **Las Nubes** | **1.04** | **5** | *eP* | **Pb** | **13 33 15.9** | **+1.1** |
| **BOQS** | **Boqueron** | **1.05** | **33** | *eP* | **Pb** | **13 33 16.5** | **+1.5** |
| **BOQS** | **Boqueron** | **1.05** | **33** | *eP* | **Pb** | **13 33 16.5** | **+1.5** |
| **LFRS** | **El Faro** | **1.10** | **46** | *eP* | **Pb** | **13 33 16.9** | **+1.2** |
| **LFRS** | **El Faro** | **1.10** | **46** | *eP* | **Pb** | **13 33 16.9** | **+1.2** |
| **SJTE** | **Alcalda de S** | **1.13** | **48** | *eP* | **Pb** | **13 33 17.5** | **+1.2** |
| SJTE | | | | IAML | | 13 33 39.8 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **SJTE** | **Alcalda de S** | **1.13** | **48** | *eP* | **Pb** | **13 33 17.5** | **+1.2** |
| SJTE | | | | IAML | | 13 33 39.8 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **PAVA** | **Las Pavas** | **1.25** | **47** | *eP* | **Pb** | **13 33 19.7** | **+1.4** |
| **PAVA** | **Las Pavas** | **1.25** | **47** | *eP* | **Pb** | **13 33 19.7** | **+1.4** |
| **COEB** | **Comit de Eme** | **1.46** | **64** | *eP* | **Pb** | **13 33 22.0** | **+0.2** |
| COEB | | | | IAML | | 13 33 47.2 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **COEB** | **Comit de Eme** | **1.46** | **64** | *eP* | **Pb** | **13 33 22.0** | **+0.2** |
| COEB | | | | IAML | | 13 33 47.2 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **MTO3** | **Montecristo** | **1.61** | **18** | | **Pb** | **13 33 24.5** | **0.0** |
| **PCG** | **Pacaya** | **1.68** | **335** | *eP* | **Pb** | **13 33 24.9** | **-0.9** |
| **ESQI** | **Esquipulas** | **1.77** | **17** | | **Pb** | **13 33 26.7** | **-0.4** |
| **ESQI** | **Esquipulas** | **1.77** | **17** | *eP* | **Pb** | **13 33 26.9** | **-0.3** |
| **NBG** | **Las Nubes** | **1.78** | **345** | *eP* | **Pb** | **13 33 27.4** | **0.0** |
| **FUG** | **Fuego 3** | **1.84** | **329** | *eP* | **Pn** | **13 33 25.9** | **+0.7** |
| **LCND** | **La Caada** | **1.98** | **77** | *eP* | **Pb** | **13 33 29.1** | **-1.6** |
| LCND | | | | IAML | | 13 34 04.1 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **LCND** | **La Caada** | **1.98** | **77** | *eP* | **Pb** | **13 33 29.1** | **-1.6** |
| LCND | | | | IAML | | 13 34 04.1 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **APG** | **El Apazote** | **2.21** | **345** | Pn | **Pn** | **13 33 31.6** | **+1.3** |
| | comp=Z,40nm,0.3s,baz=136,slow=8.4,SNR=237 | | | | | | |
| APG | | | | Sn | **Sb** | **13 34 02.2** | **+0.4** |
| | comp=Z,36nm,0.3s,baz=141,slow=18,SNR=5.2 | | | | | | |
| **RTAL** | **Retalhuleu** | **2.42** | **313** | | **Pn** | **13 33 35.2** | **+2.2** |
| **STG3** | **Santiaguito 3,** | **2.47** | **318** | *eP* | **Pn** | **13 33 34.2** | **+0.4** |
| **CRIN** | **San Cristobal** | **2.76** | **93** | | **Pn** | **13 33 39.1** | **+1.5** |
| **CRIN** | **San Cristobal** | **2.76** | **93** | *eP* | **Pn** | **13 33 39.7** | **+2.0** |
| **TGUH** | **Tegucigalpa,Un** | **2.80** | **64** | Pn | **Pn** | **13 33 40.4** | **+2.2** |
| **HUEH** | **Huehuetenango** | **2.91** | **327** | | **Pb** | **13 33 43.4** | **-3.4** |
| **CNGN** | **Cerro Negro** | **3.12** | **96** | | **Pn** | **13 33 44.0** | **+1.4** |
| **CNGN** | **Cerro Negro** | **3.12** | **96** | *eP* | **Pn** | **13 33 44.3** | **+1.7** |
| CNGN | | | | IAML | | 13 34 41.6 | |
| | comp=E,542nm,0.9s | | | | | | |
| **MOMN** | **Momotombo** | **3.28** | **97** | *eP* | **Pn** | **13 33 46.6** | **+1.7** |
| MOMN | | | | IAML | | 13 34 40.6 | |
| | comp=E,152nm,0.5s | | | | | | |
| **MGAN** | **Managua** | **3.61** | **101** | *eP* | **Pn** | **13 33 51.2** | **+1.9** |
| **MATN** | **Matagalpa** | **3.85** | **88** | | **Pn** | **13 33 53.5** | **+0.8** |
| **MATN** | **Matagalpa** | **3.85** | **88** | *eP* | **Pn** | **13 33 54.3** | **+1.6** |
| **CCIG** | **Comitan** | **4.05** | **328** | Pn | **Pn** | **13 33 56.6** | **+1.1** |
| **BOAB** | **JOAQUIN BROADBAN** | **4.13** | **95** | Pn | **Pn** | **13 33 57.0** | **+0.5** |
| **ACON** | **Acoyapa** | **4.67** | **100** | Pn | **Pn** | **13 34 04.5** | **+0.5** |
| **ACON** | **Acoyapa** | **4.67** | **100** | *eP* | **Pn** | **13 34 06.4** | **+2.4** |
| **HZTE** | **Horizontes, Gu** | **4.70** | **117** | *eP* | **Pn** | **13 34 07.5** | **+3.2** |
| **HZTE** | **Horizontes, Gu** | **4.70** | **117** | Pn | **Pn** | **13 34 07.2** | **+2.9** |
| **SAJU** | **San Juanillo,** | **4.93** | **124** | *eP* | **Pn** | **13 34 09.4** | **+1.9** |
| **ORTG** | **Ortega, Santa** | **4.99** | **119** | | **Pn** | **13 34 10.7** | **+2.4** |
| **DUNO** | **Dulce Nombre,** | **5.10** | **122** | | **Pn** | **13 34 12.3** | **+2.4** |
| **INDI** | **Punta indio, G** | **5.22** | **124** | *eP* | **Pn** | **13 34 13.7** | **+2.3** |
| **JTS** | **Las Juntas de** | **5.46** | **117** | Pn | Pn | 13 34 09.7 | -5.0 |
| | comp=E,0.3nm,0.3s,baz=311,slow=19,SNR=1.3 | | | | | | |
| JTS | | | | Sn | **Sn** | **13 35 13.6** | **-2.9** |
| | comp=E,2.4nm,0.3s,baz=318,slow=19,SNR=1.1 | | | | | | |
| JTS | | | | Lg | Lg | 13 35 39.2 | |
| | baz=21,slow=23,SNR=1.4 | | | | | | |
| **JTS** | **Las Juntas de** | **5.46** | **117** | Pn | **Pn** | **13 34 13.5** | **-1.2** |
| **ESPN** | **Las Esperanzas** | **5.48** | **96** | | **Pn** | **13 34 16.6** | **+1.6** |
| **LAFE** | **Finca La Fe, P** | **5.73** | **121** | *eP* | **Pn** | **13 34 20.2** | **+1.7** |
| **JACO** | **JACO, Garabito** | **6.02** | **121** | | **Pn** | **13 34 25.6** | **+3.2** |
| **CMIG** | **Matias Romero** | **6.42** | **312** | Pn | **Pn** | **13 34 30.5** | **+2.7** |
| | comp=E,1.3nm,0.3s,baz=111,slow=11,SNR=13 | | | | | | |
| CMIG | | | | Sn | **Sn** | **13 35 42.2** | **+2.0** |
| | comp=E,0.3nm,0.3s,baz=80,slow=22,SNR=1.3 | | | | | | |
| **PIRO** | **Carate, Puerto** | **7.80** | **124** | *eP* | **Pn** | **13 34 51.2** | **+4.3** |
| **CDITO** | **Canoas** | **8.09** | **121** | | **Pn** | **13 34 52.7** | **+1.8** |
| **SJCC** | **San Jacinto, C** | **14.70** | **100** | *iP* | **P** | **13 36 26.1** | **-1.2** |
| **SJCC** | **San Jacinto, C** | **14.70** | **100** | | **P** | **13 36 28.2** | **+0.8** |
| **UREC** | **San Jos de Ur** | **14.99** | **108** | *iP* | **P** | **13 36 30.9** | **+0.4** |
| **CBOC** | **Ciudad Bolivar** | **15.33** | **116** | *iP* | **P** | **13 36 35.7** | **+1.3** |
| **PLMC** | **San Jos del P** | **15.57** | **119** | *iP* | **P** | **13 36 40.5** | **+3.5** |
| **ZARC** | **Zaragoza, Cauc** | **15.71** | **108** | *iP* | **P** | **13 36 40.5** | **+2.1** |
| **ZARC** | **Zaragoza, Cauc** | **15.71** | **108** | | **P** | **13 36 39.5** | **+1.0** |
| **YOTC** | **Yotoco, Valle** | **16.02** | **122** | *iP* | **P** | **13 36 42.9** | **+0.9** |
| **SMLC** | **San Martn de** | **16.03** | **103** | *iP* | **Pn** | **13 36 38.1** | **-0.8** |
| **GUY2C** | **Guyana, Caldas** | **16.20** | **117** | *iP* | **P** | **13 36 45.3** | **+0.9** |
| **PTBC** | **PUERTO BERRIO,** | **16.44** | **111** | *iP* | **P** | **13 36 47.7** | **+1.1** |
| **NORC** | **Norcasia** | **16.48** | **115** | *iP* | **P** | **13 36 47.7** | **+0.6** |
| **ANIL** | **Santa Ana** | **16.53** | **119** | *iP* | **P** | **13 36 47.7** | **-0.2** |
| **POPC** | **Popayan, Colom** | **16.60** | **127** | *iP* | **Pn** | **13 36 47.7** | **+1.3** |
| **OCAC** | **Ocana** | **16.91** | **104** | | **P** | **13 36 51.4** | **-0.5** |
| OCAC | | | | IAmb | IAmb | 13 36 54.7 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,0.2s | | | | | | | |
| **SOTA** | **Rioblanco** | **16.91** | **128** | *iP* | **P** | **13 36 57.3** | **+5.0** |
| **PCON** | **Cinco Dias** | **16.95** | **127** | *iP* | **P** | **13 36 54.9** | **+2.0** |
| **ORTC** | **Ortega, Tolima** | **16.97** | **120** | *iP* | **Pn** | **13 36 50.1** | **-0.7** |
| **MARP** | **Paez Belalcaza** | **16.99** | **125** | *iP* | **P** | **13 36 57.3** | **+4.3** |
| **SPBC** | **San Pablo de B** | **17.15** | **113** | *iP* | **P** | **13 36 54.9** | **+0.3** |
| **ROSC** | **El Rosal** | **17.30** | **116** | Pn | **Pn** | **13 36 50.6** | **-4.6** |
| | comp=Z,1.4nm,0.3s,baz=268,slow=23,SNR=1.3 | | | | | | | |
| **PRAC** | **Prado** | **17.38** | **120** | *iP* | **P** | **13 36 57.3** | **+0.3** |
| **CHIC** | **Chingaza** | **17.91** | **116** | *iP* | **Pn** | **13 37 02.1** | **-0.8** |
| **FLOC** | **Florencia** | **18.00** | **127** | *iP* | **P** | **13 37 04.5** | **+0.6** |
| **SOCV** | **Socops** | **19.23** | **102** | *iP* | **Pn** | **13 37 18.8** | **+0.3** |
| **SDV** | **Santo Domingo** | **19.30** | **100** | P | **P** | **13 37 18.2** | **-0.1** |
| | comp=Z,0.9nm,0.3s,baz=276,slow=6.1,SNR=10.0 | | | | | | | |
| **SDV** | **Santo Domingo** | **19.30** | **100** | P | **P** | **13 37 19.2** | **+0.9** |
| **TX31** | **Lajitas Ar. Si** | **20.81** | **324** | P | Pn | 13 37 36.6 | -0.5 |
| **TX32** | **Lajitas Array** | **20.81** | **324** | P | Pn | 13 37 36.8 | -0.3 |
| TX32 | | | | IAmb | IAmb | 13 37 38.3 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **20.81** | **324** | P | Pn | 13 37 38.0 | +0.9 |
| | comp=Z,9.4nm,0.6s,baz=145,slow=12,SNR=14 | | | | | | | |
| TXAR | | | | PcP | **PcP** | **13 41 44.3** | **+1.3** |
| | comp=Z,0.3nm,0.6s,baz=186,slow=3.8,SNR=3.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **20.81** | **324** | P | Pn | 13 37 36.5 | -0.5 |
| **Z38A** | **Mt. Pleasant** | **20.84** | **348** | P | **P** | **13 37 35.4** | **+0.7** |
| Z38A | | | | IAmb | IAmb | 13 37 40.9 | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **Y49A** | **Blount Mountai** | **21.14** | **8** | P | **P** | **13 37 39.0** | **+1.0** |
| **GOGA** | **Godfrey** | **21.28** | **15** | P | **P** | **13 37 39.0** | **-0.5** |
| **X40A** | **Basin Creek Fa** | **21.70** | **353** | P | **P** | **13 37 44.0** | **0.0** |
| **BAUV** | **El Baul** | **21.78** | **98** | P | **P** | **13 37 44.6** | **-0.4** |
| BAUV | | | | IAmb | IAmb | 13 37 49.6 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **LOOK** | **Love County** | **22.07** | **344** | P | **P** | **13 37 48.4** | **+0.5** |
| LOOK | | | | IAmb | IAmb | 13 38 01.9 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **W41B** | **Gary Mavity, V** | **22.32** | **355** | P | **P** | **13 37 52.0** | **+1.3** |
| W41B | | | | IAmb | IAmb | 13 38 03.1 | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **22.82** | **343** | P | **P** | **13 37 56.1** | **+0.1** |
| X34A | | | | IAmb | IAmb | 13 37 56.9 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **ATAH** | **Atahualpa** | **22.90** | **150** | P | **P** | **13 37 58.1** | **+0.7** |
| | comp=Z,4.6nm,0.8s,baz=281,slow=16,SNR=1.8 | | | | | | | |
| ATAH | | | | LR | LR | 13 45 04.9 | | |
| | comp=Z,107nm,21.2s,baz=324,slow=32 | | | | | | | |
| **W35A** | **Tecumseh** | **23.08** | **345** | P | **P** | **13 37 57.7** | **-1.0** |
| **WMOK** | **Wichita Mounta** | **23.23** | **341** | P | **P** | **13 37 58.7** | **-1.5** |
| **WVT** | **Waverly** | **23.25** | **4** | P | **P** | **13 38 00.8** | **+0.6** |
| WVT | | | | IAmb | IAmb | 13 38 01.8 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **FNO** | **Franklin** | **23.32** | **344** | P | **P** | **13 38 00.1** | **-0.9** |
| **TKL** | **Tuckaleechee C** | **23.36** | **13** | P | **P** | **13 38 00.6** | **-0.9** |
| | comp=Z,4.0nm,0.6s,baz=

| | | | | | | |
|---|---|---|---|---|---|---|
| NV11 | | | | IAmb | IAmb | 13 39 55.8 |
| | comp=Z,14nm,1.4s | | | | | |
| **MDND** | **Maddock** | **35.82** | **349** | P | **P** | **13 39 51.9 -0.3** |
| **NVAR** | **Mina Array Bea** | **35.86** | **320** | P | **P** | **13 39 55.8 +2.9** |
| | comp=Z,6.9nm,1.0s,baz=135,slow=8.3,SNR=30 | | | | | |
| NVAR | | | | PcP | **PcP** | **13 42 21.7 +1.8** |
| | comp=Z,2.0nm,0.7s,baz=129,slow=3.4,SNR=10 | | | | | |
| NVAR | | | | LR | LR | 13 56 13.7 |
| | comp=Z,178nm,18.6s,baz=78,slow=39 | | | | | |
| **NVAR** | **Mina Array Bea** | **35.86** | **320** | P | **P** | **13 39 54.2 +1.2** |
| **KVN** | **Kaiserville** | **36.12** | **321** | P | **P** | **13 39 57.0 +1.9** |
| **LAO** | **LASA Array** | **36.43** | **341** | P | **P** | **13 39 57.5 +0.1** |
| LAO | | | | IAmb | IAmb | 13 39 58.9 |
| | comp=Z,12nm,1.1s | | | | | |
| **YERR** | **Yerington** | **36.78** | **320** | P | **P** | **13 40 02.5 +1.8** |
| YERR | | | | IAmb | IAmb | 13 40 04.4 |
| | comp=Z,14nm,1.5s | | | | | |
| **MCMT** | **McKenzie Canyo** | **37.41** | **333** | P | **P** | **13 40 07.0 +0.9** |
| **DGMT** | **Dagmar** | **37.45** | **344** | P | **P** | **13 40 06.5 +0.4** |
| **ULM** | **Lac du Bonnet** | **37.61** | **354** | P | **P** | **13 40 05.8 -1.6** |
| | comp=Z,9.3nm,0.7s,baz=181,slow=9.8,SNR=10.0 | | | | | |
| ULM | | | | LR | LR | 13 58 20.8 |
| | comp=Z,126nm,19.1s,baz=48,slow=41 | | | | | |
| **ULM** | **Lac du Bonnet** | **37.61** | **354** | P | **P** | **13 40 05.7 -1.6** |
| ULM | | | | IAmb | IAmb | 13 40 06.9 |
| | comp=Z,10nm,0.8s | | | | | |
| **LRM** | **Limekiln Ridge** | **38.02** | **334** | P | **P** | **13 40 12.1 +0.9** |
| **PLID** | **Pearl Lake** | **39.07** | **330** | P | **P** | **13 40 19.9 -0.1** |
| **F10A** | **Beach Ranch, E** | **40.31** | **330** | P | **P** | **13 40 30.3 +0.1** |
| **SIV** | **San Ignacio** | **40.41** | **134** | P | **P** | **13 40 31.2 0.0** |
| | comp=Z,4.7nm,0.8s,baz=304,slow=8.8,SNR=15 | | | | | |
| SIV | | | | LR | LR | 13 56 36.0 |
| | comp=Z,87nm,18.0s,baz=12,slow=35 | | | | | |
| **YBH** | **Yreka Blue Hor** | **40.54** | **321** | LR | LR | 14 01 24.0 |
| | comp=Z,87nm,19.0s,baz=140,slow=42 | | | | | |
| **PINE** | **Pine Mountain** | **40.76** | **325** | P | **P** | **13 40 35.0 +1.0** |
| **LVC** | **Limon Verde** | **40.80** | **150** | LR | LR | 13 55 49.1 |
| | comp=Z,82nm,20.1s,baz=322,slow=34 | | | | | |
| **H04A** | **Detroit Lake** | **42.02** | **325** | P | **P** | **13 40 45.1 +0.9** |
| H04A | | | | IAmb | IAmb | 13 40 50.9 |
| | comp=Z,15nm,1.2s | | | | | |
| **J01E** | **Myrtle Point** | **42.10** | **322** | P | **P** | **13 40 47.0 +2.1** |
| **C09A** | **Chrisman Ranch** | **42.13** | **331** | P | **P** | **13 40 46.3 +1.3** |
| **FFC** | **Flin Flon** | **42.84** | **350** | P | **P** | **13 40 50.5 -0.1** |
| **SCHQ** | **Schefferville** | **45.61** | **18** | P | **P** | **13 41 11.6 -1.3** |
| | comp=Z,13nm,0.6s,baz=222,slow=6.4,SNR=28 | | | | | |
| **SCHQ** | **Schefferville** | **45.61** | **18** | P | **P** | **13 41 11.1 -1.7** |
| **FCC** | **Fort Churchill** | **45.93** | **357** | P | **P** | **13 41 14.2 -1.0** |
| FCC | | | | IAmb | IAmb | 13 41 15.3 |
| | comp=Z,6.1nm,0.8s | | | | | |
| **YKA** | **Yellowknife Ar** | **52.62** | **346** | P | **P** | **13 42 06.0 -0.4** |
| | comp=Z,4.8nm,0.8s,baz=136,slow=7.3,SNR=83 | | | | | |
| YKA | | | | PcP | **PcP** | **13 43 16.3 +0.2** |
| | comp=Z,0.2nm,0.6s,baz=149,slow=3.6,SNR=4.4 | | | | | |
| **DLBC** | **Dease Lake** | **54.54** | **335** | P | **P** | **13 42 22.0 +1.4** |
| | comp=Z,3.1nm,0.8s,baz=114,slow=5.6,SNR=6.7 | | | | | |
| **DLBC** | **Dease Lake** | **54.54** | **335** | P | **P** | **13 42 21.8 +1.2** |
| DLBC | | | | IAmb | IAmb | 13 42 38.5 |
| | comp=Z,8.9nm,1.2s | | | | | |
| **P33M** | **Teslin, Yukon** | **56.77** | **336** | P | **P** | **13 42 36.8 +0.2** |
| P33M | | | | IAmb | IAmb | 13 42 57.5 |
| | comp=Z,8.5nm,1.4s | | | | | |
| **SFJD** | **Kangerlussuaq** | **59.99** | **17** | LR | LR | 14 09 42.0 |
| | comp=Z,151nm,18.2s,baz=74,slow=37 | | | | | |
| **C36M** | **Paulatuk** | **60.47** | **347** | P | **P** | **13 43 00.8 -1.2** |
| **RES** | **Resolute Bay** | **61.88** | **358** | P | **P** | **13 43 10.2 -1.4** |
| | comp=Z,3.8nm,0.7s,baz=180,slow=11,SNR=24 | | | | | |
| **RES** | **Resolute Bay** | **61.88** | **358** | P | **P** | **13 43 10.6 -0.9** |
| RES | | | | IAmb | IAmb | 13 43 11.3 |
| | comp=Z,4.7nm,0.8s | | | | | |
| **BCAR** | **Beaver Creek A** | **61.91** | **336** | P | **P** | **13 43 11.9 -0.2** |
| **INK** | **Inuvik** | **62.12** | **343** | P | **P** | **13 43 12.3 -0.9** |
| | comp=Z,1.9nm,0.6s,baz=130,slow=6.3,SNR=13 | | | | | |
| **INK** | **Inuvik** | **62.12** | **343** | P | **P** | **13 43 12.8 -0.5** |
| INK | | | | IAmb | IAmb | 13 43 14.4 |
| | comp=Z,3.8nm,1.1s | | | | | |
| **N25K** | **Chitina, Valde** | **62.39** | **334** | P | **P** | **13 43 16.9 +1.6** |
| **A36M** | **Sachs Harbour** | **62.77** | **348** | P | **P** | **13 43 16.4 -1.1** |
| A36M | | | | IAmb | IAmb | 13 43 17.4 |
| | comp=Z,4.1nm,0.7s | | | | | |
| **J25K** | **Salcha River,** | **64.05** | **337** | P | **P** | **13 43 27.1 +0.9** |
| J25K | | | | IAmb | IAmb | 13 43 49.3 |
| | comp=Z,4.0nm,1.2s | | | | | |
| **IL31** | | **64.70** | **337** | P | **P** | **13 43 30.9 +0.6** |
| IL31 | | | | IAmb | IAmb | 13 43 31.7 |
| | comp=Z,3.2nm,0.9s | | | | | |
| **ILAR** | **Eielson Array** | **64.70** | **337** | P | **P** | **13 43 30.2 -0.2** |
| | comp=Z,2.9nm,1.1s,baz=135,slow=4.3,SNR=13 | | | | | |
| **ILAR** | **Eielson Array** | **64.70** | **337** | P | **P** | **13 43 30.4 0.0** |
| **FYU** | **Fort Yukon** | **64.89** | **339** | P | **P** | **13 43 32.1 +0.6** |
| FYU | | | | IAmb | IAmb | 13 43 33.4 |
| | comp=Z,4.3nm,1.0s | | | | | |
| **RND** | **Reindeer** | **64.94** | **335** | P | **P** | **13 43 32.2 +0.1** |
| RND | | | | IAmb | IAmb | 13 43 33.8 |
| | comp=Z,7.8nm,1.2s | | | | | |
| **BMAR** | **Burnt Mountain** | **65.07** | **340** | P | **P** | **13 43 33.3 +0.4** |
| **MDM** | **Murphy Dome** | **65.30** | **336** | P | **P** | **13 43 33.6 -0.8** |
| MDM | | | | IAmb | IAmb | 13 43 46.7 |
| | comp=Z,5.0nm,1.4s | | | | | |
| **H24K** | **Noodor Dome** | **65.53** | **337** | P | **P** | **13 43 36.5 +0.7** |
| H24K | | | | IAmb | IAmb | 13 43 36.9 |
| | comp=Z,6.4nm,1.2s | | | | | |
| **TRF** | **Thorofare Moun** | **65.55** | **335** | P | **P** | **13 43 35.9 -0.3** |
| **CAST** | **Castle Rocks** | **66.30** | **334** | P | **P** | **13 43 40.7 -0.1** |
| CAST | | | | IAmb | IAmb | 13 43 49.2 |
| | comp=Z,5.1nm,1.4s | | | | | |
| **MLY** | **Manley** | **66.31** | **336** | P | **P** | **13 43 40.6 -0.3** |
| MLY | | | | IAmb | IAmb | 13 43 41.6 |
| | comp=Z,4.3nm,0.9s | | | | | |
| **N19K** | **Bonanza Creek** | **66.57** | **331** | P | **P** | **13 43 43.1 +0.4** |
| **SUMG** | **Summit** | **66.79** | **15** | P | **P** | **13 43 43.3 -0.9** |
| SUMG | | | | IAmb | IAmb | 13 43 53.9 |
| | comp=Z,9.0nm,1.5s | | | | | |
| **EUNU** | **Eureka** | **67.23** | **1** | P | **P** | **13 43 45.9 -0.7** |
| EUNU | | | | IAmb | IAmb | 13 43 46.8 |
| | comp=Z,3.2nm,0.7s | | | | | |
| **TOLK** | **Toolik Lake Re** | **67.29** | **340** | P | **P** | **13 43 46.4 -0.7** |
| TOLK | | | | IAmb | IAmb | 13 43 55.4 |
| | comp=Z,3.8nm,1.2s | | | | | |
| **J20K** | **Nowinta River** | **67.41** | **335** | P | **P** | **13 43 47.8 0.0** |
| J20K | | | | IAmb | IAmb | 13 43 58.0 |
| | comp=Z,5.3nm,1.4s | | | | | |
| **ESDC** | **Sonseca Array** | **78.80** | **52** | P | **P** | **13 44 54.3 -1.5** |
| | comp=Z,0.4nm,0.6s,baz=282,slow=5.5,SNR=4.5 | | | | | |
| **BILL** | **Bilibino** | **83.28** | **338** | P | **P** | **13 45 19.0 0.0** |
| BILL | | | | IAmb | IAmb | 13 45 19.9 |
| | comp=Z,7.2nm,1.3s | | | | | |
| **NOA** | **NORSAR Array B** | **84.15** | **29** | P | **P** | **13 45 22.6 -1.0** |
| | comp=Z,1.1nm,0.8s,baz=290,slow=5.2,SNR=2.1 | | | | | |
| **ARCES** | **ARCESS Array B** | **86.56** | **19** | P | **P** | **13 45 34.0 -1.4** |
| | comp=Z,3.0nm,0.9s,baz=337,slow=2.8,SNR=5.2 | | | | | |
| **ARCES** | **ARCESS Array B** | **86.56** | **19** | IAmb | IAmb | 13 45 47.8 |
| | comp=Z,5.0nm,1.1s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **88.63** | **77** | P | **P** | **13 45 44.9 -1.5** |
| | comp=Z,0.4nm,0.5s,baz=283,slow=6.4,SNR=2.4 | | | | | |
| **TIXI** | **Tiksi** | **91.79** | **349** | P | **P** | **13 45 59.0 -1.0** |
| **SONM** | **Songino Array** | **117.86** | **348** | PKP | **PKiKP** | **13 51 39.9 +0.5** |
| | comp=Z,0.2nm,0.4s,baz=30,slow=0.6,SNR=3.1 | | | | | |
| **KSRS** | **Korea Array** | **118.64** | **326** | PKP | **PKiKP** | **13 51 43.1 +2.1** |
| | comp=Z,0.8nm,0.6s,baz=15,slow=2.4,SNR=3.4 | | | | | |
| **MKAR** | **Makanchi Array** | **120.21** | **6** | PKP | **PKPdf** | **13 51 42.8 -1.0** |
| | comp=Z,0.2nm,0.3s,baz=277,slow=2.3,SNR=3.6 | | | | | |
| **CTA** | **Charters Tower** | **125.90** | **254** | PKP | **PKiKP** | **13 51 57.3 +1.6** |
| | comp=Z,0.6nm,0.3s,baz=13,slow=7.1,SNR=1.4 | | | | | |
| **WRA** | **Warramunga Arr** | **137.10** | **255** | PKP | **PKPdf** | **13 52 17.4 +0.9** |
| | comp=Z,0.3nm,0.8s,baz=104,slow=1.0,SNR=2.2 | | | | | |
| **ASAR** | **Alice Springs** | **137.21** | **249** | PKP | **PKPdf** | **13 52 16.9 +0.3** |
| | comp=Z,0.3nm,0.8s,baz=90,slow=2.6,SNR=2.8 | | | | | |
| **PZH** | **PanZhiHua** | **139.28** | **344** | PKP | **PKPdf** | **13 52 20.7 +0.1** |
| **FITZ** | **Fitzroy Crossi** | **145.42** | **257** | PKPbc | **PKiKP** | **13 52 35.2 -0.1** |
| | comp=Z,2.1nm,0.6s,baz=162,slow=6.4,SNR=2.6 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.69** | **344** | PKPbc | **PKPbc** | **13 52 38.8 +0.8** |
| | comp=Z,5.1nm,0.7s,baz=340,slow=3.6,SNR=36 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.69** | **344** | | **PKPbc** | **13 52 39.0 +1.0** |

*IDC **02** 13:40:27.7±1.4, 5.°46S×128.°57E, h338km±15km, mb3.1/6, mb1 3.4/13, mb1mx3.1/38, mbtmp4.1/13, Error ellipse: s-maj=20.6km s-min=13.5km az=78.0*
*DJA **02** 13:40:27.8±0.4, 6.°S±3.°×12.°9E±.°, h315km±5km, M4.2/13, mB4.9/2, mb4.2/8, MLv4.2/13, Mw(mB)4.2/2*
*NEIC **02** 13:40:27.7±1.0, 5.°47S±0.°04×128.°62E±0.°09, h333km±9km, mb4.1/15, Error ellipse: s-maj=13.5km s-min=4.6km az=109.0*

**ISC 02 13:40:27.2±0.5, 5.°48S±0.°05×128.°62E±0.°06, h337km, n49, σ1°44/57, mb3.4/7, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **1.83** | **347** | P | **Pn** | **13 41 15.2** | **-0.9** |
| AAI | | | | S | **S** | **13 41 53.3** | **-2.0** |
| **MSAI** | **Masohi** | **2.14** | **8** | P | **Pn** | **13 41 17.5** | **-0.9** |
| MSAI | | | | S | **S** | **13 41 55.4** | **-4.0** |
| **SAUI** | **Saumlaki** | **3.65** | **133** | P | **Pn** | **13 41 30.3** | **-1.5** |
| SAUI | | | | S | **S** | **13 42 21.5** | **-2.3** |
| **SAUI** | **Saumlaki** | **3.65** | **133** | Pn | **Pn** | **13 41 32.0** | **+0.2** |
| **SANI** | **Sanana** | **4.30** | **322** | P | **Pn** | **13 41 38.1** | **-0.5** |
| **FAKI** | **Fak Fak** | **4.42** | **55** | P | **Pn** | **13 41 39.8** | **-0.2** |
| **FAKI** | **Fak Fak** | **4.42** | **55** | | **Pn** | **13 41 39.6** | **-0.4** |
| **LBMI** | **Labuha** | **4.94** | **347** | P | **Pn** | **13 41 47.0** | **+1.4** |
| **SIJI** | **Sorong** | **5.29** | **30** | P | **Pn** | **13 41 49.5** | **0.0** |
| | 16nm,0.3s,baz=271,slow=20,SNR=25 | | | | | | |
| SIJI | | | | S | **S** | **13 42 52.0** | **-4.0** |
| | 8.2nm,0.3s,baz=263,slow=23,SNR=9.2 | | | | | | |
| **SWI** | **Sorong** | **5.29** | **30** | P | **Pn** | **13 41 49.4** | **-0.1** |
| | 0.4nm1μm78nm,0.5s | | | | | | |
| **SOEI** | **Soe** | **6.05** | **225** | P | **Pn** | **13 41 58.6** | **+0.2** |
| | 0.3nm22nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **6.05** | **225** | | **Pn** | **13 41 59.4** | **+1.0** |
| **BATI** | **Baumata** | **6.79** | **226** | P | **Pn** | **13 42 08.1** | **+1.1** |
| | 22nm,0.3s,baz=36,slow=3.1,SNR=20 | | | | | | |
| BATI | | | | S | **S** | **13 43 22.9** | **-4.9** |
| | 14nm,0.3s,baz=15,slow=2.5,SNR=18 | | | | | | |
| **BATI** | **Baumata** | **6.79** | **226** | P | **Pn** | **13 42 07.1** | **+0.2** |
| | 0.2nm30nm,0.4s | | | | | | |
| **MMRI** | **Maumere** | **7.07** | **243** | P | **Pn** | **13 42 09.5** | **-0.6** |
| | 0.2nm27nm,1.3s | | | | | | |
| **MMRI** | **Maumere** | **7.07** | **243** | Pn | **Pn** | **13 42 11.7** | **+1.6** |
| **MTN** | **Manton Dam** | **7.73** | **161** | Pn | **Pn** | **13 42 17.9** | **0.0** |
| **BASI** | **Baing, Sumba** | **9.25** | **239** | P | **Pn** | **13 42 37.2** | **+1.0** |
| | 36nm,1.0s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **10.04** | **245** | P | **Pn** | **13 42 45.8** | **+0.1** |
| **KNRA** | **Kununurra** | **10.14** | **179** | Pn | **Pn** | **13 42 47.0** | **+0.2** |
| **TOLI2** | **Tolitoli** | **10.20** | **310** | P | **P** | **13 42 50.3** | **+0.8** |
| **JAY** | **Jayapura** | **12.41** | **77** | P | **Pn** | **13 43 15.7** | **+1.5** |
| | 0.7nm,0.3s,baz=278,slow=22,SNR=2.0 | | | | | | |
| **DAV** | **Davao City (W)** | **12.83** | **346** | P | **P** | **13 43 18.3** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **12.88** | **193** | P | **P** | **13 43 19.6** | **+0.5** |
| | 1.1nm,0.3s,baz=31,slow=10,SNR=34 | | | | | | |
| FITZ | | | | S | **S** | **13 45 40.3** | **-0.9** |
| | 0.2nm,0.3s,baz=343,slow=20,SNR=1.5 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.66** | **257** | P | **P** | **13 43 38.5** | **-0.3** |
| **WB0** | **Warramunga Arr** | **15.28** | **159** | P | **P** | **13 43 45.6** | **+0.1** |
| **WRAB** | **Tennant Creek** | **15.41** | **159** | P | **P** | **13 43 47.1** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 13 43 51.9 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.42** | **159** | P | **P** | **13 43 46.9** | **-0.2** |
| | comp=Z,0.9nm,0.3s,baz=340,slow=11,SNR=38 | | | | | | |
| WRA | | | | S | **S** | **13 46 29.5** | **-3.4** |
| | comp=Z,0.3nm,0.3s,baz=343,slow=18,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.42** | **159** | P | **P** | **13 43 46.0** | **-1.0** |
| **WB2** | **Warramunga Arr** | **15.42** | **159** | P | **P** | **13 43 47.2** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 13 43 51.6 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.51** | **159** | P | **P** | **13 43 48.3** | **+0.3** |
| WR0 | | | | IAmb | IAmb | 13 43 55.4 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **COEN** | **Coen** | **16.63** | **121** | P | **P** | **13 44 00.8** | **+0.6** |
| COEN | | | | IAmb | IAmb | 13 44 02.1 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **17.81** | **208** | P | **P** | **13 44 12.9** | **0.0** |
| MBWA | | | | IAmb | IAmb | 13 44 35.9 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.12** | **207** | P | **P** | **13 44 16.5** | **+0.3** |
| PSA00 | | | | IAmb | IAmb | 13 44 16.6 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **18.79** | **165** | P | **P** | **13 44 23.5** | **+0.3** |
| AS31 | | | | IAmb | IAmb | 13 44 24.6 | |
| | comp=Z,2.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **18.79** | **165** | P | **P** | **13 44 23.6** | **+0.3** |
| | comp=Z,1.0nm,0.3s,baz=345,slow=12,SNR=115 | | | | | | |
| ASAR | | | | S | **S** | **13 47 36.6** | **-2.6** |
| | comp=Z,0.6nm,0.3s,baz=347,slow=22,SNR=40 | | | | | | |
| ASAR | | | | ScP | **ScP** | **13 51 37.4** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=358,slow=2.1,SNR=4.9 | | | | | | |
| **PMG** | **Port Moresby** | **18.79** | **103** | P | **P** | **13 44 25.2** | **+1.9** |
| | comp=Z,0.6nm,0.3s,baz=312,slow=4.8,SNR=5.9 | | | | | | |
| **PMG** | **Port Moresby** | **18.79** | **103** | IAmb | IAmb | 13 44 26.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **22.47** | **132** | P | **P** | **13 44 60.0** | **+1.2** |
| | comp=Z,2.7nm,0.9s,baz=18,slow=12,SNR=2.4 | | | | | | |
| **MORW** | **Morawa** | **26.31** | **205** | P | **P** | **13 45 33.1** | **-0.1** |
| **STKA** | **Stephens Creek** | **28.94** | **157** | P | **P** | **13 45 57.0** | **+0.6** |
| | comp=Z,0.6nm,0.4s,baz=353,slow=8.8,SNR=2.8 | | | | | | |
| **CAN** | **Canberra** | **35.15** | **150** | P | **P** | **13 46 51.7** | **+1.6** |
| CAN | | | | IAmb | IAmb | 13 47 02.6 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **42.71** | **359** | P | **P** | **13 47 52.7** | **+0.6** |
| | comp=Z,0.6nm,0.6s,baz=179,slow=9.6,SNR=2.3 | | | | | | |
| **JTM** | **Tenmabayashi** | **47.44** | **13** | P | **P** | **13 48 29.0** | **+0.1** |
| **WHZ** | **Wether Hill Ro** | **52.72** | **146** | P | **P** | **13 49 08.6** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **63.33** | **19** | P | **P** | **13 50 21.1** | **+0.1** |
| | comp=Z,2.8nm,0.9s,baz=186,slow=3.0,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.21** | **327** | P | **P** | **13 50 40.4** | **+0.8** |
| | comp=Z,0.3nm,0.4s,baz=113,slow=8.1,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.21** | **327** | P | **P** | **13 50 40.2** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **69.62** | **334** | P | **P** | **13 50 59.7** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=113,slow=13,SNR=1.9 | | | | | | |

*DDA **02** 13:50:44.8±0.0, 41.°16N×43.°89E, h7km±2km, ML2.1*
*TIF **02** 13:50:44.5, 41.°14N×43.°91E, h15km±1km*
*ISK **02** 13:50:44.8, 41.°12N×43.°84E, h8km, ML2.5/6*

**ISC 02 13:50:45.1±0.9, 41.°15N±0.°02×43.°89E±0.°02, h11km±8km, n24, σ0°82/44, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BGD** | **Bogdanovka** | **0.25** | **298** | P | **Pg** | **13 50 50.8** | **+0.4** |
| BGD | | | | S | **Sb** | **13 50 55.0** | **+1.2** |
| **DMNI** | **Dmanisi** | **0.29** | **51** | P | **Pg** | **13 50 51.3** | **+0.3** |
| DMNI | | | | S | **Sg** | **13 50 55.7** | **+0.7** |
| **AKH** | **Akhalkalaki** | **0.40** | **311** | P | **Pg** | **13 50 53.1** | **+0.1** |
| AKH | | | | S | **Sg** | **13 50 58.9** | **+0.6** |
| **AKH** | **Akhalkalaki** | **0.40** | **311** | PG | **Pg** | **13 50 52.9** | **-0.1** |
| AKH | | | | SG | **Sg** | **13 50 58.7** | **+0.4** |
| **KZRT** | **Kazreti** | **0.45** | **58** | P | **Pg** | **13 50 54.0** | **+0.1** |
| KZRT | | | | S | **Sg** | **13 51 00.3** | **+0.3** |
| **KZRT** | **Kazreti** | **0.45** | **58** | P | **Pg** | **13 50 54.0** | **+0.1** |
| KZRT | | | | S | **Sg** | **13 50 59.9** | **0.0** |
| **EAK** | **Akyaka** | **0.51** | **205** | P | **Pg** | **13 50 54.5** | **-0.5** |
| EAK | | | | S | **Sg** | **13 51 01.5** | **-0.2** |
| **KARS** | **Kars** | **0.81** | **230** | PG | **Pg** | **13 51 00.5** | **-0.1** |
| KARS | | | | SG | **Sg** | **13 51 10.6** | **-0.5** |
| **DIGO** | **Kars** | **0.83** | **208** | P | **Pb** | **13 51 01.2** | **-0.5** |
| DIGO | | | | S | **Sb** | **13 51 12.1** | **-0.9** |
| **BTNK** | **Botanikuri** | **0.87** | **52** | P | **Pg** | **13 50 58.9** | **-2.9** |
| BTNK | | | | S | **Sg** | **13 51 10.9** | **-2.2** |
| **EPOS** | **Posof** | **0.94** | **293** | P | **Pg** | **13 51 02.5** | **-0.8** |
| EPOS | | | | S | **Sg** | **13 51 15.0** | **-0.6** |
| **ABS** | **Abastumani** | **1.01** | **307** | P | **Pg** | **13 51 04.2** | **-0.3** |
| ABS | | | | S | **Sb** | **13 51 18.3** | **+0.1** |
| **GNI** | **Garni** | **1.19** | **147** | PN | **Pn** | **13 51 07.9** | **+0.1** |
| GNI | | | | SN | **Sn** | **13 51 24.8** | **+0.7** |
| **SENK** | **Senkaya-Erzuru** | **1.31** | **244** | PN | **Pn** | **13 51 09.3** | **-0.2** |
| **TKB** | **Tkibuli** | **1.38** | **331** | P | **Pb** | **13 51 11.0** | **+0.1** |
| TKB | | | | S | **Sg** | **13 51 30.0** | **+0.6** |
| **KOTA** | **Agri, Merkez-K** | **1.44** | **201** | P | **Pg** | **13 51 14.0** | **+1.2** |
| **ONI** | **Oni** | **1.48** | **347** | P | **Pg** | **13 51 13.6** | **+0.1** |
| ONI | | | | S | **Sg** | **13 51 34.0** | **+1.4** |
| **DAGI** | **Agillar** | **1.50** | **268** | P | **Pb** | **13 51 12.5** | **-0.4** |
| DAGI | | | | S | **Sg** | **13 51 32.4** | **-0.7** |
| DAGI | | | | *i* AML | AML | 13 51 34.0 | |
| | comp=N,30nm,0.4s | | | | | | |
| **DDEM** | **Demirkent** | **1.64** | **262** | P | **Pb** | **13 51 15.1** | **-0.2** |
| DDEM | | | | S | **Sb** | **13 51 36.7** | **+0.6** |
| DDEM | | | | *i* AML | AML | 13 51 41.0 | |
| | comp=N,71nm,0.4s | | | | | | |
| **DBAD** | **Bademkaya** | **1.67** | **266** | P | **Pb** | **13 51 15.7** | **-0.1** |
| DBAD | | | | S | **Sb** | **13 51 37.5** | **+0.6** |
| **DDFL** | **Dedoflistskaro** | **1.71** | **79** | P | **Pg** | **13 51 18.9** | **+1.2** |
| **BATM** | **Batumi** | **1.71** | **286** | PN | **Pb** | **13 51 16.2** | **-0.4** |
| BATM | | | | SN | **Sn** | **13 51 37.5** | **+0.6** |
| **LGD** | **Lagodekhi** | **1.90** | **68** | P | **Pb** | **13 51 19.8** | **+0.1** |
| LGD | | | | S | **Sg** | **13 51 46.3** | **+0.3** |
| **KOPR** | **Koprukoy-ERZUR** | **1.93** | **234** | PN | **Pn** | **13 51 18.3** | **+0.2** |

*IDC **02** 14:01:13.0±1.4, 1.°21S×146.°16E, h0km, mb3.6/8, mb1 3.8/8, mb1mx3.6/37, mbtmp3.6/8, Error ellipse: s-maj=47.5km s-min=23.4km az=104.0*

**ISC 02 14:01:18.3±1.3, 1.°3S±0.°2×146.°1E±0.°3, h35km, n14, σ0°45/8, mb3.6/8, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.86** | **211** | P | **P** | **14 06 07.6** | **-0.5** |
| | 0.7nm,0.6s,baz=34,slow=10,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **25.23** | **207** | P | **P** | **14 06 41.6** | **+0.5** |
| | 0.4nm,0.6s,baz=32,slow=11,SNR=8.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.19** | **45** | T | T | 14 36 39.0 | |
| | baz=228,slow=76,SNR=11 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.20** | **45** | T | T | 14 36 40.5 | |
| | baz=228,slow=76,SNR=5.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.21** | **45** | T | T | 14 36 44.4 | |
| | baz=228,slow=76,SNR=9.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.15** | **43** | T | T | 14 37 52.0 | |
| | baz=226,slow=76,SNR=3.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.17** | **43** | T | T | 14 37 53.2 | |
| | baz=226,slow=76,SNR=6.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.17** | **43** | T | T | 14 38 00.9 | |
| | baz=226,slow=76,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **50.34** | **295** | P | **P** | **14 10 12.7** | **+0.5** |
| | 1.0nm,0.7s,baz=126,slow=6.3,SNR=9.0 | | | | | | |
| **SONM** | **Songino Array** | **59.87** | **330** | P | **P** | **14 11 20.7** | **0.0** |
| | 0.2nm,0.3s,baz=131,slow=4.6,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.31** | **320** | P | **P** | **14 12 45.9** | **-0.5** |
| | 0.4nm,0.8s,baz=76,slow=5.1,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **81.50** | **24** | P | **P** | **14 13 31.8** | **-0.1** |
| | 0.6nm,1.0s,baz=231,slow=5.7,SNR=2.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **82.44** | **324** | P | **P** | **14 13 37.0** | **-0.1** |
| | 0.9nm,0.8s,baz=81,slow=9.2,SNR=5.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.40** | **27** | P | **P** | **14 14 39.1** | **+0.2** |
| | 0.2nm,0.6s,baz=278,slow=5.4,SNR=2.8 | | | | | | |

*IDC **02** 14:03:54.1±1.6, 0.°44S×123.°44E, h0km, mb3.3/3, mb1 3.6/4, mb1mx3.3/46, mbtmp3.5/4, ML3.5/1, MS3.4/2, Ms1 3.4/2, ms1mx2.8/35, Error ellipse: s-maj=55.4km s-min=26.6km az=66.0*
*DJA **02** 14:03:59.7±1.7, 1.°S±3.°×12.°3E±.°, h36km±37km, M3.9/13, mb4.2/1, MLv3.7/13*

**ISC 02 14:04:00.7±1.0, 0.°68S±0.°05×123.°48E±0.°05, h54km, n16, σ1°69/18, mb3.5/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **1.34** | **22** | P | **Pn** | **14 04 22.4** | **-0.7** |
| KMSI | | | | S | **Sn** | **14 04 39.6** | **-0.2** |
| **GTOI** | **Gorontalo** | **1.39** | **340** | P | **Pn** | **14 04 22.9** | **-0.8** |
| GTOI | | | | S | **Sn** | **14 04 42.7** | **+1.7** |
| **APSI** | **Ampana** | **1.85** | **263** | P | **Pn** | **14 04 29.2** | **-0.8** |
| APSI | | | | S | **Sn** | **14 04 54.2** | **+2.0** |
| **MRSI** | **Marisa** | **1.92** | **307** | P | **Pn** | **14 04 27.6** | **-3.4** |
| **SANI** | **Sanana** | **2.85** | **119** | P | **Pn** | **14 04 41.2** | **-2.6** |
| **MPSI** | **Mapaga** | **3.72** | **286** | P | **Pn** | **14 04 55.5** | **-0.2** |
| **LBMI** | **Labuha** | **4.02** | **89** | P | **Pn** | **14 04 59.8** | **0.0** |
| **TTSI** | **Tana Toraja** | **4.35** | **237** | P | **Pn** | **14 05 02.9** | **-1.4** |
| **SPSI** | **Sidrap Palu** | **4.94** | **229** | P | **Pn** | **14 05 11.4** | **-1.0** |
| **BNSI** | **Bone** | **5.01** | **222** | P | **Pn** | **14 05 13.1** | **-0.2** |
| **KAPI** | **Kappang** | **5.70** | **221** | Pn | **Pn** | **14 05 22.7** | **-0.1** |
| | 1.3nm,0.3s,baz=67,slow=7.7,SNR=5.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **14 06 25.4** | **-1.5** |
| | 1.1nm,0.3s,baz=180,slow=20,SNR=2.1 | | | | | | |
| **SIJI** | **Sorong** | **7.79** | **91** | LR | LR | 14 09 26.8 | |
| | comp=Z,46nm,20.0s,baz=45,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **21

*BJI* ***02*** *14:19:21.2±0.0,25°.35N×123°.43E,h200km,mb5.8/86, mB6.0/64*

*NIED* ***02*** *14:19:22.2,25°.41N×123°.42E,h201km,MW5.7,Moment Tensor Solution. s3 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-3.26; $M_{\theta\theta}$0.34; $M_{\phi\phi}$2.92; $M_{r\theta}$-1.78; $M_{\theta\phi}$-0.02; $M_{\phi r}$-1.32; Fault plane solution: $M_o$3.72000×$10^{17}$ NP1:$\phi_s$24.00000°, δ61.00000°,λ-68.00000°. NP2:$\phi_s$164.00000°,δ36.00000°, λ-124.00000°.*

*NEIC* ***02*** *14:19:22.3,25°.60N×123°.45E,h194km,Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-3.42; $M_{\theta\theta}$0.02; $M_{\phi\phi}$3.40; $M_{r\theta}$-2.58; $M_{\theta\phi}$0.31; $M_{\phi r}$-2.06; Fault plane solution: $M_o$4.75000×$10^{17}$ NP1:$\phi_s$32.42000°, δ67.20000°,λ-68.70000°. NP2:$\phi_s$167.25000°,δ30.80000°, λ-130.83000°. Principal axes: T 4.2536, Plg19.0000°, Azm107.0000°; N 0.8792, Plg20.0000°, Azm204.0000°; P -5.1328, Plg62.0000°, Azm335.0000°;*

*JMA* ***02*** *14:19:22.2±0.2,25°.41N×123°.42E,h201km,M5.8*

*JMA Felt II J1.*

*IDC* ***02*** *14:19:23.3±0.5,25°.56N×123°.41E,h198km±3km,mb5.5/49, mb1 5.5/55,mb1mx5.3/59,mbtmp6.0/55,MS4.6/11, Ms1 4.6/11,ms1mx3.9/90,Error ellipse: s-maj=7.5km s-min=4.4km az=69.0*

*NEIC* ***02*** *14:19:23.0±1.7,25°.57N±0°.06×123°.45E±0°.07, h196km±1km,mb5.8/486,Mwb5.7/24,Mww5.7,Error ellipse: s-maj=11.2km s-min=9.1km az=135.0*

*KEA* ***02*** *14:19:24.9,25°.63N×123°.26E,h187km,MS4.5/4*

*BGR* ***02*** *14:19:24.5±0.0,25°.56N×123°.41E,h224km±5km,mb6.0*

*GCMT* ***02*** *14:19:25.0±0.1,25°.51N±0°.01×123°.38E±0°.01, h201km,MW5.7/163,Moment Tensor Solution. s146,c279; s163,c329; Duration: 1s8 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-3.62±.04; $M_{\theta\theta}$0.21±.04; $M_{\phi\phi}$3.41±.05; $M_{r\theta}$-3.01±.04; $M_{\theta\phi}$-0.56±.05; $M_{\phi r}$-1.86±.04; Best double couple: $M_o$4.77800×$10^{17}$ NP1:$\phi_s$153.00000°,δ37.00000°, λ-135.00000°. NP2:$\phi_s$25.00000°,δ65.00000°, λ-62.00000°. Principal axes: T 3.8850, Plg15.0000°, Azm94.0000°; N 1.7880, Plg25.0000°, Azm192.0000°; P -5.6710, Plg60.0000°, Azm336.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***02*** *14:19:26,25°.52N×123°.45E,h200km,Moment Tensor Solution. Duration: 8s0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-3.64; $M_{\theta\theta}$0.80; $M_{\phi\phi}$2.84; $M_{r\theta}$-2.36; $M_{\theta\phi}$-0.30; $M_{\phi r}$-1.15; Fault plane solution: $M_o$4.24000×$10^{17}$ NP1: $\phi_s$159.00000°,δ39.00000°,λ-126.00000°. NP2: $\phi_s$22.00000°,δ60.00000°,λ-64.00000°. Principal axes: T 3.0463, Plg11.0000°, Azm94.0000°; N 1.7950, Plg22.0000°, Azm189.0000°; P -4.8413, Plg65.0000°, Azm339.0000°;*

**ISC 02 14:19:23.2±0.2,25°.52N±0°.02×123°.44E±0°.02,h202km±1km, h202km:pP-P,n2184,σ1s35/2512,mb5.8/513,301C-411D, Fault plane solution: NP1:$\phi_s$26.34242°,δ73.41731°, λ-103.31395°. NP2:$\phi_s$246.00728°,δ21.14833°, λ-52.28397°. Principal axes:** T Plg27.2372°, Azm126.8954°; N Plg12.7507°, Azm30.2062°; P Plg59.4618°, Azm277.6508°; **Fault plane solution: NP1:**$\phi_s$358.16696°,δ62.34787°,λ-83.68157°. **NP2:** $\phi_s$164.74806°,δ28.30922°,λ-101.86243°. **Principal axes:** T Plg17.1196°, Azm83.4963°; N Plg5.5943°, Azm175.2252°; P Plg71.9354°, Azm282.7013°;

**Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **1.13** | **200** | P | | **Pn** | | **14 19 52.3** | **-1.8** |
| YOJ | | | | S | | **S** | | **14 20 16.1** | **-1.6** |
| **YOJ** | **Yonaguni jima** baz=208 | **1.13** | **200** | ⇓*i*P | | **Pn** | | **14 19 52.3** | **-1.8** |
| YOJ | | | | *i* S | | **S** | | **14 20 15.3** | **-2.4** |
| **YOJ** | **Yonaguni jima** baz=208 | **1.13** | **200** | | | **Pn** | | **14 19 52.2** | **-1.8** |
| YOJ | | | | | Sn | **S** | | **14 20 14.6** | **-3.2** |
| **YOJ** | **Yonaguni jima** | **1.13** | **200** | P | | **Pn** | | **14 19 52.7** | **-1.3** |
| **JYNG** | **Yonagunijimaku** | **1.16** | **203** | P | | **Pn** | | **14 19 52.5** | **-1.8** |
| JYNG | | | | S | | **S** | | **14 20 16.8** | **-1.3** |
| **IRIF** | **Iriomote-Funau** | **1.21** | **167** | P | | **Pn** | | **14 19 52.6** | **-2.1** |
| IRIF | | | | S | | **S** | | **14 20 16.3** | **-2.5** |
| **JISG** | **Ishigakijimahi** | **1.22** | **140** | P | | **Pn** | | **14 19 53.1** | **-1.6** |
| JISG | | | | S | | **S** | | **14 20 16.9** | **-2.0** |
| **PCYT** | **Pengchaiyu** baz=279 | **1.24** | **275** | ⇓*i*P | | **Pn** | | **14 19 54.6** | **-0.2** |
| PCYT | | | | *i* S | | **S** | | **14 20 19.5** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **1.32** | **151** | P | | **Pn** | | **14 19 53.7** | **-1.8** |
| JIJ | | | | S | | **S** | | **14 20 17.2** | **-3.1** |
| **JKRS** | **Kuro-shima** | **1.38** | **158** | P | | **Pn** | | **14 19 54.5** | **-1.5** |
| JKRS | | | | S | | **S** | | **14 20 19.9** | **-1.3** |
| **TWB1** | **Santiao Chiao** baz=253 | **1.41** | **249** | *i* P | | **Pn** | | **14 19 55.7** | **-0.5** |
| TWB1 | | | | *i* S | | **S** | | **14 20 19.7** | **-1.8** |
| **JTJ** | **Tarama** | **1.44** | **127** | P | | **Pn** | | **14 19 55.4** | **-1.1** |
| JTJ | | | | S | | **S** | | **14 20 20.4** | **-1.6** |
| **SXI1** | **Grass Mountain** baz=261 | **1.48** | **254** | *i* P | | **Pn** | | **14 19 56.5** | **-0.4** |
| SXI1 | | | | *i* S | | **S** | | **14 20 22.1** | **-0.6** |
| **HATJ** | **Hateruma jima** | **1.50** | **167** | P | | **Pn** | | **14 19 55.4** | **-1.6** |
| HATJ | | | | S | | **S** | | **14 20 21.1** | **-1.8** |
| **TIPB** | **Shuangxi** baz=257 | **1.56** | **250** | *i* P | | **Pn** | | **14 19 57.3** | **-0.3** |
| TIPB | | | | S | | **S** | | **14 20 22.9** | **-0.9** |
| **NWF** | **Wu-fen Shan** baz=260 | **1.57** | **254** | ⇑*i*P | | **Pn** | | **14 19 57.5** | **-0.2** |
| NWF | | | | S | | **S** | | **14 20 23.8** | **-0.3** |
| **NTC** | **Toucheng** baz=244 | **1.60** | **246** | ⇑*i*P | | **Pn** | | **14 19 57.5** | **-0.4** |
| NTC | | | | *i* S | | **S** | | **14 20 23.0** | **-1.5** |
| **TWY** | **Chenhua** baz=265 | **1.68** | **262** | ⇑*i*P | | **Pn** | | **14 19 59.0** | **+0.3** |
| TWY | | | | S | | **S** | | **14 20 25.8** | **0.0** |
| **ILA** | **Ilan** baz=243 | **1.71** | **244** | ⇑*i*P | | **Pn** | | **14 19 58.6** | **-0.3** |
| ILA | | | | S | | **S** | | **14 20 25.7** | **-0.5** |
| **JIRB** | **Irabujima** | **1.71** | **113** | P | | **Pn** | | **14 19 58.0** | **-1.0** |
| JIRB | | | | S | | **S** | | **14 20 24.8** | **-1.5** |
| **YM01** | **YM01** baz=266 | **1.73** | **258** | ⇑*i*P | | **Pn** | | **14 19 59.4** | **+0.2** |
| YM01 | | | | *e*S | | **S** | | **14 20 26.9** | **+0.2** |
| **JIKM** | **Ikemajima** | **1.74** | **110** | P | | **Pn** | | **14 19 58.7** | **-0.5** |
| JIKM | | | | S | | **S** | | **14 20 25.7** | **-1.0** |
| **TWA** | **Mucha** baz=260 | **1.77** | **253** | ⇑*i*P | | **Pn** | | **14 19 59.2** | **-0.3** |
| TWA | | | | *i* S | | **S** | | **14 20 26.5** | **-0.7** |
| **ANP** | **Anpu** baz=267 | **1.77** | **259** | ⇑*i*P | | **Pn** | | **14 19 59.5** | **-0.1** |
| ANP | | | | *i* S | | **S** | | **14 20 26.8** | **-0.6** |
| **TWE** | **Neicheng** baz=242 | **1.80** | **244** | ⇑*i*P | | **Pn** | | **14 19 59.0** | **-0.8** |
| TWE | | | | *e*S | | **S** | | **14 20 27.3** | **-0.4** |
| **NDS** | **Dongshan** baz=242 | **1.80** | **241** | ⇑P | | **Pn** | | **14 19 59.0** | **-0.8** |
| NDS | | | | S | | **S** | | **14 20 26.4** | **-1.3** |
| **TAP** | **Taipei** baz=263 | **1.82** | **255** | P | | **Pn** | | **14 19 59.5** | **-0.5** |
| TAP | | | | *e*S | | **S** | | **14 20 28.0** | **0.0** |
| **JMJ** | **Miyako jima 2** | **1.82** | **112** | P | | **Pn** | | **14 20 01.0** | **+1.0** |
| **NHDH** | **Xindian Distri** baz=260 | **1.82** | **253** | ⇑*i*P | | **Pn** | | **14 19 59.9** | **-0.2** |
| NHDH | | | | *i* S | | **S** | | **14 20 26.8** | **-1.3** |
| **NTST** | **Danshui** baz=265 | **1.84** | **259** | ⇑*e*P | | **Pn** | | **14 20 00.6** | **+0.5** |
| NTST | | | | S | | **S** | | **14 20 28.3** | **0.0** |
| **FUSB** | **Fushanzhiwuyua** baz=250 | **1.84** | **246** | ⇑*i*P | | **Pn** | | **14 19 59.5** | **-0.9** |
| FUSB | | | | *e*S | | **S** | | **14 20 26.7** | **-1.9** |
| **TATO** | **Taipei** baz=250 | **1.85** | **253** | Pn | | **Pn** | | **14 19 59.8** | **-0.5** |
| **TATO** | **Taipei** | **1.85** | **253** | P | | **Pn** | | **14 19 59.9** | **-0.4** |
| **EWUT** | **Wuta** baz=236 | **1.85** | **235** | ⇑P | | **Pn** | | **14 19 59.3** | **-1.0** |
| EWUT | | | | *i* S | | **S** | | **14 20 27.4** | **-1.3** |
| **JMJ2** | **Miyako jima3** | **1.88** | **114** | P | | **Pn** | | **14 20 00.2** | **-0.4** |
| JMJ2 | | | | S | | **S** | | **14 20 28.3** | **-0.8** |
| **TWS1** | **Kuangyinshan** baz=264 | **1.88** | **257** | ⇑*i*P | | **Pn** | | **14 20 00.8** | **+0.2** |
| TWS1 | | | | S | | **S** | | **14 20 29.9** | **+0.8** |
| **ENA** | **Nanau** baz=233 | **1.89** | **235** | ⇑*e*P | | **Pn** | | **14 19 59.4** | **-1.3** |
| ENA | | | | *e*S | | **S** | | **14 20 27.9** | **-1.4** |
| **NWLT** | **Wulai** baz=251 | **1.91** | **247** | ⇑P | | **Pn** | | **14 20 00.3** | **-0.7** |
| NWLT | | | | S | | **S** | | **14 20 27.5** | **-2.2** |
| **ENTT** | **Nioudou** baz=240 | **1.92** | **243** | ⇑P | | **Pn** | | **14 20 00.2** | **-0.8** |
| ENTT | | | | *e*S | | **S** | | **14 20 30.1** | **+0.3** |
| **JOGS** | **Gusukube** | **1.94** | **113** | P | | **Pn** | | **14 20 00.9** | **-0.3** |
| JOGS | | | | S | | **S** | | **14 20 29.2** | **-0.9** |
| **EHP** | **Heping Village** baz=229 | **1.96** | **232** | *e*P | | **Pn** | | **14 19 59.9** | **-1.5** |
| EHP | | | | *e*S | | **S** | | **14 20 28.5** | **-2.1** |
| **NDT** | **Datong Townshi** baz=242 | **1.98** | **243** | ⇑P | | **Pn** | | **14 20 01.0** | **-0.5** |
| NDT | | | | *e*S | | **S** | | **14 20 30.6** | **-0.3** |
| **LATG** | **Datong** baz=239 | **2.00** | **241** | ⇑P | | **Pn** | | **14 20 01.3** | **-0.7** |
| LATG | | | | *e*S | | **S** | | **14 20 31.0** | **-0.5** |
| **YHNB** | **Yeheng** baz=253 | **2.06** | **246** | ⇑*i*P | | **Pn** | | **14 20 01.7** | **-0.8** |
| YHNB | | | | S | | **S** | | **14 20 31.0** | **-1.5** |
| **YHNB** | **Yeheng** | **2.06** | **246** | Pn | | **Pn** | | **14 20 01.6** | **-0.9** |
| **YHNB** | **Yeheng** | **2.06** | **246** | P | | **Pn** | | **14 20 02.5** | **0.0** |
| **NSK** | **Sanguang** baz=253 | **2.07** | **246** | ⇑*i*P | | **Pn** | | **14 20 01.7** | **-0.9** |
| NSK | | | | *e*S | | **S** | | **14 20 31.0** | **-1.7** |
| **NCU** | **National Centr** baz=262 | **2.12** | **255** | *e*P | | **Pn** | | **14 20 02.7** | **-0.3** |
| NCU | | | | S | | **S** | | **14 20 34.5** | **+1.2** |
| **NCUH** | **Zhongli** baz=262 | **2.12** | **255** | *e*P | | **Pn** | | **14 20 02.6** | **-0.4** |
| NCUH | | | | *e*S | | **S** | | **14 20 33.1** | **-0.3** |
| **ETL** | **Fush Village** baz=234 | **2.14** | **231** | *e*P | | **Pn** | | **14 20 01.3** | **-2.0** |
| ETL | | | | *e*S | | **S** | | **14 20 31.4** | **-2.6** |
| **NACB** | **Ninganchiao** baz=230 | **2.15** | **232** | ⇑*i*P | | **Pn** | | **14 20 01.3** | **-2.1** |
| NACB | | | | *e*S | | **S** | | **14 20 30.6** | **-3.5** |
| **NACB** | **Ninganchiao** | **2.15** | **232** | | | **Pn** | | **14 20 01.2** | **-2.1** |
| **NNSB** | **Datong** baz=238 | **2.16** | **240** | ⇑*i*P | | **Pn** | | **14 20 02.8** | **-0.8** |
| NNSB | | | | S | | **S** | | **14 20 32.9** | **-1.6** |
| **NNS** | **Nan Shan** baz=237 | **2.17** | **241** | ⇑P | | **Pn** | | **14 20 02.8** | **-0.8** |
| NNS | | | | *e*S | | **S** | | **14 20 32.7** | **-1.8** |
| **TWD** | **Chiawan** baz=233 | **2.21** | **230** | *e*P | | **Pn** | | **14 20 02.0** | **-2.0** |
| TWD | | | | *e*S | | **S** | | **14 20 31.8** | **-3.4** |
| **ETLH** | **Xiulin Townshi** baz=232 | **2.21** | **234** | ⇑*i*P | | **Pn** | | **14 20 02.4** | **-1.7** |
| ETLH | | | | *e*S | | **S** | | **14 20 32.3** | **-3.1** |
| **HWA** | **Hwalien** baz=230 | **2.27** | **228** | *e*P | | **Pn** | | **14 20 02.8** | **-1.9** |
| HWA | | | | *e*S | | **S** | | **14 20 33.8** | **-2.5** |
| **NFF** | **Wufeng Townshi** baz=243 | **2.29** | **248** | ⇑P | | **Pn** | | **14 20 04.0** | **-0.9** |
| NFF | | | | *e*S | | **S** | | **14 20 34.9** | **-1.8** |
| **SBCB** | **Hsinchu** baz=255 | **2.34** | **252** | ⇑*i*P | | **Pn** | | **14 20 05.1** | **-0.3** |
| SBCB | | | | S | | **S** | | **14 20 37.1** | **-0.6** |
| **HSN** | **Hsinchu** baz=256 | **2.35** | **253** | ⇑P | | **Pn** | | **14 20 04.7** | **-0.8** |
| HSN | | | | *e*S | | **S** | | **14 20 37.1** | **-0.7** |
| **FUSS** | **Fushou** baz=237 | **2.37** | **238** | ⇑*e*P | | **Pn** | | **14 20 05.3** | **-0.7** |
| FUSS | | | | *e*S | | **S** | | **14 20 37.0** | **-1.6** |
| **LIOB** | **Emei** baz=244 | **2.37** | **249** | ⇑*i*P | | **Pn** | | **14 20 04.9** | **-0.8** |
| LIOB | | | | *e*S | | **S** | | **14 20 37.2** | **-1.0** |
| **NSTT** | **Nanjuang** baz=244 | **2.38** | **249** | ⇑*i*P | | **Pn** | | **14 20 05.0** | **-0.9** |
| NSTT | | | | *e*S | | **S** | | **14 20 36.7** | **-1.8** |
| **WHF** | **Hehuan Shan** baz=233 | **2.41** | **236** | ⇑*i*P | | **Pn** | | **14 20 05.3** | **-1.3** |
| WHF | | | | S | | **S** | | **14 20 37.7** | **-2.1** |
| **TWT** | **Tachien** baz=242 | **2.42** | **239** | *i* P | | **Pn** | | **14 20 05.8** | **-0.6** |
| TWT | | | | S | | **S** | | **14 20 38.1** | **-1.4** |
| **TDCB** | **Techi** baz=242 | **2.43** | **239** | ⇑*i*P | | **Pn** | | **14 20 06.0** | **-0.5** |
| TDCB | | | | S | | **S** | | **14 20 36.9** | **-2.8** |
| **ESL** | **Shilin** baz=230 | **2.50** | **227** | ⇑*i*P | | **Pn** | | **14 20 04.8** | **-2.4** |
| ESL | | | | *e*S | | **S** | | **14 20 37.4** | **-3.4** |
| **CHGB** | **Renai** baz=233 | **2.52** | **235** | ⇑*i*P | | **Pn** | | **14 20 06.7** | **-1.0** |
| CHGB | | | | S | | **S** | | **14 20 39.7** | **-2.0** |
| **WHP** | **Taichung City** baz=250 | **2.58** | **242** | ⇑*i*P | | **Pn** | | **14 20 07.6** | **-0.6** |
| WHP | | | | S | | **S** | | **14 20 40.9** | **-1.7** |
| **NMLH** | **Miaoli** baz=246 | **2.60** | **248** | ⇑P | | **Pn** | | **14 20 08.1** | **-0.1** |
| NMLH | | | | S | | **S** | | **14 20 41.8** | **-1.0** |
| **EGFH** | **Guangfu** baz=228 | **2.60** | **225** | *e*P | | **Pn** | | **14 20 06.5** | **-1.9** |
| EGFH | | | | *e*S | | **S** | | **14 20 38.7** | **-4.2** |
| **WUSB** | **Renai** baz=234 | **2.61** | **235** | ⇑*i*P | | **Pn** | | **14 20 07.4** | **-1.1** |
| WUSB | | | | S | | **S** | | **14 20 39.8** | **-3.4** |
| **NSY** | **Sanyi** baz=248 | **2.67** | **246** | ⇑P | | **Pn** | | **14 20 08.3** | **-0.8** |
| NSY | | | | S | | **S** | | **14 20 42.4** | **-1.9** |
| **TWQ1** | **Liyutan** baz=247 | **2.69** | **245** | ⇑*i*P | | **Pn** | | **14 20 08.2** | **-1.1** |
| TWQ1 | | | | S | | **S** | | **14 20 43.3** | **-1.4** |
| **WCS** | **Beigang Elemen** baz=236 | **2.72** | **238** | ⇑P | | **Pn** | | **14 20 09.0** | **-0.7** |
| WCS | | | | S | | **S** | | **14 20 43.6** | **-1.7** |
| **HGSD** | **Ruisui** baz=229 | **2.73** | **223** | *e*P | | **Pn** | | **14 20 07.7** | **-2.1** |
| HGSD | | | | *e*S | | **S** | | **14 20 41.8** | **-3.8** |
| **VWDT** | **VWDT** baz=230 | **2.74** | **230** | ⇑*i*P | | **Pn** | | **14 20 08.6** | **-1.2** |
| VWDT | | | | *e*S | | **S** | | **14 20 41.4** | **-4.2** |
| **EHY** | **Hungye** baz=229 | **2.79** | **224** | P | | **Pn** | | **14 20 08.2** | **-2.3** |
| EHY | | | | *e*S | | **S** | | **14 20 42.7** | **-4.0** |
| **WDJ** | **Dajia District** baz=248 | **2.80** | **246** | ⇑P | | **Pn** | | **14 20 09.8** | **-0.8** |
| WDJ | | | | S | | **S** | | **14 20 45.1** | **-1.8** |
| **SMLT** | **Sun Moon Lake** baz=236 | **2.83** | **235** | ⇑*i*P | | **Pn** | | **14 20 10.4** | **-0.7** |
| SMLT | | | | *e*S | | **S** | | **14 20 46.8** | **-0.9** |
| **SSLB** | **Suanglung** baz=234 | **2.85** | **233** | P | | **Pn** | | **14 20 10.4** | **-0.8** |
| SSLB | | | | *e*S | | **S** | | **14 20 46.7** | **-1.3** |
| **SSLB** | **Suanglung** | **2.85** | **233** | Pn | | **Pn** | | **14 20 10.1** | **-1.1** |
| **SSLB** | **Suanglung** | **2.85** | **233** | P | | **Pn** | | **14 20 11.1** | **-0.1** |
| **TYC** | **Yuchr** baz=236 | **2.85** | **236** | ⇑*i*P | | **Pn** | | **14 20 10.4** | **-0.7** |
| TYC | | | | *e*S | | **S** | | **14 20 45.8** | **-2.2** |
| **TCU** | **Taichung** baz=250 | **2.86** | **242** | ⇑*i*P | | **Pn** | | **14 20 10.5** | **-0.8** |
| TCU | | | | *e*S | | **S** | | **14 20 46.2** | **-1.9** |
| **YULB** | **Yu-li** baz=233 | **2.88** | **223** | P | | **Pn** | | **14 20 09.3** | **-2.3** |
| YULB | | | | *e*S | | **S** | | **14 20 44.6** | **-4.2** |
| **YULB** | **Yu-li** | **2.88** | **223** | Pn | | **Pn** | | **14 20 08.9** | **-2.7** |
| **EYUL** | **Yuli** baz=233 | **2.91** | **222** | ⇑*e*P | | **Pn** | | **14 20 10.3** | **-1.5** |
| EYUL | | | | *e*S | | **S** | | **14 20 46.8** | **-2.4** |
| **WCHH** | **Zhanghua** baz=244 | **2.99** | **242** | P | | **Pn** | | **14 20 11.6** | **-1.2** |
| WCHH | | | | *e*S | | **S** | | **14 20 48.0** | **-2.9** |
| **WJS** | **Zhushan** baz=238 | **2.99** | **236** | ⇑P | | **Pn** | | **14 20 12.1** | **-0.7** |
| WJS | | | | *e*S | | **S** | | **14 20 49.4** | **-1.6** |
| **WNT** | **Mingjian** baz=239 | **3.00** | **237** | ⇑P | | **Pn** | | **14 20 12.0** | **-0.9** |
| WNT | | | | S | | **S** | | **14 20 49.2** | **-1.8** |
| **FULB** | **Fuli** baz=217 | **3.03** | **221** | ⇑P | | **Pn** | | **14 20 11.4** | **-1.9** |
| FULB | | | | *e*S | | **S** | | **14 20 49.3** | **-2.5** |
| **CHKT** | **Chengkung** baz=215 | **3.07** | **219** | P | | **Pn** | | **14 20 11.1** | **-2.6** |
| CHKT | | | | *e*S | | **S** | | **14 20 48.4** | **-4.2** |
| **JKE** | **Kume jima 2** | **3.12** | **74** | P | | **Pn** | | **14 20 13.0** | **-1.2** |
| JKE | | | | S | | **S** | | **14 20 52.5** | **-1.0** |
| **ALS** | **Alishan** baz=228 | **3.13** | **231** | ⇑P | | **Pn** | | **14 20 14.0** | **-0.8** |
| ALS | | | | *e*S | | **S** | | **14 20 53.8** | **-0.6** |
| **CHN5** | **Tsauling** baz=242 | **3.16** | **233** | ⇑*i*P | | **Pn** | | **14 20 14.0** | **-0.9** |
| CHN5 | | | | *e*S | | **S** | | **14 20 52.0** | **-2.7** |
| **EDH** | **Donghe** baz=220 | **3.20** | **218** | *e*P | | **Pn** | | **14 20 13.2** | **-2.1** |
| EDH | | | | *e*S | | **S** | | **14 20 52.1** | **-3.4** |
| **ELDTW** | **Lidau** baz=220 | **3.21** | **224** | ⇑P | | **Pn** | | **14 20 13.5** | **-2.1** |
| ELDTW | | | | *e*S | | **S** | | **14 20 52.2** | **-3.5** |
| **WDLH** | **Douliu** baz=238 | **3.21** | **236** | P | | **Pn** | | **14 20 14.7** | **-0.8** |
| WDLH | | | | *e*S | | **S** | | **14 20 54.6** | **-1.0** |
| **WRL** | **Guolierlin Hig** baz=242 | **3.22** | **241** | *e*P | | **Pn** | | **14 20 14.2** | **-1.3** |
| WRL | | | | *e*S | | **S** | | **14 20 52.9** | **-2.9** |
| **XPSS** | **Dashiqiu** baz=296 | **3.24** | **296** | ⇑*i*P | | **Pn** | | **14 20 15.2** | **-0.5** |
| XPSS | | | | S | | **S** | | **14 20 55.5** | **-0.7** |
| **WTCT** | **Ta-ch'eng** baz=242 | **3.32** | **241** | *e*P | | **Pn** | | **14 20 15.3** | **-1.3** |
| WTCT | | | | *e*S | | **S** | | **14 20 54.6** | **-3.2** |
| **WTK** | **Tuku** baz=247 | **3.33** | **237** | ⇑P | | **Pn** | | **14 20 15.8** | **-1.0** |
| WTK | | | | S | | **S** | | **14 20 55.2** | **-2.9** |
| **CHN2** | **Minshiung** baz=244 | **3.35** | **234** | *e*P | | **Pn** | | **14 20 16.1** | **-0.9** |
| CHN2 | | | | *e*S | | **S** | | **14 20 56.2** | **-2.5** |
| **LONT** | **Longtian** baz=221 | **3.35** | **219** | ⇑*i*P | | **Pn** | | **14 20 14.8** | **-2.3** |
| LONT | | | | S | | **S** | | **14 20 54.6** | **-4.1** |
| **LDUT** | **Ludao** baz=218 | **3.36** | **213** | *e*P | | **Pn** | | **14 20 14.8** | **-2.4** |
| LDUT | | | | *e*S | | **S** | | **14 20 54.1** | **-4.8** |
| **STYH** | **Taoyuan** baz=228 | **3.38** | **227** | ⇑P | | **Pn** | | **14 20 16.6** | **-0.8** |
| STYH | | | | *e*S | | **S** | | **14 20 57.4** | **-1.8** |
| **TPUB** | **Ta-pu** baz=225 | **3.39** | **230** | ⇑*i*P | | **Pn** | | **14 20 16.3** | **-1.3** |
| TPUB | | | | *e*S | | **S** | | **14 20 56.4** | **-3.0** |
| **TPUB** | **Ta-pu** | **3.39** | **230** | | | **Pn** | | **14 20 15.7** | **-1.9** |
| **TPUB** | **Ta-pu** | **3.39** | **230** | P | | **Pn** | | **14 20 16.9** | **-0.7** |
| **CHY** | **Chiayi** baz=243 | **3.41** | **234** | ⇑*e*P | | **Pn** | | **14 20 16.7** | **-1.1** |
| CHY | | | | *e*S | | **S** | | **14 20 57.2** | **-2.6** |
| **WTP** | **Ta-pu** baz=231 | **3.43** | **229** | ⇑*i*P | | **Pn** | | **14 20 16.8** | **-1.3** |
| WTP | | | | *e*S | | **S** | | **14 20 58.4** | **-2.2** |
| **TWGBT** | **Beinan** baz=221 | **3.45** | **219** | ⇑*i*P | | **Pn** | | **14 20 15.7** | **-2.6** |
| TWGBT | | | | S | | **S** | | **14 20 55.8** | **-5.1** |
| **TWG** | **Pinlang** | **3.45** | **219** | | | **Pn** | | **14 20 15.7** | **-2.6** |
| **TTN** | **Taitung** baz=225 | **3.46** | **218** | *e*P | | **Pn** | | **14 20 17.1** | **-1.4** |
| **LYJJ** | **Jianjiangzhen** baz=288 | **3.47** | **288** | ⇑*i*P | | **Pn** | | **14 20 18.0** | **-0.4** |
| **WSF** | **Szhu** baz=234 | **3.48** | **238** | *e*P | | **Pn** | | **14 20 17.1** | **-1.5** |
| WSF | | | | *e*S | | **S** | | **14 20 58.6** | **-2.8** |
| **TWK** | **Hsinying** baz=232 | **3.51** | **231** | ⇑*i*P | | **Pn** | | **14 20 17.8** | **-1.3** |
| TWK | | | | *e*S | | **S** | | **14 20 59.8** | **-2.3** |
| **SNST** | **Tainan City** baz=232 | **3.53** | **230** | ⇑*i*P | | **Pn** | | **14 20 18.2** | **-1.1** |
| SNST | | | | *e*S | | **S** | | **14 21 00.1** | **-2.5** |
| **CHN1** | **Nanshi** baz=231 | **3.53** | **229** | ⇑*i*P | | **Pn** | | **14 20 18.1** | **-1.2** |
| CHN1 | | | | S | | **S** | | **14 20 59.9** | **-2.8** |
| **WSL** | **Shuilin Townsh** baz=238 | **3.54** | **236** | ⇑P | | **Pn** | | **14 20 18.0** | **-1.4** |
| WSL | | | | *e*S | | **S** | | **14 21 00.7** | **-2.1** |
| **SGST** | **Jiashian** baz=229 | **3.56** | **228** | ⇑*i*P | | **Pn** | | **14 20 17.9** | **-1.8** |
| SGST | | | | S | | **S** | | **14 21 00.7** | **-2.7** |
| **JAGN** | **Aguni-jima** | **3.58** | **72** | P | | **Pn** | | **14 20 18.4** | **-1.4** |
| JAGN | | | | S | | **S** | | **14 21 02.2** | **-1.4** |
| **ICHU** | **Yijhu** baz=235 | **3.60** | **234** | *e*P | | **Pn** | | **14 20 18.9** | **-1.2** |
| ICHU | | | | *e*S | | **S** | | **14 21 00.0** | **-4.0** |
| **ECL** | **Taimali** baz=220 | **3.70** | **218** | ⇑P | | **Pn** | | **14 20 18.5** | **-2.8** |
| ECL | | | | *e*S | | **S** | | **14 21 00.3** | **-6.0** |
| **CHN3** | **Shinhua** baz=238 | **3.72** | **230** | ⇑*e*P | | **Pn** | | **14 20 21.1** | **-0.4** |
| CHN3 | | | | *e*S | | **S** | | **14 21 06.1** | **-0.6** |

baz=238
**SSHA Shanhua** 3.73 231 *e*P Pn 14 20 21.1 -0.6
baz=232
**SHHT Tainan City** 3.77 229 ⇑P Pn 14 20 22.1 -0.1
baz=237
SHHT *e*S **S** 14 21 05.7 -2.0
baz=237
**SSD Sandimen** 3.77 223⇑*i*P Pn 14 20 21.4 -0.8
baz=225
**SCLT Jiali** 3.77 232 *e*P Pn 14 20 21.4 -0.8
baz=240
SCLT *e*S **S** 14 21 05.8 -2.1
baz=240
**TSMG Majia** 3.79 223 ⇑P Pn 14 20 21.8 -0.7
baz=224
TSMG *e*S **S** 14 21 06.1 -2.3
baz=224
**TAI1 Yung-k'ang** 3.84 231⇑*e*P Pn 14 20 22.4 -0.6
baz=232
TAI1 S **S** 14 21 08.6 -0.6
baz=232
**TWM1 Shoushan** 3.85 226 ⇑P Pn 14 20 22.7 -0.5
baz=228
**MASBT Mashibuluo** 3.87 222⇑*e*P Pn 14 20 22.7 -0.8
baz=223
MASBT *e*S **S** 14 21 08.7 -1.5
baz=223
**SGLT Jiouru** 3.88 225 *e*P Pn 14 20 22.7 -0.8
baz=226
**LAY Lan-yu** 3.88 207 *e*P Pn 14 20 21.2 -2.4
baz=208
**LYUB Lan-yu** 3.90 206 *e*P Pn 14 20 21.1 -2.6
baz=204
LYUB *e*S **S** 14 21 04.5 -6.3
baz=204
**TAW Tawu** 3.92 217 *e*P Pn 14 20 22.5 -1.5
baz=221
TAW *e*S **S** 14 21 07.7 -3.6
baz=221
**EAST Anshuo** 3.92 218 ⇑P Pn 14 20 21.8 -2.4
baz=220
**TAWH Dawu Township** 3.94 217 *e*P Pn 14 20 22.7 -1.6
baz=221
TAWH *e*S **S** 14 21 07.7 -4.0
baz=221
**PTMZ Houxiangcun** 3.94 264⇑*i*P Pn 14 20 23.3 -1.0
baz=258
**SNJT Kaohsiung City** 3.96 226 *e*P Pn 14 20 24.1 -0.4
baz=228
**JJT3 Tamagusuku3** 3.96 80 P Pn 14 20 23.4 -1.1
JJT3 S **S** 14 21 10.3 -1.8
**SSPT Xinbi** 4.01 222⇑*e*P Pn 14 20 24.4 -0.7
baz=227
**MHZQ Yeshan** 4.02 279⇑*e*P Pn 14 20 24.1 -1.1
baz=279
**PNG Penghu** 4.04 242⇑*e*P Pn 14 20 23.4 -2.1
baz=243
PNG *e*S **S** 14 21 09.9 -3.9
baz=243
**PHUB P'eng-hu** 4.05 241 ⇑P Pn 14 20 23.4 -2.3
baz=242
PHUB *e*S **S** 14 21 09.6 -4.6
baz=242
**SCZT Fangliau** 4.06 220 ⇑P Pn 14 20 24.9 -1.0
baz=218
**SLIU Shizi** 4.09 217⇓*e*P Pn 14 20 25.4 -0.7
baz=212
SLIU *e*S **S** 14 21 12.5 -2.5
baz=212
**WDGT Dungji** 4.12 238 *e*P Pn 14 20 24.9 -1.6
baz=232
WDGT *e*S **S** 14 21 11.1 -4.5
baz=232
**WLCH Liuqiu** 4.22 222 *e*P Pn 14 20 27.7 -0.1
baz=223
WLCH *e*S **S** 14 21 15.8 -2.2
baz=223
**SMST Manzhou Townsh** 4.23 215 *e*P Pn 14 20 27.6 -0.2
baz=216
**JNTH Nagotoyohara** 4.24 76 P Pn 14 20 26.1 -1.9
JNTH S **S** 14 21 14.8 -3.5
**HEN Hengchun** 4.29 216 *e*P Pn 14 20 28.7 0.0
baz=212
**TSEB Hengchuen, Pin** 4.29 213 *e*P Pn 14 20 28.2 -0.5
baz=215
**TWKBT Hengchun** 4.30 215 *e*P Pn 14 20 27.6 -1.2
baz=216
TWKBT *e*S **S** 14 21 17.2 -2.8
baz=216
**TWK1 Hengchun** 4.31 215 *e*P Pn 14 20 28.2 -0.7
baz=216
**JIH Iheya** 4.33 69 P Pn 14 20 27.4 -1.7
JIH S **S** 14 21 17.4 -3.1
**QZH Quanzhou** 4.43 264⇑*i*P Pn 14 20 29.2 -1.2
QZH sP 14 21 09.4
QZH S **S** 14 21 18.7 -4.0
QZH smax smax
comp=N,3μm,0.7s
QZH smax smax
comp=E,1μm,0.7s
QZH LR LR
comp=N,11μm,3.9s
QZH LR LR
comp=E,7μm,3.1s
QZH LR LR
comp=Z,8μm,8.8s
**JOW Kunigami** 4.53 72 P Pn 14 20 29.9 -1.7
1μm,0.3s,baz=178,slow=8.8,SNR=665
JOW S **S** 14 21 20.4 -4.7
3μm,0.3s,baz=323,slow=20,SNR=13
**JOW Kunigami** 4.53 72 P Pn 14 20 29.4 -2.3
**JOW Kunigami** 4.53 72 Pn Pn 14 20 29.2 -2.5
**JOW Kunigami** 4.53 72 P Pn 14 20 30.5 -1.2
**KNM Kinmen** 4.68 257⇑*i*P Pn 14 20 33.5 0.0
baz=258
KNM *e*S **S** 14 21 27.3 -1.1
baz=258
**KNMB Chin-men Tao** 4.71 258⇑*i*P Pn 14 20 32.0 -1.9
baz=258
KNMB *i* S **S** 14 21 24.6 -4.3
baz=258
**KNMB Chin-men Tao** 4.71 258 Pn Pn 14 20 32.3 -1.6
**JYRO Yoronjima** 4.74 71 P Pn 14 20 31.9 -2.3
**JOKE Okinoerabujima** 4.95 67 P Pn 14 20 34.3 -2.6
**AXDP Jialang** 5.00 264⇑*i*P Pn 14 20 36.6 -1.0
baz=258
**BBP Basco** 5.24 195⇑*i*P Pn 14 20 39.8 -0.9
**SXFK Yanhouchang** 5.29 281⇑*i*P Pn 14 20 40.5 -0.8
baz=280
**ZPLA Ao Xicun** 5.41 254 ⇑P Pn 14 20 41.6 -1.3
baz=254
**JTK Tokunoshima** 5.42 64 P Pn 14 20 39.9 -3.0
**SSE Sheshan** 5.89 341 P Pn 14 20 50.7 +1.7
SSE S **S** 14 21 57.4 +0.7
SSE pmax pmax
comp=Z,590nm,0.7s
SSE pmax pmax
comp=Z,4μm,3.6s
SSE LR LR
comp=N,2μm,5.3s
SSE LR LR
comp=E,4μm,5.6s
**SSE Sheshan** 5.89 341 P Pn 14 20 50.2 +1.2
**JKDJ Kitadaitoujima** 7.10 85 P Pn 14 21 02.5 -2.2
**NJ2 Nanjing** 7.65 329⇓*i*P Pn 14 21 12.2 +0.5
NJ2 sP 14 21 59.4
NJ2 S **S** 14 22 39.0 +0.9
NJ2 ScP **ScP** 14 30 45.0 +0.8
NJ2 pmax pmax
comp=Z,2μm,0.9s
**JSU Suzuyama** 8.57 44 Pn Pn 14 21 22.0 -1.9
**SAMP Sagada Mountai** 8.73 196⇓*e*P Pn 14 21 25.9 0.0
**HKPS Hong Kong Po S** 9.10 251 Pn 14 21 29.6 -1.1
**WHN Wuhan** 9.46 304⇑*i*P Pn 14 21 36.4 +1.1
WHN S **S** 14 23 19.7 -1.7
WHN pmax pmax
comp=Z,1μm,0.8s
WHN pmax pmax
comp=Z,8μm,3.3s
WHN LR LR
comp=N,7μm,4.0s
WHN LR LR
comp=Z,14μm,10.0s
**GZH Guangzhou** 9.52 257 P Pn 14 21 29.4 -6.8
GZH S S 14 23 09.1 -14
GZH pmax pmax
comp=Z,310nm,1.2s
GZH smax smax
comp=N,950nm,1.0s
GZH smax smax
comp=E,550nm,1.2s
**MCO Taipa Grande** 9.66 252 P Pn 14 21 38.0 0.0
**SMPP San Manuel, Pa** 9.68 196⇓*e*P Pn 14 21 37.6 -0.7
**JNU Nakatsue** 9.97 39 P Pn 14 21 42.6 +0.6
5.7nm,0.3s,baz=202,slow=4.0,SNR=72
JNU PcP **PcP** 14 27 34.4 +0.7
0.5nm,0.3s,baz=354,slow=1.3,SNR=2.7
JNU ScP **ScP** 14 30 48.6 +1.9
0.3nm,0.3s,baz=4.0,slow=9.4,SNR=4.0
**JNU Nakatsue** 9.97 39 Pn 14 21 41.8 -0.2
**JNU Nakatsue** 9.97 39 P Pn 14 21 43.4 +1.5
**JTU Tsushima** 10.35 28 Pn 14 21 44.9 -1.9
**TJN Taejon** 11.33 16*ce*P Pn 14 22 00.2 +0.9
**TJN Taejon** 11.33 16 P Pn 14 22 01.6 +2.3
**TGY Tagaytay City** 11.61 192 P Pn 14 22 04.6 +1.4
53nm,0.3s,baz=142,slow=2.0,SNR=14
**GULI GuiLin** 11.82 272 ⇓P **P** 14 22 09.7 -1.0
GULI S **S** 14 24 21.6 +4.0
GULI pmax pmax
comp=Z,5μm,2.4s
GULI LR LR
comp=N,4μm,5.2s
GULI LR LR
comp=E,1μm,3.2s
GULI LR LR
comp=Z,3μm,6.5s
**TIA Tai'an** 11.95 335 ⇓P **Pn** 14 22 09.0 +1.7
TIA pmax pmax
comp=Z,420nm,1.0s
TIA pmax pmax
comp=Z,3μm,4.3s
TIA LR LR
comp=N,2μm,7.0s
TIA LR LR
comp=E,3μm,7.0s
TIA LR LR
comp=Z,3μm,12.7s
**JMN Monobe** 12.21 46 Pn 14 22 06.2 -4.5
**INCN Inchon** 12.23 12 P P 14 22 13.1 -2.0
**INCN Inchon** 12.23 12 P 14 22 13.1 -2.0
**INCN Inchon** 12.23 12 P P 14 22 13.4 -1.7
**INCN Inchon** 12.23 12 P P 14 22 13.3 -1.8
**KSAR Wonju Array Be** 12.47 17 P P 14 22 16.5 -1.2
**KSAR Wonju Array Be** 12.47 17 P P 14 22 16.5 -1.2
**KSRS Korea Array** 12.49 17 P P 14 22 16.6 -1.3
22nm,0.3s,baz=200,slow=13,SNR=1390
KSRS S **S** 14 24 31.6 -1.6
baz=22,slow=24,SNR=2.4
KSRS PcP **PcP** 14 27 36.7 +0.6
1.8nm,0.3s,baz=211,slow=1.1,SNR=12
KSRS ScP **ScP** 14 30 50.7 +0.6
0.3nm,0.3s,baz=196,slow=2.0,SNR=21
KSRS PKiKP **PKiKP** 14 35 33.5 -0.1
0.1nm,0.3s,baz=159,slow=0.7,SNR=9.0
**KS19 Wonju Array Si** 12.52 16 P P 14 22 16.5 -1.9
**JHS Saijyo** 12.61 39 Pn 14 22 12.7 -2.9
**HJU Haeju** 12.63 8 P Pn 14 22 17.0 +1.2
HJU S **S** 14 24 39.8 +3.3
HJU AMS AMS
comp=N,4μm,2.8s
HJU AMS AMS
comp=E,5μm,3.4s
HJU AMS AMS
comp=Z,4μm,3.0s
**LYN LuoYang** 13.08 316 ⇓P **Pn** 14 22 22.7 +1.2
LYN S **S** 14 24 48.1 +1.0
LYN pmax pmax
comp=Z,1μm,2.2s
LYN LR LR
comp=Z,5μm,8.4s
LYN LR LR
comp=Z,3μm,9.2s
**ENH Enshi** 13.21 294 Pn 14 22 24.7 +1.4
**ENH Enshi** 13.21 294 P Pn 14 22 24.4 +1.1
**DL2 Dalian** 13.43 354⇓*i*P P 14 22 27.7 -0.7
DL2 S **S** 14 24 56.8 +1.5
DL2 ScP **ScP** 14 30 52.4 +0.9
DL2 ScS **ScS** 14 34 27.1 -1.3
DL2 pmax pmax
comp=Z,640nm,0.8s
DL2 pmax pmax
comp=Z,3μm,4.9s
**PYAG Pyongyang** 13.63 8 P P 14 22 30.5 -0.1
PYAG S **S** 14 25 00.7 +0.8
PYAG AMS AMS
comp=N,1μm,4.6s
PYAG AMS AMS
comp=E,2μm,6.9s
PYAG AMS AMS
comp=Z,2μm,7.1s
**HNS HongShan** 13.98 330 ⇑P **P** 14 22 33.7 -0.8
HNS S **S** 14 25 11.4 +3.3
HNS PcS **PcS** 14 31 08.5 -4.3
HNS ScS **ScS** 14 34 30.1 +0.4
HNS pmax pmax
comp=Z,570nm,1.0s
HNS LR LR
comp=Z,3μm,11.7s
HNS LR LR
comp=Z,2μm,12.7s
**QIZ Qiongzhong** 14.14 246 P Pn 14 22 35.7 +0.8
QIZ pmax pmax
comp=Z,210nm,1.9s
QIZ LR LR
comp=Z,3μm,9.5s
QIZ LR LR
comp=Z,3μm,14.8s
QIZ LR LR
comp=Z,4μm,19.1s
**QIZ Qiongzhong** 14.14 246 P 14 22 36.5 -0.1
**QIZ Qiongzhong** 14.14 246 P P 14 22 36.5 -0.1
**QIZ Qiongzhong** 14.14 246 P Pn 14 22 35.8 +0.8
**SUJ Sinuiju** 14.56 3 P P 14 22 40.8 -0.2
SUJ S **S** 14 25 21.6 +0.1
SUJ AMS AMS
comp=N,2μm,5.1s
SUJ AMS AMS
comp=E,2μm,5.2s
SUJ AMS AMS
comp=Z,1μm,4.0s
**HHU Hamhung** 14.77 12 P Pn 14 22 42.6 +0.3
HHU S **S** 14 25 26.9 +0.8
HHU AMS AMS
comp=N,195nm,3.2s
HHU AMS AMS
comp=E,280nm,4.5s
HHU AMS AMS
comp=Z,275nm,4.4s
**GYA Guiyang** 15.12 277 ⇑P **P** 14 22 48.1 +0.7
GYA sP sP 14 23 39.3 -6.3
GYA S **S** 14 25 34.6 -0.2
GYA pmax pmax
comp=Z,240nm,1.3s
GYA pmax pmax
comp=Z,3μm,3.5s
**XAN Xi'an** 15.18 307 P **P** 14 22 48.8 +0.8
XAN sP sP 14 23 41.7 -4.6
XAN S **S** 14 25 39.2 +3.1
XAN PcP **PcP** 14 27 37.3 -2.5
XAN pmax pmax
comp=Z,350nm,0.8s
XAN pmax pmax
comp=Z,5μm,6.2s
XAN LR LR
comp=Z,4μm,10.8s
XAN LR LR
comp=Z,4μm,8.2s
XAN LR LR
comp=Z,3μm,10.7s
**XAN Xi'an** 15.18 307 P **P** 14 22 48.4 +0.4
**INU Inuyama** 15.25 47 P **P** 14 22 50.5 +1.9
**TIY Taiyuan** 15.33 325 ⇓P **P** 14 22 51.9 +2.3
TIY S **S** 14 25 43.6 +4.1
TIY pmax pmax
comp=Z,480nm,0.5s
TIY pmax pmax
comp=Z,8μm,3.5s
TIY LR LR
comp=Z,2μm,11.7s
TIY LR LR
comp=Z,920nm,6.9s
TIY LR LR
comp=Z,2μm,12.6s
**JGF Kuroka** 15.62 47 P **P** 14 22 52.6 -0.2
**BJT Baijiatuau** 15.68 339 P Pn 14 22 53.6 +0.1
BJT pmax pmax
comp=Z,306nm,0.7s
**BJT Baijiatuau** 15.68 339 **Pn** 14 22 53.6 +0.1
BJT IAmb IAmb 14 23 08.1
comp=Z,306nm,0.7s
**BJT Baijiatuau** 15.68 339 P Pn 14 22 54.3 +0.8
**BJI Beijing** 15.70 339 P Pn 14 22 54.2 +0.5
BJI S **S** 14 25 49.1 +1.4
BJI pmax pmax
comp=Z,340nm,1.2s
BJI pmax pmax
comp=Z,7μm,5.8s
BJI LR LR
comp=Z,1μm,9.4s
BJI LR LR
comp=Z,1μm,10.7s
BJI LR LR
comp=Z,1μm,11.8s
**JHJ Hachijo jima 2** 16.13 58 P Pn 14 23 02.5 +3.6
comp=Z,63nm,0.3s,baz=207,slow=5.3,SNR=23
**JHJ2 Mitsune** 16.15 58 P 14 22 58.8 +0.2
**JHJ2 Mitsune** 16.15 58 P Pn 14 23 01.2 +2.0
**SNY Shenyang** 16.26 0 ⇓P Pn 14 23 00.6 +0.2
SNY sP **sP** 14 23 57.7 -0.4
SNY S **S** 14 25 59.5 -0.3
SNY pmax pmax
comp=Z,67nm,0.6s
SNY pmax pmax
comp=Z,6μm,4.1s
SNY LR LR
comp=Z,3μm,16.3s
SNY LR LR
comp=Z,3μm,13.9s
SNY LR LR
comp=Z,4μm,15.9s
**MAJO Matsushiro** 16.73 45 *i*P P 14 23 05.2 +0.2
**MAJO Matsushiro** 16.73 45 P P 14 23 03.7 -1.3
**MAJO Matsushiro** 16.73 45 P P 14 23 05.5 +0.5
**MAJO Matsushiro** 16.73 45 P P 14 23 05.1 +0.1
**MAT Matsushiro** 16.73 45 P P 14 23 03.9 -1.1
MAT S **S** 14 26 05.4 -4.1
**MJAR Matsushiro Arr** 16.73 45 P P 14 23 05.1 +0.1
comp=Z,0.5nm,0.3s,baz=245,slow=9.2,SNR=49
MJAR S **S** 14 26 12.0 +2.5
baz=140,slow=24,SNR=0.5
MJAR PcP **PcP** 14 27 42.6 +0.5
comp=Z,0.1nm,0.3s,baz=179,slow=1.5,SNR=3.1
MJAR ScP **ScP** 14 30 58.6 +0.9
comp=Z,0.1nm,0.3s,baz=245,slow=3.0,SNR=12
**MJAR Matsushiro Arr** 16.73 45 P P 14 23 03.5 -1.5
**MJB9 Matsu-Tunnel** 16.73 45 P P 14 23 03.8 -1.2
**JCJ Chichijima** 16.88 81 P Pn 14 23 08.1 +0.1
**JSD Sado** 17.70 42 P P 14 23 14.6 -1.0
**JYT Yasato** 17.88 49 P P 14 23 15.1 -2.3
**CD2 Chengdu** 18.15 292 P P 14 23 21.1 +0.5
CD2 sP sP 14 24 15.7 -3.5
CD2 S **S** 14 26 36.6 -1.3
CD2 pmax pmax
comp=Z,740nm,0.6s
CD2 pmax pmax
comp=Z,1μm,3.4s
CD2 LR LR
comp=Z,380nm,6.3s
CD2 LR LR
comp=Z,3μm,8.0s
CD2 LR LR
comp=Z,3μm,7.6s
**MSHR Mys Shultsa** 18.16 19*ce*P P 14 23 21.0 +0.6
MSHR pmax pmax
comp=Z,464nm,1.0s
**HHC Hu-ho-hao-te** 18.20 330⇓*i*P **Pn** 14 23 22.7 -0.8
HHC S **S** 14 26 44.4 +5.5
HHC pmax pmax
comp=Z,750nm,1.0s
HHC pmax pmax
comp=Z,4μm,4.9s
**CN2 Changchun** 18.31 5 *e*P P 14 23 20.8 -1.3
CN2 *e*S **S** 14 26 33.9 -6.7
CN2 ScP **ScP** 14 31 00.6 -0.2
CN2 ScS **ScS** 14 34 40.3 -1.4
CN2 pmax pmax
comp=Z,360nm,0.7s
CN2 pmax pmax
comp=Z,2μm,4.0s
CN2 LR LR
comp=Z,2μm,13.0s
CN2 LR LR
comp=Z,2μm,13.0s
CN2 LR LR
comp=Z,2μm,13.0s
**DAV Davao City (W)** 18.46 173 P P 14 23 24.9 +0.8
comp=Z,215nm,0.3s,baz=359,slow=1.5,SNR=36
DAV LR LR 14 30 10.6
comp=Z,2μm,21.4s,baz=360,slow=35
**DAV Davao City (W)** 18.46 173 P P 14 23 24.1 +0.1
**DAV Davao City (W)** 18.46 173 P P 14 23 25.3 +1.2
**DAV Davao City (W)** 18.46 173 P P 14 23 24.9 +0.8
**KMI Kunming** 18.72 273 ⇑P Pn 14 23 28.8 -1.0
KMI sP sP 14 24 25.5 -0.2
KMI S **S** 14 26 45.3 -4.3
KMI ScP **ScP** 14 31 03.6 +1.2
KMI pmax pmax
comp=Z,1μm,0.8s
KMI pmax pmax
comp=Z,2μm,4.0s
KMI LR LR
comp=Z,4μm,8.6s
KMI LR LR
comp=Z,3μm,9.9s
KMI LR LR
comp=Z,2μm,10.5s
**KMI Kunming** 18.72 273 P Pn 14 23 29.0 -0.8
**BTO Baotou** 18.75 327 *e*P Pn 14 23 29.4 -0.4
BTO S **S** 14 26 53.8 +4.2
BTO LR LR
comp=Z,7μm,6.5s
BTO LR LR
comp=Z,4μm,8.0s
**VLA Vladivostok** 18.87 19*d*P P 14 23 28.9 +0.8
**JMM Marumori** 19.18 46 P P 14 23 28.4 -3.2
JMM IAmb IAmb 14 23 42.9
comp=Z,162nm,0.8s
**XLT XiLinHaoTe** 19.29 344⇓*i*P P 14 23 32.2 -0.6
XLT S **S** 14 26 58.7 -1.5
XLT PcP **PcP** 14 27 47.9 +1.6
XLT ScP **ScP** 14 31 04.1 +1.0
XLT pmax pmax
comp=Z,830nm,0.8s
XLT pmax pmax
comp=Z,3μm,3.9s
**PZH PanZhiHua** 19.53 278 ⇓P P 14 23 35.6 0.0
PZH sP **sP** 14 24 36.5 +2.0
PZH S **S** 14 27 05.0 -0.3
PZH PcP **PcP** 14 27 51.5 +4.4
PZH pmax pmax
comp=Z,1μm,0.8s
PZH pmax pmax
comp=Z,2μm,4.1s
PZH LR LR
comp=Z,6μm,13.6s
PZH LR LR
comp=Z,7μm,14.8s
PZH LR LR
comp=Z,7μm,14.2s
**DLV T Lat** 19.54 229 P Pn 14 23 38.4 -1.3
**UBPT Khong Chiam** 19.66 242 P P 14 23 37.7 +0.7
UBPT IAmb IAmb 14 23 43.0
comp=Z,522nm,1.2s
**MDJ Mudanjiang** 19.69 13 P P 14 23 37.2 +0.2
MDJ S **S** 14 27 09.7 +1.9
MDJ pmax pmax
comp=Z,370nm,1.0s
MDJ LR LR
comp=Z,2μm,11.7s
MDJ LR LR
comp=Z,3μm,16.4s
MDJ LR LR
comp=Z,3μm,12.9s
**MDJ Mudanjiang** 19.69 13 P P 14 23 36.6 -0.4
MDJ PcP 14 27 47.3 +0.4
**MDJ Mudanjiang** 19.69 13 P P 14 23 38.5 +1.5
**MDJ Mudanjiang** 19.69 13 P P 14 23 37.2 +0.2

LZH **Lanzhou** **19.82 307** ⇓P **P** **14 23 39.0 +0.4**
LZH sP sP 14 24 35.4 -2.3
LZH *e*S **S** **14 27 11.4 +0.5**
LZH PcP **PcP** **14 27 49.8 +2.3**
LZH SS 14 28 05.6
LZH ScP **ScP** **14 31 06.5 +1.9**
LZH PcS **PcS** **14 31 26.2 +1.0**
LZH ScS **ScS** **14 34 48.5 +1.2**
LZH pmax pmax
comp=Z,520nm,1.0s
LZH pmax pmax
comp=Z,3μm,4.1s
**USA0B Ussuriysk Arra** **19.89 18** P **P** **14 23 38.6 -0.5**
USA0B pmax pmax
comp=Z,317nm,0.8s
**USA0B Ussuriysk Arra** **19.89 18** P **P** **14 23 38.6 -0.5**
USA0B IAmb IAmb 14 23 43.5
comp=Z,317nm,0.8s
**USRK Ussuriysk Ar.** **19.89 18** P **P** **14 23 39.4 +0.4**
baz=207,slow=10,SNR=265
USRK ScP **ScP** **14 31 04.5 +0.1**
baz=239,slow=2.2,SNR=19
**USRK Ussuriysk Ar.** **19.89 18** P **P** **14 23 38.7 -0.3**
**BNX BinXian** **20.42 8** ⇑P **P** **14 23 44.2 -0.6**
BNX sP **sP** **14 24 41.6 -2.4**
BNX S **S** **14 27 17.7 -4.3**
BNX SS 14 28 12.2
BNX ScS **ScS** **14 34 45.7 -2.9**
BNX pmax pmax
comp=Z,100nm,0.7s
BNX pmax pmax
comp=Z,3μm,6.4s
BNX LR LR
comp=Z,920nm,4.2s
BNX LR LR
comp=Z,5μm,4.9s
BNX LR LR
comp=Z,4μm,12.0s
**KKM Kota Kinabalu** **20.57 201** P **P** **14 23 46.0 -0.7**
KKM IAmb IAmb 14 23 48.4
comp=Z,194nm,0.6s
**KKM Kota Kinabalu** **20.57 201** P **P** **14 23 46.9 +0.2**
**MYLDM Lahad Datu** **20.78 194** P **P** **14 23 49.9 +1.1**
**JTM Tenmabayashi** **21.14 40** P **P** **14 23 49.4 -3.0**
JTM IAmb IAmb 14 23 53.8
comp=Z,364nm,1.0s
**SPMM Sapulut** **21.75 199** P **P** **14 23 58.0 -1.0**
**SGSI Sangihe** **21.81 174** P **P** **14 23 57.8 -1.7**
comp=Z,9μmcomp=Z,678nm,0.5s
**TEY Ternei** **22.18 25**⇓ *e*P **P** **14 23 59.7 -3.1**
TEY *e* 14 24 42.1
TEY pmax pmax
comp=Z,20nm,0.8s
TEY pmax pmax
comp=Z,100nm,5.9s
TEY pmax pmax
comp=N,100nm,5.9s
TEY pmax pmax
comp=E,100nm,5.9s
**JEW Eniwo** **22.73 36** P **P** **14 24 05.4 -2.4**
**ERM Erimo** **23.13 40***ce*P **P** **14 24 09.6 -1.9**
ERM pmax pmax
comp=Z,188nm,1.0s
**ERM Erimo** **23.13 40** P **P** **14 24 09.2 -2.2**
ERM IAmb IAmb 14 24 21.9
comp=Z,154nm,0.8s
**ERM Erimo** **23.13 40** P **P** **14 24 12.5 +1.1**
**ERM Erimo** **23.13 40** P **P** **14 24 09.5 -1.9**
**GUMO Guam** **23.38 116** P **P** **14 24 15.5 +1.6**
comp=Z,1μm,0.9s,baz=195,slow=4.0,SNR=40
**GUMO Guam** **23.38 116** P **P** **14 24 13.8 -0.1**
**GUMO Guam** **23.38 116** P **P** **14 24 15.9 +1.9**
**GUMO Guam** **23.38 116** P **P** **14 24 15.1 +1.2**
**CHTO Chiang Mai** **23.63 259** P **P** **14 24 15.5 -0.7**
CHTO pmax pmax
comp=Z,284nm,0.7s
**CHTO Chiang Mai** **23.63 259** P **P** **14 24 15.5 -0.7**
CHTO IAmb IAmb 14 24 18.3
comp=Z,284nm,0.7s
**CHTO Chiang Mai** **23.63 259** P **P** **14 24 17.1 +0.8**
**CHTO Chiang Mai** **23.63 259** P **P** **14 24 17.0 +0.8**
**CM31 Chiang Mai Arr** **23.76 258** P **P** **14 24 18.4 +1.0**
SNR=46
**CM31 Chiang Mai Arr** **23.76 258** P **P** **14 24 17.1 -0.3**
CM31 IAmb IAmb 14 24 19.6
comp=Z,144nm,0.7s
CM31 **PcP** **14 27 56.6 +1.1**
**CMAR Chiang Mai Arr** **23.76 258** P **P** **14 24 18.3 +0.9**
comp=Z,94nm,0.7s,baz=59,slow=7.9,SNR=632
CMAR PcP **PcP** **14 27 56.8 +1.3**
comp=Z,71nm,0.7s,baz=25,slow=0.9,SNR=37
CMAR ScP **ScP** **14 31 16.4 +1.7**
comp=Z,15nm,0.9s,baz=58,slow=0.4,SNR=16
CMAR PKiKP **PKiKP** **14 35 38.6 0.0**
comp=Z,4.4nm,0.8s,baz=287,slow=1.7,SNR=13
CMAR P3KPbc 14 57 25.8
comp=Z,1.0nm,0.6s,baz=249,slow=5.2,SNR=3.4
**CMAR Chiang Mai Arr** **23.76 258** P **P** **14 24 17.2 -0.1**
**HIA Hailar** **23.88 354** P **P** **14 24 17.1 -1.0**
HIA **PcP** **14 27 55.8 +0.6**
**HIA Hailar** **23.88 354** P **P** **14 24 16.9 -1.3**
**GTA Gaotai** **24.18 311** ⇓P **P** **14 24 20.2 -1.0**
GTA pP pP 14 25 02.9 +3.4
GTA sP sP 14 25 26.2 +1.6
GTA PcP **PcP** **14 27 57.7 +1.5**
GTA S **S** **14 28 22.1 -2.4**
GTA SS **sS** **14 29 39.8 +5.5**
GTA ScP **ScP** **14 31 17.0 +1.4**
GTA PcS **PcS** **14 31 35.9 -0.3**
GTA ScS **ScS** **14 34 58.7 -4.6**
GTA pmax pmax
comp=Z,170nm,1.3s
GTA pmax pmax
comp=Z,2μm,4.7s
**ASAJ Asahikawa** **24.21 35** P **P** **14 24 21.1 -0.1**
comp=Z,98nm,0.5s,baz=238,slow=7.4,SNR=112
ASAJ PcP **PcP** **14 27 57.6 +1.6**
comp=Z,29nm,0.8s,baz=244,slow=2.4,SNR=3.8
ASAJ ScP **ScP** **14 31 16.3 +0.8**
comp=Z,19nm,0.9s,baz=264,slow=12,SNR=3.8
**JKA Kamikawa-asahi** **24.21 35** P **P** **14 24 20.6 -0.6**
JKA IAmb IAmb 14 24 25.1
comp=Z,106nm,0.6s
**TOLI2 Tolitoli** **24.41 186** P **P** **14 24 22.5 -0.7**
TOLI2 IAmb IAmb 14 24 29.3
comp=Z,133nm,0.7s
**TOLI2 Tolitoli** **24.41 186** P **P** **14 24 24.5 +1.2**
**KLR Kul'dur** **24.54 13** P **P** **14 24 24.0 -0.1**
comp=Z,678nm,0.9s,baz=217,slow=7.9,SNR=845
KLR PcP **PcP** **14 27 57.6 +1.1**
comp=Z,73nm,0.8s,baz=211,slow=3.1,SNR=7.7
KLR ScP **ScP** **14 31 16.8 +0.6**
comp=Z,46nm,0.9s,baz=280,slow=4.4,SNR=21
KLR PKiKP **PKiKP** **14 35 38.1 -0.1**
comp=Z,1.5nm,0.6s,baz=224,slow=1.4,SNR=4.4
**GTOI Gorontalo** **24.75 181** P **P** **14 24 26.3 0.0**
comp=Z,4μmcomp=Z,391nm,0.9s
**KMSI Cibinong** **24.81 179** P **P** **14 24 27.0 +0.1**
comp=Z,372nm,0.9s
**TNTI Ternate** **24.90 171** P **P** **14 24 28.9 +1.2**
comp=Z,11μmcomp=Z,1μm,0.8s
**TNTI Ternate** **24.90 171** P **P** **14 24 28.4 +0.6**
**TNTI Ternate** **24.90 171** P **P** **14 24 29.0 +1.2**
**MRSI Marisa** **24.94 184** P **P** **14 24 29.8 +1.7**
comp=Z,2μmcomp=Z,6μmcomp=Z,314nm,0.9s
**MPSI Mapaga** **25.27 188** P **P** **14 24 32.0 +0.9**
comp=Z,3μmcomp=Z,1μmcomp=Z,66nm,1.1s
**SBUM Sibu** **25.36 207** P **P** **14 24 31.3 -0.5**
SBUM IAmb IAmb 14 24 36.2
comp=Z,111nm,0.7s
**SBUM Sibu** **25.36 207** P **P** **14 24 32.0 +0.1**
**DIBR DIBRUGARH** **25.59 281** *e*P **P** **14 24 35.5 +1.6**
**ULN Ulaanbaatar** **25.78 334***ce*P **P** **14 24 35.0 -0.5**
ULN pmax pmax
comp=Z,500nm,2.5s
**ULN Ulaanbaatar** **25.78 334** P **P** **14 24 34.7 -0.9**
ULN IAmb IAmb 14 24 40.5
comp=Z,158nm,0.7s
**ULN Ulaanbaatar** **25.78 334** P **P** **14 24 35.1 -0.5**
ULN pP **pP** **14 25 19.0 +3.2**
**SONM Songino Array** **26.02 333** P **P** **14 24 37.6 -0.1**
comp=Z,76nm,0.7s,baz=150,slow=9.2,SNR=417
SONM PcP **PcP** **14 28 01.4 +1.3**
comp=Z,67nm,0.9s,baz=161,slow=4.6,SNR=12
SONM ScP **ScP** **14 31 21.8 +1.1**
comp=Z,20nm,1.0s,baz=158,slow=3.0,SNR=12
SONM PKiKP **PKiKP** **14 35 39.0 -0.3**
comp=Z,3.2nm,1.0s,baz=205,slow=0.8,SNR=5.0
**SONM Songino Array** **26.02 333** P **P** **14 24 36.6 -1.0**
SONM IAmb IAmb 14 24 39.0
comp=Z,87nm,0.6s
**LBMI Labuha** **26.30 171** P **P** **14 24 41.0 +0.6**
comp=Z,2μmcomp=Z,11μmcomp=Z,2μm,1.0s
**YSS Yuzh-Sakhalins** **26.32 31** *e*P **P** **14 24 39.9 -0.3**
YSS *e**PP **pP** **14 25 20.4 -0.3**
YSS *e**SP **PP** **14 25 40.1 -3.8**
YSS *e* 14 28 01.4
YSS *e*S **S** **14 28 58.0 +0.2**
YSS *e*SS **sS** **14 30 07.3 -2.7**
YSS *e* 14 35 10.0
YSS pmax pmax
comp=Z,800nm,4.1s
YSS pmax pmax
comp=N,400nm,3.9s
YSS pmax pmax
comp=Z,450nm,1.0s
**YSS Yuzh-Sakhalins** **26.32 31** P **P** **14 24 39.2 -1.0**
**YSS Yuzh-Sakhalins** **26.32 31** P **P** **14 24 40.9 +0.7**
**YSS Yuzh-Sakhalins** **26.32 31** P **P** **14 24 39.7 -0.5**
YSS pP **pP** **14 25 21.8 +1.1**
**APSI Ampana** **26.34 184** P **P** **14 24 41.9 +1.3**
comp=Z,2μmcomp=Z,3μmcomp=Z,220nm,1.4s
**KOHI KOHIMA** **26.43 277** *e*P **P** **14 24 40.8 -0.9**
KOHI IAmb IAmb 14 24 41.9
comp=Z,116nm,0.6s
**SMKI Samarinda** **26.51 194** P **P** **14 24 45.0 +2.8**
comp=Z,3μmcomp=Z,150nm,0.6s
**ITAN ITANAGAR** **26.66 280** *e*P **P** **14 24 44.9 +1.4**
ITAN IAmb IAmb 14 24 47.1
comp=Z,297nm,0.7s
**IMP Imphal** **26.68 275** *e*P **P** **14 24 42.8 -0.9**
IMP IAmb IAmb 14 24 44.4
comp=Z,157nm,0.9s
**GOMU GeErMu** **26.69 300** P **P** **14 24 44.2 +0.1**
GOMU PcP **PcP** **14 28 04.0 +1.7**
GOMU S **S** **14 29 03.3 -1.3**
GOMU sS sS 14 30 13.8 -3.1
GOMU pmax pmax
comp=Z,110nm,0.9s
GOMU pmax pmax
comp=Z,1μm,4.5s
**KSM Kuching** **27.06 210** P **P** **14 24 46.7 -0.4**
KSM **PcP** **14 28 02.8 -0.1**
**KSM Kuching** **27.06 210** P **P** **14 24 47.0 -0.1**
**KSM Kuching** **27.06 210** P **P** **14 24 47.3 +0.2**
**GRNR Gornyy** **27.11 18**⇑ *i*P **P** **14 24 47.3 +0.1**
GRNR *e* 14 25 51.5
GRNR *e*S **S** **14 29 14.1 +3.9**
GRNR *e*SS **sS** **14 30 22.8 +0.2**
GRNR pmax pmax
comp=N,20nm,0.7s
GRNR pmax pmax
comp=E,10.0nm,0.7s
GRNR pmax pmax
comp=Z,40nm,0.7s
GRNR smax smax
comp=N,2.0nm,0.8s
GRNR MLR MLR
comp=E,460nm,13.0s
GRNR MLR MLR
comp=N,450nm,17.0s
GRNR MLR MLR
comp=Z,570nm,19.0s
**SWI Sorong** **27.30 163** P **P** **14 24 49.8 +0.6**
comp=Z,2μmcomp=Z,4μmcomp=Z,519nm,0.6s
**SIJI Sorong** **27.31 163** P **P** **14 24 50.1 +0.7**
comp=Z,340nm,0.6s,baz=0.7,slow=8.6,SNR=59
SIJI PcP **PcP** **14 28 03.9 +0.3**
comp=Z,48nm,0.9s,baz=1.7,slow=5.4,SNR=4.2
SIJI S **S** **14 29 14.0 0.0**
comp=Z,3.9nm,0.5s,baz=270,slow=2.0,SNR=1.0
SIJI ScP **ScP** **14 31 26.0 +1.1**
comp=Z,26nm,1.0s,baz=14,slow=6.0,SNR=8.2
**CIT Chita** **27.51 347** *e*P **P** **14 24 51.4 +0.6**
CIT *e* 14 25 30.9
CIT *e* 14 25 49.9
CIT *e* 14 28 05.4
CIT pmax pmax
comp=Z,589nm,2.0s
**SANI Sanana** **27.52 174** P **P** **14 24 51.4 +0.2**
comp=Z,3μmcomp=Z,7μmcomp=Z,844nm,0.9s
**SANI Sanana** **27.52 174** P **P** **14 24 51.6 +0.4**
**MTKI Muara Teweh, K** **27.58 199** P **P** **14 24 52.4 +0.7**
comp=Z,112nm,0.8s
**UGL Uglegorsk** **27.64 27**⇓ *i*P **P** **14 24 51.9 0.0**
UGL pmax pmax
comp=Z,100nm,1.1s
**SILR SILCHAR** **27.72 275** *e*P **P** **14 24 54.3 +1.4**
**KUR Kuril'sk** **27.81 39** *i* P **P** **14 24 51.6 -1.8**
KUR pmax pmax
comp=Z,228nm,1.2s
**STKI Sintang** **27.82 206** P **P** **14 24 55.4 +1.5**
comp=Z,49nm,1.3s
**SRIT Nakonsritamara** **28.25 238** P **P** **14 24 57.2 -0.5**
SRIT IAmb IAmb 14 25 00.7
comp=Z,118nm,0.7s
SRIT PcP **PcP** **14 28 06.2 +0.3**
**ZEA Zeya** **28.32 5***de*P **P** **14 24 58.3 +0.4**
ZEA *e**PP **pP** **14 25 41.7 +3.0**
ZEA *e*S **S** **14 29 26.7 -2.5**
ZEA pmax pmax
comp=E,40nm,1.4s
ZEA pmax pmax
comp=N,170nm,1.5s
ZEA pmax pmax
comp=Z,280nm,1.3s
ZEA smax smax
comp=E,500nm,7.1s
ZEA smax smax
comp=N,500nm,11.8s
ZEA MLR MLR
comp=E,600nm,12.0s
ZEA MLR MLR
comp=N,900nm,11.0s
ZEA MLR MLR
comp=Z,600nm,11.0s
**SHL Shillong** **28.44 277** P **P** **14 24 58.9 -0.7**
SHL pmax pmax
comp=Z,256nm,0.9s
**SHL Shillong** **28.44 277** *e*P **P** **14 24 60.0 +0.4**
SHL IAmb IAmb 14 25 01.7
comp=Z,197nm,0.8s
**SHL Shillong** **28.44 277** P **P** **14 24 59.8 +0.3**
SNR=105
**SHL Shillong** **28.44 277** P **P** **14 24 58.9 -0.7**
SHL IAmb IAmb 14 25 01.5
comp=Z,256nm,0.9s
**GUWA GUWAHATI** **28.54 278** *e*P **P** **14 25 00.4 +0.2**
GUWA IAmb IAmb 14 25 02.2
comp=Z,99nm,0.7s
**TTSI Tana Toraja** **28.62 188** P **P** **14 25 00.2 -0.7**
comp=Z,989nmcomp=Z,70nm,1.0s
**LSA Lhasa** **28.86 286** P **P** **14 25 04.1 +0.5**
LSA S **S** **14 29 31.2 -7.9**
LSA LR LR
comp=Z,3μm,12.8s
LSA LR LR
comp=Z,4μm,17.1s
LSA LR LR
comp=Z,2μm,19.9s
**MSAI Masohi** **29.19 169** P **P** **14 25 07.7 +1.7**
comp=Z,1μmcomp=Z,108nm,1.0s
**BELO BELONIA** **29.19 272** *e*P **P** **14 25 07.9 +1.9**
**BAKI Biak** **29.25 153** P **P** **14 25 07.5 +1.0**
**AGT Agartala** **29.25 274** *e*P **P** **14 25 08.5 +2.0**
**ZAK Zakamensk** **29.28 333** *e*P **P** **14 25 05.4 -1.2**
**TYV Tymovskoe** **29.29 25** *e*P **P** **14 25 07.9 +1.4**
TYV pmax pmax
comp=Z,67nm,0.7s
TYV pmax pmax
comp=Z,200nm,2.3s
**AAI Ambon** **29.40 170** P **P** **14 25 08.6 +0.7**
comp=Z,7μmcomp=Z,972nm,1.1s
**JRMM Jerantut** **29.47 227** P **P** **14 25 10.0 +1.5**
**KBKI Kotabaru** **29.51 195** P **P** **14 25 09.5 +0.7**
comp=Z,1μmcomp=Z,83nm,0.8s
**SPSI Sidrap Palu** **29.53 187** P **P** **14 25 09.2 +0.2**
comp=Z,3μmcomp=Z,815nmcomp=Z,57nm,1.1s
**FAKI Fak Fak** **29.54 162** P **P** **14 25 09.9 +0.8**
comp=Z,6μmcomp=Z,665nm,1.1s
**FAKI Fak Fak** **29.54 162** P **P** **14 25 08.2 -0.8**
**FAKI Fak Fak** **29.54 162** P **P** **14 25 10.2 +1.1**
**KULM Kulim** **29.69 231** P **P** **14 25 10.1 -0.4**
KULM IAmb IAmb 14 25 13.5
comp=Z,178nm,0.9s
KULM **PcP** **14 28 10.0 +0.5**
**KULM Kulim** **29.69 231** P **P** **14 25 12.0 +1.6**
**SRPI Serui, Papua** **29.92 154** P **P** **14 25 13.5 +1.1**
comp=Z,4μmcomp=Z,384nm,1.0s
**BNSI Bone** **29.92 187** P **P** **14 25 13.7 +1.3**
comp=Z,805nmcomp=Z,49nm,1.4s
**BBKI Banjar Baru** **30.00 197** P **P** **14 25 14.2 +1.1**
comp=Z,5μmcomp=Z,120nm,0.9s
**IPM Ipoh** **30.00 229** P **P** **14 25 13.3 0.0**
IPM **PcP** **14 28 10.6 +0.2**
**IPM Ipoh** **30.00 229** P **P** **14 25 14.0 +0.8**
**IPM Ipoh** **30.00 229** P **P** **14 25 14.2 +1.0**
**MYKOM Kota Tinggi** **30.22 222** P **P** **14 25 14.9 -0.2**
MYKOM IAmb IAmb 14 25 17.7
comp=Z,121nm,1.0s
MYKOM **PcP** **14 28 11.5 +0.6**
**MYKOM Kota Tinggi** **30.22 222** P **P** **14 25 16.0 +0.9**
**IRK Irkutsk** **30.38 336** *e*P **P** **14 25 16.2 +0.1**
IRK *e* 14 25 59.6
IRK pmax pmax
comp=Z,384nm,0.5s
**NKL Nikolayevsk** **30.48 21** *e*P **P** **14 25 15.5 -1.4**
NKL *e* 14 26 21.8
NKL pmax pmax
comp=N,666nm,1.3s
NKL pmax pmax
comp=Z,91nm,1.0s
NKL pmax pmax
comp=Z,106nm,3.0s
NKL pmax pmax
comp=E,3.0nm,0.8s
NKL MLR MLR
comp=E,4.0nm,13.0s
NKL MLR MLR
comp=N,2μm,12.0s
NKL MLR MLR
comp=Z,492nm,10.0s
**BNDI Bandanaira** **30.52 167** P **P** **14 25 18.2 +0.5**
**TPRI Tanjung Pinang** **30.52 220** P **P** **14 25 19.6 +1.9**
comp=Z,166nm,0.9s
**KAPI Kappang** **30.57 187** P **P** **14 25 17.7 -0.4**
KAPI pmax pmax
comp=Z,35nm,0.7s
**KAPI Kappang** **30.57 187** P **P** **14 25 17.7 -0.4**
**KAPI Kappang** **30.57 187** P **P** **14 25 18.5 +0.4**
**BKSI Bulukumba** **30.83 186** P **P** **14 25 20.2 -0.2**
comp=Z,479nmcomp=Z,51nm,0.7s
**BBSI Bau Bau** **30.84 182** P **P** **14 25 23.2 +2.7**
comp=Z,324nmcomp=Z,38nm,0.9s
**MOY Mondy** **31.20 333** *e*P **P** **14 25 22.8 -0.7**
MOY pmax pmax
comp=Z,38nm,2.2s
**DGPR DIGLIPUR** **31.21 253** *e*P **P** **14 25 22.7 -1.1**
DGPR IAmb IAmb 14 25 26.1
comp=Z,214nm,0.8s
**TPI Tanjungpandan** **32.01 211** P **P** **14 25 31.7 +0.9**
**PPBI Pangkal Pinang** **32.23 214** P **P** **14 25 33.5 +0.8**
comp=Z,5μmcomp=Z,76nm,1.1s
**GENI Genyem** **32.31 147** P **P** **14 25 35.0 +1.6**
comp=Z,4μmcomp=Z,462nm,1.1s
**GENI Genyem** **32.31 147** P **P** **14 25 35.7 +2.3**
**TSI Tuntungan** **32.42 232** P **P** **14 25 35.9 +1.6**
comp=Z,7μmcomp=Z,615nm,1.0s
**LHMI Lhok Sumawe** **32.42 236** P **P** **14 25 36.9 +2.5**
comp=Z,4μmcomp=Z,488nm,0.9s
**LHMI Lhok Sumawe** **32.42 236** P **P** **14 25 34.7 +0.3**
LHMI IAmb IAmb 14 25 38.0
comp=Z,309nm,0.7s
**LHMI Lhok Sumawe** **32.42 236** P **P** **14 25 37.3 +2.9**
**JAY Jayapura** **32.51 147** P **P** **14 25 36.4 +1.3**
comp=Z,123nm,0.9s,baz=285,slow=6.0,SNR=28
JAY PcP **PcP** **14 28 18.3 +1.1**
comp=Z,24nm,0.7s,baz=323,slow=5.1,SNR=3.8
JAY ScP **ScP** **14 31 42.9 +1.0**
comp=Z,43nm,1.1s,baz=280,slow=5.6,SNR=6.4
**JAY Jayapura** **32.51 147** P **P** **14 25 36.5 +1.3**
comp=Z,1μmcomp=Z,101nm,1.0s
**PSI Prapat** **32.66 230** LR LR 14 37 42.0
comp=Z,726nm,21.6s,baz=29,slow=34
**RGRI Rengat** **32.83 222** P **P** **14 25 40.4 +2.5**
comp=Z,11μmcomp=Z,88nm,0.5s
**BOD Bodaibo** **32.97 351** *e*P **P** **14 25 37.5 -1.1**
BOD pmax pmax
comp=Z,118nm,1.8s
**KCSI Kotacane, Aceh** **32.97 233** P **P** **14 25 39.2 0.0**
comp=Z,951nmcomp=Z,99nm,0.8s
**BKNI Bangkinang** **33.10 224** P **P** **14 25 41.8 +1.6**
comp=Z,448nm,1.3s
**BKNI Bangkinang** **33.10 224** P **P** **14 25 40.1 -0.1**
**BKNI Bangkinang** **33.10 224** P **P** **14 25 42.2 +2.0**
**JMBI JAMBI** **33.11 218** P **P** **14 25 43.2 +2.9**
comp=Z,3μmcomp=Z,392nm,0.9s
**JIRN Jiri** **33.30 282** *e*P **P** **14 25 42.6 +0.2**
comp=Z,306nm,0.9s
**GUN Gumba** **33.55 283** *e*P **P** **14 25 44.5 0.0**
comp=Z,250nm,0.6s
**MNSI Mandailing Nat** **33.68 227** P **P** **14 25 45.9 +0.6**
comp=Z,5μmcomp=Z,676nm,0.8s
**MMRI Maumere** **33.97 182** P **P** **14 25 48.0 +0.2**
comp=Z,4μmcomp=Z,462nm,0.9s
**MMRI Maumere** **33.97 182** P **P** **14 25 47.6 -0.2**
MMRI IAmb IAmb 14 25 49.4
comp=Z,360nm,1.0s
**MMRI Maumere** **33.97 182** P **P** **14 25 48.8 +1.0**
**PKI Pulchoki** **34.00 282** *e*P **P** **14 25 48.0 -0.3**
comp=Z,419nm,1.0s
**PKIN Phulchoki** **34.01 282** *e*P **P** **14 25 48.0 -0.4**
comp=Z,298nm,0.9s
**KKN Kakani** **34.09 282** *e*P **P** **14 25 48.7 -0.3**
comp=Z,522nm,0.9s
**BOK Bokaro** **34.10 275** *e*P **P** **14 25 50.2 +1.3**
BOK IAmb IAmb 14 25 51.7
comp=Z,330nm,0.8s
**PPI Padang Panjang** **34.11 224** P **P** **14 25 50.1 +1.2**
comp=Z,1μmcomp=Z,120nm,1.1s
**SAUI Saumlaki** **34.17 166** P **P** **14 25 49.8 +0.3**
comp=Z,7μmcomp=Z,879nm,1.1s
**SAUI Saumlaki** **34.17 166** P **P** **14 25 49.5 0.0**
**SAUI Saumlaki** **34.17 166** P **P** **14 25 50.2 +0.7**
**DMN Daman** **34.26 282** *e*P **P** **14 25 50.3 -0.2**
comp=Z,424nm,0.9s
**WMQ Urumqi** **34.26 311** *e*P **P** **14 25 49.9 -0.2**
WMQ pP pP 14 26 33.8 +2.1
WMQ PP **PnPn** **14 27 17.1 +4.8**
WMQ PcP **PcP** **14 28 22.8 +1.1**
WMQ S **S** **14 30 59.4 -2.6**
WMQ ScP **ScP** **14 31 50.6 +3.0**
WMQ pmax pmax
comp=Z,190nm,1.3s
WMQ pmax pmax
comp=Z,1μm,4.7s
**WMQ Urumqi** **34.26 311** P **P** **14 25 49.7 -0.4**
WMQ pP **pP** **14 26 33.0 +1.3**
**BLJI Banyuglugur** **34.43 197** P **P** **14 25 53.0 +1.3**
comp=Z,100nm,0.6s
**GKN Gorkha** **34.64 283** *e*P **P** **14 25 53.5 -0.1**
comp=Z,546nm,0.9s
**GSI Gunungsitoli** **34.67 230** P **P** **14 25 53.5 -0.3**
comp=Z,2μmcomp=Z,157nm,0.7s
**GSI Gunungsitoli** **34.67 230** P **P** **14 25 53.2 -0.6**
GSI IAmb IAmb 14 25 55.1
comp=Z,382nm,1.5s
**GSI Gunungsitoli** **34.67 230** P **P** **14 25 54.0 +0.2**
**KRJI Kerinci** **34.74 221** P **P** **14 25 55.8 +1.3**
comp=Z,8μmcomp=Z,584nm,1.1s
**JAGI Jajag, Banyuwa** **34.98 196** P **P** **14 25 55.5 -0.9**
JAGI **PcP** **14 28 22.4 -1.7**
**JAGI Jajag, Banyuwa** **34.98 196** P **P** **14 25 57.7 +1.3**
**LHSI Lahat** **35.00 216** P **P** **14 25 57.9 +1.3**
comp=Z,175nm,1.1s
**SOEI Soe** **35.08 179** P **P** **14 25 56.0 -1.4**
comp=Z,3μmcomp=Z,2μmcomp=Z,187nm,0.7s
**SOEI Soe** **35.08 179** P **P** **14 25 55.9 -1.4**
SOEI IAmb IAmb 14 26 23.4
comp=Z,185nm,0.9s
**SOEI Soe** **35.08 179** P **P** **14 25 56.4 -0.9**
**KLSI** **35.10 214** P **P** **14 25 58.7 +1.2**
comp=Z,886nmcomp=Z,75nm,0.8s
**MASI Maura Aman, Be** **35.14 219** P **P** **14 25 59.9 +2.1**
comp=Z,3μmcomp=Z,312nm,1.2s
**WBSI Waikabubak, Su** **35.17 187** P **P** **14 25 57.8 -0.3**

comp=Z,1μmcomp=Z,119nm,0.7s
**KLI Kotabumi 35.19 213** P **P** **14 25 59.4 +1.2**
comp=Z,1μmcomp=Z,4μmcomp=Z,444nm,1.1s
**MDSI Maura Dua 35.21 215** P **P** **14 25 59.1 +0.7**
comp=Z,1μmcomp=Z,132nm,1.0s
**DANN Dangsing 35.38 284** *e*P **P** **14 26 00.3 +0.2**
comp=Z,446nm,0.6s
**SKR Severo-Kuril's 35.47 36**⇑ *i*P **P** **14 25 59.3 -0.8**
SKR *e**PP **pP** **14 26 39.9 -2.0**
SKR *e* 14 27 02.9
SKR pmax pmax
comp=Z,700nm,6.3s
SKR pmax pmax
comp=Z,597nm,0.8s
SKR pmax pmax
comp=Z,100nm,6.1s
SKR MLR MLR
comp=Z,300nm,13.0s
SKR MLR MLR
comp=Z,500nm,13.0s
**BATI Baumata 35.52 180** S **S** **14 31 15.2 -6.3**
comp=Z,34nm,0.7s,baz=80,slow=23,SNR=8.6
BATI ScP **ScP** **14 31 53.5 +1.1**
comp=Z,113nm,0.7s,baz=329,slow=0.9,SNR=9.6
**BATI Baumata 35.52 180** P **P** **14 25 59.6 -1.4**
comp=Z,2μmcomp=Z,1μmcomp=Z,232nm,0.9s
**UGM Wanagama 35.53 202** P **P** **14 26 01.8 +0.7**
UGM IAmb IAmb 14 26 10.9
comp=Z,443nm,1.5s
**KOLN Koldanda 35.58 283** *e*P **P** **14 26 01.8 +0.1**
comp=Z,420nm,0.8s
**SISI Saibi 35.60 225** P **P** **14 26 01.6 -0.2**
comp=Z,3μmcomp=Z,247nm,0.9s
**BASI Baing, Sumba 35.64 185** P **P** **14 26 02.3 +0.3**
comp=Z,1μmcomp=Z,108nm,0.5s
**LEM Lembang 35.65 208** P **P** **14 26 04.7 +2.4**
comp=Z,106nm,1.0s
**LWLI Liwa 35.72 214** P **P** **14 26 04.4 +1.5**
comp=Z,11μmcomp=Z,258nm,0.8s
**MNAI Manna 35.75 217** P **P** **14 26 02.6 -0.4**
MNAI IAmb IAmb 14 26 17.0
comp=Z,495nm,1.1s
**DBJI Dramaga 35.78 209** P **P** **14 26 05.6 +2.4**
comp=Z,4μmcomp=Z,338nm,1.4s
**MANU Manus Island 35.88 136** P **P** **14 26 03.9 -0.3**
**KASI Kota Agung 35.94 213** P **P** **14 26 05.0 +0.5**
comp=Z,163nm,1.0s
**PYUN Piuthan 36.08 283** *e*P **P** **14 26 06.2 +0.2**
comp=Z,695nm,0.9s
**YAK Yakutsk 36.74 5** P **P** **14 26 10.4 -0.4**
comp=Z,431nm,0.8s,baz=317,slow=0.3,SNR=240
YAK PcP **PcP** **14 28 29.0 +0.5**
comp=Z,132nm,0.7s,baz=49,slow=0.1,SNR=9.5
YAK ScP **ScP** **14 31 56.8 +0.6**
comp=Z,14nm,0.7s,baz=225,slow=3.0,SNR=5.8
**YAK Yakutsk 36.74 5** *e*P **P** **14 26 09.5 -1.3**
YAK *e**PP **pP** **14 26 52.6 -0.2**
YAK *e* 14 27 36.5
YAK *e* 14 28 28.4
YAK *e*S **S** **14 31 38.0 -1.0**
YAK *e**SS **sS** **14 32 54.2 +1.3**
YAK *e* 14 35 57.4
YAK pmax pmax
comp=Z,966nm,0.9s
YAK pmax pmax
comp=N,356nm,1.0s
YAK pmax pmax
comp=E,93nm,1.0s
YAK pmax pmax
comp=Z,278nm,2.3s
YAK pmax pmax
comp=N,128nm,2.0s
YAK pmax pmax
comp=E,88nm,1.8s
YAK smax smax
comp=E,185nm,3.0s
YAK smax smax
comp=N,181nm,3.0s
**YAK Yakutsk 36.74 5** P **P** **14 26 09.7 -1.1**
YAK **PcP** **14 28 27.6 -0.9**
**YAK Yakutsk 36.74 5** P **P** **14 26 09.6 -1.1**
**DGZ Jazzator, Alta 36.82 320** *d*iP **P** **14 26 11.0 -0.9**
DGZ pmax pmax
comp=Z,41nm,0.7s
**CHLP Challavanipeta 37.07 267** *e*P **P** **14 26 14.7 +0.5**
CHLP IVmB_BB 14 26 16.8
comp=Z,3μm,0.8s
**ZSN Zaisan 37.43 316** *e*P **P** **14 26 14.7 -2.1**
**ZSN Zaisan 37.43 316** *e*P **P** **14 26 14.8 -2.1**
baz=315
**PEA0B Petropavlovsk- 37.62 34** P **P** **14 26 17.5 -0.8**
PEA0B pmax pmax
comp=Z,41nm,0.7s
**PEA0B Petropavlovsk- 37.62 34** P **P** **14 26 17.5 -0.8**
**PETK Petropavlovsk- 37.62 34** P **P** **14 26 17.4 -0.9**
comp=Z,28nm,0.6s,baz=215,slow=1.8,SNR=52
PETK PcP **PcP** **14 28 32.2 +0.7**
comp=Z,33nm,0.8s,baz=209,slow=8.0,SNR=7.9
PETK ScP **ScP** **14 32 00.8 +1.1**
comp=Z,11nm,1.0s,baz=14,slow=0.6,SNR=3.4
**PETK Petropavlovsk- 37.62 34** P **P** **14 26 16.8 -1.5**
**KRAR Krasnoyarsk 37.68 332** *i*P **P** **14 26 16.7 -2.1**
**VIS Vishakhapatnam 37.98 266** *e*P **P** **14 26 23.3 +1.6**
VIS IAmb IAmb 14 26 24.8
comp=Z,398nm,0.5s
**PET Petropavlovsk 38.05 34** *e*P **P** **14 26 21.6 -0.3**
PET *e**SP **sP** **14 27 23.7 -3.5**
PET *e* 14 28 33.8
PET *e*S **S** **14 31 58.7 -0.4**
PET *e**SS **sS** **14 33 09.9 -3.4**
PET *e* 14 36 10.7
PET pmax pmax
comp=Z,1μm,2.4s
PET pmax pmax
comp=Z,400nm,14.7s
PET pmax pmax
comp=Z,294nm,1.2s
PET MLR MLR
comp=Z,700nm,15.0s
PET MLR MLR
comp=Z,500nm,16.0s
**PET Petropavlovsk 38.05 34** P **P** **14 26 20.9 -1.0**
PET IAmb IAmb 14 26 23.6
comp=Z,298nm,1.2s
**PET Petropavlovsk 38.05 34** P **P** **14 26 21.6 -0.3**
**PET Petropavlovsk 38.05 34** P **P** **14 26 20.9 -1.0**
**PATS Pohnpei 38.12 113** P **P** **14 26 23.6 +0.7**
**PATS Pohnpei 38.12 113** P **P** **14 26 24.5 +1.5**
**DRS Darwin Rock St 38.42 168** P **P** **14 26 25.5 +0.1**
**MK31 Makanchi Array 38.85 314** P **P** **14 26 28.0 -0.8**
MK31 pmax pmax
comp=Z,195nm,1.1s
**MK31 Makanchi Array 38.85 314** P **P** **14 26 28.0 -0.8**
MK31 IAmb IAmb 14 26 30.2
comp=Z,195nm,1.1s
**MKAR Makanchi Array 38.85 314** P **P** **14 26 28.8 0.0**
comp=Z,301nm,1.0s,baz=99,slow=9.8,SNR=946
MKAR PcP **PcP** **14 28 35.9 +0.4**
comp=Z,71nm,0.8s,baz=90,slow=4.3,SNR=8.4
MKAR ScP **ScP** **14 32 05.9 +1.3**
comp=Z,14nm,0.8s,baz=104,slow=5.1,SNR=7.2
MKAR S **S** **14 32 09.8 -1.5**
comp=Z,6.0nm,1.0s,baz=96,slow=12,SNR=1.8
MKAR PKiKP **PKiKP** **14 35 47.5 -0.8**
comp=Z,3.4nm,0.8s,baz=110,slow=0.5,SNR=5.4
MKAR P4KPbc 15 04 39.1
comp=Z,0.5nm,0.7s,baz=92,slow=5.6,SNR=6.4
**MKAR Makanchi Array 38.85 314** P **P** **14 26 28.0 -0.7**
**MTN Manton Dam 38.87 168** P **P** **14 26 28.2 -0.9**
MTN IAmb IAmb 14 26 30.8
comp=Z,445nm,1.1s
**MTN Manton Dam 38.87 168** P **P** **14 26 29.3 +0.2**
**MA2 Magadan 38.98 22***c**e*P **P** **14 26 28.6 -1.0**
MA2 pmax pmax
comp=Z,107nm,1.0s
**MA2 Magadan 38.98 22** P **P** **14 26 28.3 -1.3**
**MA2 Magadan 38.98 22** P **P** **14 26 29.3 -0.3**
**MA2 Magadan 38.98 22** P **P** **14 26 27.8 -1.8**
**KDU Kakadu 38.99 166** P **P** **14 26 30.4 +0.3**
**MAKZ Makanchi 39.06 314** P **P** **14 26 29.9 -0.6**
**MAKZ Makanchi 39.06 314** P **P** **14 26 29.7 -0.8**
MAKZ IAmb IAmb 14 26 32.0
comp=Z,274nm,0.8s
**MAKZ Makanchi 39.06 314** P **P** **14 26 30.2 -0.3**
MAKZ pP **pP** **14 27 14.9 +2.0**
**JBP Jabalpur 39.54 276** *e*P **P** **14 26 35.4 +0.7**
JBP IAmb IAmb 14 26 39.1
comp=Z,131nm,0.6s
JBP *e*S **S** **14 32 22.5 +0.4**
**PVM Polavaram 39.67 267** *e*P **P** **14 26 36.7 +0.8**
PVM IVmB_BB 14 26 37.9
comp=Z,2μm,0.6s
**XMIS Christmas Isla 39.76 208** P **P** **14 26 35.8 -0.8**
**PDGK Podgornoye 39.85 308** P **P** **14 26 36.7 -0.5**
**UZB Uzynbulak 40.15 307** *e*P **P** **14 26 37.8 -1.9**
UZB *e*S **S** **14 32 29.3 -1.8**
UZB pmax pmax
comp=Z,194nm,1.3s
**UZB Uzynbulak 40.15 307** *e*P **P** **14 26 37.8 -1.9**
comp=Z,194nm,1.3s,baz=307
UZB *e*S **S** **14 32 29.4 -1.7**
baz=307
**DDI Dehra Dun 40.19 287** *e*P **P** **14 26 40.8 +0.8**
DDI IAmb IAmb 14 26 42.4
comp=Z,574nm,0.8s
**ZAA0 Zalesovo Array 40.28 325** P **P** **14 26 38.9 -1.5**
ZAA0 IAmb IAmb 14 26 42.1
comp=Z,184nm,0.9s
**ZALV Zalesovo Beam 40.28 325** P **P** **14 26 39.9 -0.5**
comp=Z,186nm,0.6s,baz=110,slow=7.9,SNR=560
ZALV pP **pP** **14 27 23.1 +0.1**
comp=Z,82nm,0.8s,baz=115,slow=7.0,SNR=3.0
ZALV PcP **PcP** **14 28 39.9 0.0**
comp=Z,26nm,0.5s,baz=112,slow=4.9,SNR=8.0
ZALV ScP **ScP** **14 32 10.3 +0.4**
comp=Z,24nm,0.8s,baz=124,slow=3.0,SNR=10
ZALV S **S** **14 32 25.6 -6.7**
comp=Z,3.9nm,0.8s,baz=127,slow=9.2,SNR=1.6
ZALV PKiKP **PKiKP** **14 35 48.6 -0.6**
comp=Z,4.0nm,0.8s,baz=168,slow=1.4,SNR=5.2
ZALV P4KPbc 15 04 45.5
comp=Z,1.1nm,0.7s,baz=151,slow=3.4,SNR=4.8
**ZALV Zalesovo Beam 40.28 325** P **P** **14 26 39.0 -1.3**
**H11N1 WAKE ISLAND Hy 40.39 89** T T 15 09 16.0
baz=284
**H11N2 WAKE ISLAND Hy 40.39 89** T T 15 09 15.4
baz=284,slow=74,SNR=2.8
**H11N3 WAKE ISLAND Hy 40.41 89** T T 15 09 17.2
baz=284,slow=74,SNR=7.6
**H11S3 WAKE ISLAND Hy 40.56 91** T T 15 08 30.3
baz=284,SNR=10
**H11S1 WAKE ISLAND Hy 40.57 91** T T 15 08 28.2
baz=284,SNR=4.0
**ZHN Zhinishke 40.58 307** *e*P **P** **14 26 41.4 -1.7**
ZHN *e*S **S** **14 32 35.8 -1.5**
**ZHN Zhinishke 40.58 307** *e*P **P** **14 26 41.5 -1.7**
baz=307
ZHN *e*S **S** **14 32 35.8 -1.5**
baz=307
**SATY Saty 40.58 307** *e*P **P** **14 26 41.1 -2.0**
SATY pmax pmax
comp=Z,156nm,1.1s
**SATY Saty 40.58 307** *e*P **P** **14 26 41.2 -2.0**
comp=Z,156nm,1.1s,baz=307
**H11S2 WAKE ISLAND Hy 40.58 91** T T 15 08 34.6
baz=284
**RABL Rabaul 40.61 133** P **P** **14 26 44.2 +0.6**
**RABL Rabaul 40.61 133** P **P** **14 26 46.3 +2.7**
**MYLAV Mylavaram 40.73 266** *e*P **P** **14 26 45.2 +0.7**
MYLAV IVmBBB 14 26 46.8
comp=Z,1μm,0.7s
**SMLA Simla 40.89 289** *e*P **P** **14 26 45.9 +0.2**
SMLA IAmb IAmb 14 26 47.9
comp=Z,528nm,0.8s
**TDK Taldyqorghan 40.98 310** *e*P **P** **14 26 44.5 -1.7**
TDK *e*S **S** **14 32 41.6 -1.3**
TDK pmax pmax
comp=Z,396nm,0.7s
**TDK Taldyqorghan 40.98 310** *e*P **P** **14 26 44.6 -1.7**
comp=Z,396nm,0.7s,baz=310
TDK *e*S **S** **14 32 41.6 -1.3**
baz=310
**NDI New Delhi 41.08 285** *e*P **P** **14 26 46.5 -0.8**
NDI *e*S **S** **14 32 43.0 -1.8**
**ARXS Arharly 41.21 309** *e*P **P** **14 26 48.0 -0.3**
**RPR Rampur 41.27 270** *e*P **P** **14 26 49.0 +0.1**
RPR IVmBBB 14 26 50.6
comp=Z,1μm,0.6s
**KNRA Kununurra 41.28 172** P **P** **14 26 48.5 -0.4**
**KNRA Kununurra 41.28 172** P **P** **14 26 49.9 +1.0**
**KDJ Kajisay 41.32 306** P **P** **14 26 49.0 -0.3**
KDJ pmax pmax
comp=Z,283nm,1.0s
**KDJ Kajisay 41.32 306** P **P** **14 26 49.0 -0.3**
KDJ IAmb IAmb 14 26 51.7
comp=Z,283nm,0.9s
**DHRM DHARAMSHALA 41.55 291** *e*P **P** **14 26 50.8 -0.6**
DHRM IAmb IAmb 14 26 54.4
comp=Z,173nm,0.8s
**MDOK Medeo 41.58 307** *e*P **P** **14 26 49.6 -1.7**
MDOK *e*S **S** **14 32 50.3 -1.8**
**MDOK Medeo 41.58 307** *e*P **P** **14 26 49.6 -1.7**
baz=307
MDOK *e*S **S** **14 32 50.3 -1.8**
baz=307
**ADKI Addanki 41.64 265** *e*P **P** **14 26 52.7 +0.8**
ADKI IVmB_BB 14 26 54.4
comp=Z,1μm,1.4s
**KNDC Almaty 41.65 307** P **P** **14 26 52.6 +0.8**
**AAA Alma-Ata 41.68 307** *e*P **P** **14 26 50.5 -1.5**
AAA pmax pmax
comp=Z,112nm,0.9s
**AAA Alma-Ata 41.68 307** *e*P **P** **14 26 50.6 -1.5**
comp=Z,112nm,0.9s,baz=307
**PMG Port Moresby 41.70 143** P **P** **14 26 53.2 +0.8**
comp=Z,217nm,0.9s,baz=349,slow=7.1,SNR=74
PMG ScP **ScP** **14 32 18.2 +2.1**
comp=Z,9.8nm,0.8s,baz=346,slow=8.3,SNR=3.9
**PMG Port Moresby 41.70 143** P **P** **14 26 52.4 0.0**
PMG IAmb IAmb 14 26 55.1
comp=Z,426nm,1.2s
**PMG Port Moresby 41.70 143** P **P** **14 26 53.4 +1.0**
**PMG Port Moresby 41.70 143** P **P** **14 26 52.8 +0.4**
PMG pP **pP** **14 27 32.3 -3.0**
**BHPL Bhopal 41.82 277** *e*P **P** **14 26 53.5 +0.1**
BHPL IAmb IAmb 14 26 55.0
comp=Z,248nm,1.2s
**KSH Kashi 41.92 301** P **P** **14 26 57.5 +3.3**
KSH pP pP 14 27 43.0 +5.9
KSH sP sP 14 28 06.2 +6.3
KSH PcP **PcP** **14 28 48.6 +2.8**
KSH ScP **ScP** **14 32 20.3 +3.4**
KSH PcS **PcS** **14 32 40.5 +2.7**
KSH S **S** **14 33 03.5 +6.2**
KSH sS sS 14 34 23.0 +11
KSH SS **SS** **14 36 10.1 -2.0**
KSH ScS **ScS** **14 36 36.9 +1.9**
KSH pmax pmax
comp=Z,170nm,0.9s
KSH pmax pmax
comp=Z,2μm,4.6s
KSH LR LR
comp=Z,800nm,10.0s
KSH LR LR
comp=Z,560nm,12.5s
KSH LR LR
comp=Z,1μm,17.2s
**NJS Nagarjunasagar 41.99 267** *e*P **P** **14 26 55.5 +0.6**
NJS IVmB_BB 14 26 56.7
comp=Z,760nm,0.8s
**ULHL Ulahol 42.02 306** P **P** **14 26 56.6 +1.5**
SNR=16
**SEY Seymchan 42.03 19** P **P** **14 26 54.3 -0.2**
comp=Z,106nm,0.8s,baz=224,slow=6.2,SNR=421
SEY PcP **PcP** **14 28 46.2 +0.7**
comp=Z,140nm,0.7s,baz=208,slow=5.3,SNR=26
SEY ScP **ScP** **14 32 18.1 +1.4**
comp=Z,23nm,0.8s,baz=204,slow=4.3,SNR=8.0
**SEY Seymchan 42.03 19** *i*P **P** **14 26 54.4 -0.1**
**CUPL Choutuppal 42.09 268** *e*P **P** **14 26 56.3 +0.6**
CUPL IVmB_BB 14 26 57.5
comp=Z,1μm,0.7s
**SRSP Sriramsagar 42.11 270** *e*P **P** **14 26 56.3 +0.5**
SRSP IVmB_BB 14 26 57.5
comp=Z,780nm,0.7s
**KUU Kurty 42.21 308** *e*P **P** **14 26 54.4 -1.9**
KUU pmax pmax
comp=Z,219nm,0.7s
**KUU Kurty 42.21 308** *e*P **P** **14 26 54.4 -1.9**
comp=Z,219nm,0.7s,baz=308
**BOOM Boomskoye usch 42.28 306** P **P** **14 26 57.2 +0.1**
BOOM pmax pmax
comp=Z,71nm,0.8s
**BOOM Boomskoye usch 42.28 306** P **P** **14 26 57.2 +0.1**
**HYB Hyderabad 42.38 268** *e*P **P** **14 26 59.2 +1.1**
HYB IAmb IAmb 14 26 59.7
comp=Z,179nm,0.8s
**HYBB Hyderabad (bro 42.38 268** *e*P **P** **14 26 58.5 +0.4**
HYBB IVmB_BB 14 26 59.7
comp=Z,1μm,0.8s
HYBB *e*pP **pP** **14 27 42.4 +1.3**
HYBB *e*sP **sP** **14 28 04.8 +1.0**
HYBB *e* 14 28 47.9
HYBB *e*ScP **ScP** **14 32 19.0 0.0**
HYBB *e*S **S** **14 33 04.6 +0.3**
HYBB *e* 14 34 16.7
HYBB *e*ScS **ScS** **14 36 37.5 -0.7**
**KURK Kurchatov 42.42 318** P **P** **14 26 57.8 0.0**
KURK *PP **pP** **14 27 41.9 +1.0**
KURK 14 28 47.4
**KURK Kurchatov 42.42 318** P **P** **14 26 56.9 -0.9**
KURK IAmb IAmb 14 26 59.1
comp=Z,264nm,1.1s
**KURK Kurchatov 42.42 318** P **P** **14 26 57.0 -0.9**
KURK pP **pP** **14 27 39.3 -1.6**
**KURBB Kurchatov Arra 42.44 318** P **P** **14 26 57.8 -0.2**
comp=Z,66nm,0.6s,baz=110,slow=8.0,SNR=286
KURBB pP **pP** **14 27 41.9 +0.8**
comp=Z,83nm,1.1s,baz=108,slow=7.9,SNR=3.2
KURBB PcP **PcP** **14 28 47.4 +0.3**
comp=Z,29nm,0.6s,baz=113,slow=3.7,SNR=8.3
KURBB PKPPKP P'P'df 14 58 25.3 -32
comp=Z,0.3nm,0.3s,baz=251,slow=2.8,SNR=4.5
**KURBB Kurchatov Arra 42.44 318** P **P** **14 26 57.0 -1.0**
**SRLM Srisailam 42.52 266** *e*P **P** **14 26 59.7 +0.6**
SRLM IVmB_BB 14 27 00.8
comp=Z,1μm,2.1s
**TKM2 Tokmak 2 42.59 306** P **P** **14 27 00.2 +0.5**
SNR=294
**TKM2 Tokmak 2 42.59 306** P **P** **14 27 00.1 +0.5**
**SKHT Srikalahasti 42.65 263** *e*P **P** **14 27 01.1 +1.0**
SKHT IVmB_BB 14 27 02.7
comp=Z,2μm,1.2s
**RCLA Racherla 42.69 265** *e*P **P** **14 27 00.6 +0.2**
RCLA IVmB_BB 14 27 02.3
comp=Z,1μm,1.0s
**KBK Karagaybulak 43.03 306** P **P** **14 27 04.3 +1.3**
SNR=162
**CHMS Chumysh 43.22 306** P **P** **14 27 05.3 +0.9**
SNR=11
**FRU1 Bishkek 43.28 306** P **P** **14 27 04.5 -0.4**
FRU1 pmax pmax
comp=Z,206nm,1.0s
**FRU1 Bishkek 43.28 306** P **P** **14 27 04.5 -0.4**
FRU1 IAmb IAmb 14 27 07.2
comp=Z,206nm,1.0s
**UCH Uchtor 43.29 305** P **P** **14 27 07.4 +1.8**
SNR=16
**AAK Ala-Archa 43.36 306** P **P** **14 27 07.0 +1.3**
SNR=7.5
**AAK Ala-Archa 43.36 306** P **P** **14 27 05.9 +0.2**
AAK pmax pmax
comp=Z,103nm,1.0s
**AAK Ala-Archa 43.36 306** P **P** **14 27 05.9 +0.2**
**AAK Ala-Archa 43.36 306** P **P** **14 27 06.1 +0.4**
**AAK Ala-Archa 43.36 306** *i*P **P** **14 27 06.3 +0.6**
SNR=7.2
**SGDS Sogindy 43.37 307** *e*P **P** **14 27 05.4 -0.2**
**FITZ Fitzroy Crossi 43.41 177** PcP **PcP** **14 28 50.8 +0.1**
comp=Z,42nm,0.8s,baz=325,slow=5.6,SNR=2.8
FITZ ScP **ScP** **14 32 24.1 +1.2**
comp=Z,12nm,0.9s,baz=7.9,slow=8.4,SNR=4.4
FITZ S **S** **14 33 14.8 -4.1**
comp=Z,19nm,1.0s,baz=260,slow=21,SNR=9.2
**USP Ospenovka 43.43 307** P **P** **14 27 06.3 +0.2**
SNR=60
**COEN Coen 43.70 152** P **P** **14 27 09.1 +0.6**
COEN IAmb IAmb 14 27 11.3
comp=Z,442nm,0.8s
**COEN Coen 43.70 152** P **P** **14 27 09.7 +1.2**
**EKS2 Erkin-Say 43.88 306** P **P** **14 27 11.1 +1.2**
SNR=8.9
**AML Almayashu 43.89 305** P **P** **14 27 12.0 +1.8**
SNR=29
**AML Almayashu 43.89 305** P **P** **14 27 11.0 +0.7**
**AML Almayashu 43.89 305** *i*P **P** **14 27 10.9 +0.6**
SNR=142
**KLRI Killari 43.94 270** *e*P **P** **14 27 10.9 +0.3**
KLRI IVmB_BB 14 27 12.1
comp=Z,8μm,0.6s
**BTLS Baital 44.02 309** *e*P **P** **14 27 08.8 -1.9**
BTLS *e*S **S** **14 33 25.8 -1.5**
BTLS pmax pmax
comp=Z,167nm,1.4s
**BTLS Baital 44.02 309** *e*P **P** **14 27 08.8 -1.9**
comp=Z,167nm,1.4s,baz=309
BTLS *e*S **S** **14 33 25.9 -1.5**
baz=309
**NIL Nilore 44.04 293** P **P** **14 27 11.1 +0.1**
**URV Uravakonda 44.40 265** *e*P **P** **14 27 14.4 +0.3**
URV IVmB_BB 14 27 16.0
comp=Z,1μm,0.9s
**PALK Pallekele 44.58 254** P **P** **14 27 16.6 +0.9**
PALK pmax pmax
comp=Z,146nm,1.1s
**PALK Pallekele 44.58 254** P **P** **14 27 17.6 +2.0**
**PALK Pallekele 44.58 254** P **P** **14 27 16.6 +0.9**
**COCO West Island 45.58 218** P **P** **14 27 22.7 -0.5**
COCO pmax pmax
comp=Z,287nm,1.2s
**COCO West Island 45.58 218** P **P** **14 27 22.7 -0.5**
COCO IAmb IAmb 14 27 25.9
comp=Z,287nm,1.2s
**DZA Taraz 45.70 306** *e*P **P** **14 27 22.6 -1.4**
**DZA Taraz 45.70 306** *e*P **P** **14 27 22.7 -1.4**
baz=306
**OTUK Ortayu 45.74 313** P **P** **14 27 23.8 -0.4**
**BRZS Berezniki 45.88 316** *e*P **P** **14 27 23.2 -2.1**
**BRZS Berezniki 45.88 316** *e*P **P** **14 27 23.2 -2.1**
baz=316
**BTK Batken 45.92 302** P **P** **14 27 25.6 -0.3**
BTK pmax pmax
comp=Z,67nm,0.7s
**BTK Batken 45.92 302** P **P** **14 27 25.6 -0.3**
**TIXI Tiksi 46.26 2** P **P** **14 27 27.4 -0.5**
comp=Z,320nm,0.8s,baz=270,slow=2.0,SNR=399
TIXI PcP **PcP** **14 28 59.3 -0.5**
comp=Z,49nm,0.6s,baz=269,slow=19,SNR=5.7
TIXI ScP **ScP** **14 32 34.9 +1.0**
comp=Z,17nm,0.9s,baz=90,slow=22,SNR=3.6
**TIXI Tiksi 46.26 2** P **P** **14 27 26.5 -1.4**
TIXI IAmb IAmb 14 27 28.8
comp=Z,404nm,0.9s
**TIXI Tiksi 46.26 2** P **P** **14 27 26.8 -1.1**
TIXI pP **pP** **14 28 15.6 +4.0**
**WB0 Warramunga Arr 46.26 166** P **P** **14 27 28.2 -0.4**
WB0 IAmb IAmb 14 27 30.6
comp=Z,401nm,0.9s
**GAR Garm 46.28 300** P **P** **14 27 28.5 -0.3**
GAR IAmb IAmb 14 27 30.9
comp=Z,674nm,1.1s
**POO Poona 46.29 272** *e*P **P** **14 27 29.8 +0.8**
**KKAR Karatay Array 46.32 306** P **P** **14 27 28.6 -0.3**
**KKAR Karatay Array 46.32 306** P **P** **14 27 28.6 -0.3**
**WRAB Tennant Creek 46.41 166** P **P** **14 27 29.6 -0.2**
WRAB pmax pmax
comp=Z,421nm,0.9s
**WRAB Tennant Creek 46.41 166** P **P** **14 27 29.6 -0.2**
WRAB IAmb IAmb 14 27 31.9
comp=Z,421nm,0.8s
**WRAB Tennant Creek 46.41 166** P **P** **14 27 30.4 +0.7**
**WRAB Tennant Creek 46.41 166** P **P** **14 27 29.9 +0.2**
WRAB pP **pP** **14 28 12.8 -0.8**
**WRA Warramunga Arr 46.42 166** P **P** **14 27 30.4 +0.6**
comp=Z,369nm,0.7s,baz=348,slow=8.5,SNR=893
WRA pP **pP** **14 28 13.0 -0.7**
comp=Z,58nm,0.9s,baz=346,slow=8.5,SNR=2.3
WRA ScP **ScP** **14 32 36.0 +0.7**
comp=Z,11nm,0.8s,baz=349,slow=4.0,SNR=7.6
WRA S **S** **14 34 01.3 -0.9**
comp=Z,67nm,0.8s,baz=346,slow=15,SNR=26
WRA PKPPKP P'P'df 14 58 24.9 -24
comp=Z,3.7nm,1.0s,baz=132,slow=2.2,SNR=8.7
WRA PKP2ab 14 59 55.1
comp=Z,2.4nm,1.1s,baz=178,slow=3.7,SNR=4.8
**WRA Warramunga Arr 46.42 166** P **P** **14 27 29.6 -0.2**

**WB2 Warramunga Arr 46.42 166** P **P** **14 27 29.6 -0.2**
WB2 lAmb lAmb 14 27 31.9
comp=Z,469nm,0.8s
**WR0 Warramunga Arr 46.48 166** P **P** **14 27 30.3 0.0**
WR0 lAmb lAmb 14 27 32.3
comp=Z,422nm,0.7s
**SHEM Shemya Is, Ala 46.49 40** P **P** **14 27 31.3 +1.3**
comp=Z,111nm,1.0s,baz=340,slow=9.5,SNR=4.9
**SMY Shemya 46.49 40** P **P** **14 27 28.7 -1.2**
SMY pmax pmax
comp=Z,251nm,1.2s
**SMY Shemya 46.49 40** P **P** **14 27 28.7 -1.2**
**MBWA Marble Bar 46.55 185** P **P** **14 27 30.2 -0.5**
**MBWA Marble Bar 46.55 185** P **P** **14 27 30.8 +0.1**
**MBWA Marble Bar 46.55 185** P **P** **14 27 30.9 +0.2**
**IUG luzhnay 46.60 305** *e*P **P** **14 27 31.5 +0.3**
**IUG luzhnay 46.60 305** *e*P **P** **14 27 29.7 -1.5**
baz=304
**BRLS Borolday 46.80 306** *e*P **P** **14 27 31.6 -1.0**
**BRLS Borolday 46.80 306** *e*P **P** **14 27 31.7 -1.0**
baz=305
**PSA00 Pilbara Seismi 46.95 185** P **P** **14 27 33.4 -0.4**
**PSA00 Pilbara Seismi 46.95 185** P **P** **14 27 33.4 -0.4**
**PSA00 Pilbara Seismi 46.95 185** P **P** **14 27 34.1 +0.3**
**CHGR Chuyangaron 47.19 300** P **P** **14 27 35.4 -0.4**
CHGR lAmb lAmb 14 27 37.5
comp=Z,442nm,0.7s
**TRD Trivandrum 47.28 257** *e*P **P** **14 27 38.5 +1.8**
**GOA Goa 47.30 268** *e*P **P** **14 27 38.4 +1.7**
**KBL Kabul 47.46 294** P **P** **14 27 38.2 +0.1**
KBL pmax pmax
comp=Z,649nm,0.8s
**KBL Kabul 47.46 294** P **P** **14 27 38.2 +0.1**
**KBL Kabul 47.46 294** P **P** **14 27 38.7 +0.6**
**MTSU Mount Surprise 47.92 153** P **P** **14 27 42.9 +1.5**
**BVAR Borovoye Array 47.97 319** P **P** **14 27 41.4 0.0**
comp=Z,58nm,0.5s,baz=84,slow=14,SNR=310
BVAR PcP **PcP** **14 29 06.4 +0.2**
comp=Z,102nm,0.6s,baz=67,slow=8.3,SNR=14
BVAR ScP **ScP** **14 32 42.3 +0.8**
comp=Z,34nm,0.8s,baz=81,slow=9.3,SNR=13
BVAR P4KPbc 15 05 18.5
comp=Z,2.4nm,0.7s,baz=82,slow=11,SNR=13
**BRVK Borovoye 48.03 319** P **P** **14 27 41.4 -0.5**
BRVK pmax pmax
comp=Z,164nm,0.8s
**BRVK Borovoye 48.03 319** P **P** **14 27 41.4 -0.5**
BRVK lAmb lAmb 14 27 44.2
comp=Z,164nm,0.8s
**BRVK Borovoye 48.03 319** P **P** **14 27 41.6 -0.3**
BRVK pP **pP** **14 28 26.8 +0.8**
**QIS Mount Isa 48.42 160** P **P** **14 27 45.9 +0.7**
**NRIK Noril'sk 48.67 344** P **P** **14 27 46.5 0.0**
comp=Z,237nm,0.5s,baz=117,slow=9.4,SNR=335
NRIK PcP **PcP** **14 29 08.9 +0.5**
comp=Z,125nm,0.7s,baz=120,slow=4.8,SNR=5.1
NRIK ScP **ScP** **14 32 45.6 +1.5**
comp=Z,12nm,0.7s,baz=128,slow=4.7,SNR=3.3
**NRIK Noril'sk 48.67 344** P **P** **14 27 45.5 -0.9**
NRIK lAmb lAmb 14 27 48.3
comp=Z,494nm,0.9s
**GIRL Giralia 48.71 191** P **P** **14 27 48.1 +0.8**
GIRL lAmb lAmb 14 27 49.7
comp=Z,352nm,1.5s
**BHUJ Bhuj 48.76 279** *e*P **P** **14 27 48.5 +0.7**
BHUJ lAmb lAmb 14 27 50.7
comp=Z,167nm,1.0s
**HNR Honiara 49.70 130** P **P** **14 27 56.3 +1.3**
comp=Z,235nm,0.8s,baz=209,slow=3.4,SNR=24
**HNR Honiara 49.70 130** P **P** **14 27 55.4 +0.3**
HNR lAmb lAmb 14 27 59.0
comp=Z,273nm,0.9s
**HNR Honiara 49.70 130** P **P** **14 27 56.7 +1.7**
**HNR Honiara 49.70 130** P **P** **14 27 55.5 +0.5**
**BILL Bilibino 49.74 20***c* *i*P **P** **14 27 53.4 -1.2**
BILL *e**SP **sP** **14 29 00.1 -1.3**
BILL *i* 14 29 13.3
BILL *e* 14 29 57.1
BILL *i* S **S** **14 34 45.3 -2.4**
BILL *i* 14 37 23.6
BILL pmax pmax
comp=Z,135nm,1.0s
**BILL Bilibino 49.74 20** P **P** **14 27 53.7 -0.9**
**BILL Bilibino 49.74 20** P **P** **14 27 53.7 -0.9**
**AS31 Alice Springs 49.94 167** P **P** **14 27 56.9 +0.2**
**ASAR Alice Springs 49.94 167** P **P** **14 27 57.6 +0.9**
comp=Z,158nm,0.8s,baz=354,slow=12,SNR=624
ASAR pP **pP** **14 28 41.0 0.0**
comp=Z,36nm,0.8s,baz=347,slow=7.1,SNR=2.5
ASAR PcP **PcP** **14 29 14.6 +0.7**
comp=Z,55nm,0.8s,baz=342,slow=4.6,SNR=5.9
ASAR ScP **ScP** **14 32 50.8 +0.6**
comp=Z,17nm,0.8s,baz=356,slow=4.8,SNR=7.7
ASAR S **S** **14 34 52.6 +1.1**
comp=Z,33nm,0.9s,baz=354,slow=17,SNR=16
ASAR PKPPKP P'P'df 14 58 22.0 -22
comp=Z,3.4nm,1.0s,baz=145,slow=2.8,SNR=8.6
ASAR P4KPbc 15 05 28.5
comp=Z,1.9nm,0.8s,baz=351,slow=4.0,SNR=16
**ASAR Alice Springs 49.94 167** P **P** **14 27 56.8 +0.1**
**CTA Charters Tower 50.47 152** P **P** **14 28 01.4 +0.7**
comp=Z,140nm,0.8s,baz=333,slow=8.6,SNR=141
CTA ScP **ScP** **14 32 54.4 +1.9**
comp=Z,27nm,0.9s,baz=325,slow=3.7,SNR=6.2
**CTA Charters Tower 50.47 152** P **P** **14 28 02.2 +1.5**
**CTAO Charters Tower 50.47 152** P **P** **14 28 01.1 +0.4**
CTAO pmax pmax
comp=Z,177nm,0.8s
**CTAO Charters Tower 50.47 152** P **P** **14 28 01.1 +0.4**
CTAO lAmb lAmb 14 28 03.6
comp=Z,177nm,0.8s
**CTAO Charters Tower 50.47 152** P **P** **14 28 02.2 +1.5**
**CTAO Charters Tower 50.47 152** P **P** **14 28 01.3 +0.7**
**WRKA Warakurna 50.48 174** P **P** **14 28 01.9 +1.2**
**HMDM Hanimaadhoo 51.40 258** P **P** **14 28 09.7 +1.9**
**KIWB Kanaga Island 51.59 43** P **P** **14 28 07.9 -0.7**
**MEEK Meekatharra 52.07 185** P **P** **14 28 12.7 +0.2**
**GSTR Great Sitkin T 52.28 43** P **P** **14 28 12.3 -1.6**
**HRA Herat 53.06 295** P **P** **14 28 19.2 -0.9**
HRA lAmb lAmb 14 28 22.3
comp=Z,215nm,1.3s
**ATKA Atka Island 53.44 43** P **P** **14 28 22.0 -0.2**
**AB31 Akbulak array 53.99 314** *i*P **P** **14 28 26.1 -0.2**
**ABKAR Akbulak array 53.99 314** P **P** **14 28 26.1 -0.2**
ABKAR lAmb lAmb 14 28 28.0
comp=Z,231nm,0.8s
**ABKAR Akbulak array 53.99 314** P **P** **14 28 25.9 -0.4**
**SVE Sverdlovsk 54.20 323***ce*P **P** **14 28 27.2 -0.4**
SVE pmax pmax
comp=Z,466nm,1.4s
**OOD Oodnadatta 54.31 167** P **P** **14 28 29.5 +0.8**
**KAAM Kaadhehdhoo 54.62 251** P **P** **14 28 32.3 +1.0**
**MORW Morawa 54.74 188** P **P** **14 28 32.1 +0.2**
**MORW Morawa 54.74 188** P **P** **14 28 32.8 +0.9**
**ARU Arti 55.29 322** P **P** **14 28 35.3 -0.2**
comp=Z,38nm,0.4s,baz=101,slow=4.1,SNR=187
ARU P4KPbc 15 05 48.4
comp=Z,1.2nm,0.6s,baz=243,slow=0.4,SNR=7.1
**ARU Arti 55.29 322***d* *i*P **P** **14 28 34.8 -0.7**
ARU *PP **pP** **14 29 20.1 -0.7**
ARU 14 29 31.7
ARU S **S** **14 36 03.9 +0.6**
ARU pmax pmax
comp=Z,552nm,1.7s
**ARU Arti 55.29 322** P **P** **14 28 34.5 -1.0**
**ARU Arti 55.29 322** P **P** **14 28 35.3 -0.2**
**INKA Innaminka 55.52 161** P **P** **14 28 38.4 +1.0**
**QLP Quilpie 55.55 157** P **P** **14 28 38.1 +0.4**
**GEYT Alibeck 55.90 300** P **P** **14 28 41.2 +1.0**
comp=Z,300nm,0.7s,baz=84,slow=4.6,SNR=267
**GEYT Alibeck 55.90 300** P **P** **14 28 40.7 +0.5**
**GYA0 ALIBECK ARRAY 55.90 300** P **P** **14 28 40.9 +0.7**
**GYA0B ALIBECK ARRAY 55.90 300** P **P** **14 28 40.7 +0.5**
**SPIA Saint Paul Isl 56.14 37** P **P** **14 28 40.4 -1.1**
baz=265
**FORT Forrest 56.16 175** P **P** **14 28 42.2 +0.3**
**FORT Forrest 56.16 175** P **P** **14 28 42.8 +0.9**
**GAMB Gambell 56.32 29** P **P** **14 28 42.0 -0.6**
**GAMB Gambell 56.32 29** P **P** **14 28 42.2 -0.4**
baz=259,SNR=43
**MULG Mulgathing 56.41 169** P **P** **14 28 44.4 +0.7**
**NIKH Nikolski High 56.73 42** P **P** **14 28 44.9 -0.8**
NIKH lAmb lAmb 14 28 47.6
comp=Z,251nm,0.8s
**NIKH Nikolski High 56.73 42** P **P** **14 28 44.9 -0.8**
baz=269,SNR=5.9
**KLBR Kellerberrin 57.05 186** P **P** **14 28 49.0 +0.8**
**RMQ Roma 57.19 153** P **P** **14 28 50.4 +1.2**
**EIDS Eidsvold 57.21 150** P **P** **14 28 49.6 +0.2**
**EIDS Eidsvold 57.21 150** P **P** **14 28 50.1 +0.7**
**LCRK Leigh Creek 57.43 165** P **P** **14 28 51.6 +0.8**
**UNV Unalaska Valle 58.14 41** P **P** **14 28 54.4 -1.1**
UNV lAmb lAmb 14 29 03.0
comp=Z,87nm,0.7s
**UNV Unalaska Valle 58.14 41** P **P** **14 28 54.5 -1.0**
baz=270
**JLN Jalan Bani Buh 58.17 281** P **P** **14 28 56.7 +0.4**
SNR=24
**TNA Tin City 58.22 27** P **P** **14 28 55.8 -0.1**
**TNA Tin City 58.22 27** P **P** **14 28 55.5 -0.4**
baz=262,SNR=53
**WBK Wadi Bani Khal 58.42 282** P **P** **14 28 58.9 +0.8**
SNR=29
WBK P **P** **14 29 00.0 +1.9**
SNR=25
**NWAO Narrogin (SRO) 58.43 186** P **P** **14 28 57.6 -0.1**
NWAO pmax pmax
comp=Z,41nm,0.9s
**NWAO Narrogin (SRO) 58.43 186** P **P** **14 28 57.5 -0.1**
**NWAO Narrogin (SRO) 58.43 186** P **P** **14 28 59.3 +1.6**
**WSAR Wadi Sarin 58.54 283** P **P** **14 29 00.5 +1.6**
SNR=30
**AKUT Akutan 58.57 41** P **P** **14 28 58.2 -0.3**
AKUT lAmb lAmb 14 29 18.7
comp=Z,89nm,0.8s
**BIDO Bidbid 58.91 283** P **P** **14 29 01.9 +0.5**
SNR=34
**SANVU Saraoutou 58.95 129** P **P** **14 29 02.3 +0.7**
**SANVU Saraoutou 58.95 129** P **P** **14 29 03.1 +1.5**
**SMDO Samad 59.11 283** P **P** **14 29 03.3 +0.4**
SNR=42
**ANM Nome 59.18 28** P **P** **14 29 01.6 -0.9**
ANM pmax pmax
comp=Z,123nm,0.9s
**ANM Nome 59.18 28** P **P** **14 29 01.6 -0.9**
ANM lAmb lAmb 14 29 05.1
comp=Z,123nm,0.9s
**ANM Nome 59.18 28** P **P** **14 29 02.2 -0.4**
baz=265,SNR=128
**BBOO Buckleboo 59.24 168** P **P** **14 29 03.4 +0.1**
BBOO lAmb lAmb 14 29 05.6
comp=Z,183nm,0.8s
**BBOO Buckleboo 59.24 168** P **P** **14 29 04.0 +0.7**
**JMDO Jabal Madar 59.26 282** P **P** **14 29 04.1 +0.2**
SNR=27
**DGAR Diego Garcia 59.39 244** P **P** **14 29 05.1 +0.4**
DGAR pmax pmax
comp=Z,351nm,0.9s
**DGAR Diego Garcia 59.39 244** P **P** **14 29 05.1 +0.4**
**H08S3 Diego Garcia H 59.49 243** P **P** **14 29 06.4 +1.3**
baz=17,slow=10,SNR=38
**H08S2 Diego Garcia H 59.49 243** P **P** **14 29 06.6 +1.5**
baz=17,slow=10,SNR=29
**H08S1 Diego Garcia H 59.51 243** P **P** **14 29 06.6 +1.4**
baz=17,slow=10,SNR=33
**HOQ Hoqain 59.61 283** P **P** **14 29 06.4 +0.2**
SNR=41
**STKA Stephens Creek 59.66 162** P **P** **14 29 06.5 +0.4**
comp=Z,87nm,0.7s,baz=343,slow=6.7,SNR=109
STKA pP **pP** **14 29 52.2 +0.3**
comp=Z,54nm,0.8s,baz=330,slow=7.9,SNR=4.8
STKA S **S** **14 36 60.0 -0.6**
comp=Z,3.7nm,0.7s,baz=164,slow=16,SNR=7.2
STKA PKP2bc 14 58 42.5
comp=Z,6.3nm,0.9s,baz=107,slow=7.1,SNR=6.8
**STKA Stephens Creek 59.66 162** P **P** **14 29 06.4 +0.2**
**STKA Stephens Creek 59.66 162** P **P** **14 29 06.6 +0.4**
**WHYH Whyalla 59.77 166** P **P** **14 29 08.4 +1.5**
**BANOM Banah 59.84 286** P **P** **14 29 08.2 +0.4**
SNR=20
**BANOM Banah 59.84 286** *i*P **P** **14 29 08.6 +0.8**
SNR=91
**FALS False Pass 59.92 40** P **P** **14 29 06.8 -1.0**
FALS lAmb lAmb 14 29 24.8
comp=Z,153nm,0.6s
**FALS False Pass 59.92 40** P **P** **14 29 07.0 -0.8**
baz=272,SNR=5.2
**FALS False Pass 59.92 40** P **P** **14 29 07.6 -0.2**
**SHME Shamm 59.95 287** P **P** **14 29 09.3 +0.9**
SNR=15
**SHME Shamm 59.95 287** *i*P **P** **14 29 09.2 +0.7**
SNR=51
**BSY Bisya 59.95 283** P **P** **14 29 09.0 +0.4**
SNR=43
**NAPP Napperby 60.04 166** P **P** **14 29 09.7 +1.0**
**MASF Masafi 60.11 286** P **P** **14 29 10.2 +0.5**
SNR=17
**MSFE Esna-Masafi 60.12 286** *i*P **P** **14 29 10.0 +0.3**
SNR=39
**UOSS Minazif 60.19 285** P **P** **14 29 08.6 -1.5**
**UOSS Minazif 60.19 285** P **P** **14 29 10.0 -0.1**
UOSS pP **PcP** **14 29 53.3 -0.3**
**UOSS Minazif 60.19 285** *i*P **P** **14 29 10.1 -0.1**
SNR=36
**HATD Hatta, Dubai 60.29 285** P **P** **14 29 11.4 +0.5**
SNR=27
**HATD Hatta, Dubai 60.29 285** *i*P **P** **14 29 11.3 +0.5**
SNR=52
**KIRV Kirov 60.31 325** LR LR 14 59 35.3
comp=Z,637nm,18.8s,baz=112,slow=40
**KIRV Kirov 60.31 325***d* *i*P **P** **14 29 09.8 -0.5**
**ARQ Araqi 60.37 283** P **P** **14 29 11.9 +0.5**
SNR=30
**ASHO Ashiyiah 60.39 285** P **P** **14 29 12.0 +0.4**
SNR=16
**ASHO Ashiyiah 60.39 285** *i*P **P** **14 29 11.9 +0.4**
SNR=16
**HTT Hallett 60.45 165** P **P** **14 29 12.4 +0.8**
**RDOG Red Dog Mine 60.48 24** P **P** **14 29 10.3 -1.0**
**RDOG Red Dog Mine 60.48 24** P **P** **14 29 11.1 -0.3**
baz=265
**UMQ Umm Al-Quwin 60.50 286** P **P** **14 29 13.8 +1.5**
SNR=11
**UMQ Umm Al-Quwin 60.50 286** *i*P **P** **14 29 12.4 +0.2**
SNR=12
**CMSA Cobar Meteorol 60.59 158** P **P** **14 29 13.8 +1.2**
**KOUNC Koumac, New Ca 60.59 135** P **P** **14 29 14.4 +1.6**
**NAZ Nazwa, Dubai 60.65 285** P **P** **14 29 13.6 +0.3**
SNR=34
**NAZ Nazwa, Dubai 60.65 285** *i*P **P** **14 29 13.6 +0.3**
SNR=29
**FAQ Al Faqa, Dubai 60.78 285** P **P** **14 29 14.3 +0.1**
SNR=27
**FAQ Al Faqa, Dubai 60.78 285** *i*P **P** **14 29 14.4 +0.3**
SNR=50
**ALNE Al Ain 60.84 284** P **P** **14 29 15.0 +0.5**
SNR=51
**ALNE Al Ain 60.84 284** *i*P **P** **14 29 15.0 +0.5**
SNR=52
**ASUD Al Ashush, Dub 61.05 285** P **P** **14 29 16.4 +0.5**
SNR=19
**ASUD Al Ashush, Dub 61.05 285** *i*P **P** **14 29 16.6 +0.7**
SNR=50
**DVP Devils Point 61.19 130** P **P** **14 29 18.4 +1.6**
**AJN Ajban 61.36 285** P **P** **14 29 18.3 +0.3**
SNR=19
**AJN Ajban 61.36 285** *i*P **P** **14 29 18.4 +0.4**
SNR=9.6
**SDPT Sand Point 61.58 39** P **P** **14 29 17.7 -1.2**
**SDPT Sand Point 61.58 39** P **P** **14 29 17.8 -1.2**
baz=274,SNR=8.5
**UMZA Um Al Zommool 61.75 283** P **P** **14 29 20.3 -0.3**
**GHSS Government Hou 61.81 166** P **P** **14 29 22.9 +2.3**
**ARMA Armidale 61.83 152** P **P** **14 29 22.5 +1.5**
ARMA lAmb lAmb 14 29 24.8
comp=Z,214nm,1.4s
**ARMA Armidale 61.83 152** P **P** **14 29 22.7 +1.7**
**TWOA Tennyson Woods 61.91 166** P **P** **14 29 22.3 +1.0**
**PRGR Permogore 62.12 328** *e*P **P** **14 29 22.5 +0.1**
PRGR pmax pmax
comp=Z,752nm,0.6s
**CHNA Chernabura Isl 62.13 40** P **P** **14 29 21.8 -0.8**
baz=275,SNR=10.0
**CNBA Chernabura Isl 62.14 40** P **P** **14 29 21.8 -0.9**
**MZWR Madinat Zayed 62.56 285** P **P** **14 29 25.8 -0.2**
**JOHN Johnston Islan 62.58 84** P **P** **14 29 25.4 -0.8**
**CHGN Chignik 62.66 38** P **P** **14 29 25.5 -0.5**
CHGN lAmb lAmb 14 29 27.6
comp=Z,132nm,0.8s
**CHGN Chignik 62.66 38** P **P** **14 29 25.2 -0.9**
baz=276
**LIFNC LIFOU 62.67 133** P **P** **14 29 27.6 +1.0**
LIFNC lAmb lAmb 14 29 29.6
comp=Z,217nm,0.8s
**LIFNC LIFOU 62.67 133** P **P** **14 29 28.1 +1.5**
**GCSA Galena City Sc 62.84 28** P **P** **14 29 27.2 +0.1**
baz=272,SNR=31
**A21K Barrow 62.84 21** P **P** **14 29 27.3 +0.3**
A21K lAmb lAmb 14 29 29.7
comp=Z,241nm,0.9s
**A21K Barrow 62.84 21** P **P** **14 29 26.8 -0.2**
baz=269,SNR=16
**SHAO Shalim 62.84 278** P **P** **14 29 28.1 +0.1**
SNR=11
**SHAO Shalim 62.84 278** *i*P **P** **14 29 27.9 -0.1**
SNR=29
**NOUC Port Laguerre 63.01 135** P **P** **14 29 30.4 +1.6**
**DZM Mont Dzumac 63.08 135** P **P** **14 29 30.6 +1.2**
comp=Z,96nm,0.9s,baz=287,slow=11,SNR=18
DZM LR LR 14 52 25.4
comp=Z,509nm,20.9s,baz=345,slow=31
**DZM Mont Dzumac 63.08 135** *e*P **P** **14 29 30.8 +1.4**
comp=Z,299nm,1.1s
**DZM Mont Dzumac 63.08 135** P **P** **14 29 30.2 +0.8**
DZM lAmb lAmb 14 29 32.8
comp=Z,122nm,1.0s
**DZM Mont Dzumac 63.08 135** P **P** **14 29 30.9 +1.5**
**DZM Mont Dzumac 63.08 135** P **P** **14 29 30.0 +0.6**
**MAK Makhachkala 63.12 307** *e*P **P** **14 29 26.8 -2.5**
MAK *e**PP **pP** **14 30 12.7 -3.1**
MAK *e**SP **sP** **14 30 35.0 -2.7**
MAK *e* 14 31 50.0
MAK *e*PPP PPP 14 33 19.1
MAK *e*S **S** **14 37 42.7 -1.4**
MAK *e**SS **ScS** **14 39 03.3 +0.9**
MAK *e*SS **SS** **14 41 49.4 -4.1**
MAK *e*SSS SSS 14 44 50.6
MAK pmax pmax
comp=Z,367nm,1.1s
**ONTNC Ouen Toro 63.25 135** P **P** **14 29 31.7 +1.2**
**ONTNC Ouen Toro 63.25 135** P **P** **14 29 32.9 +2.5**
**TTA Tatalina 63.32 30** P **P** **14 29 30.5 0.0**
TTA pmax pmax
comp=Z,60nm,0.7s
**TTA Tatalina 63.32 30** P **P** **14 29 30.5 0.0**
**TTA Tatalina 63.32 30** P **P** **14 29 30.7 +0.3**
baz=274,SNR=48
**YATNC Mamie plateau, 63.35 134** P **P** **14 29 32.8 +1.7**
**GHWR Ruwais 63.38 285** P **P** **14 29 31.2 -0.2**
**DMTO DMTO 63.55 278** P **P** **14 29 32.8 +0.2**
SNR=11
**OUENC Ouen Island, N 63.58 135** P **P** **14 29 33.9 +1.3**
OUENC lAmb lAmb 14 29 36.3
comp=Z,160nm,0.8s
**OUENC Ouen Island, N 63.58 135** P **P** **14 29 34.4 +1.8**
**MARNC Mare, Loyalty 63.69 133** P **P** **14 29 33.6 +0.3**
**MARNC Mare, Loyalty 63.69 133** P **P** **14 29 34.8 +1.5**
**L19K White Mountain 63.92 31** P **P** **14 29 33.7 -0.6**
L19K lAmb lAmb 14 29 37.0
comp=Z,126nm,1.2s
**L19K White Mountain 63.92 31** P **P** **14 29 34.4 +0.1**
baz=276,SNR=29
**DOK Doka 63.98 279** P **P** **14 29 34.9 -0.6**
SNR=25
**O18K Koktuh Hills 63.99 34** P **P** **14 29 35.5 +0.7**
**P18K Big Mountain, 64.03 34** P **P** **14 29 35.3 +0.2**
**P18K Big Mountain, 64.03 34** P **P** **14 29 34.9 -0.2**
baz=277,SNR=11
**NTLH Newcastle Hard 64.03 154** P **P** **14 29 38.9 +3.6**
**J20K Nowinta River 64.06 29** P **P** **14 29 35.2 +0.1**
J20K lAmb lAmb 14 29 38.5
comp=Z,117nm,0.7s
**J20K Nowinta River 64.06 29** P **P** **14 29 35.3 +0.1**
baz=275
**KHOR Al-Khor Airpor 64.07 287** P **P** **14 29 35.4 -0.5**
**IMAR Indian Mountai 64.07 27** P **P** **14 29 35.1 -0.1**
**MGCD Mangrove Creek 64.07 154** P **P** **14 29 38.0 +2.4**
**PINNC Pines Island, 64.11 134** P **P** **14 29 36.5 +0.5**
PINNC lAmb lAmb 14 29 39.8
comp=Z,111nm,1.0s
**PINNC Pines Island, 64.11 134** P **P** **14 29 38.4 +2.4**
**M19K Big River Lodg 64.17 31** P **P** **14 29 36.1 +0.2**
**N19K Bonanza Creek 64.24 33** P **P** **14 29 36.9 +0.3**
**N19K Bonanza Creek 64.24 33** P **P** **14 29 37.0 +0.4**
baz=276,SNR=10
**CHIR Chirikof Islan 64.27 38** P **P** **14 29 36.8 +0.1**
baz=278
**RBK Rabkut 64.29 278** P **P** **14 29 37.4 -0.1**
SNR=29
**GROC Groznyy 64.30 308** *e*P **P** **14 29 35.5 -1.6**
GROC *e* 14 30 07.7
GROC *e**PP **pP** **14 30 20.4 -3.3**
GROC *e**SP **sP** **14 30 44.1 -1.5**
GROC *e* 14 32 00.0
GROC pmax pmax
comp=Z,278nm,0.8s
**ARPS Mount Arapiles 64.34 164** P **P** **14 29 37.7 +0.4**
**L20K Farewell, AK 64.34 31** P **P** **14 29 37.5 +0.4**
baz=276
**O19K Port Alsworth 64.39 33** P **P** **14 29 37.5 +0.2**
**O19K Port Alsworth 64.39 33** P **P** **14 29 37.0 -0.3**
baz=277,SNR=12
**SYDH Sydney Hard Ro 64.42 155** P **P** **14 29 40.0 +2.2**
**SHMA Al-Shehemyia 64.47 288** P **P** **14 29 38.1 -0.4**
**H21K Melozitna Rive 64.48 27** P **P** **14 29 38.3 +0.4**
H21K lAmb lAmb 14 29 41.1
comp=Z,186nm,0.8s
**H21K Melozitna Rive 64.48 27** P **P** **14 29 38.6 +0.7**
baz=276
**WHFO Wadi Hawf 64.54 279** P **P** **14 29 38.1 -1.0**
SNR=23
**TRNA Turayna 64.59 287** P **P** **14 29 39.1 -0.1**
**SAKB Bahrain 64.80 288** P **P** **14 29 40.4 -0.2**
**I21K Tanana 64.88 28** P **P** **14 29 41.2 +0.8**
I21K lAmb lAmb 14 29 43.5
comp=Z,171nm,1.0s
**I21K Tanana 64.88 28** P **P** **14 29 41.1 +0.6**
baz=277
**CHUM Lake Minchumin 64.89 29** P **P** **14 29 41.0 +0.5**
baz=277,SNR=42
**Q19K Cape Douglas, 64.90 35** P **P** **14 29 40.5 -0.2**
Q19K lAmb lAmb 14 29 42.3
comp=Z,62nm,0.6s
**Q19K Cape Douglas, 64.90 35** P **P** **14 29 40.1 -0.6**
baz=278
**SII Sitkinak Islan 64.96 37** P **P** **14 29 41.0 -0.1**
SII lAmb lAmb 14 29 45.4
comp=Z,94nm,1.0s
**SII Sitkinak Islan 64.96 37** P **P** **14 29 39.7 -1.4**
baz=279
**ILSW Iliamna Southw 65.01 33** P **P** **14 29 40.7 -0.8**
**CAST Castle Rocks 65.05 30** P **P** **14 29 41.8 +0.2**
CAST lAmb lAmb 14 29 44.1
comp=Z,146nm,1.1s
**CAST Castle Rocks 65.05 30** P **P** **14 29 41.8 +0.2**
baz=277,SNR=50
**PPLA Purkeypile 65.07 30** P **P** **14 29 41.3 -0.6**
PPLA lAmb lAmb 14 29 45.5
comp=Z,73nm,0.7s
**PPLA Purkeypile 65.07 30** P **P** **14 29 42.1 +0.2**
baz=278,SNR=21
**RSO Redoubt South 65.13 33** P **P** **14 29 42.1 -0.3**
**KLMR Klimovskoe 65.13 328** *e*P **P** **14 29 39.0 -3.1**
KLMR *e* 14 30 10.6
KLMR *e**PP **pP** **14 30 27.9 -1.0**
KLMR pmax pmax
comp=Z,998nm,1.1s
**KLMR Klimovskoe 65.13 328** *e*P **P** **14 29 39.1 -3.1**
KLMR AMP 14 29 43.5
comp=Z,998nm,1.1s
KLMR *e*PcP **PcP** **14 30 10.6 -2.5**
KLMR *e*pP **pP** **14 30 28.0 -1.0**
**ABTO Aybut 65.16 278** P **P** **14 29 42.7 -0.4**
SNR=28
**CAN Canberra 65.17 157** P **P** **14 29 43.4 +0.7**
CAN pmax pmax
comp=Z,48nm,0.9s
**CAN Canberra 65.17 157** P **P** **14 29 43.4 +0.7**
**CAN Canberra 65.17 157** P **P** **14 29 44.1 +1.4**
**CAN Canberra 65.17 157** P **P** **14 29 43.7 +1.0**
CAN pP **pP** **14 30 33.4 +4.3**
**O20K Slope Mountain 65.25 33** P **P** **14 29 43.3 +0.2**
baz=278
**CNB Canberra Magne 65.30 157** P **P** **14 29 45.1 +1.6**

OHAK **Old Harbor** 65.34 36 P P 14 29 43.1 -0.4
OHAK **Old Harbor** 65.34 36 P P 14 29 43.9 +0.3
baz=279
COLD **Coldfoot** 65.35 25 P P 14 29 43.8 +0.4
COLD **Coldfoot** 65.35 25 P P 14 29 43.7 +0.3
baz=277,SNR=71
SPU **Mount Spurr** 65.37 32 P P 14 29 43.4 -0.3
TOLK **Toolik Lake Re** 65.41 24 P P 14 29 44.5 +0.6
TOLK IAmb IAmb 14 29 47.4
comp=Z,143nm,0.7s
TOLK **Toolik Lake Re** 65.41 24 P P 14 29 44.4 +0.6
baz=277,SNR=159
MLY **Manley** 65.42 28 P P 14 29 44.6 +0.6
MLY IAmb IAmb 14 29 47.1
comp=Z,105nm,0.7s
MLY **Manley** 65.42 28 P P 14 29 44.4 +0.4
baz=278
BPAW **Bear Paw Mtn.** 65.44 29 P P 14 29 44.4 +0.3
BPAW IAmb IAmb 14 29 47.2
comp=Z,83nm,0.6s
BPAW **Bear Paw Mtn.** 65.44 29 P P 14 29 44.6 +0.4
baz=278,SNR=29
VRH **Novokhopyorsk** 65.48 317 eP P 14 29 44.0 -0.5
VRH pmax pmax
comp=Z,1µm,0.7s
KTH **Kantishna Hill** 65.55 29 P P 14 29 44.9 0.0
KDAK **Kodiak Island** 65.63 36 P P 14 29 46.1 +0.8
comp=Z,48nm,0.5s,baz=283,slow=4.4,SNR=46
KDAK PcP PcP 14 30 15.4 +0.2
comp=Z,63nm,0.7s,baz=125,slow=0.7,SNR=7.6
KDAK **Kodiak Island** 65.63 36 P P 14 29 45.4 0.0
KDAK IAmb IAmb 14 29 48.2
comp=Z,80nm,0.7s
KDAK **Kodiak Island** 65.63 36 P P 14 29 45.4 0.0
baz=280
BRAT **Ballarat** 65.63 162 P P 14 29 47.1 +1.6
GNI **Garni** 65.74 304 i P P 14 29 47.4 +0.8
GNI pmax pmax
comp=Z,307nm,1.3s
GNI **Garni** 65.74 304 P P 14 29 46.7 +0.1
GNI IAmb IAmb 14 29 49.5
comp=Z,264nm,1.1s
GNI **Garni** 65.74 304 P P 14 29 47.7 +1.1
GNI **Garni** 65.74 304 P P 14 29 47.6 +1.0
ZEI **Tsey** 65.75 307 eP P 14 29 45.1 -1.6
ZEI pmax pmax
comp=Z,189nm,1.0s
HOM **Homer** 65.80 34 P P 14 29 45.9 -0.6
baz=279
NCK **Nalchik** 65.81 308 i P P 14 29 46.5 -0.3
NCK pmax pmax
comp=Z,132nm,1.0s
TRF **Thorofare Moun** 65.84 29 P P 14 29 46.2 -0.6
TRF **Thorofare Moun** 65.84 29 P P 14 29 46.4 -0.4
baz=279,SNR=17
GOF **Gofitskoye** 65.85 310⇑ eP P 14 29 47.3 +0.3
GOF eS S 14 38 18.5 +0.9
GOF pmax pmax
comp=Z,672nm,0.9s
GOF smax smax
comp=N,118nm,1.4s
GOF smax smax
comp=E,73nm,1.5s
CAPN **Captain Cook N** 65.86 32 P P 14 29 46.5 -0.3
baz=279
I23K **Minto, Yukon-K** 65.98 28 P P 14 29 47.5 0.0
I23K **Minto, Yukon-K** 65.98 28 P P 14 29 48.2 +0.7
baz=279,SNR=20
CUT **Chulitna** 66.02 31 P P 14 29 47.1 -0.6
CUT IAmb IAmb 14 29 50.9
comp=Z,116nm,0.6s
CUT **Chulitna** 66.02 31 P P 14 29 47.2 -0.5
baz=279,SNR=12
CNPM **China Poot** 66.03 34 P P 14 29 47.1 -0.9
BWN **Browne** 66.09 29 P P 14 29 48.6 +0.4
BWN IAmb IAmb 14 30 20.3
comp=Z,138nm,0.8s
TOO **Toolangi** 66.10 161 P P 14 29 48.9 +0.3
TOO pmax pmax
comp=Z,110nm,1.2s
TOO **Toolangi** 66.10 161 P P 14 29 48.9 +0.3
TOO **Toolangi** 66.10 161 P P 14 29 49.6 +1.0
ONI **Oni** 66.11 307 P P 14 29 50.0 +1.1
ONI pmax pmax
comp=Z,420nm,1.1s
ONI **Oni** 66.11 307 P P 14 29 50.0 +1.1
BRLK **Bradley Lake** 66.16 33 P P 14 29 48.2 -0.7
LVZ **Lovozero** 66.18 336 i P P 14 29 48.7 -0.1
LVZ pmax pmax
comp=Z,126nm,0.9s
LVZ **Lovozero** 66.18 336 P P 14 29 48.5 -0.3
LVZ IAmb IAmb 14 29 54.3
comp=Z,181nm,0.7s
LVZ **Lovozero** 66.18 336 P P 14 29 49.1 +0.4
NEA2 **Nenana** 66.19 28 P P 14 29 48.9 +0.1
NEA2 IAmb IAmb 14 29 51.1
comp=Z,176nm,1.1s
NEA2 **Nenana** 66.19 28 P P 14 29 49.1 +0.2
baz=279,SNR=15
M22K **Willow** 66.19 31 P P 14 29 48.2 -0.6
M22K IAmb IAmb 14 29 50.1
comp=Z,166nm,0.8s
M22K **Willow** 66.19 31 P P 14 29 47.8 -1.1
baz=280,SNR=12
BRSE **Bradley Lake S** 66.24 33 P P 14 29 49.5 +0.2
baz=280
KBZ **Khabaz** 66.25 309 P P 14 29 50.2 +0.6
comp=Z,242nm,0.9s,baz=107,slow=5.2,SNR=171
GEXS **Deakin Univers** 66.34 162 P P 14 29 52.2 +2.2
KIV **Kislovodsk** 66.34 309 eP P 14 29 50.7 +0.4
KIV ePPP PPP 14 33 57.3
KIV eS S 14 38 24.5 +0.7
KIV pmax pmax
comp=Z,645nm,1.0s
KIV pmax pmax
comp=Z,308nm,3.1s
KIV MLR MLR
comp=Z,165nm,17.0s
KIV **Kislovodsk** 66.34 309 P P 14 29 50.3 0.0
KIV **Kislovodsk** 66.34 309 P P 14 29 51.0 +0.7
KIV **Kislovodsk** 66.34 309 i P P 14 29 51.0 +0.7
SNR=107
MCK **McKinley** 66.39 29 P P 14 29 49.8 -0.4
MCK pmax pmax
comp=Z,74nm,0.9s
MCK **McKinley** 66.39 29 P P 14 29 49.8 -0.4
MCK **McKinley** 66.39 29 P P 14 29 49.8 -0.4
baz=280,SNR=20
SHA1 **Shidzhatmaz** 66.41 309 d iP P 14 29 51.2 +0.2
SOCY **Socotra** 66.43 273 P P 14 29 50.4 -0.9
SNR=19
SOCY **Socotra** 66.43 273 P P 14 29 49.8 -1.5
H24K **Noodor Dome** 66.48 27 P P 14 29 50.7 0.0
H24K **Noodor Dome** 66.48 27 P P 14 29 50.8 0.0
baz=280
NEY **Neytrino** 66.48 308 d iP P 14 29 52.8 +1.5
NEY pmax pmax
comp=Z,48nm,1.0s
MDM **Murphy Dome** 66.48 28 P P 14 29 50.8 +0.1
MDM IAmb IAmb 14 29 53.2
comp=Z,182nm,1.0s
RND **Reindeer** 66.49 29 P P 14 29 50.5 -0.4
RND pmax pmax
comp=Z,178nm,0.7s
RND **Reindeer** 66.49 29 P P 14 29 50.5 -0.4
RND IAmb IAmb 14 29 53.4
comp=Z,178nm,0.7s
RC01 **Rabbit Creek A** 66.49 32 P P 14 29 50.0 -0.8
RC01 **Rabbit Creek A** 66.49 32 P P 14 29 50.1 -0.7
baz=280
WRH **Wood River Hil** 66.63 28 P P 14 29 51.0 -0.6
TCOL **CIGO, UAF Yank** 66.65 28 P P 14 29 52.1 +0.4
TCOL **CIGO, UAF Yank** 66.65 28 P P 14 29 51.9 +0.2
baz=280,SNR=9.2
COLA **College** 66.66 28 P P 14 29 52.0 +0.2
COLA pmax pmax
comp=Z,49nm,0.8s
COLA **College** 66.66 28 P P 14 29 52.0 +0.2
COLA **College** 66.66 28 P P 14 29 52.3 +0.5
baz=280
COLA **College** 66.66 28 P P 14 29 51.8 +0.1
PMR **Palmer** 66.69 31 P P 14 29 51.6 -0.4
PMR pmax pmax
comp=Z,45nm,1.0s
PMR **Palmer** 66.69 31 P P 14 29 51.6 -0.4
baz=281,SNR=12
APA **Apatity** 66.70 335 ⇓ iP P 14 29 51.8 -0.2
APA i *PP pP 14 30 39.0 0.0
APA i S S 14 38 19.0 -8.0
APA i 14 39 30.0
APA pmax pmax
comp=Z,323nm,0.7s
CCB **Clear Creek Bu** 66.72 28 P P 14 29 51.9 -0.2
GHO **Glory Hole Cre** 66.75 31 P P 14 29 51.9 -0.7
POKR **Poker Plat Res** 66.79 27 P P 14 29 53.2 +0.5
POKR IAmb IAmb 14 29 55.2
comp=Z,90nm,0.8s
POKR **Poker Plat Res** 66.79 27 P P 14 29 53.2 +0.5
baz=281,SNR=25
SEW **Seward** 66.81 33 P P 14 29 52.4 -0.4
SEW **Seward** 66.81 33 P P 14 29 52.1 -0.8
baz=281
KARS **Kars** 66.85 305 P P 14 29 52.5 -1.2
KARS pmax pmax
comp=Z,1µm,1.1s
KARS **Kars** 66.85 305 P P 14 29 52.5 -1.2
LPSR **Galich'ya Gora** 66.90 319 eP P 14 29 53.1 -0.4
LPSR pmax pmax
comp=Z,1µm,0.8s
VORR **Voronezh** 66.93 318 eP P 14 29 53.9 +0.2
VORR pmax pmax
comp=Z,2µm,0.8s
SML **Sawmill** 67.02 31 P P 14 29 53.6 -0.7
SML IAmb IAmb 14 29 58.5
comp=Z,94nm,0.9s
SML **Sawmill** 67.02 31 P P 14 29 54.0 -0.2
baz=281,SNR=23
VORD **Divnogorie** 67.03 317 eP P 14 29 53.6 -0.8
VORD pmax pmax
comp=Z,550nm,1.0s
KNK **Knik Glacier** 67.04 31 P P 14 29 54.0 -0.3
KNK **Knik Glacier** 67.04 31 P P 14 29 54.0 -0.3
baz=281,SNR=11
IL31 67.08 28 P P 14 29 53.5 -0.9
ILAR **Eielson Array** 67.08 28 P P 14 29 54.5 0.0
comp=Z,10nm,0.5s,baz=247,slow=3.1,SNR=31
ILAR PKP2bc 14 58 14.9
comp=Z,1.5nm,1.0s,baz=103,slow=2.2,SNR=4.1
ILAR **Eielson Array** 67.08 28 P P 14 29 53.5 -1.0
HDA **Harding Lake** 67.13 28 P P 14 29 53.6 -1.1
HDA **Harding Lake** 67.13 28 P P 14 29 54.3 -0.5
baz=281,SNR=11
PWL **Port Wells** 67.21 32 P P 14 29 54.9 -0.5
PWL IAmb IAmb 14 29 59.9
comp=Z,98nm,0.8s
PWL **Port Wells** 67.21 32 P P 14 29 54.6 -0.7
baz=282,SNR=11
HOPEN **Hopen** 67.33 345 eP P 14 29 57.0 +1.2
FYU **Fort Yukon** 67.39 26 P P 14 29 57.5 +1.1
GEVA **Gevas** 67.46 303 P P 14 29 58.0 +0.4
GEVA IAmb IAmb 14 29 59.9
comp=Z,263nm,0.9s
BMAR **Burnt Mountain** 67.46 25 P P 14 29 57.6 +0.7
SCM **Sheep Creek Mo** 67.48 31 P P 14 29 57.4 +0.2
SCM pmax pmax
comp=Z,124nm,0.7s
SCM **Sheep Creek Mo** 67.48 31 P P 14 29 57.4 +0.2
SCM IAmb IAmb 14 30 00.1
comp=Z,124nm,0.7s
SCM **Sheep Creek Mo** 67.48 31 P P 14 29 56.2 -0.9
baz=282,SNR=23
PRP **Porcupine Dome** 67.50 27 P P 14 29 57.6 +0.4
PRP **Porcupine Dome** 67.50 27 P P 14 29 57.0 -0.3
baz=282
OBN **Obninsk** 67.72 322 d iP P 14 29 58.1 -0.5
OBN 14 30 19.0
OBN S S 14 38 44.0 +4.4
OBN pmax pmax
comp=Z,502nm,0.8s
OBN **Obninsk** 67.72 322 P P 14 29 58.2 -0.5
OBN **Obninsk** 67.72 322 P P 14 29 58.2 -0.4
J25K **Salcha River,** 67.75 28 P P 14 29 57.6 -1.2
J25K **Salcha River,** 67.75 28 P P 14 29 57.5 -1.3
baz=283,SNR=10.0
GLI **Glacier Island** 67.80 32 P P 14 29 58.2 -0.8
GLI IAmb IAmb 14 30 03.3
comp=Z,85nm,0.7s
GLI **Glacier Island** 67.80 32 P P 14 29 58.7 -0.4
baz=283
M24K **Tolsona, Glenn** 67.95 30 P P 14 30 00.4 +0.3
M24K IAmb IAmb 14 30 03.6
comp=Z,192nm,0.8s
M24K **Tolsona, Glenn** 67.95 30 P P 14 30 00.9 +0.8
baz=283,SNR=20
PAX **Paxson** 68.08 29 P P 14 30 01.1 +0.2
PAX pmax pmax
comp=Z,55nm,0.9s
PAX **Paxson** 68.08 29 P P 14 30 01.1 +0.2
PAX **Paxson** 68.08 29 P P 14 30 00.6 -0.2
baz=283,SNR=23
FID **Port Fidalgo** 68.12 32 P P 14 30 01.2 +0.2
SIRT **Sirnak** 68.15 302 P P 14 30 01.4 -0.5
GURO **Guroymak-BITLI** 68.17 303 P P 14 30 02.1 +0.1
GURO IAmb IAmb 14 30 04.6
comp=Z,129nm,0.9s
RIDG **Independent Ri** 68.17 29 P P 14 30 01.5 +0.1
RIDG IAmb IAmb 14 30 28.7
comp=Z,175nm,1.1s
RIDG **Independent Ri** 68.17 29 P P 14 30 00.4 -1.0
baz=283,SNR=16
KLU **Klutina** 68.21 31 P P 14 30 02.0 +0.3
KLU **Klutina** 68.21 31 P P 14 30 01.4 -0.4
baz=283,SNR=9.4
VSLR **Vesyoloye** 68.33 309 d iP P 14 30 02.6 -0.1
MSVF **Nonsavu** 68.35 123 i P P 14 30 04.7 +1.5
MSVF pmax pmax
comp=Z,129nm,1.0s
MSVF **Nonsavu** 68.35 123 P P 14 30 04.6 +1.5
MSVF IAmb IAmb 14 30 07.2
comp=Z,118nm,0.9s
MSVF **Nonsavu** 68.35 123 P P 14 30 05.3 +2.1
MSVF **Nonsavu** 68.35 123 P P 14 30 04.7 +1.5
MSVF pP pwP 14 30 52.2 -0.2
HARP **HAARP** 68.35 30 P P 14 30 02.3 -0.2
baz=284,SNR=9.2
DIV **Divide** 68.37 31 P P 14 30 02.9 +0.2
SCRK **Sand Creek** 68.49 28 P P 14 30 03.2 -0.2
SCRK **Sand Creek** 68.49 28 P P 14 30 03.3 -0.2
baz=284,SNR=18
Q23K **Middleton Isla** 68.49 33 P P 14 30 03.4 0.0
baz=284
KEV **Kevo** 68.50 338 P P 14 30 02.7 -0.5
KEV pmax pmax
comp=Z,265nm,1.1s
KEV **Kevo** 68.50 338 P P 14 30 02.7 -0.5
KEV IAmb IAmb 14 30 04.9
comp=Z,264nm,1.1s
KEV **Kevo** 68.50 338 P P 14 30 03.2 0.0
EYAK **Cordova Ski Ar** 68.52 32 P P 14 30 04.2 +0.7
baz=284
SOC **Sochi** 68.52 309 c iP P 14 30 02.3 -1.5
SOC e*PP pP 14 30 48.8 -2.3
SOC e*SP sP 14 31 12.0 -0.8
SOC e 14 32 37.1
SOC eS S 14 38 47.1 -2.4
SOC eSS SS 14 43 14.3 -2.9
SOC pmax pmax
comp=Z,375nm,0.9s
DOT **Dot Lake** 68.53 29 P P 14 30 03.2 -0.5
J26L **Joseph Creek** 68.54 28 P P 14 30 02.8 -0.9
J26L **Joseph Creek** 68.54 28 P P 14 30 03.6 -0.1
baz=284,SNR=18
SPB2 **Spitsbergen Ar** 68.61 348 P P 14 30 03.3 -0.5
SPA0 **Spitsbergen Ar** 68.61 348 ⇓ iP P 14 30 04.4 +0.6
SPITS **Spitsbergen Ar** 68.61 348 P P 14 30 04.0 +0.1
comp=Z,283nm,0.7s,baz=134,slow=14,SNR=262
DGTI **Dogotuki** 68.78 121 P P 14 30 06.6 +0.8
N25K **Chitina, Valde** 68.80 31 P P 14 30 05.8 +0.4
N25K **Chitina, Valde** 68.80 31 P P 14 30 06.0 +0.7
baz=284,SNR=19
MENT **Mentasta** 68.86 29 P P 14 30 05.6 -0.1
BMRM **Bremner River** 68.96 31 P P 14 30 04.9 -1.4
BMRM **Bremner River** 68.96 31 P P 14 30 06.3 0.0
baz=285,SNR=6.5
L26K **Log Cabin Wild** 69.00 29 P P 14 30 06.9 +0.4
L26K **Log Cabin Wild** 69.00 29 P P 14 30 06.9 +0.4
baz=285,SNR=15
ARA0 **ARCESS Array S** 69.07 338 ⇓ iP P 14 30 07.3 +0.5
ARCES **ARCESS Array B** 69.07 338 P P 14 30 07.1 +0.3
comp=Z,70nm,0.9s,baz=70,slow=6.6,SNR=96
ARCES LR LR 15 04 57.6
comp=Z,458nm,18.2s,baz=256,slow=40
ARCES **ARCESS Array B** 69.07 338 P P 14 30 06.5 -0.3
ARCES IAmb IAmb 14 30 08.6
comp=Z,277nm,1.2s
KBS **Kingsbay** 69.12 349 P P 14 30 06.9 0.0
KBS pmax pmax
comp=Z,169nm,0.8s
KBS **Kingsbay** 69.12 349 i P P 14 30 07.1 +0.2
KBS **Kingsbay** 69.12 349 ⇓ iP P 14 30 07.4 +0.5
KBS **Kingsbay** 69.12 349 P P 14 30 06.9 0.0
KBS IAmb IAmb 14 30 08.5
comp=Z,169nm,0.8s
GLB **Gilahina Butte** 69.21 31 P P 14 30 08.2 +0.3
GLB IAmb IAmb 14 30 10.4
comp=Z,98nm,0.6s
HSPB **Hornsund (broa** 69.23 347 eP P 14 30 09.1 +1.4
TAVE **Taveuni** 69.30 121 P P 14 30 10.6 +1.7
M26K **Nabesna, AK** 69.32 30 P P 14 30 09.0 +0.4
M26K IAmb IAmb 14 30 11.3
comp=Z,153nm,0.5s
M26K **Nabesna, AK** 69.32 30 P P 14 30 08.8 +0.2
baz=286
HAMF **Hammerfest** 69.33 339 ⇓ iP P 14 30 08.8 +0.5
BJO1 **Bjornoya** 69.38 344 ⇓ iP P 14 30 08.4 -0.2
VRDI **Verde Repeater** 69.43 31 P P 14 30 09.5 +0.1
VRDI IAmb IAmb 14 30 11.8
comp=Z,80nm,0.6s
EGAK **Eagle** 69.47 27 P P 14 30 09.4 +0.1
EGAK IAmb IAmb 14 30 11.9
comp=Z,82nm,0.8s
EGAK **Eagle** 69.47 27 P P 14 30 08.6 -0.7
baz=286,SNR=38
MARD **Mardin** 69.47 302 P P 14 30 10.0 0.0
BERG **Berg Lake** 69.54 32 P P 14 30 10.1 +0.3
BERG IAmb IAmb 14 30 12.4
comp=Z,136nm,0.6s
SUCK **Suckling Hills** 69.59 32 P P 14 30 11.7 +1.6
SUCK IAmb IAmb 14 30 14.8
comp=Z,202nm,1.3s
L27K **Beaver Creek,** 69.66 29 P P 14 30 11.5 +1.0
L27K IAmb IAmb 14 30 13.8
comp=Z,96nm,0.7s
L27K **Beaver Creek,** 69.66 29 P P 14 30 11.3 +0.7
baz=286
BCAR **Beaver Creek A** 69.68 29 P P 14 30 11.6 +0.9
PUL **Pulkovo** 69.83 327 i P P 14 30 11.5 -0.1
PUL pmax pmax
comp=Z,624nm,0.9s
PUL **Pulkovo** 69.83 327 eP P 14 30 12.4 +0.9
RAYN **Ar Rayn** 69.92 287 P P 14 30 12.3 -0.5
RAYN pmax pmax
comp=Z,157nm,1.0s
RAYN **Ar Rayn** 69.92 287 P P 14 30 12.3 -0.5
RAYN IAmb IAmb 14 30 14.7
comp=Z,157nm,1.0s
RAYN **Ar Rayn** 69.92 287 P P 14 30 12.7 -0.2
RAYN **Ar Rayn** 69.92 287 i P P 14 30 12.8 -0.1
SNR=106
WAX **Waxell Ridge** 69.93 32 P P 14 30 12.8 +0.5
WAX IAmb IAmb 14 30 14.9
comp=Z,141nm,0.6s
GLAD **Gladstone** 69.99 160 P P 14 30 13.4 +0.7
KTK1 **Kautokeino** 70.00 338 ⇓ iP P 14 30 13.1 +0.6
ISLE **Juniper Island** 70.13 32 P P 14 30 14.1 +0.6
ISLE IAmb IAmb 14 30 15.8
comp=Z,74nm,0.7s
BARN **Barnard Glacie** 70.31 31 P P 14 30 15.3 +0.6
BARN IAmb IAmb 14 30 17.6
comp=Z,122nm,0.6s
DAWY **Dawson** 70.41 28 P P 14 30 15.5 +0.4
DAWY IAmb IAmb 14 30 17.7
comp=Z,110nm,0.7s
DAWY **Dawson** 70.41 28 P P 14 30 15.4 +0.3
baz=288,SNR=89
MESA **MESA** 70.43 32 P P 14 30 15.1 -0.3
MESA IAmb IAmb 14 30 19.0
comp=Z,152nm,1.3s
MESA **MESA** 70.43 32 P P 14 30 15.2 -0.3
baz=287
I29M **Ogilvie Camp,** 70.45 26 P P 14 30 16.2 +0.9
I29M **Ogilvie Camp,** 70.45 26 P P 14 30 15.8 +0.5
baz=288,SNR=15
YAH **Yahtse** 70.48 32 P P 14 30 16.9 +1.1
YUK3 **Moose Creek** 70.65 30 P P 14 30 16.9 +0.1
baz=288
EPYK **Eagle Plains** 70.73 25 P P 14 30 17.2 +0.1
EPYK IAmb IAmb 14 30 19.2
comp=Z,185nm,0.7s
EPYK **Eagle Plains** 70.73 25 P P 14 30 16.5 -0.5
baz=290,SNR=125
TABL **Table Mountain** 70.74 32 P P 14 30 17.9 +0.5
JETT **Jettan, Norway** 70.75 339 ⇓ iP P 14 30 18.9 +1.8
J29M **Klondike Camp** 70.77 27 P P 14 30 18.7 +1.4
J29M **Klondike Camp** 70.77 27 P P 14 30 17.8 +0.5
baz=289,SNR=7.5
LKBA **Tubou, Lakemba** 71.03 122 P P 14 30 23.2 +3.8
KIP **Kipapa** 71.17 75 P P 14 30 20.7 +0.4
KIP pmax pmax
comp=Z,130nm,0.7s
KIP **Kipapa** 71.17 75 P P 14 30 20.7 +0.4
KIP IAmb IAmb 14 30 23.7
comp=Z,130nm,0.7s
KIP **Kipapa** 71.17 75 P P 14 30 22.4 +2.1
TRO **Tromso** 71.21 339 ⇓ eP P 14 30 19.9 +0.3
INK **Inuvik** 71.21 22 P P 14 30 20.1 +0.3
comp=Z,128nm,0.8s,baz=304,slow=6.3,SNR=404
INK PKPPKP PP'df 14 57 57.1 -17
comp=Z,1.5nm,1.0s,baz=45,slow=4.3,SNR=3.3
INK **Inuvik** 71.21 22 P P 14 30 19.4 -0.4
INK IAmb IAmb 14 30 21.8
comp=Z,131nm,0.8s
INK **Inuvik** 71.21 22 P P 14 30 19.6 -0.2
baz=292
NOR **Nord** 71.22 354 i P P 14 30 18.9 -0.8
PCA **Pinnacle** 71.27 32 P P 14 30 21.4 +1.1
PCA IAmb IAmb 14 30 23.9
comp=Z,263nm,0.8s
PINM **Pinnacle** 71.27 32 P P 14 30 20.6 +0.2
baz=289,SNR=29
FIA1 **FINESS Array S** 71.33 330 P P 14 30 20.1 -0.5
FINES **FINESS Array B** 71.33 330 P P 14 30 20.9 +0.3
comp=Z,366nm,0.7s,baz=62,slow=5.9,SNR=903
FINES **FINESS Array B** 71.33 330 P P 14 30 20.2 -0.3
TAU **Tasmania Unive** 71.56 162 P P 14 30 22.8 +0.7
TAU pmax pmax
comp=Z,118nm,1.2s
TAU **Tasmania Unive** 71.56 162 P P 14 30 22.8 +0.7
TAU **Tasmania Unive** 71.56 162 P P 14 30 23.6 +1.5
TOKA **Tokat** 71.77 307 P P 14 30 23.7 0.0
TOKA IAmb IAmb 14 30 25.9
comp=Z,208nm,1.0s
PNL **Peninsula** 71.81 32 P P 14 30 23.7 +0.1
baz=289,SNR=12
YUK6 **Outpost Mounta** 71.87 31 P P 14 30 24.7 +0.6
baz=290,SNR=42
SIM **Simferopol'** 71.98 312 deP P 14 30 24.2 -0.6
SIM e 14 30 41.0
SIM pmax pmax
comp=Z,84nm,0.9s
VSU **Vasula** 72.00 327 d iP P 14 30 24.3 -0.3
VSU pmax pmax
comp=Z,2µm,1.0s
VSU **Vasula** 72.00 327 eP P 14 30 25.2 +0.6
MAYO **Mayo, Yukon** 72.03 28 P P 14 30 25.4 +0.6
baz=291,SNR=131
SNOP **Sinop** 72.15 309 P P 14 30 25.7 -0.2
SNOP IAmb IAmb 14 30 27.4
comp=Z,152nm,0.7s
GAZ **Gaziantep** 72.22 303 P P 14 30 25.6 -0.9
GAZ IAmb IAmb 14 30 27.4
comp=Z,249nm,1.0s
A36M **Sachs Harbour** 72.23 18 P P 14 30 25.1 -0.7
A36M IAmb IAmb 14 30 28.0
comp=Z,136nm,0.8s
A36M **Sachs Harbour** 72.23 18 P P 14 30 25.2 -0.6
baz=298,SNR=163
HYT **Haines Junctio** 72.31 31 P P 14 30 27.1 +0.5
HYT IAmb IAmb 14 30 29.9
comp=Z,112nm,0.7s
HYT **Haines Junctio** 72.31 31 P P 14 30 27.9 +1.3
baz=291,SNR=75
MSEY **Mahe Island** 72.35 256 P P 14 30 27.3 -0.2

MSEY pmax pmax
comp=Z,155nm,1.0s
**MSEY Mahe Island 72.35 256** P **P** **14 30 27.3 -0.2**
MSEY IAmb IAmb 14 30 29.3
comp=Z,155nm,0.9s
**MSEY Mahe Island 72.35 256** P **P** **14 30 28.2 +0.7**
**MSEY Mahe Island 72.35 256** *i* P **P** **14 30 27.2 -0.4**
SNR=14
**BNN Bunyan 72.70 305** P **P** **14 30 29.2 -0.2**
**MNK Minsk 72.72 323** *i* P **P** **14 30 29.8 +0.8**
MNK *i* *PP **pP** **14 31 12.9 -3.8**
MNK *i* 14 33 14.1
MNK *i* PPP PPP 14 34 59.4
MNK *i* S **S** **14 39 39.5 +2.0**
MNK *i* SS **SS** **14 44 26.6 +5.8**
MNK pmax pmax
comp=Z,1μm,0.9s
MNK pmax pmax
comp=N,135nm,0.8s
MNK pmax pmax
comp=E,93nm,0.9s
**MNK Minsk 72.72 323** *i* P **P** **14 30 29.8 +0.8**
comp=E,93nm,0.9s
MNK *i* P **P** **14 30 29.8 +0.8**
comp=N,135nm,0.8s
MNK *i* P **P** **14 30 29.8 +0.8**
comp=Z,1μm,0.9s,baz=251
MNK *i* pP **pP** **14 31 12.9 -3.8**
MNK *i* PP **PP** **14 33 14.2 +1.0**
MNK *i* PPP PPP 14 34 59.4
MNK *i* S **S** **14 39 39.5 +2.0**
MNK *i* SS **SS** **14 44 26.6 +5.8**
MNK *i* SSS SSS 14 47 43.5
**N31M Braeburn, Yuko 72.85 30** P **P** **14 30 30.6 +0.9**
baz=292,SNR=83
**BZK Bozkurt 73.02 309** ⇑P **P** **14 30 31.6 +0.7**
**BZK Bozkurt 73.02 309** P **P** **14 30 30.8 -0.1**
**IDID Didziasalis 73.06 324** *eP* **P** **14 30 31.7 +0.8**
**STEI Steigen 73.14 338** ⇓*i*P **P** **14 30 31.5 +0.3**
**NACGM Naroch 73.18 323** *i* P **P** **14 30 32.3 +0.7**
**M31M Drury Creek, Y 73.19 29** P **P** **14 30 31.8 +0.1**
M31M IAmb IAmb 14 30 34.3
comp=Z,157nm,0.7s
**M31M Drury Creek, Y 73.19 29** P **P** **14 30 31.9 +0.2**
baz=293,SNR=134
**AKASG Malin Array Be 73.23 319** P **P** **14 30 31.9 -0.2**
comp=Z,415nm,0.7s,baz=58,slow=6.1,SNR=758
**AKASG Malin Array Be 73.23 319** P **P** **14 30 31.2 -0.9**
**AKBB Malin Array Si 73.23 319** P **P** **14 30 30.8 -1.3**
AKBB pmax pmax
comp=Z,349nm,0.7s
**AKBB Malin Array Si 73.23 319** P **P** **14 30 30.8 -1.3**
**ISAL Salakas 73.30 324** *eP* **P** **14 30 33.3 +0.9**
**IIGN Ignalina 73.33 324** *eP* **P** **14 30 33.4 +0.9**
**MTSE Matsula 73.34 328** *eP* **P** **14 30 33.1 +0.6**
**FAUS Fauske 73.36 337** ⇓*i*P **P** **14 30 32.8 +0.3**
**EUNU Eureka 73.39 5** P **P** **14 30 32.2 -0.4**
**ILGA Ilgaz 73.52 308** P **P** **14 30 33.0 -1.3**
ILGA IAmb IAmb 14 30 36.5
comp=Z,305nm,0.9s
**WHY Whitehorse 73.57 30** P **P** **14 30 34.4 +0.4**
WHY IAmb IAmb 14 30 37.2
comp=Z,175nm,0.8s
**WHY Whitehorse 73.57 30** P **P** **14 30 34.8 +0.8**
baz=293,SNR=90
**LOF Lofoten 73.61 338** ⇓*i*P **P** **14 30 33.5 -0.5**
**FARO Faro, Yukon 73.62 28** P **P** **14 30 34.9 +0.7**
baz=294,SNR=208
**HPAH Hawaii Prepara 73.69 75** P **P** **14 30 35.6 +0.2**
HPAH IAmb IAmb 14 30 38.5
comp=Z,91nm,0.7s
**SKAG Skagway 73.82 31** P **P** **14 30 35.6 +0.3**
SKAG IAmb IAmb 14 30 39.2
comp=Z,220nm,0.8s
**SKAG Skagway 73.82 31** P **P** **14 30 36.5 +1.2**
baz=293,SNR=71
**C36M Paulatuk 73.86 20** P **P** **14 30 34.5 -0.8**
C36M IAmb IAmb 14 30 37.4
comp=Z,227nm,1.1s
**C36M Paulatuk 73.86 20** P **P** **14 30 34.2 -1.1**
baz=300,SNR=236
**POHA Pohakuloa 73.93 75** P **P** **14 30 39.0 +2.0**
**BR131 Keskin Array S 74.03 307** P **P** **14 30 36.7 -0.4**
BR131 pmax pmax
comp=Z,447nm,1.0s
**BR131 Keskin Array S 74.03 307** P **P** **14 30 36.9 -0.2**
SNR=91
**BR131 Keskin Array S 74.03 307** P **P** **14 30 36.7 -0.4**
**BRTR Keskin Array B 74.03 307** P **P** **14 30 37.5 +0.4**
comp=Z,198nm,0.9s,baz=98,slow=5.3,SNR=291
**BRTR Keskin Array B 74.03 307** P **P** **14 30 36.5 -0.6**
**HMH Humu'ula Sheep 74.03 76** P **P** **14 30 38.8 +1.1**
HMH IAmb IAmb 14 30 41.0
comp=Z,118nm,0.8s
**HWQ Hawqa 74.16 301** *eP* **P** **14 30 38.3 +0.3**
**MOR8 Moi Rana 74.21 336** ⇓*i*P **P** **14 30 36.7 -0.8**
**AFI Afiamalu 74.25 114** P **P** **14 30 39.5 +0.9**
comp=Z,14nm,0.8s,baz=214,slow=3.6,SNR=2.3
AFI LR LR 14 58 00.6
comp=Z,172nm,19.2s,baz=310,slow=31
**PURM Purcari 74.27 314** ⇑P **P** **14 30 38.1 -0.1**
**MMPY Sheldon Lake, 74.35 28** P **P** **14 30 39.0 +0.5**
baz=295,SNR=62
**BESE Bessie Mountai 74.39 32** P **P** **14 30 39.9 +1.2**
BESE IAmb IAmb 14 30 41.9
comp=Z,186nm,1.1s
**PABE Paberze 74.47 324** *eP* **P** **14 30 39.8 +0.7**
**PABE Paberze 74.47 324** P **P** **14 30 39.1 0.0**
**SLIT Slitere, Latvi 74.50 327** *eP* **P** **14 30 39.8 +0.5**
**BHL Bhannes 74.52 300** *eP* **P** **14 30 39.8 -0.2**
**KONS Konsvik 74.53 337** *eP* **P** **14 30 39.4 +0.1**
**AAL Aland 74.56 330** *eP* **P** **14 30 39.6 +0.1**
**ANTO Ankara 74.59 307** P **P** **14 30 39.9 -0.3**
ANTO pmax pmax
comp=Z,358nm,0.8s
**ANTO Ankara 74.59 307** P **P** **14 30 39.9 -0.3**
**BR231 Keskin MP Arra 74.61 307** P **P** **14 30 39.9 -0.5**
**SHBL Chebaa 74.64 300** *eP* **P** **14 30 40.8 0.0**
**SORM Soroca 74.66 316** ⇑P **P** **14 30 39.9 -0.4**
**P33M Teslin, Yukon 74.68 30** P **P** **14 30 40.5 0.0**
P33M IAmb IAmb 14 30 43.4
comp=Z,179nm,1.0s
**P33M Teslin, Yukon 74.68 30** P **P** **14 30 41.2 +0.7**
baz=295,SNR=86
**JIS Juneau Island 74.74 32** P **P** **14 30 41.2 +0.6**
JIS IAmb IAmb 14 30 44.0
comp=Z,188nm,0.9s
**SIT Sitka 74.77 34** P **P** **14 30 41.9 +1.1**
SIT pmax pmax
comp=Z,358nm,1.1s
**SIT Sitka 74.77 34** P **P** **14 30 41.9 +1.1**
SIT IAmb IAmb 14 30 44.8
comp=Z,358nm,1.1s
**SIT Sitka 74.77 34** P **P** **14 30 42.0 +1.2**
baz=293,SNR=19
**KIS Kishinev 74.78 315** ⇓*i*P **P** **14 30 40.9 -0.2**
comp=Z,200nm,0.5s
**KIS Kishinev 74.78 315** *di*P **P** **14 30 40.9 -0.2**
KIS pmax pmax
comp=Z,200nm,0.5s
**MILM Milestii Mici 74.81 315** ⇓*i*P **P** **14 30 40.0 -1.3**
comp=Z,500nm,0.9s
**MILM Milestii Mici 74.81 315** ⇑P **P** **14 30 40.6 -0.6**
**MILM Milestii Mici 74.81 315** *di*P **P** **14 30 40.0 -1.3**
MILM pmax pmax
comp=Z,500nm,0.9s
**KDZE Karadeniz Ereo 75.04 309** ⇑P **P** **14 30 41.7 -1.0**
**PBUR Paburge 75.32 325** *eP* **P** **14 30 44.9 +0.9**
**LEOM Leova 75.33 315** ⇓P **P** **14 30 44.7 +0.4**
**TLCR 75.44 313** ⇓P **P** **14 30 45.4 +0.5**
**SUW Suwalki 75.47 323** P **P** **14 30 44.4 -0.5**
SUW pmax pmax
comp=Z,1μm,1.0s
**SUW Suwalki 75.47 323** *eP* **P** **14 30 45.0 +0.2**
**SUW Suwalki 75.47 323** P **P** **14 30 44.4 -0.5**
**IAS Iasi 75.50 316** ⇑P **P** **14 30 45.3 +0.1**
**GHAJ Ghor Haditha 75.51 298** P **P** **14 30 45.9 +0.4**
GHAJ IAmb IAmb 14 30 48.0
comp=Z,343nm,1.0s
**MDUB Mudurnu 75.52 308** P **P** **14 30 45.1 -0.5**
**JURR Jurilovca 75.55 313** ⇓P **P** **14 30 46.3 +0.8**
**VASR Vaslui 75.56 315** ⇑P **P** **14 30 46.2 +0.6**
**VLDR Vladesti 75.67 314** ⇑P **P** **14 30 46.8 +0.6**
**GIUM Giurgiulesti 75.72 314** ⇓P **P** **14 30 47.4 +0.9**

**UPP Uppsala 75.78 330** *eP* **P** **14 30 46.9 +0.5**
**TATR Tatarca 75.78 314** ⇓P **P** **14 30 47.8 +0.9**
**SCTR Scanteiesti 75.79 314** ⇑P **P** **14 30 47.7 +0.8**
**VARL Varlezi 75.80 314** ⇓P **P** **14 30 47.8 +0.8**
**BIR Birlad 75.81 315** ⇓P **P** **14 30 48.1 +1.1**
**TPGR Topolog 75.82 313** ⇑P **P** **14 30 47.9 +0.8**
**CFR Carcaliu 75.89 313** ⇑P **P** **14 30 47.6 +0.2**
**NSS Namsos 75.91 335** ⇓*i*P **P** **14 30 46.9 -0.3**
**TSCT Constanta Port 75.92 312** ⇓P **P** **14 30 48.8 +1.2**
**CSS Mathiatis 75.94 302** P **P** **14 30 47.5 -0.5**
**SCHL Schela 75.97 314** ⇓P **P** **14 30 48.8 +1.0**
**EFOR EFORIE 75.97 312** ⇓P **P** **14 30 49.0 +1.1**
**SLCR Slobozia Conac 75.97 314** ⇓P **P** **14 30 48.5 +0.6**
**TIRR Tirgusor 75.97 313** ⇑P **P** **14 30 48.4 +0.5**
**TIRR Tirgusor 75.97 313** P **P** **14 30 47.5 -0.4**
TIRR pmax pmax
comp=Z,610nm,0.8s
**TIRR Tirgusor 75.97 313** P **P** **14 30 47.5 -0.4**
**IZVR Izvoarele 75.99 314** ⇑P **P** **14 30 48.0 0.0**
**GHRR 76.03 314** ⇓P **P** **14 30 49.7 +1.5**
**MANR Mangalia 76.09 312** ⇑P **P** **14 30 49.4 +0.8**
**TLBR Topalu 76.18 313** ⇑P **P** **14 30 49.7 +0.5**
**LEF Lefka 76.21 302** ⇓P **P** **14 30 49.8 +0.4**
**BORA Eskisehir 76.26 308** P **P** **14 30 49.0 -0.8**
**PANC Panciu 76.27 314** ⇓P **P** **14 30 50.6 +1.0**
**CVDA Cernavoda 76.27 313** ⇓P **P** **14 30 50.4 +0.8**
**PRAR RASCA 76.28 316** ⇑P **P** **14 30 49.1 -0.6**
**TESR Tescani 76.34 315** ⇑P **P** **14 30 50.2 +0.2**
**ODBI Odobesti 76.37 314** ⇓P **P** **14 30 52.2 +2.1**
**PSN Preselentsi 76.42 312** *i* P **P** **14 30 51.2 +0.8**
**ICOR Ion Corvin 76.51 313** ⇑P **P** **14 30 51.9 +1.0**
**WRAK Wrangell Islan 76.53 34** P **P** **14 30 51.7 +0.9**
WRAK IAmb IAmb 14 30 53.8
comp=Z,173nm,0.8s
**WRAK Wrangell Islan 76.53 34** P **P** **14 30 51.6 +0.9**
baz=296,SNR=18
**WTLY Watson Lake, Y 76.53 29** P **P** **14 30 51.5 +0.7**
baz=298,SNR=16
**VRI Vrincioaia 76.54 314** ⇓P **P** **14 30 52.5 +1.3**
**CRAG Craig 76.54 35** P **P** **14 30 52.2 +1.3**
CRAG IAmb IAmb 14 30 54.0
comp=Z,148nm,0.8s
**CRAG Craig 76.54 35** P **P** **14 30 52.3 +1.4**
baz=295,SNR=9.1
**GRER 76.57 314** ⇓P **P** **14 30 53.8 +2.5**
**PLOR Plostina 76.60 314** ⇑P **P** **14 30 52.1 +0.6**
**AMRR Amara 76.63 313** ⇑P **P** **14 30 52.0 +0.4**
**LVV L'vov 76.66 319** *eP* **P** **14 30 52.8 +1.1**
**BISRR Bisoca 76.67 314** ⇑P **P** **14 30 53.6 +1.6**
**ATD Arta Tunnel 76.71 277** P **P** **14 30 53.2 +0.5**
ATD IAmb IAmb 14 30 55.6
comp=Z,223nm,1.0s
**ATD Arta Tunnel 76.71 277** P **P** **14 30 53.7 +1.0**
**PGOR Pogoanele 76.74 313** ⇓P **P** **14 30 54.4 +2.1**
**DLBC Dease Lake 76.75 31** P **P** **14 30 53.8 +1.6**
comp=Z,135nm,0.9s,baz=298,slow=5.9,SNR=166
**DLBC Dease Lake 76.75 31** P **P** **14 30 52.9 +0.7**
DLBC IAmb IAmb 14 30 55.6
comp=Z,216nm,1.0s
**KLNR Kaliningrad 76.81 324** *i* P **P** **14 30 53.3 +0.9**
KLNR pmax pmax
comp=Z,286nm,1.2s
**BUR08 Bucovina Ar. S 76.81 317** P **P** **14 30 52.6 -0.1**
BUR08 IAmb IAmb 14 30 54.6
comp=Z,195nm,0.7s
**BUR01 Bucovina Ar. S 76.81 317** ⇓P **P** **14 30 53.7 +1.0**
**BURAR Bucovina Array 76.81 317** P **P** **14 30 52.6 -0.2**
**VIKU Vikbolandet 76.82 329** *eP* **P** **14 30 53.1 +0.7**
**COVR Voineasa-Covas 76.89 315** ⇓P **P** **14 30 54.1 +1.0**
**RASA Rasa 76.90 313** ⇓P **P** **14 30 54.1 +0.9**
**ISR Istrita 76.95 314** ⇓P **P** **14 30 55.0 +1.5**
**ISP Isparta 76.98 306** *i* P **P** **14 30 52.9 -1.0**
ISP pmax pmax
comp=Z,471nm,1.4s
**ISP Isparta 76.98 306** P **P** **14 30 52.7 -1.2**
**NEHR Nehoiu 76.99 314** ⇓P **P** **14 30 55.1 +1.4**
**RES Resolute Bay 77.01 10** P **P** **14 30 53.0 -0.1**
comp=Z,88nm,0.8s,baz=318,slow=5.7,SNR=264
**RES Resolute Bay 77.01 10** P **P** **14 30 52.4 -0.8**
RES IAmb IAmb 14 30 54.8
comp=Z,144nm,0.9s
**LEHL Lehliu 77.02 313** ⇑P **P** **14 30 54.8 +1.0**
**OZUR 77.06 315** ⇑P **P** **14 30 54.9 +0.9**
**PRD Provadia 77.13 312** *i* P **P** **14 30 54.6 +0.2**
**MLR Muntele Rosu 77.19 314** ⇓P **P** **14 30 55.9 +0.9**
**MLR Muntele Rosu 77.19 314** P **P** **14 30 54.3 -0.6**
MLR pmax pmax
comp=Z,299nm,0.7s
**MLR Muntele Rosu 77.19 314** P **P** **14 30 54.3 -0.6**
**WRGLY Wrigley 77.20 25** P **P** **14 30 54.7 +0.3**
baz=302,SNR=48
**NEEM North Greenlan 77.21 359** *i* P **P** **14 30 54.3 -0.4**
**TBLU Trondheim 77.22 335** *eP* **P** **14 30 54.1 -0.4**
**SECR 77.29 314** ⇓P **P** **14 30 56.7 +1.4**
**SULR 77.31 313** ⇑P **P** **14 30 56.3 +0.9**
**DOPR Dopca 77.36 315** ⇑P **P** **14 30 56.4 +0.7**
**PLAR PLOIESTI 77.37 314** ⇓P **P** **14 30 57.0 +1.3**
**KWP Kalwaria Pacla 77.52 319** P **P** **14 30 56.4 -0.1**
KWP pmax pmax
comp=Z,8μm,0.7s
**KWP Kalwaria Pacla 77.52 319** P **P** **14 30 56.4 -0.1**
**ARCR ARCALIA 77.56 316** ⇓P **P** **14 30 58.0 +1.1**
**RAZG Razgrad 77.58 312** ⇑P **P** **14 30 57.4 +0.4**
**DBG Daneborg 77.63 350** *i* P **P** **14 30 55.2 -1.4**
DBG IAmb IAmb 14 30 57.3
comp=Z,209nm,0.7s
**SGRR Singureni 77.68 313** ⇓P **P** **14 30 58.3 +0.9**
**TGMR Targu Mures 77.69 316** ⇓P **P** **14 30 59.1 +1.6**
**NC405 NORSAR Array S 77.75 333** P **P** **14 30 56.0 -1.5**
**VOIR 77.79 315** ⇓P **P** **14 30 58.5 +0.3**
**NC303 NORSAR Array S 77.83 333** P **P** **14 30 57.5 -0.5**
NC303 IAmb IAmb 14 30 59.4
comp=Z,283nm,0.9s
**ELL Elmali 77.84 305** P **P** **14 30 57.8 -0.9**
ELL pmax pmax
comp=Z,961nm,0.7s
**ELL Elmali 77.84 305** P **P** **14 30 57.8 -0.9**
**BMR Baia Mare 77.85 317** ⇑P **P** **14 30 59.7 +1.4**
**MTUR Matau 77.87 314** ⇓P **P** **14 30 58.7 +0.1**
**DIB Dawson Inlet, 77.87 37** P **P** **14 30 58.4 0.0**
DIB IAmb IAmb 14 31 00.7
comp=Z,299nm,0.8s
**TULEG Thule 77.89 3** *i* P **P** **14 30 56.0 -2.1**
TULEG IAmb IAmb 14 30 58.3
comp=Z,72nm,0.8s
**TULEG Thule 77.89 3** P **P** **14 30 57.4 -0.7**
TULEG IAmb IAmb 14 30 59.3
comp=Z,170nm,1.0s
**MDB Medias 77.93 315** ⇓P **P** **14 31 00.8 +1.9**
**NB201 NORSAR Array S 77.96 333** P **P** **14 30 58.2 -0.6**
**NB2 NORSAR Subarra 77.99 333** P **P** **14 30 58.1 -0.9**
comp=Z,184nm,0.6s,baz=56,slow=5.6
**NB2 NORSAR Subarra 77.99 333** P **P** **14 30 58.1 -0.9**
baz=56,slow=5.6
**NOA NORSAR Array B 77.99 333** P **P** **14 30 58.6 -0.3**
comp=Z,222nm,0.8s,baz=56,slow=5.6,SNR=397
**NC602 NORSAR Array S 78.02 332** ⇓*i*P **P** **14 30 58.9 -0.1**
**NC602 NORSAR Array S 78.02 332** P **P** **14 30 58.0 -1.0**
**NC204 NORSAR Array S 78.06 333** P **P** **14 30 58.9 -0.4**
**STFAR Stefanesti-Arg 78.08 314** ⇓P **P** **14 31 01.3 +1.6**
**SZH Strazhica 78.09 312** *i* P **P** **14 30 59.8 0.0**
**ARR Arges 78.09 315** ⇑P **P** **14 31 00.7 +0.9**
**MOBC Moresby Island 78.17 37** P **P** **14 31 00.4 +0.3**
MOBC IAmb IAmb 14 31 02.5
comp=Z,264nm,0.9s
**NBO00 NORSAR Array S 78.18 333** P **P** **14 30 58.4 -1.5**
**UZH Uzhgorod 78.18 318** *eP* **P** **14 31 00.1 -0.1**
UZH *e* 14 31 09.7
UZH *e* 14 31 48.7
**CJR Cluj-Napoca 78.19 316** ⇑P **P** **14 31 01.6 +1.3**
**CBBR Cluj-Babes-Bol 78.20 316** ⇑P **P** **14 31 01.4 +1.1**
**HUMR Humele 78.20 314** ⇑P **P** **14 31 00.3 -0.1**
**COPA Copaceanca 78.21 313** ⇓P **P** **14 31 00.2 -0.2**
**NAO01 NORSAR Array S 78.23 332** P **P** **14 30 59.5 -0.8**
**TRPA Tarpa 78.25 318** ⇑P **P** **14 31 01.3 +0.8**
**TRPA Tarpa 78.25 318** P **P** **14 31 00.8 +0.3**
**MQOL MQOL 78.25 287** *i* P **P** **14 31 01.6 +0.5**
**AKAS Kas 78.27 305** P **P** **14 30 59.7 -1.4**
AKAS IAmb IAmb 14 31 01.3
comp=Z,189nm,0.8s
**ZIMR 78.31 313** ⇑P **P** **14 31 01.2 +0.3**
**DOMB Dombas 78.33 334** ⇓*i*P **P** **14 31 01.3 +0.5**

**MESR Meseseni 78.41 317** ⇓P **P** **14 31 02.9 +1.5**
**STHS Stebnicka Huta 78.47 319** *eP* **P** **14 31 02.1 +0.3**
**STHS Stebnicka Huta 78.47 319** *eP* **P** **14 31 02.1 +0.3**
**RUBB Prince Rupert 78.54 35** P **P** **14 31 02.7 +0.8**
RUBB IAmb IAmb 14 31 04.6
comp=Z,168nm,0.9s
**CRVS Cervenica-Dubn 78.56 319** *eP* **P** **14 31 02.8 +0.5**
CRVS pmax pmax
comp=Z,1μm,2.2s
**CRVS Cervenica-Dubn 78.56 319** *eP* **P** **14 31 02.8 +0.5**
**LOT Lotru 78.61 315** ⇑P **P** **14 31 03.3 +0.6**
**MOL Molde 78.63 335** *eP* **P** **14 31 03.4 +1.1**
**DRGR 78.71 316** ⇑P **P** **14 31 03.9 +0.7**
**OSL Oslo 78.78 332** ⇓*i*P **P** **14 31 03.8 +0.7**
**VLAD Vladila 78.80 313** ⇑P **P** **14 31 04.0 +0.4**
**DIM Dimitrovgrad 78.85 311** *i* P **P** **14 31 04.1 +0.2**
**GRNB Grenville Isla 78.92 35** P **P** **14 31 04.9 +0.8**
GRNB IAmb IAmb 14 31 06.8
comp=Z,191nm,0.8s
**LTVH Ltavrtes, Hu 78.96 317** ⇓P **P** **14 31 04.7 +0.3**
**LTVH Ltavrtes, Hu 78.96 317** P **P** **14 31 06.2 +1.8**
**OJC Ojcow 78.96 321** P **P** **14 31 04.3 -0.1**
OJC pmax pmax
comp=Z,510nm,0.8s
**OJC Ojcow 78.96 321** P **P** **14 31 04.3 -0.1**
**ALN Alexandroupoli 78.97 310** P **P** **14 31 03.9 -0.7**
ALN pmax pmax
comp=Z,223nm,1.0s
**ALN Alexandroupoli 78.97 310** P **P** **14 31 03.9 -0.7**
ALN IAmb IAmb 14 31 06.1
comp=Z,223nm,1.0s
**DEV Deva 78.97 316** ⇑P **P** **14 31 05.7 +1.1**
**GKP Gorka Klasztor 78.98 324** *eP* **P** **14 31 05.2 +0.8**
**HG4B Hotspring 78.98 37** P **P** **14 31 04.8 +0.4**
HG4B IAmb IAmb 14 31 07.4
comp=Z,280nm,0.9s
**AKN Aaknes 79.07 335** ⇓*i*P **P** **14 31 05.6 +0.8**
**KDZ Kurdzhali 79.09 311** *i* P **P** **14 31 06.2 +0.9**
**DEL Delary 79.13 328** *eP* **P** **14 31 05.6 +0.4**
**BORR Bors 79.15 317** ⇓P **P** **14 31 07.3 +1.8**
**GZR Gura Zlata 79.27 315** ⇑P **P** **14 31 06.9 +0.7**
**BSD Bornholm Skovb 79.29 326** *i* P **P** **14 31 05.2 -0.9**
**BSD Bornholm Skovb 79.29 326** *eP* **P** **14 31 06.5 +0.5**
**SRE Strehaia 79.30 314** ⇓P **P** **14 31 07.2 +0.8**
**KECS Kecovo 79.33 319** *eP* **P** **14 31 07.2 +0.8**
KECS pmax pmax
comp=Z,102nm,0.7s
**KECS Kecovo 79.33 319** *eP* **P** **14 31 07.2 +0.8**
**SKAR Skarslia 79.39 333** ⇓*i*P **P** **14 31 07.6 +1.0**
**KONO Kongsberg 79.42 332** P **P** **14 31 06.0 -0.7**
KONO pmax pmax
comp=Z,132nm,1.1s
**KONO Kongsberg 79.42 332** *eP* **P** **14 31 06.8 +0.1**
**KONO Kongsberg 79.42 332** P **P** **14 31 06.0 -0.7**
KONO IAmb IAmb 14 31 08.0
comp=Z,132nm,1.1s
**BAIL Bailesti 79.48 314** ⇑P **P** **14 31 08.5 +1.2**
**MPEP Malo Peshtene 79.51 313** *i* P **P** **14 31 08.8 +1.3**
**PGB Panagyurishte 79.56 312** *i* P **P** **14 31 08.0 +0.1**
**SIRR Siria 79.59 316** ⇓P **P** **14 31 08.2 +0.3**
**LANS Liptovska Anna 79.63 320** *eP* **P** **14 31 09.3 +1.1**
LANS pmax pmax
comp=Z,67nm,0.9s
**LANS Liptovska Anna 79.63 320** *eP* **P** **14 31 09.2 +1.1**
**PUNG Punghina 79.64 314** ⇑P **P** **14 31 09.0 +0.8**
**TOZ Tahuroa Road 79.67 141** P **P** **14 31 10.3 +2.0**
**HERR Herculane 79.72 315** ⇑P **P** **14 31 09.3 +0.7**
**DJES Djerdap 79.74 315** ⇓P **P** **14 31 09.8 +1.1**
**IZAB Izabela 79.75 319** *eP* **P** **14 31 09.8 +1.1**
IZAB pmax pmax
comp=Z,233nm,0.8s
**NBEZ Newall Road No 79.82 143** P **P** **14 31 12.3 +3.3**
**HIZ Hauiti 79.84 141** P **P** **14 31 11.5 +2.3**
**HIZ Hauiti 79.84 141** P **P** **14 31 10.3 +1.2**
**BZS Buzias 79.90 316** ⇑P **P** **14 31 09.4 -0.1**
**KHEZ Kahui Hut 79.92 142** P **P** **14 31 12.4 +2.7**
**PSZ Piszkesteto 79.94 318** ⇓P **P** **14 31 10.3 +0.5**
**PSZ Piszkesteto 79.94 318** P **P** **14 31 09.4 -0.4**
PSZ pmax pmax
comp=Z,192nm,0.9s
**PSZ Piszkesteto 79.94 318** P **P** **14 31 09.4 -0.4**
PSZ IAmb IAmb 14 31 11.9
comp=Z,192nm,0.9s
**PSZ Piszkesteto 79.94 318** P **P** **14 31 10.0 +0.2**
**NEZ North Egmont 79.95 142** P **P** **14 31 12.6 +2.8**
**BSZH Besenyszg 79.99 318** ⇑P **P** **14 31 11.5 +1.6**
**BSZH Besenyszg 79.99 318** P **P** **14 31 11.4 +1.4**
**OKC Ostrava-Krasne 80.08 321** *eP* **P** **14 31 10.1 -0.3**
**OKC Ostrava-Krasne 80.08 321** *eP* **P** **14 31 10.1 -0.3**
**TLZ Tolley Road 80.10 141** P **P** **14 31 12.7 +2.1**
**AMBH Ambrzfalva 80.14 317** ⇓P **P** **14 31 12.2 +1.4**
**AMBH Ambrzfalva 80.14 317** P **P** **14 31 12.1 +1.4**
**FOO Floro 80.16 335** ⇓*i*P **P** **14 31 11.1 +0.6**
**VTS Vitosha 80.16 312** ⇑P **P** **14 31 12.2 +1.0**
**VTS Vitosha 80.16 312** P **P** **14 31 11.5 +0.3**
VTS pmax pmax
comp=Z,558nm,0.8s
**VTS Vitosha 80.16 312** P **P** **14 31 11.5 +0.3**
**VTS Vitosha 80.16 312** *i* P **P** **14 31 11.7 +0.5**
**MDVR Moldovita 80.21 315** ⇓P **P** **14 31 12.0 +0.7**
**QRZ Quartz Range 80.22 144** P **P** **14 31 11.9 +0.8**
**VRZ Vera Road 80.22 142** P **P** **14 31 13.3 +2.2**
**COP Copenhagen 80.23 328** *i* P **P** **14 31 11.5 +0.5**
**MMB Musomiste 80.27 311** *i* P **P** **14 31 11.4 -0.3**
**VYHS Vyhne 80.30 319** *eP* **P** **14 31 12.3 +0.6**
VYHS *e* 14 32 04.3
VYHS pmax pmax
comp=Z,394nm,1.1s
**VYHS Vyhne 80.30 319** *eP* **P** **14 31 12.3 +0.6**
VYHS *e* 14 32 04.3
**BANR Banloc 80.31 316** ⇓P **P** **14 31 12.9 +1.2**
**RGN Rugen 80.37 326** *eP* **P** **14 31 15.6 +3.7**
**RGN Rugen 80.37 326** *eP* **P** **14 31 13.4 +1.5**
comp=Z,238nm,0.8s,baz=58,slow=5.1
**OMRZ Omania 80.43 140** P **P** **14 31 13.8 +1.4**
**RER Riviere de l'E 80.43 241** P **P** **14 31 13.0 +0.2**
RER IAmb IAmb 14 31 15.2
comp=Z,238nm,0.9s
**MORC Moravsky Berou 80.45 321** ⇑P **P** **14 31 13.0 +0.5**
**MORC Moravsky Berou 80.45 321** P **P** **14 31 12.3 -0.2**
MORC pmax pmax
comp=Z,159nm,0.9s
**MORC Moravsky Berou 80.45 321** *eP* **P** **14 31 12.9 +0.4**
**MORC Moravsky Berou 80.45 321** P **P** **14 31 12.3 -0.2**
MORC IAmb IAmb 14 31 14.6
comp=Z,159nm,0.9s
**ODD1 Odda 80.51 333** ⇓*i*P **P** **14 31 12.9 +0.4**
**KOLL Kolacno 80.52 319** *eP* **P** **14 31 13.9 +1.1**
**KKB Krupnik 80.58 312** *i* P **P** **14 31 13.6 +0.3**
**SUE Sulen 80.59 334** *eP* **P** **14 31 13.8 +1.0**
**HOMB Homborsund 80.65 331** *eP* **P** **14 31 12.8 -0.5**
**PKVZ Pokaka 80.66 142** P **P** **14 31 15.1 +1.5**
**WTVZ West Tongariro 80.67 142** P **P** **14 31 15.2 +1.4**
**BBB Bella Bella 80.70 36** P **P** **14 31 14.4 +0.8**
comp=Z,69nm,0.8s,baz=314,slow=6.3,SNR=31
**BBB Bella Bella 80.70 36** P **P** **14 31 13.8 +0.2**
**NNVZ North Ngauruho 80.70 142** P **P** **14 31 15.3 +1.4**
**BOVS Bovan 80.72 314** ⇑P **P** **14 31 14.0 0.0**
**NGZ Ngauruhoe 80.72 142** P **P** **14 31 15.4 +1.3**
**TMVZ Te Maari 80.74 141** P **P** **14 31 15.5 +1.4**
**KRLC Kraliky 80.74 321** *eP* **P** **14 31 14.2 +0.2**
**KRLC Kraliky 80.74 321** *eP* **P** **14 31 14.2 +0.2**
**FWVZ Far West T-bar 80.75 142** P **P** **14 31 15.6 +1.3**
**OTVZ Oturere 80.75 141** P **P** **14 31 15.5 +1.3**
**SNVZ South Ngauruho 80.75 142** P **P** **14 31 15.7 +1.5**
**ETVZ East Tongariro 80.76 141** P **P** **14 31 15.5 +1.4**
**ASK Askoy 80.76 334** ⇓*i*P **P** **14 31 14.3 +0.5**
**BER Bergen 80.76 334** ⇓*i*P **P** **14 31 14.4 +0.6**
**TRVZ Turoa 80.78 142** P **P** **14 31 15.6 +1.1**
**WAZ Wanganui 80.78 142** P **P** **14 31 15.6 +1.5**
**MTVZ Mangateitei 80.79 142** P **P** **14 31 15.6 +1.3**
**JAVC Velka Javorina 80.81 320** *eP* **P** **14 31 15.9 +1.4**
**WNVZ Wahianoa 80.83 142** P **P** **14 31 16.5 +1.9**
**FOZ Fox Glacier 80.84 148** P **P** **14 31 14.5 +0.2**
**BLS5 Blasjo 80.87 333** ⇓*i*P **P** **14 31 15.0 +0.5**
**DPC Dobruska-Polom 80.87 322** *eP* **P** **14 31 15.2 +0.5**
**DPC Dobruska-Polom 80.87 322** *eP* **P** **14 31 15.2 +0.5**
**KSLA Kassala 80.87 283** *i* P **P** **14 31 15.5 +0.2**
KSLA AMP 14 31 17.0
comp=Z,3μm,0.4s
KSLA *i* 14 31 23.6
baz=55,slow=6.5

**CHVC Chvalec 80.90 322** *eP* **P** **14 31 15.2 +0.4**
**SRO Srobarova 80.93 319** *eP* **P** **14 31 16.0 +1.0**
SRO pmax pmax
comp=Z,133nm,0.8s
**SRO Srobarova 80.93 319** *eP* **P** **14 31 16.0 +1.0**
**YKA Yellowknife Ar 80.94 24** P **P** **14 31 15.2 +0.5**
comp=Z,410nm,0.9s,baz=310,slow=5.0,SNR=1923
YKA PKKPbc **PKKPbc** **14 49 49.3 -2.9**
comp=Z,17nm,0.6s,baz=130,slow=2.3,SNR=129
YKA PKPPKP P'P'df 14 57 32.3 -24
comp=Z,0.6nm,0.9s,baz=154,slow=1.3,SNR=5.5
**YKA Yellowknife Ar 80.94 24** P **P** **14 31 14.5 -0.2**
**NNZ Nelson 80.94 144** P **P** **14 31 15.2 +0.2**
**NNZ Nelson 80.94 144** P **P** **14 31 14.9 -0.1**
**URZ Urewera 80.96 140** P **P** **14 31 14.9 -0.2**
comp=Z,14nm,0.7s,baz=296,slow=2.4,SNR=17
URZ S **S** **14 41 08.7 +1.7**
comp=Z,18nm,1.1s,baz=128,slow=21,SNR=8.0
**URZ Urewera 80.96 140** P **P** **14 31 15.5 +0.4**
**URZ Urewera 80.96 140** P **P** **14 31 14.6 -0.5**
**MOVZ Moawhango 80.97 142** P **P** **14 31 15.9 +0.6**
**UPC Upice 80.97 322** *eP* **P** **14 31 15.7 +0.6**
**UPC Upice 80.97 322** *eP* **P** **14 31 15.7 +0.6**
**GOET G??ttrup 81.01 330** *i* P **P** **14 31 15.8 +0.6**
GOET IAmb IAmb 14 31 16.9
comp=Z,449nm,0.8s
**THZ Tophouse 81.09 145** P **P** **14 31 15.3 -0.4**
**SMOL Smolenice 81.12 320** *eP* **P** **14 31 17.1 +1.1**
SMOL *e* 14 32 09.6
SMOL pmax pmax
comp=Z,104nm,1.0s
**SMOL Smolenice 81.12 320** *eP* **P** **14 31 17.1 +1.1**
SMOL *e* 14 32 09.6
**SCO Scoresbysund 81.16 349** P **P** **14 31 15.8 0.0**
SCO pmax pmax
comp=Z,287nm,0.9s
**SCO Scoresbysund 81.16 349** *i* P **P** **14 31 16.1 +0.3**
**SCO Scoresbysund 81.16 349** P **P** **14 31 15.8 0.0**
SCO IAmb IAmb 14 31 18.6
comp=Z,288nm,0.9s
**VAY Valandovo 81.17 312** *i* P **P** **14 31 15.8 -0.5**
**CSKK Cskako 81.17 318** P **P** **14 31 16.6 +0.3**
**SNART Snartemo 81.17 331** ⇓*i*P **P** **14 31 16.7 +0.7**
**RUE Ruedersdorf 81.19 324** *eP* **P** **14 31 17.0 +0.7**
**RUE Ruedersdorf 81.19 324** *eP* **P** **14 31 17.4 +1.2**
comp=Z,113nm,0.7s,baz=58,slow=5.1
**BHHZ Black Hill Sta 81.20 142** P **P** **14 31 16.9 +0.4**
**MTHZ Maungatapiri Sta 81.20 141** P **P** **14 31 16.9 +0.4**
**BKZ Black Stump Fm 81.22 141** P **P** **14 31 16.7 +0.1**
**BKZ Black Stump Fm 81.22 141** P **P** **14 31 16.3 -0.3**
**BKZ Black Stump Fm 81.22 141** P **P** **14 31 16.7 +0.1**
**VRAC Vranov 81.22 321** ⇑P **P** **14 31 17.6 +1.0**
**VRAC Vranov 81.22 321** LR LR 15 11 02.3
comp=Z,310nm,18.6s,baz=5.5,slow=38
**VRAC Vranov 81.22 321** *eP* **P** **14 31 17.2 +0.7**
**FRGS Fruska Gora 81.25 316** ⇑P **P** **14 31 16.5 -0.2**
**FRGS Fruska Gora 81.25 316** ⇓*i*P **P** **14 31 15.8 -1.0**
**MWZ Matawai 81.25 140** P **P** **14 31 17.3 +0.6**
**STIP Stip 81.26 312** *i* P **P** **14 31 15.4 -1.5**
**MODS Modra-Piesok 81.28 320** *eP* **P** **14 31 19.4 +2.6**
MODS pmax pmax
comp=Z,286nm,1.5s
**MODS Modra-Piesok 81.28 320** *eP* **P** **14 31 19.4 +2.6**
**RAGZ Rawiri 81.30 140** P **P** **14 31 17.6 +0.6**
**MUD Monsted U'grnd 81.36 329** ⇑*eP* **P** **14 31 17.5 +0.5**
**MUD Monsted U'grnd 81.36 329** *i* P **P** **14 31 16.5 -0.5**
MUD IAmb IAmb 14 31 18.0
comp=Z,190nm,0.7s
**SBV Sambava 81.36 251** P **P** **14 31 19.4 +1.7**
**SUMG Summit 81.38 355** P **P** **14 31 17.2 -0.2**
SUMG pmax pmax
comp=Z,377nm,0.8s
**SUMG Summit 81.38 355** *i* P **P** **14 31 17.3 -0.2**
**SUMG Summit 81.38 355** P **P** **14 31 17.2 -0.2**
**TUMZ Tuamarina 81.39 144** P **P** **14 31 16.6 -0.7**
**TWGZ Tauwhareparae 81.41 140** P **P** **14 31 18.9 +1.3**
**HOLB Holberg 81.45 38** P **P** **14 31 18.2 +0.5**
**KRUC Moravsky 81.45 321** *eP* **P** **14 31 18.3 +0.6**
**ZST Bratislava 81.46 320** *eP* **P** **14 31 18.8 +1.0**
ZST pmax pmax
comp=Z,635nm,1.8s
**ZST Bratislava 81.46 320** *eP* **P** **14 31 18.8 +1.0**
ZST *e* 14 32 13.9
**KRHZ Kereru 81.48 141** P **P** **14 31 18.4 +0.6**
**MORH Mrgy, Hungar 81.48 317** ⇑P **P** **14 31 18.5 +0.6**
**MORH Mrgy, Hungar 81.48 317** ⇓*i*P **P** **14 31 17.6 -0.3**
**MORH Mrgy, Hungar 81.48 317** P **P** **14 31 17.7 -0.3**
**KMY Karmoy 81.49 333** *eP* **P** **14 31 18.2 +0.6**
**LTZ Lake Taylor 81.50 146** P **P** **14 31 17.6 -0.3**
**KIW Kapiti Island 81.51 143** P **P** **14 31 18.2 +0.3**
**MCHZ McNeill Hill 81.53 141** P **P** **14 31 19.2 +1.1**
**TSZ Takapari Road 81.53 142** P **P** **14 31 18.4 +0.2**
**BSWZ Blackbirch Sta 81.56 144** P **P** **14 31 17.4 -0.8**
**PNHZ Pukenui 81.57 142** P **P** **14 31 18.9 +0.6**
**RPZ Rata Peaks 81.57 147** P **P** **14 31 18.4 +0.2**
RPZ IAmb IAmb 14 31 23.7
comp=Z,89nm,0.7s
**TIH Tihany 81.61 318** P **P** **14 31 17.7 -0.9**
**DIVS Divibare 81.62 315** ⇓*i*P **P** **14 31 18.3 -0.5**
**DIVS Divibare 81.62 315** P **P** **14 31 18.1 -0.7**
DIVS IAmb IAmb 14 31 20.4
comp=Z,220nm,0.8s
**OGWZ Otaki Gorge 81.62 143** P **P** **14 31 19.4 +0.9**
**RIGZ Rimuhau 81.64 140** P **P** **14 31 19.4 +0.7**
**SKO Skopje 81.64 313** *i* P **P** **14 31 19.1 +0.2**
**LBZ Lake Benmore 81.65 148** P **P** **14 31 19.3 +0.7**
**POWZ Post Office Ro 81.66 142** P **P** **14 31 20.1 +1.4**
**MPLH Magyarpolny 81.70 318** P **P** **14 31 19.1 +0.1**
**EGYH Egyhazaskeszo 81.70 319** P **P** **14 31 19.9 +0.8**
**TEKS Tekeris 81.70 315** *eP* **P** **14 31 17.7 -1.5**
**MRZ Mangatainoka R 81.74 143** P **P** **14 31 19.0 -0.2**
**CNGZ Carnagh Statio 81.75 140** P **P** **14 31 21.0 +1.7**
**PVCC Panska Ves 81.76 322** *eP* **P** **14 31 19.9 +0.6**
**PVCC Panska Ves 81.76 322** *eP* **P** **14 31 19.9 +0.6**
**BLJ Bijeljina 81.76 316** *eP* **P** **14 31 19.4 0.0**
**CAW Cannon Point 81.77 143** P **P** **14 31 19.6 +0.3**
**OXZ Oxford 81.78 146** P **P** **14 31 19.0 -0.3**
**WPHZ Waipukurau 81.80 142** P **P** **14 31 20.0 +0.5**
**DVHZ Dannevirke 81.81 142** P **P** **14 31 19.7 +0.2**
**TREC Trest 81.86 321** *eP* **P** **14 31 20.1 +0.2**
**TREC Trest 81.86 321** *eP* **P** **14 31 20.1 +0.2**
**HOWZ Holdsworth Sta 81.87 141** P **P** **14 31 19.9 0.0**
**KOVH Kovagotottos 81.87 317** P **P** **14 31 19.9 -0.1**
**PRWZ Pori Road 81.88 142** P **P** **14 31 20.6 +0.7**
**KHZ Kahutara 81.88 145** P **P** **14 31 19.4 -0.4**
**BRG Berggiesshubel 81.92 323** ⇑*iP* **P** **14 31 20.6 +0.4**
BRG Amp 14 31 21.9
comp=Z,91nm,0.7s
BRG *i* x x 14 31 22.9
BRG Amp 14 31 23.7
comp=Z,81nm,1.0s
BRG pP **pP** **14 32 10.5 +1.5**
BRG Amp 14 32 15.7
comp=Z,24nm,1.0s
BRG *ex* x 14 33 45.2
BRG Amp 14 33 55.1
comp=Z,14nm,0.8s
**BRG Berggiesshubel 81.92 323** ⇑*iP* **P** **14 31 20.5 +0.4**
BRG 14 32 10.5
BRG pmax pmax
comp=Z,91nm,0.7s
BRG pmax pmax
comp=Z,81nm,1.0s
BRG pmax pmax
comp=Z,24nm,1.0s
BRG pmax pmax
comp=Z,14nm,0.8s
**BRG Berggiesshubel 81.92 323** *eP* **P** **14 31 20.9 +0.8**
comp=Z,66nm,0.8s,baz=58,slow=5.1
**UPNV Upernavik 81.95 360** *i* P **P** **14 31 19.4 -0.5**
**TIWZ Tintock 81.98 143** P **P** **14 31 20.8 +0.3**
**PXZ Pawanui 82.02 141** P **P** **14 31 21.0 +0.4**
**SOP Sopron 82.03 319** P **P** **14 31 21.3 +0.5**
**MTW Mount Morrison 82.04 143** P **P** **14 31 20.6 -0.1**
**PRU Pruhonice 82.04 322** *eP* **P** **14 31 20.9 +0.1**
**PRU Pruhonice 82.04 322** *eP* **P** **14 31 20.9 +0.1**
**PRHZ Porangahau 82.05 142** P **P** **14 31 21.4 +0.6**
**MSWZ Moikau Station 82.08 143** P **P** **14 31 20.5 -0.4**
**ANWZ Angora Road 82.09 142** P **P** **14 31 21.9 +0.9**
**BBLS Lazići 82.10 315** ⇓*i*P **P** **14 31 21.2 -0.1**
**BFZ Birch Farm 82.12 142** P **P** **14 31 21.4 +0.3**
**BFZ Birch Farm 82.12 142** P **P** **14 31 20.8 -0.3**
**BFZ Birch Farm 82.12 142** P **P** **14 31 21.4 +0.3**
**PAWZ Paruwai Farm 82.15 143** P **P** **14 31 21.4 +0.1**
**PLWZ Palliser 82.19 143** P **P** **14 31 21.8 +0.2**
**PLWZ Palliser 82.19 143** P **P** **14 31 21.0 -0.5**
**BSEG Bad Segeberg 82.19 327** *eP* **P** **14 31 22.2 +0.8**
comp=Z,173nm,0.9s,baz=58,slow=5.1
**CLL Collm 82.21 324** *i* P **P** **14 31 21.4 -0.2**
CLL pmax pmax
comp=Z,141nm,0.9s
**CLL Collm 82.21 324** *i* P **P** **14 31 21.4 -0.2**
comp=Z,141nm,0.9s
CLL *ep*PcP 14 32 14.0
CLL *ep*PP 14 35 16.0
**CLL Collm 82.21 324** *eP* **P** **14 31 21.8 +0.1**
comp=Z,94nm,0.8s,baz=58,slow=5.1
CLL *ep*P **pP** **14 32 16.7 +6.2**
**CLL Collm 82.21 324** P **P** **14 31 20.6 -1.0**
CLL IAmb IAmb 14 31 23.2
comp=Z,134nm,0.9s
**TLCB Telegraph Cove 82.22 37** P **P** **14 31 21.6 0.0**
TLCB IAmb IAmb 14 31 24.0
comp=Z,128nm,0.9s
**FNA Florina 82.22 311** P **P** **14 31 20.5 -1.4**
FNA pmax pmax
comp=Z,174nm,0.7s
**FNA Florina 82.22 311** P **P** **14 31 20.5 -1.4**
FNA IAmb IAmb 14 31 22.4
comp=Z,174nm,0.7s
**RUDO Rudo 82.24 315** ⇓*i*P **P** **14 31 21.5 -0.5**
**CONA Conrad Observa 82.32 320** *eP* **P** **14 31 22.8 +0.4**
comp=Z,238nm,1.2s,SNR=74
**AGG Agios Georgios 82.35 310** P **P** **14 31 20.7 -2.0**
AGG pmax pmax
comp=Z,402nm,0.8s
**AGG Agios Georgios 82.35 310** P **P** **14 31 20.7 -2.0**
**MQZ McQueen's Vall 82.36 146** P **P** **14 31 22.8 +0.5**
**OHR Ohrid 82.46 312** *i* P **P** **14 31 22.6 -0.6**
**PBCC Pribram 82.50 322** *eP* **P** **14 31 23.6 +0.4**
**DOB Doboj 82.52 316** *eP* **P** **14 31 20.6 -2.7**
**FLTG Flechtingen 82.60 325** *eP* **P** **14 31 24.0 +0.4**
comp=Z,13µm,2.5s,baz=58,slow=5.1
**KBN Korca 82.69 312** P **P** **14 31 23.3 -1.1**
KBN pmax pmax
comp=Z,282nm,0.8s
**KBN Korca 82.69 312** P **P** **14 31 23.3 -1.1**
**UPM Unac-Piva 82.73 314** *eP* **P** **14 31 24.8 +0.1**
**CKRC Cesky Krumlov 82.77 321** *eP* **P** **14 31 25.1 +0.5**
**KOGS Kog 82.82 318** *eP* **P** **14 31 25.2 +0.3**
**KALN Kalnik 82.85 318** P **P** **14 31 25.1 0.0**
**ARSA Arzberg 82.86 319** *eP* **P** **14 31 24.6 -0.5**
comp=Z,111nm,1.2s,SNR=32
**PDG Podgorica 82.87 314** ⇑P **P** **14 31 25.4 +0.2**
**PDG Podgorica 82.87 314** ⇓*i*P **P** **14 31 24.7 -0.5**
**PDG Podgorica 82.87 314** P **P** **14 31 24.7 -0.5**
PDG IAmb IAmb 14 31 27.5
comp=Z,194nm,0.7s
**NEUB Neuenburg 82.92 324** *eP* **P** **14 31 25.7 +0.5**
comp=Z,112nm,0.7s,baz=58,slow=5.1
**TANN Tannenbergstha 82.97 323** *eP* **P** **14 31 26.2 +0.5**
comp=Z,39nm,0.9s,baz=58,slow=5.1
**TIR Tirane 82.97 312** ⇓P **P** **14 31 26.4 +0.7**
**TIR Tirane 82.97 312** P **P** **14 31 25.4 -0.4**
TIR pmax pmax
comp=Z,323nm,0.9s
**TIR Tirane 82.97 312** P **P** **14 31 25.4 -0.4**
TIR IAmb IAmb 14 31 28.3
comp=Z,323nm,0.9s
**ASSE Asse, Remlinge 83.00 325** *eP* **P** **14 31 26.5 +1.0**
comp=Z,56nm,0.7s,baz=58,slow=5.1
**KHC Kasperske Hory 83.02 322** *eP* **P** **14 31 26.1 +0.2**
**KHC Kasperske Hory 83.02 322** *eP* **P** **14 31 26.1 +0.2**
KHC *ex* x 14 31 45.5
KHC *ex* x 14 32 21.0
**KHC Kasperske Hory 83.02 322** P **P** **14 31 25.6 -0.3**
KHC IAmb IAmb 14 31 28.0
comp=Z,141nm,1.1s
**DRME Dracevica, Mon 83.03 313** ⇓*i*P **P** **14 31 25.7 -0.3**
**WERD Werda 83.04 323** *eP* **P** **14 31 26.6 +0.6**
comp=Z,49nm,0.8s,baz=58,slow=5.1
**GUNZ Gunzen 83.07 323** *eP* **P** **14 31 26.7 +0.6**
comp=Z,80nm,0.8s,baz=58,slow=5.1
**NKC Novy Kostel 83.07 323** *eP* **P** **14 31 26.4 +0.3**
**NKC Novy Kostel 83.07 323** *eP* **P** **14 31 26.4 +0.3**
**BLY Banja Luka 83.08 316** ⇓*i*P **P** **14 31 26.2 -0.1**
**WERN Wernitzgruen 83.08 323** *eP* **P** **14 31 26.9 +0.7**
comp=Z,105nm,0.9s,baz=58,slow=5.1
**NRDL Niedersach Rie 83.09 326** *eP* **P** **14 31 26.8 +0.8**
comp=Z,58nm,0.7s,baz=58,slow=5.1
**GEC2 GERESS Array S 83.10 321** *eP* **P** **14 31 26.9 +0.5**
comp=Z,155nm,0.8s,baz=58,slow=5.1
**GEC2 GERESS Array S 83.10 321** P **P** **14 31 26.0 -0.4**
GEC2 IAmb IAmb 14 31 28.7
comp=Z,246nm,1.1s
**GERES GERESS Array B 83.10 321** P **P** **14 31 26.8 +0.4**
comp=Z,153nm,0.9s,baz=57,slow=4.9,SNR=359
GERES PKKPbc **PKKPbc** **14 49 46.6 -0.3**
comp=Z,1.6nm,0.6s,baz=236,slow=1.4,SNR=7.5
GERES LR LR 15 09 26.2
comp=Z,503nm,19.3s,baz=4.5,slow=36
**GERES GERESS Array B 83.10 321** P **P** **14 31 26.0 -0.4**
**BRY Bratogost 83.11 314** *eP* **P** **14 31 26.6 0.0**
**MRAK Mrakovica 83.13 317** ⇓*i*P **P** **14 31 26.2 -0.4**
**NUUG Nuugaatsiaq 83.17 359** *i* P **P** **14 31 26.0 -0.1**
**GROS Grobnik 83.27 319** *eP* **P** **14 31 26.9 -0.4**
**CBB Campbell River 83.29 37** P **P** **14 31 27.3 +0.1**
CBB IAmb IAmb 14 31 29.9
comp=Z,134nm,0.8s
**MOA Molln 83.29 320** *eP* **P** **14 31 27.2 -0.1**
comp=Z,148nm,0.7s,SNR=87
**ZAG Zagreb 83.29 318** *eP* **P** **14 31 28.5 +1.2**
**MOX Moxa 83.30 323** *eP* **P** **14 31 28.0 +0.7**
comp=Z,38nm,0.7s,baz=58,slow=5.1
**MGRS Mrkonjic Grad 83.31 316** ⇑*i*P **P** **14 31 28.5 +1.0**
**CLZ Clausthal 83.31 325** *eP* **P** **14 31 28.3 +0.9**
comp=Z,89nm,0.7s,baz=58,slow=5.1
**TREB Trebinje 83.32 314** ⇓*i*P **P** **14 31 27.5 0.0**
**HCY Herceg Novi 83.36 314** *eP* **P** **14 31 27.3 -0.4**
**MANZ Manzenberg 83.39 323** *eP* **P** **14 31 28.4 +0.6**
comp=Z,14nm,0.9s,baz=58,slow=5.1
**WET Wettzell 83.41 322** *eP* **P** **14 31 28.4 +0.5**
comp=Z,41nm,1.0s,baz=58,slow=5.1
**SOKA Soboth 83.44 319** *i* P **P** **14 31 28.0 -0.1**
comp=Z,183nm,0.7s,SNR=106
**ROTZ Rotzenmuhle 83.45 323** *eP* **P** **14 31 28.9 +0.9**
comp=Z,20nm,0.9s,baz=58,slow=5.1
**ITM Ithomi 83.47 308** P **P** **14 31 26.8 -1.6**
**CRES Cresnjev 83.61 318** ⇓*i*P **P** **14 31 28.8 -0.2**
**STON Ston 83.67 315** ⇓*i*P **P** **14 31 28.3 -0.9**
**STON Ston 83.67 315** P **P** **14 31 28.5 -0.8**
**GTTG Gottingen 83.69 325** *eP* **P** **14 31 30.3 +1.1**
comp=Z,93nm,1.0s,baz=58,slow=5.1
**OZLJ Ozalj 83.71 318** P **P** **14 31 29.8 +0.4**
**RICI Ricice 83.73 315** P **P** **14 31 28.6 -1.0**
**OBKA Obir 83.81 319** *eP* **P** **14 31 29.7 -0.4**
comp=Z,176nm,0.8s,SNR=84
**MAKA Makarska 83.90 315** P **P** **14 31 29.4 -1.0**
**KIJV Kijevo 83.94 316** P **P** **14 31 30.3 -0.3**
**PLIT Plitvice 83.98 317** P **P** **14 31 30.7 -0.2**
**GRA1 Grafenberg Arr 84.03 323** P **P** **14 31 31.1 +0.1**
GRA1 IAmb IAmb 14 31 34.0
comp=Z,114nm,0.9s
**GRF Grafenberg Arr 84.03 323** P **P** **14 31 31.1 +0.1**
GRF pmax pmax
comp=Z,115nm,0.9s
**GRF Grafenberg Arr 84.03 323** *eP* **P** **14 31 31.7 +0.7**
comp=Z,2µm,1.9s,baz=58,slow=5.1
**GRFO Grafenberg 84.03 323** P **P** **14 31 30.9 -0.1**
GRFO pmax pmax
comp=Z,112nm,0.9s
**GRFO Grafenberg 84.03 323** P **P** **14 31 30.9 -0.1**
GRFO IAmb IAmb 14 31 34.0
comp=Z,112nm,0.9s
**LJU Ljubljana 84.06 319** ⇓*i*P **P** **14 31 30.7 -0.5**
**UBBA Unterbreizbach 84.07 324** *eP* **P** **14 31 32.2 +1.2**
comp=Z,39nm,1.0s,baz=58,slow=5.1
UBBA *ep*P **pP** **14 32 25.2 +5.1**
**GBAS Gorenja Brezov 84.17 318** *eP* **P** **14 31 31.4 -0.4**
**RJOB Jochberg 84.19 321** *eP* **P** **14 31 32.6 +0.7**
comp=Z,200nm,0.9s,baz=58,slow=5.1
**KBA Koelnbreinsper 84.22 320** *eP* **P** **14 31 31.7 -0.6**
comp=Z,88nm,0.5s,SNR=76
**LSTV Lastovo 84.24 315** P **P** **14 31 31.1 -1.0**
**CEY Cerknica 84.28 318** ⇓*i*P **P** **14 31 31.6 -0.7**
**MYKA Terra Mystica 84.28 319** *eP* **P** **14 31 31.7 -0.7**
comp=Z,35nm,0.7s,SNR=35
**HVAR Hvar 84.32 315** P **P** **14 31 32.0 -0.5**
**IBBN Ibbenburen 84.39 326** *eP* **P** **14 31 34.0 +1.3**
comp=Z,202nm,0.8s,baz=58,slow=5.1
**MORI Morici 84.44 316** P **P** **14 31 32.6 -0.5**
**VOJS Vojsko 84.45 319** *eP* **P** **14 31 32.4 -0.9**
**RIY Rijeka 84.45 318** *eP* **P** **14 31 32.8 -0.4**
**SCTE Santa Cesarea 84.51 312** P **P** **14 31 32.7 -0.9**
**ZIRJ Zirje 84.59 316** P **P** **14 31 33.1 -0.8**
**CLRS Cowichan Lake 84.62 38** P **P** **14 31 34.9 +1.0**
CLRS IAmb IAmb 14 31 36.9
comp=Z,124nm,0.9s
**SOEG Soedalen 84.71 351** *i* P **P** **14 31 33.3 -0.7**
SOEG IAmb IAmb 14 31 34.9
comp=Z,158nm,0.7s
**DUGI Dugi Otok 84.78 317** P **P** **14 31 34.1 -0.7**
**SMRN Sveta Marina 84.80 318** P **P** **14 31 34.2 -0.6**
**FUR Furstenfeldbru 84.83 321** *eP* **P** **14 31 35.8 +0.8**
comp=Z,316nm,0.8s,baz=58,slow=5.1
**LLLB Lillooet 84.84 36** P **P** **14 31 35.6 +0.5**
LLLB IAmb IAmb 14 31 37.9
comp=Z,260nm,0.9s
**ICESG Greenland Ices 84.86 354** *i* P **P** **14 31 34.5 -0.7**
**ABTA Abfaltersbach 84.88 320** *i* P **P** **14 31 34.8 -0.6**
comp=Z,110nm,0.8s,SNR=61
**STAL STALIGIAL 85.03 319** P **P** **14 31 34.5 -1.5**
STAL IAmb IAmb 14 31 36.7
comp=Z,195nm,1.0s
**PGC Sidney 85.09 38** P **P** **14 31 36.8 +0.5**
PGC IAmb IAmb 14 31 39.2
comp=Z,210nm,0.8s
**WATA Walderalm 85.11 321** *i* P **P** **14 31 36.3 -0.3**
comp=Z,93nm,1.1s,SNR=26
**WTTA Wattenberg 85.11 321** *eP* **P** **14 31 36.2 -0.4**
comp=Z,68nm,0.7s,SNR=48
**BRJN Brijuni 85.11 318** P **P** **14 31 35.8 -0.7**
**BUG Bochum--Univer 85.14 326** *eP* **P** **14 31 37.5 +1.1**
comp=Z,158nm,0.9s,baz=58,slow=5.1
**TNS Taunus Mts 85.23 324** *eP* **P** **14 31 37.9 +0.9**
comp=Z,98nm,0.8s,baz=58,slow=5.1
TNS *ep*P **pP** **14 32 31.4 +5.2**
**MOTA Moosalm 85.37 321** *i* P **P** **14 31 37.8 -0.2**
comp=Z,2nm,0.6s,SNR=23
**SQTA Sankt Quirin 85.38 321** *i* P **P** **14 31 37.8 -0.1**
comp=Z,55nm,0.7s,SNR=24
**B04A Port Angeles 85.39 38** P **P** **14 31 38.5 +0.7**
B04A IAmb IAmb 14 31 41.1
comp=Z,114nm,0.8s
**MATE Matera 85.41 313** ⇑P **P** **14 31 37.7 -0.3**
**ILULI Ilulissat 85.46 358** P **P** **14 31 37.4 -0.3**
ILULI pmax pmax
comp=Z,118nm,0.8s
**ILULI Ilulissat 85.46 358** *i* P **P** **14 31 36.9 -0.7**
**ILULI Ilulissat 85.46 358** P **P** **14 31 37.4 -0.3**
ILULI IAmb IAmb 14 31 39.2
comp=Z,118nm,0.8s
**A04D Lummi Island 85.46 37** P **P** **14 31 39.4 +1.3**
baz=304,SNR=12
**SGRT San Giovanni R 85.48 314** P **P** **14 31 37.8 -0.7**
**RETA Reutte 85.49 321** *eP* **P** **14 31 38.3 -0.1**
comp=Z,20nm,0.6s,SNR=11
**UBR Ueberruh 85.75 322** *eP* **P** **14 31 39.9 +0.2**
comp=Z,110nm,0.9s,baz=58,slow=5.1
UBR *ep*P **pP** **14 32 33.6 +4.6**
**WISH Wishkah 85.75 39** P **P** **14 31 41.3 +1.7**
WISH IAmb IAmb 14 31 43.4
comp=Z,213nm,0.8s
**AHRW Bad Neuenahr-A 85.76 325** *eP* **P** **14 31 40.6 +1.1**
comp=Z,65nm,0.8s,baz=58,slow=5.1
**CTI Castel Tesino 85.76 320** P **P** **14 31 38.1 -1.7**
CTI pmax pmax
comp=Z,92nm,1.2s
**CTI Castel Tesino 85.76 320** P **P** **14 31 38.0 -1.7**
**FETA Feichten 85.76 321** *eP* **P** **14 31 39.5 -0.4**
comp=Z,136nm,1.8s,SNR=31
**D03D Eldon 85.91 39** P **P** **14 31 41.8 +1.4**
baz=304,SNR=67
**B05A Bryant 86.05 38** P **P** **14 31 42.0 +1.0**
baz=305,SNR=58
**DAVA Damuels 86.10 321** *eP* **P** **14 31 41.5 0.0**
comp=Z,148nm,0.8s,SNR=31
**TIP Timpagrande 86.10 312** ⇑P **P** **14 31 41.9 +0.3**
**TIP Timpagrande 86.10 312** P **P** **14 31 40.7 -0.8**
TIP IAmb IAmb 14 31 43.5
comp=Z,222nm,0.9s
**TEOL Teolo 86.12 319** P **P** **14 31 40.6 -0.8**
TEOL IAmb IAmb 14 31 43.1
comp=Z,193nm,1.0s
**E03A Lebam 86.19 40** P **P** **14 31 41.8 +0.1**
E03A IAmb IAmb 14 31 45.0
comp=Z,283nm,1.1s
**BTNL Ternell 86.22 325** *dP* **P** **14 31 42.3 +0.5**
**B06A Marblemount 86.24 37** P **P** **14 31 42.5 +0.5**
**MEM Membach 86.27 325** *dP* **P** **14 31 42.1 0.0**
comp=Z,65nm,0.8s
**ABPO Ambohimpanom 86.28 247** P **P** **14 31 42.5 -0.3**
ABPO pmax pmax
comp=Z,195nm,1.0s
**ABPO Ambohimpanom 86.28 247** P **P** **14 31 42.5 -0.3**
ABPO IAmb IAmb 14 31 44.5
comp=Z,195nm,0.9s
**ABPO Ambohimpanom 86.28 247** P **P** **14 31 43.1 +0.3**
**D04E Lakebay 86.29 39** P **P** **14 31 44.0 +1.8**
baz=304,SNR=14
**BEBN Eben Emael 86.33 326** *dP* **P** **14 31 43.3 +1.0**
**BFO Black Forest 86.37 323** P **P** **14 31 42.3 -0.4**
BFO pmax pmax
comp=Z,107nm,1.0s
**BFO Black Forest 86.37 323** *eP* **P** **14 31 42.9 +0.3**
comp=Z,55nm,0.8s,baz=58,slow=5.1
**BFO Black Forest 86.37 323** P **P** **14 31 42.2 -0.4**
BFO IAmb IAmb 14 31 44.1
comp=Z,107nm,1.0s
**BFO Black Forest 86.37 323** P **P** **14 31 43.0 +0.3**
**DAVOX Davos/Dischmat 86.38 321** PKKPbc PKKPbc 14 49 40.3 +0.9
baz=248,slow=11
**BHOU Houvegnez 86.42 325** κP **P** **14 31 42.7 -0.2**
comp=Z,64nm,1.1s
**BSTI Sart Tilman 86.51 326** *dP* **P** **14 31 43.7 +0.4**
BSTI *d*PcP **PcP** **14 31 45.7 +0.3**
**NRCA Norcia 86.59 316** P **P** **14 31 43.4 -0.6**
NRCA IAmb IAmb 14 31 45.9
comp=Z,182nm,1.1s
**PAOL Paolisi 86.61 314** P **P** **14 31 43.3 -0.7**
**SALO Salr 86.66 320** P **P** **14 31 43.8 -0.3**
SALO IAmb IAmb 14 31 46.4
comp=Z,197nm,0.9s
**AQU L'Aquila 86.67 316** P **P** **14 31 44.2 0.0**
AQU pmax pmax
comp=Z,247nm,0.9s
**AQU L'Aquila 86.67 316** ⇓*i*P **P** **14 31 44.2 0.0**
**AQU L'Aquila 86.67 316** P **P** **14 31 44.2 0.0**
AQU IAmb IAmb 14 31 46.3
comp=Z,247nm,0.9s
**D05A Enumclaw 86.72 38** P **P** **14 31 43.9 -0.5**
**MURB Monte Urbino 86.73 317** P **P** **14 31 44.4 -0.2**
MURB IAmb IAmb 14 31 47.3
comp=Z,207nm,0.8s
**BCLA Clavier 86.74 326** κP **P** **14 31 45.0 +0.7**
comp=Z,45nm,1.1s
**E04D Cinebar 86.75 39** P **P** **14 31 44.8 +0.3**
E04D IAmb IAmb 14 31 47.9
comp=Z,285nm,1.3s
**E04D Cinebar 86.75 39** P **P** **14 31 45.4 +0.9**
baz=304,SNR=21
**WLF Walferdange 86.76 325** P **P** **14 31 44.1 -0.3**
WLF pmax pmax
comp=Z,330nm,0.9s
**WLF Walferdange 86.76 325** *eP* **P** **14 31 45.4 +1.0**
comp=Z,236nm,0.8s,baz=58,slow=5.1
**WLF Walferdange 86.76 325** P **P** **14 31 44.1 -0.3**
**WLF Walferdange 86.76 325** *dP* **P** **14 31 44.6 +0.1**
comp=Z,240nm,0.9s
**F04D Rainier, OR 86.76 40** P **P** **14 31 45.1 +0.6**
baz=304,SNR=7.7
**LODK Lodwar 86.81 272** P **P** **14 31 46.7 +1.2**
SNR=36
**LODK Lodwar 86.81 272** P **P** **14 31 45.4 0.0**
LODK IAmb IAmb 14 31 48.1
comp=Z,86nm,1.0s
**KIBK Kibwezi 86.84 266** P **P** **14 31 46.3 +0.7**
SNR=21
**KIBK Kibwezi 86.84 266** P **P** **14 31 45.8 +0.2**
KIBK IAmb IAmb 14 31 48.2
comp=Z,142nm,1.1s

TUE **Stuetta** 86.86 321 P **P** 14 31 44.3 -1.0
TUE IAmb IAmb 14 31 47.7
comp=Z,173nm,0.8s
**BGES Gesves** 86.88 326 *b*P **P** **14 31 45.6 +0.6**
**C06D Leavenworth** 86.91 37 P **P** **14 31 46.3 +1.0**
baz=306,SNR=32
**RCHB Rochefort** 86.94 325 *d*P **P** **14 31 44.8 -0.5**
comp=Z,82nm,0.9s
**UCC Uccle** 86.99 326 P **P** **14 31 45.3 -0.2**
UCC pmax pmax
comp=Z,27nm,0.8s
**UCC Uccle** 86.99 326 P **P** **14 31 45.3 -0.2**
**UCC Uccle** 86.99 326 *d*PcP **PcP** **14 31 47.1 -0.3**
**KMBO Kilima Mbogo** 87.04 267 P **P** **14 31 47.9 +1.2**
comp=Z,35nm,0.7s,baz=50,slow=7.5,SNR=59
**KMBO Kilima Mbogo** 87.04 267 *i* P **P** **14 31 48.2 +1.5**
KMBO pmax pmax
comp=Z,35nm,0.7s
**KMBO Kilima Mbogo** 87.04 267 P **P** **14 31 46.4 -0.4**
KMBO IAmb IAmb 14 31 49.4
comp=Z,159nm,1.4s
**KMBO Kilima Mbogo** 87.04 267 P **P** **14 31 47.2 +0.5**
**KMBO Kilima Mbogo** 87.04 267 *i* P **P** **14 31 47.3 +0.5**
SNR=48
**ECH Echery** 87.08 323 P **P** **14 31 45.3 -0.8**
ECH pmax pmax
comp=Z,107nm,1.0s
**ECH Echery** 87.08 323 P **P** **14 31 45.3 -0.8**
ECH IAmb IAmb 14 31 47.4
comp=Z,107nm,1.0s
**ECH Echery** 87.08 323 P **P** **14 31 45.9 -0.2**
**ZCCA Zocca** 87.08 318 P **P** **14 31 45.9 -0.3**
ZCCA IAmb IAmb 14 31 50.3
comp=Z,139nm,0.8s
**BMRD Maredsous** 87.09 326 *d*P **P** **14 31 46.6 +0.6**
comp=Z,78nm,0.8s
**G03D McMinnville, O** 87.10 41 P **P** **14 31 47.2 +1.1**
baz=304,SNR=10
**CEL Celeste** 87.14 311 P **P** **14 31 46.7 +0.1**
**F04A Amboy** 87.19 40 P **P** **14 31 47.3 +0.7**
**SNF Seneffe** 87.21 326 *d*PcP **PcP** **14 31 48.0 -0.4**
**PRMA PARMA** 87.25 319 P **P** **14 31 46.9 0.0**
PRMA IAmb IAmb 14 31 49.3
comp=Z,170nm,0.7s
**DOU Dourbes** 87.30 326 κP **P** **14 31 47.8 +0.7**
comp=Z,72nm,0.8s
**EDMD Edmundbyers** 87.33 332⇑ *e*P **P** **14 31 46.5 -0.6**
EDMD IAmb IAmb 14 31 47.6
comp=Z,63nm,0.8s
**I02E Swisshome, OR** 87.37 42 P **P** **14 31 49.0 +1.5**
baz=304
**OSSC Osservatorio P** 87.38 318 P **P** **14 31 46.4 -1.2**
OSSC IAmb IAmb 14 31 48.5
comp=Z,72nm,0.8s
**LTY Liberty** 87.42 38 P **P** **14 31 47.7 -0.1**
LTY IAmb IAmb 14 31 50.5
comp=Z,202nm,1.0s
**COR Corvallis** 87.43 41 P **P** **14 31 48.2 +0.4**
COR pmax pmax
comp=Z,330nm,0.9s
**COR Corvallis** 87.43 41 P **P** **14 31 48.1 +0.4**
**EDM Edmonton** 87.43 30 P **P** **14 31 47.8 +0.2**
EDM pmax pmax
comp=Z,628nm,0.9s
**EDM Edmonton** 87.43 30 P **P** **14 31 47.8 +0.2**
**B08A Colville Reser** 87.50 36 P **P** **14 31 48.5 +0.4**
**ESK Eskdalemuir** 87.52 333 *e*P **P** **14 31 47.5 -0.4**
ESK IAmb IAmb 14 31 48.8
comp=Z,39nm,0.8s
**LMK Market Rasen** 87.53 330 *e*P **P** **14 31 48.6 +0.6**
LMK IAmb IAmb 14 31 50.5
comp=Z,454nm,0.8s
**VLC Villacollemand** 87.54 318 P **P** **14 31 47.9 -0.5**
**SFJD Kangerlussuaq** 87.66 358 P **P** **14 31 47.8 -0.6**
SFJD pmax pmax
comp=Z,81nm,0.9s
**SFJD Kangerlussuaq** 87.66 358 *i* P **P** **14 31 46.6 -1.8**
**SFJD Kangerlussuaq** 87.66 358 P **P** **14 31 47.8 -0.6**
SFJD IAmb IAmb 14 31 49.4
comp=Z,81nm,0.8s
**F05D White Salmon** 87.77 39 P **P** **14 31 50.4 +1.0**
baz=305,SNR=20
**HPK Haverah Park** 87.77 331 *e*P **P** **14 31 48.9 -0.3**
HPK IAmb IAmb 14 31 51.7
comp=Z,156nm,1.2s
**RAR Rarotonga** 87.79 115 LR LR 15 03 43.3
comp=Z,170nm,21.9s,baz=293,slow=30
**H04D Lebanon** 87.80 41 P **P** **14 31 50.8 +1.3**
baz=304,SNR=16
**ELMS Elmsett, Ipswi** 87.81 329 *e*P **P** **14 31 49.1 -0.3**
ELMS IAmb IAmb 14 31 50.1
comp=Z,153nm,0.7s
**J01E Myrtle Point** 87.84 43 P **P** **14 31 51.2 +1.5**
baz=304,SNR=10
**I03D Drain, OR** 87.89 42 P **P** **14 31 51.6 +1.6**
baz=304,SNR=23
**DY2G Dye2** 87.96 356 *i* P **P** **14 31 49.3 -0.8**
**HOOD Mount Hood Mea** 87.98 40 P **P** **14 31 51.5 +1.0**
**ANGG Ammassalik, Gr** 87.99 352 *i* P **P** **14 31 49.0 -0.9**
ANGG IAmb IAmb 14 31 50.2
comp=Z,64nm,0.9s
**ANGG Ammassalik, Gr** 87.99 352 P **P** **14 31 49.4 -0.6**
ANGG IAmb IAmb 14 31 50.9
comp=Z,135nm,1.0s
**VOI Vohitsoka** 88.01 245 P **P** **14 31 50.3 -0.6**
**VOI Vohitsoka** 88.01 245 P **P** **14 31 50.9 0.0**
**CASP Castiglione de** 88.01 317 P **P** **14 31 49.8 -0.7**
CASP IAmb IAmb 14 31 51.2
comp=Z,65nm,0.7s
**SENIN Lac Senin/Sane** 88.08 322 P **P** **14 31 50.3 -0.8**
SENIN IAmb IAmb 14 31 52.4
comp=Z,118nm,0.8s
**LBWR Ladybower, Pea** 88.19 331⇑ *e*P **P** **14 31 50.9 -0.3**
LBWR IAmb IAmb 14 31 53.7
comp=Z,271nm,0.8s
**ISOG Isortoq, Green** 88.22 353 *i* P **P** **14 31 49.9 -1.1**
**G05D Wamic, OR** 88.22 40 P **P** **14 31 53.0 +1.4**
baz=305,SNR=33
**K02D Willamette Mer** 88.26 43 P **P** **14 31 52.8 +0.9**
baz=304,SNR=9.7
**E07A Sunnyside** 88.28 38 P **P** **14 31 53.0 +1.2**
**I04A Tendick Farm,** 88.40 41 P **P** **14 31 53.2 +0.7**
baz=305,SNR=47
**C09A Chrisman Ranch** 88.40 36 P **P** **14 31 53.0 +0.7**
**CWF Charnwood Fore** 88.45 330⇑ *e*P **P** **14 31 51.9 -0.5**
CWF IAmb IAmb 14 31 54.5
comp=Z,125nm,1.0s
**D08A Wollman Farm,** 88.50 37 P **P** **14 31 53.7 +0.9**
**HAWA Hanford** 88.56 38 P **P** **14 31 54.0 +0.9**
**L02E Cave Junction** 88.59 43 P **P** **14 31 54.0 +0.7**
L02E IAmb IAmb 14 31 56.9
comp=Z,112nm,1.3s
**L02E Cave Junction** 88.59 43 P **P** **14 31 54.7 +1.3**
baz=304,SNR=8.5
**F07A Phinny Hill Vi** 88.63 39 P **P** **14 31 54.1 +0.7**
**RAFF Raffo Rosso** 88.72 311 P **P** **14 31 54.5 +0.4**
**I05D Terrebonne, OR** 88.73 40 P **P** **14 31 55.0 +1.0**
baz=305,SNR=43
**NEW Newport** 88.73 36 P **P** **14 31 55.4 +1.5**
comp=Z,401nm,0.8s,baz=304,slow=4.2,SNR=453
**NEW Newport** 88.73 36 P **P** **14 31 54.9 +1.0**
**NEW Newport** 88.73 36 P **P** **14 31 54.5 +0.6**
baz=308,SNR=414
**HUMO Hull Mountain** 88.74 43 P **P** **14 31 55.4 +1.4**
HUMO IAmb IAmb 14 31 58.3
comp=Z,51nm,0.6s
**E08A Dider Farm, El** 88.76 38 P **P** **14 31 54.9 +0.9**
**J04D Umpqua Nationa** 88.90 42 P **P** **14 31 55.7 +0.7**
**J04D Umpqua Nationa** 88.90 42 P **P** **14 31 56.1 +1.1**
baz=305,SNR=60
**HMNX Herstmonceux** 88.92 328 *e*P **P** **14 31 54.7 +0.1**
HMNX IAmb IAmb 14 31 56.8
comp=Z,321nm,1.0s
**BNI Bardonecchia** 89.20 321 P **P** **14 31 55.7 -0.6**
BNI pmax pmax
comp=Z,163nm,0.8s
**BNI Bardonecchia** 89.20 321 P **P** **14 31 55.7 -0.6**
BNI IAmb IAmb 14 31 57.9
comp=Z,163nm,0.8s
**E09A Wood Farm, Sta** 89.25 37 P **P** **14 31 57.0 +0.7**
**PINE Pine Mountain** 89.28 41 P **P** **14 31 57.2 +0.5**
**HLM1 Long Mynd** 89.30 331⇑ *e*P **P** **14 31 56.1 -0.3**
HLM1 IAmb IAmb 14 31 58.4
comp=Z,197nm,1.4s
**CLTB Caltabellotta** 89.31 312 P **P** **14 31 56.1 -0.8**
CLTB IAmb IAmb 14 31 58.8
comp=Z,63nm,0.7s
**WME Myndd Eilian** 89.31 332⇑ *e*P **P** **14 31 56.2 -0.2**
**L04D Klamath Falls** 89.36 43 P **P** **14 31 58.1 +1.0**
baz=305,SNR=44
**YBH Yreka Blue Hor** 89.38 43 P **P** **14 31 58.6 +1.4**
comp=Z,44nm,0.9s,baz=39,slow=3.6,SNR=8.8
**J05D Fort Rock, OR** 89.39 41 P **P** **14 31 58.5 +1.3**
baz=305,SNR=60
**LLW Llanuwchllyn** 89.42 331⇑ *e*P **P** **14 31 56.8 -0.2**
**WLF1 Llynfaes** 89.43 332⇑ *e*P **P** **14 31 56.8 -0.1**
WLF1 IAmb IAmb 14 31 58.0
comp=Z,377nm,1.0s
**YLL Llanberis** 89.44 331⇑ *e*P **P** **14 31 56.9 -0.1**
**K04D Chiloquin, OR** 89.46 42 P **P** **14 31 58.7 +1.2**
baz=305,SNR=28
**M02C Callahan** 89.48 44 P **P** **14 31 59.1 +1.5**
baz=304,SNR=19
**STRD Stroud** 89.49 330⇑ *e*P **P** **14 31 56.8 -0.5**
STRD IAmb IAmb 14 31 58.2
comp=Z,293nm,0.9s
**YRC Rhoscolyn** 89.53 332⇑ *e*P **P** **14 31 57.1 -0.3**
**G08A Pilot Rock** 89.54 39 P **P** **14 31 57.7 -0.1**
G08A IAmb IAmb 14 32 01.3
comp=Z,185nm,1.4s
**MCH1 Michaelchurch** 89.71 330⇑ *e*P **P** **14 31 58.0 -0.3**
MCH1 IAmb IAmb 14 31 59.3
comp=Z,164nm,0.8s
**MONM Monmouth** 89.73 330 *e*P **P** **14 31 57.8 -0.6**
MONM IAmb IAmb 14 31 59.5
comp=Z,92nm,0.8s
**CLF Chambon-Foret** 89.79 325 P **P** **14 31 58.3 -0.5**
CLF IAmb IAmb 14 32 03.4
comp=Z,89nm,1.3s
**N02D Trinity Center** 89.81 44 P **P** **14 32 00.7 +1.6**
baz=304,SNR=12
**WALA Waterton Lakes** 89.88 34 P **P** **14 31 60.0 +0.6**
**M04C Macdoel** 89.89 43 P **P** **14 32 00.5 +0.9**
**M04C Macdoel** 89.89 43 P **P** **14 32 00.6 +1.0**
baz=305,SNR=48
**K05A Summer Lake** 89.92 42 P **P** **14 32 01.0 +1.2**
**I07A Izee** 89.95 40 P **P** **14 32 00.9 +1.1**
I07A IAmb IAmb 14 32 03.4
comp=Z,168nm,1.2s
**WDC Whiskeytown Da** 90.14 44 P **P** **14 32 01.6 +1.0**
WDC pmax pmax
comp=Z,65nm,1.1s
**WDC Whiskeytown Da** 90.14 44 P **P** **14 32 01.6 +1.0**
**SSB Saint Sauveur** 90.28 322 P **P** **14 32 00.9 -0.3**
SSB pmax pmax
comp=Z,134nm,0.8s
**SSB Saint Sauveur** 90.28 322 P **P** **14 32 00.8 -0.3**
SSB IAmb IAmb 14 32 02.6
comp=Z,134nm,0.8s
**FCC Fort Churchill** 90.44 19 P **P** **14 32 00.8 -0.7**
FCC pmax pmax
comp=Z,219nm,0.9s
**FCC Fort Churchill** 90.44 19 P **P** **14 32 00.8 -0.7**
**NUUK Nuuk** 90.52 358 *i* P **P** **14 32 00.2 -1.6**
NUUK IAmb IAmb 14 32 02.1
comp=Z,45nm,0.7s
**FRB Frobisher Bay** 90.53 5 LR LR 15 15 18.8
comp=Z,267nm,19.5s,baz=0.5,slow=37
**BMO Blue Mountains** 90.73 38 P **P** **14 32 03.9 +0.5**
BMO pmax pmax
comp=Z,200nm,0.9s
**BMO Blue Mountains** 90.73 38 P **P** **14 32 03.9 +0.5**
**MOD Modoc Plateau** 90.76 42 P **P** **14 32 04.2 +0.5**
**VSL Villasalto** 90.78 315 P **P** **14 32 03.4 -0.2**
VSL IAmb IAmb 14 32 05.6
comp=Z,122nm,1.0s
**FFC Flin Flon** 91.08 24 P **P** **14 32 04.4 -0.2**
FFC pmax pmax
comp=Z,349nm,0.8s
**FFC Flin Flon** 91.08 24 P **P** **14 32 04.4 -0.2**
**FFC Flin Flon** 91.08 24 P **P** **14 32 04.5 -0.2**
**MSO Missoula** 91.31 35 P **P** **14 32 06.1 0.0**
**MSO Missoula** 91.31 35 P **P** **14 32 06.5 +0.4**
baz=310,SNR=104
**PLID Pearl Lake** 91.31 38 P **P** **14 32 06.4 +0.1**
PLID IAmb IAmb 14 32 11.6
comp=Z,98nm,0.8s
**ORV Oroville** 91.38 44 P **P** **14 32 06.5 +0.2**
ORV pmax pmax
comp=Z,69nm,0.9s
**ORV Oroville** 91.38 44 P **P** **14 32 06.5 +0.2**
ORV IAmb IAmb 14 32 08.7
comp=Z,69nm,0.8s
**WVOR Wild Horse Val** 91.44 41 P **P** **14 32 06.9 +0.2**
WVOR pmax pmax
comp=Z,126nm,0.9s
**WVOR Wild Horse Val** 91.44 41 P **P** **14 32 06.9 +0.2**
WVOR IAmb IAmb 14 32 10.1
comp=Z,126nm,0.8s
**CASY Casey** 92.04 185 P **P** **14 32 09.3 +0.8**
**ROSF Rostrenen** 92.36 328 *e*P **P** **14 32 10.4 -0.3**
**MPK Martis Peak** 92.45 44 P **P** **14 32 11.0 -0.7**
MPK IAmb IAmb 14 32 14.7
comp=Z,117nm,0.8s
**MFID Camas Ranch** 92.46 39 P **P** **14 32 12.3 +0.8**
**HRY Holter Researc** 92.48 34 P **P** **14 32 12.2 +0.7**
**EMB Emerald Bay** 92.60 44 P **P** **14 32 12.7 +0.4**
**PAHR Pah Rah Range** 92.62 43 P **P** **14 32 12.9 +0.6**
**EGMT Eagleton** 92.62 33 P **P** **14 32 12.2 +0.2**
**EGMT Eagleton** 92.62 33 P **P** **14 32 12.5 +0.4**
baz=314
**VCNR Virginia City** 92.69 44 P **P** **14 32 13.3 +0.6**
VCNR IAmb IAmb 14 32 16.1
comp=Z,114nm,0.8s
**MBAR Mbarara** 92.70 271 P **P** **14 32 12.9 -0.2**
MBAR pmax pmax
comp=Z,76nm,0.8s
**MBAR Mbarara** 92.70 271 P **P** **14 32 12.9 -0.2**
MBAR IAmb IAmb 14 32 15.0
comp=Z,76nm,0.8s
**MBAR Mbarara** 92.70 271 P **P** **14 32 13.4 +0.3**
**LRM Limekiln Ridge** 92.75 35 P **P** **14 32 13.3 +0.4**
**PNTR Pine Nut** 92.85 44 P **P** **14 32 13.6 +0.1**
PNTR IAmb IAmb 14 32 16.6
comp=Z,118nm,0.8s
**KEST Kesra** 92.92 312 P **P** **14 32 14.5 +0.8**
comp=Z,160nm,0.8s,baz=321,slow=1.5,SNR=192
**KEST Kesra** 92.92 312 P **P** **14 32 14.2 +0.5**
SNR=34
**KEST Kesra** 92.92 312 P **P** **14 32 13.0 -0.7**
**CMB Columbia Colle** 92.97 45 P **P** **14 32 14.0 +0.2**
CMB pmax pmax
comp=Z,93nm,0.9s
**CMB Columbia Colle** 92.97 45 P **P** **14 32 14.0 +0.2**
CMB IAmb IAmb 14 32 16.5
comp=Z,93nm,0.8s
**DLMT Dillon** 92.98 36 P **P** **14 32 14.3 +0.5**
**SAO San Andreas Ge** 93.01 47 P **P** **14 32 13.4 -0.5**
SAO pmax pmax
comp=Z,36nm,1.1s
**SAO San Andreas Ge** 93.01 47 P **P** **14 32 13.4 -0.5**
**YERR Yerington** 93.13 44 P **P** **14 32 14.7 0.0**
YERR IAmb IAmb 14 32 17.6
comp=Z,68nm,0.9s
**HLID Hailey** 93.16 38 P **P** **14 32 16.0 +1.2**
baz=310,SNR=134
**MCMT McKenzie Canyo** 93.19 36 P **P** **14 32 14.8 -0.1**
**BCYI Bear Canyon** 93.23 37 P **P** **14 32 14.9 -0.2**
**IVI Ivigtut** 93.31 356 *i* P **P** **14 32 11.5 -3.2**
IVI IAmb IAmb 14 32 14.7
comp=Z,25nm,0.6s
**BOZ Bozeman (W)** 93.33 35 P **P** **14 32 14.9 -0.5**
BOZ pmax pmax
comp=Z,53nm,0.8s
**BOZ Bozeman (W)** 93.33 35 P **P** **14 32 14.9 -0.5**
BOZ IAmb IAmb 14 32 18.1
comp=Z,53nm,0.8s
**BOZ Bozeman (W)** 93.33 35 P **P** **14 32 15.6 +0.2**
baz=312,SNR=101
**BBGB Big Mountain B** 93.39 47 P **P** **14 32 15.9 +0.1**
BBGB IAmb IAmb 14 32 18.9
comp=Z,104nm,0.9s
**PMPB Monarch Peak** 93.75 47 P **P** **14 32 17.6 +0.2**
PMPB IAmb IAmb 14 32 22.2
comp=Z,76nm,0.8s
**RYN Ryan** 93.80 44 P **P** **14 32 18.3 +0.6**
**KVN Kaiserville** 93.81 43 P **P** **14 32 18.5 +0.7**
KVN pmax pmax
comp=Z,142nm,0.9s
**KVN Kaiserville** 93.81 43 P **P** **14 32 18.5 +0.7**
**QLMT Earthquake Lak** 93.95 36 P **P** **14 32 19.1 +0.7**
**LHV Little Huntoon** 94.03 44 P **P** **14 32 19.6 +1.0**
LHV IAmb IAmb 14 32 22.2
comp=Z,144nm,1.0s
**NVAR Mina Array Bea** 94.05 44 P **P** **14 32 20.4 +1.5**
comp=Z,103nm,0.7s,baz=294,slow=4.7,SNR=184
NVAR PP **PP** **14 36 06.7 -0.7**
comp=Z,6.3nm,0.9s,baz=290,slow=9.6,SNR=5.0
NVAR PKKPbc **PKKPbc** **14 49 21.0 +0.7**
comp=Z,0.3nm,0.5s,baz=145,slow=3.3,SNR=4.3
**NVAR Mina Array Bea** 94.05 44 P **P** **14 32 19.9 +0.9**
**NV11 Mina Array Sit** 94.14 44 P **P** **14 32 20.1 +0.8**
NV11 IAmb IAmb 14 32 22.0
comp=Z,58nm,0.8s
**MLAC Mammoth, Mammo** 94.19 45 P **P** **14 32 19.7 0.0**
baz=307
**GCMT Greycliff** 94.20 34 P **P** **14 32 20.1 +0.7**
**YHH Holmes Hill** 94.28 35 P **P** **14 32 20.5 +0.5**
**YMR Madison River** 94.30 36 P **P** **14 32 20.1 +0.1**
YMR IAmb IAmb 14 32 23.5
comp=Z,77nm,0.8s
**PAGB Antelope Grade** 94.40 47 P **P** **14 32 20.9 +0.5**
**ELK Elko** 94.49 41 P **P** **14 32 20.7 -0.2**
ELK pmax pmax
comp=Z,51nm,1.0s
**ELK Elko** 94.49 41 P **P** **14 32 20.7 -0.2**
ELK IAmb IAmb 14 32 24.5
comp=Z,51nm,0.9s
**Q09A Carvers** 94.50 43 P **P** **14 32 20.4 -0.6**
**VOG Valley Oaks Go** 94.62 46 P **P** **14 32 20.9 -0.4**
baz=306
**LKWY Lake** 94.67 35 P **P** **14 32 22.1 +0.4**
LKWY pmax pmax
comp=Z,87nm,0.9s
**LKWY Lake** 94.67 35 P **P** **14 32 22.1 +0.4**
LKWY IAmb IAmb 14 32 26.3
comp=Z,86nm,0.9s
**YMP Mirror Lake Pl** 94.67 35 P **P** **14 32 22.4 +0.6**
YMP IAmb IAmb 14 32 25.3
comp=Z,68nm,1.0s
**H17A Grant Village** 94.69 36 P **P** **14 32 24.1 +2.3**
baz=313,SNR=64
**PPT Papeete** 94.77 107 LR LR 15 07 07.3
comp=Z,377nm,21.4s,baz=285,slow=30
**PPT2 Papeete2** 94.78 107 *e*S **S** **14 43 15.4 -3.3**
comp=Z,462nm,25.5s
**PPT2 Papeete2** 94.78 107 *e*LR LR 15 03 13.3
comp=Z,751nm,22.5s
**SMMC Simmler** 94.81 47 P **P** **14 32 23.4 +1.2**
baz=306,SNR=8.4
**DGMT Dagmar** 94.89 30 P **P** **14 32 22.5 +0.1**
**DGMT Dagmar** 94.89 30 P **P** **14 32 22.3 0.0**
baz=318
**TIN Tinemaha, Big** 94.93 45 P **P** **14 32 23.8 +0.9**
baz=307,SNR=14
**TPH Tonopah** 94.94 44 P **P** **14 32 23.6 +0.6**
TPH pmax pmax
comp=Z,556nm,0.8s
**TPH Tonopah** 94.94 44 P **P** **14 32 23.6 +0.6**
**MOOW Moose Ponds** 95.04 36 P **P** **14 32 23.7 +0.4**
**VES Vestal, Richgr** 95.10 46 P **P** **14 32 24.3 +0.8**
baz=307,SNR=11
**ECR Eagle Creek** 95.17 37 P **P** **14 32 23.7 -0.3**
**PKM Mcpherson Peak** 95.18 47 P **P** **14 32 25.3 +1.2**
baz=306,SNR=12
**LCH Last Change Ra** 95.19 45 P **P** **14 32 24.3 +0.2**
LCH IAmb IAmb 14 32 26.9
comp=Z,86nm,1.2s
**LOHW Long Hollow** 95.21 36 P **P** **14 32 24.4 +0.2**
**HVU Hansel Valley** 95.24 39 P **P** **14 32 24.7 +0.4**
HVU pmax pmax
comp=Z,38nm,0.9s
**HVU Hansel Valley** 95.24 39 P **P** **14 32 24.7 +0.4**
HVU IAmb IAmb 14 32 27.5
comp=Z,38nm,0.9s
**REDW Red Top Meadow** 95.24 36 P **P** **14 32 24.4 0.0**
**LAO LASA Array** 95.26 32 P **P** **14 32 24.4 +0.3**
LAO IAmb IAmb 14 32 26.8
comp=Z,93nm,1.0s
**LAO LASA Array** 95.26 32 P **P** **14 32 24.6 +0.5**
baz=316
**CWC Cottonwood Cre** 95.39 45 P **P** **14 32 25.7 +0.6**
baz=307
**AHID Auburn Hatcher** 95.51 37 P **P** **14 32 24.5 -1.0**
**ISA Isabella, Lake** 95.60 46 P **P** **14 32 25.7 -0.2**
ISA pmax pmax
comp=Z,28nm,0.9s
**ISA Isabella, Lake** 95.60 46 P **P** **14 32 25.7 -0.2**
ISA IAmb IAmb 14 32 27.6
comp=Z,28nm,0.8s
**ISA Isabella, Lake** 95.60 46 P **P** **14 32 26.4 +0.5**
baz=307,SNR=9.5
**ARVC Arvin** 95.69 47 P **P** **14 32 26.7 +0.5**
baz=307,SNR=8.1
**ECRI Cripan** 95.89 323 P **P** **14 32 23.7 -3.3**
**MPMC Manual Prospec** 96.00 45 P **P** **14 32 28.1 +0.2**
baz=308,SNR=32
**OSI Osito Audit: C** 96.06 47 P **P** **14 32 28.4 +0.4**
baz=307
**FURC Furnace Creek,** 96.15 45 P **P** **14 32 29.0 +0.8**
baz=308,SNR=21
**LRMC Laurel Mtn Rad** 96.23 46 P **P** **14 32 29.1 +0.3**
baz=307,SNR=22
**TPNV Topopah Spring** 96.25 44 P **P** **14 32 28.8 -0.2**
TPNV pmax pmax
comp=Z,24nm,0.9s
**TPNV Topopah Spring** 96.25 44 P **P** **14 32 28.8 -0.2**
**TPNV Topopah Spring** 96.25 44 P **P** **14 32 29.1 +0.1**
baz=308,SNR=22
**DUG Dugway, Tooele** 96.25 40 P **P** **14 32 29.6 +0.7**
baz=311,SNR=12
**BW06 Boulder Array** 96.34 36 P **P** **14 32 28.8 -0.5**
**BW06 Boulder Array** 96.34 36 P **P** **14 32 29.9 +0.6**
baz=314,SNR=16
**PD31 Pinedale Array** 96.34 36 P **P** **14 32 28.7 -0.6**
**PDAR Pinedale Array** 96.34 36 P **P** **14 32 29.6 +0.3**
comp=Z,7.1nm,0.7s,baz=110,slow=0.4,SNR=63
PDAR PP **PP** **14 36 25.2 +0.3**
comp=Z,2.8nm,0.9s,baz=316,slow=6.2,SNR=4.3
PDAR PKKPbc **PKKPdf** **14 49 13.6 -0.5**
comp=Z,1.3nm,0.7s,baz=141,slow=4.8,SNR=8.3
**PDAR Pinedale Array** 96.34 36 P **P** **14 32 28.7 -0.6**
**EDW2 Edwards Air Fo** 96.39 47 P **P** **14 32 29.8 +0.3**
baz=307,SNR=12
**GWY Greenwater Val** 96.45 45 P **P** **14 32 30.4 +0.5**
GWY IAmb IAmb 14 32 32.4
comp=Z,36nm,0.8s
**QSM Queen of Sheba** 96.46 45 P **P** **14 32 30.3 +0.6**
QSM IAmb IAmb 14 32 32.5
comp=Z,46nm,0.9s
**CTU Camp Tracy** 96.54 39 P **P** **14 32 30.2 0.0**
**PSUT Pine Spring** 96.72 42 P **P** **14 32 31.0 -0.1**
PSUT IAmb IAmb 14 32 33.8
comp=Z,37nm,0.8s
**MWC Mount Wilson** 96.74 47 P **P** **14 32 31.5 +0.3**
**MWC Mount Wilson** 96.74 47 P **P** **14 32 31.5 +0.3**
MWC IAmb IAmb 14 32 33.5
comp=Z,56nm,1.4s
**JLU Jordanelle** 96.77 39 P **P** **14 32 31.6 +0.3**
**NLU North Lily Min** 96.84 40 P **P** **14 32 32.0 +0.4**
**ULM Lac du Bonnet** 96.90 24 P **P** **14 32 31.3 -0.1**
comp=Z,40nm,0.8s,baz=328,slow=4.9,SNR=43
ULM PKKPbc **PKKPdf** **14 49 10.3 -2.4**
comp=Z,6.2nm,0.8s,baz=103,slow=3.2,SNR=5.8
**ULM Lac du Bonnet** 96.90 24 P **P** **14 32 30.6 -0.8**
ULM IAmb IAmb 14 32 34.0
comp=Z,42nm,0.8s
**GSC Goldstone, Bar** 96.90 46 P **P** **14 32 31.9 +0.1**
GSC pmax pmax
comp=Z,55nm,1.1s
**GSC Goldstone, Bar** 96.90 46 P **P** **14 32 31.9 +0.1**
GSC IAmb IAmb 14 32 34.6
comp=Z,55nm,1.1s
**GSC Goldstone, Bar** 96.90 46 P **P** **14 32 31.7 -0.1**
baz=308,SNR=16
**CIS Catalina Islan** 96.99 48 P **P** **14 32 31.9 -0.2**
baz=307
**SCI2 San Clemente I** 97.15 48 P Pdif 14 32 33.3 +0.4
baz=307
**SHPR Sheep Range** 97.21 44 P **P** **14 32 33.2 -0.1**
SHPR IAmb IAmb 14 32 36.4
comp=Z,38nm,1.2s
**MDND Maddock** 97.36 28 P **P** **14 32 33.3 -0.2**
baz=322
**TUQ Turquoise Moun** 97.39 45 P **P** **14 32 34.1 0.0**
baz=308,SNR=9.9

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BBRC** | **Big Bear Solar** | **97.46** | **47** | P | | **P** | | **14 32 34.6** | **0.0** |
| | baz=308 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **97.50** | **46** | P | | Pdif | | 14 32 34.7 | +0.2 |
| | baz=308,SNR=18 | | | | | | | | |
| **CCUT** | **Cedar City** | **97.65** | **42** | P | | Pdif | | 14 32 36.2 | +0.9 |
| **MURC** | **Murrieta** | **97.69** | **47** | P | | Pdif | | 14 32 35.5 | +0.1 |
| | baz=308 | | | | | | | | |
| **MSU** | **Marysvale** | **97.73** | **41** | P | | Pdif | | 14 32 36.0 | +0.3 |
| **MSU** | **Marysvale** | **97.73** | **41** | P | | Pdif | | 14 32 36.0 | +0.3 |
| **RDMU** | **Red Mountain** | **97.84** | **38** | P | | Pdif | | 14 32 36.6 | +0.5 |
| RDMU | | | | IAmb | | IAmb | | 14 32 42.6 | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| **E28A** | **Huff** | **97.88** | **29** | P | | **P** | | **14 32 35.4** | **-0.5** |
| E28A | | | | IAmb | | IAmb | | 14 32 38.1 | |
| | comp=Z,58nm,1.1s | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **97.93** | **39** | P | | Pdif | | 14 32 36.6 | +0.1 |
| P17A | | | | IAmb | | IAmb | | 14 32 41.1 | |
| | comp=Z,41nm,0.7s | | | | | | | | |
| **GMRC** | **Granite Mounta** | **97.96** | **45** | P | | Pdif | | 14 32 37.2 | +0.5 |
| | baz=309,SNR=13 | | | | | | | | |
| **K22A** | **Casper** | **98.02** | **35** | P | | Pdif | | 14 32 36.9 | +0.1 |
| | baz=316 | | | | | | | | |
| **P18A** | **Preston Nutter** | **98.11** | **39** | P | | Pdif | | 14 32 38.0 | +0.6 |
| P18A | | | | IAmb | | IAmb | | 14 32 42.6 | |
| | comp=Z,47nm,1.0s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **98.16** | **47** | P | | Pdif | | 14 32 38.2 | +0.7 |
| | comp=Z,32nm,1.1s,baz=293,slow=4.8,SNR=10 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **98.16** | **47** | P | | Pdif | | 14 32 38.1 | +0.5 |
| PFO | | | | IAmb | | IAmb | | 14 32 40.3 | |
| | comp=Z,41nm,1.1s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **98.16** | **47** | P | | Pdif | | 14 32 38.4 | +0.8 |
| | baz=308,SNR=7.2 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **98.17** | **47** | P | | Pdif | | 14 32 38.5 | +0.9 |
| | baz=308,SNR=8.0 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **98.17** | **48** | P | | Pdif | | 14 32 38.7 | +1.2 |
| | baz=308 | | | | | | | | |
| **RSSD** | **Black Hills** | **98.19** | **32** | P | | **P** | | **14 32 37.6** | **0.0** |
| RSSD | | | | pmax | | pmax | | | |
| | comp=Z,44nm,1.2s | | | | | | | | |
| **RSSD** | **Black Hills** | **98.19** | **32** | P | | **P** | | **14 32 37.6** | **0.0** |
| RSSD | | | | IAmb | | IAmb | | 14 32 39.9 | |
| | comp=Z,44nm,1.2s | | | | | | | | |
| **RSSD** | **Black Hills** | **98.19** | **32** | P | | **P** | | **14 32 37.5** | **0.0** |
| | baz=318 | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **98.23** | **46** | P | | Pdif | | 14 32 38.8 | +0.9 |
| | baz=308,SNR=6.2 | | | | | | | | |
| **SRU** | **San Rafael Swe** | **98.30** | **39** | P | | **P** | | **14 32 37.7** | **-0.4** |
| SRU | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **98.30** | **39** | P | | **P** | | **14 32 37.7** | **-0.4** |
| SRU | | | | IAmb | | IAmb | | 14 32 48.0 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **KNB** | **Kanab** | **98.32** | **42** | P | | Pdif | | 14 32 38.8 | +0.5 |
| KNB | | | | pmax | | pmax | | | |
| | comp=Z,51nm,0.8s | | | | | | | | |
| **KNB** | **Kanab** | **98.32** | **42** | P | | Pdif | | 14 32 38.8 | +0.5 |
| KNB | | | | IAmb | | IAmb | | 14 32 41.7 | |
| | comp=Z,51nm,0.8s | | | | | | | | |
| **RWWY** | **Rawlins** | **98.34** | **36** | P | | Pdif | | 14 32 38.7 | +0.3 |
| **AGMN** | **Agassiz Nation** | **98.50** | **25** | P | | **P** | | **14 32 37.8** | **-0.8** |
| **AGMN** | **Agassiz Nation** | **98.50** | **25** | P | | **P** | | **14 32 38.3** | **-0.3** |
| | baz=325 | | | | | | | | |
| **BAR** | **Barrett** | **98.59** | **48** | | | Pdif | | 14 32 39.9 | +0.5 |
| BAR | | | | IAmb | | IAmb | | 14 32 42.7 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **MONP2** | **Monument Peak** | **98.63** | **47** | P | | Pdif | | 14 32 40.2 | +0.5 |
| | baz=308 | | | | | | | | |
| **IRM** | **Iron Mountain** | **98.69** | **46** | P | | Pdif | | 14 32 40.7 | +0.9 |
| | baz=309,SNR=12 | | | | | | | | |
| **ESBB** | **Sonseca Array** | **98.69** | **322** | P | | **P** | | **14 32 39.1** | **-0.6** |
| **ESDC** | **Sonseca Array** | **98.69** | **322** | P | | **P** | | **14 32 39.5** | **-0.2** |
| | comp=Z,7.2nm,1.0s,baz=32,slow=4.2,SNR=30 | | | | | | | | |
| ESDC | | | | PKKPbc | | **PKKPbc** | | **14 49 07.7** | **0.0** |
| | comp=Z,2.7nm,1.0s,baz=242,slow=2.1,SNR=9.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **98.69** | **322** | | | **P** | | **14 32 38.8** | **-0.9** |
| **PBRG** | **Braganca** | **98.70** | **325** | *e*Pdif | | **P** | | **14 32 39.4** | **-0.3** |
| **BC3** | **Big Chuckawall** | **98.80** | **46** | P | | Pdif | | 14 32 41.1 | +0.7 |
| | baz=309,SNR=5.8 | | | | | | | | |
| **O20A** | **White River Ci** | **98.88** | **38** | P | | Pdif | | 14 32 41.3 | +0.6 |
| | baz=314,SNR=8.9 | | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **98.98** | **47** | P | | Pdif | | 14 32 42.2 | +1.0 |
| | baz=308 | | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **99.01** | **47** | P | | **Pdif** | | **14 32 42.4** | **+1.2** |
| | baz=308 | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **99.24** | **45** | P | | **Pdif** | | **14 32 43.2** | **+1.1** |
| | baz=310,SNR=7.7 | | | | | | | | |
| **MVO** | **Moncorvo** | **99.31** | **324** | *e*Pdif | | **Pdif** | | **14 32 42.4** | **-0.1** |
| **PGAV** | **Gavieira, Arco** | **99.37** | **326** | *e*Pdif | | **Pdif** | | **14 32 42.6** | **-0.2** |
| **PCAB** | **Cabril** | **99.43** | **325** | *e*Pdif | | **Pdif** | | **14 32 43.2** | **+0.3** |
| **SCHQ** | **Schefferville** | **99.49** | **6** | P | | **Pdif** | | **14 32 42.5** | **-0.4** |
| | comp=Z,13nm,0.9s,baz=349,slow=5.2,SNR=5.9 | | | | | | | | |
| SCHQ | | | | PP | | **PP** | | **14 36 44.0** | **-4.0** |
| | comp=Z,9.8nm,0.7s,baz=2.7,slow=10,SNR=5.4 | | | | | | | | |
| SCHQ | | | | PKKPbc | | **PKKPbc** | | **14 49 03.1** | **-2.9** |
| | comp=Z,6.9nm,0.9s,baz=171,slow=4.4,SNR=4.3 | | | | | | | | |
| **SCHQ** | **Schefferville** | **99.49** | **6** | Pdif | | **Pdif** | | **14 32 43.1** | **+0.2** |
| SCHQ | | | | IAmb | | IAmb | | 14 32 44.1 | |
| | comp=Z,33nm,1.2s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **99.56** | **325** | *e*Pdif | | **Pdif** | | **14 32 43.2** | **-0.4** |
| **N23A** | **Red Feather La** | **99.58** | **36** | P | | **Pdif** | | **14 32 44.8** | **+0.8** |
| | baz=316,SNR=17 | | | | | | | | |
| **GLA** | **Glamis** | **99.58** | **46** | P | | **Pdif** | | **14 32 44.3** | **+0.5** |
| | baz=309 | | | | | | | | |
| **PVIS** | **Viseu** | **100.09** | **325** | *e*Pdif | | **Pdif** | | **14 32 46.4** | **+0.5** |
| **MTE** | **Manteigas** | **100.13** | **324** | *e*Pdif | | **Pdif** | | **14 32 46.4** | **+0.3** |
| **WUAZ** | **Wupatki** | **100.19** | **43** | P | | **Pdif** | | **14 32 47.9** | **+1.3** |
| | baz=312,SNR=24 | | | | | | | | |
| **SUSD** | **Miller** | **100.31** | **29** | P | | **Pdif** | | **14 32 46.5** | **-0.3** |
| | baz=322 | | | | | | | | |
| **EYMN** | **Ely** | **100.41** | **23** | P | | **Pdif** | | **14 32 45.8** | **-1.3** |
| | baz=328 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **100.54** | **36** | P | | **Pdif** | | **14 32 49.3** | **+1.0** |
| | baz=316 | | | | | | | | |
| **PMRV** | **Marv??o** | **100.75** | **323** | *e*Pdif | | **Pdif** | | **14 32 49.0** | **+0.2** |
| **MVCO** | **Mesa Verde** | **100.76** | **40** | P | | **Pdif** | | **14 32 50.0** | **+0.8** |
| | baz=314 | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **100.89** | **324** | *e*Pdif | | **Pdif** | | **14 32 50.0** | **+0.6** |
| **PESTR** | **Estremoz** | **101.26** | **323** | *e*Pdif | | **Pdif** | | **14 32 51.9** | **+0.8** |
| **S22A** | **4UR Ranch, Cre** | **101.34** | **38** | P | | **Pdif** | | **14 32 52.3** | **+0.4** |
| | baz=315 | | | | | | | | |
| **Q24A** | **Divide** | **101.39** | **37** | P | | **Pdif** | | **14 32 52.8** | **+0.7** |
| | baz=316 | | | | | | | | |
| **PMTG** | **Montargil** | **101.45** | **324** | *e*Pdif | | **Pdif** | | **14 32 51.8** | **-0.1** |
| **ECSD** | **EROS Data Cent** | **101.89** | **28** | P | | **Pdif** | | **14 32 54.1** | **+0.3** |
| | baz=324 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **102.08** | **38** | P | | **Pdif** | | **14 32 56.3** | **+1.2** |
| | baz=316,SNR=11 | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **102.31** | **323** | *e*Pdif | | **Pdif** | | **14 32 56.7** | **+0.9** |
| **MESJ** | **Messejana** | **102.34** | **323** | *e*Pdif | | **Pdif** | | **14 32 57.2** | **+1.3** |
| **TUC** | **Tucson** | **102.67** | **45** | P | | **Pdif** | | **14 32 58.3** | **+0.7** |
| | baz=312 | | | | | | | | |
| **T25A** | **Trinidad** | **103.11** | **37** | P | | **Pdif** | | **14 33 00.1** | **+0.5** |
| | baz=317 | | | | | | | | |
| **ANMO** | **Albuquerque** | **103.52** | **40** | P | | **Pdif** | | **14 33 01.9** | **+0.4** |
| | baz=315 | | | | | | | | |
| **MDT** | **Midelt** | **103.76** | **317** | Pdiff | | **Pdif** | | **14 33 03.1** | **+0.7** |
| | comp=Z,3.0nm,0.9s,baz=223,slow=0.8,SNR=6.1 | | | | | | | | |
| **VNDA** | **Vanda** | **105.32** | **172** | PKKPbc | | PKKPbc | | 14 48 49.0 | -0.8 |
| | comp=Z,9.1nm,0.8s,baz=178,slow=1.1,SNR=7.3 | | | | | | | | |
| **MSTX** | **Muleshoe** | **106.33** | **39** | P | | **PKiKP** | | **14 37 24.5** | **+0.3** |
| | baz=317 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **106.44** | **42** | P | | **PKiKP** | | **14 37 25.0** | **+0.6** |
| | baz=315 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **107.94** | **36** | P | | **PKiKP** | | **14 37 26.7** | **-0.4** |
| | baz=320 | | | | | | | | |
| **LONY** | **Lake Ozonia** | **108.28** | **13** | P | | **PKiKP** | | **14 37 27.3** | **-0.1** |
| | baz=343 | | | | | | | | |
| **BOSA** | **Boshof** | **108.50** | **247** | PKiKP | | **PKiKP** | | **14 37 28.8** | **+0.5** |
| | comp=Z,11nm,0.5s,baz=109,slow=1.4,SNR=19 | | | | | | | | |
| **BOSA** | **Boshof** | **108.50** | **247** | PKiKP | | **PKiKP** | | **14 37 28.4** | **+0.1** |
| **PKME** | **Peaks-Kenny Pk** | **108.60** | **9** | P | | **PKiKP** | | **14 37 27.9** | **-0.1** |
| | baz=348 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **108.87** | **28** | P | | **PKiKP** | | **14 37 28.6** | **-0.1** |
| | baz=327 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **109.08** | **38** | P | | **PKiKP** | | **14 37 29.6** | **+0.4** |
| | baz=319 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **109.15** | **43** | Pdiff | | **Pdif** | | **14 33 28.1** | **+1.6** |
| | comp=Z,2.3nm,0.7s,baz=302,slow=2.8,SNR=28 | | | | | | | | |
| TXAR | | | | PKiKP | | **PKiKP** | | **14 37 30.2** | **+0.6** |
| | comp=Z,8.4nm,0.8s,baz=187,slow=0.6,SNR=26 | | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPbc** | | **14 48 35.5** | **-1.0** |
| | comp=Z,0.7nm,0.7s,baz=153,slow=4.4,SNR=5.0 | | | | | | | | |
| TXAR | | | | SKKPbc | | SKKPbc | | 14 52 00.5 | +2.1 |
| | comp=Z,0.6nm,0.8s,baz=126,slow=5.9,SNR=3.9 | | | | | | | | |
| TXAR | | | | PKPPKP | | | | 14 56 50.7 | |
| | comp=Z,0.3nm,0.8s,baz=176,slow=4.8,SNR=3.8 | | | | | | | | |
| **O48B** | **Farmland** | **109.34** | **23** | P | | **PKiKP** | | **14 37 29.3** | **-0.2** |
| | baz=333 | | | | | | | | |
| **U40A** | **Yellville** | **109.57** | **30** | P | | **PKiKP** | | **14 37 30.1** | **+0.1** |
| | baz=326 | | | | | | | | |
| **M53A** | **WI Miller and** | **109.72** | **19** | P | | **PKiKP** | | **14 37 30.0** | **-0.2** |
| | baz=337 | | | | | | | | |
| **M54A** | **Oil Creek Stat** | **109.95** | **18** | P | | **PKiKP** | | **14 37 30.3** | **-0.3** |
| | baz=339 | | | | | | | | |
| **W39A** | **Magazine** | **110.08** | **32** | P | | **PKiKP** | | **14 37 31.0** | **0.0** |
| | baz=325 | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **110.11** | **21** | P | | **PKiKP** | | **14 37 30.9** | **-0.1** |
| | baz=335 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **110.14** | **23** | P | | **PKiKP** | | **14 37 30.7** | **-0.3** |
| | baz=333 | | | | | | | | |
| **BINY** | **Binghamton** | **110.26** | **15** | P | | **PKiKP** | | **14 37 31.2** | **0.0** |
| | baz=341 | | | | | | | | |
| **N54A** | **Moraine State** | **110.36** | **19** | P | | **PKiKP** | | **14 37 30.9** | **-0.6** |
| | baz=338 | | | | | | | | |
| **JCT** | **Junction City** | **110.60** | **39** | P | | **PKiKP** | | **14 37 32.7** | **+0.5** |
| | baz=319 | | | | | | | | |
| **O53A** | **New Philadelph** | **110.65** | **20** | P | | **PKiKP** | | **14 37 31.7** | **-0.3** |
| | baz=336 | | | | | | | | |
| **MIAR** | **Mount Ida** | **110.71** | **32** | P | | **PKiKP** | | **14 37 32.9** | **+0.6** |
| | baz=325 | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **110.72** | **25** | P | | **PKiKP** | | **14 37 32.3** | **+0.1** |
| | baz=332 | | | | | | | | |
| **L61B** | **Northampton** | **110.75** | **13** | P | | **PKiKP** | | **14 37 32.1** | **+0.1** |
| | baz=344 | | | | | | | | |
| **W41B** | **Gary Mavity, V** | **110.82** | **31** | P | | **PKiKP** | | **14 37 32.0** | **-0.4** |
| | baz=326 | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **110.91** | **12** | P | | **PKiKP** | | **14 37 32.1** | **-0.3** |
| | baz=346 | | | | | | | | |
| **P52A** | **Corning** | **110.92** | **21** | P | | **PKiKP** | | **14 37 32.2** | **-0.3** |
| | baz=335 | | | | | | | | |
| **SSPA** | **Standing Stone** | **111.25** | **17** | P | | **PKiKP** | | **14 37 33.0** | **-0.1** |
| | baz=339 | | | | | | | | |
| **SYO** | **Syowa Base** | **111.40** | **203** | *e*Pdiff | | **Pdif** | | **14 33 38.2** | **+3.0** |
| **O56A** | **Blue Knob Stat** | **111.41** | **18** | P | | **PKiKP** | | **14 37 33.8** | **+0.3** |
| | baz=339 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **111.48** | **297** | Pdiff | | **Pdif** | | **14 33 37.0** | **0.0** |
| | comp=Z,1.3nm,0.9s,baz=25,slow=5.0,SNR=5.6 | | | | | | | | |
| TORD | | | | PKiKP | | **PKiKP** | | **14 37 33.8** | **-0.4** |
| | comp=Z,16nm,0.7s,baz=47,slow=2.0,SNR=50 | | | | | | | | |
| TORD | | | | PP | | **PP** | | **14 38 16.2** | **-1.6** |
| | comp=Z,8.3nm,0.9s,baz=49,slow=8.0,SNR=6.1 | | | | | | | | |
| TORD | | | | PKKPbc | | **PKKPbc** | | **14 48 28.2** | **-0.2** |
| | comp=Z,1.4nm,0.7s,baz=242,slow=3.0,SNR=7.5 | | | | | | | | |
| **N59A** | **State Game Lan** | **111.53** | **16** | P | | **PKiKP** | | **14 37 33.6** | **0.0** |
| | baz=341 | | | | | | | | |
| **PAL** | **Palisades** | **111.88** | **14** | P | | **PKiKP** | | **14 37 34.6** | **+0.4** |
| | baz=343 | | | | | | | | |
| **WVT** | **Waverly** | **111.94** | **27** | P | | **PKiKP** | | **14 37 34.8** | **+0.3** |
| | baz=330 | | | | | | | | |
| **833A** | **Chaparral WMA,** | **112.45** | **40** | P | | **PKiKP** | | **14 37 36.7** | **+1.0** |
| | baz=318 | | | | | | | | |
| **OXF** | **Oxford** | **112.65** | **29** | P | | **PKiKP** | | **14 37 35.7** | **-0.2** |
| | baz=328 | | | | | | | | |
| **TZTN** | **Tazewell** | **113.22** | **23** | P | | **PKiKP** | | **14 37 36.8** | **-0.2** |
| | baz=334 | | | | | | | | |
| **BLA** | **Blacksburg** | **113.68** | **21** | P | | **PKiKP** | | **14 37 37.9** | **0.0** |
| | baz=337 | | | | | | | | |
| **VBMS** | **Vicksburg** | **114.07** | **31** | P | | **PKiKP** | | **14 37 38.7** | **0.0** |
| | baz=327 | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **114.95** | **28** | P | | **PKiKP** | | **14 37 39.8** | **-0.6** |
| | baz=330 | | | | | | | | |
| **KOWA** | **Kowa** | **115.19** | **302** | PKKPbc | | PKKPbc | | 14 48 16.7 | +0.6 |
| | comp=Z,4.3nm,0.9s,baz=268,slow=3.1,SNR=7.9 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **115.26** | **22** | | | **PKPdf** | | **14 37 41.0** | **+0.1** |
| **KMSC** | **Kings Mountain** | **115.26** | **22** | P | | **PKiKP** | | **14 37 40.8** | **-0.1** |
| | baz=335 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **115.31** | **180** | PKP | | **PKPdf** | | **14 37 39.8** | **-0.1** |
| | comp=Z,23nm,0.8s,baz=236,slow=0.3,SNR=47 | | | | | | | | |
| QSPA | | | | PKKPbc | | **PKKPbc** | | **14 48 15.5** | **-2.2** |
| | comp=Z,4.8nm,0.7s,baz=192,slow=1.1,SNR=14 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **115.31** | **180** | | | **PKPdf** | | **14 37 39.6** | **-0.3** |
| **Y52A** | **Lilburn** | **115.41** | **25** | | | **PKiKP** | | **14 37 41.2** | **-0.1** |
| **Z51A** | **Franklin** | **115.46** | **26** | | | **PKiKP** | | **14 37 40.6** | **-0.7** |
| **GOGA** | **Godfrey** | **116.04** | **25** | PKIKP | | **PKPdf** | | **14 37 40.5** | **-2.0** |
| **GOGA** | **Godfrey** | **116.04** | **25** | | | **PKPdf** | | **14 37 40.5** | **-2.0** |
| **GOGA** | **Godfrey** | **116.04** | **25** | P | | **PKiKP** | | **14 37 42.7** | **+0.2** |
| | baz=333 | | | | | | | | |
| **CNNC** | **Cliffs of the** | **116.28** | **19** | P | | **PKPdf** | | **14 37 42.7** | **-0.1** |
| | baz=339 | | | | | | | | |
| **BRAL** | **Brewton** | **116.53** | **29** | P | | **PKiKP** | | **14 37 44.1** | **+0.6** |
| | baz=336 | | | | | | | | |
| **NHSC** | **New Hope** | **117.51** | **22** | P | | **PKiKP** | | **14 37 45.3** | **+0.1** |
| **TIGA** | **Tifton** | **117.74** | **26** | P | | **PKiKP** | | **14 37 45.8** | **0.0** |
| | baz=332 | | | | | | | | |
| **DBIC** | **Dimbokro** | **120.45** | **295** | PKP | | **PKPdf** | | **14 37 51.1** | **-0.2** |
| | comp=Z,57nm,0.8s,baz=61,slow=2.1,SNR=54 | | | | | | | | |
| DBIC | | | | PKKPbc | | **PKKPbc** | | **14 47 58.9** | **+1.6** |
| | comp=Z,7.9nm,1.1s,baz=275,slow=2.6,SNR=4.8 | | | | | | | | |
| **DBIC** | **Dimbokro** | **120.45** | **295** | PKiKP | | **PKPdf** | | **14 37 50.6** | **-0.8** |
| **DBIC** | **Dimbokro** | **120.45** | **295** | PKPdf | | **PKPdf** | | **14 37 50.6** | **-0.8** |
| **KIC** | **Kosan Boka** | **120.53** | **295** | *e*PKIKP | | **PKPdf** | | **14 37 51.2** | **-0.4** |
| | comp=Z,96nm,0.6s | | | | | | | | |
| **TIC** | **Toumodi** | **120.60** | **295** | *e*PKIKP | | **PKPdf** | | **14 37 51.6** | **-0.1** |
| **LIC** | **Lamto** | **120.84** | **295** | *e*PKIKP | | **PKPdf** | | **14 37 51.6** | **-0.6** |
| | comp=Z,208nm,0.8s | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **120.97** | **201** | *e*PKIKP | | **PKiKP** | | **14 37 56.7** | **+5.9** |
| NVL | | | | pmax | | pmax | | | |
| | comp=Z,98nm,0.8s | | | | | | | | |
| **DWPF** | **Disney Wildern** | **121.55** | **26** | P | | **PKPdf** | | **14 37 52.3** | **-0.9** |
| | baz=334 | | | | | | | | |
| **SNAA** | **Sanae** | **125.15** | **198** | PKPdf | | **PKPdf** | | **14 37 58.7** | **-0.1** |
| **SNAA** | **Sanae** | **125.15** | **198** | PKKPbc | | PKKPbc | | 14 47 38.7 | -1.9 |
| | comp=Z,6.2nm,0.9s,baz=275,slow=4.9,SNR=9.3 | | | | | | | | |
| **SNAA** | **Sanae** | **125.15** | **198** | PKiKP | | **PKPdf** | | **14 37 58.5** | **-0.3** |
| **SNAA** | **Sanae** | **125.15** | **198** | PKPdf | | **PKPdf** | | **14 37 58.5** | **-0.3** |
| **VNA2** | **Neumayer--Watz** | **126.80** | **198** | PKPdf | | **PKiKP** | | **14 38 02.3** | **0.0** |
| | baz=104,slow=1.5 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **127.19** | **198** | PKPdf | | **PKPdf** | | **14 38 02.3** | **-0.3** |
| **VNA3** | **Neumayer Olymp** | **127.25** | **197** | PKPdf | | **PKPdf** | | **14 38 03.0** | **+0.3** |
| **MTO3** | **Montecristo** | **129.05** | **43** | | | **PKPdf** | | **14 38 05.9** | **-2.2** |
| **DR12** | **Loma Pena Alta** | **134.22** | **17** | | | **PKPdf** | | **14 38 16.8** | **-0.8** |
| **JTS** | **Las Juntas de** | **134.92** | **41** | PKP | | **PKPdf** | | **14 38 18.6** | **-0.4** |
| | comp=Z,15nm,0.5s,baz=264,slow=9.2,SNR=4.0 | | | | | | | | |
| JTS | | | | SKPbc | | **SKPbc** | | **14 41 31.3** | **+0.8** |
| | comp=Z,8.4nm,0.6s,baz=8.3,slow=6.6,SNR=5.5 | | | | | | | | |
| **GCPR** | **Guaynabo City** | **135.46** | **13** | PKPdf | | **PKPdf** | | **14 38 18.8** | **-1.0** |
| **CBYP** | **Canovanas** | **135.54** | **13** | | | **PKPdf** | | **14 38 19.3** | **-0.8** |
| **MLPR** | **Magueyes Islan** | **135.58** | **14** | | | **PKPdf** | | **14 38 18.2** | **-1.9** |
| **CUPR** | **Culebra, Puert** | **135.61** | **12** | PKPdf | | **PKPdf** | | **14 38 19.5** | **-0.6** |
| **STVI** | **Saint Thomas** | **135.63** | **11** | PKPdf | | **PKPdf** | | **14 38 19.6** | **-0.5** |
| **SJG** | **San Juan** | **135.63** | **13** | PKP | | **PKPdf** | | **14 38 18.9** | **-1.3** |
| | comp=Z,11nm,0.3s,baz=315,slow=4.3,SNR=6.4 | | | | | | | | |
| **PDPR** | **Patillas Dam,** | **135.75** | **13** | PKPdf | | **PKPdf** | | **14 38 19.0** | **-1.4** |
| **RIMA** | **Rio Macho** | **135.98** | **41** | PKPdf | | **PKPdf** | | **14 38 20.9** | **-0.2** |
| **SMAI** | **San Martin Ant** | **136.90** | **174** | | | **PKPdf** | | **14 38 21.4** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **138.74** | **36** | *i* P | | PKPdf | | 14 38 14.1 | -12 |
| **SMRC** | **Santa Marta, M** | **139.68** | **27** | *i* P | | **PKPdf** | | **14 38 21.3** | **-6.4** |
| **CRJC** | **Cerrejon, Guaj** | **140.35** | **26** | *i* P | | **PKPdf** | | **14 38 21.3** | **-7.7** |
| **ARGC** | **Ariguani, Magd** | **140.84** | **28** | *i* P | | **PKPdf** | | **14 38 23.7** | **-6.1** |
| **MOTC** | **Monteria, Cord** | **141.16** | **31** | *i* P | | PKPdf | | 14 38 21.3 | -9.1 |
| **MOTC** | **Monteria, Cord** | **141.16** | **31** | | | PKPpre | | 14 38 23.6 | |
| **PTAC** | **Punta Ardita,** | **141.50** | **35** | *i* P | | **PKPdf** | | **14 38 26.1** | **-4.9** |
| **SMLC** | **San Martn de** | **141.86** | **29** | *i* P | | **PKPdf** | | **14 38 26.1** | **-5.5** |
| **UREC** | **San Jos de Ur** | **142.12** | **32** | *i* P | | **PKPdf** | | **14 38 27.8** | **-4.3** |
| **GRGR** | **Grenville** | **142.24** | **8** | | | **PKPdf** | | **14 38 29.0** | **-3.4** |
| **DBBC** | **Dabeiba** | **142.43** | **33** | *i* P | | **PKPdf** | | **14 38 26.1** | **-6.7** |
| **ZARC** | **Zaragoza, Cauc** | **142.66** | **31** | *i* P | | **PKPdf** | | **14 38 28.8** | **-4.3** |
| **OCAC** | **Ocana** | **142.69** | **28** | *i* P | | **PKPdf** | | **14 38 28.5** | **-4.8** |
| **OCAC** | **Ocana** | **142.69** | **28** | | | **PKPdf** | | **14 38 29.5** | **-3.8** |
| **BIRV** | **Birongo** | **142.99** | **16** | | | **PKPdf** | | **14 38 30.5** | **-3.1** |
| **SDV** | **Santo Domingo** | **143.15** | **24** | PKP | | PKPbc | | 14 38 32.1 | +0.5 |
| | comp=Z,248nm,0.8s,baz=326,slow=1.8,SNR=116 | | | | | | | | |
| SDV | | | | SKPbc | | **SKiKP** | | **14 41 54.0** | **-0.5** |
| | comp=Z,46nm,0.8s,baz=324,slow=2.9,SNR=5.6 | | | | | | | | |
| **SDV** | **Santo Domingo** | **143.15** | **24** | *e*P | | PKPbc | | 14 38 31.8 | +0.2 |
| **SDV** | **Santo Domingo** | **143.15** | **24** | | | PKPbc | | 14 38 31.1 | -0.6 |
| **TOSP** | **Speyside** | **143.20** | **7** | PKPdf | | PKPbc | | 14 38 32.3 | +0.8 |
| **HELC** | **Santa Helena** | **143.48** | **33** | *i* P | | PKPab | | 14 38 30.9 | -0.8 |
| **CBOC** | **Ciudad Bolivar** | **143.52** | **34** | *i* P | | PKPab | | 14 38 30.9 | -0.7 |
| **PCRV** | **Puerto La Cruz** | **143.65** | **13** | PKhKP | | PKPpre | | 14 38 31.8 | |
| | comp=Z,101nm,0.8s,baz=30,slow=0.9,SNR=38 | | | | | | | | |
| PCRV | | | | SKPbc | | **SKPbc** | | **14 41 53.7** | **-0.7** |
| | comp=Z,44nm,1.0s,baz=317,slow=6.4,SNR=5.7 | | | | | | | | |
| **PTBC** | **PUERTO BERRIO** | **143.69** | **31** | *i* P | | PKPab | | 14 38 28.5 | -3.6 |
| **PAMC** | **Pamplona, Colo** | **143.76** | **28** | *i* P | | PKPab | | 14 38 33.3 | +0.4 |
| **BAUV** | **El Baul** | **143.96** | **20** | PKPdf | | PKPab | | 14 38 33.1 | 0.0 |
| **PLMC** | **San Jos del P** | **144.20** | **35** | *i* P | | **PKPab** | | **14 38 30.9** | **-3.2** |
| **BARC** | **Barichara** | **144.22** | **29** | *i* P | | **PKPdf** | | **14 38 35.7** | **-0.4** |
| **NORC** | **Norcasia** | **144.34** | **32** | *i* P | | **PKPab** | | **14 38 33.3** | **-1.3** |
| **GUY2C** | **Guyana, Caldas** | **144.39** | **33** | *i* P | | PKPbc | | 14 38 35.7 | +0.1 |
| **SPBC** | **San Pablo de B** | **144.65** | **31** | *i* P | | **PKPab** | | **14 38 35.6** | **-0.2** |
| **RUSC** | **La Rusia** | **144.88** | **29** | *i* P | | PKPbc | | 14 38 35.7 | -1.5 |
| **YOTC** | **Yotoco, Valle** | **144.94** | **36** | *i* P | | **PKPdf** | | **14 38 38.0** | **+0.7** |
| **TAMC** | **Tame, Arauca** | **144.95** | **27** | *i* P | | PKPbc | | 14 38 36.6 | -0.2 |
| **ROSC** | **El Rosal** | **145.24** | **32** | PKPbc | | **PKPab** | | **14 38 38.3** | **-0.1** |
| | comp=Z,260nm,0.8s,baz=122,slow=1.9,SNR=62 | | | | | | | | |
| **ROSC** | **El Rosal** | **145.24** | **32** | *i* P | | **PKPdf** | | **14 38 38.1** | **0.0** |
| **ROSC** | **El Rosal** | **145.24** | **32** | | | **PKPdf** | | **14 38 37.5** | **-0.6** |
| **TUMC** | **Tumaco** | **145.36** | **42** | *i* P | | **PKPab** | | **14 38 39.0** | **+0.5** |
| **ORTC** | **Ortega, Tolima** | **145.58** | **34** | *i* P | | **PKPdf** | | **14 38 38.1** | **-0.2** |
| **CHIC** | **Chingaza** | **145.70** | **31** | *i* P | | **PKPdf** | | **14 38 38.1** | **-0.8** |
| **PRAC** | **Prado** | **145.93** | **34** | *i* P | | **PKPdf** | | **14 38 35.7** | **-3.1** |
| **POPC** | **Popayan, Colom** | **145.97** | **38** | *i* P | | **PKPdf** | | **14 38 38.1** | **-1.1** |
| **VILC** | **Villavicencio,** | **146.17** | **32** | *i* P | | **PKPab** | | **14 38 42.0** | **+0.4** |
| **BETC** | **Betania** | **146.52** | **36** | *i* P | | **PKPdf** | | **14 38 40.5** | **+0.6** |
| **PAC1** | **Pacto, Paraso** | **146.55** | **43** | *i* P | | **PKPdf** | | **14 38 40.5** | **+0.5** |
| **CUSE** | **Cuicocha Este** | **146.76** | **43** | *i* P | | **PKiKP** | | **14 38 45.3** | **0.0** |
| **OTAV** | **Otavalo** | **146.78** | **43** | *e*P | | **PKPdf** | | **14 38 41.4** | **+0.6** |
| **GARC** | **Garzon, Huila** | **146.91** | **36** | *i* P | | **PKPdf** | | **14 38 40.5** | **-0.3** |
| **FLOC** | **Florencia** | **147.32** | **37** | *i* P | | **PKPbc** | | **14 38 42.9** | **-0.9** |
| **MACC** | **Macarena, Meta** | **147.80** | **34** | *i* P | | **PKPdf** | | **14 38 40.5** | **-1.5** |
| **MDP** | **Montagnes des** | **149.32** | **352** | PKPbc | | **PKiKP** | | **14 38 49.5** | **-0.5** |
| | comp=Z,226nm,0.7s,baz=23,slow=1.6,SNR=63 | | | | | | | | |
| **USHA** | **Ushuaia** | **149.44** | **166** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **SARI** | **SarD1z-Kayseri** | **1.20 249** | PN | **Pb** | **14 21 39.4** | **-1.0** |
| SARI | | | SN | **Sn** | **14 21 58.2** | **+0.9** |
| **SVRC** | **Sivrice-ELAZID** | **1.23 112** | PN | **Pn** | **14 21 39.3** | **-1.7** |
| **SVSK** | **Karacayir** | **1.26 329** | PN | **Pn** | **14 21 39.9** | **-1.3** |
| **REFA** | **Refahiye_ERZN** | **1.28 33** | P | **Pg** | **14 21 41.3** | **-0.3** |
| REFA | | | S | **Sn** | **14 21 59.9** | **+0.7** |
| **TNCL** | **Tunceli-Merkez** | **1.35 78** | P | **Pn** | **14 21 41.5** | **-1.0** |
| TNCL | | | S | **Sg** | **14 22 00.9** | **+0.6** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.38 295** | P | **Pn** | **14 21 42.1** | **-0.9** |
| CUSAR | | | S | **Sg** | **14 22 02.5** | **+1.2** |
| **SUSE** | **Susehri** | **1.39 11** | P | **Pg** | **14 21 44.1** | **+0.3** |
| SUSE | | | S | **Sg** | **14 22 04.1** | **+2.2** |
| **ATAB** | **Bozova** | **1.41 166** | P | **Pg** | **14 21 43.9** | **-0.2** |
| ATAB | | | S | **Sg** | **14 22 03.1** | **+0.7** |
| **KAHM** | **Kahramanmaras,** | **1.49 208** | P | **Pg** | **14 21 45.0** | **-0.6** |
| KAHM | | | S | **Sg** | **14 22 06.0** | **+1.2** |
| **GZT** | **Gaziantep** | **1.50 189** | P | **Sg** | **14 21 45.8** | **-0.1** |
| GZT | | | S | **Sg** | **14 22 06.7** | **+1.4** |
| **KOVA** | **Elazig, Kovanc** | **1.54 94** | P | **Pb** | **14 21 45.5** | **-0.5** |
| KOVA | | | S | **Sg** | **14 22 07.6** | **+1.1** |
| **KHMN** | **Narli-Kahraman** | **1.55 201** | PN | **Pb** | **14 21 45.8** | **-0.3** |
| **BNN** | **Bunyan** | **1.57 271** | PN | **Pb** | **14 21 45.7** | **-0.8** |
| **BNN** | **Bunyan** | **1.57 271** | Pn | **Pb** | **14 21 45.5** | **-1.0** |
| **RSDY** | **Resadiye-TOKAT** | **1.61 346** | PN | **Pb** | **14 21 46.9** | **-0.3** |
| **ERZN** | **Erzincan** | **1.63 62** | PN | **Pb** | **14 21 47.5** | **-0.2** |
| **SAIM** | **ADANA** | **1.64 239** | P | **Pb** | **14 21 46.6** | **-1.1** |
| SAIM | | | S | **Sg** | **14 22 10.9** | **+1.2** |
| **ALUC** | **Giresun/Alucra** | **1.66 25** | P | **Pg** | **14 21 48.3** | **-0.7** |
| ALUC | | | S | **Sg** | **14 22 11.9** | **+1.4** |
| **EUZM** | **Uzumlu** | **1.67 58** | P | **Pb** | **14 21 48.3** | **-0.1** |
| EUZM | | | S | **Sg** | **14 22 12.3** | **+1.4** |
| **KELT** | **Kelkit** | **1.70 39** | P | **Pb** | **14 21 48.5** | **-0.4** |
| KELT | | | S | **Sg** | **14 22 11.9** | **+0.1** |
| **ANDN** | **Andirin** | **1.73 224** | P | **Pb** | **14 21 48.2** | **-1.1** |
| ANDN | | | S | **Sg** | **14 22 14.3** | **+1.7** |
| **GUNE** | **Kayseri** | **1.74 273** | P | **Pb** | **14 21 49.1** | **-0.3** |
| GUNE | | | S | **Sg** | **14 22 15.6** | **+2.6** |
| **GAZ** | **Gaziantep** | **1.74 197** | PN | **Pb** | **14 21 48.5** | **-1.0** |
| **GAZ** | **Gaziantep** | **1.74 197** | Pn | **Pn** | **14 21 46.6** | **-1.3** |
| **TOKT** | **Tokat** | **1.79 326** | PN | **Pb** | **14 21 48.7** | **-1.6** |
| **TOKA** | **Tokat** | **1.82 325** | | **Pb** | **14 21 49.7** | **-1.1** |
| **TOKA** | **Tokat** | **1.82 325** | P | **Pb** | **14 21 49.8** | **-1.1** |
| TOKA | | | S | **Sg** | **14 22 15.0** | **-0.6** |
| **HACI** | **Hacifakili, Ak** | **1.86 298** | P | **Pb** | **14 21 50.2** | **-1.3** |
| HACI | | | S | **Sg** | **14 22 16.9** | **+0.1** |
| **SANL** | **SANLIURFA_Merk** | **1.89 151** | P | **Pb** | **14 21 50.9** | **-1.1** |
| SANL | | | S | **Sg** | **14 22 18.4** | **+0.5** |
| **KAMA** | **Osmaniye** | **1.90 210** | P | **Pb** | **14 21 51.8** | **-0.4** |
| KAMA | | | S | **Sg** | **14 22 17.1** | **-0.9** |
| **DYBB** | **Diyarbakir** | **2.00 116** | PN | **Pb** | **14 21 52.4** | **-1.6** |
| **DIYA** | **Diyarbakir** | **2.00 116** | P | **Pb** | **14 21 52.5** | **-1.5** |
| DIYA | | | S | **Sg** | **14 22 21.4** | **0.0** |
| **ERBA** | **Erbaa** | **2.02 336** | P | **Pb** | **14 21 52.6** | **-1.7** |
| ERBA | | | S | **Sg** | **14 22 21.7** | **-0.4** |
| **KOZT** | **Kozan** | **2.10 230** | PN | **Pb** | **14 21 53.8** | **-1.7** |
| **KUZU** | **Kuzuini** | **2.15 197** | P | **Pb** | **14 21 54.8** | **-1.7** |
| KUZU | | | S | **Sg** | **14 22 25.6** | **-0.7** |
| **YEDI** | **Yedisu-Bingol** | **2.18 73** | PN | **Pb** | **14 21 54.9** | **-2.1** |
| **CKRK** | **Yozgat, Cekere** | **2.20 305** | P | **Pb** | **14 21 55.8** | **-1.4** |
| CKRK | | | S | **Sg** | **14 22 26.8** | **-0.9** |
| **BNGB** | **Bingl** | **2.21 85** | PN | **Pb** | **14 21 55.5** | **-2.0** |
| **AKO** | **Adana** | **2.34 235** | P | **Pn** | **14 21 56.5** | **+0.4** |
| AKO | | | S | **Sg** | **14 22 35.8** | **+3.4** |
| **AVNS** | **Nevsehir-Avano** | **2.35 270** | P | **Pn** | **14 21 56.8** | **+0.6** |
| AVNS | | | S | **Sg** | **14 22 32.1** | **-0.4** |
| **BAYT** | **Aydıntepe-Bayb** | **2.35 48** | PN | **Pb** | **14 21 57.6** | **-2.4** |
| **KOZK** | **Kozakli-Nevseh** | **2.35 280** | PN | **Pb** | **14 21 56.3** | **0.0** |
| **MAZI** | **Mazidag** | **2.47 123** | PN | **Pn** | **14 21 58.8** | **+0.9** |
| **CEYT** | **Ceyhan** | **2.47 223** | PN | **Pb** | **14 21 59.2** | **-2.7** |
| **KIZO** | **Buyukkizoglu-L** | **2.53 325** | PN | **Pn** | **14 21 59.6** | **+0.8** |
| **CMRD** | **Camardi-Nigde** | **2.54 243** | PN | **Pn** | **14 21 59.8** | **+0.9** |
| **NIDE** | **Nigde/Merkez-G** | **2.56 252** | P | **Pn** | **14 22 00.2** | **+1.1** |
| NIDE | | | S | **Sg** | **14 22 40.5** | **+1.3** |
| **YARM** | **Yarimca-Ladik(** | **2.60 324** | PN | **Pn** | **14 22 00.6** | **+0.9** |
| **KTUT** | **Trabzon** | **2.60 34** | PN | **Pn** | **14 22 00.8** | **+1.2** |
| **COAL** | **Corum-Alaca** | **2.63 303** | P | **Pn** | **14 22 01.0** | **+0.9** |
| COAL | | | S | **Sg** | **14 22 42.2** | **+0.7** |
| **KVT** | **Kavak** | **2.63 329** | PN | **Pn** | **14 22 00.4** | **+0.3** |
| **SVAN** | **Silvan-Diyarba** | **2.71 104** | PN | **Pn** | **14 22 01.7** | **+0.4** |
| **MARD** | **Mardin** | **2.77 122** | | **Pn** | **14 22 02.4** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **2.79 209** | PN | **Pn** | **14 22 03.4** | **+1.1** |
| **CORM** | **Corum** | **2.83 299** | PN | **Pn** | **14 22 03.7** | **+0.8** |
| **VRTB** | **Varto-Mus** | **2.83 82** | PN | **Pn** | **14 22 04.3** | **+1.4** |
| **EJDE** | **Erzurum, Palan** | **2.85 69** | PN | **Pn** | **14 22 04.6** | **+1.1** |
| **GUA** | **Gulagac** | **2.88 261** | PN | **Pn** | **14 22 04.5** | **+0.9** |
| **ERZM** | **Erzurum** | **2.92 68** | PN | **Pn** | **14 22 05.2** | **+0.9** |
| **YAYL** | **Yayladag** | **3.13 207** | PN | **Pn** | **14 22 07.9** | **+0.9** |
| **CHOM** | **Cayeli-Rize** | **3.17 44** | PN | **Pn** | **14 22 08.9** | **+1.3** |
| **KAMT** | **Kaman** | **3.26 281** | PN | **Pn** | **14 22 09.4** | **+0.6** |
| **GURO** | **Guroymak-BITLI** | **3.28 94** | PN | **Pn** | **14 22 10.8** | **+1.6** |
| **KOPR** | **Koprukoy-ERZUR** | **3.31 68** | PN | **Pn** | **14 22 11.5** | **+2.0** |
| **BR131** | **Keskin Array S** | **3.39 286** | Pn | **Pn** | **14 22 11.6** | **+1.0** |
| **BRTR** | **Keskin Array B** | **3.39 286** | Pn | **Pn** | **14 22 11.9** | **+1.4** |
| **SNOP** | **Sinop** | **3.76 328** | Pn | **Pn** | **14 22 16.5** | **+0.9** |
| **SIRT** | **Sirnak** | **3.85 109** | PN | **Pn** | **14 22 18.4** | **+1.4** |
| **SIRT** | **Sirnak** | **3.85 109** | | **Pn** | **14 22 16.9** | **-0.1** |
| **ILGA** | **Ilgaz** | **3.87 306** | | **Pn** | **14 22 18.2** | **+0.9** |
| **BATM** | **Batumi** | **4.03 46** | PN | **Pn** | **14 22 21.4** | **+2.1** |
| **ANTO** | **Ankara** | **4.05 286** | Pn | **Pn** | **14 22 21.2** | **+1.5** |
| **BZK** | **Bozkurt** | **4.28 318** | Pn | **Pn** | **14 22 24.3** | **+1.6** |
| **BORA** | **Eskisehir** | **5.83 283** | Pn | **Pn** | **14 22 44.8** | **+0.8** |
| **TIRR** | **Tirgusor** | **9.02 311** | Pn | **Pn** | **14 23 29.2** | **+1.5** |
| **BURAR** | **Bucovina Array** | **12.71 318** | Pn | **Pn** | **14 24 18.8** | **+0.3** |
| **BUR08** | **Bucovina Ar. S** | **12.73 318** | Pn | **Pn** | **14 24 20.0** | **+1.3** |
| **UOSS** | **Minazif** | **20.80 126** | | Pn | 14 25 59.4 | -2.0 |
| UOSS | | | IAmb | IAmb | 14 26 01.1 | |
| | comp=Z,8.6nm,0.7s | | | | | |
| **FINES** | **FINESS Array B** | **23.78 346** | P | **P** | **14 26 31.3** | **+1.2** |

*NEIC **02** 14:28:34.7±1.0,40.74N±0.03×121.52W±0.03,h9km±8km, Error ellipse: s-maj=5.4km s-min=0.6km az=135.0*
*NCEDC **02** 14:28:34.8±0.9,40.72N±0.02×121.52W±0.05,h6km±7km, ML3.1/21,ML2.8/70(NEIC),Error ellipse: s-maj=5.8km s-min=3.2km az=72.0*
*ANF **02** 14:28:35.1±1.2,40.77N×121.65W,h5km,ML2.9/9, Error ellipse: s-maj=11.5km s-min=5.1km az=153.0*
**ISC 02 14:28:34.4±1.0,40.74N±0.03×121.54W±0.03,h11km±9km, n48,σ0°77/51,Northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HATC** | **Hat Creek Radi** | **0.10** | **37** | | **Pg** | **14 22 37.4** | **+0.2** |
| **LMEM** | **Manzanita Entr** | **0.20** | **186** | | **Pg** | **14 28 38.8** | **0.0** |
| **LTCM** | **Tuscan Springs** | **0.69** | **220** | | **Pg** | **14 28 47.9** | **+0.1** |
| **WDC** | **Whiskeytown Da** | **0.78** | **259** | | **Pg** | **14 28 48.6** | **-0.8** |
| **N02D** | **Trinity Center** | **0.91** | **285** | | **Pg** | **14 28 51.3** | **-0.8** |
| **N02D** | **Trinity Center** baz=105,SNR=294 | **0.91** | **285** | P | **Pg** | **14 28 51.3** | **-0.8** |
| N02D | | | | S | **Sg** | **14 29 05.0** | **+1.0** |
| | baz=105 | | | | | | |
| **M04C** | **Macdoel** | **1.07** | **348** | | **Pg** | **14 28 54.6** | **-0.5** |
| M04C | | | | IAML | | 14 29 27.4 | |
| | comp=N,327nm,1.1s | | | | | | |
| M04C | | | | IAML | | 14 29 28.2 | |
| | comp=E,268nm,1.6s | | | | | | |
| **M04C** | **Macdoel** baz=167,SNR=262 | **1.07** | **348** | P | **Pg** | **14 28 54.7** | **-0.3** |
| M04C | | | | S | **Sb** | **14 29 10.3** | **+1.1** |
| | baz=167 | | | | | | |
| **ORV** | **Oroville** | **1.18** | **178** | | **Pb** | **14 28 55.6** | **-1.3** |
| **M02C** | **Callahan** | **1.19** | **304** | | **Pb** | **14 28 55.8** | **-1.3** |
| M02C | | | | IAML | | 14 29 19.9 | |
| | comp=E,173nm,0.8s | | | | | | |
| **M02C** | **Callahan** baz=123,SNR=79 | **1.19** | **304** | P | **Pb** | **14 28 55.8** | **-1.3** |
| M02C | | | | S | **Sg** | **14 29 11.6** | **-1.2** |
| | baz=123 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **1.33** | **319** | | **Pn** | **14 28 58.2** | **-0.9** |
| **YBH** | **Yreka Blue Hor** comp=N,131nm,0.6s | **1.33** | **319** | IAML | | 14 29 21.4 | |
| **MOD** | **Modoc Plateau** | **1.49** | **38** | | **Pn** | **14 29 01.5** | **+0.1** |
| **KOMM** | **Orleans Mounta** | **1.54** | **291** | | **Pn** | **14 29 02.6** | **+0.6** |
| **L04D** | **Klamath Falls** | **1.59** | **339** | | **Pn** | **14 29 03.2** | **+0.5** |
| L04D | | | | IAML | | 14 29 34.3 | |
| | comp=N,81nm,0.9s | | | | | | |
| L04D | | | | IAML | | 14 29 35.0 | |
| | comp=E,135nm,0.8s | | | | | | |
| **L04D** | **Klamath Falls** baz=158 | **1.59** | **339** | P | **Pn** | **14 29 03.5** | **+0.9** |
| **KHMM** | **Horse Mountain** | **1.67** | **275** | | **Pn** | **14 29 04.5** | **+0.7** |
| **KMRM** | **Mail Ridge** | **1.73** | **253** | | **Pn** | **14 29 05.3** | **+0.8** |
| **KCRM** | **Chalk Rock** | **1.76** | **261** | | **Pb** | **14 29 07.3** | **+0.4** |
| **MPK** | **Martis Peak** | **1.85** | **141** | | **Pn** | **14 29 06.5** | **+0.2** |
| MPK | | | | IAML | | 14 29 45.7 | |
| | comp=N,117nm,1.5s | | | | | | |
| MPK | | | | IAML | | 14 29 56.9 | |
| | comp=E,115nm,1.3s | | | | | | |
| **KCPM** | **Cahto Peak** | **1.88** | **237** | Pn | **Pn** | **14 29 07.6** | **+0.9** |
| KCPM | | | | IAML | | 14 29 47.0 | |
| | comp=N,104nm,1.0s | | | | | | |
| KCPM | | | | IAML | | 14 29 47.8 | |
| | comp=E,131nm,1.1s | | | | | | |
| **JCC** | **Jacoby Creek,** | **1.89** | **273** | | **Pn** | **14 29 08.0** | **+1.4** |
| JCC | | | | IAML | | 14 29 46.7 | |
| | comp=E,140nm,1.2s | | | | | | |
| JCC | | | | IAML | | 14 29 48.2 | |
| | comp=N,138nm,1.4s | | | | | | |
| **K04D** | **Chiloquin, OR** baz=175 | **1.89** | **355** | P | **Pn** | **14 29 07.9** | **+1.1** |
| **KRPM** | **Rodgers** | **1.93** | **283** | Pn | **Pn** | **14 29 07.8** | **+0.5** |
| **PAHR** | **Pah Rah Range** | **1.95** | **121** | | **Pn** | **14 29 08.0** | **+0.5** |
| **KMPM** | **Mount Pierce** | **1.99** | **262** | | **Pn** | **14 29 08.5** | **+0.4** |
| **VCNR** | **Virginia City** | **2.04** | **134** | Pn | **Pn** | **14 29 08.7** | **-0.3** |
| **K05A** | **Summer Lake** | **2.05** | **13** | Pn | **Pn** | **14 29 10.0** | **+1.0** |
| K05A | | | | IAML | | 14 29 56.9 | |
| | comp=E,89nm,1.5s | | | | | | |
| **EMB** | **Emerald Bay** | **2.08** | **147** | Pn | **Pn** | **14 29 10.2** | **+0.7** |
| EMB | | | | IAML | | 14 29 50.2 | |
| | comp=E,64nm,1.1s | | | | | | |
| EMB | | | | IAML | | 14 29 57.8 | |
| | comp=N,88nm,1.7s | | | | | | |
| **HOPS** | **Hopland Field** | **2.10** | **215** | Pn | **Pn** | **14 29 10.3** | **+0.7** |
| HOPS | | | | IAML | | 14 29 57.7 | |
| | comp=E,52nm,1.8s | | | | | | |
| HOPS | | | | IAML | | 14 30 01.0 | |
| | comp=N,60nm,1.6s | | | | | | |
| **L02E** | **Cave Junction** | **2.10** | **313** | | **Pn** | **14 29 10.2** | **+0.6** |
| L02E | | | | IAML | | 14 29 51.2 | |
| | comp=E,50nm,1.9s | | | | | | |
| **L02E** | **Cave Junction** baz=132 | **2.10** | **313** | Pb | **Pb** | **14 29 12.6** | **0.0** |
| **HUMO** | **Hull Mountain** | **2.15** | **331** | | **Pn** | **14 29 11.1** | **+0.8** |
| **YERR** | **Yerington** | **2.49** | **134** | | **Pn** | **14 29 15.5** | **+0.4** |
| YERR | | | | IAML | | 14 30 19.9 | |
| | comp=E,38nm,1.6s | | | | | | |
| **KBO** | **Bosley Butte** | **2.50** | **307** | Pn | **Pn** | **14 29 15.9** | **+0.8** |
| **K02D** | **Willamette Mer** baz=140 | **2.52** | **322** | Pb | **Pb** | **14 29 18.8** | **-1.0** |
| **J04D** | **Umpqua National** | **2.54** | **351** | Pn | **Pn** | **14 29 16.6** | **+0.9** |
| **J04D** | **Umpqua National** baz=170 | **2.54** | **351** | Pb | **Pb** | **14 29 20.1** | **-0.1** |
| **J05D** | **Fort Rock, OR** baz=185 | **2.56** | **5** | Pb | **Pb** | **14 29 20.2** | **-0.3** |
| J05D | | | | Sb | **Sg** | **14 29 56.2** | **-0.4** |
| | baz=185 | | | | | | |
| **WVOR** | **Wild Horse Val** | **2.76** | **51** | | **Pn** | **14 29 19.0** | **+0.2** |
| WVOR | | | | IAML | | 14 30 23.3 | |
| | comp=E,27nm,1.6s | | | | | | |
| WVOR | | | | IAML | | 14 30 28.2 | |
| | comp=E,31nm,1.8s | | | | | | |
| **CMB** | **Columbia Colle** | **2.84** | **161** | Pn | **Pn** | **14 29 20.6** | **+0.8** |
| CMB | | | | IAML | | 14 30 14.7 | |
| | comp=E,31nm,1.7s | | | | | | |
| CMB | | | | IAML | | 14 30 16.8 | |
| | comp=N,28nm,1.4s | | | | | | |
| **PINE** | **Pine Mountain** | **3.09** | **8** | Pn | **Pn** | **14 29 23.8** | **+0.5** |
| PINE | | | | IAML | | 14 30 31.3 | |
| | comp=E,36nm,1.2s | | | | | | |
| PINE | | | | IAML | | 14 30 35.7 | |
| | comp=N,38nm,4.6s | | | | | | |
| **KVN** | **Kaiserville** | **3.14** | **121** | | **Pn** | **14 29 23.8** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **3.40** | **132** | | **Pn** | **14 29 28.3** | **+0.6** |
| **LHV** | **Little Huntoon** | **3.42** | **136** | | **Pn** | **14 29 28.7** | **+1.0** |
| LHV | | | | IAML | | 14 30 48.1 | |
| | comp=N,36nm,1.9s | | | | | | |
| LHV | | | | IAML | | 14 30 57.1 | |
| | comp=E,35nm,1.5s | | | | | | |
| **J08A** | **Circle Bar Ran** | **3.48** | **40** | | **Pn** | **14 29 29.4** | **+0.8** |
| J08A | | | | IAML | | 14 30 33.9 | |
| | comp=E,19nm,2.3s | | | | | | |
| J08A | | | | IAML | | 14 30 42.8 | |
| | comp=N,25nm,1.4s | | | | | | |
| **NV11** | **Mina Array Sit** | **3.48** | **130** | | **Pn** | **14 29 29.1** | **+0.3** |
| NV11 | | | | IAML | | 14 30 50.7 | |
| | comp=E,15nm,3.5s | | | | | | |

*NNC **02** 14:36:13.6±3.2,37.72N×72.04E,h190km±66km,mb3.1, mpv4.1,Error ellipse: s-maj=42.0km s-min=16.1km az=17.0*
**ISC 02 14:36:08.8±1.5,37.35N±0.10×72.10E±0.1,h130km,n20, σ1°10/22,5C-1D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** SNR=42 | **4.96** | **15** | P | **Pn** | **14 37 22.8** | **+1.2** |
| **UCH** | **Uchtor** SNR=17 | **5.25** | **21** | P | **Pn** | **14 37 26.9** | **+1.4** |
| **EKS2** | **Erkin-Say** SNR=44 | **5.48** | **14** | P | **Pn** | **14 37 29.9** | **+1.5** |
| **AAK** | **Ala-Archa** SNR=29 | **5.62** | **19** | P | **Pn** | **14 37 31.8** | **+1.5** |
| **AAK** | **Ala-Archa** 18nm,0.5s | **5.62** | **19** | ⇑P | **Pn** | **14 37 31.7** | **+1.5** |
| AAK | | | | ⇑S | **Sn** | **14 38 33.3** | **-0.6** |
| | 15nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** SNR=9.4 | **5.77** | **22** | P | **Pn** | **14 37 34.3** | **+2.1** |
| **KK02** | **Karatay Array** 6.7nm,0.5s | **5.86** | **349** | ⇑P | **Pn** | **14 37 34.5** | **+1.3** |
| KK02 | | | | ⇓S | **Sn** | **14 38 38.0** | **-1.2** |
| | 13nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** SNR=11 | **6.03** | **20** | P | **Pn** | **14 37 36.6** | **+0.9** |
| **TKM2** | **Tokmak 2** SNR=8.4 | **6.22** | **25** | P | **Pn** | **14 37 39.3** | **+1.0** |
| **TKM2** | **Tokmak 2** 9.8nm,0.5s | **6.22** | **25** | ⇑P | **Pn** | **14 37 38.8** | **+0.5** |
| **USP** | **Ospenovka** SNR=9.2 | **6.22** | **17** | P | **Pn** | **14 37 38.5** | **+0.3** |
| **MDOK** | **Medeo** 13nm,0.6s | **6.98** | **32** | P | **Pn** | **14 37 48.6** | **0.0** |
| **PYUN** | **Piuthan** 5.0nm,0.3s | **13.07** | **132** | *e*P | **Pn** | **14 39 09.9** | **+0.1** |
| **KOLN** | **Koldanda** 7.6nm,0.4s | **13.68** | **131** | *e*P | **Pn** | **14 39 17.9** | **+0.3** |
| **GKN** | **Gorkha** 41nm,0.4s | **14.15** | **128** | *e*P | **Pn** | **14 39 23.5** | **-0.1** |
| **AB31** | **Akbulak array** 1.3nm,0.5s,baz=135,slow=12,SNR=32 | **14.75** | **328** | ⇑P | **Pn** | **14 39 30.1** | **-0.7** |
| **PKIN** | **Phulchoki** 4.7nm,0.2s | **14.93** | **127** | *e*P | **Pn** | **14 39 33.3** | **-0.2** |
| **PKI** | **Pulchoki** 6.1nm,0.3s | **14.94** | **127** | *e*P | **Pn** | **14 39 33.0** | **-0.7** |
| **GUN** | **Gumba** 10nm,0.5s | **15.01** | **125** | *e*P | **Pn** | **14 39 33.5** | **-1.1** |
| **JIRN** | **Jiri** 7.5nm,0.3s | **15.38** | **125** | *e*P | **Pn** | **14 39 38.3** | **-1.0** |

*ATH **02** 15:15:50.6,37.27N×20.20E,h7km±4km,ML2.9/2,Error ellipse: s-maj=5.5km s-min=2.2km az=65.0*
*THE **02** 15:15:51.4,37.32N×20.24E,h2km±1km,ML3.1/9,Error ellipse: s-maj=2.2km s-min=1.1km az=62.0*
**ISC 02 15:15:48.1±1.7,37.22N±0.05×20.07E±0.05,h13km±10km, n44,σ1°59/60,Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LTHK** | **Lithakia** | **0.78** | **51** | P | **Pg** | **15 16 02.7** | **-0.6** |
| **LTHK** | **Lithakia** | **0.78** | **51** | P | **Pg** | **15 16 02.7** | **-0.6** |
| LTHK | | | | S | **Sg** | **15 16 12.0** | **-1.5** |
| **ZAK2** | **Zakynthos** | **0.87** | **49** | P | **Pb** | **15 16 05.2** | **+0.2** |
| **PSDA** | **Pessada-Kefalo** | **0.98** | **25** | P | **Pg** | **15 16 06.3** | **-0.7** |
| PSDA | | | | S | **Sg** | **15 16 18.4** | **-1.4** |
| | 180nm,0.4s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.98** | **25** | P | **Pb** | **15 16 07.9** | **+1.0** |
| PSDA | | | | S | **Sb** | **15 16 19.7** | **-0.1** |
| **KEF3** | **Kipouria, Keph** | **1.00** | **13** | P | **Pb** | **15 16 07.9** | **+0.6** |
| KEF3 | | | | S | **Sb** | **15 16 21.6** | **+1.1** |
| | 3µm,0.5s | | | | | | |
| **VLS** | **Valsamata** | **1.04** | **23** | P | **Pg** | **15 16 07.4** | **-0.7** |
| VLS | | | | S | **Sg** | **15 16 20.5** | **-1.2** |
| | 865nm,0.5s | | | | | | |
| **VLS** | **Valsamata** | **1.04** | **23** | P | **Pb** | **15 16 09.0** | **+1.0** |
| VLS | | | | S | **Sb** | **15 16 21.6** | **+0.1** |
| VLS | | | | AML | AML | 15 16 25.1 | |
| | comp=E,1172µm,0.2s | | | | | | |
| VLS | | | | AML | AML | 15 16 28.6 | |
| | comp=N,1828µm,0.5s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.04** | **13** | P | **Pg** | **15 16 08.4** | **+0.2** |
| DMLN | | | | S | **Sb** | **15 16 22.1** | **+0.5** |
| | comp=N,2µm,0.6s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.04** | **13** | P | **Pg** | **15 16 08.4** | **+0.2** |
| DMLN | | | | S | **Sb** | **15 16 22.0** | **+0.4** |
| **KEF4** | **Livadi, Kephal** | **1.07** | **15** | P | **Pn** | **15 16 09.8** | **+1.0** |
| KEF4 | | | | S | **Sg** | **15 16 22.2** | **-0.5** |
| | comp=N,6µm,0.4s | | | | | | |
| **VTN** | **Vitineika** | **1.13** | **52** | P | **Pn** | **15 16 10.5** | **+1.0** |
| **VTN** | **Vitineika** | **1.13** | **52** | P | **Pn** | **15 16 10.6** | **+1.0** |
| **FSK** | **Fiskardo** | **1.29** | **18** | P | **Pg** | **15 16 12.9** | **-0.1** |
| FSK | | | | S | **Sn** | **15 16 30.8** | **+1.7** |
| | comp=N,562nm,0.5s | | | | | | |
| **FSK** | **Fiskardo** | **1.29** | **18** | P | **Pn** | **15 16 13.7** | **+1.9** |
| FSK | | | | S | **Sn** | **15 16 30.6** | **+1.5** |
| FSK | | | | AML | AML | 15 16 39.0 | |
| | comp=E,1015µm,0.4s | | | | | | |
| FSK | | | | AML | AML | 15 16 39.5 | |
| | comp=N,1049µm,0.4s | | | | | | |
| **PYL** | **PYLOS** | **1.38** | **103** | P | **Pg** | **15 16 14.5** | **-0.1** |
| **PYL** | **PYLOS** | **1.38** | **103** | P | **Pg** | **15 16 14.4** | **-0.1** |
| **RLS** | **Riolos of Patr** | **1.39** | **53** | P | **Pn** | **15 16 14.2** | **+1.0** |
| RLS | | | | S | **Sn** | **15 16 32.1** | **+0.7** |
| **EVGI** | **Lefkada island** | **1.47** | **18** | P | **Pn** | **15 16 15.4** | **+1.0** |
| **EVGI** | **Lefkada island** | **1.47** | **18** | P | **Pn** | **15 16 15.3** | **+1.0** |
| **ITM** | **Ithomi** | **1.49** | **91** | P | **Pb** | **15 16 15.9** | **+0.3** |
| ITM | | | | S | **Sg** | **15 16 35.1** | **-0.8** |
| | comp=N,270nm,0.5s | | | | | | |
| **DRO** | **Drossia** | **1.50** | **60** | P | **Pb** | **15 16 16.2** | **+0.5** |
| DRO | | | | S | **Sg** | **15 16 35.4** | **-0.8** |
| | comp=N,740nm,0.6s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **1.51** | **15** | P | **Pg** | **15 16 17.2** | **0.0** |
| DRAG | | | | S | **Sg** | **15 16 37.3** | **+0.5** |
| | comp=N,772nm,0.4s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **1.51** | **15** | P | **Pg** | **15 16 17.1** | **0.0** |
| **NYDR** | **Nydri-Lefkada** | **1.57** | **18** | P | **Pb** | **15 16 17.6** | **+0.6** |
| NYDR | | | | S | **Sg** | **15 16 38.1** | **-0.5** |
| **NYDR** | **Nydri-Lefkada** | **1.57** | **18** | P | **Pb** | **15 16 17.8** | **+0.8** |
| **LKD2** | **Lefkada island** | **1.63** | **16** | P | **Pb** | **15 16 19.0** | **+0.9** |
| **LKD2** | **Lefkada island** | **1.63** | **16** | P | **Pb** | **15 16 19.0** | **+0.9** |
| **TSLK** | **Tsoukalades, L** | **1.67** | **16** | P | **Pb** | **15 16 19.6** | **+1.0** |
| **TSLK** | **Tsoukalades, L** | **1.67** | **16** | P | **Pb** | **15 16 19.6** | **+1.0** |
| **LAKA** | **Lakka** | **1.82** | **56** | P | **Pb** | **15 16 21.5** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.85** | **63** | P | **Pn** | **15 16 21.2** | **+1.7** |
| **ANX** | **Ano Chora** | **2.01** | **46** | P | **Pb** | **15 16 24.1** | **-0.4** |
| **STON** | **Ston** | **5.93** | **343** | Sn | **Sn** | **15 18 18.8** | **-4.5** |
| **STON** | **Ston** | **5.93** | **343** | *e*Pn | **Pn** | **15 17 16.2** | **+0.7** |
| **LSTV** | **Lastovo** | **6.05** | **337** | Sn | **Sn** | **15 18 21.0** | **-5.3** |
| **LSTV** | **Lastovo** | **6.05** | **337** | *e*Pn | **Pn** | **15 17 18.2** | **+0.9** |
| **RICI** | **Ricice** | **6.65** | **341** | Sn | **Sn** | **15 18 36.8** | **-4.4** |
| **RICI** | **Ricice** | **6.65** | **341** | *e*Pn | **Pn** | **15 17 26.8** | **+1.3** |
| **ZIRJ** | **Zirje** | **7.25** | **334** | *e*Pg | **Pg** | **15 18 10.4** | **+3.5** |
| **KIJV** | **Kijevo** | **7.32** | **339** | Sn | **Sn** | **15 18 53.8** | **-3.9** |
| **KIJV** | **Kijevo** | **7.32** | **339** | *e*Pn | **Pn** | **15 17 36.6** | **+1.9** |
| **MORI** | **Morici** | **7.42** | **335** | *i* Pg | **Pg** | **15 18 08.6** | **-1.4** |
| **DUGI** | **Dugi Otok** | **7.76** | **332** | *e*Pg | **Pg** | **15 18 17.5** | **+1.0** |

*DDA **02** 15:25:34.3±0.0,38.61N×26.09E,h7km±3km,ML2.1*
*ISK **02** 15:25:34.5,38.60N×26.13E,h19km,ML2.5/8*
*ATH **02** 15:25:34.7,38.54N×25.90E,h24km±3km,ML2.1/1, Error ellipse: s-maj=4.0km s-min=1.2km az=247.0*
*THE **02** 15:25:35.5,38.59N×26.04E,h16km±2km,ML2.3/4, Error ellipse: s-maj=2.9km s-min=1.2km az=77.0*
**ISC 02 15:25:34.7±1.0,38.61N±0.02×26.09E±0.03,h19km±3km, n30,σ0°37/49,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOS** | **Chios island** | **0.22** | **187** | P | **Pg** | **15 25 40.0** | **-0.1** |
| **CHOS** | **Chios island** | **0.22** | **187** | P | **Pg** | **15 25 40.0** | **-0.1** |
| CHOS | | | | S | **Sg** | **15 25 43.9** | **+0.1** |
| CHOS | | | | AML | AML | 15 25 44.0 | |
| | comp=N,882µm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 15 25 45.1 | |
| | comp=E,1547µm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.22** | **187** | PG | **Pg** | **15 25 40.0** | **-0.1** |
| **URLA** | **Izmir** | **0.47** | **122** | PG | **Pg** | **15 25 44.0** | **-0.2** |
| URLA | | | | SG | **Sb** | **15 25 50.8** | **-0.1** |
| **URLA** | **Izmir** | **0.47** | **122** | P | **Pg** | **15 25 44.2** | **-0.1** |
| URLA | | | | *i* AML | AML | 15 25 50.0 | |
| | comp=E,243nm,0.4s | | | | | | |
| URLA | | | | S | **Sg** | **15 25 50.5** | **-0.1** |
| URLA | | | | *i* AML | AML | 15 25 51.0 | |
| | comp=E,229nm,0.3s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.49** | **138** | P | **Pg** | **15 25 44.4** | **-0.2** |
| ZEYE | | | | S | **Sg** | **15 25 50.9** | **-0.4** |
| ZEYE | | | | *i* AML | AML | 15 25 52.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| STEP | | | | *i* AML | AML | 15 26 26.0 | | | |
| | comp=E,56nm,0.7s | | | | | | | | |

*IDC* ***02*** *15:27:44.7±1.1,7°42N×79°04W,h0km,mb3.8/7,mb1 4.0/8, mb1mx3.8/32,mbtmp3.9/8,ML3.1/1, Error ellipse: s-maj=35.4km s-min=21.2km az=46.0*

*NEIC* ***02*** *15:27:48.3±1.3,7°58N±0°05×78°87W±0°06,h14km±4km, mb4.6/7, Error ellipse: s-maj=10.0km s-min=6.4km az=60.0*

*UPA* ***02*** *15:27:49.0±0.2,7°45N×78°92W,h21km±14km,MW3.9*

**ISC 02 15:27:47.3±2.1,7°49N±0°04×78°84W±0°04,h16km±13km, n59,σ1°70/84,mb4.3/10,3C-2D,Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **PTAC** | **Punta Ardita,** | **1.08** | **108** | *eP* | | **Pb** | **15** | **28 06.4** | **-1.3** |
| PTAC | | | | *eS* | | **Sb** | **15** | **28 18.9** | **-2.7** |
| **UPD2** | **Meteti** | **1.33** | **38** | *eP* | | **Pb** | **15** | **28 12.7** | **+0.6** |
| UPD2 | | | | *eS* | | **Sg** | **15** | **28 30.3** | **-0.2** |
| **CHIT3** | **Chitre** | **1.63** | **287** | ⇑*iP* | | **Pn** | **15** | **28 14.9** | **-0.5** |
| CHIT3 | | | | *eS* | | **Sn** | **15** | **28 34.6** | **-1.5** |
| **UPA** | **Univ. de Panam** | **1.63** | **335** | ⇑*iP* | | **Pn** | **15** | **28 15.4** | **-0.1** |
| UPA | | | | *eS* | | **Sb** | **15** | **28 36.0** | **-1.6** |
| **VTON** | **El Valle, Cocl** | **1.68** | **312** | ⇑*iP* | | **Pn** | **15** | **28 16.3** | **+0.1** |
| VTON | | | | *i S* | | **Sn** | **15** | **28 36.8** | **-0.7** |
| **CHPO** | **Chepo, Panama** | **1.69** | **351** | ⇓*eP* | | **Pn** | **15** | **28 16.8** | **+0.5** |
| CHPO | | | | *eS* | | **Sn** | **15** | **28 36.8** | **-0.9** |
| **CAPC** | **Capurgana** | **1.87** | **52** | *eP* | | **Pn** | **15** | **28 19.3** | **+0.6** |
| CAPC | | | | *eS* | | **Sn** | **15** | **28 42.9** | **+1.0** |
| **SOLC** | **Bahia Solano** | **1.90** | **131** | *iP* | | **Pn** | **15** | **28 17.0** | **-2.1** |
| SOLC | | | | *eS* | | **Sn** | **15** | **28 37.5** | **-5.2** |
| **BCIP** | **Isla Barro Col** | **1.94** | **330** | *eP* | | **Pn** | **15** | **28 19.3** | **-0.3** |
| BCIP | | | | *eS* | | **Sn** | **15** | **28 45.0** | **-1.2** |
| **BCIP** | **Isla Barro Col** | **1.94** | **330** | | | **Pn** | **15** | **28 19.1** | **-0.6** |
| **DBBC** | **Dabeiba** | **2.65** | **100** | *eP* | | **Pn** | **15** | **28 30.3** | **+0.7** |
| DBBC | | | | *eS* | | **Sn** | **15** | **29 00.4** | **-1.1** |
| **CBOC** | **Ciudad Bolivar** | **3.24** | **120** | *eP* | | **Pn** | **15** | **28 37.4** | **-0.4** |
| CBOC | | | | *eS* | | **Sn** | **15** | **29 14.3** | **-1.9** |
| **UREC** | **San Jos de Ur** | **3.29** | **85** | *eP* | | **Pn** | **15** | **28 39.6** | **+1.3** |
| UREC | | | | *eS* | | **Sn** | **15** | **29 17.9** | **+0.7** |
| **MOTC** | **Monteria, Cord** | **3.40** | **68** | *eP* | | **Pn** | **15** | **28 41.5** | **+1.7** |
| MOTC | | | | *eS* | | **Sn** | **15** | **29 20.4** | **+0.6** |
| **MOTC** | **Monteria, Cord** | **3.40** | **68** | | | **Pn** | **15** | **28 41.1** | **+1.3** |
| **MONA** | **Monteria** | **3.40** | **68** | *eP* | | **Pn** | **15** | **28 42.0** | **+2.2** |
| MONA | | | | *eS* | | **Sn** | **15** | **29 20.2** | **+0.3** |
| **HELC** | **Santa Helena** | **3.53** | **111** | *eP* | | **Pn** | **15** | **28 42.9** | **+1.0** |
| HELC | | | | *eS* | | **Sn** | **15** | **29 24.6** | **+0.9** |
| **HELC** | **Santa Helena** | **3.53** | **111** | ⇓*iP* | | **Pn** | **15** | **28 43.2** | **+1.3** |
| HELC | | | | *eS* | | **Sn** | **15** | **29 24.9** | **+1.3** |
| **ZARC** | **Zaragoza, Cauc** | **3.95** | **90** | *eP* | | **Pn** | **15** | **28 49.0** | **+1.7** |
| ZARC | | | | *eS* | | **Sn** | **15** | **29 31.6** | **-1.8** |
| **ZARC** | **Zaragoza, Cauc** | **3.95** | **90** | | | **Pn** | **15** | **28 48.9** | **+1.5** |
| **GUY2C** | **Guyana, Caldas** | **4.12** | **123** | *eP* | | **Pn** | **15** | **28 50.6** | **+0.5** |
| GUY2C | | | | *eS* | | **Sn** | **15** | **29 39.0** | **+0.6** |
| **YOTC** | **Yotoco, Valle** | **4.28** | **144** | *eP* | | Pn | 15 | 28 57.5 | +5.6 |
| **SJCC** | **San Jacinto, C** | **4.34** | **56** | Pn | | **Pn** | **15** | **28 53.4** | **+0.5** |
| **SJCC** | **San Jacinto, C** | **4.34** | **56** | *eP* | | **Pn** | **15** | **28 56.6** | **+3.8** |
| SJCC | | | | *eS* | | **Sn** | **15** | **29 44.5** | **+1.3** |
| **NORC** | **Norcasia** | **4.39** | **116** | *eP* | | **Pn** | **15** | **28 55.0** | **+1.5** |
| NORC | | | | *eS* | | **Sn** | **15** | **29 46.8** | **+2.5** |
| **PTBC** | **PUERTO BERRIO,** | **4.46** | **102** | *eP* | | **Pn** | **15** | **28 53.4** | **-1.0** |
| **DRK0** | **Durika** | **4.70** | **292** | | | **Pn** | **15** | **28 57.9** | **+0.1** |
| **SRBA** | **San Rafael, Bu** | **4.79** | **292** | | | **Pn** | **15** | **28 59.3** | **+0.2** |
| **SMLC** | **San Martn de** | **4.90** | **74** | *eP* | | **Pn** | **15** | **29 03.9** | **+3.5** |
| SMLC | | | | *eS* | | **Sn** | **15** | **29 54.1** | **-2.8** |
| **ORTC** | **Ortega, Tolima** | **5.04** | **135** | *eP* | | **Pn** | **15** | **29 05.1** | **+2.6** |
| ORTC | | | | *eS* | | **Sn** | **15** | **30 03.8** | **+3.3** |
| **SPBC** | **San Pablo de B** | **5.08** | **111** | *eP* | | **Pn** | **15** | **29 05.0** | **+2.0** |
| **ROSC** | **El Rosal** | **5.21** | **120** | Pn | | **Pn** | **15** | **29 06.5** | **+1.4** |
| **POPC** | **Popayan, Colom** | **5.37** | **156** | *eP* | | **Pn** | **15** | **29 09.7** | **+2.6** |
| **PRAC** | **Prado** | **5.44** | **133** | *eP* | | **Pn** | **15** | **29 11.1** | **+3.2** |
| PRAC | | | | *eS* | | **Sn** | **15** | **30 12.8** | **+2.6** |
| **RIMA** | **Rio Macho** | **5.46** | **295** | Pn | | **Pn** | **15** | **29 07.9** | **-0.4** |
| **RUSC** | **La Rusia** | **5.94** | **105** | *eP* | | **Pn** | **15** | **29 17.0** | **+1.9** |
| RUSC | | | | *eS* | | **Sn** | **15** | **30 21.7** | **-1.4** |
| **PAMC** | **Pamplona, Colo** | **6.09** | **91** | *eP* | | **Pn** | **15** | **29 18.6** | **+1.3** |
| PAMC | | | | *eS* | | **Sn** | **15** | **30 24.5** | **-2.5** |
| **JACO** | **JACO, Garabito** | **6.14** | **291** | Pn | | **Pn** | **15** | **29 17.7** | **+0.1** |
| **GARC** | **Garzon, Huila** | **6.23** | **147** | *eP* | | **Pn** | **15** | **29 21.2** | **+2.2** |
| GARC | | | | *eS* | | **Sn** | **15** | **30 30.5** | **+0.4** |
| **PRVC** | **Isla de Provid** | **6.36** | **337** | Pn | | **Pn** | **15** | **29 19.7** | **-0.7** |
| **SDV** | **Santo Domingo** | **8.24** | **80** | Pn | | **Pn** | **15** | **29 48.6** | **+2.0** |
| | 2.4nm,0.3s,baz=264,slow=8.0,SNR=9.0 | | | | | | | | |
| SDV | | | | Sn | | **Sn** | **15** | **31 16.6** | **-3.0** |
| | 3.3nm,0.3s,baz=73,slow=23,SNR=8.4 | | | | | | | | |
| **BAUV** | **El Baul** | **10.79** | **82** | | | **Pn** | **15** | **30 20.2** | **-1.2** |
| **PTGA** | **Pitinga** | **20.52** | **113** | P | | **P** | **15** | **32 27.7** | **+2.5** |
| | 0.8nm,0.5s,baz=308,slow=12,SNR=1.8 | | | | | | | | |
| **SIV** | **San Ignacio** | **29.22** | **143** | P | | **P** | **15** | **33 49.0** | **+0.3** |
| | 0.5nm,0.2s,baz=322,slow=11,SNR=6.9 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **32.44** | **342** | P | | **P** | **15** | **34 16.5** | **-0.3** |
| **LMN** | **Caledonia Moun** | **40.10** | **15** | P | | **P** | **15** | **35 19.9** | **-2.3** |
| **PDAR** | **Pinedale Array** | **44.33** | **327** | P | | **P** | **15** | **35 57.2** | **+0.1** |
| | 0.8nm,1.1s,baz=121,slow=5.7,SNR=3.7 | | | | | | | | |
| **LKWY** | **Lake** | **46.01** | **329** | P | | **P** | **15** | **36 12.2** | **+1.7** |
| LKWY | | | | | IAmb | IAmb | 15 | 36 38.9 | |
| | comp=Z,2.6nm,0.5s | | | | | | | | |
| **DGMT** | **Dagmar** | **46.13** | **337** | P | | **P** | **15** | **36 11.7** | **+0.6** |
| DGMT | | | | | IAmb | IAmb | 15 | 36 23.3 | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **SCHQ** | **Schefferville** | **48.19** | **9** | P | | **P** | **15** | **36 27.9** | **+1.0** |
| | comp=Z,4.6nm,0.8s,baz=207,slow=9.0,SNR=4.2 | | | | | | | | |
| **LL01** | **San Ignacio de** | **49.97** | **174** | P | | **P** | **15** | **36 41.2** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **60.77** | **342** | P | | **P** | **15** | **37 57.6** | **-0.7** |
| | comp=Z,0.9nm,0.7s,baz=130,slow=7.2,SNR=19 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **70.38** | **346** | P | | **P** | **15** | **38 58.7** | **-1.5** |
| A36M | | | | | IAmb | IAmb | 15 | 38 59.8 | |
| | comp=Z,3.2nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **70.53** | **341** | P | | **P** | **15** | **39 01.4** | **+0.3** |
| INK | | | | | IAmb | IAmb | 15 | 39 14.1 | |
| | comp=Z,5.1nm,1.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **73.62** | **51** | P | | **P** | **15** | **39 21.6** | **+1.2** |
| | comp=Z,0.3nm,0.3s,baz=266,slow=5.8,SNR=4.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.16** | **78** | P | | **P** | **15** | **39 52.6** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=267,slow=6.9,SNR=4.7 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.16** | **78** | | IAmb | IAmb | 15 | 40 06.8 | |
| | comp=Z,8.3nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **144.72** | **239** | PKP | | **PKPab** | **15** | **47 22.4** | **-0.8** |
| | comp=Z,1.1nm,0.9s,baz=116,slow=3.8,SNR=12 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **145.55** | **246** | PKPbc | | **PKPdf** | **15** | **47 25.1** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=102,slow=3.6,SNR=4.8 | | | | | | | | |

*IDC* ***02*** *15:27:50.5±2.3,37°02N×70°30E,h0km,mb3.7/4, mb1 3.7/10,mb1mx3.4/62,mbtmp3.7/10,ML3.3/6, Error ellipse: s-maj=47.5km s-min=17.8km az=138.0*

*NNC* ***02*** *15:27:55.8±3.8,37°78N×69°39E,h0km,mb3.9,mpv3.6, Error ellipse: s-maj=37.1km s-min=25.6km az=11.0*

*NEIC* ***02*** *15:27:55.8±1.6,37°63N±0°03×69°91E±0°05,h5km±7km, mb4.1/4, Error ellipse: s-maj=6.8km s-min=0.9km az=50.0*

**ISC 02 15:27:58.3±0.8,37°64N±0°09×69°83E±0°06,h30km,n45, σ2°05/47,mb4.0/5,5C-4D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **CHGR** | **Chuyangaron** | **1.15** | **333** | | | **Pn** | **15** | **28 17.9** | **-0.5** |
| **GAR** | **Garm** | **1.41** | **16** | | | **Pn** | **15** | **28 22.7** | **+0.6** |
| **DRK** | **Karamyk** | **2.40** | **39** | Pn | | **Pn** | **15** | **28 35.3** | **-0.5** |
| **BTK** | **Batken** | **2.53** | **17** | | | **Pn** | **15** | **28 38.4** | **+0.9** |
| **KBL** | **Kabul** | **3.16** | **192** | Pn | | **Pn** | **15** | **28 47.5** | **+1.3** |
| **KSH** | **Kashi** | **5.16** | **67** | P | | **Pn** | **15** | **29 11.3** | **-2.4** |
| KSH | | | | S | | **Sn** | **15** | **30 09.9** | **-2.4** |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| KSH | | | | smax | | smax | | | |
| | comp=N,32nm,0.7s | | | | | | | | |
| KSH | | | | smax | | smax | | | |
| | comp=E,39nm,0.8s | | | | | | | | |
| **AML** | **Almayashu** | **5.38** | **32** | P | | **Pn** | **15** | **29 19.6** | **+2.8** |
| | SNR=7.8 | | | | | | | | |
| **KK02** | **Karatay Array** | **5.48** | **5** | ⇑Pn | | **Pn** | **15** | **29 19.3** | **+1.4** |
| | comp=E,1.3nm,0.3s | | | | | | | | |
| KK02 | | | | ⇑Lg | | Lg | 15 | 30 48.3 | |
| | comp=E,35nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **5.48** | **5** | Pn | | **Pn** | **15** | **29 19.1** | **+1.1** |
| **UCH** | **Uchtor** | **5.82** | **37** | P | | **Pn** | **15** | **29 25.7** | **+2.6** |
| | SNR=16 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **34** | Pn | | **Pn** | **15** | **29 29.8** | **+2.8** |
| | comp=E,2.2nm,0.3s,baz=194,slow=5.7,SNR=36 | | | | | | | | |
| AAK | | | | Lg | | Lg | 15 | 31 15.0 | |
| | comp=E,0.6nm,0.3s,baz=64,slow=5.3,SNR=8.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **34** | P | | **Pn** | **15** | **29 29.8** | **+2.8** |
| | SNR=9.3 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **34** | ⇓Pn | | **Pn** | **15** | **29 29.6** | **+2.6** |
| | comp=E,7.9nm,0.8s | | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 15 | 31 11.8 | |
| | comp=E,50nm,1.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **34** | Pn | | **Pn** | **15** | **29 27.9** | **+0.9** |
| **KBK** | **Karagaybulak** | **6.36** | **36** | P | | **Pn** | **15** | **29 33.7** | **+3.6** |
| | SNR=5.1 | | | | | | | | |
| **CHMS** | **Chumysh** | **6.54** | **34** | P | | **Pn** | **15** | **29 35.1** | **+2.7** |
| | SNR=8.8 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.87** | **38** | ⇑Pn | | **Pn** | **15** | **29 39.2** | **+2.0** |
| | comp=E,5.1nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 15 | 31 37.2 | |
| | comp=E,14nm,0.8s | | | | | | | | |
| **GEYT** | **Alibeck** | **9.28** | **275** | Pn | | **Pn** | **15** | **30 10.6** | **+0.5** |
| | comp=E,0.7nm,0.3s,baz=90,slow=17,SNR=2.4 | | | | | | | | |
| GEYT | | | | Sn | | **Sn** | **15** | **31 51.8** | **-1.6** |
| | comp=E,1.9nm,0.3s,baz=305,slow=26,SNR=5.8 | | | | | | | | |
| **GEYT** | **Alibeck** | **9.28** | **275** | Pn | | **Pn** | **15** | **30 11.2** | **+1.1** |
| **GYA0B** | **ALIBECK ARRAY** | **9.28** | **275** | Pn | | **Pn** | **15** | **30 11.1** | **+1.0** |
| **MAKZ** | **Makanchi** | **12.83** | **41** | ⇓Pn | | **Pn** | **15** | **31 01.3** | **+2.8** |
| | comp=E,3.2nm,1.2s | | | | | | | | |
| **MK31** | **Makanchi Array** | **12.98** | **41** | Pn | | **Pn** | **15** | **31 00.3** | **-0.4** |
| | comp=E,1.4nm,0.8s,baz=229,slow=12,SNR=11 | | | | | | | | |
| **MK31** | **Makanchi Array** | **12.98** | **41** | | | **Pn** | **15** | **31 00.2** | **-0.5** |
| **MKAR** | **Makanchi Array** | **12.98** | **41** | Pn | | **Pn** | **15** | **31 00.6** | **-0.1** |
| | comp=E,0.1nm,0.3s,baz=230,slow=13,SNR=10 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **12.98** | **41** | Pn | | **Pn** | **15** | **30 59.8** | **-0.8** |
| **AB31** | **Akbulak array** | **13.64** | **331** | Pn | | **Pn** | **15** | **31 05.0** | **-4.5** |
| | comp=E,0.6nm,0.3s,baz=160,slow=12,SNR=48 | | | | | | | | |
| AB31 | | | | ⇓Sn | | **Sn** | **15** | **33 34.0** | **-5.9** |
| | comp=E,0.9nm,0.6s,baz=170,slow=11,SNR=5.6 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **13.64** | **331** | Pn | | **Pn** | **15** | **31 07.7** | **-1.8** |
| **KURBB** | **Kurchatov Arra** | **14.39** | **23** | Pn | | **Pn** | **15** | **31 18.0** | **-1.8** |
| | comp=E,0.0nm,0.3s,baz=210,slow=12,SNR=5.3 | | | | | | | | |
| KURBB | | | | Lg | | Lg | 15 | 35 38.8 | |
| | comp=E,0.0nm,0.3s,baz=209,slow=29,SNR=5.2 | | | | | | | | |
| **WMQ** | **Urumqi** | **14.87** | **60** | *eP* | | **Pn** | **15** | **31 27.9** | **+1.4** |
| **BVAR** | **Borovoye Array** | **15.39** | **1** | Pn | | **Pn** | **15** | **31 33.9** | **+0.7** |
| | comp=E,0.6nm,0.3s,baz=123,slow=9.5,SNR=15 | | | | | | | | |
| **BRVK** | **Borovoye** | **15.42** | **1** | ⇑Pn | | **Pn** | **15** | **31 34.1** | **+0.5** |
| | comp=E,1.7nm,0.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **15.42** | **1** | Pn | | **Pn** | **15** | **31 33.9** | **+0.4** |
| BRVK | | | | IAmb | | IAmb | 15 | 31 42.9 | |
| | comp=Z,8.4nm,1.5s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.30** | **28** | P | | **P** | **15** | **32 18.9** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **19.30** | **28** | P | | **P** | **15** | **32 19.9** | **-0.7** |
| | comp=Z,0.4nm,0.3s,baz=213,slow=11,SNR=9.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.30** | **28** | P | | **P** | **15** | **32 18.7** | **-1.9** |
| **ARU** | **Arti** | **20.25** | **342** | P | | Pn | 15 | 32 35.3 | +2.2 |
| | comp=Z,0.9nm,0.6s,baz=172,slow=7.9,SNR=4.8 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **32.26** | **71** | *eP* | | **P** | **15** | **34 24.7** | **+0.4** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,360nm,6.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.73** | **337** | P | | **P** | **15** | **35 29.2** | **+1.5** |
| | comp=Z,3.4nm,1.1s,baz=106,slow=2.6,SNR=4.9 | | | | | | | | |
| **CLL** | **Collm** | **41.75** | **308** | *eP* | | **P** | **15** | **35 48.0** | **+3.5** |
| **TORD** | **Torodi Ar. Bea** | **64.82** | **267** | P | | **P** | **15** | **38 33.6** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=58,slow=4.9,SNR=2.7 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **70.05** | **14** | P | | **P** | **15** | **39 08.2** | **+1.2** |
| TOLK | | | | | IAmb | IAmb | 15 | 39 16.9 | |
| | comp=Z,4.1nm,1.4s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **71.37** | **17** | P | | **P** | **15** | **39 14.6** | **-0.3** |
| **BMAR** | **Burnt Mountain** | **72.05** | **13** | P | | **P** | **15** | **39 20.6** | **+1.5** |
| **C36M** | **Paulatuk** | **72.83** | **5** | P | | **P** | **15** | **39 24.0** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **80.15** | **2** | P | | **P** | **15** | **40 05.9** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=348,slow=5.2,SNR=8.1 | | | | | | | | |

*IDC* ***02*** *15:29:37.6±3.1,36°02N×69°64E,h0km,mb3.5/3, mb1 3.7/7,mb1mx3.3/53,mbtmp3.6/7,ML3.2/4, Error ellipse: s-maj=89.8km s-min=21.9km az=98.0*

**ISC 02 15:29:48.8±2.1,36°3N±0°1×69°6E±0°3,h100km,n7, σ2°83/8,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **AAK** | **Ala-Archa** | **7.37** | **30** | Pn | | **Pn** | **15** | **31 31.4** | **-2.4** |
| | 2.2nm,0.3s,baz=186,slow=10,SNR=4.5 | | | | | | | | |
| AAK | | | | Sn | | **Sn** | **15** | **32 58.2** | **+2.4** |
| | 0.9nm,0.3s,baz=143,slow=23,SNR=7.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **14.13** | **38** | Pn | | **Pn** | **15** | **33 02.0** | **-2.4** |
| | 0.0nm,0.3s,baz=227,slow=16,SNR=3.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.68** | **22** | Pn | | **Pn** | **15** | **33 19.5** | **-4.5** |
| | 0.0nm,0.3s,baz=209,slow=11,SNR=2.5 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.70** | **2** | P | | **Pn** | **15** | **33 37.1** | **+0.5** |
| | 0.4nm,0.3s,baz=158,slow=12,SNR=5.4 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.57** | **26** | P | | **P** | **15** | **34 20.8** | **+1.4** |
| | 1.1nm,0.3s,baz=216,slow=11,SNR=5.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.90** | **121** | P | | **P** | **15** | **42 03.1** | **+0.4** |
| | 0.2nm,0.6s,baz=318,slow=5.0,SNR=1.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **85.12** | **124** | P | | **P** | **15** | **42 14.7** | **+0.8** |
| | 0.1nm,0.5s,baz=324,slow=4.7,SNR=4.5 | | | | | | | | |

*IDC* ***02*** *15:59:24.1±3.6,9°90N×125°39E,h0km,mb3.3/3, mb1 3.5/3,mb1mx3.3/35,mbtmp3.3/3,MS3.2/1,Ms1 3.2/1, ms1mx2.5/35,Error ellipse: s-maj=301.0km s-min=29.7km az=65.0*

*MAN* ***02*** *15:59:28.5,10°24N×126°17E,h14km,mb4.7,ML3.6, MS3.4*

**ISC 02 15:59:25.5±1.2,10°35N±0°07×126°26E±0°07,h10km,n15, σ1°82/16,mb3.3/3,4C-4D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **GLSP** | **General Luna,** | **0.58** | **193** | ⇓*eP* | | **Pg** | **15** | **59 37.9** | **+1.2** |
| **SCPH** | **Surigao** | **0.94** | **233** | ⇑*eP* | | **Pg** | **15** | **59 44.0** | **+0.3** |
| SCPH | | | | *eS* | | **Sn** | **15** | **59 57.6** | **-0.7** |
| **MSLP** | **Maasin** | **1.39** | **261** | ⇓*iP* | | **Pn** | **15** | **59 50.9** | **-0.1** |
| MSLP | | | | *i S* | | **Sb** | **16** | **00 09.8** | **+0.3** |
| **BESP** | **Borongan** | **1.48** | **327** | ⇑*eP* | | **Pn** | **15** | **59 54.5** | **+2.3** |
| **OCLP** | **Ormoc** | **1.77** | **293** | ⇓*eP* | | **Pn** | **15** | **59 57.3** | **+1.2** |
| **LLP** | **Lapu-Lapu** | **2.26** | **269** | ⇓*eP* | | **Pn** | **16** | **00 04.7** | **+1.8** |
| LLP | | | | *eS* | | **Sn** | **16** | **00 31.8** | **+1.0** |
| **TBP** | **Tagbilaran** | **2.45** | **255** | *eP* | | **Pn** | **16** | **00 07.8** | **+2.2** |
| TBP | | | | *i S* | | **Sb** | **16** | **00 38.3** | **-1.6** |
| **KCP** | **Kidapawan** | **3.51** | **199** | ⇑*iP* | | **Pn** | **16** | **00 23.1** | **+2.8** |
| **RCP** | **Roxas** | **3.65** | **290** | ⇑*eP* | | **Pn** | **16** | **00 24.6** | **+2.4** |
| **WRA** | **Warramunga Arr** | **31.13** | **165** | P | | **P** | **16** | **05 42.4** | **-2.2** |
| | 0.7nm,0.9s,baz=343,slow=9.8,SNR=2.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **34.62** | **168** | P | | **P** | **16** | **06 13.5** | **-1.6** |
| | 0.3nm,0.6s,baz=351,slow=7.0,SNR=16 | | | | | | | | |
| ASAR | | | | LR | | LR | 16 | 19 50.1 | |
| | comp=Z,43nm,20.3s,baz=266,slow=36 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.24** | **72** | T | | T | 16 | 50 19.9 | |
| | baz=264,slow=74,SNR=7.0 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.25** | **72** | T | | T | 16 | 50 20.2 | |
| | baz=264,slow=74,SNR=6.0 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.26** | **72** | T | | T | 16 | 50 20.9 | |
| | baz=264,slow=74,SNR=5.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.96** | **323** | P | | **P** | **16** | **08 33.7** | **-1.2** |
| | 0.2nm,0.8s,baz=138,slow=9.3,SNR=2.2 | | | | | | | | |

*NEIC* ***02*** *16:05:48.4±1.1,25°92S±0°07×178°9W±0°2,h367km±12km, mb4.2/14, Error ellipse: s-maj=28.2km s-min=9.3km az=101.0*

*IDC* ***02*** *16:05:51.9±3.0,25°74S×179°20W,h398km±30km,mb2.9/3, mb1 3.3/5,mb1mx3.1/30,mbtmp4.1/5, Error ellipse: s-maj=35.0km s-min=23.6km az=88.0*

**ISC 02 16:05:50.1±0.7,25°85S±0°06×178°9W±0°1,h400km,n69, σ1°29/90,mb3.6/5,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **GLKZ** | **Green Lake** | **3.50** | **166** | P | | **Pn** | **16** | **07 00.1** | **+2.6** |
| GLKZ | | | | S | | **S** | **16** | **07 49.5** | **-2.8** |
| **MSVF** | **Nonsavu** | **8.57** | **340** | P | | **P** | **16** | **07 51.5** | **-0.6** |
| | 3.3nm,0.3s,baz=142,slow=14,SNR=14 | | | | | | | | |
| **NIUE** | **Niue** | **10.66** | **53** | P | | **P** | **16** | **08 14.3** | **-0.8** |
| **MXZ** | **Matakaoa Point** | **11.93** | **191** | P | | **Pn** | **16** | **08 30.7** | **+0.4** |
| MXZ | | | | S | | **S** | **16** | **10 36.6** | **-3.4** |
| **MXZ** | **Matakaoa Point** | **11.93** | **191** | P | | **P** | **16** | **08 28.6** | **-0.2** |
| **WIAZ** | **Waiheke Island** | **12.05** | **204** | P | | **Pn** | **16** | **08 32.4** | **+0.6** |
| **WMGZ** | **Waiomatatini S** | **12.16** | **190** | P | | **Pn** | **16** | **08 32.1** | **-0.9** |
| WMGZ | | | | S | | **S** | **16** | **10 44.0** | **-0.7** |
| **HAZ** | **Te Kaha** | **12.21** | **193** | P | | **Pn** | **16** | **08 33.2** | **-0.4** |
| HAZ | | | | S | | **S** | **16** | **10 45.9** | **+0.1** |
| **PKGZ** | **Pakihiroa** | **12.28** | **191** | P | | **Pn** | **16** | **08 33.5** | **-1.0** |
| PKGZ | | | | S | | **S** | **16** | **10 44.5** | **-2.8** |
| **PUZ** | **Puketiti** | **12.43** | **191** | P | | **P** | **16** | **08 34.7** | **+0.2** |
| PUZ | | | | S | | **S** | **16** | **10 47.0** | **-3.3** |
| **RUGZ** | **Raukumara Rang** | **12.43** | **193** | P | | **Pn** | **16** | **08 35.3** | **-1.1** |
| RUGZ | | | | S | | **S** | **16** | **10 50.6** | **+0.1** |
| **OPRZ** | **Ohinepanea** | **12.58** | **197** | P | | **Pn** | **16** | **08 40.3** | **+2.5** |
| **TWGZ** | **Tauwhareparae** | **12.58** | **192** | P | | **Pn** | **16** | **08 38.0** | **+0.1** |
| TWGZ | | | | S | | **S** | **16** | **10 51.6** | **-1.7** |
| **MWZ** | **Matawai** | **12.82** | **193** | P | | **P** | **16** | **08 37.8** | **-1.0** |
| MWZ | | | | S | | **S** | **16** | **10 57.3** | **-0.9** |
| **KARZ** | **Kaharoa** | **12.82** | **198** | P | | **Pn** | **16** | **08 42.5** | **+1.7** |
| **URZ** | **Urewera** | **12.84** | **194** | P | | **Pn** | **16** | **08 40.0** | **-0.8** |
| | 6.2nm,0.3s,baz=15,slow=4.0,SNR=49 | | | | | | | | |
| URZ | | | | S | | **S** | **16** | **10 58.9** | **+0.5** |
| | 1.3nm,0.3s,baz=37,slow=21,SNR=9.7 | | | | | | | | |
| **URZ** | **Urewera** | **12.84** | **194** | P | | **P** | **16** | **08 39.3** | **+0.5** |
| URZ | | | | S | | **S** | **16** | **10 57.2** | **-1.2** |
| **URZ** | **Urewera** | **12.84** | **194** | P | | **P** | **16** | **08 38.0** | **-0.9** |
| **TKGZ** | **Te Karaka** | **12.86** | **192** | P | | **P** | **16** | **08 39.6** | **+0.4** |
| TKGZ | | | | S | | **S** | **16** | **10 59.1** | **+0.2** |
| **RAGZ** | **Rawiri** | **13.00** | **193** | P | | **P** | **16** | **08 39.7** | **-1.1** |
| RAGZ | | | | S | | **S** | **16** | **11 00.5** | **-1.3** |
| **MUGZ** | **Murupara** | **13.12** | **195** | P | | **P** | **16** | **08 42.5** | **+0.5** |
| MUGZ | | | | S | | **S** | **16** | **11 03.3** | **-0.9** |
| **RIGZ** | **Rimuhau** | **13.13** | **192** | P | | **P** | **16** | **08 42.3** | **+0.1** |
| **TLZ** | **Tolley Road** | **13.32** | **199** | P | | **Pn** | **16** | **08 47.5** | **+1.1** |
| **PRGZ** | **Paritu Road** | **13.32** | **191** | P | | **Pn** | **16** | **08 46.3** | **-0.2** |
| PRGZ | | | | S | | **S** | **16** | **11 09.3** | **+1.0** |
| **AFI** | **Afiamalu** | **13.61** | **31** | P | | **P** | **16** | **08 46.6** | **-1.2** |
| **HIZ** | **Hauiti** | **13.70** | **201** | P | | **Pn** | **16** | **08 51.5** | **+0.7** |
| **BKZ** | **Black Stump Fm** | **13.84** | **195** | P | | **P** | **16** | **08 49.2** | **-0.8** |
| BKZ | | | | S | | **S** | **16** | **11 16.8** | **-2.0** |
| **BKZ** | **Black Stump Fm** | **13.84** | **195** | P | | **P** | **16** | **08 48.3** | **-1.7** |
| **NTVZ** | **North Tongarir** | **13.99** | **198** | P | | **Pn** | **16** | **08 53.0** | **-1.3** |
| **TMVZ** | **Te Maari** | **14.00** | **198** | P | | **Pn** | **16** | **08 53.0** | **-1.4** |
| **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PVAQ | | | | | A | A | 16 27 24.8 | | |
| | 2.9nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.21** | **290** | P | **Pn** | **16 26 34.6** | **+0.5** | | |
| **PVAQ** | **Vaqueiros** | **4.21** | **290** | P | **Pn** | **16 26 35.2** | **+1.1** | | |
| PVAQ | | | | S | **Sn** | **16 27 22.8** | **-0.5** | | |
| **PBDV** | **Barranco-do-Ve** | **4.33** | **287** | *e*Pn | **Pn** | **16 26 37.8** | **+2.0** | | |
| PBDV | | | | *e*Sn | **Sn** | **16 27 28.0** | **+1.6** | | |
| PBDV | | | | A | A | 16 27 36.8 | | | |
| | 3.1nm,0.6s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.53** | **292** | *e*Pn | **Pn** | **16 26 39.7** | **+1.3** | | |
| **PESTR** | **Estremoz** | **4.76** | **307** | *e*Pn | **Pn** | **16 26 43.1** | **+1.4** | | |
| **PESTR** | **Estremoz** | **4.76** | **307** | P | **Pn** | **16 26 42.8** | **+1.1** | | |
| PESTR | | | | S | **Sn** | **16 27 37.3** | **+0.4** | | |
| **MORF** | **Marmelete** | **4.91** | **286** | *e*Pn | **Pn** | **16 26 44.2** | **+0.5** | | |
| MORF | | | | *e*Sn | **Sn** | **16 27 40.9** | **+0.3** | | |
| **PMRV** | **Marv??o** | **4.98** | **314** | *e*Pn | **Pn** | **16 26 46.3** | **+1.6** | | |
| **PFVI** | **Vila Bisbo** | **5.01** | **284** | *e*Pn | **Pn** | **16 26 47.0** | **+1.9** | | |
| **PNCL** | **Nicolau / Gran** | **5.05** | **295** | *e*Pn | **Pn** | **16 26 46.6** | **+0.9** | | |
| PNCL | | | | *e*Sn | **Sn** | **16 27 44.0** | **-0.1** | | |
| **PMTG** | **Montargil** | **5.28** | **306** | *e*Pn | **Pn** | **16 26 50.0** | **+1.2** | | |
| **PCBR** | **Castelo Branco** | **5.30** | **317** | *e*Pn | **Pn** | **16 26 51.0** | **+1.9** | | |
| **PSBE** | **So Bento** | **5.90** | **307** | *e*Pn | **Pn** | **16 26 58.8** | **+1.5** | | |
| **PCAS** | **Casmilo, Conde** | **6.03** | **313** | *e*Pn | **Pn** | **16 27 01.0** | **+1.8** | | |
| **MVO** | **Moncorvo** | **6.09** | **328** | *e*Pn | **Pn** | **16 27 02.2** | **+2.2** | | |
| **PVIS** | **Viseu** | **6.15** | **320** | *e*Pn | **Pn** | **16 27 03.0** | **+2.2** | | |
| **POLO** | **Lamas de Olo** | **6.60** | **325** | *e*Pn | **Pn** | **16 27 09.5** | **+2.4** | | |

*IDC **02** 16:32:60.0±2.3, 7°.41S×123°.74E, h566km±32km, mb2.3/1, mb1 2.9/5, mb1mx2.2/47, mbtmp3.6/5, Error ellipse: s-maj=150.5km s-min=25.5km az=57.0*
*DJA **02** 16:33:00.6±0.6, 7°.5±5°×12°.4E±°, h546km±7km, M3.6/9, mb3.6/5, MLv3.6/9*
**ISC 02 16:32:59.8±1.0, 7°.3S±0°.1×124°.0E±0°.2, h550km, n12, σ1§26/15, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **2.49** | **173** | P | **P** | **16 34 13.6** | **+1.5** |
| SOEI | | | | S | **S** | **16 35 11.4** | **+0.5** |
| **BATI** | **Baumata** | **2.94** | **185** | P | **P** | **16 34 16.0** | **+1.6** |
| | 4.9nm,0.3s,baz=83,slow=4.5,SNR=12 | | | | | | |
| BATI | | | | S | **S** | **16 35 16.3** | **+1.0** |
| | 6.7nm,0.3s,baz=315,slow=4.3,SNR=6.0 | | | | | | |
| **BATI** | **Baumata** | **2.94** | **185** | P | **P** | **16 34 16.1** | **+1.6** |
| BATI | | | | S | **S** | **16 35 15.3** | **0.0** |
| **BKSI** | **Bulukumba** | **4.26** | **297** | P | **P** | **16 34 25.9** | **+2.2** |
| **BASI** | **Baing, Sumba** | **4.44** | **228** | P | **P** | **16 34 25.5** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **5.09** | **242** | P | **P** | **16 34 30.3** | **-0.2** |
| | 0.2nm40nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **5.57** | **22** | P | **P** | **16 34 35.7** | **+1.1** |
| | 0.0nm16nm,1.2s | | | | | | |
| **LBMI** | **Labuha** | **7.48** | **28** | P | **P** | **16 34 52.5** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **10.89** | **171** | P | **P** | **16 35 26.4** | **-0.5** |
| | 1.6nm,0.3s,baz=338,slow=11,SNR=72 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.14** | **142** | P | | **16 36 19.2** | **-1.5** |
| | 0.3nm,0.3s,baz=317,slow=9.9,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **18.90** | **151** | P | **P** | **16 36 45.3** | **-0.7** |
| | 0.3nm,0.3s,baz=326,slow=8.8,SNR=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.29** | **330** | P | **P** | **16 42 46.5** | **-1.2** |
| | 0.1nm,0.5s,baz=141,slow=7.1,SNR=2.4 | | | | | | |

**KRSC 02 17:12:44.6±1.7, 49°.45N×156°.61E, h48km±26km, ML3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.28** | **346** | *e*P | Pn | 17 13 06.9 | +0.8 |
| SKR | | | | *e*S | Sn | 17 13 22.2 | +0.1 |
| **PAU** | **Pauzhetka** | **2.03** | **4** | *e*P | Pn | 17 13 19.3 | +3.0 |
| PAU | | | | *e*S | Sn | 17 13 43.3 | +2.9 |
| **KDTR** | **Khodutka, Kamc** | **2.54** | **21** | *e*P | Pn | 17 13 27.1 | +3.7 |
| KDTR | | | | *e*S | Sn | 17 13 57.0 | +3.9 |
| **MTVR** | **Mutnovka** | **3.20** | **18** | *e*P | Pn | 17 13 36.9 | +4.4 |
| MTVR | | | | *e*S | Sn | 17 14 14.5 | +5.1 |
| **RUS** | **Russkaya** | **3.23** | **21** | *e*P | Pn | 17 13 36.3 | +3.6 |
| RUS | | | | *e*S | Sn | 17 14 13.5 | +3.7 |
| **DALK** | **Dalny** | **3.83** | **20** | P | Pn | 17 13 45.7 | +4.7 |
| DALK | | | | S | Sn | 17 14 29.6 | +4.8 |
| **SDLR** | **Sedlovina** | **4.09** | **19** | *e*P | Pn | 17 13 49.0 | +4.3 |
| **SPN** | **Mys Shipunski** | **4.24** | **29** | P | Pn | 17 13 50.9 | +4.3 |
| SPN | | | | S | Sn | 17 14 38.5 | +3.8 |
| **MKZ** | **Mys Kozlova** | **6.01** | **30** | *e*P | Pn | 17 14 14.0 | +3.1 |
| **KBTR** | **Krutoberegovo** | **7.75** | **27** | P | Pn | 17 14 38.0 | +3.4 |

**IDC 02 17:26:36.0±2.7, 5°.89S×129°.46E, h223km±40km, mb2.7/1, mb1 3.0/5, mb1mx2.8/25, mbtmp3.5/5, Error ellipse: s-maj=70.6km s-min=15.9km az=86.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.30** | **20** | P | Pn | 17 27 56.5 | +1.7 |
| | 2.2nm,0.3s,baz=131,slow=11,SNR=45 | | | | | | |
| SIJI | | | | S | S | 17 28 56.7 | -0.6 |
| | 0.9nm,0.3s,baz=245,slow=23,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.70** | **197** | P | Pn | 17 29 28.1 | -0.9 |
| | 0.1nm,0.3s,baz=46,slow=16,SNR=1.1 | | | | | | |
| FITZ | | | | S | S | 17 31 42.0 | -7.5 |
| | 0.1nm,0.3s,baz=319,slow=19,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.76** | **162** | P | Pn | 17 29 52.9 | -1.5 |
| | 0.2nm,0.3s,baz=344,slow=12,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **18.19** | **167** | P | P | 17 30 33.0 | +0.5 |
| | 0.3nm,0.3s,baz=344,slow=13,SNR=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.01** | **327** | P | P | 17 37 04.8 | -0.2 |
| | 0.1nm,0.3s,baz=125,slow=7.1,SNR=4.8 | | | | | | |

*NEIC **02** 17:47:21.0±1.7, 6°.07S±0°.06×148°.89E±0°.06, h56km±7km, mb4.6/30, Error ellipse: s-maj=9.6km s-min=7.7km az=48.0*
*IDC **02** 17:47:22.1±2.0, 6°.15S×148°.93E, h70km±17km, mb3.7/11, mb1 3.9/14, mb1mx3.8/30, mbtmp4.1/14, MS3.2/8, Ms1 3.2/8, ms1mx2.9/62, Error ellipse: s-maj=21.2km s-min=11.3km az=115.0*
*DJA **02** 17:47:23.3±0.5, 6°.5±4°×14°.9E±°, h65km±7km, M4.5/9, mB5.1/1, mb4.3/9, MLv4.6/3, Mw(mB)4.5/1*
**ISC 02 17:47:21.2±0.5, 6°.12S±0°.06×148°.89E±0°.08, h60km, n60, σ1§23/63, mb4.4/23, MS3.3/3, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.69** | **208** | P | **Pn** | **17 48 17.1** | **+1.4** |
| | 52nm,0.3s,baz=46,slow=5.1,SNR=247 | | | | | | |
| PMG | | | | S | **Sn** | **17 48 59.2** | **+1.3** |
| | 41nm,0.3s,baz=346,slow=15,SNR=16 | | | | | | |
| PMG | | | | LR | LR | 17 49 49.2 | |
| | comp=Z,241nm,20.5s,baz=18,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **3.69** | **208** | | **Pn** | **17 48 16.5** | **+0.8** |
| PMG | | | | Sn | **Sn** | **17 48 58.1** | **+0.2** |
| **RABL** | **Rabaul** | **3.78** | **60** | | **Pn** | **17 48 16.9** | **-0.1** |
| **MANU** | **Manus Island** | **4.33** | **339** | Pn | **Pn** | **17 48 25.3** | **+0.8** |
| **JAY** | **Jayapura** | **8.92** | **293** | LR | LR | 17 53 29.6 | |
| | comp=Z,99nm,18.0s,baz=328,slow=41 | | | | | | |
| **COEN** | **Coen** | **9.60** | **215** | Pn | **Pn** | **17 49 36.4** | **-0.4** |
| **HNR** | **Honiara** | **11.44** | **107** | LR | LR | 17 54 10.5 | |
| | comp=Z,74nm,18.8s,baz=302,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **14.12** | **190** | P | **Pn** | **17 50 39.8** | **+1.6** |
| | 0.2nm,0.3s,baz=4.7,slow=14,SNR=2.4 | | | | | | |
| CTA | | | | LR | LR | 17 55 07.8 | |
| | comp=Z,74nm,18.5s,baz=323,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **14.12** | **190** | Pn | **Pn** | **17 50 40.2** | **+2.0** |
| **SIJI** | **Sorong** | **18.35** | **286** | LR | LR | 17 58 57.7 | |
| | comp=Z,47nm,18.9s,baz=56,slow=38 | | | | | | |
| **MTN** | **Manton Dam** | **18.74** | **248** | P | **P** | **17 51 35.7** | **+0.4** |
| MTN | | | | IAmb | IAmb | 17 52 23.9 | |
| | comp=Z,44nm,1.6s | | | | | | |
| **EIDS** | **Eidsvold** | **19.25** | **174** | | **P** | **17 51 40.3** | **-0.5** |
| EIDS | | | | IAmb | IAmb | 17 51 51.3 | |
| | comp=Z,39nm,1.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **19.56** | **225** | | **P** | **17 51 43.8** | **-0.5** |
| **WR0** | **Warramunga Arr** | **19.59** | **224** | P | **P** | **17 51 44.6** | **+0.1** |
| **WRAB** | **Tennant Creek** | **19.70** | **224** | P | **P** | **17 51 45.9** | **+0.1** |
| **WB2** | **Warramunga Arr** | **19.71** | **224** | P | **P** | **17 51 45.9** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 17 51 47.7 | |
| | comp=Z,9.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **19.71** | **224** | P | **P** | **17 51 46.7** | **+0.7** |
| | comp=Z,1.5nm,0.3s,baz=52,slow=11,SNR=72 | | | | | | |
| WRA | | | | S | **S** | **17 55 19.6** | **-5.6** |
| | comp=Z,0.1nm,0.3s,baz=39,slow=20,SNR=2.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 56 02.9** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=46,slow=2.3,SNR=5.2 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.71** | **224** | P | **P** | **17 51 45.3** | **-0.6** | | |
| **KNRA** | **Kununurra** | **21.91** | **243** | P | **P** | **17 52 08.9** | **-0.6** | | |
| KNRA | | | | IAmb | IAmb | 17 52 17.4 | | | |
| | comp=Z,40nm,1.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **22.63** | **218** | P | **P** | **17 52 17.8** | **+0.4** | | |
| **ASAR** | **Alice Springs** | **22.63** | **218** | P | **P** | **17 52 18.0** | **+0.7** | | |
| | comp=Z,1.8nm,0.5s,baz=55,slow=8.7,SNR=86 | | | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 56 08.7** | **+0.2** | | |
| | comp=Z,1.2nm,0.8s,baz=46,slow=3.1,SNR=5.4 | | | | | | | | |
| ASAR | | | | S | **S** | **17 56 21.1** | **-0.1** | | |
| | comp=Z,2.9nm,0.8s,baz=29,slow=23,SNR=12 | | | | | | | | |
| ASAR | | | | LR | LR | 18 01 51.5 | | | |
| | comp=Z,103nm,18.1s,baz=358,slow=38 | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.63** | **218** | P | **P** | **17 52 17.2** | **-0.1** | | |
| ASAR | | | | | **PcP** | **17 56 08.4** | **-0.1** | | |
| ASAR | | | | S | **S** | **17 56 21.3** | **+0.2** | | |
| **DZM** | **Mont Dzumac** | **23.22** | **135** | P | **P** | **17 52 22.6** | **-0.8** | | |
| | comp=Z,5.5nm,0.9s,baz=315,slow=2.3,SNR=3.0 | | | | | | | | |
| DZM | | | | LR | LR | 18 00 10.0 | | | |
| | comp=Z,68nm,21.4s,baz=329,slow=33 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **23.22** | **135** | IAmb | IAmb | 17 53 00.7 | | | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| **ARMA** | **Armidale** | **24.30** | **174** | | **P** | **17 52 33.4** | **+0.1** | | |
| ARMA | | | | IAmb | IAmb | 17 53 08.7 | | | |
| | comp=Z,21nm,1.5s | | | | | | | | |
| **SOEI** | **Soe** | **24.65** | **260** | P | **P** | **17 52 37.3** | **+0.7** | | |
| SOEI | | | | IAmb | IAmb | 17 53 03.5 | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **BATI** | **Baumata** | **25.29** | **259** | P | **P** | **17 52 43.0** | **+0.6** | | |
| | comp=Z,20nm,0.8s,baz=154,slow=1.0,SNR=5.8 | | | | | | | | |
| **BATI** | **Baumata** | **25.29** | **259** | P | **P** | **17 52 43.9** | **+1.5** | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.62** | **240** | P | **P** | **17 52 45.5** | **+0.2** | | |
| | comp=Z,5.1nm,0.5s,baz=57,slow=8.4,SNR=28 | | | | | | | | |
| **STKA** | **Stephens Creek** | **26.51** | **194** | P | **P** | **17 52 53.1** | **-0.1** | | |
| | comp=Z,0.8nm,0.5s,baz=333,slow=11,SNR=1.4 | | | | | | | | |
| **MMRI** | **Maumere** | **26.55** | **263** | P | **P** | **17 52 52.6** | **-1.1** | | |
| MMRI | | | | IAmb | IAmb | 17 53 25.1 | | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **CAN** | **Canberra** | **29.06** | **180** | P | **P** | **17 53 14.6** | **-1.3** | | |
| CAN | | | | IAmb | IAmb | 17 53 53.0 | | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **FORT** | **Forrest** | **31.37** | **216** | P | **P** | **17 53 36.0** | **-0.3** | | |
| **URZ** | **Urewera** | **40.97** | **145** | LR | LR | 18 11 02.5 | | | |
| | comp=Z,59nm,18.1s,baz=274,slow=35 | | | | | | | | |
| **MSWZ** | **Moikau Station** | **42.27** | **150** | P | **P** | **17 55 08.8** | **0.0** | | |
| **KSRS** | **Korea Array** | **47.57** | **337** | P | **P** | **17 55 50.7** | **-0.2** | | |
| | comp=Z,1.1nm,0.9s,baz=138,slow=9.7,SNR=2.6 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.48** | **6** | P | **P** | **17 57 17.3** | **-0.5** | | |
| **PETK** | **Petropavlovsk-** | **59.48** | **6** | P | **P** | **17 57 18.5** | **+0.6** | | |
| | comp=Z,1.0nm,0.5s,baz=164,slow=6.2,SNR=9.9 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.48** | **6** | P | **P** | **17 57 17.9** | **0.0** | | |
| **SONM** | **Songino Array** | **65.44** | **330** | P | **P** | **17 57 58.8** | **+0.9** | | |
| | comp=Z,0.2nm,0.5s,baz=165,slow=3.3,SNR=2.6 | | | | | | | | |
| **VNDA** | **Vanda** | **71.69** | **177** | P | **P** | **17 58 36.5** | **+0.2** | | |
| | comp=Z,3.5nm,1.0s,baz=45,slow=5.7,SNR=1.5 | | | | | | | | |
| **VNDA** | **Vanda** | **71.69** | **177** | P | **P** | **17 58 41.0** | **+4.8** | | |
| **TIXI** | **Tiksi** | **78.73** | **354** | P | **P** | **17 59 15.8** | **-0.9** | | |
| TIXI | | | | IAmb | IAmb | 17 59 17.3 | | | |
| | comp=Z,3.9nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **78.80** | **320** | P | **P** | **17 59 16.6** | **-1.1** | | |
| | comp=Z,2.0nm,0.5s,baz=96,slow=8.8,SNR=6.5 | | | | | | | | |
| **TTA** | **Tatalina** | **80.44** | **22** | P | **P** | **17 59 25.7** | **-0.6** | | |
| TTA | | | | IAmb | IAmb | 18 00 08.1 | | | |
| | comp=Z,18nm,1.8s | | | | | | | | |
| **L19K** | **White Mountain** | **80.47** | **23** | P | **P** | **17 59 26.6** | **+0.2** | | |
| L19K | | | | IAmb | IAmb | 18 00 04.5 | | | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **J20K** | **Nowinta River** | **81.83** | **22** | P | **P** | **17 59 33.7** | **+0.2** | | |
| J20K | | | | IAmb | IAmb | 17 59 38.3 | | | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **CAST** | **Castle Rocks** | **82.21** | **23** | P | **P** | **17 59 34.8** | **-0.7** | | |
| **PWL** | **Port Wells** | **82.52** | **26** | P | **P** | **17 59 36.9** | **-0.3** | | |
| **KTH** | **Kantishna Hill** | **82.73** | **23** | P | **P** | **17 59 37.2** | **-1.1** | | |
| **TRF** | **Thorofare Moun** | **82.92** | **23** | P | **P** | **17 59 38.2** | **-1.3** | | |
| **IMAR** | **Indian Mountai** | **82.94** | **20** | P | **P** | **17 59 38.9** | **-0.4** | | |
| **RND** | **Reindeer** | **83.47** | **24** | P | **P** | **17 59 40.7** | **-1.4** | | |
| RND | | | | IAmb | IAmb | 18 00 18.4 | | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| **MCK** | **McKinley** | **83.59** | **23** | P | **P** | **17 59 41.3** | **-1.4** | | |
| MCK | | | | IAmb | IAmb | 17 59 42.2 | | | |
| | comp=Z,9.7nm,1.2s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.84** | **180** | P | **P** | **17 59 43.9** | **-0.3** | | |
| QSPA | | | | IAmb | IAmb | 17 59 48.5 | | | |
| | comp=Z,14nm,1.8s | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **84.00** | **25** | P | **P** | **17 59 44.8** | **0.0** | | |
| **ILAR** | **Eielson Array** | **84.86** | **23** | P | **P** | **17 59 47.5** | **-1.6** | | |
| | comp=Z,1.4nm,0.8s,baz=250,slow=5.0,SNR=14 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.94** | **285** | PKPbc | **PKPdf** | **18 06 57.3** | **+1.3** | | |
| | comp=Z,0.5nm,0.3s,baz=62,slow=3.1,SNR=7.7 | | | | | | | | |
| **PTGA** | **Pitinga** | **150.40** | **102** | PKPbc | **PKPbc** | **18 07 06.3** | **-0.7** | | |
| | comp=Z,2.7nm,0.4s,baz=298,slow=6.1,SNR=11 | | | | | | | | |
| **BDFB** | **Brasilia** | **152.65** | **142** | PKPbc | **PKPbc** | **18 07 11.7** | **-0.6** | | |
| | comp=Z,5.9nm,0.4s,baz=147,slow=2.2,SNR=8.9 | | | | | | | | |

**WEL 02 17:47:47.1±1.3, 31°.5S±19°×17°.9E±5°.2, h231km±58km, M4.2/10, mB4.5/7, MLv4.7/10, Mw(mB)3.7/7, Error ellipse: s-maj=0.1km s-min=0.0km az=109.8, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.19** | **61** | P | Pn | 17 48 39.6 | -1.0 |
| GLKZ | | | | S | S | 17 49 23.5 | +0.9 |
| **MXZ** | **Matakaoa Point** | **6.71** | **184** | P | Pn | 17 49 25.3 | +1.6 |
| MXZ | | | | S | S | 17 50 41.9 | +1.0 |
| **HAZ** | **Te Kaha** | **6.94** | **187** | P | Pn | 17 49 27.1 | +0.4 |
| HAZ | | | | S | S | 17 50 47.6 | +1.3 |
| **WMGZ** | **Waiomatatini S** | **6.96** | **183** | P | Pn | 17 49 27.1 | +0.2 |
| WMGZ | | | | S | S | 17 50 47.2 | +0.5 |
| **RUGZ** | **Raukumara Rang** | **7.16** | **188** | P | Pn | 17 49 29.1 | -0.5 |
| RUGZ | | | | S | S | 17 50 51.4 | -0.3 |
| **PUZ** | **Puketiti** | **7.22** | **184** | P | Pn | 17 49 31.4 | +1.2 |
| PUZ | | | | S | S | 17 50 51.9 | -0.9 |
| **TWGZ** | **Tauwhareparae** | **7.34** | **186** | P | Pn | 17 49 32.6 | +0.7 |
| TWGZ | | | | S | S | 17 50 56.9 | +1.2 |
| **URZ** | **Urewera** | **7.53** | **191** | P | Pn | 17 49 33.6 | -0.6 |
| URZ | | | | S | S | 17 50 58.8 | -1.2 |
| **MWZ** | **Matawai** | **7.54** | **188** | P | Pn | 17 49 35.5 | +1.1 |
| MWZ | | | | S | S | 17 51 02.0 | +1.5 |
| **RAGZ** | **Rawiri** | **7.72** | **189** | P | Pn | 17 49 35.7 | -1.0 |
| **MUGZ** | **Murupara** | **7.80** | **192** | P | Pn | 17 49 38.2 | +0.5 |
| MUGZ | | | | S | S | 17 51 08.5 | +2.1 |
| **RTZ** | **Ruatahuna** | **7.90** | **191** | P | Pn | 17 49 37.4 | -1.6 |
| RTZ | | | | S | S | 17 51 08.6 | -0.2 |
| **SNGZ** | **Shannon Statio** | **8.01** | **189** | P | Pn | 17 49 40.5 | +0.1 |
| SNGZ | | | | S | S | 17 51 10.4 | -0.9 |
| **ARHZ** | **Aropaoanui** | **8.53** | **190** | P | Pn | 17 49 46.4 | -0.6 |
| ARHZ | | | | S | S | 17 51 21.9 | -1.6 |

*IDC **02** 17:57:55.3±4.8, 3°.97S×137°.78E, h122km±37km, mb2.9/1, mb1 3.3/5, mb1mx3.1/33, mbtmp3.6/5, Error ellipse: s-maj=49.3km s-min=16.2km az=82.0*
*DJA **02** 17:57:57.4±0.4, 4°.5±4°×13°.8E±°, h172km±5km, M3.9/6, mb4.0/6, mB4.3/1, MLv3.9/6, Mw(mB)3.4/1*
**ISC 02 17:57:58.6±0.8, 4°.04S±0°.07×137°.58E±0°.07, h150km, n12, σ1§35/17, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMPI** | **Sarmi** | **2.33** | **29** | S | **Sn** | **17 59 10.3** | **+2.6** |
| **SRPI** | **Serui, Papua** | **2.54** | **328** | P | **Pn** | **17 58 40.0** | **-0.2** |
| **GENI** | **Genyem** | **2.95** | **61** | P | **Pn** | **17 58 44.5** | **-0.9** |
| GENI | | | | S | **Sn** | **17 59 21.2** | **-0.3** |
| **BAKI** | **Biak** | **3.19** | **332** | P | **Pn** | **17 58 48.0** | **-0.4** |
| **JAY** | **Jayapura** | **3.46** | **64** | P | **Pn** | **17 58 50.7** | **-1.3** |
| JAY | | | | S | **Sn** | **17 59 32.3** | **-1.0** |
| **FAKI** | **Fak Fak** | **5.44** | **282** | P | **Pn** | **17 59 16.3** | **-1.6** |
| | 0.1nm12nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **7.05** | **296** | P | **Pn** | **17 59 38.1** | **-1.3** |
| | 2.8nm,0.3s,baz=111,slow=14,SNR=20 | | | | | | |
| SIJI | | | | S | **Sn** | **18 00 59.1** | **+0.6** |
| | 0.5nm,0.3s,baz=158,slow=19,SNR=1.2 | | | | | | |
| **SWI** | **Sorong** | **7.06** | **296** | P | **Pn** | **17 59 39.1** | **-0.4** |
| | 0.1nm26nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.12** | **191** | P | **Pn** | **18 01 36.4** | **-0.5** |
| | 0.3nm,0.3s,baz=12,slow=12,SNR=14 | | | | | | |
| WRA | | | | S | **Sn** | **18 04 36.4** | **-0.3** |
| | 0.1nm,0.3s,baz=14,slow=20,SNR=6.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.22** | **219** | P | **P** | **18 02 00.8** | **+0.5** |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **19.83** | **190** | P | **P** | **18 02 18.1** | **+0.2** |
| | 0.3nm,0.3s,baz=14,slow=8.1,SNR=39 | | | | | | |
| ASAR | | | | S | **S** | **18 05 56.3** | **+3.1** |
| | 0.1nm,0.3s,baz=13,slow=20,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.16** | **323** | P | **P** | **18 08 55.1** | **+0.1** |
| | 0.2nm,0.5s,baz=105,slow=8.5,SNR=4.4 | | | | | | |

*INMG **02** 18:01:32.8±1.6, 35°.60N×3°.98W, h6km±6km, ML2.2, Error ellipse: s-maj=5.4km s-min=4.1km az=9.0*
*CNRM **02** 18:01:34.8, 35°.63N×3°.90W, h26km, ml2.6*
*SFS **02** 18:01:34.0, 35°.50N×3°.70W, h34km, ML2.2, ALBORAN SUR*
**ISC 02 18:01:32.0±1.3, 35°.67N±0°.03×3°.89W±0°.03, h8km±11km, n28, σ1§53/49, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.45** | **185** | P | **Pb** | **18 01 42.5** | **+0.3** |
| PALE | | | | S | **Sb** | **18 01 50.7** | **+1.6** |
| **GOG** | **Mont Gurugu** | **0.85** | **121** | P | **Pg** | **18 01 49.8** | **+1.4** |
| GOG | | | | S | **Sb** | **18 02 02.3** | **+1.5** |
| **EMAL** | **Malaga-Limoner** | **1.18** | **338** | P | **Pg** | **18 01 54.7** | **+0.1** |
| EMAL | | | | S | **Sg** | **18 02 09.8** | **-0.1** |
| **SMIR** | **Smir Dam** | **1.21** | **271** | P | **Pg** | **18 01 54.1** | **-1.1** |
| SMIR | | | | S | **Sn** | **18 02 11.3** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.29** | **112** | P | **Pn** | **18 01 55.1** | **-1.1** |
| CHAS | | | | S | **Sb** | **18 02 10.9** | **-2.1** |
| **CHEFC** | **Chefchaouen** | **1.31** | **245** | P | **Pn** | **18 01 57.4** | **+0.7** |
| CHEFC | | | | S | **Sn** | **18 02 16.3** | **+2.0** |
| **JBK** | **JBK** | **1.72** | **140** | P | **Pn** | **18 02 02.6** | **+0.3** |
| JBK | | | | S | **Sn** | **18 02 23.0** | **-1.6** |
| **LIJA** | **Lijar** | **1.74** | **316** | P | **Pn** | **18 02 03.0** | **+0.4** |
| LIJA | | | | S | **Sn** | **18 02 26.0** | **+1.0** |
| **IFR** | **Ifrane** | **2.37** | **206** | P | **Pn** | **18 02 11.7** | **+0.3** |
| IFR | | | | S | **Sn** | **18 02 39.3** | **-1.5** |
| **MD31** | **MD31** | **2.88** | **195** | P | **Pn** | **18 02 19.5** | **+1.2** |
| MD31 | | | | S | **Sn** | **18 02 54.4** | **+1.2** |
| **MDT** | **Midelt** | **2.91** | **192** | P | **Pn** | **18 02 20.1** | **+1.5** |
| MDT | | | | S | **Sn** | **18 02 55.0** | **+1.2** |
| **TDRA** | **Tendrara** | **3.04** | **149** | P | **Pn** | **18 02 21.8** | **+1.3** |
| TDRA | | | | S | **Sn** | **18 02 56.2** | **-1.0** |
| **ZHG** | **ZHG** | **3.17** | **226** | P | **Pb** | **18 02 25.3** | **-3.3** |
| ZHG | | | | S | **Sn** | **18 02 60.0** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.54** | **300** | *e*Pn | **Pn** | **18 02 28.6** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **18 03 07.6** | **-1.6** |
| PVAQ | | | | A | A | 18 03 13.7 | |
| | 6.1nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.54** | **300** | P | **Pn** | **18 02 30.3** | **+3.1** |
| PVAQ | | | | S | **Sn** | **18 03 09.3** | **+0.1** |
| **PBDV** | **Barranco-do-Ve** | **3.62** | **297** | *e*Pn | **Pn** | **18 02 29.3** | **+1.0** |
| PBDV | | | | *e*Sn | **Sn** | **18 03 11.3** | **+0.1** |
| **PCVE** | **Castro Verde** | **3.87** | **302** | *e*Pn | **Pn** | **18 02 32.8** | **+1.1** |
| **MESJ** | **Messejana** | **4.10** | **303** | *e*Sn | **Sn** | **18 03 21.4** | **-1.6** |
| MESJ | | | | A | A | 18 03 24.2 | |
| | 3.2nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **4.35** | **318** | *e*Sn | **Sn** | **18 03 28.8** | **-0.4** |
| **PESTR** | **Estremoz** | **4.35** | **318** | P | **Pn** | **18 02 40.2** | **+1.8** |
| PESTR | | | | S | **Sn** | **18 03 30.5** | **+1.3** |
| **EVO** | **Evora** | **4.36** | **312** | P | **Pn** | **18 02 39.2** | **+0.7** |
| EVO | | | | S | **Sn** | **18 03 28.1** | **-1.5** |
| **PNCL** | **Nicolau / Gran** | **4.45** | **305** | *e*Pn | **Pn** | **18 02 40.7** | **+1.0** |
| PNCL | | | | *e*Sn | **Sn** | **18 03 29.6** | **-2.0** |
| **PMRV** | **Marv??o** | **4.67** | **325** | *e*Pn | **Pn** | **18 02 45.1** | **+2.3** |
| PMRV | | | | *e*Sn | **Sn** | **18 03 37.0** | **-0.2** |
| **PMTG** | **Montargil** | **4.84** | **316** | *e*Pn | **Pn** | **18 02 46.9** | **+1.8** |
| PMTG | | | | *e*Sn | **Sn** | **18 03 39.5** | **-1.9** |
| **PCBR** | **Castelo Branco** | **5.04** | **327** | *e*Pn | **Pn** | **18 02 48.4** | **+0.5** |
| **MVO** | **Moncorvo** | **6.02** | **337** | *e*Pn | **Pn** | **18 03 03.7** | **+2.4** |
| **POLO** | **L

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JKMT | | | | S | | Sn | 18 13 01.7 | -0.5 |
| **OFUJ** | **Ofunato** | **0.82** | **344** | ⇓P | | Pn | 18 12 56.5 | +1.0 |
| OFUJ | | | | S | | Sn | 18 13 06.7 | +0.2 |
| **JOFO** | **Osakifurukawao** | **0.88** | **291** | ⇓P | | Pn | 18 12 56.3 | +0.1 |
| JOFO | | | | S | | Sn | 18 13 07.3 | -0.5 |
| **JMK** | **Ichinoseki** | **0.88** | **319** | ⇓P | | Pn | 18 12 56.7 | +0.5 |
| JMK | | | | S | | Sn | 18 13 07.0 | -0.9 |
| **JMM** | **Marumori** | **1.01** | **246** | ⇓P | | Pn | 18 12 57.6 | -0.4 |
| JMM | | | | *e*S | | Sn | 18 13 09.1 | -1.9 |
| **JOU** | **Okura** | **1.02** | **275** | ⇓P | | Pn | 18 12 58.0 | -0.2 |
| JOU | | | | S | | Sn | 18 13 09.6 | -1.7 |
| **JFK** | **Kawauchi** | **1.26** | **223** | ⇓P | | Pn | 18 13 01.7 | +0.3 |
| JFK | | | | S | | Sn | 18 13 16.3 | -0.8 |
| **JOM** | **Ohasama** | **1.29** | **337** | ⇓P | | Pn | 18 13 02.8 | +0.9 |
| JOM | | | | S | | Sn | 18 13 18.2 | +0.2 |
| **JYK** | **Kaneyama** | **1.40** | **297** | ⇓P | | Pn | 18 13 03.3 | -0.1 |
| **JYS** | **Shirataka** | **1.49** | **268** | P | | Pn | 18 13 04.6 | 0.0 |
| JYS | | | | *e*S | | Sn | 18 13 21.9 | -1.0 |
| **JFT** | **Otama** | **1.49** | **240** | ⇓P | | Pn | 18 13 05.0 | +0.4 |
| JFT | | | | S | | Sn | 18 13 22.1 | -0.8 |
| **JRG** | **Rokugo** | **1.52** | **317** | ⇓P | | Pn | 18 13 05.5 | +0.6 |
| **MJAR** | **Matsushiro Arr** | **3.46** | **241** | P | | Pn | 18 13 33.0 | +1.4 |
| | 0.8nm,0.3s,baz=45,slow=14,SNR=27 | | | | | | | |
| MJAR | | | | S | | Sn | 18 14 17.6 | +6.3 |
| | 0.3nm,0.3s,baz=47,slow=32,SNR=1.7 | | | | | | | |
| **MAT** | **Matsushiro** | **3.46** | **241** | P | | Pn | 18 13 33.2 | +1.6 |
| MAT | | | | *e*S | | Sn | 18 14 15.5 | +4.2 |
| **JHJ** | **Hachijo jima 2** | **5.45** | **200** | P | | Pn | 18 14 00.6 | +1.6 |
| | 8.2nm,0.3s,baz=260,slow=21,SNR=2.3 | | | | | | | |
| JHJ | | | | S | | Sn | 18 14 57.7 | -2.7 |
| | 11nm,0.3s,baz=62,slow=21,SNR=1.3 | | | | | | | |
| **ASAJ** | **Asahikawa** | **5.84** | **5** | P | | Pn | 18 14 05.0 | +0.6 |
| | 0.7nm,0.3s,baz=202,slow=17,SNR=11 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.55** | **311** | P | | Pn | 18 14 56.1 | +1.0 |
| | baz=121,slow=14,SNR=5.6 | | | | | | | |
| **SEY** | **Seymchan** | **25.48** | **11** | P | | P | 18 18 03.6 | -0.6 |
| | 0.2nm,0.2s,baz=177,slow=6.4,SNR=3.6 | | | | | | | |
| **SONM** | **Songino Array** | **27.47** | **302** | P | | P | 18 18 21.1 | -1.4 |
| | 0.3nm,0.5s,baz=122,slow=7.4,SNR=2.2 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 28.45** | **124** | | T | | T | 18 48 50.3 | |
| | baz=316,slow=76,SNR=60 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 28.46** | **124** | | T | | T | 18 48 50.9 | |
| | baz=316,slow=76,SNR=75 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 28.46** | **124** | | T | | T | 18 48 51.6 | |
| | baz=316,slow=76,SNR=95 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 29.20** | **126** | | T | | T | 18 49 48.0 | |
| | baz=318,slow=76,SNR=23 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 29.21** | **126** | | T | | T | 18 49 48.0 | |
| | baz=318,slow=76,SNR=48 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 29.22** | **126** | | T | | T | 18 49 49.2 | |
| | baz=318,slow=76,SNR=21 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.40** | **311** | P | | P | 18 20 22.1 | -0.2 |
| | 1.1nm,0.4s,baz=86,slow=7.2,SNR=7.0 | | | | | | | |
| **NRIK** | **Noril'sk** | **42.32** | **335** | P | | P | 18 20 29.7 | +0.2 |
| | 1.6nm,0.4s,baz=86,slow=5.8,SNR=3.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.83** | **301** | P | | P | 18 20 41.7 | -0.4 |
| | 1.0nm,0.7s,baz=85,slow=9.6,SNR=15 | | | | | | | |
| **WRA** | **Warramunga Arr** | **58.36** | **188** | P | | P | 18 22 30.9 | -0.3 |
| | 0.7nm,0.6s,baz=5.0,slow=7.3,SNR=8.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **62.09** | **188** | P | | P | 18 22 57.3 | +0.6 |
| | 0.5nm,0.7s,baz=17,slow=9.7,SNR=6.0 | | | | | | | |

*FUNV **02** 18:20:38.1, 11˚.55N×71˚.62W, h17km, MW3.4*
*RSNC **02** 18:20:38.6±0.6, 11˚.54N×71˚.56W, h65km±7km, ML2.6*
**ISC 02 18:20:38.0±1.1, 11˚.55N±0˚.06×71˚.60W±0˚.03, h74km±13km, n21, σ0s93/33, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URIC** | **Uribia, Colomb** | **0.42** | **291** | *e*P | **Pn** | **18 20 50.4** | **-0.1** |
| URIC | | | | *e*S | **Sn** | **18 20 59.0** | **-0.6** |
| URIC | | | | *i* | | 18 20 59.8 | |
| | comp=Z,192nm,0.3s | | | | | | |
| **DABV** | **Dabajuro** | **1.13** | **123** | *e*P | Pn | 18 20 59.5 | +1.1 |
| DABV | | | | *e*S | **Sn** | **18 21 14.2** | **+0.7** |
| **CRJC** | **Cerrejon, Guaj** | **1.37** | **248** | *e*P | **Pn** | **18 21 01.8** | **+0.2** |
| CRJC | | | | *e*S | **Sn** | **18 21 19.2** | **+0.1** |
| CRJC | | | | *i* | | 18 21 20.4 | |
| | comp=Z,149nm,0.2s | | | | | | |
| **MONV** | **Montecano** | **1.64** | **76** | *e*P | **Pn** | **18 21 05.6** | **+0.6** |
| MONV | | | | *e*S | **Sn** | **18 21 26.4** | **+1.0** |
| **MCQV** | **Machiques** | **1.75** | **212** | *e*P | Pn | 18 21 07.6 | +1.1 |
| MCQV | | | | *e*S | **Sn** | **18 21 28.7** | **+0.6** |
| **SIQV** | **Siquisique** | **1.97** | **117** | *e*P | **Pn** | **18 21 10.7** | **+1.3** |
| SIQV | | | | *e*S | **Sn** | **18 21 34.0** | **+0.7** |
| **LL6C** | **La Loma 6 Bece** | **2.44** | **223** | *e*S | **Sn** | **18 21 45.4** | **+0.8** |
| LL6C | | | | *i* | | 18 21 47.0 | |
| | comp=Z,24nm,0.4s | | | | | | |
| **SMRC** | **Santa Marta, M** | **2.61** | **262** | *e*P | Pn | 18 21 20.3 | +2.3 |
| SMRC | | | | *e*S | **Sn** | **18 21 49.1** | **+0.5** |
| SMRC | | | | *i* | | 18 21 55.4 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **SDV** | **Santo Domingo** | **2.81** | **160** | *e*P | **Pn** | **18 21 20.3** | **-0.7** |
| SDV | | | | *e*S | **Sn** | **18 21 53.4** | **-0.5** |
| **SOCV** | **Socops** | **3.33** | **167** | *e*P | **Pn** | **18 21 28.1** | **+0.3** |
| SOCV | | | | *e*S | **Sn** | **18 22 06.0** | **-0.2** |
| **MAPV** | **Macapo** | **3.52** | **119** | *e*P | **Pn** | **18 21 31.7** | **+1.2** |
| MAPV | | | | *e*S | **Sn** | **18 22 11.6** | **+0.5** |
| **SMLC** | **San Martn de** | **3.66** | **222** | *e*P | **Pn** | **18 21 31.8** | **-0.6** |
| SMLC | | | | *e*S | **Sn** | **18 22 12.1** | **-2.2** |
| SMLC | | | | *i* | | 18 22 13.8 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **OCAC** | **Ocana** | **3.70** | **207** | *e*P | **Pn** | **18 21 33.4** | **+0.3** |
| OCAC | | | | *e*S | **Sn** | **18 22 15.3** | **-0.3** |
| **CAPV** | **Capacho** | **3.73** | **191** | *e*P | **Pn** | **18 21 34.3** | **+0.8** |
| CAPV | | | | *e*S | **Sn** | **18 22 15.1** | **-1.2** |
| **SJCC** | **San Jacinto, C** | **3.89** | **245** | *e*S | **Sn** | **18 22 20.6** | **+0.7** |
| **BENV** | **Beln** | **4.23** | **111** | *e*P | **Pn** | **18 21 41.0** | **+0.8** |
| BENV | | | | *e*S | **Sn** | **18 22 27.0** | **-1.4** |
| **BAUV** | **El Baul** | **4.35** | **126** | *e*P | **Pn** | **18 21 42.6** | **+0.8** |
| BAUV | | | | *e*S | **Sn** | **18 22 30.0** | **-1.3** |
| **ZARC** | **Zaragoza, Cauc** | **5.16** | **219** | *e*P | **Pn** | **18 21 52.9** | **+0.1** |
| ZARC | | | | *e*S | **Sn** | **18 22 50.7** | **-0.3** |
| **BIRV** | **Birongo** | **5.34** | **101** | *e*S | **Sn** | **18 22 53.4** | **-2.0** |
| **CACV** | **CAICARA DEL OR** | **6.37** | **128** | *e*P | Pn | 18 22 15.2 | +5.9 |
| CACV | | | | *e*S | Sn | 18 23 28.3 | +7.7 |
| **PAYV** | **Puerto Ayacuch** | **7.23** | **147** | *e*P | **Pn** | **18 22 20.9** | **-0.2** |

*SFS **02** 18:29:55.0, 35˚.30N×3˚.80W, h31km, ML2.5, ALHUCEMAS (MARRUECOS)*
*INMG **02** 18:29:56.0±1.5, 35˚.48N×3˚.77W, h11km±5km, ML2.4, Error ellipse: s-maj=2.7km s-min=2.6km az=86.0*
*CNRM **02** 18:29:57.5, 35˚.32N×3˚.84W, h9km, ml2.8*
**ISC 02 18:29:55.1±1.1, 35˚.46N±0˚.03×3˚.78W±0˚.03, h11km±8km, n31, σ1s44/52, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.27** | **209** | P | **Pg** | **18 30 00.3** | **-0.3** |
| **PALE** | **Palemas** | **0.27** | **209** | P | **Pg** | **18 30 00.7** | **+0.1** |
| PALE | | | | S | **Sg** | **18 30 04.2** | **-0.1** |
| **GOG** | **Mont Gurugu** | **0.68** | **110** | P | **Pn** | **18 30 11.0** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.68** | **110** | P | **Pg** | **18 30 08.4** | **+0.1** |
| GOG | | | | S | **Sb** | **18 30 18.9** | **+0.4** |
| **CHAS** | **Isla Isabel II** | **1.14** | **103** | P | **Pb** | **18 30 15.2** | **-1.5** |
| CHAS | | | | S | **Sb** | **18 30 29.6** | **-1.9** |
| **CHEFC** | **Chefchaouen** | **1.32** | **255** | P | **Pg** | **18 30 21.0** | **+0.5** |
| **CHEFC** | **Chefchaouen** | **1.32** | **255** | P | **Pn** | **18 30 19.8** | **+0.2** |
| CHEFC | | | | S | **Sb** | **18 30 35.7** | **-1.2** |
| **SMIR** | **Smir Dam** | **1.32** | **280** | P | **Pn** | **18 30 18.9** | **-0.6** |
| SMIR | | | | S | **Sg** | **18 30 38.0** | **+0.3** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **338** | P | **Pg** | **18 30 23.0** | **+1.0** |
| EMAL | | | | S | **Sn** | **18 30 37.7** | **-1.5** |
| **JBK** | **JBK** | **1.50** | **138** | P | **Pn** | **18 30 23.0** | **+0.9** |
| **JBK** | **JBK** | **1.50** | **138** | P | **Pn** | **18 30 21.7** | **-0.4** |
| JBK | | | | S | **Sg** | **18 30 44.0** | **+0.7** |
| **LIJA** | **Lijar** | **1.96** | **318** | P | **Pb** | **18 30 30.0** | **-0.8** |
| LIJA | | | | S | **Sn** | **18 30 54.0** | **+1.1** |
| **LCRM** | **LCR** | **1.98** | **207** | P | **Pb** | **18 30 31.0** | **-0.2** |
| **LCRM** | **LCR** | **1.98** | **207** | P | **Pb** | **18 30 30.6** | **-0.5** |
| LCRM | | | | S | **Sg** | **18 30 58.0** | **-0.6** |
| **IFR** | **Ifrane** | **2.23** | **210** | P | **Pn** | **18 30 32.2** | **0.0** |
| IFR | | | | S | **Sn** | **18 30 58.5** | **-1.4** |
| **MD31** | **MD31** | **2.71** | **198** | P | **Pn** | **18 30 38.9** | **+0.3** |
| MD31 | | | | S | **Sn** | **18 31 11.7** | **+0.3** |
| **MDT** | **Midelt** | **2.72** | **195** | P | **Pn** | **18 30 39.5** | **+0.7** |
| **MDT** | **Midelt** | **2.72** | **195** | P | **Pn** | **18 30 39.6** | **+0.7** |
| MDT | | | | S | **Sn** | **18 31 13.6** | **+1.8** |
| **TDRA** | **Tendrara** | **2.81** | **148** | P | **Pn** | **18 30 40.2** | **0.0** |
| TDRA | | | | S | **Sn** | **18 31 16.2** | **+2.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZHG** | **ZHG** | **3.10** | **231** | P | | Pn | 18 30 45.6 | +1.6 |
| ZHG | | | | S | | Sn | 18 31 24.1 | +3.0 |
| **PVAQ** | **Vaqueiros** | **3.72** | **303** | *e*Pn | | Pn | 18 30 52.5 | 0.0 |
| PVAQ | | | | *e*Sn | | Sn | 18 31 34.5 | -1.9 |
| PVAQ | | | | A | | A | 18 31 36.7 | |
| | 7.7nm,0.6s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **303** | P | | Pn | 18 30 53.9 | +1.4 |
| PVAQ | | | | S | | Sn | 18 31 35.9 | -0.5 |
| **PBDV** | **Barranco-do-Ve** | **3.80** | **299** | *e*Pn | | Pn | 18 30 53.9 | +0.4 |
| PBDV | | | | *e*Sn | | Sn | 18 31 36.0 | -2.2 |
| PBDV | | | | A | | A | 18 31 43.7 | |
| | 4.0nm,0.5s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.06** | **304** | *e*Pn | | Pn | 18 30 57.6 | +0.5 |
| PCVE | | | | *e*Sn | | Sn | 18 31 43.2 | -1.5 |
| PCVE | | | | A | | A | 18 31 50.7 | |
| | 3.5nm,0.3s | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **305** | *e*Pn | | Pn | 18 31 01.3 | +1.0 |
| MESJ | | | | *e*Sn | | Sn | 18 31 48.3 | -2.0 |
| MESJ | | | | A | | A | 18 31 54.0 | |
| | 3.8nm,0.3s | | | | | | | |
| **PESTR** | **Estremoz** | **4.57** | **319** | *e*Pn | | Pn | 18 31 08.4 | +4.3 |
| PESTR | | | | *e*Sn | | Sn | 18 31 56.1 | -1.1 |
| **PNCL** | **Nicolau / Gran** | **4.64** | **306** | *e*Pn | | Pn | 18 31 05.8 | +0.7 |
| PNCL | | | | *e*Sn | | Sn | 18 31 57.5 | -1.5 |
| PNCL | | | | A | | A | 18 32 00.6 | |
| | 5.9nm,0.5s | | | | | | | |
| **PMRV** | **Marv??o** | **4.90** | **325** | *e*Pn | | Pn | 18 31 10.3 | +1.6 |
| **PMTG** | **Montargil** | **5.06** | **317** | *e*Pn | | Pn | 18 31 12.6 | +1.8 |
| **PSBE** | **So Bento** | **5.68** | **317** | *e*Pn | | Pn | 18 31 22.3 | +2.8 |
| **MVO** | **Moncorvo** | **6.25** | **337** | *e*Pn | | Pn | 18 31 30.2 | +3.0 |

**NNC 02 18:31:53.1±3.4, 38˚.61N×72˚.04E, h0km, mb3.5, mpv3.1, 7C-1D, Error ellipse: s-maj=28.6km s-min=25.1km az=32.0, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.43** | **24** | ⇑Pn | Pn | 18 33 02.4 | +0.6 |
| | 2.5nm,0.6s | | | | | | |
| AAK | | | | ⇓Pg | Pb | 18 33 14.7 | +2.8 |
| | 4.1nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 18 34 14.8 | |
| | 9.1nm,1.1s | | | | | | |
| **KK02** | **Karatay Array** | **4.63** | **346** | ⇑Pg | Pb | 18 33 17.4 | +2.1 |
| | 0.5nm,0.4s,baz=136,slow=11 | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 18 34 20.0 | |
| | 3.6nm,0.8s,baz=172,slow=24 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.08** | **31** | ⇑Pn | Pn | 18 33 10.2 | -0.5 |
| | 3.0nm,1.1s | | | | | | |
| TKM2 | | | | ⇑Pg | Pb | 18 33 24.1 | +1.1 |
| | 3.0nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 18 34 34.5 | |
| | 5.8nm,1.0s | | | | | | |

*IDC **02** 18:54:35.1±2.3, 36˚.94N×70˚.29E, h0km, mb3.5/3, mb1 3.8/9, mb1mx3.5/43, mbtmp3.7/9, ML3.4/6, MS3.9/1, Ms1 3.9/1, ms1mx2.8/77, Error ellipse: s-maj=47.4km s-min=22.8km az=144.0*
*NNC **02** 18:54:41.1±1.4, 37˚.66N×69˚.91E, h0km, mb4.3, mpv4.0, Error ellipse: s-maj=12.0km s-min=10.5km az=165.0*
**ISC 02 18:54:40.4±1.1, 37˚.59N±0˚.10×69˚.91E±0˚.08, h10km, n34, σ2s97/31, mb3.6/5, 8C-7D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IUG** | **luzhnay** | **4.55** | **1** | Pg | **Pb** | **18 56 01.8** | **+1.5** |
| | 228nm,0.4s | | | | | | |
| IUG | | | | Lg | Lg | 18 57 03.6 | |
| | 262nm,0.6s | | | | | | |
| **DZA** | **Taraz** | **5.41** | **11** | Pg | **Pb** | **18 56 18.7** | **+3.8** |
| | 35nm,0.2s | | | | | | |
| DZA | | | | Lg | Lg | 18 57 32.3 | |
| | 218nm,0.9s | | | | | | |
| **BRLS** | **Borolday** | **5.43** | **359** | Pg | **Pb** | **18 56 15.2** | **-0.1** |
| | 2.0nm,0.2s | | | | | | |
| BRLS | | | | Lg | Lg | 18 57 26.3 | |
| | 48nm,0.8s | | | | | | |
| **KK02** | **Karatay Array** | **5.53** | **5** | ⇑Pn | **Pn** | **18 56 04.6** | **+1.9** |
| | 3.3nm,0.5s | | | | | | |
| KK02 | | | | ⇑Pg | **Pb** | **18 56 20.4** | **+3.5** |
| | 23nm,0.8s | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 18 57 35.2 | |
| | 34nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **5.74** | **25** | Pg | **Pb** | **18 56 23.9** | **+3.3** |
| | 8.2nm,0.9s | | | | | | |
| MRKS | | | | Lg | Lg | 18 57 40.6 | |
| | 90nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **33** | Pn | **Pn** | **18 56 15.0** | **+3.7** |
| | 2.0nm,0.3s,baz=208,slow=7.5,SNR=36 | | | | | | |
| AAK | | | | Pg | **Pg** | **18 56 36.2** | **-1.8** |
| | 2.2nm,0.3s,baz=203,slow=12,SNR=11 | | | | | | |
| AAK | | | | Sn | **Sn** | **18 57 19.6** | **-2.0** |
| | 1.7nm,0.3s,baz=196,slow=20,SNR=1.6 | | | | | | |
| AAK | | | | Lg | Lg | 18 57 55.5 | |
| | 3.7nm,0.3s,baz=112,slow=17,SNR=4.1 | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **33** | ⇓Pn | **Pn** | **18 56 13.4** | **+2.1** |
| | 12nm,1.0s | | | | | | |
| AAK | | | | ⇓Pg | **Pb** | **18 56 32.0** | **+4.5** |
| | 30nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 18 57 55.1 | |
| | 84nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.87** | **37** | ⇓Pn | **Pn** | **18 56 24.3** | **+2.9** |
| | 3.6nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Pg | Pg | 18 56 46.4 | -5.5 |
| | 9.6nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 18 58 17.7 | |
| | 33nm,0.9s | | | | | | |
| **KST** | **Kastek** | **7.14** | **38** | Pg | Pb | 18 56 50.5 | +6.0 |
| | 9.3nm,0.8s | | | | | | |
| KST | | | | Lg | Lg | 18 58 27.1 | |
| | 36nm,1.5s | | | | | | |
| **DGS** | **Degeres** | **7.20** | **37** | Pg | Pb | 18 56 51.4 | +5.9 |
| | 6.0nm,0.7s | | | | | | |
| DGS | | | | Lg | Lg | 18 58 28.3 | |
| | 24nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **7.51** | **34** | Pg | Pb | 18 56 55.9 | +5.2 |
| | 2.6nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 18 58 35.8 | |
| | 19nm,0.9s | | | | | | |
| **TNSS** | **Tian-Shan** | **7.64** | **42** | Pg | Pg | 18 56 59.9 | -6.8 |
| | 4.0nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 18 58 43.0 | |
| | 15nm,1.4s | | | | | | |
| **KNDC** | **Almaty** | **7.78** | **42** | ⇑Lg | Lg | 18 58 48.1 | |
| | 162nm,1.1s | | | | | | |
| **MDOK** | **Medeo** | **7.79** | **42** | Pn | **Pn** | **18 56 34.6** | **+0.8** |
| | 7.1nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 18 58 48.4 | |
| | 33nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **7.87** | **42** | Pg | **Pb** | **18 57 00.9** | **+4.0** |
| | 4.2nm,0.8s | | | | | | |
| KOTS | | | | Lg | Lg | 18 58 44.7 | |
| | 34nm,0.8s | | | | | | |
| **KUU** | **Kurty** | **7.96** | **36** | Pg | Pb | 18 57 04.8 | +6.4 |
| | 2.0nm,0.6s | | | | | | |
| KUU | | | | Lg | Lg | 18 58 51.3 | |
| | 44nm,1.2s | | | | | | |
| **PDGK** | **Podgornoye** | **9.28** | **49** | ⇓Lg | Lg | 18 59 34.6 | |
| | 30nm,1.4s | | | | | | |
| **GEYT** | **Alibeck** | **9.35** | **276** | Pn | **Pn** | **18 56 55.4** | **+0.2** |
| | 0.4nm,0.3s,baz=33,slow=36,SNR=1.5 | | | | | | |
| **OTUK** | **Ortayu** | **10.79** | **9** | ⇑Pn | **Pn** | **18 57 17.0** | **+2.1** |
| | 2.1nm,1.2s | | | | | | |
| **MAKZ** | **Makanchi** | **12.82** | **40** | ⇑Pn | **Pn** | **18 57 44.1** | **+1.4** |
| | 1.3nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **12.98** | **41** | Pn | **Pn** | **18 57 45.5** | **+0.7** |
| | 2.1nm,0.8s,baz=225,slow=13,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.98** | **41** | Pn | **Pn** | **18 57 45.8** | **+1.0** |
| | 0.1nm,0.3s,baz=228,slow=14,SNR=16 | | | | | | |
| MKAR | | | | Sn | **Sn** | **19 00 11.2** | **+2.0** |
| | 0.0nm,0.3s,baz=236,slow=14,SNR=1.2 | | | | | | |
| MKAR | | | | Lg | Lg | 19 01 39.2 | |
| | 0.1nm,0.3s,baz=237,slow=24,SNR=6.2 | | | | | | |
| **AB31** | **Akbulak array** | **13.71** | **331** | ⇓Pn | **Pn** | **18 57 52.9** | **-1.8** |
| | 0.6nm,0.4s,baz=149,slow=15,SNR=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.41** | **23** | Pn | **Pn** | **18 58 03.0** | **-1.3** |
| | 0.0nm,0.3s,baz=210,slow=12,SNR=8.6 | | | | | | |
| KURBB | | | | Sn | **S** | **19 00 56.5** | **-7.6** |
| | 0.0nm,0.3s,baz=227,slow=24,SNR=2.2 | | | | | | |
| KURBB | | | | Lg | Lg | 19 02 18.8 | |
| | 0.1nm,0.3s,baz=235,slow=35,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.41** | **23** | ⇑Pn | **Pn** | **18 58 02.1** | **-2.1** |
| | 6.3nm,1.4s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BVAR** | **Borovoye Array** | **15.44** | **1** | Pn | | **Pn** | **18 58 20.1** | **+2.0** |
| | 0.5nm,0.3s,baz=138,slow=10.0,SNR=5.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.32** | **27** | P | | **P** | **18 59 05.1** | **-0.3** |
| | 0.5nm,0.3s,baz=217,slow=11,SNR=17 | | | | | | | |
| **ARU** | **Arti** | **20.32** | **342** | P | | Pn | 18 59 17.8 | -0.6 |
| | 0.9nm,0.7s,baz=140,slow=5.3,SNR=5.4 | | | | | | | |
| **KBZ** | **Khabaz** | **21.34** | **295** | P | | **P** | **18 59 33.4** | **+6.0** |
| | 2.3nm,0.8s,baz=112,slow=9.3,SNR=4.1 | | | | | | | |
| **SONM** | **Songino Array** | **28.45** | **57** | P | | **P** | **19 00 33.8** | **-1.7** |
| | 0.3nm,0.6s,baz=265,slow=10,SNR=2.6 | | | | | | | |
| **TIXI** | **Tiksi** | **45.09** | **23** | LR | | LR | 19 23 57.7 | |
| | comp=Z,141nm,19.2s,baz=354,slow=39 | | | | | | | |
| **ILAR** | **Eielson Array** | **73.97** | **15** | P | | **P** | **19 06 15.5** | **0.0** |
| | 0.5nm,0.9s,baz=313,slow=7.5,SNR=4.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.19** | **2** | P | | **P** | **19 06 50.2** | **-0.3** |
| | 0.5nm,0.7s,baz=352,slow=5.6,SNR=8.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **96.13** | **126** | P | | **P** | **19 08 05.0** | **-3.3** |
| | 1.0nm,0.9s,baz=60,slow=1.4,SNR=4.8 | | | | | | | |

*SOME **02** 19:01:21.6, 42˚.53N×79˚.62E, h15km*
*NNC **02** 19:01:21.9±0.7, 42˚.56N×79˚.61E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=4.4km s-min=2.6km az=143.0*
*KRNET **02** 19:01:22.1±0.1, 42˚.55N×79˚.63E, h18km, mb2.8*
**ISC 02 19:01:21.6±1.4, 42˚.54N±0˚.04×79˚.63E±0˚.04, h13km±10km, n43, σ0s98/76, 10C-5D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UZB** | **Uzynbulak** | **0.75** | **324** | *e*P | **Pg** | **19 01 36.2** | **0.0** |
| | 7.0nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sb** | **19 01 46.7** | **-0.1** |
| | 15nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **0.75** | **324** | P | **Pg** | **19 01 36.2** | **0.0** |
| | 7.0nm,0.2s | | | | | | |
| UZB | | | | S | **Sb** | **19 01 46.7** | **-0.1** |
| | 15nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **0.75** | **324** | *e*P | **Pg** | **19 01 36.3** | **0.0** |
| | baz=24 | | | | | | |
| UZB | | | | *e*S | **Sb** | **19 01 46.8** | **-0.1** |
| | baz=24 | | | | | | |
| **PDGK** | **Podgornoye** | **0.80** | **353** | ⇓P | **Pg** | **19 01 36.8** | **-0.3** |
| | 2.1nm,0.6s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **19 01 47.6** | **0.0** |
| | 6.8nm,0.3s | | | | | | |
| **PRZ** | **Przheval'sk** | **0.91** | **267** | ⇑*i*P | **Pg** | **19 01 39.5** | **+0.3** |
| | baz=67 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sg** | **19 01 51.9** | **+0.8** |
| | baz=67 | | | | | | |
| **SATY** | **Saty** | **1.04** | **300** | *e*P | **Pb** | **19 01 41.3** | **-0.2** |
| | 2.3nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sg** | **19 01 55.2** | **0.0** |
| | 8.0nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.04** | **300** | P | **Pb** | **19 01 41.3** | **-0.2** |
| | 2.3nm,0.3s | | | | | | |
| SATY | | | | S | **Sg** | **19 01 55.2** | **0.0** |
| | 8.0nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.04** | **300** | *e*P | **Pb** | **19 01 41.3** | **-0.2** |
| | baz=0.0 | | | | | | |
| SATY | | | | *e*S | **Sg** | **19 01 55.2** | **0.0** |
| | baz=0.0 | | | | | | |
| **KTMS** | **Ketmen** | **1.05** | **30** | *e*P | **Pb** | **19 01 41.9** | **+0.1** |
| | 0.9nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **19 01 55.8** | **+0.1** |
| | 9.1nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.05** | **30** | P | **Pb** | **19 01 41.9** | **+0.1** |
| | 0.9nm,0.1s | | | | | | |
| KTMS | | | | S | **Sg** | **19 01 55.8** | **+0.1** |
| | 9.1nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.05** | **30** | *e*P | **Pb** | **19 01 41.9** | **+0.1** |
| | baz=30 | | | | | | |
| KTMS | | | | *e*S | **Sg** | **19 01 55.9** | **+0.2** |
| | baz=30 | | | | | | |
| **KPKS** | **Kokpek** | **1.16** | **324** | *e*P | **Pn** | **19 01 43.6** | **0.0** |
| | 6.0nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sn** | **19 01 59.0** | **-0.2** |
| | 15nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **1.16** | **324** | *e*P | **Pn** | **19 01 43.6** | **0.0** |
| | baz=23 | | | | | | |
| KPKS | | | | *e*S | **Sn** | **19 01 59.1** | **-0.2** |
| | baz=23 | | | | | | |
| **KURS** | **Kuram** | **1.43** | **312** | *e*P | **Pg** | **19 01 48.8** | **-0.3** |
| | 3.3nm,0.3s | | | | | | |
| KURS | | | | *e*S | **Sg** | **19 02 08.0** | **+0.3** |
| | 3.1nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.43** | **312** | P | **Pg** | **19 01 48.8** | **-0.3** |
| | 3.3nm,0.3s | | | | | | |
| KURS | | | | S | **Sg** | **19 02 08.0** | **+0.3** |
| | 3.1nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.43** | **312** | *e*P | **Pg** | **19 01 48.8** | **-0.3** |
| | baz=12 | | | | | | |
| KURS | | | | *e*S | **Sg** | **19 02 08.0** | **+0.3** |
| | baz=12 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.46** | **280** | ⇑*i*P | **Pb** | **19 01 49.3** | **+0.5** |
| | baz=80 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sg** | **19 02 09.3** | **+0.4** |
| | baz=80 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.58** | **240** | ⇓*e*P | **Pb** | **19 01 50.8** | **-0.1** |
| | baz=40 | | | | | | |
| TARG | | | | ⇓*i*S | **Sg** | **19 02 12.5** | **0.0** |
| | baz=40 | | | | | | |
| **BLB** | **Baldybastay** | **1.77** | **332** | *e*P | **Pb** | **19 01 54.5** | **+0.5** |
| | 4.1nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sg** | **19 02 18.1** | **-0.4** |
| | 9.9nm,0.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 5.0nm,0.8s | | | | | | |
| **KST** | **Kastek** | **2.74** | **282** | Pg | **Pb** | **19 02 11.4** | **+0.8** |
| | 3.7nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 19 02 46.7 | |
| | 5.0nm,0.8s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.75** | **356** | *e*P | **Pb** | **19 02 11.6** | **+0.9** |
| | 1.9nm,0.3s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **19 02 47.2** | **-2.9** |
| | 4.2nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.75** | **356** | Pg | **Pb** | **19 02 11.6** | **+0.9** |
| | 1.9nm,0.3s | | | | | | |
| KAPS | | | | Lg | Lg | 19 02 47.2 | |
| | 4.2nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **2.76** | **301** | *e*P | **Pb** | **19 02 11.3** | **+0.6** |
| | 1.6nm,0.6s | | | | | | |
| KUU | | | | *e*S | **Sb** | **19 02 46.6** | **+2.2** |
| | 5.3nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **2.76** | **301** | Pg | **Pb** | **19 02 11.4** | **+0.6** |
| | 1.6nm,0.6s | | | | | | |
| KUU | | | | Lg | Lg | 19 02 46.6 | |
| | 5.3nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **2.92** | **285** | *e*P | **Pb** | **19 02 14.6** | **+1.1** |
| | 1.5nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **19 02 52.3** | **-3.0** |
| | 5.2nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **2.92** | **285** | Pg | **Pb** | **19 02 14.6** | **+1.1** |
| | 1.5nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 19 02 52.3 | |
| | 5.2nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.99** | **279** | ⇓Pg | **Pb** | **19 02 14.9** | **0.0** |
| | 3.6nm,1.1s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 19 02 55.7 | |
| | 2.3nm,0.7s | | | | | | |

**DJA 02 19:13:08.8**±0.9,**9°S**±9″×**11°0E**±°,**h10**km,**M3.4**/6,**MLv3.4**/6,
**Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YOGI** | **Yogyakarta** | **0.99** | **19** | P | Pg | 19 13 27.5 | -0.4 |
| **UGM** | **Wanagama** | **1.00** | **33** | P | Pg | 19 13 28.1 | -0.1 |
| **PCJI** | **Pacitan** | **1.32** | **65** | P | Pn | 19 13 32.7 | -0.6 |
| **SMRI** | **Semarang** | **1.76** | **15** | P | Pn | 19 13 39.4 | 0.0 |
| **UWJI** | **Ujung Watu** | **2.52** | **23** | P | Pn | 19 13 49.6 | -0.2 |
| **CNJI** | **Cibinong** | **3.16** | **297** | P | Pn | 19 13 58.4 | -0.2 |
| **GMJI** | **Gumukmas** | **3.47** | **82** | P | Pn | 19 14 03.0 | +0.1 |

**IDC 02 19:13:26.2**±12.0,**27°54S**×**176°84E**,**h0**km,**mb3.5**/3,
**mb1 3.8**/4,**mb1mx3.4**/40,**mbtmp3.8**/4,**ML4.6**/1,**Error
ellipse: s-maj=225.3km s-min=35.7km az=63.0**,**North of
New Zealand**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **10.69** | **179** | P | Pn | 19 16 01.3 | +0.7 |
| | 4.6nm,0.3s,baz=342,slow=3.2,SNR=20 | | | | | | |
| URZ | | | | Sn | Sn | 19 18 00.2 | -0.8 |
| | 0.3nm,0.3s,baz=50,slow=4.0,SNR=3.2 | | | | | | |
| **STKA** | **Stephens Creek** | **30.83** | **253** | P | P | 19 19 42.8 | -1.2 |
| | 0.8nm,0.7s,baz=51,slow=3.0,SNR=0.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.77** | **266** | P | P | 19 20 53.2 | +0.5 |
| | 0.2nm,0.5s,baz=96,slow=6.7,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.48** | **272** | P | P | 19 20 58.8 | +0.1 |
| | 0.3nm,0.4s,baz=104,slow=8.5,SNR=5.9 | | | | | | |

*IDC **02** 19:13:47.7±2.2,9°.60S×110°.31E,h0km,mb3.5/5,
mb1 3.7/7,mb1mx3.4/42,mbtmp3.6/7,ML3.5/2,Error
ellipse: s-maj=101.0km s-min=18.1km az=46.0*

**ISC 02 19:13:52.1**±2.2,**9°.8S**±0°.5×**110°.3E**±0°.5,**h35**km,**n7**,σ1§**67**/8,
**mb3.3**/5,**South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **3.92** | **318** | Pn | **Pn** | **19 14 49.0** | **-1.1** |
| | 2.4nm,0.3s,baz=118,slow=23,SNR=5.4 | | | | | | |
| LEM | | | | Sn | **Sn** | **19 15 36.8** | **+1.8** |
| | 1.6nm,0.3s,baz=160,slow=21,SNR=1.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.05** | **121** | P | **Pn** | **19 17 46.5** | **-1.4** |
| | 0.2nm,0.3s,baz=299,slow=11,SNR=9.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.33** | **116** | P | **P** | **19 19 17.6** | **+1.8** |
| | 0.5nm,0.6s,baz=286,slow=11,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **26.46** | **124** | P | **P** | **19 19 27.9** | **+1.8** |
| | 0.6nm,0.8s,baz=308,slow=9.6,SNR=4.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.18** | **338** | P | **P** | **19 19 59.6** | **+0.3** |
| | 0.2nm,0.5s,baz=178,slow=8.6,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **57.44** | **357** | P | **P** | **19 23 37.5** | **+0.1** |
| | 0.3nm,0.5s,baz=177,slow=9.7,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.59** | **338** | P | **P** | **19 24 04.8** | **-1.2** |
| | 0.5nm,0.5s,baz=154,slow=6.8,SNR=17 | | | | | | |

*PRE **02** 19:14:29.8±0.6,18°.49S×13°.00E,h5km,ML4.2*
*IDC **02** 19:15:00.4±0.8,20°.03S×14°.51E,h0km,mb4.3/12,
mb1 4.3/18,mb1mx4.0/48,mbtmp4.3/18,ML3.9/5,MS3.2/5,
Ms1 3.1/5,ms1mx3.0/66,Error ellipse: s-maj=19.3km
s-min=13.9km az=15.0*
*NEIC **02** 19:15:01.7±2.2,20°.1S±0°.1×14°.57E±0°.10,h12km±4km,
mb4.7/15,Error ellipse: s-maj=15.9km s-min=11.9km
az=149.0*

**ISC 02 19:15:01.4**±0.6,**20°.02S**±0°.07×**14°.55E**±0°.05,**h10**km,**n69**,
σ2§**39**/83,**mb4.6**/20,**1C,Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSUM** | **Tsumeb** | **2.98** | **75** | Pn | **Pn** | **19 15 49.0** | **+0.2** |
| | 26nm,0.3s,baz=93,slow=6.2,SNR=165 | | | | | | |
| TSUM | | | | Pg | **Pb** | **19 15 56.5** | **+1.9** |
| | 40nm,0.3s,baz=238,slow=16,SNR=25 | | | | | | |
| TSUM | | | | LR | LR | 19 16 29.7 | |
| | comp=Z,99nm,21.7s,baz=184,slow=30 | | | | | | |
| TSUM | | | | Lg | Lg | 19 16 35.8 | |
| | 249nm,0.3s,baz=334,slow=12,SNR=16 | | | | | | |
| **TSUM** | **Tsumeb** | **2.98** | **75** | ⇑*i*P | **Pn** | **19 15 49.2** | **+0.5** |
| TSUM | | | | *e*S | **Sg** | **19 16 39.0** | **+2.0** |
| **TSUM** | **Tsumeb** | **2.98** | **75** | | **Pn** | **19 15 48.9** | **+0.2** |
| TSUM | | | | Pb | **Pb** | **19 15 52.6** | **-1.9** |
| TSUM | | | | Pg | **Pg** | **19 15 57.5** | **-0.9** |
| TSUM | | | | Sn | **Sn** | **19 16 24.9** | **+0.3** |
| TSUM | | | | LR | LR | 19 16 35.5 | |
| **UPI** | **Upington** | **10.31** | **145** | *e*P | **Pn** | **19 17 29.4** | **-0.1** |
| UPI | | | | *e*S | Sn | 19 19 40.3 | +15 |
| UPI | | | | IAML | | 19 20 37.0 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **KEIM** | **Keimoes** | **10.43** | **147** | *e*P | **Pn** | **19 17 29.9** | **-1.2** |
| KEIM | | | | *e*S | Sn | 19 19 42.0 | +14 |
| KEIM | | | | IAML | | 19 20 34.0 | |
| | comp=Z,32nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **11.35** | **118** | Pn | **Pn** | **19 17 43.0** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=292,slow=13,SNR=3.0 | | | | | | |
| LBTB | | | | Sn | **Sn** | **19 19 56.7** | **+5.9** |
| | comp=Z,1.3nm,0.3s,baz=344,slow=22,SNR=2.7 | | | | | | |
| LBTB | | | | Lg | Lg | 19 20 49.8 | |
| | comp=Z,5.9nm,0.3s,baz=203,slow=23,SNR=22 | | | | | | |
| LBTB | | | | LR | LR | 19 22 16.5 | |
| | comp=Z,173nm,18.7s,baz=296,slow=38 | | | | | | |
| **LBTB** | **Lobatse** | **11.35** | **118** | *e*P | **Pn** | **19 17 42.2** | **-1.6** |
| LBTB | | | | *e*S | Sn | 19 20 03.3 | +12 |
| LBTB | | | | IAML | | 19 21 10.5 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **11.35** | **118** | *i* P | Pn | 19 17 38.1 | -5.7 |
| LBTB | | | | *e*S | Sn | 19 19 24.1 | -27 |
| **LBTB** | **Lobatse** | **11.35** | **118** | *i* P | Pn | 19 17 38.1 | -5.7 |
| LBTB | | | | *e*S | Sn | 19 19 24.1 | -27 |
| **LBTB** | **Lobatse** | **11.35** | **118** | | **Pn** | **19 17 42.2** | **-1.6** |
| **SWZ** | **Schweizer** | **12.18** | **128** | *e*P | **Pn** | **19 17 55.1** | **0.0** |
| SWZ | | | | *e*S | Sn | 19 20 25.8 | +15 |
| SWZ | | | | IAML | | 19 21 29.3 | |
| | comp=Z,17nm,1.7s | | | | | | |
| **CVNA** | **Calvinia** | **12.34** | **159** | *e*P | **Pn** | **19 17 54.8** | **-2.4** |
| CVNA | | | | *e*S | Sn | 19 20 25.4 | +11 |
| CVNA | | | | IAML | | 19 21 30.2 | |
| | comp=Z,80nm,0.7s | | | | | | |
| **KSR** | **Koster** | **12.77** | **119** | *e*P | **Pn** | **19 18 02.3** | **-0.9** |
| KSR | | | | *e*S | Sn | 19 20 37.7 | +12 |
| KSR | | | | IAML | | 19 21 51.7 | |
| | comp=Z,177nm,0.5s | | | | | | |
| **BOSA** | **Boshof** | **12.97** | **133** | Pn | **Pn** | **19 18 04.3** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=305,slow=12,SNR=11 | | | | | | |
| BOSA | | | | Sn | **Sn** | **19 20 33.0** | **+2.6** |
| | comp=Z,0.3nm,0.3s,baz=64,slow=17,SNR=2.0 | | | | | | |
| BOSA | | | | Lg | Lg | 19 21 44.7 | |
| | comp=Z,2.5nm,0.3s,baz=226,slow=14,SNR=4.4 | | | | | | |
| BOSA | | | | LR | LR | 19 22 45.1 | |
| | comp=Z,66nm,21.1s,baz=310,slow=36 | | | | | | |
| **BOSA** | **Boshof** | **12.97** | **133** | *e*P | **Pn** | **19 18 04.0** | **-1.9** |
| BOSA | | | | *e*S | Sn | 19 20 43.7 | +13 |
| BOSA | | | | IAML | | 19 22 12.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **12.97** | **133** | | **Pn** | **19 18 03.6** | **-2.3** |
| **MATP** | **Matopo** | **13.10** | **94** | Pn | **Pn** | **19 18 08.0** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=273,slow=19,SNR=19 | | | | | | |
| MATP | | | | Sn | **Sn** | **19 20 42.2** | **+8.5** |
| | comp=Z,0.1nm,0.3s,baz=336,slow=21,SNR=2.2 | | | | | | |
| MATP | | | | Lg | Lg | 19 21 49.4 | |
| | comp=Z,0.9nm,0.3s,baz=352,slow=23,SNR=6.5 | | | | | | |
| **MATP** | **Matopo** | **13.10** | **94** | *i* P | **Pn** | **19 18 04.6** | **-3.2** |
| MATP | | | | *e*S | Sn | 19 20 11.0 | -23 |
| **MATP** | **Matopo** | **13.10** | **94** | *i* P | **Pn** | **19 18 04.6** | **-3.2** |
| MATP | | | | *e*S | Sn | 19 20 11.0 | -23 |
| **HRAO** | **HartRAO** | **13.43** | **118** | *e*P | **Pn** | **19 18 11.6** | **-0.6** |
| HRAO | | | | *e*S | Sn | 19 20 52.2 | +10 |
| HRAO | | | | IAML | | 19 22 09.7 | |
| | comp=Z,56nm,0.6s | | | | | | |
| **SUR** | **Sutherland** | **13.52** | **157** | Pn | **Pn** | **19 18 13.3** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=334,slow=14,SNR=8.3 | | | | | | |
| SUR | | | | Lg | Lg | 19 21 54.4 | |
| | comp=Z,3.8nm,0.3s,baz=55,slow=22,SNR=4.5 | | | | | | |
| **SUR** | **Sutherland** | **13.52** | **157** | | **Pn** | **19 18 13.8** | **+0.3** |
| SUR | | | | | LR | 19 21 54.6 | |
| **LSZ** | **Lusaka** | **13.83** | **72** | Pn | **Pn** | **19 18 16.3** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=249,slow=13,SNR=5.7 | | | | | | |
| LSZ | | | | Sn | **Sn** | **19 20 45.0** | **-6.5** |
| | comp=Z,0.7nm,0.3s,baz=337,slow=12,SNR=4.3 | | | | | | |
| LSZ | | | | Lg | Lg | 19 22 14.9 | |
| | comp=Z,0.7nm,0.3s,baz=328,slow=13,SNR=4.8 | | | | | | |
| LSZ | | | | LR | LR | 19 23 22.3 | |
| | comp=Z,80nm,18.2s,baz=294,slow=36 | | | | | | |
| **LSZ** | **Lusaka** | **13.83** | **72** | Pn | **Pn** | **19 18 15.5** | **-2.2** |
| **GRAN** | **Grantham** | **14.00** | **152** | *e*P | **Pn** | **19 18 20.3** | **+0.3** |
| GRAN | | | | *e*S | S | 19 21 06.3 | -11 |
| GRAN | | | | IAML | | 19 22 37.7 | |
| | comp=Z,38nm,0.6s | | | | | | |
| **MSNA** | **Messina** | **14.62** | **102** | *e*P | **Pn** | **19 18 25.6** | **-2.8** |
| MSNA | | | | *e*S | **Sn** | **19 21 16.1** | **+5.5** |
| MSNA | | | | IAML | | 19 23 05.0 | |
| | comp=Z,23nm,0.6s | | | | | | |
| **MSNA** | **Messina** | **14.62** | **102** | *i* P | **Pn** | **19 18 25.7** | **-2.7** |
| MSNA | | | | *i* S | **Sn** | **19 21 10.5** | **-0.1** |
| **MSNA** | **Messina** | **14.62** | **102** | *i* P | **Pn** | **19 18 25.7** | **-2.7** |
| MSNA | | | | *i* S | **Sn** | **19 21 10.5** | **-0.1** |
| **KRI** | **Karoi** | **14.64** | **80** | *i* P | **Pn** | **19 18 27.8** | **-1.1** |
| KRI | | | | *i* S | **Sn** | **19 21 14.1** | **+2.6** |
| **KRI** | **Karoi** | **14.64** | **80** | *i* P | **Pn** | **19 18 27.8** | **-1.1** |
| KRI | | | | *i* S | **Sn** | **19 21 14.1** | **+2.6** |
| **MOPA** | **Mopani** | **16.03** | **106** | *e*P | **Pn** | **19 18 45.0** | **-2.1** |
| MOPA | | | | *e*S | **Sn** | **19 21 51.9** | **+6.9** |
| MOPA | | | | IAML | | 19 23 47.1 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **MOPA** | **Mopani** | **16.03** | **106** | *i* P | **Pn** | **19 18 46.6** | **-0.5** |
| MOPA | | | | *i* S | **S** | **19 21 52.8** | **-6.0** |
| **MOPA** | **Mopani** | **16.03** | **106** | *i* P | **Pn** | **19 18 46.6** | **-0.5** |
| MOPA | | | | *i* S | **S** | **19 21 52.8** | **-6.0** |
| **CNG** | **Changalane** | **17.37** | **114** | *i* P | **Pn** | **19 19 02.4** | **-1.5** |
| CNG | | | | *i* S | **Sn** | **19 22 19.0** | **+1.5** |
| **CNG** | **Changalane** | **17.37** | **114** | *i* P | **Pn** | **19 19 02.4** | **-1.5** |
| CNG | | | | *i* S | **Sn** | **19 22 19.0** | **+1.5** |
| **MBAR** | **Mbarara** | **24.97** | **41** | P | **P** | **19 20 27.4** | **+1.8** |
| | comp=Z,6.1nm,0.2s,baz=193,slow=12,SNR=11 | | | | | | |
| MBAR | | | | Lg | Lg | 19 28 05.6 | |
| | comp=Z,2.2nm,0.2s,baz=50,slow=21,SNR=5.0 | | | | | | |
| **MBAR** | **Mbarara** | **24.97** | **41** | P | **P** | **19 20 25.6** | **0.0** |
| MBAR | | | | IAmb | IAmb | 19 20 33.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **OPO** | **Ambohidratompo** | **30.81** | **93** | LR | LR | 19 33 28.3 | |
| | comp=Z,128nm,18.7s,baz=104,slow=36 | | | | | | |
| **KIC** | **Kosan Boka** | **32.37** | **322** | *e*P | **P** | **19 21 31.1** | **-0.2** |
| | comp=Z,11nm,0.5s | | | | | | |
| **LIC** | **Lamto** | **32.42** | **322** | *e*P | **P** | **19 21 34.6** | **+2.8** |
| | comp=Z,48nm,1.3s | | | | | | |
| **DBIC** | **Dimbokro** | **32.68** | **322** | P | **P** | **19 21 32.7** | **-1.3** |
| | comp=Z,7nm,0.7s,baz=152,slow=9.9,SNR=3.5 | | | | | | |
| **DBIC** | **Dimbokro** | **32.68** | **322** | IAmb | IAmb | 19 21 53.3 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **TIC** | **Toumodi** | **32.76** | **322** | *e*P | **P** | **19 21 34.3** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **35.31** | **338** | P | **P** | **19 21 57.2** | **+0.4** |
| | comp=Z,7.3nm,0.7s,baz=160,slow=8.7,SNR=42 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.31** | **338** | P | **P** | **19 21 57.2** | **+0.4** |
| **KOWA** | **Kowa** | **38.86** | **331** | P | **P** | **19 22 27.5** | **+0.5** |
| | comp=Z,5.1nm,0.6s,baz=143,slow=8.5,SNR=18 | | | | | | |
| **KOWA** | **Kowa** | **38.86** | **331** | P | **P** | **19 22 27.2** | **+0.1** |
| **SNAA** | **Sanae** | **52.64** | **187** | P | **P** | **19 24 17.3** | **+2.0** |
| | comp=Z,2.7nm,0.8s,baz=127,slow=10,SNR=6.1 | | | | | | |
| **SNAA** | **Sanae** | **52.64** | **187** | P | **P** | **19 24 15.5** | **+0.2** |
| SNAA | | | | IAmb | IAmb | 19 24 27.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KEST** | **Kesra** | **55.67** | **355** | P | P | 19 24 43.0 | +5.1 |
| | comp=Z,3.4nm,0.8s,baz=184,slow=5.3,SNR=5.2 | | | | | | |
| **KEST** | **Kesra** | **55.67** | **355** | P | **P** | **19 24 38.0** | **+0.1** |
| KEST | | | | IAmb | IAmb | 19 24 43.9 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **TIP** | **Timpagrande** | **58.93** | **2** | P | **P** | **19 24 59.9** | **-0.9** |
| TIP | | | | IAmb | IAmb | 19 25 06.9 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **CART** | **Cartagena** | **59.14** | **346** | P | **P** | **19 25 01.9** | **-0.4** |
| **AGG** | **Agios Georgios** | **59.19** | **7** | P | **P** | **19 25 01.9** | **-0.6** |
| AGG | | | | IAmb | IAmb | 19 25 07.2 | |
| | comp=Z,8.3nm,1.3s | | | | | | |
| **PAB** | **San Pablo** | **61.84** | **343** | P | **P** | **19 25 20.2** | **-0.5** |
| **ESDC** | **Sonseca Array** | **61.85** | **344** | P | **P** | **19 25 22.1** | **+1.3** |
| | comp=Z,1.1nm,0.9s,baz=164,slow=5.9,SNR=6.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **61.85** | **344** | P | **P** | **19 25 21.6** | **+0.8** |
| **BELA** | **Belgrano 2** | **62.44** | **190** | P | **P** | **19 25 23.3** | **-1.0** |
| BELA | | | | IAmb | IAmb | 19 25 59.1 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **NRCA** | **Norcia** | **62.56** | **359** | P | **P** | **19 25 24.9** | **-0.6** |
| NRCA | | | | IAmb | IAmb | 19 25 30.6 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **TOKA** | **Tokat** | **63.42** | **19** | P | **P** | **19 25 31.3** | **+0.1** |
| **SENIN** | **Lac Senin/Sane** | **66.40** | **355** | P | **P** | **19 25 49.7** | **-1.0** |
| SENIN | | | | IAmb | IAmb | 19 25 52.8 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **66.62** | **357** | P | **P** | **19 25 52.7** | **+0.6** |
| | comp=Z,3.9nm,0.5s,baz=72,slow=22,SNR=8.3 | | | | | | |
| **GERES** | **GERESS Array B** | **68.56** | **359** | P | **P** | **19 26 04.3** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=200,slow=11,SNR=2.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.56** | **350** | P | **P** | **19 26 51.0** | **-0.5** |
| | comp=Z,3.0nm,1.0s,baz=191,slow=28,SNR=4.2 | | | | | | |
| **HFS** | **Hagfors** | **79.87** | **360** | P | **P** | **19 27 11.8** | **+2.0** |
| | comp=Z,4.4nm,0.9s,baz=207,slow=9.3,SNR=2.4 | | | | | | |
| **FINES** | **FINESS Array B** | **81.71** | **6** | P | **P** | **19 27 21.0** | **+1.4** |
| | comp=Z,5.4nm,1.1s,baz=208,slow=3.2,SNR=4.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **87.27** | **30** | P | **P** | **19 27 49.2** | **+1.2** |
| | comp=Z,0.3nm,0.6s,baz=265,slow=34,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **125.25** | **334** | PKP | **PKPdf** | **19 34 01.3** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=62,slow=1.7,SNR=4.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **128.21** | **309** | PKP | **PKPdf** | **19 34 08.0** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=132,slow=2.2,SNR=4.4 | | | | | | |

*SFS **02** 19:26:32.0,35°.50N×3°.79W,ML2.2,ALBORAN SUR*
*INMG **02** 19:26:32.2±1.3,35°.50N×3°.80W,h0km,ML2.3,Error
ellipse: s-maj=5.1km s-min=3.3km az=6.0*
*CNRM **02** 19:26:32.8,35°.49N×3°.74W,h19km,ml2.6*

**ISC 02 19:26:31.7**±1.3,**35°.54N**±0°.03×**3°.68W**±0°.03,**h15**km±9km,
**n21**,σ1§**20**/40,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.39** | **213** | P | **Pg** | **19 26 39.4** | **-0.2** |
| PALE | | | | S | **Sg** | **19 26 44.8** | **-0.1** |
| **GOG** | **Mont Gurugu** | **0.64** | **119** | P | **Pb** | **19 26 44.8** | **+0.1** |
| GOG | | | | S | **Sn** | **19 26 55.7** | **-0.8** |
| **CHAS** | **Isla Isabel II** | **1.08** | **109** | P | **Pb** | **19 26 51.7** | **-0.5** |
| CHAS | | | | S | **Sb** | **19 27 06.0** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **334** | P | **Pn** | **19 26 56.1** | **-0.1** |
| EMAL | | | | S | **Sn** | **19 27 12.8** | **-1.2** |
| **SMIR** | **Smir Dam** | **1.39** | **276** | P | **Pn** | **19 26 56.0** | **-0.6** |
| SMIR | | | | S | **Sn** | **19 27 13.4** | **-1.4** |
| **CHEFC** | **Chefchaouen** | **1.43** | **253** | P | **Pn** | **19 26 57.1** | **-0.1** |
| CHEFC | | | | S | **Sb** | **19 27 16.7** | **+0.6** |
| **JBK** | **JBK** | **1.51** | **142** | P | **Pn** | **19 26 59.3** | **+0.8** |
| JBK | | | | S | **Sb** | **19 27 19.2** | **+0.5** |
| **LCRM** | **LCR** | **2.09** | **208** | P | **Pb** | **19 27 09.1** | **-0.4** |
| LCRM | | | | S | **Sb** | **19 27 35.5** | **+0.2** |
| **IFR** | **Ifrane** | **2.35** | **211** | P | **Pn** | **19 27 10.7** | **+0.7** |
| IFR | | | | S | **Sn** | **19 27 36.9** | **-1.7** |
| **MD31** | **MD31** | **2.81** | **199** | P | **Pn** | **19 27 16.7** | **+0.4** |
| MD31 | | | | S | **Sn** | **19 27 51.4** | **+1.4** |
| **MDT** | **MideIt** | **2.83** | **196** | P | **Pn** | **19 27 17.7** | **+1.3** |
| MDT | | | | S | **Sn** | **19 27 51.8** | **+1.4** |
| **TDRA** | **Tendrara** | **2.84** | **151** | P | **Pn** | **19 27 17.7** | **+0.9** |
| TDRA | | | | S | **Sn** | **19 27 47.8** | **-3.1** |
| **ZHG** | **ZHG** | **3.22** | **230** | P | **Pn** | **19 27 21.7** | **-0.1** |
| ZHG | | | | S | **Sn** | **19 27 59.7** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | *e*Pn | **Pn** | **19 27 29.7** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **19 28 11.2** | **-1.7** |
| PVAQ | | | | A | A | 19 28 15.9 | |
| | 4.6nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **19 27 30.0** | **+1.0** |
| PVAQ | | | | S | **Sn** | **19 28 15.3** | **+2.4** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **298** | *e*Pn | **Pn** | **19 27 30.1** | **-0.1** |
| PBDV | | | | *e*Sn | **Sn** | **19 28 13.7** | **-1.2** |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | **Pn** | **19 27 37.5** | **+0.7** |
| MESJ | | | | *e*Sn | **Sn** | **19 28 25.7** | **-1.1** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **305** | *e*Pn | **Pn** | **19 27 41.8** | **+0.2** |
| PNCL | | | | *e*Sn | **Sn** | **19 28 35.9** | **+0.5** |
| PNCL | | | | A | A | 19 28 44.9 | |
| | 5.4nm,0.9s | | | | | | |
| **PMRV** | **Marv??o** | **4.88** | **324** | *e*Pn | **Pn** | **19 27 46.5** | **+1.9** |
| PMRV | | | | *e*Sn | **Sn** | **19 28 39.6** | **-1.2** |
| **PMTG** | **Montargil** | **5.05** | **316** | *e*Sn | **Sn** | **19 28 44.7** | **-0.4** |
| **MVO** | **Moncorvo** | **6.20** | **336** | *e*Pn | **Pn** | **19 28 05.5** | **+2.7** |

*SJA **02** 19:29:02.3±0.7,18°.73S×67°.26W,h268km±8km,ML4.5,
MW4.2*
*IDC **02** 19:29:02.4±0.7,18°.80S×66°.97W,h229km±8km,mb3.6/6,
mb1 3.7/10,mb1mx3.4/48,mbtmp4.2/10,Error ellipse:
s-maj=15.5km s-min=9.6km az=102.0*
*VAO **02** 19:29:03.9±0.4,18°.73S×67°.41W,h265km±4km,mb3.8*
*NEIC **02** 19:29:03.8±2.2,18°.79S±0°.05×67°.34W±0°.10,
h256km±11km,mb4.4/9,Error ellipse: s-maj=13.9km
s-min=7.4km az=84.0*
*GUC **02** 19:29:04.0±0.7,18°.83S×67°.57W,h285km±9km,ML4.3*
*SCB **02** 19:29:06.8±1.4,18°.91S×67°.33W,h217km±21km,ML4.1/5,
Error ellipse: s-maj=8.6km s-min=4.7km az=1.0*

**ISC 02 19:29:03.6**±0.6,**18°.82S**±0°.04×**67°.33W**±0°.05,**h255**km±7km,
**n126**,σ1§**47**/173,**mb3.9**/6,**5D,Central Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **1.95** | **244** | *e*P | **Pn** | **19 29 47.6** | **+0.9** |
| GO01 | | | | *e*S | **S** | **19 30 22.3** | **+1.8** |
| GO01 | | | | IAML | | 19 30 34.2 | |
| | comp=N,1μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.95** | **244** | | **Pn** | **19 29 46.5** | **-0.2** |
| GO01 | | | | Sn | **S** | **19 30 21.5** | **+1.0** |
| **BBOE** | **La Paz, Chanca** | **2.09** | **343** | P | **Pn** | **19 29 49.0** | **+1.0** |
| **PB16** | **IPOC Station P** | **2.12** | **283** | ⇓*i*P | **Pn** | **19 29 49.5** | **+1.3** |
| PB16 | | | | *e*S | **S** | **19 30 24.6** | **+1.2** |
| **PB16** | **IPOC Station P** | **2.12** | **283** | | **Pn** | **19 29 49.5** | **+1.3** |
| PB16 | | | | | **S** | **19 30 24.9** | **+1.6** |
| **PB16** | **IPOC Station P** | **2.12** | **283** | P | **Pn** | **19 29 49.5** | **+1.3** |
| **PB08** | **IPOC Station P** | **2.16** | **232** | ⇓*i*P | **Pn** | **19 29 49.5** | **+1.1** |
| PB08 | | | | *e*S | **S** | **19 30 24.3** | **+0.5** |
| PB08 | | | | IAML | | 19 30 33.5 | |
| | comp=E,482nm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **2.16** | **232** | | **Pn** | **19 29 49.3** | **+0.9** |
| PB08 | | | | Sn | **S** | **19 30 24.5** | **+0.7** |
| **PB08** | **IPOC Station P** | **2.16** | **232** | P | **Pn** | **19 29 49.7** | **+1.3** |
| **PB08** | **IPOC Station P** | **2.16** | **232** | *e*P | **Pn** | **19 29 49.1** | **+0.7** |
| PB08 | | | | *e*S | **S** | **19 30 24.8** | **+1.0** |
| PB08 | | | | IAML | | 19 30 33.7 | |
| | comp=Z,281nm,0.2s | | | | | | |
| **MNMC** | **Minye Minye** | **2.17** | **261** | ⇓*i*P | **Pn** | **19 29 49.2** | **+0.9** |
| MNMC | | | | *e*S | **S** | **19 30 22.9** | **-0.7** |
| MNMC | | | | IAML | | 19 30 30.7 | |
| | comp=E,664nm,0.3s | | | | | | |
| **MNMC** | **Minye Minye** | **2.17** | **261** | | **Pn** | **19 29 49.3** | **+0.9** |
| MNMC | | | | Sn | **S** | **19 30 23.7** | **+0.1** |
| **MNMC** | **Minye Minye** | **2.17** | **261** | P | **Pn** | **19 29 49.3** | **+1.0** |
| **MNMCX** | **Minye Minye** | **2.17** | **261** | *e*P | **Pn** | **19 29 48.8** | **+0.5** |
| MNMCX | | | | *e*S | **S** | **19 30 25.1** | **+1.5** |
| MNMCX | | | | IAML | | 19 30 31.5 | |
| | comp=Z,336nm,0.2s | | | | | | |
| **PB11** | **IPOC Station P** | **2.39** | **247** | ⇓*i*P | **Pn** | **19 29 50.7** | **+0.4** |
| PB11 | | | | *e*S | **S** | **19 30 26.2** | **-0.9** |
| PB11 | | | | IAML | | 19 30 27.3 | |
| | comp=E,584nm,0.3s | | | | | | |
| **PB11** | **IPOC Station P** | **2.39** | **247** | | **Pn** | **19 29 50.3** | **0.0** |
| PB11 | | | | Sn | **S** | **19 30 26.4** | **-0.7** |
| **PB11** | **IPOC Station P** | **2.39** | **247** | P | **Pn** | **19 29 50.9** | **+0.6** |
| **PB11** | **IPOC Station P** | **2.39** | **247** | *e*P | **Pn** | **19 29 50.9** | **+0.6** |
| PB11 |

comp=Z,408nm,0.4s
**PB03 IPOC Station P 3.93 215** *eP* **Pn 19 30 08.0 +1.0**
PB03 *eS* **S 19 30 54.8 -2.6**
**PB03 IPOC Station P 3.93 215 Pn 19 30 07.8 +0.8**
PB03 Sn **S 19 30 54.0 -3.4**
**PB03 IPOC Station P 3.93 215** P **Pn 19 30 08.3 +1.3**
**PB03 IPOC Station P 3.93 215** *eP* **Pn 19 30 08.3 +1.3**
PB03 *eS* **S 19 30 55.8 -1.6**
PB03 IAML 19 30 58.5
comp=Z,557nm,0.3s
**LVC Limon Verde 4.05 201** P **Pn 19 30 09.8 +1.2**
comp=Z,12nm,0.3s,baz=51,slow=8.7,SNR=105
LVC S **S 19 30 58.6 -1.6**
comp=Z,15nm,0.3s,baz=282,slow=21,SNR=25
**LVC Limon Verde 4.05 201** *eP* **Pn 19 30 09.4 +0.8**
**LVC Limon Verde 4.05 201** *eP* **Pn 19 30 09.7 +1.2**
**LVC Limon Verde 4.05 201 Pn 19 30 09.4 +0.8**
**LVC Limon Verde 4.05 201** P **Pn 19 30 09.8 +1.2**
**PB04 IPOC Station P 4.38 217** *eP* **Pn 19 30 13.3 +1.0**
**PB04 IPOC Station P 4.38 217 Pn 19 30 13.0 +0.7**
**PB04 IPOC Station P 4.38 217** P **Pn 19 30 13.5 +1.3**
PB04 S **S 19 31 03.4 -3.5**
PB04 IAML 19 31 08.1
comp=Z,306nm,0.2s
**PB04 IPOC Station P 4.38 217** *eP* **Pn 19 30 13.5 +1.3**
PB04 *eP* **Pn 19 30 13.6 +1.3**
PB04 *eS* **S 19 31 05.7 -1.2**
PB04 IAML 19 31 08.1
comp=Z,578nm,0.2s
**PB06 IPOC Station P 4.40 208** *eP* **Pn 19 30 13.2 +0.7**
**PB06 IPOC Station P 4.40 208 Pn 19 30 13.2 +0.7**
**PB06 IPOC Station P 4.40 208** P **Pn 19 30 13.6 +1.1**
PB06 S **S 19 31 03.4 -3.9**
PB06 IAML 19 31 10.2
comp=Z,248nm,0.2s
**PB06 IPOC Station P 4.40 208** *eP* **Pn 19 30 13.6 +1.1**
PB06 *eS* **S 19 31 06.4 -0.9**
PB06 IAML 19 31 13.0
comp=Z,390nm,0.2s
**PB15 IPOC Station P 4.80 204 Pn 19 30 17.7 +0.4**
**PB15 IPOC Station P 4.80 204** P **Pn 19 30 18.7 +1.3**
**PB15 IPOC Station P 4.80 204** *eP* **Pn 19 30 18.6 +1.3**
PB15 *eS* **S 19 31 14.9 -1.2**
PB15 IAML 19 31 21.0
comp=Z,2µm,0.1s
**PB10 IPOC Station P 5.55 212** Pn **Pn 19 30 26.5 +0.2**
**PB14 IPOC Station P 6.44 206** Pn **Pn 19 30 39.0 +1.3**
**SIV San Ignacio 6.60 66** P **Pn 19 30 35.7 -3.8**
comp=Z,0.8nm,0.3s,baz=254,slow=11,SNR=13
SIV S S 19 31 47.0 -9.3
comp=Z,0.2nm,0.3s,baz=251,slow=12,SNR=1.5
**AC02 Maricunga 8.15 191** Pn **Pn 19 30 59.7 +0.5**
**PTLB Pontes e Lacer 8.52 68** *eP* **Pn 19 31 01.2 -2.3**
**PTLB Pontes e Lacer 8.52 68 Pn 19 31 01.1 -2.5**
**VILB Vilhena 9.01 51** Pn **Pn 19 31 12.3 +2.6**
**ETMB Extrema 9.02 7** *eP* **Pn 19 31 08.4 -1.5**
**ETMB Extrema 9.02 7 Pn 19 31 08.4 -1.5**
**GO03 Copiap 9.13 196 Pn 19 31 10.2 -1.0**
**NNA Nana 11.41 305** P **Pn 19 31 41.7 +1.7**
comp=Z,3.2nm,0.3s,baz=148,slow=14,SNR=2.8
NNA S **S 19 33 43.3 -4.3**
comp=Z,2.8nm,0.3s,baz=181,slow=21,SNR=4.0
**GO04 Tololo Observa 11.73 195** Pn **Pn 19 31 44.5 +0.5**
**CO03 El Pedregal 12.35 194 Pn 19 31 50.6 -0.8**
**CO06 Fray Jorge 12.43 197 Pn 19 31 52.3 -0.1**
**PDRB Porto dos Gac 12.49 56** *eP* **P 19 31 55.4 -0.1**
**CO02 Combarbal 12.77 194 Pn 19 31 56.6 -0.1**
**VA03 San Esteban 14.18 191** P **Pn 19 32 13.5 -0.3**
**ROC1 El Roble 14.48 192 Pn 19 32 16.5 -1.0**
**ITQB Itaqui 14.55 140** *eP* **Pn 19 32 18.5 +0.3**
**PEL Peldehue 14.58 191 P 19 32 18.2 -0.3**
**TBTG Tabatinga, AM 14.76 350** P **P 19 32 19.4 -1.2**
**MT02 Curacav 14.78 193** P **Pn 19 32 22.0 +1.1**
**MT09 Talagante 15.25 192 Pn 19 32 28.0 +1.3**
MT09 IAmb IAmb 19 32 44.4
comp=Z,24nm,1.6s
**PTGB Pitanga 15.34 115** *eP* **Pn 19 32 28.6 +0.8**
**MT01 Popeta 15.38 192** P **Pn 19 32 28.3 +0.1**
MT01 IAmb IAmb 19 32 41.4
comp=Z,35nm,1.6s
**BO01 Tunca 15.86 191** P **Pn 19 32 33.4 -0.4**
BO01 IAmb IAmb 19 32 38.2
comp=Z,13nm,0.7s
**ITRB Iturama 16.05 96** *eP* **Pn 19 32 36.1 -0.1**
**BO02 Sierra Bellavi 16.20 190** P **P 19 32 36.4 0.0**
**ITAB Concordia 16.29 124** P **P 19 32 37.1 -0.3**
**NPGB Novo Progresso 16.51 46** *eP* **P 19 32 39.9 0.0**
**SNDB Serra Nova Dou 16.89 69** *eP* **P 19 32 43.8 -0.2**
**BB19B Bebedouro 17.82 100** *eP* **P 19 32 54.9 +0.8**
**PLTB Pedras Altas 17.87 139** *eP* **P 19 32 55.1 +0.6**
**PLTB Pedras Altas 17.87 139** P **P 19 32 53.9 -0.6**
**IPMB Ipameri, GO 18.16 90** *eP* **P 19 32 58.8 +0.9**
**ITTB Itaituba 18.30 40** *eP* **P 19 32 58.8 -0.5**
**BDFB Brasília 18.72 83** P **P 19 33 04.7 +0.7**
comp=Z,1.4nm,0.3s,baz=265,slow=8.2,SNR=8.0
**BDFB Brasilia 18.72 83** P **P 19 33 04.9 +0.9**
BDFB IAmb IAmb 19 33 24.7
comp=Z,12nm,1.3s
**PTGA Pitinga 19.38 23** P **P 19 33 12.3 +1.4**
comp=Z,0.2nm,0.3s,baz=324,slow=22,SNR=1.5
**PEXB Peixe 19.51 73** *eP* **P 19 33 12.8 +0.5**
**PRPB Parauapebas 21.20 56** *eP* **P 19 33 29.1 -0.9**
**SMTB Santa Maria do 21.55 65** *eP* **P 19 33 33.7 +0.4**
**PLCA Paso Flores 22.01 187** P **P 19 33 40.6 +3.3**
comp=Z,0.7nm,0.6s,baz=14,slow=12,SNR=3.5
**PLCA Paso Flores 22.01 187** P **P 19 33 39.7 +2.4**
**JANB Januaria 22.33 84** *eP* **P 19 33 40.4 -0.1**
**DIAM Diamantina, MG 22.43 92** *eP* **P 19 33 41.4 -0.1**
**SDBA SAO DESIDERIO 22.51 77** *eP* **P 19 33 42.0 -0.1**
**GDU01 Guandu, BA 27.11 83** *eP* **P 19 34 22.9 -0.6**
**DBIC Dimbokro 66.56 74** P **P 19 39 25.6 -1.4**
comp=Z,2.2nm,0.8s,baz=279,slow=6.7,SNR=3.8
**DBIC Dimbokro 66.56 74** IAmb IAmb 19 39 31.6
comp=Z,9.7nm,1.3s
**KOWA Kowa 70.59 67** P **P 19 39 50.6 -1.2**
comp=Z,1.0nm,0.3s,baz=231,slow=6.9,SNR=3.8
**TORD Torodi Ar. Bea 75.06 70** P **P 19 40 17.1 -0.9**
comp=Z,2.8nm,0.5s,baz=253,slow=5.3,SNR=31
**ESDC Sonseca Array 82.89 44** P **P 19 41 00.4 +0.4**
comp=Z,1.5nm,0.9s,baz=254,slow=5.0,SNR=8.3
**YKA Yellowknife Ar 89.18 340** P **P 19 41 31.8 +1.9**
comp=Z,0.8nm,0.6s,baz=129,slow=4.5,SNR=14
**ASAR Alice Springs 132.96 207** PKP **PKiKP 19 47 51.8 +1.2**
comp=Z,0.4nm,0.6s,baz=48,slow=1.7,SNR=8.2
**WRA Warramunga Arr 136.00 210** PKP **PKiKP 19 47 58.1 +1.2**
comp=Z,0.3nm,0.5s,baz=163,slow=1.9,SNR=9.2
**SONM Songino Array 150.61 9** PKPbc **PKiKP 19 48 27.6 +1.5**
comp=Z,1.2nm,0.6s,baz=322,slow=1.9,SNR=12

*IDC **02** 19:32:24.0±0.8, 8°3S±0.1°×158°3E±0.1°, h50km, n12, σ1°39/16, mb4.0/6, Bougainville-Solomon Islands region*

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.99** | **125** | P | | **Pn** | **19 32 56.0** | **+0.8** |
| | 46nm,0.3s,baz=240,slow=8.0,SNR=36 | | | | | | | |
| HNR | | | | S | | **Sn** | **19 33 19.9** | **+1.1** |
| | 132nm,0.3s,baz=203,slow=22,SNR=15 | | | | | | | |
| **HNR** | **Honiara** | **1.99** | **125** | | | **Pn** | **19 32 54.4** | **-0.7** |
| HNR | | | | Sn | | **Sn** | **19 33 17.5** | **-1.4** |
| **RABL** | **Rabaul** | **7.33** | **303** | Pn | | **Pn** | **19 34 08.2** | **-0.3** |
| **PATS** | **Pohnpei** | **15.02** | **0** | | | **Pn** | **19 35 53.0** | **-0.2** |
| **WB0** | **Warramunga Arr** | **25.81** | **241** | P | | **P** | **19 37 50.8** | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 19 38 15.0 | |
| | comp=Z,14nm,1.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **25.91** | **241** | P | | **P** | **19 37 50.2** | **-1.5** |
| **WB2** | **Warramunga Arr** | **25.92** | **241** | P | | **P** | **19 37 52.0** | **+0.3** |
| WB2 | | | | IAmb | | IAmb | 19 38 12.4 | |
| | comp=Z,21nm,1.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.93** | **241** | P | | **P** | **19 37 52.4** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=65,slow=9.2,SNR=2.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.93** | **234** | P | | **P** | **19 38 09.9** | **+0.2** |
| | comp=Z,0.4nm,0.8s,baz=60,slow=10,SNR=4.7 | | | | | | | |
| **SONM** | **Songino Array** | **72.20** | **326** | P | | **P** | **19 43 42.7** | **-1.1** |
| | comp=Z,0.4nm,0.7s,baz=140,slow=5.4,SNR=3.7 | | | | | | | |
| SONM | | | | pP | | **sP** | **19 44 06.1** | **+3.1** |
| | comp=Z,0.7nm,0.7s,baz=131,slow=5.7,SNR=4.5 | | | | | | | |
| **SONM** | **Songino Array** | **72.20** | **326** | P | | **P** | **19 43 43.6** | **-0.3** |
| SONM | | | | IAmb | | IAmb | 19 44 05.6 | |
| | comp=Z,2.2nm,1.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **86.54** | **318** | P | | **P** | **19 45 00.1** | **-1.7** |
| | comp=Z,0.8nm,0.6s,baz=94,slow=6.5,SNR=19 | | | | | | | |
| MKAR | | | | pP | | **sP** | **19 45 23.2** | **+2.0** |
| | comp=Z,0.5nm,0.6s,baz=101,slow=6.2,SNR=5.1 | | | | | | | |

*NEIC **02** 19:36:19.6±2.5, 16°.86N±0°.07×86°.23W±0°.06, h19km±4km, mb4.8/303, Mwr5.0/15, Error ellipse: s-maj=9.8km s-min=8.6km az=185.0*

*NEIC **02** 19:36:19, 16°.86N×86°.23W, h14km, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr=0.11; Mθθ=2.59; Mϕϕ 2.69; Mrθ=0.12; Mϕϕ 2.07; Mϕr 1.06; Fault plane solution: M0 3.52000×10¹⁶ NP1: ϕs 333.57000°, δ 85.75000°, λ 163.68000°. NP2: ϕs 64.81000°, δ 73.7300°, λ 4.43000°. Principal axes: T 3.6589, Plg 15.0000°, Azm 288.0000°; N -0.2891, Plg 73.0000°, Azm 139.0000°; P -3.3698, Plg 8.0000°, Azm 20.0000°;*

*IDC **02** 19:36:22.5±0.6, 16°.72N×86°.13W, h0km, mb4.5/26, mb1 4.7/30, mb1mx4.5/53, mbtmp4.5/30, ML3.4/3, MS4.2/43, Ms1 4.2/43, ms1mx4.1/71 Error ellipse: s-maj=21.4km s-min=11.6km az=48.0*

*INET **02** 19:36:24.4±1.6, 16°.82N×86°.27W, h15km, ML4.6*

*GCMT **02** 19:36:28.6±0.2, 16°.86N±0°.01×86°.34W±0°.01, h22km±1km, MW5.1/125, Moment Tensor Solution. s66,c84; s125,c182; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.61±.16; Mθθ=3.07±.14; Mϕϕ 3.68±.16; Mrθ=0.92±.22; Mϕϕ 4.33±.12; Mϕr 1.82±.26; Best double couple: M0 5.87400×10¹⁶ NP1: ϕs 70.00000°, δ 69.00000°, λ -5.00000°. NP2: ϕs 162.00000°, δ 85.00000°, λ -159.00000°. Principal axes: T 6.0320, Plg 11.0000°, Azm 294.0000°; N -0.3180, Plg 69.0000°, Azm 175.0000°; P -5.7160, Plg 18.0000°, Azm 28.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 02 19:36:19.1±0.2, 16°.85N±0°.02×86°.22W±0°.03, h10km, n548, σ2s 46/434, mb4.8/130, MS4.3/37, North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TGUH** | **Tegucigalpa,Un** | **2.96** | **200** | Pn | | **Pn** | **19 37 07.5** | **+1.3** |
| **PETF** | **Flores** | **3.49** | **272** | Pn | | **Pn** | **19 37 15.5** | **+2.0** |
| **PETF** | **Flores** | **3.49** | **272** | *eP* | | **Pn** | **19 37 16.5** | **+3.0** |
| **ESQI** | **Esquipulas** | **3.77** | **233** | Pn | | **Pn** | **19 37 17.9** | **+0.5** |
| **LCND** | **La Caada** | **3.88** | **205** | *eP* | | **Pb** | **19 37 28.6** | **+1.0** |
| **LCND** | **La Caada** | **3.88** | **205** | *eP* | | **Pb** | **19 37 28.6** | **+1.0** |
| **MTO3** | **Montecristo** | **3.89** | **232** | Pn | | **Pn** | **19 37 20.1** | **+0.9** |
| **MTO3** | **Montecristo** | **3.89** | **232** | *eP* | | **Pn** | **19 37 21.3** | **+2.2** |
| **MATN** | **Matagalpa** | **3.91** | **176** | Pn | | **Pn** | **19 37 20.7** | **+1.3** |
| **MATN** | **Matagalpa** | **3.91** | **176** | *eP* | | **Pn** | **19 37 20.8** | **+1.4** |
| **PACA** | **Pacayal** | **3.93** | **211** | *eP* | | **Pn** | **19 37 21.7** | **+2.1** |
| **SCLA** | **Alcaldia de Sa** | **3.96** | **218** | *eP* | | **Pb** | **19 37 30.9** | **+1.9** |
| **SCLA** | **Alcaldia de Sa** | **3.96** | **218** | *eP* | | **Pb** | **19 37 30.9** | **+1.9** |
| **COEB** | **Comit de Eme** | **4.01** | **214** | *eP* | | **Pn** | **19 37 23.3** | **+2.5** |
| **COEB** | **Comit de Eme** | **4.01** | **214** | *eP* | | **Pn** | **19 37 23.1** | **+2.4** |
| **COEB** | **Comit de Eme** | **4.01** | **214** | *eP* | | **Pn** | **19 37 23.3** | **+2.5** |
| **PAVA** | **Las Pavas** | **4.08** | **220** | *eP* | | **Pn** | **19 37 24.6** | **+3.0** |
| **PAVA** | **Las Pavas** | **4.08** | **220** | *eP* | | **Pn** | **19 37 24.9** | **+3.3** |
| **PAVA** | **Las Pavas** | **4.08** | **220** | *eP* | | **Pn** | **19 37 24.6** | **+3.0** |
| **TACO** | **Tacachico** | **4.16** | **227** | *eP* | | **Pn** | **19 37 25.5** | **+2.7** |
| TACO | | | | IAML | | | 19 38 36.0 | |
| | comp=Z,289nm,0.5s | | | | | | | |
| **TACO** | **Tacachico** | **4.16** | **227** | *eP* | | **Pn** | **19 37 25.5** | **+2.7** |
| TACO | | | | IAML | | | 19 38 36.0 | |
| | comp=Z,289nm,0.5s | | | | | | | |
| **CRIN** | **San Cristobal** | **4.21** | **191** | Pn | | **Pn** | **19 37 25.2** | **+1.9** |
| **CRIN** | **San Cristobal** | **4.21** | **191** | *eP* | | **Pn** | **19 37 26.0** | **+2.6** |
| **SNET** | **Serv Nac Est T** | **4.28** | **223** | Pn | | **Pn** | **19 37 25.7** | **+1.3** |
| **CNGN** | **Cerro Negro** | **4.35** | **186** | Pn | | **Pn** | **19 37 26.2** | **+0.9** |
| **CNGN** | **Cerro Negro** | **4.35** | **186** | *eP* | | **Pn** | **19 37 28.5** | **+3.1** |
| **BOAB** | **BOACO BROADBAN** | **4.41** | **173** | Pn | | **Pn** | **19 37 27.8** | **+1.6** |
| **MOMN** | **Momotombo** | **4.43** | **184** | *eP* | | **Pn** | **19 37 29.3** | **+2.9** |
| **CEVE** | **Cerro Verde** | **4.45** | **228** | *eP* | | **Pn** | **19 37 29.8** | **+2.9** |
| **CEVE** | **Cerro Verde** | **4.45** | **228** | *eP* | | **Pn** | **19 37 29.8** | **+2.9** |
| **JAYA** | **Jayaque - finc** | **4.45** | **225** | *eP* | | **Pn** | **19 37 29.2** | **+2.4** |
| JAYA | | | | IAML | | | 19 38 35.2 | |
| | comp=Z,213nm,0.3s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **4.45** | **225** | *eP* | | **Pn** | **19 37 29.2** | **+2.4** |
| JAYA | | | | IAML | | | 19 38 35.2 | |
| | comp=Z,213nm,0.3s | | | | | | | |
| **APG** | **El Apazote** | **4.48** | **246** | Pn | | **Pn** | **19 37 29.0** | **+1.8** |
| | comp=Z,24nm,0.3s,baz=21,slow=9.6,SNR=84 | | | | | | | |
| APG | | | | Sn | | **Sn** | **19 38 18.4** | **-1.1** |
| | comp=Z,29nm,0.3s,baz=183,slow=18,SNR=4.2 | | | | | | | |
| APG | | | | LR | | LR | 19 38 57.4 | |
| | comp=Z,669nm,19.4s,baz=28,slow=34 | | | | | | | |
| **LALI** | **Alcalda de L** | **4.49** | **222** | *eP* | | **Pn** | **19 37 30.4** | **+3.2** |
| **NUBE** | **Las Nubes** | **4.51** | **230** | *eP* | | **Pn** | **19 37 30.4** | **+2.7** |
| **NUBE** | **Las Nubes** | **4.51** | **230** | *eP* | | **Pn** | **19 37 30.4** | **+2.7** |
| **ACON** | **Acoyapa** | **4.96** | **168** | Pn | | **Pn** | **19 37 35.3** | **+1.6** |
| **ESPN** | **Las Esperanzas** | **4.99** | **158** | Pn | | **Pn** | **19 37 36.1** | **+2.0** |
| **ESPN** | **Las Esperanzas** | **4.99** | **158** | *eP* | | **Pn** | **19 37 36.6** | **+2.5** |
| **HUEH** | **Huehuetenango** | **5.30** | **254** | Pn | | **Pn** | **19 37 41.4** | **+2.8** |
| **CCIG** | **Comitan** | **5.70** | **265** | Pn | | **Pn** | **19 37 47.0** | **+3.0** |
| **RTAL** | **Retalhuleu** | **5.76** | **247** | Pn | | **Pn** | **19 37 43.9** | **-0.8** |
| **PRVC** | **Isla de Provid** | **5.83** | **126** | Pn | | **Pn** | **19 37 45.4** | **-0.2** |
| **HZTE** | **Horizontes, Gu** | **6.13** | **174** | Pn | | **Pn** | **19 37 48.4** | **-1.4** |
| **COVE** | **Coope Vega, Sa** | **6.35** | **164** | Pn | | **Pn** | **19 37 52.6** | **-0.2** |
| **LCCY** | **Blossom Villag** | **6.47** | **63** | Pn | | **Pn** | **19 37 54.1** | **-0.3** |
| **ORTG** | **Ortega, Santa** | **6.50** | **173** | Pn | | **Pn** | **19 37 52.5** | **-2.3** |
| **SOR** | **Soroa** | **6.64** | **27** | Pn | | **Pn** | **19 37 59.0** | **+2.3** |
| **JTS** | **Las Juntas de** | **6.64** | **169** | Pn | | **Pn** | **19 38 00.2** | **+3.4** |
| | comp=Z,2.1nm,0.3s,baz=80,slow=11,SNR=3.5 | | | | | | | |
| JTS | | | | Sn | | **Sn** | **19 39 10.9** | **-1.7** |
| | comp=Z,4.2nm,0.3s,baz=77,slow=16,SNR=3.6 | | | | | | | |
| **JTS** | **Las Juntas de** | **6.64** | **169** | Pn | | **Pn** | **19 37 55.2** | **-1.6** |
| **DUNO** | **Dulce Nombre,** | **6.77** | **174** | Pn | | **Pn** | **19 37 58.4** | **-0.2** |
| **HDC** | **Heredia** | **7.11** | **163** | Pn | | **Pn** | **19 38 03.3** | **-0.1** |
| **CAO2** | **Cobano, Puntar** | **7.21** | **171** | Pn | | **Pn** | **19 38 01.2** | **-3.4** |
| **JACO** | **JACO, Garabito** | **7.31** | **168** | Pn | | **Pn** | **19 38 03.4** | **-2.6** |
| **RIMA** | **Rio Macho** | **7.41** | **162** | Pn | | **Pn** | **19 38 05.2** | **-2.3** |
| **PEZE** | **Perez Zeledon,** | **7.83** | **161** | Pn | | **Pn** | **19 38 11.2** | **-2.0** |
| **SRBA** | **San Rafael, Bu** | **8.07** | **159** | Pn | | **Pn** | **19 38 14.6** | **-2.0** |
| **CMIG** | **Matias Romero** | **8.29** | **273** | Pn | | **Pn** | **19 38 22.1** | **+2.6** |
| | comp=Z,11nm,0.3s,baz=103,slow=8.8,SNR=50 | | | | | | | |
| CMIG | | | | Sn | | **Sn** | **19 39 48.9** | **-4.4** |
| | comp=Z,4.3nm,0.3s,baz=250,slow=22,SNR=1.1 | | | | | | | |
| CMIG | | | | LR | | LR | 19 42 02.5 | |
| | comp=Z,4µm,18.5s,baz=99,slow=40 | | | | | | | |
| **MTDJ** | **Mount Denham** | **8.40** | **79** | Pn | | **Pn** | **19 38 20.4** | **-0.6** |
| **BCIP** | **Isla Barro Col** | **9.85** | **140** | Pn | | **Pn** | **19 38 41.2** | **+0.3** |
| **061Z** | **Ochoppi** | **10.24** | **28** | Pn | | **Pn** | **19 38 47.6** | **+1.4** |
| **GTBY** | **Guantanamo Bay** | **10.98** | **72** | Pn | | **Pn** | **19 38 58.1** | **+1.8** |
| **060A** | **Indiantown** | **11.50** | **27** | Pn | | **Pn** | **19 39 05.9** | **+2.5** |
| **DWPF** | **Disney Wildern** | **12.04** | **21** | | | **Pn** | **19 39 10.8** | **0.0** |
| **DWPF** | **Disney Wildern** | **12.04** | **21** | P | | Pn | 19 39 17.3 | +6.5 |
| | baz=202 | | | | | | | |
| **SJCC** | **San Jacinto, C** | **12.77** | **121** | Pn | | **Pn** | **19 39 17.3** | **-3.6** |
| **656A** | **Willston** | **12.91** | **15** | | | **Pn** | **19 39 23.1** | **+0.5** |
| **553A** | **Crawfordville** | **13.38** | **7** | Pn | | **Pn** | **19 39 28.4** | **-0.6** |
| **451A** | **Vernon** | **13.71** | **2** | Pn | | **Pn** | **19 39 33.7** | **+0.2** |
| **BRAL** | **Brewton** | **14.27** | **357** | Pn | | **Pn** | **19 39 40.2** | **-1.1** |
| **BRAL** | **Brewton** | **14.27** | **357** | P | | **P** | **19 39 48.1** | **-0.5** |
| | baz=177 | | | | | | | |
| **456A** | **Hilliard** | **14.33** | **15** | Pn | | **Pn** | **19 39 42.7** | **+0.6** |
| **SDDR** | **Presa de Saban** | **14.37** | **79** | Pn | | **Pn** | **19 39 40.4** | **-2.4** |
| **ZARC** | **Zaragoza, Cauc** | **14.48** | **129** | Pn | | **Pn** | **19 39 40.6** | **-3.7** |
| **MOIG** | **Morelia** | **14.49** | **283** | | | **P** | **19 39 49.4** | **-2.0** |
| **352A** | **Blakely** | **14.61** | **4** | Pn | | **Pn** | **19 39 46.8** | **+0.9** |
| **TIGA** | **Tifton** | **14.72** | **9** | Pn | | **Pn** | **19 39 48.5** | **+1.1** |
| **TIGA** | **Tifton** | **14.72** | **9** | P | | **P** | **19 39 53.3** | **-0.3** |
| | baz=190 | | | | | | | |
| **346A** | **Big Creek Wild** | **14.77** | **349** | Pn | | **Pn** | **19 39 49.8** | **+1.7** |
| **SC01** | **Santiago de lo** | **14.95** | **78** | Pn | | **Pn** | **19 39 51.4** | **+0.8** |
| **250A** | **Grady** | **15.06** | **360** | | | **Pn** | **19 39 54.4** | **+2.4** |
| **344A** | **Westbrook Farm** | **15.10** | **345** | | | **Pn** | **19 39 54.5** | **+2.0** |
| 344A | | | | IAmb | | IAmb | 19 40 29.6 | |
| | comp=Z,51nm,0.8s | | | | | | | |
| **KVTX** | **Kingsville** | **15.15** | **317** | | | **Pn** | **19 39 54.9** | **+1.6** |
| **OCAC** | **Ocana** | **15.22** | **123** | Pn | | **Pn** | **19 39 55.0** | **+0.6** |
| **441A** | **DeRidder** | **15.22** | **337** | | | **Pn** | **19 39 56.4** | **+2.2** |
| **255A** | **Hazlehurst** | **15.39** | **12** | | | **P** | **19 39 59.5** | **-1.5** |
| **342A** | **Flagon Creek P** | **15.49** | **340** | | | **Pn** | **19 39 59.7** | **+2.1** |
| 342A | | | | IAmb | | IAmb | 19 40 18.6 | |
| | comp=Z,42nm,0.8s | | | | | | | |
| **HKT** | **Hockley** | **15.73** | **328** | | | **P** | **19 40 03.8** | **-0.9** |
| HKT | | | | IAmb | | IAmb | 19 40 11.1 | |
| | comp=Z,72nm,0.9s | | | | | | | |
| **257A** | **Skidaway Islan** | **15.78** | **16** | | | **P** | **19 40 03.9** | **-1.4** |
| **VBMS** | **Vicksburg** | **15.79** | **347** | | | **P** | **19 40 05.5** | **+0.1** |
| VBMS | | | | IAmb | | IAmb | 19 40 58.0 | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **152A** | **Waverly Hall** | **15.80** | **5** | | | **P** | **19 40 04.5** | **-1.2** |
| **146A** | **Union** | **15.92** | **351** | P | | **P** | **19 40 06.0** | **-1.0** |
| **154A** | **Montrose** | **15.94** | **10** | P | | **P** | **19 40 06.3** | **-0.8** |
| 154A | | | | IAmb | | IAmb | 19 40 38.5 | |
| | comp=Z,53nm,0.9s | | | | | | | |
| **735A** | **Kenedy** | **16.01** | **320** | | | **P** | **19 40 07.1** | **-0.8** |
| **LRAL** | **Lakeview Retre** | **16.13** | **358** | | | **P** | **19 40 08.1** | **-1.1** |
| **LRAL** | **Lakeview Retre** | **16.13** | **358** | P | | **P** | **19 40 11.3** | **+2.1** |
| | baz=178,SNR=21 | | | | | | | |
| **DR12** | **Loma Pena Alta** | **16.15** | **81** | | | **Pn** | **19 40 07.0** | **+0.6** |
| **Z47A** | **Carrollton** | **16.36** | **354** | | | **Pn** | **19 40 09.9** | **+1.0** |
| Z47A | | | | IAmb | | IAmb | 19 40 51.8 | |
| | comp=Z,51nm,0.9s | | | | | | | |
| **Z51A** | **Franklin** | **16.42** | **3** | P | | **Pn** | **19 40 10.3** | **+0.6** |
| **ZAIG** | **Zacatecas** | **16.46** | **294** | | | **Pn** | **19 40 10.4** | **-0.1** |
| **833A** | **Chaparral WMA,** | **16.66** | **316** | | | **Pn** | **19 40 14.0** | **+1.2** |
| **833A** | **Chaparral WMA,** | **16.66** | **316** | P | | **P** | **19 40 15.8** | **+0.6** |
| | baz=131,SNR=22 | | | | | | | |
| **GOGA** | **Godfrey** | **16.67** | **8** | | | **Pn** | **19 40 13.3** | **+0.4** |
| **GOGA** | **Godfrey** | **16.67** | **8** | P | | **P** | **19 40 17.3** | **+2.1** |
| | baz=189,SNR=7.2 | | | | | | | |
| **ROSC** | **El Rosal** | **16.69** | **134** | Pn | | **P** | **19 40 17.6** | **+1.6** |
| | comp=Z,1.3nm,0.3s,baz=66,slow=24,SNR=1.4 | | | | | | | |
| ROSC | | | | LR | | LR | 19 46 46.5 | |
| | comp=Z,634nm,19.5s,baz=8.0,slow=38 | | | | | | | |
| **ROSC** | **El Rosal** | **16.69** | **134** | Pn | | **Pn** | **19 40 14.4** | **-2.3** |
| **NATX** | **Nacogdoches** | **16.70** | **334** | | | **Pn** | **19 40 13.6** | **+0.3** |
| NATX | | | | IAmb | | IAmb | 19 40 49.7 | |
| | comp=Z,126nm,1.3s | | | | | | | |
| **Y49A** | **Blount Mountai** | **16.93** | **359** | | | **P** | **19 40 17.7** | **-0.5** |
| **Y52A** | **Lilburn** | **17.05** | **6** | P | | **P** | **19 40 19.2** | **-0.2** |
| **NHSC** | **New Hope** | **17.08** | **18** | | | **Pn** | **19 40 18.8** | **+0.8** |
| **NHSC** | **New Hope** | **17.08** | **18** | P | | **P** | **19 40 25.4** | **+5.6** |
| | baz=200 | | | | | | | |
| **SDV** | **Santo Domingo** | **17.13** | **116** | Pn | | **P** | **19 40 22.2** | **+1.6** |
| | comp=Z,1.2nm,0.3s,baz=288,slow=4.3,SNR=11 | | | | | | | |
| SDV | | | | LR | | LR | 19 48 18.2 | |
| | comp=Z,450nm,18.3s,baz=265,slow=42 | | | | | | | |
| **SDV** | **Santo Domingo** | **17.13** | **116** | | | **Pn** | **19 40 19.3** | **+0.3** |
| **Y45A** | **Yeager Farm, C** | **17.20** | **351** | | | **Pn** | **19 40 19.3** | **-0.2** |
| Y45A | | | | IAmb | | IAmb | 19 41 02.6 | |
| | comp=Z,51nm,0.8s | | | | | | | |
| **435B** | **Jarrell** | **17.31** | **325** | P | | **P** | **19 40 22.4** | **0.0** |
| **435B** | **Jarrell** | **17.31** | **325** | P | | **P** | **19 40 25.6** | **+3.2** |
| | baz=141 | | | | | | | |
| **HATO** | **Hato, Curacao** | **17.34** | **103** | | | **Pn** | **19 40 21.8** | **+0.4** |
| **Z41A** | **Richland Creek** | **17.38** | **341** | | | **Pn** | **19 40 22.8** | **+1.1** |
| Z41A | | | | IAmb | | IAmb | 19 40 45.2 | |
| | comp=Z,43nm,0.7s | | | | | | | |
| **237A** | **Washetta, Mont** | **17.41** | **332** | | | **P** | **19 40 24.1** | **+0.7** |
| 237A | | | | IAmb | | IAmb | 19 40 34.1 | |
| | comp=Z,98nm,0.9s | | | | | | | |
| **X48A** | **Hartselle** | **17.54** | **358** | P | | **Pn** | **19 40 24.2** | **+0.4** |
| **FPAL** | **Fort Paine** | **17.62** | **2** | P | | **P** | **19 40 27.1** | **+1.3** |
| **HODGE** | **Hodges** | **17.67** | **11** | | | **P** | **19 40 27.4** | **+1.2** |
| **X51A** | **Calhoun** | **17.68** | **4** | P | | **P** | **19 40 26.5** | **+0.1** |
| **OXF** | **Oxford** | **17.82** | **351** | P | | **Pn** | **19 40 26.8** | **-0.4** |
| OXF | | | | IAmb | | IAmb | 19 40 58.2 | |
| | comp=Z,112nm,1.1s | | | | | | | |
| **OXF** | **Oxford** | **17.82** | **351** | P | | **P** | **19 40 34.5** | **+6.6** |
| | baz=170 | | | | | | | |
| **JSC** | **Jenkinsville** | **17.92** | **13** | P | | **Pn** | **19 40 27.8** | **-0.6** |
| **Y58A** | **Scranton** | **17.97** | **18** | P | | **Pn** | **19 40 27.5** | **-1.6** |
| **PLAL** | **Pickwick Lake** | **18.13** | **355** | P | | **Pn** | **19 40 29.3** | **-1.7** |
| **Z38A** | **Mt. Pleasant** | **18.15** | **336** | P | | **Pn** | **19 40 30.6** | **-0.6** |
| Z38A | | | | IAmb | | IAmb | 19 41 00.9 | |
| | comp=Z,45nm,0.7s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **18.19** | **328** | P | | **Pn** | **19 40 31.2** | **-0.6** |
| **WHTX** | **Lake Whitney,** | **18.19** | **328** | P | | **P** | **19 40 38.5** | **+6.4** |
| | baz=144,SNR=35 | | | | | | | |
| **OTAV** | **Otavalo** | **18.20** | **154** | P | | **Pn** | **19 40 29.5** | **-3.0** |
| **W52A** | **Murphy** | **18.28** | **6** | P | | **Pn** | **19 40 32.8** | **-0.1** |
| W52A | | | | IAmb | | IAmb | 19 40 44.1 | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **SWET** | **Sewanee** | **18.29** | **1** | P | | **Pn** | **19 40 32.7** | **-0.3** |
| **W50A** | **Signal Mountai** | **

U49A **Red Boiling Sp** 19.59 1 P P 19 40 46.5 -0.8
LCAR **Lake Charles** 19.64 348 P 19 40 46.2 -1.6
FCAR **Ozark Folk Cen** 19.67 346 P P 19 40 46.3 -2.0
LOOK **Love County** 19.70 332 P P 19 40 47.0 -1.7
TZTN **Tazewell** 19.75 6 P 19 40 45.1 -4.1
TZTN IAmb IAmb 19 41 00.4
comp=Z,52nm,1.1s
TZTN **Tazewell** 19.75 6 P Pn 19 40 57.0 +6.3
baz=188,SNR=9.7
MTP **Monte Pirata** 19.76 83 P P 19 40 46.2 -3.2
ABTX **Abilene, Hawle** 19.84 325 P P 19 40 47.2 -3.0
ABTX **Abilene, Hawle** 19.84 325 P Pn 19 40 56.5 +4.7
baz=140
U54A **Nelsons Funny** 19.98 10 P P 19 40 50.9 -0.8
U54A IAmb IAmb 19 41 03.0
comp=Z,59nm,1.1s
CUPR **Culebra, Puert** 20.02 83 P P 19 40 50.0 -2.1
T47A **Sharon Grove** 20.07 358 P P 19 40 52.7 0.0
T47A IAmb IAmb 19 41 09.1
comp=Z,56nm,1.1s
U56A **King** 20.10 14 P P 19 40 52.4 -0.5
U56A IAmb IAmb 19 41 10.6
comp=Z,46nm,0.7s
T50A **Nancy** 20.12 3 P P 19 40 52.1 -1.2
T50A IAmb IAmb 19 41 09.5
comp=Z,48nm,0.7s
PBMO **Poplar Bluff** 20.19 350 P P 19 40 51.6 -2.4
TX32 **Lajitas Array** 20.26 311 P P 19 40 53.2 -1.7
TX32 IAmb IAmb 19 41 03.7
comp=Z,26nm,0.9s
TXAR **Lajitas Array** 20.26 311 P Pn 19 41 02.1 +5.3
comp=Z,20nm,0.8s,baz=129,slow=11,SNR=112
TXAR S **S** 19 44 35.0 -7.3
comp=Z,2.6nm,0.5s,baz=132,slow=24,SNR=7.5
TXAR **Lajitas Array** 20.26 311 P P 19 40 53.2 -1.7
TX31 **Lajitas Ar. Si** 20.26 311 P P 19 40 53.9 -1.0
U40A **Yellville** 20.30 344 P 19 40 53.8 -1.4
U40A **Yellville** 20.30 344 P Pn 19 41 00.4 +3.2
baz=162
X34A **Smith Ranch, M** 20.51 332 P 19 40 53.2 -4.2
HHAR **Hobbs** 20.53 342 P P 19 40 53.1 -4.6
HHAR IAmb IAmb 19 41 20.9
comp=Z,50nm,1.5s
T42A **Van Buren** 20.55 349 P P 19 40 55.7 -2.2
W35A **Tecumseh** 20.56 334 P 19 40 54.9 -3.1
W35A IAmb IAmb 19 41 32.0
comp=Z,28nm,0.7s
HPIG 20.62 302 P P 19 40 53.4 -5.5
TUL1 **Leonard** 20.80 338 P 19 40 57.7 -2.9
TUL1 IAmb IAmb 19 41 41.0
comp=Z,37nm,0.8s
TUL1 **Leonard** 20.80 338 P Pn 19 41 07.7 +4.7
baz=154
U38A **Gravette** 20.81 341 P P 19 40 58.1 -2.6
U59A **Littleton** 20.81 19 P P 19 40 58.1 -2.6
U59A IAmb IAmb 19 41 13.1
comp=Z,31nm,1.0s
S51A **Beattyville** 20.84 6 P P 19 40 58.1 -2.9
S51A IAmb IAmb 19 41 10.4
comp=Z,52nm,0.9s
FNO **Franklin** 20.87 334 P 19 40 57.7 -3.6
BLA **Blacksburg** 20.92 13 P P 19 40 59.6 -2.3
BLA **Blacksburg** 20.92 13 P Pn 19 41 09.3 +4.9
baz=196,SNR=7.1
MGMO **Mountain Grove** 20.92 346 P P 19 40 59.8 -2.1
S44A **Carbondale** 20.93 353 P P 19 40 59.4 -2.6
S44A IAmb IAmb 19 41 19.4
comp=Z,27nm,0.7s
T57A **Hurt** 20.99 16 P P 19 41 00.4 -2.2
T57A IAmb IAmb 19 41 12.0
comp=Z,52nm,1.0s
OKCFA **Oklahoma City** 21.02 334 P P 19 40 59.5 -3.5
OKCFA IAmb IAmb 19 41 28.6
comp=Z,56nm,1.1s
WMOK **Wichita Mounta** 21.06 330 P P 19 41 00.8 -2.6
WMOK IAmb IAmb 19 41 12.9
comp=Z,66nm,1.1s
WMOK **Wichita Mounta** 21.06 330 P P 19 41 09.6 +6.2
baz=145,SNR=23
WCI **Wyandotte Cave** 21.30 360 P P 19 41 04.0 -1.9
WCI **Wyandotte Cave** 21.30 360 P P 19 41 12.3 +6.5
baz=180
S54A **Dingess, Beckl** 21.31 11 P P 19 41 03.2 -2.9
S54A IAmb IAmb 19 41 18.5
comp=Z,37nm,0.8s
OK029 **Liberty Lake** 21.35 334 P 19 41 05.6 -0.9
OK029 IAmb IAmb 19 41 17.5
comp=Z,38nm,1.0s
OK033 **Mehan** 21.36 336 P P 19 41 04.2 -2.3
OK033 IAmb IAmb 19 41 37.9
comp=Z,38nm,0.8s
QUOK **Quay** 21.38 336 P P 19 41 05.6 -1.2
QUOK IAmb IAmb 19 41 46.5
comp=Z,40nm,0.8s
R49A **Shelbyville** 21.38 2 P P 19 41 05.2 -1.6
R49A IAmb IAmb 19 41 21.1
comp=Z,37nm,0.9s
T59A **Double "B" Far** 21.46 19 P P 19 41 07.8 +0.2
T59A IAmb IAmb 19 41 30.4
comp=Z,30nm,1.0s
CCM **Cathedral Cave** 21.58 349 P P 19 41 10.5 +1.6
CCM IAmb IAmb 19 41 30.4
comp=Z,21nm,0.7s
CCM **Cathedral Cave** 21.58 349 P P 19 41 15.1 +6.2
baz=167
S39A **Bolivar** 21.68 345 P P 19 41 09.0 -1.0
R53A **Hurricane** 21.72 9 P P 19 41 12.8 +2.3
R53A IAmb IAmb 19 41 35.6
comp=Z,39nm,0.9s
S57A **Dark Hollow, R** 21.79 16 P P 19 41 10.3 -0.9
OLIL **Olney** 21.86 356 P P 19 41 11.3 -0.7
OLIL IAmb IAmb 19 41 33.6
comp=Z,51nm,0.9s
T60A **Surry** 21.88 21 P P 19 41 09.9 -2.2
T35A **Sooner Cattle** 21.96 337 P P 19 41 12.4 -0.6
T35A IAmb IAmb 19 41 56.7
comp=Z,33nm,1.0s
R40A **Maddies Statio** 22.01 347 P P 19 41 12.2 -1.3
R55A **Marlinton** 22.01 13 P P 19 41 12.7 -1.0
R55A IAmb IAmb 19 41 29.6
comp=Z,42nm,0.8s
JSRW **J. Sargeant Re** 22.02 18 P P 19 41 12.7 -1.0
BLOK **Blackwell** 22.09 336 P 19 41 11.5 -2.9
BLOK IAmb IAmb 19 41 38.0
comp=Z,48nm,1.1s
Q44A **Meyer Farm, Va** 22.10 354 P P 19 41 14.8 +0.3
Q44A IAmb IAmb 19 41 27.2
comp=Z,25nm,0.8s
SMRT **St. Maarten** 22.11 83 P P 19 41 13.5 -1.3
CROK **Carrier** 22.18 334 P P 19 41 14.7 -0.7
Q51A **Peebles** 22.23 6 P P 19 41 14.7 -1.3
Q51A IAmb IAmb 19 41 34.8
comp=Z,42nm,0.8s
R58B **Mineral** 22.27 18 P P 19 41 15.6 -0.8
Q52A **Bidwell** 22.30 8 P P 19 41 16.9 +0.3
Q54A **Coxs Mills** 22.55 11 P P 19 41 19.9 +0.6
Q54A IAmb IAmb 19 41 33.1
comp=Z,36nm,1.1s
MSTX **Muleshoe** 22.61 322 P P 19 41 21.1 +0.9
MSTX **Muleshoe** 22.61 322 P P 19 41 26.9 +6.7
baz=135,SNR=9.2
P49A **Miami Univ. Ec** 22.64 3 P P 19 41 20.6 +0.3
P49A IAmb IAmb 19 41 43.1
comp=Z,45nm,1.3s
AMTX **Amarillo** 22.66 325 P P 19 41 22.7 +2.1
AMTX **Amarillo** 22.66 325 P P 19 41 27.0 +6.3
baz=139
P46A **Rosedale** 22.70 358 P P 19 41 19.3 -1.6
P51A **Williamsport** 22.71 6 P P 19 41 20.7 -0.4
P51A IAmb IAmb 19 41 55.0
comp=Z,40nm,1.1s
S61A **Accomac** 22.73 22 P P 19 41 25.4 +4.1
KAN08 **Anthony NE Sta** 22.79 335 P P 19 41 22.4 +0.4
MNTX **Cornudas Mount** 22.82 314 P P 19 41 20.8 -1.6
MNTX IAmb IAmb 19 41 31.7
comp=Z,31nm,1.1s
MNTX **Cornudas Mount** 22.82 314 P P 19 41 27.1 +4.7
baz=126
KAN16 **Harper SW Stat** 22.83 335 P P 19 41 23.6 +1.3
KAN12 **Harper NE Stat** 22.86 335 P P 19 41 26.1 +3.4
P43A **Skaggs, Pawnee** 22.89 353 P P 19 41 21.3 -1.6
P53A **Whipple** 22.94 10 P P 19 41 22.1 -1.4
Q56A **Snyder Ridge,** 22.95 14 P P 19 41 23.9 +0.3
Q56A IAmb IAmb 19 41 58.8
comp=Z,39nm,0.9s
P52A **Corning** 22.98 8 P P 19 41 22.6 -1.3
P52A **Corning** 22.98 8 P P 19 41 31.2 +7.4
baz=190,SNR=8.3
P40A **Paris** 23.16 348 P P 19 41 23.6 -2.1
P40A IAmb IAmb 19 41 59.0
comp=Z,19nm,0.9s
SLBS **Sierra La Lagu** 23.25 291 P P 19 41 24.3 -2.6
O44A **Mansfield** 23.30 356 P P 19 41 26.1 -1.0
O44A IAmb IAmb 19 41 51.6
comp=Z,23nm,0.9s
MCWV **Mont Chateau** 23.39 12 P P 19 41 27.7 -0.4
MCWV IAmb IAmb 19 41 37.7
comp=Z,28nm,0.8s
MCWV **Mont Chateau** 23.39 12 P P 19 41 36.1 +8.0
baz=196
SFIN **Lafayette** 23.45 358 P P 19 41 27.6 -1.1
ACSO **Alum Creek Sta** 23.46 6 P P 19 41 28.1 -0.7
ACSO IAmb IAmb 19 41 57.2
comp=Z,23nm,0.8s
ACSO **Alum Creek Sta** 23.46 6 P P 19 41 36.6 +7.8
baz=188
O52A **Adamsville** 23.49 8 P P 19 41 27.3 -1.7
O52A IAmb IAmb 19 41 53.9
comp=Z,27nm,0.9s
P38A **Dawn** 23.57 346 P P 19 41 27.6 -2.2
P38A IAmb IAmb 19 41 56.0
comp=Z,14nm,0.7s
P57A **Homestead Farm** 23.66 16 P P 19 41 29.9 -0.8
LPIG **La Paz** 23.67 292 LR LR 19 51 44.6
comp=Z,1µm,18.2s,baz=72,slow=39
O53A **New Philadelph** 23.71 10 P P 19 41 29.8 -1.4
O53A **New Philadelph** 23.71 10 P P 19 41 38.4 +7.1
baz=192,SNR=8.8
HDIL **Hopedale** 23.77 354 P P 19 41 30.8 -0.9
HDIL IAmb IAmb 19 42 25.3
comp=Z,24nm,0.8s
HDIL **Hopedale** 23.77 354 P P 19 41 38.6 +6.8
baz=173
O54A **Avella** 23.79 11 P P 19 41 31.2 -0.8
O54A IAmb IAmb 19 41 41.0
comp=Z,32nm,0.8s
N47A **Urbana** 23.95 1 P P 19 41 31.3 -2.2
N47A IAmb IAmb 19 42 05.3
comp=Z,53nm,1.4s
KSU1 **Kansas State U** 23.95 340 P P 19 41 31.3 -2.2
KSU1 **Kansas State U** 23.95 340 P P 19 41 39.9 +6.4
baz=155
N49A **Columbus Grove** 24.05 4 P P 19 41 33.5 -0.9
N49A IAmb IAmb 19 41 43.2
comp=Z,36nm,1.1s
N41A **Harden Midland** 24.11 351 P P 19 41 33.3 -1.6
N41A IAmb IAmb 19 42 04.3
comp=Z,22nm,1.1s
N51A **Ashland** 24.21 7 P P 19 41 34.7 -1.2
N51A IAmb IAmb 19 41 58.0
comp=Z,22nm,0.8s
FDF **Fort de France** 24.21 91 P P 19 41 34.1 -2.1
O56A **Blue Knob Stat** 24.26 14 P P 19 41 35.0 -1.5
O56A IAmb IAmb 19 41 46.2
comp=Z,26nm,1.1s
O56A **Blue Knob Stat** 24.26 14 P P 19 41 44.2 +7.8
baz=198
N53A **Lisbon** 24.32 10 P P 19 41 35.3 -1.6
N53A IAmb IAmb 19 41 45.4
comp=Z,26nm,0.9s
SVB **Belmont** 24.37 95 P P 19 41 36.9 -0.8
MVL **Millersville** 24.61 18 P P 19 41 38.5 -1.1
MVL IAmb IAmb 19 42 17.1
comp=Z,17nm,1.1s
N38A **Joes South For** 24.61 347 P P 19 41 39.0 -0.6
N38A IAmb IAmb 19 42 21.9
comp=Z,26nm,1.1s
M50A **Fremont** 24.62 6 P P 19 41 38.9 -0.7
M50A IAmb IAmb 19 42 00.9
comp=Z,29nm,0.9s
N54A **Moraine State** 24.62 11 P P 19 41 38.7 -1.0
N54A IAmb IAmb 19 42 20.2
comp=Z,22nm,1.0s
N54A **Moraine State** 24.62 11 P P 19 41 47.0 +7.4
baz=194
PAGS **Pennsylvania G** 24.71 18 P P 19 41 39.1 -1.3
SSPA **Standing Stone** 24.77 15 P P 19 41 39.6 -1.4
SSPA IAmb IAmb 19 41 49.5
comp=Z,16nm,0.8s
SSPA **Standing Stone** 24.77 15 P P 19 41 48.6 +7.6
baz=199
WUPA **West Chester U** 24.78 20 P P 19 41 39.0 -2.0
BBSR **BB Station** 24.86 48 P P 19 41 41.2 -0.7
M53A **WI Miller and** 24.96 10 P P 19 41 41.8 -1.0
M53A **WI Miller and** 24.96 10 P P 19 41 49.6 +6.9
baz=193,SNR=5.7
121A **Cookes Peak, D** 24.97 313 P P 19 41 41.6 -1.5
121A IAmb IAmb 19 42 03.6
comp=Z,15nm,0.8s
121A **Cookes Peak, D** 24.97 313 P P 19 41 50.6 +7.5
baz=124,SNR=7.5
ATAH **Atahualpa** 25.06 161 LR LR 19 50 46.1
comp=Z,785nm,18.2s,baz=330,slow=35
M54A **Oil Creek Stat** 25.21 12 P P 19 41 43.0 -2.0
M54A IAmb IAmb 19 42 28.3
comp=Z,23nm,1.1s
M54A **Oil Creek Stat** 25.21 12 P P 19 41 52.6 +7.6
baz=195
L42A **Oliver, Polo** 25.24 354 P P 19 41 43.7 -1.5
ALLY **Alegheny Colle** 25.26 11 P P 19 41 45.9 +0.5
N35A **Tabor** 25.27 343 P P 19 41 45.2 -0.3
N58A **Sunbury** 25.28 17 P P 19 41 45.4 -0.2
N58A IAmb IAmb 19 41 56.1
comp=Z,31nm,0.9s
M55A **Ridgway** 25.36 13 P P 19 41 47.4 +1.0
M55A IAmb IAmb 19 41 56.0
comp=Z,27nm,1.1s
LUPA **Lehigh Univers** 25.46 19 P P 19 41 47.0 -0.2
LUPA IAmb IAmb 19 41 56.9
comp=Z,28nm,0.9s
319A **Douglas** 25.46 309 P P 19 41 47.1 -0.4
L40A **Anamosa** 25.49 351 P P 19 41 48.3 +0.8
L40A IAmb IAmb 19 42 31.4
comp=Z,23nm,0.9s
ANMO **Albuquerque** 25.52 319 P P 19 41 55.1 +7.1
comp=Z,14nm,0.9s,baz=139,slow=11,SNR=11
ANMO **Albuquerque** 25.52 319 P P 19 41 47.6 -0.5
ANMO IAmb IAmb 19 41 56.6
comp=Z,16nm,0.9s
ANMO **Albuquerque** 25.52 319 P P 19 41 55.2 +7.1
baz=130
N59A **State Game Lan** 25.62 19 P P 19 41 49.0 +0.2
N59A IAmb IAmb 19 41 58.4
comp=Z,22nm,0.9s
N59A **State Game Lan** 25.62 19 P P 19 41 55.6 +6.8
baz=204,SNR=5.9
M57A **Sunshine Farm,** 25.63 16 P P 19 41 49.1 +0.4
M57A IAmb IAmb 19 41 58.3
comp=Z,34nm,1.1s
N33A **J Bar K, Exete** 25.71 340 P P 19 41 48.8 -0.7
ERPA **Erie** 25.74 11 P P 19 41 48.1 -1.7
ERPA **Erie** 25.74 11 P P 19 41 57.8 +8.0
baz=194
T25A **Trinidad** 25.81 325 P P 19 41 50.8 0.0
T25A IAmb IAmb 19 42 39.5
comp=Z,22nm,0.9s
T25A **Trinidad** 25.81 325 P P 19 41 58.2 +7.4
baz=137
CPNY **Central Park** 26.10 21 P P 19 41 54.3 +1.2
CPNY IAmb IAmb 19 42 04.9
comp=Z,22nm,0.8s
ODNJ **Ogdensburg** 26.14 20 P P 19 41 55.8 +2.3
ODNJ IAmb IAmb 19 42 37.7
comp=Z,18nm,1.0s
JFWS **Jewell Farm** 26.20 353 P P 19 41 53.8 -0.2
JFWS IAmb IAmb 19 42 33.8
comp=Z,18nm,0.7s
JFWS **Jewell Farm** 26.20 353 P P 19 42 02.0 +8.1
baz=172
KSPA **Keystone Colle** 26.21 18 P P 19 41 55.3 +1.2
KSPA IAmb IAmb 19 42 07.0
comp=Z,43nm,1.5s
L56A **Greenwood** 26.27 15 P P 19 41 56.6 +2.0
L56A IAmb IAmb 19 42 06.3
comp=Z,24nm,1.0s
WVNY **West Valley, N** 26.29 13 P P 19 41 55.9 +1.1
PAL **Palisades** 26.31 21 P P 19 41 54.3 -0.7
PAL **Palisades** 26.31 21 P P 19 42 02.9 +8.0
baz=207
TRNY **Table Rock, Ra** 26.33 21 P P 19 41 54.0 -1.1
TRNY IAmb IAmb 19 42 30.5
comp=Z,17nm,1.1s
WSPT **Westport, CT** 26.66 22 P P 19 41 57.0 -1.1
WSPT IAmb IAmb 19 42 09.7
comp=Z,22nm,0.8s
BINY **Binghamton** 26.74 17 P P 19 41 58.5 -0.4
BINY IAmb IAmb 19 42 08.1
comp=Z,23nm,1.0s
MMNY **Mt. Morris Dam** 26.75 14 P P 19 41 57.2 -1.8
MMNY IAmb IAmb 19 42 24.1
comp=Z,21nm,1.1s
SDCO **Great Sand Dun** 26.85 325 P P 19 41 59.2 -1.1
SDCO **Great Sand Dun** 26.85 325 P P 19 42 07.3 +7.1
baz=136,SNR=9.7
TUC **Tucson** 27.03 309 P P 19 41 59.4 -2.3
TUC IAmb IAmb 19 42 13.4
comp=Z,16nm,1.1s
TUC **Tucson** 27.03 309 P P 19 42 09.0 +7.3
baz=119
K57A **Scipio Center** 27.09 16 P P 19 42 00.5 -1.5
K57A IAmb IAmb 19 42 10.7
comp=Z,25nm,1.1s
KSCT **Kent School, K** 27.10 21 P P 19 42 00.6 -1.4
KSCT IAmb IAmb 19 42 14.8
comp=Z,37nm,1.2s
J56A **Wolcott** 27.52 15 P P 19 42 04.0 -1.8
Q24A **Divide** 27.55 327 P P 19 42 03.5 -3.0
X18A **Snowflake** 27.58 314 P P 19 42 04.7 -2.1
S22A **4UR Ranch, Cre** 27.60 323 P P 19 42 04.8 -2.3
S22A **4UR Ranch, Cre** 27.60 323 P P 19 42 13.9 +6.9
baz=134,SNR=6.2
UCCT **U. Connecticut** 27.61 23 P P 19 42 06.2 -0.5
W18A **Petrified Fore** 27.77 315 P P 19 42 07.1 -1.3
W18A **Petrified Fore** 27.77 315 P P 19 42 14.4 +6.0
baz=125,SNR=9.1
J57A **Williamstown** 27.86 16 P P 19 42 07.2 -1.6
J57A IAmb IAmb 19 42 17.4
comp=Z,22nm,0.9s
BRYW **Bryant College** 27.98 24 P P 19 42 07.6 -2.4
BRYW IAmb IAmb 19 42 41.2
comp=Z,18nm,1.1s
QUA2 **Belchertown** 27.99 22 P P 19 42 08.5 -1.5
QUA2 IAmb IAmb 19 42 23.7
comp=Z,15nm,1.0s
J58A **Remsen** 28.01 17 P P 19 42 09.0 -1.3
J58A IAmb IAmb 19 42 19.1
comp=Z,13nm,1.0s
PECO **Prince Edward** 28.10 14 P P 19 42 09.8 -1.2
ECSD **EROS Data Cent** 28.21 344 P P 19 42 11.4 -0.6
ECSD **EROS Data Cent** 28.21 344 P P 19 42 18.4 +6.4
baz=159
MVCO **Mesa Verde** 28.24 320 P P 19 42 10.1 -2.5
MVCO **Mesa Verde** 28.24 320 P P 19 42 19.5 +6.9
baz=130
L64A **Middleborough** 28.27 25 P P 19 42 11.8 -0.8
214A **Organ Pipe Nat** 28.40 307 P P 19 42 11.7 -2.2
SADO **Sadowa** 28.46 11 P P 19 42 20.4 +6.2
comp=Z,11nm,0.8s,baz=240,slow=4.8,SNR=6.9
SADO LR LR 19 54 07.3
comp=Z,608nm,18.6s,baz=190,slow=37
SADO **Sadowa** 28.46 11 P P 19 42 12.5 -1.7
SADO IAmb IAmb 19 42 22.1
comp=Z,16nm,1.0s
WES **Weston** 28.46 24 P P 19 42 14.0 -0.2
BCX **Boston College** 28.48 24 P P 19 42 14.2 -0.2
G40A **Rib Lake** 28.52 354 P P 19 42 14.6 -0.2
G40A IAmb IAmb 19 43 00.5
comp=Z,29nm,1.5s
X16A **Lo Mia Camp, P** 28.56 313 P P 19 42 14.2 -1.3
SMCO **Snowmass** 28.68 325 P P 19 42 15.0 -1.8
NCB **Newcomb** 28.88 18 P P 19 42 15.0 -2.9
NCB IAmb IAmb 19 43 05.5
comp=Z,20nm,1.4s
PV01 **Paradox Valley** 28.88 322 P P 19 42 17.6 -0.8
PV15 **Paradox Valley** 28.97 322 P P 19 42 16.2 -2.9
PV15 IAmb IAmb 19 42 28.8
comp=Z,9.1nm,0.8s
PV13 **Radium Mtn., P** 29.05 321 P P 19 42 17.9 -1.9
WUAZ **Wupatki** 29.10 315 P P 19 42 17.9 -2.4
WUAZ IAmb IAmb 19 42 42.5
comp=Z,11nm,0.9s
WUAZ **Wupatki** 29.10 315 P P 19 42 26.9 +6.7
baz=124
PV12 **Saucer Basin,** 29.14 322 P P 19 42 17.9 -2.7
PV18 **Skein Mesa, Pa** 29.16 321 P P 19 42 17.4 -3.4
PV05 **Paradox Valley** 29.16 321 P P 19 42 17.3 -3.6
PV11 **David Mesa, Pa** 29.17 322 P P 19 42 17.9 -3.0
PV17 **East Wray Mesa** 29.21 321 P P 19 42 18.1 -3.1
PV04 **Paradox Valley** 29.25 322 P P 19 42 18.1 -3.5
PV20 **West Nyswonger** 29.25 322 P P 19 42 18.4 -3.2
LONY **Lake Ozonia** 29.37 17 P P 19 42 20.0 -2.3
LONY IAmb IAmb 19 42 31.1
comp=Z,19nm,0.9s
N23A **Red Feather La** 29.39 329 P P 19 42 19.9 -3.0
N23A IAmb IAmb 19 42 22.0
comp=Z,23nm,1.7s
Y14A **Wickenburg** 29.44 310 P P 19 42 20.1 -3.1
113A **Mohawk Valley,** 29.48 308 P P 19 42 21.1 -2.2
I62A **Tamworth** 29.74 22 P P 19 42 24.1 -1.5
I62A IAmb IAmb 19 42 35.3
comp=Z,20nm,1.1s
D41A **Chassel** 30.18 357 P P 19 42 28.3 -1.1
D41A IAmb IAmb 19 43 00.6
comp=Z,23nm,1.0s
U15A **North Rim** 30.22 315 P P 19 42 28.1 -2.2
W13A **Hualapai Mount** 30.64 312 P P 19 42 30.5 -3.4
SRU **San Rafael Swe** 30.68 321 P P 19 42 30.5 -3.7
SRU IAmb IAmb 19 42 42.3
comp=Z,13nm,1.2s
PKCU **Pink Cliffs** 30.80 317 P P 19 42 31.6 -3.9
P18A **Preston Nutter** 30.85 322 P P 19 42 32.9 -2.9
P18A IAmb IAmb 19 42 44.1
comp=Z,10nm,0.8s
TRQ **Mont Tremblant** 30.85 16 P P 19 42 33.1 -2.4
TRQ IAmb IAmb 19 42 43.7
comp=Z,14nm,1.0s
KNB **Kanab** 30.90 316 P P 19 42 33.4 -2.8
KNB IAmb IAmb 19 42 46.7
comp=Z,9.9nm,1.0s
Q16A **Castle Valley** 30.95 320 P P 19 42 33.8 -2.8
P17A **Butcher Ranch,** 31.04 321 P P 19 42 34.5 -2.9
P17A IAmb IAmb 19 42 45.7
comp=Z,13nm,1.3s
MTPU **Mount Pierson** 31.06 318 P P 19 42 34.3 -3.5
MTPU IAmb IAmb 19 42 46.8
comp=Z,12nm,1.3s
RDMU **Red Mountain** 31.09 324 P P 19 42 34.3 -3.5
IRM **Iron Mountain** 31.12 309 P P 19 42 46.8 +8.8
baz=117
BC3 **Big Chuckawall** 31.13 308 P P 19 42 45.6 +7.4
baz=116
LCMT **Little Creek M** 31.18 315 P P 19 42 36.2 -2.4
G62A **West of Eustis** 31.19 22 P P 19 42 37.9 -0.6
TMUT **Trail Mountain** 31.21 321 P P 19 42 36.2 -2.8
EYMN **Ely** 31.31 353 P P 19 42 38.2 -1.2
EYMN IAmb IAmb 19 43 07.2
comp=Z,21nm,1.5s
SZCU **Shurtz Canyon** 31.40 316 P P 19 42 38.8 -1.8
SZCU IAmb IAmb 19 43 23.7
comp=Z,12nm,1.2s
CCUT **Cedar City** 31.55 316 P P 19 42 40.0 -2.0
TCRU **Three Creeks R** 31.56 319 P P 19 42 39.7 -2.4
TCRU IAmb IAmb 19 42 50.9
comp=Z,14nm,0.9s
BAR **Barrett** 31.68 306 P P 19 42 39.8 -3.1
BAR IAmb IAmb 19 42 51.1
comp=Z,17nm,1.4s
PKME **Peaks-Kenny Pk** 31.68 23 P P 19 42 42.3 -0.4
PKME **Peaks-Kenny Pk** 31.68 23 P P 19 42 50.8 +8.1
baz=212
BELC **Belle Mtn. Jos** 31.69 308 P P 19 42 50.1 +7.0
baz=116
GMRC **Granite Mounta** 31.78 310 P P 19 42 49.6 +5.6
baz=117
TPFO **Pinon Flats** 31.87 307 P P 19 42 50.6 +5.9
baz=114
PFO **Pinyon Flats O** 31.88 307 P P 19 42 50.7 +5.9
comp=Z,6.8nm,0.9s,baz=136,slow=6.9,SNR=6.0
PFO LR LR 19 58 22.0
comp=Z,606nm,19.1s,baz=186,slow=41
PFO **Pinyon Flats O** 31.88 307 P P 19 42 41.7 -3.0
PFO IAmb IAmb 19 43 06.8
comp=Z,21nm,1.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PFO** | **Pinyon Flats O** | **31.88** | **307** | P | P | 19 42 50.8 | +6.1 |
| | baz=114 | | | | | | |
| **TJX** | **Tijuana** | **31.91** | **305** | P | **P** | **19 42 43.0** | **-1.9** |
| **F62A** | **Pittston Farm,** | **31.98** | **22** | P | **P** | **19 42 44.8** | **-0.5** |
| **VLDQ** | **Val d'Or** | **31.99** | **11** | P | **P** | **19 42 45.7** | **+0.3** |
| VLDQ | | | | IAmb | IAmb | 19 42 53.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **B35A** | **Bob, Littlefor** | **32.02** | **351** | P | **P** | **19 42 43.9** | **-1.8** |
| B35A | | | | IAmb | IAmb | 19 43 23.9 | |
| | comp=Z,17nm,1.6s | | | | | | |
| **SHPR** | **Sheep Range** | **32.23** | **313** | P | **P** | **19 42 45.2** | **-2.7** |
| SHPR | | | | IAmb | IAmb | 19 42 57.1 | |
| | comp=Z,17nm,1.6s | | | | | | |
| **HEC** | **Hector,Ludlow** | **32.30** | **309** | P | P | 19 42 55.9 | +7.5 |
| | baz=116,SNR=7.8 | | | | | | |
| **AGMN** | **Agassiz Nation** | **32.34** | **348** | P | **P** | **19 42 47.6** | **-0.8** |
| AGMN | | | | IAmb | IAmb | 19 42 55.5 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **AGMN** | **Agassiz Nation** | **32.34** | **348** | P | P | 19 42 54.4 | +5.9 |
| | baz=163,SNR=6.1 | | | | | | |
| **PSUT** | **Pine Spring** | **32.42** | **317** | P | **P** | **19 42 47.4** | **-2.2** |
| PSUT | | | | IAmb | IAmb | 19 42 59.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BW06** | **Boulder Array** | **32.60** | **327** | P | **P** | **19 42 48.3** | **-2.9** |
| **BW06** | **Boulder Array** | **32.60** | **327** | P | P | 19 42 56.1 | +4.9 |
| | baz=136 | | | | | | |
| **PD31** | **Pinedale Array** | **32.60** | **327** | P | **P** | **19 42 48.3** | **-2.9** |
| **PDAR** | **Pinedale Array** | **32.60** | **327** | P | P | 19 42 57.0 | +5.9 |
| | comp=Z,0.8nm,0.5s,baz=130,slow=8.5,SNR=4.7 | | | | | | |
| PDAR | | | | LR | LR | 19 59 26.5 | |
| | comp=Z,214nm,21.0s,baz=124,slow=42 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.60** | **327** | P | **P** | **19 42 48.1** | **-3.0** |
| **PRN** | **Pahroc Range** | **32.61** | **315** | P | **P** | **19 42 49.0** | **-2.2** |
| PRN | | | | IAmb | IAmb | 19 43 00.7 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **DUG** | **Dugway, Tooele** | **32.74** | **321** | P | **P** | **19 42 49.6** | **-2.6** |
| DUG | | | | IAmb | IAmb | 19 43 00.9 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **DUG** | **Dugway, Tooele** | **32.74** | **321** | P | P | 19 42 58.9 | +6.6 |
| | baz=128,SNR=5.5 | | | | | | |
| **SPR3** | **Spring Creek 3** | **32.99** | **318** | P | **P** | **19 42 51.8** | **-2.9** |
| SPR3 | | | | IAmb | IAmb | 19 43 03.2 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **ETMB** | **Extrema** | **33.07** | **142** | P | **P** | **19 42 52.6** | **-2.6** |
| ETMB | | | | IAmb | IAmb | 19 43 09.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **GWY** | **Greenwater Val** | **33.15** | **311** | P | **P** | **19 42 53.4** | **-2.5** |
| **QSM** | **Queen of Sheba** | **33.19** | **311** | P | **P** | **19 42 53.2** | **-2.9** |
| QSM | | | | IAmb | IAmb | 19 43 37.7 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **TPNV** | **Topopah Spring** | **33.21** | **313** | P | **P** | **19 42 54.0** | **-2.5** |
| **D62A** | **Allapoint, All** | **33.32** | **22** | P | **P** | **19 42 55.7** | **-1.4** |
| **R11A** | **Troy Canyon, C** | **33.46** | **316** | P | **P** | **19 42 56.0** | **-2.6** |
| R11A | | | | IAmb | IAmb | 19 43 07.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **33.56** | **308** | P | P | 19 43 07.0 | +7.6 |
| | baz=115 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **33.58** | **310** | P | P | 19 43 06.1 | +6.5 |
| | baz=116 | | | | | | |
| **MPMC** | **Manual Prospec** | **33.69** | **311** | P | P | 19 43 07.2 | +6.5 |
| | baz=117 | | | | | | |
| **REDW** | **Red Top Meadow** | **33.70** | **327** | P | **P** | **19 42 58.1** | **-2.6** |
| REDW | | | | IAmb | IAmb | 19 43 37.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **LAO** | **LASA Array** | **34.06** | **335** | P | P | 19 43 11.7 | +8.1 |
| | baz=144 | | | | | | |
| **ULM** | **Lac du Bonnet** | **34.21** | **349** | P | P | 19 43 09.5 | +4.7 |
| | comp=Z,5.6nm,0.8s,baz=163,slow=9.9,SNR=4.5 | | | | | | |
| **ARVC** | **Arvin** | **34.28** | **308** | P | P | 19 43 12.9 | +7.3 |
| | baz=114 | | | | | | |
| **ELK** | **Elko** | **34.55** | **319** | P | P | 19 43 14.8 | +6.6 |
| | comp=Z,7.4nm,0.8s,baz=126,slow=6.1,SNR=29 | | | | | | |
| **ELK** | **Elko** | **34.55** | **319** | IAmb | IAmb | 19 43 16.9 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **DGMT** | **Dagmar** | **34.79** | **339** | P | P | 19 43 16.0 | +6.2 |
| | baz=149 | | | | | | |
| **MDP** | **Montagnes des** | **34.91** | **106** | LR | LR | 20 00 14.2 | |
| | comp=Z,326nm,18.4s,baz=289,slow=41 | | | | | | |
| **PKM** | **Mcpherson Peak** | **34.93** | **307** | P | P | 19 43 18.8 | +7.4 |
| | baz=113 | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.35** | **314** | P | P | 19 43 22.8 | +7.7 |
| | comp=Z,10nm,0.9s,baz=126,slow=7.7,SNR=39 | | | | | | |
| NVAR | | | | PcP | **PcP** | **19 45 50.5** | **+5.2** |
| | comp=Z,1.0nm,0.8s,baz=131,slow=2.7,SNR=3.8 | | | | | | |
| NVAR | | | | LR | LR | 20 01 41.2 | |
| | comp=Z,422nm,18.5s,baz=135,slow=43 | | | | | | |
| **BMN** | **Battle Mountai** | **35.64** | **318** | P | **P** | **19 43 15.9** | **-1.5** |
| **BOZ** | **Bozeman (W)** | **35.66** | **329** | P | P | 19 43 24.0 | +6.4 |
| | baz=136 | | | | | | |
| **HLID** | **Hailey** | **35.77** | **324** | P | P | 19 43 25.4 | +6.9 |
| | baz=130 | | | | | | |
| **LPAZ** | **La Paz** | **37.45** | **151** | LR | LR | 19 58 51.4 | |
| | comp=Z,354nm,21.4s,baz=320,slow=36 | | | | | | |
| **MNMC** | **Minye Minye** | **39.32** | **155** | P | **P** | **19 43 46.5** | **-2.5** |
| MNMC | | | | IAmb | IAmb | 19 44 28.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **M04C** | **Macdoel** | **39.33** | **317** | P | P | 19 43 55.6 | +6.9 |
| | baz=119 | | | | | | |
| **J05D** | **Fort Rock, OR** | **39.68** | **319** | P | P | 19 43 57.8 | +6.2 |
| | baz=121 | | | | | | |
| **FFC** | **Flin Flon** | **39.71** | **346** | P | **P** | **19 43 51.4** | **-0.1** |
| **L04D** | **Klamath Falls** | **39.84** | **317** | P | P | 19 43 58.9 | +5.9 |
| | baz=119 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **39.88** | **316** | P | P | 19 43 58.3 | +5.1 |
| | comp=Z,2.7nm,0.8s,baz=128,slow=8.3,SNR=4.9 | | | | | | |
| **J04D** | **Umpqua Nationa** | **40.21** | **318** | P | **P** | **19 43 53.4** | **-2.7** |
| **J04D** | **Umpqua Nationa** | **40.21** | **318** | P | P | 19 44 02.7 | +6.6 |
| | baz=120,SNR=5.3 | | | | | | |
| **NEW** | **Newport** | **40.23** | **328** | LR | LR | 20 03 20.4 | |
| | comp=Z,187nm,21.1s,baz=134,slow=40 | | | | | | |
| **SCHQ** | **Schefferville** | **40.74** | **17** | P | P | 19 44 05.4 | +5.3 |
| | comp=Z,24nm,0.9s,baz=219,slow=6.8,SNR=17 | | | | | | |
| SCHQ | | | | LR | LR | 20 01 45.5 | |
| | comp=Z,397nm,18.7s,baz=269,slow=37 | | | | | | |
| **SCHQ** | **Schefferville** | **40.74** | **17** | P | **P** | **19 43 59.7** | **-0.4** |
| **K02D** | **Willamette Mer** | **40.96** | **317** | P | P | 19 44 08.1 | +6.0 |
| | baz=118 | | | | | | |
| **SIV** | **San Ignacio** | **40.99** | **141** | P | **P** | **19 44 05.9** | **+3.3** |
| | comp=Z,3.7nm,0.7s,baz=309,slow=8.8,SNR=16 | | | | | | |
| SIV | | | | LR | LR | 20 03 22.3 | |
| | comp=Z,409nm,18.8s,baz=328,slow=40 | | | | | | |
| **I03D** | **Drain, OR** | **41.22** | **318** | P | P | 19 44 10.3 | +6.1 |
| | baz=119 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **41.77** | **139** | P | **P** | **19 44 06.9** | **-2.0** |
| **EDM** | **Edmonton** | **42.04** | **336** | P | **P** | **19 44 09.6** | **-1.1** |
| EDM | | | | IAmb | IAmb | 19 44 32.4 | |
| | comp=Z,49nm,1.8s | | | | | | |
| **FCC** | **Fort Churchill** | **42.24** | **354** | P | **P** | **19 44 10.5** | **-1.7** |
| **LVC** | **Limon Verde** | **42.73** | **156** | LR | LR | 20 02 51.7 | |
| | comp=Z,147nm,18.8s,baz=324,slow=37 | | | | | | |
| **BBB** | **Bella Bella** | **48.24** | **327** | LR | LR | 20 07 57.3 | |
| | comp=Z,133nm,19.7s,baz=120,slow=39 | | | | | | |
| **FRB** | **Frobisher Bay** | **48.41** | **10** | LR | LR | 20 05 50.4 | |
| | comp=Z,444nm,18.0s,baz=197,slow=36 | | | | | | |
| **RPN** | **Rapa Nui** | **49.14** | **208** | LR | LR | 20 00 02.4 | |
| | comp=Z,105nm,20.1s,baz=191,slow=29 | | | | | | |
| **BDFB** | **Brasilia** | **49.63** | **129** | P | **P** | **19 45 15.4** | **+4.2** |
| | comp=Z,1.2nm,0.5s,baz=167,slow=23,SNR=1.6 | | | | | | |
| BDFB | | | | LR | LR | 20 07 32.2 | |
| | comp=Z,432nm,19.4s,baz=313,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.73** | **343** | P | P | 19 45 16.9 | +5.7 |
| | comp=Z,5.0nm,0.8s,baz=139,slow=7.8,SNR=58 | | | | | | |
| **CPUP** | **Villa Florida** | **51.30** | **146** | LR | LR | 20 09 33.8 | |
| | comp=Z,259nm,18.2s,baz=318,slow=39 | | | | | | |
| **DLBC** | **Dease Lake** | **52.51** | **333** | LR | LR | 20 10 27.6 | |
| | comp=Z,177nm,21.1s,baz=107,slow=39 | | | | | | |
| **DLBC** | **Dease Lake** | **52.51** | **333** | P | **P** | **19 45 32.8** | **+0.4** |
| DLBC | | | | IAmb | IAmb | 19 45 54.8 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **MMPY** | **Sheldon Lake,** | **55.37** | **337** | P | P | 19 45 59.5 | +6.4 |
| | baz=125,SNR=5.6 | | | | | | |
| **FARO** | **Faro, Yukon** | **55.96** | **336** | P | P | 19 46 02.8 | +5.4 |
| | baz=122 | | | | | | |
| **PLCA** | **Paso Flores** | **59.11** | **166** | P | **P** | **19 46 23.4** | **+3.6** |
| | comp=Z,1.4nm,0.8s,baz=341,slow=11,SNR=2.9 | | | | | | |
| **INK** | **Inuvik** | **59.41** | **341** | P | P | 19 46 27.5 | +6.0 |
| | comp=Z,3.5nm,1.0s,baz=129,slow=9.9,SNR=7.3 | | | | | | |
| **INK** | **Inuvik** | **59.41** | **341** | P | **P** | **19 46 18.8** | **-2.6** |
| **INK** | **Inuvik** | **59.41** | **341** | IAmb | IAmb | 19 46 39.6 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **59.41** | **341** | P | P | 19 46 27.8 | +6.4 |
| | baz=125 | | | | | | |
| **ICESG** | **Greenland Ices** | **59.65** | **18** | *i* P | **P** | **19 46 27.6** | **+4.0** |
| ICESG | | | | IAmb | IAmb | 19 46 29.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **60.63** | **331** | P | P | 19 46 34.7 | +4.7 |
| | baz=109 | | | | | | |
| **PAX** | **Paxson** | **61.31** | **333** | P | P | 19 46 39.7 | +5.0 |
| | baz=110 | | | | | | |
| **RIDG** | **Independent Ri** | **61.32** | **334** | P | P | 19 46 40.6 | +5.8 |
| | baz=111 | | | | | | |
| **SUMG** | **Summit** | **62.05** | **15** | *i* P | **P** | **19 46 44.4** | **+4.5** |
| SUMG | | | | IAmb | IAmb | 19 46 47.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **SUMG** | **Summit** | **62.05** | **15** | P | **P** | **19 46 37.3** | **-2.6** |
| **ILAR** | **Eielson Array** | **62.52** | **335** | P | P | 19 46 48.5 | +5.8 |
| | comp=Z,4.0nm,0.8s,baz=117,slow=5.2,SNR=27 | | | | | | |
| ILAR | | | | LR | LR | 20 17 08.4 | |
| | comp=Z,124nm,18.8s,baz=106,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **62.52** | **335** | P | **P** | **19 46 40.6** | **-2.1** |
| **RND** | **Reindeer** | **62.91** | **333** | P | **P** | **19 46 42.3** | **-3.1** |
| **MCK** | **McKinley** | **63.04** | **334** | P | P | 19 46 51.0 | +4.8 |
| | baz=108 | | | | | | |
| **NEEM** | **North Greenlan** | **63.10** | **8** | *i* P | **P** | **19 46 51.2** | **+4.5** |
| NEEM | | | | IAmb | IAmb | 19 46 52.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KDAK** | **Kodiak Island** | **63.32** | **327** | LR | LR | 20 16 33.7 | |
| | comp=Z,164nm,20.5s,baz=126,slow=38 | | | | | | |
| **TRF** | **Thorofare Moun** | **63.54** | **333** | P | P | 19 46 54.7 | +5.0 |
| | baz=106 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **64.01** | **334** | P | P | 19 46 57.8 | +5.2 |
| | baz=106 | | | | | | |
| **CAST** | **Castle Rocks** | **64.31** | **333** | P | **P** | **19 46 59.0** | **+4.4** |
| | baz=104 | | | | | | |
| **COLD** | **Coldfoot** | **64.60** | **337** | P | P | 19 47 02.9 | +6.5 |
| | baz=108 | | | | | | |
| **TTA** | **Tatalina** | **65.95** | **332** | P | P | 19 47 10.1 | +4.8 |
| | baz=100 | | | | | | |
| **PPT** | **Papeete** | **71.14** | **244** | LR | LR | 20 12 45.2 | |
| | comp=Z,155nm,19.7s,baz=14,slow=31 | | | | | | |
| **TNA** | **Tin City** | **71.36** | **334** | P | **P** | **19 47 37.7** | **-1.2** |
| **TNA** | **Tin City** | **71.36** | **334** | P | P | 19 47 45.6 | +6.7 |
| | baz=90 | | | | | | |
| **GAMB** | **Gambell** | **73.04** | **332** | P | P | 19 47 55.1 | +6.1 |
| | baz=86 | | | | | | |
| **ESDC** | **Seoca Array** | **73.57** | **53** | P | P | 19 47 58.5 | +5.8 |
| | comp=Z,2.7nm,1.0s,baz=292,slow=6.0,SNR=11 | | | | | | |
| ESDC | | | | LR | LR | 20 16 18.4 | |
| | comp=Z,127nm,20.5s,baz=334,slow=33 | | | | | | |
| **ESDC** | **Sonseca Array** | **73.57** | **53** | P | **P** | **19 47 51.3** | **-1.5** |
| **MDT** | **Midelt** | **74.16** | **60** | LR | LR | 20 16 50.9 | |
| | comp=Z,203nm,19.0s,baz=33,slow=33 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **76.18** | **12** | LR | LR | 20 23 55.9 | |
| | comp=Z,248nm,18.1s,baz=110,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.97** | **29** | P | P | 19 48 28.7 | +5.8 |
| | comp=Z,4.8nm,1.1s,baz=291,slow=5.9,SNR=4.2 | | | | | | |
| NOA | | | | LR | LR | 20 21 39.4 | |
| | comp=Z,150nm,20.7s,baz=340,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **79.86** | **86** | P | P | 19 48 33.9 | +5.3 |
| | comp=Z,6.1nm,1.0s,baz=286,slow=1.6,SNR=4.9 | | | | | | |
| **RAR** | **Rarotonga** | **81.41** | **245** | LR | LR | 20 15 39.4 | |
| | comp=Z,34nm,18.2s,baz=312,slow=29 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.66** | **19** | P | P | 19 48 42.7 | +5.5 |
| | comp=Z,3.6nm,0.8s,baz=300,slow=4.9,SNR=12 | | | | | | |
| ARCES | | | | LR | LR | 20 25 49.1 | |
| | comp=Z,291nm,19.7s,baz=246,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.66** | **19** | IAmb | IAmb | 19 48 44.9 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **81.99** | **44** | LR | LR | 20 20 16.5 | |
| | comp=Z,214nm,19.5s,baz=356,slow=32 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **82.48** | **323** | LR | LR | 20 27 35.1 | |
| | comp=Z,32nm,18.9s,baz=120,slow=37 | | | | | | |
| **CLL** | **Collm** | **82.65** | **39** | *e*pP | pP | 19 48 48.0 | +3.6 |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **GERES** | **GERESS Array B** | **83.84** | **41** | P | **P** | **19 48 53.6** | **+4.5** |
| | comp=Z,1.4nm,0.9s,baz=103,slow=2.9,SNR=5.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.32** | **78** | P | **P** | **19 48 55.0** | **+2.9** |
| | comp=Z,1.8nm,0.9s,baz=289,slow=5.6,SNR=6.6 | | | | | | |
| **KEST** | **Kesra** | **84.72** | **54** | P | P | 19 48 59.9 | +6.1 |
| | comp=Z,5.6nm,0.9s,baz=5.5,slow=2.5,SNR=7.3 | | | | | | |
| **KEST** | **Kesra** | **84.72** | **54** | IAmb | IAmb | 19 49 00.8 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **VRAC** | **Vranov** | **85.48** | **40** | P | P | 19 49 02.6 | +5.4 |
| | comp=Z,2.0nm,0.5s,baz=254,slow=8.6,SNR=3.6 | | | | | | |
| VRAC | | | | LR | LR | 20 26 30.9 | |
| | comp=Z,209nm,19.8s,baz=350,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **85.52** | **26** | P | P | 19 49 03.0 | +5.8 |
| | comp=Z,15nm,0.8s,baz=280,slow=1.8,SNR=21 | | | | | | |
| **MODS** | **Modra-Piesok** | **86.23** | **41** | *e*P | P | 19 49 09.0 | +8.0 |
| **SMOL** | **Smolenice** | **86.28** | **40** | *e*P | P | 19 49 07.9 | +6.7 |
| **LANS** | **Liptovska Anna** | **87.29** | **39** | *e*P | P | 19 49 12.5 | +6.3 |
| **VAE** | **Valguarnera** | **88.05** | **51** | LR | LR | 20 23 11.4 | |
| | comp=Z,399nm,19.1s,baz=176,slow=32 | | | | | | |
| **SEY** | **Seymchan** | **88.39** | **337** | LR | LR | 20 32 13.8 | |
| | comp=Z,67nm,20.0s,baz=326,slow=38 | | | | | | |
| **TIXI** | **Tiksi** | **88.56** | **350** | P | **P** | **19 49 10.3** | **-1.4** |
| TIXI | | | | IAmb | IAmb | 19 49 31.8 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **DIVS** | **Divibare** | **89.59** | **44** | P | **P** | **19 49 15.1** | **-2.2** |
| DIVS | | | | IAmb | IAmb | 19 49 24.4 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **AFI** | **Afiamalu** | **89.81** | **255** | LR | LR | 20 23 49.2 | |
| | comp=Z,36nm,18.7s,baz=67,slow=32 | | | | | | |
| **MA2** | **Magadan** | **91.00** | **335** | P | **P** | **19 49 21.7** | **-1.7** |
| MA2 | | | | IAmb | IAmb | 19 49 29.8 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **91.37** | **327** | LR | LR | 20 34 05.7 | |
| | comp=Z,68nm,18.6s,baz=64,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **92.25** | **35** | LR | LR | 20 29 44.6 | |
| | comp=Z,219nm,19.1s,baz=333,slow=35 | | | | | | |
| **MLR** | **Muntele Rosu** | **92.83** | **41** | P | P | 19 49 38.3 | +5.9 |
| | comp=Z,4.1nm,1.1s,baz=339,slow=7.6,SNR=3.8 | | | | | | |
| **NRIK** | **Norilsk** | **93.92** | **2** | LR | LR | 20 34 05.7 | |
| | comp=Z,188nm,19.1s,baz=316,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **96.41** | **344** | LR | LR | 20 41 31.8 | |
| | comp=Z,105nm,18.4s,baz=38,slow=40 | | | | | | |
| **CD2** | **Chengdu** | **131.55** | **349** | PKP | **PKiKP** | **19 55 35.2** | **+1.4** |
| **PZH** | **PanZhiHua** | **136.21** | **350** | PKP | **PKiKP** | **19 55 44.8** | **+1.4** |
| **WRA** | **Warramunga Arr** | **141.45** | **259** | PKhKP | PKPpre | 19 55 48.2 | |
| | comp=Z,0.4nm,0.6s,baz=86,slow=3.2,SNR=5.3 | | | | | | |
| WRA | | | | PKP | **PKiKP** | **19 55 56.1** | **+2.0** |
| | comp=Z,0.8nm,0.9s,baz=86,slow=2.9,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **141.85** | **253** | PKhKP | PKPpre | 19 55 49.8 | |
| | comp=Z,0.6nm,0.7s,baz=111,slow=3.6,SNR=9.1 | | | | | | |
| ASAR | | | | PKP | **PKiKP** | **19 55 56.0** | **+1.2** |
| | comp=Z,0.6nm,0.7s,baz=89,slow=2.2,SNR=4.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **144.54** | **352** | PKP | **PKiKP** | **19 56 00.7** | **+0.2** |
| | comp=Z,1.2nm,0.5s,baz=330,slow=3.5,SNR=11 | | | | | | |

*IDC **02** 19:50:16.2±7.2,36°.37N×70°.72E,h167km±61km, mb3.1/2, mb1 3.0/6, mb1mx2.7/53, mbtmp3.6/6, Error ellipse: s-maj=98.5km s-min=43.9km az=137.0*
*NNC **02** 19:50:24.2±2.2,37°.00N×70°.75E, h241km±27km, mb2.6, mpv3.7, Error ellipse: s-maj=21.7km s-min=13.9km az=16.0*

**ISC 02 19:50:19.2±1.0,36°.61N±0°.08×70°.69E±0°.10,h204km±25km, σ1$39/30,7C-2D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.99** | **22** | P | **Pn** | **19 51 47.4** | **+0.8** |
| | SNR=40 | | | | | | |
| **UCH** | **Uchtor** | **6.34** | **27** | P | **Pn** | **19 51 52.1** | **+0.9** |
| | SNR=16 | | | | | | |
| **KK02** | **Karatay Array** | **6.49** | **359** | ⇑P | **Pn** | **19 51 53.5** | **+0.8** |
| | 2.4nm,0.3s | | | | | | |
| KK02 | | | | ⇑S | **S** | **19 53 04.3** | **-2.4** |
| | 30nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **6.50** | **21** | P | **Pn** | **19 51 54.0** | **+1.1** |
| | SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **6.70** | **25** | P | **Pn** | **19 51 56.0** | **+0.5** |
| | 2.0nm,0.3s,baz=181,slow=5.1,SNR=32 | | | | | | |
| AAK | | | | S | **S** | **19 53 11.7** | **-0.2** |
| | 3.7nm,0.3s,baz=15,slow=19,SNR=32 | | | | | | |
| **AAK** | **Ala-Archa** | **6.70** | **25** | P | **Pn** | **19 51 56.6** | **+1.1** |
| | SNR=6.3 | | | | | | |
| **AAK** | **Ala-Archa** | **6.70** | **25** | ⇑P | **Pn** | **19 51 56.5** | **+1.0** |
| | 2.1nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **S** | **19 53 10.8** | **-1.0** |
| | 26nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.35** | **29** | P | **Pn** | **19 52 04.9** | **+0.9** |
| | SNR=6.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.35** | **29** | ⇑P | **Pn** | **19 52 04.5** | **+0.5** |
| | 2.6nm,0.3s | | | | | | |
| TKM2 | | | | ⇑S | **S** | **19 53 25.9** | **-1.4** |
| | 6.1nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **13.21** | **36** | ⇑P | **Pn** | **19 53 18.9** | **-0.1** |
| | 2.7nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **13.35** | **37** | ⇓P | **Pn** | **19 53 18.6** | **-2.1** |
| | 0.8nm,0.7s,baz=201,slow=16,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.35** | **37** | P | **Pn** | **19 53 21.1** | **+0.3** |
| | 0.1nm,0.3s,baz=212,slow=12,SNR=6.1 | | | | | | |
| **PYUN** | **Piuthan** | **13.41** | **126** | *e*P | **Pn** | **19 53 19.0** | **-2.8** |
| | 4.1nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **13.75** | **123** | *e*P | **Pn** | **19 53 24.9** | **-1.3** |
| **GKN** | **Gorkha** | **14.57** | **122** | *e*P | **Pn** | **19 53 35.7** | **-0.4** |
| | 7.6nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.87** | **332** | ⇑P | **Pn** | **19 53 39.7** | **+0.3** |
| | 0.8nm,0.5s,baz=144,slow=12,SNR=24 | | | | | | |
| AB31 | | | | S | **S** | **19 56 21.4** | **-2.8** |
| | 0.9nm,0.5s,baz=164,slow=21,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.10** | **19** | P | **P** | **19 53 44.7** | **+2.0** |
| | 0.1nm,0.3s,baz=209,slow=12,SNR=7.6 | | | | | | |
| **KKN** | **Kakani** | **15.14** | **121** | *e*P | **Pn** | **19 53 42.9** | **-0.3** |
| | 8.7nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **15.36** | **122** | *e*P | **P** | **19 53 45.9** | **-0.2** |
| | 6.3nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **15.37** | **122** | *e*P | **Pn** | **19 53 45.6** | **-0.5** |
| | 8.2nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **15.48** | **120** | *e*P | **P** | **19 53 47.8** | **+0.3** |
| | 2.8nm,0.2s | | | | | | |
| **JIRN** | **Jiri** | **15.86** | **120** | *e*P | **Pn** | **19 53 52.2** | **+0.2** |
| | 15nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.42** | **359** | P | **Pn** | **19 54 00.4** | **+2.4** |
| | 0.8nm,0.3s,baz=134,slow=10,SNR=17 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.92** | **25** | P | **P** | **19 54 37.0** | **+1.9** |
| | 3.2nm,0.7s,baz=222,slow=11,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.47** | **268** | P | **P** | **20 00 41.3** | **+0.6** |
| | 0.2nm,0.5s,baz=58,slow=5.8,SNR=1.1 | | | | | | |

**IDC 02 19:50:47.3±24.0,15°.70S×172°.36W,h0km,mb3.8/3, mb1 4.1/3,mb1mx3.6/31,mbtmp3.8/3,Error ellipse: s-maj=615.7km s-min=55.4km az=35.0,Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **50.75** | **257** | P | P | 19 59 48.9 | -0.7 |
| | 0.2nm,0.6s,baz=92,slow=6.8,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **50.97** | **252** | P | P | 19 59 51.5 | +0.3 |
| | 0.8nm,0.6s,baz=88,slow=8.6,SNR=16 | | | | | | |
| **VNDA** | **Vanda** | **63.18** | **186** | P | P | 20 01 16.7 | -0.1 |
| | 3.2nm,0.9s,baz=45,slow=10.0,SNR=1.5 | | | | | | |

*NIC **02** 20:11:50.4±0.0,35°.13N×33°.30E,h57km±2km, Md2.6/1, Ml2.1/3*
*DDA **02** 20:11:50.6±0.0,35°.21N×33°.15E,h22km±1km, ML1.8*

**ISC 02 20:11:52.0±2.2,35°.08N±0°.09×33°.28E±0°.06,h49km±19km, n14,σ1$12/23,Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CSS** | **Mathiatis** | **0.12** | **159** | P | **Pn** | **20 11 59.4** | **-0.5** |
| CSS | | | | S | **Sn** | **20 12 06.5** | **+1.1** |
| **ASGA** | **Asgata** | **0.29** | **185** | P | **Pn** | **20 12 00.1** | **-0.9** |
| ASGA | | | | AMI | | 20 12 08.3 | |
| | 0.5nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 20 12 09.2 | |
| | 0.3nm,0.4s | | | | | | |
| **MVOU** | **Mavrovouni** | **0.30** | **102** | P | **Pn** | **20 12 00.5** | **-0.5** |
| MVOU | | | | S | **Sn** | **20 12 07.8** | **+0.4** |
| MVOU | | | | AMI | | 20 12 08.8 | |
| | 0.3nm,0.5s | | | | | | |
| MVOU | | | | AMI | | 20 12 08.8 | |
| | 0.3nm,0.5s | | | | | | |
| **SZAC** | **Souni** | **0.46** | **226** | P | **Pn** | **20 12 02.1** | **-0.6** |
| SZAC | | | | S | **Sn** | **20 12 11.6** | **+1.2** |
| SZAC | | | | AMI | | 20 12 12.2 | |
| | 1.6nm,0.3s | | | | | | |
| SZAC | | | | AMI | | 20 12 12.2 | |
| | 1.6nm,0.3s | | | | | | |
| SZAC | | | | AMI | | 20 12 12.3 | |
| | 1.3nm,0.3s | | | | | | |
| SZAC | | | | AMI | | 20 12 12.3 | |
| | 1.3nm,0.3s | | | | | | |
| SZAC | | | | AMd | | 20 12 22.4 | |
| SZAC | | | | AMd | | 20 12 22.4 | |
| **NATA** | **Nata** | **0.65** | **243** | P | **Pn** | **20 12 04.6** | **-0.5** |
| **AKMS** | **Akamas** | **0.78** | **266** | P | **Pn** | **20 12 05.8** | **-0.9** |
| **EREN** | **Erenkoy** | **0.86** | **58** | P | **Pn** | **20 12 07.7** | **-0.1** |
| EREN | | | | *i* AML | AML | 20 12 25.0 | |
| | comp=N,56nm,0.8s | | | | | | |
| **GULN** | **MERSIN_Gulnar** | **1.13** | **11** | P | **Pn** | **20 12 10.0** | **-1.4** |
| GULN | | | | S | **Sn** | **20 12 25.0** | **-0.8** |
| **GAZI** | **Gazipasa** | **1.40** | **326** | P | **Pn** | **20 12 13.9** | **-1.2** |
| GAZI | | | | S | **Sn** | **20 12 31.1** | **-1.3** |
| GAZI | | | | *i* AML | AML | 20 12 33.0 | |
| | comp=E,18nm,0.6s | | | | | | |
| GAZI | | | | *i* AML | AML | 20 12 33.0 | |
| | comp=N,16nm,0.3s | | | | | | |
| **KIZK** | **Mersin** | **1.57** | **26** | P | **Pn** | **20 12 15.4** | **-2.0** |
| KIZK | | | | S | **Sn** | **20 12 35.9** | **-0.7** |
| KIZK | | | | *i* AML | AML | 20 12 39.0 | |
| | comp=E,12nm,0.7s | | | | | | |
| **ERMK** | **Ermenek** | **1.59** | **349** | P | **Pn** | **20 12 17.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **53.39** | **323** | P | **P** | **20 44 16.7** | **+1.0** |
| **TARG** | **Taragay, Kyrgy** | **53.90** | **315** | P | **P** | **20 44 21.2** | **+1.3** |
| **ZALV** | **Zalesovo Beam** | **55.75** | **331** | P | **P** | **20 44 32.9** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=131,slow=9.1,SNR=2.7 | | | | | | |
| **KURK** | **Kurchatov** | **57.23** | **325** | P | **P** | **20 44 44.3** | **+1.2** |
| KURK | | | | IAmb | IAmb | 20 45 03.9 | |
| | comp=Z,5.3nm,1.4s | | | | | | |
| **BTK** | **Batken** | **58.38** | **311** | P | **P** | **20 44 51.5** | **-0.1** |
| BTK | | | | IAmb | IAmb | 20 45 00.5 | |
| | comp=Z,2.5nm,0.9s | | | | | | |

**DDA 02 20:46:09.0±0.0, 39°09'N×27°77'E, h7km±2km, ML1.4, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.21** | **170** | P | Pg | 20 46 13.9 | +0.6 |
| AKHS | | | | S | Sg | 20 46 17.8 | +1.7 |
| AKHS | | | | *i* AML | AML | 20 46 18.0 | |
| | comp=E,60nm,0.4s | | | | | | |
| **STEP** | **BALIKESIR_Sava** | **0.29** | **353** | P | Pg | 20 46 15.2 | +0.5 |
| STEP | | | | S | Sg | 20 46 19.6 | +1.1 |
| **ZEDA** | **zmir-Bergama** | **0.55** | **257** | P | Pb | 20 46 20.5 | -0.5 |
| ZEDA | | | | S | Sb | 20 46 28.3 | -0.8 |
| **BALY** | **Balya** | **0.66** | **350** | P | Pg | 20 46 21.9 | +0.2 |
| BALY | | | | S | Sg | 20 46 31.3 | +1.0 |
| BALY | | | | *i* AML | AML | 20 46 32.0 | |
| | comp=E,15nm,0.5s | | | | | | |
| BALY | | | | *i* AML | AML | 20 46 32.0 | |
| | comp=N,20nm,0.4s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **0.67** | **308** | P | Pb | 20 46 23.0 | 0.0 |
| BUHA | | | | S | Sg | 20 46 31.7 | +0.9 |
| **DEMI** | **Demirci** | **0.74** | **93** | P | Pb | 20 46 24.5 | +0.2 |
| DEMI | | | | S | Sg | 20 46 32.9 | 0.0 |
| DEMI | | | | *i* AML | AML | 20 46 34.0 | |
| | comp=E,17nm,0.2s | | | | | | |
| **DURS** | **Dursunbey** | **0.75** | **47** | P | Pg | 20 46 23.3 | -0.1 |
| DURS | | | | S | Sb | 20 46 34.3 | -0.6 |
| DURS | | | | *i* AML | AML | 20 46 37.0 | |
| | comp=E,12nm,0.2s | | | | | | |
| **AYVA** | **Ayvalik** | **0.86** | **285** | P | Pg | 20 46 25.4 | -0.2 |
| AYVA | | | | S | Sb | 20 46 38.0 | -0.1 |
| AYVA | | | | *i* AML | AML | 20 46 40.0 | |
| | comp=E,14nm,0.6s | | | | | | |
| AYVA | | | | *i* AML | AML | 20 46 40.0 | |
| | comp=N,15nm,0.6s | | | | | | |
| **USAK** | **Uak-Merkez** | **1.05** | **111** | P | Pg | 20 46 28.8 | -0.3 |
| USAK | | | | S | Sg | 20 46 42.1 | -0.5 |

*CNRM **02** 20:53:45.4, 35°.67N×3°.62W, h20km, ml2.9*
*SFS **02** 20:53:46.0, 35°.45N×3°.76W, h35km, ML2.2, ALBORAN SUR*

**ISC 02 20:53:43.8±1.5, 35°55'N±0°.03×3°70'W±0°.03, h14km±12km, n18, σ1°18/31, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.39** | **210** | P | **Pn** | **20 53 56.0** | **+0.9** |
| **PALE** | **Palemas** | **0.39** | **210** | P | **Pb** | **20 53 51.9** | **-0.6** |
| PALE | | | | S | **Sb** | **20 53 57.4** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.67** | **120** | P | **Pn** | **20 53 58.6** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.67** | **120** | P | **Pn** | **20 53 59.3** | **+0.4** |
| GOG | | | | S | **Sn** | **20 54 09.3** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.10** | **109** | P | **Pn** | **20 54 05.2** | **+0.3** |
| CHAS | | | | S | **Sb** | **20 54 19.7** | **+0.7** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **334** | P | **Pg** | **20 54 09.6** | **0.0** |
| EMAL | | | | S | **Sb** | **20 54 25.2** | **-0.6** |
| **SMIR** | **Smir Dam** | **1.37** | **276** | P | **Pn** | **20 54 08.8** | **+0.2** |
| SMIR | | | | S | **Sn** | **20 54 26.2** | **-0.4** |
| **CHEFC** | **Chefchaouen** | **1.41** | **252** | P | **Pg** | **20 54 11.0** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.41** | **252** | P | **Pg** | **20 54 11.0** | **+0.1** |
| CHEFC | | | | S | **Sn** | **20 54 25.9** | **-1.7** |
| **JBK** | **JBK** | **1.53** | **142** | P | **Pb** | **20 54 12.0** | **-0.2** |
| **JBK** | **JBK** | **1.53** | **142** | P | **Pb** | **20 54 12.2** | **0.0** |
| JBK | | | | S | **Sn** | **20 54 30.7** | **-0.1** |
| **LCRM** | **LCR** | **2.09** | **207** | P | **Pg** | **20 54 23.3** | **-0.6** |
| **IFR** | **Ifrane** | **2.35** | **210** | P | **Pg** | **20 54 28.1** | **-0.7** |
| IFR | | | | S | **Sn** | **20 54 48.2** | **-2.7** |
| **MD31** | **MD31** | **2.82** | **198** | P | **Pn** | **20 54 29.6** | **+1.0** |
| MD31 | | | | S | **Sn** | **20 55 03.2** | **+0.8** |
| **MDT** | **Midelt** | **2.83** | **196** | P | **Pn** | **20 54 30.4** | **+1.7** |
| MDT | | | | S | **Sn** | **20 55 02.4** | **-0.4** |
| **ZHG** | **ZHG** | **3.21** | **230** | P | **Pn** | **20 54 36.1** | **+2.2** |
| ZHG | | | | S | **Sn** | **20 55 13.5** | **+1.5** |
| **PVAQ** | **Vaqueiros** | **3.72** | **301** | *e*Pn | **Pn** | **20 54 42.2** | **+1.3** |
| PVAQ | | | | *e*Sn | **Sn** | **20 55 22.0** | **-2.6** |
| PVAQ | | | | A | A | 20 55 32.8 | |
| | 3.2nm,0.9s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **301** | P | **Pn** | **20 54 42.4** | **+1.5** |
| PVAQ | | | | S | **Sn** | **20 55 25.2** | **+0.6** |

*IDC **02** 21:12:19.6±1.0, 43°.72N×105°.42W, h0km, mb4.1/1, mb1 3.7/7, mb1mx3.5/45, mbtmp3.4/7, ML3.2/6, MS3.0/3, Ms1 3.0/3, ms1mx2.7/94, Error ellipse: s-maj=23.3km s-min=8.1km az=150.0*
*NEIC **02** 21:12:21.2±1.4, 43°.78N±0°.05×105°.26W±0°.07, h0km±2km, ML3.4/56, Error ellipse: s-maj=9.7km s-min=6.9km az=41.0*

**ISC 02 21:12:20.0±0.8, 43°78'N±0°.05×105°25'W±0°.06, h0km, n54, σ1°32/52, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.94** | **68** | Pg | **Pg** | **21 12 38.7** | **+0.6** |
| **K22A** | **Casper** | **1.46** | **220** | | **Pn** | **21 12 46.6** | **-1.2** |
| K22A | | | | IAML | | 21 13 13.6 | |
| | comp=N,702nm,0.7s | | | | | | |
| K22A | | | | IAML | | 21 13 14.0 | |
| | comp=E,646nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.48** | **184** | | **Pn** | **21 13 02.5** | **+0.5** |
| PHWY | | | | IAML | | 21 13 38.9 | |
| | comp=E,121nm,0.6s | | | | | | |
| **RWWY** | **Rawlins** | **2.54** | **215** | Pn | **Pn** | **21 13 04.1** | **+1.4** |
| RWWY | | | | IAML | | 21 13 44.4 | |
| | comp=E,225nm,0.7s | | | | | | |
| RWWY | | | | IAML | | 21 13 46.6 | |
| | comp=E,268nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **2.92** | **190** | Pn | **Pn** | **21 13 08.8** | **+0.8** |
| N23A | | | | IAML | | 21 13 56.4 | |
| | comp=N,141nm,0.7s | | | | | | |
| N23A | | | | IAML | | 21 13 56.9 | |
| | comp=E,140nm,0.7s | | | | | | |
| **LAO** | **LASA Array** | **2.99** | **347** | Pn | **Pn** | **21 13 09.1** | **+0.3** |
| **RLMT** | **Red Lodge** | **3.17** | **296** | | **Pn** | **21 13 11.6** | **+0.2** |
| RLMT | | | | IAML | | 21 14 09.4 | |
| | comp=E,86nm,0.7s | | | | | | |
| RLMT | | | | IAML | | 21 14 17.0 | |
| | comp=E,90nm,2.0s | | | | | | |
| **PD31** | **Pinedale Array** | **3.30** | **254** | Pn | **Pn** | **21 13 13.7** | **+0.5** |
| **PDAR** | **Pinedale Array** | **3.30** | **254** | Pn | **Pn** | **21 13 13.8** | **+0.7** |
| | comp=E,2.8nm,0.3s,baz=71,slow=17,SNR=21 | | | | | | |
| PDAR | | | | Pg | **Pb** | **21 13 19.1** | **-0.5** |
| | comp=E,16nm,0.3s,baz=69,slow=20,SNR=36 | | | | | | |
| PDAR | | | | Lg | Lg | 21 13 58.5 | |
| | comp=E,15nm,0.3s,baz=300,slow=3.9,SNR=12 | | | | | | |
| PDAR | | | | LR | LR | 21 14 25.3 | |
| | comp=E,106nm,21.6s,baz=63,slow=40 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.30** | **254** | | **Pn** | **21 13 14.0** | **+0.8** |
| **BW06** | **Boulder Array** | **3.30** | **254** | Pn | **Pn** | **21 13 14.1** | **+0.9** |
| BW06 | | | | IAML | | 21 14 10.4 | |
| | comp=E,62nm,2.5s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **3.65** | **287** | | **Pn** | **21 13 19.4** | **+1.3** |
| YMP | | | | IAML | | 21 14 19.0 | |
| | comp=E,104nm,0.9s | | | | | | |
| **OGNE** | **Ogallala** | **3.70** | **139** | Pn | **Pn** | **21 13 20.0** | **+1.5** |
| **GCMT** | **Greycliff** | **3.73** | **304** | Pn | **Pn** | **21 13 20.0** | **+1.0** |
| **LKWY** | **Lake** | **3.79** | **284** | | **Pn** | **21 13 21.8** | **+1.9** |
| LKWY | | | | IAML | | 21 14 26.0 | |
| | comp=E,64nm,0.8s | | | | | | |
| LKWY | | | | IAML | | 21 14 52.0 | |
| | comp=E,46nm,2.6s | | | | | | |
| **H17A** | **Grant Village** | **3.89** | **281** | | **Pn** | **21 13 23.2** | **+2.0** |
| H17A | | | | IAML | | 21 14 26.7 | |
| | comp=E,50nm,2.4s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.95** | **276** | | **Pn** | **21 13 22.6** | **+0.6** |
| FLWY | | | | IAML | | 21 14 34.2 | |
| | comp=E,76nm,2.1s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.98** | **271** | | **Pn** | **21 13 23.2** | **+0.7** |
| **SNOW** | **Snow King Moun** | **4.01** | **267** | Pn | **Pn** | **21 13 24.3** | **+1.4** |
| SNOW | | | | IAML | | 21 14 43.9 | |
| | comp=E,79nm,2.0s | | | | | | |
| SNOW | | | | IAML | | 21 14 48.3 | |
| | comp=E,74nm,1.2s | | | | | | |
| **YNR** | **Norris Junctio** | **4.01** | **285** | Pn | **Pn** | **21 13 25.8** | **+2.8** |
| **REDW** | **Red Top Meadow** | **4.09** | **266** | | **Pn** | **21 13 24.2** | **+0.2** |
| **YHH** | **Holmes Hill** | **4.14** | **286** | | **Pn** | **21 13 26.3** | **+1.4** |
| **O20A** | **White River Ci** | **4.27** | **213** | Pn | **Pn** | **21 13 27.3** | **+0.9** |
| **E28A** | **Huff** | **4.27** | **47** | | **Pn** | **21 13 27.4** | **+1.1** |
| **AHID** | **Auburn Hatcher** | **4.39** | **259** | | **Pn** | **21 13 29.5** | **+1.4** |
| AHID | | | | IAML | | 21 14 57.0 | |
| | comp=E,41nm,1.7s | | | | | | |
| **ECR** | **Eagle Creek** | **4.52** | **263** | | **Pn** | **21 13 32.0** | **+2.1** |
| **RDMU** | **Red Mountain** | **4.53** | **227** | | **Pn** | **21 13 32.3** | **+2.2** |
| RDMU | | | | IAML | | 21 14 49.4 | |
| | comp=E,44nm,0.8s | | | | | | |
| RDMU | | | | IAML | | 21 14 52.4 | |
| | comp=N,45nm,2.0s | | | | | | |
| **QLMT** | **Earthquake Lak** | **4.56** | **286** | | **Pn** | **21 13 32.8** | **+2.4** |
| **DGMT** | **Dagmar** | **4.75** | **9** | | **Pn** | **21 13 34.8** | **+1.8** |
| **Q24A** | **Divide** | **4.81** | **179** | Pn | **Pn** | **21 13 34.5** | **+0.5** |
| **BOZ** | **Bozeman (W)** | **4.90** | **294** | | **Pn** | **21 13 35.6** | **+0.6** |
| BOZ | | | | IAML | | 21 14 53.4 | |
| | comp=N,30nm,2.6s | | | | | | |
| BOZ | | | | IAML | | 21 14 57.8 | |
| | comp=N,21nm,1.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.15** | **157** | | **Pn** | **21 13 39.8** | **+1.2** |
| **EGMT** | **Eagleton** | **5.28** | **325** | | **Pn** | **21 13 40.0** | **-0.3** |
| **HRY** | **Holter Researc** | **5.49** | **305** | | **Pn** | **21 13 44.7** | **+1.5** |
| **LRM** | **Limekiln Ridge** | **5.52** | **294** | | **Pn** | **21 13 44.7** | **+1.1** |
| **P18A** | **Preston Nutter** | **5.58** | **224** | | **Pn** | **21 13 45.0** | **+0.4** |
| **HVU** | **Hansel Valley** | **5.88** | **253** | | **Pn** | **21 13 49.2** | **+0.6** |
| **BCYI** | **Bear Canyon** | **5.90** | **278** | | **Pn** | **21 13 51.2** | **+2.3** |
| **SDCO** | **Great Sand Dun** | **6.03** | **182** | Pn | **Pn** | **21 13 51.1** | **+0.4** |
| **SRU** | **San Rafael Swe** | **6.12** | **222** | | **Pn** | **21 13 52.5** | **+0.7** |
| **PV11** | **David Mesa, Pa** | **6.12** | **208** | | **Pn** | **21 13 54.0** | **+2.2** |
| **S22A** | **4UR Ranch, Cre** | **6.14** | **192** | Pn | **Pn** | **21 13 54.0** | **+1.8** |
| **ECSD** | **EROS Data Cent** | **6.26** | **87** | Pn | **Pn** | **21 13 54.2** | **+0.6** |
| **DUG** | **Dugway, Tooele** | **6.67** | **240** | Pn | **Pn** | **21 13 59.7** | **+0.3** |
| **PLID** | **Pearl Lake** | **7.80** | **283** | | **Pn** | **21 14 16.0** | **+1.0** |
| **ELK** | **Elko** | **8.00** | **251** | Pn | **Pn** | **21 14 19.9** | **+2.2** |
| | comp=N,0.5nm,0.3s,baz=90,slow=11,SNR=7.1 | | | | | | |
| ELK | | | | Lg | Lg | 21 16 24.7 | |
| | comp=N,0.0nm,0.3s,baz=197,slow=9.4,SNR=1.3 | | | | | | |
| **ANMO** | **Albuquerque** | **8.87** | **186** | LR | LR | 21 17 58.8 | |
| | comp=N,58nm,19.3s,baz=20,slow=38 | | | | | | |
| **I10CA** | **LAC DU BONNET** | **9.00** | **41** | *i* | | 22 06 40.0 | |
| | baz=227,slow=332,SNR=3.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.10** | **41** | Pn | **Pn** | **21 14 32.2** | **-0.4** |
| | comp=N,0.9nm,0.3s,baz=234,slow=9.9,SNR=4.4 | | | | | | |
| ULM | | | | Pg | | 21 15 05.6 | |
| | comp=N,0.6nm,0.3s,baz=218,slow=13,SNR=4.2 | | | | | | |
| ULM | | | | Lg | Lg | 21 17 03.5 | |
| | comp=N,0.7nm,0.3s,baz=136,slow=21,SNR=4.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.20** | **246** | Pn | **Pn** | **21 15 03.1** | **+1.6** |
| | comp=N,0.1nm,0.3s,baz=50,slow=12,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.47** | **174** | Pn | **Pn** | **21 15 45.3** | **-0.8** |
| | comp=N,0.0nm,0.3s,baz=3.7,slow=15,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.53** | **347** | P | **P** | **21 16 47.9** | **-0.8** |
| | comp=N,0.0nm,0.3s,baz=156,slow=12,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.38** | **18** | P | **P** | **21 22 36.5** | **-0.8** |
| | comp=N,1.5nm,0.7s,baz=23,slow=6.6,SNR=3.9 | | | | | | |
| **CPUP** | **Villa Florida** | **82.44** | **138** | LR | LR | 22 10 12.2 | |
| | comp=N,23nm,18.6s,baz=40,slow=42 | | | | | | |

**IDC 02 21:19:20.6±2.9, 2°42S×143°38E, h0km, mb3.1/2, mb1 3.4/4, mb1mx3.2/26, mbtmp3.2/4, ML3.4/2, Error ellipse: s-maj=60.2km s-min=32.0km az=91.0, Ninigo Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **2.68** | **268** | Pn | Pn | 21 20 05.7 | +0.7 |
| | 5.7nm,0.3s,baz=226,slow=11,SNR=15 | | | | | | |
| JAY | | | | Sn | Sn | 21 20 23.9 | -14 |
| | 5.7nm,0.3s,baz=99,slow=18,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.53** | **206** | P | P | 21 23 47.9 | -1.9 |
| | 0.1nm,0.3s,baz=14,slow=13,SNR=8.4 | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **203** | P | P | 21 24 28.9 | +1.4 |
| | 0.3nm,0.5s,baz=21,slow=10,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **59.56** | **332** | P | P | 21 29 26.0 | -0.2 |
| | 0.2nm,0.4s,baz=133,slow=43,SNR=2.8 | | | | | | |

*KRSC **02** 21:37:32.3±0.8, 53°.72N×159°.07E, h172km±8km, ML4.4*
*MOS **02** 21:37:32.6±0.8, 53°.83N×158°.70E, h174km, mb4.1/13, Error ellipse: s-maj=12.5km s-min=5.1km az=77.9*
*IDC **02** 21:37:33.8±0.6, 53°.93N×158°.55E, h164km±7km, mb3.5/17, mb1 3.7/18, mb1mx3.5/46, mbtmp4.0/18, MS4.0/1, Ms1 4.0/1, ms1mx2.7/76, Error ellipse: s-maj=16.8km s-min=12.2km az=145.0*
*NEIC **02** 21:37:33.8±1.1, 53°.9N±0°.2×158°.5E±0°.2, h168km±8km, mb4.1/61, Error ellipse: s-maj=26.6km s-min=10.7km az=156.0*

**ISC 02 21:37:33.4±0.5, 53°78'N±0°.04×158°92E±0°.04, h169km±5km, n182, σ1°20/203, mb4.1/52, 2C-1D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KII** | **Karymskiy** | **0.41** | **51** | PN | **Pn** | **21 37 57.0** | **+0.5** |
| KII | | | | S | **Sn** | **21 38 14.7** | **+0.3** |
| **KII** | **Karymskiy** | **0.41** | **51** | *e*P | **Pn** | **21 37 57.0** | **+0.5** |
| KII | | | | *e*S | **Sn** | **21 38 14.7** | **+0.3** |
| **KRER** | **Koryakskii** | **0.49** | **192** | PN | **Pn** | **21 37 57.6** | **+0.5** |
| **KRER** | **Koryakskii** | **0.49** | **192** | *e*P | **Pn** | **21 37 57.6** | **+0.5** |
| **SDLR** | **Sedlovina** | **0.50** | **182** | PN | **Pn** | **21 37 57.4** | **+0.4** |
| **SDLR** | **Sedlovina** | **0.50** | **182** | *e*P | **Pn** | **21 37 57.4** | **+0.4** |
| **KOK** | **Koryaka** | **0.52** | **199** | PN | **Pn** | **21 37 57.7** | **+0.6** |
| **KOK** | **Koryaka** | **0.52** | **199** | *e*P | **Pn** | **21 37 57.7** | **+0.6** |
| **SMAR** | **Somma** | **0.52** | **188** | PN | **Pn** | **21 37 57.7** | **+0.4** |
| **SMAR** | **Somma** | **0.52** | **188** | *e*P | **Pn** | **21 37 57.7** | **+0.4** |
| **AVH** | **Avacha** | **0.53** | **192** | PN | **Pn** | **21 37 57.8** | **+0.7** |
| **AVH** | **Avacha** | **0.53** | **192** | *e*P | **Pn** | **21 37 57.8** | **+0.7** |
| **UGLR** | **Uglovaya** | **0.58** | **186** | PN | **Pn** | **21 37 57.9** | **+0.5** |
| **UGLR** | **Uglovaya** | **0.58** | **186** | *e*P | **Pn** | **21 37 57.9** | **+0.5** |
| **GNL** | **Ganaly** | **0.59** | **262** | PN | **Pn** | **21 37 57.5** | **+0.1** |
| GNL | | | | S | **Sn** | **21 38 15.8** | **0.0** |
| **GNL** | **Ganaly** | **0.59** | **262** | *e*P | **Pn** | **21 37 57.5** | **+0.1** |
| GNL | | | | *e*S | **Sn** | **21 38 15.8** | **0.0** |
| **NLC** | **Nalytchevo** | **0.66** | **157** | PN | **Pn** | **21 37 57.8** | **+0.2** |
| NLC | | | | S | **Sn** | **21 38 16.2** | **0.0** |
| **NLC** | **Nalytchevo** | **0.66** | **157** | *e*P | **Pn** | **21 37 57.8** | **+0.2** |
| NLC | | | | *e*S | **Sn** | **21 38 16.2** | **0.0** |
| **DALK** | **Dalny** | **0.76** | **188** | PN | **Pn** | **21 37 58.4** | **+0.2** |
| **DALK** | **Dalny** | **0.76** | **188** | *e*P | **Pn** | **21 37 58.4** | **+0.2** |
| **PET** | **Petropavlovsk** | **0.78** | **192** | *i* PN | **Pn** | **21 37 58.6** | **+0.3** |
| PET | | | | *e*S | **Sn** | **21 38 17.7** | **+0.3** |
| PET | | | | pmax | pmax | | |
| | comp=Z,977nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,300nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,260nm,0.5s | | | | | | |
| **PET** | **Petropavlovsk** | **0.78** | **192** | | **Pn** | **21 37 58.6** | **+0.3** |
| **PET** | **Petropavlovsk** | **0.78** | **192** | *e*P | **Pn** | **21 37 58.6** | **+0.3** |
| **SPN** | **Mys Shipunski** | **0.95** | **136** | PN | **Pn** | **21 37 59.0** | **-0.5** |
| SPN | | | | S | **Sn** | **21 38 18.1** | **-1.5** |
| **SPN** | **Mys Shipunski** | **0.95** | **136** | *e*P | **Pn** | **21 37 59.0** | **-0.5** |
| SPN | | | | *e*S | **Sn** | **21 38 18.1** | **-1.5** |
| **PEA0B** | **Petropavlovsk-** | **0.99** | **228** | PN | **Pn** | **21 38 00.1** | **+0.2** |
| PEA0B | | | | | | 21 38 20.0 | |
| **PEA0B** | **Petropavlovsk-** | **0.99** | **228** | | **Pn** | **21 38 00.1** | **+0.2** |
| PEA0B | | | | Sn | **Sn** | **21 38 20.0** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **0.99** | **228** | P | **Pn** | **21 37 59.2** | **-0.7** |
| | comp=E,91nm,0.3s,baz=67,slow=11,SNR=1033 | | | | | | |
| PETK | | | | S | **Sn** | **21 38 20.1** | **-0.1** |
| | baz=353,slow=10,SNR=1.7 | | | | | | |
| **KRMR** | **Karymshinskiy** | **1.06** | **207** | PN | **Pn** | **21 38 00.7** | **+0.3** |
| **KRMR** | **Karymshinskiy** | **1.06** | **207** | *e*P | **Pn** | **21 38 00.7** | **+0.3** |
| **GRL** | **Gorelyy** | **1.33** | **203** | PN | **Pn** | **21 38 03.7** | **+0.8** |
| **GRL** | **Gorelyy** | **1.33** | **203** | *e*P | **Pn** | **21 38 03.7** | **+0.8** |
| **APC** | **Apacha** | **1.36** | **232** | PN | **Pn** | **21 38 03.7** | **+0.7** |
| **APC** | **Apacha** | **1.36** | **232** | *e*P | **Pn** | **21 38 03.7** | **+0.7** |
| **RUS** | **Russkaya** | **1.37** | **190** | PN | **Pn** | **21 38 02.8** | **-0.3** |
| RUS | | | | S | **Sn** | **21 38 25.1** | **-0.9** |
| **RUS** | **Russkaya** | **1.37** | **190** | *e*P | **Pn** | **21 38 02.8** | **-0.3** |
| RUS | | | | *e*S | **Sn** | **21 38 25.1** | **-0.9** |
| **MTVR** | **Mutnovka** | **1.37** | **199** | PN | **Pn** | **21 38 04.0** | **+0.7** |
| MTVR | | | | S | **Sn** | **21 38 27.6** | **+1.2** |
| **MTVR** | **Mutnovka** | **1.37** | **199** | *e*P | **Pn** | **21 38 04.0** | **+0.7** |
| MTVR | | | | *e*S | **Sn** | **21 38 27.6** | **+1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TUMD** | **Tumrok D** | **1.67** | **31** | *e*P | **Pn** | **21 38 06.5** | **+0.5** |
| **TUMR** | **Tumrok** | **1.67** | **25** | PN | **Pn** | **21 38 07.4** | **+1.3** |
| **TUMR** | **Tumrok** | **1.67** | **25** | *e*P | **Pn** | **21 38 07.4** | **+1.3** |
| **MKZ** | **Mys Kozlova** | **1.83** | **64** | PN | **Pn** | **21 38 07.7** | **0.0** |
| MKZ | | | | S | **Sn** | **21 38 32.4** | **-1.8** |
| **MKZ** | **Mys Kozlova** | **1.83** | **64** | *e*P | **Pn** | **21 38 07.7** | **0.0** |
| MKZ | | | | *e*S | **Sn** | **21 38 32.4** | **-1.8** |
| **KDTR** | **Khodutka, Kamc** | **2.04** | **195** | PN | **Pn** | **21 38 09.3** | **-0.8** |
| KDTR | | | | S | **Sn** | **21 38 36.4** | **-2.0** |
| **KDTR** | **Khodutka, Kamc** | **2.04** | **195** | *e*P | **Pn** | **21 38 09.3** | **-0.8** |
| KDTR | | | | *e*S | **Sn** | **21 38 36.4** | **-2.0** |
| **KMNR** | **Kamenistaya** | **2.12** | **21** | PN | **Pn** | **21 38 12.0** | **+0.9** |
| **KMNR** | **Kamenistaya** | **2.12** | **21** | *e*P | **Pn** | **21 38 12.0** | **+0.9** |
| **ESO** | **Esso** | **2.15** | **357** | PN | **Pn** | **21 38 11.6** | **+0.3** |
| **ESO** | **Esso** | **2.15** | **357** | *e*P | **Pn** | **21 38 11.6** | **+0.3** |
| **KIRR** | **Kirishev** | **2.33** | **20** | PN | **Pn** | **21 38 14.0** | **+0.5** |
| **KIRR** | **Kirishev** | **2.33** | **20** | *e*P | **Pn** | **21 38 14.0** | **+0.5** |
| **BZWR** | **Bezymyannyi-We** | **2.37** | **22** | PN | **Pn** | **21 38 15.2** | **+1.2** |
| **BZWR** | **Bezymyannyi-We** | **2.37** | **22** | *e*P | **Pn** | **21 38 15.2** | **+1.2** |
| **BZGR** | **Bezymyannyi-Gr** | **2.40** | **25** | PN | **Pn** | **21 38 17.2** | **+3.0** |
| **BZGR** | **Bezymyannyi-Gr** | **2.40** | **25** | *e*P | **Pn** | **21 38 17.2** | **+3.0** |
| **KRSR** | **Krestovskiy** | **2.62** | **21** | PN | **Pn** | **21 38 18.1** | **+1.2** |
| **KRSR** | **Krestovskiy** | **2.62** | **21** | *e*P | **Pn** | **21 38 18.1** | **+1.2** |
| **PAU** | **Pauzhetka** | **2.65** | **210** | PN | **Pn** | **21 38 18.6** | **+1.4** |
| **PAU** | **Pauzhetka** | **2.65** | **210** | *e*P | **Pn** | **21 38 18.6** | **+1.4** |
| **KLY** | **Klyuchi** | **2.73** | **21** | PN | **Pn** | **21 38 19.9** | **+1.9** |
| **KLY** | **Klyuchi** | **2.73** | **21** | *e*P | **Pn** | **21 38 19.9** | **+1.9** |
| **KBG** | **Krutoberegovo** | **3.30** | **40** | PN | **Pn** | **21 38 25.3** | **+0.2** |
| **KBG** | **Krutoberegovo** | **3.30** | **40** | *e*P | **Pn** | **21 38 25.3** | **+0.2** |
| **KBTR** | **Krutoberegovo** | **3.31** | **41** | PN | **Pn** | **21 38 25.3** | **0.0** |
| KBTR | | | | S | **Sn** | **21 39 04.4** | **-1.3** |
| **KBTR** | **Krutoberegovo** | **3.31** | **41** | *e*P | **Pn** | **21 38 25.3** | **0.0** |
| KBTR | | | | *e*S | **Sn** | **21 39 04.4** | **-1.3** |
| **SKR** | **Severo-Kuril's** | **3.55** | **210** | *e*PN | **Pn** | **21 38 29.1** | **+0.8** |
| SKR | | | | *e*S | **Sn** | **21 39 11.6** | **+0.5** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,19nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,359nm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,223nm,0.8s | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.55** | **210** | *e*P | **Pn** | **21 38 29.3** | **+1.0** |
| **BKI** | **Bering** | **4.35** | **68** | PN | **Pn** | **21 38 38.3** | **-0.3** |
| BKI | | | | S | **Sn** | **21 39 26.3** | **-3.2** |
| **BKI** | **Bering** | **4.35** | **68** | *e*P | **Pn** | **21 38 38.3** | **-0.3** |
| BKI | | | | *e*S | **Sn** | **21 39 26.3** | **-3.2** |
| **MA2** | **Magadan** | **7.34** | **326** | *i* PN | **Pn** | **21 39 15.7** | **-2.0** |
| **ASAJ** | **Asahikawa** | **14.41** | **234** | P | **P** | **21 40 50.6** | **-1.0** |
| | comp=N,0.5nm,0.3s,baz=49,slow=14,SNR=5.5 | | | | | | |
| **ERM** | **Erimo** | **15.78** | **228** | P | **Pn** | **21 41 04.8** | **-1.5** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,116nm,1.5s | | | | | | |
| **ERM** | **Erimo** | **15.78** | **228** | | **Pn** | **21 41 04.8** | **-1.5** |
| **YAK** | **Yakutsk** | **17.46** | **310** | *ce*P | **P** | **21 41 24.5** | **-0.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **17.46** | **266** | *i* P | **P** | **21 41 24.2** | **-1.0** |
| **TNA** | **Tin City** | **20.18** | **41** | P | **P** | **21 41 55.8** | **+1.4** |
| TNA | | | | IAmb | IAmb | 21 42 01.9 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **ANM** | **Nome** | **20.93** | **45** | P | **P** | **21 42 03.6** | **+1.2** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ANM** | **Nome** | **20.93** | **45** | P | **P** | **21 42 03.6** | **+1.2** |
| **TIXI** | **Tiksi** | **22.16** | **335** | P | **P** | **21 42 14.5** | **-0.6** |
| | comp=Z,1.5nm,0.3s,baz=91,slow=23,SNR=9.8 | | | | | | |
| **TIXI** | **Tiksi** | **22.16** | **335** | | **P** | **21 42 14.1** | **-1.1** |
| TIXI | | | | IAmb | IAmb | 21 42 22.0 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.45** | **228** | P | **P** | **21 42 18.9** | **+0.6** |
| | comp=Z,1.7nm,0.4s,baz=23,slow=6.9,SNR=4.7 | | | | | | |
| **RDOG** | **Red Dog Mine** | **22.90** | **37** | P | **P** | **21 42 23.1** | **+1.1** |
| RDOG | | | | IAmb | IAmb | 21 42 24.3 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **M19K** | **Big River Lodg** | **25.62** | **53** | P | **P** | **21 42 48.5** | **+1.7** |
| M19K | | | | IAmb | IAmb | 21 43 13.0 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **25.70** | **48** | P | **P** | **21 42 48.7** | **+1.2** |
| **IMAR** | **Indian Mountai** | **25.98** | **43** | P | **P** | **21 42 50.1** | **+0.2** |
| **A21K** | **Barrow** | **26.05** | **31** | P | **P** | **21 42 51.2** | **+0.6** |
| **H21K** | **Melozit

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KURK** | **Kurchatov** | **46.77** | **301** | P | **P** | **21 45 43.9** | **-1.5** |
| KURK | | | | lAmb | lAmb | 21 45 44.4 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **47.23** | **294** | P | **P** | **21 45 47.2** | **-1.8** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **47.23** | **294** | P | **P** | **21 45 47.2** | **-1.8** |
| **MKAR** | **Makanchi Array** | **47.23** | **294** | P | **P** | **21 45 47.6** | **-1.4** |
| | comp=Z,1.0nm,0.6s,baz=57,slow=7.1,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 22 04 52.6 | |
| | comp=Z,150nm,18.0s,baz=308,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.23** | **294** | P | **P** | **21 45 47.5** | **-1.6** |
| **MAKZ** | **Makanchi** | **47.39** | **295** | P | **P** | **21 45 48.7** | **-1.6** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **47.39** | **295** | P | **P** | **21 45 48.7** | **-1.6** |
| **WALA** | **Waterton Lakes** | **51.28** | **57** | P | **P** | **21 46 21.4** | **+1.6** |
| **JTMT** | **Jette** | **51.95** | **59** | P | **P** | **21 46 26.6** | **+1.7** |
| JTMT | | | | lAmb | lAmb | 21 46 27.5 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **52.41** | **341** | P | **P** | **21 46 26.0** | **-1.7** |
| | comp=Z,2.4nm,1.0s,baz=43,slow=7.4,SNR=8.5 | | | | | | |
| **ARU** | **Arti** | **52.41** | **316** | P | **P** | **21 46 26.9** | **-1.0** |
| ARU | | | | lAmb | lAmb | 21 46 30.0 | |
| | comp=Z,5.1nm,1.3s | | | | | | |
| **PLID** | **Pearl Lake** | **52.83** | **62** | P | **P** | **21 46 33.0** | **+1.6** |
| PLID | | | | lAmb | lAmb | 21 46 33.9 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **SUMG** | **Summit** | **53.36** | **6** | P | **P** | **21 46 34.7** | **-0.4** |
| **SUMG** | **Summit** | **53.36** | **6** | P | **P** | **21 46 34.7** | **-0.4** |
| **FCC** | **Fort Churchill** | **53.38** | **38** | P | **P** | **21 46 35.6** | **+0.7** |
| FCC | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **FCC** | **Fort Churchill** | **53.38** | **38** | P | **P** | **21 46 35.6** | **+0.7** |
| FCC | | | | lAmb | lAmb | 21 46 36.3 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **54.14** | **295** | P | **P** | **21 46 38.8** | **-2.2** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **54.14** | **295** | P | **P** | **21 46 38.8** | **-2.2** |
| **HLID** | **Hailey** | **54.71** | **63** | P | **P** | **21 46 47.1** | **+2.1** |
| **YHH** | **Holmes Hill** | **55.71** | **60** | P | **P** | **21 46 54.5** | **+2.2** |
| **KKAR** | **Karatay Array** | **55.94** | **298** | P | **P** | **21 46 52.0** | **-1.6** |
| **KKAR** | **Karatay Array** | **55.94** | **298** | P | **P** | **21 46 52.0** | **-1.6** |
| **NVAR** | **Mina Array Bea** | **56.17** | **70** | P | **P** | **21 46 58.0** | **+2.4** |
| | comp=Z,0.8nm,0.6s,baz=306,slow=7.7,SNR=2.0 | | | | | | |
| **LAO** | **LASA Array** | **56.69** | **55** | P | **P** | **21 47 00.9** | **+1.9** |
| **ABKAR** | **Akbulak array** | **56.81** | **309** | P | **P** | **21 46 57.8** | **-1.9** |
| **ABKAR** | **Akbulak array** | **56.81** | **309** | P | **P** | **21 46 57.9** | **-1.8** |
| ABKAR | | | | lAmb | lAmb | 21 47 20.8 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **PD31** | **Pinedale Array** | **57.80** | **60** | P | **P** | **21 47 08.7** | **+1.7** |
| **PDAR** | **Pinedale Array** | **57.80** | **60** | P | **P** | **21 47 09.1** | **+2.1** |
| | comp=Z,1.5nm,0.6s,baz=352,slow=2.9,SNR=21 | | | | | | |
| **PDAR** | **Pinedale Array** | **57.80** | **60** | P | **P** | **21 47 08.7** | **+1.7** |
| **SPR3** | **Spring Creek 3** | **57.95** | **67** | P | **P** | **21 47 10.3** | **+2.1** |
| SPR3 | | | | lAmb | lAmb | 21 47 15.1 | |
| | comp=Z,3.9nm,1.3s | | | | | | |
| **FINES** | **FINESS Array B** | **59.21** | **336** | P | **P** | **21 47 15.6** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=31,slow=7.1,SNR=8.3 | | | | | | |
| **FINES** | **FINESS Array B** | **59.21** | **336** | P | **P** | **21 47 15.3** | **-0.8** |
| **RSSD** | **Black Hills** | **59.60** | **56** | P | **P** | **21 47 21.1** | **+1.7** |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **RSSD** | **Black Hills** | **59.60** | **56** | P | **P** | **21 47 21.1** | **+1.7** |
| **CHGR** | **Chuyangaron** | **59.82** | **295** | P | **P** | **21 47 18.9** | **-2.0** |
| CHGR | | | | lAmb | lAmb | 21 47 21.9 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **NC204** | **NORSAR Array S** | **62.54** | **343** | P | **P** | **21 47 37.7** | **-0.9** |
| **NOA** | **NORSAR Array B** | **62.68** | **343** | P | **P** | **21 47 38.8** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=21,slow=6.8,SNR=4.7 | | | | | | |
| **ECSD** | **EROS Data Cent** | **63.45** | **52** | P | **P** | **21 47 45.8** | **+0.9** |
| ECSD | | | | lAmb | lAmb | 21 47 51.7 | |
| | comp=Z,5.2nm,1.4s | | | | | | |
| **SCHQ** | **Schefferville** | **65.36** | **27** | P | **P** | **21 47 56.9** | **-0.2** |
| | comp=Z,3.4nm,0.8s,baz=15,slow=7.2,SNR=2.6 | | | | | | |
| **LMQ** | **La Malbaie** | **70.76** | **33** | P | **P** | **21 48 31.2** | **+0.4** |
| **TX31** | **Lajitas Ar. Si** | **71.01** | **66** | P | **P** | **21 48 34.6** | **+1.9** |
| **TXAR** | **Lajitas Array** | **71.01** | **66** | P | **P** | **21 48 34.5** | **+1.7** |
| | comp=Z,0.8nm,0.4s,baz=300,slow=5.4,SNR=8.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.01** | **66** | P | **P** | **21 48 34.3** | **+1.5** |
| **BUR08** | **Bucovina Ar. S** | **71.60** | **329** | P | **P** | **21 48 35.0** | **-1.1** |
| **BURAR** | **Bucovina Array** | **71.62** | **329** | P | **P** | **21 48 35.0** | **-1.2** |
| **MLR** | **Muntele Rosu** | **73.29** | **327** | P | **P** | **21 48 45.6** | **-0.5** |
| MLR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **73.29** | **327** | P | **P** | **21 48 45.6** | **-0.5** |
| MLR | | | | lAmb | lAmb | 21 49 01.4 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **LMN** | **Caledonia Moun** | **73.98** | **30** | P | **P** | **21 48 50.3** | **+0.4** |
| **DIVS** | **Divibare** | **76.36** | **331** | P | **P** | **21 49 02.6** | **-1.1** |
| DIVS | | | | lAmb | lAmb | 21 49 15.8 | |
| | comp=Z,6.6nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **76.42** | **204** | P | **P** | **21 49 04.7** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=19,slow=6.2,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.42** | **204** | *ce*P | **P** | **21 49 05.3** | **+1.3** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **CTI** | **Castel Tesino** | **76.71** | **337** | P | **P** | **21 49 05.0** | **-0.6** |
| CTI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **CTI** | **Castel Tesino** | **76.71** | **337** | P | **P** | **21 49 05.0** | **-0.6** |
| **TUE** | **Stuetta** | **76.82** | **339** | P | **P** | **21 49 05.8** | **-0.5** |
| TUE | | | | lAmb | lAmb | 21 49 07.4 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **NRCA** | **Norcia** | **79.39** | **335** | P | **P** | **21 49 20.4** | **0.0** |
| NRCA | | | | lAmb | lAmb | 21 49 21.6 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **80.11** | **203** | P | **P** | **21 49 25.6** | **+1.4** |
| | comp=Z,0.3nm,0.5s,baz=17,slow=5.6,SNR=4.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **85.75** | **347** | P | **P** | **21 49 54.0** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=6.0,slow=5.0,SNR=4.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **85.75** | **347** | P | **P** | **21 49 54.0** | **+0.7** |

*JMA* ***02*** *21:52:54.9±0.2,23.35N×121.57E,h13km,M3.2*
*TAP* ***02*** *21:52:56.0,23.34N×121.45E,h25km,ML3.5,C*
**ISC 02 21:52:55.6±0.9,23.33N±0.02×121.53E±0.02,h27km±4km, n117,σt14/212,2C-16D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ECBN** | **Changbin** | **0.07** | **261** | ⇑P | **Pb** | **21 53 00.7** | **+0.3** |
| ECBN | baz=175 | | | S | **Sb** | **21 53 04.2** | **+0.6** |
| **HGSD** | **Ruisui** | **0.19** | **330** | ⇑P | **Pb** | **21 53 01.2** | **-0.2** |
| HGSD | baz=346 | | | S | **Sb** | **21 53 07.4** | **+2.0** |
| **EYUL** | **Yuli** | **0.19** | **276** | *i* P | **Pb** | **21 53 01.5** | **0.0** |
| EYUL | baz=287 | | | *i* S | **Sb** | **21 53 05.9** | **+0.5** |
| **TWF1** | **Yuli** | **0.21** | **277** | ⇓*i*P | **Pb** | **21 53 01.3** | **-0.4** |
| TWF1 | baz=287 | | | *i* S | **Sb** | **21 53 05.1** | **-0.8** |
| **YULB** | **Yu-li** | **0.22** | **287** | ⇓P | **Pb** | **21 53 01.3** | **-0.5** |
| YULB | baz=290 | | | S | **Sb** | **21 53 05.3** | **-0.7** |
| **FULB** | **Fuli** | **0.25** | **239** | *i* P | **Pb** | **21 53 02.2** | **0.0** |
| FULB | baz=221 | | | S | **Sb** | **21 53 07.4** | **+0.8** |
| **EHY** | **Hungye** | **0.26** | **313** | ⇓*i*P | **Pb** | **21 53 01.9** | **-0.4** |
| EHY | baz=315 | | | *i* S | **Sb** | **21 53 06.0** | **-0.9** |
| **CHKT** | **Chengkung** | **0.27** | **213** | *i* P | **Pb** | **21 53 02.5** | **+0.1** |
| CHKT | baz=186 | | | *i* S | **Sb** | **21 53 07.5** | **+0.4** |
| **EGFH** | **Guangfu** | **0.35** | **345** | *i* P | **Pb** | **21 53 03.6** | **0.0** |
| EGFH | baz=341 | | | *i* S | **Sb** | **21 53 09.8** | **+0.8** |
| **ECS** | **Chishang** | **0.37** | **231** | ⇓P | **Pb** | **21 53 03.8** | **0.0** |
| ECS | baz=235 | | | S | **Sb** | **21 53 09.4** | **0.0** |
| **TEGC** | **Jichi Village** | **0.38** | **2** | P | **Pb** | **21 53 04.7** | **+0.7** |
| TEGC | baz=14 | | | S | **Sn** | **21 53 11.8** | **+0.1** |
| | baz=14 | | | | | | |
| **EDH** | **Donghe** | **0.41** | **210** | *i* P | **Pb** | **21 53 04.8** | **+0.3** |
| EDH | baz=194 | | | *i* S | **Sb** | **21 53 11.2** | **+0.8** |
| **ELDTW** | **Lidau** | **0.49** | **254** | ⇓*i*P | **Pb** | **21 53 04.7** | **-1.2** |
| ELDTW | baz=250 | | | *i* S | **Sb** | **21 53 10.7** | **-2.1** |
| **ESL** | **Shilin** | **0.49** | **350** | *i* P | **Pb** | **21 53 05.3** | **-0.5** |
| ESL | baz=347 | | | *i* S | **Sb** | **21 53 12.0** | **-0.8** |
| **TEYL** | **Yanliau Villag** | **0.54** | **7** | *i* P | **Pn** | **21 53 08.2** | **+0.7** |
| **VWDT** | **VWDT** | **0.55** | **320** | ⇓P | **Pb** | **21 53 06.5** | **-0.3** |
| VWDT | baz=322 | | | S | **Sb** | **21 53 13.7** | **-0.7** |
| **YUS** | **Yu-Shan** | **0.55** | **287** | *i* P | **Pb** | **21 53 06.4** | **-0.8** |
| YUS | baz=287 | | | *e*S | **Sb** | **21 53 13.8** | **-1.2** |
| **LONT** | **Longtian** | **0.56** | **221** | *i* P | **Pb** | **21 53 06.2** | **-0.7** |
| LONT | baz=217 | | | *i* S | **Sb** | **21 53 13.7** | **-0.8** |
| **ETM** | **Tongmen** | **0.64** | **357** | *i* P | **Pb** | **21 53 07.8** | **-0.5** |
| ETM | baz=352 | | | *e*S | **Sb** | **21 53 16.0** | **-0.8** |
| **HWA** | **Hwalien** | **0.65** | **6** | P | **Pb** | **21 53 08.5** | **0.0** |
| HWA | baz=358 | | | *e*S | **Sn** | **21 53 18.1** | **-0.3** |
| **LDUT** | **Ludao** | **0.65** | **185** | *i* P | **Pb** | **21 53 07.6** | **-0.9** |
| LDUT | baz=177 | | | *i* S | **Sn** | **21 53 18.5** | **0.0** |
| **TWGBT** | **Beinan** | **0.65** | **219** | P | **Pb** | **21 53 06.9** | **-1.6** |
| **TTN** | **Taitung** | **0.67** | **212** | *i* P | **Pb** | **21 53 08.8** | **0.0** |
| TTN | baz=207 | | | S | **Sn** | **21 53 19.0** | **+0.1** |
| **ALS** | **Alishan** | **0.69** | **285** | ⇓*i*P | **Pb** | **21 53 08.8** | **-0.5** |
| ALS | baz=285 | | | *i* S | **Sb** | **21 53 17.9** | **-0.7** |
| **SSLB** | **Suanglung** | **0.70** | **311** | ⇓P | **Pb** | **21 53 08.4** | **-0.9** |
| SSLB | baz=313 | | | S | **Sb** | **21 53 16.5** | **-2.0** |
| **STYH** | **Taoyuan** | **0.71** | **257** | P | **Pb** | **21 53 08.7** | **-0.7** |
| STYH | baz=253 | | | S | **Sb** | **21 53 17.7** | **-1.1** |
| **STYT** | **Tauyuan** | **0.73** | **257** | *i* P | **Pb** | **21 53 09.1** | **-0.6** |
| **TWD** | **Chiawan** | **0.75** | **5** | *i* P | **Pb** | **21 53 09.5** | **-0.6** |
| TWD | baz=355 | | | *i* S | **Sb** | **21 53 19.3** | **-0.7** |
| **WUSB** | **Renai** | **0.76** | **330** | ⇓P | **Pn** | **21 53 09.8** | **-0.9** |
| WUSB | baz=324 | | | S | **Sb** | **21 53 18.6** | **-1.8** |
| **CHGB** | **Renai** | **0.80** | **336** | ⇓P | **Pn** | **21 53 10.5** | **-0.8** |
| CHGB | baz=346 | | | S | **Sb** | **21 53 20.3** | **-1.3** |
| **SMLT** | **Sun Moon Lake** | **0.80** | **314** | ⇓*i*P | **Pn** | **21 53 10.4** | **-0.8** |
| SMLT | baz=319 | | | *i* S | **Sb** | **21 53 20.1** | **-1.4** |
| **CHN5** | **Tsauling** | **0.82** | **289** | *i* P | **Pn** | **21 53 11.5** | **0.0** |
| CHN5 | baz=289 | | | S | **Sn** | **21 53 23.6** | **+0.7** |
| **TPUB** | **Ta-pu** | **0.83** | **268** | ⇓P | **Pn** | **21 53 11.0** | **-0.5** |
| TPUB | baz=271 | | | S | **Sb** | **21 53 21.7** | **-0.5** |
| **ETL** | **Fush Village** | **0.83** | **6** | P | **Pn** | **21 53 11.2** | **-0.4** |
| ETL | baz=357 | | | S | **Sb** | **21 53 21.8** | **-0.6** |
| **NACB** | **Ninganchiao** | **0.84** | **4** | P | **Pn** | **21 53 10.5** | **-1.2** |
| NACB | baz=354 | | | S | **Sb** | **21 53 21.4** | **-1.3** |
| **WTP** | **Ta-pu** | **0.84** | **265** | ⇓*i*P | **Pn** | **21 53 11.3** | **-0.4** |
| WTP | baz=263 | | | *i* S | **Sb** | **21 53 22.7** | **-0.1** |
| **WHF** | **Hehuan Shan** | **0.85** | **344** | *i* P | **Pn** | **21 53 11.1** | **-1.1** |
| WHF | baz=345 | | | *i* S | **Sb** | **21 53 22.3** | **-0.9** |
| **WPL** | **Puli Township** | **0.86** | **323** | *i* P | **Pn** | **21 53 11.6** | **-0.4** |
| **ETLH** | **Xiulin Townshi** | **0.88** | **357** | P | **Pn** | **21 53 11.2** | **-1.1** |
| ETLH | baz=358 | | | S | **Sb** | **21 53 23.1** | **-0.6** |
| **WJS** | **Zhushan** | **0.88** | **304** | ⇓*i*P | **Pb** | **21 53 12.8** | **+0.4** |
| WJS | baz=304 | | | *i* S | **Sb** | **21 53 25.2** | **+1.3** |
| **DPDB** | **Guoxing** | **0.89** | **322** | P | **Pb** | **21 53 12.6** | **+0.1** |
| **ECL** | **Taimali** | **0.90** | **216** | *i* P | **Pn** | **21 53 10.5** | **-2.0** |
| ECL | baz=213 | | | *i* S | **Sn** | **21 53 21.1** | **-3.4** |
| **SGST** | **Jiashian** | **0.90** | **254** | *i* P | **Pn** | **21 53 11.4** | **-1.1** |
| SGST | baz=246 | | | S | **Sn** | **21 53 23.8** | **-0.9** |
| **WCS** | **Beigang Elemen** | **0.92** | **322** | P | **Pn** | **21 53 10.8** | **-2.0** |
| WCS | baz=326 | | | S | **Sn** | **21 53 23.8** | **-1.3** |
| **CHN1** | **Nanshi** | **0.93** | **261** | *i* P | **Pn** | **21 53 13.1** | **+0.1** |
| CHN1 | baz=255 | | | S | **Sn** | **21 53 25.2** | **-0.2** |
| **WNT** | **Mingjian** | **0.95** | **305** | ⇓*i*P | **Pb** | **21 53 13.7** | **+0.2** |
| WNT | baz=306 | | | *i* S | **Sb** | **21 53 26.6** | **+0.9** |
| **FUSS** | **Fushou** | **0.95** | **344** | P | **Pn** | **21 53 13.3** | **-0.1** |
| FUSS | baz=352 | | | *i* S | **Sn** | **21 53 25.2** | **-1.1** |
| **SNST** | **Tainan City** | **0.95** | **264** | *i* P | **Pn** | **21 53 13.4** | **+0.2** |
| **WGK** | **Gukeng** | **0.96** | **292** | *i* P | **Pb** | **21 53 13.8** | **+0.2** |
| **TWK** | **Hsinying** | **0.96** | **267** | *i* P | **Pn** | **21 53 13.3** | **0.0** |
| **WNT1** | **Nantou City** | **0.97** | **307** | P | **Pb** | **21 53 14.4** | **+0.6** |
| WNT1 | baz=307 | | | *e*S | **Sb** | **21 53 27.3** | **+1.1** |
| **TWT** | **Tachien** | **0.98** | **341** | *i* P | **Pn** | **21 53 13.6** | **-0.2** |
| TWT | baz=340 | | | *i* S | **Sn** | **21 53 25.1** | **-1.6** |
| **WDLH** | **Douliu** | **0.98** | **292** | *e*P | **Pb** | **21 53 14.1** | **+0.2** |
| WDLH | baz=291 | | | *e*S | **Sb** | **21 53 27.7** | **+1.3** |
| **TDCB** | **Techi** | **0.98** | **340** | ⇓P | **Pn** | **21 53 13.6** | **-0.1** |
| TDCB | baz=340 | | | S | **Sn** | **21 53 25.5** | **-1.3** |
| **CHN2** | **Minshiung** | **0.99** | **282** | *i* P | **Pb** | **21 53 14.6** | **+0.5** |
| CHN2 | baz=281 | | | S | **Sb** | **21 53 28.1** | **+1.3** |
| **SSD** | **Sandimen** | **1.01** | **235** | *i* P | **Pn** | **21 53 13.9** | **-0.1** |
| SSD | baz=233 | | | S | **Sn** | **21 53 26.0** | **-1.3** |
| **TSMG** | **Majia** | **1.02** | **233** | *i* P | **Pb** | **21 53 15.0** | **+0.3** |
| TSMG | baz=230 | | | S | **Sn** | **21 53 26.7** | **-0.9** |
| | baz=230 | | | | | | |
| **CHY** | **Chiayi** | **1.03** | **280** | *i* P | **Pb** | **21 53 14.7** | **-0.1** |
| CHY | baz=279 | | | *i* S | **Sb** | **21 53 29.0** | **+1.1** |
| **WHP** | **Taichung City** | **1.08** | **331** | P | **Pb** | **21 53 15.6** | **-0.2** |
| **MASBT** | **Mashibuluo** | **1.09** | **229** | P | **Pn** | **21 53 14.1** | **-1.0** |
| MASBT | baz=228 | | | S | **Sb** | **21 53 29.5** | **-0.2** |
| **CHN3** | **Shinhua** | **1.10** | **257** | *i* P | **Pb** | **21 53 17.4** | **+1.4** |
| CHN3 | baz=268 | | | *i* S | **Sb** | **21 53 33.5** | **+3.5** |
| **NNSB** | **Datong** | **1.10** | **353** | P | **Pn** | **21 53 14.8** | **-0.6** |
| NNSB | baz=352 | | | S | **Sn** | **21 53 28.2** | **-1.6** |
| **WTK** | **Tuku** | **1.10** | **289** | *e*P | **Pb** | **21 53 16.0** | **-0.1** |
| WTK | baz=288 | | | *e*S | **Sb** | **21 53 31.5** | **+1.4** |
| **ENA** | **Nanau** | **1.11** | **10** | P | **Pn** | **21 53 15.2** | **-0.2** |
| ENA | baz=356 | | | S | **Sn** | **21 53 29.4** | **-0.5** |
| **NNS** | **Nan Shan** | **1.12** | **353** | *i* P | **Pn** | **21 53 15.1** | **-0.5** |
| NNS | baz=360 | | | *i* S | **Sn** | **21 53 29.3** | **-0.9** |
| **SGLT** | **Jiouru** | **1.13** | **238** | *e*P | **Pb** | **21 53 18.7** | **+2.2** |
| **SHHT** | **Tainan City** | **1.13** | **255** | P | **Pb** | **21 53 17.9** | **+1.4** |
| SHHT | baz=253 | | | S | **Sb** | **21 53 35.2** | **+4.5** |
| **TAW** | **Tawu** | **1.13** | **211** | *i* P | **Pn** | **21 53 14.2** | **-1.4** |
| TAW | baz=210 | | | *i* S | **Sn** | **21 53 27.6** | **-2.6** |
| **TCU** | **Taichung** | **1.13** | **316** | P | **Pb** | **21 53 16.9** | **+0.3** |
| TCU | baz=316 | | | S | **Sb** | **21 53 31.7** | **+0.9** |
| **EAST** | **Anshuo** | **1.13** | **214** | *i* P | **Pn** | **21 53 14.1** | **-1.6** |
| **TWM1** | **Shoushan** | **1.14** | **244** | *e*P | **Pb** | **21 53 17.9** | **+1.3** |
| TWM1 | baz=242 | | | S | **Sb** | **21 53 34.9** | **+3.9** |
| **EWUT** | **Wuta** | **1.14** | **12** | P | **Pb** | **21 53 16.4** | **-0.3** |
| EWUT | baz=357 | | | *e*S | **Sb** | **21 53 30.9** | **-0.1** |
| **TAWH** | **Dawu Township** | **1.15** | **211** | P | **Pn** | **21 53 14.5** | **-1.4** |
| TAWH | baz=209 | | | *e*S | **Sn** | **21 53 28.9** | **-1.8** |
| **ICHU** | **Yijhu** | **1.15** | **272** | *i* P | **Pb** | **21 53 17.0** | **+0.1** |
| ICHU | baz=271 | | | *i* S | **Sb** | **21 53 32.7** | **+1.3** |
| **SSHA** | **Shanhua** | **1.16** | **261** | S | **Sb** | **21 53 35.1** | **+3.5** |
| **WCHH** | **Zhanghua** | **1.16** | **310** | *i* P | **Pb** | **21 53 17.2** | **+0.1** |
| WCHH | baz=309 | | | *i* S | **Sb** | **21 53 33.2** | **+1.4** |
| **WRL** | **Guolierlin Hig** | **1.20** | **299** | *e*P | **Pn** | **21 53 17.2** | **+0.6** |
| WRL | baz=298 | | | *e*S | **Sb** | **21 53 32.8** | **-0.1** |
| **LATG** | **Datong** | **1.20** | **360** | P | **Pn** | **21 53 16.7** | **-0.1** |
| **WSL** | **Shuilin Townsh** | **1.21** | **279** | *e*P | **Pn** | **21 53 17.1** | **+0.3** |
| WSL | baz=279 | | | S | **Sb** | **21 53 33.3** | **+0.2** |
| **SSPT** | **Xinbi** | **1.22** | **227** | P | **Pb** | **21 53 17.5** | **-0.6** |
| **TWQ1** | **Liyutan** | **1.23** | **326** | *i* P | **Pb** | **21 53 18.5** | **+0.3** |
| TWQ1 | baz=325 | | | *i* S | **Sb** | **21 53 35.0** | **+1.3** |
| **SCLT** | **Jiali** | **1.24** | **263** | *e*P | **Pb** | **21 53 17.8** | **-0.5** |
| SCLT | baz=262 | | | S | **Sb** | **21 53 34.9** | **+1.1** |
| **WSF** | **Szhu** | **1.24** | **285** | P | **Pb** | **21 53 19.3** | **+1.0** |
| WSF | baz=284 | | | S | **Sb** | **21 53 34.2** | **+0.3** |
| **SNJT** | **Kaohsiung City** | **1.24** | **243** | *e*P | **Pb** | **21 53 19.8** | **+1.5** |
| **SCZT** | **Fangliau** | **1.27** | **222** | *i* P | **Pn** | **21 53 17.1** | **-0.5** |
| SCZT | baz=218 | | | S | **Sn** | **21 53 33.8** | **+0.1** |
| **NDT** | **Datong Townshi** | **1.27** | **359** | P | **Pn** | **21 53 17.7** | **+0.1** |
| NDT | baz=357 | | | S | **Sb** | **21 53 34.7** | **-0.1** |
| **LAY** | **Lan-yu** | **1.28** | **179** | *i* P | **Pn** | **21 53 16.5** | **-1.3** |
| LAY | baz=165 | | | *e*S | **Sn** | **21 53 32.0** | **-2.1** |
| **NSY** | **Sanyi** | **1.29** | **327** | *i* P | **Pb** | **21 53 20.1** | **+0.8** |
| NSY | baz=326 | | | *i* S | **Sb** | **21 53 37.1** | **+1.6** |
| **SLIU** | **Shizi** | **1.29** | **211** | *e*P | **Pn** | **21 53 16.4** | **-1.6** |
| **WDJ** | **Dajia District** | **1.30** | **322** | P | **Pb** | **21 53 19.9** | **+0.5** |
| WDJ | baz=334 | | | *e*S | **Sb** | **21 53 37.1** | **+1.3** |
| **ENTT** | **Nioudou** | **1.31** | **2** | P | **Pn** | **21 53 18.5** | **+0.4** |
| ENTT | baz=359 | | | S | **Sn** | **21 53 34.7** | **0.0** |
| **TWC** | **Suao** | **1.31** | **13** | P | **Pb** | **21 53 19.2** | **-0.3** |
| TWC | baz=358 | | | S | **Sb** | **21 53 37.0** | **+1.0** |
| **NDS** | **Dongshan** | **1.31** | **8** | *e*P | **Pb** | **21 53 19.1** | **-0.5** |
| NDS | baz=5.0 | | | *e*S | **Sn** | **21 53 35.0** | **+0.2** |
| **LYUB** | **Lan-yu** | **1.32** | **178** | P | **Pn** | **21 53 15.9** | **-2.3** |
| LYUB | baz=164 | | | *e*S | **Sn** | **21 53 33.8** | **-1.2** |
| **YHNB** | **Yeheng** | **1.34** | **354** | P | **Pn** | **21 53 19.4** | **+0.8** |
| YHNB | baz=352 | | | S | **Sn** | **21 53 35.3** | **-0.4** |
| **NFF** | **Wufeng Townshi** | **1.35** | **344** | *e*P | **Pb** | **21 53 20.5** | **+0.1** |
| NFF | baz=349 | | | *e*S | **Sb** | **21 53 37.1** | **-0.2** |
| **NSK** | **Sanguang** | **1.35** | **353** | *i* P | **Pb** | **21 53 19.7** | **-0.6** |
| NSK | baz=351 | | | *e*S | **Sn** | **21 53 36.1** | **+0.3** |
| **NMLH** | **Miaoli** | **1.38** | **331** | *e*P | **Pb** | **21 53 20.5** | **-0.3** |
| NMLH | baz=329 | | | *e*S | **Sb** | **21 53 38.3** | **+0.3** |
| **NSTT** | **Nanjuang** | **1.38** | **340** | P | **Pb** | **21 53 20.4** | **-0.5** |
| NSTT | baz=338 | | | S | **Sb** | **21 53 37.9** | **-0.2** |
| **LIOB** | **Emei** | **1.39** | **340** | P | **Pb** | **21 53 20.8** | **-0.3** |
| **TWE** | **Neicheng** | **1.39** | **5** | P | **Pn** | **21 53 20.1** | **+0.8** |
| **FUSB** | **Fushanzhiwuyua** | **1.43** | **2** | *e*P | **Pn** | **21 53 20.6** | **+0.7** |
| **WLCH** | **Liuqiu** | **1.44** | **228** | *e*P | **Pb** | **21 53 22.8** | **+1.1** |
| WLCH | baz=226 | | | *e*S | **Sb** | **21 53 43.6** | **+4.0** |
| **NWLT** | **Wulai** | **1.44** | **359** | *e*P | **Pb** | **21 53 21.3** | **-0.6** |
| NWLT | baz=356 | | | *e*S | **Sb** | **21 53 39.0** | **-0.8** |
| **HEN** | **Hengchun** | **1.50** | **209** | *e*P | **Pn** | **21 53 21.2** | **+0.4** |
| | baz=194 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TWK1** | **Hengchun** baz=190 | **1.53** | **206** | *e*P | | **Pb** | **21 53 22.3** | **-1.1** |
| **TWKBT** | **Hengchun** baz=191 | **1.53** | **206** | *e*P | | **Pn** | **21 53 21.5** | **+0.3** |
| **JYNG** | **Yonaguni jima** | **1.71** | **49** | P | | **Pb** | **21 53 25.1** | **-1.3** |
| JYNG | | | | *e*S | | **Sb** | **21 53 46.2** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **1.77** | **50** | P | | **Pn** | **21 53 24.9** | **+0.5** |
| YOJ | | | | *e*S | | **Sb** | **21 53 47.2** | **-1.9** |
| **HATJ** | **Hateruma jima** | **2.21** | **70** | P | | **Pn** | **21 53 31.4** | **+0.9** |
| HATJ | | | | S | | **Sn** | **21 53 57.6** | **+0.7** |
| **IRIF** | **Iriomote-Funau** | **2.25** | **63** | P | | **Pn** | **21 53 32.3** | **+1.2** |
| IRIF | | | | *e*S | | **Sn** | **21 53 59.3** | **+1.3** |
| **JKRS** | **Kuro-shima** | **2.45** | **68** | P | | **Pn** | **21 53 35.2** | **+1.4** |
| JKRS | | | | S | | **Sn** | **21 54 04.1** | **+1.3** |
| **JIJ** | **Ishigaki jima** | **2.61** | **66** | P | | **Pn** | **21 53 37.1** | **+1.1** |
| JIJ | | | | *e*S | | **Sn** | **21 54 07.4** | **+0.6** |
| **JISG** | **Ishigakijimahi** | **2.84** | **63** | P | | **Pn** | **21 53 39.6** | **+0.5** |
| JISG | | | | *e*S | | **Sn** | **21 54 12.5** | **+0.1** |
| **JTJ** | **Tarama** | **3.18** | **65** | P | | **Pn** | **21 53 44.8** | **+0.9** |
| JTJ | | | | S | | **Sn** | **21 54 23.0** | **+2.0** |
| **JIRB** | **Irabujima** | **3.65** | **65** | P | | **Pn** | **21 53 51.4** | **+1.1** |
| JIRB | | | | *e*S | | **Sn** | **21 54 32.8** | **+0.3** |
| **JMJ2** | **Miyako jima3** | **3.75** | **67** | P | | **Pn** | **21 53 53.1** | **+1.4** |
| JMJ2 | | | | S | | **Sn** | **21 54 36.6** | **+1.7** |

**DJA 02 22:04:19.0±0.5,3°N±3°×12°8E±°, h95km±7km, M3.9/11, mb4.1/3, mB4.8/3, MLv3.8/11, Mw(mB)4.0/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.08** | **186** | P | Pn | 22 04 53.4 | +0.9 |
| TNTI | | | | S | Sn | 22 05 19.9 | +1.8 |
| **SGSI** | **Sangihe** | **2.21** | **292** | P | Pn | 22 04 53.7 | -0.4 |
| SGSI | | | | S | Sn | 22 05 20.7 | -0.3 |
| **KMSI** | **Cibinong** | **4.25** | **238** | P | Pn | 22 05 22.1 | +0.5 |
| **GTOI** | **Gorontalo** 0.0nm14nm,0.7s | **5.07** | **244** | P | Pn | 22 05 33.8 | +1.1 |
| **SANI** | **Sanana** | **5.13** | **198** | P | Pn | 22 05 31.8 | -1.7 |
| SANI | | | | S | Sn | 22 06 27.2 | -4.3 |
| **MRSI** | **Marisa** 0.1nm28nm,0.6s | **6.11** | **247** | P | Pn | 22 05 48.7 | +1.8 |
| MRSI | | | | S | Sn | 22 06 57.5 | +2.1 |
| **MSAI** | **Masohi** | **6.31** | **168** | P | Pn | 22 05 52.6 | +3.0 |

*SJA **02** 22:26:18.4±0.7,21°.78S×68°.49W, h142km±3km, ML4.3, MW4.2*
*NEIC **02** 22:26:19.6±1.6,21°.74S±0°.04×68°.36W±0°.07, h117km±5km, mb4.6/33, ML4.2(GUC), Error ellipse: s-maj=9.9km s-min=6.5km az=83.0*
*VAO **02** 22:26:19.9±0.4,21°.72S×68°.33W, h126km±3km, mb4.5*
*IDC **02** 22:26:20.0±0.5,21°.88S×68°.33W, h122km±5km, mb3.9/7, mb1 4.0/10, mb1mx3.9/24, mbtmp4.2/10, MS3.1/2, Ms1 3.1/2, ms1mx2.7/61, Error ellipse: s-maj=17.7km s-min=11.9km az=127.0*
*GUC **02** 22:26:20.7±0.8,21°.80S×68°.40W, h116km±5km, ML4.2*

**ISC 02 22:26:19.3±0.5,21°.78S±0°.03×68°.44W±0°.04, h121km±4km, n190, σ1°43/235, mb4.5/21, 8C-2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.74** | **268** | ⇑*i*P | **Pn** | **22 26 40.7** | **+1.4** |
| PB09 | | | | *i* S | **Sn** | **22 26 55.7** | **+1.3** |
| PB09 | | | | IAML | | 22 26 59.8 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **0.74** | **268** | | **Pn** | **22 26 40.6** | **+1.4** |
| PB09 | | | | Sn | **Sn** | **22 26 55.6** | **+1.3** |
| **PB09** | **IPOC Station P** | **0.74** | **268** | *e*P | **Pn** | **22 26 40.7** | **+1.4** |
| PB09 | | | | *e*S | **Sn** | **22 26 57.5** | **+3.1** |
| PB09 | | | | IAML | | 22 26 57.9 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **LVC** | **Limon Verde** | **0.93** | **207** | P | **Pn** | **22 26 42.3** | **+1.1** |
| | comp=Z,691nm,0.3s,baz=3.0,slow=8.9,SNR=3413 | | | | | | |
| LVC | | | | S | **Sn** | **22 26 58.4** | **+0.7** |
| | comp=Z,165nm,0.3s,baz=224,slow=18,SNR=32 | | | | | | |
| LVC | | | | LR | LR | 22 27 16.5 | |
| | comp=Z,436nm,19.2s,baz=293,slow=62 | | | | | | |
| **LVC** | **Limon Verde** | **0.93** | **207** | *e*P | **Pn** | **22 26 41.8** | **+0.6** |
| LVC | | | | *i* S | **Sn** | **22 26 58.2** | **+0.5** |
| **LVC** | **Limon Verde** | **0.93** | **207** | *e*P | **Pn** | **22 26 42.4** | **+1.2** |
| **LVC** | **Limon Verde** | **0.93** | **207** | Pn | **Pn** | **22 26 42.2** | **+1.1** |
| LVC | | | | Sn | **Sn** | **22 26 59.0** | **+1.3** |
| **LVC** | **Limon Verde** | **0.93** | **207** | *e*P | **Pn** | **22 26 42.3** | **+1.1** |
| LVC | | | | *e*S | **Sn** | **22 27 00.6** | **+2.9** |
| **PB01** | **IPOC Station P** | **1.22** | **307** | *e*P | **Pn** | **22 26 44.6** | **+0.8** |
| PB01 | | | | *i* S | **Sn** | **22 27 02.9** | **+0.6** |
| PB01 | | | | IAML | | 22 27 05.8 | |
| | comp=E,4μm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **1.22** | **307** | | **Pn** | **22 26 44.5** | **+0.8** |
| PB01 | | | | Sn | **Sn** | **22 27 02.8** | **+0.6** |
| **PB01** | **IPOC Station P** | **1.22** | **307** | *e*P | **Pn** | **22 26 44.0** | **+0.3** |
| PB01 | | | | *e*P | **Pn** | **22 26 44.8** | **+1.1** |
| PB01 | | | | *e*S | **Sn** | **22 27 04.2** | **+1.9** |
| PB01 | | | | IAML | | 22 27 05.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **PB03** | **IPOC Station P** | **1.25** | **257** | ⇑*i*P | **Pn** | **22 26 45.0** | **+1.0** |
| PB03 | | | | *i* S | **Sn** | **22 27 03.8** | **+0.9** |
| PB03 | | | | IAML | | 22 27 05.1 | |
| | comp=N,5μm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **1.25** | **257** | | **Pn** | **22 26 45.0** | **+1.0** |
| PB03 | | | | Sn | **Sn** | **22 27 03.8** | **+0.9** |
| **PB03** | **IPOC Station P** | **1.25** | **257** | *e*P | **Pn** | **22 26 45.1** | **+1.0** |
| PB03 | | | | *e*S | **Sn** | **22 27 04.8** | **+1.9** |
| PB03 | | | | IAML | | 22 27 06.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.34** | **272** | ⇑*i*P | **Pn** | **22 26 46.0** | **+0.8** |
| PB07 | | | | *i* S | **Sn** | **22 27 06.2** | **+1.3** |
| PB07 | | | | IAML | | 22 27 07.2 | |
| | comp=E,8μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.34** | **272** | | **Pn** | **22 26 45.9** | **+0.8** |
| PB07 | | | | Sn | **Sn** | **22 27 05.8** | **+1.0** |
| **PB07** | **IPOC Station P** | **1.34** | **272** | *e*P | **Pn** | **22 26 46.1** | **+1.0** |
| PB07 | | | | *e*S | **Sn** | **22 27 06.9** | **+2.1** |
| PB07 | | | | IAML | | 22 27 07.5 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.39** | **228** | *i* P | **Pn** | **22 26 47.0** | **+1.2** |
| PB06 | | | | *i* S | **Sn** | **22 27 07.3** | **+1.4** |
| PB06 | | | | IAML | | 22 27 09.9 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.39** | **228** | | **Pn** | **22 26 46.9** | **+1.2** |
| **PB06** | **IPOC Station P** | **1.39** | **228** | *e*P | **Pn** | **22 26 47.0** | **+1.2** |
| PB06 | | | | *e*P | **Pn** | **22 26 47.0** | **+1.2** |
| PB06 | | | | *e*S | **Sn** | **22 27 08.2** | **+2.4** |
| PB06 | | | | IAML | | 22 27 08.7 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **PB02** | **IPOC Station P** | **1.43** | **288** | ⇑*i*P | **Pn** | **22 26 46.9** | **+0.8** |
| PB02 | | | | *i* S | **Sn** | **22 27 06.9** | **+0.5** |
| PB02 | | | | IAML | | 22 27 09.0 | |
| | comp=N,7μm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **1.43** | **288** | | **Pn** | **22 26 46.9** | **+0.8** |
| **PB02** | **IPOC Station P** | **1.43** | **288** | *e*P | **Pn** | **22 26 47.0** | **+1.0** |
| PB02 | | | | *e*S | **Sn** | **22 27 07.9** | **+1.5** |
| PB02 | | | | IAML | | 22 27 09.1 | |
| | comp=Z,7μm,0.1s | | | | | | |
| **PB04** | **IPOC Station P** | **1.68** | **250** | ⇑*i*P | **Pn** | **22 26 49.8** | **+0.8** |
| PB04 | | | | *i* S | **Sn** | **22 27 10.5** | **-1.1** |
| PB04 | | | | IAML | | 22 27 15.9 | |
| | comp=N,2μm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **1.68** | **250** | | **Pn** | **22 26 49.6** | **+0.6** |
| **PB04** | **IPOC Station P** | **1.68** | **250** | *e*P | **Pn** | **22 26 49.8** | **+0.8** |
| PB04 | | | | *e*S | **Sn** | **22 27 13.8** | **+2.1** |
| PB04 | | | | IAML | | 22 27 16.6 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **PB15** | **IPOC Station P** | **1.71** | **214** | ⇑*i*P | **Pn** | **22 26 50.6** | **+1.2** |
| PB15 | | | | *i* S | **Sn** | **22 27 14.0** | **+1.5** |
| **PB15** | **IPOC Station P** | **1.71** | **214** | | **Pn** | **22 26 50.7** | **+1.2** |
| **PB15** | **IPOC Station P** | **1.71** | **214** | *e*P | **Pn** | **22 26 50.8** | **+1.3** |
| PB15 | | | | *e*S | **Sn** | **22 27 15.6** | **+3.1** |
| PB15 | | | | IAML | | 22 27 20.0 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **PB08** | **IPOC Station P** | **1.76** | **338** | ⇓*i*P | **Pn** | **22 26 52.0** | **+1.7** |
| PB08 | | | | *i* S | **Sn** | **22 27 15.7** | **+1.9** |
| PB08 | | | | IAML | | 22 27 17.9 | |
| | comp=E,2μm,0.1s | | | | | | |
| **PB08** | **IPOC Station P** | **1.76** | **338** | | **Pn** | **22 26 52.0** | **+1.7** |
| **PB08** | **IPOC Station P** | **1.76** | **338** | *e*P | **Pn** | **22 26 52.0** | **+1.7** |
| PB08 | | | | *e*S | **Sn** | **22 27 16.6** | **+2.8** |
| PB08 | | | | IAML | | 22 27 17.3 | |
| | comp=Z,992nm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **2.02** | **306** | ⇑*i*P | **Pn** | **22 26 53.4** | **+0.4** |
| TA01 | | | | IAML | | 22 27 21.6 | |
| | comp=E,3μm,0.6s | | | | | | |
| **TA01** | **Diego Aracena** | **2.02** | **306** | | **Pn** | **22 26 53.4** | **+0.4** |
| **TA01** | **Diego Aracena** | **2.02** | **306** | *e*P | **Pn** | **22 26 53.5** | **+0.5** |
| TA01 | | | | *e*S | **Sn** | **22 27 13.8** | **-5.1** |
| TA01 | | | | *e*S | **Sn** | **22 27 20.2** | **+1.4** |
| TA01 | | | | IAML | | 22 27 27.3 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **TA02** | **Huaiquique** | **2.18** | **313** | | **Pn** | **22 26 55.1** | **+0.1** |
| **TA02** | **Huaiquique** | **2.18** | **313** | *e*P | Pn | 22 26 49.8 | -5.2 |
| TA02 | | | | *e*P | **Pn** | **22 26 55.8** | **+0.8** |
| TA02 | | | | *e*S | **Sn** | **22 27 23.8** | **+1.4** |
| TA02 | | | | IAML | | 22 27 26.2 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **2.21** | **341** | ⇓*i*P | **Pn** | **22 26 57.2** | **+1.2** |
| GO01 | | | | *i* S | **Sn** | **22 27 25.4** | **+1.5** |
| **GO01** | **Chusmiza** | **2.21** | **341** | | **Pn** | **22 26 57.2** | **+1.2** |
| **GO01** | **Chusmiza** | **2.21** | **341** | *e*P | **Pn** | **22 26 57.0** | **+1.0** |
| GO01 | | | | *e*S | **Sn** | **22 27 27.3** | **+3.3** |
| **PB11** | **IPOC Station P** | **2.31** | **330** | ⇑*i*P | **Pn** | **22 26 57.6** | **+0.7** |
| PB11 | | | | *i* S | **Sn** | **22 27 26.4** | **+0.8** |
| **PB11** | **IPOC Station P** | **2.31** | **330** | | **Pn** | **22 26 57.5** | **+0.7** |
| **PB11** | **IPOC Station P** | **2.31** | **330** | *e*P | **Pn** | **22 26 57.0** | **+0.2** |
| PB11 | | | | *e*P | **Pn** | **22 26 57.5** | **+0.7** |
| PB11 | | | | *e*P | **Pn** | **22 26 57.5** | **+0.7** |
| PB11 | | | | *e*S | **Sn** | **22 27 26.7** | **+1.1** |
| PB11 | | | | IAML | | 22 27 28.1 | |
| | comp=Z,948nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **2.60** | **228** | *e*P | **Pn** | **22 27 01.1** | **+0.7** |
| **PB10** | **IPOC Station P** | **2.60** | **228** | | **Pn** | **22 27 00.6** | **+0.1** |
| **PB10** | **IPOC Station P** | **2.60** | **228** | *e*P | **Pn** | **22 27 01.0** | **+0.6** |
| PB10 | | | | *e*S | **Sn** | **22 27 29.8** | **-2.3** |
| **YJA** | **Yavi** | **2.75** | **99** | *e*P | **Pn** | **22 27 04.8** | **+2.1** |
| YJA | | | | *e*P | **Pn** | **22 27 05.0** | **+2.3** |
| YJA | | | | *e*S | Sn | 22 27 43.7 | +7.6 |
| **HJA** | **Humahuaca** | **3.15** | **117** | *e*P | **Pn** | **22 27 10.8** | **+2.9** |
| HJA | | | | *e*P | **Pn** | **22 27 11.0** | **+3.1** |
| **PB14** | **IPOC Station P** | **3.36** | **212** | Pn | **Pn** | **22 27 11.1** | **+0.5** |
| **PB14** | **IPOC Station P** | **3.36** | **212** | *e*P | **Pn** | **22 27 11.0** | **+0.4** |
| PB14 | | | | *e*S | **Sn** | **22 27 50.8** | **+0.6** |
| PB14 | | | | IAML | | 22 27 57.8 | |
| | comp=Z,292nm,0.6s | | | | | | |
| **PB16** | **IPOC Station P** | **3.57** | **344** | | **Pn** | **22 27 14.4** | **+0.7** |
| **PB16** | **IPOC Station P** | **3.57** | **344** | *e*P | **Pn** | **22 27 15.0** | **+1.3** |
| PB16 | | | | *e*S | **Sn** | **22 28 00.3** | **+4.6** |
| **PB12** | **IPOC Station P** | **3.61** | **330** | Pn | **Pn** | **22 27 12.7** | **-1.1** |
| **PB12** | **IPOC Station P** | **3.61** | **330** | *e*P | **Pn** | **22 27 13.0** | **-0.8** |
| PB12 | | | | *e*S | Sn | 22 27 42.3 | -14 |
| PB12 | | | | IAML | | 22 28 18.2 | |
| | comp=Z,252nm,0.8s | | | | | | |
| **SLA** | **San Lorenzo** | **3.99** | **138** | *e*P | **Pn** | **22 27 22.0** | **+3.2** |
| **FSA** | **Cafayete** | **4.87** | **153** | *e*P | **Pn** | **22 27 27.3** | **-3.3** |
| **AC02** | **Maricunga** | **5.07** | **187** | Pn | **Pn** | **22 27 34.1** | **+0.4** |
| **LPAZ** | **La Paz** | **5.47** | **3** | P | **Pn** | **22 27 41.0** | **+1.8** |
| | comp=Z,5.2nm,0.3s,baz=170,slow=7.5,SNR=67 | | | | | | |
| LPAZ | | | | S | Sn | 22 28 30.9 | -10 |
| | comp=Z,0.3nm,0.3s,baz=152,slow=23,SNR=1.3 | | | | | | |
| **LPAZ** | **La Paz** | **5.47** | **3** | *e*P | **Pn** | **22 27 41.7** | **+2.5** |
| **LPAZ** | **La Paz** | **5.47** | **3** | Pn | **Pn** | **22 27 40.7** | **+1.5** |
| **LPAZ** | **La Paz** | **5.47** | **3** | *e*P | **Pn** | **22 27 41.0** | **+1.8** |
| **AHML** | **Horco Molle** | **5.73** | **151** | *e*P | **Pn** | **22 27 43.7** | **+1.5** |
| **GO03** | **Copiap** | **6.01** | **195** | Pn | **Pn** | **22 27 44.0** | **-2.0** |
| **GO03** | **Copiap** | **6.01** | **195** | *e*P | **Pn** | **22 27 44.4** | **-1.6** |
| **AC04** | **Llanos de Chal** | **6.83** | **200** | *e*P | **Pn** | **22 27 55.0** | **-1.9** |
| AC04 | | | | IAML | | 22 29 36.1 | |
| | comp=Z,110nm,1.4s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **7.73** | **170** | *e*P | **Pn** | **22 28 09.1** | **-0.2** |
| **ACCO** | **Cerro Coronel** | **8.79** | **184** | *e*P | **Pn** | **22 28 23.0** | **-0.7** |
| **SIV** | **San Ignacio** | **9.04** | **52** | P | **Pn** | **22 28 23.8** | **-3.2** |
| | comp=Z,24nm,0.3s,baz=233,slow=11,SNR=253 | | | | | | |
| SIV | | | | S | Sn | 22 29 56.0 | -11 |
| | baz=219,slow=19,SNR=0.8 | | | | | | |
| SIV | | | | LR | LR | 22 32 23.8 | |
| | comp=Z,103nm,21.2s,baz=334,slow=40 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.84** | **56** | *e*P | **Pn** | **22 28 48.5** | **-2.5** |
| **PTLB** | **Pontes e Lacer** | **10.84** | **56** | Pn | **Pn** | **22 28 47.6** | **-3.5** |
| **MRA** | **San Martin** | **10.87** | **168** | *e*P | **Pn** | **22 28 49.9** | **-1.7** |
| **CPUP** | **Villa Florida** | **11.12** | **116** | P | **Pn** | **22 28 53.0** | **-1.8** |
| | comp=Z,0.4nm,0.3s,baz=287,slow=12,SNR=6.4 | | | | | | |
| **CPUP** | **Villa Florida** | **11.12** | **116** | *e*P | **Pn** | **22 28 53.4** | **-1.3** |
| **CPUP** | **Villa Florida** | **11.12** | **116** | Pn | **Pn** | **22 28 52.5** | **-2.3** |
| **VILB** | **Vilhena** | **11.78** | **43** | *e*P | **Pn** | **22 29 02.1** | **-1.6** |
| **VILB** | **Vilhena** | **11.78** | **43** | Pn | **Pn** | **22 29 01.3** | **-2.4** |
| **AQDB** | **Aquidauana** | **11.96** | **86** | *e*P | **Pn** | **22 29 03.4** | **-2.6** |
| **AQDB** | **Aquidauana** | **11.96** | **86** | Pn | **Pn** | **22 29 03.4** | **-2.6** |
| **ETMB** | **Extrema** | **12.09** | **11** | *e*P | **Pn** | **22 29 05.1** | **-2.6** |
| **ETMB** | **Extrema** | **12.09** | **11** | Pn | **Pn** | **22 29 04.5** | **-3.1** |
| **BO01** | **Tunca** | **12.78** | **190** | | **Pn** | **22 29 16.6** | **0.0** |
| **ITQB** | **Itaqui** | **13.23** | **129** | *e*P | **Pn** | **22 29 22.4** | **0.0** |
| **PP1B** | **Ponte de Pedra** | **13.43** | **74** | *e*P | **Pn** | **22 29 24.9** | **-0.3** |
| **CZSB** | **Cruzeiro do Su** | **14.56** | **346** | *e*P | **Pn** | **22 29 39.2** | **-0.4** |
| **PDRB** | **Porto dos Gac** | **15.09** | **50** | *e*P | **Pn** | **22 29 45.8** | **-0.5** |
| **PTGB** | **Pitanga** | **15.34** | **104** | *e*P | **P** | **22 29 49.6** | **-1.7** |
| **ITAB** | **Concordia** | **15.80** | **113** | *e*P | **P** | **22 29 55.1** | **-1.3** |
| **ITAB** | **Concordia** | **15.80** | **113** | | **P** | **22 29 55.6** | **-0.8** |
| **CPSB** | **Cacapava Do Su** | **15.97** | **126** | *e*P | **Pn** | **22 29 57.1** | **0.0** |
| **PCMB** | **Pacaembu** | **15.97** | **93** | *e*P | **Pn** | **22 29 56.5** | **-0.7** |
| **CLDB** | **Colider** | **16.26** | **50** | *e*P | **P** | **22 30 00.3** | **-1.3** |
| **PLTB** | **Pedras Altas** | **16.55** | **130** | *e*P | **P** | **22 30 04.3** | **-0.4** |
| **PLTB** | **Pedras Altas** | **16.55** | **130** | | **Pn** | **22 30 03.4** | **-0.8** |
| **ARAG** | **Araguaiana, MT** | **16.86** | **72** | *e*P | **P** | **22 30 07.8** | **-0.5** |
| **ITRB** | **Iturama** | **17.04** | **86** | *e*P | **Pn** | **22 30 10.1** | **-0.3** |
| **LC01** | **Cunco** | **17.32** | **189** | P | **P** | **22 30 12.9** | **-0.2** |
| **TBTG** | **Tabatinga, AM** | **17.55** | **355** | *e*P | **P** | **22 30 15.1** | **-0.6** |
| **TBTG** | **Tabatinga, AM** | **17.55** | **355** | P | **P** | **22 30 15.8** | **0.0** |
| **TIJ01** | **Guaruva-PR** | **18.17** | **105** | *e*P | **P** | **22 30 21.9** | **-0.8** |
| **BB19B** | **Bebedouro** | **18.56** | **91** | *e*P | **P** | **22 30 26.3** | **-0.5** |
| **TER01** | **Tubaro-SC** | **18.72** | **115** | *e*P | **P** | **22 30 28.2** | **-0.4** |
| **PLCA** | **Paso Flores** | **18.98** | **185** | P | **P** | **22 30 32.2** | **+0.9** |
| | comp=Z,0.5nm,0.3s,baz=21,slow=10.0,SNR=18 | | | | | | |
| **PLCA** | **Paso Flores** | **18.98** | **185** | *e*P | **P** | **22 30 31.9** | **+0.6** |
| **PLCA** | **Paso Flores** | **18.98** | **185** | P | **P** | **22 30 31.7** | **+0.4** |
| **SNDB** | **Serra Nova Dou** | **19.07** | **62** | *e*P | **P** | **22 30 31.2** | **-1.2** |
| **NPGB** | **Novo Progresso** | **19.34** | **43** | *e*P | **P** | **22 30 33.7** | **-1.7** |
| **LL04** | **Puerto Octay** | **19.37** | **189** | P | **P** | **22 30 35.7** | **+0.3** |
| LL04 | | | | IAmb | IAmb | 22 30 37.9 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **19.39** | **96** | *e*P | **P** | **22 30 35.0** | **-1.0** |
| **IPMB** | **Ipameri, GO** | **19.40** | **82** | *e*P | **P** | **22 30 35.2** | **-0.8** |
| **PET01** | **Itanhaem-SP** | **19.64** | **101** | *e*P | **P** | **22 30 38.3** | **-0.3** |
| **VAO** | **Valinhos** | **19.90** | **98** | *e*P | **P** | **22 30 40.2** | **-1.2** |
| **MACA** | **Manacapuru-AM** | **19.98** | **23** | *e*P | **P** | **22 30 40.8** | **-1.5** |
| **MACA** | **Manacapuru-AM** | **19.98** | **23** | P | **P** | **22 30 40.2** | **-2.1** |
| **BDFB** | **Brasilia** | **20.28** | **76** | P | **P** | **22 30 43.9** | **-1.8** |
| | comp=Z,4.2nm,0.4s,baz=229,slow=10,SNR=13 | | | | | | |
| **BDFB** | **Brasilia** | **20.28** | **76** | P | **P** | **22 30 44.0** | **-1.6** |
| **PARB** | **Paraibuna** | **21.13** | **99** | *e*P | **P** | **22 30 53.5** | **-1.2** |
| **ITTB** | **Itaituba** | **21.25** | **37** | *e*P | **P** | **22 30 54.4** | **-1.5** |
| **PEXB** | **Peixe** | **21.51** | **67** | *e*P | **P** | **22 30 57.0** | **-1.8** |
| **BSCB** | **Bom Sucesso** | **22.05** | **92** | *e*P | **P** | **22 31 03.9** | **-0.6** |
| **PTGA** | **Pitinga** | **22.49** | **23** | P | **P** | **22 31 06.4** | **-2.4** |
| | comp=Z,9.3nm,0.3s,baz=206,slow=19,SNR=25 | | | | | | |
| PTGA | | | | LR | LR | 22 41 11.4 | |
| | comp=Z,60nm,19.1s,baz=298,slow=40 | | | | | | |
| **MAN01** | **Angra dos Reis** | **22.67** | **97** | *e*P | **P** | **22 31 09.7** | **-0.9** |
| **DIAM** | **Diamantina, MG** | **23.52** | **86** | *e*P | **P** | **22 31 17.2** | **-1.6** |
| **PRPB** | **Parauapebas** | **23.77** | **52** | *e*P | **P** | **22 31 18.9** | **-2.0** |
| **SMTB** | **Santa Maria do** | **23.82** | **61** | *e*P | **P** | **22 31 20.4** | **-1.0** |
| **JANB** | **Januaria** | **23.83** | **78** | *e*P | **P** | **22 31 19.6** | **-1.9** |
| **OTAV** | **Otavalo** | **23.96** | **335** | *e*P | **P** | **22 31 22.6** | **-0.5** |
| **MALB** | **Monte Alegre** | **24.14** | **37** | *e*P | **P** | **22 31 23.4** | **-0.7** |
| **DUB01** | **Friburgo-RJ** | **24.18** | **96** | *e*P | **P** | **22 31 23.6** | **-1.0** |
| **SDBA** | **SAO DESIDERIO** | **24.32** | **71** | *e*P | **P** | **22 31 25.2** | **-0.8** |
| **BOAV** | **Boa Vista** | **25.24** | **19** | *e*P | **P** | **22 31 33.7** | **-0.5** |
| **BOAV** | **Boa Vista** | **25.24** | **19** | P | **P** | **22 31 34.4** | **+0.2** |
| **SJMB** | **Sao Joao De Ma** | **25.75** | **88** | *e*P | **P** | **22 31 37.9** | **-0.9** |
| **ALF01** | **Guarapari-ES** | **25.86** | **93** | *e*P | **P** | **22 31 39.0** | **-0.7** |
| **BSFB** | **Barra de Sao F** | **26.04** | **89** | *e*P | **P** | **22 31 40.7** | **-0.6** |
| **RIB01** | **Linhares ES** | **26.37** | **90** | *e*P | **P** | **22 31 43.0** | **-1.3** |
| **MCPB** | **Macapa, AP** | **26.62** | **39** | *e*P | **P** | **22 31 46.0** | **-0.6** |
| **GUA01** | **Guaratinga, BA** | **27.52** | **84** | *e*P | **P** | **22 31 53.7** | **-1.0** |
| **TMAB** | **Tom-Au,PA,Br** | **27.64** | **48** | *e*P | **P** | **22 31 55.5** | **-0.2** |
| **CMC01** | **Camacan, BA** | **28.12** | **82** | *e*P | **P** | **22 31 59.6** | **-0.5** |
| **NBIT** | **Itapeh - BA** | **28.33** | **81** | *e*P | **P** | **22 32 01.2** | **-0.8** |
| **GDU01** | **Guandu, BA** | **28.60** | **79** | *e*P | **P** | **22 32 02.8** | **-1.6** |
| **ZARC** | **Zaragoza, Cauc** | **29.76** | **347** | P | **P** | **22 32 14.1** | **-0.4** |
| **BAUV** | **El Baul** | **30.53** | **1** | P | **P** | **22 32 20.0** | **-1.3** |
| BAUV | | | | IAmb | IAmb | 22 32 24.2 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **NBLA** | **Lagarto - SE** | **31.24** | **75** | *e*P | **P** | **22 32 26.6** | **-1.0** |
| **BIRV** | **Birongo** | **32.12** | **4** | P | **P** | **22 32 34.4** | **-0.9** |
| **SJCC** | **San Jacinto, C** | **32.16** | **347** | P | **P** | **22 32 35.1** | **-0.6** |
| SJCC | | | | IAmb | IAmb | 22 32 39.4 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **TOSP** | **Speyside** | **33.78** | **14** | P | **P** | **22 32 49.3** | **-0.3** |
| **RCBR** | **Riachuelo** | **35.24** | **68** | *e*P | **P** | **22 33 02.2** | **-0.2** |
| **RCBR** | **Riachuelo** | **35.24** | **68** | P | **P** | **22 33 00.8** | **-1.7** |
| **SVN** | **Savane Anatole** | **37.09** | **12** | P | **P** | **22 33 17.8** | **-0.2** |
| **833A** | **Chaparral WMA,** | **58.09** | **328** | P | **P** | **22 35 60.0** | **0.0** |
| 833A | | | | IAmb | IAmb | 22 36 18.3 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **58.41** | **172** | P | **P** | **22 36 02.8** | **+1.1** |
| BELA | | | | IAmb | IAmb | 22 36 04.1 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **V55A** | **Taylorsville** | **58.58** | **348** | P | **P** | **22 36 04.1** | **+0.8** |
| V55A | | | | IAmb | IAmb | 22 36 28.4 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **X48A** | **Hartselle** | **58.65** | **342** | P | **P** | **22 36 04.0** | **+0.2** |
| X48A | | | | IAmb | IAmb | 22 36 16.6 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **58.94** | **345** | P | **P** | **22 36 05.9** | **+0.1** |
| TKL | | | | IAmb | IAmb | 22 36 28.0 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **U54A** | **Nelsons Funny** | **59.35** | **347** | P | **P** | **22 36 08.4** | **-0.3** |
| **VNA3** | **Neumayer Olymp** | **59.67** | **161** | P | **P** | **22 36 11.9** | **+1.4** |
| **V48A** | **Smith Brothers** | **59.80** | **343** | P | **P** | **22 36 11.4** | **-0.2** |
| **VNA1** | **Neumayer--Stat** | **59.88** | **160** | P | **P** | **22 36 13.7** | **+1.9** |
| **VNA2** | **Neumayer--Watz** baz=283,slow=6.8 | **60.25** | **161** | P | **P** | **22 36 15.8** | **+1.4** |
| **U49A** | **Red Boiling Sp** | **60.25** | **344** | P | **P** | **22 36 14.9** | **+0.2** |
| U49A | | | | IAmb | IAmb | 22 36 15.4 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **WVT** | **Waverly** | **60.44** | **342** | P | **P** | **22 36 15.9** | **-0.2** |
| WVT | | | | IAmb | IAmb | 22 36 16.7 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **60.90** | **336** | P | **P** | **22 36 19.4** | **+0.3** |
| MIAR | | | | IAmb | IAmb | 22 36 20.7 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **61.10** | **325** | P | **P** | **22 36 21.7** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=64,slow=43,SNR=3.0 | | | | | | |
| **SNAA** | **Sanae** | **61.88** | **161** | P | **P** | **22 36 26.7** | **+1.3** |
| **SNAA** | **Sanae** | **61.88** | **161** | P | **P** | **22 36 26.4** | **+0.9** |
| SNAA | | | | IAmb | IAmb | 22 36 27.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **63.62** | **338** | P | **P** | **22 36 37.5** | **+0.3** |
| S39A | | | | IAmb | IAmb | 22 36 38.6 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **68.40** | **73** | P | **P** | **22 37 08.4** | **0.0** |
| | comp=Z,6.1nm,0.6s,baz=240,slow=6.9,SNR=11 | | | | | | |
| **DBIC** | **Dimbokro** | **68.40** | **73** | P | **P** | **22 37 08.2** | **-0.2** |
| DBIC | | | | IAmb | IAmb | 22 37 09.8 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.41** | **180** | P | **P** | **22 37 09.9** | **+2.1** |
| QSPA | | | | IAmb | IAmb | 22 37 10.8 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IMMV** | **Iera Moni Meta** | **0.96** | **45** | P | | **Pg** | **23 50 31.1** | **+0.1** |
| IMMV | | | | S | | **Sb** | **23 50 44.3** | **+0.9** |
| | comp=N,1μm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.96** | **45** | P | | **Pg** | **23 50 31.3** | **+0.3** |
| IMMV | | | | AML | AML | | 23 50 49.0 | |
| | comp=N,1646μm,0.4s | | | | | | | |
| IMMV | | | | AML | AML | | 23 50 54.1 | |
| | comp=E,2353μm,0.8s | | | | | | | |
| **VAM** | **Vamos** | **1.06** | **54** | P | | **Pg** | **23 50 32.7** | **-0.3** |
| VAM | | | | S | | **Sg** | **23 50 46.0** | **-0.9** |
| | comp=E,1μm,0.7s | | | | | | | |
| **VAM** | **Vamos** | **1.06** | **54** | P | | **Pg** | **23 50 32.9** | **-0.1** |
| VAM | | | | AML | AML | | 23 50 51.9 | |
| | comp=E,1987μm,1.0s | | | | | | | |
| VAM | | | | AML | AML | | 23 50 52.8 | |
| | comp=N,2337μm,0.5s | | | | | | | |
| **ANKY** | **Antikythira Is** | **1.09** | **7** | P | | **Pg** | **23 50 33.4** | **0.0** |
| ANKY | | | | S | | **Sn** | **23 50 48.9** | **+0.9** |
| | comp=N,845nm,0.7s | | | | | | | |
| **ANKY** | **Antikythira Is** | **1.09** | **7** | P | | **Pg** | **23 50 32.6** | **-0.8** |
| ANKY | | | | AML | AML | | 23 50 53.0 | |
| | comp=E,1371μm,0.7s | | | | | | | |
| ANKY | | | | AML | AML | | 23 50 53.9 | |
| | comp=N,2004μm,0.6s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **1.25** | **62** | P | | **Pb** | **23 50 35.0** | **-0.8** |
| **SIVA** | **Sivas** | **1.39** | **80** | P | | **Pn** | **23 50 38.6** | **+1.3** |
| **SIVA** | **Sivas** | **1.39** | **80** | P | | **Pn** | **23 50 37.0** | **-0.2** |
| **KTHA** | **Kythira Island** | **1.47** | **357** | P | | **Pn** | **23 50 39.5** | **+1.0** |
| **KTHA** | **Kythira Island** | **1.47** | **357** | P | | **Pn** | **23 50 38.8** | **+0.3** |
| KTHA | | | | AML | AML | | 23 51 16.7 | |
| | comp=N,274μm,0.9s | | | | | | | |
| KTHA | | | | AML | AML | | 23 51 22.2 | |
| | comp=E,684μm,0.6s | | | | | | | |
| **KTHR** | **Kythira** | **1.48** | **356** | P | | **Pn** | **23 50 39.3** | **+0.8** |
| **IDI** | **Anoyia** | **1.52** | **70** | P | | **Pn** | **23 50 39.8** | **+0.7** |
| IDI | | | | S | | **Sn** | **23 50 59.4** | **+0.7** |
| | comp=E,190nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **1.52** | **70** | P | | **Pn** | **23 50 39.9** | **+0.7** |
| IDI | | | | AML | AML | | 23 51 05.0 | |
| | comp=E,356μm,0.5s | | | | | | | |
| IDI | | | | AML | AML | | 23 51 11.3 | |
| | comp=N,403μm,0.6s | | | | | | | |
| **VLI** | **Veliai** | **1.94** | **355** | P | | **Pn** | **23 50 46.1** | **+1.2** |
| VLI | | | | S | | **Sn** | **23 51 10.5** | **+1.5** |
| | comp=N,140nm,1.2s | | | | | | | |
| **VLI** | **Veliai** | **1.94** | **355** | P | | **Pn** | **23 50 46.0** | **+1.1** |
| VLI | | | | AML | AML | | 23 51 27.6 | |
| | comp=N,276μm,0.8s | | | | | | | |
| VLI | | | | AML | AML | | 23 51 30.9 | |
| | comp=E,273μm,0.9s | | | | | | | |
| **NPS** | **Neapolis** | **2.08** | **76** | P | | **Pn** | **23 50 48.4** | **+1.6** |
| **NPS** | **Neapolis** | **2.08** | **76** | P | | **Pn** | **23 50 48.5** | **+1.7** |
| NPS | | | | AML | AML | | 23 51 30.8 | |
| | comp=E,235μm,0.9s | | | | | | | |
| NPS | | | | AML | AML | | 23 51 32.1 | |
| | comp=N,226μm,1.0s | | | | | | | |
| **PYL** | **PYLOS** | **2.40** | **332** | P | | **Pn** | **23 50 51.6** | **+0.5** |
| **ITM** | **Ithomi** | **2.59** | **338** | P | | **Pn** | **23 50 55.5** | **+1.7** |
| **KRND** | **KRANIDI** | **2.59** | **0** | P | | **Pn** | **23 50 54.7** | **+0.8** |
| **GERES** | **GERESS Array B** | **15.70** | **336** | P | | **Pn** | **23 53 57.2** | **+4.2** |
| | comp=N,0.0nm,0.3s,baz=170,slow=12,SNR=1.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **16.51** | **14** | P | | **Pn** | **23 54 02.2** | **-1.2** |
| | comp=N,0.7nm,0.3s,baz=210,slow=10,SNR=4.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.83** | **1** | P | | P | 23 56 59.1 | -3.3 |
| | comp=N,2.3nm,1.0s,baz=190,slow=8.2,SNR=1.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.36** | **56** | P | | **P** | **23 58 28.0** | **-2.1** |
| | comp=N,0.8nm,0.5s,baz=268,slow=7.7,SNR=23 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.45** | **46** | P | | P | 23 58 34.9 | -3.6 |
| | comp=N,0.9nm,0.5s,baz=272,slow=8.6,SNR=5.1 | | | | | | | |
| **SONM** | **Songino Array** | **61.00** | **50** | P | | **P** | **00 00 23.6** | **-1.7** |
| | comp=N,0.2nm,0.4s,baz=285,slow=7.6,SNR=5.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.29** | **341** | P | | **P** | **00 02 04.6** | **-1.3** |
| | comp=N,0.2nm,0.4s,baz=34,slow=5.9,SNR=2.7 | | | | | | | |

*KRNET **03** 00:05:01.5±0.1, 40.86N×72.62E, h16km, mb3.3*
*SOME **03** 00:05:02.3, 41.00N×72.67E, h5km*
*NNC **03** 00:05:03.4±1.9, 41.00N×72.65E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=16.0km s-min=6.3km az=171.0*
*ISU **03** 00:05:03, 40.80N×72.70E, h5km*
**ISC 03 00:05:00.9±1.1, 40.91N±0.02×72.67E±0.02, h5km±11km, n40, σ1s23/63, 24C-8D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TSTA** | **Tashata** | **0.36** | **204** | *i* P | | **Pg** | **00 05 08.0** | **+0.1** |
| TSTA | | | | S | | **Sg** | **00 05 13.0** | **+0.4** |
| **OHH** | **Osh** | **0.39** | **167** | ⇓*i* P | | **Pg** | **00 05 08.7** | **+0.2** |
| | baz=59 | | | | | | | |
| OHH | | | | ⇓*i* S | | **Sg** | **00 05 13.5** | **-0.2** |
| | baz=59 | | | | | | | |
| **ARK** | **Arkit** | **1.04** | **330** | ⇑*i* P | | **Pb** | **00 05 21.5** | **+0.1** |
| | baz=33 | | | | | | | |
| ARK | | | | ⇑*i* S | | **Sn** | **00 05 36.0** | **-1.2** |
| | baz=33 | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.10** | **144** | ⇓*e* P | | **Pg** | **00 05 21.7** | **-0.3** |
| | baz=41 | | | | | | | |
| SFK | | | | ⇓*e* S | | **Sg** | **00 05 36.8** | **+0.6** |
| | baz=41 | | | | | | | |
| **TRKS** | **Terek-Say** | **1.31** | **299** | ⇑*i* P | | **Pn** | **00 05 24.9** | **-1.1** |
| | baz=99 | | | | | | | |
| TRKS | | | | ⇑*i* S | | **Sb** | **00 05 42.0** | **-1.2** |
| | baz=99 | | | | | | | |
| **AML** | **Almayashu** | **1.45** | **32** | P | | **Pg** | **00 05 29.6** | **+0.9** |
| | SNR=121 | | | | | | | |
| **ARLS** | **Aral** | **1.57** | **52** | ⇑*i* P | | **Pg** | **00 05 31.5** | **+0.5** |
| | baz=52 | | | | | | | |
| ARLS | | | | ⇑*i* S | | **Sg** | **00 05 53.5** | **+2.1** |
| | baz=52 | | | | | | | |
| **DRK** | **Karamyk** | **1.57** | **205** | ⇑*i* P | | **Pn** | **00 05 29.7** | **0.0** |
| | baz=5.0 | | | | | | | |
| DRK | | | | ⇑*i* S | | **Sb** | **00 05 50.1** | **-0.8** |
| | baz=5.0 | | | | | | | |
| **MNAS** | **Manas** | **1.58** | **356** | ⇑*i* P | | **Pg** | **00 05 31.7** | **+0.4** |
| | baz=57 | | | | | | | |
| MNAS | | | | ⇑*i* S | | **Sg** | **00 05 53.8** | **+1.9** |
| | baz=57 | | | | | | | |
| **BTK** | **Batken** | **1.64** | **240** | ⇑*i* P | | **Pb** | **00 05 30.8** | **-0.9** |
| | baz=40 | | | | | | | |
| BTK | | | | ⇑*i* S | | **Sb** | **00 05 52.2** | **-0.6** |
| | baz=40 | | | | | | | |
| **MRKS** | **Merke** | **1.89** | **13** | *e* P | | **Pg** | **00 05 37.8** | **+0.7** |
| | 16nm,0.2s | | | | | | | |
| MRKS | | | | *e* S | | **Sg** | **00 06 02.8** | **+1.3** |
| | 66nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **1.89** | **13** | Pg | | **Pg** | **00 05 37.8** | **+0.7** |
| | 16nm,0.2s | | | | | | | |
| MRKS | | | | Lg | | Lg | 00 06 03.9 | |
| | 66nm,0.3s | | | | | | | |
| **UCH** | **Uchtor** | **1.91** | **46** | P | | **Pg** | **00 05 37.9** | **+0.2** |
| | SNR=25 | | | | | | | |
| **UCH** | **Uchtor** | **1.91** | **46** | ⇓*i* P | | **Pg** | **00 05 37.6** | **0.0** |
| | baz=46 | | | | | | | |
| UCH | | | | ⇓*i* S | | **Sg** | **00 06 03.7** | **+1.2** |
| | baz=46 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.94** | **25** | P | | **Pg** | **00 05 38.1** | **-0.1** |
| | SNR=36 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.94** | **25** | ⇑*i* P | | **Pg** | **00 05 37.7** | **-0.4** |
| | baz=25 | | | | | | | |
| EKS2 | | | | ⇑*i* S | | **Sg** | **00 06 04.0** | **+0.7** |
| | baz=25 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.21** | **38** | P | | **Pb** | **00 05 41.8** | **+0.5** |
| | SNR=13 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.21** | **38** | ⇑Pg | | **Pb** | **00 05 41.5** | **+0.2** |
| | 4.3nm,0.2s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 00 06 13.0 | |
| | 10nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.21** | **38** | ⇑*i* P | | **Pb** | **00 05 41.3** | **-0.1** |
| | baz=38 | | | | | | | |
| AAK | | | | ⇑*i* S | | **Sb** | **00 06 10.5** | **+1.5** |
| | baz=38 | | | | | | | |
| **DZA** | **Taraz** | **2.22** | **334** | *e* P | | **Pb** | **00 05 42.5** | **+1.0** |
| | 23nm,0.3s | | | | | | | |
| DZA | | | | *e* S | | **Sg** | **00 06 11.2** | **-1.1** |
| | 92nm,0.2s | | | | | | | |
| **DZA** | **Taraz** | **2.22** | **334** | Pg | | **Pb** | **00 05 42.5** | **+1.0** |
| | 23nm,0.3s | | | | | | | |
| DZA | | | | Lg | | Lg | 00 06 11.2 | |
| | 92nm,0.2s | | | | | | | |
| **IUG** | **luzhnay** | **2.33** | **303** | *e* P | | **Pb** | **00 05 44.2** | **+0.7** |
| | 236nm,0.4s | | | | | | | |
| IUG | | | | *e* S | | **Sb** | **00 06 14.0** | **+1.3** |
| | 128nm,0.3s | | | | | | | |
| **IUG** | **luzhnay** | **2.33** | **303** | Pg | | **Pb** | **00 05 44.2** | **+0.7** |
| | 236nm,0.4s | | | | | | | |
| IUG | | | | Lg | | Lg | 00 06 14.0 | |
| | 128nm,0.3s | | | | | | | |
| **YBZ** | **Yangibazar** | **2.36** | **281** | *e* P | | **Pg** | **00 05 46.0** | **-0.2** |
| YBZ | | | | S | | **Sg** | **00 06 15.0** | **-1.8** |
| **KBK** | **Karagaybulak** | **2.44** | **44** | P | | **Pb** | **00 05 46.0** | **+0.6** |
| | SNR=7.8 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.44** | **44** | ⇓*i* P | | **Pb** | **00 05 44.8** | **-0.6** |
| | baz=43 | | | | | | | |
| KBK | | | | ⇓*i* S | | **Sb** | **00 06 16.2** | **+0.3** |
| | baz=43 | | | | | | | |
| **GAR** | **Garm** | **2.62** | **224** | ⇑*i* P | | **Pn** | **00 05 45.6** | **+1.6** |
| | baz=24 | | | | | | | |
| GAR | | | | ⇑*i* S | | **Sn** | **00 06 17.7** | **+1.4** |
| | baz=24 | | | | | | | |
| **USP** | **Ospenovka** | **2.73** | **29** | P | | **Pb** | **00 05 48.7** | **-1.4** |
| | SNR=5.7 | | | | | | | |
| **KK08** | **Karatay Array** | **2.73** | **324** | ⇑Pg | | **Pg** | **00 05 53.2** | **0.0** |
| | 2.2nm,0.5s,baz=144,slow=16 | | | | | | | |
| KK08 | | | | ⇑Lg | | Lg | 00 06 24.3 | |
| | 8.9nm,0.5s,baz=139,slow=30 | | | | | | | |
| **SGDS** | **Sogindy** | **2.93** | **29** | *e* P | | **Pb** | **00 05 55.0** | **+1.2** |
| | 2.6nm,0.2s | | | | | | | |
| SGDS | | | | *e* S | | **Sg** | **00 06 32.7** | **-2.4** |
| | 12nm,0.5s | | | | | | | |
| **SGDS** | **Sogindy** | **2.93** | **29** | Pg | | **Pb** | **00 05 55.0** | **+1.2** |
| | 2.6nm,0.2s | | | | | | | |
| SGDS | | | | Lg | | Lg | 00 06 33.1 | |
| | 12nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.97** | **46** | ⇑Pn | | **Pb** | **00 05 52.3** | **-2.2** |
| | 1.4nm,0.3s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 00 06 33.7 | |
| | 7.2nm,0.6s | | | | | | | |
| **BRLS** | **Borolday** | **2.99** | **316** | *e* P | | **Pb** | **00 05 55.2** | **+0.5** |
| | 6.3nm,0.1s | | | | | | | |
| BRLS | | | | *e* S | | **Sb** | **00 06 32.4** | **+0.8** |
| | 12nm,0.2s | | | | | | | |
| **BRLS** | **Borolday** | **2.99** | **316** | Pg | | **Pb** | **00 05 55.2** | **+0.5** |
| | 6.3nm,0.1s | | | | | | | |
| BRLS | | | | Lg | | Lg | 00 06 32.4 | |
| | 12nm,0.2s | | | | | | | |
| **KST** | **Kastek** | **3.26** | **48** | *e* P | | **Pb** | **00 06 01.1** | **+1.9** |
| | 3.3nm,0.2s | | | | | | | |
| KST | | | | *e* S | | **Sg** | **00 06 43.0** | **-2.5** |
| | 8.0nm,0.5s | | | | | | | |
| **KST** | **Kastek** | **3.26** | **48** | Pg | | **Pb** | **00 06 01.1** | **+1.9** |
| | 3.3nm,0.2s | | | | | | | |
| KST | | | | Lg | | Lg | 00 06 43.0 | |
| | 8.0nm,0.5s | | | | | | | |
| **DGS** | **Degeres** | **3.29** | **44** | *e* P | | **Pg** | **00 06 02.2** | **-1.7** |
| | 4.0nm,0.5s | | | | | | | |
| DGS | | | | *e* S | | **Sg** | **00 06 45.0** | **-1.4** |
| | 16nm,0.5s | | | | | | | |
| **DGS** | **Degeres** | **3.29** | **44** | Pg | | **Pg** | **00 06 02.2** | **-1.7** |
| | 4.0nm,0.5s | | | | | | | |
| DGS | | | | Lg | | Lg | 00 06 45.0 | |
| | 16nm,0.5s | | | | | | | |
| **KRBS** | **Karabastau** | **3.57** | **38** | *e* P | | **Pg** | **00 06 07.2** | **-2.1** |
| | 3.1nm,0.4s | | | | | | | |
| KRBS | | | | *e* S | | **Sg** | **00 06 53.4** | **-2.2** |
| | 4.8nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **3.57** | **38** | Pg | | **Pg** | **00 06 07.2** | **-2.1** |
| | 3.1nm,0.4s | | | | | | | |
| KRBS | | | | Lg | | Lg | 00 06 53.4 | |
| | 4.8nm,0.4s | | | | | | | |

*IDC **03** 00:18:33.0±18.0, 1.49N×127.07E, h95km±181km, mb3.6/6, mb1 3.7/7, mb1mx3.4/37, mbtmp3.9/7, ML3.7/1, Error ellipse: s-maj=77.7km s-min=25.8km az=57.0*
**ISC 03 00:18:33.8±1.0, 1.4N±0.2×126.9E±0.4, h103km, n7, σ0s75/7, mb3.9/6, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **19.41** | **183** | P | | **Pn** | **00 22 54.5** | **+0.3** |
| | 0.2nm,0.3s,baz=5.2,slow=11,SNR=6.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.45** | **161** | P | | **P** | **00 23 23.7** | **-0.8** |
| | 3.3nm,0.4s,baz=340,slow=11,SNR=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.84** | **165** | P | | **P** | **00 23 55.7** | **-0.2** |
| | 1.0nm,0.5s,baz=347,slow=7.2,SNR=22 | | | | | | | |
| **CTA** | **Charters Tower** | **28.60** | **139** | P | | **P** | **00 24 21.3** | **+0.7** |
| | 1.0nm,0.3s,baz=315,slow=7.1,SNR=1.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.93** | **158** | P | | **P** | **00 25 24.0** | **-0.4** |
| | 1.8nm,0.6s,baz=336,slow=10,SNR=6.6 | | | | | | | |
| **SONM** | **Songino Array** | **49.53** | **342** | P | | **P** | **00 27 13.5** | **-0.7** |
| | 0.2nm,0.5s,baz=161,slow=8.2,SNR=3.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.53** | **326** | P | | **P** | **00 28 27.1** | **+0.7** |
| | 0.6nm,0.5s,baz=118,slow=7.5,SNR=16 | | | | | | | |

*IDC **03** 00:29:22.9±3.2, 35.60N×5.48W, h0km, mb3.1/2, mb1 3.2/5, mb1mx2.8/41, mbtmp3.1/5, ML2.7/3, MS3.7/1, Ms1 3.7/1, ms1mx2.8/31, Error ellipse: s-maj=79.5km s-min=12.7km az=91.0*
*INMG **03** 00:29:23.4±1.2, 35.50N×3.77W, h2km±3km, ML2.3, Error ellipse: s-maj=3.4km s-min=2.5km az=178.0*
*SFS **03** 00:29:23.0, 35.50N×3.70W, ML2.1, ALBORAN SUR*
*CNRM **03** 00:29:24.9, 35.49N×3.62W, h11km, ml3.1*
**ISC 03 00:29:23.1±0.8, 35.68N±0.03×3.59W±0.03, h14km, n40, σ2s00/47, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.55** | **212** | P | | **Pg** | **00 29 32.5** | **-1.3** |
| **PALE** | **Palemas** | **0.55** | **212** | P | | **Pg** | **00 29 32.5** | **-1.3** |
| **GOG** | **Mont Gurugu** | **0.67** | **133** | P | | **Pn** | **00 29 39.0** | **+0.8** |
| **GOG** | **Mont Gurugu** | **0.67** | **133** | P | | **Pn** | **00 29 39.0** | **+0.8** |
| **GOG** | **Mont Gurugu** | **0.67** | **133** | P | | **Pg** | **00 29 35.6** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.67** | **133** | P | | **Pg** | **00 29 36.0** | **-0.1** |
| **CHAS** | **Isla Isabel II** | **1.07** | **117** | P | | **Pb** | **00 29 42.3** | **-1.0** |
| CHAS | | | | S | | **Sb** | **00 29 55.6** | **-1.4** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **328** | P | | **Pg** | **00 29 48.1** | **+0.4** |
| EMAL | | | | S | | **Sg** | **00 30 04.0** | **-0.2** |
| **SMIR** | **Smir Dam** | **1.46** | **271** | P | | **Pn** | **00 29 48.0** | **-1.1** |
| **SMIR** | **Smir Dam** | **1.46** | **271** | P | | **Pn** | **00 29 48.0** | **-1.1** |
| **SMIR** | **Smir Dam** | **1.46** | **271** | P | | **Pn** | **00 29 48.0** | **-1.1** |
| **CEU** | **Ceuta** | **1.47** | **279** | P | | **Pn** | **00 29 46.3** | **-2.8** |
| CEU | | | | S | | **Sn** | **00 30 03.7** | **-4.4** |
| **CHEFC** | **Chefchaouen** | **1.54** | **249** | P | | **Pg** | **00 29 53.0** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.54** | **249** | P | | **Pg** | **00 29 53.0** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.54** | **249** | P | | **Pb** | **00 29 51.0** | **-0.5** |
| **JBK** | **JBK** | **1.58** | **148** | P | | **Pn** | **00 29 49.1** | **-1.8** |
| **JBK** | **JBK** | **1.58** | **148** | P | | **Pn** | **00 29 51.0** | **+0.1** |
| **LCRM** | **LCR** | **2.25** | **208** | P | | **Pn** | **00 30 03.2** | **-0.3** |
| **LCRM** | **LCR** | **2.25** | **208** | P | | **Pn** | **00 30 01.0** | **+0.9** |
| **LCRM** | **LCR** | **2.25** | **208** | P | | **Pn** | **00 30 01.0** | **+0.9** |
| **MDT** | **Midelt** | **2.98** | **197** | Pn | | **Pn** | **00 30 09.3** | **-0.7** |
| | 0.4nm,0.3s,baz=329,slow=4.0,SNR=27 | | | | | | | |
| MDT | | | | Pg | | **Pb** | **00 30 16.9** | **+0.9** |
| | 1.9nm,0.3s,baz=342,slow=20,SNR=13 | | | | | | | |
| MDT | | | | Sn | | **Sn** | **00 30 44.8** | **-0.9** |
| | 1.0nm,0.3s,baz=280,slow=18,SNR=2.3 | | | | | | | |
| MDT | | | | Lg | | Lg | 00 30 53.5 | |
| | 1.8nm,0.3s,baz=46,slow=21,SNR=4.5 | | | | | | | |
| **MDT** | **Midelt** | **2.98** | **197** | P | | **Pn** | **00 30 09.3** | **-0.7** |
| **MDT** | **Midelt** | **2.98** | **197** | P | | **Pb** | **00 30 15.0** | **-1.1** |
| **MDT** | **Midelt** | **2.98** | **197** | P | | **Pn** | **00 30 09.3** | **-0.7** |
| **ZHG** | **ZHG** | **3.37** | **229** | P | | **Pn** | **00 30 15.1** | **-0.2** |
| **ZHG** | **ZHG** | **3.37** | **229** | P | | **Pn** | **00 30 15.1** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | *e* Pn | | **Pn** | **00 30 22.2** | **+1.8** |
| PVAQ | | | | *e* Sn | | **Sn** | **00 31 03.6** | **-0.7** |
| PVAQ | | | | A | | A | 00 31 09.6 | |
| | 5.6nm,0.7s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **295** | *e* Pn | | **Pn** | **00 30 24.1** | **+2.4** |
| PBDV | | | | *e* Sn | | **Sn** | **00 31 07.0** | **+0.4** |
| PBDV | | | | A | | A | 00 31 19.4 | |
| | 4.4nm,0.4s | | | | | | | |
| **PAB** | **San Pablo** | **3.91** | **351** | P | | **Pb** | **00 30 27.7** | **-4.1** |
| **ESDC** | **Sonseca Array** | **4.00** | **356** | Pn | | **Pb** | **00 30 28.8** | **-4.5** |
| | 0.3nm,0.3s,baz=182,slow=13,SNR=14 | | | | | | | |
| ESDC | | | | Pg | | **Pg** | **00 30 39.0** | **-0.7** |
| | 0.2nm,0.3s,baz=181,slow=13,SNR=4.4 | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **00 31 15.2** | **+4.6** |
| | 0.1nm,0.3s,baz=174,slow=22,SNR=1.9 | | | | | | | |
| ESDC | | | | Lg | | Lg | 00 31 36.0 | |
| | 0.3nm,0.3s,baz=183,slow=26,SNR=4.5 | | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **300** | *e* Pn | | **Pn** | **00 30 29.4** | **+4.4** |
| PCVE | | | | *e* Sn | | **Sn** | **00 31 12.5** | **0.0** |
| PCVE | | | | A | | A | 00 31 15.2 | |
| | 3.6nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e* Pn | | **Pn** | **00 30 30.6** | **+2.6** |
| MESJ | | | | *e* Sn | | **Sn** | **00 31 18.4** | **+0.4** |
| MESJ | | | | A | | A | 00 31 20.7 | |
| | 4.0nm,0.5s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.53** | **296** | *e* Sn | | **Sn** | **00 31 26.8** | **+3.1** |
| **PNCL** | **Nicolau / Gran** | **4.65** | **303** | *e* Pn | | **Pn** | **00 30 35.3** | **+2.5** |
| PNCL | | | | *e* Sn | | **Sn** | **00 31 27.1** | **+0.6** |
| **PCBR** | **Castelo Branco** | **5.17** | **325** | *e* Pn | | Pn | 00 30 45.8 | +5.8 |
| **MVO** | **Moncorvo** | **6.11** | **335** | *e* Pn | | Pn | 00 30 58.7 | +5.8 |
| **VAE** | **Valguarnera** | **14.57** | **78** | Pn | | P | 00 33 10.1 | +15 |
| | 0.3nm,0.3s,baz=272,slow=19,SNR=7.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.94** | **167** | P | | **P** | **00 34 30.9** | **+4.0** |
| | 0.3nm,0.8s,baz=354,slow=12,SNR=1.5 | | | | | | | |
| **FRB** | **Frobisher Bay** | **47.67** | **327** | LR | | LR | 00 53 44.7 | |
| | comp=Z,88nm,19.2s,baz=346,slow=31 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.47** | **51** | P | | P | 00 39 57.5 | +12 |
| | 0.4nm,0.9s,baz=297,slow=6.3,SNR=3.8 | | | | | | | |

*SNET **03** 00:38:01.3±1.3, 14.42N×89.15W, h1km±5km, ML2.3*
*GCG **03** 00:38:04.1±0.8, 14.75N×89.29W, h0km±401km, MD3.3*
**ISC 03 00:37:59.4±1.4, 14.53N±0.05×89.07W±0.04, h11km±10km, n16, σ0s88/28, 4C-1D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MTO3** | **Montecristo** | **0.31** | **245** | ⇑*i* P | | **Pg** | **00 38 05.8** | **0.0** |
| MTO3 | | | | *e* S | | **Sg** | **00 38 09.8** | **-0.3** |
| MTO3 | | | | IAML | | | 00 38 10.9 | |
| | comp=Z,617nm,0.2s | | | | | | | |
| **LLGN** | **La Laguna** | **0.39** | **162** | ⇑*i* P | | **Pb** | **00 38 08.3** | **0.0** |
| LLGN | | | | *e* S | | **Sb** | **00 38 13.9** | **-0.5** |
| **TACO** | **Tacachico** | **0.62** | **206** | ⇑*i* P | | **Pb** | **00 38 12.0** | **-0.4** |
| TACO | | | | *e* S | | **Sg** | **00 38 20.0** | **+0.3** |
| **MRL** | **Marmol** | **0.81** | **313** | ⇓*e* P | | **Pn** | **00 38 16.0** | **-0.9** |
| MRL | | | | *e* S | | **Sg** | **00 38 24.7** | **-0.9** |
| **PAVA** | **Las Pavas** | **0.82** | **171** | *e* P | | **Pn** | **00 38 16.3** | **-0.8** |
| PAVA | | | | *e* S | | **Sb** | **00 38 27.2** | **+0.2** |
| PAVA | | | | *e* S | | **Sn** | **00 38 27.8** | **-1.5** |
| **CEVE** | **Cerro Verde** | **0.88** | **218** | *i* P | | **Pn** | **00 38 17.1** | **-0.9** |
| CEVE | | | | *e* S | | **Sb** | **00 38 29.0** | **+0.2** |
| **SCLA** | **Alcaldia de Sa** | **0.89** | **158** | ⇑*e* P | | **Pn** | **00 38 17.6** | **-0.3** |
| **SJTE** | **Alcalda de S** | **0.92** | **176** | *e* P | | **Pn** | **00 38 17.7** | **-0.6** |
| SJTE | | | | IAML | | | 00 38 33.5 | |
| | comp=Z,100nm,0.4s | | | | | | | |
| **NUBE** | **Las Nubes** | **0.93** | **228** | *e* P | | **Pb** | **00 38 17.4** | **-0.3** |
| NUBE | | | | *e* S | | **Sg** | **00 38 29.0** | **-0.6** |
| **JAYA** | **Jayaque - finc** | **0.95** | **203** | *e* P | | **Pb** | **00 38 17.8** | **-0.2** |
| **TECO** | **Alcaldia de Te** | **1.03** | **164** | *i* P | | **Pn** | **00 38 19.7** | **-0.1** |
| TECO | | | | *e* S | | **Sn** | **00 38 33.9** | **-0.4** |
| **COEB** | **Comit de Eme** | **1.15** | **153** | *e* P | | **Pn** | **00 38 22.2** | **+0.6** |
| **NBG** | **Las Nubes** | **1.24** | **273** | *e* P | | **Pg** | **00 38 24.1** | **+0.9** |
| NBG | | | | *e* S | | **Sn** | **00 38 41.2** | **+1.4** |
| **PACA** | **Pacayal** | **1.28** | **146** | *e* P | | **Pg** | **00 38 25.1** | **+1.0** |
| PACA | | | | *e* S | | **Sn** | **00 38 42.5** | **+1.8** |
| **LCND** | **La Caada** | **1.67** | **137** | *e* P | | **Pg** | **00 38 31.1** | **-0.4** |
| **FUG** | **Fuego 3** | **1.72** | **267** | *e* P | | **Pg** | **00 38 32.7** | **+0.2** |
| FUG | | | | *e* S | | **Sg** | **00 38 56.7** | **+1.9** |

**NNC 03 00:41:03.0±46.0, 36.78N×70.21E, h208km±999km, mb2.5, mpv3.5,1C-5D, Error ellipse: s-maj=762.2km s-min=97.5km az=179.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KK08** | **Karatay Array** | **6.32** | **2** | ⇓P | | Pn | 00 42 36.7 | +2.3 |
| | 0.9nm,0.4s,baz=174,slow=13 | | | | | | | |
| KK08 | | | | ⇓S | | S | 00 43 47.7 | +0.8 |
| | 1.7nm,0.5s,baz=187,slow=24 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **28** | ⇓P | | Pn | 00 42 39.2 | -0.4 |
| | 2.4nm,0.6s | | | | | | | |
| AAK | | | | ⇓S | | S | 00 43 55.3 | -1.0 |
| | 7.5nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.40** | **32** | ⇑P | | Pn | 00 42 46.7 | -1.8 |
| | 3.4nm,0.5s | | | | | | | |
| TKM2 | | | | ⇓S | | S | 00 44 14.4 | +1.9 |
| | 1.0nm,0.5s | | | | | | | |

*IDC **03** 01:11:13.1±7.9, 23.09N×142.25E, h94km±72km, mb3.7/18, mb1 3.9/19, mb1mx3.7/52, mbtmp4.0/19, MS3.5/17, Ms1 3.5/17, ms1mx3.3/86, Error ellipse: s-maj=23.6km s-min=14.0km az=80.0*
*NEIC **03** 01:11:22.1±1.6, 23.1N±0.1×142.5E±0.4, h183km±13km, mb4.1/10, Error ellipse: s-maj=62.2km s-min=3.0km az=73.0*
**ISC 03 01:11:19.1±0.6, 22.96N±0.09×142.3E±0.1, h150km, n54, σ1s16/34, mb3.8/23, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **4.12** | **359** | Pn | | **Pn** | **01 12 23.6** | **+2.6** |
| **JHJ** | **Hachijo jima 2** | **10.36** | **348** | LR | | LR | 01 17 11.4 | |
| | comp=Z,101nm,18.8s,baz=319,slow=35 | | | | | | | |
| **JOW** | **Kunigami** | **13.26** | **290** | LR | | LR | 01 18 35.8 | |
| | comp=Z,257nm,18.7s,baz=332,slow=34 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.98** | **346** | LR | | LR | 01 19 04.6 | |
| | comp=Z,130nm,19.3s,baz=142,slow=34 | | | | | | | |
| **JHS** | **Saijyo** | **14.41** | **328** | P | | **P** | **01 14 41.0** | **+2.3** |
| **KSRS** | **Korea Array** | **18.99** | **323** | P | | **P** | **01 15 27.9** | **-1.2** |
| | baz=130,slow=11,SNR=2.3 | | | | | | | |
| **ASAJ** | **Asahikawa** | **21.11** | **1** | LR | | LR | 01 25 13.0 | |
| | comp=Z,72nm,21.0s,baz=156,slow=40 | | | | | | | |
| **DAV** | **Davao City (W)** | **22.51** | **228** | L

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **61.32** | **27** | P | | **P** | **01 21 16.7** | **-1.8** |
| | comp=Z,1.2nm,1.1s,baz=252,slow=5.3,SNR=5.5 | | | | | | | |
| **KKAR** | **Karatay Array** | **61.60** | **308** | P | | **P** | **01 21 22.1** | **+1.3** |
| **INK** | **Inuvik** | **66.77** | **24** | LR | | LR | 01 51 13.0 | |
| | comp=Z,55nm,19.6s,baz=7.5,slow=36 | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.05** | **316** | P | | **P** | **01 22 02.8** | **+0.4** |
| **DLBC** | **Dease Lake** | **69.57** | **34** | LR | | LR | 01 51 55.6 | |
| | comp=Z,48nm,20.3s,baz=302,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.75** | **28** | P | | **P** | **01 22 47.4** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=293,slow=5.6,SNR=7.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.46** | **341** | P | | **P** | **01 22 57.9** | **+0.4** |
| | comp=Z,3.2nm,1.0s,baz=54,slow=4.6,SNR=3.9 | | | | | | | |
| **NEW** | **Newport** | **79.93** | **42** | LR | | LR | 01 52 35.0 | |
| | comp=Z,76nm,19.3s,baz=22,slow=31 | | | | | | | |
| **KBZ** | **Khabaz** | **80.88** | **314** | P | | **P** | **01 23 16.8** | **+0.3** |
| | comp=Z,4.0nm,0.9s,baz=142,slow=4.4,SNR=6.1 | | | | | | | |
| **FIA1** | **FINESS Array S** | **81.67** | **334** | P | | **P** | **01 23 19.1** | **-1.2** |
| FIA1 | | | | IAmb | | IAmb | 01 23 21.7 | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **FINES** | **FINESS Array B** | **81.68** | **334** | P | | **P** | **01 23 19.6** | **-0.7** |
| | comp=Z,4.3nm,0.8s,baz=73,slow=5.7,SNR=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **81.68** | **334** | P | | **P** | **01 23 19.2** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **83.04** | **51** | P | | **P** | **01 23 28.8** | **+0.6** |
| | comp=Z,1.5nm,0.8s,baz=267,slow=6.6,SNR=9.9 | | | | | | | |
| **ELK** | **Elko** | **84.24** | **48** | P | | **P** | **01 23 35.0** | **+0.7** |
| | comp=Z,0.9nm,0.8s,baz=348,slow=5.9,SNR=3.5 | | | | | | | |
| ELK | | | | LR | | LR | 01 54 24.0 | |
| | comp=Z,48nm,19.7s,baz=9.0,slow=31 | | | | | | | |
| **AKASG** | **Malin Array Be** | **85.98** | **324** | P | | **P** | **01 23 41.8** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=52,slow=5.2,SNR=5.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.11** | **44** | P | | **P** | **01 23 49.1** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=242,slow=3.2,SNR=9.0 | | | | | | | |
| **ANMO** | **Albuquerque** | **93.09** | **50** | LR | | LR | 02 03 09.1 | |
| | comp=Z,59nm,19.6s,baz=14,slow=34 | | | | | | | |

*SKHL **03** 01:48:51.8±0.4, 42.70N×149.40E, h43km±4km, mb4.3/4*
*JMA **03** 01:48:54.2±0.4, 44.92N×147.94E, h177km, M3.5*
**ISC 03 01:48:58.6±3.9, 45°2'N±0.2'×147°2'E±0.1', h150km, n14, σ2s23/19, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.49** | **82** | *e*P | P | Pn | 01 49 33.7 | +14 |
| KUR | | | | AMB | AMB | AMB | 01 49 36.8 | |
| | 40nm,0.5s | | | | | | | |
| KUR | | | | *e*S | S | Sn | 01 50 05.3 | +29 |
| KUR | | | | A | A | A | 01 50 18.5 | |
| | 30nm,0.8s | | | | | | | |
| KUR | | | | A | A | A | 01 50 18.5 | |
| | 30nm,0.8s | | | | | | | |
| **SHO** | **Shikotan** | **1.32** | **191** | *i* P | P | **Pn** | **01 49 25.2** | **-1.1** |
| SHO | | | | AMB | AMB | AMB | 01 49 25.4 | |
| | 50nm,0.3s | | | | | | | |
| SHO | | | | *i* S | S | **Sn** | **01 49 50.2** | **+2.7** |
| SHO | | | | A | A | A | 01 49 52.9 | |
| | 170nm,0.3s | | | | | | | |
| SHO | | | | A | A | A | 01 49 52.9 | |
| | 270nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.47** | **220** | *e*P | P | Pn | 01 49 36.0 | +8.1 |
| YUK | | | | AMB | AMB | AMB | 01 49 36.4 | |
| | 100nm,0.5s | | | | | | | |
| YUK | | | | *e*S | S | Sn | 01 50 08.9 | +19 |
| YUK | | | | A | A | A | 01 50 13.5 | |
| | 150nm,0.3s | | | | | | | |
| YUK | | | | A | A | A | 01 50 13.5 | |
| | 130nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.08** | **210** | P | | **Pn** | **01 49 33.8** | **-0.8** |
| NEM2 | | | | *e*S | | **Sn** | **01 50 04.1** | **+1.9** |
| **NMR** | **Nemuro--Hokkai** | **2.08** | **211** | *i* P | | **Pn** | **01 49 33.9** | **-0.7** |
| NMR | | | | *i* S | | **Sn** | **01 50 04.3** | **+2.1** |
| **JNK** | **Nakash** | **2.37** | **229** | P | | **Pn** | **01 49 39.6** | **+1.5** |
| **JKHN** | **Kushirohamanak** | **2.54** | **216** | P | | **Pn** | **01 49 39.7** | **-0.5** |
| **AKK** | **Akkeshi** | **2.73** | **219** | *i* P | | **Pn** | **01 49 42.0** | **-0.6** |
| AKK | | | | AMB | | AMB | 01 49 42.7 | |
| | 30nm,0.5s | | | | | | | |
| AKK | | | | *e*S | | **Sn** | **01 50 19.3** | **+2.9** |
| AKK | | | | A | | A | 01 50 21.9 | |
| | 30nm,0.2s | | | | | | | |
| AKK | | | | A | | A | 01 50 21.9 | |
| | 70nm,0.2s | | | | | | | |
| **JAK** | **Akkeshi** | **2.81** | **220** | P | | **Pn** | **01 49 43.3** | **-0.3** |
| JAK | | | | *e*S | | **Sn** | **01 50 21.3** | **+3.0** |
| **JAR** | **Ashorobuto** | **3.08** | **234** | P | | **Pn** | **01 49 48.3** | **+1.3** |
| **JCH** | **Churui** | **3.76** | **229** | P | | **Pn** | **01 49 55.3** | **-0.4** |
| JCH | | | | *e*S | | **Sn** | **01 50 41.6** | **+1.7** |
| **JNBK** | **Urakawa-nobuka** | **4.31** | **230** | P | | **Pn** | **01 50 01.5** | **-1.5** |
| **JKB** | **Kayabe** | **5.54** | **236** | P | | **Pn** | **01 50 17.3** | **-1.8** |
| **JANG** | **Nango** | **6.35** | **223** | P | | **Pn** | **01 50 25.7** | **-4.2** |
| JANG | | | | *e*S | | **Sn** | **01 51 37.7** | **-3.7** |

**IDC 03 02:11:08.3±0.8, 53°21N×158°47E, h166km±6km, mb2.9/3, mb1 3.2/3, mb1mx2.8/28, mbtmp3.4/3, Error ellipse: s-maj=26.6km s-min=12.1km az=75.0, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **0.47** | **258** | P | | Pn | 02 11 32.5 | +1.1 |
| | 8.4nm,0.3s,baz=83,slow=15,SNR=301 | | | | | | | |
| PETK | | | | S | | Sn | 02 11 50.0 | +0.9 |
| | 2.3nm,0.3s,baz=47,slow=15,SNR=8.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.22** | **295** | P | | P | 02 19 24.0 | -0.2 |
| | 0.5nm,0.5s,baz=55,slow=6.9,SNR=12 | | | | | | | |
| **PDAR** | **Pinedale Array** | **58.32** | **60** | P | | P | 02 20 45.6 | -0.2 |
| | 0.2nm,0.6s,baz=352,slow=5.5,SNR=2.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.49** | **66** | P | | P | 02 22 10.6 | -0.3 |
| | 0.1nm,0.5s,baz=317,slow=4.9,SNR=1.9 | | | | | | | |

*INMG **03** 02:22:03.5±1.6, 35.67N×3.70W, h3km±4km, ML2.4, Error ellipse: s-maj=3.0km s-min=2.8km az=62.0*
*SFS **03** 02:22:03.0, 35.50N×3.70W, ML2.2, ALBORAN SUR*
*CNRM **03** 02:22:05.6, 35.50N×3.62W, h12km, ml2.8*
**ISC 03 02:22:03.0±0.8, 35°65N±0.04'×3°64W±0.04', h14km, n38, σ1s26/47, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.49** | **209** | P | | **Pg** | **02 22 13.0** | **+0.2** |
| **PALE** | **Palemas** | **0.49** | **209** | P | | **Pg** | **02 22 13.0** | **+0.2** |
| **PALE** | **Palemas** | **0.49** | **209** | P | | **Pg** | **02 22 13.0** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.68** | **128** | P | | **Pg** | **02 22 16.8** | **+0.6** |
| **GOG** | **Mont Gurugu** | **0.68** | **128** | P | | **Pg** | **02 22 16.8** | **+0.6** |
| **GOG** | **Mont Gurugu** | **0.68** | **128** | P | | **Pg** | **02 22 16.8** | **+0.6** |
| **CHAS** | **Isla Isabel II** | **1.09** | **115** | P | | **Pb** | **02 22 23.2** | **-0.4** |
| CHAS | | | | S | | **Sb** | **02 22 38.0** | **+0.2** |
| **AKLM** | **AKL** | **1.15** | **189** | P | | **Pb** | **02 22 24.0** | **-0.7** |
| **AKLM** | **AKL** | **1.15** | **189** | P | | **Pb** | **02 22 24.0** | **-0.7** |
| **AKLM** | **AKL** | **1.15** | **189** | P | | **Pb** | **02 22 24.0** | **-0.7** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **331** | P | | **Pn** | **02 22 26.1** | **-0.4** |
| EMAL | | | | S | | **Sb** | **02 22 42.3** | **-0.9** |
| **CEU** | **Ceuta** | **1.43** | **281** | P | | Pn | 02 22 25.1 | -3.4 |
| CEU | | | | S | | Sn | 02 22 40.1 | -6.9 |
| **CHEFC** | **Chefchaouen** | **1.49** | **249** | P | | **Pn** | **02 22 31.0** | **+1.7** |
| **CHEFC** | **Chefchaouen** | **1.49** | **249** | P | | **Pn** | **02 22 31.0** | **+1.7** |
| **CHEFC** | **Chefchaouen** | **1.49** | **249** | P | | **Pn** | **02 22 31.2** | **+1.8** |
| **JBK** | **JBK** | **1.58** | **146** | P | | **Pn** | **02 22 31.0** | **+0.2** |
| **JBK** | **JBK** | **1.58** | **146** | P | | **Pn** | **02 22 31.0** | **+0.2** |
| **JBK** | **JBK** | **1.58** | **146** | P | | **Pn** | **02 22 31.0** | **+0.2** |
| **LCRM** | **LCR** | **2.20** | **207** | P | | **Pb** | **02 22 43.0** | **+0.4** |
| **LCRM** | **LCR** | **2.20** | **207** | P | | **Pb** | **02 22 43.0** | **+0.4** |
| **LCRM** | **LCR** | **2.20** | **207** | P | | **Pb** | **02 22 43.0** | **+0.4** |
| **MDT** | **Midelt** | **2.94** | **196** | P | | **Pn** | **02 22 49.5** | **+0.2** |
| **MDT** | **Midelt** | **2.94** | **196** | P | | **Pn** | **02 22 49.4** | **0.0** |
| **PVAQ** | **Vaqueiros** | **3.72** | **299** | *e*Pn | | **Pn** | **02 23 00.3** | **+0.3** |
| PVAQ | | | | *e*Sn | | **Sn** | **02 23 41.4** | **-2.2** |
| PVAQ | | | | A | | A | 02 23 43.9 | |
| | 5.5nm,0.4s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **296** | *e*Pn | | **Pn** | **02 23 01.7** | **+0.5** |
| PBDV | | | | *e*Sn | | **Sn** | **02 23 44.2** | **-1.6** |
| PBDV | | | | A | | A | 02 24 02.4 | |
| | 5.3nm,0.6s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.05** | **301** | *e*Pn | | **Pn** | **02 23 05.5** | **+0.9** |
| PCVE | | | | *e*Sn | | **Sn** | **02 23 50.9** | **-0.9** |
| PCVE | | | | A | | A | 02 23 54.8 | |
| | 6.1nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **302** | *e*Pn | | **Pn** | **02 23 08.6** | **+0.9** |
| MESJ | | | | *e*Sn | | **Sn** | **02 23 55.7** | **-1.7** |
| MESJ | | | | A | | A | 02 23 58.5 | |
| | 4.0nm,0.5s | | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **317** | *e*Sn | | **Sn** | **02 24 01.6** | **-1.3** |
| **PNCL** | **Nicolau / Gran** | **4.62** | **304** | *e*Pn | | **Pn** | **02 23 12.8** | **+0.4** |
| PNCL | | | | *e*Sn | | **Sn** | **02 24 04.0** | **-1.9** |
| PNCL | | | | A | | A | 02 24 06.6 | |
| | 3.5nm,0.7s | | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **323** | *e*Pn | | **Pn** | **02 23 16.4** | **+1.4** |
| PMRV | | | | *e*Sn | | **Sn** | **02 24 09.9** | **-0.6** |
| PMRV | | | | A | | A | 02 24 30.3 | |
| | 4.0nm,0.6s | | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **314** | *e*Pn | | **Pn** | **02 23 19.0** | **+1.4** |
| PMTG | | | | *e*Sn | | **Sn** | **02 24 13.5** | **-1.7** |
| PMTG | | | | A | | A | 02 24 18.7 | |
| | 3.3nm,1.1s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.17** | **325** | *e*Pn | | **Pn** | **02 23 21.6** | **+1.6** |
| **MTE** | **Manteigas** | **5.66** | **328** | *e*Pn | | **Pn** | **02 23 28.4** | **+1.7** |
| MTE | | | | *e*Sn | | **Sn** | **02 24 29.7** | **-1.8** |
| MTE | | | | A | | A | 02 24 35.9 | |
| | 4.0nm,0.5s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.66** | **220** | S | | **Sn** | **02 24 32.3** | **+0.3** |
| **PVIS** | **Viseu** | **6.07** | **328** | *e*Pn | | **Pn** | **02 23 34.5** | **+2.2** |
| **MVO** | **Moncorvo** | **6.12** | **335** | *e*Pn | | **Pn** | **02 23 35.5** | **+2.5** |
| **PVRL** | **Vila Real** | **6.46** | **332** | *e*Sn | | **Sn** | **02 24 50.2** | **-1.1** |
| PVRL | | | | A | | A | 02 24 52.9 | |
| | 4.2nm,0.5s | | | | | | | |
| **PBRG** | **Braganca** | **6.61** | **339** | *e*Pn | | **Pn** | **02 23 42.8** | **+3.1** |

**WEL 03 02:39:00.1±1.1, 32°S±11°×17°9E±2°1, h11km±12km, M4.5/18, mB5.0/12, ML5.0/20, MLv4.7/18, Mw(mB)4.3/12, Error ellipse: s-maj=0.0km s-min=0.0km az=117.3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **3.88** | **43** | P | | Pn | 02 39 58.7 | -0.9 |
| GLKZ | | | | S | | Sn | 02 40 46.6 | +1.4 |
| **MXZ** | **Matakaoa Point** | **5.44** | **186** | P | | Pn | 02 40 23.6 | +2.5 |
| MXZ | | | | S | | Sn | 02 41 26.8 | +3.1 |
| **WMGZ** | **Waiomatatini S** | **5.69** | **185** | P | | Pn | 02 40 23.6 | -0.9 |
| WMGZ | | | | S | | Sn | 02 41 30.8 | +1.1 |
| **HAZ** | **Te Kaha** | **5.70** | **190** | P | | Pn | 02 40 26.6 | +2.0 |
| **PKGZ** | **Pakihiroa** | **5.79** | **188** | P | | Pn | 02 40 26.2 | +0.2 |
| PKGZ | | | | S | | Sn | 02 41 33.6 | +1.3 |
| **RUGZ** | **Raukumara Rang** | **5.92** | **191** | P | | Pn | 02 40 27.4 | -0.3 |
| RUGZ | | | | S | | Sn | 02 41 36.2 | +0.6 |
| **PUZ** | **Puketiti** | **5.95** | **186** | P | | Pn | 02 40 29.1 | +1.0 |
| PUZ | | | | S | | Sn | 02 41 38.0 | +1.7 |
| **TWGZ** | **Tauwhareparae** | **6.08** | **188** | P | | Pn | 02 40 31.2 | +1.3 |
| TWGZ | | | | S | | Sn | 02 41 42.1 | +2.5 |
| **MWZ** | **Matawai** | **6.30** | **191** | P | | Pn | 02 40 33.3 | +0.4 |
| MWZ | | | | S | | Sn | 02 41 46.1 | +1.1 |
| **URZ** | **Urewera** | **6.31** | **194** | P | | Pn | 02 40 33.3 | +0.4 |
| URZ | | | | S | | Sn | 02 41 45.0 | 0.0 |
| **TKGZ** | **Te Karaka** | **6.36** | **189** | P | | Pn | 02 40 31.9 | -1.8 |
| TKGZ | | | | S | | Sn | 02 41 45.5 | -0.8 |
| **CNGZ** | **Carnagh Statio** | **6.36** | **186** | P | | Pn | 02 40 35.2 | +1.4 |
| **RAGZ** | **Rawiri** | **6.48** | **191** | P | | Pn | 02 40 35.3 | -0.1 |
| RAGZ | | | | S | | Sn | 02 41 50.4 | +1.1 |
| **MUGZ** | **Murupara** | **6.59** | **196** | P | | Pn | 02 40 37.3 | +0.4 |
| MUGZ | | | | S | | Sn | 02 41 54.5 | +2.5 |
| **HRRZ** | **Handcock Road** | **6.63** | **199** | P | | Pn | 02 40 39.7 | +2.2 |
| **RIGZ** | **Rimuhau** | **6.63** | **189** | P | | Pn | 02 40 36.9 | -0.6 |
| RIGZ | | | | S | | Sn | 02 41 51.4 | -1.7 |
| **RTZ** | **Ruatahuna** | **6.68** | **194** | P | | Pn | 02 40 36.9 | -1.3 |
| RTZ | | | | S | | Sn | 02 41 53.0 | -1.2 |
| **SNGZ** | **Shannon Statio** | **6.77** | **191** | P | | Pn | 02 40 38.9 | -0.5 |
| SNGZ | | | | S | | Sn | 02 41 56.1 | -0.4 |
| **TLZ** | **Tolley Road** | **6.81** | **204** | P | | Pn | 02 40 43.3 | +3.4 |
| **MTHZ** | **Maungataniwha** | **6.93** | **194** | P | | Pn | 02 40 41.7 | 0.0 |
| MTHZ | | | | S | | Sn | 02 42 03.3 | +2.8 |
| **MRHZ** | **Matea Rd** | **7.01** | **197** | P | | Pn | 02 40 41.7 | -1.0 |
| **MHGZ** | **Mahia Peninsul** | **7.06** | **187** | P | | Pn | 02 40 42.0 | -1.3 |
| **NMHZ** | **Naumai** | **7.18** | **194** | P | | Pn | 02 40 43.1 | -1.9 |
| NMHZ | | | | S | | Sn | 02 42 07.1 | +0.6 |
| **HIZ** | **Hauiti** | **7.22** | **207** | P | | Pn | 02 40 49.2 | +3.7 |
| **RATZ** | **Rangitukua** | **7.22** | **201** | P | | Pn | 02 40 45.5 | -0.1 |
| **ARHZ** | **Aropaoanui** | **7.30** | **193** | P | | Pn | 02 40 43.3 | -3.3 |
| **BKZ** | **Black Stump Fm** | **7.31** | **196** | P | | Pn | 02 40 43.6 | -3.2 |
| **NTVZ** | **North Tongarir** | **7.46** | **201** | P | | Pn | 02 40 48.0 | -1.0 |
| **TMVZ** | **Te Maari** | **7.47** | **200** | P | | Pn | 02 40 47.9 | -1.2 |
| **ETVZ** | **East Tongariro** | **7.49** | **200** | P | | Pn | 02 40 48.0 | -1.4 |
| **NNVZ** | **North Ngauruho** | **7.51** | **201** | P | | Pn | 02 40 48.4 | -1.3 |
| **SNVZ** | **South Ngauruho** | **7.56** | **201** | P | | Pn | 02 40 48.9 | -1.4 |
| **NGZ** | **Ngauruhoe** | **7.56** | **201** | P | | Pn | 02 40 48.9 | -1.4 |
| **FWVZ** | **Far West T-bar** | **7.64** | **201** | P | | Pn | 02 40 49.7 | -1.8 |
| **TRVZ** | **Turoa** | **7.69** | **201** | P | | Pn | 02 40 50.1 | -2.1 |
| **WNVZ** | **Wahianoa** | **7.70** | **200** | P | | Pn | 02 40 49.9 | -2.3 |
| **BHHZ** | **Black Hill Sta** | **7.72** | **197** | P | | Pn | 02 40 49.0 | -3.5 |
| **MOVZ** | **Moawhango** | **7.73** | **199** | P | | Pn | 02 40 49.5 | -3.0 |
| **PKVZ** | **Pokaka** | **7.74** | **202** | P | | Pn | 02 40 50.9 | -1.8 |
| **VRZ** | **Vera Road** | **7.79** | **205** | P | | Pn | 02 40 53.5 | +0.1 |
| **KAHZ** | **Kahuranaki** | **7.84** | **192** | P | | Pn | 02 40 50.4 | -3.6 |
| **PXZ** | **Pawanui** | **8.07** | **192** | P | | Pn | 02 40 52.1 | -5.0 |
| **PNHZ** | **Pukenui** | **8.09** | **196** | P | | Pn | 02 40 52.8 | -4.7 |
| **WPHZ** | **Waipukurau** | **8.18** | **194** | P | | Pn | 02 40 54.4 | -4.4 |
| **TSZ** | **Takapari Road** | **8.29** | **197** | P | | Pn | 02 40 55.0 | -5.2 |
| **PRHZ** | **Porangahau** | **8.34** | **193** | P | | Pn | 02 40 56.3 | -4.6 |
| **DVHZ** | **Dannevirke** | **8.47** | **195** | P | | Pn | 02 40 57.1 | -5.5 |
| **ANWZ** | **Angora Road** | **8.56** | **193** | P | | Pn | 02 40 58.7 | -5.1 |
| **PRWZ** | **Pori Road** | **8.75** | **196** | P | | Pn | 02 41 00.7 | -5.8 |
| **BFZ** | **Birch Farm** | **8.82** | **194** | P | | Pn | 02 41 00.4 | -7.1 |
| **TIWZ** | **Tintock** | **8.98** | **196** | P | | Pn | 02 41 03.2 | -6.5 |
| **OGWZ** | **Otaki Gorge** | **9.20** | **199** | P | | Pn | 02 41 05.6 | -7.1 |

*DJA **03** 02:48:18.5±0.6, 4°N±4'×12°8E±°, h43km±27km, M4.4/12, mb4.5/12, mB5.0/6, MLv4.4/12, Mw(mB)4.3/6*
*NEIC **03** 02:48:19.5±1.2, 3.69N±0.05×128.2E±0.1', h63km±13km, mb4.0/9, Error ellipse: s-maj=18.2km s-min=6.4km az=79.0*
*IDC **03** 02:48:20.5±4.7, 3.79N×128.68E, h84km±53km, mb3.4/5, mb1 3.6/6, mb1mx3.3/35, mbtmp3.8/6, ML4.1/1, Error ellipse: s-maj=135.4km s-min=19.4km az=70.0*
**ISC 03 02:48:21.1±0.9, 3°49N±0.09×128°00E±0.08, h84km, n38, σ1s54/37, mb4.0/8, 1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **2.47** | **275** | P | P | **Pn** | **02 48 57.8** | **-1.6** |
| SGSI | | | | S | S | **Sn** | **02 49 25.0** | **-3.8** |
| **TNTI** | **Ternate** | **2.77** | **193** | P | P | **Pn** | **02 49 04.8** | **+1.3** |
| **TNTI** | **Ternate** | **2.77** | **193** | Pn | Pn | **Pn** | **02 49 04.9** | **+1.3** |
| **LBMI** | **Labuha** | **4.13** | **187** | P | P | **Pn** | **02 49 24.3** | **+2.4** |
| **KCP** | **Kidapawan** | **4.54** | **320** | *e*P | P | **Pn** | **02 49 25.8** | **-1.7** |
| **KMSI** | **Cibinong** | **4.95** | **234** | P | P | **Pn** | **02 49 33.6** | **+0.5** |
| | 0.9nm106nm,0.6s | | | | | | | |
| **SWI** | **Sorong** | **5.42** | **143** | P | P | **Pn** | **02 49 38.0** | **-1.4** |
| | 1.0nm2µm21nm,0.5s | | | | | | | |
| **SIJI** | **Sorong** | **5.42** | **143** | P | P | **Pn** | **02 49 38.8** | **-0.8** |
| | 6.3nm,0.3s,baz=330,slow=20,SNR=5.5 | | | | | | | |
| SIJI | | | | S | S | **Sn** | **02 50 36.2** | **-4.5** |
| | 3.0nm,0.3s,baz=187,slow=23,SNR=2.4 | | | | | | | |
| **GTOI** | **Gorontalo** | **5.73** | **240** | P | P | **Pn** | **02 49 45.0** | **+1.2** |
| | 0.1nm266nm29nm,0.6s | | | | | | | |
| **SANI** | **Sanana** | **5.86** | **200** | P | P | **Pn** | **02 49 45.0** | **-0.5** |
| | 0.1nm887nm16nm,0.4s | | | | | | | |
| **MRSI** | **Marisa** | **6.75** | **244** | P | P | **Pn** | **02 49 59.4** | **+1.7** |
| | 2.3nm6µm627nm,0.6s | | | | | | | |
| **TOLI2** | **Tolitoli** | **7.59** | **252** | Pn | Pn | **Pn** | **02 50 08.5** | **-0.6** |
| **FAKI** | **Fak Fak** | **7.66** | **146** | Pn | Pn | **Pn** | **02 50 09.2** | **-0.8** |
| **APSI** | **Ampana** | **7.71** | **236** | P | P | **Pn** | **02 50 10.4** | **-0.3** |
| | 0.2nm43nm,1.6s | | | | | | | |
| **MPSI** | **Mapaga** | **8.68** | **249** | P | P | **Pn** | **02 50 24.7** | **+0.7** |
| | 604nm30nm,0.9s | | | | | | | |
| **TTSI** | **Tana Toraja** | **10.44** | **232** | P | P | **Pn** | **02 50 47.8** | **-0.2** |
| | 28nm,0.5s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.07** | **228** | P | P | **Pn** | **02 50 57.8** | **+1.3** |
| | 16nm,1.5s | | | | | | | |
| **BNSI** | **Bone** | **11.12** | **225** | P | P | **Pn** | **02 50 57.4** | **+0.2** |
| | 12nm,0.8s | | | | | | | |
| **BKSI** | **Bulukumba** | **11.77** | **222** | P | P | **Pn** | **02 51 07.2** | **+1.1** |
| | 14nm,0.9s | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **12.16** | **218** | P | P | **Pn** | **02 51 12.1** | **+0.8** |
| **SBUM** | **Sibu** | **15.79** | **267** | P | P | **P** | **02 52 03.4** | **+2.4** |
| SBUM | | | | IAmb | IAmb | IAmb | 02 52 04.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.95** | **165** | P | P | **P** | **02 53 27.8** | **0.0** |
| WB0 | | | | IAmb | IAmb | IAmb | 02 53 37.1 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.11** | **165** | P | P | **P** | **02 53 29.7** | **+0.6** |
| | comp=Z,3.5nm,0.6s,baz=349,slow=11,SNR=23 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.11** | **165** | P | P | **P** | **02 53 29.0** | **-0.2** |
| **WB2** | **Warramunga Arr** | **24.11** | **165** | P | P | **P** | **02 53 29.5** | **+0.3** |
| WB2 | | | | IAmb | IAmb | IAmb | 02 53 30.9 | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **24.17** | **165** | P | P | **P** | **02 53 30.5** | **+0.8** |
| WR0 | | | | IAmb | IAmb | IAmb | 02 53 55.1 | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **27.60** | **168** | P | P | **P** | **02 54 00.9** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=357,slow=7.8,SNR=4.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.48** | **161** | P | P | **P** | **02 55 27.1** | **+0.5** |
| | comp=Z,1.0nm,0.3s,baz=356,slow=8.3,SNR=5.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.48** | **161** | P | P | **P** | **02 55 27.0** | **+0.3** |
| STKA | | | | IAmb | IAmb | IAmb | 02 55 49.8 | |
| | comp=Z,1.6nm,1.1s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.67** | **66** | T | T | T | 03 38 58.1 | |
| | baz=252,slow=75,SNR=29 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.69** | **66** | T | T | T | 03 38 58.9 | |
| | baz=252,slow=75,SNR=11 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.69** | **66** | T | T | T | 03 38 58.7 | |
| | baz=252,slow=75,SNR=17 | | | | | | | |
| **SONM** | **Songino Array** | **47.94** | **340** | P | P | **P** | **02 56 50.5** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=157,slow=7.8,SNR=2.1 | | | | | | | |
| **SONM** | **Songino Array** | **47.94** | **340** | P | P | **P** | **02 56 50.1** | **-1.1** |
| **MK31** | **Makanchi Array** | **58.48** | **325** | P | P | **P** | **02 58 08.5** | **-0.1** |
| **MKAR** | **Makanchi Array** | **58.48** | **325** | P | P | **P** | **02 58 08.6** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=113,slow=7.5,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.48** | **325** | P | P | **P** | **02 58 08.1** | **-0.4** |
| **KURK** | **Kurchatov** | **62.62** | **327** | P | P | **P** | **02 58 39.6** | **+3.0** |

*INET **03** 03:00:07.0±2.1, 18°.49N×83°.49W, h10km, ML4.7*
*NEIC **03** 03:00:26.1±1.9, 17°.12N±0°.07×84°.67W±0°.08, h10km±1km, mb4.5/36, Error ellipse: s-maj=12.4km s-min=11.9km az=90.0*
*IDC **03** 03:00:29.6±1.0, 17°.64N×85°.29W, h0km, mb3.9/9, mb1 4.1/12, mb1mx3.8/42, mbtmp3.9/12, ML3.7/3, MS3.5/16, Ms1 3.5/16, ms1mx3.2/73, Error ellipse: s-maj=29.4km s-min=20.9km az=10.0*
*SSNC **03** 03:00:35.9±1.6, 17°.84N×84°.32W, h5km, MD4.3, ML4.3*
**ISC 03 03:00:27.0±0.5, 17°25N±0°.04×84°74W±0°.05, h10km, n110, σ2s20/91, mb4.4/23, MS3.5/10, North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TGUH** | **Tegucigalpa,Un** | **4.00** | **218** | *e*P | | **Pn** | **03 01 26.6** | **-2.0** |
| **TGUH** | **Tegucigalpa,Un** | **4.00** | **218** | Pn | | **Pn** | **03 01 26.3** | **-2.3** |
| TGUH | | | | Sn | | **Sn** | **03 02 11.6** | **-4.1** |
| **MATN** | **Matagalpa** | **4.44** | **195** | | | Pn | 03 01 31.1 | -3.5 |
| **MATN** | **Matagalpa** | **4.44** | **195** | *e*P | | **Pn** | **03 01 32.7** | **-1.9** |
| **BOAB** | **BOACO BROADBAN** | **4.85** | **191** | Pn | | **Pn** | **03 01 37.2** | **-2.9** |
| **PETF** | **Flores** | **4.91** | **267** | | | **Pn** | **03 01 39.5** | **-1.5** |
| **ESPN** | **Las Esperanzas** | **5.04** | **175** | | | **Pn** | **03 01 39.8** | **-2.9** |
| **ESPN** | **Las Esperanzas** | **5.04** | **175** | *e*P | | **Pn** | **03 01 39.8** | **-2.9** |
| **CRIN** | **San Cristobal** | **5.04** | **207** | | | **Pn** | **03 01 41.0** | **-1.8** |
| **PRVC** | **Isla de Provid** | **5.04** | **139** | *e*P | | **Pn** | **03 01 40.7** | **-2.1** |
| **PRVC** | **Isla de Provid** | **5.04** | **139** | | | Pn | 03 01 38.5 | -4.2 |
| **CNGN** | **Cerro Negro** | **5.09** | **202** | *e*P | | **Pn** | **03 01 44.4** | **+1.0** |
| CNGN | | | | *e*S | | **Sb** | **03 03 00.7** | **+3.2** |
| **ESQI** | **Esquipulas** | **5.17** | **240** | Pn | | **Pn** | **03 01 43.5** | **-1.2** |
| **ACON** | **Acoyapa** | **5.27** | **185** | Pn | | Pn | 03 01 42.7 | -3.1 |
| **ACON** | **Acoyapa** | **5.27** | **185** | *e*P | | **Pn** | **03 01 43.4** | **-2.5** |
| ACON | | | | *e*S | | **Sb** | **03 02 58.1** | **-4.5** |
| ACON | | | | IAML | | | 03 03 26.8 | |
| | comp=E,146nm,0.6s | | | | | | | |
| **MTO3** | **Montecristo** | **5.27** | **238** | | | **Pn** | **03 01 43.0** | **-3.2** |
| **SOR** | **Soroa** | **5.75** | **16** | Pn | | **Pn** | **03 01 51.4** | **-1.1** |
| **SOR** | **Soroa** | **5.75** | **16** | *e*P | | **Pn** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WMOK** | **Wichita Mounta** | **21.47** | **327** | P | | **P** | **03 05 16.5** | **+0.8** |
| **CCM** | **Cathedral Cave** | **21.50** | **346** | P | | **P** | **03 05 16.7** | **+0.7** |
| CCM | | | | IAmb | | IAmb | 03 05 28.4 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **Q51A** | **Peebles** | **21.73** | **3** | P | | **P** | **03 05 19.1** | **+0.6** |
| Q51A | | | | IAmb | | IAmb | 03 05 34.9 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **AMTX** | **Amarillo** | **23.18** | **323** | P | | **P** | **03 05 33.7** | **-0.4** |
| AMTX | | | | IAmb | | IAmb | 03 05 43.9 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **MSTX** | **Muleshoe** | **23.21** | **319** | P | | **P** | **03 05 33.1** | **-1.3** |
| MSTX | | | | IAmb | | IAmb | 03 05 44.5 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **23.60** | **311** | P | | **P** | **03 05 38.2** | **0.0** |
| **M55A** | **Ridgway** | **24.68** | **11** | P | | **P** | **03 05 48.1** | **0.0** |
| M55A | | | | IAmb | | IAmb | 03 05 57.2 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **ATAH** | **Atahualpa** | **25.03** | **165** | LR | | LR | 03 14 16.3 | |
| | comp=Z,45nm,19.3s,baz=346,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | **26.19** | **316** | LR | | LR | 03 19 25.1 | |
| | comp=Z,95nm,18.1s,baz=80,slow=44 | | | | | | | |
| **ANMO** | **Albuquerque** | **26.19** | **316** | P | | **P** | **03 06 01.0** | **-1.2** |
| **SADO** | **Sadowa** | **27.84** | **9** | LR | | LR | 03 17 17.0 | |
| | comp=Z,101nm,19.6s,baz=186,slow=37 | | | | | | | |
| **PTGA** | **Pitinga** | **30.25** | **124** | LR | | LR | 03 20 12.8 | |
| | comp=Z,100nm,18.9s,baz=324,slow=38 | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.06** | **325** | P | | **P** | **03 07 02.1** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=113,slow=7.0,SNR=3.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.06** | **325** | P | | **P** | **03 07 03.0** | **-0.1** |
| **MDP** | **Montagnes des** | **33.66** | **107** | LR | | LR | 03 22 02.3 | |
| | comp=Z,33nm,18.8s,baz=222,slow=38 | | | | | | | |
| **REDW** | **Red Top Meadow** | **34.16** | **325** | P | | **P** | **03 07 13.5** | **+0.8** |
| **MOOW** | **Moose Ponds** | **34.36** | **326** | P | | **P** | **03 07 14.3** | **-0.1** |
| MOOW | | | | IAmb | | IAmb | 03 07 29.1 | |
| | comp=Z,8.5nm,1.3s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **36.08** | **327** | P | | **P** | **03 07 29.2** | **+0.1** |
| BOZ | | | | IAmb | | IAmb | 03 07 39.9 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **36.12** | **313** | P | | **P** | **03 07 28.8** | **-0.8** |
| | comp=Z,0.1nm,0.4s,baz=122,slow=8.6,SNR=2.0 | | | | | | | |
| NVAR | | | | LR | | LR | 03 25 53.4 | |
| | comp=Z,95nm,18.4s,baz=10,slow=43 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **36.12** | **313** | P | | **P** | **03 07 29.6** | **0.0** |
| **MCMT** | **McKenzie Canyo** | **36.21** | **325** | P | | **P** | **03 07 30.6** | **+0.3** |
| **F10A** | **Beach Ranch, E** | **39.34** | **324** | P | | **P** | **03 07 55.5** | **-1.2** |
| **SCHQ** | **Schefferville** | **39.96** | **16** | LR | | LR | 03 24 13.2 | |
| | comp=Z,128nm,19.1s,baz=103,slow=36 | | | | | | | |
| **FCC** | **Fort Churchill** | **42.02** | **353** | P | | **P** | **03 08 17.3** | **-1.1** |
| **FRB** | **Frobisher Bay** | **47.77** | **10** | LR | | LR | 03 29 47.6 | |
| | comp=Z,193nm,18.6s,baz=182,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.78** | **342** | P | | **P** | **03 09 18.9** | **-0.7** |
| | comp=Z,1.7nm,0.9s,baz=136,slow=8.0,SNR=8.3 | | | | | | | |
| YKA | | | | PcP | | **PcP** | **03 10 41.2** | **+0.9** |
| | comp=Z,0.3nm,0.8s,baz=134,slow=3.5,SNR=2.3 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **54.41** | **16** | LR | | LR | 03 32 56.9 | |
| | comp=Z,146nm,18.9s,baz=109,slow=36 | | | | | | | |
| **INK** | **Inuvik** | **59.49** | **341** | P | | **P** | **03 10 31.1** | **+1.1** |
| | comp=Z,1.5nm,1.0s,baz=82,slow=2.8 | | | | | | | |
| **A36M** | **Sachs Harbour** | **59.59** | **346** | P | | **P** | **03 10 31.1** | **+0.5** |
| A36M | | | | IAmb | | IAmb | 03 10 39.1 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **SUMG** | **Summit** | **61.32** | **14** | *i* P | | P | 03 10 48.9 | +6.0 |
| SUMG | | | | IAmb | | IAmb | 03 10 52.9 | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **J25K** | **Salcha River,** | **62.10** | **335** | P | | **P** | **03 10 48.2** | **+0.3** |
| **HDA** | **Harding Lake** | **62.68** | **334** | P | | **P** | **03 10 51.7** | **0.0** |
| **IL31** | | **62.77** | **335** | P | | **P** | **03 10 51.3** | **-0.9** |
| **ILAR** | **Eielson Array** | **62.77** | **335** | P | | **P** | **03 10 52.2** | **-0.1** |
| | comp=Z,1.7nm,0.7s,baz=114,slow=4.8,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **62.77** | **335** | P | | **P** | **03 10 52.6** | **+0.3** |
| **RND** | **Reindeer** | **63.20** | **333** | P | | **P** | **03 10 55.3** | **+0.1** |
| **TRF** | **Thorofare Moun** | **63.83** | **333** | P | | **P** | **03 11 00.0** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **63.88** | **335** | P | | **P** | **03 11 00.4** | **+0.8** |
| **RSD** | **Rainshed** | **66.55** | **284** | P | | **P** | **03 11 16.7** | **-1.3** |
| **ESDC** | **Sonseca Array** | **72.21** | **53** | P | | P | 03 11 58.0 | +5.4 |
| | comp=Z,1.1nm,0.9s,baz=272,slow=5.2,SNR=5.8 | | | | | | | |
| **TIC** | **Toumodi** | **78.27** | **87** | *eP* | | P | 03 12 35.2 | +7.3 |
| **LIC** | **Lamto** | **78.38** | **87** | *eP* | | P | 03 12 35.8 | +7.3 |
| | comp=Z,28nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **78.42** | **87** | P | | P | 03 12 36.4 | +7.7 |
| | comp=Z,1.8nm,0.5s,baz=303,slow=5.3,SNR=6.7 | | | | | | | |
| **KIC** | **Kosan Boka** | **78.62** | **87** | *eP* | | P | 03 12 37.2 | +7.4 |
| | comp=Z,9.5nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.82** | **20** | P | | **P** | **03 12 43.9** | **+3.2** |
| | comp=Z,3.2nm,0.9s,baz=284,slow=3.6,SNR=2.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.85** | **71** | P | | P | 03 12 58.8 | +6.3 |
| | comp=Z,1.3nm,0.7s,baz=300,slow=4.8,SNR=8.4 | | | | | | | |
| **PZH** | **PanZhiHua** | **136.06** | **352** | PKP | | **PKPdf** | **03 19 47.8** | **-1.6** |
| **WRA** | **Warramunga Arr** | **142.92** | **260** | PKP | | **PKPdf** | **03 20 03.7** | **+1.9** |
| | comp=Z,0.9nm,1.0s,baz=84,slow=2.7,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **143.32** | **253** | PKhKP | | PKPpre | 03 19 57.8 | |
| | comp=Z,1.1nm,0.6s,baz=101,slow=3.4,SNR=9.1 | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | **03 20 04.8** | **+2.4** |
| | comp=Z,1.1nm,0.6s,baz=103,slow=3.6,SNR=6.9 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **151.06** | **264** | PKPbc | | **PKiKP** | **03 20 23.8** | **+2.0** |
| | comp=Z,1.7nm,0.7s,baz=144,slow=3.2,SNR=3.6 | | | | | | | |

*UCR **03** 03:03:11.8±1.6,9.°52N×84.°82W,h19km±4km,MW3.7*
*UPA **03** 03:03:14.7±1.2,9.°83N×84.°72W,h10km±9km,MW4.3*
**ISC 03 03:03:12.3**±1.0,**9.°63N**±0.°03×**84.°78W**±0.°03,**h17**km±8km,
**n36,**σ1°9**16**/47,**1C-3D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JACO** | **JACO, Garabito** | **0.12** | **72** | *eP* | **Pg** | **03 03 16.3** | **+0.3** |
| JACO | | | | *eS* | **Sb** | **03 03 20.3** | **+1.5** |
| **LAFE** | **Finca La Fe, P** | **0.22** | **324** | *eP* | **Pb** | **03 03 18.2** | **+0.2** |
| LAFE | | | | *eS* | **Sb** | **03 03 23.5** | **+1.8** |
| **CAO2** | **Cobano, Puntar** | **0.33** | **281** | *eP* | **Pg** | **03 03 18.4** | **-0.9** |
| **SRA1** | **San Ramn** | **0.54** | **33** | *eP* | **Pb** | **03 03 23.6** | **0.0** |
| SRA1 | | | | *eS* | **Sn** | **03 03 33.1** | **-1.2** |
| **JTS** | **Las Juntas de** | **0.68** | **345** | *eP* | **Pg** | **03 03 25.5** | **-0.3** |
| **JTS** | **Las Juntas de** | **0.68** | **345** | *eP* | **Pg** | **03 03 25.5** | **-0.3** |
| **JTS** | **Las Juntas de** | **0.68** | **345** | *eP* | **Pg** | **03 03 25.5** | **-0.3** |
| JTS | | | | *eS* | **Sg** | **03 03 33.4** | **-1.5** |
| **HDC** | **Heredia** | **0.75** | **60** | *eP* | **Pg** | **03 03 27.2** | **+0.1** |
| HDC | | | | *eS* | **Sb** | **03 03 38.7** | **+1.5** |
| **HDC** | **Heredia** | **0.75** | **60** | *eP* | **Pg** | **03 03 27.0** | **-0.1** |
| HDC | | | | *eS* | **Sb** | **03 03 37.2** | **0.0** |
| **INDI** | **Punta indio, G** | **0.75** | **289** | *eP* | **Pg** | **03 03 26.0** | **-1.0** |
| **LCR2** | **La Lucha 2** | **0.77** | **81** | *eP* | **Pg** | **03 03 26.4** | **-1.3** |
| **CASO** | **Castillo** | **0.80** | **3** | *i* P | **Pb** | **03 03 28.2** | **+0.2** |
| **FORC** | **Fortuna** | **0.84** | **7** | *i* P | **Pb** | **03 03 29.0** | **+0.4** |
| **CEDE** | **Laguna Cedeo** | **0.86** | **5** | *i* P | **Pb** | **03 03 29.4** | **+0.6** |
| **RIMA** | **Rio Macho** | **0.91** | **81** | *eP* | **Pg** | **03 03 29.1** | **-1.0** |
| **GUAI** | **GUAI** | **0.97** | **312** | *i* P | **Pb** | **03 03 30.1** | **-0.6** |
| GUAI | | | | *i* S | **Sg** | **03 03 44.4** | **+0.6** |
| **EDDO** | **Dominical** | **0.97** | **112** | *eP* | **Pb** | **03 03 28.8** | **-2.0** |
| **SAJU** | **San Juanillo,** | **1.02** | **296** | *eP* | **Pb** | **03 03 31.2** | **-0.3** |
| **ACAL** | **Aguas Claras** | **1.03** | **346** | *eP* | **Pb** | **03 03 31.8** | **-0.1** |
| **CUI** | **Cuipilapa** | **1.09** | **340** | *i* P | **Pb** | **03 03 32.5** | **-0.3** |
| **PEZE** | **Perez Zeledon,** | **1.11** | **102** | *eP* | **Pb** | **03 03 31.6** | **-1.5** |
| **COVE** | **Coope Vega, Sa** | **1.15** | **19** | *eP* | **Pb** | **03 03 33.5** | **-0.2** |
| **HORNC** | **Hornillas** | **1.15** | **340** | *i* P | **Pb** | **03 03 33.4** | **-0.5** |
| **LAPC** | **Finca la Perla** | **1.31** | **330** | *i* P | **Pn** | **03 03 35.6** | **-0.3** |
| **GB1A** | **Borinquen Arri** | **1.33** | **333** | *i* P | **Pn** | **03 03 36.2** | **-0.1** |
| **HZTE** | **Horizontes, Gu** | **1.35** | **323** | *eP* | **Pn** | **03 03 36.8** | **+0.3** |
| **SRBA** | **San Rafael, Bu** | **1.45** | **105** | *eP* | **Pn** | **03 03 36.4** | **-1.5** |
| **BATAN** | **Batan** | **1.46** | **71** | *eP* | **Pn** | **03 03 38.8** | **+0.8** |
| **EDPN** | **Palmar Norte** | **1.46** | **117** | *i* P | **Pn** | **03 03 35.7** | **-2.3** |
| **DRK0** | **Durika** | **1.55** | **103** | *eP* | **Pn** | **03 03 38.1** | **-1.4** |
| DRK0 | | | | *eS* | **Sb** | **03 04 01.8** | **+1.6** |
| **PTJ1** | **Puerto Jimnez** | **1.81** | **126** | *eP* | **Pb** | **03 03 46.1** | **+0.9** |
| PTJ1 | | | | *eS* | **Sg** | **03 04 11.4** | **+0.6** |
| **PIRO** | **Carate, Puerto** | **1.87** | **130** | *eP* | **Pn** | **03 03 46.1** | **+2.5** |
| PIRO | | | | *eS* | **Sb** | **03 04 12.7** | **+3.5** |
| **CDITO** | **Canoas** | **2.15** | **119** | *eP* | **Pn** | **03 03 48.3** | **+0.8** |
| **BRU2** | **Volcan** | **2.22** | **112** | *eP* | **Pn** | **03 03 47.7** | **-0.8** |
| **BRU2** | **Volcan** | **2.22** | **112** | *eP* | **Pb** | **03 03 51.8** | **-0.3** |
| BRU2 | | | | *eS* | **Sb** | **03 04 20.2** | **+0.8** |
| **PTPM** | **Petroterminale** | **2.35** | **127** | *eS* | **Sg** | **03 04 28.0** | **+0.1** |

*IDC **03** 03:16:47.9±2.9,9.°35N×127.°12E,h0km,mb3.5/4,*
*mb1 3.7/4,mb1mx3.4/40,mbtmp3.5/4,MS3.1/1,Ms1 3.1/1,*
*ms1mx2.4/50,Error ellipse: s-maj=177.0km s-min=26.7km*
*az=69.0*
*MAN **03** 03:16:55.4,9.°27N×126.°72E,h11km,mb4.4,ML3.2,MS3.0*
**ISC 03 03:16:52.5**±2.4,**9.°26N**±0.°06×**126.°9E**±0.°1,**h26**km±16km,
**n11,**σ0°**99**/15,**mb3.5**/4,**6C,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLSP** | **General Luna,** | **0.96** | **303** | *iP* | **Pn** | **03 17 10.7** | **+0.4** |
| GLSP | | | | *eS* | **Sn** | **03 17 23.8** | **+0.8** |
| **BIPH** | **Bislig** | **1.22** | **208** | *iP* | **Pb** | **03 17 15.8** | **+1.0** |
| BIPH | | | | *i* S | **Sn** | **03 17 30.2** | **+0.8** |
| **BUTP** | **Butuan** | **1.34** | **258** | *iP* | **Pn** | **03 17 15.1** | **-0.3** |
| BUTP | | | | *eS* | **Sn** | **03 17 33.1** | **+0.7** |
| **SCPH** | **Surigao** | **1.52** | **290** | *eP* | **Pn** | **03 17 18.6** | **+0.6** |
| **MSLP** | **Maasin** | **2.23** | **293** | *iP* | **Pb** | **03 17 31.3** | **-0.8** |
| MSLP | | | | *eS* | **Sb** | **03 18 00.5** | **+1.2** |
| **BUKP** | **Musuan** | **2.31** | **234** | *iP* | **Pb** | **03 17 31.6** | **-2.0** |
| BUKP | | | | *i* S | **Sb** | **03 18 01.8** | **+0.1** |
| **DAV** | **Davao City (W)** | **2.56** | **212** | LR | LR | 03 18 59.2 | |
| | comp=Z,316nm,18.0s,baz=343,slow=48 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.22** | **183** | P | **P** | **03 22 34.4** | **0.0** |
| | 0.5nm,0.3s,baz=7.6,slow=8.1,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.92** | **166** | P | **P** | **03 22 57.4** | **-1.1** |
| | 0.3nm,0.5s,baz=347,slow=9.5,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **33.43** | **168** | P | **P** | **03 23 29.8** | **+0.4** |
| | 0.3nm,0.5s,baz=355,slow=6.7,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.23** | **323** | P | **P** | **03 26 08.4** | **-0.3** |
| | 0.4nm,0.7s,baz=128,slow=6.7,SNR=5.5 | | | | | | |

*IDC **03** 04:01:11.4±1.8,28.°08S×66.°91W,h0km,mb3.4/2,*
*mb1 3.6/3,mb1mx3.5/20,mbtmp3.4/3,ML3.6/1,Error*
*ellipse: s-maj=86.0km s-min=42.5km az=2.0*
**ISC 03 04:01:32.3**±1.8,**27.°9S**±0.°5×**66.°7W**±0.°4,**h167**km,**n6,**
σ0°**09**/5,**Catamarca Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPUP** | **Villa Florida** | **8.51** | **81** | Pn | Pn | 04 03 19.9 | -12 |
| | 0.2nm,0.3s,baz=253,slow=14,SNR=2.1 | | | | | | |
| CPUP | | | | Lg | | 04 06 00.7 | |
| | 0.4nm,0.3s,baz=352,slow=19,SNR=1.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.77** | **68** | P | **P** | **04 13 11.3** | **0.0** |
| | 0.2nm,0.7s,baz=242,slow=4.4,SNR=1.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **80.66** | **329** | P | **P** | **04 13 26.7** | **0.0** |
| | 0.1nm,0.5s,baz=142,slow=7.4,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **128.23** | **205** | PKP | **PKiKP** | **04 20 20.1** | **0.0** |
| | 0.2nm,0.8s,baz=158,slow=1.8,SNR=1.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.68** | **31** | PKPbc | **PKPab** | **04 20 55.3** | **-0.1** |
| | 0.6nm,0.5s,baz=318,slow=1.9,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **149.28** | **44** | PKPbc | **PKPbc** | **04 21 01.1** | **0.0** |
| | 0.3nm,0.5s,baz=304,slow=1.5,SNR=3.5 | | | | | | |

*IDC **03** 04:09:00.6±0.8,30.°80S×179.°99W,h378km±13km,mb3.2/5,*
*mb1 3.4/7,mb1mx3.2/49,mbtmp4.1/7,Error ellipse:*
*s-maj=23.4km s-min=21.1km az=53.0*
**ISC 03 04:09:00.3**±0.8,**31.°03S**±0.°07×**179.°6W**±0.°1,**h400**km,**n48,**
σ2°**36**/69,**mb3.4/5,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **2.29** | **40** | P | Pn | **04 09 56.9** | **-1.4** |
| GLKZ | | | | S | **S** | **04 10 40.8** | **-4.2** |
| **RIZ** | **Raoul Island** | **2.30** | **40** | P | **Pn** | **04 09 57.3** | **-1.0** |
| RIZ | | | | S | **S** | **04 10 44.0** | **-1.1** |
| **RAO** | **Raoul Island** | **2.30** | **40** | P | **Pn** | **04 09 58.1** | **-0.3** |
| | 85nm,0.3s,baz=89,slow=8.3,SNR=7.0 | | | | | | |
| RAO | | | | S | **S** | **04 10 42.7** | **-2.4** |
| | 110nm,0.3s,baz=72,slow=23,SNR=2.8 | | | | | | |
| **GRZ** | **Great Barrier** | **6.63** | **217** | P | P | **04 10 42.8** | **+2.4** |
| **MXZ** | **Matakaoa Point** | **6.74** | **194** | P | **Pn** | **04 10 40.6** | **-0.3** |
| MXZ | | | | S | **S** | **04 12 00.9** | **-2.2** |
| **WMGZ** | **Waiomatatini S** | **6.97** | **193** | P | **Pn** | **04 10 45.5** | **+2.1** |
| WMGZ | | | | S | **S** | **04 12 04.9** | **-2.8** |
| **WCZ** | **Waipu Caves** | **7.03** | **224** | P | **P** | **04 10 47.2** | **+2.4** |
| **OUZ** | **Omahuta** | **7.06** | **232** | P | **P** | **04 10 47.0** | **+1.9** |
| **RUGZ** | **Raukumara Rang** | **7.27** | **197** | P | **Pn** | **04 10 47.8** | **+0.7** |
| RUGZ | | | | S | **S** | **04 12 11.9** | **-2.4** |
| **TWGZ** | **Tauwhareparae** | **7.40** | **195** | P | **P** | **04 10 51.3** | **+2.3** |
| TWGZ | | | | S | **S** | **04 12 16.2** | **-0.6** |
| **MWZ** | **Matawai** | **7.66** | **197** | P | **Pn** | **04 10 52.5** | **+1.2** |
| MWZ | | | | S | **S** | **04 12 20.0** | **-2.2** |
| **TKGZ** | **Te Karaka** | **7.68** | **195** | P | **P** | **04 10 53.8** | **+1.8** |
| TKGZ | | | | S | **S** | **04 12 19.8** | **-2.7** |
| **URZ** | **Urewera** | **7.70** | **200** | P | **Pn** | **04 10 52.3** | **+0.5** |
| | 11nm,0.3s,baz=209,slow=19,SNR=114 | | | | | | |
| URZ | | | | S | **S** | **04 12 19.1** | **-3.9** |
| | 7.1nm,0.3s,baz=76,slow=23,SNR=21 | | | | | | |
| **URZ** | **Urewera** | **7.70** | **200** | P | **Pn** | **04 10 52.3** | **+0.5** |
| URZ | | | | S | **S** | **04 12 19.8** | **-3.2** |
| **RAGZ** | **Rawiri** | **7.84** | **197** | P | **Pn** | **04 10 53.3** | **-0.2** |
| RAGZ | | | | S | **S** | **04 12 22.7** | **-3.4** |
| **RIGZ** | **Rimuhau** | **7.96** | **195** | P | **P** | **04 10 57.1** | **+2.0** |
| RIGZ | | | | S | **S** | **04 12 25.3** | **-3.1** |
| **MUGZ** | **Murupara** | **8.00** | **201** | P | **P** | **04 10 57.4** | **+1.8** |
| MUGZ | | | | S | **S** | **04 12 25.7** | **-3.6** |
| **HRRZ** | **Handcock Road** | **8.08** | **204** | P | **P** | **04 10 59.7** | **+3.2** |
| **SNGZ** | **Shannon Statio** | **8.13** | **197** | P | **Pn** | **04 10 58.3** | **+1.6** |
| SNGZ | | | | S | **S** | **04 12 30.5** | **-1.6** |
| **PRGZ** | **Paritu Road** | **8.14** | **194** | P | **P** | **04 11 00.4** | **+3.3** |
| PRGZ | | | | S | **S** | **04 12 29.0** | **-3.2** |
| **KNZ** | **Kokohu** | **8.28** | **195** | P | **Pn** | **04 11 00.3** | **+2.0** |
| **MTHZ** | **Maungataniwha** | **8.33** | **199** | P | **Pn** | **04 11 00.5** | **+1.5** |
| MTHZ | | | | S | **S** | **04 12 32.3** | **-4.0** |
| **MHGZ** | **Mahia Peninsul** | **8.36** | **193** | P | **S** | **04 11 02.3** | **+2.8** |
| MHGZ | | | | S | **S** | **04 12 34.9** | **-1.8** |
| **MRHZ** | **Matea Rd** | **8.44** | **202** | P | **P** | **04 11 02.0** | **+1.5** |
| **ARHZ** | **Aropaoanui** | **8.67** | **198** | P | **Pn** | **04 11 04.6** | **+1.8** |
| ARHZ | | | | S | **S** | **04 12 41.0** | **-2.4** |
| **BKZ** | **Black Stump Fm** | **8.72** | **200** | P | **Pn** | **04 11 03.7** | **+0.2** |
| BKZ | | | | S | **S** | **04 12 41.0** | **-3.6** |
| **SNVZ** | **South Ngauruho** | **9.02** | **204** | P | **P** | **04 11 07.5** | **+0.4** |
| **BHHZ** | **Black Hill Sta** | **9.15** | **201** | P | **P** | **04 11 08.2** | **-0.2** |
| BHHZ | | | | S | **S** | **04 12 49.3** | **-4.4** |
| **PKVZ** | **Pokaka** | **9.21** | **205** | P | **P** | **04 11 09.8** | **+0.6** |
| **VRZ** | **Vera Road** | **9.30** | **208** | P | **Pn** | **04 11 13.1** | **+3.1** |
| **PNHZ** | **Pukenui** | **9.50** | **200** | P | **P** | **04 11 11.9** | **-0.3** |
| PNHZ | | | | S | **S** | **04 12 55.3** | **-5.5** |
| **TSZ** | **Takapari Road** | **9.70** | **201** | P | **P** | **04 11 14.2** | **-0.3** |
| TSZ | | | | S | **S** | **04 12 59.3** | **-5.7** |
| **PRHZ** | **Porangahau** | **9.71** | **197** | P | **P** | **04 11 15.7** | **+1.2** |
| **DVHZ** | **Dannevirke** | **9.86** | **199** | P | **P** | **04 11 16.6** | **+0.3** |
| **ANWZ** | **Angora Road** | **9.93** | **198** | P | **P** | **04 11 18.6** | **+1.6** |
| **BFZ** | **Birch Farm** | **10.20** | **198** | P | **P** | **04 11 20.3** | **+0.3** |
| **MRZ** | **Mangatainoka R** | **10.37** | **201** | P | **P** | **04 11 21.3** | **-0.5** |
| **TIWZ** | **Tintock** | **10.39** | **199** | P | **P** | **04 11 23.3** | **+1.2** |
| **HOWZ** | **Holdsworth Sta** | **10.61** | **200** | P | **P** | **04 11 24.6** | **+0.1** |
| **OGWZ** | **Otaki Gorge** | **10.64** | **202** | P | P | 04 11 19.5 | -5.3 |
| **STKA** | **Stephens Creek** | **32.98** | **258** | P | **P** | **04 15 00.0** | **+0.1** |
| | 2.6nm,0.7s,baz=113,slow=15,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **41.69** | **268** | P | **P** | **04 16 11.2** | **-0.9** |
| | 0.7nm,0.7s,baz=104,slow=7.5,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.74** | **274** | P | **P** | **04 16 19.7** | **-0.8** |
| | 0.8nm,0.4s,baz=110,slow=8.1,SNR=15 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.97** | **271** | P | **P** | **04 17 23.1** | **-0.2** |
| | 1.4nm,0.7s,baz=124,slow=3.6,SNR=5.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.08** | **180** | P | **P** | **04 18 23.9** | **+3.9** |
| | 1.5nm,0.6s,baz=48,slow=3.9,SNR=11 | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.89** | **347** | PKhKP | PKPpre | 04 27 33.0 | |
| | 3.1nm,1.0s,baz=18,slow=4.2,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **145.24** | **339** | PKP | **PKPab** | **04 27 51.8** | **+0.1** |
| | 2.0nm,0.4s,baz=49,slow=2.6,SNR=35 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.93** | **321** | PKPbc | **PKiKP** | **04 28 07.3** | **+0.8** |
| | 0.4nm,0.4s,baz=49,slow=2.8,SNR=2.5 | | | | | | |

**IDC 03 04:13:29.6**±2.1,**0.°93N**×**125.°80E,h0**km,**mb3.2**/3,
**mb1 3.5**/3,**mb1mx3.3**/40,**mbtmp3.3**/3,**Error ellipse:**
**s-maj=183.2km s-min=28.3km az=65.0,Northern**
**Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.37** | **158** | P | P | 04 18 29.4 | -0.2 |
| | 0.5nm,0.4s,baz=337,slow=11,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **25.69** | **163** | P | P | 04 19 01.7 | +0.1 |
| | 0.2nm,0.3s,baz=346,slow=12,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.34** | **327** | P | P | 04 23 33.5 | 0.0 |
| | 0.2nm,0.8s,baz=112,slow=8.5,SNR=1.7 | | | | | | |

**TRN 03 04:24:59.6,14.°80N×61.°30W,h151km,MD3.8,1C,**
**Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCM** | **Pelee Case Pet** | **0.09** | **81** | *eP* | Pn | 04 25 21.3 | +1.4 |
| **PML** | **Morne Lenard** | **0.11** | **101** | *eP* | Pn | 04 25 21.4 | +1.5 |
| **GBMF** | **Grand Be** | **0.13** | **92** | *eP* | Pn | 04 25 21.2 | +1.2 |
| **SVN** | **Savane Anatole** | **0.13** | **72** | *eP* | Pn | 04 25 21.1 | +1.2 |
| **BAMF** | **Morne Balai** | **0.14** | **85** | *eP* | Pn | 04 25 21.2 | +1.2 |
| **FDF** | **Fort de France** | **0.16** | **116** | *eP* | Pn | 04 25 20.7 | +0.7 |
| FDF | | | | *eS* | Sn | 04 25 36.1 | +0.7 |
| **ZAM** | **Aeronautique** | **0.35** | **131** | *eP* | Pn | 04 25 21.1 | +0.7 |
| **TRMF** | **Trois Ilets** | **0.35** | **138** | *eP* | Pn | 04 25 21.2 | +0.7 |
| **BIM** | **Bigot** | **0.36** | **142** | *eP* | Pn | 04 25 21.7 | +1.2 |
| BIM | | | | *eS* | Sn | 04 25 38.0 | +1.6 |
| **LPMF** | **Morne Lapointe** | **0.39** | **125** | *eP* | Pn | 04 25 21.1 | +0.5 |
| **ILAM** | **Ilet Lapin Mar** | **0.41** | **94** | *iP* | Pn | 04 25 21.0 | +0.3 |
| ILAM | | | | *eS* | Sn | 04 25 36.3 | -0.2 |
| **MVM** | **Montagne Vaucl** | **0.46** | **122** | *eP* | Pn | 04 25 21.4 | +0.5 |
| **DLPL** | **La Plaine** | **0.53** | **5** | *eP* | Pn | 04 25 22.0 | +0.7 |
| DLPL | | | | *eS* | Sn | 04 25 38.7 | +0.9 |
| **MPOM** | **Morne Pois Mar** | **0.55** | **130** | *eP* | Pn | 04 25 21.5 | +0.2 |
| MPOM | | | | *eS* | Sn | 04 25 37.9 | 0.0 |
| **DSLB** | **Salisbury** | **0.64** | **349** | *eP* | Pn | 04 25 23.1 | +1.2 |
| DSLB | | | | *eS* | Sn | 04 25 40.0 | +1.1 |
| **MDVC** | **Dominica, Viel** | **0.81** | **353** | *eP* | Pn | 04 25 24.7 | +1.6 |
| MDVC | | | | *eS* | Sn | 04 25 42.8 | +1.9 |
| **MDCT** | **Cottage Hill,** | **0.83** | **349** | *eP* | Pn | 04 25 24.6 | +1.5 |
| MDCT | | | | *eS* | Sn | 04 25 43.3 | +2.2 |
| **SLBI** | **Saint Lucia, B** | **0.83** | **158** | *eP* | Pn | 04 25 23.4 | +0.2 |
| SLBI | | | | *eS* | Sn | 04 25 41.1 | 0.0 |
| **SLCP** | **Castries, St.** | **0.84** | **159** | *eP* | Pn | 04 25 23.4 | +0.1 |
| SLCP | | | | *eS* | Sn | 04 25 42.5 | +1.3 |
| **TDBA** | **Terre de Bas,** | **1.09** | **343** | *eP* | Pn | 04 25 26.4 | +1.1 |
| TDBA | | | | *eS* | Sn | 04 25 45.5 | +0.6 |
| **TBG** | **Guadaloupe-3** | **1.10** | **342** | *eP* | Pn | 04 25 25.8 | +0.4 |
| TBG | | | | *eS* | Sn | 04 25 46.1 | +1.1 |
| **MCLT** | **Moule a Chique** | **1.14** | **162** | *eP* | Pn | 04 25 28.5 | +2.7 |
| MCLT | | | | *eS* | Sn | 04 25 45.4 | -0.3 |
| **MAGL** | **Barre de l'ile** | **1.14** | **1** | *eP* | Pn | 04 25 26.6 | +0.9 |
| MAGL | | | | *eS* | Sn | 04 25 45.6 | -0.1 |
| **CBE** | **Ff, Capester** | **1.29** | **347** | *eP* | Pn | 04 25 27.9 | +0.6 |
| CBE | | | | *eS* | Sn | 04 25 49.3 | +0.9 |
| **SVB** | **Belmont** | **1.52** | **178** | *eP* | Pn | 04 25 30.4 | +0.8 |
| SVB | | | | *eS* | Sn | 04 25 52.5 | +0.1 |
| **SVOC** | **Richmond Hill,** | **1.64** | **177** | *eS* | Sn | 04 25 55.0 | +0.4 |
| **ABD** | **La Joyeuse, An** | **1.67** | **354** | *eP* | Pn | 04 25 31.6 | +0.5 |
| ABD | | | | *eS* | Sn | 04 25 55.4 | +0.1 |
| **ANBD** | **Bethesda, Anti** | **2.28** | **349** | *eP* | Pn | 04 25 38.8 | +0.7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **80.52** | **76** | P | | **P** | **04 57 16.0** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=284,slow=6.0,SNR=12 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.52** | **76** | P | | **P** | **04 57 14.1** | **-1.3** |
| TORD | | | | IAmb | | IAmb | 04 57 21.4 | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **135.39** | **20** | PKP | | **PKPdf** | **05 04 22.6** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=308,slow=1.5,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.87** | **230** | PKP | | **PKPdf** | **05 04 33.4** | **+2.0** |
| | comp=Z,0.3nm,0.4s,baz=110,slow=2.1,SNR=6.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.87** | **230** | | | **PKPdf** | **05 04 33.0** | **+1.5** |

*NEIC **03** 05:00:40.9±1.7,23°.63S±0°.08×66°.8W±0°.1,h200km±13km, Error ellipse: s-maj=15.2km s-min=11.0km az=71.0*
*SJA **03** 05:00:40.0±0.7,23°.56S×66°.83W,h216km±4km,ML4.4, MW4.0*
*IDC **03** 05:00:41.2±1.1,23°.48S×66°.77W,h198km±13km,mb3.2/2, mb1 3.4/8,mb1mx3.2/26,mbtmp3.8/8,Error ellipse: s-maj=19.4km s-min=17.5km az=158.0*
*VAO **03** 05:00:41.1±0.6,23°.61S×67°.10W,h239km±7km,mb3.7*

**ISC 03 05:00:40.3**±0.6,**23°.56S**±0°.04×**66°.85W**±0°.04,**h205**km±7km, **n75**,σ1°**66**/106,**Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HJA** | **Humahuaca** | **1.37** | **75** | *e*P | | **Pn** | | **05 01 11.0** | **-2.8** |
| HJA | | | | *e*P | | **Pn** | | **05 01 14.7** | **+0.9** |
| HJA | | | | *e*S | | **S** | | **05 01 40.1** | **+0.8** |
| **YJA** | **Yavi** | **1.85** | **42** | *e*P | | **Pn** | | **05 01 19.9** | **+1.7** |
| YJA | | | | *e*S | | S | | 05 01 43.0 | -4.1 |
| YJA | | | | *e*S | | S | | 05 01 48.9 | +1.7 |
| **LVC** | **Limon Verde** | **2.12** | **296** | P | | **Pn** | | **05 01 22.2** | **+1.3** |
| | 83nm,0.3s,baz=126,slow=7.1,SNR=299 | | | | | | | | |
| LVC | | | | S | | **S** | | **05 01 52.9** | **+1.0** |
| | 120nm,0.3s,baz=273,slow=20,SNR=28 | | | | | | | | |
| **LVC** | **Limon Verde** | **2.12** | **296** | *e*P | | **Pn** | | **05 01 22.0** | **+1.1** |
| **LVC** | **Limon Verde** | **2.12** | **296** | | | **Pn** | | **05 01 21.8** | **+0.9** |
| **LVC** | **Limon Verde** | **2.12** | **296** | *e*P | | **Pn** | | **05 01 22.2** | **+1.3** |
| LVC | | | | *e*S | | **S** | | **05 01 53.2** | **+1.3** |
| LVC | | | | *e*S | | S | | 05 01 54.9 | +3.0 |
| **PB15** | **IPOC Station P** | **2.44** | **278** | | | **Pn** | | **05 01 25.1** | **+1.0** |
| **PB15** | **IPOC Station P** | **2.44** | **278** | *e*P | | **Pn** | | **05 01 25.3** | **+1.2** |
| PB15 | | | | *e*S | | **S** | | **05 01 58.5** | **+0.9** |
| PB15 | | | | IAML | | | | 05 02 00.4 | |
| | comp=Z,5μm,0.2s | | | | | | | | |
| **PB06** | **IPOC Station P** | **2.65** | **288** | | | **Pn** | | **05 01 27.5** | **+1.2** |
| **PB06** | **IPOC Station P** | **2.65** | **288** | *e*P | | **Pn** | | **05 01 22.0** | **-4.4** |
| PB06 | | | | *e*P | | **Pn** | | **05 01 27.6** | **+1.2** |
| PB06 | | | | *e*P | | **Pn** | | **05 01 28.0** | **+1.6** |
| PB06 | | | | *e*S | | **S** | | **05 02 02.3** | **+0.6** |
| PB06 | | | | IAML | | | | 05 02 04.5 | |
| | comp=Z,956nm,0.3s | | | | | | | | |
| **FSA** | **Cafayete** | **2.66** | **163** | *e*P | | **Pn** | | **05 01 22.0** | **-4.5** |
| FSA | | | | *e*P | | **Pn** | | **05 01 27.5** | **+1.0** |
| **PB09** | **IPOC Station P** | **2.83** | **308** | | | **Pn** | | **05 01 30.0** | **+1.6** |
| **PB09** | **IPOC Station P** | **2.83** | **308** | *e*P | | **Pn** | | **05 01 30.0** | **+1.6** |
| PB09 | | | | *e*S | | **S** | | **05 02 07.4** | **+2.0** |
| **PB03** | **IPOC Station P** | **3.08** | **299** | | | **Pn** | | **05 01 32.2** | **+0.9** |
| **PB03** | **IPOC Station P** | **3.08** | **299** | *e*P | | **Pn** | | **05 01 27.0** | **-4.3** |
| PB03 | | | | *e*P | | **Pn** | | **05 01 32.1** | **+0.9** |
| PB03 | | | | *e*P | | **Pn** | | **05 01 32.3** | **+0.9** |
| PB03 | | | | *e*S | | **S** | | **05 02 10.7** | **+0.1** |
| PB03 | | | | IAML | | | | 05 02 13.2 | |
| | comp=Z,608nm,0.3s | | | | | | | | |
| **PB04** | **IPOC Station P** | **3.28** | **291** | | | **Pn** | | **05 01 34.5** | **+0.7** |
| **PB04** | **IPOC Station P** | **3.28** | **291** | *e*P | | **Pn** | | **05 01 34.4** | **+0.7** |
| PB04 | | | | *e*S | | **S** | | **05 02 14.6** | **-0.3** |
| PB04 | | | | IAML | | | | 05 02 18.2 | |
| | comp=Z,771nm,0.3s | | | | | | | | |
| **PB07** | **IPOC Station P** | **3.35** | **302** | | | | | **05 01 35.3** | **+0.7** |
| **PB07** | **IPOC Station P** | **3.35** | **302** | *e*P | | **Pn** | | **05 01 35.4** | **+0.7** |
| PB07 | | | | *e*S | | **S** | | **05 02 15.3** | **-1.1** |
| PB07 | | | | *e*S | | S | | 05 02 16.1 | -0.3 |
| PB07 | | | | IAML | | | | 05 02 16.7 | |
| | comp=Z,589nm,0.5s | | | | | | | | |
| **PB10** | **IPOC Station P** | **3.40** | **270** | Pn | | **Pn** | | **05 01 36.0** | **+1.0** |
| **PB10** | **IPOC Station P** | **3.40** | **270** | *e*P | | **Pn** | | **05 01 36.0** | **+1.0** |
| PB10 | | | | *e*S | | **S** | | **05 02 14.6** | **-2.7** |
| PB10 | | | | *e*S | | S | | 05 02 16.7 | -0.6 |
| PB10 | | | | IAML | | | | 05 02 18.3 | |
| | comp=Z,321nm,0.2s | | | | | | | | |
| **PB14** | **IPOC Station P** | **3.42** | **251** | | | **Pn** | | **05 01 36.1** | **+0.5** |
| **PB14** | **IPOC Station P** | **3.42** | **251** | *e*P | | Pn | | 05 01 27.0 | -8.5 |
| PB14 | | | | *e*P | | **Pn** | | **05 01 36.0** | **+0.5** |
| PB14 | | | | *e*P | | **Pn** | | **05 01 36.3** | **+0.8** |
| PB14 | | | | *e*S | | S | | **05 02 13.1** | **-5.1** |
| PB14 | | | | *e*S | | S | | 05 02 17.2 | -1.0 |
| PB14 | | | | IAML | | | | 05 02 21.2 | |
| | comp=Z,339nm,0.2s | | | | | | | | |
| **AHML** | **Horco Molle** | **3.49** | **157** | *e*P | | **Pn** | | **05 01 36.9** | **+0.8** |
| AHML | | | | *e*S | | **S** | | **05 02 19.4** | **+0.1** |
| **PB01** | **IPOC Station P** | **3.50** | **315** | | | **Pn** | | **05 01 37.1** | **+0.7** |
| **PB02** | **IPOC Station P** | **3.60** | **308** | Pn | | **Pn** | | **05 01 38.0** | **+0.5** |
| **AC02** | **Maricunga** | **3.86** | **212** | | | **Pn** | | **05 01 41.9** | **+0.8** |
| **AC02** | **Maricunga** | **3.86** | **212** | *e*P | | **Pn** | | **05 01 42.0** | **+1.0** |
| AC02 | | | | *e*S | | **S** | | **05 02 28.0** | **-0.2** |
| **PB08** | **IPOC Station P** | **4.02** | **327** | | | **Pn** | | **05 01 44.3** | **+1.3** |
| **PB08** | **IPOC Station P** | **4.02** | **327** | *e*P | | **Pn** | | **05 01 44.4** | **+1.4** |
| PB08 | | | | *e*S | | **S** | | **05 02 32.2** | **+0.6** |
| PB08 | | | | *e*S | | S | | 05 02 32.3 | +0.7 |
| **TA01** | **Diego Aracena** | **4.29** | **313** | Pn | | **Pn** | | **05 01 46.9** | **+0.9** |
| **GO01** | **Chusmiza** | **4.45** | **330** | | | **Pn** | | **05 01 49.2** | **+0.8** |
| **GO01** | **Chusmiza** | **4.45** | **330** | *e*P | | **Pn** | | **05 01 49.0** | **+0.6** |
| GO01 | | | | *e*S | | **S** | | **05 02 43.1** | **+1.7** |
| **TA02** | **Huaiquique** | **4.47** | **316** | | | **Pn** | | **05 01 48.6** | **+0.4** |
| **PB11** | **IPOC Station P** | **4.60** | **325** | Pn | | **Pn** | | **05 01 49.7** | **-0.2** |
| **PB11** | **IPOC Station P** | **4.60** | **325** | *e*P | | **Pn** | | **05 01 49.8** | **-0.1** |
| PB11 | | | | *e*S | | **S** | | **05 02 42.0** | **-2.3** |
| PB11 | | | | *e*S | | S | | 05 02 42.6 | -1.7 |
| PB11 | | | | IAML | | | | 05 02 45.2 | |
| | comp=Z,164nm,0.3s | | | | | | | | |
| **GO03** | **Copiap** | **5.05** | **217** | Pn | | **Pn** | | **05 01 54.5** | **-1.0** |
| **GO03** | **Copiap** | **5.05** | **217** | *e*P | | **Pn** | | **05 01 54.9** | **-0.7** |
| GO03 | | | | *e*S | | **S** | | **05 02 52.4** | **-2.1** |
| **MNMCX** | **Minye Minye** | **5.10** | **329** | *e*P | | **Pn** | | **05 01 56.7** | **+0.3** |
| MNMCX | | | | *e*P | | **Pn** | | **05 01 57.0** | **+0.6** |
| MNMCX | | | | *e*P | | **Pn** | | **05 01 57.0** | **+0.6** |
| MNMCX | | | | IAML | | | | 05 02 58.0 | |
| | comp=Z,253nm,0.3s | | | | | | | | |
| **PB16** | **IPOC Station P** | **5.76** | **334** | | | **Pn** | | **05 02 05.7** | **+0.5** |
| **PB16** | **IPOC Station P** | **5.76** | **334** | *e*P | | **Pn** | | **05 02 05.8** | **+0.5** |
| PB16 | | | | *e*P | | **Pn** | | **05 02 06.2** | **+1.0** |
| PB16 | | | | *e*S | | **S** | | **05 03 05.5** | **-6.5** |
| PB16 | | | | *e*S | | S | | 05 03 09.8 | -2.2 |
| PB16 | | | | *e*S | | S | | 05 03 14.6 | +2.6 |
| **AC04** | **Llanos de Chal** | **5.99** | **219** | | | **Pn** | | **05 02 05.7** | **-1.8** |
| **AC04** | **Llanos de Chal** | **5.99** | **219** | *e*P | | **Pn** | | **05 02 05.7** | **-1.8** |
| AC04 | | | | IAML | | | | 05 03 14.8 | |
| | comp=Z,46nm,0.3s | | | | | | | | |
| **LCO** | **Las Campanas** | **6.44** | **212** | Pn | | **Pn** | | **05 02 12.0** | **-1.5** |
| **ACCO** | **Cerro Coronel** | **7.27** | **195** | *e*S | | **S** | | **05 03 45.5** | **-1.6** |
| **LPAZ** | **La Paz** | **7.33** | **350** | P | | **Pn** | | **05 02 26.9** | **+1.3** |
| | comp=Z,1.7nm,0.3s,baz=141,slow=3.6,SNR=25 | | | | | | | | |
| LPAZ | | | | S | | **S** | | **05 03 48.3** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=330,slow=22,SNR=6.0 | | | | | | | | |
| **LPAZ** | **La Paz** | **7.33** | **350** | *e*P | | **Pn** | | **05 02 27.0** | **+1.4** |
| **LPAZ** | **La Paz** | **7.33** | **350** | Pn | | **Pn** | | **05 02 26.4** | **+0.8** |
| **GO04** | **Tololo Observa** | **7.47** | **207** | Pn | | **Pn** | | **05 02 24.9** | **-2.0** |
| **CO03** | **El Pedregal** | **8.02** | **204** | Pn | | **Pn** | | **05 02 32.8** | **-1.0** |
| **CO03** | **El Pedregal** | **8.02** | **204** | *e*P | | **Pn** | | **05 02 32.2** | **-1.6** |
| CO03 | | | | *e*P | | **Pn** | | **05 02 33.0** | **-0.8** |
| **CPUP** | **Villa Florida** | **9.07** | **110** | P | | **Pn** | | **05 02 47.7** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=300,slow=8.4,SNR=3.6 | | | | | | | | |
| **CPUP** | **Villa Florida** | **9.07** | **110** | *e*P | | **Pn** | | **05 02 50.9** | **+3.5** |
| **SIV** | **San Ignacio** | **7.29** | **37** | P | | **Pn** | | **05 02 49.1** | **-1.3** |
| | comp=Z,2.2nm,0.3s,baz=220,slow=10,SNR=44 | | | | | | | | |
| **AQDB** | **Aquidauana** | **10.79** | **76** | *e*P | | **P** | | **05 03 13.7** | **-2.5** |
| **VILB** | **Vilhena** | **12.29** | **32** | *e*P | | **Pn** | | **05 03 29.3** | **+0.4** |
| **PTGB** | **Pitanga** | **13.55** | **98** | *e*P | | **P** | | **05 03 46.7** | **-0.2** |
| **CPSB** | **Cacapava Do Su** | **13.75** | **123** | *e*P | | **Pn** | | **05 03 47.5** | **+0.5** |
| **PLTB** | **Pedras Altas** | **14.29** | **128** | *e*P | | **P** | | **05 03 55.3** | **+0.3** |
| **ARAG** | **Araguaiana, MT** | **16.16** | **64** | *e*P | | **Pn** | | **05 04 17.9** | **+1.4** |
| **PLCA** | **Paso Flores** | **17.40** | **189** | P | | **Pn** | | **05 04 32.1** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=4.9,slow=13,SNR=8.8 | | | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **17.82** | **90** | *e*P | | **Pn** | | **05 04 35.5** | **-0.6** |
| **VAO** | **Valinhos** | **18.27** | **92** | *e*P | | **P** | | **05 04 40.1** | **+1.2** |
| **IPMB** | **Ipameri, GO** | **18.28** | **76** | *e*P | | **Pn** | | **05 04 40.8** | **-0.8** |
| **SNDB** | **Serra Nova Dou** | **18.74** | **55** | *e*P | | **P** | | **05 04 44.6** | **+0.5** |
| **BDFB** | **Brasilia** | **19.40** | **69** | P | | **P** | | **05 04 52.2** | **+1.0** |
| | comp=Z,0.5nm,0.3s,baz=244,slow=6.3,SNR=7.1 | | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **19.49** | **351** | *e*P | | **P** | | **05 04 51.0** | **-1.0** |
| **MACA** | **Manacapuru-AM** | **21.14** | **17** | *e*P | | **P** | | **05 05 09.0** | **-0.6** |
| **ITTB** | **Itaituba** | **21.89** | **31** | *e*P | | **P** | | **05 05 16.2** | **-1.0** |
| **JANB** | **Januaria** | **22.86** | **72** | *e*P | | **P** | | **05 05 26.1** | **-0.1** |
| **SDBA** | **SAO DESIDERIO** | **23.60** | **66** | *e*P | | **P** | | **05 05 32.8** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **76.28** | **69** | P | | **P** | | **05 12 07.3** | **+0.4** |
| | comp=Z,0.4nm,0.4s,baz=269,slow=6.0,SNR=6.3 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.76** | **340** | P | | **P** | | **05 13 35.0** | **+1.7** |
| | comp=Z,0.1nm,0.5s,baz=125,slow=4.6,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **132.08** | **207** | PKP | | **PKPdf** | | **05 19 30.9** | **+0.6** |
| | comp=Z,0.3nm,0.8s,baz=168,slow=3.4,SNR=1.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **146.10** | **39** | PKPbc | | **PKPab** | | **05 19 57.4** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=299,slow=2.8,SNR=7.5 | | | | | | | | |

*JSN **03** 05:27:07.3±0.5, 18°.13N×77°.96W,h16km±3km, MD2.7*
*SSNC **03** 05:27:19.5±0.9, 18°.62N×77°.63W,h25km±94km, MD2.6, ML1.3,MW2.4*

**ISC 03 05:27:05.9**±2.5,**18°.19N**±0°.07×**77°.9W**±0°.2,**h23**km,**n7, σ1°43/11**,**Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MCJ** | **Malvern** | **0.35** | **137** | *i* | P | | **Pb** | **05 27 13.6** | **-0.1** |
| MCJ | | | | *i* | S | | **Sb** | **05 27 18.8** | **-0.2** |
| **CVJ** | **Coleyville** | **0.39** | **84** | *i* | P | | **Pb** | **05 27 15.2** | **+1.0** |
| **BBJ** | **Bamboo Saint A** | **0.67** | **73** | *i* | P | | **Pn** | **05 27 20.1** | **+0.1** |
| **STH** | **Stony Hill** | **1.08** | **96** | *i* | P | | **Pb** | **05 27 26.2** | **+0.3** |
| STH | | | | *i* | S | | **Sn** | **05 27 40.5** | **+0.6** |
| **GWJ** | **Greenwich** | **1.16** | **95** | *i* | P | | **Pb** | **05 27 27.7** | **+0.4** |
| **LMGC** | **Las Mercedes** | **2.06** | **25** | *e*P | | **Pb** | | **05 27 43.8** | **+1.1** |
| LMGC | | | | *e*S | | **Sn** | | **05 28 01.9** | **-2.2** |
| LMGC | | | | IAML | | | | 05 28 03.9 | |
| | comp=E,8.6nm,0.2s | | | | | | | | |
| LMGC | | | | IAML | | | | 05 28 04.0 | |
| | comp=N,9.3nm,0.1s | | | | | | | | |
| **RCC** | **Rio Carpintero** | **2.78** | **49** | *e*P | | **Pn** | | **05 27 49.9** | **+0.9** |
| RCC | | | | *e*S | | **Sn** | | **05 28 19.1** | **-2.8** |
| RCC | | | | IAML | | | | 05 28 21.6 | |
| | comp=E,0.5nm,0.1s | | | | | | | | |
| RCC | | | | IAML | | | | 05 28 22.0 | |
| | comp=N,0.5nm,0.3s | | | | | | | | |

*FUNV **03** 05:32:30.4, 12°.29N×69°.96W,h4km,MW3.4*

**ISC 03 05:32:31.4**±1.7,**12°.22N**±0°.07×**69°.97W**±0°.03,**h18**km±6km, **n32**,σ1°**46**/54,**1D**,**Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MONV** | **Montecano** | **0.27** | **179** | *i* | P | | **Pg** | **05 32 37.0** | **-0.3** |
| MONV | | | | *e*S | | | **Sg** | **05 32 41.8** | **+0.3** |
| **DABV** | **Dabajuro** | **1.45** | **207** | *e*P | | | **Pn** | **05 32 56.7** | **0.0** |
| DABV | | | | *e*S | | | **Sn** | **05 33 14.8** | **-0.5** |
| **DABV** | **Dabajuro** | **1.45** | **207** | *e*P | | | **Pn** | **05 32 56.8** | **+0.1** |
| DABV | | | | *e*S | | | **Sb** | **05 33 17.3** | **+1.3** |
| **SIQV** | **Siquisique** | **1.57** | **174** | *e*P | | | **Pn** | **05 32 59.2** | **+0.7** |
| SIQV | | | | *e*S | | | **Sb** | **05 33 20.7** | **+1.1** |
| **JACV** | **Jacura** | **1.59** | **135** | *e*P | | | **Pn** | **05 32 59.3** | **+0.6** |
| JACV | | | | *e*S | | | **Sb** | **05 33 21.1** | **+1.0** |
| **URIC** | **Uribia, Colomb** | **2.04** | **255** | *e*P | | | **Pn** | **05 33 04.8** | **0.0** |
| **CURV** | **Curarigua** | **2.20** | **180** | *e*P | | | **Pn** | **05 33 08.8** | **+1.7** |
| CURV | | | | *e*S | | | **Sb** | **05 33 36.4** | **-1.2** |
| **TURV** | **Turiamo** | **2.74** | **130** | *e*P | | | **Pn** | **05 33 14.6** | **+0.1** |
| **MAPV** | **Macapo** | **2.81** | **148** | *e*P | | | **Pn** | **05 33 15.8** | **+0.4** |
| MAPV | | | | *e*S | | | **Sn** | **05 33 49.7** | **+0.8** |
| **CRJC** | **Cerrejon, Guaj** | **3.09** | **248** | *e*P | | | **Pn** | **05 33 19.1** | **-0.3** |
| CRJC | | | | *e*S | | | **Sn** | **05 33 56.4** | **+0.5** |
| CRJC | | | | *i* | | | | 05 34 00.8 | |
| | comp=Z,28nm,0.2s | | | | | | | | |
| **BENV** | **Beln** | **3.24** | **134** | *e*P | | | **Pn** | **05 33 22.5** | **+1.1** |
| BENV | | | | *e*S | | | **Sn** | **05 33 59.5** | **-0.1** |
| **MCQV** | **Machiques** | **3.31** | **230** | *e*P | | | **Pn** | **05 33 22.6** | **+0.2** |
| MCQV | | | | *e*S | | | **Sn** | **05 34 01.9** | **+0.5** |
| **SDV** | **Santo Domingo** | **3.38** | **191** | *e*P | | | **Pn** | **05 33 24.1** | **+0.6** |
| SDV | | | | *e*S | | | **Sn** | **05 34 01.7** | **-1.6** |
| SDV | | | | *i* | | | | 05 34 07.8 | |
| | comp=Z,6.7nm,0.3s | | | | | | | | |
| **FUNV** | **FUNVISIS** | **3.56** | **119** | *e*P | | | **Pn** | **05 33 25.6** | **-0.3** |
| FUNV | | | | *e*S | | | **Sn** | **05 34 06.8** | **-0.8** |
| **BAUV** | **El Baul** | **3.77** | **150** | *e*P | | | **Pn** | **05 33 28.8** | **+0.1** |
| BAUV | | | | *e*S | | | **Sn** | **05 34 12.6** | **-0.1** |
| **SOCV** | **Socops** | **4.01** | **193** | *e*P | | | **Pn** | **05 33 32.6** | **+0.6** |
| **SOCV** | **Socops** | **4.01** | **193** | *e*P | | | **Pn** | **05 33 32.5** | **+0.5** |
| SOCV | | | | *e*S | | | **Sn** | **05 34 18.1** | **-0.5** |
| **BIRV** | **Birongo** | **4.03** | **115** | *e*P | | | **Pn** | **05 33 31.6** | **-0.6** |
| BIRV | | | | *e*S | | | **Sn** | **05 34 16.9** | **-2.1** |
| **SMRC** | **Santa Marta, M** | **4.29** | **256** | *e*P | | | **Pn** | **05 33 39.0** | **+3.1** |
| **MERV** | **Las Mercedes** | **4.67** | **129** | *e*P | | | **Pn** | **05 33 40.7** | **-0.3** |
| MERV | | | | *e*S | | | **Sn** | **05 34 32.6** | **-2.2** |
| **ARGC** | **Ariguani, Magd** | **4.81** | **241** | *e*P | | | **Pn** | **05 33 43.2** | **+0.3** |
| ARGC | | | | *e*S | | | **Sn** | **05 34 37.9** | **-0.3** |
| ARGC | | | | *i* | | | | 05 34 45.8 | |
| | comp=Z,3.5nm,0.3s | | | | | | | | |
| **CAPV** | **Capacho** | **4.91** | **208** | *e*P | | | **Pn** | **05 33 44.8** | **+0.3** |
| CAPV | | | | *e*S | | | **Sn** | **05 34 39.0** | **-2.0** |
| **OCAC** | **Ocana** | **5.15** | **220** | *e*P | | | **Pn** | **05 33 47.9** | **+0.1** |
| OCAC | | | | *e*S | | | **Sn** | **05 34 45.9** | **-1.0** |
| OCAC | | | | *i* | | | | 05 34 51.3 | |
| | comp=Z,19nm,0.5s | | | | | | | | |
| **ELOV** | **Elorza** | **5.21** | **175** | *e*P | | | **Pn** | **05 33 48.6** | **+0.1** |
| ELOV | | | | *e*S | | | **Sn** | **05 34 46.5** | **-1.8** |
| **SMLC** | **San Martn de** | **5.27** | **230** | *e*P | | | **Pn** | **05 33 48.8** | **-0.5** |
| **PAMC** | **Pamplona, Colo** | **5.55** | **209** | *e*P | | | **Pn** | **05 33 54.3** | **+0.8** |
| PAMC | | | | *e*S | | | **Sn** | **05 34 53.2** | **-4.0** |
| PAMC | | | | *i* | | | | 05 35 01.3 | |
| | comp=Z,3.4nm,0.2s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **5.61** | **246** | *e*P | | | **Pn** | **05 33 55.4** | **+1.4** |
| **PCRV** | **Puerto La Cruz** | **5.62** | **111** | *e*P | | | **Pn** | **05 33 54.7** | **+0.5** |
| PCRV | | | | *e*S | | | **Sn** | **05 34 55.5** | **-2.9** |
| **CACV** | **CAICARA DEL OR** | **5.73** | **144** | *e*P | | | Pn | 05 34 00.6 | +4.9 |
| CACV | | | | *e*S | | | **Sn** | **05 35 06.9** | **+5.8** |
| **ZARC** | **Zaragoza, Cauc** | **6.73** | **226** | *e*P | | | **Pn** | **05 34 09.4** | **0.0** |
| **RUSC** | **La Rusia** | **7.00** | **206** | *e*P | | | **Pn** | **05 34 14.6** | **+1.0** |
| **SPBC** | **San Pablo de B** | **7.68** | **212** | *e*P | | | **Pn** | **05 34 22.8** | **+0.2** |

*PRU **03** 05:37:29.8±0.0,51°.43N×16°.19E,h0km*
*VIE **03** 05:37:29.2±1.4,51°.38N×16°.16E,h0km,mb2.4/2,ml2.5/3, Error ellipse: s-maj=10.2km s-min=5.8km az=33.0 67 km WNW of Wroclaw Suspected Mining induced.*

**ISC 03 05:37:28.9**±1.2,**51°.49N**±0°.06×**16°.21E**±0°.03,**h0**km,**n22**, σ0°**92**/44,**Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.65** | **176** | *e*Pg | | | **Pg** | **05 37 41.2** | **-0.1** |
| KSP | | | | *e*Sg | | | **Sg** | **05 37 49.6** | **0.0** |
| **CHVC** | **Chvalec** | **0.91** | **186** | *e*PG | | | **Pg** | **05 37 46.0** | **-0.2** |
| CHVC | | | | *e*SG | | | **Sg** | **05 37 58.0** | **+0.1** |
| | comp=Z,29nm,0.4s | | | | | | | | |
| **UPC** | **Upice** | **0.99** | **188** | *e*PG | | | **Pg** | **05 37 47.9** | **+0.1** |
| UPC | | | | *e*SG | | | **Sg** | **05 38 00.4** | **-0.2** |
| | comp=Z,55nm,0.3s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.14** | **177** | *e*PG | | | **Pg** | **05 37 50.1** | **-0.6** |
| DPC | | | | *e*SG | | | **Sg** | **05 38 04.6** | **-0.8** |
| | comp=Z,17nm,0.5s | | | | | | | | |
| **PVCC** | **Panska Ves** | **1.41** | **228** | *e*PG | | | **Pn** | **05 37 55.4** | **-0.5** |
| PVCC | | | | *e*SG | | | **Sg** | **05 38 14.1** | **-0.2** |
| | comp=Z,68nm,0.3s | | | | | | | | |
| **KRLC** | **Kraliky** | **1.46** | **165** | *e*PG | | | **Pn** | **05 37 56.0** | **-0.5** |
| KRLC | | | | *e*SG | | | **Sg** | **05 38 14.7** | **-1.0** |
| | comp=Z,16nm,0.4s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.56** | **248** | Pg | | | **Pn** | **05 37 57.8** | **0.0** |
| BRG | | | | Sg | | | **Sn** | **05 38 18.3** | **-0.4** |
| BRG | | | | Amp | | | | 05 38 19.9 | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **216** | *e*PG | | | **Pn** | **05 38 02.3** | **+0.6** |
| PRU | | | | *e*SG | | | **Sn** | **05 38 25.9** | **+0.3** |
| | comp=Z,12nm,0.3s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.91** | **153** | *e*PN | | | **Pn** | **05 38 01.9** | **-0.8** |
| MORC | | | | *e*SG | | | **Sn** | **05 38 27.9** | **+0.4** |
| **CLL** | **Collm** | **2.02** | **266** | *e*Pg | | | **Pb** | **05 38 07.0** | **+0.5** |
| CLL | | | | *e*Sg | | | **Sb** | **05 38 33.0** | **+0.9** |
| | comp=Z,17nm,0.6s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.06** | **143** | *e*SG | | | **Sb** | **05 38 32.6** | **-0.6** |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **VRAC** | **Vranov** | **2.19** | **174** | *e*PN | | | **Pn** | **05 38 06.7** | **+0.1** |
| VRAC | | | | *e*SG | | | **Sb** | **05 38 38.0** | **+0.9** |
| **KRUC** | **Moravsky** | **2.43** | **177** | *e*PN | | | **Pn** | **05 38 09.7** | **-0.1** |
| KRUC | | | | *e*SG | | | **Sb** | **05 38 45.1** | **+1.2** |
| **OJC** | **Ojcow** | **2.60** | **118** | *e*Pg | | | **Pg** | **05 38 18.3** | **-0.4** |
| OJC | | | | *e*Sg | | | **Sg** | **05 38 53.5** | **+1.0** |
| **NKC** | **Novy Kostel** | **2.70** | **244** | *e*PN | | | **Pn** | **05 38 12.6** | **-0.9** |
| NKC | | | | *e*PG | | | **Pb** | **05 38 19.0** | **+1.0** |
| NKC | | | | *e*SG | | | **Sg** | **05 38 55.5** | **0.0** |
| | comp=Z,14nm,0.3s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **217** | *e*PN | | | **Pn** | **05 38 14.8** | **-1.5** |
| KHC | | | | *e*PG | | | **Pb** | **05 38 21.8** | **+0.3** |
| KHC | | | | *e*SN | | | **Sn** | **05 38 49.6** | **-2.3** |
| KHC | | | | *e*SG | | | **Sg** | **05 39 00.4** | **-1.6** |
| **CKRC** | **Cesky Krumlov** | **2.94** | **205** | *e*PN | | | **Pn** | **05 38 16.9** | **+0.1** |
| CKRC | | | | *e*PG | | | **Pb** | **05 38 22.6** | **+0.5** |
| CKRC | | | | *e*SG | | | **Sb** | **05 39 00.4** | **+1.9** |
| | comp=Z,5.9nm,0.4s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **3.13** | **137** | *e*PG | | | **Pg** | **05 38 28.9** | **0.0** |
| LANS | | | | *e*SG | | | **Sg** | **05 39 07.8** | **-1.7** |
| **MODS** | **Modra-Piesok** | **3.19** | **167** | *e*SG | | | **Sg** | **05 39 13.3** | **+2.0** |
| **CONA** | **Conrad Observa** | **3.57** | **184** | Sg | | | **Sg** | **05 39 23.7** | **+0.2** |
| | comp=Z,6.0nm,0.4s | | | | | | | | |
| **MOA** | **Molln** | **3.85** | **200** | *i* Pn | | | **Pn** | **05 38 29.5** | **+0.1** |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| MOA | | | | *e*Sg | | | **Sg** | **05 39 31.0** | **-1.7** |
| | comp=Z,3.7nm,0.5s | | | | | | | | |
| **ARSA** | **Arzberg** | **4.26** | **186** | *e*SG | | | **Sg** | **05 39 45.7** | **-0.1** |
| | comp=Z,2.8nm,0.5s | | | | | | | | |

*MAN **03** 05:53:58.9, 9°.27N×126°.79E,h15km,mb4.9,ML3.8,MS3.8*
*NEIC **03** 05:53:59.5±1.5, 9°.31N±0°.07×126°.7E±0°.1,h27km±5km, mb4.6/13, Error ellipse: s-maj=18.9km s-min=8.6km az=107.0*
*IDC **03** 05:54:04.8±2.3, 9°.18N×126°.61E,h80km±22km,mb3.9/20, mb1 4.0/22,mb1mx3.9/49,mbtmp4.2/22,MS3.3/7, Ms1 3.3/7,ms1mx3.0/79,Error ellipse: s-maj=23.0km s-min=11.2km az=77.0*

**ISC 03 05:53:56.5**±1.5,**9°.23N**±0°.03×**126°.91E**±0°.05,**h12**km±9km, **n61**,σ1°**40**/70,**mb4.2**/26,**MS3.2**/5,**8C-5D**,**Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GLSP** | **General Luna,** | **0.95** | **306** | *i* | P | | **Pg** | **05 54 14.5** | **-0.3** |
| GLSP | | | | *e*S | | | **Sg** | **05 54 28.4** | **+1.2** |
| **BIPH** | **Bislig** | **1.17** | **208** | *e*P | | | **Pg** | **05 54 19.4** | **+0.4** |
| BIPH | | | | *e*S | | | **Sb** | **05 54 33.2** | **-0.5** |
| **BUTP** | **Butuan** | **1.30** | **259** | *e*P | | | **Pn** | **05 54 19.2** | **-1.3** |
| BUTP | | | | *e*S | | | **Sb** | **05 54 37.3** | **-0.1** |
| **SCPH** | **Surigao** | **1.50** | **292** | *e*P | | | **Pn** | **05 54 22.7** | **-0.6** |
| SCPH | | | | *e*S | | | **Sb** | **05 54 45.4** | **+1.9** |
| **MSLP** | **Maasin** | **2.21** | **294** | *i* | P | | **Pn** | **05 54 34.2** | **+1.1** |
| MSLP | | | | *i* | S | | **Sb** | **05 55 04.3** | **+0.4** |
| **BUKP** | **Musuan** | **2.27** | **234** | *e*P | | | **Pn** | **05 54 35.3** | **+1.5** |
| BU

comp=Z,1.6nm,0.9s,baz=182,slow=5.0,SNR=4.6

*ISN **03** 05:55:41.9±1.1, 32°.14N×47°.52E, h6km±35km, ML3.2*
*TEH **03** 05:55:42.8, 32°.10N×47°.49E, h20km, ML3.3*
**ISC 03 05:55:46.8±1.3, 32°.14N±0°.05×47°.52E±0°.04, h35km, n30, σ1§28/34, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DHL1** | **Dehloran** | **0.58** | **339** | *e*Pg | **Pn** | **05 55 54.7** | **-3.9** |
| DHL1 | | | | *e*Sg | **Sn** | **05 56 03.7** | **-3.1** |
| **AHWZ** | **Ahwaz** | **1.25** | **130** | *e*Sg | **Sn** | **05 56 24.4** | **+1.0** |
| **RAFI** | **Al-Rafai** | **1.27** | **251** | *e*Pg | **Pn** | **05 56 07.0** | **-1.0** |
| RAFI | | | | *e*Sg | **Sn** | **05 56 23.8** | **0.0** |
| RAFI | | | | AML | AML | 05 56 25.1 | |
| | comp=E,444nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.41** | **11** | *e* | | 05 56 38.1 | |
| | comp=Z,6µm,0.6s | | | | | | |
| IKFM | | | | *e*Pg | **Pn** | **05 56 09.9** | **-0.1** |
| **IBDR** | **Badra** | **1.66** | **306** | *e*Pn | **Pn** | **05 56 13.0** | **-0.3** |
| IBDR | | | | *e*Sn | **Sn** | **05 56 36.2** | **+2.8** |
| **IDOB** | **Doab** | **1.73** | **18** | *e*Pn | **Pn** | **05 56 14.5** | **-0.2** |
| **BMDN** | **Meydan** | **1.88** | **35** | *e*Pn | **Pn** | **05 56 15.4** | **-1.2** |
| BMDN | | | | *e* | | 05 56 49.5 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **2.17** | **349** | *e*Pn | **Pn** | **05 56 22.1** | **+1.5** |
| KCHF | | | | *e* | | 05 56 59.7 | |
| | comp=Z,1µm,0.3s | | | | | | |
| **HSAM** | **Samen** | **2.26** | **23** | *e*Pn | **Pn** | **05 56 21.8** | **-0.1** |
| HSAM | | | | *e* | | 05 57 02.6 | |
| | comp=N,1µm,0.5s | | | | | | |
| **KER** | **Kermanshah** | **2.26** | **352** | *e*Pn | **Pn** | **05 56 21.5** | **-0.4** |
| **IGHG** | **Ghaleghazi** | **2.33** | **340** | *e*Pn | **Pn** | **05 56 23.0** | **+0.2** |
| IGHG | | | | *e* | | 05 57 02.1 | |
| | comp=N,2µm,0.3s | | | | | | |
| **IBZA** | **Bozab** | **2.34** | **7** | *e*Pn | **Pn** | **05 56 22.9** | **-0.2** |
| IBZA | | | | *e* | | 05 57 05.7 | |
| | comp=Z,942nm,0.4s | | | | | | |
| **IDHR** | **Dehrash** | **2.72** | **340** | *e*Pn | **Pn** | **05 56 28.0** | **-0.3** |
| IDHR | | | | *e* | | 05 57 14.1 | |
| | comp=Z,1µm,0.4s | | | | | | |
| **IALM** | **Almabolaq** | **2.77** | **11** | *e*Pn | **Pn** | **05 56 29.0** | **+0.1** |
| **ABEH** | **Behbahan** | **2.80** | **123** | *e*Pn | **Pn** | **05 56 27.9** | **-1.2** |
| **SHK1** | **Shahrekord** | **2.86** | **85** | *e*Pn | **Pn** | **05 56 29.8** | **-0.3** |
| SHK1 | | | | *e* | | 05 56 40.0 | |
| | comp=Z,483nm,0.5s | | | | | | |
| **BHD** | **Baghdad** | **2.88** | **294** | *e*Pn | **Pn** | **05 56 30.0** | **-0.2** |
| BHD | | | | *e*Sn | **Sn** | **05 57 06.0** | **+2.4** |
| **IPIR** | **Pirpir** | **2.90** | **78** | *e*Pn | **Pn** | **05 56 31.0** | **+0.2** |
| IPIR | | | | *e* | | 05 56 41.5 | |
| | comp=Z,723nm,0.4s | | | | | | |
| **HAGD** | **Aghdareh** | **3.00** | **26** | *e*Pn | **Pn** | **05 56 32.2** | **+0.1** |
| HAGD | | | | *e* | | 05 56 34.7 | |
| | comp=Z,768nm,0.2s | | | | | | |
| **IKLH** | **Kolahrood** | **3.62** | **70** | *e*Pn | **Pn** | **05 56 40.7** | **+0.1** |
| IKLH | | | | *e* | | 05 56 41.9 | |
| | comp=Z,592nm,0.1s | | | | | | |
| **QAMS** | **Qamsar** | **3.63** | **63** | *e*Pn | **Pn** | **05 56 41.2** | **+0.5** |
| **KLNJ** | **Kolanjah** | **3.65** | **107** | *e*Pn | **Pn** | **05 56 39.9** | **-1.3** |
| KLNJ | | | | *e* | | 05 57 49.6 | |
| | comp=Z,451nm,0.5s | | | | | | |
| **IRAZ** | **Razeghan** | **3.82** | **31** | *e*Pn | **Pn** | **05 56 44.3** | **+0.9** |
| IRAZ | | | | *e* | | 05 56 45.2 | |
| | comp=Z,1µm,0.4s | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **3.95** | **25** | *e*Pn | **Pn** | **05 56 44.1** | **-1.1** |
| **IQOM** | **Qom** | **4.01** | **47** | *e*Pn | **Pn** | **05 56 45.8** | **-0.2** |
| **IZEF** | **Zefreh** | **4.13** | **78** | *e*Pn | **Pn** | **05 56 47.2** | **-0.5** |
| IZEF | | | | *e* | | 05 56 51.5 | |
| | comp=Z,199nm,0.3s | | | | | | |
| **IRAM** | **Rameseh** | **4.14** | **93** | *e*Pn | **Pn** | **05 56 47.2** | **-0.6** |
| **KRSH** | **Karshahi** | **4.28** | **64** | *e*Pn | **Pn** | **05 56 49.4** | **-0.3** |
| KRSH | | | | *e* | | 05 57 05.3 | |
| | comp=Z,206nm,0.8s | | | | | | |
| **IVRN** | **Varamin** | **4.52** | **50** | *e*Pn | **Pn** | **05 56 52.6** | **-0.2** |
| IVRN | | | | *e* | | 06 04 23.3 | |
| | comp=Z,317nm,0.4s | | | | | | |
| **ISFB** | **Sefidab** | **4.53** | **60** | *e*Pn | **Pn** | **05 56 53.0** | **0.0** |
| ISFB | | | | *e* | | 05 57 32.1 | |
| | comp=Z,68nm,0.8s | | | | | | |

**NOU 03 06:00:24.1, 17°.05S×167°.26E, h21km, MLv4.5/16, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **1.11** | **127** | P | Pn | 06 00 44.5 | +0.1 |
| **RTV** | **Rentapao** | **1.33** | **124** | P | Pn | 06 00 47.9 | +0.4 |
| **LIFNC** | **LIFOU** | **3.71** | **180** | P | Pn | 06 01 19.5 | -0.7 |
| **MARNC** | **Mare, Loyalty** | **4.47** | **171** | P | Pn | 06 01 30.8 | +0.2 |
| **KOUNC** | **Koumac, New Ca** | **4.48** | **219** | P | Pn | 06 01 31.3 | +0.5 |
| **YATNC** | **Mamie plateau,** | **5.00** | **184** | P | Pn | 06 01 37.2 | -0.7 |
| **DZM** | **Mont Dzumac** | **5.05** | **189** | P | Pn | 06 01 39.1 | +0.3 |
| **NOUC** | **Port Laguerre** | **5.11** | **190** | P | Pn | 06 01 40.1 | +0.7 |
| **ONTNC** | **Ouen Toro** | **5.29** | **188** | P | Pn | 06 01 41.6 | -0.3 |
| **OUENC** | **Ouen Island, N** | **5.36** | **184** | P | Pn | 06 01 43.3 | +0.5 |

*UPP **03** 06:06:44.3±0.6, 59°.74N×10°.64E, h0km, ML2.3, Suspected explosion*
*DNK **03** 06:06:44.1±1.7, 59°.74N×10°.53E, h0km, Mc2.5, ML1.6, ML2.3(UPP), Suspected explosion*
*BER **03** 06:06:45.0±0.8, 59°.73N×10°.57E, h0km, ML1.3, Explosion*
**ISC 03 06:06:42.8±0.7, 59°.70N±0°.02×10°.51E±0°.02, h0km, n25, σ0§46/49, Southern Norway**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OSL** | **Oslo** | **0.26** | **25** | *e*P | **Pg** | **06 06 48.6** | **+0.8** |
| OSL | | | | *e*S | **Sg** | **06 06 51.8** | **+0.7** |
| OSL | | | | IAML | | 06 06 52.3 | |
| | comp=Z,68nm,0.2s | | | | | | |
| **KONO** | **Kongsberg** | **0.46** | **264** | *e*P | **Pb** | **06 06 53.9** | **0.0** |
| KONO | | | | *e*S | **Sb** | **06 07 00.7** | **-0.6** |
| KONO | | | | IAML | | 06 07 01.5 | |
| | comp=Z,8.2nm,0.5s | | | | | | |
| **STRU** | **Stroemstad** | **0.76** | **152** | P | **Pb** | **06 06 58.6** | **-0.1** |
| STRU | | | | *i* P | **Pb** | **06 06 58.7** | **-0.1** |
| STRU | | | | S | **Sb** | **06 07 09.0** | **-0.6** |
| STRU | | | | *i* S | **Sb** | **06 07 09.1** | **-0.4** |
| **STRU** | **Stroemstad** | **0.76** | **152** | *e*P | **Pb** | **06 06 58.7** | **-0.1** |
| STRU | | | | *e*S | **Sb** | **06 07 09.2** | **-0.4** |
| **STRU** | **Stroemstad** | **0.76** | **152** | P | **Pb** | **06 06 58.6** | **-0.1** |
| STRU | | | | S | **Sb** | **06 07 09.0** | **-0.6** |
| **FINU** | **Finntorp** | **1.05** | **106** | P | **Pg** | **06 07 02.9** | **0.0** |
| FINU | | | | S | **Sg** | **06 07 16.7** | **+0.2** |
| **FINU** | **Finntorp** | **1.05** | **106** | P | **Pg** | **06 07 02.9** | **0.0** |
| FINU | | | | S | **Sg** | **06 07 16.7** | **+0.2** |
| **NC602** | **NORSAR Array S** | **1.16** | **26** | *e*P | **Pg** | **06 07 04.9** | **-0.1** |
| NC602 | | | | *e*S | **Sg** | **06 07 19.7** | **-0.3** |
| NC602 | | | | IAML | | 06 07 23.5 | |
| | comp=Z,7.6nm,0.2s | | | | | | |
| **NAO01** | **NORSAR Array S** | **1.16** | **9** | *e*P | **Pg** | **06 07 05.0** | **0.0** |
| NAO01 | | | | *e*S | **Sg** | **06 07 20.3** | **+0.2** |
| NAO01 | | | | IAML | | 06 07 23.6 | |
| | comp=Z,6.0nm,0.2s | | | | | | |
| **NB201** | **NORSAR Array S** | **1.41** | **16** | *e*P | **Pn** | **06 07 09.4** | **-0.4** |
| NB201 | | | | *e*S | **Sg** | **06 07 27.8** | **-0.2** |
| NB201 | | | | IAML | | 06 07 29.9 | |
| | comp=Z,7.3nm,0.2s | | | | | | |
| **VANU** | **Vaenersborg** | **1.46** | **146** | P | **Pb** | **06 07 10.9** | **+0.1** |
| **VANU** | **Vaenersborg** | **1.46** | **146** | P | **Pb** | **06 07 10.9** | **+0.1** |
| **SKAR** | **Skarslia** | **1.47** | **313** | *e*P | **Pg** | **06 07 10.8** | **-0.3** |
| SKAR | | | | *e*S | **Sn** | **06 07 30.5** | **-0.2** |
| SKAR | | | | IAML | | 06 07 31.4 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **NASU** | **Vaermlandsnaes** | **1.58** | **118** | P | **Pn** | **06 07 12.2** | **+0.1** |
| NASU | | | | S | **Sn** | **06 07 32.8** | **-0.3** |
| **NASU** | **Vaermlandsnaes** | **1.58** | **118** | P | **Pn** | **06 07 12.2** | **+0.1** |
| NASU | | | | S | **Sn** | **06 07 32.8** | **-0.3** |
| **NC303** | **NORSAR Array S** | **1.59** | **15** | *e*P | **Pn** | **06 07 12.3** | **+0.1** |
| NC303 | | | | *e*S | **Sn** | **06 07 32.5** | **-0.8** |
| NC303 | | | | IAML | | 06 07 35.6 | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **UDD** | **Uddeholm** | **1.61** | **75** | P | **Pn** | **06 07 12.7** | **+0.2** |
| UDD | | | | S | **Sn** | **06 07 33.9** | **0.0** |
| **HOMB** | **Homborsund** | **1.77** | **217** | *i* P | **Pb** | **06 07 16.4** | **+0.2** |
| HOMB | | | | *i* S | **Sb** | **06 07 38.7** | **-0.1** |
| HOMB | | | | IAML | | 06 07 44.2 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **HOMB** | **Homborsund** | **1.77** | **217** | *e*P | **Pb** | **06 07 15.6** | **-0.5** |
| HOMB | | | | *e*S | **Sn** | **06 07 37.6** | **-0.2** |
| **TJOU** | **Tjoern** | **1.77** | **160** | *i* P | **Pg** | **06 07 16.4** | **-0.3** |
| TJOU | | | | P | **Pg** | **06 07 16.5** | **-0.3** |
| TJOU | | | | *i* S | **Sg** | **06 07 39.4** | **-0.4** |
| **TJOU** | **Tjoern** | **1.77** | **160** | P | **Pg** | **06 07 16.5** | **-0.3** |
| **ODD1** | **Odda** | **1.97** | **278** | *e*P | **Pn** | **06 07 18.0** | **+0.5** |
| ODD1 | | | | *e*S | **Sn** | **06 07 42.3** | **-0.6** |
| ODD1 | | | | IAML | | 06 07 50.1 | |
| | comp=Z,5.9nm,0.2s | | | | | | |
| **BLS5** | **Blasjo** | **2.08** | **264** | *e*P | **Pn** | **06 07 19.8** | **+0.9** |
| BLS5 | | | | *e*S | **Sn** | **06 07 46.1** | **+0.6** |
| BLS5 | | | | IAML | | 06 07 52.6 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **BORU** | **Boraas** | **2.39** | **149** | *i* S | **Sb** | **06 07 56.9** | **+0.3** |
| **ONAU** | **Onsala** | **2.43** | **162** | *i* P | **Pb** | **06 07 27.7** | **+0.4** |
| ONAU | | | | *i* S | **Sn** | **06 07 55.8** | **+1.8** |

*NNC **03** 06:14:52.1±5.1, 54°.12N×86°.60E, h0km, mb2.7, mpv2.5, Error ellipse: s-maj=43.0km s-min=24.5km az=17.0, Suspected Mining explosion.*
*IDC **03** 06:14:55.2±2.4, 54°.12N×86°.46E, h0km, mb1 3.0/2, mb1mx2.4/55, mbtmp3.0/2, ML2.8/2, Error ellipse: s-maj=18.7km s-min=11.7km az=58.0*
**ISC 03 06:14:55.8±4.1, 54°.2N±0°.2×86°.3E±0°.2, h0km, n8, σ1§66/13, 3C-7D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.87** | **257** | *i* | | 06 20 20.0 | |
| | baz=81,slow=340,SNR=2.4 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.87** | **257** | ⇑P | **Pg** | **06 15 11.4** | **-1.0** |
| | 0.1nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | **Sb** | **06 15 28.1** | **+2.2** |
| | 0.7nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.87** | **257** | Pg | **Pg** | **06 15 12.6** | **+0.2** |
| | 1.0nm,0.3s,baz=78,slow=16,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 06 15 28.1 | |
| | 2.2nm,0.3s,baz=78,slow=32,SNR=14 | | | | | | |
| **KURK** | **Kurchatov** | **5.80** | **237** | ⇓Pn | **Pn** | **06 16 23.9** | **+0.9** |
| | 0.9nm,0.7s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **06 17 28.4** | **-1.8** |
| | 1.8nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 06 18 06.9 | |
| | 1.9nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.90** | **236** | Pn | **Pn** | **06 16 26.1** | **+1.7** |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=9.7 | | | | | | |
| KURBB | | | | Sn | **Sn** | **06 17 33.4** | **+0.7** |
| | 0.0nm,0.3s,baz=236,slow=14,SNR=1.1 | | | | | | |
| KURBB | | | | Lg | Lg | 06 18 06.9 | |
| | 0.0nm,0.3s,baz=46,slow=31,SNR=4.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.90** | **236** | ⇓Pn | **Pn** | **06 16 21.6** | **-2.9** |
| | 0.9nm,0.5s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **06 17 30.7** | **-2.0** |
| | 3.9nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 06 18 07.7 | |
| | 4.6nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **7.79** | **200** | ⇓Pn | **Pn** | **06 16 50.9** | **+0.5** |
| | 0.2nm,0.4s,baz=27,slow=14,SNR=28 | | | | | | |
| MK31 | | | | Sn | **Sn** | **06 18 19.5** | **+0.2** |
| | 0.2nm,0.5s,baz=20,slow=26,SNR=7.6 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 18 59.8 | |
| | 1.5nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.79** | **200** | Pn | **Pn** | **06 16 51.0** | **+0.5** |
| | 0.3nm,0.3s,baz=25,slow=13,SNR=23 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 18 18.1** | **-1.2** |
| | 0.2nm,0.3s,baz=23,slow=28,SNR=8.6 | | | | | | |
| MKAR | | | | Lg | Lg | 06 19 01.9 | |
| | baz=24,slow=29,SNR=2.4 | | | | | | |

**IDC 03 06:19:37.0±13.0, 6°.70S×129°.37E, h108km±140km, mb3.1/1, mb1 3.3/4, mb1mx2.6/44, mbtmp3.5/4, ML3.4/3, Error ellipse: s-maj=84.8km s-min=58.8km az=31.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.90** | **197** | P | Pn | 06 22 24.8 | +1.6 |
| | 0.2nm,0.3s,baz=21,slow=10,SNR=9.8 | | | | | | |
| FITZ | | | | S | Sn | 06 24 29.2 | -4.8 |
| | 0.2nm,0.3s,baz=155,slow=14,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.02** | **160** | P | Pn | 06 22 49.8 | -1.1 |
| | 0.2nm,0.3s,baz=347,slow=13,SNR=3.2 | | | | | | |
| WRA | | | | S | Sn | 06 25 17.8 | -7.6 |
| | 0.2nm,0.3s,baz=218,slow=9.1,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **17.42** | **166** | P | Pn | 06 23 34.7 | +1.4 |
| | 0.3nm,0.3s,baz=346,slow=10,SNR=27 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.64** | **327** | P | P | 06 30 22.1 | -0.2 |
| | 0.2nm,0.5s,baz=137,slow=7.4,SNR=5.8 | | | | | | |

**JMA 03 06:58:54.5±0.1, 36°.62N×141°.07E, h45km±1km, M3.7, 3C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.40** | **269** | ⇑P | Pn | 06 59 04.3 | 0.0 |
| JHO | | | | S | Sn | 06 59 10.8 | -0.4 |
| **JHYU** | **Hitachinakayam** | **0.48** | **235** | ⇑P | Pn | 06 59 05.2 | 0.0 |
| JHYU | | | | S | Sn | 06 59 12.5 | -0.3 |
| **ONAJ** | **Iwakimizuishiy** | **0.53** | **336** | ⇑P | Pn | 06 59 05.6 | -0.3 |
| ONAJ | | | | S | Sn | 06 59 13.3 | -0.7 |
| **JFFD** | **Fukushimafurud** | **0.62** | **319** | ⇓P | Pn | 06 59 07.1 | 0.0 |
| JFFD | | | | S | Sn | 06 59 15.4 | -0.7 |
| **JFK** | **Kawauchi** | **0.76** | **348** | ⇓P | Pn | 06 59 08.7 | -0.2 |
| JFK | | | | S | Sn | 06 59 18.4 | -1.0 |
| **JYT** | **Yasato** | **0.81** | **241** | P | Pn | 06 59 09.3 | -0.2 |
| JYT | | | | S | Sn | 06 59 18.5 | -1.9 |
| **JFT** | **Otama** | **1.07** | **327** | ⇓P | Pn | 06 59 14.2 | +1.1 |
| JFT | | | | S | Sn | 06 59 27.9 | +1.0 |
| **JMM** | **Marumori** | **1.26** | **350** | P | Pn | 06 59 16.1 | +0.4 |
| JMM | | | | S | Sn | 06 59 31.2 | -0.3 |
| **MAT** | **Matsushiro** | **2.31** | **269** | P | Pn | 06 59 31.6 | +1.6 |
| MAT | | | | S | Sn | 06 59 59.3 | +2.1 |

*TUL **03** 07:00:42.9±1.2, 35°.96N±0°.02×97°.37W±0°.02, h6km±7km, ML3.2, mb_Lg2.9/51(NEIC), Error ellipse: s-maj=2.7km s-min=2.2km az=106.0*
**NEIC 03 07:00:43.0±0.5, 35°.97N±0°.01×97°.39W±0°.02, h5km±2km, Error ellipse: s-maj=3.1km s-min=3.0km az=125.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK029** | **Liberty Lake** | **0.18** | **197** | Pg | Pg | 07 00 46.7 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **0.36** | **209** | Pg | Pg | 07 00 50.1 | +0.2 |
| **OK033** | **Mehan** | **0.37** | **79** | Pg | Pg | 07 00 50.2 | 0.0 |
| **OK009** | **Oakdale Elemen** | **0.39** | **184** | | Pg | 07 00 50.8 | +0.2 |
| **OK025** | **Westminster Rd** | **0.39** | **174** | Pg | Pg | 07 00 50.5 | 0.0 |
| **OK031** | **S. Brethren Rd** | **0.45** | **92** | Pg | Pg | 07 00 51.6 | 0.0 |
| **OK030** | **Cody Creek RV** | **0.49** | **95** | Pg | Pg | 07 00 52.4 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.55** | **86** | | Pg | 07 00 53.5 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.56** | **185** | | Pg | 07 00 53.7 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **0.57** | **184** | Pg | Pg | 07 00 53.8 | -0.1 |
| **QUOK** | **Quay** | **0.59** | **70** | Pg | Pg | 07 00 54.2 | -0.1 |
| **CROK** | **Carrier** | **0.71** | **318** | | Pg | 07 00 57.0 | +0.3 |
| **FNO** | **Franklin** | **0.71** | **181** | Pg | Pg | 07 00 56.4 | -0.3 |
| FNO | | | | IAmb_Lg | | 07 01 06.2 | |
| | comp=Z,124nm,1.1s | | | | | | |
| **BLOK** | **Blackwell** | **0.80** | **10** | Pg | Pg | 07 00 58.3 | 0.0 |
| **W35A** | **Tecumseh** | **0.92** | **153** | Pg | Pg | 07 00 59.6 | -1.0 |
| **GC02** | **Grant County #** | **0.95** | **337** | Pg | Pg | 07 01 01.3 | 0.0 |
| **KAN13** | **South Haven SW** | **1.04** | **356** | Pg | Pg | 07 01 02.6 | -0.3 |
| **OK032** | **Salt Plains WL** | **1.06** | **322** | Pg | Pg | 07 01 03.3 | 0.0 |
| **KAN14** | **Manchester OK** | **1.08** | **335** | Pg | Pg | 07 01 03.6 | -0.2 |
| **KAN17** | **Caldwell West** | **1.11** | **344** | Pg | Pg | 07 01 04.2 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.18** | **37** | Pg | Pg | 07 01 05.1 | -0.5 |
| **KAN10** | **Anthony SW Sta** | **1.28** | **334** | Pn | Pg | 07 01 07.2 | -0.4 |
| **OK035** | **E0210 Rd and N** | **1.29** | **305** | Pn | Pn | 07 01 07.3 | -0.4 |
| **TUL1** | **Leonard** | **1.30** | **92** | Pn | Pn | 07 01 06.1 | -1.7 |
| TUL1 | | | | IAmb_Lg | | 07 01 25.7 | |
| | comp=Z,64nm,1.0s | | | | | | |
| **KAN06** | **Argonia West S** | **1.33** | **344** | Pn | Pn | 07 01 08.0 | -0.2 |
| **KAN16** | **Harper SW Stat** | **1.36** | **337** | Pn | Pn | 07 01 08.0 | -0.7 |
| **U32A** | **Winter Ranch,** | **1.36** | **288** | | Pn | 07 01 08.5 | -0.2 |
| **KAN12** | **Harper NE Stat** | **1.41** | **340** | Pn | Pn | 07 01 09.4 | +0.1 |
| **X34A** | **Smith Ranch, M** | **1.42** | **195** | Pn | Pn | 07 01 09.3 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.68** | **223** | | Pn | 07 01 13.4 | +0.4 |
| **LOOK** | **Love County** | **1.98** | **175** | | Pn | 07 01 17.6 | +0.4 |
| LOOK | | | | IAmb_Lg | | 07 01 46.1 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **2.15** | **129** | Pn | Pn | 07 01 19.7 | +0.2 |
| **U38A** | **Gravette** | **2.47** | **78** | Pn | Pn | 07 01 24.5 | +0.6 |
| **Z35A** | **Perchaven, San** | **2.64** | **178** | | Pn | 07 01 26.6 | +0.4 |
| **R32A** | **Long Quarter,** | **2.66** | **337** | | Pn | 07 01 27.1 | +0.5 |
| **HHAR** | **Hobbs** | **2.81** | **83** | | Pn | 07 01 28.6 | 0.0 |
| **W39A** | **Magazine** | **3.04** | **104** | | Pn | 07 01 31.6 | -0.1 |
| W39A | | | | IAmb_Lg | | 07 02 23.7 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.18** | **11** | IAmb_Lg | | 07 02 28.8 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.36** | **143** | IAmb_Lg | | 07 02 36.5 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.43** | **113** | Pn | Pn | 07 01 37.5 | +0.5 |
| MIAR | | | | IAmb_Lg | | 07 02 37.4 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.69** | **61** | IAmb_Lg | | 07 02 40.3 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.69** | **83** | Pn | Pn | 07 01 40.4 | -0.2 |
| **X40A** | **Basin Creek Fa** | **4.01** | **110** | Pn | Pn | 07 01 45.0 | -0.1 |
| X40A | | | | IAmb_Lg | | 07 02 57.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.19** | **122** | IAmb_Lg | | 07 02 52.9 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.21** | **98** | Pn | Pn | 07 01 47.4 | -0.4 |
| WHAR | | | | IAmb_Lg | | 07 02 58.9 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.27** | **99** | Pn | Pn | 07 01 48.6 | 0.0 |
| W41B | | | | IAmb_Lg | | 07 02 56.2 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.27** | **90** | Pn | Pn | 07 01 47.9 | -0.8 |
| **MGMO** | **Mountain Grove** | **4.29** | **73** | IAmb_Lg | | 07 03 09.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **4.65** | **124** | IAmb_Lg | | 07 03 17.9 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.70** | **59** | IAmb_Lg | | 07 03 19.6 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.76** | **39** | IAmb_Lg | | 07 03 16.4 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **LCAR** | **Lake Charles** | **5.05** | **87** | Pn | Pn | 07 01 58.5 | -0.9 |
| **N35A** | **Tabor** | **5.07** | **15** | IAmb_Lg | | 07 03 29.5 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.15** | **308** | IAmb_Lg | | 07 03 39.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.18** | **182** | IAmb_Lg | | 07 03 38.6 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.34** | **65** | IAmb_Lg | | 07 03 30.0 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.67** | **80** | IAmb_Lg | | 07 03 47.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.77** | **284** | IAmb_Lg | | 07 03 49.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **5.84** | **201** | IAmb_Lg | | 07 04 01.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.92** | **68** | IAmb_Lg | | 07 03 51.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.16** | **325** | IAmb_Lg | | 07 04 06.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **SCIA** | **State Center** | **6.76** | **28** | IAmb_Lg | | 07 04 23.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **8.32** | **309** | IAmb_Lg | | 07 05 13.7 | |
| | comp=Z,15nm,1.1s | | | | | | |

*MRB **03** 07:03:55.6±0.4, 43°.03N×0°.08E, h4km±4km, ML2.3/15, Error ellipse: s-maj=1.6km s-min=1.1km az=187.0*
*LDG **03** 07:03:55.7±0.1, 43°.05N×0°.09E, h8km, Md3.0/2, Ml2.9/26, Error ellipse: s-maj=1.3km s-min=1.2km az=61.0*
*STR **03** 07:03:56.1±0.3, 43°.N±3°×±°, h6km±4km, MLv2.3/7, preliminary*
**ISC 03 07:03:54.1±0.6, 43°.11N±0°.02×0°.08E±0°.02, h11km±3km, n71, σ2§15/127, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYLO** | **Lourdes** | **0.10** | **265** | Pg | **Pg** | **07 03 58.0** | **+1.3** |
| PYLO | | | | Sg | **Sg** | **07 03 59.9** | **+1.2** |
| **EPF** | **Esparros** | **0.20** | **112** | *e*Pg | **Pg** | **07 03 59.5** | **+1.1** |
| EPF | | | | *e*Sg | **Sg** | **07 04 02.1** | **+0.7** |
| | 295nm,0.2s | | | | | | |
| **EPF** | **Esparros** | **0.20** | **112** | Pg | **Pg** | **07 03 59.5** | **+1.1** |
| EPF | | | | Sg | **Sg** | **07 04 02.1** | **+0.7** |
| **VIEF** | **Viey** | **0.23** | **191** | Pg | **Pg** | **07 03 58.9** | **+0.1** |
| VIEF | | | | Sg | **Sg** | **07 04 01.4** | **-0.6** |
| **FMON** | **Montouss** | **0.25** | **100** | P | **Pg** | **07 04 00.4** | **+1.2** |
| FMON | | | | S | **Sg** | **07 04 03.9** | **+1.2** |
| **ECHI** | **Chisagues Biel** | **0.45** | **169** | Pg | **Pg** | **07 04 02.7** | **-0.2** |
| ECHI | | | | Sg | **Sg** | **07 04 07.8** | **-1.1** |
| **ECHI** | **Chisagues Biel** | **0.45** | **169** | P | **Pg** | **07 04 02.7** | **-0.2** |
| ECHI | | | | S | **Sg** | **07 04 07.8** | **-1.1** |
| | 669nm,0.1s | | | | | | |
| **ETSF** | **Etsaut** | **0.51** | **246** | *e*Pg | **Pg** | **07 04 04.6** | **+0.5** |
| ETSF | | | | *e*Sg | **Sg** | **07 04 10.9** | **0.0** |
| | 302nm,0.3s | | | | | | |
| **ETSF** | **Etsaut** | **0.51** | **246** | Pg | **Pg** | **07 04 04.6** | **+0.5** |
| **ATE** | **Arette** | **0.57** | **268** | Pg | **Pg** | **07 04 06.1** | **+0.9** |
| ATE | | | | Sg | **Sg** | **07 04 14.3** | **+1.5** |
| **ATE** | **Arette** | **0.57** | **268** | P | **Pg** | **07 04 06.1** | **+0.9** |
| ATE | | | | S | **Sg** | **07 04 14.6** | **+1.8** |
| | 31nm,0.1s | | | | | | |
| **CARA** | **Val d'Aran** | **0.67** | **126** | P | **Pg** | **07 04 07.6** | **+0.5** |
| CARA | | | | S | **Sg** | **07 04 16.4** | **+0.5** |
| | 128nm,0.2s | | | | | | |
| **MLS** | **Moulis** | **0.76** | **101** | P | **Pg** | **07 04 09.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CPAL** | **Palau Saverder** | **2.41** | **108** | P | | **Pn** | 07 04 35.3 | +1.9 |
| CPAL | | | | S | | **Sn** | 07 05 04.3 | +1.4 |
| **RJF** | **Les Rejaudoux** | **2.43** | **25** | *e*Pn | | **Pn** | 07 04 35.6 | +1.9 |
| **RJF** | **Les Rejaudoux** | **2.43** | **25** | *e*Pg | | **Pb** | 07 04 41.4 | +3.6 |
| RJF | | | | *e*Sn | | **Sn** | 07 05 04.2 | +0.8 |
| RJF | | | | *e*Sg | | **Sb** | 07 05 13.2 | +5.5 |
| | 15nm,0.2s | | | | | | | |
| **LASF** | **Ste Croix** | **2.91** | **69** | *e*Pn | | **Pn** | 07 04 41.7 | +1.4 |
| **LASF** | **Ste Croix** | **2.91** | **69** | *e*Pg | | **Pb** | 07 04 49.7 | +3.7 |
| LASF | | | | *e*Sn | | **Sn** | 07 05 15.8 | +0.5 |
| LASF | | | | *e*Sg | | **Sg** | 07 05 27.9 | +0.4 |
| | 4.0nm,0.2s | | | | | | | |
| **MFF** | **Saint Martin d** | **3.50** | **357** | *e*Pn | | **Pn** | 07 04 49.4 | +1.0 |
| **MFF** | **Saint Martin d** | **3.50** | **357** | *e*Pg | | Pb | 07 05 01.7 | +5.7 |
| MFF | | | | *e*Sg | | **Sb** | 07 05 45.9 | +7.4 |
| | 6.9nm,0.2s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.52** | **25** | *e*Pn | | **Pn** | 07 04 49.7 | +0.9 |
| **TCF** | **Toulx Ste Croi** | **3.52** | **25** | *e*Pg | | Pb | 07 05 01.4 | +4.9 |
| TCF | | | | *e*Sn | | **Sn** | 07 05 30.5 | 0.0 |
| TCF | | | | *e*Sg | | **Sb** | 07 05 46.2 | +6.9 |
| | 4.0nm,0.2s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **3.75** | **61** | *e*Pn | | **Pn** | 07 04 53.7 | +1.8 |
| **VIVF** | **Saint-Julien-l** | **3.75** | **61** | *e*Pg | | Pb | 07 05 05.3 | +5.1 |
| VIVF | | | | *e*Sn | | **Sn** | 07 05 35.0 | -1.0 |
| VIVF | | | | *e*Sg | | **Sg** | 07 05 53.6 | -0.7 |
| | 8.9nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **3.97** | **29** | *e*Pn | | **Pn** | 07 04 56.6 | +1.7 |
| **BGF** | **Bois d'Agland** | **3.97** | **29** | *e*Pg | | Pb | 07 05 10.1 | +6.0 |
| BGF | | | | *e*Sn | | **Sn** | 07 05 40.7 | -0.8 |
| BGF | | | | *e*Sg | | **Sb** | 07 06 00.5 | +8.4 |
| | 20nm,0.3s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **4.09** | **76** | *e*Pn | | **Pn** | 07 04 56.6 | +0.1 |
| **SMRF** | **Simiane la Rot** | **4.09** | **76** | *e*Pg | | Pb | 07 05 11.0 | +4.9 |
| SMRF | | | | *e*Sn | | **Sn** | 07 05 42.1 | -2.3 |
| SMRF | | | | *e*Sg | | **Sg** | 07 06 05.6 | +0.3 |
| | 1.7nm,0.3s | | | | | | | |
| **AVF** | **Avril sur Loir** | **4.35** | **31** | *e*Pn | | **Pn** | 07 05 02.3 | +2.2 |
| **AVF** | **Avril sur Loir** | **4.35** | **31** | *e*Pg | | Pb | 07 05 17.0 | +6.4 |
| AVF | | | | *e*Sn | | **Sn** | 07 05 49.4 | -1.5 |
| AVF | | | | *e*Sg | | **Sg** | 07 06 12.6 | -1.2 |
| | 8.2nm,0.4s | | | | | | | |
| **SMF** | **Signal de Mont** | **4.43** | **36** | *e*Pn | | **Pn** | 07 05 01.6 | +0.3 |
| **SMF** | **Signal de Mont** | **4.43** | **36** | *e*Pg | | **Pg** | 07 05 19.2 | +0.3 |
| SMF | | | | *e*Sn | | **Sn** | 07 05 51.1 | -1.8 |
| SMF | | | | *e*Sg | | **Sg** | 07 06 15.9 | -0.4 |
| | 2.9nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.56** | **65** | *e*Pn | | **Pn** | 07 05 04.9 | +1.8 |
| ORIF | | | | *e*Sn | | **Sn** | 07 05 55.3 | -0.8 |
| **SSF** | **Saint Saulge** | **4.64** | **30** | *e*Pn | | **Pn** | 07 05 04.5 | +0.4 |
| **SSF** | **Saint Saulge** | **4.64** | **30** | *e*Pg | | Pb | 07 05 21.8 | +6.4 |
| SSF | | | | *e*Sn | | **Sn** | 07 05 56.8 | -1.1 |
| SSF | | | | *e*Sg | | **Sg** | 07 06 22.4 | -0.5 |
| | 3.2nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **4.94** | **31** | *e*Pn | | **Pn** | 07 05 09.4 | +1.1 |
| | baz=211 | | | | | | | |
| **LOR** | **Lormes** | **4.94** | **31** | *e*Pg | | Pb | 07 05 26.7 | +6.1 |
| | baz=210 | | | | | | | |
| LOR | | | | *e*Sn | | **Sn** | 07 06 03.1 | -2.4 |
| LOR | | | | *e*Sg | | **Sg** | 07 06 30.4 | -2.3 |
| | 3.9nm,0.3s,baz=203 | | | | | | | |
| **GRR** | **Gorron** | **5.32** | **353** | *e*Pn | | **Pn** | 07 05 14.9 | +1.4 |
| **GRR** | **Gorron** | **5.32** | **353** | *e*Pg | | Pb | 07 05 34.6 | +7.5 |
| GRR | | | | *e*Sn | | **Sn** | 07 06 12.7 | -2.0 |
| GRR | | | | *e*Sg | | **Sg** | 07 06 43.6 | -1.3 |
| | 2.8nm,0.3s | | | | | | | |
| **QUIF** | **Quistinic** | **5.32** | **336** | *e*Pn | | **Pn** | 07 05 14.5 | +1.0 |
| **QUIF** | **Quistinic** | **5.32** | **336** | *e*Pg | | **Pg** | 07 05 34.8 | -1.2 |
| QUIF | | | | *e*Sn | | **Sn** | 07 06 13.7 | -1.0 |
| QUIF | | | | *e*Sg | | **Sg** | 07 06 43.1 | -1.8 |
| | 3.3nm,0.3s | | | | | | | |
| **SGMF** | **Saint Gilles** | **5.47** | **341** | *e*Pn | | **Pn** | 07 05 16.5 | +1.0 |
| SGMF | | | | *e*Sn | | **Sn** | 07 06 16.6 | -1.8 |
| SGMF | | | | *e*Sg | | **Sg** | 07 06 47.3 | -2.2 |
| | 2.1nm,0.3s | | | | | | | |
| **LDF** | **La Druitiere** | **5.49** | **359** | *e*Pn | | **Pn** | 07 05 16.2 | +0.5 |
| **LDF** | **La Druitiere** | **5.49** | **359** | *e*Pg | | Pb | 07 05 37.5 | +7.6 |
| LDF | | | | *e*Sn | | **Sn** | 07 06 16.7 | -2.2 |
| LDF | | | | *e*Sg | | **Sg** | 07 06 47.8 | -2.4 |
| | 1.9nm,0.3s | | | | | | | |
| **FLN** | **La Foliniere** | **5.67** | **356** | *e*P | | **Pn** | 07 05 22.3 | +4.1 |
| | baz=175 | | | | | | | |
| FLN | | | | *e*Sg | | **Sg** | 07 06 53.9 | -2.1 |
| | 2.4nm,0.3s | | | | | | | |
| **ROSF** | **Rostrenen** | **5.73** | **337** | *e*Pn | | **Pn** | 07 05 19.6 | +0.5 |
| ROSF | | | | *e*Sn | | **Sn** | 07 06 22.4 | -2.4 |
| | 1.3nm,0.2s | | | | | | | |
| ROSF | | | | *e*Sg | | **Sg** | 07 06 56.4 | -1.6 |
| | 3.4nm,0.3s | | | | | | | |

*IDC* ***03*** *07:05:21.9±0.8,50°.05N×78°.73E,h0km,mb1 2.7/3, mb1mx2.3/61,mbtmp2.7/3,ML2.4/3,Error ellipse: s-maj=12.6km s-min=5.7km az=60.0*
*NNC* ***03*** *07:05:21.2±0.3,50°.02N×78°.70E,h0km,mb3.1,mpv2.6, Error ellipse: s-maj=7.7km s-min=1.7km az=75.0, Suspected Mining explosion.*

**ISC 03 07:05:21.9±0.9,50°.01N±0°.05×78°.56E±0°.08,h0km,n21, σ0s77/30,15C-13D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.57** | **358** | ⇓P | **Pg** | **07 05 32.4** | **-0.5** |
| KUR07 | | | | ⇓S | **Sg** | **07 05 41.0** | **+0.8** |
| **KUR06** | **Kurchatov Arra** | **0.59** | **358** | ⇓P | **Pg** | **07 05 32.8** | **-0.4** |
| KUR06 | | | | ⇑S | **Sg** | **07 05 41.3** | **+0.5** |
| **KUR14** | **Kurchatov Arra** | **0.60** | **2** | ⇑P | **Pg** | **07 05 32.7** | **-0.8** |
| KUR14 | | | | ⇓S | **Sg** | **07 05 41.2** | **-0.1** |
| **KUR15** | **Kurchatov Arra** | **0.61** | **0** | ⇑P | **Pg** | **07 05 32.8** | **-0.7** |
| KUR15 | | | | ⇓S | **Sg** | **07 05 41.4** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **0.61** | **359** | Pg | **Pg** | **07 05 33.2** | **-0.4** |
| | 1.1nm,0.3s,baz=166,slow=19,SNR=64 | | | | | | |
| KURBB | | | | Lg | Lg | 07 05 41.8 | |
| | 3.4nm,0.3s,baz=134,slow=54,SNR=24 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.61** | **359** | ⇓P | **Pg** | **07 05 33.1** | **-0.5** |
| | 7.3nm,0.3s | | | | | | |
| KURBB | | | | ⇑S | **Sg** | **07 05 41.6** | **+0.1** |
| | 140nm,0.5s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.62** | **357** | ⇑P | **Pg** | **07 05 33.2** | **-0.4** |
| KUR16 | | | | ⇓S | **Sg** | **07 05 42.0** | **+0.4** |
| **KUR17** | **Kurchatov Arra** | **0.62** | **355** | ⇑P | **Pg** | **07 05 33.5** | **-0.3** |
| KUR17 | | | | ⇓S | **Sg** | **07 05 42.6** | **+0.8** |
| **KUR05** | **Kurchatov Arra** | **0.63** | **359** | ⇓P | **Pg** | **07 05 33.3** | **-0.6** |
| KUR05 | | | | ⇑S | **Sg** | **07 05 42.3** | **+0.2** |
| **KUR04** | **Kurchatov Arra** | **0.65** | **359** | ⇓P | **Pg** | **07 05 33.8** | **-0.5** |
| KUR04 | | | | ⇑S | **Sg** | **07 05 42.9** | **+0.1** |
| **KURK** | **Kurchatov** | **0.70** | **3** | ⇑P | **Pg** | **07 05 34.3** | **-1.1** |
| | 2.0nm,0.3s | | | | | | |
| KURK | | | | ⇑S | **Sg** | **07 05 44.4** | **-0.1** |
| | 35nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **3.93** | **143** | ⇑Pg | **Pb** | **07 06 32.9** | **+0.8** |
| | 1.8nm,0.6s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 07 07 23.0 | |
| | 1.2nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **4.07** | **141** | ⇑Pn | **Pn** | **07 06 25.5** | **+0.1** |
| | 0.2nm,0.2s,baz=323,slow=10.0,SNR=24 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **07 06 34.5** | **+0.1** |
| | 1.0nm,0.5s,baz=324,slow=13,SNR=10 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 07 28.0 | |
| | 1.5nm,0.5s,baz=333,slow=26,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.07** | **141** | Pn | **Pn** | **07 06 24.4** | **-1.0** |
| | 0.2nm,0.3s,baz=322,slow=10,SNR=37 | | | | | | |
| MKAR | | | | Pg | **Pb** | **07 06 32.3** | **-2.1** |
| | 0.6nm,0.3s,baz=323,slow=14,SNR=20 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 07 15.6** | **+1.9** |
| | 0.5nm,0.3s,baz=334,slow=23,SNR=5.6 | | | | | | |
| MKAR | | | | Lg | Lg | 07 07 26.6 | |
| | 1.2nm,0.3s,baz=335,slow=28,SNR=11 | | | | | | |
| **OTUK** | **Ortayu** | **4.45** | **249** | ⇑Lg | Lg | 07 07 45.0 | |
| | 6.7nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.52** | **42** | Pn | **Pn** | **07 06 45.8** | **+0.5** |
| | 0.6nm,0.3s,baz=234,slow=14,SNR=9.2 | | | | | | |
| ZALV | | | | Lg | Lg | 07 08 16.0 | |
| | 0.4nm,0.3s,baz=228,slow=35,SNR=5.6 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.52** | **42** | *i* | | 07 39 41.2 | |
| | baz=223,slow=334,SNR=5.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **5.92** | **304** | Pn | **Pn** | **07 06 51.4** | **+0.6** |
| | 0.1nm,0.3s,baz=89,slow=14,SNR=1.7 | | | | | | |
| BVAR | | | | Sn | **Sn** | **07 07 59.1** | **-0.2** |
| | 0.4nm,0.3s,baz=99,slow=26,SNR=5.2 | | | | | | |
| BVAR | | | | Lg | Lg | 07 08 31.9 | |
| | 0.4nm,0.3s,baz=110,slow=32,SNR=2.7 | | | | | | |
| **PDGK** | **Podgornoye** | **6.72** | **174** | ⇓Lg | Lg | 07 08 52.7 | |
| | 2.6nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.38** | **197** | ⇑Lg | Lg | 07 09 16.6 | |
| | 2.7nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **7.89** | **202** | Lg | Lg | 07 09 32.6 | |
| | 0.4nm,0.3s,baz=180,slow=20,SNR=4.0 | | | | | | |

**IDC 03 07:07:00.2±3.7,53°.72N×90°.92E,h0km,mb1 3.0/3, mb1mx2.9/64,mbtmp3.0/3,ML2.1/2,Error ellipse: s-maj=30.2km s-min=25.6km az=47.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.62** | **276** | *i* | | 07 33 10.0 | |
| | baz=95,slow=343,SNR=1.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.62** | **276** | Pn | Pn | 07 07 59.0 | +1.5 |
| | 0.3nm,0.3s,baz=89,slow=14,SNR=6.4 | | | | | | |
| ZALV | | | | Lg | Lg | 07 08 52.7 | |
| | 1.5nm,0.3s,baz=91,slow=25,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.22** | **253** | Pn | Pn | 07 08 59.7 | -0.9 |
| | 0.1nm,0.3s,baz=64,slow=14,SNR=4.7 | | | | | | |
| KURBB | | | | Sn | Sn | 07 10 34.0 | -0.3 |
| | 0.0nm,0.3s,baz=66,slow=25,SNR=7.0 | | | | | | |
| KURBB | | | | Lg | Lg | 07 11 20.6 | |
| | 0.0nm,0.3s,baz=60,slow=26,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.86** | **222** | Pn | Pn | 07 09 10.4 | +0.9 |
| | baz=50,slow=16,SNR=1.5 | | | | | | |
| MKAR | | | | Sn | Sn | 07 10 48.8 | -1.2 |
| | 0.1nm,0.3s,baz=38,slow=26,SNR=2.2 | | | | | | |
| MKAR | | | | Lg | Lg | 07 11 33.6 | |
| | 0.0nm,0.3s,baz=32,slow=31,SNR=2.5 | | | | | | |
| **SONM** | **Songino Array** | **11.42** | **115** | Lg | Lg | 07 12 57.0 | |
| | 0.1nm,0.3s,baz=301,slow=28,SNR=5.0 | | | | | | |

**IDC 03 07:12:15.3±1.3,23°.43N×142°.50E,h0km,mb3.7/4, mb1 3.9/4,mb1mx3.1/55,mbtmp3.7/4,MS3.0/1,Ms1 3.0/1, ms1mx2.4/84,Error ellipse: s-maj=101.8km s-min=28.3km az=98.0,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **13.58** | **345** | LR | LR | 07 20 30.4 | |
| | comp=Z,57nm,18.4s,baz=251,slow=36 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.97** | **95** | T | T | 07 41 17.2 | |
| | baz=283,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.97** | **95** | T | T | 07 41 19.1 | |
| | baz=283,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.99** | **95** | T | T | 07 41 19.8 | |
| | baz=283,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **23.10** | **98** | T | T | 07 41 27.1 | |
| | baz=285,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.11** | **98** | T | T | 07 41 25.9 | |
| | baz=285,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.12** | **98** | T | T | 07 41 26.9 | |
| | baz=285,slow=75 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.84** | **191** | P | P | 07 20 23.3 | -0.1 |
| | 1.0nm,0.8s,baz=9.9,slow=8.2,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **47.56** | **191** | P | P | 07 20 52.6 | -0.2 |
| | 0.7nm,0.7s,baz=8.2,slow=8.4,SNR=7.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.22** | **28** | P | P | 07 23 59.5 | -0.1 |
| | 0.2nm,0.8s,baz=294,slow=5.8,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **81.35** | **334** | P | P | 07 24 33.7 | +0.2 |
| | 1.6nm,0.8s,baz=53,slow=7.5,SNR=3.8 | | | | | | |

*IDC* ***03*** *07:24:54.0±2.4, 18°.90N×64°.03W,h0km,mb3.4/4, mb1 3.9/7,mb1mx3.6/41,mbtmp3.6/7,ML3.5/3,MS2.3/1, Ms1 2.3/1,ms1mx2.2/45,Error ellipse: s-maj=52.6km s-min=26.1km az=102.0*
*TRN* ***03*** *07:24:57.6, 18°.78N×64°.31W,h17km,M3.9(RSPR)*
*RSPR* ***03*** *07:24:59.9, 18°.81N×64°.15W,h43km±4km,MD3.9/16*
*NEIC* ***03*** *07:25:00.3±1.3, 18°.80N±0°.08×64°.30W±0°.03, h28km±3km, Error ellipse: s-maj=11.8km s-min=4.1km az=169.0*
*OSPL* ***03*** *07:25:01.2±3.5, 18°.65N×64°.13W,h38km±53km,ML3.7*

**ISC 03 07:24:59.2±1.4,18°.84N±0°.07×64°.27W±0°.03,h26km±11km, n109,σ1s55/141,mb3.5/4,9C-25D,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TBVI** | **Tortola** | **0.53** | **218** | ⇑*i*P | **Pn** | **07 25 11.1** | **-0.1** |
| **TBVI** | **Tortola** | **0.53** | **218** | ⇑*i*P | **Pn** | **07 25 11.1** | **-0.1** |
| **STVI** | **Saint Thomas** | **0.81** | **233** | ⇓*i*P | **Pb** | **07 25 14.8** | **+0.1** |
| **STVI** | **Saint Thomas** | **0.81** | **233** | ⇓*i*P | **Pb** | **07 25 14.8** | **+0.1** |
| STVI | | | | *e*S | **Sb** | **07 25 25.5** | **+0.3** |
| **STVI** | **Saint Thomas** | **0.81** | **233** | | **Pb** | **07 25 14.8** | **+0.1** |
| STVI | | | | | **Sb** | **07 25 25.5** | **+0.3** |
| **CUPR** | **Culebra, Puert** | **1.10** | **241** | ⇓*e*P | **Pn** | **07 25 18.6** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **1.10** | **241** | *e*S | **Sb** | **07 25 33.0** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **1.10** | **241** | | **Pn** | **07 25 18.6** | **-0.3** |
| CUPR | | | | | **Sb** | **07 25 33.0** | **-0.3** |
| **SMRT** | **St. Maarten** | **1.38** | **125** | ⇑*i*P | **Pb** | **07 25 23.6** | **-0.7** |
| SMRT | | | | *e*S | **Sb** | **07 25 42.1** | **+0.5** |
| **SMRT** | **St. Maarten** | **1.38** | **125** | | **Pb** | **07 25 23.7** | **-0.7** |
| SMRT | | | | IAML | | 07 25 45.2 | |
| | comp=N,3μm,0.2s | | | | | | |
| SMRT | | | | IAML | | 07 25 45.9 | |
| | comp=E,3μm,0.2s | | | | | | |
| **MTP** | **Monte Pirata** | **1.42** | **239** | ⇓*i*P | **Pn** | **07 25 23.5** | **+0.1** |
| **MTP** | **Monte Pirata** | **1.42** | **239** | ⇓*i*P | **Pn** | **07 25 23.5** | **+0.1** |
| MTP | | | | *e*S | **Sn** | **07 25 41.5** | **+0.2** |
| **MTP** | **Monte Pirata** | **1.42** | **239** | | **Pn** | **07 25 23.5** | **+0.1** |
| MTP | | | | | **Sn** | **07 25 41.5** | **+0.2** |
| **MTP** | **Monte Pirata** | **1.42** | **239** | IAML | | 07 25 45.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| **CBYP** | **Canovanas** | **1.61** | **250** | ⇓*e*P | **Pn** | **07 25 25.7** | **-0.3** |
| **CBYP** | **Canovanas** | **1.61** | **250** | ⇓*e*P | **Pn** | **07 25 25.7** | **-0.3** |
| CBYP | | | | *e*S | **Sn** | **07 25 48.0** | **+2.0** |
| **CBYP** | **Canovanas** | **1.61** | **250** | | **Pn** | **07 25 25.7** | **-0.3** |
| CBYP | | | | | **Sn** | **07 25 48.0** | **+2.0** |
| **HUMP** | **Col San Antoni** | **1.65** | **245** | ⇓*i*P | **Pn** | **07 25 26.6** | **0.0** |
| **HUMP** | **Col San Antoni** | **1.65** | **245** | ⇓*i*P | **Pn** | **07 25 26.6** | **0.0** |
| HUMP | | | | *e*S | **Sn** | **07 25 47.6** | **+0.6** |
| **HUMP** | **Col San Antoni** | **1.65** | **245** | | **Pn** | **07 25 26.6** | **0.0** |
| HUMP | | | | | **Sn** | **07 25 47.6** | **+0.6** |
| **HUMP** | **Col San Antoni** | **1.65** | **245** | IAML | | 07 25 53.6 | |
| | comp=N,1μm,0.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.80** | **253** | ⇓*e*P | **Pn** | **07 25 28.3** | **-0.3** |
| **GCPR** | **Guaynabo City** | **1.80** | **253** | *e*S | **Sn** | **07 25 51.8** | **+1.1** |
| **GCPR** | **Guaynabo City** | **1.80** | **253** | | **Pn** | **07 25 28.3** | **-0.3** |
| GCPR | | | | | **Sn** | **07 25 51.8** | **+1.1** |
| **PDPR** | **Patillas Dam,** | **1.85** | **244** | | **Pn** | **07 25 29.2** | **-0.1** |
| PDPR | | | | IAML | | 07 26 00.9 | |
| | comp=E,703nm,0.2s | | | | | | |
| **SJG** | **San Juan** | **1.93** | **248** | Pn | **Pn** | **07 25 30.3** | **-0.1** |
| | comp=E,43nm,0.3s,baz=80,slow=14,SNR=102 | | | | | | |
| SJG | | | | Sn | **Sn** | **07 25 53.4** | **-0.3** |
| | comp=E,100nm,0.3s,baz=328,slow=17,SNR=12 | | | | | | |
| SJG | | | | LR | LR | 07 26 14.2 | |
| | comp=E,67nm,19.9s,baz=7.5,slow=37 | | | | | | |
| **SJG** | **San Juan** | **1.93** | **248** | | **Pn** | **07 25 30.2** | **-0.1** |
| SJG | | | | IAML | | 07 25 59.0 | |
| | comp=E,684nm,0.3s | | | | | | |
| **IGPR** | **InterUniversit** | **1.95** | **244** | ⇓*e*P | **Pn** | **07 25 31.0** | **+0.4** |
| **IGPR** | **InterUniversit** | **1.95** | **244** | *e*S | **Sn** | **07 25 56.1** | **+1.8** |
| **IGPR** | **InterUniversit** | **1.95** | **244** | | **Sn** | **07 25 56.1** | **+1.8** |
| **SKOC** | **St. Kitts, UWI** | **2.12** | **136** | *e*P | **Pn** | **07 25 34.1** | **+1.1** |
| SKOC | | | | *e*S | **Sn** | **07 25 59.8** | **+1.1** |
| **EMPR** | **Esperanza - Ma** | **2.17** | **261** | ⇓*e*P | **Pn** | **07 25 34.2** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **2.17** | **261** | *e*S | **Sn** | **07 26 01.9** | **+2.1** |
| **EMPR** | **Esperanza - Ma** | **2.17** | **261** | | **Pn** | **07 25 34.2** | **+0.5** |
| EMPR | | | | | **Sn** | **07 26 01.9** | **+2.1** |
| **EMPR** | **Esperanza - Ma** | **2.17** | **261** | IAML | | 07 26 05.0 | |
| | comp=N,730nm,0.8s | | | | | | |
| **CELP** | **Cerrillos** | **2.32** | **251** | ⇓*i*P | **Pn** | **07 25 36.1** | **+0.3** |
| **CELP** | **Cerrillos** | **2.32** | **251** | ⇓*i*P | **Pn** | **07 25 36.1** | **+0.3** |
| CELP | | | | *e*S | **Sn** | **07 26 05.0** | **+1.5** |
| **CELP** | **Cerrillos** | **2.32** | **251** | | **Pn** | **07 25 36.1** | **+0.3** |
| CELP | | | | | **Sn** | **07 26 05.0** | **+1.5** |
| **CELP** | **Cerrillos** | **2.32** | **251** | IAML | | 07 26 05.3 | |
| | comp=E,623nm,0.5s | | | | | | |
| CELP | | | | IAML | | 07 26 05.5 | |
| | comp=N,460nm,0.3s | | | | | | |
| **ICMP** | **Isla Caja de M** | **2.34** | **246** | ⇓*e*P | **Pn** | **07 25 37.4** | **+1.3** |
| **ICMP** | **Isla Caja de M** | **2.34** | **246** | | **Pn** | **07 25 37.4** | **+1.3** |
| **ICMP** | **Isla Caja de M** | **2.34** | **246** | IAML | | 07 26 11.9 | |
| | comp=E,440nm,0.7s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.35** | **251** | ⇑*e*P | **Pn** | **07 25 36.6** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **2.35** | **251** | ⇑*e*P | **Pn** | **07 25 36.6** | **+0.4** |
| OBIP | | | | *e*S | **Sn** | **07 26 04.9** | **+0.6** |
| **OBIP** | **Obispado Ponce** | **2.35** | **251** | | **Pn** | **07 25 36.6** | **+0.4** |
| OBIP | | | | | **Sn** | **07 26 04.9** | **+0.6** |
| **UUPR** | **Utuado, UPR, P** | **2.40** | **256** | ⇓*e*P | **Pn** | **07 25 37.4** | **+0.5** |
| **UUPR** | **Utuado, UPR, P** | **2.40** | **256** | *e*S | **Sn** | **07 26 06.8** | **+1.4** |
| **UUPR** | **Utuado, UPR, P** | **2.40** | **256** | | **Pn** | **07 25 37.4** | **+0.5** |
| UUPR | | | | | **Sn** | **07 26 06.8** | **+1.4** |
| **AOPR** | **Arecibo Observ** | **2.41** | **259** | ⇑*e*P | **Pn** | **07 25 37.2** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **2.41** | **259** | *e*P | **Pn** | **07 25 37.1** | **+0.1** |
| AOPR | | | | *e*S | **Sn** | **07 26 06.1** | **+0.5** |
| **AOPR** | **Arecibo Observ** | **2.41** | **259** | | **Pn** | **07 25 37.2** | **+0.3** |
| AOPR | | | | | **Sn** | **07 26 06.8** | **+1.1** |
| **GBPR** | **Guanica, Bosqu** | **2.62** | **251** | ⇓*e*P | **Pn** | **07 25 41.3** | **+1.4** |
| **GBPR** | **Guanica, Bosqu** | **2.62** | **251** | ⇓*e*P | **Pn** | **07 25 41.3** | **+1.4** |
| GBPR | | | | *e*S | **Sn** | **07 26 13.5** | **+2.6** |
| **ANWB** | **Willy Bob** | **2.63** | **116** | *e*P | **Pn** | **07 25 40.1** | **0.0** |
| ANWB | | | | *e*S | **Sb** | **07 26 14.7** | **-2.9** |
| **AGPR** | **Aguadilla, PR** | **2.72** | **263** | ⇓*e*P | **Pn** | **07 25 41.8** | **+0.5** |
| **AGPR** | **Aguadilla, PR** | **2.72** | **263** | ⇓*e*P | **Pn** | **07 25 41.8** | **+0.5** |
| AGPR | | | | *e*S | **Sn** | **07 26 14.8** | **+1.5** |
| **AGPR** | **Aguadilla, PR** | **2.72** | **263** | | **Pn** | **07 25 41.8** | **+0.5** |
| AGPR | | | | | **Sn** | **07 26 14.8** | **+1.5** |
| **AGPR** | **Aguadilla, PR** | **2.72** | **263** | IAML | | 07 26 17.5 | |
| | comp=N,499nm,0.5s | | | | | | |
| AGPR | | | | IAML | | 07 26 21.7 | |
| | comp=E,401nm,0.5s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.72** | **263** | *i* P | **Pn** | **07 25 41.7** | **+0.5** |
| AGPR | | | | *e*S | **Sn** | **07 26 13.3** | **0.0** |
| AGPR | | | | IAML | | 07 26 16.9 | |
| | comp=Z,183nm,0.2s | | | | | | |
| **LSP** | **Las Mesas** | **2.75** | **257** | ⇑*e*P | **Pn** | **07 25 42.7** | **+0.9** |
| **LSP** | **Las Mesas** | **2.75** | **257** | ⇑*e*P | **Pn** | **07 25 42.7** | **+0.9** |
| LSP | | | | *e*S | **Sn** | **07 26 14.9** | **+0.7** |
| **MLPR** | **Magueyes Islan** | **2.77** | **252** | ⇓*e*P | **Pn** | **07 25 42.1** | **+0.1** |
| **MLPR** | **Magueyes Islan** | **2.77** | **252** | *e*S | **Sn** | **07 26 15.8** | **+1.2** |
| **MLPR** | **Magueyes Islan** | **2.77** | **252** | | **Pn** | **07 25 42.1** | **+0.1** |
| MLPR | | | | | **Sn** | **07 26 15.8** | **+1.2** |
| **PRSN** | **Puerto Rico Se** | **2.80** | **258** | | **Pn** | **07 25 43.0** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.82** | **253** | ⇓*i*P | **Pn** | **07 25 43.5** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **2.82** | **253** | ⇓*i*P | **Pn** | **07 25 43.5** | **+0.8** |
| CRPR | | | | *e*S | **Sn** | **07 26 16.7** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **2.82** | **253** | | **Pn** | **07 25 43.5** | **+0.8** |
| CRPR | | | | | **Sn** | **07 26 16.7** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **2.82** | **253** | IAML | | 07 26 21.1 | |
| | comp=N,299nm,0.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.82** | **253** | *i* P | **Pn** | **07 25 43.4** | **+0.8** |
| CRPR | | | | *e*S | **Sn** | **07 26 17.9** | **+2.1** |
| CRPR | | | | IAML | | 07 26 31.9 | |
| | comp=Z,228nm,1.4s | | | | | | |
| **ANDO** | **Antigua, Disas** | **2.89** | **126** | *e*P | **Pn** | **07 25 44.5** | **+0.9** |
| ANDO | | | | *e*S | **Sn** | **07 26 18.5** | **+0.9** |
| **ANBD** | **Bethesda, Anti** | **2.98** | **126** | *e*P | **Pn** | **07 25 45.4** | **+0.6** |
| ANBD | | | | *e*S | **Sn** | **07 26 22.1** | **+2.4** |
| **IDE** | **Isla Desecheo** | **3.07** | **262** | ⇑*e*P | **Pn** | **07 25 46.6** | **+0.5** |
| **IDE** | **Isla Desecheo** | **3.07** | **262** | ⇑*e*P | **Pn** | **07 25 46.6** | **+0.5** |
| IDE | | | | *e*S | **Sn** | **07 26 23.6** | **+1.5** |
| **ABD** | **La Joyeuse, An** | **3.55** | **131** | *e*P | **Pn** | **07 25 53.9** | **+1.3** |
| ABD | | | | *e*S | **Sn** | **07 26 36.6** | **+2.9** |
| **CBE** | **Ff, Capester** | **3.75** | **137** | *e*P | **Pn** | **07 25 58.2** | **+2.7** |
| CBE | | | | *e*S | **Sn** | **07 26 40.7** | **+1.9** |
| **TBG** | **Guadaloupe-3** | **3.89** | **139** | *e*P | **Pn** | **07 25 58.7** | **+1.4** |
| **TDBA** | **Terre de Bas,** | **3.90** | **139** | *e*P | **Pn** | **07 25 58.5** | **+1.0** |
| **TDBA** | **Terre de Bas,** | **3.90** | **139** | *e*S | **Sn** | **07 26 44.8** | **+2.4** |
| **PCDR** | **Punta Cana, DR** | **3.91** | **266** | ⇓*e*P | **Pn** | **07 25 58.2** | **+0.6** |
| **PCDR** | **Punta Cana, DR** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.18** | **330** | | **Pb** | **07 37 12.7** | **-0.1** |
| PNIG | | | | | **Sb** | **07 37 15.7** | **-0.6** |
| **PNIG** | **Pinotepa** | **0.18** | **330** | *i* P | **Pb** | **07 37 12.7** | **-0.1** |
| PNIG | | | | *e*S | **Sb** | **07 37 15.7** | **-0.6** |
| **YOIG** | **Yosondua** | **0.78** | **37** | *i* P | **Pb** | **07 37 21.7** | **-0.9** |
| YOIG | | | | *i* S | **Sb** | **07 37 30.4** | **-2.4** |
| **PEIG** | **Puerto Escondi** | **0.88** | **105** | *i* P | **Pb** | **07 37 23.5** | **-0.7** |
| PEIG | | | | *i* S | **Sb** | **07 37 34.5** | **-1.1** |
| **TXIG** | **Tlaxiaco** | **1.05** | **14** | *i* P | **Pn** | **07 37 25.7** | **-1.4** |
| TXIG | | | | *i* S | **Sb** | **07 37 38.4** | **-2.2** |
| **MGIG** | **Malinaltepec** | **1.15** | **330** | *i* P | **Pn** | **07 37 27.9** | **-0.6** |
| MGIG | | | | *i* S | **Sb** | **07 37 41.4** | **-2.0** |
| **CRIG** | **Cruz Grande** | **1.17** | **296** | | **Pn** | **07 37 27.6** | **-0.9** |
| CRIG | | | | | **Sn** | **07 37 42.1** | **-1.7** |
| **CRIG** | **Cruz Grande** | **1.17** | **296** | ⇓*e*P | **Pn** | **07 37 27.6** | **-0.9** |
| CRIG | | | | *i* S | **Sn** | **07 37 42.1** | **-1.7** |
| **VHO** | **Vista Hermosa** | **1.50** | **56** | *i* P | **Pn** | **07 37 33.0** | **-0.3** |
| VHO | | | | *i* S | **Sn** | **07 37 51.1** | **-1.2** |
| **HLIG** | **Huajuapan de L** | **1.60** | **8** | *i* P | **Pn** | **07 37 34.7** | **0.0** |
| HLIG | | | | *i* S | **Sn** | **07 37 53.1** | **-1.8** |
| **FTIG** | **Fresnillo de T** | **1.67** | **357** | *i* P | **Pn** | **07 37 34.6** | **-0.9** |
| FTIG | | | | *i* S | **Sn** | **07 37 54.2** | **-2.1** |
| **DAIG** | **Los Arroyos** | **1.74** | **297** | | **Pn** | **07 37 36.1** | **-0.3** |
| DAIG | | | | | **Sn** | **07 37 56.1** | **-1.8** |
| **DAIG** | **Los Arroyos** | **1.74** | **297** | *i* P | **Pn** | **07 37 36.1** | **-0.3** |
| DAIG | | | | *i* S | **Sn** | **07 37 56.1** | **-1.8** |
| **HUIG** | **Huatulco** | **1.91** | **104** | *i* P | **Pn** | **07 37 38.2** | **-0.5** |
| HUIG | | | | *i* S | **Sn** | **07 37 58.8** | **-3.3** |
| **AMVM** | **AMECAMECA** | **2.97** | **346** | | **Pb** | **07 38 01.4** | **+1.4** |
| **AMVM** | **AMECAMECA** | **2.97** | **346** | *e*P | **Pb** | **07 38 01.4** | **+1.4** |
| AMVM | | | | *e*S | **Sn** | **07 38 20.9** | **-7.8** |
| **MAVM** | **Malinalco, Edo** | **3.05** | **333** | | **Sb** | **07 38 37.7** | **-0.4** |
| **MAVM** | **Malinalco, Edo** | **3.05** | **333** | *e*P | **Pb** | **07 37 59.1** | **-2.2** |
| MAVM | | | | *e*S | **Sb** | **07 38 37.7** | **-0.4** |
| **CMIG** | **Matias Romero** | **3.14** | **74** | P | **Pn** | **07 37 55.5** | **-0.1** |
| | 7.5nm,0.3s,baz=264,slow=12,SNR=92 | | | | | | |
| CMIG | | | | S | **Sn** | **07 38 30.4** | **-2.0** |
| | 41nm,0.3s,baz=170,slow=21,SNR=5.9 | | | | | | |
| **TLVM** | **San Miguel Top** | **3.15** | **340** | *e*P | **Pb** | **07 38 02.3** | **-0.8** |
| **XCVM** | **Xochimilco** | **3.17** | **341** | *e*P | **Pb** | **07 38 03.3** | **-0.2** |
| **THVM** | **De Xico** | **3.19** | **344** | *e*P | **Pb** | **07 38 01.8** | **-1.9** |
| **AOVM** | **Tlapan** | **3.26** | **338** | *e*P | **Pn** | **07 37 59.5** | **+1.8** |
| AOVM | | | | *e*S | **Sb** | **07 38 44.2** | **-0.3** |
| **UNM** | **Universidad Na** | **3.27** | **341** | | **Pn** | **07 37 59.4** | **+1.8** |
| **BJVM** | **Benito Juarez** | **3.31** | **341** | *e*P | **Pn** | **07 38 02.5** | **-3.2** |
| BJVM | | | | *e*S | **Sn** | **07 38 39.3** | **+2.3** |
| **VRVM** | **Mexico City** | **3.33** | **342** | *e*P | **Pb** | **07 38 02.8** | **-3.3** |
| **CJVM** | **Cuajimalpa** | **3.33** | **339** | *e*P | **Pb** | **07 38 07.9** | **+1.8** |
| CJVM | | | | *i* S | **Sn** | **07 38 40.7** | **+3.1** |
| **PBVM** | **Pinon** | **3.34** | **343** | | **Pb** | **07 38 05.5** | **-0.7** |
| **PBVM** | **Pinon** | **3.34** | **343** | *e*P | **Pb** | **07 38 05.5** | **-0.7** |
| **GMVM** | **Gustavo A Made** | **3.40** | **343** | *e*P | **Pn** | **07 38 03.7** | **+4.2** |
| GMVM | | | | *e*P | **Pb** | **07 38 06.0** | **-1.3** |
| GMVM | | | | *e*S | **Sn** | **07 38 39.3** | **-0.1** |
| GMVM | | | | *e*S | **Sb** | **07 38 40.7** | **-7.7** |
| **TOVM** | **TOLUCA** | **3.41** | **333** | *e*P | **Pn** | **07 38 03.6** | **+3.9** |
| **APVM** | **Azcapotzalco** | **3.42** | **341** | *e*P | **Pb** | **07 38 07.9** | **+0.2** |
| APVM | | | | *e*S | **Sn** | **07 38 39.8** | **-0.2** |
| **PTVM** | **Pico Tres Padr** | **3.50** | **343** | | **Pb** | **07 38 07.7** | **-1.3** |
| **PTVM** | **Pico Tres Padr** | **3.50** | **343** | *e*P | **Pb** | **07 38 07.7** | **-1.3** |
| **VTVM** | **Tizayuca** | **3.59** | **349** | *e*P | **Pb** | **07 38 07.5** | **-3.1** |
| **ZUVM** | **ZUMPANGO** | **3.71** | **345** | | **Pn** | **07 38 07.5** | **+3.7** |
| **ZUVM** | **ZUMPANGO** | **3.71** | **345** | *e*P | **Pn** | **07 38 07.5** | **+3.7** |
| **ATVM** | **ATLACOMULCO** | **3.91** | **334** | | **Sb** | **07 39 00.8** | **-2.2** |
| **ATVM** | **ATLACOMULCO** | **3.91** | **334** | *e*P | **Pn** | **07 38 10.9** | **+4.3** |
| ATVM | | | | *e*S | **Sb** | **07 39 00.8** | **-2.2** |
| **ACIG** | **Acambay** | **4.12** | **335** | *i* P | **Pn** | **07 38 10.6** | **+1.3** |
| ACIG | | | | *e*S | **Sn** | **07 39 01.6** | **+4.7** |
| **MOIG** | **Morelia** | **4.56** | **319** | | **Pn** | **07 38 17.1** | **+1.7** |
| **CCIG** | **Comitan** | **5.66** | **89** | | **Pn** | **07 38 33.6** | **+3.0** |
| **APG** | **El Apazote** | **7.39** | **98** | P | **Pn** | **07 38 57.0** | **+2.6** |
| | 0.3nm,0.3s,baz=230,slow=13,SNR=3.8 | | | | | | |
| APG | | | | S | **Sn** | **07 40 14.8** | **-2.9** |
| | 0.7nm,0.3s,baz=311,slow=6.7,SNR=1.7 | | | | | | |
| APG | | | | LR | LR | 07 42 01.8 | |
| | comp=Z,172nm,20.2s,baz=269,slow=40 | | | | | | |
| **ZAIG** | **Zacatecas** | **7.78** | **327** | Pn | **Pn** | **07 38 59.4** | **-0.3** |
| **PETF** | **Flores** | **7.86** | **84** | Pn | **Pn** | **07 39 00.7** | **+0.1** |
| **LPIG** | **La Paz** | **13.93** | **306** | LR | LR | 07 45 01.4 | |
| | comp=Z,50nm,18.2s,baz=20,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.03** | **339** | P | **Pn** | **07 40 27.5** | **+2.4** |
| | 0.0nm,0.3s,baz=164,slow=11,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 07 46 22.1 | |
| | comp=Z,457nm,18.5s,baz=142,slow=40 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **16.38** | **355** | P | **P** | **07 40 59.9** | **+1.0** |
| ABTX | | | | IAmb | IAmb | 07 41 01.7 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **18.44** | **358** | P | **P** | **07 41 20.9** | **-0.7** |
| **121A** | **Cookes Peak, D** | **18.48** | **333** | P | **Pn** | **07 41 23.7** | **+1.3** |
| **AMTX** | **Amarillo** | **18.86** | **351** | P | **Pn** | **07 41 27.0** | **+0.1** |
| AMTX | | | | IAmb | IAmb | 07 41 31.6 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **W35A** | **Tecumseh** | **18.87** | **3** | P | **P** | **07 41 26.6** | **+0.4** |
| W35A | | | | IAmb | IAmb | 07 41 36.1 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **BNM** | **Barren Site** | **19.45** | **338** | P | **Pn** | **07 41 35.0** | **+0.9** |
| **ANMO** | **Albuquerque** | **20.11** | **340** | P | **P** | **07 41 41.1** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=125,slow=12,SNR=7.4 | | | | | | |
| ANMO | | | | LR | LR | 07 50 07.9 | |
| | comp=Z,195nm,20.9s,baz=144,slow=39 | | | | | | |
| **ANMO** | **Albuquerque** | **20.11** | **340** | P | Pn | 07 41 42.2 | +0.3 |
| **X18A** | **Snowflake** | **21.13** | **332** | P | **P** | **07 41 53.0** | **+1.9** |
| X18A | | | | IAmb | IAmb | 07 41 55.6 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **21.58** | **346** | P | **P** | **07 41 58.1** | **+2.2** |
| **Y52A** | **Lilburn** | **21.60** | **33** | P | **P** | **07 41 55.2** | **-0.7** |
| Y52A | | | | IAmb | IAmb | 07 41 55.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **21.75** | **329** | P | **P** | **07 41 59.9** | **+2.2** |
| X16A | | | | IAmb | IAmb | 07 42 04.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **V48A** | **Smith Brothers** | **21.85** | **25** | | **P** | **07 41 58.2** | **-0.5** |
| V48A | | | | IAmb | IAmb | 07 41 59.2 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **W50A** | **Signal Mountai** | **22.05** | **29** | IAmb | IAmb | 07 42 00.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| W50A | | | | P | **P** | **07 42 00.3** | **-0.5** |
| **Y14A** | **Wickenburg** | **22.19** | **325** | P | **P** | **07 42 01.0** | **-1.3** |
| **SDCO** | **Great Sand Dun** | **22.42** | **344** | P | **P** | **07 42 07.0** | **+2.0** |
| **CCM** | **Cathedral Cave** | **22.55** | **14** | P | **P** | **07 42 07.4** | **+1.3** |
| CCM | | | | IAmb | IAmb | 07 42 18.7 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **CPCT** | **Cooper Cave** | **22.63** | **30** | IAmb | IAmb | 07 42 06.8 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **MVCO** | **Mesa Verde** | **22.86** | **338** | P | **P** | **07 42 10.9** | **+1.3** |
| **TKL** | **Tuckaleechee C** | **23.16** | **31** | P | **P** | **07 42 11.9** | **-0.5** |
| | comp=Z,3.7nm,0.9s,baz=198,slow=6.4,SNR=2.5 | | | | | | |
| **PV07** | **Paradox Valley** | **24.01** | **339** | P | **P** | **07 42 21.7** | **+0.7** |
| PV07 | | | | IAmb | IAmb | 07 42 24.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SMCO** | **Snowmass** | **24.16** | **343** | IAmb | IAmb | 07 42 38.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **RDMU** | **Red Mountain** | **26.24** | **340** | IAmb | IAmb | 07 42 54.0 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **SPR3** | **Spring Creek 3** | **26.80** | **331** | IAmb | IAmb | 07 42 50.4 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **K22A** | **Casper** | **27.32** | **346** | IAmb | IAmb | 07 42 54.4 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **28.22** | **342** | P | **P** | **07 43 00.6** | **+1.6** |
| | comp=Z,0.6nm,0.8s,baz=156,slow=6.9,SNR=4.4 | | | | | | |
| PDAR | | | | LR | LR | 07 55 19.6 | |
| | comp=Z,118nm,20.1s,baz=156,slow=39 | | | | | | |
| **NVAR** | **Mina Array Bea** | **28.39** | **325** | P | **P** | **07 43 03.0** | **+2.4** |
| | comp=Z,1.4nm,0.8s,baz=148,slow=11,SNR=8.6 | | | | | | |
| **ELK** | **Elko** | **28.62** | **332** | P | **P** | **07 43 04.3** | **+1.8** |
| | comp=Z,1.0nm,0.8s,baz=70,slow=6.1,SNR=4.2 | | | | | | |
| ELK | | | | LR | LR | 07 55 08.7 | |
| | comp=Z,94nm,18.9s,baz=168,slow=38 | | | | | | |
| **ELK** | **Elko** | **28.62** | **332** | IAmb | IAmb | 07 43 06.0 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **PLID** | **Pearl Lake** | **32.50** | **336** | IAmb | IAmb | 07 43 56.5 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **SADO** | **Sadowa** | **32.61** | **25** | LR | LR | 07 57 31.0 | |
| | comp=Z,37nm,21.2s,baz=227,slow=38 | | | | | | |
| **ULM** | **Lac du Bonnet** | **33.98** | **2** | LR | LR | 08 00 29.0 | |
| | comp=Z,59nm,18.2s,baz=322,slow=42 | | | | | | |
| **NEW** | **Newport** | **35.58** | **338** | LR | LR | 08 00 18.1 | |
| | comp=Z,177nm,21.4s,baz=134,slow=39 | | | | | | |
| **SCHQ** | **Schefferville** | **45.41** | **25** | P | **P** | **07 45 22.2** | **-2.2** |
| | comp=Z,2.2nm,0.8s,baz=254,slow=7.4,SNR=1.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.66** | **350** | P | **P** | **07 45 42.3** | **+0.5** |
| | comp=Z,1.3nm,0.9s,baz=157,slow=7.3,SNR=12 | | | | | | |
| YKA | | | | PcP | **PcP** | **07 47 11.2** | **+0.2** |
| | comp=Z,0.2nm,0.8s,baz=148,slow=3.4,SNR=3.7 | | | | | | |
| YKA | | | | LR | LR | 08 09 41.1 | |
| | comp=Z,110nm,18.2s,baz=315,slow=41 | | | | | | |
| **SIV** | **San Ignacio** | **48.53** | **129** | P | P | 07 45 55.0 | +5.7 |
| | comp=Z,0.9nm,0.8s,baz=327,slow=9.2,SNR=3.6 | | | | | | |
| **FRB** | **Frobisher Bay** | **51.63** | **16** | LR | LR | 08 11 03.9 | |
| | comp=Z,101nm,18.6s,baz=314,slow=40 | | | | | | |
| **INK** | **Inuvik** | **56.72** | **345** | P | **P** | **07 46 50.3** | **+1.2** |
| | comp=Z,3.3nm,0.9s,baz=136,slow=8.0,SNR=8.1 | | | | | | |
| **ILAR** | **Eielson Array** | **58.54** | **338** | P | **P** | **07 47 03.8** | **+1.7** |
| | comp=Z,0.8nm,1.0s,baz=133,slow=5.0,SNR=4.3 | | | | | | |
| **TIXI** | **Tiksi** | **86.81** | **347** | LR | LR | 08 34 37.5 | |
| | comp=Z,76nm,18.6s,baz=187,slow=40 | | | | | | |

*BUC **03** 07:48:08.2±0.3, 45°.42N×26°.30E, h134km±2km, ml3.6/34, Error ellipse: s-maj=2.2km s-min=1.4km az=166.0*
**ISC 03 07:48:07.4**±1.5, **45°.43N**±0°.04×**26°.30E**±0°.03, **h143**km±8km, **n49**, σ0.961/73, **51C-20D, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NEHR** | **Nehoiu** | **0.01** | **206** | ⇑S | **Sn** | **07 48 40.2** | **-0.9** |
| **MLR** | **Muntele Rosu** | **0.26** | **283** | ⇓P | **Pn** | **07 48 27.9** | **+0.9** |
| MLR | | | | ⇑S | **Sn** | **07 48 41.2** | **-0.8** |
| **ISR** | **Istrita** | **0.36** | **151** | ⇑P | **Pn** | **07 48 27.8** | **+0.5** |
| ISR | | | | ⇑S | **Sn** | **07 48 41.8** | **-0.6** |
| **COVR** | **Voineasa-Covas** | **0.42** | **351** | ⇑P | **Pn** | **07 48 28.0** | **+0.4** |
| COVR | | | | ⇓S | **Sn** | **07 48 42.8** | **-0.2** |
| **SECR** | | **0.43** | **202** | ⇑P | **Pn** | **07 48 28.0** | **+0.4** |
| **GRER** | | **0.48** | **96** | ⇑P | **Pn** | **07 48 27.6** | **-0.2** |
| GRER | | | | ⇓S | **Sn** | **07 48 42.5** | **-0.8** |
| **PLOR** | **Plostina** | **0.49** | **30** | ⇑P | **Pn** | **07 48 27.7** | **-0.2** |
| PLOR | | | | ⇓S | **Sn** | **07 48 43.6** | **+0.2** |
| **VRI** | **Vrincioaia** | **0.53** | **35** | ⇑P | **Pn** | **07 48 28.9** | **+0.8** |
| VRI | | | | ⇓S | **Sn** | **07 48 43.2** | **-0.6** |
| **ODBI** | **Odobesti** | **0.63** | **58** | ⇑P | **Pn** | **07 48 29.1** | **+0.6** |
| ODBI | | | | ⇑S | **Sn** | **07 48 44.9** | **+0.2** |
| **PGOR** | **Pogoanele** | **0.71** | **137** | ⇓S | **Sn** | **07 48 45.1** | **-0.6** |
| **PANC** | **Panciu** | **0.74** | **53** | ⇑P | **Pn** | **07 48 29.3** | **-0.1** |
| PANC | | | | ⇑S | **Sn** | **07 48 46.3** | **+0.2** |
| **OZUR** | | **0.75** | **332** | ⇑P | **Pn** | **07 48 30.0** | **+0.5** |
| OZUR | | | | ⇓S | **Sn** | **07 48 45.4** | **-1.0** |
| **DOPR** | **Dopca** | **0.83** | **310** | ⇓P | **Pn** | **07 48 30.7** | **+0.6** |
| DOPR | | | | ⇓S | **Sn** | **07 48 46.8** | **-0.6** |
| **VOIR** | | **0.88** | **271** | ⇑P | **Pn** | **07 48 31.1** | **+0.5** |
| VOIR | | | | ⇑S | **Sn** | **07 48 47.3** | **-0.9** |
| **MTUR** | **Matau** | **0.90** | **257** | ⇑P | **Pn** | **07 48 30.9** | **+0.2** |
| **TUDR** | | **0.98** | **80** | ⇑S | **Sn** | **07 48 49.1** | **-0.2** |
| **GHRR** | | **1.00** | **51** | ⇑S | **Sn** | **07 48 50.2** | **+0.4** |
| **LEHL** | **Lehliu** | **1.03** | **159** | ⇑S | **Sn** | **07 48 50.6** | **+0.5** |
| **IZVR** | **Izvoarele** | **1.04** | **83** | ⇑P | **Pn** | **07 48 31.9** | **+0.1** |
| IZVR | | | | ⇑S | **Sn** | **07 48 49.4** | **-0.9** |
| **SLCR** | **Slobozia Conac** | **1.05** | **81** | ⇑S | **Sn** | **07 48 49.2** | **-1.2** |
| **SCHL** | **Schela** | **1.08** | **86** | ⇑S | **Sn** | **07 48 50.7** | **-0.2** |
| **BUC1** | **Bucharest** | **1.10** | **190** | ⇑S | **Sn** | **07 48 51.2** | **-0.2** |
| **AMRR** | **Amara** | **1.10** | **138** | ⇑S | **Sn** | **07 48 51.2** | **-0.2** |
| **STFAR** | **Stefanesti-Arg** | **1.10** | **239** | ⇑S | **Sn** | **07 48 52.2** | **+0.7** |
| **TESR** | **Tescani** | **1.11** | **13** | ⇑P | **Pn** | **07 48 33.1** | **+0.7** |
| TESR | | | | ⇓S | **Sn** | **07 48 50.7** | **-0.9** |
| **ARR** | **Arges** | **1.18** | **267** | ⇑P | **Pn** | **07 48 33.8** | **+0.7** |
| ARR | | | | ⇑S | **Sn** | **07 48 52.7** | **-0.4** |
| **VARL** | **Varlezi** | **1.18** | **66** | ⇑S | **Sn** | **07 48 52.7** | **0.0** |
| **SCTR** | **Scanteiesti** | **1.22** | **78** | ⇓P | **Pn** | **07 48 33.8** | **+0.4** |
| SCTR | | | | ⇓S | **Sn** | **07 48 53.5** | **+0.2** |
| **TATR** | **Tataca** | **1.24** | **82** | ⇑S | **Sn** | **07 48 53.7** | **0.0** |
| **BIR** | **Birlad** | **1.25** | **48** | ⇓S | **Sn** | **07 48 54.2** | **+0.3** |
| **HUMR** | **Humele** | **1.30** | **226** | ⇓P | **Pn** | **07 48 34.9** | **+0.6** |
| HUMR | | | | ⇑S | **Sn** | **07 48 54.8** | **0.0** |
| **VLDR** | **Vladesti** | **1.32** | **71** | ⇑P | **Pn** | **07 48 35.3** | **+0.9** |
| VLDR | | | | ⇑S | **Sn** | **07 48 54.4** | **-0.7** |
| **CFR** | **Carcaliu** | **1.32** | **100** | ⇓P | **Pn** | **07 48 34.8** | **+0.3** |
| CFR | | | | ⇓S | **Sn** | **07 48 53.8** | **-1.4** |
| **GIUM** | **Giurgiulesti** | **1.34** | **87** | ⇑S | **Sn** | **07 48 55.7** | **+0.2** |
| **COPA** | **Copaceanca** | **1.51** | **211** | ⇑P | **Pn** | **07 48 36.8** | **+0.3** |
| COPA | | | | ⇑S | **Sn** | **07 48 57.8** | **-0.9** |
| **VASR** | **Vaslui** | **1.59** | **40** | ⇓P | **Pn** | **07 48 38.1** | **+0.7** |
| VASR | | | | ⇑S | **Sn** | **07 49 00.0** | **-0.4** |
| **TPGR** | **Topolog** | **1.61** | **110** | ⇑P | **Pn** | **07 48 37.9** | **+0.3** |
| TPGR | | | | ⇑S | **Sn** | **07 48 59.4** | **-1.2** |
| **CVDA** | **Cernavoda** | **1.65** | **131** | ⇑S | **Sn** | **07 49 01.5** | **0.0** |
| **LEOM** | **Leova** | **1.71** | **52** | ⇑S | **Sn** | **07 49 02.3** | **-0.4** |
| **LOT** | **Lotru** | **1.78** | **271** | ⇑S | **Sn** | **07 49 04.3** | **0.0** |
| **TLCR** | | **1.79** | **97** | ⇑P | **Pn** | **07 48 40.2** | **+0.5** |
| TLCR | | | | ⇓S | **Sn** | **07 49 04.1** | **-0.2** |
| **MILM** | **Milestii Mici** | **2.29** | **49** | ⇓*i*P | **Pn** | **07 48 46.2** | **+0.7** |
| | 40nm,0.1s | | | | | | |
| MILM | | | | *e*S | **Sn** | **07 49 13.4** | **-1.5** |
| | 60nm,0.3s | | | | | | |
| **MILM** | **Milestii Mici** | **2.29** | **49** | ⇑P | **Pn** | **07 48 45.4** | **-0.2** |
| **SRE** | **Strehaia** | **2.32** | **252** | ⇓S | **Sn** | **07 49 14.9** | **-0.7** |
| **KIS** | **Kishinev** | **2.35** | **47** | *e*P | **Pn** | **07 48 47.0** | **+0.8** |
| | 14nm,0.1s | | | | | | |
| **GZR** | **Gura Zlata** | **2.48** | **270** | ⇓P | **Pn** | **07 48 48.1** | **+0.2** |
| GZR | | | | ⇑S | **Sn** | **07 49 18.8** | **-0.4** |
| **HERR** | **Herculane** | **2.80** | **260** | ⇑P | **Pn** | **07 48 51.7** | **-0.2** |
| **SORM** | **Soroca** | **3.05** | **27** | ⇑P | **Pn** | **07 48 55.4** | **+0.4** |
| **MDVR** | **Moldovita** | **3.31** | **260** | ⇑P | **Pn** | **07 48 58.9** | **+0.4** |

*IDC **03** 07:49:18.0±3.0, 16°.31N×98°.02W, h0km, mb3.5/5, mb1 3.7/8, mb1mx3.6/36, mbtmp3.4/8, ML3.3/3, MS3.3/2, Ms1 3.3/2, ms1mx2.6/45, Error ellipse: s-maj=57.0km s-min=14.8km az=12.0*
*MEX **03** 07:49:21.1±0.8, 16°.24N×98°.03W, h12km±3km, MD4.1*
**ISC 03 07:49:19.0**±1.0, **16°.33N**±0°.04×**97°.94W**±0°.04, **h13**km±7km, **n27**, σ1.934/42, **mb3.4**/4, **Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.19** | **288** | *e*P | **Pg** | **07 49 24.4** | **+1.1** |
| PNIG | | | | *i* S | **Sg** | **07 49 27.5** | **+1.2** |
| **YOIG** | **Yosondua** | **0.64** | **36** | *i* P | **Pn** | **07 49 33.5** | **-0.6** |
| YOIG | | | | *i* S | **Sb** | **07 49 41.6** | **+0.3** |
| **PEIG** | **Puerto Escondi** | **0.83** | **114** | *i* P | **Pb** | **07 49 35.4** | **+0.1** |
| PEIG | | | | *i* S | **Sb** | **07 49 46.5** | **+0.1** |
| **TXIG** | **Tlaxiaco** | **0.93** | **10** | *i* P | **Pn** | **07 49 38.0** | **-0.1** |
| TXIG | | | | *i* S | **Sb** | **07 49 50.2** | **+0.7** |
| **MGIG** | **Malinaltepec** | **1.12** | **323** | *i* P | **Pg** | **07 49 39.7** | **-0.8** |
| MGIG | | | | *i* S | **Sg** | **07 49 54.0** | **-1.2** |
| **CRIG** | **Cruz Grande** | **1.21** | **289** | *i* P | **Pg** | **07 49 39.5** | **-2.9** |
| CRIG | | | | *i* S | **Sg** | **07 49 53.2** | **-5.0** |
| **VHO** | **Vista Hermosa** | **1.37** | **57** | *i* P | **Pb** | **07 49 44.8** | **+0.2** |
| VHO | | | | *i* S | **Sn** | **07 50 02.9** | **+0.7** |
| **HLIG** | **Huajuapan de L** | **1.49** | **5** | *i* P | **Pb** | **07 49 46.5** | **-0.2** |
| HLIG | | | | *i* S | **Sg** | **07 50 04.6** | **-2.6** |
| **FTIG** | **Fresnillo de T** | **1.58** | **353** | *i* P | **Pn** | **07 49 47.4** | **+0.6** |
| FTIG | | | | *i* S | **Sn** | **07 50 07.1** | **-0.1** |
| **HUIG** | **Huatulco** | **1.85** | **107** | *i* P | **Pn** | **07 49 50.1** | **-0.4** |
| HUIG | | | | *i* S | **Sn** | **07 50 11.8** | **-1.9** |
| **MAVM** | **Malinalco, Edo** | **3.00** | **331** | *e*P | **Pn** | **07 50 06.8** | **+0.3** |
| MAVM | | | | *e*S | **Sn** | **07 50 42.4** | **-0.1** |
| **CMIG** | **Matias Romero** | **3.02** | **75** | Pn | **Pn** | **07 50 07.4** | **+0.8** |
| | 4.2nm,0.3s,baz=254,slow=12,SNR=88 | | | | | | |
| CMIG | | | | Pg | **Pg** | **07 50 15.2** | **-1.7** |
| | 5.2nm,0.3s,baz=269,slow=14,SNR=16 | | | | | | |
| CMIG | | | | Sn | **Sn** | **07 50 43.0** | **+0.3** |
| | 10nm,0.3s,baz=254,slow=9.1,SNR=6.8 | | | | | | |
| CMIG | | | | Lg | Lg | 07 50 56.4 | |
| | 55nm,0.3s,baz=180,slow=19,SNR=16 | | | | | | |
| **TLVM** | **San Miguel Top** | **3.09** | **338** | *e*P | **Pn** | **07 50 07.4** | **-0.4** |
| TLVM | | | | *i* S | **Sn** | **07 50 44.0** | **-0.8** |
| **THVM** | **De Xico** | **3.12** | **342** | *i* P | **Pn** | **07 50 08.6** | **+0.4** |
| THVM | | | | *e*S | **Sn** | **07 50 45.8** | **+0.3** |
| **CJVM** | **Cuajimalpa** | **3.27** | **337** | *e*P | **Pn** | **07 50 10.6** | **+0.3** |
| CJVM | | | | *i* S | **Sn** | **07 50 48.6** | **-0.7** |
| **GMVM** | **Gustavo A Made** | **3.33** | **341** | *i* P | **Pn** | **07 50 10.9** | **-0.3** |
| GMVM | | | | *e*S | **Sn** | **07 50 50.2** | **-0.6** |
| **APVM** | **Azcapotzalco** | **3.36** | **339** | *i* P | **Pn** | **07 50 12.0** | **+0.4** |
| **APG** | **El Apazote** | **7.32** | **99** | Pn | **Pn** | **07 51 06.7** | **+0.8** |
| | 0.2nm,0.3s,baz=220,slow=20,SNR=1.3 | | | | | | |
| APG | | | | Sn | **Sn** | **07 52 27.4** | **-1.6** |
| | 0.4nm,0.3s,baz=53,slow=7.1,SNR=2.4 | | | | | | |
| APG | | | | Lg | Lg | 07 53 15.3 | |
| | 0.1nm,0.3s,baz=18,slow=20,SNR=1.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **13.97** | **339** | Pn | **Pn** | **07 52 37.9** | **+1.0** |
| | 0.1nm,0.3s,baz=145,slow=13,SNR=4.7 | | | | | | |
| TXAR | | | | LR | LR | 07 58 50.3 | |
| | comp=Z,85nm,19.3s,baz=121,slow=41 | | | | | | |
| **ANMO** | **Albuquerque** | **20.05** | **339** | P | **P** | **07 53 53.7** | **+1.6** |
| | 1.5nm,1.1s,baz=97,slow=8.5,SNR=3.8 | | | | | | |
| ANMO | | | | LR | LR | 08 02 19.6 | |
| | comp=Z,104nm,18.3s,baz=43,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **28.16** | **342** | P | **P** | **07 55 12.9** | **+1.5** |
| | 0.3nm,0.7s,baz=161,slow=11,SNR=2.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **28.36** | **325** | P | **P** | **07 55 14.5** | **+1.3** |
| | 0.9nm,0.9s,baz=136,slow=11,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.58** | **350** | P | **P** | **07 57 54.1** | **-0.1** |
| | 0.2nm,0.8s,baz=155,slow=7.2,SNR=5.1 | | | | | | |
| **H03N2** | **Juan Fernandez** | **52.72** | **160** | T | T | 08 55 26.5 | |
| | baz=338,slow=77,SNR=32 | | | | | | |
| **H03N1** | **Juan Fernandez** | **52.72** | **160** | T | T | 08 55 27.7 | |
| | baz=338,slow=77,SNR=52 | | | | | | |
| **H03N3** | **Juan Fernandez** | **52.73** | **160** | T | T | 08 55 26.6 | |
| | baz=338,slow=77,SNR=26 | | | | | | |
| **INK** | **Inuvik** | **56.65** | **345** | P | **P** | **07 59 02.4** | **+0.8** |
| | 1.3nm,0.9s,baz=132,slow=8.0,SNR=3.8 | | | | | | |

**NOU 03 07:54:02.4, 14°.68S×167°.41E, h11**km**, MLv4.7**/11**,**
**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.79** | **195** | P | Pn | 07 54 22.1 | +0.2 |
| **DVP** | **Devils Point** | **3.12** | **166** | P | Pn | 07 54 49.6 | -0.5 |
| **RTV** | **Rentapao** | **3.25** | **163** | P | Pn | 07 54 52.1 | +0.3 |
| **YATNC** | **Mamie plateau,** | **7.36** | **184** | P | Pn | 07 55 46.7 | -0.5 |
| **DZM** | **Mont Dzumac** | **7.41** | **187** | P | Pn | 07 55 47.9 | -0.1 |
| **ONTNC** | **Ouen Toro** | **7.64** | **187** | P | Pn | 07 55 51.6 | +0.6 |
| **OUENC** | **Ouen Island, N** | **7.72** | **184** | P | Pn | 07 55 52.4 | +0.4 |

*DJA **03** 08:01:47.7±0.4, 3°.5S×14°.7E±°, h10km, M4.2/12, mB4.7/5, mb4.5/12, MLv4.3/3, Mw(mB)3.9/5*
*NEIC **03** 08:01:49.9±1.9, 3°.32S±0°.05×147°.0E±0°.1, h18km±3km, mb4.5/13, Error ellipse: s-maj=16.4km s-min=6.9km az=104.0*
*IDC **03** 08:01:55.6±4.3, 3°.71S×147°.32E, h77km±45km, mb3.9/11, mb1 4.1/12, mb1mx3.9/28, mbtmp4.2/12, ML1.7/1, MS3.8/34, Ms1 3.8/34, ms1mx3.7/57, Error ellipse: s-maj=35.0km s-min=21.1km az=119.0*
**ISC 03 08:01:50.9**±0.5, **3°.41S**±0°.06×**147°.10E**±0°.07, **h25**km**, n75,** σ1.955/49, **mb4.3**/18, **MS3.9**/31, **Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **1.38** | **11** | Pn | **Pn** | **08 02 10.8** | **-3.9** |
| **RABL** | **Rabaul** | **5.11** | **99** | Pn | **Pn** | **08 03 09.1** | **+3.1** |
| **RABL** | **Rabaul** | **5.11** | **99** | P | **Pb** | **08 03 16.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GTA | | | | pmax | pmax | | |
| | comp=Z,230nm,6.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,170nm,16.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,150nm,17.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,170nm,16.0s | | | | | | |
| **SONM** | **Songino Array** | **62.21 330** | | P | **P** | **08 12 11.5** | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=150,slow=6.2,SNR=5.3 | | | | | | |
| SONM | | | | LR | LR | 08 37 55.0 | |
| | comp=Z,79nm,20.7s,baz=82,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **62.21 330** | | IAmb | IAmb | 08 12 12.3 | |
| | comp=Z,5.2nm,1.4s | | | | | | |
| **PPT** | **Papeete** | **63.56 108** | | LR | LR | 08 36 08.7 | |
| | comp=Z,42nm,20.6s,baz=274,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **67.11 279** | | LR | LR | 08 44 21.2 | |
| | comp=Z,64nm,18.7s,baz=194,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.58 320** | | P | **P** | **08 13 34.4** | **+0.8** |
| | comp=Z,0.4nm,0.8s,baz=99,slow=6.0,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **76.89 328** | | P | **P** | **08 13 39.4** | **-1.5** |
| | comp=Z,0.4nm,0.4s,baz=110,slow=6.3,SNR=2.3 | | | | | | |
| **KURK** | **Kurchatov** | **79.21 323** | | P | **P** | **08 13 53.3** | **-0.6** |
| KURK | | | | IAmb | IAmb | 08 13 55.4 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **79.23 323** | | LR | LR | 08 47 38.2 | |
| | comp=Z,112nm,21.6s,baz=292,slow=34 | | | | | | |
| **AAK** | **Ala-Archa** | **79.61 314** | | LR | LR | 08 49 37.9 | |
| | comp=Z,87nm,20.2s,baz=70,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **83.07 23** | | P | **P** | **08 14 13.0** | **-1.1** |
| | comp=Z,1.6nm,1.0s,baz=268,slow=4.9,SNR=7.4 | | | | | | |
| ILAR | | | | LR | LR | 08 46 45.2 | |
| | comp=Z,64nm,21.8s,baz=236,slow=32 | | | | | | |
| **DLBC** | **Dease Lake** | **89.14 31** | | LR | LR | 08 47 38.7 | |
| | comp=Z,97nm,20.3s,baz=290,slow=31 | | | | | | |
| **INK** | **Inuvik** | **89.22 21** | | LR | LR | 08 50 17.7 | |
| | comp=Z,100nm,21.7s,baz=225,slow=32 | | | | | | |
| **BBB** | **Bella Bella** | **89.47 38** | | LR | LR | 08 48 22.6 | |
| | comp=Z,88nm,19.9s,baz=266,slow=31 | | | | | | |
| **ARU** | **Arti** | **92.00 326** | | LR | LR | 08 58 44.1 | |
| | comp=Z,76nm,18.6s,baz=122,slow=37 | | | | | | |
| **AKTO** | **Aktyubinsk** | **92.02 320** | | LR | LR | 08 56 42.2 | |
| | comp=Z,89nm,19.7s,baz=352,slow=36 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **92.38 49** | | LR | LR | 08 47 18.3 | |
| | comp=Z,94nm,21.8s,baz=322,slow=30 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.84 28** | | P | **P** | **08 15 19.0** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=269,slow=4.5,SNR=6.9 | | | | | | |
| YKA | | | | LR | LR | 08 56 13.0 | |
| | comp=Z,76nm,19.2s,baz=284,slow=34 | | | | | | |
| **PFO** | **Pinyon Flats O** | **97.24 57** | | LR | LR | 08 52 46.4 | |
| | comp=Z,35nm,18.3s,baz=327,slow=31 | | | | | | |
| **ELK** | **Elko** | **98.02 50** | | LR | LR | 08 55 46.1 | |
| | comp=Z,40nm,18.4s,baz=316,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.47 288** | | PKP | **PKPab** | **08 21 23.6** | **-0.9** |
| | comp=Z,0.8nm,0.8s,baz=79,slow=2.9,SNR=5.0 | | | | | | |

*CNRM **03** 08:08:55.6, 36.00N×3.47W, h23km, ml2.9*
*INMG **03** 08:08:57.0±1.2, 35.84N×3.61W, h0km, ML2.5, Error ellipse: s-maj=2.2km s-min=2.0km az=45.0*

**ISC 03 08:08:55.4±1.5, 35.92N±0.08×3.50W±0.07, h8km, n10, σ1§51/19, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.79** | **207** | P | **Pb** | **08 09 11.7** | **+0.4** |
| PALE | | | | S | **Sb** | **08 09 22.8** | **+0.6** |
| **TAF** | **Taforalt** | **1.41** | **141** | P | **Pn** | **08 09 21.4** | **-0.1** |
| TAF | | | | S | **Sn** | **08 09 39.7** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.71** | **242** | P | **Pn** | **08 09 25.7** | **+0.1** |
| CHEFC | | | | S | **Sb** | **08 09 49.0** | **+0.2** |
| **JBK** | **JBK** | **1.75** | **154** | P | **Pn** | **08 09 26.1** | **-0.2** |
| JBK | | | | S | **Sn** | **08 09 47.5** | **-1.4** |
| **TDRA** | **Tendrara** | **3.12** | **157** | P | **Pn** | **08 09 44.7** | **-0.3** |
| TDRA | | | | S | **Sn** | **08 10 23.7** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **3.70** | **295** | *e*Pn | **Pn** | **08 09 53.7** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **08 10 36.0** | **-0.7** |
| PVAQ | | | | A | A | 08 10 41.4 | |
| | 11nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **295** | P | **Pn** | **08 09 52.6** | **-0.3** |
| PVAQ | | | | S | **Sn** | **08 10 31.9** | **-4.8** |
| **PCVE** | **Castro Verde** | **4.03** | **296** | *e*Pn | **Pn** | **08 09 58.6** | **+1.2** |
| PCVE | | | | *e*Sn | **Sn** | **08 10 43.7** | **-1.0** |
| PCVE | | | | A | A | 08 10 53.5 | |
| | 6.9nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **298** | *e*Pn | **Pn** | **08 10 02.0** | **+1.7** |
| **PNCL** | **Nicolau / Gran** | **4.58** | **300** | *e*Pn | **Pn** | **08 10 06.6** | **+1.6** |
| PNCL | | | | *e*Sn | **Sn** | **08 10 58.1** | **-0.3** |
| PNCL | | | | A | A | 08 10 59.5 | |
| | 4.1nm,0.6s | | | | | | |

**RSNC 03 08:30:36.0±1.1, 6.81N×73.11W, h144km±4km, ML3.1, Mw3.6, 4C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.23** | **199** | ⇑*i*P | Pn | 08 30 56.0 | 0.0 |
| BARC | | | | *e*S | Sn | 08 31 09.9 | -1.3 |
| BARC | | | | *i* | | 08 31 13.0 | |
| | comp=Z,232nm,0.3s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.66** | **38** | ⇑*i*P | Pn | 08 30 58.8 | +0.6 |
| PAMC | | | | *e*S | Sn | 08 31 15.6 | +0.5 |
| PAMC | | | | *i* | | 08 31 18.1 | |
| | comp=Z,554nm,0.6s | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **179** | *e*P | Pn | 08 30 60.0 | -0.1 |
| RUSC | | | | *e*S | Sn | 08 31 18.0 | -0.4 |
| RUSC | | | | *i* | | 08 31 20.2 | |
| | comp=Z,132nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.36** | **106** | ⇑*i*P | Pn | 08 31 04.3 | +0.6 |
| TAMC | | | | *e*S | Sn | 08 31 23.0 | -1.8 |
| TAMC | | | | *i* | | 08 31 27.3 | |
| | comp=Z,91nm,0.6s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **259** | *e*P | Pn | 08 31 02.5 | -1.2 |
| PTBC | | | | *e*S | Sn | 08 31 23.9 | -1.1 |
| PTBC | | | | *i* | | 08 31 26.1 | |
| | comp=Z,135nm,0.1s | | | | | | |
| **OCAC** | **Ocana** | **1.43** | **351** | ⇓*i*P | Pn | 08 31 04.3 | -0.3 |
| OCAC | | | | *e*S | Sn | 08 31 25.6 | -0.9 |
| OCAC | | | | *i* | | 08 31 29.5 | |
| | comp=Z,362nm,0.2s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.50** | **220** | *e*P | Pn | 08 31 04.9 | -0.3 |
| SPBC | | | | *e*S | Sn | 08 31 27.3 | -0.4 |
| SPBC | | | | *i* | | 08 31 32.6 | |
| | comp=Z,120nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **291** | *e*P | Pn | 08 31 09.0 | -0.3 |
| ZARC | | | | *e*S | Sn | 08 31 35.0 | +0.3 |
| ZARC | | | | *i* | | 08 31 40.3 | |
| | comp=Z,197nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **235** | *e*P | Pn | 08 31 12.4 | -0.2 |
| NORC | | | | *e*S | Sn | 08 31 38.8 | -2.0 |
| NORC | | | | *i* | | 08 31 43.9 | |
| | comp=Z,66nm,0.2s | | | | | | |
| **SMLC** | **San Martn de** | **2.19** | **334** | *e*P | Pn | 08 31 12.1 | -1.0 |
| SMLC | | | | *e*S | Sn | 08 31 40.4 | -1.3 |
| SMLC | | | | *i* | | 08 31 46.4 | |
| | comp=Z,122nm,0.1s | | | | | | |
| **CHIC** | **Chingaza** | **2.26** | **196** | ⇓*e*P | Pn | 08 31 14.1 | -0.3 |
| CHIC | | | | *e*S | Sn | 08 31 43.3 | -0.4 |
| CHIC | | | | *i* | | 08 31 47.9 | |
| | comp=Z,24nm,0.5s | | | | | | |
| **ROSC** | **El Rosal** | **2.30** | **212** | *e*P | Pn | 08 31 15.8 | +1.0 |
| ROSC | | | | *e*S | Sn | 08 31 44.4 | -0.3 |
| ROSC | | | | *i* | | 08 31 50.6 | |
| | comp=Z,60nm,0.4s | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **256** | *e*P | Pn | 08 31 16.5 | -0.5 |
| HELC | | | | *e*S | Sn | 08 31 47.3 | -1.3 |
| HELC | | | | *i* | | 08 31 55.2 | |
| | comp=Z,61nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | *e*P | Pn | 08 31 16.5 | -1.4 |
| UREC | | | | *e*S | Sn | 08 31 47.5 | -2.7 |
| UREC | | | | *i* | | 08 31 50.1 | |
| | comp=Z,93nm,0.1s | | | | | | |
| **SOCV** | **Socops** | **2.67** | **57** | *e*P | Pn | 08 31 17.9 | -1.1 |
| SOCV | | | | *e*S | Sn | 08 31 49.2 | -2.8 |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **235** | *e*P | Pn | 08 31 20.7 | +0.3 |
| GUY2C | | | | *e*S | Sn | 08 31 55.1 | +0.5 |
| GUY2C | | | | *i* | | 08 32 04.0 | |
| | comp=Z,52nm,0.7s | | | | | | |
| **VILC** | **Villavicencio,** | **2.75** | **192** | *e*P | Pn | 08 31 19.4 | -0.7 |
| VILC | | | | *e*S | Sn | 08 31 53.5 | -0.7 |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **160** | ⇓*e*P | Pn | 08 31 19.2 | -1.1 |
| PTGC | | | | *e*S | Sn | 08 31 51.8 | -2.7 |
| PTGC | | | | *i* | | 08 31 55.0 | |
| | comp=Z,66nm,0.2s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | *e*P | Pn | 08 31 24.2 | +0.3 |
| CBOC | | | | *e*S | Sn | 08 31 58.9 | -1.9 |
| CBOC | | | | *i* | | 08 32 12.3 | |
| | comp=Z,22nm,0.5s | | | | | | |
| **DBBC** | **Dabeiba** | **3.09** | **274** | ⇑*e*P | Pn | 08 31 24.1 | -0.3 |
| DBBC | | | | *e*S | Sn | 08 31 56.9 | -4.8 |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *e*P | Pn | 08 31 25.6 | -0.2 |
| SDV | | | | *e*S | Sn | 08 32 01.9 | -2.5 |
| SDV | | | | *i* | | 08 32 07.7 | |
| | comp=Z,36nm,0.5s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.20** | **308** | *e*P | Pn | 08 31 23.9 | -1.8 |
| MOTC | | | | *e*S | Sn | 08 32 00.5 | -3.7 |
| MOTC | | | | *i* | | 08 32 03.4 | |
| | comp=Z,61nm,0.2s | | | | | | |
| **ARGC** | **Ariguani, Magd** | **3.23** | **340** | *e*P | Pn | 08 31 26.4 | +0.3 |
| ARGC | | | | *e*S | Sn | 08 32 04.6 | -0.3 |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *e*P | Pn | 08 31 27.1 | +0.5 |
| ANIL | | | | *e*S | Sn | 08 32 06.3 | +0.5 |
| ANIL | | | | *i* | | 08 32 14.2 | |
| | comp=Z,98nm,0.4s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **217** | *e*P | Pn | 08 31 30.3 | -0.5 |
| ORTC | | | | *e*S | Sn | 08 32 12.3 | -1.0 |
| ORTC | | | | *i* | | 08 32 19.2 | |
| | comp=Z,28nm,0.4s | | | | | | |
| **PLMC** | **San Jos del P** | **3.69** | **239** | *e*P | Pn | 08 31 32.3 | +0.2 |
| PLMC | | | | *i* | | 08 32 20.3 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.69** | **326** | *e*P | Pn | 08 31 30.4 | -1.7 |
| SJCC | | | | *e*S | Sn | 08 32 11.4 | -4.2 |
| **LCBC** | **Los crdobas,** | **3.82** | **302** | *e*S | Sn | 08 32 15.0 | -3.6 |
| LCBC | | | | *i* | | 08 32 22.4 | |
| | comp=Z,42nm,0.3s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | *e*P | Pn | 08 31 36.6 | -2.1 |
| CRJC | | | | *e*S | Sn | 08 32 21.5 | -5.8 |
| CRJC | | | | *i* | | 08 32 28.9 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **GUVC** | **San Jose del G** | **4.27** | **174** | *e*P | Pn | 08 31 38.4 | -1.3 |
| GUVC | | | | *e*S | Sn | 08 32 26.4 | -2.8 |
| GUVC | | | | *i* | | 08 32 30.8 | |
| | comp=Z,40nm,0.2s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.70** | **189** | *e*P | Pn | 08 31 43.1 | -2.3 |
| MACC | | | | *e*S | Sn | 08 32 34.6 | -4.8 |
| MACC | | | | *i* | | 08 33 03.0 | |
| | comp=Z,9.9nm,0.4s | | | | | | |
| **POPC** | **Popayan, Colom** | **5.54** | **220** | *e*P | Pn | 08 31 56.6 | -0.2 |
| POPC | | | | *e*S | Sn | 08 32 56.1 | -3.7 |
| **FLOC** | **Florencia** | **5.78** | **206** | *e*P | Pn | 08 31 59.0 | -0.8 |
| FLOC | | | | *e*S | Sn | 08 32 56.3 | -9.0 |

**IDC 03 08:39:30.3±1.8, 54.68N×83.73E, h0km, mb1 2.6/3, mb1mx2.2/63, mbtmp2.6/3, ML2.2/3, Error ellipse: s-maj=15.4km s-min=10.0km az=4.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.97** | **138** | *i* | | 08 45 10.0 | |
| | baz=320,slow=329,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.97** | **138** | Pg | Pg | 08 39 48.1 | -0.8 |
| | 1.8nm,0.3s,baz=323,slow=16,SNR=20 | | | | | | |
| ZALV | | | | Lg | Lg | 08 40 03.1 | |
| | 3.3nm,0.3s,baz=316,slow=28,SNR=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.15** | **220** | Pn | Pn | 08 40 49.0 | +0.4 |
| | 0.0nm,0.3s,baz=43,slow=14,SNR=1.9 | | | | | | |
| KURBB | | | | Sn | Sn | 08 41 47.0 | -1.6 |
| | 0.0nm,0.3s,baz=44,slow=30,SNR=2.3 | | | | | | |
| KURBB | | | | Lg | Lg | 08 42 14.9 | |
| | 0.0nm,0.3s,baz=59,slow=34,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.95** | **187** | Pn | Pn | 08 41 27.3 | +0.3 |
| | 0.0nm,0.3s,baz=5.6,slow=13,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 08 43 43.4 | |
| | 0.1nm,0.3s,baz=9.5,slow=27,SNR=1.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **8.06** | **264** | Pn | Pn | 08 41 27.7 | -0.9 |
| | 0.2nm,0.3s,baz=52,slow=16,SNR=3.3 | | | | | | |

*NNC **03** 09:01:01.2±12.0, 54.37N×86.46E, h0km, mb3.1, mpv2.9, Error ellipse: s-maj=186.4km s-min=64.6km az=167.0, Suspected Mining explosion.*
*IDC **03** 09:01:02.9±2.3, 54.30N×86.13E, h0km, mb1 3.6/2, mb1mx2.8/54, mbtmp3.6/2, ML3.4/2, Error ellipse: s-maj=18.0km s-min=11.7km az=50.0*

**ISC 03 09:00:54.4±2.6, 53.44N±0.07×86.5E±0.1, h0km, n8, σ1§58/11, 5C-4D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.13** | **298** | *i* | | 09 05 50.0 | |
| | baz=66,slow=340,SNR=5.5 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.13** | **298** | ⇑P | **Pn** | **09 01 17.4** | **+0.1** |
| | 0.6nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sb** | **09 01 31.1** | **-0.8** |
| | 3.4nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.13** | **298** | Pg | **Pb** | **09 01 17.1** | **+0.4** |
| | 3.5nm,0.3s,baz=62,slow=17,SNR=45 | | | | | | |
| ZALV | | | | Lg | Lg | 09 01 31.8 | |
| | 12nm,0.3s,baz=68,slow=31,SNR=13 | | | | | | |
| **KURK** | **Kurchatov** | **5.57** | **244** | ⇓Pn | **Pb** | **09 02 33.2** | **+0.8** |
| | 0.4nm,0.3s | | | | | | |
| KURK | | | | ⇓Sn | **Sb** | **09 03 43.0** | **+3.2** |
| | 0.6nm,0.5s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 09 04 11.3 | |
| | 1.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.67** | **243** | Pn | **Pb** | **09 02 33.0** | **-1.2** |
| | 0.4nm,0.3s,baz=53,slow=13,SNR=30 | | | | | | |
| KURBB | | | | Sn | **Sb** | **09 03 40.0** | **-2.6** |
| | baz=43,slow=32,SNR=0.9 | | | | | | |
| KURBB | | | | Lg | Lg | 09 04 11.1 | |
| | 0.1nm,0.3s,baz=4.1,slow=28,SNR=2.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.67** | **243** | ⇑Pn | **Pb** | **09 02 33.7** | **-0.4** |
| | 1.6nm,0.2s | | | | | | |
| KURBB | | | | ⇓Sn | **Sb** | **09 03 42.7** | **+0.1** |
| | 1.1nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 04 12.8 | |
| | 3.2nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **7.18** | **204** | ⇑Pn | **Pb** | **09 02 59.8** | **-0.1** |
| | 0.2nm,0.2s,baz=28,slow=14,SNR=86 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.18** | **204** | Pn | **Pb** | **09 02 59.8** | **0.0** |
| | 1.2nm,0.3s,baz=24,slow=13,SNR=45 | | | | | | |

*IDC **03** 09:00:56.5±0.8, 13.81N×145.01E, h137km±8km, mb2.9/4, mb1 3.3/4, mb1mx2.8/51, mbtmp3.3/4, MS2.9/1, Ms1 2.9/1, ms1mx2.5/17, Error ellipse: s-maj=164.5km s-min=20.2km az=110.0*
*NEIC **03** 09:00:58.1±1.3, 13.82N±0.09×144.6E±0.2, h133km±7km, mb4.2/6, Error ellipse: s-maj=32.2km s-min=9.4km az=106.0*

**ISC 03 09:00:56.9±1.2, 14.0N±0.2×144.6E±0.3, h144km, n12, σ0§88/12, mb3.5/7, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **0.43** | **146** | P | **Pn** | **09 01 17.2** | **-0.1** |
| | 137nm,0.3s,baz=18,slow=3.2,SNR=88 | | | | | | |
| GUMO | | | | S | **Sn** | **09 01 30.9** | **-1.8** |
| | 301nm,0.3s,baz=142,slow=23,SNR=16 | | | | | | |
| **PMG** | **Port Moresby** | **23.34** | **174** | LR | LR | 09 14 19.7 | |
| | comp=Z,26nm,18.2s,baz=336,slow=35 | | | | | | |
| **WB0** | **Warramunga Arr** | **34.98** | **197** | P | **P** | **09 07 35.5** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 09 07 51.3 | |
| | comp=Z,5.9nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.16** | **197** | P | **P** | **09 07 37.1** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 09 08 00.9 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.16** | **197** | P | **P** | **09 07 37.1** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=17,slow=9.3,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.16** | **197** | P | **P** | **09 07 38.3** | **+1.2** |
| **ASAR** | **Alice Springs** | **38.83** | **196** | P | **P** | **09 08 08.2** | **+0.2** |
| | comp=Z,0.3nm,0.5s,baz=18,slow=13,SNR=13 | | | | | | |
| **EIDS** | **Eidsvold** | **39.59** | **171** | P | **P** | **09 08 14.2** | **0.0** |
| EIDS | | | | IAmb | IAmb | 09 08 19.9 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **41.71** | **149** | P | **P** | **09 08 32.9** | **+1.1** |
| **BBOO** | **Buckleboo** | **47.21** | **190** | P | **P** | **09 09 14.6** | **-0.6** |
| **ILAR** | **Eielson Array** | **68.35** | **25** | P | **P** | **09 11 41.9** | **-0.5** |
| | comp=Z,0.1nm,0.4s,baz=256,slow=5.5,SNR=4.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.65** | **27** | P | **P** | **09 13 04.5** | **+0.6** |
| | comp=Z,0.1nm,0.4s,baz=291,slow=4.8,SNR=1.7 | | | | | | |

*KRNET **03** 09:01:42.6±0.1, 42.03N×79.35E, h12km, mb3.5*
*SOME **03** 09:01:42.4, 42.05N×79.32E, h15km*

*NNC **03** 09:01:43.8±1.3, 42.09N×79.45E, h0km, mb3.8, mpv3.6, Error ellipse: s-maj=8.9km s-min=5.4km az=148.0*

**ISC 03 09:01:41.3±1.8, 41.98N±0.06×79.38E±0.04, h5km±10km, n68, σ1§54/117, 16C-16D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRZ** | **Przheval'sk** | **0.89** | **305** | ⇑*i*P | **Pb** | **09 01 59.1** | **-0.2** |
| | baz=4.0 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sb** | **09 02 10.9** | **-0.6** |
| | baz=4.0 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.20** | **259** | ⇓*i*P | **Pn** | **09 02 05.5** | **+0.3** |
| | baz=56 | | | | | | |
| TARG | | | | ⇓*i*S | **Sn** | **09 02 22.3** | **+0.3** |
| | baz=56 | | | | | | |
| **UZB** | **Uzynbulak** | **1.20** | **347** | *e*P | **Pb** | **09 02 04.3** | **-0.3** |
| | 24nm,0.4s | | | | | | |
| UZB | | | | *e*S | **Sn** | **09 02 20.4** | **-1.3** |
| | 24nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.20** | **347** | P | **Pb** | **09 02 04.3** | **-0.3** |
| | 24nm,0.4s | | | | | | |
| UZB | | | | S | **Sn** | **09 02 20.4** | **-1.3** |
| | 24nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.20** | **347** | *e*P | **Pb** | **09 02 04.3** | **-0.3** |
| | baz=48 | | | | | | |
| UZB | | | | *e*S | **Sn** | **09 02 20.3** | **-1.3** |
| | baz=48 | | | | | | |
| **SATY** | **Saty** | **1.30** | **327** | *e*P | **Pg** | **09 02 06.4** | **+0.1** |
| | 9.8nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sn** | **09 02 23.6** | **-0.5** |
| | 106nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.30** | **327** | P | **Pg** | **09 02 06.4** | **+0.1** |
| | 9.8nm,0.1s | | | | | | |
| SATY | | | | S | **Sn** | **09 02 23.6** | **-0.5** |
| | 106nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.30** | **327** | *e*P | **Pg** | **09 02 06.4** | **+0.1** |
| | baz=26 | | | | | | |
| SATY | | | | *e*S | **Sn** | **09 02 23.6** | **-0.5** |
| | baz=26 | | | | | | |
| **PDGK** | **Podgornoye** | **1.35** | **3** | ⇓P | **Pn** | **09 02 06.7** | **-0.4** |
| | 11nm,0.5s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **09 02 26.7** | **+1.8** |
| | 24nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **1.38** | **330** | *e*P | **Pg** | **09 02 07.8** | **0.0** |
| | 26nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **09 02 26.8** | **+1.1** |
| | 145nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.38** | **330** | P | **Pg** | **09 02 07.8** | **0.0** |
| | 26nm,0.1s | | | | | | |
| ZHN | | | | S | **Sg** | **09 02 26.8** | **+1.1** |
| | 145nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.38** | **330** | *e*P | **Pg** | **09 02 07.8** | **0.0** |
| | baz=30 | | | | | | |
| ZHN | | | | *e*S | **Sg** | **09 02 26.8** | **+1.1** |
| | baz=30 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.50** | **303** | ⇓*e*P | **Pb** | **09 02 10.1** | **+0.3** |
| | baz=2.0 | | | | | | |
| ANVS | | | | ⇓*e*S | **Sg** | **09 02 30.5** | **+0.9** |
| | baz=2.0 | | | | | | |
| **KPKS** | **Kokpek** | **1.57** | **341** | *e*P | **Pg** | **09 02 11.9** | **+0.3** |
| | 42nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **09 02 33.0** | **+1.0** |
| | 62nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.64** | **26** | *e*P | **Pb** | **09 02 11.8** | **-0.2** |
| | 41nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **09 02 33.0** | **-0.1** |
| | 54nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.64** | **26** | P | **Pb** | **09 02 11.9** | **-0.2** |
| | 41nm,0.1s | | | | | | |
| KTMS | | | | S | **Sb** | **09 02 32.9** | **-0.1** |
| | 54nm,0.3s | | | | | | |
| **KDJ** | **Kajisay** | **1.64** | **276** | ⇓*i*P | **Pb** | **09 02 12.9** | **+0.7** |
| | baz=74 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sg** | **09 02 35.2** | **+1.0** |
| | baz=74 | | | | | | |
| **KURS** | **Kuram** | **1.75** | **330** | *e*P | **Pg** | **09 02 14.7** | **-0.3** |
| | 11nm,0.2s | | | | | | |
| KURS | | | | *e*S | **Sg** | **09 02 37.8** | **+0.1** |
| | 23nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **1.75** | **330** | P | **Pg** | **09 02 14.7** | **-0.3** |
| | 11nm,0.2s | | | | | | |
| KURS | | | | S | **Sg** | **09 02 37.8** | **+0.1** |
| | 23nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **1.75** | **330** | *e*P | **Pg** | **09 02 14.7** | **-0.3** |
| | baz=30 | | | | | | |
| KURS | | | | *e*S | **Sg** | **09 02 37.8** | **+0.1** |
| | baz=30 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.09** | **301** | *e*P | **Pg** | **09 02 21.0** | **-0.3** |
| | 21nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **09 02 48.8** | **+0.4** |
| | 26nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.09** | **301** | Pg | **Pg** | **09 02 21.0** | **-0.3** |
| | 21nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 09 02 48.8 | |
| | 26nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **2.09** | **305** | *e*P | **Pg** | **09 02 20.7** | **-0.7** |
| | 25nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **09 02 48.2** | **-0.4** |
| | 53nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.09** | **305** | ⇑Pn | **Pg** | **09 02 20.3** | **+0.4** |
| | 17nm,0.5s | | | | | | |
| MDOK | | | | ⇑Sn | **Sg** | **09 02 48.0** | **-0.5** |
| | 125nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **2.09** | **305** | Pg | **Pg** | **09 02 20.7** | **-0.7** |
| | 25nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 09 02 48.2 | |
| | 53nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.09** | **305** | *e*P | **Pg** | **09 02 20.7** | **-0.7** |
| | baz=4.0 | | | | | | |
| MDOK | | | | *e*S | **Sg** | **09 02 48.1** | **-0.4** |
| | baz=4.0 | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.09** | **308** | *e*P | **Pg** | **09 02 21.0** | **-0.5** |
| | 30nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **09 02 48.4** | **-0.2** |
| | 89nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.09** | **308** | Pg | **Pg** | **09 02 21.0** | **-0.5** |
| | 30nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 09 02 48.4 | |
| | 89nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.09** | **308** | *e*P | **Pg** | **09 02 21.0** | **-0.5** |
| | baz=7.0 | | | | | | |
| KOTS | | | | *e*S | **Sg** | **09 02 48.4** | **-0.2** |
| | baz=7.0 | | | | | | |
| **KNDC** | **Almaty** | **2.17** | **306** | ⇓Pn | **Pg** | **09 02 22.5** | **-0.4** |
| | 28nm,0.3s | | | | | | |
| KNDC | | | | ⇓Sn | **Sg** | **09 02 52.0** | **+0.9** |
| | 47nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **2.22** | **343** | *e*P | **Pb** | **09 02 22.4** | **+0.4** |
| | 110nm,0.2s | | | | | | |
| BLB | | | | *e*S | **Sg** | **09 02 50.9** | **-1.8** |
| | 178nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **2.22** | **343** | Pg | **Pb** | **09 02 22.4** | **+0.4** |
| | 110

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ARXS** | **Arharly** | **2.51** | **334** | Pg | | **Pb** | **09 02 27.2** | **+0.3** |
| | 15nm,0.2s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 09 02 59.1 | | |
| | 82nm,0.4s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.60** | **283** | ⇑ | *i*P | **Pb** | **09 02 27.8** | **-0.8** |
| | baz=81 | | | | | | | | |
| BOOM | | | | ⇑ | *i*S | **Sb** | **09 03 00.8** | **-0.1** |
| | baz=81 | | | | | | | | |
| **KTBS** | **Karatobe** | **2.63** | **312** | | *e*P | **Pg** | **09 02 30.5** | **-1.3** |
| | 9.2nm,0.4s | | | | | | | | |
| KTBS | | | | | *e*S | **Sg** | **09 03 05.0** | **-1.0** |
| | 233nm,0.3s | | | | | | | | |
| **KTBS** | **Karatobe** | **2.63** | **312** | Pg | | **Pg** | **09 02 30.5** | **-1.3** |
| | 9.2nm,0.4s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 09 03 05.0 | | |
| | 233nm,0.3s | | | | | | | | |
| **KST** | **Kastek** | **2.74** | **294** | | *e*P | **Pg** | **09 02 32.8** | **-1.1** |
| | 20nm,0.4s | | | | | | | | |
| KST | | | | | *e*S | **Sg** | **09 03 08.8** | **-0.6** |
| | 46nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **2.74** | **294** | Pg | | **Pg** | **09 02 32.8** | **-1.1** |
| | 20nm,0.4s | | | | | | | | |
| KST | | | | Lg | | Lg | 09 03 08.8 | | |
| | 46nm,0.5s | | | | | | | | |
| **KUU** | **Kurty** | **2.94** | **312** | | *e*P | **Pb** | **09 02 35.4** | **+1.2** |
| | 2.8nm,0.2s | | | | | | | | |
| KUU | | | | | *e*S | **Sg** | **09 03 13.3** | **-2.4** |
| | 88nm,0.4s | | | | | | | | |
| **KUU** | **Kurty** | **2.94** | **312** | Pg | | **Pb** | **09 02 35.4** | **+1.2** |
| | 2.8nm,0.2s | | | | | | | | |
| KUU | | | | Lg | | Lg | 09 03 13.4 | | |
| | 88nm,0.4s | | | | | | | | |
| **DGS** | **Degeres** | **2.95** | **297** | | *e*P | **Pb** | **09 02 34.0** | **-0.4** |
| | 13nm,0.4s | | | | | | | | |
| DGS | | | | | *e*S | **Sb** | **09 03 12.1** | **+1.3** |
| | 38nm,0.5s | | | | | | | | |
| **DGS** | **Degeres** | **2.95** | **297** | Pg | | **Pb** | **09 02 34.0** | **-0.4** |
| | 13nm,0.4s | | | | | | | | |
| DGS | | | | Lg | | Lg | 09 03 12.1 | | |
| | 38nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.95** | **290** | ⇓ | Pn | **Pb** | **09 02 33.3** | **-1.3** |
| | 7.9nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇓ | Sn | **Sb** | **09 03 13.2** | **+2.2** |
| | 19nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.95** | **290** | ⇑ | *i*P | **Pb** | **09 02 32.6** | **-2.0** |
| | baz=89 | | | | | | | | |
| TKM2 | | | | ⇑ | *i*S | **Sb** | **09 03 09.1** | **-1.9** |
| | baz=89 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.11** | **347** | | *e*P | **Pb** | **09 02 38.1** | **+1.1** |
| | 34nm,0.2s | | | | | | | | |
| TDK | | | | | *e*S | **Sg** | **09 03 18.3** | **-2.9** |
| | 86nm,0.5s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.11** | **347** | Pg | | **Pb** | **09 02 38.2** | **+1.1** |
| | 34nm,0.2s | | | | | | | | |
| TDK | | | | Lg | | Lg | 09 03 18.3 | | |
| | 86nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.22** | **304** | | *e*P | **Pb** | **09 02 40.4** | **+1.3** |
| | 2.6nm,0.2s | | | | | | | | |
| KRBS | | | | | *e*S | **Sg** | **09 03 21.8** | **-2.9** |
| | 56nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.22** | **304** | Pg | | **Pb** | **09 02 40.4** | **+1.3** |
| | 2.6nm,0.2s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 09 03 21.8 | | |
| | 56nm,0.5s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.31** | **360** | | *e*P | **Pb** | **09 02 41.2** | **+0.7** |
| | 4.7nm,0.3s | | | | | | | | |
| KAPS | | | | | *e*S | **Sb** | **09 03 22.8** | **+1.7** |
| | 20nm,0.4s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.31** | **360** | Pg | | **Pb** | **09 02 41.2** | **+0.7** |
| | 4.7nm,0.3s | | | | | | | | |
| KAPS | | | | Lg | | Lg | 09 03 22.8 | | |
| | 20nm,0.4s | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.35** | **283** | ⇑ | *e*P | **Pb** | **09 02 38.3** | **-3.1** |
| | baz=82 | | | | | | | | |
| KBK | | | | ⇑ | *i*S | **Sb** | **09 03 19.0** | **-3.6** |
| | baz=82 | | | | | | | | |
| **UCH** | **Uchtor** | **3.63** | **276** | ⇓ | *e*P | **Pn** | **09 02 42.2** | **+3.6** |
| | baz=75 | | | | | | | | |
| UCH | | | | ⇓ | *i*S | **Sb** | **09 03 25.9** | **-4.8** |
| | baz=75 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.68** | **282** | ⇑ | Pn | **Pb** | **09 02 43.3** | **-3.7** |
| | 1.8nm,0.5s | | | | | | | | |
| AAK | | | | ⇓ | Pg | **Pg** | **09 02 53.1** | **+1.3** |
| | 3.5nm,0.6s | | | | | | | | |
| AAK | | | | ⇑ | Sn | **Sb** | **09 03 30.8** | **-1.2** |
| | 6.8nm,0.6s | | | | | | | | |
| AAK | | | | ⇓ | Lg | Lg | 09 03 46.8 | | |
| | 9.8nm,0.6s | | | | | | | | |
| **SGDS** | **Sogindy** | **3.80** | **294** | | *e*P | **Pb** | **09 02 50.0** | **+1.2** |
| | 2.1nm,0.4s | | | | | | | | |
| SGDS | | | | | *e*S | **Sb** | **09 03 38.2** | **+3.0** |
| | 37nm,0.7s | | | | | | | | |
| **SGDS** | **Sogindy** | **3.80** | **294** | Pg | | **Pb** | **09 02 50.0** | **+1.2** |
| | 2.1nm,0.4s | | | | | | | | |
| SGDS | | | | Lg | | Lg | 09 03 38.2 | | |
| | 37nm,0.7s | | | | | | | | |
| **MRKS** | **Merke** | **4.62** | **282** | | *e*P | **Pb** | **09 03 06.8** | **+3.8** |
| | 3.9nm,0.7s | | | | | | | | |
| MRKS | | | | | *e*S | **Sg** | **09 04 07.1** | **-2.7** |
| | 3.1nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **4.62** | **282** | Pg | | **Pb** | **09 03 06.8** | **+3.8** |
| | 3.9nm,0.7s | | | | | | | | |
| MRKS | | | | Lg | | Lg | 09 04 07.1 | | |
| | 3.1nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **4.94** | **310** | | *e*P | **Pb** | **09 03 11.6** | **+3.2** |
| | 0.5nm,0.3s | | | | | | | | |
| BTLS | | | | | *e*S | **Sg** | **09 04 15.1** | **-4.9** |
| | 4.7nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **4.94** | **310** | Pg | | **Pb** | **09 03 11.6** | **+3.2** |
| | 0.5nm,0.3s | | | | | | | | |
| BTLS | | | | Lg | | Lg | 09 04 15.1 | | |
| | 4.7nm,0.8s | | | | | | | | |
| **KK06** | **Karatay Array** | **6.63** | **283** | ⇑ | Pg | Pg | 09 03 43.2 | -5.1 | |
| | 0.8nm,0.7s | | | | | | | | |
| KK06 | | | | ⇓ | Lg | Lg | 09 05 15.3 | | |
| | 1.3nm,0.7s | | | | | | | | |

*VAO **03** 09:07:04.0±3.3, 22°.29S×71°.18W, h152km±9km, mb3.9*
*SJA **03** 09:07:13.0±0.8, 21°.26S×69°.68W, h44km±4km, ML4.1, MW4.1*
*NEIC **03** 09:07:14.0±1.4, 21°.26S±0°.02×69°.64W±0°.03, h45km±5km, mb4.1/5, ML4.2(GUC), Error ellipse: s-maj=4.2km s-min=3.5km az=83.0*
*IDC **03** 09:07:14.2±0.8, 21°.09S×69°.42W, h50km±7km, mb3.5/5, mb1 3.8/6, mb1mx3.5/30, mbtmp3.8/6, MS2.9/1, Ms1 3.1/1, ms1mx2.5/33, Error ellipse: s-maj=27.4km s-min=6.8km az=76.0*
*GUC **03** 09:07:14.6±0.7, 21°.27S×69°.62W, h44km±1km, ML4.2*

**ISC 03 09:07:13.0±0.6, 21°.24S±0°.02×69°.69W±0°.04, h49km±4km, n92, σ2s04/123, mb4.1/7, 3C-11D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PB02** | **IPOC Station P** | **0.21** | **248** | ⇑ | *i*P | | **Pn** | **09 07 22.5** | **+0.9** |
| PB02 | | | | | *i*S | | **Sn** | **09 07 28.5** | **+0.9** |
| PB02 | | | | | IAML | | | 09 07 30.1 | |
| | comp=E,33μm,0.4s | | | | | | | | |
| **PB02** | **IPOC Station P** | **0.21** | **248** | | Pn | | **Pn** | **09 07 22.4** | **+0.8** |
| PB02 | | | | | Sn | | **Sn** | **09 07 28.7** | **+1.1** |
| **PB02** | **IPOC Station P** | **0.21** | **248** | | *e*P | | **Pn** | **09 07 22.0** | **+0.5** |
| PB02 | | | | | *e*S | | **Sn** | **09 07 32.0** | **+4.5** |
| PB02 | | | | | IAML | | | 09 07 33.9 | |
| | comp=Z,14μm,0.2s | | | | | | | | |
| **PB01** | **IPOC Station P** | **0.27** | **44** | ⇑ | *i*P | | **Pn** | **09 07 22.3** | **+0.3** |
| PB01 | | | | | *i*S | | **Sn** | **09 07 28.6** | **+0.2** |
| PB01 | | | | | IAML | | | 09 07 28.9 | |
| | comp=N,82μm,0.2s | | | | | | | | |
| **PB01** | **IPOC Station P** | **0.27** | **44** | | Pn | | **Pn** | **09 07 22.3** | **+0.3** |
| PB01 | | | | | Sn | | **Sn** | **09 07 28.5** | **+0.2** |
| **PB01** | **IPOC Station P** | **0.27** | **44** | | *e*P | | **Pn** | **09 07 22.0** | **0.0** |
| PB01 | | | | | *e*P | | **Pn** | **09 07 22.3** | **+0.3** |
| PB01 | | | | | *e*S | | **Sn** | **09 07 28.5** | **+0.2** |
| PB01 | | | | | IAML | | | 09 07 28.8 | |
| | comp=Z,42μm,0.2s | | | | | | | | |
| **PB07** | **IPOC Station P** | **0.52** | **201** | ⇓ | *i*P | | **Pn** | **09 07 25.3** | **+0.6** |
| PB07 | | | | | *i*S | | **Sn** | **09 07 33.7** | **+0.7** |
| PB07 | | | | | IAML | | | 09 07 34.0 | |
| | comp=N,24μm,0.3s | | | | | | | | |
| **PB07** | **IPOC Station P** | **0.52** | **201** | | Pn | | **Pn** | **09 07 25.3** | **+0.6** |
| PB07 | | | | | Sn | | **Sn** | **09 07 33.5** | **+0.6** |
| **PB07** | **IPOC Station P** | **0.52** | **201** | | *e*P | | **Pn** | **09 07 25.1** | **+0.5** |
| PB07 | | | | | IAML | | | 09 07 34.9 | |
| | comp=Z,9μm,0.3s | | | | | | | | |
| **PB09** | **IPOC Station P** | **0.69** | **143** | ⇓ | *i*P | | **Pn** | **09 07 27.5** | **+0.6** |
| PB09 | | | | | *i*S | | **Sn** | **09 07 36.7** | **-0.1** |
| PB09 | | | | | IAML | | | 09 07 38.2 | |
| | comp=E,14μm,0.2s | | | | | | | | |
| **PB09** | **IPOC Station P** | **0.69** | **143** | | Pn | | **Pn** | **09 07 27.4** | **+0.6** |
| **PB03** | **IPOC Station P** | **0.81** | **184** | ⇓ | *i*P | | **Pn** | **09 07 29.0** | **+0.6** |
| PB03 | | | | | *i*S | | **Sn** | **09 07 39.8** | **+0.3** |
| PB03 | | | | | IAML | | | 09 07 40.6 | |
| | comp=E,10μm,0.3s | | | | | | | | |
| **PB03** | **IPOC Station P** | **0.81** | **184** | | Pn | | **Pn** | **09 07 28.9** | **+0.6** |
| **PB03** | **IPOC Station P** | **0.81** | **184** | | *e*P | | **Pn** | **09 07 29.0** | **+0.6** |
| PB03 | | | | | *e*P | | **Pn** | **09 07 29.0** | **+0.6** |
| PB03 | | | | | IAML | | | 09 07 40.3 | |
| | comp=Z,6μm,0.3s | | | | | | | | |
| PB03 | | | | | *e*S | | **Sn** | **09 07 40.4** | **+1.0** |
| **TA01** | **Diego Aracena** | **0.81** | **326** | ⇓ | *i*P | | **Pn** | **09 07 29.7** | **+1.4** |
| TA01 | | | | | *i*S | | **Sn** | **09 07 41.4** | **+2.0** |
| TA01 | | | | | IAML | | | 09 07 42.7 | |
| | comp=N,26μm,0.3s | | | | | | | | |
| **TA01** | **Diego Aracena** | **0.81** | **326** | | | | **Pn** | **09 07 29.7** | **+1.4** |
| **TA01** | **Diego Aracena** | **0.81** | **326** | | *e*P | | **Pn** | **09 07 29.0** | **+0.7** |
| TA01 | | | | | *e*P | | **Pn** | **09 07 29.6** | **+1.4** |
| TA01 | | | | | *e*S | | **Sn** | **09 07 41.9** | **+2.5** |
| TA01 | | | | | IAML | | | 09 07 42.4 | |
| | comp=Z,5μm,0.4s | | | | | | | | |
| **TA02** | **Huaiquique** | **1.05** | **337** | ⇓ | *i*P | | **Pn** | **09 07 33.4** | **+1.9** |
| TA02 | | | | | *i*S | | **Sn** | **09 07 47.5** | **+2.5** |
| TA02 | | | | | IAML | | | 09 07 49.1 | |
| | comp=N,13μm,0.2s | | | | | | | | |
| **TA02** | **Huaiquique** | **1.05** | **337** | | | | **Pn** | **09 07 33.2** | **+1.8** |
| **TA02** | **Huaiquique** | **1.05** | **337** | | *e*P | | **Pn** | **09 07 33.0** | **+1.6** |
| TA02 | | | | | *e*S | | **Sn** | **09 07 48.3** | **+3.3** |
| TA02 | | | | | IAML | | | 09 07 49.5 | |
| | comp=Z,6μm,0.1s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.17** | **201** | ⇓ | *i*P | | **Pn** | **09 07 34.0** | **+0.8** |
| PB04 | | | | | *i*S | | **Sn** | **09 07 47.5** | **-0.6** |
| PB04 | | | | | IAML | | | 09 07 53.1 | |
| | comp=N,4μm,0.4s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.17** | **201** | | Pn | | **Pn** | **09 07 33.9** | **+0.8** |
| **PB04** | **IPOC Station P** | **1.17** | **201** | | *e*P | | **Pn** | **09 07 34.0** | **+0.8** |
| PB04 | | | | | *e*S | | **Sn** | **09 07 49.4** | **+1.2** |
| PB04 | | | | | IAML | | | 09 07 52.8 | |
| | comp=Z,4μm,0.4s | | | | | | | | |
| **PB08** | **IPOC Station P** | **1.20** | **25** | ⇓ | *i*P | | **Pn** | **09 07 35.2** | **+1.4** |
| PB08 | | | | | *i*S | | **Sn** | **09 07 51.3** | **+1.9** |
| PB08 | | | | | IAML | | | 09 07 52.1 | |
| | comp=E,9μm,0.3s | | | | | | | | |
| **PB08** | **IPOC Station P** | **1.20** | **25** | | Pn | | **Pn** | **09 07 35.2** | **+1.4** |
| **PB08** | **IPOC Station P** | **1.20** | **25** | | *e*P | | **Pn** | **09 07 35.4** | **+1.5** |
| PB08 | | | | | *e*S | | **Sn** | **09 07 51.6** | **+2.3** |
| PB08 | | | | | IAML | | | 09 07 52.8 | |
| | comp=Z,4μm,0.3s | | | | | | | | |
| **PB06** | **IPOC Station P** | **1.46** | **176** | ⇓ | *i*P | | **Pn** | **09 07 37.9** | **+0.8** |
| PB06 | | | | | *i*S | | **Sn** | **09 07 56.1** | **+0.9** |
| PB06 | | | | | IAML | | | 09 08 00.9 | |
| | comp=E,3μm,0.3s | | | | | | | | |
| **PB06** | **IPOC Station P** | **1.46** | **176** | | | | **Pn** | **09 07 38.0** | **+0.8** |
| **PB11** | **IPOC Station P** | **1.47** | **1** | ⇓ | *i*P | | **Pn** | **09 07 38.6** | **+1.3** |
| PB11 | | | | | *i*S | | **Sn** | **09 07 57.6** | **+2.0** |
| PB11 | | | | | IAML | | | 09 07 58.5 | |
| | comp=E,12μm,0.2s | | | | | | | | |
| **PB11** | **IPOC Station P** | **1.47** | **1** | | Pn | | **Pn** | **09 07 38.8** | **+1.4** |
| **PB11** | **IPOC Station P** | **1.47** | **1** | | *e*P | | **Pn** | **09 07 39.0** | **+1.6** |
| PB11 | | | | | *e*S | | **Sn** | **09 07 58.2** | **+2.7** |
| PB11 | | | | | IAML | | | 09 07 59.3 | |
| | comp=Z,5μm,0.3s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.54** | **152** | | P | | **Pn** | **09 07 40.5** | **+2.0** |
| | comp=Z,383nm,0.3s,baz=350,slow=9.7,SNR=620 | | | | | | | | |
| LVC | | | | | S | | **Sn** | **09 07 59.8** | **+2.2** |
| | comp=Z,754nm,0.3s,baz=326,slow=4.8,SNR=47 | | | | | | | | |
| LVC | | | | | LR | | LR | 09 08 24.4 | |
| | comp=Z,147nm,19.7s,baz=273,slow=44 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.54** | **152** | ⇓ | *i*P | | **Pn** | **09 07 40.5** | **+2.0** |
| LVC | | | | | *i*S | | **Sn** | **09 07 59.0** | **+1.5** |
| **LVC** | **Limon Verde** | **1.54** | **152** | | *e*P | | **Pn** | **09 07 40.7** | **+2.2** |
| **LVC** | **Limon Verde** | **1.54** | **152** | | *e*P | | **Pn** | **09 07 40.0** | **+1.5** |
| LVC | | | | | *e*S | | **Sn** | **09 08 00.8** | **+3.3** |
| LVC | | | | | IAML | | | 09 08 01.7 | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| **GO01** | **Chusmiza** | **1.63** | **17** | ⇓ | *i*P | | **Pn** | **09 07 41.8** | **+2.0** |
| GO01 | | | | | *i*S | | **Sn** | **09 08 02.4** | **+2.5** |
| GO01 | | | | | IAML | | | 09 08 05.9 | |
| | comp=N,8μm,0.1s | | | | | | | | |
| **GO01** | **Chusmiza** | **1.63** | **17** | | Pn | | **Pn** | **09 07 41.8** | **+2.0** |
| **GO01** | **Chusmiza** | **1.63** | **17** | | *e*P | | **Pn** | **09 07 41.8** | **+2.0** |
| GO01 | | | | | *e*S | | **Sn** | **09 08 03.2** | **+3.3** |
| **PB15** | **IPOC Station P** | **1.97** | **174** | | *e*P | | **Pn** | **09 07 45.7** | **+1.6** |
| PB15 | | | | | *e*S | | **Sn** | **09 08 10.0** | **+2.2** |
| **PB15** | **IPOC Station P** | **1.97** | **174** | | | | **Pn** | **09 07 44.6** | **+0.5** |
| **PB15** | **IPOC Station P** | **1.97** | **174** | | *e*P | | **Pn** | **09 07 45.7** | **+1.6** |
| PB15 | | | | | *e*S | | **Sn** | **09 08 11.9** | **+4.1** |
| PB15 | | | | | IAML | | | 09 08 20.3 | |
| | comp=Z,4μm,0.3s | | | | | | | | |
| **MNMC** | **Minye Minye** | **2.10** | **2** | | Pn | | **Pn** | **09 07 48.2** | **+2.1** |
| **PB10** | **IPOC Station P** | **2.40** | **199** | ⇑ | *i*P | | **Pn** | **09 07 50.6** | **+0.7** |
| PB10 | | | | | *e*S | | **Sn** | **09 08 23.9** | **+5.9** |
| PB10 | | | | | IAML | | | 09 08 36.1 | |
| | comp=E,1μm,0.8s | | | | | | | | |
| **PB10** | **IPOC Station P** | **2.40** | **199** | | | | **Pn** | **09 07 50.3** | **+0.4** |
| **PB10** | **IPOC Station P** | **2.40** | **199** | | *e*P | | **Pn** | **09 07 51.1** | **+1.3** |
| PB10 | | | | | *e*S | | **Sn** | **09 08 25.1** | **+7.1** |
| PB10 | | | | | IAML | | | 09 08 38.2 | |
| | comp=Z,436nm,0.4s | | | | | | | | |
| **PB12** | **IPOC Station P** | **2.68** | **347** | | Pn | | **Pn** | **09 07 55.7** | **+1.9** |
| **PB12** | **IPOC Station P** | **2.68** | **347** | | *e*P | | **Pn** | **09 07 55.7** | **+1.9** |
| PB12 | | | | | *e*S | | **Sn** | **09 08 17.1** | **-8.0** |
| PB12 | | | | | IAML | | | 09 08 42.6 | |
| | comp=Z,696nm,0.2s | | | | | | | | |
| **PB16** | **IPOC Station P** | **2.90** | **3** | | *e*P | | **Pn** | **09 08 00.6** | **+3.4** |
| PB16 | | | | | *e*S | | **Sn** | **09 08 32.1** | **+1.0** |
| PB16 | | | | | IAML | | | 09 08 43.0 | |
| | comp=Z,539nm,0.4s | | | | | | | | |
| **PB14** | **IPOC Station P** | **3.43** | **191** | | Pn | | **Pn** | **09 08 04.6** | **+0.2** |
| **LPAZ** | **La Paz** | **5.14** | **17** | | P | | Pn | 09 08 33.5 | +5.3 |
| | comp=Z,1.4nm,0.3s,baz=200,slow=3.9,SNR=12 | | | | | | | | |
| LPAZ | | | | | LR | | LR | 09 10 59.8 | |
| | comp=Z,146nm,21.2s,baz=248,slow=46 | | | | | | | | |
| **AC02** | **Maricunga** | **5.59** | **175** | | Pn | | **Pn** | **09 08 35.9** | **+1.8** |
| **AC02** | **Maricunga** | **5.59** | **175** | | *e*P | | **Pn** | **09 08 36.0** | **+1.8** |
| **GO03** | **Copiap** | **6.34** | **184** | | Pn | | **Pn** | **09 08 43.1** | **-1.0** |
| **GO03** | **Copiap** | **6.34** | **184** | | *e*P | | **Pn** | **09 08 43.8** | **-0.2** |
| **AC04** | **Llanos de Chal** | **7.05** | **190** | | Pn | | **Pn** | **09 08 50.3** | **-3.3** |
| **ACLC** | **CERRO LA CRUZ** | **8.52** | **164** | | *e*P | | **Pn** | **09 09 14.0** | **+0.1** |
| **GO04** | **Tololo Observa** | **8.95** | **186** | | Pn | | **Pn** | **09 09 17.5** | **-2.5** |
| **AVFE** | **Valle Fertil** | **9.59** | **168** | | *e*P | | **Pn** | **09 09 29.0** | **+0.4** |
| AVFE | | | | | *e*P | | **Pn** | **09 09 29.0** | **+0.4** |
| **CO03** | **El Pedregal** | **9.60** | **185** | | Pn | | **Pn** | **09 09 25.3** | **-3.4** |
| **SIV** | **San Ignacio** | **9.69** | **59** | | P | | **Pn** | **09 09 28.9** | **-1.0** |
| | comp=Z,1.1nm,0.3s,baz=248,slow=9.8,SNR=31 | | | | | | | | |
| **CO02** | **Combarbal** | **9.99** | **186** | | Pn | | **Pn** | **09 09 30.4** | **-3.7** |
| **PTLB** | **Pontes e Lacer** | **11.55** | **62** | | Pn | | **Pn** | **09 09 55.4** | **0.0** |
| **VILB** | **Vilhena** | **12.25** | **49** | | *e*P | | **P** | **09 10 17.0** | **+1.0** |
| **SALV** | **Santo Antonio** | **14.29** | **71** | | *e*P | | **P** | **09 10 39.1** | **+0.4** |
| **H03N1** | **Juan Fernandez** | **14.65** | **212** | | T | | T | 09 25 45.3 | |
| | baz=35,slow=72,SNR=27 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **14.65** | **212** | | T | | T | 09 25 49.3 | |
| | baz=35,slow=72,SNR=24 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **14.66** | **212** | | T | | T | 09 25 48.7 | |
| | baz=35,slow=72,SNR=28 | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **17.82** | **75** | | *e*P | | **P** | **09 11 18.1** | **+0.3** |
| **PLCA** | **Paso Flores** | **19.45** | **182** | | P | | **P** | **09 11 29.2** | **-6.3** |
| **IPMB** | **Ipameri, GO** | **20.49** | **85** | | *e*P | | **P** | **09 11 46.6** | **-0.4** |
| **BDFB** | **Brasilia** | **21.29** | **78** | | P | | **P** | **09 11 53.2** | **-2.6** |
| | comp=Z,1.7nm,0.5s,baz=235,slow=12,SNR=2.0 | | | | | | | | |
| **BDFB** | **Brasilia** | **21.29** | **78** | | IAmb | | IAmb | 09 11 53.8 | |
| | comp=Z,7.8nm,1.5s | | | | | | | | |
| BDFB | | | | | P | | **P** | **09 11 54.9** | **-0.9** |
| **ITTB** | **Itaituba** | **21.57** | **41** | | *e*P | | **P** | **09 11 57.0** | **-1.6** |
| **PEXB** | **Peixe** | **22.39** | **69** | | *e*P | | **P** | **09 12 06.7** | **-0.8** |
| **PTGA** | **Pitinga** | **22.49** | **26** | | P | | **P** | **09 12 05.6** | **-2.9** |
| | comp=Z,1.1nm,0.3s,baz=196,slow=17,SNR=8.8 | | | | | | | | |
| **BOAV** | **Boa Vista** | **25.15** | **22** | | P | | **P** | **09 12 32.9** | **-0.9** |
| BOAV | | | | | IAmb | | IAmb | 09 12 53.4 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.00** | **326** | | P | | **P** | **09 17 15.7** | **+0.9** |
| | comp=Z,0.2nm,0.6s,baz=138,slow=6.8,SNR=1.8 | | | | | | | | |
| TXAR | | | | | pP | | **pP** | **09 17 29.9** | **+0.9** |
| | comp=Z,0.2nm,0.6s,baz=163,slow=6.6,SNR=2.1 | | | | | | | | |
| **S39A** | **Bolivar** | **62.70** | **339** | | P | | **P** | **09 17 33.6** | **+0.9** |
| **SNAA** | **Sanae** | **62.76** | **161** | | P | | **P** | **09 17 33.1** | **+0.2** |
| SNAA | | | | | IAmb | | IAmb | 09 17 54.8 | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.95** | **71** | | P | | **P** | **09 19 05.7** | **-0.8** |
| | comp=Z,1.2nm,0.5s,baz=253,slow=5.3,SNR=9.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.70** | **341** | | P | | **P** | **09 20 10.9** | **+0.9** |
| | comp=Z,0.5nm,0.6s,baz=137,slow=4.4,SNR=15 | | | | | | | | |
| YKA | | | | | pP | | **pP** | **09 20 24.7** | **-0.1** |
| | comp=Z,0.7nm,0.8s,baz=138,slow=4.6,SNR=7.4 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **27.12** | **278** | | T | | T | 11 45 58.7 | |
| | baz=102,slow=74,SNR=63 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **27.13** | **278** | | T | | T | 11 45 58.7 | |
| | baz=102,slow=74,SNR=36 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **27.14** | **278** | | T | | T | 11 46 01.5 | |
| | baz=102,slow=74,SNR=30 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **27.20** | **279** | | T | | T | 11 46 11.3 | |
| | baz=103,slow=74,SNR=18 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **27.22** | **279** | | T | | T | 11 46 08.0 | |
| | baz=103,slow=74,SNR=16 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **27.22** | **279** | | T | | T | 11 46 10.8 | |
| | baz=103,slow=74,SNR=10 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.02** | **24** | | PKP | | **PKPdf** | **09 26 39.2** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=255,slow=3.9,SNR=2.2 | | | | | | | | |
| **KSH** | **Kashi** | **145.50** | **50** | | PKPbc | | **PKPab** | **09 26 48.1** | **+1.6** |
| **MKAR** | **Makanchi Array** | **145.85** | **35** | | PKPbc | | **PKPab** | **09 26 47.8** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=329,slow=3.2,SNR=16 | | | | | | | | |
| MKAR | | | | | pPKPbc | | **pPKPdf** | **09 27 01.8** | **+0.2** |
| | comp=Z,0.6nm,0.5s,baz=328,slow=2.7,SNR=6.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.85** | **35** | | | | **PKPbc** | **09 26 47.1** | **+0.2** |
| MKAR | | | | | PKPbc | | **PKPab** | **09 26 48.1** | **+0.7** |
| **PZH** | **PanZhiHua** | **170.57** | **55** | | PKP | | **PKPdf** | **09 27 15.3** | **-1.0** |

*INMG **03** 09:13:30.5±1.4, 35°.52N×3°.87W, h0km, ML2.5, Error ellipse: s-maj=3.0km s-min=2.9km az=28.0*
*CNRM **03** 09:13:30.1, 35°.59N×3°.76W, h19km, ml2.7*
*SFS **03** 09:13:30.0, 35°.50N×3°.80W, ML2.5, ALBORAN SUR*

**ISC 03 09:13:29.1±1.6, 35°.59N±0°.04×3°.76W±0°.03, h12km±12km, n17, σ1s44/34, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.40** | **201** | | | P | **Pg** | **09 13 36.7** | **-0.3** |
| PALE | | | | | | S | **Sb** | **09 13 43.8** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.16** | **110** | | | P | **Pb** | **09 13 50.5** | **-0.6** |
| CHAS | | | | | | S | **Sb** | **09 14 05.6** | **-0.6** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **335** | | | P | **Pb** | **09 13 53.6** | **+0.5** |
| EMAL | | | | | | S | **Sb** | **09 14 10.2** | **+0.5** |
| **CEU** | **Ceuta** | **1.34** | **284** | | | P | **Pn** | **09 13 51.6** | **-2.0** |
| CEU | | | | | | S | **Sb** | **09 14 06.5** | **-4.9** |
| **TAF** | **Taforalt** | **1.35** | **125** | | | P | **Pn** | **09 13 53.4** | **-0.4** |
| TAF | | | | | | S | **Sb** | **09 14 11.4** | **-0.3** |
| **CHEFC** | **Chefchaouen** | **1.38** | **250** | | | P | **Pb** | **09 13 55.4** | **+0.5** |
| CHEFC | | | | | | S | **Sb** | **09 14 13.0** | **+0.6** |
| **JBK** | **JBK** | **1.59** | **142** | | | P | **Pn** | **09 13 57.6** | **+0.3** |
| JBK | | | | | | S | **Sn** | **09 14 16.9** | **-1.1** |
| **MD31** | **MD31** | **2.84** | **197** | | | P | **Pn** | **09 14 15.6** | **+1.2** |
| MD31 | | | | | | S | **Sn** | **09 14 49.0** | **+0.4** |
| **MDT** | **Midelt** | **2.86** | **194** | | | P | **Pn** | **09 14 16.6** | **+1.9** |
| MDT | | | | | | S | **Sn** | **09 14 49.0** | **0.0** |
| **TDRA** | **Tendrara** | **2.92** | **150** | | | P | **Pn** | **09 14 17.2** | **+1.6** |
| TDRA | | | | | | S | **Sn** | **09 14 50.3** | **-0.5** |
| **PVAQ** | **Vaqueiros** | **3.66** | **301** | | *e*Pn | P | **Pn** | **09 14 27.3** | **+1.8** |
| PVAQ | | | | | *e*Sn | S | **Sn** | **09 15 08.4** | **-0.3** |
| PVAQ | | | | | | A | A | 09 15 12.2 | |
| | 8.9nm,0.5s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.66** | **301** | | | P | **Pn** | **09 14 26.5** | **+1.0** |
| PVAQ | | | | | | S | **Sn** | **09 15 07.0** | **-1.7** |
| **PBDV** | **Barranco-do-Ve** | **3.74** | **297** | | *e*Pn | P | **Pn** | **09 14 27.6** | **+0.9** |
| PBDV | | | | | *e*Sn | S | **Sn** | **09 15 10.1** | **-0.6** |
| PBDV | | | | | | A | A | 09 15 11.4 | |
| | 7.7nm,0.5s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.00** | **302** | | *e*Pn | P | **Pn** | **09 14 31.6** | **+1.5** |
| PCVE | | | | | *e*Sn | S | **Sn** | **09 15 16.4** | **-0.5** |
| PCVE | | | | | | A | A | 09 15 21.9 | |
| | 5.5nm,0.5s | | | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **303** | | *e*Pn | P | **Pn** | **09 14 35.0** | **+1.7** |
| MESJ | | | | | *e*Sn | S | **Sn** | **09 15 22.4** | **-0.1** |
| MESJ | | | | | | A | A | 09 15 26.9 | |
| | 5.8nm,0.5s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.

*az=141.0*
*IDC **03** 10:24:38.4±2.4,25°.78S×179°.75E,h503km±30km,mb3.3/5, mb1 3.5/6,mb1mx3.1/35,mbtmp4.2/6,Error ellipse: s-maj=45.7km s-min=22.2km az=175.0*
**ISC 03 10:24:37.2±0.9,25°.7S±0°.1×179°.9E±0°.1,h493km,n27, σ0:96/27,mb4.0/12,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **4.02** | **151** | P | **P** | **10 25 57.6** | **+2.4** |
| | 93nm,0.3s,baz=112,slow=5.5,SNR=9.8 | | | | | | |
| **MARNC** | **Mare, Loyalty** | **11.64** | **289** | P | **P** | **10 27 12.6** | **+0.5** |
| **PINNC** | **Pines Island,** | **11.75** | **283** | P | **P** | **10 27 14.1** | **+0.9** |
| **URZ** | **Urewera** | **12.71** | **190** | P | **P** | **10 27 22.1** | **-1.0** |
| | 0.2nm,0.3s,baz=359,slow=23,SNR=1.5 | | | | | | |
| URZ | | | | S | **S** | **10 29 38.1** | **-1.8** |
| | 0.1nm,0.3s,baz=66,slow=6.6,SNR=1.3 | | | | | | |
| **QRZ** | **Quartz Range** | **16.24** | **200** | P | **P** | **10 28 00.2** | **-0.1** |
| **LTZ** | **Lake Taylor** | **18.11** | **198** | P | **P** | **10 28 18.9** | **+0.1** |
| LTZ | | | | IAmb | IAmb | 10 28 34.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **25.31** | **253** | P | **P** | **10 29 24.9** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 10 29 48.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **25.95** | **264** | P | **P** | **10 29 29.8** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 10 29 30.6 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **31.40** | **273** | P | **P** | **10 30 17.2** | **-0.1** |
| | comp=Z,2.7nm,0.3s,baz=97,slow=9.9,SNR=12 | | | | | | |
| **CTAO** | **Charters Tower** | **31.40** | **273** | P | **P** | **10 30 17.7** | **+0.4** |
| **STKA** | **Stephens Creek** | **33.96** | **251** | P | **P** | **10 30 38.9** | **+0.1** |
| | comp=Z,1.4nm,0.5s,baz=114,slow=13,SNR=7.0 | | | | | | |
| **STKA** | **Stephens Creek** | **33.96** | **251** | P | **P** | **10 30 39.5** | **+0.6** |
| **COEN** | **Coen** | **36.32** | **282** | P | **P** | **10 30 59.3** | **+0.5** |
| COEN | | | | IAmb | IAmb | 10 30 59.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **38.64** | **249** | P | **P** | **10 31 16.9** | **-0.8** |
| **AS31** | **Alice Springs** | **41.64** | **263** | P | **P** | **10 31 41.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **41.64** | **263** | P | **P** | **10 31 41.5** | **-0.5** |
| | comp=Z,1.7nm,0.4s,baz=92,slow=7.6,SNR=60 | | | | | | |
| **ASAR** | **Alice Springs** | **41.64** | **263** | P | **P** | **10 31 41.3** | **-0.6** |
| **WR0** | **Warramunga Arr** | **42.00** | **268** | P | **P** | **10 31 44.3** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 10 31 48.0 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.18** | **268** | P | **P** | **10 31 45.6** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 10 31 45.9 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.19** | **268** | P | **P** | **10 31 45.4** | **-0.9** |
| | comp=Z,2.4nm,0.6s,baz=100,slow=6.8,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.19** | **268** | P | **P** | **10 31 45.5** | **-0.7** |
| **WB0** | **Warramunga Arr** | **42.19** | **268** | P | **P** | **10 31 45.5** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 10 31 46.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **48.58** | **271** | P | **P** | **10 32 35.1** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 10 32 36.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KHU** | **Kahuku** | **50.67** | **30** | P | **P** | **10 32 48.6** | **-2.2** |
| **TXAR** | **Lajitas Array** | **51.50** | **58** | P | **P** | **10 36 51.7** | **+0.8** |
| | comp=Z,0.5nm,1.1s,baz=232,slow=4.4,SNR=2.2 | | | | | | |
| **HFS** | **Hagfors** | **144.31** | **348** | PKP | PKPbc | 10 43 14.8 | -0.9 |
| | comp=Z,5.6nm,1.0s,baz=86,slow=1.9,SNR=5.8 | | | | | | |
| **ASF** | **Jabal al Asfar** | **147.08** | **290** | PKPbc | **PKPbc** | **10 43 24.9** | **+0.1** |
| | comp=Z,1.0nm,0.3s,baz=0.0,slow=1.0,SNR=1.9 | | | | | | |

*JMA **03** 10:29:54.3±0.1,40°.67N×141°.74E,h73km±1km,M3.2 Broadband fault plane solution: P waves. NP1: ϕs86.00000°,δ24.00000°,λ169.00000°. NP2: ϕs185.00000°,δ86.00000°,λ66.00000°. Principal axes: T Plg44.0000°, Azm72.0000°; N Plg24.0000°, Azm187.0000°; P Plg36.0000°, Azm296.0000°;*
*JMA Felt II J1.*
*IDC **03** 10:29:55.1±2.1,40°.70N×141°.72E,h87km±19km,mb3.3/6, mb1 3.3/9,mb1mx3.1/62,mbtmp3.6/9 Error ellipse: s-maj=26.2km s-min=15.9km az=111.0*
**ISC 03 10:29:54.1±0.9,40°.66N±0°.04×141°.71E±0°.06,h74km±6km, n25,σ1°00/33,mb3.7/6,7C,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JANG** | **Nango** | **0.32** | **208** | ⇑P | **Pn** | **10 30 06.0** | **+0.1** |
| JANG | | | | S | **Sn** | **10 30 14.5** | **-0.1** |
| **JARK** | **Aomorirokkasho** | **0.43** | **323** | ⇑P | **Pn** | **10 30 06.9** | **+0.2** |
| JARK | | | | S | **Sn** | **10 30 16.1** | **+0.1** |
| **JKEN** | **Kujiedanarisaw** | **0.46** | **180** | ⇑P | **Pn** | **10 30 07.3** | **+0.4** |
| JKEN | | | | S | **Sn** | **10 30 16.6** | **+0.3** |
| **JTM** | **Tenmabayashi** | **0.50** | **285** | ⇑P | **Pn** | **10 30 07.3** | **0.0** |
| JTM | | | | S | **Sn** | **10 30 17.1** | **0.0** |
| **JOT** | **Ohata** | **0.88** | **325** | ⇑P | **Pn** | **10 30 11.6** | **+0.2** |
| JOT | | | | eS | **Sn** | **10 30 24.1** | **0.0** |
| **JAH** | **Hinai** | **0.95** | **240** | ⇑P | **Pn** | **10 30 12.8** | **+0.6** |
| JAH | | | | S | **Sn** | **10 30 27.1** | **+1.5** |
| **JOM** | **Ohasama** | **1.23** | **195** | ⇑P | **Pn** | **10 30 16.3** | **+0.6** |
| JOM | | | | S | **Sn** | **10 30 32.4** | **+0.5** |
| **JIW** | **Iwasaki** | **1.30** | **268** | P | **Pn** | **10 30 17.2** | **+0.6** |
| **JSR** | **Shiriuchi** | **1.31** | **312** | P | **Pn** | **10 30 17.6** | **+0.9** |
| JSR | | | | S | **Sn** | **10 30 34.6** | **+1.0** |
| **JKB** | **Kayabe** | **1.33** | **338** | P | **Pn** | **10 30 17.8** | **+0.8** |
| JKB | | | | S | **Sn** | **10 30 34.8** | **+0.7** |
| **JRG** | **Rokugo** | **1.51** | **214** | P | **Pn** | **10 30 20.5** | **+1.1** |
| **JOMM** | **Oshimamatsumae** | **1.55** | **304** | P | **Pn** | **10 30 20.6** | **+0.7** |
| JOMM | | | | S | **Sn** | **10 30 39.3** | **0.0** |
| **JEM** | **Erimo** | **1.74** | **38** | P | **Pn** | **10 30 23.4** | **+1.1** |
| **ASAJ** | **Asahikawa** | **3.52** | **10** | P | **Pn** | **10 30 47.1** | **+0.8** |
| | 1.9nm,0.3s,baz=227,slow=9.6,SNR=12 | | | | | | |
| ASAJ | | | | S | **Sn** | **10 31 26.5** | **-0.2** |
| | 1.4nm,0.3s,baz=258,slow=20,SNR=2.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.94** | **215** | P | **Pn** | **10 31 08.5** | **+2.6** |
| | 0.1nm,0.3s,baz=37,slow=10.0,SNR=5.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.01** | **299** | P | **Pn** | **10 31 50.1** | **+2.4** |
| | baz=104,slow=16,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **26.12** | **298** | P | **P** | **10 35 20.1** | **-1.1** |
| | 0.4nm,0.5s,baz=93,slow=9.2,SNR=2.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.97** | **127** | T | T | 11 06 52.2 | |
| | baz=318,slow=75,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.98** | **127** | T | T | 11 06 53.6 | |
| | baz=318,slow=75,SNR=16 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.98** | **127** | T | T | 11 06 56.5 | |
| | baz=318,slow=75,SNR=10.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.72** | **309** | P | **P** | **10 37 17.9** | **-1.2** |
| | 0.6nm,0.5s,baz=69,slow=9.4,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.48** | **299** | P | **P** | **10 37 41.8** | **-0.1** |
| | 0.5nm,0.4s,baz=84,slow=9.9,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.03** | **305** | P | **P** | **10 37 53.4** | **-0.8** |
| | 0.7nm,0.3s,baz=80,slow=8.5,SNR=6.5 | | | | | | |
| **INK** | **Inuvik** | **51.07** | **28** | P | **P** | **10 38 49.4** | **+1.0** |
| | 0.7nm,0.5s,baz=286,slow=4.3,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.68** | **188** | P | **P** | **10 39 56.2** | **-1.4** |
| | 0.2nm,0.4s,baz=6.4,slow=7.2,SNR=5.0 | | | | | | |

*IDC **03** 10:37:40.6±1.7,9°.85N×92°.63E,h0km,mb3.6/6,mb1 3.8/7, mb1mx3.4/66,mbtmp3.6/7,Error ellipse: s-maj=67.7km s-min=21.1km az=60.0*
**ISC 03 10:37:46.1±1.5,9°.9N±0°.2×92°.7E±0°.2,h35km,n7,σ1°13/7, mb3.6/6,Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **10.43** | **35** | Pn | **Pn** | **10 40 13.4** | **+0.2** |
| | baz=221,slow=15,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **37.83** | **348** | P | **P** | **10 44 57.3** | **-2.0** |
| | 0.2nm,0.3s,baz=166,slow=8.9,SNR=3.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.26** | **347** | P | **P** | **10 45 36.5** | **+0.6** |
| | 0.3nm,0.3s,baz=160,slow=9.3,SNR=1.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.39** | **353** | P | **P** | **10 45 53.0** | **-0.1** |
| | 0.5nm,0.3s,baz=187,slow=6.5,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.58** | **126** | P | **P** | **10 46 41.4** | **-0.4** |
| | 0.1nm,0.4s,baz=302,slow=9.6,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **52.28** | **130** | P | **P** | **10 46 54.6** | **+0.1** |
| | 0.4nm,0.5s,baz=302,slow=7.8,SNR=13 | | | | | | |
| **ARCES** | **ARCESS Array B** | **72.90** | **340** | P | **P** | **10 49 12.1** | **+0.8** |
| | 5.0nm,1.1s,baz=91,slow=7.2,SNR=3.8 | | | | | | |

**IDC 03 10:54:10.5±2.6,2°.41S×133°.27E,h0km,mb3.3/2, mb1 3.7/5,mb1mx3.4/28,mbtmp3.5/5,ML3.5/3,MS2.9/5, Ms1 2.9/5,ms1mx2.7/30,Error ellipse: s-maj=71.6km s-min=21.8km az=66.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **2.52** | **307** | Pn | Pn | 10 54 53.7 | +0.9 |
| | 16nm,0.3s,baz=92,slow=2.5,SNR=24 | | | | | | |
| SIJI | | | | Sn | Sn | 10 55 25.6 | +1.3 |
| | 13nm,0.3s,baz=106,slow=7.1,SNR=6.2 | | | | | | |
| **DAV** | **Davao City (W)** | **12.15** | **321** | LR | LR | 11 00 42.5 | |
| | comp=Z,29nm,21.8s,baz=178,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **15.46** | **117** | LR | LR | 11 05 09.9 | |
| | comp=Z,72nm,19.3s,baz=212,slow=43 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.29** | **205** | P | Pn | 10 58 11.7 | -1.8 |
| | 0.2nm,0.3s,baz=43,slow=12,SNR=6.0 | | | | | | |
| FITZ | | | | S | Sn | 11 01 15.3 | -11 |
| | 0.1nm,0.3s,baz=133,slow=5.7,SNR=5.3 | | | | | | |
| FITZ | | | | LR | LR | 11 05 08.8 | |
| | comp=Z,32nm,21.0s,baz=341,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.45** | **177** | P | Pn | 10 58 14.2 | -1.5 |
| | 0.1nm,0.3s,baz=352,slow=13,SNR=2.7 | | | | | | |
| WRA | | | | S | Sn | 11 01 20.3 | -10 |
| | 0.1nm,0.3s,baz=0.0,slow=22,SNR=5.0 | | | | | | |
| WRA | | | | LR | LR | 11 06 13.6 | |
| | comp=Z,93nm,18.9s,baz=40,slow=41 | | | | | | |
| **GUMO** | **Guam** | **19.62** | **36** | LR | LR | 11 06 17.3 | |
| | comp=Z,24nm,20.2s,baz=216,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **21.14** | **178** | P | P | 10 58 58.9 | +1.6 |
| | 2.3nm,0.8s,baz=0.7,slow=12,SNR=16 | | | | | | |
| ASAR | | | | S | S | 11 02 47.5 | -6.0 |
| | 0.6nm,0.9s,baz=360,slow=28,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.31** | **324** | P | P | 11 05 00.3 | -0.6 |
| | 0.1nm,0.6s,baz=117,slow=6.3,SNR=1.5 | | | | | | |

*TRN **03** 10:58:59.6,10°.01N×62°.04W,h15km,MD3.8*
*FUNV **03** 10:59:01.5,9°.91N×61°.82W,h30km,MW4.1*
**ISC 03 10:59:00.8±1.4,9°.92N±0°.08×62°.03W±0°.04,h27km±14km, n24,σ1°87/39,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TPP** | **Pointe-a-Pierr** | **0.69** | **55** | *e*P | **Pb** | **10 59 13.5** | **-0.8** |
| **TRN** | **Trinidad (W)** | **0.95** | **41** | *e*P | **Pn** | **10 59 17.4** | **-1.0** |
| TRN | | | | *e*S | **Sn** | **10 59 29.3** | **-1.8** |
| **TBH** | **Brigand Hill** | **1.10** | **59** | *e*P | **Pb** | **10 59 20.6** | **-0.6** |
| **TBH** | **Brigand Hill** | **1.10** | **59** | *e* | **Sb** | **10 59 36.2** | **+1.1** |
| **CRUV** | **Carupano** | **1.40** | **302** | *e*P | **Pn** | **10 59 25.6** | **+1.0** |
| CRUV | | | | *e*S | **Sn** | **10 59 44.0** | **+1.8** |
| **COAV** | **Cumanacoa** | **1.78** | **278** | *e*P | **Pb** | **10 59 32.8** | **-0.1** |
| COAV | | | | *e*S | **Sb** | **10 59 55.8** | **+0.9** |
| **BOT** | **Bacolet** | **1.79** | **46** | *e*P | **Pb** | **10 59 31.8** | **-1.1** |
| **TOSP** | **Speyside** | **2.01** | **47** | *e*P | **Pn** | **10 59 32.1** | **-0.8** |
| **GRFF** | **Grenada Fort F** | **2.13** | **8** | *e*P | **Pn** | **10 59 34.4** | **-0.3** |
| GRFF | | | | *e*S | **Sn** | **10 59 58.6** | **-1.7** |
| **CUMV** | **Cumana_UDO** | **2.19** | **283** | *e*P | **Pn** | **10 59 38.2** | **+2.8** |
| CUMV | | | | *e*S | **Sb** | **11 00 05.5** | **-0.9** |
| **GRGR** | **Grenville** | **2.23** | **10** | *e*P | **Pn** | **10 59 34.9** | **-1.0** |
| GRGR | | | | *e*S | **Sn** | **11 00 00.6** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **2.58** | **276** | *e*P | **Pn** | **10 59 42.6** | **+1.8** |
| PCRV | | | | *e*S | **Sn** | **11 00 13.1** | **+1.7** |
| **GCMP** | **Grenada, Carri** | **2.62** | **13** | *e*P | **Pn** | **10 59 40.3** | **-1.1** |
| GCMP | | | | *e*S | **Sn** | **11 00 11.7** | **-0.5** |
| **PRGV** | **PARIAGUAN** | **2.83** | **246** | *e*P | **Pn** | **10 59 46.4** | **+2.2** |
| PRGV | | | | *e*S | **Sn** | **11 00 19.9** | **+2.4** |
| **BIRV** | **Birongo** | **4.21** | **278** | *e*P | **Pn** | **11 00 05.8** | **+2.5** |
| BIRV | | | | *e*S | **Sn** | **11 00 52.1** | **+0.6** |
| **FUNV** | **FUNVISIS** | **4.74** | **277** | *e*P | **Pn** | **11 00 12.5** | **+2.0** |
| FUNV | | | | *e*S | **Sn** | **11 01 04.9** | **+0.2** |
| **CACV** | **CAICARA DEL OR** | **5.03** | **243** | *e*P | Pn | 11 00 10.1 | -4.5 |
| CACV | | | | *e*S | Sn | 11 01 00.6 | -11 |
| **BENV** | **Beln** | **5.49** | **271** | *e*P | **Pn** | **11 00 22.3** | **+1.5** |
| BENV | | | | *e*S | **Sn** | **11 01 21.3** | **-1.8** |
| **TURV** | **Turiamo** | **5.74** | **276** | *e*P | **Pn** | **11 00 25.7** | **+1.4** |
| TURV | | | | *e*S | **Sn** | **11 01 28.3** | **-1.1** |
| **BAUV** | **El Baul** | **6.01** | **261** | *e*P | **Pn** | **11 00 28.9** | **+1.0** |
| **BAUV** | **El Baul** | **6.01** | **261** | *e*S | **Sn** | **11 01 35.0** | **-0.9** |
| **BAUV** | **El Baul** | **6.01** | **261** | *e*P | **Pn** | **11 00 28.5** | **+0.5** |
| BAUV | | | | *e*S | **Sn** | **11 01 34.0** | **-2.0** |
| **MAPV** | **Macapo** | **6.33** | **270** | *e*P | **Pn** | **11 00 33.8** | **+1.4** |
| MAPV | | | | *e*S | **Sn** | **11 01 41.8** | **-2.2** |
| **SOCV** | **Socops** | **8.87** | **260** | *e*P | **Pn** | **11 01 07.0** | **-0.2** |
| SOCV | | | | *e*S | **Sn** | **11 02 39.6** | **-6.8** |

*NOU **03** 10:59:28.5,37°.60S×176°.65E,h234km,mb3.8/9,North Island, New Zealand*
*WEL **03** 10:59:37.7±0.7,38°.3S±0°.1×17°.6E±0°.1,h156km±6km,M3.0/63, ML2.4/8,MLv3.0/63,Error ellipse: s-maj=0.0km s-min=0.0km az=176.7*
**ISC 03 10:59:32.3±1.8,37°.86S±0°.06×176°.48E±0°.06, h201km±10km,n149,σ1°60/163,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPRZ** | **Ohinepanea** | **0.07** | **74** | P | **Pn** | **10 59 58.9** | **+0.4** |
| **MARZ** | **Manawahe** | **0.20** | **128** | P | **Pn** | **10 59 59.6** | **+0.9** |
| **TGRZ** | **Tauranga** | **0.22** | **308** | P | **Pn** | **10 59 59.2** | **+0.5** |
| **KARZ** | **Kaharoa** | **0.24** | **229** | P | **Pn** | **10 59 59.5** | **+0.8** |
| **OMRZ** | **Omania** | **0.26** | **198** | P | **Pn** | **10 59 59.7** | **+0.9** |
| **MKRZ** | **Makatiti** | **0.28** | **181** | P | **Pn** | **11 00 00.6** | **+1.7** |
| **EDRZ** | **Edgecumbe** | **0.32** | **139** | P | **Pn** | **10 59 60.0** | **+1.0** |
| **NGRZ** | **Ngongotaha** | **0.33** | **224** | P | **Pn** | **11 00 00.1** | **+1.1** |
| **TARZ** | **Mount Tarawera** | **0.37** | **176** | P | **Pn** | **11 00 00.4** | **+1.2** |
| **UTU** | **Utuhina** | **0.38** | **215** | P | **Pn** | **11 00 00.4** | **+1.3** |
| **HLRZ** | **Highlands Stat** | **0.40** | **194** | P | **Pn** | **11 00 00.7** | **+1.5** |
| **KMRZ** | **Kaimai** | **0.42** | **272** | P | **Pn** | **11 00 00.1** | **+0.9** |
| **RRRZ** | **Republican Roa** | **0.48** | **176** | P | **Pn** | **11 00 00.5** | **+1.1** |
| **HSRZ** | **Hossack Road** | **0.48** | **202** | P | **Pn** | **11 00 00.8** | **+1.4** |
| **HRRZ** | **Handcock Road** | **0.55** | **196** | P | **Pn** | **11 00 01.0** | **+1.3** |
| **PRRZ** | **Plateau Road** | **0.64** | **186** | P | **Pn** | **11 00 01.2** | **+1.2** |
| **URZ** | **Urewera** | **0.64** | **128** | P | **Pn** | **11 00 00.6** | **+0.6** |
| URZ | | | | S | **Sn** | **11 00 18.9** | **-2.7** |
| **URZ** | **Urewera** | **0.64** | **128** | P | **Pn** | **11 00 00.8** | **+0.8** |
| **MUGZ** | **Murupara** | **0.66** | **159** | P | **Pn** | **11 00 01.1** | **+1.0** |
| **WPRZ** | **Whakapapatarin** | **0.70** | **200** | P | **Pn** | **11 00 01.8** | **+1.4** |
| **ALRZ** | **Allen Road** | **0.70** | **188** | P | **Pn** | **11 00 01.7** | **+1.4** |
| **TOZ** | **Tahuroa Road** | **0.78** | **279** | P | **Pn** | **11 00 01.9** | **+1.1** |
| **KUTZ** | **Kaahu Road** | **0.81** | **219** | P | **Pn** | **11 00 02.5** | **+1.5** |
| **RTZ** | **Ruatahuna** | **0.85** | **152** | P | **Pn** | **11 00 02.4** | **+1.2** |
| RTZ | | | | S | **S** | **11 00 21.9** | **-1.9** |
| **TLZ** | **Tolley Road** | **0.87** | **238** | P | **Pn** | **11 00 02.9** | **+1.6** |
| **WHTZ** | **Whakaora** | **0.90** | **207** | P | **Pn** | **11 00 03.5** | **+2.0** |
| **MWZ** | **Matawai** | **0.95** | **120** | P | **Pn** | **11 00 02.9** | **+1.0** |
| MWZ | | | | S | **S** | **11 00 23.2** | **-1.5** |
| **RUGZ** | **Raukumara Rang** | **0.96** | **96** | P | **Pn** | **11 00 02.3** | **+0.3** |
| RUGZ | | | | S | **S** | **11 00 21.7** | **-3.1** |
| **MRHZ** | **Matea Rd** | **0.97** | **183** | P | **Pn** | **11 00 03.4** | **+1.4** |
| **RAGZ** | **Rawiri** | **0.97** | **131** | P | **Pn** | **11 00 03.6** | **+1.6** |
| RAGZ | | | | S | **S** | **11 00 23.9** | **-1.1** |
| **WATZ** | **Wairara** | **1.03** | **214** | P | **Pn** | **11 00 04.2** | **+1.9** |
| **MTHZ** | **Maungataniwha** | **1.03** | **164** | P | **Pn** | **11 00 03.9** | **+1.6** |
| **HAZ** | **Te Kaha** | **1.04** | **85** | P | **Pn** | **11 00 02.8** | **+0.5** |
| HAZ | | | | S | **S** | **11 00 23.2** | **-2.3** |
| **HATZ** | **Hinemaiaia** | **1.07** | **196** | P | **Pn** | **11 00 04.3** | **+1.7** |
| **SNGZ** | **Shannon Statio** | **1.14** | **144** | P | **Pn** | **11 00 05.1** | **+1.9** |
| SNGZ | | | | S | **S** | **11 00 25.9** | **-1.1** |
| **RATZ** | **Rangitukua** | **1.14** | **209** | P | **Pn** | **11 00 05.0** | **+1.8** |
| **RITZ** | **Rihia Road** | **1.21** | **203** | P | **Pn** | **11 00 05.9** | **+2.2** |
| **TKGZ** | **Te Karaka** | **1.23** | **118** | P | **Pn** | **11 00 05.7** | **+2.0** |
| TKGZ | | | | S | **S** | **11 00 27.4** | **-0.5** |
| **TWGZ** | **Tauwhareparae** | **1.23** | **105** | P | **Pn** | **11 00 05.8** | **+1.9** |
| TWGZ | | | | S | **S** | **11 00 28.0** | **-0.1** |
| **NMHZ** | **Naumai** | **1.26** | **168** | P | **Pn** | **11 00 06.6** | **+2.5** |
| **KUZ** | **Kuaotunu** | **1.27** | **331** | P | **Pn** | **11 00 04.9** | **+0.8** |
| **KATZ** | **Kakaramea** | **1.27** | **209** | P | **Pn** | **11 00 06.2** | **+2.0** |
| **PKGZ** | **Pakihiroa** | **1.27** | **92** | P | **Pn** | **11 00 05.7** | **+1.6** |
| PKGZ | | | | S | **S** | **11 00 27.4** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **1.30** | **179** | P | **Pn** | **11 00 05.9** | **+1.5** |
| BKZ | | | | S | **S** | **11 00 27.8** | **-1.4** |
| **BKZ** | **Black Stump Fm** | **1.30** | **179** | P | **Pn** | **11 00 05.9** | **+1.5** |
| **RIGZ** | **Rimuhau** | **1.32** | **130** | P | **Pn** | **11 00 06.6** | **+2.1** |
| RIGZ | | | | S | **S** | **11 00 29.5** | **+0.2** |
| **NTVZ** | **North Tongarir** | **1.38** | **207** | P | **Pn** | **11 00 07.1** | **+2.0** |
| **TMVZ** | **Te Maari** | **1.39** | **206** | P | **Pn** | **11 00 07.1** | **+1.9** |
| **KRVZ** | **Karewarewa** | **1.39** | **208** | P | **Pn** | **11 00 07.2** | **+1.9** |
| **ETVZ** | **East Tongariro** | **1.41** | **205** | P | **Pn** | **11 00 07.3** | **+2.0** |
| **PUZ** | **Puketiti** | **1.42** | **99** | P | **Pn** | **11 00 06.8** | **+1.4** |
| PUZ | | | | S | **S** | **11 00 29.2** | **-1.5** |
| **WTVZ** | **West Tongariro** | **1.43** | **209** | P | **Pn** | **11 00 07.4** | **+1.9** |
| **HIZ** | **Hauiti** | **1.43** | **243** | P | **Pn** | **11 00 07.6** | **+2.1** |
| **HIZ** | **Hauiti** | **1.43** | **243** | P | **Pn** | **11 00 07.7** | **+2.3** |
| **NNVZ** | **North Ngauruho** | **1.44** | **208** | P | **Pn** | **11 00 07.6** | **+2.0** |
| **OTVZ** | **Oturere** | **1.45** | **206** | P | **Pn** | **11 00 07.9** | **+2.2** |
| **TWVZ** | **Taurewa** | **1.46** | **214** | P | **Pn** | **11 00 07.7** | **+2.0** |
| **ARHZ** | **Aropaoanui** | **1.46** | **164** | P | **Pn** | **11 00 08.0** | **+2.4** |
| **SNVZ** | **South Ngauruho** | **1.47** | **206** | P | **Pn** | **11 00 08.0** | **+2.0** |
| **NGZ** | **Ngauruhoe** | **1.48** | **207** | P | **Pn** | **11 00 08.1** | **+2.1** |
| **MXZ** | **Matakaoa Point** | **1.48** | **79** | P | **Pn** | **11 00 07.4** | **+1.6** |
| MXZ | | | | S | **S** | **11 00 31.2** | **-0.3** |
| **KNZ** | **Kokohu** | **1.49** | **141** | P | **Pn** | **11 00 08.1** | **+2.2** |
| **CNGZ** | **Carnagh Statio** | **1.50** | **115** | P | **Pn** | **11 00 08.7** | **+2.7** |
| **WIAZ** | **Waiheke Island** | **1.51** | **315** | P | **Pn** | **11 00 07.7** | **+1.5** |
| **ETAZ** | **East Tamaki Re** | **1.53** | **306** | P | **Pn** | **11 00 08.3** | **+2.0** |
| **PRGZ** | **Paritu Road** | **1.53** | **134** | P | **Pn** | **11 00 08.6** | **+2.2** |
| **WMGZ** | **Waiomatatini S** | **1.54** | **89** | P | **Pn** | **11 00 08.0** | **+1.7** |
| **TUVZ** | **Tukino** | **1.54** | **204** | P | **Pn** | **11 00 08.6** | **+2.0** |
| **KWHZ** | **Kaweka Forest** | **1.56** | **181** | P | **Pn** | **11 00 08.7** | **+2.1** |
| **FWVZ** | **Far West T-bar** | **1.57** | **207** | P | **Pn** | **11 00 08.8** | **+1.9** |
| **WHVZ** | **Whangaehu Hut** | **1.58** | **206** | P | **Pn** | **11 00 09.0** | **+2.0** |
| **MCHZ** | **McNeill Hill** | **1.59** | **174** | P | **Pn** | **11 00 09.3** | **+2.5** |
| **TRVZ** | **Turoa** | **1.61** | **207** | P | **Pn** | **11 00 09.3** | **+2.0** |
| **WNVZ** | **Wahianoa** | **1.61** | **205** | P | **Pn** | **11 00 09.1** | **+1.9** |
| **MOVZ** | **Moawhango** | **1.64** | **200** | P | **Pn** | **11 00 08.9** | **+1.5** |
| **BHHZ** | **Black Hill Sta** | **1.66** | **191** | P | **Pn** | **11 00 09.2** | **+1.7** |
| **AWAZ** | **Awhitu Peninsu** | **1.66** | **298** | P | **Pn** | **11 00 09.4** | **+1.9** |
| **MBAZ** | **Motutapu North** | **1.67** | **311** | P | **Pn** | **11 00 09.8** | **+2.3** |
| **PKVZ** | **Pokaka** | **1.68** | **211** | P | **Pn** | **11 00 09.8** | **+2.1** |
| **MHGZ** | **Mahia Peninsul** | **1.71** | **139** | P | **Pn** | **11 00 10.5** | **+2.6** |
| **MTVZ** | **Mangateitei** | **1.71** | **207** | P | **Pn** | **11 00 10.1** | **+2.1** |
| **KRHZ** | **Kereru** | **1.78** | **183** | P | **Pn** | **11 00 10.6** | **+2.0** |
| **VRZ** | **Vera Road** | **1.84** | **226** | P | **Pn** | **11 00 11.9** | **+2.7** |
| **CKHZ** | **Cape Kidnapper** | **1.85** | **165** | P | **Pn** | **11 00 11.8** | **+2.5** |
| **KAHZ** | **Kahuranaki** | **1.95** | **171** | P | **Pn** | **11 00 12.8** | **+2.4** |
| **PNHZ** | **Pukenui** | **2.06** | **186** | P | **Pn** | **11 00 13.3** | **+1.8** |
| **PXZ** | **Pawanui** | **2.19** | **172** | P | **Pn** | **11 00 14.9** | **+2.2** |
| **WPHZ** | **Waipukurau** | **2.20** | **181** | P | **Pn** | **11 00 14.8** | **+2.0** |
| **WAZ** | **Wanganui** | **2.22** | **211** | P | **Pn** | **11 00 15.3** | **+2.2** |
| **TSZ** | **Takapari Road** | **2.23** | **190** | P | **Pn** | **11 00 15.8** | **+1.7** |
| **NEZ** | **North Egmont** | **2.33** | **232** | P | **Pn** | **11 00 17.9** | **+3.5** |
| **PKE** | **Pukeiti** | **2.36** | **235** | P | **Pn** | **11 00 18.1** | **+3.4** |
| **PRHZ** | **Porangahau** | **2.40** | **177** | P | **Pn** | **11 00 17.1** | **+2.0** |
| **DVHZ** | **Dannevirke** | **2.44** | **186** | P | **Pn** | **11 00 17.1** | **+1.6** |
| **OHWZ** | **Ohakea** | **2.51** | **201** | P | **Pn** | **11 00 18.5** | **+2.3** |
| **WCZ** | **Waipu Caves** | **2.57** | **318** | P | **Pn** | **11 00 19.4** | **+2.4** |
| **POWZ** | **Post Office Ro** | **2.58** | **192** | P | **Pn** | **11 00 18.8** | **+1.7** |
| **ANWZ** | **Angora Road** | **2.59** | **180** | P | **Pn** | **11 00 19.3** | **+2.1** |
| **PRWZ** | **Pori Road** | **2.72** | **188** | P | **Pn** | **11 00 20.6** | **+2.0** |
| **BFZ** | **Birch Farm** | **2.82** | **184** | P | **Pn** | **11 00 21.5** | **+1.7** |
| **BFZ** | **Birch Farm** | **2.82** | **184** | P | **Pn** | **11 00 21.6** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **2.88** | **194** | P | **Pn** | **11 00 21.8** | **+1.3** |
| **TIWZ** | **Tintock** | **2.94** | **189** | P | **Pn** | **11 00 22.9** | **+1.6** |
| **CPWZ** | **Castlepoint** | **3.05** | **184** | P | **Pn** | **11 00 24.8** | **+2.4** |
| **OGWZ** | **Otaki Gor

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KRI** | **Karoi** | **14.75** | **80** | *i* P | **Pn** | **11 07 24.7** | **-4.2** |
| KRI | | | | *e*S | Sn | 11 10 19.1 | +6.5 |
| **KRI** | **Karoi** | **14.75** | **80** | *i* P | **Pn** | **11 07 24.7** | **-4.2** |
| KRI | | | | *e*S | Sn | 11 10 19.1 | +6.5 |
| **MBAR** | **Mbarara** | **25.01** | **42** | P | **P** | **11 09 26.0** | **+1.5** |
| | 3.7nm,0.3s,baz=205,slow=10,SNR=3.1 | | | | | | |
| MBAR | | | | LR | LR | 11 18 02.3 | |
| | comp=Z,41nm,20.4s,baz=74,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **25.01** | **42** | P | **P** | **11 09 23.7** | **-0.8** |
| MBAR | | | | IAmb | IAmb | 11 09 33.1 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **KIC** | **Kosan Boka** | **32.26** | **322** | *e*PKIKP | **P** | **11 10 30.0** | **+1.1** |
| | comp=Z,20nm,0.5s | | | | | | |
| **LIC** | **Lamto** | **32.32** | **322** | *e*PKIKP | **P** | **11 10 30.2** | **+0.8** |
| | comp=Z,17nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **32.58** | **322** | P | **P** | **11 10 32.5** | **+0.8** |
| | comp=Z,4.6nm,0.7s,baz=160,slow=9.9,SNR=6.4 | | | | | | |
| DBIC | | | | LR | LR | 11 22 01.2 | |
| | comp=Z,51nm,19.0s,baz=134,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | **32.58** | **322** | P | **P** | **11 10 33.0** | **+1.3** |
| **TIC** | **Toumodi** | **32.65** | **322** | *e*PKIKP | **P** | **11 10 29.7** | **-2.7** |
| **TORD** | **Torodi Ar. Bea** | **35.22** | **338** | P | **P** | **11 10 56.0** | **+1.4** |
| | comp=Z,11nm,0.7s,baz=160,slow=8.7,SNR=94 | | | | | | |
| **KOWA** | **Kowa** | **38.77** | **331** | P | **P** | **11 11 26.5** | **+1.6** |
| | comp=Z,8.1nm,0.6s,baz=140,slow=8.4,SNR=24 | | | | | | |
| KOWA | | | | LR | LR | 11 26 39.9 | |
| | comp=Z,76nm,18.5s,baz=22,slow=35 | | | | | | |
| **KOWA** | **Kowa** | **38.77** | **331** | P | **P** | **11 11 26.5** | **+1.6** |
| KOWA | | | | IAmb | IAmb | 11 11 27.2 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **KEST** | **Kesra** | **55.61** | **355** | P | **P** | **11 13 37.1** | **+1.1** |
| | comp=Z,3.8nm,0.7s,baz=288,slow=4.1,SNR=5.1 | | | | | | |
| **KEST** | **Kesra** | **55.61** | **355** | P | **P** | **11 13 36.5** | **+0.5** |
| KEST | | | | IAmb | IAmb | 11 13 41.8 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **PAB** | **San Pablo** | **61.76** | **344** | P | **P** | **11 14 21.1** | **+2.3** |
| PAB | | | | IAmb | IAmb | 11 14 24.3 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **61.78** | **344** | P | **P** | **11 14 20.8** | **+2.0** |
| | comp=Z,1.9nm,0.9s,baz=166,slow=6.6,SNR=7.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **61.78** | **344** | P | **P** | **11 14 20.2** | **+1.4** |
| **ESBB** | **Sonseca Array** | **61.78** | **344** | P | **P** | **11 14 19.9** | **+1.0** |
| **ABTA** | **Abfaltersbach** | **66.43** | **359** | *e*P | **P** | **11 14 53.3** | **+4.0** |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **66.75** | **359** | *e*P | **P** | **11 14 53.5** | **+2.0** |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **66.77** | **357** | *e*P | **P** | **11 14 53.8** | **+2.2** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **66.94** | **358** | *e*P | **P** | **11 14 54.1** | **+1.4** |
| | comp=Z,3.6nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **66.97** | **358** | *e*P | **P** | **11 14 54.3** | **+1.4** |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **MOA** | **Molln** | **67.51** | **360** | *e*P | **P** | **11 14 57.8** | **+1.7** |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **68.51** | **359** | P | **P** | **11 15 03.6** | **+1.2** |
| | comp=Z,0.8nm,0.6s,baz=176,slow=5.2,SNR=6.3 | | | | | | |
| **GERES** | **GERESS Array B** | **68.51** | **359** | P | **P** | **11 15 03.9** | **+1.5** |
| **QSPA** | **South Pole Qui** | **70.19** | **180** | P | **P** | **11 15 12.8** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 11 15 14.1 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **71.57** | **10** | P | **P** | **11 15 21.1** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=198,slow=6.5,SNR=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **80.77** | **358** | P | **P** | **11 16 14.5** | **+1.2** |
| | comp=Z,0.8nm,0.7s,baz=214,slow=4.6,SNR=2.2 | | | | | | |
| **KKAR** | **Karatay Array** | **81.19** | **38** | P | **P** | **11 16 17.5** | **+1.6** |
| **FINES** | **FINESS Array B** | **81.67** | **6** | P | **P** | **11 16 19.1** | **+1.1** |
| | comp=Z,1.6nm,0.7s,baz=176,slow=5.5,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **81.67** | **6** | P | **P** | **11 16 19.4** | **+1.4** |
| **TARG** | **Taragay, Kyrgy** | **84.82** | **42** | P | **P** | **11 16 35.1** | **-0.1** |
| **MKAR** | **Makanchi Array** | **90.19** | **40** | P | **P** | **11 16 58.6** | **-2.0** |
| | comp=Z,0.6nm,1.0s,baz=126,slow=6.3,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **90.19** | **40** | P | **P** | **11 16 59.6** | **-1.0** |
| **TXAR** | **Lajitas Array** | **123.53** | **292** | PKP | **PKPdf** | **11 22 56.7** | **-1.5** |
| | comp=Z,0.2nm,0.6s,baz=134,slow=2.6,SNR=3.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **123.53** | **292** | | **PKiKP** | **11 22 58.5** | **0.0** |
| **YKA** | **Yellowknife Ar** | **125.16** | **334** | PKP | **PKPdf** | **11 22 59.5** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=47,slow=1.8,SNR=3.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **125.16** | **334** | | **PKiKP** | **11 23 00.4** | **-0.2** |
| **PDAR** | **Pinedale Array** | **128.09** | **309** | PKP | **PKPdf** | **11 23 06.6** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=109,slow=4.7,SNR=7.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **128.09** | **309** | | **PKiKP** | **11 23 07.1** | **-0.3** |
| **ILAR** | **Eielson Array** | **133.53** | **349** | PKP | **PKPdf** | **11 23 15.6** | **-0.5** |
| | comp=Z,0.5nm,0.7s,baz=352,slow=4.6,SNR=5.5 | | | | | | |

*IDC* ***03*** *11:44:41.6±0.5, 47.36N×153.83E, h0km, mb4.5/34, mb1 4.7/37, mb1mx4.6/54, mbtmp4.5/37, ML3.4/4, MS3.9/37, Ms1 3.9/37, ms1mx3.6/93, Error ellipse: s-maj=13.4km s-min=10.9km az=146.0*

*NIED* ***03*** *11:44:43.7, 46.93N×154.49E, h30km, MW4.7, Moment Tensor Solution. s3 Moment tensor: Scale 1016Nm; Mrr0.56; Mθθ 0.46; Mφφ -1.02; Mrθ-0.54; Mθφ 0.14; Mφr-0.30; Fault plane solution: M0 1.09000×1016 NP1: φs209.00000°, δ66.00000°, λ136.00000°. NP2: φs320.00000°, δ50.00000°, λ32.00000°.*

*BJI* ***03*** *11:44:44.3±0.0, 47.38N×154.25E, h41km, mb4.6/71, mB4.9/42, Ms4.3/36, Ms7 4.1/39*

*SKHL* ***03*** *11:44:45.0±0.6, 47.10N×154.40E, h50km±5km, mb5.6/8, mbv5.2/3*

*MOS* ***03*** *11:44:45.2±1.4, 47.26N×154.03E, h39km, mb5.1/35, MS3.6/6, Error ellipse: s-maj=5.6km s-min=4.6km az=83.5*

*BGR* ***03*** *11:44:45.4±0.0, 47.21N×154.31E, h10km, mb4.7*

*NEIC* ***03*** *11:44:48.0±1.5, 47.35N±0.05×154.0E±0.1, h42km±6km, mb5.0/282, Error ellipse: s-maj=11.9km s-min=7.3km az=110.0*

**ISC 03 11:44:48.1**±0.5, **47.30N**±0.0×**154.99E**±0.0, **h47**km±3km, **h48**km;**pP-P, n802,** σ1§**41**/704, **mb4.9**/256, **MS4.0**/48, **42C-25D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **3.67** | **22** | ⇑*i* | *i*PN | **Pn** | **11 45 41.0** | **-1.3** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,1μm,0.4s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.67** | **22** | *i* | P | **Pn** | **11 45 41.5** | **-0.8** |
| SKR | | | | | AMB | AMB | 11 45 44.5 | |
| | comp=Z,810nm,0.4s | | | | | | | |
| SKR | | | | | AMB | AMB | 11 45 44.5 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| SKR | | | | *e* | S | **Sn** | **11 46 23.4** | **-0.8** |
| SKR | | | | | A | A | 11 46 26.9 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| SKR | | | | | A | A | 11 46 26.9 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **PAU** | **Pauzhetka** | **4.56** | **23** | *i* | P | **Pn** | **11 45 53.8** | **-0.7** |
| PAU | | | | | AMB | AMB | 11 45 55.3 | |
| | comp=Z,150nm,0.3s | | | | | | | |
| PAU | | | | | AMB | AMB | 11 45 55.3 | |
| | comp=Z,150nm,0.3s | | | | | | | |
| PAU | | | | | AMB | AMB | 11 45 55.3 | |
| | comp=Z,370nm,0.3s | | | | | | | |
| PAU | | | | *i* | S | **Sn** | **11 46 45.8** | **-0.4** |
| PAU | | | | | A | A | 11 46 48.7 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| PAU | | | | | A | A | 11 46 48.7 | |
| | comp=Z,900nm,0.2s | | | | | | | |
| **KUR** | **Kuril'sk** | **4.72** | **246** | *d* | iPN | **Pn** | **11 45 57.4** | **+0.6** |
| KUR | | | | *e* | S | **Sn** | **11 46 51.0** | **+0.8** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,365nm,0.6s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,58nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,4μm,1.9s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,3μm,2.1s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,781nm,0.9s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,291nm,0.5s | | | | | | | |
| KUR | | | | | MLR | MLR | | |
| | comp=Z,2μm,12.0s | | | | | | | |
| **KUR** | **Kuril'sk** | **4.72** | **246** | *i* | P | **Pn** | **11 45 57.2** | **+0.4** |
| KUR | | | | | AMB | AMB | 11 46 01.7 | |
| | comp=Z,430nm,0.5s | | | | | | | |
| KUR | | | | *e* | S | **Sn** | **11 46 50.5** | **+0.3** |
| KUR | | | | | A | A | 11 46 55.4 | |
| | comp=Z,4μm,2.0s | | | | | | | |
| KUR | | | | | A | A | 11 46 55.4 | |
| | comp=Z,3μm,2.0s | | | | | | | |
| KUR | | | | | A | A | 11 47 11.8 | |
| | comp=Z,560nm,0.6s | | | | | | | |
| KUR | | | | | A | A | 11 47 11.8 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **SHO** | **Shikotan** | **6.08** | **238** | *e* | PN | Pn | 11 46 12.4 | -3.0 |
| SHO | | | | | pmax | pmax | | |
| | comp=N,37nm,0.4s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,44nm,0.4s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,60nm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **6.08** | **238** | *e* | P | **Pn** | **11 46 14.7** | **-0.7** |
| SHO | | | | | AMB | AMB | 11 46 39.9 | |
| | comp=Z,170nm,0.6s | | | | | | | |
| SHO | | | | *e* | S | **Sn** | **11 47 22.0** | **-1.7** |
| SHO | | | | | A | A | 11 47 29.9 | |
| | comp=Z,280nm,0.7s | | | | | | | |
| SHO | | | | | A | A | 11 47 29.9 | |
| | comp=Z,170nm,0.4s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **6.29** | **21** | *c* | iPN | **Pn** | **11 46 18.5** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **6.29** | **21** | | Pn | **Pn** | **11 46 17.7** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **6.29** | **21** | | Pn | **Pn** | **11 46 16.3** | **-1.9** |
| | comp=Z,21nm,0.3s,baz=180,slow=12,SNR=177 | | | | | | | |
| PETK | | | | | Sn | **Sn** | **11 47 27.3** | **-1.4** |
| | baz=85,slow=24,SNR=0.7 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.29** | **21** | | Pn | **Pn** | **11 46 17.8** | **-0.4** |
| **PET** | **Petropavlovsk** | **6.47** | **26** | *e* | PN | **Pn** | **11 46 19.1** | **-1.5** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,152nm,0.5s | | | | | | | |
| **PET** | **Petropavlovsk** | **6.47** | **26** | | | **Pn** | **11 46 19.4** | **-1.2** |
| PET | | | | | Sn | **Sn** | **11 47 31.2** | **-1.8** |
| **PET** | **Petropavlovsk** | **6.47** | **26** | *e* | P | **Pn** | **11 46 19.1** | **-1.5** |
| PET | | | | | AMB | AMB | 11 46 22.0 | |
| | comp=Z,150nm,0.5s | | | | | | | |
| PET | | | | *e* | S | **Sn** | **11 47 31.0** | **-2.0** |
| PET | | | | | A | A | 11 47 43.1 | |
| | comp=Z,520nm,0.7s | | | | | | | |
| PET | | | | | A | A | 11 47 43.1 | |
| | comp=Z,530nm,0.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.56** | **243** | *e* | PN | **Pn** | **11 46 21.4** | **-0.6** |
| YUK | | | | *e* | S | **Sn** | **11 47 38.0** | **+2.5** |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,171nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=N,102nm,0.3s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,90nm,0.2s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,728nm,0.8s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.56** | **243** | *e* | P | **Pn** | **11 46 21.5** | **-0.6** |
| YUK | | | | | AMB | AMB | 11 46 27.9 | |
| | comp=N,280nm,0.4s | | | | | | | |
| YUK | | | | *i* | S | **Sn** | **11 47 35.4** | **-0.1** |
| YUK | | | | | A | A | 11 47 55.0 | |
| | comp=N,680nm,0.7s | | | | | | | |
| YUK | | | | | A | A | 11 47 55.0 | |
| | comp=N,1μm,0.7s | | | | | | | |
| **RUSJ** | **Misakicho** | **6.91** | **246** | *e* | PN | **Pn** | **11 46 27.7** | **+1.0** |
| RUSJ | | | | *e* | S | **Sn** | **11 47 47.5** | **+3.6** |
| **GLVR** | **Golovnino** | **6.93** | **242** | *e* | PN | **Pn** | **11 46 25.5** | **-1.6** |
| GLVR | | | | | pmax | pmax | | |
| | comp=Z,304nm,0.6s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=N,110nm,0.5s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=E,84nm,0.4s | | | | | | | |
| **GLVR** | **Golovnino** | **6.93** | **242** | *e* | P | **Pn** | **11 46 25.5** | **-1.6** |
| GLVR | | | | | AMB | AMB | 11 46 30.5 | |
| | comp=E,110nm,0.6s | | | | | | | |
| GLVR | | | | | AMB | AMB | 11 46 30.5 | |
| | comp=E,80nm,0.6s | | | | | | | |
| GLVR | | | | | AMB | AMB | 11 46 30.5 | |
| | comp=E,300nm,0.6s | | | | | | | |
| GLVR | | | | *e* | S | **Sn** | **11 47 44.7** | **+0.1** |
| GLVR | | | | | A | A | 11 48 06.3 | |
| | comp=E,440nm,0.9s | | | | | | | |
| GLVR | | | | | A | A | 11 48 06.3 | |
| | comp=E,410nm,0.9s | | | | | | | |
| **NEM2** | **Nemuro 2** | **7.02** | **239** | | P | Pn | 11 46 25.3 | -2.9 |
| NEM2 | | | | *e* | S | Sn | 11 47 39.8 | -6.8 |
| **NMR** | **Nemuro--Hokkai** | **7.02** | **239** | *e* | PN | Pn | 11 46 25.4 | -2.9 |
| **NMR** | **Nemuro--Hokkai** | **7.02** | **239** | *e* | P | Pn | 11 46 25.4 | -2.9 |
| **JRA** | **Rausu** | **7.07** | **245** | | P | **Pn** | **11 46 29.6** | **+0.7** |
| **JNK** | **Nakash** | **7.50** | **244** | | P | **Pn** | **11 46 33.8** | **-1.1** |
| **YSS** | **Yuzh-Sakhalins** | **7.67** | **272** | α*e* | PN | **Pn** | **11 46 40.1** | **+2.9** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,110nm,0.7s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=Z,1μm,17.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.67** | **272** | | Pn | **Pn** | **11 46 36.6** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **7.67** | **272** | *e* | P | **Pn** | **11 46 40.1** | **+2.9** |
| YSS | | | | | AMB | AMB | 11 46 41.1 | |
| | comp=Z,110nm,0.7s | | | | | | | |
| YSS | | | | | AMB | AMB | 11 46 42.5 | |
| | comp=Z,400nm,4.8s | | | | | | | |
| **AKK** | **Akkeshi** | **7.75** | **240** | *e* | P | **Pn** | **11 46 36.4** | **-1.9** |
| **JTKR** | **Abashiri--Toko** | **7.81** | **248** | | P | **Pn** | **11 46 39.1** | **0.0** |
| **JAK** | **Akkeshi** | **7.85** | **240** | | P | Pn | 11 46 36.5 | -3.2 |
| JAK | | | | *e* | S | Sn | 11 47 59.5 | -7.6 |
| **JMP** | **Maruseppu** | **8.14** | **250** | | P | **Pn** | **11 46 44.2** | **+0.5** |
| **UGL** | **Uglegorsk** | **8.17** | **287** | ⇑*i* | PN | **Pn** | **11 46 47.4** | **+3.4** |
| UGL | | | | | pmax | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | | |
| **UGL** | **Uglegorsk** | **8.17** | **287** | *i* | P | **Pn** | **11 46 47.4** | **+3.4** |
| UGL | | | | | AMB | AMB | 11 46 48.1 | |
| | comp=Z,120nm,0.7s | | | | | | | |
| **JAR** | **Ashorobuto** | **8.24** | **245** | | P | **Pn** | **11 46 44.1** | **-0.9** |
| JAR | | | | *e* | S | **Sn** | **11 48 12.4** | **-4.3** |
| **TYV** | **Tymovskoe** | **8.25** | **300** | *e* | PN | **Pn** | **11 46 47.9** | **+2.8** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,200nm,2.7s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,60nm,0.7s | | | | | | | |
| TYV | | | | | MLR | MLR | | |
| | comp=Z,900nm,18.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.25** | **300** | *e* | P | **Pn** | **11 46 48.1** | **+3.0** |
| TYV | | | | | AMB | AMB | 11 46 50.0 | |
| | comp=Z,200nm,2.7s | | | | | | | |
| TYV | | | | *e* | S | **Sn** | **11 48 20.1** | **+3.2** |
| **JSE** | **Soyaes** | **8.26** | **258** | | P | **Pn** | **11 46 48.9** | **+3.6** |
| **JOB** | **Onbets** | **8.42** | **242** | | P | **Pn** | **11 46 45.6** | **-1.8** |
| JOB | | | | *e* | S | **Sn** | **11 48 15.3** | **-5.8** |
| **JKA** | **Kamikawa-asahi** | **8.58** | **252** | | Pn | **Pn** | **11 46 51.3** | **+1.6** |
| **ASAJ** | **Asahikawa** | **8.59** | **252** | | Pn | **Pn** | **11 46 50.2** | **+0.5** |
| | comp=Z,1.3nm,0.3s,baz=89,slow=19,SNR=20 | | | | | | | |
| ASAJ | | | | | LR | LR | 11 49 57.2 | |
| | comp=Z,757nm,19.7s,baz=20,slow=37 | | | | | | | |
| **ASAJ** | **Asahikawa** | **8.59** | **252** | | P | **Pn** | **11 46 51.3** | **+1.6** |
| **ASAJ** | **Asahikawa** | **8.59** | **252** | | PN | **Pn** | **11 46 51.3** | **+1.6** |
| **JKK2** | **Kamakawa 2** | **8.60** | **251** | | P | **Pn** | **11 46 50.5** | **+0.6** |
| **JWK2** | **Keihoku** | **8.61** | **261** | | P | Pn | 11 46 54.9 | +4.9 |
| **JCH** | **Churui** | **8.87** | **242** | | P | **Pn** | **11 46 51.1** | **-2.5** |
| JCH | | | | *e* | S | Sn | 11 48 24.3 | -7.8 |
| **JRBN** | **Rebuntou** | **9.14** | **263** | | P | Pn | 11 47 02.6 | +5.4 |
| **ERM** | **Erimo** | **9.35** | **240** | ⇑*e* | PN | **Pn** | **11 46 59.6** | **-0.6** |
| ERM | | | | | pmax | pmax | | |
| | comp=Z,87nm,1.7s | | | | | | | |
| **ERM** | **Erimo** | **9.35** | **240** | | | **Pn** | **11 46 58.6** | **-1.6** |
| **JBT2** | **Biratori 2** | **9.39** | **245** | | P | **Pn** | **11 46 59.2** | **-1.5** |
| **OKH** | **Okha** | **9.43** | **316** | *e* | P | Pn | 11 47 05.1 | +3.9 |
| OKH | | | | | AMB | AMB | 11 47 06.5 | |
| | comp=Z,90nm,0.6s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **9.43** | **242** | | P | Pn | 11 46 58.2 | -3.1 |
| **JEW** | **Eniwo** | **9.93** | **248** | | | **Pn** | **11 47 06.6** | **-1.5** |
| **JNB** | **Noboribetsu** | **10.38** | **247** | | P | **Pn** | **11 47 11.8** | **-2.5** |
| **JKB** | **Kayabe** | **10.70** | **244** | | P | Pn | 11 47 15.4 | -3.3 |
| JKB | | | | *e* | S | Sn | 11 49 07.0 | -10 |
| **JSH** | **Shimam** | **10.92** | **250** | | P | **Pn** | **11 47 20.8** | **-0.8** |
| **JYM2** | **Yakumo 2** | **10.99** | **247** | | P | **Pn** | **11 47 19.8** | **-2.8** |
| **JTM** | **Tenmabayashi** | **11.35** | **240** | | Pn | Pn | 11 47 23.4 | -4.1 |
| **JANG** | **Nango** | **11.35** | **237** | | P | Pn | 11 47 21.8 | -5.8 |
| JANG | | | | *e* | S | Sn | 11 49 18.8 | -14 |
| **JOSM** | **Okushiri--Mats** | **11.57** | **249** | | P | **Pn** | **11 47 28.7** | **-1.8** |
| **GRNR** | **Gornyy** | **12.04** | **293** | ⇓*i* | PN | **Pn** | **11 47 39.5** | **+2.5** |
| GRNR | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=E,320nm,14.0s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=N,140nm,16.0s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=Z,360nm,17.0s | | | | | | | |
| **GRNR** | **Gornyy** | **12.04** | **293** | *i* | P | **Pn** | **11 47 39.1** | **+2.1** |
| GRNR | | | | | AMB | AMB | 11 47 44.0 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **TEY** | **Ternei** | **12.27** | **266** | ⇑*e* | PN | **Pn** | **11 47 43.8** | **+3.8** |
| TEY | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| TEY | | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.1s | | | | | | | |
| **TEY** | **Ternei** | **12.27** | **266** | *e* | P | **Pn** | **11 47 41.3** | **+1.3** |
| TEY | | | | | AMB | AMB | 11 47 45.5 | |
| | comp=E,100nm,0.8s | | | | | | | |
| TEY | | | | | AMB | AMB | 11 47 45.5 | |
| | comp=E,20nm,0.8s | | | | | | | |
| **MA2** | **Magadan** | **12.45** | **352** | *d* | iPN | **Pn** | **11 47 42.7** | **+0.3** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | | |
| **MA2** | **Magadan** | **12.45** | **352** | | Pn | **Pn** | **11 47 42.2** | **-0.2** |
| **KHBR** | **Khabarovsk** | **12.77** | **282** | *e* | P | **Pn** | **11 47 48.5** | **+1.7** |
| **JYA** | **Atsumi** | **13.59** | **235** | | P | **Pn** | **11 47 55.8** | **-2.3** |
| **SHEM** | **Shemya Is, Ala** | **14.01** | **60** | | Pn | **Pn** | **11 48 01.8** | **-1.9** |
| | comp=Z,7.0nm,0.3s,baz=260,slow=2.7,SNR=6.8 | | | | | | | |
| SHEM | | | | | Sn | Sn | 11 50 25.1 | -12 |
| | comp=Z,9.8nm,0.3s,baz=330,slow=22,SNR=7.3 | | | | | | | |
| SHEM | | | | | LR | LR | 11 53 00.6 | |
| | comp=Z,147nm,21.1s,baz=268,slow=36 | | | | | | | |
| **SMY** | **Shemya** | **14.01** | **60** | | P | **Pn** | **11 48 01.7** | **-2.0** |
| **SMY** | **Shemya** | **14.01** | **60** | | Pn | **Pn** | **11 48 01.7** | **-2.0** |
| **JSD** | **Sado** | **14.79** | **237** | | Pn | **Pn** | **11 48 14.8** | **+0.5** |
| **KLR** | **Kul'dur** | **14.93** | **286** | | Pn | **Pn** | **11 48 14.2** | **-1.8** |
| | comp=Z,0.1nm,0.3s,baz=328,slow=9.5,SNR=1.2 | | | | | | | |
| KLR | | | | | LR | LR | 11 54 23.0 | |
| | comp=Z,465nm,18.2s,baz=92,slow=39 | | | | | | | |
| **KLR** | **Kul'dur** | **14.93** | **286** | ⇓*e* | P | **Pn** | **11 48 17.3** | **+1.3** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| KLR | | | | | MLR | MLR | | |
| | comp=Z,353nm,14.0s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **15.66** | **267** | | P | **Pn** | **11 48 24.8** | **-0.7** |
| USA0B | | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **15.66** | **267** | | Pn | **Pn** | **11 48 24.8** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **267** | | Pn | **Pn** | **11 48 22.6** | **-2.9** |
| | baz=72,slow=11,SNR=1.8 | | | | | | | |
| USRK | | | | | LR | LR | 11 54 17.5 | |
| | comp=Z,408nm,19.4s,baz=54,slow=37 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **267** | | P | **Pn** | **11 48 24.8** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **267** | | | **Pn** | **11 48 24.8** | **-0.7** |
| **SEY** | **Seymchan** | **15.70** | **357** | | Pn | **Pn** | **11 48 22.1** | **-3.7** |
| | comp=Z,0.1nm,0.3s,baz=211,slow=23,SNR=1.9 | | | | | | | |
| SEY | | | | | LR | LR | 11 53 51.4 | |
| | comp=Z,224nm,20.4s,baz=224,slow=35 | | | | | | | |
| **SEY** | **Seymchan** | **15.70** | **357** | ⇓*e* | P | **P** | **11 48 28.4** | **-0.8** |
| **GRTR** | **Gornotajezhnoj** | **15.71** | **265** | *e* | P | **Pn** | **11 48 25.1** | **-1.1** |
| GRTR | | | | | AMB | AMB | 11 48 31.7 | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.89** | **233** | | Pn | **Pn** | **11 48 24.1** | **-4.4** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=10,SNR=16 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.89** | **233** | | P | **Pn** | **11 48 27.0** | **-1.5** |
| MJAR | | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.89** | **233** | | | **Pn** | **11 48 26.9** | **-1.5** |
| **MJB9** | **Matsu-Tunnel** | **15.89** | **233** | | | **Pn** | **11 48 24.4** | **-4.1** |
| **MAJO** | **Matsushiro** | **15.89** | **233** | ⇑*e* | P | **Pn** | **11 48 26.1** | **-2.4** |
| MAJO | | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **15.89** | **233** | | Pn | **Pn** | **11 48 24.4** | **-4.1** |
| **MAT** | **Matsushiro** | **15.89** | **233** | | P | **Pn** | **11 48 23.6** | **-4.9** |
| MAT | | | | *e* | S | **Sn** | **11 51 17.6** | **-5.9** |
| **VLA** | **Vladivostok** | **16.12** | **263** | ⇑*e* | P | **P** | **11 48 33.6** | **-0.3** |
| VLA | | | | | pmax | pmax | | |
| | comp=Z,47nm,0.9s | | | | | | | |
| **MSHR** | **Mys Shultsa** | **16.82** | **262** | ⇑*e* | P | **P** | **11 48 42.3** | **+0.6** |
| MSHR | | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **JGF** | **Kuroka** | **17.05** | **233** | | P | **Pn** | **11 48 41.4** | **-1.7** |
| **MDJ** | **Mudanjiang** | **17.16** | **270** | | P | **P** | **11 48 46.3** | **+0.8** |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,25nm,1.2s | | | | | | | |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,120nm,3.6s | | | | | | | |
| **MDJ** | **Mudanjiang** | **17.16** | **270** | | P | **Pn** | **11 48 41.4** | **-3.0** |
| **INU** | **Inuyama** | **17.42** | **233** | | P | **Pn** | **11 48 46.3** | **-1.3** |
| **ZEA** | **Zeya** | **18.12** | **301** | *e* | P | **P** | **11 48 58.8** | **+2.8** |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,20nm,1.1s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,100nm,3.4s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=E,100nm,7.3s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=E,200nm,15.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=Z,200nm,15.0s | | | | | | | |
| **ZEA** | **Zeya** | **18.12** | **301** | *e* | P | **P** | **11 48 58.8** | **+2.8** |
| ZEA | | | | | AMB | AMB | 11 49 00.2 | |
| | comp=Z,30nm,1.0s | | | | | | | |
| ZEA | | | | | AMB | AMB | 11 49 00.6 | |
| | comp=Z,200nm,3.4s | | | | | | | |
| **BNX** | **BinXian** | **18.34** | **275** | ⇑ | P | **P** | **11 48 58.2** | **-0.3** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,220nm,4.7s | | | | | | | |
| **KIWB** | **Kanaga Island** | **19.19** | **66** | | P | **P** | **11 49 07.1** | **-0.7** |
| **GSTR** | **Great Sitkin T** | **19.88** | **65** | | P | **P** | **11 49 13.7** | **-1.6** |
| **JHS** | **Sa

comp=Z,47nm,0.8s
**INCN Inchon 22.36 254** P **P** **11 49 43.4 +1.3**
**INCN Inchon 22.36 254** P **P** **11 49 41.1 -1.0**
INCN IAmb IAmb 11 49 47.5
comp=Z,47nm,0.8s
**INCN Inchon 22.36 254** *e*P **P** **11 49 41.1 -1.0**
**JNU Nakatsue 22.52 239** P **P** **11 49 42.8 -1.1**
comp=Z,14nm,1.2s,baz=13,slow=3.3,SNR=4.0
JNU LR LR 11 59 02.4
comp=Z,111nm,18.3s,baz=133,slow=38
**JNU Nakatsue 22.52 239** P **P** **11 49 43.3 -0.5**
**TJN Taejon 22.53 251** P **P** **11 49 44.0 0.0**
TJN pmax pmax
comp=Z,135nm,1.0s
**TJN Taejon 22.53 251** P **P** **11 49 44.0 0.0**
**HIA Hailar 22.77 288** P **P** **11 49 45.7 -0.7**
HIA pmax pmax
comp=Z,7.0nm,0.7s
**HIA Hailar 22.77 288** P **P** **11 49 45.6 -0.7**
**GAMB Gambell 25.02 36** P **P** **11 50 07.7 +0.4**
GAMB IAmb IAmb 11 50 10.0
comp=Z,32nm,0.8s
**GAMB Gambell 25.02 36** P **P** **11 50 07.9 +0.6**
baz=245,SNR=14
**BOD Bodaibo 26.11 309** *e*P **P** **11 50 17.6 +0.3**
BOD pmax pmax
comp=Z,9.0nm,1.3s
**BOD Bodaibo 26.11 309** *e*P **P** **11 50 17.6 +0.3**
**XLT XiLinHaoTe 26.57 277** *e*P **P** **11 50 21.9 +0.2**
XLT pP pP 11 50 29.1 -4.0
XLT sP pwP 11 50 32.4 -3.9
XLT pmax pmax
comp=Z,8.0nm,1.1s
XLT pmax pmax
comp=Z,160nm,5.5s
**TIXI Tiksi 27.12 343** P **P** **11 50 23.1 -3.1**
comp=Z,3.0nm,0.8s,baz=90,slow=23,SNR=6.8
TIXI LR LR 12 01 59.0
comp=Z,156nm,18.9s,baz=180,slow=38
**TIXI Tiksi 27.12 343** P **P** **11 50 24.6 -1.6**
TIXI pmax pmax
comp=Z,4.0nm,0.8s
**TIXI Tiksi 27.12 343** P **P** **11 50 24.6 -1.6**
**TNA Tin City 27.24 34** P **P** **11 50 28.4 +1.0**
**TNA Tin City 27.24 34** P **P** **11 50 28.3 +0.9**
baz=247
**ANM Nome 27.89 37** P **P** **11 50 34.1 +0.9**
ANM pmax pmax
comp=Z,15nm,0.9s
**ANM Nome 27.89 37** P **P** **11 50 34.1 +0.9**
**ANM Nome 27.89 37** P **P** **11 50 34.1 +0.9**
baz=252,SNR=16
**BJI Beijing 28.09 269** P **P** **11 50 39.9 +4.7**
BJI pP **pP** **11 50 47.2 +0.6**
BJI S **S** **11 55 22.0 +5.3**
BJI sS **sS** **11 55 32.4 -3.6**
BJI pmax pmax
comp=Z,11nm,0.9s
BJI pmax pmax
comp=Z,75nm,3.9s
BJI LR LR
comp=Z,150nm,16.7s
BJI LR LR
comp=Z,220nm,17.5s
BJI LR LR
comp=Z,350nm,18.2s
**BJT Baijiatuau 28.10 269** P **P** **11 50 38.5 +3.2**
BJT pmax pmax
comp=Z,12nm,1.1s
**BJT Baijiatuau 28.10 269** P **P** **11 50 38.5 +3.2**
**SDPT Sand Point 29.11 57** P **P** **11 50 45.6 +1.5**
baz=273
**H11N2 WAKE ISLAND Hy 29.44 155** T T 12 21 56.1
baz=343,slow=76,SNR=318
**H11N1 WAKE ISLAND Hy 29.46 155** T T 12 22 02.1
baz=343,slow=76,SNR=500
**H11N3 WAKE ISLAND Hy 29.46 155** T T 12 22 01.5
baz=343,slow=76,SNR=296
**RDOG Red Dog Mine 30.04 31** P **P** **11 50 52.6 +0.3**
**RDOG Red Dog Mine 30.04 31** P **P** **11 50 53.0 +0.8**
baz=248
**HNS HongShan 30.39 265** ⇑P **P** **11 50 55.7 +0.1**
HNS S **S** **11 55 57.6 +4.7**
HNS pmax pmax
comp=Z,5.0nm,0.9s
HNS LR LR
comp=Z,330nm,17.1s
HNS LR LR
comp=Z,290nm,22.9s
**H11S1 WAKE ISLAND Hy 30.55 156** T T 12 23 20.2
baz=343,slow=76,SNR=2710
**H11S3 WAKE ISLAND Hy 30.55 156** T T 12 23 21.0
baz=343,slow=76,SNR=3274
**H11S2 WAKE ISLAND Hy 30.56 156** T T 12 23 19.6
baz=343,slow=76,SNR=2985
**NJ2 Nanjing 30.73 253** *e*P **P** **11 50 59.6 +0.9**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
NJ2 LR LR
comp=Z,260nm,14.8s
NJ2 LR LR
comp=Z,330nm,13.3s
NJ2 LR LR
comp=Z,540nm,16.1s
**HHC Hu-ho-hao-te 30.86 274** *e*P **P** **11 51 01.4 +1.5**
HHC pmax pmax
comp=Z,29nm,0.9s
HHC pmax pmax
comp=Z,97nm,5.4s
HHC LR LR
comp=Z,250nm,14.0s
HHC LR LR
comp=Z,190nm,14.6s
HHC LR LR
comp=Z,260nm,14.6s
**ULN Ulaanbaatar 31.29 289** *c i*P **P** **11 51 04.4 +0.7**
ULN pmax pmax
comp=Z,5.0nm,1.2s
**ULN Ulaanbaatar 31.29 289** *e*P **P** **11 51 04.4 +0.7**
**GCSA Galena City Sc 31.48 38** P **P** **11 51 05.4 +0.5**
baz=260
**TTA Tatalina 31.61 42** IAmb IAmb 11 51 08.2
comp=Z,41nm,1.3s
**TTA Tatalina 31.61 42** P **P** **11 51 06.9 +0.7**
baz=264,SNR=11
**SONM Songino Array 31.72 289** P **P** **11 51 06.2 -1.2**
comp=Z,2.5nm,0.9s,baz=66,slow=7.9,SNR=8.4
SONM LR LR 12 04 17.8
comp=Z,283nm,20.0s,baz=96,slow=37
**P18K Big Mountain, 31.83 49** P **P** **11 51 08.3 +0.2**
**P18K Big Mountain, 31.83 49** P **P** **11 51 08.9 +0.8**
baz=271
**L19K White Mountain 32.08 43** P **P** **11 51 10.3 -0.1**
L19K IAmb IAmb 11 51 12.6
comp=Z,22nm,1.2s
**L19K White Mountain 32.08 43** P **P** **11 51 11.2 +0.9**
baz=266,SNR=5.7
**N19K Bonanza Creek 32.21 46** P **P** **11 51 12.8 +1.3**
baz=269
**O19K Port Alsworth 32.28 47** P **P** **11 51 14.5 +2.5**
baz=270
**M19K Big River Lodg 32.29 44** P **P** **11 51 13.3 +1.2**
baz=267
**K20K Telida 32.53 41** P **P** **11 51 14.4 +0.2**
K20K IAmb IAmb 11 51 17.0
comp=Z,26nm,1.2s
**K20K Telida 32.53 41** P **P** **11 51 15.1 +0.9**
baz=265
**L20K Farewell, AK 32.56 43** P **P** **11 51 15.3 +0.8**
baz=267
**J20K Nowinta River 32.57 40** P **P** **11 51 15.2 +0.6**
J20K IAmb IAmb 11 51 16.7
comp=Z,24nm,1.1s
**J20K Nowinta River 32.57 40** P **P** **11 51 15.5 +0.9**
baz=264
**Q19K Cape Douglas, 32.65 50** P **P** **11 51 15.7 +0.4**
baz=273
**OHAK Old Harbor 32.97 53** P **P** **11 51 17.9 -0.1**
baz=276
**IMAR Indian Mountai 32.97 36** P **P** **11 51 18.2 +0.1**
**ZAK Zakamensk 33.00 295** *e*P **P** **11 51 16.2 -2.3**
ZAK *e* 11 54 00.5
ZAK pmax pmax
comp=Z,6.0nm,1.2s
**KDAK Kodiak Island 33.29 52** P **P** **11 51 20.6 -0.3**
baz=275

**H21K Melozitna Rive 33.31 37** IAmb IAmb 11 51 23.1
comp=Z,17nm,0.8s
**H21K Melozitna Rive 33.31 37** P **P** **11 51 21.9 +0.9**
baz=263
**CHUM Lake Minchumin 33.35 40** P **P** **11 51 22.8 +1.5**
baz=266
**PPLA Purkeypile 33.35 42** P **P** **11 51 22.7 +1.1**
baz=288,SNR=5.9
**SPU Mount Spurr 33.39 45** P **P** **11 51 21.7 -0.1**
**CAST Castle Rocks 33.43 41** IAmb IAmb 11 51 24.4
comp=Z,25nm,1.3s
**CAST Castle Rocks 33.43 41** P **P** **11 51 23.3 +1.3**
baz=267,SNR=5.3
**LYN LuoYang 33.47 263** *e*P **P** **11 51 23.1 +0.4**
LYN pP pP 11 51 34.2 -0.1
LYN pmax pmax
comp=Z,10.0nm,1.1s
LYN LR LR
comp=Z,240nm,17.5s
LYN LR LR
comp=Z,170nm,15.1s
**I21K Tanana 33.60 38** IAmb IAmb 11 51 27.2
comp=Z,18nm,0.9s
**I21K Tanana 33.60 38** P **P** **11 51 24.3 +0.8**
baz=265
**BPAW Bear Paw Mtn. 33.95 40** P **P** **11 51 27.4 +0.8**
baz=267
**BRSE Bradley Lake S 34.09 48** P **P** **11 51 29.1 +1.2**
baz=274
**MLY Manley 34.11 38** IAmb IAmb 11 51 29.8
comp=Z,14nm,0.9s
**CUT Chulitna 34.23 43** P **P** **11 51 29.0 0.0**
baz=270
**TRF Thorofare Moun 34.23 41** IAmb IAmb 11 51 32.7
comp=Z,23nm,1.0s
**TRF Thorofare Moun 34.23 41** P **P** **11 51 30.0 +0.8**
baz=269,SNR=6.3
**M22K Willow 34.31 44** P **P** **11 51 28.8 -0.9**
baz=271
**RC01 Rabbit Creek A 34.52 45** IAmb IAmb 11 51 33.2
comp=Z,27nm,0.9s
**RC01 Rabbit Creek A 34.52 45** P **P** **11 51 31.8 +0.3**
baz=273
**COLD Coldfoot 34.54 35** IAmb IAmb 11 51 33.6
comp=Z,18nm,1.0s
**COLD Coldfoot 34.54 35** P **P** **11 51 32.5 +0.8**
baz=263,SNR=22
**WHN Wuhan 34.65 255** ⇓P **P** **11 51 34.3 +1.4**
**I23K Minto, Yukon-K 34.70 38** P **P** **11 51 34.1 +1.1**
baz=267,SNR=9.6
**SEW Seward 34.72 47** P **P** **11 51 33.9 +0.7**
baz=274
**PMR Palmer 34.79 45** IAmb IAmb 11 51 35.6
comp=Z,19nm,0.9s
**PMR Palmer 34.79 45** P **P** **11 51 33.8 0.0**
baz=272,SNR=5.8
**NEA2 Nenana 34.80 39** IAmb IAmb 11 51 35.8
comp=Z,24nm,0.9s
**NEA2 Nenana 34.80 39** P **P** **11 51 34.9 +1.0**
baz=268,SNR=6.4
**MCK McKinley 34.84 41** IAmb IAmb 11 51 36.0
comp=Z,34nm,1.0s
**MCK McKinley 34.84 41** P **P** **11 51 34.8 +0.5**
baz=270,SNR=11
**RND Reindeer 34.88 41** P **P** **11 51 34.1 -0.6**
RND pmax pmax
comp=Z,38nm,1.0s
**RND Reindeer 34.88 41** P **P** **11 51 34.1 -0.6**
**TOLK Toolik Lake Re 34.96 32** P **P** **11 51 35.7 +0.4**
TOLK IAmb IAmb 11 51 36.9
comp=Z,15nm,0.7s
**TOLK Toolik Lake Re 34.96 32** P **P** **11 51 36.4 +1.1**
baz=262,SNR=14
**KNK Knik Glacier 35.12 45** P **P** **11 51 36.9 +0.2**
**KNK Knik Glacier 35.12 45** P **P** **11 51 37.2 +0.5**
baz=273,SNR=16
**SML Sawmill 35.16 44** P **P** **11 51 37.0 -0.1**
**SML Sawmill 35.16 44** P **P** **11 51 37.7 +0.6**
baz=273,SNR=27
**MDM Murphy Dome 35.17 39** IAmb IAmb 11 51 39.2
comp=Z,20nm,0.7s
**PWL Port Wells 35.21 46** P **P** **11 51 37.3 -0.2**
baz=274
**WRH Wood River Hil 35.22 40** IAmb IAmb 11 51 42.2
comp=Z,14nm,0.8s
**TCOL CIGO, UAF Yank 35.33 39** P **P** **11 51 39.1 +0.7**
**TCOL CIGO, UAF Yank 35.33 39** P **P** **11 51 39.7 +1.3**
baz=269,SNR=16
**COLA College 35.33 39** *c i*P **P** **11 51 39.6 +1.2**
COLA pmax pmax
comp=Z,36nm,0.7s
**COLA College 35.33 39** P **P** **11 51 38.9 +0.5**
**COLA College 35.33 39** P **P** **11 51 39.6 +1.2**
baz=269
**CCB Clear Creek Bu 35.35 39** IAmb IAmb 11 51 40.5
comp=Z,29nm,1.2s
**H24K Noodor Dome 35.35 37** IAmb IAmb 11 51 40.7
comp=Z,14nm,0.6s
**H24K Noodor Dome 35.35 37** P **P** **11 51 40.0 +1.3**
baz=268
**POKR Poker Flat Res 35.52 38** P **P** **11 51 41.5 +1.5**
baz=269,SNR=13
**SCM Sheep Creek Mo 35.63 44** P **P** **11 51 41.8 +0.6**
baz=274,SNR=5.8
**HDA Harding Lake 35.72 40** IAmb IAmb 11 51 43.1
comp=Z,19nm,0.6s
**HDA Harding Lake 35.72 40** P **P** **11 51 41.7 -0.1**
baz=270,SNR=12
**IL31 35.74 39** IAmb IAmb 11 51 43.6
comp=Z,58nm,1.7s
**ILAR Eielson Array 35.74 39** P **P** **11 51 42.3 +0.3**
comp=Z,6.1nm,0.6s,baz=262,slow=8.6,SNR=74
**GLI Glacier Island 35.82 46** P **P** **11 51 42.7 0.0**
baz=275
**XAN Xi'an 36.16 265** P **P** **11 51 45.2 -0.8**
XAN pP pP 11 51 52.6 -5.0
XAN pmax pmax
comp=Z,10.0nm,1.2s
XAN pmax pmax
comp=Z,80nm,4.8s
XAN LR LR
comp=Z,280nm,16.5s
XAN LR LR
comp=Z,250nm,15.1s
XAN LR LR
comp=Z,300nm,15.6s
**KLU Klutina 36.33 45** P **P** **11 51 47.7 +0.6**
baz=275,SNR=7.9
**J25K Salcha River, 36.40 39** IAmb IAmb 11 51 48.1
comp=Z,12nm,0.8s
**J25K Salcha River, 36.40 39** P **P** **11 51 47.1 -0.6**
baz=272,SNR=10
**PAX Paxson 36.43 42** IAmb IAmb 11 51 50.7
comp=Z,21nm,1.2s
**PAX Paxson 36.43 42** P **P** **11 51 48.7 +0.7**
baz=274,SNR=7.9
**EYAK Cordova Ski Ar 36.51 46** P **P** **11 51 48.2 -0.3**
baz=277
**HARP HAARP 36.61 43** P **P** **11 51 50.1 +0.6**
baz=275
**RIDG Independent Ri 36.66 41** P **P** **11 51 49.7 -0.2**
baz=273
**BMAR Burnt Mountain 36.73 35** P **P** **11 51 51.8 +1.4**
**N25K Chitina, Valde 36.95 44** IAmb IAmb 11 51 54.2
comp=Z,19nm,0.9s
**N25K Chitina, Valde 36.95 44** P **P** **11 51 53.5 +1.1**
baz=276,SNR=5.1
**BMRM Bremner River 37.02 45** P **P** **11 51 53.7 +0.7**
baz=277,SNR=7.1
**DOT Dot Lake 37.02 41** IAmb IAmb 11 51 53.7
comp=Z,13nm,0.8s
**SCRK Sand Creek 37.03 40** P **P** **11 51 52.3 -0.8**
SCRK IAmb IAmb 11 51 54.4
comp=Z,31nm,1.4s
**SCRK Sand Creek 37.03 40** P **P** **11 51 53.0 -0.2**
baz=274,SNR=7.5
**J26L Joseph Creek 37.18 39** P **P** **11 51 54.7 +0.3**
baz=273
**MENT Mentasta 37.23 42** IAmb IAmb 11 52 00.3
comp=Z,13nm,0.9s
**L26K Log Cabin Wild 37.39 42** IAmb IAmb 11 51 58.7
comp=Z,17nm,1.0s
**L26K Log Cabin Wild 37.39 42** P **P** **11 51 57.6 +1.6**
baz=275,SNR=6.8
**VRDI Verde Repeater 37.54 45** IAmb IAmb 11 51 59.7
comp=Z,24nm,0.9s
**M26K Nabesna, AK 37.61 43** P **P** **11 51 59.5 +1.5**
baz=276

**ENH Enshi 38.06 260** IAmb IAmb 11 52 06.7
comp=Z,29nm,1.2s
**L27K Beaver Creek, 38.07 42** P **P** **11 52 03.3 +1.5**
baz=277
**BCAR Beaver Creek A 38.09 42** P **P** **11 52 03.8 +1.7**
**M27K Edge Creek, AK 38.13 43** IAmb IAmb 11 52 05.4
comp=Z,35nm,1.1s
**M27K Edge Creek, AK 38.13 43** P **P** **11 52 04.2 +1.7**
baz=278,SNR=14
**EGAK Eagle 38.20 39** P **P** **11 52 03.1 +0.3**
baz=275,SNR=20
**MESA MESA 38.43 46** P **P** **11 52 06.6 +1.5**
baz=280
**LZH Lanzhou 38.47 272** *e*P **P** **11 52 06.7 +1.0**
LZH pmax pmax
comp=Z,17nm,1.1s
LZH LR LR
comp=Z,230nm,13.6s
LZH LR LR
comp=Z,250nm,14.2s
LZH LR LR
comp=Z,350nm,15.5s
**BVCY Beaver Creek 38.60 43** P **P** **11 52 08.0 +1.7**
baz=278,SNR=12
**NRIK Noril'sk 38.60 329** P **P** **11 52 06.0 -0.1**
comp=Z,1.3nm,0.3s,baz=313,slow=4.2,SNR=3.9
**NRIK Noril'sk 38.60 329** ⇑*e*P **P** **11 52 06.9 +0.7**
NRIK pmax pmax
comp=Z,11nm,1.5s
**NRIK Noril'sk 38.60 329** P **P** **11 52 06.1 -0.1**
**YUK3 Moose Creek 38.88 44** P **P** **11 52 10.1 +1.3**
baz=279,SNR=9.7
**DAWY Dawson 39.03 40** P **P** **11 52 10.1 +0.2**
**DAWY Dawson 39.03 40** P **P** **11 52 10.8 +0.9**
baz=277,SNR=7.1
**PCA Pinnacle 39.28 46** P **P** **11 52 13.2 +1.2**
PCA IAmb IAmb 11 52 14.1
comp=Z,37nm,0.8s
**PINM Pinnacle 39.28 46** P **P** **11 52 13.0 +1.0**
baz=282
**I29M Ogilvie Camp, 39.34 38** P **P** **11 52 13.5 +1.0**
I29M IAmb IAmb 11 52 14.6
comp=Z,19nm,0.8s
**I29M Ogilvie Camp, 39.34 38** P **P** **11 52 13.4 +1.0**
baz=277,SNR=16
**GTA Gaotai 39.48 279** *e*P **P** **11 52 15.6 +1.6**
GTA PP **PnPn** **11 53 51.6 +3.3**
GTA PcP **PcP** **11 54 21.4 +0.4**
GTA pmax pmax
comp=Z,8.0nm,1.2s
GTA pmax pmax
comp=Z,77nm,5.8s
GTA LR LR
comp=Z,150nm,16.4s
GTA LR LR
comp=Z,200nm,16.4s
GTA LR LR
comp=Z,190nm,17.1s
**J29M Klondike Camp 39.49 39** P **P** **11 52 15.0 +1.2**
baz=278,SNR=7.2
**YUK4 Talbot Arm 39.81 44** P **P** **11 52 17.9 +1.3**
baz=281
**YUK6 Outpost Mounta 40.03 45** P **P** **11 52 19.6 +1.2**
baz=282
**HYT Haines Junctio 40.46 45** IAmb IAmb 11 52 24.9
comp=Z,24nm,0.8s
**HYT Haines Junctio 40.46 45** P **P** **11 52 23.8 +1.9**
baz=283,SNR=9.9
**MAYO Mayo, Yukon 40.64 40** P **P** **11 52 25.0 +1.8**
baz=281,SNR=12
**INK Inuvik 40.87 33** LR LR 12 10 19.9
comp=Z,97nm,18.8s,baz=337,slow=38
**INK Inuvik 40.87 33** P **P** **11 52 26.1 +1.2**
INK pmax pmax
comp=Z,19nm,0.6s
**INK Inuvik 40.87 33** P **P** **11 52 26.1 +1.2**
INK IAmb IAmb 11 52 26.9
comp=Z,19nm,0.6s
**INK Inuvik 40.87 33** P **P** **11 52 26.4 +1.4**
baz=277,SNR=29
**N31M Braeburn, Yuko 41.13 43** IAmb IAmb 11 52 30.7
comp=Z,35nm,0.8s
**N31M Braeburn, Yuko 41.13 43** P **P** **11 52 29.5 +2.2**
baz=283
**CD2 Chengdu 41.52 265** ⇑*i*P **P** **11 52 31.1 +0.2**
CD2 S **S** **11 58 44.6 +1.3**
CD2 pmax pmax
comp=Z,40nm,0.9s
CD2 pmax pmax
comp=Z,140nm,6.4s
CD2 LR LR
comp=Z,510nm,15.7s
CD2 LR LR
comp=Z,520nm,18.5s
**M31M Drury Creek, Y 41.60 42** IAmb IAmb 11 52 34.2
comp=Z,24nm,0.8s
**M31M Drury Creek, Y 41.60 42** P **P** **11 52 33.0 +1.8**
baz=284,SNR=11
**WHY Whitehorse 41.75 44** IAmb IAmb 11 52 35.7
comp=Z,25nm,1.0s
**WHY Whitehorse 41.75 44** P **P** **11 52 34.6 +2.2**
baz=285,SNR=6.7
**FARO Faro, Yukon 42.07 42** P **P** **11 52 36.5 +1.5**
baz=284,SNR=16
**GYA Guiyang 42.42 258** ⇑P **P** **11 52 39.2 +0.9**
GYA pP pP 11 52 47.6 -2.6
GYA S **S** **11 59 04.0 +7.3**
GYA pmax pmax
comp=Z,15nm,1.4s
GYA pmax pmax
comp=Z,250nm,6.7s
GYA LR LR
comp=Z,170nm,7.2s
GYA LR LR
comp=Z,190nm,4.4s
GYA LR LR
comp=Z,88nm,6.5s
**SIT Sitka 42.56 50** P **P** **11 52 40.9 +2.0**
baz=288
**JIS Juneau Island 42.66 48** IAmb IAmb 11 52 42.9
comp=Z,37nm,1.0s
**ZAA0 Zalesovo Array 42.78 306** P **P** **11 52 39.1 -1.7**
**ZALV Zalesovo Beam 42.78 306** P **P** **11 52 38.6 -2.1**
comp=Z,5.2nm,0.6s,baz=70,slow=7.1,SNR=14
ZALV PcP **PcP** **11 54 30.8 -0.5**
comp=Z,1.9nm,0.7s,baz=49,slow=4.5,SNR=3.7
ZALV LR LR 12 10 33.7
comp=Z,150nm,20.9s,baz=74,slow=36
**ZALV Zalesovo Beam 42.78 306** P **P** **11 52 39.5 -1.3**
**P33M Teslin, Yukon 42.86 45** IAmb IAmb 11 52 44.6
comp=Z,34nm,0.9s
**P33M Teslin, Yukon 42.86 45** P **P** **11 52 43.2 +1.8**
baz=287,SNR=19
**DGZ Jazzator, Alta 42.87 299** ⇓*e*P **P** **11 52 41.2 -0.5**
DGZ pmax pmax
comp=Z,3.0nm,1.1s
**MMPY Sheldon Lake, 42.91 41** P **P** **11 52 43.7 +1.9**
baz=285,SNR=10
**A36M Sachs Harbour 43.09 27** IAmb IAmb 11 52 46.0
comp=Z,25nm,0.8s
**A36M Sachs Harbour 43.09 27** P **P** **11 52 44.5 +1.5**
baz=281,SNR=23
**C36M Paulatuk 44.04 30** IAmb IAmb 11 52 52.4
comp=Z,26nm,0.6s
**C36M Paulatuk 44.04 30** P **P** **11 52 51.7 +1.0**
baz=284,SNR=32
**GOMU GeErMu 44.53 278** P **P** **11 52 54.5 -1.0**
GOMU pmax pmax
comp=Z,10.0nm,1.0s
GOMU pmax pmax
comp=Z,130nm,5.3s
**DLBC Dease Lake 44.78 46** LR LR 12 13 28.7
comp=Z,94nm,19.6s,baz=291,slow=38
**DLBC Dease Lake 44.78 46** IAmb IAmb 11 53 00.4
comp=Z,32nm,1.1s
**WTLY Watson Lake, Y 44.80 44** P **P** **11 52 58.2 +1.2**
baz=290
**WMQ Urumqi 45.29 291** *e*P **P** **11 53 01.6 +0.5**
WMQ pmax pmax
comp=Z,8.0nm,0.9s
WMQ LR LR
comp=Z,180nm,21.3s
**ZSN Zaisan 45.36 297** *e*P **P** **11 52 59.8 -1.8**
**ZSN Zaisan 45.36 297** *e*P **P** **11 52 59.8 -1.8**
baz=297
**PZH PanZhiHua 45.69 262** P **P** **11 53 04.3 -0.2**
PZH pmax pmax

comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,120nm,5.9s
**KMI Kunming 45.93 260** ⇑P **P 11 53 06.9 +0.3**
KMI pP pP 11 53 15.5 -3.1
KMI pmax pmax
comp=Z,17nm,1.1s
**WRGLY Wrigley 46.12 39** P **P 11 53 09.1 +1.8**
baz=291,SNR=9.5
**MK31 Makanchi Array 47.23 297** P **P 11 53 15.6 -0.6**
MK31 pmax pmax
comp=Z,4.0nm,0.9s
**MK31 Makanchi Array 47.23 297** P **P 11 53 15.6 -0.6**
**MKAR Makanchi Array 47.23 297** P **P 11 53 14.4 -1.8**
comp=Z,2.6nm,0.6s,baz=66,slow=7.8,SNR=30
MKAR PcP **PcP 11 54 46.6 -0.3**
comp=Z,1.1nm,0.6s,baz=64,slow=4.4,SNR=2.2
MKAR LR LR 12 14 57.9
comp=Z,137nm,19.2s,baz=9.0,slow=39
**MKAR Makanchi Array 47.23 297** P **P 11 53 15.1 -1.1**
**MAKZ Makanchi 47.41 297** P **P 11 53 17.0 -0.6**
MAKZ pmax pmax
comp=Z,6.0nm,1.2s
**MAKZ Makanchi 47.41 297** P **P 11 53 17.0 -0.6**
**KURK Kurchatov 47.56 304***c i*P **P 11 53 17.3 -1.4**
KURK pmax pmax
comp=Z,19nm,0.8s
**KURK Kurchatov 47.56 304** P **P 11 53 17.7 -1.0**
**KURK Kurchatov 47.56 304** P **P 11 53 16.9 -1.9**
KURK lAmb lAmb 11 53 21.5
comp=Z,16nm,0.8s
**KURBB Kurchatov Arra 47.66 303** LR LR 12 14 34.3
comp=Z,231nm,18.6s,baz=1.1,slow=38
**EUNU Eureka 48.47 12** P **P 11 53 25.6 +0.2**
EUNU lAmb lAmb 11 53 28.1
comp=Z,17nm,0.8s
**RES Resolute Bay 50.12 19** LR LR 12 18 46.8
comp=Z,79nm,18.5s,baz=292,slow=41
**RES Resolute Bay 50.12 19** P **P 11 53 37.8 -0.2**
RES pmax pmax
comp=Z,10.0nm,0.8s
**RES Resolute Bay 50.12 19** P **P 11 53 37.8 -0.2**
RES lAmb lAmb 11 53 39.8
comp=Z,10nm,0.8s
**YKA Yellowknife Ar 50.12 37** P **P 11 53 39.1 +0.9**
comp=Z,24nm,0.9s,baz=297,slow=7.4,SNR=153
YKA PcP **PcP 11 54 56.6 -0.4**
comp=Z,0.9nm,0.6s,baz=302,slow=3.6,SNR=5.1
**YKA Yellowknife Ar 50.12 37** P **P 11 53 39.0 +0.8**
**TDK Taldyqorghan 50.47 297** *eP* **P 11 53 39.2 -1.9**
TDK pmax pmax
comp=Z,8.0nm,0.8s
**TDK Taldyqorghan 50.47 297** *eP* **P 11 53 39.2 -1.9**
comp=Z,8.5nm,0.8s,baz=297
**JAY Jayapura 50.96 197** LR LR 12 11 06.0
comp=Z,150nm,21.9s,baz=83,slow=31
**BVAR Borovoye Array 50.98 309** P **P 11 53 44.0 -0.8**
comp=Z,1.7nm,0.5s,baz=53,slow=15,SNR=16
**BVAR Borovoye Array 50.98 309** P **P 11 53 44.0 -0.8**
**BRVK Borovoye 51.02 309** P **P 11 53 44.6 -0.5**
BRVK pmax pmax
comp=Z,7.0nm,0.6s
**BRVK Borovoye 51.02 309** P **P 11 53 44.8 -0.2**
**BRVK Borovoye 51.02 309** P **P 11 53 44.6 -0.5**
BRVK lAmb lAmb 11 53 50.1
comp=Z,7.2nm,0.6s
**UZB Uzunbulak 51.07 295** *eP* **P 11 53 43.9 -1.9**
**UZB Uzunbulak 51.07 295** *eP* **P 11 53 44.0 -1.9**
baz=295
**KPKS Kokpek 51.11 295** *eP* **P 11 53 44.2 -1.8**
**KPKS Kokpek 51.11 295** *eP* **P 11 53 44.2 -1.8**
baz=295
**BRZS Berezniki 51.26 305** *eP* **P 11 53 45.1 -1.8**
**BRZS Berezniki 51.26 305** *eP* **P 11 53 45.1 -1.8**
baz=305
**ZHN Zhinishke 51.42 295** *eP* **P 11 53 46.6 -1.8**
**ZHN Zhinishke 51.42 295** *eP* **P 11 53 46.6 -1.8**
baz=295
**SATY Saty 51.50 295** *eP* **P 11 53 47.3 -1.7**
**SATY Saty 51.50 295** *eP* **P 11 53 47.3 -1.7**
baz=295
**CHTO Chiang Mai 52.83 257** P **P 11 53 59.3 +0.3**
CHTO pmax pmax
comp=Z,10.0nm,0.9s
**CHTO Chiang Mai 52.83 257** P **P 11 53 59.8 +0.9**
**CHTO Chiang Mai 52.83 257** P **P 11 53 59.3 +0.3**
CHTO lAmb lAmb 11 54 03.0
comp=Z,10nm,0.9s
**SHL Shillong 52.99 269** P **P 11 53 59.6 -0.7**
SHL pmax pmax
comp=Z,45nm,1.4s
**SHL Shillong 52.99 269** P **P 11 54 00.2 -0.1**
**SHL Shillong 52.99 269** P **P 11 53 59.6 -0.7**
**A04D Lummi Island 53.02 55** P **P 11 54 00.6 +0.6**
baz=302
**CMAR Chiang Mai Arr 53.08 257** P **P 11 54 01.3 +0.5**
comp=Z,6.0nm,1.1s,baz=32,slow=7.3,SNR=26
**CMAR Chiang Mai Arr 53.08 257** *i*P **P 11 54 02.0 +1.1**
CMAR pmax pmax
comp=Z,6.0nm,1.0s
**CMAR Chiang Mai Arr 53.08 257** P **P 11 54 01.0 +0.1**
**D03D Eldon 53.44 57** P **P 11 54 03.5 +0.4**
baz=303
**TULEG Thule 53.47 11** lAmb lAmb 11 54 03.4
comp=Z,11nm,0.9s
**SGDS Sogindy 53.59 297** *eP* **P 11 54 02.9 -1.5**
baz=297
**B05A Bryant 53.61 56** P **P 11 54 04.9 +0.6**
baz=303
**D04E Lakebay 53.82 57** P **P 11 54 06.1 +0.3**
baz=303
**AAK Ala-Archa 54.13 296** LR LR 12 18 22.1
comp=Z,199nm,19.4s,baz=24,slow=37
**AAK Ala-Archa 54.13 296**⇓*i*P **P 11 54 07.6 -0.8**
AAK pmax pmax
comp=Z,5.0nm,0.9s
**AAK Ala-Archa 54.13 296** P **P 11 54 07.9 -0.6**
**NEEM North Greenlan 54.55 7** *i*P **P 11 54 10.7 -0.5**
NEEM lAmb lAmb 11 54 11.3
comp=Z,18nm,0.7s
**TAPN Taplejung 54.67 273** *eP* **P 11 54 13.3 +0.6**
comp=Z,36nm,0.8s
**KSH Kashi 55.00 293** P **P 11 54 19.2 +4.4**
KSH pmax pmax
comp=Z,3.0nm,0.5s
**ARU Arti 55.02 318** P **P 11 54 12.7 -1.7**
comp=Z,5.8nm,0.6s,baz=36,slow=5.1,SNR=18
ARU LR LR 12 19 26.7
comp=Z,180nm,19.0s,baz=24,slow=38
**ARU Arti 55.02 318***c i*P **P 11 54 13.6 -0.8**
ARU S **S 12 01 54.6 +1.7**
ARU SS **SS 12 05 31.7 -4.6**
ARU pmax pmax
comp=Z,40nm,1.3s
**ARU Arti 55.02 318** P **P 11 54 14.4 -0.1**
**B08A Colville Reser 55.10 54** P **P 11 54 14.8 -0.4**
B08A lAmb lAmb 11 54 16.9
comp=Z,16nm,1.1s
**ODAN Odare 55.20 273** *eP* **P 11 54 17.6 +1.1**
comp=Z,10nm,0.5s
**I03D Drain, OR 55.43 61** P **P 11 54 18.5 +0.9**
baz=305
**JIRN Jiri 55.50 275** *eP* **P 11 54 19.0 +0.2**
comp=Z,46nm,0.7s
**RAMN Ramite 55.68 274** *eP* **P 11 54 20.6 +0.7**
comp=Z,29nm,0.5s
**K02D Willamette Mer 55.82 62** P **P 11 54 21.4 +0.9**
baz=306
**E07A Sunnyside 55.82 56** lAmb lAmb 11 54 22.4
comp=Z,22nm,1.4s
**I04A Tendick Farm, 55.93 60** P **P 11 54 22.2 +0.9**
baz=305
**KKN Kakani 56.03 276** *eP* **P 11 54 22.7 +0.3**
comp=Z,32nm,0.6s
**D08A Wollman Farm, 56.06 55** P **P 11 54 21.0 -1.1**
D08A lAmb lAmb 11 54 45.2
comp=Z,31nm,2.0s
**PKI Pulchoki 56.09 275** *eP* **P 11 54 23.0 0.0**
comp=Z,18nm,0.6s
**PKIN Phulchoki 56.09 275** *eP* **P 11 54 22.9 0.0**
comp=Z,20nm,0.5s
**HAWA Hanford 56.10 56** P **P 11 54 21.9 -0.5**
**F07A Phinny Hill Vi 56.16 57** lAmb lAmb 11 54 25.0
comp=Z,8.7nm,0.8s
**I05D Terrebonne, OR 56.24 59** P **P 11 54 24.6 +1.0**
baz=306

**KKAR Karatay Array 56.26 299** P **P 11 54 22.4 -1.3**
**KKAR Karatay Array 56.26 299** P **P 11 54 22.4 -1.3**
**DMN Daman 56.27 275** *eP* **P 11 54 24.6 +0.4**
comp=Z,43nm,0.7s
**GKN Gorkha 56.33 276** *eP* **P 11 54 24.5 0.0**
comp=Z,36nm,0.6s
**NEW Newport 56.37 53** P **P 11 54 24.9 +0.6**
baz=305,SNR=5.7
**J04D Umpqua Nationa 56.43 61** P **P 11 54 26.0 +1.0**
baz=306
**DANN Dangsing 56.70 277** *eP* **P 11 54 27.3 0.0**
comp=Z,38nm,0.6s
**BRLS Borolday 56.71 299** *eP* **P 11 54 27.3 +0.5**
**BRLS Borolday 56.71 299** *eP* **P 11 54 27.3 +0.5**
baz=299
**PINE Pine Mountain 56.80 60** lAmb lAmb 11 54 30.5
comp=Z,14nm,0.9s
**E09A Wood Farm, Sta 56.81 56** lAmb lAmb 11 54 29.3
comp=Z,9.2nm,0.8s
**L04D Klamath Falls 56.91 62** P **P 11 54 29.5 +1.1**
baz=306
**J05D Fort Rock, OR 56.92 60** P **P 11 54 30.0 +1.6**
baz=306,SNR=5.0
**M02C Callahan 57.07 63** P **P 11 54 31.1 +1.6**
baz=307
**APA Apatity 57.07 337**⇓*i*P **P 11 54 26.3 -2.6**
APA pmax pmax
comp=Z,4.0nm,1.2s
**IUG Iuzhnay 57.11 298** *eP* **P 11 54 28.2 -1.6**
**IUG Iuzhnay 57.11 298** *eP* **P 11 54 28.2 -1.6**
baz=298
**KOLN Koldanda 57.19 277** *eP* **P 11 54 30.9 +0.3**
comp=Z,30nm,0.7s
**PRGR Permogore 57.23 327** *eP* **P 11 54 29.3 -0.8**
PRGR pmax pmax
comp=Z,15nm,0.4s
**PYUN Piuthan 57.38 277** *eP* **P 11 54 32.0 0.0**
**N02D Trinity Center 57.41 63** P **P 11 54 32.8 +1.0**
baz=307
**ARCES ARCESS Array B 57.53 341** P **P 11 54 30.8 -1.4**
comp=Z,2.6nm,0.8s,baz=36,slow=10,SNR=8.1
ARCES LR LR 12 22 37.9
comp=Z,265nm,19.5s,baz=342,slow=40
**WALA Waterton Lakes 57.63 51** P **P 11 54 33.8 +0.5**
WALA lAmb lAmb 11 54 34.8
comp=Z,12nm,0.8s
**KIRV Kirov 57.70 323**⇓*i*P **P 11 54 35.6 +2.1**
**MOD Modoc Plateau 58.30 61** lAmb lAmb 11 54 40.3
comp=Z,21nm,1.6s
**UPNV Upernavik 58.40 10** *i*P **P 11 54 37.5 -0.6**
UPNV lAmb lAmb 11 54 38.4
comp=Z,8.9nm,0.5s
**AB31 Akbulak array 58.54 310** *eP* **P 11 54 38.3 -1.2**
**ABKAR Akbulak array 58.54 310** P **P 11 54 38.8 -0.7**
**ABKAR Akbulak array 58.54 310** P **P 11 54 38.6 -0.9**
**AKTO Aktyubinsk 58.81 312** P **P 11 54 39.5 -1.9**
comp=Z,0.8nm,0.4s,baz=49,slow=8.9,SNR=4.1
AKTO LR LR 12 21 17.0
comp=Z,170nm,19.6s,baz=48,slow=37
**GAR Garm 58.83 295** lAmb lAmb 11 54 46.2
comp=Z,10nm,0.8s
**MSO Missoula 58.95 53** lAmb lAmb 11 54 44.7
comp=Z,30nm,1.5s
**MSO Missoula 58.95 53** P **P 11 54 43.4 +0.8**
baz=308,SNR=10
**FFC Flin Flon 59.93 41** P **P 11 54 50.5 +1.4**
FFC pmax pmax
comp=Z,29nm,0.8s
**FFC Flin Flon 59.93 41** P **P 11 54 50.5 +1.4**
**KLMR Klimovskoe 59.95 329** *eP* **P 11 54 47.7 -1.4**
KLMR pmax pmax
comp=Z,15nm,1.2s
**KLMR Klimovskoe 59.95 329** *eP* **P 11 54 47.7 -1.4**
KLMR AMP 11 54 53.1
comp=Z,15nm,1.2s
**SUMG Summit 60.11 4** P **P 11 54 51.3 +0.8**
SUMG pmax pmax
comp=Z,41nm,1.0s
**SUMG Summit 60.11 4**⇓*i*P **P 11 54 51.3 +0.8**
SUMG lAmb lAmb 11 54 52.5
comp=Z,25nm,0.8s
**SUMG Summit 60.11 4** P **P 11 54 51.3 +0.8**
**NIL Nilore 60.30 289** P **P 11 54 51.8 -0.2**
NIL pmax pmax
comp=Z,20nm,1.0s
**NIL Nilore 60.30 289** P **P 11 54 53.4 +1.4**
**NIL Nilore 60.30 289** P **P 11 54 51.8 -0.2**
NIL lAmb lAmb 11 54 57.6
comp=Z,20nm,0.9s
**LRM Limekiln Ridge 60.38 53** P **P 11 54 52.9 +0.3**
**PNTR Pine Nut 60.45 63** lAmb lAmb 11 54 56.1
comp=Z,6.3nm,0.6s
**EGMT Eagleton 60.45 50** P **P 11 54 53.6 +0.8**
baz=309,SNR=9.2
**FCC Fort Churchill 60.47 34** P **P 11 54 52.5 -0.2**
FCC pmax pmax
comp=Z,18nm,0.7s
**FCC Fort Churchill 60.47 34** P **P 11 54 52.5 -0.2**
**HLID Hailey 60.70 56** P **P 11 54 55.8 +1.0**
baz=309,SNR=5.9
**YERR Yerington 60.73 63** lAmb lAmb 11 54 57.3
comp=Z,13nm,1.6s
**BOZ Bozeman (W) 60.98 53** P **P 11 54 57.7 +1.2**
baz=309,SNR=19
**NVAR Mina Array Bea 61.65 63** P **P 11 55 02.2 +1.0**
comp=Z,2.2nm,0.6s,baz=298,slow=7.3,SNR=22
**MLAC Mammoth, Mammo 61.83 64** P **P 11 55 03.7 +1.2**
baz=310
**YHH Holmes Hill 61.91 54** lAmb lAmb 11 55 05.4
comp=Z,11nm,1.1s
**YMR Madison River 61.93 54** lAmb lAmb 11 55 05.6
comp=Z,34nm,1.6s
**ELK Elko 62.01 59** LR LR 12 18 51.5
comp=Z,39nm,20.8s,baz=323,slow=33
**H17A Grant Village 62.32 54** lAmb lAmb 11 55 09.7
comp=Z,24nm,1.4s
**H17A Grant Village 62.32 54** P **P 11 55 08.3 +2.6**
baz=310,SNR=8.8
**KBL Kabul 62.42 292** P **P 11 55 05.0 -1.5**
KBL pmax pmax
comp=Z,13nm,1.0s
**KBL Kabul 62.42 292** P **P 11 55 05.6 -0.9**
SNR=6.9
**KBL Kabul 62.42 292** P **P 11 55 05.0 -1.5**
KBL lAmb lAmb 11 55 09.7
comp=Z,12nm,1.0s
**TPH Tonopah 62.53 63** lAmb lAmb 11 55 08.6
comp=Z,19nm,0.9s
**RLMT Red Lodge 62.56 52** lAmb lAmb 11 55 10.2
comp=Z,10nm,1.1s
**RLMT Red Lodge 62.56 52** P **P 11 55 08.8 +1.5**
baz=311,SNR=10
**LOHW Long Hollow 62.81 54** lAmb lAmb 11 55 12.0
comp=Z,22nm,1.5s
**PKM Mcpherson Peak 62.98 67** P **P 11 55 11.1 +0.9**
baz=310
**DGMT Dagmar 62.99 47** P **P 11 55 10.9 +1.0**
baz=312,SNR=11
**CWC Cottonwood Cre 63.06 65** P **P 11 55 11.2 +0.5**
baz=310
**AHID Auburn Hatcher 63.08 55** lAmb lAmb 11 55 13.0
comp=Z,11nm,1.4s
**CHLP Challavanipeta 63.08 268** *eP* **P 11 55 11.8 +1.1**
**LAO LASA Array 63.14 50** lAmb lAmb 11 55 13.5
comp=Z,22nm,0.9s
**LAO LASA Array 63.14 50** P **P 11 55 12.4 +1.4**
baz=311,SNR=5.7
**ICESG Greenland Ices 63.49 5** *i*P **P 11 55 13.8 +0.6**
ICESG lAmb lAmb 11 55 14.7
comp=Z,34nm,0.8s
**MPMC Manual Prospec 63.67 65** P **P 11 55 15.4 +0.7**
baz=311
**FURC Furnace Creek, 63.78 64** P **P 11 55 15.9 +0.7**
baz=311
**FINES FINESS Array B 63.80 335** P **P 11 55 13.6 -1.3**
comp=Z,4.2nm,0.4s,baz=36,slow=7.5,SNR=57
**FINES FINESS Array B 63.80 335** *i*P **P 11 55 14.1 -0.8**
FINES pmax pmax
comp=Z,4.0nm,0.4s
**FINES FINESS Array B 63.80 335** P **P 11 55 13.8 -1.1**
**TPNV Topopah Spring 63.85 63** P **P 11 55 16.6 +0.7**
baz=311
**LRMC Laurel Mtn Rad 63.92 65** P **P 11 55 16.7 +0.4**
baz=311
**BW06 Boulder Array 63.94 55** lAmb lAmb 11 55 18.4
comp=Z,11nm,1.1s
**BW06 Boulder Array 63.94 55** P **P 11 55 17.0 +0.5**

baz=311,SNR=12
**PDAR Pinedale Array 63.94 55** P **P 11 55 17.2 +0.7**
comp=Z,5.0nm,0.8s,baz=298,slow=1.8,SNR=39
PDAR LR LR 12 23 38.3
comp=Z,32nm,19.2s,baz=334,slow=36
**GWY Greenwater Val 64.09 64** lAmb lAmb 11 57 19.3
comp=Z,11nm,0.4s
**EDW2 Edwards Air Fo 64.12 66** P **P 11 55 17.9 +0.4**
baz=311
**SFJD Kangerlussuaq 64.50 10** P **P 11 55 19.4 0.0**
comp=Z,6.0nm,0.4s,baz=337,slow=4.1,SNR=9.1
SFJD LR LR 12 24 56.1
comp=Z,96nm,18.1s,baz=359,slow=38
**SFJD Kangerlussuaq 64.50 10** P **P 11 55 17.5 -2.0**
**GSC Goldstone, Bar 64.58 65** P **P 11 55 20.7 +0.1**
baz=311
**TUQ Turquoise Moun 65.04 64** P **P 11 55 23.9 +0.2**
baz=312
**HEC Hector,Ludlow 65.18 65** P **P 11 55 24.6 +0.1**
baz=312
**OBN Obninsk 65.20 326** *eP* **P 11 55 24.8 +0.7**
OBN *e**PP **pP 11 55 37.3 +0.6**
OBN *e**SP **sP 11 55 42.9 +1.2**
OBN *e* 11 55 53.8
OBN *e* 11 57 48.7
OBN pmax pmax
comp=Z,6.0nm,1.1s
OBN MLR MLR
comp=Z,228nm,15.0s
**OBN Obninsk 65.20 326** *eP* **P 11 55 24.8 +0.7**
**P17A Butcher Ranch, 65.45 58** lAmb lAmb 11 55 28.5
comp=Z,32nm,1.7s
**MURC Murrieta 65.46 67** P **P 11 55 26.4 +0.1**
baz=312
**DY2G Dye2 65.50 9** *i*P **P 11 55 26.4 +0.2**
DY2G lAmb lAmb 11 55 27.2
comp=Z,14nm,0.7s
**GMRC Granite Mounta 65.63 65** P **P 11 55 27.8 +0.4**
baz=312
**P18A Preston Nutter 65.63 58** lAmb lAmb 11 55 30.7
comp=Z,24nm,1.9s
**MDND Maddock 65.67 45** P **P 11 55 28.5 +1.2**
baz=314
**K22A Casper 65.68 53** lAmb lAmb 11 55 29.7
comp=Z,38nm,1.6s
**K22A Casper 65.68 53** P **P 11 55 28.2 +0.5**
baz=313,SNR=6.5
**ULM Lac du Bonnet 65.71 41** P **P 11 55 27.9 +0.3**
comp=Z,11nm,0.7s,baz=316,slow=6.8,SNR=11
**ULM Lac du Bonnet 65.71 41** lAmb lAmb 11 55 28.8
comp=Z,12nm,0.8s
**SRU San Rafael Swe 65.82 58** lAmb lAmb 11 55 30.5
comp=Z,12nm,0.9s
**RSSD Black Hills 66.01 50** P **P 11 55 29.9 0.0**
RSSD pmax pmax
comp=Z,18nm,0.9s
**RSSD Black Hills 66.01 50** P **P 11 55 29.9 0.0**
RSSD lAmb lAmb 11 55 31.6
comp=Z,18nm,0.8s
**RSSD Black Hills 66.01 50** P **P 11 55 30.4 +0.5**
baz=313
**IRM Iron Mountain 66.36 65** P **P 11 55 32.7 +0.6**
baz=312,SNR=6.0
**O20A White River Ci 66.43 56** P **P 11 55 33.3 +0.7**
baz=313
**BC3 Big Chuckawall 66.51 65** P **P 11 55 33.6 +0.6**
baz=312
**MYLAV Mylavaram 66.64 270** *eP* **P 11 55 33.3 -0.6**
**SRSP Sriramsagar 66.68 273** *eP* **P 11 55 34.0 -0.2**
**IKP In-Ko-Pah, Jac 66.77 67** P **P 11 55 34.5 -0.3**
baz=312
**PDMCI Parker Dam,Lak 66.88 64** P **P 11 55 35.8 +0.5**
baz=312
**AGMN Agassiz Nation 67.12 43** P **P 11 55 36.6 0.0**
baz=316
**PV10 Paradox Valley 67.17 58** lAmb lAmb 11 55 39.6
comp=Z,16nm,0.9s
**N23A Red Feather La 67.19 54** lAmb lAmb 11 55 39.3
comp=Z,8.4nm,0.9s
**N23A Red Feather La 67.19 54** P **P 11 55 38.7 +1.1**
baz=314,SNR=6.4
**GLA Glamis 67.30 66** P **P 11 55 38.8 +0.8**
baz=313
**PV11 David Mesa, Pa 67.32 58** lAmb lAmb 11 55 40.2
comp=Z,31nm,1.4s
**CUPL Choutuppal 67.42 271** *eP* **P 11 55 39.4 +0.5**
**PV13 Radium Mtn., P 67.44 58** lAmb lAmb 11 55 41.0
comp=Z,13nm,1.0s
**DOMB Dombas 67.44 343** *eP* **P 11 55 38.5 +0.1**
**HYBB Hyderabad (bro 67.58 272** *eP* **P 11 55 40.0 0.0**
**NJS Nagarjunasagar 67.68 270** *eP* **P 11 55 40.3 -0.2**
**AKN Aaknes 67.72 344** *eP* **P 11 55 41.0 +0.8**
**ADKI Addanki 67.72 269** *eP* **P 11 55 40.0 -0.8**
**WUAZ Wupatki 67.74 61** P **P 11 55 41.8 +0.9**
baz=313
**NC204 NORSAR Array S 67.79 342** P **P 11 55 40.6 0.0**
**NB2 NORSAR Subarra 67.90 341** P **P 11 55 41.0 -0.4**
comp=Z,5.4nm,0.6s,baz=26,slow=6.5
**NB2 NORSAR Subarra 67.90 341** P **P 11 55 41.0 -0.4**
baz=26,slow=6.5
**NOA NORSAR Array B 67.90 341** P **P 11 55 41.3 -0.1**
comp=Z,9.0nm,0.7s,baz=26,slow=6.4,SNR=27
NOA LR LR 12 31 00.8
comp=Z,90nm,19.1s,baz=5.0,slow=41
**NAO01 NORSAR Array S 68.15 342** *eP* **P 11 55 43.0 +0.1**
**HFS Hagfors 68.15 340** P **P 11 55 42.6 -0.3**
comp=Z,12nm,0.4s,baz=57,slow=4.0,SNR=15
**AFI Afiamalu 68.19 144** LR LR 12 19 44.7
comp=Z,61nm,21.1s,baz=60,slow=31
**MVCO Mesa Verde 68.28 58** P **P 11 55 44.4 0.0**
baz=314
**SRLM Srisailam 68.28 270** *eP* **P 11 55 43.5 -0.8**
**SUSD Miller 68.39 47** P **P 11 55 44.7 0.0**
baz=316
**KLRI Killari 68.46 274** *eP* **P 11 55 45.3 -0.2**
**RCLA Racherla 68.69 270** *eP* **P 11 55 46.1 -0.8**
**MNK Minsk 68.83 330** *i*P **P 11 55 45.3 -1.9**
MNK *i* *PP **pP 11 55 59.5 -0.3**
MNK *i* 11 58 21.6
MNK *i* PPP PPP 11 59 59.6
MNK *i* S **S 12 04 46.3 -1.0**
MNK *i* *SS **sS 12 05 12.2 +3.8**
MNK *i* SS **SS 12 09 10.0 -1.9**
MNK pmax pmax
comp=E,4.0nm,1.0s
MNK pmax pmax
comp=N,33nm,0.9s
MNK pmax pmax
comp=Z,15nm,0.8s
MNK MLR MLR
comp=E,258nm,22.0s
MNK MLR MLR
comp=Z,405nm,21.0s
**MNK Minsk 68.83 330** *i*P **P 11 55 45.4 -1.8**
comp=E,4.0nm,1.1s
MNK *i*P **P 11 55 45.4 -1.8**
comp=N,33nm,0.9s
MNK *i*P **P 11 55 45.4 -1.8**
comp=Z,15nm,0.8s,baz=37
MNK *i*pP **pP 11 55 59.5 -0.3**
MNK *i*PP **PP 11 58 21.7 +2.7**
MNK *i*PPP PPP 11 59 59.6
MNK *i*S **S 12 04 46.3 -0.9**
MNK *i*sS **sS 12 05 12.2 +3.8**
MNK *i*SS **SS 12 09 10.1 -1.8**
MNK *i*SSS SSS 12 12 30.4
MNK *i*LQ LQ 12 20 56.1
MNK *i*LR LR 12 25 47.4
MNK *i*LRM MLR 12 28 00.3
comp=E,258nm,21.6s
MNK *i*LRM MLR 12 28 08.6
comp=Z,405nm,21.0s
MNK *i*LRM MLR 12 28 11.8
comp=N,1μm,22.9s
**SKAR Skarslia 68.84 343** *eP* **P 11 55 48.4 +1.2**
**S22A 4UR Ranch, Cre 68.87 57** P **P 11 55 49.5 +1.4**
baz=314,SNR=7.1
**NACGM Naroch 68.88 330** *i*P **P 11 55 45.8 -1.7**
**Q24A Divide 68.97 55** P **P 11 55 49.5 +0.8**
baz=314
**OSL Oslo 69.00 341** *eP* **P 11 55 49.1 +0.9**
**WRA Warramunga Arr 69.23 200** P **P 11 55 49.2 -0.8**
comp=N,1.0nm,0.6s,baz=19,slow=6.7,SNR=10
**WRA Warramunga Arr 69.23 200** *i*P **P 11 55 49.5 -0.5**
WRA pmax pmax
comp=Z,1.0nm,0.6s

**WRA Warramunga Arr 69.23 200** IAmb IAmb 11 55 50.5
comp=Z,0.6nm,1.4s
**OGNE Ogallala 69.28 52** P **P** **11 55 50.8 +0.4**
baz=315,SNR=9.4
**EYMN Ely 69.36 41** P **P** **11 55 50.3 -0.3**
baz=319
**KONO Kongsberg 69.51 342** *e*P **P** **11 55 51.9 +0.6**
**SDCO Great Sand Dun 69.62 56** IAmb IAmb 11 55 55.0
comp=Z,22nm,1.9s
**SDCO Great Sand Dun 69.62 56** P **P** **11 55 53.5 +0.7**
baz=315,SNR=6.1
**ODD1 Odda 69.88 343** *e*P **P** **11 55 54.6 +0.9**
**F36A Milaca 69.99 43** IAmb IAmb 11 55 55.3
comp=Z,13nm,1.1s
**ECSD EROS Data Cent 70.07 47** IAmb IAmb 11 55 56.3
comp=Z,26nm,1.1s
**ECSD EROS Data Cent 70.07 47** P **P** **11 55 55.3 +0.2**
baz=317,SNR=14
**TUC Tucson 70.29 64** P **P** **11 55 57.4 +0.7**
baz=314
**T25A Trinidad 70.67 56** P **P** **11 55 58.8 -0.3**
baz=315
**SPMN Marine on St. 70.81 43** IAmb IAmb 11 56 00.8
comp=Z,28nm,1.0s
**SPMN Marine on St. 70.81 43** P **P** **11 55 59.8 +0.3**
baz=319
**KIV Kislovodsk 70.85 315** *e*P **P** **11 56 02.8 +2.9**
KIV pmax pmax
comp=Z,11nm,1.1s
KIV MLR MLR
comp=Z,85nm,18.0s
**KBZ Khabaz 70.91 314** P **P** **11 56 00.2 +0.1**
comp=Z,5.9nm,0.8s,baz=166,slow=2.6,SNR=7.0
**KBZ Khabaz 70.91 314** *c i*P **P** **11 56 01.8 +1.7**
KBZ pmax pmax
comp=Z,8.0nm,0.9s
**ANMO Albuquerque 71.04 59** LR LR 12 24 06.3
comp=Z,39nm,21.4s,baz=312,slow=33
**ANMO Albuquerque 71.04 59** *c i*P **P** **11 56 02.2 +0.9**
ANMO pmax pmax
comp=Z,4.0nm,0.9s
**ANMO Albuquerque 71.04 59** P **P** **11 56 01.5 +0.2**
**ANMO Albuquerque 71.04 59** P **P** **11 56 02.1 +0.7**
baz=315
**AKASG Malin Array Be 71.42 327** P **P** **11 56 02.1 -1.0**
comp=Z,2.6nm,0.4s,baz=34,slow=6.2,SNR=26
AKASG LR LR 12 29 39.1
comp=Z,96nm,18.6s,baz=359,slow=38
**AKASG Malin Array Be 71.42 327** P **P** **11 56 02.8 -0.3**
AKASG pmax pmax
comp=Z,3.0nm,1.2s
**AKASG Malin Array Be 71.42 327** P **P** **11 56 02.8 -0.3**
**AKBB Malin Array Si 71.42 327** ⇓ *i*P **P** **11 56 02.2 -0.9**
AKBB pmax pmax
comp=Z,8.0nm,0.9s
**319A Douglas 71.86 63** IAmb IAmb 11 56 08.3
comp=Z,11nm,0.9s
**121A Cookes Peak, D 71.95 62** P **P** **11 56 07.9 +1.0**
baz=315
**G40A Rib Lake 71.97 42** IAmb IAmb 11 56 07.6
comp=Z,19nm,0.8s
**SCHQ Schefferville 72.57 23** P **P** **11 56 10.4 +0.5**
comp=Z,8.1nm,0.7s,baz=351,slow=5.8,SNR=21
**SCHQ Schefferville 72.57 23** P **P** **11 56 09.9 -0.1**
SCHQ IAmb IAmb 11 56 11.4
comp=Z,11nm,0.9s
**GNI Garni 72.63 311** LR LR 12 31 50.6
comp=Z,203nm,18.2s,baz=38,slow=39
**I40A Norwalk 72.83 43** IAmb IAmb 11 56 12.7
comp=Z,26nm,0.9s
**AS31 Alice Springs 72.92 199** P **P** **11 56 12.8 +0.5**
**ASAR Alice Springs 72.92 199** P **P** **11 56 12.9 +0.6**
comp=Z,3.6nm,0.8s,baz=8.7,slow=5.1,SNR=40
**ASAR Alice Springs 72.92 199** P **P** **11 56 12.7 +0.4**
**JFWS Jewell Farm 73.76 44** P **P** **11 56 16.7 -0.4**
baz=320
**AMTX Amarillo 73.82 56** P **P** **11 56 18.3 +0.5**
baz=317
**SORM Soroca 73.84 325** ⇑P **P** **11 56 16.5 -1.0**
**MSTX Muleshoe 73.86 57** P **P** **11 56 18.8 +0.7**
baz=317
**N38A Joes South For 73.93 47** IAmb IAmb 11 56 27.6
comp=Z,25nm,1.0s
**MNTX Cornudas Mount 73.97 61** P **P** **11 56 18.6 0.0**
baz=316
**MILM Milestii Mici 74.66 324** ⇑P **P** **11 56 20.9 -1.4**
**P38A Dawn 74.67 48** IAmb IAmb 11 56 23.6
comp=Z,26nm,1.2s
**VLDQ Val d'Or 74.96 33** IAmb IAmb 11 56 23.9
comp=Z,22nm,0.9s
**OJC Ojcow 75.13 332** IAmb IAmb 11 56 27.5
comp=Z,11nm,0.7s
**BUR08 Bucovina Ar. S 75.44 327** IAmb IAmb 11 56 29.3
comp=Z,26nm,1.4s
**BURAR Bucovina Array 75.46 327** ⇑P **P** **11 56 26.9 -0.2**
**BURAR Bucovina Array 75.46 327** P **P** **11 56 26.9 -0.2**
**P40A Paris 75.48 47** IAmb IAmb 11 56 28.4
comp=Z,20nm,1.0s
**WMOK Wichita Mounta 75.55 54** P **P** **11 56 27.9 +0.2**
baz=318,SNR=5.3
**UZH Uzhgorod 75.65 329** *e*P **P** **11 56 30.5 +2.5**
UZH *e* 11 56 39.9
UZH *e* 11 56 51.3
**CRVS Cervenica-Dubn 75.71 330** *e*P **P** **11 56 28.4 0.0**
**CRVS Cervenica-Dubn 75.71 330** *e*P **P** **11 56 28.4 0.0**
**FLTG Flechtingen 75.77 337** *e*P **P** **11 56 28.5 0.0**
comp=Z,12nm,0.8s,baz=27,slow=5.9
**TESR Tescani 75.84 326** ⇑P **P** **11 56 28.9 -0.2**
**NRDL Niedersach Rie 75.91 338** *e*P **P** **11 56 29.4 +0.1**
comp=Z,6.2nm,0.8s,baz=27,slow=5.9
**EKA Eskdalemuir Ar 75.95 347** P **P** **11 56 29.2 -0.4**
baz=19,slow=4.8
**CHVC Chvalec 75.98 334** *e*P **P** **11 56 30.0 +0.1**
**TRPA Tarpa 75.99 329** ⇓P **P** **11 56 30.3 +0.4**
**TRPA Tarpa 75.99 329** P **P** **11 56 30.2 +0.2**
**SCTR Scanteiesti 76.00 324** ⇓P **P** **11 56 29.8 -0.3**
**HDIL Hopedale 76.03 45** P **P** **11 56 30.4 +0.1**
baz=321,SNR=6.1
**ASSE Asse, Remlinge 76.09 338** *e*P **P** **11 56 30.5 +0.1**
comp=Z,5.2nm,0.8s,baz=27,slow=5.9
**DPC Dobruska-Polom 76.11 334** *e*P **P** **11 56 31.0 +0.3**
**DPC Dobruska-Polom 76.11 334** *e*P **P** **11 56 31.0 +0.3**
**LANS Liptovska Anna 76.16 331** *e*P **P** **11 56 32.0 +1.0**
LANS pmax pmax
comp=Z,7.0nm,0.7s
**LANS Liptovska Anna 76.16 331** *e*P **P** **11 56 32.0 +1.0**
**CLL Collm 76.21 336** *i*P **P** **11 56 30.6 -0.6**
CLL *e**SP **pwP** **11 56 49.0 +2.0**
CLL pmax pmax
comp=Z,34nm,1.2s
**CLL Collm 76.21 336** *i*P **P** **11 56 30.6 -0.6**
comp=Z,34nm,1.2s
CLL *es*P **pwP** **11 56 49.0 +2.0**
**CLL Collm 76.21 336** *e*P **P** **11 56 30.8 -0.3**
comp=Z,13nm,0.8s,baz=27,slow=5.9
**CLL Collm 76.21 336** IAmb IAmb 11 56 32.8
comp=Z,23nm,1.0s
**ARCR ARCALIA 76.22 327** ⇓P **P** **11 56 32.4 +1.0**
**MORC Moravsky Berou 76.23 333** ⇑P **P** **11 56 32.2 +0.8**
**MORC Moravsky Berou 76.23 333** *e*P **P** **11 56 31.3 -0.1**
**MORC Moravsky Berou 76.23 333** IAmb IAmb 11 56 34.0
comp=Z,17nm,1.2s
**W35A Tecumseh 76.28 53** IAmb IAmb 11 56 33.2
comp=Z,12nm,1.0s
**TUL1 Leonard 76.30 52** P **P** **11 56 31.9 0.0**
baz=319
**BANOM Banah 76.32 293** P **P** **11 56 32.8 +0.5**
**BRG Berggiesshubel 76.34 335** *e*P **P** **11 56 33.5 +1.6**
BRG Amp 11 56 35.2
comp=Z,8.5nm,0.9s
BRG *ex* x 11 56 46.3
BRG Amp 11 56 48.2
comp=Z,3.5nm,0.8s
BRG *ex* x 11 56 55.4
BRG Amp 11 56 56.5
comp=Z,4.5nm,0.9s
BRG *ex* x 12 05 03.4
BRG Amp 12 05 05.5
comp=Z,3.9nm,1.1s
**BRG Berggiesshubel 76.34 335** *e*P **P** **11 56 31.7 -0.2**
comp=Z,5.9nm,0.9s,baz=27,slow=5.9
**CFR Carcaliu 76.36 324** ⇑P **P** **11 56 32.4 +0.3**
**TPGR Topolog 76.51 323** ⇓P **P** **11 56 33.2 +0.2**
**ABTX Abilene, Hawle 76.63 56** P **P** **11 56 34.0 0.0**
baz=318
**TX31 Lajitas Ar. Si 76.70 61** IAmb IAmb 11 56 36.1
comp=Z,26nm,1.1s
**TXAR Lajitas Array 76.70 61** P **P** **11 56 35.1 +0.6**
comp=Z,5.7nm,0.8s,baz=297,slow=4.6,SNR=58
**TXAR Lajitas Array 76.70 61** P **P** **11 56 35.0 +0.5**
**WSAR Wadi Sarin 76.77 290** LR LR 12 35 01.8
comp=Z,90nm,18.1s,baz=85,slow=39
**WSAR Wadi Sarin 76.77 290** P **P** **11 56 36.6 +1.8**
**DOPR Dopca 76.78 326** ⇑P **P** **11 56 35.5 +1.0**
**MASF Masafi 76.81 293** P **P** **11 56 35.4 +0.3**
**TIRR Tirgusor 76.84 323** ⇓P **P** **11 56 34.1 -0.7**
**TIRR Tirgusor 76.84 323** IAmb IAmb 11 56 36.6
comp=Z,26nm,0.9s
**HARR Harsova 76.84 324** ⇑P **P** **11 56 34.6 -0.2**
**VYHS Vyhne 76.94 331** *e*P **P** **11 56 35.7 +0.3**
VYHS pmax pmax
comp=Z,26nm,1.5s
**VYHS Vyhne 76.94 331** *e*P **P** **11 56 35.7 +0.3**
**VRAC Vranov 76.94 333** ⇑P **P** **11 56 35.8 +0.5**
**VRAC Vranov 76.94 333** P **P** **11 56 35.3 0.0**
comp=Z,7.5nm,0.9s,baz=32,slow=7.6,SNR=4.3
VRAC LR LR 12 33 58.7
comp=Z,172nm,18.1s,baz=5.5,slow=38
**VRAC Vranov 76.94 333** *e*P **P** **11 56 35.5 +0.1**
**PRU Pruhonice 76.96 334** *e*P **P** **11 56 35.5 +0.1**
**PRU Pruhonice 76.96 334** *e*P **P** **11 56 35.5 +0.1**
**MLR Muntele Rosu 76.96 325** ⇑P **P** **11 56 36.8 +1.1**
**MLR Muntele Rosu 76.96 325** P **P** **11 56 36.3 +0.6**
comp=Z,10nm,0.8s,baz=0.0,slow=3.0
MLR LR LR 12 33 36.0
comp=Z,161nm,18.0s,baz=360,slow=38
**MLR Muntele Rosu 76.96 325** P **P** **11 56 36.2 +0.5**
MLR IAmb IAmb 11 56 38.4
comp=Z,11nm,0.8s
**JAVC Velka Javorina 77.00 332** *e*P **P** **11 56 36.8 +1.1**
**WBK Wadi Bani Khal 77.00 289** P **P** **11 56 38.6 +2.4**
**UMQ Umm Al-Quwin 77.01 293** P **P** **11 56 40.2 +4.2**
**CCM Cathedral Cave 77.02 47** P **P** **11 56 35.8 -0.2**
CCM pmax pmax
comp=Z,29nm,1.7s
**CCM Cathedral Cave 77.02 47** P **P** **11 56 35.8 -0.2**
CCM IAmb IAmb 11 56 52.2
comp=Z,29nm,1.6s
**CCM Cathedral Cave 77.02 47** P **P** **11 56 35.8 -0.2**
baz=321
**ISR Istrita 77.04 325** ⇑P **P** **11 56 36.5 +0.4**
**JLN Jalan Bani Buh 77.04 289** P **P** **11 56 38.0 +1.7**
SNR=6.6
**DRGR 77.07 328** ⇑P **P** **11 56 36.4 +0.2**
**UOSS Minazif 77.08 293** P **P** **11 56 36.7 +0.2**
**UOSS Minazif 77.08 293** P **P** **11 56 36.2 -0.4**
UOSS IAmb IAmb 11 56 38.1
comp=Z,15nm,0.9s
**PSZ Piszkesteto 77.09 330** ⇑P **P** **11 56 37.2 +0.9**
**PSZ Piszkesteto 77.09 330** P **P** **11 56 36.1 -0.2**
**WERD Werda 77.18 336** *e*P **P** **11 56 36.4 -0.3**
comp=Z,5.0nm,0.9s,baz=27,slow=5.9
**MOX Moxa 77.19 337** *e*P **P** **11 56 36.9 +0.2**
comp=Z,6.4nm,0.8s,baz=27,slow=5.9
**SFIN Lafayette 77.21 43** P **P** **11 56 37.0 0.0**
baz=322
**HATD Hatta, Dubai 77.22 293** P **P** **11 56 38.2 +0.9**
SNR=5.9
**KRUC Moravsky 77.22 333** *e*P **P** **11 56 37.0 +0.1**
**GUNZ Gunzen 77.25 336** *e*P **P** **11 56 37.5 +0.4**
comp=Z,10.0nm,1.0s,baz=27,slow=5.9
**SMDO Samad 77.27 290** P **P** **11 56 38.4 +0.7**
**WERN Wernitzgruen 77.31 336** *e*P **P** **11 56 37.7 +0.3**
comp=Z,8.7nm,0.8s,baz=27,slow=5.9
**NKC Novy Kostel 77.34 336** *e*P **P** **11 56 38.8 +1.2**
**NKC Novy Kostel 77.34 336** *e*P **P** **11 56 38.8 +1.2**
**VOIR 77.35 326** ⇓P **P** **11 56 38.4 +0.6**
**ASHO Ashiyiah 77.36 293** P **P** **11 56 39.1 +0.9**
SNR=5.7
**HOQ Hoqain 77.36 291** P **P** **11 56 38.9 +0.7**
**ICOR Ion Corvin 77.37 323** ⇓P **P** **11 56 38.8 +1.0**
**Q44A Meyer Farm, Va 77.46 45** IAmb IAmb 11 56 39.6
comp=Z,28nm,1.1s
**SOHO SOHO 77.46 292** P **P** **11 56 39.5 +0.9**
**UBBA Unterbreizbach 77.46 338** *e*P **P** **11 56 38.7 +0.6**
comp=Z,2.0nm,0.7s,baz=27,slow=5.9
**U40A Yellville 77.50 49** IAmb IAmb 11 56 39.4
comp=Z,15nm,0.8s
**U40A Yellville 77.50 49** P **P** **11 56 38.5 -0.3**
baz=320,SNR=6.5
**MODS Modra-Piesok 77.55 332** *e*P **P** **11 56 41.4 +2.6**
**MODS Modra-Piesok 77.55 332** *e*P **P** **11 56 41.4 +2.6**
**ARR Arges 77.57 326** ⇑P **P** **11 56 40.4 +1.4**
**FAQ Al Faqa, Dubai 77.61 293** P **P** **11 56 40.2 +0.7**
**MANZ Manzenberg 77.65 336** *e*P **P** **11 56 39.6 +0.2**
comp=Z,2.0nm,0.9s,baz=27,slow=5.9
**JMDO Jabal Madar 77.73 290** P **P** **11 56 41.0 +0.8**
**ROTZ Rotzenmuhle 77.82 336** *e*P **P** **11 56 40.6 +0.3**
comp=Z,2.7nm,1.0s,baz=27,slow=5.9
**ASUD Al Ashush, Dub 77.86 293** P **P** **11 56 41.6 +0.8**
**SIRR Siria 77.90 328** ⇑P **P** **11 56 41.4 +0.7**
**LMQ La Malbaie 77.94 29** IAmb IAmb 11 56 41.9
comp=Z,16nm,0.9s
**KHC Kasperske Hory 78.00 335** *e*P **P** **11 56 41.7 +0.4**
**KHC Kasperske Hory 78.00 335** *e*P **P** **11 56 41.7 +0.4**
**KHC Kasperske Hory 78.00 335** IAmb IAmb 11 56 43.9
comp=Z,12nm,1.0s
**BSY Bisa 78.04 290** P **P** **11 56 43.1 +1.2**
SNR=7.0
**ARQ Araqi 78.04 291** P **P** **11 56 42.9 +1.0**
**CKRC Cesky Krumlov 78.07 334** *e*P **P** **11 56 41.9 +0.2**
**JCT Junction City 78.13 58** P **P** **11 56 42.3 0.0**
baz=318
**GRF Grafenberg Arr 78.16 336** *e*P **P** **11 56 42.4 +0.2**
comp=Z,19nm,1.0s,baz=27,slow=5.9
**WET Wettzell 78.20 335** *e*P **P** **11 56 42.2 -0.2**
comp=Z,10nm,1.0s,baz=27,slow=5.9
**O48B Farland 78.20 42** P **P** **11 56 42.4 -0.2**
baz=324
**GEC2 GERESS Array S 78.22 334** *e*P **P** **11 56 42.1 -0.6**
comp=Z,3.2nm,0.8s,baz=27,slow=5.9
**GERES GERESS Array B 78.22 334** P **P** **11 56 42.5 -0.2**
comp=Z,1.8nm,0.6s,baz=34,slow=5.3,SNR=13
**GERES GERESS Array B 78.22 334** P **P** **11 56 42.2 -0.4**
**GZR Gura Zlata 78.24 327** ⇓P **P** **11 56 42.4 -0.3**
**COPA Copaceanca 78.38 325** ⇓P **P** **11 56 43.5 +0.1**
**CONA Conrad Observa 78.39 333** *e*P **P** **11 56 44.0 +0.5**
comp=Z,16nm,1.5s
**BR131 Keskin Array S 78.40 317** P **P** **11 56 44.6 +0.7**
**BRTR Keskin Array B 78.40 317** P **P** **11 56 43.5 -0.3**
comp=Z,3.7nm,0.8s,baz=53,slow=4.8,SNR=7.3
BRTR LR LR 12 38 01.4
comp=Z,104nm,18.2s,baz=10,slow=41
**BRTR Keskin Array B 78.40 317** P **P** **11 56 44.1 +0.3**
**BRTR Keskin Array B 78.40 317** P **P** **11 56 44.1 +0.3**
**TNS Taunus Mts 78.41 338** *e*P **P** **11 56 44.4 +0.8**
comp=Z,9.4nm,0.9s,baz=27,slow=5.9
**AHRW Bad Neuenahr-A 78.45 339** *e*P **P** **11 56 44.8 +1.1**
comp=Z,9.2nm,0.8s,baz=27,slow=5.9
**BZS Buzias 78.47 328** ⇑P **P** **11 56 44.0 +0.1**
**MIAR Mount Ida 78.51 51** P **P** **11 56 44.5 +0.1**
baz=320
**BTNL Ternell 78.64 340** *d*P **P** **11 56 45.3 +0.6**
comp=Z,8.6nm,0.9s
**MEM Membach 78.64 340** *dx* x 11 56 45.7
**P48A Milroy 78.72 43** IAmb IAmb 11 56 46.3
comp=Z,18nm,0.9s
**W41B Gary Mavity, V 78.73 50** IAmb IAmb 11 56 48.4
comp=Z,22nm,1.4s
**W41B Gary Mavity, V 78.73 50** P **P** **11 56 45.5 0.0**
baz=321
**D62A Allapoint, All 78.76 28** IAmb IAmb 11 56 46.5
comp=Z,11nm,0.6s
**HERR Herculane 78.81 327** ⇑P **P** **11 56 45.5 -0.2**
**X40A Basin Creek Fa 78.95 51** P **P** **11 56 46.7 0.0**
baz=321
**P49A Miami Univ. Ec 78.98 42** IAmb IAmb 11 56 47.9
comp=Z,29nm,1.1s
**P49A Miami Univ. Ec 78.98 42** P **P** **11 56 46.6 -0.3**
baz=324
**MORH Mrgy, Hungar 78.99 330** ⇑P **P** **11 56 46.5 -0.3**
**MORH Mrgy, Hungar 78.99 330** P **P** **11 56 45.7 -1.0**
**E62A Clayton Lake 79.02 29** IAmb IAmb 11 56 47.8
comp=Z,12nm,0.8s
**ARSA Arzberg 79.10 333** *e*P **P** **11 56 50.1 +2.8**
comp=Z,7.0nm,1.0s
**ACSO Alum Creek Sta 79.20 41** P **P** **11 56 48.2 +0.2**
baz=325
**BMRD Maredsous 79.22 340** *d*P **P** **11 56 47.1 -0.8**
**M53A WI Miller and 79.22 39** P **P** **11 56 48.3 +0.2**
baz=326
**WCI Wyandotte Cave 79.30 44** P **P** **11 56 48.9 +0.4**
WCI pmax pmax
comp=Z,49nm,1.2s
**WCI Wyandotte Cave 79.30 44** P **P** **11 56 48.9 +0.4**
**WCI Wyandotte Cave 79.30 44** P **P** **11 56 48.9 +0.4**
baz=323
**RJOB Jochberg 79.49 335** *e*P **P** **11 56 50.3 +0.8**
comp=Z,4.1nm,0.7s,baz=27,slow=5.9
**FRGS Fruska Gora 79.51 329** ⇑P **P** **11 56 48.4 -1.3**
**BATG Bathurst New B 79.53 26** IAmb IAmb 11 56 50.9
comp=Z,16nm,0.7s
**M54A Oil Creek Stat 79.59 38** P **P** **11 56 50.0 -0.1**
baz=326
**STKA Stephens Creek 79.60 191** P **P** **11 56 49.9 -0.1**
comp=Z,1.1nm,0.3s,baz=338,slow=7.7,SNR=3.1
**SHMA Al-Shehemyia 79.66 297** P **P** **11 56 50.8 +0.1**
**SOKA Soboth 79.76 333** *e*P **P** **11 56 51.9 +0.8**
comp=Z,15nm,1.2s
**O52A Adamsville 79.81 40** IAmb IAmb 11 56 52.8
comp=Z,26nm,1.0s
**RAR Rarotonga 79.88 137** LR LR 12 26 06.8
comp=Z,68nm,19.4s,baz=248,slow=31
**T47A Sharon Grove 79.89 45** IAmb IAmb 11 56 54.5
comp=Z,30nm,1.5s
**N54A Moraine State 79.90 38** IAmb IAmb 11 56 53.1
comp=Z,28nm,0.9s
**N54A Moraine State 79.90 38** P **P** **11 56 51.6 -0.2**
baz=326
**KBA Koelnbreinsper 79.92 334** *e*P **P** **11 56 54.2 +2.1**
comp=Z,27nm,1.3s
**O53A New Philadelph 79.97 40** IAmb IAmb 11 56 53.7
comp=Z,25nm,1.0s
**O53A New Philadelph 79.97 40** P **P** **11 56 52.1 -0.1**
baz=326
**M55A Ridgway 80.00 37** IAmb IAmb 11 56 53.5
comp=Z,18nm,0.7s
**Q51A Peebles 80.02 42** IAmb IAmb 11 56 53.9
comp=Z,21nm,0.8s
**OBKA Obir 80.06 333** *e*P **P** **11 56 52.7 0.0**
comp=Z,5.9nm,0.7s
**P52A Corning 80.07 41** P **P** **11 56 52.7 -0.1**
baz=325
**BFO Black Forest 80.18 338** P **P** **11 56 53.3 +0.1**
BFO pmax pmax
comp=Z,26nm,1.6s
**BFO Black Forest 80.18 338** *e*P **P** **11 56 54.2 +1.0**
comp=Z,5.7nm,0.9s,baz=27,slow=5.9
**BFO Black Forest 80.18 338** P **P** **11 56 53.3 +0.1**
BFO IAmb IAmb 11 57 15.8
comp=Z,26nm,1.6s
**WATA Walderalm 80.20 335** *e*P **P** **11 56 54.5 +1.0**
comp=Z,23nm,1.3s
**WVT Waverly 80.22 46** P **P** **11 56 53.8 +0.2**
baz=323
**H62A Milan 80.25 31** P **P** **11 56 53.7 +0.1**
H62A IAmb IAmb 11 56 55.0
comp=Z,18nm,0.9s
**WTTA Wattenberg 80.25 335** *e*P **P** **11 56 54.4 +0.6**
comp=Z,10nm,0.7s
**LBNH Lisbon 80.27 32** P **P** **11 56 53.9 +0.1**
baz=330
**RETA Reutte 80.30 336** *e*P **P** **11 56 54.9 +1.0**
comp=Z,14nm,1.4s
**UBR Ueberruh 80.30 336** *e*P **P** **11 56 55.3 +1.4**
comp=Z,6.8nm,1.1s,baz=27,slow=5.9
**MOTA Moosalm 80.33 335** *e*P **P** **11 56 54.4 +0.2**
comp=Z,22nm,1.2s
**SQTA Sankt Quirin 80.41 335** *e*P **P** **11 56 55.8 +1.2**
comp=Z,13nm,0.9s
**VTS Vitosha 80.43 325** IAmb IAmb 11 56 57.5
comp=Z,16nm,1.1s
**ABTA Abfaltersbach 80.46 334** *e*P **P** **11 56 55.5 +0.7**
comp=Z,4.5nm,0.7s
**BINY Binghamton 80.50 35** P **P** **11 56 55.2 +0.2**
baz=328
**OXF Oxford 80.70 48** P **P** **11 56 56.2 0.0**
baz=322
**DAVA Damuels 80.72 336** *e*P **P** **11 56 58.1 +1.8**
comp=Z,8.6nm,0.9s
**FETA Feichten 80.73 336** *e*P **P** **11 56 57.6 +1.2**
comp=Z,12nm,1.6s
**M57A Sunshine Farm, 80.78 36** IAmb IAmb 11 56 57.9
comp=Z,16nm,0.9s
**PMOR Pomariorio Ree 80.85 124** *e*T T 13 25 50.1
comp=Z,12nm,0.2s
**L59A Walton 80.88 35** IAmb IAmb 11 56 57.7
comp=Z,24nm,1.1s
**MCWV Mont Chateau 81.05 39** P **P** **11 56 57.9 -0.1**
baz=326
**SSPA Standing Stone 81.06 37** P **P** **11 56 58.0 0.0**
SSPA IAmb IAmb 11 56 59.1
comp=Z,14nm,0.8s
**SSPA Standing Stone 81.06 37** P **P** **11 56 58.0 0.0**
baz=327
**O56A Blue Knob Stat 81.08 38** P **P** **11 56 56.6 -1.6**
O56A IAmb IAmb 11 56 59.3
comp=Z,19nm,0.8s
**O56A Blue Knob Stat 81.08 38** P **P** **11 56 58.7 +0.5**
baz=327
**Q54A Coxs Mills 81.18 40** IAmb IAmb 11 57 50.2
comp=Z,51nm,1.6s
**DAVOX Davos/Dischmat 81.19 336** P **P** **11 56 59.2 +0.4**
comp=Z,4.7nm,0.7s,baz=27,slow=9.0
DAVOX LR LR 12 38 57.2
comp=Z,108nm,18.6s,baz=83,slow=40
**TUE Stuetta 81.62 336** IAmb IAmb 11 57 10.5
comp=Z,17nm,1.0s
**N59A State Game Lan 81.68 36** IAmb IAmb 11 57 02.4
comp=Z,15nm,0.9s
**N59A State Game Lan 81.68 36** P **P** **11 57 01.3 0.0**
baz=328
**SWET Sewanee 81.88 46** IAmb IAmb 11 57 02.8
comp=Z,10nm,0.9s
**TZTN Tazewell 81.94 43** P **P** **11 57 03.1 +0.3**
baz=325
**PPT2 Papeete2 82.01 127** *e*LR LR 12 22 47.8
comp=Z,82nm,21.5s
**PPT2 Papeete2 82.01 127** *e*T T 13 27 17.3
comp=Z,2.2nm,0.3s
**SHAO Shalim 82.47 288** P **P** **11 57 08.2 +2.4**
**BLA Blacksburg 82.82 41** P **P** **11 57 07.4 0.0**
baz=326
**MMAI Mount Meron Ar 82.90 312** LR LR 12 38 30.5
comp=Z,84nm,19.7s,baz=210,slow=39
**DOK Doka 83.00 290** P **P** **11 57 09.6 +1.1**
**LRAL Lakeview Retre 83.10 48** P **P** **11 57 08.6 -0.2**
baz=323
**MURB Monte Urbino 83.61 333** IAmb IAmb 11 57 09.7
comp=Z,22nm,0.9s
**WHFO Wadi Hawf 83.74 290** P **P** **11 57 11.9 -0.5**
**ABTO Aybut 84.46 289** P **P** **11 57 17.3 +1.2**
**GOGA Godfrey 84.53 45** P **P** **11 57 16.2 +0.1**
baz=325
**RAYN Ar Rayn 84.69 299** P **P** **11 57 17.5 +0.3**
RAYN pmax pmax
comp=Z,10.0nm,1.0s
**RAYN Ar Rayn 84.69 299** P **P** **11 57 18.8 +1.7**
**RAYN Ar Rayn 84.69 299** P **P** **11 57 17.4 +0.3**
RAYN IAmb IAmb 11 57 23.8
comp=Z,9.8nm,0.9s
**CNNC Cliffs of the 85.59 40** P **P** **11 57 21.8 +0.4**
baz=328
**EIL Elat 85.80 310** LR LR 12 39 07.9
comp=Z,60nm,19.8s,baz=86,slow=38
**TORD Torodi Ar. Bea 114.93 330** PKP **PKiKP** **12 03 23.0 -1.0**
comp=Z,0.4nm,0.4s,baz=19,slow=2.0,SNR=6.8
**H03N2 Juan Fernandez 138.15 90** T T 14 37 46.6
baz=309,slow=77,SNR=58
**H03N1 Juan Fernandez 138.17 90** T T 14 37 47.9
baz=309,slow=77,SNR=66
**H03N3 Juan Fernandez 138.17 90** T T 14 37 51.4
baz=309,slow=77,SNR=151
**SYO Syowa Base 141.69 212** ⇓ *ep*Pdiff pPdif 12 01 45.6 +0.2
**SYO Syowa Base 141.69 212** ⇓ *es*Pdiff Pdif 12 01 54.2 +22
**BO02 Sierra Bellavi 144.47 86** PKPdf **PKPab** **12 04 17.7 +0.3**
**LC01 Cunco 145.89 93** PKPdf **PKPdf** **12 04 21.9 +0.7**
**LL04 Puerto Octay 146.48 96** PKPdf **PKPdf** **12 04 22.9 +0.8**
**PLCA Paso Flores 147.66 95** PKPbc **PKPbc** **12 04 27.2 +0.1**
comp=Z,9.1nm,0.9s,baz=248,slow=3.8,SNR=17
**PLCA Paso Flores 147.66 95** PKPdf **PKPdf** **12 04 25.4 +1.1**
**CPUP Villa Florida 147.67 61** PKPbc **PKPdf** **12 04 26.7 +2.1**
comp=Z,2.5nm,0.9s,baz=19,slow=4.1,SNR=4.3
**SNAA Sanae 153.25 196** PKPdf **PKPbc** **12 04 38.5 -1.0**

**JMA 03 11:49:39.5±0.2, 37°.45N×143°.64E, h52km, M3.5, Off east**

**coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **1.92** | **297** | P | Pn | 11 50 10.8 | +1.0 |
| JIKH | | | | S | Sn | 11 50 33.5 | +0.7 |
| **JIO** | **Ouri** | **2.07** | **300** | P | Pn | 11 50 12.9 | +1.1 |
| JIO | | | | S | Sn | 11 50 37.5 | +1.1 |
| **JKMT** | **Kesennumamotoy** | **2.18** | **309** | P | Pn | 11 50 14.0 | +0.7 |
| JKMT | | | | S | Sn | 11 50 39.8 | +0.6 |
| **JMK** | **Ichinoseki** | **2.43** | **309** | P | Pn | 11 50 18.0 | +1.3 |
| JMK | | | | *e*S | Sn | 11 50 46.4 | +1.3 |
| **JFT** | **Otama** | **2.63** | **272** | P | Pn | 11 50 21.7 | +2.2 |
| JFT | | | | *e*S | Sn | 11 50 52.4 | +2.2 |
| **JOM** | **Ohasama** | **2.73** | **318** | P | Pn | 11 50 22.0 | +1.1 |
| JOM | | | | S | Sn | 11 50 53.7 | +1.0 |
| **JYK** | **Kaneyama** | **2.97** | **301** | P | Pn | 11 50 26.1 | +1.9 |
| **JANG** | **Nango** | **3.36** | **331** | P | Pn | 11 50 30.6 | +1.2 |
| JANG | | | | *e*S | Sn | 11 51 06.6 | -1.4 |
| **JAG** | **Ashikaga** | **3.51** | **254** | P | Pn | 11 50 32.9 | +1.4 |
| JAG | | | | *e*S | Sn | 11 51 12.5 | +0.8 |
| **BSO1** | **Boso 1** | **3.53** | **218** | P | Pn | 11 50 31.1 | -0.2 |
| BSO1 | | | | S | Sn | 11 51 12.4 | +1.0 |
| **JRY** | **Ryogami san** | **4.07** | **251** | P | Pn | 11 50 40.3 | +1.1 |
| JRY | | | | *e*S | Sn | 11 51 24.7 | -0.8 |
| **JOD2** | **Odawara 2** | **4.27** | **241** | P | Pn | 11 50 42.9 | +0.9 |
| JOD2 | | | | *e*S | Sn | 11 51 29.4 | -1.2 |
| **JKB** | **Kayabe** | **4.87** | **336** | P | Pn | 11 50 51.4 | +1.3 |
| **JCH** | **Churui** | **5.16** | **358** | P | Pn | 11 50 53.3 | -0.9 |
| JCH | | | | S | Sn | 11 51 48.9 | -3.5 |

*IDC **03** 11:54:27.6±0.8, 10°.83S×164°.44E, h0km, mb4.1/17, mb1 4.3/21, mb1mx4.3/36, mbtmp4.2/21, ML4.3/3, MS4.0/34, Ms1 4.0/34, ms1mx3.8/62, Error ellipse: s-maj=22.3km s-min=16.8km az=132.0*

*BJI **03** 11:54:28.6±0.0, 10°.75S×164°.66E, h12km, mb4.5/41, mB5.0/23, Ms5.1/9, Ms7 4.7/11*

*NEIC **03** 11:54:30.3±1.4, 10°.77S±0°.09×164°.50E±0°.09, h10km±1km, mb4.9/50, Error ellipse: s-maj=18.2km s-min=12.2km az=44.0*

*GCMT **03** 11:54:31.3±0.3, 10°.71S±0°.02×164°.43E±0°.01, h12km, MW4.8/82, Moment Tensor Solution. s19,c19; s82,c122; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=0.48±.07; Mθθ=0.48±.06; Mφφ=0.96±.06; Mrθ=0.84±.19; Mθφ=1.62±.05; Mφr=0.86±.18; Best double couple: M=2.17100×10^16 NP1:φs=253.00000°, δ62.00000°, λ=-20.00000°. NP2: φs=352.00000°, δ73.00000°, λ=-150.00000°. Principal axes: T 2.0460, Plg7.0000°, Azm121.0000°; N 0.2510, Plg56.0000°, Azm20.0000°; P -2.2970, Plg33.0000°, Azm215.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 11:54:29.7±0.4, 10°.87S±0°.06×164°.52E±0°.06, h10km, n137, σ1s63/105, mb4.7/52, MS4.0/36, 1C, Santa Cruz Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.72** | **287** | Pn | **Pn** | **11 55 40.6** | **-0.4** |
| | 34nm,0.3s,baz=133,slow=1.1,SNR=17 | | | | | | |
| HNR | | | | Sn | **Sn** | **11 56 34.6** | **-1.2** |
| | 20nm,0.3s,baz=57,slow=2.2,SNR=1.2 | | | | | | |
| HNR | | | | LR | LR | 11 57 38.2 | |
| | comp=Z,4μm,18.2s,baz=87,slow=41 | | | | | | |
| **HNR** | **Honiara** | **4.72** | **287** | Pn | **Pn** | **11 55 41.2** | **+0.2** |
| **SANVU** | **Saraoutou** | **5.25** | **150** | Pn | **Pn** | **11 55 48.7** | **+0.3** |
| **LIFNC** | **LIFOU** | **10.20** | **165** | Pn | **Pn** | **11 56 56.9** | **+0.7** |
| **MARNC** | **Mare, Loyalty** | **11.08** | **163** | Pn | **Pn** | **11 57 09.6** | **+1.2** |
| **DZM** | **Mont Dzumac** | **11.29** | **171** | *e*Pn | **Pn** | **11 57 13.7** | **+2.3** |
| DZM | | | | *e*LR | LR | 11 59 47.4 | |
| | comp=Z,345nm,21.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **11.29** | **171** | Pn | **Pn** | **11 57 12.7** | **+1.4** |
| | 3.1nm,0.3s,baz=142,slow=19,SNR=31 | | | | | | |
| DZM | | | | Sn | **Sn** | **11 59 12.7** | **-5.1** |
| | baz=118,slow=19,SNR=1.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.29** | **171** | Pn | **Pn** | **11 57 13.0** | **+1.6** |
| **ONTNC** | **Ouen Toro** | **11.53** | **171** | Pn | **Pn** | **11 57 17.4** | **+2.9** |
| **OUENC** | **Ouen Island, N** | **11.70** | **169** | Pn | **Pn** | **11 57 19.5** | **+2.7** |
| **PINNC** | **Pines Island,** | **12.01** | **167** | | **Pn** | **11 57 22.7** | **+1.6** |
| **MSVF** | **Nonsavu** | **14.78** | **119** | Pn | **Pn** | **11 58 00.2** | **+1.2** |
| | 1.7nm,0.3s,baz=200,slow=8.4,SNR=4.8 | | | | | | |
| MSVF | | | | LR | LR | 12 02 48.6 | |
| | comp=Z,1μm,18.6s,baz=7.4,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **14.78** | **119** | | **Pn** | **11 57 58.7** | **-0.3** |
| **PMG** | **Port Moresby** | **17.15** | **273** | P | **P** | **11 58 34.2** | **+2.8** |
| | 0.5nm,0.3s,baz=311,slow=19,SNR=1.6 | | | | | | |
| PMG | | | | LR | LR | 12 04 46.5 | |
| | comp=Z,935nm,18.9s,baz=122,slow=36 | | | | | | |
| **PMG** | **Port Moresby** | **17.15** | **273** | P | **Pn** | **11 58 28.3** | **-1.3** |
| **PATS** | **Pohnpei** | **18.64** | **340** | P | P | 11 58 41.4 | -6.3 |
| | baz=18 | | | | | | |
| **MANU** | **Manus Island** | **19.15** | **296** | P | **P** | **11 58 51.5** | **-1.9** |
| MANU | | | | IAmb | IAmb | 11 59 06.3 | |
| | comp=Z,59nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **19.24** | **220** | P | **Pn** | **11 58 57.4** | **+2.1** |
| | baz=20,SNR=9.6 | | | | | | |
| **EIDS** | **Eidsvold** | **19.24** | **220** | | **P** | **11 58 54.8** | **+0.4** |
| **CTA** | **Charters Tower** | **19.83** | **240** | P | **P** | **11 59 01.5** | **+0.7** |
| | comp=Z,0.2nm,0.3s,baz=63,slow=11,SNR=16 | | | | | | |
| CTA | | | | LR | LR | 12 05 46.0 | |
| | comp=Z,357nm,19.8s,baz=60,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **19.83** | **240** | P | **P** | **11 59 01.1** | **+0.3** |
| **MTSU** | **Mount Surprise** | **20.84** | **247** | P | **P** | **11 59 12.9** | **+1.1** |
| | baz=21,SNR=6.3 | | | | | | |
| **COEN** | **Coen** | **21.07** | **259** | P | **P** | **11 59 14.4** | **+0.1** |
| **RMQ** | **Roma** | **21.51** | **222** | P | **P** | **11 59 21.3** | **+2.4** |
| | baz=22,SNR=22 | | | | | | |
| **ARMA** | **Armidale** | **22.85** | **210** | P | **P** | **11 59 33.0** | **-0.4** |
| **AFI** | **Afiamalu** | **23.35** | **100** | LR | LR | 12 07 15.8 | |
| | comp=Z,407nm,18.1s,baz=274,slow=33 | | | | | | |
| **RAO** | **Raoul Island** | **24.57** | **141** | LR | LR | 12 08 14.3 | |
| | comp=Z,115nm,19.5s,baz=109,slow=34 | | | | | | |
| **QLP** | **Quilpie** | **24.71** | **228** | P | **P** | **11 59 52.6** | **+1.4** |
| | baz=25,SNR=4.6 | | | | | | |
| **JAY** | **Jayapura** | **25.04** | **288** | P | **P** | **11 59 50.3** | **-4.1** |
| | comp=Z,14nm,1.0s | | | | | | |
| **NIUE** | **Niue** | **25.98** | **111** | P | **P** | **12 00 02.4** | **-0.4** |
| **H11S2** | **WAKE ISLAND Hy** | **29.25** | **4** | T | T | 12 31 07.8 | |
| | baz=182 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.25** | **4** | T | T | 12 31 03.5 | |
| | baz=182 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.27** | **4** | T | T | 12 31 06.6 | |
| | baz=182 | | | | | | |
| **URZ** | **Urewera** | **29.52** | **160** | LR | LR | 12 09 22.1 | |
| | comp=Z,265nm,21.7s,baz=350,slow=30 | | | | | | |
| **STKA** | **Stephens Creek** | **29.76** | **222** | P | **P** | **12 00 35.4** | **-1.2** |
| | comp=Z,2.1nm,0.7s,baz=30,slow=17,SNR=4.3 | | | | | | |
| STKA | | | | LR | LR | 12 11 07.5 | |
| | comp=Z,382nm,21.7s,baz=25,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **29.76** | **222** | P | **P** | **12 00 36.9** | **+0.3** |
| **WB0** | **Warramunga Arr** | **30.33** | **249** | P | **P** | **12 00 39.9** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 12 00 51.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **30.41** | **249** | P | **P** | **12 00 42.2** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 12 00 45.3 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.42** | **249** | P | **P** | **12 00 40.1** | **-2.5** |
| | comp=Z,5.5nm,1.2s,baz=75,slow=8.9,SNR=8.6 | | | | | | |
| WRA | | | | LR | LR | 12 12 58.9 | |
| | comp=Z,324nm,18.1s,baz=196,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.42** | **249** | P | **P** | **12 00 40.8** | **-1.7** |
| **H11N1** | **WAKE ISLAND Hy** | **30.48** | **4** | T | T | 12 32 34.8 | |
| | baz=184,slow=76,SNR=14 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.48** | **4** | T | T | 12 32 34.1 | |
| | baz=184,slow=76,SNR=7.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.49** | **4** | T | T | 12 32 38.9 | |
| | baz=184,slow=76,SNR=9.9 | | | | | | |
| **GUMO** | **Guam** | **31.15** | **321** | LR | LR | 12 11 50.2 | |
| | comp=Z,256nm,21.1s,baz=144,slow=34 | | | | | | |
| **NNZ** | **Nelson** | **31.23** | **167** | P | **P** | **12 00 49.3** | **0.0** |
| NNZ | | | | IAmb | IAmb | 12 00 50.5 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **31.80** | **242** | P | **P** | **12 00 52.6** | **-2.1** |
| | comp=Z,0.7nm,0.6s,baz=71,slow=9.3,SNR=9.6 | | | | | | |
| ASAR | | | | LR | LR | 12 13 38.0 | |
| | comp=Z,341nm,18.1s,baz=71,slow=36 | | | | | | |
| **HTT** | **Hallett** | **32.48** | **222** | P | **P** | **12 01 02.2** | **+1.6** |
| | baz=33,SNR=3.5 | | | | | | |
| **BBOO** | **Buckleboo** | **34.08** | **226** | P | **P** | **12 01 15.6** | **+1.1** |
| BBOO | | | | IAmb | IAmb | 12 01 24.8 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **34.49** | **284** | LR | LR | 12 17 08.4 | |
| | comp=Z,181nm,18.1s,baz=40,slow=40 | | | | | | |
| **KNRA** | **Kunumurra** | **35.10** | **258** | P | **P** | **12 01 21.5** | **-2.0** |
| | baz=36,SNR=13 | | | | | | |
| **KNRA** | **Kunumurra** | **35.10** | **258** | P | **P** | **12 01 21.4** | **-2.2** |
| KNRA | | | | IAmb | IAmb | 12 01 38.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **35.75** | **111** | LR | LR | 12 13 02.2 | |
| | comp=Z,191nm,21.6s,baz=293,slow=31 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.26** | **255** | LR | LR | 12 16 32.9 | |
| | comp=Z,139nm,19.2s,baz=78,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.26** | **255** | P | **P** | **12 01 48.2** | **-2.3** |
| | baz=39,SNR=7.2 | | | | | | |
| **DAV** | **Davao City (W)** | **42.66** | **293** | LR | LR | 12 21 01.0 | |
| | comp=Z,104nm,18.1s,baz=154,slow=37 | | | | | | |
| **KAPI** | **Kappang** | **44.68** | **274** | LR | LR | 12 21 40.1 | |
| | comp=Z,40nm,20.4s,baz=126,slow=37 | | | | | | |
| **PPT** | **Papeete** | **44.91** | **104** | LR | LR | 12 19 43.4 | |
| | comp=Z,96nm,18.9s,baz=280,slow=34 | | | | | | |
| **PPT2** | **Papeete2** | **44.91** | **104** | *e*LQ | LQ | 12 13 30.7 | |
| | comp=Z,466nm,28.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 12 15 23.0 | |
| | comp=Z,186nm,23.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.26** | **334** | P | **P** | **12 03 48.3** | **-0.4** |
| | comp=Z,1.0nm,0.4s,baz=164,slow=6.8,SNR=5.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.26** | **334** | P | **P** | **12 03 47.7** | **-1.1** |
| **MAT** | **Matsushiro** | **53.27** | **334** | P | **P** | **12 03 49.0** | **+0.2** |
| MAT | | | | *e*S | **S** | **12 11 22.0** | **+1.8** |
| **JKA** | **Kamikawa-asahi** | **58.23** | **342** | P | **P** | **12 04 21.4** | **-2.8** |
| **JKA** | **Kamikawa-asahi** | **58.23** | **342** | IAmb | IAmb | 12 04 36.9 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **ASAJ** | **Asahikawa** | **58.23** | **342** | P | **P** | **12 04 21.4** | **-2.8** |
| | comp=Z,5.5nm,1.0s,baz=99,slow=16,SNR=2.4 | | | | | | |
| **KSRS** | **Korea Array** | **59.05** | **326** | P | **P** | **12 04 28.0** | **-2.1** |
| | comp=Z,0.5nm,0.9s,baz=132,slow=7.2,SNR=1.9 | | | | | | |
| **NJ2** | **Nanjing** | **61.05** | **316** | *e*P | **P** | **12 04 45.2** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **62.25** | **334** | P | **P** | **12 04 51.2** | **-0.6** |
| | comp=Z,2.2nm,0.7s,baz=151,slow=4.4,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **63.98** | **355** | P | **P** | **12 05 02.4** | **-0.7** |
| | comp=Z,3.5nm,0.9s,baz=204,slow=11,SNR=4.1 | | | | | | |
| **CN2** | **Changchun** | **64.97** | **330** | *e*P | P | 12 05 16.9 | +7.1 |
| CN2 | | | | *e*S | S | 12 14 04.5 | +13 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,200nm,13.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=E,300nm,13.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,17.2s | | | | | | |
| **VNDA** | **Vanda** | **66.66** | **181** | P | **P** | **12 05 21.6** | **+1.4** |
| VNDA | | | | IAmb | IAmb | 12 05 38.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **HNS** | **HongShan** | **66.95** | **319** | ⇑P | **P** | **12 05 24.4** | **+1.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **69.11** | **313** | P | **P** | **12 05 36.7** | **+0.3** |
| XAN | | | | sP | sP | 12 05 43.7 | +5.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,81nm,3.6s | | | | | | |
| **XLT** | **XiLinHaoTe** | **70.02** | **325** | *e*P | **P** | **12 05 42.1** | **+0.3** |
| XLT | | | | pP | sP | 12 05 46.6 | +3.1 |
| XLT | | | | sP | pwP | 12 05 50.0 | -1.4 |
| XLT | | | | S | **S** | **12 14 57.7** | **+5.1** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,150nm,4.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,230nm,10.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,450nm,12.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,370nm,16.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **70.92** | **320** | *e*P | **P** | **12 05 49.9** | **+2.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,6.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,290nm,11.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,310nm,12.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,250nm,13.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.94** | **294** | P | **P** | **12 05 47.3** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=121,slow=4.2,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 12 36 50.4 | |
| | comp=Z,45nm,19.4s,baz=100,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.94** | **294** | P | **P** | **12 05 47.8** | **-0.1** |
| **MA2** | **Magadan** | **71.07** | **353** | P | **P** | **12 05 47.8** | **0.0** |
| **PZH** | **PanZhiHua** | **71.36** | **303** | P | **P** | **12 05 52.9** | **+2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **CD2** | **Chengdu** | **71.54** | **308** | P | **P** | **12 05 51.8** | **+0.5** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **CHGN** | **Chignik** | **73.66** | **20** | P | **P** | **12 06 02.5** | **-0.8** |
| **LZH** | **Lanzhou** | **73.75** | **313** | *e*P | **P** | **12 06 06.8** | **+2.3** |
| LZH | | | | sP | pwP | 12 06 15.1 | +0.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,290nm,15.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,320nm,14.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,360nm,16.3s | | | | | | |
| **SEY** | **Seymchan** | **74.17** | **354** | LR | LR | 12 38 23.3 | |
| | comp=Z,57nm,18.8s,baz=337,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.86** | **22** | LR | LR | 12 35 33.2 | |
| | comp=Z,183nm,19.4s,baz=154,slow=32 | | | | | | |
| **ULN** | **Ulaanbaatar** | **77.45** | **324** | P | **P** | **12 06 25.2** | **-0.3** |
| **YAK** | **Yakutsk** | **77.59** | **344** | P | **P** | **12 06 25.8** | **+0.1** |
| YAK | | | | IAmb | IAmb | 12 06 36.7 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **77.81** | **324** | P | **P** | **12 06 27.6** | **+0.1** |
| | comp=Z,1.1nm,0.8s,baz=151,slow=6.8,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **77.81** | **324** | P | **P** | **12 06 26.2** | **-1.2** |
| **GTA** | **Gaotai** | **78.07** | **314** | *e*P | **P** | **12 06 30.2** | **+1.1** |
| GTA | | | | pP | pwP | 12 06 38.6 | -0.5 |
| GTA | | | | sP | PcP | 12 06 43.5 | +4.8 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,100nm,6.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,100nm,20.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,170nm,19.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,160nm,19.6s | | | | | | |
| **BILL** | **Bilibino** | **78.71** | **1** | P | **P** | **12 06 32.1** | **+0.2** |
| BILL | | | | IAmb | IAmb | 12 06 47.1 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **79.14** | **180** | P | **P** | **12 06 35.5** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 12 06 52.7 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **M19K** | **Big River Lodg** | **79.31** | **18** | P | **P** | **12 06 35.3** | **0.0** |
| M19K | | | | IAmb | IAmb | 12 06 45.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **SHL** | **Shillong** | **79.37** | **299** | P | **P** | **12 06 36.1** | **-0.6** |
| **L19K** | **White Mountain** | **79.38** | **18** | P | **P** | **12 06 36.2** | **+0.6** |
| L19K | | | | IAmb | IAmb | 12 06 45.8 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **TTA** | **Tatalina** | **79.61** | **17** | P | **P** | **12 06 37.5** | **+0.5** |
| TTA | | | | IAmb | IAmb | 12 06 46.9 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **GOMU** | **GeErMu** | **80.47** | **310** | P | **P** | **12 06 42.0** | **-0.6** |
| **RDOG** | **Red Dog Mine** | **82.09** | **12** | P | **P** | **12 06 50.7** | **+0.7** |
| RDOG | | | | IAmb | IAmb | 12 07 00.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **82.58** | **16** | P | **P** | **12 06 52.8** | **+0.1** |
| **MDM** | **Murphy Dome** | **83.44** | **18** | P | **P** | **12 06 57.3** | **+0.2** |
| **COLA** | **College** | **83.50** | **19** | P | **P** | **12 06 57.0** | **-0.3** |
| **M26K** | **Nabesna, AK** | **83.52** | **22** | IAmb | IAmb | 12 07 07.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **83.73** | **19** | P | **P** | **12 06 58.6** | **+0.1** |
| | comp=Z,2.6nm,0.9s,baz=230,slow=5.7,SNR=14 | | | | | | |
| ILAR | | | | LR | LR | 12 40 56.2 | |
| | comp=Z,92nm,19.2s,baz=240,slow=33 | | | | | | |
| **DOT** | **Dot Lake** | **83.93** | **21** | IAmb | IAmb | 12 07 09.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **84.16** | **20** | IAmb | IAmb | 12 07 10.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **L27K** | **Beaver Creek,** | **84.35** | **22** | IAmb | IAmb | 12 07 11.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BCAR** | **Beaver Creek A** | **84.37** | **22** | P | **P** | **12 07 01.3** | **-0.7** |
| **COLD** | **Coldfoot** | **84.46** | **16** | P | **P** | **12 07 03.9** | **+1.7** |
| COLD | | | | IAmb | IAmb | 12 07 14.3 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **84.63** | **46** | LR | LR | 12 36 44.5 | |
| | comp=Z,50nm,20.2s,baz=288,slow=30 | | | | | | |
| **BBB** | **Bella Bella** | **85.11** | **35** | LR | LR | 12 37 41.0 | |
| | comp=Z,73nm,20.7s,baz=270,slow=30 | | | | | | |
| **TIXI** | **Tiksi** | **85.69** | **349** | P | **P** | **12 07 07.9** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=89,slow=24,SNR=1.7 | | | | | | |
| **TIXI** | **Tiksi** | **85.69** | **349** | P | **P** | **12 07 08.1** | **-0.2** |
| TIXI | | | | IAmb | IAmb | 12 07 18.6 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **DAWY** | **Dawson** | **85.83** | **21** | P | **P** | **12 07 09.8** | **+0.6** |
| DAWY | | | | IAmb | IAmb | 12 07 19.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.19** | **17** | P | **P** | **12 07 12.1** | **+1.1** |
| **DLBC** | **Dease Lake** | **86.83** | **29** | LR | LR | 12 38 57.9 | |
| | comp=Z,119nm,19.9s,baz=268,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.83** | **50** | P | **P** | **12 07 14.6** | **-0.4** |
| | comp=Z,0.9nm,0.9s,baz=262,slow=4.3,SNR=5.2 | | | | | | |
| NVAR | | | | LR | LR | 12 41 01.5 | |
| | comp=Z,75nm,18.5s,baz=327,slow=32 | | | | | | |
| **PFO** | **Pinyon Flats O** | **86.97** | **55** | LR | LR | 12 37 22.7 | |
| | comp=Z,44nm,20.6s,baz=320,slow=30 | | | | | | |
| **WMQ** | **Urumqi** | **88.12** | **315** | *e*P | **P** | **12 07 22.1** | **+1.2** |
| **ELK** | **Elko** | **89.73** | **48** | LR | LR | 12 41 50.3 | |
| | comp=Z,49nm,18.2s,baz=321,slow=32 | | | | | | |
| **LPIG** | **La Paz** | **90.03** | **66** | LR | LR | 12 41 00.9 | |
| | comp=Z,34nm,20.4s,baz=37,slow=31 | | | | | | |
| **INK** | **Inuvik** | **90.12** | **19** | LR | LR | 12 40 55.9 | |
| | comp=Z,80nm,21.1s,baz=214,slow=31 | | | | | | |
| **CCUT** | **Cedar City** | **90.38** | **52** | P | **P** | **12 07 32.2** | **+0.3** |
| CCUT | | | | IAmb | IAmb | 12 07 42.2 | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **U15A** | **North Rim** | **90.96** | **53** | P | **P** | **12 07 34.7** | **+0.1** |
| U15A | | | | IAmb | IAmb | 12 07 44.8 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **HVU** | **Hansel Valley** | **91.78** | **48** | P | **P** | **12 07 37.9** | **-0.3** |
| HVU | | | | IAmb | IAmb | 12 07 48.1 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **92.57** | **317** | P | **P** | **12 07 41.0** | **-0.6** |
| **MKAR** | **Makanchi Array** | **92.57** | **317** | P | **P** | **12 07 40.9** | **-0.7** |
| | comp=Z,1.4nm,0.8s,baz=93,slow=5.5,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **92.57** | **317** | P | **P** | **12 07 40.8** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **92.71** | **324** | P | **P** | **12 07 41.2** | **-0.7** |
| | comp=Z,0.3nm,0.5s,baz=132,slow=2.2,SNR=4.0 | | | | | | |
| **MAKZ** | **Makanchi** | **92.78** | **317** | P | **P** | **12 07 42.1** | **-0.4** |
| MAKZ | | | | IAmb | IAmb | 12 07 59.0 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **A36M** | **Sachs Harbour** | **94.28** | **17** | P | **P** | **12 07 49.3** | **+0.5** |
| **PDAR** | **Pinedale Array** | **94.32** | **47** | P | **P** | **12 07 49.1** | **-0.9** |
| | comp=Z,0.5nm,0.8s,baz=251,slow=1.6,SNR=3.1 | | | | | | |
| PDAR | | | | LR | LR | 12 43 41.4 | |
| | comp=Z,52nm,19.6s,baz=330,slow=31 | | | | | | |
| **ANMO** | **Albuquerque** | **95.34** | **56** | LR | LR | 12 47 43.7 | |
| | comp=Z,40nm,18.2s,baz=346,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.37** | **27** | P | **P** | **12 07 51.8** | **-2.1** |
| | comp=Z,0.3nm,0.9s,baz=265,slow=5.1,SNR=2.3 | | | | | | |
| YKA | | | | LR | LR | 12 43 47.0 | |
| | comp=Z,86nm,21.2s,baz=286,slow=31 | | | | | | |
| **KSH** | **Kashi** | **95.70** | **309** | P | **P** | **12 07 54.0** | **-2.3** |
| **TXAR** | **Lajitas Array** | **96.80** | **62** | LR | LR | 12 44 43.1 | |
| | comp=Z,66nm,18.7s,baz=313,slow=31 | | | | | | |
| **SNAA** | **Sanae** | **97.22** | **184** | LR | LR | 12 49 21.9 | |
| | comp=Z,123nm,20.4s,baz=180,slow=34 | | | | | | |
| **MODS** | **Modra-Piesok** | **133.66** | **330** | *e*PKP | **PKPdf** | **12 13 43.5** | **-3.3** |
| **KEST** | **Kesra** | **146.54** | **322** | PKPbc | **PKPdf** | **12 14 11.2** | **+0.6** |
| | comp=Z,2.3nm,0.7s,baz=247,slow=12,SNR=2.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **149.54** | **342** | PKPbc | **PKPdf** | **12 14 19.3** | **+4.0** |
| | comp=Z,0.2nm,0.4s,baz=328,slow=37,SNR=2.8 | | | | | | |

*NIED **03** 12:28:40.0, 36°.41N×137°.64E, h0km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15 Nm; Mrr=0.29; Mθθ=1.11; Mφφ=0.81; Mrθ=0.49; Mθφ=3.75; Mφr=0.96; Fault plane solution: M=4.03000×10^15 NP1: φs=172.00000°, δ81.00000°, λ=-13.00000°. NP2: φs=264.00000°, δ77.00000°, λ=-171.00000°.*

*IDC **03** 12:28:39.8±0.7, 36°.33N×137°.66E, h0km, mb3.7/15, mb1 4.0/19, mb1mx3.7/53, mbtmp3.7/19, ML3.5/4, MS3.7/20, Ms1 3.7/20, ms1mx3.4/87 Error ellipse: s-maj=17.2km s-min=7.3km az=160.0*

*JMA **03** 12:28:39.9, 36°.41N×137°.64E, h0km, M4.4 Broadband fault plane solution: P waves. NP1:φs=354.00000°, δ88.00000°, λ=-1.00000°. NP2:φs84.00000°, δ89.00000°, λ=-178.00000°. Principal axes: T Plg1.0000°, Azm219.0000°; N Plg88.0000°, Azm102.0000°; P Plg2.0000°, Azm309.0000°;*

*JMA Felt II J1.*

*BJI **03** 12:28:40.3±0.0, 36°.19N×137°.89E, h18km, mb4.1/23, mB4.6/15, Ms4.2/15, Ms7 4.0/15*

*MOS **03** 12:28:40.5±1.1, 36°.30N×137°.75E, h13km, mb4.3/12, Error ellipse: s-maj=9.6km s-min=6.3km az=86.4*

*NEIC **03** 12:28:42.1±1.8, 36°.40N±0°.05×137°.70E±0°.05, h10km±1km, mb4.2/16, Error ellipse: s-maj=8.4km s-min=5.6km az=150.0*

**ISC 03 12:28:41.4±0.8, 36°.37N±0°.04×137°.67E±0°.03, h6km±5km, n120, σ1s43/116, mb4.1/32, MS3.8/18, 10C-9D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JGN** | **Niukaw** | **0.32** | **244** | 

**ASAJ Asahikawa 8.61 24** P **Pn** **12 30 47.0 +0.5**
**JKA Kamikawa-asahi 8.61 24** Pn **Pn** **12 30 45.9 -0.6**
**USRK Ussuriysk Ar. 8.95 333** LR LR 12 33 49.3
comp=Z,314nm,21.1s,baz=133,slow=34
**YSS Yuzh-Sakhalins 11.24 18**⇓*eP* **Pn** **12 31 24.0 +1.5**
YSS pmax pmax
comp=Z,30nm,1.2s
YSS MLR MLR
comp=Z,400nm,11.0s
YSS MLR MLR
comp=N,300nm,15.0s
**YSS Yuzh-Sakhalins 11.24 18** **Pn** **12 31 22.8 +0.3**
**JMZ Minamidaito 2 11.87 209** Pn **Pn** **12 31 30.7 -0.6**
**JOW Kunigami 12.42 223** LR LR 12 36 35.0
comp=N,223nm,19.5s,baz=110,slow=38
**KLR Kul'dur 13.57 343** Pn **Pn** **12 31 53.2 -1.1**
comp=N,0.1nm,0.3s,baz=89,slow=12,SNR=2.1
KLR LR LR 12 36 56.3
comp=N,320nm,18.9s,baz=164,slow=36
**KLR Kul'dur 13.57 343**⇓*iP* **Pn** **12 31 57.6 +3.3**
KLR pmax pmax
comp=Z,9.0nm,1.4s
**TYV Tymovskoe 14.93 12** *eP* **Pn** **12 32 13.2 +0.3**
TYV pmax pmax
comp=Z,100nm,3.3s
TYV pmax pmax
comp=Z,8.0nm,1.1s
**NJ2 Nanjing 16.15 260** *eP* **Pn** **12 32 27.6 -1.4**
NJ2 sP **pP** **12 32 36.0 +1.4**
NJ2 S **Sn** **12 35 24.0 -4.4**
NJ2 sS **S** **12 35 36.6 -5.3**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
NJ2 LR LR
comp=Z,1μm,17.5s
NJ2 LR LR
comp=Z,350nm,15.2s
NJ2 LR LR
comp=Z,520nm,12.8s
**TIA Tai'an 16.57 276** *eP* **P** **12 32 40.3 +3.3**
TIA pmax pmax
comp=Z,11nm,1.4s
TIA pmax pmax
comp=Z,160nm,4.2s
TIA LR LR
comp=Z,380nm,13.3s
TIA LR LR
comp=Z,520nm,14.0s
TIA LR LR
comp=Z,570nm,14.2s
**XLT XiLinHaoTe 18.11 301** *eP* **P** **12 32 54.5 +0.4**
XLT pP pP **12 32 58.5 +2.2**
XLT sP sP 12 33 02.0 +4.6
XLT pmax pmax
comp=Z,6.0nm,1.1s
XLT pmax pmax
comp=Z,120nm,4.0s
**HIA Hailar 18.36 320**⇑*eP* **Pn** **12 32 58.8 +2.2**
HIA pmax pmax
comp=Z,4.0nm,0.7s
**HNS HongShan 18.40 280** ⇑P **Pn** **12 32 59.4 +2.3**
HNS pmax pmax
comp=Z,38nm,1.2s
HNS LR LR
comp=Z,610nm,18.1s
HNS LR LR
comp=Z,320nm,18.2s
**ZEA Zeya 18.83 341** *eP* **Pn** **12 33 02.2 0.0**
ZEA pmax pmax
comp=Z,10.0nm,1.4s
ZEA MLR MLR
comp=N,200nm,17.0s
ZEA MLR MLR
comp=Z,200nm,14.0s
**LYN LuoYang 20.60 272** *eP* Pn 12 33 26.8 +3.3
LYN sP sP 12 33 33.6 +9.0
LYN pmax pmax
comp=Z,10.0nm,0.8s
LYN pmax pmax
comp=Z,70nm,7.3s
LYN LR LR
comp=Z,630nm,14.1s
LYN LR LR
comp=Z,500nm,16.9s
**HHC Hu-ho-hao-te 20.86 290** *eP* Pn 12 33 26.5 -0.1
HHC pmax pmax
comp=Z,10.0nm,0.8s
HHC pmax pmax
comp=Z,67nm,5.3s
HHC LR LR
comp=Z,290nm,12.1s
HHC LR LR
comp=Z,310nm,11.4s
HHC LR LR
comp=Z,250nm,14.0s
**PEA0B Petropavlovsk- 21.84 34**⇑*eP* **P** **12 33 35.0 +0.5**
**PETK Petropavlovsk- 21.84 34** P **P** **12 33 32.3 -2.2**
comp=Z,0.8nm,0.6s,baz=210,slow=9.7,SNR=1.0
PETK LR LR 12 42 21.0
comp=Z,144nm,18.0s,baz=212,slow=38
**GUMO Guam 23.58 162** LR LR 12 41 51.8
comp=Z,116nm,21.2s,baz=356,slow=34
**MA2 Magadan 24.73 16** P **P** **12 34 02.1 -1.2**
MA2 pmax pmax
comp=Z,4.0nm,0.8s
**MA2 Magadan 24.73 16** P **P** **12 34 02.1 -1.2**
MA2 IAmb IAmb 12 34 05.9
comp=Z,3.9nm,0.8s
**ULN Ulaanbaatar 25.29 307**⇓*eP* **P** **12 34 08.9 +0.2**
ULN pmax pmax
comp=Z,5.0nm,1.3s
**ULN Ulaanbaatar 25.29 307** P **P** **12 34 08.8 +0.1**
ULN IAmb IAmb 12 34 11.1
comp=Z,3.3nm,0.9s
**SONM Songino Array 25.71 306** P **P** **12 34 12.7 +0.2**
comp=Z,2.0nm,0.8s,baz=114,slow=8.8,SNR=8.8
SONM LR LR 12 44 35.8
comp=Z,280nm,19.6s,baz=133,slow=37
**SONM Songino Array 25.71 306** P **P** **12 34 10.5 -1.9**
**YAK Yakutsk 26.17 351**⇓*eP* **P** **12 34 18.4 +2.1**
YAK pmax pmax
comp=Z,8.0nm,0.7s
**YAK Yakutsk 26.17 351** P **P** **12 34 15.3 -1.1**
**SEY Seymchan 28.10 14** P **P** **12 34 32.5 -1.1**
comp=Z,0.3nm,0.5s,baz=187,slow=22,SNR=2.2
**SEY Seymchan 28.10 14**⇓*eP* **P** **12 34 34.7 +1.0**
**PZH PanZhiHua 32.04 262** P **P** **12 35 10.9 +1.8**
PZH S **S** **12 40 20.6 -0.9**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.8s
PZH LR LR
comp=Z,450nm,17.2s
PZH LR LR
comp=Z,310nm,16.7s
PZH LR LR
comp=Z,240nm,14.3s
**BILL Bilibino 35.55 18** *eP* **P** **12 35 39.1 +0.1**
BILL *e* 12 36 59.4
BILL pmax pmax
comp=Z,1.0nm,1.1s
**BILL Bilibino 35.55 18** P **P** **12 35 38.6 -0.4**
BILL IAmb IAmb 12 35 55.6
comp=Z,4.7nm,1.5s
**DGZ Jazzator, Alta 38.36 306**⇓*eP* **P** **12 36 04.9 +1.6**
DGZ pmax pmax
comp=Z,12nm,3.8s
**WMQ Urumqi 38.46 297** *eP* **P** **12 36 06.1 +2.0**
**ZALV Zalesovo Beam 40.16 313** LR LR 12 51 37.7
comp=Z,73nm,20.3s,baz=68,slow=34
**MK31 Makanchi Array 41.93 302**⇓*eP* **P** **12 36 32.6 -0.2**
**MKAR Makanchi Array 41.93 302** P **P** **12 36 32.6 -0.2**
comp=Z,0.5nm,0.9s,baz=90,slow=7.9,SNR=3.8
**MKAR Makanchi Array 41.93 302***ceP* **P** **12 36 36.4 +3.6**
**NRIK Noril'sk 42.64 336** LR LR 12 55 10.7
comp=Z,118nm,20.0s,baz=212,slow=37
**NRIK Noril'sk 42.64 336**⇓*eP* **P** **12 36 39.5 +1.3**
NRIK pmax pmax
comp=Z,7.0nm,1.9s
**KURK Kurchatov 43.98 308**⇑*eP* **P** **12 36 49.4 +0.1**
KURK pmax pmax
comp=Z,4.0nm,1.3s
**KURK Kurchatov 43.98 308** P **P** **12 36 48.6 -0.7**
KURK IAmb IAmb 12 36 50.6
comp=Z,3.2nm,0.9s

**KKAR Karatay Array 50.85 299** P **P** **12 37 42.4 -0.5**
**KKAR Karatay Array 50.85 299** P **P** **12 37 42.4 -0.5**
**ILAR Eielson Array 51.66 32** P **P** **12 37 49.4 +0.8**
comp=Z,0.6nm,0.7s,baz=288,slow=7.3,SNR=8.3
**HDA Harding Lake 51.66 32** P **P** **12 37 48.3 -0.4**
HDA IAmb IAmb 12 37 55.6
comp=Z,4.8nm,1.1s
**ABKAR Akbulak array 56.06 309** P **P** **12 38 20.9 -0.1**
ABKAR IAmb IAmb 12 38 22.5
comp=Z,2.7nm,0.9s
**WB2 Warramunga Arr 56.09 184** P **P** **12 38 21.6 +0.1**
WB2 IAmb IAmb 12 38 22.0
comp=Z,2.7nm,0.9s
**WRA Warramunga Arr 56.09 184** P **P** **12 38 20.2 -1.2**
comp=Z,1.0nm,0.5s,baz=357,slow=7.6,SNR=16
**WRA Warramunga Arr 56.09 184** P **P** **12 38 21.9 +0.4**
**WRA Warramunga Arr 56.09 184** P **P** **12 38 21.9 +0.4**
**WR0 Warramunga Arr 56.10 184** P **P** **12 38 21.4 -0.1**
**INK Inuvik 56.34 27** P **P** **12 38 22.9 +0.2**
INK pmax pmax
comp=Z,2.0nm,1.0s
**INK Inuvik 56.34 27** P **P** **12 38 22.9 +0.2**
INK IAmb IAmb 12 38 27.5
comp=Z,2.1nm,1.0s
**CTA Charters Tower 56.73 170** LR LR 13 01 08.0
comp=Z,56nm,20.4s,baz=310,slow=34
**KIRV Kirov 58.95 322** LR LR 13 06 49.2
comp=Z,115nm,18.4s,baz=39,slow=39
**C36M Paulatuk 59.28 24** P **P** **12 38 43.4 0.0**
C36M IAmb IAmb 12 39 08.8
comp=Z,3.0nm,1.2s
**ASAR Alice Springs 59.81 184** P **P** **12 38 46.5 -1.1**
comp=Z,1.1nm,0.7s,baz=360,slow=6.6,SNR=19
ASAR LR LR 13 02 15.4
comp=Z,75nm,22.0s,baz=334,slow=34
**ASAR Alice Springs 59.81 184** P **P** **12 38 47.2 -0.4**
**ASAR Alice Springs 59.81 184** P **P** **12 38 47.2 -0.4**
**EUNU Eureka 61.28 8** P **P** **12 38 55.6 -1.4**
**KLMR Klimovskoe 62.70 327** *eP* **P** **12 39 06.3 -0.4**
KLMR pmax pmax
comp=Z,13nm,1.3s
**KLMR Klimovskoe 62.70 327** *eP* **P** **12 39 06.4 -0.3**
KLMR AMP 12 39 07.8
comp=Z,13nm,1.3s
**RES Resolute Bay 63.98 14** P **P** **12 39 13.9 -1.1**
RES pmax pmax
comp=Z,5.0nm,0.9s
**RES Resolute Bay 63.98 14** P **P** **12 39 13.9 -1.1**
**DZM Mont Dzumac 64.17 150** LR LR 13 04 39.5
comp=Z,37nm,20.1s,baz=42,slow=34
**YKA Yellowknife Ar 65.87 29** P **P** **12 39 26.2 -1.2**
comp=Z,0.4nm,0.8s,baz=303,slow=6.5,SNR=6.0
**YKA Yellowknife Ar 65.87 29***ceP* **P** **12 39 28.0 +0.5**
**FINES FINESS Array B 67.98 331** P **P** **12 39 40.0 -0.9**
comp=Z,2.1nm,0.9s,baz=106,slow=7.8,SNR=1.8
**FINES FINESS Array B 67.98 331** P **P** **12 39 40.0 -0.9**
**KBZ Khabaz 69.03 309**⇑*eP* **P** **12 39 48.5 +0.7**
KBZ pmax pmax
comp=Z,7.0nm,1.9s
**KIV Kislovodsk 69.04 310** *eP* **P** **12 39 48.6 +0.5**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**GNI Garni 69.67 305** LR LR 13 12 55.1
comp=Z,99nm,18.9s,baz=55,slow=38
**SUMG Summit 71.32 359** P **P** **12 40 02.1 +0.2**
SUMG pmax pmax
comp=Z,3.0nm,0.7s
**SUMG Summit 71.32 359** *i* P **P** **12 40 04.4 +2.5**
SUMG IAmb IAmb 12 40 05.4
comp=Z,10nm,0.8s
**SUMG Summit 71.32 359** P **P** **12 40 02.1 +0.2**
**AKASG Malin Array Be 72.95 321** P **P** **12 40 09.8 -1.7**
comp=Z,0.2nm,0.3s,baz=50,slow=7.1,SNR=4.5
AKASG LR LR 13 12 52.7
comp=Z,126nm,18.1s,baz=18,slow=36
**AKASG Malin Array Be 72.95 321***ceP* **P** **12 40 13.5 +2.0**
**NOA NORSAR Array B 73.60 336** P **P** **12 40 13.8 -1.5**
comp=Z,2.0nm,0.9s,baz=43,slow=5.9,SNR=3.3
NOA LR LR 13 15 32.2
comp=Z,87nm,19.2s,baz=5.0,slow=38
**NVAR Mina Array Bea 77.77 51** P **P** **12 40 40.1 +0.4**
comp=Z,0.6nm,0.8s,baz=301,slow=6.2,SNR=1.6
**CLL Colim 80.13 328** *eP* **P** **12 40 53.0 +0.8**
**CLL Colim 80.13 328** *eP* **P** **12 40 53.0 +0.8**
**PDAR Pinedale Array 80.25 44** P **P** **12 40 52.0 -1.2**
comp=Z,0.4nm,0.7s,baz=119,slow=43,SNR=3.2
**GERES GERESS Array B 81.65 326** P **P** **12 41 01.6 +1.1**
comp=Z,0.5nm,0.6s,baz=38,slow=2.4,SNR=4.2
**RAR Rarotonga 82.25 123** LR LR 13 09 31.9
comp=Z,39nm,20.8s,baz=114,slow=30
**URZ Urewera 82.72 150** LR LR 13 13 53.2
comp=Z,24nm,20.3s,baz=12,slow=33
**SADO Sadowa 92.63 25** LR LR 13 29 53.6
comp=Z,45nm,19.9s,baz=296,slow=40
**TXAR Yellowknife Ar 92.88 50** P **P** **12 41 55.9 +0.3**
comp=Z,0.4nm,1.0s,baz=265,slow=37,SNR=2.5

*IDC **03** 12:36:14.7±1.1,23.78N×124.96E,h0km,mb3.7/6, mb1 3.8/7,mb1mx3.5/45,mbtmp3.7/7,ML3.4/1,MS3.6/1, Ms1 3.6/1,ms1mx2.6/85,Error ellipse: s-maj=38.2km s-min=22.7km az=70.0*
*JMA **03** 12:36:18.0±0.2,23.70N×125.01E,h60km,M3.4*
**ISC 03 12:36:19.3±1.5,23.78N±0.07×125.01E±0.04,h34km±3km, n20,σ90/32,mb3.6/6,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTJ** | **Tarama** | **0.90** | **342** | P | **Pb** | **12 36 36.0** | **-0.5** |
| JTJ | | | | *eS* | **Sb** | **12 36 49.0** | **+0.8** |
| **JIJ** | **Ishigaki jima** | **0.98** | **306** | P | **Pn** | **12 36 36.5** | **-0.1** |
| JIJ | | | | *eS* | **Sb** | **12 36 49.9** | **-0.6** |
| **JMJ2** | **Miyako jima3** | **1.00** | **17** | P | **Pn** | **12 36 37.2** | **+0.3** |
| JMJ2 | | | | *eS* | **Sb** | **12 36 51.8** | **+0.8** |
| **JKRS** | **Kuro-shima** | **1.02** | **297** | P | **Pb** | **12 36 37.4** | **-1.1** |
| JKRS | | | | *eS* | **Sb** | **12 36 51.0** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **1.02** | **322** | P | **Pn** | **12 36 37.2** | **0.0** |
| JISG | | | | *eS* | **Sb** | **12 36 52.4** | **+0.7** |
| **JOGS** | **Gusukube** | **1.04** | **20** | P | **Pn** | **12 36 38.1** | **+0.6** |
| JOGS | | | | *eS* | **Sb** | **12 36 52.8** | **+0.6** |
| **JIRB** | **Irabujima** | **1.05** | **8** | P | **Pn** | **12 36 37.8** | **+0.2** |
| JIRB | | | | S | **Sb** | **12 36 52.4** | **-0.2** |
| **HATJ** | **Hateruma jima** | **1.13** | **284** | P | **Pn** | **12 36 38.4** | **-0.3** |
| HATJ | | | | *eS* | **Sn** | **12 36 53.0** | **-0.1** |
| **JIKM** | **Ikemajima** | **1.16** | **11** | P | **Pn** | **12 36 39.3** | **+0.2** |
| JIKM | | | | *eS* | **Sb** | **12 36 55.7** | **+0.1** |
| **IRIF** | **Iriomote-Funau** | **1.29** | **295** | P | **Pn** | **12 36 41.0** | **+0.1** |
| IRIF | | | | *eS* | **Sb** | **12 36 58.0** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **1.94** | **291** | P | **Pn** | **12 36 50.1** | **+0.2** |
| YOJ | | | | S | **Sn** | **12 37 13.6** | **+0.4** |
| **JYNG** | **Yonagunijimaku** | **2.00** | **290** | P | **Pn** | **12 36 50.8** | **+0.2** |
| JYNG | | | | *eS* | **Sn** | **12 37 14.5** | **0.0** |
| **JOW** | **Kunigami** | **4.24** | **44** | Pn | **Pn** | **12 37 20.9** | **-0.5** |
| | 4.2nm,0.3s,baz=131,slow=19,SNR=17 | | | | | | |
| JOW | | | | Sn | **Sn** | **12 38 06.3** | **-3.5** |
| | 4.4nm,0.3s,baz=104,slow=26,SNR=2.1 | | | | | | |
| **KLR** | **Kul'dur** | **25.95** | **10** | LR | LR | 12 52 33.0 | |
| | comp=Z,112nm,18.4s,baz=340,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.08** | **315** | P | **P** | **12 44 00.3** | **+0.6** |
| | 1.4nm,0.4s,baz=101,slow=10.0,SNR=30 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.51** | **326** | P | **P** | **12 44 10.7** | **-0.6** |
| | 0.7nm,0.4s,baz=125,slow=10,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.40** | **167** | P | **P** | **12 44 26.5** | **-0.4** |
| | 0.5nm,0.9s,baz=347,slow=8.7,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **47.95** | **169** | P | **P** | **12 44 55.7** | **+1.0** |
| | 0.3nm,1.0s,baz=352,slow=8.7,SNR=1.7 | | | | | | |
| **FINES** | **FINESS Array B** | **73.54** | **330** | P | **P** | **12 47 48.8** | **+0.3** |
| | 1.8nm,0.8s,baz=4.4,slow=2.5,SNR=3.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.95** | **24** | P | **P** | **12 48 36.5** | **+1.2** |
| | 0.1nm,0.4s,baz=300,slow=5.0,SNR=4.7 | | | | | | |

*EAF **03** 12:36:56.9±1.1,0.24S×29.62E,h35km±5km,MD3.2*
*ECGS **03** 12:37:12.5,1.1S×0.2×29.3E±0.2,h0km±10km,ML1.8, Error ellipse: s-maj=35.0km s-min=28.7km az=85.6, smi:local/d796cb50-3b20-4d55-9186-6cca8d4e181d Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX 77.2339 Y 120.045 Z 15.4621 CovXX 530.614 XY 13.2671 XZ 27.1289 YY 358.721 YZ -3.09139 ZZ 112.063 EllAz1 283.75 Dip1 86.1693 Len1 19.7277 Az2 355.795 Dip2 -1.18246 Len2 35.5397 Len3 4.338994e+01*

**ISC 03 12:36:56.2±1.0,0.425±0.04×29.95E±0.05,h10km,n14, σ0.38/15,Zaire**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KIL** | **Kilembe** | **0.62** | **5** | *eP* | **Pg** | **12 37 08.8** | **+0.4** |
| KIL | | | | *eS* | **Sg** | **12 37 16.4** | **-0.1** |
| **MBAR** | **Mbarara** | **0.81** | **103** | *i* P | Pn | 12 37 21.5 | +7.6 |
| **MBAR** | **Mbarara** | **0.81** | **103** | *eP* | **Pg** | **12 37 12.0** | **+0.1** |
| MBAR | | | | *eS* | **Sg** | **12 37 22.4** | **0.0** |
| **TGO** | **Tongo** | **1.03** | **221** | *i* P | **Pn** | **12 37 16.9** | **-0.1** |
| **RGB** | **Rumangabo** | **1.09** | **213** | *i* S | **Sg** | **12 37 31.2** | **-0.2** |
| **RGB** | **Rumangabo** | **1.09** | **213** | *i* P | **Pb** | **12 37 17.2** | **-0.1** |
| **SAHA** | **Sahara** | **1.20** | **200** | *i* P | **Pb** | **12 37 19.0** | **-0.3** |
| **SAHA** | **Sahara** | **1.20** | **200** | *i* S | **Sg** | **12 37 34.6** | **-0.3** |
| **KTSH** | **Kitshanga** | **1.21** | **228** | *i* P | **Pb** | **12 37 18.6** | **-0.8** |
| **BUTK** | **Butaka** | **1.24** | **207** | *i* S | **Sn** | **12 37 37.2** | **+0.3** |
| **BUTK** | **Butaka** | **1.24** | **207** | *i* P | **Pg** | **12 37 20.8** | **+0.6** |
| **BOBN** | **Bobandana** | **1.58** | **216** | *i* S | **Sb** | **12 37 45.7** | **-0.2** |
| **BOBN** | **Bobandana** | **1.58** | **216** | *i* P | **Pn** | **12 37 24.8** | **+0.2** |
| **IDJ** | **Idjwi** | **1.86** | **209** | *i* P | **Pb** | **12 37 30.2** | **-0.2** |

**HEL 03 12:42:25.6±0.1,60.74N×28.86E,h0km,ML1.6, Explosion,Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VJF** | **Virojoki** | **0.68** | **253** | PG | Pg | 12 42 37.8 | -0.7 |
| VJF | | | | SG | Sg | 12 42 46.5 | -0.7 |
| **PVF** | **Pernaja** | **1.49** | **264** | PG | Pn | 12 42 52.3 | -1.3 |
| | baz=78 | | | | | | |
| PVF | | | | MSG | | 12 43 10.4 | |
| | comp=Z,5.2nm,0.2s | | | | | | |
| PVF | | | | SG | Sg | 12 43 11.9 | -1.5 |
| **FIA0** | **FINESS Array S** | **1.52** | **299** | PG | Pn | 12 42 53.0 | -1.0 |
| | baz=119 | | | | | | |
| FIA0 | | | | SG | Sg | 12 43 12.3 | -2.2 |
| **KAF** | **Kangasniemi** | **1.84** | **319** | SG | Sn | 12 43 22.4 | 0.0 |
| **SUF** | **Sumiainen** | **2.36** | **328** | PG | Pb | 12 43 07.8 | -1.2 |
| SUF | | | | MSG | | 12 43 35.6 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| SUF | | | | SG | Sb | 12 43 38.3 | -0.4 |
| **KEF** | **Keuruu** | **2.39** | **308** | PB | Pn | 12 43 07.2 | +1.2 |
| KEF | | | | MSG | | 12 43 36.3 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| KEF | | | | SB | Sn | 12 43 37.5 | +1.6 |
| **JOF** | **Joensuu** | **2.47** | **27** | SG | Sb | 12 43 41.9 | +0.1 |

**HEL 03 12:44:18.4±0.1,64.52N×24.25E,h0km,ML0.0, Explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OBF0** | **Syolatti, Pyha** | **0.03** | **187** | SN | Pg | 12 44 18.7 | -0.2 |
| **OBF0** | **Syolatti, Pyha** | **0.03** | **187** | *eP* | Pg | 12 44 18.7 | -0.1 |
| OBF0 | | | | *eS* | Sg | 12 44 19.1 | -0.1 |
| OBF0 | | | | MSG | | 12 44 19.1 | |
| | comp=Z,17nm,0.0s | | | | | | |
| **OBF2** | **Ylip, Raahe** | **0.11** | **70** | *eP* | Pg | 12 44 20.2 | -0.2 |
| **OBF1** | **Elvisluoto, P** | **0.14** | **218** | *eP* | Pg | 12 44 21.1 | 0.0 |
| OBF1 | | | | *eS* | Sg | 12 44 23.7 | +0.7 |
| OBF1 | | | | MSG | | 12 44 23.8 | |
| | comp=Z,1.3nm,0.0s | | | | | | |
| **OUF** | **Merijarvi** | **0.26** | **126** | *eP* | Pg | 12 44 22.9 | -0.5 |
| OUF | | | | *eS* | Sg | 12 44 26.6 | -0.2 |
| OUF | | | | MSG | | 12 44 28.4 | |
| | comp=Z,0.4nm,0.0s | | | | | | |
| **OBF3** | **Siikajoki** | **0.34** | **35** | *eP* | Pg | 12 44 24.8 | -0.1 |
| OBF3 | | | | *eS* | Sg | 12 44 29.6 | +0.3 |
| **OBF7** | **Kamusenper, K** | **0.36** | **194** | *eP* | Pg | 12 44 24.9 | -0.3 |
| **OBF6** | **Kekajrvi, Yli** | **0.41** | **160** | *eP* | Pg | 12 44 26.3 | +0.1 |
| OBF6 | | | | *eS* | Sg | 12 44 31.2 | -0.3 |
| **OBF4** | **Vikkela, Lumij** | **0.47** | **51** | *eP* | Pg | 12 44 26.8 | -0.6 |
| OBF4 | | | | *eS* | Sg | 12 44 33.1 | -0.4 |
| **OBF5** | **Vihanti** | **0.47** | **105** | *eP* | Pg | 12 44 26.5 | -0.9 |

*IDC **03** 12:47:21.2±1.4,6.95S×131.80E,h0km,mb3.9/5, mb1 4.1/10,mb1mx3.7/41,mbtmp4.0/10,ML4.0/5,MS3.2/2, Ms1 3.2/2,ms1mx2.6/62,Error ellipse: s-maj=41.7km s-min=21.9km az=94.0*
*NEIC **03** 12:47:23.0±2.4,6.80S±0.03×132.0E±0.1,h10km±1km, mb4.2/9,Error ellipse: s-maj=18.0km s-min=4.3km az=99.0*

**ISC 03 12:47:24.9±0.6,6.96S±0.05×131.86E±0.09,h35km,n33, σ2.59/38,mb4.0/8,Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.16** | **209** | | **Pn** | **12 47 48.7** | **+4.1** |
| **FAKI** | **Fak Fak** | **4.04** | **6** | P | **Pn** | **12 48 22.5** | **-1.8** |
| FAKI | | | | Sn | **Sn** | **12 49 08.1** | **-2.2** |
| **MTN** | **Manton Dam** | **5.89** | **187** | | **Pn** | **12 48 53.4** | **+3.7** |
| **SIJI** | **Sorong** | **6.08** | **354** | Pn | **Pn** | **12 48 52.4** | **0.0** |
| | 3.2nm,0.3s,baz=224,slow=22,SNR=9.4 | | | | | | |
| SIJI | | | | Sn | **Sn** | **12 49 55.3** | **-5.5** |
| | 4.5nm,0.3s,baz=252,slow=23,SNR=13 | | | | | | |
| **SOEI** | **Soe** | **8.01** | **249** | | **Pn** | **12 49 21.6** | **+2.7** |
| **BATI** | **Baumata** | **8.72** | **248** | Pn | **Pn** | **12 49 29.9** | **+1.3** |
| | 6.5nm,0.3s,baz=125,slow=2.1,SNR=5.9 | | | | | | |
| BATI | | | | Sn | **Sn** | **12 51 02.3** | **-3.6** |
| | 0.9nm,0.3s,baz=258,slow=18,SNR=1.0 | | | | | | |
| **KNRA** | **Kununurra** | **9.18** | **199** | | **Pn** | **12 49 37.3** | **+2.5** |
| **FITZ** | **Fitzroy Crossi** | **12.62** | **208** | Pn | **Pn** | **12 50 21.9** | **-0.1** |
| | 0.9nm,0.3s,baz=32,slow=8.4,SNR=35 | | | | | | |
| FITZ | | | | Sn | **Sn** | **12 52 35.1** | **-6.3** |
| | 2.6nm,0.3s,baz=303,slow=18,SNR=8.9 | | | | | | |
| **WB0** | **Warramunga Arr** | **12.96** | **169** | | **Pn** | **12 50 27.1** | **+0.4** |
| **WRA** | **Warramunga Arr** | **13.12** | **170** | Pn | **Pn** | **12 50 28.6** | **-0.3** |
| | 0.6nm,0.3s,baz=352,slow=13,SNR=23 | | | | | | |
| WRA | | | | Sn | **Sn** | **12 52 50.1** | **-3.6** |
| | 1.5nm,0.3s,baz=354,slow=23,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 12 55 59.2 | |
| | comp=Z,45nm,19.8s,baz=53,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.12** | **170** | Pn | **Pn** | **12 50 28.1** | **-0.9** |
| **WB2** | **Warramunga Arr** | **13.13** | **170** | | **Pn** | **12 50 30.3** | **+1.3** |
| **WR0** | **Warramunga Arr** | **13.18** | **169** | Pn | **Pn** | **12 50 30.1** | **+0.4** |
| **PMG** | **Port Moresby** | **15.34** | **100** | | **P** | **12 51 02.4** | **-0.8** |
| PMG | | | | IAmb | IAmb | 12 51 15.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **16.72** | **173** | | **Pn** | **12 51 17.3** | **+0.7** |
| **ASAR** | **Alice Springs** | **16.72** | **173** | Pn | **Pn** | **12 51 17.5** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=351,slow=8.1,SNR=30 | | | | | | |
| ASAR | | | | Sn | **Sn** | **12 54 14.2** | **-7.2** |
| | comp=Z,0.3nm,0.3s,baz=352,slow=28,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **16.72** | **173** | | **Pn** | **12 51 17.7** | **+1.1** |
| **MBWA** | **Marble Bar** | **18.35** | **219** | P | **P** | **12 51 36.3** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 12 51 50.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.59** | **217** | P | **Pn** | **12 51 40.5** | **+0.8** |
| **KKM** | **Kota Kinabalu** | **20.27** | **309** | P | **P** | **12 51 57.9** | **+0.2** |
| **STKA** | **Stephens Creek** | **26.40** | **161** | LR | LR | 13 04 47.2 | |
| | comp=Z,103nm,18.7s,baz=5.2,slow=40 | | | | | | |
| **UBPT** | **Khong Chiam** | **34.24** | **310** | P | **P** | **12 54 08.3** | **+0.6** |
| UBPT | | | | IAmb | IAmb | 12 54 26.3 | |
| | comp=Z,3.5nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.14** | **308** | P | **P** | **12 55 06.0** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=134,slow=6.5,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.14** | **308** | P | **P** | **12 55 05.6** | **-0.4** |
| **SONM** | **Songino Array** | **59.01** | **340** | P | **P** | **12 57 23.2** | **+1.9** |
| | comp=Z,0.4nm,0.4s,baz=164,slow=7.4,SNR=5.2 | | | | | | |
| **MK31** | **Makanchi Array** | **69.22** | **326** | P | **P** | **12 58 30.0** | **+1.8** |
| MK31 | | | | IAmb | IAmb | 12 58 31.0 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.22** | **326** | P | **P** | **12 58 30.1** | **+1.9** |
| | comp=Z,1.9nm,0.6s,baz=115,slow=8.0,SNR=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.22** | **326** | P | **P** | **12 58 29.8** | **+1.6** |
| **MAKZ** | **Makanchi** | **69.40** | **326** | P | **P** | **12 58 31.2** | **+1.9** |
| **SEY** | **Seymchan** | **71.44** | **10** | P | **P** | **12 58 43.7** | **+2.3** |
| | comp=Z,2.0nm,0.3s,baz=196,slow=5.9,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.38** | **333** | P | **P** | **12 58 47.6** | **+0.4** |
| | comp=Z,0.6nm,0.4s,baz=124,slow=6.7,SNR=4.9 | | | | | | |
| **KURK** | **Kurchatov** | **73.46** | **328** | P | **P** | **12 58 55.3** | **+1.6** |
| KURK | | | | IAmb | IAmb | 12 58 56.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.63** | **321** | P | **P** | **12 59 50.9** | **+1.1** |

**IDC 03 13:16:56.4±2.8, 50°30'N×27°70'E, h0km, mb1 3.9/2, mb1mx3.1/44, mbtmp3.9/2, ML2.7/2, Error ellipse: s-maj=22.5km s-min=12.9km az=35.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKASG | **Malin Array Be** | **1.05** | **67** | Pg | Pg | 13 17 16.5 | -0.1 |
| | 15nm,0.3s,baz=250,slow=18,SNR=50 | | | | | | |
| AKASG | | | | Lg | Lg | 13 17 31.7 | |
| | 14nm,0.3s,baz=248,slow=34,SNR=17 | | | | | | |
| FINES | **FINESS Array B** | **11.21** | **356** | Pn | Pn | 13 19 31.6 | -6.2 |
| | 0.1nm,0.3s,baz=179,slow=13,SNR=3.7 | | | | | | |
| ARCES | **ARCESS Array B** | **19.33** | **358** | Pn | P | 13 21 17.7 | -5.3 |
| | baz=178,slow=12,SNR=5.9 | | | | | | |

*IDC **03** 13:37:46.0±2.0, 7°.47S×103°.41E, h0km, mb3.7/7, mb1 3.8/8, mb1mx3.5/54, mbtmp3.7/8, ML4.2/1, MS2.6/1, Ms1 2.6/1, ms1mx2.3/79, Error ellipse: s-maj=71.9km s-min=18.9km az=48.0*
*DJA **03** 13:37:51.3±1.0, 7°.5S×6°×10°.4E±°, h35km±30km, M4.3/18, mb4.2/4, MLv4.3/18*
**ISC 03 13:37:52.0±1.1, 7°.26S±0°.08×103°.73E±0°.07, h35km, n28, σ1§16/35, mb3.5/7, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KASI | **Kota Agung** | **1.88** | **24** | P | Pn | 13 38 20.8 | -0.9 |
| KASI | | | | S | Sn | 13 38 43.3 | -0.9 |
| CGJI | **Cibinong** | **2.05** | **72** | P | Pn | 13 38 23.6 | -0.4 |
| CGJI | | | | S | Sn | 13 38 46.7 | -1.7 |
| LWLI | **Liwa** | **2.25** | **8** | P | Pn | 13 38 26.2 | -0.6 |
| LWLI | | | | S | Sn | 13 38 53.0 | -0.4 |
| BLSI | **Bandar Lampung** | **2.41** | **39** | P | Pn | 13 38 28.6 | -0.3 |
| BLSI | | | | S | Sn | 13 38 57.8 | +0.6 |
| KLJ | **Kotabumi** | **2.63** | **25** | P | Pn | 13 38 31.3 | -0.6 |
| KLSI | | **2.74** | **21** | P | Pn | 13 38 33.6 | +0.2 |
| KLSI | | | | S | Sn | 13 39 04.8 | -0.5 |
| MDSI | **Maura Dua** | **2.79** | **9** | P | Pn | 13 38 33.8 | -0.3 |
| MDSI | | | | S | Sn | 13 39 06.4 | -0.2 |
| SKJI | **Sukabumi** | **2.82** | **85** | P | Pn | 13 38 33.7 | -0.8 |
| MNAI | **Manna** | **2.98** | **345** | P | Pn | 13 38 35.7 | -1.0 |
| DBJI | **Dramaga** | **3.08** | **77** | P | Pn | 13 38 38.1 | -0.1 |
| DBJI | | | | S | Sn | 13 39 13.2 | -0.6 |
| TNG | **Tangerang** | **3.09** | **70** | P | Pn | 13 38 37.4 | -0.9 |
| CBJI | **Citeko** | **3.21** | **75** | P | Pn | 13 38 41.1 | +1.2 |
| CBJI | | | | S | Sn | 13 39 17.7 | +0.7 |
| CNJI | **Cibinong** | **3.38** | **91** | P | Pn | 13 38 40.9 | -1.3 |
| CNJI | | | | S | Sn | 13 39 16.9 | -4.2 |
| LEM | **Lembang** | **3.88** | **84** | Pn | Pn | 13 38 52.0 | +2.7 |
| | 12nm,0.3s,baz=339,slow=16,SNR=5.5 | | | | | | |
| LEM | | | | Sn | Sn | 13 39 32.8 | -1.1 |
| | 7.8nm,0.3s,baz=324,slow=22,SNR=2.2 | | | | | | |
| LEM | | | | LR | LR | 13 40 37.1 | |
| | comp=Z,73nm,19.0s,baz=272,slow=41 | | | | | | |
| LEM | **Lembang** | **3.88** | **84** | P | Pn | 13 38 48.5 | -0.9 |
| MASI | **Maura Aman, Be** | **4.35** | **340** | P | Pn | 13 38 54.4 | -1.2 |
| KPJI | **Karang Pucung** | **5.16** | **91** | P | Pn | 13 39 07.2 | +0.4 |
| | 0.3nm24nm,1.6s | | | | | | |
| FITZ | **Fitzroy Crossi** | **23.91** | **119** | P | P | 13 43 03.5 | +0.7 |
| | 1.3nm,1.0s,baz=287,slow=14,SNR=1.5 | | | | | | |
| CMAR | **Chiang Mai Arr** | **25.98** | **350** | P | P | 13 43 21.7 | +0.1 |
| | 0.5nm,0.3s,baz=180,slow=9.9,SNR=5.9 | | | | | | |
| H08S2 | **Diego Garcia H** | **30.97** | **267** | T | T | 14 16 39.6 | |
| | baz=91,slow=74,SNR=16 | | | | | | |
| H08S3 | **Diego Garcia H** | **30.98** | **267** | T | T | 14 16 40.1 | |
| | baz=91,slow=74,SNR=16 | | | | | | |
| H08S1 | **Diego Garcia H** | **30.99** | **267** | T | T | 14 16 40.1 | |
| | baz=91,slow=74,SNR=12 | | | | | | |
| WRA | **Warramunga Arr** | **32.24** | **116** | P | P | 13 44 17.4 | 0.0 |
| | 0.2nm,0.7s,baz=284,slow=12,SNR=1.8 | | | | | | |
| ASAR | **Alice Springs** | **33.23** | **123** | P | P | 13 44 26.1 | +0.1 |
| | 0.4nm,1.1s,baz=307,slow=7.7,SNR=4.4 | | | | | | |
| SONM | **Songino Array** | **54.90** | **2** | P | P | 13 47 20.1 | +0.9 |
| | 0.4nm,0.5s,baz=176,slow=9.4,SNR=4.0 | | | | | | |
| MKAR | **Makanchi Array** | **57.09** | **343** | P | P | 13 47 35.0 | +0.2 |
| | 1.6nm,0.8s,baz=147,slow=8.3,SNR=14 | | | | | | |
| ZALV | **Zalesovo Beam** | **63.03** | **348** | P | P | 13 48 15.1 | -0.2 |
| | 1.7nm,0.6s,baz=152,slow=4.4,SNR=13 | | | | | | |
| TXAR | **Lajitas Array** | **146.13** | **46** | PKPbc | PKPab | 13 57 30.5 | +0.6 |
| | 0.3nm,0.6s,baz=293,slow=1.6,SNR=7.6 | | | | | | |

**IDC 03 13:38:32.8±699.0, 53°80'N×6°89'E, h0km, Error ellipse: s-maj=314.1km s-min=134.1km az=125.0, The Netherlands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I26DE | **FREYUNG INFRAS** | **6.54** | **136** | *i* | | 14 18 50.0 | |
| | baz=322,slow=323,SNR=0.4 | | | | | | |
| I43RU | **DUBNA INFRASON** | **7.46** | **68** | *i* | | 15 26 50.0 | |
| | baz=274,slow=313,SNR=1.0 | | | | | | |
| I46RU | **ZALESOVO INFRA** | **43.73** | **57** | *i* | | 18 07 20.0 | |
| | baz=304,slow=336,SNR=1.7 | | | | | | |

*NNC **03** 13:50:26.5±12.0, 36°.67N×70°.51E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=102.4km s-min=76.1km az=158.0*
*IDC **03** 13:50:29.8±9.6, 36°.55N×70°.46E, h126km±67km, mb3.0/2, mb1 2.9/5, mb1mx2.7/59, mbtmp3.3/5, MS3.6/1, Ms1 3.6/1, ms1mx2.6/27, Error ellipse: s-maj=173.9km s-min=75.5km az=117.0*
**ISC 03 13:50:33.6±2.7, 36°.7N±0°.2×70°.9E±0°.1, h200km, n10, σ1§86/12, 5C-1D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KK08 | **Karatay Array** | **6.42** | **357** | ⇑P | Pn | 13 52 04.1 | -2.0 |
| | 0.9nm,0.4s,baz=184,slow=13 | | | | | | |
| KK08 | | | | ⇑S | Sn | 13 53 20.1 | +0.5 |
| | 1.9nm,0.4s,baz=187,slow=24 | | | | | | |
| AAK | **Ala-Archa** | **6.56** | **24** | P | Pn | 13 52 07.3 | -0.9 |
| | 1.5nm,0.3s,baz=169,slow=6.6,SNR=21 | | | | | | |
| AAK | | | | S | Sn | 13 53 24.7 | +1.5 |
| | 0.3nm,0.3s,baz=148,slow=23,SNR=1.6 | | | | | | |
| AAK | **Ala-Archa** | **6.56** | **24** | ⇑P | Pn | 13 52 06.7 | -1.4 |
| | 1.9nm,0.5s | | | | | | |
| AAK | | | | S | Sn | 13 53 25.5 | +2.3 |
| | 1.3nm,0.5s | | | | | | |
| TKM2 | **Tokmak 2** | **7.21** | **29** | ⇑P | Pn | 13 52 15.2 | -1.4 |
| | 3.9nm,0.6s | | | | | | |
| TKM2 | | | | ⇓S | Sn | 13 53 35.3 | -3.1 |
| | 1.5nm,0.7s | | | | | | |
| MKAR | **Makanchi Array** | **13.20** | **37** | P | P | 13 53 37.5 | +1.2 |
| | 0.1nm,0.3s,baz=212,slow=10,SNR=6.2 | | | | | | |
| AB31 | **Akbulak array** | **14.88** | **331** | ⇑P | P | 13 53 55.0 | +0.2 |
| | 0.6nm,0.3s | | | | | | |
| KURBB | **Kurchatov Arra** | **14.98** | **19** | P | P | 13 53 57.9 | +1.9 |
| | 0.0nm,0.3s,baz=208,slow=10,SNR=5.3 | | | | | | |
| ZALV | **Zalesovo Beam** | **19.79** | **25** | P | Pn | 13 54 52.1 | -0.4 |
| | 1.0nm,0.4s,baz=227,slow=11,SNR=6.0 | | | | | | |
| AKASG | **Malin Array Be** | **32.76** | **309** | LR | LR | 14 13 29.9 | |
| | comp=Z,95nm,18.2s,baz=345,slow=42 | | | | | | |
| YKA | **Yellowknife Ar** | **81.06** | **3** | P | P | 14 02 31.4 | +5.6 |
| | 0.1nm,0.3s,baz=351,slow=5.1,SNR=5.4 | | | | | | |

**IDC 03 14:02:42.2±3.4, 4°.06S×152°.76E, h0km, mb3.7/3, mb1 3.9/4, mb1mx3.2/39, mbtmp3.8/4, ML1.1/1, Error ellipse: s-maj=117.0km s-min=46.0km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | **Port Moresby** | **7.69** | **226** | Pn | Pn | 14 04 36.3 | +0.8 |
| | 0.2nm,0.3s,baz=210,slow=15,SNR=2.2 | | | | | | |
| PMG | | | | Sn | Sn | 14 06 00.5 | -2.9 |
| | 2.3nm,0.3s,baz=283,slow=3.7,SNR=6.0 | | | | | | |
| WRA | **Warramunga Arr** | **23.91** | **227** | P | P | 14 07 58.4 | +0.5 |
| | 0.7nm,0.3s,baz=52,slow=9.7,SNR=18 | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **26.28** | **31** | T | T | 14 36 04.7 | |
| | baz=208,slow=74,SNR=4.4 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **26.29** | **31** | T | T | 14 36 05.3 | |
| | baz=208,slow=74,SNR=3.3 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **26.30** | **31** | T | T | 14 36 05.9 | |
| | baz=208 | | | | | | |
| ASAR | **Alice Springs** | **26.67** | **221** | P | P | 14 08 22.7 | -0.4 |
| | 0.2nm,0.4s,baz=53,slow=9.0,SNR=16 | | | | | | |
| FITZ | **Fitzroy Crossi** | **29.98** | **240** | P | P | 14 08 53.1 | +0.4 |
| | 1.4nm,0.6s,baz=47,slow=7.2,SNR=12 | | | | | | |
| TORD | **Torodi Ar. Bea** | **150.03** | **289** | PKPbc | PKPbc | 14 22 34.8 | -1.1 |
| | 0.3nm,0.5s,baz=55,slow=2.9,SNR=2.1 | | | | | | |

**IDC 03 14:04:20.7±7.6, 16°.53S×178°.33W, h0km, mb3.6/3, mb1 3.9/3, mb1mx3.2/36, mbtmp3.6/3, Error ellipse: s-maj=333.0km s-min=40.0km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **44.97** | **258** | P | P | 14 12 38.1 | +0.1 |
| | 0.2nm,0.4s,baz=92,slow=7.5,SNR=7.3 | | | | | | |
| ASAR | **Alice Springs** | **45.25** | **253** | P | P | 14 12 39.9 | -0.3 |
| | 0.3nm,0.4s,baz=87,slow=8.6,SNR=18 | | | | | | |
| ILAR | **Eielson Array** | **84.54** | **13** | P | P | 14 16 55.3 | 0.0 |
| | 0.9nm,1.1s,baz=212,slow=8.3,SNR=2.3 | | | | | | |

*IDC **03** 14:42:48.4±6.1, 8°.83S×116°.53E, h0km, mb3.6/3, mb1 3.9/5, mb1mx3.1/53, mbtmp3.7/5, ML3.5/2, Error ellipse: s-maj=92.5km s-min=60.2km az=174.0*
*DJA **03** 14:42:49.7±0.3, 8°.5S×7°×11°.7E±°, h10km, M3.8/13, MLv3.8/13*
**ISC 03 14:42:52.3±1.2, 8°.3S±0°.1×116°.70E±0°.04, h110km, n15, σ2§49/16, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SRBI | **Singaraja** | **1.49** | **277** | P | Pn | 14 43 18.0 | -0.9 |
| SRBI | | | | S | Sn | 14 43 39.2 | 0.0 |
| DNP | **Denpasar** | **1.53** | **255** | P | Pn | 14 43 19.1 | -0.3 |
| DNP | | | | S | Sn | 14 43 40.6 | +0.5 |
| IGBI | **Denpasar** | **1.63** | **251** | P | Pn | 14 43 20.7 | 0.0 |
| ABJI | **Asem Bagus** | **2.49** | **281** | P | Pn | 14 43 31.0 | -0.6 |
| JAGI | **Jagag, Banyuwa** | **2.53** | **266** | P | Pn | 14 43 31.5 | -0.6 |
| WBSI | **Waikabubak, Su** | **2.98** | **117** | P | Pn | 14 43 35.7 | -2.4 |
| GMJI | **Gumukmas** | **3.23** | **270** | P | Pn | 14 43 42.0 | +0.7 |
| BASI | **Baing, Sumba** | **4.28** | **117** | P | Pn | 14 43 54.2 | -1.2 |
| BSSI | **Bau Bau, Buton** | **4.32** | **61** | P | Pn | 14 43 53.6 | -2.3 |
| KAPI | **Kappang** | **4.44** | **43** | Sn | Sn | 14 45 05.1 | +17 |
| | 4.2nm,0.3s,baz=266,slow=23,SNR=1.6 | | | | | | |
| BATI | **Baumata** | **7.13** | **106** | Pn | Pn | 14 44 34.2 | +0.2 |
| | 2.7nm,0.3s,baz=273,slow=18,SNR=2.8 | | | | | | |
| BATI | | | | Sn | Sn | 14 45 58.8 | +5.2 |
| | 0.6nm,0.3s,baz=114,slow=20,SNR=1.2 | | | | | | |
| FITZ | **Fitzroy Crossi** | **13.07** | **139** | Pn | Pn | 14 45 51.4 | -2.4 |
| | 0.1nm,0.3s,baz=309,slow=14,SNR=2.2 | | | | | | |
| FITZ | | | | Sn | Sn | 14 48 14.7 | -3.0 |
| | 0.1nm,0.3s,baz=182,slow=14,SNR=1.5 | | | | | | |
| WRA | **Warramunga Arr** | **20.64** | **126** | P | Pn | 14 47 27.8 | +1.2 |
| | 1.0nm,0.5s,baz=300,slow=12,SNR=22 | | | | | | |
| ASAR | **Alice Springs** | **22.49** | **135** | P | P | 14 47 47.7 | +4.9 |
| | 0.8nm,0.6s,baz=309,slow=9.9,SNR=22 | | | | | | |
| STKA | **Stephens Creek** | **32.97** | **139** | P | P | 14 49 22.0 | +5.3 |
| | 1.3nm,0.5s,baz=322,slow=10,SNR=3.4 | | | | | | |

*BER **03** 14:45:43.3±1.3, 77°.47N×18°.72E, h21km±7km, ML2.5, Confirmed Earthquake*
*KOLA **03** 14:45:50.8, 76°.95N×22°.48E, h0km, ML2.5*
**ISC 03 14:45:38.3±0.8, 77°.36N±0°.06×18°.45E±0°.08, h9km, n9, σ2§40/16, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPA0 | **Spitsbergen Ar** | **0.93** | **333** | *e*P | Pn | 14 45 58.4 | +0.8 |
| SPA0 | | | | *e*S | Sn | 14 46 11.0 | -0.1 |
| SPA0 | | | | IAML | | 14 46 13.1 | |
| | comp=Z,120nm,0.3s | | | | | | |
| BRBA | **Barentsburg A** | **1.15** | **310** | *e*P | Pn | 14 46 02.1 | +1.6 |
| BRBA | | | | *e*S | Sn | 14 46 16.3 | 0.0 |
| BRBA | | | | IAML | | 14 46 17.5 | |
| | comp=Z,123nm,0.3s | | | | | | |
| BRBB | **Barentsburg B** | **1.17** | **311** | *e*P | Pn | 14 46 02.7 | +1.9 |
| BRBB | | | | *e*S | Sn | 14 46 16.9 | +0.1 |
| HOPEN | **Hopen** | **1.72** | **117** | *e*P | Pb | 14 46 10.3 | +0.3 |
| HOPEN | | | | *e*Sg | Sg | 14 46 35.2 | +1.8 |
| HOPEN | | | | IAML | | 14 46 39.6 | |
| | comp=Z,123nm,0.2s | | | | | | |
| KBS | **Kingsbay** | **2.07** | **323** | *e*P | Pn | 14 46 13.5 | +0.3 |
| KBS | | | | *e*Pg | Pg | 14 46 17.8 | -0.1 |
| KBS | | | | *e*Sg | Sg | 14 46 43.4 | -1.3 |
| KBS | | | | IAML | | 14 46 45.5 | |
| | comp=Z,52nm,0.3s | | | | | | |
| BJO1 | **Bjornoya** | **2.88** | **177** | *e*Sg | Sg | 14 47 12.1 | +1.5 |
| ARCES | **ARCESS Array B** | **8.11** | **162** | P | Pn | 14 47 39.2 | +3.1 |
| ARCES | | | | S | Sn | 14 49 00.6 | -7.1 |
| PRVG | **Vayda Guba** | **8.55** | **146** | P | Pn | 14 47 42.1 | +0.1 |
| TERR | **Teriberka** | **9.44** | **141** | P | Pn | 14 47 53.6 | -0.6 |

*HEL **03** 14:48:33.2±0.8, 67°.63N×33°.90E, h0km, ML1.9, Explosion*
**KOLA 03 14:48:31.5, 67°.50N×34°.15E, h0km, ML2.2, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| APA | **Apatity** | **0.29** | **283** | P | Pg | 14 48 37.2 | +0.1 |
| APA | | | | S | Sg | 14 48 40.0 | -0.9 |
| LVZ | **Lovozero** | **0.44** | **25** | P | Pg | 14 48 39.4 | -0.5 |
| LVZ | | | | S | Sg | 14 48 43.2 | -2.3 |
| APA0 | **Apatity Array** | **0.46** | **284** | P | Pg | 14 48 40.2 | 0.0 |
| APA0 | | | | S | Sg | 14 48 44.9 | -1.2 |
| TERR | **Teriberka** | **1.74** | **11** | P | Pb | 14 49 03.6 | -0.6 |
| TERR | | | | S | Sn | 14 49 24.8 | -1.0 |
| TERR | **Teriberka** | **1.74** | **11** | S | Sn | 14 49 24.8 | -1.0 |
| VRF | **Varrio** | **1.76** | **280** | PG | Pn | 14 49 02.5 | -0.6 |
| | baz=91 | | | | | | |
| VRF | | | | MSG | | 14 49 22.2 | |
| | comp=Z,9.0nm,0.2s | | | | | | |
| VRF | | | | SN | Sn | 14 49 23.6 | -2.6 |
| KU6 | **Riekki** | **2.25** | **231** | PG | Pb | 14 49 13.3 | +0.4 |
| | baz=45 | | | | | | |
| KU6 | | | | MSG | | 14 49 40.1 | |
| | comp=Z,5.7nm,0.2s | | | | | | |
| KU6 | | | | SG | Sg | 14 49 43.8 | +0.1 |
| PRVG | **Vayda Guba** | **2.37** | **343** | P | Pn | 14 49 11.4 | 0.0 |
| PRVG | | | | S | Sn | 14 49 40.4 | -0.8 |
| PRVG | **Vayda Guba** | **2.37** | **343** | S | Pn | 14 49 07.7 | -3.8 |
| RNF | **Rovaniemi** | **3.31** | **258** | PN | Pn | 14 49 25.9 | +1.4 |
| | baz=72 | | | | | | |
| RNF | | | | SN | Sn | 14 50 05.0 | +0.5 |
| KEV | **Kevo** | **3.46** | **314** | SG | Sb | 14 50 12.8 | -3.1 |
| ARA0 | **ARCESS Array S** | **3.78** | **307** | PN | Pn | 14 49 31.0 | +0.1 |
| | baz=120 | | | | | | |
| ARA0 | | | | SN | Sn | 14 50 12.1 | -3.9 |
| HEF | **Hetta** | **4.06** | **288** | SG | Sb | 14 50 32.6 | -0.7 |
| TOF | **Tornio** | **4.14** | **254** | PG | Pg | 14 49 48.2 | -2.6 |
| PAJU | **Pajala** | **4.31** | **269** | PG | Pb | 14 49 48.9 | +0.9 |
| LANU | **Lannavaara** | **4.65** | **282** | SG | Sb | 14 50 51.6 | +1.3 |
| ERTU | **Ertsjaerv** | **4.78** | **264** | PN | Pn | 14 49 46.8 | +2.1 |
| | baz=75 | | | | | | |
| ERTU | | | | SN | Sn | 14 50 38.4 | -2.3 |

**IDC 03 14:54:40.8±3.2, 50°.06S×114°.32E, h0km, mb3.9/2, mb1 4.1/2, mb1mx3.7/29, mbtmp3.9/2, Error ellipse: s-maj=209.8km s-min=55.3km az=118.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **30.46** | **37** | P | P | 15 00 55.4 | +0.2 |
| | 0.9nm,0.7s,baz=209,slow=7.9,SNR=20 | | | | | | |
| WRA | **Warramunga Arr** | **34.01** | **35** | P | P | 15 01 26.3 | 0.0 |
| | 1.2nm,0.7s,baz=203,slow=9.1,SNR=8.6 | | | | | | |
| TXAR | **Lajitas Array** | **144.71** | **112** | PKP | PKPdf | 15 14 20.4 | +1.1 |
| | 0.1nm,0.6s,baz=187,slow=6.4,SNR=3.0 | | | | | | |
| YKA | **Yellowknife Ar** | **150.90** | **46** | PKPbc | PKPbc | 15 14 32.5 | -1.5 |
| | 0.2nm,0.6s,baz=286,slow=2.1,SNR=2.8 | | | | | | |

*PGC **03** 14:55:35.9±8.6, 47°.50N×129°.11W, h10km, MLSn3.1/17, Mw3.7/17, 299km Wsw of Tofino, Bc Off Coast Of Washington*
*NEIC **03** 14:55:37.2±0.8, 47°.58N±0°.10×128°.9W±0°.1, h10km±2km, ML3.2/8, Mwr3.7(OTT), Error ellipse: s-maj=17.5km s-min=14.9km az=224.0*
**ISC 03 14:55:36.4±2.5, 47°.6N±0°.1×128°.9W±0°.1, h10km, n38, σ0§89/40, Off coast of Washington**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KEMF | **NEPTUNE Canada** | **0.39** | **343** | P | Pg | 14 55 43.3 | -0.7 |
| BFSB | **Bamfield** | **2.83** | **62** | Pn | Pn | 14 56 21.6 | -0.1 |
| BFSB | **Bamfield** | **2.83** | **62** | Pn | Pn | 14 56 21.6 | -0.1 |
| GDR | **Gold River** | **2.92** | **40** | Pn | Pn | 14 56 23.5 | +0.5 |
| GDR | **Gold River** | **2.92** | **40** | Pn | Pn | 14 56 23.5 | +0.5 |
| BTB | **Buttle Lake** | **2.95** | **49** | Pn | Pn | 14 56 23.7 | +0.2 |
| BTB | **Buttle Lake** | **2.95** | **49** | Pn | Pn | 14 56 23.7 | +0.2 |
| WOSB | **Woss** | **3.02** | **30** | Pn | Pn | 14 56 24.8 | +0.4 |
| WOSB | **Woss** | **3.02** | **30** | Pn | Pn | 14 56 24.8 | +0.4 |
| MAYB | **Maynard** | **3.06** | **22** | Pn | Pn | 14 56 24.8 | -0.1 |
| MAYB | **Maynard** | **3.06** | **22** | Pn | Pn | 14 56 24.8 | -0.1 |
| MGB | **Mount Grey** | **3.17** | **62** | Pn | Pn | 14 56 26.2 | -0.2 |
| PFB | **Port Renfrew** | **3.17** | **70** | Pn | Pn | 14 56 25.8 | -0.5 |
| PFB | | | | Sn | Sn | 14 57 03.5 | -0.7 |
| PFB | **Port Renfrew** | **3.17** | **70** | Pn | Pn | 14 56 25.8 | -0.5 |
| PFB | | | | Sn | Sn | 14 57 03.5 | -0.7 |
| SPLB | **Strathcona Par** | **3.17** | **42** | Pn | Pn | 14 56 27.4 | +1.0 |
| CBB | **Campbell River** | **3.41** | **42** | Pn | Pn | 14 56 30.6 | +1.0 |
| CBB | | | | IAML | | 14 57 24.3 | |
| | comp=N,40nm,4.7s | | | | | | |
| CBB | | | | IAML | | 14 57 28.8 | |
| | comp=E,36nm,3.2s | | | | | | |
| CBB | **Campbell River** | **3.41** | **42** | Pn | Pn | 14 56 30.6 | +1.0 |
| NCRB | **Newcastle Ridg** | **3.41** | **33** | Pn | Pn | 14 56 30.6 | +0.9 |
| B926 | **Mesachie Lake** | **3.44** | **67** | Pn | Pn | 14 56 30.2 | +0.2 |
| CLRS | **Cowichan Lake** | **3.44** | **67** | Pn | Pn | 14 56 30.2 | +0.1 |
| CLRS | **Cowichan Lake** | **3.44** | **67** | Pn | Pn | 14 56 30.1 | +0.1 |
| GHNB | **Nanoose** | **3.57** | **59** | Pn | Pn | 14 56 33.2 | +1.4 |
| TXB | **Texada** | **3.66** | **53** | Pn | Pn | 14 56 34.0 | +1.0 |
| NLLB | **Nanaimo Lost L** | **3.68** | **61** | Pn | Pn | 14 56 34.2 | +0.8 |
| E03A | **Lebam** | **3.81** | **104** | Pn | Pn | 14 56 35.1 | +0.1 |
| E03A | | | | IAML | | 14 57 15.2 | |
| | comp=E,61nm,2.6s | | | | | | |
| E03A | | | | IAML | | 14 58 20.0 | |
| | comp=N,68nm,0.3s | | | | | | |
| B009 | **North Saanich** | **3.82** | **72** | Pn | Pn | 14 56 36.3 | +1.0 |
| B010 | **North Saanich** | **3.82** | **72** | Pn | Pn | 14 56 36.2 | +1.0 |
| PGC | **Sidney** | **3.82** | **72** | Pn | Pn | 14 56 36.1 | +0.9 |
| B011 | **North Saanich** | **3.82** | **72** | Pn | Pn | 14 56 36.3 | +1.0 |
| SHB | **Sechelt** | **3.92** | **57** | Pn | Pn | 14 56 37.9 | +1.2 |
| WPB | **Watts Point** | **4.33** | **59** | Pn | Pn | 14 56 43.2 | +1.0 |
| HNBB | **Haney** | **4.56** | **66** | Pn | Pn | 14 56 46.1 | +0.7 |
| BBB | **Bella Bella** | **4.65** | **6** | Pn | Pn | 14 56 47.7 | +1.1 |
| BBB | **Bella Bella** | **4.65** | **6** | Pn | Pn | 14 56 47.5 | +1.0 |
| WSLR | **Whistler** | **4.72** | **55** | Pn | Pn | 14 56 49.5 | +1.9 |
| LLLB | **Lillooet** | **5.54** | **54** | Pn | Pn | 14 56 59.2 | +0.4 |
| LLLB | **Lillooet** | **5.54** | **54** | Pn | Pn | 14 57 00.6 | +1.8 |
| LTY | **Liberty** | **5.61** | **90** | Pn | Pn | 14 57 01.5 | +1.5 |

*ANF **03** 14:59:16.7±0.3, 37°.04N×104°.99W, h10km±5km, ML3.8/15, Error ellipse: s-maj=3.4km s-min=2.5km az=32.0*
*NEIC **03** 14:59:19.1±1.2, 37°.15N±0°.03×104°.95W±0°.05, h3km±6km, mb_Lg3.2/76, ML3.3/34, Error ellipse: s-maj=6.9km s-min=2.5km az=132.0*
**ISC 03 14:59:18.7±0.8, 37°.10N±0°.03×104°.97W±0°.02, h10km, n56, σ1§62/53, Colorado**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| T25A | **Trinidad** | **0.45** | **85** | | Pg | 14 59 26.4 | -1.2 |
| T25A | | | | Sg | Sg | 14 59 32.3 | -1.2 |
| T25A | **Trinidad** | **0.45** | **85** | P | Pg | 14 59 26.3 | -1.2 |
| | baz=272 | | | | | | |
| T25A | | | | S | Sg | 14 59 32.3 | -1.2 |
| | baz=272 | | | | | | |
| SDCO | **Great Sand Dun** | **0.77** | **327** | Pg | Pg | 14 59 32.9 | -0.9 |
| SDCO | | | | Sg | Sg | 14 59 42.7 | -1.1 |
| SDCO | **Great Sand Dun** | **0.77** | **327** | P | Pg | 14 59 32.8 | -0.9 |
| | baz=143,SNR=329 | | | | | | |
| SDCO | | | | S | Sg | 14 59 43.5 | -0.3 |
| | baz=143 | | | | | | |
| S22A | **4UR Ranch, Cre** | **1.62** | **294** | | Pb | 14 59 48.3 | -0.5 |
| S22A | | | | Sn | Sg | 15 00 09.5 | -1.3 |
| S22A | | | | IAML | | 15 00 15.6 | |
| | comp=E,485nm,0.7s | | | | | | |
| S22A | **4UR Ranch, Cre** | **1.62** | **294** | Pb | Pb | 14 59 48.2 | -0.5 |
| | baz=111,SNR=328 | | | | | | |
| S22A | | | | Sb | Sg | 15 00 09.8 | -0.9 |
| | baz=111 | | | | | | |
| Q24A | **Divide** | **1.87** | **356** | Pn | Pb | 14 59 52.6 | -0.5 |
| Q24A | | | | IAML | | 15 00 18.1 | |
| | comp=E,328nm,0.3s | | | | | | |
| Q24A | | | | IAML | | 15 00 22.2 | |
| | comp=N,192nm,0.3s | | | | | | |
| Q24A | **Divide** | **1.87** | **356** | Pb | Pb | 14 59 52.7 | -0.4 |
| | baz=175,SNR=124 | | | | | | |
| Q24A | | | | Sb | Sg | 15 00 17.5 | -1.3 |
| | baz=175 | | | | | | |
| ANMO | **Albuquerque** | **2.46** | **210** | Pn | Pn | 14 59 59.9 | +0.8 |
| ANMO | **Albuquerque** | **2.46** | **210** | Pb | Pn | 14 59 59.8 | +0.7 |
| | baz=29 | | | | | | |
| ANMO | | | | Sb | Sb | 15 00 32.2 | -1.5 |
| | baz=29 | | | | | | |
| SMCO | **Snowmass** | **2.61** | **323** | | Pb | 15 00 03.7 | -2.1 |
| KSCO | **Kaye Shedlock'** | **2.66** | **43** | Pn | Pb | 15 00 04.1 | -2.3 |
| KSCO | **Kaye Shedlock'** | **2.66** | **43** | Pb | Pb | 15 00 04.9 | -1.5 |
| | baz=225,SNR=8.2 | | | | | | |
| KSCO | | | | Sb | Sb | 15 00 40.3 | +1.1 |
| | baz=225 | | | | | | |
| MVCO | **Mesa Verde** | **2.82** | **273** | Pn | Pb | 15 00 06.7 | -2.7 |
| MVCO | **Mesa Verde** | **2.82** | **273** | Pb | Pb | 15 00 06.6 | -2.8 |
| | baz=90,SNR=44 | | | | | | |
| MVCO | | | | Sb | Sb | 15 00 45.8 | +1.8 |
| | baz=90 | | | | | | |
| BNM | **Barren Site** | **3.24** | **205** | Pn | Pn | 15 00 11.1 | +1.3 |
| AMTX | **Amarillo** | **3.46** | **129** | Pn | Pn | 15 00 15.4 | +2.6 |
| AMTX | **Amarillo** | **3.46** | **129** | Sb | Sb | 15 01 02.6 | +0.3 |
| | baz=312 | | | | | | |
| PV10 | **Paradox Valley** | **3.47** | **293** | Pn | Pn | 15 00 13.7 | +0.7 |
| PV10 | | | | IAML | | 15 01 09.3 | |
| | comp=E,50nm,1.0s | | | | | | |
| PV10 | | | | IAML | | 15 01 21.4 | |
| | comp=N,56nm,1.1s | | | | | | |
| MSTX | **Muleshoe** | **3.60** | **150** | Pn | Pn | 15 00 16.3 | +1.7 |
| MSTX | | | | IAmb_Lg | | 15 01 24.2 | |
| | comp=Z,76nm,0.9s | | | | | | |
| MSTX | **Muleshoe** | **3.60** | **150** | Sb | Sb | 15 01 07.0 | +0.7 |
| | baz=332 | | | | | | |
| PHWY | **Pilot Hill** | **4.21** | **355** | | Pn | 15 00 23.5 | +0.2 |
| PHWY | | | | IAML | | 15 01 41.3 | |
| | comp=Z,34nm,1.1s | | | | | | |
| PHWY | | | | IAML | | 15 01 53.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| W18A | **Petrified Fore** | **4.34** | **244** | | Pn | 15 00 26.7 | +1.8 |
| W18A | | | | IAML | | 15 01 39.5 | |
| | comp=E,46nm,0.9s | | | | | | |
| W18A | | | | IAML | | 15 01 41.3 | |
| | comp=N,47nm,0.7s | | | | | | |
| W18A | **Petrified Fore** | **4.34** | **244** | Sb | Sb | 15 01 28.9 | +1.3 |
| | baz=61 | | | | | | |
| OGNE | **Ogallala** | **4.47** | **30** | Pn | Pn | 15 00

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KAN06 | **Argonia West S** | **5.68** | **86** | IAmb_Lg | | 15 02 17.3 | |
| | comp=Z,26nm,1.1s | | | | | | |
| MTPU | **Mount Pierson** | **5.81** | **281** | Pn | **Pn** | **15 00 48.2** | **+3.0** |
| U15A | **North Rim** | **5.92** | **266** | Pn | **Pn** | **15 00 49.1** | **+2.5** |
| BCOK | **Bluff Creek, N** | **6.11** | **101** | Pn | **Pn** | **15 00 50.1** | **+1.0** |
| OK029 | **Liberty Lake** | **6.19** | **100** | | **Pn** | **15 00 51.1** | **+0.9** |
| BLOK | **Blackwell** | **6.22** | **91** | IAmb_Lg | | 15 02 38.8 | |
| | comp=Z,32nm,1.0s | | | | | | |
| ABTX | **Abilene, Hawle** | **6.25** | **134** | | **Pn** | **15 00 54.4** | **+3.4** |
| ABTX | | | | IAmb_Lg | | 15 02 45.5 | |
| | comp=Z,44nm,1.0s | | | | | | |
| X34A | **Smith Ranch, M** | **6.31** | **111** | IAmb_Lg | | 15 02 50.0 | |
| | comp=Z,25nm,0.9s | | | | | | |
| CTU | **Camp Tracy** | **6.39** | **306** | Pn | **Pn** | **15 00 54.3** | **+1.2** |
| T35A | **Sooner Cattle** | **6.77** | **89** | IAmb_Lg | | 15 03 03.1 | |
| | comp=Z,22nm,1.0s | | | | | | |
| W35A | **Tecumseh** | **6.83** | **104** | IAmb_Lg | | 15 03 10.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| TUL1 | **Leonard** | **7.48** | **96** | IAmb_Lg | | 15 03 16.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| TX31 | **Lajitas Ar. Si** | **7.82** | **172** | Pn | **Pn** | **15 01 14.1** | **+1.5** |
| TX32 | **Lajitas Array** | **7.82** | **172** | Pn | **Pn** | **15 01 14.3** | **+1.6** |
| TXAR | **Lajitas Array** | **7.82** | **172** | Pn | **Pn** | **15 01 14.4** | **+1.8** |
| JCT | **Junction City** | **7.88** | **145** | IAmb_Lg | | 15 03 40.6 | |
| | comp=Z,30nm,0.7s | | | | | | |
| X37A | **Clayton** | **8.19** | **105** | IAmb_Lg | | 15 03 46.2 | |
| | comp=Z,29nm,0.9s | | | | | | |

**IDC 03 15:17:51.5±7.6, 18°.79S×177°.12W, h0km, mb3.2/2, mb1 3.5/2, mb1mx3.4/31, mbtmp3.2/2, Error ellipse: s-maj=324.6km s-min=120.3km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **45.68** | **260** | P | P | 15 26 14.4 | -0.1 |
| | 0.2nm,0.3s,baz=96,slow=6.9,SNR=7.9 | | | | | | |
| ASAR | **Alice Springs** | **45.74** | **255** | P | P | 15 26 14.7 | -0.3 |
| | 0.1nm,0.4s,baz=91,slow=8.2,SNR=11 | | | | | | |
| AKASG | **Malin Array Be** | **141.90** | **333** | PKP | PKPdf | 15 37 25.2 | 0.0 |
| | 0.2nm,0.4s,baz=43,slow=4.7,SNR=4.7 | | | | | | |

*NEIC **03** 15:24:07.1±2.7, 10°.36N±0°.04×93°.4E±0°.1, h96km±8km, mb4.4/23, Error ellipse: s-maj=16.6km s-min=6.2km az=92.0*

*IDC **03** 15:24:14.0±5.5, 10°.51N×93°.68E, h170km±51km, mb3.6/10, mb1 3.7/11, mb1mx3.2/42, mbtmp4.0/11, MS3.3/2, Ms1 3.3/2, ms1mx2.6/74, Error ellipse: s-maj=35.9km s-min=12.7km az=54.0*

**ISC 03 15:24:06.8±0.8, 10°.3N±0°.1×93°.4E±0°.1, h100km, n56, σ1§00/54, mb4.3/20, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PBA | **Port Blair** | **1.46** | **334** | | **Pn** | **15 24 32.0** | **-0.5** |
| CMAR | **Chiang Mai Arr** | **9.69** | **33** | P | **Pn** | **15 26 25.9** | **+2.6** |
| | 0.7nm,0.3s,baz=224,slow=15,SNR=31 | | | | | | |
| CMAR | **Chiang Mai Arr** | **9.69** | **33** | Pn | **Pn** | **15 26 25.3** | **+2.0** |
| CHTO | **Chiang Mai** | **9.98** | **32** | Pn | **Pn** | **15 26 26.1** | **-1.3** |
| SHL | **Shillong** | **15.21** | **355** | Pn | **Pn** | **15 27 35.8** | **-0.6** |
| SHL | | | | IAmb | IAmb | 15 27 37.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| ODAN | **Odare** | **17.39** | **342** | *eP* | **Pn** | **15 28 05.3** | **+1.9** |
| | comp=Z,7.5nm,0.3s | | | | | | |
| RAMN | **Ramite** | **17.73** | **340** | *eP* | **Pn** | **15 28 08.7** | **+1.2** |
| | comp=Z,10.0nm,0.3s | | | | | | |
| TAPN | **Taplejung** | **17.75** | **343** | *eP* | **Pn** | **15 28 07.8** | **-0.1** |
| JIRN | **Jiri** | **18.52** | **339** | *eP* | **Pn** | **15 28 16.8** | **-0.4** |
| | comp=Z,7.1nm,0.4s | | | | | | |
| PKI | **Pulchoki** | **18.72** | **337** | *eP* | **Pn** | **15 28 19.0** | **-0.5** |
| | comp=Z,8.1nm,0.4s | | | | | | |
| PKIN | **Phulchoki** | **18.73** | **337** | *eP* | **Pn** | **15 28 19.0** | **-0.6** |
| | comp=Z,4.9nm,0.3s | | | | | | |
| GUN | **Gumba** | **18.86** | **339** | *eP* | **P** | **15 28 20.1** | **+0.6** |
| | comp=Z,11nm,0.4s | | | | | | |
| DMN | **Daman** | **18.87** | **337** | *eP* | **Pn** | **15 28 20.5** | **-0.7** |
| KKN | **Kakani** | **18.97** | **337** | *eP* | **Pn** | **15 28 21.4** | **-0.9** |
| GKN | **Gorkha** | **19.41** | **336** | *eP* | **P** | **15 28 25.5** | **+0.2** |
| | comp=Z,23nm,0.4s | | | | | | |
| KOLN | **Koldanda** | **19.64** | **333** | *eP* | **P** | **15 28 28.5** | **+0.6** |
| DANN | **Dangsing** | **20.08** | **335** | *eP* | **P** | **15 28 32.9** | **+0.2** |
| | comp=Z,52nm,0.6s | | | | | | |
| PYUN | **Piuthan** | **20.20** | **332** | *eP* | **P** | **15 28 34.5** | **+0.6** |
| | comp=Z,9.1nm,0.3s | | | | | | |
| LEM | **Lembang** | **22.16** | **140** | LR | LR | 15 37 54.9 | |
| | comp=Z,84nm,22.0s,baz=331,slow=37 | | | | | | |
| MYLDM | **Lahad Datu** | **25.38** | **100** | P | **P** | **15 29 25.9** | **+0.9** |
| MYLDM | | | | IAmb | IAmb | 15 29 49.6 | |
| | comp=Z,20nm,1.3s | | | | | | |
| GOMU | **GeErMu** | **25.78** | **3** | P | **P** | **15 29 27.6** | **-1.2** |
| GOMU | | | | pP | pP | 15 29 50.5 | -0.3 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| KSH | **Kashi** | **32.95** | **335** | P | **P** | **15 30 30.8** | **-1.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=N,250nm,8.6s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,180nm,10.5s | | | | | | |
| TARG | **Taragay, Kyrgy** | **34.14** | **339** | P | **P** | **15 30 43.4** | **+0.6** |
| TARG | | | | IAmb | IAmb | 15 30 43.8 | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| GAR | **Garm** | **35.21** | **328** | P | **P** | **15 30 51.6** | **0.0** |
| CHGR | **Chuyangaron** | **35.58** | **326** | P | **P** | **15 30 54.3** | **-0.4** |
| BTK | **Batken** | **35.75** | **330** | P | **P** | **15 30 57.3** | **+1.2** |
| BTK | | | | IAmb | IAmb | 15 30 59.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| AAK | **Ala-Archa** | **36.17** | **336** | P | **P** | **15 30 59.6** | **-0.3** |
| | comp=Z,1.7nm,0.7s,baz=122,slow=4.4,SNR=6.5 | | | | | | |
| AAK | **Ala-Archa** | **36.17** | **336** | P | **P** | **15 30 59.9** | **+0.1** |
| AAK | | | | IAmb | IAmb | 15 31 01.1 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| JOW | **Kunigami** | **36.73** | **59** | LR | LR | 15 47 38.4 | |
| | comp=Z,45nm,18.0s,baz=300,slow=39 | | | | | | |
| MKAR | **Makanchi Array** | **37.54** | **347** | P | **P** | **15 31 10.2** | **-0.9** |
| | comp=Z,1.5nm,0.6s,baz=171,slow=8.2,SNR=20 | | | | | | |
| MKAR | **Makanchi Array** | **37.54** | **347** | P | **P** | **15 31 09.9** | **-1.3** |
| MK31 | **Makanchi Array** | **37.54** | **347** | P | **P** | **15 31 10.1** | **-1.1** |
| MAKZ | **Makanchi** | **37.62** | **347** | P | **P** | **15 31 10.9** | **-1.0** |
| MAKZ | | | | IAmb | IAmb | 15 31 11.3 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| KKAR | **Karatay Array** | **38.25** | **333** | P | **P** | **15 31 17.5** | **+0.3** |
| SONM | **Songino Array** | **38.95** | **14** | P | **P** | **15 31 22.6** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=212,slow=8.2,SNR=2.8 | | | | | | |
| GEYT | **Alibeck** | **41.90** | **317** | P | **P** | **15 31 49.0** | **+1.5** |
| | comp=Z,10nm,0.6s,baz=108,slow=12,SNR=11 | | | | | | |
| GEYT | **Alibeck** | **41.90** | **317** | P | **P** | **15 31 48.8** | **+1.3** |
| GYA0B | **ALIBECK ARRAY** | **41.90** | **317** | P | **P** | **15 31 48.3** | **+0.7** |
| KURBB | **Kurchatov Arra** | **41.99** | **346** | P | **P** | **15 31 46.7** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=168,slow=7.6,SNR=12 | | | | | | |
| KURK | **Kurchatov** | **42.06** | **346** | P | **P** | **15 31 47.5** | **-1.0** |
| ZALV | **Zalesovo Beam** | **44.03** | **353** | P | **P** | **15 32 03.8** | **-0.6** |
| | comp=Z,1.2nm,0.6s,baz=176,slow=9.8,SNR=7.6 | | | | | | |
| ZALV | **Zalesovo Beam** | **44.03** | **353** | P | **P** | **15 32 04.0** | **-0.4** |
| BRVK | **Borovoye** | **46.50** | **341** | P | **P** | **15 32 22.5** | **-1.3** |
| ABKAR | **Akbulak array** | **47.74** | **331** | P | **P** | **15 32 33.5** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 15 32 34.0 | |
| | comp=Z,4.9nm,1.3s | | | | | | |
| WB0 | **Warramunga Arr** | **50.24** | **127** | P | **P** | **15 32 52.5** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 15 33 10.0 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| WRA | **Warramunga Arr** | **50.29** | **127** | P | **P** | **15 32 52.8** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=307,slow=8.5,SNR=24 | | | | | | |
| WRA | **Warramunga Arr** | **50.29** | **127** | P | **P** | **15 32 52.4** | **-1.1** |
| WB2 | **Warramunga Arr** | **50.30** | **127** | P | **P** | **15 32 52.2** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 15 32 56.2 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| WR0 | **Warramunga Arr** | **50.46** | **127** | P | **P** | **15 32 54.5** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 15 32 55.9 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| AS31 | **Alice Springs** | **52.06** | **131** | P | **P** | **15 33 06.0** | **-0.7** |
| ASAR | **Alice Springs** | **52.06** | **131** | P | **P** | **15 33 05.8** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=304,slow=7.2,SNR=42 | | | | | | |
| ASAR | **Alice Springs** | **52.06** | **131** | P | **P** | **15 33 06.3** | **-0.4** |
| ARCES | **ARCESS Array B** | **72.72** | **340** | P | **P** | **15 35 22.6** | **-1.1** |
| | comp=Z,3.2nm,0.9s,baz=90,slow=6.3,SNR=3.6 | | | | | | |
| ARCES | **ARCESS Array B** | **72.72** | **340** | P | **P** | **15 35 23.1** | **-0.5** |
| ARCES | | | | IAmb | IAmb | 15 35 50.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| BOSA | **Boshof** | **76.29** | **237** | P | **P** | **15 35 46.2** | **+1.0** |
| | comp=Z,0.8nm,0.4s,baz=153,slow=2.3,SNR=1.5 | | | | | | |
| BOSA | **Boshof** | **76.29** | **237** | P | **P** | **15 35 46.1** | **+0.9** |
| BOSA | | | | IAmb | IAmb | 15 36 15.5 | |
| | comp=Z,12nm,1.4s | | | | | | |

*IDC **03** 15:32:28.5±2.3, 10°.38S×123°.35E, h0km, mb3.6/3, mb1 3.7/5, mb1mx3.3/30, mbtmp3.6/5, ML3.6/2, MS2.8/2, Ms1 2.8/2, ms1mx2.5/46, Error ellipse: s-maj=177.7km s-min=30.6km az=55.0*

*DJA **03** 15:32:33.7±0.5, 10°.5S×12°.4E±°, h10km, M3.9/8, mb4.3/2, MLv3.7/8*

**ISC 03 15:32:32.7±0.8, 10°.37S±0°.07×123°.69E±0°.05, h29km, n15, σ1§27/17, mb3.6/3, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BATI | **Baumata** | **0.16** | **349** | LR | LR | 15 32 57.9 | |
| | comp=Z,908nm,19.0s,baz=116,slow=83 | | | | | | |
| BATI | **Baumata** | **0.16** | **349** | P | **Pb** | **15 32 36.9** | **-1.5** |
| SOEI | **Soe** | **0.83** | **43** | P | **Pn** | **15 32 49.9** | **+1.4** |
| SOEI | | | | S | **Sn** | **15 33 01.7** | **+1.8** |
| MMRI | **Maumere** | **2.24** | **320** | P | **Pn** | **15 33 08.6** | **+0.7** |
| MMRI | | | | S | **Sn** | **15 33 34.8** | **+0.2** |
| BASI | **Baing, Sumba** | **3.07** | **272** | P | **Pn** | **15 33 20.5** | **+1.2** |
| BASI | | | | S | **Sn** | **15 33 56.9** | **+1.9** |
| WBSI | **Waikabubak, Su** | **4.30** | **279** | P | **Pn** | **15 33 37.1** | **+0.9** |
| BSSI | **Bau Bau, Buton** | **5.26** | **323** | P | **Pn** | **15 33 49.3** | **-0.1** |
| | 0.1nm31nn,0.7s | | | | | | |
| BKSI | **Bulukumba** | **6.13** | **325** | P | **Pn** | **15 34 01.7** | **+0.3** |
| KAPI | **Kappang** | **6.60** | **323** | LR | LR | 15 36 44.3 | |
| | comp=Z,82nm,18.7s,baz=332,slow=40 | | | | | | |
| FITZ | **Fitzroy Crossi** | **7.92** | **166** | LR | LR | 15 37 40.4 | |
| | comp=Z,61nm,18.6s,baz=310,slow=39 | | | | | | |
| WRA | **Warramunga Arr** | **14.00** | **134** | Pn | **Pn** | **15 35 50.2** | **+0.9** |
| | 0.3nm,0.3s,baz=306,slow=14,SNR=12 | | | | | | |
| WRA | | | | Sn | **Sn** | **15 38 22.6** | **-1.2** |
| | 0.3nm,0.3s,baz=310,slow=24,SNR=9.0 | | | | | | |
| ASAR | **Alice Springs** | **16.43** | **145** | Pn | **P** | **15 36 24.2** | **+0.4** |
| | 0.3nm,0.3s,baz=319,slow=12,SNR=22 | | | | | | |
| ASAR | | | | Sn | **Sn** | **15 39 20.5** | **-2.3** |
| | 0.1nm,0.3s,baz=316,slow=25,SNR=4.8 | | | | | | |
| SONM | **Songino Array** | **59.95** | **347** | P | **P** | **15 42 35.7** | **-0.6** |
| | 0.2nm,0.6s,baz=155,slow=7.9,SNR=1.8 | | | | | | |
| MKAR | **Makanchi Array** | **67.84** | **331** | P | **P** | **15 43 27.7** | **-0.5** |
| | 0.3nm,0.6s,baz=137,slow=7.7,SNR=4.9 | | | | | | |
| ZALV | **Zalesovo Beam** | **72.03** | **337** | P | **P** | **15 43 53.6** | **-0.1** |
| | 0.4nm,0.3s,baz=123,slow=5.3,SNR=1.9 | | | | | | |

*JMA **03** 15:35:57.5±0.2, 41°.93N×142°.34E, h66km±3km, M3.5 Broadband fault plane solution: P waves. NP1: ϕs200.00000°, δ20.00000°, λ80.00000°. NP2: ϕs31.00000°, δ70.00000°, λ94.00000°. Principal axes: T Plg65.0000°, Azm307.0000°; N Plg3.0000°, Azm210.0000°; P Plg25.0000°, Azm118.0000°;*

*NIED **03** 15:35:57.6, 41°.93N×142°.34E, h66km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr3.54; Mϑϑ-1.46; Mϕϕ-2.08; Mrϑ1.30; Mϑϕ-2.19; Mϕr3.23; Fault plane solution: Ms5.14000×10¹⁴ NP1:ϕs28.00000°, δ67.00000°, λ78.00000°. NP2:ϕs236.00000°, δ26.00000°, λ115.00000°.*

*IDC **03** 15:35:58.9±1.7, 42°.00N×142°.36E, h75km±13km, mb3.4/15, mb1 3.6/21, mb1mx3.5/37, mbtmp3.7/21 Error ellipse: s-maj=18.5km s-min=11.5km az=120.0*

*NEIC **03** 15:35:58.4±2.5, 41°.89N±0°.04×142°.29E±0°.04, h67km±2km, mb4.3/17, Error ellipse: s-maj=6.4km s-min=4.3km az=162.0*

**ISC 03 15:35:58.1±0.7, 41°.95N±0°.03×142°.33E±0°.03, h66km±6km, n88, σ1§02/99, mb4.1/24, 5C-9D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JNBK | **Urakawa-nobuka** | **0.46** | **44** | ⇑P | **Pn** | **15 36 09.1** | **-1.0** |
| JNBK | | | | *eS* | **Sn** | **15 36 18.1** | **-0.8** |
| JSHD | **Hidakashinhida** | **0.47** | **13** | ⇑P | **Pn** | **15 36 09.9** | **-0.4** |
| JSHD | | | | *eS* | **Sn** | **15 36 19.6** | **+0.4** |
| ERM | **Erimo** | **0.62** | **83** | | **Pn** | **15 36 11.6** | **-0.2** |
| ERM | | | | Sn | **Sn** | **15 36 21.8** | **-0.1** |
| JEM | **Erimo** | **0.62** | **83** | ⇑P | **Pn** | **15 36 11.6** | **-0.2** |
| JIAM | **Iburiatsuma** | **0.74** | **336** | ⇓P | **Pn** | **15 36 13.6** | **+0.5** |
| JIAM | | | | *eS* | **Sn** | **15 36 25.6** | **+1.4** |
| JBT2 | **Biratori 2** | **0.83** | **2** | ⇓P | **Pn** | **15 36 13.7** | **-0.6** |
| JBT2 | | | | *eS* | **Sn** | **15 36 26.0** | **-0.2** |
| JKB | **Kayabe** | **0.97** | **267** | ⇓P | **Pn** | **15 36 15.3** | **-0.6** |
| JKB | | | | *eS* | **Sn** | **15 36 28.5** | **-0.6** |
| JCH | **Churui** | **1.02** | **49** | ⇑P | **Pn** | **15 36 16.3** | **-0.3** |
| JNB | **Noboribetsu** | **1.09** | **299** | ⇓P | **Pn** | **15 36 16.6** | **-0.9** |
| JNB | | | | *eS* | **Sn** | **15 36 30.6** | **-1.3** |
| JEW | **Eniwo** | **1.10** | **324** | ⇓P | **Pn** | **15 36 17.7** | **0.0** |
| JEW | | | | *eS* | **Sn** | **15 36 32.1** | **-0.2** |
| JEW | **Eniwo** | **1.10** | **324** | Pn | **Pn** | **15 36 17.7** | **0.0** |
| JEW | | | | Sn | **Sn** | **15 36 31.7** | **-0.6** |
| JOT | **Ohata** | **1.11** | **240** | ⇓P | **Pn** | **15 36 17.3** | **-0.5** |
| JOT | | | | *eS* | **Sn** | **15 36 31.3** | **-1.1** |
| JFR | **Furan** | **1.23** | **9** | ⇓P | **Pn** | **15 36 18.8** | **-0.6** |
| JYM2 | **Yakumo 2** | **1.47** | **277** | P | **Pn** | **15 36 21.9** | **-0.5** |
| JOB | **Onbets** | **1.47** | **49** | P | **Pn** | **15 36 23.3** | **+0.8** |
| JISS | **Ishikarishitsu** | **1.49** | **334** | ⇓P | **Pn** | **15 36 22.6** | **-0.1** |
| JISS | | | | *eS* | **Sn** | **15 36 41.4** | **+0.1** |
| JSR | **Shiriuchi** | **1.49** | **254** | P | **Pn** | **15 36 22.7** | **0.0** |
| JSR | | | | *eS* | **Sn** | **15 36 41.4** | **+0.1** |
| JTM | **Tenmabayashi** | **1.50** | **220** | P | **Pn** | **15 36 22.9** | **+0.1** |
| JTM | **Tenmabayashi** | **1.50** | **220** | | **Pn** | **15 36 22.8** | **-0.1** |
| JTM | | | | Sn | **Sn** | **15 36 42.4** | **+0.9** |
| JAB | **Ashibetsu** | **1.56** | **357** | P | **Pn** | **15 36 24.3** | **+0.6** |
| JANG | **Nango** | **1.69** | **202** | ⇑P | **Pn** | **15 36 25.3** | **-0.1** |
| JANG | | | | *eS* | **Sn** | **15 36 45.8** | **-0.3** |
| JAR | **Ashorobuto** | **1.72** | **38** | P | **Pn** | **15 36 25.8** | **0.0** |
| JOMM | **Oshimamatsumae** | **1.79** | **257** | P | **Pn** | **15 36 26.4** | **-0.3** |
| JHR | **Hokuryu** | **1.85** | **346** | ⇓P | **Pn** | **15 36 28.2** | **+0.6** |
| JKA | **Kamikawa-asahi** | **2.18** | **5** | Pn | **Pn** | **15 36 32.3** | **+0.3** |
| ASAJ | **Asahikawa** | **2.18** | **5** | P | **Pn** | **15 36 32.5** | **+0.5** |
| | 18nm,0.3s,baz=211,slow=12,SNR=188 | | | | | | |
| ASAJ | | | | S | **Sn** | **15 36 58.1** | **+0.1** |
| | 13nm,0.3s,baz=337,slow=29,SNR=15 | | | | | | |
| JMM | **Marumori** | **4.24** | **197** | Pn | **Pn** | **15 36 59.3** | **-0.9** |
| JSD | **Sado** | **5.00** | **220** | Pn | **Pn** | **15 37 12.6** | **+2.1** |
| YSS | **Yuzh-Sakhalins** | **5.02** | **3** | Pn | **Pn** | **15 37 12.0** | **+1.3** |
| JYT | **Yasato** | **5.95** | **197** | Pn | **Pn** | **15 37 21.6** | **-1.9** |
| MJB9 | **Matsu-Tunnel** | **6.27** | **212** | Pn | **Pn** | **15 37 29.0** | **+1.0** |
| MAJO | **Matsushiro** | **6.27** | **212** | Pn | **Pn** | **15 37 29.5** | **+1.5** |
| MJAR | **Matsushiro Arr** | **6.27** | **212** | P | **Pn** | **15 37 29.6** | **+1.6** |
| | 0.1nm,0.3s,baz=32,slow=7.7,SNR=2.7 | | | | | | |
| MJAR | **Matsushiro Arr** | **6.27** | **212** | Pn | **Pn** | **15 37 30.2** | **+2.2** |
| USA0B | **Ussuriysk Arra** | **7.89** | **290** | Pn | **Pn** | **15 37 51.8** | **+1.6** |
| USRK | **Ussuriysk Ar.** | **7.89** | **290** | P | **Pn** | **15 37 52.4** | **+2.3** |
| | baz=99,slow=16,SNR=7.2 | | | | | | |
| KLR | **Kul'dur** | **10.38** | **318** | P | **Pn** | **15 38 26.2** | **+2.1** |
| | 0.1nm,0.3s,baz=121,slow=16,SNR=12 | | | | | | |
| KSRS | **Korea Array** | **11.96** | **253** | P | **Pn** | **15 38 48.4** | **+2.7** |
| | 0.3nm,0.3s,baz=68,slow=15,SNR=5.8 | | | | | | |
| PEA0B | **Petropavlovsk-** | **15.21** | **38** | Pn | **Pn** | **15 39 30.6** | **+1.8** |
| PEA0B | | | | IAmb | IAmb | 15 39 57.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| PETK | **Petropavlovsk-** | **15.21** | **38** | P | **Pn** | **15 39 27.2** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=244,slow=12,SNR=2.1 | | | | | | |
| PETK | **Petropavlovsk-** | **15.21** | **38** | Pn | **Pn** | **15 39 30.7** | **+1.9** |
| XLT | **XiLinHaoTe** | **19.30** | **285** | *eP* | **P** | **15 40 14.4** | **-3.2** |
| XLT | | | | pP | pP | 15 40 28.1 | -3.1 |
| XLT | | | | sP | sP | 15 40 33.5 | -6.0 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,110nm,4.3s | | | | | | |
| SEY | **Seymchan** | **21.84** | **12** | P | **P** | **15 40 42.3** | **-2.4** |
| | comp=Z,0.3nm,0.3s,baz=225,slow=4.3,SNR=2.4 | | | | | | |
| HHC | **Hu-ho-hao-te** | **23.05** | **278** | *eP* | **P** | **15 40 58.5** | **+0.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,6.3s | | | | | | |
| SONM | **Songino Array** | **25.96** | **295** | P | **P** | **15 41 24.8** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=77,slow=8.9,SNR=8.3 | | | | | | |
| SONM | **Songino Array** | **25.96** | **295** | P | **P** | **15 41 25.1** | **+0.7** |
| H11N2 | **WAKE ISLAND Hy** | **30.39** | **129** | T | T | 16 14 41.3 | |
| | baz=322,slow=75,SNR=29 | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **30.40** | **129** | T | T | 16 14 42.4 | |
| | baz=322,slow=75,SNR=36 | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **30.41** | **129** | T | T | 16 14 42.8 | |
| | baz=322,slow=75,SNR=15 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **31.25** | **131** | T | T | 16 15 45.9 | |
| | baz=323,slow=76,SNR=25 | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **31.25** | **131** | T | T | 16 15 42.7 | |
| | baz=323,slow=76,SNR=16 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **31.27** | **131** | T | T | 16 15 45.3 | |
| | baz=323,slow=76,SNR=20 | | | | | | |
| PZH | **PanZhiHua** | **36.56** | **258** | P | **P** | **15 42 58.4** | **+0.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| ZAA0 | **Zalesovo Array** | **39.28** | **308** | P | **P** | **15 43 19.5** | **-0.7** |
| ZAA0 | | | | IAmb | IAmb | 15 43 20.7 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **39.28** | **308** | P | **P** | **15 43 19.0** | **-1.2** |
| | comp=Z,0.7nm,0.4s,baz=89,slow=8.5,SNR=7.5 | | | | | | |
| ZALV | | | | PcP | **PcP** | **15 45 27.3** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=117,slow=5.0,SNR=2.1 | | | | | | |
| ZALV | **Zalesovo Beam** | **39.28** | **308** | P | **P** | **15 43 18.8** | **-1.3** |
| WMQ | **Urumqi** | **39.46** | **292** | *eP* | **P** | **15 43 23.0** | **+1.1** |
| MK31 | **Makanchi Array** | **42.28** | **298** | P | **P** | **15 43 44.0** | **-0.9** |
| MKAR | **Makanchi Array** | **42.28** | **298** | P | **P** | **15 43 44.6** | **-0.3** |
| | comp=Z,1.3nm,0.7s,baz=86,slow=10,SNR=13 | | | | | | |
| MKAR | | | | PcP | **PcP** | **15 45 37.1** | **-0.5** |
| | comp=Z,0.1nm,0.4s,baz=74,slow=3.7,SNR=2.7 | | | | | | |
| MKAR | **Makanchi Array** | **42.28** | **298** | P | **P** | **15 43 43.7** | **-1.2** |
| MAKZ | **Makanchi** | **42.48** | **298** | P | **P** | **15 43 46.9** | **+0.3** |
| KURK | **Kurchatov** | **43.60** | **304** | P | **P** | **15 43 55.1** | **-0.4** |
| KURK | | | | IAmb | IAmb | 15 43 56.1 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| ILAR | **Eielson Array** | **45.02** | **35** | P | **P** | **15 44 06.6** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=257,slow=5.2,SNR=5.0 | | | | | | |
| BCAR | **Beaver Creek A** | **47.49** | **37** | P | **P** | **15 44 27.5** | **+1.3** |
| BRVK | **Borovoye** | **47.95** | **309** | P | **P** | **15 44 29.1** | **-0.7** |
| BRVK | | | | IAmb | IAmb | 15 44 41.9 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| BOOM | **Boomskoye usch** | **47.99** | **294** | P | **P** | **15 44 30.9** | **+0.5** |
| BOOM | | | | IAmb | IAmb | 15 44 31.6 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| AAK | **Ala-Archa** | **48.92** | **295** | P | **P** | **15 44 37.4** | **-0.1** |
| AAK | | | | IAmb | IAmb | 15 44 37.8 | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| INK | **Inuvik** | **49.72** | **29** | P | **P** | **15 44 43.0** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=279,slow=4.0,SNR=2.0 | | | | | | |
| INK | **Inuvik** | **49.72** | **29** | P | **P** | **15 44 42.9** | **-0.2** |
| INK | | | | IAmb | IAmb | 15 45 11.5 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| HYT | **Haines Junctio** | **49.99** | **39** | P | **P** | **15 44 46.3** | **+0.9** |
| KKAR | **Karatay Array** | **51.39** | **297** | P | **P** | **15 44 55.9** | **-0.2** |
| CHGR | **Chuyangaron** | **54.31** | **293** | P | **P** | **15 45 17.4** | **-0.3** |
| ABKAR | **Akbulak array** | **55.40** | **308** | P | **P** | **15 45 25.3** | **0.0** |
| YKA | **Yellowknife Ar** | **59.24** | **32** | P | **P** | **15 45 52.2** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=303,slow=6.0,SNR=8.3 | | | | | | |
| ARCES | **ARCESS Array B** | **59.67** | **339** | P | **P** | **15 45 54.7** | **-0.3** |
| | comp=Z,2.4nm,0.9s,baz=61,slow=7.3,SNR=2.0 | | | | | | |
| WR0 | **Warramunga Arr** | **62.01** | **188** | P | **P** | **15 46 10.8** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 15 46 21.7 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| WRA | **Warramunga Arr** | **62.02** | **189** | P | **P** | **15 46 10.6** | **-0.8** |
| | comp=Z,0.4nm,0.9s,baz=7.2,slow=6.9,SNR=5.3 | | | | | | |
| WRA | **Warramunga Arr** | **62.02** | **189** | P | **P** | **15 46 10.9** | **-0.5** |
| FIA1 | **FINESS Array S** | **64.82** | **332** | P | **P** | **15 46 29.1** | **-0.4** |
| FINES | **FINESS Array B** | **64.82** | **332** | P | **P** | **15 46 28.9** | **-0.6** |
| | comp=Z,1.6nm,0.4s,baz=56,slow=6.4,SNR=26 | | | | | | |
| FINES | **FINESS Array B** | **64.82** | **332** | P | **P** | **15 46 28.6** | **-0.9** |
| ASAR | **Alice Springs** | **65.75** | **188** | P | **P** | **15 46 35.9** | **-0.1** |
| | comp=Z,0.3nm,0.8s,baz=3.7,slow=7.2,SNR=4.5 | | | | | | |
| KBZ | **Khabaz** | **68.28** | **310** | P | **P** | **15 46 52.5** | **+0.6** |
| | comp=Z,1.9nm,1.0s,baz=11,slow=5.2,SNR=2.2 | | | | | | |
| FCC | **Fort Churchill** | **69.31** | **28** | P | **P** | **15 46 57.7** | **-0.3** |
| FCC | | | | IAmb | IAmb | 15 47 10.5 | |
| | comp=Z,5.1nm,1.5s | | | | | | |
| NOA | **NORSAR Array B** | **69.94** | **337** | P | **P** | **15 47 00.6** | **-1.3** |
| | comp=Z,1.0nm,0.8s,baz=43,slow=2.5,SNR=3.2 | | | | | | |
| AKASG | **Malin Array Be** | **70.86** | **322** | P | **P** | **15 47 07.0** | **-0.6** |
| | comp=Z,1.2nm,0.5s,baz=46,slow=6.0,SNR=9.4 | | | | | | |
| PDAR | **Pinedale Array** | **73.76** | **47** | P | **P** | **15 47 25.8** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=324,slow=2.0,SNR=

*CNRM **03** 15:47:47.6, 35°.64N×3°.80W, h11km, ml2.1*
*INMG **03** 15:47:48.9±1.4, 35°.41N×3°.85W, h3km±4km, ML2.1, Error ellipse: s-maj=7.0km s-min=2.7km az=22.0*
*SFS **03** 15:47:49.0, 35°.40N×3°.80W, ML2.5, ALBORAN SUR*
**ISC 03 15:47:49.4±1.2, 35°.52N±0°.03×3°.77W±0°.03, h19km±3km, n17, σ1§70/31, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **205** | P | | **Pg** | **15 47 56.4** | **0.0** |
| PALE | | | | S | | **Sb** | **15 48 01.7** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.70** | **115** | P | | **Pg** | **15 48 02.3** | **-0.9** |
| GOG | | | | S | | **Sn** | **15 48 14.7** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.15** | **107** | P | | **Pn** | **15 48 09.5** | **-0.9** |
| CHAS | | | | S | | **Sb** | **15 48 23.6** | **-1.5** |
| **TAF** | **Taforalt** | **1.31** | **122** | P | | **Pb** | **15 48 13.4** | **-0.1** |
| TAF | | | | S | | **Sg** | **15 48 32.3** | **+0.3** |
| **SMIR** | **Smir Dam** | **1.32** | **278** | P | | **Pn** | **15 48 09.5** | **-3.4** |
| SMIR | | | | S | | **Sn** | **15 48 29.7** | **-0.3** |
| **CHEFC** | **Chefchaouen** | **1.35** | **253** | P | | **Pb** | **15 48 14.0** | **0.0** |
| CHEFC | | | | S | | **Sg** | **15 48 32.9** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.35** | **337** | P | | **Pg** | **15 48 15.8** | **+0.4** |
| EMAL | | | | S | | **Sb** | **15 48 31.8** | **+0.8** |
| **CEU** | **Ceuta** | **1.36** | **287** | P | | **Pn** | **15 48 11.2** | **-2.1** |
| CEU | | | | S | | **Sn** | **15 48 27.1** | **-3.7** |
| **JBK** | **JBK** | **1.54** | **140** | P | | **Pn** | **15 48 16.0** | **0.0** |
| JBK | | | | S | | **Sb** | **15 48 37.5** | **+0.9** |
| **MD31** | **MD31** | **2.77** | **197** | P | | **Pn** | **15 48 31.3** | **-1.5** |
| MD31 | | | | S | | **Sb** | **15 49 10.7** | **-1.1** |
| **MDT** | **Midelt** | **2.78** | **195** | P | | **Pn** | **15 48 35.5** | **+2.5** |
| MDT | | | | S | | **Sn** | **15 49 09.4** | **+3.2** |
| **ZHG** | **ZHG** | **3.15** | **230** | P | | **Pn** | **15 48 38.1** | **+0.2** |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | *e*Pn | | **Pn** | **15 48 47.5** | **+2.0** |
| PVAQ | | | | *e*Sn | | **Sn** | **15 49 28.4** | **-0.1** |
| PVAQ | | | | A | | A | 15 49 35.0 | |
| | 3.7nm,0.2s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | P | | **Pn** | **15 48 45.3** | **-0.2** |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | | **Pn** | **15 48 53.6** | **+3.5** |
| PCVE | | | | *e*Sn | | **Sn** | **15 49 37.5** | **+0.7** |
| **PFVI** | **Vila Bisbo** | **4.39** | **293** | *e*Sn | | **Sn** | **15 49 45.0** | **-0.6** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **306** | *e*Pn | | **Pn** | **15 49 00.3** | **+2.2** |
| PNCL | | | | *e*Sn | | **Sn** | **15 49 50.6** | **-0.5** |
| PNCL | | | | A | | A | 15 49 52.0 | |
| | 2.4nm,0.7s | | | | | | | |

*INMG **03** 15:53:39.6±1.6, 35°.43N×3°.82W, h3km±6km, ML2.5, Error ellipse: s-maj=4.5km s-min=4.4km az=136.0*
*CNRM **03** 15:53:39.8, 35°.54N×3°.77W, h16km, ml2.7*
*SFS **03** 15:53:39.0, 35°.40N×3°.80W, ML2.7, ALBORAN SUR*
**ISC 03 15:53:39.5±1.2, 35°.57N±0°.03×3°.73W±0°.03, h14km±9km, n30, σ1§53/51, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.39** | **206** | P | | **Pn** | **15 53 52.1** | **+1.4** |
| **PALE** | **Palemas** | **0.39** | **206** | P | | **Pg** | **15 53 46.9** | **-0.5** |
| PALE | | | | S | | **Pg** | **15 53 52.1** | **+1.4** |
| **GOG** | **Mont Gurugu** | **0.69** | **120** | P | | **Pg** | **15 53 53.1** | **0.0** |
| GOG | | | | S | | **Sb** | **15 54 03.0** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.69** | **120** | P | | **Pg** | **15 53 52.8** | **-0.3** |
| GOG | | | | S | | **Sb** | **15 54 02.9** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.13** | **109** | P | | **Pb** | **15 53 59.6** | **-1.2** |
| CHAS | | | | S | | **Sb** | **15 54 14.0** | **-1.4** |
| **TAF** | **Taforalt** | **1.32** | **125** | P | | **Pb** | **15 54 04.0** | **-0.1** |
| **TAF** | **Taforalt** | **1.32** | **125** | P | | **Pn** | **15 54 02.7** | **-0.8** |
| TAF | | | | S | | **Sg** | **15 54 22.1** | **+0.1** |
| **EMAL** | **Malaga-Limoner** | **1.32** | **335** | P | | **Pn** | **15 54 03.6** | **+0.1** |
| EMAL | | | | S | | **Sb** | **15 54 20.3** | **-0.4** |
| **SMIR** | **Smir Dam** | **1.35** | **275** | P | | **Pn** | **15 54 01.3** | **-2.6** |
| SMIR | | | | S | | **Sn** | **15 54 19.7** | **-1.9** |
| **CEU** | **Ceuta** | **1.38** | **284** | P | | **Pn** | **15 54 01.1** | **-3.2** |
| CEU | | | | S | | **Sn** | **15 54 17.3** | **-4.9** |
| **CHEFC** | **Chefchaouen** | **1.39** | **251** | P | | **Pg** | **15 54 07.0** | **+0.6** |
| **CHEFC** | **Chefchaouen** | **1.39** | **251** | P | | **Pn** | **15 54 05.0** | **+0.4** |
| CHEFC | | | | S | | **Sg** | **15 54 24.7** | **+0.2** |
| **JBK** | **JBK** | **1.56** | **142** | P | | **Pb** | **15 54 08.0** | **-0.3** |
| **JBK** | **JBK** | **1.56** | **142** | P | | **Pn** | **15 54 05.8** | **-1.1** |
| JBK | | | | S | | **Sn** | **15 54 27.5** | **+0.5** |
| **MD31** | **MD31** | **2.83** | **198** | P | | **Pn** | **15 54 25.7** | **+1.4** |
| MD31 | | | | S | | **Sn** | **15 54 58.8** | **+0.6** |
| **MDT** | **Midelt** | **2.84** | **195** | P | | **Pn** | **15 54 25.6** | **+1.1** |
| MDT | | | | S | | **Sn** | **15 54 59.2** | **+0.6** |
| **ZHG** | **ZHG** | **3.20** | **229** | P | | **Pn** | **15 54 31.7** | **+2.2** |
| ZHG | | | | S | | **Sn** | **15 55 07.1** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.70** | **301** | *e*Pn | | **Pn** | **15 54 37.0** | **+0.8** |
| PVAQ | | | | *e*Sn | | **Sn** | **15 55 18.7** | **-0.8** |
| PVAQ | | | | A | | A | 15 55 25.7 | |
| | 6.7nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **301** | P | | **Pn** | **15 54 36.6** | **+0.4** |
| PVAQ | | | | S | | **Sn** | **15 55 20.0** | **+0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.78** | **297** | *e*Pn | | **Pn** | **15 54 37.8** | **+0.5** |
| PBDV | | | | *e*Sn | | **Sn** | **15 55 21.2** | **-0.4** |
| PBDV | | | | A | | A | 15 55 30.1 | |
| | 7.5nm,0.4s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **302** | *e*Pn | | **Pn** | **15 54 42.0** | **+1.2** |
| PCVE | | | | *e*Sn | | **Sn** | **15 55 27.0** | **-0.8** |
| PCVE | | | | A | | A | 15 55 32.7 | |
| | 3.3nm,0.4s | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **303** | *e*Pn | | **Pn** | **15 54 45.2** | **+1.3** |
| MESJ | | | | *e*Sn | | **Sn** | **15 55 33.8** | **+0.4** |
| MESJ | | | | A | | A | 15 55 39.2 | |
| | 6.6nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **292** | *e*Sn | | **Sn** | **15 55 36.1** | **-0.7** |
| **PFVI** | **Vila Bisbo** | **4.40** | **292** | P | | **Pn** | **15 54 47.2** | **+1.4** |
| PFVI | | | | S | | **Sn** | **15 55 36.7** | **-0.2** |
| **PESTR** | **Estremoz** | **4.51** | **318** | P | | **Pn** | **15 54 48.6** | **+1.2** |
| PESTR | | | | S | | **Sn** | **15 55 40.4** | **+0.8** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **305** | *e*Pn | | **Pn** | **15 54 49.6** | **+0.9** |
| PNCL | | | | *e*Sn | | **Sn** | **15 55 40.9** | **-1.1** |
| PNCL | | | | A | | A | 15 55 47.2 | |
| | 3.5nm,0.5s | | | | | | | |
| **PMRV** | **Marv??o** | **4.83** | **324** | *e*Pn | | **Pn** | **15 54 54.8** | **+3.0** |
| **PMTG** | **Montargil** | **5.00** | **316** | *e*Sn | | **Sn** | **15 55 51.1** | **-0.6** |
| **PCBR** | **Castelo Branco** | **5.20** | **326** | *e*Pn | | **Pn** | **15 54 59.6** | **+2.8** |
| **MVO** | **Moncorvo** | **6.16** | **336** | *e*Pn | | **Pn** | **15 55 14.1** | **+4.0** |

*IDC **03** 15:57:37.3±1.6, 32°.68N×91°.83E, h0km, mb3.4/5, mb1 3.6/8, mb1mx3.4/59, mbtmp3.4/8, ML3.1/3, MS3.7/1, Ms1 3.7/1, ms1mx2.6/66, Error ellipse: s-maj=67.6km s-min=19.9km az=70.0*
**ISC 03 15:57:43.2±0.8, 32°.81N±0°.07×91°.7E±0°.1, h35km, n19, σ2§50/19, mb3.7/4, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LSA** | **Lhasa** | **3.13** | **189** | P | | **Pn** | **15 58 29.7** | **-0.8** |
| LSA | | | | S | | **Sn** | **15 59 09.5** | **+2.6** |
| LSA | | | | LR | | LR | | |
| | comp=N,230nm,4.8s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=E,170nm,3.9s | | | | | | | |
| **GOMU** | **GeErMu** | **4.25** | **36** | P | | **Pn** | **15 58 49.1** | **+3.3** |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,96nm,5.8s | | | | | | | |
| **JIRN** | **Jiri** | **7.00** | **224** | *e*P | | **Pn** | **15 59 27.0** | **+3.4** |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **GUN** | **Gumba** | **7.00** | **227** | *e*P | | **Pn** | **15 59 28.3** | **+4.7** |
| **PKI** | **Pulchoki** | **7.54** | **228** | *e*P | | **Pn** | **15 59 32.4** | **+1.5** |
| | comp=Z,4.6nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **7.54** | **228** | *e*P | | **Pn** | **15 59 32.2** | **+1.3** |
| | comp=Z,8.5nm,0.4s | | | | | | | |
| **DANN** | **Dangsing** | **8.15** | **239** | *e*P | | **Pn** | **15 59 39.2** | **-0.2** |
| | comp=Z,5.2nm,0.5s | | | | | | | |
| **KOLN** | **Koldanda** | **8.61** | **236** | *e*P | | **Pn** | **15 59 43.3** | **-2.2** |
| **PYUN** | **Piuthan** | **8.86** | **240** | *e*P | | **Pn** | **15 59 45.4** | **-3.5** |
| | comp=Z,4.2nm,0.3s | | | | | | | |
| **WMQ** | **Urumqi** | **11.44** | **345** | *e*P | | **Pn** | **16 00 26.6** | **+2.6** |
| WMQ | | | | smax | | smax | | |
| | comp=N,11nm,0.5s | | | | | | | |
| WMQ | | | | smax | | smax | | |
| | comp=E,10.0nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **15.70** | **154** | Pn | | **Pn** | **16 01 18.3** | **-3.5** |
| | comp=E,0.1nm,0.3s,baz=330,slow=12,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **15.71** | **336** | Pn | | **Pn** | **16 01 21.4** | **-0.5** |
| | comp=E,0.0nm,0.3s,baz=140,slow=13,SNR=2.4 | | | | | | | |
| **SONM** | **Songino Array** | **18.68** | **32** | P | | **P** | **16 01 58.4** | **-0.1** |
| | comp=E,0.1nm,0.3s,baz=215,slow=15,SNR=5.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.28** | **335** | P | | **P** | **16 02 15.7** | **+0.1** |
| | comp=E,0.3nm,0.6s,baz=143,slow=11,SNR=2.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.70** | **349** | P | | **P** | **16 02 31.1** | **+0.2** |
| | comp=E,1.5nm,0.6s,baz=171,slow=10,SNR=9.2 | | | | | | | |
| **DAV** | **Davao City (W)** | **40.55** | **122** | LR | | LR | 16 23 30.9 | |
| | comp=E,96nm,18.7s,baz=329,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **66.42** | **136** | P | | **P** | **16 08 26.4** | **-2.6** |
| | comp=E,0.8nm,0.9s,baz=332,slow=6.3,SNR=3.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **69.10** | **139** | P | | **P** | **16 08 45.0** | **-0.8** |
| | comp=E,0.6nm,0.6s,baz=322,slow=6.8,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.60** | **23** | P | | **P** | **16 09 06.2** | **-0.4** |
| | comp=E,0.5nm,0.9s,baz=283,slow=4.9,SNR=5.1 | | | | | | | |

*BJI **03** 16:05:08.9±0.0, 5°.97N×125°.57E, h69km, mb4.2/37, mB4.8/21, Ms4.3/5, Ms7 4.0/5*
*MAN **03** 16:05:10.9, 6°.28N×125°.44E, h51km, mb5.5, ML4.4, MS4.7*
*MAN INTENSITY III - MALITA, DAVAO OCCIDENTAL; ALABEL, SARANGANI; INTENSITY II - GENERAL SANTOS CITY.*
*IDC **03** 16:05:10.3±0.5, 6°.25N×125°.37E, h62km±4km, mb3.9/29, mb1 4.0/32, mb1mx3.9/59, mbtmp4.2/32, MS3.3/14, Ms1 3.3/14, ms1mx3.0/80, Error ellipse: s-maj=12.4km s-min=7.2km az=81.0*
*DJA **03** 16:05:11.7±0.4, 6°.N±4°×12°.5E±°, h41km±5km, M4.7/29, mB5.2/12, mb4.9/29, MLv5.0/11, Mw(mB)4.5/12*
*NEIC **03** 16:05:12.1±2.4, 6°.35N±0°.02×125°.55E±0°.09, h67km±6km, mb4.6/50, Error ellipse: s-maj=12.5km s-min=1.8km az=100.0*
**ISC 03 16:05:10.8±0.5, 6°.30N±0°.03×125°.49E±0°.04, h60km±4km, n192, σ1§47/201, mb4.4/65, MS3.1/11, 8C-6D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DDMP** | **Don Marcelino,** | **0.29** | **130** | *e*P | | **Pn** | **16 05 21.1** | **+0.2** |
| DDMP | | | | *e*S | | **Sn** | **16 05 29.7** | **+1.5** |
| **GSPH** | **General Santos** | **0.57** | **249** | *e*P | | **Pn** | **16 05 22.4** | **-1.3** |
| GSPH | | | | *i* S | | **Sn** | **16 05 32.0** | **-1.1** |
| **DAV** | **Davao City (W)** | **0.78** | **7** | P | | **Pn** | **16 05 27.1** | **+1.0** |
| | 640nm,0.3s,baz=149,slow=1.8,SNR=94 | | | | | | | |
| DAV | | | | S | | **Sn** | **16 05 40.1** | **+3.0** |
| | 1µm,0.3s,baz=278,slow=20,SNR=8.1 | | | | | | | |
| **DAV** | **Davao City (W)** | **0.78** | **7** | | | **Pn** | **16 05 27.0** | **+1.0** |
| **DAV** | **Davao City (W)** | **0.78** | **7** | P | | **Pn** | **16 05 27.6** | **+1.6** |
| **KCP** | **Kidapawan** | **0.81** | **331** | *i*P | | **Pn** | **16 05 26.9** | **+0.4** |
| KCP | | | | *i* S | | **Sn** | **16 05 39.7** | **+1.7** |
| **MATI** | **Mati** | **1.00** | **50** | *e*P | | **Pn** | **16 05 28.3** | **-0.7** |
| MATI | | | | *e*S | | **Sn** | **16 05 41.1** | **-1.2** |
| **CTBH** | **Cotabato--PC H** | **1.54** | **307** | *e*P | | **Pn** | **16 05 36.1** | **+0.1** |
| CTBH | | | | *i* S | | **Sn** | **16 05 55.1** | **+0.1** |
| **BIPH** | **Bislig** | **2.07** | **25** | *i*P | | **Pn** | **16 05 47.8** | **+4.5** |
| BIPH | | | | *i* S | | **Sn** | **16 06 11.0** | **+3.1** |
| **SGSI** | **Sangihe** | **2.59** | **179** | P | | **Pn** | **16 05 50.8** | **+0.4** |
| **PAGZ** | **Pagadian** | **2.60** | **307** | *i*P | | **Pn** | **16 05 51.2** | **+0.8** |
| PAGZ | | | | *i* S | | **Sn** | **16 06 22.2** | **+1.4** |
| **BUTP** | **Butuan** | **2.66** | **3** | *e*P | | **Pn** | **16 05 53.3** | **+2.0** |
| BUTP | | | | *e*S | | Sn | 16 06 32.0 | +10 |
| **ZCP** | **Zamboanga City** | **3.45** | **281** | *i*P | | **Pn** | **16 06 02.9** | **+0.8** |
| ZCP | | | | *i* S | | **Sn** | **16 06 42.4** | **+0.7** |
| **SCPH** | **Surigao** | **3.46** | **0** | *e*P | | **Pn** | **16 06 03.6** | **+1.2** |
| **GLSP** | **General Luna,** | **3.52** | **10** | *i*P | | **Pn** | **16 06 04.4** | **+1.2** |
| GLSP | | | | *e*S | | **Sn** | **16 06 46.0** | **+2.3** |
| **TBP** | **Tagbilaran** | **3.74** | **335** | *e*P | | **Pn** | **16 06 06.5** | **+0.4** |
| **SNPH** | **Sibulan** | **3.76** | **324** | *e*P | | **Pn** | **16 06 08.4** | **+2.0** |
| **LLP** | **Lapu-Lapu** | **4.27** | **339** | *e*P | | **Pn** | **16 06 16.0** | **+2.6** |
| LLP | | | | *e*S | | Sn | 16 07 12.9 | +11 |
| **CNOP** | **Candoni, Negro** | **4.50** | **321** | *e*P | | **Pn** | **16 06 18.8** | **+2.3** |
| CNOP | | | | *e*S | | Sn | 16 07 20.6 | +13 |
| **TNTI** | **Ternate** | **5.80** | **161** | P | | **Pn** | **16 06 35.3** | **+1.0** |
| | 0.3nm968nm81nm,1.0s | | | | | | | |
| **TNTI** | **Ternate** | **5.80** | **161** | Pn | | **Pn** | **16 06 35.0** | **+0.7** |
| **KMSI** | **Cibinong** | **5.88** | **195** | P | | **Pn** | **16 06 37.6** | **+2.2** |
| | 1.1nm3µm263nm,0.7s | | | | | | | |
| **RCP** | **Roxas** | **5.89** | **333** | *e*P | | **Pn** | **16 06 38.0** | **+2.5** |
| **GTOI** | **Gorontalo** | **6.14** | **204** | P | | **Pn** | **16 06 39.1** | **+0.1** |
| | 0.8nm3µm164nm,0.6s | | | | | | | |
| **MRSI** | **Marisa** | **6.78** | **212** | P | | **Pn** | **16 06 49.2** | **+1.5** |
| | 4.1nm5µm305nm,0.6s | | | | | | | |
| **TOLI2** | **Tolitoli** | **6.97** | **223** | Pn | | **Pn** | **16 06 49.0** | **-1.3** |
| **TOLI2** | **Tolitoli** | **6.97** | **223** | P | | **Pn** | **16 06 49.3** | **-1.0** |
| **MYLDM** | **Lahad Datu** | **7.04** | **261** | Pn | | **Pn** | **16 06 54.0** | **+2.7** |
| **LBMI** | **Labuha** | **7.17** | **164** | P | | **Pn** | **16 06 54.2** | **+1.0** |
| | 0.2nm799nm63nm,0.7s | | | | | | | |
| **APSI** | **Ampana** | **8.12** | **208** | P | | **Pn** | **16 07 09.0** | **+2.9** |
| | 2µm112nm,0.6s | | | | | | | |
| **MPSI** | **Mapaga** | **8.13** | **224** | P | | **Pn** | **16 07 06.5** | **+0.2** |
| | 612nm16nm,0.6s | | | | | | | |
| **SANI** | **Sanana** | **8.30** | **177** | P | | **Pn** | **16 07 06.6** | **-2.1** |
| **SANI** | **Sanana** | **8.30** | **177** | P | | **Pn** | **16 07 07.1** | **-1.6** |
| **LQP** | **Lukban** | **8.68** | **334** | *e*P | | Pn | 16 07 02.5 | -11 |
| **I39PW** | **PALAU INFRASON** | **9.08** | **82** | *i* | | | 17 07 20.0 | |
| | baz=263,slow=302,SNR=0.9 | | | | | | | |
| **SWI** | **Sorong** | **9.15** | **141** | P | | **Pn** | **16 07 22.4** | **+2.1** |
| | 39nm,1.0s | | | | | | | |
| **SIJI** | **Sorong** | **9.16** | **141** | P | | **Pn** | **16 07 21.2** | **+0.8** |
| | 2.5nm,0.3s,baz=334,slow=7.5,SNR=10 | | | | | | | |
| SIJI | | | | S | | **Sn** | **16 09 03.3** | **+1.2** |
| | 0.7nm,0.3s,baz=342,slow=20,SNR=1.5 | | | | | | | |
| SIJI | | | | LR | | LR | 16 11 22.5 | |
| | comp=Z,70nm,18.6s,baz=49,slow=40 | | | | | | | |
| **AAI** | **Ambon** | **10.28** | **165** | P | | **Pn** | **16 07 36.0** | **+0.3** |
| | 1µm53nm,1.1s | | | | | | | |
| **FAKI** | **Fak Fak** | **11.38** | **143** | P | | **Pn** | **16 07 53.4** | **+2.7** |
| | 36nm,1.5s | | | | | | | |
| **FAKI** | **Fak Fak** | **11.38** | **143** | Pn | | **Pn** | **16 07 52.4** | **+1.7** |
| **FAKI** | **Fak Fak** | **11.38** | **143** | P | | **Pn** | **16 07 52.2** | **+1.5** |
| **KAPI** | **Kappang** | **12.61** | **207** | LR | | LR | 16 13 15.1 | |
| | comp=Z,88nm,21.4s,baz=56,slow=39 | | | | | | | |
| **SBUM** | **Sibu** | **13.77** | **254** | Pn | | **P** | **16 08 26.7** | **-3.2** |
| **BBKI** | **Banjar Baru** | **14.38** | **228** | P | | P | 16 08 43.5 | +6.7 |
| **SAUI** | **Saumlaki** | **15.32** | **158** | P | | **P** | **16 08 47.9** | **+0.7** |
| SAUI | | | | | | IAmb | IAmb | 16 08 49.2 |
| | comp=Z,57nm,0.6s | | | | | | | |
| **KSM** | **Kuching** | **15.88** | **253** | | | **P** | **16 08 56.6** | **+3.3** |
| **SOEI** | **Soe** | **15.99** | **184** | P | | **P** | **16 08 55.8** | **+1.1** |
| | comp=Z,36nm,0.8s | | | | | | | |
| **BATI** | **Baumata** | **16.49** | **186** | P | | **P** | **16 08 59.1** | **-1.1** |
| | comp=Z,9.2nm,0.3s,baz=329,slow=16,SNR=14 | | | | | | | |
| BATI | | | | LR | | LR | 16 16 49.7 | |
| | comp=Z,225nm,20.2s,baz=260,slow=42 | | | | | | | |
| **BATI** | **Baumata** | **16.49** | **186** | P | | **P** | **16 09 00.2** | **0.0** |
| | comp=Z,24nm,0.6s | | | | | | | |
| **JAY** | **Jayapura** | **17.54** | **119** | P | | **Pn** | **16 09 10.8** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=328,slow=19,SNR=1.8 | | | | | | | |
| **TPUB** | **Ta-pu** | **17.54** | **345** | P | | **P** | **16 09 13.9** | **+2.2** |
| TPUB | | | | | | IAmb | IAmb | 16 09 38.3 |
| | comp=Z,53nm,1.2s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.52** | **218** | P | | **Pn** | **16 09 26.1** | **+2.8** |
| JAGI | | | | | | IAmb | IAmb | 16 09 32.4 |
| | comp=Z,72nm,1.3s | | | | | | | |
| **DRS** | **Darwin Rock St** | **19.37** | **164** | P | | **Pn** | **16 09 32.8** | **-0.6** |
| **MTN** | **Manton Dam** | **19.82** | **164** | P | | **P** | **16 09 37.5** | **+0.7** |
| MTN | | | | | | IAmb | IAmb | 16 09 38.7 |
| | comp=Z,23nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **19.82** | **164** | P | | **P** | **16 09 37.2** | **+0.4** |
| **KDU** | **Kakadu** | **20.10** | **160** | P | | **P** | **16 09 40.6** | **+0.9** |
| **GUMO** | **Guam** | **20.41** | **68** | LR | | LR | 16 18 47.2 | |
| | comp=Z,27nm,18.7s,baz=194,slow=40 | | | | | | | |
| **JOW** | **Kunigami** | **20.60** | **7** | P | | **P** | **16 09 44.2** | **-0.9** |
| | comp=Z,6.1nm,0.5s,baz=141,slow=14,SNR=5.6 | | | | | | | |
| JOW | | | | LR | | LR | 16 17 11.0 | |
| | comp=Z,79nm,20.9s,baz=142,slow=35 | | | | | | | |
| **JOW** | **Kunigami** | **20.60** | **7** | P | | Pn | 16 09 47.5 | -0.4 |
| JOW | | | | | | IAmb | IAmb | 16 09 55.7 |
| | comp=Z,49nm,1.2s | | | | | | | |
| **UBPT** | **Khong Chiam** | **21.57** | **296** | P | | **P** | **16 09 59.3** | **+3.6** |
| **DSRI** | **Dabo** | **21.93** | **253** | P | | **P** | **16 10 00.4** | **+0.9** |
| | comp=Z,652nmcomp=Z,24nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **22.07** | **172** | P | | **P** | **16 10 00.8** | **-0.2** |
| **KNRA** | **Kununurra** | **22.07** | **172** | P | | **P** | **16 10 00.8** | **-0.2** |
| **LEM** | **Lembang** | **22.09** | **234** | P | | **P** | **16 10 01.1** | **-0.3** |
| | comp=Z,31nm,0.7s,baz=46,slow=18,SNR=8.8 | | | | | | | |
| **KLI** | **Kotabumi** | **23.39** | **242** | P | | **P** | **16 10 17.0** | **+2.4** |
| | comp=Z,147nm,0.8s | | | | | | | |
| **MDSI** | **Maura Dua** | **23.82** | **244** | P | | **P** | **16 10 20.4** | **+1.9** |
| | comp=Z,28nm,1.1s | | | | | | | |
| **KASI** | **Kota Agung** | **24.02** | **241** | P | | **P** | **16 10 22.8** | **+2.4** |
| | comp=Z,79nm,1.0s | | | | | | | |
| **LWLI** | **Liwa** | **24.16** | **243** | P | | **P** | **16 10 23.9** | **+2.1** |
| | comp=Z,161nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.24** | **180** | P | | **P** | **16 10 22.5** | **+0.2** |
| | comp=Z,9.8nm,0.5s,baz=2.7,slow=7.4,SNR=97 | | | | | | | |
| **IPM** | **Ipoh** | **24.42** | **267** | P | | **P** | **16 10 25.7** | **+1.7** |
| IPM | | | | | | IAmb | IAmb | 16 10 26.8 |
| | comp=Z,27nm,0.8s | | | | | | | |
| **KULM** | **Kulim** | **24.73** | **269** | P | | **P** | **16 10 28.7** | **+1.8** |
| KULM | | | | | | IAmb | IAmb | 16 10 30.5 |
| | comp=Z,24nm,0.9s | | | | | | | |
| **MNAI** | **Manna** | **24.86** | **245** | P | | **P** | **16 10 30.4** | **+2.3** |
| **MASI** | **Maura Aman, Be** | **25.03** | **249** | P | | **P** | **16 10 31.1** | **+1.4** |
| | comp=Z,51nm,1.3s | | | | | | | |
| **NJ2** | **Nanjing** | **26.36** | **347** | *e*P | | **P** | **16 10 43.8** | **+2.3** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **PMG** | **Port Moresby** | **26.64** | **126** | P | | **P** | **16 10 43.6** | **-0.5** |
| | comp=Z,6.6nm,0.7s,baz=295,slow=18,SNR=2.1 | | | | | | | |
| **PMG** | **Port Moresby** | **26.64** | **126** | P | | **P** | **16 10 44.8** | **+0.6** |
| PMG | | | | | | IAmb | IAmb | 16 10 51.9 |
| | comp=Z,15nm,1.1s | | | | | | | |
| **PSI** | **Prapat** | **26.70** | **264** | P | | **P** | **16 10 43.2** | **-1.7** |
| | comp=Z,3.1nm,0.4s,baz=86,slow=5.9,SNR=6.6 | | | | | | | |
| PSI | | | | LR | | LR | 16 22 41.9 | |
| | comp=Z,123nm,18.3s,baz=320,slow=40 | | | | | | | |
| **COEN** | **Coen** | **26.70** | **139** | P | | **P** | **16 10 45.3** | **+0.5** |
| COEN | | | | | | IAmb | IAmb | 16 10 50.5 |
| | comp=Z,18nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **26.70** | **139** | P | | **P** | **16 10 45.3** | **+0.5** |
| **RPSI** | **Rantau Prapat** | **26.71** | **264** | P | | **P** | **16 10 43.2** | **-1.7** |
| **WB0** | **Warramunga Arr** | **27.34** | **161** | P | | **P** | **16 10 49.7** | **-0.7** |
| WB0 | | | | | | IAmb | IAmb | 16 11 02.2 |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **SISI** | **Saibi** | **27.42** | **255** | P | | **P** | **16 10 53.8** | **+2.6** |
| | comp=Z,63nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **27.48** | **162** | P | | **P** | **16 10 51.3** | **-0.4** |
| WRAB | | | | | | IAmb | IAmb | 16 11 03.4 |
| | comp=Z,24nm,1.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **27.48** | **162** | P | | **P** | **16 10 51.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **27.49** | **162** | P | | **P** | **16 10 50.8** | **-0.9** |
| | comp=Z,0.8nm,0.3s,baz=341,slow=9.4,SNR=24 | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.49** | **162** | P | | **P** | **16 10 50.5** | **-1.3** |
| **WB2** | **Warramunga Arr** | **27.49** | **162** | P | | **P** | **16 10 51.4** | **-0.4** |
| WB2 | | | | | | IAmb | IAmb | 16 11 18.8 |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **27.57** | **161** | P | | **P** | **16 10 52.1** | **-0.3** |
| WR0 | | | | | | IAmb | IAmb | 16 11 19.5 |
| | comp=Z,13nm,1.1s | | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **27.75** | **266** | P | | **P** | **16 10 57.0** | **+2.9** |
| | comp=Z,20nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **27.86** | **192** | P | | **P** | **16 10 54.5** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **28.24** | **191** | P | | **P** | **16 10 58.0** | **-0.4** |
| PSA00 | | | | | | IAmb | IAmb | 16 11 13.3 |
| | comp=Z,13nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **28.24** | **191** | P | | **P** | **16 10 58.8** | **+0.4** |
| **GSI** | **Gunungsitoli** | **28.28** | **261** | P | | **P** | **16 11 01.9** | **+3.0** |
| | comp=Z,27nm,0.7s | | | | | | | |
| **GSI** | **Gunungsitoli** | **28.28** | **261** | P | | **P** | **16 10 59.7** | **+0.8** |
| GSI | | | | | | IAmb | IAmb | 16 11 02.6 |
| | comp=Z,16nm,0.6s | | | | | | | |
| **GSI** | **Gunungsitoli** | **28.28** | **261** | P | | **P** | **16 11 00.1** | **+1.2** |
| **CM31** | **Chiang Mai Arr** | **28.55** | **297** | P | | **P** | **16 11 02.2** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **28.55** | **297** | P | | **P** | **16 11 01.0** | **-0.3** |
| | comp=Z,1.4nm,0.3s,baz=118,slow=7.2,SNR=19 | | | | | | | |
| CMAR | | | | LR | | LR | 16 24 59.0 | |
| | comp=Z,17nm,18.0s,baz=115,slow=42 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.55** | **297** | P | | **P** | **16 11 02.2** | **+0.9** |
| **CHTO** | **Chiang Mai** | **28.68** | **298** | P | | **P** | **16 11 03.2** | **+0.7** |
| **KMI** | **Kunming** | **28.72** | **313** | P | | P | 16 11 07.8 | +4.9 |
| KMI | | | | pP | | pP | 16 11 20.4 | +2.6 |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **QIS** | **Mount Isa** | **30.08** | **153** | P | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TOO** | **Toolangi** | **47.47** | **158** | P | | **P** | | **16 13 41.3** | **+1.5** |
| **DZM** | **Mont Dzumac** | **49.03** | **126** | P | | **P** | | **16 13 52.7** | **+0.5** |
| | comp=Z,3.5nm,0.7s,baz=238,slow=9.5,SNR=5.2 | | | | | | | | |
| **WMQ** | **Urumqi** | **49.93** | **325** | *e*P | | **P** | | **16 14 01.8** | **+3.1** |
| **PETK** | **Petropavlovsk-** | **53.56** | **24** | P | | **P** | | **16 14 24.4** | **-1.1** |
| | comp=Z,1.5nm,0.5s,baz=180,slow=3.1,SNR=5.5 | | | | | | | | |
| **MK31** | **Makanchi Array** | **54.76** | **325** | P | | **P** | | **16 14 34.2** | **-0.2** |
| **MKAR** | **Makanchi Array** | **54.76** | **325** | P | | **P** | | **16 14 33.8** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=118,slow=7.6,SNR=25 | | | | | | | | |
| MKAR | | | | pP | | **pP** | | **16 14 49.1** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=125,slow=8.5,SNR=6.1 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **16 15 34.4** | **-1.9** |
| | comp=Z,0.8nm,0.7s,baz=132,slow=4.4,SNR=1.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.76** | **325** | P | | **P** | | **16 14 34.1** | **-0.4** |
| **MAKZ** | **Makanchi** | **54.94** | **325** | P | | **P** | | **16 14 35.3** | **-0.4** |
| **KSH** | **Kashi** | **55.37** | **314** | P | | **P** | | **16 14 40.6** | **+1.5** |
| KSH | | | | pP | | pP | | 16 14 56.1 | +1.1 |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.3s | | | | | | | | |
| **NIL** | **Nilore** | **55.40** | **307** | P | | **P** | | **16 14 38.9** | **-0.4** |
| **YAK** | **Yakutsk** | **55.70** | **2** | P | | **P** | | **16 14 40.3** | **-0.6** |
| YAK | | | | IAmb | | IAmb | | 16 14 41.6 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **57.64** | **317** | P | | **P** | | **16 14 53.8** | **-1.4** |
| | comp=Z,0.4nm,0.5s,baz=163,slow=14,SNR=1.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.75** | **333** | P | | **P** | | **16 14 54.1** | **-1.5** |
| | comp=Z,0.5nm,0.3s,baz=105,slow=9.3,SNR=3.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.75** | **333** | P | | **P** | | **16 14 54.8** | **-0.7** |
| **KURBB** | **Kurchatov Arra** | **58.92** | **327** | P | | **P** | | **16 15 02.6** | **-1.2** |
| | comp=Z,1.4nm,0.6s,baz=127,slow=5.8,SNR=8.1 | | | | | | | | |
| KURBB | | | | pP | | **pP** | | **16 15 18.3** | **-1.5** |
| | comp=Z,1.0nm,0.6s,baz=127,slow=6.7,SNR=2.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **58.93** | **327** | P | | **P** | | **16 15 02.5** | **-1.3** |
| KURK | | | | IAmb | | IAmb | | 16 15 04.0 | |
| | comp=Z,9.7nm,1.4s | | | | | | | | |
| **KBL** | **Kabul** | **59.00** | **307** | P | | **P** | | **16 15 04.3** | **-0.6** |
| KBL | | | | IAmb | | IAmb | | 16 15 05.8 | |
| | comp=Z,8.1nm,1.0s | | | | | | | | |
| **GAR** | **Garm** | **59.29** | **312** | P | | **P** | | **16 15 07.2** | **+0.5** |
| **CHGR** | **Chuyangaron** | **60.05** | **311** | P | | **P** | | **16 15 11.7** | **-0.2** |
| **BVAR** | **Borovoye Array** | **64.51** | **327** | P | | **P** | | **16 15 40.1** | **-1.2** |
| | comp=Z,0.9nm,0.6s,baz=93,slow=15,SNR=4.4 | | | | | | | | |
| **TIXI** | **Tiksi** | **65.31** | **1** | P | | **P** | | **16 15 45.5** | **-0.7** |
| TIXI | | | | IAmb | | IAmb | | 16 15 46.1 | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **66.29** | **293** | P | | **P** | | **16 15 52.2** | **-1.3** |
| | comp=Z,2.2nm,0.7s,baz=129,slow=6.3,SNR=4.8 | | | | | | | | |
| **NRIK** | **Noril'sk** | **67.66** | **346** | P | | **P** | | **16 15 59.9** | **-1.4** |
| | comp=Z,2.0nm,0.7s,baz=113,slow=6.2,SNR=4.4 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **69.39** | **320** | P | | **P** | | **16 16 11.8** | **-0.7** |
| **AKTO** | **Aktyubinsk** | **70.89** | **321** | P | | **P** | | **16 16 21.8** | **+0.2** |
| | comp=Z,0.7nm,0.4s,baz=68,slow=8.6,SNR=4.1 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **78.35** | **293** | P | | **P** | | **16 17 04.7** | **-0.8** |
| RAYN | | | | IAmb | | IAmb | | 16 17 21.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **80.88** | **25** | P | | **P** | | **16 17 19.6** | **+1.4** |
| H21K | | | | IAmb | | IAmb | | 16 17 35.0 | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **82.29** | **25** | P | | **P** | | **16 17 26.4** | **+0.8** |
| I23K | | | | IAmb | | IAmb | | 16 17 43.6 | |
| | comp=Z,3.5nm,0.8s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **82.33** | **22** | P | | **P** | | **16 17 27.3** | **+1.4** |
| **HDA** | **Harding Lake** | **83.31** | **26** | P | | **P** | | **16 17 32.4** | **+1.4** |
| HDA | | | | IAmb | | IAmb | | 16 17 36.4 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **IL31** | | **83.34** | **26** | P | | **P** | | **16 17 30.4** | **-0.6** |
| IL31 | | | | IAmb | | IAmb | | 16 17 50.4 | |
| | comp=Z,6.8nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.34** | **26** | P | | **P** | | **16 17 30.3** | **-0.8** |
| | comp=Z,1.1nm,0.7s,baz=246,slow=4.4,SNR=15 | | | | | | | | |
| ILAR | | | | pP | | **pP** | | **16 17 46.2** | **-1.8** |
| | comp=Z,0.9nm,0.6s,baz=243,slow=4.6,SNR=5.0 | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.34** | **26** | P | | **P** | | **16 17 32.8** | **+1.7** |
| **BMAR** | **Burnt Mountain** | **84.21** | **23** | P | | **P** | | **16 17 36.3** | **+0.7** |
| **VNDA** | **Vanda** | **86.11** | **173** | P | | **P** | | **16 17 44.6** | **-0.2** |
| | comp=Z,3.3nm,0.8s,baz=2.2,slow=7.4,SNR=1.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **89.00** | **332** | P | | **P** | | **16 17 56.6** | **-2.4** |
| | comp=Z,1.4nm,0.9s,baz=45,slow=3.0,SNR=6.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **89.00** | **332** | P | | **P** | | **16 17 56.1** | **-2.9** |
| **NOA** | **NORSAR Array B** | **95.95** | **334** | LR | | LR | | 17 05 23.6 | |
| | comp=Z,33nm,19.4s,baz=35,slow=38 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **96.19** | **180** | P | | **P** | | **16 18 30.9** | **-1.2** |
| | comp=Z,1.2nm,0.9s,baz=324,slow=1.2,SNR=1.9 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **96.19** | **180** | P | | **P** | | **16 18 30.6** | **-1.5** |
| **JMIC** | **Jan Mayen** | **97.09** | **346** | LR | | LR | | 17 09 01.4 | |
| | comp=Z,91nm,18.4s,baz=348,slow=40 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.68** | **24** | P | | **P** | | **16 18 38.7** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=298,slow=4.7,SNR=3.7 | | | | | | | | |
| YKA | | | | pP | | **pP** | | **16 18 54.0** | **-2.0** |
| | comp=Z,0.8nm,0.8s,baz=296,slow=4.6,SNR=7.4 | | | | | | | | |
| YKA | | | | PKiKP | | **PKiKP** | | **16 23 13.1** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=288,slow=1.8,SNR=5.2 | | | | | | | | |
| **SCHQ** | **Schefferville** | **118.23** | **8** | PKP | | **PKPdf** | | **16 23 50.7** | **-0.6** |
| | comp=Z,2.4nm,0.8s,baz=0.8,slow=6.1,SNR=2.2 | | | | | | | | |
| **SCHQ** | **Schefferville** | **118.23** | **8** | | | **PKPdf** | | **16 23 50.9** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** | **120.93** | **289** | PKP | | **PKPdf** | | **16 23 55.4** | **-2.1** |
| | comp=Z,0.6nm,0.5s,baz=66,slow=2.1,SNR=4.5 | | | | | | | | |
| TORD | | | | pPKP | | **pPKPdf** | | **16 24 12.6** | **-2.9** |
| | comp=Z,0.7nm,0.6s,baz=49,slow=1.7,SNR=3.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.97** | **50** | PKP | | **PKPdf** | | **16 23 57.0** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=325,slow=1.1,SNR=4.0 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.97** | **50** | | | **PKiKP** | | **16 23 57.6** | **0.0** |

*IDC **03** 16:07:42.2±1.1,30°.22S×75°.67E, h0km, mb3.7/7, mb1 3.8/7, mb1mx3.4/64, mbtmp3.7/7, MS3.6/6, Ms1 3.5/6, ms1mx3.1/71, Error ellipse: s-maj=42.0km s-min=25.6km az=86.0*

**ISC 03 16:07:43.5±1.3, 30°.2S±0°.2×75°.6E±0°.3, h10km, n17, σ0s91/8, mb3.7/7, MS3.5/6, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **22.63** | **352** | T | | T | 16 36 15.5 | |
| | baz=174,slow=76,SNR=35 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **22.63** | **352** | T | | T | 16 36 22.9 | |
| | baz=174,slow=76,SNR=21 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.65** | **352** | T | | T | 16 36 24.2 | |
| | baz=174,slow=76,SNR=33 | | | | | | | |
| **PALK** | **Pallekele** | **37.57** | **8** | LR | | LR | 16 26 30.2 | |
| | comp=Z,76nm,19.8s,baz=250,slow=30 | | | | | | | |
| **LEM** | **Lembang** | **37.97** | **59** | LR | | LR | 16 27 14.3 | |
| | comp=Z,99nm,18.6s,baz=330,slow=31 | | | | | | | |
| **MAW** | **Mawson** | **38.20** | **188** | LR | | LR | 16 25 59.0 | |
| | comp=Z,68nm,21.8s,baz=236,slow=29 | | | | | | | |
| **BOSA** | **Boshof** | **43.63** | **259** | LR | | LR | 16 30 29.9 | |
| | comp=Z,68nm,18.4s,baz=112,slow=31 | | | | | | | |
| **LBTB** | **Lobatse** | **44.37** | **264** | LR | | LR | 16 30 42.8 | |
| | comp=Z,69nm,20.4s,baz=118,slow=31 | | | | | | | |
| **LSZ** | **Lusaka** | **45.89** | **278** | LR | | LR | 16 31 36.1 | |
| | comp=Z,51nm,21.7s,baz=154,slow=31 | | | | | | | |
| **ASAR** | **Alice Springs** | **51.88** | **98** | P | | **P** | **16 16 52.5** | **+0.1** |
| | 0.8nm,0.7s,baz=254,slow=6.4,SNR=4.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.33** | **28** | P | | **P** | **16 17 02.7** | **-0.3** |
| | 0.7nm,0.8s,baz=212,slow=6.4,SNR=4.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **53.64** | **93** | P | | **P** | **16 17 05.8** | **+0.3** |
| | 0.6nm,0.3s,baz=250,slow=7.0,SNR=3.7 | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.94** | **180** | P | | **P** | **16 17 49.7** | **-0.1** |
| | 1.5nm,0.7s,baz=305,slow=7.9,SNR=18 | | | | | | | |
| **MKAR** | **Makanchi Array** | **76.87** | **5** | P | | **P** | **16 19 35.4** | **-0.1** |
| | 0.5nm,0.9s,baz=199,slow=6.5,SNR=3.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **80.51** | **2** | P | | **P** | **16 19 57.1** | **+1.7** |
| | 0.6nm,1.0s,baz=191,slow=5.9,SNR=2.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.17** | **5** | P | | **P** | **16 20 14.2** | **-0.3** |
| | 0.4nm,0.5s,baz=190,slow=4.9,SNR=2.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **147.02** | **9** | PKPbc | | **PKPab** | **16 27 26.4** | **-0.9** |
| | 0.9nm,0.9s,baz=335,slow=3.4,SNR=7.2 | | | | | | | |

*SJA **03** 16:08:25.5±0.7, 29°.61S×72°.38W, h11km, ML4.2, MW4.2*
*NEIC **03** 16:08:29.6±2.4, 29°.63S±0°.04×72°.09W±0°.03, h10km±1km, mb4.3/6, ML4.1(GUC), Error ellipse: s-maj=6.0km s-min=4.6km az=192.0*
*IDC **03** 16:08:29.7±0.8, 29°.69S×71°.93W, h0km, mb4.1/5, mb1 4.1/9, mb1mx3.9/36, mbtmp4.0/9, ML3.9/4, MS3.5/5, Ms1 3.4/5, ms1mx3.1/48, Error ellipse: s-maj=29.8km s-min=22.0km az=116.0*
*GUC **03** 16:08:31.7±0.6, 29°.67S×72°.02W, h32km±4km, ML4.1*

**ISC 03 16:08:29.3±0.8, 29°.63S±0°.02×72°.06W±0°.04, h5km±4km, n93, σ1s44/123, mb4.4/6, MS3.5/3, 7C-3D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO05** | **La Serena** | **0.77** | **112** | ⇓*i*P | | **Pb** | **16 08 45.1** | **-0.1** |
| CO05 | | | | *i* S | | **Sg** | **16 08 54.8** | **+0.7** |
| CO05 | | | | IAML | | | 16 08 58.7 | |
| | comp=E,7μm,0.3s | | | | | | | |
| **CO05** | **La Serena** | **0.77** | **112** | | | **Pb** | **16 08 45.0** | **-0.1** |
| CO05 | | | | Sg | | **Sg** | **16 08 54.6** | **+0.6** |
| **CO06** | **Fray Jorge** | **1.10** | **161** | ⇑*i*P | | **Pg** | **16 08 50.3** | **-0.2** |
| CO06 | | | | IAML | | | 16 09 11.6 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **CO06** | **Fray Jorge** | **1.10** | **161** | Pn | | **Pg** | **16 08 50.3** | **-0.2** |
| CO06 | | | | Sg | | **Sg** | **16 09 03.8** | **-1.0** |
| **GO04** | **Tololo Observa** | **1.22** | **117** | ⇓*i*P | | **Pg** | **16 08 52.7** | **0.0** |
| GO04 | | | | *i* S | | **Sg** | **16 09 08.2** | **-0.3** |
| **GO04** | **Tololo Observa** | **1.22** | **117** | | | **Pg** | **16 08 52.7** | **0.0** |
| GO04 | | | | Sg | | **Sg** | **16 09 08.1** | **-0.5** |
| **GO04** | **Tololo Observa** | **1.22** | **117** | *e*P | | **Pb** | **16 08 53.0** | **0.0** |
| GO04 | | | | *e*S | | **Sn** | **16 09 09.9** | **-0.4** |
| **LCO** | **Las Campanas** | **1.33** | **63** | ⇓*i*P | | **Pn** | **16 08 54.7** | **-0.2** |
| LCO | | | | *i* S | | **Sb** | **16 09 12.6** | **+0.1** |
| **LCO** | **Las Campanas** | **1.33** | **63** | Pn | | **Pn** | **16 08 54.6** | **-0.2** |
| LCO | | | | | | **Sb** | **16 09 12.5** | **0.0** |
| **LCO** | **Las Campanas** | **1.33** | **63** | *e*P | | **Pb** | **16 08 55.0** | **0.0** |
| LCO | | | | *e*S | | **Sg** | **16 09 12.2** | **0.0** |
| **AC04** | **Llanos de Chal** | **1.66** | **32** | ⇑*i*P | | **Pn** | **16 08 58.6** | **-0.5** |
| **AC04** | **Llanos de Chal** | **1.66** | **32** | Pn | | **Pn** | **16 08 58.4** | **-0.7** |
| **AC04** | **Llanos de Chal** | **1.66** | **32** | *e*P | | Pn | 16 08 53.2 | -5.9 |
| AC04 | | | | *e*P | | **Pb** | **16 08 58.7** | **-1.7** |
| AC04 | | | | *e*S | | **Sg** | **16 09 24.1** | **+1.4** |
| AC04 | | | | IAML | | | 16 09 34.3 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **CO03** | **El Pedregal** | **1.69** | **136** | ⇑*i*P | | **Pn** | **16 08 59.7** | **+0.1** |
| CO03 | | | | IAML | | | 16 09 26.8 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **1.69** | **136** | | | **Pn** | **16 08 59.6** | **0.0** |
| **CO03** | **El Pedregal** | **1.69** | **136** | *e*P | | **Pn** | **16 09 00.0** | **+0.4** |
| CO03 | | | | *e*S | | **Sg** | **16 09 25.9** | **+2.3** |
| CO03 | | | | IAML | | | 16 09 28.1 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **CO02** | **Combarbal** | **1.81** | **150** | ⇑*i*P | | **Pn** | **16 09 01.7** | **+0.4** |
| CO02 | | | | IAML | | | 16 09 31.6 | |
| | comp=N,4μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **1.81** | **150** | | | **Pn** | **16 09 01.7** | **+0.4** |
| **CO02** | **Combarbal** | **1.81** | **150** | *e*P | | **Pn** | **16 09 01.0** | **-0.4** |
| CO02 | | | | *e*S | | **Sg** | **16 09 32.7** | **+5.0** |
| CO02 | | | | IAML | | | 16 09 40.6 | |
| | comp=Z,1μm,1.4s | | | | | | | |
| **AROD** | **Rodeo** | **2.31** | **104** | *e*P | | **Pb** | **16 09 10.8** | **-0.8** |
| AROD | | | | *e*S | | **Sg** | **16 09 42.7** | **-0.8** |
| **GO03** | **Copiap** | **2.58** | **39** | ⇑*e*P | | **Pn** | **16 09 13.2** | **+1.4** |
| GO03 | | | | *e*S | | **Sn** | **16 09 45.8** | **+2.0** |
| GO03 | | | | IAML | | | 16 10 00.9 | |
| | comp=N,844nm,0.6s | | | | | | | |
| **GO03** | **Copiap** | **2.58** | **39** | Pn | | **Pn** | **16 09 11.8** | **-0.1** |
| **GO03** | **Copiap** | **2.58** | **39** | *e*P | | **Pn** | **16 09 12.5** | **+0.6** |
| GO03 | | | | *e*S | | **Sb** | **16 09 48.7** | **+0.4** |
| GO03 | | | | *e*S | | **Sg** | **16 09 53.2** | **+0.8** |
| **ACCO** | **Cerro Coronel** | **2.76** | **111** | *e*P | | **Pb** | **16 09 18.0** | **-1.4** |
| ACCO | | | | *e*S | | **Sb** | **16 09 51.7** | **-2.0** |
| **VA06** | **Catapilco** | **2.99** | **168** | ⇑*i*P | | **Pn** | **16 09 17.3** | **-0.2** |
| VA06 | | | | *i* S | | **Sn** | **16 09 52.6** | **-1.2** |
| VA06 | | | | IAML | | | 16 10 25.5 | |
| | comp=N,709nm,0.6s | | | | | | | |
| **VA03** | **San Esteban** | **3.38** | **158** | *e*P | | **Pn** | **16 09 23.9** | **+1.0** |
| VA03 | | | | *i* S | | **Sn** | **16 10 02.9** | **-0.6** |
| VA03 | | | | IAML | | | 16 10 23.8 | |
| | comp=N,669nm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **3.38** | **158** | | | **Pn** | **16 09 22.9** | **0.0** |
| **VA03** | **San Esteban** | **3.38** | **158** | *e*P | | **Pn** | **16 09 24.5** | **+1.6** |
| VA03 | | | | *e*S | | **Sb** | **16 10 09.7** | **-1.5** |
| VA03 | | | | IAML | | | 16 10 32.1 | |
| | comp=Z,593nm,0.9s | | | | | | | |
| **ROCH** | **El Roble** | **3.45** | **165** | *e*P | | **Pn** | **16 09 24.1** | **+0.1** |
| ROCH | | | | IAML | | | 16 10 33.1 | |
| | comp=N,700nm,0.8s | | | | | | | |
| **ROC1** | **El Roble** | **3.45** | **165** | | | **Pn** | **16 09 22.6** | **-1.4** |
| **ROC1** | **El Roble** | **3.45** | **165** | *e*P | | **Pn** | **16 09 23.0** | **-1.0** |
| ROC1 | | | | *e*S | | **Sn** | **16 10 07.7** | **+2.3** |
| **VCA** | **Vinchina** | **3.48** | **76** | *e*P | | **Pn** | **16 09 24.7** | **+0.4** |
| VCA | | | | *e*S | | **Sb** | **16 10 12.2** | **-2.1** |
| VCA | | | | IAML | | | 16 10 26.9 | |
| | comp=Z,845nm,0.9s | | | | | | | |
| **PEL** | **Peldehue** | **3.69** | **162** | | | **Pn** | **16 09 27.3** | **+0.1** |
| **MT02** | **Curacav** | **3.70** | **168** | Pn | | **Pn** | **16 09 26.9** | **-0.3** |
| **MT02** | **Curacav** | **3.70** | **168** | *e*P | | **Pn** | **16 09 27.0** | **-0.3** |
| MT02 | | | | *e*S | | **Sn** | **16 10 13.8** | **+2.6** |
| MT02 | | | | IAML | | | 16 10 33.7 | |
| | comp=Z,235nm,0.8s | | | | | | | |
| **AC02** | **Maricunga** | **3.80** | **44** | ⇑*i*P | | **Pn** | **16 09 30.1** | **+1.2** |
| AC02 | | | | IAML | | | 16 10 36.2 | |
| | comp=E,333nm,0.5s | | | | | | | |
| **AC02** | **Maricunga** | **3.80** | **44** | Pn | | **Pn** | **16 09 30.0** | **+1.0** |
| **AC02** | **Maricunga** | **3.80** | **44** | *e*P | | **Pn** | **16 09 30.0** | **+1.0** |
| AC02 | | | | *e*S | | **Sn** | **16 10 16.2** | **+2.0** |
| AC02 | | | | IAML | | | 16 10 39.0 | |
| | comp=Z,408nm,0.7s | | | | | | | |
| **VA05** | **Santo Domingo** | **4.03** | **175** | Pn | | **Pn** | **16 09 30.3** | **-1.4** |
| **ASAL** | **Salagasta** | **4.04** | **138** | *e*P | | **Pn** | **16 09 31.2** | **-0.8** |
| ASAL | | | | *e*S | | **Sg** | **16 10 38.2** | **-1.0** |
| **MT09** | **Talagante** | **4.23** | **168** | Pn | | **Pn** | **16 09 34.7** | **0.0** |
| **MT01** | **Popeta** | **4.28** | **171** | Pn | | **Pn** | **16 09 34.2** | **-0.9** |
| **MT01** | **Popeta** | **4.28** | **171** | *e*P | | **Pn** | **16 09 35.0** | **-0.1** |
| MT01 | | | | *e*S | | **Sn** | **16 10 25.4** | **0.0** |
| MT01 | | | | IAML | | | 16 10 47.0 | |
| | comp=Z,167nm,1.4s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.45** | **89** | *e*P | | **Pn** | **16 09 40.0** | **+2.3** |
| ACLC | | | | *e*S | | **Sn** | **16 10 32.7** | **+2.7** |
| ACLC | | | | IAML | | | 16 10 49.6 | |
| | comp=Z,360nm,0.7s | | | | | | | |
| **LMEL** | **Las Melosas** | **4.49** | **160** | Pn | | **Pn** | **16 09 37.8** | **-0.4** |
| **BO01** | **Tunca** | **4.82** | **170** | Pn | | **Pn** | **16 09 42.2** | **-0.4** |
| **BO01** | **Tunca** | **4.82** | **170** | *e*P | | **Pn** | **16 09 43.0** | **+0.4** |
| BO01 | | | | *e*S | | **Sb** | **16 10 53.7** | **+1.1** |
| BO01 | | | | IAML | | | 16 11 11.2 | |
| | comp=Z,112nm,0.8s | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.86** | **100** | *e*P | | **Pn** | **16 09 45.0** | **+1.9** |
| APLL | | | | *e*S | | **Sb** | **16 10 53.2** | **-0.5** |
| APLL | | | | IAML | | | 16 11 24.5 | |
| | comp=Z,221nm,3.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **5.26** | **168** | Pn | | **Pn** | **16 09 48.4** | **-0.3** |
| **BO02** | **Sierra Bellavi** | **5.26** | **168** | *e*P | | **Pn** | **16 09 49.0** | **+0.3** |
| BO02 | | | | *e*S | | **Sb** | **16 11 04.7** | **-0.6** |
| BO02 | | | | IAML | | | 16 11 18.4 | |
| | comp=Z,121nm,1.1s | | | | | | | |
| **GO05** | **Huala** | **5.37** | **179** | Pn | | **Pn** | **16 09 47.9** | **-2.2** |
| **GO05** | **Huala** | **5.37** | **179** | *e*P | | **Pn** | **16 09 48.7** | **-1.4** |
| GO05 | | | | *e*P | | **Pn** | **16 09 49.0** | **-1.1** |
| **RFA** | **San Rafael** | **5.96** | **150** | *e*P | | **Pn** | **16 09 54.7** | **-3.6** |
| RFA | | | | IAML | | | 16 11 42.6 | |
| | comp=Z,75nm,1.1s | | | | | | | |
| **H03N1** | **Juan Fernandez** | **6.98** | **235** | T | | T | 16 17 57.9 | |
| | baz=64,slow=72,SNR=565 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.99** | **235** | T | | T | 16 18 06.7 | |
| | baz=64,slow=72,SNR=365 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.99** | **235** | Pn | | **Pn** | **16 10 10.5** | **-1.7** |
| | SNR=58 | | | | | | | |
| H03N3 | | | | T | | T | 16 18 00.1 | |
| | baz=64,slow=72,SNR=295 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **7.19** | **232** | Pn | | **Pn** | **16 10 12.4** | **-2.5** |
| **PB06** | **IPOC Station P** | **7.25** | **19** | Pn | | **Pn** | **16 10 13.6** | **-2.5** |
| **LVC** | **Limon Verde** | **7.54** | **23** | Pn | | **Pn** | **16 10 19.6** | **-0.7** |
| | comp=Z,0.6nm,0.3s,baz=263,slow=9.1,SNR=2.5 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **16 11 54.0** | **+7.6** |
| | comp=Z,0.8nm,0.3s,baz=148,slow=16,SNR=3.8 | | | | | | | |
| LVC | | | | Lg | | Lg | 16 12 23.0 | |
| | comp=Z,2.8nm,0.3s,baz=294,slow=20,SNR=6.8 | | | | | | | |
| **LVC** | **Limon Verde** | **7.54** | **23** | Pn | | **Pn** | **16 10 18.3** | **-2.0** |
| **PB03** | **IPOC Station P** | **7.83** | **16** | Pn | | **Pn** | **16 10 21.5** | **-2.6** |
| **PB07** | **IPOC Station P** | **8.11** | **14** | Pn | | **Pn** | **16 10 25.3** | **-2.6** |
| **PB09** | **IPOC Station P** | **8.20** | **19** | Pn | | **Pn** | **16 10 26.7** | **-2.5** |
| **LC01** | **Cunco** | **9.25** | **179** | Pn | | **Pn** | **16 10 41.5** | **-1.8** |
| **PLCA** | **Paso Flores** | **11.15** | **174** | Pn | | **Pn** | **16 11 08.7** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=333,slow=13,SNR=8.8 | | | | | | | |
| **PLCA** | **Paso Flores** | **11.15** | **174** | Pn | | **Pn** | **16 11 09.1** | **-0.4** |
| **CPUP** | **Villa Florida** | **13.42** | **79** | Pn | | **Pn** | **16 11 40.5** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=230,slow=17,SNR=1.3 | | | | | | | |
| CPUP | | | | Lg | | Lg | 16 15 31.3 | |
| | comp=Z,0.2nm,0.3s,baz=180,slow=20,SNR=1.8 | | | | | | | |
| CPUP | | | | LR | | LR | 16 16 48.7 | |
| | comp=Z,79nm,19.6s,baz=232,slow=38 | | | | | | | |
| **CPUP** | **Villa Florida** | **13.42** | **79** | | | **Pn** | **16 11 39.6** | **-0.9** |
| **LPAZ** | **La Paz** | **13.76** | **16** | Pn | | **Pn** | **16 11 47.6** | **+1.9** |
| | comp=Z,0.2nm,0.3s,baz=186,slow=6.7,SNR=7.4 | | | | | | | |
| **LPAZ** | **La Paz** | **13.76** | **16** | Pn | | **Pn** | **16 11 45.7** | **0.0** |
| **SIV** | **San Ignacio** | **16.92** | **39** | Pn | | **Pn** | **16 12 27.4** | **+0.4** |
| SIV | | | | LR | | LR | 16 19 35.9 | |
| | comp=Z,187nm,19.3s,baz=248,slow=39 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **18.46** | **43** | P | | **Pn** | **16 12 46.4** | **+0.4** |
| **ETMB** | **Extrema** | **20.46** | **17** | P | | **P** | **16 13 07.4** | **-0.4** |
| ETMB | | | | IAmb | | IAmb | 16 13 22.2 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **USHA** | **Ushuaia** | **25.32** | **175** | LR | | LR | 16 25 04.8 | |
| | comp=Z,149nm,19.1s,baz=318,slow=39 | | | | | | | |
| **BDFB** | **Brasilia** | **26.12** | **63** | P | | **P** | **16 14 04.8** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=252,slow=3.7,SNR=3.6 | | | | | | | |
| **BDFB** | **Brasilia** | **26.12** | **63** | P | | **P** | **16 14 02.7** | **-1.9** |
| BDFB | | | | IAmb | | IAmb | 16 14 13.9 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **MDP** | **Montagnes des** | **39.24** | **32** | LR | | LR | 16 33 44.8 | |
| | comp=Z,47nm,19.8s,baz=278,slow=39 | | | | | | | |
| **SNAA** | **Sanae** | **55.64** | **159** | P | | **P** | **16 18 06.8** | **+0.8** |
| SNAA | | | | IAmb | | IAmb | 16 18 07.2 | |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.59** | **180** | P | | **P** | **16 18 41.7** | **+0.9** |
| | comp=Z,3.6nm,0.8s,baz=154,slow=2.6,SNR=9.4 | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.59** | **180** | P | | **P** | **16 18 41.7** | **+0.9** |
| **TXAR** | **Lajitas Array** | **65.94** | **330** | P | | **P** | **16 19 16.8** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=152,slow=8.1,SNR=2.0 | | | | | | | |
| **DBIC** | **Dimbokro** | **73.84** | **72** | P | | **P** | **16 20 05.8** | **+0.4** |
| | comp=Z,1.9nm,0.5s,baz=243,slow=6.0,SNR=3.4 | | | | | | | |
| **DBIC** | **Dimbokro** | **73.84** | **72** | P | | **P** | **16 20 05.2** | **-0.3** |
| DBIC | | | | IAmb | | IAmb | 16 20 15.2 | |
| | comp=Z,7.8nm,1.3s | | | | | | | |
| **RAR** | **Rarotonga** | **77.92** | **252** | LR | | LR | 16 45 49.9 | |
| | comp=Z,38nm,21.0s,baz=279,slow=29 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.75** | **71** | P | | **P** | **16 20 54.6** | **-0.2** |
| | comp=Z,3.1nm,0.8s,baz=258,slow=4.7,SNR=18 | | | | | | | |
| **KURK** | **Kurchatov** | **149.57** | **38** | | | **PKiKP** | **16 28 20.4** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **149.57** | **38** | PKPbc | | **PKiKP** | **16 28 20.4** | **-0.1** |
| | comp=Z,2.4nm,0.9s,baz=301,slow=3.3,SNR=18 | | | | | | | |
| KURBB | | | | PKPab | | **sPKPab** | **16 28 25.8** | **+0.4** |
| | comp=Z,1.6nm,0.6s,baz=302,slow=3.5,SNR=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **150.23** | **55** | PKPbc | | **PKiKP** | **16 28 23.1** | **+0.6** |
| | comp=Z,4.3nm,0.8s,baz=226,slow=3.6,SNR=9.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **150.23** | **55** | PKPbc | | **PKiKP** | **16 28 22.1** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **150.46** | **28** | PKPbc | | **PKiKP** | **16 28 22.9** | **+0.6** |
| | comp=Z,13nm,0.9s,baz=297,slow=3.1,SNR=38 | | | | | | | |
| ZALV | | | | PKPab | | **sPKPab** | **16 28 30.0** | **+1.1** |
| | comp=Z,7.4nm,0.7s,baz=297,slow=3.3,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.46** | **28** | PKPbc | | **PKiKP** | **16 28 22.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LZH** | **Lanzhou** | **71.19** | **24** | *e*P | | **P** | **16 41 55.5** | **+2.7** |
| LZH | | | | pP | | PcP | 16 42 07.7 | -5.1 |
| LZH | | | | sP | | pwP | 16 42 14.1 | +15 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **XAN** | **Xi'an** | **71.34** | **29** | P | | **P** | **16 41 53.8** | **+0.1** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,41nm,4.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **72.54** | **359** | LR | | LR | 17 10 54.9 | |
| | comp=Z,166nm,20.4s,baz=174,slow=33 | | | | | | | |
| **GTA** | **Gaotai** | **72.93** | **20** | *e*P | | **P** | **16 42 05.0** | **+1.8** |
| GTA | | | | sP | | PcP | 16 42 28.8 | +8.7 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **KKAR** | **Karatay Array** | **73.14** | **356** | P | | **P** | **16 42 05.6** | **+1.4** |
| **MMAI** | **Mount Meron Ar** | **73.46** | **326** | LR | | LR | 17 11 25.8 | |
| | comp=Z,49nm,18.4s,baz=22,slow=33 | | | | | | | |
| **JOW** | **Kunigami** | **76.00** | **47** | LR | | LR | 17 13 10.8 | |
| | comp=Z,38nm,19.3s,baz=280,slow=34 | | | | | | | |
| **HNS** | **HongShan** | **76.69** | **31** | ⇓P | | **P** | **16 42 25.5** | **+0.7** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **76.94** | **5** | P | | **P** | **16 42 26.0** | **-0.1** |
| **MKAR** | **Makanchi Array** | **76.94** | **5** | P | | **P** | **16 42 25.8** | **-0.3** |
| | comp=Z,1.1nm,0.9s,baz=178,slow=6.1,SNR=12 | | | | | | | |
| MKAR | | | | LR | | LR | 17 15 33.0 | |
| | comp=Z,101nm,18.5s,baz=260,slow=35 | | | | | | | |
| **MKAR** | **Makanchi Array** | **76.94** | **5** | P | | **P** | **16 42 25.6** | **-0.5** |
| **GUMO** | **Guam** | **79.71** | **68** | LR | | LR | 17 19 50.9 | |
| | comp=Z,22nm,18.1s,baz=196,slow=37 | | | | | | | |
| **DZM** | **Mont Dzumac** | **80.03** | **110** | LR | | LR | 17 17 33.0 | |
| | comp=Z,85nm,18.1s,baz=227,slow=35 | | | | | | | |
| **ABKAR** | **Akbulak array** | **80.35** | **350** | P | | **P** | **16 42 46.3** | **+1.6** |
| **HNR** | **Honiara** | **80.60** | **95** | LR | | LR | 17 15 26.9 | |
| | comp=Z,94nm,20.8s,baz=214,slow=34 | | | | | | | |
| **IDI** | **Anoyia** | **80.71** | **320** | LR | | LR | 17 14 40.3 | |
| | comp=Z,44nm,19.8s,baz=41,slow=33 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **81.81** | **349** | LR | | LR | 17 19 55.8 | |
| | comp=Z,41nm,19.1s,baz=9,2,slow=36 | | | | | | | |
| **JNU** | **Nakatsue** | **82.00** | **44** | LR | | LR | 17 13 58.3 | |
| | comp=Z,76nm,21.7s,baz=242,slow=32 | | | | | | | |
| **SONM** | **Songino Array** | **82.56** | **20** | P | | **P** | **16 42 56.1** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=141,slow=5.2,SNR=2.4 | | | | | | | |
| SONM | | | | LR | | LR | 17 19 13.3 | |
| | comp=Z,101nm,19.7s,baz=94,slow=35 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.95** | **290** | P | | **P** | **16 42 57.6** | **-1.7** |
| | comp=Z,0.6nm,0.9s,baz=79,slow=3.7,SNR=3.1 | | | | | | | |
| **KSRS** | **Korea Array** | **83.35** | **39** | P | | **P** | **16 43 01.1** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=228,slow=4.7,SNR=2.5 | | | | | | | |
| KSRS | | | | LR | | LR | 17 16 10.5 | |
| | comp=Z,86nm,21.9s,baz=215,slow=33 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **84.25** | **6** | P | | **P** | **16 43 05.0** | **0.0** |
| ZAA0 | | | | IAmb | | IAmb | 16 43 05.6 | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.25** | **6** | P | | **P** | **16 43 05.0** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=166,slow=4.3,SNR=8.0 | | | | | | | |
| ZALV | | | | LR | | LR | 17 17 27.5 | |
| | comp=Z,80nm,21.5s,baz=244,slow=33 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.25** | **6** | P | | **P** | **16 43 04.5** | **-0.5** |
| **DBIC** | **Dimbokro** | **85.01** | **281** | LR | | LR | 17 17 46.8 | |
| | comp=Z,71nm,20.6s,baz=126,slow=33 | | | | | | | |
| **ARU** | **Arti** | **87.53** | **351** | LR | | LR | 17 20 06.4 | |
| | comp=Z,68nm,19.2s,baz=180,slow=34 | | | | | | | |
| **MLR** | **Muntele Rosu** | **87.77** | **328** | LR | | LR | 17 20 43.4 | |
| | comp=Z,56nm,18.1s,baz=12,slow=34 | | | | | | | |
| **KOWA** | **Kowa** | **88.36** | **288** | LR | | LR | 17 21 03.1 | |
| | comp=Z,75nm,19.8s,baz=197,slow=34 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **88.76** | **46** | LR | | LR | 17 18 22.5 | |
| | comp=Z,89nm,21.4s,baz=242,slow=32 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **90.30** | **37** | LR | | LR | 17 21 21.8 | |
| | comp=Z,83nm,21.9s,baz=188,slow=34 | | | | | | | |
| **KLR** | **Kul'dur** | **93.67** | **33** | LR | | LR | 17 27 34.8 | |
| | comp=Z,96nm,18.1s,baz=238,slow=36 | | | | | | | |
| **ASAJ** | **Asahikawa** | **96.08** | **42** | LR | | LR | 17 26 01.2 | |
| | comp=Z,68nm,19.5s,baz=318,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **147.10** | **9** | PKPbc | | **PKPbc** | **16 50 15.8** | **-0.4** |
| | comp=Z,1.2nm,0.9s,baz=336,slow=3.3,SNR=15 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **147.10** | **9** | | | **PKPbc** | **16 50 16.3** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **166.03** | **51** | PKPab | | **PKPab** | **16 51 39.2** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=282,slow=7.3,SNR=3.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **166.03** | **51** | | | **PKPab** | **16 51 39.0** | **-0.5** |

*NOU* ***03*** *17:05:44.4,36.°91S×177.°85E,h168km,MLv3.7/4, Off E. Coast of N. Island, N.Z.*

**WEL 03 17:04:43.1±0.7,33.°3S±10.°×178.°0E±2.°3,h447km±13km, M3.6/18,mB4.2/12,MLv4.3/18,Mw(mB)3.3/12,Error ellipse: s-maj=0.0km s-min=0.0km az=111.7,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **4.93** | **192** | P | P | 17 06 06.0 | -0.5 |
| MXZ | | | | S | S | 17 07 14.4 | -0.3 |
| **WMGZ** | **Waiomatatini S** | **5.17** | **191** | P | P | 17 06 09.4 | +0.7 |
| WMGZ | | | | S | S | 17 07 18.6 | -0.1 |
| **PUZ** | **Puketiti** | **5.44** | **191** | P | P | 17 06 11.1 | -0.4 |
| PUZ | | | | S | S | 17 07 22.9 | -0.8 |
| **RUGZ** | **Raukumara Rang** | **5.45** | **196** | P | P | 17 06 09.4 | -2.3 |
| RUGZ | | | | S | S | 17 07 21.2 | -3.0 |
| **TWGZ** | **Tauwhareparae** | **5.59** | **193** | P | P | 17 06 14.4 | +1.4 |
| TWGZ | | | | S | S | 17 07 27.9 | +1.3 |
| **MWZ** | **Matawai** | **5.84** | **196** | P | P | 17 06 15.6 | 0.0 |
| MWZ | | | | S | S | 17 07 30.5 | -0.7 |
| **TKGZ** | **Te Karaka** | **5.87** | **194** | P | P | 17 06 17.3 | +1.5 |
| TKGZ | | | | S | S | 17 07 32.2 | +0.6 |
| **URZ** | **Urewera** | **5.88** | **200** | P | P | 17 06 15.2 | -0.6 |
| URZ | | | | S | S | 17 07 31.3 | -0.4 |
| **URZ** | **Urewera** | **5.88** | **200** | P | P | 17 06 15.2 | -0.6 |
| **RIGZ** | **Rimuhau** | **6.14** | **194** | P | P | 17 06 19.1 | +0.5 |
| RIGZ | | | | S | S | 17 07 39.0 | +2.1 |
| **MUGZ** | **Murupara** | **6.18** | **201** | P | P | 17 06 19.1 | +0.1 |
| MUGZ | | | | S | S | 17 07 38.1 | +0.7 |
| **RTZ** | **Ruatahuna** | **6.25** | **199** | P | P | 17 06 20.1 | +0.4 |
| RTZ | | | | S | S | 17 07 37.3 | -1.6 |
| **SNGZ** | **Shannon Statio** | **6.31** | **196** | P | P | 17 06 21.5 | +1.2 |
| SNGZ | | | | S | S | 17 07 41.6 | +1.6 |
| **PRGZ** | **Paritu Road** | **6.33** | **192** | P | P | 17 06 22.7 | +2.1 |
| PRGZ | | | | S | S | 17 07 42.4 | +2.0 |
| **MTHZ** | **Maungataniwha** | **6.50** | **199** | P | P | 17 06 23.1 | +0.6 |
| **MHGZ** | **Mahia Peninsul** | **6.55** | **192** | P | P | 17 06 25.4 | +2.6 |
| **MRHZ** | **Matea Rd** | **6.62** | **202** | P | P | 17 06 23.9 | +0.3 |
| **NMHZ** | **Naumai** | **6.74** | **199** | P | P | 17 06 26.2 | +1.2 |
| **ARHZ** | **Aropaoanui** | **6.85** | **197** | P | P | 17 06 26.7 | +0.7 |
| **BKZ** | **Black Stump Fm** | **6.90** | **201** | P | P | 17 06 25.0 | -1.5 |
| BKZ | | | | S | S | 17 07 51.8 | +0.5 |
| **BKZ** | **Black Stump Fm** | **6.90** | **201** | P | P | 17 06 26.4 | -0.2 |
| **HIZ** | **Hauiti** | **6.94** | **212** | P | P | 17 06 30.1 | +3.1 |
| **HIZ** | **Hauiti** | **6.94** | **212** | P | P | 17 06 30.8 | +3.8 |
| **TMVZ** | **Te Maari** | **7.11** | **205** | P | P | 17 06 28.8 | -0.1 |
| **ETVZ** | **East Tongariro** | **7.13** | **205** | P | P | 17 06 28.8 | -0.3 |
| **KWHZ** | **Kaweka Forest** | **7.16** | **200** | P | P | 17 06 27.1 | -2.3 |
| KWHZ | | | | S | S | 17 07 59.5 | +3.1 |
| **OTVZ** | **Oturere** | **7.17** | **205** | P | P | 17 06 29.0 | -0.6 |
| OTVZ | | | | S | S | 17 07 59.5 | +2.7 |
| **SNVZ** | **South Ngauruho** | **7.20** | **205** | P | P | 17 06 29.9 | 0.0 |
| **BHHZ** | **Black Hill Sta** | **7.33** | **202** | P | P | 17 06 30.0 | -1.1 |
| BHHZ | | | | S | S | 17 08 01.2 | +1.5 |
| **WNVZ** | **Wahianoa** | **7.33** | **205** | P | P | 17 06 31.0 | -0.4 |
| **KRHZ** | **Kereru** | **7.37** | **200** | P | P | 17 06 30.6 | -1.0 |
| KRHZ | | | | S | S | 17 08 01.2 | +0.6 |
| **KAHZ** | **Kahuranaki** | **7.38** | **197** | P | P | 17 06 32.3 | +0.6 |
| KAHZ | | | | S | S | 17 08 02.9 | +2.1 |
| **PKVZ** | **Pokaka** | **7.39** | **207** | P | P | 17 06 31.6 | -0.3 |
| **VRZ** | **Vera Road** | **7.49** | **210** | P | P | 17 06 34.6 | +1.8 |
| **PNHZ** | **Pukenui** | **7.67** | **200** | P | P | 17 06 32.9 | -1.9 |
| PNHZ | | | | S | S | 17 08 06.3 | -0.2 |
| **TSZ** | **Takapari Road** | **7.88** | **201** | P | P | 17 06 36.8 | -0.3 |
| TSZ | | | | S | S | 17 08 10.6 | +0.1 |
| **PRHZ** | **Porangahau** | **7.89** | **197** | P | P | 17 06 37.2 | +0.1 |
| PRHZ | | | | S | S | 17 08 10.6 | -0.1 |
| **ANWZ** | **Angora Road** | **8.11** | **197** | P | P | 17 06 39.7 | +0.3 |
| ANWZ | | | | S | S | 17 08 18.3 | +3.2 |
| **BFZ** | **Birch Farm** | **8.38** | **198** | P | P | 17 06 42.3 | -0.1 |
| BFZ | | | | S | S | 17 08 20.9 | +0.4 |
| **BFZ** | **Birch Farm** | **8.38** | **198** | P | P | 17 06 44.7 | +2.3 |
| **MRZ** | **Mangatainoka R** | **8.54** | **201** | P | P | 17 06 43.4 | -0.8 |
| MRZ | | | | S | S | 17 08 23.4 | -0.3 |
| **HOWZ** | **Holdsworth Sta** | **8.78** | **201** | P | P | 17 06 46.5 | -0.3 |
| HOWZ | | | | S | S | 17 08 26.8 | -1.7 |
| **MSWZ** | **Moikau Station** | **9.34** | **201** | P | P | 17 06 52.8 | -0.1 |

*MOS* ***03*** *17:05:56.0±0.0,43.°59N×45.°59E,h151km±2km,MPVA4.7*
*TIF* ***03*** *17:05:56.0,43.°74N×45.°70E,h125km±4km*
*IDC* ***03*** *17:05:56.6±0.9,43.°68N×45.°53E,h148km±10km,mb3.2/10, mb1 3.3/16,mb1mx3.1/43,mbtmp3.7/16,Error ellipse: s-maj=14.4km s-min=9.7km az=47.0*
*NEIC* ***03*** *17:05:56.4±1.1,43.°8N±0.°1×45.°8E±0.°1,h125km±18km, mb4.2/8,Error ellipse: s-maj=16.8km s-min=12.2km az=218.0*
*NORS* ***03*** *17:05:56.3±0.0,43.°53N×45.°62E,h147km±2km,MPVA4.6*
*AZER* ***03*** *17:05:57.6±0.3,43.°46N×45.°64E,h125km,Error ellipse: s-maj=6.8km s-min=4.1km az=239.0*
*DRS* ***03*** *17:05:58.9±0.0,44.°26N×44.°88E,h36km*
**ISC 03 17:05:56.4±0.6,43.°64N±0.°03×45.°65E±0.°02,h150km±4km, n194,σ1$61/353,mb3.6/13,6C-16D,Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GROC** | **Groznyy** | **0.45** | **167** | ⇓*i*P | **Pn** | **17 06 18.3** | **+0.8** |
| GROC | | | | *e*S | **Sn** | **17 06 35.0** | **+1.5** |
| **GROC** | **Groznyy** | **0.45** | **167** | *i* Pg | **Pn** | **17 06 18.3** | **+0.8** |
| GROC | | | | *e*Sg | **Sn** | **17 06 34.0** | **+0.6** |
| **TRKR** | **Terskaya** | **0.67** | **277** | ⇓*i*P | **Pn** | **17 06 20.0** | **+1.4** |
| TRKR | | | | *e*S | **Sn** | **17 06 37.6** | **+2.0** |
| **TRKR** | **Terskaya** | **0.67** | **277** | *i* Pg | **Pn** | **17 06 20.0** | **+1.4** |
| TRKR | | | | *e*Sg | **Sn** | **17 06 37.3** | **+1.7** |
| **DVE** | **Vedeno** | **0.77** | **153** | ⇓*i*P | **Pn** | **17 06 19.9** | **+0.5** |
| DVE | | | | *e*S | **Sn** | **17 06 36.9** | **0.0** |
| **DVE** | **Vedeno** | **0.77** | **153** | *i* Pg | **Pn** | **17 06 19.9** | **+0.5** |
| DVE | | | | *e*Sg | **Sn** | **17 06 36.9** | **0.0** |
| **KMGR** | **Komgaron** | **0.82** | **225** | *e*P | **Pn** | **17 06 20.7** | **+0.9** |
| KMGR | | | | *e*S | **Sn** | **17 06 39.4** | **+1.9** |
| **KMGR** | **Komgaron** | **0.82** | **225** | *e*Pg | **Pn** | **17 06 20.7** | **+0.9** |
| KMGR | | | | *e*Sg | **Sn** | **17 06 38.8** | **+1.2** |
| **DLMR** | **Dylym** | **0.91** | **128** | *e*P | **Pn** | **17 06 21.4** | **+1.0** |
| DLMR | | | | *e*S | **Sn** | **17 06 38.9** | **+0.2** |
| DLMR | | | | *i* S | **Sn** | **17 06 39.7** | **+1.0** |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,416nm,0.3s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=N,9μm,0.4s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=E,9μm,0.4s | | | | | | |
| **DLMR** | **Dylym** | **0.91** | **128** | *e*Pg | **Pn** | **17 06 21.4** | **+1.0** |
| DLMR | | | | *e*Sg | **Sn** | **17 06 38.9** | **+0.2** |
| **VLKR** | **Vladikavkaz** | **0.93** | **230** | ⇓*i*P | **Pn** | **17 06 21.4** | **+0.8** |
| VLKR | | | | *e*S | **Sn** | **17 06 40.3** | **+1.3** |
| **VLKR** | **Vladikavkaz** | **0.93** | **230** | *i* Pg | **Pn** | **17 06 21.4** | **+0.8** |
| VLKR | | | | *e*Sg | **Sn** | **17 06 40.2** | **+1.2** |
| **PRTR** | **Priterechnaya** | **1.00** | **277** | ⇓*i*P | **Pn** | **17 06 22.4** | **+1.3** |
| PRTR | | | | *e*S | **Sn** | **17 06 41.7** | **+1.8** |
| **PRTR** | **Priterechnaya** | **1.00** | **277** | *i* Pg | **Pn** | **17 06 22.4** | **+1.3** |
| PRTR | | | | *e*Sg | **Sn** | **17 06 41.7** | **+1.8** |
| **DBC** | **Dubki** | **1.06** | **126** | ⇓*i*P | **Pn** | **17 06 22.3** | **+0.6** |
| DBC | | | | *e*S | **Sn** | **17 06 40.6** | **-0.4** |
| DBC | | | | *i* S | **Sn** | **17 06 41.5** | **+0.5** |
| DBC | | | | pmax | pmax | | |
| | comp=Z,357nm,0.3s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,1μm,0.6s | | | | | | |
| **DBC** | **Dubki** | **1.06** | **126** | *i* Pg | **Pn** | **17 06 22.2** | **+0.4** |
| DBC | | | | *e*Sg | **Sn** | **17 06 40.7** | **-0.3** |
| **BTLR** | **Botlikh** | **1.06** | **157** | *e*P | **Pn** | **17 06 22.6** | **+0.8** |
| BTLR | | | | *e*S | **Sn** | **17 06 41.1** | **0.0** |
| BTLR | | | | *i* S | **Sn** | **17 06 41.7** | **+0.6** |
| BTLR | | | | pmax | pmax | | |
| | comp=Z,601nm,0.4s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=N,816nm,0.4s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=E,556nm,0.5s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=N,645nm,0.3s | | | | | | |
| **BTLR** | **Botlikh** | **1.06** | **157** | *i* Pg | **Pn** | **17 06 22.6** | **+0.8** |
| BTLR | | | | *e*Sg | **Sn** | **17 06 41.2** | **+0.1** |
| **ARNR** | **Ardon** | **1.10** | **246** | *e*P | **Pn** | **17 06 23.1** | **+1.1** |
| ARNR | | | | *e*S | **Sn** | **17 06 42.7** | **+1.2** |
| **ARNR** | **Ardon** | **1.10** | **246** | *e*Pg | **Pn** | **17 06 23.1** | **+1.1** |
| ARNR | | | | *e*Sg | **Sn** | **17 06 40.5** | **-1.1** |
| **STDR** | **Stavd-Durt** | **1.19** | **257** | *e*P | **Pn** | **17 06 24.0** | **+1.2** |
| STDR | | | | *e*S | **Sn** | **17 06 44.5** | **+1.5** |
| **STDR** | **Stavd-Durt** | **1.19** | **257** | *e*Pg | **Pn** | **17 06 24.0** | **+1.2** |
| STDR | | | | *e*Sg | **Sn** | **17 06 44.5** | **+1.5** |
| **KRNR** | **Karanay** | **1.23** | **131** | *e*P | **Pn** | **17 06 23.8** | **+0.5** |
| KRNR | | | | *e*S | **Sn** | **17 06 42.8** | **-1.0** |
| KRNR | | | | *i* S | **Sn** | **17 06 43.7** | **-0.1** |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,184nm,0.2s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=N,892nm,0.6s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=E,579nm,0.4s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=N,838nm,0.6s | | | | | | |
| **KRNR** | **Karanay** | **1.23** | **131** | *e*Pg | **Pn** | **17 06 23.9** | **+0.5** |
| KRNR | | | | *e*Sg | **Sn** | **17 06 42.9** | **-1.0** |
| **UNCR** | **Uncukul** | **1.25** | **138** | *e*P | **Pn** | **17 06 23.8** | **+0.4** |
| UNCR | | | | *e*S | **Sn** | **17 06 43.4** | **-0.6** |
| UNCR | | | | *i* S | **Sn** | **17 06 45.1** | **+1.0** |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,417nm,0.2s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=N,826nm,0.5s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=E,930nm,0.4s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| **UNCR** | **Uncukul** | **1.25** | **138** | *e*Pg | **Pn** | **17 06 23.9** | **+0.4** |
| UNCR | | | | *e*Sg | **Sn** | **17 06 43.4** | **-0.6** |
| **PNSH** | **Pansheti** | **1.26** | **217** | P | **Pn** | **17 06 23.0** | **-0.7** |
| PNSH | | | | S | **Sn** | **17 06 42.6** | **-1.9** |
| **PNSH** | **Pansheti** | **1.26** | **217** | P | **Pn** | **17 06 23.0** | **-0.7** |
| PNSH | | | | S | **Sn** | **17 06 42.6** | **-1.9** |
| **KORR** | **Kora** | **1.28** | **245** | *e*P | **Pn** | **17 06 24.5** | **+0.8** |
| KORR | | | | *e*S | **Sn** | **17 06 44.9** | **+0.3** |
| **KORR** | **Kora** | **1.28** | **245** | *e*Pg | **Pn** | **17 06 24.5** | **+0.8** |
| KORR | | | | *e*Sg | **Sn** | **17 06 44.6** | **0.0** |
| **LACR** | **Lac** | **1.28** | **231** | *e*P | **Pn** | **17 06 23.7** | **-0.2** |
| LACR | | | | *e*S | **Sn** | **17 06 43.3** | **-1.5** |
| **LACR** | **Lac** | **1.28** | **231** | *e*Pg | **Pn** | **17 06 23.7** | **-0.2** |
| LACR | | | | *e*Sg | **Sn** | **17 06 41.6** | **-3.2** |
| **BUJR** | **Buynaksk** | **1.34** | **127** | *e*P | **Pn** | **17 06 25.3** | **+1.0** |
| BUJR | | | | *e*S | **Sn** | **17 06 46.2** | **+0.6** |
| BUJR | | | | *i* S | **Sn** | **17 06 47.0** | **+1.4** |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,4μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| **BUJR** | **Buynaksk** | **1.34** | **127** | *e*Pg | **Pn** | **17 06 25.6** | **+1.3** |
| BUJR | | | | *e*Sg | **Sn** | **17 06 47.1** | **+1.4** |
| **XNZR** | **Khunzakh** | **1.34** | **145** | ⇓*i*P | **Pn** | **17 06 25.6** | **+1.1** |
| XNZR | | | | *e*S | **Sn** | **17 06 46.2** | **+0.3** |
| XNZR | | | | *i* S | **Sn** | **17 06 47.2** | **+1.2** |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,591nm,0.5s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=N,995nm,0.6s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=E,444nm,0.2s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=N,889nm,0.4s | | | | | | |
| **XNZR** | **Khunzakh** | **1.34** | **145** | *e*Pg | **Pn** | **17 06 25.6** | **+1.1** |
| XNZR | | | | *e*Pg | | 17 06 25.8 | |
| XNZR | | | | *e*Sg | **Sn** | **17 06 46.2** | **+0.3** |
| XNZR | | | | *e*Sg | **Sn** | **17 06 46.7** | **+0.8** |
| **LSNR** | **Lesken** | **1.38** | **255** | *e*P | **Pn** | **17 06 25.5** | **+0.8** |
| LSNR | | | | *e*S | **Sn** | **17 06 47.0** | **+0.7** |
| **LSNR** | **Lesken** | **1.38** | **255** | *e*Pg | **Pn** | **17 06 25.5** | **+0.8** |
| LSNR | | | | *e*Sg | **Sn** | **17 06 46.6** | **+0.2** |
| **KANR** | **Karaman** | **1.41** | **108** | *e*P | **Pn** | **17 06 26.7** | **+1.8** |
| KANR | | | | *e*S | **Sn** | **17 06 48.9** | **+2.2** |
| KANR | | | | *i* S | **Sn** | **17 06 50.1** | **+3.4** |
| KANR | | | | pmax | pmax | | |
| | comp=Z,283nm,0.5s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=N,4μm,0.4s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=E,3μm,0.6s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=N,4μm,0.4s | | | | | | |
| **KANR** | **Karaman** | **1.41** | **108** | *e*Pg | **Pn** | **17 06 26.8** | **+1.8** |
| KANR | | | | *e*Sg | **Sn** | **17 06 48.9** | **+2.2** |
| **ARKR** | **Arakani** | **1.43** | **136** | *e*P | **Pn** | **17 06 26.2** | **+1.0** |
| ARKR | | | | *e*S | **Sn** | **17 06 47.2** | **-0.1** |
| ARKR | | | | *i* S | **Sn** | **17 06 48.0** | **+0.7** |
| ARKR | | | | pmax | pmax | | |
| | comp=Z,873nm,0.3s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=E,2μm,0.5s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| **ARKR** | **Arakani** | **1.43** | **136** | *e*Pg | **Pn** | **17 06 26.3** | **+1.0** |
| ARKR | | | | *e*Sg | **Sn** | **17 06 47.2** | **-0.1** |
| **NCK** | **Nalchik** | **1.50** | **265** | ⇓*i*P | **Pn** | **17 06 26.7** | **+0.8** |
| NCK | | | | *e*S | **Sn** | **17 06 48.7** | **+0.1** |
| **NCK** | **Nalchik** | **1.50** | **265** | *i* Pg | **Pn** | **17 06 26.7** | **+0.8** |
| NCK | | | | *e*Sg | **Sn** | **17 06 48.7** | **+0.1** |
| **MAK** | **Makhachkala** | **1.51** | **116** | *e*P | **Pn** | **17 06 27.4** | **+1.4** |
| MAK | | | | *e*S | **Sn** | **17 06 49.7** | **+1.0** |
| **MAK** | **Makhachkala** | **1.51** | **116** | *i* Pg | **Pn** | **17 06 27.7** | **+1.7** |
| MAK | | | | *i* Sg | **Sn** | **17 06 48.4** | **-0.3** |
| **ZEI** | **Tsey** | **1.54** | **237** | *e*P | **Pn** | **17 06 26.5** | **0.0** |
| ZEI | | | | *e*S | **Sn** | **17 06 47.8** | **-1.8** |
| **ZEI** | **Tsey** | **1.54** | **237** | *e*Pg | **Pn** | **17 06 26.5** | **0.0** |
| ZEI | | | | *e*Sg | **Sn** | **17 06 47.7** | **-1.8** |
| **GNBR** | **Gunib** | **1.58** | **142** | ⇓*i*P | **Pn** | **17 06 28.0** | **+1.2** |
| GNBR | | | | *e*S | **Sn** | **17 06 50.3** | **+0.2** |
| **GNBR** | **Gunib** | **1.58** | **142** | *i* Pg | **Pn** | **17 06 28.0** | **+1.2** |
| GNBR | | | | *e*Sg | **Sn** | **17 06 50.3** | **+0.2** |
| **DIGR** | **Digorskoe uzhe** | **1.69** | **245** | *e*P | **Pn** | **17 06 28.0** | **-0.1** |
| DIGR | | | | *e*S | **Sn** | **17 06 50.5** | **-1.9** |
| **DIGR** | **Digorskoe uzhe** | **1.69** | **245** | *e*Pg | **Pn** | **17 06 27.8** | **-0.4** |
| DIGR | | | | *e*Sg | **Sn** | **17 06 50.3** | **-2.1** |
| **KMKR** | **Kumukh** | **1.85** | **144** | ⇓*i*P | **Pn** | **17 06 30.9** | **+1.0** |
| KMKR | | | | *e*S | **Sn** | **17 06 55.7** | **+0.1** |
| KMKR | | | | *i* S | **Sn** | **17 06 57.2** | **+1.6** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,295nm,0.2s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=E,775nm,0.5s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,875nm,0.4s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,982nm,0.6s | | | | | | |
| **KMKR** | **Kumukh** | **1.85** | **144** | *i* Pg | **Pn** | **17 06 31.0** | **+1.0** |
| KMKR | | | | *e*Sg | **Sn** | **17 06 55.8** | **+0.1** |
| **LGD** | **Lagodekhi** | **1.86** | **166** | P | **Pn** | **17 06 30.3** | **+0.4** |
| LGD | | | | S | **Sn** | **17 06 55.7** | **+0.2** |
| **LGD** | **Lagodekhi** | **1.86** | **166** | ⇓P | **Pn** | **17 06 30.3** | **+0.4** |
| LGD | | | | S | **Sn** | **17 06 55.7** | **+0.2** |
| **SGKR** | **Sergokala** | **1.89** | **128** | *e*P | **Pn** | **17 06 31.6** | **+1.4** |
| SGKR | | | | *e*S | **Sn** | **17 06 57.7** | **+1.6** |
| SGKR | | | | *i* S | **Sn** | **17 06 58.3** | **+2.2** |
| SGKR | | | | pmax | pmax | | |
| | comp=Z,195nm,0.6s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=N,879nm,0.5s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=E,869nm,0.5s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=N,806nm,1.0s | | | | | | |
| **SGKR** | **Sergokala** | **1.89** | **128** | *e*Pg | **Pn** | **17 06 31.6** | **+1.4** |
| SGKR | | | | *e*Sg | **Sn** | **17 06 57.8** | **+1.7** |
| **PYA1** | **Pyatigorsk** | **1.90** | **284** | *e*Pg | **Pn** | **17 06 30.4** | **+0.1** |
| PYA1 | | | | *e*Sg | **Sn** | **17 06 54.4** | **-1.9** |
| **ONI** | **Oni** | **1.93** | **238** | P | **Pn** | **17 06 32.5** | **+1.8** |
| ONI | | | | S | **Sn** | **17 06 58.5** | **+1.6** |
| **ONI** | **Oni** | **1.93** | **238** | ⇑P | **Pn** | **17 06 32.5** | **+1.8** |
| ONI | | | | S | **Sn** | **17 06 58.5** | **+1.6** |
| **ONI** | **Oni** | **1.93** | **238** | *e*Pg | **Pn** | **17 06 32.6** | **+1.8** |
| ONI | | | | *i* Sg | **Sn** | **17 06 58.4** | **+1.4** |
| **ONI** | **Oni** | **1.93** | **238** | Pn | **Pn** | **17 06 32.5** | **+1.8** |
| **SEAG** | **Tbilisi Sea** | **1.98** | **199** | P | **Pn** | **17 06 32.3** | **+1.0** |
| SEAG | | | | S | **Sn** | **17 06 58.6** | **+0.5** |
| **SEAG** | **Tbilisi Sea** | **1.98** | **199** | P | **Pn** | **17 06 32.3** | **+1.0** |
| SEAG | | | | S | **Sn** | **17 06 58.6** | **+0.5** |
| **KBZ** | **Khabaz** | **2.00** | **273** | P | **Pn** | **17 06 31.2** | **-0.2** |
| | comp=N,11nm,0.3s,baz=53,slow=3.8,SNR=727 | | | | | | |
| KBZ | | | | S | **Sn** | **17 06 56.4** | **-2.0** |
| | comp=N,61nm,0.3s,baz=306,slow=22,SNR=21 | | | | | | |
| **BTNK** | **Botanikuri** | **2.06** | **198** | P | **Pn** | **17 06 30.0** | **-2.2** |
| BTNK | | | | S | **Sn** | **17 06 57.1** | **-2.5** |
| **BTNK** | **Botanikuri** | **2.06** | **198** | P | **Pn** | **17 06 30.0** | **-2.2** |
| BTNK | | | | S | **Sn** | **17 06 57.2** | **-2.5** |
| **URKR** | **Urkarakh** | **2.07** | **135** | *e*P | **Pn** | **17 06 33.4** | **+1.0** |
| URKR | | | | *e*S | **S

comp=N,2μm,0.4s
DRN smax smax
comp=N,2μm,0.4s
**DRN Derbent 2.54 128** *e*Pn **Pn 17 06 39.7 +1.7**
DRN *e*Sn **Sn 17 07 11.3 +1.3**
**DMNI Dmanisi 2.55 206** P **Pn 17 06 38.5 +0.3**
DMNI S **Sn 17 07 09.7 -0.8**
**DMNI Dmanisi 2.55 206** P **Pn 17 06 38.6 +0.3**
DMNI S **Sn 17 07 09.7 -0.8**
**QZX Qazax, Azerbai 2.59 185** P **Pn 17 06 38.6 0.0**
SNR=87
QZX S **Sn 17 07 09.8 -1.4**
**AKT Akhty 2.65 144** *e*P **Pn 17 06 40.5 +1.0**
AKT *e*S **Sn 17 07 12.7 +0.1**
AKT *i* S **Sn 17 07 13.4 +0.8**
AKT pmax pmax
comp=Z,123nm,0.3s
AKT smax smax
comp=N,813nm,0.4s
AKT smax smax
comp=E,760nm,0.3s
AKT smax smax
comp=N,633nm,0.6s
**AKT Akhty 2.65 144** *e*Pn **Pn 17 06 40.4 +0.9**
AKT *e*Sn **Sn 17 07 11.7 -1.0**
**SEKA Sheki 2.69 154** P **Pn 17 06 40.1 +0.2**
SNR=282
SEKA S **Sn 17 07 12.4 -1.0**
**KSMR Kasumkent 2.74 137** *e*P **Pn 17 06 41.9 +1.4**
KSMR *e*S **Sn 17 07 15.3 +0.8**
KSMR *i* S **Sn 17 07 16.5 +2.0**
KSMR pmax pmax
comp=Z,108nm,0.3s
KSMR smax smax
comp=N,1μm,0.4s
KSMR smax smax
comp=E,5.0nm,0.4s
KSMR smax smax
comp=N,1μm,0.4s
**KSMR Kasumkent 2.74 137** *e*Pn **Pn 17 06 41.9 +1.4**
KSMR *e*Sn **Sn 17 07 15.3 +0.8**
**CHVG Ch'k'valeri 2.77 252** P **Pn 17 06 43.1 +2.3**
CHVG S **Sn 17 07 19.8 +4.7**
**CHVG Ch'k'valeri 2.77 252** P **Pn 17 06 43.1 +2.3**
CHVG S **Sn 17 07 19.8 +4.7**
**ABS Abastumani 2.82 229** P **Pn 17 06 42.3 +0.7**
ABS S **Sn 17 07 18.2 +1.7**
**ABS Abastumani 2.82 229** ⇑P **Pn 17 06 42.3 +0.7**
ABS S **Sn 17 07 18.2 +1.7**
**BGD Bogdanovka 2.82 213** P **Pn 17 06 42.9 +1.2**
BGD S **Sn 17 07 18.3 +1.7**
**BGD Bogdanovka 2.82 213** P **Pn 17 06 42.9 +1.2**
BGD S **Sn 17 07 18.3 +1.7**
**NVNR Nevinnomyssk 2.83 291** *e*Pn **Pn 17 06 42.1 +0.6**
NVNR *e*Sn **Sn 17 07 15.0 -1.4**
**QSAR Qusar 2.87 137** P **Pn 17 06 43.4 +1.2**
SNR=24
QSAR S **Sn 17 07 17.2 -0.2**
**GDB GEDABAY 2.92 179** P **Pn 17 06 42.7 -0.3**
SNR=51
GDB S **Sn 17 07 16.9 -1.9**
**GANJ Ganja 3.04 170** P **Pn 17 06 44.1 -0.2**
SNR=20
GANJ S **Sn 17 07 19.2 -2.0**
**MNGR Mingechevir, A 3.06 159** P **Pn 17 06 45.1 +0.7**
SNR=3.8
MNGR S **Sn 17 07 19.8 -1.8**
**XNQ Khinaliq 3.08 142** P **Pn 17 06 45.4 +0.4**
SNR=81
XNQ S **Sn 17 07 22.3 -0.2**
**QUBA Quba, Azerbaij 3.10 136** P **Pn 17 06 46.0 +0.9**
SNR=3.5
QUBA S **Sn 17 07 22.4 -0.3**
**QBL Gabala 3.14 148** P **Pn 17 06 46.4 +0.8**
SNR=75
QBL S **Sn 17 07 23.5 -0.2**
**ARXR Arkhyz 3.18 270** ⇓*e*P **Pn 17 06 47.3 +1.2**
ARXR *e*S **Sn 17 07 24.0 -0.6**
ARXR pmax pmax
comp=Z,57nm,1.0s
ARXR smax smax
comp=Z,113nm,1.0s
**ARXR Arkhyz 3.18 270** *e*Pn **Pn 17 06 46.8 +0.6**
ARXR *e*Sn **Sn 17 07 17.2 -7.5**
**AHMR Akhmetovskaya 3.37 280** *e*Pn **Pn 17 06 49.6 +1.1**
AHMR *e*Sn **Sn 17 07 30.1 +1.3**
**IML Ismayilli 3.41 146** P **Pn 17 06 49.3 +0.3**
SNR=7.1
IML S **Sn 17 07 28.7 -1.1**
**SIZA Siyzn 3.52 136** P **Pn 17 06 50.8 +0.4**
SNR=24
SIZA S **Sn 17 07 31.9 -0.3**
**GNI Garni 3.56 191** P **Pn 17 06 52.4 +1.4**
comp=Z,4.3nm,0.3s,baz=326,slow=3.6,SNR=10
GNI S **Sn 17 07 34.6 +1.2**
comp=Z,3.3nm,0.3s,baz=264,slow=23,SNR=5.9
**GNI Garni 3.56 191** *e*Pn **Pn 17 06 52.2 +1.2**
GNI *e*Sn **Sn 17 07 34.7 +1.4**
**GNI Garni 3.56 191** Pn **Pn 17 06 52.0 +1.0**
**BRDA Brd 3.56 161** P **Pn 17 06 52.0 +1.0**
SNR=8.7
BRDA S **Sn 17 07 32.6 -0.6**
**PQL Pirkuli 3.59 142** P **Pn 17 06 52.1 +0.6**
SNR=6.5
PQL S **Sn 17 07 33.2 -0.9**
**ZRD Zardab 3.69 155** P **Pn 17 06 53.0 +0.5**
SNR=30
ZRD S **Sn 17 07 36.4 +0.3**
**AGDM Agdam 3.69 162** P **Pn 17 06 53.1 +0.4**
SNR=23
AGDM S **Sn 17 07 36.7 +0.4**
**ATGJ Altiaghaj 3.70 138** P **Pn 17 06 53.0 +0.2**
SNR=12
ATGJ S **Sn 17 07 36.0 -0.5**
**KDMR Kurdemir 3.77 149** P **Pn 17 06 54.1 +0.5**
KDMR S **Sn 17 07 36.9 -1.1**
**RPOR Krasnaya Polya 3.91 273** *e*Pn **Pn 17 06 57.5 +2.1**
RPOR *e*Sn **Sn 17 07 43.9 +2.6**
**GBS Qobustan 3.95 141** P **Pn 17 06 57.5 +1.4**
SNR=9.0
GBS S **Sn 17 07 43.1 +0.7**
**HYR Heyderabad 3.97 189** P **Pn 17 06 58.4 +2.2**
SNR=7.0
**GUZR Guzeripl' 4.02 277** *e*Pn **Pn 17 06 58.7 +1.8**
GUZR *e*Sn **Sn 17 07 44.8 +0.9**
**BLQ Beylaqan 4.17 159** P **Pn 17 06 59.7 +0.8**
SNR=7.2
BLQ S **Sn 17 07 46.2 -1.2**
**SBZ Shahbuz 4.24 181** P **Pn 17 07 01.7 +1.8**
SNR=20
**QRD Qoradiz 4.36 163** P **Pn 17 07 01.7 +0.3**
SNR=3.2
**GOBA Gobu 4.44 135** P **Pn 17 07 03.8 +1.4**
GOBA S **Sn 17 07 54.5 +0.8**
**NDR Nardaran 4.44 132** S **Sn 17 07 54.2 +0.5**
**ALIB Äli-Bayra 4.45 145** P **Pn 17 07 04.2 +1.7**
SNR=7.6
ALIB S **Sn 17 07 52.6 -1.4**
**NAX Nakhchivan 4.47 182** P **Pn 17 07 05.0 +2.1**
SNR=18
**GOYR Goytkh 4.57 280** *e*Pn **Pn 17 07 06.1 +2.0**
GOYR *e*Sn **Sn 17 07 53.6 -3.2**
**ORD Ordubad 4.72 177** P **Pn 17 07 07.7 +1.5**
SNR=12
**GLBA Clilabad 4.86 154** P **Pn 17 07 07.9 +0.1**
SNR=8.8
GLBA S **Sn 17 08 01.3 -2.2**
**YRD Yardimli 5.11 157** P **Pn 17 07 11.3 -0.1**
SNR=5.1
YRD S **Sn 17 08 07.3 -2.6**
**LRK Lerik 5.39 157** P **Pn 17 07 15.3 +0.2**
SNR=31
LRK S **Sn 17 08 15.2 -1.4**
**LKRN Lenkeran, Azer 5.46 153** P **Pn 17 07 16.2 +0.3**
LKRN S **Sn 17 08 14.5 -3.5**
**ASTR Astara 5.60 154** P **Pn 17 07 18.2 +0.4**
SNR=2.9
ASTR S **Sn 17 08 20.5 -0.8**
**SNOP Sinop 7.85 262** Pn **Pn 17 07 48.5 +0.9**
**BZK Bozkurt 8.73 263** Pn **Pn 17 08 00.6 +1.2**
**BRTR Keskin Array B 9.80 251** P **Pn 17 08 12.2 -1.6**
comp=Z,0.2nm,0.3s,baz=58,slow=22,SNR=2.9
**AKTO Aktyubinsk 10.82 47** P **Pn 17 08 25.0 -2.1**
comp=Z,1.4nm,0.3s,baz=218,slow=10,SNR=17
**AKTO Aktyubinsk 10.82 47** P **Pn 17 08 25.1 -1.9**
AKTO 17 10 20.8
**AKTO Aktyubinsk 10.82 47** ⇓Pn **Pn 17 08 25.2 -1.9**
comp=Z,3.5nm,0.6s
AKTO ⇓Sn **Sn 17 10 21.3 -5.4**
comp=Z,5.1nm,0.7s
**GEYT Alibeck 11.03 117** P **Pn 17 08 26.8 -3.3**
comp=Z,1.3nm,0.3s,baz=307,slow=13,SNR=6.2
GEYT S **Sn 17 10 24.1 -7.9**
comp=Z,1.5nm,0.3s,baz=142,slow=41,SNR=2.8
**GYA0B ALIBECK ARRAY 11.03 117** Pn **Pn 17 08 26.9 -3.1**
**AB31 Akbulak array 11.34 55** P **Pn 17 08 32.0 -1.8**
AB31 *i* 17 10 33.2
**AB31 Akbulak array 11.34 55** Pn **Pn 17 08 32.1 -1.8**
comp=Z,1.7nm,0.3s,baz=242,slow=12,SNR=114
AB31 ⇑Sn **Sn 17 10 33.3 -5.8**
comp=Z,1.2nm,0.5s,baz=243,slow=21,SNR=5.6
**ABKAR Akbulak array 11.34 55** Pn **Pn 17 08 31.8 -2.0**
ABKAR **Sn 17 10 31.1 -7.9**
**ABKAR Akbulak array 11.34 55** Pn **Pn 17 08 31.5 -2.3**
**OBN Obninsk 12.90 336** *e*P **Pn 17 08 54.9 +0.9**
OBN pmax pmax
comp=Z,4.0nm,0.9s
**AKASG Malin Array Be 13.20 308** P **Pn 17 08 56.8 -1.2**
comp=Z,0.8nm,0.3s,baz=116,slow=11,SNR=3.5
**BURAR Bucovina Array 14.83 293** Pn **Pn 17 09 19.4 +0.7**
**BUR08 Bucovina Ar. S 14.85 293** **P 17 09 21.7 +0.9**
**ARU Arti 15.21 28** P **Pn 17 09 22.1 -1.0**
comp=Z,0.0nm,0.3s,baz=218,slow=11,SNR=7.8
ARU S Sn 17 11 58.6 -13
comp=Z,0.0nm,0.3s,baz=245,slow=20,SNR=1.4
**ARU Arti 15.21 28** P **Pn 17 09 22.2 -1.0**
ARU S **Sn 17 12 12.5 +0.4**
**ARU Arti 15.21 28** Pn **Pn 17 09 21.9 -1.3**
**KLMR Klimovskoe 17.63 350** *e*P **P 17 09 51.1 -0.1**
KLMR pmax pmax
comp=Z,7.0nm,0.7s
**KLMR Klimovskoe 17.63 350** *e*Pn **P 17 09 51.2 0.0**
KLMR AMP 17 09 55.7
comp=Z,7.0nm,0.7s
**KKAR Karatay Array 18.07 83** P **P 17 09 56.8 +0.6**
**KKAR Karatay Array 18.07 83** P **P 17 09 56.8 +0.6**
**CHGR Chuyangaron 18.37 98** P **P 17 10 00.4 +0.7**
CHGR IAmb IAmb 17 10 03.7
comp=Z,15nm,0.7s
**BRVK Borovoye 18.80 51** ⇑*e*P **Pn 17 10 06.2 -0.1**
BRVK pmax pmax
comp=Z,3.0nm,0.8s
**BRVK Borovoye 18.80 51** P **P 17 10 04.2 0.0**
**BVAR Borovoye Array 18.85 51** P **P 17 10 05.5 +0.8**
comp=Z,0.5nm,0.3s,baz=256,slow=5.8,SNR=8.1
**BTK Batken 19.06 92** P **P 17 10 07.9 +0.7**
BTK pmax pmax
comp=Z,7.0nm,0.7s
**BTK Batken 19.06 92** P **P 17 10 07.9 +0.7**
BTK IAmb IAmb 17 10 11.1
comp=Z,6.5nm,0.7s
**GAR Garm 19.07 96** P **P 17 10 08.1 +0.8**
**AAK Ala-Archa 21.03 83** P **P 17 10 29.1 +0.8**
comp=Z,1.4nm,0.8s,baz=297,slow=2.3,SNR=2.8
**FIA1 FINESS Array S 21.28 334** P **P 17 10 31.0 +0.3**
FIA1 IAmb IAmb 17 10 42.0
comp=Z,14nm,1.3s
**FINES FINESS Array B 21.28 334** P **P 17 10 30.6 -0.1**
comp=Z,6.7nm,0.5s,baz=137,slow=9.8,SNR=37
**FINES FINESS Array B 21.28 334** P **P 17 10 31.2 +0.5**
**FINES FINESS Array B 21.28 334** P **P 17 10 31.2 +0.5**
**GERES GERESS Array B 22.60 295** P **P 17 10 45.2 +0.9**
comp=Z,0.3nm,0.4s,baz=100,slow=9.5,SNR=5.0
**KURBB Kurchatov Arra 23.29 61** P **P 17 10 51.6 +1.1**
comp=Z,0.5nm,0.5s,baz=269,slow=12,SNR=7.6
**KURK Kurchatov 23.35 61** P **P 17 10 51.7 +0.6**
**HFS Hagfors 25.36 322** P **P 17 11 09.1 -0.1**
comp=Z,2.4nm,0.5s,baz=128,slow=9.6,SNR=17
**MK31 Makanchi Array 25.85 70** ⇓*e*P **P 17 11 14.8 +1.0**
**MKAR Makanchi Array 25.85 70** P **P 17 11 14.8 +1.0**
comp=Z,0.2nm,0.3s,baz=266,slow=10.0,SNR=9.8
**NOA NORSAR Array B 26.85 322** P **P 17 11 21.6 -1.1**
comp=Z,0.2nm,0.3s,baz=109,slow=11,SNR=7.7
**ARCES ARCESS Array B 27.93 345** P **P 17 11 32.7 +0.6**
comp=Z,1.3nm,0.8s,baz=157,slow=9.6,SNR=8.9
**WMQ Urumqi 30.14 75** *e*P **P 17 11 56.4 +4.3**
**HHC Hu-ho-hao-te 47.71 69** *e*P **P 17 14 18.2 +0.3**
HHC pmax pmax
comp=Z,13nm,1.0s
HHC pmax pmax
comp=Z,140nm,7.1s
**PZH PanZhiHua 48.07 92** P **P 17 14 24.0 +3.1**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
**TORD Torodi Ar. Bea 48.36 245** P **P 17 14 22.1 -0.9**
comp=Z,0.6nm,0.5s,baz=37,slow=9.2,SNR=5.2
**YKA Yellowknife Ar 73.03 351** P **P 17 17 09.4 +0.1**
comp=Z,0.4nm,0.6s,baz=12,slow=6.3,SNR=9.8

*IDC* ***03*** *17:20:54.4±1.8,30°.63S×71°.84W,h0km,mb4.1/2, mb1 3.9/6,mb1mx3.7/36,mbtmp3.8/6,ML3.6/4,Error ellipse: s-maj=68.9km s-min=29.7km az=104.0*
*NEIC* ***03*** *17:20:55.5±2.4,30°.62S±0°.01×72°.1W±0°.1,h10km±1km, mb4.4/1,ML4.0(GUC),Error ellipse: s-maj=16.1km s-min=2.9km az=266.0*
*GUC* ***03*** *17:21:00.2±0.5,30°.63S×71°.67W,h32km±1km,ML4.0*
**ISC 03 17:20:54.5±3.2,30°.57S±0°.04×71°.97W±0°.08,h5km±20km, n59,σ1$10/60,mb4.1/3,5D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.30** | **110** | ⇓*i*P | | **Pb** | **17 21 03.9** | **+1.4** |
| CO06 | | | | *i* S | | **Sb** | **17 21 08.1** | **+0.3** |
| **CO06** | **Fray Jorge** | **0.30** | **110** | | | **Pb** | **17 21 03.6** | **+1.1** |
| **CO05** | **La Serena** | **0.91** | **44** | *i* P | | **Pn** | **17 21 14.7** | **+0.8** |
| CO05 | | | | *e*S | | **Sn** | **17 21 27.5** | **+0.2** |
| CO05 | | | | IAML | | | 17 21 31.1 | |
| comp=N,5μm,0.5s | | | | | | | | |
| **CO05** | **La Serena** | **0.91** | **44** | | | **Pn** | **17 21 14.7** | **+0.8** |
| **CO02** | **Combarbal** | **1.04** | **127** | ⇓*i*P | | **Pb** | **17 21 15.2** | **+0.1** |
| CO02 | | | | *i* S | | **Sb** | **17 21 26.7** | **-2.5** |
| CO02 | | | | IAML | | | 17 21 31.0 | |
| comp=N,14μm,0.2s | | | | | | | | |
| **CO02** | **Combarbal** | **1.04** | **127** | | | **Pb** | **17 21 15.0** | **-0.1** |
| **GO04** | **Tololo Observa** | **1.08** | **69** | *e*P | | **Pb** | **17 21 16.4** | **+0.5** |
| GO04 | | | | *i* S | | **Sb** | **17 21 28.4** | **-2.1** |
| GO04 | | | | IAML | | | 17 21 40.0 | |
| comp=N,11μm,0.3s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.08** | **69** | | | **Pn** | **17 21 17.1** | **+0.5** |
| **CO03** | **El Pedregal** | **1.13** | **104** | ⇓*i*P | | **Pn** | **17 21 16.9** | **-0.3** |
| CO03 | | | | *i* S | | **Sb** | **17 21 28.8** | **-2.9** |
| CO03 | | | | IAML | | | 17 21 34.1 | |
| comp=N,5μm,0.5s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.13** | **104** | | | **Pn** | **17 21 16.7** | **-0.5** |
| **LCO** | **Las Campanas** | **1.90** | **36** | *e*P | | **Pn** | **17 21 29.2** | **+1.3** |
| **LCO** | **Las Campanas** | **1.90** | **36** | | | **Pn** | **17 21 29.5** | **+1.6** |
| **VA06** | **Catapilco** | **2.07** | **164** | *e*P | | **Pn** | **17 21 29.3** | **-0.6** |
| VA06 | | | | IAML | | | 17 22 04.9 | |
| comp=N,2μm,0.5s | | | | | | | | |
| **VA01** | **Torpederas** | **2.46** | **174** | | | **Pn** | **17 21 35.7** | **+0.4** |
| **AC04** | **Llanos de Chal** | **2.48** | **19** | ⇓*e*P | | **Pn** | **17 21 36.4** | **+0.7** |
| **AC04** | **Llanos de Chal** | **2.48** | **19** | | | **Pn** | **17 21 36.5** | **+0.8** |
| **VA03** | **San Esteban** | **2.50** | **151** | *e*P | | **Pn** | **17 21 36.5** | **+0.6** |
| VA03 | | | | *e*S | | **Sn** | **17 22 07.3** | **+0.5** |
| VA03 | | | | IAML | | | 17 22 18.0 | |
| comp=N,2μm,0.5s | | | | | | | | |
| **VA03** | **San Esteban** | **2.50** | **151** | | | **Pn** | **17 21 36.7** | **+0.7** |
| **ROCH** | **El Roble** | **2.53** | **161** | *e*P | | **Pn** | **17 21 36.2** | **-0.3** |
| ROCH | | | | IAML | | | 17 22 22.2 | |
| comp=E,1μm,0.5s | | | | | | | | |
| **ROC1** | **El Roble** | **2.53** | **162** | | | **Pn** | **17 21 35.4** | **-1.2** |
| **MT02** | **Curacav** | **2.77** | **165** | | | **Pn** | **17 21 40.6** | **+1.0** |
| **PEL** | **Peldehue** | **2.79** | **157** | *e*P | | **Pn** | **17 21 40.7** | **+0.8** |
| PEL | | | | *e*S | | **Sn** | **17 22 15.7** | **+1.7** |
| PEL | | | | IAML | | | 17 22 23.3 | |
| comp=N,535nm,0.4s | | | | | | | | |
| **PEL** | **Peldehue** | **2.79** | **157** | | | **Pn** | **17 21 40.7** | **+0.8** |
| **MT05** | **Renca** | **3.00** | **160** | *e*S | | **Sn** | **17 22 20.4** | **+1.1** |
| MT05 | | | | IAML | | | 17 22 33.4 | |
| comp=E,1μm,0.2s | | | | | | | | |
| **MT05** | **Renca** | **3.00** | **160** | | | **Pn** | **17 21 44.3** | **+1.5** |
| **VA05** | **Santo Domingo** | **3.09** | **175** | IAML | | | 17 22 36.5 | |
| comp=E,646nm,0.5s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.09** | **175** | | | **Pn** | **17 21 44.0** | **0.0** |
| **MT09** | **Talagante** | **3.30** | **166** | ⇓*e*P | | **Pn** | **17 21 47.7** | **+0.7** |
| MT09 | | | | IAML | | | 17 22 44.3 | |
| comp=N,469nm,0.4s | | | | | | | | |
| **MT09** | **Talagante** | **3.30** | **166** | | | **Pn** | **17 21 47.7** | **+0.7** |
| **GO03** | **Copiap** | **3.33** | **28** | | | **Pn** | **17 21 48.3** | **+1.0** |
| **MT01** | **Popeta** | **3.34** | **170** | | | **Pn** | **17 21 47.1** | **-0.3** |
| **LMEL** | **Las Melosas** | **3.59** | **156** | | | **Pn** | **17 21 52.2** | **+1.2** |
| **BO04** | **La Punta** | **3.60** | **162** | *e*P | | **Pn** | **17 21 52.1** | **+1.1** |
| **BO01** | **Tunca** | **3.88** | **169** | | | **Pn** | **17 21 55.8** | **+0.9** |
| **BO02** | **Sierra Bellavi** | **4.33** | **167** | | | **Pn** | **17 22 01.9** | **+0.8** |
| **GO05** | **Huala** | **4.43** | **180** | Pn | | **Pn** | **17 22 01.2** | **-1.2** |
| **AC02** | **Maricunga** | **4.48** | **35** | | | **Pn** | **17 22 05.0** | **+1.5** |
| **H03N1** | **Juan Fernandez** | **6.56** | **242** | T | | T | 17 29 28.3 | |
| baz=72,slow=72,SNR=2592 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.57** | **242** | T | | T | 17 29 29.7 | |
| baz=72,slow=72,SNR=2275 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.57** | **242** | T | | T | 17 29 25.9 | |
| baz=72,slow=72,SNR=2327 | | | | | | | | |
| **LC01** | **Cunco** | **8.31** | **180** | Pn | | **Pn** | **17 22 54.7** | **-0.9** |
| **LVC** | **Limon Verde** | **8.39** | **20** | Pn | | **Pn** | **17 22 56.2** | **-0.9** |
| comp=N,0.5nm,0.3s,baz=203,slow=15,SNR=1.9 | | | | | | | | |
| **PB03** | **IPOC Station P** | **8.72** | **14** | Pn | | **Pn** | **17 22 59.9** | **-1.6** |
| **PB07** | **IPOC Station P** | **9.00** | **12** | Pn | | **Pn** | **17 23 03.5** | **-1.9** |
| **PB09** | **IPOC Station P** | **9.07** | **16** | Pn | | **Pn** | **17 23 05.0** | **-1.3** |
| **PLCA** | **Paso Flores** | **10.21** | **174** | Pn | | **Pn** | **17 23 21.8** | **+0.1** |
| comp=N,0.2nm,0.3s,baz=346,slow=12,SNR=5.3 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.21** | **174** | | | **Pn** | **17 23 21.1** | **-0.6** |
| **PB11** | **IPOC Station P** | **10.96** | **12** | Pn | | **Pn** | **17 23 32.9** | **+0.6** |
| **LPAZ** | **La Paz** | **14.64** | **15** | Pn | | **Pn** | **17 24 25.4** | **+2.3** |
| comp=N,0.1nm,0.3s,baz=187,slow=10,SNR=3.9 | | | | | | | | |
| **SIV** | **San Ignacio** | **17.61** | **37** | P | | **P** | **17 25 02.2** | **+0.3** |
| comp=N,0.2nm,0.3s,baz=230,slow=14,SNR=9.9 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.49** | **61** | P | | **P** | **17 26 33.2** | **+0.1** |
| comp=N,1.5nm,0.3s,baz=246,slow=12,SNR=3.5 | | | | | | | | |
| **SNAA** | **Sanae** | **54.74** | **159** | P | | **P** | **17 30 23.8** | **-0.8** |
| SNAA | | | | IAmb | | IAmb | 17 30 35.0 | |
| comp=Z,5.4nm,1.2s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.99** | **70** | P | | **P** | **17 33 21.0** | **-0.2** |
| comp=Z,0.9nm,0.7s,baz=250,slow=4.9,SNR=6.5 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.81** | **272** | T | | T | 19 58 40.7 | |
| baz=115,slow=75,SNR=24 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.82** | **272** | T | | T | 19 58 39.8 | |
| baz=115,slow=75,SNR=20 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.83** | **272** | T | | T | 19 58 41.9 | |
| baz=115,slow=75,SNR=24 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.25** | **29** | PKPbc | | **PKiKP** | **17 40 49.1** | **0.0** |
| comp=Z,2.1nm,0.6s,baz=299,slow=2.9,SNR=12 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.25** | **29** | | | **PKiKP** | **17 40 49.0** | **-0.1** |
| **MKAR** | **Makanchi Array** | **154.35** | **44** | PKPbc | | **PKiKP** | **17 40 56.1** | **+0.2** |
| comp=Z,0.2nm,0.7s,baz=323,slow=0.7,SNR=2.4 | | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | **17 41 10.9** | **+0.9** |
| comp=Z,0.1nm,0.3s,baz=271,slow=2.1,SNR=3.5 | | | | | | | | |

*GCG* ***03*** *17:27:06.3±0.6,13°.08N×93°.75W,h36km±999km,MD4.2*
*MEX* ***03*** *17:27:18.9±0.5,14°.27N×93°.08W,h81km±42km,MD4.2*
*IDC* ***03*** *17:27:23.2±4.4,14°.58N×92°.92W,h39km±29km,mb3.8/5, mb1 4.1/9,mb1mx3.7/47,mbtmp3.9/9,ML3.7/4,MS3.6/8, Ms1 3.6/8,ms1mx3.1/69,Error ellipse: s-maj=78.8km s-min=22.8km az=34.0*
*NEIC* ***03*** *17:27:24.5±1.9,14°.60N±0°.09×92°.6W±0°.1,h57km±10km, mb4.3/47,Md4.2/28(MEX),Error ellipse: s-maj=18.0km s-min=8.9km az=50.0*
**ISC 03 17:27:19.6±1.4,14°.28N±0°.06×92°.93W±0°.06,h34km±4km, n111,σ1$72/116,mb4.3/22,MS3.6/7,Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **THIG** | | **0.90** | **46** | | | **Pb** | **17 27 36.7** | **-0.1** |
| THIG | | | | | | **Sb** | **17 27 49.5** | **+0.9** |
| **THIG** | | **0.90** | **46** | *i* P | | **Pb** | **17 27 36.7** | **-0.1** |
| THIG | | | | *e*S | | **Sb** | **17 27 49.5** | **+0.9** |
| **PATR** | **El Naranjo** | **1.07** | **39** | *i* P | | **Pb** | **17 27 38.9** | **-1.0** |
| PATR | | | | *e*S | | **Sb** | **17 27 55.3** | **+1.5** |
| **CHUJ** | **Union Juarez** | **1.14** | **44** | *i* P | | **Pb** | **17 27 39.9** | **-1.0** |
| CHUJ | | | | *e*S | | **Sb** | **17 27 57.4** | **+1.8** |
| **PAVE** | **Pavencul** | **1.17** | **39** | *i* P | | **Pb** | **17 27 40.4** | **-1.1** |
| PAVE | | | | *e*S | | **Sb** | **17 27 57.4** | **+1.0** |
| **RTAL** | **Retalhuleu** | **1.23** | **78** | | | **Pn** | **17 27 38.2** | **-2.1** |
| **PCIG** | | **1.45** | **349** | | | **Pn** | **17 27 42.3** | **-1.0** |
| PCIG | | | | | | **Sn** | **17 28 00.7** | **-0.4** |
| **PCIG** | | **1.45** | **349** | *e*P | | **Pn** | **17 27 42.3** | **-1.0** |
| PCIG | | | | *e*S | | **Sn** | **17 28 00.7** | **-0.4** |
| **HUEH** | **Huehuetenango** | **1.73** | **53** | Pn | | **Pb** | **17 27 49.8** | **-1.1** |
| **FUG** | **Fuego 3** | **2.03** | **85** | *e*P | | **Pb** | **17 27 54.0** | **-2.0** |
| FUG | | | | *e*S | | Sb | 17 28 31.4 | +10 |
| **CCIG** | **Comitan** | **2.14** | **21** | Pn | | **Pn** | **17 27 49.5** | **-3.5** |
| **CCIG** | **Comitan** | **2.14** | **21** | | | **Sb** | **17 28 22.6** | **-1.4** |
| **CCIG** | **Comitan** | **2.14** | **21** | *e*P | | **Pb** | **17 27 56.0** | **-1.8** |
| CCIG | | | | *e*S | | **Sb** | **17 28 22.6** | **-1.4** |
| **PCG** | **Pacaya** | **2.26** | **87** | *e*P | | **Pb** | **17 27 56.9** | **-2.9** |
| **TGIG** | | **2.49** | **356** | | | **Pn** | **17 27 58.7** | **+0.9** |
| TGIG | | | | | | **Sn** | **17 28 28.8** | **+1.7** |
| **TGIG** | | **2.49** | **356** | *e*P | | **Pn** | **17 27 58.7** | **+0.9** |
| TGIG | | | | *e*S | | **Sn** | **17 28 28.8** | **+1.7** |
| **APG** | **El Apazote** | **2.50** | **73** | Pn | | **Pb** | **17 28 00.8** | **-3.2** |
| 21nm,0.3s,baz=244,slow=7.5,SNR=66 | | | | | | | | |
| APG | | | | Sn | | **Sb** | **17 28 35.8** | **+1.5** |
| 27nm,0.3s,baz=178,slow=23,SNR=5.7 | | | | | | | | |
| **NBG** | **Las Nubes** | **2.52** | **83** | *e*P | | **Pb** | **17 28 02.4** | **-2.0** |
| **CMIG** | **Matias Romero** | **3.37** | **326** | Pn | | **Pn** | **17 28 08.5** | **-1.3** |
| 8.7nm,0.3s,baz=141,slow=9.9,SNR=64 | | | | | | | | |
| CMIG | | | | Sn | | **Sn** | **17 28 49.8** | **+1.2** |
| 27nm,0.3s,baz=110,slow=21,SNR=7.2 | | | | | | | | |
| CMIG | | | | LR | | LR | 17 29 32.1 | |
| comp=Z,230nm,19.2s,baz=180,slow=41 | | | | | | | | |
| **CMIG** | **Matias Romero** | **3.37** | **326** | | | **Pn** | **17 28 07.8** | **-2.0** |
| CMIG | | | | | | **Sn** | **17 28 45.0** | **-3.7** |
| **CMIG** | **Matias Romero** | **3.37** | **326** | *e*P | | **Pn** | **17 28 07.8** | **-2.0** |
| CMIG | | | | *e*S | | **Sn** | **17 28 45.0** | **-3.7** |
| **HUIG** | **Huatulco** | **3.41** | **296** | *e*P | | Pn | 17 28 06.5 | -3.9 |
| HUIG | | | | *e*S | | Sn | 17 28 38.5 | -11 |
| **MTO3** | **Montecristo** | **3.46** | **88** | Pn | | **Pn** | **17 28 10.7** | **-0.6** |
| **ESQI** | **Esquipulas** | **3.49** | **85** | Pn | | **Pn** | **17 28 09.2** | **-2.4** |
| **PETF** | **Flores** | **3.95** | **48** | Pn | | **Pn** | **17 28 17.0** | **-0.8** |
| **NEUV** | **Arroyo Zacate** | **4.39** | **321** | *e*P | | **Pn** | **17 28 21.2** | **-2.7** |
| NEUV | | | | *e*S | | **Sn** | **17 29 09.7** | **-4.1** |
| **PEIG** | **Puerto Escondi** | **4.42** | **293** | *e*P | | Pn | 17 28 20.2 | -4.0 |
| PEIG | | | | *e* | | | 17 29 03.0 | |
| **YOIG** | **Yosondua** | **5.13** | **301** | *e*P | | **Pn** | **17 28 32.1** | **-2.1** |
| YOIG | | | | *e* | | | 17 29 28.6 | |
| **PNIG** | **Pinotepa** | **5.43** | **293** | *e*P | | **Pn** | **17 28 35.5** | **-2.7** |
| PNIG | | | | *e* | | | 17 29 27.6 | |
| **TXIG** | **Tlaxiaco** | **5.52** | **303** | *e*P | | **Pn** | **17 28 37.2** | **-2.3** |
| TXIG | | | | *e* | | | 17 29 35.9 | |
| **CRIN** | **San Cristobal** | **5.93** | **105** | | | **Pn** | **17 28 46.9** | **+1.8** |
| **CNGN** | **Cerro Negro** | **6.32** | **105** | Pn | | **Pn** | **17 28 49.7** | **-0.7** |
| **MATN** | **Matagalpa** | **6.94** | **100** | Pn | | **Pn** | **17 28 58.6** | **-0.5** |
| **BOAB** | **BOACO BROADBAN** | **7.30** | **104** | Pn | | **Pn** | **17 29 04.6** | **+0.7** |
| **ACON** | **Acoyapa** | **7.90** | **106** | Pn | | **Pn** | **17 29 11.4** | **-0.6** |
| **ORTG** | **Ortega, Santa** | **8.27** | **117** | | | **Pn** | **17 29 19.0** | **+1.7** |
| **JTS** | **Las Juntas de** | **8.75** | **116** | Pn | | Pn | 17 29 28.9 | +5.2 |
| 0.5nm,0.3s,baz=9.0,slow=23,SNR=1.8 | | | | | | | | |
| JTS | | | | Sn | | Sn | 17 31 17.1 | +16 |
| 0.7nm,0.3s,baz=358,slow=21,SNR=2.2 | | | | | | | | |
| **CAO2** | **Cobano, Puntar** | **8.91** | **120** | Pn | | **Pn** | **17 29 27.6** | **+1.7** |
| **RIMA** | **Rio Macho** | **9.94** | **116** | | | Pn | 17 29 45.4 | +5.2 |
| **SRBA** | **San Rafael, Bu** | **10.63** | **117** | | | **Pn** | **17 29 52.2** | **+2.6** |
| **BRU2** | **Volcan** | **11.42** | **117** | Pn | | **Pn** | **17 30 01.7** | **+1.3** |
| **SOR** | **Soroa** | **12.66** | **47** | Pn | | **Pn** | **17 30 14.2** | **-3.0** |
| **833A** | **Chaparral WM

comp=Z,14nm,1.2s
**MNTX Cornudas Mount 20.75 329 P P 17 31 59.0 +1.6**
**GOGA Godfrey 20.90 23 P P 17 31 56.5 -2.6**
GOGA IAmb IAmb 17 32 07.8
comp=Z,15nm,1.1s
**FNO Franklin 21.27 350 P P 17 32 03.1 +0.1**
**FCAR Ozark Folk Cen 21.53 2 P P 17 32 05.6 -0.2**
**MSTX Muleshoe 21.54 337 P P 17 32 05.8 -0.2**
MSTX IAmb IAmb 17 32 21.7
comp=Z,11nm,1.0s
**LCAR Lake Charles 21.76 4 P P 17 32 06.6 -1.6**
**AMTX Amarillo 21.98 340 P P 17 32 11.9 +1.1**
AMTX IAmb IAmb 17 32 13.3
comp=Z,9.9nm,0.8s
**WVT Waverly 22.24 11 P P 17 32 09.7 -3.6**
**121A Cookes Peak, D 22.67 326 P P 17 32 20.2 +1.9**
121A IAmb IAmb 17 32 29.4
comp=Z,12nm,0.8s
**TKL Tuckaleechee C 22.83 20 LR LR** 17 42 28.5
comp=Z,80nm,20.3s,baz=236,slow=40
**S39A Bolivar 23.32 359 P P 17 32 24.1 -0.5**
S39A IAmb IAmb 17 32 25.0
comp=Z,12nm,1.0s
**BNM Barren Site 23.35 330 P P 17 32 25.7 +0.4**
**LENM Lemitar 23.53 330 P P 17 32 29.2 +2.3**
**CCM Cathedral Cave 23.73 3 P P 17 32 28.3 -0.2**
CCM IAmb IAmb 17 32 30.4
comp=Z,7.9nm,1.0s
**ANMO Albuquerque 23.92 332 P P 17 32 30.8 +0.2**
comp=Z,1.5nm,0.7s,baz=162,slow=13,SNR=4.2
**ANMO Albuquerque 23.92 332** IAmb IAmb 17 32 34.5
comp=Z,1.9nm,0.8s
**R40A Maddies Statio 23.93 1 P P 17 32 30.2 -0.2**
**TUC Tucson 24.25 321 P P 17 32 35.6 +2.1**
**BAUV El Baul 24.94 100 P P 17 32 38.9 -1.1**
BAUV IAmb IAmb 17 32 52.3
comp=Z,7.3nm,0.7s
**T25A Trinidad 24.96 338 P P 17 32 40.9 +0.8**
T25A IAmb IAmb 17 32 45.5
comp=Z,6.1nm,0.8s
**SDCO Great Sand Dun 25.91 337 P P 17 32 50.4 +1.6**
SDCO IAmb IAmb 17 32 53.0
comp=Z,9.3nm,1.5s
**S22A 4UR Ranch, Cre 26.44 335 P P 17 32 55.2 +1.6**
**PFO Pinyon Flats O 28.74 316 LR LR** 17 46 25.6
comp=Z,74nm,19.9s,baz=166,slow=40
**TCRU Three Creeks R 29.75 328 S 17 38 22.5 +5.2**
**PDAR Pinedale Array 31.80 336 P P 17 33 42.0 +0.8**
comp=Z,0.4nm,0.7s,baz=150,slow=7.3,SNR=4.5
**AHID Auburn Hatcher 32.42 335 P P 17 33 45.2 -1.3**
AHID IAmb IAmb 17 33 51.4
comp=Z,4.2nm,1.1s
**SADO Sadowa 32.58 18 LR LR** 17 48 22.4
comp=Z,51nm,20.1s,baz=14,slow=39
**REDW Red Top Meadow 32.81 336 P P 17 33 50.2 +0.2**
**SNOW Snow King Moun 32.86 336 P P 17 33 50.4 -0.1**
**NVAR Mina Array Bea 32.89 322 P P 17 33 52.9 +2.1**
comp=Z,2.1nm,0.7s,baz=137,slow=8.6,SNR=16
NVAR LR LR 17 49 16.5
comp=Z,118nm,18.3s,baz=341,slow=40
**NVAR Mina Array Bea 32.89 322 P P 17 33 51.8 +1.1**
**LOHW Long Hollow 32.92 336 P P 17 33 51.9 +0.9**
LOHW IAmb IAmb 17 33 60.0
comp=Z,4.2nm,1.1s
**H17A Grant Village 33.57 337 P P 17 33 59.2 +2.6**
H17A IAmb IAmb 17 34 01.9
comp=Z,4.5nm,1.1s
**BMN Battle Mountai 33.61 325 P P 17 33 58.7 +1.8**
**YMR Madison River 33.95 337 P P 17 34 02.4 +2.5**
**QLMT Earthquake Lak 34.27 336 P P 17 34 03.1 +0.4**
**BCYI Bear Canyon 34.65 334 P P 17 34 07.6 +1.6**
**MCMT McKenzie Canyo 34.83 335 P P 17 34 09.0 +1.4**
**BOZ Bozeman (W) 34.99 337 P P 17 34 09.9 +1.1**
BOZ IAmb IAmb 17 34 16.7
comp=Z,2.3nm,0.8s
**DLMT Dillon 35.17 336 P P 17 34 11.6 +1.2**
DLMT IAmb IAmb 17 34 17.9
comp=Z,5.5nm,1.1s
**PLID Pearl Lake 36.40 332 P P 17 34 21.8 +0.7**
**F10A Beach Ranch, E 37.64 332 P P 17 34 32.4 +1.0**
F10A IAmb IAmb 17 34 40.8
comp=Z,4.0nm,0.7s
**EDM Edmonton 42.09 342 P P 17 35 08.1 0.0**
EDM IAmb IAmb 17 35 09.0
comp=Z,6.4nm,0.8s
**FCC Fort Churchill 44.41 359 P P 17 35 26.1 -0.6**
FCC IAmb IAmb 17 35 28.2
comp=Z,5.1nm,1.2s
**SCHQ Schefferville 45.28 21 LR LR** 17 55 45.0
comp=Z,140nm,18.4s,baz=254,slow=38
**YKA Yellowknife Ar 50.55 347 P P 17 36 14.8 +0.4**
comp=Z,4.3nm,0.7s,baz=152,slow=7.4,SNR=67
YKA PcP **PcP 17 37 34.3 +2.4**
comp=Z,0.3nm,0.7s,baz=148,slow=3.8,SNR=4.8
**FRB Frobisher Bay 52.25 13 LR LR** 17 59 27.1
comp=Z,134nm,18.5s,baz=240,slow=37
**BCAR Beaver Creek A 59.42 337 P P 17 37 18.6 0.0**
**INK Inuvik 59.92 344 P P 17 37 22.5 +0.7**
**RES Resolute Bay 60.41 359 P P 17 37 24.9 -0.2**
RES IAmb IAmb 17 37 26.4
comp=Z,2.1nm,0.8s
**DOT Dot Lake 60.60 336 P P 17 37 27.9 +1.3**
**A36M Sachs Harbour 60.80 349 P P 17 37 28.9 +1.1**
**ILULI Ilulissat 60.87 16 P P 17 37 27.5 -0.8**
**IL31 62.23 337 P P 17 37 38.5 +1.0**
**ILAR Eielson Array 62.23 337 P P 17 37 38.8 +1.1**
comp=Z,1.5nm,0.9s,baz=128,slow=5.3,SNR=8.7
**BMAR Burnt Mountain 62.72 340 P P 17 37 42.2 +1.2**
**EUNU Eureka 65.87 1 P P 17 38 02.0 +0.6**
**BORG Borgarnes 69.35 26 LR LR** 18 07 39.7
comp=Z,64nm,18.8s,baz=339,slow=35
**CMAR Chiang Mai Arr 145.43 340 PKPbc PKPbc 17 46 55.3 +0.5**
comp=Z,1.7nm,0.7s,baz=334,slow=3.3,SNR=19

*KRNET **03** 17:27:47.5±0.1,41.59N×72.02E,h30km,mb2.6*
*ISU **03** 17:27:48,41.50N×72.00E,h5km*
*SOME **03** 17:27:48.6,41.55N×72.07E,h10km*
*NNC **03** 17:27:49.6±1.1,41.64N×72.08E,h0km,mb3.0,mpv3.1,*
*Error ellipse: s-maj=10.7km s-min=3.3km az=175.0*
**ISC 03 17:27:48.1±1.1,41.55N±0.03×72.06E±0.02,h8km±9km,**
**n33,σ°96/59,17C-8D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARK** | **Arkit** | **0.26** | **343** | P | **Pg** | **17 27 54.0** | **+0.7** |
| ARK | | | | S | **Sg** | **17 27 57.0** | **+0.2** |
| **ARK** | **Arkit** | **0.26** | **343** | ⇑*i*P | **Pg** | **17 27 53.5** | **+0.2** |
| | baz=49 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **17 27 57.7** | **+0.9** |
| | baz=49 | | | | | | |
| **TRKS** | **Terek-Say** | **0.69** | **268** | ⇑*i*P | **Pg** | **17 28 00.3** | **-1.2** |
| | baz=59 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **17 28 09.5** | **-1.1** |
| | baz=59 | | | | | | |
| **MNAS** | **Manas** | **0.99** | **19** | ⇑*i*P | **Pg** | **17 28 05.7** | **-1.5** |
| | baz=22 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **17 28 18.7** | **-1.4** |
| | baz=22 | | | | | | |
| **OHH** | **Osh** | **1.16** | **152** | ⇑*i*P | **Pb** | **17 28 09.6** | **-0.9** |
| | baz=51 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **17 28 25.8** | **+0.1** |
| | baz=51 | | | | | | |
| **FRG** | **Fergana** | **1.20** | **190** | P | **Pb** | **17 28 12.0** | **+1.0** |
| FRG | | | | S | **Sn** | **17 28 29.0** | **+1.5** |
| **DZA** | **Taraz** | **1.45** | **338** | *e*P | **Pg** | **17 28 15.8** | **0.0** |
| | 23nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **17 28 34.9** | **+0.3** |
| | 96nm,0.1s | | | | | | |
| **DZA** | **Taraz** | **1.45** | **338** | P | **Pg** | **17 28 15.8** | **0.0** |
| | 23nm,0.1s | | | | | | |
| DZA | | | | S | **Sg** | **17 28 34.9** | **+0.3** |
| | 96nm,0.1s | | | | | | |
| **MRKS** | **Merke** | **1.47** | **36** | *e*P | **Pg** | **17 28 16.0** | **-0.4** |
| | 2.2nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **17 28 35.4** | **-0.1** |
| | 20nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **1.47** | **36** | P | **Pg** | **17 28 16.0** | **-0.4** |
| | 2.2nm,0.1s | | | | | | |
| MRKS | | | | S | **Sg** | **17 28 35.4** | **-0.1** |
| | 20nm,0.2s | | | | | | |
| **CHRV** | **Charvak** | **1.59** | **274** | S | **Sg** | **17 28 41.0** | **+1.9** |
| **IUG** | **Iuzhnay** | **1.63** | **292** | *e*P | **Pb** | **17 28 18.6** | **+0.1** |
| | 88nm,0.1s | | | | | | |
| IUG | | | | *e*S | **Sg** | **17 28 40.2** | **-0.3** |
| | 90nm,0.2s | | | | | | |
| **IUG** | **Iuzhnay** | **1.63** | **292** | P | **Pb** | **17 28 18.6** | **+0.1** |
| | 88nm,0.1s | | | | | | |
| IUG | | | | S | **Sg** | **17 28 40.2** | **-0.3** |
| | 90nm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.69** | **48** | ⇓*i*P | **Pn** | **17 28 17.4** | **-0.6** |
| | baz=50 | | | | | | |
| EKS2 | | | | ⇓*e*S | **Sn** | **17 28 39.3** | **-0.6** |
| | baz=50 | | | | | | |
| **ARLS** | **Aral** | **1.72** | **79** | ⇑*i*P | **Pn** | **17 28 18.3** | **-0.2** |
| | baz=80 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **17 28 40.8** | **+0.1** |
| | baz=80 | | | | | | |
| **BTK** | **Batken** | **1.77** | **213** | ⇑*e*P | **Pn** | **17 28 18.7** | **-0.3** |
| | baz=11 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **17 28 41.5** | **-0.2** |
| | baz=11 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.89** | **144** | ⇓*e*P | **Pn** | **17 28 20.6** | **-0.2** |
| | baz=44 | | | | | | |
| SFK | | | | ⇓*e*S | **Sn** | **17 28 45.4** | **+0.5** |
| | baz=44 | | | | | | |
| **KK08** | **Karatay Array** | **1.94** | **324** | ⇑Pn | **Pb** | **17 28 23.1** | **-0.6** |
| | 1.8nm,0.3s,baz=138,slow=17 | | | | | | |
| KK08 | | | | ⇑Sn | **Sb** | **17 28 48.3** | **+0.2** |
| | 6.2nm,0.3s,baz=142,slow=28 | | | | | | |
| **UCH** | **Uchtor** | **1.95** | **69** | ⇓*i*P | **Pn** | **17 28 21.6** | **-0.3** |
| | baz=70 | | | | | | |
| UCH | | | | ⇓*i*S | **Sn** | **17 28 46.4** | **-0.4** |
| | baz=70 | | | | | | |
| **CHM** | **Chimkent** | **1.99** | **293** | *e*P | **Pg** | **17 28 25.7** | **-0.5** |
| | 4.3nm,0.4s | | | | | | |
| CHM | | | | *e*S | **Sg** | **17 28 52.3** | **+0.3** |
| | 77nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **2.11** | **58** | ⇑Pn | **Pb** | **17 28 26.3** | **-0.4** |
| | 1.3nm,0.3s | | | | | | |
| AAK | | | | Sn | **Sb** | **17 28 53.7** | **+0.6** |
| | 3.9nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **2.11** | **58** | ⇑*i*P | **Pn** | **17 28 23.5** | **-0.3** |
| | baz=59 | | | | | | |
| AAK | | | | ⇑*e*S | **Sn** | **17 28 49.6** | **-0.7** |
| | baz=59 | | | | | | |
| **BRLS** | **Boroldav** | **2.22** | **313** | *e*P | **Pb** | **17 28 27.9** | **-0.5** |
| | 3.4nm,0.2s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **17 28 55.8** | **-0.2** |
| | 24nm,0.2s | | | | | | |
| **BRLS** | **Boroldav** | **2.22** | **313** | Pg | **Pb** | **17 28 27.9** | **-0.5** |
| | 3.4nm,0.2s | | | | | | |
| BRLS | | | | Lg | Lg | 17 28 55.8 | |
| | 24nm,0.2s | | | | | | |
| **SGDS** | **Sogindy** | **2.68** | **44** | *e*P | **Pb** | **17 28 36.2** | **-0.2** |
| | 1.2nm,0.2s | | | | | | |
| SGDS | | | | *e*S | **Sb** | **17 29 10.4** | **+0.9** |
| | 6.8nm,0.3s | | | | | | |
| **SGDS** | **Sogindy** | **2.68** | **44** | Pg | **Pb** | **17 28 36.2** | **-0.2** |
| | 1.2nm,0.2s | | | | | | |
| SGDS | | | | Lg | Lg | 17 29 10.4 | |
| | 6.8nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.96** | **61** | ⇓Pg | **Pg** | **17 28 44.9** | **+0.1** |
| | 0.6nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 17 29 20.0 | |
| | 2.3nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.22** | **57** | *e*P | **Pb** | **17 28 46.5** | **+0.8** |
| | 1.4nm,0.2s | | | | | | |
| DGS | | | | *e*S | **Sb** | **17 29 27.6** | **+2.5** |
| | 3.5nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.22** | **57** | Pg | **Pb** | **17 28 46.5** | **+0.8** |
| | 1.4nm,0.2s | | | | | | |
| DGS | | | | Lg | Lg | 17 29 27.6 | |
| | 3.5nm,0.6s | | | | | | |
| **KST** | **Kastek** | **3.25** | **61** | *e*P | **Pb** | **17 28 46.9** | **+0.8** |
| | 1.0nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sg** | **17 29 29.2** | **-3.4** |
| | 4.1nm,0.3s | | | | | | |
| **KST** | **Kastek** | **3.25** | **61** | Pg | **Pb** | **17 28 46.9** | **+0.8** |
| | 1.0nm,0.2s | | | | | | |
| KST | | | | Lg | Lg | 17 29 29.2 | |
| | 4.1nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.42** | **50** | *e*P | **Pb** | **17 28 50.0** | **+1.1** |
| | 0.9nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **17 29 33.4** | **+2.7** |
| | 3.1nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.42** | **50** | Pg | **Pb** | **17 28 50.0** | **+1.1** |
| | 0.9nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 17 29 33.4 | |
| | 3.1nm,0.3s | | | | | | |

*TUL **03** 17:36:57.4±1.1,35.67N±0.01×97.41W±0.01,h6km±3km,*
*ML2.8,mb_Lg2.4/15(NEIC),Error ellipse: s-maj=1.6km*
*s-min=1.5km az=63.0*
**NEIC 03 17:36:57.4±0.6,35.68N±0.01×97.40W±0.01,h11km±4km,**
**Error ellipse: s-maj=1.9km s-min=1.2km az=219.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.10** | **192** | | Pg | 17 36 59.7 | -0.4 |
| OK009 | | | | Sg | Sg | 17 37 01.5 | -0.5 |
| **OK025** | **Westminster Rd** | **0.11** | **152** | Pg | Pg | 17 37 00.1 | -0.1 |
| OK025 | | | | Sg | Sg | 17 37 02.0 | -0.2 |
| **OK029** | **Liberty Lake** | **0.13** | **339** | Pg | Pg | 17 37 00.6 | 0.0 |
| OK029 | | | | Sg | Sg | 17 37 02.9 | +0.1 |
| **OK001** | **Jones High Sch** | **0.14** | **142** | Pg | Pg | 17 37 00.8 | 0.0 |
| OK001 | | | | Sg | Sg | 17 37 03.4 | +0.2 |
| **BCOK** | **Bluff Creek, N** | **0.17** | **264** | Pg | Pg | 17 37 01.0 | -0.2 |
| BCOK | | | | Sg | Sg | 17 37 03.7 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.26** | **189** | Pg | Pg | 17 37 02.8 | 0.0 |
| OKCFA | | | | Sg | Sg | 17 37 06.7 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **187** | Pg | Pg | 17 37 03.0 | +0.1 |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 17 37 05.6 | -0.1 |
| **OK033** | **Mehan** | **0.53** | **45** | Pg | Pg | 17 37 07.9 | +0.2 |
| **OK031** | **S. Brethren Rd** | **0.53** | **58** | Pg | Pg | 17 37 07.6 | -0.2 |
| **OK030** | **Cody Creek RV** | **0.56** | **63** | Pg | Pg | 17 37 08.5 | +0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.65** | **59** | Pg | Pg | 17 37 09.8 | -0.2 |
| **W35A** | **Tecumseh** | **0.67** | **140** | Pg | Pg | 17 37 10.4 | -0.1 |
| **QUOK** | **Quay** | **0.75** | **48** | Pg | Pg | 17 37 11.8 | -0.1 |
| **CROK** | **Carrier** | **0.95** | **330** | Pg | Pg | 17 37 15.5 | -0.3 |
| **BLOK** | **Blackwell** | **1.09** | **8** | Pg | Pb | 17 37 17.9 | -0.4 |
| **X34A** | **Smith Ranch, M** | **1.13** | **198** | Pg | Pb | 17 37 18.8 | -0.2 |
| **GC02** | **Grant County #** | **1.23** | **343** | | Pn | 17 37 20.4 | -0.2 |
| **OK032** | **Salt Plains WL** | **1.30** | **330** | | Pn | 17 37 21.4 | -0.2 |
| **TUL1** | **Leonard** | **1.33** | **79** | | Pn | 17 37 21.4 | -0.5 |
| **KAN13** | **South Haven SW** | **1.34** | **357** | Pn | Pn | 17 37 21.8 | -0.2 |
| KAN13 | | | | IAmb_Lg | | 17 37 39.8 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **KAN14** | **Manchester OK** | **1.36** | **341** | Pn | Pn | 17 37 22.6 | +0.3 |
| **KAN17** | **Caldwell West** | **1.40** | **348** | Pn | Pb | 17 37 23.3 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pn | 17 37 23.6 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | Pn | Pn | 17 37 23.8 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.48** | **299** | Pn | Pn | 17 37 23.9 | -0.1 |
| **KAN01** | **Argonia South** | **1.50** | **349** | Pn | Pn | 17 37 24.7 | +0.4 |
| KAN01 | | | | IAmb_Lg | | 17 37 45.6 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **1.98** | **123** | Pn | Pn | 17 37 31.5 | +0.6 |
| **U38A** | **Gravette** | **2.56** | **72** | | Pn | 17 37 39.4 | +0.6 |
| **AMTX** | **Amarillo** | **3.59** | **259** | IAmb_Lg | | 17 38 48.2 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **3.75** | **78** | IAmb_Lg | | 17 39 05.5 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.84** | **57** | IAmb_Lg | | 17 39 02.7 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.93** | **106** | IAmb_Lg | | 17 39 04.8 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **86** | IAmb_Lg | | 17 39 11.9 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | IAmb_Lg | | 17 39 20.8 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.84** | **287** | IAmb_Lg | | 17 40 14.5 | |
| | comp=Z,6.4nm,0.8s | | | | | | |

**IDC 03 17:40:30.9±12.0,2.36N×128.08E,h156km±108km,**
**mb3.1/5,mb1 3.3/5,mb1mx3.0/30,mbtmp3.6/5,MS3.3/1,**
**Ms1 3.3/1,ms1mx2.3/24,Error ellipse: s-maj=106.8km**
**s-min=28.1km az=61.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **20.47** | **187** | P | P | 17 44 56.6 | +0.1 |
| | 0.6nm,0.6s,baz=4.8,slow=12,SNR=1.4 | | | | | | |
| FITZ | | | | S | S | 17 48 20.4 | -17 |
| | 0.9nm,0.8s,baz=126,slow=19,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.00** | **165** | P | P | 17 45 22.1 | -0.1 |
| | 2.4nm,0.6s,baz=345,slow=10,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **26.49** | **168** | P | P | 17 45 53.9 | 0.0 |
| | 0.3nm,0.4s,baz=351,slow=7.9,SNR=13 | | | | | | |
| ASAR | | | | PcP | PcP | 17 49 14.3 | -0.5 |
| | 0.1nm,0.4s,baz=357,slow=2.0,SNR=8.1 | | | | | | |
| **CTA** | **Charters Tower** | **28.57** | **142** | LR | LR | 17 57 55.1 | |
| | comp=Z,53nm,18.4s,baz=307,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **36.39** | **160** | P | P | 17 47 20.2 | 0.0 |
| | 1.0nm,0.3s,baz=346,slow=7.5,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.44** | **325** | P | P | 17 50 17.2 | 0.0 |
| | 0.2nm,0.5s,baz=126,slow=8.5,SNR=2.7 | | | | | | |

**NOU 03 17:50:36.9,17.23S×168.00E,h16km,MLv4.1/12,**
**Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.52** | **160** | P | Pb | 17 50 48.7 | +1.0 |
| **RTV** | **Rentapao** | **0.69** | **144** | P | Pg | 17 50 50.0 | -0.5 |
| **SANVU** | **Saraoutou** | **1.93** | **337** | P | Pn | 17 51 08.5 | -0.6 |
| **LIFNC** | **LIFOU** | **3.60** | **191** | P | Pn | 17 51 31.1 | -1.0 |
| **DZM** | **Mont Dzumac** | **5.03** | **197** | P | Pn | 17 51 51.6 | -0.3 |
| **OUENC** | **Ouen Island, N** | **5.28** | **192** | P | Pn | 17 51 55.9 | +0.8 |

*BJI **03** 17:59:38.5±0.0,36.84N×141.22E,h13km,mb4.4/51,*
*mB4.8/30,Ms4.2/31,Ms7 3.8/30*
*IDC **03** 17:59:38.9±0.5,36.86N×141.17E,h0km,mb4.3/30,*
*mb1 4.3/37,mb1mx4.2/55,mbtmp4.2/37,ML3.3/7,MS3.5/15,*
*Ms1 3.5/15,ms1mx3.2/91,Error ellipse: s-maj=12.6km*
*s-min=11.0km az=133.0*
*NEIC **03** 17:59:40.8±1.8,36.90N±0.04×141.20E±0.08,h10km±1km,*
*mb4.7/64,Error ellipse: s-maj=11.2km s-min=6.9km*
*az=86.0*
*NIED **03** 17:59:40.2,36.83N×141.33E,h29km,MW4.4,Moment*
*Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm;*
*Mrr-4.50; Mθθ0.14; Mφφ4.36; Mrθ-1.10; Mθφ1.73; Mrφ0.09;*
*Fault plane solution: Mo4.88000×10¹⁵ NP1:φs33.00000°,*
*δ48.00000°,λ-71.00000°. NP2:φs186.00000°,δ45.00000°,*
*λ-110.00000°.*
*MOS **03** 17:59:40.4±1.2,36.97N×141.33E,h23km,mb4.7/13 Error*
*ellipse: s-maj=7.5km s-min=4.5km az=100.4*
*JMA **03** 17:59:40.2,36.83N×141.33E,h29km±1km,M4.7*
*JMA Felt II J1.*
**ISC 03 17:59:41.8±0.8,36.89N±0.03×141.30E±0.04,h18km±3km,**
**n282,σ1°69/293,mb4.7/106,MS3.8/18,11C-34D,Near**
**east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **0.46** | **298** | ⇑P | **Pg** | **17 59 50.3** | **-0.8** |
| ONAJ | | | | S | **Sg** | **17 59 57.6** | **+0.3** |
| **JFK** | **Kawauchi** | **0.59** | **324** | P | **Pg** | **17 59 52.6** | **-0.9** |
| JFK | | | | *e*S | **Sg** | **18 00 01.3** | **0.0** |
| **JFFD** | **Fukushimafurud** | **0.63** | **289** | ⇑P | **Pg** | **17 59 52.8** | **-1.4** |
| JFFD | | | | *e*S | **Sg** | **18 00 01.5** | **-1.1** |
| **JHO** | **Hitachi** | **0.65** | **245** | P | **Pg** | **17 59 52.7** | **-1.9** |
| JHO | | | | S | **Sg** | **18 00 01.6** | **-1.7** |
| **JHYU** | **Hitachinakayam** | **0.80** | **227** | ⇓P | **Pb** | **17 59 54.6** | **-2.4** |
| JHYU | | | | S | **Sb** | **18 00 05.2** | **-2.2** |
| **JFT** | **Otama** | **0.99** | **309** | ⇓P | **Pb** | **17 59 59.7** | **-0.8** |
| JFT | | | | S | **Sb** | **18 00 13.1** | **-0.1** |
| **JMM** | **Marumori** | **1.05** | **338** | ⇓P | **Pb** | **18 00 00.0** | **-1.5** |
| JMM | | | | S | **Sb** | **18 00 14.4** | **-0.6** |
| **JMM** | **Marumori** | **1.05** | **338** | | **Pb** | **18 00 00.1** | **-1.4** |
| JMM | | | | Sg | **Sb** | **18 00 13.4** | **-1.6** |
| **JSB** | **Shiboa** | **1.11** | **274** | ⇓P | **Pn** | **18 00 01.4** | **-1.1** |
| JSB | | | | S | **Sb** | **18 00 15.8** | **-0.8** |
| **JYT** | **Yasato** | **1.11** | **234** | ⇓P | **Pn** | **17 59 59.4** | **-3.0** |
| JYT | | | | S | **Sb** | **18 00 13.5** | **-3.0** |
| **JYT** | **Yasato** | **1.11** | **234** | | **Pn** | **17 59 59.5** | **-3.0** |
| **JFY** | **Yanaizu** | **1.38** | **292** | ⇓P | **Pn** | **18 00 05.4** | **-0.7** |
| JFY | | | | *e*S | **Sn** | **18 00 23.0** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **2.51** | **263** | Pn | **Pn** | **18 00 20.9** | **-0.8** |
| | 2.1nm,0.3s,baz=87,slow=15,SNR=64 | | | | | | |
| MJAR | | | | Lg | Lg | 18 00 53.3 | |
| | 8.7nm,0.3s,baz=82,slow=31,SNR=3.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.51** | **263** | Pn | **Pn** | **18 00 18.4** | **-3.3** |
| **MAJO** | **Matsushiro** | **2.51** | **263** | P | **Pn** | **18 00 21.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **2.51** | **263** | | **Pn** | **18 00 21.4** | **-0.3** |
| **MAT** | **Matsushiro** | **2.51** | **263** | P | **Pn** | **18 00 21.6** | **-0.1** |
| MAT | | | | S | **Sn** | **18 00 54.8** | **+2.9** |
| **MJB9** | **Matsu-Tunnel** | **2.51** | **263** | | **Pn** | **18 00 21.6** | **-0.1** |
| **JSD** | **Sado** | **2.68** | **296** | | **Pn** | **18 00 23.1** | **-0.9** |
| **JSG** | **Sagara** | **3.36** | **230** | | **Pn** | **18 00 31.6** | **-1.8** |
| **JGF** | **Kuroka** | **3.44** | **249** | Pn | **Pn** | **18 00 32.8** | **-1.7** |
| **INU** | **Inuyama** | **3.79** | **247** | Pn | **Pn** | **18 00 37.5** | **-1.9** |
| **JTM** | **Tenmabayashi** | **3.90** | **357** | Pn | **Pn** | **18 00 41.5** | **+0.7** |
| **JHJ2** | **Mitsune** | **3.96** | **198** | Pn | **Pn** | **18 00 40.6** | **-1.0** |
| **JHJ** | **Hachijo jima 2** | **3.96** | **199** | Pn | **Pn** | **18 00 40.6** | **-1.1** |
| | 16nm,0.3s,baz=61,slow=19,SNR=10 | | | | | | |
| JHJ | | | | Sn | **Sn** | **18 01 27.3** | **-0.4** |
| | 54nm,0.3s,baz=128,slow=24,SNR=6.0 | | | | | | |
| JHJ | | | | LR | LR | 18 02 22.3 | |
| | comp=Z,510nm,18.3s,baz=50,slow=42 | | | | | | |
| **ERM** | **Erimo** | **5.32** | **15** | P | **Pn** | **18 01 00.0** | **-0.2** |
| **ERM** | **Erimo** | **5.32** | **15** | Pn | **Pn** | **18 01 00.0** | **-0.2** |
| **JEW** | **Eniwo** | **5.94** | **1** | Pn | **Pn** | **18 01 09.7** | **+0.8** |
| **JMN** | **Monobe** | **6.84** | **245** | Pn | **Pn** | **18 01 20.2** | **-1.0** |
| **JHS** | **Saijyo** | **6.90** | **257** | Pn | **Pn** | **18 01 20.1** | **-2.0** |
| **ASAJ** | **Asahikawa** | **7.29** | **7** | Pn | **Pn** | **18 01 26.4** | **-0.9** |
| | 2.6nm,0.3s,baz=206,slow=9.3,SNR=19 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **18 02 51.2** | **+1.7** |
| | 0.7nm,0.3s,baz=7.2,slow=32,SNR=2.3 | | | | | | |
| ASAJ | | | | LR | LR | 18 04 18.4 | |
| | comp=Z,70nm,20.6s,baz=176,slow=38 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **7.29** | **7** | Pn | **Pn** | **18 01 26.1** | **-1.2** |
| **JKA** | **Kamikawa-asahi** | **7.29** | **7** | | **Sn** | **18 02 51.2** | **+1.7** |
| **NMR** | **Nemuro--Hokkai** | **7.30** | **26** | *e*P | **Pn** | **18 01 25.0** | **-2.5** |
| NMR | | | | *e*S | **Sn** | **18 02 43.9** | **-6.0** |
| **GLVR** | **Golovnino** | **7.56** | **24** | *e*P | **Pn** | **18 01 29.1** | **-1.9** |
| GLVR | | | | *e*S | **Sn** | **18 02 51.9** | **-4.3** |
| **RUSJ** | **Misakicho** | **7.81** | **21** | *e*P | **Pn** | **18 01 33.3** | **-1.1** |
| RUSJ | | | | *e*S | **Sn** | **18 03 00.8** | **-1.5** |
| **YUK** | **Yuzh-Kuril'sk** | **7.94** | **25** | *e*P | **Pn** | **18 01 34.4** | **-1.8** |
| YUK | | | | *e*S | **Sn** | **18 03 00.8** | **-4.7** |
| **SHO** | **Shikotan** | **8.15** | **29** | *e*P | **Pn** | **18 01 36.1** | **-3.0** |
| SHO | | | | *e*S | **Sn** | **18 03 03.9** | **-6.8** |
| **JNU** | **Nakatsue** | **9.34** | **249** | Pn | **Pn** | **18 01 56.7** | **+1.2** |
| | 0.3nm,0.3s,baz=64,slow=8.7,SNR=6.0 | | | | | | |
| **VLA** | **Vladivostok** | **9.53** | **314** | ⇑*e*P | **Pn** | **18 01 59.8** | **+1.8** |
| **MSHR** | **Mys Shultsa** | **9.66** | **309** | ⇓*e*P | **Pn** | **18 02 01.4** | **+1.6** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,37nm,1.2s | | | | | | |
| **KUR** | **Kuril'sk** | **9.69** | **29** | P | **Pn** | **18 01 58.3** | **-2.0** |
| KUR | | | | *e*S | **Sn** | **18 03 42.8** | **-5.8** |
| KUR | | | | smax | smax

**MDJ Mudanjiang 11.76 315** Pn **Pn 18 02 29.1 +0.6**
**CN2 Changchun 13.91 305** *e*P **Pn 18 02 58.5 +0.5**
CN2 *e*S **Sn 18 05 31.7 -0.2**
CN2 pmax pmax
comp=E,10.0nm,1.2s
CN2 pmax pmax
comp=E,100nm,4.0s
CN2 LR LR
comp=E,500nm,15.0s
CN2 LR LR
comp=E,400nm,15.0s
CN2 LR LR
comp=E,400nm,17.0s
**TYV Tymovskoe 14.00 4** *e*P **P 18 03 07.3 +0.3**
TYV pmax pmax
comp=Z,13nm,1.0s
TYV pmax pmax
comp=Z,200nm,4.4s
**KLR Kul'dur 14.16 334** Pn **Pn 18 03 01.5 +0.2**
comp=Z,0.1nm,0.3s,baz=127,slow=13,SNR=2.5
KLR LR LR 18 08 10.0
comp=Z,319nm,19.4s,baz=154,slow=36
**KLR Kul'dur 14.16 334**⇑ *e*P **Pn 18 03 02.1 +0.8**
**GRNR Gornyy 14.31 347**⇓ *i*P **Pn 18 03 01.3 -2.1**
GRNR pmax pmax
comp=Z,2.0nm,0.7s
GRNR MLR MLR
comp=E,120nm,20.0s
GRNR MLR MLR
comp=N,130nm,12.0s
GRNR MLR MLR
comp=Z,260nm,12.0s
**NJ2 Nanjing 19.11 262** *e*P **P 18 04 02.3 -1.4**
NJ2 pmax pmax
comp=Z,2.0nm,0.5s
NJ2 LR LR
comp=Z,230nm,9.6s
NJ2 LR LR
comp=Z,270nm,12.6s
NJ2 LR LR
comp=Z,240nm,11.8s
**ZEA Zeya 19.47 334** *e*P **P 18 04 07.7 +0.3**
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=Z,10.0nm,0.7s
ZEA MLR MLR
comp=Z,200nm,13.0s
**PETK Petropavlovsk- 19.86 30** P **Pn 18 04 13.6 +0.3**
comp=Z,0.1nm,0.3s,baz=259,slow=33,SNR=2.0
PETK LR LR 18 12 08.2
comp=Z,44nm,18.4s,baz=66,slow=38
**BJT Baijiatuau 19.91 287** P **P 18 04 10.2 -2.2**
BJT pmax pmax
comp=Z,9.0nm,1.1s
**BJT Baijiatuau 19.91 287** P **P 18 04 10.2 -2.2**
**HIA Hailar 19.94 315**⇑ *e*P **Pn 18 04 14.7 +0.3**
HIA pmax pmax
comp=Z,6.0nm,0.9s
**XLT XiLinHaoTe 20.40 298** *e*P **P 18 04 15.2 -2.5**
XLT pP Pn 18 04 19.3 -0.6
XLT sP pP 18 04 22.1 -0.7
XLT S **S 18 08 02.9 -2.6**
XLT sS Sn 18 08 12.2 +3.0
XLT pmax pmax
comp=Z,11nm,1.1s
XLT pmax pmax
comp=Z,160nm,6.2s
XLT LR LR
comp=Z,520nm,13.1s
XLT LR LR
comp=Z,470nm,12.6s
XLT LR LR
comp=Z,530nm,16.4s
**HNS HongShan 21.19 279**⇓ P **P 18 04 22.6 -3.6**
HNS S **S 18 08 16.0 -5.0**
HNS pmax pmax
comp=Z,10.0nm,0.8s
HNS LR LR
comp=Z,390nm,20.5s
HNS LR LR
comp=Z,260nm,20.8s
**WHN Wuhan 23.25 262**⇑ P **P 18 04 54.7 +6.5**
**HHC Hu-ho-hao-te 23.43 289** *e*P **P 18 04 45.5 -4.5**
HHC S S 18 08 51.9 -11
HHC pmax pmax
comp=Z,12nm,0.8s
HHC pmax pmax
comp=Z,160nm,4.8s
HHC LR LR
comp=Z,230nm,14.0s
HHC LR LR
comp=Z,210nm,13.6s
HHC LR LR
comp=Z,230nm,13.4s
**MA2 Magadan 23.51 12**⇑ *e*P **P 18 04 50.5 0.0**
MA2 pmax pmax
comp=Z,11nm,1.1s
**MA2 Magadan 23.51 12** P **P 18 04 50.3 -0.2**
**YAK Yakutsk 26.19 348** P **P 18 05 13.8 -1.2**
comp=Z,7.8nm,0.4s,baz=134,slow=3.7,SNR=9.8
YAK LR LR 18 16 56.7
comp=Z,85nm,19.4s,baz=72,slow=40
**YAK Yakutsk 26.19 348** *e*P **P 18 05 13.3 -1.7**
YAK *e**PP **sP 18 05 24.5 +1.9**
YAK *e* 18 05 53.5
YAK *e*PPP PPP 18 06 02.5
YAK *e*S **S 18 09 43.7 -2.2**
YAK *e*SSS SSS 18 11 02.0
YAK *e* 18 16 10.8
YAK pmax pmax
comp=Z,14nm,0.8s
YAK pmax pmax
comp=E,2.0nm,0.8s
YAK pmax pmax
comp=N,6.0nm,1.1s
YAK pmax pmax
comp=Z,12nm,1.0s
YAK pmax pmax
comp=N,12nm,1.3s
YAK pmax pmax
comp=E,6.0nm,1.2s
YAK smax smax
comp=N,67nm,2.7s
YAK smax smax
comp=E,43nm,2.6s
**YAK Yakutsk 26.19 348** P **P 18 05 13.6 -1.5**
YAK IAmb IAmb 18 05 17.6
comp=Z,16nm,0.8s
**XAN Xi'an 26.46 274** P **P 18 05 21.1 +3.3**
XAN pP sP 18 05 25.3 -0.2
XAN pmax pmax
comp=Z,4.0nm,1.0s
XAN pmax pmax
comp=Z,90nm,4.8s
XAN LR LR
comp=Z,240nm,14.9s
XAN LR LR
comp=Z,290nm,12.4s
XAN LR LR
comp=Z,270nm,14.6s
**SEY Seymchan 26.95 11** P **P 18 05 21.9 +0.1**
comp=Z,5.3nm,1.0s,baz=191,slow=6.3,SNR=15
**SEY Seymchan 26.95 11**⇓ *e*P **P 18 05 22.5 +0.6**
**ENH Enshi 27.23 265** P **P 18 05 22.7 -2.1**
ENH IAmb IAmb 18 05 28.8
comp=Z,14nm,0.8s
**ULN Ulaanbaatar 27.36 304**⇑ *e*P **P 18 05 25.2 -0.8**
ULN pmax pmax
comp=Z,8.0nm,1.5s
**ULN Ulaanbaatar 27.36 304** P **P 18 05 23.6 -2.3**
**BOD Bodaibo 27.60 328** *e*P **P 18 05 26.8 -1.0**
BOD pmax pmax
comp=Z,8.0nm,1.6s
**SONM Songino Array 27.79 304** P **P 18 05 28.1 -1.7**
comp=Z,3.2nm,0.7s,baz=108,slow=8.1,SNR=24
SONM LR LR 18 16 32.0
comp=Z,152nm,20.6s,baz=36,slow=36
**SONM Songino Array 27.79 304** P **P 18 05 27.5 -2.3**
**SHEM Shemya Is, Ala 27.83 45** LR LR 18 16 12.0
comp=Z,59nm,18.6s,baz=324,slow=36
**H11N2 WAKE ISLAND Hy 28.15 120** T T 18 34 57.8
baz=313,slow=75,SNR=3141
**H11N1 WAKE ISLAND Hy 28.16 120** T T 18 34 58.5
baz=313,slow=75,SNR=3937
**H11N3 WAKE ISLAND Hy 28.17 120** T T 18 34 59.3
baz=313,slow=75,SNR=2008
**H11S1 WAKE ISLAND Hy 28.86 123** T T 18 35 49.2
baz=315,slow=75,SNR=1331
**H11S3 WAKE ISLAND Hy 28.86 123** T T 18 35 49.2
baz=315,slow=75,SNR=991
**H11S2 WAKE ISLAND Hy 28.87 123** T T 18 35 50.4
baz=315,slow=75,SNR=854
**LZH Lanzhou 30.00 280** *e*P **P 18 05 49.5 -0.1**
LZH pP pP 18 05 53.3 -1.7
LZH sP sP 18 05 55.6 -1.6
LZH pmax pmax
comp=Z,14nm,1.1s
LZH LR LR
comp=Z,180nm,13.5s
LZH LR LR
comp=Z,290nm,15.6s
LZH LR LR
comp=Z,160nm,17.8s
**ZAK Zakamensk 30.29 309** *e*P **P 18 05 54.9 +3.0**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**GYA Guiyang 31.11 260**⇓ P **P 18 06 01.5 +2.1**
GYA pmax pmax
comp=Z,6.0nm,1.0s
**CD2 Chengdu 31.58 270** P **P 18 06 01.2 -2.2**
CD2 pmax pmax
comp=Z,140nm,9.6s
CD2 LR LR
comp=Z,310nm,19.2s
CD2 LR LR
comp=Z,250nm,17.1s
**GTA Gaotai 32.52 287** *e*P **P 18 06 11.6 -0.1**
GTA pP pP 18 06 17.7 +0.6
GTA pmax pmax
comp=Z,1.0nm,1.4s
GTA pmax pmax
comp=Z,59nm,5.3s
GTA LR LR
comp=Z,150nm,18.9s
GTA LR LR
comp=Z,160nm,19.6s
GTA LR LR
comp=Z,180nm,17.8s
**BILL Bilibino 34.19 16** *e*P **P 18 06 25.4 -0.3**
BILL *e* 18 07 40.3
BILL pmax pmax
comp=Z,4.0nm,1.3s
**KMI Kunming 34.85 261**⇓ P P 18 06 37.0 +4.8
KMI pmax pmax
comp=Z,6.0nm,0.8s
**PZH PanZhiHua 35.00 264** P **P 18 06 35.6 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.9s
**TIXI Tiksi 35.42 353**⇓ *e*P **P 18 06 35.4 -0.9**
TIXI pmax pmax
comp=Z,7.0nm,1.7s
**TIXI Tiksi 35.42 353** P **P 18 06 34.7 -1.6**
**GOMU GeErMu 37.07 283** P **P 18 06 50.6 -0.7**
GOMU sP pP 18 06 54.9 -1.9
GOMU PcP **PcP 18 09 12.0 +0.3**
GOMU pmax pmax
comp=Z,3.0nm,1.0s
GOMU pmax pmax
comp=Z,78nm,6.1s
**TNTI Ternate 38.18 203** P P 18 07 07.3 +6.9
comp=Z,15nm,0.8s
**TNTI Ternate 38.18 203** P **P 18 06 58.9 -1.5**
TNTI IAmb IAmb 18 07 16.7
comp=Z,23nm,1.1s
**BAKI Biak 38.20 188** P **P 18 07 03.0 +2.5**
comp=Z,40nm,1.4s
**SIJI Sorong 38.71 196** LR LR 18 21 22.4
comp=Z,71nm,19.0s,baz=335,slow=34
**JAY Jayapura 39.21 181** P **P 18 07 11.7 +2.7**
comp=Z,11nm,1.1s
**GENI Genyem 39.30 182** P P 18 07 13.9 +4.2
comp=Z,1µmcomp=Z,34nm,1.0s
**LBMI Labuha 39.47 202** P P 18 07 17.5 +6.3
comp=Z,13nm,0.9s
**KMSI Cibinong 39.53 208** P P 18 07 18.9 +7.2
comp=Z,32nm,0.8s
**GTOI Gorontalo 39.85 209** P **P 18 07 17.7 +3.4**
**DGZ Jazzator, Alta 40.40 306**⇓ *e*P **P 18 07 18.2 -0.6**
DGZ pmax pmax
comp=Z,30nm,0.8s
**WMQ Urumqi 40.83 297** *e*P **P 18 07 22.7 +0.4**
WMQ pP pP 18 07 25.9 -1.9
WMQ PcP **PcP 18 09 25.7 +2.7**
WMQ pmax pmax
comp=Z,30nm,1.1s
**CMAR Chiang Mai Arr 41.37 255** P **P 18 07 27.6 +0.6**
comp=Z,0.5nm,0.8s,baz=48,slow=5.5,SNR=5.3
CMAR LR LR 18 24 12.4
comp=Z,66nm,18.4s,baz=65,slow=36
**APSI Ampana 41.80 210** P P 18 07 35.1 +4.7
comp=Z,18nm,1.4s
**ZAA0 Zalesovo Array 41.95 312** P **P 18 07 30.0 -1.2**
ZAA0 IAmb IAmb 18 07 36.3
comp=Z,12nm,0.9s
**ZALV Zalesovo Beam 41.95 312** P **P 18 07 30.8 -0.4**
comp=Z,6.4nm,0.6s,baz=95,slow=7.4,SNR=34
**AAI Ambon 42.18 200** P P 18 07 38.1 +4.6
comp=Z,57nm,0.7s
**NRIK Noril'sk 43.36 335** P **P 18 07 42.4 -0.2**
comp=Z,2.2nm,0.6s,baz=118,slow=6.6,SNR=3.5
**RDOG Red Dog Mine 43.67 27** P **P 18 07 46.0 +0.9**
RDOG IAmb IAmb 18 07 48.0
comp=Z,22nm,1.4s
**MK31 Makanchi Array 44.12 302***c i*P **P 18 07 48.7 -0.3**
**MK31 Makanchi Array 44.12 302** P **P 18 07 48.2 -0.8**
**MKAR Makanchi Array 44.12 302** P **P 18 07 48.7 -0.3**
comp=Z,5.0nm,0.6s,baz=88,slow=9.7,SNR=68
**MAKZ Makanchi 44.33 302** P **P 18 07 49.9 -0.8**
MAKZ pmax pmax
comp=Z,8.0nm,0.8s
**MAKZ Makanchi 44.33 302** P **P 18 07 49.9 -0.8**
MAKZ IAmb IAmb 18 07 55.5
comp=Z,8.2nm,0.8s
**MTKI Muara Teweh, K 44.91 219** P P 18 08 03.8 +8.2
**SAUI Saumlaki 45.61 194** P **P 18 08 03.7 +2.6**
comp=Z,84nm,1.0s
**TAPN Taplejung 45.86 274** *e*P **P 18 08 02.8 -0.6**
comp=Z,18nm,0.9s
**STKI Sintang 45.88 224** P P 18 08 08.9 +5.7
**KURK Kurchatov 45.95 308** P **P 18 08 03.2 -0.2**
**KURK Kurchatov 45.95 308** P **P 18 08 02.4 -1.0**
**KURBB Kurchatov Arra 46.02 308** P **P 18 08 03.2 -0.8**
comp=Z,8.0nm,0.6s,baz=84,slow=8.2,SNR=83
**KURBB Kurchatov Arra 46.02 308** P **P 18 08 02.7 -1.3**
**KAPI Kappang 46.29 210** P **P 18 08 06.5 0.0**
KAPI pmax pmax
comp=Z,42nm,1.2s
**KAPI Kappang 46.29 210** P **P 18 08 06.5 0.0**
**ODAN Odare 46.33 274** *e*P **P 18 08 06.0 -1.1**
comp=Z,17nm,0.8s
**RAMN Ramite 46.92 274** *e*P **P 18 08 11.2 -0.5**
comp=Z,13nm,0.6s
**JIRN Jiri 46.94 275** *e*P **P 18 08 11.3 -0.7**
**GUN Gumba 47.08 276** *e*P **P 18 08 13.1 0.0**
**PKI Pulchoki 47.60 276** *e*P **P 18 08 16.0 -1.1**
comp=Z,16nm,0.9s
**PKIN Phulchoki 47.61 276** *e*P **P 18 08 16.0 -1.1**
**KKN Kakani 47.61 276** *e*P **P 18 08 16.5 -0.5**
comp=Z,16nm,0.7s
**GKN Gorkha 48.03 276** *e*P **P 18 08 19.5 -0.7**
comp=Z,48nm,1.0s
**MDOK Medeo 48.53 298** P **P 18 08 23.7 -0.2**
**DANN Dangsing 48.58 277** *e*P **P 18 08 24.3 -0.3**
comp=Z,77nm,0.8s
**TOLK Toolik Lake Re 48.64 27** P **P 18 08 25.3 +1.1**
TOLK IAmb IAmb 18 08 31.8
comp=Z,5.7nm,0.9s
**NEA2 Nenana 48.73 33** P **P 18 08 26.8 +1.9**
NEA2 IAmb IAmb 18 08 28.3
comp=Z,11nm,1.2s
**KOLN Koldanda 48.96 277** *e*P **P 18 08 26.8 -0.6**
comp=Z,23nm,1.0s
**SOEI Soe 49.08 202** P **P 18 08 31.9 +3.7**
comp=Z,31nm,1.0s
**SOEI Soe 49.08 202** P **P 18 08 26.9 -1.3**
**MDM Murphy Dome 49.09 32** P **P 18 08 28.0 +0.3**
**PYUN Piuthan 49.30 277** *e*P **P 18 08 29.5 -0.5**
comp=Z,53nm,0.9s
**POKR Poker Plat Res 49.42 32** P **P 18 08 31.3 +1.1**
**BOOM Boomskoye usch 49.50 298** P **P 18 08 30.8 -0.6**
BOOM pmax pmax
comp=Z,6.0nm,0.9s
**BOOM Boomskoye usch 49.50 298** P **P 18 08 30.8 -0.6**
BOOM IAmb IAmb 18 08 36.8
comp=Z,6.1nm,0.9s
**IL31 49.66 32** P **P 18 08 32.5 +0.5**
IL31 IAmb IAmb 18 08 45.5
comp=Z,19nm,1.4s
**ILAR Eielson Array 49.66 32** P **P 18 08 32.6 +0.6**
comp=Z,3.0nm,0.8s,baz=271,slow=6.2,SNR=26
**BATI Baumata 49.69 203** P **P 18 08 34.9 +2.1**
**KSH Kashi 50.38 294** P **P 18 08 41.5 +3.5**
KSH pP sP 18 08 46.4 +0.6
KSH pmax pmax
comp=Z,3.0nm,1.2s
KSH LR LR
comp=Z,230nm,7.1s
KSH LR LR
comp=Z,230nm,9.0s
**AAK Ala-Archa 50.48 298** P **P 18 08 37.8 -1.0**
comp=Z,1.3nm,0.5s,baz=19,slow=3.6,SNR=4.9
**AAK Ala-Archa 50.48 298***ce*P **P 18 08 38.4 -0.4**
AAK pmax pmax
comp=Z,4.0nm,1.7s
**BVAR Borovoye Array 50.60 312** P **P 18 08 38.7 -0.7**
comp=Z,1.1nm,0.5s,baz=61,slow=15,SNR=10
**COEN Coen 50.60 178** P **P 18 08 39.9 +0.3**
COEN IAmb IAmb 18 08 45.2
comp=Z,11nm,0.9s
**BRVK Borovoye 50.66 312** P **P 18 08 39.2 -0.5**
BRVK pmax pmax
comp=Z,3.0nm,1.0s
**BRVK Borovoye 50.66 312** P **P 18 08 39.2 -0.5**
**DOT Dot Lake 50.97 34** P **P 18 08 42.9 +0.9**
DOT IAmb IAmb 18 08 45.2
comp=Z,11nm,1.2s
**SCRK Sand Creek 50.98 33** P **P 18 08 43.2 +1.1**
**I29M Ogilvie Camp, 53.22 31** P **P 18 09 00.0 +1.3**
I29M IAmb IAmb 18 09 05.7
comp=Z,11nm,1.0s
**KNRA Kunumurra 53.60 195** P **P 18 09 01.6 -0.3**
**GSI Gunungsitoli 53.65 239** P **P 18 09 01.4 -1.0**
**MDSI Maura Dua 53.78 228** P **P 18 09 07.0 +3.6**
**HYT Haines Junctio 54.47 37** P **P 18 09 09.2 +1.2**
**INK Inuvik 54.55 27** P **P 18 09 09.1 +0.8**
comp=Z,1.8nm,0.8s,baz=276,slow=8.0,SNR=4.1
**INK Inuvik 54.55 27** P **P 18 09 08.9 +0.6**
INK IAmb IAmb 18 09 10.6
comp=Z,9.4nm,1.4s
**NIL Nilore 54.58 288** P **P 18 09 08.7 -0.4**
NIL pmax pmax
comp=Z,11nm,1.1s
**NIL Nilore 54.58 288** P **P 18 09 08.7 -0.4**
NIL IAmb IAmb 18 09 14.4
comp=Z,11nm,1.1s
**SVE Sverdlovsk 55.20 319** *e*P **P 18 09 13.5 +0.3**
SVE pmax pmax
comp=Z,25nm,1.2s
**CHGR Chuyangaron 55.65 295** P **P 18 09 16.1 -0.8**
**ARU Arti 56.41 319** P **P 18 09 21.4 -0.5**
comp=Z,2.0nm,0.3s,baz=58,slow=1.8,SNR=18
**ARU Arti 56.41 319***d i*P **P 18 09 21.1 -0.8**
ARU S **S 18 17 13.6 +2.0**
ARU SS **SS 18 20 51.2 -6.9**
ARU pmax pmax
comp=Z,20nm,1.0s
**ARU Arti 56.41 319** P **P 18 09 21.2 -0.6**
**WB0 Warramunga Arr 56.73 188** **P 18 09 22.6 -1.8**
**WRAB Tennant Creek 56.90 188**⇓ *e*P **P 18 09 24.5 -1.1**
WRAB pmax pmax
comp=Z,24nm,1.2s
**WRAB Tennant Creek 56.90 188** P **P 18 09 24.4 -1.3**
**WR0 Warramunga Arr 56.90 188** P **P 18 09 24.3 -1.4**
**WB2 Warramunga Arr 56.91 188** P **P 18 09 24.7 -1.0**
**WRA Warramunga Arr 56.91 188** P **P 18 09 24.5 -1.3**
comp=Z,8.3nm,0.8s,baz=6.3,slow=7.4,SNR=27
**WRA Warramunga Arr 56.91 188** *i*P **P 18 09 24.7 -1.0**
WRA pmax pmax
comp=Z,8.0nm,0.8s
**AB31 Akbulak array 57.96 310** *e*P **P 18 09 31.9 -1.1**
**ABKAR Akbulak array 57.96 310** P **P 18 09 32.0 -1.0**
ABKAR IAmb IAmb 18 09 33.3
comp=Z,7.1nm,1.1s
**AKTO Aktyubinsk 58.70 312** P **P 18 09 37.2 -0.9**
comp=Z,3.1nm,0.9s,baz=79,slow=11,SNR=6.7
**KIRV Kirov 60.31 323** P **P 18 09 48.4 -0.7**
comp=Z,24nm,0.7s,baz=80,slow=2.1,SNR=8.0
**KIRV Kirov 60.31 323**⇓ *e*P **P 18 09 48.9 -0.1**
**AS31 Alice Springs 60.63 188** P **P 18 09 50.8 -0.8**
**ASAR Alice Springs 60.63 188** P **P 18 09 50.9 -0.8**
comp=Z,3.6nm,0.8s,baz=11,slow=6.3,SNR=33
ASAR LR LR 18 35 46.0
comp=Z,57nm,20.3s,baz=44,slow=36
**PRGR Permogore 60.84 327** *e*P **P 18 09 52.4 -0.2**
PRGR pmax pmax
comp=Z,10.0nm,0.9s
**RES Resolute Bay 62.76 14** P **P 18 10 04.8 -0.6**
RES pmax pmax
comp=Z,7.0nm,1.2s
**RES Resolute Bay 62.76 14** P **P 18 10 04.8 -0.6**
RES IAmb IAmb 18 10 11.0
comp=Z,7.1nm,1.2s
**GEYT Alibeck 63.83 299** P **P 18 10 13.0 -0.1**
comp=Z,4.7nm,0.7s,baz=224,slow=16,SNR=4.9
**KLMR Klimovskoe 63.83 328** *e*P **P 18 10 10.3 -2.3**
KLMR pmax pmax
comp=Z,32nm,1.5s
**KLMR Klimovskoe 63.83 328** *e*P **P 18 10 10.3 -2.3**
KLMR AMP 18 10 18.1
comp=Z,32nm,1.5s
**YKA Yellowknife Ar 63.98 30** P **P 18 10 14.3 +0.7**
comp=Z,0.9nm,0.8s,baz=299,slow=6.9,SNR=9.9
**YKA Yellowknife Ar 63.98 30** *i*P **P 18 10 14.5 +0.9**
YKA pmax pmax
comp=Z,1.0nm,0.9s
**ARCES ARCESS Array B 64.10 339** P **P 18 10 14.2 -0.1**
comp=Z,0.8nm,0.4s,baz=56,slow=7.9,SNR=19
**MSVF Nonsavu 64.45 141** LR LR 18 32 38.6
comp=Z,61nm,19.8s,baz=3.4,slow=31
**DAG Danmarks Havn 65.91 355** *i*P **P 18 10 25.5 -0.4**
DAG IAmb IAmb 18 10 26.9
comp=Z,2.8nm,0.8s
**AFI Afiamalu 67.11 130** LR LR 18 38 19.3
comp=Z,42nm,19.4s,baz=71,slow=34
**OBN Obninsk 68.16 323** *e*P **P 18 10 39.7 -0.8**
OBN *e* 18 11 04.5
OBN *e* 18 13 08.5
OBN *e*PPP PPP 18 14 48.5
OBN pmax pmax
comp=Z,11nm,1.0s
**STKA Stephens Creek 68.41 180** P **P 18 10 41.9 -0.3**
comp=Z,4.7nm,1.0s,baz=341,slow=23,SNR=4.3
**VORR Voronezh 68.71 319** *e*P **P 18 10 45.4 +1.3**
VORR pmax pmax
comp=Z,50nm,0.4s
**FINES FINESS Array B 68.90 332** P **P 18 10 44.5 -0.6**
comp=Z,6.4nm,0.8s,baz=36,slow=10,SNR=21
**FINES FINESS Array B 68.90 332** *i*P **P 18 10 44.7 -0.4**
FINES pmax pmax
comp=Z,6.0nm,0.8s
**GOF Gofitskoye 70.12 312**⇑ *e*P **P 18 10 57.2 +4.2**
**SUMG Summit 70.83 360** *i*P **P 18 10 58.4 +1.1**
SUMG IAmb IAmb 18 11 04.0
comp=Z,5.3nm,1.0s
**KBZ Khabaz 70.93 311** P **P 18 10 58.0 +0.2**
comp=Z,9.5nm,1.0s,baz=34,slow=3.6,SNR=7.6
**KIV Kislovodsk 70.93 311**⇓ P **P 18 10 59.1 +1.0**
**KIV Kislovodsk 70.93 311**⇓ P **P 18 10 59.1 +1.0**
**KIV Kislovodsk 70.93 311** P **P 18 10 57.6 -0.4**
**AKH Akhalkalaki 71.83 308**⇓ P **P 18 11 07.4 +3.8**
**NACGM Naroch 72.80 327** *i*P **P 18 11 06.1 -2.8**
**SOC Sochi 72.93 312** *e*P **P 18 11 07.7 -2.2**
SOC *e* 18 13 51.5
SOC *e*PPP PPP 18 15 36.1
SOC *e*S **S 18 20 36.2 +0.7**
SOC *e*SS **SS 18 25 17.2 +2.0**
SOC MLR MLR
comp=Z,151nm,19.0s
**MPK Martis Peak 73.55 53** P **P 18 11 13.1 -0.9**
**FFC Flin Flon 73.87 33** P **P 18 11 16.6 +1.3**
FFC pmax pmax
comp=Z,7.0nm,1.4s
**FFC Flin Flon 73.87 33** P **P 18 11 16.6 +1.3**
**FCC Fort Churchill 74.17 26** P **P 18 11 17.3 +0.4**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC | | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.4s | | | | | | | | | |
| **FCC** | **Fort Churchill** | **74.17** | **26** | P | **P** | **18 11 17.3** | **+0.4** | | | |
| FCC | | | | lAmb | lAmb | 18 11 18.5 | | | | |
| | comp=Z,12nm,1.4s | | | | | | | | | |
| **YERR** | **Yerington** | **74.23** | **53** | P | **P** | **18 11 18.3** | **+0.4** | | | |
| YERR | | | | lAmb | lAmb | 18 11 25.1 | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **74.28** | **337** | P | **P** | **18 11 17.2** | **-0.4** | | | |
| | comp=Z,5.4nm,0.9s,baz=40,slow=6.2 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.28** | **337** | P | **P** | **18 11 17.1** | **-0.4** | | | |
| | comp=Z,4.4nm,1.0s,baz=39,slow=5.9,SNR=7.3 | | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **74.35** | **307** | P | **P** | **18 11 18.5** | **-0.1** | | | |
| **AKASG** | **Malin Array Be** | **74.36** | **322** | P | **P** | **18 11 17.3** | **-0.8** | | | |
| | comp=Z,1.6nm,0.3s,baz=46,slow=5.8,SNR=27 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.36** | **322** | *i* P | **P** | **18 11 17.6** | **-0.5** | | | |
| AKASG | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **74.36** | **322** | P | **P** | **18 11 17.6** | **-0.6** | | | |
| AKBB | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **74.36** | **322** | P | **P** | **18 11 17.6** | **-0.6** | | | |
| AKBB | | | | lAmb | lAmb | 18 11 22.9 | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | | | | |
| **KVN** | **Kaiserville** | **74.92** | **52** | P | **P** | **18 11 21.5** | **-0.4** | | | |
| KVN | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | | |
| **KVN** | **Kaiserville** | **74.92** | **52** | P | **P** | **18 11 21.5** | **-0.4** | | | |
| KVN | | | | lAmb | lAmb | 18 11 24.7 | | | | |
| | comp=Z,8.2nm,1.3s | | | | | | | | | |
| **LHV** | **Little Huntoon** | **75.12** | **53** | P | **P** | **18 11 22.8** | **+0.1** | | | |
| LHV | | | | lAmb | lAmb | 18 11 48.1 | | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.15** | **53** | P | **P** | **18 11 24.6** | **+1.3** | | | |
| | comp=Z,1.6nm,0.8s,baz=284,slow=6.2,SNR=11 | | | | | | | | | |
| **H17A** | **Grant Village** | **76.23** | **45** | P | **P** | **18 11 32.9** | **+3.4** | | | |
| H17A | | | | lAmb | lAmb | 18 11 33.8 | | | | |
| | comp=Z,7.9nm,1.2s | | | | | | | | | |
| **SORM** | **Soroca** | **76.44** | **321** | ⇓P | **P** | **18 11 30.2** | **0.0** | | | |
| **SORM** | **Soroca** | **76.44** | **321** | ⇓P | **P** | **18 11 30.2** | **0.0** | | | |
| **R11A** | **Troy Canyon, C** | **76.92** | **52** | P | **P** | **18 11 33.9** | **+0.6** | | | |
| **GWY** | **Greenwater Val** | **77.52** | **54** | P | **P** | **18 11 36.6** | **-0.1** | | | |
| **QSM** | **Queen of Sheba** | **77.52** | **54** | P | **P** | **18 11 37.1** | **+0.6** | | | |
| QSM | | | | lAmb | lAmb | 18 11 44.1 | | | | |
| | comp=Z,13nm,1.4s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.83** | **45** | P | **P** | **18 11 39.6** | **+1.2** | | | |
| | comp=Z,1.4nm,0.9s,baz=304,slow=3.2,SNR=6.6 | | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **78.36** | **322** | P | **P** | **18 11 41.1** | **0.0** | | | |
| BUR08 | | | | lAmb | lAmb | 18 12 01.7 | | | | |
| | comp=Z,10nm,1.5s | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **78.37** | **322** | ⇓P | **P** | **18 11 41.4** | **+0.3** | | | |
| **BURAR** | **Bucovina Array** | **78.37** | **322** | ⇓P | **P** | **18 11 41.4** | **+0.3** | | | |
| **TPGR** | **Topolog** | **78.56** | **318** | ⇓P | **P** | **18 11 42.0** | **-0.1** | | | |
| **VRI** | **Vrincioaia** | **78.78** | **320** | ⇓P | **P** | **18 11 42.8** | **-0.5** | | | |
| **VRI** | **Vrincioaia** | **78.78** | **320** | ⇓P | **P** | **18 11 42.8** | **-0.5** | | | |
| **CCUT** | **Cedar City** | **78.80** | **51** | P | **P** | **18 11 44.4** | **+0.5** | | | |
| **BRTR** | **Keskin Array B** | **78.88** | **312** | P | **P** | **18 11 44.5** | **+0.3** | | | |
| | comp=Z,0.6nm,0.5s,baz=146,slow=2.8,SNR=2.2 | | | | | | | | | |
| **UZH** | **Uzhgorod** | **79.09** | **324** | *e*P | **P** | **18 11 41.8** | **-3.1** | | | |
| UZH | | | | *e* | | 18 11 56.4 | | | | |
| **LCMT** | **Little Creek M** | **79.21** | **52** | P | **P** | **18 11 47.4** | **+1.4** | | | |
| LCMT | | | | lAmb | lAmb | 18 11 49.1 | | | | |
| | comp=Z,9.8nm,1.4s | | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **79.22** | **49** | P | **P** | **18 11 45.6** | **-0.4** | | | |
| **RDMU** | **Red Mountain** | **79.22** | **47** | P | **P** | **18 11 47.7** | **+1.6** | | | |
| RDMU | | | | lAmb | lAmb | 18 11 48.8 | | | | |
| | comp=Z,6.7nm,1.1s | | | | | | | | | |
| **TRPA** | **Tarpa** | **79.32** | **323** | ⇓P | **P** | **18 11 46.7** | **+0.5** | | | |
| **DOPR** | **Dopca** | **79.40** | **320** | ⇓P | **P** | **18 11 47.4** | **+0.7** | | | |
| **MORC** | **Moravsky Berou** | **80.43** | **327** | ⇓P | **P** | **18 11 52.7** | **+0.4** | | | |
| **MORC** | **Moravsky Berou** | **80.43** | **327** | ⇓P | **P** | **18 11 52.7** | **+0.4** | | | |
| **MORC** | **Moravsky Berou** | **80.43** | **327** | *e*P | **P** | **18 11 52.6** | **+0.4** | | | |
| **MORC** | **Moravsky Berou** | **80.43** | **327** | P | **P** | **18 11 52.5** | **+0.2** | | | |
| MORC | | | | lAmb | lAmb | 18 11 58.1 | | | | |
| | comp=Z,8.2nm,1.1s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **80.53** | **328** | *e*P | **P** | **18 11 53.6** | **+0.8** | | | |
| **DPC** | **Dobruska-Polom** | **80.53** | **328** | *e*P | **P** | **18 11 53.6** | **+0.8** | | | |
| **RAYN** | **Ar Rayn** | **80.63** | **292** | P | **P** | **18 11 52.7** | **-1.1** | | | |
| RAYN | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| **RAYN** | **Ar Rayn** | **80.63** | **292** | P | **P** | **18 11 52.7** | **-1.1** | | | |
| RAYN | | | | lAmb | lAmb | 18 11 59.0 | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **JAVC** | **Velka Javorina** | **81.05** | **326** | *e*P | **P** | **18 11 57.1** | **+1.5** | | | |
| **GZR** | **Gura Zlata** | **81.12** | **321** | ⇓P | **P** | **18 11 56.0** | **-0.1** | | | |
| **GZR** | **Gura Zlata** | **81.12** | **321** | ⇓P | **P** | **18 11 56.0** | **-0.1** | | | |
| **CLL** | **Collm** | **81.18** | **330** | *e*P | **P** | **18 11 56.0** | **-0.1** | | | |
| CLL | | | | *i* | | 18 12 00.7 | | | | |
| CLL | | | | *e* | | 18 12 10.0 | | | | |
| CLL | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| **CLL** | **Collm** | **81.18** | **330** | *e*P | **P** | **18 11 56.0** | **-0.1** | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| CLL | | | | *i* x | x | 18 12 00.7 | | | | |
| CLL | | | | *e*x | x | 18 12 10.0 | | | | |
| CLL | | | | *e*PP | **PP** | **18 15 01.0** | **+0.3** | | | |
| CLL | | | | Lm | MLR | 19 02 00.0 | | | | |
| | comp=Z,600nm,18.1s | | | | | | | | | |
| **VRAC** | **Vranov** | **81.19** | **327** | *e*P | **P** | **18 11 57.0** | **+0.7** | | | |
| **PRU** | **Pruhonice** | **81.56** | **328** | *e*P | **P** | **18 11 59.1** | **+0.9** | | | |
| **PRU** | **Pruhonice** | **81.56** | **328** | *e*P | **P** | **18 11 59.1** | **+0.9** | | | |
| **MODS** | **Modra-Piesok** | **81.58** | **326** | *e*P | **P** | **18 11 58.0** | **-0.4** | | | |
| **MODS** | **Modra-Piesok** | **81.58** | **326** | *e*P | **P** | **18 11 58.0** | **-0.4** | | | |
| **CKRC** | **Cesky Krumlov** | **82.55** | **328** | *e*P | **P** | **18 12 03.5** | **+0.1** | | | |
| **KHC** | **Kasperske Hory** | **82.62** | **328** | *e*P | **P** | **18 12 04.0** | **+0.2** | | | |
| KHC | | | | *e**PP | **PcP** | **18 12 08.9** | **+0.1** | | | |
| **KHC** | **Kasperske Hory** | **82.62** | **328** | *e*P | **P** | **18 12 04.0** | **+0.2** | | | |
| KHC | | | | *e*pP | **PcP** | **18 12 08.9** | **+0.1** | | | |
| **KHC** | **Kasperske Hory** | **82.62** | **328** | P | **P** | **18 12 03.8** | **0.0** | | | |
| KHC | | | | lAmb | lAmb | 18 12 10.0 | | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **82.79** | **328** | P | **P** | **18 12 04.5** | **-0.3** | | | |
| | comp=Z,1.2nm,0.5s,baz=40,slow=6.0,SNR=11 | | | | | | | | | |
| **PPT** | **Papeete** | **84.65** | **116** | LR | LR | 18 42 21.9 | | | | |
| | comp=Z,29nm,21.6s,baz=356,slow=30 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **84.75** | **50** | ⇓*e*P | **P** | **18 12 16.3** | **+1.1** | | | |
| ANMO | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.28** | **52** | P | **P** | **18 12 42.9** | **+1.0** | | | |
| | comp=Z,0.7nm,0.8s,baz=316,slow=2.5,SNR=4.2 | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **117.37** | **315** | PP | PP | 18 19 35.6 | -1.5 | | | |
| | comp=Z,1.5nm,1.1s,baz=41,slow=5.5,SNR=3.9 | | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.10** | **96** | T | T | 21 03 46.4 | | | | |
| | baz=291,slow=76,SNR=94 | | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.11** | **96** | T | T | 21 03 47.4 | | | | |
| | baz=291,slow=76,SNR=90 | | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.11** | **96** | T | T | 21 03 47.6 | | | | |
| | baz=291,slow=76,SNR=91 | | | | | | | | | |

*BJI **03** 18:27:48.2±0.0,52.94N×107.92E,h9km,mb4.2/45, mB4.7/30,Ms4.7/51,Ms7 4.6/46*

*IDC **03** 18:27:49.4±0.5,52.88N×107.62E,h0km,mb4.0/22, mb1 4.2/28,mb1mx4.0/44,mbtmp4.0/28,ML3.6/6,MS4.2/50, Ms1 4.2/50,ms1mx4.0/94,Error ellipse: s-maj=12.3km s-min=11.7km az=70.0*

*MOS **03** 18:27:49.9±1.3,52.87N×107.67E,h12km,mb4.6/10, MS4.3/14,Error ellipse: s-maj=6.4km s-min=5.0km az=79.2*

*MOS Felt (V) at Elantsy; (IV-V) Enkhaluk, Kharantsy; (IV) at Irkutsk, Angarsk, Usolye-Sibirskoye, Markovo, Sredniy, Gorokhovo, Khomutovo, Tyrgan, Shelekhov, Molodyozhnyy, Ulan-Ude, Urik, Ust-Ordynskiy; (III-IV) at Granovshchina, Onguren.*

*NEIC **03** 18:27:51.1±1.8,52.87N±0.08×107.6E±0.1,h10km±1km, mb4.5/49,Error ellipse: s-maj=13.7km s-min=12.8km az=93.0*

*BYKL **03** 18:27:52.0±0.1,52.86N×107.60E,h22km±2km, Mw4.8/16(IEC),#STATIONS COLA MA2 YSS MAJO TATO QIZ KMI WMQ AAK GNI KIV ARU KEV KBS DAG NOR FELT I=V MSK at Huzhir, Zarech'e, Suhaja, Novyj JEnhjeluk, Elancy; IV-V at Harancy, JEnhjeluk, Unjegjetjej, Selenginsk, Kabansk.*

*GCMT **03** 18:27:52.2±0.3,53.04N±0.03×107.67E±0.05,h22km, MW4.8/77,Moment Tensor Solution. s29,c30; s77,c98; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=1.70±.12; Mθθ0.84±.07; Mφφ0.86±.08; Mrθ0.14±.12; Mφθ0.78±.06; Mrφ0.57±.13; Best double couple: M0 1.76100×10¹⁶ NP1:φs53.00000°,δ37.00000°,λ-76.00000°. NP2:*

*φs215.00000°,δ54.00000°,λ-101.00000°. Principal axes: T 1.7010, Plg9.0000°, Azm313.0000°; N 0.1170, Plg9.0000°, Azm222.0000°; P -1.8220, Plg78.0000°, Azm88.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 18:27:49.7±0.9,52.88N±0.02×107.69E±0.02,h1km±5km, n260,σ1°91/317,mb4.4/65,MS4.2/58,17C-14D,Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KELR** | **Kotokel** | **0.26** | **116** | ⇑*i* | P | **Pb** | | **18 27 58.0** | **+0.7** |
| KELR | | | | | S | **Sb** | | **18 28 02.9** | **+0.6** |
| **ZRHB** | **Zarechye** | **0.46** | **226** | ⇓*i* | P | **Pg** | | **18 28 00.5** | **+1.9** |
| ZRHB | | | | | Pmax | | | 18 28 01.5 | |
| | 6μm,0.2s | | | | | | | | |
| ZRHB | | | | | S | **Sg** | | **18 28 06.9** | **+2.4** |
| ZRHB | | | | | Smax | | | 18 28 10.9 | |
| | 158μm,0.6s | | | | | | | | |
| **ZRH** | **Zaryechye, Bai** | **0.46** | **225** | ⇓*i* | PG | **Pg** | | **18 28 00.5** | **+1.9** |
| ZRH | | | | | S | **Sg** | | **18 28 06.7** | **+2.1** |
| **MXMB** | **Maximikha** | **0.74** | **58** | ⇑*i* | P | **Pb** | | **18 28 06.4** | **+0.9** |
| MXMB | | | | | S | **Sb** | | **18 28 17.4** | **+1.2** |
| **OGRR** | **Ongureny** | **0.77** | **356** | ⇑*i* | PG | **Pn** | | **18 28 08.1** | **+0.3** |
| OGRR | | | | | *e* | | | 18 28 18.6 | |
| OGRR | | | | | pmax | pmax | | | |
| | comp=Z,4μm,0.4s | | | | | | | | |
| OGRR | | | | | smax | smax | | | |
| | comp=N,532μm,0.3s | | | | | | | | |
| **OGRR** | **Ongureny** | **0.77** | **356** | ⇑*i* | Pg | **Pn** | | **18 28 08.1** | **+0.3** |
| OGRR | | | | | Pmax | | | 18 28 08.6 | |
| | comp=N,4μm,0.3s | | | | | | | | |
| OGRR | | | | | S | **Sn** | | **18 28 18.5** | **-1.5** |
| OGRR | | | | | Smax | | | 18 28 20.8 | |
| | comp=N,22μm,0.3s | | | | | | | | |
| **TRG** | **Tyrgan** | **0.82** | **262** | ⇑*i* | PG | **Pg** | | **18 28 06.1** | **+0.6** |
| TRG | | | | | *e* | | | 18 28 17.2 | |
| TRG | | | | | pmax | pmax | | | |
| | comp=Z,8μm,0.1s | | | | | | | | |
| TRG | | | | | smax | smax | | | |
| | comp=N,72μm,0.1s | | | | | | | | |
| **TRG** | **Tyrgan** | **0.82** | **262** | ⇑*i* | Pg | **Pg** | | **18 28 06.1** | **+0.6** |
| TRG | | | | | Pmax | | | 18 28 07.9 | |
| | comp=N,5μm,0.1s | | | | | | | | |
| TRG | | | | | S | **Sg** | | **18 28 16.8** | **+0.6** |
| TRG | | | | | Smax | | | 18 28 20.0 | |
| | comp=N,74μm,0.2s | | | | | | | | |
| **FFNB** | **Fofonovo** | **1.01** | **215** | *e* | Pg | **Pb** | | **18 28 09.6** | **-0.4** |
| FFNB | | | | *e* | Sg | **Sg** | | **18 28 22.7** | **+0.7** |
| **UUDB** | **Ulan-Yde** | **1.01** | **181** | ⇑*i* | Pg | **Pb** | | **18 28 10.3** | **+0.2** |
| UUDB | | | | *e* | Pb | **Pn** | | **18 28 11.9** | **+0.8** |
| UUDB | | | | | max | | | 18 28 12.6 | |
| | comp=N,7μm,0.2s | | | | | | | | |
| UUDB | | | | *e* | Sg | **Sg** | | **18 28 23.6** | **+1.4** |
| UUDB | | | | *e* | Sb | **Sn** | | **18 28 26.6** | **+0.7** |
| UUDB | | | | | max | | | 18 28 27.6 | |
| | comp=N,29μm,0.5s | | | | | | | | |
| **KAB** | **Kabansk** | **1.04** | **218** | *e* | PG | **Pn** | | **18 28 11.5** | **0.0** |
| KAB | | | | *e* | | | | 18 28 24.4 | |
| KAB | | | | | pmax | pmax | | | |
| | comp=Z,8μm,0.6s | | | | | | | | |
| KAB | | | | | smax | smax | | | |
| | comp=N,125μm,0.9s | | | | | | | | |
| **KAB** | **Kabansk** | **1.04** | **218** | ⇑*i* | Pg | **Pb** | | **18 28 10.6** | **0.0** |
| KAB | | | | *e* | Pb | **Pn** | | **18 28 11.8** | **+0.3** |
| KAB | | | | | max | | | 18 28 11.9 | |
| | comp=N,5μm,0.2s | | | | | | | | |
| KAB | | | | *e* | Sg | **Sb** | | **18 28 24.2** | **-0.6** |
| KAB | | | | *e* | Sb | **Sn** | | **18 28 26.9** | **+0.2** |
| KAB | | | | | max | | | 18 28 30.2 | |
| | comp=N,120μm,0.8s | | | | | | | | |
| **SYVR** | **Suvo** | **1.59** | **60** | *e* | PN | **Pb** | | **18 28 21.1** | **+1.2** |
| SYVR | | | | *e* | | | | 18 28 43.5 | |
| SYVR | | | | | pmax | pmax | | | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| SYVR | | | | | smax | smax | | | |
| | comp=E,7μm,0.5s | | | | | | | | |
| **SYVR** | **Suvo** | **1.59** | **60** | *e* | Pg | **Pg** | | **18 28 21.3** | **+1.1** |
| SYVR | | | | | Pmax | | | 18 28 22.7 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| SYVR | | | | *e* | Sg | **Sg** | | **18 28 43.6** | **+2.8** |
| SYVR | | | | | Smax | | | 18 28 45.2 | |
| | comp=E,5μm,0.3s | | | | | | | | |
| **BGT** | **Bolshoye Golou** | **1.63** | **240** | *e* | Pn | **Pn** | | **18 28 19.4** | **-0.1** |
| BGT | | | | *e* | Pg | **Pb** | | **18 28 20.6** | **+0.1** |
| BGT | | | | | Pmax | | | 18 28 26.3 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| BGT | | | | *e* | Sg | **Sn** | | **18 28 40.8** | **-0.3** |
| BGT | | | | | Smax | | | 18 28 44.6 | |
| | comp=E,19μm,0.4s | | | | | | | | |
| **LSTR** | **Listvyanka** | **2.02** | **241** | *e* | Pn | **Pn** | | **18 28 24.7** | **-0.3** |
| LSTR | | | | *e* | Pg | **Pb** | | **18 28 27.5** | **+0.2** |
| LSTR | | | | | Pmax | | | 18 28 28.9 | |
| | comp=E,876nm,0.3s | | | | | | | | |
| LSTR | | | | *e* | | | | 18 28 35.0 | |
| LSTR | | | | *e* | Sn | **Sn** | | **18 28 48.9** | **-2.0** |
| LSTR | | | | *e* | Sg | **Sb** | | **18 28 52.0** | **-1.0** |
| LSTR | | | | *e* | | | | 18 28 55.2 | |
| LSTR | | | | | max | | | 18 28 57.3 | |
| | comp=E,10μm,0.7s | | | | | | | | |
| **IRK** | **Irkutsk** | **2.18** | **254** | *e* | PN | **Pn** | | **18 28 27.4** | **+0.2** |
| IRK | | | | *e* | | | | 18 28 29.6 | |
| IRK | | | | *e* | | | | 18 28 57.4 | |
| IRK | | | | | pmax | pmax | | | |
| | comp=Z,2μm,0.1s | | | | | | | | |
| IRK | | | | | smax | smax | | | |
| | comp=N,147μm,0.4s | | | | | | | | |
| **IRK** | **Irkutsk** | **2.18** | **254** | *e* | Pn | **Pn** | | **18 28 27.1** | **-0.1** |
| IRK | | | | *e* | Pg | **Pb** | | **18 28 29.9** | **-0.1** |
| IRK | | | | | Pmax | | | 18 28 33.5 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| IRK | | | | *e* | Sg | **Sb** | | **18 28 57.5** | **0.0** |
| IRK | | | | | Smax | | | 18 28 59.6 | |
| | comp=N,100μm,0.5s | | | | | | | | |
| **IVK** | **Ivanovka** | **2.28** | **243** | *e* | Pn | **Pn** | | **18 28 28.4** | **-0.1** |
| IVK | | | | *e* | Pg | **Pb** | | **18 28 32.2** | **+0.5** |
| IVK | | | | | Pmax | | | 18 28 32.8 | |
| | comp=N,3μm,0.5s | | | | | | | | |
| IVK | | | | *e* | Sg | **Sb** | | **18 29 01.4** | **+1.0** |
| IVK | | | | | Smax | | | 18 29 03.4 | |
| | comp=N,24μm,0.3s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **2.87** | **44** | ⇓*i* | Pn | **Pn** | | **18 28 37.7** | **+1.1** |
| YLYR | | | | *e* | Pg | **Pb** | | **18 28 44.0** | **+2.3** |
| YLYR | | | | *e* | PgPg | **Pg** | | **18 28 47.0** | **+2.3** |
| YLYR | | | | | max | | | 18 28 59.4 | |
| | comp=N,506nm,0.6s | | | | | | | | |
| YLYR | | | | *e* | Sg | **Sg** | | **18 29 21.6** | **-0.2** |
| YLYR | | | | *e* | SgSg | **SbSb** | | **18 29 28.4** | **+6.0** |
| YLYR | | | | | max | | | 18 29 45.4 | |
| | comp=N,3μm,1.0s | | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **3.10** | **20** | *e* | PN | **Pn** | | **18 28 41.3** | **+1.5** |
| NIZ | | | | *e* | | | | 18 28 47.7 | |
| NIZ | | | | *e* | S | **Sn** | | **18 29 18.1** | **+0.7** |
| NIZ | | | | *e* | | | | 18 29 27.5 | |
| NIZ | | | | | pmax | pmax | | | |
| | comp=Z,553nm,0.7s | | | | | | | | |
| NIZ | | | | | smax | smax | | | |
| | comp=N,5μm,1.0s | | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **3.10** | **20** | *e* | Pn | **Pn** | | **18 28 41.2** | **+1.5** |
| NIZ | | | | *e* | Pg | **Pb** | | **18 28 46.8** | **+1.2** |
| NIZ | | | | *e* | PgPg | **PbPb** | | **18 28 49.3** | **+0.5** |
| NIZ | | | | | max | | | 18 28 51.8 | |
| | comp=N,480nm,0.3s | | | | | | | | |
| NIZ | | | | *e* | Sn | **Sn** | | **18 29 17.5** | **+0.1** |
| NIZ | | | | *e* | Sg | **Sg** | | **18 29 27.8** | **-1.4** |
| NIZ | | | | | Smax | | | 18 29 37.4 | |
| | comp=N,5μm,0.6s | | | | | | | | |
| **ARS** | **Arshan** | **3.37** | **256** | *e* | Pn | **Pn** | | **18 28 44.2** | **+0.7** |
| ARS | | | | *e* | Pg | **Pb** | | **18 28 50.6** | **+0.4** |
| ARS | | | | *e* | | | | 18 28 52.0 | |
| ARS | | | | | max | | | 18 28 52.3 | |
| | comp=N,4μm,0.6s | | | | | | | | |
| ARS | | | | *e* | Sn | **Sn** | | **18 29 20.8** | **-3.3** |
| ARS | | | | *e* | Sg | **Sb** | | **18 29 33.0** | **+1.3** |
| ARS | | | | | Smax | | | 18 29 38.2 | |
| | comp=N,56μm,0.6s | | | | | | | | |
| **KMO** | **Kumora** | **3.65** | **33** | *e* | PN | **Pn** | | **18 28 48.9** | **+1.6** |
| KMO | | | | *e* | | | | 18 28 56.6 | |
| KMO | | | | *e* | S | **Sn** | | **18 29 29.2** | **-1.7** |
| KMO | | | | *e* | | | | 18 29 43.4 | |
| KMO | | | | | pmax | pmax | | | |
| | comp=Z,243nm,0.3s | | | | | | | | |
| KMO | | | | | smax | smax | | | |
| | comp=N,5μm,1.0s | | | | | | | | |
| **KMO** | **Kumora** | **3.65** | **33** | *e* | Pn | **Pn** | | **18 28 48.6** | **+1.3** |
| KMO | | | | *e* | Pg | **Pb** | | **18 28 57.6** | **+2.6** |
| KMO | | | | *e* | PgPg | **Pg** | | **18 29 00.1** | **+0.5** |
| KMO | | | | | max | | | 18 29 11.6 | |
| | comp=N,576nm,0.8s | | | | | | | | |
| KMO | | | | *e* | Sn | **Sn** | | **18 29 30.0** | **-0.9** |
| KMO | | | | *e* | Sg | **Sg** | | **18 29 46.3** | **-0.5** |
| KMO | | | | | Smax | | | 18 29 54.3 | |
| | comp=N,5μm,1.0s | | | | | | | | |
| **CIT** | **Chita** | **3.69** | **101** | *e* | PN | **Pn** | | **18 28 48.1** | **+0.2** |
| CIT | | | | *e* | | | | 18 28 59.2 | |
| CIT | | | | *e* | S | **Sn** | | **18 29 33.8** | **+1.9** |
| CIT | | | | *e* | | | | 18 29 47.3 | |
| CIT | | | | | pmax | pmax | | | |
| | comp=Z,900nm,0.5s | | | | | | | | |
| CIT | | | | | smax | smax | | | |
| | comp=N,7μm,0.7s | | | | | | | | |
| **CIT** | **Chita** | **3.69** | **101** | *e* | Pn | **Pn** | | **18 28 48.6** | **+0.7** |
| CIT | | | | *e* | Pg | **Pb** | | **18 28 58.8** | **+3.2** |
| CIT | | | | | Pmax | | | 18 29 00.6 | |
| | comp=N,899nm,0.5s | | | | | | | | |
| CIT | | | | *e* | Sn | **Sn** | | **18 29 30.8** | **-1.1** |
| CIT | | | | *e* | Sg | **Sg** | | **18 29 46.9** | **-1.2** |
| CIT | | | | | Smax | | | 18 29 53.3 | |
| | comp=N,6μm,0.3s | | | | | | | | |
| **ZAK** | **Zakamensk** | **3.71** | **229** | *e* | PN | **Pn** | | **18 28 49.1** | **+0.8** |
| ZAK | | | | *e* | | | | 18 28 58.4 | |
| ZAK | | | | *e* | | | | 18 29 45.2 | |
| ZAK | | | | | pmax | pmax | | | |
| | comp=Z,391nm,0.4s | | | | | | | | |
| ZAK | | | | | smax | smax | | | |
| | comp=N,4μm,0.5s | | | | | | | | |
| **ZAK** | **Zakamensk** | **3.71** | **229** | *e* | Pn | **Pn** | | **18 28 48.8** | **+0.5** |
| ZAK | | | | *e* | Pg | **Pb** | | **18 28 58.3** | **+2.1** |
| ZAK | | | | | Pmax | | | 18 29 20.9 | |
| | comp=N,1μm,1.4s | | | | | | | | |
| ZAK | | | | *e* | Sn | **Sn** | | **18 29 28.9** | **-3.8** |
| ZAK | | | | *e* | Sg | **Sg** | | **18 29 45.9** | **-3.1** |
| ZAK | | | | | Smax | | | 18 29 52.4 | |
| | comp=N,5μm,1.1s | | | | | | | | |
| **YOA** | **Uoyan** | **4.02** | **34** | *e* | Pn | **Pn** | | **18 28 53.8** | **+1.4** |
| YOA | | | | *e* | Pg | **Pg** | | **18 29 05.4** | **-1.3** |
| YOA | | | | | Pmax | | | 18 29 24.1 | |
| | comp=N,2μm,0.9s | | | | | | | | |
| YOA | | | | *e* | Sg | **Sg** | | **18 29 58.2** | **-0.6** |
| YOA | | | | | Smax | | | 18 30 35.5 | |
| | comp=N,9μm,1.1s | | | | | | | | |
| **MOY** | **Mondy** | **4.29** | **256** | *e* | PN | **Pn** | | **18 28 58.3** | **+2.1** |
| MOY | | | | *e* | | | | 18 29 09.5 | |
| MOY | | | | *e* | | | | 18 30 03.6 | |
| MOY | | | | | pmax | pmax | | | |
| | comp=Z,973nm,0.7s | | | | | | | | |
| MOY | | | | | smax | smax | | | |
| | comp=N,19μm,1.0s | | | | | | | | |
| **MOY** | **Mondy** | **4.29** | **256** | *e* | Pn | **Pn** | | **18 28 57.9** | **+1.7** |
| MOY | | | | *e* | Pg | **Pb** | | **18 29 07.7** | **+1.7** |
| MOY | | | | | Pmax | | | 18 29 20.5 | |
| | comp=N,2μm,0.9s | | | | | | | | |
| MOY | | | | *e* | | | | 18 29 59.7 | |
| MOY | | | | *e* | Sg | **Sg** | | **18 30 03.5** | **-4.0** |
| MOY | | | | | Smax | | | 18 30 05.0 | |
| | comp=N,19μm,1.0s | | | | | | | | |
| **KPC** | **Khapcheranga** | **4.33** | **135** | *e* | PN | **Pn** | | **18 28 56.6** | **-0.1** |
| KPC | | | | *e* | | | | 18 29 08.8 | |
| KPC | | | | *e* | | | | 18 30 05.3 | |
| KPC | | | | | pmax | pmax | | | |
| | comp=Z,584nm,0.3s | | | | | | | | |
| KPC | | | | | smax | smax | | | |
| | comp=E,3μm,0.5s | | | | | | | | |
| **KPC** | **Khapcheranga** | **4.33** | **135** | *e* | Pn | **Pn** | | **18 28 56.4** | **-0.3** |
| KPC | | | | *e* | Pg | **Pb** | | **18 29 10.5** | **+3.9** |
| KPC | | | | | Pmax | | | 18 29 13.5 | |
| | comp=E,582nm,0.3s | | | | | | | | |
| KPC | | | | *e* | Sn | **Sn** | | **18 29 46.5** | **-1.3** |
| KPC | | | | *e* | Sg | **Sg** | | **18 30 06.3** | **-2.4** |
| KPC | | | | | Smax | | | 18 30 20.2 | |
| | comp=E,3μm,1.5s | | | | | | | | |
| **UKT** | **Uakit** | **4.36** | **51** | ⇓*i* | Pn | **Pn** | | **18 28 58.3** | **+1.2** |
| UKT | | | | | *e*Pg | **Pg** | | **18 29 11.7** | **-1.5** |
| UKT | | | | | *e* | | | 18 29 17.3 | |
| UKT | | | | | max | | | 18 29 22.3 | |
| | comp=E,231nm,0.7s | | | | | | | | |
| UKT | | | | | *e*Sn | **Sn** | | **18 29 48.1** | **-0.5** |
| UKT | | | | | *e*Sg | **Sg** | | **18 30 08.5** | **-1.2** |
| UKT | | | | | Smax | | | 18 30 17.5 | |
| | comp=E,1μm,0.9s | | | | | | | | |
| **SVKR** | **Severomuysk** | **4.71** | **44** | | *e*Pg | **Pg** | | **18 29 18.5** | **-1.5** |
| SVKR | | | | | Pmax | | | 18 29 31.3 | |
| | comp=E,314nm,0.4s | | | | | | | | |
| SVKR | | | | | *e*Sg | **Sg** | | **18 30 20.7** | **-0.4** |
| SVKR | | | | | Smax | | | 18 30 25.3 | |
| | comp=E,5μm,1.0s | | | | | | | | |
| **ORL** | **Orlik** | **4.81** | **269** | | *e*PN | **Pn** | | **18 29 04.1** | **+0.8** |
| ORL | | | | | *e* | | | 18 29 14.3 | |
| ORL | | | | | *e*S | **Sn** | | **18 29 58.1** | **-1.5** |
| ORL | | | | | *e* | | | 18 30 16.7 | |
| ORL | | | | | pmax | pmax | | | |
| | comp=Z,654nm,0.6s | | | | | | | | |
| ORL | | | | | smax | smax | | | |
| | comp=N,6μm,1.0s | | | | | | | | |
| **ORL** | **Orlik** | **4.81** | **269** | | *e*Pn | **Pn** | | **18 29 04.1** | **+0.8** |
| ORL | | | | | *e*Pg | **Pb** | | **18 29 17.7** | **+2.9** |
| ORL | | | | | Pmax | | | 18 29 19.5 | |
| | comp=N,470nm,0.7s | | | | | | | | |
| ORL | | | | | *e*Sn | **Sn** | | **18 29 55.7** | **-3.9** |
| ORL | | | | | *e*Sg | **Sb** | | **18 30 18.8** | **+5.7** |
| ORL | | | | | Smax | | | 18 30 22.7 | |
| | comp=N,6μm,1.1s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **5.03** | **185** | *d* | iPN | **Pn** | | **18 29 07.4** | **+1.0** |
| ULN | | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.7s | | | | | | | | |
| ULN | | | | |

TUP eS Sn 18 31 05.2 +0.6
TUP e 18 31 45.4
TUP pmax pmax
comp=Z,33nm,0.4s
TUP smax smax
comp=N,4μm,1.1s
**KHNR Khani 8.16 55** ePn Pn 18 29 50.8 +1.6
KHNR ePg Pg 18 30 19.9 -5.9
KHNR eSg Sg 18 32 06.3 -5.1
**HIA Hailar 8.40 111** d iPN Pn 18 29 50.8 -1.8
HIA MLR MLR
comp=Z,4μm,12.0s
**HIA Hailar 8.40 111** e Pn 18 29 51.3 -1.3
HIA eSg Sg 18 32 13.9 -5.5
**HIA Hailar 8.40 111** Pn Pn 18 29 50.3 -2.3
**YKLR Yuktali 8.89 60** ePn Pn 18 29 59.9 +0.7
YKLR e 18 31 46.8
YKLR eSg Sg 18 32 29.0 -5.9
**KRAR Krasnoyarsk 9.19 296** i P Pn 18 30 03.7 +0.5
**XLT XiLinHaoTe 10.57 145** eP Pn 18 30 21.9 -0.4
XLT pP 18 30 25.2
XLT sP 18 30 27.6
XLT S Sn 18 32 24.6 +3.4
XLT sS 18 32 29.0
XLT pmax pmax
comp=Z,7.0nm,0.9s
XLT LR LR
comp=Z,3μm,9.7s
XLT LR LR
comp=Z,3μm,8.6s
XLT LR LR
comp=Z,5μm,10.1s
**CLNS Chul'man 10.67 61** eSg 18 33 24.0
**ZEA Zeya 11.73 78** eP Pn 18 30 38.9 +0.8
ZEA eS Sn 18 32 45.8 -3.7
ZEA smax smax
comp=E,100nm,5.0s
ZEA MLR MLR
comp=E,1μm,6.0s
ZEA MLR MLR
comp=Z,1μm,12.0s
**HHC Hu-ho-hao-te 12.32 166** eP Pn 18 30 46.5 +0.2
HHC S Sn 18 33 04.0 -0.1
HHC pmax pmax
comp=Z,13nm,1.1s
HHC pmax pmax
comp=Z,110nm,5.1s
HHC LR LR
comp=Z,5μm,8.9s
HHC LR LR
comp=Z,2μm,8.3s
HHC LR LR
comp=Z,6μm,8.6s
**BTO Baotou 12.38 172** eP Pn 18 30 45.4 -1.7
**DGZ Jazzator, Alta 13.07 264**⇓ eP Pn 18 30 58.6 +2.1
DGZ MLR MLR
comp=Z,2μm,12.0s
**ZAA0 Zalesovo Array 13.68 284** Pn Pn 18 31 05.0 +0.4
**ZALV Zalesovo Beam 13.68 284** Pn Pn 18 31 05.4 +0.8
comp=Z,0.1nm,0.3s,baz=86,slow=11,SNR=15
ZALV Lg Lg 18 34 55.0
comp=Z,1.2nm,0.3s,baz=92,slow=28,SNR=8.3
ZALV LR LR 18 36 33.9
comp=Z,1μm,19.4s,baz=84,slow=38
**ZALV Zalesovo Beam 13.68 284** i P Pn 18 31 06.5 +1.9
ZALV pmax pmax
comp=Z,3.0nm,0.7s
**ZALV Zalesovo Beam 13.68 284** Pn Pn 18 31 04.8 +0.2
**BJI Beijing 14.09 152** P Pn 18 31 09.3 -1.1
BJI S Sn 18 33 53.7 +6.4
BJI pmax pmax
comp=Z,17nm,0.9s
**BJT Baijiatuau 14.11 152** P Pn 18 31 10.3 -0.3
**BJT Baijiatuau 14.11 152** Pn Pn 18 31 10.3 -0.3
**GTA Gaotai 14.52 205** ⇑P Pn 18 31 17.9 +1.5
GTA pP P 18 31 24.2 +1.0
GTA sP 18 31 27.5
GTA pmax pmax
comp=Z,5.0nm,1.6s
GTA pmax pmax
comp=Z,140nm,4.6s
GTA LR LR
comp=Z,1μm,11.6s
GTA LR LR
comp=Z,1μm,10.2s
GTA LR LR
comp=Z,2μm,12.7s
**BNX BinXian 14.68 111** ⇑P P 18 31 24.3 -0.5
BNX pmax pmax
comp=Z,8.0nm,0.8s
BNX pmax pmax
comp=Z,220nm,4.7s
**CN2 Changchun 14.86 121** eP Pn 18 31 15.2 -5.6
CN2 eS Sn 18 34 00.1 -5.9
CN2 pmax pmax
comp=Z,10.0nm,1.1s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=N,1μm,13.0s
CN2 LR LR
comp=E,1μm,13.0s
CN2 LR LR
comp=Z,3μm,11.0s
**YAK Yakutsk 14.89 43** Pn Pn 18 31 23.9 +2.7
comp=Z,0.0nm,0.3s,baz=16,slow=1.0,SNR=1.4
YAK Lg Lg 18 35 33.4
comp=Z,0.3nm,0.3s,baz=155,slow=16,SNR=4.0
YAK LR LR 18 37 25.8
comp=Z,511nm,19.8s,baz=258,slow=39
**YAK Yakutsk 14.89 43** eP P 18 31 25.5 -1.6
YAK eS Sn 18 34 11.7 +5.1
YAK pmax pmax
comp=Z,12nm,1.1s
YAK pmax pmax
comp=N,5.0nm,1.3s
YAK pmax pmax
comp=E,10.0nm,1.3s
YAK pmax pmax
comp=Z,23nm,1.1s
YAK pmax pmax
comp=N,13nm,1.3s
YAK pmax pmax
comp=E,13nm,1.1s
YAK smax smax
comp=N,110nm,4.4s
YAK smax smax
comp=E,141nm,4.4s
YAK MLR MLR
comp=Z,705nm,15.0s
YAK MLR MLR
comp=N,223nm,14.0s
YAK MLR MLR
comp=E,463nm,15.0s
**YAK Yakutsk 14.89 43** P P 18 31 27.6 +0.6
**KLR Kul'dur 15.54 94** Pn P 18 31 34.2 -0.1
comp=E,0.2nm,0.3s,baz=284,slow=11,SNR=6.9
KLR Lg Lg 18 36 00.8
comp=E,0.8nm,0.3s,baz=199,slow=20,SNR=12
KLR LR LR 18 38 00.8
comp=E,1μm,19.3s,baz=290,slow=39
**WMQ Urumqi 16.04 244** eP P 18 31 41.8 +1.8
WMQ pP sP 18 31 47.0 +6.3
WMQ pmax pmax
comp=E,23nm,1.1s
WMQ LR LR
comp=E,1μm,7.1s
WMQ LR LR
comp=E,990nm,7.9s
WMQ LR LR
comp=E,840nm,20.7s
**HNS HongShan 16.24 160** ⇑P P 18 31 40.8 -1.3
HNS S Sn 18 34 38.8 -0.6
HNS pmax pmax
comp=E,10.0nm,1.7s
HNS LR LR
comp=E,2μm,10.3s
HNS LR LR
comp=E,930nm,10.4s
HNS LR LR
comp=E,2μm,12.7s
**MDJ Mudanjiang 16.59 111** Pn 18 31 42.3 -1.1
MDJ IAmb IAmb 18 31 57.6
comp=Z,47nm,1.4s
**LZH Lanzhou 17.01 191** eP P 18 31 52.2 +1.4
LZH pP sP 18 31 57.4 +5.9
LZH sP pP 18 32 01.6 +10
LZH pmax pmax
comp=Z,22nm,1.1s
LZH LR LR
comp=Z,2μm,9.4s
LZH LR LR
comp=Z,780nm,10.4s
LZH LR LR
comp=Z,2μm,11.5s
**MK31 Makanchi Array 17.43 260** i P P 18 31 55.1 -0.2
**MK31 Makanchi Array 17.43 260** Pn 18 31 53.6 -0.4
**MKAR Makanchi Array 17.43 260** P P 18 31 54.8 -0.5
comp=Z,0.4nm,0.3s,baz=49,slow=8.2,SNR=19
MKAR Lg Lg 18 36 58.5
comp=Z,0.1nm,0.3s,baz=66,slow=27,SNR=6.6
**MKAR Makanchi Array 17.43 260** P Pn 18 31 53.9 -0.1
**MAKZ Makanchi 17.61 260** P Pn 18 31 56.1 -0.1
**MAKZ Makanchi 17.61 260** P Pn 18 31 54.8 -1.4
**TIA Tai'an 17.94 155** eP P 18 32 01.0 0.0
TIA S S 18 35 26.0 -1.5
TIA pmax pmax
comp=Z,11nm,1.2s
TIA pmax pmax
comp=Z,180nm,7.5s
TIA LR LR
comp=Z,1μm,11.4s
TIA LR LR
comp=Z,850nm,11.6s
TIA LR LR
comp=Z,2μm,11.0s
**KURK Kurchatov 18.06 275**⇑ eP Pn 18 32 00.8 -0.9
KURK pmax pmax
comp=Z,7.0nm,0.8s
**KURK Kurchatov 18.06 275** Pn 18 32 00.0 -1.7
**KURBB Kurchatov Arra 18.14 275** P Pn 18 32 01.0 -1.7
comp=Z,0.2nm,0.3s,baz=68,slow=12,SNR=20
KURBB Lg Lg 18 37 15.8
comp=Z,0.0nm,0.3s,baz=75,slow=29,SNR=2.5
KURBB LR LR 18 39 08.5
comp=Z,896nm,18.3s,baz=49,slow=38
**USA0B Ussuriysk Arra 18.21 109** eP P 18 32 06.8 +2.9
**USRK Ussuriysk Ar. 18.21 109** P P 18 32 05.2 +1.3
baz=306,slow=12,SNR=5.9
USRK Lg Lg 18 37 26.5
baz=306,slow=24,SNR=6.1
USRK LR LR 18 39 53.7
comp=Z,1μm,18.5s,baz=303,slow=40
**LYN LuoYang 18.63 168** eP Pn 18 32 10.2 +1.4
LYN pmax pmax
comp=Z,70nm,4.1s
LYN LR LR
comp=Z,2μm,10.7s
LYN LR LR
comp=Z,1μm,10.9s
**MSHR Mys Shultsa 18.76 114** eP Pn 18 32 11.4 +1.1
MSHR MLR MLR
comp=Z,2μm,12.0s
**VLA Vladivostok 18.82 112**⇓ eP Pn 18 32 12.8 +1.8
VLA pmax pmax
comp=Z,37nm,1.1s
**XAN Xi'an 18.85 177** P P 18 32 11.2 +0.1
XAN pP pP 18 32 14.5 +3.0
XAN sP sP 18 32 17.4 +5.7
XAN S S 18 35 48.3 +2.2
XAN pmax pmax
comp=Z,72nm,3.8s
XAN LR LR
comp=Z,2μm,12.2s
XAN LR LR
comp=Z,2μm,11.3s
XAN LR LR
comp=Z,2μm,13.1s
**GOMU GeErMu 18.98 214** P P 18 32 12.9 0.0
GOMU S S 18 35 50.0 +0.7
GOMU pmax pmax
comp=Z,9.0nm,1.0s
GOMU pmax pmax
comp=Z,120nm,4.7s
GOMU LR LR
comp=Z,1μm,12.4s
GOMU LR LR
comp=Z,630nm,11.7s
GOMU LR LR
comp=Z,1μm,11.6s
**NRIK Noril'sk 18.99 338** P P 18 32 10.8 -1.5
comp=Z,0.7nm,0.3s,baz=152,slow=12,SNR=3.5
NRIK S Sn 18 35 27.8 -18
comp=Z,0.6nm,0.3s,baz=163,slow=21,SNR=2.3
NRIK Lg Lg 18 37 48.4
baz=43,slow=8.4,SNR=3.9
**NRIK Noril'sk 18.99 338**⇓ eP P 18 32 11.6 -0.7
NRIK pmax pmax
comp=Z,16nm,0.8s
NRIK MLR MLR
comp=Z,1μm,12.0s
**NRIK Noril'sk 18.99 338** P P 18 32 10.8 -1.5
NRIK IAmb IAmb 18 32 26.7
comp=Z,30nm,1.0s
**KSAR Wonju Array Be 20.89 130** P P 18 32 32.4 -0.8
**KSAR Wonju Array Be 20.89 130** P P 18 32 32.4 -0.8
**KSRS Korea Array 20.89 130** P P 18 32 34.2 +1.0
comp=Z,2.4nm,0.9s,baz=332,slow=10,SNR=7.0
KSRS LR LR 18 41 59.7
comp=Z,564nm,20.0s,baz=320,slow=41
**TIXI Tiksi 21.02 19** P P 18 32 33.3 -1.0
comp=Z,4.3nm,0.7s,baz=271,slow=23,SNR=12
TIXI S S 18 36 23.6 -5.2
comp=Z,6.3nm,0.8s,baz=88,slow=22,SNR=3.0
TIXI Lg Lg 18 38 48.0
comp=Z,31nm,1.0s,baz=270,slow=24,SNR=6.1
TIXI LR LR 18 41 08.6
comp=Z,275nm,19.3s,baz=184,slow=38
**TIXI Tiksi 21.02 19**⇑ eP P 18 32 33.4 -1.0
TIXI MLR MLR
comp=Z,305nm,10.0s
**TIXI Tiksi 21.02 19** P P 18 32 32.2 -2.2
**CD2 Chengdu 22.14 189** P P 18 32 46.6 -0.1
CD2 pP pP 18 32 49.6 +2.4
CD2 sP sP 18 32 50.8 +3.4
CD2 S S 18 36 51.5 +0.1
CD2 sS pS 18 36 57.1 +2.7
CD2 pmax pmax
comp=Z,20nm,1.5s
CD2 pmax pmax
comp=Z,130nm,4.7s
CD2 LR LR
comp=Z,80nm,11.0s
CD2 LR LR
comp=Z,670nm,10.8s
CD2 LR LR
comp=Z,1μm,11.4s
**PRZ Przheval'sk 22.14 254** P P 18 32 43.7 -3.2
PRZ pmax pmax
comp=Z,13nm,0.8s
**PRZ Przheval'sk 22.14 254** P P 18 32 43.7 -3.2
PRZ IAmb IAmb 18 33 06.1
comp=Z,12nm,0.8s
**BVAR Borovoye Array 22.32 285** P P 18 32 47.5 -1.0
comp=Z,2.9nm,0.5s,baz=75,slow=17,SNR=26
**NJ2 Nanjing 22.33 154** eP P 18 32 49.2 +0.5
NJ2 S S 18 36 52.9 -2.0
NJ2 pmax pmax
comp=Z,2.0nm,0.5s
NJ2 pmax pmax
comp=Z,160nm,4.9s
NJ2 LR LR
comp=Z,1μm,16.6s
NJ2 LR LR
comp=Z,350nm,14.2s
NJ2 LR LR
comp=Z,1μm,18.8s
**BRVK Borovoye 22.37 286** P P 18 32 49.0 0.0
**BRVK Borovoye 22.37 286** P P 18 32 47.1 -1.9
**ENH Enshi 22.62 176** P P 18 32 50.9 -1.0
**OTUK Ortayu 22.78 273** P P 18 32 55.1 +1.7
**WHN Wuhan 22.84 165** ⇑P P 18 33 03.9 +10
**KDJ Kajisay 23.07 255** P P 18 32 56.1 -0.7
KDJ pmax pmax
comp=Z,27nm,1.3s
**KDJ Kajisay 23.07 255** P P 18 32 56.1 -0.7
KDJ IAmb IAmb 18 33 09.0
comp=Z,27nm,1.3s
**YSS Yuzh-Sakhalins 23.18 91** eP P 18 32 58.2 +0.7
YSS eS S 18 37 05.4 -4.5
YSS pmax pmax
comp=Z,10.0nm,1.2s
YSS MLR MLR
comp=Z,1μm,16.0s
YSS MLR MLR
comp=E,1μm,14.0s
**TKM2 Tokmak 2 23.53 258** P P 18 33 01.7 +0.3
**BOOM Boomskoye usch 23.58 257** P P 18 33 01.0 -0.9
BOOM pmax pmax
comp=Z,22nm,1.2s
**BOOM Boomskoye usch 23.58 257** P P 18 33 01.0 -0.9
BOOM IAmb IAmb 18 33 24.5
comp=Z,22nm,1.2s
**AAK Ala-Archa 24.35 259** P P 18 33 09.6 +0.4
comp=Z,1.5nm,0.6s,baz=31,slow=5.6,SNR=2.0
AAK LR LR 18 43 10.8
comp=Z,388nm,21.0s,baz=38,slow=38
**AAK Ala-Archa 24.35 259**⇓ eP P 18 33 10.3 +1.1
AAK pmax pmax
comp=Z,17nm,2.3s
AAK MLR MLR
comp=Z,1μm,12.0s
**AAK Ala-Archa 24.35 259** P P 18 33 07.8 -1.3
**MA2 Magadan 24.50 57**⇓ iP P 18 33 10.7 +0.6
MA2 pmax pmax
comp=Z,19nm,1.4s
MA2 MLR MLR
comp=Z,1μm,13.0s
**MA2 Magadan 24.50 57** P P 18 33 10.2 0.0
MA2 IAmb IAmb 18 33 13.5
comp=Z,20nm,1.3s
**ASAJ Asahikawa 24.52 97** LR LR 18 42 01.1
comp=Z,266nm,18.7s,baz=292,slow=35
**SEY Seymchan 25.26 49** P P 18 33 18.4 +1.5
comp=Z,2.5nm,0.8s,baz=262,slow=10,SNR=14
SEY LR LR 18 43 52.7
comp=Z,785nm,18.1s,baz=270,slow=38
**SEY Seymchan 25.26 49**⇑ iP P 18 33 18.7 +1.7
**KSH Kashi 25.46 251** P P 18 33 25.0 +5.8
KSH sP sP 18 33 31.8 +12
KSH pmax pmax
comp=Z,5.0nm,1.3s
KSH LR LR
comp=Z,420nm,12.4s
KSH LR LR
comp=Z,400nm,12.5s
KSH LR LR
comp=Z,680nm,12.4s
**KKAR Karatay Array 26.46 263** P P 18 33 26.5 -1.6
**KKAR Karatay Array 26.46 263** P P 18 33 26.5 -1.6
**PZH PanZhiHua 26.72 192** P P 18 33 30.8 +0.2
PZH S S 18 38 06.1 -0.9
PZH pmax pmax
comp=Z,20nm,1.3s
PZH pmax pmax
comp=Z,100nm,5.1s
PZH LR LR
comp=Z,270nm,12.0s
PZH LR LR
comp=Z,670nm,12.9s
PZH LR LR
comp=Z,410nm,12.0s
**SVE Sverdlovsk 26.95 297** eP P 18 33 35.3 +3.0
SVE pmax pmax
comp=Z,36nm,0.9s
SVE MLR MLR
comp=Z,1μm,14.0s
**KMI Kunming 27.97 190** ⇑P P 18 33 42.1 +0.1
KMI pP sP 18 33 47.0 +4.4
KMI pmax pmax
comp=Z,7.0nm,1.1s
KMI LR LR
comp=Z,820nm,11.9s
KMI LR LR
comp=Z,500nm,11.2s
KMI LR LR
comp=Z,690nm,11.6s
**ARU Arti 28.16 297** LR LR 18 47 16.4
comp=Z,220nm,21.0s,baz=78,slow=42
**ARU Arti 28.16 297** d iP P 18 33 46.0 +2.9
ARU 18 34 34.0
ARU PPP PPP 18 34 44.3
ARU S S 18 38 35.2 +6.2
ARU SS SnSn 18 39 52.9 +9.1
ARU pmax pmax
comp=Z,11nm,1.6s
ARU MLR MLR
comp=Z,399nm,10.0s
**ARU Arti 28.16 297** P P 18 33 43.4 +0.3
**GAR Garm 29.09 257** P P 18 33 51.9 +0.1
GAR IAmb IAmb 18 34 13.2
comp=Z,16nm,1.4s
**TAPN Taplejung 29.52 218** eP P 18 33 56.8 +0.9
comp=Z,19nm,1.1s
**PETK Petropavlovsk- 29.61 69** P P 18 33 55.8 -0.3
comp=Z,2.1nm,0.8s,baz=282,slow=6.0,SNR=5.5
PETK LR LR 18 46 50.6
comp=Z,353nm,18.4s,baz=288,slow=38
**SHL Shillong 29.76 210** P P 18 33 56.6 -1.2
SHL pmax pmax
comp=Z,12nm,1.1s
**SHL Shillong 29.76 210** P P 18 33 56.6 -1.2
SHL IAmb IAmb 18 33 58.6
comp=Z,12nm,1.1s
**ABKAR Akbulak array 29.79 282** P P 18 33 56.4 -1.3
**ABKAR Akbulak array 29.79 282** P P 18 33 56.0 -1.7
**JIRN Jiri 29.83 221** eP P 18 33 59.6 +0.9
comp=Z,5.3nm,0.6s
**CHGR Chuyangaron 30.00 257** P P 18 33 59.9 +0.1
**KKN Kakani 30.08 222** eP P 18 34 01.6 +0.8
comp=Z,12nm,0.7s
**ODAN Odare 30.09 218** eP P 18 34 01.2 +0.4
**GKN Gorkha 30.16 224** eP P 18 34 02.2 +0.8
comp=Z,36nm,1.1s
**DANN Dangsing 30.23 225** eP P 18 34 03.1 +1.0
**JHJ Hachijo jima 2 30.29 118** LR LR 18 47 04.0
comp=Z,222nm,18.7s,baz=110,slow=38
**AKTO Aktyubinsk 30.42 286** LR LR 18 47 00.2
comp=Z,679nm,18.8s,baz=62,slow=38
**PYUN Piuthan 30.78 226** eP P 18 34 07.8 +0.9
comp=Z,35nm,1.2s
**KOLN Koldanda 30.80 225** eP P 18 34 08.1 +1.0
**BILL Bilibino 31.15 38** de P P 18 34 10.6 +1.1
BILL e 18 34 16.3
BILL e 18 35 13.8
BILL ePPP PPP 18 35 22.2
BILL pmax pmax
comp=Z,7.0nm,1.0s
BILL MLR MLR
comp=Z,262nm,15.0s
**BILL Bilibino 31.15 38** P P 18 34 10.4 +0.9
BILL IAmb IAmb 18 34 12.0
comp=Z,6.2nm,1.0s
**PRGR Permogore 33.44 310** eP P 18 34 32.3 +2.6
PRGR e 18 35 43.3
PRGR pmax pmax
comp=Z,15nm,0.8s
**CHTO Chiang Mai 34.67 195** P P 18 34 40.8 0.0
CHTO pmax pmax
comp=Z,7.0nm,1.2s
**CHTO Chiang Mai 34.67 195** P P 18 34 40.8 0.0
CHTO IAmb IAmb 18 34 41.4
comp=Z,6.8nm,1.2s
**CM31 Chiang Mai Arr 35.02 195** P P 18 34 43.4 -0.4
CM31 IAmb IAmb 18 34 45.2
comp=Z,6.7nm,1.1s
**CMAR Chiang Mai Arr 35.02 195** P P 18 34 43.9 +0.1
comp=Z,2.0nm,0.9s,baz=0.6,slow=8.9,SNR=20
**CMAR Chiang Mai Arr 35.02 195** P P 18 34 43.5 -0.3
**KLMR Klimovskoe 36.50 310** eP P 18 34 54.9 -1.1
KLMR e 18 37 18.7
KLMR pmax pmax
comp=Z,13nm,1.5s
**KLMR Klimovskoe 36.50 310** eP P 18 34 54.9 -1.1
KLMR AMP 18 35 07.7
comp=Z,13nm,1.5s
KLMR ePcP PcP 18 37 18.8 -0.8
KLMR LR LR 18 49 58.6
**HRA Herat 36.98 258** P P 18 35 00.4 -0.4
**GEYT Alibeck 37.09 266** LR LR 18 51 16.9
comp=Z,409nm,19.6s,baz=55,slow=38
**SHEM Shemya Is, Ala 38.84 63** LR LR 18 50 53.5
comp=Z,260nm,21.7s,baz=8.5,slow=36
**SPITS Spitsbergen Ar 39.16 341** LR LR 18 54 34.4
comp=Z,381nm,19.0s,baz=227,slow=41
**ARCES ARCESS Array B 39.33 327** P P 18 35 18.7 -1.2
comp=Z,3.1nm,1.1s,baz=62,slow=9.5,SNR=1.6
ARCES LR LR 18 53 32.2

comp=Z,181nm,19.5s,baz=18,slow=39
**OBN Obninsk 40.21 303** *e*P P **18 35 29.3 +2.0**
OBN *e* 18 37 00.5
OBN *e*PPP PPP 18 37 24.2
OBN pmax pmax
comp=Z,4.0nm,0.9s
OBN MLR MLR
comp=Z,1μm,18.0s
**FINES FINESS Array B 42.27 315** P P **18 35 43.0 -1.2**
comp=Z,1.0nm,0.6s,baz=80,slow=7.6,SNR=1.5
FINES LR LR 18 55 05.9
comp=Z,627nm,18.2s,baz=60,slow=39
**KIV Kislovodsk 42.68 285** *e*P P **18 35 45.8 -2.1**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,195nm,16.0s
**KBZ Khabaz 42.69 285** LR LR 18 55 28.1
comp=Z,244nm,19.7s,baz=44,slow=39
**GNI Garni 43.77 279** LR LR 18 56 28.3
comp=Z,336nm,18.4s,baz=55,slow=39
**MNK Minsk 44.88 306** *i* P P **18 36 03.1 -2.2**
MNK *i* 18 37 49.9
MNK *i* PPP PPP 18 38 31.2
MNK *i* S S **18 42 41.4 -2.1**
MNK *i* SS SS **18 46 04.8 +0.9**
MNK *i* SSS SSS 18 46 48.8
MNK pmax pmax
comp=N,6.0nm,0.8s
MNK pmax pmax
comp=Z,5.0nm,0.8s
MNK pmax pmax
comp=E,2.0nm,0.8s
MNK MLR MLR
comp=N,961nm,19.0s
MNK MLR MLR
comp=Z,2μm,16.0s
MNK MLR MLR
comp=E,173nm,14.0s
**MNK Minsk 44.88 306** *i* P P **18 36 03.1 -2.1**
comp=E,2.0nm,0.8s
MNK *i* P P **18 36 03.1 -2.1**
comp=N,6.0nm,0.8s
MNK *i* P P **18 36 03.1 -2.1**
comp=Z,5.0nm,0.8s,baz=58
MNK *i* PcP PcP **18 37 43.9 -2.9**
MNK *i* PP PP **18 37 50.0 +0.3**
MNK *i* PPP PPP 18 38 31.2
MNK *i* S S **18 42 41.4 -2.1**
MNK *i* SS SS **18 46 04.8 +0.9**
MNK *i* SSS SSS 18 46 48.9
MNK *i* LQ LQ 18 51 51.4
MNK *i* LR LR 18 55 03.8
MNK *i* LRM MLR 18 57 00.8
comp=N,961nm,19.2s
MNK *i* LRM MLR 18 57 03.3
comp=Z,2μm,16.3s
MNK *i* LRM MLR 18 57 04.9
comp=E,173nm,14.4s
**NACGM Naroch 45.20 307** *i* P P 18 36 16.3 +8.5
**DAG Danmarks Havn 46.27 345** *i* P P **18 36 18.6 +2.6**
DAG IAmb IAmb 18 36 20.3
comp=Z,2.5nm,0.9s
**TOLK Toolik Lake Re 46.28 30** P P **18 36 16.5 +0.2**
TOLK IAmb IAmb 18 36 18.1
comp=Z,3.9nm,0.8s
**AKASG Malin Array Be 46.30 300** P P **18 36 14.8 -1.8**
comp=Z,0.1nm,0.3s,baz=50,slow=8.6,SNR=2.9
AKASG LR LR 18 57 24.1
comp=Z,845nm,18.2s,baz=6.5,slow=38
**IMAR Indian Mountai 46.47 34** P P **18 36 17.9 +0.2**
**COLD Coldfoot 46.91 31** P P **18 36 21.6 +0.4**
COLD IAmb IAmb 18 36 28.2
comp=Z,5.5nm,1.1s
**H21K Melozitna Rive 46.97 34** P P **18 36 22.0 +0.3**
H21K IAmb IAmb 18 36 29.5
comp=Z,7.7nm,1.0s
**WSAR Wadi Sarin 47.36 251** LR LR 18 59 36.1
comp=Z,188nm,18.7s,baz=63,slow=40
**HFS Hagfors 48.13 318** LR LR 18 58 25.9
comp=Z,584nm,18.6s,baz=41,slow=38
**BMAR Burnt Mountain 48.51 29** P P **18 36 34.7 +1.0**
**NOA NORSAR Array B 48.58 320** P P **18 36 35.5 +1.2**
comp=Z,1.4nm,0.9s,baz=51,slow=7.2,SNR=2.4
NOA LR LR 18 58 39.1
comp=Z,428nm,20.4s,baz=45,slow=38
**CCB Clear Creek Bu 49.27 33** P P **18 36 40.2 +0.8**
**WRH Wood River Hil 49.28 34** P P **18 36 40.4 +0.9**
**IL31 49.49 33** P P **18 36 41.2 +0.1**
**ILAR Eielson Array 49.49 33** P P **18 36 41.9 +0.7**
comp=Z,6.6nm,1.0s,baz=300,slow=5.6,SNR=39
ILAR LR LR 19 01 20.8
comp=Z,262nm,18.1s,baz=157,slow=41
**ILAR Eielson Array 49.49 33** P P **18 36 41.5 +0.3**
**BURAR Bucovina Array 50.25 299** P P **18 36 47.4 +0.1**
**DEL Delary 50.27 314** *i* P P 18 36 53.0 +5.9
**PALK Pallekele 50.52 216** LR LR 18 59 06.6
comp=Z,72nm,20.7s,baz=136,slow=37
**BRTR Keskin Array B 50.60 286** P P **18 36 49.8 -0.3**
comp=Z,1.3nm,0.8s,baz=35,slow=5.3,SNR=2.1
BRTR LR LR 19 02 36.0
comp=Z,178nm,18.3s,baz=27,slow=41
**DOT Dot Lake 51.16 33** P P **18 36 53.7 -0.2**
**MLR Muntele Rosu 51.20 297** LR LR 19 01 49.2
comp=Z,232nm,20.6s,baz=58,slow=40
**RES Resolute Bay 51.83 7** LR LR 18 59 50.3
comp=Z,163nm,19.4s,baz=324,slow=37
**RES Resolute Bay 51.83 7** P P **18 36 58.4 -0.2**
RES pmax pmax
comp=Z,3.0nm,1.0s
**RES Resolute Bay 51.83 7** P P **18 36 58.4 -0.2**
**L27K Beaver Creek, 52.30 33** P P **18 37 03.0 +0.7**
L27K IAmb IAmb 18 37 04.3
comp=Z,12nm,1.1s
**BCAR Beaver Creek A 52.31 33** P **18 37 03.3 +0.8**
**C36M Paulatuk 52.37 21** P P **18 37 01.4 -1.3**
C36M IAmb IAmb 18 37 02.7
comp=Z,6.7nm,0.9s
**TOLI2 Tolitoli 52.73 163** P P **18 37 06.8 +0.8**
TOLI2 IAmb IAmb 18 37 08.6
comp=Z,12nm,1.2s
**DPC Dobruska-Polom 53.03 307** *e*P P 18 37 13.3 +5.4
**DPC Dobruska-Polom 53.03 307** *e*P P 18 37 13.3 +5.4
**VRAC Vranov 53.58 306** LR LR 19 02 19.5
comp=Z,422nm,20.1s,baz=44,slow=39
**MMAI Mount Meron Ar 54.11 279** LR LR 19 03 03.5
comp=Z,200nm,19.8s,baz=204,slow=39
**RAYN Ar Rayn 54.89 263** P P **18 37 21.2 -0.6**
RAYN pmax pmax
comp=Z,16nm,1.4s
**RAYN Ar Rayn 54.89 263** P P **18 37 21.2 -0.6**
**CKRC Cesky Krumlov 55.02 306** *e*P P 18 37 29.2 +6.7
**KHC Kasperske Hory 55.17 307** *e*P P 18 37 29.1 +5.5
**KHC Kasperske Hory 55.17 307** *e*P P 18 37 29.1 +5.5
**GERES GERESS Array B 55.30 307** P P **18 37 25.8 +1.2**
comp=Z,0.4nm,0.5s,baz=55,slow=4.1,SNR=2.1
**BORG Borgarnes 56.30 336** LR LR 19 03 17.8
comp=Z,122nm,18.2s,baz=7.1,slow=38
**SIJI Sorong 57.08 152** LR LR 19 04 51.9
comp=Z,95nm,18.2s,baz=316,slow=39
**KAPI Kappang 58.57 166** LR LR 19 05 14.1
comp=Z,73nm,18.6s,baz=2.5,slow=38
**DAVOX Davos/Dischmat 58.59 307** LR LR 19 05 13.3
comp=Z,375nm,19.7s,baz=82,slow=38
**LEM Lembang 59.47 180** LR LR 19 04 57.5
comp=Z,112nm,18.2s,baz=316,slow=38
**YKA Yellowknife Ar 60.24 21** P P **18 37 58.5 -0.5**
comp=Z,1.6nm,0.8s,baz=330,slow=6.4,SNR=26
**JAY Jayapura 61.76 142** LR LR 19 06 22.0
comp=Z,118nm,18.1s,baz=346,slow=37
**BBB Bella Bella 65.35 34** LR LR 19 10 47.8
comp=Z,202nm,18.9s,baz=311,slow=39
**KEST Kesra 66.99 299** LR LR 19 11 55.2
comp=Z,147nm,18.3s,baz=352,slow=40
**ESDC Sonseca Array 70.54 310** P P **18 39 06.0 -0.1**
comp=Z,1.2nm,0.9s,baz=34,slow=6.5,SNR=5.2
ESDC LR LR 19 14 23.0
comp=Z,211nm,19.2s,baz=23,slow=40
**PMG Port Moresby 70.58 138** LR LR 19 11 44.3
comp=Z,58nm,18.9s,baz=346,slow=37
**BMO Blue Mountains 75.27 31** P P **18 39 34.4 +0.2**
BMO pmax pmax
comp=Z,5.0nm,1.1s
**BMO Blue Mountains 75.27 31** P P **18 39 34.4 +0.2**
BMO IAmb IAmb 18 39 37.1
comp=Z,4.8nm,1.1s

**PLID Pearl Lake 75.47 30** P P **18 39 35.4 -0.1**
PLID IAmb IAmb 18 39 36.5
comp=Z,5.2nm,1.1s
**WRA Warramunga Arr 76.12 154** P P **18 39 38.0 -1.0**
comp=Z,1.4nm,0.3s,baz=347,slow=6.1,SNR=33
**WRA Warramunga Arr 76.12 154** P P **18 39 38.8 -0.2**
WRA pmax pmax
comp=Z,1.0nm,1.1s
**WRA Warramunga Ar 76.12 154** P P **18 39 38.8 -0.2**
**MDT Midelt 76.39 307** LR LR 19 16 40.7
comp=Z,86nm,18.4s,baz=7.5,slow=38
**PDAR Pinedale Array 79.47 27** P P **18 39 57.4 -0.5**
comp=Z,0.4nm,0.8s,baz=338,slow=1.9,SNR=4.1
PDAR LR LR 19 19 32.4
comp=Z,164nm,19.1s,baz=328,slow=39
**AS31 Alice Springs 79.56 156** P P **18 39 57.0 -1.2**
**ASAR Alice Springs 79.57 156** P P **18 39 57.6 -0.5**
comp=Z,2.7nm,0.8s,baz=351,slow=5.7,SNR=28
**ASAR Alice Springs 79.57 156** P P **18 39 57.3 -0.8**
**ELK Elko 79.63 32** LR LR 19 20 05.7
comp=Z,143nm,19.6s,baz=326,slow=39
**CTA Charters Tower 79.99 143** LR LR 19 16 43.6
comp=Z,87nm,19.8s,baz=352,slow=37
**KVN Kaiserville 80.21 34** P P **18 40 02.4 +0.5**
KVN pmax pmax
comp=Z,5.0nm,1.1s
**KVN Kaiserville 80.21 34** P P **18 40 02.4 +0.5**
**NVAR Mina Array Bea 80.70 35** P P **18 40 04.9 +0.3**
comp=Z,1.2nm,0.8s,baz=303,slow=4.2,SNR=7.9
NVAR LR LR 19 19 09.2
comp=Z,68nm,20.6s,baz=347,slow=38
**RDMU Red Mountain 81.50 28** P P **18 40 09.4 +0.6**
**KNB Kanab 83.80 32** P P **18 40 20.3 -0.5**
KNB pmax pmax
comp=Z,7.0nm,1.0s
**KNB Kanab 83.80 32** P P **18 40 20.3 -0.5**
**S22A 4UR Ranch, Cre 84.89 27** P P **18 40 27.0 +0.5**
S22A IAmb IAmb 18 40 28.4
comp=Z,5.8nm,1.4s
**SDCO Great Sand Dun 85.25 26** P P **18 40 28.6 +0.3**
SDCO IAmb IAmb 18 40 29.7
comp=Z,5.6nm,1.2s
**PFO Pinyon Flats O 85.68 36** LR LR 19 19 22.7
comp=Z,101nm,19.7s,baz=7.5,slow=36
**ANMO Albuquerque 87.62 27** P P **18 40 40.5 +0.7**
ANMO pmax pmax
comp=Z,3.0nm,1.1s
**ANMO Albuquerque 87.62 27** P P **18 40 40.5 +0.7**
ANMO IAmb IAmb 18 40 41.3
comp=Z,3.4nm,1.1s
**TORD Torodi Ar. Bea 89.02 291** P P **18 40 44.9 -1.5**
comp=Z,0.8nm,0.6s,baz=39,slow=3.8,SNR=6.5
**STKA Stephens Creek 89.43 152** P P **18 40 46.9 -0.9**
comp=Z,1.7nm,0.7s,baz=315,slow=14,SNR=3.4
**TXAR Lajitas Array 93.68 27** LR LR 19 28 53.4
comp=Z,86nm,21.0s,baz=329,slow=39
**LSZ Lusaka 95.84 253** LR LR 19 28 29.7
comp=Z,140nm,18.0s,baz=16,slow=38
**SNAA Sanae 145.26 211** PKPdf **PKPbc 18 47 25.9 -1.5**
**VNA2 Neumayer--Watz 146.68 213** PKPdf **PKPbc 18 47 30.6 -1.0**
baz=70,slow=3.3
**VNA1 Neumayer--Stat 146.96 213** PKPdf **PKPbc 18 47 32.3 0.0**

*THE **03** 18:43:19.4, 38.68N×25.60E, h4km±3km, ML2.4/4, Error ellipse: s-maj=3.8km s-min=1.1km az=333.0*
*DDA **03** 18:43:19.8±0.0, 38.73N×25.71E, h7km±2km, ML2.1*
*ATH **03** 18:43:20.0, 38.70N×25.66E, h15km±8km, ML2.6/3, Error ellipse: s-maj=8.4km s-min=1.1km az=248.0*
*ISK **03** 18:43:19.7, 38.73N×25.76E, h19km, ML2.4/7*
**ISC 03 18:43:19.5±0.9, 38.72N±0.02×25.67E±0.04, h17km±7km, n25, σ0.9 s44/44, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSRA** | **Psara** | **0.19** | **205** | P | **Pg** | **18 43 24.6** | **+0.3** |
| PSRA | | | | S | **Sg** | **18 43 27.0** | **-0.4** |
| PSRA | | | | AML | AML | 18 43 27.7 | |
| | comp=E,5618μm,0.2s | | | | | | |
| PSRA | | | | AML | AML | 18 43 27.9 | |
| | comp=N,5452μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.45** | **137** | P | **Pg** | **18 43 28.4** | **-0.2** |
| CHOS | | | | S | **Sg** | **18 43 34.7** | **-0.1** |
| | comp=N,1μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.45** | **137** | P | **Pg** | **18 43 28.4** | **-0.2** |
| CHOS | | | | S | **Sg** | **18 43 34.6** | **-0.1** |
| CHOS | | | | AML | AML | 18 43 35.2 | |
| | comp=E,3419μm,0.2s | | | | | | |
| CHOS | | | | AML | AML | 18 43 35.2 | |
| | comp=N,1470μm,0.2s | | | | | | |
| **SIGR** | **SIGRI** | **0.52** | **16** | P | **Pg** | **18 43 29.8** | **0.0** |
| SIGR | | | | S | **Sb** | **18 43 37.8** | **+0.5** |
| | comp=N,702nm,0.2s | | | | | | |
| **SIGR** | **SIGRI** | **0.52** | **16** | P | **Pg** | **18 43 29.8** | **0.0** |
| SIGR | | | | S | **Sb** | **18 43 37.6** | **+0.4** |
| SIGR | | | | AML | AML | 18 43 37.9 | |
| | comp=N,1373μm,0.2s | | | | | | |
| SIGR | | | | AML | AML | 18 43 38.2 | |
| | comp=E,1423μm,0.3s | | | | | | |
| **PRK** | **Paraskevi** | **0.71** | **42** | P | **Pn** | **18 43 34.2** | **-0.5** |
| PRK | | | | S | **Sn** | **18 43 46.0** | **+0.8** |
| | comp=E,188nm,0.5s | | | | | | |
| **PRK** | **Paraskevi** | **0.71** | **42** | P | **Pb** | **18 43 33.9** | **+0.5** |
| PRK | | | | S | **Sn** | **18 43 44.0** | **-1.2** |
| **URLA** | **Izmir** | **0.81** | **116** | PG | **Pb** | **18 43 35.3** | **+0.1** |
| URLA | | | | SG | **Sb** | **18 43 45.6** | **-0.2** |
| **URLA** | **Izmir** | **0.81** | **116** | P | **Pb** | **18 43 35.2** | **+0.1** |
| URLA | | | | S | **Sb** | **18 43 46.6** | **+0.8** |
| URLA | | | | *i* AML | AML | 18 43 49.0 | |
| | comp=E,181nm,0.5s | | | | | | |
| URLA | | | | *i* AML | AML | 18 43 50.0 | |
| | comp=E,104nm,0.3s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.81** | **126** | P | **Pg** | **18 43 35.2** | **-0.2** |
| ZEYE | | | | S | **Sb** | **18 43 46.1** | **+0.3** |
| ZEYE | | | | *i* AML | AML | 18 43 48.0 | |
| | comp=E,165nm,0.4s | | | | | | |
| ZEYE | | | | *i* AML | AML | 18 43 49.0 | |
| | comp=E,108nm,0.4s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.82** | **26** | PG | **Pb** | **18 43 35.3** | **0.0** |
| **FOCM** | **Foa** | **0.83** | **90** | PG | **Pg** | **18 43 35.2** | **-0.5** |
| **KOCA** | **Canakkale, Ayv** | **0.86** | **25** | P | **Pg** | **18 43 36.0** | **-0.4** |
| KOCA | | | | S | **Sn** | **18 43 49.9** | **+0.7** |
| KOCA | | | | *i* AML | AML | 18 43 53.0 | |
| | comp=E,153nm,0.5s | | | | | | |
| KOCA | | | | *i* AML | AML | 18 43 53.0 | |
| | comp=E,117nm,0.6s | | | | | | |
| **AYVA** | **Ayvalik** | **0.99** | **53** | P | **Pn** | **18 43 39.1** | **+0.5** |
| AYVA | | | | *i* AML | AML | 18 43 58.0 | |
| | comp=E,63nm,0.4s | | | | | | |
| AYVA | | | | *i* AML | AML | 18 44 01.0 | |
| | comp=E,37nm,0.5s | | | | | | |
| **DKL** | **Dikili** | **1.03** | **69** | PG | **Pn** | **18 43 39.2** | **+0.1** |
| DKL | | | | SG | **Sn** | **18 43 52.5** | **-0.6** |
| **ZEDA** | **zmir-Bergama** | **1.13** | **77** | P | **Pg** | **18 43 40.8** | **-0.5** |
| ZEDA | | | | S | **Sn** | **18 43 56.0** | **+0.4** |
| ZEDA | | | | *i* AML | AML | 18 43 57.0 | |
| | comp=E,32nm,0.7s | | | | | | |
| ZEDA | | | | *i* AML | AML | 18 44 02.0 | |
| | comp=E,24nm,0.5s | | | | | | |
| **BOZC** | **Bozcaada** | **1.16** | **15** | PN | **Pb** | **18 43 41.0** | **-0.1** |
| BOZC | | | | SN | **Sg** | **18 43 56.7** | **-0.5** |
| **BOZC** | **Bozcaada** | **1.16** | **15** | P | **Pb** | **18 43 41.1** | **0.0** |
| BOZC | | | | S | **Sg** | **18 43 57.9** | **+0.7** |
| BOZC | | | | *i* AML | AML | 18 43 59.0 | |
| | comp=E,79nm,0.3s | | | | | | |
| BOZC | | | | *i* AML | AML | 18 44 02.0 | |
| | comp=E,36nm,0.3s | | | | | | |
| **KARY** | **Karystos** | **1.19** | **235** | P | **Pn** | **18 43 41.2** | **-0.1** |
| KARY | | | | S | **Sb** | **18 43 56.0** | **-0.5** |
| **EZN** | **Ezine** | **1.22** | **25** | PN | **Pn** | **18 43 41.8** | **+0.1** |
| EZN | | | | SN | **Sn** | **18 43 57.7** | **-0.1** |
| **BUHA** | **Balikesir, Bur** | **1.35** | **54** | P | **Pb** | **18 43 44.5** | **+0.2** |
| BUHA | | | | S | **Sg** | **18 44 02.7** | **-0.4** |
| BUHA | | | | *i* AML | AML | 18 44 05.0 | |
| | comp=E,28nm,1.0s | | | | | | |
| BUHA | | | | *i* AML | AML | 18 44 08.0 | |
| | comp=E,25nm,0.5s | | | | | | |
| **SMG** | **Samos** | **1.36** | **137** | P | **Pb** | **18 43 45.0** | **+0.4** |
| SMG | | | | S | **Sg** | **18 44 03.5** | **-0.1** |
| | comp=E,132nm,0.4s | | | | | | |
| **GADA** | **Gvkgeada** | **1.48** | **7** | PN | **Pn** | **18 43 45.3** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.79** | **20** | PN | **Pn** | **18 43 49.6** | **0.0** |
| **KRBG** | **Karabiga-Canak** | **2.10** | **36** | PN | **Pn** | **18 43 53.9** | **+0.1** |

*PGC **03** 19:05:15.5±1.2, 49.16N×129.94W, h10km, MLSn3.3/18, Mw3.9/18, 248km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC **03** 19:05:20.5±1.4, 49.48N×129.34W, h0km, mb4.0/2, mb1 3.9/10, mb1mx3.5/42, mbtmp3.7/10, ML3.4/8, MS3.6/1, Ms1 3.5/1, ms1mx2.7/94, Error ellipse: s-maj=23.1km s-min=11.3km az=67.0*
**ISC 03 19:05:19.0±1.1, 49.34N±0.07×129.57W±0.08, h7km, n44, σ1.9 s49/52, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KEMF** | **NEPTUNE Canada** | **1.42** | **167** | Pn | Pn | 19 05 37.0 | -7.9 |
| KEMF | | | | Sn | Sn | 19 05 52.1 | -12 |
| **HOLB** | **Holberg** | **1.60** | **35** | Pn | **Pn** | **19 05 46.0** | **-1.7** |
| HOLB | | | | Sn | **Sn** | **19 06 07.3** | **-1.3** |
| **EDB** | **Eliza Dome** | **1.68** | **70** | Pn | **Pn** | **19 05 47.1** | **-1.6** |
| EDB | | | | Sn | **Sn** | **19 06 09.9** | **-0.6** |
| **PACB** | **Port Alice, BC** | **1.73** | **50** | Pn | **Pn** | **19 05 48.0** | **-1.4** |
| PACB | | | | Sn | **Sn** | **19 06 10.6** | **-1.2** |
| **MAYB** | **Maynard** | **1.88** | **55** | Pn | **Pn** | **19 05 50.5** | **-1.1** |
| **PHC** | **Port Hardy** | **1.94** | **44** | Pn | **Pn** | **19 05 51.2** | **-1.2** |
| PHC | | | | Sn | **Sn** | **19 06 16.8** | **-0.2** |
| **WOSB** | **Woss** | **2.11** | **66** | Pn | **Pn** | **19 05 54.2** | **-0.5** |
| WOSB | | | | Sn | **Sn** | **19 06 22.2** | **+0.9** |
| **GDR** | **Gold River** | **2.34** | **78** | Pn | **Pn** | **19 05 56.7** | **-1.2** |
| **NCRB** | **Newcastle Ridg** | **2.51** | **63** | Pn | **Pn** | **19 06 00.3** | **+0.1** |
| NCRB | | | | Sn | **Sn** | **19 06 32.3** | **+1.1** |
| **BTB** | **Buttle Lake** | **2.65** | **86** | Pn | **Pn** | **19 06 00.9** | **-1.3** |
| **CBB** | **Campbell River** | **2.82** | **74** | Pn | **Pn** | **19 06 04.4** | **0.0** |
| CBB | | | | Sn | **Sn** | **19 06 39.0** | **+0.5** |
| **BBB** | **Bella Bella** | **3.00** | **17** | Pn | **Pn** | **19 06 05.8** | **-1.0** |
| | 14nm,0.3s,baz=216,slow=12,SNR=59 | | | | | | |
| BBB | | | | Sn | **Sn** | **19 06 39.7** | **-3.2** |
| | 23nm,0.3s,baz=306,slow=23,SNR=17 | | | | | | |
| **BBB** | **Bella Bella** | **3.00** | **17** | Pn | **Pn** | **19 06 05.5** | **-1.3** |
| BBB | | | | Sn | **Sn** | **19 06 39.8** | **-3.2** |
| **MGB** | **Mount Grey** | **3.22** | **94** | Pn | **Pn** | **19 06 08.4** | **-1.6** |
| MGB | | | | Sn | **Sn** | **19 06 47.0** | **-1.6** |
| **TXB** | **Texada** | **3.36** | **82** | Pn | **Pn** | **19 06 12.1** | **+0.2** |
| **PFB** | **Port Renfrew** | **3.46** | **101** | Pn | **Pn** | **19 06 12.1** | **-1.2** |
| PFB | | | | Sn | **Sn** | **19 06 52.3** | **-2.2** |
| **NLLB** | **Nanaimo Lost L** | **3.65** | **90** | Pn | **Pn** | **19 06 15.4** | **-0.5** |
| **SHB** | **Sechelt** | **3.72** | **84** | Pn | **Pn** | **19 06 17.2** | **+0.3** |
| **BUTB** | **Butedale** | **3.79** | **10** | Pn | **Pn** | **19 06 16.6** | **-1.3** |
| BUTB | | | | Sn | **Sn** | **19 07 01.6** | **-1.2** |
| **BIB** | **Bowen Island** | **4.09** | **87** | Pn | **Pn** | **19 06 22.3** | **+0.4** |
| **WPB** | **Watts Point** | **4.16** | **83** | Pn | **Pn** | **19 06 22.9** | **+0.2** |
| **HNBB** | **Haney** | **4.58** | **88** | Pn | **Pn** | **19 06 29.3** | **+0.7** |
| **VDB** | **Vedder Mountai** | **4.91** | **91** | Pn | **Pn** | **19 06 33.3** | **+0.3** |
| **UBRB** | **Upper Baezaeko** | **4.96** | **42** | Pn | **Pn** | **19 06 35.5** | **+1.6** |
| **LLLB** | **Lillooet** | **5.12** | **73** | Pn | **Pn** | **19 06 36.7** | **+0.7** |
| **HOPB** | **Hope** | **5.32** | **86** | Pn | **Pn** | **19 06 39.5** | **+0.8** |
| **FSB** | **Fort Saint Jam** | **6.08** | **30** | Pn | **Pn** | **19 06 50.4** | **+1.1** |
| **LTY** | **Liberty** | **6.29** | **106** | Pn | **Pn** | **19 06 53.0** | **+0.9** |
| **PNT** | **Penticton** | **6.50** | **86** | Pn | **Pn** | **19 06 55.6** | **+0.5** |
| **MNB** | **Mounoet Dainar** | **7.65** | **64** | Pn | **Pn** | **19 07 11.9** | **+1.0** |
| **NEW** | **Newport** | **8.29** | **93** | Pn | **Pn** | **19 07 20.3** | **+0.8** |
| | 0.5nm,0.3s,baz=288,slow=10,SNR=3.6 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **8.99** | **145** | Pn | **Pn** | **19 07 32.4** | **+3.1** |
| | 0.1nm,0.3s,baz=310,slow=17,SNR=7.2 | | | | | | |
| **DLBC** | **Dease Lake** | **9.12** | **358** | Pn | **Pn** | **19 07 32.2** | **+1.2** |
| | 0.1nm,0.3s,baz=179,slow=18,SNR=1.7 | | | | | | |
| **NBC5** | **NorthernBC 5** | **9.17** | **24** | Pn | **Pn** | **19 07 33.5** | **+1.9** |
| **NVAR** | **Mina Array Bea** | **13.58** | **139** | Pn | **P** | **19 08 37.4** | **-3.9** |
| | 0.0nm,0.3s,baz=315,slow=11,SNR=4.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **15.34** | **108** | Pn | **P** | **19 09 00.0** | **-0.9** |
| | 0.1nm,0.3s,baz=308,slow=10,SNR=7.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **15.56** | **27** | Pn | **Pn** | **19 08 57.9** | **-0.6** |
| | 0.1nm,0.3s,baz=213,slow=13,SNR=5.8 | | | | | | |
| **ILAR** | **Eielson Array** | **18.00** | **336** | P | **P** | **19 09 30.0** | **+0.1** |
| | 0.0nm,0.3s,baz=143,slow=11,SNR=5.8 | | | | | | |
| **INK** | **Inuvik** | **19.13** | **356** | P | **Pn** | **19 09 43.6** | **+0.6** |
| | 0.1nm,0.3s,baz=166,slow=12,SNR=5.0 | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.67** | **75** | P | **P** | **19 10 11.5** | **+1.6** |
| | 12nm,0.8s,baz=285,slow=10,SNR=8.6 | | | | | | |
| ULM | | | | LR | LR | 19 18 47.4 | |
| | comp=Z,147nm,18.7s,baz=304,slow=38 | | | | | | |
| **SEY** | **Seymchan** | **42.73** | **319** | P | **P** | **19 13 19.1** | **+2.8** |
| | 0.6nm,0.7s,baz=96,slow=9.5,SNR=5.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **58.10** | **263** | T | T | 20 17 46.0 | |
| | baz=43,slow=75,SNR=23 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **58.10** | **263** | T | T | 20 17 45.3 | |
| | baz=43,slow=75,SNR=32 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **58.12** | **263** | T | T | 20 17 47.1 | |
| | baz=43,slow=75,SNR=19 | | | | | | |

**IDC 03 19:08:28.4±2.3, 6.23S×129.38E, h0km, mb3.5/1, mb1 3.3/3, mb1mx3.1/21, mbtmp3.2/3, ML2.8/2, Error ellipse: s-maj=167.3km s-min=31.4km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.46** | **161** | Pn | Pn | 19 11 53.9 | -0.6 |
| | 0.0nm,0.3s,baz=343,slow=13,SNR=1.9 | | | | | | |
| WRA | | | | Sn | Sn | 19 14 20.8 | -15 |
| | 0.1nm,0.3s,baz=348,slow=25,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **17.88** | **166** | P | Pn | 19 12 39.0 | +0.4 |
| | 0.1nm,0.3s,baz=349,slow=9.5,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.25** | **327** | P | P | 19 19 24.7 | 0.0 |
| | 0.2nm,0.4s,baz=118,slow=8.2,SNR=8.1 | | | | | | |

**IDC 03 19:32:56.0±1.3, 49.09S×125.25E, h0km, mb3.8/4, mb1 3.9/4, mb1mx3.7/19, mbtmp3.8/4, MS3.6/12, Ms1 3.6/12, ms1mx3.2/50, Error ellipse: s-maj=66.5km s-min=27.5km az=112.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **21.14** | **42** | P | P | 19 37 42.6 | +0.2 |
| | 3.8nm,0.9s,baz=220,slow=7.9,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 19 44 48.8 | |
| | comp=Z,90nm,19.3s,baz=199,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **26.28** | **18** | P | P | 19 38 32.1 | -1.0 |
| | 1.1nm,0.9s,baz=194,slow=9.4,SNR=6.5 | | | | | | |
| ASAR | | | | LR | LR | 19 49 16.1 | |
| | comp=Z,92nm,18.5s,baz=178,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.98** | **17** | LR | LR | 19 49 49.0 | |
| | comp=Z,131nm,21.6s,baz=64,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.92** | **1** | LR | LR | 19 50 26.3 | |
| | comp=Z,70nm,21.6s,baz=166,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **31.75** | **166** | LR | LR | 19 51 33.1 | |
| | comp=Z,86nm,18.5s,baz=284,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **33.48** | **38** | LR | LR | 19 53 26.2 | |
| | comp=Z,64nm,18.8s,baz=177,slow=37 | | | | | | |
| **BATI** | **Baumata** | **38.79** | **358** | LR | LR | 19 57 32.5 | |
| | comp=Z,249nm,18.9s,baz=251,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **41.03** | **180** | LR | LR | 19 56 02.8 | |
| | comp=Z,124nm,20.7s,baz=70,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **42.24** | **65** | LR | LR | 19 55 27.9 | |
| | comp=Z,51nm,18.3s,baz=164,slow=32 | | | | | | |
| **KAPI** | **Kappang** | **44.17** | **352** | LR | LR | 19 57 49.3 | |
| | comp=Z,31nm,20.9s,baz=107,slow=34 | | | | | | |
| **JAY** | **Jayapura** | **48.26** | **21** | LR | LR | 20 01 17.1 | |
| | comp=Z,63nm,21.6s,baz=21,slow=35 | | | | | | |
| **SNAA** | **Sanae** | **54.09** | **198** | P | P | 19 42 21.4 | -0.5 |
| | 2.6nm,0.9s,baz=137,slow=9.7,SNR=4.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.21** | **334** | P | P | 19 44 17.2 | +0.6 |
| | 0.2nm,0.4s,baz=170,slow=5.5,SNR=2.3 | | | | | | |
| **TSUM** | **Tsumeb** | **86.68** | **244** | LR | LR | 20 18 11.4 | |
| | comp=Z,64nm,19.8s,baz=274,slow=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.16** | **45** | PKPbc | PKPbc | 19 52 33.5 | -0.2 |
| | 1.2nm,0.8s,baz=269,slow=3.4,SNR=16 | | | | | | |

*IDC **03** 19:46:26.7±5.4, 3.01S×146.71E, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.4/41, mbtmp3.8/4, MS3.0/2, Ms1 3.0/2, ms1mx2.6/62, Error ellipse: s-maj=168.4km s-min=29.9km az=100.0*
*NEIC **03** 19:46:27.7±1.4, 2.7S±0.2×147.0E±0.2, h24km±5km, mb4.2/8, Error ellipse: s-maj=40.4km s-min=6.0km az=128.0*
**ISC 03 19:46:28.2±1.6, 2.8S±0.2×147.0E±0.3, h35km, n14, σ1.9 s78/13, mb4.0/6, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MANU** | **Manus Island** | **0.80** | **26** | Pn | **Pn** | **19 46 41.2** | **-1.9** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MANU | | | | Sn | **Sn** | **19 46 54.8** | **+1.0** | | |
| **JAY** | **Jayapura** | **6.31 272** | | LR | LR | 19 50 03.0 | | | |
| | comp=Z,74nm,18.9s,baz=316,slow=36 | | | | | | | | |
| **FAKI** | **Fak Fak** | **14.75 269** | | P | P | 19 50 05.0 | +5.0 | | |
| **SAUI** | **Saumlaki** | **16.48 251** | | Pn | **Pn** | **19 50 16.3** | **-0.6** | | |
| **MTN** | **Manton Dam** | **18.63 237** | | P | **P** | **19 50 40.9** | **-2.1** | | |
| **WB0** | **Warramunga Arr** | **20.91 215** | | P | **P** | **19 51 08.8** | **+0.9** | | |
| **WR0** | **Warramunga Arr** | **20.98 215** | | P | **P** | **19 51 09.4** | **+0.7** | | |
| WR0 | | | | IAmb | IAmb | 19 51 10.7 | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **21.07 215** | | P | **P** | **19 51 10.6** | **+1.1** | | |
| WRAB | | | | IAmb | IAmb | 19 51 11.6 | | | |
| | comp=Z,8.6nm,1.0s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.08 215** | | P | **P** | **19 51 10.7** | **+1.0** | | |
| WB2 | | | | IAmb | IAmb | 19 51 12.3 | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.08 215** | | P | **P** | **19 51 08.7** | **-1.1** | | |
| | comp=Z,7.5nm,1.1s,baz=40,slow=12,SNR=16 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.34 210** | | P | **P** | **19 51 43.3** | **+0.3** | | |
| | comp=Z,1.7nm,0.9s,baz=39,slow=8.2,SNR=12 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.91 233** | | P | **P** | **19 51 57.4** | **+0.2** | | |
| | comp=Z,2.1nm,0.8s,baz=56,slow=11,SNR=3.4 | | | | | | | | |
| FITZ | | | | LR | LR | 20 03 44.5 | | | |
| | comp=Z,45nm,19.0s,baz=59,slow=41 | | | | | | | | |
| **SONM** | **Songino Array** | **61.62 330** | | P | **P** | **19 56 46.7** | **+4.2** | | |
| | comp=Z,1.0nm,1.2s,baz=142,slow=4.9,SNR=4.2 | | | | | | | | |
| **SONM** | **Songino Array** | **61.62 330** | | P | **P** | **19 56 41.9** | **-0.6** | | |
| SONM | | | | IAmb | IAmb | 19 56 50.9 | | | |
| | comp=Z,2.5nm,1.4s | | | | | | | | |

**IDC 03 19:48:56.6±4.8, 5°.65S×129°.10E, h303$^{km}$±69$^{km}$, mb2.5/1, mb1 2.5/4, mb1mx2.4/39, mbtmp3.2/4, Error ellipse: s-maj=128.0km s-min=22.6km az=78.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.22** | **24** | P | Pn | 19 50 17.0 | +0.1 |
| | 0.2nm,0.3s,baz=163,slow=19,SNR=1.8 | | | | | | |
| SIJI | | | | S | S | 19 51 17.2 | -4.3 |
| | 0.3nm,0.3s,baz=150,slow=22,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.09** | **161** | P | P | 19 52 14.2 | -0.5 |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=1.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.50** | **166** | P | P | 19 52 51.8 | +0.2 |
| | 0.1nm,0.3s,baz=345,slow=12,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.62** | **327** | P | P | 19 59 15.0 | 0.0 |
| | 0.1nm,0.4s,baz=117,slow=7.7,SNR=1.7 | | | | | | |

*IDC **03** 19:58:53.6±2.5, 13°.21N×143°.52E, h204$^{km}$±48$^{km}$, mb3.1/7, mb1 3.2/7, mb1mx3.0/42, mbtmp3.6/7, Error ellipse: s-maj=105.8km s-min=17.0km az=86.0*

**ISC 03 19:58:53.4±0.9, 13°.2N±0°.2×143°.4E±0°.1, h200$^{km}$, n8, σ0$^{s}$97/9, mb3.4/7, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.46** | **75** | P | **Pn** | **19 59 27.4** | **+0.7** |
| | 3.2nm,0.3s,baz=207,slow=16,SNR=1.4 | | | | | | |
| GUMO | | | | S | **Sn** | **19 59 52.0** | **-0.6** |
| | 11nm,0.3s,baz=160,slow=19,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.14** | **195** | P | **P** | **20 05 19.6** | **0.0** |
| | 0.8nm,0.6s,baz=13,slow=9.2,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **37.82** | **194** | P | **P** | **20 05 50.5** | **-0.3** |
| | 0.2nm,0.7s,baz=21,slow=8.1,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **46.24** | **326** | P | **P** | **20 06 57.6** | **-1.1** |
| | 0.3nm,0.5s,baz=134,slow=6.2,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.78** | **316** | P | **P** | **20 08 45.2** | **+0.9** |
| | 0.2nm,0.5s,baz=91,slow=8.1,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.00** | **320** | P | **P** | **20 09 06.1** | **+0.6** |
| | 0.3nm,0.5s,baz=104,slow=6.9,SNR=5.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **69.35** | **322** | P | **P** | **20 09 40.3** | **+1.0** |
| | 0.4nm,0.3s,baz=78,slow=13,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **90.90** | **335** | P | **P** | **20 11 33.0** | **-1.1** |
| | 2.0nm,1.0s,baz=85,slow=3.3,SNR=4.2 | | | | | | |

*CNRM **03** 20:02:39.9, 35°.59N×3°.81W, h21$^{km}$, ml2.5*
*SFS **03** 20:02:39.0, 35°.60N×3°.80W, ML2.5, ALBORAN SUR*
*INMG **03** 20:02:39.1±1.4, 35°.59N×3°.84W, h0$^{km}$, ML2.2, Error ellipse: s-maj=3.8km s-min=2.7km az=35.0*

**ISC 03 20:02:39.3±1.3, 35°.61N±0°.03×3°.77W±0°.03, h16$^{km}$±10$^{km}$, n22, σ1$^{s}$23/42, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.42** | **199** | P | **Pb** | **20 02 47.9** | **-0.4** |
| PALE | | | | S | **Sb** | **20 02 53.9** | **-0.5** |
| **GOG** | **Mont Gurugu** | **0.74** | **121** | P | **Pg** | **20 02 53.8** | **0.0** |
| GOG | | | | S | **Sb** | **20 03 04.5** | **+0.7** |
| **CHAS** | **Isla Isabel II** | **1.18** | **111** | P | **Pb** | **20 02 59.8** | **-1.4** |
| CHAS | | | | S | **Sb** | **20 03 14.8** | **-1.4** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **335** | P | **Pn** | **20 03 02.2** | **0.0** |
| EMAL | | | | S | **Sb** | **20 03 18.3** | **-0.5** |
| **SMIR** | **Smir Dam** | **1.31** | **274** | P | **Pn** | **20 03 00.7** | **-2.3** |
| SMIR | | | | S | **Sb** | **20 03 18.3** | **-1.9** |
| **CHEFC** | **Chefchaouen** | **1.38** | **249** | P | **Pg** | **20 03 05.2** | **-0.6** |
| CHEFC | | | | S | **Sg** | **20 03 24.8** | **+1.0** |
| **JBK** | **JBK** | **1.61** | **142** | P | **Pn** | **20 03 06.9** | **-0.4** |
| JBK | | | | S | **Sn** | **20 03 27.4** | **-0.4** |
| **MD31** | **MD31** | **2.86** | **197** | P | **Pn** | **20 03 26.0** | **+1.7** |
| MD31 | | | | S | **Sn** | **20 03 58.7** | **+0.3** |
| **MDT** | **Midelt** | **2.88** | **194** | P | **Pn** | **20 03 26.3** | **+1.8** |
| MDT | | | | S | **Sn** | **20 03 59.5** | **+0.7** |
| **ZHG** | **ZHG** | **3.21** | **228** | P | **Pn** | **20 03 30.0** | **+0.9** |
| ZHG | | | | S | **Sn** | **20 04 07.1** | **+0.2** |
| **PVAQ** | **Vaqueiros** | **3.65** | **301** | *e*Pn | **Pn** | **20 03 36.5** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **20 04 17.2** | **-0.5** |
| PVAQ | | | | A | A | 20 04 20.5 | |
| | 3.5nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.65** | **301** | P | **Pn** | **20 03 36.5** | **+1.4** |
| PVAQ | | | | S | **Sn** | **20 04 17.5** | **-0.2** |
| **PBDV** | **Barranco-do-Ve** | **3.73** | **297** | *e*Pn | **Pn** | **20 03 37.3** | **+1.1** |
| PBDV | | | | *e*Sn | **Sn** | **20 04 19.9** | **+0.1** |
| PBDV | | | | A | A | 20 04 29.1 | |
| | 3.5nm,0.8s | | | | | | |
| **PCVE** | **Castro Verde** | **3.98** | **302** | *e*Pn | **Pn** | **20 03 40.9** | **+1.3** |
| PCVE | | | | *e*Sn | **Sn** | **20 04 26.9** | **+0.9** |
| PCVE | | | | A | A | 20 04 33.3 | |
| | 2.7nm,0.7s | | | | | | |
| **MESJ** | **Messejana** | **4.21** | **303** | *e*Pn | **Pn** | **20 03 44.4** | **+1.6** |
| MESJ | | | | *e*Sn | **Sn** | **20 04 30.9** | **-0.7** |
| MESJ | | | | A | A | 20 04 35.5 | |
| | 3.8nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.35** | **292** | P | **Pn** | **20 03 45.6** | **+0.9** |
| PFVI | | | | S | **Sn** | **20 04 35.3** | **+0.1** |
| **PESTR** | **Estremoz** | **4.45** | **318** | *e*Sn | **Pn** | **20 04 37.3** | **-0.4** |
| **EVO** | **Evora** | **4.47** | **312** | *e*Pn | **Pn** | **20 03 47.5** | **+1.1** |
| EVO | | | | *e*Sn | **Sn** | **20 04 37.8** | **-0.3** |
| EVO | | | | A | A | 20 04 40.4 | |
| | 3.4nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.56** | **305** | *e*Pn | **Pn** | **20 03 48.9** | **+1.4** |
| PNCL | | | | *e*Sn | **Sn** | **20 04 39.5** | **-0.7** |
| PNCL | | | | A | A | 20 04 43.6 | |
| | 2.8nm,0.7s | | | | | | |
| **PMRV** | **Marv??o** | **4.77** | **324** | *e*Pn | **Pn** | **20 03 52.6** | **+2.0** |
| PMRV | | | | *e*Sn | **Sn** | **20 04 45.1** | **-0.5** |
| **PMTG** | **Montargil** | **4.95** | **316** | *e*Pn | **Pn** | **20 03 55.2** | **+2.3** |
| PMTG | | | | *e*Sn | **Sn** | **20 04 49.0** | **-0.8** |
| PMTG | | | | A | A | 20 04 54.1 | |
| | 2.2nm,0.4s | | | | | | |
| **MVO** | **Moncorvo** | **6.11** | **336** | *e*Pn | **Pn** | **20 04 11.8** | **+2.9** |

*IDC **03** 20:12:08.8±1.7, 35°.46N×3°.69W, h0$^{km}$, mb3.1/3, mb1 3.3/4, mb1mx3.2/37, mbtmp3.1/4, ML3.1/1, Error ellipse: s-maj=60.8km s-min=28.5km az=79.0*
*SFS **03** 20:12:09.0, 35°.40N×3°.80W, ML3.2, ALBORAN SUR*
*LDG **03** 20:12:10.2±0.6, 35°.40N×3°.91W, h10$^{km}$, Ml3.6/2, Error ellipse: s-maj=14.1km s-min=5.9km az=2.0*
*CNRM **03** 20:12:10.9, 35°.50N×3°.84W, h8$^{km}$, ml3.7*
*IGIL **03** 20:12:10.8, 35°.49N×3°.83W, h0$^{km}$, ML3.0*

**ISC 03 20:12:08.9±0.6, 35°.52N±0°.03×3°.77W±0°.03, h11$^{km}$, n41, σ1$^{s}$93/56, mb3.2/3, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.33** | **205** | P | **Pb** | **20 12 16.5** | **-0.3** |
| **PALE** | **Palemas** | **0.33** | **205** | P | **Pb** | **20 12 16.5** | **-0.3** |
| PALE | | | | S | **Sg** | **20 12 20.9** | **+0.9** |
| **GOG** | **Mont Gurugu** | **0.70** | **115** | P | **Pn** | **20 12 25.0** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.70** | **115** | P | **Pb** | **20 12 23.1** | **0.0** |
| GOG | | | | S | **Sb** | **20 12 32.3** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.14** | **107** | P | **Pb** | **20 12 29.6** | **-1.1** |
| CHAS | | | | S | **Sb** | **20 12 43.6** | **-1.9** |
| **SMIR** | **Smir Dam** | **1.32** | **278** | P | **Pn** | **20 12 30.9** | **-2.4** |
| SMIR | | | | S | **Sb** | **20 12 48.1** | **-2.7** |
| **CHEFC** | **Chefchaouen** | **1.35** | **253** | P | **Pb** | **20 12 34.4** | **+0.2** |
| CHEFC | | | | S | **Sg** | **20 12 54.6** | **+2.3** |
| **EMAL** | **Malaga-Limoner** | **1.35** | **337** | P | **Pg** | **20 12 35.2** | **+0.3** |
| EMAL | | | | S | **Sg** | **20 12 53.5** | **+1.0** |
| **CEU** | **Ceuta** | **1.36** | **287** | P | **Pn** | **20 12 31.1** | **-2.7** |
| CEU | | | | S | **Sb** | **20 12 44.8** | **-7.0** |
| **JBK** | **JBK** | **1.54** | **140** | P | **Pn** | **20 12 35.3** | **-1.2** |
| JBK | | | | S | **Sn** | **20 12 53.4** | **-3.1** |
| **SICH** | **Sidi Chahed** | **1.90** | **223** | S | **Sb** | **20 13 07.2** | **-0.1** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pb** | **20 12 47.0** | **+1.0** |
| LCRM | | | | S | **Sg** | **20 13 16.0** | **+1.6** |
| **LCRM** | **LCR** | **2.04** | **207** | P | Pn | 20 12 37.5 | -5.7 |
| LCRM | | | | S | **Sb** | **20 13 11.0** | **-0.4** |
| **IFR** | **Ifrane** | **2.29** | **210** | P | Pn | 20 12 38.7 | -8.0 |
| IFR | | | | S | **Sn** | **20 13 12.7** | **-2.4** |
| **MD31** | **MD31** | **2.77** | **198** | P | **Pn** | **20 12 52.9** | **-0.4** |
| **MDT** | **Midelt** | **2.79** | **195** | P | **Pn** | **20 12 52.9** | **-0.7** |
| **CART** | **Cartagena** | **3.04** | **46** | P | **Pn** | **20 12 57.3** | **+0.4** |
| CART | | | | S | **Sn** | **20 13 31.1** | **-2.1** |
| **ZHG** | **ZHG** | **3.15** | **230** | P | **Pn** | **20 12 58.9** | **+0.4** |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | P | **Pn** | **20 13 07.1** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | P | **Pn** | **20 13 06.8** | **+0.8** |
| PVAQ | | | | S | **Sn** | **20 13 48.9** | **-0.7** |
| **PAB** | **San Pablo** | **4.05** | **354** | P | **Pn** | **20 13 13.4** | **+2.6** |
| **ESDC** | **Sonseca Array** | **4.15** | **358** | Pn | **Pn** | **20 13 15.0** | **+2.8** |
| | 0.5nm,0.3s,baz=178,slow=12,SNR=14 | | | | | | |
| ESDC | | | | Sn | **Sn** | **20 13 59.6** | **-1.2** |
| | 0.4nm,0.3s,baz=180,slow=23,SNR=4.7 | | | | | | |
| ESDC | | | | Lg | Lg | 20 14 18.3 | |
| | 1.0nm,0.3s,baz=178,slow=27,SNR=6.5 | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*P | **Pn** | **20 13 14.7** | **+1.0** |
| MESJ | | | | *e*S | **Sn** | **20 14 01.3** | **-2.1** |
| MESJ | | | | IAML | | 20 14 08.8 | |
| | comp=N,19nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **296** | *e*P | **Pn** | **20 13 15.5** | **+0.9** |
| MORF | | | | *e*S | **Sn** | **20 14 02.7** | **-2.4** |
| MORF | | | | IAML | | 20 14 06.8 | |
| | comp=E,45nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.39** | **293** | P | **Pn** | **20 13 17.4** | **+1.9** |
| **PFVI** | **Vila Bisbo** | **4.39** | **293** | P | **Pn** | **20 13 16.3** | **+0.8** |
| **PESTR** | **Estremoz** | **4.53** | **319** | P | **Pn** | **20 13 19.3** | **+1.9** |
| **OUZM** | **OUZ** | **5.24** | **209** | P | **Pn** | **20 13 28.5** | **+1.2** |
| **OUK** | **Oukaimeden** | **5.50** | **220** | P | **Pn** | **20 13 31.3** | **+0.3** |
| **TTIG** | **Tnine Tigouga,** | **6.32** | **220** | P | **Pn** | **20 13 40.2** | **-1.9** |
| **ETSF** | **Etsaut** | **7.78** | **18** | *e*Pn | **Pn** | **20 14 04.4** | **+2.3** |
| **SJPF** | **Ste Jean** | **7.84** | **14** | *e*Pn | **Pn** | **20 14 04.1** | **+1.3** |
| SJPF | | | | *e*Sn | **Sn** | **20 15 30.3** | **-1.2** |
| | comp=E,0.9nm,0.4s | | | | | | |
| **EPF** | **Esparros** | **8.15** | **22** | *e*Pn | **Pn** | **20 14 08.7** | **+1.6** |
| **MTLF** | **Montolieu** | **9.08** | **29** | *e*Pn | **Pn** | **20 14 22.2** | **+2.4** |
| **SMRF** | **Simiane la Rot** | **11.09** | **38** | *e*Pn | **Pn** | **20 14 48.7** | **+1.3** |
| **LMR** | **La Mourre** | **11.13** | **42** | *e*Pn | **Pn** | **20 14 48.5** | **+0.6** |
| **SBF** | **Sospel** | **11.99** | **43** | *e*P | Pn | 20 15 06.4 | +6.7 |
| **PGF** | **Pioggiola** | **12.15** | **51** | *e*Pn | **Pn** | **20 15 03.6** | **+1.6** |
| PGF | | | | *e*Sn | **Sn** | **20 17 13.0** | **-4.5** |
| | comp=E,4.1nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.81** | **166** | P | **P** | **20 17 12.8** | **+0.9** |
| | comp=E,0.6nm,0.8s,baz=341,slow=10,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **50** | P | **P** | **20 22 35.0** | **+1.4** |
| | comp=E,0.1nm,0.4s,baz=280,slow=6.3,SNR=1.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.82** | **332** | P | **P** | **20 23 08.6** | **+2.1** |
| | comp=E,0.1nm,0.5s,baz=59,slow=6.0,SNR=2.2 | | | | | | |

*BJI **03** 20:27:23.3±0.0, 10°.54S×123°.91E, h22$^{km}$, mb4.9/73, mB5.1/47, Ms4.7/51, Ms7 4.4/52*
*MOS **03** 20:27:27.5±1.4, 9°.85S×123°.45E, h10$^{km}$, mb5.2/30, Error ellipse: s-maj=8.9km s-min=5.1km az=115.0*
*IDC **03** 20:27:27.5±0.3, 9°.94S×123°.53E, h0$^{km}$, mb4.8/27, mb1 4.8/29, mb1mx4.6/44, mbtmp4.8/29, ML4.6/2, MS4.4/36, Ms1 4.4/36, ms1mx4.2/66, Error ellipse: s-maj=15.2km s-min=6.5km az=65.0*
*NEIC **03** 20:27:28.2±2.2, 10°.08S±0°.06×123°.57E±0°.04, h10$^{km}$±1$^{km}$, mb5.2/76, Error ellipse: s-maj=10.0km s-min=6.0km az=192.0*
*DJA **03** 20:27:30.6±0.3, 10°.S±1°.×12°.4E±°, h20$^{km}$±2$^{km}$, M5.0/102, mb5.2/102, mB5.5/54, MLv5.3/19, Mw(mB)5.0/54, MwMwp4.8/14, Mwp5.2/14*
*GCMT **03** 20:27:31.2±0.2, 10°.04S±0°.01×123°.58E±0°.01, h20$^{km}$±1$^{km}$, MW5.1/117, Moment Tensor Solution. s66,c86; s117,c184; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; M$_{rr}$-0.46±.14; M$_{θθ}$-5.59±.12; M$_{φφ}$6.05±.14; M$_{rθ}$0.17±.22; M$_{rφ}$0.06±.12; M$_{θφ}$-1.04±.25; Best double couple: M=5.90400×10$^{16}$ NP1:φ$_{s}$226.00000°, δ82.00000°, λ5.00000°. NP2:φ$_{s}$135.00000°, δ85.00000°, λ172.00000°. Principal axes: T 6.2120, Plg9.0000°, Azm90.0000°; N -0.6170, Plg81.0000°, Azm283.0000°; P -5.5960, Plg2.2000°, Azm180.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 20:27:29.1±0.5, 10°.11S±0°.03×123°.54E±0°.03, h17$^{km}$±2$^{km}$, n512, σ1$^{s}$87/507, mb5.1/138, MS4.4/55, 14C-21D, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.16** | **129** | Pg | **Pg** | **20 27 32.5** | **-0.8** |
| | 33µm,0.3s,baz=358,slow=10 | | | | | | |
| **BATI** | **Baumata** | **0.16** | **129** | P | **Pg** | **20 27 32.9** | **-0.4** |
| BATI | | | | S | **Sg** | **20 27 40.2** | **+4.0** |
| **SOEI** | **Soe** | **0.80** | **64** | P | **Pn** | **20 27 46.6** | **+0.9** |
| SOEI | | | | S | **Sn** | **20 28 00.9** | **+3.6** |
| **SOEI** | **Soe** | **0.80** | **64** | Pg | **Pb** | **20 27 42.3** | **-2.3** |
| **SOEI** | **Soe** | **0.80** | **64** | P | **Pn** | **20 27 45.2** | **-0.5** |
| **MMRI** | **Maumere** | **1.95** | **319** | P | **Pg** | **20 28 03.9** | **-2.6** |
| MMRI | | | | S | **Sg** | **20 28 32.0** | **+0.2** |
| **MMRI** | **Maumere** | **1.95** | **319** | Pn | **Pn** | **20 27 59.2** | **-2.2** |
| **MMRI** | **Maumere** | **1.95** | **319** | P | **Pb** | **20 28 02.3** | **-1.8** |
| **BASI** | **Baing, Sumba** | **2.92** | **268** | P | **Pn** | **20 28 17.9** | **+3.1** |
| BASI | | | | S | **Sn** | **20 28 51.9** | **+2.4** |
| **WBSI** | **Waikabubak, Su** | **4.11** | **276** | P | **Pn** | **20 28 33.7** | **+2.4** |
| WBSI | | | | S | **Sn** | **20 29 21.8** | **+2.7** |
| **BBSI** | **Bau Bau** | **4.69** | **348** | P | Pb | 20 28 43.5 | -7.4 |
| **BSSI** | **Bau Bau, Buton** | **4.96** | **322** | P | Pn | 20 28 47.5 | +4.6 |
| | 1.6nm4µm453nm,0.8s | | | | | | |
| **BKSI** | **Bulukumba** | **5.84** | **324** | P | Pn | 20 28 58.9 | +4.0 |
| | 2.0nm5µm657nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **6.30** | **323** | Pn | **Pn** | **20 29 05.0** | **+3.7** |
| | 14nm,0.3s,baz=148,slow=3.7,SNR=32 | | | | | | |
| KAPI | | | | LR | LR | 20 31 31.8 | |
| | comp=Z,5µm,20.3s,baz=164,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **6.30** | **323** | P | **Pn** | **20 29 02.4** | **+1.1** |
| **KAPI** | **Kappang** | **6.30** | **323** | Pn | **Pn** | **20 29 02.4** | **+1.1** |
| **KAPI** | **Kappang** | **6.30** | **323** | P | Pn | 20 29 05.5 | +4.2 |
| | 316nm,1.0s | | | | | | |
| **BNSI** | **Bone** | **6.61** | **329** | P | **Pn** | **20 29 08.9** | **+3.3** |
| | 1.1nm3µm375nm,1.2s | | | | | | |
| **SPSI** | **Sidrap Palu** | **7.16** | **328** | P | Pn | 20 29 17.8 | +4.7 |
| | 0.5nm1µm151nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **7.52** | **138** | P | **Pn** | **20 29 16.8** | **-1.3** |
| | baz=7.5,SNR=786 | | | | | | |
| KNRA | | | | S | **Sn** | **20 30 42.1** | **-1.0** |
| | baz=7.5 | | | | | | |
| **KNRA** | **Kununurra** | **7.52** | **138** | Pn | **Pn** | **20 29 16.8** | **-1.3** |
| **KNRA** | **Kununurra** | **7.52** | **138** | P | **Pn** | **20 29 17.3** | **-0.8** |
| | 413nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **7.58** | **108** | P | **Pn** | **20 29 18.8** | **-0.1** |
| | 201nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **7.88** | **36** | P | Pn | 20 29 27.6 | +4.6 |
| | 0.4nm2µm84nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **7.92** | **111** | P | **Pn** | **20 29 22.1** | **-1.5** |
| | baz=7.9,SNR=206 | | | | | | |
| MTN | | | | S | **Sn** | **20 30 52.3** | **-0.7** |
| | baz=7.9 | | | | | | |
| **MTN** | **Manton Dam** | **7.92** | **111** | Pn | **Pn** | **20 29 22.1** | **-1.5** |
| **MTN** | **Manton Dam** | **7.92** | **111** | P | **Pn** | **20 29 22.8** | **-0.8** |
| | 351nm,0.7s | | | | | | |
| **TTSI** | **Tana Toraja** | **7.93** | **332** | P | Pn | 20 29 27.1 | +3.4 |
| | 2µm2µm183nm,1.0s | | | | | | |
| **SAUI** | **Saumlaki** | **7.95** | **75** | P | Pn | 20 29 25.7 | +1.7 |
| | 2.6nm7µm925nm,0.7s | | | | | | |
| **SAUI** | **Saumlaki** | **7.95** | **75** | Pn | **Pn** | **20 29 23.9** | **-0.1** |
| **SAUI** | **Saumlaki** | **7.95** | **75** | P | **Pn** | **20 29 27.6** | **+3.6** |
| | 940nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.20** | **166** | Pn | **Pn** | **20 29 25.8** | **-1.7** |
| | 18nm,0.3s,baz=359,slow=8.9,SNR=296 | | | | | | |
| FITZ | | | | Sn | **Sn** | **20 30 54.3** | **-5.5** |
| | 83nm,0.3s,baz=117,slow=23,SNR=22 | | | | | | |
| FITZ | | | | LR | LR | 20 33 43.1 | |
| | comp=Z,2µm,20.2s,baz=342,slow=45 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.20** | **166** | P | **Pn** | **20 29 26.2** | **-1.2** |
| | baz=8.2,SNR=516 | | | | | | |
| FITZ | | | | S | **Sn** | **20 30 55.9** | **-3.9** |
| | baz=8.2 | | | | | | |
| **DNP** | **Denpasar** | **8.34** | **279** | P | **Pn** | **20 29 31.8** | **+2.5** |
| | 415nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **8.37** | **17** | P | Pn | 20 29 33.7 | +4.0 |
| | 3µm3µm308nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **8.37** | **17** | P | Pn | 20 29 34.7 | +5.0 |
| | 312nm,0.8s | | | | | | |
| **IGBI** | **Denpasar** | **8.38** | **278** | P | **Pn** | **20 29 30.9** | **+1.0** |
| | 3µm258nm,0.7s | | | | | | |
| **SRBI** | **Singaraja** | **8.46** | **283** | P | **Pn** | **20 29 33.1** | **+2.1** |
| | 4µm105nm,0.9s | | | | | | |
| **MSAI** | **Masohi** | **8.59** | **39** | P | Pn | 20 29 36.3 | +3.6 |
| | 497nm15nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **9.13** | **107** | P | **Pn** | **20 29 38.9** | **-1.2** |
| | baz=9.1,SNR=101 | | | | | | |
| **KDU** | **Kakadu** | **9.13** | **107** | P | **Pn** | **20 29 39.0** | **-1.2** |
| | 345nm,0.8s | | | | | | |
| **APSI** | **Ampana** | **9.33** | **348** | P | Pn | 20 29 46.9 | +4.0 |
| | 1µm122nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.41** | **279** | P | **Pn** | **20 29 43.6** | **-0.4** |
| | 4µm2µm223nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.41** | **279** | Pn | **Pn** | **20 29 43.8** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **9.41** | **279** | P | **Pn** | **20 29 44.2** | **+0.2** |
| | 224nm,1.0s | | | | | | |
| **ABJI** | **Asem Bagus** | **9.47** | **283** | P | **Pn** | **20 29 47.8** | **+2.9** |
| | 128nm,0.7s | | | | | | |
| **KMMI** | **Kalianget** | **9.94** | **287** | P | **Pn** | **20 29 54.5** | **+3.2** |
| | 3µm76nm,1.1s | | | | | | |
| **KBKI** | **Kotabaru** | **9.96** | **312** | P | **Pn** | **20 29 55.1** | **+3.5** |
| | 46nm,0.8s | | | | | | |
| **BLJI** | **Banyuglugur** | **10.10** | **283** | P | **Pn** | **20 29 56.0** | **+2.5** |
| | 70nm,0.7s | | | | | | |
| **GMJI** | **Gumukmas** | **10.13** | **280** | P | **Pn** | **20 29 53.5** | **-0.4** |
| | 119nm,0.8s | | | | | | |
| **LBMI** | **Labuha** | **10.20** | **23** | P | Pn | 20 30 00.7 | +5.8 |
| | 2µm1µm114nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **10.62** | **2** | P | Pn | 20 30 05.7 | +5.1 |
| | 2µm110nm,0.8s | | | | | | |
| **MRSI** | **Marisa** | **10.63** | **351** | P | Pn | 20 30 04.5 | +3.7 |
| | 2µm664nm66nm,0.9s | | | | | | |
| **GTOI** | **Gorontalo** | **10.69** | **357** | P | Pn | 20 30 07.9 | +6.4 |
| | 21nm,0.7s | | | | | | |
| **BBKI** | **Banjar Baru** | **10.87** | **307** | P | **Pn** | **20 30 06.8** | **+2.8** |
| | 3µm84nm,1.3s | | | | | | |
| **MPSI** | **Mapaga** | **10.99** | **341** | P | Pn | 20 30 11.2 | +5.5 |
| | 3µm465nm43nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **11.21** | **51** | P | **Pn** | **20 30 07.8** | **-1.0** |
| | 1µm63nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **11.21** | **51** | Pn | **Pn** | **20 30 07.5** | **-1.3** |
| **FAKI** | **Fak Fak** | **11.21** | **51** | P | **Pn** | **20 30 09.9** | **+1.1** |
| | 64nm,0.7s | | | | | | |
| **GRJI** | **Gresik** | **11.39** | **285** | P | **Pn** | **20 30 14.2** | **+3.1** |
| | 63nm,0.9s | | | | | | |
| **TNTI** | **Ternate** | **11.46** | **20** | P | Pn | 20 30 17.3 | +5.2 |
| | 1µm1µm78nm,1.2s | | | | | | |
| **TNTI** | **Ternate** | **11.46** | **20** | | **Pn** | **20 30 09.0** | **-3.1** |
| **TOLI2** | **Tolitoli** | **11.48** | **346** | Pn | **Pn** | **20 30 12.6** | **+0.2** |
| **TOLI2** | **Tolitoli** | **11.48** | **346** | P | **Pn** | **20 30 14.1** | **+1.7** |
| | 120nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **11.58** | **198** | Pn | **Pn** | **20 30 13.1** | **-0.7** |
| **MBWA** | **Marble Bar** | **11.58** | **198** | P | **Pn** | **20 30 13.4** | **-0.4** |
| | 35nm,0.7s | | | | | | |
| **PWJI** | **Pagerwojo** | **11.77** | **279** | P | **Pn** | **20 30 19.6** | **+3.2** |
| | 114nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **11.94** | **197** | Pn | **Pn** | **20 30 16.0** | **-2.7** |
| **PSA00** | **Pilbara Seismi** | **11.94** | **197** | Pn | **Pn** | **20 30 16.6** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **11.94** | **197** | P | **Pn** | **20 30 17.9** | **-0.8** |
| | 60nm,1.0s | | | | | | |
| **SIJI** | **Sorong** | **11.97** | **40** | Pn | Pn | 20 30 22.3 | +3.2 |
| | 4.3nm,0.3s,baz=300,slow=3.9,SNR=16 | | | | | | |
| SIJI | | | | Sn | Sn | 20 32 39.8 | +7.4 |
| | 0.3nm,0.3s,baz=278,slow=22,SNR=1.2 | | | | | | |
| **SWI** | **Sor

baz=19,SNR=31
**QIS Mount Isa 18.64 126** P **P** **20 31 44.8 -1.4**
comp=Z,113nm,0.9s
**JAY Jayapura 18.64 67** P **Pn** **20 31 45.7 -1.0**
comp=Z,1.6nm,0.3s,baz=225,slow=6.2,SNR=11
**JAY Jayapura 18.64 67** P **Pn** **20 31 46.0 -0.6**
comp=Z,600nmcomp=Z,50nm,0.8s
**BLSI Bandar Lampung 18.72 283** P **Pn** **20 31 49.3 +1.7**
comp=Z,82nm,0.9s
**PPBI Pangkal Pinang 19.01 293** P **Pn** **20 31 51.9 +0.9**
**KLI Kotabumi 19.24 284** P **Pn** **20 31 53.6 -0.2**
comp=Z,2µmcomp=Z,204nm,0.7s
**KASI Kota Agung 19.40 282** P **Pn** **20 31 56.6 +0.8**
comp=Z,5µmcomp=Z,727nm,1.0s
**KLSI 19.41 285** P **Pn** **20 31 57.9 +2.1**
comp=Z,50nm,1.4s
**COEN Coen 19.58 103** P **P** **20 31 56.3 -0.2**
**COEN Coen 19.58 103** P **Pn** **20 31 57.6 -0.3**
comp=Z,74nm,1.1s
**PMBI Palembang 19.95 290** P **Pn** **20 32 04.1 +1.8**
comp=Z,86nm,0.4s
**LWLI Liwa 19.96 283** P **Pn** **20 32 02.9 +0.4**
comp=Z,9µmcomp=Z,268nm,0.8s
**MDSI Maura Dua 19.99 285** P Pn 20 32 02.2 -0.6
comp=Z,35nm,0.8s
**MORW Morawa 20.13 199** P **P** **20 32 03.8 +1.3**
baz=20,SNR=38
**MORW Morawa 20.13 199** **P** **20 32 03.5 +1.0**
MORW IAmb IAmb 20 32 05.1
comp=Z,51nm,0.8s
**MORW Morawa 20.13 199** P **P** **20 32 04.5 +2.1**
comp=Z,87nm,1.0s
**LHSI Lahat 20.82 286** P Pn 20 32 13.7 +1.2
comp=Z,101nm,0.7s
**OOD Oodnadatta 20.98 149** P **P** **20 32 13.3 +1.6**
comp=Z,143nm,0.8s
**FORT Forrest 21.00 169** P **P** **20 32 12.3 +0.6**
baz=21,SNR=96
**FORT Forrest 21.00 169** P **P** **20 32 12.5 +0.7**
**FORT Forrest 21.00 169** P **P** **20 32 13.0 +1.2**
comp=Z,321nm,0.7s
**DSRI Dabo 21.14 296** P **P** **20 32 16.8 +3.3**
comp=Z,18nm,0.8s
**MNAI Manna 21.19 284** P **P** **20 32 16.2 +2.1**
comp=Z,193nm,1.9s
**BLDU Ballidu 21.37 196** P **P** **20 32 16.9 +1.0**
baz=21,SNR=42
**BLDU Ballidu 21.37 196** P **P** **20 32 17.4 +1.5**
comp=Z,105nm,0.9s
**JMBI JAMBI 21.49 292** P **P** **20 32 21.4 +4.1**
comp=Z,49nm,0.4s
**MTSU Mount Surprise 21.66 114** P **P** **20 32 21.2 +2.2**
baz=22,SNR=128
**MTSU Mount Surprise 21.66 114** P **P** **20 32 22.2 +3.2**
comp=Z,215nm,0.9s
**TPRI Tanjung Pinang 21.86 299** P **P** **20 32 24.4 +3.1**
comp=Z,3µmcomp=Z,73nm,1.1s
**KLBR Kellerberrin 22.04 193** P **P** **20 32 23.9 +0.9**
baz=22,SNR=40
**KLBR Kellerberrin 22.04 193** P **P** **20 32 24.8 +1.8**
comp=Z,188nm,0.8s
**MASI Maura Aman, Be 22.25 287** P **P** **20 32 26.8 +1.3**
comp=Z,2µmcomp=Z,125nm,1.1s
**MULG Mulgathing 22.34 155** P **P** **20 32 28.4 +2.1**
comp=Z,224nm,1.1s
**MUN Mundaring 22.80 196** P **P** **20 32 31.1 0.0**
baz=23,SNR=25
**MUN Mundaring 22.80 196** P **P** **20 32 31.1 0.0**
comp=Z,100nm,0.9s
**MYKOM Kota Tinggi 22.89 300** P **P** **20 32 32.9 +0.7**
**PMG Port Moresby 23.29 90** P **P** **20 32 37.3 +1.0**
comp=Z,40nm,0.7s,baz=255,slow=7.4,SNR=20
PMG LR LR 20 43 25.7
comp=Z,1µm,18.6s,baz=254,slow=41
**PMG Port Moresby 23.29 90** P **P** **20 32 35.9 -0.4**
**KRJI Kerinci 23.34 289** P **P** **20 32 38.1 +1.2**
comp=Z,88nm,0.7s
**NWAO Narrogin (SRO) 23.44 193** P **P** **20 32 37.8 +0.1**
NWAO pmax pmax
comp=Z,45nm,0.9s
**NWAO Narrogin (SRO) 23.44 193** P **P** **20 32 37.8 +0.1**
NWAO IAmb IAmb 20 33 01.7
comp=Z,45nm,0.9s
**NWAO Narrogin (SRO) 23.44 193** P **P** **20 32 36.5 -1.2**
comp=Z,57nm,0.6s
**INKA Inminka 23.88 140** P **P** **20 32 44.9 +3.0**
comp=Z,189nm,1.0s
**CTA Charters Tower 24.04 117** P **P** **20 32 45.7 +2.1**
comp=Z,10nm,0.8s,baz=296,slow=11,SNR=11
CTA LR LR 20 42 42.5
comp=Z,1µm,20.5s,baz=290,slow=38
**CTAO Charters Tower 24.04 117** P **P** **20 32 44.3 +0.7**
CTAO pmax pmax
comp=Z,134nm,1.5s
**CTAO Charters Tower 24.04 117** P **P** **20 32 44.3 +0.7**
CTAO IAmb IAmb 20 33 06.0
comp=Z,134nm,1.5s
**CTAO Charters Tower 24.04 117** P **P** **20 32 46.1 +2.5**
comp=Z,54nm,1.4s
**TGY Tagaytay City 24.19 354** P **P** **20 32 45.9 +0.9**
comp=Z,247nm,0.5s,baz=191,slow=4.8,SNR=10
**LCRK Leigh Creek 24.42 148** P **P** **20 32 49.4 +2.4**
comp=Z,165nm,0.9s
**BKNI Bangkinang 24.67 294** P **P** **20 32 51.9 +2.5**
comp=Z,2µmcomp=Z,77nm,0.5s
**BKNI Bangkinang 24.67 294** P **P** **20 32 49.5 +0.1**
BKNI IAmb IAmb 20 32 55.2
comp=Z,99nm,1.1s
**RKGY Rocky Gully 25.12 193** P **P** **20 32 55.5 +2.3**
baz=25,SNR=11
**RKGY Rocky Gully 25.12 193** P **P** **20 32 55.0 +1.8**
comp=Z,128nm,0.7s
**BBOO Buckleboo 25.37 155** P **P** **20 32 56.6 +1.1**
baz=25,SNR=20
**BBOO Buckleboo 25.37 155** P **P** **20 32 56.3 +0.7**
BBOO IAmb IAmb 20 33 17.0
comp=Z,57nm,1.0s
**BBOO Buckleboo 25.37 155** P **P** **20 32 55.6 0.0**
comp=Z,74nm,1.4s
**SISI Saibi 25.82 288** P **P** **20 33 00.1 +0.3**
comp=Z,17nm,0.9s
**MNSI Mandailing Nat 26.19 293** P **P** **20 33 01.9 -1.2**
comp=Z,14nm,0.6s
**HTT Hallett 27.18 151** P **P** **20 33 14.8 +2.8**
baz=27,SNR=7.0
**HTT Hallett 27.18 151** P **P** **20 33 13.7 +1.7**
comp=Z,39nm,1.6s
**STKA Stephens Creek 27.36 145** P **P** **20 33 14.6 +1.0**
comp=Z,4.1nm,0.7s,baz=304,slow=8.7,SNR=9.0
STKA LR LR 20 43 55.5
comp=Z,1µm,21.7s,baz=316,slow=36
**STKA Stephens Creek 27.36 145** P **P** **20 33 15.1 +1.5**
baz=27,SNR=11
**STKA Stephens Creek 27.36 145** **P** **20 33 14.3 +0.7**
**STKA Stephens Creek 27.36 145** P **P** **20 33 15.1 +1.5**
comp=Z,7.1nm,1.6s
**PSI Prapat 27.66 296** P **P** **20 33 16.2 -0.3**
comp=Z,3.0nm,0.3s,baz=139,slow=7.7,SNR=3.6
**GSI Gunungsitoli 28.22 292** P **P** **20 33 21.1 -0.3**
**TSI Tuntungan 28.31 297** P **P** **20 33 22.5 +0.3**
comp=Z,57nm,0.8s
**KCSI Kotacane, Aceh 29.02 297** P **P** **20 33 28.7 +0.2**
comp=Z,26nm,1.2s
**CMSA Cobar Meteorol 29.60 139** P **P** **20 33 34.9 +1.4**
comp=Z,16nm,1.7s
**QIZ Qiongzhong 31.95 335** P **P** **20 33 55.5 +1.2**
QIZ S **S** **20 39 08.4 +3.4**
QIZ LR LR
comp=Z,350nm,14.1s
QIZ LR LR
comp=Z,620nm,20.0s
QIZ LR LR
comp=Z,430nm,18.4s
**TPUB Ta-pu 33.32 355** P **P** **20 34 08.8 +2.5**
comp=Z,34nm,1.4s
**HNR Honiara 35.88 92** LR LR 20 50 55.2
comp=Z,354nm,18.0s,baz=262,slow=39
**JOW Kunigami 37.01 7** LR LR 20 50 32.7
comp=Z,245nm,20.4s,baz=166,slow=38
**CM31 Chiang Mai Arr 37.35 319** P **P** **20 34 40.8 -0.2**
**CMAR Chiang Mai Arr 37.35 319** P **P** **20 34 40.7 -0.3**
comp=Z,16nm,1.0s,baz=144,slow=6.3,SNR=74
CMAR PcP **PcP** **20 37 02.3 +2.1**
comp=Z,3.2nm,0.7s,baz=176,slow=2.9,SNR=11
CMAR ScP **ScP** **20 40 50.6 +3.7**
comp=Z,1.1nm,0.9s,baz=158,slow=3.1,SNR=7.6
CMAR LR LR 20 52 09.1
comp=Z,719nm,19.9s,baz=140,slow=40

**CMAR Chiang Mai Arr 37.35 319** P **P** **20 34 39.9 -1.1**
**CHTO Chiang Mai 37.61 320** P **P** **20 34 42.2 -1.0**
CHTO pmax pmax
comp=Z,18nm,0.8s
**CHTO Chiang Mai 37.61 320** P **P** **20 34 42.2 -1.0**
**GYA Guiyang 39.88 336** ⇓P **P** **20 35 03.1 +0.8**
GYA PP **PP** **20 36 34.2 0.0**
GYA S **S** **20 41 11.1 +4.5**
GYA pmax pmax
comp=Z,40nm,1.1s
GYA pmax pmax
comp=Z,120nm,4.3s
GYA LR LR
comp=Z,360nm,14.7s
GYA LR LR
comp=Z,420nm,12.5s
GYA LR LR
comp=Z,460nm,20.9s
**KMI Kunming 40.46 330** ⇓P **P** **20 35 08.2 +0.9**
KMI sP sP 20 35 14.6 0.0
KMI PP **PnPn** **20 36 44.0 -0.5**
KMI S **S** **20 41 17.2 +1.5**
KMI pmax pmax
comp=Z,19nm,1.2s
KMI LR LR
comp=Z,520nm,19.5s
KMI LR LR
comp=Z,590nm,18.9s
KMI LR LR
comp=Z,420nm,21.8s
**WHN Wuhan 41.37 348** ⇑P **P** **20 35 15.1 +0.7**
WHN S **S** **20 41 32.1 +3.6**
WHN pmax pmax
comp=Z,52nm,1.0s
WHN LR LR
comp=Z,820nm,22.3s
**JSU Suzuyama 41.90 9** P **P** **20 35 17.2 -1.6**
JSU IAmb IAmb 20 35 18.8
comp=Z,24nm,0.9s
**PZH PanZhiHua 42.10 330** P **P** **20 35 20.3 -0.4**
PZH S **S** **20 41 37.9 -1.9**
PZH pmax pmax
comp=Z,20nm,1.2s
PZH pmax pmax
comp=Z,150nm,5.5s
PZH LR LR
comp=Z,1µm,28.0s
PZH LR LR
comp=Z,2µm,29.4s
PZH LR LR
comp=Z,1µm,28.0s
**NJ2 Nanjing 42.16 354** ⇑*i*P **P** **20 35 21.0 +0.2**
NJ2 pP **sP** **20 35 24.5 -3.6**
NJ2 sP **pP** **20 35 28.4 +2.4**
NJ2 pmax pmax
comp=Z,18nm,0.7s
NJ2 pmax pmax
comp=Z,190nm,3.6s
**DZM Mont Dzumac 42.76 112** *e*P **P** **20 35 25.8 -0.4**
comp=Z,58nm,1.7s
DZM *e*S **S** **20 41 47.6 -2.1**
comp=Z,257nm,30.0s
DZM *e*LR LR 20 47 24.8
comp=Z,1µm,21.8s
**DZM Mont Dzumac 42.76 112** LR LR 20 55 03.2
comp=Z,1µm,18.5s,baz=294,slow=39
**SANVU Saraoutou 42.86 102** P **P** **20 35 25.8 -1.0**
SANVU IAmb IAmb 20 35 29.3
comp=Z,27nm,0.8s
**JNU Nakatsue 43.55 9** P **P** **20 35 31.4 -0.8**
comp=Z,10.0nm,0.8s,baz=170,slow=3.3,SNR=6.2
JNU LR LR 20 56 17.1
comp=Z,157nm,18.6s,baz=202,slow=40
**JNU Nakatsue 43.55 9** P **P** **20 35 32.0 -0.2**
JNU IAmb IAmb 20 35 39.4
comp=Z,38nm,1.5s
**JMN Monobe 44.69 12** P **P** **20 35 41.2 -0.1**
**CD2 Chengdu 44.99 336** ⇓*i*P **P** **20 35 43.0 -0.8**
CD2 S **S** **20 42 25.9 +4.2**
CD2 pmax pmax
comp=Z,80nm,1.2s
CD2 pmax pmax
comp=Z,160nm,4.1s
CD2 LR LR
comp=Z,540nm,25.5s
CD2 LR LR
comp=Z,420nm,24.3s
**LYN LuoYang 45.64 347** ⇑P **P** **20 35 48.5 -0.3**
LYN pmax pmax
comp=Z,10.0nm,1.1s
LYN pmax pmax
comp=Z,30nm,4.9s
LYN LR LR
comp=Z,290nm,19.1s
LYN LR LR
comp=Z,350nm,18.5s
**JHS Saijyo 45.77 11** P **P** **20 35 50.1 +0.2**
**PALK Pallekele 46.02 290** P **P** **20 35 53.6 +1.3**
comp=Z,7.3nm,0.8s,baz=156,slow=7.5,SNR=4.2
PALK LR LR 20 55 13.1
comp=Z,922nm,21.9s,baz=221,slow=36
**XAN Xi'an 46.05 343** P **P** **20 35 50.4 -1.7**
XAN S **S** **20 42 36.5 -0.4**
XAN SS **ScS** **20 45 54.5 +7.0**
XAN pmax pmax
comp=Z,34nm,0.9s
XAN pmax pmax
comp=Z,110nm,4.5s
XAN LR LR
comp=Z,420nm,18.0s
XAN LR LR
comp=Z,330nm,17.2s
XAN LR LR
comp=Z,640nm,19.6s
**TJN Taejon 46.37 4** ⇓*e*P **P** **20 35 53.9 -0.7**
**INU Inuyama 46.97 15** P **P** **20 35 59.5 +0.3**
INU IAmb IAmb 20 36 01.8
comp=Z,16nm,0.7s
**SHL Shillong 46.98 320** P **P** **20 35 58.0 -1.8**
SHL pmax pmax
comp=Z,43nm,1.2s
**SHL Shillong 46.98 320** P **P** **20 35 58.0 -1.8**
SHL IAmb IAmb 20 36 00.7
comp=Z,43nm,1.2s
**JGF Kuroka 47.30 15** P **P** **20 36 01.3 -0.6**
JGF IAmb IAmb 20 36 06.0
comp=Z,10nm,0.8s
**KSAR Wonju Array Be 47.47 5** P **P** **20 36 02.0 -1.1**
**KSAR Wonju Array Be 47.47 5** P **P** **20 36 02.0 -1.1**
**KSRS Korea Array 47.49 5** P **P** **20 36 02.7 -0.5**
comp=Z,4.4nm,0.7s,baz=185,slow=9.6,SNR=16
KSRS PcP **PcP** **20 37 34.5 +1.2**
comp=Z,2.1nm,0.7s,baz=184,slow=2.9,SNR=4.9
KSRS LR LR 20 56 50.3
comp=Z,100nm,20.4s,baz=200,slow=37
**KS19 Wonju Array Si 47.53 5** P **P** **20 36 03.5 -0.1**
**HNS HongShan 47.98 351** ⇑P **P** **20 36 06.4 -0.6**
HNS S **S** **20 43 04.1 -0.1**
HNS pmax pmax
comp=Z,18nm,1.2s
HNS LR LR
comp=Z,430nm,22.0s
HNS LR LR
comp=Z,280nm,21.4s
**CHLP Challavanipeta 48.23 306** *e*P **P** **20 36 09.1 -0.2**
**MJAR Matsushiro Arr 48.41 16** P **P** **20 36 08.6 -1.8**
comp=Z,23nm,0.7s,baz=195,slow=8.7,SNR=44
MJAR LR LR 20 56 47.6
comp=Z,155nm,21.1s,baz=192,slow=36
**MJAR Matsushiro Arr 48.41 16** P **P** **20 36 09.3 -1.2**
MJAR pmax pmax
comp=Z,19nm,0.7s
**MJAR Matsushiro Arr 48.41 16** P **P** **20 36 09.3 -1.2**
MJAR IAmb IAmb 20 36 12.4
comp=Z,19nm,0.7s
**MAJO Matsushiro 48.41 16** *d*P **P** **20 36 09.9 -0.6**
MAJO pmax pmax
comp=Z,31nm,0.8s
**MAJO Matsushiro 48.41 16** P **P** **20 36 09.1 -1.4**
**MAT Matsushiro 48.41 16** P **P** **20 36 08.5 -2.0**
MAT S **S** **20 43 10.6 +0.1**
**MJB9 Matsu-Tunnel 48.41 16** P **P** **20 36 08.8 -1.7**
**JYT Yasato 48.69 18** P **P** **20 36 10.9 -1.6**
**SKHT Srikalahasti 49.52 298** *e*P **P** **20 36 18.6 -0.7**
**LZH Lanzhou 49.56 339** *e*P **P** **20 36 19.7 +0.2**
LZH pP sP 20 36 23.4 -3.3

LZH sP pP 20 36 25.9 +1.2
LZH pmax pmax
comp=Z,47nm,1.2s
LZH pmax pmax
comp=Z,200nm,8.2s
LZH LR LR
comp=Z,270nm,16.6s
LZH LR LR
comp=Z,330nm,15.2s
LZH LR LR
comp=Z,430nm,17.1s
**AIS Amsterdam Isla 49.57 228** P **P** **20 36 18.1 -1.3**
**JSD Sado 49.83 15** P **P** **20 36 20.6 -0.7**
**MYLAV Mylavaram 50.12 302** *e*P **P** **20 36 22.6 -1.3**
**ADKI Addanki 50.26 300** *e*P **P** **20 36 24.0 -0.9**
**BJI Beijing 50.36 353** P **P** **20 36 24.2 -1.0**
BJI pP **sP** **20 36 29.1 -3.4**
BJI sP **pP** **20 36 32.1 +1.6**
BJI PcP **PcP** **20 37 45.2 +1.5**
BJI S **S** **20 43 34.6 -3.0**
BJI pmax pmax
comp=Z,17nm,0.8s
BJI pmax pmax
comp=Z,140nm,4.7s
BJI LR LR
comp=Z,170nm,18.0s
BJI LR LR
comp=Z,190nm,19.4s
BJI LR LR
comp=Z,230nm,23.5s
**JMM Marumori 50.38 18** P **P** **20 36 25.2 -0.3**
JMM IAmb IAmb 20 36 37.8
comp=Z,40nm,0.8s
**LSA Lhasa 50.39 323** P **P** **20 36 26.2 -0.1**
**ODAN Odare 50.80 317** *e*P **P** **20 36 28.4 -0.8**
comp=Z,31nm,0.7s
**TAPN Taplejung 50.92 318** *e*P **P** **20 36 29.8 -0.3**
comp=Z,68nm,0.5s
**RCLA Racherla 50.94 299** *e*P **P** **20 36 28.1 -2.0**
**NJS Nagarjunasagar 51.15 301** *e*P **P** **20 36 29.7 -2.0**
**SRLM Srisailam 51.29 300** *e*P **P** **20 36 30.8 -2.0**
**RAMN Ramite 51.40 317** *e*P **P** **20 36 33.1 -0.5**
comp=Z,58nm,0.5s
**CUPL Chouttuppal 51.82 301** *e*P **P** **20 36 35.3 -1.4**
**HHC Hu-ho-hao-te 51.89 348** *e*P **P** **20 36 36.6 -0.3**
HHC S **S** **20 43 59.1 0.0**
HHC SS **SS** **20 47 37.4 +1.1**
HHC pmax pmax
comp=Z,11nm,1.0s
HHC LR LR
comp=Z,230nm,17.8s
HHC LR LR
comp=Z,320nm,17.1s
HHC LR LR
comp=Z,380nm,17.8s
**JIRN Jiri 52.13 317** *e*P **P** **20 36 38.4 -0.9**
comp=Z,51nm,0.6s
**URV Uravakonda 52.18 298** *e*P **P** **20 36 37.8 -1.7**
**HYBB Hyderabad (bro 52.19 301** *e*P **P** **20 36 39.6 +0.2**
**RPR Rampur 52.27 303** *e*P **P** **20 36 38.2 -1.7**
**GUN Gumba 52.51 317** *e*P **P** **20 36 40.8 -1.2**
comp=Z,73nm,0.6s
**PKI Pulchoki 52.60 316** *e*P **P** **20 36 41.4 -1.3**
comp=Z,34nm,0.5s
**PKIN Phulchoki 52.62 316** *e*P **P** **20 36 41.7 -1.1**
comp=Z,39nm,0.6s
**KKN Kakani 52.83 316** *e*P **P** **20 36 42.7 -1.6**
comp=Z,25nm,0.7s
**DMN Daman 52.84 316** *e*P **P** **20 36 43.7 -0.7**
comp=Z,33nm,0.8s
**MSHR Mys Shultsa 52.89 7** ⇑*e*P **P** **20 36 44.6 +0.5**
MSHR pmax pmax
comp=Z,34nm,0.7s
**SRSP Sriramsagar 53.09 303** *e*P **P** **20 36 44.5 -1.6**
**MSVF Nonsavu 53.30 105** LR LR 21 00 12.8
comp=Z,192nm,18.1s,baz=213,slow=37
**GKN Gorkha 53.41 316** *e*P **P** **20 36 46.8 -1.6**
comp=Z,32nm,0.6s
**GOMU GeErMu 53.42 331** P **P** **20 36 48.8 +0.2**
GOMU pP sP 20 36 54.4 -1.6
GOMU S **S** **20 44 24.0 +3.3**
GOMU pmax pmax
comp=Z,5.0nm,1.3s
GOMU pmax pmax
comp=Z,110nm,5.5s
GOMU LR LR
comp=Z,300nm,17.5s
GOMU LR LR
comp=Z,340nm,18.6s
GOMU LR LR
comp=Z,260nm,16.6s
**VLA Vladivostok 53.51 8** *c i*P **P** **20 36 48.9 +0.2**
VLA pmax pmax
comp=Z,38nm,0.9s
**CN2 Changchun 53.68 2** *e*P **P** **20 36 48.9 -1.0**
CN2 *e*S **S** **20 44 16.4 -6.7**
CN2 pmax pmax
comp=Z,10.0nm,1.6s
CN2 pmax pmax
comp=Z,100nm,8.2s
CN2 LR LR
comp=Z,200nm,14.0s
CN2 LR LR
comp=Z,200nm,14.0s
CN2 LR LR
comp=Z,200nm,16.5s
**KOLN Koldanda 53.97 315** *e*P **P** **20 36 51.0 -1.6**
comp=Z,46nm,0.8s
**GTA Gaotai 53.98 337** ⇓P **P** **20 36 52.2 -0.2**
GTA pP sP 20 36 58.7 -1.0
GTA sP pP 20 37 02.3 +4.6
GTA pmax pmax
comp=Z,19nm,1.2s
GTA pmax pmax
comp=Z,160nm,5.6s
GTA LR LR
comp=Z,260nm,19.3s
GTA LR LR
comp=Z,440nm,18.5s
GTA LR LR
comp=Z,380nm,21.8s
**XLT XiLinHaoTe 54.17 353** *e*P **P** **20 36 53.3 -0.4**
XLT pP sP 20 36 58.9 -2.1
XLT sP pP 20 37 01.0 +2.0
XLT PcP **PcP** **20 37 53.5 -4.6**
XLT ScP **ScP** **20 41 46.4 -9.4**
XLT S **S** **20 44 32.5 +2.4**
XLT sS sS 20 44 45.2 +6.4
XLT pmax pmax
comp=Z,31nm,0.9s
XLT pmax pmax
comp=Z,250nm,5.7s
XLT LR LR
comp=Z,390nm,12.6s
XLT LR LR
comp=Z,270nm,16.0s
XLT LR LR
comp=Z,280nm,21.5s
**DANN Dangsing 54.22 316** *e*P **P** **20 36 53.0 -1.6**
comp=Z,75nm,0.6s
**USA0B Ussuriysk Arra 54.59 7** P **P** **20 36 55.7 -0.9**
USA0B pmax pmax
comp=Z,30nm,0.7s
**USA0B Ussuriysk Arra 54.59 7** P **P** **20 36 55.7 -0.9**
**USRK Ussuriysk Ar. 54.59 7** P **P** **20 36 55.6 -1.0**
comp=Z,34nm,0.7s,baz=186,slow=6.3,SNR=40
**USRK Ussuriysk Ar. 54.59 7** P **P** **20 36 55.5 -1.1**
**PYUN Piuhan 54.60 315** *e*P **P** **20 36 55.5 -1.7**
comp=Z,90nm,1.1s
**MDJ Mudanjiang 54.74 5** P **P** **20 36 58.0 +0.4**
MDJ pmax pmax
comp=Z,100nm,0.8s
MDJ pmax pmax
comp=Z,210nm,4.8s
**URZ Urewera 55.40 130** LR LR 21 02 55.2
comp=Z,818nm,18.4s,baz=310,slow=38
**BNX BinXian 55.70 3** ⇑P **P** **20 37 03.2 -1.3**
BNX pmax pmax
comp=Z,5.0nm,0.9s
BNX pmax pmax
comp=Z,180nm,3.9s
**ASAJ Asahikawa 56.67 16** LR LR 21 03 57.1
comp=Z,150nm,19.5s,baz=214,slow=39
**ASAJ Asahikawa 56.67 16** P **P** **20 37 11.5 0.0**
ASAJ pmax pmax
comp=Z,19nm,0.7s

**JKA Kamikawa-asahi 56.67 16** P **P** **20 37 11.5 0.0**
JKA lAmb lAmb 20 37 16.0
comp=Z,19nm,0.7s
**RAO Raoul Island 57.74 118** LR LR 21 02 49.4
comp=Z,542nm,18.1s,baz=306,slow=37
**YSS Yuzh-Sakhalins 59.34 15** *eP* **P** **20 37 30.8 +0.6**
YSS pmax pmax
comp=Z,20nm,1.1s
YSS MLR MLR
comp=Z,200nm,14.0s
**YSS Yuzh-Sakhalins 59.34 15** P **P** **20 37 29.9 -0.2**
YSS lAmb lAmb 20 37 43.1
comp=Z,16nm,1.0s
**KLR Kul'dur 59.52 6** *deP* **P** **20 37 31.0 -0.4**
**ULN Ulaanbaatar 59.54 347**‖ *eP* **P** **20 37 31.5 -0.3**
ULN pmax pmax
comp=Z,13nm,1.3s
**ULN Ulaanbaatar 59.54 347** P **P** **20 37 31.4 -0.3**
ULN lAmb lAmb 20 37 40.3
comp=Z,12nm,0.8s
**SONM Songino Array 59.66 347** P **P** **20 37 31.6 -1.0**
comp=Z,5.6nm,0.6s,baz=164,slow=8.3,SNR=47
**SONM Songino Array 59.66 347** P **P** **20 37 32.1 -0.5**
SONM pmax pmax
comp=Z,9.0nm,0.6s
**SONM Songino Array 59.66 347** P **P** **20 37 32.1 -0.5**
SONM lAmb lAmb 20 37 39.1
comp=Z,8.8nm,0.6s
**GRNR Gornyy 61.65 9**‖ *iP* **P** **20 37 46.7 +0.8**
GRNR pmax pmax
comp=Z,10.0nm,0.8s
GRNR MLR MLR
comp=E,150nm,20.0s
**WMQ Urumqi 62.78 332** *eP* **P** **20 37 54.5 +0.8**
WMQ pP sP 20 38 01.1 0.0
WMQ sP pP 20 38 06.6 +7.5
WMQ S **S** **20 46 20.9 -1.3**
WMQ pmax pmax
comp=E,22nm,1.5s
WMQ pmax pmax
comp=E,200nm,3.7s
WMQ LR LR
comp=E,300nm,20.1s
WMQ LR LR
comp=E,210nm,28.9s
**ZAK Zakamensk 62.78 346** *eP* **P** **20 37 52.5 -1.1**
ZAK *e* 20 38 27.0
ZAK pmax pmax
comp=Z,9.0nm,1.2s
ZAK pmax pmax
comp=Z,6.0nm,1.1s
**ZEA Zeya 63.67 2** *eP* **P** **20 38 00.5 +1.2**
ZEA pmax pmax
comp=E,10.0nm,0.9s
ZEA pmax pmax
comp=N,20nm,0.8s
ZEA pmax pmax
comp=Z,20nm,0.8s
**MOY Mondy 64.53 345** *eP* **P** **20 38 05.2 0.0**
MOY pmax pmax
comp=Z,24nm,2.1s
**NIL Nilore 64.62 315** P **P** **20 38 04.2 -1.8**
NIL pmax pmax
comp=Z,16nm,0.6s
**NIL Nilore 64.62 315** P **P** **20 38 04.2 -1.8**
**KSH Kashi 66.21 321** P **P** **20 38 16.0 -0.3**
KSH pP sP 20 38 20.4 -3.3
KSH sP pP 20 38 23.0 +1.3
KSH PcP **PcP** **20 38 46.2 -0.2**
KSH pmax pmax
comp=Z,18nm,0.6s
KSH LR LR
comp=Z,280nm,8.1s
KSH LR LR
comp=Z,380nm,7.1s
KSH LR LR
comp=Z,370nm,10.8s
**PRZ Przheval'sk 66.64 325** P **P** **20 38 19.0 -0.1**
PRZ pmax pmax
comp=Z,26nm,1.4s
**PRZ Przheval'sk 66.64 325** P **P** **20 38 19.0 -0.1**
PRZ lAmb lAmb 20 38 23.6
comp=Z,26nm,1.4s
**ZSN Zaisan 66.81 333** *eP* **P** **20 38 18.6 -1.3**
ZSN pmax pmax
comp=Z,6.0nm,1.2s
**ZSN Zaisan 66.81 333** *eP* **P** **20 38 18.7 -1.3**
comp=Z,6.4nm,1.2s,baz=332
**SATY Saty 67.01 326** *eP* **P** **20 38 20.2 -1.2**
SATY pmax pmax
comp=Z,11nm,1.3s
**SATY Saty 67.01 326** *eP* **P** **20 38 20.3 -1.2**
comp=Z,11nm,1.3s,baz=326
**ZHN Zhinishke 67.07 326** *eP* **P** **20 38 20.6 -1.1**
**ZHN Zhinishke 67.07 326** *eP* **P** **20 38 20.6 -1.1**
baz=326
**KDJ Kajisay 67.11 324** P **P** **20 38 19.8 -2.3**
KDJ pmax pmax
comp=Z,7.0nm,0.7s
**KDJ Kajisay 67.11 324** P **P** **20 38 19.8 -2.3**
KDJ lAmb lAmb 20 38 38.4
comp=Z,6.5nm,0.7s
**KPKS Kokpek 67.12 326** *eP* **P** **20 38 21.1 -1.0**
KPKS pmax pmax
comp=Z,16nm,1.2s
**KPKS Kokpek 67.12 326** *eP* **P** **20 38 21.1 -1.0**
comp=Z,16nm,1.2s,baz=326
**DGZ Jazzator, Alta 67.42 336**‖ *eP* **P** **20 38 23.4 -0.5**
DGZ pmax pmax
comp=Z,15nm,1.1s
**MK31 Makanchi Array 67.54 331**‖ *iP* **P** **20 38 24.1 -0.5**
**MK31 Makanchi Array 67.54 331** P **P** **20 38 24.0 -0.5**
MK31 lAmb lAmb 20 38 26.9
comp=Z,17nm,0.9s
**MKAR Makanchi Array 67.54 331** P **P** **20 38 23.3 -1.3**
comp=Z,12nm,0.6s,baz=140,slow=6.5,SNR=99
**MKAR Makanchi Array 67.54 331** P **P** **20 38 23.6 -1.0**
**MKAR Makanchi Array 67.54 331** P **P** **20 38 23.6 -1.0**
**MAKZ Makanchi 67.70 330** P **P** **20 38 24.8 -0.8**
MAKZ pmax pmax
comp=Z,16nm,1.1s
**MAKZ Makanchi 67.70 330** P **P** **20 38 24.8 -0.8**
MAKZ lAmb lAmb 20 38 27.8
comp=Z,16nm,1.1s
**MDOK Medeo 67.84 325** *eP* **P** **20 38 25.7 -1.0**
**MDOK Medeo 67.84 325** *eP* **P** **20 38 25.7 -1.0**
baz=325
**AAA Alma-Ata 67.94 325** *eP* **P** **20 38 26.3 -0.9**
**AAA Alma-Ata 67.94 325** *eP* **P** **20 38 26.4 -0.9**
baz=325
**BOOM Boomskoye usch 68.05 324** P **P** **20 38 26.9 -1.1**
BOOM pmax pmax
comp=Z,12nm,0.9s
**BOOM Boomskoye usch 68.05 324** P **P** **20 38 26.9 -1.1**
BOOM lAmb lAmb 20 38 44.1
comp=Z,12nm,0.8s
**KBL Kabul 68.06 314** P **P** **20 38 27.0 -1.3**
KBL pmax pmax
comp=Z,17nm,0.8s
**KBL Kabul 68.06 314** P **P** **20 38 27.0 -1.3**
KBL lAmb lAmb 20 38 43.5
comp=Z,17nm,0.8s
**BOD Bodaibo 68.14 355** *eP* **P** **20 38 29.0 +1.0**
BOD pmax pmax
comp=Z,17nm,1.6s
**TDK Taldyqorghan 68.29 327** *eP* **P** **20 38 28.2 -1.1**
TDK pmax pmax
comp=Z,22nm,1.0s
**TDK Taldyqorghan 68.29 327** *eP* **P** **20 38 28.2 -1.1**
comp=Z,22nm,1.0s,baz=327
**KUU Kurty 68.70 325** *eP* **P** **20 38 30.5 -1.4**
KUU pmax pmax
comp=Z,9.0nm,0.5s
**KUU Kurty 68.70 325** *eP* **P** **20 38 30.5 -1.4**
comp=Z,9.1nm,0.5s,baz=325
**AAK Ala-Archa 68.98 323**‖ *eP* **P** **20 38 33.6 -0.3**
AAK pmax pmax
comp=Z,21nm,1.7s
**AAK Ala-Archa 68.98 323** P **P** **20 38 33.3 -0.5**
AAK lAmb lAmb 20 38 38.4
comp=Z,8.6nm,0.7s
**PEA0B Petropavlovsk- 69.38 21**⇑ *eP* **P** **20 38 37.7 +1.8**
**PETK Petropavlovsk- 69.38 21** P **P** **20 38 37.1 +1.2**
comp=Z,5.1nm,0.7s,baz=215,slow=2.6,SNR=8.5
PETK LR LR 21 09 26.8
comp=Z,68nm,20.8s,baz=201,slow=36

**PETK Petropavlovsk- 69.38 21** P **P** **20 38 36.8 +0.9**
**SGDS Sogindy 69.40 324** *eP* **P** **20 38 34.7 -1.6**
baz=324
**GAR Garm 69.51 318** P **P** **20 38 36.9 -0.3**
**BTK Batken 69.76 319** P **P** **20 38 37.6 -1.0**
BTK pmax pmax
comp=Z,14nm,1.1s
**BTK Batken 69.76 319** P **P** **20 38 37.6 -1.0**
BTK lAmb lAmb 20 38 47.6
comp=Z,14nm,1.1s
**MAW Mawson 69.77 201** LR LR 21 05 02.6
comp=Z,530nm,22.0s,baz=54,slow=32
**CHGR Chuyangaron 70.09 317** P **P** **20 38 39.3 -1.4**
**VNDA Vanda 70.23 172** P **P** **20 38 42.3 +1.5**
comp=Z,11nm,1.2s,baz=308,slow=5.3,SNR=1.9
VNDA LR LR 21 06 44.0
comp=Z,558nm,22.0s,baz=336,slow=34
**BTLS Baital 70.70 325** *eP* **P** **20 38 42.8 -1.3**
**BTLS Baital 70.70 325** *eP* **P** **20 38 42.9 -1.3**
baz=325
**IUG Iuzhnay 71.40 321** *eP* **P** **20 38 47.8 -0.8**
**IUG Iuzhnay 71.40 321** *eP* **P** **20 38 47.9 -0.8**
baz=321
**TAS Tashkent 71.42 320** P **P** **20 38 46.6 -2.0**
TAS pmax pmax
comp=Z,45nm,0.3s
**TAS Tashkent 71.42 320** P **P** **20 38 46.5 -2.0**
**WSAR Wadi Sarin 71.60 299** LR LR 21 09 47.8
comp=Z,292nm,21.1s,baz=130,slow=36
**KKAR Karatay Array 71.64 322** P **P** **20 38 49.3 -0.6**
**KKAR Karatay Array 71.64 322** P **P** **20 38 49.3 -0.6**
**ZAA0 Zalesovo Array 71.73 337** P **P** **20 38 48.5 -1.6**
ZAA0 lAmb lAmb 20 38 58.5
comp=Z,16nm,0.8s
**ZALV Zalesovo Beam 71.73 337** P **P** **20 38 49.1 -1.1**
comp=Z,10nm,0.6s,baz=138,slow=5.1,SNR=37
ZALV S **S** **20 48 02.7 -6.7**
comp=Z,1.1nm,0.7s,baz=134,slow=14,SNR=5.7
**ZALV Zalesovo Beam 71.73 337** P **P** **20 38 48.7 -1.4**
**KURBB Kurchatov Arra 72.00 332** P **P** **20 38 50.5 -1.3**
comp=Z,6.6nm,0.7s,baz=141,slow=5.0,SNR=24
**BRLS Boroldav 72.01 322** *eP* **P** **20 38 50.8 -1.3**
**BRLS Boroldav 72.01 322** *eP* **P** **20 38 50.8 -1.3**
baz=321
**KURK Kurchatov 72.02 332** *deP* **P** **20 38 51.0 -1.0**
KURK pmax pmax
comp=Z,36nm,1.3s
**KURK Kurchatov 72.02 332** P **P** **20 38 50.8 -1.2**
KURK lAmb lAmb 20 38 55.4
comp=Z,19nm,0.8s
**YAK Yakutsk 72.07 3** P **P** **20 38 53.0 +1.0**
comp=Z,13nm,0.6s,baz=182,slow=2.2,SNR=16
**YAK Yakutsk 72.07 3** *eP* **P** **20 38 52.3 +0.2**
YAK *e* 20 38 57.8
YAK *e**PP **PcP** **20 39 06.7 -3.7**
YAK *e* 20 41 34.2
YAK *e*PPP PPP 20 43 18.0
YAK *e*S **S** **20 48 08.1 -4.9**
YAK *e**SS SKSac 20 48 42.9 -12
YAK *e* 20 48 53.1
YAK *e*SS **SS** **20 52 46.2 -4.4**
YAK pmax pmax
comp=Z,20nm,0.7s
YAK pmax pmax
comp=N,3.0nm,0.8s
YAK pmax pmax
comp=E,1.0nm,0.8s
YAK pmax pmax
comp=Z,26nm,2.2s
YAK pmax pmax
comp=N,33nm,2.5s
YAK pmax pmax
comp=E,20nm,2.1s
YAK smax smax
comp=N,22nm,1.9s
YAK smax smax
comp=E,45nm,1.7s
**YAK Yakutsk 72.07 3** P **P** **20 38 52.2 +0.2**
**SOCY Socotra 72.56 286** P **P** **20 38 57.3 +1.2**
**MA2 Magadan 72.81 14**⇑ *eP* **P** **20 38 57.5 +1.0**
MA2 pmax pmax
comp=Z,23nm,1.7s
**MA2 Magadan 72.81 14** P **P** **20 38 57.0 +0.5**
MA2 lAmb lAmb 20 39 02.9
comp=Z,9.9nm,0.8s
**HRA Herat 72.96 311** P **P** **20 38 55.7 -2.5**
**OPO Ambohidratompo 74.00 254** P **P** **20 39 06.9 +2.2**
comp=Z,7.0nm,0.9s,baz=123,slow=18,SNR=1.8
**BRZS Berezniki 74.45 329** *eP* **P** **20 39 05.0 -1.4**
**BRZS Berezniki 74.45 329** *eP* **P** **20 39 05.1 -1.4**
baz=329
**SHEM Shemya Is, Ala 75.99 29** LR LR 21 09 18.6
comp=Z,132nm,20.7s,baz=290,slow=33
**SEY Seymchan 76.14 13** P **P** **20 39 15.9 +0.1**
comp=Z,7.3nm,0.6s,baz=212,slow=5.3,SNR=36
**SEY Seymchan 76.14 13**‖ *iP* **P** **20 39 17.2 +1.4**
**GEYT Alibeck 77.46 313** P **P** **20 39 23.5 -0.4**
comp=Z,1.7nm,0.4s,baz=119,slow=8.9,SNR=7.4
**GEYT Alibeck 77.46 313** P **P** **20 39 23.1 -0.8**
**GYA0B ALIBECK ARRAY 77.46 313** P **P** **20 39 22.4 -1.5**
**BRVK Borovoye 77.49 330**‖ *iP* **P** **20 39 22.9 -0.8**
BRVK pmax pmax
comp=Z,12nm,1.2s
**BRVK Borovoye 77.49 330** P **P** **20 39 22.3 -1.4**
**SYO Syowa Base 78.46 201**⇑ *ep*P pP 20 39 33.9 -0.4
**QSPA South Pole Qui 79.89 180** LR LR 21 13 55.1
comp=Z,457nm,20.8s,baz=352,slow=35
**ABKAR Akbulak array 81.07 324** P **P** **20 39 41.2 -2.1**
**TIXI Tiksi 81.65 2** P **P** **20 39 44.9 -1.0**
comp=Z,3.5nm,0.5s,baz=263,slow=17,SNR=13
**TIXI Tiksi 81.65 2**‖ *iP* **P** **20 39 45.0 -0.9**
TIXI pmax pmax
comp=Z,16nm,1.3s
**TIXI Tiksi 81.65 2** P **P** **20 39 44.6 -1.2**
**AKTO Aktyubinsk 82.71 324** LR LR 21 21 43.4
comp=Z,216nm,19.5s,baz=123,slow=39
**NRIK Noril'sk 83.12 348** P **P** **20 39 53.7 +0.1**
comp=Z,5.3nm,0.7s,baz=177,slow=2.6,SNR=8.3
**NRIK Noril'sk 83.12 348** P **P** **20 39 54.1 +0.5**
NRIK pmax pmax
comp=Z,12nm,1.2s
**NRIK Noril'sk 83.12 348** P **P** **20 39 54.1 +0.5**
NRIK lAmb lAmb 20 40 19.3
comp=Z,12nm,1.1s
**RAYN Ar Rayn 83.21 295** P **P** **20 39 54.6 -0.6**
RAYN pmax pmax
comp=Z,16nm,0.8s
**RAYN Ar Rayn 83.21 295** P **P** **20 39 54.6 -0.6**
RAYN lAmb lAmb 20 39 57.7
comp=Z,16nm,0.8s
**BILL Bilibino 83.66 15** *eP* **P** **20 39 58.4 +2.0**
BILL *e* 20 43 09.4
BILL *e*PPP PPP 20 45 01.8
BILL pmax pmax
comp=Z,8.0nm,1.6s
BILL MLR MLR
comp=Z,271nm,20.0s
**PPT2 Papeete2 84.06 107** *e*LR LR 21 06 37.1
comp=Z,326nm,28.0s
**SVE Sverdlovsk 84.21 331** *eP* **P** **20 40 00.1 +0.7**
SVE pmax pmax
comp=Z,31nm,1.2s
**KHLH Kahului Airpor 84.40 68** P **P** **20 40 00.4 -0.9**
**ARU Arti 85.04 330** LR LR 21 21 24.2
comp=Z,193nm,19.9s,baz=126,slow=38
**ARU Arti 85.04 330** *c iP* **P** **20 40 04.4 +0.7**
ARU 20 43 20.7
ARU S **S** **20 50 29.0 -3.2**
ARU pmax pmax
comp=Z,21nm,1.2s
**ARU Arti 85.04 330** P **P** **20 40 03.5 -0.2**
ARU lAmb lAmb 20 40 07.1
comp=Z,18nm,1.1s
**KMBO Kilima Mbogo 86.15 270** P **P** **20 40 12.6 +2.1**
comp=Z,3.8nm,0.8s,baz=86,slow=7.7,SNR=9.3
KMBO LR LR 21 15 55.0
comp=Z,138nm,20.2s,baz=96,slow=34
**KMBO Kilima Mbogo 86.15 270** P **P** **20 40 09.8 -0.7**
**GNI Garni 88.01 311**⇑ *eP* **P** **20 40 20.2 +1.3**
GNI pmax pmax
comp=Z,17nm,1.3s
**GNI Garni 88.01 311** P **P** **20 40 18.7 -0.2**
GNI lAmb lAmb 20 40 36.5
comp=Z,12nm,0.9s
**GROC Groznyy 88.06 314** *eP* **P** **20 40 19.1 +0.3**
GROC *e* 20 43 39.8
GROC pmax pmax
comp=Z,20nm,0.8s
**SIRT Sirnak 89.11 308** P **P** **20 40 22.0 -2.1**
**ZEI Tsey 89.29 314** *eP* **P** **20 40 25.5 +0.6**
ZEI pmax pmax
comp=Z,39nm,1.0s
**GURO Guroymak-BITLI 89.67 309** P **P** **20 40 27.1 +0.4**
**KBZ Khabaz 90.23 314** P **P** **20 40 29.2 +0.3**
comp=Z,1.7nm,0.8s,baz=177,slow=10,SNR=4.5
KBZ LR LR 21 27 05.1
comp=Z,95nm,22.0s,baz=108,slow=40
**KBZ Khabaz 90.23 314**‖ *eP* **P** **20 40 30.7 +1.8**
KBZ pmax pmax
comp=Z,11nm,2.2s
**KIRV Kirov 90.42 330**‖ *eP* **P** **20 40 29.9 +0.4**
**KIV Kislovodsk 90.43 315** *eP* **P** **20 40 29.5 -0.5**
KIV pmax pmax
comp=Z,5.0nm,1.1s
KIV MLR MLR
comp=Z,88nm,20.0s
**SNAA Sanae 91.11 195** P **P** **20 40 35.1 +2.4**
**SNAA Sanae 91.11 195** LR LR 21 18 18.4
comp=Z,744nm,21.7s,baz=136,slow=33
**SNAA Sanae 91.11 195**‖ *eP* **P** **20 40 34.7 +2.0**
SNAA pmax pmax
comp=Z,541nm,1.0s
**SNAA Sanae 91.11 195** P **P** **20 40 34.1 +1.4**
SNAA lAmb lAmb 20 40 36.9
comp=Z,9.2nm,1.0s
**MATP Matopo 91.18 249** LR LR 21 16 00.2
comp=Z,82nm,21.4s,baz=94,slow=32
**BELA Belgrano 2 91.31 185** P **P** **20 40 33.5 0.0**
BELA lAmb lAmb 20 40 37.6
comp=Z,13nm,0.8s
**BOSA Boshof 92.39 241** P **P** **20 40 40.6 +1.1**
comp=Z,3.0nm,0.6s,baz=97,slow=3.2,SNR=8.9
**BOSA Boshof 92.39 241** P **P** **20 40 40.7 +1.1**
BOSA pmax pmax
comp=Z,11nm,1.3s
**BOSA Boshof 92.39 241** lAmb lAmb 20 40 45.9
comp=Z,11nm,1.2s
**LSZ Lusaka 92.46 254** LR LR 21 16 40.0
comp=Z,116nm,19.4s,baz=106,slow=32
**MBAR Mbarara 92.65 269** *ceP* **P** **20 40 44.1 +3.0**
MBAR pmax pmax
comp=Z,5.0nm,1.0s
**VNA2 Neumayer--Watz 92.72 194** P **P** **20 40 42.5 +2.4**
baz=132,slow=3.9
**LBTB Lobatse 92.87 244** LR LR 21 19 53.7
comp=Z,170nm,18.3s,baz=102,slow=34
**VNA1 Neumayer--Stat 93.12 194** P **P** **20 40 44.2 +2.4**
**EIL Elat 93.71 299** LR LR 21 25 53.2
comp=Z,167nm,20.7s,baz=106,slow=37
**SII Sitkinak Islan 94.12 33** P **P** **20 40 47.6 +0.9**
baz=258
**KLMR Klimovskoe 95.84 331** *eP* **P** **20 40 52.6 -1.8**
KLMR pmax pmax
comp=Z,27nm,1.4s
**KLMR Klimovskoe 95.84 331** *eP* **P** **20 40 52.6 -1.8**
KLMR AMP 20 40 57.1
comp=Z,27nm,1.4s
**BR131 Keskin Array S 96.30 309**‖ *eP* **P** **20 40 57.5 +0.3**
**BRTR Keskin Array B 96.30 309** P **P** **20 40 57.2 0.0**
comp=Z,2.4nm,0.9s,baz=193,slow=5.1,SNR=4.7
BRTR LR LR 21 27 16.7
comp=Z,194nm,21.9s,baz=120,slow=37
**OBN Obninsk 96.48 325** *eP* **P** **20 40 58.1 +0.7**
OBN *e* 20 44 57.3
OBN *e*PPP PPP 20 46 52.2
OBN pmax pmax
comp=Z,69nm,2.6s
OBN MLR MLR
comp=Z,59nm,8.0s
**ILAR Eielson Array 98.88 26** P Pdif 20 41 08.5 +0.4
comp=Z,0.5nm,0.9s,baz=263,slow=4.4,SNR=1.7
**APA Apatity 99.32 337**‖ *iP* **Pdif** **20 41 02.4 -7.6**
APA pmax pmax
comp=Z,4.0nm,0.8s
APA MLR MLR
comp=Z,2μm,17.0s
**AKASG Malin Array Be 100.47 320** P **Pdif** **20 41 14.5 -0.9**
comp=Z,0.3nm,0.3s,baz=75,slow=4.9,SNR=4.9
**RES Resolute Bay 111.90 10** PKiKP **PKiKP** **20 46 04.0 +1.4**
comp=Z,0.9nm,0.7s,baz=301,slow=4.1,SNR=5.2
**YKA Yellowknife Ar 113.31 25** PKiKP **PKiKP** **20 46 06.8 +1.1**
comp=Z,1.7nm,0.8s,baz=301,slow=2.0,SNR=16
YKA PKKPbc **PKKPbc** **20 56 53.1 0.0**
comp=Z,0.4nm,0.8s,baz=106,slow=3.8,SNR=4.8
**J05D Fort Rock, OR 115.19 47** P **PKPdf** **20 46 11.2 +1.2**
baz=280
**PKM Mcpheon Peak 117.54 56** P **PKiKP** **20 46 17.1 +2.2**
baz=277
**EDM Edmonton 117.56 35** PKiKP **PKiKP** **20 46 15.8 +1.6**
**EDM Edmonton 117.56 35** PKPdf **PKiKP** **20 46 15.8 +1.6**
**NVAR Mina Array Bea 118.22 52** PKP **PKiKP** **20 46 18.5 +2.3**
comp=Z,1.2nm,0.8s,baz=254,slow=1.6,SNR=8.1
**CWC Cottonwood Cre 118.72 54** P **PKiKP** **20 46 18.3 +1.2**
baz=279
**EDW2 Edwards Air Fo 119.02 56** P **PKiKP** **20 46 19.9 +2.3**
baz=278
**LRMC Laurel Mtn Rad 119.19 55** P **PKiKP** **20 46 19.9 +1.9**
baz=279
**GRAC Grapevine Rang 119.20 53** P **PKiKP** **20 46 20.1 +2.2**
baz=280
**MPMC Manual Prospec 119.25 54** P **PKiKP** **20 46 20.4 +2.1**
baz=279
**GSC Goldstone, Bar 119.92 55** P **PKiKP** **20 46 21.6 +2.2**
baz=279
**HLID Hailey 119.97 45** PKPdf **PKiKP** **20 46 21.5 +2.1**
**ELK Elko 120.08 49** PKP **PKiKP** **20 46 22.0 +2.2**
comp=Z,1.9nm,0.7s,baz=13,slow=2.8,SNR=7.3
**ELK Elko 120.08 49** PKiKP **PKiKP** **20 46 22.0 +2.2**
**ELK Elko 120.08 49** PKPdf **PKiKP** **20 46 21.8 +2.0**
**R11A Troy Canyon, C 120.33 51** P **PKiKP** **20 46 22.1 +1.8**
baz=282
**PFO Pinyon Flats O 120.46 57** PKP **PKiKP** **20 46 21.8 +1.2**
comp=Z,3.3nm,0.7s,baz=297,slow=6.9,SNR=4.3
**PFO Pinyon Flats O 120.46 57** P **PKiKP** **20 46 22.2 +1.6**
baz=278
**TPFO Pinon Flats 120.47 57** P **PKiKP** **20 46 23.2 +2.6**
baz=278
**MONP2 Monument Peak 120.59 58** P **PKiKP** **20 46 23.6 +2.7**
baz=278
**BELC Belle Mtn. Jos 120.78 56** P **PKiKP** **20 46 23.3 +2.1**
baz=279
**GMRC Granite Mounta 120.93 56** P **PKiKP** **20 46 23.9 +2.4**
baz=280
**SWSC Sam W. Stewart 121.10 58** P **PKiKP** **20 46 24.4 +2.8**
baz=278
**BC3 Big Chuckawall 121.28 57** P **PKiKP** **20 46 23.9 +1.7**
baz=279
**IRM Iron Mountain 121.46 56** P **PKiKP** **20 46 25.1 +2.7**
baz=280
**SFJD Kangerlussuaq 123.05 357** PKP **PKiKP** **20 46 25.8 +1.4**
comp=Z,5.8nm,0.7s,baz=70,slow=4.1,SNR=2.4
**TORD Torodi Ar. Bea 123.06 279** PKP **PKiKP** **20 46 26.9 +0.9**
comp=Z,2.7nm,0.6s,baz=66,slow=1.3,SNR=27
**PDAR Pinedale Array 123.60 45** PKP **PKiKP** **20 46 28.8 +2.1**
comp=Z,1.6nm,0.7s,baz=285,slow=3.5,SNR=1.3
**FCC Fort Churchill 123.73 22** PKiKP **PKiKP** **20 46 26.4 +0.4**
**FCC Fort Churchill 123.73 22** PKPdf **PKiKP** **20 46 26.4 +0.4**
**X16A Lo Mia Camp, P 124.42 55** PKPdf **PKPdf** **20 46 26.8 -1.4**
**ESDC Sonseca Array 125.00 312** PKP **PKiKP** **20 46 30.9 +1.6**
comp=Z,2.2nm,1.0s,baz=20,slow=3.3,SNR=7.6
**FRB Frobisher Bay 125.76 7** PKP **PKiKP** **20 46 30.3 +0.4**
comp=Z,3.1nm,0.7s,baz=273,slow=7.9,SNR=7.2
**S22A 4UR Ranch, Cre 127.17 50** P **PKiKP** **20 46 36.3 +2.3**
baz=288
**PLCA Paso Flores 127.77 166** PKP **PKiKP** **20 46 37.6 +2.8**
comp=Z,2.0nm,0.9s,baz=232,slow=6.1,SNR=3.8
**121A Cookes Peak, D 127.81 57** P **PKiKP** **20 46 37.3 +2.1**
baz=283
**ANMO Albuquerque 128.27 53** PKP **PKiKP** **20 46 38.3 +2.2**
comp=Z,1.5nm,0.7s,baz=214,slow=3.6,SNR=3.3
**ANMO Albuquerque 128.27 53** **PKPdf** **20 46 33.1 -2.4**
**ULM Lac du Bonnet 128.47 31** PKP **PKiKP** **20 46 36.4 +0.6**
comp=Z,3.7nm,0.6s,baz=228,slow=4.8,SNR=4.0
**DBIC Dimbokro 128.87 270** PKP **PKiKP** **20 46 39.1 +1.5**
comp=Z,2.1nm,0.5s,baz=178,slow=1.2,SNR=4.0
**TXAR Lajitas Array 132.00 60** PKP **PKiKP** **20 46 44.7 +1.1**
comp=Z,0.8nm,0.7s,baz=196,slow=2.0,SNR=6.8
TXAR SKPbc **SKPab** **20 50 12.0 +3.0**
comp=Z,1.3nm,0.7s,baz=285,slow=3.5,SNR=10.0
**SCHQ Schefferville 134.63 8** PKP **PKiKP** **20 46 49.0 +0.9**
comp=Z,3.9nm,0.6s,baz=9.5,slow=6.1,SNR=9.0
**JCT Junction City 134.93 57** PKiKP **PKPdf** **20 46 44.9 -3.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JCT** | **Junction City** | **134.93** | **57** | PKPdf | **PKPdf** | **20 46 44.9** | **-3.1** |
| **S39A** | **Bolivar** | **136.98** | **44** | PKPdf | **PKPdf** | **20 46 49.0** | **-2.6** |
| **CCM** | **Cathedral Cave** | **138.20** | **43** | PKIKP | **PKiKP** | **20 46 57.2** | **+1.4** |
| **CCM** | **Cathedral Cave** | **138.20** | **43** | PKPdf | **PKiKP** | **20 46 57.2** | **+1.4** |
| **CMIG** | **Matias Romero** | **142.07** | **75** | PKP | **PKPdf** | **20 47 02.9** | **+1.6** |
| | comp=Z,4.3nm,0.8s,baz=335,slow=3.3,SNR=7.2 | | | | | | |
| **R50A** | **Paris** | **142.43** | **37** | | **PKPdf** | **20 46 58.0** | **-3.5** |
| **CLTN** | **Cedars of Leba** | **142.55** | **42** | | **PKPdf** | **20 46 58.6** | **-3.1** |
| **U49A** | **Red Boiling Sp** | **142.65** | **41** | | **PKPdf** | **20 46 58.6** | **-3.3** |
| **T50A** | **Nancy** | **142.93** | **39** | | **PKPdf** | **20 46 58.9** | **-3.5** |
| **X48A** | **Hartselle** | **143.00** | **44** | PKPdf | **PKPdf** | **20 47 01.9** | **-0.7** |
| **CPUP** | **Villa Florida** | **143.77** | **179** | PKP | PKPbc | 20 47 03.2 | +1.5 |
| | comp=Z,3.4nm,0.8s,baz=185,slow=3.9,SNR=7.7 | | | | | | |
| **CPUP** | **Villa Florida** | **143.77** | **179** | | PKPab | 20 47 01.3 | +0.3 |
| **TKL** | **Tuckaleechee C** | **144.46** | **40** | PKP | **PKPdf** | **20 47 04.6** | **-0.5** |
| | comp=Z,6.8nm,0.6s,baz=212,slow=4.0,SNR=11 | | | | | | |
| **GBN** | **Guysborough** | **144.56** | **6** | PKPdf | **PKPdf** | **20 47 05.0** | **+0.1** |
| **N59A** | **State Game Lan** | **144.88** | **26** | P | **PKPdf** | **20 47 06.2** | **+0.4** |
| | baz=326 | | | | | | |
| **LVC** | **Limon Verde** | **145.27** | **160** | PKHKP | PKPpre | 20 47 04.6 | |
| **LVC** | **Limon Verde** | **145.27** | **160** | | **PKPbc** | **20 47 04.6** | **-2.4** |
| **MVL** | **Millersville** | **145.38** | **27** | | **PKPbc** | **20 47 05.1** | **-1.3** |
| **V55A** | **Taylorsville** | **145.91** | **37** | | **PKPdf** | **20 47 05.8** | **-1.8** |
| **GOGA** | **Godfrey** | **146.03** | **43** | PKP2 | **PKPab** | **20 47 09.9** | **+0.7** |
| **GOGA** | **Godfrey** | **146.03** | **43** | | **PKPab** | **20 47 09.9** | **+0.7** |
| **KMSC** | **Kings Mountain** | **146.31** | **38** | | **PKPab** | **20 47 10.5** | **+0.3** |
| **KMSC** | **Kings Mountain** | **146.31** | **38** | P | **PKPab** | **20 47 10.5** | **+0.3** |
| | baz=312 | | | | | | |
| **TIGA** | **Tifton** | **147.09** | **46** | P | **PKPbc** | **20 47 12.3** | **+0.5** |
| | baz=304 | | | | | | |
| **W57A** | **Gilead** | **147.11** | **37** | | **PKPbc** | **20 47 12.3** | **+0.6** |
| **T59A** | **Double "B" Far** | **147.16** | **32** | | **PKPab** | **20 47 12.9** | **-0.5** |
| **PB11** | **IPOC Station P** | **147.60** | **156** | | **PKiKP** | **20 47 16.0** | **+0.1** |
| **MNMC** | **Minye Minye** | **148.19** | **156** | | **PKPbc** | **20 47 15.0** | **-0.5** |
| **PB16** | **IPOC Station P** | **148.94** | **155** | | **PKiKP** | **20 47 19.6** | **+0.4** |
| **AQDB** | **Aquidauana** | **149.60** | **181** | | **PKiKP** | **20 47 20.6** | **+0.8** |
| **CRIN** | **San Cristobal** | **149.91** | **82** | | **PKiKP** | **20 47 22.2** | **+1.6** |
| **LPAZ** | **La Paz** | **151.34** | **156** | PKPbc | **PKiKP** | **20 47 25.9** | **+1.6** |
| | comp=Z,7.4nm,0.7s,baz=139,slow=1.2,SNR=25 | | | | | | |
| **LPAZ** | **La Paz** | **151.34** | **156** | PKIKP | **PKiKP** | **20 47 25.4** | **+1.2** |
| **LPAZ** | **La Paz** | **151.34** | **156** | | **PKiKP** | **20 47 25.4** | **+1.2** |
| **BDFB** | **Brasilia** | **153.09** | **198** | PKPbc | **PKiKP** | **20 47 28.9** | **+1.7** |
| | comp=Z,2.9nm,0.6s,baz=185,slow=12,SNR=5.7 | | | | | | |

*AEIC **03** 20:31:25.2±2.5, 60.33N±0.04×153.55W±0.05, h189km±3km, ML4.5, mb4.6/148(NEIC), ML4.6/123(NEIC), Error ellipse: s-maj=6.3km s-min=3.7km az=181.0*

*ANF **03** 20:31:25.8±0.2, 60.36N×153.65W, h166km±1km, ML4.8/48, Error ellipse: s-maj=3.7km s-min=2.4km az=116.0*

*NEIC **03** 20:31:25.1±2.6, 60.34N±0.03×153.68W±0.09, h188km±3km, Error ellipse: s-maj=6.3km s-min=3.6km az=82.0*

*IDC **03** 20:31:27.1±1.4, 60.52N×153.79W, h190km±12km, mb3.9/22, mb1 4.0/26, mb1mx3.7/52, mbtmp4.4/26, MS4.2/2, Ms1 4.2/2, ms1mx3.0/90, Error ellipse: s-maj=14.8km s-min=7.6km az=21.0*

**ISC 03 20:31:25.6±0.5, 60.36N±0.03×153.65W±0.03, h188km±4km, n551, σ1§60/592, mb4.5/92, 80C-33D, Fault plane solution: NP1:** ϕ±136.48769°, δ80.08144°, λ-94.05021°. **NP2:** ϕ±338.83420°, δ10.70597°, λ-68.00508°. **Principal axes:** T Plg34.9597°, Azm229.9814°; N Plg3.9896°, Azm137.1865°; P Plg54.7455°, Azm41.5239°; **Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **O19K** | **Port Alsworth** | **0.37** | **244** | | | **Pn** | **20 31 50.1** | **-0.7** |
| O19K | | | | | | **Sn** | **20 32 08.7** | **-1.5** |
| **O19K** | **Port Alsworth** | **0.37** | **244** | P | | **Pn** | **20 31 50.2** | **-0.7** |
| | baz=72,SNR=160 | | | | | | | |
| O19K | | | | S | | **Sn** | **20 32 08.6** | **-1.7** |
| | baz=72 | | | | | | | |
| **RED** | **Redoubt Volcan** | **0.44** | **81** | | | **Pn** | **20 31 50.6** | **-0.6** |
| RED | | | | | | **Sn** | **20 32 09.7** | **-1.3** |
| **ILSW** | **Iliamna Southw** | **0.45** | **146** | | | **Pn** | **20 31 50.3** | **-1.1** |
| ILSW | | | | | | **Sn** | **20 32 09.7** | **-1.4** |
| **RSO** | **Redoubt South** | **0.46** | **76** | | | **Pn** | **20 31 50.8** | **-0.6** |
| **O20K** | **Slope Mountain** | **0.58** | **118** | | | **Pn** | **20 31 51.2** | **-0.5** |
| O20K | | | | | | **Sn** | **20 32 11.1** | **-0.9** |
| **O20K** | **Slope Mountain** | **0.58** | **118** | P | | **Pn** | **20 31 51.3** | **-0.5** |
| | baz=298,SNR=54 | | | | | | | |
| O20K | | | | S | | **Sn** | **20 32 11.0** | **-0.9** |
| | baz=298 | | | | | | | |
| **N19K** | **Bonanza Creek** | **0.61** | **318** | | | **Pn** | **20 31 51.4** | **-0.5** |
| **N19K** | **Bonanza Creek** | **0.61** | **318** | | | **Sn** | **20 32 10.7** | **-1.6** |
| **N19K** | **Bonanza Creek** | **0.61** | **318** | IAML | | | 20 31 54.0 | |
| | comp=N,248nm,0.6s | | | | | | | |
| N19K | | | | IAML | | | 20 32 00.6 | |
| | comp=E,168nm,0.7s | | | | | | | |
| **N19K** | **Bonanza Creek** | **0.61** | **318** | P | | **Pn** | **20 31 51.4** | **-0.5** |
| | baz=136,SNR=93 | | | | | | | |
| N19K | | | | S | | **Sn** | **20 32 10.8** | **-1.5** |
| | baz=136 | | | | | | | |
| **RDT** | **Redoubt** | **0.65** | **70** | | | **Pn** | **20 31 51.5** | **-0.6** |
| **OPT** | **Oil Point** | **0.74** | **163** | | | **Pn** | **20 31 52.0** | **-0.5** |
| **AUL** | **Augustine Lava** | **0.98** | **174** | | | **Pn** | **20 31 53.9** | **-0.1** |
| AUL | | | | | | **Sn** | **20 32 15.1** | **-0.8** |
| **AUQ** | **Augustine Qik'** | **1.01** | **173** | | | **Pn** | **20 31 53.6** | **-0.7** |
| **SPBG** | **Spurr Blockage** | **1.10** | **34** | | | **Pn** | **20 31 55.2** | **+0.3** |
| **SPNN** | **North Nagishla** | **1.12** | **24** | | | **Pn** | **20 31 55.2** | **+0.1** |
| **SPCN** | **Chakachatna No** | **1.13** | **39** | | | **Pn** | **20 31 55.1** | **0.0** |
| **SPU** | **Mount Spurr** | **1.14** | **43** | | | **Pn** | **20 31 54.6** | **-0.6** |
| **SPCP** | **Crater Peak Br** | **1.17** | **38** | | | **Pn** | **20 31 55.5** | **0.0** |
| **SVW2** | **Sparrevohn** | **1.21** | **309** | | | **Pn** | **20 31 55.2** | **-0.5** |
| **SVW2** | **Sparrevohn** | **1.21** | **309** | | | **Sn** | **20 32 17.2** | **-1.8** |
| **HOM** | **Homer** | **1.23** | **124** | | | **Pn** | **20 31 55.4** | **-0.5** |
| HOM | | | | | | **Sn** | **20 32 18.6** | **-0.6** |
| **HOM** | **Homer** | **1.23** | **124** | IAML | | | 20 32 19.1 | |
| | comp=E,16μm,0.5s | | | | | | | |
| HOM | | | | IAML | | | 20 32 19.8 | |
| | comp=N,19μm,0.7s | | | | | | | |
| **HOM** | **Homer** | **1.23** | **124** | P | | **Pn** | **20 31 55.4** | **-0.5** |
| | baz=306,SNR=24 | | | | | | | |
| HOM | | | | S | | **Sn** | **20 32 18.1** | **-1.1** |
| | baz=306 | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.23** | **40** | | | **Pn** | **20 31 55.7** | **-0.3** |
| **P18K** | **Big Mountain,** | **1.25** | **220** | | | **Pn** | **20 31 55.4** | **-0.8** |
| P18K | | | | | | **Sn** | **20 32 18.1** | **-1.6** |
| **P18K** | **Big Mountain,** | **1.25** | **220** | P | | **Pn** | **20 31 55.4** | **-0.8** |
| | baz=42,SNR=72 | | | | | | | |
| P18K | | | | S | | **Sn** | **20 32 17.6** | **-2.1** |
| | baz=42 | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.30** | **70** | | | **Pn** | **20 31 57.0** | **+0.6** |
| **CAPN** | **Captain Cook N** | **1.30** | **70** | IAML | | | 20 32 23.9 | |
| | comp=E,16μm,0.8s | | | | | | | |
| CAPN | | | | IAML | | | 20 32 24.0 | |
| | comp=N,12μm,0.8s | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.30** | **70** | P | | **Pn** | **20 31 57.0** | **+0.6** |
| | baz=250,SNR=24 | | | | | | | |
| CAPN | | | | S | | **Sn** | **20 32 22.2** | **+1.9** |
| | baz=250 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.43** | **180** | | | **Pn** | **20 31 56.0** | **-1.7** |
| Q19K | | | | | | **Sn** | **20 32 21.1** | **-1.4** |
| **Q19K** | **Cape Douglas,** | **1.43** | **180** | P | | **Pn** | **20 31 56.7** | **-1.0** |
| | baz=2.2,SNR=9.0 | | | | | | | |
| Q19K | | | | S | | **Sn** | **20 32 19.9** | **-2.6** |
| | baz=2.2 | | | | | | | |
| **STLK** | **Strandline Lak** | **1.45** | **37** | | | **Pn** | **20 31 57.6** | **-0.3** |
| **CNPM** | **China Poot** | **1.47** | **123** | | | **Pn** | **20 31 57.4** | **-0.7** |
| CNPM | | | | | | **Sn** | **20 32 20.9** | **-2.2** |
| **CNPM** | **China Poot** | **1.47** | **123** | IAML | | | 20 32 22.1 | |
| | comp=E,15μm,0.5s | | | | | | | |
| **BRLK** | **Bradley Lake** | **1.51** | **112** | | | **Pn** | **20 31 57.4** | **-1.0** |
| **BRLK** | **Bradley Lake** | **1.51** | **112** | IAML | | | 20 32 23.1 | |
| | comp=E,9μm,0.6s | | | | | | | |
| BRLK | | | | IAML | | | 20 32 23.7 | |
| | comp=N,9μm,0.3s | | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.58** | **112** | | | **Pn** | **20 31 58.2** | **-0.9** |
| **BRSE** | **Bradley Lake S** | **1.58** | **112** | P | | **Pn** | **20 31 58.5** | **-0.6** |
| | baz=294,SNR=227 | | | | | | | |
| BRSE | | | | S | | **Sn** | **20 32 22.2** | **-2.7** |
| | baz=294 | | | | | | | |
| **M19K** | **Big River Lodg** | **1.59** | **347** | | | **Pn** | **20 31 58.9** | **-0.2** |
| **SLKM** | **Skilak Lake** | **1.71** | **83** | | | **Pn** | **20 31 58.7** | **-1.5** |
| **SUA** | **Susitna One** | **1.80** | **51** | | | **Pn** | **20 32 00.4** | **-0.9** |
| SUA | | | | | | **Sn** | **20 32 28.2** | **-0.8** |
| **SUA** | **Susitna One** | **1.80** | **51** | IAML | | | 20 32 29.9 | |
| | comp=N,3μm,0.6s | | | | | | | |
| **FIS** | **Fire Island** | **1.86** | **63** | | | **Pn** | **20 32 01.4** | **-0.3** |
| **FIS** | **Fire Island** | **1.86** | **63** | IAML | | | 20 32 32.4 | |
| | comp=N,7μm,0.6s | | | | | | | |
| FIS | | | | IAML | | | 20 32 33.4 | |
| | comp=E,6μm,0.4s | | | | | | | |
| **L19K** | **White Mountain** | **1.92** | **343** | | | **Pn** | **20 32 02.0** | **-0.3** |
| **L19K** | **White Mountain** | **1.92** | **343** | P | | **Pn** | **20 32 02.1** | **-0.3** |
| | baz=161,SNR=105 | | | | | | | |
| L19K | | | | S | | **Sn** | **20 32 29.3** | **-1.8** |
| | baz=161 | | | | | | | |
| **O22K** | **Cooper Landing** | **1.95** | **85** | | | **Pn** | **20 32 01.3** | **-1.3** |
| **O22K** | **Cooper Landing** | **1.95** | **85** | IAML | | | 20 32 32.4 | |
| | comp=E,7μm,0.4s | | | | | | | |
| O22K | | | | IAML | | | 20 32 35.3 | |
| | comp=N,10μm,0.7s | | | | | | | |
| **O22K** | **Cooper Landing** | **1.95** | **85** | P | | **Pn** | **20 32 01.3** | **-1.3** |
| | baz=267,SNR=56 | | | | | | | |
| O22K | | | | S | | **Sn** | **20 32 29.0** | **-2.5** |
| | baz=267 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.06** | **67** | | | **Pn** | **20 32 02.3** | **-1.5** |
| RC01 | | | | | | **Sn** | **20 32 31.4** | **-2.1** |
| **RC01** | **Rabbit Creek A** | **2.06** | **67** | IAML | | | 20 32 32.6 | |
| | comp=E,7μm,0.3s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.06** | **67** | P | | **Pn** | **20 32 02.3** | **-1.5** |
| | baz=249,SNR=94 | | | | | | | |
| RC01 | | | | S | | **Sn** | **20 32 30.9** | **-2.6** |
| | baz=249 | | | | | | | |
| **SEW** | **Seward** | **2.11** | **95** | | | **Pn** | **20 32 03.2** | **-1.1** |
| SEW | | | | | | **Sn** | **20 32 31.7** | **-2.7** |
| **SEW** | **Seward** | **2.11** | **95** | P | | **Pn** | **20 32 03.3** | **-1.1** |
| | baz=278,SNR=43 | | | | | | | |
| SEW | | | | S | | **Sn** | **20 32 31.5** | **-3.0** |
| | baz=278 | | | | | | | |
| **L20K** | **Farewell, AK** | **2.13** | **357** | | | **Pn** | **20 32 05.0** | **+0.3** |
| **KCG** | **Knife Ck. Glac** | **2.19** | **201** | | | **Pn** | **20 32 04.3** | **-1.0** |
| **M22K** | **Willow** | **2.22** | **49** | | | **Pn** | **20 32 04.3** | **-1.1** |
| M22K | | | | | | **Sn** | **20 32 36.0** | **-0.6** |
| **M22K** | **Willow** | **2.22** | **49** | P | | **Pn** | **20 32 04.4** | **-1.1** |
| | baz=231,SNR=75 | | | | | | | |
| M22K | | | | S | | **Sn** | **20 32 35.4** | **-1.2** |
| | baz=231 | | | | | | | |
| **PMR** | **Palmer** | **2.53** | **59** | | | **Pn** | **20 32 06.7** | **-2.2** |
| PMR | | | | | | **Sn** | **20 32 40.0** | **-2.9** |
| **PMR** | **Palmer** | **2.53** | **59** | IAML | | | 20 32 41.5 | |
| | comp=E,2μm,0.6s | | | | | | | |
| PMR | | | | IAML | | | 20 32 42.1 | |
| | comp=N,3μm,0.2s | | | | | | | |
| **PMR** | **Palmer** | **2.53** | **59** | P | | **Pn** | **20 32 06.7** | **-2.2** |
| | baz=241,SNR=65 | | | | | | | |
| PMR | | | | S | | **Sn** | **20 32 39.7** | **-3.1** |
| | baz=241 | | | | | | | |
| **CUT** | **Chulitna** | **2.62** | **37** | | | **Pn** | **20 32 09.1** | **-0.9** |
| **CUT** | **Chulitna** | **2.62** | **37** | IAML | | | 20 32 44.8 | |
| | comp=E,4μm,0.3s | | | | | | | |
| CUT | | | | IAML | | | 20 32 45.0 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **CUT** | **Chulitna** | **2.62** | **37** | P | | **Pn** | **20 32 09.1** | **-0.9** |
| | baz=218,SNR=126 | | | | | | | |
| CUT | | | | S | | **Sn** | **20 32 43.3** | **-1.5** |
| | baz=218 | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.64** | **167** | P | | **Pn** | **20 32 07.9** | **-2.4** |
| | comp=N,15nm,0.3s,baz=58,slow=6.3,SNR=189 | | | | | | | |
| KDAK | | | | S | | **Sn** | **20 32 41.0** | **-4.1** |
| | comp=N,40nm,0.3s,baz=52,slow=5.7,SNR=5.5 | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.64** | **167** | P | | **Pn** | **20 32 08.0** | **-2.4** |
| | baz=350 | | | | | | | |
| **PPLA** | **Purkeypile** | **2.64** | **15** | | | **Pn** | **20 32 10.9** | **+0.4** |
| **PPLA** | **Purkeypile** | **2.64** | **15** | P | | **Pn** | **20 32 11.0** | **+0.5** |
| | baz=195,SNR=412 | | | | | | | |
| **PWL** | **Port Wells** | **2.67** | **77** | | | **Pn** | **20 32 08.7** | **-2.0** |
| **PWL** | **Port Wells** | **2.67** | **77** | IAML | | | 20 32 45.9 | |
| | comp=N,4μm,0.4s | | | | | | | |
| PWL | | | | IAML | | | 20 32 46.7 | |
| | comp=E,4μm,0.5s | | | | | | | |
| **PWL** | **Port Wells** | **2.67** | **77** | P | | **Pn** | **20 32 08.7** | **-2.0** |
| | baz=260,SNR=37 | | | | | | | |
| PWL | | | | S | | **Sn** | **20 32 43.3** | **-2.6** |
| | baz=260 | | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.70** | **56** | | | **Pn** | **20 32 09.3** | **-1.8** |
| **GHO** | **Glory Hole Cre** | **2.70** | **56** | IAML | | | 20 32 45.0 | |
| | comp=E,4μm,0.3s | | | | | | | |
| GHO | | | | IAML | | | 20 32 45.4 | |
| | comp=N,4μm,0.4s | | | | | | | |
| **KNK** | **Knik Glacier** | **2.75** | **65** | | | **Pn** | **20 32 09.8** | **-1.8** |
| **KNK** | **Knik Glacier** | **2.75** | **65** | IAML | | | 20 32 46.5 | |
| | comp=N,4μm,0.4s | | | | | | | |
| KNK | | | | IAML | | | 20 32 47.3 | |
| | comp=E,4μm,0.4s | | | | | | | |
| **KNK** | **Knik Glacier** | **2.75** | **65** | P | | **Pn** | **20 32 09.8** | **-1.8** |
| | baz=248,SNR=43 | | | | | | | |
| KNK | | | | S | | **Sn** | **20 32 45.2** | **-2.4** |
| | baz=248 | | | | | | | |
| **TT01** | **Tatalina** | **2.80** | **337** | | | **Pn** | **20 32 11.8** | **-0.3** |
| **TTA** | **Tatalina** | **2.82** | **337** | | | **Pn** | **20 32 12.0** | **-0.4** |
| **SML** | **Sawmill** | **2.97** | **58** | | | **Pn** | **20 32 12.3** | **-1.9** |
| SML | | | | | | **Sn** | **20 32 49.1** | **-3.1** |
| **SML** | **Sawmill** | **2.97** | **58** | IAML | | | 20 32 51.6 | |
| | comp=E,2μm,0.5s | | | | | | | |
| SML | | | | IAML | | | 20 32 51.7 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **SML** | **Sawmill** | **2.97** | **58** | P | | **Pn** | **20 32 12.3** | **-1.9** |
| | baz=242,SNR=43 | | | | | | | |
| SML | | | | S | | **Sn** | **20 32 49.0** | **-3.1** |
| | baz=242 | | | | | | | |
| **K20K** | **Telida** | **3.02** | **356** | | | **Pn** | **20 32 15.1** | **+0.4** |
| **K20K** | **Telida** | **3.02** | **356** | P | | **Pn** | **20 32 15.2** | **+0.4** |
| | baz=175,SNR=128 | | | | | | | |
| K20K | | | | S | | **Sn** | **20 32 52.2** | **-1.0** |
| | baz=175 | | | | | | | |
| **OHAK** | **Old Harbor** | **3.15** | **176** | | | **Pn** | **20 32 13.7** | **-2.7** |
| **OHAK** | **Old Harbor** | **3.15** | **176** | IAML | | | 20 32 52.0 | |
| | comp=N,766nm,0.5s | | | | | | | |
| OHAK | | | | IAML | | | 20 32 54.2 | |
| | comp=E,740nm,0.6s | | | | | | | |
| **OHAK** | **Old Harbor** | **3.15** | **176** | P | | **Pn** | **20 32 13.8** | **-2.7** |
| | baz=358 | | | | | | | |
| OHAK | | | | S | | **Sn** | **20 32 50.9** | **-5.1** |
| | baz=358 | | | | | | | |
| **CAST** | **Castle Rocks** | **3.16** | **13** | | | **Pn** | **20 32 16.2** | **-0.3** |
| **CAST** | **Castle Rocks** | **3.16** | **13** | P | | **Pn** | **20 32 16.2** | **-0.3** |
| | baz=193,SNR=816 | | | | | | | |
| CAST | | | | S | | **Sn** | **20 32 54.8** | **-1.6** |
| | baz=193 | | | | | | | |
| **GLI** | **Glacier Island** | **3.27** | **78** | | | **Pn** | **20 32 15.4** | **-2.4** |
| **GLI** | **Glacier Island** | **3.27** | **78** | P | | **Pn** | **20 32 15.4** | **-2.4** |
| | baz=263 | | | | | | | |
| GLI | | | | S | | **Sn** | **20 32 56.1** | **-2.6** |
| | baz=263 | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.41** | **62** | | | **Pn** | **20 32 18.1** | **-1.5** |
| **SCM** | **Sheep Creek Mo** | **3.41** | **62** | IAML | | | 20 33 02.3 | |
| | comp=N,2μm,0.4s | | | | | | | |
| SCM | | | | IAML | | | 20 33 03.5 | |
| | comp=E,2μm,0.7s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.41** | **62** | P | | **Pn** | **20 32 18.1** | **-1.5** |
| | baz=246,SNR=55 | | | | | | | |
| SCM | | | | S | | **Sn** | **20 32 59.9** | **-2.0** |
| | baz=246 | | | | | | | |
| **KTH** | **Kantishna Hill** | **3.46** | **21** | | | **Pn** | **20 32 19.1** | **-1.0** |
| **KTH** | **Kantishna Hill** | **3.46** | **21** | IAML | | | 20 33 01.3 | |
| | comp=E,390nm,0.6s | | | | | | | |
| KTH | | | | IAML | | | 20 33 03.2 | |
| | comp=N,517nm,0.8s | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.49** | **26** | | | **Pn** | **20 32 19.7** | **-1.0** |
| **TRF** | **Thorofare Moun** | **3.49** | **26** | IAML | | | 20 33 05.7 | |
| | comp=E,643nm,0.9s | | | | | | | |
| TRF | | | | IAML | | | 20 33 06.2 | |
| | comp=N,779nm,0.4s | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.49** | **26** | P | | **Pn** | **20 32 19.6** | **-1.0** |
| | baz=208,SNR=297 | | | | | | | |
| TRF | | | | S | | **Sn** | **20 33 01.0** | **-2.8** |
| | baz=208 | | | | | | | |
| **JPK** | **Jack Peak** | **3.54** | **76** | | | **Pn** | **20 32 19.7** | **-1.4** |
| **FID** | **Port Fidalgo** | **3.56** | **81** | | | **Pn** | **20 32 19.1** | **-2.3** |
| **CHUM** | **Lake Minchumin** | **3.59** | **9** | | | **Pn** | **20 32 21.3** | **-0.4** |
| **CHUM** | **Lake Minchumin** | **3.59** | **9** | P | | **Pn** | **20 32 21.3** | **-0.4** |
| | baz=190,SNR=87 | | | | | | | |
| CHUM | | | | S | | **Sn** | **20 33 03.9** | **-1.9** |
| | baz=190 | | | | | | | |
| **VMT** | **TAPS TI Valdez** | **3.65** | **75** | | | **Pn** | **20 32 21.4** | **-1.0** |
| **Q23K** | **Middleton Isla** | **3.79** | **101** | S | | **Sn** | **20 33 08.2** | **-2.0** |
| | baz=287 | | | | | | | |
| **RND** | **Reindeer** | **3.81** | **35** | | | **Pn** | **20 32 23.3** | **-1.3** |
| **RND** | **Reindeer** | **3.81** | **35** | IAML | | | 20 33 09.9 | |
| | comp=N,670nm,0.4s | | | | | | | |
| RND | | | | IAML | | | 20 33 11.5 | |
| | comp=E,871nm,0.4s | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.82** | **184** | | | **Sn** | **20 33 06.0** | **-5.0** |
| **J20K** | **Nowinta River** | **3.84** | **357** | | | **Pn** | **20 32 24.9** | **+0.1** |
| **J20K** | **Nowinta River** | **3.84** | **357** | P | | **Pn** | **20 32 25.2** | **+0.4** |
| | baz=176,SNR=696 | | | | | | | |
| J20K | | | | S | | **Sn** | **20 33 10.2** | **-1.1** |
| | baz=176 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.92** | **84** | | | **Pn** | **20 32 24.4** | **-1.4** |
| **EYAK** | **Cordova Ski Ar** | **3.92** | **84** | P | | **Pn** | **20 32 25.4** | **-0.5** |
| | baz=270,SNR=29 | | | | | | | |
| EYAK | | | | S | | **Sn** | **20 33 10.9** | **-2.1** |
| | baz=270 | | | | | | | |
| **KLU** | **Klutina** | **3.94** | **70** | | | **Pn** | **20 32 25.0** | **-1.2** |
| KLU | | | | | | **Sn** | **20 33 11.5** | **-2.2** |
| **KLU** | **Klutina** | **3.94** | **70** | P | | **Pn** | **20 32 25.1** | **-1.2** |
| | baz=256,SNR=376 | | | | | | | |
| KLU | | | | S | | **Sn** | **20 33 11.6** | **-2.2** |
| | baz=256 | | | | | | | |
| **DIV** | **Divide** | **3.94** | **75** | | | **Pn** | **20 32 25.0** | **-1.2** |
| **BPAW** | **Bear Paw Mtn.** | **3.96** | **17** | | | **Pn** | **20 32 25.0** | **-1.3** |
| **BPAW** | **Bear Paw Mtn.** | **3.96** | **17** | IAML | | | 20 33 11.7 | |
| | comp=N,460nm,0.8s | | | | | | | |
| BPAW | | | | IAML | | | 20 33 12.7 | |
| | comp=E,338nm,0.7s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **3.96** | **17** | P | | **Pn** | **20 32 25.0** | **-1.3** |
| | baz=199,SNR=23 | | | | | | | |
| BPAW | | | | S | | **Sn** | **20 33 10.1** | **-4.0** |
| | baz=199 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.02** | **61** | | | **Pn** | **20 32 26.8** | **-0.4** |
| **M24K** | **Tolsona, Glenn** | **4.02** | **61** | IAML | | | 20 33 16.5 | |
| | comp=E,1μm,0.8s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.02** | **61** | P | | **Pn** | **20 32 26.8** | **-0.4** |
| | baz=246,SNR=78 | | | | | | | |
| M24K | | | | S | | **Sn** | **20 33 15.0** | **-0.4** |
| | baz=246 | | | | | | | |
| **MCK** | **McKinley** | **4.05** | **31** | | | **Pn** | **20 32 26.4** | **-1.0** |
| **MCK** | **McKinley** | **4.05** | **31** | IAML | | | 20 33 15.4 | |
| | comp=E,573nm,0.4s | | | | | | | |
| MCK | | | | IAML | | | 20 33 18.1 | |
| | comp=N,695nm,0.5s | | | | | | | |
| **MCK** | **McKinley** | **4.05** | **31** | P | | **Pn** | **20 32 26.5** | **-1.0** |
| | baz=214,SNR=203 | | | | | | | |
| MCK | | | | S | | **Sn** | **20 33 13.8** | **-2.3** |
| | baz=214 | | | | | | | |
| **BWN** | **Browne** | **4.30** | **25** | | | **Pn** | **20 32 30.1** | **-0.5** |
| **BWN** | **Browne** | **4.30** | **25** | IAML | | | 20 33 27.1 | |
| | comp=N,508nm,0.6s | | | | | | | |
| BWN | | | | IAML | | | 20 33 27.2 | |
| | comp=E,420nm,0.5s | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.32** | **63** | | | **Pn** | **20 32 30.6** | **-0.3** |
| **BMRM** | **Bremner River** | **4.49** | **78** | | | **Pn** | **20 32 32.5** | **-0.7** |
| **BMRM** | **Bremner River** | **4.49** | **78** | P | | **Pn** | **20 32 32.1** | **-1.1** |
| | baz=266,SNR=49 | | | | | | | |
| BMRM | | | | S | | **Sn** | **20 33 23.7** | **-2.6** |
| | baz=266 | | | | | | | |
| **HARP** | **HAARP** | **4.57** | **60** | | | **Pn** | **20 32 34.1** | **+0.1** |
| **HARP** | **HAARP** | **4.57** | **60** | P | | **Pn** | **20 32 34.2** | **+0.1** |
| | baz=246,SNR=136 | | | | | | | |
| HARP | | | | S | | **Sn** | **20 33 27.7** | **-0.2** |
| | baz=246 | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.58** | **70** | | | **Pn** | **20 32 33.6** | **-0.7** |
| **N25K** | **Chitina, Valde** | **4.58** | **70** | P | | **Pn** | **20 32 33.7** | **-0.7** |
| | baz=257,SNR=186 | | | | | | | |
| N25K | | | | S | | **Sn** | **20 33 26.2** | **-2.2** |
| | baz=257 | | | | | | | |
| **KAIM** | **Kayak Island** | **4.64** | **91** | P | | **Pn** | **20 32 34.2** | **-0.8** |
| | baz=279 | | | | | | | |
| **GCSA** | **Galena City Sc** | **4.65** | **343** | | | **Pn** | **20 32 35.3** | **+0.3** |
| **GCSA** | **Galena City Sc** | **4.65** | **343** | P | | **Pn** | **20 32 35.5** | **+0.4** |
| | baz=159,SNR=21 | | | | | | | |
| **HMT** | **Hamilton** | **4.67** | **86** | | | **Pn** | **20 32 35.2** | **-0.2** |
| **CHIR** | **Chirikof Islan** | **4.67** | **194** | P | | **Pn** | **20 32 32.1** | **-3.3** |
| | baz=13 | | | | | | | |
| **PAX** | **Paxson** | **4.70** | **53** | | | **Pn** | **20 32 35.5** | **-0.4** |
| **PAX** | **Paxson** | **4.70** | **53** | P | | **Pn** | **20 32 35.4** | **-0.4** |
| | baz=239,SNR=99 | | | | | | | |
| **NEA2** | **Nenana** | **4.75** | **25** | | | **Pn** | **20 32 34.8** | **-1.6** |
| **NEA2** | **Nenana** | **4.75** | **25** | IAML | | | 20 33 31.4 | |
| | comp=E,219nm,0.7s | | | | | | | |
| NEA2 | | | | IAML | | | 20 33 31.6 | |
| | comp=N,178nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** | **4.75** | **25** | P | | **Pn** | **20 32 34.6** | **-1.8** |
| | baz=208,SNR=88 | | | | | | | |
| **CHGN** | **Chignik** | **4.78** | **214** | Pn | | **Pn** | **20 32 34.1** | **-2.6** |
| CHGN | | | | IAML | | | 20 33 30.4 | |
| | comp=N,421nm,0.7s | | | | | | | |
| CHGN | | | | IAML | | | 20 33 45.9 | |
| | comp=E,510nm,0.1s | | | | | | | |
| **CHGN** | **Chignik** | **4.78** | **214** | P | | **Pn** | **20 32 34.1** | **-2.6** |
| | baz=30 | | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.82** | **87** | | | **Pn** | **20 32 36.6** | **-0.8** |
| **PS10** | **TAPS Pump St10** | **4.83** | **47** | | | **Pn** | **20 32 38.2** | **+0.7** |
| **WRH** | **Wood River Hil** | **4.87** | **30** | | | **Pn** | **20 32 36.4** | **-1.5** |
| **WRH** | **Wood River Hil** | **4.87** | **30** | IAML | | | 20 33 33.8 | |
| | comp=E,311nm,0.5s | | | | | | | |
| WRH | | | | IAML | | | 20 33 37.7 | |
| | comp=N,227nm,0.6s | | | | | | | |
| **MLY** | **Manley** | **4.88** | **15** | | | **Pn** | **20 32 36.6** | **-1.5** |
| **I21K** | **Tanana** | **4.90** | **8** | | | **Pn** | **20 32 37.5** | **-0.8** |
| **GLB** | **Gilahina Butte** | **4.93** | **73** | | | **Pn** | **20 32 38.

baz=252,SNR=224
M26K S Sn 20 33 47.4 -2.5
baz=252
PS07 TAPS Pump Stn7 5.55 24 Pn 20 32 45.7 -1.0
POKR Poker Plat Res 5.56 28 Pn 20 32 45.8 -1.0
POKR Poker Plat Res 5.56 28 P Pn 20 32 45.9 -1.0
baz=213,SNR=266
POKR S Sn 20 33 46.6 -4.4
baz=213
L26K Log Cabin Wild 5.59 57 P Pn 20 32 47.6 +0.4
baz=245
KIAG Kiagna River 5.59 79 Pn 20 32 47.2 -0.2
DOT Dot Lake 5.59 50 Pn 20 32 46.6 -0.7
BALM Baldy 5.60 78 Pn 20 32 47.3 -0.1
ISLE Juniper Island 5.60 83 Pn 20 32 47.3 -0.2
IM03 5.65 360 Pn 20 32 47.9 -0.1
IMAR Indian Mountai 5.65 360 Pn Pn 20 32 47.4 -0.5
J25K Salcha River, 5.74 38 Pn 20 32 48.5 -0.6
J25K Salcha River, 5.74 38 P Pn 20 32 48.6 -0.6
baz=225,SNR=366
J25K S Sn 20 33 51.4 -3.8
baz=225
PS06 TAPS Pump Stn6 5.80 16 Pn 20 32 48.7 -1.2
SCRK Sand Creek 5.80 47 Pn 20 32 49.0 -1.1
SCRK Sand Creek 5.80 47 P Pn 20 32 48.9 -1.1
baz=235,SNR=168
SCRK S Sn 20 33 52.3 -4.4
baz=235
MESA MESA 5.83 87 Pn 20 32 50.9 +0.4
MESA MESA 5.83 87 P Pn 20 32 50.9 +0.4
baz=276,SNR=13
MESA S Sn 20 33 54.9 -2.6
baz=276
YAH Yahtse 5.91 85 Pn 20 32 51.8 +0.2
BARN Barnard Glacie 5.93 78 Pn 20 32 51.9 0.0
M27K Edge Creek, AK 6.01 65 Pn 20 32 53.4 +0.6
H24K Noodor Dome 6.09 23 Pn 20 32 52.1 -1.7
H24K Noodor Dome 6.09 23 P Pn 20 32 52.4 -1.4
baz=208,SNR=172
H24K S Sn 20 34 00.3 -3.0
baz=208
TABL Table Mountain 6.20 84 Pn 20 32 55.2 -0.2
L27K Beaver Creek, 6.24 59 Pn 20 32 56.0 +0.3
L27K Beaver Creek, 6.24 59 P Pn 20 32 56.0 +0.3
baz=249,SNR=85
BC03 6.26 59 Pn 20 32 56.3 +0.4
BCAR Beaver Creek A 6.26 59 Pn Pn 20 32 56.0 0.0
J26L Joseph Creek 6.26 44 Pn 20 32 54.7 -1.3
J26L Joseph Creek 6.26 44 P Pn 20 32 55.0 -1.0
baz=232,SNR=518
J26L S Sn 20 34 02.7 -4.7
baz=232
PRP Porcupine Dome 6.37 32 Pn 20 32 55.5 -1.9
PRP Porcupine Dome 6.37 32 P Pn 20 32 56.1 -1.3
baz=219,SNR=10
PRP S Sn 20 34 05.8 -4.2
baz=219
YUK2 White River 6.38 71 Pn 20 32 57.7 +0.1
BVCY Beaver Creek 6.48 66 P Pn 20 32 59.5 +0.6
baz=257,SNR=58
YUK3 Moose Creek 6.56 72 Pn 20 33 00.2 +0.1
YUK3 Moose Creek 6.56 72 P Pn 20 33 00.1 +0.1
baz=263,SNR=73
YUK3 S Sn 20 34 12.3 -2.4
baz=263
PS05 TAPS Pump Stn5 6.62 10 Pn 20 32 59.6 -0.9
PCA Pinnacle 6.68 86 Pn 20 33 01.6 +0.1
PINM Pinnacle 6.68 86 P Pn 20 33 01.6 0.0
baz=278,SNR=12
PINM S Sn 20 34 13.9 -3.5
baz=278
ANM Nome 6.88 313 Pn 20 33 04.0 0.0
COLD Coldfoot 7.06 11 Pn 20 33 05.1 -1.2
COLD Coldfoot 7.06 11 P Pn 20 33 05.2 -1.2
baz=194,SNR=18
PNL Peninsula 7.18 89 Pn 20 33 07.6 -0.5
PNL Peninsula 7.18 89 P Pn 20 33 07.8 -0.2
baz=281
EGAK Eagle 7.27 47 Pn 20 33 08.3 -0.8
EGAK Eagle 7.27 47 P Pn 20 33 08.4 -0.7
baz=238
FYU Fort Yukon 7.28 28 Pn 20 33 07.4 -1.8
YUK4 Talbot Arm 7.40 76 P Pn 20 33 11.3 +0.3
baz=268,SNR=9.8
YUK6 Outpost Mounta 7.54 79 P Pn 20 33 12.7 -0.2
baz=272
DAWY Dawson 7.63 55 Pn 20 33 14.3 +0.5
DAWY Dawson 7.63 55 P Pn 20 33 14.2 +0.4
baz=247,SNR=82
HYT Haines Junctio 7.96 80 Pn Pn 20 33 18.2 -0.2
HYT Haines Junctio 7.96 80 P Pn 20 33 19.1 +0.7
baz=273,SNR=13
BM03 Burnt Mountain 8.12 25 Pn 20 33 18.5 -1.8
BMAR Burnt Mountain 8.14 25 Pn Pn 20 33 18.4 -2.1
BM01 Burnt Mountain 8.17 25 Pn 20 33 19.0 -1.9
J29M Klondike Camp 8.25 54 Pn 20 33 20.0 -2.0
J29M Klondike Camp 8.25 54 P Pn 20 33 21.2 -0.9
baz=247
TNA Tin City 8.32 315 Pn Pn 20 33 23.7 +0.8
TNA Tin City 8.32 315 P Pn 20 33 24.5 +1.6
baz=122,SNR=9.1
TOLK Toolik Lake Re 8.50 10 Pn 20 33 25.3 0.0
TOLK Toolik Lake Re 8.50 10 P Pn 20 33 25.2 0.0
baz=193
I29M Ogilvie Camp, 8.61 48 Pn 20 33 26.1 -0.6
I29M Ogilvie Camp, 8.61 48 P Pn 20 33 26.6 -0.1
baz=241
RDOG Red Dog Mine 8.71 336 P Pn 20 33 28.8 +0.9
baz=148
N31M Braeburn, Yuko 8.78 75 Pn 20 33 28.9 +0.1
N31M Braeburn, Yuko 8.78 75 P Pn 20 33 28.8 -0.1
baz=270,SNR=8.3
MAYO Mayo, Yukon 8.96 61 P Pn 20 33 31.6 +0.4
baz=256
GAMB Gambell 9.13 300 Pn 20 33 34.1 +0.7
GAMB Gambell 9.13 300 P Pn 20 33 34.2 +0.8
baz=104
SKAG Skagway 9.25 88 Pn 20 33 29.7 -5.3
SKAG Skagway 9.25 88 P Pn 20 33 35.1 +0.1
baz=283
WHY Whitehorse 9.26 80 Pn 20 33 34.9 -0.4
WHY Whitehorse 9.26 80 P Pn 20 33 35.0 -0.4
baz=276,SNR=18
M31M Drury Creek, Y 9.45 70 P Pn 20 33 38.1 +0.4
baz=267
UNV Unalaska Valle 9.55 233 Pn Pn 20 33 36.6 -2.4
BESE Bessie Mountai 9.73 92 Pn Pn 20 33 41.6 +0.2
FARO Faro, Yukon 9.94 70 P Pn 20 33 44.9 +0.9
baz=268
JIS Juneau Island 10.06 94 Pn 20 33 44.9 -0.7
P33M Teslin, Yukon 10.34 82 Pn Pn 20 33 48.9 -0.4
P33M Teslin, Yukon 10.34 82 P Pn 20 33 49.8 +0.5
baz=280,SNR=14
MMPY Sheldon Lake, 10.92 68 P Pn 20 33 57.8 +1.0
baz=268,SNR=9.2
A21K Barrow 11.08 355 Pn Pn 20 33 57.9 -0.7
INK Inuvik 11.76 39 P Pn 20 34 06.4 -1.0
comp=E,3.8nm,0.3s,baz=233,slow=16,SNR=63
INK S Sn 20 36 14.0 -3.9
baz=344,slow=26,SNR=5.0
INK Inuvik 11.76 39 P Pn 20 34 06.7 -0.7
baz=237,SNR=20
DLBC Dease Lake 12.17 89 P Pn 20 34 14.4 +1.6
comp=E,1.0nm,0.3s,baz=278,slow=8.8,SNR=25
DLBC S Sn 20 36 26.0 -2.2
comp=E,0.3nm,0.3s,baz=358,slow=19,SNR=1.7
DLBC Dease Lake 12.17 89 P Pn 20 34 14.2 +1.3
C36M Paulatuk 15.29 42 P Pn 20 34 49.9 -1.5
C36M Paulatuk 15.29 42 P Pn 20 34 50.3 -1.1
baz=248,SNR=45
A36M Sachs Harbour 16.12 32 P P 20 35 01.1 -0.1
A36M Sachs Harbour 16.12 32 P P 20 35 00.8 -0.4
baz=238,SNR=16
BBB Bella Bella 16.28 109 P Pn 20 35 06.3 +2.7
comp=E,2.2nm,0.3s,baz=307,slow=14,SNR=9.0
YKA Yellowknife Ar 18.60 66 P P 20 35 29.4 +1.0
comp=E,2.5nm,0.3s,baz=279,slow=11,SNR=316
YKA S S 20 38 49.3 -0.9
baz=281,slow=19,SNR=5.8
YKA ScP ScP 20 43 04.4 -1.2
comp=E,0.1nm,0.3s,baz=289,slow=2.3,SNR=19
YKA Yellowknife Ar 18.60 66 P P 20 35 28.9 +0.6
YKA S 20 38 49.0 -1.1
YKA ScP 20 43 04.1 -1.5
LLLB Lilooet 20.27 105 P P 20 35 47.4 +0.9

B05A Bryant 21.78 110 P P 20 36 04.6 +2.3
baz=316,SNR=6.2
D03D Eldon 21.85 112 P P 20 36 04.9 +1.9
baz=317
C06D Leavenworth 22.59 109 P P 20 36 12.2 +2.2
baz=316
EDM Edmonton 22.89 90 P P 20 36 13.4 +0.8
B08A Colville Reser 23.02 106 P P 20 36 15.2 +1.2
LTY Liberty 23.18 110 P P 20 36 13.3 -2.0
F05D White Salmon 23.83 113 P P 20 36 23.0 +1.8
baz=319
C09A Chrisman Ranch 23.92 106 P P 20 36 23.4 +1.3
C09A IAmb IAmb 20 36 25.1
comp=Z,11nm,0.8s
E07A Sunnyside 24.07 110 P P 20 36 25.9 +2.5
D08A Wollman Farm, 24.14 108 P P 20 36 23.1 -1.0
D08A IAmb IAmb 20 36 29.3
comp=Z,13nm,0.7s
NEW Newport 24.15 104 P P 20 36 26.1 +1.9
comp=Z,8.8nm,0.5s,baz=321,slow=7.8,SNR=20
NEW Newport 24.15 104 P P 20 36 26.0 +1.8
NEW IAmb IAmb 20 36 27.3
comp=Z,16nm,1.1s
NEW Newport 24.15 104 P P 20 36 26.5 +2.3
baz=314,SNR=10
E08A Dider Farm, El 24.49 109 P P 20 36 28.8 +1.6
E08A IAmb IAmb 20 36 32.4
comp=Z,9.6nm,0.7s
E09A Wood Farm, Sta 24.91 108 P P 20 36 29.0 -2.0
E09A IAmb IAmb 20 36 33.5
comp=Z,10.0nm,0.7s
SEY Seymchan 25.13 299 P P 20 36 32.1 -0.7
comp=Z,1.6nm,0.6s,baz=92,slow=12,SNR=5.7
RES Resolute Bay 25.17 32 P P 20 36 33.3 +0.2
comp=Z,1.5nm,0.5s,baz=261,slow=8.8,SNR=7.5
RES Resolute Bay 25.17 32 P P 20 36 32.3 -0.8
WALA Waterton Lakes 25.18 99 P P 20 36 31.7 -1.8
WALA IAmb IAmb 20 36 35.9
comp=Z,7.7nm,0.5s
F10A Beach Ranch, E 25.73 108 P P 20 36 40.3 +1.7
F10A IAmb IAmb 20 36 41.5
comp=Z,14nm,0.7s
JTMT Jette 25.89 101 P P 20 36 37.0 -3.0
J05D Fort Rock, OR 25.94 117 P P 20 36 43.4 +2.9
baz=323
L04D Klamath Falls 26.33 119 P P 20 36 46.3 +2.3
baz=324
BMO Blue Mountains 26.53 109 P P 20 36 47.4 +1.7
BMO IAmb IAmb 20 36 49.1
comp=Z,10nm,0.7s
YBH Yreka Blue Hor 26.55 121 P P 20 36 49.3 +3.4
comp=Z,5.3nm,0.7s,baz=342,slow=5.9,SNR=12
M04C Macdoel 26.88 119 P P 20 36 50.8 +1.8
baz=325
PLID Pearl Lake 26.97 107 P P 20 36 51.4 +1.6
PETK Petropavlovsk- 27.09 276 P P 20 36 49.9 -0.6
comp=Z,1.4nm,0.4s,baz=64,slow=13,SNR=8.1
MA2 Magadan 27.14 293 P P 20 36 50.8 0.0
MA2 IAmb IAmb 20 36 55.0
comp=Z,7.2nm,0.8s
N02D Trinity Center 27.18 122 P P 20 36 53.7 +2.2
baz=326
MOD Modoc Plateau 27.46 117 P P 20 36 56.1 +2.0
MOD IAmb IAmb 20 36 57.4
comp=Z,5.0nm,0.7s
HRY Holter Researc 27.81 100 P P 20 36 58.0 +0.9
EGMT Eagleton 27.92 96 P P 20 36 59.1 +1.1
baz=313
MCMT McKenzie Canyo 28.67 104 P P 20 37 03.3 -1.6
BOZ Bozeman (W) 28.70 102 P P 20 37 06.9 +1.9
baz=316
BCYI Bear Canyon 28.79 106 P P 20 37 04.0 -1.9
HLID Hailey 28.87 108 P P 20 37 05.4 -1.1
HLID Hailey 28.87 108 P P 20 37 08.8 +2.2
baz=319,SNR=8.4
FCC Fort Churchill 29.33 67 P P 20 37 11.1 +0.8
FCC IAmb IAmb 20 37 12.7
comp=Z,13nm,0.9s
QLMT Earthquake Lak 29.35 103 P P 20 37 09.8 -1.1
YHH Holmes Hill 29.67 102 P P 20 37 15.9 +2.2
YHH IAmb IAmb 20 37 17.2
comp=Z,9.5nm,0.7s
YMR Madison River 29.70 102 P P 20 37 16.6 +2.7
YMR IAmb IAmb 20 37 17.6
comp=Z,11nm,0.7s
MPK Martis Peak 29.71 120 P P 20 37 11.9 -2.3
YNR Norris Junctio 29.80 102 P P 20 37 13.2 -1.7
YNR IAmb IAmb 20 37 19.1
comp=Z,7.1nm,1.0s
EMB Emerald Bay 29.95 120 P P 20 37 14.0 -2.2
EMB IAmb IAmb 20 37 19.1
comp=Z,9.1nm,0.5s
H17A Grant Village 30.09 102 P P 20 37 19.4 +2.0
baz=317
RLMT Red Lodge 30.20 100 P P 20 37 16.1 -2.2
RLMT Red Lodge 30.20 100 P P 20 37 20.9 +2.6
baz=316,SNR=17
FLWY Flagg Ranch 30.26 103 P P 20 37 15.9 -2.9
DGMT Dagmar 30.38 90 P P 20 37 21.4 +1.7
baz=312
MOOW Moose Ponds 30.48 103 P P 20 37 19.6 -1.3
TPAW Teton Pass 30.58 104 P P 20 37 20.0 -1.8
LAO LASA Array 30.59 95 P P 20 37 23.6 +2.0
baz=314
CMB Columbia Colle 30.61 122 P P 20 37 18.6 -3.2
ELK Elko 30.67 112 P P 20 37 21.8 -0.8
ELK IAmb IAmb 20 37 26.4
comp=Z,11nm,0.9s
SNOW Snow King Moun 30.69 104 P P 20 37 18.8 -4.0
REDW Red Top Meadow 30.72 104 P P 20 37 19.3 -3.7
REDW IAmb IAmb 20 37 26.8
comp=Z,9.1nm,0.8s
KVN Kaiserville 30.75 118 P P 20 37 20.3 -3.0
KVN IAmb IAmb 20 37 26.4
comp=Z,5.0nm,0.6s
RYN Ryan 30.92 119 P P 20 37 22.8 -1.8
RYN IAmb IAmb 20 37 28.0
comp=Z,4.7nm,0.7s
TIXI Tiksi 31.00 323 P P 20 37 23.3 -1.5
HVU Hansel Valley 31.01 108 P P 20 37 23.1 -2.4
HVU IAmb IAmb 20 37 28.9
comp=Z,4.9nm,0.7s
NVAR Mina Array Bea 31.18 119 P P 20 37 29.6 +2.6
comp=Z,5.7nm,0.7s,baz=313,slow=9.0,SNR=47
NVAR ScP ScP 20 43 42.4 +0.7
comp=Z,0.9nm,0.9s,baz=290,slow=2.7,SNR=4.6
NVAR Mina Array Bea 31.18 119 P P 20 37 29.0 +1.9
NV11 Mina Array Sit 31.24 118 P P 20 37 29.5 +2.0
NV11 IAmb IAmb 20 37 30.6
comp=Z,5.5nm,0.6s
BW06 Boulder Array 31.79 103 P P 20 37 34.2 +1.8
BW06 Boulder Array 31.79 103 P P 20 37 33.8 +1.4
baz=319
PD31 Pinedale Array 31.79 103 P P 20 37 31.0 -1.3
PDAR Pinedale Array 31.79 103 P P 20 37 34.5 +2.2
comp=Z,2.4nm,0.5s,baz=317,slow=5.2,SNR=26
PDAR pP pP 20 38 14.0 +2.8
comp=Z,0.2nm,0.6s,baz=318,slow=6.6,SNR=1.3
PDAR ScP ScP 20 43 42.8 -1.0
comp=Z,0.3nm,0.5s,baz=329,slow=0.5,SNR=5.4
PDAR Pinedale Array 31.79 103 P P 20 37 32.8 +0.5
TPH Tonopah 31.95 118 P P 20 37 31.3 -2.4
R11A Troy Canyon, C 32.45 115 P P 20 37 39.6 +1.6
R11A Troy Canyon, C 32.45 115 P P 20 37 40.3 +2.3
baz=325,SNR=7.2
LCH Last Change Ra 32.46 119 P P 20 37 37.8 -0.4
SPR3 Spring Creek 3 32.49 113 P P 20 37 36.4 -2.1
SPR3 IAmb IAmb 20 37 43.0
comp=Z,7.8nm,0.8s
NLU North Lily Min 32.77 110 P P 20 37 39.5 -1.3
NLU IAmb IAmb 20 37 44.0
comp=Z,10nm,0.7s
CWC Cottonwood Cre 32.94 120 P P 20 37 45.3 +3.0
baz=328
S11A Rachel 32.96 116 P P 20 37 39.7 -2.8
MDND Maddock 33.08 87 P P 20 37 41.9 -1.3
MDND Maddock 33.08 87 P P 20 37 44.4 +1.2
baz=312,SNR=6.0
PSUT Pine Spring 33.08 113 P P 20 37 40.9 -2.7
PSUT IAmb IAmb 20 37 46.8
comp=Z,11nm,0.6s
SMMC Simmler 33.10 124 P P 20 37 46.4 +2.8
baz=330
TPNV Topopah Spring 33.31 118 P P 20 37 43.9 -1.7
TPNV Topopah Spring 33.31 118 P P 20 37 48.1 +2.6

baz=327
ULM Lac du Bonnet 33.34 81 P P 20 37 47.0 +1.6
comp=Z,8.9nm,0.5s,baz=306,slow=10.0,SNR=9.3
ULM Lac du Bonnet 33.34 81 P P 20 37 43.7 -1.7
ULM IAmb IAmb 20 37 47.4
comp=Z,11nm,0.5s
K22A Casper 33.36 100 P P 20 37 47.5 +1.7
K22A IAmb IAmb 20 37 49.8
comp=Z,6.3nm,0.7s
K22A Casper 33.36 100 P P 20 37 48.3 +2.4
baz=319
ISA Isabella, Lake 33.44 122 P P 20 37 47.9 +1.4
ISA Isabella, Lake 33.44 122 P P 20 37 48.3 +1.8
baz=329
PRN Pahroc Range 33.47 116 P P 20 37 44.9 -2.0
RDMU Red Mountain 33.47 106 P P 20 37 48.2 +1.3
RDMU IAmb IAmb 20 37 51.0
comp=Z,7.3nm,0.8s
RSSD Black Hills 33.49 96 P P 20 37 48.7 +1.6
RSSD IAmb IAmb 20 37 50.4
comp=Z,12nm,0.8s
RSSD Black Hills 33.49 96 P P 20 37 49.1 +2.0
baz=317
PKM Mcpherson Peak 33.54 124 P P 20 37 50.5 +3.0
baz=330,SNR=6.0
RWWY Rawlins 33.75 102 P P 20 37 51.0 +1.7
RWWY IAmb IAmb 20 37 52.2
comp=Z,16nm,0.8s
QSM Queen of Sheba 33.87 119 P P 20 37 52.8 +2.6
QSM IAmb IAmb 20 37 53.8
comp=Z,12nm,1.0s
MSU Marysvale 33.87 111 P P 20 37 45.9 -4.6
P18A Preston Nutter 33.89 108 P P 20 37 47.9 -2.8
LRMC Laurel Mtn Rad 33.93 121 P P 20 37 52.9 +2.1
baz=329
Q16A Castle Valley 34.02 110 P P 20 37 49.3 -2.3
Q16A IAmb IAmb 20 37 55.5
comp=Z,14nm,0.9s
CCUT Cedar City 34.11 114 P P 20 37 51.8 -0.7
SRU San Rafael Swe 34.17 109 P P 20 37 51.2 -1.7
SZCU Shurtz Canyon 34.20 113 P P 20 37 55.3 +2.1
O20A White River Ci 34.45 105 P P 20 37 56.6 +1.3
O20A IAmb IAmb 20 37 58.4
comp=Z,13nm,0.6s
O20A White River Ci 34.45 105 P P 20 37 57.8 +2.5
baz=321
GSC Goldstone, Bar 34.45 120 P P 20 37 53.5 -1.8
GSC IAmb IAmb 20 37 58.8
comp=Z,8.6nm,1.1s
GSC Goldstone, Bar 34.45 120 P P 20 37 57.5 +2.2
baz=328
LCMT Little Creek M 34.60 114 P P 20 37 58.8 +2.2
AGMN Agassiz Nation 34.63 84 P P 20 37 57.5 +0.9
AGMN Agassiz Nation 34.63 84 P P 20 37 58.0 +1.5
baz=312,SNR=8.2
TUQ Turquoise Moun 34.72 119 P P 20 38 00.2 +2.5
baz=328
KNB Kanab 34.79 113 P P 20 37 55.1 -3.1
KNB IAmb IAmb 20 38 02.1
comp=Z,11nm,0.9s
N23A Red Feather La 34.97 102 P P 20 38 01.4 +1.6
baz=320
YAK Yakutsk 34.99 307 P P 20 37 59.3 -0.1
comp=Z,3.1nm,0.3s,baz=96,slow=2.8,SNR=5.4
YAK Yakutsk 34.99 307 IAmb IAmb 20 37 59.8
comp=Z,10.0nm,1.1s
GMRC Granite Mounta 35.39 119 P P 20 38 05.5 +2.2
baz=328
PV23 Carpenter Ridg 35.41 108 P P 20 38 05.5 +1.9
U15A North Rim 35.52 113 P P 20 38 04.8 +0.2
U15A IAmb IAmb 20 38 08.2
comp=Z,10nm,1.1s
PV07 Paradox Valley 35.59 107 P P 20 38 03.6 -1.5
PV07 IAmb IAmb 20 38 08.1
comp=Z,7.3nm,0.6s
PV11 David Mesa, Pa 35.59 108 P P 20 38 05.2 +0.1
SCI2 San Clemente I 35.72 124 P P 20 38 08.6 +2.6
baz=331
PV13 Radium Mtn., P 35.73 108 P P 20 38 08.2 +1.8
PV15 Paradox Valley 35.74 107 P P 20 38 08.0 +1.5
PV15 IAmb IAmb 20 38 09.3
comp=Z,11nm,0.7s
W13A Hualapai Mount 35.91 117 P P 20 38 08.8 +1.0
BELC Belle Mtn. Jos 35.91 120 P P 20 38 09.7 +1.9
baz=329,SNR=5.2
PFO Pinyon Flats O 36.05 121 P P 20 38 10.7 +1.8
baz=329
TPFO Pinon Flats 36.05 121 P P 20 38 10.8 +1.8
baz=329
IRM Iron Mountain 36.15 119 P P 20 38 12.0 +2.3
baz=328,SNR=7.8
BC3 Big Chuckawall 36.44 120 P P 20 38 14.1 +1.9
baz=329
PDMCI Parker Dam,Lak 36.46 118 P P 20 38 14.8 +2.6
baz=328
MVCO Mesa Verde 36.64 108 P P 20 38 15.7 +1.6
baz=324
MONP2 Monument Peak 36.68 122 P P 20 38 16.8 +2.5
baz=330
WUAZ Wupatki 36.69 113 P P 20 38 15.4 +1.0
WUAZ Wupatki 36.69 113 P P 20 38 17.2 +2.8
baz=326,SNR=12
OGNE Ogallala 36.85 98 P P 20 38 17.6 +2.0
baz=320
Q24A Divide 36.85 103 P P 20 38 17.9 +2.0
baz=322
S22A 4UR Ranch, Cre 37.01 106 P P 20 38 18.4 +1.2
S22A 4UR Ranch, Cre 37.01 106 P P 20 38 19.3 +2.1
baz=323
EYMN Ely 37.02 81 P P 20 38 17.7 +0.9
baz=313
IKP In-Ko-Pah, Jac 37.02 121 P P 20 38 19.5 +2.4
baz=330
FRB Frobisher Bay 37.25 47 P P 20 38 19.0 +0.5
comp=Z,9.7nm,0.6s,baz=303,slow=8.7,SNR=19
ECSD EROS Data Cent 37.46 90 P P 20 38 21.6 +1.0
ECSD IAmb IAmb 20 38 22.6
comp=Z,5.6nm,0.5s
ECSD EROS Data Cent 37.46 90 P P 20 38 21.5 +0.9
baz=317,SNR=5.2
X16A Lo Mia Camp, P 37.57 114 P P 20 38 22.2 +0.3
SDCO Great Sand Dun 37.64 105 P P 20 38 21.4 -1.2
SDCO Great Sand Dun 37.64 105 P P 20 38 24.9 +2.4
baz=323,SNR=8.5
KSCO Kaye Shedlock' 38.04 101 P P 20 38 27.7 +2.0
baz=321
X18A Snowflake 38.16 113 P P 20 38 25.8 -1.0
X18A IAmb IAmb 20 38 30.4
comp=Z,14nm,1.2s
SPMN Marine on St. 38.28 85 P P 20 38 29.3 +1.9
baz=316
BGNE Belgrade 38.41 94 P P 20 38 27.4 -1.3
BGNE Belgrade 38.41 94 P P 20 38 30.7 +2.0
baz=319
T25A Trinidad 38.65 104 P P 20 38 33.0 +2.1
baz=323
I37A Lemond, Waseca 38.85 87 P P 20 38 33.3 +1.1
ANMO Albuquerque 39.44 108 ScP ScP 20 44 12.5 +0.8
comp=Z,1.9nm,0.8s,baz=312,slow=2.0,SNR=4.7
ANMO Albuquerque 39.44 108 P P 20 38 39.4 +1.9
baz=325
CBKS Cedar Bluff 39.61 98 P P 20 38 40.7 +2.1
baz=321
TUC Tucson 39.64 115 P P 20 38 41.2 +2.3
baz=328
BNM Barren Site 40.01 109 P P 20 38 40.2 -2.0
N35A Tabor 40.07 92 P P 20 38 43.0 +0.7
121A Cookes Peak, D 40.82 112 P P 20 38 44.2 -4.5
121A Cookes Peak, D 40.82 112 P P 20 38 51.0 +2.3
baz=327
JFWS Jewell Farm 41.22 85 P P 20 38 52.2 +0.5
baz=318
L40A Anamosa 41.37 87 P P 20 38 53.6 +0.8
SPITS Spitsbergen Ar 41.58 3 P P 20 38 54.0 -0.1
comp=Z,9.5nm,0.9s,baz=8.3,slow=11,SNR=8.0
AMTX Amarillo 41.77 104 P P 20 38 58.3 +1.9
AMTX IAmb IAmb 20 38 59.6
comp=Z,15nm,1.1s
AMTX Amarillo 41.77 104 P P 20 38 58.2 +1.9
baz=324
MSTX Muleshoe 41.99 105 P P 20 38 59.5 +1.3
MSTX IAmb IAmb 20 39 00.9
comp=Z,17nm,0.9s
MSTX Muleshoe 41.99 105 P P 20 39 00.2 +2.1
baz=325
MNTX Cornudas Mount 42.63 110 P P 20 39 03.7 +0.5

MNTX IAmb IAmb 20 39 06.6
comp=Z,7.8nm,0.7s
**MNTX Cornudas Mount 42.63 110** P **P** **20 39 05.7 +2.5**
baz=327,SNR=14
**P40A Paris 42.87 90** P **P** **20 39 05.6 +0.6**
P40A IAmb IAmb 20 39 07.1
comp=Z,28nm,1.2s
**WMOK Wichita Mounta 43.30 101** P **P** **20 39 10.0 +1.5**
baz=324,SNR=9.8
**HDIL Hopedale 43.46 87** P **P** **20 39 10.7 +1.0**
baz=319
**SCHQ Schefferville 43.64 57** P **P** **20 39 11.5 +0.5**
comp=Z,3.6nm,0.4s,baz=309,slow=6.8,SNR=27
**VLDQ Val d'Or 43.66 71** P **P** **20 39 08.4 -2.8**
VLDQ IAmb IAmb 20 39 11.1
comp=Z,12nm,0.6s
**W35A Tecumseh 43.90 99** P **P** **20 39 14.5 +1.2**
W35A IAmb IAmb 20 39 15.2
comp=Z,17nm,0.6s
**U38A Gravette 44.11 95** P **P** **20 39 13.8 -1.2**
U38A IAmb IAmb 20 39 16.2
comp=Z,11nm,0.8s
**CCM Cathedral Cave 44.41 91** P **P** **20 39 17.4 +0.1**
baz=321
**ABTX Abilene, Hawle 44.59 103** P **P** **20 39 20.3 +1.4**
baz=325
**U40A Yellville 44.94 94** P **P** **20 39 22.2 +0.7**
baz=322
**W39A Magazine 45.39 96** P **P** **20 39 24.9 -0.2**
baz=323
**TX31 Lajitas Ar. Si 45.41 110** P **P** **20 39 26.1 +0.6**
TX31 IAmb IAmb 20 39 28.5
comp=Z,13nm,0.9s
**TX32 Lajitas Array 45.41 110** P **P** **20 39 27.1 +1.7**
**TXAR Lajitas Array 45.41 110** P **P** **20 39 27.5 +2.0**
comp=Z,3.9nm,0.8s,baz=328,slow=6.1,SNR=31
TXAR ScP **ScP** **20 44 36.3 +0.6**
comp=Z,0.7nm,0.9s,baz=219,slow=1.2,SNR=4.4
**TXAR Lajitas Array 45.41 110** P **P** **20 39 27.0 +1.6**
**OLIL Olney 45.44 88** P **P** **20 39 25.9 +0.5**
OLIL IAmb IAmb 20 39 27.1
comp=Z,26nm,0.8s
**USRK Ussuriysk Ar. 45.63 284** LR LR 21 00 47.7
comp=Z,167nm,18.4s,baz=166,slow=39
**FCAR Ozark Folk Cen 45.66 94** P **P** **20 39 27.1 -0.1**
**O48B Farmland 45.73 84** P **P** **20 39 27.7 -0.1**
baz=320
**PBMO Poplar Bluff 45.81 91** P **P** **20 39 28.6 +0.3**
**MIAR Mount Ida 46.01 96** P **P** **20 39 30.8 +0.8**
baz=323
**JCT Junction City 46.28 105** P **P** **20 39 33.2 +1.1**
**JCT Junction City 46.28 105** P **P** **20 39 33.9 +1.7**
baz=326,SNR=12
**X40A Basin Creek Fa 46.43 95** P **P** **20 39 33.3 +0.1**
baz=323
**WCI Wyandotte Cave 46.73 87** P **P** **20 39 36.2 +0.7**
baz=321
**ACSO Alum Creek Sta 46.83 82** P **P** **20 39 36.6 +0.4**
baz=320
**ERPA Erie 46.86 78** P **P** **20 39 37.2 +0.7**
baz=319
**M53A WI Miller and 47.04 79** P **P** **20 39 38.5 +0.7**
**M53A WI Miller and 47.04 79** P **P** **20 39 38.8 +1.0**
baz=320,SNR=6.6
**WVNY West Valley, N 47.31 77** P **P** **20 39 40.8 +0.8**
WVNY IAmb IAmb 20 39 41.8
comp=Z,21nm,0.8s
**M54A Oil Creek Stat 47.48 78** P **P** **20 39 39.6 -1.7**
M54A IAmb IAmb 20 39 43.0
comp=Z,28nm,0.9s
**M54A Oil Creek Stat 47.48 78** P **P** **20 39 42.3 +1.0**
baz=320
**Q51A Peebles 47.57 83** P **P** **20 39 42.5 +0.5**
**WVT Waverly 47.61 90** P **P** **20 39 43.6 +1.3**
baz=322
**O53A New Philadelph 47.68 81** P **P** **20 39 43.2 +0.4**
O53A IAmb IAmb 20 39 43.9
comp=Z,20nm,1.2s
**O53A New Philadelph 47.68 81** P **P** **20 39 43.2 +0.4**
baz=320
**P52A Corning 47.70 82** P **P** **20 39 43.4 +0.4**
baz=320
**W45A Hickory Valley 47.70 92** P **P** **20 39 42.1 -0.9**
**N54A Moraine State 47.74 79** P **P** **20 39 43.7 +0.5**
baz=320
**M55A Ridgway 47.95 78** P **P** **20 39 45.4 +0.5**
**L56A Greenwood 48.02 76** P **P** **20 39 46.1 +0.6**
**OXF Oxford 48.11 92** P **P** **20 39 47.0 +0.8**
**OXF Oxford 48.11 92** P **P** **20 39 46.9 +0.8**
baz=323,SNR=6.9
**O54A Avella 48.14 80** P **P** **20 39 46.8 +0.4**
O54A IAmb IAmb 20 39 47.7
comp=Z,27nm,0.9s
**Q52A Bidwell 48.16 83** P **P** **20 39 46.1 -0.3**
Q52A IAmb IAmb 20 39 47.1
comp=Z,13nm,0.6s
**P53A Whipple 48.18 81** P **P** **20 39 46.8 +0.1**
**833A Chaparral WMA, 48.28 107** P **P** **20 39 49.9 +2.4**
baz=327
**D62A Allapoint, All 48.29 66** P **P** **20 39 48.0 +0.7**
D62A IAmb IAmb 20 39 48.7
comp=Z,11nm,0.9s
**U49A Red Boiling Sp 48.33 88** P **P** **20 39 48.2 +0.4**
U49A IAmb IAmb 20 39 49.3
comp=Z,7.5nm,0.7s
**V48A Smith Brothers 48.42 89** P **P** **20 39 49.2 +0.7**
**MAT Matsushiro 48.44 273** P **P** **20 39 48.6 -0.1**
**S51A Beattyville 48.53 85** P **P** **20 39 50.2 +0.8**
S51A IAmb IAmb 20 39 50.7
comp=Z,16nm,0.8s
**BINY Binghamton 48.73 75** P **P** **20 39 51.4 +0.6**
BINY IAmb IAmb 20 39 52.5
comp=Z,13nm,0.9s
**BINY Binghamton 48.73 75** P **P** **20 39 51.7 +0.8**
baz=320
**R53A Hurricane 48.80 83** P **P** **20 39 51.4 -0.1**
**MCWV Mont Chateau 48.81 80** P **P** **20 39 52.0 +0.5**
MCWV IAmb IAmb 20 39 52.9
comp=Z,16nm,0.7s
**MCWV Mont Chateau 48.81 80** P **P** **20 39 52.1 +0.7**
baz=321
**M57A Sunshine Farm, 48.84 77** P **P** **20 39 49.7 -2.0**
M57A IAmb IAmb 20 39 53.3
comp=Z,16nm,1.1s
**Q54A Coxs Mills 48.84 81** P **P** **20 39 50.6 -1.1**
Q54A IAmb IAmb 20 39 52.9
comp=Z,13nm,0.7s
**O56A Blue Knob Stat 48.96 79** P **P** **20 39 53.2 +0.6**
baz=320
**SSPA Standing Stone 49.01 78** P **P** **20 39 51.7 -1.2**
SSPA IAmb IAmb 20 39 54.7
comp=Z,18nm,0.6s
**SSPA Standing Stone 49.01 78** P **P** **20 39 53.9 +1.0**
baz=320
**X48A Hartselle 49.33 90** P **P** **20 39 55.5 0.0**
X48A IAmb IAmb 20 39 56.3
comp=Z,9.3nm,0.5s
**TZTN Tazewell 49.41 86** P **P** **20 39 56.9 +0.8**
baz=322
**N58A Sunbury 49.42 77** P **P** **20 39 55.8 -0.3**
N58A IAmb IAmb 20 39 58.2
comp=Z,19nm,0.9s
**N59A State Game Lan 49.82 76** P **P** **20 40 00.0 +0.9**
baz=320
**Z47A Carrollton 49.82 92** P **P** **20 39 57.5 -1.6**
**P57A Homestead Farm 49.84 79** P **P** **20 39 58.1 -1.1**
P57A IAmb IAmb 20 40 00.8
comp=Z,15nm,0.7s
**TKL Tuckaleechee C 50.00 87** P **P** **20 40 00.9 +0.4**
TKL IAmb IAmb 20 40 01.8
comp=Z,9.6nm,0.6s
**L61B Northampton 50.12 72** P **P** **20 40 02.5 +1.2**
baz=320
**Y49A Blount Mountai 50.12 90** P **P** **20 40 01.1 -0.3**
Y49A IAmb IAmb 20 40 02.5
comp=Z,16nm,0.7s
**ARCES ARCESS Array B 50.40 0** P **P** **20 40 04.6 +1.6**
comp=Z,2.2nm,0.9s,baz=7.0,slow=8.2,SNR=1.3
**BLA Blacksburg 50.43 83** P **P** **20 40 04.5 +0.7**
BLA IAmb IAmb 20 40 05.2
comp=Z,13nm,0.8s
**BLA Blacksburg 50.43 83** P **P** **20 40 04.5 +0.7**
baz=322
**V53A Saluda 50.46 86** P **P** **20 40 03.3 -0.7**
V53A IAmb IAmb 20 40 05.4
comp=Z,8.9nm,0.6s
**R58B Mineral 51.09 80** S **20 47 10.1 -1.2**
**KMSC Kings Mountain 51.62 85** P **P** **20 40 13.8 +1.3**
baz=323
**HODGE Hodges 51.88 86** P **P** **20 40 14.6 +0.1**
HODGE IAmb IAmb 20 40 15.7
comp=Z,12nm,0.7s
**W57A Gilead 52.27 84** P **P** **20 40 16.3 -1.0**
W57A IAmb IAmb 20 40 18.2
comp=Z,12nm,0.6s
**KSRS Korea Array 52.78 282** P **P** **20 40 21.8 +0.7**
comp=Z,4.8nm,0.8s,baz=36,slow=7.1,SNR=12
**ULN Ulaanbaatar 54.02 305** P **P** **20 40 30.3 +0.1**
**SONM Songino Array 54.32 305** P **P** **20 40 33.4 +1.1**
comp=Z,4.9nm,0.7s,baz=54,slow=5.9,SNR=22
**SONM Songino Array 54.32 305** P **P** **20 40 32.7 +0.4**
**BJT Baijiatuau 56.32 293** P **P** **20 40 46.2 -0.3**
**ZALV Zalesovo Beam 56.89 323** P **P** **20 40 50.8 +0.5**
comp=Z,2.0nm,0.5s,baz=35,slow=7.2,SNR=5.9
**FINES FINESS Array B 58.53 0** P **P** **20 41 02.3 +0.8**
comp=Z,1.5nm,0.8s,baz=316,slow=5.3,SNR=4.4
FINES PcP **PcP** **20 41 51.1 +1.4**
comp=Z,1.2nm,0.7s,baz=343,slow=4.4,SNR=4.4
**KURK Kurchatov 61.55 325** P **P** **20 41 23.0 +0.8**
**BRVK Borovoye 61.59 332** P **P** **20 41 22.3 -0.2**
**KURBB Kurchatov Arra 61.66 325** P **P** **20 41 23.0 0.0**
comp=Z,1.0nm,0.4s,baz=28,slow=6.2,SNR=5.9
**MK31 Makanchi Array 63.95 321** P **P** **20 41 37.7 -0.5**
**MKAR Makanchi Array 63.95 321** P **P** **20 41 38.0 -0.2**
comp=Z,1.0nm,0.5s,baz=37,slow=6.6,SNR=8.9
**MAKZ Makanchi 64.03 321** P **P** **20 41 38.5 -0.3**
**ABKAR Akbulak array 67.41 337** P **P** **20 42 00.2 -0.1**
**ABKAR Akbulak array 67.41 337** P **P** **20 41 59.9 -0.3**
**AKASG Malin Array Be 69.27 358** P **P** **20 42 12.1 +0.3**
comp=Z,0.3nm,0.4s,baz=1.9,slow=5.6,SNR=1.7
AKASG pP **pP** **20 42 56.4 0.0**
comp=Z,0.6nm,0.5s,baz=353,slow=5.7,SNR=2.3
**BFO Black Forest 70.69 13** P **P** **20 42 18.9 -1.6**
**KKAR Karatay Array 70.76 327** P **P** **20 42 20.8 -0.1**
**CHGR Chuyangaron 75.27 327** P **P** **20 42 47.3 -0.3**
CHGR IAmb IAmb 20 42 48.3
comp=Z,7.0nm,0.7s
**BAUV El Baul 80.12 89** P **P** **20 43 11.4 -3.2**
BAUV IAmb IAmb 20 43 15.0
comp=Z,9.9nm,0.7s
**CMAR Chiang Mai Arr 82.42 294** P **P** **20 43 26.4 -0.2**
comp=Z,1.4nm,0.6s,baz=16,slow=5.6,SNR=15
**SIJI Sorong 83.40 257** LR LR 21 15 45.5
comp=Z,190nm,21.1s,baz=334,slow=32
**BOSA Boshof 148.25 2** PKPbc **PKPbc** **20 50 48.5 -0.5**
comp=Z,2.0nm,0.8s,baz=12,slow=1.3,SNR=7.5
**BOSA Boshof 148.25 2** **PKPdf** **20 50 47.5 +2.0**

*CNRM **03** 20:36:09.1, 35.°65N×3.°71W, h16km, ml2.9*
*SFS **03** 20:36:10.0, 35.°60N×3.°80W, ML2.6, ALBORAN SUR*
*INMG **03** 20:36:10.2± 1.4, 35.°67N×3.°75W, h0km, ML2.3, Error ellipse: s-maj=2.8km s-min=2.4km az=59.0*

**ISC 03 20:36:09.3±1.3, 35.°62N±0.°03×3.°72W±0.°03, h14km±10km, n23, σ1°31/41, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.44** | **204** | P | | | **Pg** | **20 36 18.1** | **0.0** |
| PALE | | | | S | | | **Sg** | **20 36 24.1** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.71** | **124** | P | | | **Pb** | **20 36 24.1** | **+0.5** |
| GOG | | | | S | | | **Sb** | **20 36 34.0** | **+0.7** |
| **CHAS** | **Isla Isabel II** | **1.14** | **112** | P | | | **Pb** | **20 36 29.9** | **-0.9** |
| CHAS | | | | S | | | **Sb** | **20 36 45.1** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **333** | P | | | **Pn** | **20 36 32.5** | **-0.3** |
| **SMIR** | **Smir Dam** | **1.36** | **273** | P | | | **Pn** | **20 36 33.4** | **-0.5** |
| SMIR | | | | S | | | **Sg** | **20 36 52.8** | **-0.2** |
| **CEU** | **Ceuta** | **1.37** | **282** | P | | | **Pn** | **20 36 31.7** | **-2.4** |
| CEU | | | | S | | | **Sn** | **20 36 48.5** | **-3.6** |
| **JBK** | **JBK** | **1.59** | **143** | P | | | **Pn** | **20 36 36.9** | **-0.5** |
| JBK | | | | S | | | **Sn** | **20 36 56.4** | **-1.4** |
| **LCRM** | **LCR** | **2.15** | **206** | P | | | **Pb** | **20 36 46.9** | **-1.3** |
| LCRM | | | | S | | | **Sb** | **20 37 16.2** | **+1.5** |
| **MD31** | **MD31** | **2.88** | **198** | P | | | **Pn** | **20 36 56.1** | **+1.1** |
| MD31 | | | | S | | | **Sn** | **20 37 30.9** | **+1.4** |
| **MDT** | **Midelt** | **2.90** | **195** | P | | | **Pn** | **20 36 55.1** | **0.0** |
| MDT | | | | S | | | **Sn** | **20 37 31.1** | **+1.2** |
| **CART** | **Cartagena** | **2.94** | **47** | P | | | **Pn** | **20 36 55.5** | **-0.1** |
| CART | | | | S | | | **Sn** | **20 37 29.1** | **-1.6** |
| **PVAQ** | **Vaqueiros** | **3.68** | **300** | *e*Pn | | | **Pn** | **20 37 06.7** | **+0.9** |
| PVAQ | | | | *e*Sn | | | **Sn** | **20 37 47.9** | **-1.1** |
| PVAQ | | | | A | | | A | 20 37 55.4 | |
| | 5.2nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.68** | **300** | P | | | **Pn** | **20 37 05.8** | **-0.1** |
| PVAQ | | | | S | | | **Sn** | **20 37 49.1** | **0.0** |
| **PBDV** | **Barranco-do-Ve** | **3.76** | **297** | *e*Pn | | | **Pn** | **20 37 07.5** | **+0.5** |
| PBDV | | | | *e*Sn | | | **Sn** | **20 37 51.0** | **-0.1** |
| PBDV | | | | A | | | A | 20 37 53.7 | |
| | 5.4nm,0.8s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.01** | **301** | *e*Sn | | | **Sn** | **20 37 58.9** | **+1.6** |
| PCVE | | | | A | | | A | 20 38 00.8 | |
| | 3.2nm,0.5s | | | | | | | | |
| **MESJ** | **Messejana** | **4.24** | **303** | *e*Pn | | | **Pn** | **20 37 14.6** | **+1.1** |
| MESJ | | | | *e*Sn | | | **Sn** | **20 38 02.1** | **-0.7** |
| MESJ | | | | A | | | A | 20 38 06.2 | |
| | 4.1nm,0.6s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **318** | *e*Sn | | | **Sn** | **20 38 09.2** | **+0.5** |
| **EVO** | **Evora** | **4.50** | **311** | *e*Pn | | | **Pn** | **20 37 18.5** | **+1.4** |
| EVO | | | | *e*Sn | | | **Sn** | **20 38 08.0** | **-1.2** |
| EVO | | | | A | | | A | 20 38 12.9 | |
| | 6.6nm,0.5s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.59** | **304** | *e*Pn | | | **Pn** | **20 37 19.2** | **+0.9** |
| PNCL | | | | *e*Sn | | | **Sn** | **20 38 10.7** | **-0.7** |
| PNCL | | | | A | | | A | 20 38 13.8 | |
| | 3.0nm,0.6s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.79** | **324** | *e*Pn | | | **Pn** | **20 37 22.8** | **+1.7** |
| PMRV | | | | *e*Sn | | | **Sn** | **20 38 15.6** | **-0.9** |
| **PMTG** | **Montargil** | **4.97** | **315** | *e*Pn | | | **Pn** | **20 37 25.1** | **+1.5** |
| PMTG | | | | *e*Sn | | | **Sn** | **20 38 20.7** | **-0.2** |
| **PCBR** | **Castelo Branco** | **5.16** | **326** | *e*Pn | | | **Pn** | **20 37 28.4** | **+2.3** |
| **MVO** | **Moncorvo** | **6.11** | **336** | *e*Pn | | | **Pn** | **20 37 41.9** | **+2.6** |

*IDC **03** 20:37:54.7±20.0, 19.°98S×177.°64W, h507km±256km, mb3.1/5, mb1 3.4/6, mb1mx2.9/38, mbtmp4.0/6, Error ellipse: s-maj=106.6km s-min=33.2km az=15.0*

**ISC 03 20:37:54.1±1.2, 19.°9S±0.°2×177.°7W±0.°2, h500km, n6, σ0°95/6, mb3.9/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **18.81** | **193** | P | | | **P** | **20 41 41.2** | **-0.5** |
| | 0.9nm,0.3s,baz=315,slow=7.1,SNR=1.5 | | | | | | | | |
| **CTA** | **Charters Tower** | **33.88** | **263** | P | | | **P** | **20 43 55.3** | **+0.5** |
| | 4.0nm,0.8s,baz=87,slow=9.6,SNR=1.2 | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.97** | **256** | P | | | **P** | **20 45 24.6** | **+0.2** |
| | 3.1nm,0.7s,baz=93,slow=8.1,SNR=24 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **261** | P | | | **P** | **20 45 24.2** | **-0.4** |
| | 1.0nm,0.3s,baz=97,slow=8.3,SNR=57 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.48** | **57** | P | | | **P** | **20 49 44.7** | **+1.0** |
| | 0.4nm,0.7s,baz=217,slow=8.6,SNR=2.9 | | | | | | | | |
| **ILAR** | **Eielson Array** | **87.70** | **13** | P | | | **P** | **20 49 47.5** | **-1.0** |
| | 0.4nm,0.8s,baz=226,slow=5.5,SNR=2.0 | | | | | | | | |

*IDC **03** 20:43:22.3±1.7, 33.°91N×25.°40E, h0km, mb3.6/3, mb1 3.7/4, mb1mx3.4/45, mbtmp3.6/4, ML3.7/1, Error ellipse: s-maj=60.3km s-min=29.4km az=143.0*
*ATH **03** 20:43:28.1, 34.°29N×25.°20E, h10km±31km, ML2.3/4, Error ellipse: s-maj=31.6km s-min=2.6km az=0.0*

**ISC 03 20:43:25.2±1.3, 34.°14N±0.°10×25.°28E±0.°08, h17km, n10, σ0°93/11, mb3.6/3, Crete**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NPS** | **Neapolis** | **1.16** | **14** | P | | | **Pg** | **20 43 47.2** | **-0.4** |
| NPS | | | | S | | | **Sn** | **20 44 01.2** | **-0.9** |
| NPS | | | | AML | | | AML | 20 44 18.2 | |
| | comp=N,229μm,1.2s | | | | | | | | |
| NPS | | | | AML | | | AML | 20 44 30.6 | |
| | comp=E,324μm,1.0s | | | | | | | | |
| **IDI** | **Anoyia** | **1.19** | **345** | LR | | | LR | 20 44 05.9 | |
| | comp=E,43nm,18.3s,baz=251,slow=30 | | | | | | | | |
| **IDI** | **Anoyia** | **1.19** | **345** | P | | | **Pb** | **20 43 47.9** | **+0.4** |
| **GVD** | **Gavdhos** | **1.21** | **306** | P | | | **Pn** | **20 43 48.2** | **+0.8** |
| GVD | | | | S | | | **Sb** | **20 44 01.8** | **-1.2** |
| GVD | | | | AML | | | AML | 20 44 23.3 | |
| | comp=E,352μm,0.6s | | | | | | | | |
| GVD | | | | AML | | | AML | 20 44 33.4 | |
| | comp=N,401μm,0.6s | | | | | | | | |
| **ZKR** | **Zakros** | **1.25** | **38** | P | | | **Pg** | **20 43 49.3** | **0.0** |
| ZKR | | | | AML | | | AML | 20 44 23.9 | |
| | comp=E,383μm,0.8s | | | | | | | | |
| ZKR | | | | AML | | | AML | 20 44 28.8 | |
| | comp=N,141μm,0.6s | | | | | | | | |
| **VAM** | **Vamos** | **1.55** | **325** | P | | | **Pb** | **20 43 54.4** | **+0.9** |
| VAM | | | | AML | | | AML | 20 44 29.1 | |
| | comp=N,236μm,1.0s | | | | | | | | |
| VAM | | | | AML | | | AML | 20 44 35.0 | |
| | comp=E,240μm,0.9s | | | | | | | | |
| **GERES** | **GERESS Array B** | **17.03** | **333** | P | | | **P** | **20 47 25.4** | **+1.1** |
| | comp=E,0.1nm,0.3s,baz=153,slow=13,SNR=4.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.92** | **231** | P | | | **P** | **20 49 31.5** | **-0.9** |
| | comp=E,0.3nm,0.5s,baz=37,slow=8.4,SNR=2.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.26** | **56** | P | | | **P** | **20 51 34.4** | **+0.6** |
| | comp=E,0.5nm,0.5s,baz=274,slow=7.0,SNR=7.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.65** | **45** | P | | | **P** | **20 51 44.0** | **-0.7** |
| | comp=E,0.5nm,0.4s,baz=287,slow=7.6,SNR=2.9 | | | | | | | | |

*BJI **03** 21:01:06.0±0.0, 19.°30N×121.°20E, h10km, mb4.3/57, mB4.8/40, ML4.2/3, Ms4.4/63, Ms7 4.3/59*
*IDC **03** 21:01:08.5±4.2, 19.21N×121.°33E, h19km±26km, mb4.2/26, mb1 4.3/28, mb1mx4.1/56, mbtmp4.3/28, ML3.9/2, MS4.1/35, Ms1 4.1/35, ms1mx3.9/90, Error ellipse: s-maj=17.1km s-min=11.4km az=81.0*
*NEIC **03** 21:01:08.1±1.8, 19.°35N±0.°05×121.°09E±0.°08, h10km±1km, mb4.8/93, Error ellipse: s-maj=12.3km s-min=8.8km az=84.0*
*MAN **03** 21:01:08.7, 19.°55N×121.°21E, h50km, mb5.3, ML4.3, MS4.5*
*GCMT **03** 21:01:13.1±0.3, 19.°45N±0.°02×120.°78E±0.°02, h35km±1km, MW4.9/73, Moment Tensor Solution. s34,c40; s73,c106; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.90±.19; $M_{\theta\theta}$0.16±.12; $M_{\phi\phi}$-2.06±.12; $M_{r\theta}$-1.12±.14; $M_{r\phi}$-1.52±.07; $M_{\theta\phi}$-1.97±.15; Best double couple: $M_o$3.27700×$10^{16}$ NP1:ϕs22.00000°, δ23.00000°, λ83.00000°. NP2: ϕs210.00000°, δ67.00000°, λ93.00000°. Principal axes: T 2.8140, Plg68.0000°, Azm125.0000°; N 0.9280, Plg3.0000°, Azm28.0000°; P -3.7410, Plg22.0000°, Azm297.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 21:01:10.7±0.3, 19.°33N±0.°03×121.°15E±0.°04, h32km, n242, σ1°73/239, mb4.6/89, MS4.1/41, 11C-11D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SGCP** | **Gonzaga** | **1.38** | **141** | ↑*e*P | | | **Pn** | **21 01 34.0** | **+0.4** |
| SGCP | | | | *e*S | | | **Sb** | **21 01 53.8** | **+0.8** |
| **SIPP** | **Brgy, Tapao** | **1.54** | **205** | ↓*i*P | | | **Pb** | **21 01 37.7** | **-0.9** |
| SIPP | | | | *i* S | | | Sb | 21 02 11.6 | +14 |
| **SAMP** | **Sagada Mountai** | **2.25** | **186** | ↑*i*P | | | **Pn** | **21 01 46.7** | **+1.0** |
| SAMP | | | | *e*S | | | **Sn** | **21 02 13.7** | **+1.4** |
| **BOLP** | **Bolinao** | **3.15** | **202** | ↑*e*P | | | **Pn** | **21 02 00.6** | **+2.4** |
| **SMPP** | **San Manuel, Pa** | **3.19** | **188** | ↑*i*P | | | **Pn** | **21 02 00.4** | **+1.7** |
| SMPP | | | | *e*S | | | **Sn** | **21 02 39.1** | **+3.5** |
| **TWG** | **Pinlang** | **3.48** | **359** | | | | **Pn** | **21 02 01.7** | **-0.9** |
| TWG | | | | Sn | | | **Sn** | **21 02 40.2** | **-2.5** |
| **BALP** | **Baler** | **3.59** | **173** | ↑*i*P | | | **Pn** | **21 02 05.9** | **+1.8** |
| **PCPH** | **Palayan** | **3.74** | **181** | ↑*e*P | | | **Pn** | **21 02 09.2** | **+3.0** |
| PCPH | | | | *e*S | | | **Sb** | **21 02 56.6** | **-4.4** |
| **TPUB** | **Ta-pu** | **3.98** | **353** | | | | **Pn** | **21 02 08.6** | **-1.0** |
| **YULB** | **Yu-li** | **4.05** | **2** | | | | **Pn** | **21 02 09.4** | **-1.1** |
| YULB | | | | Sn | | | **Sn** | **21 02 56.1** | **-0.7** |
| **SSLB** | **Suanglung** | **4.44** | **358** | | | | **Pn** | **21 02 15.0** | **-0.9** |
| **NACB** | **Ninganchiao** | **4.84** | **5** | | | | **Pn** | **21 02 21.5** | **+0.1** |
| **MACP** | **Maragondon, Ca** | **5.05** | **185** | ↑*i*P | | | **Pn** | **21 02 25.7** | **+1.5** |
| **LQP** | **Lukban** | **5.20** | **176** | *e*P | | | **Pn** | **21 02 29.7** | **+3.3** |
| **TGY** | **Tagaytay City** | **5.20** | **182** | Pn | | | **Pn** | **21 02 28.3** | **+2.0** |
| | 41nm,0.3s,baz=315,slow=8.6,SNR=1.4 | | | | | | | | |
| TGY | | | | Lg | | | Lg | 21 03 45.9 | |
| | 74nm,0.3s,baz=12,slow=20,SNR=1.3 | | | | | | | | |
| **TGY** | **Tagaytay City** | **5.20** | **182** | ↓*e*P | | | **Pb** | **21 02 43.4** | **+2.4** |
| TGY | | | | *i* S | | | **Sb** | **21 03 44.6** | **+1.6** |
| **YHNB** | **Yeheng** | **5.32** | **2** | | | | **Pn** | **21 02 28.5** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **5.40** | **18** | Pn | | | **Pn** | **21 02 30.0** | **+1.1** |
| **LUBP** | **Lubang** | **5.63** | **189** | ↑*e*P | | | Pn | 21 02 37.8 | +5.6 |
| LUBP | | | | *e*S | | | **Sn** | **21 03 28.8** | **-6.9** |
| **TATO** | **Taipei** | **5.63** | **3** | Pn | | | **Pn** | **21 02 34.0** | **+1.8** |
| **KNMB** | **Chin-men Tao** | **5.72** | **334** | | | | **Pn** | **21 02 30.6** | **-2.8** |
| **PGP** | **Puerto Galera** | **5.79** | **182** | ↑*e*P | | | Pn | 21 02 23.3 | -11 |
| **QZH** | **Quanzhou** | **6.07** | **338** | Pn | | | **Pn** | **21 02 35.5** | **-2.7** |
| QZH | | | | Sn | | | **Sn** | **21 03 40.2** | **-6.4** |
| QZH | | | | *smax* | | | *smax* | | |
| | comp=N,58nm,0.4s | | | | | | | | |
| QZH | | | | *smax* | | | *smax* | | |
| | comp=E,97nm,0.5s | | | | | | | | |
| QZH | | | | LR | | | LR | | |
| | comp=N,1μm,10.7s | | | | | | | | |
| QZH | | | | LR | | | LR | | |
| | comp=E,1μm,11.1s | | | | | | | | |
| QZH | | | | LR | | | LR | | |
| | comp=Z,2μm,12.2s | | | | | | | | |
| **HKPS** | **Hong Kong Po S** | **7.18** | **295** | | | | **Pn** | **21 02 50.5** | **-2.9** |
| **MCO** | **Taipa Grande** | **7.63** | **293** | P | | | **Pn** | **21 02 58.0** | **-1.6** |
| **JOW** | **Kunigami** | **9.94** | **40** | Pn | | | **Pn** | **21 03 32.8** | **+1.4** |
| | 5.3nm,0.3s,baz=155,slow=14,SNR=12 | | | | | | | | |
| JOW | | | | Sn | | | **Sn** | **21 05 21.9** | **0.0** |
| | 1.5nm,0.3s,baz=342,slow=28,SNR=1.3 | | | | | | | | |
| **JOW** | **Kunigami** | **9.94** | **40** | | | | **Pn** | **21 03 32.2** | **+0.8** |
| **QIZ** | **Qiongzhong** | **10.68** | **270** | P | | | **Pn** | **21 03 38.9** | **-2.7** |
| QIZ | | | | LR | | | LR | | |
| | comp=N,730nm,13.3s | | | | | | | | |
| QIZ | | | | LR | | | LR | | |
| | comp=E,1μm,14.0s | | | | | | | | |
| QIZ | | | | LR | | | LR | | |
| | comp=Z,2μm,14.7s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **10.68** | **270** | Pn | | | **Pn** | **21 03 38.3** | **-3.3** |
| **WHN** | **Wuhan** | **12.75** | **332** | ↓P | | | **Pn** | **21 04 07.3** | **-2.5** |
| WHN | | | | S | | | **Sn** | **21 06 25.2** | **-5.4** |
| WHN | | | | LR | | | LR | | |
| | comp=N,4μm,18.0s | | | | | | | | |
| WHN | | | | LR | | | LR | | |
| | comp=E,1μm,13.3s | | | | | | | | |
| WHN | | | | LR | | | LR | | |
| | comp=Z,3μm,15.1s | | | | | | | | |
| **NJ2** | **Nanjing** | **12.84** | **351** | *e*P | | | **Pn** | **21 04 10.6** | **-0.4** |
| NJ2 | | | | LR | | | LR | | |
| | comp=N,1μm,12.7s | | | | | | | | |
| NJ2 | | | | LR | | | LR | | |
| | comp=E,960nm,15.0s | | | | | | | | |
| NJ2 | | | | LR | | | LR | | |
| | comp=Z,1μm,16.2s | | | | | | | | |
| **DAV** | **Davao City (W)** | **12.92** | **160** | LR | | | LR | 21 09 56.1 | |
| | comp=Z,1μm,19.2s,baz=10,slow=41 | | | | | | | | |
| **GYA** | **Guiyang** | **15.11** | **301** | ↓P | | | **P** | **21 04 45.3** | **-1.5** |
| GYA | | | | S | | | **Sn** | **21 07 33.7** | **+5.3** |
| GYA | | | | *pmax* | | | *pmax* | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| GYA | | | | *pmax* | | | *pmax* | | |
| | comp=Z,230nm,4.1s | | | | | | | | |
| GYA | | | | LR | | | LR | | |
| | comp=N,820nm,14.8s | | | | | | | | |
| GYA | | | | LR | | | LR | | |
| | comp=E,1μm,15.3s | | | | | | | | |
| GYA | | | | LR | | | LR | | |
| | comp=Z,2μm,14.3s | | | | | | | | |
| **ENH** | **Enshi** | **15.18** | **318** | Pn | | | **Pn** | **21 04 41.9** | **-0.9** |
| ENH | | | | IAmb | | | IAmb | 21 04 44.8 | |
| | comp=Z,54nm,1.3s | | | | | | | | |
| **UBPT** | **Khong Chiam** | **15.50** | **257** | | | | **P** | **21 04 50.0** | **-1.1** |
| UBPT | | | | IAmb | | | IAmb | 21 05 17.6 | |
| | comp=Z,51nm,1.6s | | | | | | | | |
| **JNU** | **Nakatsue** | **16.27** | **30** | Pn | | | **Pn** | **21 04 57.4** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=170,slow=9.1,SNR=4.8 | | | | | | | | |
| **JNU** | **Nakatsue** | **16.27** | **30** | Pn | | | **Pn** | **21 04 56.9** | **+0.1** |
| JNU | | | | IAmb | | | IAmb | 21 05 14.6 | |
| | comp=Z,79nm,1.1s | | | | | | | | |
| **LYN** | **LuoYang** | **17.01** | **335** | ↓P | | | **Pn** | **21 05 06.5** | **+0.3** |
| LYN | | | | *pP* | | | *pP* | 21 05 14.6 | -0.7 |
| LYN | | | | *sP* | | | *sP* | 21 05 18.5 | -0.7 |
| LYN | | | | *pmax* | | | *pmax* | | |
| | comp=Z,10.0nm,2.0s | | | | | | | | |
| LYN | | | | *pmax* | | | *pmax* | | |
| | comp=Z,180nm,9.1s | | | | | | | | |
| LYN | | | | LR | | | LR | | |
| | comp=Z,480nm,15.8s | | | | | | | | |

**TIA Tai'an 17.19 349** *e*P **P 21 05 12.4 +2.6**
TIA pmax pmax
comp=Z,14nm,1.1s
TIA LR LR
comp=Z,750nm,13.7s
TIA LR LR
comp=Z,530nm,11.8s
TIA LR LR
comp=Z,1μm,15.1s
**KMI Kunming 17.98 292** ⇑P **P 21 05 19.3 +0.5**
KMI pP Pn 21 05 21.8 +3.3
KMI PP **pwP 21 05 34.8 +4.6**
KMI S **Sn 21 08 38.1 -0.3**
KMI pmax pmax
comp=Z,12nm,1.4s
KMI LR LR
comp=Z,930nm,13.8s
KMI LR LR
comp=Z,1μm,15.8s
KMI LR LR
comp=Z,1μm,17.9s
**TOLI2 Tolitoli 18.11 181 Pn 21 05 18.3 -1.6**
**XAN Xi'an 18.25 326** P **Pn 21 05 22.2 +0.6**
XAN pP pP 21 05 26.1 -3.0
XAN sP sP 21 05 29.4 -3.3
XAN pmax pmax
comp=Z,14nm,1.0s
XAN pmax pmax
comp=Z,410nm,3.7s
XAN LR LR
comp=Z,1μm,15.6s
XAN LR LR
comp=Z,720nm,14.9s
XAN LR LR
comp=Z,1μm,15.1s
**JMN Monobe 18.29 36 P 21 05 20.4 -1.5**
**HNS HongShan 18.87 344** ⇓P **Pn 21 05 30.2 +1.3**
HNS pmax pmax
comp=Z,24nm,1.0s
HNS LR LR
comp=Z,960nm,17.7s
HNS LR LR
comp=Z,560nm,17.6s
HNS LR LR
comp=Z,1μm,18.2s
**JHS Saijyo 18.87 32** P **P 21 05 27.8 -0.6**
JHS IAmb IAmb 21 06 05.1
comp=Z,132nm,1.8s
**SBUM Sibu 18.91 209** P **Pn 21 05 29.6 0.0**
**KSAR Wonju Array Be 18.99 17** P **P 21 05 29.8 +0.3**
**KSRS Korea Array 19.01 17** P **P 21 05 29.8 0.0**
comp=Z,1.0nm,0.3s,baz=198,slow=12,SNR=15
KSRS LR LR 21 14 01.5
comp=Z,602nm,19.3s,baz=195,slow=41
**KS19 Wonju Array Si 19.04 17** P **P 21 05 30.1 -0.1**
**PZH PanZhiHua 19.23 295** P **Pn 21 05 34.1 +0.5**
PZH pmax pmax
comp=Z,10.0nm,1.3s
PZH pmax pmax
comp=Z,280nm,4.9s
PZH LR LR
comp=Z,1μm,16.2s
PZH LR LR
comp=Z,2μm,16.2s
PZH LR LR
comp=Z,890nm,12.1s
**CD2 Chengdu 19.49 310** ⇓*i*P **P 21 05 35.7 +0.6**
CD2 pP Pn 21 05 39.4 +2.9
CD2 S **Sn 21 09 15.2 +0.8**
CD2 pmax pmax
comp=Z,30nm,1.0s
CD2 pmax pmax
comp=Z,400nm,5.5s
CD2 LR LR
comp=Z,840nm,13.5s
CD2 LR LR
comp=Z,1μm,15.7s
**APSI Ampana 20.12 179** P Pn 21 05 43.3 -0.7
comp=Z,27nm,1.1s
**KSM Kuching 20.67 212** P **P 21 05 48.3 +0.2**
KSM IAmb IAmb 21 05 52.9
comp=Z,25nm,1.0s
**JCJ Chichijima 20.81 64** P **P 21 05 49.6 +0.1**
**CHTO Chiang Mai 20.99 272 P 21 05 51.5 0.0**
CHTO IAmb IAmb 21 06 08.6
comp=Z,46nm,1.8s
**CM31 Chiang Mai Arr 21.02 271** P **P 21 05 52.7 +0.8**
**CMAR Chiang Mai Arr 21.02 271** P **P 21 05 53.0 +1.1**
comp=Z,4.9nm,0.9s,baz=74,slow=9.8,SNR=42
CMAR PcP **PcP 21 09 59.4 +1.1**
comp=Z,1.8nm,0.8s,baz=79,slow=0.5,SNR=12
CMAR ScP **ScP 21 13 32.8 -0.1**
comp=Z,0.2nm,0.7s,baz=158,slow=2.6,SNR=4.4
CMAR LR LR 21 14 13.9
comp=Z,241nm,18.2s,baz=80,slow=37
**CMAR Chiang Mai Arr 21.02 271** P **P 21 05 52.3 +0.4**
**MTKI Muara Teweh, K 21.05 198** P **P 21 05 53.2 +1.0**
comp=Z,23nm,0.6s
**BJT Baijiatuau 21.06 349** P **P 21 05 52.7 +0.6**
**BJI Beijing 21.08 349** P **P 21 05 54.0 +1.7**
BJI pP **pP 21 05 58.7 -1.2**
BJI sP **sP 21 06 01.1 -2.6**
BJI PP **PnPn 21 06 14.2 +2.2**
BJI S **S 21 09 40.0 -5.2**
BJI pmax pmax
comp=Z,9.0nm,1.2s
BJI LR LR
comp=Z,620nm,16.3s
BJI LR LR
comp=Z,380nm,17.6s
BJI LR LR
comp=Z,800nm,17.3s
**INU Inuyama 21.25 38 P 21 05 53.6 -0.5**
**JHJ Hachijo jima 2 21.59 47** LR LR 21 12 52.6
comp=Z,333nm,21.2s,baz=300,slow=33
**JGF Kuroka 21.62 38** P **P 21 05 57.9 -0.3**
JGF IAmb IAmb 21 06 20.2
comp=Z,64nm,1.5s
**SANI Sanana 21.77 167** P **P 21 05 57.5 -2.3**
comp=Z,13nm,1.2s
**TTSI Tana Toraja 22.27 183** P **P 21 06 06.0 +0.8**
comp=Z,19nm,0.8s
**SWI Sorong 22.39 153** P **P 21 06 05.3 -1.2**
comp=Z,21nm,0.8s
**LZH Lanzhou 22.60 321** *e*P **P 21 06 09.7 +0.9**
LZH pP pP 21 06 14.9 -1.7
LZH sP sP 21 06 17.2 -2.9
LZH *e*S **S 21 10 16.1 +1.5**
LZH pmax pmax
comp=Z,23nm,1.1s
LZH pmax pmax
comp=Z,290nm,5.1s
LZH LR LR
comp=Z,890nm,13.1s
LZH LR LR
comp=Z,580nm,14.2s
LZH LR LR
comp=Z,1μm,17.1s
**MAT Matsushiro 22.77 38** P **P 21 06 09.7 -0.8**
MAT S **S 21 10 23.2 +5.8**
**MJAR Matsushiro Arr 22.77 38** P **P 21 06 09.2 -1.3**
comp=Z,5.5nm,1.0s,baz=232,slow=9.3,SNR=7.7
**MJAR Matsushiro Arr 22.77 38** P **P 21 06 09.9 -0.6**
**HHC Hu-ho-hao-te 22.97 341** *e*P **P 21 06 13.5 +0.9**
HHC S **S 21 10 18.6 -2.2**
HHC pmax pmax
comp=Z,18nm,0.9s
HHC LR LR
comp=Z,1μm,16.5s
HHC LR LR
comp=Z,410nm,16.1s
HHC LR LR
comp=Z,2μm,15.2s
**KBKI Kotabaru 23.01 193** P **P 21 06 12.7 -0.3**
comp=Z,25nm,0.9s
**SPSI Sidrap Palu 23.18 183** P **P 21 06 14.6 -0.2**
comp=Z,19nm,0.9s
**BTO Baotou 23.25 338** *e*P **P 21 06 17.4 +1.9**
**GUMO Guam 23.44 100** LR LR 21 13 22.8
comp=Z,478nm,21.8s,baz=269,slow=32
**BBKI Banjar Baru 23.48 196** P **P 21 06 18.0 +0.3**
comp=Z,52nm,1.4s
**BNSI Bone 23.60 183** P **P 21 06 19.1 +0.3**
comp=Z,19nm,1.4s
**MSAI Masohi 23.80 160** P **P 21 06 20.9 +0.2**
comp=Z,1μmcomp=Z,4.5nm,0.8s

**KAPI Kappang 24.23 183** LR LR 21 16 46.8
comp=Z,218nm,19.4s,baz=18,slow=39
**KULM Kulim 24.36 238** P **P 21 06 26.0 0.0**
**IPM Ipoh 24.55 236** P **P 21 06 27.2 -0.6**
IPM IAmb IAmb 21 06 41.5
comp=Z,26nm,1.1s
**CN2 Changchun 24.67 7** *e*P **P 21 06 27.9 -0.6**
CN2 *e*S **S 21 10 46.3 -1.8**
CN2 pmax pmax
comp=Z,10.0nm,1.0s
CN2 pmax pmax
comp=Z,100nm,7.0s
CN2 LR LR
comp=Z,500nm,14.0s
CN2 LR LR
comp=Z,300nm,14.0s
CN2 LR LR
comp=Z,600nm,16.0s
**XLT XiLinHaoTe 24.87 351** *e*P **P 21 06 31.8 +1.3**
XLT pP pP 21 06 36.3 -2.6
XLT sP sP 21 06 38.3 -3.9
XLT S **S 21 11 00.1 +8.6**
XLT pmax pmax
comp=Z,17nm,1.1s
XLT pmax pmax
comp=Z,280nm,7.8s
XLT LR LR
comp=Z,660nm,15.2s
XLT LR LR
comp=Z,450nm,14.7s
XLT LR LR
comp=Z,690nm,15.2s
**JMM Marumori 25.18 39** P **P 21 06 31.6 -1.7**
JMM IAmb IAmb 21 06 38.3
comp=Z,27nm,1.0s
**BSSI Bau Bau, Buton 25.32 182** P **P 21 06 34.6 0.0**
comp=Z,34nm,1.5s
**DSRI Dabo 25.53 221** P **P 21 06 36.2 -0.4**
comp=Z,8.9nm,1.3s
**USRK Ussuriysk Ar. 26.41 18** P **P 21 06 44.6 +0.3**
comp=Z,4.3nm,0.8s,baz=207,slow=8.3,SNR=6.5
USRK LR LR 21 17 23.7
comp=Z,322nm,20.7s,baz=189,slow=37
**USRK Ussuriysk Ar. 26.41 18** P **P 21 06 44.1 -0.2**
**BNX BinXian 26.85 10** ⇑P **P 21 06 48.5 +0.3**
BNX pmax pmax
comp=Z,5.0nm,0.9s
BNX pmax pmax
comp=Z,180nm,3.9s
**KMMI Kalianget 27.15 196** P **P 21 06 51.3 +0.1**
comp=Z,28nm,1.0s
**GTA Gaotai 27.19 322** *e*P **P 21 06 53.8 +2.2**
GTA pP pwP 21 07 02.4 -1.7
GTA sP sP 21 07 06.2 +2.6
GTA pmax pmax
comp=Z,4.0nm,2.1s
GTA pmax pmax
comp=Z,150nm,6.7s
GTA LR LR
comp=Z,370nm,15.6s
GTA LR LR
comp=Z,480nm,16.4s
GTA LR LR
comp=Z,590nm,16.4s
**PSI Prapat 27.23 236** LR LR 21 17 35.5
comp=Z,290nm,18.5s,baz=85,slow=36
**BKNI Bangkinang 27.30 229** P **P 21 06 52.4 -0.2**
**UWJI Ujung Watu 27.48 202** P **P 21 06 53.3 -0.9**
comp=Z,90nm,1.1s
**KCSI Kotacane, Aceh 27.71 238** P **P 21 06 57.5 +1.2**
comp=Z,19nm,1.4s
**SHL Shillong 27.71 288** P **P 21 06 56.5 0.0**
SHL IAmb IAmb 21 07 08.9
comp=Z,38nm,1.8s
**BLJI Banyuglugur 27.91 196** P **P 21 06 58.5 +0.5**
comp=Z,23nm,0.5s
**DNP Denpasar 28.43 192** P **P 21 07 02.3 -0.4**
comp=Z,178nm,0.7s
**GMJI Gumukmas 28.45 196** P **P 21 07 02.1 -0.8**
comp=Z,24nm,1.2s
**GOMU GeErMu 28.59 311** P **P 21 07 06.2 +1.8**
GOMU pP pP 21 07 09.6 -3.1
GOMU PcP **PcP 21 10 16.4 +1.2**
GOMU S **S 21 11 55.9 +4.8**
GOMU pmax pmax
comp=Z,210nm,6.4s
GOMU LR LR
comp=Z,530nm,17.0s
GOMU LR LR
comp=Z,600nm,17.0s
GOMU LR LR
comp=Z,630nm,18.3s
**JAY Jayapura 29.00 136** LR LR 21 16 21.8
comp=Z,390nm,21.5s,baz=330,slow=32
**LSA Lhasa 29.10 297** P **P 21 07 09.5 +0.4**
**GSI Gunungsitoli 29.22 235** P **P 21 07 09.3 -0.5**
GSI IAmb IAmb 21 07 21.1
comp=Z,27nm,1.3s
**ASAJ Asahikawa 30.54 31** P **P 21 07 22.5 +1.4**
comp=Z,4.1nm,0.8s,baz=204,slow=10.0,SNR=1.8
ASAJ LR LR 21 20 12.8
comp=Z,280nm,20.7s,baz=242,slow=38
**ULN Ulaanbaatar 30.69 341** P **P 21 07 22.9 +0.3**
ULN IAmb IAmb 21 07 37.3
comp=Z,11nm,1.4s
**SONM Songino Array 30.87 340** P **P 21 07 25.0 +0.9**
comp=Z,3.7nm,1.0s,baz=160,slow=6.1,SNR=18
SONM LR LR 21 20 58.0
comp=Z,692nm,18.6s,baz=166,slow=38
**SONM Songino Array 30.87 340** P **P 21 07 24.1 -0.1**
**KLR Kul'dur 31.03 14** P **P 21 07 25.0 -0.4**
comp=Z,1.2nm,0.6s,baz=214,slow=10,SNR=7.5
KLR LR LR 21 21 27.2
comp=Z,477nm,18.8s,baz=203,slow=39
**YSS Yuzh-Sakhalins 32.74 28** P **P 21 07 40.4 -0.1**
YSS IAmb IAmb 21 07 56.2
comp=Z,20nm,1.0s
**MTN Manton Dam 33.45 162** P **P 21 07 45.9 -1.0**
MTN IAmb IAmb 21 08 00.7
comp=Z,7.5nm,0.8s
**KNRA Kununurra 35.58 167** P **P 21 08 04.1 -1.3**
KNRA IAmb IAmb 21 08 41.6
comp=Z,17nm,1.2s
**WMQ Urumqi 37.13 319** *e*P **P 21 08 20.7 +2.3**
WMQ pmax pmax
comp=Z,11nm,1.5s
WMQ LR LR
comp=Z,780nm,17.1s
WMQ LR LR
comp=Z,470nm,16.3s
WMQ LR LR
comp=Z,320nm,15.7s
**FITZ Fitzroy Crossi 37.45 173** P **P 21 08 19.2 -2.0**
comp=Z,2.7nm,0.8s,baz=350,slow=11,SNR=7.8
FITZ PcP **PcP 21 10 39.6 +0.1**
comp=Z,2.0nm,0.7s,baz=1.6,slow=2.1,SNR=4.0
**COEN Coen 39.55 145** P **P 21 08 37.3 -1.7**
**MBWA Marble Bar 40.26 182** P **P 21 08 43.1 -1.7**
**PSA00 Pilbara Seismi 40.67 182** P **P 21 08 46.5 -1.6**
PSA00 IAmb IAmb 21 08 47.7
comp=Z,25nm,1.1s
**PSA00 Pilbara Seismi 40.67 182** P **P 21 08 46.6 -1.5**
PSA00 IAmb IAmb 21 08 47.7
comp=Z,12nm,1.1s
**WB0 Warramunga Arr 40.97 161** P **P 21 08 47.9 -2.7**
WB0 IAmb IAmb 21 08 50.8
comp=Z,17nm,1.4s
**PALK Pallekele 41.03 259** LR LR 21 26 54.3
comp=Z,137nm,18.4s,baz=156,slow=38
**WRA Warramunga Arr 41.11 161** P **P 21 08 48.9 -3.0**
comp=Z,2.1nm,0.5s,baz=349,slow=9.1,SNR=26
WRA PcP **PcP 21 10 51.1 0.0**
comp=Z,1.8nm,0.8s,baz=346,slow=3.8,SNR=5.4
**WRA Warramunga Arr 41.11 161** P **P 21 08 49.5 -2.3**
**WB2 Warramunga Arr 41.12 161** P **P 21 08 49.4 -2.5**
WB2 IAmb IAmb 21 08 52.7
comp=Z,16nm,1.3s
**MK31 Makanchi Array 41.90 320** P **P 21 08 58.5 +0.4**
**MKAR Makanchi Array 41.90 320** P **P 21 08 59.3 +1.2**
comp=Z,6.4nm,0.8s,baz=113,slow=8.6,SNR=56
**MKAR Makanchi Array 41.90 320** P **P 21 08 58.3 +0.2**
**MAKZ Makanchi 42.10 320** P **P 21 08 59.2 -0.5**
**H11S3 WAKE ISLAND Hy 43.00 83** T T 21 54 56.6
baz=279,slow=75,SNR=42
**H11S1 WAKE ISLAND Hy 43.01 83** T T 21 54 55.1
baz=279,slow=75,SNR=34

**H11S2 WAKE ISLAND Hy 43.02 83** T T 21 54 57.8
baz=279,slow=75,SNR=27
**H11N1 WAKE ISLAND Hy 43.02 82** T T 21 54 42.4
baz=278,slow=75,SNR=92
**H11N2 WAKE ISLAND Hy 43.02 82** T T 21 54 49.4
baz=278,slow=75,SNR=49
**H11N3 WAKE ISLAND Hy 43.03 82** T T 21 54 44.8
baz=278,slow=75,SNR=53
**YAK Yakutsk 43.08 6** LR LR 21 29 11.8
comp=Z,250nm,19.7s,baz=232,slow=39
**PEA0B Petropavlovsk- 43.96 31** P **P 21 09 14.3 -0.4**
**PETK Petropavlovsk- 43.96 31** P **P 21 09 13.5 -1.2**
comp=Z,5.5nm,1.0s,baz=246,slow=6.2,SNR=4.6
PETK LR LR 21 28 06.7
comp=Z,155nm,20.3s,baz=179,slow=37
**PETK Petropavlovsk- 43.96 31** P **P 21 09 13.9 -0.8**
**ZAA0 Zalesovo Array 44.35 330** P **P 21 09 17.9 +0.2**
**ZALV Zalesovo Beam 44.35 330** P **P 21 09 19.1 +1.3**
comp=Z,1.5nm,0.4s,baz=119,slow=7.6,SNR=9.9
ZALV LR LR 21 28 56.3
comp=Z,446nm,18.7s,baz=132,slow=37
**ZALV Zalesovo Beam 44.35 330** P **P 21 09 18.0 +0.3**
**AS31 Alice Springs 44.51 163** P **P 21 09 18.8 -0.6**
**ASAR Alice Springs 44.51 163** P **P 21 09 16.9 -2.5**
comp=Z,2.6nm,0.5s,baz=347,slow=7.0,SNR=24
**ASAR Alice Springs 44.51 163** P **P 21 09 18.6 -0.8**
**NIL Nilore 44.80 299** P **P 21 09 21.5 -0.2**
NIL IAmb IAmb 21 09 24.6
comp=Z,14nm,0.8s
**MA2 Magadan 45.50 21** P **P 21 09 26.8 0.0**
**AAK Ala-Archa 45.54 311** LR LR 21 29 43.3
comp=Z,371nm,19.6s,baz=122,slow=38
**KURK Kurchatov 45.86 323** P **P 21 09 30.0 +0.2**
KURK IAmb IAmb 21 09 49.0
comp=Z,9.8nm,1.0s
**KURBB Kurchatov Arra 45.87 323** P **P 21 09 30.9 +1.0**
comp=Z,7.4nm,0.8s,baz=122,slow=7.7,SNR=50
**CTA Charters Tower 46.26 146** LR LR 21 28 02.1
comp=Z,119nm,21.9s,baz=333,slow=35
**BTK Batken 47.66 307 P 21 09 44.5 +0.3**
BTK IAmb IAmb 21 10 01.9
comp=Z,5.6nm,0.8s
**HNR Honiara 47.73 123** LR LR 21 28 34.8
comp=Z,160nm,18.9s,baz=287,slow=35
**GAR Garm 47.86 305** P **P 21 09 46.7 +0.9**
**KBL Kabul 48.35 299** P **P 21 09 50.4 +0.6**
KBL IAmb IAmb 21 10 03.4
comp=Z,7.6nm,0.9s
**MORW Morawa 48.36 186** P **P 21 09 48.7 -0.8**
MORW IAmb IAmb 21 09 49.6
comp=Z,14nm,1.0s
**KKAR Karatay Array 48.50 311** P **P 21 09 51.3 +0.7**
**SEY Seymchan 48.55 18** P **P 21 09 50.7 +0.1**
comp=Z,0.9nm,0.7s,baz=243,slow=6.8,SNR=10
**CHGR Chuyangaron 48.70 305** P **P 21 09 52.9 +0.6**
**BRVK Borovoye 51.53 323** P **P 21 10 14.2 +0.8**
BRVK IAmb IAmb 21 10 23.5
comp=Z,6.1nm,0.8s
**NWAO Narrogin (SRO) 52.09 184** P **P 21 10 17.0 -0.7**
**TIXI Tiksi 52.52 3** LR LR 21 33 53.4
comp=Z,264nm,19.0s,baz=182,slow=37
**TIXI Tiksi 52.52 3** P **P 21 10 19.5 -0.9**
TIXI IAmb IAmb 21 10 20.8
comp=Z,12nm,1.1s
**SHEM Shemya Is, Ala 52.62 38** LR LR 21 34 47.1
comp=Z,80nm,19.9s,baz=338,slow=38
**BBOO Buckleboo 53.77 164** P **P 21 10 28.5 -1.6**
**HRA Herat 53.96 299** P **P 21 10 31.6 -0.3**
HRA IAmb IAmb 21 10 44.6
comp=Z,7.2nm,1.1s
**NRIK Noril'sk 54.07 346** P **P 21 10 32.5 +0.6**
comp=Z,2.7nm,0.5s,baz=137,slow=7.4,SNR=7.3
NRIK LR LR 21 36 38.5
comp=Z,287nm,18.1s,baz=169,slow=39
**NRIK Noril'sk 54.07 346** P **P 21 10 32.1 +0.2**
**STKA Stephens Creek 54.56 159** P **P 21 10 34.8 -1.0**
comp=Z,3.7nm,0.9s,baz=4.0,slow=5.2,SNR=4.7
STKA LR LR 21 35 16.8
comp=Z,64nm,20.6s,baz=17,slow=38
**STKA Stephens Creek 54.56 159** P **P 21 10 34.9 -0.9**
**BILL Bilibino 56.26 19** P **P 21 10 47.4 -0.2**
BILL IAmb IAmb 21 11 05.7
comp=Z,5.3nm,0.9s
**ABKAR Akbulak array 56.87 317** P **P 21 10 52.6 +0.3**
**ABKAR Akbulak array 56.87 317** P **P 21 10 52.7 +0.4**
ABKAR IAmb IAmb 21 11 05.8
comp=Z,9.5nm,1.2s
**GEYT Alibeck 57.31 303** P **P 21 10 57.2 +1.5**
comp=Z,1.2nm,0.4s,baz=96,slow=1.4,SNR=2.1
GEYT LR LR 21 38 48.8
comp=Z,408nm,18.1s,baz=124,slow=39
**GEYT Alibeck 57.31 303 P 21 10 55.8 +0.1**
GEYT IAmb IAmb 21 11 09.5
comp=Z,14nm,1.2s
**GYA0B ALIBECK ARRAY 57.31 303** P **P 21 10 55.6 -0.1**
GYA0B IAmb IAmb 21 11 09.4
comp=Z,20nm,1.2s
**WSAR Wadi Sarin 58.00 286** LR LR 21 39 31.4
comp=Z,86nm,18.1s,baz=123,slow=40
**ARU Arti 59.00 325** P **P 21 11 07.5 +0.4**
**DZM Mont Dzumac 60.45 131** LR LR 21 33 38.5
comp=Z,200nm,20.6s,baz=282,slow=32
**TOO Toolangi 61.06 158** P **P 21 11 21.4 -0.1**
**MSVF Nonsavu 66.93 120** LR LR 21 37 56.6
comp=Z,121nm,20.3s,baz=351,slow=33
**ONI Oni 68.25 309** P **P 21 12 09.3 +0.7**
ONI IAmb IAmb 21 12 25.1
comp=Z,9.8nm,1.1s
**KBZ Khabaz 68.53 310** P **P 21 12 11.2 +1.1**
comp=Z,2.0nm,0.8s,baz=46,slow=4.5,SNR=3.2
KBZ LR LR 21 46 11.7
comp=Z,157nm,18.1s,baz=89,slow=39
**KIV Kislovodsk 68.65 311** P **P 21 12 11.3 +0.2**
KIV IAmb IAmb 21 12 24.9
comp=Z,8.9nm,0.9s
**KLMR Klimovskoe 69.26 329** *e*P **P 21 12 13.4 -0.9**
KLMR AMP 21 12 27.7
comp=Z,37nm,1.4s
**A21K Barrow 69.36 20** P **P 21 12 15.4 +0.6**
**TTA Tatalina 69.74 29** P **P 21 12 17.2 -0.2**
TTA IAmb IAmb 21 12 32.9
comp=Z,11nm,1.3s
**RAYN Ar Rayn 69.79 289** P **P 21 12 18.0 -0.4**
RAYN IAmb IAmb 21 12 34.5
comp=Z,9.5nm,1.3s
**GURO Guroymak-BITLI 69.88 305** P **P 21 12 18.9 +0.1**
**L19K White Mountain 70.32 30** P **P 21 12 21.1 +0.2**
**J20K Nowinta River 70.50 28** P **P 21 12 22.6 +0.6**
J20K IAmb IAmb 21 12 30.8
comp=Z,6.8nm,0.9s
**H21K Melozitna Rive 70.95 26** P **P 21 12 25.8 +1.0**
H21K IAmb IAmb 21 12 33.2
comp=Z,5.2nm,0.8s
**CAST Castle Rocks 71.47 28** P **P 21 12 27.8 -0.2**
CAST IAmb IAmb 21 12 36.9
comp=Z,10.0nm,0.9s
**PPLA Purkeypile 71.48 29** P **P 21 12 27.7 -0.4**
**H24K Noodor Dome 72.95 25** P **P 21 12 37.8 +1.0**
H24K IAmb IAmb 21 12 39.1
comp=Z,17nm,1.6s
**GHO Glory Hole Cre 73.15 30** P **P 21 12 38.4 +0.4**
GHO IAmb IAmb 21 13 01.1
comp=Z,17nm,1.2s
**KNK Knik Glacier 73.42 30** P **P 21 12 39.6 0.0**
**ILAR Eielson Array 73.54 27** P **P 21 12 39.5 -0.7**
comp=Z,0.7nm,0.7s,baz=262,slow=4.9,SNR=7.6
**ILAR Eielson Array 73.54 27** P **P 21 12 39.9 -0.3**
**BMAR Burnt Mountain 73.96 24** P **P 21 12 43.4 +0.8**
**ARCES ARCESS Array B 74.02 339** P **P 21 12 43.0 +0.1**
comp=Z,8.3nm,1.0s,baz=90,slow=3.8,SNR=4.5
**ARCES ARCESS Array B 74.02 339** P **P 21 12 43.2 +0.3**
**FIA1 FINESS Array S 75.61 330** P **P 21 12 52.8 +0.6**
**FINES FINESS Array B 75.62 330** P **P 21 12 53.1 +0.9**
comp=Z,4.0nm,0.8s,baz=132,slow=5.7,SNR=4.7
**FINES FINESS Array B 75.62 330** P **P 21 12 52.4 +0.2**
**EGAK Eagle 75.93 26** P **P 21 12 54.0 0.0**
EGAK IAmb IAmb 21 13 23.5
comp=Z,14nm,1.4s
**BCAR Beaver Creek A 76.12 28** P **P 21 12 55.9 +0.7**
**AKASG Malin Array Be 76.48 319** P **P 21 12 56.4 -1.0**
comp=Z,1.7nm,0.8s,baz=62,slow=5.4,SNR=5.8
**AKASG Malin Array Be 76.48 319** P **P 21 12 57.1 -0.3**
**NACGM Naroch 76.88 324** *i*P P 21 13 05.5 +5.9
**URZ Urewera 77.69 138** LR LR 21 49 10.6
comp=Z,56nm,18.4s,baz=322,slow=37

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **77.73** | **22** | LR | LR | 21 51 13.0 | | |
| | comp=Z,129nm,18.3s,baz=220,slow=39 | | | | | | | |
| **INK** | **Inuvik** | **77.73** | **22** | P | **P** | **21 13 04.3** | **+0.3** | |
| INK | | | | IAmb | IAmb | 21 13 11.5 | | |
| | comp=Z,20nm,1.6s | | | | | | | |
| **BFZ** | **Birch Farm** | **78.62** | **140** | P | **P** | **21 13 09.8** | **+0.4** | |
| **VRI** | **Vrincioaia** | **79.37** | **315** | ⇓P | **P** | **21 13 13.0** | **-0.6** | |
| **ELL** | **Elmali** | **79.65** | **305** | P | **P** | **21 13 15.6** | **+0.1** | |
| **EUNU** | **Eureka** | **79.72** | **5** | P | **P** | **21 13 15.2** | **+0.3** | |
| EUNU | | | | IAmb | IAmb | 21 13 27.3 | | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **BURAR** | **Bucovina Array** | **79.85** | **317** | ⇓P | **P** | **21 13 15.1** | **-1.1** | |
| **BURAR** | **Bucovina Array** | **79.85** | **317** | P | **P** | **21 13 16.5** | **+0.2** | |
| **BUR08** | **Bucovina Ar. S** | **79.85** | **317** | P | **P** | **21 13 16.8** | **+0.5** | |
| **MLR** | **Muntele Rosu** | **80.00** | **315** | ⇓P | **P** | **21 13 21.2** | **+4.1** | |
| **MLR** | **Muntele Rosu** | **80.00** | **315** | P | **P** | **21 13 17.0** | **-0.1** | |
| **C36M** | **Paulatuk** | **80.38** | **19** | P | **P** | **21 13 17.8** | **-0.7** | |
| C36M | | | | IAmb | IAmb | 21 13 19.1 | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **DRGR** | | **81.73** | **317** | ⇓P | **P** | **21 13 26.9** | **+0.6** | |
| **CRVS** | **Cervenica-Dubn** | **81.81** | **319** | *e*P | **P** | **21 13 28.0** | **+1.4** | |
| **NB2** | **NORSAR Subarra** | **82.49** | **333** | P | **P** | **21 13 34.6** | **+4.7** | |
| | comp=Z,1.4nm,0.7s,baz=62,slow=5.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **82.49** | **333** | LR | LR | 21 53 18.2 | | |
| | comp=Z,368nm,18.9s,baz=85,slow=38 | | | | | | | |
| **VTS** | **Vitosha** | **82.76** | **313** | P | **P** | **21 13 31.7** | **-0.2** | |
| VTS | | | | IAmb | IAmb | 21 13 44.6 | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **RES** | **Resolute Bay** | **83.44** | **9** | P | **P** | **21 13 35.0** | **+0.5** | |
| **MODS** | **Modra-Piesok** | **84.59** | **319** | *e*P | **P** | **21 13 41.0** | **0.0** | |
| **KMBO** | **Kilima Mbogo** | **84.60** | **267** | P | **P** | **21 13 43.6** | **+1.7** | |
| | comp=Z,2.4nm,0.7s,baz=86,slow=10,SNR=4.8 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.60** | **267** | P | **P** | **21 13 42.0** | **0.0** | |
| KMBO | | | | IAmb | IAmb | 21 13 44.4 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **LODK** | **Lodwar** | **84.90** | **272** | P | **P** | **21 13 43.7** | **+0.5** | |
| LODK | | | | IAmb | IAmb | 21 13 52.5 | | |
| | comp=Z,7.9nm,1.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **86.56** | **321** | P | **P** | **21 13 51.6** | **+0.7** | |
| | comp=Z,0.2nm,0.3s,baz=105,slow=2.2,SNR=2.4 | | | | | | | |
| **RAR** | **Rarotonga** | **87.22** | **113** | LR | LR | 21 48 39.3 | | |
| | comp=Z,32nm,20.4s,baz=304,slow=33 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.44** | **23** | P | **P** | **21 13 54.7** | **0.0** | |
| | comp=Z,10nm,0.8s,baz=312,slow=4.6,SNR=123 | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **21 31 43.4** | **-2.4** | |
| | comp=Z,0.2nm,0.7s,baz=111,slow=2.2,SNR=4.0 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **91.96** | **332** | LR | LR | 22 01 00.5 | | |
| | comp=Z,312nm,19.3s,baz=42,slow=39 | | | | | | | |
| **PPT** | **Papeete** | **95.01** | **107** | LR | LR | 21 47 37.5 | | |
| | comp=Z,72nm,20.7s,baz=359,slow=29 | | | | | | | |
| **MATP** | **Matopo** | **98.92** | **252** | LR | LR | 21 56 24.8 | | |
| | comp=Z,63nm,18.9s,baz=32,slow=34 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **99.98** | **43** | P | **Pdif** | **21 14 53.4** | **+0.2** | |
| | comp=Z,0.4nm,0.7s,baz=307,slow=6.7,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **112.21** | **294** | PKKPab | PKKPab | 21 30 43.3 | -1.1 | |
| | comp=Z,1.1nm,0.9s,baz=258,slow=5.1,SNR=5.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **115.13** | **43** | PKP | **PKPdf** | **21 19 49.5** | **+0.1** | |
| | comp=Z,0.9nm,0.8s,baz=275,slow=0.5,SNR=6.3 | | | | | | | |
| **ROSC** | **El Rosal** | **151.57** | **34** | PKPbc | **PKPbc** | **21 21 03.3** | **+0.2** | |
| | comp=Z,6.2nm,0.3s,baz=11,slow=16,SNR=7.4 | | | | | | | |
| **LPAZ** | **La Paz** | **170.66** | **73** | PKP | **PKPdf** | **21 21 17.8** | **+0.6** | |
| | comp=Z,0.7nm,0.4s,baz=337,slow=6.3,SNR=4.4 | | | | | | | |

*IDC **03** 21:06:11.7±2.1, 17°.85S×167°.93E, h0km, mb3.9/6, mb1 4.1/7, mb1mx3.9/35, mbtmp3.9/7, ML3.3/1, MS3.4/2, Ms1 3.4/2, ms1mx2.9/57, Error ellipse: s-maj=56.3km s-min=30.5km az=125.0*
*NEIC **03** 21:06:11.7±1.8, 17°.67S±0°.05×168°.2E±0°.2, h10km±2km, mb4.0/2, Error ellipse: s-maj=32.8km s-min=8.4km az=89.0*
*NOU **03** 21:06:14.6, 17°.75S×167°.60E, h0km, MLv4.7/13, Vanuatu Islands*
**ISC 03 21:06:17.0±0.8, 17°.75S±0°.05×167°.78E±0°.07, h32km, n26, σ1§47/25, mb3.9/8, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **0.39** | **86** | P | **Pb** | **21 06 25.6** | **-0.2** |
| **RTV** | **Rentapao** | **0.62** | **94** | P | **Pn** | **21 06 29.7** | **+0.2** |
| **SANVU** | **Saraoutou** | **2.36** | **346** | Pn | **Pn** | **21 06 51.1** | **-2.4** |
| **SANVU** | **Saraoutou** | **2.36** | **346** | P | **Pn** | **21 06 52.5** | **-1.0** |
| **LIFNC** | **LIFOU** | **3.05** | **190** | Pn | **Pn** | **21 07 01.0** | **-2.0** |
| **LIFNC** | **LIFOU** | **3.05** | **190** | P | **Pn** | **21 07 03.5** | **+0.5** |
| **MARNC** | **Mare, Loyalty** | **3.71** | **176** | Pn | **Pn** | **21 07 10.3** | **-1.8** |
| **KOUNC** | **Koumac, New Ca** | **4.32** | **229** | P | **Pn** | **21 07 20.4** | **0.0** |
| **DZM** | **Mont Dzumac** | **4.47** | **196** | Pn | **Pn** | **21 07 21.8** | **-0.9** |
| | 1.7nm,0.3s,baz=331,slow=13,SNR=22 | | | | | | |
| DZM | | | | Sn | **Sn** | **21 08 10.5** | **-3.2** |
| | 2.1nm,0.3s,baz=137,slow=24,SNR=1.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.47** | **196** | | **Pn** | **21 07 21.5** | **-1.2** |
| **DZM** | **Mont Dzumac** | **4.47** | **196** | P | **Pn** | **21 07 22.3** | **-0.4** |
| **NOUC** | **Port Laguerre** | **4.54** | **198** | P | **Pn** | **21 07 23.9** | **+0.4** |
| **ONTNC** | **Ouen Toro** | **4.70** | **195** | Pn | **Pn** | **21 07 24.4** | **-1.3** |
| **OUENC** | **Ouen Island, N** | **4.72** | **191** | Pn | **Pn** | **21 07 25.6** | **-0.5** |
| **OUENC** | **Ouen Island, N** | **4.72** | **191** | P | **Pn** | **21 07 27.0** | **+1.0** |
| **MSVF** | **Nonsavu** | **9.79** | **91** | LR | LR | 21 11 43.2 | |
| | comp=Z,397nm,19.1s,baz=304,slow=34 | | | | | | |
| **HNR** | **Honiara** | **11.24** | **316** | LR | LR | 21 12 14.7 | |
| | comp=Z,101nm,20.4s,baz=73,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **27.52** | **234** | P | **P** | **21 12 02.1** | **+1.3** |
| STKA | | | | IAmb | IAmb | 21 12 26.0 | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.68** | **261** | P | **P** | **21 12 38.1** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 21 12 59.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.69** | **261** | P | **P** | **21 12 37.1** | **-0.9** |
| | comp=Z,0.9nm,0.3s,baz=92,slow=8.4,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **32.18** | **254** | P | **P** | **21 12 41.6** | **-0.5** |
| | comp=Z,1.8nm,0.8s,baz=82,slow=8.6,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.03** | **263** | P | **P** | **21 13 50.4** | **+1.0** |
| | comp=Z,3.0nm,0.9s,baz=104,slow=8.3,SNR=3.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.63** | **295** | P | **P** | **21 18 07.5** | **+2.4** |
| | comp=Z,0.3nm,0.4s,baz=121,slow=3.5,SNR=4.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.63** | **295** | P | **P** | **21 18 05.8** | **+0.7** |
| **SONM** | **Songino Array** | **85.21** | **324** | P | **P** | **21 18 52.2** | **+1.8** |
| | comp=Z,0.5nm,1.0s,baz=134,slow=5.6,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **89.24** | **18** | P | **P** | **21 19 07.5** | **-1.8** |
| | comp=Z,0.3nm,0.7s,baz=227,slow=6.0,SNR=2.3 | | | | | | |

*SOME **03** 21:07:10.4, 40°.75N×77°.35E, h0km*
*KRNET **03** 21:07:11.3±0.1, 40°.74N×77°.41E, h19km, mb3.4*
*NNC **03** 21:07:14.8±1.3, 40°.84N×77°.42E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=9.2km s-min=7.7km az=151.0*
**ISC 03 21:07:11.5±2.1, 40°.75N±0°.08×77°.36E±0°.03, h2km±17km, n65, σ1§28/96, 20C-10D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **1.03** | **19** | ⇓*i*P | **Pg** | **21 07 31.3** | **0.0** |
| | baz=16 | | | | | | |
| TARG | | | | ⇓*i*S | **Sb** | **21 07 45.9** | **-0.7** |
| | baz=16 | | | | | | |
| **KDJ** | **Kajisay** | **1.38** | **355** | ⇑*i*P | **Pb** | **21 07 37.9** | **-0.3** |
| | baz=53 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sg** | **21 07 57.0** | **+1.0** |
| | baz=53 | | | | | | |
| **ULHL** | **Ulahol** | **1.71** | **331** | P | **Pb** | **21 07 43.6** | **-0.2** |
| | SNR=14 | | | | | | |
| **ULHL** | **Ulahol** | **1.71** | **331** | ⇑*i*P | **Pb** | **21 07 43.6** | **-0.2** |
| | baz=30 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sg** | **21 08 07.7** | **+1.2** |
| | baz=30 | | | | | | |
| **PRZ** | **Przheval'sk** | **1.90** | **24** | ⇓*i*P | **Pb** | **21 07 46.8** | **-0.2** |
| | baz=23 | | | | | | |
| PRZ | | | | ⇓*e*S | **Sg** | **21 08 12.6** | **+0.1** |
| | baz=23 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.04** | **329** | ⇑*e*P | **Pb** | **21 07 49.1** | **-0.2** |
| | baz=28 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sg** | **21 08 17.1** | **+0.2** |
| | baz=28 | | | | | | |
| **ANVS** | **Anan'yevo** | **2.04** | **6** | ⇑*i*P | **Pb** | **21 07 49.1** | **-0.3** |
| | baz=5.0 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sg** | **21 08 16.9** | **-0.2** |
| | baz=5.0 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.31** | **353** | *e*P | **Pg** | **21 07 55.1** | **-0.6** |
| | 76nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **21 08 27.3** | **+1.8** |
| | 38nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.31** | **353** | Pg | **Pg** | **21 07 55.1** | **-0.6** |
| TNSS | | | | Lg | Lg | 21 08 26.6 | |
| **MDOK** | **Medeo** | **2.42** | **355** | *e*P | **Pb** | **21 07 56.9** | **+1.0** |
| | 20nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **21 08 29.9** | **+0.6** |
| | 102nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.42** | **355** | ⇑Pn | **Pb** | **21 07 54.0** | **-1.9** |
| | 22nm,0.5s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 21 08 30.8 | |
| | 87nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.42** | **355** | Pg | **Pb** | **21 07 56.9** | **+1.0** |
| | 20nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 21 08 29.9 | |
| | 102nm,0.6s | | | | | | |
| **SATY** | **Saty** | **2.44** | **18** | *e*P | **Pg** | **21 07 57.5** | **-0.7** |
| | 11nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sg** | **21 08 31.0** | **+1.3** |
| | 42nm,0.4s | | | | | | |
| **SATY** | **Saty** | **2.44** | **18** | Pg | **Pg** | **21 07 57.5** | **-0.7** |
| | 11nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 21 08 31.0 | |
| | 42nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.48** | **344** | *e*P | **Pb** | **21 07 57.4** | **+0.6** |
| | 8.5nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **21 08 31.2** | **+0.2** |
| | 40nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **2.48** | **344** | Pg | **Pb** | **21 07 57.4** | **+0.6** |
| | 8.5nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 21 08 31.2 | |
| | 40nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **2.48** | **353** | *e*P | **Pg** | **21 07 58.6** | **-0.4** |
| | 123nm,0.3s | | | | | | |
| AAA | | | | *e*S | **Sg** | **21 08 33.0** | **+1.9** |
| | 150nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **2.48** | **353** | Pg | **Pg** | **21 07 58.6** | **-0.4** |
| | 123nm,0.3s | | | | | | |
| AAA | | | | Lg | Lg | 21 08 33.0 | |
| | 150nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **2.48** | **353** | ⇑Pn | **Pb** | **21 07 57.9** | **+1.1** |
| | 46nm,0.5s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 21 08 33.6 | |
| | 117nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.49** | **356** | *e*P | **Pg** | **21 07 58.4** | **-0.7** |
| | 32nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **21 08 32.8** | **+1.4** |
| | 75nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.49** | **356** | Pg | **Pg** | **21 07 58.4** | **-0.7** |
| | 32nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 21 08 32.8 | |
| | 75nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.52** | **336** | *e*P | **Pb** | **21 07 58.6** | **+1.1** |
| | 14nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sg** | **21 08 32.7** | **+0.4** |
| | 43nm,0.8s | | | | | | |
| **KST** | **Kastek** | **2.52** | **336** | Pg | **Pb** | **21 07 58.6** | **+1.1** |
| | 14nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 21 08 32.7 | |
| | 43nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.54** | **329** | P | **Pb** | **21 07 58.8** | **+0.9** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.54** | **329** | ⇓Pn | **Pb** | **21 07 58.6** | **+0.7** |
| | 12nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 21 08 34.5 | |
| | 32nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.54** | **329** | ⇑*i*P | **Pb** | **21 07 56.2** | **-1.6** |
| | baz=29 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **21 08 29.2** | **-0.4** |
| | baz=29 | | | | | | |
| **ARLS** | **Aral** | **2.54** | **297** | ⇓*e*P | **Pb** | **21 07 56.4** | **-1.5** |
| | baz=97 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **21 08 29.5** | **-0.1** |
| | baz=97 | | | | | | |
| **ZHN** | **Zhinishke** | **2.55** | **18** | *e*P | **Pb** | **21 07 58.7** | **+0.8** |
| | 11nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **21 08 34.0** | **+0.8** |
| | 48nm,0.6s | | | | | | |
| **ZHN** | **Zhinishke** | **2.55** | **18** | Pg | **Pb** | **21 07 58.7** | **+0.8** |
| | 11nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 21 08 34.0 | |
| | 48nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **2.60** | **306** | P | **Pg** | **21 08 01.1** | **-0.2** |
| | SNR=7.4 | | | | | | |
| **UCH** | **Uchtor** | **2.60** | **306** | ⇑*i*P | **Pb** | **21 07 57.5** | **-1.5** |
| | baz=5.0 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **21 08 31.1** | **-0.4** |
| | baz=5.0 | | | | | | |
| **KBK** | **Karagaybulak** | **2.62** | **317** | P | **Pb** | **21 08 00.3** | **+1.0** |
| | SNR=11 | | | | | | |
| **KBK** | **Karagaybulak** | **2.62** | **317** | ⇑*e*P | **Pb** | **21 07 57.6** | **-1.7** |
| | baz=17 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **21 08 31.5** | **-0.5** |
| | baz=17 | | | | | | |
| **DGS** | **Degeres** | **2.75** | **335** | *e*P | **Pg** | **21 08 03.2** | **-1.1** |
| | 11nm,0.2s | | | | | | |
| DGS | | | | *e*S | **Sg** | **21 08 41.2** | **+1.3** |
| | 38nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.75** | **335** | Pg | **Pg** | **21 08 03.2** | **-1.1** |
| | 11nm,0.2s | | | | | | |
| DGS | | | | Lg | Lg | 21 08 41.2 | |
| | 38nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **2.80** | **12** | *e*P | **Pb** | **21 08 03.1** | **+0.8** |
| | 12nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sg** | **21 08 40.8** | **-0.7** |
| | 25nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **2.80** | **12** | Pg | **Pb** | **21 08 03.1** | **+0.8** |
| | 12nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 21 08 41.5 | |
| | 25nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.85** | **312** | P | **Pb** | **21 08 03.9** | **+0.7** |
| | SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **2.85** | **312** | ⇑Pn | **Pb** | **21 08 03.3** | **+0.1** |
| | 12nm,0.9s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 21 08 42.9 | |
| | 37nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **2.85** | **312** | ⇑*e*P | **Pb** | **21 08 00.8** | **-2.4** |
| | baz=12 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **21 08 37.0** | **-1.7** |
| | baz=12 | | | | | | |
| **CHMS** | **Chumysh** | **2.97** | **320** | P | **Pb** | **21 08 06.5** | **+1.4** |
| | SNR=5.9 | | | | | | |
| **KTBS** | **Katobe** | **3.00** | **351** | *e*P | **Pg** | **21 08 07.7** | **-1.3** |
| | 13nm,0.5s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **21 08 49.2** | **+1.3** |
| | 51nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **3.00** | **351** | Pg | **Pg** | **21 08 07.6** | **-1.3** |
| | 13nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 21 08 49.2 | |
| | 51nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **3.08** | **298** | P | **Pg** | **21 08 11.8** | **+1.3** |
| | SNR=11 | | | | | | |
| **KRBS** | **Karabastau** | **3.20** | **338** | *e*P | **Pb** | **21 08 10.2** | **+1.2** |
| | 6.1nm,0.5s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **21 08 54.0** | **-0.1** |
| | 30nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.20** | **338** | Pg | **Pb** | **21 08 10.2** | **+1.2** |
| | 6.1nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 21 08 54.1 | |
| | 30nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **3.23** | **347** | *e*P | **Pb** | **21 08 10.5** | **+1.0** |
| | 4.4nm,0.2s | | | | | | |
| KUU | | | | *e*S | **Sg** | **21 08 53.7** | **-1.5** |
| | 30nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.23** | **347** | Pg | **Pg** | **21 08 12.0** | **-1.4** |
| | 4.4nm,0.2s | | | | | | |
| KUU | | | | Lg | Lg | 21 08 55.5 | |
| | 30nm,0.4s | | | | | | |
| **EKS2** | **Erkin-Say** | **3.29** | **307** | P | **Pg** | **21 08 14.3** | **-0.2** |
| | SNR=6.8 | | | | | | |
| **USP** | **Ospenovka** | **3.29** | **321** | P | **Pb** | **21 08 11.8** | **+1.1** |
| | SNR=7.7 | | | | | | |
| **SGDS** | **Sogindy** | **3.38** | **324** | *e*P | **Pb** | **21 08 13.7** | **+1.6** |
| | 11nm,0.5s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **21 08 58.9** | **-1.0** |
| | 12nm,0.6s | | | | | | |
| **SGDS** | **Sogindy** | **3.38** | **324** | Pg | **Pb** | **21 08 13.7** | **+1.6** |
| | 11nm,0.5s | | | | | | |
| SGDS | | | | Lg | Lg | 21 08 58.9 | |
| | 12nm,0.6s | | | | | | |
| **BLB** | **Baldybastay** | **3.45** | **14** | *e*P | **Pb** | **21 08 15.0** | **+1.7** |
| | 18nm,0.4s | | | | | | |
| BLB | | | | *e*S | **Sg** | **21 09 00.9** | **-1.2** |
| | 40nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **3.45** | **14** | Pg | **Pb** | **21 08 15.0** | **+1.7** |
| | 18nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 21 09 00.9 | |
| | 40nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **3.48** | **6** | *e*P | **Pb** | **21 08 15.1** | **+1.3** |
| | 11nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **21 09 01.6** | **-1.5** |
| | 32nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **3.48** | **6** | Pg | **Pb** | **21 08 15.1** | **+1.3** |
| | 11nm,0.5s | | | | | | |
| ARXS | | | | Lg | Lg | 21 09 01.6 | |
| | 32nm,0.5s | | | | | | |
| **KTMS** | **Ketmen** | **3.50** | **39** | *e*P | **Pb** | **21 08 15.6** | **+1.5** |
| | 2.0nm,0.3s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **21 09 01.9** | **-1.9** |
| | 21nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **3.50** | **39** | Pg | **Pb** | **21 08 15.6** | **+1.5** |
| | 2.0nm,0.3s | | | | | | |
| KTMS | | | | Lg | Lg | 21 09 01.9 | |
| | 21nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **3.68** | **304** | *e*P | **Pb** | **21 08 19.4** | **+2.2** |
| | 2.7nm,0.5s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **21 09 09.2** | **-0.4** |
| | 7.8nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **3.68** | **304** | Pg | **Pb** | **21 08 19.4** | **+2.2** |
| | 2.7nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 21 09 09.1 | |
| | 7.8nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **4.00** | **26** | *e*P | **Pb** | **21 08 24.6** | **+1.8** |
| | 3.6nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **21 09 17.7** | **-2.4** |
| | 14nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **4.00** | **26** | Pg | **Pb** | **21 08 24.6** | **+1.8** |
| | 3.6nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 21 09 17.7 | |
| | 14nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **4.93** | **332** | *e*P | **Pb** | **21 08 41.8** | **+3.3** |
| | 1.6nm,0.4s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **21 09 47.7** | **-2.0** |
| | 5.2nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **4.93** | **332** | Pg | **Pb** | **21 08 41.8** | **+3.3** |
| | 1.6nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 21 09 48.0 | |
| | 5.2nm,0.7s | | | | | | |
| **KK07** | **Karatay Array** | **5.62** | **297** | Pg | **Pg** | **21 08 58.7** | **-0.5** |
| | baz=110,slow=16 | | | | | | |
| KK07 | | | | Lg | Lg | 21 10 09.2 | |
| | baz=106,slow=25 | | | | | | |

*ISK **03** 21:25:06.9, 37°.72N×37°.45E, h5km, ML3.6/16*
*DDA **03** 21:25:08.0±0.0, 37°.72N×37°.42E, h7km±1km, MW3.5*
*GII **03** 21:25:14.2±0.0, 38°.57N×36°.88E, h0km, Mm3.4/2*
**ISC 03 21:25:08.1±1.1, 37°.71N±0°.02×37°.43E±0°.03, h4km±11km, n45, σ1§21/58, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GZT** | **Gaziantep** | **0.37** | **164** | P | **Pg** | **21 25 16.1** | **+0.8** |
| GZT | | | | S | **Sg** | **21 25 21.5** | **+1.3** |
| GZT | | | | *i* AML | AML | 21 25 26.0 | |
| | comp=N,4μm,0.3s | | | | | | |
| GZT | | | | *i* AML | AML | 21 25 26.0 | |
| | comp=E,7μm,0.3s | | | | | | |
| **KHMN** | **Narli-Kahraman** | **0.39** | **215** | PG | **Pg** | **21 25 16.2** | **+0.6** |
| **KAHM** | **Kahramanmaras,** | **0.40** | **241** | P | **Pg** | **21 25 16.5** | **+0.5** |
| KAHM | | | | *i* AML | AML | 21 25 22.0 | |
| | comp=E,4μm,0.5s | | | | | | |
| KAHM | | | | S | **Sg** | **21 25 22.3** | **+1.1** |
| KAHM | | | | *i* AML | AML | 21 25 23.0 | |
| | comp=N,5μm,0.7s | | | | | | |
| **GAZ** | **Gaziantep** | **0.57** | **198** | PG | **Pg** | **21 25 18.1** | **-0.9** |
| **ELBS** | **KAHRAMANMARAS** | **0.66** | **339** | P | **Pb** | **21 25 21.4** | **-0.8** |
| ELBS | | | | S | **Sg** | **21 25 29.8** | **+0.5** |
| ELBS | | | | *i* AML | AML | 21 25 32.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| ELBS | | | | *i* AML | AML | 21 25 37.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| **AKCD** | **Akcadag** | **0.70** | **33** | P | **Pg** | **21 25 21.5** | **-0.1** |
| AKCD | | | | *i* AML | AML | 21 25 34.0 | |
| | comp=E,3μm,0.4s | | | | | | |
| AKCD | | | | *i* AML | AML | 21 25 36.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **ATAB** | **Bozova** | **0.73** | **109** | P | **Pg** | **21 25 22.4** | **+0.4** |
| ATAB | | | | *i* AML | AML | 21 25 35.0 | |
| | comp=N,4μm,0.2s | | | | | | |
| ATAB | | | | *i* AML | AML | 21 25 35.0 | |
| | comp=E,5μm,0.2s | | | | | | |
| **KAMA** | **Osmaniye** | **0.80** | **230** | P | **Pg** | **21 25 23.9** | **+0.3** |
| KAMA | | | | S | **Sb** | **21 25 34.9** | **-1.0** |
| KAMA | | | | *i* AML | AML | 21 25 38.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| KAMA | | | | *i* AML | AML | 21 25 38.0 | |
| | comp=E,2μm,0.7s | | | | | | |
| **DARE** | **Darende-Malaty** | **0.86** | **3** | PG | **Pg** | **21 25 24.3** | **-0.4** |
| DARE | | | | SG | **Sb** | **21 25 37.0** | **-0.6** |
| **ANDN** | **Andirin** | **0.87** | **262** | P | **Pg** | **21 25 25.1** | **+0.2** |
| ANDN | | | | S | **Sb** | **21 25 36.9** | **-1.1** |
| ANDN | | | | *i* AML | AML | 21 25 39.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| ANDN | | | | *i* AML | AML | 21 25 41.0 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KUZU** | **Kuzuini** | **0.98** | **197** | P | **Pb** | **21 25 27.7** | **+0.1** |
| KUZU | | | | S | **Sb** | **21 25 41.4** | **+0.5** |
| **CUGUR** | **Gurin_SVAS** | **1.02** | **353** | P | **Pg** | **21 25 27.1** | **-0.6** |
| CUGUR | | | | *i* AML | AML | 21 25 45.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| CUGUR | | | | *i* AML | AML | 21 25 46.0 | |
| | comp=N,2μm,0.3s | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **1.06** | **311** | PG | **Pg** | **21 25 28.1** | **-0.4** |
| **SAIM** | **ADANA** | **1.10** | **284** | P | **Pg** | **21 25 29.0** | **-0.2** |
| SAIM | | | | S | **Sn** | **21 25 47.0** | **+0.9** |
| SAIM | | | | *i* AML | AML | 21 25 48.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| SAIM | | | | *i* AML | AML | 21 25 50.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KOZT** | **Kozan** | **1.30** | **260** | PN | **Pn** | **21 25 32.7** | **-0.3** |
| KOZT | | | | SN | **Sn** | **21 25 52.4** | **+1.6** |
| **CEYT** | **Ceyhan** | **1.51** | **243** | PN | **Pb** | **21 25 36.5** | **-0.2** |
| **ARPR** | **Arapgir-MALATY** | **1.55** | **27** | PN | **Pb** | **21 25 36.8** | **-0.7** |
| **AKO** | **Adana** | **1.60** | **262** | P | **Pn** | **21 25 37.3** | **+0.2** |
| **SVRC** | **Sivrice-ELAZID** | **1.62** | **65** | PN | **Pn** | **21 25 37.7** | **+0.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.67** | **217** | PN | **Pn** | **21 25 38.5** | **+0.4** |
| **YAHY** | **KAYSERI_Yahyal** | **1.68** | **284** | P | **Pb** | **21 25 39.3** | **-0.4** |
| YAHY | | | | *i* AML | AML | 21 26 07.0 | |
| | comp=N,212nm,0.6s

*LDG **03** 21:27:49.8,35°.39N×3°.70W,h30km*
*CNRM **03** 21:27:50.7,35°.33N×3°.84W,h14km,ml3.6*
**ISC 03 21:27:48.2**±1.0,**35°.51N**±0°.03×**3°.73W**±0°.02,**h14**km±7km,
**n177**,σ1°**98**/242,**mb3.9**/11,**1C**,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.34** | **210** | P | **Pg** | **21 27 54.1** | **-1.0** |
| **PALE** | **Palemas** | **0.34** | **210** | P | **Pg** | **21 27 54.2** | **-0.9** |
| PALE | | | | S | **Sg** | **21 27 58.8** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.67** | **115** | P | **Pg** | **21 28 01.0** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.67** | **115** | P | **Pg** | **21 28 00.5** | **-0.8** |
| GOG | | | | S | **Sg** | **21 28 09.5** | **-0.6** |
| **EMEL** | **Melilla** | **0.67** | **108** | ⇑Pg | **Pg** | **21 28 01.0** | **-0.3** |
| | 281nm,0.2s,SNR=18 | | | | | | |
| EMEL | | | | Lg | Lg | 21 28 10.4 | |
| | 14μm,0.2s,SNR=23 | | | | | | |
| **EALB** | **Alboran** | **0.71** | **53** | Pg | **Pb** | **21 28 02.5** | **+0.1** |
| | 12nm,0.1s,SNR=332 | | | | | | |
| EALB | | | | Lg | Lg | 21 28 10.6 | |
| | 1μm,0.2s | | | | | | |
| **CHAS** | **Isla Isabel II** | **1.11** | **107** | P | **Pb** | **21 28 07.6** | **-1.7** |
| CHAS | | | | S | **Sb** | **21 28 21.6** | **-2.0** |
| **EMIJ** | **Mijas** | **1.35** | **322** | Pg | **Pn** | **21 28 11.1** | **-1.6** |
| | 2.6nm,0.2s,SNR=42 | | | | | | |
| EMIJ | | | | Lg | Lg | 21 28 28.3 | |
| | 386nm,0.3s,SNR=16 | | | | | | |
| **SMIR** | **Smir Dam** | **1.35** | **278** | P | **Pg** | **21 28 15.0** | **+0.7** |
| **SMIR** | **Smir Dam** | **1.35** | **278** | P | **Pn** | **21 28 08.9** | **-3.8** |
| **ELGU** | **Los Guajares,** | **1.36** | **4** | Pg | **Pn** | **21 28 11.6** | **-1.3** |
| | 1.0nm,0.1s,SNR=7.9 | | | | | | |
| ELGU | | | | Lg | Lg | 21 28 29.8 | |
| | 445nm,0.2s,SNR=7.9 | | | | | | |
| **EMAL** | **Malaga-Limoner** | **1.37** | **336** | P | **Pn** | **21 28 11.7** | **-1.3** |
| EMAL | | | | S | **Sb** | **21 28 30.5** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.37** | **253** | P | **Pb** | **21 28 14.0** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.37** | **253** | P | **Pn** | **21 28 12.5** | **-0.6** |
| CHEFC | | | | S | **Sg** | **21 28 32.9** | **+0.3** |
| **CEU** | **Ceuta** | **1.39** | **287** | P | **Pn** | **21 28 09.5** | **-3.7** |
| CEU | | | | S | **Sn** | **21 28 25.3** | **-6.1** |
| **ECEU** | **Ceuta** | **1.39** | **287** | Pg | **Pn** | **21 28 10.8** | **-2.5** |
| | 11nm,0.1s,SNR=22 | | | | | | |
| ECEU | | | | Lg | Lg | 21 28 29.9 | |
| | 111nm,0.1s,SNR=10 | | | | | | |
| **JBK** | **JBK** | **1.51** | **140** | P | **Pb** | **21 28 16.0** | **-0.2** |
| **JBK** | **JBK** | **1.51** | **140** | P | **Pn** | **21 28 15.1** | **0.0** |
| JBK | | | | S | **Sb** | **21 28 36.0** | **+0.6** |
| **EBER** | **Berja** | **1.54** | **26** | Pg | **Pn** | **21 28 14.6** | **-0.9** |
| | 30nm,0.3s,SNR=85 | | | | | | |
| EBER | | | | Lg | Lg | 21 28 36.7 | |
| | 711nm,0.3s,SNR=7.9 | | | | | | |
| **EGOR** | **Sierra Gorda,** | **1.63** | **349** | Pg | **Pn** | **21 28 16.2** | **-0.5** |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| EGOR | | | | Lg | Lg | 21 28 38.2 | |
| | 271nm,0.4s,SNR=7.9 | | | | | | |
| **EJIF** | **Jimena Fronter** | **1.69** | **304** | Pn | **Pn** | **21 28 16.5** | **-0.9** |
| | SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **1.71** | **8** | Pg | **Pn** | **21 28 17.6** | **-0.1** |
| | 9.3nm,0.2s,SNR=102 | | | | | | |
| **ENIJ** | **Nijar** | **1.91** | **40** | Pn | **Pn** | **21 28 19.3** | **-1.1** |
| | 30nm,0.3s,SNR=7.9 | | | | | | |
| ENIJ | | | | Lg | Lg | 21 28 47.6 | |
| | 986nm,0.4s,SNR=7.9 | | | | | | |
| **SICH** | **Sidi Chahed** | **1.91** | **223** | P | **Pn** | **21 28 20.7** | **+0.2** |
| **SICH** | **Sidi Chahed** | **1.91** | **223** | P | **Pn** | **21 28 20.5** | **+0.1** |
| SICH | | | | S | **Sg** | **21 28 50.5** | **+0.7** |
| **LIJA** | **Lijar** | **1.94** | **316** | P | **Pb** | **21 28 23.8** | **+0.3** |
| LIJA | | | | S | **Sg** | **21 28 54.8** | **+4.1** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pn** | **21 28 24.0** | **+1.6** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pn** | **21 28 21.9** | **-0.4** |
| LCRM | | | | S | **Sb** | **21 28 51.8** | **+1.3** |
| **CNIL** | **Conil** | **2.07** | **295** | P | **Pb** | **21 28 24.2** | **-1.4** |
| **IFR** | **Ifrane** | **2.30** | **210** | P | **Pn** | **21 28 24.7** | **-1.1** |
| IFR | | | | S | **Sn** | **21 28 51.4** | **-2.6** |
| **EQES** | **Quesada** | **2.35** | **13** | Pg | **Pb** | **21 28 28.5** | **-2.0** |
| | 37nm,0.2s,SNR=332 | | | | | | |
| EQES | | | | Lg | Lg | 21 29 03.9 | |
| | 291nm,0.3s,SNR=4.8 | | | | | | |
| **OTSS** | **Djebel Tessala** | **2.41** | **95** | P | **Pg** | **21 28 37.0** | **+2.5** |
| **TLOR** | **Lorca, Murcia** | **2.70** | **37** | Pn | **Pn** | **21 28 31.9** | **+0.6** |
| | 13nm,0.2s,SNR=7.9 | | | | | | |
| TLOR | | | | Sn | **Sn** | **21 29 03.4** | **-0.4** |
| | SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **2.74** | **346** | Pn | **Pn** | **21 28 32.7** | **+0.9** |
| | 1.5nm,0.1s,SNR=44 | | | | | | |
| EADA | | | | Sn | **Sn** | **21 29 02.9** | **-1.8** |
| | SNR=7.9 | | | | | | |
| EADA | | | | Lg | Lg | 21 29 12.7 | |
| | 48nm,0.2s,SNR=7.9 | | | | | | |
| **MD31** | **MD31** | **2.77** | **198** | P | **Pn** | **21 28 32.0** | **-0.3** |
| MD31 | | | | S | **Sn** | **21 29 04.7** | **-0.9** |
| **MDT** | **Midelt** | **2.78** | **195** | Pn | **Pn** | **21 28 32.1** | **-0.4** |
| | 2.2nm,0.3s,baz=20,slow=12,SNR=105 | | | | | | |
| MDT | | | | Sn | **Sn** | **21 29 05.9** | **0.0** |
| | 17nm,0.3s,baz=38,slow=15,SNR=6.1 | | | | | | |
| MDT | | | | Lg | Lg | 21 29 16.7 | |
| | 30nm,0.3s,baz=279,slow=20,SNR=6.2 | | | | | | |
| **MDT** | **Midelt** | **2.78** | **195** | P | **Pn** | **21 28 32.1** | **-0.4** |
| **MDT** | **Midelt** | **2.78** | **195** | P | **Pn** | **21 28 32.1** | **-0.4** |
| MDT | | | | S | **Sn** | **21 29 06.5** | **+0.6** |
| **TDRA** | **Tendrara** | **2.84** | **150** | P | **Pn** | **21 28 34.2** | **+0.9** |
| **EZAR** | **Zarzadilla de** | **2.88** | **34** | Pn | **Pn** | **21 28 34.5** | **+0.8** |
| | 32nm,0.3s,SNR=7.9 | | | | | | |
| EZAR | | | | Sn | **Sn** | **21 29 07.1** | **-1.1** |
| | 439nm,0.6s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **2.90** | **333** | Pn | **Pn** | **21 28 34.3** | **+0.3** |
| | 2.4nm,0.4s,SNR=7.9 | | | | | | |
| ECAB | | | | Sn | **Sn** | **21 29 06.3** | **-2.3** |
| | 12nm,0.3s,SNR=7.9 | | | | | | |
| ECAB | | | | Lg | Lg | 21 29 19.8 | |
| | 98nm,0.4s,SNR=7.9 | | | | | | |
| **ODJA** | **Bouhanifia** | **2.93** | **92** | P | **Pb** | **21 28 40.0** | **-0.3** |
| **CART** | **Cartagena** | **3.02** | **46** | P | **Pn** | **21 28 32.7** | **-3.0** |
| CART | | | | S | **Sn** | **21 29 09.2** | **-2.5** |
| **CART** | **Cartagena** | **3.02** | **46** | | **Pn** | **21 28 34.6** | **-1.1** |
| **CART** | **Cartagena** | **3.02** | **46** | P | **Pn** | **21 28 34.2** | **-1.4** |
| CART | | | | S | **Sn** | **21 29 10.7** | **-0.9** |
| **EMUR** | **La Murta** | **3.07** | **40** | Pn | **Pn** | **21 28 35.8** | **-0.6** |
| | 10nm,0.4s,SNR=7.9 | | | | | | |
| EMUR | | | | Sn | **Sn** | **21 29 10.8** | **-2.2** |
| | 20nm,0.4s,SNR=7.9 | | | | | | |
| **ZHG** | **ZHG** | **3.16** | **230** | P | **Pn** | **21 28 37.0** | **-0.7** |
| **ZHG** | **ZHG** | **3.16** | **230** | P | **Pn** | **21 28 36.6** | **-1.1** |
| ZHG | | | | S | **Sn** | **21 29 16.4** | **+1.1** |
| **EMIN** | **Mina Concepcio** | **3.27** | **315** | Pn | **Pn** | **21 28 38.1** | **-0.9** |
| | 2.7nm,0.2s,SNR=7.9 | | | | | | |
| EMIN | | | | Sn | **Sn** | **21 29 12.5** | **-5.2** |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| **OJBR** | **Djebel Berber** | **3.33** | **88** | P | **Pn** | **21 28 38.0** | **-1.9** |
| **ETRV** | **Los Montesinos** | **3.46** | **43** | Sn | **Sn** | **21 29 19.5** | **-3.0** |
| | SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **3.58** | **29** | Pn | **Pn** | **21 28 45.5** | **+2.0** |
| | 34nm,0.2s,SNR=7.9 | | | | | | |
| ETOB | | | | Sn | **Sn** | **21 29 25.7** | **+0.1** |
| | SNR=7.9 | | | | | | |
| **OKGL** | **Djebel Kef Gue** | **3.60** | **80** | P | **Pn** | **21 28 39.0** | **-4.6** |
| **EGRO** | **El Granado** | **3.63** | **305** | Pn | **Pn** | **21 28 43.5** | **-0.5** |
| | 3.0nm,0.2s,SNR=7.9 | | | | | | |
| EGRO | | | | Sn | **Sn** | **21 29 24.7** | **-2.0** |
| | 2.6nm,0.2s,SNR=7.9 | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | *e*Pn | **Pn** | **21 28 44.6** | **-0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **21 29 27.1** | **-1.9** |
| PVAQ | | | | A | A | 21 29 35.0 | |
| | 50nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | | **Pn** | **21 28 44.6** | **-0.7** |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | P | **Pn** | **21 28 48.0** | **+2.7** |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | P | **Pn** | **21 28 44.6** | **-0.7** |
| PVAQ | | | | S | **Sn** | **21 29 28.9** | **-0.1** |
| **AVE** | **Averroes** | **3.76** | **235** | S | **Sn** | **21 29 28.6** | **-1.2** |
| **AVE** | **Averroes** | **3.76** | **235** | P | **Pn** | **21 28 45.2** | **-0.5** |
| **PBDV** | **Barranco-do-Ve** | **3.80** | **298** | *e*Pn | **Pn** | **21 28 46.0** | **-0.4** |
| PBDV | | | | *e*Sn | **Sn** | **21 29 28.9** | **-2.1** |
| PBDV | | | | A | A | 21 29 38.5 | |
| | 46nm,0.4s | | | | | | |
| **GOLM** | **Goulmima** | **3.93** | **195** | P | **Pn** | **21 28 49.8** | **+1.5** |
| **FIGM** | **Figuig** | **3.95** | **148** | P | **Pn** | **21 28 49.4** | **+0.9** |
| **AFON** | **Font Roja** | **4.05** | **38** | Pn | **Pn** | **21 28 51.6** | **+1.7** |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| AFON | | | | Sn | **Sn** | **21 29 34.4** | **-2.9** |
| | 26nm,0.5s,SNR=7.9 | | | | | | |
| **PAB** | **San Pablo** | **4.06** | **353** | | **Pn** | **21 28 50.2** | **+0.2** |
| **PAB** | **San Pablo** | **4.06** | **353** | Pn | **Pn** | **21 28 50.5** | **+0.5** |
| | 0.4nm,0.2s,SNR=7.9 | | | | | | |
| PAB | | | | Sn | **Sn** | **21 29 35.7** | **-1.7** |
| | 4.4nm,0.2s,SNR=7.9 | | | | | | |
| PAB | | | | Lg | Lg | 21 29 56.9 | |
| | 15nm,0.4s,SNR=7.9 | | | | | | |
| **PAB** | **San Pablo** | **4.06** | **353** | P | **Pn** | **21 28 51.0** | **+1.0** |
| **PCVE** | **Castro Verde** | **4.06** | **303** | *e*Pn | **Pn** | **21 28 49.5** | **-0.5** |
| PCVE | | | | *e*Sn | **Sn** | **21 29 35.2** | **-2.1** |
| PCVE | | | | A | A | 21 29 50.8 | |
| | 34nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.16** | **358** | Pn | **Pn** | **21 28 52.2** | **+0.8** |
| | 0.8nm,0.3s,baz=180,slow=12,SNR=36 | | | | | | |
| ESDC | | | | Sn | **Sn** | **21 29 39.9** | **0.0** |
| | 1.8nm,0.3s,baz=176,slow=22,SNR=5.1 | | | | | | |
| ESDC | | | | Lg | Lg | 21 29 57.0 | |
| | 2.9nm,0.3s,baz=173,slow=28,SNR=6.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.16** | **358** | | **Pn** | **21 28 51.8** | **+0.4** |
| **ESDC** | **Sonseca Array** | **4.16** | **358** | Pn | **Pn** | **21 28 51.3** | **-0.1** |
| | 6.6nm,0.1s,baz=173,slow=13,SNR=84 | | | | | | |
| ESDC | | | | Sn | **Sn** | **21 29 40.0** | **+0.2** |
| | 16nm,0.6s,baz=181,slow=16,SNR=4.1 | | | | | | |
| ESDC | | | | Lg | Lg | 21 30 01.1 | |
| | baz=180,slow=28,SNR=7.9 | | | | | | |
| **PBEJ** | **Beja** | **4.16** | **308** | *e*Pn | **Pn** | **21 28 51.4** | **+0.1** |
| PBEJ | | | | *e*Sn | **Sn** | **21 29 38.1** | **-1.7** |
| PBEJ | | | | A | A | 21 29 49.0 | |
| | 20nm,0.4s | | | | | | |
| **ESBB** | **Sonseca Array** | **4.16** | **358** | | **Pn** | **21 28 52.0** | **+0.6** |
| **EBAD** | **Badajoz** | **4.17** | **322** | Pn | **Pn** | **21 28 50.3** | **-1.2** |
| | 2.0nm,0.3s,SNR=7.9 | | | | | | |
| EBAD | | | | Sn | **Sn** | **21 29 38.2** | **-1.7** |
| | 20nm,0.2s,SNR=7.9 | | | | | | |
| **EBEN2** | **Beniarda presa** | **4.25** | **41** | Pn | **Pn** | **21 28 51.4** | **-1.1** |
| | 2.8nm,0.2s,SNR=7.9 | | | | | | |
| EBEN2 | | | | Sn | **Sn** | **21 29 38.3** | **-3.5** |
| | 11nm,0.2s,SNR=7.9 | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*P | **Pn** | **21 28 52.4** | **-0.7** |
| MESJ | | | | *e*S | **Sn** | **21 29 39.2** | **-3.8** |
| MESJ | | | | IAML | | 21 29 47.4 | |
| | comp=N,32nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*Pn | **Pn** | **21 28 52.8** | **-0.3** |
| MESJ | | | | *e*Sn | **Sn** | **21 29 41.5** | **-1.5** |
| MESJ | | | | A | A | 21 29 49.9 | |
| | comp=N,32nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **296** | *e*P | **Pn** | **21 28 53.4** | **-0.6** |
| MORF | | | | *e*S | **Sn** | **21 29 40.5** | **-4.0** |
| MORF | | | | IAML | | 21 29 50.8 | |
| | comp=N,70nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **296** | *e*Pn | **Pn** | **21 28 54.3** | **+0.3** |
| MORF | | | | *e*Sn | **Sn** | **21 29 42.7** | **-1.9** |
| MORF | | | | A | A | 21 29 52.0 | |
| | comp=N,28nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | *e*Pn | **Pn** | **21 28 54.3** | **-0.6** |
| PFVI | | | | *e*Sn | **Sn** | **21 29 43.2** | **-2.9** |
| PFVI | | | | A | A | 21 29 54.6 | |
| | comp=N,47nm,0.4s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | Pn | **Pn** | **21 28 55.7** | **+0.8** |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | Pn | **Pn** | **21 28 52.8** | **-2.1** |
| | comp=N,2.9nm,0.3s,SNR=7.9 | | | | | | |
| PFVI | | | | Sn | **Sn** | **21 29 41.9** | **-4.2** |
| | comp=N,13nm,0.2s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | P | **Pn** | **21 28 55.3** | **+0.5** |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | P | **Pn** | **21 28 55.3** | **+0.5** |
| **PTEO** | **Sao Teotonio** | **4.50** | **298** | *e*Pn | **Pn** | **21 28 55.7** | **-0.3** |
| PTEO | | | | *e*Sn | **Sn** | **21 29 45.5** | **-2.7** |
| PTEO | | | | A | A | 21 29 55.8 | |
| | comp=N,38nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.55** | **319** | *e*Pn | **Pn** | **21 28 56.9** | **+0.2** |
| PESTR | | | | *e*Sn | **Sn** | **21 29 47.9** | **-1.5** |
| PESTR | | | | A | A | 21 30 04.6 | |
| | comp=N,27nm,0.1s | | | | | | |
| **PESTR** | **Estremoz** | **4.55** | **319** | Pn | **Pn** | **21 28 57.9** | **+1.2** |
| **PESTR** | **Estremoz** | **4.55** | **319** | P | **Pn** | **21 28 56.0** | **-0.7** |
| **EVO** | **Evora** | **4.56** | **313** | P | **Pn** | **21 28 56.5** | **-0.3** |
| EVO | | | | S | **Sn** | **21 29 47.7** | **-1.9** |
| **EVO** | **Evora** | **4.56** | **313** | *e*Pn | **Pn** | **21 28 56.6** | **-0.3** |
| EVO | | | | *e*Sn | **Sn** | **21 29 47.0** | **-2.7** |
| EVO | | | | A | A | 21 29 56.4 | |
| | comp=N,30nm,0.5s | | | | | | |
| **SRHM** | **Skhour des Reh** | **4.60** | **230** | P | **Pn** | **21 28 55.9** | **-1.5** |
| **ECHE** | **Chera** | **4.63** | **28** | Pn | **Pn** | **21 28 59.3** | **+1.5** |
| | SNR=7.9 | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | **Pn** | **21 28 57.4** | **-0.5** |
| PNCL | | | | *e*Sn | **Sn** | **21 29 49.3** | **-2.3** |
| PNCL | | | | A | A | 21 29 56.8 | |
| | comp=N,24nm,0.4s | | | | | | |
| **UCM** | **Universidad Co** | **4.81** | **4** | P | **Pn** | **21 29 00.4** | **+0.2** |
| UCM | | | | S | **Sn** | **21 30 00.6** | **+4.8** |
| **PMRV** | **Marv??o** | **4.88** | **324** | *e*Pn | **Pn** | **21 29 01.6** | **+0.4** |
| PMRV | | | | *e*Sn | **Sn** | **21 29 53.8** | **-3.6** |
| PMRV | | | | A | A | 21 30 17.8 | |
| | comp=N,16nm,0.4s | | | | | | |
| **EPLA** | **Plasencia** | **4.91** | **338** | Pn | **Pn** | **21 29 01.9** | **+0.2** |
| | comp=N,0.4nm,0.2s,SNR=7.9 | | | | | | |
| EPLA | | | | Sn | **Sn** | **21 29 55.3** | **-3.1** |
| | comp=N,0.9nm,0.1s,SNR=7.9 | | | | | | |
| EPLA | | | | Lg | Lg | 21 30 23.0 | |
| | comp=N,9.9nm,0.3s,SNR=7.9 | | | | | | |
| **TZRR** | **Tazzarine** | **4.96** | **199** | P | **Pn** | **21 29 02.9** | **+0.5** |
| **PMTG** | **Montargil** | **5.04** | **316** | *e*Pn | **Pn** | **21 29 03.5** | **0.0** |
| PMTG | | | | *e*Sn | **Sn** | **21 29 59.7** | **-1.8** |
| PMTG | | | | A | A | 21 30 06.4 | |
| | comp=N,32nm,0.6s | | | | | | |
| **GUD** | **Guadarrama** | **5.14** | **356** | Pn | **Pn** | **21 29 05.9** | **+1.0** |
| | comp=N,1.7nm,0.2s,SNR=7.9 | | | | | | |
| GUD | | | | Sn | **Sn** | **21 30 02.4** | **-1.7** |
| | SNR=7.9 | | | | | | |
| GUD | | | | Lg | Lg | 21 30 31.8 | |
| | comp=N,18nm,0.5s,SNR=7.9 | | | | | | |
| **OUZM** | **OUZ** | **5.24** | **210** | P | **Pn** | **21 29 08.1** | **+1.8** |
| **OUZM** | **OUZ** | **5.24** | **210** | P | **Pn** | **21 29 06.1** | **-0.2** |
| **PCBR** | **Castelo Branco** | **5.25** | **327** | *e*Pn | **Pn** | **21 29 06.6** | **+0.4** |
| PCBR | | | | *e*Sn | **Sn** | **21 30 04.1** | **-2.4** |
| PCBR | | | | A | A | 21 30 22.6 | |
| | comp=N,18nm,0.5s | | | | | | |
| **EIBI** | **Ibiza** | **5.36** | **48** | Pn | **Pn** | **21 29 07.2** | **-0.6** |
| | comp=N,1.1nm,0.2s,SNR=7.9 | | | | | | |
| EIBI | | | | Sn | **Sn** | **21 30 06.5** | **-2.8** |
| | comp=N,23nm,0.5s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **5.46** | **14** | Pn | **Pn** | **21 29 08.8** | **-0.5** |
| | comp=N,5.3nm,0.2s,SNR=7.9 | | | | | | |
| ETOR | | | | Lg | Lg | 21 30 41.2 | |
| | comp=N,41nm,0.4s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.49** | **27** | Pn | **Pn** | **21 29 10.7** | **+0.9** |
| | comp=N,1.3nm,0.3s,SNR=7.9 | | | | | | |
| EMOS | | | | Sn | **Sn** | **21 30 16.0** | **+3.2** |
| | comp=N,0.4nm,0.2s,SNR=7.9 | | | | | | |
| **OUK** | **Oukaimeden** | **5.51** | **220** | P | **Pn** | **21 29 10.0** | **-0.2** |
| **OUK** | **Oukaimeden** | **5.51** | **220** | P | **Pn** | **21 29 08.5** | **-1.7** |
| **PMAFR** | **Mafra** | **5.61** | **309** | *e*Pn | **Pn** | **21 29 11.8** | **+0.6** |
| PMAFR | | | | *e*Sn | **Sn** | **21 30 13.4** | **-2.0** |
| **PMAFR** | **Mafra** | **5.61** | **309** | Pn | **Pn** | **21 29 10.7** | **-0.5** |
| | comp=N,33nm,0.6s,SNR=7.9 | | | | | | |
| PMAFR | | | | Sn | **Sn** | **21 30 13.1** | **-2.3** |
| | comp=N,28nm,0.3s,SNR=7.9 | | | | | | |
| **PSBE** | **So Bento** | **5.67** | **316** | *e*Pn | **Pn** | **21 29 12.5** | **+0.4** |
| **MTE** | **Manteigas** | **5.74** | **329** | Pn | **Pn** | **21 29 12.4** | **-0.6** |
| **PCAS** | **Casmilo, Conde** | **5.90** | **322** | *e*Sn | **Sn** | **21 30 21.2** | **-1.4** |
| PCAS | | | | A | A | 21 30 33.3 | |
| | comp=N,16nm,0.7s | | | | | | |
| **COI** | **Coimbra** | **5.97** | **323** | Pn | **Pn** | **21 29 17.1** | **+0.9** |
| **PVIS** | **Viseu** | **6.15** | **329** | *e*Sn | **Sn** | **21 30 29.8** | **+1.0** |
| PVIS | | | | A | A | 21 30 42.0 | |
| | comp=N,14nm,0.6s | | | | | | |
| **MVO** | **Moncorvo** | **6.21** | **336** | *e*Pn | **Pn** | **21 29 20.6** | **+1.0** |
| MVO | | | | *e*Sn | **Sn** | **21 30 28.9** | **-1.5** |
| MVO | | | | A | A | 21 30 40.2 | |
| | comp=N,22nm,0.6s | | | | | | |
| **MVO** | **Moncorvo** | **6.21** | **336** | Pn | **Pn** | **21 29 20.1** | **+0.5** |
| | comp=N,3.0nm,0.2s,SNR=7.9 | | | | | | |
| MVO | | | | Sn | **Sn** | **21 30 28.8** | **-1.6** |
| | comp=N,17nm,0.4s,SNR=7.9 | | | | | | |
| MVO | | | | Lg | Lg | 21 31 05.8 | |
| | SNR=7.9 | | | | | | |
| **ERTA** | **Horta de San J** | **6.31** | **29** | Pn | **Pn** | **21 29 22.6** | **+1.8** |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | |
| ERTA | | | | Sn | **Sn** | **21 30 29.6** | **-3.1** |
| | comp=N,5.8nm,0.4s,SNR=7.9 | | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.33** | **220** | P | **Pn** | **21 29 18.1** | **-3.2** |
| **PVRL** | **Vila Real** | **6.55** | **333** | *e*Pn | **Pn** | **21 29 24.6** | **+0.4** |
| PVRL | | | | *e*Sn | **Sn** | **21 30 37.0** | **-1.7** |
| PVRL | | | | A | A | 21 30 50.1 | |
| | comp=N,18nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.67** | **333** | *e*Pn | **Pn** | **21 29 26.6** | **+0.8** |
| POLO | | | | *e*Sn | **Sn** | **21 30 39.2** | **-2.4** |
| POLO | | | | A | A | 21 30 58.7 | |
| | comp=N,6.1nm,0.6s | | | | | | |
| **ETOS** | **Mallorca** | **6.71** | **49** | Pn | **Pn** | **21 29 26.8** | **+0.5** |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | |
| ETOS | | | | Sn | **Sn** | **21 30 38.5** | **-4.2** |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | |
| **PBRG** | **Braganca** | **6.71** | **340** | *e*Pn | **Pn** | **21 29 27.3** | **+0.9** |
| **ELOB** | **Lobios** | **7.19** | **333** | Pn | **Pn** | **21 29 31.6** | **-1.4** |
| | comp=N,2.0nm,0.3s,SNR=7.9 | | | | | | |
| ELOB | | | | Sn | **Sn** | **21 30 50.6** | **-3.9** |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.36** | **333** | *e*Pn | **Pn** | **21 29 38.0** | **+2.7** |
| **EORO** | **Oroz-Betelu** | **7.61** | **14** | Pn | **Pn** | **21 29 39.6** | **+0.9** |
| | SNR=7.9 | | | | | | |
| **ELAN** | **Lanestosa** | **7.72** | **2** | Pn | **Pn** | **21 29 39.9** | **-0.2** |
| | comp=N,0.3nm,0.2s,SNR=7.9 | | | | | | |
| **ETSF** | **Etsaut** | **7.78** | **17** | *e*Pn | **Pn** | **21 29 41.1** | **0.0** |
| ETSF | | | | *e*Sn | **Sn** | **21 31 04.2** | **-4.8** |
| | comp=N,1.1nm,0.2s | | | | | | |
| **CSOR** | **Sort** | **7.83** | **27** | Pn | **Pn** | **21 29 43.3** | **+1.4** |
| | comp=N,4.9nm,0.3s,SNR=7.9 | | | | | | |
| **SJPF** | **Ste Jean** | **7.84** | **14** | *e*Pn | **Pn** | **21 29 41.8** | **0.0** |
| SJPF | | | | *e*Sn | **Sn** | **21 31 03.9** | **-6.5** |
| | comp=N,3.1nm,0.3s | | | | | | |
| **EARI** | **Arriondas** | **7.87** | **352** | Pn | **Pn** | **21 29 44.1** | **+1.8** |
| | comp=N,0.3nm,0.3s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **7.89** | **12** | Pn | **Pn** | **21 29 44.8** | **+2.2** |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **7.92** | **16** | Pn | **Pn** | **21 29 45.0** | **+2.0** |
| | comp=N,2.7nm,0.4s,SNR=7.9 | | | | | | |
| ATE | | | | Sn | **Sn** | **21 31 09.6** | **-2.8** |
| | SNR=4.0 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **8.03** | **336** | Pn | **Pn** | **21 29 46.7** | **+2.2** |
| | comp=N,0.6nm,0.4s,SNR=7.9 | | | | | | |
| **EPF** | **Esparros** | **8.15** | **22** | *e*Pn | **Pn** | **21 29 46.3** | **+0.2** |
| EPF | | | | *e*Sn | **Sn** | **21 31 12.6** | **-5.4** |
| | comp=N,3.2nm,0.5s | | | | | | |
| **EPON** | **Pontenova** | **8.24** | **342** | Pn | **Pn** | **21 29 52.0** | **+4.6** |
| | SNR=7.9 | | | | | | |
| **MTLF** | **Montolieu** | **9.07** | **29** | *e*P | Pn | 21 30 04.2 | +5.4 |
| **TANT** | **Tantan** | **9.52** | **224** | P | **Pn** | **21 30 03.3** | **-1.7** |
| **LFF** | **La Frestale** | **10.02** | **19** | *e*P | **Pn** | **21 30 16.1** | **+4.4** |
| LFF | | | | *e*Sn | **Sn** | **21 31 56.9** | **-7.0** |
| | comp=N,0.6nm,0.2s | | | | | | |
| **CAF** | **Calviac** | **10.39** | **23** | *e*P | **Pn** | **21 30 20.4** | **+3.5** |
| **RJF** | **Les Rejaudoux** | **10.57** | **21** | *e*Pn | **Pn** | **21 30 18.7** | **-0.5** |
| **RJF** | **Les Rejaudoux** | **10.57** | **21** | *e*P | Pn | 21 30 24.1 | +4.9 |
| **KEST** | **Kesra** | **10.65** | **85** | Pn | **Pn** | **21 30 23.5** | **+3.1** |
| | comp=N,0.1nm,0.3s,baz=226,slow=16,SNR=1.7 | | | | | | |
| **KEST** | **Kesra** | **10.65** | **85** | | **Pn** | **21 30 21.9** | **+1.4** |
| **SMRF** | **Simiane la Rot** | **11.08** | **37** | *e*P | Pn | 21 30 31.0 | +4.8 |
| **LMR** | **La Mourre** | **11.12** | **42** | *e*P | **Pn** | **21 30 30.5** | **+3.7** |
| **VIVF** | **Saint-Julien-l** | **11.33** | **32** | *e*Pn | **Pn** | **21 30 28.7** | **-1.0** |
| **TCF** | **Toulx Ste Croi** | **11.66** | **21** | *e*Pn | **Pn** | **21 30 32.4** | **-1.8** |
| **SBF** | **Sospel** | **11.97** | **42** | *e*P | **Pn** | **21 30 42.4** | **+3.9** |
| **BGF** | **Bois d'Agland** | **12.10** | **22** | *e*Pn | **Pn** | **21 30 38.5** | **-1.6** |
| **PGF** | **Pioggiola** | **12.13** | **51** | *e*Pn | **Pn** | **21 30 39.5** | **-1.3** |
| **PGF** | **Pioggiola** | **12.13** | **51** | *e*P | **Pn** | **21 30 45.2** | **+4.4** |
| **QUIF** | **Quistinic** | **12.40** | **2** | *e*Pn | **Pn** | **21 30 44.2** | **-0.1** |
| **SSF** | **Saint Saulge** | **12.75** | **23** | *e*P | **Pn** | **21 30 53.7** | **+4.6** |
| **SGMF** | **Saint Gilles** | **12.77** | **4** | *e*Pn | **Pn** | **21 30 49.5** | **+0.3** |
| **ROSF** | **Rostrenen** | **12.82** | **1** | *e*Pn | **Pn** | **21 30 49.7** | **-0.3** |
| **GERES** | **GERESS Array B** | **18.50** | **39** | P | **Pn** | **21 32 04.7** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=224,slow=3.7,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **18.50** | **39** | P | **P** | **21 32 02.7** | **-1.3** |
| **CLL** | **Collm** | **19.85** | **32** | *e*P | **P** | **21 32 19.0** | **+0.3** |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **KOWA** | **Kowa** | **20.93** | **181** | P | Pn | 21 32 33.5 | +0.4 |
| KOWA | | | | IAmb | IAmb | 21 32 40.7 | |
| | comp=Z,6.3nm,1.5s | | | | | | |
| **MORC** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LCRM | | | | S | **Sb** | **21 35 40.9** | **-0.6** |
| **MD31** | **MD31** | **2.75** | **199** | P | **Pn** | **21 35 24.1** | **+0.8** |
| MD31 | | | | S | **Sn** | **21 35 55.2** | **-1.1** |
| **MDT** | **Midelt** | **2.77** | **196** | P | **Pn** | **21 35 23.9** | **+0.5** |
| MDT | | | | S | **Sn** | **21 35 57.8** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **3.78** | **302** | *e*Pn | **Pn** | **21 35 38.0** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **21 36 19.8** | **-1.7** |
| PVAQ | | | | A | A | 21 36 31.2 | |
| | 2.9nm,0.8s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **298** | *e*Pn | **Pn** | **21 35 38.7** | **+0.3** |
| PBDV | | | | *e*Sn | **Sn** | **21 36 21.3** | **-2.2** |
| **MESJ** | **Messejana** | **4.35** | **304** | *e*Pn | **Pn** | **21 35 45.9** | **+0.8** |
| **PNCL** | **Nicolau / Gran** | **4.70** | **305** | *e*Pn | **Pn** | **21 35 51.6** | **+1.7** |
| **PMTG** | **Montargil** | **5.10** | **316** | *e*Pn | **Pn** | **21 35 58.4** | **+3.0** |

*CNRM* ***03*** *21:36:24.9, 35˚.68N×3˚.81W, h3km, ml2.8*
*INMG* ***03*** *21:36:30.4±1.6, 35˚.45N×3˚.75W, h18km±8km, ML2.2, Error ellipse: s-maj=5.7km s-min=3.9km az=23.0*

**ISC 03 21:36:28.9**±1.4,**35˚.49N**±0˚.04×**3˚.77W**±0˚.05,**h19**km±3km,
**n15**,σ1°**57**/25,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.30** | **208** | P | **Pg** | **21 36 34.6** | **-0.9** |
| PALE | | | | S | **Sg** | **21 36 40.1** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.68** | **113** | P | **Pb** | **21 36 41.0** | **-1.2** |
| GOG | | | | S | **Sb** | **21 36 51.2** | **-0.1** |
| **SMIR** | **Smir Dam** | **1.33** | **279** | P | **Pn** | **21 36 49.3** | **-3.1** |
| **JBK** | **JBK** | **1.52** | **139** | P | **Pn** | **21 36 54.9** | **-0.3** |
| JBK | | | | S | **Sg** | **21 37 17.9** | **0.0** |
| **LCRM** | **LCR** | **2.01** | **207** | P | **Pn** | **21 37 04.0** | **+2.1** |
| LCRM | | | | S | **Sg** | **21 37 34.8** | **+1.2** |
| **MD31** | **MD31** | **2.74** | **198** | P | **Pn** | **21 37 11.4** | **-0.5** |
| MD31 | | | | S | **Sn** | **21 37 47.1** | **+2.6** |
| **MDT** | **Midelt** | **2.76** | **195** | P | **Pn** | **21 37 14.0** | **+1.9** |
| MDT | | | | S | **Sb** | **21 37 50.4** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | *e*Pn | **Pn** | **21 37 25.8** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **21 38 07.9** | **-0.6** |
| PVAQ | | | | A | A | 21 38 13.8 | |
| | 3.9nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **299** | *e*Pn | **Pn** | **21 37 26.9** | **+0.6** |
| PBDV | | | | *e*Sn | **Sn** | **21 38 10.0** | **-0.4** |
| PBDV | | | | A | A | 21 38 12.9 | |
| | 3.3nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **4.05** | **303** | *e*Pn | **Pn** | **21 37 31.9** | **+2.1** |
| **MESJ** | **Messejana** | **4.28** | **305** | *e*Pn | **Pn** | **21 37 34.5** | **+1.5** |
| MESJ | | | | *e*Sn | **Sn** | **21 38 23.0** | **+0.6** |
| MESJ | | | | A | A | 21 38 26.1 | |
| | 3.5nm,0.7s | | | | | | |
| **EVO** | **Evora** | **4.56** | **313** | *e*Pn | **Pn** | **21 37 38.1** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **21 38 28.6** | **-0.7** |
| EVO | | | | A | A | 21 38 31.4 | |
| | 3.6nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | **Pn** | **21 37 38.6** | **+0.8** |
| **PMRV** | **Marv??o** | **4.88** | **325** | *e*Pn | **Pn** | **21 37 44.2** | **+3.0** |
| **MVO** | **Moncorvo** | **6.22** | **337** | *e*Pn | **Pn** | **21 38 01.5** | **+1.8** |

*IDC* ***03*** *21:36:45.8±0.5, 8˚.17S×13˚.63W, h0km, mb4.2/24, mb1 4.3/25, mb1mx4.1/58, mbtmp4.2/25, ML3.4/1, MS3.9/20, Ms1 3.9/20, ms1mx3.6/82, Error ellipse: s-maj=18.8km s-min=13.0km az=129.0*
*NEIC* ***03*** *21:36:48.0±1.1, 8˚.12S±0˚.07×13˚.75W±0˚.04, h10km±1km, mb4.9/24, Error ellipse: s-maj=12.2km s-min=6.3km az=191.0*

**ISC 03 21:36:48.7**±0.4,**8˚.10S**±0˚.08×**13˚.72W**±0˚.05,**h17**km,**n113,**
σ1°**11**/98,**mb4.4**/35,**MS3.9**/19,**Ascension Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASCN** | **Ascension** | **0.65** | **284** | | **Pg** | **21 37 00.1** | **-1.4** |
| ASCN | | | | Sg | **Sg** | **21 37 09.1** | **-1.1** |
| **H10N1** | **ASCENSION HYDR** | **0.79** | **288** | Pn | **Pb** | **21 37 02.3** | **-1.5** |
| | baz=126,slow=18,SNR=9142 | | | | | | |
| H10N1 | | | | T | T | 21 38 01.3 | |
| | baz=114 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **0.80** | **289** | Pn | **Pb** | **21 37 02.6** | **-1.4** |
| | baz=126,slow=18,SNR=9587 | | | | | | |
| H10N2 | | | | T | T | 21 38 15.1 | |
| | baz=114 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **0.81** | **288** | Pn | **Pb** | **21 37 02.7** | **-1.4** |
| | baz=126,slow=18 | | | | | | |
| H10N3 | | | | T | T | 21 38 05.4 | |
| | baz=114 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **1.25** | **227** | T | T | 21 38 32.1 | |
| | baz=56,slow=74,SNR=4244 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **1.26** | **227** | T | T | 21 38 31.8 | |
| | baz=164,slow=74,SNR=7618 | | | | | | |
| **DBIC** | **Dimbokro** | **17.13** | **31** | P | **Pn** | **21 40 46.8** | **-0.6** |
| | 0.1nm,0.3s,baz=196,slow=14,SNR=1.8 | | | | | | |
| DBIC | | | | LR | LR | 21 45 36.1 | |
| | comp=Z,219nm,21.5s,baz=206,slow=31 | | | | | | |
| **DBIC** | **Dimbokro** | **17.13** | **31** | | **Pn** | **21 40 46.3** | **-1.1** |
| **NBRF** | **Rio Formoso -** | **21.18** | **267** | *e*P | **P** | **21 41 33.2** | **-0.3** |
| **NBPV** | **Pedro Velho** | **21.46** | **273** | *e*P | **P** | **21 41 36.9** | **+0.4** |
| **NBAN** | **Anadia - AL** | **22.34** | **264** | *e*P | **P** | **21 41 46.5** | **+0.6** |
| **KOWA** | **Kowa** | **24.42** | **23** | P | **P** | **21 42 07.0** | **+0.4** |
| KOWA | 6.3nm,0.7s,baz=207,slow=10,SNR=22 | | | LR | LR | 21 49 51.0 | |
| | comp=Z,208nm,19.9s,baz=48,slow=32 | | | | | | |
| **KOWA** | **Kowa** | **24.42** | **23** | P | **P** | **21 42 06.5** | **-0.1** |
| **NBPB** | **Pedra_Branca-C** | **25.80** | **274** | *e*P | **P** | **21 42 20.4** | **+1.2** |
| **GDU01** | **Guandu, BA** | **25.98** | **255** | *e*P | **P** | **21 42 23.3** | **+2.5** |
| **NBIT** | **Itapeh - BA** | **26.08** | **253** | *e*P | **P** | **21 42 23.3** | **+1.7** |
| **TORD** | **Torodi Ar. Bea** | **26.08** | **36** | P | **P** | **21 42 22.4** | **+0.8** |
| | 4.0nm,0.7s,baz=223,slow=10,SNR=26 | | | | | | |
| **CMC01** | **Camacan, BA** | **26.25** | **252** | *e*P | **P** | **21 42 25.3** | **+2.1** |
| **NBPN** | **Ponto Novo - B** | **26.25** | **262** | *e*P | **P** | **21 42 25.1** | **+1.8** |
| **GUA01** | **Guaratinga, BA** | **26.81** | **249** | *e*P | **P** | **21 42 29.8** | **+1.5** |
| **BSFB** | **Barra de Sao F** | **28.41** | **245** | *e*P | **P** | **21 42 44.7** | **+2.1** |
| **SJMB** | **Sao Joao De Ma** | **28.67** | **246** | *e*P | **P** | **21 42 46.4** | **+1.4** |
| **JANB** | **Januaria** | **30.73** | **254** | *e*P | **P** | **21 43 04.5** | **+1.2** |
| **SDBA** | **SAO DESIDERIO** | **30.97** | **259** | *e*P | **P** | **21 43 05.7** | **+0.3** |
| **TSUM** | **Tsumeb** | **32.30** | **113** | LR | LR | 21 53 29.1 | |
| | comp=Z,141nm,21.0s,baz=316,slow=31 | | | | | | |
| **BSCB** | **Bom Sucesso** | **32.60** | **243** | *e*P | **P** | **21 43 20.9** | **+1.1** |
| **BDFB** | **Brasilia** | **34.35** | **254** | P | **P** | **21 43 35.4** | **+0.4** |
| | 4.3nm,0.7s,baz=86,slow=8.9,SNR=7.9 | | | | | | |
| BDFB | | | | LR | LR | 21 55 00.1 | |
| | comp=Z,225nm,21.1s,baz=135,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **34.35** | **254** | P | **P** | **21 43 34.1** | **-0.9** |
| **TMAB** | **Tom-Au,PA,Br** | **34.68** | **278** | *e*P | **P** | **21 43 39.9** | **+2.0** |
| **IPMB** | **Ipameri, GO** | **34.95** | **250** | *e*P | **P** | **21 43 41.9** | **+1.7** |
| **VAO** | **Valinhos** | **35.17** | **241** | *e*P | **P** | **21 43 43.3** | **+1.2** |
| **BB19B** | **Bebedouro** | **35.97** | **245** | *e*P | **P** | **21 43 49.8** | **+0.9** |
| **PCMB** | **Pacaembu** | **38.57** | **245** | *e*P | **P** | **21 44 12.0** | **+1.1** |
| **SUR** | **Sutherland** | **40.12** | **132** | LR | LR | 21 56 38.6 | |
| | comp=Z,206nm,19.5s,baz=340,slow=30 | | | | | | |
| **PTGB** | **Pitanga** | **40.14** | **241** | *e*P | **P** | **21 44 25.4** | **+1.3** |
| **MALB** | **Monte Alegre** | **40.84** | **277** | *e*P | **P** | **21 44 31.2** | **+1.3** |
| **LBTB** | **Lobatse** | **41.08** | **119** | P | **P** | **21 44 30.6** | **-1.3** |
| | 1.3nm,0.6s,baz=297,slow=8.9,SNR=4.1 | | | | | | |
| LBTB | | | | LR | LR | 21 57 41.0 | |
| | comp=Z,164nm,22.0s,baz=14,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **41.08** | **119** | P | **P** | **21 44 30.4** | **-1.5** |
| LBTB | | | | IAmb | IAmb | 21 44 45.5 | |
| | comp=Z,28nm,1.6s | | | | | | |
| **NPGB** | **Novo Progresso** | **41.27** | **269** | *e*P | **P** | **21 44 34.8** | **+1.3** |
| **LSZ** | **Lusaka** | **41.60** | **104** | P | **P** | **21 44 35.4** | **-1.0** |
| | comp=Z,2.6nm,0.8s,baz=271,slow=5.1,SNR=8.6 | | | | | | |
| LSZ | | | | LR | LR | 22 00 01.1 | |
| | comp=Z,155nm,18.1s,baz=359,slow=34 | | | | | | |
| **LSZ** | **Lusaka** | **41.60** | **104** | P | **P** | **21 44 35.9** | **-0.4** |
| **ITTB** | **Itaituba** | **41.91** | **272** | *e*P | **P** | **21 44 38.1** | **-0.7** |
| **BOSA** | **Boshof** | **41.98** | **124** | P | **P** | **21 44 37.7** | **-1.5** |
| | comp=Z,3.5nm,0.9s,baz=312,slow=10,SNR=3.7 | | | | | | |
| BOSA | | | | LR | LR | 21 58 54.2 | |
| | comp=Z,93nm,21.0s,baz=357,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **41.98** | **124** | P | **P** | **21 44 37.8** | **-1.5** |
| BOSA | | | | IAmb | IAmb | 21 44 41.0 | |
| | comp=Z,28nm,1.7s | | | | | | |
| **AQDB** | **Aquidauana** | **42.37** | **249** | *e*P | **P** | **21 44 43.1** | **+0.7** |
| **AQDB** | **Aquidauana** | **42.37** | **249** | P | **P** | **21 44 42.3** | **-0.1** |
| AQDB | | | | IAmb | IAmb | 21 44 47.4 | |
| | comp=Z,25nm,1.7s | | | | | | |
| **PDRB** | **Porto dos Gac** | **42.49** | **262** | *e*P | **P** | **21 44 44.3** | **+0.8** |
| **CPSB** | **Cacapava Do Su** | **43.24** | **234** | *e*P | **P** | **21 44 50.5** | **+1.1** |
| **PLTB** | **Pedras Altas** | **43.90** | **232** | *e*P | **P** | **21 44 56.2** | **+1.5** |
| **MBAR** | **Mbarara** | **44.92** | **83** | LR | LR | 22 02 06.2 | |
| | comp=Z,251nm,19.0s,baz=244,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **44.92** | **83** | P | **P** | **21 45 03.6** | **+0.3** |
| **PTLB** | **Pontes e Lacer** | **44.98** | **256** | *e*P | **P** | **21 45 04.6** | **+1.1** |
| **CPUP** | **Villa Florida** | **45.16** | **241** | P | **P** | **21 45 05.0** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=53,slow=10,SNR=3.3 | | | | | | |
| CPUP | | | | LR | LR | 21 59 30.4 | |
| | comp=Z,94nm,21.8s,baz=102,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **45.16** | **241** | *e*P | **P** | **21 45 06.4** | **+1.7** |
| **ITQB** | **Itaqui** | **45.56** | **236** | *e*P | **P** | **21 45 10.3** | **+2.4** |
| **PTGA** | **Pitinga** | **46.65** | **277** | LR | LR | 22 03 40.7 | |
| | comp=Z,188nm,19.2s,baz=124,slow=34 | | | | | | |
| **SIV** | **San Ignacio** | **46.88** | **256** | P | **P** | **21 45 19.5** | **+1.0** |
| | comp=Z,1.7nm,0.9s,baz=108,slow=6.9,SNR=5.3 | | | | | | |
| **BOAV** | **Boa Vista** | **47.82** | **281** | *e*P | **P** | **21 45 25.8** | **-0.1** |
| **BOAV** | **Boa Vista** | **47.82** | **281** | P | **P** | **21 45 25.7** | **-0.2** |
| BOAV | | | | IAmb | IAmb | 21 45 30.0 | |
| | comp=Z,22nm,1.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **48.38** | **10** | P | **P** | **21 45 30.5** | **+0.7** |
| | comp=Z,1.1nm,0.9s,baz=187,slow=8.7,SNR=5.4 | | | | | | |
| **KEST** | **Kesra** | **48.71** | **25** | LR | LR | 22 05 56.3 | |
| | comp=Z,136nm,19.4s,baz=320,slow=36 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **51.24** | **85** | LR | LR | 22 05 49.5 | |
| | comp=Z,109nm,19.4s,baz=290,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **51.81** | **295** | T | T | 22 41 53.6 | |
| | SNR=33 | | | | | | |
| **ETMB** | **Extrema** | **51.84** | **264** | *e*P | **P** | **21 45 57.5** | **+1.0** |
| **H05N1** | **Guadeloupe/Mar** | **52.75** | **297** | T | T | 22 43 00.1 | |
| | SNR=7.1 | | | | | | |
| **LPAZ** | **La Paz** | **53.67** | **256** | P | **P** | **21 46 11.5** | **+0.8** |
| | comp=Z,0.8nm,0.6s,baz=68,slow=11,SNR=2.7 | | | | | | |
| LPAZ | | | | LR | LR | 22 08 01.8 | |
| | comp=Z,73nm,20.4s,baz=66,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **53.67** | **256** | *e*P | **P** | **21 46 11.8** | **+1.1** |
| **PB07** | **IPOC Station P** | **55.66** | **249** | P | **P** | **21 46 25.1** | **+0.5** |
| PB07 | | | | IAmb | IAmb | 21 46 50.2 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **FETA** | **Feichten** | **59.03** | **19** | *e*P | **P** | **21 46 49.4** | **+1.6** |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **SQTA** | **Sankt Quirin** | **59.36** | **20** | *e*P | **P** | **21 46 51.3** | **+1.3** |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **59.39** | **21** | *e*P | **P** | **21 46 52.4** | **+2.2** |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **MOTA** | **Moosalm** | **59.43** | **19** | *e*P | **P** | **21 46 51.0** | **+0.4** |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **ATD** | **Arta Tunnel** | **59.55** | **72** | LR | LR | 22 11 46.0 | |
| | comp=Z,62nm,19.0s,baz=116,slow=35 | | | | | | |
| **PLCA** | **Paso Flores** | **59.83** | **227** | P | **P** | **21 46 53.2** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=90,slow=2.0,SNR=3.2 | | | | | | |
| **PLCA** | **Paso Flores** | **59.83** | **227** | P | **P** | **21 46 52.8** | **-0.7** |
| PLCA | | | | IAmb | IAmb | 21 47 08.7 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **GERES** | **GERESS Array B** | **61.60** | **20** | P | **P** | **21 47 06.1** | **+0.8** |
| | comp=Z,1.3nm,0.7s,baz=217,slow=4.6,SNR=4.5 | | | | | | |
| **GERES** | **GERESS Array B** | **61.60** | **20** | P | **P** | **21 47 05.7** | **+0.4** |
| **ROSC** | **El Rosal** | **61.79** | **280** | LR | LR | 22 12 25.4 | |
| | comp=Z,204nm,20.3s,baz=86,slow=35 | | | | | | |
| **NNA** | **Nana** | **62.16** | **261** | LR | LR | 22 12 46.6 | |
| | comp=Z,121nm,20.6s,baz=106,slow=35 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **62.58** | **178** | P | **P** | **21 47 10.3** | **-1.2** |
| **ASF** | **Jabal al Asfar** | **62.70** | **48** | P | **P** | **21 47 14.2** | **+1.1** |
| | comp=Z,1.6nm,0.6s,baz=256,slow=4.2,SNR=3.0 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **62.89** | **178** | P | **P** | **21 47 11.6** | **-2.0** |
| | baz=343,slow=7.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **63.81** | **7** | P | **P** | **21 47 20.4** | **+0.7** |
| | comp=Z,3.2nm,0.9s,baz=196,slow=7.0,SNR=4.0 | | | | | | |
| **SNAA** | **Sanae** | **63.87** | **176** | P | **P** | **21 47 17.8** | **-2.4** |
| **SNAA** | **Sanae** | **63.87** | **176** | P | **P** | **21 47 19.3** | **-0.8** |
| | comp=Z,4.5nm,0.9s,baz=339,slow=5.1,SNR=7.0 | | | | | | |
| **SNAA** | **Sanae** | **63.87** | **176** | P | **P** | **21 47 19.4** | **-0.7** |
| SNAA | | | | IAmb | IAmb | 21 47 20.4 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **ATAH** | **Atahualpa** | **64.05** | **266** | LR | LR | 22 13 48.1 | |
| | comp=Z,177nm,21.9s,baz=63,slow=35 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.11** | **30** | P | **P** | **21 47 22.0** | **-0.1** |
| | comp=Z,4.9nm,1.1s,baz=245,slow=17,SNR=5.5 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.11** | **30** | P | **P** | **21 47 22.0** | **-0.1** |
| MLR | | | | IAmb | IAmb | 21 47 23.2 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **BNN** | **Bunyan** | **65.54** | **41** | P | **P** | **21 47 32.1** | **+0.5** |
| **SIRT** | **Sirnak** | **69.29** | **45** | P | **P** | **21 47 55.5** | **+0.2** |
| **AKASG** | **Malin Array Be** | **69.33** | **28** | P | **P** | **21 47 54.2** | **-0.9** |
| | comp=Z,1.4nm,0.6s,baz=228,slow=6.3,SNR=10 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **69.51** | **44** | P | **P** | **21 47 57.3** | **+0.6** |
| **BELA** | **Belgrano 2** | **70.59** | **185** | P | **P** | **21 48 02.6** | **0.0** |
| **HFS** | **Hagfors** | **71.41** | **14** | P | **P** | **21 48 07.6** | **-0.1** |
| | comp=Z,6.6nm,0.7s,baz=205,slow=3.1,SNR=9.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **71.65** | **12** | P | **P** | **21 48 09.4** | **+0.2** |
| | comp=Z,6.8nm,1.1s,baz=206,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **71.65** | **12** | P | **P** | **21 48 09.1** | **-0.1** |
| | comp=Z,2.7nm,0.8s,baz=207,slow=6.1,SNR=5.8 | | | | | | |
| **KBZ** | **Khabaz** | **72.63** | **39** | P | **P** | **21 48 15.7** | **+0.4** |
| | comp=Z,2.8nm,0.9s,baz=274,slow=5.1,SNR=5.6 | | | | | | |
| **UOSS** | **Minazif** | **75.53** | **62** | P | **P** | **21 48 32.7** | **0.0** |
| UOSS | | | | IAmb | IAmb | 21 48 33.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **75.95** | **18** | P | **P** | **21 48 34.4** | **+0.1** |
| | comp=Z,3.1nm,0.8s,baz=182,slow=6.6,SNR=9.2 | | | | | | |
| **FIA1** | **FINESS Array S** | **75.95** | **18** | P | **P** | **21 48 34.1** | **-0.2** |
| **WSAR** | **Wadi Sarin** | **77.22** | **64** | LR | LR | 22 23 25.3 | |
| | comp=Z,43nm,18.1s,baz=228,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.02** | **13** | P | **P** | **21 49 06.4** | **-1.1** |
| | comp=Z,3nm,0.6s,baz=197,slow=3.8,SNR=15 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.02** | **13** | P | **P** | **21 49 07.1** | **-0.4** |
| **HRA** | **Herat** | **83.11** | **54** | P | **P** | **21 49 13.8** | **-0.5** |
| HRA | | | | IAmb | IAmb | 21 49 15.2 | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **84.79** | **38** | P | **P** | **21 49 22.3** | **+0.2** |
| | comp=Z,0.8nm,0.5s,baz=240,slow=8.1,SNR=2.5 | | | | | | |
| **CHGR** | **Chuyangaron** | **89.48** | **51** | P | **P** | **21 49 45.0** | **-0.3** |
| CHGR | | | | IAmb | IAmb | 21 49 46.4 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **GAR** | **Garm** | **90.43** | **51** | P | **P** | **21 49 49.9** | **+0.1** |
| GAR | | | | IAmb | IAmb | 21 49 51.3 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **93.86** | **299** | P | **P** | **21 50 05.7** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=124,slow=6.7,SNR=3.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **99.72** | **312** | LR | LR | 22 28 02.7 | |
| | comp=Z,94nm,20.6s,baz=320,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **115.98** | **40** | PKP | **PKPdf** | **21 55 30.7** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=259,slow=1.5,SNR=2.5 | | | | | | |
| **SEY** | **Seymchan** | **124.34** | **8** | PKP | **PKPdf** | **21 55 46.0** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=11,slow=5.2,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **135.31** | **136** | PKP | **PKPdf** | **21 56 07.5** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=220,slow=2.0,SNR=1.7 | | | | | | |

*CNRM* ***03*** *22:15:35.1, 35˚.69N×3˚.84W, h11km, ml2.6*

**ISC 03 22:15:33.3**±1.3,**35˚.75N**±0˚.04×**3˚.81W**±0˚.04,**h13**km±10km,
**n13**,σ1°**79**/22,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.55** | **192** | P | **Pb** | **22 15 45.0** | **+0.3** |
| PALE | | | | S | **Sg** | **22 15 50.3** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.85** | **129** | P | **Pn** | **22 15 51.9** | **+0.9** |
| GOG | | | | S | **Sn** | **22 16 02.4** | **-0.9** |
| **CHAS** | **Isla Isabel II** | **1.26** | **116** | P | **Pg** | **22 15 58.2** | **+0.7** |
| CHAS | | | | S | **Sb** | **22 16 12.1** | **-0.8** |
| **SMIR** | **Smir Dam** | **1.28** | **267** | P | **Pg** | **22 15 57.8** | **-0.2** |
| SMIR | | | | S | **Sg** | **22 16 18.0** | **+3.2** |
| **JBK** | **JBK** | **1.74** | **144** | P | **Pb** | **22 16 04.3** | **-0.9** |
| JBK | | | | S | **Sn** | **22 16 25.8** | **+0.2** |
| **LCRM** | **LCR** | **2.24** | **203** | P | **Pb** | **22 16 12.8** | **-0.9** |
| LCRM | | | | S | **Sb** | **22 16 42.1** | **+0.8** |
| **MD31** | **MD31** | **2.99** | **196** | P | **Pn** | **22 16 21.2** | **+0.8** |
| MD31 | | | | S | **Sn** | **22 16 59.0** | **+2.9** |
| **MDT** | **Midelt** | **3.01** | **193** | P | **Pb** | **22 16 25.1** | **-1.6** |
| MDT | | | | S | **Sb** | **22 17 01.0** | **-2.4** |
| **ZHG** | **ZHG** | **3.28** | **226** | P | **Pb** | **22 16 27.7** | **-3.7** |
| ZHG | | | | S | **Sn** | **22 17 04.9** | **+1.5** |
| **PVAQ** | **Vaqueiros** | **3.55** | **299** | *e*Sn | **Sb** | **22 17 17.2** | **-1.8** |
| PVAQ | | | | A | A | 22 17 19.7 | |
| | 2.0nm,0.8s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.64** | **295** | *e*Sn | **Sb** | **22 17 20.6** | **-1.0** |
| **MESJ** | **Messejana** | **4.11** | **302** | *e*Pn | **Pb** | **22 16 45.6** | **+0.1** |
| **PNCL** | **Nicolau / Gran** | **4.46** | **303** | *e*Pn | **Pb** | **22 16 49.6** | **-1.8** |

*CNRM* ***03*** *22:32:45.3, 35˚.51N×3˚.83W, h6km, ml3.3*
*SFS* ***03*** *22:32:45.0, 35˚.40N×3˚.70W, ML2.7, ALBORAN SUR*

**ISC 03 22:32:44.0**±0.9,**35˚.46N**±0˚.04×**3˚.83W**±0˚.05,**h11**km,**n25,**
σ2°**51**/29,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.26** | **199** | P | **Pg** | **22 32 51.4** | **+2.0** |
| **GOG** | **Mont Gurugu** | **0.72** | **109** | P | **Pb** | **22 32 59.0** | **+0.3** |
| **CHAS** | **Isla Isabel II** | **1.18** | **103** | P | **Pb** | **22 33 04.3** | **-2.1** |
| CHAS | | | | S | **Sb** | **22 33 18.5** | **-3.2** |
| **SMIR** | **Smir Dam** | **1.28** | **280** | P | **Pn** | **22 33 07.0** | **-0.9** |
| **CHEFC** | **Chefchaouen** | **1.28** | **254** | P | **Pn** | **22 33 10.0** | **+2.0** |
| **CEU** | **Ceuta** | **1.33** | **290** | P | **Pn** | **22 33 06.3** | **-2.1** |
| CEU | | | | S | **Sn** | **22 33 20.9** | **-5.2** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **340** | P | **Pn** | **22 33 09.5** | **+0.3** |
| EMAL | | | | S | **Sn** | **22 33 26.6** | **-0.9** |
| **JBK** | **JBK** | **1.53** | **137** | P | **Pb** | **22 33 13.0** | **+0.4** |
| **LCRM** | **LCR** | **1.96** | **206** | P | **Pg** | **22 33 23.0** | **+1.2** |
| **IFR** | **Ifrane** | **2.22** | **209** | P | **Pn** | **22 33 21.8** | **+0.9** |
| IFR | | | | S | **Sn** | **22 33 45.7** | **-2.7** |
| **MDT** | **Midelt** | **2.72** | **194** | P | **Pn** | **22 33 30.0** | **+2.3** |
| **PVAQ** | **Vaqueiros** | **3.68** | **303** | *e*Pn | **Pn** | **22 33 41.9** | **+1.0** |
| **PBDV** | **Barranco-do-Ve** | **3.75** | **299** | *e*Pn | **Pn** | **22 33 43.0** | **+1.1** |
| **PCVE** | **Castro Verde** | **4.02** | **304** | *e*Pn | **Pn** | **22 33 48.4** | **+2.9** |
| **PAB** | **San Pablo** | **4.09** | **354** | P | **Pn** | **22 33 48.2** | **+1.6** |
| **MESJ** | **Messejana** | **4.25** | **305** | *e*Pn | **Pn** | **22 33 50.5** | **+1.8** |
| **PFVI** | **Vila Bisbo** | **4.36** | **294** | *e*Pn | **Pn** | **22 33 52.5** | **+2.3** |
| **PTEO** | **Sao Teotonio** | **4.45** | **299** | *e*Pn | **Pn** | **22 33 53.2** | **+1.7** |
| **PESTR** | **Estremoz** | **4.53** | **320** | *e*Pn | **Pn** | **22 33 56.0** | **+3.4** |
| **EVO** | **Evora** | **4.54** | **314** | *e*Pn | **Pn** | **22 33 56.0** | **+3.4** |
| **PNCL** | **Nicolau / Gran** | **4.60** | **306** | *e*Pn | **Pn** | **22 33 55.3** | **+1.8** |
| **PMRV** | **Marv??o** | **4.87** | **325** | *e*Pn | **Pn** | **22 34 01.2** | **+4.0** |
| **PMTG** | **Montargil** | **5.02** | **317** | *e*Pn | **Pn** | **22 34 01.0** | **+1.7** |
| **PCBR** | **Castelo Branco** | **5.24** | **328** | *e*Pn | **Pn** | **22 34 06.5** | **+4.3** |
| **MVO** | **Moncorvo** | **6.22** | **337** | *e*Pn | **Pn** | **22 34 17.8** | **+2.0** |

*IDC* ***03*** *22:33:14.4±1.3, 35˚.44N×4˚.08W, h0km, mb3.4/3, mb1 3.6/5, mb1mx3.3/57, mbtmp3.4/5, ML3.4/2, Error ellipse: s-maj=50.6km s-min=19.8km az=91.0*
*CNRM* ***03*** *22:33:15.4, 35˚.51N×3˚.76W, h20km, ml3.6*
*SFS* ***03*** *22:33:18.0, 35˚.50N×3˚.60W, ML3.0, ALBORAN SUR*
*MDD* ***03*** *22:33:18.2±0.6, 35˚.54N×3˚.66W, h0km, mbLg3.0/7, Error ellipse: s-maj=5.6km s-min=3.8km az=20.0*
*MDD EMS: II-III INTENSIDAD MAXIMA.*

**ISC 03 22:33:15.9**±1.0,**35˚.43N**±0˚.02×**3˚.71W**±0˚.02,**h14**km±7km,
**n73**,σ1°**75**/108,**mb3.6**/3,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.28** | **221** | P | **Pg** | **22 33 22.0** | **+0.2** |
| PALE | | | | S | **Sg** | **22 33 26.4** | **+0.5** |
| **GOG** | **Mont Gurugu** | **0.62** | **110** | P | **Pn** | **22 33 29.6** | **-0.7** |
| GOG | | | | S | **Sb** | **22 33 37.7** | **+0.5** |
| **EMEL** | **Melilla** | **0.63** | **102** | Pg | **Pn** | **22 33 29.4** | **-1.0** |
| | SNR=7.9 | | | | | | |
| EMEL | | | | Lg | Lg | 22 33 38.3 | |
| | 3µm,0.2s,SNR=7.9 | | | | | | |
| **EALB** | **Alboran** | **0.75** | **47** | Pg | **Pn** | **22 33 31.2** | **-0.8** |
| | SNR=7.9 | | | | | | |
| EALB | | | | Lg | Lg | 22 33 38.2 | |
| | 552nm,0.2s,SNR=7.9 | | | | | | |
| **CHAS** | **Isla Isabel II** | **1.08** | **103** | P | **Pg** | **22 33 35.3** | **-1.4** |
| CHAS | | | | S | **Sg** | **22 33 49.2** | **-1.5** |
| **CHEFC** | **Chefchaouen** | **1.37** | **257** | P | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **4.24** | **357** | Pn | | **Pn** | **22 34 20.6** | **+0.5** | |
| | 1.8nm,0.3s,baz=179,slow=12,SNR=14 | | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **22 35 06.2** | **-3.1** | |
| | 0.8nm,0.3s,baz=178,slow=15,SNR=5.2 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.24** | **357** | Pn | | **Pn** | **22 34 21.0** | **+1.0** | |
| | SNR=7.9 | | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **22 35 08.0** | **-1.4** | |
| | 1.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **MESJ** | **Messejana** | **4.35** | **305** | *e*Sn | | **Sn** | **22 35 10.5** | **-1.4** | |
| MESJ | | | | A | | A | 22 35 15.4 | | |
| | 15nm,0.3s | | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **297** | *e*Sn | | **Sn** | **22 35 10.1** | **-3.2** | |
| MORF | | | | A | | A | 22 35 13.8 | | |
| | 14nm,0.2s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **294** | *e*Sn | | **Sn** | **22 35 11.3** | **-3.5** | |
| PFVI | | | | A | | A | 22 35 14.7 | | |
| | 19nm,0.5s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **294** | Pn | | **Pn** | **22 34 25.6** | **+2.5** | |
| | SNR=7.9 | | | | | | | | |
| PFVI | | | | Pg | | **Pb** | **22 34 33.3** | **-0.7** | |
| | SNR=7.9 | | | | | | | | |
| PFVI | | | | Sn | | **Sn** | **22 35 13.8** | **-1.1** | |
| | 1.6nm,0.3s,SNR=7.9 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **294** | P | | **Pn** | **22 34 22.3** | **-0.8** | |
| **PTEO** | **Sao Teotonio** | **4.55** | **299** | *e*Sn | | **Sn** | **22 35 15.0** | **-2.0** | |
| PTEO | | | | A | | A | 22 35 18.1 | | |
| | 17nm,0.3s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.62** | **319** | *e*Sn | | **Sn** | **22 35 18.1** | **-0.6** | |
| PESTR | | | | A | | A | 22 35 23.1 | | |
| | 8.3nm,0.4s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.62** | **319** | P | | **Pn** | **22 34 24.9** | **-0.3** | |
| **EVO** | **Evora** | **4.63** | **313** | *e*Sn | | **Sn** | **22 35 17.2** | **-1.6** | |
| EVO | | | | A | | A | 22 35 18.1 | | |
| | 14nm,0.5s | | | | | | | | |
| **ECHE** | **Chera** | **4.69** | **27** | Pn | | **Pn** | **22 34 27.0** | **+0.7** | |
| | SNR=7.9 | | | | | | | | |
| ECHE | | | | Sn | | **Sn** | **22 35 18.7** | **-1.8** | |
| | 0.5nm,0.3s,SNR=7.9 | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.70** | **306** | *e*Sn | | **Sn** | **22 35 18.1** | **-2.5** | |
| PNCL | | | | A | | A | 22 35 19.0 | | |
| | 14nm,0.5s | | | | | | | | |
| **TZRR** | **Tazzarine** | **4.89** | **199** | P | | **Pn** | **22 34 30.9** | **+1.8** | |
| **PMRV** | **Marv??o** | **4.95** | **325** | *e*Sn | | **Sn** | **22 35 25.9** | **-0.8** | |
| **EPLA** | **Plasencia** | **4.99** | **339** | Pn | | **Pn** | **22 34 32.5** | **+2.2** | |
| | SNR=7.9 | | | | | | | | |
| EPLA | | | | Sn | | **Sn** | **22 35 26.9** | **-0.9** | |
| | 1.5nm,0.1s,SNR=7.9 | | | | | | | | |
| **PMTG** | **Montargil** | **5.11** | **317** | *e*Sn | | **Sn** | **22 35 30.3** | **-0.4** | |
| PMTG | | | | A | | A | 22 35 34.1 | | |
| | 6.7nm,0.5s | | | | | | | | |
| **OUZM** | **OUZ** | **5.18** | **210** | P | | **Pn** | **22 34 34.2** | **+1.0** | |
| **EIBI** | **Ibiza** | **5.40** | **47** | Pn | | **Pn** | **22 34 36.2** | **+0.3** | |
| | SNR=7.9 | | | | | | | | |
| EIBI | | | | Sn | | **Sn** | **22 35 35.6** | **-2.3** | |
| | 2.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **OUK** | **Oukaimeden** | **5.46** | **221** | P | | **Pn** | **22 34 37.1** | **0.0** | |
| **ETOR** | **Torete** | **5.53** | **13** | Pn | | **Pn** | **22 34 38.3** | **+0.5** | |
| | SNR=7.9 | | | | | | | | |
| ETOR | | | | Sn | | **Sn** | **22 35 38.9** | **-2.4** | |
| | 13nm,0.2s,SNR=7.9 | | | | | | | | |
| **PSBE** | **So Bento** | **5.74** | **317** | *e*Sn | | **Sn** | **22 35 45.5** | **-0.8** | |
| **TTIG** | **Tnine Tigouga,** | **6.29** | **220** | P | | **Pn** | **22 34 46.8** | **-1.5** | |
| **MVO** | **Moncorvo** | **6.29** | **337** | *e*Sn | | **Sn** | **22 35 57.9** | **-1.9** | |
| **MVO** | **Moncorvo** | **6.29** | **337** | Pn | | **Pn** | **22 34 49.8** | **+1.6** | |
| | SNR=7.9 | | | | | | | | |
| MVO | | | | Sn | | **Sn** | **22 35 57.7** | **-2.1** | |
| | 0.7nm,0.1s,SNR=7.9 | | | | | | | | |
| **ERTA** | **Horta de San J** | **6.37** | **29** | Pn | | **Pn** | **22 34 51.5** | **+2.2** | |
| | SNR=7.9 | | | | | | | | |
| **PVRL** | **Vila Real** | **6.63** | **333** | *e*Sn | | **Sn** | **22 36 07.4** | **-0.8** | |
| PVRL | | | | A | | A | 22 36 16.5 | | |
| | 7.8nm,0.8s | | | | | | | | |
| **ETOS** | **Mallorca** | **6.75** | **48** | Pn | | **Pn** | **22 34 56.8** | **+2.3** | |
| | SNR=7.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.72** | **166** | P | | **P** | **22 38 18.3** | **+0.9** | |
| | 0.7nm,0.8s,baz=344,slow=10,SNR=5.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.71** | **50** | P | | **P** | **22 43 42.6** | **+2.4** | |
| | 0.3nm,0.7s,baz=303,slow=8.0,SNR=2.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.92** | **332** | P | | **P** | **22 44 13.4** | **-0.2** | |
| | 0.4nm,0.6s,baz=61,slow=6.5,SNR=6.0 | | | | | | | | |

*LDG **03** 22:41:01.7±0.1, 42°.27N×13°.63E, h10km, Ml2.5/4, Error ellipse: s-maj=3.9km s-min=2.9km az=66.0*
*IASPEI **03** 22:41:02.7±0.9, 42°.27N±0°.02×13°.59E±0°.02, h12km±5km, Error ellipse: s-maj=3.2km s-min=2.3km az=63.2, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*IDC **03** 22:41:02.9±1.6, 42°.28N×13°.74E, h0km, mb3.7/2, mb1 3.9/5, mb1mx3.4/48, mbtmp3.7/5, ML3.4/3, Error ellipse: s-maj=23.6km s-min=16.7km az=83.0*
*ROM **03** 22:41:02.5±0.1, 42°.262N±0°.003×13°.587E±0°.005, h8km, ML3.2/31, Error ellipse: s-maj=0.3km s-min=0.2km az=62.0*
*PRU **03** 22:41:04.8±0.0, 42°.29N×13°.59E, h0km*

**ISC 03 22:41:03.4**±0.8, **42°.26N**±0°.02×**13°.57E**±0°.02, **h9**km±5km, **n101**, σ1s**85**/139, **9C-14D**, **Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FAGN** | **Fagnano** | **0.01** | **59** | ⇓P | | **Pg** | **22 41 03.8** | **-1.3** |
| **T0110** | **Collepietro** | **0.16** | **103** | P | | **Pg** | **22 41 06.5** | **-0.3** |
| T0110 | | | | S | | **Sg** | **22 41 08.7** | **-0.5** |
| T0110 | | | | AML | | AML | | |
| | comp=E,40600μm,1.4s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=N,41850μm,0.8s | | | | | | | |
| **AQU** | **L'Aquila** | **0.16** | **306** | ⇓P | | **Pg** | **22 41 06.9** | **+0.1** |
| AQU | | | | S | | **Sg** | **22 41 09.7** | **+0.4** |
| AQU | | | | AML | | AML | | |
| | comp=N,28300μm,1.0s | | | | | | | |
| AQU | | | | AML | | AML | | |
| | comp=E,21550μm,0.4s | | | | | | | |
| AQU | | | | AML | | AML | | |
| | comp=E,20750μm,1.4s | | | | | | | |
| AQU | | | | AML | | AML | | |
| | comp=N,28550μm,1.1s | | | | | | | |
| **GIGS** | **Gran Sasso** | **0.19** | **359** | P | | **Pg** | **22 41 07.0** | **-0.4** |
| GIGS | | | | S | | **Sg** | **22 41 10.5** | **+0.4** |
| GIGS | | | | AML | | AML | | |
| | comp=E,3405μm,1.1s | | | | | | | |
| GIGS | | | | AML | | AML | | |
| | comp=N,4705μm,0.9s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.24** | **56** | ⇓P | | **Pg** | **22 41 08.0** | **-0.3** |
| VCEL | | | | S | | **Sg** | **22 41 11.5** | **-0.1** |
| VCEL | | | | AML | | AML | | |
| | comp=E,27450μm,0.6s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=N,19800μm,0.5s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=N,19850μm,0.5s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=E,27500μm,0.6s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.27** | **208** | ⇑P | | **Pg** | **22 41 08.8** | **-0.1** |
| PTQR | | | | S | | **Sg** | **22 41 13.1** | **+0.6** |
| PTQR | | | | AML | | AML | | |
| | comp=E,4960μm,0.9s | | | | | | | |
| PTQR | | | | AML | | AML | | |
| | comp=N,5270μm,1.2s | | | | | | | |
| **CAMP** | **Campotosto** | **0.30** | **336** | ⇓P | | **Pg** | **22 41 09.1** | **-0.3** |
| CAMP | | | | S | | **Sg** | **22 41 14.1** | **+0.7** |
| CAMP | | | | AML | | AML | | |
| | comp=N,4430μm,0.5s | | | | | | | |
| CAMP | | | | AML | | AML | | |
| | comp=E,3200μm,0.7s | | | | | | | |
| **FIAM** | **Fiamignano** | **0.34** | **271** | ⇑P | | **Pg** | **22 41 10.0** | **-0.1** |
| FIAM | | | | S | | **Sg** | **22 41 15.9** | **+1.3** |
| FIAM | | | | AML | | AML | | |
| | comp=E,9490μm,0.6s | | | | | | | |
| FIAM | | | | AML | | AML | | |
| | comp=N,3935μm,1.0s | | | | | | | |
| **TERO** | **Teramo** | **0.36** | **3** | ⇓P | | **Pg** | **22 41 09.9** | **-0.6** |
| TERO | | | | S | | **Sg** | **22 41 15.9** | **+0.6** |
| **RM33** | **Pellescritta (** | **0.36** | **313** | P | | **Pg** | **22 41 10.4** | **-0.2** |
| RM33 | | | | S | | **Sg** | **22 41 16.7** | **+1.2** |
| RM33 | | | | AML | | AML | | |
| | comp=E,6420μm,1.1s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,7115μm,0.4s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,6425μm,1.1s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,7115μm,0.4s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,6310μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,7120μm,0.4s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,7150μm,0.4s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,6425μm,1.1s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,6315μm,0.3s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.39** | **175** | ⇑P | | **Pg** | **22 41 10.8** | **-0.3** |
| VVLD | | | | S | | **Sg** | **22 41 17.1** | **+0.8** |
| VVLD | | | | AML | | AML | | |
| | comp=E,3225μm,1.0s | | | | | | | |
| VVLD | | | | AML | | AML | | |
| | comp=N,3420μm,0.4s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.41** | **334** | ⇓P | | **Pg** | **22 41 10.9** | **-0.5** |
| SMA1 | | | | S | | **Sg** | **22 41 18.3** | **+1.4** |
| SMA1 | | | | AML | | AML | | |
| | comp=N,5060μm,1.4s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=E,5850μm,0.5s | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.50** | **115** | ⇓P | | **Pg** | **22 41 12.4** | **-0.8** |
| LPEL | | | | S | | **Sg** | **22 41 19.8** | **+0.1** |
| LPEL | | | | AML | | AML | | |
| | comp=E,5055μm,0.8s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=N,6280μm,1.4s | | | | | | | |
| **GUAR** | **Guarcino** | **0.51** | **203** | P | | **Pg** | **22 41 13.1** | **-0.1** |
| GUAR | | | | S | | **Sg** | **22 41 21.3** | **+1.4** |
| GUAR | | | | AML | | AML | | |
| | comp=N,3205μm,0.3s | | | | | | | |
| GUAR | | | | AML | | AML | | |
| | comp=E,2550μm,0.7s | | | | | | | |
| **LNSS** | **Leonessa** | **0.52** | **311** | ⇓P | | **Pg** | **22 41 13.2** | **-0.4** |
| LNSS | | | | S | | **Sg** | **22 41 20.6** | **+0.1** |
| LNSS | | | | AML | | AML | | |
| | comp=E,3310μm,1.1s | | | | | | | |
| LNSS | | | | AML | | AML | | |
| | comp=N,2485μm,1.2s | | | | | | | |
| **CERT** | **Cerreto** | **0.54** | **235** | ⇑P | | **Pg** | **22 41 13.3** | **-0.6** |
| CERT | | | | AML | | AML | | |
| | comp=N,3100μm,1.0s | | | | | | | |
| CERT | | | | AML | | AML | | |
| | comp=E,2535μm,1.4s | | | | | | | |
| **AQT1** | **Arquata del Tr** | **0.55** | **338** | ⇓P | | **Pg** | **22 41 13.3** | **-0.9** |
| AQT1 | | | | S | | **Sg** | **22 41 21.8** | **+0.4** |
| **POFI** | **Posta Fibreno** | **0.55** | **169** | ⇑P | | **Pg** | **22 41 13.6** | **-0.5** |
| POFI | | | | S | | **Sg** | **22 41 22.2** | **+0.8** |
| **CAFR** | **Castel Frentan** | **0.57** | **93** | P | | **Pg** | **22 41 14.4** | **-0.1** |
| CAFR | | | | S | | **Sg** | **22 41 22.1** | **0.0** |
| **MTCE** | **Montecelio** | **0.66** | **249** | ⇑P | | **Pg** | **22 41 15.5** | **-0.7** |
| MTCE | | | | AML | | AML | | |
| | comp=E,1845μm,1.1s | | | | | | | |
| MTCE | | | | AML | | AML | | |
| | comp=N,1155μm,0.9s | | | | | | | |
| **NRCA** | **Norcia** | **0.67** | **329** | P | | **Pg** | **22 41 15.4** | **-0.9** |
| NRCA | | | | S | | **Sg** | **22 41 25.1** | **+0.2** |
| NRCA | | | | AML | | AML | | |
| | comp=E,1430μm,1.3s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,1115μm,1.1s | | | | | | | |
| **OFFI** | **Offida** | **0.68** | **7** | ⇓P | | **Pg** | **22 41 16.6** | **+0.1** |
| OFFI | | | | AML | | AML | | |
| | comp=N,5610μm,0.6s | | | | | | | |
| OFFI | | | | AML | | AML | | |
| | comp=E,4475μm,0.7s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.71** | **142** | P | | **Pg** | **22 41 16.5** | **-0.5** |
| RNI2 | | | | S | | **Sg** | **22 41 25.6** | **-0.6** |
| RNI2 | | | | AML | | AML | | |
| | comp=N,3970μm,1.1s | | | | | | | |
| RNI2 | | | | AML | | AML | | |
| | comp=N,4045μm,1.1s | | | | | | | |
| RNI2 | | | | AML | | AML | | |
| | comp=E,3305μm,0.7s | | | | | | | |
| RNI2 | | | | AML | | AML | | |
| | comp=E,3225μm,0.8s | | | | | | | |
| **CERA** | **Filignano** | **0.74** | **153** | ⇓P | | **Pg** | **22 41 16.4** | **-1.3** |
| CERA | | | | S | | **Sg** | **22 41 27.6** | **+0.3** |
| CERA | | | | AML | | AML | | |
| | comp=E,3035μm,1.3s | | | | | | | |
| CERA | | | | AML | | AML | | |
| | comp=N,2955μm,0.8s | | | | | | | |
| CERA | | | | AML | | AML | | |
| | comp=N,2895μm,0.8s | | | | | | | |
| CERA | | | | AML | | AML | | |
| | comp=E,3055μm,1.3s | | | | | | | |
| CERA | | | | AML | | AML | | |
| | comp=E,3030μm,1.3s | | | | | | | |
| **GIUL** | **Giuliano Di Ro** | **0.74** | **199** | P | | **Pg** | **22 41 17.0** | **-0.7** |
| GIUL | | | | S | | **Sg** | **22 41 27.4** | **0.0** |
| GIUL | | | | AML | | AML | | |
| | comp=E,1365μm,0.6s | | | | | | | |
| GIUL | | | | AML | | AML | | |
| | comp=E,1360μm,0.6s | | | | | | | |
| GIUL | | | | AML | | AML | | |
| | comp=N,1780μm,0.9s | | | | | | | |
| **LIK** | **San Giovanni I** | **0.76** | **181** | P | | **Pg** | **22 41 17.7** | **-0.2** |
| LIK | | | | S | | **Sg** | **22 41 27.6** | **-0.2** |
| **CESX** | **Cesi** | **0.81** | **296** | P | | **Pg** | **22 41 18.2** | **-0.9** |
| CESX | | | | AML | | AML | | |
| | comp=E,916μm,0.6s | | | | | | | |
| CESX | | | | AML | | AML | | |
| | comp=N,1285μm,1.1s | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.84** | **18** | ⇓P | | **Pg** | **22 41 18.5** | **-1.1** |
| GUMA | | | | AML | | AML | | |
| | comp=N,2780μm,0.5s | | | | | | | |
| GUMA | | | | AML | | AML | | |
| | comp=E,2820μm,0.8s | | | | | | | |
| GUMA | | | | AML | | AML | | |
| | comp=N,2780μm,1.6s | | | | | | | |
| GUMA | | | | AML | | AML | | |
| | comp=E,4410μm,1.3s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.85** | **335** | P | | **Pg** | **22 41 18.6** | **-1.3** |
| FDMO | | | | AML | | AML | | |
| | comp=E,649μm,1.2s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=N,878μm,0.4s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=E,650μm,1.2s | | | | | | | |
| **FRES** | **Fresagrandinar** | **0.86** | **109** | P | | **Pg** | **22 41 18.7** | **-1.3** |
| **CSP1** | **Cessapalombo** | **0.87** | **342** | P | | **Pg** | **22 41 19.0** | **-1.2** |
| CSP1 | | | | AML | | AML | | |
| | comp=E,1166μm,0.4s | | | | | | | |
| CSP1 | | | | AML | | AML | | |
| | comp=N,1207μm,1.0s | | | | | | | |
| CSP1 | | | | AML | | AML | | |
| | comp=E,1167μm,0.4s | | | | | | | |
| CSP1 | | | | AML | | AML | | |
| | comp=N,1208μm,1.0s | | | | | | | |
| **TRIV** | **Trivento** | **0.88** | **124** | P | | **Pg** | **22 41 19.3** | **-1.0** |
| **LATB** | **Latina** | **0.89** | **211** | P | | **Pg** | **22 41 19.4** | **-1.2** |
| **MOMA** | **Monte Martano** | **0.92** | **306** | P | | **Pg** | **22 41 20.4** | **-0.6** |
| MOMA | | | | AML | | AML | | |
| | comp=E,704μm,0.6s | | | | | | | |
| MOMA | | | | AML | | AML | | |
| | comp=N,964μm,1.5s | | | | | | | |
| **VAGA** | **Valle Agricola** | **0.98** | **150** | P | | **Pg** | **22 41 21.0** | **-1.2** |
| **ASSB** | **Assisi San Ben** | **1.03** | **319** | P | | **Pg** | **22 41 22.1** | **-1.2** |
| ASSB | | | | S | | **Sg** | **22 41 36.4** | **-0.3** |
| ASSB | | | | AML | | AML | | |
| | comp=E,903μm,1.2s | | | | | | | |
| ASSB | | | | AML | | AML | | |
| | comp=N,951μm,0.9s | | | | | | | |
| **BSSO** | **Busso** | **1.04** | **133** | P | | **Pg** | **22 41 22.3** | **-1.2** |
| **SNTG** | **Esanatoglia** | **1.10** | **335** | P | | **Pg** | **22 41 22.8** | **-1.6** |
| SNTG | | | | AML | | AML | | |
| | comp=E,545μm,0.6s | | | | | | | |
| SNTG | | | | AML | | AML | | |
| | comp=E,544μm,0.6s | | | | | | | |
| SNTG | | | | AML | | AML | | |
| | comp=N,407μm,0.8s | | | | | | | |
| **EL6** | **Elcito** | **1.12** | **342** | P | | **Pg** | **22 41 23.5** | **-1.5** |
| **CING** | **Cingoli** | **1.15** | **346** | ⇓P | | **Pg** | **22 41 23.9** | **-1.6** |
| CING | | | | AML | | AML | | |
| | comp=N,379μm,0.5s | | | | | | | |
| CING | | | | AML | | AML | | |
| | comp=E,568μm,1.1s | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **1.16** | **121** | P | | **Pg** | **22 41 24.1** | **-1.6** |
| **MGAB** | **Montegabbione** | **1.26** | **302** | P | | **Pn** | **22 41 26.5** | **-0.8** |
| **ARVD** | **Arcevia** | **1.32** | **340** | P | | **Pn** | **22 41 27.2** | **-0.8** |
| ARVD | | | | AML | | AML | | |
| | comp=E,511μm,1.2s | | | | | | | |
| ARVD | | | | AML | | AML | | |
| | comp=N,282μm,0.3s | | | | | | | |
| **ATFO** | **Monte Foce - G** | **1.33** | **327** | P | | **Pn** | **22 41 27.4** | **-0.8** |
| ATFO | | | | AML | | AML | | |
| | comp=E,556μm,0.6s | | | | | | | |
| ATFO | | | | AML | | AML | | |
| | comp=N,530μm,0.9s | | | | | | | |
| **NARO** | **Abbazia di Nar** | **1.53** | **332** | P | | **Pn** | **22 41 30.8** | **-0.1** |
| NARO | | | | AML | | AML | | |
| | comp=N,279μm,1.6s | | | | | | | |
| NARO | | | | AML | | AML | | |
| | comp=E,357μm,0.9s | | | | | | | |
| **SGRT** | **San Giovanni R** | **1.69** | **107** | ⇑P | | **Pb** | **22 41 34.5** | **-0.3** |
| **MSAG** | **Monte S. Angel** | **1.83** | **107** | ⇑P | | **Pb** | **22 41 37.4** | **+0.4** |
| **DUGI** | **Dugi Otok** | **2.04** | **32** | *e*Pn | | **Pn** | **22 41 37.8** | **-0.2** |
| **ZIRJ** | **Zirje** | **2.06** | **47** | *e*Pn | | **Pn** | **22 41 37.5** | **-0.7** |
| ZIRJ | | | | Sn | | **Sn** | **22 42 03.4** | **-0.6** |
| **MORI** | **Morici** | **2.24** | **44** | *e*Pn | | **Pn** | **22 41 40.6** | **0.0** |
| MORI | | | | Sn | | **Sn** | **22 42 08.8** | **+0.4** |
| **HVAR** | **Hvar** | **2.31** | **66** | *e*Pn | | **Pn** | **22 41 41.5** | **0.0** |
| **NVLJ** | **Novalja** | **2.49** | **22** | *e*Pn | | **Pn** | **22 41 43.6** | **-0.4** |
| NVLJ | | | | Sn | | **Sn** | **22 42 12.9** | **-1.5** |
| **LSTV** | **Lastovo** | **2.50** | **77** | *e*Pn | | **Pn** | **22 41 44.4** | **+0.2** |
| **MTSN** | **Montesano sull** | **2.58** | **140** | S | | **Sn** | **22 42 18.0** | **+1.0** |
| **BRJN** | **Brijuni** | **2.65** | **3** | *e*Pn | | **Pn** | **22 41 44.8** | **-1.4** |
| **KIJV** | **Kijevo** | **2.71** | **49** | *e*Pn | | **Pn** | **22 41 48.0** | **+0.9** |
| KIJV | | | | Sn | | **Sn** | **22 42 19.4** | **-0.6** |
| **MAKA** | **Makarska** | **2.74** | **67** | *e*Pn | | **Pn** | **22 41 47.9** | **+0.5** |
| **UDBI** | **Udbina** | **2.77** | **34** | *e*Pn | | **Pn** | **22 41 49.1** | **+1.1** |
| **RICI** | **Ricice** | **2.89** | **64** | *e*Pn | | **Pn** | **22 41 50.2** | **+0.6** |
| **PLIT** | **Plitvice** | **3.01** | **29** | *e*Pn | | **Pn** | **22 41 51.8** | **+0.6** |
| **STON** | **Ston** | **3.11** | **77** | *e*Pn | | **Pn** | **22 41 53.1** | **+0.6** |
| **RIY** | **Rijeka** | **3.13** | **12** | *e*Pn | | **Pn** | **22 41 52.4** | **-0.5** |
| **TDS** | **Terranova Siba** | **3.34** | **140** | P | | **Pn** | **22 41 59.3** | **+3.5** |
| **PGF** | **Pioggiola** | **3.40** | **276** | *e*P | | **Pn** | **22 41 57.5** | **+0.8** |
| PGF | | | | *e*Sn | | **Sn** | **22 42 33.0** | **-4.2** |
| | comp=E,3.0nm,0.3s | | | | | | | |
| **BOJS** | **Bojanci** | **3.46** | **20** | ⇑P | | **Pn** | **22 41 59.0** | **+1.6** |
| **A251A** | **Rujevac** | **3.47** | **33** | *e*Pn | | **Pn** | **22 41 58.6** | **+1.1** |
| **OZLJ** | **Ozalj** | **3.62** | **22** | *e*Pn | | **Pn** | **22 42 00.2** | **+0.7** |
| **MOSL** | **Moslavina** | **4.06** | **33** | *e*Pn | | **Pn** | **22 42 04.9** | **-0.8** |
| **MAGA** | **Magasa** | **4.11** | **330** | ⇓P | | **Pn** | **22 42 08.1** | **+1.7** |
| **MYKA** | **Terra Mystica** | **4.37** | **1** | / Pn | | **Pn** | **22 42 11.6** | **+1.6** |
| | comp=E,2.4nm,0.3s | | | | | | | |
| MYKA | | | | *e*Sn | | **Sn** | **22 43 04.9** | **+4.0** |
| | comp=E,2.9nm,0.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **4.55** | **351** | *e*Pn | | **Pn** | **22 42 14.4** | **+1.9** |
| | comp=E,6.7nm,0.4s | | | | | | | |
| **MTTG** | **Motta San Giov** | **4.55** | **158** | P | | **Pn** | **22 42 15.4** | **+2.9** |
| **SBF** | **Sospel** | **4.77** | **292** | *e*P | | **Pn** | **22 42 16.5** | **+1.0** |
| SBF | | | | *e*Sn | | **Sn** | **22 43 04.9** | **-6.1** |
| | comp=E,1.4nm,0.3s | | | | | | | |
| **FETA** | **Feichten** | **5.17** | **338** | *e*Pn | | **Pn** | **22 42 24.1** | **+3.0** |
| | comp=E,1.4nm,0.3s | | | | | | | |
| **WTTA** | **Wattenberg** | **5.19** | **345** | *e*Pn | | **Pn** | **22 42 25.3** | **+4.0** |
| | comp=E,1.7nm,0.3s | | | | | | | |
| WTTA | | | | *e*Sn | | **Sn** | **22 43 27.7** | **+6.4** |
| | comp=E,11nm,0.7s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **5.23** | **331** | Pn | | **Pn** | **22 42 24.4** | **+2.5** |
| | comp=E,1.3nm,0.3s,baz=155,slow=17,SNR=13 | | | | | | | |
| DAVOX | | | | Sn | | **Sn** | **22 43 25.8** | **+3.3** |
| | baz=342,slow=20,SNR=2.2 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.24** | **342** | *e*Pn | | **Pn** | **22 42 24.4** | **+2.5** |
| | comp=E,5.5nm,0.3s | | | | | | | |
| SQTA | | | | *e*Sn | | **Sn** | **22 43 29.1** | **+6.6** |
| | comp=E,2.4nm,0.3s | | | | | | | |
| **WATA** | **Walderalm** | **5.27** | **345** | *e*Pn | | **Pn** | **22 42 25.7** | **+3.3** |
| WATA | | | | *e*Sn | | **Sn** | **22 43 21.0** | **-2.3** |
| | comp=E,4.5nm,0.3s | | | | | | | |
| **LMR** | **La Mourre** | **5.31** | **284** | *e*P | | **Pn** | **22 42 23.6** | **+0.8** |
| **MOTA** | **Moosalm** | **5.38** | **342** | *e*Pn | | Pn | 22 42 29.4 | +5.5 |
| | comp=E,1.6nm,0.3s | | | | | | | |
| MOTA | | | | *e*Sn | | **Sb** | **22 43 38.0** | **-4.3** |
| | comp=E,2.9nm,0.4s | | | | | | | |
| **MBDF** | **Montbardon** | **5.53** | **299** | *e*P | | **Pn** | **22 42 27.8** | **+1.8** |
| **MOA** | **Molln** | **5.61** | **5** | *e*Pn | | **Pn** | **22 42 28.6** | **+1.6** |
| | comp=E,1.4nm,0.3s | | | | | | | |
| **DAVA** | **Damuels** | **5.67** | **334** | *e*Pn | | **Pn** | **22 42 31.8** | **+3.8** |
| | comp=E,1.8nm,0.4s | | | | | | | |
| DAVA | | | | *e*Sn | | **Sn** | **22 43 38.2** | **+5.0** |
| | comp=E,8.7nm,0.8s | | | | | | | |
| **CONA** | **Conrad Observa** | **5.89** | **15** | *e*Pn | | **Pn** | **22 42 32.1** | **+1.2** |
| | comp=E,1.7nm,0.2s | | | | | | | |
| **LPG** | **La Plagne** | **5.90** | **306** | *e*P | | **Pn** | **22 42 32.5** | **+1.4** |
| **LPL** | **La Plagne** | **5.92** | **306** | *e*P | | **Pn** | **22 42 33.1** | **+1.7** |
| **SMRF** | **Simiane la Rot** | **6.10** | **289** | *e*P | | **Pn** | **22 42 35.4** | **+1.7** |
| **ORIF** | **Oris-en-Rattie** | **6.19** | **298** | *e*P | | **Pn** | **22 42 36.9** | **+2.0** |
| **CKRC** | **Cesky Krumlov** | **6.58** | **4** | *e*PN | | **Pn** | **22 42 40.3** | **0.0** |
| **GERES** | **GERESS Array B** | **6.58** | **1** | Pn | | **Pn** | **22 42 41.3** | **+0.9** |
| | comp=E,0.8nm,0.3s,baz=174,slow=13,SNR=19 | | | | | | | |
| GERES | | | | Sn | | **Sn** | **22 43 55.4** | **-0.2** |
| | comp=E,0.4nm,0.3s,baz=175,slow=25,SNR=3.3 | | | | | | | |
| **KHC** | **Kasperske Hory** | **6.87** | **0** | *e*PN | | **Pn** | **22 42 45.0** | **+0.7** |
| KHC | | | | *e*SN | | **Sn** | **22 44 00.8** | **-1.8** |
| **CABF** | **La Chapelle** | **6.90** | **312** | *e*P | | **Pn** | **22 42 45.0** | **+0.3** |
| CABF | | | | *e*Sn | | **Sn** | **22 43 55.8** | **-7.6** |
| | comp=E,0.1nm,0.2s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **6.97** | **295** | *e*P | | **Pn** | **22 42 48.2** | **+2.6** |
| **HINF** | **Hinteralfeld** | **7.31** | **322** | *e*P | | **Pn** | **22 42 50.3** | **-0.1** |
| **LASF** | **Ste Croix** | **7.33** | **288** | *e*P | | **Pn** | **22 42 51.9** | **+1.3** |
| **CDF** | **Champ du Feu** | **7.58** | **326** | *e*P | | **Pn** | **22 42 54.5** | **+0.4** |
| **HAU** | **Haudompre** | **7.68** | **321** | *e*P | | **Pn** | **22 42 56.0** | **+0.6** |
| **MEZF** | **Maizieres J'vi** | **8.65** | **319** | *e*P | | **Pn** | **22 43 10.0** | **+1.4** |
| | baz=139 | | | | | | | |
| **MLR** | **Muntele Rosu** | **9.50** | **66** | Pn | | **Pn** | **22 43 20.7** | **+0.3** |
| | comp=E,0.0nm,0.3s,baz=240,slow=18,SNR=4.7 | | | | | | | |
| **FINES** | **FINESS Array B** | **20.63** | **17** | P | | **P** | **22 45 43.1** | **+0.3** |
| | comp=E,7.2nm,1.2s,baz=202,slow=10,SNR=1.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.79** | **203** | P | | **P** | **22 47 20.5** | **+1.2** |
| | comp=E,0.5nm,0.7s,baz=18,slow=8.7,SNR=4.6 | | | | | | | |

*INMG **03** 22:50:36.5±1.7, 35°.60N×3°.76W, h15km±7km, ML2.2, Error ellipse: s-maj=4.5km s-min=2.8km az=55.0*
*CNRM **03** 22:50:36.9, 35°.44N×3°.79W, h3km, ml2.9*

**ISC 03 22:50:34.6**±1.1, **35°.51N**±0°.03×**3°.72W**±0°.03, **h17**km±8km, **n29**, σ1s**27**/46, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.35** | **211** | P | | **Pg** | **22 50 41.6** | **-0.3** |
| **PALE** | **Palemas** | **0.35** | **211** | P | | **Pg** | **22 50 41.7** | **-0.2** |
| PALE | | | | S | | **Sg** | **22 50 47.0**

6.3nm,0.7s
**PTEO Sao Teotonio 4.51 298** *e*Sn **Sn 22 52 33.9 -0.3**
**PESTR Estremoz 4.55 318** *e*Pn **Pn 22 51 44.3 +1.6**
**PNCL Nicolau / Gran 4.65 305** *e*Pn **Pn 22 51 44.5 +0.5**
PNCL *e*Sn **Sn 22 52 36.4 -1.1**
PNCL A A 22 52 42.0
2.2nm,0.5s
**PMRV Marv??o 4.88 324** *e*Pn **Pn 22 51 48.8 +1.6**
**PMTG Montargil 5.05 316** *e*Pn **Pn 22 51 51.4 +1.9**
PMTG *e*Sn **Sn 22 52 45.0 -2.4**
**PSBE So Bento 5.68 316** *e*Pn **Pn 22 52 01.7 +3.5**
**MVO Moncorvo 6.21 336** *e*Pn **Pn 22 52 07.8 +2.3**

*DJA* ***03*** *22:57:31.7±0.3,3˚S±2˚×12˚9E±˚, h10km, M4.0/10, mb4.2/1, MLv3.9/10*
*IDC* ***03*** *22:57:33.3± 1.2, 2˚.99S× 129˚.20E, h0km, mb3.8/3, mb1 4.0/6, mb1mx3.5/42, mbtmp3.9/6, ML3.8/3, MS2.8/1, Ms1 2.8/1, ms1mx2.4/72, Error ellipse: s-maj=33.3km s-min=16.5km az=83.0*
**ISC 03 22:57:30.7±0.9, 2˚.68S±0˚.05×128˚.68E±0˚.05, h10km, n13, σ3§10/17, mb3.9/3, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **0.71** | **159** | P | **Pb** | **22 57 46.8** | **+1.7** |
| MSAI | | | | S | **Sg** | **22 57 56.6** | **+2.9** |
| **AAI** | **Ambon** | **1.11** | **206** | P | **Pn** | **22 57 54.4** | **+2.1** |
| AAI | | | | S | **Sg** | **22 58 09.0** | **+2.4** |
| **LBMI** | **Labuha** | **2.34** | **330** | P | **Pn** | **22 58 10.5** | **+1.2** |
| LBMI | | | | S | **Sn** | **22 58 38.7** | **+0.5** |
| **SANI** | **Sanana** | **2.76** | **283** | P | **Pn** | **22 58 14.9** | **-0.1** |
| **SWI** | **Sorong** | **3.15** | **55** | P | **Pn** | **22 58 22.5** | **+2.2** |
| **SIJI** | **Sorong** | **3.15** | **55** | Pn | **Pn** | **22 58 21.9** | **+1.5** |
| | 15nm,0.3s,baz=246,slow=12,SNR=76 | | | | | | |
| SIJI | | | | Sn | **Sn** | **22 58 58.4** | **+0.4** |
| | 11nm,0.3s,baz=261,slow=14,SNR=12 | | | | | | |
| SIJI | | | | LR | LR | 22 59 56.9 | |
| | comp=Z,183nm,20.9s,baz=250,slow=49 | | | | | | |
| **FAKI** | **Fak Fak** | **3.57** | **94** | P | **Pn** | **22 58 26.5** | **+0.3** |
| **TNTI** | **Ternate** | **3.67** | **339** | P | **Pn** | **22 58 27.0** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **15.61** | **191** | Pn | **Pn** | **23 01 13.2** | **+2.3** |
| | 0.1nm,0.3s,baz=17,slow=7.3,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.03** | **163** | P | **Pn** | **23 01 40.1** | **-1.4** |
| | 0.5nm,0.3s,baz=345,slow=13,SNR=24 | | | | | | |
| WRA | | | | S | **Sn** | **23 04 58.1** | **-4.7** |
| | 0.1nm,0.3s,baz=348,slow=23,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **21.47** | **167** | P | **P** | **23 02 18.4** | **-1.1** |
| | 4.3nm,0.8s,baz=346,slow=11,SNR=39 | | | | | | |
| ASAR | | | | S | **S** | **23 06 09.3** | **-8.6** |
| | 0.8nm,0.9s,baz=348,slow=22,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.92** | **326** | P | P | 23 08 11.3 | +7.4 |
| | 0.3nm,0.6s,baz=126,slow=7.6,SNR=3.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **79.87** | **322** | P | P | 23 09 47.3 | +7.7 |
| | 1.1nm,0.8s,baz=96,slow=9.2,SNR=3.7 | | | | | | |

**IDC 03 23:10:51.8±1.1, 20˚.19N×144˚.73E, h0km, mb3.6/5, mb1 3.9/5, mb1mx3.4/49, mbtmp3.6/5, Error ellipse: s-maj=48.4km s-min=24.2km az=108.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **41.16** | **195** | P | P | 23 18 38.4 | +0.2 |
| | 0.2nm,0.3s,baz=15,slow=8.7,SNR=4.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **42.41** | **207** | P | P | 23 18 48.0 | -0.4 |
| | 0.7nm,0.6s,baz=29,slow=13,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.77** | **313** | P | P | 23 20 37.9 | +0.1 |
| | 0.6nm,0.5s,baz=94,slow=7.6,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **62.72** | **27** | P | P | 23 21 19.1 | +0.7 |
| | 0.4nm,0.7s,baz=252,slow=5.1,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.11** | **28** | P | P | 23 22 46.2 | -0.7 |
| | 0.5nm,0.5s,baz=291,slow=4.9,SNR=7.3 | | | | | | |

*TUL* ***03*** *23:11:28±1.1, 36˚.81N±0˚.02×97˚.62W±0˚.03, h6km±7km, ML3.5, mb_Lg3.2/71(NEIC), Error ellipse: s-maj=4.2km s-min=2.3km az=46.0*
*NEIC* ***03*** *23:11:28.2±0.8, 36˚.79N±0˚.02×97˚.61W±0˚.03, h2km±7km, Error ellipse: s-maj=4.2km s-min=2.2km az=50.0*
**ISC 03 23:11:28.3±0.9, 36˚.80N±0˚.02×97˚.62W±0˚.02, h9km±10km, n86, σ§58/75, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GC02** | **Grant County #** | **0.20** | **285** | Pg | **Pg** | **23 11 32.3** | **-0.1** |
| GC02 | | | | Sg | **Sg** | **23 11 35.4** | **+0.2** |
| **KAN13** | **South Haven SW** | **0.24** | **28** | Pg | **Pg** | **23 11 33.0** | **-0.2** |
| KAN13 | | | | Sg | **Sg** | **23 11 36.5** | **0.0** |
| **KAN17** | **Caldwell West** | **0.27** | **335** | Pg | **Pg** | **23 11 33.5** | **-0.2** |
| KAN17 | | | | Sg | **Sg** | **23 11 37.6** | **+0.2** |
| **KAN14** | **Manchester OK** | **0.32** | **300** | Pg | **Pg** | **23 11 34.4** | **-0.2** |
| KAN14 | | | | Sg | **Sg** | **23 11 38.9** | **+0.1** |
| **BLOK** | **Blackwell** | **0.33** | **97** | Pg | **Pg** | **23 11 34.7** | **-0.1** |
| **KAN05** | **Bluff City Nor** | **0.37** | **327** | | **Pg** | **23 11 35.9** | **+0.3** |
| KAN05 | | | | Sg | **Sg** | **23 11 40.6** | **+0.1** |
| **KAN01** | **Argonia South** | **0.37** | **343** | | **Pg** | **23 11 35.4** | **-0.2** |
| KAN01 | | | | Sg | **Sg** | **23 11 40.6** | **+0.1** |
| **CROK** | **Carrier** | **0.41** | **225** | Pg | **Pg** | **23 11 36.5** | **+0.1** |
| CROK | | | | Sg | **Sg** | **23 11 42.4** | **+0.6** |
| **OK032** | **Salt Plains WL** | **0.47** | **271** | | **Pg** | **23 11 37.3** | **-0.2** |
| OK032 | | | | Sg | **Sg** | **23 11 44.0** | **+0.3** |
| **KAN06** | **Argonia West S** | **0.49** | **337** | | **Pg** | **23 11 37.5** | **-0.2** |
| **KAN10** | **Anthony SW Sta** | **0.50** | **311** | Pg | **Pg** | **23 11 37.8** | **-0.1** |
| **KAN08** | **Anthony NE Sta** | **0.51** | **327** | | **Pg** | **23 11 38.0** | **-0.2** |
| **KAN16** | **Harper SW Stat** | **0.55** | **320** | Pg | **Pg** | **23 11 38.8** | **-0.2** |
| **KAN12** | **Harper NE Stat** | **0.58** | **329** | Pg | **Pg** | **23 11 39.3** | **-0.3** |
| **OK035** | **E0210 Rd and N** | **0.88** | **264** | Pg | **Pg** | **23 11 44.7** | **-0.5** |
| **T35A** | **Sooner Cattle** | **0.90** | **82** | Pg | **Pg** | **23 11 45.0** | **-0.5** |
| **OK033** | **Mehan** | **0.93** | **144** | Pg | **Pg** | **23 11 46.0** | **-0.2** |
| **QUOK** | **Quay** | **0.97** | **130** | | **Pg** | **23 11 46.4** | **-0.4** |
| **OK029** | **Liberty Lake** | **1.01** | **172** | | **Pg** | **23 11 47.3** | **-0.3** |
| **OK031** | **S. Brethren Rd** | **1.05** | **143** | | **Pg** | **23 11 48.1** | **-0.5** |
| **OK034** | **N. Norfolk Rd.** | **1.07** | **137** | | **Pg** | **23 11 48.5** | **-0.4** |
| **OK030** | **Cody Creek RV** | **1.10** | **142** | | **Pg** | **23 11 49.0** | **-0.4** |
| **BCOK** | **Bluff Creek, N** | **1.14** | **180** | | **Pb** | **23 11 49.7** | **-0.4** |
| **U32A** | **Winter Ranch,** | **1.19** | **250** | | **Pb** | **23 11 50.4** | **-0.6** |
| **OK009** | **Oakdale Elemen** | **1.23** | **172** | Pg | **Pn** | **23 11 51.2** | **-0.4** |
| **OK025** | **Westminster Rd** | **1.24** | **169** | | **Pn** | **23 11 51.4** | **-0.3** |
| **OK001** | **Jones High Sch** | **1.27** | **168** | Pn | **Pn** | **23 11 52.1** | **0.0** |
| **OKCFA** | **Oklahoma City** | **1.39** | **174** | | **Pn** | **23 11 54.1** | **+0.3** |
| **OKCSW** | **OKLAHOMA CITY** | **1.40** | **174** | | **Pn** | **23 11 54.2** | **+0.3** |
| **FNO** | **Franklin** | **1.55** | **173** | | **Pb** | **23 11 56.8** | **-0.4** |
| **TUL1** | **Leonard** | **1.72** | **120** | | **Pn** | **23 11 59.2** | **+0.8** |
| **W35A** | **Tecumseh** | **1.75** | **160** | | **Pn** | **23 11 59.6** | **+0.8** |
| **R32A** | **Long Quarter,** | **1.84** | **332** | | **Pn** | **23 12 00.9** | **+0.9** |
| **X34A** | **Smith Ranch, M** | **2.20** | **185** | | **Pn** | **23 12 06.1** | **+1.1** |
| **WMOK** | **Wichita Mounta** | **2.26** | **205** | | **Pn** | **23 12 06.3** | **+0.4** |
| **KSU1** | **Kansas State U** | **2.43** | **19** | | **Pn** | **23 12 09.0** | **+0.8** |
| **CBKS** | **Cedar Bluff** | **2.62** | **321** | | **Pn** | **23 12 11.2** | **+0.5** |
| **U38A** | **Gravette** | **2.63** | **97** | | **Pn** | **23 12 11.9** | **+1.1** |
| **LOOK** | **Love County** | **2.82** | **173** | Pn | **Pn** | **23 12 14.5** | **+1.0** |
| LOOK | | | | IAmb_Lg | | 23 13 03.1 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **X37A** | **Clayton** | **2.87** | **140** | | **Pn** | **23 12 15.3** | **+1.2** |
| X37A | | | | IAmb_Lg | | 23 13 07.2 | |
| | comp=Z,111nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.01** | **99** | | **Pn** | **23 12 17.0** | **+0.9** |
| HHAR | | | | IAmb_Lg | | 23 13 11.9 | |
| | comp=Z,78nm,0.7s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.47** | **175** | | **Pn** | **23 12 23.1** | **+0.6** |
| **W39A** | **Magazine** | **3.50** | **116** | | **Pn** | **23 12 23.6** | **+0.8** |
| W39A | | | | IAmb_Lg | | 23 13 25.6 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **S39A** | **Bolivar** | **3.54** | **74** | | **Pn** | **23 12 24.1** | **+0.7** |
| S39A | | | | IAmb_Lg | | 23 13 21.9 | |
| | comp=Z,59nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.81** | **241** | | **Pn** | **23 12 28.2** | **+1.0** |
| **U40A** | **Yellville** | **3.86** | **95** | | **Pn** | **23 12 28.5** | **+0.7** |
| U40A | | | | IAmb_Lg | | 23 13 31.8 | |
| | comp=Z,59nm,1.0s | | | | | | |
| **N33A** | **J Bar K, Exete** | **3.94** | **2** | Pn | **Pn** | **23 12 28.7** | **-0.1** |
| **MIAR** | **Mount Ida** | **3.99** | **123** | | **Pn** | **23 12 30.4** | **+0.9** |
| MIAR | | | | IAmb_Lg | | 23 13 40.5 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.28** | **48** | | **Pn** | **23 12 34.2** | **+0.6** |
| P38A | | | | IAmb_Lg | | 23 13 43.2 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.30** | **84** | | **Pn** | **23 12 34.3** | **+0.4** |
| MGMO | | | | IAmb_Lg | | 23 13 42.3 | |
| | comp=Z,72nm,0.7s | | | | | | |
| **N35A** | **Tabor** | **4.34** | **20** | | **Pn** | **23 12 34.9** | **+0.6** |
| N35A | | | | IAmb_Lg | | 23 13 52.7 | |
| | comp=Z,77nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.49** | **202** | | **Pn** | **23 12 36.1** | **-0.3** |
| **R40A** | **Maddies Statio** | **4.51** | **69** | | **Pn** | **23 12 37.3** | **+0.6** |
| R40A | | | | IAmb_Lg | | 23 13 52.3 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.53** | **100** | | **Pn** | **23 12 37.8** | **+0.8** |
| FCAR | | | | IAmb_Lg | | 23 13 48.7 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.53** | **119** | | **Pn** | **23 12 38.0** | **+1.0** |
| **KSCO** | **Kaye Shedlock'** | **4.53** | **301** | | **Pn** | **23 12 37.6** | **+0.5** |
| KSCO | | | | IAmb_Lg | | 23 14 04.4 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.58** | **108** | | **Pn** | **23 12 38.3** | **+0.7** |
| WHAR | | | | IAmb_Lg | | 23 13 53.0 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.62** | **355** | | **Pn** | **23 12 38.5** | **+0.2** |
| **W41B** | **Gary Mavity, V** | **4.65** | **109** | IAmb_Lg | | **23 12 38.5** | **+0.2** |
| | comp=Z,42nm,1.0s | | | | | 23 13 53.3 | |
| **WHTX** | **Lake Whitney,** | **4.80** | **178** | | **Pn** | **23 12 41.1** | **+0.4** |
| **WLAR** | **White Oak Lake** | **4.82** | **129** | IAmb_Lg | | 23 14 13.6 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **5.01** | **162** | IAmb_Lg | | 23 14 15.2 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **5.07** | **238** | IAmb_Lg | | 23 14 14.6 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.17** | **56** | IAmb_Lg | | 23 14 16.0 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.23** | **74** | | **Pn** | **23 12 46.9** | **+0.3** |
| **L34A** | **Svendsen Farm,** | **5.25** | **10** | | **Pn** | **23 12 46.9** | **0.0** |
| L34A | | | | IAmb_Lg | | 23 14 26.0 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **N38A** | **Joes South For** | **5.26** | **39** | Pn | **Pn** | **23 12 46.8** | **-0.2** |
| N38A | | | | IAmb_Lg | | 23 14 25.3 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.26** | **96** | Pn | **Pn** | **23 12 47.1** | **0.0** |
| LCAR | | | | IAmb_Lg | | 23 14 20.8 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **Z41A** | **Richland Creek** | **5.30** | **130** | IAmb_Lg | | 23 14 28.7 | |
| | comp=Z,50nm,0.9s | | | | | | |
| **OGNE** | **Ogallala** | **5.38** | **322** | IAmb_Lg | | 23 14 28.7 | |
| | comp=Z,45nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.45** | **276** | Pn | **Pn** | **23 12 50.8** | **+1.0** |
| T25A | | | | IAmb_Lg | | 23 14 32.6 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **NATX** | **Nacogdoches** | **5.59** | **153** | IAmb_Lg | | 23 14 40.8 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **HBAR** | **Harrisburg** | **5.77** | **100** | IAmb_Lg | | 23 14 35.1 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.85** | **76** | IAmb_Lg | | 23 14 32.9 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **5.88** | **352** | | **Pn** | **23 12 54.8** | **-0.8** |
| **435B** | **Jarrell** | **6.00** | **180** | IAmb_Lg | | 23 14 47.1 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **SLM** | **Saint Louis** | **6.13** | **70** | IAmb_Lg | | 23 14 44.1 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **6.33** | **292** | Pn | **Pn** | **23 13 01.3** | **-0.8** |
| **SDCO** | **Great Sand Dun** | **6.36** | **281** | Pn | **Pn** | **23 13 01.2** | **-1.2** |
| **143A** | **Socs Landing,** | **6.55** | **127** | IAmb_Lg | | 23 15 08.3 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.56** | **197** | IAmb_Lg | | 23 15 13.4 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.67** | **305** | IAmb_Lg | | 23 15 48.7 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **SUSD** | **Miller** | **7.70** | **353** | IAmb_Lg | | 23 15 34.0 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.19** | **234** | IAmb_Lg | | 23 15 59.6 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.33** | **41** | IAmb_Lg | | 23 15 57.5 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **K22A** | **Casper** | **9.01** | **313** | IAmb_Lg | | 23 16 31.3 | |
| | comp=Z,21nm,0.9s | | | | | | |

**IDC 03 23:48:02.6±3.9, 58˚.22S×146˚.61E, h0km, mb3.9/3, mb1 4.1/3, mb1mx3.5/30, mbtmp3.9/3, MS3.5/3, Ms1 3.5/3, ms1mx3.1/46, Error ellipse: s-maj=338.2km s-min=27.6km az=81.0, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **20.07** | **170** | LR | LR | 23 59 19.6 | |
| | comp=Z,85nm,18.3s,baz=282,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **31.88** | **180** | P | P | 23 54 29.1 | -0.1 |
| | 1.8nm,1.0s,baz=6.7,slow=6.2,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **35.71** | **340** | P | P | 23 55 02.6 | 0.0 |
| | 1.4nm,0.8s,baz=166,slow=9.9,SNR=10 | | | | | | |
| **MAW** | **Mawson** | **36.31** | **220** | LR | LR | 00 09 54.0 | |
| | comp=Z,125nm,19.5s,baz=180,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.27** | **342** | P | P | 23 55 32.6 | -0.3 |
| | 2.2nm,0.9s,baz=168,slow=7.5,SNR=11 | | | | | | |
| **H08S2** | **Diego Garcia H** | **75.19** | **280** | T | T | 01 23 37.5 | |
| | baz=148,slow=76,SNR=14 | | | | | | |
| **H08S1** | **Diego Carcia H** | **75.19** | **280** | T | T | 01 23 47.6 | |
| | baz=148,slow=76,SNR=9.1 | | | | | | |
| **H08S3** | **Diego Garcia H** | **75.20** | **280** | T | T | 01 23 40.1 | |
| | baz=148,slow=76,SNR=16 | | | | | | |
| **OPO** | **Ambohidratompo** | **79.25** | **252** | LR | LR | 00 31 41.3 | |
| | comp=Z,26nm,18.0s,baz=46,slow=33 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.06** | **286** | PKP | PKPbc | 00 07 37.6 | +0.7 |
| | 0.7nm,0.6s,baz=99,slow=2.5,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **150.85** | **302** | PKPbc | PKPbc | 00 07 55.6 | +0.2 |
| | 2.6nm,0.9s,baz=180,slow=1.4,SNR=3.5 | | | | | | |

**IDC 03 23:59:18.3±74.0, 3˚.75N×94˚.68E, h0km, mb3.4/3, mb1 3.4/3, mb1mx3.0/48, mbtmp3.4/3, Error ellipse: s-maj=1394.0km s-min=159.5km az=179.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **24.86** | **243** | T | T | 00 30 38.0 | |
| | baz=66,slow=74,SNR=5.2 | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.87** | **243** | T | T | 00 30 41.1 | |
| | baz=66,slow=74,SNR=6.8 | | | | | | |
| **H08S1** | **Diego Carcia H** | **24.88** | **243** | T | T | 00 30 46.5 | |
| | baz=66 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.20** | **348** | P | P | 00 07 29.0 | -0.1 |
| | 0.5nm,0.8s,baz=165,slow=8.3,SNR=6.6 | | | | | | |
| **SONM** | **Songino Array** | **45.06** | **11** | P | P | 00 07 36.0 | -0.1 |
| | 0.2nm,0.6s,baz=207,slow=7.1,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.69** | **352** | P | P | 00 08 19.3 | -0.1 |
| | 0.4nm,0.5s,baz=160,slow=7.6,SNR=2.6 | | | | | | |

*INMG* ***04*** *00:07:33.6±1.4, 35˚.48N×3˚.89W, h2km±5km, ML2.0, Error ellipse: s-maj=4.3km s-min=3.1km az=9.0*
*CNRM* ***04*** *00:07:33.9, 35˚.61N×3˚.78W, h13km, ml2.6*
**ISC 04 00:07:34.0±1.4, 35˚.59N±0˚.04×3˚.76W±0˚.03, h10km±10km, n25, σ1§36/37, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.40** | **202** | P | **Pn** | **00 07 47.0** | **+1.1** |
| **PALE** | **Palemas** | **0.40** | **202** | P | **Pg** | **00 07 42.0** | **+0.1** |
| PALE | | | | S | **Sg** | **00 07 46.7** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.72** | **120** | P | Pn | 00 07 58.0 | +7.6 |
| **GOG** | **Mont Gurugu** | **0.72** | **120** | P | **Pg** | **00 07 48.5** | **+0.5** |
| GOG | | | | S | **Sb** | **00 07 58.9** | **+0.1** |
| **AKLM** | **AKL** | **1.08** | **185** | P | **Pb** | **00 07 55.0** | **+0.2** |
| **AKLM** | **AKL** | **1.08** | **185** | P | **Pb** | **00 07 54.7** | **-0.1** |
| AKLM | | | | S | **Sb** | **00 08 09.2** | **+0.2** |
| **CHAS** | **Isla Isabel II** | **1.16** | **110** | P | Pn | 00 07 55.1 | -1.2 |
| CHAS | | | | S | **Sb** | **00 08 08.7** | **-2.5** |
| **SMIR** | **Smir Dam** | **1.32** | **275** | P | Pn | 00 07 57.0 | -1.5 |
| **SMIR** | **Smir Dam** | **1.32** | **275** | P | Pn | 00 07 56.7 | -1.9 |
| SMIR | | | | S | **Sb** | **00 08 13.5** | **-2.5** |
| **CHEFC** | **Chefchaouen** | **1.38** | **250** | P | **Pg** | **00 08 00.2** | **-0.3** |
| CHEFC | | | | S | **Sb** | **00 08 17.4** | **-0.2** |
| **JBK** | **JBK** | **1.59** | **142** | P | **Pg** | **00 08 07.0** | **+2.5** |
| **JBK** | **JBK** | **1.59** | **142** | P | Pn | 00 08 00.7 | -1.7 |
| JBK | | | | S | **Sn** | **00 08 23.3** | **+0.3** |
| **SICH** | **Sidi Chahed** | **1.96** | **221** | P | Pn | 00 08 07.8 | +0.6 |
| SICH | | | | S | **Sg** | **00 08 35.8** | **-1.1** |
| **LCRM** | **LCR** | **2.10** | **206** | P | **Pb** | **00 08 11.7** | **-0.7** |
| LCRM | | | | S | **Sb** | **00 08 38.0** | **-0.5** |
| **MD31** | **MD31** | **2.83** | **197** | P | Pn | 00 08 20.0 | +0.5 |
| MD31 | | | | S | **Sn** | **00 08 52.8** | **-0.9** |
| **MDT** | **Midelt** | **2.85** | **194** | P | Pn | 00 08 20.4 | +0.7 |
| **MDT** | **Midelt** | **2.85** | **194** | P | Pn | 00 08 20.4 | +0.7 |
| MDT | | | | S | **Sn** | **00 08 54.9** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **3.67** | **301** | *e*Pn | Pn | 00 08 33.0 | +2.2 |
| PVAQ | | | | *e*Sn | **Sn** | **00 09 14.1** | **0.0** |
| PVAQ | | | | A | A | 00 09 16.3 | |
| | 2.8nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.67** | **301** | S | **Sn** | **00 09 15.5** | **+1.3** |
| **PBDV** | **Barranco-do-Ve** | **3.75** | **297** | *e*Pn | **Pn** | **00 08 33.4** | **+1.4** |
| PBDV | | | | *e*Sn | **Sn** | **00 09 17.0** | **+0.8** |
| PBDV | | | | A | A | 00 09 22.4 | |
| | 4.0nm,0.8s | | | | | | |
| **MESJ** | **Messejana** | **4.23** | **303** | *e*Pn | **Pn** | **00 08 41.8** | **+3.3** |
| MESJ | | | | *e*Sn | **Sn** | **00 09 26.8** | **-1.2** |
| **PESTR** | **Estremoz** | **4.48** | **318** | *e*Pn | Pb | 00 08 46.8 | -6.0 |
| **EVO** | **Evora** | **4.50** | **312** | *e*Pn | **Pn** | **00 08 41.5** | **-0.7** |
| **PNCL** | **Nicolau / Gran** | **4.58** | **305** | *e*Pn | **Pn** | **00 08 45.0** | **+1.7** |
| PNCL | | | | *e*Sn | **Sn** | **00 09 37.5** | **+0.9** |
| **PMTG** | **Montargil** | **4.97** | **316** | *e*Pn | Pn | 00 08 54.0 | +5.2 |

*IDC* ***04*** *00:07:44.1±0.4, 30˚.44S×177˚.51W, h0km, mb4.9/22, mb1 5.0/23, mb1mx4.8/44, mbtmp4.9/23, ML4.6/1, MS4.5/31, Ms1 4.5/31, ms1mx4.3/62, Error ellipse: s-maj=14.7km s-min=13.6km az=68.0*
*BJI* ***04*** *00:07:44.1±0.0, 29˚.85S×176˚.97W, h9km, mb5.1/37, mB5.6/22, Ms5.0/10, Ms7 4.8/9*
*MOS* ***04*** *00:07:45.2±0.8, 30˚.49S×177˚.62W, h12km, mb5.4/38, MS4.7/4, Error ellipse: s-maj=10.4km s-min=7.8km az=97.4*
*NEIC* ***04*** *00:07:47.9±1.4, 30˚.45S±0˚.06×177˚.7W±0˚.1, h17km±3km, mb5.2/95, Error ellipse: s-maj=15.3km s-min=8.6km az=89.0*
*NOU* ***04*** *00:07:48.6, 30˚.96S×177˚.08W, h36km, mb5.3/66, Kermadec Islands, New Zealand*
*GCMT* ***04*** *00:07:49.9±0.2, 30˚.46S±0˚.02×177˚.32W±0˚.01, h27km, MW5.2/107, Moment Tensor Solution. s76,c105; s107,c157; Duration: 0 Moment tensor: Scale 10¹⁶Nm; $M_{rr}$5.19±.18; $M_{\theta\theta}$0.11±.14; $M_{\phi\phi}$-5.30±.12; $M_{r\theta}$0.40±.26; $M_{r\phi}$-2.08±.11; $M_{\theta\phi}$3.86±.22; Best double couple: $M_o$6.82200×10¹⁶ NP1:∅₁208.00000°, δ29.00000°, λ106.00000°. NP2:∅₂11.00000°, δ63.00000°, λ82.00000°. Principal axes: T 6.4690, Plg71.0000°, Azm262.0000°; N 0.7080, Plg7.0000°, Azm15.0000°; P -7.1740, Plg17.0000°, Azm107.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 04 00:07:48.8±0.3, 30˚.54S±0˚.04×177˚.40W±0˚.05, h33km, h33km:pP-P, n714, σ1§69/663, mb5.2/115, MS4.6/36, 47C-27D, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.36** | **341** | Pn | **Pn** | **00 08 09.1** | **-2.4** |
| | 5µm,0.3s,baz=191,slow=2.8,SNR=138 | | | | | | |
| RAO | | | | Sn | **Sn** | **00 08 26.0** | **-2.3** |
| | 14µm,0.3s,baz=69,slow=22,SNR=13 | | | | | | |
| RAO | | | | LR | LR | 00 08 36.2 | |
| | comp=Z,9µm,19.1s,baz=138,slow=42 | | | | | | |
| **RAO** | **Raoul Island** | **1.36** | **341** | P | **Pn** | **00 08 09.1** | **-2.4** |
| RAO | | | | | | 00 08 25.4 | |
| **RAO** | **Raoul Island** | **1.36** | **341** | Pn | **Pn** | **00 08 09.1** | **-2.4** |
| RAO | | | | Sn | **Sn** | **00 08 25.4** | **-2.9** |
| **WMGZ** | **Waiomatatini S** | **8.04** | **204** | P | **Pn** | **00 09 41.3** | **-1.9** |
| **HAZ** | **Te Kaha** | **8.23** | **208** | P | **Pn** | **00 09 42.0** | **-3.7** |
| **PKGZ** | **Pakihiroa** | **8.23** | **206** | P | **Pn** | **00 09 41.8** | **-4.1** |
| **PUZ** | **Puketiti** | **8.32** | **204** | P | **Pn** | **00 09 43.3** | **-3.8** |
| **RUGZ** | **Raukumara Rang** | **8.45** | **207** | P | **Pn** | **00 09 45.2** | **-3.7** |
| **TWGZ** | **Tauwhareparae** | **8.52** | **205** | P | **Pn** | **00 09 46.3** | **-3.3** |
| **MWZ** | **Matawai** | **8.83** | **207** | P | **Pn** | **00 09 49.9** | **-4.1** |
| **URZ** | **Urewera** | **8.93** | **209** | Pn | **Pn** | **00 09 50.9** | **-4.5** |
| | 1.4nm,0.3s,baz=272,slow=4.7,SNR=15 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 11 30.1** | **-4.8** |
| | 11nm,0.3s,baz=219,slow=11,SNR=10.0 | | | | | | |
| **URZ** | **Urewera** | **8.93** | **209** | P | **Pn** | **00 09 51.0** | **-4.5** |
| **URZ** | **Urewera** | **8.93** | **209** | Pn | Pn | 00 09 50.4 | -5.0 |
| **URZ** | **Urewera** | **8.93** | **209** | P | **Pn** | **00 09 52.2** | **-3.2** |
| **SNGZ** | **Shannon Statio** | **9.29** | **206** | P | **Pn** | **00 09 56.8** | **-3.6** |
| **MTHZ** | **Maungataniwha** | **9.54** | **208** | P | **Pn** | **00 10 00.7** | **-3.2** |
| **BKZ** | **Black Stump Fm** | **9.95** | **209** | P | **Pn** | **00 10 05.2** | **-4.3** |
| **HIZ** | **Hauiti** | **10.19** | **217** | P | **Pn** | **00 10 16.3** | **+3.5** |
| **KWHZ** | **Kaweka Forest** | **10.20** | **208** | P | Pn | 00 10 07.7 | -5.3 |
| **NTVZ** | **North Tongarir** | **10.25** | **212** | P | **Pn** | **00 10 11.8** | **-1.9** |
| **ETVZ** | **East Tongariro** | **10.27** | **212** | P | **Pn** | **00 10 12.5** | **-1.4** |
| **OTVZ** | **Oturere** | **10.31** | **212** | P | **Pn** | **00 10 12.7** | **-1.8** |
| **SNVZ** | **South Ngauruho** | **10.34** | **212** | P | **Pn** | **00 10 12.6** | **-2.3** |
| **KAHZ** | **Kahuranaki** | **10.35** | **205** | P | Pn | 00 10 08.6 | -6.2 |
| **BFZ** | **Birch Farm** | **11

comp=Z,1µm,21.8s,baz=256,slow=31
**RAR Rarotonga 18.36 64** P **P** **00 11 58.5 -2.3**
RAR pmax pmax
comp=Z,107nm,1.2s
**RAR Rarotonga 18.36 64** P **P** **00 11 58.5 -2.3**
**RAR Rarotonga 18.36 64** P **Pn** **00 12 01.6 +0.7**
**MLZ Mavora Lakes 18.65 213** P **P** **00 12 02.8 -0.9**
**SYZ Scrubby Hill 19.08 209** P **Pn** **00 12 08.6 -0.8**
**KOUNC Koumac, New Ca 19.26 297** P **Pn** **00 12 14.2 +2.4**
**LHI Lord Howe Isla 20.19 261** P Pn 00 12 22.9 +0.2
baz=20,SNR=4.9
**LHI Lord Howe Isla 20.19 261** P Pn 00 12 24.4 +1.7
**SANVU Saraoutou 20.61 313** P **P** **00 12 24.7 -0.6**
**SANVU Saraoutou 20.61 313** P Pn 00 12 32.8 +5.0
**ARMA Armidale 26.65 262** P **P** **00 13 27.5 +2.8**
baz=27,SNR=8.6
**ARMA Armidale 26.65 262** P **P** **00 13 23.1 -1.6**
**ARMA Armidale 26.65 262** P **P** **00 13 27.5 +2.8**
**MGCD Mangrove Creek 26.82 256** P **P** **00 13 27.6 +1.5**
baz=27,SNR=12
**MGCD Mangrove Creek 26.82 256** P **P** **00 13 28.8 +2.7**
**EIDS Eidsvold 28.26 273** P **P** **00 13 40.0 +1.0**
baz=28,SNR=15
**EIDS Eidsvold 28.26 273** P **P** **00 13 37.7 -1.3**
EIDS IAmb IAmb 00 13 42.6
comp=Z,42nm,0.9s
**EIDS Eidsvold 28.26 273** P **P** **00 13 40.3 +1.3**
**PAE Paea 28.36 70** *e*T T 00 42 38.3
comp=Z,9.3nm,0.3s
**PPT2 Papeete2 28.40 69** *e*LQ LQ 00 19 25.6
comp=Z,958nm,24.2s
PPT2 *e*LR LR 00 20 36.5
comp=Z,2µm,26.8s,baz=229
**PPT2 Papeete2 28.40 69** *e*T T 00 42 41.9
comp=Z,26nm,0.4s
**PPT Papeete 28.41 69** LR LR 00 22 10.9
comp=Z,492nm,20.7s,baz=227,slow=30
**MILA Mila 28.44 248** P **P** **00 13 41.0 +0.4**
baz=29,SNR=3.3
**RK1H Rockhampton Ha 29.42 276** P **P** **00 13 50.5 +1.2**
comp=Z,59nm,0.6s
**MEH Mehetia 29.48 71** *e*T T 00 44 03.8
comp=Z,15nm,0.2s
**HNR Honiara 29.78 310** LR LR 00 23 41.2
comp=Z,639nm,21.6s,baz=143,slow=32
**RMQ Roma 29.94 269** P **P** **00 13 56.0 +2.0**
baz=30,SNR=22
**RMQ Roma 29.94 269** P **P** **00 13 57.3 +3.3**
**TAU Tasmania Unive 30.63 236** P **P** **00 13 59.3 -0.6**
TAU pmax pmax
comp=Z,85nm,1.4s
**TAU Tasmania Unive 30.63 236** **P** **00 13 59.3 -0.6**
TAU IAmb IAmb 00 14 01.1
comp=Z,85nm,1.4s
**VAH Vaihoa 31.25 68** *e*T T 00 46 12.9
comp=Z,24nm,0.2s
**TOO Toolangi 31.38 247** P **P** **00 14 06.1 -0.5**
baz=32,SNR=4.4
**TOO Toolangi 31.38 247** P **P** **00 14 06.4 -0.2**
TOO pmax pmax
comp=Z,66nm,1.4s
**TOO Toolangi 31.38 247** P **P** **00 14 06.3 -0.2**
TOO IAmb IAmb 00 14 20.5
comp=Z,66nm,1.4s
**CMSA Cobar Meteorol 31.54 259** P **P** **00 14 09.2 +1.2**
baz=32,SNR=19
**CMSA Cobar Meteorol 31.54 259** P **P** **00 14 09.8 +1.7**
**BRAT Ballarat 32.62 247** P **P** **00 14 18.8 +1.4**
**QLP Quilpie 33.81 267** P **P** **00 14 31.9 +3.9**
**CTA Charters Tower 34.33 279** P **P** **00 14 33.1 +0.6**
comp=Z,36nm,0.6s,baz=102,slow=10.0,SNR=29
CTA ScP **ScP** **00 20 52.4 +1.6**
comp=Z,2.3nm,0.4s,baz=74,slow=2.2,SNR=3.9
CTA LR LR 00 27 27.2
comp=Z,2µm,18.1s,baz=109,slow=35
**CTA Charters Tower 34.33 279** P **P** **00 14 34.7 +2.2**
**CTAO Charters Tower 34.33 279** P **P** **00 14 32.6 +0.1**
CTAO pmax pmax
comp=Z,86nm,0.8s
**CTAO Charters Tower 34.33 279** P **P** **00 14 32.6 +0.1**
**CTAO Charters Tower 34.33 279** P **P** **00 14 34.4 +1.9**
**STKA Stephens Creek 34.95 257** P **P** **00 14 39.2 +1.5**
comp=Z,94nm,0.8s,baz=92,slow=9.6,SNR=69
STKA ScP **ScP** **00 20 55.1 +2.2**
comp=Z,2.6nm,0.7s,baz=144,slow=8.2,SNR=3.9
STKA LR LR 00 27 49.5
comp=Z,1µm,18.4s,baz=77,slow=35
**STKA Stephens Creek 34.95 257** P **P** **00 14 38.7 +1.0**
baz=35,SNR=86
**STKA Stephens Creek 34.95 257** P **P** **00 14 37.9 +0.1**
**STKA Stephens Creek 34.95 257** P **P** **00 14 39.7 +1.9**
**INKA Innaminka 36.51 264** P **P** **00 14 52.8 +1.6**
**MTSU Mount Surprise 36.83 281** P **P** **00 14 54.4 +0.4**
baz=37,SNR=32
**MTSU Mount Surprise 36.83 281** P **P** **00 14 55.0 +1.0**
**HTT Hallett 36.96 254** P **P** **00 14 55.3 +0.3**
baz=37,SNR=23
**HTT Hallett 36.96 254** P **P** **00 14 55.3 +0.3**
**NAPP Napperby 37.63 254** P **P** **00 15 01.9 +1.2**
comp=Z,102nm,1.0s
**LCRK Leigh Creek 38.05 258** P **P** **00 15 05.3 +1.1**
**WHYH Whyalla 38.13 254** P **P** **00 15 05.7 +0.8**
comp=Z,66nm,1.2s
**PMG Port Moresby 39.13 295** P **P** **00 15 13.1 -0.3**
comp=Z,16nm,0.9s,baz=243,slow=1.6,SNR=4.2
PMG LR LR 00 28 35.3
comp=Z,694nm,20.6s,baz=150,slow=32
**PMG Port Moresby 39.13 295**‖ *e*P **P** **00 15 13.5 +0.1**
PMG pmax pmax
comp=Z,30nm,1.5s
**PMG Port Moresby 39.13 295** P **P** **00 15 12.8 -0.6**
**PMG Port Moresby 39.13 295** P P 00 15 18.6 +5.2
**PMG Port Moresby 39.13 295** P P 00 15 18.3 +4.9
**BBOO Buckleboo 39.42 254** P **P** **00 15 15.6 -0.2**
baz=40,SNR=33
**BBOO Buckleboo 39.42 254** P **P** **00 15 14.9 -0.8**
BBOO IAmb IAmb 00 15 16.3
comp=Z,60nm,0.8s
**BBOO Buckleboo 39.42 254** P **P** **00 15 17.3 +1.5**
**COEN Coen 39.80 286** P **P** **00 15 18.4 -0.7**
**COEN Coen 39.80 286** P P 00 15 24.2 +5.1
**QIS Mount Isa 39.84 274** P **P** **00 15 20.1 +0.8**
baz=40,SNR=11
**QIS Mount Isa 39.84 274** P **P** **00 15 20.7 +1.4**
**OOD Oodnadatta 40.83 262** P **P** **00 15 28.9 +1.5**
**TAOE Nuku Hiva Isla 40.89 66** *e*S **S** **00 21 31.3 -6.5**
comp=Z,260nm,24.6s
TAOE *e*LR LR 00 26 23.3
comp=Z,1µm,26.4s,baz=237
**MULG Mulgathing 41.60 258** P **P** **00 15 37.7 +4.0**
**AS31 Alice Springs 43.61 267** P **P** **00 15 48.5 -1.7**
**ASAR Alice Springs 43.62 267** P **P** **00 15 49.4 -0.8**
comp=Z,19nm,0.7s,baz=108,slow=7.8,SNR=125
ASAR ScP **ScP** **00 21 28.6 +2.1**
comp=Z,6.2nm,0.8s,baz=119,slow=4.3,SNR=16
ASAR LR LR 00 33 42.7
comp=Z,2µm,18.0s,baz=114,slow=36
**ASAR Alice Springs 43.62 267** P **P** **00 15 48.8 -1.4**
ASAR **ScP** **00 21 28.2 +1.7**
**WR0 Warramunga Arr 44.44 272** P **P** **00 15 55.6 -1.2**
WR0 IAmb IAmb 00 15 58.0
comp=Z,63nm,1.0s
**WB2 Warramunga Arr 44.61 272** P **P** **00 15 57.0 -1.2**
**WRAB Tennant Creek 44.61 272***c i*P **P** **00 15 57.6 -0.6**
WRAB pmax pmax
comp=Z,113nm,1.3s
**WRAB Tennant Creek 44.61 272** P **P** **00 15 57.0 -1.3**
**WRAB Tennant Creek 44.61 272** P **P** **00 15 58.2 0.0**
**WRA Warramunga Arr 44.62 272** P **P** **00 15 57.0 -1.3**
comp=Z,68nm,1.0s,baz=110,slow=7.9,SNR=23
WRA ScP **ScP** **00 21 32.1 +1.5**
comp=Z,2.2nm,0.9s,baz=111,slow=3.7,SNR=1.0
WRA S **S** **00 22 30.8 -1.5**
comp=Z,1.9nm,1.0s,baz=112,slow=14,SNR=0.1
**WRA Warramunga Arr 44.62 272** P **P** **00 15 57.0 -1.3**
**WRA Warramunga Arr 44.62 272** P **P** **00 15 56.6 -1.7**
**WB0 Warramunga Arr 44.64 272** P **P** **00 15 56.7 -1.8**
**FORT Forrest 46.51 255** P **P** **00 16 11.7 -1.4**
**FORT Forrest 46.51 255** P **P** **00 16 12.7 -0.4**
**WRKA Warakurna 47.97 263** P **P** **00 16 22.4 -2.2**
baz=48,SNR=17
**WRKA Warakurna 47.97 263** P **P** **00 16 23.3 -1.3**
**VNDA Vanda 48.01 186** P **P** **00 16 23.7 -0.4**
comp=Z,3.7nm,0.9s,baz=46,slow=3.3,SNR=1.7
VNDA LR LR 00 31 55.6
comp=Z,121nm,21.4s,baz=28,slow=30
**VNDA Vanda 48.01 186** P **P** **00 16 25.8 +1.7**
VNDA pmax pmax
comp=Z,59nm,1.4s
**VNDA Vanda 48.01 186** P **P** **00 16 25.8 +1.7**
VNDA IAmb IAmb 00 16 33.0
comp=Z,59nm,1.4s
**JAY Jayapura 48.42 297** LR LR 00 35 53.5
comp=Z,218nm,19.2s,baz=344,slow=35
**KDU Kakadu 49.45 280** P **P** **00 16 34.9 -1.1**
baz=50,SNR=6.5
**KDU Kakadu 49.45 280** P **P** **00 16 36.7 +0.7**
**MTN Manton Dam 50.51 279** P **P** **00 16 43.0 -1.0**
baz=51,SNR=3.7
**MTN Manton Dam 50.51 279** P **P** **00 16 42.0 -2.1**
MTN IAmb IAmb 00 16 58.0
comp=Z,17nm,0.8s
**MTN Manton Dam 50.51 279** P P 00 16 48.9 +4.8
**KNRA Kununurra 51.23 274** P **P** **00 16 48.4 -1.1**
baz=52,SNR=15
**KNRA Kununurra 51.23 274** P **P** **00 16 47.9 -1.5**
KNRA IAmb IAmb 00 17 03.0
comp=Z,17nm,0.7s
**KNRA Kununurra 51.23 274** P **P** **00 16 49.2 -0.3**
**WAKE Wake Island 51.86 341** P **P** **00 16 54.5 +0.6**
**FITZ Fitzroy Crossi 52.87 270** P **P** **00 17 00.7 -1.0**
comp=Z,31nm,0.9s,baz=153,slow=6.7,SNR=43
FITZ LR LR 00 38 05.7
comp=Z,717nm,21.3s,baz=117,slow=34
**FITZ Fitzroy Crossi 52.87 270** P **P** **00 17 00.7 -1.0**
baz=53,SNR=16
**KLBR Kellerberrin 54.79 251** P **P** **00 17 13.9 -1.8**
baz=55,SNR=9.6
**KLBR Kellerberrin 54.79 251** P **P** **00 17 13.8 -1.8**
**FAKI Fak Fak 54.87 290** P **P** **00 17 12.8 -3.5**
comp=Z,41nm,1.2s
**FAKI Fak Fak 54.87 290** P **P** **00 17 14.6 -1.8**
FAKI IAmb IAmb 00 17 15.8
comp=Z,68nm,1.3s
**CASY Casey 55.26 208** P **P** **00 17 18.1 -0.3**
**MEEK Meekatharra 55.65 257** P **P** **00 17 20.4 -1.5**
baz=56,SNR=7.6
**MEEK Meekatharra 55.65 257** P **P** **00 17 20.7 -1.2**
**PSA00 Pilbara Seismi 56.46 263** P **P** **00 17 26.1 -1.6**
**MBWA Marble Bar 56.72 264** P **P** **00 17 27.2 -2.4**
**SIJI Sorong 56.86 291** P **P** **00 17 29.9 -0.8**
comp=Z,40nm,1.0s,baz=88,slow=6.6,SNR=10
SIJI LR LR 00 41 51.1
comp=Z,202nm,18.3s,baz=168,slow=36
**SWI Sorong 56.87 291** P **P** **00 17 29.4 -1.3**
comp=Z,52nm,1.0s
**GUMO Guam 56.94 315** LR LR 00 38 57.5
comp=Z,260nm,20.7s,baz=116,slow=33
**MORW Morawa 56.98 253** P **P** **00 17 29.6 -1.7**
baz=57,SNR=3.8
**MORW Morawa 56.98 253** P **P** **00 17 29.1 -2.2**
MORW IAmb IAmb 00 17 33.9
comp=Z,49nm,1.4s
**MORW Morawa 56.98 253** P **P** **00 17 29.9 -1.4**
**SOEI Soe 57.88 278** P **P** **00 17 36.9 -1.1**
**SOEI Soe 57.88 278** P **P** **00 17 39.4 +1.4**
**BATI Baumata 58.18 277** LR LR 00 43 08.8
comp=Z,2µm,19.0s,baz=124,slow=37
**RPN Rapa Nui 58.90 105** LR LR 00 39 41.9
comp=Z,158nm,18.4s,baz=256,slow=32
**QSPA South Pole Qui 59.57 180** P **P** **00 17 51.3 +2.4**
comp=Z,31nm,0.9s,baz=50,slow=1.9,SNR=40
QSPA LR LR 00 42 04.6
comp=Z,586nm,18.6s,baz=45,slow=34
**QSPA South Pole Qui 59.57 180** P **P** **00 17 51.3 +2.4**
**LBMI Labuha 60.05 289** P **P** **00 17 52.4 -0.5**
comp=Z,1µmcomp=Z,28nm,0.8s
**MMRI Maumere 60.18 278** P **P** **00 17 52.9 -0.8**
comp=Z,6µmcomp=Z,64nm,1.1s
**MMRI Maumere 60.18 278** P **P** **00 17 52.3 -1.4**
**SANI Sanana 60.50 287** P **P** **00 17 53.5 -2.4**
comp=Z,39nm,1.3s
**GIRL Giralia 60.83 260** P **P** **00 17 59.6 +1.5**
baz=61,SNR=3.6
**GIRL Giralia 60.83 260** P **P** **00 17 56.8 -1.3**
**TNTI Ternate 60.97 290** P **P** **00 17 57.9 -1.2**
TNTI IAmb IAmb 00 18 51.4
comp=Z,24nm,0.7s
**BKSI Bulukumba 63.66 280** P **P** **00 18 16.1 -1.1**
comp=Z,11nm,1.2s
**KAPI Kappang 64.14 280** LR LR 00 47 24.2
comp=Z,325nm,18.0s,baz=156,slow=37
**BNSI Bone 64.16 281** P **P** **00 18 18.7 -1.7**
comp=Z,24nm,1.3s
**GTOI Gorontalo 64.46 287** P **P** **00 18 21.7 -0.7**
comp=Z,9.4nm,0.5s
**SPSI Siap Palu 64.67 281** P **P** **00 18 22.1 -1.7**
comp=Z,4µmcomp=Z,16nm,1.1s
**TTSI Tana Toraja 65.11 282** P **P** **00 18 25.5 -1.2**
comp=Z,2µmcomp=Z,18nm,0.8s
**MRSI Marisa 65.25 286** P **P** **00 18 25.3 -2.3**
comp=Z,807nmcomp=Z,15nm,1.0s
**MPSI Mapaga 66.87 285** P **P** **00 18 36.3 -1.7**
comp=Z,20nm,1.0s
**PWJI Pagerwojo 69.44 273** P **P** **00 18 51.5 -2.6**
comp=Z,42nm,1.2s
**BELA Belgrano 2 69.58 172** P **P** **00 18 54.8 +0.8**
BELA IAmb IAmb 00 19 08.4
comp=Z,13nm,0.8s
**PCJI Pacitan 69.89 272** P **P** **00 18 56.7 -0.2**
comp=Z,152nm,1.2s
**UGM Wanagama 70.60 272** P **P** **00 19 00.0 -1.2**
**MYLDM Lahad Datu 70.73 288** P **P** **00 19 02.1 +0.2**
MYLDM IAmb IAmb 00 19 42.8
comp=Z,16nm,0.9s
**PMSA Palmer Station 71.92 156** LR LR 00 43 35.7
comp=Z,251nm,18.8s,baz=264,slow=30
**KPJI Karang Pucung 72.25 272** P **P** **00 19 08.9 -2.3**
comp=Z,45nm,1.6s
**MAW Mawson 72.36 200** LR LR 00 50 14.9
comp=Z,277nm,19.4s,baz=76,slow=35
**KKM Kota Kinabalu 73.09 288** P **P** **00 19 15.0 -1.3**
KKM IAmb IAmb 00 19 16.1
comp=Z,26nm,0.9s
**LEM Lembang 73.64 272** LR LR 00 53 37.6
comp=Z,436nm,18.7s,baz=100,slow=37
**LEM Lembang 73.64 272** P **P** **00 19 18.6 -1.0**
comp=Z,34nm,0.9s
**CNJI Cibinong 73.82 271** P **P** **00 19 18.8 -1.7**
comp=Z,82nm,1.0s
**SBUM Sibu 74.45 282** P **P** **00 19 23.1 -1.1**
**DBJI Dramaga 74.52 271** P **P** **00 19 22.8 -1.8**
comp=Z,55nm,0.9s
**CGJI Cibinong 75.40 271** P **P** **00 19 27.8 -1.8**
comp=Z,46nm,1.0s
**USHA Ushuaia 75.51 146** LR LR 00 44 05.8
comp=Z,261nm,21.1s,baz=239,slow=29
**KSM Kuching 75.55 280** P **P** **00 19 28.8 -1.7**
KSM IAmb IAmb 00 19 30.4
comp=Z,31nm,1.2s
**KSM Kuching 75.55 280** P **P** **00 19 30.3 -0.2**
comp=Z,22nm,1.3s
**KASI Kota Agung 76.97 271** P **P** **00 19 36.3 -2.3**
comp=Z,43nm,1.2s
**KLSI 77.18 272** P **P** **00 19 37.7 -2.1**
comp=Z,12nm,0.9s
**MDSI Maura Dua 77.76 272** P **P** **00 19 40.6 -2.4**
comp=Z,28nm,0.8s
**SNAA Sanae 78.00 178** P **P** **00 19 44.8 +1.3**
**SNAA Sanae 78.00 178** LR LR 00 52 31.6
comp=Z,214nm,19.1s,baz=180,slow=34
**SNAA Sanae 78.00 178** P **P** **00 19 44.2 +0.7**
SNAA pmax pmax
comp=Z,42nm,1.3s
**SNAA Sanae 78.00 178** P **P** **00 19 44.2 +0.7**
SNAA IAmb IAmb 00 20 11.8
comp=Z,42nm,1.3s
**VNA3 Neumayer Olymp 78.13 176** P **P** **00 19 45.4 +1.3**
**VNA2 Neumayer--Watz 78.57 177** P **P** **00 19 48.1 +1.6**
baz=174,slow=4.8
**MJAR Matsushiro Arr 78.65 325** P **P** **00 19 45.5 -1.9**
comp=Z,3.8nm,0.8s,baz=158,slow=4.9,SNR=4.3
**MJAR Matsushiro Arr 78.65 325** P **P** **00 19 46.6 -0.8**
MJAR pmax pmax
comp=Z,19nm,1.8s
**MJAR Matsushiro Arr 78.65 325** P **P** **00 19 46.6 -0.8**
**MAJO Matsushiro 78.65 325**‖ *e*P **P** **00 19 50.4 +3.0**
MAJO pmax pmax
comp=Z,17nm,1.2s
**NVL N'lazarevskaya 78.76 183** *e*P P 00 20 01.9 +14
NVL pmax pmax
comp=Z,25nm,1.1s
**VNA1 Neumayer--Stat 78.80 176** P **P** **00 19 49.3 +1.6**
**JSD Sado 79.81 326** P **P** **00 19 52.8 -0.8**
JSD IAmb IAmb 00 20 52.5
comp=Z,38nm,1.2s
**H03S2 Juan Fernandez 79.96 123** T T 01 49 16.9
baz=237,SNR=10.0
**H03S1 Juan Fernandez 79.97 123** T T 01 49 14.8
baz=237,SNR=10
**H03S3 Juan Fernandez 79.97 123** T T 01 49 16.9
baz=237,SNR=12
**TPUB Ta-pu 79.98 305** P **P** **00 19 53.2 -1.7**
**MASI Maura Aman, Be 80.11 272** P **P** **00 19 54.6 -1.3**
comp=Z,110nm,1.0s
**H03N3 Juan Fernandez 80.15 123** T T 01 49 34.0
baz=241,slow=72,SNR=15
**H03N2 Juan Fernandez 80.15 123** T T 01 49 35.6
baz=241,slow=72,SNR=11
**H03N1 Juan Fernandez 80.16 123** T T 01 49 23.4
baz=241,slow=72,SNR=16
**ERM Erimo 80.83 331** P **P** **00 20 00.6 +1.6**
ERM pmax pmax
comp=Z,37nm,1.2s
**ERM Erimo 80.83 331** P **P** **00 20 00.6 +1.6**
ERM IAmb IAmb 00 20 02.3
comp=Z,37nm,1.1s
**PLCA Paso Flores 82.03 133** P **P** **00 20 05.9 0.0**
comp=Z,2.1nm,0.9s,baz=243,slow=5.0,SNR=3.0
PLCA LR LR 00 48 08.4
comp=Z,282nm,21.6s,baz=232,slow=30
**PLCA Paso Flores 82.03 133** P **P** **00 20 06.8 +1.0**
PLCA pmax pmax
comp=Z,23nm,1.5s
**PLCA Paso Flores 82.03 133** P **P** **00 20 06.8 +1.0**
PLCA IAmb IAmb 00 20 18.7
comp=Z,23nm,1.5s
**KIWB Kanaga Island 82.04 0** P **P** **00 20 05.8 +0.6**
**ADK Adak 82.07 0** P **P** **00 20 06.0 +0.7**
ADK pmax pmax
comp=Z,329nm,1.9s
**ADK Adak 82.07 0** P **P** **00 20 06.0 +0.7**
**ADK Adak 82.07 0** P **P** **00 20 06.0 +0.7**
**DLV T Lat 82.69 288** P **P** **00 20 10.8 +1.1**
**JKA Kamikawa-asahi 82.80 332** P **P** **00 20 10.0 +0.6**
JKA IAmb IAmb 00 20 11.9
comp=Z,53nm,1.3s
**ASAJ Asahikawa 82.80 332** LR LR 00 52 19.0
comp=Z,301nm,20.8s,baz=163,slow=32
**ASAJ Asahikawa 82.80 332** P **P** **00 20 10.0 +0.6**
ASAJ pmax pmax
comp=Z,53nm,1.3s
**BKNI Bangkinang 82.89 275** P **P** **00 20 09.4 -1.1**
**SHEM Shemya Is, Ala 83.25 355** LR LR 00 52 06.2
comp=Z,394nm,19.5s,baz=138,slow=32
**NIKH Nikolski High 83.50 5** P **P** **00 20 12.5 -0.2**
**LPIG La Paz 84.17 58** LR LR 00 50 46.0
comp=Z,211nm,18.7s,baz=208,slow=31
**TJN Taejon 84.35 318**‖ *e*P **P** **00 20 18.4 +0.9**
**TJN Taejon 84.35 318** P **P** **00 20 18.9 +1.4**
**MNSI Mandailing Nat 84.38 274** P **P** **00 20 15.7 -2.5**
**UNV Unalaska Valle 84.57 6** P **P** **00 20 19.8 +1.7**
**PKM Mcpherson Peak 84.71 44** P **P** **00 20 21.8 +2.2**
baz=227
**KSRS Korea Array 84.79 319** P **P** **00 20 19.1 -0.6**
comp=Z,3.5nm,0.9s,baz=136,slow=5.6,SNR=6.8
KSRS LR LR 00 55 57.9
comp=Z,74nm,19.3s,baz=140,slow=34
**KSAR Wonju Array Be 84.80 319** P **P** **00 20 19.7 -0.1**
**KSAR Wonju Array Be 84.80 319** P **P** **00 20 19.7 -0.1**
**YSS Yuzh-Sakhalins 85.10 334** *e*P **P** **00 20 22.0 +1.0**
YSS pmax pmax
comp=Z,60nm,0.9s
YSS MLR MLR
comp=Z,300nm,15.0s
YSS MLR MLR
comp=N,200nm,14.0s
**YSS Yuzh-Sakhalins 85.10 334** P **P** **00 20 21.5 +0.5**
**YSS Yuzh-Sakhalins 85.10 334** P **P** **00 20 22.5 +1.5**
comp=N,71nm,1.0s
**OSI Osito Audit: C 85.18 45** P **P** **00 20 23.9 +2.1**
**MURC Murrieta 85.45 47** P **P** **00 20 25.7 +2.5**
baz=229
**MONP2 Monument Peak 85.48 48** P **P** **00 20 25.5 +1.9**
baz=229
**RMX La Rumorosa 85.51 48** P **P** **00 20 25.7 +2.1**
RMX IAmb IAmb 00 20 42.4
comp=Z,13nm,1.1s
**IKP In-Ko-Pah, Jac 85.52 48** P **P** **00 20 25.1 +1.5**
baz=230
**KULM Kulim 85.75 279** P **P** **00 20 25.6 +0.5**
KULM IAmb IAmb 00 21 01.1
comp=Z,38nm,1.4s
**PET Petropavlovsk 85.79 346**‖ *e*P **P** **00 20 24.3 0.0**
PET pmax pmax
comp=Z,39nm,1.6s
**EDW2 Edwards Air Fo 85.81 45** P **P** **00 20 27.2 +2.3**
baz=228,SNR=6.5
**SWSC Sam W. Stewart 85.91 48** P **P** **00 20 27.9 +2.5**
baz=230
**PFO Pinyon Flats O 85.92 47** LR LR 00 53 33.9
comp=Z,198nm,18.3s,baz=311,slow=32
**PFO Pinyon Flats O 85.92 47** P **P** **00 20 27.0 +1.4**
PFO pmax pmax
comp=Z,9.0nm,1.0s
**PFO Pinyon Flats O 85.92 47** P **P** **00 20 27.0 +1.4**
**PFO Pinyon Flats O 85.92 47** P **P** **00 20 28.1 +2.5**
baz=229,SNR=5.5
**TPFO Pinon Flats 85.92 47** P **P** **00 20 27.8 +2.1**
baz=229
**PSI Prapat 85.96 276** LR LR 00 58 50.9
comp=Z,276nm,21.3s,baz=139,slow=36
**ISA Isabella, Lake 86.04 44** P **P** **00 20 27.9 +1.8**
ISA pmax pmax
comp=Z,18nm,1.1s
**ISA Isabella, Lake 86.04 44** P **P** **00 20 27.9 +1.8**
ISA IAmb IAmb 00 20 41.9
comp=Z,18nm,1.1s
**ISA Isabella, Lake 86.04 44** P **P** **00 20 28.6 +2.5**
baz=228,SNR=9.8
**PEA0B Petropavlovsk- 86.08 345** P **P** **00 20 26.6 +0.9**
PEA0B pmax pmax
comp=Z,36nm,1.0s
**PEA0B Petropavlovsk- 86.08 345** P **P** **00 20 26.6 +0.9**
**PETK Petropavlovsk- 86.08 345** P **P** **00 20 26.0 +0.3**
comp=Z,28nm,0.8s,baz=168,slow=9.1,SNR=33
PETK LR LR 00 53 11.0
comp=Z,174nm,21.1s,baz=134,slow=32
**PETK Petropavlovsk- 86.08 345** P **P** **00 20 25.9 +0.2**
**GSI Gunungsitoli 86.36 274** P **P** **00 20 27.4 -0.8**
**GSI Gunungsitoli 86.36 274** P **P** **00 20 27.2 -1.0**
**GSI Gunungsitoli 86.36 274** P **P** **00 20 28.4 +0.2**
**LRMC Laurel Mtn Rad 86.40 45** P **P** **00 20 30.3 +2.3**
baz=228,SNR=8.7
**BELC Belle Mtn. Jos 86.47 47** P **P** **00 20 30.9 +2.6**
baz=230,SNR=11
**CMB Columbia Colle 86.52 42** P **P** **00 20 29.8 +1.4**
CMB pmax pmax
comp=Z,10.0nm,1.1s
**CMB Columbia Colle 86.52 42** P **P** **00 20 29.8 +1.4**
**BC3 Big Chuckawall 86.59 48** P **P** **00 20 31.9 +3.0**
baz=230
**GLA Glamis 86.60 48** P **P** **00 20 31.0 +2.1**
GLA pmax pmax
comp=Z,15nm,1.0s
**GLA Glamis 86.60 48** P **P** **00 20 31.0 +2.1**
GLA IAmb IAmb 00 20 33.0
comp=Z,15nm,0.9s
**GLA Glamis 86.60 48** P **P** **00 20 31.8 +2.9**
baz=230
**NJ2 Nanjing 86.73 310** *e*P **P** **00 20 30.5 +1.1**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**SDPT Sand Point 86.77 10** P **P** **00 20 32.4 +3.4**
baz=195
**CWC Cottonwood Cre 86.80 44** P **P** **00 20 31.8 +1.9**
baz=228
**HEC Hector,Ludlow 86.80 46** P **P** **00 20 32.2 +2.3**
baz=229,SNR=7.3
**GSC Goldstone, Bar 86.82 46** P **P** **00 20 31.3 +1.4**
GSC pmax pmax
comp=Z,19nm,1.2s
**GSC Goldstone, Bar 86.82 46** P **P** **00 20 31.3 +1.4**
GSC IAmb IAmb 00 20 45.6
comp=Z,19nm,1.1s
**GSC Goldstone, Bar 86.82 46** P **P** **00 20 32.1 +2.2**
baz=229,SNR=9.4

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MPMC** | **Manual Prospec** | **86.90** | **45** | P | **P** | **00 20 32.6** | **+2.2** | | | |
| | baz=228,SNR=8.2 | | | | | | | | | |
| **ORV** | **Oroville** | **86.95** | **40** | P | **P** | **00 20 31.8** | **+1.4** | | | |
| ORV | | | | pmax | pmax | | | | | |
| | comp=Z,27nm,1.7s | | | | | | | | | |
| **ORV** | **Oroville** | **86.95** | **40** | P | **P** | **00 20 31.8** | **+1.4** | | | |
| ORV | | | | IAmb | IAmb | 00 20 47.1 | | | | |
| | comp=Z,27nm,1.7s | | | | | | | | | |
| **UBPT** | **Khong Chiam** | **86.96** | **290** | P | **P** | **00 20 29.7** | **-1.3** | | | |
| **IRM** | **Iron Mountain** | **87.11** | **47** | P | **P** | **00 20 34.1** | **+2.7** | | | |
| | baz=230,SNR=14 | | | | | | | | | |
| **113A** | **Mohawk Valley,** | **87.11** | **49** | P | **P** | **00 20 33.5** | **+2.1** | | | |
| 113A | | | | IAmb | IAmb | 00 20 49.5 | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **TIN** | **Tinemaha, Big** | **87.12** | **43** | P | **P** | **00 20 33.6** | **+2.2** | | | |
| | baz=228 | | | | | | | | | |
| **GMRC** | **Granite Mounta** | **87.19** | **47** | P | **P** | **00 20 34.3** | **+2.5** | | | |
| | baz=230 | | | | | | | | | |
| **QSM** | **Queen of Sheba** | **87.21** | **45** | P | **P** | **00 20 33.4** | **+1.7** | | | |
| QSM | | | | IAmb | IAmb | 00 20 49.5 | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **87.23** | **50** | P | **P** | **00 20 34.3** | **+2.3** | | | |
| | baz=231 | | | | | | | | | |
| **N02D** | **Trinity Center** | **87.29** | **38** | P | **P** | **00 20 34.7** | **+2.6** | | | |
| | baz=225 | | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **87.45** | **46** | P | **P** | **00 20 35.5** | **+2.4** | | | |
| | baz=230 | | | | | | | | | |
| **GWY** | **Greenwater Val** | **87.48** | **45** | P | **P** | **00 20 35.0** | **+1.7** | | | |
| GWY | | | | IAmb | IAmb | 00 20 50.8 | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| **M02C** | **Callahan** | **87.51** | **38** | P | **P** | **00 20 35.0** | **+1.9** | | | |
| M02C | | | | IAmb | IAmb | 00 20 36.3 | | | | |
| | comp=Z,20nm,1.3s | | | | | | | | | |
| **M02C** | **Callahan** | **87.51** | **38** | P | **P** | **00 20 35.8** | **+2.7** | | | |
| | baz=225 | | | | | | | | | |
| **FURC** | **Furnace Creek,** | **87.55** | **45** | P | **P** | **00 20 36.0** | **+2.7** | | | |
| | baz=229 | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **87.56** | **326** | P | **P** | **00 20 33.2** | **0.0** | | | |
| USA0B | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,1.1s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **87.56** | **326** | P | **P** | **00 20 33.2** | **0.0** | | | |
| USA0B | | | | IAmb | IAmb | 00 20 35.0 | | | | |
| | comp=Z,24nm,1.1s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.56** | **326** | P | **P** | **00 20 34.0** | **+0.8** | | | |
| | comp=Z,14nm,1.0s,baz=128,slow=2.6,SNR=15 | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.56** | **326** | P | **P** | **00 20 33.2** | **0.0** | | | |
| **GRAC** | **Grapevine Rang** | **87.59** | **44** | P | **P** | **00 20 36.1** | **+2.5** | | | |
| | baz=228 | | | | | | | | | |
| **LHV** | **Little Huntoon** | **87.76** | **42** | P | **P** | **00 20 36.6** | **+2.3** | | | |
| LHV | | | | IAmb | IAmb | 00 20 54.1 | | | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **87.83** | **38** | P | **P** | **00 20 34.4** | **-0.3** | | | |
| | comp=Z,4.0nm,0.9s,baz=262,slow=10,SNR=4.4 | | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **87.84** | **48** | P | **P** | **00 20 37.6** | **+2.8** | | | |
| | baz=231 | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.00** | **42** | P | **P** | **00 20 37.6** | **+1.9** | | | |
| | comp=Z,6.7nm,1.0s,baz=221,slow=7.8,SNR=32 | | | | | | | | | |
| **NV11** | **Mina Array Sit** | **88.08** | **42** | P | **P** | **00 20 37.6** | **+1.6** | | | |
| NV11 | | | | IAmb | IAmb | 00 20 55.3 | | | | |
| | comp=Z,18nm,1.4s | | | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.23** | **45** | P | **P** | **00 20 39.1** | **+2.3** | | | |
| TPNV | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.23** | **45** | P | **P** | **00 20 39.1** | **+2.3** | | | |
| **TPNV** | **Topopah Spring** | **88.23** | **45** | P | **P** | **00 20 39.1** | **+2.3** | | | |
| | baz=229,SNR=6.3 | | | | | | | | | |
| **Y14A** | **Wickenburg** | **88.34** | **49** | P | **P** | **00 20 39.1** | **+1.8** | | | |
| Y14A | | | | IAmb | IAmb | 00 20 41.0 | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **88.39** | **336** | *e*P | **P** | **00 20 38.0** | **+1.0** | | | |
| TYV | | | | *e*S | **S** | **00 31 25.0** | **+5.3** | | | |
| TYV | | | | pmax | pmax | | | | | |
| | comp=Z,200nm,2.2s | | | | | | | | | |
| TYV | | | | pmax | pmax | | | | | |
| | comp=Z,36nm,1.0s | | | | | | | | | |
| TYV | | | | smax | smax | | | | | |
| | comp=N,200nm,7.3s | | | | | | | | | |
| TYV | | | | smax | smax | | | | | |
| | comp=E,800nm,7.3s | | | | | | | | | |
| **W13A** | **Hualapai Mount** | **88.51** | **47** | P | **P** | **00 20 39.5** | **+1.2** | | | |
| W13A | | | | IAmb | IAmb | 00 20 42.1 | | | | |
| | comp=Z,8.9nm,1.0s | | | | | | | | | |
| **TUC** | **Tucson** | **88.80** | **51** | P | **P** | **00 20 41.7** | **+2.2** | | | |
| TUC | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.3s | | | | | | | | | |
| **TUC** | **Tucson** | **88.80** | **51** | P | **P** | **00 20 41.7** | **+2.2** | | | |
| TUC | | | | IAmb | IAmb | 00 20 43.9 | | | | |
| | comp=Z,16nm,1.2s | | | | | | | | | |
| **TUC** | **Tucson** | **88.80** | **51** | P | **P** | **00 20 42.5** | **+3.0** | | | |
| | baz=232 | | | | | | | | | |
| **WHN** | **Wuhan** | **88.84** | **307** | ⇑P | **P** | **00 20 39.5** | **-0.1** | | | |
| **I03D** | **Drain, OR** | **88.90** | **36** | P | **P** | **00 20 42.9** | **+3.3** | | | |
| | baz=224 | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **89.03** | **325** | P | **P** | **00 20 40.5** | **+0.4** | | | |
| MDJ | | | | IAmb | IAmb | 00 20 42.0 | | | | |
| | comp=Z,24nm,1.2s | | | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **89.66** | **49** | P | **P** | **00 20 46.4** | **+2.8** | | | |
| X16A | | | | IAmb | IAmb | 00 21 00.5 | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **89.70** | **37** | P | **P** | **00 20 46.5** | **+3.0** | | | |
| | baz=226 | | | | | | | | | |
| **BMN** | **Battle Mountai** | **89.95** | **41** | P | **P** | **00 20 46.4** | **+1.6** | | | |
| BMN | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| **BMN** | **Battle Mountai** | **89.95** | **41** | P | **P** | **00 20 46.4** | **+1.6** | | | |
| **LCMT** | **Little Creek M** | **90.12** | **46** | P | **P** | **00 20 47.8** | **+2.1** | | | |
| **WUAZ** | **Wupatki** | **90.37** | **48** | P | **P** | **00 20 49.4** | **+2.5** | | | |
| WUAZ | | | | IAmb | IAmb | 00 21 05.8 | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| **WUAZ** | **Wupatki** | **90.37** | **48** | P | **P** | **00 20 49.5** | **+2.6** | | | |
| | baz=232 | | | | | | | | | |
| **TIA** | **Tai'an** | **90.44** | **313** | P | **P** | **00 20 47.4** | **+0.4** | | | |
| TIA | | | | pmax | pmax | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| **CN2** | **Changchun** | **90.57** | **323** | *e*P | **P** | **00 20 46.7** | **-0.6** | | | |
| CN2 | | | | SKS | **SKSac** | **00 31 16.0** | **-0.2** | | | |
| CN2 | | | | *e*sS | pS | 00 31 48.3 | -3.7 | | | |
| CN2 | | | | pmax | pmax | | | | | |
| | comp=Z,40nm,1.2s | | | | | | | | | |
| CN2 | | | | LR | LR | | | | | |
| | comp=Z,150nm,12.0s | | | | | | | | | |
| CN2 | | | | LR | LR | | | | | |
| | comp=Z,120nm,12.0s | | | | | | | | | |
| CN2 | | | | LR | LR | | | | | |
| | comp=Z,310nm,14.0s | | | | | | | | | |
| **BNX** | **BinXian** | **90.92** | **325** | ⇓P | **P** | **00 20 48.9** | **0.0** | | | |
| BNX | | | | pmax | pmax | | | | | |
| | comp=Z,78nm,1.2s | | | | | | | | | |
| BNX | | | | pmax | pmax | | | | | |
| | comp=Z,230nm,7.6s | | | | | | | | | |
| **121A** | **Cookes Peak, D** | **90.96** | **52** | P | **P** | **00 20 52.2** | **+2.5** | | | |
| | baz=234 | | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **91.21** | **39** | P | **P** | **00 20 52.2** | **+1.7** | | | |
| J08A | | | | IAmb | IAmb | 00 20 53.5 | | | | |
| | comp=Z,12nm,1.1s | | | | | | | | | |
| **ELK** | **Elko** | **91.30** | **42** | P | **P** | **00 20 52.7** | **+1.5** | | | |
| ELK | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| **ELK** | **Elko** | **91.30** | **42** | P | **P** | **00 20 52.7** | **+1.5** | | | |
| **KLR** | **Kul'dur** | **91.42** | **329***c* | *i*P | **P** | **00 20 51.7** | **+0.5** | | | |
| KLR | | | | pmax | pmax | | | | | |
| | comp=Z,27nm,1.6s | | | | | | | | | |
| **MTPU** | **Mount Pierson** | **91.42** | **46** | P | **P** | **00 20 53.7** | **+1.8** | | | |
| MTPU | | | | IAmb | IAmb | 00 20 56.3 | | | | |
| | comp=Z,13nm,1.2s | | | | | | | | | |
| **MSU** | **Marysvale** | **91.72** | **45** | P | **P** | **00 20 54.9** | **+1.7** | | | |
| **MSU** | **Marysvale** | **91.72** | **45** | P | **P** | **00 20 54.9** | **+1.7** | | | |
| **TXAR** | **Lajitas Array** | **92.03** | **57** | P | **P** | **00 20 56.5** | **+1.8** | | | |
| | comp=Z,1.8nm,1.0s,baz=199,slow=6.6,SNR=10 | | | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **00 38 11.0** | **-0.3** | | | |
| | comp=Z,0.6nm,0.8s,baz=90,slow=3.8,SNR=4.3 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **92.03** | **57** | P | **P** | **00 20 56.9** | **+2.2** | | | |
| **TXAR** | **Lajitas Array** | **92.03** | **57** | P | **P** | **00 20 56.9** | **+2.2** | | | |
| **GYA** | **Guiyang** | **92.07** | **300** | ⇑P | **P** | **00 20 55.6** | **+0.7** | | | |
| GYA | | | | pP | pP | 00 21 01.1 | -2.9 | | | |
| GYA | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| **ENH** | **Enshi** | **92.11** | **304** | P | **P** | **00 20 54.2** | **-0.7** | | | |
| **MNTX** | **Cornudas Mount** | **92.14** | **54** | P | **P** | **00 20 56.7** | **+1.7** | | | |
| **MNTX** | **Cornudas Mount** | **92.14** | **54** | P | **P** | **00 20 57.0** | **+1.9** | | | |
| | baz=235 | | | | | | | | | |
| **G08A** | **Pilot Rock** | **92.26** | **37** | P | **P** | **00 20 57.1** | **+1.8** | | | |
| G08A | | | | IAmb | IAmb | 00 21 09.6 | | | | |
| | comp=Z,39nm,1.8s | | | | | | | | | |
| **LYN** | **LuoYang** | **92.49** | **309** | *e*P | **P** | **00 20 57.0** | **+0.5** | | | |
| LYN | | | | pP | pP | 00 21 02.4 | -3.2 | | | |
| LYN | | | | sP | sP | 00 21 03.9 | -4.7 | | | |
| LYN | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| LYN | | | | pmax | pmax | | | | | |
| | comp=Z,120nm,9.8s | | | | | | | | | |
| **HNS** | **HongShan** | **92.70** | **312** | ⇑P | **P** | **00 20 57.9** | **+0.5** | | | |
| HNS | | | | pmax | pmax | | | | | |
| | comp=Z,15nm,1.3s | | | | | | | | | |
| **SRU** | **San Rafael Swe** | **93.10** | **46** | P | **P** | **00 21 01.1** | **+1.6** | | | |
| SRU | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | | |
| **SRU** | **San Rafael Swe** | **93.10** | **46** | P | **P** | **00 21 01.1** | **+1.6** | | | |
| SRU | | | | IAmb | IAmb | 00 21 17.0 | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.27** | **51** | P | **P** | **00 21 02.0** | **+1.7** | | | |
| | comp=Z,2.2nm,0.9s,baz=205,slow=7.0,SNR=7.0 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.27** | **51** | ⇓*i*P | **P** | **00 21 02.8** | **+2.5** | | | |
| ANMO | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,1.7s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.27** | **51** | P | **P** | **00 21 02.4** | **+2.1** | | | |
| **ANMO** | **Albuquerque** | **93.27** | **51** | P | **P** | **00 21 03.3** | **+2.9** | | | |
| | baz=235 | | | | | | | | | |
| **BJI** | **Beijing** | **93.39** | **315** | P | **P** | **00 21 00.9** | **+0.4** | | | |
| BJI | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| **HVU** | **Hansel Valley** | **93.39** | **43** | P | **P** | **00 21 01.8** | **+1.1** | | | |
| HVU | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.3s | | | | | | | | | |
| **HVU** | **Hansel Valley** | **93.39** | **43** | P | **P** | **00 21 01.8** | **+1.1** | | | |
| HVU | | | | IAmb | IAmb | 00 21 15.8 | | | | |
| | comp=Z,16nm,1.3s | | | | | | | | | |
| **MA2** | **Magadan** | **93.57** | **344** | ⇓*i*P | **P** | **00 21 01.0** | **+0.2** | | | |
| MA2 | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | | |
| **MA2** | **Magadan** | **93.57** | **344** | P | **P** | **00 21 01.5** | **+0.7** | | | |
| | comp=Z,5.4nm,1.0s | | | | | | | | | |
| **HLID** | **Hailey** | **93.58** | **40** | P | **P** | **00 21 03.6** | **+2.1** | | | |
| | baz=230 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.93** | **289** | P | **P** | **00 21 05.0** | **+1.5** | | | |
| | comp=Z,1.9nm,0.8s,baz=140,slow=3.4,SNR=13 | | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **94.40** | **15** | P | **P** | **00 21 08.2** | **+3.6** | | | |
| | baz=207 | | | | | | | | | |
| **XAN** | **Xi'an** | **94.61** | **307** | P | **P** | **00 21 06.2** | **-0.2** | | | |
| XAN | | | | pP | pP | 00 21 10.6 | -4.9 | | | |
| XAN | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | | |
| XAN | | | | pmax | pmax | | | | | |
| | comp=Z,110nm,4.1s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,250nm,20.4s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,290nm,21.1s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,330nm,19.4s | | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **94.98** | **43** | P | **P** | **00 21 09.2** | **+1.2** | | | |
| **KLU** | **Klutina** | **95.20** | **15** | P | **P** | **00 21 11.9** | **+3.4** | | | |
| | baz=207 | | | | | | | | | |
| **CAST** | **Castle Rocks** | **95.78** | **11** | P | **P** | **00 21 14.5** | **+3.6** | | | |
| | baz=202 | | | | | | | | | |
| **PZH** | **PanZhiHua** | **95.83** | **297** | P | **P** | **00 21 13.6** | **+1.4** | | | |
| PZH | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | |
| PZH | | | | pmax | pmax | | | | | |
| | comp=Z,90nm,4.7s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **95.88** | **43** | P | **P** | **00 21 13.1** | **+0.9** | | | |
| | comp=Z,0.6nm,0.8s,baz=180,slow=2.8,SNR=4.7 | | | | | | | | | |
| PDAR | | | | PKKPbc | **PKKPbc** | **00 38 00.7** | **-1.2** | | | |
| | comp=Z,0.6nm,0.8s,baz=76,slow=6.3,SNR=4.5 | | | | | | | | | |
| **SEY** | **Seymchan** | **96.23** | **347** | P | **P** | **00 21 13.3** | **+0.3** | | | |
| | comp=Z,1.5nm,0.3s,baz=149,slow=4.6,SNR=5.5 | | | | | | | | | |
| **SEY** | **Seymchan** | **96.23** | **347** | ⇓*i*P | **P** | **00 21 13.4** | **+0.4** | | | |
| **BOZ** | **Bozeman (W)** | **96.40** | **40** | P | **P** | **00 21 16.4** | **+2.0** | | | |
| BOZ | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **96.40** | **40** | P | **P** | **00 21 16.4** | **+2.0** | | | |
| BOZ | | | | IAmb | IAmb | 00 21 30.1 | | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | | | |
| **MCK** | **McKinley** | **96.62** | **12** | P | **P** | **00 21 17.9** | **+3.2** | | | |
| | baz=205 | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **96.70** | **314** | *e*P | **P** | **00 21 16.8** | **+1.0** | | | |
| HHC | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | | |
| HHC | | | | pmax | pmax | | | | | |
| | comp=Z,160nm,8.4s | | | | | | | | | |
| **N23A** | **Red Feather La** | **97.00** | **46** | P | **P** | **00 21 20.4** | **+3.0** | | | |
| | baz=236 | | | | | | | | | |
| **RLMT** | **Red Lodge** | **97.45** | **42** | P | Pdif | 00 21 21.0 | +1.7 | | | |
| | baz=234 | | | | | | | | | |
| **H21K** | **Melozitna Rive** | **97.76** | **10** | P | Pdif | 00 21 22.4 | +2.6 | | | |
| | baz=202 | | | | | | | | | |
| **COLA** | **College** | **97.86** | **12** | ⇓*e*P | Pdif | 00 21 19.8 | -0.5 | | | |
| COLA | | | | pmax | pmax | | | | | |
| | comp=Z,42nm,3.2s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **97.95** | **13** | P | Pdif | 00 21 20.9 | +0.2 | | | |
| | comp=Z,0.8nm,0.8s,baz=218,slow=5.7,SNR=5.2 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **97.95** | **13** | P | Pdif | 00 21 21.0 | +0.2 | | | |
| **J26L** | **Joseph Creek** | **98.37** | **14** | P | Pdif | 00 21 24.9 | +2.2 | | | |
| | baz=209 | | | | | | | | | |
| **BILL** | **Bilibino** | **99.04** | **354** | ⇑*e*P | **Pdif** | **00 21 28.5** | **+3.0** | | | |
| BILL | | | | *e* | | 00 25 29.9 | | | | |
| BILL | | | | *e*S | **SKSac** | **00 31 59.1** | **-1.5** | | | |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | | |
| BILL | | | | MLR | MLR | | | | | |
| | comp=Z,207nm,19.0s | | | | | | | | | |
| **CPUP** | **Villa Florida** | **99.49** | **128** | PKKPbc | PKKPbc | 00 37 48.8 | -1.7 | | | |
| | comp=Z,2.1nm,0.8s,baz=49,slow=3.8,SNR=4.0 | | | | | | | | | |
| **SONM** | **Songino Array** | **103.59** | **318** | Pdiff | **Pdif** | **00 21 45.8** | **-0.6** | | | |
| | comp=Z,0.3nm,0.8s,baz=72,slow=4.7,SNR=1.8 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **105.35** | **25** | Pdiff | **Pdif** | **00 21 51.6** | **-2.1** | | | |
| | comp=Z,0.1nm,0.3s,baz=232,slow=4.6,SNR=1.6 | | | | | | | | | |
| YKA | | | | PKiKP | **PKiKP** | **00 26 07.0** | **-0.4** | | | |
| | comp=Z,0.4nm,0.7s,baz=245,slow=1.2,SNR=5.5 | | | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **00 37 32.1** | **-2.7** | | | |
| | comp=Z,0.9nm,0.8s,baz=44,slow=3.1,SNR=13 | | | | | | | | | |
| **TIGA** | **Tifton** | **108.15** | **64** | P | **PKiKP** | **00 26 15.2** | **+1.6** | | | |
| | baz=245 | | | | | | | | | |
| **NHSC** | **New Hope** | **111.47** | **63** | P | **PKiKP** | **00 26 21.6** | **+1.9** | | | |
| | baz=247 | | | | | | | | | |
| **WMQ** | **Urumqi** | **113.72** | **308** | *e*PKP | **PKiKP** | **00 26 24.5** | **+0.7** | | | |
| WMQ | | | | AMB | AMB | | | | | |
| | comp=Z,230nm,4.7s | | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **115.78** | **314** | ⇑*i*PKiKP | **PKiKP** | **00 26 27.3** | **-0.4** | | | |
| **ZSN** | **Zaisan** | **116.75** | **311** | *e*PKiKP | **PKiKP** | **00 26 29.4** | **0.0** | | | |
| **ZSN** | **Zaisan** | **116.75** | **311** | *e*PKP | **PKiKP** | **00 26 29.4** | **0.0** | | | |
| | baz=311 | | | | | | | | | |
| **RES** | **Resolute Bay** | **117.23** | **17** | PKP | **PKiKP** | **00 26 29.0** | **-0.5** | | | |
| | comp=Z,3.2nm,0.9s,baz=305,slow=3.0,SNR=11 | | | | | | | | | |
| **RES** | **Resolute Bay** | **117.23** | **17** | PKiKP | **PKiKP** | **00 26 29.5** | **0.0** | | | |
| **RES** | **Resolute Bay** | **117.23** | **17** | | **PKiKP** | **00 26 29.5** | **0.0** | | | |
| **BOSA** | **Boshof** | **117.33** | **202** | PKP | **PKiKP** | **00 26 32.2** | **+0.7** | | | |
| | comp=Z,2.6nm,0.9s,baz=315,slow=7.1,SNR=2.3 | | | | | | | | | |
| **MK31** | **Makanchi Array** | **118.26** | **310** | *d*iPKiKP | **PKPdf** | **00 26 31.8** | **-0.6** | | | |
| **MK31** | **Makanchi Array** | **118.26** | **310** | | **PKPdf** | **00 26 31.7** | **-0.6** | | | |
| **MKAR** | **Makanchi Array** | **118.26** | **310** | PKP | **PKPdf** | **00 26 31.6** | **-0.7** | | | |
| | comp=Z,1.9nm,0.6s,baz=217,slow=1.6,SNR=22 | | | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPab** | **00 36 51.9** | **-0.1** | | | |
| | comp=Z,0.1nm,0.6s,baz=263,slow=3.2,SNR=4.4 | | | | | | | | | |
| **MAKZ** | **Makanchi** | **118.47** | **310** | PKiKP | **PKPdf** | **00 26 31.8** | **-1.0** | | | |
| **MAKZ** | **Makanchi** | **118.47** | **310** | PKPdf | **PKPdf** | **00 26 31.8** | **-1.0** | | | |
| **ZAA0** | **Zalesovo Array** | **118.48** | **318** | | **PKPdf** | **00 26 31.3** | **-1.2** | | | |
| **ZALV** | **Zalesovo Beam** | **118.48** | **318** | PKP | **PKPdf** | **00 26 31.7** | **-0.8** | | | |
| | comp=Z,1.7nm,0.7s,baz=105,slow=1.1,SNR=9.2 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **118.48** | **318** | PKPdf | **PKPdf** | **00 26 31.4** | **-1.1** | | | |
| **PRZ** | **Przheval'sk** | **119.79** | **304** | PKiKP | **PKiKP** | **00 26 35.4** | **-0.3** | | | |
| **PRZ** | **Przheval'sk** | **119.79** | **304** | | **PKiKP** | **00 26 35.4** | **-0.3** | | | |
| **KPKS** | **Kokpek** | **119.84** | **305** | *e*PKiKP | **PKPdf** | **00 26 34.1** | **-1.5** | | | |
| **KPKS** | **Kokpek** | **119.84** | **305** | *e*PKP | **PKPdf** | **00 26 34.1** | **-1.5** | | | |
| | baz=306 | | | | | | | | | |
| **SATY** | **Saty** | **119.93** | **305** | *e*PKiKP | **PKPdf** | **00 26 35.1** | **-0.7** | | | |
| **SATY** | **Saty** | **119.93** | **305** | *e*PKP | **PKPdf** | **00 26 35.1** | **-0.7** | | | |
| | baz=305 | | | | | | | | | |
| **ZHN** | **Zhinishke** | **119.94** | **305** | *e*PKiKP | **PKPdf** | **00 26 35.3** | **-0.5** | | | |
| **ZHN** | **Zhinishke** | **119.94** | **305** | *e*PKP | **PKPdf** | **00 26 35.4** | **-0.5** | | | |
| | baz=305 | | | | | | | | | |
| **NRIK** | **Noril'sk** | **119.98** | **336** | PKP | **PKPdf** | **00 26 34.4** | **-0.6** | | | |
| | comp=Z,4.3nm,0.7s,baz=90,slow=2.4,SNR=14 | | | | | | | | | |
| **NRIK** | **Noril'sk** | **119.98** | **336** | PKiKP | **PKiKP** | **00 26 34.9** | **-0.1** | | | |
| **NRIK** | **Noril'sk** | **119.98** | **336** | PKPdf | **PKiKP** | **00 26 34.9** | **-0.1** | | | |
| **TARG** | **Taragay, Kyrgy** | **120.01** | **303** | | **PKiKP** | **00 26 35.9** | **-0.5** | | | |
| **TDK** | **Taldyqorghan** | **120.42** | **307** | *e*PKiKP | **PKPdf** | **00 26 35.7** | **-0.9** | | | |
| **TDK** | **Taldyqorghan** | **120.42** | **307** | *e*PKP | **PKPdf** | **00 26 35.7** | **-0.9** | | | |
| | baz=307 | | | | | | | | | |
| **KSH** | **Kashi** | **120.75** | **300** | PKP | **PKiKP** | **00 26 39.0** | **+1.4** | | | |
| **MDOK** | **Medeo** | **120.92** | **305** | *e*PKiKP | **PKPdf** | **00 26 36.9** | **-0.8** | | | |
| **MDOK** | **Medeo** | **120.92** | **305** | *e*PKP | **PKPdf** | **00 26 37.0** | **-0.8** | | | |
| | baz=305 | | | | | | | | | |
| **TNSS** | **Tian-Shan** | **120.96** | **305** | *e*PKP | **PKPdf** | **00 26 37.6** | **-0.6** | | | |
| | baz=305 | | | | | | | | | |
| **NIL** | **Nilore** | **121.15** | **293** | PKiKP | **PKPdf** | **00 26 37.2** | **-1.2** | | | |
| **NIL** | **Nilore** | **121.15** | **293** | | **PKPdf** | **00 26 37.1** | **-1.2** | | | |
| **ULHL** | **Ulahol** | **121.27** | **304** | P | **PKiKP** | **00 26 38.9** | **+0.2** | | | |
| | SNR=11 | | | | | | | | | |
| **KURK** | **Kurchatov** | **121.52** | **314** | PKiKP | **PKPdf** | **00 26 37.6** | **-0.8** | | | |
| **KURK** | **Kurchatov** | **121.52** | **314** | PKPdf | **PKPdf** | **00 26 37.6** | **-0.8** | | | |
| **BOOM** | **Boomskoye usch** | **121.55** | **304** | PKiKP | **PKiKP** | **00 26 38.8** | **-0.4** | | | |
| **BOOM** | **Boomskoye usch** | **121.55** | **304** | PKPdf | **PKiKP** | **00 26 38.8** | **-0.4** | | | |
| **KUU** | **Kurty** | **121.60** | **305** | *e*PKiKP | **PKPdf** | **00 26 37.8** | **-1.0** | | | |
| **KUU** | **Kurty** | **121.60** | **305** | *e*PKP | **PKPdf** | **00 26 37.9** | **-1.0** | | | |
| | baz=306 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **121.90** | **304** | P | **PKiKP** | **00 26 39.5** | **-0.4** | | | |
| | SNR=13 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **121.90** | **304** | PKiKP | **PKPdf** | **00 26 38.6** | **-1.1** | | | |
| **KBK** | **Karagaybulak** | **122.30** | **304** | P | **PKiKP** | **00 26 40.5** | **-0.2** | | | |
| | SNR=9.4 | | | | | | | | | |
| **UCH** | **Uchtor** | **122.51** | **303** | P | **PKiKP** | **00 26 41.7** | **+0.3** | | | |
| | SNR=21 | | | | | | | | | |
| **CHMS** | **Chumysh** | **122.52** | **304** | P | **PKiKP** | **00 26 40.7** | **-0.2** | | | |
| | SNR=7.3 | | | | | | | | | |
| **FRU1** | **Bishkek** | **122.56** | **304** | PKiKP | **PKiKP** | **00 26 40.5** | **-0.5** | | | |
| **FRU1** | **Bishkek** | **122.56** | **304** | | **PKiKP** | **00 26 40.5** | **-0.5** | | | |
| **AAK** | **Ala-Archa** | **122.62** | **304** | P | **PKiKP** | **00 26 41.1** | **-0.1** | | | |
| | SNR=8.6 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **122.62** | **304** | ⇓*i*PKiKP | **PKiKP** | **00 26 41.2** | **-0.1** | | | |
| **AAK** | **Ala-Archa** | **122.62** | **304** | PKPdf | **PKiKP** | **00 26 40.7** | **-0.5** | | | |
| **SGDS** | **Sogindy** | **122.71** | **305** | *e*PKP | **PKPdf** | **00 26 40.1** | **-1.0** | | | |
| | baz=305 | | | | | | | | | |
| **USP** | **Ospenovka** | **122.76** | **304** | P | **PKiKP** | **00 26 41.0** | **-0.4** | | | |
| | SNR=11 | | | | | | | | | |
| **AML** | **Almayashu** | **123.08** | **303** | P | **PKiKP** | **00 26 42.6** | **+0.1** | | | |
| | SNR=21 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **123.14** | **304** | P | **PKiKP** | **00 26 42.3** | **+0.1** | | | |
| | SNR=13 | | | | | | | | | |
| **BTLS** | **Baital** | **123.45** | **306** | *e*PKiKP | **PKPdf** | **00 26 41.8** | **-0.5** | | | |
| **BTLS** | **Baital** | **123.45** | **306** | *e*PKP | **PKPdf** | **00 26 41.9** | **-0.5** | | | |
| | baz=306 | | | | | | | | | |
| **BTK** | **Batken** | **124.74** | **300** | PKiKP | **PKiKP** | **00 26 45.0** | **-0.5** | | | |
| **BTK** | **Batken** | **124.74** | **300** | PKPdf | **PKiKP** | **00 26 45.0** | **-0.5** | | | |
| **KBL** | **Kabul** | **124.75** | **293** | PKiKP | **PKiKP** | **00 26 45.9** | **+0.1** | | | |
| **KBL** | **Kabul** | **124.75** | **293** | PKPdf | **PKiKP** | **00 26 45.9** | **+0.1** | | | |
| **GAR** | **Garm** | **124.88** | **298** | | **PKiKP** | **00 26 45.9** | **+0.1** | | | |
| **DZA** | **Taraz** | **124.95** | **303** | *e*PKiKP | **PKPdf** | **00 26 44.8** | **-0.5** | | | |
| **DZA** | **Taraz** | **124.95** | **303** | *e*PKP | **PKPdf** | **00 26 44.9** | **-0.5** | | | |
| | baz=303 | | | | | | | | | |
| **KKAR** | **Karatay Array** | **125.58** | **303** | PKiKP | **PKiKP** | **00 26 46.4** | **-0.5** | | | |
| **KKAR** | **Karatay Array** | **125.58** | **303** | PKPdf | **PKiKP** | **00 26 46.4** | **-0.5** | | | |
| **CHGR** | **Chuyangaron** | **125.68** | **298** | PKPdf | **PKiKP** | **00 26 47.1** | **-0.2** | | | |
| **IUG** | **Iuzhnay** | **125.75** | **302** | *e*PKiKP | **PKPdf** | **00 26 46.4** | **-0.6** | | | |
| **IUG** | **Iuzhnay** | **125.75** | **302** | *e*PKP | **PKPdf** | **00 26 46.5** | **-0.6** | | | |
| | baz=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MTSE** | **Matsula** | **148.32** | **339** | *eP* | **PKiKP** | **00 27 31.6** | **-0.9** |
| **NC303** | **NORSAR Array S** | **148.77** | **352** | | **PKPbc** | **00 27 32.1** | **+0.1** |
| **NC204** | **NORSAR Array S** | **148.79** | **352** | | **PKPbc** | **00 27 32.1** | **-0.1** |
| **NC405** | **NORSAR Array S** | **148.83** | **351** | | **PKPbc** | **00 27 32.1** | **-0.2** |
| **NB201** | **NORSAR Array S** | **148.95** | **352** | | **PKPbc** | **00 27 32.5** | **-0.1** |
| **NB2** | **NORSAR Subarra** | **148.97** | **352** | PKP | **PKPbc** | **00 27 32.7** | **0.0** |
| | comp=Z,12nm,0.7s,baz=12,slow=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.97** | **352** | PKPbc | **PKPbc** | **00 27 32.6** | **0.0** |
| | comp=Z,20nm,0.8s,baz=14,slow=4.3,SNR=56 | | | | | | |
| **UPP** | **Uppsala** | | **148.99** | **345** *eP* | **PKPbc** | **00 27 32.3** | **-0.3** |
| **NAO01** | **NORSAR Array S** | **149.20** | **352** | | **PKPbc** | **00 27 33.2** | **0.0** |
| **NC602** | **NORSAR Array S** | **149.22** | **351** | | **PKPbc** | **00 27 32.7** | **-0.5** |
| **IDID** | **Didziasalis** | **149.87** | **332** *eP* | | **PKiKP** | **00 27 36.0** | **+0.1** |
| **ISAL** | **Salakas** | **149.93** | **333** *eP* | | **PKiKP** | **00 27 36.7** | **+0.7** |
| **MNK** | **Minsk** | **149.96** | **330** *i* PKP2 | | **PKiKP** | **00 27 35.9** | **-0.2** |
| MNK | | | *i* | | | 00 31 15.3 | |
| MNK | | | *i* PPP | PPP | | 00 34 36.1 | |
| MNK | | | *i* SS | SS | | 00 50 32.6 | +9.2 |
| MNK | | | pmax | pmax | | | |
| | comp=Z,81nm,1.1s | | | | | | |
| MNK | | | pmax | pmax | | | |
| | comp=N,30nm,1.0s | | | | | | |
| MNK | | | pmax | pmax | | | |
| | comp=E,8.0nm,1.2s | | | | | | |
| MNK | | | MLR | MLR | | | |
| | comp=E,13nm,14.0s | | | | | | |
| MNK | | | MLR | MLR | | | |
| | comp=N,262nm,23.0s | | | | | | |
| MNK | | | MLR | MLR | | | |
| | comp=Z,32nm,6.0s | | | | | | |
| **MNK** | **Minsk** | **149.96** | **330** *i* PKP | | **PKiKP** | **00 27 35.9** | **-0.2** |
| | comp=E,8.0nm,1.2s | | | | | | |
| MNK | | | *i* PKP | | **PKiKP** | **00 27 35.9** | **-0.2** |
| | comp=N,30nm,1.1s | | | | | | |
| MNK | | | *i* PKP | | **PKiKP** | **00 27 35.9** | **-0.2** |
| | comp=Z,81nm,1.1s,baz=227 | | | | | | |
| MNK | | | *i* PKiKP | | **sPKPdf** | **00 27 42.4** | **-0.2** |
| MNK | | | *i* PP | | **PP** | **00 31 15.4** | **+5.9** |
| MNK | | | *i* PPP | PPP | | 00 34 36.2 | |
| MNK | | | *i* SKS | | **SKSdf** | **00 34 44.1** | **+8.5** |
| MNK | | | *i* SS | | **SS** | **00 50 32.6** | **+9.2** |
| MNK | | | *i* SSS | SSS | | 00 56 15.6 | |
| MNK | | | *i* LR | LR | | 01 30 22.3 | |
| MNK | | | *i* LRM | MLR | | 01 35 00.1 | |
| | comp=E,13nm,13.6s | | | | | | |
| MNK | | | *i* LRM | MLR | | 01 35 11.0 | |
| | comp=N,262nm,22.6s | | | | | | |
| MNK | | | *i* LRM | MLR | | 01 35 44.6 | |
| | comp=Z,32nm,5.6s | | | | | | |
| **IIGN** | **Ignalina** | **150.06** | **333** *eP* | | **PKiKP** | **00 27 36.7** | **+0.4** |
| **NACGM** | **Naroch** | **150.15** | **332** *i* PKP | | **PKiKP** | **00 27 36.0** | **-0.5** |
| **VIKU** | **Vikbolandet** | **150.42** | **345** *eP* | | **PKiKP** | **00 27 36.4** | **-0.6** |
| **KONO** | **Kongsberg** | **150.51** | **353** | PKiKP | **PKiKP** | **00 27 36.8** | **-0.3** |
| KONO | | | | | | 00 27 45.5 | |
| **KONO** | **Kongsberg** | **150.51** | **353** | | **PKiKP** | **00 27 36.8** | **-0.3** |
| KONO | | | | PKPab | **pPKPbc** | **00 27 45.5** | **-0.2** |
| **GAZ** | **Gaziantep** | **150.62** | **292** | | **PKPbc** | **00 27 36.3** | **-1.2** |
| GAZ | | | | PKPab | **PKPab** | **00 27 44.7** | **+0.2** |
| **PABE** | **Paberze** | **150.80** | **335** *eP* | | **PKiKP** | **00 27 37.9** | **+0.1** |
| **PABE** | **Paberze** | **150.80** | **335** | | **PKPbc** | **00 27 36.6** | **-0.5** |
| **TOKA** | **Tokat** | **150.87** | **299** | | **PKPbc** | **00 27 37.2** | **-0.7** |
| **PBUR** | **Paburge** | **151.10** | **337** *eP* | | **PKiKP** | **00 27 38.7** | **+0.3** |
| **SIM** | **Simferopol'** | **151.43** | **309** *d* PKiKP | | **PKiKP** | **00 27 38.8** | **-0.7** |
| SIM | | | *i* | | | 00 27 46.3 | |
| SIM | | | pmax | pmax | | | |
| | comp=Z,76nm,0.9s | | | | | | |
| **BNN** | **Bunyan** | **151.55** | **296** | | **PKiKP** | **00 27 39.7** | **-0.4** |
| **AKASG** | **Malin Array Be** | **151.72** | **323** | PKPbc | **PKPbc** | **00 27 39.2** | **-0.3** |
| | comp=Z,34nm,0.8s,baz=48,slow=2.7,SNR=4.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.72** | **323** | PKiKP | **PKPdf** | **00 27 33.0** | **-0.2** |
| AKASG | | | | | | 00 27 39.1 | |
| **AKASG** | **Malin Array Be** | **151.72** | **323** | PKPdf | **PKPdf** | **00 27 33.0** | **-0.2** |
| AKASG | | | | | **PKPbc** | **00 27 39.1** | **-0.3** |
| **AKBB** | **Malin Array Si** | **151.72** | **323** | PKiKP | **PKiKP** | **00 27 39.4** | **-0.5** |
| **AKBB** | **Malin Array Si** | **151.72** | **323** | | **PKiKP** | **00 27 39.4** | **-0.5** |
| **SHBL** | **Chebaa** | **151.80** | **284** *eP* | | **PKiKP** | **00 27 41.4** | **+0.5** |
| **BHL** | **Bhannes** | **151.90** | **286** *eP* | | **PKiKP** | **00 27 41.1** | **+0.2** |
| **DQRL** | **Deir Qamar** | **151.96** | **285** *eP* | | **PKiKP** | **00 27 41.7** | **+0.6** |
| **SUW** | **Suwalki** | **152.23** | **334** *e*PKP | | **PKiKP** | **00 27 40.7** | **-0.1** |
| **SUW** | **Suwalki** | **152.23** | **334** | PKiKP | **PKiKP** | **00 27 40.7** | **-0.1** |
| **SUW** | **Suwalki** | **152.23** | **334** *eP* | | **PKiKP** | **00 27 40.8** | **-0.1** |
| **SUW** | **Suwalki** | **152.23** | **334** | | **PKiKP** | **00 27 40.7** | **-0.1** |
| **BZK** | **Bozkurt** | **152.38** | **303** ⇑P | | **PKiKP** | **00 27 41.4** | **-0.1** |
| **BZK** | **Bozkurt** | **152.38** | **303** | | **PKiKP** | **00 27 41.8** | **+0.2** |
| **ILGA** | **Ilgaz** | **152.80** | **301** | PKPbc | **PKiKP** | **00 27 43.0** | **+0.3** |
| ILGA | | | | PKPab | **pPKPbc** | **00 27 50.8** | **-1.1** |
| **DEL** | **Delary** | **152.90** | **346** *eP* | | **PKPab** | **00 27 49.8** | **-3.3** |
| **BR131** | **Keskin Array S** | **153.12** | **298** *c* PKiKP | | **PKiKP** | **00 27 42.9** | **-0.4** |
| **BR131** | **Keskin Array S** | **153.12** | **298** | | **PKPbc** | **00 27 42.6** | **-0.6** |
| **BRTR** | **Keskin Array B** | **153.12** | **298** | PKPbc | **PKiKP** | **00 27 43.0** | **-0.4** |
| | comp=Z,15nm,0.9s,baz=127,slow=3.3,SNR=31 | | | | | | |
| **SORM** | **Soroca** | **153.63** | **319** ⇑P | | **PKiKP** | **00 27 43.6** | **-0.3** |
| **SORM** | **Soroca** | **153.63** | **319** ⇑PKiKP | | **PKiKP** | **00 27 43.6** | **-0.3** |
| **ANTO** | **Ankara** | **153.73** | **299** | PKiKP | **PKiKP** | **00 27 44.4** | **-0.1** |
| **ANTO** | **Ankara** | **153.73** | **299** | | **PKiKP** | **00 27 44.4** | **-0.1** |
| **BR231** | **Keskin MP Arra** | **153.75** | **299** | | **PKiKP** | **00 27 44.5** | **-0.2** |
| **CSS** | **Mathiatis** | **153.83** | **288** | | **PKPbc** | **00 27 44.2** | **-0.6** |
| **MILM** | **Milestii Mici** | **153.99** | **316** ⇓ *i* PKP | | **PKiKP** | **00 27 44.5** | **-0.2** |
| | comp=Z,24nm,1.0s | | | | | | |
| **MILM** | **Milestii Mici** | **153.99** | **316** ⇑P | | **PKPbc** | **00 27 43.9** | **-0.7** |
| **MILM** | **Milestii Mici** | **153.99** | **316** *d* PKiKP | | **PKiKP** | **00 27 44.5** | **-0.2** |
| MILM | | | *i* | | | 00 27 47.0 | |
| MILM | | | pmax | pmax | | | |
| | comp=Z,24nm,1.0s | | | | | | |
| MILM | | | pmax | pmax | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **LEF** | **Lefka** | **154.19** | **288** ⇑P | | **PKiKP** | **00 27 45.6** | **+0.1** |
| **MDUB** | **Mudurnu** | **154.79** | **301** | | **PKPbc** | **00 27 46.2** | **-0.5** |
| **TLCR** | | **154.80** | **313** ⇑P | | **PKiKP** | **00 27 47.1** | **+0.7** |
| **TLCR** | | **154.80** | **313** ⇑PKiKP | | **PKiKP** | **00 27 47.1** | **+0.7** |
| **BEL** | **Belsk** | **154.84** | **333** *e*PKP | | **PKiKP** | **00 27 47.1** | **+0.9** |
| **LVV** | **L'vov** | **154.88** | **326** *i* PKiKP | | **PKPbc** | **00 27 43.3** | **-3.1** |
| LVV | | | *e* | | | 00 28 01.1 | |
| **VLDR** | **Vladesti** | **154.96** | **315** ⇑P | | **PKiKP** | **00 27 48.1** | **+1.4** |
| **TPGR** | **Topolog** | **155.20** | **312** ⇑P | | PKPdf | 00 27 47.6 | +9.2 |
| **CFR** | **Carcaliu** | **155.24** | **313** ⇑P | | PKPdf | 00 27 47.1 | +8.8 |
| **CFR** | **Carcaliu** | **155.24** | **313** ⇑PKiKP | | PKPdf | 00 27 47.1 | +8.8 |
| **DBIC** | **Dimbokro** | **155.24** | **162** | PKP | **PKPdf** | **00 27 40.1** | **+0.8** |
| | comp=Z,2.7nm,1.0s,baz=57,slow=2.0,SNR=3.1 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **00 28 04.5** | **+0.3** |
| | comp=Z,3.5nm,0.7s,baz=172,slow=1.4,SNR=4.6 | | | | | | |
| **DBIC** | **Dimbokro** | **155.24** | **162** | | **PKPdf** | **00 27 39.1** | **-0.2** |
| **PRAR** | **RASCA** | **155.25** | **319** ⇑P | | PKPab | 00 27 52.7 | -11 |
| **GHRR** | | **155.26** | **316** ⇑P | | PKPdf | 00 27 49.3 | +11 |
| **TIRR** | **Tirgusor** | **155.38** | **312** | PKiKP | PKPdf | 00 27 47.4 | +8.8 |
| **TIRR** | **Tirgusor** | **155.38** | **312** | | PKPdf | 00 27 47.4 | +8.8 |
| **TESR** | **Tescani** | **155.48** | **317** ⇑P | | PKPab | 00 27 54.9 | -10 |
| **BORA** | **Eskisehir** | **155.49** | **300** | | PKPdf | 00 27 47.6 | +8.6 |
| **HARR** | **Harsova** | **155.59** | **312** ⇑P | | PKPdf | 00 27 48.6 | +10 |
| **HARR** | **Harsova** | **155.59** | **312** ⇑PKiKP | | PKPdf | 00 27 48.6 | +10 |
| **BUR08** | **Bucovina Ar. S** | **155.66** | **321** | | PKPdf | 00 27 48.8 | +10 |
| **BURAR** | **Bucovina Array** | **155.66** | **321** ⇑P | | PKPdf | 00 27 49.7 | +11 |
| **BURAR** | **Bucovina Array** | **155.66** | **321** ⇑PKiKP | | PKPdf | 00 27 49.7 | +11 |
| **VRI** | **Vrincioaia** | **155.77** | **316** ⇑P | | PKPab | 00 27 56.1 | -10 |
| **PLOR** | **Plostina** | **155.82** | **316** ⇑P | | PKPab | 00 27 56.7 | -9.4 |
| **MLR** | **Muntele Rosu** | **156.43** | **316** ⇑P | | PKPab | 00 27 58.4 | -10 |
| **DOPR** | **Dopca** | **156.51** | **317** ⇑P | | PKPdf | 00 27 50.7 | +11 |
| **UZH** | **Uzhgorod** | **156.52** | **326** *e*PKP2 | | **PKPab** | **00 28 04.5** | **-4.3** |
| **CRVS** | **Cervenica-Dubn** | **156.73** | **327** *e*PKP2 | | **PKPab** | **00 28 10.3** | **+0.5** |
| **TRPA** | **Tarpa** | **156.74** | **325** PKPpB | | **PKPab** | **00 28 09.9** | **+0.1** |
| **VOIR** | | **156.99** | **317** ⇑P | | PKPab | 00 27 59.9 | -11 |
| **ARR** | **Arges** | **157.28** | **317** ⇑P | | **PKPdf** | **00 27 42.2** | **+1.0** |
| **HUMR** | **Humele** | **157.51** | **315** ⇑P | | PKPab | 00 27 59.7 | -14 |
| **DRGR** | | **157.52** | **322** ⇓P | | PKPab | 00 28 01.2 | -12 |
| **DRGR** | | **157.52** | **322** ⇓PKP2 | | PKPab | 00 28 01.2 | -12 |
| **COPA** | **Copaceanca** | **157.56** | **313** ⇑P | | **PKPab** | **00 28 12.8** | **-0.7** |
| **CHVC** | **Chvalec** | **157.58** | **337** *e*PKPAB | | **PKPab** | **00 28 13.6** | **+0.2** |
| **UPC** | **Upice** | **157.67** | **337** *e*PKP2 | | **PKPab** | **00 28 13.7** | **0.0** |
| **UPC** | **Upice** | **157.67** | **337** *e*PKPAB | | **PKPab** | **00 28 13.7** | **0.0** |
| **DPC** | **Dobruska-Polom** | **157.69** | **336** *e*PKP2 | | **PKPab** | **00 28 14.2** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **157.67** | **336** *e*PKPAB | | **PKPab** | **00 28 14.2** | **+0.3** |
| **CLL** | **Collm** | **157.86** | **342** ⇓ *e*PKiKP | | **PKPdf** | **00 27 43.0** | **+1.4** |
| CLL | | | *i* | | | 00 28 14.3 | |
| CLL | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CLL** | **Collm** | **157.86** | **342** *e*PKPdf | | **PKPdf** | **00 27 43.0** | **+1.4** |
| CLL | | | ⇓ *i* PKPab | | **PKPab** | **00 28 14.3** | **-0.2** |
| | comp=Z,20nm,1.1s | | | | | | |
| CLL | | | *i* x | x | | 00 28 17.5 | |
| **CLL** | **Collm** | **157.86** | **342** *i* pPKPab | | **pPKPab** | **00 28 21.1** | **-2.5** |
| | baz=27,slow=3.9 | | *eP* | | **PKPab** | **00 28 14.7** | **+0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CLL** | **Collm** | **157.86** | **342** | PKPab | **PKPab** | **00 28 13.9** | **-0.6** |
| **IBBN** | **Ibbenburen** | **157.92** | **352** *eP** | PKPab | | 00 28 22.8 | +8.1 |
| | baz=27,slow=3.9 | | | | | | |
| **BRG** | **Berggiesshubel** | **157.99** | **341** *eP* | | **PKPab** | **00 28 15.3** | **+0.2** |
| BRG | | | | Amp | | 00 28 16.9 | |
| | comp=Z,31nm,1.5s | | | | | | |
| BRG | | | *i* x | x | | 00 28 22.1 | |
| BRG | | | | Amp | | 00 28 23.0 | |
| | comp=Z,13nm,0.8s | | | | | | |
| BRG | | | *ex* | x | | 00 28 30.9 | |
| BRG | | | | Amp | | 00 28 32.5 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **157.99** | **341** *e*PKP2 | | **PKPab** | **00 28 15.2** | **+0.2** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,31nm,1.5s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **157.99** | **341** *eP* | | **PKPab** | **00 28 14.2** | **-0.9** |
| | baz=27,slow=3.9 | | | | | | |
| **PVCC** | **Panska Ves** | **158.11** | **339** *e*PKP2 | | **PKPab** | **00 28 16.4** | **+0.8** |
| **PVCC** | **Panska Ves** | **158.11** | **339** *e*PKPAB | | **PKPab** | **00 28 16.4** | **+0.8** |
| **VLAD** | **Vladila** | **158.14** | **314** ⇑P | | **PKPab** | **00 28 14.9** | **-1.0** |
| **PSZ** | **Piszkesteto** | **158.16** | **327** | PKP2 | **PKPab** | **00 28 15.8** | **-0.2** |
| **PSZ** | **Piszkesteto** | **158.16** | **327** | PKPab | **PKPab** | **00 28 15.8** | **-0.2** |
| **PSZ** | **Piszkesteto** | **158.16** | **327** | PKPpB | | 00 28 16.4 | |
| **VYHS** | **Vyhne** | **158.21** | **330** *e*PKP2 | | **PKPab** | **00 28 16.2** | **+0.1** |
| **PRU** | **Pruhonice** | **158.59** | **339** *e*PKP2 | | **PKPab** | **00 28 17.9** | **+0.2** |
| **PRU** | **Pruhonice** | **158.59** | **339** *e*PKPAB | | **PKPab** | **00 28 17.9** | **+0.2** |
| **MOX** | **Moxa** | **158.81** | **344** *eP* | | **PKPab** | **00 28 19.0** | **+0.3** |
| | baz=27,slow=3.9 | | | | | | |
| **TANN** | **Tannenbergstha** | **158.81** | **342** *eP* | | **PKPab** | **00 28 18.9** | **+0.2** |
| | baz=27,slow=3.9 | | | | | | |
| **WERD** | **Werda** | **158.82** | **343** *eP* | | **PKPab** | **00 28 19.3** | **+0.6** |
| | baz=27,slow=3.9 | | | | | | |
| **BUG** | **Bochum--Univer** | **158.83** | **352** *eP* | | PKPab | 00 28 26.8 | +8.2 |
| | baz=27,slow=3.9 | | | | | | |
| **GUNZ** | **Gunzen** | **158.90** | **342** *eP* | | **PKPab** | **00 28 19.9** | **+0.8** |
| | baz=27,slow=3.9 | | | | | | |
| **SRO** | **Srobarova** | **158.95** | **329** *e*PKP2 | | **PKPab** | **00 28 20.2** | **+0.9** |
| **WERN** | **Wernitzgruen** | **158.95** | **342** *eP* | | **PKPab** | **00 28 19.9** | **+0.6** |
| | baz=27,slow=3.9 | | | | | | |
| **MODS** | **Modra-Piesok** | **158.96** | **332** *e*PKP2 | | **PKPab** | **00 28 21.8** | **+2.4** |
| **NKC** | **Novy Kostel** | **158.98** | **342** *e*PKP2 | | **PKPab** | **00 28 20.0** | **+0.6** |
| **NKC** | **Novy Kostel** | **158.98** | **342** *e*PKPAB | | **PKPab** | **00 28 20.0** | **+0.6** |
| **VTS** | **Vitosha** | **159.57** | **312** ⇑P | | **PKPab** | **00 28 21.3** | **-1.2** |
| **VTS** | **Vitosha** | **159.57** | **312** | PKP2 | **PKPab** | **00 28 22.0** | **-0.5** |
| **VTS** | **Vitosha** | **159.57** | **312** | PKPab | **PKPab** | **00 28 22.0** | **-0.5** |
| **KHC** | **Kasperske Hory** | **159.65** | **339** *e*PKP2 | | **PKPab** | **00 28 22.3** | **-0.1** |
| **KHC** | **Kasperske Hory** | **159.65** | **339** *e*PKPAB | | **PKPab** | **00 28 22.3** | **-0.1** |
| KHC | | | *e* pPKP | | **pPKPab** | **00 28 29.0** | **-2.5** |
| **KHC** | **Kasperske Hory** | **159.65** | **339** | PKPab | **PKPab** | **00 28 22.0** | **-0.4** |
| **CKRC** | **Cesky Krumlov** | **159.69** | **337** *e*PKPDF | | **PKPdf** | **00 27 43.0** | **-0.9** |
| CKRC | | | *e*PKPAB | | **PKPab** | **00 28 21.9** | **-0.6** |
| **MPLH** | **Magyarpolny** | **159.78** | **329** | PKPpB | | 00 28 24.6 | |
| **MEM** | **Membach** | **159.79** | **354** *d*PKPdf | | **PKPdf** | **00 27 45.5** | **+1.6** |
| **GRF** | **Grafenberg Arr** | **159.79** | **344** *e*PKPab | | **PKPab** | **00 28 24.0** | **+1.0** |
| | baz=27,slow=3.9 | | | | | | |
| GRF | | | *e*PKPbc | | **pPKPab** | **00 28 30.9** | **-1.2** |
| | baz=27,slow=3.9 | | | | | | |
| **GEC2** | **GERESS Array S** | **159.86** | **338** | | **PKPab** | **00 28 23.0** | **-0.4** |
| **GERES** | **GERESS Array B** | **159.86** | **338** | PKP | **PKPdf** | **00 27 45.3** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=123,slow=4.9,SNR=3.8 | | | | | | |
| GERES | | | | PKPab | **PKPab** | **00 28 23.5** | **+0.1** |
| | comp=Z,5.8nm,1.0s,baz=46,slow=5.8,SNR=14 | | | | | | |
| **GERES** | **GERESS Array B** | **159.86** | **338** | PKPab | **PKPab** | **00 28 22.4** | **-1.0** |
| **CONA** | **Conrad Observa** | **159.88** | **333** *eP* | | **PKPab** | **00 28 23.6** | **+0.1** |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **BCLA** | **Clavier** | **160.04** | **355** *d*PKPab | | **PKPab** | **00 28 23.7** | **-0.2** |
| **BMRD** | **Maredsous** | **160.19** | **356** *d*PKPab | | **PKPab** | **00 28 25.8** | **+1.2** |
| **MOA** | **Molln** | **160.53** | **336** *eP* | | **PKPab** | **00 28 27.3** | **+1.0** |
| | comp=Z,10nm,1.2s | | | | | | |
| **WLF** | **Walferdange** | **160.71** | **353** *eP* | | PKPab | 00 28 35.7 | +8.8 |
| | baz=27,slow=3.9 | | | | | | |
| **FUR** | **Furstenfeldbru** | **161.19** | **342** *eP* | | **PKPab** | **00 28 29.7** | **+0.6** |
| | baz=27,slow=3.9 | | | | | | |
| **SOKA** | **Soboth** | **161.22** | **333** *eP* | | **PKPab** | **00 28 29.6** | **+0.2** |
| | comp=Z,16nm,1.3s | | | | | | |
| **WATA** | **Walderalm** | **161.86** | **340** *eP* | | **PKPab** | **00 28 32.4** | **+0.2** |
| | comp=Z,32nm,1.6s | | | | | | |
| **WTTA** | **Wattenberg** | **161.90** | **340** *i* P | | **PKPab** | **00 28 32.5** | **+0.1** |
| | comp=Z,33nm,1.3s,SNR=5.3 | | | | | | |
| **RETA** | **Reutte** | **161.95** | **342** *i* P | | **PKPab** | **00 28 33.0** | **+0.5** |
| | comp=Z,19nm,1.1s,SNR=5.2 | | | | | | |
| **MOTA** | **Moosalm** | **161.98** | **341** *i* P | | **PKPab** | **00 28 32.9** | **+0.1** |
| | comp=Z,32nm,1.2s,SNR=7.1 | | | | | | |
| **SQTA** | **Sankt Quirin** | **162.07** | **341** *eP* | | **PKPab** | **00 28 33.4** | **+0.3** |
| | comp=Z,30nm,1.2s,SNR=7.3 | | | | | | |
| **ABTA** | **Abfaltersbach** | **162.09** | **337** *eP* | | **PKPab** | **00 28 33.1** | **-0.1** |
| | comp=Z,19nm,1.2s | | | | | | |
| **DAVA** | **Damuels** | **162.36** | **343** *eP* | | **PKPab** | **00 28 34.5** | **+0.1** |
| | comp=Z,19nm,1.0s | | | | | | |
| **FETA** | **Feichten** | **162.38** | **341** *eP* | | **PKPab** | **00 28 34.7** | **+0.1** |
| | comp=Z,10nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.67** | **177** | PKP | **PKPdf** | **00 27 48.8** | **+0.8** |
| | comp=Z,1.5nm,1.0s,baz=285,slow=4.9,SNR=4.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **00 28 37.1** | **+0.9** |
| | comp=Z,7.8nm,0.9s,baz=183,slow=3.1,SNR=18 | | | | | | |
| **KOWA** | **Kowa** | **162.91** | **158** | PKP | **PKPdf** | **00 27 49.5** | **+1.2** |
| | comp=Z,2.5nm,0.8s,baz=197,slow=3.9,SNR=7.9 | | | | | | |
| KOWA | | | | PKPab | **PKPab** | **00 28 38.6** | **+1.2** |
| | comp=Z,2.5nm,0.7s,baz=255,slow=2.8,SNR=4.9 | | | | | | |
| **TUE** | **Stuetta** | **163.25** | **344** | PKPab | **PKPab** | **00 28 38.1** | **-0.3** |
| **ESDC** | **Sonseca Array** | **169.43** | **29** | PKP | **PKPdf** | **00 27 54.0** | **+1.2** |
| | comp=Z,2.2nm,1.1s,baz=338,slow=2.0,SNR=5.6 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **00 29 05.8** | **+0.1** |
| | comp=Z,1.1nm,0.8s,baz=331,slow=5.8,SNR=2.9 | | | | | | |

**GUC 04 00:16:05.5±0.8, 29.50S×71.87W, h44km±4km, ML3.7,1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO05** | **La Serena** | **0.69** | **128** | *eP* | Pn | 00 16 19.6 | +0.7 |
| CO05 | | | | *i* S | Sn | 00 16 30.2 | +1.6 |
| CO05 | | | | IAML | | 00 16 32.0 | |
| | comp=N,3μm,0.2s | | | | | | |
| **LCO** | **Las Campanas** | **1.13** | **65** | *eP* | Pn | 00 16 27.5 | +2.4 |
| LCO | | | | *i* S | Sn | 00 16 43.7 | +4.1 |
| **GO04** | **Tololo Observa** | **1.15** | **126** | *eP* | Pn | 00 16 27.5 | +2.2 |
| GO04 | | | | *i* S | Sn | 00 16 43.9 | +3.9 |
| GO04 | | | | IAML | | 00 16 52.4 | |
| | comp=N,5μm,0.6s | | | | | | |
| **CO06** | **Fray Jorge** | **1.19** | **170** | *eP* | Pn | 00 16 26.7 | +1.0 |
| CO06 | | | | *i* S | Sn | 00 16 41.8 | +1.0 |
| **AC04** | **Llanos de Chal** | **1.47** | **29** | *eP* | Pn | 00 16 31.2 | +1.7 |
| AC04 | | | | *i* S | Sn | 00 16 49.8 | +2.3 |
| AC04 | | | | *i* S | | 00 16 50.1 | |
| **CO03** | **El Pedregal** | **1.68** | **143** | *eP* | Pn | 00 16 35.1 | +2.6 |
| CO03 | | | | *i* S | Sn | 00 16 57.2 | +4.2 |
| CO03 | | | | IAML | | 00 17 00.8 | |
| | comp=E,661nm,0.1s | | | | | | |
| **CO02** | **Combarbal** | **1.86** | **156** | *eP* | Pn | 00 16 37.7 | +2.7 |
| CO02 | | | | *i* S | Sn | 00 17 01.6 | +4.3 |
| CO02 | | | | IAML | | 00 17 11.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **GO03** | **Copiap** | **2.38** | **38** ⇓ | *eP* | Pn | 00 16 44.6 | +2.5 |
| GO03 | | | | IAML | | 00 17 31.9 | |
| | comp=E,231nm,0.2s | | | | | | |
| **VA06** | **Catapilco** | **3.09** | **171** | *eP* | Pn | 00 16 53.9 | +2.1 |
| VA06 | | | | IAML | | 00 17 52.7 | |
| | comp=E,216nm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **3.45** | **161** | *eP* | Pn | 00 16 59.4 | +2.7 |
| VA03 | | | | *i* S | Sn | 00 17 40.8 | +4.4 |
| VA03 | | | | IAML | | 00 18 00.4 | |
| | comp=E,205nm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **3.54** | **168** | *eP* | | 00 17 00.4 | |
| ROCH | | | | *eP* | Pn | 00 16 59.3 | +1.1 |
| ROCH | | | | *i* S | Sn | 00 17 45.6 | +6.7 |
| ROCH | | | | IAML | | 00 18 04.4 | |
| | comp=N,137nm,0.2s | | | | | | |
| **AC02** | **Maricunga** | **3.59** | **43** | *eP* | Pn | 00 17 03.0 | +3.9 |
| **MT02** | **Curacav** | **3.80** | **171** | *eP* | Pn | 00 17 03.8 | +2.3 |
| MT02 | | | | *i* S | Sn | 00 17 48.9 | +3.9 |
| **VA05** | **Santo Domingo** | **4.15** | **177** | *eP* | Pn | 00 17 07.8 | +1.4 |
| **MT09** | **Talagante** | **4.33** | **170** | *eP* | Pn | 00 17 11.5 | +2.5 |
| MT09 | | | | *i* S | Sn | 00 18 01.3 | +3.0 |

*IDC **04** 00:20:43.6±0.9, 30.45S×177.57W, h0km, mb4.5/4, mb1 4.7/4, mb1mx4.2/24, mbtmp4.5/4, MS3.7/4, Ms1 3.7/4, ms1mx3.3/60, Error ellipse: s-maj=28.5km s-min=21.1km az=102.0*

*NEIC **04** 00:20:45.8±0.8, 30.41S±0.05×177.5W±0.2, h10km±1km, mb4.6/18, Error ellipse: s-maj=26.6km s-min=3.3km az=73.0*

**ISC 04 00:20:48.5±0.6, 30.58S±0.05×177.7W±0.1, h33km, n58, s23/38/74, mb4.6/14, MS3.6/3, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **1.33** | **351** | P | **Pn** | **00 21 07.7** | **-3.1** |
| GLKZ | | | | S | **Sn** | **00 21 23.7** | **-3.6** |
| **RAO** | **Raoul Island** | **1.34** | **351** | Pn | **Pn** | **00 21 08.7** | **-2.2** |
| | 2μm,0.3s,baz=94,slow=14,SNR=56 | | | | | | |
| RAO | | | | Sn | **Sn** | **00 21 24.6** | **-3.0** |
| | 2μm,0.3s,baz=68,slow=22,SNR=6.5 | | | | | | |
| **RIZ** | **Raoul Island** | **1.35** | **351** | P | **Pn** | **00 21 08.1** | **-2.9** |
| RIZ | | | | S | **Sn** | **00 21 25.4** | **-2.4** |
| **MXZ** | **Matakaoa Point** | **7.72** | **204** | P | **Pn** | **00 22 34.1** | **-4.4** |
| MXZ | | | | S | **Sn** | **00 24 03.5** | **-1.3** |
| **WMGZ** | **Waiomatatini S** | **7.91** | **203** | P | **Pn** | **00 22 38.7** | **-2.5** |
| WMGZ | | | | S | **Sn** | **00 24 09.7** | **+0.2** |
| **HAZ** | **Te Kaha** | **8.09** | **207** | P | **Pn** | **00 22 40.8** | **-2.7** |
| HAZ | | | | S | **Sn** | **00 24 15.6** | **+1.8** |
| **PKGZ** | **Pakihiroa** | **8.09** | **205** | P | **Pn** | **00 22 39.9** | **-3.8** |
| PKGZ | | | | S | **Sn** | **00 24 08.1** | **-6.0** |
| **PUZ** | **Puketiti** | **8.19** | **203** | P | **Pn** | **00 22 42.1** | **-3.0** |
| PUZ | | | | S | **Sn** | **00 24 14.8** | **-1.7** |
| **RUGZ** | **Raukumara Rang** | **8.31** | **206** | P | **Pn** | **00 22 43.7** | **-3.1** |
| RUGZ | | | | S | **Sn** | **00 24 17.2** | **-2.2** |
| **TWGZ** | **Tauwhareparae** | **8.38** | **204** | P | **Pn** | **00 22 44.8** | **-2.9** |
| TWGZ | | | | S | **Sn** | **00 24 19.2** | **-2.0** |
| **CNGZ** | **Carnagh Statio** | **8.58** | **202** | P | Pn | 00 22 45.5 | -4.9 |
| CNGZ | | | | S | **Sn** | **00 24 25.9** | **-0.2** |
| **MWZ** | **Matawai** | **8.69** | **206** | P | **Pn** | **00 22 48.6** | **-3.2** |
| MWZ | | | | S | **Sn** | **00 24 26.8** | **-1.9** |
| **URZ** | **Urewera** | **8.79** | **208** | Pn | **Pn** | **00 22 49.9** | **-3.2** |
| | 1.4nm,0.3s,baz=278,slow=4.0,SNR=13 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 24 28.6** | **-2.4** |
| | 17nm,0.3s,baz=219,slow=15,SNR=18 | | | | | | |
| **URZ** | **Urewera** | **8.79** | **208** | P | **Pn** | **00 22 49.9** | **-3.2** |
| URZ | | | | S | **Sn** | **00 24 27.6** | **-3.4** |
| **SNGZ** | **Shannon Statio** | **9.15** | **205** | P | **Pn** | **00 22 56.4** | **-1.9** |
| SNGZ | | | | S | **Sn** | **00 24 36.6** | **-3.5** |
| **MTHZ** | **Maungataniwha** | **9.40** | **207** | P | **Pn** | **00 22 59.7** | **-2.0** |
| MTHZ | | | | S | **Sn** | **00 24 43.7** | **-2.6** |
| **BKZ** | **Black Stump Fm** | **9.81** | **208** | P | **Pn** | **00 23 04.2** | **-3.1** |
| BKZ | | | | S | **Sn** | **00 24 52.7** | **-3.6** |
| **TMVZ** | **Te Maari

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KIF | | | | *e*S | | Sg | 00 25 53.7 | +0.4 | |
| **PAJU** | **Pajala** | **1.37** | **124** | P | | Pg | 00 25 39.7 | -1.1 | |
| PAJU | | | | S | | Sg | 00 25 58.5 | -0.1 | |
| **PAJU** | **Pajala** | **1.37** | **124** | *e*P | | Pg | 00 25 39.7 | -1.1 | |
| PAJU | | | | *e*S | | Sg | 00 25 58.5 | -0.1 | |
| **HEF** | **Hetta** | **1.42** | **64** | *e*P | | Pn | 00 25 40.9 | -0.6 | |
| **HEF** | **Hetta** | **1.42** | **64** | *e*P | | Pn | 00 25 40.6 | -0.9 | |
| HEF | | | | *e*S | | Sg | 00 25 59.3 | -0.7 | |
| HEF | | | | MSG | | | 00 26 07.0 | | |
| | comp=Z,2.3nm,0.2s | | | | | | | | |
| **ERTU** | **Ertsjaerv** | **1.48** | **148** | P | | Pn | 00 25 41.7 | -0.7 | |
| **ERTU** | **Ertsjaerv** | **1.48** | **148** | *e*P | | Pn | 00 25 41.7 | -0.7 | |
| **HARU** | **Harads** | **1.69** | **169** | P | | Pn | 00 25 45.1 | -0.1 | |
| **HARU** | **Harads** | **1.69** | **169** | *e*P | | Pn | 00 25 45.1 | -0.1 | |
| **TOF** | **Tornio** | **2.38** | **135** | *e*P | | Pn | 00 25 56.1 | +1.4 | |
| TOF | | | | *e*S | | Sb | 00 26 26.6 | -1.4 | |
| **SGF** | **Sodankyl** | **2.44** | **96** | *e*P | | Pn | 00 25 56.5 | +0.9 | |
| SGF | | | | *e*S | | Sn | 00 26 27.1 | +1.1 | |
| **RNF** | **Rovaniemi** | **2.56** | **116** | *e*P | | Pn | 00 25 59.0 | +1.8 | |
| RNF | | | | *e*S | | Sb | 00 26 31.5 | -1.8 | |
| **ARA0** | **ARCESS Array S** | **2.59** | **46** | *e*P | | Pn | 00 25 58.8 | +1.2 | |
| ARA0 | | | | *e*S | | Sn | 00 26 30.3 | +0.5 | |
| **KEV** | **Kevo** | **3.14** | **49** | *e*S | | Sn | 00 26 43.3 | 0.0 | |

*CNRM* ***04*** *00:45:26.8, 36.02N×3.59W, h10km, ml2.9*
*INMG* ***04*** *00:45:31.4±1.3, 35.74N×3.71W, h4km±3km, ML2.2, Error ellipse: s-maj=3.2km s-min=2.0km az=1.0*

**ISC 04 00:45:29.0**±1.4**, 35.67N**±0.03×**3.65W**±0.03**, h6**km±11**km, n32,** σ1**§48/54, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.51** | **207** | P | | | **Pn** | **00 45 43.0** | **+0.1** |
| **PALE** | **Palemas** | **0.51** | **207** | P | | | **Pb** | **00 45 41.5** | **+1.1** |
| PALE | | | | S | | | **Sn** | **00 45 51.0** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.70** | **130** | P | | | **Pn** | **00 45 45.0** | **-0.6** |
| GOG | | | | S | | | **Sn** | **00 45 57.0** | **+0.3** |
| **GOG** | **Mont Gurugu** | **0.70** | **130** | P | | | **Pb** | **00 45 44.6** | **+0.9** |
| GOG | | | | S | | | **Sb** | **00 45 54.2** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.11** | **116** | P | | | **Pg** | **00 45 49.8** | **-0.6** |
| CHAS | | | | S | | | **Sg** | **00 46 03.4** | **-1.4** |
| **AKLM** | **AKL** | **1.17** | **188** | P | | | **Pn** | **00 45 53.1** | **+1.0** |
| **AKLM** | **AKL** | **1.17** | **188** | P | | | **Pn** | **00 45 53.9** | **+1.9** |
| AKLM | | | | S | | | **Sg** | **00 46 06.3** | **-0.5** |
| **SMIR** | **Smir Dam** | **1.41** | **271** | P | | | **Pn** | **00 45 54.1** | **-1.1** |
| **SMIR** | **Smir Dam** | **1.41** | **271** | P | | | **Pn** | **00 45 53.7** | **-1.4** |
| SMIR | | | | S | | | **Sb** | **00 46 14.1** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.49** | **248** | P | | | **Pg** | **00 45 57.9** | **+0.3** |
| CHEFC | | | | S | | | **Sn** | **00 46 15.9** | **-0.3** |
| **JBK** | **JBK** | **1.61** | **146** | P | | | **Pn** | **00 45 58.1** | **0.0** |
| **LCRM** | **LCR** | **2.22** | **207** | P | | | **Pb** | **00 46 08.5** | **-1.1** |
| LCRM | | | | S | | | **Sn** | **00 46 35.7** | **+1.4** |
| **MD31** | **MD31** | **2.94** | **198** | P | | | **Pn** | **00 46 17.9** | **+1.4** |
| MD31 | | | | S | | | **Sn** | **00 46 50.1** | **-2.1** |
| **MDT** | **Midelt** | **2.96** | **196** | P | | | **Pn** | **00 46 18.3** | **+1.7** |
| **MDT** | **Midelt** | **2.96** | **196** | P | | | **Pn** | **00 46 18.3** | **+1.7** |
| MDT | | | | S | | | **Sn** | **00 46 50.0** | **-2.5** |
| **ZHG** | **ZHG** | **3.32** | **229** | P | | | **Pn** | **00 46 22.4** | **+0.9** |
| ZHG | | | | S | | | **Sn** | **00 47 01.1** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | *e*Pn | | | **Pn** | **00 46 27.7** | **+1.0** |
| PVAQ | | | | *e*Sn | | | **Sn** | **00 47 08.9** | **-1.7** |
| PVAQ | | | | A | | | A | 00 47 13.1 | |
| | 2.9nm,0.5s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | P | | | **Pn** | **00 46 27.7** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | P | | | **Pn** | **00 46 27.8** | **+1.0** |
| PVAQ | | | | S | | | **Sn** | **00 47 09.2** | **-1.4** |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **296** | *e*Pn | | | **Pn** | **00 46 28.8** | **+0.8** |
| PBDV | | | | *e*Sn | | | **Sn** | **00 47 11.3** | **-1.5** |
| **PCVE** | **Castro Verde** | **4.03** | **300** | *e*Pn | | | **Pn** | **00 46 32.5** | **+1.2** |
| PCVE | | | | *e*Sn | | | **Sn** | **00 47 17.0** | **-1.8** |
| PCVE | | | | A | | | A | 00 47 21.3 | |
| | 3.9nm,0.2s | | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **302** | *e*Pn | | | **Pn** | **00 46 35.5** | **+1.1** |
| MESJ | | | | *e*Sn | | | **Sn** | **00 47 23.0** | **-1.3** |
| MESJ | | | | A | | | A | 00 47 25.4 | |
| | 3.0nm,0.8s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.47** | **317** | *e*Sn | | | **Sn** | **00 47 28.8** | **-0.9** |
| **PESTR** | **Estremoz** | **4.47** | **317** | P | | | **Pn** | **00 46 36.7** | **-0.7** |
| PESTR | | | | S | | | **Sn** | **00 47 28.4** | **-1.3** |
| **PTEO** | **Sao Teotonio** | **4.49** | **296** | *e*Pn | | | **Pn** | **00 46 40.1** | **+2.6** |
| PTEO | | | | *e*Sn | | | **Sn** | **00 47 30.4** | **+0.4** |
| **EVO** | **Evora** | **4.50** | **311** | *e*Pn | | | **Pn** | **00 46 39.3** | **+1.5** |
| EVO | | | | *e*Sn | | | **Sn** | **00 47 28.3** | **-2.1** |
| EVO | | | | A | | | A | 00 47 29.9 | |
| | 3.6nm,0.4s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **303** | *e*Pn | | | **Pn** | **00 46 40.3** | **+1.2** |
| PNCL | | | | *e*Sn | | | **Sn** | **00 47 30.6** | **-2.3** |
| PNCL | | | | A | | | A | 00 47 34.6 | |
| | 2.8nm,0.7s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.78** | **323** | *e*Pn | | | **Pn** | **00 46 43.5** | **+1.9** |
| PMRV | | | | *e*Sn | | | **Sn** | **00 47 35.3** | **-2.0** |
| PMRV | | | | A | | | A | 00 47 42.4 | |
| | 1.9nm,0.6s | | | | | | | | |
| **PMTG** | **Montargil** | **4.97** | **314** | *e*Pn | | | **Pn** | **00 46 46.4** | **+2.2** |
| PMTG | | | | *e*Sn | | | **Sn** | **00 47 41.3** | **-0.7** |
| **PCBR** | **Castelo Branco** | **5.14** | **325** | *e*Pn | | | **Pn** | **00 46 49.2** | **+2.6** |
| **PSBE** | **So Bento** | **5.60** | **315** | *e*Pn | | | **Pn** | **00 46 55.4** | **+2.5** |
| **MVO** | **Moncorvo** | **6.09** | **335** | *e*Pn | | | **Pn** | **00 47 01.8** | **+2.2** |

*BJI* ***04*** *00:48:08.0±0.0, 30.60S×177.50W, h10km, mb5.1/29, mB5.7/15, Ms5.6/13, Ms7 5.2/12*
*IDC* ***04*** *00:48:09.4±0.5, 30.44S×177.63W, h0km, mb4.8/20, mb1 4.9/22, mb1mx4.5/49, mbtmp4.8/22, ML4.3/2, MS4.6/37, Ms1 4.6/37, ms1mx4.4/62, Error ellipse: s-maj=17.2km s-min=14.5km az=156.0*
*MOS* ***04*** *00:48:11.7±0.7, 30.46S×177.68W, h21km, mb5.2/21, Error ellipse: s-maj=12.4km s-min=9.9km az=100.7*
*NEIC* ***04*** *00:48:14.1±1.6, 30.42S±0.06×177.6W±0.1, h25km±4km, mb5.1/72, Error ellipse: s-maj=13.8km s-min=9.2km az=82.0*
*GCMT* ***04*** *00:48:17.1±0.2, 30.45S±0.01×177.31W±0.01, h26km, MW5.2/115, Moment Tensor Solution. s101,c144; s115,c172; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr0.65±.02; Mθθ-0.01±.01; Mφφ-0.64±.01; Mrθ0.07±.03; Mrφ-0.23±.01; Mθφ0.58±.03; Best double couple: M0.90500×10^17 NP1:φs207.00000°, δ26.00000°, λ105.00000°. NP2:φs10.00000°, δ65.00000°, λ83.00000°. Principal axes: T 0.8790, Plg69.0000°, Azm266.0000°; N 0.0520, Plg6.0000°, Azm13.0000°; P -0.9310, Plg20.0000°, Azm106.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 04 00:48:14.1**±0.3**, 30.59S**±0.04×**177.57W**±0.06**, h33**km**, n457,** σ1**§65/449, mb5.1/76, MS4.7/46, 38C-22D, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **1.35** | **347** | P | | | **Pn** | **00 48 34.4** | **-2.3** |
| GLKZ | | | | S | | | **Sn** | **00 48 52.2** | **-1.3** |
| **RAO** | **Raoul Island** | **1.36** | **347** | P | | | **Pn** | **00 48 34.2** | **-2.6** |
| | 3μm,0.3s,baz=196,slow=2.4,SNR=71 | | | | | | | | |
| RAO | | | | | Sn | | **Sn** | **00 48 50.2** | **-3.5** |
| | 7μm,0.3s,baz=118,slow=21,SNR=11 | | | | | | | | |
| RAO | | | | | LR | | LR | 00 49 01.9 | |
| | comp=Z,12μm,19.9s,baz=136,slow=43 | | | | | | | | |
| **RAO** | **Raoul Island** | **1.36** | **347** | P | | | **Pn** | **00 48 33.9** | **-2.9** |
| RAO | | | | | | | | 00 48 50.5 | |
| **RAO** | **Raoul Island** | **1.36** | **347** | Pn | | | **Pn** | **00 48 33.9** | **-2.9** |
| RAO | | | | | Sn | | **Sn** | **00 48 50.5** | **-3.3** |
| **RIZ** | **Raoul Island** | **1.37** | **347** | P | | | **Pn** | **00 48 34.4** | **-2.5** |
| RIZ | | | | S | | | **Sn** | **00 48 49.7** | **-4.3** |
| **MXZ** | **Matakaoa Point** | **7.75** | **205** | P | | | **Pn** | **00 50 01.6** | **-3.1** |
| MXZ | | | | S | | | **Sn** | **00 51 29.8** | **-1.5** |
| **MXZ** | **Matakaoa Point** | **7.75** | **205** | Pn | | | **Pn** | **00 50 01.5** | **-3.1** |
| **WMGZ** | **Waiomatatini S** | **7.95** | **204** | P | | | **Pn** | **00 50 04.5** | **-2.7** |
| WMGZ | | | | S | | | **Sn** | **00 51 34.9** | **-1.1** |
| **HAZ** | **Te Kaha** | **8.12** | **207** | P | | | **Pn** | **00 50 06.7** | **-2.9** |
| HAZ | | | | S | | | **Sn** | **00 51 40.5** | **+0.2** |
| **PKGZ** | **Pakihiroa** | **8.13** | **205** | P | | | **Pn** | **00 50 05.9** | **-3.9** |
| PKGZ | | | | S | | | **Sn** | **00 51 36.7** | **-3.9** |
| **PUZ** | **Puketiti** | **8.23** | **204** | P | | | **Pn** | **00 50 07.3** | **-3.8** |
| PUZ | | | | S | | | **Sn** | **00 51 40.2** | **-2.7** |
| **RUGZ** | **Raukumara Rang** | **8.35** | **207** | P | | | **Pn** | **00 50 10.2** | **-2.6** |
| RUGZ | | | | S | | | **Sn** | **00 51 43.1** | **-2.9** |
| **TWGZ** | **Tauwhareparae** | **8.42** | **205** | P | | | **Pn** | **00 50 10.7** | **-3.1** |
| TWGZ | | | | S | | | **Sn** | **00 51 46.6** | **-1.1** |
| **CNGZ** | **Carnagh Statio** | **8.62** | **203** | P | | | **Pn** | **00 50 12.8** | **-3.6** |
| CNGZ | | | | S | | | **Sn** | **00 51 51.3** | **-1.2** |
| **TKGZ** | **Te Karaka** | **8.70** | **205** | P | | | **Pn** | **00 50 13.7** | **-3.8** |
| TKGZ | | | | S | | | **Sn** | **00 51 52.2** | **-2.3** |
| **OPRZ** | **Ohinepanea** | **8.72** | **212** | P | | | **Pn** | **00 50 19.0** | **+1.1** |
| **MWZ** | **Matawai** | **8.73** | **206** | P | | | **Pn** | **00 50 14.3** | **-3.7** |
| MWZ | | | | S | | | **Sn** | **00 51 53.6** | **-1.6** |
| **URZ** | **Urewera** | **8.83** | **208** | Pn | | | **Pn** | **00 50 15.0** | **-4.3** |
| | 0.7nm,0.3s,baz=278,slow=4.7,SNR=15 | | | | | | | | |
| URZ | | | | S | | | **Sn** | **00 51 56.3** | **-1.3** |
| | 28nm,0.3s,baz=184,slow=15,SNR=15 | | | | | | | | |
| **URZ** | **Urewera** | **8.83** | **208** | P | | | **Pn** | **00 50 15.1** | **-4.3** |
| URZ | | | | S | | | **Sn** | **00 51 55.6** | **-2.0** |
| **TOZ** | **Tahuroa Road** | **9.15** | **217** | P | | | Pn | 00 50 27.8 | +4.1 |
| **RTZ** | **Ruatahuna** | **9.18** | **208** | P | | | Pn | 00 50 19.4 | -4.9 |
| RTZ | | | | S | | | **Sn** | **00 52 03.4** | **-3.2** |
| **SNGZ** | **Shannon Statio** | **9.19** | **206** | P | | | **Pn** | **00 50 22.5** | **-1.8** |
| SNGZ | | | | S | | | **Sn** | **00 52 05.1** | **-1.4** |
| **MTHZ** | **Maungataniwha** | **9.44** | **208** | P | | | **Pn** | **00 50 28.0** | **+0.2** |
| MTHZ | | | | S | | | **Sn** | **00 52 11.1** | **-1.7** |
| **NMHZ** | **Naumai** | **9.67** | **207** | P | | | **Pn** | **00 50 29.1** | **-1.8** |
| NMHZ | | | | S | | | **Sn** | **00 52 15.6** | **-2.8** |
| **KWHZ** | **Kaweka Forest** | **10.10** | **208** | P | | | **Pn** | **00 50 32.5** | **-4.3** |
| KWHZ | | | | S | | | **Sn** | **00 52 24.5** | **-4.5** |
| **NTVZ** | **North Tongarir** | **10.14** | **211** | P | | | **Pn** | **00 50 34.9** | **-2.6** |
| **TMVZ** | **Te Maari** | **10.14** | **211** | P | | | **Pn** | **00 50 35.6** | **-1.9** |
| **ETVZ** | **East Tongariro** | **10.16** | **211** | P | | | **Pn** | **00 50 36.8** | **-0.9** |
| **SNVZ** | **South Ngauruho** | **10.23** | **211** | P | | | **Pn** | **00 50 37.3** | **-1.5** |
| **PRHZ** | **Porangahau** | **10.75** | **204** | P | | | Pn | 00 50 39.7 | -6.0 |
| PRHZ | | | | S | | | **Sn** | **00 52 39.4** | **-5.5** |
| **NIUE** | **Niue** | **13.39** | **33** | P | | | Pn | 00 51 16.9 | -4.9 |
| | baz=13,SNR=4.0 | | | | | | | | |
| NIUE | | | | S | | | Sn | 00 53 29.4 | -20 |
| | baz=13 | | | | | | | | |
| **NIUE** | **Niue** | **13.39** | **33** | Pn | | | Pn | 00 51 16.5 | -5.3 |
| **MSVF** | **Nonsavu** | **13.40** | **342** | Pn | | | **Pn** | **00 51 21.7** | **-0.4** |
| | baz=178,slow=14,SNR=1.9 | | | | | | | | |
| MSVF | | | | LR | | | LR | 00 55 45.8 | |
| | comp=Z,4μm,18.4s,baz=168,slow=34 | | | | | | | | |
| **MSVF** | **Nonsavu** | **13.40** | **342** | P | | | **Pn** | **00 51 20.7** | **-1.4** |
| **MSVF** | **Nonsavu** | **13.40** | **342** | Pn | | | **Pn** | **00 51 20.7** | **-1.4** |
| **OXZ** | **Oxford** | **15.17** | **210** | | | | **Pn** | **00 51 43.8** | **-2.1** |
| OXZ | | | | | IAmb | | IAmb | 00 51 51.6 | |
| | comp=Z,69nm,0.6s | | | | | | | | |
| **MARNC** | **Mare, Loyalty** | **15.79** | **302** | | | | **Pn** | **00 51 55.1** | **+1.1** |
| **OUENC** | **Ouen Island, N** | **16.14** | **297** | | | | **Pn** | **00 51 59.8** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **16.50** | **296** | | | | **Pn** | **00 52 03.2** | **+0.1** |
| **DZM** | **Mont Dzumac** | **16.64** | **297** | *e*Pn | | | **P** | **00 52 10.7** | **+3.6** |
| | comp=Z,198nm,1.2s | | | | | | | | |
| DZM | | | | *e*LR | | | LR | 00 56 19.0 | |
| | comp=Z,5μm,23.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.64** | **297** | Pn | | | **P** | **00 52 06.8** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=100,slow=15,SNR=8.6 | | | | | | | | |
| DZM | | | | LR | | | LR | 00 57 29.4 | |
| | comp=Z,5μm,18.1s,baz=108,slow=34 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.64** | **297** | | | | **Pn** | **00 52 04.7** | **-0.3** |
| **LIFNC** | **LIFOU** | **16.80** | **302** | Pn | | | **Pn** | **00 52 05.6** | **-1.4** |
| LIFNC | | | | IAmb | | | IAmb | 00 52 43.7 | |
| | comp=Z,191nm,1.2s | | | | | | | | |
| **AFI** | **Afiamalu** | **17.43** | **19** | P | | | **Pn** | **00 52 13.7** | **-1.2** |
| | comp=Z,3.8nm,0.3s,baz=169,slow=16,SNR=2.7 | | | | | | | | |
| AFI | | | | S | | | Sn | 00 55 08.2 | -20 |
| | comp=Z,1.4nm,0.3s,baz=229,slow=22,SNR=1.5 | | | | | | | | |
| **RAR** | **Rarotonga** | **18.51** | **64** | P | | | **P** | **00 52 25.5** | **-2.1** |
| | comp=Z,2.2nm,0.3s,baz=155,slow=5.8,SNR=3.8 | | | | | | | | |
| RAR | | | | S | | | Sn | 00 55 36.9 | -17 |
| | comp=Z,1.8nm,0.3s,baz=85,slow=16,SNR=1.5 | | | | | | | | |
| RAR | | | | LR | | | LR | 00 57 56.3 | |
| | comp=Z,798nm,19.9s,baz=258,slow=32 | | | | | | | | |
| **RAR** | **Rarotonga** | **18.51** | **64** | P | | | **P** | **00 52 25.1** | **-2.5** |
| RAR | | | | pmax | | | pmax | | |
| | comp=Z,99nm,1.3s | | | | | | | | |
| **RAR** | **Rarotonga** | **18.51** | **64** | P | | | **P** | **00 52 25.1** | **-2.5** |
| **LHI** | **Lord Howe Isla** | **20.04** | **261** | P | | | Pn | 00 52 49.2 | +2.9 |
| | baz=21,SNR=7.3 | | | | | | | | |
| **LHI** | **Lord Howe Isla** | **20.04** | **261** | P | | | **P** | **00 52 44.2** | **-0.1** |
| LHI | | | | IAmb | | | IAmb | 00 52 51.0 | |
| | comp=Z,117nm,0.9s | | | | | | | | |
| **SANVU** | **Saraoutou** | **20.54** | **314** | P | | | **P** | **00 52 49.1** | **-0.8** |
| SANVU | | | | IAmb | | | IAmb | 00 53 22.9 | |
| | comp=Z,161nm,1.7s | | | | | | | | |
| **ARMA** | **Armidale** | **26.51** | **262** | P | | | **P** | **00 53 52.5** | **+3.8** |
| | baz=27,SNR=9.0 | | | | | | | | |
| **ARMA** | **Armidale** | **26.51** | **262** | P | | | **P** | **00 53 48.3** | **-0.4** |
| **MGCD** | **Mangrove Creek** | **26.68** | **256** | P | | | **P** | **00 53 54.2** | **+4.1** |
| | baz=27,SNR=4.7 | | | | | | | | |
| **EIDS** | **Eidsvold** | **28.12** | **273** | P | | | **P** | **00 54 04.9** | **+1.8** |
| | baz=29,SNR=8.8 | | | | | | | | |
| **EIDS** | **Eidsvold** | **28.12** | **273** | P | | | **P** | **00 54 03.5** | **+0.4** |
| EIDS | | | | IAmb | | | IAmb | 00 54 07.6 | |
| | comp=Z,25nm,0.8s | | | | | | | | |
| **MILA** | **Mila** | **28.30** | **248** | P | | | **P** | **00 54 06.6** | **+1.9** |
| | baz=29,SNR=4.2 | | | | | | | | |
| **PAE** | **Paea** | **28.51** | **70** | *e*T | | | T | 01 23 08.2 | |
| | comp=Z,6.6nm,0.3s | | | | | | | | |
| **PPT2** | **Papeete2** | **28.55** | **69** | *e*LQ | | | LQ | 00 59 56.0 | |
| | comp=Z,1μm,24.0s | | | | | | | | |
| PPT2 | | | | *e*LR | | | LR | 01 01 14.9 | |
| | comp=Z,2μm,26.5s | | | | | | | | |
| **PPT2** | **Papeete2** | **28.55** | **69** | *e*T | | | T | 01 23 12.7 | |
| | comp=Z,5.1nm,0.3s | | | | | | | | |
| **PPT** | **Papeete** | **28.56** | **69** | LR | | | LR | 01 02 25.3 | |
| | comp=Z,751nm,21.9s,baz=218,slow=30 | | | | | | | | |
| **HNR** | **Honiara** | **29.71** | **310** | LR | | | LR | 01 04 17.7 | |
| | comp=Z,791nm,20.8s,baz=145,slow=33 | | | | | | | | |
| **RMQ** | **Roma** | **29.80** | **269** | P | | | **P** | **00 54 21.0** | **+2.9** |
| | baz=30,SNR=18 | | | | | | | | |
| **TAU** | **Tasmania Unive** | **30.49** | **236** | P | | | **P** | **00 54 25.1** | **+1.1** |
| TAU | | | | pmax | | | pmax | | |
| | comp=Z,87nm,1.5s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **30.49** | **236** | P | | | **P** | **00 54 25.1** | **+1.1** |
| **TOO** | **Toolangi** | **31.24** | **247** | P | | | **P** | **00 54 31.1** | **+0.4** |
| TOO | | | | pmax | | | pmax | | |
| | comp=Z,101nm,2.0s | | | | | | | | |
| **TOO** | **Toolangi** | **31.24** | **247** | P | | | **P** | **00 54 31.1** | **+0.4** |
| **VAH** | **Vaihoa** | **31.40** | **68** | *e*T | | | T | 01 26 43.5 | |
| | comp=Z,8.9nm,0.3s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.40** | **259** | P | | | **P** | **00 54 34.5** | **+2.4** |
| | baz=32,SNR=23 | | | | | | | | |
| **CTA** | **Charters Tower** | **34.20** | **279** | P | | | **P** | **00 54 57.1** | **+0.4** |
| | comp=Z,32nm,1.0s,baz=108,slow=10,SNR=19 | | | | | | | | |
| CTA | | | | LR | | | LR | 01 07 44.3 | |
| | comp=Z,3μm,18.0s,baz=106,slow=34 | | | | | | | | |
| **CTAO** | **Charters Tower** | **34.20** | **279** | P | | | **P** | **00 54 57.9** | **+1.2** |
| CTAO | | | | pmax | | | pmax | | |
| | comp=Z,45nm,0.9s | | | | | | | | |
| **CTAO** | **Charters Tower** | **34.20** | **279** | P | | | **P** | **00 54 57.9** | **+1.2** |
| **STKA** | **Stephens Creek** | **34.80** | **257** | P | | | **P** | **00 55 03.0** | **+1.1** |
| | comp=Z,20nm,0.6s,baz=92,slow=9.5,SNR=27 | | | | | | | | |
| STKA | | | | LR | | | LR | 01 08 15.6 | |
| | comp=Z,2μm,18.5s,baz=85,slow=35 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.80** | **257** | P | | | **P** | **00 55 04.2** | **+2.4** |
| | baz=35,SNR=14 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.80** | **257** | P | | | **P** | **00 55 03.5** | **+1.7** |
| STKA | | | | pmax | | | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.80** | **257** | P | | | **P** | **00 55 03.5** | **+1.7** |
| **MTSU** | **Mount Surprise** | **36.70** | **281** | P | | | **P** | **00 55 19.7** | **+1.5** |
| | baz=37,SNR=13 | | | | | | | | |
| **HTT** | **Hallett** | **36.81** | **254** | P | | | **P** | **00 55 20.8** | **+1.7** |
| | baz=37,SNR=23 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.02** | **295** | LR | | | LR | 01 08 40.2 | |
| | comp=Z,917nm,21.6s,baz=140,slow=32 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.02** | **295** | *e*P | | | **P** | **00 55 38.5** | **+0.7** |
| PMG | | | | pmax | | | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **BBOO** | **Buckleboo** | **39.28** | **254** | P | | | **P** | **00 55 40.6** | **+0.7** |
| | baz=40,SNR=14 | | | | | | | | |
| **BBOO** | **Buckleboo** | **39.28** | **254** | P | | | **P** | **00 55 40.1** | **+0.2** |
| BBOO | | | | IAmb | | | IAmb | 00 55 41.6 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| **COEN** | **Coen** | **39.68** | **286** | P | | | **P** | **00 55 44.1** | **+0.8** |
| **QIS** | **Mount Isa** | **39.70** | **274** | P | | | **P** | **00 55 45.1** | **+1.6** |
| | baz=40,SNR=7.4 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **41.04** | **66** | *e*S | | | **S** | **01 02 04.7** | **-0.5** |
| | comp=Z,266nm,25.8s | | | | | | | | |
| TAOE | | | | *e*LR | | | LR | 01 07 04.4 | |
| | comp=Z,1μm,26.3s | | | | | | | | |
| **AS31** | **Alice Springs** | **43.47** | **267** | P | | | **P** | **00 56 13.5** | **-1.0** |
| **ASAR** | **Alice Springs** | **43.47** | **267** | P | | | **P** | **00 56 14.2** | **-0.3** |
| | comp=Z,13nm,0.8s,baz=108,slow=7.8,SNR=90 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **00 58 01.3** | **-0.9** |
| | comp=Z,3.6nm,0.9s,baz=129,slow=3.8,SNR=1.9 | | | | | | | | |
| ASAR | | | | ScP | | | **ScP** | **01 01 54.4** | **+3.1** |
| | comp=Z,2.3nm,0.8s,baz=114,slow=4.3,SNR=9.8 | | | | | | | | |
| ASAR | | | | LR | | | LR | 01 13 59.7 | |
| | comp=Z,2μm,18.4s,baz=108,slow=36 | | | | | | | | |
| **ASAR** | **Alice Springs** | **43.47** | **267** | P | | | **P** | **00 56 13.3** | **-1.1** |
| **ASAR** | **Alice Springs** | **43.47** | **267** | P | | | **P** | **00 56 13.3** | **-1.1** |
| **WR0** | **Warramunga Arr** | **44.30** | **272** | P | | | **P** | **00 56 20.8** | **-0.3** |
| WR0 | | | | IAmb | | | IAmb | 00 56 23.3 | |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.47** | **272** | *e*P | | | **P** | **00 56 22.1** | **-0.3** |
| WRAB | | | | pmax | | | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.47** | **272** | P | | | **P** | **00 56 21.9** | **-0.5** |
| WRAB | | | | IAmb | | | IAmb | 00 56 23.7 | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | P | | | **P** | **00 56 21.8** | **-0.8** |
| | comp=Z,33nm,0.9s,baz=110,slow=7.8,SNR=80 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **00 58 05.6** | **0.0** |
| | comp=Z,4.8nm,0.9s,baz=118,slow=3.6,SNR=2.5 | | | | | | | | |
| WRA | | | | ScP | | | **ScP** | **01 01 57.9** | **+2.6** |
| | comp=Z,1.4nm,0.8s,baz=111,slow=3.2,SNR=3.1 | | | | | | | | |
| WRA | | | | LR | | | LR | 01 13 51.8 | |
| | comp=Z,1μm,18.4s,baz=62,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | P | | | **P** | **00 56 22.1** | **-0.4** |
| WRA | | | | pmax | | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | P | | | **P** | **00 56 22.1** | **-0.4** |
| **FORT** | **Forrest** | **46.36** | **255** | P | | | **P** | **00 56 37.4** | **+0.2** |
| | baz=47,SNR=11 | | | | | | | | |
| **FORT** | **Forrest** | **46.36** | **255** | P | | | **P** | **00 56 37.3** | **0.0** |
| **WRKA** | **Warakurna** | **47.83** | **263** | P | | | **P** | **00 56 47.3** | **-1.5** |
| | baz=48,SNR=9.0 | | | | | | | | |
| **VNDA** | **Vanda** | **47.95** | **186** | LR | | | LR | 01 15 13.1 | |
| | comp=Z,160nm,19.6s,baz=38,slow=34 | | | | | | | | |
| **KDU** | **Kakadu** | **49.32** | **280** | P | | | **P** | **00 56 59.8** | **-0.5** |
| | baz=50,SNR=4.5 | | | | | | | | |
| **MTN** | **Manton Dam** | **50.38** | **279** | P | | | **P** | **00 57 09.4** | **+1.0** |
| | baz=51,SNR=4.9 | | | | | | | | |
| **MTN** | **Manton Dam** | **50.38** | **279** | P | | | **P** | **00 57 07.9** | **-0.5** |
| **KNRA** | **Kununurra** | **51.09** | **274** | P | | | **P** | **00 57 13.9** | **+0.2** |
| | baz=52,SNR=15 | | | | | | | | |
| **KNRA** | **Kununurra** | **51.09** | **274** | P | | | **P** | **00 57 14.2** | **+0.4** |
| KNRA | | | | IAmb | | | IAmb | 00 57 18.8 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.73** | **270** | P | | | **P** | **00 57 25.7** | **-0.3** |
| | comp=Z,16nm,0.8s,baz=158,slow=5.5,SNR=34 | | | | | | | | |
| FITZ | | | | LR | | | LR | 01 18 31.5 | |
| | comp=Z,983nm,20.8s,baz=112,slow=35 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.73** | **270** | P | | | **P** | **00 57 26.0** | **0.0** |
| | baz=53,SNR=21 | | | | | | | | |
| **KLBR** | **Kellerberrin** | **54.64** | **251** | P | | | **P** | **00 57 38.6** | **-1.2** |
| | baz=55,SNR=6.1 | | | | | | | | |
| **CASY** | **Casey** | **55.15** | **208** | P | | | **P** | **00 57 43.6** | **+0.6** |
| **MEEK** | **Meekatharra** | **55.51** | **257** | P | | | **P** | **00 57 45.8** | **-0.4** |
| | baz=56,SNR=4.6 | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **56.32** | **263** | P | | | **P** | **00 57 52.1** | **+0.1** |
| PSA00 | | | | IAmb | | | IAmb | 00 59 11.9 | |
| | comp=Z,57nm,1.9s | | | | | | | | |
| **MBWA** | **Marble Bar** | **56.58** | **264** | P | | | **P** | **00 57 52.3** | **-1.5** |
| MBWA | | | | IAmb | | | IAmb | 00 58 13.6 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **SIJI** | **Sorong** | **56.75** | **291** | P | | | **P** | **00 57 54.9** | **-0.3** |
| | comp=Z,11nm,0.4s,baz=58,slow=7.6,SNR=5.4 | | | | | | | | |
| SIJI | | | | LR | | | LR | 01 20 48.7 | |
| | comp=Z,311nm,21.2s,baz=98,slow=35 | | | | | | | | |
| **MORW** | **Morawa** | **56.84** | **253** | P | | | **P** | **00 57 55.0** | **-0.6** |
| MORW | | | | IAmb | | | IAmb | 00 57 55.8 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| **GUMO**

comp=Z,14nm,1.3s
**PSI Prapat 85.83 276** LR LR 01 40 30.9
comp=Z,368nm,19.6s,baz=138,slow=37
**EDW2 Edwards Air Fo 85.94 45** P **P 01 00 53.3 +2.4**
baz=228
**SWSC Sam W. Stewart 86.04 48** P **P 01 00 53.5 +2.1**
baz=230
**PFO Pinyon Flats O 86.06 47** P **P 01 00 52.9 +1.3**
comp=Z,5.7nm,1.0s,baz=270,slow=6.0,SNR=5.4
PFO LR LR 01 32 18.6
comp=Z,240nm,19.8s,baz=302,slow=31
**PFO Pinyon Flats O 86.06 47** P **P 01 00 51.5 -0.1**
PFO pmax pmax
comp=Z,14nm,1.4s
**PFO Pinyon Flats O 86.06 47** P **P 01 00 51.5 -0.1**
PFO IAmb IAmb 01 01 12.9
comp=Z,14nm,1.4s
**PFO Pinyon Flats O 86.06 47** P **P 01 00 54.2 +2.6**
baz=229
**PEA0B Petropavlovsk- 86.08 345**⇓*i*P **P 01 00 51.3 +0.2**
**PEA0B Petropavlovsk- 86.08 345** P **P 01 00 51.2 +0.1**
**PETK Petropavlovsk- 86.08 345** P **P 01 00 51.0 -0.1**
comp=Z,14nm,0.8s,baz=171,slow=10,SNR=16
**PETK Petropavlovsk- 86.08 345** P **P 01 00 50.8 -0.3**
**PETK Petropavlovsk- 86.08 345** P **P 01 00 50.8 -0.3**
**ISA Isabella, Lake 86.17 44** P **P 01 00 53.0 +1.0**
ISA pmax pmax
comp=Z,19nm,1.3s
**ISA Isabella, Lake 86.17 44** P **P 01 00 53.0 +1.0**
ISA IAmb IAmb 01 01 14.2
comp=Z,19nm,1.3s
**ISA Isabella, Lake 86.17 44** P **P 01 00 53.5 +1.5**
baz=228
**GSI Gunungsitoli 86.23 274** P **P 01 00 53.0 +0.2**
**LRMC Laurel Mtn Rad 86.53 45** P **P 01 00 55.6 +1.7**
baz=228
**BELC Belle Mtn. Jos 86.60 47** P **P 01 00 55.6 +1.3**
baz=229
**CMB Columbia Colle 86.65 42** P **P 01 00 54.6 +0.3**
CMB pmax pmax
comp=Z,9.0nm,1.2s
**CMB Columbia Colle 86.65 42** P **P 01 00 54.6 +0.3**
**NJ2 Nanjing 86.65 310** *e*P **P 01 00 56.0 +1.6**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
NJ2 LR LR
comp=Z,750nm,19.0s
NJ2 LR LR
comp=Z,820nm,14.7s
NJ2 LR LR
comp=Z,1µm,16.5s
**BC3 Big Chuckawall 86.72 48** P **P 01 00 55.6 +0.7**
baz=230
**GLA Glamis 86.74 48** P **P 01 00 56.3 +1.4**
baz=230
**CWC Cottonwood Cre 86.92 44** P **P 01 00 56.3 +0.5**
baz=228
**HEC Hector,Ludlow 86.93 46** P **P 01 00 57.2 +1.4**
baz=229
**GSC Goldstone, Bar 86.94 46** P **P 01 00 56.3 +0.4**
GSC pmax pmax
comp=Z,13nm,1.1s
**GSC Goldstone, Bar 86.94 46** P **P 01 00 56.3 +0.4**
GSC IAmb IAmb 01 01 17.3
comp=Z,13nm,1.1s
**GSC Goldstone, Bar 86.94 46** P **P 01 00 57.0 +1.1**
baz=229
**MPMC Manual Prospec 87.03 45** P **P 01 00 56.8 +0.4**
baz=228
**IRM Iron Mountain 87.24 47** P **P 01 00 58.7 +1.4**
baz=230
**GMRC Granite Mounta 87.32 47** P **P 01 00 59.4 +1.6**
baz=230
**QSM Queen of Sheba 87.34 45** P **P 01 00 58.3 +0.6**
QSM IAmb IAmb 01 01 19.5
comp=Z,13nm,1.1s
**214A Organ Pipe Nat 87.36 50** P **P 01 01 00.4 +2.5**
baz=231
**USA0B Ussuriysk Arra 87.52 326** P **P 01 00 58.6 +0.3**
USA0B pmax pmax
comp=Z,9.0nm,0.8s
**USA0B Ussuriysk Arra 87.52 326** P **P 01 00 58.6 +0.3**
USA0B IAmb IAmb 01 04 01.6
comp=Z,9.3nm,0.8s
**USRK Ussuriysk Ar. 87.52 326** P **P 01 00 59.0 +0.7**
comp=Z,7.6nm,0.9s,baz=152,slow=4.1,SNR=7.2
**USRK Ussuriysk Ar. 87.52 326** P **P 01 00 59.0 +0.7**
**TUQ Turquoise Moun 87.58 46** P **P 01 01 00.3 +1.3**
baz=229
**GWY Greenwater Val 87.61 45** P **P 01 00 59.5 +0.4**
GWY IAmb IAmb 01 01 26.4
comp=Z,15nm,1.4s
**M02C Callahan 87.63 38** P **P 01 00 59.9 +0.9**
**FURC Furnace Creek, 87.67 45** P **P 01 01 01.4 +2.2**
baz=229
**LCH Last Change Ra 87.71 44** P **P 01 01 00.6 +1.0**
**GRAC Grapevine Rang 87.72 44** P **P 01 01 01.3 +1.8**
baz=228
**PNTR Pine Nut 87.82 41** P **P 01 01 00.2 +0.1**
PNTR IAmb IAmb 01 01 27.7
comp=Z,10nm,1.0s
**PDMCI Parker Dam,Lak 87.97 48** P **P 01 01 02.5 +1.8**
baz=230
**NVAR Mina Array Bea 88.12 42** P **P 01 01 02.9 +1.2**
comp=Z,5.1nm,0.9s,baz=222,slow=7.5,SNR=16
NVAR LR LR 01 36 18.1
comp=Z,304nm,18.2s,baz=249,slow=33
**NVAR Mina Array Bea 88.12 42** P **P 01 01 02.2 +0.6**
**NV11 Mina Array Sit 88.21 43** P **P 01 01 02.5 +0.6**
NV11 IAmb IAmb 01 01 19.2
comp=Z,17nm,1.4s
**TPNV Topopah Spring 88.36 45** P **P 01 01 03.8 +1.0**
TPNV pmax pmax
comp=Z,4.0nm,1.0s
**TPNV Topopah Spring 88.36 45** P **P 01 01 03.8 +1.0**
**TYV Tymovskoe 88.38 336** *e*P **P 01 01 01.9 -0.3**
TYV *e*S **S 01 11 42.2 -2.7**
TYV pmax pmax
comp=Z,13nm,1.0s
TYV pmax pmax
comp=Z,300nm,4.9s
TYV smax smax
comp=N,700nm,9.5s
TYV smax smax
comp=E,600nm,9.5s
**Y14A Wickenburg 88.47 49** P **P 01 01 04.1 +0.9**
**TPH Tonopah 88.52 43** P **P 01 01 04.6 +1.1**
TPH pmax pmax
comp=Z,59nm,1.1s
**TPH Tonopah 88.52 43** P **P 01 01 04.6 +1.1**
**W13A Hualapai Mount 88.64 47** P **P 01 01 05.2 +1.1**
**KVN Kaiserville 88.65 42** P **P 01 01 04.7 +0.6**
KVN pmax pmax
comp=Z,11nm,1.3s
**KVN Kaiserville 88.65 42** P **P 01 01 04.7 +0.6**
KVN IAmb IAmb 01 01 25.0
comp=Z,11nm,1.3s
**SHPR Sheep Range 88.74 46** P **P 01 01 05.7 +1.1**
SHPR IAmb IAmb 01 01 48.7
comp=Z,13nm,1.4s
**TUC Tucson 88.93 51** P **P 01 01 06.8 +1.3**
TUC pmax pmax
comp=Z,15nm,1.4s
**TUC Tucson 88.93 51** P **P 01 01 06.8 +1.3**
TUC IAmb IAmb 01 01 18.7
comp=Z,15nm,1.4s
**PRN Pahroc Range 89.39 45** P **P 01 01 08.7 +1.2**
PRN IAmb IAmb 01 01 30.2
comp=Z,18nm,1.2s
**I04A Tendick Farm, 89.56 36** P **P 01 01 11.8 +3.7**
baz=225
**X16A Lo Mia Camp, P 89.79 49** P **P 01 01 10.4 +0.9**
X16A IAmb IAmb 01 01 15.4
comp=Z,10nm,1.1s
**J05D Fort Rock, OR 89.81 37** P **P 01 01 10.3 +1.0**
baz=226
**LCMT Little Creek M 90.25 46** P **P 01 01 12.5 +0.9**
**TIA Tai'an 90.37 313**⇓P **P 01 01 12.7 +0.7**
TIA pmax pmax
comp=Z,10.0nm,0.7s
**U15A North Rim 90.48 47** P **P 01 01 13.7 +0.9**
U15A IAmb IAmb 01 01 37.3
comp=Z,19nm,1.2s
**WUAZ Wupatki 90.50 48** P **P 01 01 14.5 +1.6**
WUAZ IAmb IAmb 01 01 19.0
comp=Z,16nm,1.1s

**CN2 Changchun 90.52 323** *e*P **P 01 01 11.7 -0.7**
CN2 sP pP 01 01 18.8 -2.8
CN2 PP **PP 01 04 49.8 +1.9**
CN2 SKS **SKSac 01 11 41.0 -0.2**
CN2 pmax pmax
comp=Z,20nm,1.0s
CN2 LR LR
comp=Z,880nm,13.0s
CN2 LR LR
comp=Z,470nm,13.0s
CN2 LR LR
comp=Z,680nm,15.0s
**BNX BinXian 90.88 325**⇓P **P 01 01 13.6 -0.4**
BNX pmax pmax
comp=Z,26nm,1.0s
BNX pmax pmax
comp=Z,380nm,7.4s
**121A Cookes Peak, D 91.10 52** P **P 01 01 17.9 +2.2**
baz=234
**KLR Kul'dur 91.38 330** P **P 01 01 16.8 +0.4**
comp=Z,5.3nm,0.7s,baz=258,slow=3.8,SNR=11
**KLR Kul'dur 91.38 330***c i*P **P 01 01 16.5 +0.2**
KLR pmax pmax
comp=Z,7.0nm,0.9s
**ELK Elko 91.42 42** P **P 01 01 17.9 +0.9**
comp=Z,0.8nm,0.6s,baz=184,slow=3.6,SNR=4.7
**MTPU Mount Pierson 91.55 46** P **P 01 01 18.1 +0.2**
MTPU IAmb IAmb 01 01 36.6
comp=Z,9.6nm,1.1s
**GYA Guiyang 91.97 300**⇑P **P 01 01 21.5 +1.7**
GYA pmax pmax
comp=Z,10.0nm,0.7s
**ENH Enshi 92.02 304** P **P 01 01 19.8 0.0**
**TXAR Lajitas Array 92.17 57** P **P 01 01 22.4 +1.8**
comp=Z,2.4nm,1.0s,baz=216,slow=6.2,SNR=9.6
TXAR LR LR 01 35 58.4
comp=Z,292nm,19.1s,baz=276,slow=31
**TXAR Lajitas Array 92.17 57** P **P 01 01 21.3 +0.6**
**TXAR Lajitas Array 92.17 57** P **P 01 01 21.2 +0.6**
**LYN LuoYang 92.41 309** *e*P **P 01 01 21.8 +0.4**
LYN pP pP 01 01 26.6 -4.0
LYN sP sP 01 01 29.2 -4.7
LYN S **S 01 12 18.4 -4.4**
LYN pmax pmax
comp=Z,10.0nm,1.2s
LYN pmax pmax
comp=Z,90nm,7.8s
LYN LR LR
comp=Z,180nm,17.9s
**HNS HongShan 92.63 312**⇑P **P 01 01 22.5 +0.1**
HNS pmax pmax
comp=Z,7.0nm,0.9s
**TMUT Trail Mountain 92.92 45** P **P 01 01 24.6 +0.4**
TMUT IAmb IAmb 01 01 50.2
comp=Z,7.1nm,1.0s
**NNA Nana 93.01 106** LR LR 01 34 01.6
comp=Z,126nm,21.0s,baz=242,slow=30
**BJI Beijing 93.32 315** P **P 01 01 25.8 +0.3**
BJI pmax pmax
comp=Z,4.0nm,0.8s
BJI LR LR
comp=Z,540nm,13.4s
BJI LR LR
comp=Z,610nm,15.6s
BJI LR LR
comp=Z,630nm,15.8s
**ANMO Albuquerque 93.40 51** P **P 01 01 26.2 -0.1**
comp=Z,2.2nm,1.0s,baz=202,slow=6.1,SNR=5.2
**ANMO Albuquerque 93.40 51**⇓*e*P **P 01 01 26.9 +0.6**
**ANMO Albuquerque 93.40 51** P **P 01 01 26.7 +0.4**
**HVU Hansel Valley 93.52 43** P **P 01 01 27.2 +0.6**
HVU pmax pmax
comp=Z,13nm,1.4s
**HVU Hansel Valley 93.52 43** P **P 01 01 27.2 +0.6**
HVU IAmb IAmb 01 01 44.7
comp=Z,13nm,1.4s
**LVC Limon Verde 93.52 119** LR LR 01 35 03.5
comp=Z,166nm,20.4s,baz=234,slow=30
**MA2 Magadan 93.57 344**⇓*i*P **P 01 01 25.5 -0.7**
MA2 pmax pmax
comp=Z,13nm,2.5s
**HLID Hailey 93.70 41** P **P 01 01 27.6 +0.2**
HLID IAmb IAmb 01 01 45.2
comp=Z,8.7nm,1.2s
**PLID Pearl Lake 93.81 39** P **P 01 01 27.8 -0.1**
PLID IAmb IAmb 01 01 47.9
comp=Z,9.1nm,1.1s
**CMAR Chiang Mai Arr 93.82 289** P **P 01 01 29.7 +1.4**
comp=Z,2.0nm,0.3s,baz=143,slow=2.9,SNR=7.9
**CMAR Chiang Mai Arr 93.82 289** P **P 01 01 28.3 -0.1**
**CMAR Chiang Mai Arr 93.82 289** P **P 01 01 28.2 -0.1**
**ATAH Atahualpa 94.24 101** LR LR 01 34 11.0
comp=Z,156nm,21.9s,baz=241,slow=29
**L19K White Mountain 94.24 10** P **P 01 01 33.1 +3.9**
baz=200
**XAN Xi'an 94.52 307** P **P 01 01 35.2 +3.9**
XAN pmax pmax
comp=Z,4.0nm,1.0s
**APG El Apazote 95.05 76** LR LR 01 34 13.5
comp=Z,160nm,21.5s,baz=284,slow=29
**PZH PanZhiHua 95.72 297** P **P 01 01 38.8 +1.7**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,120nm,5.3s
**XLT XiLinHaoTe 95.73 318** *e*P **P 01 01 33.6 -3.0**
XLT S **S 01 12 49.2 -2.5**
XLT sS pS 01 12 59.3 -4.4
XLT pmax pmax
comp=Z,9.0nm,1.0s
XLT pmax pmax
comp=Z,200nm,7.8s
XLT LR LR
comp=Z,440nm,14.9s
XLT LR LR
comp=Z,780nm,13.2s
XLT LR LR
comp=Z,250nm,16.0s
**SEY Seymchan 96.24 347** LR LR 01 43 05.4
comp=Z,326nm,18.2s,baz=230,slow=34
**SEY Seymchan 96.24 347**⇓*e*P **P 01 01 38.0 -0.3**
**HHC Hu-ho-hao-te 96.63 314** *e*P **P 01 01 42.0 +1.2**
HHC sP pP 01 01 49.2 -0.8
HHC S **S 01 13 04.4 +4.7**
HHC sS sS 01 13 15.4 +0.4
HHC pmax pmax
comp=Z,7.0nm,1.1s
HHC pmax pmax
comp=Z,120nm,6.4s
HHC LR LR
comp=Z,550nm,15.1s
HHC LR LR
comp=Z,610nm,16.9s
HHC LR LR
comp=Z,750nm,17.3s
**LPAZ La Paz 97.73 114** LR LR 01 37 18.9
comp=Z,120nm,20.8s,baz=220,slow=30
**COLA College 97.93 12**⇑*e*P Pdif 01 01 46.9 +1.0
COLA pmax pmax
comp=Z,4.0nm,1.3s
**ILAR Eielson Array 98.02 13** P **P 01 01 45.0 -1.3**
comp=Z,0.4nm,0.7s,baz=196,slow=6.2,SNR=2.3
**CPUP Villa Florida 99.58 128** LR LR 01 42 18.7
comp=Z,139nm,18.1s,baz=242,slow=33
**YKA Yellowknife Ar 105.45 25** PKKPbc PKKPbc 01 17 58.2 -1.6
comp=Z,0.4nm,0.7s,baz=50,slow=3.1,SNR=7.5
**WMQ Urumqi 113.64 308** *e*PKP **PKiKP 01 06 50.7 +1.8**
WMQ LR LR
comp=Z,690nm,17.5s
WMQ LR LR
comp=Z,520nm,13.7s
WMQ LR LR
comp=Z,510nm,22.3s
**DGZ Jazzator, Alta 115.71 314**⇓*i*PKIKP **PKPdf 01 06 52.5 -0.4**
**MK31 Makanchi Array 118.18 310** PKIKP **PKPdf 01 06 56.8 -0.8**
**MK31 Makanchi Array 118.18 310** **PKPdf 01 06 56.8 -0.8**
**MKAR Makanchi Array 118.18 310** PKP **PKPdf 01 06 56.8 -0.8**
comp=Z,0.7nm,0.5s,baz=83,slow=1.6,SNR=13
MKAR PKKPbc **PKKPbc 01 17 16.7 -0.2**
comp=Z,0.4nm,0.8s,baz=87,slow=0.9,SNR=3.0
**MKAR Makanchi Array 118.18 310** PKIKP **PKPdf 01 06 56.6 -0.9**
**MKAR Makanchi Array 118.18 310** **PKPdf 01 06 56.6 -0.9**
**MAKZ Makanchi 118.39 310** PKIKP **PKPdf 01 06 57.4 -0.5**
**MAKZ Makanchi 118.39 310** **PKPdf 01 06 57.4 -0.5**
**ZALV Zalesovo Beam 118.42 318** PKP **PKPdf 01 06 56.4 -1.3**
comp=Z,0.9nm,0.6s,baz=96,slow=1.1,SNR=4.8

**ZALV Zalesovo Beam 118.42 318** PKIKP **PKPdf 01 06 56.8 -0.9**
**ZALV Zalesovo Beam 118.42 318** **PKPdf 01 06 56.8 -0.9**
**TARG Taragay, Kyrgy 119.92 303** **PKPdf 01 07 00.9 -0.6**
**NRIK Noril'sk 119.96 336** PKP **PKPdf 01 06 59.4 -0.8**
comp=Z,3.1nm,0.7s,baz=123,slow=2.4,SNR=3.7
**NRIK Noril'sk 119.96 336**⇑*i*PKIKP **PKiKP 01 07 00.3 0.0**
**KSH Kashi 120.66 300** PKP **PKiKP 01 07 03.5 +0.7**
KSH LR LR
comp=Z,220nm,10.6s
KSH LR LR
comp=Z,290nm,9.5s
**KURK Kurchatov 121.45 314**⇓*i*PKIKP **PKiKP 01 07 05.5 +1.8**
**KURK Kurchatov 121.45 314** **PKPdf 01 07 02.8 -0.8**
**KURBB Kurchatov Arra 121.49 314** PKP **PKPdf 01 07 03.0 -0.7**
comp=Z,2.9nm,0.7s,baz=102,slow=1.9,SNR=30
**AAK Ala-Archa 122.53 304** PKP **PKPdf 01 07 05.8 -0.4**
comp=Z,3.7nm,0.8s,baz=139,slow=4.4,SNR=8.7
**AAK Ala-Archa 122.53 304**⇓*i*PKIKP **PKPdf 01 07 05.6 -0.6**
**AAK Ala-Archa 122.53 304** PKPdf **PKPdf 01 07 05.2 -1.0**
**BTK Batken 124.64 300** PKIKP **PKPdf 01 07 09.7 -0.6**
**BTK Batken 124.64 300** PKPdf **PKPdf 01 07 09.7 -0.6**
**KBL Kabul 124.64 293** PKIKP **PKPdf 01 07 10.2 -0.4**
**KBL Kabul 124.64 293** PKPdf **PKPdf 01 07 10.2 -0.4**
**GAR Garm 124.77 299** **PKPdf 01 07 10.4 -0.1**
**KKAR Karatay Array 125.49 303** PKIKP **PKPdf 01 07 11.2 -0.5**
**KKAR Karatay Array 125.49 303** PKPdf **PKPdf 01 07 11.2 -0.5**
**CHGR Chuyangaron 125.58 298** PKPdf **PKPdf 01 07 11.9 -0.2**
**BVAR Borovoye Array 126.80 316** PKP **PKPdf 01 07 13.7 -0.1**
comp=Z,2.3nm,0.5s,baz=72,slow=6.7,SNR=14
**BRVK Borovoye 126.86 316**⇓*i*PKIKP **PKPdf 01 07 13.7 -0.2**
**BRVK Borovoye 126.86 316** PKPdf **PKPdf 01 07 13.2 -0.8**
**ARU Arti 133.47 321** PKP **PKPdf 01 07 26.3 -0.1**
comp=Z,1.4nm,0.5s,baz=305,slow=2.4,SNR=7.8
**ARU Arti 133.47 321** *i* PKIKP **PKPdf 01 07 26.7 +0.3**
ARU 01 09 52.2
ARU SS SS 01 27 34.6 -3.1
**ARU Arti 133.47 321** PKPdf **PKPdf 01 07 26.1 -0.3**
**GEYT Alibeck 133.98 295** PKP **PKPdf 01 07 27.8 -0.2**
comp=Z,4.9nm,0.8s,baz=58,slow=15,SNR=4.5
**GEYT Alibeck 133.98 295** **PKPdf 01 07 27.6 -0.3**
**AKTO Aktyubinsk 134.50 312** PKP **PKPdf 01 07 28.0 -0.5**
comp=Z,3.0nm,0.8s,baz=113,slow=1.9,SNR=3.1
**AKTO Aktyubinsk 134.50 312** PKIKP **PKPdf 01 07 28.0 -0.5**
**KIRV Kirov 137.68 325**⇓*e*PKIKP **PKPdf 01 07 33.2 -0.9**
**PRGR Permogore 138.16 331** *e*PKIKP **PKPdf 01 07 33.1 -1.8**
PRGR pmax pmax
comp=Z,4.0nm,0.9s
**HAMF Hammerfest 138.19 350** *e*PKPdf **PKPdf 01 07 35.0 +0.3**
**ARCES ARCESS Array B 138.85 348** PKHKP PKPpre 01 07 27.9
comp=Z,2.7nm,0.7s,baz=23,slow=2.2,SNR=10
ARCES PKP **PKiKP 01 07 37.6 -0.6**
comp=Z,4.4nm,0.8s,baz=82,slow=1.9,SNR=6.5
**KTK1 Kautokeino 139.71 349** *e*PKPdf **PKPdf 01 07 37.9 +0.3**
**TRO Tromso 139.79 351** *e*Pdif **Pdif 01 04 53.5 +1.4**
**KLMR Klimovskoe 141.10 332** *e*PKIKP **PKPdf 01 07 36.6 -3.7**
KLMR pmax pmax
comp=Z,22nm,1.4s
**KLMR Klimovskoe 141.10 332** *e*PKPdf **PKPdf 01 07 36.7 -3.6**
KLMR AMP 01 07 50.1
comp=Z,22nm,1.4s
**MAK Makhachkala 142.27 302** *e*PKHKP PKPpre 01 07 38.1
MAK *e* 01 10 46.7
MAK pmax pmax
comp=Z,76nm,1.3s
**FAUS Fauske 142.38 352** *e*PKPdf **PKPdf 01 07 42.8 +0.4**
**VRH Novokhopyorsk 144.44 317** *e*PKIKP **PKPab 01 07 44.2 -0.6**
VRH pmax pmax
comp=Z,10.0nm,0.7s
**GNI Garni 144.49 297** PKP PKPbc 01 07 46.0 +0.1
comp=Z,7.0nm,0.8s,baz=142,slow=2.5
**ZEI Tsey 144.92 302** *i* PKIKP **PKPab 01 07 46.4 -0.8**
ZEI pmax pmax
comp=Z,15nm,0.9s
**NCK Nalchik 145.06 303**⇓*i*PKIKP **PKPdf 01 07 47.8 -0.1**
**GOF Gofitskoye 145.20 306**⇑*i*PKIKP **PKPab 01 07 47.8 -0.1**
GOF pmax pmax
comp=Z,44nm,0.9s
**PUL Pulkovo 145.32 335**⇓*i*PKIKP **PKPbc 01 07 47.4 -0.2**
**PUL Pulkovo 145.32 335** *e*P **PKPbc 01 07 47.1 -0.5**
**AKH Akhalkalaki 145.36 300**⇑P **PKPab 01 07 49.1 +0.3**
**FIA1 FINESS Array S 145.45 340** **PKPdf 01 07 46.9 -1.0**
**FINES FINESS Array B 145.45 340** PKPbc **PKPdf 01 07 47.3 -0.6**
comp=Z,50nm,0.9s,baz=55,slow=3.9,SNR=148
**FINES FINESS Array B 145.45 340** PKIKP **PKPdf 01 07 47.4 -0.5**
**LPSR Galich'ya Gora 145.49 320** *e*PKIKP **PKPdf 01 07 47.7 -0.6**
LPSR pmax pmax
comp=Z,90nm,0.8s
**NSS Namsos 145.51 353** *e*PKPbc **PKPdf 01 07 47.8 -0.2**
**KBZ Khabaz 145.53 304** PKPbc **PKPdf 01 07 48.4 -0.2**
comp=Z,21nm,1.1s,baz=212,slow=1.4,SNR=16
**KBZ Khabaz 145.53 304***d i*PKIKP **PKPab 01 07 49.1 0.0**
**OBN Obninsk 145.54 325**⇑P **PKPdf 01 07 48.0 -0.2**
**OBN Obninsk 145.54 325***c i*PKIKP **PKPdf 01 07 47.7 -0.6**
OBN *e* 01 11 11.5
OBN pmax pmax
comp=Z,107nm,0.8s
**OBN Obninsk 145.54 325** **PKPdf 01 07 47.6 -0.6**
**KIV Kislovodsk 145.64 304**⇑P **PKPbc 01 07 49.2 -0.1**
**KIV Kislovodsk 145.64 304**⇑PKIKP **PKPbc 01 07 49.2 -0.1**
**KIV Kislovodsk 145.64 304** PKPdf **PKPdf 01 07 48.5 -0.5**
**VORR Voronezh 145.72 319** *e*PKIKP **PKPdf 01 07 48.8 +0.1**
VORR pmax pmax
comp=Z,100nm,0.6s
**NEY Neytrino 145.72 303**⇑*e*PKIKP **PKPab 01 07 50.1 0.0**
**VORD Divnogorie 145.95 317** *e*PKP2 **PKPdf 01 07 49.2 +0.1**
VORD pmax pmax
comp=Z,70nm,0.9s
**CHVG Ch'k'valeri 146.26 302**⇑P **PKPab 01 07 52.6 +0.7**
**CHVG Ch'k'valeri 146.26 302**⇑PKP2 **PKPbc 01 07 52.6 +0.7**
**GURO Gurcoymak-BITLI 146.64 295** **PKPbc 01 07 51.9 -0.7**
**VSU Vasula 147.55 336**⇑*e*PKP2 **PKPbc 01 07 53.5 -0.7**
**VSU Vasula 147.55 336** *e*P **PKPbc 01 07 54.2 -0.1**
**VSLR Vesyoloye 147.62 304**⇓*e*PKIKP **PKPdf 01 07 53.4 +1.2**
**SOC Sochi 147.82 304** *e*PKIKP **PKPdf 01 07 51.7 -0.8**
SOC *e* 01 11 19.8
SOC *e*PPP PPP 01 14 51.4
SOC pmax pmax
comp=Z,36nm,0.8s
**KTUT Trabzon 148.20 299**⇑P **PKPbc 01 07 57.1 +0.5**
**DOMB Dombas 148.24 354** *e*PKPbc **PKPbc 01 07 56.1 0.0**
**AKN Aaknes 148.26 356** *e*PKPbc **PKPbc 01 07 56.4 +0.3**
**MTSE Matsula 148.31 339** *e*P **PKPab 01 08 02.6 +3.1**
**NC303 NORSAR Array S 148.79 352** **PKPbc 01 07 57.4 0.0**
**FOO Floro 148.93 358** *e*PKPbc **PKPbc 01 07 58.4 +0.6**
**NB2 NORSAR Subarra1 148.99 352** PKP **PKPbc 01 07 57.1 -0.9**
comp=Z,9.4nm,1.1s,baz=17,slow=2.6
**NOA NORSAR Array B 148.99 352** PKPbc **PKPbc 01 07 57.5 -0.5**
comp=Z,12nm,0.8s,baz=14,slow=4.3,SNR=34
**UPP Uppsala 148.99 345** *e*P **PKPbc 01 07 57.0 -0.9**
**NC602 NORSAR Array S 149.24 351** *e*pPKPdf **PKPbc 01 07 58.0 -0.6**
**SKAR Skarslia 149.65 354** *e*pPKPdf **PKPbc 01 07 59.5 -0.2**
**IDID Didziasalis 149.85 332** *e*P **PKPbc 01 08 00.1 -0.1**
**ISAL Salakas 149.91 333** *e*P **PKPbc 01 08 00.8 +0.4**
**MNK Minsk 149.93 330** *i* PKP2 **PKiKP 01 08 03.7 +2.3**
MNK *i* 01 11 42.6
MNK *i* PPP PPP 01 15 03.4
MNK pmax pmax
comp=N,20nm,0.8s
MNK pmax pmax
comp=Z,17nm,0.6s
MNK pmax pmax
comp=E,3.0nm,0.9s
MNK MLR MLR
comp=N,539nm,19.0s
MNK MLR MLR
comp=E,43nm,19.0s
MNK MLR MLR
comp=Z,100nm,10.0s
**MNK Minsk 149.93 330** *i* PKP **PKiKP 01 08 03.8 +2.4**
comp=E,3.0nm,0.8s
MNK *i* PKP **PKiKP 01 08 03.8 +2.4**
comp=N,20nm,0.8s
MNK *i* PKP **PKiKP 01 08 03.8 +2.4**
comp=Z,17nm,0.7s,baz=229
MNK *i* PP PP 01 11 42.6 +8.0
MNK *i* PPP PPP 01 15 03.5
MNK *i* SKS SKSdf 01 15 16.2 +15
MNK *i* SS **SS 01 30 58.5 +10**
MNK *i* SSS SSS 01 36 38.8
MNK *i* LR LR 02 10 27.8
MNK *i* LRM MLR 02 15 10.9
comp=E,43nm,19.3s
MNK *i* LRM MLR 02 15 10.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=N,539nm,19.3s | | | | | | |
| MNK | | | | *i* LRM | MLR | 02 15 10.9 | |
| | comp=Z,100nm,10.3s | | | | | | |
| **IIGN** | **Ignalina** | **150.03 333** | | *e*P | **PKPbc** | **01 08 00.8** | **+0.1** |
| NACGM | **Naroch** | **150.12 331** | | *i* PKP | **PKiKP** | **01 08 01.3** | **-0.4** |
| **VIKU** | **Vikbolandet** | **150.42 345** | | *e*P | **PKPbc** | **01 08 01.1** | **-0.5** |
| **GAZ** | **Gaziantep** | **150.50 292** | | PKPbc | **PKPbc** | **01 08 01.9** | **-0.6** |
| **PABE** | **Paberze** | **150.78 335** | | *e*P | **PKPbc** | **01 08 02.1** | **-0.3** |
| **PABE** | **Paberze** | **150.78 335** | | | **PKPbc** | **01 08 02.7** | **+0.3** |
| **PBUR** | **Paburge** | **151.09 337** | | *e*P | **PKPbc** | **01 08 03.4** | **+0.2** |
| **SIM** | **Simferopol'** | **151.35 309** | | *i* PKIKP | **PKPbc** | **01 08 03.9** | **-0.3** |
| SIM | | | | pmax | pmax | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **BNN** | **Bunyan** | **151.45 296** | | | **PKPbc** | **01 08 04.6** | **-0.1** |
| AKASG | **Malin Array Be** | **151.67 323** | | PKPbc | **PKPbc** | **01 08 04.3** | **-0.4** |
| | comp=Z,6.7nm,0.5s,baz=48,slow=2.9,SNR=50 | | | | | | |
| AKASG | **Malin Array Be** | **151.67 323** | | PKIKP | **PKPbc** | **01 08 04.4** | **-0.3** |
| AKASG | **Malin Array Be** | **151.67 323** | | | **PKPbc** | **01 08 04.4** | **-0.3** |
| **AKBB** | **Malin Array Si** | **151.67 323** | | PKIKP | **PKPbc** | **01 08 04.3** | **-0.4** |
| **AKBB** | **Malin Array Si** | **151.67 323** | | | **PKPbc** | **01 08 04.3** | **-0.4** |
| **SHBL** | **Chebaa** | **151.68 284** | | *e*P | **PKiKP** | **01 08 06.0** | **0.0** |
| **BHL** | **Bhannes** | **151.78 286** | | *e*P | **PKiKP** | **01 08 06.2** | **+0.1** |
| **DQRL** | **Deir Qamar** | **151.84 285** | | *e*P | **PKiKP** | **01 08 06.6** | **+0.5** |
| **HOMB** | **Homborsund** | **152.00 353** | | *e*PKPdf | **PKPdf** | **01 07 58.6** | **0.0** |
| **SUW** | **Suwalki** | **152.21 333** | | *e*P | **PKPbc** | **01 08 05.3** | **-0.5** |
| **BZK** | **Bozkurt** | **152.28 303** | | ⇑P | **PKiKP** | **01 08 06.8** | **+0.1** |
| **BR131** | **Keskin Array S** | **153.02 298** | | PKIKP | **PKPbc** | **01 08 07.0** | **-1.3** |
| **BR131** | **Keskin Array S** | **153.02 298** | | | **PKPbc** | **01 08 07.0** | **-1.3** |
| **BRTR** | **Keskin Array B** | **153.02 298** | | PKPbc | **PKPbc** | **01 08 08.2** | **-0.1** |
| | comp=Z,7.2nm,0.9s,baz=127,slow=3.3,SNR=17 | | | | | | |
| **BRTR** | **Keskin Array B** | **153.02 298** | | PKIKP | **PKPbc** | **01 08 07.2** | **-1.1** |
| **BRTR** | **Keskin Array B** | **153.02 298** | | | **PKPbc** | **01 08 07.2** | **-1.1** |
| **SORM** | **Soroca** | **153.57 319** | | ⇑P | **PKPbc** | **01 08 08.2** | **-0.8** |
| **SORM** | **Soroca** | **153.57 319** | | ⇑PKIKP | **PKPbc** | **01 08 08.2** | **-0.8** |
| **ANTO** | **Ankara** | **153.63 299** | | PKIKP | **PKPbc** | **01 08 08.0** | **-1.5** |
| **ANTO** | **Ankara** | **153.63 299** | | | **PKPbc** | **01 08 08.0** | **-1.5** |
| **CSS** | **Mathiatis** | **153.72 288** | | | **PKPbc** | **01 08 08.7** | **-1.1** |
| **MILM** | **Milestii Mici** | **153.92 316** | | ⇑P | **PKiKP** | **01 08 10.0** | **+0.1** |
| **MILM** | **Milestii Mici** | **153.92 316** | | ⇑PKIKP | **PKiKP** | **01 08 10.0** | **+0.1** |
| **MDUB** | **Mudurnu** | **154.70 301** | | | **PKPbc** | **01 08 10.9** | **-0.9** |
| **TPGR** | **Topolog** | **155.13 312** | | ⇑P | **PKPab** | **01 08 28.5** | **+0.1** |
| **CFR** | **Carcaliu** | **155.16 313** | | ⇑P | PKPab | 01 08 20.3 | -8.2 |
| **DBIC** | **Dimbokro** | **155.24 162** | | PKPab | **PKPab** | **01 08 31.7** | **+2.2** |
| | comp=Z,2.7nm,0.7s,baz=188,slow=4.4,SNR=4.8 | | | | | | |
| **HARR** | **Harsova** | **155.51 312** | | ⇑P | **PKPab** | **01 08 29.6** | **-0.4** |
| **HARR** | **Harsova** | **155.51 312** | | ⇑PKP2 | **PKPab** | **01 08 29.6** | **-0.4** |
| **ODBI** | **Odobesti** | **155.55 315** | | ⇑P | **PKPab** | **01 08 31.5** | **+1.4** |
| **KWP** | **Kalwaria Pacla** | **155.59 327** | | PKP2 | **PKPab** | **01 08 29.7** | **-0.5** |
| **KWP** | **Kalwaria Pacla** | **155.59 327** | | | **PKPab** | **01 08 29.7** | **-0.5** |
| BURAR | **Bucovina Array** | **155.61 321** | | ⇑P | PKPab | 01 08 21.5 | -8.9 |
| BURAR | **Bucovina Array** | **155.61 321** | | PKPab | **PKPab** | **01 08 29.9** | **-0.6** |
| **VRI** | **Vrincioaia** | **155.70 316** | | ⇑P | **PKPab** | **01 08 31.2** | **+0.4** |
| **VRI** | **Vrincioaia** | **155.70 316** | | ⇑PKP2 | **PKPab** | **01 08 31.2** | **+0.4** |
| **PLOR** | **Plostina** | **155.75 316** | | ⇑P | **PKPab** | **01 08 30.7** | **-0.4** |
| **PLOR** | **Plostina** | **155.75 316** | | ⇑PKP2 | **PKPab** | **01 08 30.7** | **-0.4** |
| **MLR** | **Muntele Rosu** | **156.36 316** | | ⇓P | **PKPab** | **01 08 27.9** | **-5.9** |
| **MLR** | **Muntele Rosu** | **156.36 316** | | ⇓PKP2 | **PKPab** | **01 08 27.9** | **-5.9** |
| **TRPA** | **Tarpa** | **156.69 324** | | ⇓P | **PKPab** | **01 08 34.4** | **-0.5** |
| **ARR** | **Arges** | **157.21 317** | | ⇑P | **PKPab** | **01 08 29.7** | **-7.7** |
| **HUMR** | **Humele** | **157.44 314** | | ⇑P | **PKPab** | **01 08 36.8** | **-1.5** |
| **DRGR** | | **157.47 322** | | ⇑P | **PKPab** | **01 08 37.6** | **-0.8** |
| **DRGR** | | **157.47 322** | | ⇑PKP2 | **PKPab** | **01 08 37.6** | **-0.8** |
| **UPC** | **Upice** | **157.65 337** | | *e*PKP2 | **PKPab** | **01 08 39.2** | **+0.2** |
| **UPC** | **Upice** | **157.65 337** | | *e*PKPAB | **PKPab** | **01 08 39.2** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **157.68 336** | | *e*PKP2 | **PKPab** | **01 08 38.8** | **-0.3** |
| **DPC** | **Dobruska-Polom** | **157.68 336** | | *e*PKPAB | **PKPab** | **01 08 38.8** | **-0.3** |
| **CLL** | **Collm** | **157.86 342** | | *i* PKP2 | **PKPab** | **01 08 38.3** | **-1.5** |
| **CLL** | **Collm** | **157.86 342** | | *i* PKPab | **PKPab** | **01 08 38.3** | **-1.5** |
| CLL | | | | *e*pPKPab | **pPKPab** | **01 08 46.0** | **-3.1** |
| **BRG** | **Berggiesshubel** | **157.99 340** | | *e*PKP2 | **PKPab** | **01 08 40.3** | **-0.1** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **PVCC** | **Panska Ves** | **158.10 339** | | *e*PKP2 | **PKPab** | **01 08 41.2** | **+0.3** |
| **PVCC** | **Panska Ves** | **158.10 339** | | *e*PKPAB | **PKPab** | **01 08 41.2** | **+0.3** |
| **PSZ** | **Piszkesteto** | **158.12 327** | | PKP2 | **PKPab** | **01 08 41.1** | **-0.1** |
| **PSZ** | **Piszkesteto** | **158.12 327** | | PKPab | **PKPab** | **01 08 41.0** | **-0.1** |
| **VYHS** | **Vyhne** | **158.18 330** | | *e*PKP2 | **PKPab** | **01 08 41.6** | **+0.3** |
| **PRU** | **Pruhonice** | **158.58 338** | | *e*PKP2 | **PKPab** | **01 08 42.9** | **-0.1** |
| **PRU** | **Pruhonice** | **158.58 338** | | *e*PKPAB | **PKPab** | **01 08 42.9** | **-0.1** |
| **MODS** | **Modra-Piesok** | **158.93 332** | | *e*PKP2 | **PKPab** | **01 08 46.6** | **+2.0** |
| **MDVR** | **Moldovita** | **159.25 318** | | ⇑P | **PKPab** | **01 08 46.3** | **+0.1** |
| **VTS** | **Vitosha** | **159.49 312** | | ⇑P | **PKPab** | **01 08 47.4** | **0.0** |
| **VTS** | **Vitosha** | **159.49 312** | | ⇑PKP2 | **PKPab** | **01 08 47.4** | **0.0** |
| **VTS** | **Vitosha** | **159.49 312** | | PKPab | **PKPab** | **01 08 47.1** | **-0.3** |
| **KHC** | **Kasperske Hory** | **159.64 339** | | *e*PKP2 | **PKPab** | **01 08 47.4** | **-0.3** |
| **KHC** | **Kasperske Hory** | **159.64 339** | | *e*PKPAB | **PKPab** | **01 08 47.4** | **-0.3** |
| **CKRC** | **Cesky Krumlov** | **159.67 337** | | *e*PKPAB | **PKPab** | **01 08 47.1** | **-0.7** |
| GERES | **GERESS Array B** | **159.85 338** | | PKPab | **PKPab** | **01 08 46.2** | **-2.5** |
| | comp=Z,3.1nm,0.9s,baz=22,slow=3.6,SNR=8.3 | | | | | | |
| **CONA** | **Conrad Observa** | **159.85 333** | | *e*P | **PKPab** | **01 08 49.3** | **+0.6** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **MOA** | **Molln** | **160.51 336** | | *e*P | **PKPab** | **01 08 54.5** | **+3.0** |
| | comp=Z,10nm,1.3s | | | | | | |
| **ARSA** | **Arzberg** | **160.54 332** | | *e*P | **PKPab** | **01 08 53.7** | **+2.1** |
| | comp=Z,15nm,1.8s | | | | | | |
| **WATA** | **Walderalm** | **161.85 340** | | *e*P | **PKPab** | **01 08 57.9** | **+0.4** |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | **161.90 339** | | *e*P | **PKPab** | **01 08 58.4** | **+0.6** |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **RETA** | **Reutte** | **161.94 342** | | *e*P | **PKPab** | **01 08 58.2** | **+0.4** |
| | comp=Z,12nm,1.2s | | | | | | |
| **MOTA** | **Moosalm** | **161.98 341** | | *e*P | **PKPab** | **01 08 57.8** | **-0.3** |
| | comp=Z,12nm,1.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **162.06 340** | | *e*P | **PKPab** | **01 08 58.5** | **+0.1** |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.63 178** | | PKP | **PKPdf** | **01 08 12.4** | **-0.9** |
| | comp=Z,0.5nm,1.0s,baz=326,slow=1.9,SNR=2.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **01 09 02.0** | **+0.6** |
| | comp=Z,2.9nm,0.8s,baz=184,slow=3.6,SNR=9.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **169.53 28** | | PKP | **PKPdf** | **01 08 18.7** | **+0.5** |
| | comp=Z,0.9nm,1.0s,baz=58,slow=3.6,SNR=2.7 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **01 09 31.0** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=309,slow=4.3,SNR=3.1 | | | | | | |

*MOS **04** 00:54:57.7±1.2,56°.10N×113°.75E,h13km,mb3.8/1,Error ellipse: s-maj=10.3km s-min=6.7km az=66.7*
*MOS Felt (III-IV) at Severomuysk.*
*IDC **04** 00:54:58.3±1.3,56°.15N×113°.66E,h0km,mb3.6/5, mb1 3.7/10,mb1mx3.4/65,mbtmp3.7/10,ML3.9/4,Error ellipse: s-maj=28.2km s-min=15.3km az=151.0*
*BYKL **04** 00:54:58.5±0.1,56°.11N×113°.71E,h7km±2km,FELT I=III-IV MSK at Severomuysk.*
**ISC 04 00:54:57.7**±0.9,**56°.09N**±0°.02×**113°.70E**±0°.02,**h4**km±7km,
**n72**,σ2$^{8}$**60**/125,**mb3.7**/5,**7C-10D**,**East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **SVKR** | **Severomuysk** | **0.09** | **292** | ⇑*i*Pg | | | **Pg** | **00 55 00.8** | **+1.3** |
| **SVKR** | **Severomuysk** | **0.09** | **292** | ⇑*i*Pg | | | **Pg** | **00 55 00.8** | **+1.3** |
| SVKR | | | | Pmax | | | | 00 55 01.1 | |
| | 29μm,0.2s | | | | | | | | |
| SVKR | | | | *e*Sg | | | **Sg** | **00 55 02.8** | **+2.1** |
| SVKR | | | | Smax | | | | 00 55 03.0 | |
| | 112μm,0.3s | | | | | | | | |
| **UKT** | **Uakit** | **0.60** | **184** | *e*PG | | | **Pg** | **00 55 09.9** | **+0.7** |
| UKT | | | | pmax | pmax | | | | |
| | comp=Z,317nm,0.6s | | | | | | | | |
| **UKT** | **Uakit** | **0.60** | **184** | ⇑*i*Pg | | | **Pg** | **00 55 09.6** | **+0.4** |
| UKT | | | | Pmax | | | | 00 55 12.3 | |
| | comp=Z,350nm,0.6s | | | | | | | | |
| UKT | | | | *e*Sg | | | **Sg** | **00 55 18.0** | **+1.1** |
| UKT | | | | Smax | | | | 00 55 18.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **YOA** | **Uoyan** | **1.11** | **273** | *e*PG | | | **Pg** | **00 55 19.5** | **+0.6** |
| YOA | | | | pmax | pmax | | | | |
| | comp=Z,985nm,0.2s | | | | | | | | |
| **YOA** | **Uoyan** | **1.11** | **273** | *e*Pg | | | **Pg** | **00 55 19.2** | **+0.3** |
| YOA | | | | Pmax | | | | 00 55 19.8 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| YOA | | | | *e* | | | | 00 55 23.8 | |
| YOA | | | | *e*Sg | | | **Sg** | **00 55 34.1** | **+0.8** |
| YOA | | | | Smax | | | | 00 55 38.0 | |
| | comp=Z,5μm,0.5s | | | | | | | | |
| **NLYR** | **Nelyaty** | **1.19** | **69** | *e*PG | | | **Pg** | **00 55 19.8** | **-0.7** |
| NLYR | | | | pmax | pmax | | | | |
| | comp=Z,597nm,0.8s | | | | | | | | |
| **NLYR** | **Nelyaty** | **1.19** | **69** | ⇓*i*Pg | | | **Pg** | **00 55 19.8** | **-0.7** |
| NLYR | | | | *e*Pb | | | **Pn** | **00 55 22.0** | **+0.8** |
| NLYR | | | | *e* | | | | 00 55 23.8 | |
| NLYR | | | | max | | | | 00 55 25.3 | |
| | comp=Z,574nm,0.6s | | | | | | | | |
| NLYR | | | | *e*Sg | | | **Sg** | **00 55 35.3** | **-0.6** |
| NLYR | | | | *e*Sb | | | **Sn** | **00 55 38.3** | **+0.5** |
| NLYR | | | | *e* | | | | 00 55 43.8 | |
| NLYR | | | | max | | | | 00 55 44.4 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| **KMO** | **Kumora** | **1.42** | **263** | ⇓*i*PG | | | **Pn** | **00 55 24.3** | **0.0** |
| KMO | | | | pmax | pmax | | | | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| **KMO** | **Kumora** | **1.42** | **263** | ⇓*i*Pg | | | **Pn** | **00 55 24.4** | **+0.1** |
| KMO | | | | *e*Pb | | | **Pg** | **00 55 25.8** | **+1.0** |
| KMO | | | | max | | | | 00 55 26.1 | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| KMO | | | | *e*Sg | | | **Sb** | **00 55 43.4** | **+0.3** |
| KMO | | | | *e* | | | | 00 55 46.3 | |
| KMO | | | | max | | | | 00 55 47.1 | |
| | comp=Z,4μm,1.1s | | | | | | | | |
| **BOD** | **Bodaibo** | **1.75** | **5** | ⇑*i*PN | | | **Pn** | **00 55 29.3** | **+0.5** |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,493nm,1.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **1.75** | **5** | *e*Pg | | | **Pn** | **00 55 29.3** | **+0.5** |
| BOD | | | | Pmax | | | | 00 55 29.8 | |
| | comp=Z,496nm,0.8s | | | | | | | | |
| BOD | | | | *e* | | | | 00 55 32.7 | |
| BOD | | | | *e*Sg | | | **Sb** | **00 55 51.9** | **-0.7** |
| BOD | | | | Smax | | | | 00 55 53.3 | |
| | comp=Z,2μm,0.9s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.89** | **231** | ⇓*i*PN | | | **Pn** | **00 55 32.2** | **+1.5** |
| YLYR | | | | pmax | pmax | | | | |
| | comp=Z,564nm,0.3s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.89** | **231** | ⇓*i*Pn | | | **Pn** | **00 55 32.2** | **+1.5** |
| YLYR | | | | *e*Pg | | | **Pb** | **00 55 32.9** | **+0.2** |
| YLYR | | | | Pmax | | | | 00 55 33.5 | |
| | comp=Z,560nm,0.5s | | | | | | | | |
| YLYR | | | | *e* | | | | 00 55 36.0 | |
| YLYR | | | | *e*Sg | | | **Sb** | **00 55 57.9** | **+1.3** |
| YLYR | | | | Smax | | | | 00 56 00.6 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.36** | **264** | ⇓*i*PN | | | **Pn** | **00 55 38.5** | **+1.3** |
| NIZ | | | | pmax | pmax | | | | |
| | comp=Z,172nm,1.0s | | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.36** | **264** | *e*Pn | | | **Pn** | **00 55 38.5** | **+1.3** |
| NIZ | | | | *e*Pg | | | **Pb** | **00 55 41.0** | **+0.2** |
| NIZ | | | | Pmax | | | | 00 55 42.0 | |
| | comp=Z,171nm,0.5s | | | | | | | | |
| NIZ | | | | *e*Sn | | | **Sn** | **00 56 07.8** | **+1.1** |
| NIZ | | | | *e*Sg | | | **Sb** | **00 56 12.3** | **+2.0** |
| NIZ | | | | Smax | | | | 00 56 14.4 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| **CRS** | **Chara** | **2.66** | **70** | *e*PN | | | **Pn** | **00 55 42.5** | **+1.1** |
| CRS | | | | pmax | pmax | | | | |
| | comp=Z,422nm,0.7s | | | | | | | | |
| **CRS** | **Chara** | **2.66** | **70** | *e*Pn | | | **Pn** | **00 55 42.5** | **+1.1** |
| CRS | | | | *e*Pg | | | **Pb** | **00 55 46.8** | **+0.9** |
| CRS | | | | Pmax | | | | 00 55 47.7 | |
| | comp=Z,422nm,0.9s | | | | | | | | |
| CRS | | | | *e*Sn | | | **Sn** | **00 56 14.3** | **+0.2** |
| CRS | | | | *e*Sg | | | **Sb** | **00 56 20.7** | **+1.7** |
| CRS | | | | Smax | | | | 00 56 26.4 | |
| | comp=Z,925nm,2.1s | | | | | | | | |
| **SYVR** | **Suvo** | **3.24** | **223** | *e*PN | | | **Pb** | **00 55 58.3** | **+2.6** |
| SYVR | | | | pmax | pmax | | | | |
| | comp=Z,123nm,1.0s | | | | | | | | |
| **SYVR** | **Suvo** | **3.24** | **223** | *e*Pn | | | **Pn** | **00 55 50.6** | **+1.3** |
| SYVR | | | | *e*Pg | | | **Pb** | **00 55 57.5** | **+1.8** |
| SYVR | | | | Pmax | | | | 00 56 00.3 | |
| | comp=Z,121nm,1.0s | | | | | | | | |
| SYVR | | | | *e* | | | | 00 56 21.3 | |
| SYVR | | | | *e*Sn | | | **Sn** | **00 56 29.0** | **+0.7** |
| SYVR | | | | *e*Sg | | | **Sb** | **00 56 39.1** | **+3.6** |
| SYVR | | | | Smax | | | | 00 56 47.9 | |
| | comp=Z,538nm,0.9s | | | | | | | | |
| **VTMR** | **Vitim** | **3.42** | **350** | *e*Pn | | | **Pn** | **00 55 51.9** | **+0.1** |
| VTMR | | | | *e*Pg | | | **Pb** | **00 55 59.7** | **+0.9** |
| VTMR | | | | *e*Sn | | | **Sn** | **00 56 32.0** | **-0.7** |
| VTMR | | | | *e*Sg | | | **Sb** | **00 56 43.1** | **+2.4** |
| **KHNR** | **Khani** | **3.58** | **74** | *e*Pn | | | **Pn** | **00 55 54.4** | **+0.4** |
| KHNR | | | | *e*Pg | | | **Pb** | **00 56 02.8** | **+1.2** |
| KHNR | | | | *e*Sg | | | **Sg** | **00 56 49.7** | **-2.9** |
| **TUP** | **Tupik** | **3.95** | **112** | *e*PN | | | **Pn** | **00 55 59.5** | **+0.5** |
| TUP | | | | pmax | pmax | | | | |
| | comp=Z,87nm,0.4s | | | | | | | | |
| **TUP** | **Tupik** | **3.95** | **112** | *e*Pn | | | **Pn** | **00 55 59.5** | **+0.5** |
| TUP | | | | *e* | | | | 00 56 03.5 | |
| TUP | | | | *e*Pg | | | **Pb** | **00 56 09.9** | **+2.1** |
| TUP | | | | *e*PgPg | | | **Pg** | **00 56 12.7** | **-0.5** |
| TUP | | | | max | | | | 00 56 14.0 | |
| | comp=Z,86nm,0.4s | | | | | | | | |
| TUP | | | | *e*Sn | | | **Sn** | **00 56 45.2** | **-0.6** |
| TUP | | | | *e*Sg | | | **Sg** | **00 57 00.8** | **-3.5** |
| TUP | | | | *e* | | | | 00 57 05.1 | |
| TUP | | | | max | | | | 00 57 16.7 | |
| | comp=Z,615nm,1.1s | | | | | | | | |
| **MXMB** | **Maximikha** | **4.03** | **228** | *e*Pn | | | **Pn** | **00 56 02.6** | **+2.4** |
| MXMB | | | | *e*Pg | | | **Pb** | **00 56 11.4** | **+2.1** |
| MXMB | | | | *e* | | | | 00 56 21.4 | |
| MXMB | | | | *e*Sg | | | **Sg** | **00 57 04.1** | **-3.0** |
| **CIT** | **Chita** | **4.07** | **181** | *e*PN | | | **Pn** | **00 56 01.8** | **+1.0** |
| CIT | | | | pmax | pmax | | | | |
| | comp=Z,110nm,0.6s | | | | | | | | |
| **CIT** | **Chita** | **4.07** | **181** | *e*Sg | | | **Sb** | **00 57 04.8** | **+5.3** |
| CIT | | | | Smax | | | | 00 57 10.8 | |
| | comp=Z,549nm,1.0s | | | | | | | | |
| **OGRR** | **Ongureny** | **4.29** | **238** | *e*PN | | | **Pn** | **00 56 07.1** | **+3.3** |
| OGRR | | | | pmax | pmax | | | | |
| | comp=Z,88nm,1.1s | | | | | | | | |
| **OGRR** | **Ongureny** | **4.29** | **238** | *e*Pg | | | **Pb** | **00 56 15.8** | **+2.1** |
| OGRR | | | | Pmax | | | | 00 56 19.2 | |
| | comp=Z,85nm,0.8s | | | | | | | | |
| OGRR | | | | *e* | | | | 00 56 47.3 | |
| OGRR | | | | *e*Sn | | | **Sn** | **00 56 53.3** | **-1.0** |
| OGRR | | | | *e*Sg | | | **Sg** | **00 57 12.4** | **-3.0** |
| OGRR | | | | Smax | | | | 00 57 24.1 | |
| | comp=Z,140nm,0.9s | | | | | | | | |
| **YKLR** | **Yuktali** | **4.46** | **80** | *e*Pn | | | **Pn** | **00 56 07.3** | **+1.3** |
| YKLR | | | | *e*Pg | | | **Pb** | **00 56 17.4** | **+0.9** |
| YKLR | | | | *e* | | | | 00 56 23.4 | |
| YKLR | | | | *e*Sg | | | **Sb** | **00 57 15.4** | **+4.9** |
| **TRG** | **Tyrgan** | **5.43** | **235** | *e*PN | | | **Pn** | **00 56 20.6** | **+1.1** |
| TRG | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| **TRG** | **Tyrgan** | **5.43** | **235** | *e*Pn | | | **Pn** | **00 56 21.5** | **+2.0** |
| TRG | | | | *e*Pg | | | **Pb** | **00 56 35.8** | **+2.7** |
| TRG | | | | *e* | | | | 00 56 40.5 | |
| TRG | | | | max | | | | 00 56 41.3 | |
| | comp=Z,27nm,0.1s | | | | | | | | |
| TRG | | | | *e*Sn | | | **Sn** | **00 57 22.3** | **-0.1** |
| TRG | | | | *e*Sg | | | **Sg** | **00 57 47.2** | **-4.8** |
| TRG | | | | Smax | | | | 00 57 52.3 | |
| | comp=Z,94nm,0.1s | | | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.53** | **223** | *e*Pg | | | **Pb** | **00 56 38.7** | **+4.0** |
| UUDB | | | | Pmax | | | | 00 56 42.3 | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| UUDB | | | | *e* | | | | 00 56 45.2 | |
| UUDB | | | | *e*Sg | | | **Sg** | **00 57 50.7** | **-4.3** |
| UUDB | | | | Smax | | | | 00 57 56.4 | |
| | comp=Z,387nm,0.9s | | | | | | | | |
| **FFNB** | **Fofonovo** | **5.75** | **228** | *e*Pn | | | **Pn** | **00 56 24.9** | **+1.1** |
| FFNB | | | | *e*Pg | | | **Pb** | **00 56 42.7** | **+4.2** |
| FFNB | | | | *e*Sn | | | **Sn** | **00 57 30.2** | **+0.1** |
| FFNB | | | | *e*Sg | | | **Sg** | **00 57 57.3** | **-4.8** |
| **KAB** | **Kabansk** | **5.79** | **229** | *e*Sg | | | **Sg** | **00 57 58.8** | **-4.7** |
| KAB | | | | Smax | | | | 00 58 44.4 | |
| | comp=Z,488nm,1.3s | | | | | | | | |
| **IENR** | **Iengra** | **6.24** | **84** | *e*Pn | | | **Pn** | **00 56 31.5** | **+1.0** |
| IENR | | | | *e*Pg | | | **Pb** | **00 56 51.2** | **+4.4** |
| IENR | | | | *e* | | | | 00 56 54.6 | |
| IENR | | | | *e*Sg | | | **Sg** | **00 58 11.0** | **-6.8** |
| **CLNS** | **Chul'man** | **6.25** | **78** | *e*Pg | | | **Pb** | **00 56 50.6** | **+3.5** |
| CLNS | | | | *e*Sg | | | **Sg** | **00 58 11.5** | **-6.8** |
| **BGT** | **Bolshoye Golou** | **6.34** | **234** | *e*Pn | | | **Pn** | **00 56 32.6** | **+0.7** |
| BGT | | | | *e*Pg | | | **Pb** | **00 56 52.8** | **+4.3** |
| BGT | | | | Pmax | | | | 00 56 55.5 | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| BGT | | | | *e*Sg | | | **Sg** | **00 58 14.9** | **-6.2** |
| BGT | | | | Smax | | | | 00 58 24.5 | |
| | comp=Z,76nm,0.8s | | | | | | | | |
| **KPC** | **Khapcheranga** | **6.44** | **188** | *e*PN | | | **Pn** | **00 56 33.4** | **0.0** |
| KPC | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **KPC** | **Khapcheranga** | **6.44** | **188** | *e*Pn | | | **Pn** | **00 56 35.7** | **+2.3** |
| KPC | | | | *e* | | | | 00 56 44.5 | |
| KPC | | | | *e*Pg | | | Pb | 00 56 55.6 | +5.3 |
| KPC | | | | *e* | | | | 00 57 03.4 | |
| KPC | | | | max | | | | 00 57 25.4 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| KPC | | | | *e*Sn | | | **Sn** | **00 57 46.4** | **-0.9** |
| KPC | | | | *e*Sg | | | **Sg** | **00 58 18.7** | **-5.7** |
| KPC | | | | *e* | | | | 00 58 22.5 | |
| KPC | | | | max | | | | 00 58 27.6 | |
| | comp=Z,251nm,1.5s | | | | | | | | |
| KPC | | | | *e* | | | | 00 58 32.2 | |
| **LSTR** | **Listvyanka** | **6.72** | **235** | *e*Pg | | | **Pb** | **00 56 59.0** | **+4.0** |
| LSTR | | | | Pmax | | | | 00 57 08.0 | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| LSTR | | | | *e*Sg | | | **Sg** | **00 58 26.2** | **-7.1** |
| LSTR | | | | Smax | | | | 00 58 33.7 | |
| | comp=Z,88nm,1.4s | | | | | | | | |
| **IRK** | **Irkutsk** | **6.74** | **239** | *e*Sg | | | **Sg** | **00 58 26.8** | **-7.2** |
| IRK | | | | Smax | | | | 00 58 33.0 | |
| | comp=Z,158nm,0.4s | | | | | | | | |
| **IVK** | **Ivanovka** | **6.96** | **236** | *e*Pg | | | Pb | 00 57 03.9 | +4.8 |
| IVK | | | | Pmax | | | | 00 57 11.2 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| IVK | | | | *e*Sn | | | **Sn** | **00 57 58.7** | **-1.2** |
| IVK | | | | *e* | | | | 00 58 28.4 | |
| IVK | | | | *e*Sg | | | **Sg** | **00 58 35.0** | **-5.9** |
| IVK | | | | Smax | | | | 00 58 58.9 | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **ARS** | **Arshan** | **7.84** | **243** | *e*PG | | | **Pb** | **00 57 16.5** | **+2.4** |
| **ARS** | **Arshan** | **7.84** | **243** | *e*PN | | | **Pn** | **00 56 54.9** | **+2.3** |
| ARS | | | | *e* | | | | 00 57 15.8 | |
| ARS | | | | max | | | | 00 57 24.1 | |
| | comp=Z,24nm,0.4s | | | | | | | | |
| ARS | | | | *e*Sn | | | **Sn** | **00 58 19.2** | **-2.5** |
| ARS | | | | *e*Sg | | | Sg | 00 59 01.3 | -8.0 |
| ARS | | | | Smax | | | | 00 59 22.3 | |
| | comp=Z,226nm,1.0s | | | | | | | | |
| **ZAK** | **Zakamensk** | **8.46** | **232** | *e*PN | | | **Pn** | **00 57 05.3** | **+4.2** |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **ZAK** | **Zakamensk** | **8.46** | **232** | *e*Pg | | | Pb | 00 57 31.6 | +6.9 |
| ZAK | | | | Pmax | | | | 00 57 49.9 | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| ZAK | | | | *e*Sn | | | **Sn** | **00 58 35.3** | **-1.7** |
| ZAK | | | | *e*Sg | | | Sg | 00 59 21.2 | -7.9 |
| ZAK | | | | *e* | | | | 00 59 31.2 | |
| ZAK | | | | *e* | | | | 00 59 49.4 | |
| ZAK | | | | max | | | | 00 59 54.1 | |
| | comp=Z,61nm,1.1s | | | | | | | | |
| **MOY** | **Mondy** | **8.71** | **245** | *e*PN | | | **Pn** | **00 57 05.7** | **+1.2** |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,15nm,0.5s | | | | | | | | |
| **MOY** | **Mondy** | **8.71** | **245** | *e*Pn | | | **Pn** | **00 57 05.7** | **+1.2** |
| MOY | | | | *e*Pg | | | Pg | 00 57 36.1 | -8.3 |
| MOY | | | | Pmax | | | | 00 57 51.2 | |
| | comp=Z,26nm,1.5s | | | | | | | | |
| MOY | | | | *e*Sn | | | **Sn** | **00 58 40.5** | **-2.6** |
| MOY | | | | *e*Sg | | | Sg | 00 59 27.5 | -10 |
| MOY | | | | Smax | | | | 00 59 50.9 | |
| | comp=Z,79nm,1.1s | | | | | | | | |
| **ORL** | **Orlik** | **8.86** | **252** | *e*PN | | | **Pn** | **00 57 06.4** | **-0.1** |
| **ORL** | **Orlik** | **8.86** | **252** | *e*Pn | | | **Pn** | **00 57 07.4** | **+0.9** |
| ORL | | | | *e*Pg | | | Pg | 00 57 37.0 | -10 |
| ORL | | | | Pmax | | | | 00 57 39.3 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| ORL | | | | *e*Sn | | | **Sn** | **00 58 43.3** | **-3.5** |
| ORL | | | | *e* | | | | 00 59 04.7 | |
| ORL | | | | *e*Sg | | | Sg | 00 59 32.2 | -10 |
| ORL | | | | Smax | | | | 00 59 42.5 | |
| | comp=Z,59nm,1.2s | | | | | | | | |
| ORL | | | | *e* | | | | 00 59 50.4 | |
| **SONM** | **Songino Array** | **9.41** | **212** | Pn | | | **Pn** | **00 57 16.0** | **+2.0** |
| | comp=Z,0.1nm,0.3s,baz=25,slow=13,SNR=5.4 | | | | | | | | |
| SONM | | | | Lg | Lg | | | 00 59 56.7 | |
| | comp=Z,2.2nm,0.3s,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RIZ** | **Raoul Island** | **1.34 349** | P | | **Pn** | **00 59 06.5** | **-1.6** |
| RIZ | | | S | | **Sb** | **00 59 24.6** | **-1.2** |
| **MXZ** | **Matakaoa Point** | **7.74 205** | S | | **Sn** | **01 02 03.6** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **7.93 203** | P | | **Pn** | **01 00 36.1** | **-2.6** |
| WMGZ | | | S | | **Sn** | **01 02 05.7** | **-2.8** |
| **HAZ** | **Te Kaha** | **8.11 207** | P | | **Pn** | **01 00 38.2** | **-2.8** |
| HAZ | | | S | | **Sn** | **01 02 13.1** | **+0.3** |
| **PKGZ** | **Pakihiroa** | **8.11 205** | P | | **Pn** | **01 00 38.8** | **-2.5** |
| PKGZ | | | S | | **Sn** | **01 02 11.0** | **-2.1** |
| **PUZ** | **Puketiti** | **8.21 203** | P | | Pn | 01 00 38.2 | -4.4 |
| PUZ | | | S | | **Sn** | **01 02 11.0** | **-4.5** |
| **RUGZ** | **Raukumara Rang** | **8.33 206** | P | | **Pn** | **01 00 42.5** | **-1.8** |
| RUGZ | | | S | | **Sn** | **01 02 18.4** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **8.40 204** | P | | Pn | 01 00 42.0 | -3.3 |
| TWGZ | | | S | | **Sn** | **01 02 16.3** | **-3.9** |
| **URZ** | **Urewera** | **8.81 208** | Pn | | Pn | 01 00 47.5 | -3.2 |
| | 1.0nm,0.3s,baz=288,slow=4.7,SNR=14 | | | | | | |
| URZ | | | Sn | | **Sn** | **01 02 26.5** | **-3.5** |
| | 5.7nm,0.3s,baz=69,slow=5.7,SNR=3.6 | | | | | | |
| **URZ** | **Urewera** | **8.81 208** | Pn | | **Pn** | **01 00 50.2** | **-0.5** |
| **NMHZ** | **Naumai** | **9.65 207** | P | | **Pn** | **01 00 59.2** | **-3.1** |
| NMHZ | | | S | | **Sn** | **01 02 47.5** | **-3.3** |
| **ARHZ** | **Aropaoanui** | **9.72 205** | P | | **Pn** | **01 01 02.6** | **-0.7** |
| ARHZ | | | S | | **Sn** | **01 02 48.4** | **-4.1** |
| **MCHZ** | **McNeill Hill** | **9.99 206** | P | | Pn | 01 00 58.4 | -8.6 |
| MCHZ | | | S | | **Sn** | **01 02 55.2** | **-4.0** |
| **CKHZ** | **Cape Kidnapper** | **10.04 204** | S | | Sn | 01 02 52.6 | -7.7 |
| **KWHZ** | **Kaweka Forest** | **10.08 207** | P | | Pn | 01 01 03.5 | -4.8 |
| KWHZ | | | S | | **Sn** | **01 02 55.2** | **-6.3** |
| **ETVZ** | **East Tongariro** | **10.14 211** | P | | **Pn** | **01 01 06.0** | **-3.1** |
| **KAHZ** | **Kahuranaki** | **10.23 204** | P | | Pn | 01 01 02.6 | -7.7 |
| KAHZ | | | S | | **Sn** | **01 03 00.2** | **-4.9** |
| **KRHZ** | **Kereru** | **10.29 207** | P | | Pn | 01 01 06.0 | -5.1 |
| **MOVZ** | **Moawhango** | **10.34 210** | P | | Pn | 01 01 06.0 | -5.8 |
| **PNHZ** | **Pukenui** | **10.59 207** | P | | Pn | 01 01 10.4 | -4.8 |
| PNHZ | | | S | | Sn | 01 03 06.4 | -7.4 |
| **WPHZ** | **Waipukurau** | **10.63 205** | P | | Pn | 01 01 06.7 | -9.0 |
| WPHZ | | | S | | Sn | 01 03 06.5 | -8.3 |
| **PRHZ** | **Porangahau** | **10.74 204** | P | | Pn | 01 01 10.9 | -6.3 |
| PRHZ | | | S | | Sn | 01 03 10.6 | -6.8 |
| **MSVF** | **Nonsavu** | **13.36 342** | Pn | | Pn | 01 01 58.0 | +4.8 |
| | 0.5nm,0.3s,baz=170,slow=15,SNR=7.5 | | | | | | |
| MSVF | | | LR | | LR | 01 06 09.6 | |
| | comp=Z,1μm,19.1s,baz=168,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **13.36 342** | *e*P | | **Pn** | **01 01 54.0** | **+0.8** |
| **MSVF** | **Nonsavu** | **13.36 342** | Pn | | **Pn** | **01 01 51.2** | **-2.1** |
| **RPZ** | **Rata Peaks** | **15.89 211** | | | **Pn** | **01 02 24.8** | **-2.3** |
| **OUENC** | **Ouen Island, N** | **16.07 297** | | | **Pn** | **01 02 29.9** | **+0.5** |
| **DZM** | **Mont Dzumac** | **16.57 297** | *e*Pn | | **P** | **01 02 44.4** | **+5.9** |
| | 129nm,1.5s | | | | | | |
| DZM | | | *e*LR | | LR | 01 06 50.0 | |
| | comp=Z,3μm,23.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.57 297** | Pn | | **P** | **01 02 41.3** | **+2.8** |
| | 0.5nm,0.3s,baz=108,slow=17,SNR=7.5 | | | | | | |
| DZM | | | LR | | LR | 01 08 02.2 | |
| | comp=Z,3μm,18.2s,baz=96,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.57 297** | Pn | | **Pn** | **01 02 37.1** | **+1.1** |
| **RAR** | **Rarotonga** | **18.57 64** | LR | | LR | 01 07 38.9 | |
| | comp=Z,778nm,21.2s,baz=188,slow=29 | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.97 261** | P | | Pn | 01 03 22.1 | +4.5 |
| | baz=24 | | | | | | |
| **ARMA** | **Armidale** | **26.44 262** | P | | **P** | **01 04 24.9** | **+4.4** |
| | baz=30,SNR=4.6 | | | | | | |
| **ARMA** | **Armidale** | **26.44 262** | P | | **P** | **01 04 22.4** | **+1.8** |
| **MGCD** | **Mangrove Creek** | **26.61 256** | P | | **P** | **01 04 26.6** | **+4.6** |
| | baz=31,SNR=6.1 | | | | | | |
| **EIDS** | **Eidsvold** | **28.05 273** | P | | **P** | **01 04 37.7** | **+2.8** |
| | baz=32,SNR=3.6 | | | | | | |
| **EIDS** | **Eidsvold** | **28.05 273** | P | | **P** | **01 04 36.2** | **+1.3** |
| **CAN** | **Canberra** | **28.31 251** | P | | **P** | **01 04 39.0** | **+1.7** |
| CAN | | | pmax | | pmax | | |
| | comp=Z,65nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **28.31 251** | P | | **P** | **01 04 39.0** | **+1.7** |
| **PAE** | **Paea** | **28.57 70** | *e*T | | T | 01 33 37.6 | |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **28.61 70** | *e*LR | | LR | 01 11 46.9 | |
| | comp=Z,1μm,24.8s,baz=228 | | | | | | |
| **PPT2** | **Papeete2** | **28.61 70** | *e*T | | T | 01 33 40.7 | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **28.62 70** | LR | | LR | 01 13 06.6 | |
| | comp=Z,352nm,20.7s,baz=200,slow=30 | | | | | | |
| **HNR** | **Honiara** | **29.64 310** | LR | | LR | 01 14 50.5 | |
| | comp=Z,481nm,20.1s,baz=158,slow=33 | | | | | | |
| **RMQ** | **Roma** | **29.73 269** | P | | **P** | **01 04 53.4** | **+3.5** |
| | baz=34,SNR=8.9 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.33 259** | P | | **P** | **01 05 06.7** | **+2.7** |
| | baz=35,SNR=7.2 | | | | | | |
| **VAH** | **Vaihoa** | **31.46 68** | *e*T | | T | 01 37 12.7 | |
| | comp=Z,18nm,0.3s | | | | | | |
| **CTA** | **Charters Tower** | **34.12 279** | P | | **P** | **01 05 30.6** | **+2.0** |
| | comp=Z,15nm,0.7s,baz=102,slow=11,SNR=27 | | | | | | |
| CTA | | | LR | | LR | 01 18 34.6 | |
| | comp=Z,1μm,18.4s,baz=104,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **34.12 279** | P | | **P** | **01 05 29.4** | **+0.8** |
| CTAO | | | pmax | | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **34.12 279** | P | | **P** | **01 05 29.4** | **+0.8** |
| CTAO | | | IAmb | | IAmb | 01 05 43.4 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **34.74 257** | P | | **P** | **01 05 36.2** | **+2.5** |
| | comp=Z,16nm,0.7s,baz=98,slow=10,SNR=36 | | | | | | |
| STKA | | | LR | | LR | 01 18 09.0 | |
| | comp=Z,949nm,19.3s,baz=76,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **34.74 257** | P | | **P** | **01 05 36.2** | **+2.5** |
| | baz=39,SNR=14 | | | | | | |
| **STKA** | **Stephens Creek** | **34.74 257** | P | | **P** | **01 05 34.6** | **+0.8** |
| **MTSU** | **Mount Surprise** | **36.62 281** | P | | **P** | **01 05 50.2** | **+0.1** |
| | baz=40,SNR=12 | | | | | | |
| **HTT** | **Hallett** | **36.75 254** | P | | **P** | **01 05 53.2** | **+2.1** |
| | baz=41,SNR=17 | | | | | | |
| **PMG** | **Port Moresby** | **38.95 295** | LR | | LR | 01 19 33.8 | |
| | comp=Z,462nm,20.1s,baz=321,slow=32 | | | | | | |
| **BBOO** | **Buckleboo** | **39.22 254** | P | | **P** | **01 06 13.4** | **+1.5** |
| | baz=43,SNR=7.9 | | | | | | |
| **BBOO** | **Buckleboo** | **39.22 254** | P | | **P** | **01 06 12.1** | **+0.2** |
| BBOO | | | IAmb | | IAmb | 01 06 15.4 | |
| | comp=Z,78nm,1.6s | | | | | | |
| **COEN** | **Coen** | **39.61 286** | P | | **P** | **01 06 14.7** | **-0.6** |
| **QIS** | **Mount Isa** | **39.63 274** | P | | **P** | **01 06 15.2** | **-0.3** |
| | baz=44,SNR=4.7 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **41.09 66** | *e*LR | | LR | 01 17 32.7 | |
| | comp=Z,763nm,26.0s,baz=250 | | | | | | |
| **AS31** | **Alice Springs** | **43.40 267** | P | | **P** | **01 06 46.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **43.40 267** | P | | **P** | **01 06 46.6** | **+0.2** |
| | comp=Z,5.2nm,0.6s,baz=103,slow=7.5,SNR=43 | | | | | | |
| ASAR | | | PcP | | **PcP** | **01 08 35.6** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=128,slow=3.5,SNR=4.5 | | | | | | |
| **WB2** | **Warramunga Arr** | **44.40 272** | P | | **P** | **01 06 53.9** | **-0.5** |
| WB2 | | | IAmb | | IAmb | 01 06 56.5 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.40 272** | *d* iP | | **P** | **01 06 55.5** | **+1.1** |
| WRAB | | | pmax | | pmax | | |
| | comp=Z,31nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.41 272** | P | | **P** | **01 06 54.5** | **0.0** |
| | comp=Z,15nm,0.8s,baz=113,slow=7.4,SNR=67 | | | | | | |
| WRA | | | ScP | | **ScP** | **01 12 31.1** | **+0.6** |
| | comp=Z,0.6nm,0.7s,baz=109,slow=3.5,SNR=1.8 | | | | | | |
| WRA | | | LR | | LR | 01 24 33.6 | |
| | comp=Z,753nm,18.2s,baz=40,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.41 272** | P | | **P** | **01 06 53.9** | **-0.6** |
| **FORT** | **Forrest** | **46.30 255** | P | | **P** | **01 07 09.3** | **0.0** |
| **WRKA** | **Warakurna** | **47.76 263** | P | | **P** | **01 07 20.1** | **-0.8** |
| | baz=52,SNR=12 | | | | | | |
| **JAY** | **Jayapura** | **48.24 297** | LR | | LR | 01 27 20.0 | |
| | comp=Z,231nm,18.1s,baz=154,slow=36 | | | | | | |
| **MTN** | **Manton Dam** | **50.31 279** | P | | P | 01 07 35.1 | -5.4 |
| | baz=54,SNR=7.1 | | | | | | |
| **KNRA** | **Kununurra** | **51.02 274** | P | | **P** | **01 07 47.0** | **+1.1** |
| KNRA | | | IAmb | | IAmb | 01 08 07.7 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.66 270** | P | | **P** | **01 07 58.1** | **0.0** |
| | comp=Z,5.6nm,0.7s,baz=164,slow=8.8,SNR=13 | | | | | | |
| **CASY** | **Casey** | **55.13 208** | P | | **P** | **01 08 16.3** | **+0.8** |
| CASY | | | IAmb | | IAmb | 01 08 17.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **56.51 264** | P | | **P** | **01 08 25.5** | **-0.5** |
| **MORW** | **Morawa** | **56.77 253** | P | | **P** | **01 08 27.6** | **-0.2** |
| MORW | | | IAmb | | IAmb | 01 08 33.5 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **56.81 315** | LR | | LR | 01 29 44.1 | |
| | comp=Z,218nm,21.1s,baz=110,slow=33 | | | | | | |
| **RPN** | **Rapa Nui** | **59.10 105** | LR | | LR | 01 27 18.8 | |
| | comp=Z,193nm,21.0s,baz=273,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.54 180** | P | | **P** | **01 08 48.7** | **+1.9** |
| | comp=Z,1.8nm,0.3s,baz=273,slow=3.1,SNR=4.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.54 180** | P | | **P** | **01 08 47.6** | **+0.8** |
| **GIRL** | **Giralia** | **60.62 260** | P | | **P** | **01 08 54.7** | **0.0** |
| **BELA** | **Belgrano 2** | **69.58 172** | P | | **P** | **01 09 52.0** | **0.0** |
| BELA | | | IAmb | | IAmb | 01 10 06.7 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **USHA** | **Ushuaia** | **75.61 146** | LR | | LR | 01 35 10.2 | |
| | comp=Z,181nm,19.5s,baz=237,slow=29 | | | | | | |
| **SNAA** | **Sanae** | **77.98 178** | P | | **P** | **01 10 41.8** | **+0.3** |
| **SNAA** | **Sanae** | **77.98 178** | *e*P | | **P** | **01 10 41.8** | **+0.3** |
| SNAA | | | pmax | | pmax | | |
| | comp=Z,673nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **77.98 178** | P | | **P** | **01 10 40.7** | **-0.7** |
| SNAA | | | IAmb | | IAmb | 01 10 52.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **78.12 176** | P | | **P** | **01 10 42.4** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **78.55 325** | P | | **P** | **01 10 46.0** | **+1.0** |
| | comp=Z,0.5nm,0.3s,baz=147,slow=6.8,SNR=1.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **78.55 325** | P | | **P** | **01 10 46.0** | **+1.0** |
| **VNA2** | **Neumayer--Watz** | **78.56 177** | P | | **P** | **01 10 45.2** | **+0.7** |
| | baz=164,slow=4.9 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **78.78 176** | P | | **P** | **01 10 46.1** | **+0.3** |
| **H03S2** | **Juan Fernandez** | **80.12 123** | T | | T | 02 40 11.8 | |
| | baz=234 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.13 123** | T | | T | 02 40 13.4 | |
| | baz=234 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.14 123** | T | | T | 02 40 24.0 | |
| | baz=234 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.31 123** | T | | T | 02 40 33.6 | |
| | baz=242,slow=72,SNR=4.6 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.31 123** | T | | T | 02 40 22.1 | |
| | baz=242,slow=72,SNR=5.3 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.33 123** | T | | T | 02 40 26.2 | |
| | baz=242,slow=72,SNR=8.3 | | | | | | |
| **PLCA** | **Paso Flores** | **82.17 133** | P | | **P** | **01 11 07.7** | **+3.0** |
| | comp=Z,2.7nm,1.0s,baz=257,slow=5.1,SNR=3.1 | | | | | | |
| **KSRS** | **Korea Array** | **84.67 319** | P | | **P** | **01 11 18.2** | **+1.0** |
| | comp=Z,0.4nm,0.3s,baz=126,slow=4.7,SNR=1.9 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **85.03 334** | *e*P | | **P** | **01 11 19.8** | **+1.0** |
| YSS | | | *e* | | | 01 11 26.4 | |
| **YSS** | **Yuzh-Sakhalins** | **85.03 334** | P | | **P** | **01 11 19.0** | **+0.3** |
| **QIZ** | **Qiongzhong** | **85.34 295** | P | | **P** | **01 11 19.2** | **-1.8** |
| QIZ | | | S | | **S** | **01 21 54.1** | **+2.0** |
| QIZ | | | LR | | LR | | |
| | comp=Z,430nm,15.9s | | | | | | |
| QIZ | | | LR | | LR | | |
| | comp=Z,450nm,17.5s | | | | | | |
| QIZ | | | LR | | LR | | |
| | comp=Z,430nm,15.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **86.05 345** | P | | **P** | **01 11 24.1** | **+0.4** |
| PEA0B | | | pmax | | pmax | | |
| | comp=Z,55nm,1.6s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **86.05 345** | P | | **P** | **01 11 24.1** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **86.05 345** | P | | **P** | **01 11 24.0** | **+0.2** |
| | comp=Z,3.0nm,0.7s,baz=159,slow=8.9,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **86.05 345** | P | | **P** | **01 11 24.0** | **+0.2** |
| **GSI** | **Gunungsitoli** | **86.16 274** | P | | **P** | **01 11 25.8** | **+0.6** |
| **ISA** | **Isabella, Lake** | **86.20 44** | P | | **P** | **01 11 26.0** | **+0.9** |
| ISA | | | pmax | | pmax | | |
| | comp=Z,24nm,1.8s | | | | | | |
| **ISA** | **Isabella, Lake** | **86.20 44** | P | | **P** | **01 11 26.0** | **+0.9** |
| ISA | | | IAmb | | IAmb | 01 11 27.6 | |
| | comp=Z,24nm,1.8s | | | | | | |
| **NJ2** | **Nanjing** | **86.58 310** | *e*P | | **P** | **01 11 27.5** | **+0.6** |
| NJ2 | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **GSC** | **Goldstone, Bar** | **86.98 46** | P | | **P** | **01 11 28.6** | **-0.3** |
| GSC | | | pmax | | pmax | | |
| | comp=Z,15nm,1.5s | | | | | | |
| **GSC** | **Goldstone, Bar** | **86.98 46** | P | | **P** | **01 11 28.6** | **-0.3** |
| GSC | | | IAmb | | IAmb | 01 11 31.3 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **QSM** | **Queen of Sheba** | **87.38 45** | P | | **P** | **01 11 30.5** | **-0.2** |
| QSM | | | IAmb | | IAmb | 01 11 33.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.47 326** | P | | **P** | **01 11 31.6** | **+0.7** |
| | comp=Z,2.0nm,0.7s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.47 326** | P | | **P** | **01 11 31.7** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **87.47 326** | P | | **P** | **01 11 31.7** | **+0.8** |
| **LHV** | **Little Huntoon** | **87.92 43** | P | | **P** | **01 11 34.1** | **+0.9** |
| LHV | | | IAmb | | IAmb | 01 11 41.1 | |
| | comp=Z,20nm,1.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.16 43** | P | | **P** | **01 11 35.7** | **+1.0** |
| | comp=Z,1.3nm,0.8s,baz=231,slow=7.3,SNR=8.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.16 43** | P | | **P** | **01 11 33.9** | **-0.8** |
| **Y14A** | **Wickenburg** | **88.52 49** | P | | **P** | **01 11 36.4** | **+0.2** |
| Y14A | | | IAmb | | IAmb | 01 11 39.1 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **TUC** | **Tucson** | **88.98 51** | P | | **P** | **01 11 39.1** | **+0.6** |
| TUC | | | pmax | | pmax | | |
| | comp=Z,17nm,1.7s | | | | | | |
| **TUC** | **Tucson** | **88.98 51** | P | | **P** | **01 11 39.0** | **+0.6** |
| TUC | | | IAmb | | IAmb | 01 11 41.7 | |
| | comp=Z,17nm,1.7s | | | | | | |
| **PRN** | **Pahroc Range** | **89.43 45** | P | | **P** | **01 11 41.0** | **+0.5** |
| PRN | | | IAmb | | IAmb | 01 11 51.4 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **89.83 49** | P | | **P** | **01 11 43.1** | **+0.6** |
| X16A | | | IAmb | | IAmb | 01 11 45.0 | |
| | comp=Z,9.4nm,1.3s | | | | | | |
| **TIA** | **Tai'an** | **90.31 313** | P | | **P** | **01 11 44.9** | **+0.4** |
| TIA | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **CN2** | **Changchun** | **90.46 323** | *e*P | | **P** | **01 11 44.7** | **-0.3** |
| CN2 | | | sP | | pwP | 01 11 51.7 | -0.8 |
| **U15A** | **North Rim** | **90.52 47** | P | | **P** | **01 11 46.3** | **+0.4** |
| U15A | | | IAmb | | IAmb | 01 12 07.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WUAZ** | **Wupatki** | **90.55 48** | P | | **P** | **01 11 46.4** | **+0.5** |
| WUAZ | | | IAmb | | IAmb | 01 11 56.3 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **SZCU** | **Shurtz Canyon** | **90.75 46** | P | | **P** | **01 11 46.0** | **-0.9** |
| SZCU | | | IAmb | | IAmb | 01 12 10.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **KLR** | **Kul'dur** | **91.33 330** | P | | **P** | **01 11 49.2** | **+0.3** |
| | comp=Z,1.7nm,0.6s,baz=139,slow=5.2,SNR=11 | | | | | | |
| **KLR** | **Kul'dur** | **91.33 330** | *i* P | | **P** | **01 11 49.5** | **+0.6** |
| KLR | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **92.22 57** | P | | **P** | **01 11 55.2** | **+1.5** |
| | comp=Z,0.5nm,0.8s,baz=235,slow=4.4,SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.22 57** | P | | **P** | **01 11 52.4** | **-1.4** |
| **LYN** | **LuoYang** | **92.34 309** | *e*P | | **P** | **01 11 53.7** | **-0.3** |
| LYN | | | LR | | LR | | |
| | comp=Z,550nm,14.7s | | | | | | |
| LYN | | | LR | | LR | | |
| | comp=Z,380nm,18.6s | | | | | | |
| **BJI** | **Beijing** | **93.26 315** | P | | **P** | **01 11 58.2** | **+0.2** |
| BJI | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **93.44 51** | *e*P | | **P** | **01 11 59.3** | **0.0** |
| ANMO | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.8s | | | | | | |
| **MA2** | **Magadan** | **93.53 345** | *e*P | | **P** | **01 11 58.6** | **-0.2** |
| MA2 | | | pmax | | pmax | | |
| | comp=Z,12nm,2.8s | | | | | | |
| **PZH** | **PanZhiHua** | **95.65 297** | P | | **P** | **01 12 10.3** | **+0.7** |
| **HHC** | **Hu-ho-hao-te** | **96.57 314** | *e*P | | **P** | **01 12 13.3** | **-0.1** |
| HHC | | | S | | **S** | **01 23 32.6** | **-1.8** |
| HHC | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| HHC | | | LR | | LR | | |
| | comp=Z,530nm,12.8s | | | | | | |
| HHC | | | LR | | LR | | |
| | comp=Z,540nm,12.9s | | | | | | |
| **WMQ** | **Urumqi** | **113.57 308** | *e*PKP | | **PKiKP** | **01 17 21.9** | **+0.1** |
| WMQ | | | LR | | LR | | |
| | comp=Z,490nm,19.5s | | | | | | |
| **MK31** | **Makanchi Array** | **118.11 310** | *i* PKIKP | | **PKPdf** | **01 17 30.4** | **+0.1** |
| **MKAR** | **Makanchi Array** | **118.11 310** | PKP | | **PKPdf** | **01 17 29.6** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=207,slow=0.2,SNR=7.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **118.11 310** | | | **PKPdf** | **01 17 29.5** | **-0.9** |
| **NRIK** | **Noril'sk** | **119.91 336** | *i* PKIKP | | **PKiKP** | **01 17 33.6** | **+0.5** |
| **KURK** | **Kurchatov** | **121.38 314** | *i* PKIKP | | **PKPdf** | **01 17 35.7** | **-0.7** |
| **KURK** | **Kurchatov** | **121.38 314** | PKPdf | | **PKPdf** | **01 17 35.6** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **121.42 314** | PKP | | **PKPdf** | **01 17 35.0** | **-1.5** |
| | comp=Z,1.2nm,0.7s,baz=109,slow=2.0,SNR=11 | | | | | | |
| **KKAR** | **Karatay Array** | **125.42 303** | PKIKP | | **PKPdf** | **01 17 43.6** | **-0.9** |
| **KKAR** | **Karatay Array** | **125.42 303** | PKPdf | | **PKPdf** | **01 17 43.6** | **-0.9** |
| **BVAR** | **Borovoye Array** | **126.74 316** | PKP | | **PKPdf** | **01 17 46.3** | **-0.4** |
| | comp=Z,1.1nm,0.5s,baz=79,slow=7.7,SNR=6.6 | | | | | | |
| **BRVK** | **Borovoye** | **126.80 316** | *i* PKIKP | | **PKPdf** | **01 17 46.6** | **-0.2** |
| **BRVK** | **Borovoye** | **126.80 316** | PKPdf | | **PKPdf** | **01 17 45.9** | **-0.8** |
| **ARU** | **Arti** | **133.41 321** | PKP | | **PKPdf** | **01 17 59.2** | **0.0** |
| | comp=Z,2.0nm,0.4s,baz=320,slow=3.8,SNR=3.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.82 348** | PKP | | **PKPdf** | **01 18 08.4** | **-0.5** |
| | comp=Z,1.8nm,0.7s,baz=72,slow=1.2,SNR=7.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.82 348** | PKIKP | | **PKPdf** | **01 18 08.5** | **-0.4** |
| **ARCES** | **ARCESS Array B** | **138.82 348** | | | **PKPdf** | **01 18 08.5** | **-0.4** |
| **KLMR** | **Klimovskoe** | **141.05 332** | *e*PKIKP | | **PKPdf** | **01 18 12.3** | **-0.9** |
| KLMR | | | pmax | | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KLMR** | **Klimovskoe** | **141.05 332** | *e*PKPdf | | **PKPdf** | **01 18 12.4** | **-0.8** |
| **KLMR** | **Klimovskoe** | **141.05 332** | AMP | | | 01 18 23.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **VRH** | **Novokhopyorsk** | **144.37 317** | *e*PKIKP | | **PKPab** | **01 18 17.0** | **-0.5** |
| VRH | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | |
| **GNI** | **Garni** | **144.42 297** | PKP | | **PKPab** | **01 18 18.2** | **0.0** |
| | comp=Z,3.0nm,0.6s,baz=34,slow=3.9,SNR=3.9 | | | | | | |
| **NCK** | **Nalchik** | **144.99 303** | *i* PKIKP | | **PKPbc** | **01 18 20.6** | **+0.5** |
| **GOF** | **Gofitskoye** | **145.13 306** | *e*PKIKP | | **PKPbc** | **01 18 20.5** | **+0.1** |
| **PUL** | **Pulkovo** | **145.28 335** | *e*PKIKP | | **PKPbc** | **01 18 20.3** | **-0.1** |
| **FIA1** | **FINESS Array S** | **145.41 340** | | | **PKPbc** | **01 18 19.1** | **-1.6** |
| **FINES** | **FINESS Array B** | **145.41 340** | PKPbc | | **PKPbc** | **01 18 19.3** | **-1.4** |
| | comp=Z,9.7nm,0.6s,baz=58,slow=2.9,SNR=86 | | | | | | |
| **LPSR** | **Galich'ya Gora** | **145.43 320** | *e*PKP2 | | **PKPbc** | **01 18 20.2** | **-0.9** |
| LPSR | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **145.46 304** | PKPbc | | **PKPdf** | **01 18 21.4** | **-0.1** |
| | comp=Z,2.7nm,0.7s,baz=206,slow=5.0,SNR=9.9 | | | | | | |
| **OBN** | **Obninsk** | **145.48 325** | PKPbc | | **PKPdf** | **01 18 20.0** | **-1.1** |
| | comp=Z,6.5nm,0.6s,baz=307,slow=2.2,SNR=9.0 | | | | | | |
| **OBN** | **Obninsk** | **145.48 325** | *i* PKIKP | | **PKPdf** | **01 18 20.8** | **-0.3** |
| OBN | | | *e* | | | 01 21 40.8 | |
| OBN | | | pmax | | pmax | | |
| | comp=Z,88nm,1.6s | | | | | | |
| **OBN** | **Obninsk** | **145.48 325** | PKPdf | | **PKPdf** | **01 18 20.1** | **-1.1** |
| **KIV** | **Kislovodsk** | **145.57 304** | *e*PKP2 | | **PKPdf** | **01 18 20.9** | **-0.9** |
| KIV | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **145.57 304** | | | **PKPdf** | **01 18 20.6** | **-1.2** |
| **NEY** | **Neytrino** | **145.65 303** | *i* PKIKP | | **PKPdf** | **01 18 22.8** | **+0.7** |
| **VORR** | **Voronezh** | **145.66 319** | *e*PKIKP | | **PKPdf** | **01 18 21.3** | **-0.3** |
| VORR | | | pmax | | pmax | | |
| | comp=Z,32nm,0.5s | | | | | | |
| **VSU** | **Vasula** | **147.50 336** | *e*PKIKP | | **PKPdf** | **01 18 22.9** | **-1.5** |
| **VSU** | **Vasula** | **147.50 336** | *e*P | | **PKPbc** | **01 18 26.2** | **-0.8** |
| **VSLR** | **Vesyoloye** | **147.55 304** | *e*PKP2 | | **PKPbc** | **01 18 27.3** | **-0.4** |
| **MARD** | **Mardin** | **147.58 292** | | | **PKPdf** | **01 18 27.2** | **+1.8** |
| **MTSE** | **Matsula** | **148.27 339** | *e*P | | **PKPbc** | **01 18 28.2** | **-0.9** |
| **NC303** | **NORSAR Array S** | **148.76 352** | | | **PKPbc** | **01 18 29.1** | **-1.3** |
| **NB2** | **NORSAR Subarra** | **148.96 352** | PKP | | **PKPbc** | **01 18 29.8** | **-1.1** |
| | comp=Z,5.0nm,0.9s,baz=17,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.96 352** | PKPbc | | **PKPbc** | **01 18 29.4** | **-1.5** |
| | comp=Z,2.3nm,0.7s,baz=14,slow=4.2,SNR=7.8 | | | | | | |
| **IDID** | **Didziasalis** | **149.80 332** | *e*P | | **PKiKP** | **01 18 36.7** | **+2.6** |
| **ISAL** | **Salakas** | **149.86 333** | *e*P | | **PKiKP** | **01 18 35.0** | **+0.8** |
| **MNK** | **Minsk** | **149.88 330** | *i* PKIKP | | **PKPdf** | **01 18 24.9** | **-3.5** |
| MNK | | | *i* | | | 01 22 04.1 | |
| MNK | | | *i* | | | 01 25 33.0 | |
| MNK | | | *i* SS | | SS | 01 41 21.5 | -1.3 |
| MNK | | | *i* SSS | | SSS | 01 47 05.8 | |
| MNK | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| MNK | | | pmax | | pmax | | |
| | comp=N,18nm,1.2s | | | | | | |
| MNK | | | pmax | | pmax | | |
| | comp=E,2.0nm,0.9s | | | | | | |
| MNK | | | MLR | | MLR | | |
| | comp=Z,136nm,17.0s | | | | | | |
| MNK | | | MLR | | MLR | | |
| | comp=E,26nm,19.0s | | | | | | |
| MNK | | | MLR | | MLR | | |
| | comp=N,296nm,22.0s | | | | | | |
| **MNK** | **Minsk** | **149.88 330** | *i* LRM | | MLR | 02 26 26.8 | |
| | comp=N,296nm,21.7s | | | | | | |
| **MNK** | **Minsk** | **149.88 330** | *i* PKP | | **PKPdf** | **01 18 24.9** | **-3.5** |
| | comp=E,2.0nm,0.9s | | | | | | |
| **MNK** | **Minsk** | **149.88 330** | *i* PKP |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **9.31 203** | P | | Pn | 01 08 16.6 | -17 |
| | 1.6nm,0.3s,baz=265,slow=5.0,SNR=7.6 | | | | | | |
| URZ | | | S | | Sn | 01 09 54.6 | -22 |
| | 5.4nm,0.3s,baz=73,slow=20,SNR=17 | | | | | | |
| **URZ** | **Urewera** | **9.31 203** | | | **Pn** | **01 08 35.0** | **+1.1** |
| **MSVF** | **Nonsavu** | **12.38 344** | P | | **Pn** | **01 09 17.7** | **+1.7** |
| | 0.2nm,0.3s,baz=193,slow=18,SNR=1.2 | | | | | | |
| MSVF | | | S | | **Sn** | **01 11 29.3** | **-3.0** |
| | 0.6nm,0.3s,baz=159,slow=19,SNR=4.0 | | | | | | |
| **MSVF** | **Nonsavu** | **12.38 344** | | | **Pn** | **01 09 16.1** | **0.0** |
| **CTAO** | **Charters Tower** | **33.39 278** | P | | **P** | **01 12 55.9** | **+1.3** |
| CTAO | | | IAmb | | IAmb | 01 13 12.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **34.33 256** | P | | **P** | **01 13 03.1** | **+0.4** |
| | comp=Z,5.0nm,0.7s,baz=95,slow=12,SNR=5.5 | | | | | | |
| **STKA** | **Stephens Creek** | **34.33 256** | P | | **P** | **01 13 04.4** | **+1.7** |
| **BBOO** | **Buckleboo** | **38.86 253** | P | | **P** | **01 13 41.5** | **+0.3** |
| BBOO | | | IAmb | | IAmb | 01 13 46.1 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **42.84 266** | P | | **P** | **01 14 13.8** | **-0.2** |
| | comp=Z,1.3nm,0.4s,baz=106,slow=7.2,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **42.84 266** | P | | **P** | **01 14 14.8** | **+0.7** |
| **WR0** | **Warramunga Arr** | **43.58 272** | P | | **P** | **01 14 20.1** | **0.0** |
| WR0 | | | IAmb | | IAmb | 01 14 23.7 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.76 272** | P | | **P** | **01 14 22.4** | **+1.0** |
| WB2 | | | IAmb | | IAmb | 01 14 37.0 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.77 272** | P | | **P** | **01 14 22.6** | **+1.0** |
| | comp=Z,2.9nm,0.7s,baz=111,slow=7.9,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.77 272** | P | | **P** | **01 14 23.8** | **+2.3** |
| **WB0** | **Warramunga Arr** | **43.78 272** | P | | **P** | **01 14 22.4** | **+0.7** |
| WB0 | | | IAmb | | IAmb | 01 14 28.3 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **45.92 255** | P | | **P** | **01 14 38.8** | **+0.3** |
| **KNRA** | **Kununurra** | **50.35 274** | P | | **P** | **01 15 12.8** | **-0.1** |
| KNRA | | | IAmb | | IAmb | 01 15 27.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.05 270** | P | | **P** | **01 15 25.7** | **+0.1** |
| | comp=Z,1.0nm,0.6s,baz=160,slow=2.8,SNR=4.2 | | | | | | |
| **VA02** | **Isla de Pascua** | **59.82 106** | P | | **P** | **01 16 19.5** | **-1.4** |
| **QSPA** | **South Pole Qui** | **60.38 180** | P | | **P** | **01 16 24.4** | **-0.1** |
| | comp=Z,3.5nm,0.6s,baz=30,slow=1.8,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **60.38 180** | P | | **P** | **01 16 24.3** | **-0.1** |
| QSPA | | | IAmb | | IAmb | 01 16 35.2 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **H03S2** | **Juan Fernandez** | **81.10 124** | T | | T | 02 49 37.3 | |
| | baz=237 | | | | | | |
| **H03S1** | **Juan Fernandez** | **81.11 124** | T | | T | 02 49 37.6 | |
| | baz=237 | | | | | | |
| **H03S3** | **Juan Fernandez** | **81.11 124** | T | | T | 02 49 36.5 | |
| | baz=237 | | | | | | |
| **H03N3** | **Juan Fernandez** | **81.29 123** | T | | T | 02 49 52.0 | |
| | baz=241,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **81.29 123** | T | | T | 02 49 49.3 | |
| | baz=241,slow=72 | | | | | | |
| **H03N1** | **Juan Fernandez** | **81.30 123** | T | | T | 02 49 50.2 | |
| | baz=241,slow=72 | | | | | | |
| **PETK** | **Petropavlovsk-** | **85.08 346** | P | | **P** | **01 18 51.0** | **+0.7** |
| | comp=Z,3.3nm,0.9s,baz=161,slow=6.1,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **117.10 310** | PKP | | **PKPdf** | **01 24 57.5** | **-2.0** |
| | comp=Z,0.1nm,0.5s,baz=102,slow=1.0,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **144.40 340** | PKP | | **PKPab** | **01 25 48.5** | **0.0** |
| | comp=Z,3.5nm,0.4s,baz=48,slow=4.1,SNR=85 | | | | | | |
| **OBN** | **Obninsk** | **144.44 326** | PKP | | **PKPab** | **01 25 49.3** | **+0.5** |
| | comp=Z,1.6nm,0.3s,baz=64,slow=20,SNR=3.7 | | | | | | |
| **OBN** | **Obninsk** | **144.44 326** | | | PKPbc | 01 25 49.7 | +0.7 |
| **KBZ** | **Khabaz** | **144.47 305** | PKP | | PKPbc | 01 25 50.3 | +0.8 |
| | comp=Z,1.3nm,0.8s,baz=235,slow=20,SNR=2.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **148.04 351** | PKP | | **PKPdf** | **01 25 58.3** | **+1.9** |
| | comp=Z,3.5nm,0.8s,baz=22,slow=2.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.04 351** | PKPbc | | **PKPdf** | **01 25 58.5** | **-1.1** |
| | comp=Z,1.0nm,0.6s,baz=13,slow=4.1,SNR=2.7 | | | | | | |
| **HFS** | **Hagfors** | **148.52 348** | PKPbc | | **PKPdf** | **01 25 59.5** | **+2.3** |
| | comp=Z,2.9nm,0.7s,baz=300,slow=1.2,SNR=2.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.57 323** | PKPbc | | **PKPbc** | **01 26 05.2** | **-0.9** |
| | comp=Z,1.0nm,0.5s,baz=54,slow=2.6,SNR=6.1 | | | | | | |
| AKASG | | | PKPab | | **PKPab** | **01 26 12.6** | **-0.5** |
| | comp=Z,3.3nm,0.6s,baz=48,slow=2.8,SNR=13 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.57 323** | | | **PKPbc** | **01 26 05.5** | **-0.6** |
| **MMAI** | **Mount Meron Ar** | **151.06 285** | PKPbc | | **PKPbc** | **01 26 07.8** | **-0.1** |
| | comp=Z,2.4nm,0.5s,baz=74,slow=7.6,SNR=11 | | | | | | |
| MMAI | | | PKPab | | **PKPab** | **01 26 15.2** | **-0.7** |
| | comp=Z,2.7nm,0.5s,baz=74,slow=6.2,SNR=12 | | | | | | |
| **EIL** | **Elat** | **151.12 278** | PKPbc | | **PKPbc** | **01 26 07.7** | **-0.5** |
| | comp=Z,1.8nm,0.6s,baz=27,slow=9.0,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.51 180** | PKPab | | **PKPab** | **01 27 06.9** | **-2.5** |
| | comp=Z,0.3nm,0.5s,baz=194,slow=4.2,SNR=4.5 | | | | | | |

*IDC **04** 01:08:11.2±0.8,30°.34S×177°.72W,h0km,mb4.5/9, mb1 4.6/10,mb1mx4.4/38,mbtmp4.5/10,ML4.3/1,MS4.0/4, Ms1 4.0/4,ms1mx3.4/59,Error ellipse: s-maj=23.3km s-min=16.2km az=102.0*

*NEIC **04** 01:08:14.9±2.0,30°.31S±0°.05×177°.7W±0°.1,h10km±1km, mb4.7/13,Error ellipse: s-maj=20.0km s-min=7.5km az=76.0*

**ISC 04 01:08:13.1±0.6,30°.38S±0°.05×177°.7W±0°.1,h10km,n55, σ1°68/57,mb4.5/13,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.14 350** | | Pn | | **Pg** | **01 08 33.9** | **-1.2** |
| | 1µm,0.3s,baz=68,slow=10,SNR=13 | | | | | | | |
| RAO | | | | Sn | | **Sb** | **01 08 49.5** | **-0.4** |
| | 3µm,0.3s,baz=90,slow=20,SNR=9.8 | | | | | | | |
| **RAO** | **Raoul Island** | **1.14 350** | | Pn | | **Pn** | **01 08 36.4** | **+1.1** |
| RAO | | | | Sn | | **Sn** | **01 08 51.2** | **+0.3** |
| **URZ** | **Urewera** | **8.96 207** | | Pn | | **Pn** | **01 10 20.2** | **-2.3** |
| | 3.2nm,0.3s,baz=9.1,slow=19,SNR=2.5 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **01 11 58.1** | **-5.3** |
| | 10nm,0.3s,baz=86,slow=22,SNR=8.1 | | | | | | | |
| **URZ** | **Urewera** | **8.96 207** | | | | **Pn** | **01 10 25.6** | **+3.1** |
| **SNZO** | **South Karori** | **12.52 207** | | Pn | | **Pn** | **01 11 14.1** | **+2.8** |
| **PLWZ** | **Palliser** | **12.54 205** | | Pn | | **Pn** | **01 11 14.7** | **+3.1** |
| **MSVF** | **Nonsavu** | **13.18 342** | | LR | | LR | 01 15 47.1 | |
| | comp=Z,514nm,18.6s,baz=148,slow=35 | | | | | | | |
| **LTZ** | **Lake Taylor** | **14.76 210** | | Pn | | **Pn** | **01 11 45.0** | **+3.1** |
| **OXZ** | **Oxford** | **15.30 210** | | Pn | | **Pn** | **01 11 52.6** | **+3.5** |
| OXZ | | | | IAmb | | IAmb | 01 11 55.6 | |
| | comp=Z,26nm,0.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.46 296** | | LR | | LR | 01 17 21.4 | |
| | comp=Z,688nm,19.1s,baz=104,slow=34 | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.46 296** | | | | **Pn** | **01 12 06.4** | **+2.1** |
| DZM | | | | IAmb | | IAmb | 01 12 15.4 | |
| | comp=Z,23nm,1.0s | | | | | | | |
| **ODZ** | **Otahua Downs** | **17.28 209** | | Pn | | **Pn** | **01 12 14.9** | **+0.5** |
| **RAR** | **Rarotonga** | **18.52 65** | | LR | | LR | 01 17 27.7 | |
| | comp=Z,405nm,19.7s,baz=183,slow=30 | | | | | | | |
| **EIDS** | **Eidsvold** | **28.01 273** | | P | | **P** | **01 14 05.3** | **+0.9** |
| EIDS | | | | IAmb | | IAmb | 01 14 12.1 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **CTA** | **Charters Tower** | **34.06 279** | | P | | **P** | **01 14 58.7** | **+0.9** |
| | comp=Z,15nm,0.6s,baz=107,slow=10 | | | | | | | |
| CTA | | | | LR | | LR | 01 27 37.7 | |
| | comp=Z,269nm,18.7s,baz=93,slow=34 | | | | | | | |
| **CTAO** | **Charters Tower** | **34.06 279** | | P | | **P** | **01 14 58.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **34.75 257** | | P | | **P** | **01 15 04.1** | **+0.5** |
| | comp=Z,13nm,0.7s,baz=88,slow=10,SNR=17 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.75 257** | | P | | **P** | **01 15 04.5** | **+0.8** |
| STKA | | | | IAmb | | IAmb | 01 15 11.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.23 254** | | P | | **P** | **01 15 41.6** | **-0.2** |
| BBOO | | | | IAmb | | IAmb | 01 15 47.9 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **43.38 267** | | P | | **P** | **01 16 15.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **43.38 267** | | P | | **P** | **01 16 14.7** | **-1.4** |
| | comp=Z,3.7nm,0.5s,baz=106,slow=7.0,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.38 267** | | P | | **P** | **01 16 16.8** | **+0.7** |
| **WB2** | **Warramunga Arr** | **44.36 272** | | P | | **P** | **01 16 23.3** | **-0.6** |
| WB2 | | | | IAmb | | IAmb | 01 16 29.5 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.37 272** | | P | | **P** | **01 16 21.8** | **-2.2** |
| | comp=Z,8.2nm,0.6s,baz=111,slow=7.6,SNR=15 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.37 272** | | P | | **P** | **01 16 23.4** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.39 272** | | P | | **P** | **01 16 23.5** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | 01 16 29.4 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.63 270** | | P | | **P** | **01 17 27.4** | **-0.3** |
| | comp=Z,3.0nm,0.7s,baz=148,slow=9.6,SNR=7.7 | | | | | | | |
| **CASY** | **Casey** | **55.28 208** | | P | | **P** | **01 17 46.0** | **-0.3** |
| **QSPA** | **South Pole Qui** | **59.73 180** | | P | | **P** | **01 18 18.5** | **+0.6** |
| | comp=Z,1.2nm,0.3s,baz=3.5,slow=2.3,SNR=6.8 | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.73 180** | | P | | **P** | **01 18 19.5** | **+1.6** |
| **VNA3** | **Neumayer Olymp** | **78.30 176** | | P | | **P** | **01 20 13.1** | **+0.1** |
| **VNA2** | **Neumayer--Watz** | **78.74 177** | | P | | **P** | **01 20 15.2** | **-0.2** |
| | baz=190,slow=2.9 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **78.97 176** | | P | | **P** | **01 20 18.7** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **85.86 345** | | P | | **P** | **01 20 53.5** | **+0.8** |
| | comp=Z,2.3nm,0.6s,baz=164,slow=11,SNR=2.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **85.86 345** | | P | | **P** | **01 20 52.7** | **0.0** |
| **NVAR** | **Mina Array Bea** | **88.04 43** | | P | | **P** | **01 21 04.2** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=229,slow=8.2,SNR=3.5 | | | | | | | |
| **KLR** | **Kul'dur** | **91.16 330** | | P | | **P** | **01 21 16.1** | **-1.9** |
| | comp=Z,1.3nm,0.7s,baz=171,slow=6.7,SNR=5.4 | | | | | | | |
| **MK31** | **Makanchi Array** | **117.97 310** | | | | **PKPdf** | **01 26 59.1** | **-0.8** |
| **MKAR** | **Makanchi Array** | **117.97 310** | | PKP | | **PKPdf** | **01 26 58.4** | **-1.5** |
| | comp=Z,0.5nm,0.7s,baz=195,slow=1.4,SNR=9.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **118.20 318** | | PKP | | **PKPdf** | **01 26 58.3** | **-1.7** |
| | comp=Z,0.2nm,0.3s,baz=268,slow=0.4,SNR=1.7 | | | | | | | |
| **KKAR** | **Karatay Array** | **125.29 304** | | | | **PKPdf** | **01 27 14.3** | **+0.2** |
| **BRVK** | **Borovoye** | **126.65 316** | | | | **PKPdf** | **01 27 16.3** | **0.0** |
| **ARCES** | **ARCESS Array B** | **138.63 348** | | PKhKP | | PKPpre | 01 27 30.2 | |
| | comp=Z,1.7nm,0.8s,baz=54,slow=2.1,SNR=4.9 | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | **01 27 37.0** | **-1.4** |
| | comp=Z,3.6nm,0.9s,baz=0.0,slow=0.3,SNR=5.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.22 340** | | PKPbc | | **PKPbc** | **01 27 47.5** | **-2.5** |
| | comp=Z,9.9nm,0.5s,baz=56,slow=3.8,SNR=28 | | | | | | | |
| **KBZ** | **Khabaz** | **145.33 304** | | PKPbc | | **PKPbc** | **01 27 50.3** | **-0.6** |
| | comp=Z,3.0nm,0.9s,baz=235,slow=1.0,SNR=7.2 | | | | | | | |
| **NC303** | **NORSAR Array S** | **148.57 352** | | PKPdf | | **PKPdf** | **01 27 56.9** | **+0.9** |
| **NB2** | **NORSAR Subarra** | **148.77 352** | | PKP | | **PKPbc** | **01 28 00.2** | **0.0** |
| | comp=Z,4.3nm,0.7s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **148.77 352** | | PKPbc | | **PKPbc** | **01 27 59.9** | **-0.3** |
| | comp=Z,2.5nm,0.7s,baz=16,slow=4.4,SNR=7.7 | | | | | | | |
| **HFS** | **Hagfors** | **149.28 349** | | PKPbc | | **PKPbc** | **01 28 01.0** | **-0.5** |
| | comp=Z,3.7nm,0.6s,baz=31,slow=3.5,SNR=8.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.45 323** | | PKPbc | | **PKPbc** | **01 28 06.4** | **-0.5** |
| | comp=Z,2.1nm,0.5s,baz=46,slow=2.7,SNR=11 | | | | | | | |
| AKASG | | | | PKPab | | **PKPab** | **01 28 14.6** | **-0.7** |
| | comp=Z,10nm,0.6s,baz=47,slow=2.7,SNR=21 | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.45 323** | | PKPdf | | **PKPdf** | **01 28 01.1** | **+0.2** |
| **BRTR** | **Keskin Array B** | **152.83 299** | | PKPbc | | **PKPbc** | **01 28 10.2** | **-0.4** |
| | comp=Z,1.7nm,0.8s,baz=129,slow=5.4,SNR=2.9 | | | | | | | |
| BRTR | | | | PKPab | | **sPKPbc** | **01 28 18.1** | **+4.5** |
| | comp=Z,3.3nm,0.6s,baz=119,slow=4.4,SNR=6.8 | | | | | | | |
| **CLL** | **Collm** | **157.63 342** | | *e*PKPab | | **PKPab** | **01 28 42.0** | **+0.5** |
| **GERES** | **GERESS Array B** | **159.62 338** | | PKPab | | **PKPab** | **01 28 50.0** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=66,slow=5.5,SNR=1.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.84 178** | | PKPab | | **PKPab** | **01 29 03.9** | **-1.1** |
| | comp=Z,1.0nm,0.8s,baz=192,slow=2.9,SNR=5.2 | | | | | | | |

*NNC **04** 01:11:45.6±5.2,38°.40N×72°.73E,h0km,mb4.5,mpv4.1, Error ellipse: s-maj=41.0km s-min=27.8km az=166.0*

*SOME **04** 01:11:50.4,39°.05N×73°.32E,h10km*

*KRNET **04** 01:11:52.7±0.1,39°.10N×73°.60E,mb3.6*

**ISC 04 01:11:58.4±2.0,39°.38N±0°.07×73°.18E±0°.04,h3km±12km, n26,σ1°73/52,10C-10D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **1.07 276** | | ⇑*i*P | | **Pn** | **01 12 19.6** | **-1.0** |
| | baz=86 | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sn** | **01 12 38.3** | **+2.1** |
| | baz=86 | | | | | | | |
| **OHH** | **Osh** | **1.18 345** | | ⇑*i*P | | **Pg** | **01 12 21.0** | **0.0** |
| | baz=36 | | | | | | | |
| OHH | | | | ⇑*i*S | | **Sn** | **01 12 41.2** | **+2.6** |
| | baz=36 | | | | | | | |
| **BTK** | **Batken** | **1.94 291** | | ⇓*i*P | | **Pn** | **01 12 32.0** | **-0.4** |
| | baz=95 | | | | | | | |
| BTK | | | | ⇓*i*S | | **Sg** | **01 13 01.3** | **+0.5** |
| | baz=95 | | | | | | | |
| **ARK** | **Arkit** | **2.58 339** | | ⇓*e*P | | **Pn** | **01 12 40.7** | **-0.6** |
| | baz=36 | | | | | | | |
| ARK | | | | ⇓*i*S | | **Sb** | **01 13 16.0** | **-1.7** |
| | baz=36 | | | | | | | |
| **ARLS** | **Aral** | **2.62 19** | | ⇓*i*P | | **Pn** | **01 12 38.6** | **-3.2** |
| | baz=11 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **01 13 12.3** | **-2.0** |
| | baz=11 | | | | | | | |
| **TRKS** | **Terek-Say** | **2.65 325** | | ⇑*i*P | | **Pn** | **01 12 41.2** | **-1.0** |
| | baz=22 | | | | | | | |
| TRKS | | | | ⇑*i*S | | **Sn** | **01 13 16.5** | **+1.5** |
| | baz=22 | | | | | | | |
| **MNAS** | **Manas** | **3.14 351** | | ⇓*i*P | | **Pn** | **01 12 47.4** | **-1.6** |
| | baz=47 | | | | | | | |
| MNAS | | | | ⇓*i*S | | **Sn** | **01 13 28.8** | **+1.7** |
| | baz=47 | | | | | | | |
| **MRKS** | **Merke** | **3.36** | **1** | *e*P | | **Pb** | **01 12 58.3** | **-0.4** |
| | 18nm,0.7s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **01 13 47.0** | **+0.7** |
| | 18nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.40** | **17** | ⇑P | | **Pn** | **01 12 53.1** | **+0.6** |
| | 23nm,0.5s | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **01 13 48.1** | **+0.5** |
| | 52nm,0.9s | | | | | | | |
| **IUG** | **Iuzhnay** | **3.65 320** | | *e*P | | **Pb** | **01 13 03.7** | **+0.1** |
| | 2µm,0.6s | | | | | | | |
| IUG | | | | *e*S | | **Sg** | **01 13 56.6** | **+0.9** |
| | 146nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.98** | **27** | ⇓P | | **Pn** | **01 13 02.1** | **+1.6** |
| | 17nm,0.9s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sg** | **01 14 02.4** | **-3.7** |
| | 29nm,0.9s | | | | | | | |
| **SGDS** | **Sogindy** | **4.21** | **15** | *e*P | | **Pb** | **01 13 14.5** | **+1.4** |
| | 6.3nm,0.6s | | | | | | | |
| SGDS | | | | *e*S | | **Sg** | **01 14 15.6** | **+2.1** |
| | 11nm,0.6s | | | | | | | |
| **KST** | **Kastek** | **4.22** | **29** | *e*P | | **Pb** | **01 13 13.2** | **0.0** |
| | 8.2nm,0.7s | | | | | | | |
| KST | | | | *e*S | | **Sg** | **01 14 13.7** | **-0.1** |
| | 25nm,0.7s | | | | | | | |
| **KK09** | **Karatay Array** | **4.25 332** | | ⇑P | | **Pn** | **01 13 04.0** | **0.0** |
| | 12nm,0.3s,baz=164,slow=16 | | | | | | | |
| KK09 | | | | ⇑S | | **Sb** | **01 14 01.4** | **-4.0** |
| | 14nm,0.6s,baz=159,slow=27 | | | | | | | |
| **DGS** | **Degeres** | **4.32** | **26** | *e*P | | **Pb** | **01 13 15.9** | **+0.9** |
| | 12nm,0.4s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **01 14 17.9** | **+0.7** |
| | 18nm,0.7s | | | | | | | |
| **BRLS** | **Borolday** | **4.43 326** | | *e*P | | **Pb** | **01 13 16.5** | **-0.3** |
| | 8.9nm,0.5s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **01 14 18.6** | **-2.0** |
| | 12nm,0.4s | | | | | | | |
| **MTBS** | **Maitube** | **4.47** | **32** | *e*P | | **Pb** | **01 13 17.8** | **+0.2** |
| | 9.9nm,0.6s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **01 14 21.1** | **-1.0** |
| | 14nm,0.8s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.63** | **37** | *e*P | | **Pb** | **01 13 20.9** | **+0.4** |
| | 7.0nm,0.5s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **01 14 26.4** | **-0.6** |
| | 10nm,0.7s | | | | | | | |
| **KRBS** | **Karabastau** | **4.70** | **23** | *e*P | | **Pb** | **01 13 22.9** | **+1.4** |
| | 10.0nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **01 14 30.2** | **+1.0** |
| | 14nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **4.77** | **36** | *e*P | | **Pb** | **01 13 24.5** | **+1.8** |
| | 7.2nm,0.5s | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **01 14 32.2** | **+0.6** |
| | 19nm,1.0s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.86** | **36** | *e*P | | **Pb** | **01 13 26.3** | **+2.1** |
| | 10nm,0.6s | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **01 14 35.6** | **+1.3** |
| | 45nm,1.3s | | | | | | | |
| **KTBS** | **Karatobe** | **5.06** | **30** | *e*P | | **Pb** | **01 13 29.6** | **+2.0** |
| | 6.8nm,0.7s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **01 14 41.6** | **+0.7** |
| | 28nm,1.4s | | | | | | | |
| **KUU** | **Kurty** | **5.09** | **27** | *e*P | | **Pb** | **01 13 29.9** | **+1.8** |
| | 3.2nm,0.3s | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **01 14 41.8** | **0.0** |
| | 16nm,0.8s | | | | | | | |
| **SATY** | **Saty** | **5.39** | **45** | *e*P | | **Pb** | **01 13 33.5** | **+0.3** |
| | 13nm,1.0s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **01 14 48.0** | **-3.3** |
| | 17nm,2.0s | | | | | | | |
| **BTLS** | **Baital** | **5.69** | **6** | *e*P | | **Pb** | **01 13 42.1** | **+3.8** |
| | 1.7nm,0.6s | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **01 15 03.0** | **+1.9** |
| | 4.2nm,0.8s | | | | | | | |
| **ARXS** | **Arharly** | **5.95** | **34** | *e*P | | **Pb** | **01 13 45.2** | **+2.5** |
| | 3.9nm,0.5s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **01 15 08.4** | **-0.9** |
| | 8.7nm,0.5s | | | | | | | |

*IDC **04** 01:13:23.4±1.3,35°.43N×3°.63W,h0km,mb3.4/3,mb1 3.5/5, mb1mx3.2/59,mbtmp3.3/5,ML3.1/2,Error ellipse:*

*s-maj=38.3km s-min=13.4km az=99.0*

*SFS **04** 01:13:24.0,35°.60N×3°.70W,ML2.9,ALBORAN SUR*

*INMG **04** 01:13:24.6±1.3,35°.58N×3°.79W,h0km,mb4.1,ML2.6,Error ellipse: s-maj=2.5km s-min=2.1km az=30.0*

*CNRM **04** 01:13:24.0,35°.56N×3°.75W,h24km,ml3.4*

*IGIL **04** 01:13:26.0,35°.60N×3°.79W,h0km,ML2.6*

**ISC 04 01:13:24.6±1.1,35°.51N±0°.03×3°.76W±0°.02,h15km±8km, n62,σ1°50/88,mb3.4/3,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33 207** | | P | | **Pg** | **01 13 31.5** | **+0.1** |
| **PALE** | **Palemas** | **0.33 207** | | P | | **Pg** | **01 13 31.3** | **-0.1** |
| PALE | | | | S | | **Sb** | **01 13 36.5** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.68 114** | | P | | **Pb** | **01 13 39.0** | **+0.7** |
| **GOG** | **Mont Gurugu** | **0.68 114** | | P | | **Pg** | **01 13 38.0** | **+0.1** |
| GOG | | | | S | | **Sg** | **01 13 47.3** | **+0.2** |
| **AKLM** | **AKL** | **1.00 185** | | P | | **Pn** | **01 13 45.0** | **+0.9** |
| **AKLM** | **AKL** | **1.00 185** | | P | | **Pg** | **01 13 43.9** | **-0.1** |
| AKLM | | | | S | | **Sb** | **01 13 56.5** | **-0.1** |
| **CHAS** | **Isla Isabel II** | **1.13 106** | | P | | **Pn** | **01 13 44.4** | **-1.4** |
| CHAS | | | | S | | **Sb** | **01 13 58.7** | **-1.6** |
| **SMIR** | **Smir Dam** | **1.34 278** | | P | | **Pg** | **01 13 50.0** | **-0.3** |
| **SMIR** | **Smir Dam** | **1.34 278** | | P | | **Pn** | **01 13 46.0** | **-2.7** |
| SMIR | | | | S | | **Sn** | **01 14 04.6** | **-1.5** |
| **CHEFC** | **Chefchaouen** | **1.36 253** | | P | | **Pn** | **01 13 49.2** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.36 253** | | P | | **Pn** | **01 13 49.0** | **0.0** |
| CHEFC | | | | S | | **Sg** | **01 14 08.2** | **-0.2** |
| **EMAL** | **Malaga-Limoner** | **1.36 337** | | P | | **Pn** | **01 13 48.7** | **-0.4** |
| EMAL | | | | S | | **Sn** | **01 14 05.5** | **-1.3** |
| **CEU** | **Ceuta** | **1.37 287** | | P | | **Pn** | **01 13 46.2** | **-2.9** |
| **JBK** | **JBK** | **1.52 140** | | P | | **Pn** | **01 13 50.5** | **-1.0** |
| **JBK** | **JBK** | **1.52 140** | | P | | **Pn** | **01 13 50.5** | **-1.0** |
| JBK | | | | S | | **Sn** | **01 14 10.2** | **-0.9** |
| **SICH** | **Sidi Chahed** | **1.90 223** | | S | | Sn | 01 14 05.0 | -15 |
| **SICH** | **Sidi Chahed** | **1.90 223** | | P | | **Pb** | **01 13 57.5** | **-1.4** |
| **LCRM** | **LCR** | **2.03 207** | | P | | **Pn** | **01 13 59.0** | **+0.6** |
| **LCRM** | **LCR** | **2.03 207** | | P | | **Pn** | **01 13 58.7** | **+0.3** |
| LCRM | | | | S | | **Sb** | **01 14 25.1** | **-1.3** |
| **IFR** | **Ifrane** | **2.29 210** | | P | | **Pn** | **01 14 01.6** | **-0.3** |
| IFR | | | | S | | **Sn** | **01 14 28.2** | **-1.7** |
| **MD31** | **MD31** | **2.76 198** | | P | | **Pn** | **01 14 08.7** | **+0.3** |
| **MDT** | **Midelt** | **2.78 195** | | Pn | | **Pn** | **01 14 09.0** | **+0.4** |
| | 2.4nm,0.3s,baz=173,slow=17,SNR=77 | | | | | | | |
| MDT | | | | Sn | | **Sn** | **01 14 41.5** | **-0.4** |
| | 4.6nm,0.3s,baz=201,slow=24,SNR=6.5 | | | | | | | |
| MDT | | | | Lg | | Lg | 01 14 49.8 | |
| | 7.1nm,0.3s,baz=54,slow=8.3,SNR=5.7 | | | | | | | |
| **MDT** | **Midelt** | **2.78 195** | | P | | **Pn** | **01 14 09.4** | **+0.8** |
| **MDT** | **Midelt** | **2.78 195** | | P | | **Pn** | **01 14 08.8** | **+0.2** |
| **TDRA** | **Tendrara** | **2.85 149** | | P | | **Pn** | **01 14 11.0** | **+1.4** |
| **TDRA** | **Tendrara** | **2.85 149** | | P | | **Pn** | **01 14 09.6** | **0.0** |
| **CART** | **Cartagena** | **3.04 46** | | P | | **Pn** | **01 14 09.6** | **-2.4** |
| CART | | | | S | | **Sn** | **01 14 44.9** | **-3.2** |
| **ZHG** | **ZHG** | **3.15 230** | | P | | **Pn** | **01 14 14.0** | **+0.3** |
| **ZHG** | **ZHG** | **3.15 230** | | P | | **Pn** | **01 14 13.4** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.71 302** | | *e*Pn | | **Pn** | **01 14 21.6** | **+0.3** |
| PVAQ | | | | *e*Sn | | **Sn** | **01 15 03.6** | **-1.1** |
| PVAQ | | | | A | | A | 01 15 08.4 | |
| | 12nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71 302** | | P | | **Pn** | **01 14 21.6** | **+0.3** |
| **PVAQ** | **Vaqueiros** | **3.71 302** | | P | | **Pn** | **01 14 21.6** | **+0.3** |
| PVAQ | | | | S | | **Sn** | **01 15 02.5** | **-2.3** |
| **PBDV** | **Barranco-do-Ve** | **3.79 298** | | *e*Pn | | **Pn** | **01 14 22.6** | **+0.2** |
| PBDV | | | | *e*Sn | | **Sn** | **01 15

comp=Z,12nm,1.3s
**WB2 Warramunga Arr 43.90 270** P **P** **01 22 37.2 +1.1**
WB2 IAmb IAmb 01 22 40.7
comp=Z,7.9nm,1.1s
**WRA Warramunga Arr 43.91 270** P **P** **01 22 37.0 +0.8**
comp=Z,1.2nm,0.3s,baz=110,slow=8.1,SNR=37
**WRA Warramunga Arr 43.91 270** P **P** **01 22 35.7 -0.5**
**WB0 Warramunga Arr 43.92 270** P **P** **01 22 35.8 -0.4**
WB0 IAmb IAmb 01 22 55.3
comp=Z,16nm,1.4s
**MKAR Makanchi Array 116.26 311** PKP **PKPdf** **01 33 12.1 0.0**
comp=Z,0.2nm,0.6s,baz=94,slow=2.1,SNR=1.9
**MKAR Makanchi Array 116.26 311** **PKPdf** **01 33 12.3 +0.2**
**ARCES ARCESS Array B 136.45 348** PKP **PKPdf** **01 33 50.9 +1.1**
comp=Z,2.4nm,0.9s,baz=26,slow=2.3,SNR=3.6
**FINES FINESS Array B 143.07 341** PKP **PKPdf** **01 34 02.9 +0.9**
comp=Z,2.6nm,0.3s,baz=51,slow=4.6,SNR=66
**KBZ Khabaz 143.75 306** PKP **PKPdf** **01 34 04.9 +1.1**
comp=Z,0.8nm,0.7s,baz=90,slow=8.1,SNR=1.6
**NB2 NORSAR Subarra146.60 352** PKP **PKiKP** **01 34 13.2 +0.6**
comp=Z,1.3nm,0.6s,baz=17,slow=4.3
**NOA NORSAR Array B 146.60 352** PKPbc **PKiKP** **01 34 12.8 +0.2**
comp=Z,0.5nm,0.6s,baz=18,slow=4.1,SNR=1.9
**AKASG Malin Array Be 149.47 325** PKPbc **PKiKP** **01 34 19.8 +1.0**
comp=Z,0.4nm,0.3s,baz=46,slow=3.5,SNR=4.9

*INMG **04** 01:15:12.7±1.2,35°.51N×3°.76W, h3km±4km, ML2.1, Error ellipse: s-maj=2.6km s-min=2.5km az=148.0*
*CNRM **04** 01:15:12.4,35°.53N×3°.75W, h16km, ml2.8*
*SFS **04** 01:15:12.0,35°.50N×3°.80W, ML2.0, ALBORAN SUR*
**ISC 04 01:15:11.7±1.1,35°.53N±0°.03×3°.71W±0°.03, h13km±9km, n19, σ1º17/33, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.37** | **210** | P | | **Pg** | **01 15 18.9** | **-0.1** |
| PALE | | | | S | | **Sg** | **01 15 24.2** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.66** | **118** | P | | **Pg** | **01 15 25.7** | **+1.1** |
| GOG | | | | S | | **Sb** | **01 15 36.0** | **+1.7** |
| **AKLM** | **AKL** | **1.03** | **187** | P | | **Pg** | **01 15 30.6** | **-1.0** |
| AKLM | | | | S | | **Sn** | **01 15 46.8** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.10** | **108** | P | | **Pb** | **01 15 31.4** | **-1.2** |
| CHAS | | | | S | | **Sg** | **01 15 45.8** | **-1.5** |
| **EMAL** | **Malaga-Limoner** | **1.35** | **335** | P | | **Pn** | **01 15 36.3** | **-0.1** |
| EMAL | | | | S | | **Sb** | **01 15 53.9** | **-0.3** |
| **SMIR** | **Smir Dam** | **1.37** | **277** | P | | **Pb** | **01 15 37.7** | **+0.5** |
| SMIR | | | | S | | **Sg** | **01 15 56.0** | **+0.3** |
| **CHEFC** | **Chefchaouen** | **1.40** | **253** | P | | **Pn** | **01 15 36.1** | **-0.9** |
| CHEFC | | | | S | | **Sg** | **01 15 56.8** | **+0.1** |
| **LCRM** | **LCR** | **2.07** | **207** | P | | **Pn** | **01 15 47.9** | **+1.6** |
| LCRM | | | | S | | **Sn** | **01 16 13.4** | **+1.2** |
| **IFR** | **Ifrane** | **2.33** | **211** | P | | **Pn** | **01 15 48.9** | **-1.0** |
| IFR | | | | S | | **Sn** | **01 16 15.2** | **-3.2** |
| **MD31** | **MD31** | **2.80** | **198** | P | | **Pn** | **01 15 56.6** | **+0.3** |
| MD31 | | | | S | | **Sn** | **01 16 30.0** | **0.0** |
| **MDT** | **Midelt** | **2.81** | **196** | P | | **Pn** | **01 15 56.7** | **+0.2** |
| MDT | | | | S | | **Sn** | **01 16 31.5** | **+1.1** |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | *e*Pn | | **Pn** | **01 16 10.0** | **+1.1** |
| PVAQ | | | | *e*Sn | | **Sn** | **01 16 51.3** | **-1.4** |
| PVAQ | | | | A | | A | 01 17 00.0 | |
| | 4.1nm,0.6s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **298** | *e*Pn | | **Pn** | **01 16 10.3** | **+0.2** |
| **PCVE** | **Castro Verde** | **4.06** | **302** | *e*Sn | | **Sn** | **01 17 01.0** | **0.0** |
| PCVE | | | | A | | A | 01 17 06.6 | |
| | 3.7nm,0.5s | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*Pn | | **Pn** | **01 16 17.4** | **+0.7** |
| **PESTR** | **Estremoz** | **4.54** | **318** | *e*Sn | | **Sn** | **01 17 11.2** | **-1.7** |
| **EVO** | **Evora** | **4.56** | **312** | *e*Pn | | **Pn** | **01 16 21.6** | **+1.2** |
| EVO | | | | *e*Sn | | **Sn** | **01 17 13.4** | **+0.2** |
| EVO | | | | A | | A | 01 17 16.0 | |
| | 2.4nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | | **Pn** | **01 16 21.8** | **+0.3** |
| PNCL | | | | *e*Sn | | **Sn** | **01 17 14.2** | **-1.1** |
| PNCL | | | | A | | A | 01 17 21.2 | |
| | 2.4nm,0.7s | | | | | | | |
| **PMTG** | **Montargil** | **5.04** | **316** | *e*Pn | | **Pn** | **01 16 28.7** | **+1.7** |

*IDC **04** 01:16:29.0±4.6,5°.66S×152°.52E, h53km±33km, mb3.3/8, mb1 3.5/8, mb1mx3.4/38, mbtmp3.6/8, Error ellipse: s-maj=50.4km s-min=17.5km az=106.0*
**ISC 04 01:16:27.2±1.2,5°.7S±0°.1×152°.6E±0°.2, h40km, n9, σ0º78/10, mb3.5/8, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **1.52** | **337** | P | | **Pn** | **01 16 52.5** | **+0.4** |
| | baz=163,slow=19 | | | | | | | |
| KRVT | | | | S | | **Sn** | **01 17 10.3** | **-0.4** |
| | baz=197,slow=19 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.71** | **230** | P | | **P** | **01 21 26.9** | **+1.1** |
| | 0.4nm,0.5s,baz=55,slow=10,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.36** | **223** | P | | **P** | **01 21 51.1** | **+0.4** |
| | 0.6nm,0.7s,baz=54,slow=9.4,SNR=5.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.07** | **243** | P | | **P** | **01 22 23.4** | **-0.7** |
| | 1.1nm,0.7s,baz=77,slow=11,SNR=2.1 | | | | | | | |
| **SONM** | **Songino Array** | **67.01** | **328** | P | | **P** | **01 27 17.2** | **+1.0** |
| | 0.2nm,0.4s,baz=123,slow=5.3,SNR=2.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.90** | **319** | P | | **P** | **01 28 36.8** | **-0.6** |
| | 0.3nm,0.6s,baz=104,slow=6.2,SNR=2.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.82** | **326** | P | | **P** | **01 28 41.1** | **-0.9** |
| | 0.4nm,0.4s,baz=101,slow=4.7,SNR=2.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.08** | **22** | P | | **P** | **01 28 48.3** | **0.0** |
| | 0.3nm,0.6s,baz=264,slow=5.9,SNR=2.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.32** | **28** | P | | **P** | **01 29 51.4** | **0.0** |
| | 0.1nm,0.5s,baz=274,slow=4.8,SNR=1.9 | | | | | | | |

*IDC **04** 01:16:32.0±2.1,30°.45S×177°.63W, h0km, mb4.1/5, mb1 4.2/6, mb1mx4.0/34, mbtmp4.1/6, ML3.8/1, Error ellipse: s-maj=46.9km s-min=20.7km az=105.0*
*NEIC **04** 01:16:32.9±1.9,30°.32S±0°.06×177°.3W±0°.1, h10km±1km, mb4.5/8, Error ellipse: s-maj=22.0km s-min=9.7km az=77.0*
**ISC 04 01:16:32.4±1.3,30°.38S±0°.07×177°.3W±0°.2, h10km, n24, σ1º21/26, mb4.2/8, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.25** | **333** | Pn | | **Pg** | **01 16 57.1** | **+0.6** |
| | 498nm,0.3s,baz=97,slow=9.1,SNR=8.6 | | | | | | | |
| RAO | | | | Sn | | **Sn** | **01 17 13.6** | **+0.7** |
| | 847nm,0.3s,baz=90,slow=22,SNR=6.7 | | | | | | | |
| **RAO** | **Raoul Island** | **1.25** | **333** | Pn | | **Pg** | **01 16 56.4** | **-0.1** |
| RAO | | | | Sn | | **Sn** | **01 17 11.9** | **-1.0** |
| **OUZ** | **Omahuta** | **9.07** | **235** | Pn | | **Pn** | **01 18 45.0** | **+1.6** |
| **URZ** | **Urewera** | **9.13** | **209** | Pn | | **Pn** | **01 18 41.9** | **-2.2** |
| | 1.0nm,0.3s,baz=333,slow=2.3,SNR=1.5 | | | | | | | |
| **URZ** | **Urewera** | **9.13** | **209** | Pn | | **Pn** | **01 18 45.3** | **+1.2** |
| **HIZ** | **Hauiti** | **10.39** | **217** | Pn | | **Pn** | **01 19 02.3** | **+0.8** |
| **PLWZ** | **Palliser** | **12.69** | **206** | Pn | | **Pn** | **01 19 33.7** | **+0.8** |
| **LTZ** | **Lake Taylor** | **14.94** | **211** | Pn | | **Pn** | **01 20 03.0** | **-0.7** |
| LTZ | | | | IAmb | | IAmb | 01 20 15.5 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| **CTA** | **Charters Tower** | **34.41** | **279** | P | | **P** | **01 23 20.2** | **+0.1** |
| | comp=Z,1.6nm,0.5s,baz=101,slow=12,SNR=1.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.09** | **257** | P | | **P** | **01 23 25.6** | **-0.3** |
| | comp=Z,1.7nm,0.4s,baz=97,slow=15,SNR=5.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.09** | **257** | P | | **P** | **01 23 26.7** | **+0.8** |
| **BBOO** | **Buckleboo** | **39.58** | **254** | P | | **P** | **01 24 03.3** | **-0.6** |
| **ASAR** | **Alice Springs** | **43.74** | **267** | P | | **P** | **01 24 36.2** | **-1.9** |
| | comp=Z,0.6nm,0.3s,baz=101,slow=7.3,SNR=6.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.74** | **267** | P | | **P** | **01 24 37.7** | **-0.5** |
| **WB2** | **Warramunga Arr** | **44.71** | **272** | P | | **P** | **01 24 44.7** | **-1.3** |
| WB2 | | | | IAmb | | IAmb | 01 24 57.2 | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **272** | P | | **P** | **01 24 43.5** | **-2.5** |
| | comp=Z,0.8nm,0.3s,baz=110,slow=8.1,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **272** | P | | **P** | **01 24 44.7** | **-1.3** |
| **WB0** | **Warramunga Arr** | **44.75** | **272** | P | | **P** | **01 24 44.9** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **52.99** | **270** | P | | **P** | **01 25 48.0** | **-1.6** |
| | comp=Z,1.7nm,0.9s,baz=108,slow=19,SNR=3.1 | | | | | | | |
| **MAW** | **Mawson** | **72.55** | **200** | P | | **P** | **01 28 00.5** | **+1.3** |
| MAW | | | | IAmb | | IAmb | 01 28 12.3 | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **78.16** | **178** | P | | **P** | **01 28 31.6** | **+0.2** |
| SNAA | | | | IAmb | | IAmb | 01 28 45.6 | |
| | comp=Z,4.9nm,1.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **145.34** | **340** | PKPbc | | **PKPab** | **01 36 10.0** | **+0.3** |
| | comp=Z,2.3nm,0.4s,baz=52,slow=4.1,SNR=24 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.34** | **340** | | | **PKPab** | **01 36 10.0** | **+0.3** |
| **AKASG** | **Malin Array Be** | **151.66** | **323** | PKPbc | | **PKiKP** | **01 36 27.4** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=48,slow=2.4,SNR=3.0 | | | | | | | |

*IDC **04** 01:29:14.2±1.2,30°.51S×177°.45W, h0km, mb4.4/3, mb1 4.6/4, mb1mx3.8/34, mbtmp4.4/4, ML3.8/1, MS3.7/4, Ms1 3.7/4, ms1mx3.2/59, Error ellipse: s-maj=34.5km s-min=24.1km az=110.0*
*NEIC **04** 01:29:16.5±1.2,30°.44S±0°.06×177°.3W±0°.2, h17km±6km, mb4.4/11, Error ellipse: s-maj=20.5km s-min=8.5km az=89.0*
**ISC 04 01:29:16.1±0.9,30°.50S±0°.06×177°.4W±0°.1, h10km, n41, σ1º69/40, mb4.5/8, MS3.6/3, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.34** | **338** | Pn | | **Pn** | **01 29 40.2** | **-0.6** |
| | 1μm,0.3s,baz=98,slow=8.4,SNR=62 | | | | | | | |
| RAO | | | | Sn | | **Sb** | **01 29 55.0** | **-3.5** |
| | 899nm,0.3s,baz=95,slow=20,SNR=8.5 | | | | | | | |
| RAO | | | | LR | | LR | 01 30 06.6 | |
| | comp=Z,538nm,19.8s,baz=90,slow=40 | | | | | | | |
| **RAO** | **Raoul Island** | **1.34** | **338** | Pn | | **Pn** | **01 29 40.2** | **-0.6** |
| RAO | | | | Sn | | **Sb** | **01 29 57.1** | **-1.5** |
| **OUZ** | **Omahuta** | **8.95** | **236** | Pn | | **Pn** | **01 31 27.2** | **+1.8** |
| **URZ** | **Urewera** | **8.99** | **209** | Pn | | **Pn** | **01 31 24.4** | **-1.5** |
| | 1.1nm,0.3s,baz=224,slow=1.9,SNR=2.1 | | | | | | | |
| URZ | | | | Sn | | Sn | 01 32 59.2 | -7.9 |
| | 8.2nm,0.3s,baz=124,slow=16,SNR=13 | | | | | | | |
| **URZ** | **Urewera** | **8.99** | **209** | | | **Pn** | **01 31 25.4** | **-0.4** |
| **BHW** | **Baring Head** | **12.57** | **208** | Pn | | **Pn** | **01 32 17.1** | **+2.2** |
| **MSVF** | **Nonsavu** | **13.39** | **341** | Pn | | **Pn** | **01 32 30.9** | **+4.6** |
| | 0.6nm,0.3s,baz=128,slow=12,SNR=4.0 | | | | | | | |
| **THZ** | **Tophouse** | **13.71** | **212** | Pn | | **Pn** | **01 32 28.0** | **-2.5** |
| **KHZ** | **Kahutara** | **13.96** | **209** | Pn | | **Pn** | **01 32 33.0** | **-0.8** |
| **LTZ** | **Lake Taylor** | **14.80** | **211** | Pn | | **Pn** | **01 32 46.9** | **+1.4** |
| **DZM** | **Mont Dzumac** | **16.77** | **296** | Pn | | **P** | **01 33 18.1** | **+4.7** |
| | 0.2nm,0.3s,baz=318,slow=20,SNR=1.9 | | | | | | | |
| DZM | | | | LR | | LR | 01 38 04.4 | |
| | comp=Z,213nm,19.4s,baz=108,slow=32 | | | | | | | |
| **ODZ** | **Otahua Downs** | **17.31** | **210** | Pn | | **Pn** | **01 33 17.9** | **+0.1** |
| ODZ | | | | IAmb | | IAmb | 01 33 25.0 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **18.70** | **213** | P | | **P** | **01 33 34.7** | **+0.1** |
| MLZ | | | | IAmb | | IAmb | 01 33 46.0 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **EIDS** | **Eidsvold** | **28.30** | **273** | P | | **P** | **01 35 09.1** | **-0.9** |
| EIDS | | | | IAmb | | IAmb | 01 35 13.1 | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| **CTA** | **Charters Tower** | **34.37** | **279** | LR | | LR | 01 47 17.8 | |
| | comp=Z,83nm,18.6s,baz=84,slow=32 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.00** | **257** | P | | **P** | **01 36 08.8** | **+0.1** |
| | comp=Z,5.9nm,0.6s,baz=106,slow=12,SNR=16 | | | | | | | |
| STKA | | | | LR | | LR | 01 49 55.2 | |
| | comp=Z,111nm,18.1s,baz=26,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.00** | **257** | P | | **P** | **01 36 09.1** | **+0.4** |
| **ASAR** | **Alice Springs** | **43.66** | **267** | P | | **P** | **01 37 19.6** | **-1.6** |
| | comp=Z,1.7nm,0.5s,baz=104,slow=7.3,SNR=22 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 39 08.0** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=116,slow=4.2,SNR=2.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.66** | **267** | P | | **P** | **01 37 19.9** | **-1.4** |
| **WB2** | **Warramunga Arr** | **44.65** | **272** | P | | **P** | **01 37 27.9** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.66** | **272** | P | | **P** | **01 37 27.7** | **-1.6** |
| | comp=Z,3.5nm,0.5s,baz=110,slow=8.1,SNR=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.66** | **272** | P | | **P** | **01 37 27.8** | **-1.5** |
| **WB0** | **Warramunga Arr** | **44.69** | **272** | P | | **P** | **01 37 28.4** | **-1.1** |
| WB0 | | | | IAmb | | IAmb | 01 37 29.6 | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **46.56** | **255** | P | | **P** | **01 37 43.0** | **-1.1** |
| **KNRA** | **Kununurra** | **51.27** | **274** | P | | **P** | **01 38 19.7** | **-0.8** |
| KNRA | | | | IAmb | | IAmb | 01 38 37.6 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **SIJI** | **Songa** | **56.90** | **291** | LR | | LR | 02 01 16.2 | |
| | comp=Z,102nm,19.8s,baz=42,slow=34 | | | | | | | |
| **MAW** | **Mawson** | **72.41** | **200** | P | | **P** | **01 40 44.1** | **+2.1** |
| MAW | | | | IAmb | | IAmb | 01 40 54.5 | |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **78.04** | **178** | P | | **P** | **01 41 13.7** | **-0.8** |
| SNAA | | | | IAmb | | IAmb | 01 41 22.9 | |
| | comp=Z,4.8nm,1.2s | | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.13** | **123** | T | | T | 03 11 01.6 | |
| | baz=241,slow=73 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.13** | **123** | T | | T | 03 10 59.3 | |
| | baz=241,slow=73 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.14** | **123** | T | | T | 03 10 55.9 | |
| | baz=241,slow=73 | | | | | | | |
| **MKAR** | **Makanchi Array** | **118.27** | **310** | PKP | | **PKPdf** | **01 48 01.7** | **-1.7** |
| | comp=Z,0.3nm,0.7s,baz=72,slow=4.7,SNR=2.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.81** | **348** | PKP | | **PKPdf** | **01 48 42.5** | **+0.9** |
| | comp=Z,2.2nm,0.9s,baz=27,slow=4.4,SNR=1.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.81** | **348** | | | **PKPdf** | **01 48 41.8** | **+0.2** |
| **FINES** | **FINESS Array B** | **145.43** | **340** | PKPbc | | **PKPbc** | **01 48 53.1** | **-0.4** |
| | comp=Z,3.3nm,0.5s,baz=59,slow=3.3,SNR=34 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.43** | **340** | PKPbc | | **PKPbc** | **01 48 53.0** | **-0.6** |
| **KBZ** | **Khabaz** | **145.64** | **304** | PKPbc | | **PKPdf** | **01 48 54.1** | **-0.3** |
| | comp=Z,7.4nm,1.3s,baz=162,slow=9.6,SNR=2.3 | | | | | | | |
| **NB2** | **NORSAR Subarra148.94** | **352** | | PKP | | **PKPbc** | **01 49 04.0** | **+0.5** |
| | comp=Z,0.4nm,0.5s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B 148.94** | **352** | | PKPbc | | **PKPbc** | **01 49 03.0** | **-0.6** |
| | comp=Z,0.9nm,0.4s,baz=46,slow=3.0,SNR=6.4 | | | | | | | |
| AKASG | | | | PKPab | | **PKPab** | **01 49 17.9** | **-1.4** |
| | comp=Z,3.4nm,0.7s,baz=49,slow=3.1,SNR=13 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.71** | **177** | PKPab | | **PKPab** | **01 50 07.0** | **-0.3** |
| | comp=Z,0.4nm,0.8s,baz=174,slow=5.6,SNR=2.2 | | | | | | | |

*CNRM **04** 01:30:43.8,35°.58N×3°.85W, h11km, ml2.5*
*INMG **04** 01:30:44.5±1.1,35°.54N×3°.78W, h0km, ML2.1, Error ellipse: s-maj=2.3km s-min=2.0km az=106.0*
*SFS **04** 01:30:44.0,35°.50N×3°.70W, ML2.1, ALBORAN SUR*
**ISC 04 01:30:43.2±1.4,35°.54N±0°.04×3°.72W±0°.04, h14km±12km, n16, σ1º34/29, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.37** | **210** | P | | **Pb** | **01 30 50.9** | **-0.6** |
| PALE | | | | S | | **Sb** | **01 30 55.5** | **-1.7** |
| **AKLM** | **AKL** | **1.03** | **187** | P | | **Pn** | **01 31 03.6** | **+0.2** |
| **CHAS** | **Isla Isabel II** | **1.11** | **108** | P | | **Pn** | **01 31 04.0** | **-0.3** |
| CHAS | | | | S | | **Sb** | **01 31 18.1** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.35** | **335** | P | | **Pg** | **01 31 09.0** | **-0.2** |
| EMAL | | | | S | | **Sb** | **01 31 26.1** | **+0.6** |
| **SMIR** | **Smir Dam** | **1.36** | **277** | P | | **Pn** | **01 31 05.7** | **-2.1** |
| SMIR | | | | S | | **Sb** | **01 31 24.8** | **-1.1** |
| **CHEFC** | **Chefchaouen** | **1.40** | **253** | P | | **Pb** | **01 31 08.5** | **-0.6** |
| CHEFC | | | | S | | **Sb** | **01 31 26.1** | **-0.7** |
| **JBK** | **JBK** | **1.53** | **141** | P | | **Pb** | **01 31 10.1** | **-1.3** |
| JBK | | | | S | | **Sg** | **01 31 33.3** | **+0.9** |
| **SICH** | **Sidi Chahed** | **1.94** | **223** | P | | **Pb** | **01 31 17.9** | **-0.5** |
| SICH | | | | S | | **Sb** | **01 31 42.8** | **+0.2** |
| **MD31** | **MD31** | **2.80** | **198** | P | | **Pn** | **01 31 28.8** | **+1.1** |
| MD31 | | | | S | | **Sn** | **01 32 02.4** | **+1.1** |
| **MDT** | **Midelt** | **2.81** | **195** | P | | **Pn** | **01 31 29.3** | **+1.4** |
| MDT | | | | S | | **Sn** | **01 32 03.2** | **+1.5** |
| **TDRA** | **Tendrara** | **2.85** | **150** | S | | **Sb** | **01 32 08.6** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | *e*Pn | | **Pn** | **01 31 43.5** | **+3.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **01 32 22.5** | **-1.5** |
| PVAQ | | | | A | | A | 01 32 32.3 | |
| | 3.6nm,0.6s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | P | | **Pn** | **01 31 41.6** | **+1.2** |
| PVAQ | | | | S | | **Sn** | **01 32 22.7** | **-1.3** |
| **PBDV** | **Barranco-do-Ve** | **3.80** | **298** | *e*Pn | | **Pn** | **01 31 43.9** | **+2.5** |
| PBDV | | | | *e*Sn | | **Sn** | **01 32 25.9** | **-0.1** |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*Sn | | **Sn** | **01 32 37.4** | **-0.5** |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | | **Pn** | **01 31 54.6** | **+1.7** |
| PNCL | | | | *e*Sn | | **Sn** | **01 32 46.5** | **0.0** |

*BJI **04** 01:33:57.1±0.0,48°.08N×152°.22E, h29km, mb4.3/34, mB5.0/26, Ms4.6/33, Ms7 4.4/32*
*IDC **04** 01:33:58.9±3.7,47°.62N×151°.96E, h33km±28km, mb4.4/29, mb1 4.5/36, mb1mx4.4/49, mbtmp4.6/36, ML3.2/6, MS4.2/37, Ms1 4.2/37, ms1mx3.9/91, Error ellipse: s-maj=13.9km s-min=9.2km az=131.0*
*SKHL **04** 01:33:58.8±0.3,47°.50N×152°.10E, h48km±5km, mb5.3/13, ms4.9/7*
*NEIC **04** 01:34:00.5±1.4,47°.60N±0°.09×152°.0E±0°.1, h45km±5km, mb5.1/301, Error ellipse: s-maj=14.4km s-min=9.1km az=138.0*
*GCMT **04** 01:34:00.5±0.3,47°.64N±0°.02×152°.00E±0°.02, h20km, MW5.0/104, Moment Tension Solution. s42,c46; s104,c144; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr3.12±.18; Mθθ-0.32±.11; Mϕϕ-2.79±.11; Mrθ-0.09±.24; Mrϕ-1.13±.07; Mθϕ-1.95±.19; Best double couple: M03.72800×10^16 NP1:ϕ31.00000°, δ31.00000°, λ107.00000°. NP2:ϕ192.00000°, δ61.00000°, λ80.00000°. Principal axes: T 3.7200, Plg72.0000°, Azm78.0000°; N 0.0240, Plg8.0000°, Azm196.0000°; P -3.7360, Plg15.0000°, Azm289.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 04 01:34:00.7±0.3,47°.59N±0°.05×152°.02E±0°.04, h50km, n365, σ1º31/262, mb5.1/179, MS4.4/40, 2C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.71** | **232** | *e*P | | **Pn** | **01 34 54.1** | **-1.4** |
| KUR | | | | AMB | | AMB | 01 35 04.9 | |
| | 50nm,0.3s | | | | | | | |
| KUR | | | | AMB | | AMB | 01 35 04.9 | |
| | 30nm,0.3s | | | | | | | |
| KUR | | | | AMB | | AMB | 01 35 04.9 | |
| | 160nm,0.3s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **01 35 35.4** | **-2.5** |
| KUR | | | | A | | A | 01 36 00.3 | |
| | 290nm,0.3s | | | | | | | |
| KUR | | | | A | | A | 01 36 00.3 | |
| | 820nm,0.3s | | | | | | | |
| KUR | | | | AMS | | AMS | 01 36 23.7 | |
| | 5μm,10.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.10** | **39** | *e*P | | **Pn** | **01 35 00.0** | **-0.8** |
| SKR | | | | AMB | | AMB | 01 35 07.5 | |
| | 340nm,0.7s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **01 35 45.8** | **-1.7** |
| SKR | | | | A | | A | 01 35 53.0 | |
| | 900nm,0.5s | | | | | | | |
| SKR | | | | A | | A | 01 35 53.0 | |
| | 480nm,0.5s | | | | | | | |
| SKR | | | | AMS | | AMS | 01 36 45.5 | |
| | 9μm,14.0s | | | | | | | |
| SKR | | | | AMS | | AMS | 01 36 45.5 | |
| | 11μm,14.0s | | | | | | | |
| SKR | | | | AMS | | AMS | 01 36 45.5 | |
| | 6μm,14.0s | | | | | | | |
| **SHO** | **Shikotan** | **5.20** | **226** | *e*P | | **Pn** | **01 35 14.3** | **-1.5** |
| SHO | | | | AMB | | AMB | 01 35 15.5 | |
| | 150nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **01 36 11.2** | **-3.2** |
| SHO | | | | A | | A | 01 36 27.6 | |
| | 190nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 01 36 27.6 | |
| | 100nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.58** | **233** | *e*P | | **Pn** | **01 35 20.2** | **-0.9** |
| YUK | | | | AMB | | AMB | 01 35 26.7 | |
| | 150nm,0.5s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **01 36 20.6** | **-3.2** |
| YUK | | | | A | | A | 01 36 50.3 | |
| | 460nm,0.4s | | | | | | | |
| YUK | | | | A | | A | 01 36 50.3 | |
| | 350nm,0.4s | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **6.11** | **229** | *e*P | | **Pn** | **01 35 28.1** | **-0.3** |
| **YSS** | **Yuzh-Sakhalins** | **6.33** | **268** | Pn | | **Pn** | **01 35 28.7** | **-2.7** |
| **YSS** | **Yuzh-Sakhalins** | **6.33** | **268** | *e*P | | **Pn** | **01 35 30.8** | **-0.6** |
| YSS | | | | AMB | | AMB | 01 35 31.1 | |
| | 120nm,0.7s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **01 36 40.7** | **-1.7** |
| YSS | | | | A | | A | 01 36 44.3 | |
| | 50nm,0.8s | | | | | | | |
| YSS | | | | A | | A | 01 36 44.3 | |
| | 120nm,0.8s | | | | | | | |
| YSS | | | | AMS | | AMS | 01 37 32.0 | |
| | 2μm,17.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **6.61** | **31** | | | **Pn** | **01 35 35.7** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **6.61** | **31** | Pn | | **Pn** | **01 35 33.6** | **-1.6** |
| | 2.2nm,0.3s,baz=163,slow=5.4,SNR=28 | | | | | | | |
| PETK | | | | LR | | LR | 01 38 16.0 | |
| | comp=Z,1μm,20.1s,baz=192,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.61** | **31** | | | **Pn** | **01 35 35.7** | **+0.4** |
| **UGL** | **Uglegorsk** | **6.80** | **286** | *i* P | | **Pn** | **01 35 37.9** | **+0.1** |
| UGL | | | | AMB | | AMB | 01 35 39.0 | |
| | 420nm,0.8s | | | | | | | |
| UGL | | | | *e*S | | **Sn** | **01 36 52.1** | **-1.6** |
| UGL | | | | A | | A | 01 36 59.9 | |
| | 30nm,0.5s | | | | | | | |
| UGL | | | | A | | A | 01 36 59.9 | |
| | 180nm,0.5s | | | | | | | |
| UGL | | | | AMS | | AMS | 01 39 36.0 | |
| | 3μm,12.0s | | | | | | | |
| UGL | | | | AMS | | AMS | 01 39 36.0 | |
| | 2μm,12.0s | | | | | | | |
| UGL | | | | AMS | | AMS | 01 39 36.0 | |
| | 4μm,12.0s | | | | | | | |
| **AKK** | **Akkeshi** | **6.82** | **231** | *e*P | | **Pn** | **01 35 37.3** | **-0.7** |
| AKK | | | | AMB | | AMB | 01 35 41.8 | |
| | 50nm,0.5s | | | | | | | |
| **PET** | **Petropavlovsk** | **6.90** | **36** | | | **Pn** | **01 35 39.3** | **+0.1** |
| **PET** | **Petropavlovsk** | **6.90** | **36** | *e*P | | **Pn** | **01 35 39.1** | **-0.1** |
| PET | | | | AMB | | AMB | 01 35 47.5 | |
| | 90nm,0.6s | | | | | | | |
| PET | | | | *e*S | | **Sn** | **01 36 53.2** | **-3.0** |
| PET | | | | A | | A | 01 37 16.8 | |
| | 60nm,0.

TEY AMB AMB 01 36 38.3
20nm,0.8s
TEY AMB AMB 01 36 38.3
200nm,0.8s
TEY AMS AMS 01 42 46.0
500nm,12.0s
TEY AMS AMS 01 42 46.0
500nm,12.0s
TEY AMS AMS 01 42 46.0
500nm,12.0s
**KHBR Khabarovsk 11.39 281** *e*P **Pn 01 36 40.1 -0.5**
KHBR AMB AMB 01 36 42.0
20nm,0.6s
**MA2 Magadan 12.03 357** **Pn 01 36 46.5 -2.8**
**MA2 Magadan 12.03 357** *e*P **Pn 01 36 47.9 -1.4**
**OKHT Okhotsk 12.88 339** *e*P **Pn 01 36 59.3 -1.5**
**KLR Kul'dur 13.56 284** Pn **Pn 01 37 09.2 -1.1**
0.4nm,0.3s,baz=89,slow=14,SNR=34
KLR LR LR 01 42 44.6
comp=Z,2μm,18.1s,baz=97,slow=39
**KLR Kul'dur 13.56 284** *e*P **Pn 01 37 10.9 +0.7**
**USA0B Ussuriysk Arra 14.35 264** Pn **Pn 01 37 20.0 -0.9**
**USRK Ussuriysk Ar. 14.35 264** Pn **Pn 01 37 20.7 -0.1**
baz=72,slow=12,SNR=30
**GRTR Gornotajezhnoj 14.42 262** *e*P **Pn 01 37 19.3 -2.4**
GRTR AMB AMB 01 37 24.6
30nm,1.0s
**SHEM Shemya Is, Ala 15.04 62** LR LR 01 44 03.8
comp=Z,382nm,19.3s,baz=260,slow=40
**SMY Shemya 15.04 62** Pn **Pn 01 37 28.8 -1.0**
**MJB9 Matsu-Tunnel 15.04 228** **Pn 01 37 29.6 -0.4**
**MAJO Matsushiro 15.04 228** Pn **Pn 01 37 29.6 -0.3**
**MAT Matsushiro 15.04 228** P **P 01 37 35.0 +0.6**
MAT eS **Sn 01 40 11.2 -4.2**
**MJAR Matsushiro Arr 15.04 228** Pn **Pn 01 37 27.7 -2.3**
0.1nm,0.3s,baz=28,slow=14,SNR=9.8
**MJAR Matsushiro Arr 15.04 228** **Pn 01 37 29.7 -0.2**
**SEY Seymchan 15.38 1** Pn **Pn 01 37 31.9 -2.2**
0.4nm,0.3s,baz=197,slow=19,SNR=1.9
**MDJ Mudanjiang 15.82 267** P **P 01 37 42.3 -0.7**
MDJ S **S 01 40 42.8 -3.8**
MDJ pmax pmax
comp=Z,85nm,1.3s
MDJ pmax pmax
comp=Z,950nm,3.6s
MDJ LR LR
comp=N,780nm,11.8s
MDJ LR LR
comp=E,920nm,12.1s
MDJ LR LR
comp=Z,1μm,11.6s
**MDJ Mudanjiang 15.82 267** P **P 01 37 41.6 -1.4**
**JGF Kuroka 16.20 228** Pn **Pn 01 37 43.9 -1.1**
**INU Inuyama 16.57 228** **Pn 01 37 49.7 +0.2**
**ZEA Zeya 16.81 301** *e*P **Pn 01 37 50.5 -1.9**
ZEA AMB AMB 01 37 55.2
30nm,0.4s
ZEA AMS AMS 01 43 15.0
1μm,13.0s
ZEA AMS AMS 01 43 15.0
700nm,13.0s
ZEA AMS AMS 01 43 15.0
1μm,13.0s
**BNX BinXian 16.98 273** ⇓P **P 01 37 55.0 -0.8**
BNX pP **pP 01 38 04.2 -2.0**
BNX PP **pwP 01 38 08.4 -2.1**
BNX sP **sP 01 38 10.6 -1.5**
BNX S **S 01 41 05.3 -4.8**
BNX sS sS 01 41 15.7 -11
BNX pmax pmax
comp=Z,32nm,1.1s
BNX pmax pmax
comp=Z,1μm,7.4s
BNX LR LR
comp=N,930nm,9.4s
BNX LR LR
comp=E,950nm,8.8s
BNX LR LR
comp=Z,2μm,12.8s
**CN2 Changchun 18.90 268** *e*P **P 01 38 13.7 -3.3**
**YAK Yakutsk 19.21 327** P **Pn 01 38 20.4 -1.1**
0.3nm,0.3s,baz=118,slow=8.0,SNR=17
YAK LR LR 01 45 21.1
comp=Z,343nm,19.4s,baz=89,slow=36
**YAK Yakutsk 19.21 327** P **P 01 38 19.8 -0.4**
**KSRS Korea Array 20.37 249** P **P 01 38 32.1 -0.8**
18nm,0.8s,baz=53,slow=11,SNR=26
KSRS LR LR 01 45 48.3
comp=Z,773nm,18.3s,baz=50,slow=35
**KS19 Wonju Array Si 20.37 249** P **P 01 38 32.9 -0.2**
**KSAR Wonju Array Be 20.40 249** P **P 01 38 33.2 -0.1**
**HIA Hailar 21.40 287** P **P 01 38 43.6 -0.4**
**JNU Nakatsue 21.54 235** P **P 01 38 44.7 -1.0**
11nm,0.8s,baz=51,slow=5.8,SNR=4.9
**JNU Nakatsue 21.54 235** P **P 01 38 45.4 -0.3**
**BILL Bilibino 21.75 14** P **P 01 38 47.6 0.0**
**BILL Bilibino 21.75 14** *e*P **P 01 38 48.8 +1.2**
**XLT XiLinHaoTe 25.20 275** *e*P **P 01 39 23.7 +2.1**
XLT pmax pmax
comp=Z,11nm,0.8s
XLT pmax pmax
comp=Z,290nm,4.8s
**GAMB Gambell 25.60 37** P **P 01 39 25.8 +1.0**
GAMB IAmb IAmb 01 39 27.0
comp=Z,27nm,0.6s
**TIXI Tiksi 26.45 344** P **P 01 39 31.9 -0.6**
comp=Z,5.0nm,0.5s,baz=270,slow=23,SNR=15
TIXI LR LR 01 49 57.1
comp=Z,451nm,18.3s,baz=179,slow=36
**TIXI Tiksi 26.45 344** P **P 01 39 32.4 -0.1**
**TIXI Tiksi 26.45 344** *e*P **P 01 39 32.8 +0.3**
**TNA Tin City 27.76 35** P **P 01 39 44.3 0.0**
**JOW Kunigami 27.86 230** LR LR 01 51 15.1
comp=Z,222nm,20.8s,baz=76,slow=37
**TIA Tai'an 28.12 259** P P 01 39 55.6 +7.8
TIA S S 01 44 38.8 +9.5
TIA pmax pmax
comp=Z,2.0nm,0.5s
TIA pmax pmax
comp=Z,72nm,3.5s
TIA LR LR
comp=Z,330nm,14.9s
TIA LR LR
comp=Z,360nm,14.2s
TIA LR LR
comp=Z,240nm,14.2s
**ANM Nome 28.47 38** P **P 01 39 50.6 -0.1**
**SSE Sheshan 28.73 246** P **P 01 39 53.6 +0.4**
SSE S **S 01 44 45.8 +6.9**
SSE pmax pmax
comp=Z,6.0nm,1.0s
SSE pmax pmax
comp=Z,82nm,3.7s
SSE LR LR
comp=Z,200nm,15.9s
SSE LR LR
comp=Z,100nm,16.0s
**HNS HongShan 29.08 263** ⇑P P 01 40 03.8 +7.5
HNS pmax pmax
comp=Z,5.0nm,1.2s
HNS LR LR
comp=Z,700nm,17.3s
HNS LR LR
comp=Z,920nm,20.8s
HNS LR LR
comp=Z,660nm,20.8s
**ULN Ulaanbaatar 29.92 287** *e*P **P 01 40 04.8 +0.9**
**H11N2 WAKE ISLAND Hy 30.31 151** T T 02 11 37.9
baz=341,slow=76
**H11N1 WAKE ISLAND Hy 30.33 151** T T 02 11 40.8
baz=341,slow=76
**H11N3 WAKE ISLAND Hy 30.33 151** T T 02 11 38.0
baz=341,slow=76
**SONM Songino Array 30.36 288** P **P 01 40 07.9 +0.2**
comp=Z,0.2nm,0.4s,baz=77,slow=9.2,SNR=2.2
SONM PcP **PcP 01 43 06.8 +0.2**
comp=Z,1.3nm,0.7s,baz=95,slow=3.3,SNR=4.4
SONM LR LR 01 53 19.3
comp=Z,840nm,18.8s,baz=78,slow=38
**SONM Songino Array 30.36 288** P **P 01 40 07.7 0.0**
SONM **PcP 01 43 07.0 +0.5**
**RDOG Red Dog Mine 30.48 32** P **P 01 40 07.4 -1.0**
**H11S1 WAKE ISLAND Hy 31.39 152** T T 02 12 59.5
baz=342,slow=76
**H11S3 WAKE ISLAND Hy 31.40 153** T T 02 13 10.3
baz=342,slow=76
**H11S2 WAKE ISLAND Hy 31.41 153** T T 02 13 11.0
baz=342,slow=76
**TTA Talatina 32.30 42** P **P 01 40 24.6 +0.1**
TTA IAmb IAmb 01 40 25.9
comp=Z,44nm,1.4s
**L19K White Mountain 32.80 44** P **P 01 40 28.8 -0.1**
**K20K Telida 33.20 42** P **P 01 40 32.9 +0.5**
K20K IAmb IAmb 01 40 33.9
comp=Z,26nm,1.2s
**J20K Nowinta River 33.21 40** P **P 01 40 32.8 +0.4**
J20K IAmb IAmb 01 40 34.5
comp=Z,33nm,1.1s
**WHN Wuhan 33.44 253** ⇑P **P 01 40 35.7 +1.0**
**IMAR Indian Mountai 33.54 37** P **P 01 40 35.3 +0.1**
IMAR **PcP 01 43 15.7 +1.1**
**A21K Barrow 33.59 27** P **P 01 40 35.7 +0.1**
**H21K Melozitna Rive 33.89 38** P **P 01 40 39.2 +0.8**
H21K IAmb IAmb 01 40 39.8
comp=Z,32nm,1.1s
**PPLA Purkeypile 34.04 43** P **P 01 40 40.5 +0.7**
**CAST Castle Rocks 34.10 42** P **P 01 40 40.6 +0.5**
CAST IAmb IAmb 01 40 41.9
comp=Z,16nm,0.9s
**SPU Mount Spurr 34.14 46** P **P 01 40 41.1 +0.5**
**I21K Tanana 34.20 39** P **P 01 40 40.5 -0.5**
I21K IAmb IAmb 01 40 42.8
comp=Z,24nm,1.1s
**KTH Kantishna Hill 34.62 41** P **P 01 40 45.0 +0.3**
**MLY Manley 34.72 39** P **P 01 40 45.8 +0.2**
MLY IAmb IAmb 01 40 47.3
comp=Z,30nm,1.2s
**XAN Xi'an 34.86 263** P **P 01 40 49.7 +2.7**
XAN pP pwP 01 41 02.5 -0.9
XAN S **S 01 46 19.5 +5.0**
XAN sS sS 01 46 38.6 +3.7
XAN SS **SnSn 01 48 37.8 +5.6**
XAN pmax pmax
comp=Z,4.0nm,0.9s
XAN pmax pmax
comp=Z,230nm,4.0s
XAN LR LR
comp=Z,640nm,16.0s
XAN LR LR
comp=Z,420nm,17.2s
XAN LR LR
comp=Z,840nm,17.7s
**TRF Thorofare Moun 34.90 42** P **P 01 40 47.6 +0.3**
TRF IAmb IAmb 01 40 48.7
comp=Z,17nm,0.8s
**CUT Chulitna 34.94 43** P **P 01 40 47.1 -0.3**
**COLD Coldfoot 35.07 35** P **P 01 40 48.3 -0.1**
COLD IAmb IAmb 01 40 49.9
comp=Z,20nm,1.0s
**BWN Browne 35.26 40** P **P 01 40 50.1 0.0**
**I23K Minto, Yukon-K 35.31 39** P **P 01 40 51.3 +0.8**
I23K IAmb IAmb 01 40 52.2
comp=Z,28nm,1.1s
**TOLK Toolik Lake Re 35.43 33** P **P 01 40 50.2 -1.4**
TOLK IAmb IAmb 01 40 53.1
comp=Z,30nm,1.1s
**RND Reindeer 35.55 42** P **P 01 40 52.4 -0.3**
**MDM Murphy Dome 35.79 39** IAmb IAmb 01 40 56.8
comp=Z,37nm,1.0s
**WRH Wood River Hil 35.85 40** P **P 01 40 55.5 +0.3**
**H24K Noodor Dome 35.94 37** P **P 01 40 55.4 -0.6**
H24K IAmb IAmb 01 40 58.6
comp=Z,44nm,1.3s
**TCOL CIGO, UAF Yank 35.95 39** P **P 01 40 56.4 +0.4**
**COLA College 35.95 39** P **P 01 40 56.3 +0.3**
**CCB Clear Creek Bu 35.98 39** P **P 01 40 55.8 -0.4**
CCB IAmb IAmb 01 40 57.4
comp=Z,28nm,1.1s
**POKR Poker Plat Res 36.12 39** P **P 01 40 57.4 -0.1**
**HDA Harding Lake 36.35 40** P **P 01 40 59.1 -0.4**
HDA IAmb IAmb 01 41 01.2
comp=Z,18nm,0.7s
**SCM Sheep Creek Mo 36.36 44** P **P 01 41 00.1 +0.4**
**IL31 36.37 39** P **P 01 40 58.8 -0.7**
IL31 IAmb IAmb 01 41 01.2
comp=Z,46nm,1.2s
**ILAR Eielson Array 36.37 39** P **P 01 40 59.0 -0.6**
comp=Z,39nm,1.2s,baz=263,slow=7.9,SNR=69
ILAR PcP **PcP 01 43 21.8 -1.1**
comp=Z,1.2nm,0.9s,baz=280,slow=5.1,SNR=2.7
**PRP Porcupine Dome 36.91 38** P **P 01 41 04.3 -0.1**
PRP IAmb IAmb 01 41 06.6
comp=Z,37nm,1.0s
**FYU Fort Yukon 37.01 36** P **P 01 41 05.5 +0.6**
**J25K Salcha River, 37.02 39** P **P 01 41 04.3 -1.0**
**KLU Klutina 37.06 45** P **P 01 41 05.8 +0.2**
KLU IAmb IAmb 01 41 07.6
comp=Z,19nm,0.7s
**PAX Paxson 37.11 42** P **P 01 41 06.0 -0.1**
**BMAR Burnt Mountain 37.25 35** P **P 01 41 07.3 +0.2**
**NRIK Noril'sk 37.65 328** P **P 01 41 10.7 +0.3**
comp=Z,1.2nm,0.3s,baz=99,slow=8.9,SNR=1.4
NRIK LR LR 01 58 31.1
comp=Z,167nm,19.0s,baz=71,slow=39
**DOT Dot Lake 37.67 41** P **P 01 41 09.5 -1.2**
**N25K Chitina, Valde 37.68 44** P **P 01 41 11.0 +0.2**
N25K IAmb IAmb 01 41 12.4
comp=Z,29nm,1.1s
**SCRK Sand Creek 37.68 40** P **P 01 41 10.3 -0.6**
SCRK IAmb IAmb 01 41 11.4
comp=Z,37nm,1.2s
**J26L Joseph Creek 37.81 40** P **P 01 41 11.6 -0.4**
**MENT Mentasta 37.91 42** P **P 01 41 13.6 +0.8**
MENT IAmb IAmb 01 41 18.2
comp=Z,28nm,1.3s
**L26K Log Cabin Wild 38.07 42** P **P 01 41 14.9 +0.9**
**GTA Gaotai 38.11 277** *e*P **P 01 41 18.9 +4.1**
GTA pP pP 01 41 23.6 -3.3
GTA PcP **PcP 01 43 30.4 +1.5**
GTA pmax pmax
comp=Z,92nm,4.7s
GTA LR LR
comp=Z,340nm,15.6s
GTA LR LR
comp=Z,490nm,14.9s
GTA LR LR
comp=Z,560nm,16.4s
**M26K Nabesna, AK 38.31 43** P **P 01 41 17.8 +1.7**
M26K IAmb IAmb 01 41 19.0
comp=Z,45nm,1.1s
**L27K Beaver Creek, 38.75 42** P **P 01 41 20.7 +1.0**
**BCAR Beaver Creek A 38.77 42** P **P 01 41 20.4 +0.5**
**EGAK Eagle 38.81 39** P **P 01 41 19.7 -0.5**
EGAK IAmb IAmb 01 41 21.7
comp=Z,51nm,1.1s
**M27K Edge Creek, AK 38.83 43** P **P 01 41 20.7 +0.1**
M27K IAmb IAmb 01 41 23.5
comp=Z,41nm,1.1s
**BARN Barnard Glacie 39.16 45** P **P 01 41 24.0 +0.6**
BARN IAmb IAmb 01 41 31.6
comp=Z,54nm,1.2s
**DAWY Dawson 39.67 40** P **P 01 41 27.8 +0.3**
**I29M Ogilvie Camp, 39.93 38** P **P 01 41 30.4 +0.8**
I29M IAmb IAmb 01 41 31.8
comp=Z,50nm,1.2s
**HYT Haines Junctio 41.20 45** P **P 01 41 40.8 +0.6**
HYT IAmb IAmb 01 41 42.9
comp=Z,37nm,1.1s
**INK Inuvik 41.35 33** P **P 01 41 41.2 +0.1**
comp=Z,2.7nm,0.4s,baz=273,slow=6.2,SNR=16
**INK Inuvik 41.35 33** P **P 01 41 41.4 +0.3**
**ZALV Zalesovo Beam 41.52 305** P **P 01 41 42.1 -0.6**
comp=Z,0.8nm,0.3s,baz=53,slow=7.0,SNR=2.1
ZALV PcP **PcP 01 43 39.7 +0.4**
comp=Z,5.5nm,0.7s,baz=64,slow=3.4,SNR=14
ZALV LR LR 02 00 14.4
comp=Z,522nm,18.7s,baz=66,slow=38
**ZALV Zalesovo Beam 41.52 305** P **P 01 41 43.1 +0.4**
ZALV **PcP 01 43 39.7 +0.4**
**N31M Braeburn, Yuko 41.84 43** P **P 01 41 46.1 +0.8**
N31M IAmb IAmb 01 41 48.6
comp=Z,61nm,1.3s
**M31M Drury Creek, Y 42.29 42** P **P 01 41 50.1 +1.2**
M31M IAmb IAmb 01 41 51.4
comp=Z,41nm,1.4s
**GOMU GeErMu 43.16 276** P **P 01 41 56.8 0.0**
GOMU PcP **PcP 01 43 47.7 +2.1**
GOMU S **S 01 48 19.5 -0.5**
GOMU pmax pmax
comp=Z,130nm,5.8s
GOMU LR LR
comp=Z,290nm,12.9s
GOMU LR LR
comp=Z,400nm,14.5s
GOMU LR LR
comp=Z,350nm,16.6s
**A36M Sachs Harbour 43.44 27** P **P 01 41 58.4 +0.4**
A36M IAmb IAmb 01 42 06.2
comp=Z,31nm,0.9s
**P33M Teslin, Yukon 43.59 44** P **P 01 41 59.8 +0.2**
**C36M Paulatuk 44.47 30** P **P 01 42 06.7 +0.3**
C36M IAmb IAmb 01 42 07.9
comp=Z,32nm,1.1s
**DLBC Dease Lake 45.55 46** P **P 01 42 14.7 -0.5**
comp=Z,6.5nm,0.6s,baz=254,slow=2.9,SNR=17
**DLBC Dease Lake 45.55 46** P **P 01 42 16.0 +0.8**
**MK31 Makanchi Array 45.89 296** P **P 01 42 18.1 +0.1**
**MKAR Makanchi Array 45.89 296** P **P 01 42 17.7 -0.3**
comp=Z,3.7nm,0.8s,baz=68,slow=7.2,SNR=27
MKAR PcP **PcP 01 43 54.6 +0.2**
comp=Z,1.1nm,0.8s,baz=53,slow=2.5,SNR=4.7
MKAR LR LR 02 02 41.0
comp=Z,414nm,18.1s,baz=60,slow=38
**MKAR Makanchi Array 45.89 296** P **P 01 42 17.9 -0.1**
**MAKZ Makanchi 46.08 296** P **P 01 42 19.3 -0.1**
**KURK Kurchatov 46.28 303** P **P 01 42 20.5 -0.4**
**KURK Kurchatov 46.28 303** *e*P **P 01 42 21.2 +0.3**
**KURBB Kurchatov Arra 46.37 302** LR LR 02 02 59.6
comp=Z,577nm,19.2s,baz=46,slow=38
**EUNU Eureka 48.45 11** P **P 01 42 37.4 -0.2**
**TDK Taldyorghan 49.14 296** *e*P **P 01 42 43.5 +0.3**
baz=296
**BRVK Borovoye 49.79 309** P **P 01 42 48.1 +0.1**
**BRVK Borovoye 49.79 309** *e*P **P 01 42 47.9 -0.1**
**BRZS Berezniki 49.98 304** *e*P **P 01 42 50.3 +0.7**
baz=304
**RES Resolute Bay 50.28 19** P **P 01 42 51.0 -0.4**
comp=Z,9.5nm,0.9s,baz=331,slow=7.7,SNR=28
**RES Resolute Bay 50.28 19** P **P 01 42 51.3 -0.1**
RES IAmb IAmb 01 42 59.3
comp=Z,11nm,0.8s
**YKA Yellowknife Ar 50.70 37** P **P 01 42 55.2 +0.5**
comp=Z,18nm,0.8s,baz=298,slow=7.2,SNR=130
YKA PcP **PcP 01 44 11.2 -0.1**
comp=Z,3.2nm,0.9s,baz=305,slow=3.7,SNR=7.6
**CMAR Chiang Mai Arr 51.85 255** P **P 01 43 03.5 -0.5**
comp=Z,2.0nm,0.3s,baz=33,slow=7.6,SNR=8.5
CMAR LR LR 02 06 35.0
comp=Z,262nm,18.9s,baz=0.0,slow=38
**SGDS Sogindy 52.26 296** *e*P **P 01 43 07.5 +0.7**
baz=296
**AAK Ala-Archa 52.79 295** LR LR 02 07 32.8
comp=Z,358nm,19.4s,baz=72,slow=38
**AAK Ala-Archa 52.79 295** P **P 01 43 11.0 +0.1**
**AAK Ala-Archa 52.79 295** *e*P **P 01 43 11.4 +0.5**
**TOLI2 Tolitoli 53.64 220** P **P 01 43 15.6 -1.5**
**KSH Kashi 53.65 291** P P 01 43 22.9 +5.8
KSH pP sP 01 43 34.8 -0.3
KSH PcP **PcP 01 44 25.6 +2.6**
KSH pmax pmax
comp=Z,6.0nm,1.7s
KSH LR LR
comp=Z,350nm,11.3s
KSH LR LR
comp=Z,370nm,12.5s
KSH LR LR
comp=Z,750nm,19.5s
**ARU Arti 53.89 317** P **P 01 43 18.6 +0.1**
**ARU Arti 53.89 317** *e*P **P 01 43 19.0 +0.5**
**NEEM North Greenlan 54.41 6** *i* P **P 01 43 21.5 -0.9**
NEEM IAmb IAmb 01 43 24.6
comp=Z,4.9nm,0.8s
**DZA Taraz 54.57 297** *e*P **P 01 43 24.2 +0.5**
comp=Z,6.5nm,0.6s,baz=297
**KKAR Karatay Array 54.94 298** P **P 01 43 26.1 -0.2**
**IUG Iuzhnay 55.78 297** *e*P **P 01 43 33.2 +0.6**
baz=297
**LTY Liberty 55.91 55** P **P 01 43 33.0 -0.4**
LTY IAmb IAmb 01 43 35.6
comp=Z,15nm,1.2s
**B08A Colville Reser 56.01 54** P **P 01 43 34.3 +0.3**
B08A IAmb IAmb 01 43 35.7
comp=Z,26nm,1.2s
**EDM Edmonton 56.27 46** P **P 01 43 36.6 +0.8**
**BTK Batken 56.54 295** P **P 01 43 36.2 -1.7**
**E07A Sunnyside 56.77 56** P **P 01 43 38.7 -0.7**
**ARCES ARCESS Array B 56.81 340** P **P 01 43 37.9 -1.4**
comp=Z,2.3nm,1.0s,baz=38,slow=9.3,SNR=4.1
**C09A Chrisman Ranch 56.91 54** P **P 01 43 39.1 -1.3**
C09A IAmb IAmb 01 43 42.7
comp=Z,31nm,1.3s
**D08A Wollman Farm, 56.99 55** P **P 01 43 42.0 +1.0**
D08A IAmb IAmb 01 43 42.5
comp=Z,29nm,1.4s
**HAWA Hanford 57.05 56** P **P 01 43 42.4 +1.0**
HAWA IAmb IAmb 01 43 43.4
comp=Z,26nm,1.4s
**NEW Newport 57.26 53** LR LR 02 07 18.0
comp=Z,444nm,20.1s,baz=291,slow=35
**NEW Newport 57.26 53** P **P 01 43 43.5 +0.6**
NEW IAmb IAmb 01 43 44.5
comp=Z,37nm,1.4s
**GAR Garm 57.49 294** IAmb IAmb 01 43 51.8
comp=Z,17nm,0.9s
**AKTO Aktyubinsk 57.61 311** LR LR 02 10 58.4
comp=Z,457nm,18.6s,baz=53,slow=39
**E09A Wood Farm, Sta 57.75 55** IAmb IAmb 01 43 48.1
comp=Z,20nm,1.1s
**YBH Yreka Blue Hor 58.00 62** P **P 01 43 49.0 +0.8**
comp=Z,3.3nm,0.6s,baz=327,slow=5.4,SNR=8.0
**G08A Pilot Rock 58.03 56** IAmb IAmb 01 44 01.7
comp=Z,15nm,1.3s
**CHGR Chuyangaron 58.41 294** IAmb IAmb 01 44 03.8
comp=Z,16nm,0.8s
**F10A Beach Ranch, E 58.58 55** IAmb IAmb 01 44 06.1
comp=Z,13nm,1.2s
**WDC Whiskeytown Da 58.81 63** IAmb IAmb 01 44 02.6
comp=Z,11nm,1.1s
**KLMR Klimovskoe 59.00 328** *e*P **P 01 43 55.9 +1.2**
KLMR AMP 01 44 01.3
comp=Z,12nm,1.0s
KLMR *e*PP **PP 01 46 06.6 +1.6**
**BMO Blue Mountains 59.22 56** IAmb IAmb 01 43 59.0
comp=Z,18nm,1.2s
**MOD Modoc Plateau 59.32 60** IAmb IAmb 01 43 59.6
comp=Z,16nm,0.9s
**J08A Circle Bar Ran 59.48 58** IAmb IAmb 01 44 01.0
comp=Z,26nm,1.3s
**KAPI Kappang 59.58 218** LR LR 02 12 00.0
comp=Z,30nm,18.8s,baz=18,slow=38
**SUMG Summit 59.91 4** *i* P **P 01 44 00.7 -0.7**
SUMG IAmb IAmb 01 44 25.5
comp=Z,4.6nm,1.0s
**WVOR Wild Horse Val 59.96 59** IAmb IAmb 01 44 04.1
comp=Z,16nm,1.0s
**FFC Flin Flon 60.58 40** P **P 01 44 06.3 +0.7**
**FCC Fort Churchill 60.97 33** P **P 01 44 08.1 -0.2**
FCC IAmb IAmb 01 44 09.4
comp=Z,19nm,0.9s
**KBL Kabul 61.06 291** P **P 01 44 08.8 -0.8**
**PAHR Pah Rah Range 61.24 62** IAmb IAmb 01 44 12.4
comp=Z,17nm,1.0s
**VCNR Virginia City 61.34 62** IAmb IAmb 01 44 13.4
comp=Z,11nm,0.9s
**PNTR Pine Nut 61.51 62** IAmb IAmb 01 44 14.6
comp=Z,14nm,0.9s
**HLID Hailey 61.65 56** IAmb IAmb 01 44 15.7
comp=Z,18nm,1.4s
**CMB Columbia Colle 61.70 64** IAmb IAmb 01 44 15.5
comp=Z,15nm,1.3s
**COEN Coen 61.77 190** P **P 01 44 14.5 +0.4**
**YERR Yerington 61.79 62** IAmb IAmb 01 44 16.4
comp=Z,25nm,1.0s
**BMN Battle Mountai 62.05 60** IAmb IAmb 01 44 18.3
comp=Z,14nm,0.9s
**KVN Kaiserville 62.42 61** IAmb IAmb 01 44 20.7
comp=Z,22nm,1.0s
**RYN Ryan 62.45 62** IAmb IAmb 01 44 20.7
comp=Z,11nm,0.9s
**LHV Little Huntoon 62.70 62** IAmb IAmb 01 44 22.9
comp=Z,24nm,1.0s
**NVAR Mina Array Bea 62.70 62** P **P 01 44 21.2 +0.6**
comp=Z,5.6nm,0.7s,baz=289,slow=7.2,SNR=41
NVAR LR LR 02 06 34.6
comp=Z,157nm,21.6s,baz=312,slow=31
**NV11 Mina Array Sit 62.79 62** IAmb IAmb 01 44 22.7

comp=Z,13nm,1.1s
**YHH Holmes Hill 62.81 53** IAmb IAmb 01 44 23.6
comp=Z,15nm,1.0s
**YMR Madison River 62.83 53** IAmb IAmb 01 44 23.8
comp=Z,30nm,1.2s
**FINES FINESS Array B 62.96 334** P **P** **01 44 20.2 -1.4**
comp=Z,5.6nm,0.8s,baz=36,slow=7.6,SNR=29
**MTN Manton Dam 62.98 203** P **P** **01 44 22.1 -0.1**
**ELK Elko 63.00 58** LR LR 02 10 21.0
comp=Z,165nm,20.1s,baz=322,slow=35
**LKWY Lake 63.20 53** IAmb IAmb 01 44 27.5
comp=Z,17nm,1.1s
**PAGB Antelope Grade 63.27 66** IAmb IAmb 01 44 26.1
comp=Z,28nm,1.2s
**MOOW Moose Ponds 63.55 53** IAmb IAmb 01 44 28.9
comp=Z,31nm,1.4s
**PSI Prapat 63.78 243** LR LR 02 15 36.7
comp=Z,151nm,18.1s,baz=6.5,slow=39
**AHID Auburn Hatcher 64.01 54** IAmb IAmb 01 44 31.3
comp=Z,19nm,1.2s
**OBN Obninsk 64.19 325** *e*P **P** **01 44 31.6 +1.8**
**DUG Dugway, Tooele 64.76 58** IAmb IAmb 01 44 36.2
comp=Z,20nm,1.1s
**BW06 Boulder Array 64.85 54** IAmb IAmb 01 44 36.5
comp=Z,21nm,1.0s
**PD31 Pinedale Array 64.85 54** IAmb IAmb 01 44 36.5
comp=Z,9nm,1.0s
**PDAR Pinedale Array 64.85 54** P **P** **01 44 35.1 +0.5**
comp=Z,10nm,0.9s,baz=296,slow=1.6,SNR=74
**GWY Greenwater Val 65.16 63** IAmb IAmb 01 44 38.3
comp=Z,22nm,1.0s
**QSM Queen of Sheba 65.19 63** IAmb IAmb 01 44 38.4
comp=Z,22nm,1.1s
**PRN Pahroc Range 65.31 61** IAmb IAmb 01 44 39.7
comp=Z,22nm,1.4s
**GEYT Alibeck 65.53 300** LR LR 02 16 36.2
comp=Z,230nm,18.1s,baz=118,slow=39
**SHPR Sheep Range 65.85 62** IAmb IAmb 01 44 43.1
comp=Z,13nm,1.1s
**KNRA Kununurra 66.33 205** P **P** **01 44 43.2 -0.8**
KNRA IAmb IAmb 01 44 45.1
comp=Z,11nm,0.7s
**ULM Lac du Bonnet 66.37 40** P **P** **01 44 43.5 -0.5**
comp=Z,7.9nm,0.7s,baz=315,slow=5.5,SNR=7.1
**ULM Lac du Bonnet 66.37 40** IAmb IAmb 01 44 45.1
comp=Z,11nm,0.9s
**P17A Butcher Ranch, 66.42 57** IAmb IAmb 01 44 46.8
comp=Z,28nm,1.2s
**K22A Casper 66.57 52** IAmb IAmb 01 44 48.1
comp=Z,28nm,1.1s
**P18A Preston Nutter 66.60 56** IAmb IAmb 01 44 48.1
comp=Z,17nm,1.2s
**LCMT Little Creek M 66.65 60** IAmb IAmb 01 44 48.3
comp=Z,17nm,1.0s
**E28A Huff 66.79 46** IAmb IAmb 01 44 49.1
comp=Z,39nm,1.4s
**SRU San Rafael Swe 66.79 57** IAmb IAmb 01 44 48.9
comp=Z,23nm,1.0s
**RSSD Black Hills 66.85 49** P **P** **01 44 47.4 -0.1**
**RWWY Rawlins 66.86 53** IAmb IAmb 01 44 49.2
comp=Z,15nm,0.9s
**KNB Kanab 66.89 60** IAmb IAmb 01 44 50.1
comp=Z,23nm,1.1s
**PFO Pinyon Flats O 67.01 65** LR LR 02 14 36.0
comp=Z,138nm,18.5s,baz=332,slow=36
**PFO Pinyon Flats O 67.01 65** P **P** **01 44 47.8 -0.7**
PFO IAmb IAmb 01 44 49.9
comp=Z,20nm,1.4s
**NB2 NORSAR Subarra 67.19 341** P **P** **01 44 48.5 -0.6**
comp=Z,1.1nm,0.7s,baz=28,slow=6.5
**NOA NORSAR Array B 67.19 341** P **P** **01 44 48.0 -1.1**
comp=Z,1.8nm,0.8s,baz=26,slow=6.4,SNR=6.0
**O20A White River Ci 67.37 55** IAmb IAmb 01 44 52.3
comp=Z,16nm,1.1s
**CTA Charters Tower 67.56 186** P **P** **01 44 51.5 -0.3**
comp=Z,9.6nm,0.8s,baz=357,slow=7.5,SNR=5.2
**U15A North Rim 67.60 60** IAmb IAmb 01 44 54.6
comp=Z,17nm,1.2s
**AGMN Agassiz Nation 67.81 42** IAmb IAmb 01 44 54.1
comp=Z,20nm,1.1s
**PHWY Pilot Hill 68.08 52** IAmb IAmb 01 44 56.7
comp=Z,19nm,1.4s
**N23A Red Feather La 68.10 53** IAmb IAmb 01 44 57.6
comp=Z,24nm,1.1s
**PV23 Carpenter Ridg 68.10 57** IAmb IAmb 01 44 57.3
comp=Z,33nm,1.3s
**PV07 Paradox Valley 68.32 57** IAmb IAmb 01 44 58.5
comp=Z,20nm,1.3s
**GLA Glamis 68.39 64** IAmb IAmb 01 44 58.8
comp=Z,20nm,0.9s
**WUAZ Wupatki 68.77 60** IAmb IAmb 01 45 01.7
comp=Z,19nm,1.2s
**WB0 Warramunga Arr 68.89 198** IAmb IAmb 01 45 00.9
comp=Z,23nm,0.8s
**WR0 Warramunga Arr 69.05 198** IAmb IAmb 01 45 01.8
comp=Z,14nm,0.9s
**WB2 Warramunga Arr 69.07 198** P **P** **01 45 01.4 +0.2**
WB2 IAmb IAmb 01 45 02.0
comp=Z,22nm,0.8s
**WRA Warramunga Arr 69.07 198** P **P** **01 45 00.9 -0.3**
comp=Z,18nm,0.9s,baz=17,slow=6.9,SNR=72
**MSVF Nonsavu 69.09 153** LR LR 02 09 24.2
comp=Z,130nm,20.5s,baz=10,slow=31
**AFI Afiamalu 69.23 142** LR LR 02 11 44.0
comp=Z,15nm,21.2s,baz=49,slow=33
**MVCO Mesa Verde 69.26 57** IAmb IAmb 01 45 04.4
comp=Z,13nm,0.8s
**FITZ Fitzroy Crossi 69.54 207** P **P** **01 45 04.6 +0.5**
comp=Z,17nm,1.0s,baz=13,slow=6.7,SNR=32
**KBZ Khabaz 69.74 313** P **P** **01 45 05.4 +0.2**
comp=Z,1.9nm,0.9s,baz=240,slow=15,SNR=5.2
KBZ LR LR 02 20 39.4
comp=Z,256nm,18.0s,baz=33,slow=40
**KBZ Khabaz 69.74 313** *e*P **P** **01 45 06.9 +1.7**
**AKASG Malin Array Be 70.43 325** P **P** **01 45 08.8 -0.5**
comp=Z,1.0nm,0.5s,baz=34,slow=6.3,SNR=8.5
**AKASG Malin Array Be 70.43 325** P **P** **01 45 09.3 0.0**
**TUC Tucson 71.36 62** P **P** **01 45 14.1 -1.2**
**GNI Garni 71.42 309** LR LR 02 19 52.7
comp=Z,230nm,19.9s,baz=50,slow=39
**T25A Trinidad 71.61 55** IAmb IAmb 01 45 18.6
comp=Z,17nm,1.1s
**ANMO Albuquerque 72.03 58** LR LR 02 17 28.1
comp=Z,74nm,18.8s,baz=315,slow=36
**ANMO Albuquerque 72.03 58** P **P** **01 45 18.9 -0.6**
**ASAR Alice Springs 72.78 197** P **P** **01 45 24.7 +1.0**
comp=Z,29nm,0.9s,baz=11,slow=5.6,SNR=152
**ASAR Alice Springs 72.78 197** P **P** **01 45 24.6 +0.9**
**SCHQ Schefferville 72.82 22** P **P** **01 45 24.4 +0.7**
comp=Z,6.1nm,0.8s,baz=320,slow=5.6,SNR=10
**319A Douglas 72.92 62** IAmb IAmb 01 45 27.2
comp=Z,31nm,0.9s
**121A Cookes Peak, D 72.98 60** IAmb IAmb 01 45 27.4
comp=Z,22nm,1.2s
**N35A Tabor 73.47 47** IAmb IAmb 01 45 28.8
comp=Z,31nm,0.9s
**BUR08 Bucovina Ar. S 74.46 326** P **P** **01 45 33.2 -0.3**
**N38A Joes South For 74.70 46** IAmb IAmb 01 45 35.8
comp=Z,28nm,0.8s
**MSTX Muleshoe 74.83 56** IAmb IAmb 01 45 37.2
comp=Z,28nm,1.2s
**U32A Winter Ranch, 75.11 52** IAmb IAmb 01 45 38.5
comp=Z,36nm,1.1s
**KAN01 Argonia South 75.19 51** IAmb IAmb 01 45 38.3
comp=Z,30nm,1.1s
**DPC Dobruska-Polom 75.23 332** *e*P **P** **01 45 39.5 +1.6**
**CLL Collm 75.39 335** *i* P **P** **01 45 40.1 +1.5**
comp=Z,15nm,1.6s
**WSAR Wadi Sarin 75.40 288** LR LR 02 22 35.3
comp=Z,252nm,20.1s,baz=96,slow=39
**VLDO Val d'Or 75.43 32** P **P** **01 45 37.6 -1.3**
**BLOK Blackwell 75.77 51** IAmb IAmb 01 45 41.9
comp=Z,19nm,1.1s
**T35A Sooner Cattle 76.02 50** IAmb IAmb 01 45 43.5
comp=Z,29nm,1.1s
**VRAC Vranov 76.06 332** LR LR 02 24 34.2
comp=Z,269nm,18.5s,baz=31,slow=40
**P40A Paris 76.25 46** IAmb IAmb 01 45 44.9
comp=Z,33nm,1.0s
**OK029 Liberty Lake 76.37 52** IAmb IAmb 01 45 45.8
comp=Z,28nm,1.0s
**OK030 Cody Creek RV 76.63 51** IAmb IAmb 01 45 47.2
comp=Z,33nm,1.0s
**S39A Bolivar 77.05 48** IAmb IAmb 01 45 48.6
comp=Z,16nm,1.1s
**KHC Kasperske Hory 77.15 333** *e*P **P** **01 45 51.3 +2.5**
**TUL1 Leonard 77.16 50** IAmb IAmb 01 45 50.2
comp=Z,20nm,0.9s

**W35A Tecumseh 77.17 52** IAmb IAmb 01 45 50.3
comp=Z,29nm,1.0s
**GERES GERESS Array B 77.37 333** P **P** **01 45 51.7 +1.6**
comp=Z,0.5nm,0.6s,baz=28,slow=6.7,SNR=5.0
GERES LR LR 02 23 26.5
comp=Z,186nm,19.0s,baz=8.0,slow=38
**U38A Gravette 77.48 49** IAmb IAmb 01 45 51.6
**TX32 Lajitas Array 77.72 60** IAmb IAmb 01 45 54.5
comp=Z,30nm,1.0s
**TXAR Lajitas Array 77.73 60** P **P** **01 45 52.6 +0.2**
comp=Z,15nm,0.7s,baz=296,slow=4.0,SNR=148
**CCM Cathedral Cave 77.80 46** P **P** **01 45 52.5 +0.1**
CCM IAmb IAmb 01 45 53.4
comp=Z,35nm,1.2s
**HHAR Hobbs 77.83 49** IAmb IAmb 01 45 53.4
comp=Z,18nm,1.0s
**Q44A Meyer Farm, Va 78.20 44** IAmb IAmb 01 45 56.4
comp=Z,47nm,1.5s
**FVM French Village 78.25 46** IAmb IAmb 01 45 56.1
comp=Z,24nm,1.2s
**LMQ La Malbaie 78.32 28** IAmb IAmb 01 45 56.4
comp=Z,29nm,1.0s
**S44A Carbondale 79.04 45** IAmb IAmb 01 46 01.2
comp=Z,38nm,1.3s
**FCAR Ozark Folk Cen 79.06 48** IAmb IAmb 01 46 00.1
comp=Z,19nm,0.9s
**JCT Junction City 79.10 57** IAmb IAmb 01 46 01.0
comp=Z,24nm,0.9s
**PBMO Poplar Bluff 79.20 46** IAmb IAmb 01 46 01.4
comp=Z,49nm,1.4s
**WHTX Lake Whitney, 79.26 54** IAmb IAmb 01 46 02.0
comp=Z,33nm,1.1s
**MIAR Mount Ida 79.36 50** IAmb IAmb 01 46 02.5
comp=Z,18nm,1.0s
**VTS Vitosha 79.42 324** P **P** **01 46 00.9 -0.6**
**W41B Gary Mavity, V 79.55 49** IAmb IAmb 01 46 03.1
comp=Z,36nm,1.2s
**STKA Stephens Creek 79.66 189** P **P** **01 46 03.0 +0.5**
comp=Z,1.4nm,0.4s,baz=0.1,slow=7.1,SNR=5.6
**X40A Basin Creek Fa 79.79 49** IAmb IAmb 01 46 04.7
comp=Z,27nm,1.3s
**BATG Bathurst New B 79.85 25** IAmb IAmb 01 46 05.0
comp=Z,23nm,0.9s
**WCI Wyandotte Cave 80.01 43** P **P** **01 46 04.5 -0.1**
WCI IAmb IAmb 01 46 05.9
comp=Z,40nm,1.2s
**WLAR White Oak Lake 80.27 50** IAmb IAmb 01 46 07.5
comp=Z,24nm,0.8s
**DAVOX Davos/Dischmat 80.36 335** LR LR 02 23 39.7
comp=Z,182nm,20.0s,baz=83,slow=37
**P51A Williamsport 80.43 40** IAmb IAmb 01 46 08.2
comp=Z,37nm,1.2s
**O53A New Philadelph 80.58 38** IAmb IAmb 01 46 08.7
comp=Z,32nm,1.1s
**Q51A Peebles 80.68 40** IAmb IAmb 01 46 09.4
comp=Z,23nm,0.9s
**FORT Forrest 80.93 201** P **P** **01 46 10.3 +0.9**
**833A Chaparral WMA, 80.96 58** IAmb IAmb 01 46 11.6
comp=Z,17nm,1.1s
**RAR Rarotonga 81.02 135** LR LR 02 16 23.9
comp=Z,78nm,20.1s,baz=325,slow=31
**T50A Nancy 81.66 43** IAmb IAmb 01 46 14.6
comp=Z,28nm,1.2s
**HKT Hockley 81.71 54** P **P** **01 46 13.6 -0.2**
HKT IAmb IAmb 01 46 18.5
comp=Z,21nm,1.4s
**CLTN Cedars of Leba 81.72 44** IAmb IAmb 01 46 15.1
comp=Z,24nm,1.2s
**V48A Smith Brothers 81.77 45** IAmb IAmb 01 46 15.1
comp=Z,15nm,1.1s
**SWET Sewanee 82.62 44** IAmb IAmb 01 46 19.4
comp=Z,19nm,0.9s
**CPCT Cooper Cave 83.09 43** IAmb IAmb 01 46 21.9
comp=Z,27nm,1.3s
**PPT Papeete 83.25 125** LR LR 02 17 14.2
comp=Z,69nm,21.6s,baz=354,slow=31
**TKL Tuckaleechee C 83.27 43** LR LR 02 24 51.5
comp=Z,136nm,19.0s,baz=322,slow=37
**TKL Tuckaleechee C 83.27 43** IAmb IAmb 01 46 23.0
comp=Z,13nm,0.9s
**ESDC Sonseca Array 90.52 342** LR LR 02 32 17.6
comp=Z,221nm,19.0s,baz=356,slow=39
**CMIG Matias Romero 92.23 62** LR LR 02 27 50.9
comp=Z,50nm,19.5s,baz=282,slow=35
**ATD Arta Tunnel 94.11 292** LR LR 02 33 47.2
comp=Z,165nm,19.1s,baz=76,slow=38
**ESQI Esquipulas 97.49 59** P Pdif 01 47 29.6 0.0
**TORD Torodi Ar. Bea 113.99 328** PKiKP **PKiKP** **01 52 34.1 -0.3**
comp=Z,0.3nm,0.7s,baz=25,slow=1.8,SNR=4.6
**LPAZ La Paz 134.59 60** PKPdf **PKPdf** **01 53 13.8 -0.6**
**QSPA South Pole Qui 137.32 180** **PKiKP** **01 53 19.1 -0.1**
**PB03 IPOC Station P 138.00 67** **PKPdf** **01 53 19.0 -1.1**
**BDFB Brasilia 144.09 34** PKP PKPbc 01 53 28.9 -0.2
comp=Z,16nm,1.1s,baz=343,slow=5.2,SNR=16
**VA01 Torpederas 144.16 82** PKPdf **PKPdf** **01 53 32.1 +1.6**
**AQDB Aquidauana 144.87 49** PKPdf **PKPdf** **01 53 32.3 +0.2**
**CPUP Villa Florida 148.68 58** PKPbc **PKPbc** **01 53 41.5 -0.7**
comp=Z,6.2nm,0.9s,baz=289,slow=2.5,SNR=9.4
**CPUP Villa Florida 148.68 58** **PKPdf** **01 53 39.0 +0.6**
**PLCA Paso Flores 149.01 93** PKP **PKPdf** **01 53 37.5 -1.1**
comp=Z,3.0nm,1.0s,baz=209,slow=5.4,SNR=3.2
PLCA PKPbc **PKPbc** **01 53 43.2 +0.5**
comp=Z,6.6nm,0.8s,baz=277,slow=2.6,SNR=13
**PLCA Paso Flores 149.01 93** **PKPdf** **01 53 39.3 +0.7**
**BELA Belgrano 2 149.49 177** **PKPbc** **01 53 41.5 -1.3**
**COYC Coyhaique 149.93 103** **PKPdf** **01 53 41.2 +1.4**
**SNAA Sanae 153.14 197** PKPbc **PKiKP** **01 53 51.6 0.0**
**SNAA Sanae 153.14 197** PKPdf **PKPdf** **01 53 45.7 +1.7**
**VNA2 Neumayer--Watz 154.62 196** PKPbc **PKiKP** **01 53 54.8 +0.2**
baz=116,slow=1.3
**VNA3 Neumayer Olymp 154.74 194** PKPbc **PKPbc** **01 53 54.3 -0.4**
**VNA1 Neumayer--Stat 155.01 195** PKPbc PKPdf 01 53 55.7 +9.2

*IDC **04** 01:43:59.5±0.6, 47°.52N×152°.09E, h0km, mb4.0/14, mb1 4.3/17, mb1mx4.0/47, mbtmp4.0/17, ML2.9/3, MS3.5/2, Ms1 3.5/2, ms1mx2.9/97, Error ellipse: s-maj=20.9km s-min=13.8km az=138.0*
*SKHL **04** 01:44:03.1±0.5, 46°.90N×153°.20E, h43km±3km, mb4.5/3*
*MOS **04** 01:44:03.3±1.0, 47°.55N×151°.92E, h39km, mb4.0/3, Error ellipse: s-maj=17.0km s-min=13.0km az=80.6*
*NEIC **04** 01:44:07.1±1.0, 47°.6N±0°.1×151°.9E±0°.2, h56km±7km, mb4.4/11, Error ellipse: s-maj=20.8km s-min=12.7km az=135.0*

**ISC 04 01:44:06.8**±0.6, **47°.64N**±0°.08×**152°.01E**±0°.08, **h50**km, **n61,** σ1§**29**/59, **mb4.3**/20, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **3.74** | **232** | PN | Pn | 01 45 10.0 | +8.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,63nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **3.74** | **232** | *e*P | **Pn** | **01 45 03.5** | **+1.6** |
| KUR | | | | AMB | AMB | 01 45 10.2 | |
| | comp=Z,60nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **01 45 48.4** | **+3.8** |
| KUR | | | | A | A | 01 46 04.4 | |
| | comp=Z,60nm,0.3s | | | | | | |
| KUR | | | | A | A | 01 46 04.4 | |
| | comp=Z,90nm,0.3s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.07** | **40** | *e*PN | Pn | 01 45 13.8 | +7.4 |
| SKR | | | | *e*S | **Sn** | **01 45 53.4** | **+0.7** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,93nm,0.6s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,140nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,77nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.07** | **40** | *e*P | **Pn** | **01 45 06.8** | **+0.4** |
| SKR | | | | AMB | AMB | 01 45 09.9 | |
| | comp=N,50nm,0.6s | | | | | | |
| SKR | | | | *e*S | **Sn** | **01 45 54.5** | **+1.8** |
| SKR | | | | A | A | 01 46 05.4 | |
| | comp=N,70nm,0.4s | | | | | | |
| SKR | | | | A | A | 01 46 05.4 | |
| | comp=N,40nm,0.4s | | | | | | |
| **PAU** | **Pauzhetka** | **4.95** | **37** | *e*P | **Pn** | **01 45 19.4** | **+1.0** |
| PAU | | | | AMB | AMB | 01 45 23.1 | |
| | comp=N,20nm,0.4s | | | | | | |
| PAU | | | | *e*S | **Sn** | **01 46 17.2** | **+3.0** |
| PAU | | | | A | A | 01 46 25.0 | |
| | comp=N,40nm,0.3s | | | | | | |
| PAU | | | | A | A | 01 46 25.0 | |
| | comp=N,30nm,0.3s | | | | | | |

**NMR Nemuro--Hokkai 6.14 228** *e*P **Pn** **01 45 35.4 +0.6**
NMR *e*S **Sn** **01 46 44.7 +1.1**
**PETK Petropavlovsk- 6.58 31** Pn **Pn** **01 45 39.2 -1.6**
comp=N,0.3nm,0.3s,baz=189,slow=15,SNR=7.2
**PETK Petropavlovsk- 6.58 31** PN **Pn** **01 45 42.2 +1.4**
**PETK Petropavlovsk- 6.58 31** **Pn** **01 45 42.1 +1.4**
**TYV Tymovskoe 6.92 301** *e*PN **Pn** **01 45 43.5 -2.0**
TYV pmax pmax
comp=Z,31nm,0.5s
TYV pmax pmax
comp=Z,600nm,4.0s
**ASAJ Asahikawa 7.45 245** LR LR 01 48 16.8
comp=Z,410nm,19.3s,baz=181,slow=34
**KLR Kul'dur 13.55 284** Pn **Pn** **01 47 14.9 -1.2**
comp=Z,0.1nm,0.3s,baz=82,slow=15,SNR=4.0
**KLR Kul'dur 13.55 284** *e*P **P** **01 47 25.4 +1.6**
**MJAR Matsushiro Arr 15.07 228** Pn **Pn** **01 47 33.4 -3.0**
comp=Z,0.1nm,0.3s,baz=42,slow=8.7,SNR=1.4
**MJAR Matsushiro Arr 15.07 228** **Pn** **01 47 32.5 -3.9**
**JHJ Hachijo jima 2 17.20 217** LR LR 01 53 43.0
comp=Z,110nm,20.5s,baz=18,slow=34
**KSRS Korea Array 20.38 249** P **P** **01 48 39.0 -0.1**
comp=Z,2.1nm,0.7s,baz=47,slow=10.0,SNR=6.6
**KSRS Korea Array 20.38 249** P **P** **01 48 39.0 -0.1**
**TIXI Tiksi 26.41 344** P **P** **01 49 39.6 +1.5**
comp=Z,1.1nm,0.4s,baz=270,slow=20,SNR=1.8
**SONM Songino Array 30.34 288** P **P** **01 50 14.6 +1.1**
comp=Z,0.2nm,0.5s,baz=85,slow=6.4,SNR=2.1
**H11N2 WAKE ISLAND Hy 30.35 151** T T 02 21 37.3
baz=340,slow=76
**H11N1 WAKE ISLAND Hy 30.37 151** T T 02 21 54.4
baz=340,slow=76
**H11N3 WAKE ISLAND Hy 30.37 151** T T 02 21 38.3
baz=340,slow=76
**H11S1 WAKE ISLAND Hy 31.44 153** T T 02 23 04.3
baz=341,slow=76
**H11S3 WAKE ISLAND Hy 31.45 153** T T 02 23 05.3
baz=341,slow=76
**H11S2 WAKE ISLAND Hy 31.45 153** T T 02 22 59.6
baz=341,slow=76
**ILAR Eielson Array 36.33 39** P **P** **01 51 04.7 -0.6**
comp=Z,4.4nm,1.1s,baz=266,slow=8.6,SNR=16
**ILAR Eielson Array 36.33 39** P **P** **01 51 05.2 -0.1**
**ILAR Eielson Array 36.33 39** P **P** **01 51 05.2 -0.1**
**BMAR Burnt Mountain 37.21 35** P **P** **01 51 13.4 +0.6**
**A36M Sachs Harbour 43.40 27** P **P** **01 52 05.1 +1.4**
A36M IAmb IAmb 01 52 11.4
comp=Z,6.1nm,0.8s
**MK31 Makanchi Array 45.87 296** P **P** **01 52 23.4 -0.5**
MK31 pmax pmax
comp=Z,1.0nm,0.9s
**MK31 Makanchi Array 45.87 296** P **P** **01 52 23.4 -0.5**
**MKAR Makanchi Array 45.87 296** P **P** **01 52 22.9 -1.0**
comp=Z,0.4nm,0.6s,baz=67,slow=7.4,SNR=7.2
MKAR PcP **PcP** **01 54 00.6 +0.3**
comp=Z,0.1nm,0.5s,baz=57,slow=5.3,SNR=1.3
**MKAR Makanchi Array 45.87 296** P **P** **01 52 23.1 -0.8**
MKAR **PcP** **01 53 59.8 -0.5**
**YKA Yellowknife Ar 50.66 37** P **P** **01 53 00.3 -0.2**
comp=Z,2.4nm,0.7s,baz=298,slow=7.1,SNR=28
YKA PcP **PcP** **01 54 17.0 -0.2**
comp=Z,0.2nm,0.6s,baz=308,slow=3.5,SNR=2.7
**MSO Missoula 59.82 52** P **P** **01 54 07.1 +0.3**
MSO IAmb IAmb 01 54 23.6
comp=Z,6.3nm,1.4s
**NVAR Mina Array Bea 62.69 62** P **P** **01 54 26.6 +0.1**
comp=Z,1.6nm,0.7s,baz=293,slow=7.5,SNR=13
**NVAR Mina Array Bea 62.69 62** P **P** **01 54 26.2 -0.2**
**FINES FINESS Array B 62.92 334** P **P** **01 54 26.2 -1.1**
comp=Z,1.6nm,0.9s,baz=12,slow=9.4,SNR=3.9
**FINES FINESS Array B 62.92 334** P **P** **01 54 26.7 -0.6**
**FINES FINESS Array B 62.92 334** P **P** **01 54 26.7 -0.6**
**PD31 Pinedale Array 64.83 54** P **P** **01 54 40.3 -0.2**
PD31 IAmb IAmb 01 54 41.7
comp=Z,2.2nm,0.8s
**PDAR Pinedale Array 64.83 54** P **P** **01 54 40.6 +0.1**
comp=Z,1.6nm,0.7s,baz=289,slow=1.1,SNR=17
**PDAR Pinedale Array 64.83 54** P **P** **01 54 40.8 +0.3**
**HRA Herat 65.39 295** P **P** **01 54 42.9 -1.3**
**RDMU Red Mountain 66.31 55** P **P** **01 54 50.4 +0.3**
**SRU San Rafael Swe 66.77 57** P **P** **01 54 53.4 +0.4**
SRU pmax pmax
comp=Z,4.0nm,1.0s
**SRU San Rafael Swe 66.77 57** P **P** **01 54 53.4 +0.4**
SRU IAmb IAmb 01 54 54.2
comp=Z,4.2nm,1.0s
**PV13 Radium Mtn., P 68.39 57** P **P** **01 55 03.9 +0.6**
PV13 IAmb IAmb 01 55 04.3
comp=Z,2.8nm,0.6s
**WB0 Warramunga Arr 68.94 198** P **P** **01 55 05.2 -1.2**
WB0 IAmb IAmb 01 55 24.6
comp=Z,7.3nm,1.2s
**WB2 Warramunga Arr 69.11 198** P **P** **01 55 06.5 -1.0**
WB2 IAmb IAmb 01 55 20.4
comp=Z,5.4nm,1.2s
**WRA Warramunga Arr 69.12 198** P **P** **01 55 06.4 -1.1**
comp=Z,2.3nm,0.8s,baz=15,slow=6.9,SNR=9.0
**WRA Warramunga Arr 69.12 198** P **P** **01 55 06.4 -1.1**
**FITZ Fitzroy Crossi 69.58 207** P **P** **01 55 09.7 -0.7**
comp=Z,1.3nm,0.6s,baz=16,slow=3.9,SNR=5.1
**AKASG Malin Array Be 70.39 325** P **P** **01 55 15.7 +0.6**
comp=Z,0.2nm,0.4s,baz=73,slow=1.7,SNR=1.4
**AKASG Malin Array Be 70.39 325** P **P** **01 55 15.3 +0.2**
**ASAR Alice Springs 72.82 197** P **P** **01 55 29.5 -0.4**
comp=Z,2.3nm,0.5s,baz=12,slow=5.8,SNR=30
**ASAR Alice Springs 72.82 197** P **P** **01 55 28.6 -1.4**
**TXAR Lajitas Array 77.70 60** P **P** **01 55 58.1 -0.2**
comp=Z,3.9nm,0.7s,baz=297,slow=4.3,SNR=44
**TXAR Lajitas Array 77.70 60** P **P** **01 55 57.9 -0.4**

*IDC **04** 01:45:25.7±2.8, 3°.40S×135°.78E, h0km, mb3.3/2, mb1 3.8/5, mb1mx3.3/35, mbtmp3.6/5, ML3.6/3, MS3.2/2, Ms1 3.2/2, ms1mx2.7/30, Error ellipse: s-maj=69.5km s-min=27.2km az=75.0*
*DJA **04** 01:45:32.6±0.6, 3°.5S±5°×13°.5E±°, h42km±9km, M3.9/5, MLv3.9/5*

**ISC 04 01:45:30.7**±1.2, **3°.55S**±0°.09×**135°.53E**±0°.07, **h35**km, **n10,** σ1§**49**/11, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRPI** | **Serui, Papua** | **1.81** | **23** | P | Pn | **01 45 59.5** | **+0.1** |
| SRPI | | | | S | **Sn** | **01 46 20.9** | **-0.3** |
| **BAKI** | **Biak** | **2.41** | **14** | P | **Pn** | **01 46 08.8** | **+1.1** |
| **FAKI** | **Fak Fak** | **3.34** | **281** | P | **Pn** | **01 46 21.8** | **+1.3** |
| FAKI | | | | S | **Sn** | **01 46 58.2** | **-0.7** |
| **SIJI** | **Sorong** | **5.02** | **302** | Pn | **Pn** | **01 46 44.8** | **+1.1** |
| | 3.8nm,0.3s,baz=16,slow=23,SNR=16 | | | | | | |
| SIJI | | | | Sn | **Sn** | **01 47 37.6** | **-3.0** |
| | 6.7nm,0.3s,baz=270,slow=23,SNR=5.2 | | | | | | |
| SIJI | | | | LR | LR | 01 48 46.4 | |
| | comp=Z,102nm,21.8s,baz=100,slow=39 | | | | | | |
| **SWI** | **Sorong** | | **5.03** | **302** | P | **Pn** | **01 46 45.5** | **+1.7** |
| **WRA** | **Warramunga Arr** | | **16.34** | **184** | Pn | **Pn** | **01 49 16.6** | **-1.0** |
| | 0.2nm,0.3s,baz=4.8,slow=13,SNR=7.2 | | | | | | |
| WRA | | | | Sn | Sn | 01 52 08.2 | -10 |
| | 0.1nm,0.3s,baz=359,slow=23,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | **17.41** | **213** | P | **P** | **01 49 31.9** | **-0.1** |
| | 0.2nm,0.3s,baz=33,slow=10.0,SNR=11 | | | | | | |
| FITZ | | | | S | Sn | 01 52 33.0 | -11 |
| | 0.3nm,0.3s,baz=200,slow=16,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | | **20.06** | **184** | P | Pn | 01 50 04.2 | +1.0 |
| | 2.2nm,0.7s,baz=8.4,slow=11,SNR=16 | | | | | | |
| ASAR | | | | S | S | 01 53 33.2 | -12 |
| | 0.2nm,0.3s,baz=312,slow=38,SNR=2.0 | | | | | | |
| **KLR** | **Kul'dur** | | **52.66** | **357** | LR | LR | 02 17 37.0 |
| | comp=Z,56nm,18.3s,baz=59,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | | **68.55** | **324** | P | **P** | **01 56 30.3** | **+0.4** |
| | 0.1nm,0.4s,baz=116,slow=6.6,SNR=1.3 | | | | | | |

*IDC **04** 01:50:52.9±0.8, 47°.66N×151°.79E, h0km, mb3.8/9, mb1 4.0/10, mb1mx3.8/40, mbtmp3.7/10, ML1.5/1, MS3.0/1, Ms1 3.0/1, ms1mx2.5/98, Error ellipse: s-maj=30.4km s-min=19.4km az=129.0*

**ISC 04 01:50:59.9**±1.0, **47°.8N**±0°.2×**151°.8E**±0°.2, **h50**km, **n17,** σ1§**02**/10, **mb3.7**/9, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** | | **6.53** | **33** | Pn | **Pn** | **01 52 32.1** | **-1.2** |
| | 0.1nm,0.3s,baz=186,slow=13,SNR=1.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | | **30.54** | **151** | T | T | 02 28 45.8 | |
| | baz=341,slow=76 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H11N1** | **WAKE ISLAND Hy** | **30.55** | **151** | T | T | | 02 28 44.2 | |
| | baz=341,slow=76 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.55** | **151** | T | T | | 02 28 47.5 | |
| | baz=341,slow=76 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.62** | **152** | T | T | | 02 30 08.3 | |
| | baz=342,slow=76 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.63** | **152** | T | T | | 02 30 09.0 | |
| | baz=342,slow=76 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.64** | **152** | T | T | | 02 30 01.5 | |
| | baz=342,slow=76 | | | | | | | |
| **ILAR** | **Eielson Array** | **36.31** | **39** | P | **P** | | **01 57 57.9** | **-0.4** |
| | 2.9nm,1.2s,baz=270,slow=9.6,SNR=5.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.69** | **296** | P | **P** | | **01 59 16.1** | **+0.4** |
| | 0.7nm,0.7s,baz=76,slow=4.2,SNR=9.1 | | | | | | | |
| **DAV** | **Davao City (W)** | **46.30** | **217** | LR | LR | | 02 17 40.2 | |
| | comp=Z,17nm,20.6s,baz=356,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.64** | **37** | P | **P** | | **01 59 54.0** | **+0.6** |
| | 0.8nm,0.5s,baz=298,slow=7.1,SNR=15 | | | | | | | |
| **FINES** | **FINESS Array B** | **62.74** | **334** | P | **P** | | **02 01 19.2** | **-0.1** |
| | 1.5nm,0.9s,baz=37,slow=7.1,SNR=4.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.74** | **62** | P | **P** | | **02 01 21.3** | **+1.4** |
| | 0.2nm,0.6s,baz=297,slow=8.0,SNR=2.0 | | | | | | | |
| **PDAR** | **Pinedale Array** | **64.86** | **54** | P | **P** | | **02 01 34.8** | **+0.9** |
| | 0.3nm,0.6s,baz=287,slow=1.5,SNR=2.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **69.20** | **198** | P | **P** | | **02 01 59.7** | **-1.5** |
| | 0.8nm,0.9s,baz=21,slow=7.0,SNR=4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **72.91** | **197** | P | **P** | | **02 02 23.6** | **0.0** |
| | 0.7nm,0.5s,baz=15,slow=5.4,SNR=9.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.75** | **60** | P | **P** | | **02 02 51.8** | **+0.1** |
| | 0.7nm,0.8s,baz=299,slow=4.9,SNR=5.5 | | | | | | | |

**IDC 04 02:00:37.5±3.1, 13°03S×167°25E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.6/29, mbtmp3.7/3, Error ellipse: s-maj=126.1km s-min=51.1km az=138.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **30.10** | **227** | P | P | 02 06 49.0 | +0.1 |
| | 1.8nm,0.5s,baz=38,slow=13,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.26** | **253** | P | P | 02 07 07.8 | -0.3 |
| | 0.3nm,0.8s,baz=86,slow=9.7,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **33.29** | **247** | P | P | 02 07 17.2 | +0.1 |
| | 0.5nm,0.5s,baz=74,slow=9.3,SNR=8.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **118.61** | **346** | PKP | PKPdf | 02 19 26.6 | -0.3 |
| | 2.8nm,1.0s,baz=79,slow=1.9,SNR=1.2 | | | | | | |

*IDC 04 02:10:24.0±6.3, 21°91N×142°92E, h315km±63km, mb3.1/10, mb1 3.2/10, mb1mx3.1/36, mbtmp3.8/10, Error ellipse: s-maj=34.5km s-min=15.5km az=81.0*

**ISC 04 02:10:22.4±1.1, 21°9N±0°1×143°0E±0°2, h300km, n10, σ0s61/10, mb3.2/9, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **20.22** | **323** | P | **P** | **02 14 36.0** | **+0.5** |
| | 3.9nm,0.6s,baz=146,slow=9.2,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **39.04** | **320** | P | **P** | **02 17 20.9** | **+0.1** |
| | 0.7nm,0.4s,baz=124,slow=6.5,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.43** | **192** | P | **P** | **02 17 49.0** | **+0.5** |
| | 0.5nm,0.5s,baz=12,slow=8.2,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **46.14** | **192** | P | **P** | **02 18 17.2** | **-0.5** |
| | 0.1nm,0.3s,baz=8.9,slow=6.6,SNR=1.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.92** | **322** | P | **P** | **02 19 14.2** | **-1.2** |
| | 0.5nm,0.3s,baz=105,slow=6.7,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.40** | **313** | P | **P** | **02 19 19.4** | **+0.4** |
| | 0.3nm,0.5s,baz=88,slow=8.9,SNR=9.1 | | | | | | |
| **ILAR** | **Eielson Array** | **61.96** | **27** | P | **P** | **02 20 10.4** | **-0.2** |
| | 0.4nm,0.9s,baz=248,slow=5.3,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.38** | **28** | P | **P** | **02 21 39.1** | **+0.5** |
| | 0.2nm,0.4s,baz=291,slow=6.0,SNR=6.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.66** | **341** | P | **P** | **02 21 51.3** | **+0.2** |
| | 2.7nm,0.8s,baz=59,slow=7.5,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **82.90** | **334** | P | **P** | **02 22 13.3** | **-0.2** |
| | 0.9nm,0.4s,baz=59,slow=5.0,SNR=15 | | | | | | |

*MEX 04 02:11:09.9±1.0, 14°72N×92°57W, h79km±16km, MD4.2*
*NEIC 04 02:11:10.8±1.6, 14°74N±0°07×92°68W±0°04, h53km±11km, mb4.0/5, Md4.3/32(MEX), Error ellipse: s-maj=10.6km s-min=3.6km az=205.0*
*IDC 04 02:11:11.4±2.3, 14°85N×92°64W, h77km±16km, mb3.2/3, mb1 3.6/7, mb1mx3.4/37, mbtmp3.6/7, MS2.3/1, Ms1 2.3/1, ms1mx2.1/28, Error ellipse: s-maj=38.3km s-min=8.2km az=24.0*
*SNET 04 02:11:12.1±3.0, 14°46N×92°58W, h35km±999km, ML3.9*
*UCR 04 02:11:12.1±3.0, 14°46N×92°57W, h33km±999km, ML3.6, mb4.0(NEIC)*
*GCG 04 02:11:13.4±0.6, 14°74N×92°41W, h29km±999km, MD4.2*

**ISC 04 02:11:10.0±0.8, 14°73N±0°05×92°65W±0°04, h66km±7km, n77, σ1s41/124, mb3.5/3, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THIG** | | **0.41** | **65** | | **Pn** | **02 11 20.6** | **-1.0** |
| THIG | | | | | **Sn** | **02 11 30.1** | **-0.1** |
| **THIG** | | **0.41** | **65** | *eP* | **Pn** | **02 11 20.6** | **-1.0** |
| THIG | | | | *i* S | **Sn** | **02 11 30.1** | **-0.1** |
| **PATR** | **El Naranjo** | **0.56** | **46** | *eP* | **Pn** | **02 11 22.1** | **-1.3** |
| PATR | | | | *eS* | **Sn** | **02 11 32.2** | **-0.9** |
| **CHUJ** | **Union Juarez** | **0.64** | **55** | *eP* | **Pn** | **02 11 23.2** | **-1.0** |
| CHUJ | | | | *eS* | **Sn** | **02 11 33.8** | **-0.8** |
| **PAVE** | **Pavencul** | **0.65** | **45** | *eP* | **Pn** | **02 11 23.8** | **-0.6** |
| PAVE | | | | *i* S | **Sn** | **02 11 34.7** | **-0.2** |
| **RTAL** | **Retalhuleu** | **0.95** | **102** | | **Pn** | **02 11 27.1** | **-0.6** |
| RTAL | | | | | **Sn** | **02 11 39.6** | **-1.2** |
| **PCIG** | | **1.11** | **331** | | **Pn** | **02 11 29.6** | **-0.2** |
| PCIG | | | | | **Sn** | **02 11 44.4** | **-0.1** |
| **PCIG** | | **1.11** | **331** | *i* P | **Pn** | **02 11 29.6** | **-0.2** |
| PCIG | | | | *eS* | **Sn** | **02 11 44.4** | **-0.1** |
| **HUEH** | **Huehuetenango** | **1.26** | **62** | Pn | **Pn** | **02 11 32.7** | **+0.9** |
| HUEH | | | | Sn | **Sn** | **02 11 50.5** | **+2.3** |
| **CCIG** | **Comitan** | **1.62** | **18** | | **Pn** | **02 11 38.0** | **+1.3** |
| **CCIG** | **Comitan** | **1.62** | **18** | *eP* | **Pn** | **02 11 38.5** | **+1.8** |
| CCIG | | | | *eS* | **Sn** | **02 11 57.4** | **+0.6** |
| **FUG** | **Fuego 3** | **1.77** | **99** | *eP* | **Pn** | **02 11 39.3** | **+0.6** |
| **PCG** | **Pacaya** | **2.01** | **99** | *eP* | **Pn** | **02 11 43.1** | **+1.2** |
| PCG | | | | *eS* | **Sn** | **02 12 06.1** | **-0.1** |
| **TGIG** | | **2.09** | **348** | | **Pn** | **02 11 42.2** | **-0.7** |
| TGIG | | | | | **Sn** | **02 12 07.5** | **-0.4** |
| **TGIG** | | **2.09** | **348** | *i* P | **Pn** | **02 11 42.2** | **-0.7** |
| TGIG | | | | *i* S | **Sn** | **02 12 07.5** | **-0.4** |
| **APG** | **El Apazote** | **2.13** | **82** | P | **Pn** | **02 11 43.4** | **-0.3** |
| | 24nm,0.3s,baz=264,slow=8.2,SNR=87 | | | | | | |
| APG | | | | LR | LR | 02 12 09.8 | |
| | comp=Z,64nm,18.9s,baz=274,slow=28 | | | | | | |
| APG | | | | S | **Sn** | **02 12 11.2** | **+2.0** |
| | 34nm,0.3s,baz=252,slow=17,SNR=8.1 | | | | | | |
| **NBG** | **Las Nubes** | **2.24** | **93** | *eP* | **Pn** | **02 11 47.1** | **+2.0** |
| **SLOZ** | **Alcaldia de Sa** | **2.87** | **104** | *eP* | **Pn** | **02 11 53.7** | **+0.3** |
| SLOZ | | | | *eS* | **Sn** | **02 12 26.8** | **0.0** |
| SLOZ | | | | IAML | | 02 12 33.8 | |
| | comp=Z,266nm,0.3s | | | | | | |
| **MRL** | **Marmol** | **2.89** | **83** | *eP* | **Pn** | **02 11 55.1** | **+1.2** |
| **NUBE** | **Las Nubes** | **2.90** | **106** | *eP* | **Pn** | **02 11 54.2** | **+0.2** |
| NUBE | | | | *eS* | **Sn** | **02 12 25.3** | **-2.5** |
| NUBE | | | | IAML | | 02 12 38.1 | |
| | comp=Z,342nm,0.4s | | | | | | |
| **NUBE** | **Las Nubes** | **2.90** | **106** | *eP* | **Pn** | **02 11 54.2** | **+0.2** |
| NUBE | | | | *eS* | **Sn** | **02 12 25.3** | **-2.5** |
| NUBE | | | | IAML | | 02 12 38.1 | |
| | comp=Z,342nm,0.4s | | | | | | |
| **CMIG** | **Matias Romero** | **3.18** | **318** | P | **Pn** | **02 11 58.1** | **+0.4** |
| | comp=Z,11nm,0.3s,baz=143,slow=12,SNR=60 | | | | | | |
| CMIG | | | | S | **Sn** | **02 12 34.5** | **+0.1** |
| | comp=Z,29nm,0.3s,baz=125,slow=14,SNR=7.2 | | | | | | |
| **CMIG** | **Matias Romero** | **3.18** | **318** | | **Pn** | **02 11 57.9** | **+0.2** |
| CMIG | | | | | **Sn** | **02 12 34.8** | **+0.3** |
| **CMIG** | **Matias Romero** | **3.18** | **318** | *eP* | **Pn** | **02 11 57.9** | **+0.2** |
| CMIG | | | | *eS* | **Sn** | **02 12 34.8** | **+0.3** |
| **MTO3** | **Montecristo** | **3.20** | **95** | | **Pn** | **02 11 57.9** | **-0.3** |
| **ESQI** | **Esquipulas** | **3.21** | **93** | | **Pn** | **02 11 59.6** | **+1.4** |
| **JAYA** | **Jayaque - finc** | **3.29** | **109** | *eP* | **Pn** | **02 11 59.2** | **0.0** |
| JAYA | | | | *eS* | **Sn** | **02 12 35.2** | **-2.0** |
| JAYA | | | | IAML | | 02 12 41.0 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **3.29** | **109** | *eP* | **Pn** | **02 11 59.2** | **0.0** |
| JAYA | | | | *eS* | **Sn** | **02 12 35.2** | **-2.0** |
| JAYA | | | | IAML | | 02 12 41.0 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **TACO** | **Tacachico** | **3.29** | **103** | *eP* | **Pn** | **02 11 58.7** | **-0.4** |
| TACO | | | | *eS* | **Sn** | **02 12 36.1** | **-0.9** |
| TACO | | | | IAML | | 02 12 52.4 | |
| | comp=Z,147nm,0.5s | | | | | | |
| **TACO** | **Tacachico** | **3.29** | **103** | *eP* | **Pn** | **02 11 58.7** | **-0.4** |
| TACO | | | | *eS* | **Sn** | **02 12 36.1** | **-0.9** |
| TACO | | | | IAML | | 02 12 52.4 | |
| | comp=Z,147nm,0.5s | | | | | | |
| **PETF** | **Flores** | **3.45** | **51** | | **Pn** | **02 12 01.9** | **+0.6** |
| **LALI** | **Alcalda de L** | **3.46** | **110** | *eP* | **Pn** | **02 12 01.5** | **+0.1** |
| LALI | | | | *eS* | **Sn** | **02 12 39.5** | **-1.8** |
| LALI | | | | IAML | | 02 12 51.2 | |
| | comp=Z,283nm,0.4s | | | | | | |
| **LALI** | **Alcalda de L** | **3.46** | **110** | *eP* | **Pn** | **02 12 01.5** | **+0.1** |
| LALI | | | | *eS* | **Sn** | **02 12 39.5** | **-1.8** |
| LALI | | | | IAML | | 02 12 51.2 | |
| | comp=Z,283nm,0.4s | | | | | | |
| **SNET** | **Serv Nac Est T** | **3.48** | **107** | Pn | **Pn** | **02 12 02.5** | **+0.7** |
| **HUIG** | **Huatulco** | **3.49** | **288** | | **Pn** | **02 12 00.7** | **-1.2** |
| HUIG | | | | | **Sn** | **02 12 44.2** | **+2.1** |
| **HUIG** | **Huatulco** | **3.49** | **288** | *eP* | **Pn** | **02 12 00.8** | **-1.1** |
| HUIG | | | | *i* S | **Sn** | **02 12 43.0** | **+1.0** |
| **SJTE** | **Alcalda de S** | **3.71** | **107** | *eP* | **Pn** | **02 12 06.5** | **+1.6** |
| SJTE | | | | *eS* | **Sn** | **02 12 47.1** | **-0.4** |
| **SJTE** | **Alcalda de S** | **3.71** | **107** | *eP* | **Pn** | **02 12 06.5** | **+1.6** |
| SJTE | | | | *eS* | **Sn** | **02 12 47.1** | **-0.4** |
| **PAVA** | **Las Pavas** | **3.74** | **105** | *eP* | **Pn** | **02 12 06.0** | **+0.5** |
| PAVA | | | | *eS* | **Sn** | **02 12 49.6** | **+1.3** |
| PAVA | | | | IAML | | 02 13 03.3 | |
| | comp=Z,221nm,0.4s | | | | | | |
| **PAVA** | **Las Pavas** | **3.74** | **105** | *eP* | **Pn** | **02 12 06.0** | **+0.5** |
| PAVA | | | | *eS* | **Sn** | **02 12 49.6** | **+1.3** |
| PAVA | | | | IAML | | 02 13 03.3 | |
| | comp=Z,221nm,0.4s | | | | | | |
| **TECO** | **Alcaldia de Te** | **3.94** | **107** | *eP* | **Pn** | **02 12 09.5** | **+1.5** |
| TECO | | | | *eS* | **Sn** | **02 12 53.8** | **+0.7** |
| **TECO** | **Alcaldia de Te** | **3.94** | **107** | *eP* | **Pn** | **02 12 09.5** | **+1.5** |
| TECO | | | | *eS* | **Sn** | **02 12 53.8** | **+0.7** |
| **SCLA** | **Alcaldia de Sa** | **3.94** | **105** | *eP* | **Pn** | **02 12 08.3** | **+0.3** |
| SCLA | | | | *eS* | **Sn** | **02 12 57.8** | **+4.7** |
| SCLA | | | | IAML | | 02 13 13.4 | |
| | comp=Z,50nm,0.5s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **3.94** | **105** | *eP* | **Pn** | **02 12 08.3** | **+0.3** |
| SCLA | | | | *eS* | **Sn** | **02 12 57.8** | **+4.7** |
| SCLA | | | | IAML | | 02 13 13.4 | |
| | comp=Z,50nm,0.5s | | | | | | |
| **NEUV** | **Arroyo Zacate** | **4.24** | **315** | *eP* | **Pn** | **02 12 13.1** | **+1.0** |
| NEUV | | | | *eS* | **Sn** | **02 13 02.0** | **+1.7** |
| **SCIG** | **Sabancuy** | **4.44** | **18** | | **Pn** | **02 12 15.5** | **+0.6** |
| SCIG | | | | | **Sn** | **02 13 02.4** | **-3.0** |
| **SCIG** | **Sabancuy** | **4.44** | **18** | *eP* | **Pn** | **02 12 15.5** | **+0.6** |
| SCIG | | | | *eS* | **Sn** | **02 13 02.4** | **-3.0** |
| **PEIG** | **Puerto Escondi** | **4.52** | **287** | *eP* | **Pn** | **02 12 14.7** | **-1.3** |
| PEIG | | | | *i* S | **Sn** | **02 13 07.6** | **+0.4** |
| **VHO** | **Vista Hermosa** | **4.57** | **301** | *eP* | **Pn** | **02 12 15.6** | **-1.2** |
| **LCND** | **La Caada** | **4.83** | **106** | *eP* | **Pn** | **02 12 22.9** | **+2.7** |
| LCND | | | | *eS* | **Sn** | **02 13 14.4** | **-0.6** |
| LCND | | | | IAML | | 02 13 20.1 | |
| | comp=Z,249nm,0.3s | | | | | | |
| **LCND** | **La Caada** | **4.83** | **106** | *eP* | **Pn** | **02 12 22.9** | **+2.7** |
| LCND | | | | *eS* | **Sn** | **02 13 14.4** | **-0.6** |
| LCND | | | | IAML | | 02 13 20.1 | |
| | comp=Z,249nm,0.3s | | | | | | |
| **YOIG** | **Yosondua** | **5.16** | **295** | *eP* | **Pn** | **02 12 26.4** | **+1.4** |
| YOIG | | | | *eS* | **Sn** | **02 13 24.4** | **+1.0** |
| **TGUH** | **Tegucigalpa,Un** | **5.25** | **97** | Pn | **Pn** | **02 12 25.9** | **-0.3** |
| **TOIG** | **Toxpalan** | **5.40** | **309** | *eP* | **Pn** | **02 12 30.5** | **+0.7** |
| TOIG | | | | *eS* | **Sn** | **02 13 30.0** | **+1.0** |
| **TXIG** | **Tlaxiaco** | **5.52** | **298** | *eP* | **Pn** | **02 12 30.6** | **+0.7** |
| TXIG | | | | *eS* | **Sn** | **02 13 33.8** | **+1.5** |
| **PNIG** | **Pinotepa** | **5.53** | **288** | | **Pn** | **02 12 29.6** | **-0.2** |
| PNIG | | | | | **Sn** | **02 13 32.6** | **+0.5** |
| **PNIG** | **Pinotepa** | **5.53** | **288** | *eP* | **Pn** | **02 12 29.6** | **-0.2** |
| PNIG | | | | *eS* | **Sn** | **02 13 32.6** | **+0.5** |
| **CRIN** | **San Cristobal** | **5.81** | **110** | | **Pn** | **02 12 34.1** | **+0.4** |
| **CNGN** | **Cerro Negro** | **6.20** | **110** | | **Pn** | **02 12 41.4** | **+2.4** |
| **MATN** | **Matagalpa** | **6.77** | **104** | | **Pn** | **02 12 48.5** | **+1.6** |
| **BOAB** | **BOACO BROADBAN** | **7.16** | **108** | | **Pn** | **02 12 52.7** | **+0.5** |
| **ORTG** | **Ortega, Santa** | **8.26** | **121** | | **Pn** | **02 13 09.4** | **+2.2** |
| **DUNO** | **Dulce Nombre,** | **8.38** | **123** | | **Pn** | **02 13 11.7** | **+2.9** |
| **JTS** | **Las Juntas de** | **8.72** | **120** | P | **Pn** | **02 13 16.6** | **+3.2** |
| | comp=Z,2.6nm,0.3s,baz=291,slow=22,SNR=8.1 | | | | | | |
| JTS | | | | S | **Sn** | **02 14 53.3** | **+3.1** |
| | comp=Z,0.4nm,0.3s,baz=330,slow=21,SNR=1.7 | | | | | | |
| **JTS** | **Las Juntas de** | **8.72** | **120** | | **Pn** | **02 13 16.2** | **+2.7** |
| **RIMA** | **Rio Macho** | **9.90** | **119** | | **Pn** | **02 13 30.5** | **+0.6** |
| **PEZE** | **Perez Zeledon,** | **10.26** | **120** | | **Pn** | **02 13 35.8** | **+1.2** |
| **SRBA** | **San Rafael, Bu** | **10.60** | **120** | | **Pn** | **02 13 39.8** | **+0.4** |
| **TXAR** | **Lajitas Array** | **17.74** | **327** | P | **Pn** | **02 15 12.3** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=149,slow=11,SNR=2.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **17.74** | **327** | | **P** | **02 15 13.7** | **+1.0** |
| **ABTX** | **Abilene, Hawle** | **18.92** | **342** | P | **P** | **02 15 24.3** | **-1.2** |
| ABTX | | | | IAMb | IAMb | 02 15 31.1 | |
| | comp=Z,4.7nm,0.5s | | | | | | |
| **LRAL** | **Lakeview Retre** | **18.93** | **15** | P | **Pn** | **02 15 27.2** | **+0.3** |
| LRAL | | | | IAMb | IAMb | 02 15 29.7 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **GOGA** | **Godfrey** | **20.38** | **23** | P | Pn | 02 15 42.7 | -1.3 |
| **MNTX** | **Cornudas Mount** | **20.52** | **328** | P | **P** | **02 15 43.7** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **32.71** | **321** | P | **P** | **02 17 37.2** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=131,slow=8.6,SNR=11 | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.18** | **347** | P | **P** | **02 19 57.3** | **-1.4** |
| | comp=Z,0.2nm,0.5s,baz=153,slow=7.4,SNR=6.8 | | | | | | |
| **ILAR** | **Eielson Array** | **61.92** | **337** | P | **P** | **02 21 21.6** | **-1.0** |
| | comp=Z,0.2nm,0.5s,baz=133,slow=6.9,SNR=4.1 | | | | | | |

*IDC 04 02:23:28.7±2.0, 32°92N×76°17E, h0km, mb3.6/7, mb1 3.7/10, mb1mx3.5/46, mbtmp3.6/10, ML3.0/3, Error ellipse: s-maj=39.1km s-min=28.1km az=123.0*

**ISC 04 02:23:31.0±1.5, 32°9N±0°1×76°4E±0°2, h15km, n10, σ1s62/12, mb3.5/6, Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **9.80** | **352** | Pn | **Pn** | **02 25 52.7** | **+1.3** |
| | 0.2nm,0.3s,baz=159,slow=8.6,SNR=1.7 | | | | | | |
| AAK | | | | Sn | **Sn** | **02 27 42.5** | **+1.2** |
| | 0.1nm,0.3s,baz=207,slow=17,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **14.56** | **16** | Pn | **Pn** | **02 26 57.5** | **+1.0** |
| | 0.1nm,0.3s,baz=196,slow=13,SNR=8.5 | | | | | | |
| MKAR | | | | Sn | **Sn** | **02 29 34.8** | **-2.8** |
| | 0.1nm,0.3s,baz=202,slow=24,SNR=3.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.75** | **5** | P | **Pn** | **02 27 36.6** | **-0.7** |
| | 0.0nm,0.3s,baz=192,slow=12,SNR=6.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **20.54** | **350** | P | **P** | **02 28 08.4** | **-0.3** |
| | 1.5nm,0.7s,baz=112,slow=12,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.85** | **14** | P | **P** | **02 28 23.5** | **+0.7** |
| | 0.7nm,0.5s,baz=204,slow=6.5,SNR=5.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.11** | **328** | P | **P** | **02 28 26.1** | **+0.5** |
| | 1.4nm,0.6s,baz=129,slow=6.3,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **27.08** | **48** | P | **P** | **02 29 15.6** | **+2.6** |
| | 0.4nm,0.5s,baz=250,slow=8.4,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.11** | **338** | P | **P** | **02 31 52.6** | **-1.6** |
| | 2.4nm,0.9s,baz=122,slow=8.6,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **70.19** | **273** | P | **P** | **02 34 43.5** | **-0.1** |
| | 0.2nm,0.6s,baz=50,slow=5.4,SNR=1.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.49** | **5** | P | **P** | **02 36 01.7** | **-1.2** |
| | 0.2nm,0.5s,baz=342,slow=4.9,SNR=4.4 | | | | | | |

*IDC 04 02:23:39.0±1.3, 5°33S×152°35E, h0km, mb3.8/11, mb1 3.9/11, mb1mx3.8/38, mbtmp3.7/11, Error ellipse: s-maj=49.4km s-min=21.8km az=126.0*
*NEIC 04 02:23:44.7±0.8, 5°48S±0°09×152°4E±0°2, h43km±7km, mb4.2/8, Error ellipse: s-maj=22.2km s-min=12.4km az=80.0*

**ISC 04 02:23:44.0±0.8, 5°51S±0°09×152°4E±0°1, h40km, n26, σ0s72/27, mb3.8/14, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.33** | **349** | Pn | **Pn** | **02 24 06.6** | **+0.5** |
| RABL | | | | Sn | **Sn** | **02 24 22.3** | **-0.4** |
| **MTN** | **Manton Dam** | **22.23** | **249** | P | **P** | **02 28 37.0** | **-0.5** |
| MTN | | | | IAmb | IAmb | 02 28 43.5 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.55** | **229** | P | **P** | **02 28 40.0** | **-1.0** |
| **WB2** | **Warramunga Arr** | **22.69** | **229** | P | **P** | **02 28 42.7** | **+0.3** |
| **WRA** | **Warramunga Arr** | **22.70** | **229** | P | **P** | **02 28 44.0** | **+1.6** |
| | comp=Z,0.6nm,0.8s,baz=53,slow=10,SNR=2.2 | | | | | | |
| **KNRA** | **Kununurra** | **25.33** | **245** | P | **P** | **02 29 06.8** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 02 29 14.2 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.38** | **223** | P | **P** | **02 29 09.1** | **+1.3** |
| | comp=Z,0.3nm,0.4s,baz=51,slow=9.9,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.38** | **223** | P | **P** | **02 29 07.7** | **-0.1** |
| **MSVF** | **Nonsavu** | **27.84** | **118** | P | **P** | **02 29 29.6** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **28.99** | **242** | P | **P** | **02 29 40.2** | **-0.1** |
| | comp=Z,1.0nm,0.6s,baz=59,slow=11,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **66.72** | **328** | P | **P** | **02 34 31.3** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=141,slow=7.1,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **66.72** | **328** | P | **P** | **02 34 31.2** | **0.0** |
| SONM | | | | IAmb | IAmb | 02 34 33.3 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.61** | **319** | P | **P** | **02 35 52.4** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=92,slow=8.5,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.61** | **319** | P | **P** | **02 35 52.6** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **81.53** | **326** | P | **P** | **02 35 57.9** | **+0.7** |
| | comp=Z,0.4nm,0.4s,baz=119,slow=5.4,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **82.95** | **22** | P | **P** | **02 36 04.8** | **+0.3** |
| | comp=Z,1.1nm,0.8s,baz=246,slow=5.6,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **82.95** | **22** | P | **P** | **02 36 04.2** | **-0.3** |
| **J25K** | **Salcha River,** | **83.45** | **23** | P | **P** | **02 36 07.4** | **+0.2** |
| **KURK** | **Kurchatov** | **84.09** | **322** | P | **P** | **02 36 09.1** | **-1.6** |
| KURK | | | | IAmb | IAmb | 02 36 13.9 | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.12** | **322** | P | **P** | **02 36 10.6** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=131,slow=4.0,SNR=6.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **89.58** | **323** | P | **P** | **02 36 37.7** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=56,slow=11,SNR=5.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.81** | **52** | P | **P** | **02 36 53.5** | **+0.5** |
| | comp=Z,0.2nm,0.6s,baz=278,slow=6.3,SNR=2.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.81** | **52** | P | **P** | **02 36 52.1** | **-1.0** |
| **YKA** | **Yellowknife Ar** | **96.22** | **28** | P | **P** | **02 37 08.9** | **+1.2** |
| | comp=Z,0.3nm,0.8s,baz=276,slow=4.5,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.22** | **28** | P | **P** | **02 37 07.5** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **150.16** | **287** | PKPbc | **PKPbc** | **02 43 31.3** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=69,slow=1.4,SNR=2.6 | | | | | | |

*IDC 04 02:38:12.4±1.3, 10°40S×160°72E, h0km, mb3.9/9, mb1 4.1/10, mb1mx3.8/37, mbtmp3.9/10, ML3.6/1, MS3.3/1, Ms1 3.3/1, ms1mx2.6/60, Error ellipse: s-maj=34.3km s-min=22.3km az=126.0*
*NEIC 04 02:38:18.2±1.4, 10°31S±0°10×160°6E±0°1, h37km±8km, mb4.0/8, Error ellipse: s-maj=18.7km s-min=9.7km az=48.0*

**ISC 04 02:38:18.5±0.8, 10°4S±0°1×160°6E±0°1, h42km, n22, σ0s89/23, mb3.9/11, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.10** | **326** | Pn | **Pn** | **02 38 36.6** | **-0.8** |
| | 59nm,0.3s,baz=177,slow=9.8,SNR=11 | | | | | | |
| HNR | | | | Sn | **Sn** | **02 38 50.1** | **-1.3** |
| | 419nm,0.3s,baz=175,slow=11,SNR=10 | | | | | | |
| **CTA** | **Charters Tower** | **16.85** | **233** | Pn | **Pn** | **02 42 11.4** | **-0.1** |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=2.3 | | | | | | |
| CTA | | | | LR | LR | 02 48 24.6 | |
| | comp=Z,90nm,19.1s,baz=81,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **16.85** | **233** | Pn | **Pn** | **02 42 10.8** | **-0.7** |
| **MSVF** | **Nonsavu** | **18.47** | **115** | P | **P** | **02 42 30.0** | **-1.1** |
| MSVF | | | | IAmb | IAmb | 02 42 46.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **26.92** | **247** | P | **P** | **02 43 57.3** | **+1.3** |
| **WB2** | **Warramunga Arr** | **27.00** | **246** | P | **P** | **02 43 57.8** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 02 43 58.7 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.02** | **246** | P | **P** | **02 43 58.1** | **+1.2** |
| | comp=Z,2.3nm,0.7s,baz=74,slow=9.6,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.02** | **246** | P | **P** | **02 43 55.2** | **-1.7** |
| **ASAR** | **Alice Springs** | **28.66** | **239** | P | **P** | **02 44 11.5** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=64,slow=10.0,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HRRZ** | **Handcock Road** | **0.48** | **56** | P | | **Pn** | **02 52 10.5** | **-0.1** | |
| **OTVZ** | **Oturere** | **0.50** | **190** | P | | **Pn** | **02 52 11.2** | **+0.4** | |
| **HSRZ** | **Hossack Road** | **0.51** | **46** | P | | **Pn** | **02 52 10.7** | **0.0** | |
| **PRRZ** | **Plateau Road** | **0.51** | **71** | P | | **Pn** | **02 52 10.5** | **-0.1** | |
| **NGZ** | **Ngauruhoe** | **0.53** | **195** | P | | **Pn** | **02 52 11.3** | **+0.4** | |
| **MRHZ** | **Matea Rd** | **0.53** | **109** | P | | **Pn** | **02 52 10.7** | **-0.1** | |
| MRHZ | | | | S | | **Sn** | **02 52 27.5** | **-2.0** | |
| **SNVZ** | **South Ngauruho** | **0.53** | **191** | P | | **Pn** | **02 52 11.4** | **+0.5** | |
| **UTU** | **Utuhina** | **0.59** | **34** | P | | **Pn** | **02 52 11.1** | **+0.1** | |
| **TUVZ** | **Tukino** | **0.61** | **189** | P | | **Pn** | **02 52 12.0** | **+0.7** | |
| **FWVZ** | **Far West T-bar** | **0.61** | **196** | P | | **Pn** | **02 52 11.9** | **+0.5** | |
| **HLRZ** | **Highlands Stat** | **0.61** | **48** | P | | **Pn** | **02 52 11.6** | **+0.4** | |
| **DRZ** | **Dome Shelter** | **0.63** | **195** | P | | **Pn** | **02 52 12.3** | **+0.8** | |
| **WHVZ** | **Whangaehu Hut** | **0.63** | **195** | P | | **Pn** | **02 52 12.0** | **+0.6** | |
| **TRVZ** | **Turoa** | **0.66** | **196** | P | | **Pn** | **02 52 12.4** | **+0.8** | |
| **RRRZ** | **Republican Roa** | **0.67** | **61** | P | | **Pn** | **02 52 11.2** | **-0.2** | |
| **WNVZ** | **Wahianoa** | **0.68** | **192** | P | | **Pn** | **02 52 12.3** | **+0.7** | |
| WNVZ | | | | S | | **Sn** | **02 52 28.8** | **-2.3** | |
| **PKVZ** | **Pokaka** | **0.71** | **208** | P | | **Pn** | **02 52 12.3** | **+0.6** | |
| **TARZ** | **Mount Tarawera** | **0.72** | **53** | P | | **Pn** | **02 52 11.7** | **-0.2** | |
| **OMRZ** | **Omania** | **0.73** | **40** | P | | **Pn** | **02 52 11.5** | **-0.3** | |
| **HIZ** | **Hauiti** | **0.74** | **282** | P | | **Pn** | **02 52 12.0** | **+0.2** | |
| HIZ | | | | S | | **Sn** | **02 52 31.4** | **+0.2** | |
| **MOVZ** | **Moawhango** | **0.74** | **181** | P | | **Pn** | **02 52 12.3** | **+0.4** | |
| MOVZ | | | | S | | **Sn** | **02 52 29.9** | **-1.8** | |
| **KARZ** | **Kaharoa** | **0.74** | **30** | P | | **Pn** | **02 52 11.7** | **-0.2** | |
| **BKZ** | **Black Stump Fm** | **0.75** | **132** | P | | **Pn** | **02 52 12.3** | **+0.4** | |
| BKZ | | | | S | | **Sn** | **02 52 30.1** | **-1.5** | |
| **MTVZ** | **Mangateitei** | **0.76** | **198** | P | | **Pn** | **02 52 12.8** | **+0.9** | |
| **MKRZ** | **Makatiti** | **0.76** | **46** | P | | **Pn** | **02 52 12.3** | **+0.2** | |
| **BHHZ** | **Black Hill Sta** | **0.85** | **165** | P | | **Pn** | **02 52 13.1** | **+0.5** | |
| BHHZ | | | | S | | **Sn** | **02 52 31.8** | **-1.1** | |
| **MTHZ** | **Maungataniwha** | **0.85** | **103** | P | | **Pn** | **02 52 12.9** | **+0.3** | |
| MTHZ | | | | S | | **Sn** | **02 52 31.3** | **-1.4** | |
| **KWHZ** | **Kaweka Forest** | **0.91** | **147** | P | | **Pn** | **02 52 13.9** | **+0.9** | |
| **VRZ** | **Vera Road** | **0.92** | **240** | P | | **Pn** | **02 52 13.6** | **+0.7** | |
| **RTZ** | **Ruatahuna** | **0.95** | **87** | P | | **Pn** | **02 52 13.2** | **-0.1** | |
| RTZ | | | | S | | **Sn** | **02 52 32.3** | **-1.5** | |
| **TOZ** | **Tahuroa Road** | **0.96** | **347** | P | | **Pn** | **02 52 13.2** | **-0.1** | |
| TOZ | | | | S | | **Sn** | **02 52 33.0** | **-0.9** | |
| **MARZ** | **Manawahe** | **0.98** | **46** | P | | **Pn** | **02 52 13.3** | **-0.2** | |
| **OPRZ** | **Ohinepanea** | **1.02** | **37** | P | | **Pn** | **02 52 13.3** | **-0.5** | |
| **MCHZ** | **McNeill Hill** | **1.06** | **138** | P | | **Pn** | **02 52 15.5** | **+1.5** | |
| **KRHZ** | **Kereru** | **1.08** | **155** | P | | **Pn** | **02 52 15.1** | **+0.9** | |
| **ARHZ** | **Aropaoanui** | **1.12** | **122** | P | | **Pn** | **02 52 15.6** | **+1.1** | |
| **URZ** | **Urewera** | **1.12** | **69** | P | | **Pn** | **02 52 13.7** | **-0.8** | |
| | 84nm,0.3s,baz=248,slow=6.4,SNR=51 | | | | | | | | |
| URZ | | | | S | | **Sn** | **02 52 32.9** | **-3.2** | |
| | 60nm,0.3s,baz=127,slow=21,SNR=32 | | | | | | | | |
| **URZ** | **Urewera** | **1.12** | **69** | P | | **Pn** | **02 52 13.9** | **-0.7** | |
| **SNGZ** | **Shannon Statio** | **1.23** | **96** | P | | **Pn** | **02 52 16.0** | **+0.5** | |
| **WAZ** | **Wanganui** | **1.25** | **209** | P | | **Pn** | **02 52 16.4** | **+0.8** | |
| **PNHZ** | **Pukenui** | **1.29** | **165** | P | | **Pn** | **02 52 16.8** | **+0.8** | |
| **RAGZ** | **Rawiri** | **1.30** | **83** | P | | **Pn** | **02 52 16.2** | **+0.1** | |
| **LREZ** | **Lake Rotokare** | **1.33** | **233** | P | | **Pn** | **02 52 17.7** | **+1.4** | |
| **DREZ** | **Durham Road** | **1.33** | **246** | P | | **Pn** | **02 52 17.5** | **+1.1** | |
| **TSZ** | **Takapari Road** | **1.40** | **174** | P | | **Pn** | **02 52 18.0** | **+1.0** | |
| **KAHZ** | **Kahuranaki** | **1.42** | **143** | P | | **Pn** | **02 52 18.4** | **+1.3** | |
| **MWZ** | **Matawai** | **1.42** | **77** | P | | **Pn** | **02 52 16.9** | **-0.3** | |
| **CKHZ** | **Cape Kidnapper** | **1.42** | **135** | P | | **Pn** | **02 52 18.4** | **+1.3** | |
| **PREZ** | **Palmer Road** | **1.43** | **241** | P | | **Pn** | **02 52 18.3** | **+1.1** | |
| **NEZ** | **North Egmont** | **1.44** | **245** | P | | **Pn** | **02 52 18.6** | **+1.1** | |
| **WPHZ** | **Waipukurau** | **1.49** | **160** | P | | **Pn** | **02 52 18.8** | **+1.0** | |
| **PKE** | **Pukeiti** | **1.49** | **249** | P | | **Pn** | **02 52 18.8** | **+0.9** | |
| **KHEZ** | **Kahui Hut** | **1.51** | **245** | P | | **Pn** | **02 52 19.1** | **+1.0** | |
| **KNZ** | **Kokohu** | **1.52** | **104** | P | | **Pn** | **02 52 18.7** | **+0.6** | |
| **RIGZ** | **Rimuhau** | **1.56** | **92** | P | | **Pn** | **02 52 18.9** | **+0.3** | |
| **OHWZ** | **Ohakea** | **1.58** | **193** | P | | **Pn** | **02 52 20.0** | **+1.4** | |
| **PXZ** | **Pawanui** | **1.60** | **149** | P | | **Pn** | **02 52 19.8** | **+0.9** | |
| **TKGZ** | **Te Karaka** | **1.64** | **83** | P | | **Pn** | **02 52 19.7** | **+0.4** | |
| **RUGZ** | **Raukumara Rang** | **1.65** | **66** | P | | **Pn** | **02 52 18.3** | **-1.3** | |
| **DVHZ** | **Dannevirke** | **1.66** | **170** | P | | **Pn** | **02 52 20.1** | **+0.6** | |
| **PRGZ** | **Paritu Road** | **1.67** | **100** | P | | **Pn** | **02 52 20.1** | **+0.5** | |
| **POWZ** | **Post Office Ro** | **1.72** | **180** | P | | **Pn** | **02 52 20.7** | **+0.6** | |
| **PRHZ** | **Porangahau** | **1.73** | **158** | P | | **Pn** | **02 52 21.2** | **+1.0** | |
| **MHGZ** | **Mahia Peninsul** | **1.73** | **107** | P | | **Pn** | **02 52 21.1** | **+0.8** | |
| **TWGZ** | **Tauwhareparae** | **1.80** | **75** | P | | **Pn** | **02 52 21.4** | **+0.3** | |
| **HAZ** | **Te Kaha** | **1.82** | **61** | P | | **Pn** | **02 52 20.0** | **-1.2** | |
| **AWAZ** | **Awhitu Peninsu** | **1.83** | **330** | P | | **Pn** | **02 52 21.3** | **-0.1** | |
| **ANWZ** | **Angora Road** | **1.87** | **163** | P | | **Pn** | **02 52 22.6** | **+0.9** | |
| **PRWZ** | **Pori Road** | **1.89** | **171** | P | | **Pn** | **02 52 22.6** | **+0.7** | |
| **CNGZ** | **Carnagh Statio** | **1.92** | **85** | P | | **Pn** | **02 52 23.1** | **+1.0** | |
| **KUZ** | **Kuaotunu** | **1.92** | **359** | P | | **Pn** | **02 52 21.3** | **-1.0** | |
| **WIAZ** | **Waiheke Island** | **1.94** | **345** | P | | **Pn** | **02 52 22.2** | **-0.3** | |
| **PKGZ** | **Pakihiroa** | **1.97** | **68** | P | | **Pn** | **02 52 22.5** | **-0.4** | |
| **WTAZ** | **Waiatarua** | **1.98** | **331** | P | | **Pn** | **02 52 23.2** | **+0.3** | |
| **MRZ** | **Mangatainoka R** | **2.00** | **184** | P | | **Pn** | **02 52 23.3** | **+0.2** | |
| **MBAZ** | **Motutapu North** | **2.02** | **340** | P | | **Pn** | **02 52 23.1** | **-0.3** | |
| **PUZ** | **Puketiti** | **2.04** | **74** | P | | **Pn** | **02 52 23.4** | **-0.2** | |
| **BFZ** | **Birch Farm** | **2.05** | **170** | P | | **Pn** | **02 52 23.9** | **+0.4** | |
| **TIWZ** | **Tintock** | **2.11** | **178** | P | | **Pn** | **02 52 24.7** | **+0.4** | |
| **OGWZ** | **Otaki Gorge** | **2.20** | **192** | P | | **Pn** | **02 52 25.7** | **+0.4** | |
| **HOWZ** | **Holdsworth Sta** | **2.24** | **185** | P | | **Pn** | **02 52 25.7** | **0.0** | |
| **WMGZ** | **Waiomatatini S** | **2.24** | **69** | P | | **Pn** | **02 52 25.3** | **-0.6** | |
| **CPWZ** | **Castlepoint** | **2.27** | **172** | P | | **Pn** | **02 52 26.9** | **+0.9** | |
| **MXZ** | **Matakaoa Point** | **2.28** | **62** | P | | **Pn** | **02 52 26.3** | **+0.1** | |
| **KIW** | **Kapiti Island** | **2.29** | **197** | P | | **Pn** | **02 52 26.2** | **-0.1** | |
| **GRZ** | **Great Barrier** | **2.42** | **354** | P | | **Pn** | **02 52 27.6** | **-0.4** | |
| **TMWZ** | **Te Maipa** | **2.44** | **178** | P | | **Pn** | **02 52 28.0** | **-0.1** | |
| **MTW** | **Mount Morrison** | **2.50** | **185** | P | | **Pn** | **02 52 28.4** | **-0.3** | |
| **CAW** | **Cannon Point** | **2.50** | **192** | P | | **Pn** | **02 52 28.7** | **-0.1** | |
| **DUWZ** | **D'Urville Isla** | **2.57** | **213** | P | | **Pn** | **02 52 29.2** | **-0.4** | |
| **PAWZ** | **Paruwai Farm** | **2.73** | **186** | P | | **Pn** | **02 52 31.0** | **-0.5** | |
| **WEL** | **Wellington** | **2.73** | **196** | P | | **Pn** | **02 52 31.3** | **-0.1** | |
| **TRWZ** | **Traveller** | **2.73** | **181** | P | | **Pn** | **02 52 31.2** | **-0.3** | |
| **MSWZ** | **Moikau Station** | **2.78** | **188** | P | | **Pn** | **02 52 31.5** | **-0.6** | |
| **TCW** | **Tory Channel** | **2.79** | **204** | P | | **Pn** | **02 52 31.8** | **-0.4** | |
| **BHW** | **Baring Head** | **2.83** | **194** | P | | **Pn** | **02 52 32.1** | **-0.6** | |
| **PLWZ** | **Palliser** | **2.93** | **188** | P | | **Pn** | **02 52 33.1** | **-0.8** | |
| **WCZ** | **Waipu Caves** | **2.95** | **337** | P | | **Pn** | **02 52 34.6** | **+0.3** | |
| **TUWZ** | **Tuamarina** | **3.10** | **206** | P | | **Pn** | **02 52 35.1** | **-0.8** | |
| **NNZ** | **Nelson** | **3.14** | **215** | P | | **Pn** | **02 52 35.6** | **-0.9** | |
| **TKNZ** | **Takaka Hill** | **3.21** | **222** | P | | **Pn** | **02 52 36.4** | **-1.0** | |
| **QRZ** | **Quartz Range** | **3.30** | **228** | P | | **Pn** | **02 52 37.2** | **-1.3** | |
| **BSWZ** | **Blackbirch Sta** | **3.38** | **205** | P | | **Pn** | **02 52 39.0** | **-0.4** | |
| **MRNZ** | **Matariki Terra** | **3.58** | **215** | P | | **Pn** | **02 52 40.8** | **-1.2** | |
| **THZ** | **Tophouse** | **3.79** | **214** | P | | **Pn** | **02 52 43.9** | **-0.8** | |
| **OUZ** | **Omahuta** | **3.86** | **332** | P | | **Pn** | **02 52 46.1** | **+0.5** | |
| **KHZ** | **Kahutara** | **4.12** | **204** | P | | **Pn** | **02 52 48.0** | **-0.8** | |
| **DSZ** | **Denniston Nort** | **4.32** | **223** | P | | **Pn** | **02 52 49.5** | **-2.1** | |
| **GVZ** | **Greta Valley S** | **4.77** | **205** | P | | **Pn** | **02 52 56.0** | **-1.3** | |
| **LTZ** | **Lake Taylor** | **4.90** | **212** | P | | **Pn** | **02 52 57.2** | **-1.8** | |
| **MQZ** | **McQueen's Vall** | **5.56** | **204** | P | | **Pn** | **02 53 04.9** | **-2.5** | |
| **TMZ** | **Timaru** | **6.74** | **211** | P | | **Pn** | **02 53 21.3** | **-1.7** | |
| **ODZ** | **Otahua Downs** | **7.43** | **209** | P | | **Pn** | **02 53 30.5** | **-1.7** | |
| **ASAR** | **Alice Springs** | **38.48** | **280** | P | | **P** | **02 58 53.1** | **+1.4** | |
| | 0.8nm,0.6s,baz=124,slow=8.6,SNR=9.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.26** | **286** | P | | **P** | **02 59 06.9** | **+0.4** | |
| | 0.2nm,0.6s,baz=123,slow=8.0,SNR=1.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **150.51** | **330** | PKPbc | | **PKPdf** | **03 11 13.9** | **+3.0** | |
| | 4.1nm,1.0s,baz=44,slow=4.2,SNR=4.2 | | | | | | | | |

**IDC 04 02:55:09.2±3.2, 30°41'S×177°31'W, h0km, mb3.3/2, mb1 3.6/2, mb1mx2.9/27, mbtmp3.3/2, Error ellipse: s-maj=76.5km s-min=25.0km az=112.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.15** | **360** | Pn | Pn | 02 55 33.3 | +0.7 |
| | 73nm,0.3s,baz=314,slow=21,SNR=2.5 | | | | | | |
| RAO | | | | Sn | Sn | 02 55 49.3 | +0.3 |
| | 282nm,0.3s,baz=40,slow=23,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **43.18** | **267** | P | P | 03 03 12.1 | +0.1 |
| | 0.2nm,0.4s,baz=108,slow=7.2,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.17** | **272** | P | P | 03 03 19.8 | -0.3 |
| | 0.3nm,0.4s,baz=111,slow=7.9,SNR=2.4 | | | | | | |
| **FINES** | **FINESS Array B** | **145.18** | **340** | PKPbc | PKPbc | 03 14 46.3 | -1.2 |
| | 1.0nm,0.3s,baz=47,slow=4.4,SNR=11 | | | | | | |

*TRN **04** 03:24:00.6, 10°.96N×62°.29W, h109km, MD3.5*
*FUNV **04** 03:24:02.9, 10°.98N×62°.36W, h26km, MW3.7*
**ISC 04 03:23:59.6±1.4, 10°.98N±0°.05×62°.35W±0°.05, h111km±14km, n35, σ1§52/52, 1C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRUV** | **Carupano** | **0.92** | **251** | eS | **Sn** | **03 24 32.6** | **-2.9** |
| **TRN** | **Trinidad (W)** | **0.98** | **109** | ||/P | **Pn** | **03 24 21.9** | **+1.3** |
| TRN | | | | eS | **Sn** | **03 24 36.2** | **-0.4** |
| **GRFF** | **Grenada Fort F** | **1.22** | **29** | eP | **Pn** | **03 24 23.6** | **+0.3** |
| GRFF | | | | eS | **Sn** | **03 24 40.6** | **-0.6** |
| **GRGR** | **Grenville** | **1.34** | **31** | eP | **Pn** | **03 24 25.2** | **+0.7** |
| GRGR | | | | eS | **Sn** | **03 24 43.5** | **+0.1** |
| **BOT** | **Bacolet** | **1.61** | **83** | eP | **Pn** | **03 24 28.5** | **+0.8** |
| BOT | | | | eS | **Sn** | **03 24 47.4** | **-1.8** |
| **COAV** | **Cumanacoa** | **1.67** | **241** | eP | **Pn** | **03 24 30.6** | **+2.0** |
| **GCMP** | **Grenada, Carri** | **1.75** | **31** | eP | **Pn** | **03 24 30.2** | **+0.7** |
| GCMP | | | | eS | **Sn** | **03 24 52.5** | **+0.2** |
| **TOSP** | **Speyside** | **1.81** | **80** | eP | **Pn** | **03 24 31.4** | **+1.2** |
| TOSP | | | | eS | **Sn** | **03 24 52.1** | **-1.5** |
| **CUMV** | **Cumana_UDO** | **1.89** | **253** | eP | **Pn** | **03 24 33.4** | **+2.1** |
| CUMV | | | | eS | **Sn** | **03 24 55.4** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **2.39** | **251** | eP | **Pn** | **03 24 39.0** | **+1.4** |
| PCRV | | | | eS | **Sn** | **03 25 06.0** | **-0.8** |
| **SVOC** | **Richmond Hill,** | **2.43** | **27** | eP | **Pn** | **03 24 39.3** | **+1.2** |
| **SVB** | **Belmont** | **2.52** | **25** | eP | **Pn** | **03 24 40.8** | **+1.5** |
| **SVV** | **Soufriere Volc** | **2.58** | **25** | eP | **Pn** | **03 24 41.8** | **+1.7** |
| **MCLT** | **Moule a Chique** | **3.04** | **27** | eP | **Pn** | **03 24 46.2** | **0.0** |
| MCLT | | | | eS | **Sn** | **03 25 21.6** | **-0.6** |
| **PRGV** | **PARIAGUAN** | **3.16** | **226** | eP | **Pn** | **03 24 49.2** | **+1.5** |
| PRGV | | | | eS | **Sn** | **03 25 25.0** | **+0.1** |
| **SLBI** | **Saint Lucia, B** | **3.31** | **24** | eP | **Pn** | **03 24 50.5** | **+0.7** |
| SLBI | | | | eS | **Sn** | **03 25 28.3** | **-0.2** |
| **BIM** | **Bigot** | **3.73** | **19** | eP | **Pn** | **03 24 56.4** | **+1.0** |
| BIM | | | | eS | **Sn** | **03 25 37.9** | **-0.8** |
| **MPOM** | **Morne Pois Mar** | **3.74** | **23** | eP | **Pn** | **03 24 56.6** | **+1.1** |
| MPOM | | | | eS | **Sn** | **03 25 37.7** | **-1.1** |
| **LPMF** | **Morne Lapointe** | **3.82** | **20** | eP | **Pn** | **03 24 57.9** | **+1.3** |
| **BIRV** | **Birongo** | **3.89** | **263** | eP | **Pn** | **03 25 00.0** | **+2.6** |
| BIRV | | | | eS | **Sn** | **03 25 41.3** | **-1.0** |
| **FDF** | **Fort de France** | **3.91** | **17** | eP | **Pn** | **03 24 58.9** | **+1.1** |
| **PML** | **Morne Lenard** | **3.95** | **17** | eP | **Pn** | **03 24 59.2** | **+0.8** |
| **GBMF** | **Grand Be** | **3.97** | **17** | eP | **Pn** | **03 24 58.9** | **+0.3** |
| **PCM** | **Pelee Case Pet** | **3.97** | **16** | eP | **Pn** | **03 24 59.5** | **+0.8** |
| **BAMF** | **Morne Balai** | **3.99** | **17** | eP | **Pn** | **03 24 59.7** | **+0.8** |
| **SVN** | **Savane Anatole** | **4.01** | **17** | eP | **Pn** | **03 24 59.2** | **+0.1** |
| **MERV** | **Las Mercedes** | **4.25** | **247** | eP | **Pn** | **03 25 03.7** | **+1.4** |
| MERV | | | | eS | **Sn** | **03 25 50.1** | **-0.9** |
| **BENV** | **Beln** | **5.26** | **259** | eS | **Sn** | **03 26 13.2** | **-2.4** |
| **CACV** | **CAICARA DEL OR** | **5.35** | **231** | eS | Sn | 03 26 07.2 | -10 |
| **TURV** | **Turiamo** | **5.42** | **265** | eP | **Pn** | **03 25 19.8** | **+1.7** |
| TURV | | | | eS | **Sn** | **03 26 17.1** | **-2.2** |
| **BAUV** | **El Baul** | **5.96** | **251** | eP | **Pn** | **03 25 26.4** | **+1.0** |
| **BAUV** | **El Baul** | **5.96** | **251** | eS | **Sn** | **03 26 31.2** | **-1.3** |
| **BAUV** | **El Baul** | **5.96** | **251** | eP | **Pn** | **03 25 26.3** | **+0.9** |
| BAUV | | | | eS | **Sn** | **03 26 30.8** | **-1.7** |
| **MAPV** | **Macapo** | **6.12** | **260** | eP | **Pn** | **03 25 29.8** | **+2.2** |
| MAPV | | | | eS | **Sn** | **03 26 33.1** | **-3.2** |
| **PAYV** | **Puerto Ayacuch** | **7.62** | **224** | eS | **Sn** | **03 27 08.7** | **-4.0** |

**IDC 04 03:25:32.7±3.3, 30°.46S×177°.47W, h0km, mb3.3/2, mb1 3.6/2, mb1mx3.5/22, mbtmp3.3/2, Error ellipse: s-maj=71.9km s-min=38.0km az=112.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.26** | **342** | Pn | Pn | 03 25 57.7 | +0.1 |
| | 77nm,0.3s,baz=57,slow=23,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **43.56** | **267** | P | P | 03 33 38.6 | 0.0 |
| | 0.1nm,0.3s,baz=111,slow=8.4,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.55** | **272** | P | P | 03 33 46.5 | -0.1 |
| | 0.2nm,0.3s,baz=113,slow=8.3,SNR=9.3 | | | | | | |
| **FINES** | **FINESS Array B** | **145.35** | **340** | PKPbc | PKPbc | 03 45 10.5 | -1.1 |
| | 2.0nm,0.9s,baz=49,slow=3.1,SNR=8.8 | | | | | | |

*IDC **04** 03:25:47.8±0.8, 30°.39S×177°.59W, h0km, mb4.3/6, mb1 4.5/7, mb1mx4.2/23, mbtmp4.3/7, ML3.5/1, Error ellipse: s-maj=25.6km s-min=17.6km az=88.0*
*NEIC **04** 03:25:49.7±1.6, 30°.51S±0°.04×177°.6W±0°.2, h10km±4km, mb4.5/16, Error ellipse: s-maj=21.6km s-min=6.3km az=86.0*
**ISC 04 03:25:48.8±0.7, 30°.52S±0°.05×177°.6W±0°.1, h10km, n53, σ1§28/54, mb4.5/12, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.29** | **348** | Pn | **Pn** | **03 26 13.0** | **+0.1** |
| | 552nm,0.3s,baz=180,slow=3.8,SNR=22 | | | | | | |
| RAO | | | | Sn | **Sb** | **03 26 27.7** | **-2.2** |
| | 3µm,0.3s,baz=84,slow=22,SNR=23 | | | | | | |
| RAO | | | | LR | LR | 03 26 47.8 | |
| | comp=Z,1µm,18.0s,baz=110,slow=51 | | | | | | |
| **RAO** | **Raoul Island** | **1.29** | **348** | Pn | **Pn** | **03 26 13.0** | **+0.1** |
| RAO | | | | Sn | **Sb** | **03 26 28.9** | **-0.9** |
| **URZ** | **Urewera** | **8.87** | **208** | Pn | **Pn** | **03 27 53.7** | **-3.3** |
| | 0.3nm,0.3s,baz=338,slow=22,SNR=1.4 | | | | | | |
| URZ | | | | Sn | **Sn** | **03 29 34.1** | **-2.8** |
| | 2.0nm,0.3s,baz=240,slow=19,SNR=2.8 | | | | | | |
| **URZ** | **Urewera** | **8.87** | **208** | Pn | **Pn** | **03 27 55.8** | **-1.2** |
| URZ | | | | | **Sn** | **03 29 35.4** | **-1.5** |
| **BKZ** | **Black Stump Fm** | **9.89** | **208** | Pn | **Pn** | **03 28 11.7** | **+0.5** |
| **SNZO** | **South Karori** | **12.43** | **208** | Pn | **Pn** | **03 28 45.8** | **0.0** |
| **TUWZ** | **Tuamarina** | **12.85** | **210** | Pn | **Pn** | **03 28 51.4** | **-0.1** |
| **QRZ** | **Quartz Range** | **13.03** | **215** | Pn | **Pn** | **03 28 53.7** | **-0.3** |
| **KHZ** | **Kahutara** | **13.83** | **208** | Pn | **Pn** | **03 29 05.9** | **+1.0** |
| **LTZ** | **Lake Taylor** | **14.67** | **211** | Pn | **Pn** | **03 29 18.4** | **+1.9** |
| **OXZ** | **Oxford** | **15.21** | **210** | Pn | **Pn** | **03 29 24.2** | **+0.6** |
| OXZ | | | | IAmb | IAmb | 03 29 32.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.58** | **297** | Pn | **Pn** | **03 29 40.9** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=216,slow=21,SNR=1.7 | | | | | | |
| **ODZ** | **Otahua Downs** | **17.19** | **209** | Pn | **Pn** | **03 29 49.2** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **18.57** | **213** | P | **P** | **03 30 05.5** | **-0.3** |
| **EIDS** | **Eidsvold** | **28.08** | **273** | P | **P** | **03 31 40.6** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 03 31 48.4 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **CTAO** | **Charters Tower** | **34.15** | **279** | P | **P** | **03 32 36.8** | **+2.5** |
| **STKA** | **Stephens Creek** | **34.78** | **257** | P | **P** | **03 32 42.1** | **+2.5** |
| | comp=Z,9.7nm,0.7s,baz=104,slow=11,SNR=14 | | | | | | |
| **STKA** | **Stephens Creek** | **34.78** | **257** | P | **P** | **03 32 42.4** | **+2.7** |
| STKA | | | | IAmb | IAmb | 03 32 55.4 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **39.26** | **254** | P | **P** | **03 33 19.1** | **+1.3** |
| BBOO | | | | IAmb | IAmb | 03 33 20.7 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **COEN** | **Coen** | **39.63** | **286** | P | **P** | **03 33 21.9** | **+1.0** |
| COEN | | | | IAmb | IAmb | 03 33 23.9 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **43.44** | **267** | P | **P** | **03 33 52.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **43.44** | **267** | P | **P** | **03 33 52.3** | **+0.1** |
| | comp=Z,2.4nm,0.5s,baz=105,slow=7.0,SNR=52 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 35 40.8** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=104,slow=3.9,SNR=1.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 39 32.3** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=93,slow=4.6,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **43.44** | **267** | P | **P** | **03 33 52.6** | **+0.4** |
| **WB2** | **Warramunga Arr** | **44.43** | **272** | P | **P** | **03 34 00.0** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 03 34 05.5 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.44** | **272** | P | **P** | **03 34 00.5** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 03 34 03.9 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.44** | **272** | P | **P** | **03 34 00.5** | **+0.2** |
| | comp=Z,5.2nm,0.6s,baz=111,slow=7.7,SNR=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.44** | **272** | P | **P** | **03 34 00.7** | **+0.4** |
| **WB0** | **Warramunga Arr** | **44.46** | **272** | P | **P** | **03 34 00.7** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 03 34 03.9 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **46.34** | **255** | P | **P** | **03 34 15.5** | **+0.3** |
| **QSPA** | **South Pole Qui** | **59.59** | **180** | P | **P** | **03 35 54.9** | **+2.3** |
| | comp=Z,1.5nm,0.5s,baz=318,slow=1.2,SNR=7.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.59** | **180** | P | **P** | **03 35 53.5** | **+0.8** |
| **MAW** | **Mawson** | **72.31** | **200** | P | **P** | **03 37 15.1** | **+0.8** |
| **VNA3** | **Neumayer Olymp** | **78.16** | **176** | P | **P** | **03 37 46.3** | **-1.6** |
| **VNA2** | **Neumayer--Watz** | **78.60** | **177** | P | **P** | **03 37 47.1** | **-3.3** |
| | baz=291,slow=13 | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.12** | **123** | T | T | 05 07 17.0 | |
| | baz=238 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.13** | **123** | T | T | 05 07 19.5 | |
| | baz=238 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.13** | **123** | T | T | 05 07 16.2 | |
| | baz=238 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.31** | **123** | T | T | 05 07 34.7 | |
| | baz=241 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.31** | **123** | T | T | 05 07 40.5 | |
| | baz=241 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.32** | **123** | T | T | 05 07 34.2 | |
| | baz=241 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **86.01** | **345** | P | | **P** | **03 38 29.2** | **+0.2** | |
| | comp=Z,1.6nm,0.6s,baz=134,slow=8.2,SNR=2.2 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.10** | **43** | P | | **P** | **03 38 40.7** | **+0.9** | |
| | comp=Z,0.4nm,0.7s,baz=229,slow=5.4,SNR=2.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **118.11** | **310** | PKP | | **PKPdf** | **03 44 34.9** | **-1.0** | |
| | comp=Z,0.3nm,0.5s,baz=206,slow=1.8,SNR=7.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **118.11** | **310** | | | **PKPdf** | **03 44 35.2** | **-0.6** | |
| **ARCES** | **ARCESS Array B** | **138.78** | **348** | PKhKP | | PKPpre | 03 45 07.0 | | |
| | comp=Z,2.8nm,1.0s,baz=48,slow=1.8,SNR=6.1 | | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | **03 45 14.0** | **-0.3** | |
| | comp=Z,2.7nm,0.7s,baz=59,slow=2.3,SNR=4.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **145.37** | **340** | PKPbc | | **PKPbc** | **03 45 26.1** | **-0.1** | |
| | comp=Z,5.5nm,0.4s,baz=52,slow=4.2,SNR=90 | | | | | | | | |
| **KBZ** | **Khabaz** | **145.46** | **304** | PKPbc | | **PKPdf** | **03 45 27.4** | **+0.5** | |
| | comp=Z,1.9nm,0.9s,baz=186,slow=4.5,SNR=4.9 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **148.92** | **352** | PKP | | **PKPbc** | **03 45 36.6** | **+0.3** | |
| | comp=Z,4.4nm,0.8s,baz=17,slow=2.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **148.92** | **352** | PKPbc | | **PKPbc** | **03 45 36.3** | **+0.1** | |
| | comp=Z,1.7nm,0.6s,baz=14,slow=4.2,SNR=8.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.60** | **323** | PKPbc | | **PKPbc** | **03 45 42.9** | **-0.1** | |
| | comp=Z,2.1nm,0.5s,baz=46,slow=3.1,SNR=12 | | | | | | | | |
| AKASG | | | | PKPab | | **PKPab** | **03 45 50.0** | **-1.6** | |
| | comp=Z,5.8nm,0.6s,baz=48,slow=2.8,SNR=22 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **152.96** | **298** | PKPbc

| | | | | | | |
|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **59.54 180** | P | **P** | **03 47 46.0** | **+1.7** |
| QSPA | | | IAmb | IAmb | 03 48 04.1 | |
| | comp=Z,13nm,1.4s | | | | | |
| **SNAA** | **Sanae** | **77.98 178** | P | P | 03 49 48.8 | +10 |
| **VNA3** | **Neumayer Olymp** | **78.11 176** | P | P | 03 49 50.0 | +10 |
| **VNA2** | **Neumayer--Watz** | **78.55 177** | P | P | 03 49 51.5 | +9.5 |
| | baz=192,slow=5.0 | | | | | |
| **H03S2** | **Juan Fernandez** | **80.07 123** | T | T | 05 19 13.8 | |
| | baz=238 | | | | | |
| **H03S1** | **Juan Fernandez** | **80.08 123** | T | T | 05 19 16.2 | |
| | baz=238 | | | | | |
| **H03S3** | **Juan Fernandez** | **80.09 123** | T | T | 05 19 15.1 | |
| | baz=238 | | | | | |
| **H03N3** | **Juan Fernandez** | **80.26 123** | T | T | 05 19 22.3 | |
| | baz=234 | | | | | |
| **H03N2** | **Juan Fernandez** | **80.27 123** | T | T | 05 19 25.6 | |
| | baz=234 | | | | | |
| **H03N1** | **Juan Fernandez** | **80.28 123** | T | T | 05 19 19.6 | |
| | baz=234 | | | | | |
| **MKAR** | **Makanchi Array** | **118.16 310** | PKP | **PKPdf** | **03 56 26.5** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=96,slow=1.7,SNR=2.3 | | | | | |
| **ARCES** | **ARCESS Array B** | **138.83 348** | PKhKP | PKPpre | 03 56 58.8 | |
| | comp=Z,5.0nm,0.9s,baz=64,slow=4.1,SNR=5.0 | | | | | |
| ARCES | | | PKP | **PKPdf** | **03 57 07.1** | **+0.7** |
| | comp=Z,2.7nm,0.8s,baz=79,slow=1.9,SNR=6.6 | | | | | |
| **FINES** | **FINESS Array B** | **145.43 340** | PKPbc | **PKPbc** | **03 57 18.1** | **-0.2** |
| | comp=Z,5.8nm,0.3s,baz=51,slow=4.5,SNR=156 | | | | | |
| **KBZ** | **Khabaz** | **145.54 304** | PKPbc | **PKPbc** | **03 57 19.7** | **+0.6** |
| | comp=Z,0.7nm,0.5s,baz=342,slow=3.2,SNR=2.1 | | | | | |
| **NB2** | **NORSAR Subarra** | **148.97 352** | PKP | **PKPbc** | **03 57 28.6** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=17,slow=2.6 | | | | | |
| **NOA** | **NORSAR Array B** | **148.97 352** | PKPbc | **PKPbc** | **03 57 27.8** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=13,slow=4.0,SNR=5.1 | | | | | |
| **AKASG** | **Malin Array Be** | **151.65 323** | PKPbc | **PKPbc** | **03 57 35.1** | **0.0** |
| | comp=Z,0.8nm,0.3s,baz=51,slow=3.4,SNR=11 | | | | | |
| AKASG | | | PKPab | **PKPab** | **03 57 42.8** | **-1.0** |
| | comp=Z,4.6nm,0.5s,baz=48,slow=2.7,SNR=24 | | | | | |
| **BRTR** | **Keskin Array B** | **153.00 298** | PKPbc | **PKPbc** | **03 57 38.7** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=70,slow=1.7,SNR=2.5 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.65 178** | PKPab | **PKPab** | **03 58 32.8** | **+1.0** |
| | comp=Z,0.6nm,0.8s,baz=186,slow=3.6,SNR=6.1 | | | | | |

*NEIC **04** 03:47:25.7±0.7,37.10N±0.02×98.06W±0.03,h7km±6km,*
*Error ellipse: s-maj=4.1km s-min=1.3km az=123.0*

**NEIC 04 03:47:25.6±0.4,37.09N±0.02×98.03W±0.03,h5km±6km,**
**mb_Lg2.5/20,ML2.6/17,Error ellipse: s-maj=4.4km**
**s-min=2.0km az=129.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAN10** | **Anthony SW Sta** | **0.06** | **301** | | | Pg | Pg | 03 47 27.3 | +0.2 |
| KAN10 | | | | | | Sg | Sg | 03 47 28.4 | +0.2 |
| **KAN05** | **Bluff City Nor** | **0.13** | **83** | | | | Pg | 03 47 28.6 | +0.2 |
| KAN05 | | | | | | Sg | Sg | 03 47 30.7 | +0.6 |
| **KAN16** | **Harper SW Stat** | **0.13** | **350** | | | Pg | Pg | 03 47 28.6 | +0.3 |
| KAN16 | | | | | | Sg | Sg | 03 47 30.3 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **0.14** | **21** | | | | Pg | 03 47 28.8 | +0.2 |
| KAN08 | | | | | | Sg | Sg | 03 47 30.9 | +0.5 |
| **KAN14** | **Manchester OK** | **0.15** | **157** | | | Pg | Pg | 03 47 28.9 | +0.3 |
| KAN14 | | | | | | Sg | Sg | 03 47 31.3 | +0.7 |
| **KAN12** | **Harper NE Stat** | **0.20** | **8** | | | Pg | Pg | 03 47 30.0 | +0.3 |
| **KAN06** | **Argonia West S** | **0.21** | **42** | | | Pg | Pg | 03 47 30.0 | +0.3 |
| **KAN17** | **Caldwell West** | **0.22** | **103** | | | Pg | Pg | 03 47 30.2 | +0.3 |
| **KAN01** | **Argonia South** | **0.23** | **75** | | | Pg | Pg | 03 47 30.3 | +0.2 |
| **GC02** | **Grant County #** | **0.28** | **150** | | | Pg | Pg | 03 47 31.2 | +0.2 |
| **OK032** | **Salt Plains WL** | **0.32** | **206** | | | Pg | Pg | 03 47 32.2 | +0.3 |
| **KAN13** | **South Haven SW** | **0.45** | **100** | | | Pg | Pg | 03 47 34.5 | +0.1 |
| KAN13 | | | | | | | Sg | 03 47 40.2 | 0.0 |
| **CROK** | **Carrier** | **0.59** | **176** | | | Pg | Pg | 03 47 37.0 | +0.1 |
| **OK035** | **E0210 Rd and N** | **0.66** | **235** | | | | Pg | 03 47 38.4 | +0.1 |
| **BLOK** | **Blackwell** | **0.74** | **117** | | | | Pg | 03 47 39.5 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.05** | **228** | | | | Pg | 03 47 45.3 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.23** | **98** | | | Pn | Pg | 03 47 48.6 | -0.6 |
| **OK033** | **Mehan** | **1.37** | **140** | | | | Pn | 03 47 51.3 | -0.1 |
| **OK029** | **Liberty Lake** | **1.38** | **160** | | | | Pn | 03 47 50.9 | -0.5 |
| **QUOK** | **Quay** | **1.41** | **130** | | | | Pn | 03 47 51.7 | -0.2 |
| **R32A** | **Long Quarter,** | **1.43** | **338** | | | | Pn | 03 47 52.1 | -0.1 |
| **BCOK** | **Bluff Creek, N** | **1.48** | **166** | | | Pn | Pn | 03 47 52.4 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.49** | **139** | | | | Pn | 03 47 52.9 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **1.52** | **135** | | | | Pn | 03 47 53.5 | +0.2 |
| **OK030** | **Cody Creek RV** | **1.54** | **139** | | | | Pn | 03 47 53.6 | 0.0 |
| **OK025** | **Westminster Rd** | **1.61** | **159** | | | | Pn | 03 47 54.9 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.75** | **164** | | | Pn | Pn | 03 47 56.7 | +0.1 |
| **FNO** | **Franklin** | **1.90** | **164** | | | | Pn | 03 47 58.8 | +0.1 |
| **W35A** | **Tecumseh** | **2.15** | **154** | | | Pn | Pn | 03 48 02.4 | +0.3 |
| W35A | | | | | | IAmb_Lg | | 03 48 34.6 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **TUL1** | **Leonard** | **2.16** | **123** | | | Pn | Pn | 03 48 02.5 | +0.3 |
| TUL1 | | | | | | IAmb_Lg | | 03 48 34.4 | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| **KSU1** | **Kansas State U** | **2.30** | **29** | | | Pn | Pn | 03 48 04.4 | +0.3 |
| KSU1 | | | | | | IAmb_Lg | | 03 48 44.9 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.43** | **195** | | | Pn | Pn | 03 48 06.3 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.49** | **176** | | | Pn | Pn | 03 48 06.9 | +0.1 |
| **U38A** | **Gravette** | **3.00** | **101** | | | | Pn | 03 48 14.1 | +0.3 |
| **X37A** | **Clayton** | **3.31** | **138** | | | | Pn | 03 48 18.4 | +0.5 |
| **HHAR** | **Hobbs** | **3.39** | **103** | | | | Pn | 03 48 19.0 | -0.1 |
| **AMTX** | **Amarillo** | **3.69** | **234** | | | IAmb_Lg | | 03 49 31.5 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **S39A** | **Bolivar** | **3.80** | **80** | | | | Pn | 03 48 24.7 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **4.10** | **299** | | | Pn | Pn | 03 48 28.3 | -0.7 |
| **U40A** | **Yellville** | **4.23** | **98** | | | | Pn | 03 48 30.7 | +0.1 |
| U40A | | | | | | IAmb_Lg | | 03 49 46.7 | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **BGNE** | **Belgrade** | **4.31** | **359** | | | IAmb_Lg | | 03 49 45.8 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **R40A** | **Maddies Statio** | **4.73** | **74** | | | Pn | Pn | 03 48 37.7 | +0.2 |
| R40A | | | | | | IAmb_Lg | | 03 50 00.2 | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.03** | **14** | | | IAmb_Lg | | 03 50 15.9 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.53** | **297** | | | IAmb_Lg | | 03 50 57.3 | |
| | comp=Z,3.1nm,0.8s | | | | | | | | |
| **JCT** | **Junction City** | **6.76** | **193** | | | IAmb_Lg | | 03 51 15.3 | |
| | comp=Z,9.6nm,0.9s | | | | | | | | |

*IDC **04** 03:56:06.4±1.0,30.30S×177.57W,h0km,mb4.2/5,*
*mb1 4.4/6,mb1mx4.1/20,mbtmp4.3/6,ML5.8/1,MS3.5/4,*
*Ms1 3.5/4,ms1mx3.0/61,Error ellipse: s-maj=29.0km*
*s-min=19.8km az=95.0*

*NEIC **04** 03:56:10.2±1.6,30.20S±0.05×177.6W±0.1,h10km±1km,*
*mb4.6/12,Error ellipse: s-maj=21.3km s-min=7.1km*
*az=76.0*

**ISC 04 03:56:09.1±0.8,30.22S±0.06×177.6W±0.1,h10km,n43,**
**σ1s53/36,mb4.5/11,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.01** | **342** | | | Pn | **Pg** | **03 56 28.3** | **-0.3** |
| | 439nm,0.3s,baz=61,slow=10,SNR=13 | | | | | | | | |
| RAO | | | | | | Sn | **Sn** | **03 56 46.9** | **+3.2** |
| | 1μm,0.3s,baz=128,slow=24,SNR=8.7 | | | | | | | | |
| RAO | | | | | | LR | LR | 03 56 50.9 | |
| | comp=Z,151nm,21.6s,baz=186,slow=41 | | | | | | | | |
| **RAO** | **Raoul Island** | **1.01** | **342** | | | Pg | **Pb** | **03 56 29.2** | **+0.5** |
| RAO | | | | | | Sg | **Sb** | **03 56 42.5** | **+0.4** |
| **OUZ** | **Omahuta** | **8.97** | **234** | | | Pn | **Pn** | **03 58 19.2** | **+0.5** |
| **URZ** | **Urewera** | **9.16** | **207** | | | Pn | Pn | 03 58 13.2 | -8.1 |
| | 0.7nm,0.3s,baz=11,slow=23,SNR=2.1 | | | | | | | | |
| URZ | | | | | | Sn | Sn | 03 59 51.4 | -13 |
| | 1.7nm,0.3s,baz=149,slow=21,SNR=8.7 | | | | | | | | |
| **MSVF** | **Nonsavu** | **13.06** | **341** | | | Pn | **Pn** | **03 59 13.2** | **-1.6** |
| | 1.9nm,0.3s,baz=132,slow=3.5,SNR=14 | | | | | | | | |
| MSVF | | | | | | LR | LR | 04 03 51.7 | |
| | comp=Z,141nm,18.6s,baz=350,slow=36 | | | | | | | | |
| **MSVF** | **Nonsavu** | **13.06** | **341** | | | | **Pn** | **03 59 13.5** | **-1.3** |
| **BSWZ** | **Blackbirch Sta** | **13.40** | **209** | | | Pn | **Pn** | **03 59 19.3** | **-0.1** |
| **DZM** | **Mont Dzumac** | **16.49** | **296** | | | LR | LR | 04 05 25.4 | |
| | comp=Z,148nm,18.1s,baz=90,slow=34 | | | | | | | | |
| **RAR** | **Rarotonga** | **18.34** | **65** | | | LR | LR | 04 06 43.0 | |
| | comp=Z,116nm,18.1s,baz=266,slow=35 | | | | | | | | |
| **CTAO** | **Charters Tower** | **34.15** | **279** | | | P | **P** | **04 02 54.6** | **0.0** |
| CTAO | | | | | | IAmb | IAmb | 04 03 09.5 | |
| | comp=Z,15nm,1.3s | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.90** | **257** | | | P | **P** | **04 02 59.2** | **-1.7** |
| | comp=Z,6.6nm,0.6s,baz=87,slow=9.2,SNR=7.2 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.90** | **257** | | | P | **P** | **04 03 01.7** | **+0.8** |
| **BBOO** | **Buckleboo** | **39.39** | **254** | | | P | **P** | **04 03 38.6** | **-0.5** |
| BBOO | | | | | | IAmb | IAmb | 04 03 41.5 | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **AS31** | **Alice Springs** | **43.50** | **267** | | | P | **P** | **04 04 13.1** | **0.0** |
| **ASAR** | **Alice Springs** | **43.51** | **267** | | | P | **P** | **04 04 11.7** | **-1.4** |
| | comp=Z,2.1nm,0.5s,baz=105,slow=7.1,SNR=23 | | | | | | | | |
| ASAR | | | | | | PcP | **PcP** | **04 05 59.6** | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=103,slow=4.1,SNR=1.2 | | | | | | | | |
| **ASAR** | **Alice Springs** | **43.51** | **267** | | | P | **P** | **04 04 12.4** | **-0.7** |
| **WR0** | **Warramunga Arr** | **44.30** | **272** | | | P | **P** | **04 04 19.7** | **+0.3** |
| WR0 | | | | | | IAmb | IAmb | 04 04 22.2 | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.47** | **272** | | | P | **P** | **04 04 19.5** | **-1.3** |
| WB2 | | | | | | IAmb | IAmb | 04 04 24.7 | |
| | comp=Z,4.9nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | | | P | **P** | **04 04 19.4** | **-1.5** |
| | comp=Z,1.8nm,0.3s,baz=110,slow=8.1,SNR=39 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | | | P | **P** | **04 04 20.1** | **-0.8** |
| **WB0** | **Warramunga Arr** | **44.50** | **272** | | | P | **P** | **04 04 19.9** | **-1.2** |
| WB0 | | | | | | IAmb | IAmb | 04 04 23.9 | |
| | comp=Z,8.9nm,1.2s | | | | | | | | |
| **FORT** | **Forrest** | **46.47** | **255** | | | P | **P** | **04 04 34.6** | **-1.9** |
| **SBA** | **Scott Base** | **48.25** | **184** | | | P | **P** | **04 04 51.2** | **+1.5** |
| **MTN** | **Manton Dam** | **50.34** | **279** | | | P | **P** | **04 05 06.2** | **-0.3** |
| MTN | | | | | | IAmb | IAmb | 04 05 19.5 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **MAW** | **Mawson** | **72.62** | **200** | | | P | **P** | **04 07 39.5** | **+3.2** |
| **H03S2** | **Juan Fernandez** | **80.24** | **123** | | | T | T | 05 37 32.2 | |
| | baz=237 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.26** | **123** | | | T | T | 05 37 35.1 | |
| | baz=237 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.26** | **123** | | | T | T | 05 37 37.2 | |
| | baz=237 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.44** | **123** | | | T | T | 05 38 07.8 | |
| | baz=240 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.44** | **123** | | | T | T | 05 37 52.3 | |
| | baz=240 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.45** | **123** | | | T | T | 05 37 51.5 | |
| | baz=240 | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **82.91** | **355** | | | LR | LR | 04 40 49.9 | |
| | comp=Z,57nm,21.4s,baz=335,slow=32 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **85.73** | **345** | | | P | **P** | **04 08 47.3** | **-0.6** |
| | comp=Z,1.8nm,0.8s,baz=145,slow=6.0,SNR=2.2 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **85.73** | **345** | | | P | **P** | **04 08 49.0** | **+1.0** |
| **PDAR** | **Pinedale Array** | **95.73** | **43** | | | P | **P** | **04 09 33.8** | **-1.7** |
| | comp=Z,0.2nm,0.8s,baz=225,slow=5.0,SNR=1.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **117.95** | **310** | PKP | | PKPdf | **PKPdf** | **04 14 54.3** | **-1.6** |
| | comp=Z,0.3nm,0.5s,baz=157,slow=1.8,SNR=4.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.49** | **348** | PKhKP | | PKPpre | | 04 15 26.1 | |
| | comp=Z,3.3nm,1.0s,baz=48,slow=1.8,SNR=3.8 | | | | | | | | |
| **FINES** | **FINESS Array B** | **145.10** | **340** | PKPbc | | PKPbc | **PKPbc** | **04 15 45.1** | **-0.4** |
| | comp=Z,4.5nm,0.3s,baz=53,slow=4.5,SNR=86 | | | | | | | | |
| **FINES** | **FINESS Array B** | **145.10** | **340** | | | | **PKPbc** | **04 15 45.3** | **-0.3** |
| **NB2** | **NORSAR Subarra** | **146.62** | **352** | PKP | | | **PKPbc** | **04 15 55.5** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=12,slow=2.7 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **148.62** | **352** | PKPbc | | PKPdf | **PKPdf** | **04 15 54.9** | **+2.8** |
| | comp=Z,1.0nm,0.6s,baz=14,slow=4.1,SNR=3.9 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.38** | **323** | PKPbc | | | **PKPbc** | **04 16 01.8** | **-1.0** |
| | comp=Z,0.6nm,0.3s,baz=51,slow=3.5,SNR=8.4 | | | | | | | | |
| AKASG | | | | | | PKPab | **sPKPbc** | **04 16 09.1** | **+3.5** |
| | comp=Z,3.5nm,0.5s,baz=48,slow=2.7,SNR=16 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.00** | **177** | PKPab | | | **PKPab** | **04 16 59.9** | **-1.8** |
| | comp=Z,0.6nm,0.7s,baz=184,slow=3.5,SNR=5.1 | | | | | | | | |

*IDC **04** 04:13:36.8±1.6,17.7S×168.01E,h0km,mb3.8/7,*
*mb1 4.0/8,mb1mx3.8/29,mbtmp3.9/8,ML3.3/1,MS3.1/1,*
*Ms1 3.1/1,ms1mx2.6/59,Error ellipse: s-maj=32.7km*
*s-min=29.0km az=108.0*

**ISC 04 04:13:41.8±1.2,17.9S±0.1×168.0E±0.2,h32km,n12,**
**σ1s07/9,mb3.9/6,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **4.38** | **199** | | | Pn | **Pn** | **04 14 46.8** | **+0.5** |
| | 1.4nm,0.3s,baz=75,slow=14,SNR=13 | | | | | | | | |
| DZM | | | | | | Sn | **Sn** | **04 15 35.0** | **-1.4** |
| | 1.5nm,0.3s,baz=188,slow=22,SNR=2.1 | | | | | | | | |
| **MSVF** | **Nonsavu** | **9.58** | **90** | LR | | LR | | 04 19 12.3 | |
| | comp=Z,99nm,19.3s,baz=12,slow=35 | | | | | | | | |
| **CTA** | **Charters Tower** | **20.67** | **261** | P | | P | **P** | **04 18 19.4** | **+0.2** |
| | 2.8nm,0.8s,baz=130,slow=5.0,SNR=3.9 | | | | | | | | |
| **URZ** | **Urewera** | **21.78** | **160** | P | | P | **P** | **04 18 31.5** | **+0.6** |
| | 6.1nm,1.0s,baz=19,slow=8.5,SNR=1.6 | | | | | | | | |
| **STKA** | **Stephens Creek** | **27.60** | **235** | P | | P | **P** | **04 19 27.3** | **+1.1** |
| | 3.3nm,0.9s,baz=67,slow=7.7,SNR=3.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.87** | **261** | P | | P | **P** | **04 20 03.3** | **-1.0** |
| | 0.9nm,0.7s,baz=90,slow=9.4,SNR=7.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.33** | **254** | P | | P | **P** | **04 20 08.3** | **0.0** |
| | 1.4nm,0.7s,baz=80,slow=8.8,SNR=14 | | | | | | | | |
| **SONM** | **Songino Array** | **85.46** | **324** | P | | P | **P** | **04 26 17.2** | **+0.8** |
| | 0.2nm,0.7s,baz=131,slow=4.0,SNR=2.4 | | | | | | | | |
| **ILAR** | **Eielson Array** | **89.33** | **18** | P | | P | **P** | **04 26 33.3** | **-1.2** |
| | 0.7nm,1.1s,baz=234,slow=7.6,SNR=1.6 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **98.30** | **129** | T | | T | T | 06 17 42.0 | |
| | baz=239,slow=72,SNR=4.7 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **98.30** | **129** | T | | T | T | 06 17 39.1 | |
| | baz=239,slow=72,SNR=4.7 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **98.31** | **129** | T | | T | T | 06 17 40.5 | |
| | baz=239,slow=72,SNR=8.2 | | | | | | | | |

*ISK **04** 04:14:34.1,39.31N×28.12E,h5km,ML3.5/45*
*DDA **04** 04:14:34.8±0.0,39.31N×28.18E,h7km±2km,MW3.3*
*THE **04** 04:14:36.0,39.25N×28.23E,h15km±3km,ML3.2/8,Error*
*ellipse: s-maj=3.3km s-min=1.0km az=101.0*

**ISC 04 04:14:35.0±1.0,39.30N±0.02×28.19E±0.02,h13km±8km,**
**n84,σ0s92/103,7C-3D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STEP** | **BALIKESIR_Sava** | **0.37** | **282** | | | P | **Pg** | **04 14 42.4** | **-0.1** |
| STEP | | | | | | S | **Sg** | **04 14 47.8** | **+0.2** |
| STEP | | | | | | *i* AML | AML | 04 14 48.0 | |
| | comp=N,3μm,0.6s | | | | | | | | |
| STEP | | | | | | *i* AML | AML | 04 14 48.0 | |
| | comp=E,4μm,0.3s | | | | | | | | |
| **DURS** | **Dursunbey** | **0.37** | **37** | | | P | **Pg** | **04 14 42.3** | **-0.3** |
| DURS | | | | | | *i* AML | AML | 04 14 49.0 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| DURS | | | | | | *i* AML | AML | 04 14 53.0 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| **DST** | **Dursunbey** | **0.45** | **48** | | PG | **Pg** | **04 14 44.0** | **0.0** | |
| **DEMI** | **Demirci** | **0.49** | **122** | | P | **Pb** | **04 14 45.1** | **-0.3** | |
| DEMI | | | | | S | **Sg** | **04 14 51.7** | **+0.5** | |
| DEMI | | | | | *i* AML | AML | 04 14 57.0 | | |
| | comp=E,640nm,0.2s | | | | | | | | |
| DEMI | | | | | *i* AML | AML | 04 15 01.0 | | |
| | comp=N,447nm,0.2s | | | | | | | | |
| **AKHS** | **Akhisar** | **0.51** | **214** | | P | **Pg** | **04 14 45.0** | **-0.1** | |
| AKHS | | | | | *i* AML | AML | 04 14 53.0 | | |
| | comp=E,3μm,0.2s | | | | | | | | |
| AKHS | | | | | S | **Sb** | **04 14 53.4** | **+0.2** | |
| **AKS** | **Akhisar** | **0.51** | **214** | | PG | **Pg** | **04 14 44.7** | **-0.4** | |
| AKS | | | | | SG | **Sb** | **04 14 52.6** | **-0.6** | |
| **BALY** | **Balya** | **0.62** | **315** | | P | **Pg** | **04 14 46.6** | **-0.5** | |
| BALY | | | | | S | **Sg** | **04 14 55.6** | **+0.3** | |
| BALY | | | | | *i* AML | AML | 04 14 56.0 | | |
| | comp=N,516nm,0.5s | | | | | | | | |
| BALY | | | | | *i* AML | AML | 04 14 56.0 | | |
| | comp=E,374nm,0.3s | | | | | | | | |
| **GOMA** | **Golmarmara-Man** | **0.63** | **199** | | PG | **Pg** | **04 14 47.4** | **+0.1** | |
| GOMA | | | | | SG | **Sb** | **04 14 56.7** | **+0.2** | |
| **SIMA** | **Simav-Kutahya** | **0.66** | **109** | | PG | **Pb** | **04 14 48.9** | **+0.5** | |
| **GONE** | **Gonen-Balikesi** | **0.84** | **333** | | PG | **Pg** | **04 14 50.7** | **-0.5** | |
| **SHAP** | **Saphane-Kutahy** | **0.85** | **109** | | PG | **Pn** | **04 14 52.9** | **+0.1** | |
| **KULA** | **Kula-Manisa** | **0.87** | **155** | | P | **Pb** | **04 14 52.1** | **+0.1** | |
| KULA | | | | | S | **Sg** | **04 15 02.7** | **-0.6** | |
| **KULA** | **Kula-Manisa** | **0.87** | **155** | | PG | **Pb** | **04 14 52.1** | **+0.1** | |
| **USAK** | **Uak-Merkez** | **0.88** | **132** | | P | **Pb** | **04 14 52.3** | **+0.2** | |
| USAK | | | | | *i* AML | AML | 04 15 06.0 | | |
| | comp=E,551nm,0.6s | | | | | | | | |
| USAK | | | | | *i* AML | AML | 04 15 07.0 | | |
| | comp=N,314nm,0.7s | | | | | | | | |
| **BUHA** | **Balikesir, Bur** | **0.88** | **283** | | P | **Pb** | **04 14 52.3** | **+0.2** | |
| BUHA | | | | | S | **Sb** | **04 15 03.7** | **-0.1** | |
| BUHA | | | | | *i* AML | AML | 04 15 06.0 | | |
| | comp=E,760nm,0.3s | | | | | | | | |
| BUHA | | | | | *i* AML | AML | 04 15 07.0 | | |
| | comp=N,810nm,0.4s | | | | | | | | |
| **ORLT** | **Orhaneli** | **0.92** | **36** | | PG | **Pg** | **04 14 52.8** | **-0.1** | |
| **ZEDA** | **zmir-Bergama** | **0.93** | **249** | | P | **Pg** | **04 14 52.8** | **-0.1** | |
| ZEDA | | | | | S | **Sg** | **04 15 05.0** | **0.0** | |
| ZEDA | | | | | *i* AML | AML | 04 15 06.0 | | |
| | comp=N,932nm,0.3s | | | | | | | | |
| ZEDA | | | | | *i* AML | AML | 04 15 07.0 | | |
| | comp=E,1μm,0.3s | | | | | | | | |
| **GEDZ** | **Gediz** | **0.99** | **105** | | PG | **Pn** | **04 14 54.9** | **+0.3** | |
| **TVSB** | **Tavsanli** | **1.00** | **81** | | PG | **Pn** | **04 14 55.2** | **+0.4** | |
| **DKL** | **Dikili** | **1.02** | **257** | | PG | **Pg** | **04 14 53.9** | **-0.8** | |
| **EDC** | **Edincik** | **1.07** | **347** | | PG | **Pg** | **04 14 54.9** | **-0.8** | |
| **AYVA** | **Ayvalik** | **1.16** | **271** | | P | **Pb** | **04 14 57.0** | **+0.2** | |
| AYVA | | | | | *i* AML | AML | 04 15 13.0 | | |
| | comp=E,1μm,0.4s | | | | | | | | |
| **FOCM** | **Foa** | **1.28** | **243** | | PN | **Pn** | **04 14 58.9** | **+0.4** | |
| **KRBG** | **Karabiga-Canak** | **1.28** | **328** | | PN | **Pn** | **04 14 58.7** | **+0.1** | |
| **GEMT** | **Gemlik** | **1.37** | **34** | | PN | **Pb** | **04 15 00.9** | **+0.5** | |
| **MRMT** | **Marmara Adasi** | **1.38** | **341** | | PN | **Pb** | **04 15 00.8** | **+0.2** | |
| **IZI** | **Iznik** | **1.43** | **43** | | PN | **Pg** | **04 15 02.6** | **+0.1** | |
| **PRK** | **Paraskevi** | **1.49** | **268** | | P | Pn | **04 15 02.2** | **+0.8** | |
| PRK | | | | | S | **Sb** | **04 15 22.0** | **+0.8** | |
| | 1μm,0.5s | | | | | | | | |
| **TRML** | **Termal-Yalova** | **1.51** | **30** | | PN | **Pb** | **04 15 03.3** | **+0.5** | |
| **EZN** | **Ezine** | **1.53** | **291** | | P | **Pn** | **04 15 01.9** | **-0.1** | |
| EZN | | | | | S | **Sn** | **04 15 22.5** | **+0.8** | |
| | 480nm,0.3s | | | | | | | | |
| **EZN** | **Ezine** | **1.53** | **291** | | PN | **Pn** | **04 15 02.7** | **+0.8** | |
| **YLV** | **Yalova** | **1.56** | **36** | | PN | **Pg** | **04 15 04.4** | **-0.5** | |
| **URLA** | **Izmir** | **1.56** | **233** | | PN | **Pn** | **04 15 02.9** | **+0.5** | |
| **URLA** | **Izmir** | **1.56** | **233** | | P | Pn | **04 15 02.2** | **-0.2** | |
| **CAVI** | **Cavuskoy** | **1.56** | **54** | | PN | **Pb** | **04 15 04.4** | **+0.7** | |
| **MAR6** | **Marsite Statio** | **1.57** | **333** | | PN | **Pb** | **04 15 03.7** | **-0.1** | |
| **RKY** | **Sarkoy-Tekirda** | **1.58** | **331** | | PN | **Pb** | **04 15 03.9** | **-0.3** | |
| **GZKV** | **Gazikoy-Tekird** | **1.59** | **336** | | PN | **Pb** | **04 15 04.0** | **-0.1** | |
| **MAR3** | **Marsite Statio** | **1.59** | **335** | | PN | **Pb** | **04 15 04.2** | **-0.1** | |
| **MAR4** | **Marsite Statio** | **1.63** | **336** | | PN | **Pb** | **04 15 04.5** | **+1.0** | |
| **ZEYE** | **Izmir, Urla-Ze** | **1.69** | **232** | | P | Pn | **04 15 03.7** | **-0.5** | |
| **GELI** | **Tayfur-Gelibol** | **1.71** | **310** | | PN | **Pn** | **04 15 04.8** | **+0.3** | |
| **BOZC** | **Bozcaada** | **1.73** | **289** | | PN | **Pn** | **04 15 05.6** | **+0.8** | |
| **TKR** | **Tekirdag** | **1.76** | **344** | | PN | **Pb** | **04 15 06.5** | **-0.6** | |
| **GCAM** | **G?zelcaml?** | **1.77** | **205** | | PN | **Pn** | **04 15 06.3** | **+1.1** | |
| **SIGR** | **SIGRI** | **1.81** | **268** | | P | Pn | **04 15 05.5** | **-0.3** | |
| SIGR | | | | | S | **Sn** | **04 15 28.9** | **+0.3** | |
| | 768nm,0.6s | | | | | | | | |
| **BORA** | **Eskisehir** | **1.84** | **71** | | PN | **Pb** | **04 15 08.6** | **0.0** | |
| **ERIK** | **Erikli-Kesan** | **1.88** | **317** | | PN | **Pb** | **04 15 07.8** | **+1.1** | |
| **KAVV** | **Kandilli-Istan** | **1.88** | **21** | | PN | **Pb** | **04 15 08.8** | **-0.4** | |
| **ISK** | **Istanbul-Kandi** | **1.88** | **21** | | P | Pn | **04 15 05.9** | **-0.9** | |
| ISK | | | | | S | **Sn** | **04 15 31.8** | **+1.4** | |
| | 385nm,0.6s | | | | | | | | |
| **ISK** | **Istanbul-Kandi** | **1.88** | **21** | | PN | **Pb** | **04 15 08.7** | **-0.5** | |
| **HRT** | **Hereke** | **1.90** | **36** | | PN | **Pb** | **04 15 08.9** | **-0.6** | |
| **CHOS** | **Chios island** | **1.90** | **242** | | P | Pn | **04 15 06.8** | **-0.3** | |
| CHOS | | | | | S | **Sn** | **04 15 30.8** | **-0.1** | |
| | 555nm,0.6s | | | | | | | | |
| **SMG** | **Samos** | **1.91** | **214** | | P | **Pn** | **04 15 06.9** | **-0.3** | |
| SMG | | | | | S | **Sn** | **04 15 29.9** | **-1.2** | |
| | 382nm,0.6s | | | | | | | | |
| **SLVT** | **Silivri** | **1.93** | **1** | | PN | **Pb** | **04 15 09.1** | **-0.8** | |
| **BGKT** | **Bogazkoy** | **1.93** | **13** | | PN | **Pb** | **04 15 09.4** | **-0.6** | |
| **CTKS** | **Kestanelik-??a** | **1.95** | **7** | | PN | **Pb** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO06 | | | | IAML | | | 04 19 41.7 | | |
| | comp=E,391nm,0.4s | | | | | | | | |
| **CO06** | **Fray Jorge** | **3.26** | **279** | Pn | **Pn** | | **04 18 50.5** | **+1.2** | |
| **LCO** | **Las Campanas** | **3.30** | **312**⇑ | *e*P | **Pn** | | **04 18 53.1** | **+2.9** | |
| **MT02** | **Curacav** | **3.39** | **233** | *e*P | **Pn** | | **04 18 52.4** | **+1.3** | |
| MT02 | | | | *e*S | **Sn** | | **04 19 33.8** | **+1.9** | |
| MT02 | | | | IAML | | | 04 19 47.1 | | |
| | comp=E,231nm,0.5s | | | | | | | | |
| **MT02** | **Curacav** | **3.39** | **233** | Pn | **Pn** | | **04 18 52.6** | **+1.5** | |
| **BO04** | **La Punta** | **3.55** | **219** | *e*P | **Pn** | | **04 18 56.3** | **+2.9** | |
| BO04 | | | | *e*S | **Sb** | | **04 19 41.6** | **-2.8** | |
| **MT09** | **Talagante** | **3.62** | **225** | *e*P | **Pn** | | **04 18 56.0** | **+1.6** | |
| MT09 | | | | IAML | | | 04 19 51.5 | | |
| | comp=N,357nm,0.5s | | | | | | | | |
| **MT09** | **Talagante** | **3.62** | **225** | | **Pn** | | **04 18 56.2** | **+1.8** | |
| **VA01** | **Torpederas** | **3.63** | **240** | | **Pn** | | **04 18 56.3** | **+1.9** | |
| **MT01** | **Popeta** | **3.84** | **227**⇓ | *e*P | **Pn** | | **04 18 57.9** | **+0.6** | |
| **MT01** | **Popeta** | **3.84** | **227** | | **Pn** | | **04 18 58.1** | **+0.8** | |
| **VA05** | **Santo Domingo** | **3.94** | **232** | *e*P | **Pn** | | **04 19 00.2** | **+1.5** | |
| **AC04** | **Llanos de Chal** | **4.11** | **317** | *e*P | **Pn** | | **04 19 03.5** | **+2.5** | |
| **AC04** | **Llanos de Chal** | **4.11** | **317** | Pn | **Pn** | | **04 19 03.0** | **+2.0** | |
| **BO01** | **Tunca** | **4.12** | **220** | | **Pn** | | **04 19 02.5** | **+1.5** | |
| **GO03** | **Copiap** | **4.18** | **330** | Pn | **Pn** | | **04 19 04.2** | **+2.1** | |
| **BO02** | **Sierra Bellavi** | **4.27** | **214** | Pn | **Pn** | | **04 19 06.2** | **+2.9** | |
| **AC02** | **Maricunga** | **4.54** | **346** | Pn | **Pn** | | **04 19 11.2** | **+3.9** | |
| **ML02** | **Panimavida** | **5.37** | **212** | Pn | **Pn** | | **04 19 21.5** | **+3.3** | |
| **LVC** | **Limon Verde** | **8.66** | **354** | Pn | **Pn** | | **04 20 03.4** | **-0.5** | |
| | comp=N,1.0nm,0.3s,baz=169,slow=8.2,SNR=5.8 | | | | | | | | |
| LVC | | | | Sn | **Sn** | | **04 21 39.2** | **-3.1** | |
| | comp=N,0.3nm,0.3s,baz=81,slow=9.0,SNR=1.5 | | | | | | | | |
| LVC | | | | Lg | Lg | | 04 22 21.8 | | |
| | comp=N,0.4nm,0.3s,baz=90,slow=20,SNR=4.0 | | | | | | | | |
| LVC | | | | LR | LR | | 04 23 57.1 | | |
| | comp=N,108nm,19.4s,baz=250,slow=42 | | | | | | | | |
| **LVC** | **Limon Verde** | **8.66** | **354** | | **Pn** | | **04 20 05.5** | **+1.6** | |
| **PLCA** | **Paso Flores** | **9.69** | **192** | Pn | **Pn** | | **04 20 18.5** | **+0.8** | |
| | comp=N,0.1nm,0.3s,baz=338,slow=19,SNR=1.7 | | | | | | | | |
| PLCA | | | | Lg | Lg | | 04 23 00.2 | | |
| | comp=N,0.4nm,0.3s,baz=310,slow=22,SNR=4.2 | | | | | | | | |
| PLCA | | | | LR | LR | | 04 24 32.4 | | |
| | comp=N,125nm,18.2s,baz=160,slow=40 | | | | | | | | |
| **ITQB** | **Itaqui** | **9.86** | **84** | | **Pn** | | **04 20 22.5** | **+2.5** | |
| **CPUP** | **Villa Florida** | **10.49** | **65** | Pn | **Pn** | | **04 20 28.4** | **-0.2** | |
| | comp=N,0.4nm,0.3s,baz=240,slow=13,SNR=8.4 | | | | | | | | |
| CPUP | | | | Sn | **Sn** | | **04 22 25.8** | **-0.9** | |
| | comp=N,0.5nm,0.3s,baz=274,slow=16,SNR=3.8 | | | | | | | | |
| CPUP | | | | Lg | Lg | | 04 23 26.9 | | |
| | comp=N,0.7nm,0.3s,baz=166,slow=20,SNR=1.4 | | | | | | | | |
| **LPAZ** | **La Paz** | **14.91** | **359** | Pn | **Pn** | | **04 21 29.5** | **-0.1** | |
| | comp=N,0.1nm,0.3s,baz=203,slow=7.8,SNR=2.0 | | | | | | | | |
| **LPAZ** | **La Paz** | **14.91** | **359** | P | **P** | | **04 21 37.2** | **+1.7** | |
| **SIV** | **San Ignacio** | **16.43** | **24** | Pn | **Pn** | | **04 21 47.3** | **-1.7** | |
| | comp=N,0.1nm,0.3s,baz=223,slow=18,SNR=4.5 | | | | | | | | |
| **ETMB** | **Extrema** | **21.39** | **5** | P | **P** | | **04 22 46.4** | **+0.2** | |
| **BDFB** | **Brasilia** | **23.91** | **54** | P | **P** | | **04 23 14.0** | **+1.4** | |
| BDFB | | | | IAmb | IAmb | | 04 23 29.0 | | |
| | comp=Z,3.9nm,1.1s | | | | | | | | |
| **BOAV** | **Boa Vista** | **34.20** | **13** | P | **P** | | **04 24 45.6** | **+1.5** | |
| BOAV | | | | IAmb | IAmb | | 04 24 57.3 | | |
| | comp=Z,8.0nm,1.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.20** | **327** | P | **P** | | **04 29 04.0** | **-1.5** | |
| | comp=Z,0.3nm,0.6s,baz=144,slow=8.7,SNR=3.4 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.97** | **68** | P | **P** | | **04 30 07.5** | **-0.8** | |
| | comp=Z,0.3nm,0.7s,baz=286,slow=6.7,SNR=4.7 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **83.00** | **330** | P | **P** | | **04 30 23.1** | **-0.9** | |
| | comp=Z,0.1nm,0.4s,baz=145,slow=11,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.79** | **206** | PKP | **PKiKP** | | **04 36 59.9** | **+0.4** | |
| | comp=Z,0.3nm,0.7s,baz=167,slow=1.3,SNR=1.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **148.49** | **42** | PKPbc | **PKPbc** | | **04 37 43.7** | **-1.4** | |
| | comp=Z,0.1nm,0.5s,baz=295,slow=2.8,SNR=5.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.04** | **33** | PKPbc | **PKPbc** | | **04 37 47.1** | **-1.8** | |
| | comp=Z,0.8nm,0.5s,baz=298,slow=3.2,SNR=3.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **152.34** | **47** | PKPbc | **PKPbc** | | **04 37 52.2** | **-2.2** | |
| | comp=Z,0.3nm,0.6s,baz=282,slow=1.2,SNR=4.5 | | | | | | | | |

*EAF **04** 04:55:38.7±1.3, 17.81S×28.06E, h19km±13km, MD3.7*
**BUL 04 04:55:38.7±1.3, 17.81S×28.06E, h19km±13km, MD4.0, Zimbabwe**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KRI** | **Karoi** | **1.78** | **57** | *i* P | | Pb | 04 56 11.0 | +0.2 |
| KRI | | | | *e*S | | Sb | 04 56 33.2 | +0.5 |
| **KRI** | **Karoi** | **1.78** | **57** | *i* P | | Pb | 04 56 11.0 | +0.2 |
| KRI | | | | *e*S | | Sb | 04 56 33.2 | +0.5 |
| **BLWY** | **Bulawayo** | **2.38** | **167** | *i* P | | Pn | 04 56 15.9 | -0.8 |
| BLWY | | | | *i* S | | Sn | 04 56 45.3 | -0.2 |
| **BLWY** | **Bulawayo** | **2.38** | **167** | *i* P | | Pn | 04 56 15.9 | -0.8 |
| BLWY | | | | *i* S | | Sn | 04 56 45.3 | -0.2 |
| **LSZ** | **Lusaka** | **2.52** | **3** | *e*P | | Pn | 04 56 19.4 | +0.6 |
| LSZ | | | | *e*S | | Sn | 04 56 47.5 | -1.6 |
| **LSZ** | **Lusaka** | **2.52** | **3** | *e*P | | Pn | 04 56 19.4 | +0.6 |
| LSZ | | | | *e*S | | Sn | 04 56 47.5 | -1.6 |
| **MATP** | **Matopo** | **2.63** | **171** | *i* P | | Pn | 04 56 20.5 | +0.2 |
| MATP | | | | *i* S | | Sn | 04 56 50.1 | -1.8 |
| **MATP** | **Matopo** | **2.63** | **171** | *i* P | | Pn | 04 56 20.5 | +0.2 |
| MATP | | | | *i* S | | Sn | 04 56 50.1 | -1.8 |
| **LBTB** | **Lobatse** | **7.53** | **197** | *e*P | | Pn | 04 57 25.7 | -1.8 |
| LBTB | | | | *e*S | | Sn | 04 58 45.2 | -7.2 |
| **LBTB** | **Lobatse** | **7.53** | **197** | *e*P | | Pn | 04 57 25.7 | -1.8 |
| LBTB | | | | *e*S | | Sn | 04 58 45.2 | -7.2 |
| **BOSA** | **Boshof** | **11.06** | **193** | *e*P | | Pn | 04 58 12.8 | -3.2 |
| BOSA | | | | *e*S | | Sn | 05 00 06.4 | -13 |
| **BOSA** | **Boshof** | **11.06** | **193** | *e*P | | Pn | 04 58 12.8 | -3.2 |
| BOSA | | | | *e*S | | Sn | 05 00 06.4 | -13 |

**IDC 04 04:58:11.2±3.2, 6.85S×146.45E, h427km±30km, mb3.2/2, mb1 3.4/4, mb1mx2.6/37, mbtmp4.0/4, Error ellipse: s-maj=71.2km s-min=45.2km az=142.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PMG** | **Port Moresby** | **2.64** | **165** | P | | P | 04 59 14.7 | +0.9 |
| | 11nm,0.3s,baz=270,slow=13,SNR=6.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.54** | **221** | P | | P | 05 01 48.2 | -1.9 |
| | 1.2nm,0.3s,baz=47,slow=11,SNR=75 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.62** | **214** | P | | P | 05 02 20.5 | +0.8 |
| | 1.8nm,0.5s,baz=52,slow=8.3,SNR=29 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.16** | **239** | P | | P | 05 02 43.1 | +0.3 |
| | 2.3nm,0.5s,baz=67,slow=7.6,SNR=18 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.76** | **283** | PKP | | PKPdf | 05 16 57.6 | -1.8 |
| | 0.2nm,0.6s,baz=65,slow=4.4,SNR=1.2 | | | | | | | |

*CNRM **04** 05:07:08.8, 35.68N×3.82W, h2km, ml2.7*
*INMG **04** 05:07:10.2±1.4, 35.48N×3.88W, h0km, ML2.1, Error ellipse: s-maj=4.7km s-min=3.5km az=21.0*
**ISC 04 05:07:08.9±1.7, 35.59N±0.05×3.68W±0.05, h7km±11km, n21, σ0.88/29, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PALE** | **Palemas** | **0.42** | **210** | P | | **Pg** | **05 07 17.0** | **-0.1** |
| **PALE** | **Palemas** | **0.42** | **210** | P | | **Pg** | **05 07 17.1** | **-0.1** |
| PALE | | | | S | | **Sg** | **05 07 22.2** | **-0.5** |
| **AKLM** | **AKL** | **1.08** | **188** | P | | **Pb** | **05 07 30.0** | **0.0** |
| **AKLM** | **AKL** | **1.08** | **188** | P | | **Pg** | **05 07 29.4** | **-0.3** |
| **CHEFC** | **Chefchaouen** | **1.44** | **251** | P | | **Pg** | **05 07 36.8** | **+0.3** |
| CHEFC | | | | S | | **Sg** | **05 07 55.4** | **+0.3** |
| **JBK** | **JBK** | **1.55** | **143** | P | | **Pg** | **05 07 39.0** | **+0.4** |
| **JBK** | **JBK** | **1.55** | **143** | P | | **Pn** | **05 07 36.1** | **-0.9** |
| JBK | | | | S | | **Sn** | **05 07 56.3** | **-1.1** |
| **SICH** | **Sidi Chahed** | **2.00** | **223** | P | | **Pn** | **05 07 44.1** | **+1.1** |
| SICH | | | | S | | **Sb** | **05 08 09.7** | **-0.9** |
| **LCRM** | **LCR** | **2.13** | **207** | P | | **Pb** | **05 07 48.0** | **+0.1** |
| **LCRM** | **LCR** | **2.13** | **207** | P | | **Pb** | **05 07 47.3** | **-0.6** |
| **MD31** | **MD31** | **2.86** | **199** | P | | **Pn** | **05 07 54.7** | **-0.2** |
| MD31 | | | | S | | **Sn** | **05 08 29.6** | **0.0** |
| **MDT** | **Midelt** | **2.87** | **196** | P | | **Pn** | **05 07 56.3** | **+1.2** |
| **MDT** | **Midelt** | **2.87** | **196** | P | | **Pn** | **05 07 56.3** | **+1.2** |
| MDT | | | | S | | **Sn** | **05 08 30.9** | **+0.9** |
| **TDRA** | **Tendrara** | **2.88** | **151** | P | | **Pn** | **05 07 56.3** | **+0.9** |
| TDRA | | | | S | | **Sn** | **05 08 31.5** | **+1.1** |
| **PVAQ** | **Vaqueiros** | **3.72** | **300** | *e*Pn | | **Pn** | **05 08 07.2** | **+0.4** |
| PVAQ | | | | *e*Sn | | **Sn** | **05 08 49.3** | **-1.6** |
| PVAQ | | | | A | | A | 05 08 54.6 | |
| | 2.9nm,0.6s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **297** | *e*Pn | | **Pn** | **05 08 08.6** | **+0.7** |
| **PCVE** | **Castro Verde** | **4.06** | **301** | A | | A | 05 09 00.6 | |
| | 2.2nm,0.5s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.51** | **297** | *e*Pn | | **Pn** | **05 08 18.3** | **+0.8** |
| PTEO | | | | *e*Sn | | **Sn** | **05 09 09.0** | **-1.1** |
| **PESTR** | **Estremoz** | **4.52** | **318** | *e*Sn | | **Sn** | **05 09 10.1** | **-0.5** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **304** | *e*Pn | | **Pn** | **05 08 19.6** | **+0.3** |
| **PMTG** | **Montargil** | **5.02** | **315** | *e*Pn | | **Pn** | **05 08 26.4** | **+1.8** |

*NEIC **04** 05:14:20.5±0.9, 3.06N±0.09×128.48E±0.09, h30km±8km, mb4.3/11, Error ellipse: s-maj=17.0km s-min=7.1km az=46.0*
*IDC **04** 05:14:22.4±2.2, 2.96N×128.45E, h47km±22km, mb3.6/10, mb1 3.9/11, mb1mx3.6/42, mbtmp3.9/11, ML3.9/1, MS3.5/12, Ms1 3.5/12, ms1mx3.1/72, Error ellipse: s-maj=34.9km s-min=13.4km az=71.0*
*DJA **04** 05:14:22.2±0.5, 3°N±4°×12°8E±°, h28km±3km, M4.3/10, mb4.5/9, mB4.8/3, MLv4.3/10, Mw(mB)4.0/3*
**ISC 04 05:14:20.9±0.6, 3.04N±0.08×128.49E±0.09, h35km, n54, σ0.95/42, mb4.1/15, MS3.8/9, 1C, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **2.51** | **207** | P | | **Pn** | **05 15 00.8** | **+1.5** |
| **TNTI** | **Ternate** | **2.51** | **207** | | | **Pn** | **05 15 00.3** | **+1.0** |
| **LBMI** | **Labuha** | **3.78** | **195** | P | | **Pn** | **05 15 17.4** | **+0.7** |
| **SWI** | **Sorong** | **4.76** | **144** | P | | **Pn** | **05 15 32.4** | **+2.2** |
| SWI | | | | S | | **Sn** | **05 16 24.8** | **+0.6** |
| **SIJI** | **Sorong** | **4.77** | **144** | P | | **Pn** | **05 15 31.7** | **+1.4** |
| | 4.7nm,0.3s,baz=41,slow=20,SNR=17 | | | | | | | |
| SIJI | | | | S | | **Sn** | **05 16 24.8** | **+0.3** |
| | 5.6nm,0.3s,baz=161,slow=22,SNR=12 | | | | | | | |
| SIJI | | | | LR | LR | | 05 17 35.2 | |
| | comp=Z,272nm,19.9s,baz=118,slow=41 | | | | | | | |
| **DAV** | **Davao City (W)** | **4.95** | **324** | LR | | LR | 05 17 45.4 | |
| | comp=Z,371nm,20.0s,baz=129,slow=41 | | | | | | | |
| **KCP** | **Kidapawan** | **5.20** | **319**⇑ | *e*P | | Pn | 05 15 41.3 | +5.0 |
| **SANI** | **Sanana** | **5.64** | **206** | P | | **Pn** | **05 15 43.5** | **+1.3** |
| | 0.2nm76nm,0.9s | | | | | | | |
| **GTOI** | **Gorontalo** | **5.97** | **247** | P | | **Pn** | **05 15 48.0** | **+1.2** |
| | 0.1nm210nm14nm,0.7s | | | | | | | |
| **FAKI** | **Fak Fak** | **7.01** | **148** | Pn | | **Pn** | **05 16 00.6** | **-0.5** |
| FAKI | | | | Sn | | **Sn** | **05 17 19.2** | **-0.5** |
| **MRSI** | **Marisa** | **7.02** | **249** | P | | **Pn** | **05 16 02.9** | **+1.6** |
| | 0.3nm1µm107nm,0.8s | | | | | | | |
| **TOLI2** | **Tolitoli** | **7.94** | **256** | Pn | | **Pn** | **05 16 12.7** | **-1.1** |
| **MPSI** | **Mapaga** | **9.00** | **253** | P | | **Pn** | **05 16 29.9** | **+1.5** |
| | 747nm24nm,1.0s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.15** | **231** | P | | **Pn** | **05 16 58.2** | **+0.3** |
| | 22nm,0.7s | | | | | | | |
| **JAY** | **Jayapura** | **13.40** | **114** | LR | | LR | 05 21 56.8 | |
| | comp=Z,101nm,21.7s,baz=330,slow=34 | | | | | | | |
| **SBUM** | **Sibu** | **16.26** | **268** | Pn | | **Pn** | **05 18 06.1** | **-0.6** |
| **KNRA** | **Kununurra** | **18.60** | **179** | P | | **P** | **05 18 35.1** | **-0.2** |
| KNRA | | | | IAmb | | IAmb | 05 18 44.3 | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.19** | **188** | P | | **P** | **05 19 02.4** | **-1.1** |
| | comp=Z,1.3nm,0.9s,baz=14,slow=11,SNR=2.0 | | | | | | | |
| FITZ | | | | LR | | LR | 05 27 01.1 | |
| | comp=Z,95nm,20.7s,baz=38,slow=36 | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.39** | **166** | P | | **P** | **05 19 26.6** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 05 19 39.3 | |
| | comp=Z,32nm,1.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.54** | **166** | P | | **P** | **05 19 28.3** | **+0.1** |
| WRAB | | | | IAmb | | IAmb | 05 19 39.3 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.55** | **166** | P | | **P** | **05 19 28.3** | **+0.1** |
| | comp=Z,4.8nm,0.7s,baz=346,slow=10,SNR=28 | | | | | | | |
| **WB2** | **Warramunga Arr** | **23.55** | **166** | P | | **P** | **05 19 28.3** | **+0.1** |
| WB2 | | | | IAmb | | IAmb | 05 19 39.4 | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.61** | **166** | P | | **P** | **05 19 29.1** | **+0.2** |
| WR0 | | | | IAmb | | IAmb | 05 19 53.0 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **27.06** | **169** | P | | **P** | **05 20 00.5** | **+0.2** |
| | comp=Z,1.0nm,0.7s,baz=350,slow=6.8,SNR=9.9 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **05 23 20.9** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=327,slow=1.8,SNR=5.8 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **05 26 56.4** | **-2.4** |
| | comp=Z,0.6nm,1.0s,baz=352,slow=2.7,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.06** | **169** | P | | **P** | **05 20 00.0** | **-0.3** |
| **PSI** | **Prapat** | **29.53** | **270** | LR | | LR | 05 32 35.3 | |
| | comp=Z,100nm,18.8s,baz=6.0,slow=37 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.74** | **300** | P | | **P** | **05 20 51.2** | **+0.6** |
| | comp=Z,1.8nm,0.4s,baz=130,slow=8.3,SNR=2.7 | | | | | | | |
| **KSRS** | **Korea Array** | **34.26** | **359** | LR | | LR | 05 34 24.9 | |
| | comp=Z,48nm,21.2s,baz=145,slow=35 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.53** | **14** | LR | | LR | 05 34 45.8 | |
| | comp=Z,38nm,20.1s,baz=181,slow=35 | | | | | | | |
| **BBOO** | **Buckleboo** | **36.37** | **169** | P | | **P** | **05 21 21.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **36.89** | **161** | P | | **P** | **05 21 26.4** | **+0.1** |
| | comp=Z,1.6nm,0.3s,baz=340,slow=7.4,SNR=6.3 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.89** | **161** | P | | **P** | **05 21 26.4** | **+0.1** |
| **H11S3** | **WAKE ISLAND Hy** | **40.42** | **65** | T | | T | 06 05 30.5 | |
| | baz=252,slow=74,SNR=55 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.43** | **65** | T | | T | 06 05 25.5 | |
| | baz=252,slow=74,SNR=22 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.43** | **65** | T | | T | 06 05 25.3 | |
| | baz=252,slow=74,SNR=23 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.98** | **63** | T | | T | 06 06 05.9 | |
| | baz=250,slow=75,SNR=21 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.99** | **63** | T | | T | 06 05 58.9 | |
| | baz=250,slow=75,SNR=9.3 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.00** | **63** | T | | T | 06 06 05.7 | |
| | baz=250,slow=75,SNR=25 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.11** | **4** | P | | **P** | **05 22 02.7** | **+1.3** |
| | comp=Z,2.7nm,0.8s,baz=146,slow=14,SNR=4.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.11** | **4** | P | | **P** | **05 22 00.8** | **-0.6** |
| **SHL** | **Shillong** | **41.70** | **306** | P | | **P** | **05 22 06.8** | **0.0** |
| **KLR** | **Kul'dur** | **46.11** | **3** | P | | **P** | **05 22 42.8** | **+1.2** |
| | comp=Z,3.8nm,1.3s,baz=202,slow=7.0,SNR=4.2 | | | | | | | |
| **SONM** | **Songino Array** | **48.52** | **340** | P | | **P** | **05 23 00.8** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=90,slow=8.8,SNR=1.8 | | | | | | | |
| **SONM** | **Songino Array** | **48.52** | **340** | P | | **P** | **05 22 59.8** | **-0.8** |
| SONM | | | | IAmb | | IAmb | 05 23 15.4 | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **YAK** | **Yakutsk** | **58.86** | **1** | LR | | LR | 05 49 46.4 | |
| | comp=Z,94nm,19.7s,baz=60,slow=36 | | | | | | | |
| **MK31** | **Makanchi Array** | **59.13** | **325** | P | | **P** | **05 24 17.3** | **-0.7** |
| MK31 | | | | IAmb | | IAmb | 05 24 34.9 | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.13** | **325** | P | | **P** | **05 24 17.9** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=121,slow=7.3,SNR=7.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.13** | **325** | P | | **P** | **05 24 17.5** | **-0.6** |
| **URZ** | **Urewera** | **60.84** | **137** | LR | | LR | 05 51 22.3 | |
| | comp=Z,79nm,19.0s,baz=34,slow=36 | | | | | | | |
| **AAK** | **Ala-Archa** | **62.05** | **317** | LR | | LR | 05 53 35.6 | |
| | comp=Z,76nm,20.0s,baz=24,slow=38 | | | | | | | |
| **GEYT** | **Alibeck** | **72.69** | **309** | LR | | LR | 06 03 45.0 | |
| | comp=Z,42nm,18.0s,baz=4.5,slow=41 | | | | | | | |
| **VNDA** | **Vanda** | **82.53** | **173** | LR | | LR | 06 01 59.9 | |
| | comp=Z,81nm,19.9s,baz=66,slow=35 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.97** | **25** | P | | **P** | **05 26 52.4** | **0.0** |
| | comp=Z,0.2nm,0.6s,baz=236,slow=6.4,SNR=1.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.80** | **288** | PKP | | **PKPdf** | **05 33 17.5** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=32,slow=3.1,SNR=2.5 | | | | | | | |

*IDC **04** 05:22:46.6±1.4, 2.56N×127.43E, h0km, mb3.5/6, mb1 3.6/6, mb1mx3.4/47, mbtmp3.5/6, Error ellipse: s-maj=101.8km s-min=19.2km az=73.0*
**ISC 04 05:22:54.8±1.5, 2.4N±0.2×127.3E±0.7, h64km, n6, σ0.80/6, mb3.6/5, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **20.46** | **184** | P | | **P** | **05 27 27.0** | **-0.3** |
| | 1.3nm,1.1s,baz=11,slow=16,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.29** | **163** | P | | **P** | **05 27 56.6** | **-0.6** |
| | 1.0nm,0.6s,baz=344,slow=11,SNR=9.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.73** | **166** | P | | **P** | **05 28 29.3** | **+0.8** |
| | 0.2nm,0.6s,baz=349,slow=7.7,SNR=2.0 | | | | | | | |
| **SONM** | **Songino Array** | **48.70** | **341** | P | | **P** | **05 31 33.4** | **+0.5** |
| | 0.3nm,0.4s,baz=156,slow=7.4,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.93** | **325** | P | | **P** | **05 32 47.3** | **-0.2** |
| | 0.5nm,0.4s,baz=119,slow=8.2,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.99** | **333** | P | | **P** | **05 33 07.5** | **-0.7** |
| | 0.5nm,0.6s,baz=137,slow=7.1,SNR=2.2 | | | | | | | |

**IDC 04 05:26:35.0±2.9, 30.65S×177.52W, h0km, mb3.6/2, mb1 3.9/3, mb1mx3.7/34, mbtmp3.7/3, ML3.0/1, Error ellipse: s-maj=67.0km s-min=25.3km az=107.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **RAO** | **Raoul Island** | **1.44** | **346** | Pn | | Pn | 05 27 01.4 | -0.9 |
| | 175nm,0.3s,baz=76,slow=19,SNR=6.9 | | | | | | | |
| RAO | | | | Sn | | Sg | 05 27 16.1 | -5.1 |
| | 353nm,0.3s,baz=159,slow=24,SNR=6.2 | | | | | | | |
| **URZ** | **Urewera** | **8.79** | **209** | Pn | | Pn | 05 28 41.8 | -1.4 |
| | 0.2nm,0.3s,baz=36,slow=8.7,SNR=2.0 | | | | | | | |
| URZ | | | | Sn | | Sn | 05 30 22.2 | -0.8 |
| | 0.7nm,0.3s,baz=99,slow=23,SNR=6.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.51** | **267** | P | | P | 05 34 41.5 | +1.0 |
| | 0.4nm,0.6s,baz=106,slow=7.0,SNR=5.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.52** | **272** | P | | P | 05 34 48.1 | -0.5 |
| | 0.5nm,0.5s,baz=110,slow=8.0,SNR=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.52** | **340** | PKPbc | | PKPdf | 05 46 14.0 | -0.4 |
| | 0.6nm,0.3s,baz=42,slow=4.7,SNR=12 | | | | | | | |

*GCG **04** 05:34:04.4±0.3, 13.61N×90.20W, h14km±8km, MD3.6*
**MEX 04 05:33:38.3±1.3, 16.99N×91.07W, h5km, MD3.9, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CCIG** | **Comitan** | **1.25** | **236** | *e*P | | Pg | 05 33 58.0 | -4.2 |
| CCIG | | | | *e*S | | Sg | 05 34 15.2 | -3.1 |
| **SCIG** | **Sabancuy** | **1.97** | **357** | *e*P | | Pn | 05 34 09.6 | -2.8 |
| SCIG | | | | *i* S | | Sn | 05 34 34.2 | -3.2 |
| **TGIG** | | **1.98** | **264** | *e*P | | Pn | 05 34 08.5 | -4.0 |
| TGIG | | | | *i* S | | Sn | 05 34 32.8 | -5.0 |
| **PAVE** | **Pavencul** | **2.08** | **211** | *e*P | | Pn | 05 34 11.8 | -2.3 |
| PAVE | | | | *e*S | | Sn | 05 34 36.0 | -4.6 |
| **CHUJ** | **Union Juarez** | **2.14** | **208** | *e*P | | Pn | 05 34 13.0 | -1.9 |
| CHUJ | | | | *i* S | | Sn | 05 34 39.0 | -2.9 |
| **PATR** | **El Naranjo** | **2.18** | **211** | *e*P | | Pn | 05 34 13.0 | -2.4 |
| PATR | | | | *i* S | | Sn | 05 34 38.9 | -4.0 |
| **MRL** | **Marmol** | **2.32** | **145** | *e*S | | Sg | 05 34 53.5 | +0.6 |
| **PCIG** | | **2.43** | **239** | *i* P | | Pn | 05 34 14.8 | -3.9 |
| PCIG | | | | *e*S | | Sn | 05 34 43.5 | -5.4 |
| **NBG** | **Las Nubes** | **2.49** | **164** | *e*P | | Pb | 05 34 23.0 | -0.7 |
| **FUG** | **Fuego 3** | **2.54** | **175** | *e*P | | Pb | 05 34 23.6 | -0.9 |
| FUG | | | | *e*S | | Sn | 05 34 38.6 | -13 |
| **CMIG** | **Matias Romero** | **3.65** | **272** | *e*P | | Pn | 05 34 36.2 | +0.7 |
| CMIG | | | | *e*S | | Sn | 05 35 09.7 | -9.4 |

*SOME **04** 06:02:27.9, 40.92N×69.70E, h0km*
*KRNET **04** 06:02:27.1±0.1, 41.12N×69.38E, mb2.3*
*NNC **04** 06:02:29.4±3.2, 40.86N×69.56E, h0km, mb3.5, mpv3.0, Error ellipse: s-maj=21.9km s-min=13.2km az=31.0*
*ISU **04** 06:02:31.41.00N×69.80E, h5km*
**ISC 04 06:02:31.6±1.4, 41.11N±0.04×69.76E±0.04, h4km±9km, n23, σ2.95/38, 10C-3D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **YBZ** | **Yangibazar** | **0.24** | **326** | P | | **Pb** | **06 02 38.0** | **+1.8** |
| **TAS** | **Tashkent** | **0.41** | **302** | *e*S | | **Sb** | **06 02 48.0** | **-0.1** |
| **CHMG** | **Chimgan** | **0.48** | **23** | *e*P | | **Pb** | **06 02 42.0** | **-0.8** |
| CHMG | | | | *e*S | | **Sb** | **06 02 51.0** | **+0.7** |
| **TRKS** | **Terek-Say** | **1.12** | **67**⇑ | *i*P | | **Pg** | **06 02 52.6** | **-0.5** |
| | baz=75 | | | | | | | |
| TRKS | | | | ⇑*i*S | | **Sn** | **06 03 12.4** | **+2.1** |
| | baz=75 | | | | | | | |
| **BTK** | **Batken** | **1.32** | **142** | P | | **Pn** | **06 02 56.0** | **-1.0** |
| BTK | | | | S | | **Sn** | **06 03 16.0** | **+0.9** |
| **BTK** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CBB** | **Campbell River** | **3.57** | **43** | Pn | Pn | 06 08 27.1 | -0.2 |
| CBB | | | | Sn | Sn | 06 09 06.8 | -2.8 |
| **B926** | **Mesachie Lake** | **3.61** | **66** | Pn | Pn | 06 08 26.7 | -1.2 |
| B926 | | | | Sn | Sn | 06 09 07.6 | -2.9 |
| **CLRS** | **Cowichan Lake** | **3.61** | **66** | Pn | Pn | 06 08 26.7 | -1.2 |
| CLRS | | | | Sn | Sn | 06 09 07.7 | -2.8 |
| **OSD** | **Olympics--Snow** | **3.69** | **83** | Pn | Pn | 06 08 29.0 | -0.2 |
| **STW** | **Striped Peak** | **3.74** | **78** | Pn | Pn | 06 08 29.6 | -0.1 |
| **TXB** | **Texada** | **3.83** | **53** | Pn | Pn | 06 08 30.5 | -0.5 |
| **NLLB** | **Nanaimo Lost L** | **3.85** | **61** | Pn | Pn | 06 08 30.6 | -0.6 |
| **E03A** | **Lebam** | **3.92** | **102** | Sn | Sn | 06 09 15.3 | -3.0 |
| **B009** | **North Saanich** | **3.98** | **71** | Pn | Pn | 06 08 32.6 | -0.5 |
| B009 | | | | Sn | Sn | 06 09 16.9 | -2.9 |
| **B010** | **North Saanich** | **3.99** | **71** | Pn | Pn | 06 08 31.9 | -1.2 |
| B010 | | | | Sn | Sn | 06 09 16.7 | -3.1 |
| **PGC** | **Sidney** | **3.99** | **71** | Pn | Pn | 06 08 31.8 | -1.2 |
| PGC | | | | Sn | Sn | 06 09 16.8 | -3.0 |
| **B011** | **North Saanich** | **3.99** | **71** | Pn | Pn | 06 08 31.9 | -1.2 |
| B011 | | | | Sn | Sn | 06 09 17.1 | -2.7 |
| **PA01** | **PA01 North** | **3.99** | **71** | Pn | Pn | 06 08 32.0 | -1.1 |
| **VGZ** | **Gonzales** | **4.01** | **74** | Pn | Pn | 06 08 32.7 | -0.7 |
| VGZ | | | | Sn | Sn | 06 09 17.4 | -3.1 |
| **GOBB** | **Galiano Island** | **4.04** | **67** | Pn | Pn | 06 08 33.2 | -0.5 |
| **SHB** | **Sechelt** | **4.08** | **57** | Pn | Pn | 06 08 34.4 | -0.2 |
| SHB | | | | Sn | Sn | 06 09 19.3 | -3.1 |
| **CPW** | **Capitol Peak** | **4.12** | **95** | Pn | Pn | 06 08 34.3 | -0.6 |
| **HDW** | **Hoodsport** | **4.12** | **85** | Pn | Pn | 06 08 35.7 | +0.7 |
| **SNB** | **Saturna Island** | **4.20** | **70** | Pn | Pn | 06 08 35.7 | -0.3 |
| **GNW** | **Green Mountain** | **4.28** | **87** | Pn | Pn | 06 08 37.5 | +0.5 |
| **BIB** | **Bowen Island** | **4.33** | **61** | Pn | Pn | 06 08 37.6 | -0.2 |
| BIB | | | | Sn | Sn | 06 09 25.8 | -2.5 |
| **MCW** | **Mount Constitu** | **4.39** | **72** | Pn | Pn | 06 08 38.2 | -0.5 |
| MCW | | | | Sn | Sn | 06 09 27.1 | -2.8 |
| **WPB** | **Watts Point** | **4.50** | **59** | Pn | Pn | 06 08 39.9 | -0.2 |
| WPB | | | | Sn | Sn | 06 09 29.3 | -3.1 |
| **HNBB** | **Haney** | **4.73** | **65** | Pn | Pn | 06 08 42.7 | -0.6 |
| HNBB | | | | Sn | Sn | 06 09 35.1 | -3.1 |
| **BBB** | **Bella Bella** | **4.76** | **8** | Pn | Pn | 06 08 43.8 | +0.1 |
| **CMW** | **Cultus Mountai** | **4.81** | **76** | Pn | Pn | 06 08 45.7 | +1.3 |
| **D05A** | **Enumclaw** | **4.87** | **91** | Pn | Pn | 06 08 46.2 | +1.0 |
| **WSLR** | **Whistler** | **4.88** | **55** | Pn | Pn | 06 08 46.0 | +0.5 |
| **VDB** | **Vedder Mountai** | **4.94** | **69** | Pn | Pn | 06 08 46.2 | -0.1 |
| **A05A** | **Maple Falls** | **4.95** | **70** | Pn | Pn | 06 08 46.4 | +0.1 |
| **MBW** | **Mount Baker** | **5.02** | **72** | Pn | Pn | 06 08 47.8 | +0.4 |
| **FMW** | **Mount Fremont** | **5.11** | **93** | Pn | Pn | 06 08 50.3 | +1.6 |
| **RPW** | **Rockport** | **5.21** | **76** | Pn | Pn | 06 08 50.2 | +0.3 |
| **B06A** | **Marblemount** | **5.24** | **76** | Pn | Pn | 06 08 50.5 | +0.2 |
| **HOPB** | **Hope** | **5.48** | **67** | Pn | Pn | 06 08 53.6 | +0.1 |
| HOPB | | | | Sn | Sn | 06 09 54.0 | -2.6 |
| **BUTB** | **Butedale** | **5.61** | **4** | Pn | Pn | 06 08 55.8 | +0.4 |
| **LLLB** | **Lillooet** | **5.70** | **54** | Pn | Pn | 06 08 57.0 | +0.3 |
| **LTY** | **Liberty** | **5.75** | **89** | Pn | Pn | 06 08 59.4 | +1.9 |
| **PNT** | **Penticton** | **6.60** | **70** | Pn | Pn | 06 09 09.2 | +0.2 |
| **BLBC** | **Blue River** | **7.86** | **51** | Pn | Pn | 06 09 27.2 | +0.7 |
| **SLEB** | **Sale Mountain** | **8.08** | **59** | Pn | Pn | 06 09 30.0 | +0.5 |
| **MNB** | **Mounoet Dainar** | **8.40** | **52** | Pn | Pn | 06 09 34.8 | +0.9 |
| **BDMTA** | **Bald Mountain** | **9.74** | **37** | Pn | Pn | 06 09 54.4 | +2.3 |

**IDC 04 06:14:31.6±2.2, 8°48S×127°10E, h0km, mb3.2/1, mb1 3.5/3, mb1mx3.3/31, mbtmp3.3/3, ML3.4/2, Error ellipse: s-maj=205.6km s-min=33.8km az=61.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.38** | **149** | Pn | Pn | 06 17 42.5 | -0.5 |
| | 0.3nm,0.3s,baz=327,slow=14,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 06 20 06.6 | -6.0 |
| | 0.2nm,0.3s,baz=329,slow=22,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **16.45** | **157** | Pn | Pn | 06 18 24.6 | +0.6 |
| | 0.1nm,0.3s,baz=333,slow=11,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.92** | **329** | P | P | 06 25 32.3 | 0.0 |
| | 0.1nm,0.4s,baz=121,slow=6.0,SNR=1.8 | | | | | | |

**IDC 04 06:15:19.0±2.6, 54°22N×86°40E, h0km, mb1 2.7/2, mb1mx2.7/44, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=20.2km s-min=12.8km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.97** | **255** | *i* | | 06 20 50.0 | |
| | baz=73,slow=342,SNR=29 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.97** | **255** | Pg | Pg | 06 15 36.2 | -1.3 |
| | 1.1nm,0.3s,baz=74,slow=18,SNR=8.2 | | | | | | |
| ZALV | | | | Lg | Lg | 06 15 51.3 | |
| | 2.6nm,0.3s,baz=76,slow=25,SNR=19 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.01** | **236** | Pn | Pn | 06 16 50.0 | +1.0 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=6.5 | | | | | | |
| KURBB | | | | Lg | Lg | 06 18 31.4 | |
| | 0.0nm,0.3s,baz=58,slow=29,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.88** | **201** | Pn | Pn | 06 17 15.6 | +0.9 |
| | 0.1nm,0.3s,baz=21,slow=13,SNR=11 | | | | | | |
| MKAR | | | | Sn | Sn | 06 18 44.6 | +0.1 |
| | 0.0nm,0.3s,baz=18,slow=29,SNR=1.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 19 27.8 | |
| | 0.0nm,0.3s,baz=17,slow=30,SNR=6.7 | | | | | | |

*NEIC **04** 06:19:15.4±1.8, 1°53S±0.05×77°6W±0.1, h173km±13km, mb4.2/8, Error ellipse: s-maj=18.7km s-min=4.9km az=105.0*
*IDC **04** 06:19:16.2±1.9, 1°62S×77°75W, h197km±18km, mb3.2/7, mb1 3.4/13, mb1mx3.2/39, mbtmp3.9/13, Error ellipse: s-maj=26.1km s-min=14.1km az=91.0*
**ISC 04 06:19:14.4±0.6, 1°60S±0°05×77°72W±0°09, h181km, n62, σ1°43/62, mb3.6/7, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OTAV** | **Otavalo** | **1.97** | **338** | *e*P | **Pn** | **06 19 51.2** | **-0.6** |
| **OTAV** | **Otavalo** | **1.97** | **338** | | **Pn** | **06 19 51.2** | **-0.6** |
| OTAV | | | | Sn | **Sn** | **06 20 20.1** | **-0.6** |
| **CUSE** | **Cuicocha Este** | **2.02** | **340** | *e*P | **Pn** | **06 19 52.1** | **-0.1** |
| **CMBC** | **Cumbal** | **2.53** | **358** | *e*P | **Pn** | **06 19 55.5** | **-2.5** |
| **GCUF** | **Volcan Galeras** | **2.83** | **8** | *e*P | **Pn** | **06 20 01.4** | **-0.3** |
| **FLOC** | **Florencia** | **3.78** | **33** | *e*P | **Pn** | **06 20 13.0** | **+0.2** |
| FLOC | | | | *e*S | **Sn** | **06 20 56.7** | **-1.8** |
| FLOC | | | | *i* | | 06 21 07.3 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **SOTA** | **Rioblanco** | **3.87** | **17** | *e*P | **Pn** | **06 20 15.2** | **+0.7** |
| **PCON** | **Cinco Dias** | **4.12** | **19** | *e*P | **Pn** | **06 20 18.5** | **+0.8** |
| **POPC** | **Popayan, Colom** | **4.24** | **14** | *e*P | **Pn** | **06 20 18.7** | **-0.2** |
| **GARC** | **Garzon, Huila** | **4.37** | **31** | *e*P | **Pn** | **06 20 21.2** | **+0.6** |
| GARC | | | | *e*S | Sn | 06 20 42.2 | -30 |
| **BETC** | **Betania** | **4.82** | **28** | *e*P | **Pn** | **06 20 27.9** | **+1.7** |
| **MACC** | **Macarena, Meta** | **5.37** | **46** | *e*P | **Pn** | **06 20 33.5** | **+0.2** |
| **ATAH** | **Atahualpa** | **5.54** | **187** | P | **Pn** | **06 20 36.3** | **+0.5** |
| | comp=Z,4.7nm,0.3s,baz=21,slow=8.4,SNR=43 | | | | | | |
| ATAH | | | | S | **Sn** | **06 21 36.7** | **-3.2** |
| | comp=Z,4.0nm,0.3s,baz=302,slow=19,SNR=9.7 | | | | | | |
| **YOTC** | **Yotoco, Valle** | **5.71** | **14** | *e*P | **Pn** | **06 20 35.4** | **-2.5** |
| **ORTC** | **Ortega, Tolima** | **6.00** | **24** | *e*P | **Pn** | **06 20 42.4** | **+0.8** |
| **ANIL** | **Santa Ana** | **6.48** | **21** | *e*P | **Pn** | **06 20 37.0** | **-11** |
| **PLMC** | **San Jos del P** | **6.62** | **12** | *e*P | **Pn** | **06 20 46.5** | **-3.2** |
| **VILC** | **Villavicencio,** | **6.96** | **35** | *e*P | **Pn** | **06 20 55.0** | **+0.8** |
| **GUY2C** | **Guyana, Caldas** | **7.18** | **19** | *e*P | **Pn** | **06 20 55.5** | **-1.8** |
| **ROSC** | **El Rosal** | **7.24** | **28** | P | **Pn** | **06 21 01.1** | **+2.9** |
| | comp=Z,0.9nm,0.3s,baz=233,slow=20,SNR=1.4 | | | | | | |
| **NORC** | **Norcasia** | **7.67** | **22** | *e*P | **Pn** | **06 21 02.8** | **-0.6** |
| **CZSB** | **Cruzeiro do Su** | **7.87** | **141** | | **Pn** | **06 21 06.0** | **-0.1** |
| **SPBC** | **San Pablo de B** | **8.07** | **27** | *e*P | **Pn** | **06 21 05.1** | **-3.7** |
| **TBTG** | **Tabatinga, AM** | **8.21** | **108** | Pn | **Pn** | **06 21 09.8** | **-0.7** |
| **PTBC** | **PUERTO BERRIO,** | **8.72** | **22** | *e*P | **Pn** | **06 21 16.1** | **-1.2** |
| **BARC** | **Barichara** | **9.31** | **29** | *e*P | **Pn** | **06 21 27.1** | **+1.8** |
| **ZARC** | **Zaragoza, Cauc** | **9.47** | **17** | *e*P | Pn | 06 21 19.4 | -7.7 |
| **ZARC** | **Zaragoza, Cauc** | **9.47** | **17** | | **Pn** | **06 21 25.0** | **-2.2** |
| **TAMC** | **Tame, Arauca** | **9.94** | **36** | *e*P | **Pn** | **06 21 33.4** | **+0.1** |
| **NNA** | **Nana** | **10.35** | **175** | P | **Pn** | **06 21 39.9** | **+1.2** |
| | comp=Z,1.3nm,0.3s,baz=352,slow=7.1,SNR=1.8 | | | | | | |
| NNA | | | | S | Sn | 06 23 24.2 | -10 |
| | comp=Z,1.6nm,0.3s,baz=357,slow=17,SNR=1.7 | | | | | | |
| **NNA** | **Nana** | **10.35** | **175** | | **Pn** | **06 21 40.2** | **+1.5** |
| **MOTC** | **Monteria, Cord** | **10.51** | **11** | Pn | **Pn** | **06 21 41.3** | **+0.6** |
| **OCAC** | **Ocana** | **10.71** | **24** | *e*P | **Pn** | **06 21 43.1** | **-0.4** |
| **OCAC** | **Ocana** | **10.71** | **24** | Pn | **Pn** | **06 21 43.3** | **-0.2** |
| **SMLC** | **San Martn de** | **10.95** | **19** | *e*P | **Pn** | **06 21 46.3** | **-0.1** |
| **SJCC** | **San Jacinto, C** | **11.70** | **12** | Pn | **Pn** | **06 21 56.1** | **0.0** |
| **SOCV** | **Socops** | **11.97** | **35** | *e*P | **Pn** | **06 21 55.9** | **-3.6** |
| **SDV** | **Santo Domingo** | **12.59** | **34** | P | **Pn** | **06 22 08.7** | **+1.2** |
| | comp=Z,0.8nm,0.3s,baz=252,slow=7.4,SNR=4.4 | | | | | | |
| **SDV** | **Santo Domingo** | **12.59** | **34** | Pn | **Pn** | **06 22 08.6** | **+1.0** |
| **COVE** | **Coope Vega, Sa** | **13.93** | **332** | Pn | **Pn** | **06 22 24.9** | **+0.5** |
| **BAUV** | **El Baul** | **14.24** | **42** | Pn | **Pn** | **06 22 27.4** | **-0.8** |
| **URIC** | **Uribia, Colomb** | **14.39** | **23** | Pn | **Pn** | **06 22 28.6** | **-1.5** |
| **AUA1** | **Aruba** | **15.97** | **28** | P | **P** | **06 22 49.0** | **-0.3** |
| **MACA** | **Manacapuru-AM** | **17.09** | **96** | P | **Pn** | **06 23 02.6** | **-0.2** |
| MACA | | | | IAmb | IAmb | 06 23 11.1 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | | **17.38 148** | P | **Pn** | **06 23 07.7** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=317,slow=4.5,SNR=11 | | | | | | |
| **LPAZ** | **La Paz** | | **17.38 148** | P | **Pn** | **06 23 06.6** | **-0.3** |
| **PCRV** | **Puerto La Cruz** | **17.50** | **48** | P | **Pn** | **06 23 09.6** | **+1.7** |
| | comp=Z,0.5nm,0.3s,baz=327,slow=5.6,SNR=1.6 | | | | | | |
| **PB16** | **IPOC Station P** | | **18.48 155** | P | **Pn** | **06 23 19.3** | **-0.4** |
| **MNMC** | **Minye Minye** | | **19.15 156** | P | **Pn** | **06 23 26.3** | **-1.0** |
| **PB11** | **IPOC Station P** | | **19.69 157** | P | **Pn** | **06 23 32.0** | **-1.7** |
| PB11 | | | | IAmb | IAmb | 06 23 39.8 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **SIV** | **San Ignacio** | | **21.76 132** | P | **P** | **06 23 53.1** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=299,slow=9.2,SNR=6.7 | | | | | | |
| **LVC** | **Limon Verde** | | **22.57 158** | P | **P** | **06 24 01.0** | **+1.0** |
| | comp=Z,1.9nm,0.4s,baz=25,slow=7.3,SNR=2.3 | | | | | | |
| **LVC** | **Limon Verde** | | **22.57 158** | P | **P** | **06 24 00.2** | **+0.2** |
| LVC | | | | IAmb | IAmb | 06 24 18.5 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **PLCA** | **Paso Flores** | | **39.49 171** | P | **P** | **06 26 27.9** | **+0.5** |
| | comp=Z,1.4nm,0.8s,baz=343,slow=8.2,SNR=3.8 | | | | | | |
| **PLCA** | **Paso Flores** | | **39.49 171** | P | **P** | **06 26 29.0** | **+1.6** |
| PLCA | | | | IAmb | IAmb | 06 26 56.1 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | | **69.72 343** | P | **P** | **06 30 04.0** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=140,slow=6.2,SNR=5.6 | | | | | | |
| **DBIC** | **Dimbokro** | **73.17** | **83** | P | **P** | **06 30 25.9** | **-0.1** |
| | comp=Z,0.8nm,0.2s,baz=279,slow=4.5,SNR=7.8 | | | | | | |
| **KOWA** | **Kowa** | **74.64** | **75** | P | **P** | **06 30 34.2** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **80.06** | **76** | P | **P** | **06 31 04.1** | **-0.6** |
| | comp=Z,0.4nm,0.3s,baz=285,slow=5.4,SNR=8.8 | | | | | | |
| **ILAR** | **Eielson Array** | | **82.69 336** | P | **P** | **06 31 19.3** | **+1.8** |
| | comp=Z,0.4nm,0.9s,baz=94,slow=2.7,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | | **140.30 224** | PKPbc | PKPpre | 06 38 15.5 | |
| | comp=Z,0.1nm,0.4s,baz=115,slow=2.9,SNR=1.8 | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **06 38 21.0** | **-1.7** |
| | comp=Z,0.3nm,0.6s,baz=125,slow=2.6,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | | **141.96 234** | PKhKP | PKPpre | 06 38 20.8 | |
| | comp=Z,0.3nm,0.6s,baz=114,slow=2.6,SNR=1.7 | | | | | | |

*TUL **04** 06:27:38.1±1.5, 36°48N±0°02×98°75W±0°02, h8km±7km, ML2.7, mb_Lg2.3/16(NEIC), Error ellipse: s-maj=3.5km s-min=2.3km az=153.0*
**NEIC 04 06:27:38.3±1.8, 36°45N±0°02×98°72W±0°02, h5km±2km, Error ellipse: s-maj=3.5km s-min=3.1km az=334.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.24** | **253** | Pg | Pg | 06 27 42.9 | -0.1 |
| U32A | | | | Sg | Sg | 06 27 46.8 | +0.6 |
| **OK035** | **E0210 Rd and N** | **0.26** | **1** | Pg | Pg | 06 27 43.2 | -0.1 |
| **OK032** | **Salt Plains WL** | **0.54** | **49** | | Pg | 06 27 47.2 | -1.5 |
| OK032 | | | | Sg | Sg | 06 27 56.3 | +0.6 |
| **CROK** | **Carrier** | **0.59** | **85** | Pg | Pg | 06 27 49.9 | +0.2 |
| CROK | | | | Sg | Sg | 06 27 58.3 | +0.9 |
| **KAN14** | **Manchester OK** | **0.79** | **50** | | Pg | 06 27 53.4 | -0.1 |
| KAN14 | | | | Sg | Sg | 06 28 03.8 | +0.1 |
| **GC02** | **Grant County #** | **0.80** | **60** | Pg | Pg | 06 27 53.6 | 0.0 |
| **KAN10** | **Anthony SW Sta** | **0.84** | **37** | Pg | Pg | 06 27 53.6 | -0.7 |
| **KAN16** | **Harper SW Stat** | **0.93** | **34** | Pg | Pg | 06 27 55.6 | -0.6 |
| **KAN05** | **Bluff City Nor** | **0.94** | **46** | Pg | Pg | 06 27 56.0 | -0.4 |
| **KAN17** | **Caldwell West** | **0.97** | **52** | Pg | Pg | 06 27 56.3 | -0.5 |
| **KAN08** | **Anthony NE Sta** | **0.98** | **38** | Pg | Pg | 06 27 56.5 | -0.6 |
| **KAN12** | **Harper NE Stat** | **1.02** | **34** | Pg | Pg | 06 27 57.2 | -0.7 |
| **KAN01** | **Argonia South** | **1.04** | **47** | Pg | Pg | 06 27 57.5 | -0.7 |
| **KAN06** | **Argonia West S** | **1.05** | **41** | Pg | Pg | 06 27 57.8 | -0.7 |
| **KAN13** | **South Haven SW** | **1.14** | **60** | | Pg | 06 27 59.5 | -0.8 |
| **BCOK** | **Bluff Creek, N** | **1.20** | **131** | | Pg | 06 27 59.9 | -1.4 |
| **OK029** | **Liberty Lake** | **1.21** | **122** | Pn | Pg | 06 28 00.7 | -0.9 |
| **BLOK** | **Blackwell** | **1.25** | **75** | Pn | Pg | 06 28 01.5 | -0.8 |
| **OK025** | **Westminster Rd** | **1.42** | **127** | | Pn | 06 28 04.6 | -0.1 |
| **OKCFA** | **Oklahoma City** | **1.46** | **135** | | Pn | 06 28 05.2 | -0.1 |
| **OK033** | **Mehan** | **1.50** | **105** | Pn | Pn | 06 28 05.8 | 0.0 |
| **OK031** | **S. Brethren Rd** | **1.60** | **108** | | Pn | 06 28 07.6 | +0.4 |
| **FNO** | **Franklin** | **1.60** | **138** | | Pn | 06 28 07.5 | +0.2 |
| **QUOK** | **Quay** | **1.65** | **99** | | Pb | 06 28 08.7 | -0.4 |
| **OK030** | **Cody Creek RV** | **1.65** | **108** | | Pn | 06 28 08.2 | +0.3 |
| **OK034** | **N. Norfolk Rd.** | **1.68** | **105** | | Pn | 06 28 08.8 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.71** | **182** | | Pn | 06 28 08.7 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.83** | **75** | | Pn | 06 28 11.4 | +0.9 |
| **W35A** | **Tecumseh** | **1.98** | **130** | Pn | Pn | 06 28 11.5 | -1.0 |
| W35A | | | | IAmb_Lg | | 06 28 47.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.98** | **158** | | Pn | 06 28 12.4 | -0.1 |
| X34A | | | | IAmb_Lg | | 06 28 42.9 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.43** | **102** | | Pn | 06 28 19.4 | +0.7 |
| **CBKS** | **Cedar Bluff** | **2.49** | **341** | IAmb_Lg | | 06 28 58.8 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.88** | **238** | | Pn | 06 28 25.4 | +0.5 |
| **KSU1** | **Kansas State U** | **3.13** | **32** | IAmb_Lg | | 06 29 19.0 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.30** | **123** | Pn | Pn | 06 28 30.6 | 0.0 |
| **U38A** | **Gravette** | **3.49** | **89** | Pn | Pn | 06 28 34.5 | +1.2 |
| U38A | | | | IAmb_Lg | | 06 29 36.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **192** | IAmb_Lg | | 06 29 43.8 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **311** | IAmb_Lg | | 06 29 52.2 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.14** | **234** | IAmb_Lg | | 06 29 56.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.61** | **113** | Pn | Pn | 06 28 49.5 | +0.9 |
| **T25A** | **Trinidad** | **4.62** | **280** | | Pn | 06 28 49.1 | +0.1 |
| **U40A** | **Yellville** | **4.73** | **89** | Pn | Pn | 06 28 50.3 | -0.1 |

**RSNC 04 06:31:05.8±1.0, 6°83N×73°17W, h140km±4km, ML3.0, Mw3.6, 1C-4D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **183** | *i*P | Pn | 06 31 25.1 | -0.2 |
| BARC | | | | *e*S | Sn | 06 31 38.8 | -1.2 |
| BARC | | | | *i* | | 06 31 41.4 | |
| | comp=Z,163nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.69** | **42** | *i*P | Pn | 06 31 27.9 | +0.2 |
| PAMC | | | | *e*S | Sn | 06 31 44.8 | +0.5 |
| PAMC | | | | *i* | | 06 31 47.3 | |
| | comp=Z,372nm,0.4s | | | | | | |
| **RUSC** | **La Rusia** | **0.93** | **175** | *i*P | Pn | 06 31 29.0 | -0.6 |
| RUSC | | | | *e*S | Sn | 06 31 47.2 | -0.5 |
| RUSC | | | | *i* | | 06 31 49.2 | |
| | comp=Z,140nm,0.3s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.31** | **257** | *e*P | Pn | 06 31 31.5 | -1.1 |
| PTBC | | | | *e*S | Sn | 06 31 52.8 | -0.2 |
| PTBC | | | | *i* | | 06 32 00.3 | |
| | comp=Z,72nm,0.3s | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **354** | *e*P | Pn | 06 31 33.2 | -0.6 |
| OCAC | | | | *e*S | Sn | 06 31 54.7 | -0.5 |
| OCAC | | | | *i* | | 06 31 59.2 | |
| | comp=Z,187nm,0.1s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.42** | **106** | *i*P | Pn | 06 31 33.5 | -0.3 |
| TAMC | | | | *i* | | 06 31 54.5 | |
| | comp=Z,50nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.48** | **218** | *e*P | Pn | 06 31 34.0 | -0.4 |
| SPBC | | | | *e*S | Sn | 06 31 55.6 | -0.7 |
| SPBC | | | | *i* | | 06 31 58.7 | |
| | comp=Z,150nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.80** | **292** | *e*P | Pn | 06 31 37.6 | -0.4 |
| ZARC | | | | *e*S | Sn | 06 32 01.9 | -0.8 |
| ZARC | | | | *i* | | 06 32 09.2 | |
| | comp=Z,118nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.11** | **233** | *e*S | Sn | 06 32 08.2 | -1.0 |
| NORC | | | | *i* | | 06 32 16.6 | |
| | comp=Z,52nm,0.2s | | | | | | |
| **SMLC** | **San Martn de** | **2.15** | **336** | *e*P | Pn | 06 31 41.1 | -1.1 |
| SMLC | | | | *e*S | Sn | 06 32 09.9 | -0.2 |
| SMLC | | | | *i* | | 06 32 13.5 | |
| | comp=Z,109nm,0.1s | | | | | | |
| **CHIC** | **Chingaza** | **2.26** | **194** | *e*P | Pn | 06 31 43.3 | -0.5 |
| CHIC | | | | *e*S | Sn | 06 32 12.6 | -0.5 |
| CHIC | | | | *i* | | 06 32 16.2 | |
| | comp=Z,70nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.28** | **210** | *e*P | Pn | 06 31 44.9 | +0.7 |
| ROSC | | | | *e*S | Sn | 06 32 13.8 | +0.2 |
| ROSC | | | | *i* | | 06 32 18.9 | |
| | comp=Z,135nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.52** | **291** | *e*P | Pn | 06 31 45.0 | -1.7 |
| UREC | | | | *e*Pg | | 06 31 45.7 | |
| UREC | | | | *e*S | Sn | 06 32 16.8 | -1.3 |
| UREC | | | | *i* | | 06 32 28.2 | |
| | comp=Z,80nm,0.2s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.71** | **234** | *e*P | Pn | 06 31 49.2 | -0.3 |
| GUY2C | | | | *e*S | Sn | 06 32 23.4 | +0.3 |
| GUY2C | | | | *i* | | 06 32 31.1 | |
| | comp=Z,36nm,0.3s | | | | | | |
| **SOCV** | **Socops** | **2.71** | **58** | *e*P | Pn | 06 31 46.9 | -2.2 |
| SOCV | | | | *e*S | Sn | 06 32 19.1 | -3.4 |
| **VILC** | **Villavicencio,** | **2.75** | **191** | *e*P | Pn | 06 31 48.6 | -1.2 |
| VILC | | | | *e*S | Sn | 06 32 22.4 | -1.2 |
| **CBOC** | **Ciudad Bolivar** | **2.98** | **251** | *e*P | Pn | 06 31 53.0 | +0.3 |
| CBOC | | | | *e*S | Sn | 06 32 26.0 | -2.9 |
| **ANIL** | **Santa Ana** | **3.22** | **224** | *e*P | Pn | 06 31 55.4 | -0.4 |
| ANIL | | | | *e*S | Sn | 06 32 34.6 | +0.1 |
| ANIL | | | | *i* | | 06 32 40.0 | |
| | comp=Z,115nm,0.4s | | | | | | |
| **SDV** | **Santo Domingo** | **3.24** | **51** | *e*P | Pn | 06 31 54.4 | -1.6 |
| SDV | | | | *e*S | Sn | 06 32 29.2 | -5.6 |
| **ORTC** | **Ortega, Tolima** | **3.56** | **216** | *e*S | Sn | 06 32 42.4 | +0.1 |
| ORTC | | | | *i* | | 06 32 46.1 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **PLMC** | **San Jos del P** | **3.64** | **238** | *e*P | Pn | 06 32 00.9 | -0.3 |
| PLMC | | | | *i* | | 06 32 49.0 | |
| | comp=Z,10.0nm,0.3s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.64** | **327** | *e*P | Pn | 06 31 58.7 | -2.4 |
| SJCC | | | | *e*Pg | | 06 31 59.8 | |
| SJCC | | | | *e*S | Sn | 06 32 38.9 | -5.2 |
| **ELOV** | **Elorza** | **3.66** | **87** | *e*P | Pn | 06 31 59.4 | -2.0 |
| ELOV | | | | *e*S | Sn | 06 32 40.0 | -4.4 |
| **CRJC** | **Cerrejon, Guaj** | **4.17** | **4** | *e*P | Pn | 06 32 05.4 | -2.8 |
| CRJC | | | | *e*S | Sn | 06 32 51.1 | -5.6 |
| CRJC | | | | *i* | | 06 32 56.0 | |
| | comp=Z,18nm,0.2s | | | | | | |
| **FLOC** | **Florencia** | **5.77** | **206** | *e*P | Pn | 06 32 27.8 | -1.6 |
| FLOC | | | | *e*S | Sn | 06 33 32.5 | -2.2 |
| FLOC | | | | *i* | | 06 33 36.3 | |
| | comp=Z,4.0nm,0.3s | | | | | | |

*DNK **04** 06:38:18.8±3.1, 59°72N×10°50E, h0km±20km, Mc2.7*
*BER **04** 06:38:19.2±1.6, 59°73N×10°52E, h0km, ML1.4, Explosion*
**ISC 04 06:38:18.0±0.9, 59°75N±0°03×10°55E±0°03, h0km, n15, σ1°13/26, Southern Norway**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KONO** | **Kongsberg** | **0.49** | **259** | *e*P | **Pg** | **06 38 27.4** | **0.0** |
| KONO | | | | *e*S | **Sg** | **06 38 34.5** | **+0.7** |
| KONO | | | | IAML | | 06 38 36.6 | |
| | comp=Z,7.6nm,0.3s | | | | | | |
| **STRU** | **Stroemstad** | **0.79** | **155** | *i* P | **Pg** | **06 38 31.7** | **-1.3** |
| STRU | | | | *i* S | **Sg** | **06 38 42.4** | **-0.8** |
| **NC602** | **NORSAR Array S** | **1.11** | **26** | *e*P | **Pg** | **06 38 38.6** | **-0.6** |
| NC602 | | | | *e*S | **Sg** | **06 38 54.8** | **+1.3** |
| NC602 | | | | IAML | | 06 38 56.9 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **NAO01** | **NORSAR Array S** | **1.11** | **8** | *e*P | **Pg** | **06 38 38.7** | **-0.6** |
| NAO01 | | | | *e*S | **Sg** | **06 38 54.5** | **+0.9** |
| NAO01 | | | | IAML | | 06 38 56.6 | |
| | comp=Z,6.6nm,0.1s | | | | | | |
| **NB201** | **NORSAR Array S** | **1.36** | **15** | *e*P | **Pg** | **06 38 43.0** | **-0.9** |
| **SKAR** | **Skarslia** | **1.46** | **311** | *e*P | **Pn** | **06 38 44.3** | **-1.4**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AGPR** | **Aguadilla, PR** | **0.90** | **63** | | Pn | 06 43 35.5 | -0.3 |
| AGPR | | | | IAML | | 06 44 03.2 | |
| | comp=N,127nm,2.1s | | | | | | |
| AGPR | | | | IAML | | 06 44 05.2 | |
| | comp=E,126nm,1.3s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.90** | **63** | *iP* | Pn | 06 43 35.4 | -0.4 |
| AGPR | | | | IAML | | 06 43 58.4 | |
| | comp=Z,84nm,1.1s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.18** | **76** | *eP* | Pn | 06 43 38.4 | -0.4 |
| **AOPR** | **Arecibo Observ** | **1.18** | **76** | *eS* | Sn | 06 43 55.7 | -0.2 |
| **AOPR** | **Arecibo Observ** | **1.18** | **76** | | Pn | 06 43 38.3 | -0.6 |
| AOPR | | | | IAML | | 06 44 07.3 | |
| | comp=N,180nm,0.3s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.20** | **81** | *eP* | Pn | 06 43 38.8 | -0.2 |
| **UUPR** | **Utuado, UPR, P** | **1.20** | **81** | *eS* | Sn | 06 43 55.6 | -0.6 |
| **UUPR** | **Utuado, UPR, P** | **1.20** | **81** | | Pn | 06 43 38.8 | -0.2 |
| UUPR | | | | | Sn | 06 43 55.6 | -0.6 |
| **OBIP** | **Obispado Ponce** | **1.29** | **91** | Pn | Pn | 06 43 39.8 | -0.2 |
| **CELP** | **Cerrillos** | **1.31** | **89** | *eP* | Pn | 06 43 39.8 | -0.6 |
| **CELP** | **Cerrillos** | **1.31** | **89** | *eS* | Sn | 06 43 57.9 | -0.7 |
| **CELP** | **Cerrillos** | **1.31** | **89** | | Pn | 06 43 40.5 | +0.1 |
| CELP | | | | IAML | | 06 44 12.1 | |
| | comp=N,55nm,0.7s | | | | | | |
| **ICMP** | **Isla Caja de M** | **1.38** | **97** | Pn | Pn | 06 43 40.5 | -0.5 |
| ICMP | | | | IAML | | 06 44 15.1 | |
| | comp=N,43nm,2.2s | | | | | | |
| ICMP | | | | IAML | | 06 44 16.4 | |
| | comp=E,43nm,2.2s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.42** | **73** | *eP* | Pn | 06 43 40.9 | -0.8 |
| **EMPR** | **Esperanza - Ma** | **1.42** | **73** | *eS* | Sn | 06 44 00.6 | -0.2 |
| **EMPR** | **Esperanza - Ma** | **1.42** | **73** | | Pn | 06 43 40.8 | -0.8 |
| **IGPR** | **InterUniversit** | **1.77** | **93** | *eP* | Pn | 06 43 45.8 | -0.1 |
| **IGPR** | **InterUniversit** | **1.77** | **93** | *eS* | Sn | 06 44 08.4 | -0.1 |
| **GCPR** | **Guaynabo City** | **1.80** | **82** | Pn | Pn | 06 43 45.0 | -1.3 |
| GCPR | | | | IAML | | 06 43 59.3 | |
| | comp=N,26nm,2.5s | | | | | | |
| GCPR | | | | IAML | | 06 44 33.4 | |
| | comp=E,29nm,2.0s | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.84** | **91** | Pn | Pn | 06 43 47.0 | +0.2 |
| PDPR | | | | IAML | | 06 44 22.2 | |
| | comp=E,36nm,1.2s | | | | | | |
| **HUMP** | **Col San Antoni** | **2.01** | **87** | *eP* | Pn | 06 43 48.8 | -0.2 |
| **HUMP** | **Col San Antoni** | **2.01** | **87** | *eS* | Sn | 06 44 13.9 | -0.1 |
| **HUMP** | **Col San Antoni** | **2.01** | **87** | | Pn | 06 43 48.6 | -0.4 |
| HUMP | | | | IAML | | 06 44 25.1 | |
| | comp=N,46nm,0.2s | | | | | | |
| **CBYP** | **Canovanas** | **2.01** | **84** | *eP* | Pn | 06 43 48.4 | -0.6 |
| CBYP | | | | *eS* | Sn | 06 44 13.8 | -0.4 |
| **CBYP** | **Canovanas** | **2.01** | **84** | Pn | Pn | 06 43 47.7 | -1.4 |
| **MTP** | **Monte Pirata** | **2.29** | **89** | *eP* | Pn | 06 43 52.8 | +0.1 |
| **MTP** | **Monte Pirata** | **2.29** | **89** | *eS* | Sn | 06 44 21.0 | +0.4 |
| **MTP** | **Monte Pirata** | **2.29** | **89** | | Pn | 06 43 52.2 | -0.4 |
| MTP | | | | IAML | | 06 44 32.0 | |
| | comp=E,25nm,0.8s | | | | | | |
| MTP | | | | IAML | | 06 44 48.6 | |
| | comp=N,25nm,2.7s | | | | | | |
| **CUPR** | **Culebra, Puert** | **2.56** | **84** | *eP* | Pn | 06 43 56.7 | +0.6 |
| **CUPR** | **Culebra, Puert** | **2.56** | **84** | *eS* | Sn | 06 44 26.9 | +0.1 |
| **CUPR** | **Culebra, Puert** | **2.56** | **84** | | Pn | 06 43 54.8 | -1.3 |
| CUPR | | | | IAML | | 06 44 22.8 | |
| | comp=N,12nm,1.1s | | | | | | |
| CUPR | | | | IAML | | 06 45 27.4 | |
| | comp=E,13nm,1.0s | | | | | | |
| **STVI** | **Saint Thomas** | **2.87** | **84** | *eP* | Pn | 06 44 00.5 | +0.2 |
| **STVI** | **Saint Thomas** | **2.87** | **84** | *eS* | Sn | 06 44 34.2 | -0.1 |
| **STVI** | **Saint Thomas** | **2.87** | **84** | | Pn | 06 43 59.5 | -0.8 |
| STVI | | | | IAML | | 06 44 26.5 | |
| | comp=N,34nm,2.8s | | | | | | |

*BJI* ***04*** *06:59:21.9±0.0, 6°.30S×148°.04E, h74km, mb5.0/67, mB5.1/31, Ms4.6/26, Ms7 4.3/27*
*MOS* ***04*** *06:59:24.3±0.9, 6°.27S×147°.37E, h68km, mb5.3/30, Error ellipse: s-maj=9.7km s-min=5.8km az=102.5*
*DJA* ***04*** *06:59:25.5±0.3, 6°.5±2°×14°.7E±°, h54km±3km, M5.2/78, mB5.6/43, mb5.5/78, MLv5.5/3, Mw(mB)5.1/43, MwMwp5.1/2, Mwp5.3/2*
*IDC* ***04*** *06:59:26.2±0.5, 6°.26S×147°.54E, h72km±4km, mb4.6/27, mb1 4.7/32, mb1mx4.6/45, mbtmp5.0/32, MS4.1/46, Ms1 4.1/46, ms1mx4.0/63, Error ellipse: s-maj=13.1km s-min=9.5km az=81.0*
*NEIC* ***04*** *06:59:26.3±2.3, 6°.41S±0°.05×147°.45E±0°.08, h66km±5km, mb5.1/95, Error ellipse: s-maj=10.8km s-min=7.7km az=97.0*
*GCMT* ***04*** *06:59:28.3±0.1, 6°.53S±0°.01×147°.69E±0°.01, h71km±1km, MW5.1/111, Moment Tensor Solution. s82,c119; s111,c185; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr3.31±.14; Mθθ-2.49±.13; Mϕϕ-0.82±.13; Mrθ3.84±.08; Mθϕ-3.42±.10; Mϕr-0.25±.09; Best double couple: M₀5.94400×10¹⁶ NP1:ϕs201.00000°, δ37.00000°, λ36.00000°. NP2:ϕs81.00000°, δ69.00000°, λ121.00000°. Principal axes: T 5.7570, Plg55.0000°, Azm30.0000°; N 0.3640, Plg29.0000°, Azm249.0000°; P -6.1300, Plg18.0000°, Azm148.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 04 06:59:26.1±0.3, 6°.40S±0°.03×147°.48E±0°.04, h73km±3km, h73km:pP-P, n491, σ1s32/506, mb5.1/144, 58C-60D, Fault plane solution: NP1:ϕs113.03395°, δ77.82799°, λ116.46009°. NP2:ϕs225.99307°, δ28.94095°, λ25.83099°.**
**Principal axes:** T Plg50.1652°, Azm52.4963°; N Plg25.8208°, Azm287.0432°; P Plg28.0155°, Azm182.1247°; **Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.00** | **186** | P | **Pn** | **07 00 11.7** | **+0.3** |
| | 351nm,0.3s,baz=16,slow=14,SNR=269 | | | | | | |
| PMG | | | | S | **Sn** | **07 00 48.0** | **+1.6** |
| | 838nm,0.3s,baz=221,slow=22,SNR=8.3 | | | | | | |
| PMG | | | | LR | LR | 07 01 16.0 | |
| | comp=Z,3μm,18.9s,baz=30,slow=35 | | | | | | |
| **PMG** | **Port Moresby** | **3.00** | **186** | P | **Pn** | **07 00 11.9** | **+0.5** |
| **MANU** | **Manus Island** | **4.33** | **358** | | **Pn** | **07 00 30.8** | **+1.2** |
| **RABL** | **Rabaul** | **5.16** | **65** | | **Pn** | **07 00 40.6** | **-0.2** |
| **RABL** | **Rabaul** | **5.16** | **65** | P | **Pn** | **07 00 41.0** | **+0.2** |
| **JAY** | **Jayapura** | **7.78** | **299** | P | **Pn** | **07 01 19.3** | **+2.6** |
| | 5.3nm,0.3s,baz=120,slow=4.4,SNR=13 | | | | | | |
| JAY | | | | S | **Sn** | **07 02 51.1** | **+7.8** |
| | baz=143,slow=20,SNR=1.8 | | | | | | |
| JAY | | | | LR | LR | 07 05 02.3 | |
| | comp=Z,2μm,20.8s,baz=140,slow=43 | | | | | | |
| **GENI** | **Genyem** | **8.21** | **297** | P | **Pn** | **07 01 23.0** | **+0.4** |
| | 4μm338nm,1.0s | | | | | | |
| **GENI** | **Genyem** | **8.21** | **297** | P | **Pn** | **07 01 24.7** | **+2.1** |
| **COEN** | **Coen** | **8.62** | **209** | P | **Pn** | **07 01 28.5** | **+0.2** |
| | baz=8.8 | | | | | | |
| **COEN** | **Coen** | **8.62** | **209** | Pn | **Pn** | **07 01 28.7** | **+0.5** |
| COEN | | | | | **Sn** | **07 03 01.3** | **-2.6** |
| **COEN** | **Coen** | **8.62** | **209** | P | **Pn** | **07 01 28.4** | **+0.2** |
| **MTSU** | **Mount Surprise** | **12.06** | **195** | P | **Pn** | **07 02 15.6** | **+0.4** |
| | baz=12,SNR=228 | | | | | | |
| **MTSU** | **Mount Surprise** | **12.06** | **195** | P | **Pn** | **07 02 16.6** | **+1.4** |
| **SRPI** | **Serui, Papua** | **12.08** | **291** | P | **Pn** | **07 02 13.9** | **-1.5** |
| | 230nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **12.71** | **105** | P | **Pn** | **07 02 25.1** | **+1.1** |
| | 8.4nm,0.3s,baz=119,slow=11,SNR=3.7 | | | | | | |
| HNR | | | | S | **Sn** | **07 04 51.2** | **+7.4** |
| | 7.6nm,0.3s,baz=22,slow=7.4,SNR=3.6 | | | | | | |
| **HNR** | **Honiara** | **12.71** | **105** | Pn | **Pn** | **07 02 23.3** | **-0.7** |
| **CTA** | **Charters Tower** | **13.66** | **185** | P | **Pn** | **07 02 38.1** | **+1.5** |
| | 6.5nm,0.3s,baz=1.9,slow=13,SNR=118 | | | | | | |
| CTA | | | | S | **Sn** | **07 05 05.3** | **-1.5** |
| | 0.8nm,0.3s,baz=84,slow=18,SNR=1.7 | | | | | | |
| CTA | | | | LR | LR | 07 07 47.4 | |
| | comp=Z,348nm,21.6s,baz=4.0,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **13.66** | **185** | P | **Pn** | **07 02 38.0** | **+1.3** |
| | 92nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **13.66** | **185** | P | **Pn** | **07 02 37.8** | **+1.1** |
| **CTAO** | **Charters Tower** | **13.66** | **185** | Pn | **Pn** | **07 02 37.8** | **+1.1** |
| **CTAO** | **Charters Tower** | **13.66** | **185** | P | **Pn** | **07 02 38.0** | **+1.3** |
| **FAKI** | **Fak Fak** | **15.57** | **282** | P | **Pn** | **07 02 58.8** | **-2.6** |
| | 2μm122nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **15.57** | **282** | Pn | **Pn** | **07 02 59.3** | **-2.1** |
| FAKI | | | | IAmb | IAmb | 07 03 25.1 | |
| | comp=Z,158nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **15.57** | **282** | P | **P** | **07 03 04.1** | **-0.1** |
| **QIS** | **Mount Isa** | **16.01** | **208** | P | **Pn** | **07 03 08.0** | **+1.0** |
| | baz=16,SNR=34 | | | | | | |
| **QIS** | **Mount Isa** | **16.01** | **208** | P | **P** | **07 03 08.4** | **-0.8** |
| **KDU** | **Kakadu** | **16.06** | **246** | P | **Pn** | **07 03 06.8** | **-0.8** |
| | baz=16,SNR=7.0 | | | | | | |
| **KDU** | **Kakadu** | **16.06** | **246** | P | **P** | **07 03 09.5** | **-0.2** |
| **SIJI** | **Sorong** | **17.08** | **288** | P | **Pn** | **07 03 20.5** | **+0.1** |
| | comp=Z,1.5nm,0.3s,baz=90,slow=8.4,SNR=9.5 | | | | | | |
| SIJI | | | | LR | LR | 07 11 36.5 | |
| | comp=Z,909nm,21.8s,baz=135,slow=43 | | | | | | |
| **SWI** | **Sorong** | **17.09** | **288** | P | **Pn** | **07 03 19.8** | **-0.6** |
| | comp=Z,2μmcomp=Z,140nm,0.7s | | | | | | |
| SWI | | | | pP | **pP** | **07 03 31.0** | **-5.6** |
| | comp=Z,2μmcomp=Z,140nm,0.7s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **17.14** | **171** | P | **P** | **07 03 23.1** | **+1.6** |
| **MTN** | **Manton Dam** | **17.34** | **247** | P | **P** | **07 03 23.6** | **-0.2** |
| | baz=17,SNR=20 | | | | | | |
| **MTN** | **Manton Dam** | **17.34** | **247** | | **P** | **07 03 23.8** | **0.0** |
| **MTN** | **Manton Dam** | **17.34** | **247** | P | **P** | **07 03 25.3** | **+1.5** |
| **DRS** | **Darwin Rock St** | **17.41** | **249** | P | **P** | **07 03 26.1** | **+1.4** |
| **BNDI** | **Bandanaira** | **17.59** | **275** | P | **P** | **07 03 29.0** | **+2.3** |
| **WB0** | **Warramunga Arr** | **18.39** | **223** | P | **Pn** | **07 03 36.0** | **-0.2** |
| **WR0** | **Warramunga Arr** | **18.43** | **222** | P | **P** | **07 03 35.4** | **-0.5** |
| **WRAB** | **Tennant Creek** | **18.54** | **222** | *iP* | **P** | **07 03 37.5** | **+0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.54** | **222** | P | **P** | **07 03 36.9** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 07 03 59.6 | |
| | comp=Z,57nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.54** | **222** | P | **Pn** | **07 03 37.9** | **-0.1** |
| **WB2** | **Warramunga Arr** | **18.54** | **222** | P | **Pn** | **07 03 37.8** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 07 03 59.7 | |
| | comp=Z,64nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.55** | **222** | P | **Pn** | **07 03 37.8** | **-0.4** |
| | comp=Z,7.1nm,0.3s,baz=50,slow=10,SNR=143 | | | | | | |
| WRA | | | | S | **S** | **07 06 59.3** | **-5.3** |
| | comp=Z,1.4nm,0.3s,baz=40,slow=23,SNR=3.0 | | | | | | |
| WRA | | | | LR | LR | 07 11 21.0 | |
| | comp=Z,635nm,20.0s,baz=56,slow=38 | | | | | | |
| WRA | | | | ScP | **ScP** | **07 11 34.6** | **+1.1** |
| | baz=25,slow=1.6,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.55** | **222** | P | **P** | **07 03 36.8** | **-0.3** |
| **MSAI** | **Masohi** | **18.73** | **278** | P | **Pn** | **07 03 41.0** | **+0.6** |
| | comp=Z,1μmcomp=Z,43nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **19.18** | **170** | P | **Pn** | **07 03 45.0** | **-0.5** |
| | baz=19,SNR=49 | | | | | | |
| **EIDS** | **Eidsvold** | **19.18** | **170** | | **Pn** | **07 03 44.8** | **-0.7** |
| EIDS | | | | IAmb | IAmb | 07 03 46.6 | |
| | comp=Z,97nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **19.18** | **170** | P | **Pn** | **07 03 45.5** | **0.0** |
| **AAI** | **Ambon** | **19.40** | **277** | P | **Pn** | **07 03 48.8** | **+0.5** |
| | comp=Z,2μmcomp=Z,298nm,0.7s | | | | | | |
| **RMQ** | **Roma** | **20.01** | **177** | P | Pn | 07 03 54.6 | -0.8 |
| | baz=20,SNR=121 | | | | | | |
| **RMQ** | **Roma** | **20.01** | **177** | P | Pn | 07 03 54.6 | -0.8 |
| **GUMO** | **Guam** | **20.03** | **353** | P | **P** | **07 03 53.6** | **+0.3** |
| | comp=Z,3.9nm,0.3s,baz=180,slow=9.9,SNR=5.0 | | | | | | |
| GUMO | | | | LR | LR | 07 11 52.2 | |
| | comp=Z,326nm,18.6s,baz=167,slow=38 | | | | | | |
| **GUMO** | **Guam** | **20.03** | **353** | P | **P** | **07 03 53.7** | **+0.5** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,143nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **20.03** | **353** | P | **P** | **07 03 53.7** | **+0.5** |
| **QLP** | **Quilpie** | **20.31** | **188** | P | **P** | **07 03 57.3** | **+1.0** |
| | baz=20,SNR=57 | | | | | | |
| **QLP** | **Quilpie** | **20.31** | **188** | P | Pn | 07 03 57.6 | -1.3 |
| **KNRA** | **Kununurra** | **20.54** | **242** | P | **P** | **07 03 59.3** | **+0.5** |
| | baz=21,SNR=25 | | | | | | |
| **KNRA** | **Kununurra** | **20.54** | **242** | P | **P** | **07 03 58.6** | **-0.2** |
| **KNRA** | **Kununurra** | **20.54** | **242** | P | Pn | 07 04 00.4 | -1.2 |
| **LBMI** | **Labuha** | **20.74** | **285** | P | Pn | 07 04 03.1 | -1.0 |
| | comp=Z,4μmcomp=Z,160nm,1.2s | | | | | | |
| **TNTI** | **Ternate** | **21.30** | **289** | P | **P** | **07 04 06.9** | **-0.2** |
| TNTI | | | | IAmb | IAmb | 07 04 28.4 | |
| | comp=Z,80nm,1.1s | | | | | | |
| **SANVU** | **Saraoutou** | **21.33** | **117** | P | **P** | **07 04 07.0** | **-0.4** |
| SANVU | | | | IAmb | IAmb | 07 04 08.5 | |
| | comp=Z,86nm,0.6s | | | | | | |
| **SANVU** | **Saraoutou** | **21.33** | **117** | P | **P** | **07 04 07.7** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **21.53** | **132** | P | **P** | **07 04 10.9** | **+1.5** |
| **AS31** | **Alice Springs** | **21.57** | **216** | P | **P** | **07 04 10.3** | **+0.4** |
| **ASAR** | **Alice Springs** | **21.57** | **216** | P | **P** | **07 04 10.6** | **+0.8** |
| | comp=Z,31nm,0.4s,baz=53,slow=8.9,SNR=515 | | | | | | |
| ASAR | | | | S | **S** | **07 08 04.7** | **-0.4** |
| | comp=Z,18nm,0.8s,baz=37,slow=22,SNR=7.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **07 11 42.4** | **+1.8** |
| | comp=Z,5.4nm,0.8s,baz=49,slow=3.2,SNR=3.2 | | | | | | |
| ASAR | | | | LR | LR | 07 12 50.7 | |
| | comp=Z,723nm,18.2s,baz=44,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **21.57** | **216** | P | **P** | **07 04 10.4** | **+0.6** |
| **SANI** | **Sanana** | **21.86** | **280** | P | **P** | **07 04 13.2** | **+0.2** |
| | comp=Z,1μmcomp=Z,180nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **21.86** | **280** | P | **P** | **07 04 13.3** | **+0.2** |
| **INKA** | **Innaminka** | **22.17** | **196** | P | **P** | **07 04 16.7** | **+0.5** |
| **SOEI** | **Soe** | **23.22** | **260** | P | **P** | **07 04 30.0** | **+2.7** |
| | comp=Z,2μmcomp=Z,157nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **23.22** | **260** | P | **P** | **07 04 27.5** | **+0.2** |
| **SOEI** | **Soe** | **23.22** | **260** | P | **P** | **07 04 29.0** | **+1.7** |
| **BATI** | **Baumata** | **23.86** | **259** | P | **P** | **07 04 35.4** | **+2.3** |
| | comp=Z,267nm,0.8s,baz=167,slow=1.2,SNR=44 | | | | | | |
| **BATI** | **Baumata** | **23.86** | **259** | P | **P** | **07 04 34.3** | **+1.2** |
| | comp=Z,2μmcomp=Z,206nm,1.0s | | | | | | |
| **LIFNC** | **LIFOU** | **23.90** | **129** | P | **P** | **07 04 33.0** | **-0.3** |
| **LIFNC** | **LIFOU** | **23.90** | **129** | P | **P** | **07 04 33.1** | **-0.2** |
| **NOUC** | **Port Laguerre** | **23.96** | **133** | P | **P** | **07 04 35.2** | **+1.4** |
| **OOD** | **Oodnadatta** | **24.04** | **206** | P | **P** | **07 04 35.5** | **+1.0** |
| **DZM** | **Mont Dzumac** | **24.05** | **132** | *eP* | **P** | **07 04 34.3** | **-0.4** |
| | comp=Z,102nm,1.0s | | | | | | |
| DZM | | | | *eS* | **S** | **07 08 43.3** | **-3.8** |
| | comp=Z,697nm,27.5s | | | | | | |
| DZM | | | | *eLR* | LR | 07 10 33.0 | |
| | comp=Z,2μm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.05** | **132** | P | **P** | **07 04 34.6** | **-0.1** |
| | comp=Z,26nm,0.8s,baz=319,slow=20,SNR=9.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **24.05** | **132** | P | **P** | **07 04 33.9** | **-0.8** |
| DZM | | | | IAmb | IAmb | 07 04 59.3 | |
| | comp=Z,70nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.05** | **132** | P | **P** | **07 04 34.3** | **-0.4** |
| **ARMA** | **Armidale** | **24.21** | **171** | P | **P** | **07 04 36.8** | **+0.7** |
| | baz=24,SNR=155 | | | | | | |
| **ARMA** | **Armidale** | **24.21** | **171** | P | **P** | **07 04 36.9** | **+0.7** |
| **ARMA** | **Armidale** | **24.21** | **171** | P | **P** | **07 04 37.0** | **+0.9** |
| **FITZ** | **Fitzroy Crossi** | **24.27** | **239** | P | **P** | **07 04 37.8** | **+1.1** |
| | comp=Z,29nm,0.4s,baz=56,slow=9.6,SNR=378 | | | | | | |
| FITZ | | | | LR | LR | 07 15 33.8 | |
| | comp=Z,658nm,18.4s,baz=64,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.27** | **239** | P | **P** | **07 04 37.7** | **+1.1** |
| | baz=24,SNR=260 | | | | | | |
| **YATNC** | **Mamie plateau,** | **24.37** | **132** | P | **P** | **07 04 39.1** | **+1.5** |
| **KMSI** | **Cibinong** | **24.46** | **286** | P | **P** | **07 04 39.9** | **+1.5** |
| | comp=Z,376nm,0.9s | | | | | | |
| **OUENC** | **Ouen Island, N** | **24.55** | **132** | P | **P** | **07 04 38.8** | **-0.4** |
| **MARNC** | **Mare, Loyalty** | **24.90** | **129** | P | **P** | **07 04 42.4** | **0.0** |
| **MARNC** | **Mare, Loyalty** | **24.90** | **129** | P | **P** | **07 04 43.2** | **+0.8** |
| **CMSA** | **Cobar Meteorol** | **25.06** | **184** | P | **P** | **07 04 44.1** | **+0.3** |
| | baz=25,SNR=148 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.06** | **184** | P | **P** | **07 04 44.5** | **+0.7** |
| **MMRI** | **Maumere** | **25.12** | **263** | P | **P** | **07 04 46.5** | **+2.0** |
| | comp=Z,274nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **25.12** | **263** | P | **P** | **07 04 45.0** | **+0.5** |
| **MMRI** | **Maumere** | **25.12** | **263** | P | **P** | **07 04 46.0** | **+1.5** |
| **LCRK** | **Leigh Creek** | **25.46** | **199** | P | **P** | **07 04 48.0** | **+0.6** |
| **DAV** | **Davao City (W)** | **25.62** | **301** | LR | LR | 07 14 49.6 | |
| | comp=Z,206nm,21.8s,baz=126,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **25.94** | **192** | P | **P** | **07 04 52.0** | **+0.3** |
| | comp=Z,82nm,0.6s,baz=355,slow=8.4,SNR=141 | | | | | | |
| STKA | | | | LR | LR | 07 15 02.1 | |
| | comp=Z,337nm,21.6s,baz=7.2,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **25.94** | **192** | P | **P** | **07 04 52.2** | **+0.6** |
| | baz=26,SNR=51 | | | | | | |
| **STKA** | **Stephens Creek** | **25.94** | **192** | P | **P** | **07 04 51.8** | **+0.1** |
| **STKA** | **Stephens Creek** | **25.94** | **192** | P | **P** | **07 04 52.3** | **+0.6** |
| **WRKA** | **Warakurna** | **26.09** | **223** | P | **P** | **07 04 53.6** | **+0.4** |
| | baz=26,SNR=56 | | | | | | |
| **WRKA** | **Warakurna** | **26.09** | **223** | P | **P** | **07 04 54.0** | **+0.8** |
| **APSI** | **Ampana** | **26.34** | **281** | P | **P** | **07 04 57.2** | **+1.7** |
| | comp=Z,2μmcomp=Z,201nm,1.1s | | | | | | |
| **MRSI** | **Marisa** | **26.39** | **284** | P | **P** | **07 04 56.5** | **+0.5** |
| | comp=Z,928nmcomp=Z,106nm,1.2s | | | | | | |
| **BASI** | **Baing, Sumba** | **26.88** | **260** | P | **P** | **07 05 00.1** | **-0.3** |
| | comp=Z,2μmcomp=Z,152nm,0.9s | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.89** | **173** | P | **P** | **07 05 01.9** | **+1.7** |
| | baz=27,SNR=68 | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.89** | **173** | P | **P** | **07 05 01.5** | **+1.3** |
| **MULG** | **Mulgathing** | **26.90** | **206** | P | **P** | **07 05 00.9** | **+0.5** |
| **BKSI** | **Bulukumba** | **27.23** | **271** | P | **P** | **07 05 02.1** | **-1.5** |
| | comp=Z,45nm,1.0s | | | | | | |
| **LHI** | **Lord Howe Isla** | **27.24** | **158** | P | **P** | **07 05 04.3** | **+0.9** |
| | baz=27,SNR=5.6 | | | | | | |
| **LHI** | **Lord Howe Isla** | **27.24** | **158** | P | **P** | **07 05 04.3** | **+0.9** |
| **BNSI** | **Bone** | **27.32** | **273** | P | **P** | **07 05 06.0** | **+1.6** |
| | comp=Z,979nmcomp=Z,50nm,1.8s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **27.39** | **174** | P | **P** | **07 05 06.1** | **+1.4** |
| **RIV** | **Riverview** | **27.51** | **173** | P | **P** | **07 05 06.9** | **+1.2** |
| | baz=28,SNR=3.5 | | | | | | |
| **KAPI** | **Kappang** | **27.62** | **271** | P | **P** | **07 05 07.9** | **+0.8** |
| | comp=Z,7.1nm,0.5s,baz=197,slow=20,SNR=3.7 | | | | | | |
| **KAPI** | **Kappang** | **27.62** | **271** | P | **P** | **07 05 06.1** | **-0.9** |
| KAPI | | | | IAmb | IAmb | 07 05 29.9 | |
| | comp=Z,89nm,1.4s | | | | | | |
| **TOLI2** | **Tolitoli** | **27.68** | **285** | P | **P** | **07 05 07.0** | **-0.5** |
| TOLI2 | | | | IAmb | IAmb | 07 05 13.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **27.68** | **285** | P | **P** | **07 05 07.8** | **+0.3** |
| **TTSI** | **Tana Toraja** | **27.76** | **276** | P | **P** | **07 05 11.1** | **+2.8** |
| | comp=Z,1μmcomp=Z,43nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **27.99** | **262** | P | **P** | **07 05 13.4** | **+3.0** |
| | comp=Z,71nm,0.8s | | | | | | |
| **NAPP** | **Napperby** | **28.02** | **197** | P | **P** | **07 05 10.9** | **+0.5** |
| **HTT** | **Hallett** | **28.05** | **195** | P | **P** | **07 05 11.1** | **+0.5** |
| | baz=28,SNR=42 | | | | | | |
| **HTT** | **Hallett** | **28.05** | **195** | P | **P** | **07 05 11.0** | **+0.3** |
| **WHYH** | **Whyalla** | **28.05** | **198** | P | **P** | **07 05 11.2** | **+0.5** |
| **MPSI** | **Mapaga** | **28.33** | **283** | P | **P** | **07 05 13.8** | **+0.5** |
| | comp=Z,739nmcomp=Z,79nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **28.35** | **201** | P | **P** | **07 05 14.0** | **+0.7** |
| | baz=29,SNR=9.5 | | | | | | |
| **BBOO** | **Buckleboo** | **28.35** | **201** | P | **P** | **07 05 13.2** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 07 05 16.0 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **28.35** | **201** | P | **P** | **07 05 13.5** | **+0.2** |
| **CAN** | **Canberra** | **28.82** | **177** | P | **P** | **07 05 17.6** | **+0.1** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **28.82** | **177** | P | **P** | **07 05 17.6** | **+0.1** |
| CAN | | | | IAmb | IAmb | 07 05 41.2 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **CNB** | **Canberra Magne** | **28.83** | **177** | P | **P** | **07 05 18.7** | **+1.1** |
| | baz=29,SNR=6.2 | | | | | | |
| **TWOA** | **Tennyson Woods** | **29.65** | **195** | P | **P** | **07 05 26.1** | **+1.3** |
| **FORT** | **Forrest** | **30.34** | **215** | P | **P** | **07 05 31.7** | **+0.7** |
| | baz=30,SNR=32 | | | | | | |
| **FORT** | **Forrest** | **30.34** | **215** | P | **P** | **07 05 31.4** | **+0.5** |
| **FORT** | **Forrest** | **30.34** | **215** | P | **P** | **07 05 32.1** | **+1.2** |
| **MBWA** | **Marble Bar** | **30.60** | **239** | P | **P** | **07 05 34.6** | **+1.2** |
| **MBWA** | **Marble Bar** | **30.60** | **239** | P | **P** | **07 05 35.2** | **+1.8** |
| **ARPS** | **Mount Arapiles** | **30.66** | **189** | P | **P** | **07 05 34.9** | **+1.1** |
| | baz=31,SNR=13 | | | | | | |
| **ARPS** | **Mount Arapiles** | **30.66** | **189** | P | **P** | **07 05 34.8** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **30.68** | **238** | P | **P** | **07 05 35.3** | **+1.2** |
| **PSA00** | **Pilbara Seismi** | **30.68** | **238** | P | **P** | **07 05 35.2** | **+1.1** |
| PSA00 | | | | IAmb | IAmb | 07 05 36.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.68** | **238** | P | **P** | **07 05 36.1** | **+2.0** |
| **TOO** | **Toolangi** | **31.08** | **183** | P | **P** | **07 05 38.8** | **+1.4** |
| | baz=31,SNR=4.8 | | | | | | |
| **TOO** | **Toolangi** | **31.08** | **183** | P | **P** | **07 05 38.0** | **+0.5** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **31.08** | **183** | P | **P** | **07 05 38.0** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **31.13** | **291** | P | **P** | **07 05 38.7** | **+0.6** |
| MYLDM | | | | IAmb | IAmb | 07 06 05.4 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **BRAT** | **Ballarat** | **31.18** | **185** | P | **P** | **07 05 40.0** | **+1.8** |
| **MSVF** | **Nonsavu** | **31.89** | **113** | P | **P** | **07 05 46.2** | **+1.3** |
| | comp=Z,5.6nm,0.6s,baz=281,slow=18,SNR=4.7 | | | | | | |
| MSVF | | | | LR | LR | 07 16 30.0 | |
| | comp=Z,176nm,19.5s,baz=309,slow=32 | | | | | | |
| **MSVF** | **Nonsavu** | **31.89** | **113** | P | **P** | **07 05 46.7** | **+1.8** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **MSVF** | **Nonsavu** | **31.89** | **113** | P | **P** | **07 05 46.7** | **+1.8** |
| **DGTI** | **Dogotuki** | **33.07** | **110** | P | **P** | **07 05 56.8** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **33.10** | **264** | P | **P** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **43.59** | **349** | P | **P** | **07 07 21.9** | **-1.2** |
| | comp=Z,11nm,0.8s,baz=173,slow=8.0,SNR=15 | | | | | | |
| MJAR | | | | pP | **pP** | **07 07 39.8** | **-1.3** |
| | comp=Z,20nm,0.9s,baz=177,slow=7.7,SNR=8.6 | | | | | | |
| MJAR | | | | PcP | **PcP** | **07 09 09.1** | **-0.5** |
| | comp=Z,3.0nm,0.7s,baz=176,slow=3.2,SNR=2.0 | | | | | | |
| MJAR | | | | LR | LR | 07 25 22.0 | |
| | comp=Z,115nm,18.5s,baz=156,slow=36 | | | | | | |
| **MAJO** | **Matsushiro** | **43.59** | **349** | *i* P | **P** | **07 07 21.9** | **-1.2** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **43.59** | **349** | P | **P** | **07 07 21.5** | **-1.6** |
| MAJO | | | | IAmb | IAmb | 07 07 42.6 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **43.59** | **349** | P | **P** | **07 07 22.5** | **-0.6** |
| **MAT** | **Matsushiro** | **43.59** | **349** | P | **P** | **07 07 21.8** | **-1.3** |
| MAT | | | | *e*S | **S** | **07 13 51.8** | **+4.6** |
| **MJB9** | **Matsu-Tunnel** | **43.60** | **349** | IAmb | IAmb | 07 07 42.6 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **44.48** | **352** | IAmb | IAmb | 07 07 49.1 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **QIZ** | **Qiongzhong** | **44.87** | **305** | P | **P** | **07 07 38.4** | **+4.7** |
| QIZ | | | | S | **S** | **07 14 06.7** | **+0.3** |
| QIZ | | | | LR | LR | | |
| | comp=Z,260nm,18.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,260nm,19.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,390nm,35.3s | | | | | | |
| **MASI** | **Maura Aman, Be** | **45.19** | **272** | P | **P** | **07 07 38.2** | **+1.9** |
| | comp=Z,249nm,0.7s | | | | | | |
| **KRJI** | **Kerinci** | **46.07** | **273** | P | **P** | **07 07 45.7** | **+2.3** |
| | comp=Z,358nm,0.9s | | | | | | |
| **BKNI** | **Bangkinang** | **46.82** | **276** | P | **P** | **07 07 51.6** | **+2.5** |
| | comp=Z,3µmcomp=Z,92nm,0.4s | | | | | | |
| **BKNI** | **Bangkinang** | **46.82** | **276** | P | **P** | **07 07 51.1** | **+2.0** |
| **NJ2** | **Nanjing** | **46.98** | **326** | *e*P | **P** | **07 07 50.2** | **+0.2** |
| NJ2 | | | | pP | **pP** | **07 08 07.2** | **-1.1** |
| NJ2 | | | | sP | **sP** | **07 08 18.3** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **47.29** | **339** | P | **P** | **07 07 52.0** | **-0.4** |
| | comp=Z,7.1nm,0.8s,baz=156,slow=8.2,SNR=21 | | | | | | |
| KSRS | | | | PcP | **PcP** | **07 09 22.3** | **-0.1** |
| | comp=Z,4.2nm,0.7s,baz=164,slow=4.2,SNR=6.3 | | | | | | |
| KSRS | | | | LR | LR | 07 24 41.3 | |
| | comp=Z,254nm,21.9s,baz=150,slow=32 | | | | | | |
| **KS19** | **Wonju Array Si** | **47.36** | **339** | IAmb | IAmb | 07 08 18.3 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **IPM** | **Ipoh** | **47.62** | **282** | P | **P** | **07 07 56.1** | **+0.8** |
| **IPM** | **Ipoh** | **47.62** | **282** | P | **P** | **07 07 56.8** | **+1.5** |
| **KULM** | **Kulim** | **48.17** | **283** | P | **P** | **07 07 58.8** | **-0.8** |
| **MNSI** | **Mandailing Nat** | **48.34** | **277** | P | **P** | **07 08 01.9** | **+1.0** |
| | comp=Z,3µmcomp=Z,77nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **48.54** | **321** | ⇑P | **P** | **07 08 02.6** | **+0.5** |
| **PSI** | **Prapat** | **49.33** | **279** | LR | LR | 07 30 51.1 | |
| | comp=Z,96nm,21.1s,baz=130,slow=38 | | | | | | |
| **TSI** | **Tuntungan** | **49.82** | **280** | P | **P** | **07 08 13.8** | **+1.6** |
| | comp=Z,221nm,1.2s | | | | | | |
| **GSI** | **Gunungsitoli** | **50.40** | **277** | P | **P** | **07 08 17.1** | **+0.5** |
| | comp=Z,146nm,0.8s | | | | | | |
| **GSI** | **Gunungsitoli** | **50.40** | **277** | P | **P** | **07 08 16.6** | **0.0** |
| **GSI** | **Gunungsitoli** | **50.40** | **277** | P | **P** | **07 08 17.1** | **+0.5** |
| **ASAJ** | **Asahikawa** | **50.48** | **355** | LR | LR | 07 26 23.3 | |
| | comp=Z,124nm,21.6s,baz=167,slow=32 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **50.60** | **280** | P | **P** | **07 08 17.7** | **-0.4** |
| | comp=Z,1µmcomp=Z,199nm,0.8s | | | | | | |
| **TIA** | **Tai'an** | **51.06** | **328** | P | **P** | **07 08 20.1** | **-1.1** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **51.75** | **282** | P | **P** | **07 08 28.5** | **+1.9** |
| | comp=Z,232nm,0.8s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **51.75** | **282** | P | **P** | **07 08 28.6** | **+1.9** |
| **USA0B** | **Ussuriysk Arra** | **52.27** | **346** | IAmb | IAmb | 07 08 31.2 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.27** | **346** | P | **P** | **07 08 29.8** | **-0.2** |
| | comp=Z,10.0nm,0.7s,baz=169,slow=8.7,SNR=13 | | | | | | |
| USRK | | | | pP | **pP** | **07 08 47.2** | **-1.5** |
| | comp=Z,5.7nm,0.8s,baz=191,slow=7.8,SNR=4.0 | | | | | | |
| USRK | | | | LR | LR | 07 29 01.6 | |
| | comp=Z,117nm,19.1s,baz=139,slow=34 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.27** | **346** | P | **P** | **07 08 29.7** | **-0.3** |
| **LYN** | **LuoYang** | **52.46** | **323** | ⇑P | **P** | **07 08 30.6** | **-1.0** |
| LYN | | | | pP | pP | 07 08 47.6 | -3.0 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,230nm,14.9s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,290nm,18.2s | | | | | | |
| **HNS** | **HongShan** | **53.23** | **327** | ⇑P | **P** | **07 08 36.6** | **-0.6** |
| HNS | | | | S | **S** | **07 16 02.9** | **-0.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,57nm,1.0s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,270nm,16.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,360nm,19.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **53.28** | **344** | P | **P** | **07 08 37.4** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **53.28** | **356** | *ce*P | **P** | **07 08 37.4** | **0.0** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **53.28** | **356** | P | **P** | **07 08 37.2** | **-0.2** |
| YSS | | | | IAmb | IAmb | 07 08 38.6 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **53.28** | **356** | P | **P** | **07 08 37.8** | **+0.4** |
| **KMI** | **Kunming** | **53.62** | **308** | ⇓P | **P** | **07 08 41.6** | **+1.0** |
| KMI | | | | pP | pP | 07 09 01.9 | +2.1 |
| KMI | | | | sP | sP | 07 09 12.7 | +4.5 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,350nm,31.0s | | | | | | |
| **CN2** | **Changchun** | **53.79** | **340** | *e*P | **P** | **07 08 41.5** | **+0.3** |
| CN2 | | | | PcP | **PcP** | **07 09 45.4** | **-0.9** |
| CN2 | | | | S | **S** | **07 16 09.9** | **-0.5** |
| CN2 | | | | sS | sS | 07 16 42.8 | +1.8 |
| CN2 | | | | LR | LR | | |
| | comp=Z,180nm,19.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,240nm,19.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,260nm,21.0s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **53.86** | **298** | P | **P** | **07 08 42.4** | **+0.2** |
| CM31 | | | | IAmb | IAmb | 07 08 45.6 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.86** | **298** | P | **P** | **07 08 42.8** | **+0.6** |
| | comp=Z,4.1nm,0.6s,baz=121,slow=5.7,SNR=22 | | | | | | |
| CMAR | | | | pP | **pP** | **07 09 02.2** | **+0.9** |
| | comp=Z,8.6nm,0.6s,baz=121,slow=5.8,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 07 30 45.9 | |
| | comp=Z,50nm,20.6s,baz=115,slow=35 | | | | | | |
| CMAR | | | | PKP2ab | | 07 39 34.5 | |
| | comp=Z,1.2nm,0.3s,baz=299,slow=2.2,SNR=4.1 | | | | | | |
| **CHTO** | **Chiang Mai** | **53.99** | **299** | P | **P** | **07 08 43.3** | **+0.1** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **53.99** | **299** | P | **P** | **07 08 43.2** | **+0.1** |
| CHTO | | | | IAmb | IAmb | 07 09 12.6 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **53.99** | **299** | P | **P** | **07 08 43.9** | **+0.7** |
| **XAN** | **Xi'an** | **54.29** | **320** | P | **P** | **07 08 44.2** | **-0.9** |
| XAN | | | | pP | pP | 07 09 00.8 | -3.4 |
| XAN | | | | sP | sP | 07 09 08.1 | -4.5 |
| XAN | | | | S | **S** | **07 16 16.2** | **-1.4** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,130nm,4.6s | | | | | | |
| **BJT** | **Baijiatuau** | **54.47** | **331** | IAmb | IAmb | 07 08 46.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **54.48** | **331** | P | **P** | **07 08 45.6** | **-0.7** |
| BJI | | | | pP | **pP** | **07 09 06.8** | **+1.5** |
| BJI | | | | sP | **sP** | **07 09 14.8** | **+1.1** |
| BJI | | | | PcP | **PcP** | **07 09 49.1** | **+0.1** |
| BJI | | | | S | **S** | **07 16 21.4** | **+1.6** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,18nm,1.4s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,150nm,18.4s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,330nm,21.4s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,430nm,21.1s | | | | | | |
| **BNX** | **BinXian** | **54.92** | **343** | ⇓P | **P** | **07 08 48.5** | **-0.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,79nm,1.2s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,390nm,7.1s | | | | | | |
| **PZH** | **PanZhiHua** | **55.08** | **308** | P | **P** | **07 08 50.5** | **-0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,160nm,4.7s | | | | | | |
| **UGL** | **Uglegorsk** | **55.45** | **356** | *e*P | **P** | **07 08 52.3** | **-0.8** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,50nm,1.3s | | | | | | |
| **CD2** | **Chengdu** | **55.89** | **314** | P | **P** | **07 08 56.4** | **-0.3** |
| CD2 | | | | S | **S** | **07 16 41.9** | **+2.8** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,190nm,6.9s | | | | | | |
| **KLR** | **Kul'dur** | **57.08** | **348** | LR | LR | 07 30 57.4 | |
| | comp=Z,148nm,21.8s,baz=165,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **57.08** | **348** | *ce*P | **P** | **07 09 04.6** | **-0.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,52nm,1.8s | | | | | | |
| **TYV** | **Tymovskoe** | **57.18** | **356** | *e*P | **P** | **07 09 05.9** | **+0.5** |
| TYV | | | | *e*S | **S** | **07 16 57.5** | **+2.2** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,4.9s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,500nm,8.3s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,400nm,8.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.42** | **328** | *e*P | **P** | **07 09 07.0** | **-0.5** |
| HHC | | | | sP | sP | 07 09 31.6 | -3.4 |
| HHC | | | | pmax | pmax | | |
| | comp=E,21nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=E,68nm,4.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,280nm,15.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,350nm,19.6s | | | | | | |
| **XLT** | **XiLinHaoTe** | **57.54** | **333** | ⇑*i*P | **P** | **07 09 07.6** | **-0.6** |
| XLT | | | | pP | pP | 07 09 24.2 | -3.2 |
| XLT | | | | sP | sP | 07 09 35.0 | -0.7 |
| XLT | | | | PcP | **PcP** | **07 10 00.3** | **-0.6** |
| XLT | | | | S | **S** | **07 16 57.0** | **-3.5** |
| XLT | | | | pmax | pmax | | |
| | comp=E,21nm,1.3s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=E,110nm,4.5s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,370nm,21.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,290nm,16.4s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,450nm,24.0s | | | | | | |
| **GRNR** | **Gornyy** | **57.73** | **352** | ⇑*i*P | **P** | **07 09 09.5** | **+0.2** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **LZH** | **Lanzhou** | **58.82** | **319** | *e*P | **P** | **07 09 17.8** | **+0.4** |
| LZH | | | | pP | pP | 07 09 34.8 | -1.8 |
| LZH | | | | sP | sP | 07 09 43.7 | -1.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,160nm,18.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,180nm,19.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,180nm,19.3s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.91** | **7** | P | **P** | **07 09 24.5** | **+0.1** |
| PEA0B | | | | pmax | pmax | | |
| | comp=Z,36nm,0.9s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.91** | **7** | P | **P** | **07 09 24.5** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **59.91** | **7** | P | **P** | **07 09 24.3** | **0.0** |
| | comp=Z,21nm,0.8s,baz=185,slow=11,SNR=29 | | | | | | |
| PETK | | | | LR | LR | 07 30 35.2 | |
| | comp=Z,164nm,21.7s,baz=188,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.91** | **7** | P | **P** | **07 09 24.1** | **-0.3** |
| **PET** | **Petropavlovsk** | **59.95** | **8** | *ce*P | **P** | **07 09 24.4** | **-0.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,38nm,2.5s | | | | | | |
| **PET** | **Petropavlovsk** | **59.95** | **8** | P | **P** | **07 09 24.1** | **-0.5** |
| PET | | | | IAmb | IAmb | 07 09 25.5 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PET** | **Petropavlovsk** | **59.95** | **8** | P | **P** | **07 09 24.4** | **-0.2** |
| **ZEA** | **Zeya** | **62.30** | **347** | *e*P | **P** | **07 09 40.7** | **+0.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,30nm,0.8s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,60nm,1.1s | | | | | | |
| **PPT2** | **Papeete2** | **62.33** | **106** | *e*S | **S** | **07 18 01.4** | **-1.4** |
| | comp=Z,127nm,23.0s | | | | | | |
| **PPT2** | **Papeete2** | **62.33** | **106** | *e*LR | LR | 07 28 22.2 | |
| | comp=Z,356nm,25.8s | | | | | | |
| **SHL** | **Shillong** | **62.63** | **303** | P | **P** | **07 09 42.9** | **-0.6** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **62.63** | **303** | P | **P** | **07 09 42.9** | **-0.6** |
| SHL | | | | IAmb | IAmb | 07 09 47.0 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **63.10** | **18** | LR | LR | 07 31 15.3 | |
| | comp=Z,125nm,20.0s,baz=284,slow=30 | | | | | | |
| **GTA** | **Gaotai** | **63.35** | **320** | ⇑P | **P** | **07 09 47.7** | **-0.3** |
| GTA | | | | pP | pP | 07 10 11.3 | +3.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,140nm,5.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,79nm,18.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,180nm,19.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,180nm,19.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **64.69** | **331** | P | **P** | **07 09 56.8** | **+0.2** |
| ULN | | | | IAmb | IAmb | 07 09 57.8 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **64.86** | **307** | P | **P** | **07 09 59.1** | **+0.6** |
| **SONM** | **Songino Array** | **64.98** | **331** | P | **P** | **07 09 58.4** | **-0.1** |
| | comp=Z,16nm,1.0s,baz=148,slow=7.2,SNR=46 | | | | | | |
| SONM | | | | LR | LR | 07 37 42.1 | |
| | comp=Z,222nm,21.5s,baz=142,slow=35 | | | | | | |
| SONM | | | | PKP2ab | | 07 38 49.9 | |
| | comp=Z,0.5nm,0.8s,baz=236,slow=0.5,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **64.98** | **331** | P | **P** | **07 09 58.3** | **-0.1** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **64.98** | **331** | P | **P** | **07 09 58.3** | **-0.1** |
| SONM | | | | IAmb | IAmb | 07 09 59.6 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CASY** | **Casey** | **65.00** | **196** | P | **P** | **07 09 58.9** | **+0.8** |
| CASY | | | | IAmb | IAmb | 07 10 00.3 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **GOMU** | **GeErMu** | **65.01** | **315** | P | **P** | **07 09 59.1** | **-0.1** |
| GOMU | | | | pP | pP | 07 10 18.8 | -0.3 |
| GOMU | | | | sP | sP | 07 10 26.8 | -0.6 |
| GOMU | | | | PcP | **PcP** | **07 10 34.4** | **+2.7** |
| **MA2** | **Magadan** | **65.82** | **2** | *ce*P | **P** | **07 10 03.1** | **-0.4** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **65.82** | **2** | P | **P** | **07 10 03.0** | **-0.4** |
| MA2 | | | | IAmb | IAmb | 07 10 03.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **65.82** | **2** | P | **P** | **07 10 03.3** | **-0.1** |
| **TAPN** | **Taplejung** | **66.77** | **303** | *e*P | **P** | **07 10 09.8** | **-0.8** |
| | comp=Z,21nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **66.86** | **303** | *e*P | **P** | **07 10 10.8** | **-0.3** |
| | comp=Z,39nm,0.9s | | | | | | |
| **CHLP** | **Challavanipeta** | **67.23** | **293** | *e*P | **P** | **07 10 12.9** | **-0.4** |
| **RAMN** | **Ramite** | **67.55** | **302** | *e*P | **P** | **07 10 14.6** | **-0.9** |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **PALK** | **Pallekele** | **67.98** | **280** | P | **P** | **07 10 19.6** | **+1.4** |
| | comp=Z,22nm,0.7s,baz=145,slow=5.6 | | | | | | |
| **PALK** | **Pallekele** | **67.98** | **280** | P | **P** | **07 10 17.9** | **-0.3** |
| PALK | | | | IAmb | IAmb | 07 10 20.7 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **JIRN** | **Jiri** | **68.14** | **303** | *e*P | **P** | **07 10 18.6** | **-0.7** |
| | comp=Z,19nm,0.7s | | | | | | |
| **ZAK** | **Zakamensk** | **68.22** | **331** | *e*P | **P** | **07 10 18.4** | **-0.6** |
| ZAK | | | | *e* | | 07 10 43.2 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,40nm,1.2s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **GUN** | **Gumba** | **68.48** | **303** | *e*P | **P** | **07 10 21.1** | **-0.3** |
| | comp=Z,36nm,0.7s | | | | | | |
| **DMN** | **Daman** | **69.03** | **303** | *e*P | **P** | **07 10 24.6** | **-0.1** |
| | comp=Z,25nm,0.8s | | | | | | |
| **PVM** | **Polavaram** | **69.16** | **291** | *e*P | **P** | **07 10 26.5** | **+1.2** |
| **SEY** | **Seymchan** | **69.24** | **2** | LR | LR | 07 35 12.4 | |
| | comp=Z,154nm,21.0s,baz=219,slow=31 | | | | | | |
| **BOD** | **Bodaibo** | **69.51** | **342** | *e*P | **P** | **07 10 26.1** | **-0.6** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | |
| **GKN** | **Gorkha** | **69.55** | **303** | *e*P | **P** | **07 10 27.3** | **-0.5** |
| | comp=Z,22nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **69.61** | **351** | LR | LR | 07 39 00.7 | |
| | comp=Z,148nm,22.0s,baz=112,slow=34 | | | | | | |
| **YAK** | **Yakutsk** | **69.61** | **351** | *ce*P | **P** | **07 10 27.2** | **0.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,48nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **69.61** | **351** | P | **P** | **07 10 26.6** | **-0.6** |
| YAK | | | | IAmb | IAmb | 07 10 28.7 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **MYLAV** | **Mylavaram** | **69.96** | **290** | *e*P | **P** | **07 10 30.5** | **+0.2** |
| **MOY** | **Mondy** | **70.15** | **331** | *e*P | **P** | **07 10 30.7** | **-0.3** |
| MOY | | | | pmax | pmax | | |
| | comp=Z,36nm,2.5s | | | | | | |
| **SKHT** | **Srikalahasti** | **70.17** | **287** | *e*P | **P** | **07 10 32.5** | **+0.9** |
| **KOLN** | **Koldanda** | **70.34** | **302** | *e*P | **P** | **07 10 32.2** | **-0.5** |
| | comp=Z,32nm,0.7s | | | | | | |
| **ADKI** | **Addanki** | **70.38** | **289** | *e*P | **P** | **07 10 34.0** | **+1.1** |
| **DANN** | **Dangsing** | **70.39** | **303** | *e*P | **P** | **07 10 32.3** | **-0.9** |
| | comp=Z,22nm,0.7s | | | | | | |
| **PYUN** | **Piuthan** | **70.96** | **302** | *e*P | **P** | **07 10 35.6** | **-0.9** |
| | comp=Z,37nm,0.7s | | | | | | |
| **NJS** | **Nagarjunasagar** | **71.15** | **290** | *e*P | **P** | **07 10 38.1** | **+0.5** |
| **KNGR** | **Kungurtug, Tuv** | **71.21** | **329** | *i* P | **P** | **07 10 37.4** | **0.0** |
| **RCLA** | **Racherla** | **71.24** | **289** | *e*P | **P** | **07 10 37.6** | **-0.6** |
| **SRLM** | **Srisailam** | **71.44** | **289** | *e*P | **P** | **07 10 39.8** | **+0.4** |
| **VNDA** | **Vanda** | **71.49** | **177** | P | **P** | **07 10 39.8** | **+1.3** |
| | comp=Z,10nm,0.7s,baz=327,slow=6.6,SNR=18 | | | | | | |
| VNDA | | | | LR | LR | 07 39 57.0 | |
| | comp=Z,92nm,18.2s,baz=324,slow=34 | | | | | | |
| **CUPL** | **Choutuppal** | **71.68** | **290** | *e*P | **P** | **07 10 41.0** | **+0.3** |
| **RPR** | **Rampur** | **71.69** | **292** | *e*P | **P** | **07 10 41.6** | **+0.8** |
| **HYBB** | **Hyderabad (bro** | **72.05** | **291** | *e*P | **P** | **07 10 42.7** | **-0.3** |
| **SRSP** | **Sriramsagar** | **72.58** | **292** | *e*P | **P** | **07 10 45.7** | **-0.5** |
| **URV** | **Uravakonda** | **72.74** | **288** | *e*P | **P** | **07 10 47.9** | **+0.7** |
| **WMQ** | **Urumqi** | **73.40** | **319** | *e*P | **P** | **07 10 50.4** | **-0.2** |
| WMQ | | | | PcP | **PcP** | **07 11 08.2** | **+1.7** |
| WMQ | | | | pP | pP | 07 11 11.1 | +0.4 |
| WMQ | | | | sP | sP | 07 11 17.2 | -1.7 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **KLRI** | **Killari** | **74.01** | **291** | *e*P | **P** | **07 10 54.5** | **-0.1** |
| **BILL** | **Bilibino** | **75.45** | **7** | *de*P | **P** | **07 11 01.5** | **-0.3** |
| BILL | | | | *e* | | 07 13 54.6 | |
| BILL | | | | *e*S | S | 07 20 52.9 | +17 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,66nm,11.0s | | | | | | |
| **BILL** | **Bilibino** | **75.45** | **7** | P | **P** | **07 11 01.6** | **-0.3** |
| **DGZ** | **Jazzator, Alta** | **76.23** | **325** | *c* *i*P | **P** | **07 11 05.7** | **-1.2** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **KRAR** | **Krasnoyarsk** | **76.61** | **332** | *i* P | **P** | **07 11 08.6** | **0.0** |
| **ZSN** | **Zaisan** | **76.77** | **322** | *e*P | **P** | **07 11 08.6** | **-1.1** |
| **ZSN** | **Zaisan** | **76.77** | **322** | *e*P | **P** | **07 11 08.7** | **-1.1** |
| | baz=322 | | | | | | |
| ZSN | | | | *i* S | **S** | **07 20 49.8** | **-1.5** |
| | baz=322 | | | | | | |
| **MK31** | **Makanchi Array** | **78.11** | **320** | P | **P** | **07 11 16.7** | **-0.6** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **78.11** | **320** | P | **P** | **07 11 16.6** | **-0.6** |
| **MKAR** | **Makanchi Array** | **78.11** | **320** | P | **P** | **07 11 16.8** | **-0.5** |
| | comp=Z,9.5nm,0.8s,baz=105,slow=6.8,SNR=83 | | | | | | |
| MKAR | | | | pP | **pP** | **07 11 37.1** | **-0.4** |
| | comp=Z,5.2nm,0.8s,baz=110,slow=5.9,SNR=5.3 | | | | | | |
| MKAR | | | | PKKPbc | **PKKPbc** | **07 30 17.3** | **-1.3** |
| | comp=Z,0.4nm,0.7s,baz=338,slow=1.6,SNR=3.6 | | | | | | |
| MKAR | | | | LR | LR | 07 45 15.0 | |
| | comp=Z,54nm,21.5s,baz=56,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.11** | **320** | P | **P** | **07 11 16.6** | **-0.8** |
| **MAKZ** | **Makanchi** | **78.31** | **320** | P | **P** | **07 11 17.6** | **-0.8** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **78.31** | **320** | P | **P** | **07 11 17.6** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 07 11 18.9 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **78.86** | **354** | *ce*P | **P** | **07 11 19.4** | **-1.4** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **TIXI** | **Tiksi** | **78.86** | **354** | P | **P** | **07 11 19.1** | **-1.8** |
| **KPKS** | **Kokpek** | **79.29** | **316** | *e*P | **P** | **07 11 22.8** | **-1.1** |
| **KPKS** | **Kokpek** | **79.29** | **316** | *e*P | **P** | **07 11 22.9** | **-1.1** |
| | baz=316 | | | | | | |
| **SATY** | **Saty** | **79.35** | **316** | *e*P | **P** | **07 11 23.4** | **-0.9** |
| **SATY** | **Saty** | **79.35** | **316** | *e*P | **P** | **07 11 23.5** | **-0.9** |
| | baz=316 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **79.60** | **328** | P | **P** | **07 11 23.5** | **-1.8** |
| **ZALV** | **Zalesovo Beam** | **79.60** | **328** | P | **P** | **07 11 23.6** | **-1.6** |
| | comp=Z,12nm,0.7s,baz=109,slow=5.3,SNR=51 | | | | | | |
| ZALV | | | | pP | **pP** | **07 11 43.5** | **-2.3** |
| | comp=Z,4.4nm,0.7s,baz=112,slow=4.1,SNR=2.1 | | | | | | |
| ZALV | | | | LR | LR | 07 45 27.4 | |
| | comp=Z,181nm,21.7s,baz=119,slow=35 | | | | | | |
| **TDK** | **Taldyqorghan** | **79.99** | **318** | *e*P | **P** | **07 11 26.8** | **-0.8** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **TDK** | **Taldyqorghan** | **79.99** | **318** | *e*P | **P** | **07 11 26.8** | **-0.8** |
| | comp=Z,9.8nm,0.6s,baz=318 | | | | | | |
| **KSH** | **Kashi** | **80.00** | **312** | P | **P** | **07 11 29.1** | **+1.2** |
| KSH | | | | pP | pP | 07 11 49.8 | +1.6 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **80.03** | **28** | LR | LR | 07 38 35.1 | |
| | comp=Z,440nm,21.7s,baz=220,slow=29 | | | | | | |
| **MDOK** | **Medeo** | **80.32** | **316** | *e*P | **P** | **07 11 28.6** | **-1.0** |
| **MDOK** | **Medeo** | **80.32** | **316** | *e*P | **P** | **07 11 28.7** | **-1.0** |
| | baz=316 | | | | | | |
| **KUU** | **Kurty** | **81.04** | **316** | *e*P | **P** | **07 11 32.2** | **-1.1** |
| KUU | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **KUU** | **Kurty** | **81.04** | **316** | *e*P | **P** | **07 11 32.2** | **-1.1** |
| | comp=Z,30nm,1.0s,baz=316 | | | | | | |
| **KURK** | **Kurchatov** | **81.81** | **323** | *ce*P | **P** | **07 11 36.6** | **-0.5** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IUG | luzhnay | 85.03 | 313 | *e*P | | P | 07 | 11 | 53.0 -1.0 |
| IUG | luzhnay | 85.03 | 313 | *e*P | | P | 07 | 11 | 53.1 -1.0 |
| | baz=313 | | | | | | | | |
| BRZS | Berezniki | 85.20 | 321 | *e*P | | P | 07 | 11 | 53.7 -0.9 |
| BRZS | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| BRZS | Berezniki | 85.20 | 321 | *e*P | | P | 07 | 11 | 53.7 -0.9 |
| | comp=Z,15nm,1.0s,baz=321 | | | | | | | | |
| COLA | College | 85.33 | 23 | *i* P | | P | 07 | 11 | 54.4 -0.4 |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.8s | | | | | | | | |
| BRLS | Boroldaу | 85.37 | 314 | *e*P | | P | 07 | 11 | 54.6 -1.0 |
| BRLS | Boroldaу | 85.37 | 314 | *e*P | | P | 07 | 11 | 54.6 -1.0 |
| | baz=314 | | | | | | | | |
| ILAR | Eielson Array | 85.66 | 23 | P | | P | 07 | 11 | 54.0 -2.5 |
| | comp=Z,4.3nm,0.8s,baz=250,slow=4.9,SNR=50 | | | | | | | | |
| ILAR | | | | PKKPbc | | **PKKPbc** | 07 | 30 | 03.1 +1.2 |
| | comp=Z,0.4nm,1.0s,baz=27,slow=2.2,SNR=4.2 | | | | | | | | |
| ILAR | | | | LR | | LR | 07 | 47 | 15.3 |
| | comp=Z,100nm,22.0s,baz=172,slow=34 | | | | | | | | |
| NRIK | Noril'sk | 85.80 | 342 | P | | P | 07 | 11 | 56.1 -1.0 |
| | comp=Z,15nm,0.8s,baz=122,slow=5.7,SNR=14 | | | | | | | | |
| NRIK | | | | LR | | LR | 07 | 51 | 54.3 |
| | comp=Z,111nm,18.8s,baz=127,slow=37 | | | | | | | | |
| NRIK | Noril'sk | 85.80 | 342 | IAmb | | IAmb | 07 | 11 | 58.1 |
| | comp=Z,19nm,0.9s | | | | | | | | |
| BVAR | Borovoye Array | 87.37 | 324 | P | | P | 07 | 12 | 03.6 -1.5 |
| | comp=Z,9.9nm,0.8s,baz=82,slow=11,SNR=42 | | | | | | | | |
| BRVK | Borovoye | 87.44 | 324 | *e*P | | P | 07 | 12 | 04.1 -1.4 |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| BRVK | Borovoye | 87.44 | 324 | P | | P | 07 | 12 | 03.9 -1.6 |
| HYT | Haines Junctio | 88.32 | 28 | IAmb | | IAmb | 07 | 12 | 10.7 |
| | comp=Z,23nm,1.3s | | | | | | | | |
| DAWY | Dawson | 88.43 | 25 | P | | P | 07 | 12 | 10.1 +0.1 |
| DAWY | | | | IAmb | | IAmb | 07 | 12 | 10.8 |
| | comp=Z,17nm,1.3s | | | | | | | | |
| BBB | Bella Bella | 91.58 | 38 | LR | | LR | 07 | 47 | 41.1 |
| | comp=Z,538nm,19.0s,baz=288,slow=32 | | | | | | | | |
| INK | Inuvik | 91.85 | 21 | LR | | LR | 07 | 52 | 43.9 |
| | comp=Z,107nm,20.9s,baz=188,slow=35 | | | | | | | | |
| INK | Inuvik | 91.85 | 21 | P | | P | 07 | 12 | 25.2 -0.6 |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| INK | Inuvik | 91.85 | 21 | P | | P | 07 | 12 | 25.2 -0.6 |
| INK | | | | IAmb | | IAmb | 07 | 12 | 52.3 |
| | comp=Z,8.3nm,1.1s | | | | | | | | |
| ABKAR | Akbulak array | 93.19 | 319 | P | | P | 07 | 12 | 30.4 -2.0 |
| ABKAR | | | | IAmb | | IAmb | 07 | 12 | 31.4 |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| GEYT | Alibeck | 93.39 | 308 | P | | P | 07 | 12 | 33.1 -0.5 |
| | comp=Z,2.9nm,0.5s,baz=125,slow=6.5,SNR=3.5 | | | | | | | | |
| GEYT | | | | LR | | LR | 07 | 57 | 31.5 |
| | comp=Z,34nm,21.2s,baz=128,slow=37 | | | | | | | | |
| GEYT | Alibeck | 93.39 | 308 | P | | P | 07 | 12 | 32.4 -1.2 |
| GEYT | | | | IAmb | | IAmb | 07 | 12 | 33.5 |
| | comp=Z,6.5nm,1.1s | | | | | | | | |
| YBH | Yreka Blue Hor | 94.07 | 49 | LR | | LR | 07 | 46 | 27.0 |
| | comp=Z,257nm,21.8s,baz=330,slow=30 | | | | | | | | |
| AKTO | Aktyubinsk | 94.54 | 320 | P | | P | 07 | 12 | 37.4 -1.2 |
| | comp=Z,0.8nm,0.4s,baz=92,slow=8.9,SNR=8.5 | | | | | | | | |
| AKTO | | | | LR | | LR | 07 | 55 | 43.9 |
| | comp=Z,68nm,20.9s,baz=63,slow=36 | | | | | | | | |
| ARU | Arti | 94.68 | 326 | P | | P | 07 | 12 | 38.1 -1.0 |
| | comp=Z,0.6nm,0.4s,baz=120,slow=2.0,SNR=5.8 | | | | | | | | |
| ARU | | | | LR | | LR | 07 | 54 | 48.4 |
| | comp=Z,92nm,21.4s,baz=78,slow=35 | | | | | | | | |
| ARU | Arti | 94.68 | 326 | *c i*P | | P | 07 | 12 | 36.4 -2.7 |
| ARU | | | | | | | 07 | 16 | 24.7 |
| ARU | | | | S | | **SKSac** | 07 | 23 | 04.2 -3.7 |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| A36M | Sachs Harbour | 95.19 | 18 | IAmb | | IAmb | 07 | 12 | 40.6 |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| BELA | Belgrano 2 | 95.84 | 180 | P | | P | 07 | 12 | 44.0 0.0 |
| NVAR | Mina Array Bea | 97.23 | 52 | P | | P | 07 | 12 | 51.1 -0.4 |
| | comp=Z,0.6nm,0.8s,baz=248,slow=8.6,SNR=5.2 | | | | | | | | |
| PFO | Pinyon Flats O | 98.55 | 57 | LR | | LR | 07 | 53 | 23.8 |
| | comp=Z,134nm,18.1s,baz=328,slow=33 | | | | | | | | |
| RPN | Rapa Nui | 98.73 | 119 | LR | | LR | 07 | 49 | 32.8 |
| | comp=Z,62nm,21.8s,baz=183,slow=30 | | | | | | | | |
| YKA | Yellowknife Ar | 99.30 | 28 | P | | **Pdif** | 07 | 12 | 59.0 -0.8 |
| | comp=Z,1.1nm,1.0s,baz=279,slow=4.4,SNR=8.8 | | | | | | | | |
| YKA | | | | PKKPbc | | **PKKPbc** | 07 | 29 | 23.6 -2.8 |
| | comp=Z,0.8nm,0.8s,baz=89,slow=2.6,SNR=3.9 | | | | | | | | |
| KIRV | Kirov | 99.63 | 328 | LR | | LR | 07 | 58 | 50.7 |
| | comp=Z,199nm,21.1s,baz=77,slow=36 | | | | | | | | |
| PRGR | Permogore | 101.23 | 332 | *e*P | | **Pdif** | 07 | 13 | 04.3 -4.1 |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| PDAR | Pinedale Array | 103.83 | 48 | Pdiff | | **Pdif** | 07 | 13 | 19.9 -0.8 |
| | comp=Z,0.2nm,0.6s,baz=250,slow=3.0,SNR=4.4 | | | | | | | | |
| KLMR | Klimovskoe | 104.28 | 331 | *e*P | | **Pdif** | 07 | 13 | 18.7 -3.3 |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| KLMR | Klimovskoe | 104.28 | 331 | *e*Pdif | | **Pdif** | 07 | 13 | 18.7 -3.3 |
| KLMR | | | | AMP | | | 07 | 13 | 20.9 |
| | comp=Z,26nm,1.3s | | | | | | | | |
| TXAR | Lajitas Array | 109.54 | 61 | PKKP | | **PKKPdf** | 07 | 29 | 10.4 0.0 |
| | comp=Z,1.0nm,0.8s,baz=103,slow=5.5,SNR=6.7 | | | | | | | | |
| FINES | FINESS Array B | 110.24 | 334 | Pdiff | | **Pdif** | 07 | 13 | 46.7 -1.8 |
| | comp=Z,1.4nm,0.8s,baz=76,slow=5.9,SNR=2.2 | | | | | | | | |
| KLNR | Kaliningrad | 116.12 | 329 | *i* PKIKP | | **PKiKP** | 07 | 18 | 01.8 +1.0 |
| KLNR | | | | pmax | pmax | | | | |
| | comp=Z,175nm,1.2s | | | | | | | | |
| P38A | Dawn | 116.25 | 49 | | | **PKPdf** | 07 | 18 | 00.1 -1.4 |
| MBAR | Mbarara | 116.49 | 266 | *i* PKIKP | | **PKPdf** | 07 | 18 | 02.2 -0.8 |
| NOA | NORSAR Array B | 116.50 | 338 | PKP | | **PKiKP** | 07 | 18 | 01.5 0.0 |
| | comp=Z,2.0nm,0.9s,baz=336,slow=1.8,SNR=3.9 | | | | | | | | |
| S39A | Bolivar | 116.87 | 51 | PKPdf | | **PKPdf** | 07 | 18 | 02.5 -0.3 |
| U40A | Yellville | 117.55 | 52 | PKPdf | | **PKPdf** | 07 | 18 | 03.3 -0.9 |
| CRVS | Cervenica-Dubn | 117.96 | 323 | *e*PKIKP | | **PKiKP** | 07 | 18 | 04.6 0.0 |
| CRVS | Cervenica-Dubn | 117.96 | 323 | *e*PKP | | **PKiKP** | 07 | 18 | 04.6 0.0 |
| VYHS | Vyhne | 119.70 | 323 | *e*PKIKP | | **PKPdf** | 07 | 18 | 07.7 -0.2 |
| VYHS | Vyhne | 119.70 | 323 | *e*PKP | | **PKPdf** | 07 | 18 | 07.6 -0.3 |
| MODS | Modra-Piesok | 120.68 | 324 | *e*PKIKP | | **PKiKP** | 07 | 18 | 11.5 +1.6 |
| MODS | Modra-Piesok | 120.68 | 324 | *e*PKP | | **PKiKP** | 07 | 18 | 11.5 +1.6 |
| BRG | Berggiesshubel | 121.29 | 327 | *e*P | | **PKPdf** | 07 | 18 | 10.7 -0.3 |
| BRG | | | | Amp | | | 07 | 18 | 11.9 |
| | comp=Z,7.5nm,0.9s | | | | | | | | |
| BRG | | | | *ex* | | x | 07 | 18 | 28.0 |
| BRG | | | | Amp | | | 07 | 18 | 29.4 |
| | comp=Z,4.6nm,1.1s | | | | | | | | |
| BRG | Berggiesshubel | 121.29 | 327 | *e*PKIKP | | **PKPdf** | 07 | 18 | 10.6 -0.3 |
| BRG | | | | *e* | | | 07 | 18 | 27.9 |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| PLCA | Paso Flores | 121.53 | 147 | PKP | | **PKiKP** | 07 | 18 | 12.6 +0.6 |
| | comp=Z,3.5nm,0.8s,baz=240,slow=3.3,SNR=14 | | | | | | | | |
| PLCA | | | | PKKPab | | **PKKPbc** | 07 | 28 | 13.1 -0.2 |
| | comp=Z,1.1nm,0.8s,baz=36,slow=11,SNR=3.8 | | | | | | | | |
| CLL | Collm | 121.55 | 328 | *e*PKIKP | | **PKPdf** | 07 | 18 | 11.0 -0.4 |
| CLL | | | | *e* | | | 07 | 18 | 30.0 |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| CLL | Collm | 121.55 | 328 | *e*PKiKP | | **PKPdf** | 07 | 18 | 11.0 -0.4 |
| | comp=Z,11nm,0.8s | | | | | | | | |
| CLL | | | | *ep*PKPdf | | **pPKPdf** | 07 | 18 | 30.0 -3.1 |
| CLL | | | | LmV | | | 08 | 11 | 00.0 |
| | comp=Z,200nm,19.5s | | | | | | | | |
| CLL | Collm | 121.55 | 328 | | | **PKPdf** | 07 | 18 | 10.5 -0.8 |
| CONA | Conrad Observa | 121.73 | 324 | *e*P | | **PKPdf** | 07 | 18 | 11.2 -0.8 |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| LC01 | Cunco | 122.03 | 144 | PKPdf | | **PKiKP** | 07 | 18 | 13.1 +0.2 |
| GEC2 | GERESS Array S | 122.50 | 326 | | | **PKPdf** | 07 | 18 | 12.6 -0.8 |
| GERES | GERESS Array B | 122.50 | 326 | PKP | | **PKPdf** | 07 | 18 | 12.8 -0.6 |
| | comp=Z,2.9nm,0.6s,baz=80,slow=1.5,SNR=19 | | | | | | | | |
| GERES | | | | pPKP | | **pPKPdf** | 07 | 18 | 32.2 -2.9 |
| | comp=Z,2.5nm,0.7s,baz=79,slow=2.9,SNR=5.1 | | | | | | | | |
| CLTN | Cedars of Leba | 122.70 | 51 | | | **PKPdf** | 07 | 18 | 13.7 -0.4 |
| SOKA | Soboth | 122.83 | 323 | *e*P | | **PKPdf** | 07 | 18 | 13.7 -0.4 |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| MYKA | Terra Mystica | 123.69 | 323 | P | | **PKPdf** | 07 | 18 | 15.1 -0.7 |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| ABTA | Abfaltersbach | 124.29 | 324 | *e*P | | **PKPdf** | 07 | 18 | 15.7 -1.2 |
| | comp=Z,12nm,1.0s | | | | | | | | |
| SCHQ | Schefferville | 124.42 | 23 | PKP | | **PKPdf** | 07 | 18 | 16.2 -0.6 |
| | comp=Z,3.2nm,0.7s,baz=269,slow=5.1,SNR=5.4 | | | | | | | | |
| STAL | STALIGIAL | 124.43 | 323 | PKPdf | | **PKPdf** | 07 | 18 | 16.3 -0.8 |
| WATA | Walderalm | 124.52 | 325 | *e*P | | **PKPdf** | 07 | 18 | 17.2 -0.2 |
| | comp=Z,5.6nm,0.5s | | | | | | | | |
| WTTA | Wattenberg | 124.52 | 325 | *e*P | | **PKPdf** | 07 | 18 | 16.9 -0.6 |
| | comp=Z,10nm,0.7s | | | | | | | | |
| MOTA | Moosalm | 124.78 | 325 | *e*P | | **PKPdf** | 07 | 18 | 17.3 -0.6 |
| | comp=Z,18nm,0.9s | | | | | | | | |
| SQTA | Sankt Quirin | 124.79 | 325 | *e*P | | **PKPdf** | 07 | 18 | 17.0 -0.9 |
| | comp=Z,10nm,0.9s | | | | | | | | |
| RETA | Reutte | 124.89 | 325 | *e*P | | **PKiKP** | 07 | 18 | 19.1 +0.8 |
| | comp=Z,1.6nm,0.4s | | | | | | | | |
| FETA | Feichten | 125.17 | 325 | *e*P | | **PKPdf** | 07 | 18 | 18.1 -0.6 |
| | comp=Z,13nm,1.0s | | | | | | | | |
| BTNL | Ternell | 125.46 | 331 | *d*PKPdf | | **PKPdf** | 07 | 18 | 18.8 -0.1 |
| MEM | Membach | 125.50 | 331 | *d*PKPdf | | **PKPdf** | 07 | 18 | 18.9 -0.1 |
| DAVA | Damuels | 125.50 | 326 | *e*P | | **PKPdf** | 07 | 18 | 18.8 -0.5 |
| | comp=Z,12nm,0.8s | | | | | | | | |
| TGUH | Tegucigalpa,Un | 125.69 | 77 | PKPdf | | **PKiKP** | 07 | 18 | 20.8 -0.1 |
| TUE | Stuetta | 126.27 | 325 | PKPdf | | **PKPdf** | 07 | 18 | 20.3 -0.6 |
| BMRD | Maredsous | 126.30 | 331 | *d*PKPdf | | **PKPdf** | 07 | 18 | 20.4 -0.1 |
| MATN | Matagalpa | 127.03 | 79 | | | **PKiKP** | 07 | 18 | 23.4 -0.2 |
| KEST | Kesra | 131.80 | 313 | PKP | | **PKPdf** | 07 | 18 | 30.9 -0.7 |
| | comp=Z,5.0nm,1.0s,baz=53,slow=22,SNR=1.6 | | | | | | | | |
| ESDC | Sonseca Array | 138.09 | 326 | PKP | | **PKiKP** | 07 | 18 | 44.6 -0.6 |
| | comp=Z,0.6nm,0.3s,baz=215,slow=49,SNR=3.3 | | | | | | | | |
| LPAZ | La Paz | 138.17 | 123 | PKhKP | PKPpre | | 07 | 18 | 38.5 |
| | comp=Z,2.0nm,0.7s,baz=271,slow=4.3,SNR=7.3 | | | | | | | | |
| LPAZ | | | | PKP | | **PKPdf** | 07 | 18 | 44.8 +0.2 |
| | comp=Z,8.3nm,1.0s,baz=256,slow=3.3,SNR=12 | | | | | | | | |
| LPAZ | | | | SKP | | | 07 | 22 | 16.6 |
| | comp=Z,3.9nm,1.0s,baz=333,slow=2.3,SNR=5.4 | | | | | | | | |
| ROSC | El Rosal | 138.38 | 90 | PKhKP | PKPpre | | 07 | 18 | 37.6 |
| | comp=Z,4.6nm,0.6s,baz=92,slow=18,SNR=1.9 | | | | | | | | |
| ROSC | | | | PKP | | **PKiKP** | 07 | 18 | 46.0 -0.9 |
| | comp=Z,20nm,0.7s,baz=97,slow=16,SNR=12 | | | | | | | | |
| ROSC | El Rosal | 138.38 | 90 | PKIKP | | **PKiKP** | 07 | 18 | 46.0 -0.9 |
| CPUP | Villa Florida | 139.53 | 145 | PKhKP | PKPpre | | 07 | 18 | 41.7 |
| | comp=Z,3.5nm,0.8s,baz=71,slow=14,SNR=2.6 | | | | | | | | |
| CPUP | | | | PKP | | **PKPdf** | 07 | 18 | 46.9 +0.8 |
| | comp=Z,6.5nm,0.9s,baz=260,slow=2.9,SNR=8.7 | | | | | | | | |
| CPUP | | | | pPKP | pPKPdf | | 07 | 19 | 06.2 -1.1 |
| | comp=Z,8.5nm,1.0s,baz=250,slow=2.4,SNR=5.3 | | | | | | | | |
| CRPR | Cabo Rojo, PR | 144.35 | 68 | PKPdf | | **PKPab** | 07 | 18 | 52.2 -0.9 |
| MLPR | Magueyes Islan | 144.42 | 68 | | | **PKPab** | 07 | 18 | 52.1 -1.2 |
| BAUV | El Baul | 144.72 | 84 | *i*P | | **PKPab** | 07 | 18 | 53.0 -1.5 |
| BAUV | El Baul | 144.72 | 84 | P | PKPdf | **PKPab** | 07 | 18 | 53.7 -0.8 |
| OBIP | Obispado Ponce | 144.81 | 68 | | | **PKPab** | 07 | 18 | 53.7 -1.1 |
| SJG | San Juan | 145.21 | 67 | PKIKP | | **PKPbc** | 07 | 18 | 55.5 -0.6 |
| SJG | San Juan | 145.21 | 67 | | | **PKPbc** | 07 | 18 | 55.5 -0.6 |
| HUMP | Col San Antoni | 145.48 | 67 | | | **PKPbc** | 07 | 18 | 57.1 +0.1 |
| TORD | Torodi Ar. Bea | 145.65 | 284 | PKPbc | | **PKPbc** | 07 | 18 | 57.5 -0.1 |
| | comp=Z,80nm,0.7s,baz=53,slow=2.8,SNR=260 | | | | | | | | |
| TORD | | | | pPKPbc | | **pPKPdf** | 07 | 19 | 17.9 -0.9 |
| | comp=Z,22nm,0.7s,baz=55,slow=2.4,SNR=5.5 | | | | | | | | |
| MTP | Monte Pirata | 145.76 | 67 | | | **PKPbc** | 07 | 18 | 58.0 +0.2 |
| STVI | Saint Thomas | 146.24 | 66 | | | **PKPbc** | 07 | 18 | 59.1 -0.2 |
| BIRV | Birongo | 146.38 | 81 | | | **PKPbc** | 07 | 19 | 00.2 +0.4 |
| VILB | Vilhena | 146.44 | 125 | | | **PKPdf** | 07 | 18 | 58.8 +0.2 |
| SMRT | St. Maarten | 148.03 | 66 | *e*P | | **PKPbc** | 07 | 19 | 04.5 0.0 |
| SMRT | St. Maarten | 148.03 | 66 | | | **PKPbc** | 07 | 19 | 04.8 +0.5 |
| ANBD | Bethesda, Anti | 148.52 | 67 | *e*P | | **PKPdf** | 07 | 19 | 05.2 +1.7 |
| CBE | Ff, Capester | 149.94 | 69 | *e*P | | **PKPbc** | 07 | 19 | 08.9 -0.3 |
| DSLB | Salisbury | 150.27 | 70 | *e*P | | **PKPbc** | 07 | 19 | 08.9 -1.1 |
| FDF | Fort de France | 150.69 | 71 | *e*P | | **PKiKP** | 07 | 19 | 11.5 -0.2 |
| GRGR | Grenville | 150.70 | 77 | *e*P | | **PKPbc** | 07 | 19 | 08.7 -2.3 |
| BIM | Bigot | 150.82 | 72 | *e*P | | **PKPbc** | 07 | 19 | 10.5 -0.9 |
| SVB | Belmont | 150.90 | 74 | *e*P | | **PKPbc** | 07 | 19 | 09.9 -1.6 |
| SVB | Belmont | 150.90 | 74 | | | **PKPbc** | 07 | 19 | 11.0 -0.5 |
| ILAM | Ilet Lapin Mar | 150.94 | 71 | *e*P | | **PKPbc** | 07 | 19 | 11.3 -0.3 |
| SLBI | Saint Lucia, B | 151.02 | 73 | *e*P | | **PKPbc** | 07 | 19 | 11.0 -0.7 |
| MPOM | Morne Pois Mar | 151.03 | 72 | *e*P | | **PKPbc** | 07 | 19 | 10.1 -1.6 |
| MCLT | Moule a Chique | 151.11 | 73 | PKPdf | | **PKPdf** | 07 | 19 | 05.7 -0.4 |
| MCLT | | | | | | **PKPbc** | 07 | 19 | 10.8 -1.3 |
| TRN | Trinidad (W) | 151.14 | 80 | *e*P | | **PKPbc** | 07 | 19 | 11.0 -1.1 |
| TOSP | Speyside | 151.91 | 78 | *e*P | | **PKPbc** | 07 | 19 | 13.5 -0.3 |
| KIC | Kosan Boka | 152.39 | 271 | *e*PKIKP | | **PKPdf** | 07 | 19 | 07.9 -0.2 |
| | comp=Z,57nm,0.7s | | | | | | | | |
| DBIC | Dimbokro | 152.51 | 272 | PKP | | **PKPdf** | 07 | 19 | 08.2 -0.1 |
| | comp=Z,9.3nm,1.0s,baz=11,slow=5.2,SNR=6.0 | | | | | | | | |
| DBIC | | | | PKPbc | | **PKiKP** | 07 | 19 | 16.0 +0.5 |
| | comp=Z,32nm,0.7s,baz=111,slow=2.1,SNR=37 | | | | | | | | |
| DBIC | | | | PKPab | | **PKPab** | 07 | 19 | 26.9 +1.1 |
| | comp=Z,27nm,0.9s,baz=104,slow=5.1,SNR=10 | | | | | | | | |
| DBIC | | | | pPKPab | | **sPKPbc** | 07 | 19 | 45.0 +0.3 |
| | comp=Z,22nm,1.0s,baz=97,slow=4.6,SNR=3.5 | | | | | | | | |
| DBIC | Dimbokro | 152.51 | 272 | PKPdf | | **PKPdf** | 07 | 19 | 07.0 -1.3 |
| LIC | Lamto | 152.67 | 271 | *e*PKIKP | | **PKPdf** | 07 | 19 | 08.4 -0.1 |
| | comp=Z,123nm,0.8s | | | | | | | | |
| TIC | Toumodi | 152.68 | 272 | *e*PKIKP | | **PKPdf** | 07 | 19 | 08.2 -0.3 |
| BDFB | Brasilia | 153.26 | 145 | PKP | | **PKPdf** | 07 | 19 | 10.5 +1.0 |
| | comp=Z,4.6nm,0.7s,baz=137,slow=2.4,SNR=8.7 | | | | | | | | |
| BDFB | | | | PKPbc | | **PKiKP** | 07 | 19 | 17.5 +0.4 |
| | comp=Z,22nm,0.7s,baz=190,slow=1.6,SNR=37 | | | | | | | | |
| BDFB | | | | PKPab | | **pPKPdf** | 07 | 19 | 30.8 +0.1 |
| | comp=Z,11nm,0.7s,baz=224,slow=7.8,SNR=4.7 | | | | | | | | |
| BDFB | | | | pPKPab | | **pPKPab** | 07 | 19 | 49.2 -0.1 |
| | comp=Z,10nm,0.8s,baz=120,slow=6.0,SNR=2.9 | | | | | | | | |

*NOU **04** 07:00:16.4, 37°.48S×178°.41E, h145km, MLv4.6/10, Off E. Coast of N. Island, N.Z.*
*WEL **04** 07:00:20.4±1.1, 37°.S±.9°×17°.8E±°, h33km, M4.1/19, ML4.5/19, MLv4.1/19, Error ellipse: s-maj=0.0km s-min=0.0km az=25.4*

**ISC 04 07:00:20.3±2.0, 37°.35S±0°.07×178°.05E±0°.07, h72km±11km, n119, σ1°33/123, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 0.29 | 137 | P | Pn | 07 00 31.3 | -0.4 |
| MXZ | | | | S | Sn | 07 00 39.4 | -0.5 |
| HAZ | Te Kaha | 0.46 | 208 | P | Pn | 07 00 35.1 | -1.2 |
| PKGZ | Pakihiroa | 0.54 | 178 | P | Pn | 07 00 34.1 | +0.4 |
| PKGZ | | | | S | Sn | 07 00 44.3 | +0.7 |
| WMGZ | Waiomatatini S | 0.55 | 149 | P | Pn | 07 00 34.8 | +1.0 |
| WMGZ | | | | S | Sn | 07 00 46.0 | +2.3 |
| RUGZ | Raukumara Rang | 0.68 | 206 | P | Pn | 07 00 34.2 | -1.1 |
| RUGZ | | | | S | Sn | 07 00 48.0 | +1.6 |
| WIZ | White Island | 0.71 | 255 | P | Pn | 07 00 34.6 | -0.9 |
| WIZ | | | | S | Sn | 07 00 43.6 | -3.0 |
| WSRZ | White Island S | 0.72 | 256 | P | Pn | 07 00 35.3 | -0.3 |
| PUZ | Puketiti | 0.74 | 167 | P | Pn | 07 00 36.5 | +0.7 |
| TWGZ | Tauwhareparae | 0.83 | 184 | P | Pn | 07 00 38.0 | +1.1 |
| TWGZ | | | | S | Sn | 07 00 52.0 | +2.8 |
| WHRZ | Whale Island | 0.99 | 239 | P | Pn | 07 00 38.5 | -0.3 |
| MWZ | Matawai | 1.07 | 203 | P | Pn | 07 00 39.6 | -0.2 |
| TKGZ | Te Karaka | 1.10 | 188 | P | Pn | 07 00 41.0 | +0.8 |
| CNGZ | Carnagh Statio | 1.14 | 174 | P | Pn | 07 00 41.5 | +0.8 |
| URZ | Urewera | 1.18 | 219 | P | Pn | 07 00 40.6 | -0.5 |
| URZ | Urewera | 1.18 | 219 | P | Pn | 07 00 42.5 | +1.4 |
| RAGZ | Rawiri | 1.25 | 203 | P | Pn | 07 00 43.2 | +1.0 |
| MARZ | Manawahe | 1.26 | 239 | P | Pn | 07 00 41.8 | -0.5 |
| EDRZ | Edgecumbe | 1.29 | 234 | P | Pn | 07 00 42.3 | -0.3 |
| OPRZ | Ohinepanea | 1.29 | 247 | P | Pn | 07 00 41.8 | -0.7 |
| RIGZ | Rimuhau | 1.38 | 189 | P | Pn | 07 00 44.2 | +0.5 |
| MYRZ | Mayor Island | 1.45 | 272 | P | Pn | 07 00 44.4 | -0.2 |
| TGRZ | Tauranga | 1.47 | 255 | P | Pn | 07 00 44.7 | -0.3 |
| MKRZ | Makatiti | 1.48 | 237 | P | Pn | 07 00 45.6 | +0.4 |
| TARZ | Mount Tarawera | 1.51 | 234 | P | Pn | 07 00 45.9 | +0.3 |
| MUGZ | Murupara | 1.52 | 222 | P | Pn | 07 00 45.4 | -0.2 |
| RTZ | Ruatahuna | 1.52 | 213 | P | Pn | 07 00 45.7 | 0.0 |
| OMRZ | Omania | 1.53 | 240 | P | Pn | 07 00 46.3 | +0.5 |
| SNGZ | Shannon Statio | 1.54 | 201 | P | Pn | 07 00 46.9 | +1.0 |
| RRRZ | Republican Roa | 1.57 | 230 | P | Pn | 07 00 46.3 | +0.1 |
| PRGZ | Paritu Road | 1.58 | 185 | P | Pn | 07 00 46.8 | +0.3 |
| KARZ | Kaharoa | 1.58 | 244 | P | Pn | 07 00 46.3 | -0.1 |
| HLRZ | Highlands Stat | 1.62 | 236 | P | Pn | 07 00 48.5 | +1.6 |
| UTU | Utuhina | 1.69 | 240 | P | Pn | 07 00 50.9 | +3.0 |
| KNZ | Kokohu | 1.70 | 190 | P | Pn | 07 00 47.7 | -0.2 |
| HSRZ | Hossack Road | 1.72 | 236 | P | Pn | 07 00 50.1 | +1.8 |
| HRRZ | Handcock Road | 1.74 | 233 | P | Pn | 07 00 51.0 | +2.4 |
| PRRZ | Plateau Road | 1.74 | 228 | P | Pn | 07 00 48.7 | +0.1 |
| KMRZ | Kaimai | 1.75 | 253 | P | Pn | 07 00 48.5 | -0.1 |
| MTHZ | Maungataniwha | 1.78 | 212 | P | Pn | 07 00 49.3 | +0.2 |
| MHGZ | Mahia Peninsul | 1.81 | 184 | P | Pn | 07 00 49.5 | +0.1 |
| ALRZ | Allen Road | 1.81 | 228 | P | Pn | 07 00 50.1 | +0.5 |
| WPRZ | Whakapapatarin | 1.90 | 231 | P | Pn | 07 00 52.3 | +1.6 |
| KUZ | Kuaotunu | 1.96 | 287 | P | Pn | 07 00 51.1 | -0.4 |
| MRHZ | Matea Rd | 1.96 | 220 | P | Pn | 07 00 52.4 | +0.8 |
| NMHZ | Naumai | 2.00 | 209 | P | Pn | 07 00 53.5 | +1.4 |
| TOZ | Tahuroa Road | 2.06 | 259 | P | Pn | 07 00 52.6 | -0.2 |
| ARHZ | Aropaoanui | 2.08 | 203 | P | Pn | 07 00 53.9 | +0.7 |
| KUTZ | Kaahu Road | 2.10 | 236 | P | Pn | 07 00 53.9 | +0.6 |
| WHTZ | Whakaora | 2.11 | 231 | P | Pn | 07 00 56.3 | +2.7 |
| HATZ | Hinemaiaia | 2.18 | 224 | P | Pn | 07 00 55.3 | +0.9 |
| BKZ | Black Stump Fm | 2.19 | 214 | P | Pn | 07 00 55.2 | +0.6 |
| BKZ | Black Stump Fm | 2.19 | 214 | P | Pn | 07 00 55.6 | +1.0 |
| WATZ | Wairara | 2.28 | 233 | P | Pn | 07 00 57.3 | +1.5 |
| MCHZ | McNeill Hill | 2.35 | 207 | P | Pn | 07 00 57.3 | +0.6 |
| GRZ | Great Barrier | 2.35 | 297 | P | Pn | 07 00 56.9 | +0.2 |
| RATZ | Rangitukua | 2.35 | 229 | P | Pn | 07 00 58.3 | +1.5 |
| RITZ | Rihia Road | 2.37 | 226 | P | Pn | 07 00 58.7 | +1.6 |
| WIAZ | Waiheke Island | 2.40 | 282 | P | Pn | 07 00 57.7 | +0.3 |
| CKHZ | Cape Kidnapper | 2.43 | 198 | P | Pn | 07 00 57.5 | -0.3 |
| KWHZ | Kaweka Forest | 2.44 | 211 | P | Pn | 07 00 58.1 | +0.1 |
| KATZ | Kakaramea | 2.47 | 228 | P | Pn | 07 01 00.0 | +1.6 |
| ETAZ | East Tamaki Re | 2.53 | 278 | P | Pn | 07 00 59.7 | +0.6 |
| TMVZ | Te Maari | 2.56 | 226 | P | Pn | 07 01 00.6 | +1.0 |
| NTVZ | North Tongariro | 2.56 | 226 | P | Pn | 07 01 00.7 | +1.0 |
| ETVZ | East Tongariro | 2.56 | 225 | P | Pn | 07 01 00.5 | +0.7 |
| KRVZ | Karewarewa | 2.58 | 227 | P | Pn | 07 01 01.3 | +1.4 |
| MBAZ | Motutapu North | 2.59 | 282 | P | Pn | 07 01 00.6 | +0.7 |
| KAHZ | Kahuranaki | 2.61 | 200 | P | Pn | 07 00 59.9 | -0.4 |
| OTVZ | Oturere | 2.61 | 225 | P | Pn | 07 01 01.0 | +0.6 |
| NNVZ | North Ngauruho | 2.62 | 226 | P | Pn | 07 01 01.4 | +0.9 |
| WTVZ | West Tongariro | 2.62 | 227 | P | Pn | 07 01 02.0 | +1.5 |
| SNVZ | South Ngauruho | 2.64 | 225 | P | Pn | 07 01 01.5 | +0.7 |
| KRHZ | Kereru | 2.64 | 209 | P | Pn | 07 01 00.4 | -0.3 |
| BHHZ | Black Hill Sta | 2.65 | 216 | P | Pn | 07 01 01.0 | +0.2 |
| NGZ | Ngauruhoe | 2.66 | 226 | P | Pn | 07 01 02.3 | +1.3 |
| ABAZ | Army Bay | 2.68 | 285 | P | Pn | 07 01 02.1 | +0.9 |
| TWVZ | Taurewa | 2.68 | 229 | P | Pn | 07 01 02.9 | +1.6 |
| EPAZ | Eden Park BICE | 2.69 | 279 | P | Pn | 07 01 02.4 | +1.1 |
| TUVZ | Tukino | 2.69 | 224 | P | Pn | 07 01 02.4 | +1.0 |
| HBAZ | Herne Bay Bore | 2.70 | 280 | P | Pn | 07 01 02.6 | +1.1 |
| WHVZ | Whangaehu Hut | 2.73 | 224 | P | Pn | 07 01 03.0 | +0.8 |
| AWAZ | Awhitu Peninsu | 2.74 | 275 | P | Pn | 07 01 03.0 | +1.0 |
| FWVZ | Far West T-bar | 2.74 | 225 | P | Pn | 07 01 03.1 | +0.9 |
| MOVZ | Moawhango | 2.74 | 221 | P | Pn | 07 01 02.3 | +0.3 |
| WNVZ | Wahianoa | 2.76 | 224 | P | Pn | 07 01 03.2 | +0.7 |
| TRVZ | Turoa | 2.77 | 225 | P | P

comp=E,52nm,0.5s
**ODAN Odare 11.45 118** *e*Pn Pn 07 13 12.4 -3.5
**BOK Bokaro 12.45 134** *e*P Pn 07 13 27.0 -2.4
**SRSP Sriramsagar 14.00 171** *e*P **Pn 07 13 50.9 +0.3**
**MAKZ Makanchi 14.65 16** **Pn 07 14 00.1 +0.9**
**MK31 Makanchi Array 14.71 17** *i* P **Pn 07 14 01.5 +1.5**
**MK31 Makanchi Array 14.71 17** Pn **Pn 07 14 00.8 +0.7**
**MKAR Makanchi Array 14.71 17** Pn **Pn 07 14 01.5 +1.4**
comp=E,0.8nm,0.3s,baz=201,slow=13,SNR=13
MKAR Sn **Sn 07 16 36.1 -5.6**
comp=E,0.7nm,0.3s,baz=195,slow=23,SNR=7.3
MKAR LR LR 07 20 37.8
comp=E,139nm,19.7s,baz=204,slow=41
**MKAR Makanchi Array 14.71 17** P **Pn 07 14 01.8 +1.7**
**MKAR Makanchi Array 14.71 17** Pn **Pn 07 14 01.8 +1.7**
**KLRI Killari 14.72 178** *e*P **Pn 07 14 01.9 +1.5**
**HYBB Hyderabad (bro 15.52 171** *e*P **Pn 07 14 13.1 +2.2**
HYBB *e*S **Sn 07 17 10.2 +8.5**
**HYB Hyderabad 15.52 171** *e*P **Pn 07 14 12.0 +1.1**
HYB *e*S **Sn 07 17 03.0 +1.3**
**GEYT Alibeck 15.53 294** LR LR 07 21 27.1
comp=E,67nm,19.4s,baz=141,slow=42
**CUPL Choutuppal 15.69 170** *e*P **Pn 07 14 14.3 +1.2**
**GOMU GeErMu 15.76 73** P **P 07 14 19.7 +1.8**
GOMU pmax pmax
comp=E,3.0nm,1.0s
**CHLP Challavanipeta 15.96 152** *e*P **Pn 07 14 19.4 +2.8**
**MYLAV Mylavaram 16.54 165** *e*P **Pn 07 14 26.6 +2.8**
**SRLM Srisailam 16.86 171** *e*P **Pn 07 14 27.1 -0.9**
**ADKI Addanki 17.28 167** *e*P **Pn 07 14 35.1 +1.9**
**RCLA Racherla 17.50 171** *e*P **Pn 07 14 35.1 -0.8**
**URV Uravakonda 17.85 176** *e*P **Pn 07 14 41.8 +1.5**
**KURBB Kurchatov Arra 17.85 5** P **Pn 07 14 38.7 -1.4**
comp=E,0.2nm,0.3s,baz=192,slow=12,SNR=17
**KURBB Kurchatov Arra 17.85 5** *e*P **Pn 07 14 36.9 -3.2**
**KURK Kurchatov 17.95 5** P **Pn 07 14 39.6 -1.7**
KURK pmax pmax
comp=E,13nm,0.9s
**KURK Kurchatov 17.95 5** P **Pn 07 14 39.6 -1.7**
**WSAR Wadi Sarin 18.15 243** P **Pn 07 14 41.9 -2.0**
comp=E,0.4nm,0.3s,baz=53,slow=10,SNR=2.0
WSAR LR LR 07 24 02.4
comp=E,49nm,18.8s,baz=116,slow=45
**DGZ Jazzator, Alta 18.83 23** *i* P **P 07 14 51.7 +0.3**
DGZ pmax pmax
comp=E,7.0nm,1.1s
**GTA Gaotai 20.20 64** ⇑P **P 07 15 06.8 +0.4**
GTA pmax pmax
comp=E,10.0nm,1.0s
GTA pmax pmax
comp=E,81nm,5.1s
GTA LR LR
comp=E,130nm,18.2s
GTA LR LR
comp=E,92nm,19.3s
**AB31 Akbulak array 20.37 328** *i* P **P 07 15 07.9 -0.1**
**ABKAR Akbulak array 20.37 328** P **P 07 15 07.9 -0.1**
**ABKAR Akbulak array 20.37 328** P **P 07 15 07.5 -0.6**
ABKAR IAmb IAmb 07 15 13.7
comp=E,9.0nm,0.7s
**BVAR Borovoye Array 20.59 350** P **P 07 15 11.2 +0.7**
comp=E,11nm,0.7s,baz=113,slow=11,SNR=25
**BRVK Borovoye 20.64 350** P **P 07 15 11.4 +0.5**
BRVK pmax pmax
comp=E,38nm,1.0s
**BRVK Borovoye 20.64 350** P **P 07 15 11.4 +0.5**
**ZAA0 Zalesovo Array 21.99 14** P **P 07 15 24.9 -0.5**
ZAA0 IAmb IAmb 07 15 28.0
comp=E,8.1nm,0.7s
**ZALV Zalesovo Beam 21.99 14** P **P 07 15 24.9 -0.5**
comp=E,6.6nm,0.6s,baz=214,slow=12,SNR=16
ZALV LR LR 07 24 57.9
comp=E,117nm,19.3s,baz=205,slow=39
**ZALV Zalesovo Beam 21.99 14** P **P 07 15 24.2 -1.2**
**AKTO Aktyubinsk 22.08 328** P **P 07 15 27.4 +1.0**
comp=E,9.4nm,0.7s,baz=125,slow=7.7,SNR=29
**LZH Lanzhou 23.05 74** *e*P **P 07 15 43.6 +6.5**
LZH pP pP 07 15 48.5 +0.9
LZH pmax pmax
comp=E,16nm,1.3s
**CMAR Chiang Mai Arr 24.99 119** P **P 07 15 54.8 -0.4**
comp=E,1.1nm,0.3s,baz=306,slow=10,SNR=11
**CMAR Chiang Mai Arr 24.99 119** *e*P **P 07 15 55.7 +0.5**
CMAR pmax pmax
comp=E,2.0nm,0.5s
**CMAR Chiang Mai Arr 24.99 119** P **P 07 15 54.5 -0.7**
**GNI Garni 26.17 295** P **P 07 16 04.9 -1.0**
comp=E,2.1nm,0.4s,baz=117,slow=9.0,SNR=1.5
**GNI Garni 26.17 295** *ce*P **P 07 16 07.3 +1.4**
GNI pmax pmax
comp=E,16nm,1.3s
**GNI Garni 26.17 295** IAmb IAmb 07 16 22.1
comp=E,13nm,0.9s
**ARU Arti 26.53 338** P **P 07 16 08.9 +0.1**
comp=Z,0.9nm,0.4s,baz=338,slow=5.0,SNR=3.6
**ARU Arti 26.53 338** *d* iP **P 07 16 09.8 +1.0**
ARU 07 16 47.1
ARU S **S 07 20 43.1 +2.5**
ARU SS **SnSn 07 21 46.8 +2.7**
ARU pmax pmax
comp=Z,5.0nm,1.0s
**ARU Arti 26.53 338** P **P 07 16 08.9 +0.1**
ARU IAmb IAmb 07 16 22.0
comp=Z,9.6nm,1.1s
**ZAK Zakamensk 26.59 41** *e*P **P 07 16 08.4 -1.2**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**SONM Songino Array 27.29 48** P **P 07 16 17.4 +1.5**
comp=Z,3.3nm,0.6s,baz=244,slow=9.2,SNR=14
**SONM Songino Array 27.29 48** P **P 07 16 16.5 +0.6**
**XAN Xi'an 27.33 78** P **P 07 16 14.7 -1.6**
XAN pmax pmax
comp=Z,4.0nm,0.8s
XAN pmax pmax
comp=Z,86nm,4.8s
**ULN Ulaanbaatar 27.71 48** *ce*P **P 07 16 20.9 +1.2**
ULN pmax pmax
comp=Z,9.0nm,2.5s
**ULN Ulaanbaatar 27.71 48** P **P 07 16 20.0 +0.3**
ULN IAmb IAmb 07 16 27.3
comp=Z,6.3nm,1.1s
**KBZ Khabaz 28.08 302** *i* P **P 07 16 24.2 +1.4**
KBZ pmax pmax
comp=Z,2.0nm,1.0s
**KIV Kislovodsk 28.28 303** *e*P **P 07 16 27.6 +2.9**
KIV pmax pmax
comp=Z,5.0nm,1.0s
**BRTR Keskin Array B 34.68 294** P **P 07 17 20.6 -0.5**
comp=Z,0.8nm,0.6s,baz=64,slow=9.8,SNR=2.2
**OBN Obninsk 35.44 321** ⇓ *e*P **P 07 17 28.2 +1.0**
OBN *e* 07 18 47.1
OBN *e*S **S 07 22 55.9 -3.8**
OBN pmax pmax
comp=Z,9.0nm,0.9s
OBN MLR MLR
comp=Z,116nm,18.0s
**KLMR Klimovskoe 36.73 331** *e*P **P 07 17 36.9 -1.2**
KLMR pmax pmax
comp=Z,10.0nm,0.9s
**KLMR Klimovskoe 36.73 331** *e*P **P 07 17 37.0 -1.2**
KLMR AMP 07 17 38.4
comp=Z,10.0nm,0.9s
**NRIK Noril'sk 37.11 7** *ce*P **P 07 17 42.3 +1.0**
NRIK pmax pmax
comp=Z,7.0nm,1.4s
**AKASG Malin Array Be 38.52 312** P **P 07 17 52.7 -0.8**
comp=Z,2.3nm,0.6s,baz=81,slow=6.8,SNR=13
**AKASG Malin Array Be 38.52 312** PKIKP **P 07 17 52.7 -0.8**
**AKASG Malin Array Be 38.52 312** P **P 07 17 52.3 -1.2**
**FINES FINESS Array B 42.85 327** P **P 07 18 29.3 +0.2**
comp=Z,3.0nm,0.9s,baz=132,slow=13,SNR=3.8
**FINES FINESS Array B 42.85 327** *e*P **P 07 18 32.2 +3.2**
FINES pmax pmax
comp=Z,4.0nm,0.9s
**KLR Kul'dur 44.01 51** *ce*P **P 07 18 38.4 -0.2**
KLR pmax pmax
comp=Z,2.0nm,0.9s
**ARCES ARCESS Array B 46.12 338** P **P 07 18 55.8 +0.7**
comp=Z,4.3nm,0.8s,baz=117,slow=7.3,SNR=9.7
**ARCES ARCESS Array B 46.12 338** *e*P **P 07 18 56.8 +1.7**
ARCES pmax pmax
comp=Z,4.0nm,0.8s
**HFS Hagfors 48.52 324** P **P 07 19 14.1 +0.2**
comp=Z,2.9nm,0.7s,baz=174,slow=1.5,SNR=3.5
**NB2 NORSAR Subarra 49.81 325** P **P 07 19 23.1 -0.7**
comp=Z,2.2nm,0.8s,baz=95,slow=7.9
**NOA NORSAR Array B 49.81 325** P **P 07 19 22.4 -1.4**
comp=Z,1.3nm,0.7s,baz=101,slow=6.9,SNR=4.2
**YSS Yuzh-Sakhalins 51.54 53** *ce*P **P 07 19 38.0 +1.1**
YSS pmax pmax
comp=Z,25nm,2.5s
**MA2 Magadan 54.68 37** *ce*P **P 07 20 00.9 +1.0**
MA2 pmax pmax
comp=Z,9.0nm,1.7s
**SEY Seymchan 55.15 33** P **P 07 20 04.3 +1.1**
comp=Z,6.1nm,0.7s,baz=266,slow=9.0,SNR=32
**NOR Nord 58.14 350** *i* P **P 07 20 24.4 +0.1**
NOR IAmb IAmb 07 20 25.2
comp=Z,2.4nm,0.9s
**DAG Danmarks Havn 59.40 345** *i* P **P 07 20 33.0 0.0**
DAG IAmb IAmb 07 20 33.7
comp=Z,2.8nm,0.9s
**PETK Petropavlovsk- 59.67 44** P **P 07 20 34.8 -0.5**
comp=Z,1.6nm,0.8s,baz=270,slow=5.8,SNR=2.5
**BILL Bilibino 60.04 26** *ce*P **P 07 20 37.1 -0.5**
BILL *e* 07 21 26.8
BILL *e* 07 22 52.2
BILL pmax pmax
comp=Z,5.0nm,1.0s
**NEEM North Greenlan 65.46 349** *i* P **P 07 21 13.9 0.0**
NEEM IAmb IAmb 07 21 14.6
comp=Z,4.8nm,0.7s
**SUMG Summit 65.84 343** *i* P **P 07 21 17.1 +0.6**
SUMG IAmb IAmb 07 21 17.5
comp=Z,2.4nm,0.6s
**TORD Torodi Ar. Bea 70.00 273** P **P 07 21 40.5 -2.5**
comp=Z,2.8nm,0.8s,baz=56,slow=5.7,SNR=2.6
**WRA Warramunga Arr 76.46 125** P **P 07 22 19.2 -1.8**
comp=Z,1.8nm,1.1s,baz=323,slow=5.9,SNR=8.1
**INK Inuvik 76.76 11** P **P 07 22 21.1 -0.8**
comp=Z,1.2nm,0.5s,baz=343,slow=7.1,SNR=6.0
**INK Inuvik 76.76 11** P **P 07 22 21.1 -0.8**
INK pmax pmax
comp=Z,9.0nm,1.5s
**INK Inuvik 76.76 11** IAmb IAmb 07 24 40.6
comp=Z,9.3nm,1.5s
**ILAR Eielson Array 77.06 17** P **P 07 22 23.5 -0.3**
comp=Z,1.5nm,0.8s,baz=318,slow=4.8,SNR=14
**BOSA Boshof 77.88 224** P **P 07 22 29.1 +0.2**
comp=Z,2.4nm,1.0s,baz=27,slow=2.3,SNR=1.5
**BOSA Boshof 77.88 224** P **P 07 22 29.2 +0.2**
BOSA pmax pmax
comp=Z,42nm,1.7s
**ASAR Alice Springs 78.69 128** P **P 07 22 31.8 -1.7**
comp=Z,0.7nm,0.8s,baz=309,slow=5.9,SNR=4.6
**YKA Yellowknife Ar 84.60 5** P **P 07 23 03.6 -0.4**
comp=Z,1.6nm,0.6s,baz=343,slow=5.1,SNR=35

*IDC **04** 07:12:03.2±1.1, 32.°42N×75.°99E, h0km, mb4.0/13, mb1 4.1/14, mb1mx3.8/55, mbtmp4.0/14, ML3.8/1, MS4.3/1, Ms1 4.3/1, ms1mx2.8/86, Error ellipse: s-maj=29.7km s-min=21.0km az=48.0*
**ISC 04 07:12:06.6**±1.1, **32.°5N**±0.°2×**76.°0E**±0.°2, **h20**km, **n15,**
σ0**s75**/14, **mb4.0**/12, **Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **15.10** | **17** | Pn | | **Pn** | | **07 15 38.6** | **-0.1** |
| | 0.4nm,0.3s,baz=196,slow=14,SNR=1.3 | | | | | | | | |
| MKAR | | | | Sn | | Sn | | 07 18 13.8 | -12 |
| | 0.8nm,0.3s,baz=205,slow=26,SNR=2.6 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **20.94** | **351** | P | | **P** | | **07 16 48.0** | **0.0** |
| | 1.3nm,0.4s,baz=137,slow=7.9,SNR=5.3 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.34** | **329** | P | | **P** | | **07 17 03.8** | **+0.7** |
| | 4.9nm,0.7s,baz=139,slow=9.3,SNR=2.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.38** | **14** | P | | **P** | | **07 17 03.5** | **+0.1** |
| | 2.2nm,0.5s,baz=209,slow=9.3,SNR=2.1 | | | | | | | | |
| **SONM** | **Songino Array** | **27.63** | **47** | P | | **P** | | **07 17 53.5** | **+0.6** |
| | 1.1nm,0.5s,baz=244,slow=10,SNR=2.6 | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **32.91** | **280** | LR | | LR | | 07 35 27.7 | |
| | comp=Z,456nm,18.4s,baz=101,slow=43 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **38.69** | **312** | P | | **P** | | **07 19 29.0** | **+0.1** |
| | 0.7nm,0.5s,baz=81,slow=6.9,SNR=4.6 | | | | | | | | |
| **FINES** | **FINESS Array B** | **43.11** | **327** | P | | **P** | | **07 20 03.1** | **-2.0** |
| | 4.7nm,0.9s,baz=71,slow=8.3,SNR=3.7 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.43** | **338** | P | | **P** | | **07 20 32.0** | **+0.5** |
| | 1.6nm,0.6s,baz=110,slow=7.9,SNR=1.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **50.06** | **325** | P | | **P** | | **07 20 59.7** | **0.0** |
| | 1.1nm,0.8s,baz=101,slow=6.9,SNR=2.4 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.90** | **273** | P | | **P** | | **07 23 17.3** | **+0.7** |
| | 1.6nm,0.7s,baz=44,slow=4.9,SNR=2.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.34** | **124** | P | | **P** | | **07 23 54.4** | **-0.1** |
| | 1.1nm,0.8s,baz=324,slow=5.8,SNR=3.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **77.46** | **17** | P | | **P** | | **07 23 59.7** | **-0.4** |
| | 0.9nm,0.8s,baz=307,slow=4.9,SNR=3.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **78.55** | **128** | P | | **P** | | **07 24 06.5** | **-0.3** |
| | 0.9nm,0.8s,baz=322,slow=5.9,SNR=3.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.99** | **5** | P | | **P** | | **07 24 40.2** | **0.0** |
| | 1.2nm,0.7s,baz=344,slow=5.1,SNR=5.3 | | | | | | | | |

*GCMT **04** 07:13:42.9±0.2, 63.°13S±0.°01×169.°81E±0.°05, h12km, MW5.0/89, Moment Tensor Solution. s15,c18; s89,c120; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.86±.12; $M_{\theta\theta}$2.98±.08; $M_{\phi\phi}$-2.11±.11; $M_{r\theta}$-4.03±.30; $M_{\theta\phi}$-1.11±.11; $M_{\phi r}$0.33±.39; Best double couple: $M_o$4.58500×$10^{16}$ NP1:ϕ322.00000°, δ20.00000°, λ-35.00000°. NP2: ϕ86.00000°, δ79.00000°, λ-107.00000°. Principal axes: T 5.6820, Plg32.0000°, Azm190.0000°; N -2.1910, Plg16.0000°, Azm89.0000°; P -3.4870, Plg53.0000°, Azm336.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*IDC **04** 07:13:43.0±0.6, 63.°18S×169.°01E, h0km, mb4.4/9, mb1 4.5/10, mb1mx4.3/25, mbtmp4.4/10, ML4.1/1, MS4.2/33, Ms1 4.2/33, ms1mx4.1/43 Error ellipse: s-maj=31.2km s-min=16.6km az=60.0*
*NEIC **04** 07:13:44.9±1.6, 63.°20S±0.°10×169.°1E±0.°2, h10km±1km, mb4.9/26, Error ellipse: s-maj=20.6km s-min=13.5km az=232.0*
**ISC 04 07:13:45.1**±0.4, **63.°20S**±0.°07×**169.°0E**±0.°1, **h10**km, **n93,**
σ1**s24**/49, **mb4.8**/18, **MS4.2**/34, **Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **14.56** | **186** | Pn | | **Pn** | | **07 17 10.4** | **-0.5** |
| | 0.8nm,0.3s,baz=34,slow=18,SNR=16 | | | | | | | | |
| VNDA | | | | LR | | LR | | 07 21 34.2 | |
| | comp=Z,2μm,21.1s,baz=14,slow=32 | | | | | | | | |
| **SBA** | **Scott Base** | **14.74** | **182** | Pn | | Pn | | 07 17 11.8 | -1.5 |
| **DCZ** | **Deep Cove** | **17.80** | **356** | P | | **Pn** | | **07 17 54.7** | **+1.9** |
| **MLZ** | **Mavora Lakes** | **17.88** | **358** | | | **Pn** | | **07 17 53.5** | **-0.2** |
| MLZ | | | | IAmb | | IAmb | | 07 18 08.0 | |
| | comp=Z,106nm,1.6s | | | | | | | | |
| **ODZ** | **Otahua Downs** | **18.22** | **4** | | | **Pn** | | **07 17 57.4** | **-0.5** |
| ODZ | | | | IAmb | | IAmb | | 07 17 59.8 | |
| | comp=Z,75nm,1.4s | | | | | | | | |
| **SNZO** | **South Karori** | **22.19** | **11** | P | | **P** | | **07 18 39.6** | **-1.5** |
| SNZO | | | | IAmb | | IAmb | | 07 18 43.6 | |
| | comp=Z,104nm,1.2s | | | | | | | | |
| **BFZ** | **Birch Farm** | **22.96** | **14** | P | | **P** | | **07 18 47.6** | **-1.8** |
| **CASY** | **Casey** | **24.34** | **237** | P | | **P** | | **07 19 02.9** | **+0.4** |
| **URZ** | **Urewera** | **25.46** | **15** | P | | **P** | | **07 19 11.8** | **-1.1** |
| | comp=Z,16nm,1.1s,baz=158,slow=5.6,SNR=6.0 | | | | | | | | |
| URZ | | | | LR | | LR | | 07 27 21.8 | |
| | comp=Z,866nm,21.7s,baz=200,slow=32 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **26.89** | **180** | P | | **P** | | **07 19 23.9** | **-2.0** |
| | comp=Z,4.2nm,0.9s,baz=351,slow=4.6,SNR=7.1 | | | | | | | | |
| QSPA | | | | LR | | LR | | 07 28 21.0 | |
| | comp=Z,603nm,19.9s,baz=30,slow=33 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **26.89** | **180** | IAmb | | IAmb | | 07 19 42.1 | |
| | comp=Z,46nm,2.0s | | | | | | | | |
| **RAO** | **Raoul Island** | **35.00** | **20** | LR | | LR | | 07 33 05.8 | |
| | comp=Z,153nm,20.9s,baz=134,slow=33 | | | | | | | | |
| **STKA** | **Stephens Creek** | **35.82** | **318** | P | | **P** | | **07 20 43.9** | **-0.6** |
| | comp=Z,3.2nm,0.8s,baz=164,slow=15,SNR=3.9 | | | | | | | | |
| STKA | | | | LR | | LR | | 07 33 17.4 | |
| | comp=Z,387nm,19.4s,baz=161,slow=33 | | | | | | | | |
| **BELA** | **Belgrano 2** | **38.42** | **172** | P | | **P** | | **07 21 07.1** | **+1.0** |
| **MAW** | **Mawson** | **39.18** | **216** | LR | | LR | | 07 37 21.3 | |
| | comp=Z,1μm,18.8s,baz=108,slow=36 | | | | | | | | |
| **ONTNC** | **Quen Toro** | **40.91** | **356** | P | | **P** | | **07 21 26.8** | **-0.5** |
| ONTNC | | | | IAmb | | IAmb | | 07 21 35.9 | |
| | comp=Z,47nm,1.2s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.15** | **356** | *e*LR | | LR | | 07 32 49.0 | |
| | comp=Z,622nm,23.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.15** | **356** | LR | | LR | | 07 38 26.0 | |
| | comp=Z,300nm,18.1s,baz=198,slow=36 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.15** | **356** | P | | **P** | | **07 21 28.5** | **-0.9** |
| DZM | | | | IAmb | | IAmb | | 07 21 51.2 | |
| | comp=Z,33nm,1.3s | | | | | | | | |
| **LIFNC** | **LIFOU** | **42.41** | **358** | P | | **P** | | **07 21 38.8** | **-0.8** |
| **SNAA** | **Sanae** | **45.28** | **184** | P | | P | | 07 22 00.7 | -1.6 |
| **SNAA** | **Sanae** | **45.28** | **184** | LR | | LR | | 07 40 15.8 | |
| | comp=Z,614nm,18.5s,baz=181,slow=35 | | | | | | | | |
| **SNAA** | **Sanae** | **45.28** | **184** | P | | **P** | | **07 22 02.8** | **+0.5** |
| SNAA | | | | IAmb | | IAmb | | 07 22 08.4 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **CTA** | **Charters Tower** | **45.79** | **330** | LR | | LR | | 07 39 04.5 | |
| | comp=Z,244nm,19.1s,baz=148,slow=33 | | | | | | | | |
| **CTAO** | **Charters Tower** | **45.79** | **330** | P | | **P** | | **07 22 08.0** | **+1.3** |
| CTAO | | | | IAmb | | IAmb | | 07 22 08.5 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **45.83** | **181** | P | | **P** | | **07 22 05.7** | **-0.8** |
| **MSVF** | **Nonsavu** | **45.86** | **12** | LR | | LR | | 07 39 33.1 | |
| | comp=Z,365nm,18.2s,baz=181,slow=34 | | | | | | | | |
| **MSVF** | **Nonsavu** | **45.86** | **12** | P | | **P** | | **07 22 07.1** | **-0.3** |
| MSVF | | | | IAmb | | IAmb | | 07 22 33.5 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.90** | **313** | P | | **P** | | **07 22 07.9** | **+0.2** |
| **ASAR** | **Alice Springs** | **45.90** | **313** | P | | **P** | | **07 22 08.2** | **+0.5** |
| | comp=Z,4.7nm,1.0s,baz=158,slow=8.4,SNR=21 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **07 23 44.0** | **-0.5** |
| | comp=Z,0.8nm,0.8s,baz=151,slow=4.2,SNR=3.7 | | | | | | | | |
| ASAR | | | | LR | | LR | | 07 40 10.7 | |
| | comp=Z,129nm,18.4s,baz=156,slow=35 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.90** | **313** | P | | **P** | | **07 22 07.4** | **-0.2** |
| **VNA1** | **Neumayer--Stat** | **46.41** | **181** | P | | P | | 07 22 08.7 | -2.4 |
| **PMSA** | **Palmer Station** | **46.48** | **152** | LR | | LR | | 07 38 30.5 | |
| | comp=Z,188nm,19.4s,baz=198,slow=32 | | | | | | | | |
| **RAR** | **Rarotonga** | **46.98** | **41** | LR | | LR | | 07 37 08.5 | |
| | comp=Z,189nm,19.9s,baz=218,slow=30 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.23** | **315** | P | | **P** | | **07 22 32.1** | **-1.4** |
| | comp=Z,2.2nm,1.0s,baz=167,slow=6.7,SNR=6.0 | | | | | | | | |
| WRA | | | | LR | | LR | | 07 40 29.7 | |
| | comp=Z,214nm,19.9s,baz=143,slow=33 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.23** | **315** | P | | **P** | | **07 22 33.6** | **+0.1** |
| **AFI** | **Afiamalu** | **51.06** | **24** | LR | | LR | | 07 40 27.6 | |
| | comp=Z,89nm,21.7s,baz=161,slow=31 | | | | | | | | |
| **PAE** | **Paea** | **53.65** | **52** | *e*T | | T | | 08 20 05.2 | |
| | comp=Z,3.0nm,0.2s | | | | | | | | |
| **PPT2** | **Papeete2** | **53.71** | **52** | *e*LR | | LR | | 07 38 14.8 | |
| | comp=Z,406nm,26.2s,baz=192 | | | | | | | | |
| **PPT2** | **Papeete2** | **53.71** | **52** | *e*T | | T | | 08 20 10.6 | |
| | comp=Z,6.3nm,0.3s | | | | | | | | |
| **PPT** | **Papeete** | **53.73** | **52** | LR | | LR | | 07 41 20.9 | |
| | comp=Z,127nm,18.9s,baz=198,slow=31 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.93** | **306** | P | | P | | 07 23 06.8 | -1.8 |
| | comp=Z,3.4nm,1.1s,baz=164,slow=9.8,SNR=3.9 | | | | | | | | |
| **MEH** | **Mehetia** | **53.99** | **53** | *e*T | | T | | 08 20 31.6 | |
| | comp=Z,27nm,0.3s | | | | | | | | |
| **HNR** | **Honiara** | **54.07** | **349** | LR | | LR | | 07 42 53.9 | |
| | comp=Z,161nm,19.6s,baz=202,slow=32 | | | | | | | | |
| **USHA** | **Ushuaia** | **54.14** | **143** | LR | | LR | | 07 43 02.1 | |
| | comp=Z,181nm,19.0s,baz=224,slow=32 | | | | | | | | |
| **MG01** | **Puerto William** | **54.27** | **144** | P | | **P** | | **07 23 11.4** | **+0.7** |
| **KNRA** | **Kununurra** | **55.06** | **311** | P | | **P** | | **07 23 16.2** | **-0.6** |
| KNRA | | | | IAmb | | IAmb | | 07 23 19.1 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **PMG** | **Port Moresby** | **55.95** | **334** | LR | | LR | | 07 43 07.9 | |
| | comp=Z,152nm,21.5s,baz=167,slow=32 | | | | | | | | |
| **VAH** | **Vaihoa** | **56.58** | **53** | *e*T | | T | | 08 23 45.0 | |
| | comp=Z,130nm,0.3s | | | | | | | | |
| **JAY** | **Jayapura** | **64.05** | **328** | LR | | LR | | 07 49 20.7 | |
| | comp=Z,111nm,20.5s,baz=242,slow=33 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **65.23** | **58** | *e*LR | | LR | | 07 43 21.6 | |
| | comp=Z,72nm,26.2s | | | | | | | | |
| **PLCA** | **Paso Flores** | **66.12** | **134** | P | | **P** | | **07 24 32.0** | **-0.3** |
| | comp=Z,3.5nm,1.1s,baz=208,slow=8.6,SNR=5.3 | | | | | | | | |
| **PLCA** | **Paso Flores** | **66.12** | **134** | P | | **P** | | **07 24 32.2** | **0.0** |
| **LC01** | **Cunco** | **67.34** | **132** | P | | **P** | | **07 24 40.0** | **0.0** |
| **KAPI** | **Kappang** | **68.14** | **306** | LR | | LR | | 07 52 23.3 | |
| | comp=Z,70nm,19.6s,baz=175,slow=34 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **69.38** | **125** | T | | T | | 08 40 47.2 | |
| | baz=205 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **69.38** | **125** | T | | T | | 08 40 49.3 | |
| | baz=205 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **69.40** | **125** | T | | T | | 08 40 51.0 | |
| | baz=205 | | | | | | | | |
| **LEM** | **Lembang** | **71.28** | **293** | LR | | LR | | 07 51 37.3 | |
| | comp=Z,148nm,21.4s,baz=166,slow=32 | | | | | | | | |
| **DAV** | **Davao City (W)** | **77.42** | **316** | LR | | LR | | 08 01 51.3 | |
| | comp=Z,58nm,18.3s,baz=352,slow=37 | | | | | | | | |
| **AC02** | **Maricunga** | **79.27** | **129** | P | | **P** | | **07 25 50.9** | **-0.2** |
| **ITQB** | **Itaqui** | **80.62** | **141** | P | | **P** | | **07 25 56.1** | **-1.6** |
| ITQB | | | | IAmb | | IAmb | | 07 26 00.2 | |
| | comp=Z,29nm,1.2s | | | | | | | | |
| **LVC** | **Limon Verde** | **83.22** | **128** | P | | **P** | | **07 26 12.1** | **+0.1** |
| LVC | | | | IAmb | | IAmb | | 07 26 15.2 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **CPUP** | **Villa Florida** | **83.56** | **139** | P | | **P** | | **07 26 13.3** | **+0.2** |
| | comp=Z,5.8nm,1.0s,baz=234,slow=3.6,SNR=5.9 | | | | | | | | |
| **CPUP** | **Villa Florida** | **83.56** | **139** | P | | **P** | | **07 26 12.4** | **-0.8** |
| CPUP | | | | IAmb | | IAmb | | 07 26 15.7 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **PSI** | **Prapat** | **83.62** | **289** | LR | | LR | | 07 58 40.8 | |
| | comp=Z,92nm,19.9s,baz=96,slow=32 | | | | | | | | |
| **BOSA** | **Boshof** | **84.06** | **212** | LR | | LR | | 08 01 57.4 | |
| | comp=Z,129nm,19.6s,baz=166,slow=34 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **86.16** | **261** | T | | T | | 09 02 28.0 | |
| | baz=153,slow=76,SNR=42 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **86.16** | **261** | T | | T | | 09 02 29.8 | |
| | baz=153,slow=76,SNR=18 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **86.17** | **261** | T | | T | | 09 02 29.5 | |
| | baz=153,slow=76,SNR=47 | | | | | | | | |
| **LBTB** | **Lobatse** | **87.44** | **213** | LR | | LR | | 08 02 55.4 | |
| | comp=Z,115nm,20.6s,baz=158,slow=34 | | | | | | | | |
| **OPA** | **Opana** | **88.51** | **30** | P | | **P** | | **07 26 38.1** | **+0.7** |
| **LPAZ** | **La Paz** | **89.31** | **126** | P | | **P** | | **07 26 43.1** | **+0.8** |
| | comp=Z,3.7nm,1.1s,baz=153,slow=1.7,SNR=5.7 | | | | | | | | |
| **LPAZ** | **La Paz** | **89.31** | **126** | P | | **P** | | **07 26 39.9** | **-2.4** |
| LPAZ | | | | IAmb | | IAmb | | 07 26 44.6 | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **NNA** | **Nana** | **89.87** | **117** | LR | | LR | | 07 57 02.3 | |
| | comp=Z,101nm,20.0s,baz=209,slow=29 | | | | | | | | |
| **MATP** | **Matopo** | **91.07** | **217** | LR | | LR | | 08 05 22.0 | |
| | comp=Z,94nm,18.7s,baz=154,slow=34 | | | | | | | | |
| **ATAH** | **Atahualpa** | **93.62** | **113** | LR | | LR | | 07 59 44.0 | |
| | comp=Z,151nm,19.1s,baz=231,slow=30 | | | | | | | | |
| **TSUM** | **Tsumeb** | **94.86** | **207** | LR | | LR | | 08 07 03.1 | |
| | comp=Z,534nm,21.8s,baz=154,slow=34 | | | | | | | | |
| **JOW** | **Kunigami** | **95.34** | **324** | LR | | LR | | 08 09 39.4 | |
| | comp=Z,44nm,18.4s,baz=154,slow=35 | | | | | | | | |
| **LSZ** | **Lusaka** | **96.06** | **218** | LR | | LR | | 08 07 28.7 | |
| | comp=Z,175nm,20.2s,baz=156,slow=34 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **97.68** | **296** | LR | | LR | | 08 08 57.7 | |
| | comp=Z,68nm,19.8s,baz=135,slow=34 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.21** | **196** | PKP | | **PKPdf** | | **07 32 54.0** | **+0.6** |
| | comp=Z,3.8nm,1.2s,baz=143,slow=2.0,SNR=6.4 | | | | | | | | |
| **ILAR** | **Eielson Array** | **131.75** | **24** | PKP | | **PKPdf** | | **07 32 55.7** | **-0.9** |
| | comp=Z,1.5nm,1.1s,baz=230,slow=2.4,SNR=7.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **137.74** | **42** | PKP | | **PKP

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMMC** | **Simmler** | **0.13** | **192** | P | **Pg** | **07 21 01.3** | **-0.2** |
| | baz=6.4,SNR=1000 | | | | | | |
| SMMC | | | | S | **Sg** | **07 21 04.4** | **+0.4** |
| | baz=6.4 | | | | | | |
| **TSCN** | **Private Proper** | **0.33** | **288** | | **Pg** | **07 21 04.6** | **0.0** |
| **TRAM** | **Private Proper** | **0.34** | **313** | | **Pg** | **07 21 04.6** | **-0.3** |
| TRAM | | | | | **Sg** | **07 21 10.0** | **+0.2** |
| **THS** | **South End of C** | **0.35** | **323** | | **Pg** | **07 21 05.1** | **0.0** |
| **PAGB** | **Antelope Grade** | **0.37** | **321** | | **Pg** | **07 21 04.9** | **-0.5** |
| **PKM** | **Mcpherson Peak** | **0.56** | **167** | P | **Pg** | **07 21 09.0** | **0.0** |
| | baz=347,SNR=158 | | | | | | |
| PKM | | | | S | **Sg** | **07 21 16.7** | **+0.2** |
| | baz=347 | | | | | | |
| **PKD** | **Bear Valley Ra** | **0.69** | **317** | | **Pg** | **07 21 10.4** | **-0.8** |
| **PMLM** | **Mount Lospe** | **0.76** | **224** | | **Pb** | **07 21 12.7** | **+0.1** |
| **RAMR** | **Ramage Ranch** | **0.76** | **285** | | **Pg** | **07 21 12.0** | **-0.6** |
| RAMR | | | | | **Sb** | **07 21 23.9** | **+1.0** |
| **VES** | **Vestal, Richgr** | **0.82** | **61** | P | **Pg** | **07 21 13.0** | **-0.7** |
| | baz=243,SNR=90 | | | | | | |
| VES | | | | S | **Sg** | **07 21 24.6** | **+0.1** |
| | baz=243 | | | | | | |
| **ARVC** | **Arvin** | **0.98** | **108** | P | **Pb** | **07 21 15.6** | **-0.8** |
| | baz=290,SNR=84 | | | | | | |
| ARVC | | | | S | **Sb** | **07 21 29.0** | **0.0** |
| | baz=290 | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.00** | **28** | P | **Pb** | **07 21 15.7** | **-0.9** |
| | baz=209,SNR=30 | | | | | | |
| VOG | | | | S | **Sb** | **07 21 29.6** | **+0.1** |
| | baz=209 | | | | | | |
| **SBC** | **Santa Barbara** | **1.02** | **168** | P | **Pb** | **07 21 16.9** | **-0.1** |
| | baz=348,SNR=55 | | | | | | |
| **PMPB** | **Monarch Peak** | **1.03** | **319** | | **Pb** | **07 21 16.4** | **-0.9** |
| PMPB | | | | IAML | | 07 21 38.8 | |
| | comp=E,737nm,0.7s | | | | | | |
| PMPB | | | | IAML | | 07 21 46.7 | |
| | comp=N,808nm,0.9s | | | | | | |
| **ISA** | **Isabella, Lake** | **1.23** | **79** | Pn | **Pn** | **07 21 19.8** | **-0.6** |
| **ISA** | **Isabella, Lake** | **1.23** | **79** | P | **Pn** | **07 21 19.7** | **-0.7** |
| | baz=261,SNR=218 | | | | | | |
| ISA | | | | S | **Sb** | **07 21 36.0** | **-0.5** |
| | baz=261 | | | | | | |
| **OSI** | **Osito Audit: C** | **1.31** | **129** | | **Pn** | **07 21 21.4** | **0.0** |
| OSI | | | | IAML | | 07 21 48.0 | |
| | comp=E,438nm,0.9s | | | | | | |
| **OSI** | **Osito Audit: C** | **1.31** | **129** | P | **Pn** | **07 21 21.0** | **-0.5** |
| | baz=310,SNR=17 | | | | | | |
| OSI | | | | S | **Sb** | **07 21 38.1** | **-0.5** |
| | baz=310 | | | | | | |
| **BBGB** | **Big Mountain B** | **1.43** | **323** | | **Pn** | **07 21 23.4** | **+0.2** |
| **HELL** | **Mitchell Peak,** | **1.45** | **31** | | **Pn** | **07 21 22.7** | **-0.7** |
| **HAST** | **Hastings Reser** | **1.60** | **307** | | **Pn** | **07 21 24.1** | **-1.3** |
| **EDW2** | **Edwards Air Fo** | **1.71** | **109** | Pb | **Pn** | **07 21 27.9** | **+0.9** |
| | baz=290 | | | | | | |
| **SAO** | **San Andreas Ge** | **1.79** | **318** | | **Pn** | **07 21 27.0** | **-0.9** |
| **DECC** | **Green Verdugo** | **1.79** | **131** | Pb | **Pb** | **07 21 29.5** | **-0.7** |
| | baz=312 | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.82** | **56** | Pb | **Pn** | **07 21 29.9** | **+1.2** |
| | baz=238 | | | | | | |
| CWC | | | | Sb | **Sb** | **07 21 54.1** | **+0.5** |
| | baz=238 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.86** | **88** | P | **Pn** | **07 21 29.1** | **0.0** |
| | baz=270 | | | | | | |
| LRMC | | | | Sb | **Sb** | **07 21 55.1** | **+0.5** |
| | baz=270 | | | | | | |
| **PASC** | **Pasadena Art C** | **1.94** | **130** | | **Pn** | **07 21 30.7** | **+0.7** |
| PASC | | | | IAML | | 07 22 09.7 | |
| | comp=N,102nm,0.7s | | | | | | |
| PASC | | | | IAML | | 07 22 11.3 | |
| | comp=E,140nm,0.5s | | | | | | |
| **MWC** | **Mount Wilson** | **1.98** | **127** | | **Pn** | **07 21 31.2** | **+0.3** |
| MWC | | | | IAML | | 07 22 05.0 | |
| | comp=E,236nm,0.5s | | | | | | |
| **MPMC** | **Manual Prospec** | **2.10** | **72** | Pb | **Pb** | **07 21 35.1** | **-0.6** |
| | baz=254 | | | | | | |
| MPMC | | | | Sb | **Sb** | **07 22 02.4** | **+0.7** |
| | baz=254 | | | | | | |
| **TIN** | **Tinemaha, Big** | **2.13** | **41** | Pb | **Pb** | **07 21 35.2** | **-0.9** |
| | baz=222 | | | | | | |
| TIN | | | | Sb | **Sb** | **07 22 03.0** | **+0.6** |
| | baz=222 | | | | | | |
| **FMP** | **Fort Macarthur** | **2.21** | **141** | S | **Sn** | **07 22 00.8** | **+0.1** |
| | baz=322 | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.22** | **170** | P | **Pn** | **07 21 34.2** | **+0.3** |
| | baz=351 | | | | | | |
| SNCC | | | | S | **Sn** | **07 22 01.0** | **0.0** |
| | baz=351 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **2.37** | **22** | Pb | **Pb** | **07 21 39.0** | **-1.1** |
| | baz=203 | | | | | | |
| MLAC | | | | Sb | **Sb** | **07 22 10.9** | **+1.6** |
| | baz=203 | | | | | | |
| **CIS** | **Catalina Islan** | **2.40** | **147** | P | **Pn** | **07 21 36.5** | **0.0** |
| | baz=328 | | | | | | |
| CIS | | | | S | **Sn** | **07 22 05.0** | **-0.6** |
| | baz=328 | | | | | | |
| **RRX** | **Edison Barstow** | **2.50** | **102** | S | **Sn** | **07 22 08.1** | **+0.2** |
| | baz=284 | | | | | | |
| **QSM** | **Queen of Sheba** | **2.57** | **77** | | **Pn** | **07 21 39.2** | **+0.4** |
| QSM | | | | IAML | | 07 22 25.7 | |
| | comp=E,117nm,0.8s | | | | | | |
| QSM | | | | IAML | | 07 22 26.6 | |
| | comp=N,119nm,0.7s | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.58** | **92** | | **Pn** | **07 21 39.0** | **0.0** |
| GSC | | | | IAML | | 07 22 23.9 | |
| | comp=N,107nm,0.9s | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.58** | **92** | S | **Sn** | **07 22 10.7** | **+0.5** |
| | baz=274 | | | | | | |
| **LCH** | **Last Change Ra** | **2.59** | **46** | | **Pn** | **07 21 40.2** | **+1.1** |
| LCH | | | | IAML | | 07 22 23.9 | |
| | comp=E,112nm,1.0s | | | | | | |
| LCH | | | | IAML | | 07 22 31.4 | |
| | comp=N,74nm,0.7s | | | | | | |
| **CMB** | **Columbia Colle** | **2.61** | **353** | | **Pn** | **07 21 40.3** | **+0.9** |
| **GWY** | **Greenwater Val** | **2.78** | **74** | | **Pn** | **07 21 41.8** | **0.0** |
| GWY | | | | IAML | | 07 22 29.2 | |
| | comp=N,98nm,0.8s | | | | | | |
| GWY | | | | IAML | | 07 22 32.9 | |
| | comp=E,86nm,1.4s | | | | | | |
| **MURC** | **Murrieta** | **2.93** | **128** | P | **Pn** | **07 21 43.8** | **0.0** |
| | baz=310 | | | | | | |
| **HEC** | **Hector,Ludlow** | **3.04** | **101** | P | **Pn** | **07 21 45.2** | **-0.1** |
| | baz=283,SNR=11 | | | | | | |
| **LHV** | **Little Huntoon** | **3.04** | **22** | | **Pn** | **07 21 46.7** | **+1.6** |
| LHV | | | | IAML | | 07 22 51.7 | |
| | comp=E,88nm,0.8s | | | | | | |
| LHV | | | | IAML | | 07 22 51.7 | |
| | comp=N,72nm,0.7s | | | | | | |
| **TUQ** | **Turquoise Moun** | **3.30** | **89** | P | **Pn** | **07 21 48.7** | **-0.2** |
| | baz=272,SNR=9.3 | | | | | | |
| **TPNV** | **Topopah Spring** | **3.36** | **62** | | **Pn** | **07 21 51.0** | **+1.3** |
| TPNV | | | | IAML | | 07 22 44.8 | |
| | comp=N,25nm,0.8s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.36** | **62** | P | **Pn** | **07 21 50.5** | **+0.7** |
| | baz=245,SNR=14 | | | | | | |
| **RYN** | **Ryan** | **3.38** | **19** | | **Pn** | **07 21 51.7** | **+1.6** |
| RYN | | | | IAML | | 07 22 58.7 | |
| | comp=E,23nm,0.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.42** | **121** | | **Pn** | **07 21 51.1** | **+0.6** |
| **PFO** | **Pinyon Flats O** | **3.42** | **121** | P | **Pn** | **07 21 50.4** | **-0.2** |
| | baz=304 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **3.57** | **113** | P | **Pn** | **07 21 52.5** | **-0.1** |
| | baz=295 | | | | | | |
| **GMRC** | **Granite Mounta** | **3.59** | **99** | P | **Pn** | **07 21 51.8** | **-1.0** |
| | baz=282 | | | | | | |
| **BAR** | **Barrett** | **3.88** | **134** | | **Pn** | **07 21 57.2** | **+0.5** |
| BAR | | | | IAML | | 07 22 42.3 | |
| | comp=N,15nm,0.8s | | | | | | |
| BAR | | | | IAML | | 07 22 45.2 | |
| | comp=E,22nm,0.4s | | | | | | |
| **MONP2** | **Monument Peak** | **3.88** | **130** | P | **Pn** | **07 21 57.5** | **+0.5** |
| | baz=312 | | | | | | |
| **KVN** | **Kaiserville** | **3.90** | **22** | | **Pn** | **07 21 58.5** | **+1.3** |
| **SHPR** | **Sheep Range** | **4.04** | **73** | | **Pn** | **07 22 01.2** | **+2.2** |
| SHPR | | | | IAML | | 07 23 08.0 | |
| | comp=E,16nm,0.8s | | | | | | |
| **ORV** | **Oroville** | **4.28** | **344** | | **Pn** | **07 22 02.9** | **+0.6** |
| **PRN** | **Pahroc Range** | **4.42** | **62** | | **Pn** | **07 22 06.1** | **+1.8** |
| PRN | | | | IAML | | 07 23 24.1 | |
| | comp=E,27nm,1.0s | | | | | | |
| PRN | | | | IAML | | 07 23 34.9 | |
| | comp=N,32nm,1.2s | | | | | | |

*NNC **04** 07:22:02.6±0.4,50.°01N×78.°70E,h0km,mb3.5,mpv3.2, Error ellipse: s-maj=4.0km s-min=2.0km az=66.0,*

*Suspected Mining explosion.*
*IDC **04** 07:22:04.1±0.8,50.°08N×78.°80E,h0km,mb1 2.8/3, mb1mx2.4/67,mbtmp2.8/3,ML2.5/3,Error ellipse: s-maj=13.3km s-min=5.7km az=59.0*
**ISC 04 07:22:03.7**±0.8,**50.06N**±0.05°×**78.76E**±0.04,**h0km,n22,**
**σ0s88/36,18C-8D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.55** | **344** | ⇓P | **Pg** | **07 22 14.3** | **+0.1** |
| KUR07 | | | | ⇑S | **Sb** | **07 22 23.3** | **-1.3** |
| **KUR06** | **Kurchatov Arra** | **0.57** | **345** | ⇑P | **Pg** | **07 22 14.5** | **-0.1** |
| KUR06 | | | | ⇑S | **Sb** | **07 22 23.9** | **-1.2** |
| **KUR14** | **Kurchatov Arra** | **0.57** | **349** | ⇑P | **Pg** | **07 22 14.6** | **0.0** |
| KUR14 | | | | ⇑S | **Sb** | **07 22 23.8** | **-1.4** |
| **KUR15** | **Kurchatov Arra** | **0.58** | **348** | ⇑P | **Pg** | **07 22 14.7** | **0.0** |
| KUR15 | | | | ⇑S | **Sb** | **07 22 24.1** | **-1.4** |
| **KURBB** | **Kurchatov Arra** | **0.58** | **346** | Pg | **Pg** | **07 22 14.8** | **-0.2** |
| | 2.7nm,0.3s,baz=167,slow=17,SNR=80 | | | | | | |
| KURBB | | | | Lg | Lg | 07 22 23.6 | |
| | 4.8nm,0.3s,baz=144,slow=44,SNR=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.58** | **346** | ⇓P | **Pg** | **07 22 14.6** | **-0.3** |
| | 20nm,0.4s | | | | | | |
| KURBB | | | | ⇓S | **Sg** | **07 22 23.7** | **+1.2** |
| | 91nm,0.5s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.59** | **344** | ⇑P | **Pg** | **07 22 14.9** | **-0.1** |
| KUR16 | | | | ⇑S | **Sb** | **07 22 24.6** | **-1.4** |
| **KUR05** | **Kurchatov Arra** | **0.60** | **347** | ⇑P | **Pg** | **07 22 15.2** | **-0.1** |
| KUR05 | | | | ⇑S | **Sg** | **07 22 24.5** | **+1.4** |
| **KUR17** | **Kurchatov Arra** | **0.60** | **342** | ⇓P | **Pg** | **07 22 15.3** | **0.0** |
| KUR17 | | | | ⇓S | **Sb** | **07 22 25.0** | **-1.3** |
| **KUR04** | **Kurchatov Arra** | **0.62** | **347** | ⇑P | **Pg** | **07 22 15.5** | **-0.1** |
| KUR04 | | | | ⇑S | **Sg** | **07 22 25.1** | **+1.4** |
| **KURK** | **Kurchatov** | **0.67** | **352** | P | **Pg** | **07 22 15.6** | **-0.9** |
| KURK | | | | S | **Sg** | **07 22 26.2** | **+1.1** |
| **SEM** | **Semipalatinsk** | **1.02** | **69** | P | **Pg** | **07 22 23.0** | **-0.3** |
| | 3.9nm,0.1s | | | | | | |
| SEM | | | | S | **Sb** | **07 22 38.5** | **+0.1** |
| | 20nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **3.89** | **145** | ⇑Pg | **Pb** | **07 23 13.6** | **+0.4** |
| | 2.2nm,0.6s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 07 24 03.5 | |
| | 8.7nm,0.5s | | | | | | |
| **BRZS** | **Berezniki** | **3.92** | **271** | Pg | **Pb** | **07 23 14.6** | **+1.0** |
| | 2.7nm,0.1s | | | | | | |
| BRZS | | | | Lg | Lg | 07 24 06.9 | |
| | 4.6nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **4.02** | **143** | Pn | **Pn** | **07 23 07.0** | **+0.4** |
| | 0.7nm,0.5s,baz=325,slow=10,SNR=17 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **07 23 14.7** | **-0.7** |
| | 1.6nm,0.5s,baz=325,slow=14,SNR=17 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 24 09.5 | |
| | 12nm,0.6s,baz=329,slow=26,SNR=15 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.02** | **143** | Pn | **Pn** | **07 23 07.2** | **+0.6** |
| | 0.3nm,0.3s,baz=322,slow=10,SNR=18 | | | | | | |
| MKAR | | | | Pg | **Pb** | **07 23 15.2** | **-0.3** |
| | 0.9nm,0.3s,baz=322,slow=16,SNR=13 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 23 54.8** | **+0.4** |
| | 0.6nm,0.3s,baz=329,slow=21,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 24 09.1 | |
| | 2.5nm,0.3s,baz=331,slow=26,SNR=15 | | | | | | |
| **OTUK** | **Ortayu** | **4.59** | **249** | ⇑Pn | **Pn** | **07 23 13.9** | **-0.4** |
| | 1.0nm,0.3s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 24 25.7 | |
| | 4.2nm,0.6s | | | | | | |
| **ZSN** | **Zaisan** | **4.81** | **121** | Pg | **Pb** | **07 23 27.8** | **-1.0** |
| | 2.5nm,0.2s | | | | | | |
| ZSN | | | | Lg | Lg | 07 24 29.5 | |
| | 7.0nm,0.6s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.40** | **42** | *i* | | 07 54 30.0 | |
| | baz=224,slow=326,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.40** | **42** | Pn | **Pn** | **07 23 27.0** | **+1.5** |
| | 0.7nm,0.3s,baz=229,slow=14,SNR=9.6 | | | | | | |
| ZALV | | | | Lg | Lg | 07 24 53.3 | |
| | 0.3nm,0.3s,baz=230,slow=37,SNR=4.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **6.01** | **303** | Pn | **Pn** | **07 23 32.8** | **-1.0** |
| | 0.1nm,0.3s,baz=102,slow=14,SNR=1.6 | | | | | | |
| BVAR | | | | Sn | **Sn** | **07 24 43.4** | **+0.2** |
| | 0.7nm,0.3s,baz=95,slow=30,SNR=12 | | | | | | |
| BVAR | | | | Lg | Lg | 07 25 13.1 | |
| | 1.0nm,0.3s,baz=115,slow=30,SNR=3.7 | | | | | | |
| **BRVK** | **Borovoye** | **6.08** | **303** | ⇑Sn | **Sn** | **07 24 44.3** | **-0.7** |
| | 2.2nm,0.5s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 07 25 17.2 | |
| | 3.5nm,0.7s | | | | | | |

*CNRM **04** 07:27:09.2,35.°67N×3.°66W,h0km,ml2.9*
*INMG **04** 07:27:10.8±1.4,35.°50N×3.°84W,h0km,ML2.5,Error ellipse: s-maj=3.0km s-min=2.8km az=45.0*
*IGIL **04** 07:27:11.4,35.°49N×3.°82W,h0km,ML2.7*
**ISC 04 07:27:09.8**±1.3,**35.50N**±0.04×**3.70W**±0.04,**h15**km±9km,
**n38,σ1s52/56,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.34** | **214** | P | **Pg** | **07 27 16.8** | **0.0** |
| PALE | | | | S | **Sg** | **07 27 21.3** | **-0.4** |
| **AKLM** | **AKL** | **1.00** | **188** | P | **Pb** | **07 27 30.1** | **+1.2** |
| **AKLM** | **AKL** | **1.00** | **188** | P | **Pg** | **07 27 27.7** | **-1.4** |
| AKLM | | | | S | **Sg** | **07 27 41.4** | **-0.7** |
| **CHAS** | **Isla Isabel II** | **1.09** | **106** | P | **Pb** | **07 27 29.8** | **-0.5** |
| CHAS | | | | S | **Sb** | **07 27 43.9** | **-0.4** |
| **CHEFC** | **Chefchaouen** | **1.40** | **254** | P | **Pg** | **07 27 37.0** | **+0.3** |
| **CHEFC** | **Chefchaouen** | **1.40** | **254** | P | **Pn** | **07 27 34.9** | **0.0** |
| CHEFC | | | | S | **Sn** | **07 27 55.1** | **+2.1** |
| **JBK** | **JBK** | **1.49** | **141** | P | **Pn** | **07 27 39.0** | **+2.7** |
| **JBK** | **JBK** | **1.49** | **141** | P | **Pn** | **07 27 36.1** | **-0.1** |
| JBK | | | | S | **Sn** | **07 27 53.7** | **-1.8** |
| **SICH** | **Sidi Chahed** | **1.92** | **224** | S | **Sn** | **07 28 06.8** | **+0.8** |
| **LCRM** | **LCR** | **2.04** | **208** | P | **Pg** | **07 27 49.0** | **0.0** |
| **LCRM** | **LCR** | **2.04** | **208** | P | **Pn** | **07 27 44.1** | **+0.2** |
| LCRM | | | | S | **Sn** | **07 28 09.9** | **+0.7** |
| **MD31** | **MD31** | **2.77** | **199** | P | **Pn** | **07 27 54.2** | **+0.5** |
| **MDT** | **Midelt** | **2.78** | **196** | P | **Pn** | **07 27 54.4** | **+0.5** |
| **TDRA** | **Tendrara** | **2.82** | **150** | P | **Pn** | **07 27 56.0** | **+1.5** |
| **PVAQ** | **Vaqueiros** | **3.75** | **302** | *e*Pn | **Pn** | **07 28 07.8** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **07 28 49.6** | **-1.5** |
| PVAQ | | | | A | A | 07 28 52.0 | |
| | 13nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **302** | P | **Pn** | **07 28 07.7** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.75** | **302** | P | **Pn** | **07 28 07.7** | **+0.5** |
| PVAQ | | | | S | **Sn** | **07 28 49.1** | **-2.0** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **298** | *e*Pn | **Pn** | **07 28 08.4** | **+0.1** |
| PBDV | | | | *e*Sn | **Sn** | **07 28 51.2** | **-1.9** |
| PBDV | | | | A | A | 07 28 53.9 | |
| | 7.2nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **4.09** | **303** | *e*Pn | **Pn** | **07 28 12.9** | **+1.1** |
| PCVE | | | | *e*Sn | **Sn** | **07 28 58.3** | **-1.1** |
| PCVE | | | | A | A | 07 29 04.0 | |
| | 6.6nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **4.19** | **308** | *e*Sn | **Sn** | **07 29 00.8** | **-1.0** |
| PBEJ | | | | A | A | 07 29 05.2 | |
| | 4.4nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **304** | *e*P | **Pn** | **07 28 15.3** | **+0.4** |
| MESJ | | | | *e*S | **Sn** | **07 29 02.1** | **-3.0** |
| MESJ | | | | IAML | | 07 29 09.2 | |
| | comp=N,12nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **304** | *e*Pn | **Pn** | **07 28 16.1** | **+1.2** |
| MESJ | | | | *e*Sn | **Sn** | **07 29 03.9** | **-1.1** |
| MESJ | | | | A | A | 07 29 08.7 | |
| | comp=N,6.1nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **296** | *e*S | **Sn** | **07 29 03.4** | **-3.3** |
| MORF | | | | IAML | | 07 29 07.2 | |
| | comp=E,19nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **296** | *e*Sn | **Sn** | **07 29 05.7** | **-0.9** |
| MORF | | | | A | A | 07 29 08.6 | |
| | comp=E,8.5nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.45** | **293** | *e*Sn | **Sn** | **07 29 05.2** | **-3.0** |
| PFVI | | | | A | A | 07 29 08.5 | |
| | comp=E,10nm,0.6s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.53** | **298** | *e*Pn | **Pn** | **07 28 19.4** | **+1.5** |
| PTEO | | | | *e*Sn | **Sn** | **07 29 09.2** | **-1.1** |
| PTEO | | | | A | A | 07 29 12.8 | |
| | comp=E,7.8nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.58** | **318** | *e*Pn | **Pn** | **07 28 20.8** | **+2.3** |
| PESTR | | | | *e*Sn | **Sn** | **07 29 10.2** | **-1.2** |
| PESTR | | | | A | A | 07 29 16.7 | |
| | comp=E,4.7nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.58** | **318** | P | **Pn** | **07 28 19.8** | **+1.3** |
| **EVO** | **Evora** | **4.59** | **313** | *e*Pn | **Pn** | **07 28 19.9** | **+1.2** |
| EVO | | | | *e*Sn | **Sn** | **07 29 10.5** | **-1.2** |
| EVO | | | | A | A | 07 29 13.4 | |
| | comp=E,6.7nm,0.5s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNCL** | **Nicolau / Gran** | **4.67** | **305** | *e*Pn | **Pn** | **07 28 20.3** | **+0.5** |
| PNCL | | | | *e*Sn | **Sn** | **07 29 12.9** | **-0.8** |
| PNCL | | | | A | A | 07 29 13.7 | |
| | comp=E,4.7nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **4.90** | **324** | *e*Pn | **Pn** | **07 28 24.0** | **+1.1** |
| PMRV | | | | *e*Sn | **Sn** | **07 29 19.0** | **-0.4** |
| PMRV | | | | A | A | 07 29 26.2 | |
| | comp=E,2.2nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **5.07** | **316** | *e*Pn | **Pn** | **07 28 27.5** | **+2.2** |
| PMTG | | | | *e*Sn | **Sn** | **07 29 22.9** | **-0.6** |
| **PCBR** | **Castelo Branco** | **5.27** | **326** | *e*Pn | **Pn** | **07 28 30.4** | **+2.4** |
| **OUK** | **Oukaimeden** | **5.52** | **220** | P | **Pn** | **07 28 31.5** | **-0.3** |
| **PMAFR** | **Mafra** | **5.63** | **309** | *e*Sn | **Sn** | **07 29 35.8** | **-1.6** |
| PMAFR | | | | A | A | 07 29 43.5 | |
| | comp=E,15nm,0.1s | | | | | | |
| **PSBE** | **So Bento** | **5.70** | **316** | *e*Pn | **Pn** | **07 28 36.3** | **+2.4** |
| **MVO** | **Moncorvo** | **6.23** | **336** | *e*Pn | **Pn** | **07 28 43.9** | **+2.6** |
| **PBRG** | **Braganca** | **6.73** | **340** | *e*Pn | **Pn** | **07 28 50.7** | **+2.6** |

*IDC **04** 07:28:15.1±2.7,36.°27N×70.°50E,h192km±25km,mb3.6/13, mb1 3.6/19,mb1mx3.2/70,mbtmp4.1/19,Error ellipse: s-maj=18.3km s-min=15.2km az=173.0*
*MOS **04** 07:28:17.4±0.8,36.°51N×70.°50E,h221km,mb4.5/4,Error ellipse: s-maj=15.1km s-min=6.4km az=79.5*
*NEIC **04** 07:28:18.2±2.2,36.°54N±0.°04×70.°40E±0.°09,h215km±7km, mb4.3/9,Error ellipse: s-maj=10.8km s-min=5.2km az=72.0.*
**ISC 04 07:28:17.4**±0.5,**36.59N**±0.05°×**70.54E**±0.06,**h204**km,**n89,**
**σ1s89/89,mb3.9/14,5C-2D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHGR** | **Chuyangaron** | **2.34** | **332** | Pn | **Pn** | **07 29 01.1** | **+1.3** |
| **KBL** | **Kabul** | **2.38** | **211** | PN | **Pn** | **07 29 00.8** | **+0.3** |
| **KBL** | **Kabul** | **2.38** | **211** | Pn | **Pn** | **07 29 00.8** | **+0.3** |
| **GAR** | **Garm** | **2.41** | **356** | | **Pn** | **07 29 02.5** | **+1.9** |
| **CEP** | **Cherat** | **2.98** | **157** | P | **Pn** | **07 29 08.4** | **+1.2** |
| CEP | | | | S | **S** | **07 29 46.0** | **+0.5** |
| **BTK** | **Batken** | **3.47** | **4** | PN | **Pn** | **07 29 16.0** | **+3.2** |
| **BTK** | **Batken** | **3.47** | **4** | Pn | **Pn** | **07 29 16.0** | **+3.2** |
| **CHCP** | **Chirah Chowk** | **3.68** | **142** | P | **Pn** | **07 29 17.2** | **+1.7** |
| **NIL** | **Nilore** | **3.68** | **142** | PN | **Pn** | **07 29 17.3** | **+1.8** |
| **NIL** | **Nilore** | **3.68** | **142** | | **Pn** | **07 29 17.3** | **+1.8** |
| **THW** | **Thamme Wali** | **3.91** | **165** | P | **Pn** | **07 29 19.0** | **+0.7** |
| **KSH** | **Kashi** | **5.19** | **54** | Pn | **Pn** | **07 29 32.2** | **-2.2** |
| KSH | | | | Sn | **S** | **07 30 28.4** | **-6.4** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,89nm,0.4s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,180nm,0.7s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,100nm,0.7s | | | | | | |
| **IUG** | **Iuzhnay** | **5.56** | **356** | *e*PN | **Pn** | **07 29 41.1** | **+2.0** |
| **AML** | **Almayashu** | **6.05** | **23** | P | **Pn** | **07 29 47.3** | **+1.7** |
| | SNR=403 | | | | | | |
| **UCH** | **Uchtor** | **6.42** | **27** | P | **Pn** | **07 29 52.3** | **+1.9** |
| | SNR=116 | | | | | | |
| **KKAR** | **Karatay Array** | **6.51** | **360** | PN | **Pn** | **07 29 51.8** | **+0.7** |
| **KKAR** | **Karatay Array** | **6.51** | **360** | Pn | **Pn** | **07 29 51.8** | **+0.7** |
| **KK09** | **Karatay Array** | **6.53** | **360** | ⇓Pn | **Pn** | **07 29 52.4** | **+1.0** |
| | comp=E,6.7nm,0.3s,baz=172,slow=12 | | | | | | |
| KK09 | | | | ⇑Sn | **S** | **07 31 01.6** | **-4.2** |
| | comp=E,8.9nm,0.4s | | | | | | |
| KK09 | | | | ⇓Lg | Lg | 07 31 29.7 | |
| | comp=E,9.4nm,0.5s,baz=176,slow=26 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.56** | **21** | P | **Pn** | **07 29 54.0** | **+2.1** |
| | SNR=42 | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **26** | P | **Pn** | **07 29 56.7** | **+2.0** |
| | comp=E,14nm,0.3s,baz=199,slow=7.0,SNR=141 | | | | | | |
| AAK | | | | S | **S** | **07 31 12.3** | **+0.6** |
| | comp=E,5.2nm,0.3s,baz=328,slow=21,SNR=22 | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **26** | P | **Pn** | **07 29 56.8** | **+2.0** |
| | SNR=66 | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **26** | ⇑Pn | **Pn** | **07 29 56.4** | **+1.7** |
| | comp=E,22nm,0.4s | | | | | | |
| AAK | | | | ⇑Sn | **S** | **07 31 07.9** | **-3.8** |
| | comp=E,34nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **6.95** | **28** | P | **Pn** | **07 29 59.4** | **+2.3** |
| | SNR=24 | | | | | | |
| **HRA** | **Herat** | **7.11** | **254** | Pn | **Pn** | **07 29 59.0** | **-0.3** |
| **ULHL** | **Ulahol** | **7.17** | **36** | P | **Pn** | **07 30 01.4** | **+1.4** |
| | SNR=29 | | | | | | |
| **CHMS** | **Chumysh** | **7.17** | **26** | P | **Pn** | **07 30 01.5** | **+1.6** |
| | SNR=11 | | | | | | |
| **BOOM** | **Boomskoye usch** | **7.22** | **34** | PN | **Pn** | **07 30 01.7** | **+1.1** |
| **BOOM** | **Boomskoye usch** | **7.22** | **34** | | **Pn** | **07 30 01.7** | **+1.1** |
| **USP** | **Ospenovka** | **7.33** | **23** | P | **Pn** | **07 30 04.3** | **+2.4** |
| | SNR=18 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.42** | **30** | P | **Pn** | **07 30 04.8** | **+1.6** |
| | SNR=74 | | | | | | |
| **KDJ** | **Kajisay** | **7.55** | **41** | PN | **Pn** | **07 30 06.3** | **+1.4** |
| **KDJ** | **Kajisay** | **7.55** | **41** | | **Pn** | **07 30 06.3** | **+1.4** |
| **TARG** | **Taragay, Kyrgy** | **7.63** | **46** | Pn | **Pn** | **07 30 06.8** | **+0.7** |
| **PRZ** | **Przheval'sk** | **8.46** | **43** | PN | **Pn** | **07 30 18.5** | **+1.9** |
| **PRZ** | **Przheval'sk** | **8.46** | **43** | | **Pn** | **07 30 18.5** | **+1.9** |
| **ARXS** | **Arharly** | **9.42** | **34** | *e*P | **Pn** | **07 30 29.3** | **+0.2** |
| **GEYT** | **Alibeck** | **9.99** | **281** | P | **Pn** | **07 30 34.9** | **-1.6** |
| | comp=E,1.0nm,0.3s,baz=134,slow=12,SNR=2.4 | | | | | | |
| **MAKZ** | **Makanchi** | **13.30** | **36** | P | **P** | **07 31 19.4** | **-1.6** |
| **MAKZ** | **Makanchi** | **13.30** | **36** | | **P** | **07 31 19.4** | **-1.6** |
| **MK31** | **Makanchi Array** | **13.44** | **37** | *c iP* | **P** | **07 31 21.4** | **-1.2** |
| **MK31** | **

comp=Z,12nm,1.3s
**HFS Hagfors 42.77 322** P **P** **07 35 55.4 +1.0**
comp=Z,0.9nm,0.5s,baz=91,slow=12,SNR=6.1
**NB2 NORSAR Subarra 44.09 323** P **P** **07 36 05.1 +0.1**
comp=Z,0.6nm,0.4s,baz=99,slow=8.6
**NOA NORSAR Array B 44.09 323** P **P** **07 36 05.5 +0.5**
comp=Z,1.5nm,0.8s,baz=103,slow=7.3,SNR=4.1
**TORD Torodi Ar. Bea 65.35 268** P **P** **07 38 36.1 -2.0**
comp=Z,0.8nm,0.3s,baz=48,slow=6.2,SNR=15
**TORD Torodi Ar. Bea 65.35 268** IAmb IAmb 07 38 38.5
comp=Z,5.2nm,0.9s
**KOWA Kowa 69.19 273** P **P** **07 39 00.8 -1.5**
comp=Z,1.8nm,0.6s,baz=58,slow=8.9,SNR=6.6
**DBIC Dimbokro 74.33 267** P **P** **07 39 31.6 -1.2**
comp=Z,1.6nm,0.4s,baz=10.0,slow=4.0,SNR=4.5
**DBIC Dimbokro 74.33 267** P **P** **07 39 31.7 -1.2**
DBIC pmax pmax
comp=Z,13nm,1.5s
**DBIC Dimbokro 74.33 267** IAmb IAmb 07 39 34.5
comp=Z,13nm,1.4s
**ILAR Eielson Array 74.79 16** P **P** **07 39 35.2 +0.5**
comp=Z,0.4nm,0.6s,baz=299,slow=4.7,SNR=4.2
**BOSA Boshof 77.58 220** P **P** **07 39 50.2 -0.8**
comp=Z,2.6nm,0.8s,baz=148,slow=20,SNR=3.2
**BOSA Boshof 77.58 220** P **P** **07 39 50.2 -0.8**
BOSA pmax pmax
comp=Z,12nm,1.3s
**BOSA Boshof 77.58 220** IAmb IAmb 07 39 53.8
comp=Z,12nm,1.2s
**YKA Yellowknife Ar 81.17 2** P **P** **07 40 10.7 +0.9**
comp=Z,0.3nm,0.4s,baz=346,slow=5.5,SNR=8.6
**WRA Warramunga Arr 82.35 122** P **P** **07 40 14.7 -1.8**
comp=Z,0.7nm,0.5s,baz=329,slow=5.2,SNR=6.6
**ASAR Alice Springs 84.61 125** P **P** **07 40 26.5 -1.5**
comp=Z,0.8nm,0.5s,baz=313,slow=4.4,SNR=7.4

*IDC **04** 07:35:50.5±1.6, 11.˚10S×118.˚63E, h0km, mb3.6/2, mb1 3.8/7, mb1mx3.4/47, mbtmp3.7/7, ML3.6/5, MS3.5/4, Ms1 3.5/4, ms1mx2.9/67, Error ellipse: s-maj=37.4km s-min=20.1km az=50.0*
**ISC 04 07:35:51.8±0.8, 11.˚37S±0.˚06×118.˚56E±0.˚07, h26km, n20, σ2=91/21, MS3.8/3, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.15** | **77** | Pn | **Pn** | **07 37 05.8** | **-1.5** |
| | 7.4nm,0.3s,baz=294,slow=17,SNR=13 | | | | | | |
| BATI | | | | Sn | **Sn** | **07 38 09.7** | **+3.8** |
| | 4.9nm,0.3s,baz=282,slow=7.1,SNR=1.6 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.21** | **303** | P | **Pn** | **07 37 06.1** | **-2.0** |
| **SOEI** | **Soe** | **5.84** | **75** | P | Pb | 07 37 25.4 | -7.6 |
| **KAPI** | **Kappang** | **6.43** | **11** | Pn | **Pn** | **07 37 20.7** | **-4.1** |
| | 0.3nm,0.3s,baz=196,slow=15,SNR=1.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **07 38 37.5** | **+0.1** |
| | 5.3nm,0.3s,baz=307,slow=22,SNR=12 | | | | | | |
| KAPI | | | | LR | LR | 07 39 32.8 | |
| | comp=Z,48nm,18.4s,baz=44,slow=36 | | | | | | |
| **UGM** | **Wanagama** | **8.64** | **293** | P | **Pn** | **07 37 54.2** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **9.57** | **135** | Pn | **Pn** | **07 38 11.0** | **+3.0** |
| | 0.7nm,0.3s,baz=354,slow=7.1,SNR=24 | | | | | | |
| FITZ | | | | Sn | **Sn** | **07 39 52.8** | **-1.9** |
| | 1.3nm,0.3s,baz=172,slow=19,SNR=4.9 | | | | | | |
| **MBWA** | **Marble Bar** | **9.80** | **174** | P | **Pn** | **07 38 11.7** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **10.22** | **173** | P | **Pn** | **07 38 17.7** | **+0.8** |
| **GIRL** | **Giralia** | **11.94** | **200** | P | **Pn** | **07 38 40.2** | **-0.3** |
| **MEEK** | **Meekatharra** | **15.19** | **180** | P | **Pn** | **07 39 23.9** | **-0.8** |
| | 5.5nm,2.0s | | | | | | |
| **WRKA** | **Warakurna** | **16.43** | **147** | P | **P** | **07 39 43.5** | **+0.2** |
| **WRA** | **Warramunga Arr** | **17.41** | **121** | P | **P** | **07 39 55.9** | **+1.8** |
| | 0.1nm,0.3s,baz=290,slow=14,SNR=7.2 | | | | | | |
| WRA | | | | S | **Sn** | **07 42 58.9** | **-7.3** |
| | 0.2nm,0.3s,baz=295,slow=23,SNR=5.8 | | | | | | |
| **MORW** | **Morawa** | **17.76** | **187** | P | **Pn** | **07 39 57.7** | **+0.4** |
| **ASAR** | **Alice Springs** | **19.05** | **132** | P | **Pn** | **07 40 17.0** | **+3.9** |
| | 0.2nm,0.3s,baz=311,slow=12,SNR=14 | | | | | | |
| ASAR | | | | S | **Sn** | **07 43 41.0** | **-4.8** |
| | 0.2nm,0.3s,baz=305,slow=22,SNR=6.4 | | | | | | |
| **BLDU** | **Ballidu** | **19.23** | **185** | P | **Pn** | **07 40 15.3** | **+0.2** |
| **ASAJ** | **Asahikawa** | **59.39** | **20** | LR | LR | 08 11 57.0 | |
| | comp=Z,75nm,20.7s,baz=163,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **59.93** | **351** | P | **P** | **07 45 57.1** | **+1.4** |
| | 0.3nm,0.4s,baz=169,slow=8.2,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.37** | **334** | P | **P** | **07 46 39.7** | **+1.3** |
| | 0.4nm,0.5s,baz=146,slow=6.9,SNR=11 | | | | | | |
| **WSAR** | **Wadi Sarin** | **67.97** | **301** | LR | LR | 08 15 33.1 | |
| | comp=Z,50nm,18.7s,baz=148,slow=35 | | | | | | |
| **YAK** | **Yakutsk** | **73.69** | **5** | LR | LR | 08 24 31.1 | |
| | comp=Z,75nm,18.5s,baz=88,slow=40 | | | | | | |

**KRSC 04 07:40:02.6±0.8, 51.˚07N×155.˚78E, h493km±7km, ML3.8, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **1.62** | **62** | P | P | 07 41 06.3 | +1.2 |
| KDTR | | | | S | S | 07 41 55.5 | -0.7 |
| **GRL** | **Gorelyy** | **2.06** | **43** | P | P | 07 41 08.3 | +0.9 |
| **MTVR** | **Mutnovka** | **2.06** | **45** | P | P | 07 41 08.9 | +1.5 |
| **RUS** | **Russkaya** | **2.18** | **50** | P | P | 07 41 09.2 | +1.4 |
| RUS | | | | S | S | 07 42 01.2 | +0.1 |
| **DALK** | **Dalny** | **2.69** | **42** | P | P | 07 41 12.0 | +1.2 |
| **KOK** | **Koryaka** | **2.84** | **37** | P | P | 07 41 13.6 | +1.7 |
| **UGLR** | **Uglovaya** | **2.85** | **40** | P | P | 07 41 14.0 | +2.0 |
| **AVH** | **Avacha** | **2.86** | **38** | P | P | 07 41 13.8 | +1.8 |
| **SDLR** | **Sedlovina** | **2.92** | **40** | P | P | 07 41 13.8 | +1.3 |
| **SPN** | **Mys Shipunski** | **3.31** | **50** | S | S | 07 42 13.9 | -0.4 |
| **MKZ** | **Mys Kozlova** | **5.02** | **44** | P | P | 07 41 31.5 | +2.3 |
| MKZ | | | | S | S | 07 42 39.0 | -1.1 |
| **KBTR** | **Krutoberegovo** | **6.63** | **36** | P | P | 07 41 46.5 | +1.9 |

*IDC **04** 07:46:59.1±1.0, 46.˚44N×112.˚21W, h0km, mb1 3.2/4, mb1mx3.1/52, mbtmp2.9/4, ML3.2/4, Error ellipse: s-maj=17.3km s-min=7.1km az=54.0*
*BUT **04** 07:46:59.7±0.9, 46.˚50N±0.˚03×112.˚04W±0.˚06, h7km±7km, ML3.7/24, ML3.4/42(NEIC), Error ellipse: s-maj=6.3km s-min=4.1km az=59.0*
*NEIC **04** 07:46:59.9±1.0, 46.˚48N±0.˚02×112.˚08W±0.˚05, h5km±6km, Error ellipse: s-maj=4.9km s-min=2.6km az=66.0*
**ISC 04 07:46:58.9±0.9, 46.˚51N±0.˚03×112.˚09W±0.˚04, h6km, n43, σ1=15/47, Montana**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HRY** | **Holter Researc** | **0.27** | **42** | | **Pg** | **07 47 04.7** | **+0.5** |
| **LRM** | **Limekiln Ridge** | **0.73** | **200** | | **Pg** | **07 47 13.6** | **+0.6** |
| **BOZ** | **Bozeman (W)** | **0.97** | **160** | | **Pg** | **07 47 17.3** | **-0.2** |
| BOZ | | | | Sg | **Sg** | **07 47 30.0** | **-0.1** |
| BOZ | | | | IAML | | 07 47 33.7 | |
| | 732nm,0.6s | | | | | | |
| BOZ | | | | IAML | | 07 47 34.0 | |
| | 758nm,0.3s | | | | | | |
| **DLMT** | **Dillon** | **1.20** | **197** | | **Pg** | **07 47 22.0** | **+0.1** |
| DLMT | | | | Sg | **Sg** | **07 47 37.6** | **+0.1** |
| DLMT | | | | IAML | | 07 47 41.5 | |
| | 933nm,0.8s | | | | | | |
| DLMT | | | | IAML | | 07 47 43.7 | |
| | 801nm,0.4s | | | | | | |
| **MSO** | **Missoula** | **1.31** | **285** | | **Pg** | **07 47 25.2** | **+1.2** |
| MSO | | | | Sg | **Sn** | **07 47 42.2** | **+0.5** |
| MSO | | | | IAML | | 07 47 46.6 | |
| | 572nm,0.5s | | | | | | |
| MSO | | | | IAML | | 07 47 47.4 | |
| | 725nm,0.6s | | | | | | |
| **QLMT** | **Earthquake Lak** | **1.74** | **164** | | **Pn** | **07 47 30.5** | **+0.6** |
| **MCMT** | **McKenzie Canyo** | **1.77** | **198** | Pn | **Pb** | **07 47 31.1** | **-0.7** |
| **YMV** | **Mammoth Vault** | **1.82** | **147** | | **Pn** | **07 47 31.6** | **+0.6** |
| **GCMT** | **Greycliff** | **1.83** | **112** | | **Pn** | **07 47 31.8** | **+0.7** |
| **GCR** | **Grayling Creek** | **1.85** | **158** | | **Pn** | **07 47 32.2** | **+0.8** |
| **YHB** | **Horse Butte** | **1.87** | **160** | | **Pn** | **07 47 32.2** | **+0.6** |
| **YPDC** | **Denny Creek** | **1.90** | **161** | | **Pn** | **07 47 32.7** | **+0.7** |
| **YMC** | **Maple Creek** | **1.91** | **156** | | **Pn** | **07 47 32.8** | **+0.6** |
| **YHH** | **Holmes Hill** | **1.93** | **153** | | **Pn** | **07 47 32.9** | **+0.3** |
| YHH | | | | IAML | | 07 48 00.7 | |
| | comp=N,193nm,0.4s | | | | | | |
| YHH | | | | IAML | | 07 48 04.7 | |
| | comp=E,269nm,0.5s | | | | | | |
| **JTMT** | **Jette** | **1.94** | **310** | | **Pb** | **07 47 34.0** | **-0.7** |
| JTMT | | | | IAML | | 07 48 02.9 | |
| | comp=E,254nm,0.6s | | | | | | |
| JTMT | | | | IAML | | 07 48 04.3 | |
| | comp=N,216nm,0.4s | | | | | | |
| **YMR** | **Madison River** | **2.00** | **156** | | **Pn** | **07 47 34.2** | **+0.7** |
| YMR | | | | IAML | | 07 48 05.9 | |
| | comp=E,311nm,0.4s | | | | | | |
| YMR | | | | IAML | | 07 48 08.1 | |
| | comp=N,343nm,0.5s | | | | | | |
| **CMI** | **Centennial Mou** | **2.01** | **170** | | **Pn** | **07 47 34.2** | **+0.6** |
| **YPWB** | **West Boundary** | **2.03** | **160** | | **Pn** | **07 47 35.0** | **+1.2** |
| **YNR** | **Norris Junctio** | **2.05** | **151** | | **Pn** | **07 47 34.6** | **+0.5** |
| YNR | | | | IAML | | 07 48 06.1 | |
| | comp=E,180nm,0.4s | | | | | | |
| **YPSB** | **Soda Butte** | **2.12** | **139** | | **Pn** | **07 47 35.3** | **+0.2** |
| **EGMT** | **Eagleton** | **2.20** | **46** | | **Pn** | **07 47 37.3** | **+1.3** |
| **YMP** | **Mirror Lake Pl** | **2.23** | **142** | | **Pn** | **07 47 37.0** | **+0.3** |
| YMP | | | | IAML | | 07 48 13.0 | |
| | comp=E,258nm,0.4s | | | | | | |
| YMP | | | | IAML | | 07 48 13.7 | |
| | comp=N,298nm,0.4s | | | | | | |
| **ICI** | **Italian Canyon** | **2.26** | **196** | | **Pn** | **07 47 37.7** | **+0.6** |
| **LKWY** | **Lake** | **2.28** | **148** | | **Pn** | **07 47 38.0** | **+0.7** |
| LKWY | | | | IAML | | 07 48 16.8 | |
| | comp=N,138nm,0.5s | | | | | | |
| **MCID** | **Moose Creek** | **2.41** | **164** | | **Pn** | **07 47 40.0** | **+1.0** |
| **RLMT** | **Red Lodge** | **2.42** | **124** | | **Pn** | **07 47 40.2** | **+1.1** |
| RLMT | | | | IAML | | 07 48 17.9 | |
| | comp=N,307nm,0.5s | | | | | | |
| **EMI** | **Eightmile Cany** | **2.51** | **194** | | **Pn** | **07 47 41.6** | **+1.2** |
| **FLWY** | **Flagg Ranch** | **2.62** | **157** | | **Pn** | **07 47 43.2** | **+1.2** |
| **MOOW** | **Moose Ponds** | **2.92** | **160** | | **Pn** | **07 47 47.7** | **+1.6** |
| **FXWY** | **Fox Creek** | **2.97** | **165** | | **Pn** | **07 47 48.8** | **+2.0** |
| **PLID** | **Pearl Lake** | **3.08** | **244** | | **Pn** | **07 47 49.7** | **+1.4** |
| PLID | | | | IAML | | 07 48 39.2 | |
| | comp=N,131nm,0.3s | | | | | | |
| PLID | | | | IAML | | 07 48 41.8 | |
| | comp=N,101nm,0.4s | | | | | | |
| **LOHW** | **Long Hollow** | **3.08** | **159** | | **Pn** | **07 47 49.9** | **+1.6** |
| **HLID** | **Hailey** | **3.38** | **210** | | **Pn** | **07 47 53.5** | **+1.2** |
| HLID | | | | IAML | | 07 48 48.2 | |
| | comp=N,103nm,0.5s | | | | | | |
| **F10A** | **Beach Ranch, E** | **3.60** | **263** | | **Pn** | **07 47 56.9** | **+1.6** |
| **NEW** | **Newport** | **3.84** | **299** | Pn | **Pn** | **07 47 59.6** | **+1.0** |
| | comp=N,1.2nm,0.3s,baz=115,slow=9.1,SNR=21 | | | | | | |
| NEW | | | | Lg | Lg | 07 49 00.3 | |
| | comp=N,9.5nm,0.3s,baz=24,slow=18,SNR=11 | | | | | | |
| **NEW** | **Newport** | **3.84** | **299** | | **Pn** | **07 47 59.5** | **+1.0** |
| NEW | | | | IAML | | 07 49 03.2 | |
| | comp=N,44nm,0.7s | | | | | | |
| NEW | | | | IAML | | 07 49 05.6 | |
| | comp=N,56nm,1.1s | | | | | | |
| **MFID** | **Camas Ranch** | **4.08** | **222** | | **Pn** | **07 48 03.1** | **+1.2** |
| **PDAR** | **Pinedale Array** | **4.16** | **153** | Pn | **Pn** | **07 48 05.5** | **+2.4** |
| | comp=N,0.3nm,0.3s,baz=354,slow=15,SNR=12 | | | | | | |
| PDAR | | | | Pg | **Pb** | **07 48 13.7** | **+1.1** |
| | comp=N,0.6nm,0.3s,baz=352,slow=16,SNR=15 | | | | | | |
| PDAR | | | | Lg | Lg | 07 49 09.7 | |
| | comp=N,0.7nm,0.3s,baz=348,slow=27,SNR=6.6 | | | | | | |
| **C09A** | **Chrisman Ranch** | **4.41** | **289** | | **Pn** | **07 48 07.0** | **+0.7** |
| **RSSD** | **Black Hills** | **6.16** | **110** | | **Pn** | **07 48 32.3** | **+1.7** |
| **ELK** | **Elko** | **6.20** | **203** | Pn | **Pn** | **07 48 31.6** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=4.3,slow=16,SNR=1.9 | | | | | | |
| ELK | | | | Pg | **Pb** | **07 48 45.5** | **-1.9** |
| | comp=N,0.1nm,0.3s,baz=19,slow=17,SNR=2.5 | | | | | | |
| ELK | | | | Lg | Lg | 07 50 09.7 | |
| | comp=N,0.5nm,0.3s,baz=148,slow=4.6,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **9.29** | **212** | Pg | | 07 49 41.9 | |
| | comp=N,0.1nm,0.3s,baz=30,slow=17,SNR=2.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **16.08** | **356** | Pn | **Pn** | **07 50 42.2** | **-3.1** |
| | comp=N,0.1nm,0.3s,baz=180,slow=13,SNR=8.7 | | | | | | |
| YKA | | | | Lg | Lg | 07 55 15.4 | |
| | comp=N,0.0nm,0.3s,baz=166,slow=28,SNR=2.7 | | | | | | |

*IDC **04** 07:49:51.4±1.2, 33.˚30S×179.˚28W, h0km, mb4.2/3, mb1 4.4/5, mb1mx4.0/35, mbtmp4.3/5, ML4.3/2, MS3.7/5, Ms1 3.7/5, ms1mx3.1/59, Error ellipse: s-maj=33.2km s-min=23.5km az=96.0*
*NEIC **04** 07:49:51.9±2.3, 33.˚21S±0.˚05×179.˚0W±0.˚1, h10km±1km, mb4.5/11, Error ellipse: s-maj=19.1km s-min=8.6km az=271.0*
*WEL **04** 07:49:56.8±0.7, 34.˚5S±7.˚×17.˚9W±1.˚6, h33km, M4.3/24, mB4.8/13, ML4.8/26, MLv4.7/24, Mw(mB)4.1/13, Error ellipse: s-maj=0.0km s-min=0.0km az=111.9*
**ISC 04 07:49:56.7±0.8, 33.˚54S±0.˚06×179.˚1W±0.˚1, h48km, n82, σ2=44/98, mb4.3/9, MS4.0/4, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **4.38** | **14** | P | **Pn** | **07 50 59.7** | **-1.1** |
| GLKZ | | | | S | Sn | **07 51 50.3** | **-0.1** |
| **RAO** | **Raoul Island** | **4.39** | **14** | Pn | **Pn** | **07 50 56.3** | **-4.6** |
| | 42nm,0.3s,baz=92,slow=23,SNR=1.8 | | | | | | |
| RAO | | | | Sn | **Sn** | **07 51 50.5** | **-0.2** |
| | 73nm,0.3s,baz=81,slow=22,SNR=1.9 | | | | | | |
| **RAO** | **Raoul Island** | **4.39** | **14** | | Pn | 07 50 52.4 | -8.4 |
| **MXZ** | **Matakaoa Point** | **4.54** | **207** | P | **Pn** | **07 51 02.6** | **-0.3** |
| MXZ | | | | S | **Sn** | **07 51 55.1** | **+0.8** |
| **MXZ** | **Matakaoa Point** | **4.54** | **207** | Pn | **Pn** | **07 51 03.9** | **+1.0** |
| **WMGZ** | **Waiomatatini S** | **4.73** | **205** | P | **Pn** | **07 51 06.9** | **+1.5** |
| WMGZ | | | | S | **Sn** | **07 52 02.2** | **+3.3** |
| **PKGZ** | **Pakihiroa** | **4.91** | **207** | P | **Pn** | **07 51 07.9** | **-0.2** |
| PKGZ | | | | S | **Sn** | **07 52 03.9** | **+0.3** |
| **HAZ** | **Te Kaha** | **4.92** | **210** | P | **Pn** | **07 51 09.9** | **+0.9** |
| HAZ | | | | S | **Sn** | **07 52 05.2** | **+1.6** |
| **PUZ** | **Puketiti** | **5.01** | **205** | P | **Pn** | **07 51 09.4** | **0.0** |
| PUZ | | | | S | **Sn** | **07 52 06.4** | **+0.4** |
| **RUGZ** | **Raukumara Rang** | **5.14** | **210** | P | **Pn** | **07 51 11.7** | **+0.5** |
| RUGZ | | | | S | **Sn** | **07 52 10.6** | **+1.3** |
| **TWGZ** | **Tauwhareparae** | **5.20** | **206** | P | **Pn** | **07 51 12.6** | **+0.6** |
| TWGZ | | | | S | **Sn** | **07 52 10.6** | **-0.2** |
| **GRZ** | **Great Barrier** | **5.23** | **237** | P | **Pn** | **07 51 14.7** | **+2.4** |
| **KUZ** | **Kuaotunu** | **5.31** | **231** | P | **Pn** | **07 51 16.4** | **+2.9** |
| **CNGZ** | **Carnagh Station** | **5.40** | **203** | P | **Pn** | **07 51 14.8** | **+0.2** |
| **TKGZ** | **Te Karaka** | **5.48** | **206** | P | **Pn** | **07 51 14.9** | **-0.9** |
| TKGZ | | | | S | **Sn** | **07 52 19.5** | **+2.0** |
| **MWZ** | **Matawai** | **5.51** | **209** | P | **Pn** | **07 51 15.8** | **-0.5** |
| MWZ | | | | S | **Sn** | **07 52 19.1** | **+0.7** |
| **OPRZ** | **Ohinepanea** | **5.56** | **218** | P | **Pn** | **07 51 18.5** | **+1.6** |
| **URZ** | **Urewera** | **5.63** | **212** | Pn | **Pn** | **07 51 17.3** | **-0.4** |
| | 3.8nm,0.3s,baz=278,slow=3.4,SNR=43 | | | | | | |
| URZ | | | | Sn | **Sn** | **07 52 21.4** | **+0.4** |
| | 12nm,0.3s,baz=142,slow=23,SNR=6.6 | | | | | | |
| **URZ** | **Urewera** | **5.63** | **212** | P | **Pn** | **07 51 19.2** | **+1.5** |
| URZ | | | | S | **Sn** | **07 52 21.8** | **+0.7** |
| **URZ** | **Urewera** | **5.63** | **212** | | **Pn** | **07 51 18.4** | **+0.7** |
| **RAGZ** | **Rawiri** | **5.70** | **209** | P | **Pn** | **07 51 21.6** | **+2.7** |
| **RIGZ** | **Rimuhau** | **5.75** | **205** | P | **Pn** | **07 51 19.5** | **0.0** |
| RIGZ | | | | S | **Sn** | **07 52 23.7** | **-0.4** |
| **PRGZ** | **Paritu Road** | **5.90** | **204** | P | **Pn** | **07 51 20.1** | **-1.5** |
| **OUZ** | **Omahuta** | **6.27** | **252** | | **Pn** | **07 51 26.3** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **6.65** | **211** | | **Pn** | **07 51 35.0** | **+3.2** |
| **NTVZ** | **North Tongarir** | **6.97** | **216** | P | **Pn** | **07 51 36.8** | **+0.5** |
| **TMVZ** | **Te Maari** | **6.97** | **215** | P | **Pn** | **07 51 36.5** | **+0.2** |
| **HIZ** | **Hauiti** | **6.97** | **223** | P | **Pn** | **07 51 40.4** | **+4.1** |
| **HIZ** | **Hauiti** | **6.97** | **223** | Pn | **Pn** | **07 51 36.5** | **+0.2** |
| **NNVZ** | **North Ngauruho** | **7.02** | **216** | P | **Pn** | **07 51 39.0** | **+1.9** |
| **OTVZ** | **Oturere** | **7.02** | **215** | P | **Pn** | **07 51 37.7** | **+0.6** |
| **WTVZ** | **West Tongariro** | **7.02** | **216** | P | **Pn** | **07 51 38.5** | **+1.4** |
| **SNVZ** | **South Ngauruho** | **7.05** | **215** | P | **Pn** | **07 51 38.6** | **+1.0** |
| **NGZ** | **Ngauruhoe** | **7.07** | **216** | P | **Pn** | **07 51 38.5** | **+0.9** |
| **KRHZ** | **Kereru** | **7.10** | **210** | P | **Pn** | **07 51 36.2** | **-1.8** |
| KRHZ | | | | S | **Sn** | **07 52 54.2** | **-3.2** |
| **BHHZ** | **Black Hill Sta** | **7.10** | **212** | P | **Pn** | **07 51 39.2** | **+1.1** |
| BHHZ | | | | S | **Sn** | **07 52 57.0** | **-0.5** |
| **MOVZ** | **Moawhango** | **7.17** | **214** | P | **Pn** | **07 51 40.0** | **+0.9** |
| MOVZ | | | | S | **Sn** | **07 52 55.9** | **-3.4** |
| **WNVZ** | **Wahianoa** | **7.18** | **215** | P | **Pn** | **07 51 39.6** | **+0.3** |
| **TRVZ** | **Turoa** | **7.19** | **215** | P | Pn | 07 51 45.6 | +6.1 |
| **PXZ** | **Pawanui** | **7.24** | **205** | P | **Pn** | **07 51 39.7** | **-0.2** |
| PXZ | | | | S | **Sn** | **07 52 56.5** | **-4.3** |
| **PKVZ** | **Pokaka** | **7.28** | **216** | P | **Pn** | **07 51 43.0** | **+2.5** |
| **PNHZ** | **Pukenui** | **7.40** | **209** | P | **Pn** | **07 51 41.7** | **-0.4** |
| PNHZ | | | | S | **Sn** | **07 53 00.6** | **-4.0** |
| **TSZ** | **Takapari Road** | **7.62** | **210** | P | **Pn** | **07 51 43.3** | **-1.8** |
| TSZ | | | | S | **Sn** | **07 53 06.9** | **-3.2** |
| **ANWZ** | **Angora Road** | **7.76** | **206** | P | **Pn** | **07 51 48.1** | **+1.0** |
| ANWZ | | | | S | **Sn** | **07 53 10.5** | **-3.1** |
| **WAZ** | **Wanganui** | **7.81** | **216** | P | **Pn** | **07 51 48.3** | **+0.5** |
| WAZ | | | | S | **Sn** | **07 53 17.3** | **+2.4** |
| **PRWZ** | **Pori Road** | **8.04** | **208** | P | **Pn** | **07 51 50.5** | **-0.3** |
| PRWZ | | | | S | **Sn** | **07 53 16.2** | **-4.1** |
| **BFZ** | **Birch Farm** | **8.04** | **206** | P | **Pn** | **07 51 48.9** | **-2.0** |
| BFZ | | | | S | **Sn** | **07 53 13.1** | **-7.3** |
| **BFZ** | **Birch Farm** | **8.04** | **206** | Pn | **Pn** | **07 51 51.7** | **+0.8** |
| **TIWZ** | **Tintock** | **8.26** | **208** | P | **Pn** | **07 51 52.5** | **-1.4** |
| TIWZ | | | | S | **Sn** | **07 53 21.4** | **-4.4** |
| **MRZ** | **Mangatainoka R** | **8.28** | **209** | P | **Pn** | **07 51 51.8** | **-2.4** |
| MRZ | | | | S | **Sn** | **07 53 20.3** | **-6.1** |
| **HOWZ** | **Holdsworth Sta** | **8.51** | **209** | P | **Pn** | **07 51 55.4** | **-1.9** |
| HOWZ | | | | S | **Sn** | **07 53 24.8** | **-7.1** |
| **OGWZ** | **Otaki Gorge** | **8.58** | **210** | P | **Pn** | **07 51 56.0** | **-2.3** |
| OGWZ | | | | S | **Sn** | **07 53 27.5** | **-6.2** |
| **CAW** | **Cannon Point** | **8.87** | **210** | P | **Pn** | **07 51 59.2** | **-3.1** |
| CAW | | | | S | **Sn** | **07 53 32.8** | **-7.9** |
| **MSWZ** | **Moikau Station** | **9.05** | **208** | Pn | **Pn** | **07 52 05.8** | **+1.0** |
| **PLWZ** | **Palliser** | **9.18** | **208** | Pn | **Pn** | **07 52 07.9** | **+1.3** |
| **DZM** | **Mont Dzumac** | **17.12** | **308** | LR | LR | 07 59 03.5 | |
| | comp=Z,134nm,19.5s,baz=80,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **21.06** | **59** | LR | LR | 08 02 37.5 | |
| | comp=Z,46nm,19.2s,baz=225,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **33.53** | **285** | P | **P** | **07 56 30.0** | **-2.0** |
| CTAO | | | | IAmb | IAmb | 07 56 56.4 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **37.32** | **258** | P | **P** | **07 57 03.8** | **-0.6** |
| **AS31** | **Alice Springs** | **42.11** | **271** | P | **P** | **07 57 43.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **42.11** | **271** | P | **P** | **07 57 44.3** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=112,slow=7.1,SNR=16 | | | | | | |
| **WB2** | **Warramunga Arr** | **43.38** | **276** | P | **P** | **07 57 54.4** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 07 57 56.6 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.39** | **276** | P | **P** | **07 57 54.6** | **-0.2** |
| | comp=Z,1.9nm,0.7s,baz=117,slow=7.8,SNR=22 | | | | | | |
| **WB0** | **Warramunga Arr** | **43.42** | **276** | P | **P** | **07 57 54.8** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 07 58 00.1 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.10** | **278** | P | **P** | **07 58 47.1** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 07 58 48.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.50** | **273** | LR | LR | 08 19 35.3 | |
| | comp=Z,68nm,18.5s,baz=82,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **56.58** | **180** | P | **P** | **07 59 37.9** | **+3.6** |
| | comp=Z,5.9nm,0.9s,baz=50,slow=4.7,SNR=11 | | | | | | |
| **QSPA** | **South Pole Qui** | **56.58** | **180** | P | **P** | **07 59 37.6** | **+3.3** |
| QSPA | | | | IAmb | IAmb | 07 59 39.4 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **56.95** | **281** | P | **P** | **07 59 37.2** | **-0.4** |
| **BATI** | **Baumata** | **57.20** | **280** | LR | LR | 08 22 53.3 | |
| | comp=Z,206nm,18.7s,baz=260,slow=35 | | | | | | |
| **BELA** | **Belgrano 2** | **66.81** | **172** | P | **P** | **08 00 45.2** | **+2.4** |
| BELA | | | | IAmb | IAmb | 08 00 46.1 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **73.73** | **284** | P | **P** | **08 01 26.9** | **+0.8** |
| SBUM | | | | IAmb | IAmb | 08 01 51.1 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| **H03S2** | **Juan Fernandez** | **79.52** | **124** | T | T | 09 30 21.3 | |
| | baz=230 | | | | | | |
| **H03S1** | **Juan Fernandez** | **79.53** | **124** | T | T | 09 30 22.5 | |
| | baz=230 | | | | | | |
| **H03S3** | **Juan Fernandez** | **79.53** | **124** | T | T | 09 30 20.7 | |
| | baz=230 | | | | | | |
| **H03N3** | **Juan Fernandez** | **79.73** | **123** | T | T | 09 30 32.6 | |
| | baz=239,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **79.73** | **123** | T | T | 09 30 31.3 | |
| | baz=239,slow=72 | | | | | | |
| **H03N1** | **Juan Fernandez** | **79.74** | **123** | T | T | 09 30 31.2 | |
| | baz=239,slow=72 | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.01** | **48** | LR | LR | 08 36 12.9 | |
| | comp=Z,143nm,20.1s,baz=330,slow=31 | | | | | | |
| **FINES** | **FINESS Array B** | **147.72** | **337** | | **PKPbc** | **08 09 35.0** | **-0.3** |
| | comp=Z,2.2nm,0.8s,baz=64,slow=4.4,SNR=7.4 | | | | | | |
| **FINES** | **FINESS Array B** | **147.72** | **337** | | **PKPbc** | **08 09 35.0** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **159.69** | **182** | PKPab | **PKPab** | **08 10 31.3** | **+2.0** |
| | comp=Z,1.2nm,0.8s,baz=163,slow=2.9,SNR=7.4 | | | | | | |

*NEIC **04** 08:02:54.1±0.2, 47.˚44N±0.˚07×129.˚0W±0.˚2, h10km±2km, Error ellipse: s-maj=22.2km s-min=4.8km az=300.0*
*PGC **04** 08:02:55.9±14.0, 47.˚53N×129.˚08W, h10km, MLSn3.2/11, Mw3.8/11, 295km Wsw of Tofino, Bc Off Coast Of Washington*
**ISC 04 08:02:52.9±4.8, 47.˚4N±0.˚2×129.˚2W±0.˚3, h10km, n24, σ0=70/25, Off coast of Washington**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KEMF** | **NEPTUNE Canada** | **0.51** | **7** | P | **Pg** | **08 03 02.7** | **-0.1** |
| KEMF | | | | S | **Sg** | **08 03 08.5** | **-1.0** |
| **GDR** | **Gold River** | **3.14** | **41** | Pn | **Pn** | **08 03 42.5** | **+0.1** |
| **GDR** | **Gold River** | **3.14** | **41** | Pn | **Pn** | **08 03 42.5** | **+0.

*4.1630, Plg68.0000°, Azm244.0000°; N -0.2790, Plg13.0000°, Azm8.0000°; P -3.8830, Plg18.0000°, Azm102.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 04 08:52:19.2**±0.3,**30.55S**±0.05×**177.63W**±0.07,**h33**km, **n310**,σ**2**/**90**/**270**,**mb4.9**/47,**MS4.4**/47,**13C-1D**,**Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.32** | **349** | Pn | **Pn** | **08 52 38.7** | **-2.6** |
| | 2μm,0.3s,baz=162,slow=2.8,SNR=85 | | | | | | |
| RAO | | | | Sn | **Sn** | **08 52 54.6** | **-3.2** |
| | 7μm,0.3s,baz=46,slow=23,SNR=14 | | | | | | |
| **RAO** | **Raoul Island** | **1.32** | **349** | | **Pn** | **08 52 39.4** | **-1.9** |
| RAO | | | | Sn | **Sn** | **08 52 54.9** | **-2.9** |
| **RAO** | **Raoul Island** | **1.32** | **349** | P | **Pb** | **08 52 42.8** | **-0.6** |
| **WMGZ** | **Waiomatatini S** | **7.95** | **203** | P | **Pn** | **08 54 09.8** | **-2.7** |
| **HAZ** | **Te Kaha** | **8.13** | **207** | P | **Pn** | **08 54 11.5** | **-3.3** |
| **PKGZ** | **Pakihiroa** | **8.13** | **205** | P | **Pn** | **08 54 11.8** | **-3.2** |
| **PUZ** | **Puketiti** | **8.23** | **203** | P | **Pn** | **08 54 12.7** | **-3.6** |
| **RUGZ** | **Raukumara Rang** | **8.35** | **206** | P | **Pn** | **08 54 14.9** | **-3.1** |
| **TWGZ** | **Tauwhareparae** | **8.43** | **204** | P | **Pn** | **08 54 15.1** | **-3.9** |
| **CNGZ** | **Carnagh Statio** | **8.62** | **202** | P | **Pn** | **08 54 17.5** | **-4.1** |
| **TKGZ** | **Te Karaka** | **8.71** | **204** | P | **Pn** | **08 54 19.3** | **-3.5** |
| **OPRZ** | **Ohinepanea** | **8.72** | **212** | P | **Pn** | **08 54 21.9** | **-1.1** |
| **MWZ** | **Matawai** | **8.73** | **206** | P | **Pn** | **08 54 19.0** | **-4.1** |
| **URZ** | **Urewera** | **8.83** | **208** | Pn | **Pn** | **08 54 19.8** | **-4.6** |
| | 1.1nm,0.3s,baz=277,slow=5.8,SNR=19 | | | | | | |
| URZ | | | | Sn | **Sn** | **08 56 01.7** | **-1.0** |
| | 11nm,0.3s,baz=94,slow=20,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **8.83** | **208** | P | **Pn** | **08 54 19.8** | **-4.6** |
| **URZ** | **Urewera** | **8.83** | **208** | Pn | **Pn** | **08 54 23.6** | **-0.8** |
| **URZ** | **Urewera** | **8.83** | **208** | P | **Pn** | **08 54 20.8** | **-3.6** |
| **RIGZ** | **Rimuhau** | **8.97** | **204** | P | **Pn** | **08 54 22.0** | **-4.5** |
| **PRGZ** | **Paritu Road** | **9.13** | **203** | P | Pn | 08 54 23.4 | -5.1 |
| **SNGZ** | **Shannon Statio** | **9.19** | **205** | P | **Pn** | **08 54 26.3** | **-3.2** |
| **HSRZ** | **Hossack Road** | **9.24** | **212** | P | **Pn** | **08 54 32.8** | **+2.7** |
| **MHKZ** | **Mahia Peninsul** | **9.33** | **202** | P | Pn | 08 54 25.9 | -5.4 |
| **MTHZ** | **Maungataniwha** | **9.45** | **207** | P | **Pn** | **08 54 31.3** | **-1.6** |
| **BKZ** | **Black Stump Fm** | **9.85** | **208** | P | **Pn** | **08 54 35.0** | **-3.5** |
| **BKZ** | **Black Stump Fm** | **9.85** | **208** | Pn | **Pn** | **08 54 35.6** | **-2.9** |
| **BKZ** | **Black Stump Fm** | **9.85** | **208** | P | **Pn** | **08 54 37.0** | **-1.5** |
| **MCHZ** | **McNeill Hill** | **10.01** | **206** | P | **Pn** | **08 54 36.0** | **-4.7** |
| **HIZ** | **Hauiti** | **10.07** | **216** | P | **Pn** | **08 54 45.3** | **+3.8** |
| **HIZ** | **Hauiti** | **10.07** | **216** | Pn | **Pn** | **08 54 42.8** | **+1.3** |
| **HIZ** | **Hauiti** | **10.07** | **216** | P | **Pn** | **08 54 43.5** | **+2.1** |
| **KWHZ** | **Kaweka Forest** | **10.10** | **207** | P | **Pn** | **08 54 38.4** | **-3.6** |
| **NTVZ** | **North Tongarir** | **10.14** | **211** | P | **Pn** | **08 54 40.2** | **-2.3** |
| **TMVZ** | **Te Maari** | **10.14** | **211** | P | **Pn** | **08 54 40.0** | **-2.5** |
| **ETVZ** | **East Tongariro** | **10.16** | **211** | P | **Pn** | **08 54 41.2** | **-1.6** |
| **OTVZ** | **Oturere** | **10.20** | **211** | P | **Pn** | **08 54 40.5** | **-2.9** |
| **SNVZ** | **South Ngauruho** | **10.23** | **211** | P | **Pn** | **08 54 41.9** | **-1.9** |
| **NGZ** | **Ngauruhoe** | **10.24** | **211** | P | **Pn** | **08 54 43.6** | **-0.3** |
| **KAHZ** | **Kahuranaki** | **10.26** | **204** | P | Pn | 08 54 39.1 | -4.9 |
| **BHHZ** | **Black Hill Sta** | **10.30** | **208** | P | **Pn** | **08 54 42.3** | **-2.5** |
| **KRHZ** | **Kereru** | **10.31** | **207** | P | **Pn** | **08 54 40.3** | **-4.5** |
| **SNZO** | **South Karori** | **12.39** | **208** | P | **Pn** | **08 55 09.9** | **-3.3** |
| **QRZ** | **Quartz Range** | **12.99** | **215** | P | **Pn** | **08 55 23.4** | **+2.0** |
| **MSVF** | **Nonsavu** | **13.36** | **342** | Pn | **Pn** | **08 55 23.4** | **-3.2** |
| | 0.2nm,0.3s,baz=177,slow=18,SNR=1.6 | | | | | | |
| MSVF | | | | LR | LR | 08 59 48.8 | |
| | comp=Z,2μm,18.8s,baz=177,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **13.36** | **342** | *i* P | **Pn** | **08 55 24.9** | **-1.6** |
| **NIUE** | **Niue** | **13.39** | **33** | P | Pn | 08 55 20.9 | -6.0 |
| **KHZ** | **Kahutara** | **13.80** | **208** | P | **Pn** | **08 55 30.7** | **-1.6** |
| **RPZ** | **Rata Peaks** | **15.92** | **211** | P | **Pn** | **08 55 59.0** | **-1.6** |
| | 122nm,1.2s | | | | | | |
| **OUENC** | **Ouen Island, N** | **16.08** | **297** | P | **P** | **08 56 11.1** | **+5.2** |
| **DZM** | **Mont Dzumac** | **16.58** | **297** | *e*LR | LR | 08 59 47.1 | |
| | comp=Z,2μm,23.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.58** | **297** | Pn | **P** | **08 56 10.9** | **-0.6** |
| | 0.1nm,0.3s,baz=100,slow=15,SNR=3.5 | | | | | | |
| DZM | | | | LR | LR | 09 01 31.5 | |
| | comp=Z,2μm,18.3s,baz=157,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.58** | **297** | | **P** | **08 56 11.3** | **-0.2** |
| **DZM** | **Mont Dzumac** | **16.58** | **297** | P | **P** | **08 56 15.7** | **+4.2** |
| **LIFNC** | **LIFOU** | **16.74** | **302** | P | **P** | **08 56 16.7** | **+3.5** |
| **ODZ** | **Otahua Downs** | **17.15** | **209** | P | **Pn** | **08 56 13.8** | **-2.4** |
| **AFI** | **Afiamalu** | **17.42** | **19** | LR | LR | 09 03 45.9 | |
| | comp=Z,241nm,18.9s,baz=180,slow=40 | | | | | | |
| **RTV** | **Rentapao** | **17.96** | **312** | P | **P** | **08 56 32.0** | **+5.4** |
| | 577μm,1.1s | | | | | | |
| **RAR** | **Rarotonga** | **18.54** | **64** | LR | LR | 09 01 28.1 | |
| | comp=Z,854nm,20.8s,baz=269,slow=30 | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.99** | **261** | P | Pn | 08 56 54.2 | +3.4 |
| | baz=22,SNR=4.8 | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.99** | **261** | P | Pn | 08 56 50.5 | -0.2 |
| LHI | | | | IAmb | IAmb | 08 56 54.5 | |
| | comp=Z,86nm,0.7s | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.99** | **261** | P | Pn | 08 56 54.2 | +3.4 |
| **ARMA** | **Armidale** | **26.45** | **262** | P | **P** | **08 57 55.9** | **+2.6** |
| | baz=28,SNR=6.0 | | | | | | |
| **ARMA** | **Armidale** | **26.45** | **262** | P | **P** | **08 57 57.4** | **+4.0** |
| **MGCD** | **Mangrove Creek** | **26.63** | **256** | P | **P** | **08 57 58.6** | **+3.9** |
| | baz=28,SNR=6.6 | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.63** | **256** | P | **P** | **08 57 58.7** | **+3.9** |
| **EIDS** | **Eidsvold** | **28.06** | **273** | P | **P** | **08 58 09.3** | **+1.6** |
| | baz=30,SNR=7.0 | | | | | | |
| **EIDS** | **Eidsvold** | **28.06** | **273** | P | **P** | **08 58 07.7** | **0.0** |
| EIDS | | | | IAmb | IAmb | 08 58 11.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **28.06** | **273** | P | **P** | **08 58 10.5** | **+2.8** |
| **CAN** | **Canberra** | **28.33** | **251** | P | **P** | **08 58 12.5** | **+2.4** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,59nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **28.33** | **251** | P | **P** | **08 58 12.5** | **+2.4** |
| CAN | | | | IAmb | IAmb | 08 58 26.6 | |
| | comp=Z,59nm,1.3s | | | | | | |
| **PAE** | **Paea** | **28.55** | **70** | *e*T | T | 09 27 43.4 | |
| | comp=Z,6.1nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **28.59** | **70** | *e*S | **S** | **09 03 03.8** | **+4.9** |
| | comp=Z,137nm,24.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 09 05 39.4 | |
| | comp=Z,795nm,24.0s | | | | | | |
| **PPT2** | **Papeete2** | **28.59** | **70** | *e*T | T | 09 27 47.0 | |
| | comp=Z,4.3nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **28.60** | **70** | LR | LR | 09 06 20.6 | |
| | comp=Z,339nm,21.9s,baz=236,slow=30 | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.22** | **276** | P | **P** | **08 58 20.3** | **+2.3** |
| **HNR** | **Honiara** | **29.64** | **310** | LR | LR | 09 08 20.3 | |
| | comp=Z,310nm,20.6s,baz=191,slow=33 | | | | | | |
| **MEH** | **Mehetia** | **29.67** | **72** | *e*T | T | 09 29 08.7 | |
| | comp=Z,10nm,0.2s | | | | | | |
| **RMQ** | **Roma** | **29.75** | **269** | P | **P** | **08 58 25.5** | **+2.9** |
| | baz=31,SNR=11 | | | | | | |
| **RMQ** | **Roma** | **29.75** | **269** | P | P | 08 58 27.6 | +4.9 |
| | comp=Z,25nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **31.20** | **247** | P | **P** | **08 58 37.2** | **+1.8** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **31.20** | **247** | P | **P** | **08 58 37.2** | **+1.8** |
| TOO | | | | IAmb | IAmb | 08 58 52.4 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **31.20** | **247** | P | **P** | **08 58 37.9** | **+2.5** |
| **CMSA** | **Cobar Meteorol** | **31.35** | **259** | P | **P** | **08 58 38.9** | **+2.2** |
| | baz=33,SNR=18 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.35** | **259** | P | **P** | **08 58 39.1** | **+2.3** |
| **VAH** | **Vaihoa** | **31.43** | **68** | *e*T | T | 09 31 18.0 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **QLP** | **Quilpie** | **33.62** | **267** | P | **P** | **08 58 58.6** | **+1.9** |
| | baz=35,SNR=8.3 | | | | | | |
| **QLP** | **Quilpie** | **33.62** | **267** | P | **P** | **08 58 58.9** | **+2.2** |
| **CTA** | **Charters Tower** | **34.14** | **279** | LR | LR | 09 11 46.7 | |
| | comp=Z,891nm,18.1s,baz=97,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **34.14** | **279** | P | **P** | **08 59 03.8** | **+2.5** |
| **CTAO** | **Charters Tower** | **34.14** | **279** | P | **P** | **08 59 02.8** | **+1.5** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,33nm,0.7s | | | | | | |
| CTAO | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | |
| **CTAO** | **Charters Tower** | **34.14** | **279** | P | **P** | **08 59 02.8** | **+1.5** |
| **CTAO** | **Charters Tower** | **34.14** | **279** | IAMs_20 | IAMs_20 | 09 11 34.9 | |
| | comp=Z,958nm,18.0s | | | | | | |
| **CTAO** | **Charters Tower** | **34.14** | **279** | P | **P** | **08 59 03.6** | **+2.3** |
| **STKA** | **Stephens Creek** | **34.76** | **257** | P | **P** | **08 59 08.6** | **+2.1** |
| | comp=Z,29nm,0.6s,baz=104,slow=11,SNR=72 | | | | | | |
| STKA | | | | LR | LR | 09 12 18.4 | |
| | comp=Z,561nm,18.7s,baz=80,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **34.76** | **257** | P | **P** | **08 59 08.8** | **+2.4** |
| | baz=36,SNR=55 | | | | | | |
| **STKA** | **Stephens Creek** | **34.76** | **257** | P | **P** | **08 59 08.9** | **+2.4** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **34.76** | **257** | P | **P** | **08 59 08.9** | **+2.4** |
| STKA | | | | IAmb | IAmb | 08 59 23.0 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **34.76** | **257** | P | **P** | **08 59 09.3** | **+2.8** |
| **MTSU** | **Mount Surprise** | **36.64** | **281** | P | **P** | **08 59 24.3** | **+1.5** |
| | baz=38,SNR=35 | | | | | | |
| **MTSU** | **Mount Surprise** | **36.64** | **281** | P | **P** | **08 59 25.5** | **+2.7** |
| **HTT** | **Hallett** | **36.77** | **254** | P | **P** | **08 59 25.0** | **+1.2** |
| | baz=38,SNR=17 | | | | | | |
| **HTT** | **Hallett** | **36.77** | **254** | P | **P** | **08 59 25.4** | **+1.6** |
| **NAPP** | **Napperby** | **37.44** | **254** | P | **P** | **08 59 31.7** | **+2.2** |
| **LCRK** | **Leigh Creek** | **37.86** | **259** | P | **P** | **08 59 34.2** | **+1.2** |
| **PMG** | **Port Moresby** | **38.96** | **295** | LR | LR | 09 13 03.3 | |
| | comp=Z,364nm,20.2s,baz=158,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **38.96** | **295** | IAMs_20 | IAMs_20 | 09 13 03.3 | |
| | comp=Z,421nm,19.0s | | | | | | |
| **BBOO** | **Buckleboo** | **39.23** | **254** | P | **P** | **08 59 45.6** | **+1.0** |
| | baz=41,SNR=16 | | | | | | |
| **BBOO** | **Buckleboo** | **39.23** | **254** | P | **P** | **08 59 45.1** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 08 59 46.7 | |
| | comp=Z,26nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **39.23** | **254** | P | **P** | **08 59 45.5** | **+1.0** |
| **COEN** | **Coen** | **39.62** | **286** | P | **P** | **08 59 49.8** | **+1.9** |
| COEN | | | | IAmb | IAmb | 08 59 50.4 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **COEN** | **Coen** | **39.62** | **286** | P | **P** | **08 59 50.1** | **+2.2** |
| **QIS** | **Mount Isa** | **39.64** | **274** | P | **P** | **08 59 49.5** | **+1.4** |
| | baz=41,SNR=12 | | | | | | |
| **QIS** | **Mount Isa** | **39.64** | **274** | P | **P** | **08 59 49.6** | **+1.5** |
| **OOD** | **Oodnadatta** | **40.63** | **262** | P | **P** | **08 59 57.8** | **+1.6** |
| **TAOE** | **Nuku Hiva Isla** | **41.07** | **66** | *e*S | **S** | **09 06 15.0** | **+4.1** |
| | comp=Z,126nm,23.8s | | | | | | |
| TAOE | | | | *e*LR | LR | 09 11 11.6 | |
| | comp=Z,630nm,26.2s | | | | | | |
| **MULG** | **Mulgathing** | **41.40** | **258** | P | **P** | **09 00 03.4** | **+0.9** |
| **AS31** | **Alice Springs** | **43.42** | **267** | P | **P** | **09 00 19.8** | **+0.7** |
| **ASAR** | **Alice Springs** | **43.42** | **267** | P | **P** | **09 00 18.4** | **-0.7** |
| | comp=Z,8.1nm,0.6s,baz=106,slow=7.3,SNR=116 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 02 05.5** | **-1.6** |
| | comp=Z,2.2nm,0.9s,baz=120,slow=4.5,SNR=2.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **09 05 57.5** | **+1.4** |
| | comp=Z,1.1nm,0.7s,baz=115,slow=4.2,SNR=6.5 | | | | | | |
| ASAR | | | | LR | LR | 09 18 11.1 | |
| | comp=Z,885nm,18.2s,baz=116,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **43.42** | **267** | P | **P** | **09 00 18.8** | **-0.3** |
| **WRAB** | **Tennant Creek** | **44.42** | **272** | P | **P** | **09 00 27.3** | **+0.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,22nm,0.7s | | | | | | |
| WRAB | | | | MLR | MLR | | |
| | comp=Z,700nm,18.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.42** | **272** | P | **P** | **09 00 27.3** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 09 00 30.1 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.42** | **272** | IAMs_20 | IAMs_20 | 09 18 28.2 | |
| | comp=Z,654nm,18.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.42** | **272** | P | **P** | **09 00 26.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.42** | **272** | P | **P** | **09 00 26.3** | **-0.8** |
| | comp=Z,17nm,0.6s,baz=110,slow=8.1,SNR=178 | | | | | | |
| WRA | | | | ScP | **ScP** | **09 06 00.4** | **+0.2** |
| | comp=Z,0.8nm,0.9s,baz=103,slow=4.3,SNR=3.7 | | | | | | |
| WRA | | | | LR | LR | 09 18 03.2 | |
| | comp=Z,454nm,18.4s,baz=72,slow=35 | | | | | | |
| **WB0** | **Warramunga Arr** | **44.45** | **272** | P | **P** | **09 00 26.6** | **-0.8** |
| **FORT** | **Forrest** | **46.32** | **255** | P | **P** | **09 00 40.5** | **-1.5** |
| **FORT** | **Forrest** | **46.32** | **255** | P | **P** | **09 00 41.4** | **-0.6** |
| **WRKA** | **Warakurna** | **47.78** | **263** | P | **P** | **09 00 52.2** | **-1.3** |
| | baz=49,SNR=12 | | | | | | |
| **WRKA** | **Warakurna** | **47.78** | **263** | P | **P** | **09 00 52.6** | **-0.9** |
| **VNDA** | **Vanda** | **47.98** | **186** | LR | LR | 09 16 58.7 | |
| | comp=Z,71nm,21.2s,baz=360,slow=31 | | | | | | |
| **JAY** | **Jayapura** | **48.25** | **297** | LR | LR | 09 18 57.3 | |
| | comp=Z,143nm,19.5s,baz=188,slow=33 | | | | | | |
| **KDU** | **Kakadu** | **49.26** | **280** | P | **P** | **09 01 04.0** | **-1.0** |
| | baz=51,SNR=5.2 | | | | | | |
| **MTN** | **Manton Dam** | **50.32** | **279** | P | **P** | **09 01 11.7** | **-1.3** |
| | baz=52,SNR=3.9 | | | | | | |
| **MTN** | **Manton Dam** | **50.32** | **279** | P | **P** | **09 01 11.5** | **-1.5** |
| MTN | | | | IAmb | IAmb | 09 01 15.5 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **51.03** | **274** | P | **P** | **09 01 17.2** | **-1.2** |
| | baz=52,SNR=16 | | | | | | |
| **KNRA** | **Kununurra** | **51.03** | **274** | P | **P** | **09 01 17.4** | **-1.0** |
| KNRA | | | | IAmb | IAmb | 09 01 21.4 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **51.03** | **274** | P | **P** | **09 01 18.7** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **52.68** | **270** | LR | LR | 09 22 33.9 | |
| | comp=Z,346nm,21.1s,baz=109,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.68** | **270** | P | **P** | **09 01 30.1** | **-0.5** |
| | baz=54,SNR=14 | | | | | | |
| **KLBR** | **Kellerberrin** | **54.60** | **251** | P | **P** | **09 01 43.6** | **-1.0** |
| | baz=56,SNR=5.1 | | | | | | |
| **FAKI** | **Fak Fak** | **54.69** | **290** | P | **P** | **09 01 43.4** | **-2.1** |
| **KIP** | **Kipapa** | **55.01** | **22** | *i* P | **P** | **09 01 48.2** | **+0.7** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,37nm,1.2s | | | | | | |
| **CASY** | **Casey** | **55.16** | **208** | P | **P** | **09 01 48.2** | **+0.2** |
| **MEEK** | **Meekatharra** | **55.46** | **257** | P | **P** | **09 01 51.4** | **+0.5** |
| | baz=57,SNR=3.4 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **56.27** | **263** | P | **P** | **09 01 55.0** | **-1.7** |
| **MBWA** | **Marble Bar** | **56.53** | **264** | P | **P** | **09 01 57.6** | **-1.0** |
| **MBWA** | **Marble Bar** | **56.53** | **264** | IAMs_20 | IAMs_20 | 09 26 50.2 | |
| | comp=Z,815nm,18.0s | | | | | | |
| **MORW** | **Morawa** | **56.79** | **253** | P | **P** | **09 01 59.1** | **-1.3** |
| | baz=58,SNR=3.7 | | | | | | |
| **MORW** | **Morawa** | **56.79** | **253** | P | **P** | **09 01 59.3** | **-1.1** |
| MORW | | | | IAmb | IAmb | 09 02 18.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **GUMO** | **Guam** | **56.81** | **315** | LR | LR | 09 24 31.9 | |
| | comp=Z,112nm,19.0s,baz=123,slow=34 | | | | | | |
| **MSAI** | **Masohi** | **57.16** | **287** | P | **P** | **09 02 04.9** | **+1.8** |
| | comp=Z,1μmcomp=Z,12nm,0.4s | | | | | | |
| **SOEI** | **Soe** | **57.69** | **278** | IAMs_20 | IAMs_20 | 09 27 56.1 | |
| | comp=Z,673nm,18.0s | | | | | | |
| **SOEI** | **Soe** | **57.69** | **278** | P | **P** | **09 02 09.0** | **+2.0** |
| | comp=Z,63nm,0.4s | | | | | | |
| **RPN** | **Rapa Nui** | **59.09** | **105** | LR | LR | 09 24 13.7 | |
| | comp=Z,91nm,18.3s,baz=262,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.56** | **180** | P | **P** | **09 02 21.3** | **+2.0** |
| | comp=Z,11nm,1.1s,baz=16,slow=1.5,SNR=23 | | | | | | |
| QSPA | | | | LR | LR | 09 27 02.9 | |
| | comp=Z,234nm,18.3s,baz=60,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.56** | **180** | P | **P** | **09 02 20.0** | **+0.7** |
| **SANI** | **Sanae** | **60.31** | **287** | P | **P** | **09 02 23.9** | **-1.1** |
| | comp=Z,14nm,1.0s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **61.93** | **275** | P | **P** | **09 02 36.5** | **+0.4** |
| | comp=Z,25nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **63.95** | **280** | LR | LR | 09 31 35.1 | |
| | comp=Z,159nm,18.3s,baz=162,slow=37 | | | | | | |
| **DAV** | **Davao City (W)** | **65.98** | **295** | LR | LR | 09 31 21.6 | |
| | comp=Z,62nm,18.5s,baz=15,slow=36 | | | | | | |
| **BELA** | **Belgrano 2** | **69.59** | **172** | P | **P** | **09 03 24.1** | **-0.3** |
| BELA | | | | IAmb | IAmb | 09 03 33.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **PMSA** | **Palmer Station** | **71.99** | **156** | LR | LR | 09 28 16.1 | |
| | comp=Z,203nm,18.9s,baz=298,slow=30 | | | | | | |
| **JOW** | **Kunigami** | **77.00** | **312** | LR | LR | 09 33 57.2 | |
| | comp=Z,95nm,21.2s,baz=112,slow=33 | | | | | | |
| **MDSI** | **Maura Dua** | **77.57** | **272** | P | **P** | **09 04 09.8** | **-2.5** |
| **SNAA** | **Sanae** | **77.99** | **178** | P | **P** | **09 04 14.4** | **+0.6** |
| **SNAA** | **Sanae** | **77.99** | **178** | *ce*P | **P** | **09 04 15.3** | **+1.5** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,904nm,1.7s | | | | | | |
| **SNAA** | **Sanae** | **77.99** | **178** | P | **P** | **09 04 14.1** | **+0.3** |
| SNAA | | | | IAmb | IAmb | 09 04 24.8 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **78.13** | **176** | P | **P** | **09 04 15.0** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **78.55** | **325** | P | **P** | **09 04 15.9** | **-1.3** |
| | comp=Z,2.1nm,0.8s,baz=172,slow=3.7,SNR=2.7 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **78.57** | **177** | P | **P** | **09 04 18.4** | **+1.4** |
| | baz=186,slow=4.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **78.80** | **176** | P | **P** | **09 04 19.8** | **+1.6** |
| **H03S2** | **Juan Fernandez** | **80.11** | **123** | T | T | 10 33 45.0 | |
| | baz=238 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.12** | **123** | T | T | 10 33 42.7 | |
| | baz=238 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.13** | **123** | T | T | 10 33 39.9 | |
| | baz=238 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.31** | **123** | T | T | 10 33 54.7 | |
| | baz=241,slow=8.7 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.31** | **123** | T | T | 10 33 53.0 | |
| | baz=241,slow=72,SNR=5.2 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.32** | **123** | T | T | 10 33 41.8 | |
| | baz=241,slow=72,SNR=12 | | | | | | |
| **PLCA** | **Paso Flores** | **82.17** | **133** | P | **P** | **09 04 36.2** | **-0.7** |
| | comp=Z,1.5nm,1.0s,baz=242,slow=10,SNR=3.2 | | | | | | |
| PLCA | | | | LR | LR | 09 32 17.3 | |
| | comp=Z,151nm,21.9s,baz=253,slow=29 | | | | | | |
| **PLCA** | **Paso Flores** | **82.17** | **133** | P | **P** | **09 04 36.3** | **-0.7** |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **82.72** | **332** | LR | LR | 09 37 10.4 | |
| | comp=Z,164nm,20.2s,baz=163,slow=33 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **83.24** | **355** | LR | LR | 09 37 07.0 | |
| | comp=Z,167nm,19.4s,baz=30,slow=32 | | | | | | |
| **LPIG** | **La Paz** | **84.34** | **58** | LR | LR | 09 35 25.6 | |
| | comp=Z,173nm,18.4s,baz=220,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **84.67** | **319** | P | **P** | **09 04 48.5** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=142,slow=5.2,SNR=2.2 | | | | | | |
| KSRS | | | | LR | LR | 09 36 03.1 | |
| | comp=Z,38nm,21.5s,baz=170,slow=31 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **85.02** | **334** | *ce*P | **P** | **09 04 51.1** | **+0.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,42nm,2.5s | | | | | | |
| **MURC** | **Murrieta** | **85.60** | **47** | P | **P** | **09 04 55.4** | **+1.0** |
| | baz=229 | | | | | | |
| **MONP2** | **Monument Peak** | **85.63** | **48** | P | **P** | **09 04 55.7** | **+1.0** |
| | baz=229 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **85.67** | **48** | P | **P** | **09 04 56.1** | **+1.4** |
| | baz=229 | | | | | | |
| **VES** | **Vestal, Richgr** | **85.93** | **44** | P | **P** | **09 04 56.6** | **+0.8** |
| | baz=227 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **85.95** | **45** | P | **P** | **09 04 56.8** | **+0.7** |
| | baz=228 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **86.04** | **345** | *i* P | **P** | **09 04 56.5** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **86.04** | **345** | P | **P** | **09 04 54.5** | **-1.5** |
| | comp=Z,9.3nm,0.9s,baz=157,slow=8.0,SNR=9.7 | | | | | | |
| PETK | | | | LR | LR | 09 36 37.2 | |
| | comp=Z,98nm,21.4s,baz=130,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **86.04** | **345** | P | **P** | **09 04 55.5** | **-0.4** |
| **PETK** | **Petropavlovsk-** | **86.04** | **345** | P | **P** | **09 04 55.5** | **-0.4** |
| **SWSC** | **Sam W. Stewart** | **86.06** | **48** | P | **P** | **09 04 58.0** | **+1.5** |
| | baz=230 | | | | | | |
| **PFO** | **Pinyon Flats O** | **86.07** | **47** | P | **P** | **09 04 57.6** | **+0.8** |
| | comp=Z,2.4nm,0.9s,baz=175,slow=4.4,SNR=3.7 | | | | | | |
| PFO | | | | LR | LR | 09 35 22.7 | |
| | comp=Z,172nm,20.4s,baz=328,slow=30 | | | | | | |
| **TPFO** | **Pinon Flats** | **86.07** | **47** | P | **P** | **09 04 58.5** | **+1.8** |
| | baz=229 | | | | | | |
| **ISA** | **Isabella, Lake** | **86.18** | **44** | P | **P** | **09 04 58.4** | **+1.2** |
| | baz=228 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **86.54** | **45** | P | **P** | **09 05 00.2** | **+1.2** |
| | baz=228 | | | | | | |
| **NJ2** | **Nanjing** | **86.59** | **310** | *e*P | **P** | **09 04 59.5** | **+0.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **86.62** | **47** | P | **P** | **09 05 00.9** | **+1.4** |
| | baz=229 | | | | | | |
| **BC3** | **Big Chuckawall** | **86.74** | **48** | P | **P** | **09 05 01.4** | **+1.3** |
| | baz=230 | | | | | | |
| **GLA** | **Glamis** | **86.76** | **48** | P | **P** | **09 05 01.3** | **+1.3** |
| | baz=230 | | | | | | |
| **CWC** | **Cottonwood Cre** | **86.94** | **44** | P | **P** | **09 05 01.6** | **+0.5** |
| | baz=228 | | | | | | |
| **HEC** | **Hector,Ludlow** | **86.94** | **46** | P | **P** | **09 05 01.9** | **+0.9** |
| | baz=229 | | | | | | |
| **GSC** | **Goldstone, Bar** | **86.96** | **46** | P | **P** | **09 05 02.0** | **+1.0** |
| | baz=229 | | | | | | |
| **MPMC** | **Manual Prospec** | **87.04** | **45** | P | **P** | **09 05 02.8** | **+1.2** |
| | baz=228 | | | | | | |
| **IRM** | **Iron Mountain** | **87.26** | **47** | P | **P** | **09 05 04.1** | **+1.6** |
| | baz=230 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **87.29** | **43** | P | **P** | **09 05 04.4** | **+1.7** |
| | baz=228 | | | | | | |
| **GMRC** | **Granite Mounta** | **87.34** | **47** | P | **P** | **09 05 04.1** | **+1.1** |
| | baz=230 | | | | | | |
| **214A** | **Organ Pipe Nat** | **87.39** | **50** | P | **P** | **09 05 04.4** | **+1.3** |
| | baz=231 | | | | | | |
| **TUQ** | **Turquoise Moun** | **87.59** | **46** | P | **P** | **09 05 05.1** | **+0.9** |
| | baz=229 | | | | |

comp=Z,5.0nm,0.9s
HHC pmax pmax
comp=Z,110nm,7.0s
**JTS Las Juntas de 97.44 82** LR LR 09 40 21.7
comp=Z,87nm,20.6s,baz=10.0,slow=30
**HKT Hockley 98.30 60** *i* P **P** **09 05 53.2 -0.3**
HKT pmax pmax
comp=Z,4.0nm,1.1s
**BILL Bilibino 99.03 354**[1] *e*P **Pdif** **09 05 58.5 +2.6**
BILL *e* 09 09 58.6
BILL *e*S **S** **09 17 15.8 -7.9**
BILL pmax pmax
comp=Z,6.0nm,1.9s
BILL MLR MLR
comp=Z,149nm,20.0s
**CPUP Villa Florida 99.64 128** LR LR 09 42 49.0
comp=Z,85nm,21.5s,baz=234,slow=30
**YAK Yakutsk 101.51 338** *i* P **Pdif** **09 06 07.1 +0.1**
YAK pmax pmax
comp=Z,7.0nm,0.8s
**C36M Paulatuk 106.92 17** IAMs_20 IAMs_20 09 45 11.7
comp=Z,591nm,22.0s
**WMQ Urumqi 113.57 308** *e*PKP **PKiKP** **09 10 54.7 +0.8**
**MK31 Makanchi Array 118.11 310** *i* PKIKP **PKPdf** **09 11 01.4 -1.1**
**MKAR Makanchi Array 118.11 310** PKP **PKPdf** **09 11 01.4 -1.0**
comp=Z,0.8nm,0.6s,baz=141,slow=0.8,SNR=4.1
**ZALV Zalesovo Beam 118.36 318** PKP **PKPdf** **09 11 01.2 -1.5**
comp=Z,0.9nm,0.6s,baz=48,slow=2.1,SNR=1.9
**SEUS St. Eustatius 119.63 86** IAMs_20 IAMs_20 09 52 43.0
comp=Z,254nm,18.0s
**SMRT St. Maarten 119.79 86** IAMs_20 IAMs_20 09 50 22.2
comp=Z,183nm,18.0s
**NRIK Noril'sk 119.91 336** PKP **PKPdf** **09 11 04.7 -0.5**
comp=Z,1.5nm,0.6s,baz=90,slow=4.0,SNR=1.6
**NRIK Noril'sk 119.91 336** *i* PKIKP **PKiKP** **09 11 06.3 +1.0**
NRIK pmax pmax
comp=Z,1.0nm,0.9s
**KURK Kurchatov 121.39 314***c* *i* PKIKP **PKPdf** **09 11 08.4 -0.2**
KURK pmax pmax
comp=Z,5.0nm,1.3s
**BOOM Boomskoye usch 121.39 304** PKIKP **PKPdf** **09 11 08.6 -0.5**
**BOOM Boomskoye usch 121.39 304** PKPdf **PKPdf** **09 11 08.6 -0.5**
**KURBB Kurchatov Arra 121.42 314** PKP **PKPdf** **09 11 07.7 -1.0**
comp=Z,2.0nm,0.7s,baz=108,slow=2.0,SNR=8.3
**AAK Ala-Archa 122.46 304** PKP **PKPdf** **09 11 10.7 -0.4**
comp=Z,1.7nm,0.7s,baz=253,slow=5.0,SNR=4.5
**AAK Ala-Archa 122.46 304***c* *i* PKIKP **PKiKP** **09 11 12.1 +0.7**
AAK pmax pmax
comp=Z,3.0nm,1.3s
**BVAR Borovoye Array 126.74 316** PKP **PKPdf** **09 11 18.3 -0.5**
comp=Z,1.2nm,0.5s,baz=100,slow=7.7,SNR=6.6
**BRVK Borovoye 126.80 316***c* *i* PKIKP **PKPdf** **09 11 18.9 0.0**
BRVK 09 13 55.9
BRVK pmax pmax
comp=Z,12nm,1.7s
**ARU Arti 133.41 321** PKP **PKiKP** **09 11 32.0 -0.6**
comp=Z,3.1nm,0.2s,baz=51,slow=15,SNR=3.2
**ARU Arti 133.41 321** PKIKP **PKiKP** **09 11 32.0 -0.6**
**KMBO Kilima Mbogo 134.24 233** *i* PKIKP **PKPdf** **09 11 34.9 +0.3**
KMBO pmax pmax
comp=Z,1.0nm,0.5s
**AKTO Aktyubinsk 134.44 312** PKP **PKPdf** **09 11 33.8 +0.3**
comp=Z,2.1nm,0.8s,baz=89,slow=2.9,SNR=7.4
**ARCES ARCESS Array B 138.81 348** PKhKP PKPpre 09 11 33.4
comp=Z,5.2nm,1.0s,baz=45,slow=3.6,SNR=4.2
ARCES PKP **PKPdf** **09 11 41.1 +0.1**
comp=Z,1.8nm,0.6s,baz=48,slow=1.3,SNR=6.4
**KLMR Klimovskoe 141.05 332** *e*PKIKP **PKPdf** **09 11 43.0 -2.2**
KLMR pmax pmax
comp=Z,16nm,1.2s
**KLMR Klimovskoe 141.05 332** *e*PKPdf **PKPdf** **09 11 43.1 -2.2**
KLMR AMP 09 11 46.1
comp=Z,16nm,1.2s
**VRH Novokhopyorsk 144.37 317** *e*PKIKP **PKPab** **09 11 48.6 -1.0**
VRH pmax pmax
comp=Z,8.0nm,0.7s
**GNI Garni 144.43 297** PKP PKPbc 09 11 50.9 +0.2
comp=Z,4.2nm,0.7s,baz=186,slow=2.5,SNR=5.2
**GNI Garni 144.43 297***c* *i* PKIKP **PKPdf** **09 11 53.0 +0.8**
GNI pmax pmax
comp=Z,24nm,1.7s
**GOF Gofitskoye 145.14 306**[1] *e*PKIKP **PKPab** **09 11 52.8 +0.1**
**FIA1 FINESS Array S 145.40 340** **PKPbc** **09 11 51.5 -1.4**
**FINES FINESS Array B 145.40 340** PKPbc **PKPbc** **09 11 52.0 -0.9**
comp=Z,28nm,0.8s,baz=53,slow=4.1,SNR=75
**FINES FINESS Array B 145.40 340** **PKPbc** **09 11 51.4 -1.5**
**LPSR Galich'ya Gora 145.43 320** *e*PKIKP **PKPdf** **09 11 52.3 -1.0**
LPSR pmax pmax
comp=Z,40nm,0.8s
**KBZ Khabaz 145.46 304** PKPbc **PKPdf** **09 11 53.3 -0.3**
comp=Z,6.3nm,0.9s,baz=11,slow=1.2,SNR=8.8
**OBN Obninsk 145.48 325** PKPbc **PKPdf** **09 11 52.6 -0.7**
comp=Z,12nm,0.6s,baz=68,slow=3.5,SNR=11
**OBN Obninsk 145.48 325***c* *i* PKIKP **PKPdf** **09 11 52.5 -0.7**
OBN *e* 09 15 11.9
OBN pmax pmax
comp=Z,41nm,0.8s
**KIV Kislovodsk 145.58 304** *e*PKP2 **PKPdf** **09 11 52.4 -1.6**
KIV pmax pmax
comp=Z,13nm,1.1s
**SHA1 Shidzhatmaz 145.63 304** *i* PKIKP **PKPdf** **09 11 53.9 -0.3**
**NEY Neytrino 145.66 303** *i* PKIKP **PKPdf** **09 11 53.9 -0.3**
**VORR Voronezh 145.66 319** *e*PKIKP **PKPbc** **09 11 54.1 +0.1**
VORR pmax pmax
comp=Z,110nm,0.4s
**VORD Divnogorie 145.89 317** *e*PKP2 **PKPdf** **09 11 53.9 -0.2**
VORD pmax pmax
comp=Z,30nm,0.7s
**VSU Vasula 147.49 336** *e*P **PKPbc** **09 11 59.0 -0.1**
**AAL Aland 148.11 343** *e*P **PKPbc** **09 11 59.5 -1.3**
**NB2 NORSAR Subarra 148.95 352** PKP **PKPbc** **09 12 01.9 -1.1**
comp=Z,3.5nm,0.6s,baz=12,slow=2.7
**NOA NORSAR Array B 148.95 352** PKPbc **PKPbc** **09 12 02.2 -0.8**
comp=Z,4.2nm,0.7s,baz=14,slow=4.3,SNR=21
**ISAL Salakas 149.85 333** *e*P **PKiKP** **09 12 06.3 0.0**
**MNK Minsk 149.88 330** *i* PKHKP PKPpre 09 12 03.3
MNK *i* 09 15 41.9
MNK *i* PPP PPP 09 19 02.9
MNK *i* 09 19 11.5
MNK *i* SS SS 09 34 58.9 +6.1
MNK *i* SSS SSS 09 40 38.1
MNK pmax pmax
comp=E,3.0nm,0.9s
MNK pmax pmax
comp=Z,13nm,0.7s
MNK pmax pmax
comp=N,27nm,0.9s
MNK MLR MLR
comp=N,111nm,14.0s
MNK MLR MLR
comp=Z,135nm,17.0s
MNK MLR MLR
comp=E,15nm,14.0s
**MNK Minsk 149.88 330** *i* PKP **PKPbc** **09 12 03.4 -2.0**
comp=E,3.0nm,0.8s
MNK *i* PKP **PKPbc** **09 12 03.4 -2.0**
comp=N,27nm,0.9s
MNK *i* PKP **PKPbc** **09 12 03.4 -2.0**
comp=Z,13nm,0.7s,baz=229
MNK *i* PP **PP** **09 15 42.0 +2.6**
MNK *i* PPP PPP 09 19 03.0
MNK *i* SKS **SKSdf** **09 19 11.5 +5.7**
MNK *i* SS **SS** **09 34 59.0 +6.2**
MNK *i* SSS SSS 09 40 38.2
MNK *i* LR LR 10 16 04.6
MNK *i* LRM MLR 10 18 59.2
comp=N,111nm,14.2s
MNK *i* LRM MLR 10 19 22.4
comp=Z,135nm,17.4s
MNK *i* LRM MLR 10 19 29.5
comp=E,15nm,14.2s
**IIGN Ignalina 149.97 333** *e*P **PKPbc** **09 12 05.4 -0.3**
**NACGM Naroch 150.06 331** *i* PKP **PKPbc** **09 12 06.2 +0.3**
**PABE Paberze 150.72 335** *e*P **PKiKP** **09 12 07.9 -0.2**
**AKASG Malin Array Be 151.62 323** PKPbc **PKPbc** **09 12 09.0 -0.6**
comp=E,7.5nm,0.7s,baz=48,slow=2.7,SNR=33
**AKBB Malin Array Si 151.62 323***c* *i* PKIKP **PKPbc** **09 12 09.2 -0.4**
**HOMB Homborsund 151.97 353** *i* P **PKPbc** **09 12 10.0 -0.2**
**BRTR Keskin Array B 152.95 298** PKPbc **PKPbc** **09 12 12.4 -0.8**
comp=E,4.7nm,0.9s,baz=157,slow=4.0,SNR=9.2
**CRVS Cervenica-Dubn 156.63 327** *e*PKP2 **PKPab** **09 12 39.7 0.0**
**CLL Collm 157.81 342** *e*PKIKP **PKPdf** **09 12 12.0 +0.1**
CLL *e* 09 12 44.0
**CLL Collm 157.81 342** *e*PKPdf **PKPdf** **09 12 12.0 +0.1**
CLL *e*PKPab **PKPab** **09 12 44.0 -0.7**
CLL *i* x x 09 12 50.3
**BRG Berggiesshubel 157.94 340** *e*PKP2 **PKPab** **09 12 45.0 -0.2**
BRG pmax pmax
comp=Z,5.0nm,0.8s
BRG pmax pmax
comp=Z,4.0nm,0.7s
**MODS Modra-Piesok 158.87 332** *e*PKP2 **PKPab** **09 12 50.6 +1.2**
**GERES GERESS Array B 159.80 338** PKPab **PKPab** **09 12 53.5 0.0**
comp=Z,0.7nm,0.5s,baz=345,slow=4.1,SNR=3.9
**TORD Torodi Ar. Bea 162.67 178** PKP **PKPdf** **09 12 16.4 -2.0**
comp=Z,0.7nm,1.0s,baz=204,slow=1.3,SNR=3.3
TORD PKPab **PKPab** **09 13 06.3 -0.4**
comp=Z,2.3nm,0.8s,baz=179,slow=3.0,SNR=10

*NEIC **04** 08:54:34.4±1.7,30.17°S±0.07°×177.20W±0.09, h10km±1km, mb4.6/16, Error ellipse: s-maj=14.2km s-min=10.4km az=66.0*
*IDC **04** 08:54:37.0±1.7,30.20°S×177.85W, h0km, mb4.1/4, mb1 4.3/4, mb1mx3.9/25, mbtmp4.1/4, Error ellipse: s-maj=44.2km s-min=20.1km az=98.0*
**ISC 04 08:54:36.0±0.7,30.22°S±0.08×177.21W±0.09, h24km, n29, σ1s53/26, mb4.5/10, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.14** | **327** | Pn | **Pn** | | **08 54 59.5** | **+2.9** |
| | 405nm,0.3s,baz=92,slow=21,SNR=1.6 | | | | | | | |
| RAO | | | | Sn | **Sn** | | **08 55 11.6** | **+0.2** |
| | 600nm,0.3s,baz=105,slow=21,SNR=2.5 | | | | | | | |
| **RAO** | **Raoul Island** | **1.14** | **327** | | **Pn** | | **08 54 56.1** | **-0.5** |
| **OUZ** | **Omahuta** | **9.21** | **235** | Pn | **Pn** | | **08 56 47.2** | **-0.1** |
| **QRZ** | **Quartz Range** | **13.47** | **215** | Pn | **Pn** | | **08 57 45.3** | **-0.4** |
| **THZ** | **Tophouse** | **14.01** | **212** | Pn | **Pn** | | **08 57 51.8** | **-1.3** |
| **KHZ** | **Kahutara** | **14.26** | **209** | Pn | **Pn** | | **08 57 54.0** | **-2.4** |
| **RAR** | **Rarotonga** | **18.07** | **64** | Pn | **Pn** | | **08 58 43.1** | **-2.5** |
| **LHI** | **Lord Howe Isla** | **20.40** | **260** | P | **P** | | **08 59 09.7** | **-1.6** |
| LHI | | | | IAmb | IAmb | | 08 59 23.5 | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **FUNA** | **Funafuti** | **21.84** | **350** | P | **P** | | **08 59 24.3** | **-2.5** |
| **ARMA** | **Armidale** | **26.86** | **262** | P | **P** | | **09 00 14.0** | **-1.1** |
| **PPTF** | **Pamatai, Papee** | **28.14** | **70** | P | **P** | | **09 00 27.1** | **+0.6** |
| **EIDS** | **Eidsvold** | **28.41** | **272** | P | **P** | | **09 00 28.2** | **-0.6** |
| EIDS | | | | IAmb | IAmb | | 09 00 48.3 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **28.78** | **251** | P | **P** | | **09 00 32.1** | **0.0** |
| **CTAO** | **Charters Tower** | **34.45** | **278** | P | **P** | | **09 01 21.4** | **-0.6** |
| CTAO | | | | IAmb | IAmb | | 09 01 36.3 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **35.18** | **257** | P | **P** | | **09 01 29.4** | **+1.2** |
| | comp=Z,1.4nm,0.4s,baz=105,slow=14,SNR=2.1 | | | | | | | |
| **AS31** | **Alice Springs** | **43.80** | **266** | P | **P** | | **09 02 40.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **43.80** | **266** | P | **P** | | **09 02 40.1** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=107,slow=7.6,SNR=2.2 | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.59** | **272** | P | **P** | | **09 02 46.2** | **-0.3** |
| WR0 | | | | IAmb | IAmb | | 09 03 01.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.77** | **272** | P | **P** | | **09 02 47.0** | **-1.0** |
| | comp=Z,1.2nm,0.3s,baz=110,slow=8.0,SNR=2.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.77** | **272** | P | **P** | | **09 02 47.5** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.80** | **272** | P | **P** | | **09 02 48.3** | **+0.1** |
| WB0 | | | | IAmb | IAmb | | 09 03 03.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **CASY** | **Casey** | **55.62** | **208** | P | **P** | | **09 04 08.2** | **-1.3** |
| CASY | | | | IAmb | IAmb | | 09 04 09.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.89** | **180** | P | P | | 09 04 45.0 | +5.3 |
| | comp=Z,2.8nm,1.0s,baz=30,slow=8.1,SNR=1.3 | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.89** | **180** | P | **P** | | **09 04 42.8** | **+3.1** |
| QSPA | | | | IAmb | IAmb | | 09 05 04.2 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **78.32** | **178** | P | **P** | | **09 06 35.3** | **+1.5** |
| SNAA | | | | IAmb | IAmb | | 09 07 02.5 | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **138.68** | **154** | T | T | | 11 47 33.2 | |
| | baz=204 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **138.68** | **154** | T | T | | 11 47 30.3 | |
| | baz=204,slow=74 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **138.69** | **154** | T | T | | 11 47 25.2 | |
| | baz=204,slow=74 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.21** | **341** | PKPbc | **PKPbc** | | **09 14 12.4** | **+1.9** |
| | comp=Z,2.8nm,0.5s,baz=49,slow=4.4,SNR=5.8 | | | | | | | |

*TAP **04** 08:55:23.6,22.52N×122.32E, h44km±1km, ML3.3, D*
*JMA **04** 08:55:24.0±0.4,22.62N×122.37E, h65km, M3.0*
**ISC 04 08:55:20.3±1.3, 22.57N±0.03×122.36E±0.03, h10km±9km, n96, σ0s86/166, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LDUT** | **Ludao** | **0.83** | **278** | *i* P | **Pb** | | **08 55 37.6** | **+0.8** |
| | baz=272 | | | | | | | |
| LDUT | | | | *i* S | **Sg** | | **08 55 47.5** | **+0.4** |
| | baz=272 | | | | | | | |
| **LYUB** | **Lan-yu** | **0.91** | **232** | P | **Pb** | | **08 55 39.0** | **+0.8** |
| | baz=240 | | | | | | | |
| LYUB | | | | S | **Sg** | | **08 55 49.4** | **-0.3** |
| | baz=240 | | | | | | | |
| **LAY** | **Lan-yu** | **0.91** | **235** | *i* P | **Pb** | | **08 55 38.8** | **+0.4** |
| | baz=243 | | | | | | | |
| LAY | | | | S | **Sg** | | **08 55 49.5** | **-0.4** |
| | baz=243 | | | | | | | |
| **EDH** | **Donghe** | **1.05** | **293** | *i* P | **Pn** | | **08 55 41.3** | **+0.1** |
| | baz=302 | | | | | | | |
| EDH | | | | *i* S | **Sg** | | **08 55 54.3** | **0.0** |
| | baz=302 | | | | | | | |
| **CHKT** | **Chengkung** | **1.06** | **300** | P | **Pb** | | **08 55 41.0** | **+0.2** |
| | baz=303 | | | | | | | |
| CHKT | | | | S | **Sg** | | **08 55 53.9** | **-0.5** |
| | baz=303 | | | | | | | |
| **ECBN** | **Changbin** | **1.12** | **312** | S | **Sg** | | **08 55 56.3** | **-0.2** |
| | baz=314 | | | | | | | |
| **TTN** | **Taitung** | **1.13** | **280** | *e*S | **Sb** | | **08 55 57.2** | **+0.4** |
| | baz=276 | | | | | | | |
| **FULB** | **Fuli** | **1.16** | **303** | *i* P | **Pg** | | **08 55 42.9** | **+0.2** |
| | baz=305 | | | | | | | |
| FULB | | | | *i* S | **Sb** | | **08 55 56.4** | **-1.4** |
| | baz=305 | | | | | | | |
| **ECS** | **Chishang** | **1.17** | **297** | P | **Pn** | | **08 55 43.6** | **+0.7** |
| | baz=299 | | | | | | | |
| ECS | | | | S | **Sn** | | **08 55 58.7** | **-0.3** |
| | baz=299 | | | | | | | |
| **LONT** | **Longtian** | **1.18** | **287** | *i* P | **Pg** | | **08 55 43.7** | **+0.6** |
| | baz=294 | | | | | | | |
| LONT | | | | *i* S | **Sn** | | **08 55 59.2** | **+0.1** |
| | baz=294 | | | | | | | |
| **TWGBT** | **Beinan** | **1.21** | **282** | P | **Pg** | | **08 55 43.9** | **+0.3** |
| | baz=289 | | | | | | | |
| TWGBT | | | | S | **Sb** | | **08 55 58.7** | **-0.2** |
| | baz=289 | | | | | | | |
| **TWG** | **Pinlang** | **1.21** | **282** | *i* P | **Pg** | | **08 55 43.8** | **+0.2** |
| | baz=289 | | | | | | | |
| TWG | | | | *i* S | **Sb** | | **08 55 58.3** | **-0.9** |
| | baz=289 | | | | | | | |
| **EYUL** | **Yuli** | **1.23** | **309** | *i* P | **Pb** | | **08 55 44.0** | **+0.3** |
| | baz=315 | | | | | | | |
| EYUL | | | | *i* S | **Sb** | | **08 55 59.3** | **-0.4** |
| | baz=315 | | | | | | | |
| **HGSD** | **Ruisui** | **1.26** | **317** | P | **Pn** | | **08 55 44.0** | **0.0** |
| | baz=319 | | | | | | | |
| HGSD | | | | *e*S | **Sb** | | **08 55 58.7** | **-1.8** |
| | baz=319 | | | | | | | |
| **YULB** | **Yu-li** | **1.28** | **310** | P | **Pb** | | **08 55 44.7** | **+0.2** |
| | baz=312 | | | | | | | |
| YULB | | | | S | **Sn** | | **08 56 01.7** | **+0.2** |
| | baz=312 | | | | | | | |
| **ECL** | **Taimali** | **1.30** | **272** | *i* P | **Pb** | | **08 55 45.1** | **+0.3** |
| | baz=284 | | | | | | | |
| ECL | | | | S | **Sb** | | **08 55 59.9** | **-1.6** |
| | baz=284 | | | | | | | |
| **EHY** | **Hungye** | **1.33** | **315** | *i* P | **Pn** | | **08 55 45.4** | **+0.3** |
| | baz=321 | | | | | | | |
| EHY | | | | *i* S | **Sb** | | **08 56 02.3** | **-0.4** |
| | baz=321 | | | | | | | |
| **TEGC** | **Jichi Village** | **1.36** | **327** | S | **Sb** | | **08 56 02.8** | **-0.6** |
| | baz=321 | | | | | | | |
| **TAWH** | **Dawu Township** | **1.38** | **261** | P | **Pb** | | **08 55 46.4** | **+0.2** |
| | baz=251 | | | | | | | |
| TAWH | | | | S | **Sb** | | **08 56 03.7** | **-0.2** |
| | baz=251 | | | | | | | |
| **ELDTW** | **Lidau** | **1.38** | **297** | *i* P | **Pn** | | **08 55 46.0** | **+0.1** |
| | baz=298 | | | | | | | |
| ELDTW | | | | S | **Sb** | | **08 56 02.9** | **-1.3** |
| | baz=298 | | | | | | | |
| **EGFH** | **Guangfu** | **1.39** | **322** | *i* S | **Sn** | | **08 56 04.6** | **+0.3** |
| | baz=324 | | | | | | | |
| **EAST** | **Anshuo** | **1.41** | **263** | *i* P | **Pb** | | **08 55 46.8** | **+0.1** |
| | baz=254 | | | | | | | |
| EAST | | | | *i* S | **Sb** | | **08 56 03.0** | **-1.8** |
| | baz=254 | | | | | | | |
| **SLIU** | **Shizi** | **1.48** | **257** | *i* P | **Pn** | | **08 55 47.9** | **+0.8** |
| | baz=248 | | | | | | | |
| SLIU | | | | *i* S | **Sn** | | **08 56 04.2** | **-2.4** |
| | baz=248 | | | | | | | |
| **ESL** | **Shilin** | **1.50** | **326** | *i* P | **Pb** | | **08 55 48.3** | **0.0** |
| | baz=336 | | | | | | | |
| ESL | | | | *i* S | **Sn** | | **08 56 06.5** | **-0.6** |
| | baz=336 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.50** | **244** | *i* S | **Sg** | | **08 56 08.6** | **-0.2** |
| | baz=253 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.51** | **249** | *e*P | **Pn** | | **08 55 47.9** | **+0.4** |
| | baz=249 | | | | | | | |
| SMST | | | | S | **Sn** | | **08 56 05.5** | **-1.7** |
| | baz=249 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.56** | **247** | P | **Pn** | | **08 55 48.8** | **+0.6** |
| | baz=254 | | | | | | | |
| TWKBT | | | | S | **Sn** | | **08 56 07.3** | **-1.2** |
| | baz=254 | | | | | | | |
| **HWA** | **Hwalien** | **1.56** | **334** | *e*S | **Sn** | | **08 56 06.8** | **-1.8** |
| | baz=344 | | | | | | | |
| **TWK1** | **Hengchun** | **1.57** | **247** | *i* P | **Pb** | | **08 55 50.0** | **+0.6** |
| | baz=254 | | | | | | | |
| TWK1 | | | | *i* S | **Sn** | | **08 56 07.9** | **-0.7** |
| | baz=254 | | | | | | | |
| **STYH** | **Taoyuan** | **1.58** | **293** | P | **Pb** | | **08 55 49.8** | **+0.2** |
| | baz=300 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.59** | **306** | *e*P | **Pn** | | **08 55 49.7** | **+0.7** |
| | baz=307 | | | | | | | |
| **TSMG** | **Majia** | **1.59** | **275** | *i* P | **Pb** | | **08 55 49.5** | **-0.3** |
| | baz=282 | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.59** | **272** | P | **Pb** | | **08 55 50.1** | **+0.2** |
| | baz=278 | | | | | | | |
| **HEN** | **Hengchun** | **1.60** | **250** | *i* S | **Sn** | | **08 56 08.5** | **-0.9** |
| | baz=250 | | | | | | | |
| **SSD** | **Sandimen** | **1.60** | **277** | *i* P | **Pn** | | **08 55 49.2** | **+0.4** |
| | baz=275 | | | | | | | |
| SSD | | | | *i* S | **Sn** | | **08 56 08.3** | **-1.2** |
| | baz=275 | | | | | | | |
| **SCZT** | **Fangliau** | **1.62** | **263** | *i* P | **Pb** | | **08 55 51.0** | **+0.6** |
| | baz=254 | | | | | | | |
| **VWDT** | **VWDT** | **1.63** | **317** | P | **Pb** | | **08 55 50.5** | **+0.1** |
| | baz=325 | | | | | | | |
| VWDT | | | | S | **Sn** | | **08 56 10.0** | **-0.1** |
| | baz=325 | | | | | | | |
| **SLGT** | **Liugui** | **1.64** | **285** | *i* P | **Pb** | | **08 55 50.8** | **+0.2** |
| | baz=286 | | | | | | | |
| **SSPT** | **Xinbi** | **1.66** | **267** | *e*P | **Pb** | | **08 55 51.7** | **+0.7** |
| | baz=258 | | | | | | | |
| **TWD** | **Chiawan** | **1.66** | **335** | *e*P | **Pb** | | **08 55 50.6** | **-0.4** |
| | baz=336 | | | | | | | |
| TWD | | | | *i* S | **Sn** | | **08 56 09.7** | **-1.2** |
| | baz=336 | | | | | | | |
| **ALS** | **Alishan** | **1.71** | **304** | *i* P | **Pb** | | **08 55 52.6** | **+0.5** |
| | baz=305 | | | | | | | |
| **SGST** | **Jiashian** | **1.71** | **288** | *e*P | **Pb** | | **08 55 51.8** | **-0.2** |
| | baz=293 | | | | | | | |
| SGST | | | | S | **Sb** | | **08 56 14.1** | **+0.4** |
| | baz=293 | | | | | | | |
| **ETL** | **Fush Village** | **1.72** | **337** | S | **Sn** | | **08 56 11.9** | **-0.6** |
| | baz=338 | | | | | | | |
| **WTP** | **Ta-pu** | **1.74** | **293** | *i* P | **Pb** | | **08 55 53.2** | **+0.7** |
| | baz=301 | | | | | | | |
| WTP | | | | *i* S | **Sg** | | **08 56 16.0** | **-0.4** |
| | baz=301 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.75** | **337** | P | **Pn** | | **08 55 51.8** | **+1.0** |
| | baz=345 | | | | | | | |
| NACB | | | | S | **Sn** | | **08 56 12.0** | **-1.1** |
| | baz=345 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.75** | **295** | P | **Pb** | | **08 55 53.2** | **+0.6** |
| | baz=302 | | | | | | | |
| TPUB | | | | *e*S | **Sb** | | **08 56 14.5** | **-0.2** |
| | baz=302 | | | | | | | |
| **SSLB** | **Suanglung** | **1.77** | **314** | P | **Pb** | | **08 55 52.6** | **-0.4** |
| | baz=322 | | | | | | | |
| **CHN1** | **Nanshi** | **1.79** | **290** | *i* P | **Pg** | | **08 55 54.6** | **-0.2** |
| | baz=294 | | | | | | | |
| CHN1 | | | | S | **Sb** | | **08 56 16.9** | **+0.9** |
| | baz=294 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.80** | **296** | *i* P | **Pb** | | **08 55 53.9** | **+0.4** |
| | baz=303 | | | | | | | |
| CHN4 | | | | S | **Sb** | | **08 56 17.0** | **+0.9** |
| | baz=303 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.82** | **334** | P | **Pn** | | **08 55 52.9** | **+1.1** |
| | baz=343 | | | | | | | |
| ETLH | | | | S | **Sn** | | **08 56 14.1** | **-0.9** |
| | baz=343 | | | | | | | |
| **WUSB** | **Renai** | **1.82** | **321** | P | **Pb** | | **08 55 53.5** | **-0.4** |
| | baz=322 | | | | | | | |
| WUSB | | | | S | **Sn** | | **08 56 14.0** | **-1.1** |
| | baz=322 | | | | | | | |
| **SNST** | **Tainan City** | **1.83** | **291** | *e*P | **Pb** | | **08 55 55.0** | **+0.9** |
| | baz=299 | | | | | | | |
| SNST | | | | S | **Sb** | | **08 56 18.0** | **+1.0** |
| | baz=299 | | | | | | | |
| **CHGB** | **Renai** | **1.84** | **324** | P | **Pb** | | **08 55 53.8** | **-0.5** |
| | baz=324 | | | | | | | |
| CHGB | | | | S | **Sn** | | **08 56 15.6** | **-0.1** |
| | baz=324 | | | | | | | |
| **CHN5** | **Tsauling** | **1.85** | **304** | *i* P | **Pg** | | **08 55 55.6** | **-0.4** |
| | baz=304 | | | | | | | |
| CHN5 | | | | *i* S | **Sb** | | **08 56 18.4** | **+0.7** |
| | baz=304 | | | | | | | |
| **TWK** | **Hsinying** | **1.86** | **292** | *i* P | **Pb** | | **08 55 55.3** | **+0.8** |
| | baz=301 | | | | | | | |
| TWK | | | | S | **Sb** | | **08 56 19.0** | **+1.2** |
| | baz=301 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.86** | **328** | *i* P | **Pn** | | **08 55 53.9** | **+1.2** |
| | baz=328 | | | | | | | |
| WHF | | | | S | **Sn** | | **08 56 16.5** | **-0.1** |
| | baz=328 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.87** | **315** | P | **Pb** | | **08 55 54.3** | **-0.4** |
| | baz=321 | | | | | | | |
| SMLT | | | | *e*S | **Sn** | | **08 56 17.4** | **+1.0** |
| | baz=321 | | | | | | | |
| **TYC** | **Yuchr** | **1.92** | **314** | *i* P | **Pb** | | **08 55 55.4** | **0.0** |
| | baz=320 | | | | | | | |
| TYC | | | | *e*S | **Sb** | | **08 56 18.9** | **-0.5** |
| | baz=320 | | | | | | | |
| **ENA** | **Nanau** | **1.94** | **343** | *i* P | **Pn** | | **08 55 54.8** | **+1.4** |
| | baz=344 | | | | | | | |
| ENA | | | | *i* S | **Sn** | | **08 56 16.7** | **-1.1** |
| | baz=344 | | | | | | | |
| **EWUT** | **Wuta** | **1.94** | **344** | *i* P | **Pb** | | **08 55 55.7** | **-0.1** |
| | baz=345 | | | | | | | |
| EWUT | | | | *i* S | **Sn** | | **08 56 17.9** | **0.0** |
| | baz=345 | | | | | | | |
| **FUSS** | **Fushou** | **1.96** | **329** | *i* P | **Pb** | | **08 55 55.5** | **-0.8** |
| | baz=329 | | | | | | | |
| FUSS | | | | *i* S | **Sn** | | **08 56 18.5** | **-0.2** |
| | baz=329 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.99** | **318** | P | **Pb** | | **08 55 56.4** | **-0.3** |
| | baz=323 | | | | | | | |
| WCS | | | | S | **Sn** | | **08 56 20.1** | **+1.0** |
| | baz=323 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.99** | **42** | P | **Pn** | | **08 55 55.6** | **+1.5** |
| HATJ | | | | *e*S | **Sn** | | **08 56 18.8** | **-0.3** |
| **WDLH** | **Douliu** | **2.01** | **304** | P | **Pg** | | **08 55 58.5** | **-0.4** |
| | baz=304 | | | | | | | |
| WDLH | | | | S | **Sg** | | **08 56 23.8** | **-1.3** |
| | baz=304 | | | | | | | |
| **WNT** | **Mingjian** | **2.02** | **311** | *i* P | **Pb** | | **08 55 57.8** | **+0.7** |
| | baz=310 | | | | | | | |
| WNT | | | | *i* S | **Sb** | | **08 56 23.7** | **+1.4** |
| | baz=310 | | | | | | | |
| **NNSB** | **Datong** | **2.06** | **334** | P | **Pb** | | **08 55 57.9** | **0.0** |
| | baz=335 | | | | | | | |
| NNSB | | | | S | **Sn** | | **08 56 20.3** | **-0.6** |
| | baz=335 | | | | | | | |
| **NNS** | **Nan Shan** | **2.07** | **334** | *e*P | **Pb** | | **08 55 59.1** | **+0.9** |
| | baz=335 | | | | | | | |
| NNS | | | | S | **Sn** | | **08 56 21.6** | **+0.4** |
| | baz=335 | | | | | | | |
| **TWC** | **Suao** | **2.08** | **347** | *i* P | **Pb** | | **08 55 57.7** | **-0.6** |
| | baz=358 | | | | | | | |
| TWC | | | | *i* S | **Sn** | | **08 56 22.0** | **+0.6** |
| | baz=358 | | | | | | | |
| **LATG** | **Datong** | **2.10** | **339** | P | **Pb** | | **08 55 57.8** | **-0.8** |
| | baz=347 | | | | | | | |
| LATG | | | | S | **Sn** | | **08 56 22.5** | **+0.5** |
| | baz=347 | | | | | | | |
| **NDS** | **Dongshan** | **2.14** | **344** | P | **Pb** | | **08 55 59.2** | **-0.1** |
| | baz=337 | | | | | | | |
| NDS | | | | S | **Sn** | | **08 56 23.6** | **+0.8** |

baz=337
**WHP Taichung City 2.14 323** *i* P **Pb 08 55 59.8 +0.5**
baz=330
WHP S **Sn 08 56 24.3 +1.4**
baz=330
**IRIF Iriomote-Funau 2.17 35** P **Pn 08 55 58.1 +1.6**
**WSL Shuilin Townsh 2.18 296** P **Pb 08 56 00.1 +0.2**
baz=306
WSL S **Sb 08 56 27.3 +0.3**
baz=306
**TCU Taichung 2.20 316** *e*S **Sb 08 56 28.5 +0.8**
baz=316
**TWE Neicheng 2.23 344** *e*P **Pb 08 56 00.6 -0.2**
baz=344
**JKRS Kuro-shima 2.25 42** P **Pn 08 55 58.3 +0.6**
JKRS S **Sn 08 56 25.1 -0.4**
**YHNB Yeheng 2.28 337** P **Pb 08 56 00.9 -0.7**
baz=337
YHNB *e*S **Sn 08 56 26.6 +0.3**
baz=337
**NSK Sanguang 2.29 337** *i* P **Pb 08 56 01.2 -0.6**
baz=337
NSK *i* S **Sn 08 56 26.6 0.0**
baz=337
**TWQ1 Liyutan 2.29 321** *i* P **Pb 08 56 01.7 -0.1**
baz=330
TWQ1 *i* S **Sb 08 56 30.6 +0.3**
baz=330
**FUSB Fushanzhiwuyua 2.29 342** P **Pb 08 56 02.4 +0.5**
baz=343
FUSB *e*S **Sb 08 56 28.8 -1.5**
baz=343
**NWLT Wulai 2.33 341** P **Pb 08 56 01.6 -0.9**
baz=341
NWLT S **Sn 08 56 28.5 +0.8**
baz=341
**NFF Wufeng Townshi 2.35 331** P **Pb 08 56 02.6 -0.2**
baz=339
NFF S **Sb 08 56 30.8 -1.2**
baz=339
**NSTT Nanjuang 2.40 329** *e*P **Pb 08 56 04.5 +0.8**
baz=340
NSTT S **Sb 08 56 32.0 -1.4**
baz=340
**LIOB Emei 2.41 330** *i* P **Pb 08 56 03.6 -0.2**
baz=340
LIOB *i* S **Sb 08 56 33.1 -0.5**
baz=340
**JIJ Ishigaki jima 2.43 42** P **Pn 08 56 01.3 +1.2**
JIJ S **Sn 08 56 28.6 -1.2**
**TIPB Shuangxi 2.44 349** *i* P **Pb 08 56 03.4 -1.0**
baz=357
TIPB *i* S **Sn 08 56 31.4 +1.1**
baz=357
**TWB1 Santiao Chiao 2.45 352** *e*P **Pn 08 56 02.8 +2.3**
baz=352
**NWF Wu-fen Shan 2.55 348** *i* P **Pb 08 56 05.0 -1.2**
baz=348
**SXI1 Grass Mountain 2.55 350** P **Pb 08 56 04.6 -1.7**
baz=359
SXI1 S **Sn 08 56 34.8 +1.7**
baz=359
**JISG Ishigakijimahi 2.69 41** P **Pn 08 56 04.9 +1.1**
JISG *e*S **Sn 08 56 35.4 -1.0**
**ANP Anpu 2.72 344** *e*P **Pb 08 56 07.7 -1.4**
baz=331
**PHUB P'eng-hu 2.73 291** *e*P **Pb 08 56 07.3 -2.1**
baz=289
PHUB *e*S **Sn 08 56 37.5 +0.2**
baz=289
**JTJ Tarama 2.98 46** P **Pn 08 56 09.3 +1.6**
JTJ S **Sn 08 56 42.9 -0.6**
**JIRB Irabujima 3.42 48** P **Pn 08 56 15.4 +1.6**
**JMJ2 Miyako jima3 3.48 51** *e*S **Sn 08 56 55.3 -0.5**
**JIKM Ikemajima 3.54 48** *e*S **Sn 08 56 56.7 -0.6**

*NNC **04** 09:06:33.2±1.1,51.72N×75.45E,h0km,mb3.2,mpv2.8, Error ellipse: s-maj=14.1km s-min=7.1km az=19.0, Suspected Mining explosion.*

*IDC **04** 09:06:37.9±1.0,51.70N×75.87E,h0km,mb1 2.8/3, mb1mx2.8/37,mbtmp2.8/3,ML2.4/3,Error ellipse: s-maj=23.1km s-min=7.6km az=30.0*

**ISC 04 09:06:32.4±1.0,51.72N±0.06×75.28E±0.06,h0km,n11, σ1§29/13,5C-6D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURBB** | **Kurchatov Arra** | **2.32** | **117** | Pg | **Pn** | **09 07 13.6** | **+1.7** |
| | 0.3nm,0.3s,baz=303,slow=18,SNR=32 | | | | | | |
| KURBB | | | | Lg | Lg | 09 07 40.8 | |
| | 0.6nm,0.3s,baz=294,slow=32,SNR=3.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.32** | **117** | ⇓Pg | **Pb** | **09 07 14.9** | **-0.2** |
| | 2.6nm,0.5s,baz=301,slow=17 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 07 45.4 | |
| | 64nm,0.8s,baz=298,slow=30 | | | | | | |
| **KURK** | **Kurchatov** | **2.33** | **114** | ⇓Pg | **Pn** | **09 07 13.2** | **+1.2** |
| | 3.8nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 07 41.7 | |
| | 22nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **3.27** | **296** | Pn | **Pg** | **09 07 34.4** | **-0.8** |
| | 0.6nm,0.3s,baz=120,slow=16,SNR=12 | | | | | | |
| BVAR | | | | Sn | **Sg** | **09 08 18.6** | **+1.0** |
| | 1.2nm,0.3s,baz=99,slow=28,SNR=4.3 | | | | | | |
| **BRVK** | **Borovoye** | **3.35** | **296** | ⇓Pg | **Pg** | **09 07 35.6** | **-0.9** |
| | 4.2nm,0.8s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 09 08 20.8 | |
| | 18nm,1.0s | | | | | | |
| **OTUK** | **Ortayu** | **3.96** | **210** | ⇑Pg | **Pg** | **09 07 47.2** | **-1.0** |
| | 1.3nm,0.8s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 09 08 41.5 | |
| | 6.5nm,0.9s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.20** | **65** | *i* | | 09 42 20.0 | |
| | baz=252,slow=310,SNR=1.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.20** | **65** | Pn | **Pn** | **09 08 05.5** | **+0.4** |
| | 0.3nm,0.3s,baz=246,slow=11,SNR=3.8 | | | | | | |
| ZALV | | | | Sn | **Sn** | **09 09 15.9** | **-0.7** |
| | 0.2nm,0.3s,baz=230,slow=22,SNR=1.6 | | | | | | |
| ZALV | | | | Lg | Lg | 09 09 46.7 | |
| | 0.1nm,0.3s,baz=256,slow=24,SNR=1.5 | | | | | | |
| **MAKZ** | **Makanchi** | **6.58** | **136** | ⇑Lg | Lg | 09 09 58.7 | |
| | 4.3nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **6.73** | **134** | ⇓Pn | **Pn** | **09 08 13.7** | **+1.3** |
| | 0.6nm,0.7s,baz=309,slow=13,SNR=3.9 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **09 09 28.7** | **-1.1** |
| | 0.7nm,0.5s | | | | | | |
| MK31 | | | | Lg | Lg | 09 10 05.8 | |
| | 3.3nm,0.7s,baz=312,slow=26,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.73** | **134** | Pn | **Pn** | **09 08 14.3** | **+1.8** |
| | 0.1nm,0.3s,baz=321,slow=13,SNR=4.1 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 09 28.5** | **-1.3** |
| | 0.2nm,0.3s,baz=319,slow=33,SNR=8.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 10 02.4 | |
| | 0.2nm,0.3s,baz=318,slow=26,SNR=3.8 | | | | | | |

*DDA **04** 09:18:07.0±0.0,34.38N×26.22E,h53km,ML2.8*

*ATH **04** 09:18:10.9,34.75N×26.70E,h37km±9km,ML2.6/1, Error ellipse: s-maj=14.4km s-min=5.5km az=345.0*

*IDC **04** 09:18:15.7±3.0,34.51N×26.37E,h89km±24km,mb3.6/7, mb1 3.6/8,mb1mx3.3/38,mbtmp3.8/8, Error ellipse: s-maj=32.6km s-min=24.7km az=139.0*

**ISC 04 09:18:11.0±1.0,34.64N±0.09×26.56E±0.06,h33km,n19, σ1§43/23,mb4.0/7,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **0.55** | **329** | P | **Pb** | **09 18 22.1** | **-0.3** |
| ZKR | | | | S | **Sb** | **09 18 30.3** | **0.0** |
| ZKR | | | | AML | AML | 09 18 42.2 | |
| | comp=N,949μm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 09 18 47.9 | |
| | comp=E,2275μm,0.7s | | | | | | |
| **NPS** | **Neapolis** | **0.99** | **309** | P | **Pb** | **09 18 30.0** | **+0.2** |
| **IDI** | **Anoyia** | **1.52** | **296** | P | **Pb** | **09 18 39.1** | **+0.5** |
| | comp=E,4.4nm,0.3s,baz=106,slow=15,SNR=24 | | | | | | |
| IDI | | | | S | **Sb** | **09 18 59.7** | **+2.2** |
| | comp=E,6.7nm,0.3s,baz=205,slow=23,SNR=13 | | | | | | |
| **IDI** | **Anoyia** | **1.52** | **296** | P | **Pb** | **09 18 39.0** | **+0.4** |
| **SNT5** | **Nea Kammeni, S** | **2.00** | **332** | P | **Pb** | **09 18 45.4** | **-1.3** |
| **TURN** | **Turunc** | **2.53** | **32** | P | **Pn** | **09 18 50.7** | **+0.9** |
| TURN | | | | S | **Sb** | **09 19 25.4** | **-1.1** |
| TURN | | | | *i* AML | AML | 09 19 29.0 | |
| | comp=E,27nm,1.4s | | | | | | |
| TURN | | | | *i* AML | AML | 09 19 36.0 | |
| | comp=E,36nm,1.3s | | | | | | |
| **FETY** | **Fethiye** | **2.86** | **45** | P | **Pn** | **09 18 56.0** | **+1.7** |
| **AKAS** | **Kas** | **2.95** | **57** | P | **Pn** | **09 18 57.5** | **+1.9** |
| AKAS | | | | S | **Sn** | **09 19 29.9** | **0.0** |
| AKAS | | | | *i* AML | AML | 09 19 35.0 | |
| | comp=E,94nm,0.7s | | | | | | |
| AKAS | | | | *i* AML | AML | 09 19 46.0 | |
| | comp=E,37nm,1.0s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **3.40** | **33** | P | **Pn** | **09 19 01.0** | **-0.8** |
| **GOLH** | **Golhisar** | **3.55** | **42** | P | **Pn** | **09 19 06.9** | **+2.9** |
| **KEPZ** | **Antalya-Kepez** | **4.68** | **60** | P | **Pn** | **09 19 19.9** | **+0.6** |
| KEPZ | | | | *i* AML | AML | 09 20 51.0 | |
| | comp=E,6.4nm,3.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **16.17** | **6** | P | **P** | **09 21 59.0** | **+0.5** |
| | comp=E,0.9nm,0.3s,baz=192,slow=11,SNR=4.9 | | | | | | |
| **FINES** | **FINESS Array B** | **26.82** | **359** | P | **P** | **09 23 47.1** | **-0.8** |
| | comp=E,0.6nm,0.5s,baz=157,slow=12,SNR=4.0 | | | | | | |
| **HFS** | **Hagfors** | **26.85** | **346** | P | **P** | **09 23 47.0** | **-1.3** |
| | comp=E,4.7nm,0.9s,baz=168,slow=14,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.07** | **233** | P | **P** | **09 24 22.9** | **-3.3** |
| | comp=E,0.2nm,0.4s,baz=36,slow=9.0,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.95** | **359** | P | **P** | **09 24 59.1** | **-0.4** |
| | comp=E,4.1nm,1.0s,baz=168,slow=7.3,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.10** | **56** | P | **P** | **09 26 09.3** | **+1.3** |
| | comp=E,0.3nm,0.6s,baz=272,slow=7.7,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **58.92** | **51** | P | **P** | **09 28 08.1** | **+1.1** |
| | comp=E,0.4nm,0.3s,baz=270,slow=8.5,SNR=2.6 | | | | | | |
| **SCHQ** | **Schefferville** | **64.32** | **320** | P | **P** | **09 28 43.3** | **+0.2** |
| | comp=E,2.9nm,0.9s,baz=76,slow=8.3,SNR=1.9 | | | | | | |

**IDC 04 09:25:07.5±312.0,54.54N×43.52E,h0km,Error ellipse: s-maj=138.1km s-min=85.4km az=131.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.19** | **304** | *i* | | 09 50 50.0 | |
| | baz=119,slow=341,SNR=1.5 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **9.77** | **109** | *i* | | 10 23 40.0 | |
| | baz=304,slow=297,SNR=1.0 | | | | | | |
| **I37NO** | **I37NO** | **18.51** | **332** | *i* | | 11 29 10.0 | |
| | baz=123,slow=337,SNR=1.2 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **23.90** | **74** | *i* | | 11 51 40.0 | |
| | baz=286,slow=327,SNR=1.1 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **38.81** | **73** | *i* | | 13 24 30.0 | |
| | baz=302,slow=339,SNR=1.2 | | | | | | |

**IDC 04 10:22:42.4±1.6,4.10S×129.46E,h0km,mb3.2/1, mb1 3.5/5,mb1mx3.2/42,mbtmp3.3/5,ML3.2/4,MS3.3/1, Ms1 3.3/1,ms1mx2.4/29,Error ellipse: s-maj=50.8km s-min=22.9km az=95.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **3.68** | **29** | Pn | Pn | 10 23 41.8 | +1.2 |
| | 2.8nm,0.3s,baz=33,slow=23,SNR=29 | | | | | | |
| SIJI | | | | Sn | Sn | 10 24 24.1 | -0.6 |
| | 1.6nm,0.3s,baz=223,slow=23,SNR=6.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.41** | **195** | Pn | Pn | 10 26 07.4 | -0.4 |
| | 0.1nm,0.3s,baz=16,slow=18,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.45** | **164** | Pn | Pn | 10 26 32.7 | -2.1 |
| | 0.1nm,0.3s,baz=349,slow=13,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **19.93** | **168** | P | Pn | 10 27 16.9 | -0.6 |
| | 0.2nm,0.3s,baz=348,slow=11,SNR=20 | | | | | | |
| **CTA** | **Charters Tower** | **22.81** | **136** | LR | LR | 10 38 51.2 | |
| | comp=Z,70nm,18.3s,baz=91,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.52** | **326** | P | P | 10 33 27.3 | -0.3 |
| | 0.2nm,0.6s,baz=114,slow=7.8,SNR=3.1 | | | | | | |

**IDC 04 10:33:33.6±3.0,3.59S×126.97E,h0km,mb3.1/2, mb1 3.4/3,mb1mx3.2/44,mbtmp3.1/3,ML2.9/1,MS2.4/1, Ms1 2.4/1,ms1mx2.1/21,Error ellipse: s-maj=358.6km s-min=29.6km az=65.0,Buru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **10.68** | **353** | LR | LR | 10 40 45.7 | |
| | comp=Z,21nm,21.4s,baz=170,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.77** | **157** | P | Pn | 10 37 42.7 | +0.2 |
| | 0.0nm,0.3s,baz=333,slow=13,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **21.05** | **162** | P | P | 10 38 19.4 | 0.0 |
| | 0.7nm,0.8s,baz=345,slow=12,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.75** | **327** | P | P | 10 44 07.3 | -0.1 |
| | 0.1nm,0.7s,baz=130,slow=8.3,SNR=1.6 | | | | | | |

*IDC **04** 10:48:07.6±2.1,30.48S×177.56W,h0km,mb3.9/4, mb1 4.0/5,mb1mx3.4/43,mbtmp3.9/5,ML3.2/1,Error ellipse: s-maj=47.6km s-min=21.4km az=101.0*

**ISC 04 10:48:09.8±2.0,30.56S±0.08×177.3W±0.3,h33km,n8, σ1§30/10,mb4.0/4,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.41** | **338** | Pn | **Pn** | **10 48 32.9** | **-0.2** |
| | 234nm,0.3s,baz=111,slow=5.7,SNR=13 | | | | | | |
| RAO | | | | Sn | **Sn** | **10 48 49.3** | **-1.3** |
| | 322nm,0.3s,baz=7.4,slow=23,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **8.95** | **209** | Pn | **Pn** | **10 50 16.3** | **-0.4** |
| | 0.3nm,0.3s,baz=140,slow=16,SNR=1.5 | | | | | | |
| URZ | | | | Sn | **Sn** | **10 51 54.9** | **-1.4** |
| | 0.6nm,0.3s,baz=143,slow=19,SNR=7.7 | | | | | | |
| **CTA** | **Charters Tower** | **34.41** | **279** | P | **P** | **10 54 54.2** | **0.0** |
| | 1.4nm,0.6s,baz=119,slow=10,SNR=1.4 | | | | | | |
| **STKA** | **Stephens Creek** | **35.02** | **257** | P | **P** | **10 54 59.6** | **+0.2** |
| | 0.7nm,0.3s,baz=112,slow=19,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.69** | **267** | P | **P** | **10 56 14.1** | **+2.2** |
| | 0.9nm,0.6s,baz=104,slow=7.5,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.69** | **272** | P | **P** | **10 56 21.0** | **+1.1** |
| | 1.3nm,0.6s,baz=111,slow=8.0,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **145.50** | **340** | PKPbc | **PKiKP** | **11 07 46.6** | **-1.2** |
| | 1.9nm,0.3s,baz=49,slow=5.0,SNR=31 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.79** | **323** | PKPbc | **PKiKP** | **11 08 01.7** | **+0.7** |
| | 0.5nm,0.5s,baz=48,slow=3.6,SNR=2.9 | | | | | | |

*IDC **04** 10:49:49.4±2.0,0.01N×124.24E,h74km±20km,mb4.0/24, mb1 4.1/27,mb1mx3.8/60,mbtmp4.3/27,MS3.3/11, Ms1 3.3/11,ms1mx3.0/76,Error ellipse: s-maj=13.9km s-min=10.3km az=78.0*

*NEIC **04** 10:49:50.6±2.3,0.02S±0.08×124.32E±0.06,h78km±8km, mb4.6/35,Error ellipse: s-maj=11.8km s-min=8.8km az=184.0*

*DJA **04** 10:49:50.0±0.2,0°S±2°×12°4E±°,h64km±3km,M4.6/20, mb4.8/18,mB5.0/8,MLv4.7/20,Mw(mB)4.4/8,MwMwp5.6/1, Mwp5.8/1*

**ISC 04 10:49:49.5±0.4,0.02S±0.05×124.34E±0.05,h73km,n115, σ1§11/109,mb4.4/42,Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.69** | **329** | P | **Pn** | **10 50 04.0** | **-0.5** |
| KMSI | | | | S | **Sn** | **10 50 15.1** | **-0.5** |
| **MRSI** | **Marisa** | **2.44** | **282** | P | **Pn** | **10 50 25.8** | **-1.4** |
| **SANI** | **Sanana** | **2.61** | **141** | P | **Pn** | **10 50 27.0** | **-2.5** |
| **SANI** | **Sanana** | **2.61** | **141** | P | **Pn** | **10 50 27.4** | **-2.1** |
| **APSI** | **Ampana** | **2.83** | **252** | P | **Pn** | **10 50 34.7** | **+2.2** |
| **TNTI** | **Ternate** | **3.13** | **75** | P | **Pn** | **10 50 37.1** | **+0.5** |
| TNTI | | | | S | **Sn** | **10 51 14.0** | **+1.1** |
| **TNTI** | **Ternate** | **3.13** | **75** | Pn | **Pn** | **10 50 37.4** | **+0.8** |
| **TNTI** | **Ternate** | **3.13** | **75** | P | **Pn** | **10 50 37.8** | **+1.2** |
| **LBMI** | **Labuha** | **3.23** | **101** | P | **Pn** | **10 50 38.0** | **+0.1** |
| LBMI | | | | S | **Sn** | **10 51 14.4** | **-0.8** |
| **TOLI2** | **Tolitoli** | **3.73** | **288** | Pn | **Pn** | **10 50 45.3** | **+0.7** |
| **TOLI2** | **Tolitoli** | **3.73** | **288** | P | **Pn** | **10 50 45.4** | **+0.7** |
| **MPSI** | **Mapaga** | **4.45** | **275** | P | **Pn** | **10 50 54.1** | **-0.5** |
| **AAI** | **Ambon** | **5.31** | **133** | P | **Pn** | **10 51 06.9** | **+0.6** |
| | 1.0nm3μm171nm,0.5s | | | | | | |
| **TTSI** | **Tana Toraja** | **5.42** | **236** | P | **Pn** | **10 51 09.2** | **+1.3** |
| | 1.4nm3μm230nm,0.6s | | | | | | |
| **MSAI** | **Masohi** | **5.66** | **126** | P | **Pn** | **10 51 12.3** | **+1.2** |
| | 0.5nm2μm94nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.01** | **229** | P | **Pn** | **10 51 17.4** | **+1.4** |
| | 0.6nm2μm142nm,0.5s | | | | | | |
| **BNSI** | **Bone** | **6.07** | **224** | P | **Pn** | **10 51 18.0** | **+1.3** |
| | 0.5nm39μm1μm106nm,0.7s | | | | | | |
| **BKSI** | **Bulukumba** | **6.74** | **219** | P | **Pn** | **10 51 27.1** | **+1.2** |
| | 0.3nm610nm36nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **6.75** | **223** | P | **Pn** | **10 51 27.3** | **+1.2** |
| | 4.8nm,0.3s,baz=85,slow=8.0,SNR=14 | | | | | | |
| KAPI | | | | S | **Sn** | **10 52 40.9** | **-0.7** |
| | 2.5nm,0.3s,baz=352,slow=23,SNR=1.5 | | | | | | |
| KAPI | | | | LR | LR | 10 54 46.5 | |
| | comp=Z,65nm,19.8s,baz=64,slow=44 | | | | | | |
| **KAPI** | **Kappang** | **6.75** | **223** | Pn | **Pn** | **10 51 27.4** | **+1.4** |
| **KAPI** | **Kappang** | **6.75** | **223** | P | **Pn** | **10 51 27.6** | **+1.5** |
| **SWI** | **Sorong** | **6.98** | **97** | P | **Pn** | **10 51 28.4** | **-0.7** |
| | 0.2nm61nm,0.9s | | | | | | |
| **SIJI** | **Sorong** | **6.98** | **97** | P | **Pn** | **10 51 30.5** | **+1.2** |
| | 3.2nm,0.3s,baz=326,slow=19,SNR=7.9 | | | | | | |
| SIJI | | | | S | **Sn** | **10 52 49.4** | **+2.1** |
| | baz=247,slow=22,SNR=1.7 | | | | | | |
| **SMKI** | **Samarinda** | **7.14** | **267** | P | Pn | 10 51 37.6 | +6.2 |
| **BNDI** | **Bandanaira** | **7.14** | **129** | P | **Pn** | **10 51 32.2** | **+0.8** |
| **DAV** | **Davao City (W)** | **7.15** | **10** | LR | LR | 10 54 36.9 | |
| | comp=Z,152nm,20.4s,baz=170,slow=40 | | | | | | |
| **MYLDM** | **Lahad Datu** | **7.79** | **312** | Pn | **Pn** | **10 51 42.0** | **+1.8** |
| **FAKI** | **Fak Fak** | **8.42** | **110** | P | **Pn** | **10 51 47.5** | **-1.4** |
| | 30nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **8.42** | **110** | Pn | **Pn** | **10 51 47.1** | **-1.8** |
| **FAKI** | **Fak Fak** | **8.42** | **110** | P | **Pn** | **10 51 47.2** | **-1.7** |
| **KBKI** | **Kotabaru** | **8.79** | **248** | P | Pn | 10 52 06.5 | +13 |
| **BBKI** | **Banjar Baru** | **10.09** | **250** | P | Pn | 10 52 19.3 | +7.7 |
| **KKM** | **Kota Kinabalu** | **10.10** | **307** | Pn | **Pn** | **10 52 14.4** | **+2.5** |
| **KKM** | **Kota Kinabalu** | **10.10** | **307** | P | **Pn** | **10 52 14.5** | **+2.6** |
| **BATI** | **Baumata** | **10.14** | **184** | LR | LR | 10 56 13.5 | |
| | comp=Z,294nm,20.6s,baz=306,slow=38 | | | | | | |
| **KDU** | **Kakadu** | **14.95** | **148** | P | **Pn** | **10 53 17.1** | **+0.2** |
| **KNRA** | **Kununurra** | **16.16** | **165** | | **P** | **10 53 33.8** | **-0.5** |
| **KNRA** | **Kununurra** | **16.16** | **165** | P | **P** | **10 53 33.9** | **-0.3** |
| **LEM** | **Lembang** | **18.00** | **248** | LR | LR | 11 01 18.0 | |
| | comp=Z,135nm,19.9s,baz=26,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.01** | **176** | P | **P** | **10 53 54.7** | **+0.1** |
| | 0.7nm,0.3s,baz=1.6,slow=9.0,SNR=23 | | | | | | |
| **MBWA** | **Marble Bar** | **21.49** | **192** | P | **P** | **10 54 32.1** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 10 54 33.3 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **21.49** | **192** | P | **P** | **10 54 32.8** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **21.87** | **191** | P | **P** | **10 54 36.0** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 10 54 37.1 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.87** | **191** | P | **P** | **10 54 35.6** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 10 54 37.6 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.87** | **191** | P | **P** | **10 54 36.6** | **+0.2** |
| **WB0** | **Warramunga Arr** | **21.96** | **154** | P | **P** | **10 54 36.6** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 10 54 39.7 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.09** | **154** | P | **P** | **10 54 39.1** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 10 54 40.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.09** | **154** | P | **P** | **10 54 37.8** | **-1.1** |
| **WRA** | **Warramunga Arr** | **22.09** | **154** | P | **P** | **10 54 37.6** | **-1.3** |
| | comp=Z,10.0nm,0.8s,baz=333,slow=10,SNR=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.09** | **154** | P | **P** | **10 54 37.3** | **-1.6** |
| **WB2** | **Warramunga Arr** | **22.10** | **154** | P | **P** | **10 54 38.2** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 10 54 41.0 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.20** | **154** | P | **P** | **10 54 38.4** | **-1.6** |
| **COEN** | **Coen** | **23.23** | **127** | P | **P** | **10 54 50.5** | **-0.2** |
| COEN | | | | IAmb | IAmb | 10 55 07.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **COEN** | **Coen** | **23.23** | **127** | P | **P** | **10 54 50.9** | **+0.2** |
| **TPUB** | **Ta-pu** | **23.46** | **351** | P | **P** | **10 54 52.4** | **-0.3** |
| TPUB | | | | IAmb | IAmb | 10 54 57.0 | |
| | comp=Z,61nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **23.46** | **351** | P | **P** | **10 54 53.3** | **+0.6** |
| **IPM** | **Ipoh** | **23.71** | **281** | P | **P** | **10 54 56.2** | **+1.1** |
| IPM | | | | IAmb | IAmb | 10 55 02.1 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **PPI** | **Padang Panjang** | **23.94** | **269** | P | **P** | **10 54 58.8** | **+1.6** |
| | comp=Z,14nm,0.9s | | | | | | |
| **GIRL** | **Giralia** | **24.55** | **203** | P | **P** | **10 55 03.7** | **+1.2** |
| **GIRL** | **Giralia** | **24.55** | **203** | P | **P** | **10 55 03.5** | **+1.0** |
| **WRKA** | **Warakurna** | **25.17** | **172** | P | **P** | **10 55 08.5** | **+0.3** |
| **AS31** | **Alice Springs** | **25.28** | **159** | P | **P** | **10 55 09.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **25.28** | **159** | P | **P** | **10 55 09.3** | **+0.1** |
| | comp=Z,6.1nm,0.5s,baz=337,slow=8.6,SNR=76 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 58 41.2** | **+0.3** |
| | comp=Z,1.4nm,0.6s,baz=351,slow=2.3,SNR=8.8 | | | | | | |
| **QIS** | **Mount Isa** | **25.30** | **145** | P | **P** | **10 55 10.4** | **+0.9** |
| **PSI** | **Prapat** | **25.55** | **276** | LR | LR | 11 05 17.8 | |
| | comp=Z,102nm,20.4s,baz=42,slow=36 | | | | | | |
| **MEEK** | **Meekatharra** | **27.03** | **191** | P | **P** | **10 55 24.3** | **-0.8** |
| **OOD** | **Oodnadatta** | **29.69** | **159** | P | **P** | **10 55 49.0** | **+0.4** |
| **FORT** | **Forrest** | **30.80** | **174** | P | **P** | **10 55 58.7** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **30.97** | **308** | P | **P** | **10 55 59.6** | **-0.5** |
| | comp=Z,1.1nm,0.3s,baz=138,slow=7.9,SNR=7.4 | | | | | | |
| CMAR | | | | PcP | **PcP** | **10 58 55.4** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=170,slow=3.1,SNR=4.6 | | | | | | |
| CMAR | | | | LR | LR | 11 08 18.5 | |
| | comp=Z,29nm,21.1s,baz=115,slow=36 | | | | | | |
| **MULG** | **Mulgathing** | **31.49** | **164** | P | **P** | **10 56 04.8** | **+0.3** |
| **BBOO** | **Buckleboo** | **34.44** | **162** | P | **P** | **10 56 30.1** | **-0.2** |
| **JMN** | **Monobe** | **34.74** | **14** | P | **P** | **10 56 33.5** | **+0.6** |
| **STKA** | **Stephens Creek** | **35.65** | **154** | P | **P** | **10 56 41.2** | **+0.6** |
| | comp=Z,3.1nm,0.4s,baz=336,slow=9.5,SNR=14 | | | | | | |
| **JHS** | **Saijyo** | **35.79** | **12** | P | **P** | **10 56 43.0** | **+1.1** |
| **JHJ** | **Hachijo jima 2** | **36.03** | **22** | LR | LR | 11 11 38.4 | |
| | comp=Z,24nm,20.6s,baz=72,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **37.43** | **5** | P | **P** | **10 56 54.9** | **-0.8** |
| | comp=Z,1.3nm,0.8s,baz=183,slow=10.0,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 11 14 45.1 | |
| | comp=Z,13nm,18.4s,baz=185,slow=40 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **38.59** | **18** | P | **P** | **10 57 04.6** | **-0.9** |
| | comp=Z,6.0nm,0.7s,baz=198,slow=8.5,SNR=10 | | | | | | |
| **ARMA** | **Armidale** | **39.84** | **142** | P | **P** | **10 57 16.6** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 10 57 18.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **40.64** | **20** | P | **P** | **10 57 24.0** | **+1.5** |
| JMM | | | | IAmb | IAmb | 10 57 26.5 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **41.98** | **149** | P | **P** | **10 57 35.3** | **+1.7** |
| **TOO** | **Toolangi** | **42.17** | **155** | P | **P** | **10 57 37.0** | **+1.9** |
| TOO | | | | IAmb | IAmb | 10 57 56.2 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **JTM** | **Tenmabayashi** | **43.37** | **19** | P | **P** | **10 57 45.2** | **+0.5** |
| JTM | | | | IAmb | IAmb | 10 57 54.3 | |
| | comp=Z,33nm,1.3s | | | | | | |
| **PALK** | **Pallekele** | **44.11** | **280** | LR | LR | 11 17 25.1 | |
| | comp=Z,52nm,18.7s,baz=215,slow=38 | | | | | | |
| **USA0B** | **

comp=Z,3.0nm,0.3s,baz=274,slow=23,SNR=11
**TIXI Tiksi 71.61 2** P **P** **11 01 01.3 -1.4**
TIXI IAmb IAmb 11 01 03.2
comp=Z,5.4nm,0.5s
**NRIK Noril'sk 73.50 347** P **P** **11 01 13.0 -1.0**
comp=Z,2.9nm,0.5s,baz=121,slow=8.0,SNR=6.8
**NRIK Noril'sk 73.50 347** IAmb IAmb 11 01 14.2
comp=Z,3.1nm,0.6s
**AKTO Aktyubinsk 75.13 323** P **P** **11 01 22.3 -1.6**
comp=Z,1.5nm,0.5s,baz=97,slow=8.3,SNR=6.6
**MMAI Mount Meron Ar 89.11 303** LR LR 11 49 40.4
comp=Z,32nm,18.2s,baz=42,slow=40
**ILAR Eielson Array 89.49 25** P **P** **11 02 37.1 -1.3**
comp=Z,0.2nm,0.5s,baz=239,slow=4.9,SNR=4.5
**QSPA South Pole Qui 89.92 180** P **P** **11 02 41.0 +0.5**
comp=Z,1.4nm,0.6s,baz=310,slow=2.2,SNR=10
**QSPA South Pole Qui 89.92 180** IAmb IAmb 11 03 05.8
comp=Z,3.1nm,1.4s
**TORD Torodi Ar. Bea 121.70 285** PKP **PKPdf** **11 08 34.5 -1.6**
comp=Z,0.9nm,0.6s,baz=48,slow=2.1,SNR=7.0
**SCHQ Schefferville 124.60 8** PKP **PKPdf** **11 08 40.9 +0.2**
comp=Z,3.1nm,0.9s,baz=252,slow=8.2,SNR=4.7
**TXAR Lajitas Array 125.76 53** PKP **PKPdf** **11 08 43.8 +0.1**
comp=Z,0.3nm,0.9s,baz=318,slow=2.2,SNR=2.1

*IDC **04** 10:52:04.2±3.8, 48.71N×77.69E, h0km, mb1 2.4/2, mb1mx2.0/63, mbtmp2.4/2, ML1.9/2, Error ellipse: s-maj=52.7km s-min=13.3km az=77.0*
*NNC **04** 10:52:04.7±2.2, 48.58N×78.30E, h0km, mb2.7, mpv2.4, Error ellipse: s-maj=29.9km s-min=6.0km az=66.0, Suspected Mining explosion.*
**ISC 04 10:52:05.8±3.7, 48.71N±0.10×77.8E±0.3, h0km, n8, σ0s50/10, 3C-5D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **1.98** | **13** | Pg | | **Pn** | | **10 52 40.5** | **0.0** |
| | 0.3nm,0.3s,baz=200,slow=16,SNR=26 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 10 53 06.7 | |
| | 0.4nm,0.3s,baz=197,slow=28,SNR=13 | | | | | | | | |
| KURBB | **Kurchatov Arra** | **1.98** | **13** | ⇓Pn | | **Pn** | | **10 52 39.9** | **-0.5** |
| | 2.9nm,0.5s | | | | | | | | |
| KURBB | | | | ⇓Sn | | **Sb** | | **10 53 07.5** | **-0.2** |
| | 11nm,0.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **2.08** | **14** | ⇑Pn | | **Pn** | | **10 52 42.7** | **+0.8** |
| | 1.7nm,0.4s | | | | | | | | |
| KURK | | | | ⇑Sn | | **Sb** | | **10 53 10.1** | **-0.6** |
| | 7.6nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.39** | **122** | ⇓Pg | | **Pn** | | **10 53 00.2** | **+0.3** |
| | 0.6nm,0.6s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | | 10 53 42.7 | |
| | 2.2nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.57** | **121** | ⇓Pg | | **Pn** | | **10 53 02.5** | **0.0** |
| | 0.2nm,0.5s,baz=317,slow=17,SNR=6.1 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | | 10 53 49.6 | |
| | 0.6nm,0.3s,baz=308,slow=27,SNR=11 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **3.57** | **121** | Pn | | **Pn** | | **10 53 02.3** | **-0.2** |
| | 0.1nm,0.3s,baz=301,slow=11,SNR=5.1 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 10 53 52.6 | |
| | 0.7nm,0.3s,baz=310,slow=28,SNR=15 | | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.84** | **37** | *i* | | | | 11 33 30.0 | |
| | baz=221,slow=324,SNR=2.9 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.84** | **37** | Pn | | **Pn** | | **10 53 47.8** | **+0.6** |
| | 0.1nm,0.3s,baz=230,slow=15,SNR=1.9 | | | | | | | | |
| ZALV | | | | Pg | | **Pg** | | **10 54 16.7** | **0.0** |
| | 0.1nm,0.3s,baz=223,slow=14,SNR=3.8 | | | | | | | | |

*JMA **04** 11:03:26.7±0.2, 24.05N×122.92E, h27km±4km, M2.1*
*TAP **04** 11:03:27.4, 24.12N×122.89E, h27km, ML2.5, C*
**ISC 04 11:03:27.0±1.0, 24.08N±0.05×122.91E±0.02, h28km±10km, n48, σ0s77/87, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.37** | **5** | P | | | **Pb** | **11 03 35.2** | **-0.1** |
| JYNG | | | | S | | | **Sb** | **11 03 41.3** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.39** | **14** | P | | | **Pb** | **11 03 35.5** | **-0.1** |
| YOJ | | | | S | | | **Sb** | **11 03 41.7** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.39** | **14** | *i* P | | | **Pb** | **11 03 35.7** | **+0.1** |
| | baz=16 | | | | | | | | |
| YOJ | | | | *i* S | | | **Sb** | **11 03 41.6** | **+0.2** |
| | baz=16 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.79** | **71** | P | | | **Pb** | **11 03 41.3** | **-0.9** |
| IRIF | | | | *e*S | | | **Sb** | **11 03 52.2** | **-0.3** |
| **HATJ** | **Hateruma jima** | **0.82** | **92** | *e*S | | | **Sb** | **11 03 52.0** | **-1.3** |
| **JKRS** | **Kuro-shima** | **1.01** | **81** | P | | | **Pn** | **11 03 45.6** | **+0.3** |
| **EHP** | **Heping Village** | **1.09** | **282** | *e*P | | | **Pn** | **11 03 46.2** | **-0.2** |
| | baz=281 | | | | | | | | |
| **EWUT** | **Wuta** | **1.09** | **289** | *e*P | | | **Pn** | **11 03 46.7** | **+0.2** |
| | baz=288 | | | | | | | | |
| **TWC** | **Suao** | **1.10** | **299** | P | | | **Pn** | **11 03 46.8** | **+0.3** |
| | baz=298 | | | | | | | | |
| TWC | | | | *e*S | | | **Sb** | **11 04 01.3** | **-0.1** |
| | baz=298 | | | | | | | | |
| **ENA** | **Nanau** | **1.12** | **288** | *e*P | | | **Pb** | **11 03 47.6** | **-0.2** |
| | baz=287 | | | | | | | | |
| ENA | | | | *e*S | | | **Sn** | **11 04 00.8** | **-0.6** |
| | baz=287 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.16** | **76** | P | | | **Pn** | **11 03 47.6** | **+0.3** |
| JIJ | | | | S | | | **Sn** | **11 04 03.0** | **+0.8** |
| **NACB** | **Ninganchiao** | **1.21** | **275** | *e*P | | | **Pn** | **11 03 47.7** | **-0.2** |
| | baz=257 | | | | | | | | |
| NACB | | | | *e*S | | | **Sn** | **11 04 03.6** | **+0.2** |
| | baz=257 | | | | | | | | |
| **NDS** | **Dongshan** | **1.22** | **297** | *e*P | | | **Pb** | **11 03 49.2** | **-0.2** |
| | baz=296 | | | | | | | | |
| NDS | | | | *e*S | | | **Sb** | **11 04 04.8** | **0.0** |
| | baz=296 | | | | | | | | |
| **TWE** | **Neicheng** | **1.30** | **300** | *e*P | | | **Pb** | **11 03 50.6** | **-0.2** |
| | baz=312 | | | | | | | | |
| TWE | | | | *e*S | | | **Sb** | **11 04 06.2** | **-0.9** |
| | baz=312 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.31** | **276** | *e*P | | | **Pn** | **11 03 49.8** | **+0.3** |
| | baz=274 | | | | | | | | |
| ETLH | | | | *e*S | | | **Sb** | **11 04 07.9** | **+0.3** |
| | baz=274 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.33** | **312** | *e*P | | | **Pn** | **11 03 50.0** | **+0.3** |
| | baz=326 | | | | | | | | |
| TIPB | | | | *e*S | | | **Sn** | **11 04 05.3** | **-1.1** |
| | baz=326 | | | | | | | | |
| **LATG** | **Datong** | **1.34** | **290** | *e*P | | | **Pb** | **11 03 50.9** | **-0.7** |
| | baz=289 | | | | | | | | |
| LATG | | | | *e*S | | | **Sb** | **11 04 07.8** | **-0.6** |
| | baz=289 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.37** | **68** | P | | | **Pn** | **11 03 50.1** | **-0.2** |
| JISG | | | | *e*S | | | **Sb** | **11 04 09.3** | **+0.1** |
| **NDT** | **Datong Townshi** | **1.38** | **292** | *e*P | | | **Pb** | **11 03 51.9** | **-0.2** |
| | baz=291 | | | | | | | | |
| NDT | | | | *e*S | | | **Sb** | **11 04 08.6** | **-0.8** |
| | baz=291 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.38** | **317** | *e*P | | | **Pn** | **11 03 50.3** | **-0.2** |
| | baz=330 | | | | | | | | |
| SXI1 | | | | *e*S | | | **Sn** | **11 04 07.7** | **-0.1** |
| | baz=330 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.38** | **299** | *e*P | | | **Pb** | **11 03 52.0** | **-0.3** |
| | baz=310 | | | | | | | | |
| FUSB | | | | *e*S | | | **Sb** | **11 04 09.1** | **-0.4** |
| | baz=310 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.42** | **314** | *e*P | | | **Pn** | **11 03 51.0** | **0.0** |
| | baz=314 | | | | | | | | |
| NWF | | | | *e*S | | | **Sb** | **11 04 09.4** | **-1.3** |
| | baz=314 | | | | | | | | |
| **NNSB** | **Datong** | **1.44** | **284** | *e*P | | | **Pn** | **11 03 50.5** | **-0.7** |
| | baz=283 | | | | | | | | |
| NNSB | | | | *e*S | | | **Sn** | **11 04 09.5** | **+0.3** |
| | baz=283 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.45** | **285** | *e*P | | | **Pb** | **11 03 52.8** | **-0.6** |
| | baz=283 | | | | | | | | |
| NNS | | | | *e*S | | | **Sb** | **11 04 11.2** | **-0.3** |
| | baz=283 | | | | | | | | |
| **NWLT** | **Wulai** | **1.46** | **299** | *e*P | | | **Pb** | **11 03 53.7** | **+0.2** |
| | baz=307 | | | | | | | | |
| NWLT | | | | *e*S | | | **Sb** | **11 04 11.0** | **-0.7** |
| | baz=307 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.50** | **273** | *e*P | | | **Pn** | **11 03 51.4** | **-1.1** |
| | baz=272 | | | | | | | | |
| WHF | | | | *e*S | | | **Sn** | **11 04 12.4** | **+1.0** |
| | baz=272 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.52** | **293** | *e*P | | | **Pn** | **11 03 52.8** | **+0.4** |
| | baz=292 | | | | | | | | |
| YHNB | | | | *e*S | | | **Sb** | **11 04 12.3** | **-1.1** |
| | baz=292 | | | | | | | | |
| **FUSS** | **Fushou** | **1.53** | **276** | *e*P | | | **Pn** | **11 03 52.7** | **0.0** |
| | baz=275 | | | | | | | | |
| FUSS | | | | *e*S | | | **Sn** | **11 04 12.8** | **+1.0** |
| | baz=275 | | | | | | | | |
| **NSK** | **Sanguang** | **1.53** | **293** | *e*P | | | **Pn** | **11 03 53.5** | **+1.0** |
| | baz=292 | | | | | | | | |
| NSK | | | | *e*S | | | **Sb** | **11 04 13.1** | **-0.9** |
| | baz=292 | | | | | | | | |
| **CHGB** | **Renai** | **1.59** | **270** | *e*P | | | **Pn** | **11 03 52.1** | **-1.3** |
| | baz=269 | | | | | | | | |
| CHGB | | | | *e*S | | | **Sn** | **11 04 13.1** | **0.0** |
| | baz=269 | | | | | | | | |
| **WUSB** | **Renai** | **1.64** | **267** | *e*P | | | **Pn** | **11 03 53.5** | **-0.6** |
| | baz=266 | | | | | | | | |
| WUSB | | | | *e*S | | | **Sn** | **11 04 13.7** | **-0.6** |
| | baz=266 | | | | | | | | |
| **VWDT** | **VWDT** | **1.65** | **259** | *e*P | | | **Pn** | **11 03 52.8** | **-1.3** |
| | baz=258 | | | | | | | | |
| VWDT | | | | *e*S | | | **Sn** | **11 04 13.7** | **-0.7** |
| | baz=258 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.72** | **289** | *e*P | | | **Pn** | **11 03 56.6** | **+1.4** |
| | baz=294 | | | | | | | | |
| NFF | | | | *e*S | | | **Sb** | **11 04 19.4** | **+0.1** |
| | baz=294 | | | | | | | | |
| **WHP** | **Taichung City** | **1.81** | **277** | *e*P | | | **Pn** | **11 03 57.7** | **+1.4** |
| | baz=263 | | | | | | | | |
| WHP | | | | *e*S | | | **Sn** | **11 04 19.3** | **+1.0** |
| | baz=263 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.81** | **261** | *e*P | | | **Pn** | **11 03 56.5** | **+0.1** |
| | baz=260 | | | | | | | | |
| SSLB | | | | *e*S | | | **Sn** | **11 04 19.9** | **+1.4** |
| | baz=260 | | | | | | | | |
| **LIOB** | **Emei** | **1.82** | **288** | *e*P | | | **Pn** | **11 03 57.7** | **+1.3** |
| | baz=288 | | | | | | | | |
| LIOB | | | | *e*S | | | **Sn** | **11 04 19.5** | **+1.0** |
| | baz=288 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.83** | **270** | *e*P | | | **Pn** | **11 03 58.0** | **+1.4** |
| | baz=269 | | | | | | | | |
| WCS | | | | *e*S | | | **Sn** | **11 04 20.2** | **+1.5** |
| | baz=269 | | | | | | | | |
| **EDH** | **Donghe** | **1.84** | **233** | *e*P | | | **Pn** | **11 03 57.7** | **+1.0** |
| | baz=221 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.85** | **264** | *e*P | | | **Pn** | **11 03 57.1** | **+0.1** |
| | baz=263 | | | | | | | | |
| SMLT | | | | *e*S | | | **Sn** | **11 04 20.6** | **+1.1** |
| | baz=263 | | | | | | | | |
| **TYC** | **Yuchr** | **1.89** | **265** | *e*P | | | **Pn** | **11 03 58.7** | **+1.4** |
| | baz=264 | | | | | | | | |
| TYC | | | | *e*S | | | **Sb** | **11 04 22.4** | **-1.5** |
| | baz=264 | | | | | | | | |
| **ALS** | **Alishan** | **2.01** | **254** | *e*P | | | **Pn** | **11 03 58.2** | **-1.1** |
| | baz=253 | | | | | | | | |
| **CHN5** | **Tsauling** | **2.10** | **257** | *e*P | | | **Pn** | **11 04 01.1** | **+0.7** |
| | baz=246 | | | | | | | | |
| CHN5 | | | | *e*S | | | **Sn** | **11 04 26.2** | **+0.5** |
| | baz=246 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.23** | **250** | *e*P | | | **Pn** | **11 04 02.0** | **-0.1** |
| | baz=238 | | | | | | | | |
| TPUB | | | | *e*S | | | **Sn** | **11 04 29.4** | **+0.6** |
| | baz=238 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.27** | **249** | *e*P | | | **Pn** | **11 04 03.0** | **+0.4** |
| | baz=237 | | | | | | | | |
| WTP | | | | *e*S | | | **Sn** | **11 04 30.2** | **+0.6** |
| | baz=237 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.36** | **248** | *e*P | | | **Pn** | **11 04 04.2** | **+0.3** |
| | baz=247 | | | | | | | | |
| **TWK** | **Hsinying** | **2.37** | **250** | *e*P | | | **Pn** | **11 04 04.4** | **+0.4** |
| | baz=249 | | | | | | | | |
| TWK | | | | *e*S | | | **Sn** | **11 04 33.7** | **+1.6** |
| | baz=249 | | | | | | | | |
| **SSD** | **Sandimen** | **2.48** | **238** | *e*P | | | **Pn** | **11 04 06.1** | **+0.5** |
| | baz=228 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.56** | **235** | *e*P | | | **Pn** | **11 04 07.3** | **+0.7** |
| | baz=226 | | | | | | | | |

**KRSC 04 11:36:17.9±0.9, 55.14N×162.71E, h62km±22km, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.81** | **225** | *e*P | | | Pn | 11 36 35.8 | +2.2 |
| MKZ | | | | *e*S | | | Sn | 11 36 47.7 | +2.5 |
| **KBTR** | **Krutoberegovo** | **1.07** | **3** | *e*P | | | Pn | 11 36 37.9 | +1.0 |
| KBTR | | | | *e*S | | | Sn | 11 36 51.9 | +0.8 |
| **KBG** | **Krutoberegovo** | **1.12** | **360** | *e*P | | | Pn | 11 36 38.3 | +0.8 |
| KBG | | | | *e*S | | | Sn | 11 36 52.9 | +0.8 |
| **TUMD** | **Tumrok D** | **1.33** | **274** | *e*P | | | Pn | 11 36 41.3 | +1.0 |
| TUMD | | | | *e*S | | | Sn | 11 36 58.1 | +1.0 |
| **ZLN** | **Zelenaya** | **1.40** | **310** | *e*P | | | Pn | 11 36 43.1 | +1.8 |
| **BZGR** | **Bezymyannyi-Gr** | **1.40** | **306** | *e*P | | | Pn | 11 36 44.3 | +3.0 |
| **TUMR** | **Tumrok** | **1.48** | **277** | *e*P | | | Pn | 11 36 43.9 | +1.5 |
| **BZWR** | **Bezymyannyi-We** | **1.50** | **304** | *e*P | | | Pn | 11 36 48.4 | +5.6 |
| **KMNR** | **Kamenistaya** | **1.54** | **295** | *e*P | | | Pn | 11 36 44.7 | +1.5 |
| **BKI** | **Bering** | **1.87** | **87** | *e*P | | | Pn | 11 36 50.6 | +3.0 |
| BKI | | | | *e*S | | | Sn | 11 37 12.7 | +2.6 |
| **KII** | **Karymskiy** | **2.19** | **241** | *e*P | | | Pn | 11 36 54.6 | +2.5 |
| KII | | | | *e*S | | | Sn | 11 37 21.6 | +3.5 |
| **ESO** | **Esso** | **2.41** | **291** | *e*P | | | Pn | 11 36 54.9 | 0.0 |
| **SPN** | **Mys Shipunski** | **2.58** | **219** | *e*P | | | Pn | 11 36 58.7 | +1.4 |
| SPN | | | | *e*S | | | Sn | 11 37 28.2 | +0.7 |
| **NLC** | **Nalytchevo** | **2.79** | **226** | *e*P | | | Pn | 11 37 02.7 | +2.6 |
| NLC | | | | *e*S | | | Sn | 11 37 34.9 | +2.3 |
| **SDLR** | **Sedlovina** | **2.92** | **232** | *e*P | | | Pn | 11 37 04.8 | +2.8 |
| SDLR | | | | *e*S | | | Sn | 11 37 38.7 | +2.8 |
| **KRER** | **Koryakskii** | **2.96** | **233** | *e*P | | | Pn | 11 37 06.0 | +3.4 |
| **SMAR** | **Somma** | **2.97** | **232** | *e*P | | | Pn | 11 37 05.6 | +2.9 |
| **UGLR** | **Uglovaya** | **2.99** | **231** | *e*P | | | Pn | 11 37 06.0 | +3.1 |
| UGLR | | | | *e*S | | | Sn | 11 37 40.9 | +3.3 |
| **AVH** | **Avacha** | **2.99** | **233** | *e*P | | | Pn | 11 37 06.2 | +3.3 |
| AVH | | | | *e*S | | | Sn | 11 37 41.3 | +3.7 |
| **KOK** | **Koryaka** | **3.02** | **234** | *e*P | | | Pn | 11 37 06.5 | +3.1 |
| **GNL** | **Ganaly** | **3.14** | **245** | *e*P | | | Pn | 11 37 08.3 | +3.4 |
| **DALK** | **Dalny** | **3.14** | **229** | *e*P | | | Pn | 11 37 07.8 | +2.9 |
| DALK | | | | *e*S | | | Sn | 11 37 43.4 | +2.2 |
| **PET** | **Petropavlovsk** | **3.19** | **230** | *e*P | | | Pn | 11 37 08.7 | +3.1 |
| PET | | | | *e*S | | | Sn | 11 37 45.0 | +2.6 |
| **KRMR** | **Karymshinskiy** | **3.56** | **231** | *e*P | | | Pn | 11 37 14.8 | +4.3 |
| KRMR | | | | *e*S | | | Sn | 11 37 54.9 | +3.6 |
| **RUS** | **Russkaya** | **3.68** | **224** | *e*P | | | Pn | 11 37 15.0 | +2.8 |
| RUS | | | | *e*S | | | Sn | 11 37 55.7 | +1.4 |
| **GRL** | **Gorelyy** | **3.77** | **229** | *e*P | | | Pn | 11 37 17.9 | +4.2 |
| **MTVR** | **Mutnovka** | **3.78** | **227** | *e*P | | | Pn | 11 37 17.1 | +3.4 |

**NNC 04 11:49:27.8±5.6, 37.62N×69.65E, h0km, mb3.6, mpv3.2, 3C-4D, Error ellipse: s-maj=51.5km s-min=38.5km az=5.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KK09** | **Karatay Array** | **5.54** | **6** | ⇓Pn | | | Pn | 11 50 51.3 | -0.2 |
| | 0.6nm,0.4s | | | | | | | | |
| KK09 | | | | ⇓Pg | | | Pb | 11 51 09.5 | +4.2 |
| | 3.9nm,0.8s,baz=182,slow=15 | | | | | | | | |
| KK09 | | | | ⇑Lg | | | Lg | 11 52 23.4 | |
| | 5.3nm,0.5s,baz=189,slow=26 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.24** | **35** | ⇑Pn | | | Pn | 11 51 02.7 | +1.4 |
| | 2.1nm,0.7s | | | | | | | | |
| AAK | | | | ⇓Lg | | | Lg | 11 52 44.9 | |
| | 3.1nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.98** | **39** | ⇓Pn | | | Pn | 11 51 09.9 | -1.6 |
| | 1.4nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | | Lg | 11 53 09.6 | |
| | 4.4nm,0.9s | | | | | | | | |

*IDC **04** 11:56:57.9±2.0, 8.58S×125.34E, h0km, mb3.4/1, mb1 3.8/3, mb1mx3.5/21, mbtmp3.6/3, ML3.8/2, Error ellipse: s-maj=194.4km s-min=33.0km az=59.0*
**ISC 04 11:57:06.6±1.3, 10.0S±0.1×124.3E±0.2, h10km, n11, σ2s37/11, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.24** | **354** | P | | | **Pg** | **11 57 12.1** | **+0.5** |
| **DRS** | **Darwin Rock St** | **6.92** | **111** | P | | | **Pn** | **11 58 50.7** | **+2.5** |
| **KNRA** | **Kununurra** | **7.13** | **143** | P | | | **Pn** | **11 58 54.1** | **+3.0** |
| **MTN** | **Manton Dam** | **7.28** | **114** | P | | | **Pn** | **11 58 54.8** | **+1.7** |
| **WRA** | **Warramunga Arr** | **13.85** | **137** | Pn | | | **Pn** | **12 00 22.2** | **-1.0** |
| | 0.5nm,0.3s,baz=321,slow=13,SNR=14 | | | | | | | | |
| WRA | | | | Sn | | | **Sn** | **12 02 52.8** | **-4.3** |
| | 0.2nm,0.3s,baz=315,slow=24,SNR=5.4 | | | | | | | | |
| **WRKA** | **Warakurna** | **15.44** | **166** | P | | | **Pn** | **12 00 46.0** | **+1.3** |
| **ASAR** | **Alice Springs** | **16.40** | **147** | P | | | **Pn** | **12 00 57.6** | **+0.5** |
| | 0.3nm,0.3s,baz=320,slow=12,SNR=12 | | | | | | | | |
| ASAR | | | | S | | | **Sn** | **12 03 59.0** | **-0.3** |
| | 0.1nm,0.3s,baz=326,slow=25,SNR=5.7 | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **17.85** | **333** | P | | | **Pn** | **12 01 13.3** | **-2.1** |
| | 23nm,1.3s | | | | | | | | |
| **QIS** | **Mount Isa** | **18.11** | **127** | P | | | **P** | **12 01 19.4** | **+0.6** |
| **OOD** | **Oodnadatta** | **20.70** | **150** | P | | | Pn | 12 01 50.0 | +0.5 |
| **MKAR** | **Makanchi Array** | **67.81** | **330** | P | | | P | 12 07 53.5 | -11 |
| | 0.3nm,0.6s,baz=141,slow=7.8,SNR=3.6 | | | | | | | | |

*CNRM **04** 11:59:31.8, 35.50N×3.80W, h30km, ml2.7*
**ISC 04 11:59:31.7±1.2, 35.51N±0.05×3.76W±0.04, h25km±10km, n21, σ1s15/34, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **207** | P | | | **Pb** | **11 59 39.0** | **-0.1** |
| **PALE** | **Palemas** | **0.33** | **207** | P | | | **Pb** | **11 59 38.8** | **-0.3** |
| PALE | | | | S | | | **Sb** | **11 59 44.1** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.69** | **115** | P | | | **Pn** | **11 59 46.0** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.69** | **115** | P | | | **Pn** | **11 59 46.1** | **+0.2** |
| GOG | | | | S | | | **Sb** | **11 59 54.1** | **0.0** |
| **AKLM** | **AKL** | **1.00** | **185** | P | | | **Pb** | **11 59 50.9** | **+0.4** |
| AKLM | | | | S | | | **Sb** | **12 00 04.1** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.13** | **106** | P | | | **Pn** | **11 59 51.6** | **-0.4** |
| CHAS | | | | S | | | **Sn** | **12 00 06.0** | **-0.7** |
| **TAF** | **Taforalt** | **1.30** | **122** | P | | | **Pn** | **11 59 55.0** | **+0.6** |
| **TAF** | **Taforalt** | **1.30** | **122** | P | | | **Pn** | **11 59 54.6** | **+0.2** |
| TAF | | | | S | | | **Sn** | **12 00 09.5** | **-1.5** |
| **SMIR** | **Smir Dam** | **1.33** | **278** | P | | | **Pb** | **11 59 56.8** | **+0.7** |
| SMIR | | | | S | | | **Sb** | **12 00 12.7** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.36** | **253** | P | | | **Pb** | **11 59 56.6** | **+0.1** |
| **JBK** | **JBK** | **1.53** | **140** | P | | | **Pn** | **11 59 58.1** | **+0.5** |
| **JBK** | **JBK** | **1.53** | **140** | P | | | **Pn** | **11 59 57.8** | **+0.2** |
| JBK | | | | S | | | **Sn** | **12 00 15.6** | **-1.1** |
| **MD31** | **MD31** | **2.77** | **198** | P | | | **Pn** | **12 00 15.6** | **+1.1** |
| MD31 | | | | S | | | **Sn** | **12 00 47.7** | **+0.5** |
| **TDRA** | **Tendrara** | **2.85** | **149** | P | | | **Pn** | **12 00 17.4** | **+1.6** |
| TDRA | | | | S | | | **Sn** | **12 00 49.5** | **+0.1** |
| **ZHG** | **ZHG** | **3.15** | **230** | P | | | **Pn** | **12 00 20.0** | **+0.2** |
| ZHG | | | | S | | | **Sn** | **12 00 52.5** | **-4.2** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | *e*Pn | | | **Pn** | **12 00 28.4** | **+1.0** |
| PVAQ | | | | *e*Sn | | | **Sn** | **12 01 10.1** | **-0.3** |
| PVAQ | | | | A | | A | | 12 01 12.4 | |
| | 4.3nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | P | | | **Pn** | **12 00 26.4** | **-1.0** |
| PVAQ | | | | S | | | **Sn** | **12 01 07.6** | **-2.7** |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **298** | *e*Sn | | | **Sn** | **12 01 12.4** | **+0.1** |
| **PCVE** | **Castro Verde** | **4.04** | **303** | *e*Sn | | | **Sn** | **12 01 19.1** | **+0.5** |
| PCVE | | | | A | | A | | 12 01 21.4 | |
| | 3.0nm,0.5s | | | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Sn | | | **Sn** | **12 01 24.7** | **+0.4** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | | | **Pn** | **12 00 40.8** | **+0.8** |
| PNCL | | | | *e*Sn | | | **Sn** | **12 01 32.3** | **-0.6** |
| PNCL | | | | A | | A | | 12 01 32.6 | |
| | 2.4nm,0.7s | | | | | | | | |

*INET **04** 12:11:22.7±0.7, 12.84N×87.05W, h3km±3km, MW4.1*
**ISC 04 12:11:22.6±1.2, 12.88N±0.05×87.04W±0.04, h6km±10km, n46, σ0s87/67, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.18** | **184** | *e*P | | | **Pg** | **12 11 26.9** | **+0.6** |
| **CNGN** | **Cerro Negro** | **0.51** | **139** | *e*P | | | **Pg** | **12 11 32.8** | **+0.4** |
| **MOMN** | **Momotombo** | **0.68** | **134** | *e*P | | | **Pg** | **12 11 35.8** | **+0.1** |
| **LCND** | **La Caada** | **0.93** | **297** | *e*P | | | **Pg** | **12 11 40.1** | **-0.4** |
| LCND | | | | *e*S | | | **Sb** | **12 11 54.0** | **+0.2** |
| LCND | | | | *e*S | | | **Sg** | **12 11 54.2** | **+1.6** |
| LCND | | | | IAML | | | | 12 11 57.0 | |
| | comp=Z,13μm,0.4s | | | | | | | | |
| **LCND** | **La Caada** | **0.93** | **297** | *e*P | | | **Pg** | **12 11 40.1** | **-0.4** |
| LCND | | | | *e*S | | | **Sb** | **12 11 54.0** | **+0.2** |
| LCND | | | | *e*S | | | **Sg** | **12 11 54.2** | **+1.6** |
| LCND | | | | IAML | | | | 12 11 57.0 | |
| | comp=Z,13μm,0.4s | | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.05** | **134** | *e*P | | | **Pg** | **12 11 42.0** | **-0.8** |
| **MGAN** | **Managua** | **1.06** | **133** | *e*P | | | **Pg** | **12 11 42.0** | **-1.0** |
| **MATN** | **Matagalpa** | **1.09** | **87** | *e*P | | | **Pg** | **12 11 43.3** | **-0.2** |
| **TGUH** | **Tegucigalpa,Un** | **1.19** | **349** | *e*P | | | **Pg** | **12 11 45.7** | **+0.3** |
| **JUCU** | **Jucuarįn** | **1.23** | **287** | *e*P | | | **Pg** | **12 11 44.8** | **-1.6** |
| JUCU | | | | IAML | | | | 12 12 06.9 | |
| | comp=Z,3μm,0.5s | | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.23** | **287** | *e*P | | | **Pg** | **12 11 44.8** | **-1.6** |
| **JUCU** | **Jucuarįn** | **1.23** | **287** | *e*P | | | **Pg** | **12 11 44.8** | **-1.6** |
| JUCU | | | | *e*S | | | **Sg** | **12 12 01.9** | **-0.5** |
| JUCU | | | | IAML | | | | 12 12 06.9 | |
| | comp=Z,3μm,0.5s | | | | | | | | |
| **PACA** | **Pacayal** | **1.38** | **295** | *e*P | | | **Pn** | **12 11 48.3** | **-0.3** |
| **BOAB** | **BOACO BROADBAN** | **1.41** | **108** | *e*P | | | **Pn** | **12 11 47.5** | **-1.3** |
| **COEB** | **Comit de Eme** | **1.58** | **293** | *e*P | | | **Pn** | **12 11 50.4** | **-0.8** |
| COEB | | | | IAML | | | | 12 12 14.7 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **COEB** | **Comit de Eme** | **1.58** | **293** | *e*P | | | **Pn** | **12 11 50.7** | **-0.5** |
| **COEB** | **Comit de Eme** | **1.58** | **293** | *e*P | | | **Pn** | **12 11 50.4** | **-0.8** |
| COEB | | | | *e*S | | | **Sn** | **12 12 12.4** | **+0.4** |
| COEB | | | | IAML | | | | 12 12 14.7 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.66** | **297** | *e*P | | | **Pn** | **12 11 51.6** | **-0.6** |
| **PQSS** | **Presa 15 de Se** | **1.66** | **297** | *e*P | | | **Pn** | **12 11 51.6** | **-0.6** |
| **TECO** | **Alcaldia de Te** | **1.82** | **291** | *e*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **LCR2** | **La Lucha 2** | **4.31** | **136** | *e*P | | **Pn** | **12 12 29.4** | | **+0.4** |

*IDC **04** 12:31:14.5±1.1, 35˚.56N×3˚.68W, h0km, mb3.4/4, mb1 3.5/6, mb1mx3.1/49, mbtmp3.3/6, ML2.9/2, Error ellipse: s-maj=31.9km s-min=12.3km az=101.0*
*CNRM **04** 12:31:15.3, 35˚.49N×3˚.83W, h0km, ml3.0*
*INMG **04** 12:31:16.0±1.2, 35˚.50N×3˚.82W, h4km±3km, ML2.6, Error ellipse: s-maj=2.7km s-min=1.8km az=8.0*
*SFS **04** 12:31:16.0, 35˚.50N×3˚.80W, ML2.8, ALBORAN SUR*
**ISC 04 12:31:15.4**±1.2**, 35˚.49N**±0˚.03×**3˚.74W**±0˚.03**, h14**km±9km, **n43**, σ1°**61**/65, **mb3.5**/4, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **PALE** | **Palemas** | **0.32** | **211** | P | | **Pb** | **12 31 22.2** | | **-0.7** |
| PALE | | | | S | | **Sg** | **12 31 24.0** | | **-2.5** |
| **GOG** | **Mont Gurugu** | **0.66** | **114** | P | | **Pb** | **12 31 29.0** | | **+0.2** |
| GOG | | | | S | | **Sb** | **12 31 38.0** | | **+0.1** |
| **AKLM** | **AKL** | **0.98** | **186** | P | | **Pn** | **12 31 34.6** | | **-0.2** |
| AKLM | | | | S | | **Sb** | **12 31 47.4** | | **+0.3** |
| **CHAS** | **Isla Isabel II** | **1.11** | **106** | P | | **Pb** | **12 31 35.4** | | **-1.0** |
| CHAS | | | | S | | **Sb** | **12 31 49.0** | | **-1.7** |
| **TAF** | **Taforalt** | **1.28** | **122** | P | | **Pg** | **12 31 41.0** | | **+0.9** |
| TAF | | | | S | | **Sb** | **12 31 56.2** | | **+0.6** |
| **SMIR** | **Smir Dam** | **1.35** | **279** | P | | **Pb** | **12 31 40.0** | | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.36** | **254** | P | | **Pn** | **12 31 40.1** | | **0.0** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **336** | P | | **Pn** | **12 31 40.1** | | **-0.1** |
| EMAL | | | | S | | **Sn** | **12 31 58.2** | | **-0.2** |
| **JBK** | **JBK** | **1.50** | **140** | P | | **Pb** | **12 31 43.1** | | **0.0** |
| JBK | | | | S | | Sg | 12 32 16.5 | | +13 |
| **SICH** | **Sidi Chahed** | **1.90** | **224** | S | | **Pg** | **12 31 55.0** | | **+3.1** |
| **LCRM** | **LCR** | **2.02** | **207** | P | | **Pb** | **12 31 51.2** | | **-0.8** |
| LCRM | | | | S | | **Sb** | **12 32 15.9** | | **-1.2** |
| **IFR** | **Ifrane** | **2.28** | **211** | P | | **Pn** | **12 31 52.6** | | **-0.1** |
| IFR | | | | S | | **Sn** | **12 32 20.1** | | **-0.6** |
| **MD31** | **MD31** | **2.75** | **198** | P | | **Pn** | **12 31 59.8** | | **+0.7** |
| **MDT** | **Midelt** | **2.77** | **195** | Pn | | **Pn** | **12 31 59.9** | | **+0.6** |
| | 0.9nm,0.3s,baz=193,slow=12,SNR=37 | | | | | | | | |
| MDT | | | | Pg | | **Pg** | **12 32 07.9** | | **-0.5** |
| | 2.1nm,0.3s,baz=160,slow=8.2,SNR=9.6 | | | | | | | | |
| MDT | | | | Sn | | **Sn** | **12 32 32.0** | | **-0.6** |
| | 3.3nm,0.3s,baz=332,slow=21,SNR=5.1 | | | | | | | | |
| MDT | | | | Lg | | Lg | 12 32 44.7 | | |
| | 3.7nm,0.3s,baz=156,slow=7.4,SNR=4.6 | | | | | | | | |
| **MDT** | **Midelt** | **2.77** | **195** | P | | **Pn** | **12 32 01.0** | | **+1.7** |
| **TDRA** | **Tendrara** | **2.83** | **149** | P | | **Pn** | **12 32 02.7** | | **+2.4** |
| **CART** | **Cartagena** | **3.04** | **46** | P | | **Pn** | **12 32 01.8** | | **-1.2** |
| CART | | | | S | | **Sn** | **12 32 34.1** | | **-5.0** |
| **ZHG** | **ZHG** | **3.15** | **230** | P | | **Pn** | **12 32 06.0** | | **+1.4** |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | *e*Pn | | **Pn** | **12 32 12.6** | | **0.0** |
| PVAQ | | | | *e*Sn | | **Sn** | **12 32 54.2** | | **-2.1** |
| PVAQ | | | | A | | A | 12 32 59.9 | | |
| | 8.1nm,0.2s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | P | | **Pn** | **12 32 12.4** | | **-0.1** |
| PVAQ | | | | S | | **Sn** | **12 32 53.3** | | **-3.0** |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **299** | *e*Pn | | **Pn** | **12 32 14.0** | | **+0.4** |
| PBDV | | | | *e*Sn | | **Sn** | **12 32 56.4** | | **-1.8** |
| PBDV | | | | A | | A | 12 33 03.0 | | |
| | 9.0nm,0.7s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.07** | **303** | *e*Pn | | **Pn** | **12 32 18.0** | | **+0.8** |
| PCVE | | | | *e*Sn | | **Sn** | **12 33 03.0** | | **-1.6** |
| PCVE | | | | A | | A | 12 33 17.6 | | |
| | 6.9nm,0.6s | | | | | | | | |
| **PAB** | **San Pablo** | **4.08** | **353** | P | | **Pn** | **12 32 19.0** | | **+1.6** |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | Pn | | **Pn** | **12 32 19.9** | | **+1.2** |
| | 0.5nm,0.3s,baz=178,slow=12,SNR=10.0 | | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **12 33 09.7** | | **+2.2** |
| | 0.3nm,0.3s,baz=179,slow=15,SNR=4.3 | | | | | | | | |
| ESDC | | | | Lg | | Lg | 12 33 25.1 | | |
| | 0.6nm,0.3s,baz=174,slow=28,SNR=4.4 | | | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **304** | *e*Pn | | **Pn** | **12 32 21.4** | | **+1.1** |
| MESJ | | | | *e*Sn | | **Sn** | **12 33 08.2** | | **-2.0** |
| MESJ | | | | A | | A | 12 33 16.6 | | |
| | 7.8nm,0.2s | | | | | | | | |
| **MORF** | **Marmelete** | **4.36** | **296** | *e*Sn | | **Sn** | **12 33 09.5** | | **-2.3** |
| MORF | | | | A | | A | 12 33 21.1 | | |
| | 7.0nm,0.2s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | *e*Sn | | **Sn** | **12 33 11.4** | | **-1.9** |
| **PTEO** | **Sao Teotonio** | **4.51** | **299** | *e*Sn | | **Sn** | **12 33 13.9** | | **-1.5** |
| PTEO | | | | A | | A | 12 33 18.3 | | |
| | 9.1nm,0.1s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **319** | *e*Sn | | **Sn** | **12 33 15.2** | | **-1.6** |
| PESTR | | | | A | | A | 12 33 22.1 | | |
| | 4.9nm,0.5s | | | | | | | | |
| **EVO** | **Evora** | **4.57** | **313** | *e*Pn | | **Pn** | **12 32 23.9** | | **-0.2** |
| EVO | | | | *e*Sn | | **Sn** | **12 33 14.9** | | **-2.1** |
| **PNCL** | **Nicolau / Gran** | **4.65** | **306** | *e*Pn | | **Pn** | **12 32 25.7** | | **+0.5** |
| PNCL | | | | *e*Sn | | **Sn** | **12 33 16.9** | | **-2.0** |
| PNCL | | | | A | | A | 12 33 21.2 | | |
| | 4.9nm,0.8s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.89** | **325** | *e*Pn | | **Pn** | **12 32 29.4** | | **+0.9** |
| PMRV | | | | *e*Sn | | **Sn** | **12 33 22.8** | | **-2.0** |
| **PMTG** | **Montargil** | **5.05** | **316** | *e*Pn | | **Pn** | **12 32 31.8** | | **+1.1** |
| PMTG | | | | *e*Sn | | **Sn** | **12 33 26.8** | | **-2.1** |
| PMTG | | | | A | | A | 12 33 34.5 | | |
| | 4.6nm,0.8s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.26** | **327** | *e*Pn | | **Pn** | **12 32 34.1** | | **+0.6** |
| PCBR | | | | *e*Sn | | **Sn** | **12 33 31.6** | | **-2.3** |
| **OUK** | **Oukaimeden** | **5.49** | **220** | P | | **Pn** | **12 32 34.5** | | **-2.6** |
| **PSBE** | **So Bento** | **5.68** | **316** | *e*Pn | | **Pn** | **12 32 40.3** | | **+0.9** |
| **MVO** | **Moncorvo** | **6.23** | **336** | *e*Pn | | **Pn** | **12 32 48.5** | | **+1.6** |
| **POLO** | **Lamas de Olo** | **6.68** | **333** | *e*Pn | | **Pn** | **12 32 54.3** | | **+1.2** |
| **PBRG** | **Braganca** | **6.73** | **340** | *e*Pn | | **Pn** | **12 32 56.0** | | **+2.2** |
| **TORD** | **Torodi Ar. Bea** | **22.78** | **166** | P | | **P** | **12 36 19.4** | | **+1.9** |
| | 0.4nm,0.8s,baz=338,slow=12,SNR=2.8 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.97** | **47** | P | | **P** | **12 41 15.4** | | **+1.2** |
| | 1.2nm,0.7s,baz=292,slow=7.8,SNR=1.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **50** | P | | **P** | **12 41 40.1** | | **+0.5** |
| | 0.3nm,0.6s,baz=286,slow=5.8,SNR=4.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.86** | **332** | P | | **P** | **12 42 13.1** | | **+0.3** |
| | 0.2nm,0.7s,baz=59,slow=5.8,SNR=2.6 | | | | | | | | |

*OTT **04** 12:38:28.7±0.1, 47˚.22N×70˚.37W, h9km, MN2.5/12, Charlevoix Seismic Zone, Qc. 7km west from Saint-Jean-Port-Joli, Qc*
*NEIC **04** 12:38:28.4±0.7, 47˚.25N±0˚.02×70˚.30W±0˚.09, h11km±8km, Error ellipse: s-maj=8.5km s-min=3.3km az=87.0*
**ISC 04 12:38:27.7**±0.9**, 47˚24N**±0˚.03×**70˚37W**±0˚.03**, h13**km±6km, **n27**, σ0°**54**/41, **1C-1D, Southern Quebec**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **A11** | **Saint Roch-des** | **0.12** | **89** | ⇓P | G | **Pg** | **12 38 30.8** | | **-0.1** |
| A11 | | | | SG | | **Sg** | **12 38 32.5** | | **-0.7** |
| A11 | | | | Trac | | | 12 38 32.6 | | |
| | comp=Z,581nm,0.1s | | | | | | | | |
| **A54** | **Misere** | **0.22** | **353** | PG | | **Pg** | **12 38 32.8** | | **+0.2** |
| A54 | | | | SG | | **Sg** | **12 38 36.1** | | **+0.3** |
| A54 | | | | Trac | | | 12 38 36.3 | | |
| | comp=Z,156nm,0.0s | | | | | | | | |
| **LMQ** | **La Malbaie** | **0.31** | **6** | Pg | | **Pg** | **12 38 34.2** | | **+0.1** |
| LMQ | | | | | | **Sg** | **12 38 38.7** | | **+0.3** |
| LMQ | | | | IAML | | | 12 38 39.0 | | |
| | comp=N,234nm,0.1s | | | | | | | | |
| **LMQ** | **La Malbaie** | **0.31** | **6** | ⇑PG | | **Pg** | **12 38 34.2** | | **+0.1** |
| LMQ | | | | SG | | **Sg** | **12 38 38.7** | | **+0.3** |
| LMQ | | | | Trac | | | 12 38 38.8 | | |
| | comp=N,119nm,0.1s | | | | | | | | |
| **A16** | **Riviere Ouelle** | **0.34** | **47** | PG | | **Pg** | **12 38 34.6** | | **0.0** |
| A16 | | | | SG | | **Sg** | **12 38 39.1** | | **-0.1** |
| A16 | | | | Trac | | | 12 38 39.9 | | |
| | comp=N,24nm,0.0s | | | | | | | | |
| **A61** | **Sainte Mathild** | **0.49** | **23** | PG | | **Pg** | **12 38 37.3** | | **-0.1** |
| A61 | | | | SG | | **Sg** | **12 38 44.1** | | **+0.1** |
| A61 | | | | Trac | | | 12 38 46.0 | | |
| | comp=N,16nm,0.0s | | | | | | | | |
| **BCLQ** | **Boischatel** | **0.63** | **240** | PG | | **Pg** | **12 38 39.2** | | **-0.8** |
| BCLQ | | | | SG | | **Sg** | **12 38 47.9** | | **-0.5** |
| BCLQ | | | | Trac | | | 12 38 55.3 | | |
| | comp=N,5.6nm,0.0s | | | | | | | | |
| **A21** | **Saint Andre** | **0.65** | **45** | PG | | **Pg** | **12 38 40.3** | | **-0.1** |
| A21 | | | | SG | | **Sg** | **12 38 49.2** | | **+0.1** |
| A21 | | | | Trac | | | 12 38 49.3 | | |
| | comp=N,58nm,0.3s | | | | | | | | |
| **A64** | **Saint Simeon** | **0.67** | **29** | PG | | **Pg** | **12 38 40.3** | | **-0.4** |
| A64 | | | | SG | | **Sg** | **12 38 49.4** | | **-0.2** |
| A64 | | | | Trac | | | 12 38 50.9 | | |
| | comp=N,23nm,0.0s | | | | | | | | |
| **QCQ** | **Quebec** | **0.77** | **234** | PG | | **Pg** | **12 38 42.4** | | **-0.3** |
| QCQ | | | | SG | | **Sg** | **12 38 52.5** | | **-0.3** |
| QCQ | | | | Trac | | | 12 38 56.3 | | |
| | comp=N,3.4nm,0.0s | | | | | | | | |
| **E62A** | **Clayton Lake** | **0.85** | **137** | | | **Pg** | **12 38 44.2** | | **0.0** |
| E62A | | | | IAML | | | 12 38 52.9 | | |
| | comp=N,23nm,3.0s | | | | | | | | |
| **D62A** | **Allapoint, All** | **0.92** | **100** | | | **Pg** | **12 38 45.4** | | **0.0** |
| D62A | | | | IAML | | | 12 39 04.0 | | |
| | comp=E,31nm,0.2s | | | | | | | | |
| D62A | | | | IAML | | | 12 39 05.7 | | |
| | comp=N,29nm,0.1s | | | | | | | | |
| **BSCQ** | **Baie-Sainte-Ca** | **0.99** | **26** | PG | | **Pg** | **12 38 47.0** | | **+0.2** |
| BSCQ | | | | Trac | | | 12 39 00.1 | | |
| | comp=N,5.8nm,0.0s | | | | | | | | |
| **LESQ** | **Les-Escoumins** | **1.26** | **31** | PG | | **Pn** | **12 38 50.4** | | **-0.6** |
| LESQ | | | | Trac | | | 12 39 12.0 | | |
| | comp=N,4.8nm,0.0s | | | | | | | | |
| **PQI** | **Presque Isle** | **1.71** | **109** | | | **Pn** | **12 38 57.8** | | **+0.7** |
| **FORQ** | **Forestville** | **1.73** | **29** | PN | | **Pn** | **12 38 57.5** | | **+0.1** |
| FORQ | | | | Trac | | | 12 39 27.5 | | |
| | comp=N,2.7nm,0.0s | | | | | | | | |
| **DPQ** | **Saint Jean** | **1.74** | **252** | PN | | **Pn** | **12 38 58.1** | | **+0.5** |
| DPQ | | | | SN | | **Sn** | **12 39 20.0** | | **+0.4** |
| DPQ | | | | Trac | | | 12 39 23.4 | | |
| | comp=N,5.7nm,0.1s | | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **1.77** | **150** | | | **Pn** | **12 38 59.0** | | **+1.0** |
| **F64A** | **Sherman** | **1.96** | **134** | | | **Pn** | **12 39 01.1** | | **+0.5** |
| **G62A** | **West of Eustis** | **2.03** | **183** | | | **Pn** | **12 39 02.8** | | **+1.3** |
| **PKME** | **Peaks-Kenny Pk** | **2.11** | **159** | | | **Pn** | **12 39 03.4** | | **+0.7** |
| **MOQ** | **Mont Orford** | **2.33** | **215** | PN | | **Pn** | **12 39 05.9** | | **+0.2** |
| MOQ | | | | SN | | **Sn** | **12 39 34.0** | | **-0.3** |
| MOQ | | | | Trac | | | 12 39 42.9 | | |
| | comp=N,1.0nm,0.1s | | | | | | | | |
| **CNQ** | **Baie Comeau** | **2.57** | **36** | PN | | **Pn** | **12 39 10.3** | | **+1.3** |
| CNQ | | | | SN | | **Sn** | **12 39 39.7** | | **-0.3** |
| CNQ | | | | Trac | | | 12 39 50.3 | | |
| | comp=N,2.9nm,0.1s | | | | | | | | |
| **G65A** | **Princeton** | **2.82** | **135** | Pn | | **Pn** | **12 39 12.5** | | **+0.1** |
| **BATG** | **Bathurst New B** | **2.94** | **88** | | | **Pn** | **12 39 14.2** | | **+0.2** |
| **ICQ** | **Pointe Anglais** | **3.08** | **41** | PN | | **Pn** | **12 39 15.8** | | **-0.2** |
| ICQ | | | | SN | | **Sn** | **12 39 51.1** | | **-1.4** |
| ICQ | | | | LG | | Lg | 12 40 01.8 | | |
| ICQ | | | | Trac | | | 12 40 03.7 | | |
| | comp=N,4.2nm,0.1s | | | | | | | | |
| **GGN** | **Saint George** | **3.24** | **130** | Pn | | **Pn** | **12 39 18.4** | | **+0.2** |

*EAF **04** 12:43:45.6±8.8, 2˚.03S×27˚.50E, h0km±999km, MD4.2*
*IDC **04** 12:43:56.9±0.4, 1˚.56S×28˚.34E, h0km, mb4.7/30, mb1 4.7/35, mb1mx4.6/52, mbtmp4.6/35, ML4.5/5, MS4.0/53, Ms1 4.0/53, ms1mx3.9/79, Error ellipse: s-maj=11.9km s-min=9.0km az=110.0*
*BJI **04** 12:43:57.7±0.0, 1˚.37S×28˚.35E, h6km, mb4.6/35, mB5.2/16, Ms4.8/4, Ms7 4.5/5*
*MOS **04** 12:43:57.6±1.3, 1˚.57S×28˚.41E, h15km, mb5.3/36, Error ellipse: s-maj=10.1km s-min=4.8km az=75.0*
*ECGS **04** 12:43:60.0, 1˚.57S±0˚.01×28˚.38E±0˚.02, h25km±6km, ML4.9, Error ellipse: s-maj=4.4km s-min=2.1km az=109.7, smi:local/7d97bea5-17a7-4235-a666-545fd47ae30a Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX -69.6151 Y -7.74171 Z 22.1693 CovXX 7.65082 XY -2.05292 XZ 8.53367 YY 2.64848 YZ -3.52779 ZZ 46.5573 EllAz1 198.534 Dip1 -0.811253 Len1 2.59492 Az2 288.349 Dip2 12.8793 Len2 4.70681 Len3 1.310786e+01*
*GCMT **04** 12:43:59.7±0.2, 1˚.35S±0˚.01×28˚.18E±0˚.03, h15km, MW4.9/101, Moment Tensor Solution. s45,c50; s101,c142; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-2.83±.15; Mθθ 3.05±.10; Mϕϕ-0.22±.10; Mrθ 0.15±.20; Mθϕ-0.24±.08; Mϕr-0.10±.28; Best double couple: M0 2.95500×10^16^ NP1:ϕs92.00000°, δ44.00000°, λ-93.00000°. NP2:ϕs276.00000°, δ47.00000°, λ-87.00000°. Principal axes: T 3.0720, Plg2.0000°, Azm4.0000°; N -0.2350, Plg2.0000°, Azm94.0000°; P -2.8370, Plg88.0000°, Azm236.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **04** 12:43:59.7±2.1, 1˚.57S±0˚.09×28˚.42E±0˚.08, h10km±1km, mb5.1/72 Error ellipse: s-maj=16.2km s-min=11.7km az=319.0*
*BGR **04** 12:44:21.2±0.0, 0˚.87N×28˚.43E, h33km, mb4.7*
**ISC 04 12:43:58.8**±0.5**, 1˚.55S**±0˚.03×**28˚.46E**±0˚.04**, h8**km±2km, **h9km: pP-P, n419**, σ1°**46**/413, **mb5.0**/134, **MS4.1**/58, **23C-18D, Zaire**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **BOBN** | **Bobandana** | **0.58** | **106** | *i* P | | **Pg** | **12 44 10.6** | | **+0.5** |
| **KTSH** | **Kitshanga** | **0.67** | **63** | *i* S | | **Sb** | **12 44 22.6** | | **+0.3** |
| **KTSH** | **Kitshanga** | **0.67** | **63** | *i* P | | **Pb** | **12 44 13.1** | | **+0.3** |
| **RSY** | **Rusayo** | **0.72** | **92** | *i* S | | **Sn** | **12 44 26.6** | | **-0.2** |
| **RSY** | **Rusayo** | **0.72** | **92** | *i* P | | **Pn** | **12 44 15.0** | | **-0.5** |
| **LWI** | **Lwiro** | **0.77** | **153** | *i* S | | **Sg** | **12 44 24.7** | | **+1.0** |
| **LWI** | **Lwiro** | **0.77** | **153** | *i* P | | **Pb** | **12 44 14.4** | | **-0.2** |
| **GOM** | **Goma** | **0.78** | **100** | *i* P | | **Pb** | **12 44 15.6** | | **+0.9** |
| **GOM** | **Goma** | **0.78** | **100** | *i* S | | **Sb** | **12 44 27.0** | | **+1.5** |
| **IDJ** | **Idjwi** | **0.79** | **130** | *i* P | | **Pb** | **12 44 15.4** | | **+0.5** |
| **IDJ** | **Idjwi** | **0.79** | **130** | *i* S | | **Sb** | **12 44 26.6** | | **+0.7** |
| **KBTI** | **Kibati** | **0.82** | **91** | *i* P | | **Pb** | **12 44 16.4** | | **+0.9** |
| **KBTI** | **Kibati** | **0.82** | **91** | *i* S | | **Sn** | **12 44 28.4** | | **-0.9** |
| **TGO** | **Tongo** | **0.88** | **68** | *i* S | | **Sb** | **12 44 29.7** | | **+1.2** |
| **TGO** | **Tongo** | **0.88** | **68** | *i* P | | **Pb** | **12 44 17.3** | | **+0.8** |
| **RGB** | **Rumangabo** | **0.93** | **77** | *i* P | | **Pn** | **12 44 18.2** | | **-0.2** |
| **RGB** | **Rumangabo** | **0.93** | **77** | *i* S | | **Sn** | **12 44 31.6** | | **-0.4** |
| **BUTK** | **Butaka** | **0.93** | **89** | *i* P | | **Pn** | **12 44 18.5** | | **0.0** |
| **BUTK** | **Butaka** | **0.93** | **89** | *i* S | | **Sn** | **12 44 32.8** | | **+0.5** |
| **SAHA** | **Sahara** | **1.08** | **91** | *i* P | | **Pn** | **12 44 20.8** | | **+0.2** |
| **SAHA** | **Sahara** | **1.08** | **91** | *i* S | | **Sn** | **12 44 35.8** | | **-0.1** |
| **BUJA** | **Bujumbura/Buru** | **2.06** | **153** | *i* P | | **Pn** | **12 44 34.3** | | **+0.4** |
| **KIL** | **Kilembe** | **2.33** | **42** | *e*P | | **Pn** | **12 44 38.2** | | **+0.7** |
| KIL | | | | *e*S | | **Sb** | **12 45 10.4** | | **+0.3** |
| **MBAR** | **Mbarara** | **2.46** | **68** | Pn | | **Pn** | **12 44 40.8** | | **+1.3** |
| | 319nm,0.3s,baz=234,slow=18,SNR=384 | | | | | | | | |
| MBAR | | | | Pg | | **Pg** | **12 44 45.8** | | **-0.3** |
| | 2μm,0.3s,baz=302,slow=23,SNR=59 | | | | | | | | |
| MBAR | | | | Lg | | Lg | 12 45 17.4 | | |
| | 2μm,0.3s,baz=328,slow=23,SNR=12 | | | | | | | | |
| MBAR | | | | LR | | LR | 12 45 27.0 | | |
| | comp=Z,570nm,22.0s,baz=106,slow=35 | | | | | | | | |
| **MBAR** | **Mbarara** | **2.46** | **68** | *i* P | | **Pn** | **12 44 40.6** | | **+1.1** |
| MBAR | | | | *i* S | | **Sb** | **12 45 14.7** | | **+0.6** |
| **MBAR** | **Mbarara** | **2.46** | **68** | *e*P | | **Pn** | **12 44 40.8** | | **+1.3** |
| MBAR | | | | *e*S | | **Sg** | **12 45 17.3** | | **-0.8** |
| **MBAR** | **Mbarara** | **2.46** | **68** | | | **Pn** | **12 44 41.1** | | **+1.6** |
| **MBAR** | **Mbarara** | **2.46** | **68** | *e*P | | **Pb** | **12 44 43.9** | | **+0.4** |
| **TEBE** | **Entebbe** | **4.32** | **68** | *e*P | | **Pn** | **12 45 05.1** | | **+0.1** |
| TEBE | | | | *e*S | | **Sb** | **12 46 05.4** | | **-2.0** |
| **LODK** | **Lodwar** | **8.48** | **54** | Pn | | **Pn** | **12 46 00.2** | | **-2.0** |
| **KMBO** | **Kilima Mbogo** | **8.80** | **87** | Pn | | **Pn** | **12 46 06.7** | | **0.0** |
| | 3.2nm,0.3s,baz=263,slow=13,SNR=15 | | | | | | | | |
| KMBO | | | | Sn | | **Sn** | **12 47 43.6** | | **-2.7** |
| | 2.2nm,0.3s,baz=235,slow=22,SNR=1.6 | | | | | | | | |
| KMBO | | | | Lg | | Lg | 12 48 35.1 | | |
| | 5.3nm,0.3s,baz=208,slow=15,SNR=8.4 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **8.80** | **87** | P | | **Pn** | **12 46 07.8** | | **+1.1** |
| KMBO | | | | | | | 12 47 43.6 | | |
| **KMBO** | **Kilima Mbogo** | **8.80** | **87** | Pn | | **Pn** | **12 46 07.8** | | **+1.1** |
| **KMBO** | **Kilima Mbogo** | **8.80** | **87** | *e*P | | Pn | 12 46 13.0 | | +6.4 |
| **KIBK** | **Kibwezi** | **9.61** | **95** | Pn | | **Pn** | **12 46 15.7** | | **-2.0** |
| **DILA** | **Dilla** | **12.62** | **51** | *e*P | | P | 12 47 08.7 | | |
| **LSZ** | **Lusaka** | **13.64** | **181** | Pn | | **Pn** | **12 47 09.9** | | **-3.0** |
| | 1.1nm,0.3s,baz=14,slow=12,SNR=12 | | | | | | | | |
| LSZ | | | | Sn | | **Sn** | **12 49 40.0** | | **-4.9** |
| | 1.1nm,0.3s,baz=317,slow=20,SNR=1.7 | | | | | | | | |
| LSZ | | | | Lg | | Lg | 12 51 02.3 | | |
| | 3.7nm,0.3s,baz=94,slow=20,SNR=9.0 | | | | | | | | |
| **LSZ** | **Lusaka** | **13.64** | **181** | P | | **Pn** | **12 47 10.2** | | **-2.7** |
| **LSZ** | **Lusaka** | **13.64** | **181** | | | **Pn** | **12 47 10.2** | | **-2.7** |
| **FURI** | **Furi** | **14.54** | **44** | *e*P | | **P** | **12 47 30.7** | | **-1.3** |
| **KRI** | **Karoi** | **15.23** | **176** | *e*P | | **Pn** | **12 47 32.2** | | **-2.3** |
| **ANKE** | **Ethiopia-Afar** | **15.77** | **45** | *e*P | | **Pn** | **12 47 43.6** | | **+1.8** |
| **DESE** | **Dese** | **16.79** | **41** | *e*P | | **Pn** | **12 47 49.8** | | **-5.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MATP** | **Matopo** | **18.76** | **180** | Pn | | **Pn** | **12 48 18.9** | | **-0.1** |
| | 0.7nm,0.3s,baz=348,slow=15,SNR=14 | | | | | | | | |
| MATP | | | | S | | **Sn** | **12 51 50.2** | | **+1.0** |
| | 0.5nm,0.3s,baz=282,slow=21,SNR=2.5 | | | | | | | | |
| MATP | | | | Lg | | Lg | 12 53 35.7 | | |
| | 0.5nm,0.3s,baz=74,slow=23,SNR=4.9 | | | | | | | | |
| **ATD** | **Arta Tunnel** | **19.32** | **47** | P | | **P** | **12 48 23.8** | | **-1.0** |
| | 0.8nm,0.3s,baz=265,slow=24,SNR=1.3 | | | | | | | | |
| ATD | | | | Lg | | Lg | 12 54 04.4 | | |
| | 1.3nm,0.3s,baz=238,slow=21,SNR=1.3 | | | | | | | | |
| ATD | | | | LR | | LR | 12 55 05.9 | | |
| | comp=Z,546nm,19.8s,baz=222,slow=34 | | | | | | | | |
| **ATD** | **Arta Tunnel** | **19.32** | **47** | *e*P | | **P** | **12 48 20.8** | | **-4.0** |
| **TSUM** | **Tsumeb** | **20.53** | **211** | P | | **P** | **12 48 37.0** | | **-0.9** |
| | 32nm,1.0s,baz=26,slow=9.8,SNR=27 | | | | | | | | |
| TSUM | | | | S | | S | 12 52 14.2 | | -14 |
| | 13nm,0.8s,baz=90,slow=23,SNR=3.2 | | | | | | | | |
| TSUM | | | | Lg | | Lg | 12 54 32.1 | | |
| | 100nm,1.0s,baz=100,slow=13,SNR=3.9 | | | | | | | | |
| TSUM | | | | LR | | LR | 12 56 49.5 | | |
| | comp=Z,742nm,20.9s,baz=34,slow=38 | | | | | | | | |
| **TSUM** | **Tsumeb** | **20.53** | **211** | | | **P** | **12 48 37.1** | | **-0.7** |
| TSUM | | | | IAmb | | IAmb | 12 48 42.1 | | |
| | comp=Z,103nm,1.3s | | | | | | | | |
| **LBTB** | **Lobatse** | **23.49** | **187** | P | | **P** | **12 49 08.8** | | **-0.6** |
| | comp=Z,21nm,1.0s,baz=353,slow=11,SNR=9.2 | | | | | | | | |
| LBTB | | | | Lg | | Lg | 12 56 07.0 | | |
| | comp=Z,20nm,0.8s,baz=96,slow=17,SNR=6.1 | | | | | | | | |
| LBTB | | | | LR | | LR | 12 58 42.1 | | |
| | comp=Z,835nm,19.4s,baz=54,slow=38 | | | | | | | | |
| **LBTB** | **Lobatse** | **23.49** | **187** | P | | **P** | **12 49 08.8** | | **-0.6** |
| LBTB | | | | pmax | | pmax | | | |
| | comp=Z,61nm,1.3s | | | | | | | | |
| **LBTB** | **Lobatse** | **23.49** | **187** | P | | **P** | **12 49 08.8** | | **-0.6** |
| LBTB | | | | IAmb | | IAmb | 12 49 15.2 | | |
| | comp=Z,61nm,1.2s | | | | | | | | |
| **OPO** | **Ambohidratompo** | **24.97** | **134** | LR | | LR | 12 57 34.0 | | |
| | comp=Z,622nm,21.8s,baz=170,slow=33 | | | | | | | | |
| **BOSA** | **Boshof** | **27.09** | **186** | P | | **P** | **12 49 42.0** | | **-0.2** |
| | comp=Z,5.7nm,0.9s,baz=18,slow=6.5,SNR=4.2 | | | | | | | | |
| BOSA | | | | LR | | LR | 12 59 25.5 | | |
| | comp=Z,342nm,21.3s,baz=6.5,slow=34 | | | | | | | | |
| **BOSA** | **Boshof** | **27.09** | **186** | P | | **P** | **12 49 42.1** | | **-0.2** |
| BOSA | | | | pmax | | pmax | | | |
| | comp=Z,112nm,2.0s | | | | | | | | |
| **BOSA** | **Boshof** | **27.09** | **186** | IAmb | | IAmb | 12 49 52.5 | | |
| | comp=Z,112nm,2.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.30** | **300** | P | | **P** | **12 50 09.2** | | **-1.8** |
| | comp=Z,27nm,0.7s,baz=107,slow=8.2,SNR=133 | | | | | | | | |
| **SUR** | **Sutherland** | **31.50** | **192** | LR | | LR | 13 03 26.4 | | |
| | comp=Z,527nm,19.7s,baz=25,slow=37 | | | | | | | | |
| **EIL** | **Elat** | **31.66** | **11** | LR | | LR | 13 01 51.1 | | |
| | comp=Z,249nm,20.0s,baz=182,slow=34 | | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **33.36** | **11** | P | | **P** | **12 50 38.3** | | **+0.7** |
| **DBIC** | **Dimbokro** | **34.24** | **284** | P | | **P** | **12 50 43.9** | | **-1.7** |
| | comp=Z,23nm,0.6s,baz=118,slow=7.7,SNR=46 | | | | | | | | |
| DBIC | | | | LR | | LR | 13 04 50.6 | | |
| | comp=Z,206nm,21.3s,baz=103,slow=37 | | | | | | | | |
| **DBIC** | **Dimbokro** | **34.24** | **284** | P | | **P** | **12 50 43.2** | | **-2.3** |
| DBIC | | | | IAmb | | IAmb | 12 50 48.0 | | |
| | comp=Z,44nm,1.0s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **35.00** | **10** | LR | | LR | 13 04 00.1 | | |
| | comp=Z,250nm,21.5s,baz=18,slow=34 | | | | | | | | |
| **CSS** | **Mathiatis** | **36.60** | **7** | P | | **P** | **12 51 06.2** | | **+0.6** |
| **UOSS** | **Minazif** | **37.64** | **44** | P | | **P** | **12 51 16.0** | | **+1.5** |
| UOSS | | | | IAmb | | IAmb | 12 51 20.7 | | |
| | comp=Z,56nm,1.6s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **38.34** | **48** | LR | | LR | 13 05 53.5 | | |
| | comp=Z,222nm,20.2s,baz=269,slow=34 | | | | | | | | |
| **ISP** | **Isparta** | **39.22** | **3** | *i* P | | **P** | **12 51 30.6** | | **+2.8** |
| ISP | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.8s | | | | | |

**KIV Kislovodsk 47.06 14** *e*P P **12 52 31.9 +0.8**
KIV pmax pmax
comp=Z,48nm,1.1s
KIV MLR MLR
comp=Z,77nm,16.0s
**KIV Kislovodsk 47.06 14** P P **12 52 32.6 +1.5**
**KVAR Kislovodsk Arr 47.06 14** LR LR 13 13 28.9
comp=Z,148nm,18.1s,baz=102,slow=38
**FRGS Fruska Gora 47.13 352** ⇓P P **12 52 30.8 -0.8**
**PLOR Plostina 47.22 358** ⇓P P **12 52 32.5 +0.2**
**COVR Voineasa-Covas 47.23 358** ⇑P P **12 52 31.7 -0.7**
**VRI Vrincioaia 47.24 358** ⇓P P **12 52 32.1 -0.2**
**BZS Buzias 47.35 353** ⇓P P **12 52 33.0 -0.2**
**HRA Herat 47.78 38** P P **12 52 36.6 -0.4**
HRA IAmb IAmb 12 52 43.0
comp=Z,28nm,1.1s
**GEYT Alibeck 47.90 32** LR LR 13 13 27.8
comp=Z,274nm,18.3s,baz=204,slow=37
**SIRR Siria 47.99 354** ⇑P P **12 52 38.8 +0.6**
**GOF Gofitskoye 48.18 14**‖ *e*P P **12 52 40.5 +0.8**
GOF pmax pmax
comp=Z,49nm,0.6s
**KOVH Kovagotottos 48.31 350** P P **12 52 43.8 +3.1**
**GIRR Girov 48.33 358** ⇑P P **12 52 40.5 -0.3**
**MORH Mrgy, Hungar 48.34 351** ⇑P P **12 52 41.1 +0.2**
**MORH Mrgy, Hungar 48.34 351** P P **12 52 40.9 0.0**
**DRGR 48.40 355** ⇓P P **12 52 41.4 -0.1**
**ARCR ARCALIA 48.56 356** ⇑P P **12 52 43.2 +0.6**
**BURAR Bucovina Array 49.04 357** ⇑P P **12 52 46.3 -0.1**
**BURAR Bucovina Array 49.04 357** P P 12 52 53.4 +7.0
**BURAR Bucovina Array 49.04 357** P P **12 52 47.1 +0.7**
**MPLH Magyarpolny 49.45 350** P P **12 52 49.9 +0.5**
**SORM Soroca 49.48 360** ⇑P P **12 52 48.8 -0.8**
**CTI Castel Tesino 49.67 345** P P **12 52 50.1 -1.1**
CTI pmax pmax
comp=Z,51nm,1.5s
**CTI Castel Tesino 49.67 345** P P **12 52 50.1 -1.1**
CTI IAmb IAmb 12 52 55.7
comp=Z,51nm,1.5s
**TRPA Tarpa 49.74 355** ⇑P P **12 52 52.0 +0.4**
**TRPA Tarpa 49.74 355** P P **12 52 52.0 +0.4**
**PSZ Piszkesteto 49.83 352** ⇑P P **12 52 52.4 0.0**
**PSZ Piszkesteto 49.83 352** P P **12 52 56.8 +4.4**
**PSZ Piszkesteto 49.83 352** P P **12 52 52.0 -0.4**
PSZ IAmb IAmb 12 52 56.7
comp=Z,30nm,0.8s
**PSZ Piszkesteto 49.83 352** P P **12 52 52.0 -0.4**
**ARSA Arzberg 49.90 349** *i* P P **12 52 53.0 +0.1**
comp=Z,5.1nm,0.7s
**ABTA Abfaltersbach 50.10 346** *e*P P **12 52 55.1 +0.7**
comp=Z,9.0nm,1.0s
**KBA Koelnbreinsper 50.21 347** *e*P P **12 52 57.7 +2.3**
comp=Z,20nm,1.1s
**UZH Uzhgorod 50.26 355** *e*P P 12 53 00.6 +5.1
UZH *e* 12 53 04.3
UZH *e* 12 53 09.7
**KECS Kecovo 50.31 353** *e*P P **12 52 56.1 +0.2**
KECS pmax pmax
comp=Z,15nm,0.9s
**KECS Kecovo 50.31 353** *e*P P **12 52 56.1 +0.2**
**CONA Conrad Observa 50.49 349** P P **12 52 58.4 +1.1**
comp=Z,13nm,1.2s
**VYHS Vyhne 50.54 352** *e*P P **12 52 57.4 -0.3**
VYHS pmax pmax
comp=Z,22nm,1.0s
**VYHS Vyhne 50.54 352** *e*P P **12 52 57.4 -0.3**
**CRVS Cervenica-Dubn 50.61 354** *e*P P **12 52 58.5 +0.3**
CRVS pmax pmax
comp=Z,39nm,1.1s
**CRVS Cervenica-Dubn 50.61 354** *e*P P **12 52 58.5 +0.3**
**ESDC Sonseca Array 50.64 328** P P **12 52 57.5 -1.1**
comp=Z,5.2nm,1.0s,baz=140,slow=7.3,SNR=13
ESDC LR LR 13 16 19.6
comp=Z,114nm,21.1s,baz=138,slow=38
**ESDC Sonseca Array 50.64 328** P P **12 52 58.0 -0.6**
**MODS Modra-Piesok 50.66 350** *e*P P **12 52 59.0 +0.4**
**MODS Modra-Piesok 50.66 350** *e*P P **12 52 59.0 +0.4**
**KOLL Kolacno 50.69 351** *e*P P **12 52 59.0 +0.3**
**TUE Stuetta 50.70 343** P P **12 52 58.3 -0.8**
TUE IAmb IAmb 12 53 02.9
comp=Z,42nm,1.1s
**MOA Molln 50.73 348** *e*P P **12 52 58.9 -0.3**
comp=Z,29nm,1.0s
**WTTA Wattenberg 50.80 345** *e*P P **12 53 00.2 +0.4**
comp=Z,23nm,1.0s
**DAVOX Davos/Dischmat 50.83 344** LR LR 13 15 11.7
comp=Z,202nm,19.4s,baz=155,slow=37
**WATA Walderalm 50.88 345** *e*P P **12 53 00.7 +0.2**
comp=Z,16nm,1.0s
**MOTA Moosalm 51.01 345** *e*P P **12 53 00.2 -1.2**
comp=Z,22nm,1.1s
**JAVC Velka Javorina 51.07 351** *e*P P **12 53 00.9 -0.8**
**LANS Liptovska Anna 51.09 352** *e*P P **12 53 02.3 +0.4**
LANS pmax pmax
comp=Z,20nm,0.9s
**LANS Liptovska Anna 51.09 352** *e*P P **12 53 02.3 +0.4**
**RETA Reutte 51.23 345** *e*P P **12 53 05.1 +2.2**
comp=Z,14nm,1.0s
**SSB Saint Sauveur 51.23 338** IAmb IAmb 12 53 07.4
comp=Z,20nm,1.1s
**DAVA Damuels 51.29 344** *e*P P **12 53 02.4 -1.1**
comp=Z,30nm,0.9s
**KRUC Moravsky 51.48 350** *e*P P **12 53 03.7 -1.0**
**CKRC Cesky Krumlov 51.65 348** *e*P P **12 53 05.6 -0.4**
**VRAC Vranov 51.68 350** ⇑P P **12 53 05.5 -0.8**
**VRAC Vranov 51.68 350** LR LR 13 16 37.5
comp=Z,74nm,18.8s,baz=182,slow=38
**VRAC Vranov 51.68 350** P P **12 53 10.1 +3.8**
**VRAC Vranov 51.68 350** *e*P P **12 53 05.4 -0.8**
**GEC2 GERESS Array S 51.80 348** *e*P P **12 53 08.7 +1.4**
comp=Z,12nm,0.9s,baz=157,slow=7.7
**GERES GERESS Array B 51.80 348** P P **12 53 06.0 -1.2**
comp=Z,9.9nm,0.9s,baz=152,slow=6.0,SNR=20
GERES PP **PP 12 55 06.3 +1.2**
comp=Z,4.1nm,0.9s,baz=168,slow=6.8,SNR=6.0
**GERES GERESS Array B 51.80 348** P P **12 53 06.3 -0.9**
**GERES GERESS Array B 51.80 348** P P **12 53 06.3 -0.9**
**TREC Trest 51.87 349** *e*P P 12 53 01.3 -6.4
**MORC Moravsky Berou 51.98 351** *e*P P **12 53 07.4 -1.1**
**AKASG Malin Array Be 52.05 1** P P **12 53 07.7 -1.3**
comp=Z,7.2nm,0.7s,baz=185,slow=6.4,SNR=24
AKASG PcP **PcP 12 54 20.5 -0.6**
comp=Z,3.9nm,0.9s,baz=188,slow=4.7,SNR=1.5
**AKBB Malin Array Si 52.05 1***ce*P P **12 53 08.3 -0.6**
**AKBB Malin Array Si 52.05 1** IAmb IAmb 12 53 12.9
comp=Z,41nm,1.4s
**KHC Kasperske Hory 52.09 348** *e*P P **12 53 08.4 -1.0**
**KHC Kasperske Hory 52.09 348** *e*P P **12 53 08.4 -1.0**
**KHC Kasperske Hory 52.09 348** IAmb IAmb 12 53 12.6
comp=Z,22nm,0.9s
**WET Wettzell 52.26 347** *e*P P **12 53 12.5 +1.9**
comp=Z,7.4nm,1.1s,baz=157,slow=7.7
**KRLC Kraliky 52.39 351** *e*P P **12 53 13.3 +1.7**
**KRLC Kraliky 52.39 351** *e*P P **12 53 13.3 +1.7**
**BFO Black Forest 52.67 343** P P **12 53 14.4 +0.7**
BFO pmax pmax
comp=Z,19nm,1.2s
**BFO Black Forest 52.67 343** *e*P P **12 53 15.4 +1.7**
comp=Z,7.6nm,0.9s,baz=157,slow=7.7
**BFO Black Forest 52.67 343** P P **12 53 14.4 +0.7**
**DPC Dobruska-Polom 52.74 350** *e*P P **12 53 12.8 -1.3**
**DPC Dobruska-Polom 52.74 350** *e*P P **12 53 12.8 -1.3**
**PALK Pallekele 52.85 80** LR LR 13 12 38.2
comp=Z,127nm,21.8s,baz=11,slow=32
**UPC Upice 52.94 350** *e*P P **12 53 14.6 -1.0**
**UPC Upice 52.94 350** *e*P P **12 53 14.6 -1.0**
**ROTZ Rotzenmuhle 53.00 347** *e*P P **12 53 17.8 +1.8**
comp=Z,2.4nm,0.9s,baz=157,slow=7.7
**CHVC Chvalec 53.01 350** *e*P P **12 53 17.5 +1.4**
**GRF Grafenberg Arr 53.16 346** *e*P P **12 53 19.6 +2.4**
comp=Z,21nm,0.9s,baz=157,slow=7.7
**VSR Storozhevoye 53.35 8** *e*P P **12 53 20.3 +1.8**
VSR pmax pmax
comp=Z,40nm,1.0s
**NKC Novy Kostel 53.38 347** *e*P P **12 53 18.6 -0.2**
**NKC Novy Kostel 53.38 347** *e*P P **12 53 18.6 -0.2**
**WERN Wernitzgruen 53.45 347** *e*P P **12 53 21.1 +1.8**
comp=Z,8.7nm,1.0s,baz=157,slow=7.7
**GUNZ Gunzen 53.53 347** *e*P P **12 53 22.1 +2.2**
comp=Z,6.9nm,0.9s,baz=157,slow=7.7
**TANN Tannenbergstha 53.55 347** *e*P P **12 53 22.0 +1.9**
comp=Z,6.6nm,0.9s,baz=157,slow=7.7
**WERD Werda 53.61 347** *e*P P **12 53 22.2 +1.6**
comp=Z,8.4nm,0.8s,baz=157,slow=7.7

**BRG Berggiesshubel 53.67 349** *e*P P **12 53 23.2 +2.3**
BRG Amp 12 53 24.5
comp=Z,11nm,1.2s
**BRG Berggiesshubel 53.67 349** *e*P P **12 53 23.2 +2.3**
BRG pmax pmax
comp=Z,11nm,1.2s
**BRG Berggiesshubel 53.67 349** *e*P P **12 53 22.5 +1.5**
comp=Z,4.8nm,0.9s,baz=157,slow=7.7
**VRH Novokhopyorsk 53.75 10** *e*P P **12 53 20.3 -1.2**
VRH pmax pmax
comp=Z,80nm,0.8s
**VORR Voronezh 53.80 8** *e*P P **12 53 21.8 0.0**
VORR pmax pmax
comp=Z,110nm,0.4s
**MOX Moxa 53.95 347** *e*P P **12 53 25.2 +2.2**
comp=Z,6.1nm,0.9s,baz=157,slow=7.7
**CLL Collm 54.27 348** *e*P P **12 53 27.0 +1.7**
CLL pmax pmax
comp=Z,10.0nm,1.0s
**CLL Collm 54.27 348** *e*P P **12 53 27.0 +1.7**
comp=Z,10.0nm,1.0s
CLL *e*SS **SKiKP 13 04 46.0 +8.8**
**CLL Collm 54.27 348** *e*P P **12 53 27.4 +2.1**
comp=Z,5.8nm,0.8s,baz=157,slow=7.7
**NEUB Neuenburg 54.44 347** *e*P P **12 53 28.3 +1.8**
comp=Z,19nm,0.8s,baz=157,slow=7.7
**WLF Walferdange 54.51 342** *e*P P **12 53 29.1 +2.0**
comp=Z,16nm,0.9s,baz=157,slow=7.7
**NIL Nilore 54.76 46** P P **12 53 31.1 +1.8**
NIL pmax pmax
comp=Z,25nm,1.2s
**NIL Nilore 54.76 46** P P **12 53 31.1 +1.8**
NIL IAmb IAmb 12 53 35.6
comp=Z,25nm,1.2s
**AHRW Bad Neuenahr-A 55.02 344** *e*P P **12 53 33.1 +2.4**
comp=Z,16nm,0.9s,baz=157,slow=7.7
**GTTG Gottingen 55.18 346** *e*P P **12 53 34.7 +2.8**
comp=Z,23nm,1.1s,baz=157,slow=7.7
**RUE Ruedersdorf 55.23 349** *e*P P **12 53 33.9 +1.7**
baz=157,slow=7.7
**BTNL Ternell 55.34 343** *d*P P **12 53 31.1 -2.0**
**CLZ Clausthal 55.35 346** *e*P P **12 53 35.6 +2.4**
comp=Z,6.9nm,0.9s,baz=157,slow=7.7
**BMRD Maredsous 55.50 342** *d*P P **12 53 32.5 -1.7**
**ASSE Asse, Remlinge 55.55 347** *e*P P **12 53 36.8 +2.4**
comp=Z,13nm,0.9s,baz=157,slow=7.7
**GAR Garm 55.71 39** P P **12 53 36.0 -0.2**
GAR IAmb IAmb 12 53 41.9
comp=Z,42nm,1.4s
**BUG Bochum--Univer 55.78 344** *e*P P **12 53 39.0 +2.8**
comp=Z,17nm,0.9s,baz=157,slow=7.7
**MNK Minsk 55.86 360** *i* P P **12 53 35.5 -1.2**
MNK *i* 12 54 34.2
MNK *i* 12 55 40.2
MNK *i* PPP PPP 12 56 53.4
MNK *i* S **S 13 01 25.2 +1.0**
MNK *i* 13 03 24.9
MNK *i* SS **SS 13 05 10.8 +0.7**
MNK pmax pmax
comp=Z,35nm,1.1s
MNK pmax pmax
comp=N,43nm,1.0s
MNK pmax pmax
comp=E,3.0nm,0.9s
MNK MLR MLR
comp=N,150nm,22.0s
MNK MLR MLR
comp=E,6.0nm,14.0s
MNK MLR MLR
comp=Z,175nm,24.0s
**MNK Minsk 55.86 360** *i* P P **12 53 35.6 -1.1**
comp=E,3.0nm,0.8s
MNK *i* P P **12 53 35.6 -1.1**
comp=N,43nm,1.0s
MNK *i* P P **12 53 35.6 -1.1**
comp=Z,35nm,1.1s,baz=360
MNK *i* PcP **PcP 12 54 34.2 -1.3**
MNK *i* PP **PP 12 55 40.2 -1.2**
MNK *i* PPP PPP 12 56 53.4
MNK *i* S **S 13 01 25.2 +1.0**
MNK *i* SS **SS 13 05 10.9 +0.8**
MNK *i* SSS SSS 13 07 23.1
MNK *i* LQ LQ 13 13 24.3
MNK *i* LR LR 13 17 38.7
MNK *i* LRM MLR 13 20 00.3
comp=N,150nm,22.1s
MNK *i* LRM MLR 13 20 08.8
comp=E,6.0nm,13.6s
MNK *i* LRM MLR 13 20 21.5
comp=Z,175nm,23.8s
**NRDL Niedersach Rie 56.02 347** *e*P P **12 53 40.6 +2.8**
comp=Z,34nm,0.9s,baz=157,slow=7.7
**NACGM Naroch 56.28 359** *i* P P **12 53 39.5 -0.2**
**BTK Batken 56.65 38** IAmb IAmb 12 53 48.5
comp=Z,22nm,1.3s
**OBN Obninsk 56.86 6***ce*P P **12 53 43.5 -0.3**
OBN *e* 12 55 53.2
OBN *e*PPP PPP 12 57 05.3
OBN *i* SS **SS 13 05 20.3 -5.6**
OBN MLR MLR
comp=Z,48nm,8.0s
**IUG luzhnay 57.44 36** *e*P P **12 53 47.7 -0.7**
**IUG luzhnay 57.44 36** *e*P P **12 53 47.7 -0.7**
baz=36
**BRLS Borolday 57.87 35** *e*P P **12 53 48.9 -2.4**
**BRLS Borolday 57.87 35** *e*P P **12 53 48.9 -2.4**
baz=35
**KKAR Karatay Array 58.31 35** P P **12 53 54.6 +0.2**
KKAR *PP **sP 12 53 58.7 +0.2**
**KKAR Karatay Array 58.31 35** P P **12 53 54.5 +0.2**
KKAR pP **sP 12 53 58.7 +0.2**
**DZA Taraz 58.65 36** *e*P P **12 53 56.5 -0.2**
**DZA Taraz 58.65 36** *e*P P **12 53 56.6 -0.2**
baz=36
**KSH Kashi 59.65 41** P P **12 54 03.7 -0.2**
KSH PcP **PcP 12 54 52.2 +1.2**
KSH PcS **PcS 12 58 50.5 -2.7**
KSH pmax pmax
comp=Z,4.0nm,0.7s
**VSU Vasula 59.84 359** *i* P P **12 54 04.9 +0.3**
VSU pmax pmax
comp=Z,43nm,1.1s
**AAK Ala-Archa 60.40 38** P P **12 54 09.5 +0.5**
comp=Z,3.5nm,1.0s,baz=247,slow=7.7,SNR=5.4
AAK LR LR 13 23 23.0
comp=Z,126nm,18.4s,baz=243,slow=39
**AAK Ala-Archa 60.40 38** P P **12 54 09.3 +0.3**
**SGDS Sogindy 60.94 37** *e*P P **12 54 11.5 -1.0**
comp=Z,4.4nm,0.9s,baz=37
**BOOM Boomskoye usch 61.21 38** IAmb IAmb 12 54 20.2
comp=Z,13nm,1.2s
**BTLS Baital 61.51 35** *e*P P **12 54 15.5 -0.7**
BTLS pmax pmax
comp=Z,10.0nm,1.1s
**BTLS Baital 61.51 35** *e*P P **12 54 15.6 -0.7**
comp=Z,9.6nm,1.1s,baz=35
**TARG Taragay, Kyrgy 61.99 40** IAmb IAmb 12 54 25.1
comp=Z,9.3nm,1.0s
**TNSS Tian-Shan 62.13 38** *e*P P **12 54 20.1 -0.9**
baz=38
**KUU Kurty 62.22 37** *e*P P **12 54 20.1 -1.0**
**KUU Kurty 62.22 37** *e*P P **12 54 20.2 -1.0**
baz=37
**KIRV Kirov 62.22 12** P P **12 54 19.3 -1.4**
comp=Z,20nm,0.8s,baz=205,slow=7.7,SNR=7.7
KIRV LR LR 13 21 40.0
comp=Z,61nm,19.2s,baz=207,slow=36
**KIRV Kirov 62.22 12***ce*P P **12 54 20.5 -0.2**
**MDOK Medeo 62.26 38** *e*P P **12 54 20.5 -1.1**
**MDOK Medeo 62.26 38** *e*P P **12 54 20.5 -1.1**
baz=38
**EKA Eskdalemuir Ar 62.33 340** LR LR 13 25 05.1
comp=Z,148nm,18.1s,baz=152,slow=40
**HFS Hagfors 62.58 352** LR LR 13 23 34.7
comp=Z,117nm,18.0s,baz=207,slow=38
**ARU Arti 62.73 18** LR LR 13 23 24.8
comp=Z,104nm,18.1s,baz=246,slow=38
**ARU Arti 62.73 18***d*/P P **12 54 24.0 -0.3**
ARU PPP PPP 12 58 10.1
ARU S **S 13 02 54.7 +1.6**
ARU SS **SS 13 06 51.4 -6.6**
ARU pmax pmax
comp=Z,36nm,1.7s
**ARU Arti 62.73 18** P P **12 54 23.7 -0.5**
**KLMR Klimovskoe 62.81 6** *e*P P **12 54 22.3 -2.4**

KLMR pmax pmax
comp=Z,133nm,1.2s
**KLMR Klimovskoe 62.81 6** *e*P P **12 54 22.3 -2.4**
KLMR AMP 12 54 29.7
comp=Z,133nm,1.2s
**FINES FINESS Array B 62.85 359** P P **12 54 23.8 -1.1**
comp=Z,16nm,0.9s,baz=171,slow=3.7,SNR=8.0
FINES LR LR 13 23 32.6
comp=Z,140nm,19.6s,baz=234,slow=38
**FINES FINESS Array B 62.85 359** P P **12 54 24.2 -0.7**
FINES *PP **pP 12 54 28.2 +0.3**
**FINES FINESS Array B 62.85 359** P P **12 54 24.2 -0.7**
FINES pP **pP 12 54 28.2 +0.3**
**FIA1 FINESS Array S 62.85 359** P P **12 54 24.8 -0.1**
**SATY Saty 63.05 39** *e*P P **12 54 25.6 -1.2**
SATY pmax pmax
comp=Z,11nm,1.3s
**SATY Saty 63.05 39** *e*P P **12 54 25.7 -1.2**
comp=Z,11nm,1.3s,baz=39
**ZHN Zhinishke 63.12 39** *e*P P **12 54 26.6 -0.7**
**ZHN Zhinishke 63.12 39** *e*P P **12 54 26.7 -0.7**
baz=39
**KPKS Kokpek 63.43 39** *e*P P **12 54 28.1 -1.2**
**KPKS Kokpek 63.43 39** *e*P P **12 54 28.1 -1.2**
baz=39
**NBRF Rio Formoso - 63.66 261** *e*P P **12 54 30.3 -0.9**
**SVE Sverdlovsk 63.72 19** *e*P P **12 54 31.2 +0.4**
SVE pmax pmax
comp=Z,29nm,1.4s
**NBPV Pedro Velho 63.74 264** *e*P P **12 54 33.8 +2.0**
**BRZS Berezniki 63.77 30** *e*P P **12 54 30.6 -0.7**
**BRZS Berezniki 63.77 30** *e*P P **12 54 30.6 -0.7**
baz=30
**NB2 NORSAR Subarra 63.82 351** P P **12 54 30.8 -0.6**
comp=Z,12nm,0.6s,baz=163,slow=6.5
**NB2 NORSAR Subarra 63.82 351** P P **12 54 30.8 -0.6**
baz=163,slow=6.5
**NOA NORSAR Array B 63.82 351** P P **12 54 30.6 -0.8**
comp=Z,8.6nm,0.9s,baz=163,slow=6.4,SNR=8.7
NOA LR LR 13 24 16.9
comp=Z,79nm,20.1s,baz=355,slow=38
**RCBR Riachuelo 64.34 264** *e*P P **12 54 36.4 +0.7**
**PRGR Permogore 64.37 9** *e*P P **12 54 32.6 -2.4**
PRGR pmax pmax
comp=Z,66nm,0.9s
**NBCA Caruaru-PE 64.52 262** *e*P P **12 54 37.1 +0.1**
**BRVK Borovoye 64.64 26***ce*P P **12 54 36.7 -0.3**
BRVK pmax pmax
comp=Z,9.0nm,1.0s
**BRVK Borovoye 64.64 26** P P **12 54 35.7 -1.3**
**BVAR Borovoye Array 64.67 27** P P **12 54 36.3 -0.8**
comp=Z,2.2nm,0.8s,baz=151,slow=3.4,SNR=9.4
BVAR PcP **PcP 12 55 11.9 +1.0**
comp=Z,2.0nm,0.8s,baz=116,slow=3.4,SNR=4.1
**NBLA Lagarto - SE 66.39 259** *e*P P **12 54 48.6 -0.4**
**MAKZ Makanchi 67.12 37** P P **12 54 52.0 -1.1**
MAKZ pmax pmax
comp=Z,34nm,1.9s
**MAKZ Makanchi 67.12 37** P P **12 54 52.0 -1.1**
MAKZ IAmb IAmb 12 54 54.4
comp=Z,34nm,1.9s
**KURBB Kurchatov Arra 67.17 32** P P **12 54 53.4 +0.2**
comp=Z,6.9nm,1.0s,baz=243,slow=6.4,SNR=27
KURBB PP **PP 12 57 22.4 +1.0**
comp=Z,0.8nm,0.8s,baz=241,slow=8.6,SNR=4.1
KURBB LR LR 13 27 59.1
comp=Z,157nm,18.9s,baz=213,slow=39
**NBMA Muriti-CE 67.22 263** *e*P P **12 54 54.9 +0.6**
**KURK Kurchatov 67.27 32***ce*P P **12 54 54.3 +0.4**
KURK pmax pmax
comp=Z,22nm,1.7s
**KURK Kurchatov 67.27 32** P P **12 54 54.1 +0.2**
KURK IAmb IAmb 12 54 59.0
comp=Z,21nm,1.4s
**MK31 Makanchi Array 67.30 37** *i* P P **12 54 54.1 -0.2**
**MK31 Makanchi Array 67.30 37** P P **12 54 53.4 -0.9**
**MKAR Makanchi Array 67.30 37** P P **12 54 54.1 -0.2**
comp=Z,6.1nm,0.8s,baz=244,slow=5.7,SNR=41
MKAR LR LR 13 25 33.7
comp=Z,142nm,19.3s,baz=250,slow=37
**MKAR Makanchi Array 67.30 37** P P **12 54 54.1 -0.2**
MKAR *PP **pP 12 54 57.8 +0.5**
**MKAR Makanchi Array 67.30 37** P P **12 54 54.1 -0.2**
MKAR pP **pP 12 54 57.8 +0.5**
**NBPB Pedra_Branca-C 68.00 265** *e*P P **12 54 59.8 +0.5**
**CMC01 Camacan, BA 68.37 254** *e*P P **12 55 02.9 +1.4**
**NBMO Morrinhos-CE 68.45 267** *e*P P **12 55 03.2 +1.2**
**GUA01 Guaratinga, BA 68.74 253** *e*P P **12 55 05.3 +1.5**
**NBPN Ponto Novo - B 68.75 259** *e*P P **12 55 03.4 -0.6**
**ZSN Zaisan 69.17 37** *e*P P **12 55 05.4 -0.5**
ZSN pmax pmax
comp=Z,8.0nm,1.2s
**ZSN Zaisan 69.17 37** *e*P P **12 55 05.4 -0.5**
comp=Z,8.1nm,1.2s,baz=37
**WMQ Urumqi 69.42 42** *e*P P **12 55 05.8 -1.8**
WMQ pP sP 12 55 16.7 +4.9
WMQ pmax pmax
comp=Z,9.0nm,1.5s
WMQ LR LR
comp=Z,140nm,22.1s
**RIB01 Linhares ES 69.55 250** *e*P P **12 55 09.0 +0.1**
**NBPS Pedro II - PI 69.85 266** *e*P P **12 55 10.2 -0.7**
**BSFB Barra de Sao F 69.93 251** *e*P P **12 55 12.8 +1.6**
**MAW Mawson 70.07 167** P P **12 55 10.0 -1.0**
comp=Z,2.9nm,0.9s,baz=329,slow=12,SNR=1.6
MAW LR LR 13 21 24.3
comp=Z,148nm,21.3s,baz=270,slow=32
**RPSI Rantau Prapat 70.57 87** P P **12 55 15.0 -0.2**
**PSI Prapat 70.58 87** P P **12 55 15.0 -0.4**
comp=Z,2.4nm,0.3s,baz=264,slow=1.5,SNR=2.7
**ARCES ARCESS Array B 70.97 359** P P **12 55 16.1 -0.4**
comp=Z,31nm,0.9s,baz=173,slow=5.9,SNR=46
ARCES LR LR 13 27 41.5
comp=Z,88nm,18.9s,baz=192,slow=37
**ARCES ARCESS Array B 70.97 359** P P **12 55 16.2 -0.4**
ARCES pmax pmax
comp=Z,45nm,1.1s
**ARCES ARCESS Array B 70.97 359** P P **12 55 16.2 -0.4**
**KEV Kevo 71.17 359** P P **12 55 17.4 -0.3**
KEV pmax pmax
comp=Z,39nm,1.0s
**KEV Kevo 71.17 359** P P **12 55 17.4 -0.3**
**DGZ Jazzator, Alta 71.69 36** *i* P P **12 55 22.1 +0.6**
DGZ pmax pmax
comp=Z,7.0nm,1.2s
**CMAR Chiang Mai Arr 72.03 70** P P **12 55 24.4 +0.5**
comp=Z,1.6nm,0.8s,baz=259,slow=6.8,SNR=13
CMAR LR LR 13 26 06.2
comp=Z,18nm,19.6s,baz=285,slow=35
**CMAR Chiang Mai Arr 72.03 70** P P **12 55 24.7 +0.8**
**CMAR Chiang Mai Arr 72.03 70** P P **12 55 24.7 +0.8**
**GOMU GeErMu 72.03 51** P P **12 55 25.7 +1.4**
GOMU sP sP 12 55 28.7 +0.4
GOMU PcP **PcP 12 55 42.9 +0.3**
GOMU pmax pmax
comp=Z,7.0nm,1.3s
GOMU pmax pmax
comp=Z,120nm,5.2s
**ZALV Zalesovo Beam 72.20 31** P P **12 55 23.2 -1.1**
comp=Z,4.2nm,0.9s,baz=240,slow=4.8,SNR=12
ZALV LR LR 13 29 05.9
comp=Z,83nm,18.2s,baz=236,slow=38
**ZALV Zalesovo Beam 72.20 31** *i* P P **12 55 23.7 -0.5**
ZALV pmax pmax
comp=Z,4.0nm,0.9s
**ZALV Zalesovo Beam 72.20 31** P P **12 55 23.4 -0.8**
ZALV pP **pP 12 55 27.5 +0.2**
**ROSB Rosrio 72.53 267** *e*P P **12 55 26.5 -0.5**
**SNAA Sanae 72.80 190** LR LR 13 25 21.4
comp=Z,311nm,19.4s,baz=6.5,slow=34
**JANB Januaria 72.96 255** *e*P P **12 55 29.4 -0.2**
**VNA2 Neumayer--Watz 73.04 192** P P **12 55 31.6 +2.7**
baz=327,slow=5.7
**SDBA SAO DESIDERIO 73.42 258** *e*P P **12 55 31.9 -0.4**
**VNA3 Neumayer Olymp 73.75 192** P P **12 55 37.5 +4.3**
**BSCB Bom Sucesso 73.80 249** *e*P P **12 55 34.5 0.0**
**MDSI Maura Dua 75.65 94** P P **12 55 44.5 -0.8**
comp=Z,9.3nm,1.4s
**PZH PanZhiHua 75.77 62** P P **12 55 44.8 -1.1**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,140nm,4.1s
**SMTB Santa Maria do 75.98 261** *e*P P **12 55 47.7 +0.5**
**KMI Kunming 76.46 64** ⇓P P **12 55 50.1 +0.1**

KMI pmax pmax
comp=Z,6.0nm,1.4s
**RCLB Rio Claro- Sao 76.46 247** *eP* **P 12 55 50.8 +1.0**
**BDFB Brasilia 76.56 254** P **P 12 55 47.8 -2.8**
comp=Z,4.4nm,0.7s,baz=75,slow=9.0,SNR=4.0
**BDFB Brasilia 76.56 254** P **P 12 55 51.0 +0.5**
BDFB pmax pmax
comp=Z,8.0nm,0.7s
**BDFB Brasilia 76.56 254** P **P 12 55 51.0 +0.5**
BDFB IAmb IAmb 12 55 53.9
comp=Z,8.1nm,0.7s
**GTA Gaotai 76.67 49** ⇑*P* **P 12 55 51.9 +1.1**
GTA pP PcP 12 55 59.0 -3.2
GTA sP sP 12 56 03.0 +8.0
GTA pmax pmax
comp=Z,6.0nm,1.5s
GTA pmax pmax
comp=Z,63nm,4.9s
GTA LR LR
comp=Z,110nm,20.7s
GTA LR LR
comp=Z,100nm,18.5s
GTA LR LR
comp=Z,130nm,19.6s
**PEXB Peixe 76.73 258** *eP* **P 12 55 51.9 +0.4**
**IPMB Ipameri, GO 76.84 252** *eP* **P 12 55 52.2 +0.1**
**BB19B Bebedouro 77.30 249** *eP* **P 12 55 56.2 +1.7**
**KNGR Kungurtug, Tuv 78.05 37** *iP* **P 12 56 00.0 +1.7**
**PRPB Parauapebas 78.18 264** *eP* **P 12 56 00.2 +0.6**
**CD2 Chengdu 78.21 58** P **P 12 56 01.0 +1.5**
CD2 pmax pmax
comp=Z,250nm,9.4s
**LZH Lanzhou 79.13 53** *eP* **P 12 56 06.0 +1.4**
LZH pP PcP 12 56 12.8 -0.2
LZH pmax pmax
comp=Z,7.0nm,1.1s
LZH LR LR
comp=Z,180nm,13.5s
LZH LR LR
comp=Z,240nm,15.0s
LZH LR LR
comp=Z,210nm,15.6s
**SNDB Serra Nova Dou 79.66 258** *eP* **P 12 56 08.3 +0.6**
**PCMB Pacaembu 79.87 248** *eP* **P 12 56 10.3 +1.5**
**GYA Guiyang 80.14 63** ⇑*P* **P 12 56 12.7 +2.5**
GYA pmax pmax
comp=Z,5.0nm,1.6s
**ARAG Araguaiana, MT 80.22 254** *eP* **P 12 56 11.8 +1.2**
**MCPB Macapa, AP 80.51 270** *eP* **P 12 56 12.8 +0.5**
**ITAB Concordia 80.92 243** *eP* **P 12 56 15.9 +1.6**
**NRIK Noril'sk 80.96 18** P **P 12 56 13.6 +0.1**
comp=Z,2.2nm,0.6s,baz=225,slow=6.1,SNR=9.6
NRIK LR LR 13 37 19.0
comp=Z,73nm,19.0s,baz=296,slow=40
**NRIK Noril'sk 80.96 18***eP* **P 12 56 14.9 +1.4**
NRIK pmax pmax
comp=Z,22nm,1.6s
**DBG Daneborg 81.15 348** *iP* **P 12 56 16.7 +2.3**
DBG IAmb IAmb 12 56 19.8
comp=Z,4.5nm,1.0s
**ZAK Zakamensk 81.55 39** *eP* **P 12 56 18.1 +0.9**
ZAK pmax pmax
comp=Z,5.0nm,1.5s
**DAG Danmarks Havn 82.50 350** *iP* **P 12 56 23.9 +2.4**
DAG IAmb IAmb 12 56 25.2
comp=Z,5.1nm,1.0s
**MALB Monte Alegre 82.68 268** *eP* **P 12 56 24.0 +0.2**
**SONM Songino Array 83.05 42** P **P 12 56 25.8 +0.7**
comp=Z,0.9nm,0.8s,baz=243,slow=5.0,SNR=5.4
SONM LR LR 13 35 50.4
comp=Z,91nm,21.6s,baz=275,slow=37
**SONM Songino Array 83.05 42** P **P 12 56 26.4 +1.2**
SONM pmax pmax
comp=Z,14nm,1.7s
**SONM Songino Array 83.05 42** P **P 12 56 26.4 +1.2**
**ULN Ulaanbaatar 83.50 42** P **P 12 56 29.2 +1.7**
ULN pmax pmax
comp=Z,19nm,1.7s
**ULN Ulaanbaatar 83.50 42** P **P 12 56 29.2 +1.7**
ULN IAmb IAmb 12 56 30.0
comp=Z,19nm,1.6s
**NPGB Novo Progresso 83.68 263** *eP* **P 12 56 28.8 -0.2**
**ICESG Greenland Ices 83.76 340** *iP* **P 12 56 31.5 +2.9**
ICESG IAmb IAmb 12 56 34.3
comp=Z,9.3nm,0.8s
**SALV Santo Antonio 83.95 254** *eP* **P 12 56 31.9 +1.6**
**AQDB Aquidauana 83.99 250** *eP* **P 12 56 32.3 +1.9**
**CLDB Colider 84.07 259** *eP* **P 12 56 31.4 +0.5**
**ITTB Itaituba 84.09 266** *eP* **P 12 56 30.8 -0.2**
**SUMG Summit 84.69 344** P **P 12 56 31.4 -2.0**
SUMG pmax pmax
comp=Z,51nm,2.0s
**SUMG Summit 84.69 344** *iP* **P 12 56 32.1 -1.2**
SUMG IAmb IAmb 12 56 38.4
comp=Z,7.2nm,0.9s
**SUMG Summit 84.69 344** P **P 12 56 31.4 -2.0**
**PDRB Porto dos Gac 84.98 259** *eP* **P 12 56 35.6 +0.1**
**CPUP Villa Florida 85.54 244** LR LR 13 28 57.8
comp=Z,52nm,20.4s,baz=198,slow=32
**NOR Nord 85.58 354** *iP* **P 12 56 35.9 -1.2**
NOR IAmb IAmb 12 56 41.3
comp=Z,3.8nm,1.1s
**HHC Hu-ho-hao-te 85.78 49** *eP* **P 12 56 39.7 +0.5**
HHC pmax pmax
comp=Z,9.0nm,0.9s
HHC pmax pmax
comp=Z,110nm,7.1s
**LYN LuoYang 85.93 55** *eP* **P 12 56 41.0 +1.1**
LYN pmax pmax
comp=Z,10.0nm,0.7s
**PTLB Pontes e Lacer 87.28 255** *eP* **P 12 56 47.9 +1.1**
**PTLB Pontes e Lacer 87.28 255** P **P 12 56 46.8 0.0**
PTLB IAmb IAmb 12 56 51.3
comp=Z,8.1nm,1.0s
**VILB Vilhena 88.35 257** *eP* **P 12 56 52.9 +0.8**
**QSPA South Pole Qui 88.50 180** LR LR 13 37 24.2
comp=Z,92nm,18.0s,baz=196,slow=36
**QSPA South Pole Qui 88.50 180** P **P 12 56 52.9 +1.1**
QSPA IAmb IAmb 12 56 57.0
comp=Z,18nm,1.1s
**BOAV Boa Vista 89.05 272** P **P 12 56 55.7 +0.4**
BOAV IAmb IAmb 12 56 59.3
comp=Z,7.8nm,1.0s
**BJI Beijing 89.23 50** P **P 12 56 57.0 +1.4**
BJI pmax pmax
comp=Z,4.0nm,1.4s
**NJ2 Nanjing 91.15 58** *eP* **P 12 57 05.3 +0.6**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**USHA Ushuaia 92.72 215** LR LR 13 32 07.5
comp=Z,156nm,20.3s,baz=228,slow=31
**SCHQ Schefferville 94.31 325** LR LR 13 37 33.9
comp=Z,111nm,18.1s,baz=51,slow=34
**ETMB Extrema 94.34 260** *eP* **P 12 57 19.3 -0.5**
**FRB Frobisher Bay 94.49 334** LR LR 13 39 59.1
comp=Z,85nm,18.6s,baz=254,slow=36
**TIXI Tiksi 94.74 18** P **P 12 57 18.9 -1.5**
comp=Z,1.0nm,0.2s,baz=295,slow=5.9,SNR=1.4
TIXI LR LR 13 46 52.0
comp=Z,48nm,18.2s,baz=345,slow=40
**TIXI Tiksi 94.74 18***ceP* **P 12 57 20.9 +0.5**
TIXI pmax pmax
comp=Z,4.0nm,1.3s
**LPAZ La Paz 95.89 254** P **P 12 57 26.3 -1.4**
comp=Z,2.3nm,0.9s,baz=66,slow=4.4,SNR=3.3
**LPAZ La Paz 95.89 254** *eP* **P 12 57 27.2 -0.4**
**FITZ Fitzroy Crossi 96.35 108** P **P 12 57 28.0 -0.9**
comp=Z,1.9nm,0.9s,baz=216,slow=4.7,SNR=3.9
FITZ LR LR 13 35 35.9
comp=Z,65nm,19.0s,baz=296,slow=32
**YAK Yakutsk 96.63 28** LR LR 13 44 47.5
comp=Z,64nm,19.9s,baz=276,slow=38
**YAK Yakutsk 96.63 28** *iP* **P 12 57 31.0 +1.8**
YAK pmax pmax
comp=Z,3.0nm,0.8s
**VNDA Vanda 97.08 171** LR LR 13 39 44.6
comp=Z,57nm,19.9s,baz=202,slow=34
**KSAR Wonju Array Be 98.43 53** P **P 12 57 37.7 -0.2**
**KSAR Wonju Array Be 98.43 53** P **P 12 57 37.7 -0.2**
**KSRS Korea Array 98.46 53** P **P 12 57 37.5 -0.6**
comp=Z,1.4nm,1.0s,baz=280,slow=3.7,SNR=4.0
KSRS LR LR 13 44 32.0
comp=Z,30nm,18.0s,baz=290,slow=37
**JOW Kunigami 99.46 63** LR LR 13 46 55.4
comp=Z,42nm,18.1s,baz=167,slow=38

**KLR Kul'dur 99.84 40** LR LR 13 47 22.2
comp=Z,85nm,18.9s,baz=331,slow=38
**RES Resolute Bay 99.90 347** LR LR 13 46 58.3
comp=Z,81nm,18.9s,baz=265,slow=38
**SEY Seymchan 106.20 23** PP **PP 13 02 37.0 +1.5**
comp=Z,1.3nm,0.8s,baz=285,slow=9.0,SNR=3.7
**ILAR Eielson Array 116.82 358** PKP **PKPdf 13 02 41.4 -2.3**
comp=Z,0.7nm,0.9s,baz=350,slow=2.7,SNR=3.5
ILAR PP **PP 13 03 50.5 -0.9**
comp=Z,0.6nm,0.8s,baz=354,slow=7.6,SNR=4.7
**BCAR Beaver Creek A 118.20 355** PKPdf **PKPdf 13 02 45.2 -1.3**
**PDAR Pinedale Array 124.43 323** PKP **PKPdf 13 02 58.1 -1.1**
comp=Z,0.9nm,0.9s,baz=126,slow=2.0,SNR=5.4
**SMCO Snowmass 124.78 318 PKiKP 13 03 01.5 +0.9**
**TXAR Lajitas Array 126.77 306** PKP **PKPdf 13 03 03.9 0.0**
comp=Z,0.7nm,0.6s,baz=106,slow=2.6,SNR=8.0
**SRU San Rafael Swe 127.13 320** PKIKP **PKPdf 13 03 04.5 0.0**
**SRU San Rafael Swe 127.13 320 PKPdf 13 03 04.5 0.0**
**MNTX Cornudas Mount 127.17 310 PKPdf 13 02 58.8 -5.8**
**NVAR Mina Array Bea 132.32 324** PKP **PKiKP 13 03 15.0 -0.5**
comp=Z,0.5nm,0.7s,baz=54,slow=2.3,SNR=3.9

**IDC 04 12:49:47.4±1.1, 47°05'N×153°06'E, h0km, mb3.6/6, mb1 3.9/8, mb1mx3.5/52, mbtmp3.6/8, ML2.8/2, Error ellipse: s-maj=61.4km s-min=18.9km az=129.0, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.76** | **24** | Pn | Pn | Pn | 12 51 28.9 | +1.1 |
| | 0.3nm,0.3s,baz=178,slow=10,SNR=7.6 | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.91** | **252** | Pn | Pn | | 12 51 44.4 | +0.8 |
| | 0.2nm,0.3s,baz=232,slow=19,SNR=1.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.50** | **153** | T | T | | 13 27 28.2 | |
| | baz=341,slow=76,SNR=55 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.52** | **153** | T | T | | 13 27 35.2 | |
| | baz=341,slow=76,SNR=97 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.52** | **153** | T | T | | 13 27 30.7 | |
| | baz=341,slow=76,SNR=60 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.59** | **154** | T | T | | 13 28 52.8 | |
| | baz=342,slow=76,SNR=70 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.60** | **154** | T | T | | 13 28 53.4 | |
| | baz=342,slow=76,SNR=65 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.61** | **154** | T | T | | 13 28 52.5 | |
| | baz=342,slow=76,SNR=35 | | | | | | | |
| **ILAR** | **Eielson Array** | **36.34** | **39** | P | P | | 12 56 50.9 | -1.7 |
| | 0.7nm,0.8s,baz=251,slow=6.2,SNR=5.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.33** | **62** | P | P | | 13 00 13.0 | +1.3 |
| | 0.2nm,0.4s,baz=297,slow=7.0,SNR=2.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **64.60** | **54** | P | P | | 13 00 26.5 | -0.2 |
| | 0.3nm,0.7s,baz=332,slow=3.1,SNR=2.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **68.79** | **199** | P | P | | 13 00 52.2 | -1.0 |
| | 0.3nm,0.6s,baz=26,slow=7.0,SNR=5.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **72.48** | **198** | P | P | | 13 01 16.2 | +0.5 |
| | 0.5nm,0.5s,baz=11,slow=5.6,SNR=21 | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.38** | **61** | P | P | | 13 01 44.5 | +0.2 |
| | 0.8nm,0.6s,baz=294,slow=5.1,SNR=12 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **138.79** | **90** | T | T | | 15 44 14.0 | |
| | baz=304 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **138.80** | **90** | T | T | | 15 44 09.0 | |
| | baz=304 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **138.80** | **90** | T | T | | 15 44 09.9 | |
| | baz=304 | | | | | | | |

*IDC **04** 12:50:52.6±0.8, 31°.34N×93°.40E, h0km, mb3.9/12, mb1 4.0/14, mb1mx3.6/57, mbtmp3.9/14, ML3.6/2, MS3.8/1, Ms1 3.8/1, ms1mx2.7/85, Error ellipse: s-maj=25.1km s-min=17.5km az=49.0*

**ISC 04 12:50:57.9±1.0, 31°.4N±0°.2×93°.4E±0°.1, h35km, n17, σ0s86/16, mb4.0/12, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **18.80** | **312** | P | P | Pn | 12 55 15.2 | 0.0 |
| | 0.1nm,0.3s,baz=226,slow=11,SNR=1.9 | | | | | | | |
| **SONM** | **Songino Array** | **19.19** | **27** | P | P | Pn | 12 55 20.2 | +0.4 |
| | 0.2nm,0.3s,baz=214,slow=12,SNR=23 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **22.20** | **334** | P | P | | 12 55 51.8 | +0.8 |
| | 3.4nm,0.8s,baz=147,slow=11,SNR=4.3 | | | | | | | |
| **KSRS** | **Korea Array** | **28.98** | **68** | P | P | | 12 56 54.5 | +0.2 |
| | 1.2nm,0.6s,baz=268,slow=8.7,SNR=5.4 | | | | | | | |
| **KLR** | **Kul'dur** | **33.78** | **47** | P | P | | 12 57 36.6 | +0.2 |
| | 0.3nm,0.2s,baz=326,slow=3.6,SNR=3.7 | | | | | | | |
| **KLR** | **Kul'dur** | **33.78** | **47** | P | P | | 12 57 36.6 | +0.2 |
| **SIJI** | **Sorong** | **48.11** | **125** | LR | LR | | 13 20 34.8 | |
| | comp=Z,92nm,19.9s,baz=176,slow=37 | | | | | | | |
| **SEY** | **Seymchan** | **48.51** | **32** | P | P | | 12 59 35.3 | -1.7 |
| | 0.7nm,0.4s,baz=172,slow=6.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **50.47** | **312** | P | P | | 12 59 52.0 | -0.2 |
| | 0.9nm,0.5s,baz=80,slow=6.4,SNR=2.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **52.23** | **326** | P | P | | 13 00 05.8 | +0.7 |
| | 1.2nm,0.7s,baz=74,slow=10,SNR=1.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **59.41** | **326** | P | P | | 13 00 57.3 | +0.6 |
| | comp=Z,5.2nm,1.1s,baz=80,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **59.41** | **326** | P | P | | 13 00 54.7 | -2.0 |
| | comp=Z,1.3nm,0.7s,baz=80,slow=7.0,SNR=2.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.37** | **137** | P | P | | 13 01 30.2 | -0.3 |
| | comp=Z,0.9nm,0.7s,baz=330,slow=6.6,SNR=9.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **67.06** | **140** | P | P | | 13 01 48.4 | +0.6 |
| | comp=Z,0.9nm,0.6s,baz=327,slow=6.9,SNR=22 | | | | | | | |
| **ILAR** | **Eielson Array** | **73.35** | **23** | P | P | | 13 02 26.4 | +0.7 |
| | comp=Z,0.9nm,0.9s,baz=317,slow=5.2,SNR=5.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.78** | **13** | P | P | | 13 03 23.2 | 0.0 |
| | comp=Z,0.5nm,0.8s,baz=330,slow=5.3,SNR=6.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.73** | **282** | P | P | | 13 03 28.8 | -0.1 |
| | comp=Z,2.4nm,0.9s,baz=48,slow=4.5,SNR=5.5 | | | | | | | |

*NOU **04** 12:51:30.8, 38°.98S×176°.85E, h58km, MLv4.0/9, North Island, New Zealand*
*WEL **04** 12:51:32.4±0.2, 39°.S±2°.×17°.7E±°, h4.3km±3km, M3.4/67, ML3.6/67, MLv3.4/67, Error ellipse: s-maj=0.0km s-min=0.0km az=135.5*

**ISC 04 12:51:31.5±1.3, 38°.89S±0°.03×176°.70E±0°.03, h64km±6km, n152, σ1s02/167, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MTHZ** | **Maungataniwha** | **0.12** | **73** | P | P | Pn | 12 51 40.9 | -0.3 |
| MTHZ | | | | S | S | Sn | 12 51 47.8 | -0.4 |
| **MRHZ** | **Matea Rd** | **0.23** | **283** | P | P | Pn | 12 51 41.3 | -0.4 |
| MRHZ | | | | S | S | Sn | 12 51 47.9 | -1.1 |
| **NMHZ** | **Naumai** | **0.23** | **158** | P | P | Pn | 12 51 42.4 | +0.7 |
| NMHZ | | | | S | S | Sn | 12 51 50.5 | +1.4 |
| **BKZ** | **Black Stump Fm** | **0.32** | **210** | P | P | Pn | 12 51 42.6 | +0.3 |
| BKZ | | | | S | S | Sn | 12 51 51.0 | +0.8 |
| **BKZ** | **Black Stump Fm** | **0.32** | **210** | P | P | Pn | 12 51 42.7 | +0.4 |
| **RTZ** | **Ruatahuna** | **0.35** | **39** | P | P | Pn | 12 51 42.3 | -0.3 |
| RTZ | | | | S | S | Sn | 12 51 50.4 | -0.2 |
| **MUGZ** | **Murupara** | **0.41** | **8** | P | P | Pn | 12 51 42.6 | -0.4 |
| MUGZ | | | | S | S | Sn | 12 51 50.5 | -0.9 |
| **ALRZ** | **Allen Road** | **0.43** | **319** | P | P | Pn | 12 51 43.0 | -0.1 |
| ALRZ | | | | S | S | Sn | 12 51 51.3 | -0.3 |
| **ARHZ** | **Aropaoanui** | **0.44** | **148** | P | P | Pn | 12 51 44.3 | +1.0 |
| **PRRZ** | **Plateau Road** | **0.46** | **328** | P | P | Pn | 12 51 43.2 | -0.2 |
| PRRZ | | | | S | S | Sn | 12 51 51.4 | -0.7 |
| **HATZ** | **Hinemaiaia** | **0.47** | **269** | P | P | Pn | 12 51 43.5 | -0.1 |
| HATZ | | | | S | S | Sn | 12 51 51.6 | -0.8 |
| **SNGZ** | **Shannon Statio** | **0.51** | **78** | P | P | Pn | 12 51 44.6 | +0.6 |
| **MCHZ** | **McNeill Hill** | **0.56** | **180** | P | P | Pn | 12 51 45.9 | +1.4 |
| **WPRZ** | **Whakapapaterin** | **0.56** | **311** | P | P | Pn | 12 51 44.4 | -0.1 |
| WPRZ | | | | S | S | Sn | 12 51 53.8 | -0.1 |
| **RRRZ** | **Republican Roa** | **0.56** | **345** | P | P | Pn | 12 51 44.3 | -0.2 |
| **KWHZ** | **Kaweka Forest** | **0.58** | **202** | P | P | Pn | 12 51 45.8 | +1.1 |
| KWHZ | | | | S | S | Sn | 12 51 56.9 | +2.4 |
| **HRRZ** | **Handcock Road** | **0.59** | **327** | P | P | Pn | 12 51 44.7 | -0.1 |
| **WHTZ** | **Whakaora** | **0.62** | **291** | P | P | Pn | 12 51 45.6 | +0.4 |
| **RITZ** | **Rihia Road** | **0.66** | **262** | P | P | Pn | 12 51 46.1 | +0.5 |
| **TARZ** | **Mount Tarawera** | **0.67** | **347** | P | P | Pn | 12 51 45.8 | +0.1 |
| **HSRZ** | **Hossack Road** | **0.68** | **328** | P | P | Pn | 12 51 45.8 | +0.1 |
| **RAGZ** | **Rawiri** | **0.68** | **55** | P | P | Pn | 12 51 46.4 | +0.5 |
| RAGZ | | | | S | S | Sn | 12 51 58.4 | +1.9 |
| **HLRZ** | **Highlands Stat** | **0.69** | **337** | P | P | Pn | 12 51 46.2 | +0.3 |
| **URZ** | **Urewera** | **0.70** | **27** | P | P | Pn | 12 51 45.8 | -0.2 |
| URZ | | | | S | S | Sn | 12 51 56.2 | -0.6 |
| **URZ** | **Urewera** | **0.70** | **27** | P | P | Pn | 12 51 46.0 | -0.1 |
| **GRRZ** | **Galatos Road** | **0.71** | **319** | P | P | Pn | 12 51 46.6 | +0.5 |
| **RATZ** | **Rangitukua** | **0.72** | **271** | P | P | Pn | 12 51 46.6 | +0.2 |
| **MKRZ** | **Makatiti** | **0.77** | **346** | P | P | Pn | 12 51 47.4 | +0.4 |
| **KNZ** | **Kokohu** | **0.77** | **100** | P | P | Pn | 12 51 47.0 | +0.2 |
| **WATZ** | **Wairara** | **0.78** | **283** | P | P | Pn | 12 51 47.1 | +0.2 |
| **BHHZ** | **Black Hill Sta** | **0.78** | **219** | P | P | Pn | 12 51 47.7 | +0.6 |
| **EDRZ** | **Edgecumbe** | **0.78** | **2** | P | P | Pn | 12 51 47.0 | -0.1 |
| **KATZ** | **Kakaramea** | **0.79** | **263** | P | P | Pn | 12 51 47.6 | +0.4 |
| **KUTZ** | **Kaahu Road** | **0.79** | **300** | P | P | Pn | 12 51 47.4 | +0.3 |
| **KRHZ** | **Kereru** | **0.80** | **199** | P | P | Pn | 12 51 48.2 | +0.9 |
| **TMVZ** | **Te Maari** | **0.81** | **253** | P | P | Pn | 12 51 47.9 | +0.5 |
| **ETVZ** | **East Tongariro** | **0.81** | **252** | P | P | Pn | 12 51 47.9 | +0.5 |
| **UTU** | **Utuhina** | **0.81** | **331** | P | P | Pn | 12 51 47.7 | +0.3 |
| **OMRZ** | **Omania** | **0.82** | **342** | P | P | Pn | 12 51 47.3 | -0.3 |
| **NTVZ** | **North Tongarir** | **0.82** | **255** | P | P | Pn | 12 51 48.1 | +0.4 |
| **CKHZ** | **Cape Kidnapper** | **0.82** | **159** | P | P | Pn | 12 51 48.4 | +0.8 |
| CKHZ | | | | S | S | Sn | 12 52 00.7 | +1.4 |
| **KRVZ** | **Karewarewa** | **0.85** | **256** | P | P | Pn | 12 51 48.4 | +0.4 |
| **OTVZ** | **Oturere** | **0.85** | **251** | P | P | Pn | 12 51 48.5 | +0.5 |
| **RIGZ** | **Rimuhau** | **0.85** | **78** | P | P | Pn | 12 51 48.1 | +0.2 |
| **MWZ** | **Matawai** | **0.85** | **50** | P | P | Pn | 12 51 48.2 | +0.3 |
| MWZ | | | | S | S | Sn | 12 52 00.3 | +0.3 |
| **SNVZ** | **South Ngauruho** | **0.88** | **250** | P | P | Pn | 12 51 48.9 | +0.6 |
| **NNVZ** | **North Ngauruho** | **0.88** | **253** | P | P | Pn | 12 51 48.9 | +0.6 |
| **NGRZ** | **Ngongotaha** | **0.88** | **333** | P | P | Pn | 12 51 48.7 | +0.4 |
| **WTVZ** | **West Tongariro** | **0.89** | **255** | P | P | Pn | 12 51 49.0 | +0.5 |
| **TUVZ** | **Tukino** | **0.90** | **245** | P | P | Pn | 12 51 49.2 | +0.6 |
| **MARZ** | **Manawahe** | **0.90** | **359** | P | P | Pn | 12 51 48.4 | -0.1 |
| **MOVZ** | **Moawhango** | **0.90** | **234** | P | P | Pn | 12 51 49.0 | +0.4 |
| MOVZ | | | | S | S | Sn | 12 52 01.3 | +0.2 |
| **NGZ** | **Ngauruhoe** | **0.90** | **251** | P | P | Pn | 12 51 49.2 | +0.5 |
| **KAHZ** | **Kahuranaki** | **0.92** | **171** | P | P | Pn | 12 51 49.6 | +0.9 |
| **PRGZ** | **Paritu Road** | **0.93** | **93** | P | P | Pn | 12 51 49.0 | +0.2 |
| PRGZ | | | | S | S | Sn | 12 52 02.8 | +1.2 |
| **KARZ** | **Kaharoa** | **0.94** | **337** | P | P | Pn | 12 51 48.8 | -0.2 |
| **WHVZ** | **Whangaehu Hut** | **0.95** | **245** | P | P | Pn | 12 51 49.9 | +0.5 |
| **WNVZ** | **Wahianoa** | **0.96** | **242** | P | P | Pn | 12 51 50.0 | +0.6 |
| **DRZ** | **Dome Shelter** | **0.96** | **246** | P | P | Pn | 12 51 50.1 | +0.5 |
| **FWVZ** | **Far West T-bar** | **0.96** | **247** | P | P | Pn | 12 51 50.0 | +0.5 |
| **MHGZ** | **Mahia Peninsul** | **0.98** | **106** | P | P | Pn | 12 51 49.9 | +0.4 |
| **TRVZ** | **Turoa** | **0.98** | **245** | P | P | Pn | 12 51 50.3 | +0.5 |
| **TWVZ** | **Taurewa** | **1.00** | **259** | P | P | Pn | 12 51 50.1 | +0.3 |
| **TKGZ** | **Te Karaka** | **1.00** | **64** | P | P | Pn | 12 51 50.1 | +0.3 |
| **OPRZ** | **Ohinepanea** | **1.05** | **354** | P | P | Pn | 12 51 49.7 | -0.6 |
| **WHRZ** | **Whale Island** | **1.05** | **12** | P | P | Pn | 12 51 52.2 | +0.8 |
| **TLZ** | **Tolley Road** | **1.07** | **301** | P | P | Pn | 12 51 50.8 | +0.2 |
| **MTVZ** | **Mangateitei** | **1.08** | **242** | P | P | Pn | 12 51 51.4 | +0.6 |
| **PNHZ** | **Pukenui** | **1.10** | **200** | P | P | Pn | 12 51 51.5 | +0.5 |
| **PKVZ** | **Pokaka** | **1.13** | **249** | P | P | Pn | 12 51 52.0 | +0.6 |
| **PXZ** | **Pawanui** | **1.15** | **174** | P | P | Pn | 12 51 51.9 | +0.3 |
| **WPHZ** | **Waipukurau** | **1.19** | **190** | P | P | Pn | 12 51 52.5 | +0.3 |
| **KMRZ** | **Kaimai** | **1.20** | **330** | P | P | Pn | 12 51 52.3 | 0.0 |
| **RUGZ** | **Raukumara Rang** | **1.20** | **40** | P | P | Pn | 12 51 52.5 | +0.1 |
| **TGRZ** | **Tauranga** | **1.21** | **343** | P | P | Pn | 12 51 52.2 | -0.2 |
| **TWGZ** | **Tauwhareparae** | **1.23** | **55** | P | P | Pn | 12 51 53.6 | +0.9 |
| **CNGZ** | **Carnagh Statio** | **1.25** | **72** | P | P | Pn | 12 51 53.6 | +0.6 |
| **TSZ** | **Takapari Road** | **1.30** | **206** | P | P | Pn | 12 51 54.0 | +0.3 |
| **PRHZ** | **Porangahau** | **1.38** | **182** | P | P | Pn | 12 51 54.6 | -0.1 |
| **HAZ** | **Te Kaha** | **1.42** | **37** | P | P | Pn | 12 51 54.6 | -0.5 |
| **DVHZ** | **Dannevirke** | **1.47** | **196** | P | P | Pn | 12 51 55.5 | -0.4 |
| **PUZ** | **Puketiti** | **1.47** | **57** | P | P | Pn | 12 51 56.1 | +0.2 |
| **PKGZ** | **Pakihiroa** | **1.47** | **48** | P | P | Pn | 12 51 57.3 | +1.3 |
| **HIZ** | **Hauiti** | **1.49** | **284** | P | P | Pn | 12 51 57.1 | +0.9 |
| **HIZ** | **Hauiti** | **1.49** | **284** | P | P | Pn | 12 51 57.1 | +0.9 |
| **TOZ** | **Tahuroa Road** | **1.49** | **320** | P | P | Pn | 12 51 56.4 | +0.3 |
| **VRZ** | **Vera Road** | **1.53** | **260** | P | P | Pn | 12 51 57.7 | +1.1 |
| **ANWZ** | **Angora Road** | **1.58** | **186** | P | P | Pn | 12 51 57.1 | -0.2 |
| **WAZ** | **Wanganui** | **1.59** | **236** | P | P | Pn | 12 51 59.0 | +1.5 |
| **POWZ** | **Post Office Ro** | **1.67** | **205** | P | P | Pn | 12 51 58.3 | -0.2 |
| **OHWZ** | **Ohakea** | **1.70** | **219** | P | P | Pn | 12 52 00.3 | +1.4 |
| **WMGZ** | **Waiomatatini S** | **1.72** | **52** | P | P | Pn | 12 51 59.5 | +0.2 |
| **PRWZ** | **Pori Road** | **1.76** | **198** | P | P | Pn | 12 51 59.5 | -0.3 |
| **BFZ** | **Birch Farm** | **1.83** | **191** | P | P | Pn | 12 51 59.8 | -0.8 |
| **BFZ** | **Birch Farm** | **1.83** | **191** | P | P | Pn | 12 51 59.9 | -0.8 |
| **MXZ** | **Matakaoa Point** | **1.83** | **44** | P | P | Pn | 12 52 01.5 | +0.8 |
| **MHEZ** | **Mangahewa** | **1.86** | **263** | P | P | Pn | 12 52 03.3 | +2.2 |
| **LREZ** | **Lake Rotokare** | **1.87** | **251** | P | P | Pn | 12 52 02.9 | +1.6 |
| **DREZ** | **Durham Road** | **1.97** | **260** | P | P | Pn | 12 52 04.6 | +2.0 |
| **MRZ** | **Mangatainoka R** | **1.97** | **206** | P | P | Pn | 12 52 01.8 | -0.8 |
| **TIWZ** | **Tintock** | **1.99** | **198** | P | P | Pn | 12 52 02.2 | -0.7 |
| **PREZ** | **Palmer Road** | **2.03** | **256** | P | P | Pn | 12 52 05.7 | +2.2 |
| **CPWZ** | **Castlepoint** | **2.06** | **191** | P | P | Pn | 12 52 03.4 | -0.4 |
| **NEZ** | **North Egmont** | **2.06** | **258** | P | P | Pn | 12 52 06.0 | +2.1 |
| **KHEZ** | **Kahui Hut** | **2.13** | **258** | P | P | Pn | 12 52 07.1 | +2.2 |
| **PKE** | **Pukeiti** | **2.13** | **261** | P | P | Pn | 12 52 06.9 | +2.0 |
| **HOWZ** | **Holdsworth Sta** | **2.21** | **204** | P | P | Pn | 12 52 04.5 | -1.4 |
| **NBEZ** | **Newall Road No** | **2.24** | **259** | P | P | Pn | 12 52 08.0 | +1.8 |
| **NMEZ** | **Namu Road** | **2.25** | **256** | P | P | Pn | 12 52 08.6 | +2.1 |
| **OGWZ** | **Otaki Gorge** | **2.26** | **211** | P | P | Pn | 12 52 05.8 | -0.8 |
| **KUZ** | **Kuaotunu** | **2.27** | **340** | P | P | Pn | 12 52 07.2 | +0.5 |
| **TMWZ** | **Te Maipa** | **2.30** | **195** | P | P | Pn | 12 52 08.8 | -1.4 |
| **ETAZ** | **East Tamaki Re** | **2.38** | **323** | P | P | Pn | 12 52 09.3 | +1.1 |
| **KIW** | **Kapiti Island** | **2.41** | **214** | P | P | Pn | 12 52 07.7 | -0.8 |
| **WIAZ** | **Waiheke Island** | **2.43** | **329** | P | P | Pn | 12 52 09.8 | +0.9 |
| **AWAZ** | **Awhitu Peninsu** | **2.44** | **318** | P | P | Pn | 12 52 10.0 | +1.0 |
| **MTW** | **Mount Morrison** | **2.45** | **202** | P | P | Pn | 12 52 07.2 | -1.9 |
| **CAW** | **Cannon Point** | **2.55** | **209** | P | P | Pn | 12 52 08.9 | -1.6 |
| **MBAZ** | **Motutapu North** | **2.55** | **325** | P | P | Pn | 12 52 11.7 | +1.2 |
| **WTAZ** | **Waiatarua** | **2.58** | **319** | P | P | Pn | 12 52 12.2 | +1.3 |
| **TRWZ** | **Traveller** | **2.62** | **197** | P | P | Pn | 12 52 09.7 | -1.8 |
| **PAWZ** | **Paruwai Farm** | **2.68** | **201** | P | P | Pn | 12 52 10.1 | -2.1 |
| **RVAZ** | **Riverhead Bore** | **2.70** | **321** | P | P | Pn | 12 52 13.5 | +1.0 |
| **ABAZ** | **Army Bay** | **2.72** | **326** | P | P | Pn | 12 52 13.9 | +1.1 |
| **GRZ** | **Great Barrier** | **2.81** | **339** | P | P | Pn | 12 52 14.8 | +0.7 |
| **SNZO** | **South Karori** | **2.86** | **212** | P | P | Pn | 12 52 13.8 | -0.9 |
| **DUWZ** | **D'Urville Isla** | **2.87** | **227** | P | P |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Idehrash** | **2.77** | **340** | *e*Pn | | **Pn** | **12 53 02.8** | **-0.6** |
| IDHR | | | | *e* | | | 12 53 56.7 | |
| | comp=Z,2µm,0.8s | | | | | | | |
| **IALM** | **Almabolaq** | **2.80** | **11** | *e*Pn | | **Pn** | **12 53 03.8** | **-0.2** |
| **SHK1** | **Shahrekord** | **2.84** | **85** | *e*Pn | | **Pn** | **12 53 04.1** | **-0.4** |
| SHK1 | | | | *e* | | | 12 54 02.9 | |
| | comp=Z,2µm,0.8s | | | | | | | |
| **IPIR** | **Pirpir** | **2.89** | **77** | *e*Pn | | **Pn** | **12 53 05.2** | **0.0** |
| IPIR | | | | *e* | | | 12 53 59.2 | |
| | comp=Z,3µm,0.5s | | | | | | | |
| **BHD** | **Baghdad** | **2.91** | **294** | *e*Pn | | **Pn** | **12 53 06.0** | **+0.8** |
| BHD | | | | *e*Sn | | **Sn** | **12 53 42.0** | **+2.1** |
| BHD | | | | AML | | AML | 12 54 27.1 | |
| | comp=E,387nm,0.6s | | | | | | | |
| **SNGE** | **Sanandaj** | **2.99** | **357** | *e*Pn | | **Pn** | **12 53 03.6** | **-2.9** |
| **HAGD** | **Aghdareh** | **3.02** | **26** | *e*Pn | | **Pn** | **12 53 06.5** | **-0.5** |
| HAGD | | | | *e* | | | 12 54 11.7 | |
| | comp=Z,1µm,1.1s | | | | | | | |
| **IBRJ** | **Brojen** | **3.17** | **92** | *e*Pn | | **Pn** | **12 53 08.5** | **-0.4** |
| IBRJ | | | | *e* | | | 12 54 16.7 | |
| | comp=Z,2µm,1.2s | | | | | | | |
| **IKLH** | **Kolahrood** | **3.61** | **69** | *e*Pn | | **Pn** | **12 53 15.2** | **+0.1** |
| IKLH | | | | *e* | | | 12 53 25.9 | |
| | comp=Z,2µm,0.5s | | | | | | | |
| **KLNJ** | **Kolanjah** | **3.62** | **106** | *e*Pn | | **Pn** | **12 53 14.8** | **-0.5** |
| KLNJ | | | | *e* | | | 12 54 24.2 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **QAMS** | **Qamsar** | **3.63** | **62** | *e*Pn | | **Pn** | **12 53 15.8** | **+0.5** |
| QAMS | | | | *e* | | | 12 54 15.9 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **IGAR** | **Gharneh** | **3.83** | **84** | *e*Pn | | **Pn** | **12 53 17.8** | **-0.2** |
| **IRAZ** | **Razeghan** | **3.85** | **30** | *e*Pn | | **Pn** | **12 53 18.4** | **+0.1** |
| **GHVR** | **GHOM** | **3.94** | **52** | *e*Pn | | **Pn** | **12 53 19.8** | **+0.4** |
| **QABG** | **Abgarm-Qazvin** | **3.98** | **25** | *e*Pn | | **Pn** | **12 53 18.7** | **-1.4** |
| **IQOM** | **Qom** | **4.02** | **46** | *e*Pn | | **Pn** | **12 53 19.9** | **-0.8** |
| IQOM | | | | *e* | | | 12 53 21.4 | |
| | comp=Z,2µm,0.5s | | | | | | | |
| **IZEF** | **Zefreh** | **4.12** | **78** | *e*Pn | | **Pn** | **12 53 21.7** | **-0.4** |
| IZEF | | | | *e* | | | 12 53 35.9 | |
| | comp=Z,582nm,0.5s | | | | | | | |
| **IRAM** | **Ramesheh** | **4.12** | **93** | *e*Pn | | **Pn** | **12 53 21.5** | **-0.6** |
| IRAM | | | | *e* | | | 12 54 18.1 | |
| | comp=Z,494nm,0.3s | | | | | | | |
| **IKRK** | **Kirkuk** | **4.24** | **322** | *e*Pn | | **Pn** | **12 53 24.0** | **+0.6** |
| IKRK | | | | *e*Sn | | **Sn** | **12 54 13.0** | **+0.3** |
| IKRK | | | | AML | | AML | 12 54 15.2 | |
| | comp=N,145nm,0.4s | | | | | | | |
| IKRK | | | | AML | | AML | 12 54 48.0 | |
| | comp=E,113nm,0.7s | | | | | | | |
| **KRSH** | **Karshahi** | **4.29** | **63** | *e*Pn | | **Pn** | **12 53 24.0** | **-0.2** |
| KRSH | | | | *e* | | | 12 54 44.2 | |
| | comp=Z,892nm,0.8s | | | | | | | |
| **IMHD** | **Mahdasht** | **4.42** | **35** | *e*Pn | | **Pn** | **12 53 25.3** | **-0.8** |
| IMHD | | | | *e* | | | 12 53 43.7 | |
| | comp=Z,471nm,0.5s | | | | | | | |
| **NASN** | **Na'in** | **4.51** | **80** | *e*Pn | | **Pn** | **12 53 26.7** | **-0.7** |
| **ISFB** | **Sefidab** | **4.53** | **59** | *e*Pn | | **Pn** | **12 53 27.1** | **-0.5** |
| **IVRN** | **Varamin** | **4.53** | **49** | *e*Pn | | **Pn** | **12 53 26.2** | **-1.4** |
| **AHBU** | **AHRAM** | **4.57** | **134** | *e*Pn | | **Pn** | **12 53 27.6** | **-0.4** |
| **ZNJK** | **Zanjan** | **4.66** | **11** | *e*Pn | | **Pn** | **12 53 27.6** | **-1.8** |
| **CHTH** | **Charan** | **4.83** | **37** | *e*Pn | | **Pn** | **12 53 30.1** | **-1.6** |
| **QALM** | **Alamut, Qazvin** | **5.03** | **30** | *e*Pn | | **Pn** | **12 53 33.7** | **-0.8** |
| **DAMV** | **Damavand** | **5.10** | **45** | *e*Pn | | **Pn** | **12 53 34.4** | **-1.1** |
| **ANAR** | **Anarak** | **5.33** | **77** | *e*Pn | | **Pn** | **12 53 37.7** | **-0.9** |
| **IPRN** | **Peran** | **5.73** | **43** | *e*Pn | | **Pn** | **12 53 44.4** | **+0.3** |
| **ISHM** | **Shahmirzad** | **6.04** | **51** | *e*Pn | | **Pn** | **12 53 47.7** | **-0.8** |
| **GHIR** | **Ghir-Karzin** | **6.05** | **127** | *e*Pn | | **Pn** | **12 53 48.2** | **-0.3** |
| **IANJ** | **Anjilo** | **6.28** | **56** | *e*Pn | | **Pn** | **12 53 50.5** | **-1.2** |
| **TABS** | **Tabas** | **8.20** | **77** | *e*Pn | | **Pn** | **12 54 17.2** | **-0.8** |

*FUNV **04** 13:08:31.0,8.°80N×71.°44W,h5km,MW3.7*

**ISC 04 13:08:30.4±1.2,8.°80N±0.°02×71.°40W±0.°02,h11km±10km, n34,σ1°926/62,1D,Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.74** | **134** | *e*P | **Pg** | **13 08 44.8** | **-0.1** |
| SOCV | | | | *e*S | **Sb** | **13 08 55.8** | **+0.2** |
| **SOCV** | **Socops** | **0.74** | **134** | *e*P | **Pg** | **13 08 45.2** | **+0.3** |
| SOCV | | | | *e*S | **Sb** | **13 08 55.7** | **0.0** |
| **SDV** | **Santo Domingo** | **0.76** | **84** | *i* P | **Pb** | **13 08 46.1** | **+0.3** |
| SDV | | | | *e*S | **Sb** | **13 08 56.7** | **+0.3** |
| **CAPV** | **Capacho** | **1.30** | **224** | *e*P | **Pn** | **13 08 54.7** | **0.0** |
| CAPV | | | | *e*S | **Sb** | **13 09 12.0** | **+0.3** |
| **MCQV** | **Machiques** | **1.67** | **318** | *e*P | **Pn** | **13 08 59.7** | **0.0** |
| MCQV | | | | *e*S | **Sb** | **13 09 22.2** | **-0.1** |
| **PAMC** | **Pamplona, Colo** | **1.94** | **222** | *e*P | **Pn** | **13 09 04.2** | **+0.4** |
| PAMC | | | | *e*S | **Sn** | **13 09 28.6** | **+0.2** |
| **OCAC** | **Ocana** | **1.98** | **254** | *e*P | **Pb** | **13 09 05.4** | **-1.2** |
| OCAC | | | | *e*S | **Sb** | **13 09 32.2** | **+0.9** |
| **LL6C** | **La Loma 6 Bece** | **2.07** | **297** | *e*P | **Pn** | **13 09 05.0** | **-0.1** |
| LL6C | | | | *e*S | **Sn** | **13 09 31.3** | **+0.5** |
| **DABV** | **Dabajuro** | **2.24** | **20** | *e*P | **Pn** | **13 09 08.3** | **+0.9** |
| DABV | | | | *e*S | **Sg** | **13 09 43.4** | **+1.0** |
| **DABV** | **Dabajuro** | **2.24** | **20** | *e*P | **Pn** | **13 09 08.0** | **+0.6** |
| DABV | | | | *e*S | **Sn** | **13 09 36.0** | **+0.9** |
| **TAMC** | **Tame, Arauca** | **2.38** | **189** | *e*P | **Pg** | **13 09 16.1** | **-0.1** |
| TAMC | | | | *e*S | **Sg** | **13 09 47.4** | **+0.3** |
| **SIQV** | **Siquisique** | **2.42** | **40** | *e*P | **Pn** | **13 09 10.8** | **+0.8** |
| SIQV | | | | *e*S | **Sn** | **13 09 40.1** | **+1.0** |
| **ELOV** | **Elorza** | **2.61** | **133** | *e*P | **Pn** | **13 09 14.9** | **+2.3** |
| ELOV | | | | *e*S | **Sn** | **13 09 47.0** | **+2.7** |
| **ELOV** | **Elorza** | **2.61** | **133** | *e*P | **Pn** | **13 09 13.4** | **+0.9** |
| ELOV | | | | *e*S | **Sn** | **13 09 45.0** | **+0.7** |
| **SMLC** | **San Martn de** | **2.64** | **270** | *e*P | **Pn** | **13 09 12.7** | **-0.3** |
| SMLC | | | | *e*S | **Sb** | **13 09 50.1** | **-0.1** |
| **CRJC** | **Cerrejon, Guaj** | **2.64** | **327** | *e*P | **Pn** | **13 09 12.5** | **-0.6** |
| CRJC | | | | *e*S | **Sb** | **13 09 52.1** | **+1.7** |
| **URIC** | **Uribia, Colomb** | **2.94** | **349** | *e*P | **Pn** | **13 09 15.5** | **-1.6** |
| URIC | | | | *e*S | **Sb** | **13 09 59.5** | **+0.7** |
| **ARGC** | **Ariguani, Magd** | **3.00** | **291** | *e*P | **Pn** | **13 09 17.9** | **-0.1** |
| ARGC | | | | *e*S | **Sn** | **13 09 54.0** | **0.0** |
| **MAPV** | **Macapo** | **3.08** | **70** | *e*P | **Pn** | **13 09 19.7** | **+0.6** |
| MAPV | | | | *e*S | **Sn** | **13 09 56.3** | **+0.3** |
| **BAUV** | **El Baul** | **3.32** | **87** | *e*P | **Pn** | **13 09 23.2** | **+0.8** |
| BAUV | | | | *e*S | **Sn** | **13 10 01.9** | **0.0** |
| **RUSC** | **La Rusia** | **3.34** | **210** | *e*P | **Pn** | **13 09 23.7** | **+0.7** |
| RUSC | | | | *e*S | **Sg** | **13 10 16.2** | **-1.6** |
| **MONV** | **Montecano** | **3.43** | **24** | *e*P | **Pn** | **13 09 23.6** | **-0.3** |
| MONV | | | | *e*S | **Sn** | **13 10 02.6** | **-2.1** |
| **SMRC** | **Santa Marta, M** | **3.64** | **310** | *e*P | **Pn** | **13 09 26.4** | **-0.3** |
| SMRC | | | | *e*S | **Sn** | **13 10 10.2** | **+0.4** |
| **ZARC** | **Zaragoza, Cauc** | **3.66** | **249** | *e*P | **Pn** | **13 09 28.7** | **+1.6** |
| **PTBC** | **PUERTO BERRIO,** | **3.77** | **234** | *e*P | **Pn** | **13 09 27.2** | **-1.4** |
| **SJCC** | **San Jacinto, C** | **3.88** | **287** | *e*P | **Pn** | **13 09 31.5** | **+1.3** |
| SJCC | | | | *e*S | **Sn** | **13 10 17.6** | **+1.7** |
| **BENV** | **Beln** | **3.92** | **73** | *e*P | **Pn** | **13 09 31.4** | **+0.6** |
| BENV | | | | *e*S | **Sn** | **13 10 16.1** | **-0.8** |
| **NORC** | **Norcasia** | **4.71** | **227** | *e*P | **Pn** | **13 09 41.3** | **-0.3** |
| **CHIC** | **Chingaza** | **4.75** | **209** | *i* P | **Pn** | **13 09 42.7** | **+0.4** |
| CHIC | | | | *e*S | **Sn** | **13 10 35.4** | **-2.3** |
| **CACV** | **CAICARA DEL OR** | **4.97** | **104** | *e*P | Pb | 13 09 52.4 | -5.1 |
| CACV | | | | *e*S | **Sb** | **13 10 53.0** | **-4.2** |
| **MERV** | **Las Mercedes** | **5.06** | **85** | *e*P | **Pn** | **13 09 46.7** | **+0.4** |
| MERV | | | | *e*S | **Sn** | **13 10 42.6** | **-2.3** |
| **GUY2C** | **Guyana, Caldas** | **5.30** | **228** | *e*P | **Pn** | **13 09 51.1** | **+1.1** |
| **BIRV** | **Birongo** | **5.33** | **71** | *e*P | **Pn** | **13 09 50.3** | **+0.4** |
| BIRV | | | | *e*S | **Sn** | **13 10 49.2** | **-2.2** |
| **CBOC** | **Ciudad Bolivar** | **5.43** | **238** | *e*P | **Pn** | **13 09 54.6** | **+3.1** |

**IDC 04 13:23:41.0±2.0,47.°00N×153.°00E,h0km,mb3.4/3, mb1 3.7/4,mb1mx3.2/68,mbtmp3.4/4,ML1.9/1,Error ellipse: s-maj=146.2km s-min=27.9km az=120.0,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.82** | **25** | Pn | Pn | 13 25 23.3 | +1.1 |
| | 0.1nm,0.3s,baz=177,slow=9.7,SNR=7.2 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 29.48 153** | | | T | T | 14 01 22.6 | |
| | baz=341,slow=76,SNR=34 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 29.49 153** | | | T | T | 14 01 23.3 | |
| | baz=341,slow=76,SNR=39 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 30.57 153** | | | T | T | 14 01 19.2 | |
| | baz=341,slow=76,SNR=29 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 30.57 154** | | | T | T | 14 02 44.0 | |
| | baz=341,slow=76,SNR=46 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 30.57 154** | | | T | T | 14 02 44.0 | |
| | baz=341,slow=76,SNR=41 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 30.59 154** | | | T | T | 14 02 45.3 | |
| | baz=341,slow=76,SNR=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.73** | **199** | P | P | 13 34 45.6 | -0.8 |
| | 0.3nm,0.8s,baz=11,slow=6.2,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **72.42** | **198** | P | P | 13 35 09.7 | +0.7 |
| | 0.3nm,0.8s,baz=11,slow=5.3,SNR=9.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **77.43** | **61** | P | P | 13 35 37.8 | -0.5 |
| | 0.3nm,0.7s,baz=310,slow=5.7,SNR=4.0 | | | | | | |

*TUL **04** 13:24:08.4±1.2,35.°66N±0.°01×97.°39W±0.°01,h6km±3km, ML2.3,ML2.2/30(NEIC),Error ellipse: s-maj=1.8km s-min=1.4km az=145.0*

**NEIC 04 13:24:08.3±0.5,35.°68N±0.°01×97.°40W±0.°01,h8km±2km, Error ellipse: s-maj=1.7km s-min=1.5km az=149.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **192** | Pg | Pg | 13 24 10.7 | 0.0 |
| OK009 | | | | Sg | Sg | 13 24 12.4 | 0.0 |
| **OK025** | **Westminster Rd** | **0.11** | **152** | Pg | Pg | 13 24 10.9 | 0.0 |
| OK025 | | | | Sg | Sg | 13 24 12.6 | 0.0 |
| **BCOK** | **Bluff Creek, N** | **0.17** | **264** | Pg | Pg | 13 24 12.1 | +0.2 |
| BCOK | | | | Sg | Sg | 13 24 15.2 | +0.8 |
| **OKCFA** | **Oklahoma City** | **0.26** | **189** | Pg | Pg | 13 24 13.3 | -0.2 |
| OKCFA | | | | Sg | Sg | 13 24 17.6 | +0.5 |
| OKCFA | | | | IAML | | 13 24 17.8 | |
| | comp=E,555nm,0.4s | | | | | | |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 13 24 16.2 | -0.2 |
| FNO | | | | Sg | Sg | 13 24 22.3 | +0.4 |
| FNO | | | | IAML | | 13 24 22.7 | |
| | comp=E,307nm,0.7s | | | | | | |
| FNO | | | | IAML | | 13 24 22.7 | |
| | comp=N,166nm,0.3s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.53** | **58** | Pg | Pg | 13 24 18.7 | +0.1 |
| OK031 | | | | Sg | Sg | 13 24 26.2 | +0.5 |
| OK031 | | | | IAML | | 13 24 26.4 | |
| | comp=N,156nm,0.2s | | | | | | |
| **OK030** | **Cody Creek RV** | **0.56** | **63** | Pg | Pg | 13 24 19.1 | 0.0 |
| OK030 | | | | Sg | Sg | 13 24 27.0 | +0.4 |
| OK030 | | | | IAML | | 13 24 28.2 | |
| | comp=N,102nm,0.1s | | | | | | |
| OK030 | | | | IAML | | 13 24 31.0 | |
| | comp=N,158nm,0.1s | | | | | | |
| **OK034** | **N. Norfolk Rd.** | **0.65** | **59** | Pg | Pg | 13 24 20.9 | 0.0 |
| OK034 | | | | Sg | Sg | 13 24 29.3 | 0.0 |
| OK034 | | | | IAML | | 13 24 30.3 | |
| | comp=N,124nm,0.1s | | | | | | |
| OK034 | | | | IAML | | 13 24 30.7 | |
| | comp=N,100nm,0.1s | | | | | | |
| **W35A** | **Tecumseh** | **0.68** | **140** | Pg | Pg | 13 24 20.7 | -0.6 |
| W35A | | | | Sg | Sg | 13 24 30.4 | +0.2 |
| **QUOK** | **Quay** | **0.75** | **48** | Pg | Pg | 13 24 22.6 | -0.1 |
| QUOK | | | | Sg | Sg | 13 24 32.7 | +0.2 |
| QUOK | | | | IAML | | 13 24 35.0 | |
| | comp=N,89nm,0.2s | | | | | | |
| QUOK | | | | IAML | | 13 24 36.2 | |
| | comp=E,124nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.95** | **330** | Pg | Pg | 13 24 26.6 | 0.0 |
| CROK | | | | IAML | | 13 24 49.7 | |
| | comp=N,88nm,0.2s | | | | | | |
| **BLOK** | **Blackwell** | **1.09** | **8** | Pg | Pg | 13 24 28.9 | -0.4 |
| **X34A** | **Smith Ranch, M** | **1.13** | **198** | Pg | Pg | 13 24 29.9 | -0.1 |
| X34A | | | | IAML | | 13 24 46.3 | |
| | comp=N,58nm,0.4s | | | | | | |
| X34A | | | | IAML | | 13 24 48.8 | |
| | comp=E,58nm,0.5s | | | | | | |
| **GC02** | **Grant County #** | **1.23** | **343** | Pn | Pn | 13 24 31.5 | -0.3 |
| **TUL1** | **Leonard** | **1.33** | **79** | Pn | Pn | 13 24 32.1 | -1.0 |
| TUL1 | | | | IAML | | 13 24 51.5 | |
| | comp=E,52nm,0.3s | | | | | | |
| TUL1 | | | | IAML | | 13 24 51.6 | |
| | comp=N,48nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **1.34** | **357** | Pn | Pn | 13 24 33.4 | +0.1 |
| **KAN14** | **Manchester OK** | **1.36** | **341** | Pn | Pn | 13 24 33.6 | +0.1 |
| **KAN17** | **Caldwell West** | **1.40** | **348** | Pn | Pn | 13 24 34.3 | +0.2 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pn | 13 24 34.6 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | Pn | Pn | 13 24 34.9 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.48** | **299** | Pn | Pn | 13 24 35.4 | +0.2 |
| **OK035** | **E0210 Rd and N** | **1.48** | **315** | Pn | Pn | 13 24 35.5 | +0.3 |
| **KAN08** | **Anthony NE Sta** | **1.62** | **344** | Pn | Pn | 13 24 37.6 | +0.5 |

*IDC **04** 13:26:10.8±1.0,8.°44S×67.°82E,h0km,mb3.8/6,mb1 3.9/6, mb1mx3.5/62,mbtmp3.8/6,MS3.4/2,Ms1 3.4/2, ms1mx2.7/83,Error ellipse: s-maj=31.8km s-min=25.3km az=28.0*

**ISC 04 13:26:12.2±1.0,8.°5S±0.°2×67.°8E±0.°1,h10km,n15, σ0°80/13,mb3.9/6,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **4.65** | **80** | Pn | **Pn** | **13 27 21.8** | **-0.5** |
| | baz=272,slow=16,SNR=37 | | | | | | |
| H08S1 | | | | T | T | 13 32 20.4 | |
| | baz=266,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **4.67** | **80** | Pn | **Pn** | **13 27 22.3** | **-0.2** |
| | baz=272,slow=16,SNR=40 | | | | | | |
| H08S3 | | | | T | T | 13 32 30.3 | |
| | baz=266,slow=74 | | | | | | |
| **H08S2** | **Diego Garcia H** | **4.67** | **81** | Pn | **Pn** | **13 27 22.4** | **-0.2** |
| | baz=272,slow=16,SNR=52 | | | | | | |
| H08S2 | | | | T | T | 13 32 23.2 | |
| | baz=266,slow=74 | | | | | | |
| **TSUM** | **Tsumeb** | **49.80** | **252** | P | **P** | **13 35 06.2** | **+0.4** |
| | 2.5nm,0.6s,baz=127,slow=5.1,SNR=3.0 | | | | | | |
| **KAPI** | **Kappang** | **51.63** | **90** | LR | LR | 13 56 54.6 | |
| | comp=Z,29nm,18.6s,baz=259,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.48** | **12** | P | **P** | **13 35 55.1** | **+0.7** |
| | 0.7nm,0.6s,baz=209,slow=7.6,SNR=9.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.87** | **106** | LR | LR | 13 56 28.6 | |
| | comp=Z,38nm,20.5s,baz=320,slow=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.80** | **11** | P | **P** | **13 36 44.4** | **0.0** |
| | 0.6nm,0.6s,baz=197,slow=7.4,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **64.77** | **112** | P | **P** | **13 36 52.5** | **+1.0** |
| | 0.4nm,0.5s,baz=278,slow=6.2,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.12** | **108** | P | **P** | **13 36 54.0** | **+0.2** |
| | 0.4nm,0.7s,baz=278,slow=5.6,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **65.58** | **27** | P | **P** | **13 36 57.2** | **+0.9** |
| | 0.8nm,0.6s,baz=222,slow=5.9,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **126.03** | **1** | PKP | **PKPdf** | **13 45 13.1** | **-1.3** |
| | 0.4nm,1.0s,baz=338,slow=2.1,SNR=4.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **145.74** | **357** | PKPbc | **PKPdf** | **13 45 50.5** | **-1.2** |
| | 0.5nm,0.9s,baz=325,slow=1.8,SNR=4.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **149.64** | **10** | PKPbc | **PKiKP** | **13 46 03.5** | **-0.4** |
| | 1.0nm,0.7s,baz=298,slow=1.9,SNR=8.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **157.74** | **340** | PKPab | **PKPab** | **13 46 41.5** | **-0.6** |
| | 0.3nm,0.8s,baz=69,slow=4.9,SNR=2.7 | | | | | | |

**IDC 04 13:47:12.0±3.2,30.°64S×177.°25W,h0km,mb3.4/2, mb1 3.7/3,mb1mx3.4/37,mbtmp3.6/3,ML3.0/1,Error ellipse: s-maj=67.3km s-min=30.2km az=102.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.50** | **337** | Pn | Pn | 13 47 39.7 | -0.5 |
| | 113nm,0.3s,baz=124,slow=11,SNR=7.7 | | | | | | |
| RAO | | | | Sn | Sg | 13 47 55.1 | -5.2 |
| | 318nm,0.3s,baz=194,slow=23,SNR=7.8 | | | | | | |
| **URZ** | **Urewera** | **8.91** | **210** | Pn | Pn | 13 49 20.4 | -1.6 |
| | 0.2nm,0.3s,baz=184,slow=14,SNR=2.0 | | | | | | |
| URZ | | | | Sn | Sn | 13 50 57.0 | -6.0 |
| | 0.3nm,0.3s,baz=36,slow=17,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **43.74** | **267** | P | P | 13 55 20.1 | +0.6 |
| | 0.2nm,0.4s,baz=105,slow=7.5,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.75** | **272** | P | P | 13 55 27.1 | -0.5 |
| | 0.3nm,0.3s,baz=111,slow=8.1,SNR=18 | | | | | | |
| **FINES** | **FINESS Array B** | **145.59** | **340** | PKPbc | PKPdf | 14 06 51.1 | -0.4 |
| | 0.9nm,0.7s,baz=45,slow=3.0,SNR=5.3 | | | | | | |

**ANF 04 14:05:15.3±0.5,34.°18N×117.°41W,h6km±4km,ML2.9/9, ML2.7/11,Error ellipse: s-maj=4.7km s-min=2.2km az=91.0,Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBRC** | **Big Bear Solar** | **0.41** | **78** | P | Pg | 14 05 23.8 | +0.4 |
| | baz=259,SNR=17 | | | | | | |
| **MURC** | **Murrieta** | **0.60** | **163** | P | Pg | 14 05 27.0 | +0.1 |
| | baz=343,SNR=8.7 | | | | | | |
| MURC | | | | S | Sg | 14 05 35.5 | +0.8 |
| | baz=343 | | | | | | |
| **DECC** | **Green Verdugo** | **0.77** | **276** | P | Pb | 14 05 30.9 | -0.2 |
| | baz=95 | | | | | | |
| **RRX** | **Edison Barstow** | **0.78** | **26** | P | Pg | 14 05 30.4 | +0.3 |
| | baz=206 | | | | | | |
| RRX | | | | S | Sb | 14 05 41.2 | -0.8 |
| | baz=206 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **0.85** | **326** | P | Pg | 14 05 31.5 | -0.1 |
| | baz=145,SNR=7.7 | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.97** | **125** | P | Pg | 14 05 33.9 | 0.0 |
| | baz=306 | | | | | | |
| **HEC** | **Hector,Ludlow** | **1.10** | **53** | P | Pg | 14 05 36.4 | 0.0 |
| | baz=234,SNR=6.6 | | | | | | |
| HEC | | | | S | Sb | 14 05 51.9 | +0.4 |
| | baz=234 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **1.19** | **98** | P | Pb | 14 05 38.1 | -0.1 |
| | baz=279,SNR=119 | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.23** | **24** | S | Sn | 14 05 56.1 | 0.0 |
| | baz=204 | | | | | | |
| **MONP2** | **Monument Peak** | **1.52** | **147** | P | Pn | 14 05 43.3 | +0.1 |
| | baz=328,SNR=11 | | | | | | |
| **TUQ** | **Turquoise Moun** | **1.75** | **44** | S | Sb | 14 06 10.1 | -0.1 |
| | baz=225 | | | | | | |
| **IRM** | **Iron Mountain** | **1.88** | **90** | S | Sg | 14 06 17.6 | +2.0 |
| | baz=271 | | | | | | |

**ANF 04 14:05:24.0±0.5,34.°18N×117.°34W,h19km±3km,Error ellipse: s-maj=2.3km s-min=2.1km az=40.0,Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBRC** | **Big Bear Solar** | **0.36** | **77** | P | Pg | 14 05 30.9 | -0.8 |
| | baz=259 | | | | | | |
| BBRC | | | | S | Sb | 14 05 37.8 | +0.6 |
| | baz=259 | | | | | | |
| **RRX** | **Edison Barstow** | **0.75** | **22** | P | Pb | 14 05 38.3 | -0.1 |
| | baz=206 | | | | | | |
| RRX | | | | S | Sg | 14 05 49.2 | +0.5 |
| | baz=206 | | | | | | |
| **FMP** | **Fort Macarthur** | **0.92** | **240** | S | Sb | 14 05 53.3 | +0.2 |
| | baz=57 | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.93** | **128** | P | Pb | 14 05 41.6 | +0.1 |
| | baz=306 | | | | | | |
| PFO | | | | S | Sg | 14 05 54.6 | +0.2 |
| | baz=306 | | | | | | |
| **CIS** | **Catalina Islan** | **1.19** | **229** | P | Pb | 14 05 45.8 | -0.1 |
| | baz=47 | | | | | | |
| CIS | | | | S | Sn | 14 06 01.7 | +0.5 |
| | baz=47 | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.20** | **21** | P | Pg | 14 05 46.8 | -0.5 |
| | baz=204 | | | | | | |
| GSC | | | | S | Sn | 14 06 02.2 | +0.6 |
| | baz=204 | | | | | | |
| **OSI** | **Osito Audit: C** | **1.22** | **291** | P | Pb | 14 05 46.4 | -0.1 |
| | baz=111 | | | | | | |
| OSI | | | | S | Sg | 14 06 03.2 | -0.5 |
| | baz=111 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.30** | **171** | P | Pn | 14 05 47.5 | +0.3 |
| | baz=349 | | | | | | |
| 109C | | | | S | Sb | 14 06 04.5 | +0.3 |
| | baz=349 | | | | | | |

*IDC **04** 14:24:23.7±7.2,59.°11S×25.°62W,h67km±63km,mb4.0/5, mb1 4.1/6,mb1mx3.7/35,mbtmp4.3/6,ML4.5/1,MS3.3/2, Ms1 3.3/2,ms1mx2.8/46,Error ellipse: s-maj=35.3km s-min=25.4km az=72.0*

**ISC 04 14:24:19.7±0.8,59.°0S±0.°1×25.°5W±0.°2,h35km,n17, σ0°98/15,mb4.3/5,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **13.70** | **155** | P | **Pn** | **14 27 31.3** | **+0.2** |
| **VNA2** | **Neumayer--Watz** | **14.10** | **155** | P | **Pn** | **14 27 36.3** | **-0.2** |
| | baz=317,slow=14 | | | | | | |
| **SNAA** | **Sanae** | **15.66** | **153** | P | **Pn** | **14 27 57.6** | **+0.2** |
| SNAA | | | | S | Sn | 14 30 33.3 | -16 |
| **SNAA** | **Sanae** | **15.66** | **153** | P | **Pn** | **14 27 57.4** | **0.0** |
| | 1.8nm,0.3s,baz=306,slow=15,SNR=49 | | | | | | |
| SNAA | | | | S | Sn | 14 30 36.1 | -13 |
| | 0.2nm,0.3s,baz=270,slow=15,SNR=2.4 | | | | | | |
| **QSPA** | **South Pole Qui** | **31.23** | **180** | P | **P** | **14 30 36.2** | **+0.6** |
| | 2.8nm,0.5s,baz=173,slow=3.5,SNR=29 | | | | | | |
| **PLCA** | **Paso Flores** | **33.51** | **283** | P | **P** | **14 30 55.7** | **0.0** |
| | 0.4nm,0.4s,baz=143,slow=7.4,SNR=5.0 | | | | | | |
| **VNDA** | **Vanda** | **43.65** | **182** | P | **P** | **14 32 21.4** | **+1.2** |
| | 2.4nm,1.2s,baz=194,slow=9.3,SNR=2.0 | | | | | | |
| **LVC** | **Limon Verde** | **47.61** | **301** | LR | LR | 14 51 46.0 | |
| | comp=Z,42nm,21.5s,baz=196,slow=34 | | | | | | |
| **PTGA** | **Pitinga** | **64.08** | **321** | LR | LR | 15 01 52.3 | |
| | comp=Z,22nm,22.0s,baz=106,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.22** | **27** | P | **P** | **14 35 60.0** | **+1.4** |
| | 3.3nm,0.6s,baz=201,slow=6.5,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **95.88** | **161** | P | **P** | **14 37 40.5** | **-2.1** |
| | 0.6nm,0.6s,baz=183,slow=4.3,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **126.57** | **28** | PKP | **PKPdf** | **14 43 17.6** | **+0.1** |
| | 1.7nm,0.9s,baz=184,slow=2.2,SNR=5.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.35** | **22** | PKP | **PKiKP** | **14 43 31.7** | **+0.3** |
| | 2.1nm,0.9s,baz=197,slow=2.8,SNR=1.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **136.89** | **73** | PKP | **PKPdf** | **14 43 35.9** | **-1.6** |
| | 0.3nm,0.7s,baz=215,slow=2.1,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LSZ** | **Lusaka** | **13.35 181** | Pn | **Pn** | **14 30 36.7** | **-2.8** |
| | 0.4nm,0.3s,baz=4.0,slow=11,SNR=1.4 | | | | | |
| LSZ | | | Sn | Sn | 14 32 57.5 | -11 |
| | 0.5nm,0.3s,baz=112,slow=6.8,SNR=2.6 | | | | | |
| LSZ | | | Lg | Lg | 14 34 29.8 | |
| | 0.8nm,0.3s,baz=89,slow=16,SNR=3.2 | | | | | |
| LSZ | | | LR | LR | 14 35 31.4 | |
| | comp=Z,75nm,21.7s,baz=352,slow=37 | | | | | |
| **TSUM** | **Tsumeb** | **20.25 211** | P | **P** | **14 32 04.0** | **-1.5** |
| | 1.1nm,0.4s,baz=192,slow=8.9,SNR=1.4 | | | | | |
| TSUM | | | S | **S** | **14 35 48.0** | **-5.0** |
| | 2.2nm,0.6s,baz=290,slow=21,SNR=2.0 | | | | | |
| TSUM | | | Lg | Lg | 14 38 05.3 | |
| | 5.7nm,0.7s,baz=168,slow=6.8,SNR=1.8 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.41 300** | P | **P** | **14 33 42.1** | **-0.3** |
| | 4.4nm,0.8s,baz=106,slow=7.8,SNR=17 | | | | | |
| **SUR** | **Sutherland** | **31.21 192** | LR | LR | 14 47 14.9 | |
| | comp=Z,68nm,19.9s,baz=184,slow=38 | | | | | |
| **EIL** | **Elat** | **31.95 11** | LR | LR | 14 46 07.6 | |
| | comp=Z,31nm,20.9s,baz=293,slow=35 | | | | | |
| **KIC** | **Kosan Boka** | **34.09 284** | *e*P | **P** | **14 34 15.3** | **+0.5** |
| | 5.3nm,0.4s | | | | | |
| **DBIC** | **Dimbokro** | **34.27 285** | P | **P** | **14 34 16.2** | **-0.2** |
| | 2.9nm,0.5s,baz=85,slow=6.7,SNR=5.7 | | | | | |
| **LIC** | **Lamto** | **34.34 284** | *e*P | **P** | **14 34 17.4** | **+0.5** |
| | 51nm,1.6s | | | | | |
| **TIC** | **Toumodi** | **34.42 284** | *e*P | **P** | **14 34 16.4** | **-1.3** |
| **MMAI** | **Mount Meron Ar** | **35.29 10** | LR | LR | 14 48 41.1 | |
| | comp=Z,29nm,18.8s,baz=42,slow=36 | | | | | |
| **KOWA** | **Kowa** | **35.99 298** | P | **P** | **14 34 31.8** | **+0.6** |
| | 1.4nm,0.5s,baz=95,slow=8.1,SNR=5.9 | | | | | |
| **ESDC** | **Sonseca Array** | **50.86 328** | LR | LR | 15 01 43.7 | |
| | comp=Z,76nm,18.2s,baz=318,slow=40 | | | | | |
| **AKASG** | **Malin Array Be** | **52.34 1** | P | **P** | **14 36 42.0** | **+0.4** |
| | 0.3nm,0.5s,baz=187,slow=7.4,SNR=2.6 | | | | | |
| **FINES** | **FINESS Array B** | **63.14 359** | P | **P** | **14 37 58.9** | **+1.6** |
| | 4.3nm,1.0s,baz=190,slow=32,SNR=2.6 | | | | | |
| **NOA** | **NORSAR Array B** | **64.10 351** | P | **P** | **14 38 05.0** | **+1.2** |
| | 1.1nm,0.8s,baz=162,slow=5.9,SNR=2.7 | | | | | |
| **MKAR** | **Makanchi Array** | **67.56 37** | P | **P** | **14 38 27.2** | **+0.8** |
| | 0.6nm,0.7s,baz=240,slow=4.7,SNR=9.6 | | | | | |
| **ARCES** | **ARCESS Array B** | **71.26 359** | P | **P** | **14 38 51.1** | **+2.3** |
| | 2.0nm,0.6s,baz=166,slow=4.6,SNR=16 | | | | | |

*PRU* ***04*** *15:06:36.3±0.0,50.21N×18.92E, h0km*
*IPEC* ***04*** *15:06:36.1±0.2,50.23N×18.97E, h1km, ML2.3/3, Error ellipse: s-maj=2.4km s-min=1.1km az=167.0*
*IDC* ***04*** *15:06:40.1±4.7,50.29N×19.54E, h0km, mb1 3.4/3, mb1mx3.1/33, mbtmp3.3/3, ML2.8/2, Error ellipse: s-maj=89.6km s-min=13.8km az=139.0*

**ISC 04 15:06:35.6±0.7, 50.24N±0.03×18.93E±0.02, h0km, n36, σ1§34/56, 7C-4D, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OJC** | **Ojcow** | **0.56** | **92** | *e*Pg | **Pg** | **15 06 46.4** | **+0.1** |
| OJC | | | | *e*Sg | **Sg** | **15 06 53.8** | **+0.4** |
| **OKC** | **Ostrava-Krasne** | **0.65** | **232** | *e*PG | **Pg** | **15 06 48.0** | **0.0** |
| OKC | | | | *e*SG | **Sg** | **15 06 56.4** | **0.0** |
| | comp=Z,34nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.01** | **243** | ⇑P | **Pb** | **15 06 56.2** | **+0.2** |
| MORC | | | | ⇓S | **Sb** | **15 07 09.7** | **-0.2** |
| **MORC** | **Moravsky Berou** | **1.01** | **243** | *e*Pg | **Pb** | **15 06 56.0** | **0.0** |
| | baz=63 | | | | | | |
| MORC | | | | *e*Sg | **Sg** | **15 07 08.0** | **-0.1** |
| | 45nm,0.2s,baz=63 | | | | | | |
| **LANS** | **Liptovska Anna** | **1.15** | **162** | *e*PG | **Pg** | **15 06 58.1** | **+0.5** |
| LANS | | | | *e*SG | **Sg** | **15 07 13.0** | **+0.6** |
| LANS | | | | eLG | Lg | 15 07 17.0 | |
| **NIE** | **Niedzica** | **1.21** | **133** | *e*Pg | **Pn** | **15 07 00.1** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **15 07 16.8** | **-0.1** |
| **KRLC** | **Kraliky** | **1.39** | **264** | *e*PG | **Pg** | **15 07 01.9** | **-0.4** |
| KRLC | | | | *e*SG | **Sb** | **15 07 20.7** | **-0.2** |
| | comp=Z,48nm,0.3s | | | | | | |
| **JAVC** | **Velka Javorina** | **1.61** | **211** | *e*Pn | **Pn** | **15 07 05.6** | **+0.3** |
| | baz=31 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.68** | **275** | *e*PG | **Pn** | **15 07 06.6** | **+0.3** |
| DPC | | | | *e*SG | **Sg** | **15 07 29.9** | **+0.4** |
| | comp=Z,51nm,0.7s | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.71** | **118** | *e*SN | **Sn** | **15 07 29.3** | **+0.1** |
| **VYHS** | **Vyhne** | **1.75** | **182** | *e*PN | **Pn** | **15 07 07.4** | **+0.2** |
| VYHS | | | | *e*SN | **Sn** | **15 07 28.9** | **-1.3** |
| VYHS | | | | eLG | Lg | 15 07 33.1 | |
| **OSTC** | **Ostas** | **1.77** | **281** | *e*PG | **Pb** | **15 07 08.3** | **-0.6** |
| OSTC | | | | *e*SG | **Sg** | **15 07 33.0** | **+0.7** |
| | comp=Z,16nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **1.78** | **239** | ⇑P | **Pn** | **15 07 08.4** | **+0.7** |
| VRAC | | | | ⇑S | **Sb** | **15 07 31.8** | **-0.3** |
| **VRAC** | **Vranov** | **1.78** | **239** | *e*Pn | **Pn** | **15 07 08.2** | **+0.6** |
| | baz=58 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **15 07 32.1** | **+0.1** |
| | 20nm,0.2s,baz=58 | | | | | | |
| **KSP** | **Ksiaz** | **1.79** | **291** | *e*Pg | **Pg** | **15 07 10.7** | **+0.8** |
| KSP | | | | *e*Sg | **Sg** | **15 07 35.2** | **+2.2** |
| **CHVC** | **Chvalec** | **1.87** | **282** | *e*PG | **Pn** | **15 07 09.1** | **+0.2** |
| CHVC | | | | *e*SG | **Sb** | **15 07 34.9** | **+0.2** |
| | comp=Z,14nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.89** | **279** | *e*PG | **Pn** | **15 07 09.8** | **+0.7** |
| UPC | | | | *e*SG | **Sg** | **15 07 36.2** | **0.0** |
| | comp=Z,21nm,0.6s | | | | | | |
| **KRUC** | **Moravsky** | **2.03** | **235** | *e*Pn | **Pn** | **15 07 11.2** | **+0.2** |
| | baz=54 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **15 07 39.9** | **+0.8** |
| | 21nm,0.4s,baz=54 | | | | | | |
| **KECS** | **Kecovo** | **2.03** | **149** | *e*SN | **Sn** | **15 07 35.3** | **-1.8** |
| **CRVS** | **Cervenica-Dubn** | **2.12** | **128** | *e*PN | **Pb** | **15 07 15.7** | **+0.8** |
| **MODS** | **Modra-Piesok** | **2.16** | **211** | *e* | **Pg** | **15 07 20.9** | **+3.9** |
| **PSZ** | **Piszkesteto** | **2.41** | **164** | ⇓P | **Pb** | **15 07 18.4** | **-1.5** |
| PSZ | | | | ⇑S | **Sb** | **15 07 51.1** | **+1.0** |
| **PRU** | **Pruhonice** | **2.84** | **267** | *e*PG | **Pb** | **15 07 27.0** | **-0.1** |
| PRU | | | | *e*SG | **Sg** | **15 08 05.0** | **-1.7** |
| | comp=Z,25nm,0.9s | | | | | | |
| **TRPA** | **Tarpa** | **3.17** | **130** | ⇑P | **Pn** | **15 07 28.2** | **+1.5** |
| **BRG** | **Berggiesshubel** | **3.25** | **283** | Sg | **Sg** | **15 08 18.0** | **-1.8** |
| BRG | | | | Amp | | 15 08 23.5 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.33** | **246** | *e*SG | **Sg** | **15 08 20.8** | **-1.8** |
| **KHC** | **Kasperske Hora** | **3.65** | **254** | *e*PN | **Pn** | **15 07 34.4** | **+1.0** |
| KHC | | | | *e*SG | **Sg** | **15 08 31.1** | **-1.7** |
| | comp=Z,7.5nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **3.68** | **250** | Pn | **Pb** | **15 07 43.0** | **+1.4** |
| | baz=66,slow=14,SNR=1.8 | | | | | | |
| GERES | | | | Sn | **Sg** | **15 08 31.2** | **-2.7** |
| | comp=Z,2.8nm,0.3s,baz=64,slow=20,SNR=16 | | | | | | |
| **CLL** | **Collm** | **3.91** | **288** | *e*Pg | **Pg** | **15 07 55.0** | **+4.5** |
| CLL | | | | *e*Sg | **Sg** | **15 08 42.0** | **+0.8** |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **DRGR** | | **4.27** | **143** | ⇓P | **Pn** | **15 07 43.9** | **+2.0** |
| **BURAR** | **Bucovina Array** | **4.91** | **120** | ⇑P | **Pn** | **15 07 51.4** | **+0.8** |
| **BZS** | **Buzias** | **4.97** | **158** | ⇑P | **Pn** | **15 07 52.2** | **+0.8** |
| **GZR** | **Gura Zlata** | **5.50** | **150** | ⇓P | **Pn** | **15 08 00.2** | **+1.5** |
| **AKASG** | **Malin Array Be** | **6.59** | **82** | Lg | Lg | 15 09 58.8 | |
| | comp=Z,0.6nm,0.3s,baz=232,slow=12,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **11.91** | **17** | Pn | **Pn** | **15 09 23.7** | **-2.8** |
| | comp=Z,0.1nm,0.3s,baz=197,slow=12,SNR=5.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.61** | **7** | Pn | **P** | **15 11 04.7** | **-0.4** |
| | baz=187,slow=12,SNR=0.9 | | | | | | |

**IDC 04 15:08:55.4±3.9, 23.49S×113.50W, h0km, mb3.7/3, mb1 4.1/3, mb1mx3.7/29, mbtmp3.7/3, MS3.6/3, Ms1 3.6/3, ms1mx3.0/54, Error ellipse: s-maj=275.9km s-min=53.5km az=108.0, Easter Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H03N2** | **Juan Fernandez** | **31.84** | **116** | T | T | 15 50 20.6 | |
| | baz=283,slow=75,SNR=7.9 | | | | | | |
| **H03N3** | **Juan Fernandez** | **31.85** | **116** | T | T | 15 50 21.6 | |
| | baz=283,slow=75,SNR=13 | | | | | | |
| **H03N1** | **Juan Fernandez** | **31.86** | **116** | T | T | 15 50 22.3 | |
| | baz=283,slow=75,SNR=12 | | | | | | |
| **NNA** | **Nana** | **36.63** | **78** | LR | LR | 15 26 58.4 | |
| | comp=Z,89nm,21.3s,baz=219,slow=30 | | | | | | |
| **RAR** | **Rarotonga** | **42.72** | **264** | LR | LR | 15 29 27.4 | |
| | comp=Z,68nm,19.2s,baz=125,slow=29 | | | | | | |
| **AFI** | **Afiamalu** | **55.71** | **269** | LR | LR | 15 36 53.8 | |
| | comp=Z,69nm,21.9s,baz=102,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.75** | **356** | P | P | 15 19 16.2 | +0.3 |
| | 0.7nm,0.7s,baz=176,slow=7.7,SNR=4.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **66.02** | **3** | P | P | 15 19 43.9 | -0.1 |
| | 0.5nm,0.8s,baz=188,slow=6.5,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.69** | **359** | P | P | 15 21 35.2 | -0.4 |
| | 0.6nm,0.9s,baz=177,slow=4.7,SNR=5.7 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H11S2** | **WAKE ISLAND Hy** | **88.31** | **291** | T | T | 16 58 01.0 | |
| | baz=116,slow=75,SNR=6.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **88.33** | **291** | T | T | 16 58 01.0 | |
| | baz=116,slow=75,SNR=3.7 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **88.33** | **291** | T | T | 16 58 02.8 | |
| | baz=116,slow=75,SNR=4.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **88.66** | **292** | T | T | 16 58 26.1 | |
| | baz=118 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **88.68** | **292** | T | T | 16 58 31.4 | |
| | baz=118 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **88.68** | **292** | T | T | 16 58 33.0 | |
| | baz=118,SNR=8.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.34** | **267** | PKPbc | PKPbc | 15 28 46.5 | -0.6 |
| | 0.3nm,0.5s,baz=99,slow=1.2,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **153.50** | **335** | PKP | PKPdf | 15 28 48.0 | -0.2 |
| | 0.2nm,0.8s,baz=51,slow=2.6,SNR=1.5 | | | | | | |
| MKAR | | | | PKPbc | PKPbc | 15 28 55.9 | 0.0 |
| | 0.2nm,0.4s,baz=62,slow=1.7,SNR=3.4 | | | | | | |

**NOU 04 15:15:00.2, 16.06S×167.40E, h0km, mb3.9/7, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **0.64** | **343** | P | Pg | 15 15 12.5 | +0.1 |
| **DVP** | **Devils Point** | **1.82** | **156** | P | Pn | 15 15 32.8 | 0.0 |
| **LIFNC** | **LIFOU** | **4.69** | **182** | P | Pn | 15 16 11.0 | -1.3 |
| **DZM** | **Mont Dzumac** | **6.05** | **188** | P | Pn | 15 16 31.7 | +0.7 |
| **ONTNC** | **Ouen Toro** | **6.28** | **188** | P | Pn | 15 16 33.0 | -1.1 |
| **OUENC** | **Ouen Island, N** | **6.35** | **185** | P | Pn | 15 16 36.1 | +1.0 |

*BJI* ***04*** *15:30:45.9±0.0,14.02N×93.14E, h10km, mb4.7/64, mB4.8/39, Ms4.1/36, Ms7 3.8/34*
*NDI* ***04*** *15:30:46.4±3.5,13.96N×93.12E, h10km, ML4.6, mb5.1(NEIC)*
*NEIC* ***04*** *15:30:49.9±2.1,14.29N±0.06×93.20E±0.07, h10km±1km, mb5.1/142, Error ellipse: s-maj=12.1km s-min=9.8km az=107.0*
*MOS* ***04*** *15:30:50.2±0.9,14.24N×93.22E, h29km, mb5.1/47, Error ellipse: s-maj=7.1km s-min=3.9km az=111.6*
*IDC* ***04*** *15:30:52.6±0.5,14.20N×93.16E, h32km±3km, mb4.5/27, mb1 4.6/30, mb1mx4.5/43, mbtmp4.7/30, ML4.5/3, MS3.7/36, Ms1 3.7/36, ms1mx3.5/91, Error ellipse: s-maj=12.8km s-min=11.0km az=43.0*
*DJA* ***04*** *15:30:52.1±0.8,14°N±2°×9°3E±°, h35km±8km, M4.8/26, mB5.3/11, mb4.9/26, MLv4.8/5, Mw(mB)4.7/11*
*BGR* ***04*** *15:31:03.1±0.0,15.16N×91.63E, h38km±2km, mb4.8*

**ISC 04 15:30:51.5±0.3, 14.27N±0.04×93.15E±0.04, h24km±2km, h24km:pP-P, n582, σ1§43/610, mb5.0/170, MS3.8/46, 24C-29D, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBA** | **Port Blair** | **2.63** | **189** | | **Pn** | **15 31 33.5** | **+1.0** |
| **CM31** | **Chiang Mai Arr** | **6.94** | **52** | | **Pn** | **15 32 31.1** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **6.94** | **52** | Pn | **Pn** | **15 32 32.3** | **+0.6** |
| | 2.6nm,0.3s,baz=241,slow=14,SNR=55 | | | | | | |
| CMAR | | | | Sn | **Sn** | **15 33 49.1** | **-0.9** |
| | 4.7nm,0.3s,baz=244,slow=25,SNR=2.6 | | | | | | |
| CMAR | | | | LR | LR | 15 36 01.6 | |
| | comp=Z,390nm,18.3s,baz=235,slow=44 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **6.94** | **52** | Pn | **Pn** | **15 32 30.3** | **-1.4** |
| **CHTO** | **Chiang Mai** | **7.16** | **50** | P | **Pn** | **15 32 33.6** | **-1.1** |
| **CHTO** | **Chiang Mai** | **7.16** | **50** | Pn | **Pn** | **15 32 33.6** | **-1.1** |
| **SRIT** | **Nakonsritamara** | **8.47** | **131** | | **Pn** | **15 32 54.8** | **+2.0** |
| **BELO** | **BELONIA** | **9.07** | **350** | *e*S | **Sn** | **15 34 38.0** | **-4.4** |
| **CHLP** | **Challavanipeta** | **9.69** | **297** | *e*P | **Pn** | **15 33 08.3** | **-1.1** |
| **AGT** | **Agartala** | **9.73** | **350** | *e*S | **Sn** | **15 34 53.4** | **-5.1** |
| AGT | | | | IAML | | 15 34 57.1 | |
| | comp=E,200nm,0.6s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.73** | **157** | | Pn | 15 33 02.9 | -7.1 |
| **IMP** | **Imphal** | **10.53** | **4** | *e*P | **Pn** | **15 33 21.1** | **+0.1** |
| IMP | | | | *e*S | **Sn** | **15 35 16.9** | **-1.4** |
| **SHL** | **Shillong** | **11.30** | **354** | P | **Pn** | **15 33 29.6** | **-2.0** |
| **SHL** | **Shillong** | **11.30** | **354** | Pn | **Pn** | **15 33 29.6** | **-2.0** |
| **KOHI** | **KOHIMA** | **11.43** | **4** | *e*P | **Pn** | **15 33 32.1** | **-1.2** |
| KOHI | | | | *e*S | **Sn** | **15 35 34.0** | **-6.3** |
| KOHI | | | | IAML | | 15 35 40.6 | |
| | comp=E,135nm,0.4s | | | | | | |
| KOHI | | | | IAML | | 15 35 40.7 | |
| | comp=N,97nm,0.4s | | | | | | |
| **PVM** | **Polavaram** | **11.48** | **286** | *e*P | **Pn** | **15 33 34.8** | **+0.8** |
| **KULM** | **Kulim** | **11.58** | **140** | Pn | **Pn** | **15 33 33.7** | **-1.7** |
| **KCSI** | **Kotacane, Aceh** | **11.61** | **156** | P | **Pn** | **15 33 38.5** | **+2.7** |
| | comp=N,19nm,0.9s | | | | | | |
| **GUWA** | **GUWAHATI** | **11.94** | **354** | *e*S | **Sn** | **15 35 45.6** | **-7.1** |
| **UBPT** | **Khong Chiam** | **11.96** | **84** | Pn | **Pn** | **15 33 38.7** | **-1.8** |
| **TSI** | **Tuntungan** | **11.96** | **153** | P | Pn | 15 33 47.3 | +6.7 |
| **MOKO** | **MOKOCHONG** | **12.06** | **6** | *e*P | **Pn** | **15 33 40.4** | **-1.6** |
| MOKO | | | | *e*S | **Sn** | **15 35 51.1** | **-4.7** |
| MOKO | | | | IAML | | 15 35 54.5 | |
| | comp=N,80nm,0.6s | | | | | | |
| MOKO | | | | IAML | | 15 35 57.4 | |
| | comp=E,63nm,0.8s | | | | | | |
| **MYLAV** | **Mylavaram** | **12.31** | **283** | *e*P | **Pn** | **15 33 44.7** | **-0.7** |
| **IPM** | **Ipoh** | **12.45** | **141** | Pn | **Pn** | **15 33 45.2** | **-2.0** |
| **PSI** | **Prapat** | **12.74** | **153** | Pn | **Pn** | **15 33 53.9** | **+2.5** |
| | comp=E,1.7nm,0.3s,baz=333,slow=12,SNR=36 | | | | | | |
| **ITAN** | **ITANAGAR** | **12.82** | **2** | *e*P | **Pn** | **15 33 53.4** | **+1.2** |
| ITAN | | | | *e*S | **Sn** | **15 36 06.8** | **-7.5** |
| ITAN | | | | IAML | | 15 36 12.2 | |
| | comp=N,127nm,0.6s | | | | | | |
| ITAN | | | | IAML | | 15 36 14.3 | |
| | comp=E,134nm,0.6s | | | | | | |
| **ADKI** | **Addanki** | **12.83** | **279** | *e*P | **Pn** | **15 33 51.7** | **-0.7** |
| **RPSI** | **Rantau Prapat** | **12.84** | **153** | | **Pn** | **15 33 53.9** | **+1.3** |
| **SKHT** | **Srikalahasti** | **13.06** | **269** | *e*P | **Pn** | **15 33 54.7** | **-0.8** |
| **LKP** | **Lekhapani** | **13.24** | **11** | *e*P | **Pn** | **15 33 56.6** | **-1.3** |
| **NJS** | **Nagarjunasagar** | **13.54** | **281** | *e*P | **Pn** | **15 34 01.8** | **-0.4** |
| **GSI** | **Gunungsitoli** | **13.61** | **161** | P | **Pn** | **15 34 05.6** | **+2.5** |
| | comp=E,11nm,0.8s | | | | | | |
| **GSI** | **Gunungsitoli** | **13.61** | **161** | Pn | Pn | 15 33 55.2 | -7.9 |
| **ODAN** | **Odare** | **13.63** | **338** | *e*P | **Pn** | **15 34 03.7** | **+0.1** |
| **GTK** | **Tadong** | **13.66** | **343** | *e*P | **Pn** | **15 34 04.9** | **+1.1** |
| GTK | | | | IAML | | 15 36 32.8 | |
| | comp=E,69nm,0.3s | | | | | | |
| **RCLA** | **Racherla** | **13.78** | **277** | *e*P | **Pn** | **15 34 03.9** | **-1.5** |
| **SRLM** | **Srisailam** | **13.88** | **279** | *e*P | **Pn** | **15 34 05.5** | **-1.4** |
| **TAPN** | **Taplejung** | **13.97** | **340** | *e*P | **Pn** | **15 34 08.6** | **+0.4** |
| **RAMN** | **Ramite** | **14.02** | **335** | *e*P | **Pn** | **15 34 09.0** | **+0.1** |
| | comp=E,15nm,0.3s | | | | | | |
| **CUPL** | **Choutuppal** | **14.02** | **284** | *e*P | **Pn** | **15 34 09.3** | **+0.6** |
| **RPR** | **Rampur** | **14.04** | **291** | *e*P | **Pn** | **15 34 08.9** | **-0.1** |
| **KMI** | **Kunming** | **14.06** | **38** | ⇑P | **P** | **15 34 13.6** | **-3.5** |
| KMI | | | | pP | Pn | 15 34 15.8 | +6.3 |
| KMI | | | | sP | | 15 34 17.8 | |
| KMI | | | | S | **Sn** | **15 36 48.8** | **+3.8** |
| KMI | | | | pmax | pmax | | |
| | comp=E,7.0nm,0.9s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=E,150nm,4.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,350nm,15.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,340nm,14.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,410nm,16.7s | | | | | | |
| **PALK** | **Pallekele** | **14.06** | **242** | Pn | **Pn** | **15 34 07.5** | **-1.9** |
| | comp=E,2.0nm,0.3s,baz=45,slow=10,SNR=3.7 | | | | | | |
| PALK | | | | Sn | Sn | 15 36 32.2 | -13 |
| | comp=E,4.9nm,0.3s,baz=88,slow=18,SNR=9.2 | | | | | | |
| PALK | | | | LR | LR | 15 39 21.4 | |
| | comp=E,219nm,19.1s,baz=164,slow=36 | | | | | | |
| **PALK** | **Pallekele** | **14.06** | **242** | Pn | **Pn** | **15 34 06.0** | **-3.4** |
| **HYBB** | **Hyderabad (bro** | **14.39** | **284** | *e*P | **Pn** | **15 34 13.7** | **-0.2** |
| **PZH** | **PanZhiHua** | **14.58** | **32** | ⇓P | **P** | **15 34 24.7** | **+2.0** |
| PZH | | | | S | **S** | **15 37 17.6** | **+1.2** |
| **PZH** | **PanZhiHua** | **14.58** | **32** | ScS | ScS | 15 46 37.8 | -2.3 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,80nm,4.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=N,690nm,18.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,530nm,18.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,810nm,20.6s | | | | | | |
| **JIRN** | **Jiri** | **14.82** | **335** | *e*P | **Pn** | **15 34 19.4** | **-0.5** |
| | comp=Z,13nm,0.4s | | | | | | |
| **MNSI** | **Mandailing Nat** | **14.82** | **154** | P | **Pn** | **15 34 22.4** | **+2.7** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SRSP** | **Sriramsagar** | **14.93** | **290** | *e*P | **Pn** | **15 34 20.7** | **-0.3** |
| **PKI** | **Pulchoki** | **15.07** | **333** | *e*P | **Pn** | **15 34 22.3** | **-0.9** |
| | comp=Z,14nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **15.08** | **333** | *e*P | **Pn** | **15 34 22.9** | **-0.4** |
| | comp=Z,23nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **15.16** | **335** | *e*P | **Pn** | **15 34 24.5** | **0.0** |
| **DMN** | **Daman** | **15.24** | **332** | *e*P | **Pn** | **15 34 24.9** | **-0.5** |
| | comp=Z,4.3nm,0.2s | | | | | | |
| **JBP** | **Jabalpur** | **15.28** | **307** | *e*P | **Pn** | **15 34 24.7** | **-1.0** |
| JBP | | | | *e*S | Sn | 15 37 03.1 | -11 |
| **KKN** | **Kakani** | **15.32** | **333** | *e*P | **Pn** | **15 34 25.6** | **-0.8** |
| **URV** | **Uravakonda** | **15.40** | **274** | *e*P | **Pn** | **15 34 26.1** | **-1.2** |
| **GKN** | **Gorkha** | **15.79** | **331** | *e*P | **Pn** | **15 34 32.3** | **-0.2** |
| | comp=Z,17nm,0.3s | | | | | | |
| **BKNI** | **Bangkinang** | **15.90** | **150** | P | **P** | **15 34 36.3** | **-1.0** |
| | comp=Z,2μmcomp=Z,109nm,0.8s | | | | | | |
| **BKNI** | **Bangkinang** | **15.90** | **150** | Pn | **Pn** | **15 34 31.0** | **-2.8** |
| BKNI | | | | IAmb | IAmb | 15 34 38.6 | |
| | comp=Z,82nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **16.11** | **328** | *e*P | **Pn** | **15 34 36.7** | **+0.1** |
| | comp=Z,79nm,0.6s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **16.30** | **139** | P | **P** | **15 34 42.0** | **+0.4** |
| **PPI** | **Padang Panjang** | **16.30** | **153** | P | **Pn** | **15 34 39.2** | **+0.3** |
| **KLRI** | **Killari** | **16.34** | **286** | *e*P | **Pn** | **15 34 40.0** | **+0.5** |
| **DANN** | **Dangsing** | **16.50** | **330** | *e*P | **Pn** | **15 34 41.3** | **-0.4** |
| | comp=Z,70nm,0.5s | | | | | | |
| **SISI** | **Saibi** | **16.58** | **159** | P | **P** | **15 34 44.8** | **0.0** |
| | comp=Z,15nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **16.68** | **71** | P | **Pn** | **15 34 42.0** | **-1.7** |
| QIZ | | | | S | **Sn** | **15 37 52.0** | **+3.7** |
| QIZ | | | | LR | LR | | |
| | comp=Z,380nm,16.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,380nm,24.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,340nm,16.2s | | | | | | |
| **PYUN** | **Piuthan** | **16.69** | **327** | *e*P | **Pn** | **15 34 44.5** | **+0.5** |
| | comp=Z,48nm,0.7s | | | | | | |
| **GYA** | **Guiyang** | **17.52** | **44** | ⇑P | **P** | **15 34 55.2** | **-0.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **KRJI** | **Kerinci** | **18.23** | **152** | P | **P** | **15 35 04.2** | **+1.1** |
| | comp=Z,4μmcomp=Z,152nm,0.6s | | | | | | |
| **DSRI** | **Dabo** | **18.51** | **141** | P | **Pn** | **15 35 08.1** | **+1.6** |
| | comp=Z,746nmcomp=Z,26nm,0.8s | | | | | | |
| **JMBI** | **JAMBI** | **18.91** | **146** | P | **Pn** | **15 35 12.6** | **+1.3** |
| | comp=Z,94nm,0.4s | | | | | | |
| **POO** | **Poona** | **18.99** | **285** | *e*P | **P** | **15 35 10.0** | **-1.5** |
| POO | | | | *e*S | Sn | 15 38 32.0 | -12 |
| **CD2** | **Chengdu** | **19.22** | **29** | P | **P** | **15 35 14.3** | **+0.4** |
| CD2 | | | | pP | pP | 15 35 17.7 | -2.5 |
| CD2 | | | | sP | sP | 15 35 19.2 | -4.2 |
| CD2 | | | | S | **S** | **15 38 52.1** | **+1.9** |
| CD2 | | | | sS | sS | 15 38 59.3 | -1.8 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,80nm,5.2s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,20nm,16.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,190nm,11.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,260nm,13.9s | | | | | | |
| **MASI** | **Maura Aman, Be** | **19.51** | **152** | P | **P** | **15 35 17.7** | **+0.6** |
| | comp=Z,2μmcomp=Z,172nm,1.0s | | | | | | |
| **LHSI** | **Lahat** | **20.72** | **149** | P | Pn | 15 35 42.0 | +9.3 |
| **PPBI** | **Pangkal Pinang** | **20.79** | **141** | P | **P** | **15 35 32.2** | **+1.1** |
| | comp=Z,4μmcomp=Z,22nm,0.7s | | | | | | |
| **MNAI** | **Manna** | **20.91** | **152** | P | **P** | **15 35 29.4** | **-3.0** |
| **KSM** | **Kuching** | **21.20** | **125** | P | **P** | **15 35 34.2** | **-1.2** |
| **MDSI** | **Maura Dua** | **21.61** | **149** | P | **P** | **15 35 42.3** | **+2.4** |
| **GOMU** | **GeErMu** | **21.89** | **4** | P | **P** | **15 35 43.3** | **+0.2** |
| GOMU | | | | pP | pP | 15 35 46.4 | -3.1 |
| GOMU | | | | PcP | **PcP** | **15 39 44.4** | **+2.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **ENH** | **Enshi** | **21.91** | **41** | P | **P** | **15 35 42.3** | **-0.8** |
| **KLSI** | | **22.06** | **148** | P | **P** | **15 35 46.8** | **+2.0** |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **LZH** | **Lanzhou** | **23.75** | **22** | ⇓P | **P** | **15 36 03.2** | **+1.1** |
| LZH | | | | pP | pP | 15 36 07.4 | -1.6 |
| LZH | | | | sP | sP | 15 36 09.6 | -2.4 |
| LZH | | | | PP | **PnPn** | **15 36 36.5** | **+6.4** |
| LZH | | | | S | **S** | **15 40 19.5** | **+3.3** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,62nm,0.9s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,190nm

**H08S2 Diego Garcia H 29.91 225** T T 16 08 08.3
baz=42,slow=76,SNR=4.8
**H08S1 Diego Garcia H 29.92 225** T T 16 08 07.3
baz=42,slow=76,SNR=3.7
**HNS HongShan 29.97 36** ⇑P **P** **15 36 59.1 +1.1**
HNS pmax pmax
comp=Z,10.0nm,1.0s
**TARG Taragay, Kyrgy 30.43 337** P **P** **15 37 03.6 +1.1**
TARG IAmb IAmb 15 37 05.4
comp=Z,17nm,1.1s
**TIA Tai'an 30.62 40** ⇑P **P** **15 37 04.6 +0.8**
TIA pmax pmax
comp=Z,13nm,0.8s
**JAGI Jajag, Banyuwa 30.73 136** P **P** **15 37 06.2 +1.2**
JAGI IAmb IAmb 15 37 15.7
comp=Z,40nm,1.3s
**PRZ Przheval'sk 30.86 338** P **P** **15 37 08.3 +2.2**
PRZ pmax pmax
comp=Z,19nm,0.9s
**PRZ Przheval'sk 30.86 338** P **P** **15 37 08.3 +2.2**
PRZ IAmb IAmb 15 37 09.7
comp=Z,19nm,0.9s
**HHC Hu-ho-hao-te 30.97 28** *eP* **P** **15 37 08.8 +1.9**
HHC pmax pmax
comp=Z,17nm,0.9s
HHC pmax pmax
comp=Z,100nm,5.2s
**KDJ Kajisay 31.01 337** P **P** **15 37 07.8 +0.5**
KDJ pmax pmax
comp=Z,12nm,1.0s
**KDJ Kajisay 31.01 337** P **P** **15 37 07.8 +0.5**
**PDGK Podgornoye 31.24 341** P **P** **15 37 10.2 +0.9**
**SATY Saty 31.37 339** *eP* **P** **15 37 10.9 +0.5**
**SATY Saty 31.37 339** *eP* **P** **15 37 11.0 +0.5**
baz=339
**ZHN Zhinishke 31.45 339** *eP* **P** **15 37 11.6 +0.4**
**ZHN Zhinishke 31.45 339** *eP* **P** **15 37 11.7 +0.5**
baz=339
**KPKS Kokpek 31.63 340** *eP* **P** **15 37 13.1 +0.4**
KPKS pmax pmax
comp=Z,7.0nm,0.8s
**KPKS Kokpek 31.63 340** *eP* **P** **15 37 13.2 +0.4**
comp=Z,7.5nm,0.8s,baz=340
**GAR Garm 31.81 325** P **P** **15 37 14.3 -0.1**
GAR IAmb IAmb 15 37 16.4
comp=Z,27nm,1.0s
**MDOK Medeo 31.95 337** *eP* **P** **15 37 15.8 +0.3**
**MDOK Medeo 31.95 337** *eP* **P** **15 37 15.9 +0.3**
baz=337
**UCH Uchtor 32.18 334** P **P** **15 37 19.5 +1.5**
SNR=11
**CHGR Chuyangaron 32.23 323** P **P** **15 37 18.3 +0.3**
**BTK Batken 32.29 327** P **P** **15 37 20.5 +2.0**
BTK pmax pmax
comp=Z,30nm,1.0s
**BTK Batken 32.29 327** P **P** **15 37 20.5 +2.0**
BTK IAmb IAmb 15 37 22.4
comp=Z,30nm,0.9s
**TKM2 Tokmak 2 32.30 336** P **P** **15 37 20.0 +1.3**
SNR=8.1
**TKM2 Tokmak 2 32.30 336** P **P** **15 37 20.0 +1.3**
**KBK Karagaybulak 32.35 344** P **P** **15 37 20.7 +1.6**
SNR=5.8
**AML Almayashu 32.46 333** P **P** **15 37 22.1 +1.8**
SNR=22
**AAK Ala-Archa 32.52 334** LR LR 15 52 05.5
comp=Z,265nm,21.6s,baz=136,slow=39
**AAK Ala-Archa 32.52 334** P **P** **15 37 22.7 +2.1**
SNR=9.3
**AAK Ala-Archa 32.52 334***ce*P **P** **15 37 22.8 +2.1**
AAK pmax pmax
comp=Z,11nm,1.0s
**AAK Ala-Archa 32.52 334** P **P** **15 37 21.6 +1.0**
**FRU1 Bishkek 32.61 334** P **P** **15 37 22.7 +1.4**
FRU1 pmax pmax
comp=Z,9.0nm,0.8s
**FRU1 Bishkek 32.61 334** P **P** **15 37 22.7 +1.4**
**KAPI Kappang 32.61 124** LR LR 15 52 41.3
comp=Z,107nm,18.4s,baz=317,slow=40
**BJT Baijiatuau 32.63 34** P **P** **15 37 21.5 +0.1**
BJT pmax pmax
comp=Z,10.0nm,0.7s
**BJT Baijiatuau 32.63 34** P **P** **15 37 21.5 +0.1**
BJT IAmb IAmb 15 37 23.7
comp=Z,10nm,0.7s
**BJI Beijing 32.65 34** P **P** **15 37 22.4 +0.9**
BJI pmax pmax
comp=Z,14nm,0.7s
**CHMS Chumysh 32.71 335** P **P** **15 37 23.5 +1.4**
SNR=6.9
**KUU Kurty 32.84 337** *eP* **P** **15 37 23.2 +0.1**
**KUU Kurty 32.84 337** *eP* **P** **15 37 23.3 +0.1**
baz=337
**EKS2 Erkin-Say 32.85 333** P **P** **15 37 25.5 +2.0**
SNR=15
**USP Ospenovka 33.04 335** P **P** **15 37 26.5 +1.5**
SNR=19
**TDK Taldyqorghan 33.09 341** *eP* **P** **15 37 25.7 +0.3**
TDK pmax pmax
comp=Z,9.0nm,0.6s
**TDK Taldyqorghan 33.09 341** *eP* **P** **15 37 25.7 +0.3**
comp=Z,8.5nm,0.6s,baz=341
**SGDS Sogindy 33.14 335** *eP* **P** **15 37 26.1 +0.2**
baz=335
**MK31 Makanchi Array 33.67 346** *i* P **P** **15 37 31.3 +0.8**
**MK31 Makanchi Array 33.67 346** P **P** **15 37 31.0 +0.6**
MK31 IAmb IAmb 15 37 32.5
comp=Z,13nm,0.8s
**MKAR Makanchi Array 33.67 346** P **P** **15 37 31.5 +1.0**
comp=Z,16nm,0.7s,baz=159,slow=8.9,SNR=162
MKAR PcP **PcP** **15 40 09.8 -0.3**
comp=Z,1.5nm,0.7s,baz=163,slow=1.3,SNR=4.0
MKAR LR LR 15 54 58.2
comp=Z,169nm,19.3s,baz=173,slow=43
**MKAR Makanchi Array 33.67 346** P **P** **15 37 30.9 +0.4**
**MAKZ Makanchi 33.76 346** P **P** **15 37 31.8 +0.6**
MAKZ pmax pmax
comp=Z,12nm,0.8s
**MAKZ Makanchi 33.76 346** P **P** **15 37 31.8 +0.6**
MAKZ IAmb IAmb 15 37 33.1
comp=Z,12nm,0.8s
**ZSN Zaisan 33.79 350** *eP* **P** **15 37 32.0 +0.6**
**ZSN Zaisan 33.79 350** *eP* **P** **15 37 32.1 +0.6**
baz=350
**WSAR Wadi Sarin 33.81 290** LR LR 15 52 01.7
comp=Z,77nm,19.6s,baz=118,slow=38
**TAS Tashkent 34.01 327** P **P** **15 37 34.9 +1.5**
TAS pmax pmax
comp=Z,50nm,0.8s
**TAS Tashkent 34.01 327** P **P** **15 37 34.9 +1.5**
**IUG Iuzhnay 34.22 329** *eP* **P** **15 37 35.7 +0.3**
**IUG Iuzhnay 34.22 329** *eP* **P** **15 37 35.7 +0.3**
baz=329
**HRA Herat 34.34 311** P **P** **15 37 36.3 -0.4**
**BTLS Baital 34.69 336** *eP* **P** **15 37 39.5 +0.3**
BTLS pmax pmax
comp=Z,6.0nm,0.5s
**BTLS Baital 34.69 336** *eP* **P** **15 37 39.5 +0.3**
comp=Z,6.4nm,0.5s,baz=336
**KKAR Karatay Array 34.70 330** P **P** **15 37 39.3 -0.1**
**KKAR Karatay Array 34.70 330** P **P** **15 37 39.3 -0.1**
**BRLS Boroldaу 34.97 330** *eP* **P** **15 37 41.0 -0.7**
**BRLS Boroldaу 34.97 330** *eP* **P** **15 37 41.1 -0.7**
baz=329
**JOW Kunigami 35.06 64** LR LR 15 53 34.4
comp=Z,136nm,20.0s,baz=92,slow=39
**JOW Kunigami 35.06 64** P **P** **15 37 42.7 0.0**
**SONM Songino Array 35.23 16** P **P** **15 37 45.6 +1.5**
comp=Z,9.7nm,0.8s,baz=201,slow=6.2,SNR=50
SONM PcP **PcP** **15 40 15.7 +1.0**
comp=Z,2.6nm,0.6s,baz=204,slow=3.2,SNR=8.1
SONM LR LR 15 54 29.3
comp=Z,89nm,20.1s,baz=158,slow=40
**SONM Songino Array 35.23 16** P **P** **15 37 45.0 +1.0**
**ULN Ulaanbaatar 35.43 16***ce*P **P** **15 37 46.9 +1.1**
ULN pmax pmax
comp=Z,15nm,1.3s
**ULN Ulaanbaatar 35.43 16** P **P** **15 37 45.5 -0.3**
ULN IAmb IAmb 15 37 47.8
comp=Z,25nm,1.5s
**XLT XiLinHaoTe 35.44 29**⇓*i*P **P** **15 37 46.9 +1.1**
XLT pP pP 15 37 51.3 -1.6
XLT sP sP 15 37 54.5 -1.3
XLT PcP **PcP** **15 40 16.4 +1.1**
XLT S **S** **15 43 21.5 +2.0**
XLT pmax pmax
comp=Z,8.0nm,1.4s
XLT pmax pmax
comp=Z,190nm,4.4s
XLT LR LR
comp=Z,250nm,20.6s
XLT LR LR
comp=Z,210nm,20.6s
**DGZ Jazzator, Alta 35.64 354***i* P **P** **15 37 48.9 +1.3**
DGZ pmax pmax
comp=Z,12nm,1.6s
**UOSS Minazif 36.28 293** P **P** **15 37 54.0 +0.8**
UOSS IAmb IAmb 15 38 24.9
comp=Z,27nm,1.2s
**KNGR Kungurtug, Tuv 36.41 5***i* P **P** **15 37 56.0 +1.9**
**MMRI Maumere 36.75 127** P **P** **15 37 54.9 -2.4**
MMRI IAmb IAmb 15 38 05.0
comp=Z,22nm,0.8s
**ZAK Zakamensk 36.95 11***eP* **P** **15 37 59.4 +0.7**
ZAK pmax pmax
comp=Z,5.0nm,1.1s
**SEM Semipalatinsk 37.54 346***eP* **P** **15 38 03.7 -0.1**
**SEM Semipalatinsk 37.54 346***eP* **P** **15 38 03.8 -0.1**
baz=346
**TJN Taejon 37.66 48** P **P** **15 38 05.1 +0.3**
TJN pmax pmax
comp=Z,72nm,0.7s
**TJN Taejon 37.66 48** P **P** **15 38 05.0 +0.3**
**MOY Mondy 37.83 8***eP* **P** **15 38 07.4 +1.2**
**KURBB Kurchatov Arra 38.15 345** LR LR 15 57 29.8
comp=Z,152nm,18.2s,baz=159,slow=42
**KURBB Kurchatov Arra 38.15 345** P **P** **15 38 08.2 -0.5**
**SOCY Socotra 38.15 272** P **P** **15 38 10.1 +0.8**
SOCY IAmb IAmb 15 38 21.7
comp=Z,63nm,1.4s
**KURK Kurchatov 38.21 345***ce*P **P** **15 38 10.2 +1.0**
KURK pmax pmax
comp=Z,43nm,1.7s
**KURK Kurchatov 38.21 345** P **P** **15 38 09.9 +0.7**
KURK IAmb IAmb 15 38 11.1
comp=Z,25nm,1.1s
**KSAR Wonju Array Be 38.51 47** P **P** **15 38 07.3 -4.7**
**KSAR Wonju Array Be 38.51 47** P **P** **15 38 07.3 -4.7**
**KS19 Wonju Array Si 38.53 47** P **P** **15 38 07.8 -4.3**
KS19 IAmb IAmb 15 38 09.1
comp=Z,54nm,1.8s
**KSRS Korea Array 38.54 47** P **P** **15 38 12.1 -0.1**
comp=Z,2.8nm,0.7s,baz=240,slow=9.2,SNR=6.3
KSRS LR LR 15 56 32.0
comp=Z,112nm,19.6s,baz=240,slow=40
**GEYT Alibeck 38.95 314** P **P** **15 38 17.1 +1.4**
comp=Z,9.7nm,0.7s,baz=106,slow=14,SNR=11
GEYT LR LR 15 56 19.4
comp=Z,148nm,18.2s,baz=150,slow=39
**GEYT Alibeck 38.95 314** P **P** **15 38 15.5 -0.2**
**GYA0B ALIBECK ARRAY 38.95 314** P **P** **15 38 15.4 -0.2**
**SOEI Soe 39.02 126** P **P** **15 38 17.9 +1.3**
comp=Z,26nm,1.0s
**SOEI Soe 39.02 126** P **P** **15 38 15.9 -0.7**
SOEI IAmb IAmb 15 39 00.1
comp=Z,21nm,0.9s
**JNU Nakatsue 39.04 55** P **P** **15 38 16.5 0.0**
**BRZS Berezniki 39.34 339***eP* **P** **15 38 19.1 +0.4**
**BRZS Berezniki 39.34 339***eP* **P** **15 38 19.1 +0.4**
baz=339
**ZAA0 Zalesovo Array 40.12 352** P **P** **15 38 25.0 -0.2**
**ZALV Zalesovo Beam 40.12 352** P **P** **15 38 25.7 +0.5**
comp=Z,11nm,0.6s,baz=177,slow=8.5,SNR=57
ZALV LR LR 15 57 30.5
comp=Z,89nm,19.4s,baz=173,slow=40
**ZALV Zalesovo Beam 40.12 352** P **P** **15 38 25.1 0.0**
**CN2 Changchun 40.33 37***eP* **P** **15 38 26.5 -0.5**
CN2 S **S** **15 44 28.2 -5.2**
CN2 pmax pmax
comp=Z,10.0nm,0.9s
CN2 LR LR
comp=Z,200nm,15.0s
CN2 LR LR
comp=Z,120nm,15.0s
CN2 LR LR
comp=Z,80nm,15.0s
**JHS Saijyo 41.42 53** P **P** **15 38 35.8 -0.4**
**GIRL Giralia 42.10 150** P **P** **15 38 41.8 0.0**
**FAKI Fak Fak 42.35 111** P **P** **15 38 43.6 -0.5**
**BNX BinXian 42.60 36** ⇑P **P** **15 38 45.8 +0.2**
BNX pmax pmax
comp=Z,30nm,0.8s
BNX pmax pmax
comp=Z,300nm,4.5s
**BRVK Borovoye 42.73 340** P **P** **15 38 47.1 +0.5**
BRVK pmax pmax
comp=Z,7.0nm,0.8s
**BRVK Borovoye 42.73 340** P **P** **15 38 47.1 +0.5**
**MBWA Marble Bar 43.83 143** P **P** **15 38 54.4 -1.4**
**SAUI Saumlaki 43.83 118** P **P** **15 38 54.2 -1.8**
**PSA00 Pilbara Seismi 44.22 143** P **P** **15 38 57.3 -1.6**
**PSA00 Pilbara Seismi 44.22 143** P **P** **15 38 57.0 -2.0**
PSA00 IAmb IAmb 15 40 20.8
comp=Z,23nm,2.0s
**AB31 Akbulak array 44.23 329** P **P** **15 38 58.8 +0.1**
**ABKAR Akbulak array 44.23 329** P **P** **15 38 59.7 +1.0**
**ABKAR Akbulak array 44.23 329** P **P** **15 38 59.8 +1.0**
ABKAR IAmb IAmb 15 39 00.9
comp=Z,30nm,0.8s
**USRK Ussuriysk Ar. 44.49 40** P **P** **15 39 01.1 +0.2**
comp=Z,3.1nm,0.7s,baz=249,slow=7.7,SNR=5.3
**USRK Ussuriysk Ar. 44.49 40** P **P** **15 39 01.5 +0.6**
**USRK Ussuriysk Ar. 44.49 40** P **P** **15 39 01.4 +0.6**
**INU Inuyama 44.56 54** P **P** **15 39 02.1 +0.5**
**JGF Kuroka 44.90 54** P **P** **15 39 04.3 -0.1**
JGF IAmb IAmb 15 39 08.1
comp=Z,35nm,1.5s
**FITZ Fitzroy Crossi 45.40 134** LR LR 15 59 32.0
comp=Z,114nm,20.5s,baz=304,slow=38
**MAJO Matsushiro 45.83 53** P **P** **15 39 10.2 -1.5**
MAJO pmax pmax
comp=Z,34nm,1.5s
**MAJO Matsushiro 45.83 53** P **P** **15 39 10.2 -1.5**
MAJO IAmb IAmb 15 39 16.2
comp=Z,34nm,1.4s
**MAT Matsushiro 45.83 53** P **P** **15 39 12.0 +0.3**
**MJAR Matsushiro Arr 45.83 53** P **P** **15 39 12.8 +1.0**
comp=Z,4.8nm,0.8s,baz=266,slow=9.8,SNR=9.7
MJAR PcP **PcP** **15 40 49.2 +0.3**
comp=Z,2.9nm,0.6s,baz=243,slow=3.0,SNR=6.0
MJAR LR LR 16 01 27.4
comp=Z,63nm,20.2s,baz=217,slow=40
**RAYN Ar Rayn 45.83 289** P **P** **15 39 12.0 0.0**
RAYN pmax pmax
comp=Z,6.0nm,1.1s
**RAYN Ar Rayn 45.83 289** P **P** **15 39 12.0 0.0**
**AKTO Aktyubinsk 45.94 329** LR LR 16 02 57.6
comp=Z,56nm,18.8s,baz=144,slow=42
**KNRA Kununurra 46.09 129** P **P** **15 39 12.4 -1.6**
**JHJ Hachijo jima 2 46.22 58** LR LR 16 00 02.9
comp=Z,37nm,18.6s,baz=238,slow=38
**BOD Bodaibo 46.23 15***eP* **P** **15 39 15.3 +0.9**
BOD pmax pmax
comp=Z,17nm,1.1s
**JHJ2 Mitsune 46.24 58** P **P** **15 39 13.5 -1.4**
**MTN Manton Dam 46.27 124** P **P** **15 39 13.8 -1.6**
**KLR Kul'dur 47.02 34** LR LR 16 02 15.4
comp=Z,107nm,19.3s,baz=220,slow=40
**KLR Kul'dur 47.02 34***ce*P **P** **15 39 20.0 -0.8**
KLR pmax pmax
comp=Z,3.0nm,1.1s
**ZEA Zeya 47.62 27***eP* **P** **15 39 26.0 +0.6**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**JMM Marumori 48.18 52** P **P** **15 39 30.7 +0.7**
**MORW Morawa 48.43 153** P **P** **15 39 31.1 -0.9**
MORW IAmb IAmb 15 40 29.2
comp=Z,20nm,1.4s
**ATD Arta Tunnel 49.04 273** LR LR 15 58 55.8
comp=Z,24nm,18.1s,baz=88,slow=34
**ATD Arta Tunnel 49.04 273** P **P** **15 39 36.1 -0.9**
ATD IAmb IAmb 15 40 45.7
comp=Z,19nm,1.1s
**SVE Sverdlovsk 49.15 337***c i*P **P** **15 39 38.2 +1.1**
SVE pmax pmax
comp=Z,61nm,0.9s
**JTM Tenmabayashi 49.25 48** P **P** **15 39 34.9 -3.3**
**GNI Garni 49.41 311** LR LR 16 03 53.3
comp=Z,69nm,18.4s,baz=98,slow=40
**GNI Garni 49.41 311** P **P** **15 39 41.4 +1.8**
GNI pmax pmax
comp=Z,59nm,1.3s
**GNI Garni 49.41 311** P **P** **15 39 41.4 +1.8**
**GROC Groznyy 49.66 315***eP* **P** **15 39 42.4 +1.2**
GROC *e* 15 40 59.9
GROC pmax pmax
comp=Z,24nm,0.5s
**ARU Arti 49.68 336** LR LR 16 02 50.8
comp=Z,123nm,20.3s,baz=124,slow=39
**ARU Arti 49.68 336***d i*P **P** **15 39 41.6 +0.4**
ARU 15 41 31.9
ARU PPP PPP 15 42 30.3
ARU S **S** **15 46 53.3 +4.9**
ARU SS **SS** **15 50 20.2 -0.5**
ARU pmax pmax
comp=Z,22nm,0.8s
**ARU Arti 49.68 336** P **P** **15 39 41.4 +0.3**
ARU IAmb IAmb 15 39 42.6
comp=Z,20nm,0.7s
**GEVA Gevas 50.17 308** P **P** **15 39 45.7 +0.3**
**JEW Eniwo 50.18 46** P **P** **15 39 44.7 -0.6**
**GRNR Gornyy 50.39 34**⇓*i*P **P** **15 39 47.1 +0.4**
GRNR pmax pmax
comp=Z,6.0nm,0.9s
GRNR MLR MLR
comp=E,70nm,15.0s
GRNR MLR MLR
comp=N,40nm,16.0s
GRNR MLR MLR
comp=Z,120nm,16.0s
**SIRT Sirnak 50.45 307** P **P** **15 39 46.7 -0.8**
**AKH Akhalkalaki 50.69 312** ⇑P **P** **15 39 51.5 +2.2**
**KARS Kars 50.76 311** P **P** **15 39 51.0 +1.1**
KARS pmax pmax
comp=Z,66nm,0.9s
**KARS Kars 50.76 311** P **P** **15 39 51.0 +1.1**
**ZEI Tsey 50.83 314***eP* **P** **15 39 49.0 -1.4**
ZEI pmax pmax
comp=Z,30nm,0.7s
**GURO Guroymak-BITLI 51.01 308** P **P** **15 39 53.1 +1.3**
**ONI Oni 51.08 314** P **P** **15 39 54.4 +2.3**
**ONI Oni 51.08 314** P **P** **15 39 54.4 +2.3**
**ASAJ Asahikawa 51.39 44** LR LR 16 04 11.5
comp=Z,61nm,18.7s,baz=75,slow=39
**MARD Mardin 51.70 306** P **P** **15 39 57.4 +0.5**
MARD IAmb IAmb 15 39 58.4
comp=Z,18nm,0.6s
**KBZ Khabaz 51.82 315** P **P** **15 39 58.7 +1.2**
comp=Z,6.2nm,0.8s,baz=128,slow=7.5,SNR=18
**SHA1 Shidzhatmaz 51.99 315***d i*P **P** **15 40 00.2 +1.1**
**KIV Kislovodsk 52.04 315** ⇓P **P** **15 40 00.7 +1.4**
**KIV Kislovodsk 52.04 315** P **P** **15 40 01.6 +2.3**
**KIV Kislovodsk 52.04 315** P **P** **15 39 60.0 +0.7**
KIV IAmb IAmb 15 40 01.6
comp=Z,34nm,0.8s
**GOF Gofitskoye 52.16 316**⇑*eP* **P** **15 40 01.1 +1.1**
**NWAO Narrogin (SRO) 52.27 154** P **P** **15 40 00.0 -1.0**
NWAO pmax pmax
comp=Z,22nm,0.9s
**NWAO Narrogin (SRO) 52.27 154** P **P** **15 40 00.0 -1.0**
NWAO IAmb IAmb 15 40 01.5
comp=Z,22nm,0.9s
**YSS Yuzh-Sakhalins 52.49 41***eP* **P** **15 40 03.2 +0.7**
YSS pmax pmax
comp=Z,30nm,0.7s
**YSS Yuzh-Sakhalins 52.49 41** P **P** **15 40 00.9 -1.5**
YSS IAmb IAmb 15 40 04.2
comp=Z,20nm,0.7s
**WRA Warramunga Arr 52.89 129** P **P** **15 40 04.8 -1.0**
comp=Z,2.6nm,0.4s,baz=315,slow=8.7,SNR=81
WRA PcP **PcP** **15 41 14.7 -0.2**
comp=Z,2.1nm,0.4s,baz=324,slow=3.1,SNR=15
WRA pPcP 15 41 23.0
comp=Z,1.8nm,0.6s,baz=315,slow=3.4,SNR=7.1
**WRA Warramunga Arr 52.89 129** P **P** **15 40 04.3 -1.5**
**WRAB Tennant Creek 52.89 129***ce*P **P** **15 40 05.0 -0.8**
WRAB pmax pmax
comp=Z,22nm,2.5s
**WRAB Tennant Creek 52.89 129** P **P** **15 40 04.2 -1.6**
WRAB IAmb IAmb 15 41 24.3
comp=Z,32nm,1.9s
**WB2 Warramunga Arr 52.90 129** P **P** **15 40 04.4 -1.5**
WB2 PcP **PcP** **15 41 14.2 -0.7**
**WR0 Warramunga Arr 53.05 129** P **P** **15 40 04.8 -2.2**
**ASF Jabal al Asfar 54.09 299** P **P** **15 40 15.7 +1.0**
comp=Z,5.0nm,0.8s,baz=82,slow=7.1,SNR=4.7
**YAK Yakutsk 54.31 20** LR LR 16 06 31.1
comp=Z,101nm,18.1s,baz=249,slow=39
**YAK Yakutsk 54.31 20***d i*P **P** **15 40 15.3 -0.3**
YAK *e**PP **sP** **15 40 25.3 -0.5**
YAK *e* 15 41 17.6
YAK *e*S **S** **15 47 51.3 -0.5**
YAK *e*SS **SKiKP** **15 51 28.7 +3.7**
YAK pmax pmax
comp=Z,22nm,0.8s
YAK pmax pmax
comp=N,5.0nm,1.0s
YAK pmax pmax
comp=E,6.0nm,1.0s
YAK pmax pmax
comp=Z,83nm,4.1s
YAK pmax pmax
comp=N,85nm,4.3s
YAK pmax pmax
comp=E,84nm,4.5s
YAK smax smax
comp=N,66nm,4.7s
YAK smax smax
comp=E,24nm,3.7s
**YAK Yakutsk 54.31 20** P **P** **15 40 14.6 -1.0**
YAK PcP **PcP** **15 41 19.1 -0.3**
**GAZ Gaziantep 54.47 306** P **P** **15 40 16.4 -0.9**
GAZ IAmb IAmb 15 40 17.8
comp=Z,23nm,0.8s
**AS31 Alice Springs 54.86 133** P **P** **15 40 18.6 -1.6**
**ASAR Alice Springs 54.86 133** P **P** **15 40 19.2 -1.0**
comp=Z,3.7nm,0.6s,baz=309,slow=7.0,SNR=128
ASAR PcP **PcP** **15 41 22.4 +0.1**
comp=Z,1.2nm,0.5s,baz=317,slow=3.8,SNR=4.4
ASAR ScP **ScP** **15 45 16.8 -2.7**
comp=Z,0.7nm,0.8s,baz=310,slow=4.8,SNR=4.9
**ASAR Alice Springs 54.86 133** P **P** **15 40 19.2 -1.0**
ASAR PcP **PcP** **15 41 21.7 -0.6**
**KIRV Kirov 54.86 334** LR LR 16 06 46.5
comp=Z,83nm,18.3s,baz=134,slow=39
**KIRV Kirov 54.86 334***ce*P **P** **15 40 20.2 +0.6**
**NRIK Noril'sk 55.15 358** P **P** **15 40 22.0 +0.5**
comp=Z,10nm,0.5s,baz=158,slow=5.9,SNR=26
**NRIK Noril'sk 55.15 358** P **P** **15 40 21.7 +0.2**
NRIK 15 41 22.2
NRIK pmax pmax
comp=Z,13nm,0.7s
**NRIK Noril'sk 55.15 358** P **P** **15 40 21.7 +0.2**
NRIK IAmb IAmb 15 40 22.7
comp=Z,13nm,0.7s
NRIK PcP **PcP** **15 41 22.2 -0.3**
**VRH Novokhopyorsk 55.20 323***eP* **P** **15 40 22.2 0.0**
VRH pmax pmax
comp=Z,30nm,0.6s
**MMAI Mount Meron Ar 55.42 300** LR LR 16 06 35.1
comp=Z,74nm,19.6s,baz=248,slow=39
**EIL Elat 55.58 296** P **P** **15 40 25.5 +0.2**
comp=Z,4.0nm,0.7s,baz=97,slow=8.1,SNR=3.3
EIL LR LR 16 06 34.1
comp=Z,43nm,19.5s,baz=128,slow=38
**BNN Bunyan 55.81 307** P **P** **15 40 26.9 -0.1**
**VSR Storozhevoye 56.70 323***eP* **P** **15 40 32.4 -0.6**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**VORR Voronezh 56.84 323***eP* **P** **15 40 33.7 -0.2**
VORR pmax pmax
comp=Z,50nm,0.4s
**LPSR Galich'ya Gora 57.33 324***eP* **P** **15 40 36.9 -0.5**
LPSR pmax pmax
comp=Z,20nm,0.7s
**BR131 Keskin Array S 57.63 308***i* P **P** **15 40 39.6 -0.4**
**BR131 Keskin Array S 57.63 308** P **P** **15 40 39.5 -0.4**
BR131 IAmb IAmb 15 40 40.8
comp=Z,23nm,0.7s
BR131 PcP **PcP** **15 41 31.9 -1.2**
**BRTR Keskin Array B 57.63 308** P **P** **15 40 39.9 -0.1**
comp=Z,15nm,0.8s,baz=125,slow=7.4,SNR=33
BRTR pP **sP** **15 40 50.2 -0.1**
comp=Z,6.9nm,0.7s,baz=123,slow=7.5,SNR=8.1
BRTR LR LR 16 08 38.3

comp=Z,62nm,19.8s,baz=72,slow=39
**BRTR Keskin Array B 57.63 308** P **P** **15 40 40.1 +0.1**
BRTR PcP **PcP** **15 41 32.3 -0.7**
**BZK Bozkurt 57.72 311** ⇓P **P** **15 40 41.3 +0.9**
**LODK Lodwar 57.97 265** P **P** **15 40 44.1 +1.5**
**PRGR Permogore 58.14 335** *e*P **P** **15 40 41.3 -1.6**
PRGR *e* 15 40 53.3
PRGR pmax pmax
comp=Z,40nm,0.6s
**SIM Simferopol' 58.22 314** *e*P **P** **15 40 43.9 +0.1**
SIM pmax pmax
comp=Z,32nm,0.7s
**OBN Obninsk 59.52 326**⇑ *e*P **P** **15 40 52.7 +0.1**
OBN *e* 15 43 08.9
OBN pmax pmax
comp=Z,51nm,2.5s
OBN MLR MLR
comp=Z,98nm,18.0s
**ELL Elmali 60.23 304** P **P** **15 40 58.0 0.0**
ELL pmax pmax
comp=Z,112nm,0.6s
**ELL Elmali 60.23 304** P **P** **15 40 58.0 0.0**
**KLMR Klimovskoe 60.33 333** *e*P **P** **15 40 56.6 -1.5**
KLMR pmax pmax
comp=Z,13nm,0.7s
**KLMR Klimovskoe 60.33 333** *e*P **P** **15 40 56.6 -1.5**
KLMR AMP 15 40 58.5
comp=Z,13nm,0.7s
**TIXI Tiksi 61.20 12***ce*P **P** **15 41 03.7 -0.2**
TIXI pmax pmax
comp=Z,24nm,1.0s
**TIXI Tiksi 61.20 12** P **P** **15 41 03.2 -0.7**
TIXI IAmb IAmb 15 41 04.5
comp=Z,18nm,0.8s
**MA2 Magadan 61.63 29** P **P** **15 41 06.7 -0.3**
MA2 15 41 48.2
MA2 pmax pmax
comp=Z,8.0nm,0.8s
**MA2 Magadan 61.63 29** P **P** **15 41 06.7 -0.3**
MA2 IAmb IAmb 15 41 07.8
comp=Z,8.4nm,0.8s
MA2 PcP **PcP** **15 41 48.2 -0.2**
**TLCR 61.96 314**⇑P **P** **15 41 09.9 +0.5**
**TLCR 61.96 314** P **P** **15 41 10.3 +0.9**
**TIRR Tirgusor 62.14 313** ⇓P **P** **15 41 11.0 +0.4**
**CFR Carcaliu 62.43 314** ⇓P **P** **15 41 13.0 +0.4**
**AKASG Malin Array Be 62.61 320** P **P** **15 41 12.9 -0.8**
comp=Z,3.2nm,0.6s,baz=84,slow=5.6,SNR=25
AKASG pP **sP** **15 41 23.5 -0.6**
comp=Z,4.4nm,0.7s,baz=84,slow=5.8,SNR=8.7
AKASG LR LR 16 11 54.8
comp=Z,91nm,21.0s,baz=355,slow=39
**AKASG Malin Array Be 62.61 320** P **P** **15 41 12.6 -1.1**
**SORM Soroca 62.72 317** ⇓P **P** **15 41 14.1 -0.3**
**PETK Petropavlovsk- 63.47 37** P **P** **15 41 18.6 -0.8**
comp=Z,1.6nm,0.6s,baz=241,slow=4.6,SNR=14
PETK LR LR 16 13 18.7
comp=Z,95nm,19.0s,baz=100,slow=40
**MBAR Mbarara 63.49 262***ce*P **P** **15 41 22.9 +2.5**
MBAR pmax pmax
comp=Z,5.0nm,0.6s
**VRI Vrincioaia 63.50 314** ⇓P **P** **15 41 20.7 +0.9**
**PLOR Plostina 63.55 314** ⇓P **P** **15 41 21.2 +1.0**
**SEY Seymchan 63.59 26** *i*P **P** **15 41 19.8 -0.2**
**TESR Tescani 63.63 315** ⇓P **P** **15 41 21.0 +0.4**
**SANT Santorini 63.79 304**⇑P **P** **15 41 21.0 -0.8**
**MLR Muntele Rosu 64.00 314** ⇓P **P** **15 41 24.1 +0.9**
**MLR Muntele Rosu 64.00 314** LR LR 16 15 52.4
comp=Z,56nm,19.0s,baz=34,slow=42
**MLR Muntele Rosu 64.00 314** P **P** **15 41 23.8 +0.6**
MLR pmax pmax
comp=Z,23nm,0.9s
**MLR Muntele Rosu 64.00 314** P **P** **15 41 23.8 +0.6**
**PET Petropavlovsk 64.02 38** *e*P **P** **15 41 24.1 +1.1**
PET pmax pmax
comp=Z,7.0nm,0.8s
**MNK Minsk 64.18 324** *i*P **P** **15 41 24.2 +0.3**
MNK *i* 15 41 58.9
MNK *i* 15 43 45.3
MNK *i* PPP PPP 15 45 15.7
MNK *i* S **S** **15 50 01.4 +1.7**
MNK *i* 15 51 18.3
MNK *i* SS **SS** **15 54 12.9 +3.9**
MNK pmax pmax
comp=N,22nm,1.1s
MNK pmax pmax
comp=E,3.0nm,0.8s
MNK pmax pmax
comp=Z,38nm,0.8s
MNK MLR MLR
comp=N,246nm,20.0s
MNK MLR MLR
comp=E,51nm,22.0s
MNK MLR MLR
comp=Z,103nm,18.0s
**MNK Minsk 64.18 324** *i*P **P** **15 41 24.3 +0.3**
comp=E,3.0nm,0.8s
MNK *i*P **P** **15 41 24.3 +0.3**
comp=N,22nm,1.1s
MNK *i*P **P** **15 41 24.3 +0.3**
comp=Z,38nm,0.8s,baz=282
MNK *i* PP **PP** **15 43 45.4 +0.2**
MNK *i* PPP PPP 15 45 15.8
MNK *i* S **S** **15 50 01.5 +1.7**
MNK *i* SS **SS** **15 54 12.9 +3.9**
MNK *i* SSS SSS 15 57 13.2
MNK *i* LQ LQ 16 04 07.6
MNK *i* LR LR 16 09 42.4
MNK *i* LRM MLR 16 13 54.1
comp=N,246nm,19.5s
MNK *i* LRM MLR 16 13 54.9
comp=E,51nm,22.1s
MNK *i* LRM MLR 16 14 09.3
comp=Z,103nm,17.8s
**VOIR 64.62 314** ⇓P **P** **15 41 27.0 -0.3**
**BURAR Bucovina Array 64.73 316** ⇓P **P** **15 41 28.4 +0.5**
**BURAR Bucovina Array 64.73 316** P **P** **15 41 29.3 +1.4**
**BURAR Bucovina Array 64.73 316** P **P** **15 41 28.0 0.0**
**BUR08 Bucovina Ar. S 64.75 316** P **P** **15 41 27.9 -0.1**
BUR08 IAmb IAmb 15 41 40.1
comp=Z,8.1nm,0.8s
**NACGM Naroch 64.88 324** *i*P **P** **15 41 28.5 -0.1**
**ARR Arges 64.91 314** ⇓P **P** **15 41 29.3 +0.2**
**IDID Didziasalis 64.99 325** *e*P **P** **15 41 30.1 +0.9**
**LVZ Lovozero 65.26 339** P **P** **15 41 30.5 -0.4**
LVZ pmax pmax
comp=Z,102nm,1.6s
**LVZ Lovozero 65.26 339** P **P** **15 41 30.5 -0.4**
**STKA Stephens Creek 65.27 135** P **P** **15 41 31.0 -0.4**
comp=Z,2.3nm,0.6s,baz=293,slow=7.6,SNR=7.3
**STKA Stephens Creek 65.27 135** P **P** **15 41 31.0 -0.4**
STKA pmax pmax
comp=Z,6.0nm,1.9s
**IIGN Ignalina 65.29 325** *e*P **P** **15 41 32.3 +1.1**
**ISAL Salakas 65.38 325** *e*P **P** **15 41 33.0 +1.2**
**LOT Lotru 65.52 314** ⇓P **P** **15 41 32.7 -0.4**
**VSU Vasula 65.65 328** *e*P **P** **15 41 33.2 -0.3**
**VTS Vitosha 65.73 310** ⇓P **P** **15 41 34.8 +0.2**
**VTS Vitosha 65.73 310** P **P** **15 41 35.3 +0.7**
**VTS Vitosha 65.73 310** P **P** **15 41 34.3 -0.2**
VTS IAmb IAmb 15 41 35.2
comp=Z,8.8nm,0.6s
**GZR Gura Zlata 66.22 314** ⇓P **P** **15 41 37.5 0.0**
**DRGR 66.36 315**⇑P **P** **15 41 39.4 +1.0**
**HERR Herculane 66.44 313** ⇓P **P** **15 41 39.5 +0.6**
**TRPA Tarpa 66.58 316**⇑P **P** **15 41 39.9 +0.3**
**KWP Kalwaria Pacla 66.60 318** P **P** **15 41 39.9 +0.1**
KWP pmax pmax
comp=Z,307nm,0.7s
**KWP Kalwaria Pacla 66.60 318** P **P** **15 41 39.9 +0.1**
**FIA1 FINESS Array S 66.65 331** P **P** **15 41 39.7 -0.2**
**FINES FINESS Array B 66.65 331** P **P** **15 41 39.9 0.0**
comp=Z,15nm,0.5s,baz=97,slow=5.9,SNR=115
FINES pP **sP** **15 41 50.4 +0.1**
comp=Z,12nm,0.7s,baz=101,slow=8.0,SNR=10
FINES LR LR 16 13 22.4
comp=Z,94nm,21.6s,baz=74,slow=38
**UZH Uzhgorod 66.78 317** *e*P **P** **15 41 44.2 +3.2**
**SUW Suwalki 66.81 323** P **P** **15 41 40.0 -1.0**
SUW pmax pmax
comp=Z,38nm,0.8s
**SUW Suwalki 66.81 323** *e*P **P** **15 41 41.4 +0.4**
**SUW Suwalki 66.81 323** P **P** **15 41 40.0 -1.0**
**BOVS Bovan 66.89 312**⇑P **P** **15 41 41.7 -0.1**

**BZS Buzias 67.04 314** ⇓P **P** **15 41 42.7 0.0**
**SIRR Siria 67.05 314** ⇓P **P** **15 41 43.1 +0.4**
**CRVS Cervenica-Dubn 67.35 317** *e*P **P** **15 41 45.7 +1.1**
CRVS pmax pmax
comp=Z,38nm,1.0s
**CRVS Cervenica-Dubn 67.35 317** *e*P **P** **15 41 45.7 +1.1**
**PSZ Piszkesteto 68.34 316**⇑P **P** **15 41 50.7 -0.2**
**PSZ Piszkesteto 68.34 316** P **P** **15 41 51.8 +0.9**
**PSZ Piszkesteto 68.34 316** P **P** **15 41 50.1 -0.8**
PSZ IAmb IAmb 15 41 51.7
comp=Z,11nm,0.8s
**OJC Ojcow 68.52 319** P **P** **15 41 52.1 +0.2**
OJC pmax pmax
comp=Z,14nm,0.9s
**OJC Ojcow 68.52 319** P **P** **15 41 52.1 +0.2**
OJC IAmb IAmb 15 41 53.2
comp=Z,14nm,0.9s
**LANS Liptovska Anna 68.68 317** *e*P **P** **15 41 54.0 +1.0**
LANS pmax pmax
comp=Z,4.0nm,0.9s
**LANS Liptovska Anna 68.68 317** *e*P **P** **15 41 54.0 +1.0**
**ARA0 ARCESS Array S 68.96 340** *e*P **P** **15 41 55.0 +0.7**
**ARCES ARCESS Array B 68.96 340** P **P** **15 41 54.9 +0.5**
comp=Z,13nm,0.7s,baz=101,slow=7.5,SNR=77
ARCES pP **sP** **15 42 05.4 +1.0**
comp=Z,4.9nm,0.8s,baz=124,slow=6.0,SNR=2.8
ARCES LR LR 16 17 00.5
comp=Z,55nm,18.6s,baz=106,slow=40
**ARCES ARCESS Array B 68.96 340** P **P** **15 41 54.8 +0.5**
**VYHS Vyhne 69.07 317** *e*P **P** **15 41 55.8 +0.4**
**VYHS Vyhne 69.07 317** *e*P **P** **15 41 55.8 +0.4**
**MORH Mrgy, Hungar 69.14 314**⇑P **P** **15 41 55.9 +0.1**
**KTK1 Kautokeino 69.61 339** *e*P **P** **15 41 59.0 +0.7**
**JAVC Velka Javorina 69.85 317** *e*P **P** **15 42 01.1 +0.8**
**MORC Moravsky Berou 69.96 318** ⇓P **P** **15 42 01.7 +0.8**
**MORC Moravsky Berou 69.96 318** P **P** **15 42 02.1 +1.2**
**MORC Moravsky Berou 69.96 318** *e*P **P** **15 42 01.2 +0.3**
**MORC Moravsky Berou 69.96 318** P **P** **15 42 00.7 -0.2**
MORC IAmb IAmb 15 42 02.5
comp=Z,15nm,0.9s
**MODS Modra-Piesok 70.10 317** *e*P **P** **15 42 04.0 +2.2**
**MODS Modra-Piesok 70.10 317** *e*P **P** **15 42 04.0 +2.2**
**UPP Uppsala 70.50 329** *e*P **P** **15 42 04.5 +0.6**
**BILL Bilibino 70.56 22***d i*P **P** **15 42 04.1 -0.1**
BILL *eS* **S** **15 51 17.0 +1.0**
BILL pmax pmax
comp=Z,8.0nm,0.8s
BILL MLR MLR
comp=Z,32nm,11.0s
**BILL Bilibino 70.56 22** P **P** **15 42 04.0 -0.1**
BILL IAmb IAmb 15 42 04.8
comp=Z,11nm,0.6s
**VRAC Vranov 70.56 318** LR LR 16 19 30.4
comp=Z,38nm,19.9s,baz=352,slow=41
**LSZ Lusaka 70.62 248** LR LR 16 09 38.6
comp=Z,97nm,19.8s,baz=101,slow=33
**LSZ Lusaka 70.62 248** P **P** **15 42 06.4 +0.8**
LSZ pmax pmax
comp=Z,14nm,0.9s
**LSZ Lusaka 70.62 248** P **P** **15 42 06.3 +0.8**
LSZ IAmb IAmb 15 42 07.8
comp=Z,14nm,0.8s
**KRUC Moravsky 70.69 317** *e*P **P** **15 42 05.6 +0.2**
**JETT Jettan, Norway 70.71 339** *e*P **P** **15 42 06.8 +1.7**
**DPC Dobruska-Polom 70.75 319** *e*P **P** **15 42 05.9 +0.1**
DPC *e* 15 42 16.9
**DPC Dobruska-Polom 70.75 319** *e*P **P** **15 42 05.9 +0.1**
DPC *ex* x 15 42 16.9
**OSTC Ostas 70.83 319** *e*P **P** **15 42 06.7 +0.5**
**CHVC Chvalec 70.93 319** *e*P **P** **15 42 07.6 +0.8**
**UPC Upice 70.95 319** *e*P **P** **15 42 07.7 +0.8**
**UPC Upice 70.95 319** *e*P **P** **15 42 07.7 +0.8**
**TRO Tromso 71.23 339** *e*P **P** **15 42 08.1 -0.1**
**SOKA Soboth 71.63 315** *e*P **P** **15 42 11.9 +0.7**
comp=Z,13nm,1.2s
**PRU Pruhonice 71.90 318** *e*P **P** **15 42 12.8 +0.2**
PRU *e* 15 42 23.4
**PRU Pruhonice 71.90 318** *e*P **P** **15 42 12.8 +0.2**
PRU *ex* x 15 42 23.4
**GBAS Gorenja Brezov 72.06 314** *i*P **P** **15 42 13.9 +0.2**
**CKRC Cesky Krumlov 72.07 317** *e*P **P** **15 42 12.5 -1.2**
**CRNS Crni Vrh 72.19 314** *i*P **P** **15 42 14.8 +0.3**
**FAUS Fauske 72.26 337** *e*P **P** **15 42 14.6 +0.2**
**PBCC Pribram 72.26 318** *e*P **P** **15 42 15.4 +0.6**
PBCC *ex* x 15 42 26.2
**BRG Berggiesshubel 72.27 319** *i*P **P** **15 42 15.4 +0.6**
BRG Amp 15 42 16.4
comp=Z,12nm,0.8s
BRG *i*pP **sP** **15 42 25.5 +0.3**
BRG Amp 15 42 27.0
comp=Z,8.9nm,0.9s
**BRG Berggiesshubel 72.27 319** *i*P **P** **15 42 15.4 +0.6**
BRG *i* 15 42 25.5
BRG pmax pmax
comp=Z,12nm,0.8s
BRG pmax pmax
comp=Z,9.0nm,0.9s
**BRG Berggiesshubel 72.27 319** *e*P **P** **15 42 15.4 +0.6**
comp=Z,8.7nm,0.8s,baz=87,slow=6.0
BRG *ep*P **sP** **15 42 26.2 +0.9**
**STEI Steigen 72.33 337** *e*P **P** **15 42 15.1 +0.3**
**VOJS Vojsko 72.45 314** *e*P **P** **15 42 16.2 +0.1**
**GEC2 GERESS Array S 72.47 317** *e*P **P** **15 42 16.5 +0.3**
comp=Z,11nm,0.8s,baz=87,slow=6.0
GEC2 *ep*P **sP** **15 42 27.2 +0.6**
**GEC2 GERESS Array S 72.47 317** IAmb IAmb 15 42 17.5
comp=Z,15nm,0.9s
**GERES GERESS Array B 72.47 317** P **P** **15 42 16.5 +0.3**
comp=Z,12nm,0.8s,baz=79,slow=6.9,SNR=50
GERES pP **sP** **15 42 27.3 +0.6**
comp=Z,7.6nm,0.7s,baz=87,slow=6.8,SNR=14
**GERES GERESS Array B 72.47 317** P **P** **15 42 16.3 +0.1**
**MOR8 Moi Rana 72.48 335** *e*P **P** **15 42 15.9 +0.1**
**KHC Kasperske Hory 72.54 317** *e*P **P** **15 42 16.8 +0.2**
KHC *e* 15 42 27.6
**KHC Kasperske Hory 72.54 317** *e*P **P** **15 42 16.8 +0.2**
KHC *ex* x 15 42 27.6
**FBE Freiberg 72.64 319** *e*P **P** **15 42 17.4 +0.4**
comp=Z,13nm,0.7s,baz=87,slow=6.0
FBE *ep*P **sP** **15 42 28.4 +0.9**
**NBB17 Glomfjord B¥r 72.73 336** *e*P **P** **15 42 17.0 -0.2**
**CLL Collm 72.85 320** *i*P **P** **15 42 17.9 -0.4**
CLL *i* 15 42 28.8
CLL pmax pmax
comp=Z,16nm,1.2s
**CLL Collm 72.85 320** *i*P **P** **15 42 17.9 -0.4**
comp=Z,16nm,1.2s
CLL *i* x x 15 42 28.8
**CLL Collm 72.85 320** *e*P **P** **15 42 18.4 +0.2**
comp=Z,5.7nm,0.9s,baz=87,slow=6.0
CLL *ep*P **sP** **15 42 29.1 +0.4**
**CLL Collm 72.85 320** P **P** **15 42 17.8 -0.5**
CLL IAmb IAmb 15 42 18.9
comp=Z,42nm,1.8s
**NBB13 Alf Garage 72.96 336** *e*P **P** **15 42 19.0 +0.4**
**LOF Lofoten 72.98 337** *e*P **P** **15 42 18.6 -0.1**
**WET Wettzell 73.00 317** *e*P **P** **15 42 19.7 +0.4**
comp=Z,8.8nm,1.0s,baz=87,slow=6.0
WET *ep*P **sP** **15 42 30.4 +0.7**
**TANN Tannenbergstha 73.22 319** *e*P **P** **15 42 20.9 +0.3**
comp=Z,3.3nm,0.9s,baz=87,slow=6.0
TANN *ep*P **sP** **15 42 31.8 +0.8**
**STAL STALIGIAL 73.25 314** P **P** **15 42 20.7 -0.1**
STAL IAmb IAmb 15 42 21.6
comp=Z,17nm,0.8s
**WERN Wernitzgruen 73.28 319** *e*P **P** **15 42 21.6 +0.7**
comp=Z,3.7nm,0.9s,baz=87,slow=6.0
WERN *ep*P **sP** **15 42 32.2 +0.9**
**GUNZ Gunzen 73.31 319** *e*P **P** **15 42 21.7 +0.7**
comp=Z,15nm,1.2s,baz=87,slow=6.0
**WERD Werda 73.32 319** *e*P **P** **15 42 21.6 +0.4**
comp=Z,8.8nm,0.9s,baz=87,slow=6.0
WERD *ep*P **sP** **15 42 32.5 +0.9**
**ROTZ Rotzenmuhle 73.41 318** *e*P **P** **15 42 21.9 +0.2**
comp=Z,2.6nm,0.9s,baz=87,slow=6.0
ROTZ *ep*P **sP** **15 42 33.3 +1.2**
**NSS Namsos 73.43 334** *e*P **P** **15 42 21.1 -0.4**
**NC303 NORSAR Array S 73.65 330** P **P** **15 42 22.7 -0.1**
**NB2 NORSAR Subarra 73.73 330** P **P** **15 42 22.5 -0.8**
comp=Z,5.1nm,0.6s,baz=88,slow=5.9
**NB2 NORSAR Subarra 73.73 330** P **P** **15 42 22.5 -0.8**
baz=88,slow=5.9
**NOA NORSAR Array B 73.73 330** P **P** **15 42 22.9 -0.5**
comp=Z,6.2nm,0.6s,baz=90,slow=5.8,SNR=28

NOA pP **sP** **15 42 32.8 -0.9**
comp=Z,4.0nm,0.8s,baz=89,slow=5.9,SNR=6.4
**MOX Moxa 73.75 319** *e*P **P** **15 42 24.2 +0.6**
comp=Z,4.8nm,0.8s,baz=87,slow=6.0
MOX *ep*P **sP** **15 42 34.9 +0.8**
**FLTG Flechtingen 73.91 321** *e*P **P** **15 42 24.9 +0.5**
baz=87,slow=6.0
**WTTA Wattenberg 73.93 315** *e*P **P** **15 42 24.6 -0.4**
comp=Z,7.9nm,0.4s
**NC204 NORSAR Array S 73.95 330** *e*P **P** **15 42 24.6 -0.1**
**WATA Walderalm 73.97 316** *e*P **P** **15 42 24.4 -0.7**
comp=Z,5.6nm,0.6s
**CTI Castel Tesino 74.00 314** IAmb IAmb 15 42 25.9
comp=Z,14nm,0.9s
**GRF Grafenberg Arr 74.06 318** *e*P **P** **15 42 26.0 +0.5**
baz=87,slow=6.0
**SQTA Sankt Quirin 74.22 315** *e*P **P** **15 42 26.1 -0.5**
comp=Z,9.5nm,0.4s
**MOTA Moosalm 74.29 316** *e*P **P** **15 42 26.4 -0.7**
comp=Z,19nm,1.3s
**BSEG Bad Segeberg 74.39 322** *e*P **P** **15 42 27.6 +0.4**
comp=Z,20nm,0.9s,baz=87,slow=6.0
BSEG *ep*P **sP** **15 42 39.0 +1.3**
**CLZ Clausthal 74.47 320** *e*P **P** **15 42 28.3 +0.5**
comp=Z,8.3nm,0.7s,baz=87,slow=6.0
CLZ *ep*P **sP** **15 42 39.0 +0.7**
**RETA Reutte 74.51 316** *e*P **P** **15 42 28.0 -0.2**
comp=Z,8.2nm,0.5s
**FETA Feichten 74.56 315** *e*P **P** **15 42 28.5 -0.1**
comp=Z,5.7nm,0.6s
**GTTG Gottingen 74.74 320** *e*P **P** **15 42 30.0 +0.6**
comp=Z,11nm,0.6s,baz=87,slow=6.0
GTTG *ep*P **sP** **15 42 40.3 +0.5**
**SALO Salr 74.82 314** P **P** **15 42 29.7 -0.3**
SALO IAmb IAmb 15 42 31.6
comp=Z,24nm,0.9s
**UBR Ueberruh 74.93 316** *e*P **P** **15 42 30.3 -0.3**
comp=Z,5.4nm,0.8s,baz=87,slow=6.0
**DAVA Damuels 75.12 316** *i*P **P** **15 42 31.9 0.0**
comp=Z,12nm,0.6s,SNR=6.3
**SKAR Skarslia 75.16 330** *e*P **P** **15 42 32.5 +0.8**
**TUE Stuetta 75.56 315** IAmb IAmb 15 42 38.7
comp=Z,8.7nm,0.9s
**TNS Taunus Mts 75.80 319** *e*P **P** **15 42 36.3 +0.7**
comp=Z,6.3nm,0.7s,baz=87,slow=6.0
**BFO Black Forest 76.06 317** *e*P **P** **15 42 37.1 +0.1**
comp=Z,3.7nm,0.9s,baz=87,slow=6.0
**LBTB Lobatse 76.54 240** LR LR 16 13 45.2
comp=Z,92nm,18.3s,baz=139,slow=34
**LBTB Lobatse 76.54 240** P **P** **15 42 40.9 +0.7**
LBTB pmax pmax
comp=Z,11nm,1.0s
**LBTB Lobatse 76.54 240** P **P** **15 42 40.9 +0.7**
LBTB IAmb IAmb 15 42 42.2
comp=Z,11nm,1.0s
**SENIN Lac Senin/Sane 76.98 315** IAmb IAmb 15 42 43.5
comp=Z,26nm,1.6s
**BNI Bardonecchia 77.58 314** IAmb IAmb 15 42 50.3
comp=Z,12nm,0.8s
**BOSA Boshof 78.23 236** P **P** **15 42 50.1 +0.5**
comp=Z,11nm,0.7s,baz=74,slow=3.6,SNR=25
**BOSA Boshof 78.23 236** P **P** **15 42 50.0 +0.3**
BOSA IAmb IAmb 15 42 51.2
comp=Z,13nm,0.8s
**NOR Nord 78.82 352** *i*P **P** **15 42 50.2 -1.7**
NOR IAmb IAmb 15 42 51.6
comp=Z,9.0nm,0.6s
**TNA Tin City 80.78 25** P **P** **15 43 02.7 0.0**
baz=284
**DAG Danmarks Havn 81.06 347** *i*P **P** **15 43 02.4 -1.6**
DAG IAmb IAmb 15 43 07.2
comp=Z,2.2nm,0.6s
**RDOG Red Dog Mine 82.00 22** P **P** **15 43 09.7 +0.6**
baz=288
**ANM Nome 82.09 25** P **P** **15 43 10.5 +0.8**
baz=286
**UNV Unalaska Valle 84.60 36** P **P** **15 43 21.0 -1.8**
baz=287
**EUNU Eureka 85.83 360** P **P** **15 43 29.0 +0.4**
EUNU IAmb IAmb 15 46 06.5
comp=Z,20nm,1.9s
**NEEM North Greenlan 86.16 353** *i*P **P** **15 43 29.3 -1.3**
NEEM IAmb IAmb 15 43 32.9
comp=Z,8.8nm,0.7s
**TOLK Toolik Lake Re 86.26 19** P **P** **15 43 31.7 +0.8**
TOLK IAmb IAmb 15 43 32.8
comp=Z,21nm,1.1s
**TOLK Toolik Lake Re 86.26 19** P **P** **15 43 31.2 +0.3**
baz=300
**ESDC Sonseca Array 86.38 310** P **P** **15 43 32.0 -0.1**
comp=Z,3.4nm,0.8s,baz=54,slow=4.7,SNR=20
ESDC pP **sP** **15 43 42.3 -0.3**
comp=Z,2.3nm,0.8s,baz=53,slow=5.9,SNR=6.4
**TTA Tatalina 86.56 25** P **P** **15 43 32.8 +0.3**
baz=295
**H21K Melozitna Rive 86.61 22** P **P** **15 43 33.4 +0.8**
**H21K Melozitna Rive 86.61 22** P **P** **15 43 34.0 +1.4**
baz=297
**COLD Coldfoot 86.77 20** P **P** **15 43 34.5 +1.1**
baz=300
**J20K Nowinta River 86.77 24** IAmb IAmb 15 43 35.3
comp=Z,5.1nm,0.7s
**J20K Nowinta River 86.77 24** P **P** **15 43 34.3 +0.9**
baz=296
**I21K Tanana 87.13 23** IAmb IAmb 15 43 38.0
comp=Z,15nm,1.0s
**I21K Tanana 87.13 23** P **P** **15 43 36.4 +1.3**
baz=298
**K20K Telida 87.17 25** P **P** **15 43 36.2 +0.8**
**K20K Telida 87.17 25** P **P** **15 43 36.9 +1.5**
baz=296
**L19K White Mountain 87.36 26** P **P** **15 43 37.8 +1.4**
baz=296
**CHUM Lake Minchumin 87.62 24** P **P** **15 43 39.1 +1.5**
baz=298
**L20K Farewell, AK 87.64 25** P **P** **15 43 39.0 +1.3**
baz=297
**MLY Manley 87.67 22** IAmb IAmb 15 43 39.5
comp=Z,9.1nm,0.8s
**MLY Manley 87.67 22** P **P** **15 43 38.6 +0.8**
baz=299
**SUMG Summit 87.73 347** P **P** **15 43 38.0 -0.4**
SUMG pmax pmax
comp=Z,30nm,1.7s
**SUMG Summit 87.73 347** *i*P **P** **15 43 37.3 -1.0**
SUMG IAmb IAmb 15 43 38.6
comp=Z,6.7nm,0.7s
**SUMG Summit 87.73 347** P **P** **15 43 38.0 -0.4**
SUMG IAmb IAmb 15 44 07.0
comp=Z,30nm,1.7s
**CAST Castle Rocks 87.93 24** P **P** **15 43 40.1 +1.0**
baz=298
**I23K Minto, Yukon-K 88.11 22** IAmb IAmb 15 43 42.8
comp=Z,7.0nm,0.7s
**I23K Minto, Yukon-K 88.11 22** P **P** **15 43 40.8 +0.9**
baz=301
**N19K Bonanza Creek 88.13 27** P **P** **15 43 41.4 +1.3**
baz=296
**PPLA Purkeypile 88.14 25** P **P** **15 43 40.9 +0.7**
baz=298
**TORD Torodi Ar. Bea 88.20 283** P **P** **15 43 41.6 +0.3**
comp=Z,11nm,0.8s,baz=79,slow=4.4,SNR=66
TORD pP **sP** **15 43 52.0 +0.3**
comp=Z,6.9nm,1.0s,baz=91,slow=5.2,SNR=12
TORD PP **PP** **15 47 05.8 -2.7**
comp=Z,1.2nm,0.8s,baz=67,slow=7.7,SNR=6.2
**H24K Noodor Dome 88.28 21** IAmb IAmb 15 43 42.5
comp=Z,4.6nm,0.8s
**H24K Noodor Dome 88.28 21** P **P** **15 43 41.6 +0.8**
baz=302
**O19K Port Alsworth 88.47 27** P **P** **15 43 42.1 +0.5**
baz=296
**BMAR Burnt Mountain 88.50 19** P **P** **15 43 42.5 +0.8**
**NEA2 Nenana 88.51 22** IAmb IAmb 15 43 43.2
comp=Z,8.7nm,0.6s
**NEA2 Nenana 88.51 22** P **P** **15 43 41.8 +0.1**
baz=301
**TRF Thorofare Moun 88.62 24** P **P** **15 43 43.6 +1.1**
baz=300
**MDM Murphy Dome 88.62 22** P **P** **15 43 42.8 +0.5**
MDM IAmb IAmb 15 43 43.9
comp=Z,16nm,0.9s
**TULEG Thule 88.73 356** *i*P **P** **15 43 41.2 -1.4**
TULEG IAmb IAmb 15 43 42.4
comp=Z,9.9nm,0.7s
**TULEG Thule 88.73 356** IAmb IAmb 15 43 43.3
comp=Z,12nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **POKR** | **Poker Plat Res** | **88.83** | **22** | P | | **P** | **15 43 44.6** | **+1.3** |
| | baz=302 | | | | | | | |
| **MCK** | **McKinley** | **89.00** | **23** | IAmb | | IAmb | 15 43 45.4 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **IL31** | | **89.21** | **22** | IAmb | | IAmb | 15 43 45.7 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.21** | **22** | P | | **P** | **15 43 44.5** | **-0.5** |
| | comp=Z,4.3nm,0.8s,baz=301,slow=4.8,SNR=45 | | | | | | | |
| ILAR | | | | PP | | **PP** | **15 47 10.5** | **-4.6** |
| | comp=Z,0.5nm,0.9s,baz=308,slow=7.8,SNR=2.9 | | | | | | | |
| **PRP** | **Porcupine Dome** | **89.28** | **21** | P | | **P** | **15 43 46.5** | **+1.0** |
| | baz=304 | | | | | | | |
| **HDA** | **Harding Lake** | **89.38** | **22** | P | | **P** | **15 43 45.1** | **-0.8** |
| | baz=303 | | | | | | | |
| **SUA** | **Susitna One** | **89.42** | **26** | P | | **P** | **15 43 46.8** | **+0.5** |
| **SUA** | **Susitna One** | **89.42** | **26** | P | | **P** | **15 43 45.9** | **-0.3** |
| | baz=299 | | | | | | | |
| **M22K** | **Willow** | **89.54** | **25** | P | | **P** | **15 43 47.0** | **+0.4** |
| | baz=300 | | | | | | | |
| **J25K** | **Salcha River,** | **89.84** | **22** | P | | **P** | **15 43 47.5** | **-0.6** |
| **J25K** | **Salcha River,** | **89.84** | **22** | P | | **P** | **15 43 47.4** | **-0.7** |
| | baz=304 | | | | | | | |
| **PMR** | **Palmer** | **90.03** | **25** | P | | **P** | **15 43 49.7** | **+0.8** |
| | baz=301 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **90.03** | **26** | P | | **P** | **15 43 49.1** | **+0.1** |
| | baz=300 | | | | | | | |
| **A36M** | **Sachs Harbour** | **90.20** | **11** | P | | **P** | **15 43 49.6** | **+0.1** |
| | baz=323 | | | | | | | |
| **SML** | **Sawmill** | **90.24** | **25** | P | | **P** | **15 43 50.7** | **+0.7** |
| | baz=302 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **90.28** | **27** | P | | **P** | **15 43 49.4** | **-0.7** |
| | baz=299 | | | | | | | |
| **KNK** | **Knik Glacier** | **90.40** | **25** | P | | **P** | **15 43 51.3** | **+0.6** |
| | baz=301 | | | | | | | |
| **ICESG** | **Greenland Ices** | **90.45** | **345** | *i* P | | **P** | **15 43 50.3** | **-0.9** |
| ICESG | | | | IAmb | | IAmb | 15 43 52.2 | |
| | comp=Z,7.3nm,0.5s | | | | | | | |
| **J26L** | **Joseph Creek** | **90.54** | **21** | P | | **P** | **15 43 51.9** | **+0.5** |
| J26L | | | | IAmb | | IAmb | 15 43 52.9 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **90.54** | **21** | P | | **P** | **15 43 51.6** | **+0.2** |
| | baz=306 | | | | | | | |
| **SCRK** | **Sand Creek** | **90.70** | **22** | IAmb | | IAmb | 15 43 53.6 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SCRK** | **Sand Creek** | **90.70** | **22** | P | | **P** | **15 43 52.5** | **+0.3** |
| | baz=305 | | | | | | | |
| **PAX** | **Paxson** | **90.73** | **23** | P | | **P** | **15 43 53.1** | **+0.8** |
| | baz=304 | | | | | | | |
| **PWL** | **Port Wells** | **90.74** | **25** | P | | **P** | **15 43 52.5** | **+0.2** |
| | baz=302 | | | | | | | |
| **UPNV** | **Upernavik** | **90.82** | **351** | *i* P | | **P** | **15 43 52.0** | **-0.3** |
| UPNV | | | | IAmb | | IAmb | 15 43 53.0 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **RES** | **Resolute Bay** | **91.09** | **2** | P | | **P** | **15 43 54.0** | **+0.4** |
| | comp=Z,3.3nm,0.8s,baz=338,slow=5.3,SNR=13 | | | | | | | |
| RES | | | | pP | | **sP** | **15 44 05.0** | **+0.9** |
| | comp=Z,1.5nm,0.7s,baz=327,slow=4.6,SNR=3.7 | | | | | | | |
| **RES** | **Resolute Bay** | **91.09** | **2** | P | | **P** | **15 43 54.0** | **+0.4** |
| RES | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **RES** | **Resolute Bay** | **91.09** | **2** | P | | **P** | **15 43 54.0** | **+0.4** |
| RES | | | | IAmb | | IAmb | 15 43 55.8 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **91.14** | **16** | P | | **P** | **15 43 54.1** | **+0.2** |
| | comp=Z,6.2nm,0.8s,baz=307,slow=5.6,SNR=9.9 | | | | | | | |
| **INK** | **Inuvik** | **91.14** | **16** | IAmb | | IAmb | 15 43 55.2 | |
| | comp=Z,8.1nm,0.9s | | | | | | | |
| **INK** | **Inuvik** | **91.14** | **16** | P | | **P** | **15 43 54.2** | **+0.3** |
| | baz=315 | | | | | | | |
| **HARP** | **HAARP** | **91.17** | **23** | P | | **P** | **15 43 55.6** | **+1.4** |
| | baz=304 | | | | | | | |
| **KLU** | **Klutina** | **91.38** | **24** | P | | **P** | **15 43 56.1** | **+0.8** |
| | baz=304 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **91.49** | **22** | P | | **P** | **15 43 57.1** | **+1.4** |
| | baz=306 | | | | | | | |
| **EPYK** | **Eagle Plains** | **91.59** | **18** | P | | **P** | **15 43 56.4** | **+0.3** |
| | baz=312 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **91.77** | **19** | P | | **P** | **15 43 56.5** | **-0.5** |
| | baz=311 | | | | | | | |
| **N25K** | **Chitina, Valde** | **91.84** | **24** | P | | **P** | **15 43 58.7** | **+1.3** |
| | baz=305 | | | | | | | |
| **M26K** | **Nabesna, AK** | **91.99** | **23** | P | | **P** | **15 43 59.7** | **+1.6** |
| | baz=306 | | | | | | | |
| **L27K** | **Beaver Creek,** | **92.02** | **22** | P | | **P** | **15 43 59.7** | **+1.5** |
| | baz=307 | | | | | | | |
| **BMRM** | **Bremner River** | **92.20** | **24** | P | | **P** | **15 44 00.4** | **+1.3** |
| | baz=305 | | | | | | | |
| **DAWY** | **Dawson** | **92.25** | **20** | P | | **P** | **15 43 60.0** | **+0.7** |
| | baz=310 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **92.43** | **22** | P | | **P** | **15 44 01.6** | **+1.3** |
| | baz=307 | | | | | | | |
| **C36M** | **Paulatuk** | **92.57** | **12** | IAmb | | IAmb | 15 44 01.4 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **94.71** | **347** | LR | | LR | 16 35 50.9 | |
| | comp=Z,45nm,19.1s,baz=310,slow=41 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **95.19** | **20** | P | | **P** | **15 44 13.7** | **+0.9** |
| | baz=314 | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **95.20** | **21** | P | | **P** | **15 44 14.2** | **+1.4** |
| | baz=313 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **100.45** | **13** | P | | **Pdif** | **15 44 36.2** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=326,slow=4.0,SNR=9.1 | | | | | | | |
| YKA | | | | PP | | **PP** | **15 48 38.4** | **-3.9** |
| | comp=Z,0.7nm,0.9s,baz=331,slow=8.5,SNR=5.5 | | | | | | | |
| **LAO** | **LASA Array** | **116.87** | **15** | PKPdf | | **PKiKP** | **15 49 34.6** | **+0.3** |
| **PD31** | **Pinedale Array** | **119.53** | **19** | | | **PKPdf** | **15 49 39.4** | **-0.3** |
| **PDAR** | **Pinedale Array** | **119.53** | **19** | PKP | | **PKPdf** | **15 49 39.5** | **-0.2** |
| | comp=Z,1.3nm,0.6s,baz=5.2,slow=2.0,SNR=17 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **119.86** | **28** | PKP | | **PKiKP** | **15 49 41.8** | **+1.2** |
| | comp=Z,2.1nm,0.5s,baz=308,slow=2.5,SNR=23 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **121.59** | **8** | | | **PKiKP** | **15 49 43.6** | **0.0** |
| **CMIG** | **Matias Romero** | **147.84** | **15** | PKPbc | | **PKPbc** | **15 50 35.2** | **-0.1** |
| | comp=Z,7.1nm,0.7s,baz=352,slow=4.5,SNR=7.3 | | | | | | | |
| **BIRV** | **Birongo** | **148.05** | **319** | | | **PKPbc** | **15 50 35.4** | **-0.6** |
| **CPUP** | **Villa Florida** | **149.91** | **242** | PKPbc | | **PKPbc** | **15 50 39.1** | **-1.3** |
| | comp=Z,2.8nm,0.6s,baz=103,slow=3.5,SNR=5.9 | | | | | | | |
| CPUP | | | | PKPab | | **sPKPdf** | **15 50 45.3** | **-0.9** |
| | comp=Z,3.6nm,0.8s,baz=102,slow=5.2,SNR=6.6 | | | | | | | |
| **PLCA** | **Paso Flores** | **150.04** | **205** | PKPbc | | **PKPbc** | **15 50 38.0** | **-2.4** |
| | comp=Z,2.6nm,0.8s,baz=122,slow=1.8,SNR=6.5 | | | | | | | |
| PLCA | | | | PKPab | | **sPKPbc** | **15 50 51.4** | **+0.4** |
| | comp=Z,3.2nm,1.1s,baz=140,slow=4.3,SNR=3.9 | | | | | | | |
| **APG** | **El Apazote** | **150.69** | **7** | PKPbc | | **PKPbc** | **15 50 42.4** | **-0.4** |
| | comp=Z,5.6nm,0.5s,baz=335,slow=3.6,SNR=7.2 | | | | | | | |
| **LPAZ** | **La Paz** | **161.83** | **261** | PKP | | **PKPdf** | **15 50 52.2** | **-0.1** |
| | comp=Z,1.1nm,0.6s,baz=85,slow=9.3,SNR=5.0 | | | | | | | |
| LPAZ | | | | PKPab | | **PKPab** | **15 51 37.1** | **-0.9** |
| | comp=Z,1.2nm,0.7s,baz=76,slow=4.2,SNR=5.4 | | | | | | | |
| **LPAZ** | **La Paz** | **161.83** | **261** | PKPdf | | **PKPdf** | **15 50 51.3** | **-1.0** |

*IDC **04** 15:41:16.0±6.5,36°.31N×70°.91E,h91km±59km,mb3.5/1, mb1 3.5/4,mb1mx3.0/54,mbtmp3.8/4,ML3.6/3,MS3.9/2, Ms1 3.9/2,ms1mx2.7/76,Error ellipse: s-maj=78.4km s-min=21.7km az=152.0*

*NNC **04** 15:41:19.4±8.5,36°.76N×70°.89E,h0km,mb4.3,mpv4.0, Error ellipse: s-maj=68.0km s-min=63.4km az=27.0*

**ISC 04 15:41:15.6**±1.1,**36°.27N**±0°.09×**71°.03E**±0°.08,**h200**km,**n23, σ1s53/24,4C-1D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **6.20** | **19** | P | | | **Pn** | **15 42 46.9** | **+1.1** |
| | SNR=45 | | | | | | | | |
| **UCH** | **Uchtor** | **6.53** | **23** | P | | | **Pn** | **15 42 51.5** | **+1.4** |
| | SNR=7.4 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.72** | **18** | P | | | **Pn** | **15 42 54.3** | **+2.0** |
| | SNR=6.9 | | | | | | | | |
| **KK09** | **Karatay Array** | **6.85** | **357** | ⇑Pn | | | **Pn** | **15 42 55.8** | **+1.9** |
| | 2.9nm,0.4s,baz=176,slow=12 | | | | | | | | |
| KK09 | | | | ⇓Sn | | | **Sn** | **15 44 09.6** | **-2.2** |
| | 5.0nm,0.7s,baz=181,slow=25 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.90** | **22** | P | | | **Pn** | **15 42 56.4** | **+1.8** |
| | 3.8nm,0.3s,baz=186,slow=6.6,SNR=52 | | | | | | | | |
| AAK | | | | S | | | **Sn** | **15 44 11.1** | **-2.0** |
| | baz=170,slow=22,SNR=1.1 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.90** | **22** | P | | | **Pn** | **15 42 56.1** | **+1.5** |
| | SNR=18 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.90** | **22** | ⇑Pn | | | **Pn** | **15 42 56.1** | **+1.5** |
| | 7.7nm,0.5s | | | | | | | | |
| AAK | | | | ⇑Sn | | | **Sn** | **15 44 11.1** | **-2.0** |
| | 2.4nm,0.4s | | | | | | | | |
| **CHMS** | **Chumysh** | **7.30** | **22** | P | | | **Pn** | **15 43 01.6** | **+1.9** |
| | SNR=5.2 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.51** | **27** | P | | | **Pn** | **15 43 04.7** | **+2.0** |
| | SNR=9.9 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.51** | **27** | ⇑Pn | | | **Pn** | **15 43 04.5** | **+1.8** |
| | 5.6nm,0.6s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GEYT** | **Alibeck** | **10.45** | **283** | P | | | **Pn** | **15 43 40.9** | **+0.3** |
| | 1.2nm,0.3s,baz=99,slow=13,SNR=8.7 | | | | | | | | |
| GEYT | | | | S | | | **Sn** | **15 45 36.2** | **-1.0** |
| | 0.6nm,0.3s,baz=56,slow=48,SNR=1.9 | | | | | | | | |
| **PYUN** | **Piuthan** | **12.99** | **125** | *eP* | | | **Pn** | **15 44 12.7** | **-0.6** |
| | 8.7nm,0.3s | | | | | | | | |
| **DANN** | **Dangsing** | **13.35** | **123** | *eP* | | | **Pn** | **15 44 16.2** | **-1.6** |
| | 2.6nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.46** | **35** | P | | | **P** | **15 44 21.9** | **+0.6** |
| | 0.1nm,0.3s,baz=219,slow=14,SNR=3.5 | | | | | | | | |
| **KOLN** | **Koldanda** | **13.62** | **125** | *eP* | | | **Pn** | **15 44 20.0** | **-1.0** |
| | 3.2nm,0.3s | | | | | | | | |
| **GKN** | **Gorkha** | **14.16** | **122** | *eP* | | | **Pn** | **15 44 27.3** | **-0.5** |
| | 3.6nm,0.3s | | | | | | | | |
| **KKN** | **Kakani** | **14.74** | **121** | *eP* | | | **Pn** | **15 44 34.6** | **-0.3** |
| | 3.3nm,0.4s | | | | | | | | |
| **PKIN** | **Phulchoki** | **14.95** | **121** | *eP* | | | **Pn** | **15 44 37.2** | **-0.4** |
| | 4.7nm,0.4s | | | | | | | | |
| **PKI** | **Pulchoki** | **14.97** | **121** | *eP* | | | **Pn** | **15 44 37.3** | **-0.5** |
| | 0.7nm,0.2s | | | | | | | | |
| **JIRN** | **Jiri** | **15.46** | **119** | *eP* | | | **Pn** | **15 44 43.1** | **-0.7** |
| | 7.2nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.11** | **24** | P | | | Pn | 15 45 42.6 | +4.1 |
| | 1.8nm,0.3s,baz=206,slow=10.0,SNR=12 | | | | | | | | |
| **TIXI** | **Tiksi** | **45.97** | **22** | LR | | | LR | 16 08 48.7 | |
| | comp=Z,67nm,18.4s,baz=190,slow=36 | | | | | | | | |
| **INK** | **Inuvik** | **74.12** | **9** | LR | | | LR | 16 30 03.8 | |
| | comp=Z,112nm,18.5s,baz=196,slow=40 | | | | | | | | |

*NSSP **04** 15:51:35.8,38°.48N×45°.10E,h10km,Ms3.4*
*DDA **04** 15:51:36.4±0.0,38°.46N×45°.16E,h9km±1km,ML3.1*
*TEH **04** 15:51:38.4,38°.47N×45°.08E,h6km,ML3.5*
*ISK **04** 15:51:38.4,38°.48N×45°.02E,h5km,ML3.2/12*
*AZER **04** 15:51:38.8±0.3,38°.55N×45°.13E,h10km±2km,Error ellipse: s-maj=3.7km s-min=1.9km az=234.0*

**ISC 04 15:51:38.0**±1.1,**38°.48N**±0°.02×**45°.07E**±0°.02,**h1**km±10km, **n92,σ1s81/146,Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ISHB** | **Shabestar** | **0.47** | **114** | *eP* | g | | **Pg** | **15 51 47.2** | **+0.2** |
| ISHB | | | | *eS* | g | | **Sg** | **15 51 53.7** | **+0.6** |
| **IMRD** | **Marand** | **0.55** | **64** | *eP* | g | | **Pg** | **15 51 49.4** | **+0.9** |
| IMRD | | | | *eS* | g | | **Sg** | **15 51 56.7** | **+1.1** |
| **NAX** | **Nakhchivan** | **0.77** | **25** | *eP* | g | | **Pg** | **15 51 53.3** | **+0.6** |
| **NAX** | **Nakhchivan** | **0.77** | **25** | P | | | **Pg** | **15 51 53.3** | **+0.6** |
| | SNR=357 | | | | | | | | |
| NAX | | | | S | | | **Sb** | **15 52 04.4** | **-0.8** |
| **ORD** | **Ordubad** | **0.85** | **58** | *eP* | g | | **Pg** | **15 51 54.8** | **+0.5** |
| **ORD** | **Ordubad** | **0.85** | **58** | P | | | **Pg** | **15 51 54.8** | **+0.5** |
| | SNR=766 | | | | | | | | |
| ORD | | | | S | | | **Sb** | **15 52 07.1** | **-0.4** |
| **OZAP** | **Van, Ozalp-Mer** | **0.87** | **282** | P | | | **Pg** | **15 51 54.1** | **-0.6** |
| OZAP | | | | S | | | **Sg** | **15 52 06.5** | **+0.6** |
| OZAP | | | | *i* | AML | AML | 15 52 09.0 | | |
| | comp=E,423nm,1.0s | | | | | | | | |
| **MAKU** | **Maku** | **0.93** | **341** | *eP* | g | | **Pg** | **15 51 54.6** | **-1.2** |
| **SBZ** | **Shahbuz** | **0.99** | **22** | *eP* | g | | **Pg** | **15 51 56.9** | **-0.1** |
| **SBZ** | **Shahbuz** | **0.99** | **22** | P | | | **Pg** | **15 51 56.9** | **-0.1** |
| | SNR=87 | | | | | | | | |
| SBZ | | | | S | | | **Sb** | **15 52 11.4** | **-0.2** |
| **IAZR** | **Azarshahr** | **1.07** | **138** | *eP* | g | | **Pg** | **15 51 58.9** | **+0.3** |
| IAZR | | | | *e* | | | | 15 52 04.8 | |
| | comp=Z,38μm,0.2s | | | | | | | | |
| **TAB1** | **Tabriz** | **1.08** | **113** | *eP* | g | | **Pn** | **15 51 59.5** | **-0.9** |
| TAB1 | | | | *e* | | | | 15 52 21.6 | |
| | comp=Z,32μm,0.2s | | | | | | | | |
| **YOVA** | **Hakkari_Yksek** | **1.08** | **215** | *eP* | g | | **Pg** | **15 51 57.8** | **-1.0** |
| **YOVA** | **Hakkari_Yksek** | **1.08** | **215** | P | | | **Pg** | **15 51 57.9** | **-1.0** |
| YOVA | | | | S | | | **Sn** | **15 52 16.2** | **0.0** |
| **TVRZ** | **Varzaqan** | **1.25** | **88** | *eP* | g | | **Pn** | **15 52 02.1** | **-0.7** |
| TVRZ | | | | *e* | | | | 15 52 27.2 | |
| | comp=Z,17μm,0.4s | | | | | | | | |
| **HYR** | **Heyderabad** | **1.25** | **352** | *eP* | g | | **Pn** | **15 52 00.8** | **-1.8** |
| **HYR** | **Heyderabad** | **1.25** | **352** | P | | | **Pn** | **15 52 00.9** | **-1.8** |
| | SNR=66 | | | | | | | | |
| HYR | | | | S | | | **Sn** | **15 52 19.7** | **-0.5** |
| **VANB** | **Van** | **1.33** | **276** | PN | | | **Pg** | **15 52 03.4** | **0.0** |
| VANB | | | | SN | | | **Sg** | **15 52 22.0** | **+1.4** |
| **VANB** | **Van** | **1.33** | **276** | *eP* | g | | **Pn** | **15 52 02.8** | **-1.0** |
| **HAKT** | **HAKKARI** | **1.42** | **230** | *eP* | g | | **Pn** | **15 52 04.0** | **-1.1** |
| **HAKT** | **HAKKARI** | **1.42** | **230** | P | | | **Pn** | **15 52 04.0** | **-1.1** |
| HAKT | | | | S | | | **Sg** | **15 52 25.1** | **+1.5** |
| HAKT | | | | *i* | AML | AML | 15 52 26.0 | | |
| | comp=Z,233nm,0.6s | | | | | | | | |
| HAKT | | | | *i* | AML | AML | 15 52 29.0 | | |
| | comp=Z,264nm,0.5s | | | | | | | | |
| **NRKZ** | **NAREK** | **1.55** | **348** | *i* P | | | **Pb** | **15 52 07.2** | **-0.4** |
| NRKZ | | | | *i* S | | | **Sg** | **15 52 29.5** | **+1.6** |
| **IHRS** | **Heris** | **1.55** | **95** | *e* | | | | 15 52 09.9 | |
| | comp=Z,11μm,0.2s | | | | | | | | |
| IHRS | | | | *e*Pn | | | **Pb** | **15 52 07.0** | **-0.7** |
| **IGDI** | **IGDIR** | **1.59** | **331** | *e*Pn | | | **Pn** | **15 52 07.1** | **-0.2** |
| **IGDI** | **IGDIR** | **1.59** | **331** | P | | | **Pn** | **15 52 07.2** | **-0.2** |
| IGDI | | | | S | | | **Sg** | **15 52 30.5** | **+1.4** |
| **IBST** | **Bostanabad** | **1.63** | **118** | *e* | | | | 15 52 30.9 | |
| | comp=Z,7μm,0.5s | | | | | | | | |
| IBST | | | | *e*Pn | | | **Pn** | **15 52 07.6** | **-0.5** |
| **TASB** | **TASBURUN-IGDIR** | **1.64** | **337** | PN | | | **Pb** | **15 52 09.1** | **+0.1** |
| TASB | | | | SN | | | **Sg** | **15 52 31.4** | **+0.8** |
| **TASB** | **TASBURUN-IGDIR** | **1.64** | **337** | *e*Pn | | | **Pb** | **15 52 08.3** | **-0.7** |
| **AKDM** | **Akdamar-Van** | **1.65** | **265** | PN | | | **Pb** | **15 52 08.6** | **-0.7** |
| AKDM | | | | SN | | | **Sg** | **15 52 31.8** | **+0.7** |
| **AKDM** | **Akdamar-Van** | **1.65** | **265** | *e*Pn | | | **Pb** | **15 52 08.6** | **-0.7** |
| **GNI** | **Garni** | **1.69** | **351** | *i* P | | | **Pn** | **15 52 08.1** | **-0.6** |
| GNI | | | | *i* S | | | **Sb** | **15 52 31.0** | **-0.7** |
| **GNI** | **Garni** | **1.69** | **351** | PN | | | **Pb** | **15 52 09.7** | **-0.3** |
| GNI | | | | SN | | | **Sg** | **15 52 34.2** | **+1.9** |
| **CUKT** | **Cukurca** | **1.69** | **224** | PN | | | **Pb** | **15 52 09.5** | **-0.5** |
| CUKT | | | | SN | | | **Sg** | **15 52 32.9** | **+0.6** |
| **CUKT** | **Cukurca** | **1.69** | **224** | *e*Pn | | | **Pb** | **15 52 09.4** | **-0.5** |
| **CUKT** | **Cukurca** | **1.69** | **224** | P | | | **Pb** | **15 52 09.0** | **-1.0** |
| CUKT | | | | S | | | **Sg** | **15 52 35.8** | **+3.5** |
| CUKT | | | | *i* | AML | AML | 15 52 37.0 | | |
| | comp=Z,257nm,0.6s | | | | | | | | |
| CUKT | | | | *i* | AML | AML | 15 52 49.0 | | |
| | comp=Z,228nm,0.8s | | | | | | | | |
| **MAHB** | **Mahabad** | **1.78** | **163** | *e*Pg | | | **Pb** | **15 52 11.4** | **-0.1** |
| **METS** | **Metsamor** | **1.84** | **336** | *i* P | | | **Pb** | **15 52 12.2** | **-0.3** |
| METS | | | | *i* S | | | **Sg** | **15 52 37.8** | **+0.7** |
| **KAPZ** | **Kaputan** | **1.86** | **351** | *i* P | | | **Pb** | **15 52 12.2** | **-0.7** |
| KAPZ | | | | *i* S | | | **Sg** | **15 52 38.4** | **+0.5** |
| **ADCV** | **BITLIS_Adilcev** | **1.87** | **281** | *e*Pn | | | **Pb** | **15 52 12.2** | **-0.8** |
| **ADCV** | **BITLIS_Adilcev** | **1.87** | **281** | P | | | **Pb** | **15 52 12.2** | **-0.8** |
| ADCV | | | | S | | | **Sb** | **15 52 36.6** | **-0.4** |
| **VNNZ** | **Vanand** | **1.89** | **329** | *i* P | | | **Pg** | **15 52 13.9** | **-0.4** |
| VNNZ | | | | *i* S | | | **Sg** | **15 52 40.9** | **+2.1** |
| **KOTA** | **Agri, Merkez-K** | **1.96** | **313** | P | | | **Pb** | **15 52 13.4** | **-1.3** |
| KOTA | | | | S | | | **Sg** | **15 52 41.8** | **+0.7** |
| **QRD** | **Qoradiz** | **2.01** | **60** | P | | | **Pb** | **15 52 14.5** | **-0.8** |
| | SNR=8.7 | | | | | | | | |
| QRD | | | | S | | | **Sb** | **15 52 40.7** | **-0.1** |
| **PERV** | **Siirt/Pervari-** | **2.06** | **256** | P | | | **Pb** | **15 52 15.4** | **-1.0** |
| PERV | | | | S | | | **Sg** | **15 52 43.6** | **-0.7** |
| PERV | | | | *i* | AML | AML | 15 52 50.0 | | |
| | comp=Z,214nm,1.0s | | | | | | | | |
| PERV | | | | *i* | AML | AML | 15 52 59.0 | | |
| | comp=Z,176nm,0.6s | | | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **2.08** | **289** | PN | | | **Pb** | **15 52 15.7** | **-0.9** |
| **ISRB** | **Sarab** | **2.15** | **107** | *e*Pn | | | **Pb** | **15 52 16.1** | **-1.7** |
| ISRB | | | | *e* | | | | 15 52 21.5 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **GRMI** | **Germi** | **2.23** | **81** | *e*Pn | | | **Pb** | **15 52 17.4** | **-1.8** |
| **AGDM** | **Agdam** | **2.27** | **43** | P | | | **Pb** | **15 52 18.4** | **-1.3** |
| | SNR=26 | | | | | | | | |
| AGDM | | | | S | | | **Sb** | **15 52 48.1** | **-0.2** |
| **BLQ** | **Beylaqan** | **2.30** | **57** | P | | | **Pb** | **15 52 19.1** | **-1.1** |
| | SNR=35 | | | | | | | | |
| BLQ | | | | S | | | **Sb** | **15 52 49.2** | **+0.1** |
| **SIRT** | **Sirnak** | **2.30** | **246** | PN | | | **Pb** | **15 52 18.5** | **-1.8** |
| **GDB** | **GEDABAY** | **2.30** | **13** | P | | | **Pb** | **15 52 19.4** | **-1.0** |
| | SNR=59 | | | | | | | | |
| GDB | | | | S | | | **Sb** | **15 52 49.9** | **+0.5** |
| **BLIS** | **Bitlis-Merkez** | **2.32** | **269** | P | | | **Pb** | **15 52 19.5** | **-1.3** |
| BLIS | | | | S | | | **Sg** | **15 52 54.6** | **+2.0** |
| **GANJ** | **Ganja** | **2.37** | **24** | P | | | **Pb** | **15 52 20.6** | **-0.9** |
| | SNR=44 | | | | | | | | |
| GANJ | | | | S | | | **Sb** | **15 52 52.2** | **+1.0** |
| **GURO** | **Guroymak-BITLI** | **2.39** | **273** | PN | | | **Pb** | **15 52 19.8** | **-2.1** |
| **BRDA** | **Brd** | **2.42** | **42** | P | | | **Pb** | **15 52 19.9** | **-2.3** |
| | SNR=5.6 | | | | | | | | |
| BRDA | | | | S | | | **Sb** | **15 52 53.7** | **+1.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EATA** | **Eleskirt** | **2.44** | **305** | P | | | **Pb** | **15 52 23.1** | **+0.3** |
| EATA | | | | S | | | **Sg** | **15 52 57.2** | **+0.9** |
| **EAK** | **Akyaka** | **2.48** | **333** | P | | | **Pb** | **15 52 22.9** | **-0.5** |
| EAK | | | | S | | | **Sg** | **15 53 00.1** | **+2.4** |
| **YRD** | **Yardimli** | **2.52** | **79** | P | | | **Pb** | **15 52 22.0** | **-2.1** |
| | SNR=58 | | | | | | | | |
| YRD | | | | S | | | **Sb** | **15 52 55.4** | **-0.2** |
| **LRK** | **Lerik** | **2.56** | **85** | P | | | **Pb** | **15 52 23.0** | **-1.9** |
| | SNR=33 | | | | | | | | |
| LRK | | | | S | | | **Sb** | **15 52 57.1** | **+0.1** |
| **QZX** | **Qazax, Azerbai** | **2.59** | **5** | P | | | **Pb** | **15 52 22.7** | **-2.5** |
| | SNR=25 | | | | | | | | |
| QZX | | | | S | | | **Sb** | **15 52 57.2** | **-0.3** |
| **KARS** | **Kars** | **2.64** | **325** | PN | | | **Pb** | **15 52 23.6** | **-2.6** |
| **GLBA** | **Clilabad** | **2.70** | **73** | P | | | **Pb** | **15 52 24.4** | **-2.7** |
| | SNR=8.1 | | | | | | | | |
| GLBA | | | | S | | | **Sb** | **15 52 59.2** | **-1.5** |
| **ZRD** | **Zardab** | **2.71** | **48** | P | | | **Pb** | **15 52 25.8** | **-1.4** |
| | SNR=4.9 | | | | | | | | |
| ZRD | | | | S | | | **Sb** | **15 52 58.7** | **-2.2** |
| **MNGR** | **Mingechevir, A** | **2.77** | **33** | P | | | **Pb** | **15 52 27.3** | **-0.9** |
| | SNR=5.2 | | | | | | | | |
| MNGR | | | | S | | | **Sb** | **15 52 59.3** | **-3.3** |
| **VRTB** | **Varto-Mus** | **2.91** | **285** | PN | | | **Pn** | **15 52 27.3** | **+1.8** |
| **LKRN** | **Lenkeran, Azer** | **2.91** | **84** | P | | | **Pn** | **15 52 27.5** | **+2.1** |
| | SNR=6.3 | | | | | | | | |
| LKRN | | | | S | | | **Sb** | **15 53 05.0** | **-1.8** |
| **ASTR** | **Astara** | **2.92** | **87** | P | | | **Pb** | **15 52 28.0** | **-2.7** |
| | SNR=11 | | | | | | | | |
| ASTR | | | | S | | | **Sb** | **15 53 03.5** | **-3.5** |
| **KOPR** | **Koprukoy-ERZUR** | **2.92** | **302** | PN | | | **Pb** | **15 52 27.7** | **-3.3** |
| **SAAT** | **Saatly** | **2.95** | **61** | P | | | **Pb** | **15 52 28.5** | **-2.8** |
| | SNR=5.3 | | | | | | | | |
| SAAT | | | | S | | | **Sn** | **15 53 03.2** | **+1.4** |
| **KDMR** | **Kurdemir** | **3.06** | **51** | P | | | **Pb** | **15 52 31.1** | **-2.2** |
| KDMR | | | | S | | | **Sb** | **15 53 08.2** | **-3.0** |
| **SVAN** | **Silvan-Diyarba** | **3.07** | **265** | PN | | | **Pn** | **15 52 29.5** | **+1.9** |
| **SEKA** | **Sheki** | **3.18** | **30** | P | | | **Pb** | **15 52 33.6** | **-1.7** |
| | SNR=7.0 | | | | | | | | |
| SEKA | | | | S | | | **Sb** | **15 53 12.1** | **-2.5** |
| **ERZM** | **Erzurum** | **3.21** | **297** | PN | | | **Pn** | **15 52 31.8** | **+1.9** |
| **QBL** | **Gabala** | **3.26** | **40** | P | | | **Pb** | **15 52 33.8** | **-2.8** |
| | SNR=8.3 | | | | | | | | |
| QBL | | | | S | | | **Sb** | **15 53 16.1** | **-0.7** |
| **IML** | **Ismayilli** | **3.33** | **45** | P | | | **Pn** | **15 52 34.0** | **+2.8** |
| | SNR=3.5 | | | | | | | | |
| IML | | | | S | | | **Sb** | **15 53 15.4** | **-3.5** |
| **ZKTA** | **Zakatala** | **3.37** | **20** | P | | | **Pb** | **15 52 38.1** | **-0.5** |
| | SNR=15 | | | | | | | | |
| ZKTA | | | | S | | | **Sb** | **15 53 16.8** | **-3.2** |
| **ZNJK** | **Zanjan** | **3.39** | **121** | *e*Pn | | | **Pn** | **15 52 33.2** | **+1.0** |
| **BNGB** | **Bingl** | **3.48** | **280** | PN | | | **Pn** | **15 52 35.7** | **+2.4** |
| **PQL** | **Pirkuli** | **3.56** | **49** | P | | | **Pb** | **15 52 37.8** | **-4.1** |
| | SNR=4.0 | | | | | | | | |
| PQL | | | | S | | | **Sb** | **15 53 21.1** | **-4.7** |
| **XNQ** | **Khinaliq** | **3.58** | **40** | P | | | **Pb** | **15 52 38.3** | **-3.9** |
| | SNR=4.6 | | | | | | | | |
| XNQ | | | | S | | | **Sb** | **15 53 21.9** | **-4.3** |
| **GBS** | **Qobustan** | **3.63** | **54** | P | | | **Pb** | **15 52 38.7** | **-4.3** |
| GBS | | | | S | | | **Sn** | **15 53 21.0** | **+2.2** |
| **ATGJ** | **Altiaghaj** | **3.81** | **50** | P | | | **Pb** | **15 52 41.6** | **-4.6** |
| | SNR=5.2 | | | | | | | | |
| ATGJ | | | | S | | | **Sn** | **15 53 24.8** | **+1.3** |
| **SNGE** | **Sanandaj** | **3.84** | **151** | *e*Pn | | | **Pn** | **15 52 39.9** | **+1.5** |
| **QUBA** | **Quba, Azerbaij** | **3.89** | **41** | P

| | | | | | | |
|---|---|---|---|---|---|---|
| **JKRS** | **Kuro-shima** | **1.21 107** | P | **Pn** | **15 55 25.9** | **+0.3** |
| JKRS | | | S | **Sn** | **15 55 43.1** | **+0.4** |
| **ETLH** | **Xiulin Townshi** baz=248 | **1.22 252** | P | **Pn** | **15 55 25.4** | **-0.5** |
| ETLH | | | *e*S | **Sn** | **15 55 42.8** | **-0.3** |
| **YHNB** | **Yeheng** baz=276 | **1.25 274** | P | **Pn** | **15 55 26.3** | **+0.1** |
| YHNB | | | S | **Sn** | **15 55 43.8** | **0.0** |
| **NNSB** | **Datong** baz=252 | **1.25 263** | P | **Pn** | **15 55 26.1** | **-0.2** |
| NNSB | | | S | **Sn** | **15 55 43.8** | **-0.2** |
| **NNS** | **Nan Shan** baz=253 | **1.26 263** | P | **Pn** | **15 55 26.3** | **-0.1** |
| NNS | | | S | **Sn** | **15 55 43.7** | **-0.4** |
| **NSK** | **Sanguang** baz=276 | **1.27 274** | *i* P | **Pn** | **15 55 26.1** | **-0.3** |
| NSK | | | *i* S | **Sn** | **15 55 43.7** | **-0.4** |
| **JIJ** | **Ishigaki jima** | **1.29 100** | P | **Pn** | **15 55 26.4** | **-0.2** |
| JIJ | | | S | **Sn** | **15 55 44.0** | **-0.6** |
| **ETM** | **Tongmen** baz=234 | **1.30 242** | *i* P | **Pn** | **15 55 26.2** | **-0.6** |
| ETM | | | *i* S | **Sn** | **15 55 44.4** | **-0.4** |
| **FUSS** | **Fushou** baz=248 | **1.41 256** | P | **Pn** | **15 55 28.7** | **+0.4** |
| FUSS | | | S | **Sn** | **15 55 47.3** | **-0.2** |
| **WHF** | **Hehuan Shan** baz=248 | **1.42 252** | P | **Pn** | **15 55 28.3** | **-0.3** |
| WHF | | | S | **Sn** | **15 55 47.6** | **-0.4** |
| **JISG** | **Ishigakijimahi** | **1.43 90** | P | **Pn** | **15 55 27.9** | **-0.3** |
| JISG | | | *e*S | **Sn** | **15 55 46.3** | **-1.1** |
| **ESL** | **Shilin** baz=234 | **1.43 237** | P | **Pn** | **15 55 27.7** | **-0.6** |
| ESL | | | S | **Sn** | **15 55 46.6** | **-0.9** |
| **NFF** | **Wufeng Townshi** baz=269 | **1.48 272** | P | **Pn** | **15 55 29.1** | **+0.2** |
| NFF | | | S | **Sn** | **15 55 48.5** | **-0.3** |
| **CHGB** | **Renai** baz=240 | **1.53 250** | P | **Pn** | **15 55 29.7** | **0.0** |
| CHGB | | | S | **Sn** | **15 55 49.8** | **-0.3** |
| **LIOB** | **Emei** baz=269 | **1.57 272** | P | **Pn** | **15 55 30.3** | **+0.2** |
| LIOB | | | S | **Sn** | **15 55 50.9** | **+0.1** |
| **NSTT** | **Nanjuang** baz=269 | **1.59 272** | P | **Pn** | **15 55 30.4** | **+0.2** |
| NSTT | | | S | **Sn** | **15 55 50.9** | **-0.1** |
| **WUSB** | **Renai** baz=240 | **1.60 248** | P | **Pn** | **15 55 30.7** | **+0.2** |
| WUSB | | | S | **Sn** | **15 55 51.2** | **-0.3** |
| **HGSD** | **Ruisui** baz=224 | **1.63 228** | P | **Pn** | **15 55 30.4** | **-0.4** |
| HGSD | | | *e*S | **Sn** | **15 55 50.9** | **-1.0** |
| **WHP** | **Taichung City** baz=254 | **1.67 260** | *i* P | **Pn** | **15 55 32.3** | **+0.9** |
| WHP | | | *e*S | **Sn** | **15 55 53.5** | **+0.6** |
| **VWDT** | **VWDT** baz=233 | **1.69 241** | P | **Pn** | **15 55 31.6** | **+0.1** |
| VWDT | | | S | **Sn** | **15 55 53.0** | **-0.1** |
| **WCS** | **Beigang Elemen** baz=254 | **1.76 253** | P | **Pn** | **15 55 33.1** | **+0.8** |
| WCS | | | S | **Sn** | **15 55 54.1** | **-0.6** |
| **JTJ** | **Tarama** | **1.78 88** | *e*S | **Sn** | **15 55 55.2** | **-0.1** |
| **YULB** | **Yu-li** baz=232 | **1.78 228** | *e*P | **Pn** | **15 55 31.9** | **-0.8** |
| YULB | | | *e*S | **Sn** | **15 55 54.1** | **-1.4** |
| **TWF1** | **Yuli** baz=231 | **1.81 227** | P | **Pn** | **15 55 32.7** | **-0.4** |
| TWF1 | | | S | **Sn** | **15 55 55.1** | **-0.9** |
| **SSLB** | **Suanglung** baz=238 | **1.82 244** | *i* P | **Pn** | **15 55 33.7** | **+0.5** |
| SSLB | | | *i* S | **Sn** | **15 55 56.0** | **-0.3** |
| **SMLT** | **Sun Moon Lake** baz=239 | **1.83 248** | *e*P | **Pn** | **15 55 34.5** | **+1.1** |
| SMLT | | | *e*S | **Sn** | **15 55 59.3** | **+2.7** |
| **TYC** | **Yuchr** baz=241 | **1.85 249** | *e*P | **Pn** | **15 55 34.7** | **+1.1** |
| TYC | | | *e*S | **Sn** | **15 55 58.9** | **+1.9** |
| **ALS** | **Alishan** baz=236 | **2.08 239** | P | **Pn** | **15 55 37.6** | **+0.8** |
| ALS | | | *e*S | **Sn** | **15 56 04.0** | **+1.5** |
| **EDH** | **Donghe** baz=212 | **2.08 220** | *e*P | **Pn** | **15 55 35.6** | **-1.0** |
| EDH | | | *e*S | **Sn** | **15 56 00.5** | **-1.8** |
| **CHN5** | **Tsauling** baz=233 | **2.13 243** | P | **Pn** | **15 55 38.1** | **+0.8** |
| CHN5 | | | *e*S | **Sn** | **15 56 05.3** | **+1.7** |
| **TPUB** | **Ta-pu** baz=234 | **2.32 237** | *e*P | **Pn** | **15 55 41.0** | **+1.2** |

*JMA **04** 16:00:38.2±0.1, 38°.86N×142°.05E, h46km±1km, M3.7*
*JMA Felt I J1.*
*IDC **04** 16:00:39.2±3.4, 38°.87N×142°.17E, h62km±27km, mb3.3/4, mb1 3.4/6, mb1mx3.0/40, mbtmp3.5/6, ML3.0/2, Error ellipse: s-maj=49.8km s-min=24.7km az=93.0*
**ISC 04 16:00:37.9±1.7, 38.85N±0.06×142.1E±0.1, h45km±11km, n17, σ0.88/23, mb3.6/5, 8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **0.39 306** | | ||P | **Pn** | **16 00 47.8** | **+0.3** |
| OFUJ | | | | S | **Sn** | **16 00 54.4** | **+0.1** |
| **JKMT** | **Kesennumamotoy** | **0.47 265** | | ||P | **Pn** | **16 00 48.6** | **+0.2** |
| JKMT | | | | S | **Sn** | **16 00 55.6** | **-0.3** |
| **JMK** | **Ichinoseki** | **0.67 279** | | ||P | **Pn** | **16 00 51.2** | **+0.1** |
| JMK | | | | *e*S | **Sn** | **16 01 00.4** | **-0.1** |
| **JIO** | **Ouri** | **0.69 235** | | ||P | **Pn** | **16 00 51.2** | **-0.1** |
| JIO | | | | S | **Sn** | **16 01 00.2** | **-0.8** |
| **JOM** | **Ohasama** | **0.86 316** | | ||P | **Pn** | **16 00 54.0** | **+0.3** |
| JOM | | | | S | **Sn** | **16 01 05.3** | **+0.1** |
| **JOU** | **Okura** | **1.21 247** | | ||P | **Pn** | **16 00 58.4** | **+0.1** |
| JOU | | | | S | **Sn** | **16 01 13.7** | **+0.2** |
| **JRG** | **Rokugo** | **1.24 296** | | ||P | **Pn** | **16 00 59.1** | **+0.3** |
| **JYK** | **Kaneyama** | **1.34 273** | | ||P | **Pn** | **16 01 00.4** | **+0.3** |
| **JMM** | **Marumori** | **1.41 226** | | P | **Pn** | **16 01 00.8** | **-0.3** |
| **MAT** | **Matsushiro** | **3.83 234** | | P | **Pn** | **16 01 37.0** | **+2.6** |
| **MJAR** | **Matsushiro Arr** 0.3nm,0.3s,baz=37,slow=13,SNR=15 | **3.83 234** | | P | **Pn** | **16 01 36.8** | **+2.3** |
| **ASAJ** | **Asahikawa** 0.7nm,0.3s,baz=164,slow=32,SNR=11 | **5.27** | **4** | P | **Pn** | **16 01 55.0** | **+0.9** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.5s,baz=82,slow=10,SNR=2.3 | **41.10 311** | | P | **P** | **16 08 17.2** | **+0.1** |
| **MKAR** | **Makanchi Array** 16nm,0.4s,baz=95,slow=7.5,SNR=1.7 | **43.62 301** | | P | **P** | **16 08 37.5** | **-0.2** |
| **BVAR** | **Borovoye Array** 0.5nm,0.4s,baz=74,slow=12,SNR=5.0 | **49.75 311** | | P | **P** | **16 09 25.7** | **+0.1** |
| **WRA** | **Warramunga Arr** 0.3nm,0.6s,baz=5.1,slow=7.6,SNR=1.6 | **58.93 188** | | P | **P** | **16 10 31.9** | **-0.7** |
| **AKASG** | **Malin Array Be** 0.2nm,0.3s,baz=46,slow=6.2,SNR=4.3 | **73.18 322** | | P | **P** | **16 12 03.4** | **-0.4** |

*BJI **04** 16:12:59.3±0.0, 1°.23N×126°.50E, h5km, mb4.9/67, mB5.0/48, Ms4.5/62, Ms7 4.3/60*
*IDC **04** 16:13:02.9±0.3, 1°.48N×126°.22E, h0km, mb4.9/31, mb1 5.0/34, mb1mx4.8/43, mbtmp4.9/34, ML4.0/3, MS4.1/41, Ms1 4.1/41, ms1mx3.9/75, Error ellipse: s-maj=15.3km s-min=8.8km az=70.0*
*NEIC **04** 16:13:03.9±1.7, 1°.56N±0°.06×126°.45E±0°.06, h10km±1km, mb5.3/175, Error ellipse: s-maj=11.2km s-min=8.3km az=217.0*
*MOS **04** 16:13:04.0±1.0, 1°.51N×126°.35E, h24km, mb5.4/51, MS4.2/7, Error ellipse: s-maj=8.6km s-min=4.5km az=112.0*
*DJA **04** 16:13:06.6±0.4, 2°.N±2°.×12°.6E±°, h20km±3km, M4.9/71, mb4.9/71, mB5.4/56, MLv5.0/19, Mw(mB)4.9/56, MwMwp4.8/10, Mwp5.2/10*
*GCMT **04** 16:13:07.9±0.2, 1°.61N±0°.02×126°.11E±0°.01, h22km, MW5.1/97, Moment Tensor Solution. s60,c82; s97,c153; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.22±.18; $M_{\theta\theta}$-0.78±.12; $M_{\phi\phi}$4.00±.13; $M_{r\theta}$0.66±.21; $M_{\theta\phi}$2.10±.10; $M_{\phi r}$3.21±.25; Best double couple: $M_o$5.19300×$10^{16}$ NP1:ϕs34.00000°,δ27.00000°,λ-71.00000°. NP2: ϕs192.00000°,δ65.00000°,λ-99.00000°. Principal axes: T 5.9390, Plg20.0000°, Azm289.0000°; N -1.4970, Plg9.0000°, Azm196.0000°; P -4.4460, Plg69.0000°, Azm84.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*KLM **04** 16:13:08, 1°.56N×126°.61E, h39km, mb5.2*
**ISC 04 16:13:06.3±0.5, 1°.52N±0°.03×126°.42E±0°.04, h24km±3km, h24km:pP-P, n688, σ1§64/708, mb5.2/198, MS4.2/69, 32C-18D, Northern Moluca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.20 128** | | P | **Pn** | **16 13 26.9** | **-0.7** |
| TNTI | | | | S | **Sb** | **16 13 44.3** | **+0.8** |
| **TNTI** | **Ternate** | **1.20 128** | | Pn | **Pn** | **16 13 26.5** | **-1.1** |
| **SGSI** | **Sangihe** | **2.33 338** | | P | **Pn** | **16 13 44.2** | **+1.1** |
| **LBMI** | **Labuha** | **2.40 153** | | P | **Pn** | **16 13 44.2** | **+0.1** |
| **KMSI** | **Cibinong** | **2.61 249** | | P | **Pn** | **16 13 48.6** | **+1.6** |
| **GTOI** | **Gorontalo** | **3.52 256** | | P | **Pn** | **16 14 01.2** | **+1.7** |
| **SANI** | **Sanana** | **3.57 187** | | P | **Pn** | **16 14 01.1** | **+0.9** |
| **SANI** | **Sanana** | **3.57 187** | | P | **Pn** | **16 14 01.5** | **+1.3** |
| **MRSI** | **Marisa** | **4.60 257** | | P | **Pn** | **16 14 16.6** | **+2.3** |
| **GSPH** | **General Santos** | **4.77 342** | | *e*P | **Pn** | **16 14 17.6** | **+0.8** |
| **APSI** | **Ampana** 4.1nm3µm9µm1µm,1.2s | **5.35 243** | | P | **Pn** | **16 14 27.3** | **+2.7** |
| **SWI** | **Sorong** 0.4nm6µm1µm101nm,0.8s | **5.39 116** | | P | **Pn** | **16 14 24.6** | **-0.6** |
| **SIJI** | **Sorong** 2.1nm,0.3s,baz=270,slow=14,SNR=8.9 | **5.39 116** | | Pn | **Pn** | **16 14 25.7** | **+0.4** |
| SIJI | | | | | LR | LR | 16 16 42.3 | |
| | comp=Z,2µm,21.8s,baz=255,slow=40 | | | | | | | |
| **MSAI** | **Masohi** 0.2nm60nm,0.8s | **5.44 153** | | P | **Pn** | **16 14 27.3** | **+1.3** |
| **AAI** | **Ambon** 0.9nm2µm269nm,0.9s | **5.47 161** | | P | **Pn** | **16 14 26.6** | **+0.3** |
| **DAV** | **Davao City (W)** 50nm,0.3s,baz=144,slow=2.6,SNR=5.9 | **5.58 351** | | Pn | **Pn** | **16 14 32.4** | **+4.5** |
| **DAV** | **Davao City (W)** | **5.58 351** | | Pn | **Pn** | **16 14 25.9** | **-1.9** |
| **KCP** | **Kidapawan** | **5.61 346** | | *e*P | **Pn** | **16 14 31.2** | **+2.8** |
| KCP | | | | *e*S | **Sn** | **16 15 29.5** | **-2.7** |
| **TOLI2** | **Tolitoli** | **5.65 266** | | Pn | **Pn** | **16 14 28.8** | **0.0** |
| **TOLI2** | **Tolitoli** | **5.65 266** | | P | **Pn** | **16 14 29.6** | **+0.8** |
| **MPSI** | **Mapaga** 0.8nm8µm3µm231nm,1.3s | **6.63 260** | | P | **Pn** | **16 14 43.9** | **+1.7** |
| **ZCP** | **Zamboanga City** | **6.91 321** | | *e*P | **Pn** | **16 14 47.1** | **+1.1** |
| ZCP | | | | *e*S | **Sn** | **16 16 03.0** | **-1.0** |
| **FAKI** | **Fak Fak** | **7.31 127** | | P | **Pn** | **16 14 52.8** | **+1.2** |
| **FAKI** | **Fak Fak** | **7.31 127** | | Pn | **Pn** | **16 14 53.6** | **+2.0** |
| **FAKI** | **Fak Fak** | **7.31 127** | | P | **Pn** | **16 14 55.0** | **+3.4** |
| **BBSI** | **Bau Bau** 556nm61nm,1.0s | **7.95 209** | | P | **Pn** | **16 15 02.4** | **+2.0** |
| **TTSI** | **Tana Toraja** 0.8nm3µm2µm245nm,0.8s | **8.01 236** | | P | **Pn** | **16 15 03.2** | **+2.0** |
| **SPSI** | **Sidrap Palu** 2µm129nm,0.7s | **8.59 231** | | P | **Pn** | **16 15 11.4** | **+2.2** |
| **BNSI** | **Bone** 2µm163nm,1.0s | **8.62 227** | | P | **Pn** | **16 15 11.8** | **+2.1** |
| **MYLDM** | **Lahad Datu** | **8.70 295** | | Pn | **Pn** | **16 15 11.9** | **+1.2** |
| **BKSI** | **Bulukumba** 1µm107nm,1.0s | **9.26 223** | | P | **Pn** | **16 15 20.4** | **+2.0** |
| **KAPI** | **Kappang** 4.4nm,0.3s,baz=19,slow=7.7,SNR=15 | **9.30 226** | | Pn | **Pn** | **16 15 18.9** | **0.0** |
| **KAPI** | **Kappang** | **9.30 226** | | P | **Pn** | **16 15 18.7** | **-0.2** |
| **KAPI** | **Kappang** | **9.30 226** | | Pn | **Pn** | **16 15 18.7** | **-0.2** |
| **KAPI** | **Kappang** | **9.30 226** | | P | **Pn** | **16 15 21.7** | **+2.8** |
| **BSSI** | **Bau Bau, Buton** 997nm69nm,0.5s | **9.64 218** | | P | **Pn** | **16 15 25.6** | **+2.0** |
| **BAKI** | **Biak** | **10.05 105** | | P | **Pn** | **16 15 30.5** | **+1.2** |
| **SRPI** | **Serui, Papua** 1µm171nm,1.2s | **10.38 109** | | P | **Pn** | **16 15 34.2** | **+0.5** |
| **SPMM** | **Sapulut** | **10.43 288** | | P | **Pn** | **16 15 37.0** | **+2.5** |
| **SAUI** | **Saumlaki** | **10.62 153** | | Pn | **Pn** | **16 15 38.6** | **+1.6** |
| **RCP** | **Roxas** | **10.62 340** | | *e*P | **Pn** | **16 15 40.8** | **+3.7** |
| **MMRI** | **Maumere** 2µm105nm,1.1s | **10.91 202** | | P | **Pn** | **16 15 42.9** | **+1.8** |
| **MMRI** | **Maumere** | **10.91 202** | | Pn | **Pn** | **16 15 44.1** | **+3.0** |
| **MMRI** | **Maumere** | **10.91 202** | | P | **Pn** | **16 15 44.7** | **+3.6** |
| **KKM** | **Kota Kinabalu** | **11.13 294** | | Pn | **Pn** | **16 15 46.9** | **+2.8** |
| **KKM** | **Kota Kinabalu** | **11.13 294** | | P | **Pn** | **16 15 44.9** | **+0.8** |
| **PPR** | **Puerto Princes** | **11.21 317** | | *i* P | **Pn** | **16 15 50.1** | **+4.9** |
| **KBKI** | **Kotabaru** 628nm61nm,1.3s | **11.31 245** | | P | **Pn** | **16 15 48.7** | **+2.2** |
| **SOEI** | **Soe** 3µm248nm,1.0s | **11.40 191** | | P | **Pn** | **16 15 49.4** | **+1.5** |
| **SOEI** | **Soe** | **11.40 191** | | Pn | **Pn** | **16 15 51.6** | **+3.7** |
| **MTKI** | **Muara Teweh, K** 989nm2µm46nm,0.9s | **11.78 258** | | P | **Pn** | **16 15 55.1** | **+2.2** |
| **BATI** | **Baumata** 1.3nm,0.3s,baz=24,slow=3.1,SNR=12 | **11.97 193** | | Pn | **Pn** | **16 15 59.0** | **+3.4** |
| **BATI** | **Baumata** 901nm106nm,1.0s | **11.97 193** | | P | **Pn** | **16 15 57.2** | **+1.7** |
| **BBKI** | **Banjar Baru** 4µm34nm,1.4s | **12.59 247** | | P | **Pn** | **16 16 06.2** | **+2.2** |
| **BASI** | **Baing, Sumba** 1µm89nm,1.4s | **13.03 206** | | P | **Pn** | **16 16 11.9** | **+1.9** |
| **WBSI** | **Waikabubak, Su** 1µm102nm,0.9s | **13.11 212** | | P | **Pn** | **16 16 13.1** | **+1.9** |
| **SBUM** | **Sibu** | **14.22 274** | | | **Pn** | **16 16 26.5** | **+0.1** |
| **GENI** | **Genyem** 2µm3µm214nm,1.0s | **14.34 107** | | P | **Pn** | **16 16 28.3** | **+0.4** |
| **DRS** | **Darwin Rock St** 97nm,0.9s | **14.55 162** | | P | **Pn** | **16 16 32.8** | **+1.9** |
| **SRBI** | **Singaraja** 2µm133nm,1.2s | **14.69 229** | | P | **Pn** | **16 16 34.9** | **+2.1** |
| **JAY** | **Jayapura** 0.4nm,0.3s,baz=258,slow=20,SNR=2.8 | **14.83 106** | | Pn | **P** | **16 16 38.1** | **-2.2** |
| JAY | | | | | LR | LR | 16 22 25.8 | |
| | comp=Z,2µm,21.8s,baz=289,slow=38 | | | | | | | |
| **JAY** | **Jayapura** 694nm36nm,1.4s | **14.83 106** | | P | **Pn** | **16 16 35.1** | **+0.4** |
| **STKI** | **Sintang** 75nm,1.6s | **15.01 265** | | P | **Pn** | **16 16 39.2** | **+2.2** |
| **MTN** | **Manton Dam** baz=15,SNR=6.4 | **15.02 162** | | P | **Pn** | **16 16 37.6** | **+0.6** |
| **MTN** | **Manton Dam** | **15.02 162** | | Pn | **Pn** | **16 16 34.7** | **-2.4** |
| **KMMI** | **Kalianget** 2µm182nm,1.0s | **15.06 235** | | P | **P** | **16 16 40.4** | **-2.4** |
| **DNP** | **Denpasar** 14µm1µm,1.2s | **15.08 228** | | P | **Pn** | **16 16 40.1** | **+2.1** |
| **IGBI** | **Denpasar** 3µm248nm,1.1s | **15.22 227** | | P | **Pn** | **16 16 41.9** | **+2.1** |
| **ABJI** | **Asem Bagus** 1µm106nm,1.1s | **15.28 233** | | P | **Pn** | **16 16 42.7** | **+2.2** |
| **KDU** | **Kakadu** baz=15,SNR=28 | **15.34 157** | | P | **Pn** | **16 16 41.7** | **+0.3** |
| **KDU** | **Kakadu** | **15.34 157** | | P | **P** | **16 16 44.9** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** 3µm212nm,1.0s | **15.75 231** | | P | **P** | **16 16 48.8** | **-1.7** |
| **JAGI** | **Jajag, Banyuwa** | **15.75 231** | | P | **Pn** | **16 16 45.6** | **-1.1** |
| JAGI | | | | | IAmb | IAmb | 16 17 04.5 | |
| | comp=Z,589nm,1.6s | | | | | | | |
| **BLJI** | **Banyuglugur** comp=Z,932nmcomp=Z,101nm,1.3s | **15.76 234** | | P | **P** | **16 16 48.9** | **-1.6** |
| **KSM** | **Kuching** | **16.11 270** | | | **Pn** | **16 16 51.8** | **+0.5** |
| **KSM** | **Kuching** | **16.11 270** | | P | **P** | **16 16 57.0** | **+2.6** |
| **KSM** | **Kuching** | **16.11 270** | | P | **P** | **16 16 53.8** | **-0.6** |
| **GMJI** | **Gumukmas** comp=Z,2µmcomp=Z,121nm,0.8s | **16.19 233** | | P | **P** | **16 16 54.5** | **-0.8** |
| **KNRA** | **Kununurra** baz=17,SNR=51 | **17.24 172** | | P | **Pn** | **16 17 05.2** | **-0.4** |
| **KNRA** | **Kununurra** | **17.24 172** | | | **Pn** | **16 17 03.8** | **-1.8** |
| KNRA | | | | | IAmb | IAmb | 16 17 12.6 | |
| | comp=Z,184nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **17.24 172** | | P | **P** | **16 17 07.1** | **+0.1** |
| **PWJI** | **Pagerwojo** comp=Z,82nm,0.9s | **17.39 237** | | P | **P** | **16 17 08.3** | **-0.3** |
| **PCJI** | **Pacitan** comp=Z,2µmcomp=Z,128nm,1.6s | **18.00 237** | | P | **Pn** | **16 17 15.2** | **+0.1** |
| **SMRI** | **Semarang** | **18.08 242** | | | **Pn** | **16 17 13.5** | **-2.5** |
| **UGM** | **Wanagama** | **18.42 239** | | P | **P** | **16 17 19.3** | **-0.7** |
| UGM | | | | | IAmb | IAmb | 16 18 13.4 | |
| | comp=Z,219nm,1.2s | | | | | | | |
| **UGM** | **Wanagama** | **18.42 239** | | P | **Pn** | **16 17 22.3** | **+2.1** |
| **FITZ** | **Fitzroy Crossi** comp=Z,0.7nm,0.3s,baz=16,slow=9.9,SNR=29 | **19.51 182** | | P | **P** | **16 17 30.8** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** baz=20,SNR=50 | **19.51 182** | | P | **P** | **16 17 31.2** | **-0.8** |
| **KPJI** | **Karang Pucung** comp=Z,1µmcomp=Z,94nm,0.9s | **19.54 243** | | P | **Pn** | **16 17 33.4** | **-0.3** |
| **LEM** | **Lembang** comp=Z,473nm,20.7s,baz=62,slow=40 | **20.52 246** | | LR | LR | 16 26 37.4 | |
| **DLV** | **T Lat** | **20.58 301** | | P | **P** | **16 17 40.2** | **-3.7** |
| **PPBI** | **Pangkal Pinang** | **20.61 260** | | P | Pn | 16 17 46.1 | -0.2 |
| **CBJI** | **Citeko** comp=Z,3µmcomp=Z,86nm,0.8s | **21.07 248** | | P | **P** | **16 17 51.3** | **+2.4** |
| **DBJI** | **Dramaga** comp=Z,8µmcomp=Z,23nm,1.0s | **21.21 248** | | P | **P** | **16 17 52.6** | **+2.1** |
| **MANU** | **Manus Island** | **21.24 100** | | P | **P** | **16 17 47.8** | **-3.0** |
| **TWG** | **Pinlang** | **21.80 347** | | P | **P** | **16 17 53.6** | **-3.1** |
| **GUMO** | **Guam** | **21.84 56** | | P | **P** | **16 17 55.9** | **-1.4** |
| GUMO | | | | | pmax | pmax | | |
| | comp=Z,245nm,1.2s | | | | | | | |
| **GUMO** | **Guam** | **21.84 56** | | P | **P** | **16 17 55.9** | **-1.4** |
| GUMO | | | | | IAmb | IAmb | 16 18 07.0 | |
| | comp=Z,245nm,1.1s | | | | | | | |
| **DSRI** | **Dabo** comp=Z,573nmcomp=Z,46nm,1.5s | **21.93 265** | | P | **P** | **16 18 00.4** | **+2.2** |
| **PMBI** | **Palembang** | **22.09 258** | | P | **P** | **16 17 59.9** | **0.0** |
| **CGJI** | **Cibinong** comp=Z,42nm,0.7s | **22.21 248** | | P | **P** | **16 18 00.9** | **-0.3** |
| **YULB** | **Yu-li** | **22.30 348** | | P | **P** | **16 17 59.0** | **-3.1** |
| YULB | | | | | IAmb | IAmb | 16 18 03.4 | |
| | comp=Z,175nm,1.8s | | | | | | | |
| **TPUB** | **Ta-pu** | **22.37 346** | | P | **P** | **16 18 00.1** | **-2.7** |
| TPUB | | | | | IAmb | IAmb | 16 18 06.3 | |
| | comp=Z,237nm,1.4s | | | | | | | |
| **TPUB** | **Ta-pu** | **22.37 346** | | P | **P** | **16 18 05.6** | **+2.7** |
| **KLSI** | comp=Z,19nm,0.8s | **22.53 254** | | P | **P** | **16 18 06.7** | **+2.0** |
| **WB0** | **Warramunga Arr** | **22.55 160** | | P | **P** | **16 18 01.3** | **-3.6** |
| **MYKOM** | **Kota Tinggi** | **22.56 271** | | P | **P** | **16 18 04.2** | **-0.9** |
| **MYKOM** | **Kota Tinggi** | **22.56 271** | | P | **P** | **16 18 08.0** | **+3.0** |
| **COEN** | **Coen** | **22.63 133** | | P | **P** | **16 18 03.7** | **-2.0** |
| **COEN** | **Coen** | **22.63 133** | | P | **P** | **16 18 07.2** | **+1.5** |
| **WRAB** | **Tennant Creek** | **22.69 160** | | *i* P | **P** | **16 18 05.5** | **-0.8** |
| WRAB | | | | | pmax | pmax | | |
| | comp=Z,50nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.69 160** | | P | **P** | **16 18 04.7** | **-1.7** |
| **WRAB** | **Tennant Creek** | **22.69 160** | | P | **P** | **16 18 06.3** | **0.0** |
| **WRA** | **Warramunga Arr** comp=Z,130nm,1.0s,baz=341,slow=9.8,SNR=204 | **22.70 160** | | P | **P** | **16 18 05.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **22.70 160** | | *i* P | **P** | **16 18 04.9** | **-1.5** |
| WRA | | | | | pmax | pmax | | |
| | comp=Z,155nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.70 160** | | P | **P** | **16 18 03.1** | **-3.2** |
| **WB2** | **Warramunga Arr** | **22.70 160** | | P | **P** | **16 18 03.6** | **-2.8** |
| **SSLB** | **Suanglung** | **22.76 347** | | P | **P** | **16 18 04.9** | **-2.2** |
| SSLB | | | | | IAmb | IAmb | 16 18 18.0 | |
| | comp=Z,59nm,0.8s | | | | | | | |
| **SSLB** | **Suanglung** | **22.76 347** | | P | **P** | **16 18 07.2** | **+0.2** |
| **WR0** | **Warramunga Arr** | **22.78 160** | | P | **P** | **16 18 04.9** | **-2.4** |
| WR0 | | | | | IAmb | IAmb | 16 18 15.3 | |
| | comp=Z,90nm,0.8s | | | | | | | |
| **KASI** | **Kota Agung** comp=Z,54nm,0.7s | **22.99 252** | | P | **P** | **16 18 11.6** | **+2.1** |
| **JMBI** | **JAMBI** comp=Z,134nm,1.1s | **22.99 262** | | P | **P** | **16 18 11.6** | **+2.1** |
| **NACB** | **Ninganchiao** | **23.00 349** | | P | **P** | **16 18 06.8** | **-2.6** |
| NACB | | | | | IAmb | IAmb | 16 19 01.1 | |
| | comp=Z,106nm,1.6s | | | | | | | |
| **MDSI** | **Maura Dua** comp=Z,16nm,0.8s | **23.01 255** | | P | **P** | **16 18 08.6** | **-1.1** |
| **JMJ** | **Miyako jima 2** | **23.19 357** | | P | **P** | **16 18 13.2** | **+1.9** |
| **LWLI** | **Liwa** comp=Z,118nm,0.7s | **23.26 254** | | P | **P** | **16 18 13.5** | **+1.1** |
| **PMG** | **Port Moresby** comp=Z,28nm,1.0s,baz=271,slow=9.6,SNR=5.9 | **23.34 118** | | P | **P** | **16 18 12.7** | **-0.2** |
| PMG | | | | | LR | LR | 16 29 48.9 | |
| | comp=Z,771nm,19.7s,baz=300,slow=43 | | | | | | | |
| **PMG** | **Port Moresby** | **23.34 118** | | *i* P | **P** | **16 18 12.8** | **-0.2** |
| PMG | | | | | pmax | pmax | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **23.34 118** | | P | **P** | **16 18 10.9** | **-2.0** |
| **MBWA** | **Marble Bar** | **23.47 196** | | P | **P** | **16 18 12.3** | **-1.9** |
| MBWA | | | | | IAmb | IAmb | 16 18 15.8 | |
| | comp=Z,70nm,1.2s | | | | | | | |
| **MBWA** | **Marble Bar** | **23.47 196** | | P | **P** | **16 18 14.0** | **-0.2** |
| **YHNB** | **Yeheng** | **23.53 348** | | P | **P** | **16 18 13.4** | **-1.5** |
| YHNB | | | | | IAmb | IAmb | 16 18 15.2 | |
| | comp=Z,97nm,1.2s | | | | | | | |
| **YHNB** | **Yeheng** | **23.53 348** | | P | **P** | **16 18 15.4** | **+0.6** |
| **QIZ** | **Qiongzhong** | **23.81 318** | | P | **P** | **16 18 16.8** | **-0.7** |
| QIZ | | | | S | **S** | **16 22 33.7** | **+1.7** |
| QIZ | | | | | LR | LR | | |
| | comp=Z,940nm,15.7s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,810nm,27.0s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,880nm,25.5s | | | | | | | |
| **QIZ** | **Qiongzhong** | **23.81 318** | | P | **P** | **16 18 18.4** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **23.83 195** | | P | **P** | **16 18 15.3** | **-2.4** |
| **PSA00** | **Pilbara Seismi** | **23.83 195** | | P | **P** | **16 18 16.2** | **-1.5** |
| PSA00 | | | | | IAmb | IAmb | 16 18 24.2 | |
| | comp=Z,31nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** comp=Z,79nm,0.8s | **23.83 195** | | P | **P** | **16 18 17.6** | **-0.1** |
| **HKPS** | **Hong Kong Po S** | **23.84 331** | | P | **P** | **16 18 16.6** | **-1.2** |
| **XMIS** | **Christmas Isla** | **23.86 240** | | P | **P** | **16 18 15.1** | **-3.0** |
| **MNAI** | **Manna** | **24.16 256** | | P | **P** | **16 18 19.3** | **-1.6** |
| **QZH** | **Quanzhou** | **24.48 343** | | *e*P | **P** | **16 18 23.2** | **-0.5** |
| QZH | | | | S | **S** | **16 22 44.6** | **+1.9** |
| QZH | | | | | LR | LR | | |
| | comp=Z,680nm,15.7s | | | | | | | |
| **MASI** | **Maura Aman, Be** comp=Z,3µmcomp=Z,220nm,1.2s | **24.61 259** | | P | **P** | **16 18 27.1** | **+2.0** |
| **UBPT** | **Khong Chiam** | **24.79 305** | | P | **P** | **16 18 26.0** | **-0.6** |
| **KRJI** | **Kerinci** comp=Z,207nm,0.9s | **25.21 262** | | P | **P** | **16 18 32.5** | **+1.9** |
| **JOW** | **Kunigami** comp=Z,56nm,0.8s,baz=185,slow=9.5,SNR=13 | **25.23 4** | | P | **P** | **16 18 30.6** | **+0.1** |
| JOW | | | | | IAmb | IAmb | 16 18 37.6 | |
| | comp=Z,97nm,1.0s | | | | | | | |
| **JOW** | **Kunigami** | **25.23 4** | | P | **P** | **16 18 32.1** | **+1.6** |
| **BKNI** | **Bangkinang** | **25.41 268** | | P | **P** | **16 18 30.2** | **-2.0** |
| **QIS** | **Mount Isa** baz=26,SNR=32 | **25.46 150** | | P | **P** | **16 18 32.4** | **-0.3** |
| **QIS** | **Mount Isa** | **25.46 150** | | P | **P** | **16 18 33.6** | **+1.0** |
| **IPM** | **Ipoh** | **25.53 277** | | P | **P** | **16 18 32.2** | **-1.1** |
| **IPM** | **Ipoh** | **25.53 277** | | P | **P** | **16 18 34.0** | **+0.7** |
| **IPM** | **Ipoh** | **25.53 277** | | P | **P** | **16 18 34.7** | **+1.4** |
| **KULM** | **Kulim** | **25.99 279** | | P | **P** | **16 18 36.2** | **-1.4** |
| KULM | | | | | IAmb | IAmb | 16 19 07.3 | |
| | comp=Z,126nm,2.0s | | | | | | |

comp=Z,27nm,0.7s
**PSI Prapat 27.51 273** P **P** **16 18 48.4 -3.0**
comp=Z,11nm,0.9s,baz=73,slow=11,SNR=10
**GSI Gunungsitoli 28.84 270** P **P** **16 19 05.1 +2.0**
comp=Z,49nm,0.9s
**GSI Gunungsitoli 28.84 270** P **P** **16 19 01.2 -1.9**
GSI IAmb IAmb 16 19 10.3
comp=Z,37nm,0.9s
**CTA Charters Tower 28.97 139** P **P** **16 19 04.9 +0.7**
comp=Z,22nm,1.0s,baz=322,slow=9.3,SNR=15
CTA LR LR 16 32 39.9
comp=Z,646nm,18.2s,baz=325,slow=40
**CTA Charters Tower 28.97 139** P **P** **16 19 05.9 +1.7**
**CTAO Charters Tower 28.97 139** P **P** **16 19 03.6 -0.6**
CTAO pmax pmax
comp=Z,36nm,1.1s
**CTAO Charters Tower 28.97 139** P **P** **16 19 03.6 -0.6**
**CTAO Charters Tower 28.97 139** P **P** **16 19 05.3 +1.1**
**MEEK Meekatharra 28.99 195** P **P** **16 19 04.6 +0.4**
baz=29,SNR=12
**MEEK Meekatharra 28.99 195** P **P** **16 19 05.0 +0.7**
**CNSH ChangSha 29.48 335** ⇑P **P** **16 19 06.5 -2.1**
CNSH S **S** **16 24 01.5 -0.3**
CNSH LR LR
comp=Z,460nm,17.6s
CNSH LR LR
comp=Z,510nm,16.7s
**JCJ Chichijima 29.59 29** P **P** **16 19 09.8 +0.2**
**SSE Sheshan 29.83 351** P **P** **16 19 13.6 +2.0**
SSE S **S** **16 24 13.4 +6.2**
SSE pmax pmax
comp=Z,5.0nm,0.8s
SSE pmax pmax
comp=Z,31nm,4.8s
SSE LR LR
comp=Z,160nm,18.0s
SSE LR LR
comp=Z,140nm,18.7s
**JSU Suzuyama 30.07 7** P **P** **16 19 13.4 -0.3**
JSU IAmb IAmb 16 19 20.7
comp=Z,56nm,1.4s
**OOD Oodnadatta 30.48 164** P **P** **16 19 18.2 +0.8**
**WHN Wuhan 31.05 340** ⇓P **P** **16 19 25.4 +2.9**
WHN pP **pP** **16 19 30.6 +1.3**
**NJ2 Nanjing 31.20 348** *e*P **P** **16 19 24.7 +1.0**
NJ2 pP **pP** **16 19 29.7 -0.8**
NJ2 sP **sP** **16 19 33.2 -0.1**
NJ2 S **S** **16 24 31.4 +2.8**
NJ2 pmax pmax
comp=Z,11nm,0.8s
NJ2 LR LR
comp=Z,360nm,12.3s
NJ2 LR LR
comp=Z,410nm,14.2s
NJ2 LR LR
comp=Z,270nm,18.1s
**GYA Guiyang 31.23 324** ⇑*i*P **P** **16 19 24.7 +0.4**
GYA pP pP 16 19 29.2 -1.9
GYA S **S** **16 24 33.2 +3.6**
GYA pmax pmax
comp=Z,16nm,1.0s
GYA LR LR
comp=Z,630nm,20.8s
GYA LR LR
comp=Z,440nm,18.8s
GYA LR LR
comp=Z,570nm,18.1s
**JNU Nakatsue 31.71 7** P **P** **16 19 28.0 -0.3**
comp=Z,23nm,0.8s,baz=202,slow=3.7,SNR=12
**JNU Nakatsue 31.71 7** P **P** **16 19 28.4 +0.1**
JNU IAmb IAmb 16 19 30.1
comp=Z,29nm,0.9s
**JNU Nakatsue 31.71 7** P **P** **16 19 30.0 +1.7**
**CM31 Chiang Mai Arr 31.78 304** P **P** **16 19 28.0 -1.0**
**CMAR Chiang Mai Arr 31.78 304** P **P** **16 19 27.1 -2.0**
comp=Z,2.9nm,0.9s,baz=131,slow=7.6,SNR=28
CMAR PcP **PcP** **16 22 22.0 +1.8**
comp=Z,1.8nm,0.8s,baz=162,slow=2.4,SNR=6.6
CMAR LR LR 16 33 31.8
comp=Z,249nm,18.5s,baz=115,slow=39
**CMAR Chiang Mai Arr 31.78 304** P **P** **16 19 27.9 -1.1**
CMAR 16 22 21.5
**CMAR Chiang Mai Arr 31.78 304** P **P** **16 19 27.9 -1.1**
CMAR **PcP** **16 22 21.5 +1.3**
**CHTO Chiang Mai 31.95 304** P **P** **16 19 29.4 -1.2**
CHTO pmax pmax
comp=Z,8.0nm,0.8s
**CHTO Chiang Mai 31.95 304** P **P** **16 19 29.4 -1.2**
**CHTO Chiang Mai 31.95 304** P **P** **16 19 30.8 +0.3**
**MORW Morawa 32.00 197** P **P** **16 19 31.5 +0.7**
baz=32,SNR=14
**MORW Morawa 32.00 197** P **P** **16 19 30.1 -0.7**
MORW IAmb IAmb 16 19 32.0
comp=Z,41nm,0.9s
**MORW Morawa 32.00 197** P **P** **16 19 31.7 +0.9**
**FORT Forrest 32.16 177** P **P** **16 19 32.9 +0.8**
baz=32,SNR=19
**FORT Forrest 32.16 177** P **P** **16 19 30.9 -1.2**
**FORT Forrest 32.16 177** P **P** **16 19 33.8 +1.6**
**INKA Innaminka 32.19 156** P **P** **16 19 33.9 +1.4**
**PATS Pohnpei 32.23 80** P **P** **16 19 32.8 -0.2**
**MULG Mulgathing 32.45 168** P **P** **16 19 35.7 +0.9**
**KMI Kunming 32.76 318** ⇑P **P** **16 19 39.1 +1.3**
KMI pP pP 16 19 41.8 -2.8
KMI PcP **PcP** **16 22 22.4 -0.6**
KMI S **S** **16 24 58.4 +4.8**
KMI sS sS 16 25 03.2 -1.5
KMI pmax pmax
comp=Z,15nm,1.1s
KMI pmax pmax
comp=Z,76nm,4.4s
KMI LR LR
comp=Z,440nm,19.5s
KMI LR LR
comp=Z,230nm,18.0s
KMI LR LR
comp=Z,600nm,24.0s
**JMN Monobe 32.80 12** P **P** **16 19 37.6 -0.2**
JMN IAmb IAmb 16 20 08.4
comp=Z,44nm,1.0s
**QLP Quilpie 32.80 150** P **P** **16 19 38.0 +0.1**
baz=33,SNR=5.8
**ENH Enshi 32.80 332** IAmb IAmb 16 19 47.9
comp=Z,50nm,1.0s
**BLDU Ballidu 33.27 195** P **P** **16 19 42.5 +0.6**
baz=33,SNR=27
**BLDU Ballidu 33.27 195** P **P** **16 19 42.8 +0.9**
**LCRK Leigh Creek 33.72 161** P **P** **16 19 47.0 +1.2**
**KLBR Kellerberrin 33.94 193** P **P** **16 19 48.2 +0.4**
baz=34,SNR=15
**KLBR Kellerberrin 33.94 193** P **P** **16 19 48.4 +0.6**
**RK1H Rockhampton Ha 34.08 138** P **P** **16 19 49.8 +0.7**
comp=Z,69nm,1.0s
**PZH PanZhiHua 34.34 318** P **P** **16 19 51.0 -0.5**
PZH pP **pP** **16 19 56.2 -2.1**
PZH sP **sP** **16 19 58.7 -2.4**
PZH S **S** **16 25 20.0 +2.0**
PZH ScS **ScS** **16 30 16.1 +2.2**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,100nm,4.0s
PZH LR LR
comp=Z,880nm,22.0s
PZH LR LR
comp=Z,1μm,23.3s
PZH LR LR
comp=Z,2μm,25.0s
**MUN Mundaring 34.69 195** P **P** **16 19 55.3 +1.0**
baz=35,SNR=7.0
**MUN Mundaring 34.69 195** P **P** **16 19 55.4 +1.1**
**INU Inuyama 35.07 15** P **P** **16 19 57.3 -0.2**
INU IAmb IAmb 16 20 11.7
comp=Z,45nm,1.1s
**HNR Honiara 35.12 109** LR LR 16 33 55.8
comp=Z,281nm,21.5s,baz=275,slow=36
**HNR Honiara 35.12 109** P **P** **16 19 57.1 -1.1**
HNR pmax pmax
comp=Z,143nm,1.3s
**HNR Honiara 35.12 109** P **P** **16 19 57.1 -1.1**
**RMQ Roma 35.21 144** P **P** **16 19 59.6 +0.8**
baz=35,SNR=4.2
**BBOO Buckleboo 35.34 166** P **P** **16 19 59.6 -0.2**
baz=36,SNR=11
**BBOO Buckleboo 35.34 166** P **P** **16 19 59.4 -0.5**
**BBOO Buckleboo 35.34 166** P **P** **16 20 00.8 +1.0**
**NWAO Narrogin (SRO) 35.34 193** P **P** **16 19 59.7 -0.2**
NWAO pmax pmax
comp=Z,83nm,1.4s
**NWAO Narrogin (SRO) 35.34 193** P **P** **16 19 59.7 -0.2**
NWAO IAmb IAmb 16 20 06.1
comp=Z,83nm,1.4s
**NWAO Narrogin (SRO) 35.34 193** P **P** **16 20 01.1 +1.2**
**LYN LuoYang 35.35 340** *e*P **P** **16 19 59.4 -0.5**
LYN S **S** **16 25 31.1 -1.9**
LYN LR LR
comp=Z,330nm,21.4s
LYN LR LR
comp=Z,700nm,24.1s
**JGF Kuroka 35.40 15** P **P** **16 19 59.5 -0.9**
JGF IAmb IAmb 16 20 06.1
comp=Z,48nm,1.6s
**TIA Tai'an 35.58 347** P **P** **16 20 01.9 0.0**
TIA PP **PnPn** **16 21 21.6 +0.1**
TIA S **S** **16 25 33.7 -2.8**
TIA pmax pmax
comp=Z,7.0nm,0.7s
TIA pmax pmax
comp=Z,130nm,4.9s
TIA LR LR
comp=Z,230nm,16.4s
TIA LR LR
comp=Z,290nm,18.5s
TIA LR LR
comp=Z,420nm,13.5s
**KSAR Wonju Array Be 35.77 2** P **P** **16 20 02.4 -1.1**
**KSAR Wonju Array Be 35.77 2** P **P** **16 20 02.4 -1.1**
**KSRS Korea Array 35.79 2** P **P** **16 20 05.0 +1.5**
comp=Z,6.9nm,0.7s,baz=178,slow=9.4,SNR=24
KSRS PcP **PcP** **16 22 32.9 +1.8**
comp=Z,2.8nm,0.8s,baz=190,slow=3.0,SNR=3.8
**INCN Inchon 35.79 0** P **P** **16 20 02.5 -1.2**
INCN pmax pmax
comp=Z,22nm,1.0s
**INCN Inchon 35.79 0** P **P** **16 20 02.5 -1.2**
**KS19 Wonju Array Si 35.83 2** P **P** **16 20 01.7 -2.4**
**EIDS Eidsvold 35.84 140** P **P** **16 20 03.7 -0.6**
baz=36,SNR=5.8
**EIDS Eidsvold 35.84 140** P **P** **16 20 02.7 -1.5**
EIDS IAmb IAmb 16 20 10.1
comp=Z,50nm,1.3s
**STKA Stephens Creek 36.20 158** P **P** **16 20 07.1 -0.1**
comp=Z,42nm,0.9s,baz=331,slow=8.7,SNR=44
**STKA Stephens Creek 36.20 158** P **P** **16 20 07.0 -0.1**
baz=36,SNR=43
**STKA Stephens Creek 36.20 158** P **P** **16 20 06.1 -1.1**
STKA pmax pmax
comp=Z,10.0nm,1.0s
**STKA Stephens Creek 36.20 158** P **P** **16 20 06.0 -1.1**
**STKA Stephens Creek 36.20 158** P **P** **16 20 08.0 +0.8**
**NAPP Napperby 36.25 163** P **P** **16 20 09.1 +1.5**
**XAN Xi'an 36.26 335** P **P** **16 20 06.8 -1.0**
XAN pP pP 16 20 11.8 -2.8
XAN sP sP 16 20 14.7 -2.7
XAN PP **PP** **16 21 32.5 +2.0**
XAN S **S** **16 25 49.1 +2.0**
XAN sS sS 16 25 58.1 -0.2
XAN PcS **PcS** **16 26 18.7 -1.7**
XAN SS **SnSn** **16 28 16.3 +1.6**
XAN pmax pmax
comp=Z,30nm,1.2s
XAN pmax pmax
comp=Z,230nm,4.3s
XAN LR LR
comp=Z,500nm,15.8s
XAN LR LR
comp=Z,410nm,15.5s
XAN LR LR
comp=Z,530nm,17.4s
**CD2 Chengdu 36.26 326** ⇓*i*P **P** **16 20 07.4 -0.5**
CD2 S **S** **16 25 52.0 +4.8**
CD2 pmax pmax
comp=Z,30nm,1.1s
CD2 pmax pmax
comp=Z,170nm,5.1s
CD2 LR LR
comp=Z,60nm,18.4s
CD2 LR LR
comp=Z,470nm,15.7s
CD2 LR LR
comp=Z,740nm,18.6s
**MAJO Matsushiro 36.52 16** *i*P **P** **16 20 09.4 -0.5**
MAJO pmax pmax
comp=Z,35nm,1.0s
**MAJO Matsushiro 36.52 16** P **P** **16 20 08.7 -1.3**
MAJO IAmb IAmb 16 20 15.7
comp=Z,29nm,0.9s
**MAT Matsushiro 36.52 16** P **P** **16 20 09.1 -0.8**
**MJAR Matsushiro Arr 36.52 16** P **P** **16 20 09.5 -0.4**
comp=Z,11nm,0.9s,baz=184,slow=9.1,SNR=14
MJAR PcP **PcP** **16 22 34.6 +1.2**
comp=Z,5.6nm,0.9s,baz=181,slow=2.6,SNR=4.6
**MJAR Matsushiro Arr 36.52 16** P **P** **16 20 08.9 -1.0**
MJAR 16 22 34.6
MJAR pmax pmax
comp=Z,8.0nm,1.0s
**MJAR Matsushiro Arr 36.52 16** P **P** **16 20 08.9 -1.0**
**MJB9 Matsu-Tunnel 36.52 16** P **P** **16 20 08.9 -1.0**
MJB9 IAmb IAmb 16 20 15.6
comp=Z,30nm,0.9s
**HTT Hallett 36.71 162** P **P** **16 20 13.6 +2.0**
baz=37,SNR=7.4
**HTT Hallett 36.71 162** P **P** **16 20 14.2 +2.6**
**JYT Yasato 36.82 19** P **P** **16 20 10.1 -2.3**
**RKGY Rocky Gully 37.02 193** P **P** **16 20 16.3 +2.2**
baz=37,SNR=21
**RKGY Rocky Gully 37.02 193** P **P** **16 20 16.6 +2.5**
**HNS HongShan 37.30 345** ⇓P **P** **16 20 16.4 -0.1**
HNS S **S** **16 26 00.3 -2.4**
HNS pmax pmax
comp=Z,18nm,1.0s
HNS LR LR
comp=Z,310nm,15.3s
HNS LR LR
comp=Z,710nm,23.1s
**DL2 Dalian 37.47 354** P **P** **16 20 19.2 +1.3**
DL2 S **S** **16 26 08.9 +3.7**
DL2 pmax pmax
comp=Z,97nm,0.8s
DL2 pmax pmax
comp=Z,170nm,3.5s
DL2 LR LR
comp=Z,320nm,19.7s
DL2 LR LR
comp=Z,520nm,20.6s
DL2 LR LR
comp=Z,510nm,17.5s
**CMSA Cobar Meteorol 37.62 153** P **P** **16 20 19.9 +0.5**
baz=38,SNR=11
**CMSA Cobar Meteorol 37.62 153** P **P** **16 20 20.7 +1.3**
**JSD Sado 37.94 15** P **P** **16 20 19.7 -2.2**
**TWOA Tennyson Woods 38.10 164** P **P** **16 20 25.6 +2.3**
comp=Z,56nm,0.9s
**JMM Marumori 38.51 18** P **P** **16 20 25.9 -0.8**
JMM IAmb IAmb 16 20 33.6
comp=Z,57nm,0.8s
**BJI Beijing 39.46 348** P **P** **16 20 34.7 +0.1**
BJI S **S** **16 26 39.1 +3.8**
BJI pmax pmax
comp=Z,21nm,0.9s
BJI pmax pmax
comp=Z,110nm,4.2s
BJI LR LR
comp=Z,210nm,19.5s
BJI LR LR
comp=Z,230nm,19.5s
BJI LR LR
comp=Z,270nm,22.7s
**ARMA Armidale 39.82 145** P **P** **16 20 39.2 +1.3**
baz=40,SNR=8.4
**ARMA Armidale 39.82 145** P **P** **16 20 36.3 -1.7**
ARMA IAmb IAmb 16 20 40.2
comp=Z,44nm,0.9s
**ARMA Armidale 39.82 145** P **P** **16 20 39.8 +1.8**
**LZH Lanzhou 40.26 331** *e*P **P** **16 20 42.0 +0.4**
LZH pP pP 16 20 47.3 -1.2
LZH sP sP 16 20 51.2 -0.1
LZH PcP **PcP** **16 22 48.8 +3.6**
LZH S **S** **16 26 55.0 +7.2**
LZH pmax pmax
comp=Z,27nm,1.1s
LZH pmax pmax
comp=Z,180nm,5.4s
LZH LR LR
comp=Z,550nm,17.9s
LZH LR LR
comp=Z,490nm,14.1s
LZH LR LR
comp=Z,670nm,18.0s
**ARPS Mount Arapiles 40.70 161** P **P** **16 20 45.5 +0.5**
baz=41,SNR=16
**ARPS Mount Arapiles 40.70 161** P **P** **16 20 47.1 +2.1**
**SHL Shillong 40.97 309** P **P** **16 20 46.3 -1.4**
SHL pmax pmax
comp=Z,24nm,0.8s
**SHL Shillong 40.97 309** P **P** **16 20 46.3 -1.4**
**MSHR Mys Shultsa 41.10 5** *i*P **P** **16 20 49.2 +1.0**
MSHR pmax pmax
comp=Z,22nm,1.0s
**HHC Hu-ho-hao-te 41.40 343** *e*P **P** **16 20 51.8 +1.0**
HHC S **S** **16 27 09.5 +5.0**
HHC pmax pmax
comp=Z,18nm,1.0s
HHC pmax pmax
comp=Z,130nm,4.5s
HHC LR LR
comp=Z,280nm,20.4s
HHC LR LR
comp=Z,340nm,17.3s
HHC LR LR
comp=Z,780nm,21.1s
**MGCD Mangrove Creek 41.66 148** P **P** **16 20 55.9 +2.9**
comp=Z,42nm,1.6s
**VLA Vladivostok 41.71 6** *i*P **P** **16 20 52.8 -0.4**
VLA pmax pmax
comp=Z,22nm,1.0s
**CN2 Changchun 42.11 359** *e*P **P** **16 20 54.3 -2.2**
CN2 pP sP 16 21 06.7 +0.5
CN2 S **S** **16 27 11.1 -3.6**
CN2 sS sS 16 27 31.8 +5.8
CN2 pmax pmax
comp=Z,10.0nm,1.0s
CN2 LR LR
comp=Z,250nm,16.0s
CN2 LR LR
comp=Z,110nm,16.0s
CN2 LR LR
comp=Z,170nm,17.0s
**CAN Canberra 42.30 152** P **P** **16 20 58.0 -0.2**
CAN pmax pmax
comp=Z,63nm,1.3s
**CAN Canberra 42.30 152** P **P** **16 20 58.0 -0.2**
CAN IAmb IAmb 16 21 15.6
comp=Z,63nm,1.3s
**CAN Canberra 42.30 152** P **P** **16 21 00.1 +1.9**
**CNB Canberra Magne 42.46 152** P **P** **16 21 02.6 +3.0**
**TOO Toolangi 42.72 157** P **P** **16 21 01.3 -0.3**
TOO pmax pmax
comp=Z,89nm,1.9s
**TOO Toolangi 42.72 157** P **P** **16 21 01.3 -0.3**
TOO IAmb IAmb 16 21 52.8
comp=Z,89nm,1.9s
**TOO Toolangi 42.72 157** P **P** **16 21 03.6 +2.0**
**USA0B Ussuriysk Arra 42.79 6** P **P** **16 21 01.3 -0.7**
USA0B pmax pmax
comp=Z,21nm,0.8s
**USA0B Ussuriysk Arra 42.79 6** P **P** **16 21 01.3 -0.7**
**USRK Ussuriysk Ar. 42.79 6** P **P** **16 21 03.6 +1.6**
comp=Z,19nm,0.7s,baz=190,slow=6.8,SNR=45
**USRK Ussuriysk Ar. 42.79 6** P **P** **16 21 01.7 -0.3**
**USRK Ussuriysk Ar. 42.79 6** P **P** **16 21 01.7 -0.3**
**MDJ Mudanjiang 43.01 3** P **P** **16 21 00.6 -3.2**
MDJ pmax pmax
comp=Z,130nm,5.5s
**JEM Erimo 43.04 18** P P 16 21 16.9 +13
JEM IAmb IAmb 16 22 15.3
comp=Z,92nm,1.5s
**WAKE Wake Island 43.16 63** P **P** **16 21 04.0 -1.3**
WAKE IAmb IAmb 16 22 16.6
comp=Z,120nm,1.1s
**XLT XiLinHaoTe 43.19 349** ⇓*i*P **P** **16 21 05.8 +0.4**
XLT sP pP 16 21 12.2 -0.1
XLT S **S** **16 27 33.2 +2.4**
XLT ScS **ScS** **16 31 06.2 +1.8**
XLT pmax pmax
comp=Z,46nm,1.0s
XLT pmax pmax
comp=Z,210nm,4.7s
XLT LR LR
comp=Z,350nm,15.2s
XLT LR LR
comp=Z,340nm,20.6s
XLT LR LR
comp=Z,430nm,18.5s
**JEW Eniwo 43.28 16** P **P** **16 21 06.6 +0.6**
**LSA Lhasa 43.69 313** P **P** **16 21 11.0 +0.9**
**SANVU Saraoutou 43.70 114** P **P** **16 21 07.8 -2.0**
SANVU IAmb IAmb 16 21 17.4
comp=Z,70nm,1.2s
**BNX BinXian 44.05 1** ⇑P **P** **16 21 12.5 +0.4**
BNX pmax pmax
comp=Z,25nm,1.0s
BNX pmax pmax
comp=Z,210nm,7.1s
**ASAJ Asahikawa 44.78 17** P **P** **16 21 19.6 +1.5**
comp=Z,21nm,0.9s,baz=158,slow=3.8,SNR=13
ASAJ LR LR 16 39 47.1
comp=Z,341nm,21.8s,baz=334,slow=36
**ASAJ Asahikawa 44.78 17** P **P** **16 21 17.4 -0.7**
ASAJ pmax pmax
comp=Z,71nm,1.5s
**JKA Kamikawa-asahi 44.78 17** P **P** **16 21 17.4 -0.7**
JKA IAmb IAmb 16 22 41.5
comp=Z,71nm,1.5s
**CHLP Challavanipeta 44.83 295** *e*P **P** **16 21 18.7 -0.1**
**GTA Gaotai 44.84 331** ⇓P **P** **16 21 18.4 -0.4**
GTA pP pP 16 21 25.0 -0.7
GTA sP sP 16 21 28.0 -0.5
GTA PcP **PcP** **16 23 01.9 +1.5**
GTA SS SS 16 31 12.5 -4.3
GTA pmax pmax
comp=Z,7.0nm,0.9s
GTA pmax pmax
comp=Z,91nm,5.5s
GTA LR LR
comp=Z,270nm,20.4s
GTA LR LR
comp=Z,270nm,20.0s
GTA LR LR
comp=Z,560nm,19.6s
**TAPN Taplejung 45.10 308** *e*P **P** **16 21 20.2 -1.0**
comp=Z,93nm,1.5s
**ODAN Odare 45.13 307** *e*P **P** **16 21 20.5 -0.9**
comp=Z,35nm,0.8s
**LHI Lord Howe Isla 45.16 139** P **P** **16 21 20.5 -0.7**
LHI IAmb IAmb 16 22 53.5
comp=Z,81nm,1.2s
**GOMU GeErMu 45.24 323** P **P** **16 21 22.5 +0.2**
GOMU pP pP 16 21 27.5 -1.8
GOMU PcP **PcP** **16 23 04.6 +2.4**
GOMU S **S** **16 28 02.2 +0.7**
GOMU SS **ScS** **16 31 14.0 -4.3**
GOMU pmax pmax
comp=Z,14nm,1.2s
GOMU pmax pmax
comp=Z,140nm,5.0s
GOMU LR LR
comp=Z,250nm,17.7s
GOMU LR LR
comp=Z,310nm,23.2s
GOMU LR LR
comp=Z,570nm,22.4s
**DVP Devils Point 45.36 117** P **P** **16 21 24.8 +1.8**
**DZM Mont Dzumac 45.55 123** *e*P **P** **16 21 24.8 +0.2**
comp=Z,62nm,1.1s
**DZM Mont Dzumac 45.55 123** *e*LR LR 16 34 06.0
comp=Z,476nm,24.9s
**DZM Mont Dzumac 45.55 123** P **P** **16 21 26.4 +1.8**
comp=Z,15nm,0.9s,baz=345,slow=7.0,SNR=8.6
DZM LR LR 16 42 12.6
comp=Z,208nm,20.6s,baz=321,slow=38
**DZM Mont Dzumac 45.55 123** P **P** **16 21 22.8 -1.9**
DZM IAmb IAmb 16 21 26.7
comp=Z,39nm,1.2s
**DZM Mont Dzumac 45.55 123** P **P** **16 21 25.6 +1.0**
**ONTNC Ouen Toro 45.66 124** P **P** **16 21 23.2 -2.2**

ONTNC IAmb IAmb 16 21 26.6
comp=Z,57nm,1.2s
**LIFNC LIFOU 45.68 121** P **P** **16 21 23.2 -2.3**
**LIFNC LIFOU 45.68 121** P **P** **16 21 26.9 +1.4**
**RAMN Ramite 45.80 307** *e*P **P** **16 21 25.7 -1.0**
comp=Z,6.2nm,0.4s
**PALK Pallekele 45.92 279** LR LR 16 43 18.3
comp=Z,229nm,19.8s,baz=206,slow=40
**OUENC Ouen Island, N 46.03 124** P **P** **16 21 26.7 -1.6**
OUENC IAmb IAmb 16 21 31.8
comp=Z,26nm,1.0s
**JIRN Jiri 46.44 308** *e*P **P** **16 21 31.1 -0.8**
**PINNC Pines Island, 46.62 123** P **P** **16 21 31.3 -1.6**
**MARNC Mare, Loyalty 46.64 122** P **P** **16 21 31.8 -1.3**
**GLAD Gladstone 46.65 157** P **P** **16 21 34.5 +1.7**
comp=Z,19nm,0.8s
**PVM Polavaram 46.72 292** *e*P **P** **16 21 33.2 -0.5**
**GUN Gumba 46.80 308** *e*P **P** **16 21 33.9 -0.8**
comp=Z,51nm,0.7s
**PKI Pulchoki 47.02 307** *e*P **P** **16 21 35.5 -0.9**
**PKIN Phulchoki 47.03 307** *e*P **P** **16 21 35.5 -0.9**
comp=Z,4.5nm,0.4s
**KKN Kakani 47.22 307** *e*P **P** **16 21 36.7 -1.1**
comp=Z,6.7nm,0.5s
**DMN Daman 47.28 307** *e*P **P** **16 21 37.1 -1.2**
**YSS Yuzh-Sakhalins 47.44 15** *e*P **P** **16 21 40.0 +1.1**
YSS *e* 16 21 53.3
YSS *e* 16 23 08.2
YSS pmax pmax
comp=Z,20nm,1.0s
YSS MLR MLR
comp=Z,200nm,20.0s
**YSS Yuzh-Sakhalins 47.44 15** P **P** **16 21 37.0 -1.9**
YSS IAmb IAmb 16 21 40.9
comp=Z,22nm,0.9s
**MYLAV Mylavaram 47.51 291** *e*P **P** **16 21 40.6 +0.6**
**KLR Kul'dur 47.75 5** P **P** **16 21 42.1 +0.8**
comp=Z,27nm,1.0s,baz=202,slow=4.9,SNR=48
**KLR Kul'dur 47.75 5***ce*P **P** **16 21 41.0 -0.3**
KLR pmax pmax
comp=Z,24nm,1.0s
**SKHT Srikalahasti 47.76 287** *e*P **P** **16 21 41.5 -0.4**
**GKN Gorkha 47.83 307** *e*P **P** **16 21 41.3 -1.2**
comp=Z,23nm,0.9s
**HIA Hailar 47.91 354** IAmb IAmb 16 21 50.2
comp=Z,36nm,1.1s
**ADKI Addanki 47.93 290** *e*P **P** **16 21 42.8 -0.5**
**KOLN Koldanda 48.55 307** *e*P **P** **16 21 47.5 -0.7**
comp=Z,62nm,0.7s
**DANN Dangsing 48.67 307** *e*P **P** **16 21 48.0 -1.2**
comp=Z,60nm,0.8s
**NJS Nagarjunasagar 48.71 291** *e*P **P** **16 21 47.8 -1.4**
**RCLA Racherla 48.80 289** *e*P **P** **16 21 48.7 -1.3**
**SRLM Srisailam 49.00 290** *e*P **P** **16 21 51.3 -0.2**
**ULN Ulaanbaatar 49.12 343***ce*P **P** **16 21 52.5 +0.4**
ULN pmax pmax
comp=Z,20nm,1.3s
**ULN Ulaanbaatar 49.12 343** P **P** **16 21 51.2 -0.9**
ULN IAmb IAmb 16 21 58.0
comp=Z,21nm,1.1s
**PYUN Piuthan 49.18 307** *e*P **P** **16 21 52.4 -0.6**
comp=Z,73nm,0.8s
**CUPL Choutuppal 49.23 292** *e*P **P** **16 21 52.9 -0.4**
**UGL Uglegorsk 49.25 14** *e*P **P** **16 21 54.2 +1.4**
UGL pmax pmax
comp=Z,70nm,0.9s
**RPR Rampur 49.27 294** *e*P **P** **16 21 51.8 -1.7**
**SONM Songino Array 49.29 342** P **P** **16 21 53.6 +0.2**
comp=Z,8.2nm,0.7s,baz=149,slow=8.7,SNR=33
SONM LR LR 16 44 23.5
comp=Z,256nm,20.7s,baz=153,slow=38
**SONM Songino Array 49.29 342** P **P** **16 21 52.1 -1.3**
SONM PcP **PcP** **16 23 16.6 +0.6**
**HYBB Hyderabad (bro 49.60 292** *e*P **P** **16 21 54.7 -1.5**
**GRNR Gornyy 49.80 8**⇓ *i*P **P** **16 21 58.6 +1.6**
GRNR pmax pmax
comp=N,8.0nm,0.9s
GRNR pmax pmax
comp=Z,20nm,0.8s
GRNR MLR MLR
comp=E,80nm,19.0s
GRNR MLR MLR
comp=N,120nm,20.0s
GRNR MLR MLR
comp=Z,200nm,19.0s
**SRSP Sriramsagar 50.16 293** *e*P **P** **16 21 58.8 -1.5**
**URV Uravakonda 50.31 288** *e*P **P** **16 21 59.3 -2.2**
**TYV Tymovskoe 51.05 13** *e*P **P** **16 22 08.1 +1.6**
TYV pmax pmax
comp=Z,10.0nm,1.0s
TYV pmax pmax
comp=Z,100nm,3.4s
**CIT Chita 51.47 350** *e*P **P** **16 22 11.4 +1.7**
CIT *e* 16 22 20.0
CIT pmax pmax
comp=Z,163nm,1.4s
**KLRI Killari 51.56 292** *e*P **P** **16 22 09.1 -1.9**
**ZEA Zeya 52.05 1** *e*P **P** **16 22 14.3 +0.4**
ZEA pmax pmax
comp=N,10.0nm,0.7s
ZEA pmax pmax
comp=Z,10.0nm,0.7s
ZEA MLR MLR
comp=N,200nm,23.0s
ZEA MLR MLR
comp=Z,200nm,23.0s
**ZAK Zakamensk 52.50 342** *e*P **P** **16 22 17.5 0.0**
ZAK pmax pmax
comp=Z,10.0nm,1.3s
**FUNA Funafuti 53.54 102** P **P** **16 22 24.9 -0.7**
**IRK Irkutsk 53.84 343** *e*P P 16 22 32.4 +5.2
IRK pmax pmax
comp=Z,35nm,0.3s
**MSVF Nonsavu 54.31 113** LR LR 16 45 57.7
comp=Z,275nm,18.8s,baz=301,slow=36
**MSVF Nonsavu 54.31 113** P **P** **16 22 31.0 -0.2**
MSVF pmax pmax
comp=Z,59nm,1.1s
**MSVF Nonsavu 54.31 113** P **P** **16 22 31.0 -0.2**
MSVF IAmb IAmb 16 22 33.7
comp=Z,59nm,1.1s
**MOY Mondy 54.35 341** *e*P **P** **16 22 31.6 +0.6**
MOY pmax pmax
comp=Z,25nm,1.4s
**WMQ Urumqi 54.36 326** *e*P **P** **16 22 31.0 -0.2**
WMQ pP pP 16 22 37.8 -0.5
WMQ sP sP 16 22 41.9 +0.9
WMQ PcP **PcP** **16 23 35.3 +0.4**
WMQ pmax pmax
comp=Z,32nm,0.9s
WMQ pmax pmax
comp=Z,190nm,4.5s
WMQ LR LR
comp=Z,470nm,17.1s
WMQ LR LR
comp=Z,340nm,18.5s
WMQ LR LR
comp=Z,300nm,21.5s
**KNGR Kungurtug, Tuv 54.70 338** *i*P **P** **16 22 33.1 -0.5**
**PEA0B Petropavlovsk- 57.58 22** *i*P **P** **16 22 53.8 -0.2**
**PETK Petropavlovsk- 57.58 22** P **P** **16 22 55.5 +1.5**
comp=Z,12nm,0.8s,baz=194,slow=6.7,SNR=40
PETK LR LR 16 47 40.5
comp=Z,109nm,20.0s,baz=197,slow=36
**PETK Petropavlovsk- 57.58 22** P **P** **16 22 52.7 -1.3**
**PETK Petropavlovsk- 57.58 22** P **P** **16 22 52.7 -1.3**
**PET Petropavlovsk 57.88 22** *e*P **P** **16 22 56.8 +0.8**
PET *e*S **S** **16 30 53.0 -1.3**
PET pmax pmax
comp=Z,16nm,1.3s
PET pmax pmax
comp=Z,200nm,8.7s
PET MLR MLR
comp=Z,300nm,22.0s
**PET Petropavlovsk 57.88 22** P **P** **16 22 55.5 -0.5**
PET IAmb IAmb 16 23 23.5
comp=Z,46nm,1.4s
**ZSN Zaisan 58.20 328** *e*P **P** **16 22 57.4 -1.0**
**ZSN Zaisan 58.20 328** *e*P **P** **16 22 57.5 -1.0**
baz=328
**DGZ Jazzator, Alta 58.36 331** *i*P **P** **16 22 58.6 -1.2**
DGZ pmax pmax
comp=Z,10.0nm,0.8s
**PDGK Podgornoye 58.93 322** P **P** **16 23 02.8 -1.0**
**DCZ Deep Cove 59.04 148** P **P** **16 23 04.8 +0.4**

**NIL Nilore 59.04 309** P **P** **16 23 03.1 -1.6**
NIL pmax pmax
comp=Z,15nm,0.9s
**NIL Nilore 59.04 309** P **P** **16 23 03.1 -1.6**
NIL IAmb IAmb 16 23 13.1
comp=Z,15nm,0.9s
**PRZ Przheval'sk 59.18 320** P **P** **16 23 05.0 -0.6**
PRZ pmax pmax
comp=Z,38nm,1.2s
**PRZ Przheval'sk 59.18 320** P **P** **16 23 05.0 -0.6**
PRZ IAmb IAmb 16 23 13.9
comp=Z,38nm,1.2s
**TARG Taragay, Kyrgy 59.19 319** IAmb IAmb 16 23 20.6
comp=Z,18nm,0.9s
**MK31 Makanchi Array 59.20 326** *e*P **P** **16 23 04.6 -0.8**
**MK31 Makanchi Array 59.20 326** P **P** **16 23 04.0 -1.4**
MK31 IAmb IAmb 16 23 09.9
comp=Z,16nm,0.9s
**MKAR Makanchi Array 59.20 326** P **P** **16 23 05.0 -0.4**
comp=Z,18nm,0.7s,baz=123,slow=8.6,SNR=140
MKAR LR LR 16 49 30.3
comp=Z,388nm,21.4s,baz=104,slow=37
MKAR PKPPKP P'P'df 16 52 47.5 +9.2
comp=Z,1.3nm,0.9s,baz=302,slow=2.3,SNR=7.4
**MKAR Makanchi Array 59.20 326** P **P** **16 23 04.2 -1.3**
**FOZ Fox Glacier 59.32 144** P **P** **16 23 06.2 0.0**
**MAKZ Makanchi 59.38 326** P **P** **16 23 05.5 -1.2**
MAKZ pmax pmax
comp=Z,30nm,1.0s
**MAKZ Makanchi 59.38 326** P **P** **16 23 05.5 -1.2**
MAKZ IAmb IAmb 16 23 11.7
comp=Z,30nm,1.0s
**KSH Kashi 59.40 316** P **P** **16 23 08.2 +1.1**
KSH pP pP 16 23 13.6 -0.7
KSH sP sP 16 23 16.6 -0.5
KSH PcP **PcP** **16 23 56.8 +2.0**
KSH PP PP 16 25 26.9 +8.4
KSH S **S** **16 31 07.8 -7.1**
KSH pmax pmax
comp=Z,6.0nm,1.1s
**QRZ Quartz Range 59.42 141** P **P** **16 23 06.2 -0.8**
QRZ IAmb IAmb 16 23 37.8
comp=Z,57nm,1.3s
**SATY Saty 59.47 321** *e*P **P** **16 23 06.2 -1.3**
SATY pmax pmax
comp=Z,15nm,0.9s
**SATY Saty 59.47 321** *e*P **P** **16 23 06.2 -1.3**
comp=Z,15nm,0.9s,baz=321
**KPKS Kokpek 59.50 321** *e*P **P** **16 23 07.3 -0.4**
**KPKS Kokpek 59.50 321** *e*P **P** **16 23 06.8 -0.9**
comp=Z,6.3nm,0.7s,baz=321
**ZHN Zhinishke 59.51 321** *e*P **P** **16 23 06.4 -1.3**
**ZHN Zhinishke 59.51 321** *e*P **P** **16 23 06.5 -1.3**
baz=321
**HIZ Hauiti 59.74 137** P **P** **16 23 08.0 -1.3**
**WHZ Wether Hill Ro 59.74 148** P **P** **16 23 08.5 -0.7**
**KDJ Kajisay 59.80 319** P **P** **16 23 09.4 -0.5**
KDJ pmax pmax
comp=Z,21nm,1.1s
**KDJ Kajisay 59.80 319** P **P** **16 23 09.4 -0.5**
KDJ IAmb IAmb 16 23 21.0
comp=Z,21nm,1.1s
**MIDW Midway 59.80 58** P **P** **16 23 08.8 -1.1**
**LBZ Lake Benmore 60.05 145** P **P** **16 23 10.4 -0.9**
LBZ IAmb IAmb 16 23 19.7
comp=Z,30nm,0.9s
**RPZ Rata Peaks 60.15 144** P **P** **16 23 10.6 -1.5**
**THZ Tophouse 60.17 141** P **P** **16 23 10.8 -1.4**
THZ IAmb IAmb 16 23 28.6
comp=Z,21nm,1.0s
**MDOK Medeo 60.38 320** P **P** **16 23 12.8 -1.0**
**MDOK Medeo 60.38 320** *e*P **P** **16 23 12.7 -1.2**
baz=320
**ARXS Arharly 60.41 322** *e*P **P** **16 23 13.4 -0.5**
**YAK Yakutsk 60.41 2***d i*P **P** **16 23 14.0 +0.6**
YAK *e**PP **sP** **16 23 28.3 +5.0**
YAK *e* 16 23 58.6
YAK *e* 16 25 24.2
YAK *e*S **S** **16 31 26.9 +0.1**
YAK *e**SS sS 16 31 52.5 +14
YAK *e* 16 33 03.9
YAK pmax pmax
comp=Z,63nm,0.8s
YAK pmax pmax
comp=N,9.0nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.7s
YAK pmax pmax
comp=Z,53nm,2.1s
YAK pmax pmax
comp=N,36nm,2.3s
YAK pmax pmax
comp=E,36nm,2.3s
YAK smax smax
comp=N,37nm,2.0s
YAK smax smax
comp=E,27nm,1.8s
**YAK Yakutsk 60.41 2** P **P** **16 23 13.1 -0.3**
**TDK Taldyqorghan 60.46 323** *e*P **P** **16 23 13.5 -0.7**
TDK pmax pmax
comp=Z,13nm,0.6s
**TDK Taldyqorghan 60.46 323** *e*P **P** **16 23 13.6 -0.7**
comp=Z,13nm,0.6s,baz=323
**AAA Alma-Ata 60.49 320** *e*P **P** **16 23 13.8 -0.7**
**AAA Alma-Ata 60.49 320** *e*P **P** **16 23 13.8 -0.7**
baz=320
**MA2 Magadan 60.91 14***ce*P **P** **16 23 18.6 +1.7**
MA2 pmax pmax
comp=Z,39nm,0.7s
**MA2 Magadan 60.91 14** P **P** **16 23 18.0 +1.1**
**URZ Urewera 61.16 136** LR LR 16 51 14.6
comp=Z,214nm,19.2s,baz=315,slow=37
**BKZ Black Stump Fm 61.17 137** P **P** **16 23 18.0 -1.1**
BKZ IAmb IAmb 16 23 20.7
comp=Z,25nm,1.1s
**KUU Kurty 61.19 321** *e*P **P** **16 23 18.1 -1.0**
KUU pmax pmax
comp=Z,24nm,0.7s
**KUU Kurty 61.19 321** *e*P **P** **16 23 18.1 -1.0**
comp=Z,24nm,0.7s,baz=321
**TKM2 Tokmak 2 61.20 319** P **P** **16 23 19.3 -0.2**
SNR=11
**TKM2 Tokmak 2 61.20 319** P **P** **16 23 18.5 -1.0**
**RAO Raoul Island 61.32 125** LR LR 16 49 14.4
comp=Z,54nm,20.3s,baz=312,slow=35
**KBK Karagaybulak 61.50 319** P **P** **16 23 22.0 +0.5**
SNR=7.3
**UCH Uchtor 61.60 318** P **P** **16 23 22.1 -0.4**
SNR=20
**AAK Ala-Archa 61.79 319** P **P** **16 23 23.2 -0.2**
SNR=5.8
**AAK Ala-Archa 61.79 319***ce*P **P** **16 23 24.1 +0.7**
AAK pmax pmax
comp=Z,10.0nm,1.7s
**AAK Ala-Archa 61.79 319** P **P** **16 23 22.4 -1.0**
**SGDS Sogindy 62.07 320** *e*P **P** **16 23 23.9 -1.3**
baz=320
**USP Ospenovka 62.07 319** P **P** **16 23 24.8 -0.4**
SNR=27
**AML Almayashu 62.10 318** P **P** **16 23 26.3 +0.5**
SNR=20
**EKS2 Erkin-Say 62.28 319** P **P** **16 23 27.2 +0.6**
SNR=13
**ZAA0 Zalesovo Array 62.41 334** P **P** **16 23 25.6 -1.5**
**ZALV Zalesovo Beam 62.41 334** P **P** **16 23 26.2 -0.9**
comp=Z,4.8nm,0.6s,baz=119,slow=7.5,SNR=24
ZALV LR LR 16 52 22.2
comp=Z,113nm,19.8s,baz=135,slow=38
**ZALV Zalesovo Beam 62.41 334** P **P** **16 23 26.0 -1.1**
**KBL Kabul 62.63 308** P **P** **16 23 27.6 -1.7**
KBL pmax pmax
comp=Z,15nm,0.8s
**KBL Kabul 62.63 308** P **P** **16 23 27.6 -1.7**
KBL IAmb IAmb 16 23 40.7
comp=Z,15nm,0.8s
**AFI Afiamalu 63.10 106** LR LR 16 50 34.6
comp=Z,168nm,19.0s,baz=89,slow=36
**BTLS Baital 63.18 321** *e*P **P** **16 23 31.2 -1.2**
**BTLS Baital 63.18 321** *e*P **P** **16 23 31.3 -1.2**
baz=321
**BTK Batken 63.24 315** IAmb IAmb 16 23 43.6
comp=Z,26nm,1.1s
**KURBB Kurchatov Arra 63.43 328** P **P** **16 23 33.3 -0.7**
**KURK Kurchatov 63.44 328***ce*P **P** **16 23 33.5 -0.5**
KURK pmax pmax
comp=Z,82nm,0.8s
**KURK Kurchatov 63.44 328** P **P** **16 23 33.3 -0.7**
**CHGR Chuyangaron 63.92 313** IAmb IAmb 16 23 42.8
comp=Z,31nm,0.9s
**DZA Taraz 64.00 318** *e*P **P** **16 23 36.8 -1.2**
**DZA Taraz 64.00 318** *e*P **P** **16 23 36.9 -1.1**
baz=318
**SEY Seymchan 64.24 13** *i*P **P** **16 23 39.2 +0.1**
**IUG Iuzhnay 64.59 317** *e*P **P** **16 23 40.9 -1.0**
**IUG Iuzhnay 64.59 317** *e*P **P** **16 23 41.0 -1.0**
baz=317
**KKAR Karatay Array 64.64 318** P **P** **16 23 40.7 -1.4**
**KKAR Karatay Array 64.64 318** P **P** **16 23 40.7 -1.4**
**BRLS Borolday 65.07 318** *e*P **P** **16 23 44.6 -0.3**
**BRLS Borolday 65.07 318** *e*P **P** **16 23 43.9 -1.1**
baz=317
**BRZS Berezniki 66.31 325** *e*P **P** **16 23 51.6 -1.2**
BRZS pmax pmax
comp=Z,9.0nm,0.6s
**BRZS Berezniki 66.31 325** *e*P **P** **16 23 51.6 -1.2**
comp=Z,8.7nm,0.6s,baz=325
**CASY Casey 68.60 187** P **P** **16 24 06.7 -0.2**
CASY IAmb IAmb 16 24 08.9
comp=Z,24nm,1.1s
**WSAR Wadi Sarin 69.03 294** LR LR 16 57 52.6
comp=Z,42nm,18.2s,baz=114,slow=39
**BRVK Borovoye 69.07 328***ce*P **P** **16 24 10.1 0.0**
BRVK pmax pmax
comp=Z,38nm,1.7s
**BRVK Borovoye 69.07 328** P **P** **16 24 09.1 -1.0**
BRVK IAmb IAmb 16 24 30.1
comp=Z,23nm,1.1s
**TIXI Tiksi 70.04 1***ce*P **P** **16 24 15.8 +0.1**
TIXI pmax pmax
comp=Z,31nm,1.7s
**TIXI Tiksi 70.04 1** P **P** **16 24 14.7 -1.0**
TIXI IAmb IAmb 16 24 26.8
comp=Z,20nm,1.1s
**BILL Bilibino 71.76 15**⇓ *e*P **P** **16 24 27.0 +0.8**
BILL *e* 16 24 46.5
BILL pmax pmax
comp=Z,18nm,2.5s
BILL MLR MLR
comp=Z,77nm,15.0s
**BILL Bilibino 71.76 15** P **P** **16 24 25.6 -0.6**
**GEYT Alibeck 72.04 309** P **P** **16 24 28.3 -0.3**
comp=Z,10nm,0.7s,baz=196,slow=10,SNR=11
**NRIK Noril'sk 72.49 346** P **P** **16 24 31.4 +0.8**
comp=Z,42nm,0.7s,baz=122,slow=5.9,SNR=119
NRIK LR LR 16 58 12.4
comp=Z,176nm,20.3s,baz=148,slow=37
**NRIK Noril'sk 72.49 346** P **P** **16 24 30.6 0.0**
NRIK pmax pmax
comp=Z,46nm,0.8s
**NRIK Noril'sk 72.49 346** P **P** **16 24 30.6 0.0**
**AB31 Akbulak array 73.66 321** *i*P **P** **16 24 37.5 -0.4**
**ABKAR Akbulak array 73.66 321** P **P** **16 24 37.1 -0.9**
**ABKAR Akbulak array 73.66 321** IAmb IAmb 16 24 46.0
comp=Z,12nm,0.8s
**AKTO Aktyubinsk 75.20 322** LR LR 16 59 42.9
comp=Z,185nm,20.7s,baz=105,slow=37
**RAR Rarotonga 75.48 112** LR LR 16 58 04.5
comp=Z,79nm,18.2s,baz=284,slow=36
**SVE Sverdlovsk 75.68 329***c i*P **P** **16 24 49.7 +0.3**
SVE pmax pmax
comp=Z,80nm,0.9s
**GAMB Gambell 76.53 24** IAmb IAmb 16 25 05.8
comp=Z,23nm,1.2s
**GAMB Gambell 76.53 24** P **P** **16 24 56.2 +2.1**
baz=245
**ARU Arti 76.63 328** LR LR 17 02 01.8
comp=Z,92nm,18.3s,baz=103,slow=38
**ARU Arti 76.63 328***d i*P **P** **16 24 54.4 -0.5**
ARU S **S** **16 34 42.8 +2.9**
ARU SS **SS** **16 39 35.6 +0.1**
ARU pmax pmax
comp=Z,44nm,0.7s
**ARU Arti 76.63 328** P **P** **16 24 53.9 -1.0**
**FALS False Pass 77.43 34** P **P** **16 25 01.0 +1.6**
baz=254
**TNA Tin City 78.73 23** P **P** **16 25 08.1 +1.7**
baz=248
**SDPT Sand Point 79.19 34** P **P** **16 25 10.5 +1.4**
baz=257
**ANM Nome 79.40 24** P **P** **16 25 12.1 +2.0**
baz=251
**OPO Ambohidratompo 80.28 251** P **P** **16 25 16.9 +0.9**
comp=Z,8.3nm,0.7s,baz=75,slow=6.5,SNR=7.7
**VOI Vohitsoka 80.94 248** P **P** **16 25 19.1 -0.4**
VOI IAmb IAmb 16 25 25.0
comp=Z,18nm,0.8s
**RAYN Ar Rayn 81.07 293** P **P** **16 25 19.1 -0.9**
RAYN pmax pmax
comp=Z,23nm,0.9s
**RAYN Ar Rayn 81.07 293** P **P** **16 25 19.1 -0.9**
RAYN IAmb IAmb 16 25 22.2
comp=Z,23nm,0.8s
**VNDA Vanda 81.29 173** P **P** **16 25 20.9 +0.9**
comp=Z,9.9nm,0.9s,baz=305,slow=5.9,SNR=11
VNDA LR LR 17 02 45.1
comp=Z,112nm,18.6s,baz=334,slow=37
**VNDA Vanda 81.29 173** IAmb IAmb 16 25 54.7
comp=Z,56nm,1.6s
**RDOG Red Dog Mine 81.44 21** P **P** **16 25 20.6 -0.5**
RDOG IAmb IAmb 16 25 28.0
comp=Z,21nm,1.1s
**RDOG Red Dog Mine 81.44 21** P **P** **16 25 23.2 +2.1**
baz=252
**MAW Mawson 81.59 200** P **P** **16 25 22.3 +0.6**
comp=Z,10nm,1.0s,baz=63,slow=8.5,SNR=4.4
MAW LR LR 16 58 59.7
comp=Z,64nm,20.1s,baz=56,slow=34
**MAW Mawson 81.59 200** P **P** **16 25 22.2 +0.5**
MAW pmax pmax
comp=Z,7.0nm,1.4s
**MAW Mawson 81.59 200** P **P** **16 25 22.2 +0.5**
**KIRV Kirov 81.94 329***ce*P **P** **16 25 24.2 +0.4**
**GROC Groznyy 82.12 313** *e*P **P** **16 25 24.8 -0.3**
GROC *e* 16 25 30.2
GROC *e*S **S** **16 35 40.2 +1.5**
GROC pmax pmax
comp=Z,38nm,1.0s
**GNI Garni 82.66 310***ce*P **P** **16 25 27.7 -0.5**
GNI pmax pmax
comp=Z,30nm,1.7s
**GCSA Galena City Sc 82.97 25** P **P** **16 25 31.1 +2.1**
baz=259
**TTA Tatalina 83.00 27** IAmb IAmb 16 25 32.4
comp=Z,18nm,0.9s
**TTA Tatalina 83.00 27** P **P** **16 25 31.5 +2.1**
baz=260
**O19K Port Alsworth 83.35 30** P **P** **16 25 34.0 +2.9**
baz=261
**N19K Bonanza Creek 83.36 29** P **P** **16 25 34.0 +2.7**
baz=262
**L19K White Mountain 83.40 28** IAmb IAmb 16 25 34.6
comp=Z,27nm,1.0s
**L19K White Mountain 83.40 28** P **P** **16 25 34.3 +2.8**
baz=261
**ATD Arta Tunnel 83.40 281** LR LR 17 04 23.0
comp=Z,26nm,18.2s,baz=82,slow=37
**ZEI Tsey 83.48 313** *e*P **P** **16 25 32.3 -0.2**
ZEI pmax pmax
comp=Z,23nm,1.0s
**M19K Big River Lodg 83.57 28** P **P** **16 25 32.3 +0.1**
M19K IAmb IAmb 16 25 35.6
comp=Z,19nm,0.9s
**M19K Big River Lodg 83.57 28** P **P** **16 25 34.8 +2.5**
baz=261
**AKH Akhalkalaki 83.69 311**⇓ *i*P **P** **16 25 35.1 +1.6**
**NCK Nalchik 83.75 313** *i*P **P** **16 25 33.3 -0.3**
NCK pmax pmax
comp=Z,24nm,0.8s
**ONI Oni 83.79 313** IAmb IAmb 16 25 44.7
comp=Z,18nm,0.8s
**GEVA Gevas 83.85 308** P **P** **16 25 34.0 -0.5**
**L20K Farewell, AK 83.90 27** P **P** **16 25 36.1 +2.1**
baz=262
**KDAK Kodiak Island 83.91 32** LR LR 16 57 22.7
comp=Z,165nm,19.9s,baz=263,slow=32
**K20K Telida 83.94 26** IAmb IAmb 16 25 40.4
comp=Z,25nm,1.3s
**K20K Telida 83.94 26** P **P** **16 25 36.0 +1.8**
baz=261
**J20K Nowinta River 84.03 26** P **P** **16 25 34.3 -0.3**
**J20K Nowinta River 84.03 26** P **P** **16 25 36.1 +1.6**

baz=261
**GOF Gofitskoye 84.25 315** ⇑*e*P **P** **16 25 36.8 +0.7**
**KBZ Khabaz 84.27 314** P **P** **16 25 36.6 +0.4**
comp=Z,12nm,0.8s,baz=125,slow=3.5,SNR=26
KBZ LR LR 17 10 25.9
comp=Z,42nm,18.2s,baz=80,slow=41
**KBZ Khabaz 84.27 314** *ce*P **P** **16 25 35.8 -0.4**
KBZ pmax pmax
comp=Z,16nm,0.9s
**PRGR Permogore 84.29 332** *e*P **P** **16 25 35.2 -0.7**
PRGR pmax pmax
comp=Z,31nm,0.6s
**NEY Neytrino 84.37 313** *i* P **P** **16 25 36.5 -0.5**
NEY pmax pmax
comp=Z,7.0nm,0.9s
**KIV Kislovodsk 84.43 314** ⇓P **P** **16 25 38.2 +1.0**
**KIV Kislovodsk 84.43 314** P **P** **16 25 39.5 +2.3**
**KIV Kislovodsk 84.43 314** P **P** **16 25 35.3 -1.9**
KIV IAmb IAmb 16 25 42.0
comp=Z,16nm,0.7s
**SHA1 Shidzhatmaz 84.44 314** *i* P **P** **16 25 36.8 -0.6**
**PPLA Purkeypile 84.72 27** P **P** **16 25 39.5 +1.2**
baz=263
**PPT Papeete 84.74 108** LR LR 17 00 52.9
comp=Z,72nm,20.7s,baz=275,slow=34
**PPT2 Papeete2 84.74 108** *e*LR LR 16 52 20.8
comp=Z,142nm,24.0s
**CHVG Ch'k'valeri 84.81 313** ⇑P **P** **16 25 40.5 +1.5**
**H21K Melozitna Rive 84.81 24** IAmb IAmb 16 25 44.7
comp=Z,18nm,1.4s
**H21K Melozitna Rive 84.81 24** P **P** **16 25 40.7 +2.2**
baz=262
**CAST Castle Rocks 84.84 27** P **P** **16 25 41.3 +2.6**
baz=263
**BRLK Bradley Lake 85.01 30** P **P** **16 25 39.1 -0.6**
**BRSE Bradley Lake S 85.08 30** P **P** **16 25 40.7 +0.7**
baz=265
**I21K Tanana 85.09 25** P **P** **16 25 41.5 +1.6**
baz=263
**SUA Susitna One 85.24 29** IAmb IAmb 16 25 50.7
comp=Z,34nm,1.0s
**SUA Susitna One 85.24 29** P **P** **16 25 42.2 +1.3**
baz=264
**VRH Novokhopyorsk 85.49 321** *e*P **P** **16 25 41.4 -0.8**
VRH pmax pmax
comp=Z,140nm,0.7s
**M22K Willow 85.56 28** P **P** **16 25 42.5 +0.2**
**M22K Willow 85.56 28** P **P** **16 25 44.0 +1.7**
baz=265
**MLY Manley 85.60 25** P **P** **16 25 43.9 +1.3**
baz=264
**RC01 Rabbit Creek A 85.69 29** IAmb IAmb 16 25 53.0
comp=Z,34nm,1.2s
**RC01 Rabbit Creek A 85.69 29** P **P** **16 25 44.0 +1.0**
baz=265
**SEW Seward 85.75 30** P **P** **16 25 44.4 +1.2**
baz=266
**PMR Palmer 86.02 28** P **P** **16 25 45.2 +0.7**
PMR pmax pmax
comp=Z,39nm,1.4s
**PMR Palmer 86.02 28** P **P** **16 25 45.2 +0.7**
PMR IAmb IAmb 16 26 03.4
comp=Z,39nm,1.4s
**PMR Palmer 86.02 28** P **P** **16 25 45.3 +0.8**
baz=266
**COLD Coldfoot 86.04 23** P **P** **16 25 46.5 +2.0**
baz=264
**I23K Minto, Yukon-K 86.19 25** P **P** **16 25 45.8 +0.4**
**I23K Minto, Yukon-K 86.19 25** P **P** **16 25 46.8 +1.4**
baz=265
**MCK McKinley 86.27 26** P **P** **16 25 46.3 +0.5**
baz=266
**KNK Knik Glacier 86.33 29** IAmb IAmb 16 25 57.5
comp=Z,43nm,1.1s
**KNK Knik Glacier 86.33 29** P **P** **16 25 47.9 +1.7**
baz=266
**TOLK Toolik Lake Re 86.40 21** IAmb IAmb 16 25 53.6
comp=Z,17nm,1.2s
**TOLK Toolik Lake Re 86.40 21** P **P** **16 25 47.9 +1.5**
baz=265
**SML Sawmill 86.42 28** P **P** **16 25 47.8 +1.2**
baz=267
**KTUT Trabzon 86.48 311** ⇑P **P** **16 25 48.2 +0.9**
**SOC Sochi 86.57 313** *e*P **P** **16 25 46.4 -1.3**
SOC *e* 16 29 06.5
SOC *e*S **SKSac** **16 36 12.7 -0.3**
SOC *e*SS **SS** **16 41 57.4 -6.6**
SOC *e*SSS SSS 16 45 36.4
SOC pmax pmax
comp=Z,56nm,0.8s
**H24K Noodor Dome 86.86 24** P **P** **16 25 50.0 +1.3**
baz=267
**SCM Sheep Creek Mo 86.89 28** P **P** **16 25 49.9 +0.9**
baz=267
**POKR Poker Plat Res 87.00 25** P **P** **16 25 51.6 +2.2**
baz=267
**VORR Voronezh 87.08 321** *e*P **P** **16 25 50.9 +0.9**
VORR pmax pmax
comp=Z,113nm,0.8s
**VSR Storozhevoye 87.10 321** *e*P **P** **16 25 49.3 -0.8**
VSR pmax pmax
comp=Z,40nm,1.2s
**KLMR Klimovskoe 87.17 331** *e*P **P** **16 25 48.8 -1.4**
KLMR pmax pmax
comp=Z,61nm,1.5s
**KLMR Klimovskoe 87.17 331** *e*P **P** **16 25 48.8 -1.4**
KLMR AMP 16 25 58.7
comp=Z,61nm,1.5s
**HDA Harding Lake 87.18 26** P **P** **16 25 50.0 -0.2**
baz=268
**ILAR Eielson Array 87.22 25** P **P** **16 25 50.6 +0.2**
comp=Z,2.1nm,0.9s,baz=244,slow=4.7,SNR=10
ILAR PKKPbc **PKKPbc** **16 43 43.2 -1.1**
comp=Z,0.4nm,0.8s,baz=66,slow=3.8,SNR=4.2
ILAR LR LR 17 01 29.9
comp=Z,62nm,20.2s,baz=223,slow=33
**ILAR Eielson Array 87.22 25** P **P** **16 25 47.9 -2.5**
**ILAR Eielson Array 87.22 25** P **P** **16 25 47.9 -2.5**
**LPSR Galich'ya Gora 87.28 322** *e*P **P** **16 25 50.5 -0.4**
LPSR pmax pmax
comp=Z,60nm,1.0s
**M24K Tolsona, Glenn 87.45 28** P **P** **16 25 53.0 +1.3**
baz=268
**PAX Paxson 87.80 27** P **P** **16 25 53.9 +0.6**
baz=269
**J25K Salcha River, 87.87 26** P **P** **16 25 53.5 -0.1**
baz=269
**BMAR Burnt Mountain 88.22 23** P **P** **16 25 55.4 +0.1**
**SCRK Sand Creek 88.47 26** P **P** **16 25 56.8 +0.2**
baz=270
**J26L Joseph Creek 88.65 26** P **P** **16 25 57.8 +0.5**
baz=271
**OBN Obninsk 88.68 325** LR LR 17 09 42.4
comp=Z,18nm,18.8s,baz=17,slow=38
**OBN Obninsk 88.68 325** *ce*P **P** **16 25 57.0 -0.5**
OBN *e* 16 26 01.5
OBN *e* 16 29 25.9
OBN *e*S **S** **16 36 39.0 -3.8**
OBN pmax pmax
comp=Z,57nm,1.7s
OBN MLR MLR
comp=Z,265nm,21.0s
**L26K Log Cabin Wild 88.76 27** P **P** **16 25 58.5 +0.6**
baz=271
**KMBO Kilima Mbogo 89.20 269** LR LR 17 06 04.1
comp=Z,76nm,18.1s,baz=94,slow=36
**KMBO Kilima Mbogo 89.20 269** *ce*P **P** **16 26 00.7 -0.5**
KMBO pmax pmax
comp=Z,4.0nm,0.7s
**L27K Beaver Creek, 89.45 27** P **P** **16 26 02.2 +1.1**
baz=272
**BNN Bunyan 89.51 309** P **P** **16 26 00.0 -2.0**
**GHAJ Ghor Haditha 89.95 301** IAmb IAmb 16 26 05.7
comp=Z,37nm,1.1s
**MMAI Mount Meron Ar 90.04 303** LR LR 17 16 10.3
comp=Z,66nm,18.4s,baz=245,slow=42
**DAWY Dawson 90.48 26** P **P** **16 26 06.9 +1.0**
baz=274
**EIL Elat 90.54 300** LR LR 17 12 26.7
comp=Z,63nm,19.2s,baz=88,slow=39
**I29M Ogilvie Camp, 90.84 25** P **P** **16 26 06.9 -0.6**
I29M IAmb IAmb 16 26 12.4
comp=Z,13nm,1.2s
**I29M Ogilvie Camp, 90.84 25** P **P** **16 26 08.5 +1.0**
baz=275
**BR131 Keskin Array S 91.18 310** P **P** **16 26 08.5 -1.3**
BR131 pmax pmax
comp=Z,11nm,1.0s
**BR131 Keskin Array S 91.18 310** P **P** **16 26 08.5 -1.3**
BR131 IAmb IAmb 16 26 10.0
comp=Z,11nm,0.9s
**BRTR Keskin Array B 91.18 310** P **P** **16 26 09.0 -0.8**
comp=Z,5.3nm,0.8s,baz=122,slow=6.0,SNR=11
**EPYK Eagle Plains 91.38 24** IAmb IAmb 16 26 14.8
comp=Z,12nm,1.1s
**EPYK Eagle Plains 91.38 24** P **P** **16 26 11.3 +1.3**
baz=277
**QSPA South Pole Qui 91.44 180** P **P** **16 26 10.2 -0.2**
comp=Z,3.5nm,0.7s,baz=288,slow=1.0,SNR=14
**QSPA South Pole Qui 91.44 180** P **P** **16 26 09.6 -0.8**
QSPA IAmb IAmb 16 26 17.9
comp=Z,28nm,1.6s
**INK Inuvik 92.32 21** P **P** **16 26 13.6 -0.6**
INK pmax pmax
comp=Z,18nm,1.5s
**INK Inuvik 92.32 21** P **P** **16 26 13.6 -0.6**
INK IAmb IAmb 16 26 18.8
comp=Z,18nm,1.4s
**INK Inuvik 92.32 21** P **P** **16 26 14.9 +0.7**
baz=280
**ARCES ARCESS Array B 92.40 340** P **P** **16 26 14.6 -0.1**
comp=Z,11nm,0.8s,baz=80,slow=7.5,SNR=13
**WHY Whitehorse 92.95 29** P **P** **16 26 19.2 +1.7**
baz=278
**M31M Drury Creek, Y 92.96 28** P **P** **16 26 18.8 +1.4**
baz=279
**AKASG Malin Array Be 93.40 321** P **P** **16 26 19.1 -0.5**
comp=Z,3.3nm,0.9s,baz=70,slow=4.5,SNR=11
**AKASG Malin Array Be 93.40 321** *ce*P **P** **16 26 19.1 -0.5**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**FINES FINESS Array B 93.62 332** P **P** **16 26 19.6 -0.8**
comp=Z,3.1nm,0.8s,baz=66,slow=5.4,SNR=8.1
FINES LR LR 17 12 31.9
comp=Z,170nm,19.3s,baz=78,slow=38
**TAOE Nuku Hiva Isla 93.62 99** *e*LR LR 16 56 32.2
comp=Z,206nm,22.4s
**MNK Minsk 93.74 325** *i* P **P** **16 26 21.4 +0.4**
MNK *i* 16 30 06.1
MNK *i* PPP PPP 16 32 06.5
MNK *i* S **SKSac** **16 36 55.7 +1.5**
MNK *i* 16 37 31.7
MNK *i* PS **PS** **16 38 45.9 +0.3**
MNK *i* SS **SS** **16 43 49.7 +2.7**
MNK *i* SSS SSS 16 47 30.4
MNK pmax pmax
comp=Z,20nm,1.0s
MNK pmax pmax
comp=N,11nm,0.7s
MNK pmax pmax
comp=E,3.0nm,1.1s
MNK MLR MLR
comp=N,108nm,15.0s
MNK MLR MLR
comp=Z,135nm,18.0s
MNK MLR MLR
comp=E,46nm,17.0s
**MNK Minsk 93.74 325** *i* P **P** **16 26 21.4 +0.4**
comp=E,3.0nm,1.1s
MNK *i* P **P** **16 26 21.4 +0.4**
comp=N,11nm,0.7s
MNK *i* P **P** **16 26 21.4 +0.4**
comp=Z,20nm,1.0s,baz=262
MNK *i* PP **PP** **16 30 06.2 -0.1**
MNK *i* PPP PPP 16 32 06.6
MNK *i* S **SKSac** **16 36 55.7 +1.5**
MNK *i* PS **PS** **16 38 45.9 +0.3**
MNK *i* SS **SS** **16 43 49.8 +2.7**
MNK *i* SSS SSS 16 47 30.5
MNK *i* LR LR 17 06 43.1
MNK *i* LRM MLR 17 10 32.4
comp=N,108nm,15.3s
MNK *i* LRM MLR 17 10 33.7
comp=Z,135nm,17.9s
MNK *i* LRM MLR 17 10 39.5
comp=E,46nm,17.2s
**A36M Sachs Harbour 94.17 17** P **P** **16 26 23.2 +0.5**
baz=288
**SORM Soroca 94.27 318** ⇓P **P** **16 26 22.9 -0.8**
**TLCR 94.30 315** ⇑P **P** **16 26 23.8 -0.1**
**NACGM Naroch 94.31 325** *i* P **P** **16 26 28.3 +4.7**
**CFR Carcaliu 94.78 315** ⇓P **P** **16 26 26.1 0.0**
**NOR Nord 95.25 355** *i* P **P** **16 26 27.2 -0.3**
**C36M Paulatuk 95.38 20** P **P** **16 26 27.4 -0.8**
C36M IAmb IAmb 16 26 32.7
comp=Z,11nm,1.1s
**C36M Paulatuk 95.38 20** P **P** **16 26 28.7 +0.5**
baz=289
**TESR Tescani 95.63 317** ⇑P **P** **16 26 29.9 -0.1**
**VRI Vrincioaia 95.67 316** ⇑P **P** **16 26 30.7 +0.5**
**GIRR Girov 95.67 317** ⇑P **P** **16 26 29.6 -0.5**
**MBAR Mbarara 95.70 270** LR LR 17 06 34.1
comp=Z,104nm,21.6s,baz=76,slow=34
**PLOR Plostina 95.72 316** ⇑P **P** **16 26 30.7 +0.3**
**DLBC Dease Lake 95.79 31** LR LR 17 04 21.3
comp=Z,197nm,20.2s,baz=51,slow=32
**MLR Muntele Rosu 96.27 316** ⇓P **P** **16 26 33.2 +0.2**
**MLR Muntele Rosu 96.27 316** LR LR 17 16 56.3
comp=Z,66nm,19.2s,baz=65,slow=40
**BURAR Bucovina Array 96.43 318** ⇓P **P** **16 26 33.8 +0.1**
**BURAR Bucovina Array 96.43 318** P **P** **16 26 36.6 +2.9**
**BURAR Bucovina Array 96.43 318** IAmb IAmb 16 26 35.5
comp=Z,14nm,0.8s
**BUR08 Bucovina Ar. S 96.44 318** P **P** **16 26 32.7 -1.1**
BUR08 IAmb IAmb 16 26 36.5
comp=Z,14nm,0.9s
**LOT Lotru 97.78 316** ⇑P Pdif 16 26 40.2 +0.2
**KLNR Kaliningrad 98.10 326** *i* P Pdif 16 26 41.4 +0.5
KLNR pmax pmax
comp=Z,135nm,1.0s
**TRPA Tarpa 98.11 319** ⇑P Pdif 16 26 41.2 0.0
**UZH Uzhgorod 98.17 319** *e*P Pdif 16 26 41.6 +0.2
UZH *i* 16 26 50.2
UZH *e* 16 26 56.4
**DRGR 98.26 318** ⇑P Pdif 16 26 42.2 +0.2
**LSZ Lusaka 98.34 255** LR LR 17 10 57.9
comp=Z,124nm,18.1s,baz=107,slow=35
**IDI Anoyia 98.53 306** LR LR 17 16 50.4
comp=Z,35nm,20.9s,baz=44,slow=39
**CRVS Cervenica-Dubn 98.66 320** *e*P Pdif 16 26 45.1 +1.5
**CRVS Cervenica-Dubn 98.66 320** *e*PDIFF Pdif 16 26 45.0 +1.4
**VTS Vitosha 98.66 313** ⇓P **P** **16 26 43.9 0.0**
**DAG Danmarks Havn 99.39 352** *i* P **Pdif** **16 26 45.0 -1.2**
**HFS Hagfors 99.82 332** LR LR 17 15 27.3
comp=Z,270nm,21.4s,baz=70,slow=38
**NB2 NORSAR Subarra100.61 333** P **Pdif** **16 26 50.9 -1.2**
comp=Z,3.4nm,0.9s,baz=69,slow=4.4
**NB2 NORSAR Subarra100.61 333** P **Pdif** **16 26 50.9 -1.2**
baz=69,slow=4.4
**NOA NORSAR Array B 100.61 333** P **Pdif** **16 26 50.5 -1.5**
comp=Z,1.4nm,0.8s,baz=68,slow=4.6,SNR=5.2
**YKA Yellowknife Ar 101.63 24** P **Pdif** **16 26 56.2 -0.3**
comp=Z,0.8nm,0.8s,baz=297,slow=4.6,SNR=8.6
YKA PKiKP **PKiKP** **16 31 20.5 +0.5**
comp=Z,0.5nm,0.6s,baz=302,slow=1.9,SNR=6.4
YKA PKKPbc **PKKPbc** **16 43 04.6 -1.3**
comp=Z,0.2nm,0.6s,baz=121,slow=2.7,SNR=4.2
**YKA Yellowknife Ar 101.63 24** *i* P **Pdif** **16 26 57.5 +1.0**
YKA pmax pmax
comp=Z,1.0nm,0.8s
**CLL Collm 103.23 324** *e*Sdif Sdif 16 38 48.0 -1.7
**PDAR Pinedale Array 113.21 42** PKiKP **PKiKP** **16 31 45.0 +2.6**
comp=Z,0.2nm,0.5s,baz=225,slow=0.1,SNR=2.6
PDAR PKKPbc **PKKPbc** **16 42 30.7 +1.3**
comp=Z,0.3nm,0.6s,baz=120,slow=6.0,SNR=3.7
**FRB Frobisher Bay 113.95 7** PKP **PKiKP** **16 31 42.6 -0.2**
comp=Z,1.6nm,0.6s,baz=56,slow=10,SNR=5.2
**ANMO Albuquerque 118.72 48** *c*PKIKP **PKPdf** **16 31 51.3 -2.0**
ANMO pmax pmax
comp=Z,2.0nm,1.0s
**ECSD EROS Data Cent 120.77 35** PKPdf **PKPdf** **16 31 56.4 -0.3**
**F36A Milaca 121.11 32** PKPdf **PKPdf** **16 31 55.9 -1.4**
**SCHQ Schefferville 122.78 9** PKP **PKiKP** **16 32 00.8 +0.4**
comp=Z,4.2nm,0.7s,baz=19,slow=2.7,SNR=9.4
**TXAR Lajitas Array 123.18 53** PKP **PKiKP** **16 32 02.2 +0.2**
comp=Z,1.1nm,0.7s,baz=228,slow=1.2,SNR=14
**TXAR Lajitas Array 123.18 53** PKIKP **PKPdf** **16 32 01.3 -0.6**
**TXAR Lajitas Array 123.18 53** **PKPdf** **16 32 01.3 -0.6**
**TORD Torodi Ar. Bea 123.28 287** PKP **PKPdf** **16 32 02.1 -0.2**
comp=Z,6.8nm,0.8s,baz=46,slow=1.9,SNR=35
TORD PKKPbc **PKKPab** **16 41 53.5 +1.3**
comp=Z,2.4nm,0.9s,baz=282,slow=4.2,SNR=10
**DBIC Dimbokro 130.69 280** PKP **PKiKP** **16 32 18.1 +0.8**
comp=Z,3.6nm,0.6s,baz=332,slow=2.5,SNR=6.7
**DBIC Dimbokro 130.69 280** PKIKP **PKiKP** **16 32 16.9 -0.4**
**DBIC Dimbokro 130.69 280** **PKiKP** **16 32 16.9 -0.4**
**PLCA Paso Flores 138.05 161** PKP **PKiKP** **16 32 31.4 -0.2**
comp=Z,6.6nm,0.9s,baz=284,slow=2.0,SNR=12
**PLCA Paso Flores 138.05 161** PKIKP **PKiKP** **16 32 31.9 +0.3**
**PLCA Paso Flores 138.05 161** PKPdf **PKiKP** **16 32 31.9 +0.3**
**LCO Las Campanas 148.16 151** PKP2 **PKPbc** **16 32 50.7 -0.5**
**LCO Las Campanas 148.16 151** **PKPbc** **16 32 50.7 -0.5**
**SRBA San Rafael, Bu 148.47 70** **PKPdf** **16 32 44.6 -4.1**
SRBA PKPbc **PKPbc** **16 32 51.4 -0.8**
**GO03 Copiap 149.56 150** PKPdf **PKPdf** **16 32 46.1 -3.9**
GO03 **PKPbc** **16 32 54.5 -0.1**
**PLTB Pedras Altas 149.92 180** **PKPbc** **16 32 55.5 +0.3**
**AC02 Maricunga 150.73 151** PKPdf **PKPdf** **16 32 49.0 -3.5**
**LVC Limon Verde 154.28 146** PKPbc **PKiKP** **16 33 08.5 +2.6**
comp=Z,8.7nm,1.0s,baz=194,slow=0.4,SNR=3.5
LVC PKPab **PKPab** **16 33 21.7 +2.0**
comp=Z,12nm,0.9s,baz=270,slow=6.3,SNR=7.8
**LVC Limon Verde 154.28 146** PKIKP **PKPdf** **16 32 53.4 -4.2**
**LVC Limon Verde 154.28 146** PKPdf **PKPdf** **16 32 53.4 -4.2**
**ATAH Atahualpa 154.64 103** PKPbc **PKiKP** **16 33 09.7 +2.7**
comp=Z,12nm,0.8s,baz=220,slow=2.5,SNR=6.1
ATAH PKPab **PKPab** **16 33 23.8 +2.1**
comp=Z,11nm,0.9s,baz=290,slow=17,SNR=4.6
**CPUP Villa Florida 155.07 172** PKP **PKPdf** **16 32 58.5 +0.3**
comp=Z,3.4nm,0.9s,baz=10,slow=5.2,SNR=3.1
**CPUP Villa Florida 155.07 172** PKIKP **PKPdf** **16 32 55.9 -2.2**
**CPUP Villa Florida 155.07 172** **PKPdf** **16 32 55.9 -2.2**
**LPAZ La Paz 159.48 136** PKP **PKPdf** **16 33 05.5 +0.8**
comp=Z,3.1nm,0.8s,baz=42,slow=2.4,SNR=11
LPAZ PKPab **PKPab** **16 33 43.9 +1.4**
comp=Z,4.6nm,0.9s,baz=143,slow=0.5,SNR=4.8
**LPAZ La Paz 159.48 136** *e*P **PKPdf** **16 33 00.4 -4.3**
**SDV Santo Domingo 160.11 58** PKP **PKPdf** **16 33 04.9 -0.1**
comp=Z,5.5nm,0.7s,baz=36,slow=0.5,SNR=5.1
**SIV San Ignacio 163.83 153** PKP **PKPdf** **16 33 08.1 -0.4**
comp=Z,2.4nm,0.8s,baz=173,slow=3.0,SNR=11
SIV PKPab **PKPab** **16 34 00.6 -0.1**
comp=Z,4.6nm,0.7s,baz=205,slow=5.8,SNR=10

*IDC **04** 16:33:51.7±1.2, 6°.09S×150°.16E, h46km±24km, mb3.2/3, mb1 3.5/4, mb1mx2.9/36, mbtmp3.5/4, ML1.5/1, Error ellipse: s-maj=100.6km s-min=9.1km az=133.0*
**ISC 04 16:33:51.9**±1.1, **6°.1S**±0°.5×**150°.2E**±0°.5, **h50**km, **n6**, σ0**58**/8,
**New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **2.56** | **45** | P | **Pn** | **16 34 31.2** | **+0.1** |
| KRVT | | | | S | **Sn** | **16 35 01.2** | **+0.1** |
| **PMG** | **Port Moresby** | **4.44** | **223** | P | **Pn** | **16 34 56.5** | **-0.3** |
| | 1.7nm,0.3s,baz=33,slow=8.2,SNR=7.4 | | | | | | |
| PMG | | | | S | **Sn** | **16 35 48.1** | **+0.9** |
| | 5.4nm,0.3s,baz=210,slow=20,SNR=8.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.64** | **227** | P | **P** | **16 38 26.7** | **-0.8** |
| | 1.4nm,0.8s,baz=52,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **23.45** | **220** | P | **P** | **16 38 57.2** | **+0.1** |
| | 0.4nm,0.8s,baz=55,slow=9.2,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.75** | **241** | P | **P** | **16 39 27.3** | **+0.1** |
| | 1.2nm,0.9s,baz=50,slow=11,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.20** | **285** | PKPbc | **PKPbc** | **16 53 33.4** | **-0.1** |
| | 0.4nm,0.6s,baz=58,slow=2.7,SNR=2.6 | | | | | | |

*ISK **04** 16:34:44.6, 39°.07N×37°.80E, h5km, ML3.5/30*
*DDA **04** 16:34:45.0±0.0, 39°.07N×37°.78E, h10km±3km, MW3.6*
**ISC 04 16:34:45.5**±1.0, **39°.08N**±0°.02×**37°.81E**±0°.01, **h7**km±9km,
**n63**, σ1**°01**/98, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CUKAN** | **kangal_SIVAS** | **0.35** | **311** | P | **Pg** | **16 34 52.3** | **-0.2** |
| CUKAN | | | | S | **Sg** | **16 34 56.9** | **-0.3** |
| CUKAN | | | | *i* AML | AML | 16 34 58.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| CUKAN | | | | *i* AML | AML | 16 34 58.0 | |
| | comp=N,4μm,0.4s | | | | | | |
| CUKAN | | | | *i* AML | AML | 16 34 59.0 | |
| | comp=E,4μm,0.2s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **0.41** | **88** | PG | **Pg** | **16 34 54.1** | **+0.5** |
| ARPR | | | | SG | **Sb** | **16 35 00.9** | **-0.9** |
| **CUGUR** | **Gurin_SVAS** | **0.55** | **230** | P | **Pg** | **16 34 55.8** | **-0.3** |
| CUGUR | | | | S | **Sg** | **16 35 03.7** | **+0.3** |
| CUGUR | | | | *i* AML | AML | 16 35 04.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| CUGUR | | | | *i* AML | AML | 16 35 04.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| CUGUR | | | | *i* AML | AML | 16 35 05.0 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **KEMA** | **Kemaliye** | **0.56** | **71** | P | **Pg** | **16 34 56.3** | **-0.1** |
| KEMA | | | | S | **Sg** | **16 35 03.5** | **-0.3** |
| KEMA | | | | *i* AML | AML | 16 35 05.0 | |
| | comp=Z,1μm,0.3s | | | | | | |
| KEMA | | | | *i* AML | AML | 16 35 05.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| KEMA | | | | *i* AML | AML | 16 35 08.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **DARE** | **Darende-Malaty** | **0.57** | **207** | PG | **Pg** | **16 34 56.2** | **-0.4** |
| DARE | | | | SG | **Sg** | **16 35 04.9** | **+0.9** |
| **ILIC** | **ilic-Erzincan** | **0.70** | **58** | PG | **Pg** | **16 34 58.9** | **-0.1** |
| **AKCD** | **Akcadag** | **0.79** | **173** | P | **Pg** | **16 34 59.7** | **-1.1** |
| AKCD | | | | S | **Sb** | **16 35 12.4** | **-0.3** |
| AKCD | | | | *i* AML | AML | 16 35 16.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| AKCD | | | | *i* AML | AML | 16 35 16.0 | |
| | comp=E,3μm,0.2s | | | | | | |
| AKCD | | | | *i* AML | AML | 16 35 19.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **CUZAR** | **Zara_SIVAS** | **0.81** | **358** | P | **Pg** | **16 35 01.4** | **+0.3** |
| CUZAR | | | | S | **Sg** | **16 35 11.1** | **-0.4** |
| CUZAR | | | | *i* AML | AML | 16 35 16.0 | |
| | comp=E,568nm,0.4s | | | | | | |
| CUZAR | | | | *i* AML | AML | 16 35 18.0 | |
| | comp=Z,264nm,0.5s | | | | | | |
| CUZAR | | | | *i* AML | AML | 16 35 27.0 | |
| | comp=N,418nm,0.3s | | | | | | |
| **CUAYA** | **Sivas-Altinyay** | **0.84** | **283** | P | **Pg** | **16 35 00.8** | **-1.0** |
| CUAYA | | | | S | **Sg** | **16 35 12.9** | **+0.1** |
| CUAYA | | | | *i* AML | AML | 16 35 14.0 | |
| | comp=E,532nm,0.3s | | | | | | |
| CUAYA | | | | *i* AML | AML | 16 35 18.0 | |
| | comp=N,762nm,0.5s | | | | | | |
| CUAYA | | | | *i* AML | AML | 16 35 19.0 | |
| | comp=Z,456nm,0.6s | | | | | | |
| **ELBS** | **KAHRAMANMARAS** | **0.92** | **215** | P | **Pg** | **16 35 02.6** | **-0.7** |
| ELBS | | | | S | **Sg** | **16 35 15.1** | **-0.2** |
| ELBS | | | | *i* AML | AML | 16 35 19.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| ELBS | | | | *i* AML | AML | 16 35 20.0 | |
| | comp=Z,1μm,0.3s | | | | | | |
| ELBS | | | | *i* AML | AML | 16 35 20.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **SCER** | **sogukcermik** | **0.94** | **326** | P | **Pg** | **16 35 02.8** | **-0.8** |
| SCER | | | | S | **Sg** | **16 35 15.1** | **-0.7** |
| SCER | | | | *i* AML | AML | 16 35 17.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| SCER | | | | *i* AML | AML | 16 35 24.0 | |
| | comp=E,1μm,0.7s | | | | | | |
| SCER | | | | *i* AML | AML | 16 35 25.0 | |
| | comp=Z,388nm,0.7s | | | | | | |
| **SVSK** | **Karacayir** | **1.04** | **323** | PG | **Pb** | **16 35 05.9** | **0.0** |
| **ELZG** | **Elazig** | **1.09** | **122** | P | **Pg** | **16 35 05.6** | **-0.8** |
| ELZG | | | | S | **Sg** | **16 35 20.6** | **0.0** |
| ELZG | | | | *i* AML | AML | 16 35 21.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| ELZG | | | | *i* AML | AML | 16 35 23.0 | |
| | comp=Z,799nm,0.5s | | | | | | |
| ELZG | | | | *i* AML | AML | 16 35 23.0 | |
| | comp=E,3μm,0.7s | | | | | | |
| **REFA** | **Refahiye_ERZN** | **1.11** | **42** | P | **Pg** | **16 35 06.8** | **0.0** |
| REFA | | | | S | **Sn** | **16 35 22.2** | **-1.1** |
| REFA | | | | *i* AML | AML | 16 35 25.0 | |
| | comp=N,330nm,0.5s | | | | | | |
| REFA | | | | *i* AML | AML | 16 35 25.0 | |
| | comp=E,266nm,0.4s | | | | | | |
| REFA | | | | *i* AML | AML | 16 35 27.0 | |
| | comp=Z,214nm,0.6s | | | | | | |
| **SUSE** | **Susehri** | **1.17** | **15** | P | **Pn** | **16 35 08.9** | **+0.4** |
| SUSE | | | | S | **Sn** | **16 35 23.8** | **-1.0** |
| SUSE | | | | *i* AML | AML | 16 35 34.0 | |
| | comp=Z,101nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUSE | | | | *i* AML | AML | 16 35 39.0 | | |
| | comp=E,204nm,0.9s | | | | | | | |
| SUSE | | | | *i* AML | AML | 16 35 43.0 | | |
| | comp=N,134nm,0.4s | | | | | | | |
| **CUSAR** | **Sarkisla-SIVAS** | **1.26 286** | P | | **Pn** | **16 35 08.2** | **-1.6** | |
| CUSAR | | | S | | **Sg** | **16 35 26.0** | **-0.1** | |
| CUSAR | | | *i* AML | | AML | 16 35 30.0 | | |
| | comp=N,439nm,0.4s | | | | | | | |
| CUSAR | | | *i* AML | | AML | 16 35 33.0 | | |
| | comp=Z,146nm,0.7s | | | | | | | |
| CUSAR | | | *i* AML | | AML | 16 35 51.0 | | |
| | comp=E,8.7nm,0.5s | | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **1.28 239** | PN | | **Pb** | **16 35 09.8** | **-0.3** | |
| SARI | | | SN | | **Sn** | **16 35 28.6** | **+1.0** | |
| **TNCL** | **Tunceli-Merkez** | **1.35 88** | P | | **Pn** | **16 35 10.3** | **-0.7** | |
| TNCL | | | S | | **Sn** | **16 35 28.7** | **-0.6** | |
| TNCL | | | *i* AML | | AML | 16 35 33.0 | | |
| | comp=E,940nm,0.5s | | | | | | | |
| TNCL | | | *i* AML | | AML | 16 35 34.0 | | |
| | comp=N,604nm,0.4s | | | | | | | |
| TNCL | | | *i* AML | | AML | 16 35 36.0 | | |
| | comp=Z,393nm,0.7s | | | | | | | |
| **RSDY** | **Resadiye-TOKAT** | **1.36 344** | PN | | **Pg** | **16 35 11.6** | **-0.1** | |
| RSDY | | | SN | | **Sg** | **16 35 31.6** | **+2.2** | |
| **SVRC** | **Sivrice-ELAZID** | **1.37 121** | PN | | **Pb** | **16 35 11.3** | **-0.3** | |
| SVRC | | | SN | | **Sg** | **16 35 31.9** | **+2.4** | |
| **ALUC** | **Giresun/Alucra** | **1.46 30** | P | | **Pg** | **16 35 13.5** | **-0.1** | |
| ALUC | | | S | | **Sg** | **16 35 34.7** | **+2.1** | |
| ALUC | | | *i* AML | | AML | 16 35 36.0 | | |
| | comp=N,831nm,0.4s | | | | | | | |
| ALUC | | | *i* AML | | AML | 16 35 36.0 | | |
| | comp=E,816nm,0.7s | | | | | | | |
| ALUC | | | *i* AML | | AML | 16 35 41.0 | | |
| | comp=Z,423nm,0.8s | | | | | | | |
| **KELT** | **Kelkit** | **1.54 46** | P | | **Pb** | **16 35 14.4** | **-0.2** | |
| KELT | | | S | | **Sg** | **16 35 34.9** | **-0.3** | |
| KELT | | | *i* AML | | AML | 16 35 37.0 | | |
| | comp=N,539nm,0.6s | | | | | | | |
| KELT | | | *i* AML | | AML | 16 35 37.0 | | |
| | comp=E,552nm,0.5s | | | | | | | |
| KELT | | | *i* AML | | AML | 16 35 38.0 | | |
| | comp=Z,479nm,0.6s | | | | | | | |
| **BNN** | **Bunyan** | **1.55 262** | PN | | **Pb** | **16 35 14.3** | **-0.3** | |
| BNN | | | SN | | **Sg** | **16 35 36.0** | **+0.7** | |
| **ERZN** | **Erzincan** | **1.57 71** | PN | | **Pb** | **16 35 14.9** | **-0.1** | |
| **TOKT** | **Tokat** | **1.57 322** | PN | | **Pb** | **16 35 14.8** | **-0.2** | |
| TOKT | | | SN | | **Sg** | **16 35 36.5** | **+0.4** | |
| **EUZM** | **Uzumlu** | **1.59 66** | P | | **Pb** | **16 35 15.4** | **0.0** | |
| EUZM | | | S | | **Sg** | **16 35 36.7** | **0.0** | |
| EUZM | | | *i* AML | | AML | 16 35 39.0 | | |
| | comp=N,401nm,0.8s | | | | | | | |
| EUZM | | | *i* AML | | AML | 16 35 39.0 | | |
| | comp=E,476nm,0.6s | | | | | | | |
| EUZM | | | *i* AML | | AML | 16 35 45.0 | | |
| | comp=Z,293nm,0.7s | | | | | | | |
| **TOKA** | **Tokat** | **1.61 321** | P | | **Pb** | **16 35 15.5** | **-0.2** | |
| TOKA | | | S | | **Sb** | **16 35 36.1** | **0.0** | |
| TOKA | | | *i* AML | | AML | 16 35 38.0 | | |
| | comp=E,3.4nm,1.1s | | | | | | | |
| TOKA | | | *i* AML | | AML | 16 35 39.0 | | |
| | comp=Z,244nm,0.4s | | | | | | | |
| TOKA | | | *i* AML | | AML | 16 35 41.0 | | |
| | comp=N,561nm,0.7s | | | | | | | |
| **KOVA** | **Elazig, Kovanc** | **1.61 103** | P | | **Pb** | **16 35 14.8** | **-0.8** | |
| KOVA | | | S | | **Sg** | **16 35 38.8** | **+1.5** | |
| KOVA | | | *i* AML | | AML | 16 35 49.0 | | |
| | comp=N,87nm,0.6s | | | | | | | |
| KOVA | | | *i* AML | | AML | 16 35 50.0 | | |
| | comp=Z,96nm,0.9s | | | | | | | |
| KOVA | | | *i* AML | | AML | 16 35 50.0 | | |
| | comp=E,111nm,0.9s | | | | | | | |
| **KAHM** | **Kahramanmaras,** | **1.69 203** | P | | **Pb** | **16 35 17.0** | **0.0** | |
| KAHM | | | S | | **Sg** | **16 35 40.2** | **+0.3** | |
| KAHM | | | *i* AML | | AML | 16 35 45.0 | | |
| | comp=N,116nm,0.4s | | | | | | | |
| KAHM | | | *i* AML | | AML | 16 35 46.0 | | |
| | comp=E,111nm,0.7s | | | | | | | |
| KAHM | | | *i* AML | | AML | 16 35 48.0 | | |
| | comp=Z,72nm,0.8s | | | | | | | |
| **GUNE** | **Kayseri** | **1.71 265** | P | | **Pb** | **16 35 17.3** | **-0.1** | |
| GUNE | | | S | | **Sg** | **16 35 42.0** | **+1.5** | |
| GUNE | | | *i* AML | | AML | 16 35 46.0 | | |
| | comp=N,528nm,0.6s | | | | | | | |
| GUNE | | | *i* AML | | AML | 16 35 55.0 | | |
| | comp=E,545nm,0.5s | | | | | | | |
| GUNE | | | *i* AML | | AML | 16 36 00.0 | | |
| | comp=Z,276nm,1.0s | | | | | | | |
| **HACI** | **Hacifakili, Ak** | **1.73 292** | P | | **Pb** | **16 35 17.0** | **-0.7** | |
| HACI | | | S | | **Sb** | **16 35 38.8** | **-0.8** | |
| HACI | | | *i* AML | | AML | 16 35 42.0 | | |
| | comp=N,312nm,1.0s | | | | | | | |
| HACI | | | *i* AML | | AML | 16 35 43.0 | | |
| | comp=Z,199nm,0.6s | | | | | | | |
| HACI | | | *i* AML | | AML | 16 35 45.0 | | |
| | comp=E,104nm,0.5s | | | | | | | |
| **GZT** | **Gaziantep** | **1.73 186** | P | | **Pg** | **16 35 18.5** | **-0.4** | |
| GZT | | | S | | **Sg** | **16 35 42.0** | **+0.7** | |
| GZT | | | *i* AML | | AML | 16 35 44.0 | | |
| | comp=N,364nm,0.5s | | | | | | | |
| GZT | | | *i* AML | | AML | 16 35 47.0 | | |
| | comp=E,401nm,0.5s | | | | | | | |
| GZT | | | *i* AML | | AML | 16 35 50.0 | | |
| | comp=Z,180nm,0.9s | | | | | | | |
| **SAIM** | **ADANA** | **1.75 231** | P | | **Pb** | **16 35 17.7** | **-0.3** | |
| SAIM | | | S | | **Sg** | **16 35 40.9** | **-0.8** | |
| SAIM | | | *i* AML | | AML | 16 35 44.0 | | |
| | comp=E,239nm,0.5s | | | | | | | |
| SAIM | | | *i* AML | | AML | 16 35 45.0 | | |
| | comp=Z,135nm,0.3s | | | | | | | |
| SAIM | | | *i* AML | | AML | 16 35 49.0 | | |
| | comp=N,399nm,0.3s | | | | | | | |
| **ERBA** | **Erbaa** | **1.79 333** | P | | **Pb** | **16 35 19.1** | **+0.4** | |
| ERBA | | | S | | **Sg** | **16 35 43.2** | **+0.2** | |
| ERBA | | | *i* AML | | AML | 16 35 45.0 | | |
| | comp=E,124nm,0.8s | | | | | | | |
| ERBA | | | *i* AML | | AML | 16 35 47.0 | | |
| | comp=Z,104nm,0.5s | | | | | | | |
| ERBA | | | *i* AML | | AML | 16 35 47.0 | | |
| | comp=N,159nm,0.5s | | | | | | | |
| **ANDN** | **Andirin** | **1.89 218** | P | | **Pb** | **16 35 20.6** | **+0.1** | |
| ANDN | | | S | | **Sg** | **16 35 45.4** | **-0.9** | |
| ANDN | | | *i* AML | | AML | 16 35 51.0 | | |
| | comp=E,150nm,0.6s | | | | | | | |
| ANDN | | | *i* AML | | AML | 16 35 53.0 | | |
| | comp=Z,156nm,0.9s | | | | | | | |
| ANDN | | | *i* AML | | AML | 16 35 57.0 | | |
| | comp=N,311nm,0.6s | | | | | | | |
| **GAZ** | **Gaziantep** | **1.96 194** | PN | | **Pb** | **16 35 20.5** | **-1.2** | |
| **CKRK** | **Yozgat, Cekere** | **2.04 300** | P | | **Pb** | **16 35 22.4** | **-0.6** | |
| CKRK | | | S | | **Sb** | **16 35 48.3** | **-0.3** | |
| CKRK | | | *i* AML | | AML | 16 35 54.0 | | |
| | comp=N,167nm,0.5s | | | | | | | |
| CKRK | | | *i* AML | | AML | 16 35 57.0 | | |
| | comp=E,119nm,0.9s | | | | | | | |
| CKRK | | | *i* AML | | AML | 16 36 01.0 | | |
| | comp=Z,98nm,0.8s | | | | | | | |
| **KAMA** | **Osmaniye** | **2.10 206** | P | | **Pn** | **16 35 21.9** | **+0.7** | |
| KAMA | | | S | | **Sg** | **16 35 52.5** | **-0.4** | |
| KAMA | | | *i* AML | | AML | 16 35 54.0 | | |
| | comp=Z,78nm,0.7s | | | | | | | |
| KAMA | | | *i* AML | | AML | 16 35 54.0 | | |
| | comp=N,83nm,0.6s | | | | | | | |
| KAMA | | | *i* AML | | AML | 16 35 55.0 | | |
| | comp=E,92nm,0.5s | | | | | | | |
| **YEDI** | **Yedisu-Bingol** | **2.15 80** | PN | | **Pb** | **16 35 23.4** | **-1.6** | |
| **YAHY** | **KAYSERI_Yahyal** | **2.15 244** | P | | **Pb** | **16 35 24.5** | **-0.5** | |
| YAHY | | | S | | **Sb** | **16 35 50.9** | **-1.1** | |
| YAHY | | | *i* AML | | AML | 16 35 59.0 | | |
| | comp=E,40nm,0.4s | | | | | | | |
| YAHY | | | *i* AML | | AML | 16 36 01.0 | | |
| | comp=N,78nm,1.0s | | | | | | | |
| YAHY | | | *i* AML | | AML | 16 36 03.0 | | |
| | comp=Z,58nm,0.7s | | | | | | | |
| **BAYT** | **Aydıntepe-Bayb** | **2.23 53** | PN | | **Pb** | **16 35 24.6** | **-1.6** | |
| **KOZT** | **Kozan** | **2.23 225** | PN | | **Pn** | **16 35 24.2** | **+1.2** | |
| **BNGB** | **Bingl** | **2.24 91** | PN | | **Pb** | **16 35 24.9** | **-1.5** | |
| **KOZK** | **Kozakli-Nevseh** | **2.29 274** | PN | | **Pn** | **16 35 25.1** | **+1.2** | |
| **KIZO** | **Buyukkizoglu-L** | **2.32 322** | PN | | **Pn** | **16 35 25.4** | **+1.2** | |
| **YARM** | **Yarimca-Ladik(** | **2.39 321** | PN | | **Pn** | **16 35 26.4** | **+1.2** | |
| **KVT** | **Kavak** | **2.41 326** | PN | | **Pn** | **16 35 26.9** | **+1.4** | |
| **KTUT** | **Trabzon** | **2.42 38** | PN | | **Pb** | **16 35 27.5** | **-2.0** | |
| **COAL** | **Corum-Alaca** | **2.47 299** | P | | **Pn** | **16 35 27.4** | **+1.0** | |
| COAL | | | *i* AML | | AML | 16 36 13.0 | | |
| | comp=Z,44nm,0.9s | | | | | | | |
| COAL | | | *i* AML | | AML | 16 36 14.0 | | |
| | comp=N,74nm,0.8s | | | | | | | |
| COAL | | | *i* AML | | AML | 16 36 15.0 | | |
| | comp=E,82nm,1.0s | | | | | | | |
| **KARO** | **Karliova-Bingo** | **2.53 84** | PN | | **Pn** | **16 35 28.9** | **+1.7** | |
| **CMRD** | **Camardi-Nigde** | **2.63 238** | PN | | **Pn** | **16 35 29.9** | **+1.3** | |
| **CEYT** | **Ceyhan** | **2.63 219** | PN | | **Pn** | **16 35 29.9** | **+1.4** | |
| **MAZI** | **Mazidag** | **2.63 127** | PN | | **Pn** | **16 35 29.9** | **+1.3** | |
| **CORM** | **Corum** | **2.69 295** | PN | | **Pn** | **16 35 30.8** | **+1.4** | |
| **SVAN** | **Silvan-Diyarba** | **2.81 108** | PN | | **Pn** | **16 35 32.8** | **+1.8** | |
| **KARA** | **Karaisali** | **2.83 231** | PN | | **Pn** | **16 35 32.7** | **+1.5** | |
| **VRTB** | **Varto-Mus** | **2.84 87** | PN | | **Pn** | **16 35 33.1** | **+1.6** | |
| **GULA** | **Gulagac** | **2.89 256** | PN | | **Pn** | **16 35 33.6** | **+1.5** | |
| **TAHT** | **Tahtakopru-Hat** | **2.99 206** | PN | | **Pn** | **16 35 34.9** | **+1.5** | |
| **KAMT** | **Kaman** | **3.19 276** | PN | | **Pn** | **16 35 37.9** | **+1.6** | |
| **SERE** | **Sereflikochisa** | **3.31 269** | PN | | **Pn** | **16 35 39.6** | **+1.7** | |
| **YAYL** | **Yayladag** | **3.33 204** | PN | | **Pn** | **16 35 39.9** | **+1.7** | |
| **MERS** | **Mersin** | **3.41 231** | PN | | **Pn** | **16 35 40.9** | **+1.7** | |

*LDG **04** 16:53:14.4±0.3,51°.59N×16°.24E,h1km,Ml3.2/10,Error ellipse: s-maj=8.1km s-min=2.8km az=6.0,Suspected Mining induced.*
*MCSM **04** 16:53:16.3±0.4,52°.N-3°.×1°.6E±°,h4km±2km*
*IPEC **04** 16:53:16.2±0.4,51°.54N×16°.19E,h1km±1km,ML3.0/3, Error ellipse: s-maj=3.4km s-min=1.6km az=49.0*
*IDC **04** 16:53:16.9±0.7,51°.50N×16°.05E,h0km,mb1 3.7/6, mb1mx3.3/42,mbtmp3.6/6,ML3.1/6,Error ellipse: s-maj=12.8km s-min=6.9km az=111.0*
*BGR **04** 16:53:17.8±0.4,51°.49N×16°.11E,h1km,ML3.2/14,Error ellipse: s-maj=6.7km s-min=2.2km az=16.0*
*DNK **04** 16:53:17.8±2.3,51°.56N×16°.47E,h25km±124km,ML2.6*
*PRU **04** 16:53:17.3±0.0,51°.49N×16°.10E,h0km*

**ISC 04 16:53:13.7±0.6,51°.57N±0°.03×16°.08E±0°.02,h0km,n97,**
**σ2s17/155,7C-4D,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.74** | **170** | *i* Pg | | **Pb** | | **16 53 29.9** | **+0.5** |
| KSP | | | | *e*Sg | | **Sg** | | **16 53 39.1** | **+1.7** |
| **KSP** | **Ksiaz** | **0.74** | **170** | *e*Pg | | **Pb** | | **16 53 30.0** | **+0.5** |
| KSP | | | | *e*Sg | | **Sg** | | **16 53 38.8** | **+1.4** |
| **KSP** | **Ksiaz** | **0.74** | **170** | Pg | | **Pb** | | **16 53 29.8** | **+0.3** |
| **CHVC** | **Chvalec** | **0.98** | **181** | *e*Pg | | **Pb** | | **16 53 34.3** | **+0.7** |
| CHVC | | | | *e*SG | | **Sg** | | **16 53 46.4** | **+1.1** |
| | comp=Z,153nm,0.4s | | | | | | | | |
| **OSTC** | **Ostas** | **1.02** | **175** | *e*PG | | **Pb** | | **16 53 34.8** | **+0.6** |
| OSTC | | | | *e*SG | | **Sg** | | **16 53 47.5** | **+1.1** |
| | comp=Z,134nm,0.3s | | | | | | | | |
| **UPC** | **Upice** | **1.06** | **182** | *e*PG | | **Pb** | | **16 53 35.7** | **+0.7** |
| UPC | | | | *e*SG | | **Sg** | | **16 53 48.9** | **+1.0** |
| | comp=Z,212nm,0.4s | | | | | | | | |
| **UPC** | **Upice** | **1.06** | **182** | Pg | | **Pb** | | **16 53 35.9** | **+0.9** |
| **DPC** | **Dobruska-Polom** | **1.23** | **173** | *e*PG | | **Pn** | | **16 53 38.6** | **+0.4** |
| DPC | | | | *e*SG | | **Sg** | | **16 53 53.4** | **+0.2** |
| | comp=Z,102nm,0.4s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.23** | **173** | *e*Pg | | **Pn** | | **16 53 38.7** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **1.23** | **173** | Pg | | **Pn** | | **16 53 38.7** | **+0.5** |
| **PVCC** | **Panska Ves** | **1.42** | **223** | *e*PG | | **Pb** | | **16 53 42.5** | **+1.5** |
| PVCC | | | | *e*SG | | **Sn** | | **16 54 01.3** | **+1.3** |
| | comp=Z,265nm,0.2s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **243** | Pn | | **Pg** | | **16 53 43.8** | **+1.0** |
| BRG | | | | Pg | | **Pb** | | **16 53 45.5** | **+2.8** |
| BRG | | | | Sg | | **Sn** | | **16 54 05.5** | **+3.0** |
| BRG | | | | Amp | | | | 16 54 06.2 | |
| | comp=Z,175nm,0.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **243** | *e*Pn | | **Pg** | | **16 53 43.8** | **+1.0** |
| BRG | | | | *e*Sg | | **Sn** | | **16 54 05.2** | **+2.7** |
| **KRLC** | **Kraliky** | **1.56** | **163** | *e*PG | | **Pg** | | **16 53 44.2** | **+0.6** |
| KRLC | | | | *e*SG | | **Sg** | | **16 54 04.9** | **+1.1** |
| | comp=Z,123nm,0.4s | | | | | | | | |
| **FBE** | **Freiberg** | **1.83** | **250** | *e*Pn | | **Pg** | | **16 53 50.7** | **+1.8** |
| FBE | | | | *e*Sg | | **Sg** | | **16 54 14.7** | **+2.2** |
| **PRU** | **Pruhonice** | **1.86** | **212** | *e*PG | | **Pb** | | **16 53 49.2** | **+0.6** |
| PRU | | | | *e*SG | | **Sg** | | **16 54 14.1** | **+0.6** |
| | comp=Z,100nm,0.7s | | | | | | | | |
| **PRU** | **Pruhonice** | **1.86** | **212** | Pn | | **Pb** | | **16 53 48.4** | **-0.2** |
| **CLL** | **Collm** | **1.94** | **263** | *e*Pn | | **Pb** | | **16 53 50.0** | **0.0** |
| CLL | | | | *e*Pg | | **Pg** | | **16 53 53.0** | **+2.0** |
| CLL | | | | *e*x | | x | | 16 53 56.0 | |
| CLL | | | | *i* Sg | | **Sg** | | **16 54 19.0** | **+2.8** |
| | comp=Z,48nm,0.7s | | | | | | | | |
| **CLL** | **Collm** | **1.94** | **263** | *e*Pn | | **Pb** | | **16 53 50.0** | **0.0** |
| **MORC** | **Moravsky Berou** | **2.02** | **152** | ||P | | **Pn** | | **16 53 50.5** | **+1.4** |
| MORC | | | | ||S | | **Sg** | | **16 54 18.6** | **0.0** |
| **MORC** | **Moravsky Berou** baz=334 | **2.02** | **152** | *e*Pn | | **Pn** | | **16 53 50.4** | **+1.3** |
| MORC | | | | *e*Sg | | **Sb** | | **16 54 17.8** | **+0.8** |
| | comp=Z,82nm,0.5s,baz=334 | | | | | | | | |
| **MORC** | **Moravsky Berou** | **2.02** | **152** | *e*Pn | | **Pb** | | **16 53 50.7** | **-0.7** |
| MORC | | | | *e*Sg | | **Sg** | | **16 54 19.7** | **+1.1** |
| **MORC** | **Moravsky Berou** | **2.02** | **152** | Pn | | **Pn** | | **16 53 50.4** | **+1.3** |
| **OKC** | **Ostrava-Krasne** | **2.18** | **142** | *e*PG | | **Pg** | | **16 53 55.3** | **-0.1** |
| OKC | | | | *e*SG | | **Sg** | | **16 54 23.7** | **+0.1** |
| | comp=Z,107nm,0.6s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.18** | **142** | *e*Pg | | **Pg** | | **16 53 57.2** | **+1.8** |
| **VRAC** | **Vranov** | **2.29** | **172** | ||P | | **Pb** | | **16 53 55.3** | **-0.6** |
| VRAC | | | | ||S | | **Sb** | | **16 54 25.9** | **+1.2** |
| **VRAC** | **Vranov** | **2.29** | **172** | Pn | | **Pb** | | **16 53 54.8** | **-1.0** |
| | comp=Z,2.6nm,0.3s,baz=342,slow=16,SNR=13 | | | | | | | | |
| VRAC | | | | Lg | | Lg | | 16 54 26.1 | |
| | comp=Z,8.9nm,0.3s,baz=259,slow=21,SNR=10.0 | | | | | | | | |
| **VRAC** | **Vranov** baz=354 | **2.29** | **172** | *e*Pn | | **Pn** | | **16 53 54.4** | **+1.7** |
| VRAC | | | | *e*Sg | | **Sb** | | **16 54 26.3** | **+1.6** |
| | comp=Z,77nm,0.8s,baz=354 | | | | | | | | |
| **VRAC** | **Vranov** | **2.29** | **172** | *e*PN | | **Pn** | | **16 53 54.5** | **+1.7** |
| VRAC | | | | *e*SG | | **Sb** | | **16 54 26.4** | **+1.7** |
| **PBCC** | **Pribram** | **2.31** | **216** | *e*PN | | **Pn** | | **16 53 55.0** | **+2.0** |
| PBCC | | | | *e*SG | | **Sg** | | **16 54 28.9** | **+1.1** |
| **TREC** | **Trest** | **2.31** | **190** | *e*SG | | **Sg** | | **16 54 28.1** | **+0.2** |
| | comp=Z,63nm,0.3s | | | | | | | | |
| **TREC** | **Trest** | **2.31** | **190** | Pn | | **Pb** | | **16 53 55.2** | **-1.0** |
| **KRUC** | **Moravsky** baz=357 | **2.52** | **175** | *e*Pn | | **Pn** | | **16 53 57.5** | **+1.6** |
| KRUC | | | | *e*Sg | | **Sg** | | **16 54 33.9** | **-0.7** |
| | comp=Z,69nm,0.9s,baz=357 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **2.56** | **245** | *e*Pn | | **Pb** | | **16 53 59.1** | **-1.5** |
| TANN | | | | *e*Pg | | **Pg** | | **16 54 06.1** | **+3.3** |
| **WERD** | **Werda** | **2.64** | **246** | *e*Pn | | **Pn** | | **16 53 59.9** | **+2.4** |
| WERD | | | | *e*Pg | | **Pg** | | **16 54 07.1** | **+2.9** |
| **NKC** | **Novy Kostel** | **2.66** | **241** | *e*PN | | **Pn** | | **16 54 00.4** | **+2.5** |
| NKC | | | | *e*PG | | **Pg** | | **16 54 04.6** | **-0.1** |
| NKC | | | | *e*SG | | **Sg** | | **16 54 41.0** | **+1.8** |
| | comp=Z,80nm,0.3s | | | | | | | | |
| **NKC** | **Novy Kostel** | **2.66** | **241** | Pn | | **Pn** | | **16 54 00.2** | **+2.3** |
| **OJC** | **Ojcow** | **2.71** | **118** | *e*Pn | | **Pn** | | **16 54 00.0** | **+1.5** |
| OJC | | | | *e*Pg | | **Pg** | | **16 54 07.4** | **+1.7** |
| OJC | | | | *e*Sg | | **Sg** | | **16 54 43.0** | **+2.1** |
| **OJC** | **Ojcow** | **2.71** | **118** | Pn | | **Pn** | | **16 54 00.2** | **+1.6** |
| **JAVC** | **Velka Javorina** baz=341 | **2.90** | **159** | *e*Pn | | **Pn** | | **16 54 03.0** | **+1.8** |
| **KHC** | **Kasperske Hory** | **2.92** | **214** | *e*PN | | **Pn** | | **16 54 03.5** | **+2.1** |
| KHC | | | | *e*PG | | **Pg** | | **16 54 09.4** | **-0.3** |
| KHC | | | | *e*SN | | **Sn** | | **16 54 38.2** | **+0.9** |
| KHC | | | | *e*SG | | **Sg** | | **16 54 47.1** | **-0.4** |
| | comp=Z,34nm,0.6s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.92** | **214** | Pn | | **Pn** | | **16 54 03.2** | **+1.8** |
| **MOX** | **Moxa** | **2.96** | **254** | *e*Pn | | **Pn** | | **16 54 04.4** | **+2.4** |
| MOX | | | | *e*Pg | | **Pg** | | **16 54 12.6** | **+2.1** |
| MOX | | | | *e*Sg | | **Sg** | | **16 54 52.3** | **+3.4** |
| **CKRC** | **Cesky Krumlov** | **2.98** | **203** | *e*PN | | **Pn** | | **16 54 04.5** | **+2.3** |
| CKRC | | | | *e*PG | | **Pb** | | **16 54 09.6** | **+2.0** |
| CKRC | | | | *e*SG | | **Sg** | | **16 54 49.3** | **-0.1** |
| **GEC2** | **GERESS Array S** | **3.13** | **210** | *e*Pn | | **Pn** | | **16 54 06.7** | **+2.4** |
| GEC2 | | | | *e*Pg | | **Pg** | | **16 54 14.4** | **+0.8** |
| **GERES** | **GERESS Array B** | **3.13** | **210** | Pn | | **Pn** | | **16 54 06.5** | **+2.1** |
| | comp=Z,2.7nm,0.3s,baz=32,slow=12,SNR=65 | | | | | | | | |
| GERES | | | | Pg | | **Pg** | | **16 54 13.0** | **-0.6** |
| | comp=Z,6.0nm,0.3s,baz=28,slow=17,SNR=30 | | | | | | | | |
| GERES | | | | Lg | | Lg | | 16 54 53.5 | |
| | comp=Z,7.4nm,0.3s,baz=32,slow=27,SNR=11 | | | | | | | | |
| **WET** | **Wettzell** | **3.18** | **221** | *e*Pn | | **Pn** | | **16 54 07.1** | **+2.2** |
| **LANS** | **Liptovska Anna** | **3.25** | **137** | *e*PN | | **Pn** | | **16 54 08.0** | **+2.0** |
| LANS | | | | *e*PG | | **Pg** | | **16 54 17.2** | **+1.2** |
| LANS | | | | *e*SG | | **Sg** | | **16 55 00.0** | **+1.9** |
| **MODS** | **Modra-Piesok** | **3.29** | **166** | *e*PG | | **Pg** | | **16 54 19.3** | **+2.5** |
| MODS | | | | *e*SG | | **Sg** | | **16 55 01.3** | **+1.9** |
| **NIE** | **Niedzica** | **3.45** | **127** | *e*P | | **Pg** | | **16 54 21.4** | **+1.6** |
| NIE | | | | *e*S | | **Sg** | | **16 55 06.6** | **+2.2** |
| **VYHS** | **Vyhne** | **3.55** | **149** | *e*PN | | **Pn** | | **16 54 11.3** | **+1.2** |
| VYHS | | | | *e*PG | | **Pg** | | **16 54 22.9** | **+1.1** |
| VYHS | | | | *e*SG | | **Sg** | | **16 55 08.9** | **+1.1** |
| **VYHS** | **Vyhne** | **3.55** | **149** | Pn | | **Pn** | | **16 54 11.3** | **+1.2** |
| **CLZ** | **Clausthal** | **3.56** | **277** | *e*Pn | | **Pn** | | **16 54 13.8** | **+3.5** |
| **BSD** | **Bornholm Skovb** | **3.62** | **349** | *i* P | | **Pn** | | **16 54 13.9** | **+2.9** |
| BSD | | | | *i* S | | **Sn** | | **16 54 54.1** | **-0.2** |
| BSD | | | | IAML | | | | 16 54 57.3 | |
| | comp=Z,1.4nm,0.1s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **3.62** | **241** | *e*Pn | | **Pn** | | **16 54 13.7** | **+2.7** |
| GRF | | | | *e*Pg | | **Pg** | | **16 54 27.5** | **+4.4** |
| **CONA** | **Conrad Observa** comp=Z,3.2nm,0.5s,SNR=7.3 | **3.65** | **182** | Pn | | **Pn** | | **16 54 14.0** | **+2.6** |
| **MOA** | **Molln** comp=Z,5.0nm,0.3s,SNR=15 | **3.91** | **198** | *i* Pn | | **Pn** | | **16 54 17.4** | **+2.5** |
| **CRVS** | **Cervenica-Dubn** | **4.37** | **126** | *e*PN | | **Pn** | | **16 54 25.3** | **+4.0** |
| CRVS | | | | *e*PG | | **Pg** | | **16 54 39.1** | **+1.8** |
| **PSZ** | **Piszkesteto** | **4.41** | **144** | ⇑P | | **Pn** | | **16 54 24.2** | **+2.3** |
| **BLEU** | **Blekinge** | **4.75** | **358** | *i* P | | **Pn** | | **16 54 29.7** | **+3.3** |
| BLEU | | | | *i* S | | **Sn** | | **16 55 20.6** | **-1.5** |
| **SOKA** | **Soboth** | **4.95** | **188** | *e*Sg | | **Sg** | | **16 55 50.8** | **-1.6** |
| **DEL** | **Delary** | **5.08** | **346** | *i* P | | **Pn** | | **16 54 33.0** | **+2.0** |
| DEL | | | | *i* S | | **Sn** | | **16 55 29.5** | **-0.8** |
| **WATA** | **Walderalm** comp=Z,2.1nm,0.3s | **5.16** | **216** | *e*Pn | | **Pn** | | **16 54 35.4** | **+3.1** |
| WATA | | | | *e*Sg | | **Sg** | | **16 56 03.8** | **+4.5** |
| | comp=Z,4.8nm,0.4s | | | | | | | | |
| **OBKA** | **Obir** comp=Z,0.8nm,0.4s | **5.17** | **192** | *e*Pn | | **Pn** | | **16 54 35.7** | **+3.4** |
| **MOTA** | **Moosalm** comp=Z,3.6nm,0.4s | **5.33** | **219** | *e*Pn | | **Pn** | | **16 54 37.0** | **+2.4** |
| **RETA** | **Reutte** comp=Z,3.0nm,0.6s | **5.36** | **222** | *e*Pn | | **Pn** | | **16 54 37.1** | **+2.2** |
| **ABTA** | **Abfaltersbach** comp=Z,2.3nm,0.4s | **5.37** | **207** | *e*Pn | | **Pn** | | **16 54 38.0** | **+2.9** |
| **SQTA** | **Sankt Quirin** comp=Z,2.7nm,0.3s,SNR=4.4 | **5.39** | **218** | Pn | | **Pn** | | **16 54 39.2** | **+3.7** |
| **TRPA** | **Tarpa** | **5.41** | **127** | ⇓P | | **Pn** | | **16 54 36.9** | **+1.3** |
| **MORH** | **Mrgy, Hungar** | **5.62** | **162** | ⇓P | | **Pn** | | **16 54 41.1** | **+2.6** |
| **DAVA** | **Damuels** comp=Z,1.4nm,0.3s | **5.89** | **226** | *e*Pn | | **Pn** | | **16 54 44.3** | **+1.9** |
| **SIRR** | **Siria** | **6.45** | **143** | ⇑P | | **Pn** | | **16 54 52.0** | **+2.1** |
| **DRGR** | | **6.46** | **135** | ⇓P | | **Pn** | | **16 54 52.5** | **+2.4** |
| **CDF** | **Champ du Feu** | **6.50** | **244** | *e*P | | **Pn** | | **16 54 53.1** | **+2.5** |
| CDF | | | | *e*Sn | | **Sn** | | **16 56 00.7** | **-4.7** |
| CDF | | | | *e*Sg | | **Sg** | | **16 56 40.8** | **-1.5** |
| | comp=Z,3.4nm,0.4s | | | | | | | | |
| **OVD** | **Ostervraa, Den** | **6.70** | **332** | *i* S | | **Sn** | | **16 56 11.3** | **+1.1** |
| OVD | | | | IAML | | | | 16 56 14.3 | |
| | comp=Z,12nm,0.1s | | | | | | | | |
| **BZS** | **Buzias** | **7.00** | **146** | ⇑P | | **Pn** | | **16 54 59.8** | **+2.5** |
| **HINF** | **Hinteralfeld** comp=Z,8.6nm,0.7s | **7.07** | **241** | *e*Sg | | **Sg** | | **16 56 57.9** | **-2.6** |
| **BURAR** | **Bucovina Array** | **7.13** | **120** | ⇑P | | **Pn** | | **16 55 01.1** | **+1.8** |
| **BURAR** | **Bucovina Array** | **7.13** | **120** | Pn | | **Pn** | | **16 55 01.3** | **+1.9** |
| **HAU** | **Haudompre** | **7.24** | **244** | *e*Pn | | **Pn** | | **16 55 00.3** | **-0.4** |
| **HAU** | **Haudompre** | **7.24** | **244** | *e*Pg | | **Pg** | | **16 55 31.0** | **-1.3** |
| HAU | | | | *e*Sg | | **Sg** | | **16 57 03.6** | **-2.5** |
| | comp=Z,6.5nm,0.4s | | | | | | | | |
| **SFTF** | **Sexfontaines** | **7.89** | **249** | *e*Sn | | **Sn** | | **16 56 35.8** | **-3.7** |
| SFTF | | | | *e*Sg | | **Sg** | | **16 57 23.3** | **-3.5** |
| | comp=Z,6.7nm,0.5s,baz=62 | | | | | | | | |
| **AKASG** | **Malin Array Be** comp=Z,1.3nm,0.3s,baz=279,slow=12,SNR=9.3 | **8.31** | **91** | Pn | | **Pn** | | **16 55 16.0** | **+0.6** |
| **AKBB** | **Malin Array Si** | **8.31** | **91** | Pn | | **Pn** | | **16 55 17.4** | **+2.0** |
| AKBB | | | | pP | | **Pn** | | **16 55 18.2** | **+2.8** |
| **LPL** | **La Plagne** | **8.67** | **229** | *e*Pn | | **Pn** | | **16 55 20.5** | **0.0** |
| **LPL** | **La Plagne** | **8.67** | **229** | *e*Pg | | Pg | | 16 55 53.2 | -6.4 |
| LPL | | | | *e*Sg | | **Sg** | | **16 57 47.3** | **-4.5** |
| | comp=Z,0.6nm,0.2s | | | | | | | | |
| **LPG** | **La Plagne** | **8.67** | **229** | *e*Sn | | **Sn** | | **16 56 53.0** | **-6.2** |
| LPG | | | | *e*Sg | | **Sg** | | **16 57 47.8** | **-4.2** |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **HFS** | **Hagfors** comp=Z,0.2nm,0.3s,baz=174,slow=15,SNR=4.9 | **8.69** | **352** | Pn | | **Pn** | | **16 55 21.2** | **+0.7** |
| **LO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HATZ** | **Hinemaiaia** | **8.36** | **206** | P | **P** | **17 00 09.6** | **+1.7** |
| **ARHZ** | **Aropaoanui** | **8.40** | **200** | P | **P** | **17 00 09.6** | **+1.3** |
| ARHZ | | | | S | **S** | **17 01 43.9** | **-2.6** |
| **BKZ** | **Black Stump Fm** | **8.47** | **203** | P | **P** | **17 00 09.0** | **-0.1** |
| BKZ | | | | S | **S** | **17 01 44.5** | **-3.4** |
| **HIZ** | **Hauiti** | **8.56** | **213** | P | **P** | **17 00 14.7** | **+4.7** |
| **KATZ** | **Kakaramea** | **8.59** | **207** | P | **P** | **17 00 13.1** | **+2.7** |
| **MCHZ** | **McNeill Hill** | **8.65** | **201** | P | **P** | **17 00 14.5** | **+3.5** |
| MCHZ | | | | S | **S** | **17 01 51.7** | **+0.2** |
| **NTVZ** | **North Tongarir** | **8.70** | **207** | P | **P** | **17 00 13.9** | **+2.2** |
| **TMVZ** | **Te Maari** | **8.71** | **207** | P | **P** | **17 00 14.2** | **+2.5** |
| **ETVZ** | **East Tongariro** | **8.72** | **207** | P | **P** | **17 00 14.3** | **+2.4** |
| **KWHZ** | **Kaweka Forest** | **8.72** | **203** | P | **P** | **17 00 13.6** | **+1.8** |
| KWHZ | | | | S | **S** | **17 01 49.6** | **-3.4** |
| **CKHZ** | **Cape Kidnapper** | **8.74** | **199** | P | **P** | **17 00 14.7** | **+2.8** |
| CKHZ | | | | S | **S** | **17 01 52.0** | **-1.3** |
| **WTVZ** | **West Tongariro** | **8.75** | **207** | P | **P** | **17 00 14.4** | **+2.2** |
| **NNVZ** | **North Ngauruho** | **8.76** | **207** | P | **P** | **17 00 14.9** | **+2.6** |
| **OTVZ** | **Oturere** | **8.76** | **207** | P | **P** | **17 00 13.4** | **+1.0** |
| OTVZ | | | | S | **S** | **17 01 53.9** | **-0.2** |
| **TWVZ** | **Taurewa** | **8.77** | **208** | P | **P** | **17 00 14.6** | **+2.2** |
| **SNVZ** | **South Ngauruho** | **8.79** | **207** | P | **P** | **17 00 13.6** | **+0.9** |
| **NGZ** | **Ngauruhoe** | **8.80** | **207** | P | **P** | **17 00 15.5** | **+2.7** |
| **FWVZ** | **Far West T-bar** | **8.89** | **207** | P | **P** | **17 00 15.2** | **+1.4** |
| **BHHZ** | **Black Hill Sta** | **8.90** | **204** | P | **P** | **17 00 13.9** | **+0.1** |
| BHHZ | | | | S | **S** | **17 01 53.7** | **-3.0** |
| **KAHZ** | **Kahuranaki** | **8.92** | **200** | P | **P** | **17 00 16.0** | **+2.0** |
| KAHZ | | | | S | **S** | **17 01 56.4** | **-0.5** |
| **WNVZ** | **Wahianoa** | **8.93** | **207** | P | **P** | **17 00 15.2** | **+1.0** |
| WNVZ | | | | S | **S** | **17 01 55.0** | **-2.4** |
| **KRHZ** | **Kereru** | **8.94** | **202** | P | **P** | **17 00 13.1** | **-1.0** |
| KRHZ | | | | S | **S** | **17 01 55.5** | **-1.8** |
| **MOVZ** | **Moawhango** | **8.94** | **206** | P | **P** | **17 00 15.1** | **+0.8** |
| MOVZ | | | | S | **S** | **17 01 53.6** | **-3.9** |
| **PXZ** | **Pawanui** | **9.15** | **199** | P | **P** | **17 00 19.1** | **+2.7** |
| PXZ | | | | S | **S** | **17 01 57.4** | **-3.9** |
| **WPHZ** | **Waipukurau** | **9.30** | **201** | P | **P** | **17 00 20.0** | **+2.0** |
| WPHZ | | | | S | **S** | **17 02 00.4** | **-4.0** |
| **PRHZ** | **Porangahau** | **9.43** | **200** | P | **P** | **17 00 22.6** | **+3.1** |
| PRHZ | | | | S | **S** | **17 02 03.7** | **-3.4** |
| **TSZ** | **Takapari Road** | **9.45** | **203** | P | **P** | **17 00 21.0** | **+1.3** |
| TSZ | | | | S | **S** | **17 02 04.0** | **-3.5** |
| **WAZ** | **Wanganui** | **9.54** | **208** | P | **P** | **17 00 23.1** | **+2.4** |
| **ANWZ** | **Angora Road** | **9.65** | **200** | P | **P** | **17 00 24.7** | **+2.8** |
| ANWZ | | | | S | **S** | **17 02 10.6** | **-0.9** |
| **PRWZ** | **Pori Road** | **9.89** | **202** | P | **P** | **17 00 26.9** | **+2.4** |
| PRWZ | | | | S | **S** | **17 02 13.7** | **-2.6** |
| **ASAR** | **Alice Springs** | **41.99** | **269** | P | **P** | **17 05 20.2** | **+1.0** |
| | 0.4nm,0.8s,baz=108,slow=7.2,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.08** | **274** | P | **P** | **17 05 28.3** | **+0.6** |
| | 0.2nm,0.3s,baz=110,slow=8.1,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **145.72** | **339** | PKPbc | **PKiKP** | **17 17 02.7** | **+4.2** |
| | 0.7nm,0.5s,baz=29,slow=4.4,SNR=9.4 | | | | | | |

*IDC **04** 17:04:01.5±1.2,22.2°88S×179.6°64W,h540km±12km, mb3.6/14,mb1 3.7/17,mb1mx3.4/58,mbtmp4.4/17,Error ellipse: s-maj=19.1km s-min=12.9km az=132.0*
*NOU **04** 17:04:01.9,22.2°75S×179.7°53W,h549km,mb4.4/44,South of Fiji Islands*
*NEIC **04** 17:04:01.5±2.0,22.2°8S±0.2°×179.6°W±0.1°,h537km±10km, mb4.5/21,Error ellipse: s-maj=25.2km s-min=16.8km az=158.0*

**ISC 04 17:03:59.7**±0.4,**22.92S**±0.05°×**179.43W**±0.07°,**h526**km±**n140**,σ1§**92**/144,**mb4.3**/23,**9C-3D**,**South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LKBA** | **Tubou, Lakemba** | **4.69** | **7** | **P** | | **P** | **P** | **17 05 28.4** | **+2.8** |
| **MSVF** | **Nonsavu** | **5.67** | **335** | P | | P | **P** | **17 05 35.0** | **+0.6** |
| | 5.5nm,0.3s,baz=181,slow=5.0,SNR=37 | | | | | | | | |
| MSVF | | | | S | | S | **S** | **17 06 53.6** | **+2.0** |
| | baz=184,slow=22,SNR=9.5 | | | | | | | | |
| **MSVF** | **Nonsavu** | **5.67** | **335** | P | | P | **P** | **17 05 35.4** | **+1.0** |
| **MSVF** | **Nonsavu** | **5.67** | **335** | P | | P | **P** | **17 05 35.9** | **+1.5** |
| **TAVE** | **Taveuni** | **6.19** | **356** | P | | P | **P** | **17 05 41.6** | **+2.5** |
| **RIZ** | **Raoul Island** | **6.45** | **168** | P | | P | **P** | **17 05 44.7** | **+3.4** |
| **RAO** | **Raoul Island** | **6.45** | **168** | P | | P | **P** | **17 05 45.1** | **+3.7** |
| | 259nm,0.3s,baz=340,slow=1.8,SNR=9.6 | | | | | | | | |
| **RAO** | **Raoul Island** | **6.45** | **168** | P | | P | **P** | **17 05 45.2** | **+3.8** |
| **GLKZ** | **Green Lake** | **6.46** | **168** | P | | P | **P** | **17 05 45.5** | **+4.1** |
| GLKZ | | | | S | | S | **S** | **17 06 59.9** | **-4.9** |
| **DGTI** | **Dogotuki** | **6.63** | **353** | P | | P | **P** | **17 05 44.9** | **+1.6** |
| **NIUE** | **Niue** | **9.66** | **68** | P | | P | **P** | **17 06 16.3** | **+2.4** |
| **NIUE** | **Niue** | **9.66** | **68** | P | | P | **P** | **17 06 16.7** | **+2.8** |
| **AFI** | **Afiamalu** | **11.53** | **40** | P | | P | **P** | **17 06 32.3** | **-1.2** |
| | 4.5nm,0.3s,baz=100,slow=3.4,SNR=4.4 | | | | | | | | |
| AFI | | | | S | | S | **S** | **17 08 34.8** | **-5.2** |
| | 1.8nm,0.3s,baz=227,slow=22,SNR=2.4 | | | | | | | | |
| **AFI** | **Afiamalu** | **11.53** | **40** | P | | P | **P** | **17 06 31.8** | **-1.7** |
| **AFI** | **Afiamalu** | **11.53** | **40** | P | | P | **P** | **17 06 35.7** | **+2.2** |
| | 42nm,1.6s | | | | | | | | |
| **MARNC** | **Mare, Loyalty** | **11.71** | **275** | P | | P | **P** | **17 06 35.4** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **11.71** | **275** | P | | P | **P** | **17 06 35.8** | **+0.6** |
| **PINNC** | **Pines Island,** | **12.12** | **269** | P | | P | **P** | **17 06 39.1** | **-0.4** |
| **PINNC** | **Pines Island,** | **12.12** | **269** | P | | P | **P** | **17 06 40.6** | **+1.1** |
| **RTV** | **Rentapao** | **12.48** | **292** | P | | P | **P** | **17 06 43.5** | **+0.2** |
| **LIFNC** | **LIFOU** | **12.56** | **277** | P | | P | **P** | **17 06 43.2** | **-1.0** |
| **LIFNC** | **LIFOU** | **12.56** | **277** | P | | P | **P** | **17 06 44.6** | **+0.4** |
| **OUENC** | **Ouen Island, N** | **12.69** | **270** | P | | P | **P** | **17 06 44.2** | **-1.3** |
| **OUENC** | **Ouen Island, N** | **12.69** | **270** | P | | P | **P** | **17 06 46.9** | **+1.4** |
| **DZM** | **Mont Dzumac** | **13.09** | **271** | P | | P | **P** | **17 06 48.4** | **-1.4** |
| | 1.5nm,0.3s,baz=86,slow=18,SNR=8.0 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **13.09** | **271** | P | | P | **P** | **17 06 45.9** | **-3.9** |
| **DZM** | **Mont Dzumac** | **13.09** | **271** | P | | P | **P** | **17 06 50.3** | **+0.5** |
| **OUZ** | **Omahuta** | **13.69** | **205** | P | | P | **P** | **17 06 59.8** | **+4.1** |
| **WMGZ** | **Waiomatatini S** | **14.97** | **187** | P | | P | **P** | **17 07 14.5** | **+5.4** |
| **HAZ** | **Te Kaha** | **14.99** | **189** | P | | P | **P** | **17 07 11.3** | **+2.1** |
| HAZ | | | | S | | S | **S** | **17 09 42.9** | **-2.5** |
| **RUGZ** | **Raukumara Rang** | **15.21** | **189** | P | | P | **P** | **17 07 14.6** | **+3.0** |
| **KOUNC** | **Koumac, New Ca** | **15.32** | **276** | P | | P | **P** | **17 07 13.5** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **15.40** | **195** | P | | P | **P** | **17 07 20.4** | **+6.9** |
| **URZ** | **Urewera** | **15.58** | **190** | P | | P | **P** | **17 07 14.6** | **-0.8** |
| | 4.9nm,0.3s,baz=311,slow=3.6,SNR=23 | | | | | | | | |
| URZ | | | | S | | S | **S** | **17 09 55.5** | **-0.8** |
| | 0.4nm,0.3s,baz=302,slow=19,SNR=2.2 | | | | | | | | |
| **URZ** | **Urewera** | **15.58** | **190** | P | | P | **P** | **17 07 14.4** | **-0.9** |
| URZ | | | | S | | S | **S** | **17 09 53.0** | **-3.3** |
| **URZ** | **Urewera** | **15.58** | **190** | P | | P | **P** | **17 07 14.2** | **-1.2** |
| **URZ** | **Urewera** | **15.58** | **190** | P | | P | **P** | **17 07 17.7** | **+2.3** |
| **MWZ** | **Matawai** | **15.59** | **189** | P | | P | **P** | **17 07 14.9** | **+0.3** |
| MWZ | | | | S | | S | **S** | **17 09 54.3** | **-2.3** |
| **SNGZ** | **Shannon Statio** | **16.06** | **189** | P | | P | **P** | **17 07 22.6** | **+2.4** |
| **MTHZ** | **Maungataniwha** | **16.20** | **190** | P | | P | **P** | **17 07 23.9** | **+2.1** |
| **WATZ** | **Wairara** | **16.28** | **194** | P | | P | **P** | **17 07 27.2** | **+4.7** |
| **HIZ** | **Hauiti** | **16.30** | **196** | P | | P | **P** | **17 07 25.3** | **+2.6** |
| **RATZ** | **Rangitukua** | **16.42** | **193** | P | | P | **P** | **17 07 27.0** | **+3.1** |
| **BKZ** | **Black Stump Fm** | **16.57** | **191** | P | | P | **P** | **17 07 24.8** | **-0.5** |
| BKZ | | | | S | | S | **S** | **17 10 09.2** | **-4.4** |
| **BKZ** | **Black Stump Fm** | **16.57** | **191** | P | | P | **P** | **17 07 23.9** | **-1.4** |
| BKZ | | | | IAmb | | IAmb | IAmb | 17 07 33.9 | |
| | comp=Z,9.8nm,0.7s | | | | | | | | |
| **TMVZ** | **Te Maari** | **16.68** | **193** | P | | P | **P** | **17 07 28.6** | **+2.2** |
| **SNVZ** | **South Ngauruho** | **16.76** | **193** | P | | P | **P** | **17 07 29.1** | **+1.8** |
| **QRZ** | **Quartz Range** | **19.10** | **199** | P | | P | **P** | **17 07 49.8** | **+1.1** |
| **QRZ** | **Quartz Range** | **19.10** | **199** | P | | P | **P** | **17 07 51.2** | **+2.6** |
| | comp=Z,38nm,0.9s | | | | | | | | |
| **PLWZ** | **Palliser** | **19.13** | **192** | P | | P | **P** | **17 07 48.9** | **0.0** |
| **TUWZ** | **Tuamarina** | **19.28** | **195** | P | | P | **P** | **17 07 50.4** | **+0.2** |
| **THZ** | **Tophouse** | **19.86** | **197** | P | | P | **P** | **17 07 55.6** | **0.0** |
| THZ | | | | IAmb | | IAmb | IAmb | 17 08 00.1 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **KHZ** | **Kahutara** | **20.31** | **195** | P | | P | **P** | **17 08 00.2** | **+0.6** |
| KHZ | | | | IAmb | | IAmb | IAmb | 17 08 27.4 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| **LTZ** | **Lake Taylor** | **20.98** | **197** | P | | P | **P** | **17 08 05.0** | **-0.7** |
| LTZ | | | | IAmb | | IAmb | IAmb | 17 08 13.4 | |
| | comp=Z,30nm,1.5s | | | | | | | | |
| **ARMA** | **Armidale** | **26.87** | **248** | P | | P | **P** | **17 08 59.5** | **+1.1** |
| **MGCD** | **Mangrove Creek** | **27.86** | **242** | P | | P | **P** | **17 09 08.4** | **+1.4** |
| | comp=Z,44nm,1.3s | | | | | | | | |
| **RMQ** | **Roma** | **29.08** | **256** | P | | P | **P** | **17 09 18.9** | **+1.2** |
| **CNB** | **Canberra Magne** | **29.81** | **238** | P | | P | **P** | **17 09 25.6** | **+1.7** |
| **CAN** | **Canberra** | **30.09** | **239** | P | | P | **P** | **17 09 28.2** | **+1.8** |
| **CTA** | **Charters Tower** | **32.01** | **268** | P | | P | **P** | **17 09 43.1** | **+0.1** |
| **CTAO** | **Charters Tower** | **32.01** | **268** | P | | P | **P** | **17 09 42.1** | **-0.9** |
| **CTAO** | **Charters Tower** | **32.01** | **268** | P | | P | **P** | **17 09 43.1** | **+0.1** |
| **CMSA** | **Cobar Meteorol** | **32.08** | **247** | P | | P | **P** | **17 09 44.2** | **+0.8** |
| **QLP** | **Quilpie** | **33.13** | **256** | P | | P | **P** | **17 09 52.5** | **+0.1** |
| **TOO** | **Toolangi** | **33.43** | **236** | P | | P | **P** | **17 09 55.6** | **+0.8** |
| | comp=Z,11nm,1.1s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **34.69** | **287** | P | | **P** | **P** | **17 10 04.6** | **-1.0** |
| PMG | | | | IAmb | | IAmb | IAmb | 17 10 05.9 | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| **STKA** | **Stephens Creek** | **35.58** | **247** | P | | P | **P** | **17 10 12.6** | **-0.3** |
| | comp=Z,5.9nm,0.5s,baz=94,slow=11,SNR=16 | | | | | | | | |
| **STKA** | **Stephens Creek** | **35.58** | **247** | P | | P | **P** | **17 10 13.1** | **+0.2** |
| **STKA** | **Stephens Creek** | **35.58** | **247** | P | | P | **P** | **17 10 13.7** | **+0.8** |
| **INKA** | **Innaminka** | **36.21** | **254** | P | | P | **P** | **17 10 19.1** | **+1.0** |
| **QIS** | **Mount Isa** | **38.04** | **266** | P | | P | **P** | **17 10 32.4** | **-0.9** |
| **LCRK** | **Leigh Creek** | **38.41** | **249** | P | | P | **P** | **17 10 35.9** | **-0.2** |
| **BBOO** | **Buckleboo** | **40.32** | **246** | P | | P | **P** | **17 10 50.5** | **-1.0** |
| | comp=Z,30nm,2.4s | | | | | | | | |
| **OOD** | **Oodnadatta** | **40.68** | **254** | P | | P | **P** | **17 10 55.2** | **+0.8** |
| **MULG** | **Mulgathing** | **42.00** | **250** | P | | P | **P** | **17 11 04.8** | **-0.1** |
| **AS31** | **Alice Springs** | **42.72** | **259** | P | | P | **P** | **17 11 09.7** | **-1.0** |
| **ASAR** | **Alice Springs** | **42.72** | **259** | P | | P | **P** | **17 11 10.1** | **-0.6** |
| | comp=Z,8.5nm,0.8s,baz=100,slow=7.7,SNR=93 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.72** | **259** | P | | P | **P** | **17 11 09.0** | **-1.7** |
| **WR0** | **Warramunga Arr** | **42.82** | **265** | P | | P | **P** | **17 11 09.5** | **-1.9** |
| **WB0** | **Warramunga Arr** | **43.00** | **265** | P | | P | **P** | **17 11 11.2** | **-1.7** |
| WB0 | | | | IAmb | | IAmb | IAmb | 17 11 12.3 | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.00** | **265** | P | | P | **P** | **17 11 11.2** | **-1.7** |
| WB2 | | | | IAmb | | IAmb | IAmb | 17 11 12.4 | |
| | comp=Z,7.7nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.00** | **265** | P | | P | **P** | **17 11 10.9** | **-2.0** |
| WRAB | | | | IAmb | | IAmb | IAmb | 17 11 12.4 | |
| | comp=Z,7.2nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.00** | **265** | P | | P | **P** | **17 11 11.5** | **-1.4** |
| **WRA** | **Warramunga Arr** | **43.01** | **265** | P | | P | **P** | **17 11 11.7** | **-1.3** |
| | comp=Z,2.6nm,0.3s,baz=96,slow=8.4,SNR=75 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.01** | **265** | P | | P | **P** | **17 11 11.7** | **-1.3** |
| **FORT** | **Forrest** | **47.15** | **249** | P | | P | **P** | **17 11 43.6** | **-1.0** |
| **FORT** | **Forrest** | **47.15** | **249** | P | | P | **P** | **17 11 44.2** | **-0.4** |
| **WRKA** | **Warakurna** | **47.57** | **256** | P | | P | **P** | **17 11 47.3** | **-0.6** |
| **KNRA** | **Kununurra** | **49.23** | **269** | P | | P | **P** | **17 11 59.8** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **51.44** | **265** | P | | P | **P** | **17 12 16.0** | **-0.3** |
| | comp=Z,3.3nm,0.8s,baz=99,slow=6.1,SNR=9.8 | | | | | | | | |
| **MBWA** | **Marble Bar** | **56.07** | **259** | P | | P | **P** | **17 12 48.5** | **-0.6** |
| **BLDU** | **Ballidu** | **56.88** | **248** | P | | P | **P** | **17 12 54.0** | **-0.6** |
| **JKA** | **Kamikawa-asahi** | **75.23** | **333** | P | | P | **P** | **17 14 48.9** | **+0.5** |
| **JKA** | **Kamikawa-asahi** | **75.23** | **333** | IAmb | | IAmb | IAmb | 17 15 03.4 | |
| | comp=Z,38nm,1.5s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **75.23** | **333** | P | | P | **P** | **17 14 48.9** | **+0.5** |
| | comp=Z,4.3nm,0.6s,baz=21,slow=6.9,SNR=6.1 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.27** | **346** | P | | P | **P** | **17 15 04.5** | **-0.3** |
| | comp=Z,5.7nm,0.7s,baz=142,slow=7.5,SNR=10 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.27** | **346** | P | | P | **P** | **17 15 03.9** | **-0.8** |
| **NVAR** | **Mina Array Bea** | **83.68** | **44** | P | | P | **P** | **17 15 35.2** | **+1.9** |
| | comp=Z,1.3nm,0.9s,baz=230,slow=8.5,SNR=7.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.68** | **44** | P | | P | **P** | **17 15 34.4** | **+1.0** |
| **214A** | **Organ Pipe Nat** | **83.85** | **52** | P | | P | **P** | **17 15 33.5** | **-0.6** |
| **KLR** | **Kul'dur** | **83.94** | **330** | P | | P | **P** | **17 15 35.5** | **+1.4** |
| | comp=Z,0.6nm,0.5s,baz=139,slow=7.3,SNR=4.8 | | | | | | | | |
| **MA2** | **Magadan** | **85.76** | **345** | P | | P | **P** | **17 15 41.8** | **-0.9** |
| MA2 | | | | IAmb | | IAmb | IAmb | 17 15 43.0 | |
| | comp=Z,4.8nm,0.7s | | | | | | | | |
| **U15A** | **North Rim** | **86.56** | **48** | P | | P | **P** | **17 15 49.3** | **+1.9** |
| **SEY** | **Seymchan** | **88.42** | **348** | P | | P | **P** | **17 15 55.2** | **0.0** |
| | comp=Z,2.9nm,0.8s,baz=146,slow=5.6,SNR=12 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.46** | **58** | P | | P | **P** | **17 16 03.5** | **+2.5** |
| | comp=Z,1.2nm,0.9s,baz=206,slow=5.4,SNR=5.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.46** | **58** | P | | P | **P** | **17 16 02.9** | **+2.0** |
| **CMAR** | **Chiang Mai Arr** | **89.68** | **290** | P | | P | **P** | **17 16 02.2** | **+0.2** |
| | comp=Z,1.0nm,0.3s,baz=138,slow=3.7,SNR=7.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **90.95** | **13** | P | | P | **P** | **17 16 06.2** | **-0.7** |
| | comp=Z,0.6nm,0.7s,baz=212,slow=5.6,SNR=6.4 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.62** | **44** | P | | P | **P** | **17 16 11.5** | **+0.7** |
| | comp=Z,0.8nm,0.8s,baz=189,slow=3.4,SNR=5.8 | | | | | | | | |
| **YAK** | **Yakutsk** | **93.86** | **338** | P | | P | **P** | **17 16 19.0** | **-1.2** |
| | comp=Z,1.3nm,0.3s,baz=284,slow=1.3,SNR=4.8 | | | | | | | | |
| **YAK** | **Yakutsk** | **93.86** | **338** | IAmb | | IAmb | IAmb | 17 16 20.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.87** | **313** | PKiKP | | **PKiKP** | **PKiKP** | **17 21 33.6** | **-1.2** |
| | comp=Z,0.3nm,0.5s,baz=64,slow=3.4,SNR=7.2 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **120.05** | **319** | PKP | | **PKPdf** | **PKPdf** | **17 21 49.5** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=92,slow=5.0,SNR=3.6 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.03** | **349** | PKP | | **PKPdf** | **PKPdf** | **17 22 11.0** | **+0.3** |
| | comp=Z,3.8nm,1.0s,baz=351,slow=1.2,SNR=1.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **137.68** | **342** | PKP | | **PKiKP** | **PKiKP** | **17 22 25.0** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=102,slow=2.3,SNR=10.0 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.19** | **352** | PKP | | **PKPdf** | **PKPdf** | **17 22 23.6** | **-6.2** |
| | comp=Z,1.0nm,0.6s,baz=25,slow=3.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.42** | **328** | PKP | | PKPbc | PKPbc | 17 22 34.6 | -1.1 |
| | comp=Z,2.3nm,0.5s,baz=45,slow=4.3,SNR=34 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.42** | **328** | | | PKPbc | PKPbc | 17 22 34.1 | -1.6 |
| **SUW** | **Suwalki** | **144.58** | **337** | | | PKPbc | PKPbc | 17 22 35.5 | -0.5 |
| **SORM** | **Soroca** | **146.50** | **326** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 41.2** | **-0.6** |
| **BURAR** | **Bucovina Array** | **148.44** | **327** | ⇓P | | **PKiKP** | **PKiKP** | **17 22 48.2** | **+0.1** |
| **TRPA** | **Tarpa** | **149.35** | **331** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 49.0** | **0.0** |
| **DOPR** | **Dopca** | **149.44** | **325** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 50.0** | **+0.6** |
| **MLR** | **Muntele Rosu** | **149.45** | **324** | ⇓P | | **PKPbc** | **PKPbc** | **17 22 48.6** | **-1.0** |
| **OSTC** | **Ostas** | **149.83** | **340** | *e*PKP | | **PKPbc** | **PKPbc** | **17 22 50.7** | **+0.5** |
| **UPC** | **Upice** | **149.93** | **340** | *e*PKP | | **PKiKP** | **PKiKP** | **17 22 51.1** | **+0.1** |
| **VOIR** | | **149.97** | **324** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 50.8** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **149.97** | **340** | *e*PKP | | **PKPbc** | **PKPbc** | **17 22 50.6** | **+0.1** |
| DPC | | | | *ex* | | x | x | 17 22 59.1 | |
| **CLL** | **Collm** | **150.06** | **344** | *i* PKPbc | | **PKPbc** | **PKPbc** | **17 22 50.7** | **+0.1** |
| | comp=Z,14nm,1.0s | | | | | | | | |
| CLL | | | | *i* PKPab | | **PKPab** | **PKPab** | **17 22 58.4** | **-0.4** |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **150.06** | **344** | | | **PKPbc** | **PKPbc** | **17 22 50.3** | **-0.3** |
| **ARR** | **Arges** | **150.24** | **325** | ⇓P | | **PKiKP** | **PKiKP** | **17 22 52.4** | **+0.5** |
| **DRGR** | | **150.24** | **329** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 51.2** | **-0.1** |
| **PVCC** | **Panska Ves** | **150.35** | **342** | *e*PKP | | **PKPbc** | **PKPbc** | **17 22 51.7** | **+0.4** |
| **PRU** | **Pruhonice** | **150.84** | **341** | *e*PKP | | **PKPbc** | **PKPbc** | **17 22 52.6** | **+0.1** |
| **SIRR** | **Siria** | **151.12** | **329** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 53.4** | **+0.1** |
| **GZR** | **Gura Zlata** | **151.19** | **326** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 52.8** | **-0.7** |
| **BZS** | **Buzias** | **151.61** | **328** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 53.9** | **-0.5** |
| **KHC** | **Kasperske Hory** | **151.89** | **342** | *e*PKP | | **PKPab** | **PKPbc** | **17 23 06.3** | **-0.3** |
| **GERES** | **GERESS Array B** | **152.11** | **341** | PKPbc | | **PKPbc** | **PKPbc** | **17 22 55.0** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=93,slow=4.0,SNR=4.1 | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **152.53** | **332** | ⇑P | | **PKPbc** | **PKPbc** | **17 22 55.2** | **-1.1** |

*KRNET **04** 17:07:28.6±0.1,41.0°08N×71.0°50E,h15km,mb2.0*
*ISU **04** 17:07:28,41.0°05N×71.0°46E,h5km*
*SOME **04** 17:07:29.1,41.0°13N×71.0°47E,h15km*
*NNC **04** 17:07:32.0±2.7,41.0°30N×71.0°54E,h0km,mb3.3,mpv2.9, Error ellipse: s-maj=24.5km s-min=8.4km az=0.0*

**ISC 04 17:07:28.4**±0.9,**41.12N**±0.03°×**71.48E**±0.03°,**h14**km±8km, **n25**,σ1§**36**/43,**17C-3D**,**Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NAM** | **Namangan** | **0.19** | **134** | *i* P | | **P** | **Pg** | **17 07 32.0** | **-0.9** |
| NAM | | | | *i* S | | **Sg** | **17 07 37.0** | **+1.1** |
| **TRKS** | **Terek-Say** | **0.48** | **328** | ⇑*i*P | | **P** | **Pg** | **17 07 37.2** | **-0.8** |
| | baz=27 | | | | | | | | |
| TRKS | | | | ⇑*i*S | | **Sg** | | **17 07 43.8** | **-0.7** |
| | baz=27 | | | | | | | | |
| **ARK** | **Arkit** | **0.77** | **28** | P | | **Pg** | | **17 07 43.0** | **-0.4** |
| ARK | | | | S | | **Sg** | | **17 07 54.0** | **+0.5** |
| **ARK** | **Arkit** | **0.77** | **28** | ⇑*i*P | | **Pb** | | **17 07 44.1** | **+0.5** |
| | baz=26 | | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sb** | | **17 07 54.6** | **+0.6** |
| | baz=26 | | | | | | | | |
| **FRG** | **Fergana** | **0.78** | **163** | *i* P | | **Pb** | | **17 07 45.0** | **+1.2** |
| FRG | | | | *i* S | | **Sg** | | **17 07 54.0** | **0.0** |
| **OHH** | **Osh** | **1.16** | **121** | ⇑*i*P | | **Pn** | | **17 07 49.5** | **-0.8** |
| | baz=19 | | | | | | | | |
| OHH | | | | ⇑*i*S | | **Sb** | | **17 08 05.7** | **+0.5** |
| | baz=19 | | | | | | | | |
| **BTK** | **Batken** | **1.18** | **205** | P | | **Pn** | | **17 07 50.0** | **-0.5** |
| **BTK** | **Batken** | **1.18** | **205** | ⇑*i*P | | **Pn** | | **17 07 50.1** | **-0.5** |
| | baz=7.0 | | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sb** | | **17 08 06.4** | **+0.7** |
| | baz=7.0 | | | | | | | | |
| **IUG** | **Iuzhnay** | **1.49** | **314** | *e*P | | **Pb** | | **17 07 56.9** | **+1.0** |
| | 226nm,0.2s | | | | | | | | |
| IUG | | | | *e*S | | **Sg** | | **17 08 17.2** | **+0.7** |
| | 20nm,0.3s | | | | | | | | |
| **IUG** | **Iuzhnay** | **1.49** | **314** | P | | **Pb** | | **17 07 56.9** | **+1.0** |
| | 226nm,0.2s | | | | | | | | |
| IUG | | | | S | | **Sg** | | **17 08 17.2** | **+0.7** |
| | 20nm,0.3s | | | | | | | | |
| **MNAS** | **Manas** | **1.56** | **29** | ⇑*i*P | | **Pg** | | **17 07 58.5** | **0.0** |
| | baz=28 | | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sg** | | **17 08 19.8** | **+0.9** |
| | baz=28 | | | | | | | | |
| **MRKS** | **Merke** | **2.08** | **38** | *e*P | | **Pg** | | **17 08 08.3** | **0.0** |
| | 1.4nm,0.3s | | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | | **17 08 36.7** | **+1.3** |
| | 8.7nm,0.3s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **2.08** | **38** | Pg | | **Pg** | **17 08 08.3** | **0.0** |
| | 1.4nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 17 08 36.7 | |
| | 8.7nm,0.3s | | | | | | | |
| **KK09** | **Karatay Array** | **2.12** | **340** | ⇑Pn | | **Pb** | **17 08 07.1** | **+0.3** |
| | 1.0nm,0.3s,baz=151,slow=13 | | | | | | | |
| KK09 | | | | ⇓Lg | | Lg | 17 08 36.2 | |
| | 3.0nm,0.3s,baz=151,slow=29 | | | | | | | |
| **ARLS** | **Aral** | **2.26** | **70** | ⇓*i*P | | **Pb** | **17 08 08.7** | **-0.4** |
| | baz=69 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sb** | **17 08 38.2** | **+1.2** |
| | baz=69 | | | | | | | |
| **BRLS** | **Borolday** | **2.26** | **328** | *e*P | | **Pb** | **17 08 08.3** | **-0.8** |
| | 2.8nm,0.3s | | | | | | | |
| BRLS | | | | *e*S | | **Sb** | **17 08 36.9** | **0.0** |
| | 4.6nm,0.2s | | | | | | | |
| **BRLS** | **Borolday** | **2.26** | **328** | Pg | | **Pb** | **17 08 08.3** | **-0.8** |
| | 2.8nm,0.3s | | | | | | | |
| BRLS | | | | Lg | | Lg | 17 08 36.9 | |
| | 4.6nm,0.2s | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.31** | **47** | ⇑*i*P | | **Pb** | **17 08 09.7** | **-0.1** |
| | baz=46 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sb** | **17 08 39.6** | **+1.4** |
| | baz=46 | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SBUM** | **Sibu** | **23.60** | **295** | P | **P** | **17 16 59.7** | **+1.0** | |
| **BBOO** | **Buckleboo** | **24.83** | **175** | P | **P** | **17 17 11.7** | **+1.8** | |
| **KSM** | **Kuching** | **24.94** | **291** | P | **P** | **17 17 11.8** | **+0.8** | |
| KSM | | | | IAmb | IAmb | 17 17 15.2 | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **24.95** | **163** | P | **P** | **17 17 11.5** | **+0.5** | |
| | comp=Z,4.0nm,0.6s,baz=341,slow=10,SNR=10 | | | | | | | |
| **STKA** | **Stephens Creek** | **24.95** | **163** | P | **P** | **17 17 13.2** | **+2.2** | |
| **LEM** | **Lembang** | **25.67** | **271** | LR | LR | 17 28 25.9 | | |
| | comp=Z,64nm,18.8s,baz=22,slow=39 | | | | | | | |
| **HNR** | **Honiara** | **26.20** | **95** | LR | LR | 17 27 27.3 | | |
| | comp=Z,77nm,19.1s,baz=30,slow=36 | | | | | | | |
| **DZM** | **Mont Dzumac** | **34.68** | **118** | LR | LR | 17 32 02.1 | | |
| | comp=Z,51nm,20.1s,baz=203,slow=35 | | | | | | | |
| **JMN** | **Monobe** | **41.48** | **1** | P | **P** | **17 19 34.2** | **-0.3** | |
| **CMAR** | **Chiang Mai Arr** | **43.02** | **308** | P | **P** | **17 19 47.6** | **+0.3** | |
| | comp=Z,1.4nm,0.7s,baz=142,slow=7.9,SNR=10 | | | | | | | |
| **CHTO** | **Chiang Mai** | **43.23** | **308** | P | **P** | **17 19 49.6** | **+0.7** | |
| CHTO | | | | IAmb | IAmb | 17 20 00.5 | | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **ENH** | **Enshi** | **44.46** | **330** | P | **P** | **17 19 58.4** | **-0.4** | |
| ENH | | | | IAmb | IAmb | 17 20 02.0 | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **46.08** | **319** | P | **P** | **17 20 13.8** | **+2.1** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,5.0s | | | | | | | |
| **XAN** | **Xi'an** | **47.84** | **332** | P | **P** | **17 20 27.2** | **+2.0** | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **52.61** | **339** | *e*P | **P** | **17 21 04.4** | **+3.0** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,70nm,6.3s | | | | | | | |
| **GTA** | **Gaotai** | **56.53** | **329** | *e*P | **P** | **17 21 33.8** | **+3.9** | |
| GTA | | | | pP | pP | 17 21 38.2 | -2.3 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **WMQ** | **Urumqi** | **66.12** | **325** | *e*P | **P** | **17 22 37.2** | **+2.6** | |
| **MK31** | **Makanchi Array** | **70.95** | **326** | P | **P** | **17 23 05.3** | **+0.6** | |
| MK31 | | | | IAmb | IAmb | 17 23 09.1 | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.95** | **326** | P | **P** | **17 23 05.7** | **+1.0** | |
| | comp=Z,1.4nm,0.6s,baz=118,slow=8.3,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.95** | **326** | P | **P** | **17 23 04.7** | **0.0** | |
| **ZAA0** | **Zalesovo Array** | **74.01** | **333** | P | **P** | **17 23 23.8** | **+1.1** | |
| ZAA0 | | | | IAmb | IAmb | 17 23 25.7 | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **74.01** | **333** | P | **P** | **17 23 25.0** | **+2.3** | |
| | comp=Z,1.2nm,0.6s,baz=111,slow=5.6,SNR=6.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **74.01** | **333** | P | **P** | **17 23 23.4** | **+0.7** | |
| **I23K** | **Minto, Yukon-K** | **91.83** | **24** | P | **P** | **17 24 55.1** | **+0.3** | |

*INMG **04** 17:25:53.3±1.1,35°.57N×3°.82W,h0km,ML2.4,Error ellipse: s-maj=2.6km s-min=2.3km az=98.0*
*CNRM **04** 17:25:53.9,35°.67N×3°.62W,h20km,ml3.3*
*SFS **04** 17:25:53.0,35°.50N×3°.80W,ML2.6,ALBORAN SUR*
*IGIL **04** 17:25:54.5,35°.57N×3°.82W,h0km,ML2.5*
**ISC 04 17:25:52.4±1.1,35°51N±0°.03×3°.71W±0°.03,h17km±8km, n30,σ1§19/52,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.35** | **213** | P | **Pn** | **17 26 05.0** | **+2.3** |
| **PALE** | **Palemas** | **0.35** | **213** | P | **Pg** | **17 25 59.6** | **-0.1** |
| PALE | | | | S | **Sg** | **17 26 04.0** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.65** | **116** | P | **Pn** | **17 26 06.0** | **+0.2** |
| GOG | | | | S | **Sn** | **17 26 16.0** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.65** | **116** | P | **Pn** | **17 26 06.6** | **-0.2** |
| GOG | | | | S | **Sb** | **17 26 14.8** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.09** | **107** | P | **Pb** | **17 26 12.6** | **-0.1** |
| CHAS | | | | S | **Sb** | **17 26 26.8** | **+0.1** |
| **SMIR** | **Smir Dam** | **1.38** | **278** | P | **Pn** | **17 26 16.8** | **0.0** |
| SMIR | | | | S | **Sg** | **17 26 36.4** | **-0.5** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **335** | P | **Pn** | **17 26 16.8** | **0.0** |
| EMAL | | | | S | **Sb** | **17 26 35.4** | **+0.4** |
| **CHEFC** | **Chefchaouen** | **1.40** | **254** | P | **Pg** | **17 26 20.0** | **+0.7** |
| **CHEFC** | **Chefchaouen** | **1.40** | **254** | P | **Pn** | **17 26 17.4** | **+0.3** |
| CHEFC | | | | S | **Sn** | **17 26 32.9** | **-2.4** |
| **JBK** | **JBK** | **1.50** | **141** | P | **Pb** | **17 26 20.0** | **+0.2** |
| **JBK** | **JBK** | **1.50** | **141** | P | **Pn** | **17 26 18.6** | **-0.1** |
| JBK | | | | S | **Sn** | **17 26 37.5** | **-0.4** |
| **LCRM** | **LCR** | **2.05** | **208** | P | **Pg** | **17 26 32.0** | **+0.2** |
| **LCRM** | **LCR** | **2.05** | **208** | P | **Pb** | **17 26 29.4** | **+0.1** |
| LCRM | | | | S | **Sb** | **17 26 53.9** | **-0.7** |
| **IFR** | **Ifrane** | **2.31** | **211** | P | **Pn** | **17 26 29.0** | **-0.8** |
| IFR | | | | S | **Sn** | **17 26 57.0** | **-0.9** |
| **MD31** | **MD31** | **2.78** | **199** | P | **Pn** | **17 26 37.2** | **+1.1** |
| MD31 | | | | S | **Sn** | **17 27 07.3** | **-2.0** |
| **MDT** | **Midelt** | **2.79** | **196** | P | **Pn** | **17 26 36.9** | **+0.6** |
| MDT | | | | S | **Sn** | **17 27 10.2** | **+0.5** |
| **ZHG** | **ZHG** | **3.18** | **231** | P | **Pn** | **17 26 41.6** | **-0.1** |
| ZHG | | | | S | **Sn** | **17 27 22.4** | **+3.2** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | *e*Pn | **Pn** | **17 26 50.1** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **17 27 32.1** | **-1.0** |
| PVAQ | | | | A | A | 17 27 33.7 | |
| | 5.7nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **17 26 50.4** | **+1.1** |
| PVAQ | | | | S | **Sn** | **17 27 32.8** | **-0.3** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **298** | *e*Pn | **Pn** | **17 26 50.9** | **+0.4** |
| PBDV | | | | *e*Sn | **Sn** | **17 27 33.6** | **-1.4** |
| PBDV | | | | A | A | 17 27 37.8 | |
| | 6.9nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **303** | *e*Pn | **Pn** | **17 26 55.2** | **+1.2** |
| PCVE | | | | *e*Sn | **Sn** | **17 27 39.9** | **-1.4** |
| PCVE | | | | A | A | 17 27 52.7 | |
| | 3.4nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*P | **Pn** | **17 26 57.8** | **+0.7** |
| MESJ | | | | *e*S | **Sn** | **17 27 44.0** | **-2.9** |
| MESJ | | | | IAML | | 17 27 47.2 | |
| | comp=N,9.9nm,0.8s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | **Pn** | **17 26 57.9** | **+0.8** |
| MESJ | | | | *e*Sn | **Sn** | **17 27 46.1** | **-0.9** |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*Sn | **Sn** | **17 27 47.5** | **-1.1** |
| **EVO** | **Evora** | **4.58** | **312** | *e*Pn | **Pn** | **17 27 01.7** | **+0.9** |
| EVO | | | | *e*Sn | **Sn** | **17 27 51.7** | **-1.9** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **305** | *e*Pn | **Pn** | **17 27 02.6** | **+0.7** |
| PNCL | | | | *e*Sn | **Sn** | **17 27 54.6** | **-1.0** |
| **PMRV** | **Marv??o** | **4.89** | **324** | *e*Sn | **Sn** | **17 28 01.0** | **-0.3** |
| **PMTG** | **Montargil** | **5.06** | **316** | *e*Pn | **Pn** | **17 27 08.9** | **+1.5** |
| PMTG | | | | *e*Sn | **Sn** | **17 28 04.4** | **-1.1** |
| **PACT** | **Alcochete** | **5.23** | **310** | *e*Pn | **Pn** | **17 27 11.1** | **+1.4** |
| **MVO** | **Moncorvo** | **6.22** | **336** | *e*Pn | **Pn** | **17 27 25.8** | **+2.4** |

*CNRM **04** 17:26:45.9,35°.50N×3°.80W,h18km,ml3.0*
*SFS **04** 17:26:46.0,35°.50N×3°.70W,ML2.7,ALBORAN SUR*
*INMG **04** 17:26:47.6±1.7,35°.57N×3°.80W,h5km±5km,ML2.6,Error ellipse: s-maj=6.8km s-min=3.9km az=9.0*
**ISC 04 17:26:45.6±1.1,35°51N±0°.03×3°76W±0°.03,h14km±8km, n25,σ1§14/38,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **207** | P | **Pg** | **17 26 52.4** | **0.0** |
| PALE | | | | S | **Sg** | **17 26 56.8** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.69** | **115** | P | **Pg** | **17 26 58.9** | **0.0** |
| GOG | | | | S | **Sg** | **17 27 07.8** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.13** | **107** | P | **Pb** | **17 27 06.6** | **-0.3** |
| CHAS | | | | S | **Sb** | **17 27 19.5** | **-2.0** |
| **SMIR** | **Smir Dam** | **1.34** | **278** | P | **Pb** | **17 27 10.2** | **-0.2** |
| SMIR | | | | S | **Sn** | **17 27 26.8** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.36** | **253** | P | **Pb** | **17 27 10.2** | **-0.7** |
| CHEFC | | | | S | **Sb** | **17 27 27.5** | **-0.6** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **337** | P | **Pg** | **17 27 11.8** | **+0.1** |
| EMAL | | | | S | **Sg** | **17 27 29.2** | **-0.2** |
| **JBK** | **JBK** | **1.53** | **140** | P | **Pb** | **17 27 13.7** | **-0.1** |
| JBK | | | | S | **Sb** | **17 27 33.6** | **+0.5** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pg** | **17 27 23.3** | **-1.4** |
| LCRM | | | | S | **Sn** | **17 27 45.5** | **+0.5** |
| **IFR** | **Ifrane** | **2.29** | **210** | P | **Pb** | **17 27 27.7** | **+0.9** |
| IFR | | | | S | **Sn** | **17 27 49.9** | **-1.4** |
| **MD31** | **MD31** | **2.77** | **198** | S | **Sn** | **17 28 03.2** | **+0.3** |
| **MDT** | **Midelt** | **2.79** | **195** | S | **Sn** | **17 28 03.1** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | *e*Pn | **Pn** | **17 27 43.5** | **+1.1** |
| PVAQ | | | | *e*Sn | **Sn** | **17 28 24.9** | **-1.1** |
| PVAQ | | | | A | A | 17 28 26.2 | |
| | 14nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | P | **Pn** | **17 27 43.2** | **+0.7** |
| PVAQ | | | | S | **Sn** | **17 28 22.9** | **-3.0** |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **298** | *e*Pn | **Pn** | **17 27 46.0** | **+2.5** |
| PBDV | | | | *e*Sn | **Sn** | **17 28 27.5** | **-0.4** |
| PBDV | | | | A | A | 17 28 30.7 | |
| | 9.9nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **4.04** | **303** | *e*Sn | **Sn** | **17 28 33.7** | **-0.5** |
| PCVE | | | | A | A | 17 28 36.1 | |
| | 6.5nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.27** | **304** | *e*Pn | **Pn** | **17 27 53.3** | **+3.1** |
| MESJ | | | | *e*Sn | **Sn** | **17 28 39.4** | **-0.5** |
| MESJ | | | | A | A | 17 28 45.9 | |
| | 7.4nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.33** | **296** | *e*Sn | **Sn** | **17 28 40.7** | **-0.8** |
| MORF | | | | A | A | 17 28 44.6 | |
| | 7.4nm,0.6s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **293** | *e*Sn | **Sn** | **17 28 41.4** | **-1.7** |
| PFVI | | | | A | A | 17 28 50.8 | |
| | 14nm,0.5s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.49** | **298** | *e*Sn | **Sn** | **17 28 45.6** | **+0.5** |
| PTEO | | | | A | A | 17 28 45.7 | |
| | 11nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.54** | **319** | *e*Sn | **Sn** | **17 28 46.2** | **-0.2** |
| **PESTR** | **Estremoz** | **4.54** | **319** | P | **Pn** | **17 27 54.5** | **+0.7** |
| **EVO** | **Evora** | **4.55** | **313** | *e*Sn | **Sn** | **17 28 46.0** | **-0.6** |
| EVO | | | | A | A | 17 28 46.7 | |
| | 5.5nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.62** | **305** | *e*Sn | **Sn** | **17 28 48.1** | **-0.4** |
| PNCL | | | | A | A | 17 28 51.0 | |
| | 5.5nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **4.86** | **325** | *e*Sn | **Sn** | **17 28 54.4** | **0.0** |
| **PMTG** | **Montargil** | **5.03** | **316** | *e*Sn | **Sn** | **17 28 57.7** | **-0.8** |
| PMTG | | | | A | A | 17 28 58.6 | |
| | 5.6nm,0.9s | | | | | | |

*IDC **04** 17:33:12.6±1.8,59°.92N×152°.84W,h75km±30km,mb3.4/5,mb1 3.5/9,mb1mx3.1/44,mbtmp3.7/9,Error ellipse: s-maj=33.6km s-min=11.3km az=111.0*
*NEIC **04** 17:33:14.3±1.0,59°.91N±0°.03×152°.80W±0°.06,h95km±2km,Error ellipse: s-maj=4.5km s-min=4.4km az=127.0*
*AEIC **04** 17:33:15±1.2,59°.89N±0°.03×152°.77W±0°.06,h92km±4km,ML3.0/70,ML3.3/98(NEIC),Error ellipse: s-maj=4.7km s-min=4.1km az=121.0*
**ISC 04 17:33:14.2±0.8,59°89N±0°.03×152°76W±0°.03,h98km±5km, n184,σ0§75/181,mb3.8/5,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **O20K** | **Slope Mountain** | **0.21** | **19** | | **Pn** | **17 33 28.0** | **-0.2** |
| O20K | | | | | **Sn** | **17 33 38.1** | **-0.6** |
| **O20K** | **Slope Mountain** | **0.21** | **19** | P | **Pn** | **17 33 28.0** | **-0.2** |
| | baz=201 | | | | | | |
| O20K | | | | S | **Sn** | **17 33 38.1** | **-0.6** |
| | baz=201 | | | | | | |
| **ILSW** | **Iliamna Southw** | **0.22** | **296** | | **Pn** | **17 33 27.6** | **-0.7** |
| **ILSW** | **Iliamna Southw** | **0.22** | **296** | | **Sn** | **17 33 38.1** | **-0.7** |
| **OPT** | **Oil Point** | **0.34** | **226** | | **Pn** | **17 33 28.6** | **-0.1** |
| **OPT** | **Oil Point** | **0.34** | **226** | P | **Pn** | **17 33 28.6** | **-0.1** |
| | baz=44 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.53** | **359** | | **Pn** | **17 33 29.6** | **-0.5** |
| RED | | | | | **Sn** | **17 33 40.7** | **-1.2** |
| **RSO** | **Redoubt South** | **0.58** | **0** | | **Pn** | **17 33 30.1** | **-0.4** |
| **HOM** | **Homer** | **0.61** | **112** | | **Pn** | **17 33 30.8** | **+0.2** |
| HOM | | | | | **Sn** | **17 33 43.6** | **+0.8** |
| **HOM** | **Homer** | **0.61** | **112** | IAML | | 17 33 44.5 | |
| | comp=N,2μm,0.5s | | | | | | |
| **HOM** | **Homer** | **0.61** | **112** | P | **Pn** | **17 33 30.8** | **+0.2** |
| | baz=293 | | | | | | |
| HOM | | | | S | **Sn** | **17 33 43.6** | **+0.8** |
| | baz=293 | | | | | | |
| **AUL** | **Augustine Lava** | **0.61** | **214** | | **Pn** | **17 33 30.6** | **0.0** |
| AUL | | | | | **Sn** | **17 33 43.0** | **+0.1** |
| **AUQ** | **Augustine Qik'** | **0.63** | **212** | | **Pn** | **17 33 30.7** | **-0.1** |
| AUQ | | | | | **Sn** | **17 33 43.0** | **-0.3** |
| **NCT** | **North Crescent** | **0.68** | **353** | | **Pn** | **17 33 30.9** | **-0.4** |
| NCT | | | | | **Sn** | **17 33 42.8** | **-1.3** |
| **DFR** | **Drift River** | **0.71** | **3** | | **Pn** | **17 33 31.2** | **-0.4** |
| DFR | | | | | **Sn** | **17 33 43.6** | **-0.9** |
| **RDT** | **Redoubt** | **0.71** | **14** | | **Pn** | **17 33 31.1** | **-0.5** |
| **O19K** | **Port Alsworth** | **0.84** | **292** | | **Pn** | **17 33 32.5** | **-0.2** |
| O19K | | | | | **Sn** | **17 33 46.0** | **-0.6** |
| **O19K** | **Port Alsworth** | **0.84** | **292** | P | **Pn** | **17 33 32.5** | **-0.2** |
| | baz=111 | | | | | | |
| O19K | | | | S | **Sn** | **17 33 46.0** | **-0.6** |
| | baz=111 | | | | | | |
| **CNPM** | **China Poot** | **0.85** | **115** | | **Pn** | **17 33 32.8** | **-0.1** |
| **CNPM** | **China Poot** | **0.85** | **115** | IAML | | 17 33 48.1 | |
| | comp=N,732nm,0.4s | | | | | | |
| **BRLK** | **Bradley Lake** | **0.95** | **97** | | **Pn** | **17 33 33.8** | **-0.2** |
| **BRLK** | **Bradley Lake** | **0.95** | **97** | IAML | | 17 33 49.4 | |
| | comp=E,706nm,0.2s | | | | | | |
| BRLK | | | | IAML | | 17 33 50.6 | |
| | comp=N,743nm,0.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.03** | **97** | | **Pn** | **17 33 34.6** | **-0.1** |
| **BRSE** | **Bradley Lake S** | **1.03** | **97** | P | **Pn** | **17 33 34.6** | **-0.1** |
| | baz=279 | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.06** | **206** | | **Pn** | **17 33 35.0** | **-0.2** |
| Q19K | | | | | **Sn** | **17 33 50.4** | **-0.5** |
| **Q19K** | **Cape Douglas,** | **1.06** | **206** | IAML | | 17 33 57.4 | |
| | comp=E,464nm,1.1s | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.06** | **206** | P | **Pn** | **17 33 35.0** | **-0.2** |
| | baz=24 | | | | | | |
| Q19K | | | | S | **Sn** | **17 33 50.4** | **-0.5** |
| | baz=24 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.19** | **41** | | **Pn** | **17 33 38.1** | **+1.6** |
| **CAPN** | **Captain Cook N** | **1.19** | **41** | IAML | | 17 34 00.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.19** | **41** | P | **Pn** | **17 33 38.1** | **+1.6** |
| | baz=223 | | | | | | |
| **O18K** | **Koktuh Hills** | **1.24** | **269** | | **Pn** | **17 33 37.1** | **0.0** |
| O18K | | | | | **Sn** | **17 33 53.8** | **-0.6** |
| **O18K** | **Koktuh Hills** | **1.24** | **269** | P | **Pn** | **17 33 37.1** | **0.0** |
| | baz=87 | | | | | | |
| O18K | | | | S | **Sn** | **17 33 53.8** | **-0.6** |
| | baz=87 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.26** | **318** | | **Pn** | **17 33 37.4** | **-0.2** |
| N19K | | | | | **Sn** | **17 33 54.0** | **-1.2** |
| **N19K** | **Bonanza Creek** | **1.26** | **318** | P | **Pn** | **17 33 37.4** | **-0.2** |
| | baz=137 | | | | | | |
| N19K | | | | S | **Sn** | **17 33 54.0** | **-1.2** |
| | baz=137 | | | | | | |
| **CKL** | **Chakachamna La** | **1.33** | **9** | | **Pn** | **17 33 38.2** | **-0.1** |
| **SPU** | **Mount Spurr** | **1.34** | **15** | | **Pn** | **17 33 37.4** | **-1.6** |
| **P18K** | **Big Mountain,** | **1.35** | **249** | | **Pn** | **17 33 38.2** | **-0.3** |
| P18K | | | | | **Sn** | **17 33 55.8** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.35** | **249** | P | **Pn** | **17 33 38.2** | **-0.3** |
| | baz=67 | | | | | | |
| P18K | | | | S | **Sn** | **17 33 55.8** | **-1.1** |
| | baz=67 | | | | | | |
| **SPCN** | **Chakachatna No** | **1.37** | **12** | | **Pn** | **17 33 38.7** | **-0.1** |
| **SLKM** | **Skilak Lake** | **1.41** | **63** | | **Pn** | **17 33 39.1** | **-0.1** |
| **SPCP** | **Crater Peak Br** | **1.42** | **12** | | **Pn** | **17 33 39.4** | **0.0** |
| **SPCG** | **Spurr Capps Gl** | **1.46** | **14** | | **Pn** | **17 33 39.8** | **-0.1** |
| **SPNN** | **North Nagishla** | **1.48** | **1** | | **Pn** | **17 33 40.3** | **0.0** |
| **SEW** | **Seward** | **1.68** | **81** | | **Pn** | **17 33 42.1** | **-0.4** |
| **SEW** | **Seward** | **1.68** | **81** | P | **Pn** | **17 33 42.1** | **-0.4** |
| | baz=264 | | | | | | |
| **STLK** | **Strandline Lak** | **1.68** | **15** | | **Pn** | **17 33 42.6** | **0.0** |
| **SUA** | **Susitna One** | **1.86** | **31** | | **Pn** | **17 33 45.3** | **+0.3** |
| SUA | | | | | **Sn** | **17 34 08.7** | **+0.2** |
| **SUA** | **Susitna One** | **1.86** | **31** | IAML | | 17 34 10.1 | |
| | comp=E,334nm,0.7s | | | | | | |
| SUA | | | | IAML | | 17 34 10.5 | |
| | comp=N,253nm,0.7s | | | | | | |
| **SUA** | **Susitna One** | **1.86** | **31** | P | **Pn** | **17 33 45.3** | **+0.3** |
| | baz=213 | | | | | | |
| SUA | | | | S | **Sn** | **17 34 08.7** | **+0.2** |
| | baz=213 | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.92** | **50** | | **Pn** | **17 33 45.7** | **+0.1** |
| **RC01** | **Rabbit Creek A** | **1.92** | **50** | P | **Pn** | **17 33 45.7** | **+0.1** |
| | baz=232 | | | | | | |
| **KABU** | **Katmai Buttres** | **2.08** | **220** | | **Pn** | **17 33 48.6** | **+0.8** |
| **KDAK** | **Kodiak Island** | **2.11** | **177** | P | **Pn** | **17 33 47.4** | **-0.7** |
| | comp=N,21nm,0.3s,baz=52,slow=13,SNR=80 | | | | | | |
| KDAK | | | | S | **Sn** | **17 34 12.1** | **-1.8** |
| | comp=N,5.7nm,0.3s,baz=73,slow=8.9,SNR=6.3 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.11** | **177** | | **Pn** | **17 33 47.2** | **-0.9** |
| **KDAK** | **Kodiak Island** | **2.11** | **177** | IAML | | 17 34 14.2 | |
| | comp=N,145nm,0.4s | | | | | | |
| KDAK | | | | IAML | | 17 34 15.2 | |
| | comp=N,132nm,0.6s | | | | | | |
| **M19K** | **Big River Lodg** | **2.17** | **339** | | **Pn** | **17 33 48.9** | **0.0** |
| **M19K** | **Big River Lodg** | **2.17** | **339** | P | **Pn** | **17 33 48.9** | **0.0** |
| | baz=158 | | | | | | |
| **M22K** | **Willow** | **2.27** | **33** | | **Pn** | **17 33 50.6** | **+0.5** |
| **M22K** | **Willow** | **2.27** | **33** | IAML | | 17 34 20.8 | |
| | comp=E,369nm,0.6s | | | | | | |
| **M22K** | **Willow** | **2.27** | **33** | P | **Pn** | **17 33 50.6** | **+0.5** |
| | baz=216 | | | | | | |
| **PWL** | **Port Wells** | **2.40** | **64** | | **Pn** | **17 33 51.3** | **-0.6** |
| **PMR** | **Palmer** | **2.47** | **45** | | **Pn** | **17 33 52.2** | **-0.5** |
| **PMR** | **Palmer** | **2.47** | **45** | IAML | | 17 34 20.9 | |
| | comp=E,163nm,0.2s | | | | | | |
| PMR | | | | IAML | | 17 34 21.8 | |
| | comp=N,150nm,0.3s | | | | | | |
| **PMR** | **Palmer** | **2.47** | **45** | P | **Pn** | **17 33 52.2** | **-0.5** |
| | baz=228 | | | | | | |
| **L19K** | **White Mountain** | **2.52** | **337** | | **Pn** | **17 33 53.4** | **-0.1** |
| **L19K** | **White Mountain** | **2.52** | **337** | P | **Pn** | **17 33 53.4** | **-0.1** |
| | baz=155 | | | | | | |
| **KNK** | **Knik Glacier** | **2.61** | **52** | | **Pn** | **17 33 53.8** | **-0.8** |
| **KNK** | **Knik Glacier** | **2.61** | **52** | P | **Pn** | **17 33 53.8** | **-0.8** |
| | baz=236 | | | | | | |
| **L20K** | **Farewell, AK** | **2.66** | **349** | | **Pn** | **17 33 55.4** | **+0.2** |
| **L20K** | **Farewell, AK** | **2.66** | **349** | P | **Pn** | **17 33 55.4** | **+0.2** |
| | baz=168 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.67** | **43** | | **Pn** | **17 33 54.7** | **-0.7** |
| **GHO** | **Glory Hole Cre** | **2.67** | **43** | IAML | | 17 34 27.2 | |
| | comp=N,196nm,0.2s | | | | | | |
| **OHAK** | **Old Harbor** | **2.69** | **186** | | **Pn** | **17 33 54.7** | **-0.9** |
| **OHAK** | **Old Harbor** | **2.69** | **186** | IAML | | 17 34 55.9 | |
| | comp=N,125nm,3.2s | | | | | | |
| OHAK | | | | IAML | | 17 35 13.6 | |
| | comp=E,114nm,3.3s | | | | | | |
| **OHAK** | **Old Harbor** | **2.69** | **186** | P | **Pn** | **17 33 54.7** | **-0.9** |
| | baz=5.6 | | | | | | |
| **CUT** | **Chulitna** | **2.80** | **24** | | **Pn** | **17 33 57.2** | **+0.1** |
| **CUT** | **Chulitna** | **2.80** | **24** | IAML | | 17 34 47.7 | |
| | comp=E,100nm,0.6s | | | | | | |
| CUT | | | | IAML | | 17 34 57.4 | |
| | comp=N,95nm,1.2s | | | | | | |
| **CUT** | **Chulitna** | **2.80** | **24** | P | **Pn** | **17 33 57.2** | **+0.1** |
| | baz=207 | | | | | | |
| **SML** | **Sawmill** | **2.90** | **46** | | **Pn** | **17 33 57.7** | **-0.8** |
| **SML** | **Sawmill** | **2.90** | **46** | IAML | | 17 34 32.2 | |
| | comp=E,121nm,0.5s | | | | | | |
| SML | | | | IAML | | 17 34 32.6 | |
| | comp=N,123nm,0.5s | | | | | | |
| **SML** | **Sawmill** | **2.90** | **46** | P | **Pn** | **17 33 57.7** | **-0.8** |
| | baz=230 | | | | | | |
| **GLI** | **Glacier Island** | **2.98** | **68** | | **Pn** | **17 33 57.8** | **-1.8** |
| **GLI** | **Glacier Island** | **2.98** | **68** | P | **Pn** | **17 33 57.7** | **-1.8** |
| | baz=253 | | | | | | |
| **PPLA** | **Purkeypile** | **3.03** | **5** | | **Pn** | **17 34 01.3** | **+0.9** |
| **PPLA** | **Purkeypile** | **3.03** | **5** | P | **Pn** | **17 34 01.3** | **+0.9** |
| | baz=186 | | | | | | |
| **FID** | **Port Fidalgo** | **3.24** | **72** | | **Pn** | **17 34 00.9** | **-2.1** |
| **SCM** | **Sheep Creek Mo** | **3.30** | **51** | | **Pn** | **17 34 02.9** | **-0.9** |
| **SCM** | **Sheep Creek Mo** | **3.30** | **51** | IAML | | 17 34 41.8 | |
| | comp=E,109nm,0.2s | | | | | | |
| SCM | | | | IAML | | 17 34 47.0 | |
| | comp=N,126nm,0.8s | | | | | | |
| **TT01** | **Tatalina** | **3.41** | **334** | | **Pn** | **17 34 05.0** | **-0.3** |
| **SII** | **Sitkinak Islan** | **3.42** | **193** | | **Pn** | **17 34 04.7** | **-0.9** |
| **SII** | **Sitkinak Islan** | **3.42** | **193** | P | **Pn** | **17 34 04.6** | **-0.9** |
| | baz=12 | | | | | | |
| **TTA** | **Tatalina** | **3.43** | **334** | | **Pn** | **17 34 05.1** | **-0.5** |
| **TTA** | **Tatalina** | **3.43** | **334** | P | **Pn** | **17 34 05.1** | **-0.5** |
| | baz=152 | | | | | | |
| **K20K** | **Telida** | **3.54** | **350** | | **Pn** | **17 34 07.1** | **0.0** |
| **K20K** | **Telida** | **3.54** | **350** | P | **Pn** | **17 34 07.1** | **0.0** |
| | baz=169 | | | | | | |
| **CAST** | **Castle Rocks** | **3.56** | **5** | | **Pn** | **17 34 07.5** | **+0.2** |
| **CAST** | **Castle Rocks** | **3.56** | **5** | P | **Pn** | **17 34 07.5** | **+0.2** |
| | baz=186 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.56** | **76** | | **Pn** | **17 34 05.7** | **-1.6** |
| **EYAK** | **Cordova Ski Ar** | **3.56** | **76** | P | **Pn** | **17 34 05.7** | **-1.6** |
| | baz=262 | | | | | | |
| **DIV** | **Divide** | **3.67** | **67** | | **Pn** | **17 34 07.7** | **-1.2** |
| **KLU** | **Klutina** | **3.73** | **61** | | **Pn** | **17 34 08.6** | **-1.0** |
| **KLU** | **Klutina** | **3.73** | **61** | P | **Pn** | **17 34 08.6** | **-1.0** |
| | baz=247 | | | | | | |
| **TRF** | **Thorofare Moun** | **3.76** | **17** | | **Pn** | **17 34 09.8** | **-0.5** |
| **TRF** | **Thorofare Moun** | **3.76** | **17** | IAML | | 17 35 01.5 | |
| | comp=N,46nm,3.9s | | | | | | |
| TRF | | | | IAML | | 17 35 46.2 | |
| | comp=E,42nm,4.3s | | | | | | |
| **TRF** | **Thorofare Moun** | **3.76** | **17** | P | **Pn** | **17 34 09.8** | **-0.5** |
| | baz=199 | | | | | | |
| **KTH** | **Kantishna Hill** | **3.78** | **13** | | **Pn** | **17 34 10.2** | **-0.1** |
| **KTH** | **Kantishna Hill** | **3.78** | **13** | IAML | | 17 35 30.1 | |
| | comp=E,31nm,4.1s | | | | | | |
| KTH | | | | IAML | | 17 35 48.5 | |
| | comp=N,30nm,4.4s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **3.90** | **52** | | **Pn** | **17 34 11.8** | **-0.2** |
| **M24K** | **Tolsona, Glenn** | **3.90** | **52** | P | **Pn** | **17 34 11.8** | **-0.2** |
| | baz=238 | | | | | | |
| **RND** | **Reindeer** | **3.99** | **26**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I21K | Tanana | 5.32 | 4 | | Pn | 17 34 31.3 | +0.1 |
| I21K | | | | IAML | | 17 37 03.5 | |
| | comp=N,32nm,4.7s | | | | | | |
| I21K | | | | IAML | | 17 37 29.5 | |
| | comp=E,26nm,4.4s | | | | | | |
| RIDG | Independent Ri | 5.38 | 41 | | Pn | 17 34 31.9 | -0.1 |
| RIDG | Independent Ri | 5.38 | 41 | IAML | | 17 35 16.1 | |
| | comp=N,29nm,4.6s | | | | | | |
| RIDG | Independent Ri | 5.38 | 41 | P | Pn | 17 34 31.9 | -0.1 |
| | baz=228 | | | | | | |
| MESA | MESA | 5.43 | 82 | Pn | Pn | 17 34 33.3 | +0.5 |
| TCOL | CIGO, UAF Yank | 5.50 | 22 | | Pn | 17 34 33.3 | -0.2 |
| TCOL | CIGO, UAF Yank | 5.50 | 22 | P | Pn | 17 34 33.3 | -0.2 |
| | baz=207 | | | | | | |
| COLA | College | 5.50 | 22 | | Pn | 17 34 33.3 | -0.1 |
| MDM | Murphy Dome | 5.51 | 21 | | Pn | 17 34 33.3 | -0.3 |
| I23K | Minto, Yukon-K | 5.51 | 15 | | Pn | 17 34 33.7 | +0.1 |
| I23K | Minto, Yukon-K | 5.51 | 15 | P | Pn | 17 34 33.7 | +0.1 |
| | baz=198 | | | | | | |
| YAH | Yahtse | 5.53 | 80 | Pn | Pn | 17 34 34.6 | +0.4 |
| DOT | Dot Lake | 5.59 | 44 | | Pn | 17 34 34.9 | +0.1 |
| IL31 | | 5.61 | 27 | | Pn | 17 34 34.1 | -0.9 |
| ILAR | Eielson Array | 5.61 | 27 | P | Pn | 17 34 34.2 | -0.8 |
| | comp=N,1.9nm,0.3s,baz=213,slow=14,SNR=55 | | | | | | |
| ILAR | | | | S | Sn | 17 35 35.1 | -3.0 |
| | comp=N,0.4nm,0.3s,baz=197,slow=18,SNR=1.7 | | | | | | |
| ILAR | Eielson Array | 5.61 | 27 | | Pn | 17 34 34.8 | -0.2 |
| BARN | Barnard Glacie | 5.61 | 73 | | Pn | 17 34 34.9 | -0.4 |
| H21K | Melozitna Rive | 5.79 | 360 | | Pn | 17 34 36.9 | -0.6 |
| POKR | Poker Plat Res | 5.80 | 23 | | Pn | 17 34 37.5 | 0.0 |
| POKR | Poker Plat Res | 5.80 | 23 | P | Pn | 17 34 37.5 | 0.0 |
| | baz=208 | | | | | | |
| SCRK | Sand Creek | 5.83 | 42 | | Pn | 17 34 37.8 | -0.3 |
| SCRK | Sand Creek | 5.83 | 42 | P | Pn | 17 34 37.8 | -0.3 |
| | baz=229 | | | | | | |
| TABL | Table Mountain | 5.83 | 80 | Pn | Pn | 17 34 38.7 | +0.5 |
| J25K | Salcha River, | 5.86 | 33 | | Pn | 17 34 38.0 | -0.5 |
| J25K | Salcha River, | 5.86 | 33 | P | Pn | 17 34 38.0 | -0.5 |
| | baz=219 | | | | | | |
| IMAR | Indian Mountai | 6.14 | 356 | Pn | Pn | 17 34 42.6 | +0.5 |
| PCA | Pinnacle | 6.28 | 83 | Pn | Pn | 17 34 44.7 | +0.5 |
| J26L | Joseph Creek | 6.32 | 39 | | Pn | 17 34 43.9 | -0.8 |
| H24K | Noodor Dome | 6.37 | 18 | | Pn | 17 34 45.4 | 0.0 |
| EGAK | Eagle | 7.29 | 43 | | Pn | 17 34 56.6 | -1.2 |
| EGAK | Eagle | 7.29 | 43 | P | Pn | 17 34 56.6 | -1.2 |
| | baz=233 | | | | | | |
| BM03 | Burnt Mountain | 8.38 | 22 | | Pn | 17 35 11.2 | -1.5 |
| DLBC | Dease Lake | 11.74 | 87 | P | Pn | 17 35 59.0 | +0.7 |
| | comp=N,0.7nm,0.3s,baz=347,slow=7.7,SNR=18 | | | | | | |
| YKA | Yellowknife Ar | 18.39 | 65 | P | P | 17 37 21.9 | +0.8 |
| | comp=N,0.2nm,0.3s,baz=277,slow=9.9,SNR=13 | | | | | | |
| PETK | Petropavlovsk- | 27.60 | 278 | P | P | 17 38 52.8 | +0.9 |
| | comp=N,1.9nm,0.9s,baz=54,slow=11,SNR=2.3 | | | | | | |
| KSRS | Korea Array | 53.32 | 283 | P | P | 17 42 23.2 | +0.3 |
| | comp=N,0.4nm,0.4s,baz=36,slow=7.6,SNR=1.6 | | | | | | |
| SONM | Songino Array | 54.95 | 306 | P | P | 17 42 36.1 | +1.3 |
| | comp=N,0.9nm,0.7s,baz=35,slow=7.0,SNR=6.7 | | | | | | |
| ZALV | Zalesovo Beam | 57.54 | 324 | P | P | 17 42 52.8 | -0.1 |
| | comp=N,0.7nm,0.4s,baz=17,slow=9.4,SNR=3.9 | | | | | | |
| MKAR | Makanchi Array | 64.59 | 321 | P | P | 17 43 39.2 | -1.6 |
| | comp=N,0.1nm,0.7s,baz=40,slow=7.9,SNR=1.7 | | | | | | |

*TAP **04** 17:35:08.5, 24°.72N×122°.54E, h17km±1km, ML2.8, D*
*JMA **04** 17:35:10.7±0.1, 24°.64N×122°.49E, h30km±4km, M2.0*
**ISC 04 17:35:08.8±1.1, 24°.70N±0°.04×122°.54E±0°.02, h19km±3km, n36, σ0s51/60, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| JYNG | Yonagunijimaku | 0.45 | 123 | P | | | Pn | 17 35 20.1 | -0.1 |
| JYNG | | | | | e | S | Sn | 17 35 27.0 | -0.7 |
| YOJ | Yonaguni jima | 0.49 | 118 | P | | | Pn | 17 35 21.2 | +0.4 |
| YOJ | | | | | | S | Sn | 17 35 28.3 | -0.6 |
| TWB1 | Santiao Chiao | 0.58 | 302 | i | P | | Pb | 17 35 20.1 | -0.2 |
| | baz=301 | | | | | | | | |
| TWB1 | | | | | | S | Sb | 17 35 28.0 | -0.2 |
| | baz=301 | | | | | | | | |
| TWC | Suao | 0.63 | 262 | i | P | | Pg | 17 35 20.4 | -0.9 |
| | baz=261 | | | | | | | | |
| TWC | | | | i | S | | Sb | 17 35 29.9 | +0.4 |
| | baz=261 | | | | | | | | |
| TIPB | Shuangxi | 0.70 | 293 | | P | | Pg | 17 35 22.4 | -0.2 |
| | baz=292 | | | | | | | | |
| TIPB | | | | | | S | Sb | 17 35 32.0 | +0.3 |
| | baz=292 | | | | | | | | |
| SXI1 | Grass Mountain | 0.72 | 304 | | P | | Pg | 17 35 23.1 | +0.2 |
| | baz=303 | | | | | | | | |
| ILA | Ilan | 0.72 | 276 | | S | | Sn | 17 35 33.9 | -0.5 |
| | baz=275 | | | | | | | | |
| EWUT | Wuta | 0.73 | 250 | | P | | Pg | 17 35 23.1 | 0.0 |
| | baz=257 | | | | | | | | |
| EWUT | | | | i | S | | Sg | 17 35 33.0 | 0.0 |
| | baz=257 | | | | | | | | |
| NDS | Dongshan | 0.75 | 265 | i | P | | Pg | 17 35 23.2 | -0.3 |
| | baz=264 | | | | | | | | |
| NDS | | | | | e | S | Sg | 17 35 33.9 | +0.4 |
| | baz=264 | | | | | | | | |
| ENA | Nanau | 0.77 | 250 | i | P | | Pb | 17 35 23.3 | -0.3 |
| | baz=257 | | | | | | | | |
| ENA | | | | | S | | Sb | 17 35 33.7 | 0.0 |
| | baz=257 | | | | | | | | |
| NWF | Wu-fen Shan | 0.78 | 299 | | S | | Sg | 17 35 34.6 | +0.2 |
| | baz=298 | | | | | | | | |
| TWE | Neicheng | 0.79 | 272 | | P | | Pb | 17 35 23.4 | -0.5 |
| | baz=271 | | | | | | | | |
| TWE | | | | | S | | Sg | 17 35 35.1 | +0.4 |
| | baz=271 | | | | | | | | |
| FUSB | Fushanzhiwuyua | 0.86 | 274 | e | P | | Pb | 17 35 25.0 | -0.3 |
| | baz=287 | | | | | | | | |
| FUSB | | | | | S | | Sg | 17 35 37.4 | +0.3 |
| | baz=287 | | | | | | | | |
| ENTT | Nioudou | 0.88 | 266 | | P | | Pb | 17 35 25.4 | -0.1 |
| | baz=266 | | | | | | | | |
| ENTT | | | | | S | | Sb | 17 35 36.4 | -0.5 |
| | baz=266 | | | | | | | | |
| TWA | Mucha | 0.91 | 288 | e | P | | Pn | 17 35 27.6 | +1.0 |
| | baz=287 | | | | | | | | |
| LATG | Datong | 0.93 | 260 | e | P | | Pb | 17 35 26.1 | -0.4 |
| | baz=260 | | | | | | | | |
| LATG | | | | i | S | | Sg | 17 35 39.1 | -0.2 |
| | baz=260 | | | | | | | | |
| NDT | Datong Townshi | 0.94 | 264 | | P | | Pn | 17 35 26.9 | 0.0 |
| | baz=264 | | | | | | | | |
| NDT | | | | | S | | Sg | 17 35 39.0 | -0.3 |
| | baz=264 | | | | | | | | |
| NWLT | Wulai | 0.94 | 275 | | P | | Pg | 17 35 26.8 | -0.4 |
| | baz=287 | | | | | | | | |
| NWLT | | | | | S | | Sn | 17 35 39.8 | -0.2 |
| | baz=287 | | | | | | | | |
| NHDH | Xindian Distri | 0.95 | 286 | e | P | | Pn | 17 35 28.1 | +0.9 |
| | baz=286 | | | | | | | | |
| NHDH | | | | | e | S | Sg | 17 35 39.4 | -0.6 |
| | baz=286 | | | | | | | | |
| YM01 | YM01 | 0.98 | 297 | | P | | Pg | 17 35 27.8 | -0.2 |
| | baz=297 | | | | | | | | |
| NACB | Ninganchiao | 1.00 | 239 | e | P | | Pg | 17 35 28.2 | -0.1 |
| | baz=238 | | | | | | | | |
| NACB | | | | | e | S | Sb | 17 35 39.9 | -0.5 |
| | baz=238 | | | | | | | | |
| YHNB | Yeheng | 1.05 | 269 | i | P | | Pb | 17 35 28.3 | -0.2 |
| | baz=268 | | | | | | | | |
| YHNB | | | | | S | | Sg | 17 35 42.6 | -0.6 |
| | baz=268 | | | | | | | | |
| NSK | Sanguang | 1.07 | 269 | | P | | Pg | 17 35 29.1 | -0.5 |
| | baz=269 | | | | | | | | |
| NSK | | | | | S | | Sb | 17 35 41.4 | -1.0 |
| | baz=269 | | | | | | | | |
| ETLH | Xiulin Townshi | 1.08 | 243 | | P | | Pg | 17 35 29.5 | -0.2 |
| | baz=251 | | | | | | | | |
| ETLH | | | | | e | S | Sb | 17 35 43.0 | +0.4 |
| | baz=251 | | | | | | | | |
| NNSB | Datong | 1.08 | 256 | | P | | Pb | 17 35 28.6 | -0.4 |
| | baz=255 | | | | | | | | |
| NNSB | | | | | e | S | Sb | 17 35 43.2 | +0.4 |
| | baz=255 | | | | | | | | |
| NNS | Nan Shan | 1.09 | 257 | | P | | Pg | 17 35 29.5 | -0.5 |
| | baz=256 | | | | | | | | |
| NNS | | | | | e | S | Sg | 17 35 44.8 | +0.5 |
| | baz=256 | | | | | | | | |
| IRIF | Iriomote-Funau | 1.15 | 108 | | P | | Pg | 17 35 30.8 | -0.2 |
| IRIF | | | | | S | | Sg | 17 35 45.8 | -0.3 |
| FUSS | Fushou | 1.26 | 249 | e | P | | Pg | 17 35 32.8 | -0.3 |
| | baz=249 | | | | | | | | |
| FUSS | | | | | e | S | Sn | 17 35 48.9 | +0.8 |
| | baz=249 | | | | | | | | |
| NFF | Wufeng Townshi | 1.29 | 267 | e | P | | Pb | 17 35 32.9 | +0.4 |
| | baz=267 | | | | | | | | |
| HATJ | Hateruma jima | 1.32 | 119 | e | S | | Sg | 17 35 53.1 | +1.5 |
| CHGB | Renai | 1.39 | 243 | e | P | | Pg | 17 35 35.9 | +0.2 |
| | baz=226 | | | | | | | | |
| JKRS | Kuro-shima | 1.42 | 109 | | P | | Pb | 17 35 35.3 | +0.6 |
| WUSB | Renai | 1.47 | 242 | e | P | | Pg | 17 35 36.7 | -0.5 |
| | baz=225 | | | | | | | | |
| JIJ | Ishigaki jima | 1.50 | 102 | | P | | Pg | 17 35 37.3 | -0.4 |
| JIJ | | | | | e | S | Sg | 17 35 57.5 | +0.1 |
| WHP | Taichung City | 1.51 | 254 | e | P | | Pg | 17 35 38.3 | +0.4 |
| | baz=239 | | | | | | | | |
| JISG | Ishigakijimahi | 1.62 | 94 | | P | | Pg | 17 35 39.1 | -0.9 |

*GUC **04** 17:55:00.3±1.3, 31°.07S×71°.78W, h32km±7km, ML5.2, MW4.9*
*NEIC **04** 17:55:00.7±1.7, 31°.05S±0°.04×71°.71W±0°.08, h25km±4km, mb5.0/195, Mwr4.5/36, Mwr4.9(GUC), Error ellipse: s-maj=10.4km s-min=5.9km az=98.0*
*NEIC **04** 17:55:00.9, 31°.05S×71°.70W, h28km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; Mrr=5.09; Mθθ=0.16; Mφφ=-4.93; Mrθ=2.47; Mrφ=1.04; Mθφ=-4.97; Fault plane solution: M0 7.55000×$10^{15}$ NP1:φ1 157.63000°, δ68.86000°, λ82.23000°. NP2:φ2 358.36000°, δ22.46000°, λ109.29000°. Principal axes: T 7.6071, Plg65.0000°, Azm54.0000°; N -0.1248, Plg7.0000°, Azm160.0000°; P -7.4823, Plg23.0000°, Azm254.0000°;*
*MOS **04** 17:55:00.5±1.1, 30°.84S×71°.51W, h34km, mb4.9/8 Error ellipse: s-maj=16.3km s-min=7.5km az=102.0*
*IDC **04** 17:55:01.4±4.4, 31°.06S×71°.65W, h33km±32km, mb4.5/15, mb1 4.6/21, mb1mx4.4/37, mbtmp4.6/21, ML4.4/6, MS4.1/23, Ms1 4.1/23, ms1mx3.8/56, Error ellipse: s-maj=20.7km s-min=13.8km az=80.0*
*BJI **04** 17:55:01.0±0.0, 31°.00S×71°.70W, h30km, Ms7 4.8/1*
*VAO **04** 17:55:01.1±0.4, 31°.03S×71°.67W, h27km, mb4.7*
**ISC 04 17:54:59.3±0.6, 31°.06S±0°.02×71°.83W±0°.04, h22km±4km, n493, σ1s28/514, mb5.0/118, MS4.2/20, 9C-5D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| CO06 | Fray Jorge | 0.42 | 24 | ⇓i | P | | Pb | 17 55 09.5 | +1.6 |
| CO06 | | | | | i | S | Sn | 17 55 15.8 | -1.2 |
| CO06 | Fray Jorge | 0.42 | 24 | | | | Pb | 17 55 09.5 | +1.6 |
| CO06 | | | | | | | Sn | 17 55 15.6 | -1.4 |
| CO02 | Combarbal | 0.73 | 102 | ⇓i | P | | Pn | 17 55 13.4 | -0.9 |
| CO02 | | | | | i | S | Sn | 17 55 23.0 | -1.9 |
| CO02 | | | | | IAML | | | 17 55 25.4 | |
| | comp=N,226μm,0.2s | | | | | | | | |
| CO02 | Combarbal | 0.73 | 102 | | | | Pn | 17 55 13.5 | -0.9 |
| CO02 | Combarbal | 0.73 | 102 | e | P | | Pn | 17 55 13.6 | -0.8 |
| CO02 | | | | e | S | | Sn | 17 55 23.4 | -1.6 |
| CO03 | El Pedregal | 1.01 | 78 | ⇓i | P | | Pb | 17 55 17.8 | -0.2 |
| CO03 | | | | e | S | | Sb | 17 55 30.1 | -0.8 |
| CO03 | El Pedregal | 1.01 | 78 | | | | Pb | 17 55 17.8 | -0.2 |
| CO03 | El Pedregal | 1.01 | 78 | e | P | | Pb | 17 55 17.7 | -0.4 |
| CO03 | | | | e | S | | Sb | 17 55 30.2 | -0.7 |
| CO05 | La Serena | 1.24 | 24 | e | P | | Pb | 17 55 22.1 | 0.0 |
| CO05 | | | | i | S | | Sb | 17 55 38.3 | +0.7 |
| CO05 | La Serena | 1.24 | 24 | | | | Pb | 17 55 21.9 | -0.1 |
| GO04 | Tololo Observa | 1.25 | 46 | ⇓i | P | | Pb | 17 55 22.1 | -0.2 |
| GO04 | | | | i | S | | Sb | 17 55 38.5 | +0.4 |
| GO04 | | | | IAML | | | | 17 55 42.4 | |
| GO04 | Tololo Observa | 1.25 | 46 | | | | Pb | 17 55 22.2 | -0.2 |
| GO04 | Tololo Observa | 1.25 | 46 | e | P | | Pb | 17 55 22.2 | -0.2 |
| GO04 | | | | e | S | | Sb | 17 55 39.0 | +0.9 |
| VA06 | Catapilco | 1.57 | 163 | e | P | | Pn | 17 55 26.4 | +0.6 |
| VA06 | | | | i | S | | Sn | 17 55 46.9 | +1.5 |
| VA06 | | | | IAML | | | | 17 55 51.6 | |
| | comp=N,49μm,0.7s | | | | | | | | |
| VA01 | Torpederas | 1.97 | 175 | e | P | | Pn | 17 55 31.6 | +0.3 |
| VA01 | Torpederas | 1.97 | 175 | | | | Pn | 17 55 31.6 | +0.3 |
| VA01 | Torpederas | 1.97 | 175 | i | P | | Pn | 17 55 32.0 | +0.7 |
| VA01 | | | | e | S | | Sb | 17 55 59.8 | +1.3 |
| VA03 | San Esteban | 2.02 | 148 | ⇑i | P | | Pn | 17 55 33.7 | +1.5 |
| VA03 | | | | i | S | | Sb | 17 55 59.3 | -0.9 |
| VA03 | | | | IAML | | | | 17 56 04.1 | |
| | comp=E,29μm,0.3s | | | | | | | | |
| VA03 | San Esteban | 2.02 | 148 | | | | Pn | 17 55 33.7 | +1.5 |
| VA03 | San Esteban | 2.02 | 148 | e | P | | Pn | 17 55 33.7 | +1.5 |
| VA03 | | | | i | S | | Sb | 17 56 01.6 | +1.4 |
| ROCH | El Roble | 2.03 | 160 | ⇑e | P | | Pn | 17 55 33.4 | +0.9 |
| ROCH | | | | i | S | | Sb | 17 56 00.3 | -0.3 |
| ROCH | | | | IAML | | | | 17 56 06.1 | |
| | comp=N,33μm,0.5s | | | | | | | | |
| ROC1 | El Roble | 2.04 | 160 | | | | Pn | 17 55 32.3 | -0.1 |
| ROC1 | El Roble | 2.04 | 160 | e | P | | Pn | 17 55 32.4 | -0.1 |
| ROC1 | | | | e | S | | Sn | 17 55 59.6 | +2.2 |
| AROD | Rodeo | 2.22 | 67 | e | P | | Pb | 17 55 38.8 | -0.1 |
| LCO | Las Campanas | 2.26 | 26 | P | | | Pn | 17 55 36.4 | +0.8 |
| LCO | Las Campanas | 2.26 | 26 | ⇑e | P | | Pn | 17 55 36.4 | +0.8 |
| LCO | Las Campanas | 2.26 | 26 | Pn | | | Pn | 17 55 36.4 | +0.8 |
| LCO | Las Campanas | 2.26 | 26 | e | P | | Pn | 17 55 36.6 | +1.0 |
| LCO | | | | e | S | | Sb | 17 56 06.1 | -1.2 |
| LCO | | | | IAML | | | | 17 56 15.7 | |
| | comp=Z,18μm,0.7s | | | | | | | | |
| MT02 | Curacav | 2.27 | 165 | e | P | | Pn | 17 55 36.3 | +0.7 |
| MT02 | | | | e | S | | Sn | 17 56 05.8 | +2.9 |
| MT02 | Curacav | 2.27 | 165 | | | | Pn | 17 55 36.1 | +0.6 |
| MT02 | Curacav | 2.27 | 165 | e | P | | Pn | 17 55 36.1 | +0.6 |
| MT02 | | | | e | S | | Sb | 17 56 07.9 | +0.6 |
| PEL | Peldehue | 2.30 | 155 | P | | | Pn | 17 55 37.2 | +1.2 |
| PEL | Peldehue | 2.30 | 155 | e | P | | Pn | 17 55 37.4 | +1.5 |
| PEL | | | | i | S | | Sb | 17 56 06.5 | -1.6 |
| PEL | | | | IAML | | | | 17 56 12.6 | |
| | comp=N,13μm,0.5s | | | | | | | | |
| PEL | Peldehue | 2.30 | 155 | | | | Pn | 17 55 37.1 | +1.2 |
| PEL | Peldehue | 2.30 | 155 | e | P | | Pn | 17 55 37.4 | +1.5 |
| PEL | | | | e | S | | Sb | 17 56 08.1 | 0.0 |
| AUSP | Uspallata | 2.39 | 120 | e | P | | Pb | 17 55 41.5 | -0.3 |
| AUSP | | | | i | S | | Sb | 17 56 12.4 | +1.5 |
| ACCO | Cerro Coronel | 2.42 | 80 | e | P | | Pb | 17 55 41.7 | -0.7 |
| ACDV | Cuesta del Vie | 2.50 | 70 | e | P | | Pb | 17 55 43.2 | -0.4 |
| ACDV | | | | e | S | | Sb | 17 56 17.2 | +3.2 |
| ACDV | | | | IAML | | | | 17 56 24.7 | |
| | comp=Z,4μm,0.7s | | | | | | | | |
| MT05 | Renca | 2.51 | 159 | e | P | | Pn | 17 55 40.3 | +1.5 |
| MT05 | | | | e | S | | Sn | 17 56 11.2 | +2.4 |
| MT05 | | | | IAML | | | | 17 56 27.2 | |
| | comp=E,19μm,0.4s | | | | | | | | |
| MT05 | Renca | 2.51 | 159 | | | | Pn | 17 55 40.2 | +1.3 |
| MT05 | Renca | 2.51 | 159 | e | P | | Pn | 17 55 40.1 | +1.3 |
| MT05 | | | | e | S | | Sb | 17 56 13.2 | -0.9 |
| VA05 | Santo Domingo | 2.60 | 176 | e | P | | Pn | 17 55 40.3 | +0.2 |
| VA05 | | | | IAML | | | | 17 56 25.6 | |
| | comp=N,12μm,0.2s | | | | | | | | |
| VA05 | Santo Domingo | 2.60 | 176 | | | | Pn | 17 55 40.2 | +0.2 |
| MT09 | Talagante | 2.81 | 165 | e | P | | Pn | 17 55 44.5 | +1.5 |
| MT09 | | | | e | S | | Sn | 17 56 18.3 | +2.1 |
| MT09 | | | | IAML | | | | 17 56 29.1 | |
| | comp=N,7μm,0.4s | | | | | | | | |
| MT09 | Talagante | 2.81 | 165 | | | | Pn | 17 55 44.2 | +1.3 |
| MT01 | Popeta | 2.84 | 170 | e | P | | Pn | 17 55 44.1 | +0.7 |
| MT01 | Popeta | 2.84 | 170 | | | | Pn | 17 55 44.0 | +0.7 |
| MT01 | Popeta | 2.84 | 170 | e | P | | Pn | 17 55 44.1 | +0.7 |
| MT01 | | | | e | S | | Sn | 17 56 19.3 | +2.3 |
| RTLL | Cerro Villicun | 2.89 | 96 | e | P | | Pb | 17 55 47.5 | -2.7 |
| RTLL | | | | e | S | | Sb | 17 56 24.8 | -0.3 |
| RTLL | | | | IAML | | | | 17 56 37.3 | |
| | comp=Z,6μm,0.5s | | | | | | | | |
| AC04 | Llanos de Chal | 2.92 | 13 | e | P | | Pn | 17 55 44.7 | +0.3 |
| AC04 | Llanos de Chal | 2.92 | 13 | | | | Pn | 17 55 44.7 | +0.3 |
| AC04 | Llanos de Chal | 2.92 | 13 | e | P | | Pn | 17 55 44.8 | +0.3 |
| AC04 | | | | e | S | | Sb | 17 56 25.6 | -0.2 |
| RTCV | Cerro Valdivia | 2.93 | 107 | e | P | | Pb | 17 55 49.3 | -1.5 |
| ASAL | Salagasta | 2.98 | 122 | i | P | | Pb | 17 55 50.0 | -1.7 |
| ASAL | | | | e | S | | Sb | 17 56 28.6 | +1.0 |
| ASAL | | | | IAML | | | | 17 56 42.1 | |
| | comp=Z,2μm,1.1s | | | | | | | | |
| ARCO | CERRO ARCO | 3.04 | 127 | e | P | | Pb | 17 55 51.5 | -1.3 |
| ARCO | | | | IAML | | | | 17 56 43.2 | |
| | comp=Z,6μm,0.4s | | | | | | | | |
| LMEL | Las Melosas | 3.11 | 154 | | | | Pn | 17 55 49.3 | +2.1 |
| AAGR | Agrelo | 3.25 | 129 | i | P | | Pb | 17 55 54.0 | -2.4 |
| AAGR | | | | IAML | | | | 17 56 56.0 | |
| | comp=Z,2μm,3.3s | | | | | | | | |
| BO01 | Tunca | 3.39 | 169 | | | | Pn | 17 55 51.6 | +0.8 |
| GO03 | Copiap | 3.72 | 22 | IAML | | | | 17 57 01.5 | |
| | comp=N,4μm,0.8s | | | | | | | | |
| GO03 | Copiap | 3.72 | 22 | Pn | | | Pn | 17 55 55.7 | +0.2 |
| GO03 | Copiap | 3.72 | 22 | e | P | | Pn | 17 55 56.4 | +0.9 |
| GO03 | | | | e | S | | Sb | 17 56 46.6 | -2.4 |
| BO02 | Sierra Bellavi | 3.83 | 167 | e | P | | Pn | 17 55 58.2 | +1.2 |
| BO02 | | | | e | S | | Sn | 17 56 44.7 | +3.3 |
| BO02 | Sierra Bellavi | 3.83 | 167 | Pn | | | Pn | 17 55 58.4 | +1.4 |
| BO02 | Sierra Bellavi | 3.83 | 167 | e | P | | Pn | 17 55 58.4 | +1.4 |
| BO02 | | | | e | S | | Sb | 17 56 49.6 | -2.5 |
| VCA | Vinchina | 3.91 | 55 | e | P | | Pb | 17 56 03.1 | -4.5 |
| VCA | | | | e | S | | Sb | 17 56 51.4 | -3.1 |
| VCA | | | | IAML | | | | 17 57 06.0 | |
| | comp=Z,6μm,0.4s | | | | | | | | |
| GO05 | Huala | 3.94 | 181 | | | | Pn | 17 55 58.3 | -0.2 |
| GO05 | Huala | 3.94 | 181 | e | P | | Pn | 17 55 58.3 | -0.2 |
| ACLC | CERRO LA CRUZ | 4.52 | 70 | e | P | | Pn | 17 56 09.6 | +2.9 |
| ACLC | | | | e | S | | Sn | 17 57 02.5 | +3.8 |
| ACLC | | | | IAML | | | | 17 57 11.6 | |
| | comp=Z,8μm,0.5s | | | | | | | | |
| APLL | PUNTA DE LOS L | 4.61 | 83 | e | P | | Pn | 17 56 10.3 | +2.5 |
| RFA | San Rafael | 4.66 | 144 | e | P | | Pn | 17 56 11.0 | +2.6 |
| RFA | | | | i | P | | Pn | 17 56 11.0 | +2.6 |
| RFA | | | | e | S | | Sn | 17 57 08.1 | +6.2 |
| RFA | | | | IAML | | | | 17 57 28.2 | |
| | comp=Z,931nm,1.2s | | | | | | | | |
| ML02 | Panimavida | 4.71 | 176 | Pn | | | Pn | 17 56 09.5 | +0.5 |
| AC02 | Maricunga | 4.83 | 30 | e | P | | Pn | 17 56 12.7 | +1.7 |
| AC02 | Maricunga | 4.83 | 30 | Pn | | | Pn | 17 56 12.1 | +1.0 |
| AC02 | Maricunga | 4.83 | 30 | e | P | | Pn | 17 56 12.8 | +1.7 |
| AC02 | | | | e | S | | Sn | 17 57 12.2 | +5.7 |
| MRA | San Martin | 5.38 | 106 | e | P | | Pn | 17 56 20.2 | +1.8 |
| MRA | | | | e | S | | Sn | 17 57 24.9 | +5.1 |
| H03N1 | Juan Fernandez | 6.45 | 247 | T | | T | | 18 03 20.6 | |
| | baz=75,slow=72,SNR=2741 | | | | | | | | |
| H03N3 | Juan Fernandez | 6.47 | 246 | T | | T | | 18 03 20.0 | |
| | baz=75,slow=72,SNR=3134 | | | | | | | | |
| H03N2 | Juan Fernandez | 6.47 | 247 | T | | T | | 18 03 21.2 | |
| | baz=75,slow=72,SNR=3630 | | | | | | | | |
| AHML | Horco Molle | 7.11 | 55 | i | P | | Pn | 17 56 44.0 | +2.0 |
| AHML | | | | IAML | | | | 17 58 17.2 | |
| | comp=Z,297nm,0.7s | | | | | | | | |
| PB10 | IPOC Station P | 7.60 | 9 | Pn | | | Pn | 17 56 48.4 | -0.3 |
| LC01 | Cunco | 7.82 | 180 | | | | Pn | 17 56 50.3 | -1.5 |
| PB15 | IPOC Station P | 8.09 | 16 | | | | Pn | 17 56 54.7 | -1.1 |
| PB06 | IPOC Station P | 8.56 | 14 | Pn | | | Pn | 17 56 59.3 | -2.8 |
| LR03 | Panguipulli | 8.57 | 183 | Pn | | | Pn | 17 57 01.0 | -1.0 |
| LVC | Limon Verde | 8.81 | 18 | Pn | | | Pn | 17 57 05.4 | -0.3 |
| | comp=Z,1.4nm,0.3s,baz=178,slow=6.4,SNR=10 | | | | | | | | |
| LVC | | | | LR | | | LR | 18 00 19.0 | |
| | comp=Z,840nm,21.3s,baz=210,slow=36 | | | | | | | | |
| LVC | Limon Verde | 8.81 | 18 | P | | | Pn | 17 57 03.5 | -2.2 |
| LVC | Limon Verde | 8.81 | 18 | e | P | | Pn | 17 57 06.4 | +0.7 |
| LVC | Limon Verde | 8.81 | 18 | Pn | | | Pn | 17 57 03.5 | -2.2 |
| PB04 | IPOC Station P | 8.82 | 10 | Pn | | | Pn | 17 57 03.2 | -2.4 |
| PB03 | IPOC Station P | 9.16 | 12 | Pn | | | Pn | 17 57 09.4 | -0.9 |
| PB07 | IPOC Station P | 9.45 | 11 | Pn | | | Pn | 17 57 12.7 | -1.6 |
| PB09 | IPOC Station P | 9.51 | 15 | Pn | | | Pn | 17 57 13.1 | -2.0 |
| PLCA | Paso Flores | 9.71 | 174 | Pn | | | Pn | 17 57 17.7 | 0.0 |
| | comp=Z,0.9nm,0.3s,baz=336,slow=12,SNR=21 | | | | | | | | |
| PLCA | | | | LR | | | LR | 18 01 11.1 | |
| | comp=Z,725nm,21.6s,baz=346,slow=38 | | | | | | | | |
| PLCA | Paso Flores | 9.71 | 174 | P | | | Pn | 17 57 18.3 | +0.6 |
| PLCA | Paso Flores | 9.71 | 174 | e | P | | Pn | 17 57 19.3 | +1.6 |
| PLCA | Paso Flores | 9.71 | 174 | Pn | | | Pn | 17 57 18.3 | +0.6 |
| LL04 | Puerto Octay | 9.85 | 183 | Pn | | | Pn | 17 57 18.8 | -0.7 |
| PB02 | IPOC Station P | 9.85 | 11 | Pn | | | Pn | 17 57 18.1 | -1.6 |
| PB01 | IPOC Station P | 10.19 | 12 | Pn | | | Pn | 17 57 21.8 | -2.5 |
| PATCX | Punta Patache | 10.30 | 9 | Pn | | | Pn | 17 57 25.3 | -0.6 |
| TA01 | Diego Aracena | 10.55 | 8 | Pn | | | Pn | 17 57 28.4 | -0.8 |
| PB08 | IPOC Station P | 11.13 | 13 | Pn | | | Pn | 17 57 35.7 | -1.9 |
| PB11 | IPOC Station P | 11.42 | 10 | Pn | | | Pn | 17 57 39.4 | -1.8 |
| GO01 | Chusmiza | 11.59 | 12 | Pn | | | Pn | 17 57 41.7 | -2.2 |
| MNMC | Minye Minye | 12.04 | 10 | Pn | | | Pn | 17 57 48.0 | -1.9 |
| PB12 | IPOC Station P | 12.46 | 7 | Pn | | | Pn | 17 57 53.5 | -2.0 |
| PB16 | IPOC Station P | 12.84 | 10 | | | | Pn | 17 57 59.3 | -1.7 |
| ITQB | Itaqui | 13.21 | 88 | e | P | | Pn | 17 58 04.4 | -1.1 |
| ITQB | Itaqui | 13.21 | 88 | | | | Pn | 17 58 03.9 | -1.6 |
| CPUP | Villa Florida | 13.57 | 73 | Pn | | | Pn | 17 58 09.4 | -1.1 |
| | comp=Z,1.3nm,0.3s,baz=246,slow=10,SNR=11 | | | | | | | | |
| CPUP | | | | LR | | | LR | 18 03 50.8 | |
| | comp=Z,1μm,18.5s,baz=240,slow=39 | | | | | | | | |
| CPUP | Villa Florida | 13.57 | 73 | P | | | Pn | 17 58 08.0 | -2.5 |
| CPUP | Villa Florida | 13.57 | 73 | | | | Pn | 17 58 08.0 | -2.5 |
| LPAZ | La Paz | 15.08 | 14 | Pn | | | Pn | 17 58 32.0 | +0.3 |
| | comp=Z,0.7nm,0.3s,baz=183,slow=8.7,SNR=56 | | | | | | | | |
| LPAZ | La Paz | 15.08 | 14 | P | | P | P | 17 58 34.4 | -2.5 |
| LPAZ | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| LPAZ | La Paz | 15.08 | 14 | | | | Pn | 17 58 30.5 | -1.2 |
| LPAZ | | | | P | | | P | 17 58 34.4 | -2.5 |
| PLTB | Pedras Altas | 15.58 | 97 | e | P | | Pn | 17 58 36.7 | -0.9 |
| PLTB | Pedras Altas | 15.58 | 97 | | | | Pn | 17 58 37.0 | -0.6 |
| ITAB | Concordia | 17.62 | 82 | e | P | | P | 17 59 03.7 | -0.6 |
| ITAB | Concordia | 17.62 | 82 | | | | Pn | 17 58 59.9 | -3.6 |
| ITAB | | | | IAmb | | | IAmb | 17 59 21.9 | |
| | comp=Z,112nm,1.4s | | | | | | | | |
| AQDB | Aquidauana | 17.93 | 58 | e | P | | P | 17 59 06.9 | -0.8 |
| SIV | San Ignacio | 17.93 | 36 | P | | | P | 17 59 07.0 | -0.8 |
| | comp=Z,1.0nm,0.3s,baz=211,slow=10,SNR=37 | | | | | | | | |
| SIV | | | | LR | | | LR | 18 07 26.4 | |
| | comp=Z,660nm,19.0s,baz=230,slow=42 | | | | | | | | |
| PTGB | Pitanga | 18.57 | 75 | e | P | | Pn | 17 59 15.5

PTGA LR LR 18 15 40.0
comp=Z,309nm,19.5s,baz=202,slow=38
**GUA01 Guaratinga, BA 32.51 71** *eP* **P 18 01 29.2 +0.6**
**RPN Rapa Nui 32.90 267** LR LR 18 11 21.3
comp=Z,183nm,18.8s,baz=98,slow=30
**CMC01 Camacan, BA 33.40 70** *eP* **P 18 01 36.1 -0.3**
**MALB Monte Alegre 33.46 33** *eP* **P 18 01 36.1 -0.8**
**NBIT Itapeh - BA 33.71 69** *eP* **P 18 01 39.5 +0.4**
**PMSA Palmer Station 34.09 174** LR LR 18 14 25.1
comp=Z,421nm,19.0s,baz=302,slow=34
**GDU01 Guandu, BA 34.28 67** *eP* **P 18 01 43.8 -0.3**
**BOAV Boa Vista 34.97 20** *eP* **P 18 01 50.3 +0.4**
**BOAV Boa Vista 34.97 20** P P **18 01 47.6 -2.3**
BOAV IAmb IAmb 18 01 51.1
comp=Z,15nm,0.8s
**NBPN Ponto Novo - B 35.53 62** *eP* **P 18 01 54.0 -0.9**
**MCPB Macapa, AP 35.83 35** *eP* **P 18 01 57.6 +0.2**
**NBLA Lagarto - SE 37.30 65** *eP* **P 18 02 09.1 -0.9**
**NBMA Muriti-CE 38.86 60** *eP* **P 18 02 23.1 -0.1**
**NBPS Pedro II - PI 38.99 53** *eP* **P 18 02 24.3 0.0**
**NBAN Anadia - AL 39.28 65** *eP* **P 18 02 25.9 -0.7**
**NBPB Pedra_Branca-C 39.49 57** *eP* **P 18 02 28.7 +0.3**
**SDV Santo Domingo 39.73 2** *eP* **P 18 02 31.8 +1.2**
**BAUV El Baul 39.94 6** P P **18 02 32.1 +0.1**
BAUV IAmb IAmb 18 02 33.6
comp=Z,42nm,0.9s
**MDP Montagnes des 40.36 30** LR LR 18 21 27.6
comp=Z,204nm,19.8s,baz=216,slow=39
**NBCL Cascavel-CE 41.33 57** *eP* **P 18 02 43.6 0.0**
**PLCV Puerto La Cruz 41.57 11** P P **18 02 45.7 +0.2**
**PCRV Puerto La Cruz 41.57 11** P P **18 02 45.7 +0.1**
comp=Z,11nm,0.8s,baz=340,slow=8.5,SNR=3.6
**BIRV Birongo 41.64 8** P P **18 02 47.2 +1.2**
BIRV IAmb IAmb 18 02 47.8
comp=Z,32nm,0.9s
**NBPV Pedro Velho 42.08 62** *eP* **P 18 02 50.2 +0.4**
**MLPR Magueyes Islan 48.96 6** P P **18 03 43.5 -0.5**
**CELP Cerrillos 49.11 7** P P **18 03 45.6 +0.4**
**BANI BANI 49.18 2** P P **18 03 44.7 -1.2**
**SJG San Juan 49.19 7** LR LR 18 26 38.7
comp=Z,85nm,19.0s,baz=186,slow=39
**SJG San Juan 49.19 7** P P **18 03 45.1 -0.7**
SJG pmax pmax
comp=Z,38nm,0.9s
**SJG San Juan 49.19 7** P P **18 03 45.1 -0.7**
**CBYP Canovanas 49.38 7** P P **18 03 47.2 -0.2**
**CUPR Culebra, Puert 49.48 8** P P **18 03 46.6 -1.4**
**VNA3 Neumayer Olymp 52.02 159** P P **18 04 07.4 +0.7**
**VNA2 Neumayer--Watz 52.66 158** P P **18 04 12.0 +0.5**
baz=285,slow=6.7
**SNAA Sanae 54.25 159** P P **18 04 23.9 +0.8**
**SNAA Sanae 54.25 159** P P **18 04 23.8 +0.8**
comp=Z,13nm,0.7s,baz=277,slow=6.6,SNR=55
**SNAA Sanae 54.25 159** P P **18 04 23.9 +0.8**
SNAA IAmb IAmb 18 04 24.7
comp=Z,13nm,0.7s
**QSPA South Pole Qui 59.17 180** LR LR 18 29 47.6
comp=Z,99nm,18.6s,baz=98,slow=35
**HKT Hockley 64.82 337** *i* P P **18 05 36.7 +0.4**
HKT pmax pmax
comp=Z,13nm,1.9s
**GOGA Godfrey 65.06 349** P P **18 05 38.1 +0.3**
GOGA pmax pmax
comp=Z,10.0nm,0.9s
**GOGA Godfrey 65.06 349** P P **18 05 38.1 +0.3**
GOGA IAmb IAmb 18 05 39.2
comp=Z,10nm,0.9s
**JSC Jenkinsville 65.59 351** P P **18 05 41.4 +0.1**
JSC pmax pmax
comp=Z,21nm,1.1s
**JSC Jenkinsville 65.59 351** P P **18 05 41.4 +0.1**
JSC IAmb IAmb 18 05 43.1
comp=Z,21nm,1.1s
**X51A Calhoun 66.42 348** P P **18 05 47.9 +1.3**
**X48A Hartselle 66.72 346** P P **18 05 49.2 +0.7**
**JCT Junction City 66.72 334** P P **18 05 50.2 +1.5**
JCT pmax pmax
comp=Z,8.0nm,0.8s
**JCT Junction City 66.72 334** P P **18 05 50.2 +1.5**
JCT IAmb IAmb 18 05 50.9
comp=Z,8.2nm,0.8s
**W52A Murphy 66.78 349** P P **18 05 49.6 +0.6**
**W50A Signal Mountai 67.11 348** P P **18 05 52.2 +1.1**
**V55A Taylorsville 67.14 352** P P **18 05 52.2 +1.0**
V55A IAmb IAmb 18 05 53.1
comp=Z,14nm,0.8s
**V53A Saluda 67.17 350** P P **18 05 52.2 +0.7**
**CPCT Cooper Cave 67.22 349** P P **18 05 52.2 +0.5**
CPCT IAmb IAmb 18 05 53.5
comp=Z,17nm,0.9s
**WHTX Lake Whitney, 67.24 337** P P **18 05 53.0 +1.1**
WHTX IAmb IAmb 18 05 55.3
comp=Z,6.8nm,0.8s
**SWET Sewanee 67.24 348** P P **18 05 52.8 +0.9**
**TX32 Lajitas Array 67.27 330** P P **18 05 53.8 +1.5**
**TXAR Lajitas Array 67.27 330** P P **18 05 54.2 +2.0**
comp=Z,2.3nm,0.8s,baz=149,slow=8.0,SNR=20
TXAR LR LR 18 31 29.3
comp=Z,64nm,18.1s,baz=278,slow=32
**TXAR Lajitas Array 67.27 330** P P **18 05 53.7 +1.4**
**TXAR Lajitas Array 67.27 330** P P **18 05 53.7 +1.4**
**TX31 Lajitas Ar. Si 67.27 330** P P **18 05 53.7 +1.4**
TX31 IAmb IAmb 18 05 55.2
comp=Z,9.8nm,0.9s
**U59A Littleton 67.29 355** P P **18 05 51.7 -0.4**
U59A IAmb IAmb 18 05 54.6
comp=Z,20nm,1.1s
**OXF Oxford 67.29 344** P P **18 05 52.1 -0.1**
OXF pmax pmax
comp=Z,42nm,0.9s
**OXF Oxford 67.29 344** P P **18 05 52.0 -0.1**
**TKL Tuckaleechee C 67.30 349** P P **18 05 50.7 -1.6**
TKL pmax pmax
comp=Z,16nm,0.8s
**TKL Tuckaleechee C 67.30 349** P P **18 05 50.7 -1.6**
TKL IAmb IAmb 18 05 53.7
comp=Z,16nm,0.8s
**PLAL Pickwick Lake 67.44 346** P P **18 05 52.5 -0.6**
PLAL IAmb IAmb 18 05 54.6
comp=Z,23nm,1.3s
**V52A Sevierville 67.46 350** P P **18 05 53.1 -0.1**
**V51A Loudon 67.54 349** P P **18 05 53.9 +0.2**
V51A IAmb IAmb 18 05 55.7
comp=Z,17nm,0.8s
**U54A Nelsons Funny 67.87 351** P P **18 05 56.5 +0.6**
**V48A Smith Brothers 67.92 347** P P **18 05 57.0 +0.9**
**T57A Hurt 68.06 354** P P **18 05 57.8 +0.9**
T57A IAmb IAmb 18 05 58.9
comp=Z,19nm,1.1s
**CLTN Cedars of Leba 68.17 347** P P **18 05 58.0 +0.4**
**MIAR Mount Ida 68.39 341** P P **18 05 59.2 +0.1**
MIAR pmax pmax
comp=Z,6.0nm,0.9s
**MIAR Mount Ida 68.39 341** P P **18 05 59.2 +0.1**
**Z35A Perchaven, San 68.40 337** P P **18 05 59.1 0.0**
**U49A Red Boiling Sp 68.48 348** P P **18 05 59.7 +0.1**
U49A IAmb IAmb 18 06 01.1
comp=Z,15nm,1.1s
**WVT Waverly 68.50 346** P P **18 06 00.4 +0.6**
WVT pmax pmax
comp=Z,31nm,1.0s
**WVT Waverly 68.50 346** P P **18 06 00.3 +0.6**
**ABTX Abilene, Hawle 68.58 335** P P **18 06 00.3 -0.1**
ABTX IAmb IAmb 18 06 03.0
comp=Z,11nm,1.1s
**W41B Gary Mavity, V 68.62 342** P P **18 06 01.2 +0.7**
W41B IAmb IAmb 18 06 02.6
comp=Z,7.2nm,0.8s
**JSRW J. Sargeant Re 68.63 355** P P **18 06 02.3 +1.8**
**WHAR Wooly Hollow 68.74 342** P P **18 06 02.2 +0.9**
WHAR IAmb IAmb 18 06 03.4
comp=Z,12nm,1.0s
**S57A Dark Hollow, R 68.78 354** P P **18 06 01.2 -0.2**
S57A IAmb IAmb 18 06 04.0
comp=Z,13nm,0.9s
**W39A Magazine 69.06 341** P P **18 06 05.1 +1.8**
**T47A Sharon Grove 69.18 347** P P **18 06 04.8 +0.8**
T47A IAmb IAmb 18 06 05.7
comp=Z,19nm,0.9s
**LCAR Lake Charles 69.19 343** P P **18 06 04.9 +0.9**
**S51A Beattyville 69.22 350** P P **18 06 03.9 -0.3**
S51A IAmb IAmb 18 06 16.0
comp=Z,14nm,1.0s
**FCAR Ozark Folk Cen 69.27 342** P P **18 06 05.2 +0.7**
FCAR IAmb IAmb 18 06 06.2
comp=Z,7.7nm,0.7s
**PARMO Parma 69.43 345** P P **18 06 04.5 -1.0**
**T45A Paducah 69.53 346** P P **18 06 06.9 +0.8**
**PBMO Poplar Bluff 69.69 344** P P **18 06 08.2 +1.0**
**X34A Smith Ranch, M 69.75 337** P P **18 06 08.6 +1.1**
X34A IAmb IAmb 18 06 09.6
comp=Z,23nm,1.4s
**U40A Yellville 69.90 342** P P **18 06 09.1 +0.7**
U40A IAmb IAmb 18 06 10.3
comp=Z,16nm,0.8s
**MNTX Cornudas Mount 70.05 330** P P **18 06 10.0 +0.5**
MNTX IAmb IAmb 18 06 11.1
comp=Z,8.0nm,0.9s
**HHAR Hobbs 70.12 341** P P **18 06 10.8 +1.0**
**WMOK Wichita Mounta 70.19 337** P P **18 06 10.0 -0.3**
WMOK pmax pmax
comp=Z,8.0nm,1.0s
**WMOK Wichita Mounta 70.19 337** P P **18 06 10.0 -0.3**
WMOK IAmb IAmb 18 06 12.1
comp=Z,8.2nm,0.9s
**WCI Wyandotte Cave 70.24 348** P P **18 06 10.5 0.0**
WCI pmax pmax
comp=Z,15nm,0.9s
**WCI Wyandotte Cave 70.24 348** P P **18 06 10.5 0.0**
WCI IAmb IAmb 18 06 11.5
comp=Z,15nm,0.9s
**S44A Carbondale 70.31 345** P P **18 06 11.4 +0.6**
**TUL1 Leonard 70.31 340** P P **18 06 11.1 +0.1**
TUL1 IAmb IAmb 18 06 12.8
comp=Z,18nm,0.9s
**P57A Homestead Farm 70.42 355** P P **18 06 13.5 +2.0**
P57A IAmb IAmb 18 06 14.4
comp=Z,21nm,1.1s
**OK025 Westminster Rd 70.49 338** P P **18 06 12.3 +0.3**
**MGMO Mountain Grove 70.50 343** P P **18 06 13.2 +1.1**
MGMO IAmb IAmb 18 06 14.1
comp=Z,8.7nm,0.8s
**Q51A Peebles 70.54 351** P P **18 06 12.8 +0.4**
Q51A IAmb IAmb 18 06 13.9
comp=Z,15nm,0.9s
**FVM French Village 70.84 345** P P **18 06 14.8 +0.6**
FVM pmax pmax
comp=Z,25nm,1.1s
**FVM French Village 70.84 345** P P **18 06 14.8 +0.6**
**P51A Williamsport 70.95 351** P P **18 06 15.2 +0.4**
P51A IAmb IAmb 18 06 16.1
comp=Z,20nm,1.0s
**MSTX Muleshoe 70.96 333** P P **18 06 15.1 0.0**
**CCM Cathedral Cave 71.10 344** P P **18 06 16.7 +1.0**
CCM pmax pmax
comp=Z,26nm,0.9s
**CCM Cathedral Cave 71.10 344** P P **18 06 16.7 +1.0**
**S39A Bolivar 71.28 342** P P **18 06 18.0 +1.2**
S39A IAmb IAmb 18 06 18.8
comp=Z,22nm,1.1s
**P48A Milroy 71.29 349** P P **18 06 17.3 +0.4**
P48A IAmb IAmb 18 06 17.8
comp=Z,14nm,0.7s
**AMTX Amarillo 71.36 334** P P **18 06 19.1 +1.7**
AMTX IAmb IAmb 18 06 19.9
comp=Z,24nm,1.2s
**SLM Saint Louis 71.42 345** P P **18 06 18.1 +0.4**
SLM pmax pmax
comp=Z,39nm,0.5s
**SLM Saint Louis 71.42 345** P P **18 06 18.1 +0.4**
**T35A Sooner Cattle 71.46 339** P P **18 06 18.3 +0.4**
T35A IAmb IAmb 18 06 20.2
comp=Z,32nm,1.4s
**R40A Maddies Statio 71.58 343** P P **18 06 18.7 +0.2**
**ACSO Alum Creek Sta 71.68 351** P P **18 06 19.7 +0.5**
**P46A Rosedale 71.75 348** P P **18 06 19.6 0.0**
P46A IAmb IAmb 18 06 20.6
comp=Z,20nm,0.8s
**U32A Winter Ranch, 71.76 337** P P **18 06 20.6 +0.8**
**121A Cookes Peak, D 71.81 329** P P **18 06 22.6 +2.2**
121A IAmb IAmb 18 06 23.9
comp=Z,12nm,0.9s
**O49A Covington 71.83 350** P P **18 06 20.5 +0.4**
O49A IAmb IAmb 18 06 21.5
comp=Z,18nm,0.9s
**KAN10 Anthony SW Sta 72.14 338** P P **18 06 22.9 +0.8**
KAN10 IAmb IAmb 18 06 23.8
comp=Z,20nm,1.2s
**KAN16 Harper SW Stat 72.23 338** P P **18 06 23.2 +0.7**
KAN16 IAmb IAmb 18 06 25.0
comp=Z,14nm,0.8s
**P43A Skaggs, Pawnee 72.23 346** P P **18 06 22.4 -0.1**
**N49A Columbus Grove 72.52 350** P P **18 06 24.9 +0.7**
**BNM Barren Site 72.69 330** P P **18 06 27.0 +1.3**
**P40A Paris 72.70 344** P P **18 06 26.1 +0.9**
**LENM Lemitar 72.85 330** P P **18 06 28.4 +1.8**
**P38A Dawn 73.16 343** P P **18 06 28.3 +0.3**
P38A IAmb IAmb 18 06 29.6
comp=Z,15nm,0.8s
**ANMO Albuquerque 73.30 331** P P **18 06 30.9 +1.7**
ANMO pmax pmax
comp=Z,9.0nm,1.4s
**ANMO Albuquerque 73.30 331** P P **18 06 30.9 +1.7**
**N41A Harden Midland 73.54 345** P P **18 06 30.4 +0.2**
**L48A N Adams 73.56 350** P P **18 06 30.5 +0.2**
L48A IAmb IAmb 18 06 31.4
comp=Z,20nm,0.9s
**MMNY Mt. Morris Dam 73.64 355** P P **18 06 31.2 +0.4**
**LIC Lamto 73.69 72** *eP* **P 18 06 31.9 +0.1**
comp=Z,53nm,1.0s
**TIC Toumodi 73.94 72** *eP* **P 18 06 33.4 +0.2**
**KIC Kosan Boka 74.00 72** *eP* **P 18 06 33.9 +0.3**
comp=Z,24nm,0.8s
**DBIC Dimbokro 74.09 72** P P **18 06 34.5 +0.4**
comp=Z,16nm,0.7s,baz=229,slow=5.6,SNR=24
**DBIC Dimbokro 74.09 72** P P **18 06 34.0 -0.1**
DBIC pmax pmax
comp=Z,17nm,0.7s
**DBIC Dimbokro 74.09 72** P P **18 06 34.0 -0.1**
**N38A Joes South For 74.18 343** P P **18 06 34.3 +0.3**
**CBKS Cedar Bluff 74.21 338** P P **18 06 35.4 +1.1**
CBKS pmax pmax
comp=Z,22nm,0.9s
**CBKS Cedar Bluff 74.21 338** P P **18 06 35.4 +1.1**
CBKS IAmb IAmb 18 06 36.9
comp=Z,22nm,0.9s
**T25A Trinidad 74.38 333** P P **18 06 37.0 +1.5**
T25A IAmb IAmb 18 06 38.9
comp=Z,19nm,0.9s
**X18A Snowflake 74.47 328** P P **18 06 37.3 +1.3**
**L42A Oliver, Polo 74.53 346** P P **18 06 36.1 +0.1**
L42A IAmb IAmb 18 06 37.5
comp=Z,18nm,1.1s
**W18A Petrified Fore 74.86 329** P P **18 06 39.4 +1.0**
W18A IAmb IAmb 18 06 41.6
comp=Z,10nm,0.9s
**N35A Tabor 74.87 342** P P **18 06 38.3 +0.3**
**L40A Anamosa 74.92 345** P P **18 06 38.3 +0.1**
**X16A Lo Mia Camp, P 75.06 327** P P **18 06 41.3 +1.8**
**SCIA State Center 75.23 344** P P **18 06 40.9 +0.9**
**SDCO Great Sand Dun 75.33 333** P P **18 06 42.1 +1.1**
**JFWS Jewell Farm 75.53 346** P P **18 06 42.1 +0.4**
JFWS pmax pmax
comp=Z,25nm,1.1s
**JFWS Jewell Farm 75.53 346** P P **18 06 42.1 +0.4**
JFWS IAmb IAmb 18 06 43.6
comp=Z,25nm,1.1s
**SADO Sadowa 75.76 355** P P **18 06 43.3 +0.3**
SADO IAmb IAmb 18 06 44.7
comp=Z,16nm,1.0s
**S22A 4UR Ranch, Cre 75.86 332** P P **18 06 45.4 +1.3**
**WUAZ Wupatki 75.94 328** P P **18 06 46.9 +2.4**
WUAZ IAmb IAmb 18 06 47.9
comp=Z,11nm,1.1s
**MAW Mawson 75.95 164** LR LR 18 42 18.9
comp=Z,154nm,18.9s,baz=240,slow=37
**MVCO Mesa Verde 76.08 331** P P **18 06 47.0 +1.7**
MVCO IAmb IAmb 18 06 48.5
comp=Z,12nm,0.9s
**BGNE Belgrade 76.09 340** P P **18 06 45.2 +0.2**
**SUR Sutherland 76.11 119** LR LR 18 35 11.1
comp=Z,112nm,21.1s,baz=208,slow=32
**Q24A Divide 76.25 334** P P **18 06 47.7 +1.3**
Q24A IAmb IAmb 18 06 49.5
comp=Z,19nm,0.8s
**W13A Hualapai Mount 76.78 326** P P **18 06 51.6 +2.2**
**PFO Pinyon Flats O 76.89 323** P P **18 06 50.7 +0.8**
PFO pmax pmax
comp=Z,6.0nm,1.0s
**PFO Pinyon Flats O 76.89 323** P P **18 06 50.6 +0.8**
**TRQ Mont Tremblant 76.95 358** P P **18 06 50.6 +0.8**
TRQ IAmb IAmb 18 06 52.2
comp=Z,13nm,0.9s
**PV13 Radium Mtn., P 77.02 331** P P **18 06 51.8 +1.1**
PV13 IAmb IAmb 18 06 53.6
comp=Z,11nm,0.9s
**PV02 Paradox Valley 77.03 331** P P **18 06 51.3 +0.6**
**PV05 Paradox Valley 77.07 331** P P **18 06 52.5 +1.6**
PV05 IAmb IAmb 18 06 53.7
comp=Z,8.9nm,0.8s
**U15A North Rim 77.11 328** P P **18 06 53.5 +2.3**
U15A IAmb IAmb 18 06 54.7
comp=Z,8.5nm,0.9s
**PV03 Paradox Valley 77.12 331** P P **18 06 52.9 +1.7**
**PV18 Skein Mesa, Pa 77.14 331** P P **18 06 52.5 +1.3**
**SMCO Snowmass 77.14 333** P P **18 06 53.1 +1.6**
SMCO IAmb IAmb 18 06 55.0
comp=Z,18nm,0.9s
**PV12 Saucer Basin, 77.15 331** P P **18 06 52.8 +1.4**
**PV11 David Mesa, Pa 77.16 331** P P **18 06 51.9 +0.5**
**PV17 East Wray Mesa 77.19 331** P P **18 06 51.6 +0.1**
PV17 IAmb IAmb 18 06 54.3
comp=Z,8.1nm,0.9s
**PV07 Paradox Valley 77.19 331** P P **18 06 53.8 +2.3**
**PV16 Nyswonger Mesa 77.19 331** P P **18 06 52.5 +0.9**
**PV19 Morning Glory 77.22 331** P P **18 06 50.8 -0.9**
**I37A Lemond, Waseca 77.27 344** P P **18 06 52.1 +0.5**
**PV14 Lion Creek, Pa 77.29 331** P P **18 06 53.3 +1.1**
PV14 IAmb IAmb 18 06 55.0
comp=Z,9.3nm,0.9s
**E62A Clayton Lake 77.34 2** P P **18 06 54.0 +2.1**
E62A IAmb IAmb 18 06 54.7
comp=Z,15nm,0.8s
**PV23 Carpenter Ridg 77.35 331** P P **18 06 54.3 +1.8**
PV23 IAmb IAmb 18 06 55.4
comp=Z,10nm,1.0s
**K31A O'Neill 77.38 340** P P **18 06 53.7 +1.4**
**PV21 Cone Mtn., Par 77.43 331** P P **18 06 53.2 +0.3**
**ECSD EROS Data Cent 77.81 342** P P **18 06 55.7 +1.1**
ECSD IAmb IAmb 18 06 56.6
comp=Z,22nm,0.8s
**D62A Allapoint, All 77.82 2** P P **18 06 55.7 +1.2**
D62A IAmb IAmb 18 06 56.6
comp=Z,13nm,0.8s
**KNB Kanab 77.83 328** P P **18 06 56.8 +1.6**
KNB pmax pmax
comp=Z,10.0nm,1.0s
**KNB Kanab 77.83 328** P P **18 06 56.8 +1.6**
KNB IAmb IAmb 18 06 58.7
comp=Z,10nm,1.0s
**E46A Sault Ste Mari 77.88 351** P P **18 06 55.3 +0.4**
E46A IAmb IAmb 18 06 56.4
comp=Z,20nm,0.9s
**N23A Red Feather La 78.24 334** P P **18 06 57.6 +0.2**
**SPMN Marine on St. 78.28 345** P P **18 06 56.8 -0.4**
SPMN IAmb IAmb 18 06 58.4
comp=Z,13nm,0.9s
**E43A Lone Tree Farm 78.28 349** P P **18 06 57.6 +0.4**
E43A IAmb IAmb 18 06 59.4
comp=Z,18nm,0.9s
**MTPU Mount Pierson 78.38 329** P P **18 06 59.9 +1.5**
**PHWY Pilot Hill 78.41 335** P P **18 06 58.2 -0.1**
PHWY IAmb IAmb 18 07 01.0
comp=Z,17nm,0.9s
**O20A White River Ci 78.47 332** P P **18 07 00.1 +1.5**
O20A IAmb IAmb 18 07 01.5
comp=Z,9.5nm,0.8s
**CCUT Cedar City 78.52 327** P P **18 07 01.6 +2.6**
CCUT IAmb IAmb 18 07 02.9
comp=Z,8.9nm,0.9s
**SHPR Sheep Range 78.53 326** P P **18 07 01.0 +2.0**
**SRU San Rafael Swe 78.54 330** P P **18 07 00.4 +1.4**
SRU pmax pmax
comp=Z,8.0nm,0.8s
**SRU San Rafael Swe 78.54 330** P P **18 07 00.4 +1.4**
SRU IAmb IAmb 18 07 01.7
comp=Z,7.6nm,0.8s
**Q16A Castle Valley 78.66 330** P P **18 07 01.9 +2.1**
**MSU Marysvale 78.77 329** P P **18 07 02.5 +2.1**
**MSU Marysvale 78.77 329** P P **18 07 02.5 +2.1**
**P18A Preston Nutter 78.86 331** P P **18 07 03.1 +2.2**
P18A IAmb IAmb 18 07 04.0
comp=Z,12nm,0.9s
**P17A Butcher Ranch, 78.94 330** P P **18 07 02.3 +1.1**
P17A IAmb IAmb 18 07 04.5
comp=Z,10nm,1.0s
**QSM Queen of Sheba 78.94 324** P P **18 07 03.0 +2.0**
**VLDQ Val d'Or 78.97 356** P P **18 07 01.7 +0.8**
VLDQ IAmb IAmb 18 07 03.4
comp=Z,13nm,0.9s
**TMUT Trail Mountain 78.99 330** P P **18 07 03.4 +1.7**
**GWY Greenwater Val 79.01 324** P P **18 07 01.8 +0.1**
**F36A Milaca 79.05 345** P P **18 07 01.9 +0.6**
F36A IAmb IAmb 18 07 02.7
comp=Z,12nm,0.8s
**SUSD Miller 79.11 341** P P **18 07 02.3 +0.5**
SUSD IAmb IAmb 18 07 03.9
comp=Z,16nm,0.8s
**PRN Pahroc Range 79.19 326** P P **18 07 04.8 +2.2**
PRN IAmb IAmb 18 07 06.2
comp=Z,12nm,1.0s
**KOWA Kowa 79.27 66** P P **18 07 03.7 +0.4**
comp=Z,6.5nm,0.8s,baz=225,slow=3.4,SNR=18
KOWA LR LR 18 42 25.4
comp=Z,179nm,18.1s,baz=244,slow=36
**RDMU Red Mountain 79.37 332** P P **18 07 04.9 +1.3**
RDMU IAmb IAmb 18 07 06.2
comp=Z,10nm,0.8s
**ISA Isabella, Lake 79.52 323** P P **18 07 06.1 +1.7**
ISA pmax pmax
comp=Z,5.0nm,0.8s
**ISA Isabella, Lake 79.52 323** P P **18 07 06.1 +1.7**
**PSUT Pine Spring 79.54 328** P P **18 07 05.3 +0.8**
PSUT IAmb IAmb 18 07 06.7
comp=Z,9.7nm,0.7s
**F33A 5 Mile Ranch, 79.69 343** P P **18 07 04.9 0.0**
**TSUM Tsumeb 79.86 106** LR LR 18 38 37.0
comp=Z,138nm,18.4s,baz=222,slow=33
**TSUM Tsumeb 79.86 106** P P **18 07 07.4 +0.6**
**NLU North Lily Min 79.91 330** P P **18 07 08.3 +1.7**
**K22A Casper 79.98 335** P P **18 07 08.3 +1.6**
K22A IAmb IAmb 18 07 09.7
comp=Z,9.9nm,0.8s
**SPR3 Spring Creek 3 80.14 328** P P **18 07 09.5 +1.6**
**JLU Jordanelle 80.18 330** P P **18 07 09.6 +1.6**
**R11A Troy Canyon, C 80.20 327** P P **18 07 10.1 +2.0**
**LCH Last Change Ra 80.32 325** P P **18 07 10.5 +1.8**
**TPH Tonopah 80.77 325** P P **18 07 12.7 +1.5**
TPH pmax pmax
comp=Z,31nm,1.1s
**TPH Tonopah 80.77 325** P P **18 07 12.7 +1.5**
**PD31 Pinedale Array 81.22 333** P P **18 07 14.2 +0.7**
**PDAR Pinedale Array 81.22 333** P P **18 07 14.7 +1.1**
comp=Z,0.8nm,0.7s,baz=127,slow=5.6,SNR=9.1
**BOSA Boshof 81.29 118** P P **18 07 14.9 +0.6**
comp=Z,6.0nm,1.0s,baz=258,slow=2.6,SNR=8.0
BOSA LR LR 18 40 13.1
comp=Z,108nm,18.2s,baz=200,slow=33
**BOSA Boshof 81.29 118** P P **18 07 14.9 +0.6**
BOSA pmax pmax
comp=Z,15nm,1.3s
**BOSA Boshof 81.29 118** IAmb IAmb 18 07 15.8
comp=Z,15nm,1.3s
**B35A Bob, Littlefor 81.45 345** P P **18 07 14.6 +0.3**
B35A IAmb IAmb 18 07 15.7
comp=Z,14nm,0.8s
**LHV Little Huntoon 81.54 325** P P **18 07 17.7 +2.7**
**NVAR Mina Array Bea 81.58 325** P P **18 07 17.4 +1.9**
comp=Z,2.2nm,0.8s,baz=156,slow=6.1,SNR=12
**HVU Hansel Valley 81.71 330** P P **18 07 17.2 +1.1**
HVU pmax pmax
comp=Z,6.0nm,0.9s
**HVU Hansel Valley 81.71 330** P P **18 07 17.2 +1.1**
**AGMN Agassiz Nation 81.88 344** P P **18 07 17.0 +0.5**
AGMN IAmb IAmb 18 07 18.1
comp=Z,12nm,0.8s
**ELK Elko 81.95 328** P P **18 07 18.8 +1.3**
ELK pmax pmax
comp=Z,5.0nm,0.9s
**ELK Elko 81.95 328** P P **18 07 18.8 +1.3**
**KVN Kaiserville 81.96 325** P P **18 07 17.6 +0.1**
KVN pmax pmax

comp=Z,3.0nm,0.9s
**KVN Kaiserville 81.96 325 P P 18 07 17.6 +0.1**
**MDND Maddock 82.41 342 P P 18 07 20.2 +0.9**
**YERR Yerington 82.47 325 P P 18 07 22.2 +2.1**
**PNTR Pine Nut 82.73 324 P P 18 07 23.7 +2.1**
**TORD Torodi Ar. Bea 83.05 70 P P 18 07 22.6 -0.8**
comp=Z,9.6nm,0.8s,baz=260,slow=4.8,SNR=57
**TORD Torodi Ar. Bea 83.05 70** P **P 18 07 22.5 -1.0**
TORD IAmb IAmb 18 07 23.8
comp=Z,19nm,1.1s
**PAHR Pah Rah Range 83.10 325 P P 18 07 24.8 +1.4**
PAHR IAmb IAmb 18 07 26.5
comp=Z,8.3nm,1.1s
**LBTB Lobatse 83.39 115** LR LR 18 40 28.2
comp=Z,183nm,18.8s,baz=224,slow=33
**YHH Holmes Hill 83.43 333 P P 18 07 26.6 +1.4**
**ULM Lac du Bonnet 83.71 345 P P 18 07 26.3 +0.3**
comp=Z,10nm,0.8s,baz=165,slow=4.0,SNR=10
**ULM Lac du Bonnet 83.71 345** P **P 18 07 25.7 -0.3**
ULM pmax pmax
comp=Z,15nm,1.0s
**ULM Lac du Bonnet 83.71 345 P P 18 07 25.7 -0.3**
ULM IAmb IAmb 18 07 27.2
comp=Z,15nm,1.0s
**ORV Oroville 84.04 324 P P 18 07 30.0 +2.0**
ORV pmax pmax
comp=Z,7.0nm,1.1s
**ORV Oroville 84.04 324** P **P 18 07 30.0 +2.0**
ORV IAmb IAmb 18 07 31.1
comp=Z,7.4nm,1.1s
**MCMT McKenzie Canyo 84.25 332 P P 18 07 30.2 +1.0**
**DGMT Dagmar 84.30 339 P P 18 07 30.3 +1.1**
**SCHQ Schefferville 85.64 3 P P 18 07 36.2 +0.5**
comp=Z,5.4nm,0.9s,baz=102,slow=4.1,SNR=3.9
**PLID Pearl Lake 85.77 330 P P 18 07 37.7 +0.8**
**JTMT Jette 87.22 333 P P 18 07 44.9 +1.2**
**WALA Waterton Lakes 88.15 334 P P 18 07 48.4 +0.2**
WALA IAmb IAmb 18 07 50.2
comp=Z,5.8nm,0.8s
**MDT Midelt 89.83 51** LR LR 18 48 46.7
comp=Z,46nm,18.2s,baz=237,slow=36
**LSZ Lusaka 90.56 108** LR LR 18 45 42.3
comp=Z,107nm,19.0s,baz=214,slow=34
**FCC Fort Churchill 91.39 349 P P 18 08 03.6 +0.7**
FCC pmax pmax
comp=Z,6.0nm,1.1s
**FCC Fort Churchill 91.39 349 P P 18 08 03.6 +0.7**
FCC IAmb IAmb 18 08 04.4
comp=Z,6.3nm,1.1s
**ESDC Sonseca Array 94.41 46** LR LR 18 50 12.9
comp=Z,92nm,18.1s,baz=230,slow=35
**KIP Kipapa 97.65 290** *i* P Pdif 18 08 33.4 +0.8
KIP pmax pmax
comp=Z,40nm,1.4s
**YKA Yellowknife Ar 99.33 341 P Pdif 18 08 38.4 -0.6**
comp=Z,0.5nm,0.7s,baz=142,slow=4.3,SNR=8.2
**KONO Kongsberg 112.17 33***c* *i* PKIKP **PKiKP 18 13 31.2 -1.1**
KONO pmax pmax
comp=Z,55nm,2.5s
**KLNR Kaliningrad 115.80 40** *i* PKIKP **PKiKP 18 13 40.7 +1.3**
KLNR pmax pmax
comp=Z,155nm,0.9s
**MNK Minsk 120.09 42** *i* PKIKP **PKPdf 18 13 46.9 -0.8**
MNK *i* 18 15 12.9
MNK *i* PPP PPP 18 17 43.9
MNK *i* 18 20 59.0
MNK *i* PS **PS 18 25 01.4 -1.8**
MNK *i* SS SS 18 31 39.4 +0.5
MNK *i* SSS SSS 18 36 05.5
MNK pmax pmax
comp=E,2.0nm,1.0s
MNK pmax pmax
comp=Z,8.0nm,1.1s
MNK pmax pmax
comp=N,16nm,0.9s
MNK MLR MLR
comp=E,54nm,23.0s
MNK MLR MLR
comp=Z,86nm,15.0s
MNK MLR MLR
comp=N,380nm,22.0s
**MNK Minsk 120.09 42** *i* PKP **PKPdf 18 13 47.0 -0.8**
comp=E,2.0nm,1.0s
MNK *i* PKP **PKPdf 18 13 47.0 -0.8**
comp=N,16nm,0.9s
MNK *i* PKP **PKPdf 18 13 47.0 -0.8**
comp=Z,8.0nm,1.1s,baz=257
MNK *i* PP **PP 18 15 12.9 -0.4**
MNK *i* PPP PPP 18 17 43.9
MNK *i* SKS **SKSdf 18 20 59.0 +0.8**
MNK *i* PS **PS 18 25 01.5 -1.7**
MNK *i* SS **SKKSdf 18 31 39.5 -1.7**
MNK *i* SSS SSS 18 36 05.5
MNK *i* LR LR 19 03 01.0
MNK *i* LRM MLR 19 04 57.5
comp=E,54nm,23.2s
MNK *i* LRM MLR 19 05 10.8
comp=Z,86nm,15.4s
MNK *i* LRM MLR 19 05 29.7
comp=N,380nm,21.5s
**ASAR Alice Springs 120.26 207** PKP **PKPdf 18 13 48.8 -0.5**
comp=N,0.9nm,0.7s,baz=142,slow=2.1,SNR=11
**WRA Warramunga Arr 123.40 210** PKP **PKPdf 18 13 55.2 -0.1**
comp=N,3.3nm,0.8s,baz=164,slow=1.6,SNR=26
**WRA Warramunga Arr 123.40 210** PKIKP **PKPdf 18 13 55.1 -0.2**
**WRAB Tennant Creek 123.41 210***c* *i* PKIKP **PKPdf 18 13 55.1 -0.2**
WRAB pmax pmax
comp=Z,12nm,2.5s
**H11S2 WAKE ISLAND Hyl 25.94 271** T T 20 32 46.5
baz=115,slow=75,SNR=187
**H11S1 WAKE ISLAND Hyl 25.95 271** T T 20 32 47.8
baz=115,slow=75,SNR=130
**H11S3 WAKE ISLAND Hyl 25.95 271** T T 20 32 45.3
baz=115,slow=75,SNR=104
**H11N3 WAKE ISLAND Hyl 26.28 273** T T 20 33 09.9
baz=116,slow=75,SNR=35
**H11N1 WAKE ISLAND Hyl 26.29 273** T T 20 33 15.2
baz=116,slow=75,SNR=11
**H11N2 WAKE ISLAND Hyl 26.29 273** T T 20 33 17.3
baz=116,slow=75,SNR=94
**PSA00 Pilbara Seismi 126.49 194 PKPdf 18 14 00.9 -0.3**
**SHA1 Shidzhatmaz 127.70 56** *i* PKIKP **PKPdf 18 14 02.4 -0.6**
**KIV Kislovodsk 127.75 56** *e*PKIKP **PKPdf 18 14 02.5 -0.4**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**FITZ Fitzroy Crossi 128.32 201** PKP **PKPdf 18 14 03.9 -0.8**
comp=Z,2.7nm,0.8s,baz=199,slow=7.8,SNR=5.9
**BILL Bilibino 130.25 335***f* *e*PKIKP **PKPdf 18 14 06.7 -0.1**
BILL *i* 18 16 18.4
BILL pmax pmax
comp=Z,2.0nm,1.1s
**ARU Arti 137.37 39** *i* PKIKP **PKPdf 18 14 17.0 -3.5**
ARU pmax pmax
comp=Z,3.0nm,1.1s
**SEY Seymchan 137.55 332** *i* PKIKP **PKiKP 18 14 22.7 +0.2**
**MA2 Magadan 139.76 328***c* *i* PKIKP **PKiKP 18 14 26.3 -0.9**
MA2 pmax pmax
comp=Z,3.0nm,1.7s
**NRIK Noril'sk 139.91 11***c* *i* PKIKP **PKPdf 18 14 21.9 -2.9**
NRIK pmax pmax
comp=Z,1.0nm,0.9s
**BRVK Borovoye 144.90 40***c* *i* PKIKP **PKPdf 18 14 34.3 +0.2**
BRVK pmax pmax
comp=Z,5.0nm,0.7s
**BRVK Borovoye 144.90 40** PKPbc 18 14 33.6 +0.3
**BVAR Borovoye Array 144.97 40** PKP **PKPdf 18 14 34.6 +0.4**
comp=Z,4.2nm,0.6s,baz=28,slow=6.7,SNR=25
**YAK Yakutsk 146.01 342** *e*PKIKP **PKPdf 18 14 34.8 -0.9**
YAK *e* 18 17 58.3
YAK pmax pmax
comp=Z,14nm,0.8s
YAK pmax pmax
comp=N,1.0nm,0.9s
YAK pmax pmax
comp=E,1.0nm,1.0s
YAK pmax pmax
comp=Z,67nm,3.3s
YAK pmax pmax
comp=N,36nm,3.2s
YAK pmax pmax
comp=E,40nm,3.6s
**CHGR Chuyangaron 147.29 66 PKPbc 18 14 40.0 -1.2**
**URV Uravakonda 147.49 113** *e*PKPab **PKPbc 18 14 41.7 -0.5**
**KKAR Karatay Array 147.90 57** PKIKP **PKPdf 18 14 40.1 +0.5**
**KKAR Karatay Array 147.90 57 PKPdf 18 14 40.1 +0.5**

**GAR Garm 148.19 65 PKPdf 18 14 41.2 +0.9**
**KLRI Killari 148.63 107** *e*PKiKP **PKPbc 18 14 45.2 0.0**
**SKHT Srikalahasti 148.69 117** *e*PKiKP **PKPbc 18 14 45.2 -0.2**
**RCLA Racherla 149.12 114** *e*PKiKP **PKPbc 18 14 45.7 -0.8**
**SRLM Srisailam 149.44 112** *e*PKiKP **PKPbc 18 14 47.0 -0.3**
**HYBB Hyderabad (bro 149.88 110** *e*PKiKP **PKPbc 18 14 48.0 -0.4**
**NJS Nagarjunasagar 150.02 112** *e*PKiKP **PKPbc 18 14 48.5 -0.1**
**CUPL Choutuppal 150.12 110** *e*PKiKP **PKPbc 18 14 48.3 -0.6**
**EKS2 Erkin-Say 150.34 57** P **PKiKP 18 14 49.8 +0.2**
SNR=11
**AML Almayashu 150.38 58** P **PKiKP 18 14 50.4 +0.3**
SNR=6.3
**SRSP Sriramsagar 150.49 107** *e*PKiKP **PKPbc 18 14 49.3 -0.5**
**USP Ospenovka 150.73 56** P **PKiKP 18 14 50.1 -0.2**
SNR=9.2
**AAK Ala-Archa 150.86 57** P **PKiKP 18 14 51.5 +0.7**
SNR=11
**UCH Uchtor 150.96 58** P **PKiKP 18 14 51.7 +0.3**
SNR=12
**MYLAV Mylavaram 151.18 113** *e*PKPdf **PKPdf 18 14 44.4 -1.1**
MYLAV *e* 18 14 51.9
**RPR Rampur 151.23 108** *e*PKiKP **PKPbc 18 14 51.0 -0.5**
**TKM2 Tokmak 2 151.59 56** P **PKiKP 18 14 52.3 -0.1**
SNR=6.1
**ZALV Zalesovo Beam 151.62 30** PKPbc **PKPbc 18 14 51.5 +0.2**
comp=E,10nm,0.5s,baz=270,slow=2.8,SNR=5.0
**ZALV Zalesovo Beam 151.62 30** PKIKP **PKPbc 18 14 51.0 -0.3**
**ZALV Zalesovo Beam 151.62 30 PKPbc 18 14 51.0 -0.3**
**KSH Kashi 152.51 63** PKPbc **PKPdf 18 14 48.1 +1.0**
KSH pPKP PKiKP 18 14 54.7 +0.4
**MK31 Makanchi Array 154.62 44** PKIKP **PKPdf 18 14 49.0 -0.7**
**MK31 Makanchi Array 154.62 44** PKPdf **PKPdf 18 14 49.0 -0.7**
**MKAR Makanchi Array 154.62 44** PKP **PKPdf 18 14 48.7 -1.0**
comp=E,0.7nm,0.8s,baz=166,slow=1.1,SNR=6.9
MKAR PKPbc **PKPbc 18 14 57.4 -0.8**
comp=E,1.0nm,0.7s,baz=275,slow=1.5,SNR=14
**WMQ Urumqi 159.41 46** *e*PKP **PKPdf 18 14 56.6 +0.6**
**GTA Gaotai 169.23 37** ||PKP **PKPdf 18 15 06.2 +1.3**
GTA pPKP pPKPdf 18 15 14.4 +2.1
GTA sPKP 18 15 21.0
GTA PKPab **PKPab 18 16 18.2 +1.1**
**HHC Hu-ho-hao-te 169.85 345** *e*PKP **PKPdf 18 15 04.2 -1.0**
**NJ2 Nanjing 170.83 279** *e*PKP **PKPdf 18 15 06.8 +0.9**
**PZH PanZhiHua 172.76 127 PKP PKPdf 18 15 07.3 +0.1**
**LZH Lanzhou 173.82 35** *e*PKP **PKPdf 18 15 08.5 +1.2**
LZH pPKP pPKPdf 18 15 13.8 -0.9
**XAN Xi'an 176.96 348 PKP PKPdf 18 15 06.1 -2.0**

*IDC **04** 17:59:53.3±1.2,31°.07S×71°.99W,h0km,mb4.4/5, mb1 4.3/8,mb1mx4.0/39,mbtmp4.3/8,ML3.5/3,Error ellipse: s-maj=46.1km s-min=24.3km az=108.0*
*SJA **04** 17:59:55.8±1.5,30°.98S×71°.94W,h15km,ML4.5,MW4.5*
*GUC **04** 17:59:57.9±0.8,31°.09S×71°.81W,h43km±3km,ML4.3*
*NEIC **04** 17:59:58.6±1.5,31°.07S±0°.03×71°.8W±0°.1,h27km±6km, mb4.6/5,ML4.3(GUC),Error ellipse: s-maj=16.1km s-min=4.8km az=89.0*
**ISC 04 17:59:54.8±1.6,31°.06S±0°.03×71°.93W±0°.05,h8km±10km, n88,σ1°48/99,mb4.4/6,2C-5D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.46** | **34** | ↓↓*i* | P | **Pn** | **18 00 07.5** | **-0.3** |
| CO06 | | | | *i* | S | **Sb** | **18 00 13.1** | **+0.9** |
| CO06 | | | | | IAML | | 18 00 14.7 | |
| | comp=N,28μm,0.2s | | | | | | | |
| **CO06** | **Fray Jorge** | **0.46** | **34** | | Pg | **Pn** | **18 00 07.4** | **-0.3** |
| **CO02** | **Combarbal** | **0.81** | **101** | ↓↓*i* | P | **Pb** | **18 00 11.7** | **+0.4** |
| CO02 | | | | *i* | S | **Sb** | **18 00 21.5** | **-1.0** |
| CO02 | | | | | IAML | | 18 00 23.3 | |
| | comp=N,52μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **0.81** | **101** | | | **Pb** | **18 00 11.7** | **+0.4** |
| **CO03** | **El Pedregal** | **1.09** | **79** | ↓*i* | P | **Pb** | **18 00 16.1** | **+0.1** |
| CO03 | | | | | IAML | | 18 00 30.6 | |
| | comp=N,7μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.09** | **79** | | | **Pb** | **18 00 16.1** | **+0.1** |
| **CO05** | **La Serena** | **1.28** | **28** | *e*P | P | **Pg** | **18 00 20.2** | **+0.8** |
| CO05 | | | | *i* | S | **Sn** | **18 00 36.8** | **+0.3** |
| CO05 | | | | | IAML | | 18 00 43.0 | |
| | comp=E,7μm,0.3s | | | | | | | |
| **CO05** | **La Serena** | **1.28** | **28** | | Pn | **Pg** | **18 00 20.2** | **+0.8** |
| **GO04** | **Tololo Observa** | **1.32** | **48** | ↓*i* | P | **Pb** | **18 00 20.3** | **+0.3** |
| GO04 | | | | *i* | S | **Sn** | **18 00 37.7** | **0.0** |
| **GO04** | **Tololo Observa** | **1.32** | **48** | | | **Pb** | **18 00 20.3** | **+0.3** |
| **GO04** | **Tololo Observa** | **1.32** | **48** | *i* | P | **Pg** | **18 00 21.9** | **+1.8** |
| **VA06** | **Catapilco** | **1.59** | **160** | ↓*i* | P | **Pn** | **18 00 24.4** | **+1.0** |
| VA06 | | | | *e* | S | **Sn** | **18 00 43.4** | **-0.8** |
| VA06 | | | | | IAML | | 18 00 49.1 | |
| | comp=N,8μm,0.4s | | | | | | | |
| **VA01** | **Torpederas** | **1.97** | **173** | *e*P | P | **Pn** | **18 00 29.5** | **+0.9** |
| VA01 | | | | | IAML | | 18 01 02.6 | |
| | comp=N,2μm,0.9s | | | | | | | |
| **VA01** | **Torpederas** | **1.97** | **173** | | | **Pn** | **18 00 29.2** | **+0.6** |
| **ROCH** | **El Roble** | **2.06** | **158** | *e*P | | **Pb** | **18 00 31.4** | **-1.2** |
| ROCH | | | | *e*P | | **Pn** | **18 00 30.3** | **+0.3** |
| ROCH | | | | *e*S | | **Sn** | **18 00 55.6** | **-0.4** |
| ROCH | | | | *i* | S | **Sb** | **18 00 56.3** | **-2.3** |
| ROCH | | | | | IAML | | 18 01 04.3 | |
| | comp=E,4μm,0.8s | | | | | | | |
| ROCH | | | | | IAML | | 18 01 05.3 | |
| | comp=E,5μm,0.7s | | | | | | | |
| **ROC1** | **El Roble** | **2.06** | **158** | | Pn | **Pn** | **18 00 30.2** | **+0.1** |
| **ROC1** | **El Roble** | **2.06** | **158** | *i* | P | **Pb** | **18 00 33.7** | **+0.9** |
| ROC1 | | | | *e*S | | **Sb** | **18 00 59.1** | **+0.5** |
| **VA03** | **San Esteban** | **2.07** | **146** | ||*i* | P | **Pb** | **18 00 31.8** | **-0.9** |
| VA03 | | | | *i* | S | **Sn** | **18 00 55.6** | **-0.4** |
| VA03 | | | | | IAML | | 18 01 02.6 | |
| | comp=E,4μm,0.3s | | | | | | | |
| **VA03** | **San Esteban** | **2.07** | **146** | | Pn | **Pn** | **18 00 31.4** | **+1.4** |
| **VA03** | **San Esteban** | **2.07** | **146** | *i* | P | **Pb** | **18 00 33.0** | **+0.3** |
| VA03 | | | | *e*S | | **Sb** | **18 00 59.3** | **+0.7** |
| **MT02** | **Curacav** | **2.30** | **163** | *e*P | | **Pn** | **18 00 34.1** | **+1.1** |
| MT02 | | | | | IAML | | 18 01 08.7 | |
| | comp=E,687nm,0.2s | | | | | | | |
| **MT02** | **Curacav** | **2.30** | **163** | | Pn | **Pn** | **18 00 34.4** | **+1.4** |
| **MT02** | **Curacav** | **2.30** | **163** | *i* | P | **Pb** | **18 00 36.4** | **-0.1** |
| **AROD** | **Rodeo** | **2.30** | **68** | *i* | P | **Pb** | **18 00 37.0** | **+0.3** |
| AROD | | | | *i* | Sg | **Sg** | **18 01 06.5** | **-2.2** |
| **LCO** | **Las Campanas** | **2.30** | **28** | ||*i* | P | **Pn** | **18 00 34.6** | **+1.2** |
| LCO | | | | *e*S | | **Sn** | **18 01 02.5** | **+0.5** |
| **LCO** | **Las Campanas** | **2.30** | **28** | | Pn | **Pn** | **18 00 34.6** | **+1.2** |
| **LCO** | **Las Campanas** | **2.30** | **28** | *i* | P | **Pn** | **18 00 34.4** | **+1.0** |
| LCO | | | | | IAML | | 18 01 11.6 | |
| | comp=Z,10μm,0.4s | | | | | | | |
| **PEL** | **Peldehue** | **2.33** | **153** | *e*P | | **Pn** | **18 00 35.7** | **+2.1** |
| PEL | | | | *i* | S | **Sn** | **18 01 03.5** | **+1.0** |
| **PEL** | **Peldehue** | **2.33** | **153** | | Pn | **Pn** | **18 00 33.3** | **-0.3** |
| **PEL** | **Peldehue** | **2.33** | **153** | *i* | P | **Pb** | **18 00 37.5** | **+0.3** |
| **AUSP** | **Uspallata** | **2.46** | **119** | *i* | P | **Pb** | **18 00 40.0** | **+0.5** |
| AUSP | | | | *e*S | | **Sb** | **18 01 10.6** | **+0.4** |
| **ACCO** | **Cerro Coronel** | **2.51** | **80** | *i* | P | **Pb** | **18 00 40.0** | **-0.4** |
| ACCO | | | | | IAML | | 18 01 15.2 | |
| | comp=Z,838nm,1.8s | | | | | | | |
| **MT05** | **Renca** | **2.54** | **157** | *e*P | | **Pn** | **18 00 37.4** | **+1.0** |
| MT05 | | | | *e*S | | **Sn** | **18 01 07.6** | **+0.1** |
| MT05 | | | | | IAML | | 18 01 22.1 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **MT05** | **Renca** | **2.54** | **157** | | | **Pn** | **18 00 35.5** | **-0.9** |
| **MT05** | **Renca** | **2.54** | **157** | *i* | P | **Pb** | **18 00 40.0** | **-0.7** |
| **ACDV** | **Cuesta del Vie** | **2.58** | **71** | *i* | P | **Pb** | **18 00 40.4** | **-1.1** |
| ACDV | | | | *i* | Sg | **Sb** | **18 01 12.9** | **-0.6** |
| ACDV | | | | | IAML | | 18 01 23.2 | |
| | comp=Z,662nm,1.0s | | | | | | | |
| **VA05** | **Santo Domingo** | **2.60** | **174** | | IAML | | 18 01 20.9 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **VA05** | **Santo Domingo** | **2.60** | **174** | | | **Pn** | **18 00 38.2** | **+0.9** |
| **MT09** | **Talagante** | **2.83** | **164** | | Pn | **Pn** | **18 00 43.1** | **+2.6** |
| **ZON** | **Zonda** | **2.83** | **101** | | Pn | **Pb** | **18 00 44.2** | **-1.4** |
| **MT01** | **Popeta** | **2.86** | **169** | *e*P | | **Pn** | **18 00 41.5** | **+0.8** |
| MT01 | | | | | IAML | | 18 01 28.8 | |
| | comp=E,938nm,0.5s | | | | | | | |
| **MT01** | **Popeta** | **2.86** | **169** | | Pn | **Pn** | **18 00 42.1** | **+1.3** |
| **MT01** | **Popeta** | **2.86** | **169** | *i* | P | **Pb** | **18 00 44.5** | **-1.6** |
| **AC04** | **Llanos de Chal** | **2.94** | **15** | | Pn | **Pn** | **18 00 42.4** | **+0.5** |
| **AC04** | **Llanos de Chal** | **2.94** | **15** | *i* | P | **Pn** | **18 00 43.0** | **+1.1** |
| **RTLL** | **Cerro Villicun** | **2.98** | **96** | *i* | P | **Pb** | **18 00 45.5** | **-2.6** |
| RTLL | | | | *i* | Sg | **Sb** | **18 01 23.9** | **-0.8** |
| RTLL | | | | | IAML | | 18 01 36.9 | |
| | comp=Z,805nm,0.4s | | | | | | | |
| **ASAL** | **Salagasta** | **3.05** | **121** | *i* | P | **Pb** | **18 00 48.0** | **-1.4** |
| ASAL | | | | | IAML | | 18 01 39.4 | |
| | comp=Z,884nm,1.2s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.11** | **126** | *i* | P | **Pb** | **18 00 48.9** | **-1.6** |
| ARCO | | | | | IAML | | 18 01 39.9 | |
| | comp=Z,666nm,0.5s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.14** | **153** | | Pn | **Pn** | **18 00 44.6** | **-0.2** |
| **AAGR** | **Agrelo** | **3.32** | **128** | *i* | P | **Pb** | **18 00 51.6** | **-2.4** |
| AAGR | | | | | IAML | | 18 01 43.6 | |
| | comp=Z,489nm,0.5s | | | | | | | |
| **BO01** | **Tunca** | **3.40** | **168** | | Pn | **Pn** | **18 00 49.7** | **+1.5** |
| **GO03** | **Copiap** | **3.76** | **24** | | Pn | **Pn** | **18 00 54.2** | **+1.0** |
| **GO03** | **Copiap** | **3.76** | **24** | *i* | P | **Pn** | **18 00 54.4** | **+1.3** |
| **BO02** | **Sierra Bellavi** | **3.85** | **166** | | Pn | **Pn** | **18 00 55.9** | **+1.4** |
| **GO05** | **Huala** | **3.94** | **180** | | Pn | **Pn** | **18 00 55.8** | **+0.1** |
| **VCA** | **Vinchina** | **3.98** | **55** | *i* | P | **Pn** | **18 00 58.9** | **+2.6** |
| VCA | | | | | IAML | | 18 02 04.8 | |
| | comp=Z,952nm,0.5s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.61** | **71** | *i* | P | **Pn** | **18 01 08.0** | **+3.0** |
| ACLC | | | | *e* | S | **Sb** | **18 02 04.8** | **-7.0** |
| ACLC | | | | | IAML | | 18 02 09.8 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.70** | **83** | *i* | P | **Pn** | **18 01 09.0** | **+2.9** |
| APLL | | | | *e* | S | **Sn** | **18 02 06.3** | **+5.4** |
| APLL | | | | | IAML | | 18 02 11.3 | |
| | comp=Z,900nm,0.9s | | | | | | | |
| **AC02** | **Maricunga** | **4.87** | **31** | | Pn | **Pn** | **18 01 10.7** | **+1.8** |
| **H03N1** | **Juan Fernandez** | **6.37** | **246** | | T | T | 18 08 17.2 | |
| | baz=74,slow=72,SNR=178 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.39** | **246** | | T | T | 18 08 16.6 | |
| | baz=74,slow=72,SNR=226 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.39** | **246** | | T | T | 18 08 18.6 | |
| | baz=74,slow=72,SNR=232 | | | | | | | |
| **PB10** | **IPOC Station P** | **7.62** | **10** | | Pn | **Pn** | **18 01 48.0** | **+1.9** |
| **PB15** | **IPOC Station P** | **8.12** | **16** | | Pn | **Pn** | **18 01 52.3** | **-0.9** |
| **PB06** | **IPOC Station P** | **8.58** | **15** | | Pn | **Pn** | **18 01 59.1** | **-0.4** |
| **PB04** | **IPOC Station P** | **8.83** | **11** | | Pn | **Pn** | **18 02 04.0** | **+0.9** |
| **LVC** | **Limon Verde** | **8.84** | **18** | | Pn | **Pn** | **18 02 01.6** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=159,slow=19,SNR=0.5 | | | | | | | |
| **LPAZ** | **La Paz** | **15.11** | **14** | | PKP | **Pn** | **18 03 30.1** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=210,slow=3.8,SNR=3.5 | | | | | | | |
| **SIV** | **San Ignacio** | **17.98** | **36** | P | | **Pn** | **18 04 04.3** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=236,slow=11,SNR=3.3 | | | | | | | |
| **ETMB** | **Extrema** | **21.80** | **15** | P | | **P** | **18 04 47.5** | **+0.1** |
| **BDFB** | **Brasilia** | **26.70** | **60** | P | | **P** | **18 05 34.9** | **0.0** |
| | comp=Z,4.7nm,0.6s,baz=203,slow=6.0,SNR=3.9 | | | | | | | |
| **BDFB** | **Brasilia** | **26.70** | **60** | P | | **P** | **18 05 33.5** | **-1.4** |
| BDFB | | | | IAmb | | IAmb | 18 05 36.9 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **BOAV** | **Boa Vista** | **35.00** | **20** | P | | **P** | **18 06 48.4** | **+0.5** |
| BOAV | | | | IAmb | | IAmb | 18 06 49.0 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **54.28** | **159** | P | | **P** | **18 09 21.1** | **-0.1** |
| | comp=Z,2.3nm,0.6s,baz=272,slow=8.9,SNR=8.4 | | | | | | | |
| **SNAA** | **Sanae** | **54.28** | **159** | P | | **P** | **18 09 21.9** | **+0.8** |
| SNAA | | | | IAmb | | IAmb | 18 10 41.9 | |
| | comp=Z,33nm,2.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **74.17** | **72** | P | | **P** | **18 11 32.7** | **+0.3** |
| | comp=Z,4.2nm,0.8s,baz=236,slow=4.2,SNR=6.8 | | | | | | | |
| **BOSA** | **Boshof** | **81.36** | **118** | P | | **P** | **18 12 12.5** | **0.0** |
| | comp=Z,2.5nm,1.0s,baz=258,slow=9.3,SNR=2.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.13** | **70** | P | | **P** | **18 12 21.2** | **-0.5** |
| | comp=Z,2.4nm,0.8s,baz=258,slow=4.6,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **120.22** | **208** | PKP | | **PKPdf** | **18 18 46.2** | **-0.9** |
| | comp=Z,0.6nm,1.0s,baz=126,slow=1.6,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.36** | **210** | PKP | | **PKPdf** | **18 18 51.5** | **-1.7** |
| | comp=Z,0.4nm,0.6s,baz=154,slow=1.7,SNR=5.9 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.85** | **271** | T | | T | 20 37 45.6 | |
| | baz=116,slow=74,SNR=98 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.86** | **271** | T | | T | 20 37 45.8 | |
| | baz=116,slow=74,SNR=70 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.87** | **271** | T | | T | 20 37 46.0 | |
| | baz=116,slow=74,SNR=59 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.19** | **273** | T | | T | 20 38 11.5 | |
| | baz=154,slow=74,SNR=11 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.21** | **273** | T | | T | 20 38 12.8 | |
| | baz=120,slow=74,SNR=32 | | | | | | | |
| **BVAR** | **Borovoye Array** | **145.02** | **40** | PKPbc | | **PKPab** | **18 19 32.3** | **+0.6** |
| | comp=Z,1.2nm,0.6s,baz=15,slow=6.2,SNR=6.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.66** | **29** | PKPbc | | **PKPbc** | **18 19 49.6** | **+0.3** |
| | comp=Z,2.7nm,0.5s,baz=312,slow=3.4,SNR=10 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.66** | **29** | | | **PKPbc** | **18 19 49.3** | **-0.1** |

*KOLA **04** 18:00:57.5,67°.07N×19°.89E,h0km,ML2.6*
*UPP **04** 18:00:58.8±0.1,67°.04N×20°.97E,h0km,ML2.2,Explosion*
*HEL **04** 18:00:59.8±0.1,67°.05N×20°.96E,h0km,ML2.3, ML2.2(UPP),Explosion*
*IDC **04** 18:00:59.6±0.9,67°.07N×20°.84E,h0km,mb1 3.1/4, mb1mx2.9/62,mbtmp3.1/4,ML2.1/4,Error ellipse: s-maj=11.0km s-min=4.0km az=153.0*
**ISC 04 18:00:59.0±0.7,67°.05N±0°.02×20°.90E±0°.03,h0km,n49, σ1°36/72,Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MASU** | **Masugnsbyn** | **0.59** | **46** | | P | **Pg** | **18 01 09.9** | **-0.4** |
| MASU | | | | | S | **Sg** | **18 01 18.0** | **+0.2** |
| **MASU** | **Masugnsbyn** | **0.59** | **46** | *i* | P | **Pg** | **18 01 09.9** | **-0.4** |
| MASU | | | | *i* | S | **Sg** | **18 01 18.0** | **+0.2** |
| **ERTU** | **Ertsjaerv** | **0.72** | **134** | | P | **Pg** | **18 01 11.6** | **-1.1** |
| ERTU | | | | | S | **Sg** | **18 01 22.0** | **+0.1** |
| **ERTU** | **Ertsjaerv** | **0.72** | **134** | *e*P | | **Pg** | **18 01 11.6** | **-1.1** |
| ERTU | | | | *e*S | | **Sg** | **18 01 22.0** | **+0.1** |
| **PAJU** | **Pajala** | **0.87** | **91** | | P | **Pg** | **18 01 14.4** | **-1.2** |
| PAJU | | | | | S | **Sg** | **18 01 25.6** | **-1.3** |
| **PAJU** | **Pajala** | **0.87** | **91** | *i* | P | **Pg** | **18 01 14.4** | **-1.2** |
| PAJU | | | | *i* | S | **Sg** | **18 01 25.6** | **-1.3** |
| **HARU** | **Harads** | **0.90** | **178** | | P | **Pg** | **18 01 15.3** | **-0.9** |
| **HARU** | **Harads** | **0.90** | **178** | *i* | P | **Pg** | **18 01 15.3** | **-0.9** |
| **KUA** | **Kurravaara** | **0.93** | **347** | | P | **Pg** | **18 01 16.4** | **-0.5** |
| **KUA** | **Kurravaara** | **0.93** | **347** | *e*P | | **Pg** | **18 01 16.4** | **-0.5** |
| **SALU** | **Saltoluokta** | **0.99** | **290** | | P | **Pb** | **18 01 18.2** | **-0.8** |
| **SALU** | **Saltoluokta** | **0.99** | **290** | *e*P | | **Pb** | **18 01 18.2** | **-0.8** |
| **LANU** | **Lannavaara** | **1.08** | **22** | | P | **Pg** | **18 01 18.9** | **-0.8** |
| **LANU** | **Lannavaara** | **1.08** | **22** | *e*P | | **Pg** | **18 01 18.9** | **-0.8** |
| | baz=204 | | | | | | | |
| LANU | | | | *e*SB | | **Sb** | **18 01 34.5** | **-0.8** |
| **NIKU** | **Nikkaluokta** | **1.09** | **319** | | P | **Pg** | **18 01 19.4** | **-0.5** |
| **NIKU** | **Nikkaluokta** | **1.09** | **319** | *e*P | | **Pg** | **18 01 19.4** | **-0.5** |
| **KOVU** | **Salmi** | **1.21** | **347** | | P | **Pg** | **18 01 21.8** | **-0.4** |
| **KOVU** | **Salmi** | **1.21** | **347** | *e*P | | **Pg** | **18 01 21.8** | **-0.4** |
| **KLF** | **Kolari** | **1.21** | **80** | *e*P | | **Pg** | **18 01 20.1** | **-1.6** |
| KLF | | | | *e*SB | | **Sg** | **18 01 38.4** | **+0.5** |
| **KALU** | **Kalix** | **1.55** | **139** | | P | **Pn** | **18 01 26.7** | **-1.2** |
| **KALU** | **Kalix** | **1.55** | **139** | *e*SN | | **Sg** | **18 01 50.5** | **+1.7** |
| **SJUU** | **Sjulsmark** | **1.58** | **169** | | P | **Pn** | **18 01 27.2** | **-0.9** |
| **SJUU** | **Sjulsmark** | **1.58** | **169** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,2.7nm,0.2s | | | | | | | |
| **VRF** | **Varrio** | **3.43** | **74** | *e*P | | **Pn** | **18 01 54.2** | **+0.5** |
| **MSF** | **Maaselka** | **3.46** | **106** | *e*P | | **Pn** | **18 01 55.9** | **+1.8** |
| MSF | | | | *e*SB | | **Sb** | **18 02 40.6** | **-3.0** |
| **KEV** | **Kevo** | **3.53** | **37** | *e*P | | **Pn** | **18 01 56.3** | **+1.4** |
| **KU6** | **Riekki** | **3.74** | **102** | *e*P | | **Pn** | **18 01 58.1** | **+0.2** |
| | baz=290 | | | | | | | |
| **HUSU** | **Husum** | **3.79** | **192** | *e*P | | **Pn** | **18 02 00.0** | **+1.4** |
| | baz=7.0 | | | | | | | |
| HUSU | | | | *e*S | | **Sn** | **18 02 43.9** | **0.0** |
| **VAF** | **Ylistaro** | **4.10** | **169** | *e*P | | **Pn** | **18 02 04.4** | **+1.7** |
| **APA0** | **Apatity Array** | **4.71** | **78** | P | | **Pn** | **18 02 13.4** | **+2.2** |
| APA0 | | | | S | | **Sn** | **18 03 11.9** | **+5.4** |
| **PRVG** | **Vayda Guba** | **4.96** | **52** | P | | **Pn** | **18 02 16.2** | **+1.5** |
| PRVG | | | | S | | **Sn** | **18 03 13.3** | **+0.6** |
| **FINES** | **FINESS Array B** | **6.07** | **156** | Pn | | **Pn** | **18 02 30.8** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=347,slow=13,SNR=17 | | | | | | | |
| FINES | | | | Sn | | **Sn** | **18 03 39.7** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=343,slow=22,SNR=9.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **7.37** | **220** | Pn | | **Pn** | **18 02 47.8** | **-0.1** |
| | comp=Z,0.0nm,0.3s,baz=40,slow=12,SNR=6.7 | | | | | | | |
| **HFS** | **Hagfors** | **7.65** | **208** | Pn | | **Pn** | **18 02 50.7** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=12,SNR=11 | | | | | | | |
| HFS | | | | Sn | | **Sn** | **18 04 15.4** | **-3.4** |
| | comp=Z,0.2nm,0.3s,baz=33,slow=24,SNR=1.2 | | | | | | | |

*IDC **04** 18:02:59.5±2.4, 14°.81N×145°.62E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.3/55, mbtmp3.5/3, Error ellipse: s-maj=72.1km s-min=24.5km az=97.0*
*NEIC **04** 18:03:00.3±1.3, 15°.0N±0°.1×145°.38E±0°.09, h14km±11km, mb4.1/6, Error ellipse: s-maj=23.3km s-min=7.2km az=150.0*

**ISC 04 18:02:60.0±2.3, 14°.9N±0°.1×145°.5E±0°.5, h10km, n11, σ1s55/12, mb3.9/7, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.44** | **203** | Pn | **Pn** | **18 03 26.7** | **+0.5** |
| | 25nm,0.3s,baz=285,slow=1.2,SNR=50 | | | | | | |
| GUMO | | | | Sn | **Sn** | **18 03 45.6** | **+0.4** |
| | 64nm,0.3s,baz=163,slow=23,SNR=7.2 | | | | | | |
| **GUMO** | **Guam** | **1.44** | **203** | | **Pn** | **18 03 25.8** | **-0.4** |
| GUMO | | | | Sn | **Sn** | **18 03 43.3** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **22.48** | **345** | P | **P** | **18 07 58.5** | **-1.0** |
| MJAR | | | | IAmb | IAmb | 18 08 11.7 | |
| | comp=Z,4.9nm,1.3s | | | | | | |
| **MAJO** | **Matsushiro** | **22.48** | **345** | P | **P** | **18 07 57.3** | **-2.2** |
| MAJO | | | | IAmb | IAmb | 18 08 04.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **22.48** | **345** | P | **P** | **18 07 57.4** | **-2.2** |
| **WRAB** | **Tennant Creek** | **36.32** | **198** | P | **P** | **18 10 03.1** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 18 10 07.5 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **36.33** | **198** | P | **P** | **18 10 04.7** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 18 10 06.4 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.33** | **198** | P | **P** | **18 10 05.0** | **+0.7** |
| | comp=Z,1.5nm,0.8s,baz=26,slow=9.9,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.33** | **198** | IAmb | IAmb | 18 10 13.0 | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **39.98** | **197** | P | **P** | **18 10 35.5** | **+0.5** |
| | comp=Z,0.4nm,0.8s,baz=9.5,slow=8.2,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.93** | **315** | P | **P** | **18 13 15.4** | **+2.2** |
| | comp=Z,0.2nm,0.5s,baz=90,slow=8.0,SNR=5.0 | | | | | | |

**KRSC 04 18:06:04.8±2.0, 49°.77N×157°.70E, h48km±25km, ML3.7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.36** | **313** | *e*P | Pn | 18 06 27.6 | +0.2 |
| SKR | | | | *e*S | Sn | 18 06 44.8 | +0.5 |
| **PAU** | **Pauzhetka** | **1.79** | **342** | *e*P | Pn | 18 06 35.6 | +2.4 |
| PAU | | | | *e*S | Sn | 18 06 58.2 | +3.5 |
| **KDTR** | **Khodutka, Kamc** | **2.06** | **7** | *e*P | Pn | 18 06 39.7 | +2.9 |
| KDTR | | | | *e*S | Sn | 18 07 04.4 | +3.2 |
| **RUS** | **Russkaya** | **2.72** | **11** | *e*P | Pn | 18 06 48.6 | +2.7 |
| RUS | | | | *e*S | Sn | 18 07 20.0 | +2.6 |
| **MTVR** | **Mutnovka** | **2.73** | **6** | *e*P | Pn | 18 06 50.0 | +3.7 |
| MTVR | | | | *e*S | Sn | 18 07 21.7 | +3.6 |
| **GRL** | **Gorelyy** | **2.80** | **5** | *e*P | Pn | 18 06 50.8 | +3.7 |
| GRL | | | | *e*S | Sn | 18 07 23.3 | +3.7 |
| **KRMR** | **Karymshinskiy** | **3.08** | **5** | *e*P | Pn | 18 06 55.3 | +4.5 |
| KRMR | | | | *e*S | Sn | 18 07 32.1 | +5.8 |
| **DALK** | **Dalny** | **3.33** | **11** | *e*P | Pn | 18 06 57.6 | +3.3 |
| DALK | | | | *e*S | Sn | 18 07 35.4 | +2.8 |
| **UGLR** | **Uglovaya** | **3.52** | **11** | *e*P | Pn | 18 07 01.2 | +4.2 |
| **AVH** | **Avacha** | **3.56** | **10** | *e*P | Pn | 18 07 02.3 | +4.8 |
| **SMAR** | **Somma** | **3.57** | **11** | *e*P | Pn | 18 07 02.8 | +5.1 |
| **KOK** | **Koryaka** | **3.58** | **9** | *e*P | Pn | 18 07 02.6 | +4.8 |
| **SDLR** | **Sedlovina** | **3.59** | **11** | *e*P | Pn | 18 07 01.6 | +3.6 |
| **KRER** | **Koryakskii** | **3.60** | **10** | *e*P | Pn | 18 07 02.9 | +4.7 |
| **SPN** | **Mys Shipunski** | **3.64** | **23** | *e*P | Pn | 18 07 02.0 | +3.5 |
| SPN | | | | *e*S | Sn | 18 07 43.4 | +3.3 |
| **GNL** | **Ganaly** | **3.93** | **2** | *e*P | Pn | 18 07 07.1 | +5.0 |
| **MKZ** | **Mys Kozlova** | **5.40** | **26** | *e*P | Pn | 18 07 25.6 | +3.0 |
| **TUMD** | **Tumrok D** | **5.69** | **16** | *e*P | Pn | 18 07 31.2 | +4.6 |
| **KBTR** | **Krutoberegovo** | **7.15** | **24** | *e*P | Pn | 18 07 49.8 | +3.2 |

*GCG **04** 18:08:31.9±1.1, 14°.42N×92°.54W, h31km±16km, MD4.5*
*MEX **04** 18:08:32.1±0.9, 14°.39N×92°.34W, h84km±12km, MD4.5*
*UCR **04** 18:08:33.4±1.1, 14°.34N×92°.39W, h31km±5km, ML4.1, mb4.4(NEIC)*
*SNET **04** 18:08:33.2±1.1, 14°.33N×92°.40W, h31km±4km, ML4.4*
*IDC **04** 18:08:34.7±2.7, 14°.49N×92°.46W, h63km±18km, mb3.9/7, mb1 4.2/10, mb1mx3.8/39, mbtmp4.2/10, MS3.4/10, Ms1 3.4/10, ms1mx3.2/66, Error ellipse: s-maj=33.9km s-min=8.6km az=19.0*
*NEIC **04** 18:08:35.8±3.3, 14°.52N±0°.07×92°.38W±0°.07, h62km±4km, mb4.4/48, Md4.6/33(MEX), Error ellipse: s-maj=10.7km s-min=8.1km az=219.0*

**ISC 04 18:08:32.7±1.1, 14°.32N±0°.06×92°.50W±0°.04, h49km±10km, n149, σ1s60/173, mb4.4/26, MS3.5/8, 3C, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THIG** | | **0.62** | **21** | | **Pn** | **18 08 44.8** | **-0.6** |
| THIG | | | | | **Sn** | **18 08 55.0** | **+0.5** |
| **THIG** | | **0.62** | **21** | *e*P | **Pn** | **18 08 44.8** | **-0.6** |
| THIG | | | | *i* S | **Sn** | **18 08 55.0** | **+0.5** |
| **RTAL** | **Retalhuleu** | **0.80** | **75** | | **Pn** | **18 08 47.0** | **-0.8** |
| **RTAL** | **Retalhuleu** | **0.80** | **75** | *e*P | **Pn** | **18 08 47.0** | **-0.8** |
| RTAL | | | | *e*S | **Sn** | **18 08 57.3** | **-1.5** |
| **PATR** | **El Naranjo** | **0.83** | **18** | *e*P | **Pn** | **18 08 47.2** | **-1.1** |
| PATR | | | | *e*S | **Sn** | **18 08 58.7** | **-1.0** |
| **CHUJ** | **Union Juarez** | **0.85** | **26** | *e*P | **Pn** | **18 08 47.4** | **-1.3** |
| CHUJ | | | | *e*S | **Sn** | **18 08 59.1** | **-1.2** |
| **PAVE** | **Pavencul** | **0.92** | **20** | *e*P | **Pn** | **18 08 48.4** | **-1.1** |
| PAVE | | | | *e*S | **Sn** | **18 09 01.1** | **-0.7** |
| **STG3** | **Santiaguito 3,** | **0.98** | **67**↑ | *e*P | **Pn** | **18 08 50.0** | **-0.3** |
| **HUEH** | **Huehuetenango** | **1.38** | **44** | *e*P | **Pn** | **18 08 55.9** | **+0.1** |
| HUEH | | | | *e*S | **Sn** | **18 09 14.0** | **+1.0** |
| **HUEH** | **Huehuetenango** | **1.38** | **44** | Pn | **Pn** | **18 08 55.9** | **+0.1** |
| **HUEH** | **Huehuetenango** | **1.38** | **44** | *e*P | **Pn** | **18 08 55.9** | **+0.1** |
| HUEH | | | | *e*S | **Sn** | **18 09 14.0** | **+1.0** |
| **PCIG** | | **1.54** | **333** | | **Pn** | **18 08 56.8** | **-0.9** |
| **PCIG** | | **1.54** | **333** | *e*P | **Pn** | **18 08 56.7** | **-1.0** |
| PCIG | | | | *e*P | **Pn** | **18 08 56.8** | **-0.9** |
| **FUG** | **Fuego 3** | **1.61** | **85**↑ | *e*P | **Pn** | **18 08 58.7** | **-0.2** |
| **PCG** | **Pacaya** | **1.83** | **88** | *e*P | **Pn** | **18 09 02.4** | **+0.4** |
| PCG | | | | *e*S | **Sn** | **18 09 27.0** | **+2.9** |
| **APG** | **El Apazote** | **2.08** | **71** | P | **Pn** | **18 09 05.7** | **+0.3** |
| | 44nm,0.3s,baz=250,slow=7.7,SNR=288 | | | | | | |
| APG | | | | S | **Sn** | **18 09 31.1** | **+0.9** |
| | 98nm,0.3s,baz=260,slow=19,SNR=19 | | | | | | |
| APG | | | | LR | LR | 18 09 49.7 | |
| | comp=Z,331nm,18.0s,baz=277,slow=38 | | | | | | |
| **NBG** | **Las Nubes** | **2.10** | **83** | *e*P | **Pn** | **18 09 07.1** | **+1.4** |
| NBG | | | | *e*S | **Sn** | **18 09 32.3** | **+1.5** |
| **TGIG** | | **2.51** | **346** | | **Pn** | **18 09 11.2** | **0.0** |
| **TGIG** | | **2.51** | **346** | *i* P | **Pn** | **18 09 09.5** | **-1.7** |
| **SLOZ** | **Alcaldia de Sa** | **2.65** | **96** | *e*P | **Pn** | **18 09 12.1** | **-0.9** |
| SLOZ | | | | *e*S | **Sn** | **18 09 43.0** | **-0.9** |
| SLOZ | | | | IAML | | 18 09 57.0 | |
| | comp=Z,658nm,0.5s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **2.66** | **97** | *e*P | **Pn** | **18 09 13.5** | **+0.4** |
| LOAL | | | | *e*S | **Sn** | **18 09 44.4** | **+0.2** |
| **NUBE** | **Las Nubes** | **2.67** | **99** | *e*P | **Pn** | **18 09 13.1** | **-0.3** |
| NUBE | | | | *e*S | **Sn** | **18 09 43.5** | **-1.1** |
| **NUBE** | **Las Nubes** | **2.67** | **99** | *e*P | **Pn** | **18 09 13.1** | **-0.3** |
| NUBE | | | | *e*S | **Sn** | **18 09 43.5** | **-1.1** |
| **RTR** | **El Retiro** | **2.80** | **98** | *e*P | **Pn** | **18 09 15.7** | **+0.5** |
| **RTR** | **El Retiro** | **2.80** | **98** | *e*P | **Pn** | **18 09 15.7** | **+0.5** |
| **MRL** | **Marmol** | **2.83** | **74** | *e*P | **Pn** | **18 09 16.3** | **+0.7** |
| **SBLS** | **San Blas** | **2.83** | **99** | *e*P | **Pn** | **18 09 16.1** | **+0.4** |
| **SBLS** | **San Blas** | **2.83** | **99** | *e*P | **Pn** | **18 09 16.1** | **+0.4** |
| **CEVE** | **Cerro Verde** | **2.83** | **100** | *e*P | **Pn** | **18 09 15.9** | **+0.2** |
| CEVE | | | | *e*S | **Sn** | **18 09 50.4** | **+1.7** |
| CEVE | | | | IAML | | 18 09 55.6 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **CEVE** | **Cerro Verde** | **2.83** | **100** | *e*P | **Pn** | **18 09 15.9** | **+0.2** |
| CEVE | | | | *e*S | **Sn** | **18 09 50.4** | **+1.7** |
| CEVE | | | | IAML | | 18 09 55.6 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **SNJE** | **San Jose** | **2.84** | **99** | *e*P | **Pn** | **18 09 15.9** | **+0.1** |
| **SNJE** | **San Jose** | **2.84** | **99** | *e*P | **Pn** | **18 09 15.9** | **+0.1** |
| **JAYA** | **Jayaque - finc** | **3.03** | **102** | *e*P | **Pn** | **18 09 18.0** | **-0.4** |
| **JAYA** | **Jayaque - finc** | **3.03** | **102** | *e*P | **Pn** | **18 09 18.0** | **-0.4** |
| **MTO3** | **Montecristo** | **3.04** | **88** | Pn | **Pn** | **18 09 17.9** | **-0.7** |
| **ESQI** | **Esquipulas** | **3.07** | **85** | Pn | **Pn** | **18 09 18.4** | **-0.4** |
| **TACO** | **Tacachico** | **3.07** | **96** | *e*P | **Pn** | **18 09 18.1** | **-0.7** |
| **TACO** | **Tacachico** | **3.07** | **96** | *e*P | **Pn** | **18 09 18.1** | **-0.7** |
| **BOQS** | **Boqueron** | **3.18** | **100** | *e*P | **Pn** | **18 09 20.6** | **+0.2** |
| **BOQS** | **Boqueron** | **3.18** | **100** | *e*P | **Pn** | **18 09 20.6** | **+0.2** |
| **SNET** | **Serv Nac Est T** | **3.23** | **101** | Pn | **Pn** | **18 09 20.3** | **-0.8** |
| **LFRS** | **El Faro** | **3.41** | **101** | *e*P | **Pn** | **18 09 23.8** | **+0.3** |
| **LFRS** | **El Faro** | **3.41** | **101** | *e*P | **Pn** | **18 09 23.8** | **+0.3** |
| **SJTE** | **Alcalda de S** | **3.46** | **101** | *e*P | **Pn** | **18 09 25.0** | **+0.8** |
| **SJTE** | **Alcalda de S** | **3.46** | **101** | *e*P | **Pn** | **18 09 25.0** | **+0.8** |
| **CMIG** | **Matias Romero** | **3.58** | **320** | P | **Pn** | **18 09 26.0** | **+0.2** |
| | comp=Z,15nm,0.3s,baz=162,slow=13,SNR=88 | | | | | | |
| CMIG | | | | S | **Sn** | **18 10 06.7** | **-0.3** |
| | comp=Z,50nm,0.3s,baz=129,slow=9.0,SNR=5.8 | | | | | | |
| CMIG | | | | LR | LR | 18 11 03.2 | |
| | comp=Z,358nm,20.7s,baz=156,slow=43 | | | | | | |
| **CMIG** | **Matias Romero** | **3.58** | **320** | | **Pn** | **18 09 26.0** | **+0.2** |
| CMIG | | | | | **Sn** | **18 10 07.0** | **+0.1** |
| **CMIG** | **Matias Romero** | **3.58** | **320** | *e*P | **Pn** | **18 09 26.0** | **+0.2** |
| CMIG | | | | *i* S | **Sn** | **18 10 07.0** | **+0.1** |
| **PETF** | **Flores** | **3.62** | **44** | *e*P | **Pn** | **18 09 26.7** | **+0.5** |
| **PETF** | **Flores** | **3.62** | **44** | Pn | **Pn** | **18 09 25.7** | **-0.6** |
| **PETF** | **Flores** | **3.62** | **44** | *e*P | **Pn** | **18 09 26.7** | **+0.5** |
| **SCLA** | **Alcaldia de Sa** | **3.71** | **99** | *e*P | **Pn** | **18 09 27.4** | **-0.2** |
| **SCLA** | **Alcaldia de Sa** | **3.71** | **99** | *e*P | **Pn** | **18 09 27.4** | **-0.2** |
| **HUIG** | **Huatulco** | **3.77** | **293** | | **Pn** | **18 09 27.4** | **-1.0** |
| **HUIG** | **Huatulco** | **3.77** | **293** | *e*P | **Pn** | **18 09 27.4** | **-1.0** |
| **NEUV** | **Arroyo Zacate** | **4.63** | **317** | *e*P | **Pn** | **18 09 39.8** | **-0.4** |
| NEUV | | | | *e*S | **Sn** | **18 10 32.9** | **+0.2** |
| **PEIG** | **Puerto Escondi** | **4.79** | **291** | *e*P | **Pn** | **18 09 42.7** | **+0.3** |
| PEIG | | | | *e*S | **Sn** | **18 10 32.7** | **-4.0** |
| **VHO** | **Vista Hermosa** | **4.91** | **304** | *e*P | **Pn** | **18 09 48.6** | **+4.4** |
| VHO | | | | *e*S | **Sn** | **18 10 42.0** | **+2.1** |
| **TGUH** | **Tegucigalpa,Un** | **5.07** | **92** | | **Pn** | **18 09 45.2** | **-1.2** |
| **YOIG** | **Yosondua** | **5.48** | **298**⇓ | *e*P | **Pn** | **18 09 54.6** | **+2.6** |
| YOIG | | | | *e*S | **Sn** | **18 11 00.5** | **+6.5** |
| **CRIN** | **San Cristobal** | **5.54** | **106** | Pn | **Pn** | **18 09 54.8** | **+2.0** |
| **TOIG** | **Toxpalan** | **5.77** | **311** | *e*P | **Pn** | **18 09 57.9** | **+1.9** |
| **PNIG** | **Pinotepa** | **5.81** | **291** | | **Pn** | **18 09 57.0** | **+0.6** |
| PNIG | | | | | **Sn** | **18 10 56.0** | **-5.7** |
| **PNIG** | **Pinotepa** | **5.81** | **291** | *e*P | **Pn** | **18 09 57.0** | **+0.6** |
| PNIG | | | | *e*S | **Sn** | **18 10 56.0** | **-5.7** |
| **TXIG** | **Tlaxiaco** | **5.85** | **301** | *e*P | **Pn** | **18 09 60.0** | **+2.8** |
| TXIG | | | | *e*S | **Sn** | **18 11 09.3** | **+6.2** |
| **CNGN** | **Cerro Negro** | **5.93** | **107** | Pn | **Pn** | **18 09 58.9** | **+0.9** |
| **HLIG** | **Huajuapan de L** | **6.18** | **305** | *e*P | **Pn** | **18 10 05.2** | **+3.6** |
| HLIG | | | | *e*S | **Sn** | **18 11 15.4** | **+4.3** |
| **FTIG** | **Fresnillo de T** | **6.48** | **304** | *e*P | **Pn** | **18 10 08.0** | **+2.2** |
| FTIG | | | | *e*S | **Sn** | **18 11 17.6** | **-0.9** |
| **MATN** | **Matagalpa** | **6.54** | **101** | Pn | **Pn** | **18 10 05.8** | **-0.6** |
| **BOAB** | **BOACO BROADBAN** | **6.90** | **105** | Pn | **Pn** | **18 10 11.0** | **-0.4** |
| **ACON** | **Acoyapa** | **7.51** | **107** | Pn | **Pn** | **18 10 19.3** | **-0.4** |
| **HZTE** | **Horizontes, Gu** | **7.63** | **117** | | **Pn** | **18 10 23.0** | **+1.5** |
| **ORTG** | **Ortega, Santa** | **7.92** | **119** | | **Pn** | **18 10 27.4** | **+1.9** |
| **JTS** | **Las Juntas de** | **8.39** | **118** | P | **Pn** | **18 10 35.6** | **+3.8** |
| | comp=Z,1.2nm,0.3s,baz=337,slow=16,SNR=3.8 | | | | | | |
| JTS | | | | LR | LR | 18 12 39.3 | |
| | comp=Z,39nm,21.8s,baz=75,slow=29 | | | | | | |
| **JTS** | **Las Juntas de** | **8.39** | **118** | Pn | **Pn** | **18 10 34.6** | **+2.8** |
| **RIMA** | **Rio Macho** | **9.58** | **117** | | **Pn** | **18 10 47.9** | **-0.4** |
| **PEZE** | **Perez Zeledon,** | **9.93** | **119** | Pn | **Pn** | **18 10 53.9** | **+0.9** |
| **SRBA** | **San Rafael, Bu** | **10.28** | **119** | Pn | **Pn** | **18 10 58.5** | **+0.8** |
| **SOR** | **Soroa** | **12.32** | **45** | Pn | **Pn** | **18 11 23.3** | **-2.2** |
| **ZAIG** | **Zacatecas** | **12.71** | **313** | Pn | **Pn** | **18 11 33.5** | **+2.3** |
| **833A** | **Chaparral WMA,** | **15.33** | **336** | Pn | **Pn** | **18 12 06.6** | **+0.6** |
| 833A | | | | IAmb | IAmb | 18 12 08.5 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **HKT** | **Hockley** | **15.85** | **349** | Pn | **Pn** | **18 12 11.4** | **-1.2** |
| **JCT** | **Junction City** | **17.43** | **339** | | **P** | **18 12 34.5** | **+1.3** |
| **TXAR** | **Lajitas Array** | **18.16** | **327** | P | **Pn** | **18 12 42.5** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=151,slow=12,SNR=22 | | | | | | |
| **TXAR** | **Lajitas Array** | **18.16** | **327** | P | **Pn** | **18 12 43.4** | **+1.8** |
| **TX31** | **Lajitas Ar. Si** | **18.16** | **327** | P | **Pn** | **18 12 43.6** | **+2.1** |
| TX31 | | | | IAmb | IAmb | 18 12 45.9 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **TX32** | **Lajitas Array** | **18.16** | **327** | P | **Pn** | **18 12 43.6** | **+2.1** |
| **ABTX** | **Abilene, Hawle** | **19.35** | **342** | P | **P** | **18 12 54.1** | **-0.2** |
| **MIAR** | **Mount Ida** | **20.16** | **357** | P | **P** | **18 13 02.5** | **-0.5** |
| MIAR | | | | IAmb | IAmb | 18 13 08.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MNTX** | **Cornudas Mount** | **20.94** | **328** | P | **P** | **18 13 11.6** | **+0.1** |
| MNTX | | | | IAmb | IAmb | 18 13 13.2 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **W35A** | **Tecumseh** | **21.11** | **350** | P | **P** | **18 13 13.1** | **-0.3** |
| W35A | | | | IAmb | IAmb | 18 13 38.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **22.08** | **102** | P | **P** | **18 13 23.0** | **-1.1** |
| | comp=Z,2.7nm,0.3s,baz=269,slow=8.4,SNR=4.0 | | | | | | |
| **SDV** | **Santo Domingo** | **22.08** | **102** | P | **P** | **18 13 23.0** | **-1.1** |
| SDV | | | | IAmb | IAmb | 18 13 44.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **AMTX** | **Amarillo** | **22.09** | **340** | P | **P** | **18 13 23.6** | **-0.3** |
| AMTX | | | | IAmb | IAmb | 18 13 25.5 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.64** | **19** | LR | LR | 18 23 10.6 | |
| | comp=Z,105nm,18.9s,baz=208,slow=39 | | | | | | |
| **BLOK** | **Blackwell** | **22.74** | **350** | P | **P** | **18 13 29.2** | **-1.6** |
| BLOK | | | | IAmb | IAmb | 18 13 29.9 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **121A** | **Cookes Peak, D** | **22.87** | **325** | P | **P** | **18 13 33.7** | **+1.4** |
| 121A | | | | IAmb | IAmb | 18 13 35.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **BNM** | **Barren Site** | **23.52** | **330** | P | **P** | **18 13 40.0** | **+1.2** |
| **ANMO** | **Albuquerque** | **24.08** | **331** | P | **P** | **18 13 43.2** | **-0.7** |
| | comp=Z,2.9nm,0.8s,baz=142,slow=11,SNR=8.5 | | | | | | |
| ANMO | | | | LR | LR | 18 23 04.1 | |
| | comp=Z,54nm,20.8s,baz=321,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **24.08** | **331** | P | **P** | **18 13 44.0** | **+0.1** |
| **OLIL** | **Olney** | **24.62** | **8** | P | **P** | **18 13 47.1** | **-1.5** |
| OLIL | | | | IAmb | IAmb | 18 13 47.7 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **26.33** | **323** | P | **P** | **18 14 05.8** | **+1.5** |
| **S22A** | **4UR Ranch, Cre** | **26.58** | **334** | P | **P** | **18 14 07.7** | **+1.0** |
| **MVCO** | **Mesa Verde** | **26.88** | **331** | P | **P** | **18 14 10.8** | **+1.4** |
| MVCO | | | | IAmb | IAmb | 18 14 11.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **PV13** | **Radium Mtn., P** | **27.80** | **332** | P | **P** | **18 14 19.1** | **+1.5** |
| PV13 | | | | IAmb | IAmb | 18 14 19.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PV11** | **David Mesa, Pa** | **27.94** | **332** | P | **P** | **18 14 20.0** | **+1.3** |
| **PV07** | **Paradox Valley** | **27.95** | **332** | P | **P** | **18 14 19.7** | **+0.8** |
| PV07 | | | | IAmb | IAmb | 18 14 21.3 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **P57A** | **Homestead Farm** | **28.12** | **24** | P | **P** | **18 14 18.7** | **-1.4** |
| **PV23** | **Carpenter Ridg** | **28.13** | **332** | P | **P** | **18 14 21.3** | **+0.8** |
| PV23 | | | | IAmb | IAmb | 18 14 22.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **SDMD** | **Soldier's Deli** | **28.54** | **26** | P | **P** | **18 14 21.7** | **-2.1** |
| **CCUT** | **Cedar City** | **29.65** | **325** | P | **P** | **18 14 36.2** | **+2.2** |
| **P17A** | **Butcher Ranch,** | **29.75** | **331** | P | **P** | **18 14 36.0** | **+1.2** |
| P17A | | | | IAmb | IAmb | 18 14 36.9 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **SPR3** | **Spring Creek 3** | **31.22** | **326** | P | **P** | **18 14 49.1** | **+1.2** |
| SPR3 | | | | IAmb | IAmb | 18 14 53.0 | |
| | comp=Z,7.3nm,1.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **31.93** | **336** | P | **P** | **18 14 53.9** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=145,slow=9.2,SNR=6.2 | | | | | | |
| **SADO** | **Sadowa** | **32.40** | **18** | LR | LR | 18 28 04.7 | |
| | comp=Z,83nm,18.9s,baz=352,slow=36 | | | | | | |
| **HVU** | **Hansel Valley** | **32.52** | **331** | P | **P** | **18 15 00.5** | **+1.3** |
| HVU | | | | IAmb | IAmb | 18 15 01.3 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **REDW** | **Red Top Meadow** | **32.95** | **335** | P | **P** | **18 15 03.5** | **+0.5** |
| **ELK** | **Elko** | **32.96** | **327** | P | **P** | **18 15 04.5** | **+1.3** |
| **SNOW** | **Snow King Moun** | **32.99** | **335** | P | **P** | **18 15 04.4** | **+1.0** |
| **NV11** | **Mina Array Sit** | **33.03** | **321** | P | **P** | **18 15 05.6** | **+2.0** |
| NV11 | | | | IAmb | IAmb | 18 15 06.0 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **LOHW** | **Long Hollow** | **33.05** | **336** | P | **P** | **18 15 04.4** | **+0.5** |
| LOHW | | | | IAmb | IAmb | 18 15 05.2 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.12** | **321** | P | **P** | **18 15 05.8** | **+1.3** |
| | comp=Z,5.1nm,0.8s,baz=134,slow=8.6,SNR=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.12** | **321** | P | **P** | **18 15 06.0** | **+1.5** |
| **MOOW** | **Moose Ponds** | **33.22** | **336** | P | **P** | **18 15 05.9** | **+0.5** |
| **KVN** | **Kaiserville** | **33.39** | **322** | P | **P** | **18 15 08.3** | **+1.4** |
| KVN | | | | IAmb | IAmb | 18 15 09.6 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **BMN** | **Battle Mountai** | **33.81** | **325** | P | **P** | **18 15 12.0** | **+1.6** |
| BMN | | | | IAmb | IAmb | 18 15 12.6 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **YERR** | **Yerington** | **34.04** | **321** | P | **P** | **18 15 13.8** | **+1.4** |
| YERR | | | | IAmb | IAmb | 18 15 15.3 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **EMB** | **Emerald Bay** | **34.56** | **320** | P | **P** | **18 15 18.0** | **+1.0** |
| **HLID** | **Hailey** | **34.66** | **332** | P | **P** | **18 15 18.8** | **+1.0** |
| HLID | | | | IAmb | IAmb | 18 15 19.8 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **34.97** | **334** | P | **P** | **18 15 22.3** | **+1.7** |
| **MFID** | **Camas Ranch** | **35.22** | **330** | P | **P** | **18 15 23.7** | **+1.2** |
| **PTGA** | **Pitinga** | **35.51** | **112** | LR | LR | 18 30 27.4 | |
| | comp=Z,62nm,18.9s,baz=92,slow=37 | | | | | | |
| **J08A** | **Circle Bar Ran** | **36.51** | **328** | P | **P** | **18 15 34.8** | **+1.2** |
| **PLID** | **Pearl Lake** | **36.56** | **332** | P | **P** | **18 15 34.5** | **+0.4** |
| **F10A** | **Beach Ranch, E** | **37.80** | **332** | P | **P** | **18 15 44.5** | **0.0** |
| **C09A** | **Chrisman Ranch** | **39.64** | **333** | P | **P** | **18 16 00.3** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **50.60** | **347** | P | **P** | **18 17 24.6** | **-1.8** |
| | comp=Z,3.9nm,0.6s,baz=152,slow=7.5,SNR=49 | | | | | | |
| **INK** | **Inuvik** | **59.99** | **344** | P | **P** | **18 18 33.2** | **-0.7** |
| | comp=Z,4.5nm,0.7s,baz=125,slow=4.7,SNR=9.2 | | | | | | |
| **INK** | **Inuvik** | **59.99** | **344** | P | **P** | **18 18 33.4** | **-0.6** |
| **A36M** | **Sachs Harbour** | **60.84** | **349** | P | **P** | **18 18 38.5** | **-1.1** |
| A36M | | | | IAmb | IAmb | 18 18 38.8 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **62.35** | **337** | P | **P** | **18 18 49.5** | **-0.5** |
| | comp=Z,1.0nm,0.7s,baz=112,slow=5.5,SNR=12 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **77.99** | **36** | LR | LR | 18 55 27.4 | |
| | comp=Z,49nm,19.0s,baz=277,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.09** | **28** | LR | LR | 18 56 33.0 | |
| | comp=Z,22nm,20.8s,baz=235,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **85.55** | **29** | LR | LR | 19 01 12.3 | |
| | comp=Z,73nm,18.0s,baz=268,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **97.72** | **33** | LR | LR | 19 08 43.4 | |
| | comp=Z,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,100nm,0.5s | | | | | | | |
| **PLMC** | **San Jos del P** | **3.70** | **238** | ⇑ *i* | P | **Pn** | **18 49 12.2** | **+0.2** |
| PLMC | | | | *eS* | | **Sn** | **18 49 56.2** | **+0.4** |
| PLMC | | | | *i* | | | 18 49 58.5 | |
| | comp=Z,84nm,0.2s | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.30** | **228** | *e* | P | **Pn** | **18 49 19.2** | **-0.6** |
| YOTC | | | | *eS* | | **Sn** | **18 50 14.2** | **+4.3** |
| **BDFB** | **Brasilia** | **33.45** | **132** | | LR | LR | 19 08 07.2 | |
| | comp=Z,127nm,18.7s,baz=352,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.43** | **312** | | P | **P** | **18 55 06.3** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=124,slow=11,SNR=3.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.22** | **340** | | P | **P** | **18 58 26.8** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=134,slow=6.5,SNR=6.1 | | | | | | | |

*KRSC* ***04*** *19:28:09.9*±*1.2,54°.26N*×*161°.84E,h60km*±*15km, ML4.9*
*MOS* ***04*** *19:28:11.6*±*0.7,54°.27N*×*161°.87E,h53km,mb4.4/14, Error ellipse: s-maj=7.1km s-min=3.7km az=79.8*
*IDC* ***04*** *19:28:12.2*±*0.7,54°.45N*×*161°.46E,h44km*±*6km, mb3.8/19, mb1 4.0/23,mb1mx3.8/53, mbtmp4.0/23, ML3.9/4, MS3.4/16, Ms1 3.4/16, ms1mx3.1/99, Error ellipse: s-maj=17.8km s-min=10.1km az=141.0*
*NEIC* ***04*** *19:28:13.8*±*1.4,54°.29N*±*0°.10*×*161°.6E*±*0°.2,h62km*±*8km, mb4.4/46, Error ellipse: s-maj=17.8km s-min=10.8km az=131.0*

**ISC 04 19:28:11.9**±0.6,**54°.25N**±0°.03×**161°.85E**±0°.03,**h47**km±6km, **n212,** σ1**s24/272,mb4.4**/46,**MS3.6**/13,**7C,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.32** | **348** | | Op PN | **Pn** | **19 28 20.3** | **-0.6** |
| **MKZ** | **Mys Kozlova** | **0.32** | **348** | *eP* | | **Pn** | **19 28 20.3** | **-0.6** |
| **TUMD** | **Tumrok D** | **1.27** | **319** | *eP* | | **Pn** | **19 28 32.3** | **-1.0** |
| TUMD | | | | *eS* | | **Sn** | **19 28 46.4** | **-2.8** |
| **KII** | **Karymskiy** | **1.43** | **262** | P | PN | **Pn** | **19 28 35.4** | **0.0** |
| KII | | | | S | | **Sn** | **19 28 52.9** | **-0.1** |
| **KII** | **Karymskiy** | **1.43** | **262** | *eP* | | **Pn** | **19 28 35.4** | **0.0** |
| KII | | | | *eS* | | **Sn** | **19 28 52.9** | **-0.1** |
| **TUMR** | **Tumrok** | **1.43** | **317** | P | PN | **Pn** | **19 28 35.2** | **-0.3** |
| TUMR | | | | S | | **Sn** | **19 28 52.6** | **-0.6** |
| **TUMR** | **Tumrok** | **1.43** | **317** | *eP* | | **Pn** | **19 28 35.2** | **-0.3** |
| TUMR | | | | *eS* | | **Sn** | **19 28 52.6** | **-0.6** |
| **SPN** | **Mys Shipunski** | **1.58** | **224** | P | PN | **Pn** | **19 28 37.3** | **-0.2** |
| SPN | | | | S | | **Sn** | **19 28 55.9** | **-0.8** |
| **SPN** | **Mys Shipunski** | **1.58** | **224** | *eP* | | **Pn** | **19 28 37.3** | **-0.2** |
| SPN | | | | *eS* | | **Sn** | **19 28 55.9** | **-0.8** |
| **KMNR** | **Kamenistaya** | **1.77** | **329** | P | PN | **Pn** | **19 28 40.9** | **+0.7** |
| KMNR | | | | S | | **Sn** | **19 29 02.5** | **+0.9** |
| **KMNR** | **Kamenistaya** | **1.77** | **329** | *eP* | | **Pn** | **19 28 40.9** | **+0.7** |
| KMNR | | | | *eS* | | **Sn** | **19 29 02.5** | **+0.9** |
| **BZGR** | **Bezymyannyi-Gr** | **1.82** | **339** | P | PN | **Pn** | **19 28 42.7** | **+1.8** |
| BZGR | | | | S | | **Sn** | **19 29 05.4** | **+2.6** |
| **BZGR** | **Bezymyannyi-Gr** | **1.82** | **339** | *eP* | | **Pn** | **19 28 42.7** | **+1.8** |
| BZGR | | | | *eS* | | **Sn** | **19 29 05.4** | **+2.6** |
| **NLC** | **Nalytchevo** | **1.84** | **235** | P | PN | **Pn** | **19 28 41.3** | **+0.3** |
| NLC | | | | S | | **Sn** | **19 29 02.9** | **-0.1** |
| **NLC** | **Nalytchevo** | **1.84** | **235** | *eP* | | **Pn** | **19 28 41.3** | **+0.3** |
| NLC | | | | *eS* | | **Sn** | **19 29 02.9** | **-0.1** |
| **ZLN** | **Zelenaya** | **1.87** | **342** | P | PN | **Pn** | **19 28 42.5** | **+0.9** |
| **ZLN** | **Zelenaya** | **1.87** | **342** | *eP* | | **Pn** | **19 28 42.5** | **+0.9** |
| **BZWR** | **Bezymyannyi-We** | **1.89** | **336** | P | PN | **Pn** | **19 28 42.4** | **+0.6** |
| BZWR | | | | S | | **Sn** | **19 29 03.8** | **-0.7** |
| **BZWR** | **Bezymyannyi-We** | **1.89** | **336** | *eP* | | **Pn** | **19 28 42.4** | **+0.6** |
| BZWR | | | | *eS* | | **Sn** | **19 29 03.8** | **-0.7** |
| **KIRR** | **Kirishev** | **1.91** | **334** | P | PN | **Pn** | **19 28 42.8** | **+0.6** |
| KIRR | | | | S | | **Sn** | **19 29 05.2** | **+0.1** |
| **KIRR** | **Kirishev** | **1.91** | **334** | *eP* | | **Pn** | **19 28 42.8** | **+0.6** |
| KIRR | | | | *eS* | | **Sn** | **19 29 05.2** | **+0.1** |
| **LGNR** | **Loginova** | **1.95** | **341** | P | PN | **Pn** | **19 28 43.9** | **+1.0** |
| LGNR | | | | S | | **Sn** | **19 29 07.1** | **+0.8** |
| **LGNR** | **Loginova** | **1.95** | **341** | *eP* | | **Pn** | **19 28 43.9** | **+1.0** |
| LGNR | | | | *eS* | | **Sn** | **19 29 07.1** | **+0.8** |
| **KPT** | **Kopyto** | **1.96** | **332** | P | PN | **Pn** | **19 28 43.5** | **+0.8** |
| **KPT** | **Kopyto** | **1.96** | **332** | *eP* | | **Pn** | **19 28 43.5** | **+0.8** |
| **CIRR** | **Tsirk** | **1.97** | **342** | P | PN | **Pn** | **19 28 43.8** | **+0.8** |
| CIRR | | | | S | | **Sn** | **19 29 07.3** | **+0.7** |
| **CIRR** | **Tsirk** | **1.97** | **342** | *eP* | | **Pn** | **19 28 43.8** | **+0.8** |
| CIRR | | | | *eS* | | **Sn** | **19 29 07.3** | **+0.7** |
| **SDLR** | **Sedlovina** | **2.01** | **242** | P | PN | **Pn** | **19 28 44.7** | **+1.2** |
| SDLR | | | | S | | **Sn** | **19 29 08.3** | **+0.9** |
| **SDLR** | **Sedlovina** | **2.01** | **242** | *eP* | | **Pn** | **19 28 44.7** | **+1.2** |
| SDLR | | | | *eS* | | **Sn** | **19 29 08.3** | **+0.9** |
| **KBTR** | **Krutoberegovo** | **2.04** | **15** | P | PN | **Pn** | **19 28 44.2** | **+0.4** |
| KBTR | | | | S | | **Sn** | **19 29 08.6** | **+0.6** |
| **KBTR** | **Krutoberegovo** | **2.04** | **15** | *eP* | | **Pn** | **19 28 44.2** | **+0.4** |
| KBTR | | | | *eS* | | **Sn** | **19 29 08.6** | **+0.6** |
| **SMAR** | **Somma** | **2.06** | **243** | P | PN | **Pn** | **19 28 45.5** | **+1.3** |
| SMAR | | | | S | | **Sn** | **19 29 09.7** | **+0.9** |
| **SMAR** | **Somma** | **2.06** | **243** | *eP* | | **Pn** | **19 28 45.5** | **+1.3** |
| SMAR | | | | *eS* | | **Sn** | **19 29 09.7** | **+0.9** |
| **KRER** | **Koryakskii** | **2.07** | **244** | P | PN | **Pn** | **19 28 45.9** | **+1.6** |
| **KRER** | **Koryakskii** | **2.07** | **244** | *eP* | | **Pn** | **19 28 45.9** | **+1.6** |
| **KBG** | **Krutoberegovo** | **2.07** | **13** | P | PN | **Pn** | **19 28 44.5** | **+0.3** |
| KBG | | | | S | | **Sn** | **19 29 09.1** | **+0.4** |
| **KBG** | **Krutoberegovo** | **2.07** | **13** | *eP* | | **Pn** | **19 28 44.5** | **+0.3** |
| KBG | | | | S | | **Sn** | **19 29 09.1** | **+0.4** |
| **UGLR** | **Uglovaya** | **2.08** | **241** | P | PN | **Pn** | **19 28 45.8** | **+1.4** |
| UGLR | | | | S | | **Sn** | **19 29 10.0** | **+1.0** |
| **UGLR** | **Uglovaya** | **2.08** | **241** | *eP* | | **Pn** | **19 28 45.8** | **+1.4** |
| UGLR | | | | *eS* | | **Sn** | **19 29 10.0** | **+1.0** |
| **AVH** | **Avacha** | **2.09** | **243** | P | PN | **Pn** | **19 28 46.2** | **+1.7** |
| AVH | | | | S | | **Sn** | **19 29 10.4** | **+1.0** |
| **AVH** | **Avacha** | **2.09** | **243** | *eP* | | **Pn** | **19 28 46.2** | **+1.7** |
| AVH | | | | *eS* | | **Sn** | **19 29 10.4** | **+1.0** |
| **KRSR** | **Krestovskiy** | **2.10** | **340** | P | PN | **Pn** | **19 28 45.3** | **+0.5** |
| KRSR | | | | S | | **Sn** | **19 29 09.3** | **-0.5** |
| **KRSR** | **Krestovskiy** | **2.10** | **340** | *eP* | | **Pn** | **19 28 45.3** | **+0.5** |
| KRSR | | | | *eS* | | **Sn** | **19 29 09.3** | **-0.5** |
| **KOK** | **Koryaka** | **2.13** | **245** | P | PN | **Pn** | **19 28 46.6** | **+1.5** |
| KOK | | | | S | | **Sn** | **19 29 11.8** | **+1.4** |
| **KOK** | **Koryaka** | **2.13** | **245** | *eP* | | **Pn** | **19 28 46.6** | **+1.5** |
| KOK | | | | *eS* | | **Sn** | **19 29 11.8** | **+1.4** |
| **KOZ** | **Kozyrevsk** | **2.14** | **329** | P | PN | **Pn** | **19 28 46.0** | **+0.9** |
| KOZ | | | | S | | **Sn** | **19 29 11.2** | **+0.8** |
| **KOZ** | **Kozyrevsk** | **2.14** | **329** | *eP* | | **Pn** | **19 28 46.0** | **+0.9** |
| KOZ | | | | *eS* | | **Sn** | **19 29 11.2** | **+0.8** |
| **KLY** | **Klyuchi** | **2.18** | **342** | P | PN | **Pn** | **19 28 45.8** | **+0.1** |
| KLY | | | | S | | **Sn** | **19 29 10.8** | **-0.6** |
| **KLY** | **Klyuchi** | **2.18** | **342** | *eP* | | **Pn** | **19 28 45.8** | **+0.1** |
| KLY | | | | *eS* | | **Sn** | **19 29 10.8** | **-0.6** |
| **DALK** | **Dalny** | **2.21** | **238** | P | PN | **Pn** | **19 28 47.0** | **+1.0** |
| DALK | | | | S | | **Sn** | **19 29 12.0** | **-0.1** |
| **DALK** | **Dalny** | **2.21** | **238** | *eP* | | **Pn** | **19 28 47.0** | **+1.0** |
| DALK | | | | *eS* | | **Sn** | **19 29 12.0** | **-0.1** |
| **PET** | **Petropavlovsk** | **2.26** | **238** | *ei* | PN | **Pn** | **19 28 47.9** | **+1.1** |
| PET | | | | *eS* | | **Sn** | **19 29 13.8** | **+0.4** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,700nm,0.5s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,910nm,0.6s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=E,7μm,0.7s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=N,6μm,0.6s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,700nm,9.0s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,2μm,5.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **2.26** | **238** | | | **Pn** | **19 28 48.0** | **+1.2** |
| PET | | | | | Sn | **Sn** | **19 29 13.3** | **-0.1** |
| **PET** | **Petropavlovsk** | **2.26** | **238** | *eP* | | **Pn** | **19 28 47.9** | **+1.1** |
| PET | | | | *eS* | | **Sn** | **19 29 14.2** | **+0.8** |
| **SMKR** | **Semkarok** | **2.35** | **355** | P | PN | **Pn** | **19 28 49.4** | **+1.3** |
| SMKR | | | | S | | **Sn** | **19 29 16.5** | **+0.8** |
| **SMKR** | **Semkarok** | **2.35** | **355** | P | | **Pn** | **19 28 49.4** | **+1.3** |
| SMKR | | | | *eS* | | **Sn** | **19 29 16.5** | **+0.8** |
| **BDR** | **Baidarnaya** | **2.35** | **351** | P | PN | **Pn** | **19 28 49.4** | **+1.3** |
| BDR | | | | S | | **Sn** | **19 29 17.6** | **+1.8** |
| **BDR** | **Baidarnaya** | **2.35** | **351** | P | | **Pn** | **19 28 49.4** | **+1.3** |
| BDR | | | | *eS* | | **Sn** | **19 29 17.6** | **+1.8** |
| **GNL** | **Ganaly** | **2.37** | **258** | P | PN | **Pn** | **19 28 49.7** | **+1.3** |
| GNL | | | | S | | **Sn** | **19 29 17.0** | **+0.7** |
| **GNL** | **Ganaly** | **2.37** | **258** | P | | **Pn** | **19 28 49.7** | **+1.3** |
| GNL | | | | *eS* | | **Sn** | **19 29 17.0** | **+0.7** |
| **SRKR** | **Sorokina** | **2.44** | **351** | P | PN | **Pn** | **19 28 50.3** | **+1.0** |
| **SRKR** | **Sorokina** | **2.44** | **351** | P | | **Pn** | **19 28 50.3** | **+1.0** |
| **ESO** | **Esso** | **2.47** | **314** | P | PN | **Pn** | **19 28 49.1** | **-0.6** |
| ESO | | | | S | | **Sn** | **19 29 16.5** | **-2.1** |
| **ESO** | **Esso** | **2.47** | **314** | P | | **Pn** | **19 28 49.1** | **-0.6** |
| ESO | | | | *eS* | | **Sn** | **19 29 16.5** | **-2.1** |
| **BKI** | **Bering** | **2.58** | **67** | P | PN | **Pn** | **19 28 51.7** | **+0.6** |
| BKI | | | | S | | **Sn** | **19 29 19.8** | **-1.4** |
| **BKI** | **Bering** | **2.58** | **67** | *eP* | | **Pn** | **19 28 51.7** | **+0.6** |
| BKI | | | | S | | **Sn** | **19 29 19.8** | **-1.4** |
| **KRMR** | **Karymshinskiy** | **2.63** | **239** | P | PN | **Pn** | **19 28 53.5** | **+1.6** |
| KRMR | | | | S | | **Sn** | **19 29 24.3** | **+1.7** |
| **KRMR** | **Karymshinskiy** | **2.63** | **239** | P | | **Pn** | **19 28 53.5** | **+1.6** |
| KRMR | | | | *eS* | | **Sn** | **19 29 24.3** | **+1.7** |
| **RUS** | **Russkaya** | **2.70** | **229** | P | PN | **Pn** | **19 28 53.3** | **+0.5** |
| RUS | | | | S | | **Sn** | **19 29 23.6** | **-0.6** |
| **RUS** | **Russkaya** | **2.70** | **229** | *eP* | | **Pn** | **19 28 53.3** | **+0.5** |
| RUS | | | | *eS* | | **Sn** | **19 29 23.6** | **-0.6** |
| **PEA0B** | **Petropavlovsk-** | **2.72** | **247** | P | PN | **Pn** | **19 28 54.5** | **+1.4** |
| **PEA0B** | **Petropavlovsk-** | **2.72** | **247** | P | Pn | **Pn** | **19 28 54.5** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **2.72** | **247** | P | | **Pn** | **19 28 52.5** | **-0.6** |
| | comp=Z,51nm,0.3s,baz=78,slow=17,SNR=552 | | | | | | | |
| PETK | | | | | S | **Sn** | **19 29 26.7** | **+2.0** |
| | comp=Z,121nm,0.3s,baz=299,slow=18,SNR=5.0 | | | | | | | |
| PETK | | | | | LR | LR | 19 30 12.6 | |
| | comp=Z,482nm,19.0s,baz=66,slow=46 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.72** | **247** | | PN | **Pn** | **19 28 53.6** | **+0.5** |
| PETK | | | | | | | 19 29 26.7 | |
| **PETK** | **Petropavlovsk-** | **2.72** | **247** | P | Pn | **Pn** | **19 28 53.5** | **+0.5** |
| **MTVR** | **Mutnovka** | **2.82** | **233** | P | PN | **Pn** | **19 28 55.7** | **+1.1** |
| MTVR | | | | S | | **Sn** | **19 29 28.1** | **+0.8** |
| **MTVR** | **Mutnovka** | **2.82** | **233** | P | | **Pn** | **19 28 55.7** | **+1.1** |
| MTVR | | | | *eS* | | **Sn** | **19 29 28.1** | **+0.8** |
| **GRL** | **Gorelyy** | **2.83** | **235** | P | PN | **Pn** | **19 28 56.4** | **+1.7** |
| GRL | | | | S | | **Sn** | **19 29 29.4** | **+1.9** |
| **GRL** | **Gorelyy** | **2.83** | **235** | P | | **Pn** | **19 28 56.4** | **+1.7** |
| GRL | | | | *eS* | | **Sn** | **19 29 29.4** | **+1.9** |
| **APC** | **Apacha** | **3.09** | **247** | P | PN | **Pn** | **19 29 00.3** | **+2.1** |
| APC | | | | S | | **Sn** | **19 29 35.7** | **+1.9** |
| **APC** | **Apacha** | **3.09** | **247** | *eP* | | **Pn** | **19 29 00.3** | **+2.1** |
| APC | | | | *eS* | | **Sn** | **19 29 35.7** | **+1.9** |
| **KDTR** | **Khodutka, Kamc** | **3.34** | **224** | P | PN | **Pn** | **19 29 02.3** | **+0.7** |
| KDTR | | | | S | | **Sn** | **19 29 38.7** | **-1.2** |
| **KDTR** | **Khodutka, Kamc** | **3.34** | **224** | *eP* | | **Pn** | **19 29 02.3** | **+0.7** |
| KDTR | | | | *eS* | | **Sn** | **19 29 38.7** | **-1.2** |
| **PAU** | **Pauzhetka** | **4.13** | **230** | P | PN | **Pn** | **19 29 14.6** | **+2.2** |
| **PAU** | **Pauzhetka** | **4.13** | **230** | *eP* | | **Pn** | **19 29 14.6** | **+2.2** |
| **SKR** | **Severo-Kuril's** | **5.00** | **227** | *ePN* | | **Pn** | **19 29 25.6** | **+1.3** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.00** | **227** | P | | **Pn** | **19 29 25.3** | **+1.0** |
| SKR | | | | S | | **Sn** | **19 30 20.1** | **-0.7** |
| **OSSR** | **Ossora** | **5.06** | **7** | P | PN | **Pn** | **19 29 24.8** | **-0.3** |
| **OSSR** | **Ossora** | **5.06** | **7** | *eP* | | **Pn** | **19 29 24.8** | **-0.3** |
| **TILK** | **Tilichiki** | **6.63** | **19** | P | PN | **Pn** | **19 29 47.8** | **+1.1** |
| **TILK** | **Tilichiki** | **6.63** | **19** | *eP* | | **Pn** | **19 29 47.8** | **+1.1** |
| **MA2** | **Magadan** | **8.07** | **316** | P | PN | **Pn** | **19 30 08.6** | **+2.2** |
| **MA2** | **Magadan** | **8.07** | **316** | P | Pn | **Pn** | **19 30 08.2** | **+1.8** |
| **KMSK** | **Kamenskaya** | **8.55** | **14** | P | PN | **Pn** | **19 30 14.3** | **+1.4** |
| **KMSK** | **Kamenskaya** | **8.55** | **14** | P | P | **Pn** | **19 30 14.3** | **+1.4** |
| **SEY** | **Seymchan** | **10.00** | **334** | P | | **Pn** | **19 30 33.0** | **+0.3** |
| | baz=176,slow=15,SNR=1.4 | | | | | | | |
| **TYV** | **Tymovskoe** | **12.15** | **262** | *ePN* | | **Pn** | **19 31 06.3** | **+4.1** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,200nm,7.5s | | | | | | | |
| **BILL** | **Bilibino** | **14.00** | **7** | *ceP* | | **Pn** | **19 31 28.6** | **+1.4** |
| BILL | | | | *eS* | | **Sn** | **19 33 56.4** | **-4.5** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,102nm,16.0s | | | | | | | |
| **BILL** | **Bilibino** | **14.00** | **7** | | | **P** | **19 31 34.5** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **14.12** | **247** | *i* | P | **Pn** | **19 31 29.9** | **+0.9** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **14.12** | **247** | | P | **P** | **19 31 34.7** | **-0.8** |
| **SHO** | **Shikotan** | **14.28** | **229** | *eP* | | Pn | 19 31 24.9 | -6.2 |
| **JKA** | **Kamikawa-asahi** | **16.11** | **239** | | | **Pn** | **19 31 56.1** | **+1.2** |
| JKA | | | | | IAmb | IAmb | 19 32 02.7 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **ASAJ** | **Asahikawa** | **16.11** | **239** | | P | **Pn** | **19 31 54.5** | **-0.4** |
| | comp=Z,1.1nm,0.3s,baz=335,slow=32,SNR=7.6 | | | | | | | |
| ASAJ | | | | | LR | LR | 19 37 51.3 | |
| | comp=Z,77nm,19.7s,baz=80,slow=36 | | | | | | | |
| **ASAJ** | **Asahikawa** | **16.11** | **239** | | P | **Pn** | **19 31 56.1** | **+1.2** |
| ASAJ | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **ERM** | **Erimo** | **17.41** | **233** | | P | **Pn** | **19 32 08.3** | **-2.9** |
| ERM | | | | | pmax | pmax | | |
| | comp=Z,123nm,1.5s | | | | | | | |
| **ERM** | **Erimo** | **17.41** | **233** | | Pn | **Pn** | **19 32 08.3** | **-2.9** |
| **YAK** | **Yakutsk** | **18.51** | **308** | | P | **P** | **19 32 21.4** | **-2.6** |
| | comp=Z,0.0nm,0.3s,baz=79,slow=2.2,SNR=1.8 | | | | | | | |
| **YAK** | **Yakutsk** | **18.51** | **308** | *ceP* | | **Pn** | **19 32 24.6** | **+0.1** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **TNA** | **Tin City** | **18.70** | **41** | P | | **Pn** | **19 32 28.3** | **+1.6** |
| **KLR** | **Kul'dur** | **19.21** | **267** | P | | **P** | **19 32 30.8** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=37,slow=10,SNR=7.1 | | | | | | | |
| KLR | | | | | LR | LR | 19 39 34.2 | |
| | comp=Z,62nm,19.6s,baz=260,slow=36 | | | | | | | |
| **KLR** | **Kul'dur** | **19.21** | **267** | *ceP* | | **P** | **19 32 32.0** | **+0.2** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.6s | | | | | | | |
| **ANM** | **Nome** | **19.38** | **45** | P | | **Pn** | **19 32 35.9** | **+1.1** |
| ANM | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **ANM** | **Nome** | **19.38** | **45** | | | **Pn** | **19 32 35.9** | **+1.1** |
| ANM | | | | | IAmb | IAmb | 19 32 39.6 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **ZEA** | **Zeya** | **20.23** | **283** | *eP* | | Pn | 19 32 44.9 | -0.1 |
| **USRK** | **Ussuriysk Ar.** | **21.78** | **255** | | LR | LR | 19 42 51.8 | |
| | comp=Z,64nm,18.2s,baz=3.9,slow=41 | | | | | | | |
| **JMM** | **Marumori** | **21.82** | **230** | | P | **P** | **19 33 00.0** | **+0.1** |
| JMM | | | | | IAmb | IAmb | 19 33 03.5 | |
| | comp=Z,42nm,1.4s | | | | | | | |
| **TIXI** | **Tiksi** | **22.49** | **333** | *ceP* | | **P** | **19 33 06.7** | **-0.2** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.7s | | | | | | | |
| **TTA** | **Tatalina** | **23.21** | **51** | P | | **P** | **19 33 15.5** | **+1.0** |
| TTA | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **TTA** | **Tatalina** | **23.21** | **51** | P | | **P** | **19 33 15.5** | **+1.0** |
| TTA | | | | | IAmb | IAmb | 19 33 17.7 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **O18K** | **Koktuh Hills** | **23.68** | **59** | P | | **P** | **19 33 19.5** | **+0.6** |
| **L19K** | **White Mountain** | **23.73** | **53** | P | | **P** | **19 33 20.3** | **+0.9** |
| **M19K** | **Big River Lodg** | **23.96** | **54** | P | | **P** | **19 33 22.9** | **+1.4** |
| M19K | | | | | IAmb | IAmb | 19 33 34.0 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **24.08** | **232** | P | | **P** | **19 33 22.6** | **-0.2** |
| MJB9 | | | | | IAmb | IAmb | 19 33 25.1 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.08** | **232** | P | | **P** | **19 33 23.0** | **+0.2** |
| | comp=Z,4.3nm,0.5s,baz=22,slow=9.1,SNR=25 | | | | | | | |
| MJAR | | | | | LR | LR | 19 43 02.7 | |
| | comp=Z,55nm,20.8s,baz=40,slow=37 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.08** | **232** | | P | **P** | **19 33 22.9** | **+0.1** |
| MJAR | | | | | IAmb | IAmb | 19 33 25.1 | |
| | comp=Z,5.5nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **24.08** | **232** | | P | **P** | **19 33 23.0** | **+0.2** |
| MAJO | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **24.08** | **232** | | P | **P** | **19 33 23.0** | **+0.2** |
| MAJO | | | | | IAmb | IAmb | 19 33 25.1 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **MAT** | **Matsushiro** | **24.08** | **232** | | P | **P** | **19 33 22.5** | **-0.3** |
| **K20K** | **Telida** | **24.11** | **50** | | P | **P** | **19 33 24.1** | **+1.2** |
| **J20K** | **Nowinta River** | **24.11** | **48** | | P | **P** | **19 33 23.3** | **+0.5** |
| J20K | | | | | IAmb | IAmb | 19 33 25.4 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **IMAR** | **Indian Mountai** | **24.45** | **44** | | P | **P** | **19 33 26.0** | **+0.2** |
| **H21K** | **Melozitna Rive** | **24.80** | **45** | | P | **P** | **19 33 29.6** | **+0.6** |
| **PPLA** | **Purkeypile** | **24.96** | **51** | | P | **P** | **19 33 32.5** | **+1.8** |
| PPLA | | | | | IAmb | IAmb | 19 33 34.4 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **OHAK** | **Old Harbor** | **25.09** | **65** | | P | **P** | **19 33 32.5** | **+0.8** |
| **JGF** | **Kuroka** | **25.25** | **232** | | P | **P** | **19 33 33.2** | **-0.3** |
| JGF | | | | | IAmb | IAmb | 19 33 39.3 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **KTH** | **Kantishna Hill** | **25.52** | **50** | | P | **P** | **19 33 36.7** | **+1.0** |
| KTH | | | | | IAmb | IAmb | 19 33 51.6 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **CNPM** | **China Poot** | **25.72** | **59** | | P | **P** | **19 33 38.8** | **+1.3** |
| **TOLK** | **Toolik Lake Re** | **26.41** | **38** | | P | **P** | **19 33 44.1** | **+0.4** |
| **RND** | **Reindeer** | **26.46** | **50** | | P | **P** | **19 33 44.5** | **+0.3** |
| RND | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **RND** | **Reindeer** | **26.46** | **50** | | P | **P** | **19 33 44.5** | **+0.3** |
| RND | | | | | IAmb | IAmb | 19 33 53.5 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **MDM** | **Murphy Dome** | **26.68** | **46** | | P | **P** | **19 33 48.2** | **+2.1** |
| **CCB** | **Clear Creek Bu** | **26.87** | **47** | | P | **P** | **19 33 48.5** | **+0.7** |
| **PWL** | **Port Wells** | **26.95** | **56** | | P | **P** | **19 33 49.6** | **+1.0** |
| **HDA** | **Harding Lake** | **27.25** | **48** | | P | **P** | **19 33 51.4** | **+0.1** |
| **IL31** | | **27.26** | **47** | | P | **P** | **19 33 52.0** | **+0.8** |
| **ILAR** | **Eielson Array** | **27.26** | **47** | | P | **P** | **19 33 51.5** | **+0.2** |
| | comp=Z,1.3nm,0.7s,baz=260,slow=7.9,SNR=17 | | | | | | | |
| **J25K** | **Salcha River,** | **27.92** | **47** | | P | **P** | **19 33 57.5** | **+0.2** |
| J25K | | | | | IAmb | IAmb | 19 34 19.5 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **28.18** | **41** | | P | **P** | **19 34 00.1** | **+0.5** |
| **SCRK** | **Sand Creek** | **28.57** | **48** | | P | **P** | **19 34 03.1** | **-0.1** |
| **KSRS** | **Korea Array** | **28.62** | **248** | | P | **P** | **19 34 01.9** | **-1.7** |
| | comp=Z,0.8nm,0.7s,baz=44,slow=8.8,SNR=2.1 | | | | | | | |
| KSRS | | | | | LR | LR | 19 44 17.9 | |
| | comp=Z,44nm,20.2s,baz=40,slow=34 | | | | | | | |
| **N25K** | **Chitina, Valde** | **28.62** | **53** | | P | **P** | **19 34 04.8** | **+1.2** |
| **BMRM** | **Bremner River** | **28.73** | **55** | | P | **P** | **19 34 04.7** | **+0.2** |
| BMRM | | | | | IAmb | IAmb | 19 34 33.0 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **L27K** | **Beaver Creek,** | **29.65** | **50** | | P | **P** | **19 34 14.1** | **+1.5** |
| L27K | | | | | IAmb | IAmb | 19 34 27.1 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **29.67** | **50** | | P | **P** | **19 34 14.6** | **+1.8** |
| **EGAK** | **Eagle** | **29.71** | **46** | | P | **P** | **19 34 13.3** | **+0.2** |
| EGAK | | | | | IAmb | IAmb | 19 34 36.5 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **29.75** | **51** | | P | **P** | **19 34 14.3** | **+0.6** |
| **BARN** | **Barnard Glacie** | **30.11** | **54** | | P | **P** | **19 34 18.2** | **+1.3** |
| **INK** | **Inuvik** | **32.31** | **39** | | P | **P** | **19 34 36.0** | **+0.1** |
| | comp=Z,2.7nm,0.3s,baz=286,slow=4.5,SNR=4.5 | | | | | | | |
| INK | | | | | LR | LR | 19 48 42.6 | |
| | comp=Z,87nm,18.1s,baz=114,slow=38 | | | | | | | |
| **INK** | **Inuvik** | **32.31** | **39** | | P | **P** | **19 34 36.6** | **+0.7** |
| INK | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **INK** | **Inuvik** | **32.31** | **39** | | P | **P** | **19 34 36.5** | **+0.7** |
| INK | | | | | IAmb | IAmb | 19 34 49.0 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **A36M** | **Sachs Harbour** | **34.60** | **32** | | P | **P** | **19 34 56.9** | **+1.2** |
| A36M | | | | | IAmb | IAmb | 19 35 09.0 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.67** | **172** | | T | T | 20 12 09.8 | |
| | baz=355,slow=76,SNR=348 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.69** | **172** | | T | T | 20 12 13.8 | |
| | baz=355,slow=76,SNR=444 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.69** | **172** | | T | T | 20 12 14.0 | |
| | baz=355,slow=76,SNR=361 | | | | | | | |
| **C36M** | **Paulatuk** | **35.50** | **36** | | P | **P** | **19 35 04.3** | **+0.8** |
| C36M | | | | | IAmb | IAmb | 19 35 05.5 | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **NRIK** | **Noril'sk** | **35.57** | **324** | | LR | LR | 19 50 50.2 | |
| | comp=Z,74nm,19.5s,baz=15,sl

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **85.66** | **349** | pP | pP | 19 40 57.8 | -1.0 | |
| | comp=Z,0.6nm,0.6s,baz=358,slow=4.2,SNR=3.3 | | | | | | | |

*IDC **04** 19:28:55.5±1.0, 13°.76N×122°.56E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.4/44, mbtmp3.7/7, Error ellipse: s-maj=28.4km s-min=13.9km az=25.0*
*MAN **04** 19:28:56.7, 13°.68N×122°.29E, h1km, mb4.6, ML3.5, MS3.3*
*MAN INTENSITY II - LOPEZ, QUEZON; INTENSITY I - GUINAYANGAN, QUEZON.*

**ISC 04 19:28:56.8±1.3, 13°.62N±0°.04×122°.39E±0°.05, h7km±9km, n16, σ1°.44/21, mb3.9/8, 1C-5D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GQP** | **Guinayangan** | **0.29** | **11** | ⇓*i* P | **Pg** | **19 29 02.7** | **+0.2** |
| GQP | | | | *i* S | **Sg** | **19 29 06.1** | **-0.3** |
| **LQP** | **Lukban** | **0.96** | **301** | ⇑*e* P | **Pg** | **19 29 13.4** | **-1.9** |
| LQP | | | | *i* S | **Sg** | **19 29 27.4** | **-0.5** |
| **PGP** | **Puerto Galera** | **1.40** | **265** | ⇓*e* P | **Pn** | **19 29 21.7** | **-1.2** |
| PGP | | | | *i* S | **Sn** | **19 29 41.1** | **-0.5** |
| **TGY** | **Tagaytay City** | **1.49** | **289** | Pg | **Pn** | **19 29 24.2** | **+0.1** |
| | 485nm,0.3s,baz=93,slow=4.6,SNR=7.8 | | | | | | |
| TGY | | | | Lg | Lg | 19 29 46.8 | |
| | 452nm,0.3s,baz=110,slow=22,SNR=18 | | | | | | |
| **TGY** | **Tagaytay City** | **1.49** | **289** | *e* P | **Pn** | **19 29 24.2** | **+0.1** |
| TGY | | | | *i* S | **Sg** | **19 29 49.5** | **+4.7** |
| **RCP** | **Roxas** | **2.08** | **170** | ⇓*e* P | **Pg** | **19 29 36.3** | **-0.4** |
| **PCPH** | **Palayan** | **2.30** | **327** | ⇓*e* P | **Pn** | **19 29 34.9** | **-0.2** |
| PCPH | | | | *e* S | **Sb** | **19 30 06.3** | **-1.0** |
| **JAP** | **San Jose, Anti** | **2.89** | **189** | ⇓*e* P | **Pb** | **19 29 47.9** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **23.03** | **285** | P | **P** | **19 34 04.2** | **+1.4** |
| | 1.7nm,0.9s,baz=95,slow=7.4,SNR=11 | | | | | | |
| **GTA** | **Gaotai** | **32.49** | **326** | *e* P | **P** | **19 35 29.4** | **+1.1** |
| GTA | | | | pP | pP | 19 35 33.5 | +3.0 |
| GTA | | | | sP | sP | 19 35 36.0 | +4.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.36** | **160** | P | **P** | **19 35 53.5** | **+0.3** |
| | comp=Z,0.6nm,0.9s,baz=343,slow=8.7,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **38.73** | **163** | P | **P** | **19 36 22.6** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=345,slow=7.3,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.08** | **323** | P | **P** | **19 37 29.7** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=108,slow=8.2,SNR=5.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.74** | **339** | P | **P** | **19 41 05.1** | **-0.1** |
| | comp=Z,4.5nm,1.0s,baz=76,slow=7.5,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **81.15** | **331** | P | **P** | **19 41 11.5** | **-1.3** |
| | comp=Z,2.0nm,0.8s,baz=62,slow=6.5,SNR=3.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **88.08** | **333** | P | **P** | **19 41 47.2** | **-0.7** |
| | comp=Z,0.5nm,0.6s,baz=68,slow=4.8,SNR=2.4 | | | | | | |

**IDC 04 19:31:38.7±1.1, 13°.40N×146°.20E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.4/45, mbtmp3.5/3, Error ellipse: s-maj=39.5km s-min=6.2km az=176.0, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.31** | **278** | Pn | Pn | 19 32 04.3 | 0.0 |
| | 16nm,0.3s,baz=48,slow=4.2,SNR=16 | | | | | | |
| GUMO | | | | Sn | Sn | 19 32 23.3 | +0.9 |
| | 37nm,0.3s,baz=202,slow=23,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.52** | **316** | P | P | 19 42 05.8 | +1.5 |
| | 0.4nm,0.7s,baz=86,slow=7.8,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **68.19** | **25** | P | P | 19 42 39.8 | -0.9 |
| | 0.2nm,0.5s,baz=256,slow=6.1,SNR=5.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.43** | **28** | P | P | 19 44 02.5 | -0.1 |
| | 0.2nm,0.5s,baz=279,slow=4.5,SNR=4.5 | | | | | | |

*IDC **04** 19:33:12.4±1.7, 0°.78N×131°.97E, h0km, mb4.0/5, mb1 4.3/7, mb1mx3.8/37, mbtmp4.1/7, ML4.1/2, MS3.0/5, Ms1 3.0/5, ms1mx2.7/70, Error ellipse: s-maj=53.5km s-min=17.9km az=79.0*
*DJA **04** 19:33:15.6±0.5, 1°.N±4°×13°.2E±°, h10km, M4.4/12, mb4.7/7, mB5.0/3, MLv4.2/12, Mw(mB)4.3/3*
*NEIC **04** 19:33:15.5±1.2, 0°.77N±0°.08×132°.0E±0°.1, h17km±4km, mb4.2/13, Error ellipse: s-maj=19.7km s-min=9.9km az=65.0*

**ISC 04 19:33:17.1±0.9, 0°.69N±0°.08×131°.99E±0°.09, h35km, n54, σ1°.27/51, mb4.0/8, MS3.2/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SWI** | **Sorong** | **1.70** | **205** | P | **Pn** | **19 33 43.2** | **-1.2** |
| SWI | | | | S | **Sn** | **19 34 04.0** | **-0.9** |
| **SIJI** | **Sorong** | **1.71** | **205** | Pn | **Pn** | **19 33 43.7** | **-0.7** |
| | 129nm,0.3s,baz=229,slow=22,SNR=796 | | | | | | |
| SIJI | | | | Sn | **Sn** | **19 34 04.8** | **-0.3** |
| | 119nm,0.3s,baz=48,slow=14,SNR=5.6 | | | | | | |
| SIJI | | | | LR | LR | 19 34 36.2 | |
| | comp=Z,208nm,18.4s,baz=296,slow=47 | | | | | | |
| **FAKI** | **Fak Fak** | **3.59** | **176** | P | **Pn** | **19 34 11.3** | **+0.9** |
| **FAKI** | **Fak Fak** | **3.59** | **176** | | **Pn** | **19 34 11.2** | **+0.8** |
| **TNTI** | **Ternate** | **4.62** | **271** | P | **Pn** | **19 34 24.5** | **-0.1** |
| **TNTI** | **Ternate** | **4.62** | **271** | | **Pn** | **19 34 24.4** | **-0.1** |
| **TNTI** | **Ternate** | **4.62** | **271** | P | **Pn** | **19 34 25.0** | **+0.5** |
| **LBMI** | **Labuha** | **4.68** | **254** | P | **Pn** | **19 34 25.8** | **+0.5** |
| **SRPI** | **Serui, Papua** | **4.95** | **121** | P | **Pn** | **19 34 30.8** | **+1.7** |
| **MSAI** | **Masohi** | **5.04** | **217** | P | **Pn** | **19 34 31.2** | **+0.9** |
| **SANI** | **Sanana** | **6.59** | **246** | P | **Pn** | **19 34 51.8** | **+0.3** |
| | 0.1nm14nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **6.59** | **246** | P | **Pn** | **19 34 52.3** | **+0.8** |
| **KMSI** | **Cibinong** | **8.01** | **269** | P | **Pn** | **19 35 11.7** | **+0.6** |
| | 0.4nm1um104nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **8.98** | **270** | P | **Pn** | **19 35 27.1** | **+2.7** |
| | 13nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **9.00** | **315** | LR | LR | 19 39 33.4 | |
| | comp=Z,80nm,18.1s,baz=160,slow=43 | | | | | | |
| **MRSI** | **Marisa** | **10.05** | **269** | P | **Pn** | **19 35 38.8** | **-0.3** |
| | 19nm,0.6s | | | | | | |
| **APSI** | **Ampana** | **10.46** | **261** | P | **Pn** | **19 35 44.8** | **+0.1** |
| | 41nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **11.21** | **272** | P | **Pn** | **19 35 55.1** | **+0.1** |
| **SPSI** | **Sidrap Palu** | **13.06** | **249** | P | **Pn** | **19 36 20.3** | **+0.1** |
| **DRS** | **Darwin Rock St** | **13.08** | **185** | P | **Pn** | **19 36 19.1** | **-1.4** |
| **KDU** | **Kakadu** | **13.30** | **178** | P | **Pn** | **19 36 21.4** | **-2.1** |
| **MTN** | **Manton Dam** | **13.47** | **184** | | **Pn** | **19 36 23.9** | **-2.0** |
| **MTN** | **Manton Dam** | **13.47** | **184** | P | **Pn** | **19 36 24.3** | **-1.6** |
| **KAPI** | **Kappang** | **13.47** | **245** | LR | LR | 19 42 26.6 | |
| | comp=Z,28nm,18.3s,baz=102,slow=41 | | | | | | |
| **BATI** | **Baumata** | **13.63** | **217** | Pn | **Pn** | **19 36 29.4** | **+1.4** |
| | 1.1nm,0.3s,baz=38,slow=6.9,SNR=3.1 | | | | | | |
| **KNRA** | **Kununurra** | **16.57** | **191** | Pn | **Pn** | **19 37 02.8** | **-4.1** |
| KNRA | | | | IAmb | IAmb | 19 37 12.3 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.68** | **198** | P | **P** | **19 37 43.7** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=36,slow=9.8,SNR=14 | | | | | | |
| **SBUM** | **Sibu** | **19.84** | **275** | P | **P** | **19 37 45.3** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **19.97** | **243** | P | **P** | **19 37 47.3** | **+0.7** |
| JAGI | | | | IAmb | IAmb | 19 37 49.2 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.46** | **174** | P | **P** | **19 37 52.7** | **+0.8** |
| WB0 | | | | IAmb | IAmb | 19 37 53.9 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.62** | **174** | P | **P** | **19 37 54.7** | **+1.0** |
| **WRAB** | **Tennant Creek** | **20.62** | **174** | P | **P** | **19 37 54.7** | **+1.0** |
| **WRA** | **Warramunga Arr** | **20.63** | **174** | P | **P** | **19 37 54.2** | **+0.5** |
| | comp=Z,16nm,0.7s,baz=351,slow=11,SNR=66 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.63** | **174** | P | **P** | **19 37 53.0** | **-0.8** |
| **WB2** | **Warramunga Arr** | **20.63** | **174** | P | **P** | **19 37 54.8** | **+1.0** |
| **WR0** | **Warramunga Arr** | **20.67** | **173** | P | **P** | **19 37 55.1** | **+0.9** |
| WR0 | | | | IAmb | IAmb | 19 37 56.3 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **24.28** | **176** | P | **P** | **19 38 32.4** | **+1.0** |
| AS31 | | | | IAmb | IAmb | 19 38 34.5 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.28** | **176** | P | **P** | **19 38 33.4** | **+2.1** |
| | comp=Z,5.9nm,0.6s,baz=355,slow=9.1,SNR=108 | | | | | | |
| **ASAR** | **Alice Springs** | **24.28** | **176** | P | **P** | **19 38 32.6** | **+1.3** |
| **CTA** | **Charters Tower** | **24.93** | **147** | LR | LR | 19 49 42.4 | |
| | comp=Z,80nm,18.3s,baz=263,slow=40 | | | | | | |
| **WRKA** | **Warakurna** | **25.82** | **188** | P | **P** | **19 38 47.1** | **+1.8** |
| **QLP** | **Quilpie** | **29.57** | **157** | P | **P** | **19 39 20.1** | **+1.3** |
| | comp=Z,17nm,2.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.14** | **9** | LR | LR | 19 53 07.8 | |
| | comp=Z,38nm,19.7s,baz=90,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **36.78** | **355** | LR | LR | 19 52 50.7 | |
| | comp=Z,18nm,22.0s,baz=20,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.93** | **301** | P | **P** | **19 40 24.0** | **+0.9** |
| | comp=Z,1.0nm,0.6s,baz=119,slow=6.8,SNR=8.4 | | | | | | |
| **CHTO** | **Chiang Mai** | **37.08** | **301** | P | **P** | **19 40 25.4** | **+1.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **63.06** | **324** | P | **P** | **19 43 41.4** | **+0.4** | |
| MK31 | | | | IAmb | IAmb | 19 43 52.7 | | |
| | comp=Z,1.1nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.06** | **324** | P | **P** | **19 43 40.9** | **-0.1** | |
| | comp=Z,0.4nm,0.6s,baz=108,slow=8.0,SNR=5.4 | | | | | | | |
| **MAKZ** | **Makanchi** | **63.25** | **324** | P | **P** | **19 43 41.7** | **-0.5** | |
| MAKZ | | | | IAmb | IAmb | 19 43 43.0 | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **PRZ** | **Przheval'sk** | **63.44** | **318** | P | **P** | **19 43 42.5** | **-1.3** | |
| **ZALV** | **Zalesovo Beam** | **65.70** | **332** | P | **P** | **19 43 57.0** | **-1.1** | |
| | comp=Z,0.6nm,0.5s,baz=116,slow=6.6,SNR=2.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **65.70** | **332** | P | **P** | **19 43 56.8** | **-1.2** | |
| **KKAR** | **Karatay Array** | **69.03** | **316** | P | **P** | **19 44 18.8** | **-0.6** | |
| **GO01** | **Chusmiza** | **151.96** | **134** | | **PKPdf** | **19 53 01.6** | **-2.0** | |

**MEX 04 20:14:43.7±0.7, 16°.18N×98°.12W, h4km±5km, MD3.9, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.21** | **358** | *i* P | Pg | 20 14 47.7 | -0.1 |
| PNIG | | | | *i* S | Sg | 20 14 50.5 | 0.0 |
| **PNIG** | **Pinotepa** | **0.21** | **358** | *i* P | Pg | 20 14 47.7 | -0.1 |
| PNIG | | | | *i* S | Sg | 20 14 50.5 | 0.0 |
| **YOIG** | **Yosondua** | **0.87** | **39** | *e* P | Pg | 20 14 58.3 | -2.1 |
| **YOIG** | **Yosondua** | **0.87** | **39** | *i* P | Pg | 20 14 58.3 | -2.0 |
| YOIG | | | | *i* S | Sg | 20 15 09.0 | -2.6 |
| **PEIG** | **Puerto Escondi** | **0.95** | **101** | *e* P | Pg | 20 14 60.0 | -2.0 |
| **PEIG** | **Puerto Escondi** | **0.95** | **101** | *e* P | Pg | 20 14 59.7 | -2.3 |
| PEIG | | | | *i* S | Sg | 20 15 11.7 | -2.7 |
| **CRIG** | **Cruz Grande** | **1.11** | **300** | *e* P | Pg | 20 15 01.8 | -3.2 |
| CRIG | | | | *i* S | Sg | 20 15 16.4 | -3.2 |
| **CRIG** | **Cruz Grande** | **1.11** | **300** | *e* P | Pg | 20 15 03.5 | -1.6 |
| CRIG | | | | *i* S | Sg | 20 15 16.4 | -3.2 |
| **TXIG** | **Tlaxiaco** | **1.12** | **18** | *e* P | Pg | 20 15 02.5 | -2.7 |
| **TXIG** | **Tlaxiaco** | **1.12** | **18** | *e* P | Pg | 20 15 02.5 | -2.7 |
| TXIG | | | | *e* S | Sg | 20 15 15.9 | -3.7 |
| **MGIG** | **Malinaltepec** | **1.15** | **335** | *e* P | Pg | 20 15 03.3 | -2.6 |
| MGIG | | | | *e* S | Sg | 20 15 18.1 | -2.7 |
| **MGIG** | **Malinaltepec** | **1.15** | **335** | *e* P | Pg | 20 15 03.2 | -2.7 |
| MGIG | | | | *i* S | Sg | 20 15 18.1 | -2.8 |
| **VHO** | **Vista Hermosa** | **1.60** | **56** | *e* P | Pn | 20 15 09.8 | -3.1 |
| VHO | | | | *e* S | Sn | 20 15 29.3 | -4.8 |
| **HLIG** | **Huajuapan de L** | **1.67** | **10** | *e* P | Pn | 20 15 11.0 | -2.9 |
| HLIG | | | | *e* S | Sn | 20 15 31.7 | -4.1 |
| **HLIG** | **Huajuapan de L** | **1.67** | **10** | *e* P | Pn | 20 15 11.2 | -2.7 |
| HLIG | | | | *i* S | Sn | 20 15 32.0 | -3.8 |
| **DAIG** | **Los Arroyos** | **1.69** | **300** | *e* P | Pn | 20 15 13.0 | -1.0 |
| DAIG | | | | *e* S | Sn | 20 15 33.9 | -2.1 |
| **FTIG** | **Fresnillo de T** | **1.71** | **360** | *e* P | Pn | 20 15 11.8 | -2.7 |
| FTIG | | | | *i* S | Sn | 20 15 34.3 | -2.6 |
| **FTIG** | **Fresnillo de T** | **1.71** | **360** | *e* P | Pn | 20 15 11.8 | -2.7 |
| FTIG | | | | *i* S | Sn | 20 15 33.7 | -3.2 |
| **TOIG** | **Toxpalan** | **2.15** | **28** | *e* P | Pn | 20 15 18.2 | -2.3 |
| TOIG | | | | *e* S | Sn | 20 15 47.1 | -0.6 |
| **TOIG** | **Toxpalan** | **2.15** | **28** | *e* P | Pn | 20 15 18.4 | -2.1 |
| TOIG | | | | *i* S | Sn | 20 15 46.8 | -0.9 |
| **MEIG** | **Mezcala** | **2.25** | **321** | *e* S | Sb | 20 15 52.0 | -1.2 |
| **PLIG** | **Platanillo** | **2.56** | **329** | *e* P | Pb | 20 15 30.0 | -0.3 |
| **YAIG** | **Yautepec** | **2.81** | **341** | *e* P | Pb | 20 15 34.3 | -0.3 |

**VIE 04 20:25:16.4±0.3, 46°.70N×13°.80E, h3km, ml1.0/2, Error ellipse: s-maj=2.3km s-min=0.9km az=173.0 3 km S of Afritz, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MYKA** | **Terra Mystica** | **0.13** | **236** | *i* Pg | Pg | 20 25 18.9 | -0.1 |
| | 1.3nm,0.1s | | | | | | |
| MYKA | | | | *i* Sg | Sg | 20 25 20.8 | +0.1 |
| | 5.4nm,0.1s | | | | | | |
| **OBKA** | **Obir** | **0.55** | **110** | *i* Pg | Pg | 20 25 27.2 | +0.2 |
| | 0.1nm,0.1s | | | | | | |
| OBKA | | | | *i* Sg | Sg | 20 25 34.6 | +0.6 |
| | 2.6nm,0.2s | | | | | | |

**LJU 04 20:26:02.4, 46°.32N×13°.60E, h8km, ML0.3, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROBS** | **Robic** | **0.10** | **221** | *i* Pg | Pg | 20 26 04.8 | +0.1 |
| ROBS | | | | *i* Sg | Sg | 20 26 06.5 | +0.2 |
| ROBS | | | | IAML | | 20 26 06.6 | |
| | comp=Z,2.3nm,0.1s | | | | | | |
| **CADS** | **Cadrg** | **0.13** | **133** | *i* Pg | Pg | 20 26 05.4 | +0.1 |
| CADS | | | | *i* Sg | Sg | 20 26 07.5 | +0.3 |
| CADS | | | | IAML | | 20 26 07.6 | |
| | comp=Z,3.1nm,0.1s | | | | | | |

*TUL **04** 20:27:39.7±1.5, 35°.95N±0°.01×97°.39W±0°.02, h6km±5km, ML3.3, mb_Lg2.9/51(NEIC), Error ellipse: s-maj=2.4km s-min=1.4km az=137.0*

**NEIC 04 20:27:39.6±0.5, 35°.98N±0°.01×97°.41W±0°.02, h5km±1km, Error ellipse: s-maj=3.0km s-min=2.6km az=142.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK029** | **Liberty Lake** | **0.18** | **192** | Pg | Pg | 20 27 43.4 | +0.3 |
| OK029 | | | | Sg | Sg | 20 27 46.0 | +0.4 |
| **BCOK** | **Bluff Creek, N** | **0.36** | **207** | Pg | Pg | 20 27 46.6 | +0.1 |
| **OK005** | **Luther M Schoo** | **0.37** | **151** | Pg | Pg | 20 27 46.6 | 0.0 |
| **OK033** | **Mehan** | **0.39** | **80** | Pg | Pg | 20 27 47.2 | +0.1 |
| OK033 | | | | Sg | Sg | 20 27 52.1 | 0.0 |
| **OK009** | **Oakdale Elemen** | **0.39** | **182** | | Sg | 20 27 53.0 | +0.6 |
| **OK025** | **Westminster Rd** | **0.40** | **171** | Pg | Pg | 20 27 47.3 | +0.1 |
| **OK031** | **S. Brethren Rd** | **0.46** | **93** | Pg | Pg | 20 27 48.6 | +0.1 |
| OK031 | | | | Sg | Sg | 20 27 54.7 | +0.1 |
| **OK030** | **Cody Creek RV** | **0.51** | **95** | Pg | Pg | 20 27 49.5 | +0.1 |
| **OKCFA** | **Oklahoma City** | **0.56** | **183** | | Pg | 20 27 50.2 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.57** | **86** | Pg | Pg | 20 27 50.5 | +0.1 |
| **QUOK** | **Quay** | **0.60** | **71** | Pg | Pg | 20 27 51.3 | +0.1 |
| **CROK** | **Carrier** | **0.70** | **319** | Pg | Pb | 20 27 53.8 | -0.5 |
| **FNO** | **Franklin** | **0.72** | **179** | | Pg | 20 27 53.4 | +0.1 |
| **BLOK** | **Blackwell** | **0.80** | **11** | Pg | Pg | 20 27 55.3 | +0.3 |
| **W35A** | **Tecumseh** | **0.93** | **152** | Pg | Pg | 20 27 56.4 | -1.1 |
| **GC02** | **Grant County #** | **0.95** | **338** | Pg | Pg | 20 27 57.9 | +0.1 |
| **KAN13** | **South Haven SW** | **1.04** | **357** | | Pg | 20 27 59.7 | +0.2 |
| **OK032** | **Salt Plains WL** | **1.05** | **322** | Pg | Pg | 20 27 59.7 | 0.0 |
| **KAN14** | **Manchester OK** | **1.08** | **336** | | Pg | 20 28 00.3 | +0.1 |
| **KAN17** | **Caldwell West** | **1.10** | **345** | Pg | Pb | 20 28 01.0 | -0.2 |
| **T35A** | **Sumner Cattle** | **1.19** | **37** | Pn | Pg | 20 28 01.9 | -0.5 |
| **KAN01** | **Argonia South** | **1.21** | **347** | Pg | Pg | 20 28 02.7 | 0.0 |
| **KAN10** | **Anthony SW Sta** | **1.27** | **334** | Pn | Pg | 20 28 03.3 | -0.7 |
| KAN10 | | | | IAmb_Lg | | 20 28 20.9 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **OK035** | **E0210 Rd and N** | **1.28** | **305** | Pn | Pg | 20 28 03.7 | -0.4 |
| **TUL1** | **Leonard** | **1.31** | **92** | Pn | Pn | 20 28 03.3 | -1.3 |
| **KAN06** | **Argonia West S** | **1.32** | **344** | | Pn | 20 28 04.6 | -0.1 |
| **KAN08** | **Anthony NE Sta** | **1.33** | **340** | Pn | Pn | 20 28 04.8 | 0.0 |
| KAN08 | | | | IAmb_Lg | | 20 28 23.8 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.35** | **288** | Pn | Pn | 20 28 03.4 | -1.8 |
| **KAN16** | **Harper SW Stat** | **1.35** | **337** | Pn | Pn | 20 28 05.1 | -0.1 |
| **KAN12** | **Harper NE Stat** | **1.40** | **340** | Pn | Pn | 20 28 04.0 | -1.8 |
| **X34A** | **Smith Ranch, M** | **1.41** | **194** | | Pn | 20 28 05.9 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.67** | **223** | | Pn | 20 28 09.5 | +0.1 |
| **LOOK** | **Love County** | **1.99** | **174** | | Pn | 20 28 14.7 | +0.8 |
| LOOK | | | | IAmb_Lg | | 20 28 46.1 | |
| | comp=Z,77nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.17** | **129** | | Pn | 20 28 16.4 | +0.1 |
| **U38A** | **Gravette** | **2.49** | **78** | | Pn | 20 28 19.6 | -1.2 |
| **Z35A** | **Perchaven, San** | **2.64** | **177** | Pg | Pb | 20 28 26.3 | -1.1 |
| **R32A** | **Long Quarter,** | **2.65** | **337** | | Pn | 20 28 21.7 | -1.3 |
| **HHAR** | **Hobbs** | **2.83** | **83** | | Pn | 20 28 23.6 | -1.8 |
| **W39A** | **Magazine** | **3.06** | **104** | | Pn | 20 28 27.8 | -0.8 |
| W39A | | | | IAmb_Lg | | 20 29 23.6 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.18** | **11** | IAmb_Lg | | 20 29 27.1 | |
| | comp=Z,50nm,1.1s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.37** | **143** | IAmb_Lg | | 20 29 30.8 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.45** | **113** | Pn | Pn | 20 28 32.6 | -1.3 |
| **S39A** | **Bolivar** | **3.70** | **61** | Pn | Pn | 20 28 37.5 | +0.1 |
| **U40A** | **Yellville** | **3.71** | **83** | | Pn | 20 28 36.9 | -0.6 |
| U40A | | | | IAmb_Lg | | 20 29 47.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.82** | **210** | Pg | Pb | 20 28 48.7 | +1.2 |
| **X40A** | **Basin Creek Fa** | **4.03** | **110** | Pn | Pn | 20 28 40.0 | -1.9 |
| X40A | | | | | Pb | 20 28 52.0 | +1.0 |
| X40A | | | | IAmb_Lg | | 20 29 51.2 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.23** | **98** | IAmb_Lg | | 20 29 50.9 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.28** | **99** | Pn | Pn | 20 28 44.8 | -0.6 |
| W41B | | | | IAmb_Lg | | 20 30 00.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **90** | IAmb_Lg | | 20 30 02.2 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.30** | **73** | Pn | Pn | 20 28 44.2 | -1.5 |
| MGMO | | | | IAmb_Lg | | 20 30 06.1 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.71** | **59** | Pn | Pn | 20 28 49.2 | -2.1 |
| R40A | | | | IAmb_Lg | | 20 30 08.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.76** | **360** | IAmb_Lg | | 20 30 12.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.76** | **39** | Pn | Pn | 20 28 49.0 | -3.1 |
| P38A | | | | IAmb_Lg | | 20 30 20.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LCAR** | **Lake Charles** | **5.07** | **87** | IAmb_Lg | | 20 30 26.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.18** | **182** | IAmb_Lg | | 20 30 30.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.35** | **65** | IAmb_Lg | | 20 30 42.6 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **5.46** | **354** | IAmb_Lg | | 20 30 36.4 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.54** | **49** | IAmb_Lg | | 20 30 36.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.75** | **284** | IAmb_Lg | | 20 30 46.9 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **N38A** | **Joes South For** | **5.82** | **33** | IAmb_Lg | | 20 30 53.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.84** | **201** | IAmb_Lg | | 20 30 57.7 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **FVM** | **French Village** | **5.94** | **68** | IAmb_Lg | | 20 30 47.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.72** | **288** | Pn | Pn | 20 29 17.3 | -1.9 |
| SDCO | | | | IAmb_Lg | | 20 31 13.8 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **SCIA** | **State Center** | **6.76** | **28** | IAmb_Lg | | 20 31 23.5 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **8.03** | **259** | IAmb_Lg | | 20 32 13.8 | |
| | comp=Z,24nm,0.8s | | | | | | |

*PGC **04** 21:13:57.1±3.3, 50°.02N×130°.10W, h10km, MLSn2.8/7, Mw3.5/7, 204km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC **04** 21:13:59.6±3.0, 50°.18N×129°.77W, h0km, mb3.9/1, mb1 3.7/6, mb1mx3.2/48, mbtmp3.4/6, ML3.3/5, MS3.4/3, Ms1 3.4/3, ms1mx2.8/89, Error ellipse: s-maj=44.9km s-min=16.5km az=81.0*

**ISC 04 21:13:58.5±2.5, 50°.14N±0°.08×129°.81W±0°.10, h10km±14km, n24, σ1°.03/24, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.19** | **64** | Pn | **Pg** | **21 14 21.1** | **-0.1** |
| **PACB** | **Port Alice, BC** | **1.52** | **78** | Pn | **Pn** | **21 14 25.4** | **-0.2** |
| PACB | | | | Sn | **Sn** | **21 14 44.4** | **-1.0** |
| **PHC** | **Port Hardy** | **1.62** | **69** | Pn | **Pn** | **21 14 26.5** | **-0.6** |
| PHC | | | | Sn | **Sn** | **21 14 48.6** | **+0.6** |
| **MAYB** | **Maynard** | **1.71** | **80** | Pn | **Pn** | **21 14 27.7** | **-0.8** |
| **WOSB** | **Woss** | **2.08** | **88** | Pn | **Pn** | **21 14 33.2** | **-0.3** |
| **BBB** | **Bella Bella** | **2.31** | **27** | Pn | **Pn** | **21 14 36.2** | **-0.3** |
| | 7.3nm,0.3s,baz=222,slow=8.0,SNR=26 | | | | | | |
| BBB | | | | Sn | **Sn** | **21 15 05.0** | **0.0** |
| | 11nm,0.3s,baz=313,slow=20,SNR=14 | | | | | | |
| **BBB** | **Bella Bella** | **2.31** | **27** | Pn | **Pn** | **21 14 36.4** | **-0.1** |
| BBB | | | | Sn | **Sn** | **21 15 04.6** | **-0.4** |
| **NCRB** | **Newcastle Ridg** | **2.42** | **82** | Pn | **Pn** | **21 14 38.1** | **-0.2** |
| **BTB** | **Buttle Lake** | **2.86** | **102** | Sn | **Sn** | **21 15 17.3** | **-1.5** |
| **CBB** | **Campbell River** | **2.87** | **90** | Pn | **Pn** | **21 14 45.3** | **+1.1** |
| CBB | | | | Sn | **Sn** | **21 15 17.9** | **-0.8** |
| **BUTB** | **Butedale** | **3.05** | **15** | Pn | **Pn** | **21 14 46.7** | **-0.1** |
| BUTB | | | | Sn | **Sn** | **21 15 23.6** | **+0.3** |
| **BNKB** | **Banks Island** | **3.20** | **359** | Sn | **Sn** | **21 15 25.6** | **-1.4** |
| **MGB** | **Mount Grey** | **3.52** | **107** | Sn |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OK034** | **N. Norfolk Rd.** | **0.56** | **84** | Pg | Pg | 21 48 19.4 | -0.2 |
| OK034 | | | | Sg | Sg | 21 48 27.1 | +0.1 |
| **QUOK** | **Quay** | **0.60** | **69** | Pg | Pg | 21 48 20.2 | -0.2 |
| QUOK | | | | Sg | Sg | 21 48 28.2 | -0.1 |
| **FNO** | **Franklin** | **0.70** | **180** | Pg | Pg | 21 48 21.8 | -0.4 |
| FNO | | | | Sg | Sg | 21 48 31.7 | +0.3 |
| **CROK** | **Carrier** | **0.72** | **320** | Pg | Pg | 21 48 22.6 | 0.0 |
| CROK | | | | | Sg | 21 48 32.6 | +0.5 |
| **BLOK** | **Blackwell** | **0.82** | **11** | Pg | Pg | 21 48 24.4 | -0.1 |
| **W35A** | **Tecumseh** | **0.91** | **152** | Pg | Pg | 21 48 25.6 | -0.7 |
| **GC02** | **Grant County #** | **0.96** | **338** | Pg | Pg | 21 48 26.9 | -0.4 |
| **KAN13** | **South Haven SW** | **1.05** | **357** | Pg | Pg | 21 48 28.6 | -0.5 |
| **OK032** | **Salt Plains WL** | **1.07** | **323** | Pg | Pg | 21 48 29.0 | -0.2 |
| **KAN14** | **Manchester OK** | **1.09** | **336** | Pg | Pb | 21 48 29.4 | -0.4 |
| **KAN17** | **Caldwell West** | **1.12** | **345** | Pg | Pb | 21 48 30.1 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.20** | **37** | Pg | Pb | 21 48 30.9 | -0.6 |
| **KAN01** | **Argonia South** | **1.23** | **347** | | Pn | 21 48 31.8 | -0.2 |
| **KAN06** | **Argonia West S** | **1.34** | **344** | | Pb | 21 48 33.7 | -0.2 |
| **KAN08** | **Anthony NE Sta** | **1.35** | **340** | Pn | Pb | 21 48 33.9 | -0.1 |
| KAN08 | | | | lAmb_Lg | | 21 48 51.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.36** | **289** | Pn | Pn | 21 48 33.9 | +0.1 |
| **KAN16** | **Harper SW Stat** | **1.37** | **337** | Pn | Pb | 21 48 34.3 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.40** | **195** | Pn | Pb | 21 48 34.8 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.66** | **223** | Pn | Pb | 21 48 38.7 | -0.6 |
| WMOK | | | | lAmb_Lg | | 21 49 04.4 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **1.97** | **175** | Pn | Pb | 21 48 43.5 | -1.1 |
| **X37A** | **Clayton** | **2.15** | **129** | Pn | Pn | 21 48 45.2 | +0.6 |
| **W39A** | **Magazine** | **3.05** | **103** | lAmb_Lg | | 21 49 49.5 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.30** | **72** | lAmb_Lg | | 21 50 36.1 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.72** | **59** | lAmb_Lg | | 21 50 49.7 | |
| | comp=Z,6.4nm,1.2s | | | | | | |

*IDC **04** 21:52:53.4±1.1, 13°.76N×122°.51E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.5/39, mbtmp3.7/7, MS3.0/1, Ms1 3.0/1, ms1mx2.3/84, Error ellipse: s-maj=27.4km s-min=14.6km az=26.0*

*MAN **04** 21:52:55.4, 13°.79N×122°.26E, h1km, mb4.9, ML3.8, MS3.8*

*MAN INTENSITY III - LOPEZ & GENERAL LUNA, QUEZON.*

**ISC 04 21:52:55.3±0.8, 13°.69N±0°.05×122°.31E±0°.05, h14km, n14, σ1°20/15, mb3.6/7, 3C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GQP** | **Guinayangan** | **0.26** | **32** | *i* S | **Sg** | **21 53 03.7** | **-0.7** |
| **LQP** | **Lukban** | **0.85** | **300** | *e*P | **Pg** | **21 53 10.7** | **-1.2** |
| LQP | | | | *i* S | **Sg** | **21 53 21.7** | **-1.5** |
| **PGP** | **Puerto Galera** | **1.33** | **262** | *e*P | **Pn** | **21 53 18.9** | **-0.6** |
| PGP | | | | *i* S | **Sg** | **21 53 38.4** | **+0.2** |
| **TGY** | **Tagaytay City** | **1.39** | **287** | Pg | **Pg** | **21 53 21.5** | **-0.6** |
| | 324nm,0.3s,baz=193,slow=4.0,SNR=11 | | | | | | |
| TGY | | | | Lg | Lg | 21 53 43.3 | |
| | 222nm,0.3s,baz=126,slow=18,SNR=5.5 | | | | | | |
| **RCP** | **Roxas** | **2.16** | **168** | *e*P | **Pg** | **21 53 35.2** | **-1.6** |
| **PCPH** | **Palayan** | **2.20** | **328** | *e*P | Pn | 21 53 21.8 | -10 |
| PCPH | | | | *e*S | **Sg** | **21 54 04.5** | **-1.6** |
| **DAV** | **Davao City (W)** | **7.32** | **154** | LR | LR | 21 58 34.1 | |
| | comp=Z,110nm,18.5s,baz=355,slow=47 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.94** | **285** | P | **P** | **21 58 01.2** | **+1.9** |
| | 0.6nm,0.3s,baz=96,slow=7.9,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.46** | **160** | P | **P** | **21 59 50.9** | **-0.6** |
| | 0.9nm,1.0s,baz=328,slow=9.4,SNR=2.5 | | | | | | |
| **SONM** | **Songino Array** | **36.53** | **342** | P | **P** | **22 00 01.6** | **+1.1** |
| | 0.4nm,0.7s,baz=152,slow=6.5,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.82** | **163** | P | **P** | **22 00 21.1** | **+1.1** |
| | 0.3nm,0.6s,baz=346,slow=7.0,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.98** | **323** | P | **P** | **22 01 26.1** | **+0.1** |
| | 0.4nm,0.7s,baz=124,slow=8.7,SNR=5.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.65** | **339** | P | **P** | **22 05 02.8** | **+0.8** |
| | 4.6nm,1.0s,baz=82,slow=9.9,SNR=6.4 | | | | | | |
| **FINES** | **FINESS Array B** | **81.05** | **331** | P | **P** | **22 05 09.7** | **0.0** |
| | 4.2nm,1.1s,baz=76,slow=5.9,SNR=5.0 | | | | | | |

**KRSC 04 21:58:04.0±2.7, 53°.06N×167°.72E, h40km±55km, ML3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **2.38** | **335** | S | Sn | 21 59 10.7 | +2.2 |
| **MKZ** | **Mys Kozlova** | **3.85** | **295** | *e*P | Pn | 21 59 04.1 | +3.4 |
| MKZ | | | | *e*S | Sn | 21 59 49.5 | +4.8 |
| **KBTR** | **Krutoberegovo** | **4.25** | **320** | *e*P | Pn | 21 59 07.8 | +1.6 |
| **SPN** | **Mys Shipunski** | **4.64** | **274** | *e*S | Sn | 22 00 07.3 | +3.2 |
| **TUMD** | **Tumrok D** | **4.81** | **299** | P | Pn | 21 59 18.4 | +4.5 |
| TUMD | | | | *e*S | Sn | 22 00 13.8 | +5.5 |
| **TUMR** | **Tumrok** | **4.98** | **300** | *e*P | Pn | 21 59 20.5 | +4.2 |
| **KMNR** | **Kamenistaya** | **5.14** | **305** | P | Pn | 21 59 23.2 | +4.7 |
| KMNR | | | | S | Sn | 22 00 25.0 | +8.5 |
| **SDLR** | **Sedlovina** | **5.32** | **276** | P | Pn | 21 59 25.6 | +4.6 |
| SDLR | | | | S | Sn | 22 00 26.9 | +5.9 |
| **UGLR** | **Uglovaya** | **5.36** | **275** | P | Pn | 21 59 26.7 | +5.2 |
| **SMAR** | **Somma** | **5.37** | **276** | P | Pn | 21 59 26.4 | +4.6 |
| **AVH** | **Avacha** | **5.41** | **276** | P | Pn | 21 59 27.2 | +5.0 |
| **KOK** | **Koryaka** | **5.47** | **276** | *e*P | Pn | 21 59 27.8 | +4.8 |
| **RUS** | **Russkaya** | **5.63** | **267** | *e*P | Pn | 21 59 29.4 | +4.3 |
| RUS | | | | *e*S | Sn | 22 00 32.0 | +3.6 |
| **KRMR** | **Karymshinskiy** | **5.80** | **272** | S | Sn | 22 00 36.9 | +4.2 |
| **MTVR** | **Mutnovka** | **5.82** | **268** | P | Pn | 21 59 32.5 | +4.7 |
| MTVR | | | | S | Sn | 22 00 37.7 | +4.4 |
| **GRL** | **Gorelyy** | **5.87** | **269** | P | Pn | 21 59 34.6 | +6.0 |
| **GNL** | **Ganaly** | **5.89** | **280** | P | Pn | 21 59 35.0 | +6.2 |
| **KDTR** | **Khodutka, Kamc** | **6.03** | **262** | P | Pn | 21 59 34.6 | +4.0 |
| KDTR | | | | S | Sn | 22 00 40.1 | +1.8 |

*ATH **04** 22:02:11.5, 33°.06N×27°.00E, h10km±31km, ML3.0/3, Error ellipse: s-maj=31.6km s-min=4.1km az=0.0*

*ISK **04** 22:02:12.4, 33°.66N×27°.95E, h5km, ML3.4/12*

*HLW **04** 22:02:13.2, 33°.70N×27°.93E, h31km±13km, Md4.0*

*THE **04** 22:02:17.5, 33°.72N×27°.96E, h16km±10km, ML3.1/4, Error ellipse: s-maj=13.4km s-min=1.3km az=154.0*

*DDA **04** 22:02:21.7±0.0, 34°.31N×28°.24E, h5km±4km, ML2.7*

**ISC 04 22:02:10.9±2.3, 33°.57N±0°.04×27°.96E±0°.03, h7km±16km, n56, σ2°45/83, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **2.11** | **317** | P | **Pb** | **22 02 48.6** | **-0.9** |
| ZKR | | | | S | **Sn** | **22 03 13.2** | **0.0** |
| | 90nm,0.5s | | | | | | |
| **ZKR** | **Zakros** | **2.11** | **317** | P | **Pb** | **22 02 48.8** | **-0.7** |
| ZKR | | | | S | **Sg** | **22 03 17.2** | **-1.5** |
| ZKR | | | | AML | AML | 22 03 21.6 | |
| | comp=E,219μm,0.5s | | | | | | |
| ZKR | | | | AML | AML | 22 03 24.0 | |
| | comp=N,135μm,0.5s | | | | | | |
| **ZKR** | **Zakros** | **2.11** | **317** | PN | **Pn** | **22 02 48.3** | **+1.7** |
| ZKR | | | | SN | **Sb** | **22 03 14.6** | **-1.3** |
| **MATC** | **Matruh** | **2.30** | **196** | P | **Pn** | **22 02 51.5** | **+2.4** |
| | baz=195 | | | | | | |
| MATC | | | | S | **Sn** | **22 03 15.8** | **-2.0** |
| | baz=195 | | | | | | |
| **NPS** | **Neapolis** | **2.57** | **312** | P | **Pn** | **22 02 55.7** | **+2.7** |
| **NPS** | **Neapolis** | **2.57** | **312** | P | **Pn** | **22 02 55.6** | **+2.7** |
| NPS | | | | S | **Sb** | **22 03 28.0** | **-1.2** |
| **ARG** | **Arkhangelos** | **2.65** | **3** | PN | **Pn** | **22 02 55.8** | **+1.8** |
| **KSTL** | **Kastelli Herak** | **2.95** | **307** | P | **Pn** | **22 02 57.9** | **-0.2** |
| **SIVA** | **Sivas** | **2.98** | **300** | P | **Pn** | **22 03 01.6** | **+3.0** |
| SIVA | | | | S | **Sn** | **22 03 35.5** | **+0.9** |
| **AKAS** | **Kas** | **2.98** | **26** | PN | **Pn** | **22 03 00.7** | **+2.0** |
| AKAS | | | | SN | **Sn** | **22 03 35.8** | **+1.0** |
| **IDI** | **Anoyia** | **3.06** | **305** | P | **Pn** | **22 03 02.4** | **+2.6** |
| IDI | | | | S | **Sn** | **22 03 37.8** | **+1.1** |
| | comp=N,105nm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **3.06** | **305** | P | **Pn** | **22 03 02.3** | **+2.5** |
| IDI | | | | S | **Sn** | **22 03 37.4** | **+0.7** |
| IDI | | | | AML | AML | 22 03 38.8 | |
| | comp=N,272μm,0.5s | | | | | | |
| IDI | | | | AML | AML | 22 03 44.6 | |
| | comp=E,151μm,0.3s | | | | | | |
| **SLUM** | **Salum** | **3.11** | **229** | P | **Pn** | **22 03 01.9** | **+1.5** |
| | baz=227 | | | | | | |
| SLUM | | | | S | **Sn** | **22 03 34.4** | **-3.3** |
| | baz=227 | | | | | | |
| **FETY** | **Fethiye** | **3.20** | **16** | P | **Pn** | **22 03 03.4** | **+1.8** |
| **FETY** | **Fethiye** | **3.20** | **16** | PN | **Pn** | **22 03 03.6** | **+2.0** |
| **TURN** | **Turunc** | **3.21** | **4** | PN | **Pn** | **22 03 03.8** | **+2.1** |
| **DALY** | **Dalyan (Mula)** | **3.29** | **10** | PN | **Pn** | **22 03 04.8** | **+2.0** |
| DALY | | | | SN | **Sn** | **22 03 43.3** | **+1.1** |
| **GVD** | **Gavdhos** | **3.45** | **293** | P | **Pn** | **22 03 03.1** | **-1.9** |
| GVD | | | | S | **Sn** | **22 03 42.3** | **-3.9** |
| GVD | | | | AML | AML | 22 03 48.9 | |
| | comp=N,296μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 22 03 50.7 | |
| | comp=E,299μm,0.5s | | | | | | |
| **SANT** | **Santorini** | **3.47** | **324** | PN | **Pn** | **22 03 07.6** | **+2.3** |
| **BODT** | **Bodrum** | **3.53** | **352** | PN | **Pn** | **22 03 08.3** | **+2.2** |
| **CAME** | **Cameli-Denizli** | **3.54** | **18** | PN | **Pn** | **22 03 08.7** | **+2.3** |
| **ELL** | **Elmali** | **3.55** | **26** | PN | **Pn** | **22 03 08.9** | **+2.4** |
| **YER** | **Yerkesik** | **3.57** | **4** | PN | **Pn** | **22 03 09.0** | **+2.3** |
| **VAM** | **Vamos** | **3.61** | **302** | P | **Pn** | **22 03 09.6** | **+2.4** |
| VAM | | | | S | **Sn** | **22 03 51.4** | **+1.4** |
| | comp=E,112nm,0.3s | | | | | | |
| **VAM** | **Vamos** | **3.61** | **302** | P | **Pn** | **22 03 09.6** | **+2.4** |
| VAM | | | | S | **Sn** | **22 03 51.4** | **+1.4** |
| **MULA** | **Mugla, Merkez-** | **3.69** | **4** | P | **Pb** | **22 03 14.2** | **-2.3** |
| MULA | | | | S | **Sn** | **22 03 51.2** | **-1.0** |
| MULA | | | | *i* AML | AML | 22 04 03.0 | |
| | comp=E,33nm,0.6s | | | | | | |
| MULA | | | | *i* AML | AML | 22 04 36.0 | |
| | comp=E,21nm,1.8s | | | | | | |
| **CAEL** | **Denizli, Camel** | **3.72** | **17** | P | **Pn** | **22 03 12.9** | **+4.0** |
| CAEL | | | | S | **Sn** | **22 03 54.1** | **+1.1** |
| CAEL | | | | *i* AML | AML | 22 04 07.0 | |
| | comp=E,76nm,2.0s | | | | | | |
| CAEL | | | | *i* AML | AML | 22 04 33.0 | |
| | comp=E,118nm,2.1s | | | | | | |
| CAEL | | | | *i* AML | AML | 22 04 35.0 | |
| | comp=E,26nm,1.4s | | | | | | |
| **MLSB** | **Milas** | **3.72** | **358** | PN | **Pn** | **22 03 10.7** | **+1.9** |
| **IMMV** | **Iera Moni Meta** | **3.79** | **301** | P | **Pn** | **22 03 12.3** | **+2.6** |
| IMMV | | | | S | **Sn** | **22 03 55.2** | **+0.7** |
| | comp=E,92nm,0.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **3.79** | **301** | P | **Pn** | **22 03 12.1** | **+2.4** |
| IMMV | | | | S | **Sn** | **22 03 55.5** | **+1.0** |
| **GOLH** | **Golhisar** | **3.89** | **19** | P | **Pn** | **22 03 14.8** | **+3.6** |
| GOLH | | | | S | **Sn** | **22 03 57.5** | **+0.4** |
| GOLH | | | | *i* AML | AML | 22 04 13.0 | |
| | comp=E,18nm,1.0s | | | | | | |
| GOLH | | | | *i* AML | AML | 22 04 21.0 | |
| | comp=E,18nm,1.4s | | | | | | |
| **KORT** | **Korkueli** | **3.94** | **29** | PN | **Pn** | **22 03 14.5** | **+2.6** |
| **KORT** | **Korkueli** | **3.94** | **29** | P | **Pn** | **22 03 20.6** | **-0.2** |
| KORT | | | | S | **Sn** | **22 04 01.7** | **+3.2** |
| **TAVA** | **DENIZLI_Tavas** | **3.97** | **11** | P | **Pn** | **22 03 14.9** | **+2.7** |
| TAVA | | | | S | **Sn** | **22 03 56.2** | **-2.9** |
| TAVA | | | | *i* AML | AML | 22 04 31.0 | |
| | comp=E,20nm,2.1s | | | | | | |
| **GAZI** | **Gazipasa** | **4.46** | **52** | PN | **Pn** | **22 03 22.1** | **+3.2** |
| **BRDR** | **BURDUR-Merkez** | **4.46** | **22** | P | **Pn** | **22 03 22.9** | **+3.9** |
| BRDR | | | | S | **Sn** | **22 04 07.5** | **-3.7** |
| **KEPZ** | **Antalya-Kepez** | **4.47** | **41** | P | **Pn** | **22 03 23.1** | **+4.0** |
| KEPZ | | | | S | **Sn** | **22 04 04.8** | **-6.5** |
| **HMYD** | **Mayadein** | **4.47** | **146** | P | **Pn** | **22 03 20.6** | **+1.5** |
| | baz=147 | | | | | | |
| **HNAT** | **Natroun** | **4.53** | **149** | P | **Pn** | **22 03 21.9** | **+2.0** |
| | baz=149 | | | | | | |
| **SUTC** | **Sutluce-Ispart** | **4.62** | **32** | PN | **Pn** | **22 03 24.2** | **+3.0** |
| **SWA2** | | **4.81** | **207** | P | **Pn** | **22 03 25.8** | **+2.0** |
| | baz=207 | | | | | | |
| **KTHR** | **Kythira** | **4.88** | **305** | P | **Pn** | **22 03 28.0** | **+3.3** |
| **RYAN** | **Fayoum** | **4.89** | **155** | P | **Pn** | **22 03 26.7** | **+1.9** |
| | baz=155 | | | | | | |
| RYAN | | | | S | **Sn** | **22 04 20.6** | **-1.1** |
| | baz=155 | | | | | | |
| **PASA** | **Karahalli, USA** | **4.93** | **14** | P | **Pn** | **22 03 29.0** | **+3.5** |
| PASA | | | | S | **Sn** | **22 04 19.1** | **-3.6** |
| **SEDI** | **Konya, Seydise** | **4.96** | **38** | P | Pn | 22 03 31.0 | +5.1 |
| SEDI | | | | S | **Sn** | **22 04 21.7** | **-1.9** |
| SEDI | | | | *i* AML | AML | 22 04 29.0 | |
| | comp=E,11nm,0.8s | | | | | | |
| SEDI | | | | *i* AML | AML | 22 04 35.0 | |
| | comp=E,9.0nm,0.5s | | | | | | |
| **SEYD** | **Seydisehir-KON** | **4.97** | **38** | PN | **Pn** | **22 03 28.8** | **+2.8** |
| **HSAF** | **As Saff** | **4.99** | **141** | P | **Pn** | **22 03 27.5** | **+1.3** |
| | baz=141 | | | | | | |
| **GLL** | **Jalalah** | **5.10** | **140** | P | **Pn** | **22 03 29.3** | **+1.5** |
| | baz=140 | | | | | | |
| **USAK** | **Uak-Merkez** | **5.21** | **9** | P | **Pn** | **22 03 32.0** | **+2.8** |
| USAK | | | | S | **Sn** | **22 04 25.5** | **-4.0** |
| USAK | | | | *i* AML | AML | 22 06 03.0 | |
| | comp=E,29nm,6.3s | | | | | | |
| **YVAC** | **Isparta, Yalva** | **5.39** | **29** | P | Pn | 22 03 37.5 | +5.7 |
| YVAC | | | | S | **Sn** | **22 04 30.2** | **-4.1** |
| YVAC | | | | *i* AML | AML | 22 06 00.0 | |
| | comp=E,6.9nm,2.9s | | | | | | |
| **ZAF** | **Zafarana** | **5.80** | **136** | P | **Pn** | **22 03 39.1** | **+1.8** |
| | baz=136 | | | | | | |
| **HKAT** | **Jabal Katrina** | **7.21** | **133** | P | **Pn** | **22 03 57.1** | **+0.1** |
| | baz=133 | | | | | | |
| HKAT | | | | S | Sn | 22 05 14.3 | -5.0 |
| | baz=133 | | | | | | |
| **HBST** | **Basata** | **7.23** | **125** | P | **Pn** | **22 03 56.9** | **-0.1** |
| | baz=125 | | | | | | |
| HBST | | | | S | **Sn** | **22 05 17.5** | **-1.9** |
| | baz=125 | | | | | | |
| **HDHB** | **Dhahab** | **7.47** | **128** | P | **Pn** | **22 04 00.2** | **-0.1** |
| | baz=129 | | | | | | |
| **HHRG** | **Al Ghardaqah** | **7.97** | **141** | P | **Pn** | **22 04 09.8** | **+2.7** |
| | baz=142 | | | | | | |
| **HDK1** | **Dakhla** | **8.10** | **171** | P | **Pn** | **22 04 10.8** | **+1.9** |
| | baz=170 | | | | | | |

*IDC **04** 22:19:50.2±1.1, 0°.79N×28°.28W, h0km, mb4.0/8, mb1 4.2/8, mb1mx3.9/36, mbtmp4.0/8, MS4.0/56, Ms1 4.0/56, ms1mx3.9/85, Error ellipse: s-maj=44.9km s-min=21.0km az=153.0*

*NEIC **04** 22:19:52.6±1.4, 0°.8N×0°.2×28°.46W±0°.08, h10km±1km, mb4.6/17, Error ellipse: s-maj=30.1km s-min=3.6km az=153.0*

*GCMT **04** 22:19:54.6±0.3, 1°.16N±0°.02×28°.52W±0°.02, h15km±2km, MW4.8/94, Moment Tensor Solution. s15,c18; s94,c117; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=0.26±.09; $M_{\theta\theta}$0.45±.10; $M_{\phi\phi}$-0.19±.08; $M_{r\theta}$-0.10±.19; $M_{r\phi}$-1.90±.11; $M_{\theta\phi}$-0.46±.20; Best double couple: $M_0$1.99100×$10^{16}$ NP1:ϕs86.00000°, δ76.00000°, λ-174.00000°. NP2: ϕs354.00000°, δ84.00000°, λ-14.00000°. Principal axes: T 2.0770, Plg5.0000°, Azm41.0000°; N -0.1720, Plg75.0000°, Azm151.0000°; P -1.9060, Plg14.0000°, Azm309.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 04 22:19:51.1±0.6, 0.8N±0°.1×28°.50W±0°.09, h7km, n124, σ1°13/61, mb4.4/16, MS4.1/56, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NBPV** | **Pedro Velho** | **9.88** | **223** | *e*P | **Pn** | **22 22 12.0** | **-1.7** |
| **RCBR** | **Riachuelo** | **9.91** | **228** | *e*P | **Pn** | **22 22 13.2** | **-1.0** |
| **RCBR** | **Riachuelo** | **9.91** | **228** | | **Pn** | **22 22 13.1** | **-1.0** |
| **NBCL** | **Cascavel-CE** | **10.99** | **243** | *e*P | **Pn** | **22 22 26.5** | **-2.4** |
| **NBRF** | **Rio Formoso -** | **11.52** | **215** | *e*P | **Pn** | **22 22 34.9** | **-1.2** |
| **NBPB** | **Pedra_Branca-C** | **12.74** | **240** | *e*P | **Pn** | **22 22 50.5** | **-2.5** |
| **NBAN** | **Anadia - AL** | **12.98** | **216** | *e*P | **Pn** | **22 22 54.2** | **-1.9** |
| **NBMA** | **Muriti-CE** | **13.07** | **231** | *e*P | **Pn** | **22 22 56.1** | **-1.3** |
| **NBPS** | **Pedro II - PI** | **13.93** | **248** | *e*P | **Pn** | **22 23 09.0** | **-0.2** |
| **NBLA** | **Lagarto - SE** | **14.93** | **218** | *e*P | **Pn** | **22 23 22.1** | **-0.7** |
| **ROSB** | **Rosrio** | **16.05** | **257** | *e*P | **Pn** | **22 23 38.7** | **+1.2** |
| **H10N3** | **ASCENSION HYDR** | **16.40** | **122** | T | T | 22 40 39.1 | |
| | baz=300,slow=75,SNR=803 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **16.41** | **122** | T | T | 22 40 38.4 | |
| | baz=300,slow=75,SNR=684 | | | | | | |
| **NBPN** | **Ponto Novo - B** | **16.42** | **225** | *e*P | **Pn** | **22 23 41.9** | **-0.4** |
| **H10N1** | **ASCENSION HYDR** | **16.42** | **122** | T | T | 22 40 40.0 | |
| | baz=300,slow=75,SNR=907 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **16.86** | **125** | T | T | 22 41 14.2 | |
| | baz=302,slow=74,SNR=365 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **16.88** | **125** | T | T | 22 41 15.7 | |
| | baz=278,slow=74,SNR=139 | | | | | | |
| **GDU01** | **Guandu, BA** | **18.14** | **217** | *e*P | **P** | **22 24 03.9** | **-0.3** |
| **GUA01** | **Guaratinga, BA** | **20.58** | **212** | *e*P | **P** | **22 24 30.6** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **20.92** | **231** | *e*P | **P** | **22 24 34.6** | **0.0** |
| **SMTB** | **Santa Maria do** | **21.31** | **243** | *e*P | **P** | **22 24 38.7** | **-0.1** |
| **NAN01** | **Guarapari, ES** | **21.79** | **211** | *e*P | **P** | **22 24 44.0** | **+0.2** |
| **JANB** | **Januaria** | **22.21** | **224** | *e*P | **P** | **22 24 47.3** | **-1.2** |
| **PRPB** | **Paraupebas** | **22.38** | **252** | *e*P | **P** | **22 24 50.5** | **+0.2** |
| **SJMB** | **Sao Joao De Ma** | **23.06** | **212** | *e*P | **P** | **22 24 58.2** | **+0.8** |
| **RIB01** | **Linhares ES** | **23.17** | **210** | *e*P | **P** | **22 24 59.3** | **+0.9** |
| **PEXB** | **Peixe** | **23.48** | **236** | *e*P | **P** | **22 25 01.2** | **-0.5** |
| **MCPB** | **Macapa, AP** | **23.58** | **267** | *e*P | **P** | **22 25 02.8** | **0.0** |
| **LIC** | **Lamto** | **24.03** | **77** | *e*PKP1 | **P** | **22 25 10.2** | **+3.2** |
| | 21nm,0.7s | | | | | | |
| **TIC** | **Toumodi** | **24.13** | **76** | *e*PKP1 | **P** | **22 25 10.1** | **+2.1** |
| **DIAM** | **Diamantina, MG** | **24.16** | **217** | *e*P | **P** | **22 25 08.3** | **0.0** |
| **DBIC** | **Dimbokro** | **24.29** | **76** | P | **P** | **22 25 08.2** | **-1.2** |
| | 8.1nm,0.6s,baz=268,slow=9.1,SNR=19 | | | | | | |
| DBIC | | | | LR | LR | 22 32 56.8 | |
| | comp=Z,243nm,19.5s,baz=264,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | **24.29** | **76** | P | **P** | **22 25 09.3** | **-0.2** |
| DBIC | | | | lAmb | lAmb | 22 25 14.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **KIC** | **Kosan Boka** | **24.34** | **76** | *e*PKP1 | **P** | **22 25 09.3** | **-0.6** |
| | comp=Z,11nm,0.6s | | | | | | |
| **MDP** | **Montagnes des** | **24.47** | **280** | LR | LR | 22 32 38.3 | |
| | comp=Z,121nm,21.7s,baz=92,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **25.28** | **229** | LR | LR | 22 34 17.9 | |
| | comp=Z,717nm,19.3s,baz=124,slow=34 | | | | | | |
| **MALB** | **Monte Alegre** | **25.89** | **264** | *e*P | **P** | **22 25 24.7** | **+0.7** |
| **SNDB** | **Serra Nova Dou** | **25.96** | **240** | *e*P | **P** | **22 25 25.1** | **+0.5** |
| **ITTB** | **Itaituba** | **27.69** | **259** | *e*P | **P** | **22 25 40.8** | **+0.5** |
| **KOWA** | **Kowa** | **27.76** | **60** | P | **P** | **22 25 38.6** | **-2.2** |
| | comp=Z,2.6nm,0.6s,baz=239,slow=9.2,SNR=10.0 | | | | | | |
| KOWA | | | | LR | LR | 22 35 24.4 | |
| | comp=Z,677nm,19.1s,baz=228,slow=34 | | | | | | |
| **KOWA** | **Kowa** | **27.76** | **60** | P | **P** | **22 25 40.4** | **-0.4** |
| KOWA | | | | lAmb | lAmb | 22 25 45.2 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **NPGB** | **Novo Progresso** | **27.91** | **253** | *e*P | **P** | **22 25 41.9** | **-0.3** |
| **MAN01** | **Angra dos Reis** | **27.95** | **212** | *e*P | **P** | **22 25 42.7** | **+0.3** |
| **PDRB** | **Porto dos Gac** | **30.64** | **245** | *e*P | **P** | **22 26 06.8** | **+0.3** |
| **PTGA** | **Pitinga** | **31.50** | **267** | LR | LR | 22 38 24.7 | |
| | comp=Z,117nm,19.0s,baz=76,slow=35 | | | | | | |
| **SALV** | **Santo Antonio** | **31.58** | **237** | *e*P | **P** | **22 26 15.0** | **+0.3** |
| **BOAV** | **Boa Vista** | **32.04** | **273** | *e*P | **P** | **22 26 19.9** | **+1.1** |
| **BOAV** | **Boa Vista** | **32.04** | **273** | P | **P** | **22 26 19.2** | **+0.4** |
| BOAV | | | | lAmb | lAmb | 22 26 22.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.32** | **66** | P | **P** | **22 26 19.1** | **-2.2** |
| | comp=Z,2.6nm,0.7s,baz=259,slow=9.6,SNR=17 | | | | | | |
| **VILB** | **Vilhena** | **34.29** | **245** | P | **P** | **22 26 40.0** | **+1.5** |
| VILB | | | | lAmb | lAmb | 22 26 58.9 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **34.32** | **241** | P | **P** | **22 26 39.4** | **+0.7** |
| PTLB | | | | lAmb | lAmb | 22 26 56.4 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **34.70** | **294** | T | T | 23 03 02.0 | |
| | SNR=66 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **35.58** | **297** | T | T | 23 04 07.6 | |
| | SNR=3.9 | | | | | | |
| **PSMA** | **Santa Maria** | **36.13** | **5** | *e*T | T | 23 04 30.2 | |
| **PSMN** | **Pico do Norte,** | **36.14** | **5** | *e*T | T | 23 04 30.6 | |
| **SIV** | **San Ignacio** | **36.24** | **241** | LR | LR | 22 41 03.1 | |
| | comp=Z,556nm,20.2s,baz=110,slow=35 | | | | | | |
| **CMLA** | **Cha da Macela** | **36.86** | **4** | *e*T | T | 23 05 26.0 | |
| **GRON** | **Grota Negra** | **36.87** | **4** | *e*T | T | 23 05 25.2 | |
| **BIRV** | **Birongo** | **38.74** | **286** | P | **P** | **22 27 15.0** | **-1.4** |
| BIRV | | | | lAmb | lAmb | 22 27 16.4 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **CPUP** | **Villa Florida** | **38.75** | **224** | LR | LR | 22 43 06.2 | |
| | comp=Z,1μm,18.1s,baz=55,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **38.75** | **224** | P | **P** | **22 27 17.6** | **+1.2** |
| **MDT** | **Midelt** | **38.97** | **33** | LR | LR | 22 42 52.1 | |
| | comp=Z,254nm,18.3s,baz=242,slow=36 | | | | | | |
| **ETMB** | **Extrema** | **39.00** | **253** | P | **P** | **22 27 20.0** | **+1.4** |
| **CBYP** | **Canovanas** | **40.56** | **298** | P | **P** | **22 27 31.6** | **-0.1** |
| **SJG** | **San Juan** | **40.77** | **297** | LR | LR | 22 40 43.5 | |
| | comp=Z,192nm,21.9s,baz=110,slow=31 | | | | | | |
| **SJG** | **San Juan** | **40.77** | **297** | P | **P** | **22 27 33.4** | **+0.1** |
| **AOPR** | **Arecibo Observ** | **41.39** | **297** | P | **P** | **22 27 37.4** | **-1.0** |
| AOPR | | | | lAmb | lAmb | 22 27 47.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **42.64** | **245** | P | **P** | **22 27 50.6** | **+1.2** |
| | comp=Z,3.5nm,0.9s,baz=66,slow=8.5,SNR=8.8 | | | | | | |
| LPAZ | | | | LR | LR | 22 45 20.6 | |
| | comp=Z,370nm,18.7s,baz=72,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **42.64** | **245** | *e*P | **P** | **22 27 48.3** | **-1.1** |
| **LPAZ** | **La Paz** | **42.64** | **245** | P | **P** | **22 27 49.5** | **+0.1** |
| **SDV** | **Santo Domingo** | **42.70** | **282** | LR | LR | 22 45 04.0 | |
| | comp=Z,84nm,18.2s,baz=116,slow=35 | | | | | | |
| **SDV** | **Santo Domingo** | **42.

comp=Z,71nm,19.3s,baz=112,slow=38
**TXAR Lajitas Array 76.67 300** LR LR 23 01 53.0
comp=Z,60nm,22.0s,baz=350,slow=33
**ARCES ARCESS Array B 77.29 17** LR LR 23 00 28.6
comp=Z,80nm,20.1s,baz=195,slow=32
**ANMO Albuquerque 79.66 305** LR LR 23 04 57.3
comp=Z,135nm,18.6s,baz=108,slow=34
**RPN Rapa Nui 82.21 243** LR LR 23 05 07.7
comp=Z,67nm,20.4s,baz=92,slow=33
**PDAR Pinedale Array 82.87 313** LR LR 23 04 50.9
comp=Z,67nm,20.0s,baz=96,slow=32
**YKA Yellowknife Ar 87.47 332** P **P** **22 32 40.0 +0.7**
comp=Z,0.3nm,0.6s,baz=89,slow=5.3,SNR=5.0
YKA LR LR 23 10 02.5
comp=Z,85nm,18.4s,baz=48,slow=34
**ARU Arti 87.69 34** LR LR 23 12 04.6
comp=Z,88nm,19.3s,baz=213,slow=36
**NEW Newport 88.47 318** LR LR 23 09 42.3
comp=Z,68nm,18.4s,baz=70,slow=34
**NVAR Mina Array Bea 89.34 308** LR LR 23 12 56.2
comp=Z,69nm,18.6s,baz=198,slow=36
**QSPA South Pole Qui 90.89 180** LR LR 23 08 43.3
comp=Z,117nm,18.3s,baz=144,slow=32
**YBH Yreka Blue Hor 92.61 312** LR LR 23 12 55.5
comp=Z,106nm,19.1s,baz=332,slow=34
**ASAR Alice Springs 151.59 144** PKPbc **PKiKP** **22 39 47.6 0.0**
comp=Z,0.8nm,0.9s,baz=186,slow=1.8,SNR=5.9

*IDC **04** 22:20:14.0±9.7, 14.˚14N×93.˚08E, h60km±83km, mb3.4/9, mb1 3.6/10, mb1mx3.4/35, mbtmp3.7/10, MS3.2/1, Ms1 3.2/1, ms1mx2.4/64, Error ellipse: s-maj=79.9km s-min=18.5km az=57.0*

**ISC 04 22:20:10.8±1.2, 14.˚0N±0.˚2×93.˚0E±0.˚1, h32km, n18, σ2$01/17, mb3.6/9, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.21** | **51** | P | | **Pn** | | **22 21 55.0** | **+0.9** |
| | baz=235,slow=15,SNR=4.8 | | | | | | | | |
| **PSI** | **Prapat** | **12.53** | **152** | LR | | LR | | 22 27 50.3 | |
| | comp=Z,101nm,19.2s,baz=20,slow=36 | | | | | | | | |
| **TAPN** | **Taplejung** | **14.21** | **340** | *eP* | | **Pn** | | **22 23 30.1** | **0.0** |
| | 4.8nm,0.4s | | | | | | | | |
| **JIRN** | **Jiri** | **15.04** | **336** | *eP* | | **Pn** | | **22 23 43.3** | **+1.9** |
| | 5.1nm,0.4s | | | | | | | | |
| **PKI** | **Pulchoki** | **15.28** | **333** | *eP* | | **P** | | **22 23 48.2** | **-1.0** |
| | 5.1nm,0.3s | | | | | | | | |
| **PKIN** | **Phulchoki** | **15.29** | **333** | *eP* | | **P** | | **22 23 48.0** | **-1.2** |
| | 10nm,0.5s | | | | | | | | |
| **GKN** | **Gorkha** | **16.00** | **332** | *eP* | | **P** | | **22 23 58.1** | **+1.2** |
| **KOLN** | **Koldanda** | **16.30** | **329** | *eP* | | **P** | | **22 24 03.7** | **+3.4** |
| | 5.4nm,0.5s | | | | | | | | |
| **PYUN** | **Piuthan** | **16.88** | **328** | *eP* | | **P** | | **22 24 12.1** | **+5.3** |
| | 4.4nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **33.94** | **347** | P | | **P** | | **22 26 50.5** | **-0.6** |
| | 0.4nm,0.5s,baz=165,slow=7.8,SNR=10.0 | | | | | | | | |
| **SONM** | **Songino Array** | **35.54** | **16** | P | | **P** | | **22 27 04.4** | **-0.6** |
| | 0.4nm,0.7s,baz=212,slow=7.5,SNR=3.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.40** | **353** | P | | **P** | | **22 27 43.9** | **-1.9** |
| | 0.5nm,0.4s,baz=159,slow=9.2,SNR=4.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **52.79** | **129** | P | | **P** | | **22 29 23.7** | **+0.3** |
| | 0.8nm,1.0s,baz=311,slow=8.8,SNR=5.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **54.73** | **133** | P | | **P** | | **22 29 38.3** | **+0.7** |
| | 0.3nm,0.5s,baz=306,slow=6.7,SNR=6.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **66.86** | **331** | P | | **P** | | **22 30 58.3** | **-1.1** |
| | 1.4nm,0.7s,baz=73,slow=4.8,SNR=7.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.20** | **340** | P | | **P** | | **22 31 13.2** | **-0.8** |
| | 0.8nm,0.6s,baz=93,slow=8.2,SNR=4.5 | | | | | | | | |
| **GERES** | **GERESS Array B** | **72.61** | **317** | P | | **P** | | **22 31 35.5** | **+0.2** |
| | 0.1nm,0.3s,baz=83,slow=5.6,SNR=4.4 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **73.93** | **330** | P | | **P** | | **22 31 41.5** | **-1.3** |
| | 0.5nm,0.7s,baz=94,slow=5.8,SNR=1.7 | | | | | | | | |

**ASRS 04 22:38:40.3±0.3, 54.˚N±1.˚×9.˚4E±.˚, h10km, MLh3.0/8, 1D, confirmed, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MINR** | **Mina** | **0.52** | **356** | ⇓Pg | | Pn | | 22 38 53.5 | -0.3 |
| MINR | | | | | Sg | Sb | | 22 39 00.8 | +1.6 |
| **ABNR** | **Abakan** | **1.79** | **250** | | Sg | Sg | | 22 39 41.5 | +3.6 |
| **GZL** | **Zheleznogorsk** | **1.93** | **348** | | Sg | Sg | | 22 39 42.6 | +0.2 |
| **SHTK** | **Zheleznogorsk-** | **1.99** | **349** | | Pg | Pb | | 22 39 15.9 | -0.7 |
| SHTK | | | | | Sg | Sb | | 22 39 40.7 | -0.8 |
| **CERR** | **Cheremushki** | **2.29** | **229** | | Pg | Pg | | 22 39 23.7 | -0.4 |
| CERR | | | | | Sg | Sg | | 22 39 54.5 | +0.8 |
| **DJOS** | **Djoyskaya Sosn** | **2.33** | **228** | | Pg | Pg | | 22 39 25.0 | 0.0 |
| DJOS | | | | | Sg | Sg | | 22 39 56.6 | +1.3 |
| **SHRR** | **Shira** | **2.40** | **274** | | Sg | Sg | | 22 39 59.3 | +1.9 |
| **SHRR** | **Shira** | **2.40** | **274** | | Pg | Pb | | 22 39 23.9 | +0.3 |
| **DJO** | **Djoy, Khakassi** | **2.42** | **230** | | Pg | Pg | | 22 39 25.9 | -0.8 |
| DJO | | | | | Sg | Sg | | 22 39 58.8 | +0.8 |
| **KZLR** | **Kyzyl** | **2.68** | **178** | | Pg | Pg | | 22 39 32.2 | +0.5 |
| KZLR | | | | | Sg | Sg | | 22 40 07.1 | +0.7 |
| **LUZB** | **Luzhba, Kemero** | **3.25** | **259** | | Sg | Sg | | 22 40 24.0 | -0.5 |
| **BRCR** | **Berchikul'** | **3.65** | **293** | | Pn | Pn | | 22 39 40.0 | +3.2 |
| BRCR | | | | | Pg | Pg | | 22 39 50.2 | 0.0 |
| BRCR | | | | | Sg | Sg | | 22 40 36.1 | -1.3 |
| **TASR** | **Tashtagol** | **4.14** | **250** | | Sg | Sg | | 22 40 51.5 | -1.7 |
| **KNGR** | **Kungurtug, Tuv** | **4.27** | **151** | | Pn | Pn | | 22 39 47.9 | +2.4 |
| KNGR | | | | | Pg | Pg | | 22 40 01.6 | -0.5 |
| KNGR | | | | | Sg | Sg | | 22 40 55.7 | -1.7 |

*IDC **04** 22:41:31.7±0.5, 13.˚69N×122.˚41E, h0km, mb4.9/31, mb1 4.9/32, mb1mx4.7/53, mbtmp4.9/32, ML3.9/1, MS3.9/31, Ms1 3.9/31, ms1mx3.7/79, Error ellipse: s-maj=12.0km s-min=10.5km az=58.0*

*GCMT **04** 22:41:33.7±0.4, 13.˚77N±0.˚03×122.˚14E±0.˚02, h20km±1km, MW4.9/66, Moment Tensor Solution. s14,c17; s66,c84; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.93±.23; $M_{\theta\theta}$0.20±.13; $M_{\phi\phi}$-2.13±.17; $M_{r\theta}$0.50±.23; $M_{r\phi}$1.63±.08; $M_{\theta\phi}$-0.65±.25; Best double couple: $M_o$2.58700×$10^{16}$ NP1:ϕ$_s$342.00000°, δ37.00000°, λ103.00000°. NP2: ϕ$_s$146.00000°, δ55.00000°, λ81.00000°. Principal axes: T 2.0780, Plg78.0000°, Azm21.0000°; N 1.0180, Plg8.0000°, Azm151.0000°; P -3.0970, Plg9.0000°, Azm242.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*MAN **04** 22:41:33.3, 13.˚76N×122.˚28E, h3km, mb4.6, ML3.5, MS3.3*

*MAN INTENSITY V - BUENAVISTA, GENERAL LUNA & MULANAY, QUEZON; INTENSITY IV - GUINAYANGAN, QUEZON; INTENSITY III - LOPEZ, CALAUAG, UNISAN, GUMACA, CATANAUAN & ATIMONAN, QUEZON.*

*MOS **04** 22:41:35.9±0.8, 13.˚74N×122.˚28E, h36km, mb5.3/44, MS4.2/11, Error ellipse: s-maj=8.1km s-min=4.2km az=118.3*

*BJI **04** 22:41:36.1±0.0, 13.˚69N×122.˚45E, h45km, mb5.0/75, mB5.0/47, Ms4.5/75, Ms7 4.3/69*

*NEIC **04** 22:41:37.7±1.6, 13.˚815N±0.˚010×122.˚26E±0.˚06, h28km±4km, mb5.2/153, Error ellipse: s-maj=9.3km s-min=0.6km az=98.0*

*DJA **04** 22:41:39.6±0.4, 14.˚N±2.˚×12.˚2E±.˚, h53km±4km, M4.9/81, mB5.4/40, mb5.1/81, Mw(mB)4.8/40*

*KLM **04** 22:41:39, 13.˚97N×122.˚36E, h52km, mb5.1*

*BGR **04** 22:41:44.2±0.0, 13.˚88N×122.˚27E, h74km*

**ISC 04 22:41:35.7±0.2, 13.˚77N±0.˚03×122.˚31E±0.˚03, h21km±1km, h21km:pP-P, n685, σ1$42/702, mb5.2/218, MS4.2/55, 45C-32D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GQP** | **Guinayangan** | **0.19** | **46** | ⇓*i*P | | **Pb** | | **22 41 38.3** | **-3.3** |
| GQP | | | | *i* | S | **Sb** | | **22 41 43.2** | **-2.6** |
| **LQP** | **Lukban** | **0.82** | **294** | ⇑*e*P | | **Pb** | | **22 41 48.9** | **-2.4** |
| **PGP** | **Puerto Galera** | **1.34** | **259** | ⇓*e*P | | **Pn** | | **22 41 57.1** | **-2.2** |
| PGP | | | | *i* | S | **Sb** | | **22 42 17.1** | **+0.2** |
| **TGY** | **Tagaytay City** | **1.37** | **284** | Pg | | **Pn** | | **22 41 58.5** | **-1.1** |
| | 2μm,0.3s,baz=123,slow=2.8,SNR=134 | | | | | | | | |
| TGY | | | | Lg | | Lg | | 22 42 21.1 | |
| | 3μm,0.3s,baz=10,slow=23,SNR=8.4 | | | | | | | | |
| **TGY** | **Tagaytay City** | **1.37** | **284** | ⇓*e*P | | **Pb** | | **22 42 00.2** | **-0.4** |
| TGY | | | | *i* | S | **Sb** | | **22 42 20.8** | **+3.0** |
| **MMPH** | **Masbate** | **1.91** | **137** | ⇓*e*P | | **Pn** | | **22 42 06.9** | **-0.1** |
| MMPH | | | | | *e*S | **Sb** | | **22 42 33.7** | **+0.6** |
| **PCPH** | **Palayan** | **2.13** | **327** | ⇑*e*P | | **Pn** | | **22 42 10.1** | **0.0** |
| PCPH | | | | | *e*S | **Sb** | | **22 42 42.1** | **+2.6** |
| **RCP** | **Roxas** | **2.24** | **169** | ⇑*e*P | | **Pn** | | **22 42 11.2** | **-0.4** |
| RCP | | | | *i* | S | **Sb** | | **22 42 43.2** | **+0.4** |
| **LLP** | **Lapu-Lapu** | **3.80** | **155** | *e*P | | **Pn** | | **22 42 34.4** | **+1.3** |
| LLP | | | | *e* | S | **Sb** | | **22 43 31.6** | **+3.9** |
| **TBP** | **Tagbilaran** | **4.33** | **159** | *e*P | | **Pn** | | **22 42 39.1** | **-1.4** |
| **PPR** | **Puerto Princes** | **5.30** | **222** | ⇑*i*P | | **Pn** | | **22 42 54.0** | **+0.4** |
| **DAV** | **Davao City (W)** | **7.40** | **154** | LR | | LR | | 22 47 04.6 | |
| | comp=Z,1μm,20.0s,baz=320,slow=46 | | | | | | | | |
| **DAV** | **Davao City (W)** | **7.40** | **154** | Pn | | Pn | | 22 43 28.0 | +5.4 |
| **TWG** | **Pinlang** | **9.07** | **353** | Pn | | **Pn** | | **22 43 45.3** | **-0.2** |
| **MYLDM** | **Lahad Datu** | **9.33** | **204** | | | **Pn** | | **22 43 50.6** | **+1.6** |
| **TPUB** | **Ta-pu** | **9.61** | **351** | Pn | | **Pn** | | **22 43 52.6** | **-0.2** |
| **YULB** | **Yu-li** | **9.62** | **354** | | | **Pn** | | **22 43 52.9** | **0.0** |
| **KKM** | **Kota Kinabalu** | **9.74** | **219** | Pn | | **Pn** | | **22 43 57.4** | **+2.6** |
| **SSLB** | **Suanglung** | **10.04** | **353** | | | **Pn** | | **22 43 59.8** | **+1.0** |
| **NACB** | **Ninganchiao** | **10.37** | **356** | Pn | | **Pn** | | **22 44 03.9** | **+0.7** |
| **QZH** | **Quanzhou** | **11.65** | **343** | *e*P | | **Pn** | | **22 44 22.7** | **+1.9** |
| QZH | | | | | S | **Sn** | | **22 46 31.0** | **+0.8** |
| QZH | | | | | LR | LR | | | |
| | comp=N,1μm,17.2s | | | | | | | | |
| QZH | | | | | LR | LR | | | |
| | comp=E,510nm,10.0s | | | | | | | | |
| QZH | | | | | LR | LR | | | |
| | comp=Z,940nm,17.1s | | | | | | | | |
| **TOLI2** | **Tolitoli** | **12.67** | **187** | | | **Pn** | | **22 44 35.7** | **+0.9** |
| **QIZ** | **Qiongzhong** | **13.05** | **295** | P | | **Pn** | | **22 44 40.9** | **+0.9** |
| QIZ | | | | | S | **Sn** | | **22 47 07.6** | **+3.0** |
| QIZ | | | | | LR | LR | | | |
| | comp=N,1μm,13.2s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=E,600nm,13.2s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,720nm,15.5s | | | | | | | | |
| **GTOI** | **Gorontalo** | **13.07** | **177** | P | | **Pn** | | **22 44 41.6** | **+1.3** |
| | 306nm27nm,1.4s | | | | | | | | |
| **MRSI** | **Marisa** | **13.22** | **182** | P | | **Pn** | | **22 44 45.6** | **+3.3** |
| | 811nm58nm,1.3s | | | | | | | | |
| **KMSI** | **Cibinong** | **13.22** | **173** | P | | **Pn** | | **22 44 45.3** | **+3.0** |
| | 171nm,1.1s | | | | | | | | |
| **I39PW** | **PALAU INFRASON** | **13.53** | **116** | *i* | | | | 00 08 40.0 | |
| | baz=298,slow=315,SNR=0.8 | | | | | | | | |
| **MPSI** | **Mapaga** | **13.56** | **190** | P | | **Pn** | | **22 44 49.5** | **+2.5** |
| | 22nm,1.2s | | | | | | | | |
| **DLV** | **T Lat** | **13.60** | **264** | Pn | | **Pn** | | **22 44 47.7** | **0.0** |
| **TNTI** | **Ternate** | **13.86** | **158** | P | | **Pn** | | **22 44 52.1** | **+1.1** |
| | 51nm,1.1s | | | | | | | | |
| **TNTI** | **Ternate** | **13.86** | **158** | Pn | | **Pn** | | **22 44 52.2** | **+1.2** |
| **JOW** | **Kunigami** | **14.14** | **22** | Pn | | **Pn** | | **22 44 56.0** | **+1.2** |
| | 1.0nm,0.3s,baz=201,slow=5.9,SNR=6.6 | | | | | | | | |
| **JOW** | **Kunigami** | **14.14** | **22** | Pn | | **Pn** | | **22 44 57.9** | **+3.0** |
| **APSI** | **Ampana** | **14.61** | **183** | P | | **Pn** | | **22 45 04.1** | **+2.9** |
| | 2μm154nm,1.2s | | | | | | | | |
| **SMKI** | **Samarinda** | **15.00** | **200** | P | | **P** | | **22 45 09.5** | **-2.4** |
| | 4μm394nm,1.1s | | | | | | | | |
| **SBUM** | **Sibu** | **15.03** | **222** | Pn | | **Pn** | | **22 45 09.1** | **+2.0** |
| SBUM | | | | | | lAmb | lAmb | 22 45 19.3 | |
| | comp=Z,132nm,1.3s | | | | | | | | |
| **SBUM** | **Sibu** | **15.03** | **222** | P | | **P** | | **22 45 10.0** | **-2.3** |
| **LBMI** | **Labuha** | **15.22** | **160** | P | | **Pn** | | **22 45 09.6** | **+0.1** |
| | comp=Z,1μmcomp=Z,42nm,1.6s | | | | | | | | |
| **SANI** | **Sanana** | **16.14** | **167** | P | | **Pn** | | **22 45 19.9** | **-1.5** |
| | comp=Z,800nmcomp=Z,73nm,1.1s | | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **16.36** | **207** | P | | **P** | | **22 45 27.5** | **+0.5** |
| **UBPT** | **Khong Chiam** | **16.37** | **277** | | | **Pn** | | **22 45 25.2** | **+0.9** |
| **CNSH** | **ChangSha** | **16.78** | **330** | ⇑P | | **Pn** | | **22 45 29.4** | **-0.1** |
| CNSH | | | | | S | **Sn** | | **22 48 32.7** | **-2.8** |
| CNSH | | | | | pmax | pmax | | | |
| | comp=Z,66nm,1.3s | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| | comp=Z,1μm,14.7s | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| | comp=Z,980nm,12.1s | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| | comp=Z,830nm,15.7s | | | | | | | | |
| **TTSI** | **Tana Toraja** | **16.89** | **189** | P | | **P** | | **22 45 33.1** | **+0.2** |
| | comp=Z,678nmcomp=Z,61nm,0.9s | | | | | | | | |
| **SWI** | **Sorong** | **17.04** | **148** | P | | **P** | | **22 45 34.6** | **+0.1** |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **KSM** | **Kuching** | **17.04** | **225** | | | **P** | | **22 45 34.8** | **+0.2** |
| KSM | | | | | lAmb | lAmb | | 22 45 41.4 | |
| | comp=Z,196nm,1.1s | | | | | | | | |
| **KSM** | **Kuching** | **17.04** | **225** | P | | **P** | | **22 45 36.0** | **+1.5** |
| **SIJI** | **Sorong** | **17.04** | **148** | Pn | | **Pn** | | **22 45 33.1** | **+0.2** |
| | comp=Z,1.8nm,0.3s,baz=342,slow=14,SNR=6.6 | | | | | | | | |
| SIJI | | | | | LR | LR | | 22 53 09.4 | |
| | comp=Z,282nm,19.8s,baz=262,slow=41 | | | | | | | | |
| **SSE** | **Sheshan** | **17.27** | **357** | P | | **Pn** | | **22 45 36.0** | **+0.4** |
| SSE | | | | | S | **Sn** | | **22 48 51.0** | **+3.8** |
| SSE | | | | | pmax | pmax | | | |
| | comp=Z,140nm,5.5s | | | | | | | | |
| SSE | | | | | LR | LR | | | |
| | comp=Z,220nm,17.5s | | | | | | | | |
| SSE | | | | | LR | LR | | | |
| | comp=Z,260nm,17.2s | | | | | | | | |
| **STKI** | **Sintang** | **17.34** | **219** | P | | **P** | | **22 45 39.5** | **+1.7** |
| | comp=Z,72nm,1.1s | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **17.80** | **188** | P | | **P** | | **22 45 43.3** | **+0.3** |
| | comp=Z,751nmcomp=Z,66nm,1.1s | | | | | | | | |
| **KBKI** | **Kotabaru** | **18.02** | **200** | P | | **P** | | **22 45 46.7** | **+1.3** |
| | comp=Z,89nm,1.0s | | | | | | | | |
| **BNSI** | **Bone** | **18.19** | **187** | P | | **P** | | **22 45 49.3** | **+2.1** |
| | comp=Z,2μmcomp=Z,105nm,1.5s | | | | | | | | |
| **WHN** | **Wuhan** | **18.23** | **338** | ⇑*i*P | | **P** | | **22 45 49.6** | **+2.0** |
| WHN | | | | | pP | **pP** | | **22 45 54.0** | **+0.5** |
| WHN | | | | | pmax | pmax | | | |
| | comp=Z,200nm,1.3s | | | | | | | | |
| WHN | | | | | LR | LR | | | |
| | comp=Z,3μm,20.2s | | | | | | | | |
| WHN | | | | | LR | LR | | | |
| | comp=Z,2μm,14.2s | | | | | | | | |
| WHN | | | | | LR | LR | | | |
| | comp=Z,2μm,15.2s | | | | | | | | |
| **MSAI** | **Masohi** | **18.23** | **158** | P | | **P** | | **22 45 48.3** | **+0.6** |
| | comp=Z,4μmcomp=Z,16nm,0.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **18.47** | **351** | ⇑*i*P | | **Pn** | | **22 45 51.6** | **+1.3** |
| NJ2 | | | | | pP | **sP** | | **22 46 00.0** | **+1.2** |
| NJ2 | | | | | pmax | pmax | | | |
| | comp=Z,56nm,1.1s | | | | | | | | |
| NJ2 | | | | | LR | LR | | | |
| | comp=Z,740nm,17.1s | | | | | | | | |
| NJ2 | | | | | LR | LR | | | |
| | comp=Z,780nm,14.7s | | | | | | | | |
| NJ2 | | | | | LR | LR | | | |
| | comp=Z,830nm,16.1s | | | | | | | | |
| **BBKI** | **Banjar Baru** | **18.66** | **204** | P | | **Pn** | | **22 45 54.3** | **+1.5** |
| | comp=Z,8μmcomp=Z,28nm,0.4s | | | | | | | | |
| **KAPI** | **Kappang** | **18.84** | **188** | LR | | LR | | 22 53 09.4 | |
| | comp=Z,227nm,21.4s,baz=24,slow=37 | | | | | | | | |
| **KAPI** | **Kappang** | **18.84** | **188** | P | | **Pn** | | **22 45 56.2** | **+1.2** |
| KAPI | | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.0s | | | | | | | | |
| **KAPI** | **Kappang** | **18.84** | **188** | P | | **Pn** | | **22 45 56.2** | **+1.2** |
| **BKSI** | **Bulukumba** | **19.09** | **187** | P | | **Pn** | | **22 45 59.0** | **+0.9** |
| | comp=Z,1μmcomp=Z,102nm,1.2s | | | | | | | | |
| **JSU** | **Suzuyama** | **19.17** | **22** | P | | **P** | | **22 45 57.7** | **-0.3** |
| JSU | | | | | lAmb | lAmb | | 22 46 02.0 | |
| | comp=Z,139nm,1.0s | | | | | | | | |
| **FAKI** | **Fak Fak** | **19.30** | **149** | P | | **Pn** | | **22 46 00.9** | **+0.4** |
| | comp=Z,822nmcomp=Z,48nm,0.9s | | | | | | | | |
| **FAKI** | **Fak Fak** | **19.30** | **149** | P | | **Pn** | | **22 46 01.1** | **+0.5** |
| **GYA** | **Guiyang** | **19.34** | **313** | ⇓*i*P | | **Pn** | | **22 46 02.3** | **+1.2** |
| GYA | | | | | S | **S** | | **22 49 42.3** | **+4.3** |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,350nm,3.5s | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,740nm,15.3s | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,650nm,13.3s | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,1μm,14.1s | | | | | | | | |
| **PBKI** | **Pangkalan Bun** | **19.48** | **214** | P | | **Pn** | | **22 46 02.8** | **+0.1** |
| | comp=Z,6μmcomp=Z,154nm,1.1s | | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **19.87** | **185** | P | | **Pn** | | **22 46 08.7** | **+1.4** |
| | comp=Z,1μmcomp=Z,73nm,1.5s | | | | | | | | |
| **ENH** | **Enshi** | **20.24** | **326** | P | | **P** | | **22 46 10.2** | **+0.6** |
| ENH | | | | | lAmb | lAmb | | 22 46 22.8 | |
| | comp=Z,86nm,1.1s | | | | | | | | |
| **KMI** | **Kunming** | **21.60** | **304** | ⇓P | | **P** | | **22 46 28.9** | **+4.3** |
| KMI | | | | | pP | sP | | 22 46 36.3 | +3.0 |
| KMI | | | | | sP | pP | | 22 46 43.7 | +13 |
| KMI | | | | | S | **S** | | **22 50 20.6** | **-2.7** |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,200nm,6.2s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,700nm,15.2s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,410nm,13.2s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,610nm,17.1s | | | | | | | | |
| **JTU** | **Tsushima** | **21.63** | **16** | P | | **P** | | **22 46 25.3** | **+0.7** |
| **MYKOM** | **Kota Tinggi** | **21.79** | **238** | P | | **P** | | **22 46 27.4** | **+0.9** |
| **MYKOM** | **Kota Tinggi** | **21.79** | **238** | P | | **P** | | **22 46 29.0** | **+2.5** |
| **JRMM** | **Jerantut** | **21.90** | **245** | P | | **P** | | **22 46 30.0** | **+2.4** |
| **GUMO** | **Guam** | **21.92** | **88** | LR | | LR | | 22 52 59.6 | |
| | comp=Z,295nm,20.9s,baz=274,slow=32 | | | | | | | | |
| **MMRI** | **Maumere** | **22.26** | **180** | P | | **P** | | **22 46 31.4** | **-0.1** |
| | comp=Z,91nm,0.9s | | | | | | | | |
| **MMRI** | **Maumere** | **22.26** | **180** | P | | **P** | | **22 46 33.5** | **+1.9** |
| MMRI | | | | | | lAmb | lAmb | 22 46 46.3 | |
| | comp=Z,85nm,1.0s | | | | | | | | |
| **KMMI** | **Kalianget** | **22.28** | **202** | P | | **P** | | **22 46 34.3** | **+2.6** |
| | comp=Z,126nm,1.3s | | | | | | | | |
| **JMN** | **Monobe** | **22.48** | **26** | P | | **P** | | **22 46 34.9** | **+1.2** |
| **LYN** | **LuoYang** | **22.52** | **338** | ⇑P | | **P** | | **22 46 35.1** | **+0.9** |
| LYN | | | | | sP | sP | | 22 46 50.0 | +7.2 |
| LYN | | | | | S | **S** | | **22 50 42.6** | **+2.4** |
| LYN | | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.6s | | | | | | | | |
| LYN | | | | | pmax | pmax | | | |
| | comp=Z,170nm,7.2s | | | | | | | | |
| LYN | | | | | LR | LR | | | |
| | comp=Z,600nm,11.3s | | | | | | | | |
| LYN | | | | | LR | LR | | | |
| | comp=Z,400nm,15.1s | | | | | | | | |
| **DSRI** | **Dabo** | **22.56** | **233** | P | | **P** | | **22 46 35.4** | **+0.6** |
| | comp=Z,1μmcomp=Z,32nm,0.9s | | | | | | | | |
| **SRBI** | **Singaraja** | **22.83** | **198** | P | | **P** | | **22 46 39.7** | **+2.2** |
| | comp=Z,2μmcomp=Z,86nm,1.0s | | | | | | | | |
| **SRIT** | **Nakonsritamara** | **22.85** | **259** | P | | **P** | | **22 46 39.0** | **+1.2** |
| **ABJI** | **Asem Bagus** | **22.88** | **201** | P | | **P** | | **22 46 39.7** | **+1.6** |
| | comp=Z,98nm,1.0s | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **22.91** | **285** | P | | **P** | | **22 46 38.8** | **+0.3** |
| CM31 | | | | | | lAmb | lAmb | 22 46 43.6 | |
| | comp=Z,91nm,1.1s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.91** | **285** | P | | **P** | | **22 46 39.4** | **+0.9** |
| | comp=Z,34nm,0.9s,baz=96,slow=7.9,SNR=160 | | | | | | | | |
| CMAR | | | | | PcP | **PcP** | | **22 50 29.2** | **+0.4** |
| | comp=Z,3.9nm,0.5s,baz=52,slow=0.7,SNR=12 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.91** | **285** | P | | **P** | | **22 46 38.5** | **0.0** |
| CMAR | | | | | | | | 22 50 29.6 | |
| **CMAR** | **Chiang Mai Arr** | **22.91** | **285** | P | | **P** | | **22 46 38.5** | **0.0** |
| CMAR | | | | | | **PcP** | | **22 50 29.6** | **+0.7** |
| **IPM** | **Ipoh** | **22.93** | **248** | P | | **P** | | **22 46 38.8** | **+0.1** |
| IPM | | | | | | lAmb | lAmb | 22 46 43.7 | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| **KULM** | **Kulim** | **22.94** | **251** | P | | **P** | | **22 46 37.9** | **-0.9** |
| **TJN** | **Taejon** | **22.96** | **11** | *ce*P | | **P** | | **22 46 39.2** | **+0.5** |
| **TJN** | **Taejon** | **22.96** | **11** | P | | **P** | | **22 46 38.6** | **-0.1** |
| **CHTO** | **Chiang Mai** | **22.97** | **286** | P | | **P** | | **22 46 38.1** | **-1.0** |
| CHTO | | | | | | pmax | pmax | | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.97** | **286** | P | | **P** | | **22 46 38.1** | **-1.0** |
| **PZH** | **PanZhiHua** | **23.05** | **306** | P | | **P** | | **22 46 40.4** | **+0.5** |
| PZH | | | | | pP | **sP** | | **22 46 48.1** | **-0.5** |
| PZH | | | | | PP | **PnPn** | | **22 47 11.8** | **+6.7** |
| PZH | | | | | S | **S** | | **22 50 48.9** | **-1.0** |
| PZH | | | | | sS | Sn | | 22 51 06.6 | -0.1 |
| PZH | | | | | SS | **SnSn** | | **22 51 29.4** | **+6.6** |
| PZH | | | | | ScP | **ScP** | | **22 54 06.3** | **+0.3** |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,220nm,3.8s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,2μm,14.9s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,1μm,15.5s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,2μm,17.1s | | | | | | | | |
| **JHS** | **Saijyo** | **23.28** | **23** | P | | **P** | | **22 46 41.7** | **-0.3** |
| JHS | | | | | | lAmb | lAmb | 22 46 45.5 | |
| | comp=Z,193nm,1.5s | | | | | | | | |
| **SAUI** | **Saumlaki** | **23.39** | **157** | P | | **P** | | **22 46 43.0** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **23.44** | **187** | P | | **P** | | **22 46 45.0** | **+1.2** |
| | comp=Z,59nm,1.3s | | | | | | | | |
| **SOEI** | **Soe** | **23.46** | **175** | P | | **P** | | **22 46 45.7** | **+1.7** |
| | comp=Z,1μmcomp=Z,64nm,1.1s | | | | | | | | |
| **SOEI** | **Soe** | **23.46** | **175** | P | | **P** | | **22 46 45.5** | **+1.5** |
| SOEI | | | | | | lAmb | lAmb | 22 47 07.7 | |
| | comp=Z,67nm,1.1s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **23.54** | **201** | P | | **P** | | **22 46 45.6** | **+0.9** |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **23.54** | **201** | P | | **P** | | **22 46 46.5** | **+1.8** |
| JAGI | | | | | | lAmb | lAmb | 22 46 50.2 | |
| | comp=Z,93nm,1.2s | | | | | | | | |
| **XAN** | **Xi'an** | **23.55** | **331** | P | | **P** | | **22 46 44.2** | **-0.6** |
| XAN | | | | | pP | sP | | 22 46 56.2 | +2.6 |
| XAN | | | | | sP | pP | | 22 47 01.1 | +10 |
| XAN | | | | | PP | **PnPn** | | **22 47 19.4** | **+7.5** |
| XAN | | | | | S | **S** | | **22 50 54.4** | **-3.4** |
| XAN | | | | | sS | Sn | | 22 51 13.9 | -4.5 |
| XAN | | | | | pmax | pmax | | | |
| | comp=Z,99nm,1.1s | | | | | | | | |
| XAN | | | | | pmax | pmax | | | |
| | comp=Z,410nm,3.8s | | | | | | | | |
| XAN | | | | | LR | LR | | | |
| | comp=Z,690nm,13.4s | | | | | | | | |
| XAN | | | | | LR | LR | | | |
| | comp=

comp=Z,134nm,0.8s
**BKNI Bangkinang 24.94 239 P P 22 46 57.8 0.0**
**JHJ Hachijo jima 2 24.99 37 LR LR** 22 55 01.6
comp=Z,546nm,20.1s,baz=252,slow=32
**DL2 Dalian 25.04 359 P P 22 46 58.7 +0.3**
DL2 S **S 22 51 24.1 +2.6**
DL2 pmax pmax
comp=Z,50nm,0.8s
DL2 pmax pmax
comp=Z,230nm,5.0s
DL2 LR LR
comp=Z,320nm,12.5s
DL2 LR LR
comp=Z,380nm,16.5s
DL2 LR LR
comp=Z,470nm,16.9s
**LEM Lembang 25.13 216** LR LR 22 58 56.6
comp=Z,265nm,18.1s,baz=352,slow=42
**INU Inuyama 25.24 29 P P 22 47 00.9 +0.6**
INU IAmb IAmb 22 47 02.6
comp=Z,65nm,1.2s
**CBJI Citeko 25.26 218** P P 22 47 11.6 +11
**KLSI 25.32 225 P P 22 47 01.6 +0.5**
comp=Z,806nmcomp=Z,80nm,0.9s
**KLI Kotabumi 25.35 224** P P 22 47 10.0 +8.5
**TIY Taiyuan 25.41 342 P P 22 47 02.5 +0.6**
**DBJI Dramaga 25.42 218 P P 22 47 09.1 +7.0**
**PSI Prapat 25.55 247 P P 22 47 03.0 -0.4**
comp=Z,63nm,0.9s,baz=60,slow=4.7,SNR=15
PSI LR LR 22 56 36.1
comp=Z,173nm,20.2s,baz=72,slow=35
**MDSI Maura Dua 25.55 226 P P 22 47 02.6 -0.7**
comp=Z,1µmcomp=Z,55nm,1.2s
**LHSI Lahat 25.56 228 P P 22 47 04.4 +1.1**
comp=Z,1µmcomp=Z,72nm,1.9s
**TSI Tuntungan 25.57 249 P P 22 47 04.6 +1.2**
comp=Z,229nm,1.2s
**RPSI Rantau Prapat 25.59 247 P P 22 47 03.0 -0.6**
**MNSI Mandailing Nat 25.93 242 P P 22 47 07.3 +0.6**
comp=Z,719nmcomp=Z,72nm,1.0s
**KRJI Kerinci 25.99 234 P P 22 47 06.7 -0.7**
comp=Z,3µmcomp=Z,157nm,1.0s
**LWLI Liwa 26.01 225 P P 22 47 08.6 +1.0**
comp=Z,9µmcomp=Z,366nm,0.8s
**MASI Maura Aman, Be 26.05 231 P P 22 47 08.8 +0.9**
comp=Z,147nm,0.9s
**KASI Kota Agung 26.08 224 P P 22 47 08.9 +0.8**
comp=Z,75nm,1.1s
**CGJI Cibinong 26.12 220 P P 22 47 10.6 +2.2**
comp=Z,40nm,1.1s
**KCSI Kotacane, Aceh 26.28 249 P P 22 47 12.7 +2.8**
comp=Z,48nm,1.1s
**BJT Baijiatuau 26.69 349 P P 22 47 13.9 +0.5**
BJT pmax pmax
comp=Z,173nm,1.5s
**BJT Baijiatuau 26.69 349 P P 22 47 13.9 +0.5**
**BJI Beijing 26.71 349 P P 22 47 14.0 +0.4**
BJI S **S 22 51 52.3 +4.3**
BJI pmax pmax
comp=Z,73nm,1.2s
BJI LR LR
comp=Z,290nm,19.5s
BJI LR LR
comp=Z,270nm,18.1s
BJI LR LR
comp=Z,310nm,17.3s
**GSI Gunungsitoli 27.43 245 P P 22 47 21.6 +1.3**
comp=Z,2µmcomp=Z,68nm,0.9s
**SISI Saibi 27.47 239 P P 22 47 22.0 +1.4**
comp=Z,52nm,1.0s
**LZH Lanzhou 27.72 327** ⇑P **P 22 47 23.8 +0.9**
LZH pP sP 22 47 36.6 +4.7
LZH sP pP 22 47 41.4 +12
LZH S **S 22 52 04.7 +0.4**
LZH pmax pmax
comp=Z,51nm,0.9s
LZH pmax pmax
comp=Z,410nm,4.3s
LZH LR LR
comp=Z,890nm,13.6s
LZH LR LR
comp=Z,880nm,15.7s
LZH LR LR
comp=Z,900nm,15.7s
**HHC Hu-ho-hao-te 28.56 343** ⇑P **P 22 47 31.2 +0.9**
HHC S **S 22 52 20.8 +3.4**
HHC pmax pmax
comp=Z,35nm,1.3s
HHC pmax pmax
comp=Z,170nm,5.8s
HHC LR LR
comp=Z,510nm,15.5s
HHC LR LR
comp=Z,270nm,12.6s
HHC LR LR
comp=Z,620nm,15.6s
**MSHR Mys Shultsa 29.71 13** *i*P **P 22 47 41.0 +0.8**
MSHR pmax pmax
comp=Z,18nm,1.1s
**CN2 Changchun 30.05 5** *e*P **P 22 47 41.6 -1.6**
CN2 sP sP 22 47 59.1 +6.8
CN2 S **S 22 52 35.2 -5.2**
CN2 sS sS 22 52 55.4 +4.5
CN2 pmax pmax
comp=Z,10.0nm,1.1s
CN2 LR LR
comp=Z,340nm,13.0s
CN2 LR LR
comp=Z,510nm,13.0s
CN2 LR LR
comp=Z,320nm,13.0s
**VLA Vladivostok 30.39 14** *i*P **P 22 47 47.6 +1.4**
VLA pmax pmax
comp=Z,39nm,0.9s
**XLT XiLinHaoTe 30.49 351** ⇑*i*P **P 22 47 47.7 +0.4**
XLT pP sP 22 48 00.0 +3.6
XLT S **S 22 52 44.9 -2.7**
XLT pmax pmax
comp=Z,31nm,1.2s
XLT pmax pmax
comp=Z,230nm,3.8s
XLT LR LR
comp=Z,400nm,19.4s
XLT LR LR
comp=Z,420nm,15.2s
XLT LR LR
comp=Z,460nm,17.7s
**SHL Shillong 30.88 297 P P 22 47 50.4 -0.7**
SHL pmax pmax
comp=Z,49nm,0.8s
**SHL Shillong 30.88 297 P P 22 47 50.4 -0.7**
SHL IAmb IAmb 22 47 54.4
comp=Z,49nm,0.8s
**MDJ Mudanjiang 31.36 10 P P 22 47 55.4 +0.5**
MDJ IAmb IAmb 22 47 59.9
comp=Z,54nm,1.0s
**USA0B Ussuriysk Arra 31.43 13 P P 22 47 56.0 +0.5**
USA0B pmax pmax
comp=Z,55nm,0.9s
**USA0B Ussuriysk Arra 31.43 13 P P 22 47 56.0 +0.5**
**USRK Ussuriysk Ar. 31.43 13 P P 22 47 56.2 +0.7**
comp=Z,42nm,0.8s,baz=195,slow=7.7,SNR=41
USRK LR LR 23 02 09.8
comp=Z,146nm,18.1s,baz=187,slow=39
**FITZ Fitzroy Crossi 31.84 174** LR LR 23 03 32.5
comp=Z,57nm,18.7s,baz=355,slow=42
**GTA Gaotai 32.32 326** ⇑P **P 22 48 04.4 +0.8**
GTA SS SS 22 55 14.5 -21
GTA pmax pmax
comp=Z,81nm,1.0s
GTA pmax pmax
comp=Z,190nm,4.5s
GTA LR LR
comp=Z,400nm,17.1s
GTA LR LR
comp=Z,430nm,16.4s
GTA LR LR
comp=Z,690nm,15.3s
**LSA Lhasa 32.85 304 P P 22 48 09.7 +1.0**
**GOMU GeErMu 33.25 317 P P 22 48 13.4 +1.4**
GOMU PcP **PcP 22 50 54.4 +0.1**
GOMU S **S 22 53 33.6 +2.2**
GOMU pmax pmax
comp=Z,34nm,1.3s
GOMU pmax pmax
comp=Z,130nm,5.1s
GOMU LR LR
comp=Z,510nm,14.9s
GOMU LR LR
comp=Z,290nm,16.0s
GOMU LR LR
comp=Z,350nm,16.4s
**MBWA Marble Bar 34.81 184 P P 22 48 25.6 +0.4**
**ASAJ Asahikawa 34.86 26** LR LR 23 03 13.9
comp=Z,158nm,19.6s,baz=322,slow=37
**TAPN Taplejung 34.96 298** *e*P **P 22 48 26.7 -0.2**
comp=Z,67nm,1.0s
**ODAN Odare 35.11 297** *e*P **P 22 48 28.3 +0.2**
comp=Z,121nm,0.9s
**PSA00 Pilbara Seismi 35.21 184 P P 22 48 28.6 0.0**
PSA00 IAmb IAmb 22 48 32.2
comp=Z,18nm,1.0s
**PSA00 Pilbara Seismi 35.21 184 P P 22 48 28.6 0.0**
PSA00 IAmb IAmb 22 48 29.6
comp=Z,9.2nm,1.1s
**WRAB Tennant Creek 35.53 160** *ce*P **P 22 48 29.9 -1.5**
WRAB pmax pmax
comp=Z,26nm,1.3s
**WRA Warramunga Arr 35.53 160 P P 22 48 29.4 -2.0**
comp=Z,12nm,1.0s,baz=337,slow=9.6,SNR=37
**WB2 Warramunga Arr 35.54 160** IAmb IAmb 22 48 35.0
comp=Z,23nm,0.9s
**WR0 Warramunga Arr 35.62 160 P P 22 48 29.7 -2.5**
WR0 IAmb IAmb 22 48 33.2
comp=Z,16nm,0.9s
**RAMN Ramite 35.82 297** *e*P **P 22 48 34.6 +0.4**
comp=Z,17nm,0.6s
**KLR Kul'dur 36.20 10 P P 22 48 37.2 +0.3**
comp=Z,19nm,0.9s,baz=205,slow=5.4,SNR=31
KLR LR LR 23 02 47.8
comp=Z,171nm,21.6s,baz=198,slow=35
**KLR Kul'dur 36.20 10** *ce*P **P 22 48 36.3 -0.6**
KLR pmax pmax
comp=Z,32nm,1.1s
**ULN Ulaanbaatar 36.28 343** *ce*P **P 22 48 38.4 +0.6**
ULN pmax pmax
comp=Z,48nm,1.3s
**ULN Ulaanbaatar 36.28 343 P P 22 48 38.1 +0.3**
ULN IAmb IAmb 22 48 39.7
comp=Z,43nm,1.1s
**JIRN Jiri 36.35 298** *e*P **P 22 48 38.7 -0.2**
comp=Z,85nm,1.0s
**SONM Songino Array 36.45 342 P P 22 48 39.7 +0.5**
comp=Z,10nm,0.8s,baz=162,slow=9.9,SNR=36
**SONM Songino Array 36.45 342 P P 22 48 39.7 +0.5**
SONM pmax pmax
comp=Z,41nm,1.4s
**SONM Songino Array 36.45 342 P P 22 48 39.6 +0.5**
SONM IAmb IAmb 22 48 40.9
comp=Z,41nm,1.4s
**GUN Gumba 36.68 298** *e*P **P 22 48 41.5 -0.2**
comp=Z,131nm,1.0s
**CHLP Challavanipeta 36.99 282** *e*P **P 22 48 45.2 +1.1**
**PKI Pulchoki 36.99 298** *e*P **P 22 48 43.6 -0.8**
comp=Z,20nm,0.6s
**PKIN Phulchoki 37.01 298** *e*P **P 22 48 43.7 -0.7**
comp=Z,5.7nm,0.4s
**KKN Kakani 37.16 298** *e*P **P 22 48 45.4 -0.2**
**YSS Yuzh-Sakhalins 37.25 23** *i*P **P 22 48 47.2 +1.4**
YSS pmax pmax
comp=Z,23nm,1.1s
**YSS Yuzh-Sakhalins 37.25 23 P P 22 48 46.1 +0.3**
YSS IAmb IAmb 22 48 49.6
comp=Z,17nm,0.7s
**DMN Daman 37.27 298** *e*P **P 22 48 45.9 -0.7**
comp=Z,47nm,1.0s
**GKN Gorkha 37.76 298** *e*P **P 22 48 50.6 -0.1**
comp=Z,74nm,1.1s
**DANN Dangsing 38.60 298** *e*P **P 22 48 57.1 -0.8**
comp=Z,82nm,1.0s
**KOLN Koldanda 38.60 297** *e*P **P 22 48 56.8 -1.0**
comp=Z,74nm,1.1s
**GRNR Gornyy 38.64 14**⇑*i*P **P 22 48 58.1 +0.6**
GRNR pmax pmax
comp=N,9.0nm,1.0s
GRNR pmax pmax
comp=Z,20nm,0.8s
GRNR MLR MLR
comp=E,170nm,17.0s
GRNR MLR MLR
comp=N,230nm,14.0s
GRNR MLR MLR
comp=Z,160nm,17.0s
**ASAR Alice Springs 38.90 163** P **P 22 48 58.9 -1.1**
comp=Z,4.3nm,0.6s,baz=352,slow=7.3,SNR=38
**ASAR Alice Springs 38.90 163** P **P 22 48 59.0 -1.1**
**PYUN Piuthan 39.20 298** *e*P **P 22 49 02.4 -0.4**
comp=Z,114nm,1.1s
**PVM Polavaram 39.30 280** *e*P **P 22 49 02.9 -0.6**
**ZAK Zakamensk 39.66 341** *e*P **P 22 49 05.7 -0.5**
ZAK pmax pmax
comp=Z,16nm,1.1s
**ZEA Zeya 40.06 5** *e*P **P 22 49 09.3 0.0**
ZEA *e* 22 49 20.6
ZEA pmax pmax
comp=N,10.0nm,1.2s
ZEA pmax pmax
comp=Z,10.0nm,1.3s
ZEA MLR MLR
comp=N,300nm,15.0s
ZEA MLR MLR
comp=Z,300nm,17.0s
**MYLAV Mylavaram 40.26 280** *e*P **P 22 49 12.3 +0.8**
**ADKI Addanki 40.94 278** *e*P **P 22 49 17.9 +0.8**
**CTAO Charters Tower 41.08 145** P **P 22 49 17.9 -0.2**
CTAO pmax pmax
comp=Z,13nm,1.3s
**CTAO Charters Tower 41.08 145** P **P 22 49 17.9 -0.2**
**SKHT Srikalahasti 41.33 275** *e*P **P 22 49 20.2 -0.1**
**PALK Pallekele 41.37 265** LR LR 23 07 02.6
comp=Z,136nm,18.1s,baz=171,slow=37
**MOY Mondy 41.51 340** *e*P **P 22 49 22.0 +0.5**
MOY pmax pmax
comp=Z,51nm,1.5s
**RPR Rampur 41.51 283** *e*P **P 22 49 22.7 +0.8**
**CUPL Choutuppal 41.88 281** *e*P **P 22 49 25.5 +0.6**
**RCLA Racherla 41.93 278** *e*P **P 22 49 24.8 -0.5**
**SRLM Srisailam 41.96 279** *e*P **P 22 49 24.9 -0.6**
**WMQ Urumqi 42.09 322** *e*P **P 22 49 27.7 +1.4**
WMQ pP sP 22 49 40.0 +4.5
WMQ PP **PP 22 51 05.7 +1.8**
WMQ pmax pmax
comp=Z,26nm,1.5s
WMQ pmax pmax
comp=Z,160nm,4.9s
WMQ LR LR
comp=Z,750nm,12.9s
WMQ LR LR
comp=Z,800nm,17.9s
WMQ LR LR
comp=Z,410nm,17.1s
**HYBB Hyderabad (bro 42.23 281** *e*P **P 22 49 27.7 -0.1**
**SRSP Sriramsagar 42.41 283** *e*P **P 22 49 28.7 -0.5**
**MORW Morawa 43.02 188** P **P 22 49 34.4 +0.5**
**URV Uravakonda 43.60 277** *e*P **P 22 49 37.0 -1.8**
**HNR Honiara 43.90 120** LR LR 23 06 07.8
comp=Z,139nm,21.4s,baz=292,slow=34
**KLRI Killari 44.08 282** *e*P **P 22 49 41.8 -0.9**
**BOD Bodaibo 44.41 354** *e*P **P 22 49 44.6 -0.1**
BOD pmax pmax
comp=Z,15nm,1.9s
**FORT Forrest 44.64 173** P **P 22 49 46.5 -0.3**
**DGZ Jazzator, Alta 45.77 329** *i*P **P 22 49 56.4 +0.5**
DGZ pmax pmax
comp=Z,21nm,0.9s
**ZSN Zaisan 45.79 325** *e*P **P 22 49 55.6 -0.3**
**ZSN Zaisan 45.79 325** *e*P **P 22 49 55.6 -0.3**
baz=325
ZSN *i*S **S 22 56 37.1 -1.4**
baz=325
**NWAO Narrogin (SRO) 46.69 186** P **P 22 50 02.3 -0.7**
NWAO pmax pmax
comp=Z,20nm,0.8s
**NWAO Narrogin (SRO) 46.69 186** P **P 22 50 02.3 -0.7**
NWAO IAmb IAmb 22 50 05.6
comp=Z,20nm,0.8s
**MK31 Makanchi Array 46.91 323** *i*P **P 22 50 04.9 +0.2**
**MK31 Makanchi Array 46.91 323** P **P 22 50 04.4 -0.3**
MK31 IAmb IAmb 22 50 06.4
comp=Z,22nm,0.9s
**MKAR Makanchi Array 46.91 323** P **P 22 50 04.7 -0.1**
comp=Z,17nm,0.8s,baz=130,slow=8.8,SNR=67
**MKAR Makanchi Array 46.91 323** *ce*P **P 22 50 05.3 +0.6**
MKAR pmax pmax
comp=Z,17nm,0.8s
**MKAR Makanchi Array 46.91 323** P **P 22 50 04.9 +0.2**
**MAKZ Makanchi 47.10 323** P **P 22 50 06.0 -0.2**
MAKZ pmax pmax
comp=Z,54nm,1.5s
**MAKZ Makanchi 47.10 323** P **P 22 50 06.0 -0.2**
MAKZ IAmb IAmb 22 50 07.8
comp=Z,54nm,1.5s
**UZB Uzynbulak 47.24 317** *e*P **P 22 50 07.6 +0.1**
UZB pmax pmax
comp=Z,26nm,0.7s
**UZB Uzynbulak 47.24 317** *e*P **P 22 50 07.7 +0.1**
comp=Z,26nm,0.7s,baz=317
**PRZ Przheval'sk 47.39 316** P **P 22 50 10.3 +1.6**
PRZ pmax pmax
comp=Z,70nm,1.0s
**PRZ Przheval'sk 47.39 316** P **P 22 50 10.3 +1.6**
**TARG Taragay, Kyrgy 47.50 315** IAmb IAmb 22 50 12.4
comp=Z,40nm,1.2s
**KPKS Kokpek 47.60 317** *e*P **P 22 50 10.3 +0.1**
KPKS pmax pmax
comp=Z,14nm,0.8s
**KPKS Kokpek 47.60 317** *e*P **P 22 50 10.4 +0.1**
comp=Z,14nm,0.8s,baz=317
**SATY Saty 47.62 317** *e*P **P 22 50 10.7 +0.3**
SATY pmax pmax
comp=Z,17nm,0.8s
**SATY Saty 47.62 317** *e*P **P 22 50 10.8 +0.3**
comp=Z,17nm,0.8s,baz=316
**ZHN Zhinishke 47.64 317** *e*P **P 22 50 10.9 +0.3**
**ZHN Zhinishke 47.64 317** *e*P **P 22 50 11.0 +0.3**
baz=317
**KSH Kashi 48.02 311** P **P 22 50 16.2 +2.6**
KSH pP sP 22 50 28.2 +5.4
KSH PcP **PcP 22 51 43.1 +1.6**
KSH PP **PP 22 52 09.4 +3.6**
KSH ScP **ScP 22 55 32.4 -2.6**
KSH PcS **PcS 22 55 38.8 +1.5**
KSH S **S 22 57 10.0 -0.8**
KSH pmax pmax
comp=Z,23nm,1.3s
KSH pmax pmax
comp=Z,200nm,5.6s
KSH LR LR
comp=Z,240nm,17.5s
KSH LR LR
comp=Z,440nm,16.8s
KSH LR LR
comp=Z,370nm,12.7s
**KDJ Kajisay 48.08 315** P **P 22 50 14.9 +0.8**
KDJ pmax pmax
comp=Z,35nm,0.9s
**KDJ Kajisay 48.08 315** P **P 22 50 14.9 +0.8**
KDJ IAmb IAmb 22 50 16.3
comp=Z,35nm,0.8s
**PEA0B Petropavlovsk- 48.22 28** *ce*P **P 22 50 15.8 +1.0**
**PEA0B Petropavlovsk- 48.22 28** P **P 22 50 15.1 +0.3**
**PETK Petropavlovsk- 48.22 28** P **P 22 50 14.8 +0.1**
comp=Z,14nm,0.8s,baz=208,slow=6.0,SNR=14
PETK LR LR 23 09 21.4
comp=Z,97nm,21.6s,baz=228,slow=35
**PETK Petropavlovsk- 48.22 28** P **P 22 50 14.7 -0.1**
**PETK Petropavlovsk- 48.22 28** P **P 22 50 14.7 -0.1**
**TDK Taldyqorghan 48.44 319** *e*P **P 22 50 17.0 +0.4**
TDK pmax pmax
comp=Z,57nm,0.8s
**TDK Taldyqorghan 48.44 319** *e*P **P 22 50 17.0 +0.4**
comp=Z,57nm,0.8s,baz=319
**ARXS Arharly 48.48 318** *i*P **P 22 50 15.8 -1.2**
**YAK Yakutsk 48.48 5** P **P 22 50 16.0 -0.6**
comp=Z,8.3nm,0.5s,baz=169,slow=0.9,SNR=10
YAK LR LR 23 13 36.4
comp=Z,225nm,18.6s,baz=256,slow=40
**YAK Yakutsk 48.48 5** *e*P **P 22 50 15.7 -0.8**
YAK *e**PP **sP 22 50 28.7 +3.0**
YAK *e* 22 51 40.4
YAK *e*S **S 22 57 14.1 -2.2**
YAK *e* 23 00 07.3
YAK pmax pmax
comp=Z,48nm,1.0s
YAK pmax pmax
comp=N,20nm,0.9s
YAK pmax pmax
comp=E,10.0nm,1.0s
YAK pmax pmax
comp=Z,49nm,2.2s
YAK pmax pmax
comp=N,33nm,2.7s
YAK pmax pmax
comp=E,22nm,2.9s
YAK smax smax
comp=N,51nm,3.8s
YAK smax smax
comp=E,63nm,3.3s
YAK MLR MLR
comp=Z,281nm,17.0s
YAK MLR MLR
comp=N,231nm,17.0s
YAK MLR MLR
comp=E,174nm,19.0s
**YAK Yakutsk 48.48 5** P **P 22 50 16.1 -0.4**
**MDOK Medeo 48.57 316** *e*P **P 22 50 18.0 +0.2**
**MDOK Medeo 48.57 316** *e*P **P 22 50 18.1 +0.2**
baz=316
**NIL Nilore 48.58 303** P **P 22 50 17.9 0.0**
NIL pmax pmax
comp=Z,16nm,0.8s
**NIL Nilore 48.58 303** P **P 22 50 17.9 0.0**
NIL IAmb IAmb 22 50 21.6
comp=Z,16nm,0.8s
**TNSS Tian-Shan 48.59 316** *e*P **P 22 50 18.5 +0.2**
baz=316
**PET Petropavlovsk 48.60 29** *e*P **P 22 50 18.2 +0.5**
PET pmax pmax
comp=Z,29nm,0.9s
PET MLR MLR
comp=Z,200nm,18.0s
**PET Petropavlovsk 48.60 29** P **P 22 50 17.7 +0.1**
PET IAmb IAmb 22 50 18.9
comp=Z,18nm,0.9s
**AAA Alma-Ata 48.68 316** *e*P **P 22 50 19.2 +0.7**
**AAA Alma-Ata 48.68 316** *e*P **P 22 50 19.2 +0.7**
baz=316
**ULHL Ulahol 48.77 315** P **P 22 50 20.6 +1.1**
SNR=39
**STKA Stephens Creek 49.01 158** P **P 22 50 20.3 -0.8**
comp=Z,8.5nm,0.8s,baz=329,slow=5.6,SNR=12
STKA LR LR 23 12 35.6
comp=Z,108nm,19.4s,baz=347,slow=38
**STKA Stephens Creek 49.01 158** P **P 22 50 20.6 -0.5**
STKA pmax pmax
comp=Z,2.0nm,0.9s
**STKA Stephens Creek 49.01 158** P **P 22 50 20.6 -0.5**
**BOOM Boomskoye usch 49.07 315** IAmb IAmb 22 50 23.7
comp=Z,34nm,1.2s
**KUU Kurty 49.33 317** *e*P **P 22 50 23.8 +0.3**
**KUU Kurty 49.33 317** *e*P **P 22 50 23.8 +0.3**
baz=317
**TKM2 Tokmak 2 49.46 315** P **P 22 50 25.4 +0.6**
SNR=25
**ZAA0 Zalesovo Array 49.72 332** P **P 22 50 26.0 -0.2**
ZAA0 IAmb IAmb 22 50 27.0
comp=Z,21nm,1.0s
**ZALV Zalesovo Beam 49.72 332** P **P 22 50 25.9 -0.3**
comp=Z,14nm,0.9s,baz=116,slow=6.8,SNR=24
**KBK Karagaybulak 49.81 315** P **P 22 50 28.7 +1.3**
SNR=49
**UCH Uchtor 49.97 314** P **P 22 50 30.4 +1.5**
SNR=93
**CHMS Chumysh 50.07 315** P **P 22 50 29.7 +0.5**
SNR=31
**FRU1 Bishkek 50.09 315** P **P 22 50 29.8 +0.4**
FRU1 pmax pmax
comp=Z,30nm,0.9s
**FRU1 Bishkek 50.09 315** P **P 22 50 29.8 +0.4**
FRU1 IAmb IAmb 22 50 31.3
comp=Z,30nm,0.8s
**AAK Ala-Archa 50.12 315** P **P 22 50 30.7 +1.0**
comp=Z,11nm,0.9s,baz=127,slow=4.2,SNR=28
**AAK Ala-Archa 50.12 315** P **P 22 50 30.9 +1.1**
SNR=15
**AAK Ala-Archa 50.12 315** P **P 22 50 30.8 +1.0**
AAK IAmb IAmb 22 50 42.1
comp=Z,20nm,0.9s

**MA2 Magadan 50.33 18** *ce*P **P 22 50 30.9 +0.1**
MA2 pmax pmax
comp=Z,32nm,2.5s
**MA2 Magadan 50.33 18** P **P 22 50 30.8 +0.1**
**USP Ospenovka 50.34 315** P **P 22 50 31.9 +0.7**
SNR=48
**AML Almayashu 50.51 314** P **P 22 50 34.2 +1.3**
SNR=53
**EKS2 Erkin-Say 50.63 314** P **P 22 50 34.6 +1.1**
SNR=44
**KURK Kurchatov 51.00 326** P **P 22 50 36.9 +0.9**
KURK pmax pmax
comp=Z,125nm,0.9s
**KURK Kurchatov 51.00 326** P **P 22 50 36.9 +0.9**
**KURBB Kurchatov Arra 51.01 325** P **P 22 50 36.5 +0.5**
comp=Z,59nm,0.8s,baz=122,slow=7.9,SNR=103
**BTLS Baital 51.28 317** *e*P **P 22 50 38.0 -0.2**
BTLS pmax pmax
comp=Z,15nm,0.8s
**BTLS Baital 51.28 317** *e*P **P 22 50 38.1 -0.2**
comp=Z,15nm,0.8s,baz=317
**BTK Batken 51.98 310** IAmb IAmb 22 50 45.9
comp=Z,27nm,1.2s
**KBL Kabul 52.17 303** P **P 22 50 44.7 -0.6**
KBL pmax pmax
comp=Z,13nm,0.8s
**KBL Kabul 52.17 303** P **P 22 50 44.7 -0.6**
**DZA Taraz 52.41 314** *e*P **P 22 50 46.6 -0.1**
**DZA Taraz 52.41 314** *e*P **P 22 50 46.7 0.0**
baz=314
**CHGR Chuyangaron 52.88 308** P **P 22 50 49.8 -0.6**
**IUG luzhnay 53.11 313** *e*P **P 22 50 52.1 +0.1**
**IUG luzhnay 53.11 313** *e*P **P 22 50 52.1 +0.1**
baz=313
**SEY Seymchan 53.49 17** P **P 22 50 54.7 +0.5**
comp=Z,7.8nm,0.7s,baz=227,slow=6.0,SNR=18
**SEY Seymchan 53.49 17** *i*P **P 22 50 55.7 +1.5**
**BRLS Borolday 53.50 314** *e*P **P 22 50 55.0 +0.3**
**BRLS Borolday 53.50 314** *e*P **P 22 50 55.0 +0.3**
baz=313
**BRZS Berezniki 54.06 323** *e*P **P 22 50 58.8 +0.1**
BRZS pmax pmax
comp=Z,21nm,0.9s
**BRZS Berezniki 54.06 323** *e*P **P 22 50 58.9 +0.1**
comp=Z,21nm,0.9s,baz=323
**TOO Toolangi 55.53 158** P **P 22 51 09.4 0.0**
TOO pmax pmax
comp=Z,37nm,1.4s
**TOO Toolangi 55.53 158** P **P 22 51 09.4 0.0**
TOO IAmb IAmb 22 51 10.9
comp=Z,37nm,1.4s
**DZM Mont Dzumac 56.05 129** P **P 22 51 13.7 +0.1**
DZM IAmb IAmb 22 51 14.6
comp=Z,14nm,0.8s
**SHEM Shemya Is, Ala 56.41 35** LR LR 23 12 18.2
comp=Z,98nm,21.1s,baz=298,slow=33
**BRVK Borovoye 56.67 325** *ce*P **P 22 51 18.1 +0.7**
BRVK pmax pmax
comp=Z,114nm,1.3s
**BRVK Borovoye 56.67 325** P **P 22 51 17.8 +0.4**
**HRA Herat 57.72 302** P **P 22 51 24.7 -0.8**
**TIXI Tiksi 57.98 2** P **P 22 51 25.8 -0.5**
comp=Z,20nm,0.8s,baz=94,slow=22,SNR=44
TIXI LR LR 23 20 07.3
comp=Z,206nm,18.6s,baz=182,slow=40
**TIXI Tiksi 57.98 2** P **P 22 51 25.4 -1.0**
TIXI pmax pmax
comp=Z,24nm,0.8s
**TIXI Tiksi 57.98 2** P **P 22 51 25.4 -1.0**
TIXI IAmb IAmb 22 51 26.5
comp=Z,24nm,0.8s
**NRIK Noril'sk 59.70 346** P **P 22 51 38.4 +0.1**
comp=Z,36nm,1.0s,baz=135,slow=7.2,SNR=26
**NRIK Noril'sk 59.70 346** *ce*P **P 22 51 38.5 +0.1**
NRIK pmax pmax
comp=Z,46nm,1.1s
**FUNA Funafuti 60.65 108** P **P 22 51 46.4 +0.6**
**BILL Bilibino 61.17 17** *de*P **P 22 51 47.8 -0.6**
BILL *e* 22 54 10.2
BILL *e*S **S 23 00 03.2 -3.3**
BILL pmax pmax
comp=Z,16nm,1.3s
BILL MLR MLR
comp=Z,74nm,15.0s
**BILL Bilibino 61.17 17** P **P 22 51 48.1 -0.3**
BILL IAmb IAmb 22 51 52.1
comp=Z,11nm,1.0s
**KIWB Kanaga Island 61.19 38** P **P 22 51 48.9 +0.1**
**GEYT Alibeck 61.36 306** P **P 22 51 51.0 +0.7**
comp=Z,28nm,0.9s,baz=241,slow=18,SNR=23
**GEYT Alibeck 61.36 306** P **P 22 51 50.5 +0.2**
**SVE Sverdlovsk 63.19 327** *e*P **P 22 52 02.5 +0.4**
SVE pmax pmax
comp=Z,118nm,1.0s
**MSVF Nonsavu 63.28 118** *i*P **P 22 52 04.7 +1.2**
MSVF pmax pmax
comp=Z,17nm,0.7s
**MSVF Nonsavu 63.28 118** P **P 22 52 04.5 +1.1**
MSVF IAmb IAmb 22 52 05.6
comp=Z,28nm,0.9s
**ARU Arti 64.18 326** *c i*P **P 22 52 08.1 -0.6**
ARU 22 52 41.8
ARU 22 54 26.4
ARU PPP PPP 22 56 02.3
ARU S **S 23 00 45.0 +0.2**
ARU pmax pmax
comp=Z,77nm,1.3s
ARU MLR MLR
comp=Z,240nm,18.0s
**ARU Arti 64.18 326** P **P 22 52 08.2 -0.5**
**GAMB Gambell 67.19 26** P **P 22 52 28.2 +0.2**
GAMB IAmb IAmb 22 52 29.8
comp=Z,23nm,1.2s
**GAMB Gambell 67.19 26** P **P 22 52 28.1 +0.2**
baz=254
**TNA Tin City 69.21 25** P **P 22 52 41.2 +0.6**
baz=257
**KIRV Kirov 69.44 328** *ce*P **P 22 52 41.9 -0.2**
**MAK Makhachkala 69.66 311** *e*P **P 22 52 42.2 -1.6**
MAK *e*S **S 23 01 47.8 -3.5**
MAK pmax pmax
comp=Z,35nm,0.5s
MAK MLR MLR
comp=Z,104nm,15.0s
**ANM Nome 70.07 26** P **P 22 52 46.7 +0.7**
ANM pmax pmax
comp=Z,10.0nm,1.0s
**ANM Nome 70.07 26** P **P 22 52 46.7 +0.7**
**ANM Nome 70.07 26** P **P 22 52 46.3 +0.4**
baz=260
**GROC Groznyy 70.91 311** *e*P **P 22 52 51.4 -0.1**
GROC *e* 22 53 12.1
GROC *e*S **S 23 02 03.4 -2.6**
GROC pmax pmax
comp=Z,23nm,0.9s
**RDOG Red Dog Mine 71.63 22** P **P 22 52 56.1 +0.7**
**RDOG Red Dog Mine 71.63 22** P **P 22 52 56.1 +0.7**
baz=261
**PRGR Permogore 71.65 331** *e*P **P 22 52 53.5 -2.1**
PRGR *e**PP **sP 22 53 04.2 -0.8**
PRGR pmax pmax
comp=Z,14nm,0.8s
**GNI Garni 71.80 308** *ce*P **P 22 52 58.3 +1.1**
GNI pmax pmax
comp=Z,20nm,1.3s
**GNI Garni 71.80 308** P **P 22 52 57.3 +0.2**
GNI IAmb IAmb 22 53 07.0
comp=Z,13nm,0.8s
**ZEI Tsey 72.31 311** *e*P **P 22 52 59.1 -1.1**
ZEI pmax pmax
comp=Z,23nm,0.9s
**NCK Nalchik 72.50 312** *i*P **P 22 53 02.3 +1.2**
NCK pmax pmax
comp=Z,10.0nm,0.9s
**ONI Oni 72.65 311** P **P 22 53 02.4 +0.3**
ONI pmax pmax
comp=Z,17nm,0.7s
**ONI Oni 72.65 311** P **P 22 53 02.4 +0.3**
**AKH Akhalkalaki 72.68 309** ⇑P **P 22 53 03.3 +0.9**
**RAYN Ar Rayn 72.69 291** P **P 22 53 02.4 -0.2**
RAYN pmax pmax
comp=Z,17nm,1.1s
**RAYN Ar Rayn 72.69 291** P **P 22 53 02.4 -0.2**
RAYN IAmb IAmb 22 53 15.8
comp=Z,17nm,1.1s

**BKZ Black Stump Fm 72.95 139** P **P 22 53 03.4 -0.3**
BKZ IAmb IAmb 22 53 04.1
comp=Z,31nm,0.9s
**KBZ Khabaz 73.00 312** *i*P **P 22 53 06.0 +2.0**
KBZ pmax pmax
comp=Z,22nm,0.9s
**KIV Kislovodsk 73.14 312** *e*P **P 22 53 05.1 +0.1**
KIV pmax pmax
comp=Z,63nm,1.1s
KIV MLR MLR
comp=Z,91nm,17.0s
**NEY Neytrino 73.15 311** *i*P **P 22 53 06.1 +0.9**
NEY pmax pmax
comp=Z,4.0nm,1.0s
**SHA1 Shidzhatmaz 73.17 312** *i*P **P 22 53 06.2 +0.9**
**GEVA Gevas 73.22 306** P **P 22 53 05.4 -0.3**
GEVA IAmb IAmb 22 53 07.0
comp=Z,17nm,1.0s
**VRH Novokhopyorsk 73.51 320** *e*P **P 22 53 05.9 -0.9**
VRH pmax pmax
comp=Z,30nm,0.7s
**GCSA Galena City Sc 73.72 26** P **P 22 53 09.0 +1.2**
baz=268
**GURO Guroymak-BITLI 74.01 306** IAmb IAmb 22 53 12.1
comp=Z,22nm,0.9s
**TTA Tatalina 74.06 28** P **P 22 53 11.3 +1.3**
TTA pmax pmax
comp=Z,15nm,1.2s
**TTA Tatalina 74.06 28** P **P 22 53 11.3 +1.3**
**TTA Tatalina 74.06 28** P **P 22 53 10.6 +0.6**
baz=269
**O18K Koktuh Hills 74.43 31** P **P 22 53 12.8 +0.6**
baz=271
**KLMR Klimovskoe 74.57 330** *e*P **P 22 53 09.7 -3.2**
KLMR pmax pmax
comp=Z,36nm,1.1s
**KLMR Klimovskoe 74.57 330** *e*P **P 22 53 09.7 -3.2**
KLMR AMP 22 53 14.1
comp=Z,36nm,1.1s
KLMR *e*PP **PP 22 55 54.3 -5.1**
**L19K White Mountain 74.59 29** P **P 22 53 14.2 +1.1**
baz=270
**N19K Bonanza Creek 74.78 30** P **P 22 53 15.7 +1.5**
baz=271
**M19K Big River Lodg 74.81 29** P **P 22 53 15.6 +1.4**
baz=271
**J20K Nowinta River 74.90 27** IAmb IAmb 22 53 17.2
comp=Z,12nm,0.7s
**J20K Nowinta River 74.90 27** P **P 22 53 16.1 +1.4**
baz=270
**K20K Telida 74.94 28** P **P 22 53 16.1 +1.0**
baz=271
**VORD Divnogorie 75.05 319** *e*P **P 22 53 14.9 -0.9**
VORD pmax pmax
comp=Z,10.0nm,0.7s
**MARD Mardin 75.11 305** P **P 22 53 17.3 +0.6**
MARD IAmb IAmb 22 53 20.9
comp=Z,25nm,0.8s
**VSR Storozhevoye 75.11 320** *e*P **P 22 53 14.7 -1.5**
VSR pmax pmax
comp=Z,20nm,0.7s
**LPSR Galich'ya Gora 75.18 321** *e*P **P 22 53 15.9 -0.6**
LPSR pmax pmax
comp=Z,30nm,0.8s
**SOC Sochi 75.31 312** *e*P **P 22 53 15.7 -1.8**
SOC *e* 22 56 03.6
SOC *e*PPP PPP 22 57 50.2
SOC *e*S **S 23 02 52.7 -3.3**
SOC *e*SS **SS 23 07 41.8 -4.0**
SOC *e*SSS SSS 23 11 04.6
SOC pmax pmax
comp=Z,36nm,0.8s
SOC MLR MLR
comp=Z,135nm,16.0s
**H21K Melozitna Rive 75.45 25** IAmb IAmb 22 53 20.0
comp=Z,13nm,0.8s
**H21K Melozitna Rive 75.45 25** P **P 22 53 19.1 +1.2**
baz=271
**CHUM Lake Minchumin 75.71 27** P **P 22 53 20.5 +1.1**
baz=272
**PPLA Purkeypile 75.81 28** P **P 22 53 20.8 +0.7**
baz=272
**I21K Tanana 75.81 26** P **P 22 53 20.8 +0.9**
I21K IAmb IAmb 22 53 22.5
comp=Z,14nm,0.9s
**I21K Tanana 75.81 26** P **P 22 53 21.3 +1.3**
baz=272
**CAST Castle Rocks 75.83 28** IAmb IAmb 22 53 22.1
comp=Z,30nm,0.8s
**CAST Castle Rocks 75.83 28** P **P 22 53 20.6 +0.4**
baz=272
**BPAW Bear Paw Mtn. 76.29 27** IAmb IAmb 22 53 24.8
comp=Z,26nm,0.8s
**BPAW Bear Paw Mtn. 76.29 27** P **P 22 53 23.4 +0.7**
baz=273
**MLY Manley 76.34 26** IAmb IAmb 22 53 24.8
comp=Z,11nm,0.8s
**MLY Manley 76.34 26** P **P 22 53 23.6 +0.6**
baz=273
**OBN Obninsk 76.40 324**⇓ *e*P **P 22 53 22.8 -0.7**
OBN *e* 22 56 09.7
OBN *e*S **SKSac 23 03 26.6 -7.0**
OBN pmax pmax
comp=Z,28nm,1.3s
**OBN Obninsk 76.40 324** P **P 22 53 23.0 -0.5**
OBN IAmb IAmb 22 53 23.7
comp=Z,34nm,1.2s
**COLD Coldfoot 76.44 24** IAmb IAmb 22 53 26.8
comp=Z,18nm,1.2s
**COLD Coldfoot 76.44 24** P **P 22 53 24.5 +1.0**
baz=273
**SUA Susitna One 76.56 30** P **P 22 53 23.9 -0.6**
baz=274
**TOLK Toolik Lake Re 76.60 22** P **P 22 53 24.8 +0.4**
baz=273
**TRF Thorofare Moun 76.64 27** P **P 22 53 24.9 0.0**
baz=274
**CUT Chulitna 76.72 29** P **P 22 53 25.1 -0.1**
baz=274
**I23K Minto, Yukon-K 76.92 26** P **P 22 53 27.3 +1.1**
baz=274
**RC01 Rabbit Creek A 77.08 30** P **P 22 53 28.6 +1.3**
baz=275
**NEA2 Nenana 77.08 26** IAmb IAmb 22 53 29.2
comp=Z,19nm,1.2s
**NEA2 Nenana 77.08 26** P **P 22 53 27.8 +0.6**
baz=275
**MCK McKinley 77.22 27** P **P 22 53 28.6 +0.6**
MCK pmax pmax
comp=Z,17nm,0.8s
**MCK McKinley 77.22 27** P **P 22 53 28.6 +0.6**
MCK IAmb IAmb 22 53 29.2
comp=Z,17nm,0.8s
**MCK McKinley 77.22 27** P **P 22 53 27.6 -0.4**
baz=275
**RND Reindeer 77.28 27** IAmb IAmb 22 53 36.4
comp=Z,38nm,1.3s
**PMR Palmer 77.32 29** P **P 22 53 28.9 +0.3**
baz=276
**H24K Noodor Dome 77.47 25** P **P 22 53 29.9 +0.4**
baz=276
**KNK Knik Glacier 77.66 29** P **P 22 53 31.0 +0.4**
baz=276
**SML Sawmill 77.68 29** P **P 22 53 30.6 0.0**
baz=276
**POKR Poker Plat Res 77.73 26** P **P 22 53 31.1 +0.3**
baz=276
**PWL Port Wells 77.78 30** P **P 22 53 31.1 -0.1**
baz=276
**GAZ Gazlantep 77.95 306** IAmb IAmb 22 53 32.6
comp=Z,29nm,1.0s
**ILAR Eielson Array 78.00 26** P **P 22 53 31.3 -1.0**
comp=Z,1.4nm,0.6s,baz=231,slow=5.2,SNR=18
**HDA Harding Lake 78.02 26** IAmb IAmb 22 53 32.4
comp=Z,9.2nm,0.6s
**HDA Harding Lake 78.02 26** P **P 22 53 31.2 -1.2**
baz=277
**SCM Sheep Creek Mo 78.15 29** P **P 22 53 33.4 0.0**
baz=277
**GLI Glacier Island 78.38 30** P **P 22 53 35.4 +0.9**
baz=277
**RSD Rainshed 78.50 73** P **P 22 53 37.0 +0.8**
**M24K Tolsona, Glenn 78.66 29** P **P 22 53 36.0 -0.1**
baz=278
**J25K Salcha River, 78.67 26** P **P 22 53 34.7 -1.4**
baz=278
**PAX Paxson 78.86 28** P **P 22 53 37.2 0.0**
baz=278
**KLU Klutina 78.86 29** P **P 22 53 37.4 +0.1**
baz=278
**RIDG Independent Ri 79.02 27** IAmb IAmb 22 53 39.2
comp=Z,16nm,0.8s
**RIDG Independent Ri 79.02 27** P **P 22 53 36.8 -1.2**
baz=279
**SIM Simferopol' 79.14 314** *e*P **P 22 53 37.8 -1.2**
SIM S **S 23 03 34.0 -3.6**
SIM pmax pmax
comp=Z,31nm,0.7s
**SCRK Sand Creek 79.36 27** P **P 22 53 39.7 -0.3**
baz=280
**J26L Joseph Creek 79.46 26** P **P 22 53 40.5 0.0**
baz=280
**ARA0 ARCESS Array S 79.57 339** *e*P **P 22 53 41.4 +0.5**
**ARCES ARCESS Array B 79.57 339** P **P 22 53 40.5 -0.4**
comp=Z,14nm,0.6s,baz=79,slow=5.7,SNR=47
**ARCES ARCESS Array B 79.57 339** IAmb IAmb 22 53 42.6
comp=Z,53nm,1.4s
**L26K Log Cabin Wild 79.81 28** P **P 22 53 42.2 -0.1**
baz=280
**SPB2 Spitsbergen Ar 79.83 348** P **P 22 53 42.3 +0.2**
SPB2 IAmb IAmb 22 53 54.5
comp=Z,40nm,1.1s
**SPA0 Spitsbergen Ar 79.83 348** *e*P **P 22 53 43.1 +0.9**
**SPITS Spitsbergen Ar 79.83 348** LR LR 23 34 02.3
comp=Z,209nm,18.1s,baz=236,slow=39
**KAIM Kayak Island 79.84 31** P **P 22 53 42.1 -0.3**
baz=280
**HAMF Hammerfest 79.95 340** *e*P **P 22 53 42.5 -0.3**
**M26K Nabesna, AK 80.08 28** P **P 22 53 43.9 +0.1**
baz=281
**GHAJ Ghor Haditha 80.23 300** P **P 22 53 45.4 +0.3**
**BR131 Keskin Array S 80.33 309** P **P 22 53 45.4 -0.4**
BR131 pmax pmax
comp=Z,10.0nm,0.8s
**BR131 Keskin Array S 80.33 309** P **P 22 53 45.4 -0.4**
**BRTR Keskin Array B 80.33 309** P **P 22 53 46.0 +0.3**
comp=Z,4.7nm,0.8s,baz=96,slow=3.7,SNR=9.5
**BRTR Keskin Array B 80.33 309** *i*P **P 22 53 46.0 +0.3**
**BRTR Keskin Array B 80.33 309** pmax pmax
comp=Z,5.0nm,0.8s
**KTK1 Kautokeino 80.47 339** *e*P **P 22 53 45.1 -0.7**
**L27K Beaver Creek, 80.48 27** P **P 22 53 46.4 +0.5**
baz=282
**M27K Edge Creek, AK 80.60 28** P **P 22 53 47.0 +0.3**
baz=282
**FINES FINESS Array B 80.98 331** P **P 22 53 48.1 -0.4**
comp=Z,7.0nm,0.6s,baz=61,slow=6.5,SNR=15
**VSU Vasula 81.28 328** *i*P **P 22 53 50.3 +0.1**
VSU pmax pmax
comp=Z,112nm,1.1s
**VSU Vasula 81.28 328** *e*P **P 22 53 50.0 -0.1**
**JETT Jettan, Norway 81.31 340** *e*P **P 22 53 51.6 +1.4**
**DAWY Dawson 81.33 26** P **P 22 53 50.3 -0.2**
baz=284
**AKASG Malin Array Be 81.41 320** P **P 22 53 50.1 -1.0**
comp=Z,2.9nm,0.6s,baz=62,slow=5.5,SNR=16
**AKBB Malin Array Si 81.41 320** *ce*P **P 22 53 52.0 +0.9**
**CSS Mathiatis 81.42 304** P **P 22 53 51.1 -0.4**
**MNK Minsk 81.46 324** *i*P **P 22 53 49.8 -1.5**
MNK *i**PP **sP 22 54 02.0 +1.3**
MNK *i* 22 56 55.9
MNK *i*PPP PPP 22 58 46.4
MNK *i*S **S 23 03 58.0 -3.6**
MNK *i*SS **SS 23 09 16.6 -1.1**
MNK *i*SSS SSS 23 12 44.3
MNK pmax pmax
comp=E,4.0nm,0.9s
MNK pmax pmax
comp=Z,42nm,1.0s
MNK pmax pmax
comp=N,19nm,0.9s
MNK MLR MLR
comp=N,113nm,20.0s
MNK MLR MLR
comp=E,21nm,19.0s
MNK MLR MLR
comp=Z,147nm,20.0s
**MNK Minsk 81.46 324** *i*P **P 22 53 49.8 -1.5**
comp=E,4.0nm,0.9s
MNK *i*P **P 22 53 49.8 -1.5**
comp=N,19nm,0.9s
MNK *i*P **P 22 53 49.8 -1.5**
comp=Z,42nm,1.0s,baz=258
MNK *i*pP **sP 22 54 02.0 +1.3**
MNK *i*PP **PP 22 56 56.0 -1.2**
MNK *i*PPP PPP 22 58 46.4
MNK *i*S **S 23 03 58.0 -3.6**
MNK *i*sS **ScS 23 04 19.5 +0.5**
MNK *i*SS **SS 23 09 16.6 -1.1**
MNK *i*SSS SSS 23 12 44.4
MNK *i*LQ LQ 23 25 30.6
MNK *i*LR LR 23 30 16.0
MNK *i*LRM MLR 23 32 15.6
comp=N,113nm,20.4s
MNK *i*LRM MLR 23 32 17.3
comp=E,21nm,18.6s
MNK *i*LRM MLR 23 32 23.2
comp=Z,147nm,19.5s
**I29M Ogilvie Camp, 81.47 25** P **P 22 53 50.7 -0.4**
**I29M Ogilvie Camp, 81.47 25** P **P 22 53 51.4 +0.3**
baz=284
**J29M Klondike Camp 81.73 26** P **P 22 53 53.7 +1.0**
baz=284
**TRO Tromso 81.78 340** *e*P **P 22 53 52.4 -0.3**
**EPYK Eagle Plains 81.84 24** P **P 22 53 53.6 +0.4**
baz=286
**PINM Pinnacle 81.85 30** P **P 22 53 53.8 +0.5**
baz=283
**IDID Didziasalis 81.94 325** *e*P **P 22 53 54.3 +0.5**
**NACGM Naroch 82.00 325** *i*P **P 22 53 52.6 -1.5**
**IIGN Ignalina 82.22 325** *e*P **P 22 53 55.7 +0.4**
**ISAL Salakas 82.22 325** *e*P **P 22 53 55.4 +0.1**
**INK Inuvik 82.46 21** P **P 22 53 55.2 -1.1**
comp=Z,9.0nm,1.0s,baz=276,slow=7.3,SNR=6.6
INK LR LR 23 31 22.5
comp=Z,55nm,20.6s,baz=240,slow=36
**INK Inuvik 82.46 21** IAmb IAmb 22 54 07.4
comp=Z,24nm,1.4s
**INK Inuvik 82.46 21** P **P 22 53 56.5 +0.2**
baz=288
**SORM Soroca 82.49 318**⇓ P **P 22 53 55.8 -1.0**
**BORA Eskisehir 82.71 309** P **P 22 53 57.6 -0.7**
BORA IAmb IAmb 22 53 58.3
comp=Z,11nm,0.8s
**NOR Nord 82.75 354** *i*P **P 22 53 55.2 -2.3**
NOR IAmb IAmb 22 53 57.1
comp=Z,5.7nm,0.8s
**TLCR 82.79 315**⇑ P **P 22 53 58.4 -0.1**
**TLCR 82.79 315** P **P 22 54 01.7 +3.2**
**JURR Jurilovca 82.84 314**⇑ P **P 22 53 58.7 0.0**
**VLDR Vladesti 83.16 315**⇓ P **P 22 54 00.4 +0.1**
**SLCR Slobozia Conac 83.43 315**⇓ P **P 22 54 02.0 +0.3**
**PABE Paberze 83.43 325** *e*P **P 22 54 02.2 +0.7**
**HARR Harsova 83.52 314**⇑ P **P 22 54 01.6 -0.6**
**HARR Harsova 83.52 314** P **P 22 54 05.8 +3.6**
**N31M Braeburn, Yuko 83.61 28** P **P 22 54 03.1 +0.7**
baz=287
**STEI Steigen 83.61 339** *e*P **P 22 54 01.9 -0.3**
**A36M Sachs Harbour 83.72 17** P **P 22 54 02.8 +0.1**
baz=296
**SLIT Slitere, Latvi 83.77 328** *e*P **P 22 54 02.9 -0.3**
**ELL Elmali 83.78 306** P **P 22 54 03.4 -0.5**
ELL pmax pmax
comp=Z,47nm,0.8s
**ELL Elmali 83.78 306** P **P 22 54 03.4 -0.5**
**PANC Panciu 83.79 316**⇑ P **P 22 54 04.3 +0.7**
**FAUS Fauske 83.79 338** *e*P **P 22 54 02.4 -0.7**
**ODBI Odobesti 83.87 315**⇓ P **P 22 54 05.1 +1.0**
**TESR Tescani 83.98 316**⇑ P **P 22 54 04.3 -0.2**
**M31M Drury Creek, Y 84.02 27** P **P 22 54 05.1 +0.6**
baz=288
**PRAR RASCA 84.06 317**⇑ P **P 22 54 04.9 0.0**
**VRI Vrincioaia 84.07 316**⇑ P **P 22 54 05.2 +0.1**
**PGOR Pogoanele 84.12 315**⇑ P **P 22 54 03.7 -1.6**
**PLOR Plostina 84.13 316**⇓ P **P 22 54 05.7 +0.3**
**SUW Suwalki 84.26 324** P **P 22 54 04.6 -1.2**
SUW pmax pmax
comp=Z,213nm,1.1s
**SUW Suwalki 84.26 324** *e*P **P 22 54 05.8 0.0**
**SUW Suwalki 84.26 324** P **P 22 54 04.6 -1.2**
**WHY Whitehorse 84.27 29** P **P 22 54 06.6 +0.7**
baz=288

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PBUR | Paburge | 84.40 | 326 | *e*P | | P | | 22 54 06.2 | -0.3 |
| SKAG | Skagway | 84.42 | 30 | P | | P | | 22 54 07.6 | +1.1 |
| | baz=288 | | | | | | | | |
| COVR | Voineasa-Covas | 84.43 | 316 | ⇑P | | P | | 22 54 06.2 | -0.8 |
| NEHR | Nehoiu | 84.47 | 315 | ⇓P | | P | | 22 54 07.0 | -0.2 |
| BURAR | Bucovina Array | 84.66 | 318 | ⇑P | | P | | 22 54 08.0 | -0.1 |
| BURAR | Bucovina Array | 84.66 | 318 | P | | P | | 22 54 12.6 | +4.5 |
| SULR | | 84.68 | 315 | ⇓P | | P | | 22 54 08.7 | +0.6 |
| MLR | Muntele Rosu | 84.70 | 315 | ⇓P | | P | | 22 54 08.8 | +0.4 |
| MLR | Muntele Rosu | 84.70 | 315 | P | | P | | 22 54 07.9 | -0.5 |
| MLR | comp=Z,21nm,0.9s | | | pmax | pmax | | | | |
| MLR | Muntele Rosu | 84.70 | 315 | P | | P | | 22 54 07.9 | -0.5 |
| MLR | comp=Z,20nm,0.9s | | | IAmb | IAmb | | | 22 54 09.3 | |
| LVV | L'vov | 84.86 | 320 | *e*P | | P | | 22 54 07.4 | -1.5 |
| LVV | | | | *e* | | | | 22 57 30.0 | |
| LVV | | | | *e*S | | SKSac | | 23 04 22.3 | -10 |
| LVV | comp=Z,110nm,1.4s | | | pmax | pmax | | | | |
| LVV | comp=E,500nm,22.0s | | | MLR | MLR | | | | |
| LVV | comp=N,300nm,20.0s | | | MLR | MLR | | | | |
| LVV | comp=Z,200nm,20.0s | | | MLR | MLR | | | | |
| EUNU | Eureka | 85.13 | 5 | IAmb | IAmb | | | 22 54 10.7 | |
| C36M | comp=Z,16nm,1.3s<br>Paulatuk | 85.23 | 19 | IAmb | IAmb | | | 22 54 11.3 | |
| C36M | comp=Z,26nm,1.2s<br>Paulatuk | 85.23 | 19 | P | | P | | 22 54 10.1 | -0.3 |
| VOIR | baz=297 | 85.32 | 316 | ⇓P | | P | | 22 54 11.2 | -0.3 |
| MTUR | Matau | 85.36 | 315 | ⇑P | | P | | 22 54 10.7 | -1.1 |
| MTUR | Matau | 85.36 | 315 | P | | P | | 22 54 18.3 | +6.6 |
| UPP | Uppsala | 85.41 | 331 | *e*P | | P | | 22 54 10.4 | -1.0 |
| KMBO | Kilima Mbogo | 85.46 | 268 | P | | P | | 22 54 11.8 | -1.1 |
| KMBO | comp=Z,3.5nm,1.0s,baz=38,slow=14,SNR=3.9<br>Kilima Mbogo | 85.46 | 268 | *ce*P | | P | | 22 54 13.3 | +0.3 |
| KMBO | comp=Z,4.0nm,1.0s | | | pmax | pmax | | | | |
| HUMR | Humele | 85.60 | 315 | ⇑P | | P | | 22 54 11.7 | -1.1 |
| BMR | Baia Mare | 85.77 | 318 | ⇓P | | P | | 22 54 14.0 | +0.4 |
| CJR | Cluj-Napoca | 85.96 | 317 | ⇓P | | P | | 22 54 14.9 | +0.3 |
| CBBR | Cluj-Babes-Bol | 85.98 | 317 | ⇓P | | P | | 22 54 15.2 | +0.6 |
| VLAD | Vladila | 86.14 | 314 | ⇓P | | P | | 22 54 15.6 | +0.1 |
| NSS | Namsos | 86.14 | 336 | *e*P | | P | | 22 54 13.5 | -1.5 |
| LOT | Lotru | 86.19 | 316 | ⇓P | | P | | 22 54 15.8 | -0.1 |
| UZH | Uzhgorod | 86.28 | 319 | ⇑P | | P | | 22 54 16.0 | 0.0 |
| UZH | | | | *i* | | | | 22 54 25.5 | |
| DRGR | | 86.53 | 317 | ⇓P | | P | | 22 54 17.1 | -0.3 |
| STHS | Stebnicka Huta | 86.71 | 320 | *e*P | | P | | 22 54 17.4 | -0.8 |
| STHS | Stebnicka Huta | 86.71 | 320 | *e*P | | P | | 22 54 17.4 | -0.8 |
| CRVS | Cervenica-Dubn | 86.72 | 320 | *e*P | | P | | 22 54 18.6 | +0.3 |
| CRVS | comp=Z,159nm,1.0s | | | pmax | pmax | | | | |
| CRVS | Cervenica-Dubn | 86.72 | 320 | *e*P | | P | | 22 54 18.6 | +0.3 |
| DAG | Danmarks Havn | 86.77 | 352 | *i* P | | P | | 22 54 15.0 | -2.9 |
| DAG | comp=Z,6.2nm,0.8s | | | IAmb | IAmb | | | 22 54 16.4 | |
| VTS | Vitosha | 87.33 | 313 | ⇓P | | P | | 22 54 21.3 | -0.2 |
| VTS | Vitosha | 87.33 | 313 | P | | P | | 22 54 23.2 | +1.7 |
| VTS | Vitosha | 87.33 | 313 | IAmb | IAmb | | | 22 54 24.5 | |
| SIRR | comp=Z,9.4nm,1.0s<br>Siria | 87.37 | 317 | ⇑P | | P | | 22 54 21.0 | -0.5 |
| KECS | Kecovo | 87.47 | 319 | *e*P | | P | | 22 54 21.9 | +0.1 |
| KECS | comp=Z,19nm,0.8s | | | pmax | pmax | | | | |
| KECS | Kecovo | 87.47 | 319 | *e*P | | P | | 22 54 21.9 | +0.1 |
| LANS | Liptovska Anna | 87.90 | 320 | *e*P | | P | | 22 54 24.3 | +0.3 |
| LANS | comp=Z,27nm,2.0s | | | pmax | pmax | | | | |
| LANS | Liptovska Anna | 87.90 | 320 | *e*P | | P | | 22 54 24.3 | +0.3 |
| NB2 | NORSAR Subarra | 87.91 | 333 | P | | P | | 22 54 21.9 | -1.8 |
| NB2 | comp=Z,9.5nm,0.6s,baz=68,slow=4.6<br>NORSAR Subarra | 87.91 | 333 | P | | P | | 22 54 21.9 | -1.8 |
| NOA | baz=68,slow=4.6<br>NORSAR Array B | 87.91 | 333 | P | | P | | 22 54 22.4 | -1.3 |
| NOA | comp=Z,6.6nm,0.6s,baz=68,slow=4.7,SNR=28 | | | LR | LR | | | 23 36 37.2 | |
| PSZ | comp=Z,131nm,18.6s,baz=70,slow=38<br>Piszkesteto | 88.02 | 319 | IAmb | IAmb | | | 22 54 28.4 | |
| PSZ | comp=Z,17nm,1.1s<br>Piszkesteto | 88.02 | 319 | P | | P | | 22 54 25.1 | +0.5 |
| IDI | Anoyia | 88.08 | 306 | LR | LR | | | 23 37 13.4 | |
| DOMB | comp=Z,27nm,21.3s,baz=74,slow=38<br>Dombas | 88.40 | 334 | ⇑*e*P | | P | | 22 54 26.3 | +0.3 |
| OKC | Ostrava-Krasne | 88.49 | 321 | *e*P | | P | | 22 54 26.3 | -0.4 |
| OKC | Ostrava-Krasne | 88.49 | 321 | *e*P | | P | | 22 54 26.3 | -0.4 |
| RES | Resolute Bay | 88.72 | 9 | P | | P | | 22 54 26.9 | -0.3 |
| RES | comp=Z,9.6nm,1.0s,baz=315,slow=5.4,SNR=12 | | | LR | LR | | | 23 39 07.5 | |
| RES | comp=Z,66nm,18.3s,baz=320,slow=39<br>Resolute Bay | 88.72 | 9 | IAmb | IAmb | | | 22 54 28.0 | |
| NEEM | comp=Z,9.9nm,0.9s<br>North Greenlan | 88.87 | 359 | *i* P | | P | | 22 54 27.0 | -1.4 |
| NEEM | comp=Z,14nm,0.6s | | | IAmb | IAmb | | | 22 54 28.9 | |
| MORC | Moravsky Berou | 88.88 | 321 | ⇑P | | P | | 22 54 28.5 | -0.1 |
| MORC | Moravsky Berou | 88.88 | 321 | P | | P | | 22 54 29.5 | +0.9 |
| MORC | Moravsky Berou | 88.88 | 321 | *e*P | | P | | 22 54 28.3 | -0.3 |
| MORC | Moravsky Berou | 88.88 | 321 | IAmb | IAmb | | | 22 54 29.5 | |
| DBG | comp=Z,9.9nm,0.8s<br>Daneborg | 88.98 | 350 | *i* P | | P | | 22 54 26.1 | -2.4 |
| DBG | comp=Z,4.4nm,0.7s | | | IAmb | IAmb | | | 22 54 27.8 | |
| SRO2 | Moca | 89.03 | 319 | *e*P | | P | | 22 54 28.5 | -0.7 |
| SRO2 | Moca | 89.03 | 319 | *e*P | | P | | 22 54 28.5 | -0.7 |
| JAVC | Velka Javorina | 89.11 | 320 | *e*P | | P | | 22 54 30.7 | +1.0 |
| AKN | Aaknes | 89.19 | 335 | *e*P | | P | | 22 54 29.4 | -0.4 |
| KRLC | Kraliky | 89.23 | 322 | *e*P | | P | | 22 54 30.1 | -0.1 |
| KRLC | Kraliky | 89.23 | 322 | *e*P | | P | | 22 54 30.1 | -0.1 |
| CSKK | Cskako | 89.24 | 319 | P | | P | | 22 54 33.4 | +3.1 |
| OSTC | Ostas | 89.40 | 322 | *e*P | | P | | 22 54 30.5 | -0.5 |
| DPC | Dobruska-Polom | 89.41 | 322 | *e*P | | P | | 22 54 30.5 | -0.6 |
| DPC | Dobruska-Polom | 89.41 | 322 | *e*P | | P | | 22 54 30.5 | -0.6 |
| CHVC | Chvalec | 89.49 | 322 | *e*P | | P | | 22 54 30.6 | -0.8 |
| UPC | Upice | 89.54 | 322 | *e*P | | P | | 22 54 31.0 | -0.6 |
| UPC | Upice | 89.54 | 322 | *e*P | | P | | 22 54 31.0 | -0.6 |
| VRAC | Vranov | 89.62 | 321 | ⇓P | | P | | 22 54 32.7 | +0.6 |
| VRAC | Vranov | 89.62 | 321 | P | | P | | 22 54 33.3 | +1.3 |
| VRAC | Vranov | 89.62 | 321 | *e*P | | P | | 22 54 32.1 | +0.1 |
| MPLH | Magyarpolny | 89.77 | 319 | P | | P | | 22 54 32.0 | -0.8 |
| KOVH | Kovagotottos | 89.77 | 318 | P | | P | | 22 54 31.6 | -1.2 |
| KRUC | Moravsky | 89.83 | 321 | *e*P | | P | | 22 54 32.9 | -0.1 |
| TREC | Trest | 90.30 | 321 | *e*P | | P | | 22 54 35.3 | +0.1 |
| TREC | Trest | 90.30 | 321 | *e*P | | P | | 22 54 35.3 | +0.1 |
| PVCC | Panska Ves | 90.39 | 323 | *e*P | | P | | 22 54 35.2 | -0.4 |
| PVCC | Panska Ves | 90.39 | 323 | *e*P | | P | | 22 54 35.2 | -0.4 |
| ODD1 | Odda | 90.44 | 333 | *e*P | | P | | 22 54 35.6 | -0.1 |
| PRU | Pruhonice | 90.61 | 322 | *e*P | | P | | 22 54 36.1 | -0.5 |
| PRU | Pruhonice | 90.61 | 322 | *e*P | | P | | 22 54 36.1 | -0.5 |
| BRG | Berggiesshubel | 90.62 | 323 | *e*P | | P | | 22 54 36.5 | -0.2 |
| BRG | comp=Z,13nm,1.0s | | | Amp | | | | 22 54 37.9 | |
| BRG | Berggiesshubel | 90.62 | 323 | *e*P | | P | | 22 54 36.4 | -0.2 |
| BRG | comp=Z,13nm,1.0s | | | pmax | pmax | | | | |
| BRG | Berggiesshubel | 90.62 | 323 | *e*PKPbc | | P | | 22 54 36.7 | 0.0 |
| BRG | baz=65,slow=4.6<br>Berggiesshubel | 90.62 | 323 | *e*PKPbc | | P | | 22 54 36.6 | 0.0 |
| FBE | baz=65,slow=4.6<br>Freiberg | 90.95 | 323 | *e*PKPbc | | P | | 22 54 38.0 | -0.1 |
| FBE | baz=65,slow=4.6<br>Freiberg | 90.95 | 323 | *e*PKPbc | | P | | 22 54 38.1 | -0.1 |
| CLL | baz=65,slow=4.6<br>Collm | 91.00 | 324 | *i* P | | P | | 22 54 37.6 | -0.8 |
| CLL | | | | *e* | | | | 22 54 52.0 | |
| CLL | comp=Z,5.0nm,0.8s | | | pmax | pmax | | | | |
| CLL | Collm | 91.00 | 324 | *i* P | | P | | 22 54 37.6 | -0.8 |
| CLL | comp=Z,5.0nm,0.8s | | | *es*P | | sP | | 22 54 52.0 | +4.1 |
| CLL | | | | *ex* | | x | | 22 58 11.0 | |
| CLL | | | | *e*PP | | PP | | 22 58 17.0 | +2.7 |
| CLL | | | | Lm | | MLR | | 23 38 00.0 | |
| CLL | comp=Z,100nm,20.3s<br>Collm | 91.00 | 324 | *e*PKPbc | | P | | 22 54 37.9 | -0.5 |
| CLL | baz=65,slow=4.6<br>Collm | 91.00 | 324 | *e*PKPbc | | P | | 22 54 38.2 | -0.2 |
| PBCC | baz=65,slow=4.6<br>Pribram | 91.05 | 322 | *e*P | | P | | 22 54 38.2 | -0.5 |
| CKRC | Cesky Krumlov | 91.19 | 321 | *e*P | | P | | 22 54 39.3 | -0.1 |
| BSEG | Bad Segeberg | 91.39 | 327 | *e*PKPbc | | P | | 22 54 39.7 | -0.5 |
| | baz=65,slow=4.6 | | | | | | | | |
| BSEG | Bad Segeberg | 91.39 | 327 | *e*PKPbc | | P | | 22 54 40.2 | +0.1 |
| KHC | baz=65,slow=4.6<br>Kasperske Hory | 91.52 | 322 | *e*P | | P | | 22 54 40.5 | -0.4 |
| KHC | Kasperske Hory | 91.52 | 322 | *e*P | | P | | 22 54 40.5 | -0.4 |
| KHC | Kasperske Hory | 91.52 | 322 | IAmb | IAmb | | | 22 54 42.4 | |
| GEC2 | comp=Z,20nm,1.5s<br>GERESS Array S | 91.56 | 321 | *e*PKPbc | | P | | 22 54 40.7 | -0.4 |
| GEC2 | baz=65,slow=4.6<br>GERESS Array S | 91.56 | 321 | *e*PKPbc | | P | | 22 54 40.7 | -0.4 |
| GEC2 | baz=65,slow=4.6<br>GERESS Array S | 91.56 | 321 | IAmb | IAmb | | | 22 54 41.8 | |
| GERES | comp=Z,9.8nm,0.9s<br>GERESS Array B | 91.56 | 321 | P | | P | | 22 54 41.0 | -0.1 |
| GERES | comp=Z,4.7nm,0.7s,baz=73,slow=4.7,SNR=27 | | | LR | LR | | | 23 39 08.8 | |
| FLTG | comp=Z,103nm,20.7s,baz=3.5,slow=38<br>Flechtingen | 91.58 | 325 | *e*PKPbc | | P | | 22 54 40.4 | -0.6 |
| FLTG | baz=65,slow=4.6<br>Flechtingen | 91.58 | 325 | *e*PKPbc | | P | | 22 54 40.9 | -0.1 |
| MOA | baz=65,slow=4.6<br>Molln | 91.59 | 320 | *i* P | | P | | 22 54 41.6 | +0.4 |
| MBAR | comp=Z,26nm,1.1s,SNR=10.0<br>Mbarara | 91.67 | 270 | LR | LR | | | 23 35 32.5 | |
| TANN | comp=Z,37nm,18.1s,baz=98,slow=35<br>Tannenbergstha | 91.67 | 323 | *e*PKPbc | | P | | 22 54 41.3 | -0.3 |
| TANN | baz=65,slow=4.6<br>Tannenbergstha | 91.67 | 323 | *e*PKPbc | | P | | 22 54 41.6 | -0.1 |
| NEUB | baz=65,slow=4.6<br>Neuenburg | 91.74 | 324 | *e*PKPbc | | P | | 22 54 41.8 | 0.0 |
| GUNZ | baz=65,slow=4.6<br>Gunzen | 91.77 | 323 | *e*PKPbc | | P | | 22 54 42.0 | -0.1 |
| GUNZ | baz=65,slow=4.6<br>Gunzen | 91.77 | 323 | *e*PKPbc | | P | | 22 54 41.7 | -0.3 |
| WERN | baz=65,slow=4.6<br>Wernitzgruen | 91.77 | 323 | *e*PKPbc | | P | | 22 54 42.0 | -0.1 |
| WERN | baz=65,slow=4.6<br>Wernitzgruen | 91.77 | 323 | *e*PKPbc | | P | | 22 54 41.9 | -0.2 |
| WET | baz=65,slow=4.6<br>Wettzell | 91.94 | 322 | *e*PKPbc | | P | | 22 54 42.7 | -0.2 |
| WET | baz=65,slow=4.6<br>Wettzell | 91.94 | 322 | *e*PKPbc | | P | | 22 54 42.7 | -0.2 |
| MOX | baz=65,slow=4.6<br>Moxa | 92.07 | 323 | *e*PKPbc | | P | | 22 54 43.4 | 0.0 |
| MOX | baz=65,slow=4.6<br>Moxa | 92.07 | 323 | *e*PKPbc | | P | | 22 54 43.0 | -0.4 |
| ROTZ | baz=65,slow=4.6<br>Rotzenmuhle | 92.09 | 322 | *e*PKPbc | | P | | 22 54 43.4 | -0.1 |
| ROTZ | baz=65,slow=4.6<br>Rotzenmuhle | 92.09 | 322 | *e*PKPbc | | P | | 22 54 43.4 | -0.1 |
| YKA | baz=65,slow=4.6<br>Yellowknife Ar | 92.11 | 23 | P | | P | | 22 54 42.9 | -0.4 |
| YKA | comp=Z,2.1nm,0.6s,baz=302,slow=4.4,SNR=20 | | | PKKPbc | | PKKPbc | | 23 12 00.7 | -0.6 |
| NRDL | comp=Z,0.4nm,0.7s,baz=134,slow=2.1,SNR=4.8<br>Niedersach Rie | 92.13 | 325 | *e*PKPbc | | P | | 22 54 43.7 | +0.3 |
| NRDL | baz=65,slow=4.6<br>Niedersach Rie | 92.13 | 325 | *e*PKPbc | | P | | 22 54 43.8 | +0.3 |
| CLZ | baz=65,slow=4.6<br>Clausthal | 92.27 | 325 | *e*PKPbc | | P | | 22 54 44.3 | 0.0 |
| CLZ | baz=65,slow=4.6<br>Clausthal | 92.27 | 325 | *e*PKPbc | | P | | 22 54 44.1 | -0.3 |
| PPT | baz=65,slow=4.6<br>Papeete | 92.32 | 107 | LR | LR | | | 23 31 23.9 | |
| GTTG | comp=Z,58nm,18.7s,baz=5.5,slow=32<br>Gottingen | 92.63 | 325 | *e*PKPbc | | P | | 22 54 45.9 | 0.0 |
| GTTG | baz=65,slow=4.6<br>Gottingen | 92.63 | 325 | *e*PKPbc | | P | | 22 54 45.7 | -0.2 |
| SUMG | baz=65,slow=4.6<br>Summit | 92.91 | 354 | *i* P | | P | | 22 54 46.0 | -1.3 |
| SUMG | comp=Z,6.6nm,0.9s | | | IAmb | IAmb | | | 22 54 48.1 | |
| UBBA | Unterbreizbach | 92.92 | 324 | *e*PKPbc | | P | | 22 54 47.3 | +0.2 |
| ABTA | baz=65,slow=4.6<br>Abfaltersbach | 93.12 | 320 | *i* P | | P | | 22 54 47.5 | -1.0 |
| FUR | comp=Z,16nm,1.0s,SNR=5.6<br>Furstenfeldbru | 93.31 | 321 | *e*PKPbc | | P | | 22 54 48.9 | -0.3 |
| WTTA | baz=65,slow=4.6<br>Wattenberg | 93.46 | 320 | *i* P | | P | | 22 54 49.4 | -0.7 |
| WATA | comp=Z,34nm,0.8s,SNR=12<br>Walderalm | 93.47 | 320 | *i* P | | P | | 22 54 49.5 | -0.6 |
| IBBN | comp=Z,38nm,1.6s,SNR=8.3<br>Ibbenburen | 93.50 | 326 | *e*PKPbc | | P | | 22 54 49.4 | -0.5 |
| SQTA | baz=65,slow=4.6<br>Sankt Quirin | 93.74 | 320 | *i* P | | P | | 22 54 51.0 | -0.4 |
| MOTA | comp=Z,26nm,0.8s,SNR=8.8<br>Moosalm | 93.76 | 321 | *i* P | | P | | 22 54 50.8 | -0.6 |
| CTI | comp=Z,25nm,1.0s,SNR=8.2<br>Castel Tesino | 93.95 | 319 | IAmb | IAmb | | | 22 54 54.9 | |
| TNS | comp=Z,12nm,1.1s<br>Taunus Mts | 94.08 | 324 | *e*PKPbc | | P | | 22 54 52.4 | -0.3 |
| TNS | baz=65,slow=4.6<br>Taunus Mts | 94.08 | 324 | *e*PKPbc | | P | | 22 54 52.6 | -0.1 |
| FETA | baz=65,slow=4.6<br>Feichten | 94.12 | 320 | *i* P | | P | | 22 54 53.0 | -0.1 |
| BUG | comp=Z,24nm,0.9s,SNR=7.7<br>Bochum--Univer | 94.18 | 325 | *e*PKPbc | | P | | 22 54 53.3 | +0.2 |
| UBR | baz=65,slow=4.6<br>Ueberruh | 94.22 | 321 | *e*PKPbc | | P | | 22 54 53.1 | -0.3 |
| UBR | baz=65,slow=4.6<br>Ueberruh | 94.22 | 321 | *e*PKPbc | | P | | 22 54 52.9 | -0.6 |
| DAVA | baz=65,slow=4.6<br>Damuels | 94.53 | 321 | *e*P | | P | | 22 54 55.2 | +0.1 |
| DAVOX | comp=Z,16nm,1.2s<br>Davos/Dischmat | 94.75 | 320 | LR | LR | | | 23 40 30.7 | |
| BFO | comp=Z,73nm,19.6s,baz=85,slow=37<br>Black Forest | 95.01 | 322 | P | | P | | 22 54 56.4 | -0.6 |
| BFO | comp=Z,20nm,1.5s | | | pmax | pmax | | | | |
| BFO | Black Forest | 95.01 | 322 | *e*PKPbc | | P | | 22 54 56.6 | -0.4 |
| BFO | baz=65,slow=4.6<br>Black Forest | 95.01 | 322 | *e*PKPbc | | P | | 22 54 56.6 | -0.4 |
| BFO | baz=65,slow=4.6<br>Black Forest | 95.01 | 322 | P | | P | | 22 54 56.4 | -0.6 |
| BFO | comp=Z,20nm,1.5s | | | IAmb | IAmb | | | 22 54 57.8 | |
| TUE | Stuetta | 95.22 | 320 | IAmb | IAmb | | | 22 54 58.9 | |
| MEM | comp=Z,25nm,1.5s<br>Membach | 95.28 | 325 | *d*P | | P | | 22 54 57.6 | -0.5 |
| BSTI | Sart Tilman | 95.53 | 325 | *d*P | | P | | 22 54 59.2 | -0.1 |
| WLF | comp=Z,3.2nm,0.9s<br>Walferdange | 95.65 | 324 | *e*PKPbc | | P | | 22 54 59.7 | -0.1 |
| WLF | baz=65,slow=4.6<br>Walferdange | 95.65 | 324 | *e*PKPbc | | P | | 22 55 00.2 | +0.3 |
| WLF | baz=65,slow=4.6<br>Walferdange | 95.65 | 324 | *d*P | | P | | 22 54 59.5 | -0.3 |
| BCLA | Clavier | 95.76 | 325 | *d*P | | P | | 22 54 59.8 | -0.5 |
| BMRD | Maredsous | 96.12 | 325 | *d*P | | P | | 22 55 01.4 | -0.5 |
| DOU | comp=Z,8.4nm,0.8s<br>Dourbes | 96.31 | 325 | *d*P | | P | | 22 55 02.5 | -0.3 |
| G03D | comp=Z,8.7nm,0.8s<br>McMinnville, O | 96.70 | 40 | P | | P | | 22 55 05.0 | +0.3 |
| EKA | baz=297<br>Eskdalemuir Ar | 97.35 | 332 | LR | LR | | | 23 44 39.1 | |
| LSZ | comp=Z,102nm,20.7s,baz=18,slow=39<br>Lusaka | 97.43 | 256 | LR | LR | | | 23 35 39.3 | |
| YBH | comp=Z,58nm,20.3s,baz=132,slow=33<br>Yreka Blue Hor | 98.64 | 43 | LR | LR | | | 23 41 03.6 | |
| FRB | comp=Z,87nm,19.0s,baz=276,slow=36<br>Frobisher Bay | 102.27 | 5 | P | | Pdif | | 22 55 29.6 | +0.4 |
| ESDC | comp=Z,0.8nm,0.7s,baz=316,slow=7.1,SNR=3.4<br>Sonseca Array | 107.05 | 319 | PP | | PP | | 23 00 17.7 | +0.7 |
| TORD | comp=Z,2.5nm,1.2s,baz=42,slow=9.0,SNR=4.6<br>Torodi Ar. Bea | 115.37 | 292 | PKP | | PKiKP | | 23 00 15.3 | -1.6 |
| TORD | comp=Z,1.4nm,0.7s,baz=36,slow=1.3,SNR=8.3 | | | PP | | PP | | 23 01 14.4 | -3.4 |
| TORD | comp=Z,1.4nm,0.9s,baz=64,slow=6.9,SNR=4.8 | | | PKKPbc | | PKKPab | | 23 10 56.5 | -0.4 |
| TXAR | comp=Z,1.2nm,0.8s,baz=273,slow=4.4,SNR=7.3<br>Lajitas Array | 118.31 | 45 | PKP | | PKPdf | | 23 00 22.2 | -0.1 |
| TXAR | comp=Z,0.3nm,0.7s,baz=62,slow=0.6,SNR=4.6 | | | PP | | PP | | 23 01 44.1 | +6.4 |
| DBIC | comp=Z,1.4nm,1.1s,baz=215,slow=11,SNR=3.6<br>Dimbokro | 123.76 | 288 | PKP | | PKPdf | | 23 00 31.6 | -1.4 |
| DBIC | comp=Z,5.1nm,0.7s,baz=102,slow=2.0,SNR=8.5<br>Dimbokro | 123.76 | 288 | PKIKP | | PKPdf | | 23 00 32.1 | -0.9 |
| DBIC | Dimbokro | 123.76 | 288 | | | PKPdf | | 23 00 32.1 | -0.9 |
| KIC | Kosan Boka | 123.76 | 287 | *e*PKP1 | | PKPdf | | 23 00 32.3 | -0.8 |
| TIC | comp=Z,12nm,0.6s<br>Tomodi | 123.92 | 288 | *e*PKP1 | | PKPdf | | 23 00 31.6 | -1.8 |
| LIC | Lamto | 124.08 | 287 | *e*PKP1 | | PKPdf | | 23 00 32.8 | -0.9 |
| MTP | comp=Z,24nm,0.7s<br>Monte Pirata | 147.40 | 14 | PKPbc | | PKPbc | | 23 01 17.8 | -1.0 |
| LL02 | Futaleuf | 148.25 | 160 | | | PKPbc | | 23 01 20.1 | -0.4 |
| PLCA | Paso Flores | 150.88 | 160 | PKPbc | | PKPbc | | 23 01 27.3 | +0.1 |
| | comp=Z,7.1nm,0.9s,baz=170,slow=0.3,SNR=10.0 | | | | | | | | |
| PLCA | Paso Flores | 150.88 | 160 | PKIKP | | PKiKP | | 23 01 27.5 | -0.3 |
| PLCA | Paso Flores | 150.88 | 160 | | | PKiKP | | 23 01 27.5 | -0.3 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LC01 | Cunco | 152.01 | 156 | | | PKPbc | | 23 01 29.6 | -0.1 |

*BJI* ***04*** *22:41:46.0±0.0, 35.60N×139.50E, h30km, mb4.4/18, mB4.6/15, Ms4.2/10, Ms7.3/9/10*

*IDC* ***04*** *22:41:46.3±0.5, 35.52N×139.42E, h34km±3km, mb4.1/23, mb1 4.2/27, mb1mx4.0/62, mbtmp4.2/27, ML3.6/2, MS3.8/10, Ms1 3.8/10, ms1mx3.3/83, Error ellipse: s-maj=13.4km s-min=9.5km az=55.0*

*NEIC* ***04*** *22:41:47.5±1.6, 35.54N±0.04×139.67E±0.06, h29km±4km, mb4.7/47, Mwr4.3/24, Error ellipse: s-maj=7.7km s-min=4.3km az=126.0*

*MOS* ***04*** *22:41:47.2±1.4, 35.64N×139.40E, h55km, mb5.0/20, MS4.0/6, Error ellipse: s-maj=8.8km s-min=5.1km az=110.9*

*NEIC* ***04*** *22:41:47.1, 35.55N×139.63E, h29km, Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr3.30; Mθθ-1.66; Mφφ-1.64; Mrθ0.55; Mrφ-1.78; Mθφ1.36; Fault plane solution: M0 3.67000×10^15 NP1:φ0234.47000°, δ34.80000°, λ105.27000°. NP2:φ036.08000°, δ56.60000°, λ79.63000°. Principal axes: T 3.6482, Plg76.0000°, Azm275.0000°; N 0.0408, Plg9.0000°, Azm42.0000°; P -3.6890, Plg11.0000°, Azm134.0000°;*

*JMA* ***04*** *22:41:47.2±0.1, 35.63N×139.54E, h26km±2km, M4.6 Broadband fault plane solution: P waves. NP1: φ±248.00000°, δ28.00000°, λ131.00000°. NP2: φ±24.00000°, δ69.00000°, λ71.00000°. Principal axes: T Plg61.0000°, Azm265.0000°; N Plg18.0000°, Azm31.0000°; P Plg22.0000°, Azm128.0000°;*

*JMA Felt IV J1.*

*NIED* ***04*** *22:41:47.2, 35.63N×139.54E, h26km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr2.89; Mθθ-1.88; Mφφ-1.01; Mrθ1.97; Mrφ-1.25; Mθφ2.96; Fault plane solution: M0 4.54000×10^15 NP1:φ039.00000°, δ71.00000°, λ80.00000°. NP2:φ±247.00000°, δ21.00000°, λ116.00000°.*

**ISC 04 22:41:46.6±0.4, 35°60N±0°03×139°53E±0°04, h33km±2km, h33km:pP-P, n191, σ1$30/209, mb4.6/70, MS3.8/12, 6C-7D, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TOK | Tokyo | 0.20 | 65 | ⇑P | Pn | 22 41 53.4 | +0.1 |
| JSGW | Sagamiharawaka | 0.26 | 271 | P | Pb | 22 41 53.4 | -0.5 |
| JSGW | | | | S | Sb | 22 41 58.4 | -0.4 |
| JHU | Hanno | 0.32 | 321 | ⇓P | Pb | 22 41 54.3 | -0.4 |
| JHU | | | | *e*S | Sb | 22 41 59.7 | -0.4 |
| JOD2 | Odawara 2 | 0.49 | 227 | ⇑P | Pn | 22 41 57.6 | +0.2 |
| JOD2 | | | | *e*S | Sn | 22 42 05.5 | +0.6 |
| JRY | Ryogami san | 0.66 | 309 | ⇓P | Pn | 22 41 59.1 | -0.6 |
| I30JP | ISUMI INFRASON | 0.70 | 114 | Pg | Pn | 22 42 00.0 | -0.2 |
| I30JP | baz=279,slow=16 | | | *i* | | 22 46 10.0 | |
| JFNN | baz=295,slow=317,SNR=1.9<br>Fujinakano | 0.80 | 240 | ⇑P | Pn | 22 42 02.0 | +0.4 |
| JFNN | | | | *e*S | Sb | 22 42 13.4 | +0.7 |
| JYN | Shimob | 0.81 | 263 | ⇓P | Pb | 22 42 02.3 | -0.1 |
| JYT | Yasato | 0.82 | 40 | | Pn | 22 42 01.9 | 0.0 |
| JYT | | | | Sn | Sn | 22 42 12.4 | -0.6 |
| JAG | Ashikaga | 0.83 | 356 | ⇓P | Pn | 22 42 01.9 | -0.1 |
| JIM2 | Oshima 3 | 0.88 | 185 | P | Pn | 22 42 02.2 | -0.6 |
| JIZS | Izushimoda | 1.03 | 212 | P | Pn | 22 42 05.2 | +0.4 |
| JIZS | | | | S | Sb | 22 42 19.5 | +0.4 |
| BS03 | Boso 3 | 1.13 | 135 | ⇓P | Pn | 22 42 05.9 | 0.0 |
| JKT | Katashina | 1.19 | 349 | P | Pn | 22 42 07.7 | +0.7 |
| MJAR | Matsushiro Arr | 1.43 | 312 | Pg | Pb | 22 42 11.6 | -1.0 |
| MJAR | 100nm,0.3s,baz=145,slow=13,SNR=1273 | | | Lg | Lg | 22 42 32.4 | |
| MJAR | 46nm,0.3s,baz=144,slow=21,SNR=9.9 | | | LR | LR | 22 42 49.8 | |
| MJAR | comp=Z,2μm,21.7s,baz=186,slow=45<br>Matsushiro Arr | 1.43 | 312 | P | Pb | 22 42 12.9 | +0.2 |
| MJAR | Matsushiro Arr | 1.43 | 312 | Pn | Pb | 22 42 12.9 | +0.2 |
| MAJO | Matsushiro | 1.43 | 312 | P | Pb | 22 42 13.1 | +0.4 |
| MAJO | Matsushiro | 1.43 | 312 | Pn | Pb | 22 42 13.1 | +0.4 |
| MAT | Matsushiro | 1.43 | 312 | P | Pn | 22 42 11.4 | +1.1 |
| MAT | | | | S | Sb | 22 42 31.8 | +1.3 |
| MJB9 | Matsu-Tunnel | 1.43 | 312 | | Pb | 22 42 13.1 | +0.3 |
| JSG | Sagara | 1.44 | 230 | | Pb | 22 42 12.8 | -0.1 |
| JSG | | | | Sn | Sb | 22 42 33.7 | +2.9 |
| JGF | Kuroka | 1.77 | 271 | | Pb | 22 42 17.2 | -1.3 |
| INU | Inuyama | 2.07 | 264 | Pn | Pn | 22 42 21.0 | +1.9 |
| JMM | Marumori | 2.48 | 24 | | Pn | 22 42 26.7 | +2.0 |
| JHJ | Hachijo jima 2 | 2.48 | 175 | Pn | Pn | 22 42 25.5 | +0.7 |
| JHJ | 329nm,0.3s,baz=334,slow=3.0,SNR=117 | | | Sn | Sn | 22 42 53.6 | -0.4 |
| JHJ2 | 576nm,0.3s,baz=295,slow=23,SNR=30<br>Mitsune | 2.49 | 175 | Pn | Pn | 22 42 25.5 | +0.6 |
| JSD | Sado | 2.64 | 338 | | Pn | 22 42 28.1 | +1.2 |
| JMI | Monobe | 5.02 | 250 | | Pn | 22 43 01.5 | +1.6 |
| JHS | Saijyo | 5.28 | 265 | Pn | Pn | 22 43 06.2 | +3.0 |
| JTM | Tenmabayashi | 5.32 | 13 | Pn | Pn | 22 43 05.7 | +2.0 |
| ERM | Erimo | 7.00 | 23 | P | Pn | 22 43 27.9 | +1.1 |
| ERM | Erimo | 7.00 | 23 | Pn | Pn | 22 43 27.9 | +1.1 |
| JEW | Eniwo | 7.38 | 11 | Pn | Pn | 22 43 33.9 | +1.8 |
| JNU | Nakatsue | 7.57 | 253 | Pn | Pn | 22 43 36.7 | +2.0 |
| JCJ | Chichijima | 8.78 | 164 | Pn | Pn | 22 43 49.7 | -1.5 |
| ASAJ | Asahikawa | 8.83 | 15 | Pn | Pn | 22 43 54.6 | +2.8 |
| ASAJ | 1.5nm,0.3s,baz=244,slow=6.8,SNR=5.4 | | | LR | LR | 22 47 33.5 | |
| JKA | comp=Z,222nm,20.1s,baz=184,slow=39<br>Kamikawa-asahi | 8.83 | 15 | |

comp=Z,11nm,1.2s
XLT pmax pmax
comp=Z,110nm,4.6s
XLT LR LR
comp=N,250nm,17.7s
XLT LR LR
comp=E,370nm,20.2s
XLT LR LR
comp=Z,400nm,18.1s
**PEA0B Petropavlovsk- 21.69 31** P **P** **22 46 36.8 +2.3**
PEA0B pmax pmax
comp=Z,18nm,1.0s
**PEA0B Petropavlovsk- 21.69 31** P **P** **22 46 36.8 +2.3**
**PETK Petropavlovsk- 21.69 31** LR LR 22 55 13.4
comp=Z,99nm,18.9s,baz=224,slow=37
**PETK Petropavlovsk- 21.69 31** P **P** **22 46 34.8 +0.3**
**PETK Petropavlovsk- 21.69 31** P **P** **22 46 34.8 +0.3**
**PET Petropavlovsk 22.03 32** *e*P **P** **22 46 42.1 +3.9**
PET *e*S **S** **22 50 38.6 -0.7**
PET pmax pmax
comp=Z,200nm,10.3s
PET pmax pmax
comp=Z,30nm,1.2s
PET MLR MLR
comp=Z,300nm,15.0s
PET MLR MLR
comp=Z,100nm,15.0s
**HHC Hu-ho-hao-te 22.54 292** *e*P **P** **22 46 45.8 +1.9**
HHC pmax pmax
comp=Z,5.0nm,0.9s
HHC pmax pmax
comp=Z,120nm,5.5s
**BTO Baotou 23.70 291** *e*P P 22 46 46.7 -8.8
**MA2 Magadan 25.09 14** P **P** **22 47 09.4 +1.4**
MA2 pmax pmax
comp=Z,13nm,0.9s
**MA2 Magadan 25.09 14** P **P** **22 47 09.4 +1.4**
MA2 IAmb IAmb 22 47 20.0
comp=Z,13nm,0.9s
**XAN Xi'an 25.13 275** P P 22 47 22.7 +14
XAN pP sP 22 47 32.9 +11
XAN S S 22 51 53.5 +22
XAN pmax pmax
comp=Z,25nm,0.9s
XAN pmax pmax
comp=Z,120nm,6.0s
XAN LR LR
comp=N,680nm,12.9s
XAN LR LR
comp=E,530nm,11.2s
XAN LR LR
comp=Z,1μm,12.2s
**ULN Ulaanbaatar 26.95 307** *i* P **P** **22 47 24.3 -0.9**
ULN pmax pmax
comp=Z,3.0nm,1.3s
**YAK Yakutsk 27.17 350** LR LR 22 58 19.2
comp=Z,191nm,19.2s,baz=274,slow=36
**YAK Yakutsk 27.17 350** *i* P **P** **22 47 25.5 -1.3**
YAK pmax pmax
comp=Z,5.0nm,1.0s
**SONM Songino Array 27.38 307** P **P** **22 47 27.4 -1.5**
comp=Z,0.3nm,0.5s,baz=116,slow=8.9,SNR=4.0
**SONM Songino Array 27.38 307** *e*P **P** **22 47 29.3 +0.4**
**SEY Seymchan 28.50 12** P **P** **22 47 38.5 -0.1**
comp=Z,1.2nm,0.5s,baz=222,slow=6.7,SNR=6.0
**PZH PanZhiHua 33.45 265** P **P** **22 48 24.0 +1.2**
PZH pmax pmax
comp=Z,10.0nm,1.3s
PZH pmax pmax
comp=Z,100nm,5.0s
**BILL Bilibino 35.83 17**⇑ *e*P **P** **22 48 42.4 -0.4**
BILL *e* 22 50 05.5
BILL pmax pmax
comp=Z,13nm,2.6s
BILL MLR MLR
comp=Z,109nm,18.0s
**TIXI Tiksi 36.55 354** P **P** **22 48 47.9 -0.9**
comp=Z,1.6nm,0.4s,baz=90,slow=24,SNR=8.1
**TIXI Tiksi 36.55 354** *i* P **P** **22 48 48.3 -0.5**
TIXI pmax pmax
comp=Z,9.0nm,1.6s
**CMAR Chiang Mai Arr 39.66 255** LR LR 23 06 06.3
comp=Z,82nm,19.0s,baz=90,slow=37
**DGZ Jazzator, Alta 40.02 307** *i* P **P** **22 49 18.3 -0.2**
DGZ pmax pmax
comp=Z,4.0nm,0.8s
**ZALV Zalesovo Beam 41.78 314** P **P** **22 49 32.0 -0.7**
comp=Z,1.4nm,0.5s,baz=86,slow=6.2,SNR=8.4
**TNA Tin City 42.84 29** P **P** **22 49 42.3 +1.1**
TNA IAmb IAmb 22 49 54.5
comp=Z,14nm,1.0s
**ANM Nome 43.61 31** P **P** **22 49 47.6 +0.2**
ANM pmax pmax
comp=Z,8.0nm,1.0s
**ANM Nome 43.61 31** **P** **22 49 47.6 +0.2**
**MK31 Makanchi Array 43.61 303** *i* P **P** **22 49 47.0 -0.7**
**MKAR Makanchi Array 43.61 303** P **P** **22 49 47.4 -0.4**
comp=Z,2.1nm,0.8s,baz=90,slow=10,SNR=24
**NRIK Noril'sk 43.95 336** *i* P **P** **22 49 49.9 -0.2**
NRIK pmax pmax
comp=Z,5.0nm,1.1s
**RDOG Red Dog Mine 45.46 26** P **P** **22 50 03.5 +1.3**
RDOG IAmb IAmb 22 50 15.3
comp=Z,11nm,1.2s
**KURK Kurchatov 45.64 309** P **P** **22 50 03.4 -0.4**
**KURBB Kurchatov Arra 45.70 309** P **P** **22 50 03.4 -0.9**
comp=Z,4.9nm,0.6s,baz=85,slow=8.0,SNR=53
**O18K Koktuh Hills 47.74 38** P **P** **22 50 21.2 +1.0**
O18K IAmb IAmb 22 50 23.1
comp=Z,11nm,1.1s
**L19K White Mountain 47.96 35** P **P** **22 50 22.9 +1.1**
L19K IAmb IAmb 22 50 34.6
comp=Z,5.8nm,1.1s
**J20K Nowinta River 48.37 32** P **P** **22 50 26.4 +1.5**
J20K IAmb IAmb 22 50 38.3
comp=Z,9.3nm,0.9s
**OHAK Old Harbor 48.84 42** P **P** **22 50 26.8 -1.7**
**H21K Melozitna Rive 49.02 31** P **P** **22 50 31.8 +1.9**
**KDAK Kodiak Island 49.18 41** P **P** **22 50 31.5 +0.4**
comp=Z,13nm,0.9s,baz=319,slow=5.9,SNR=4.1
**KDAK Kodiak Island 49.18 41** P **P** **22 50 32.0 +0.8**
**CAST Castle Rocks 49.26 34** P **P** **22 50 33.1 +1.3**
CAST IAmb IAmb 22 50 44.9
comp=Z,9.2nm,1.1s
**AAK Ala-Archa 49.84 299** *i* P **P** **22 50 36.4 -0.3**
AAK pmax pmax
comp=Z,20nm,0.9s
**BRVK Borovoye 50.48 313** *i* P **P** **22 50 40.8 -0.4**
BRVK pmax pmax
comp=Z,3.0nm,1.0s
**MDM Murphy Dome 50.93 31** P **P** **22 50 45.8 +1.3**
**SML Sawmill 51.04 36** P **P** **22 50 47.4 +2.0**
SML IAmb IAmb 22 50 58.4
comp=Z,20nm,1.1s
**H24K Noodor Dome 51.06 30** P **P** **22 50 47.1 +1.7**
H24K IAmb IAmb 22 50 59.0
comp=Z,5.8nm,0.8s
**CCB Clear Creek Bu 51.12 32** P **P** **22 50 46.5 +0.6**
**POKR Poker Plat Res 51.27 31** P **P** **22 50 48.2 +1.2**
**IL31 51.51 32** IAmb IAmb 22 51 00.9
comp=Z,5.8nm,0.8s
**ILAR Eielson Array 51.51 32** P **P** **22 50 49.4 +0.6**
comp=Z,3.7nm,0.8s,baz=276,slow=6.3,SNR=30
**ILAR Eielson Array 51.51 32** P **P** **22 50 49.2 +0.4**
**SCM Sheep Creek Mo 51.52 35** P **P** **22 50 50.8 +1.8**
SCM pmax pmax
comp=Z,10.0nm,1.1s
**SCM Sheep Creek Mo 51.52 35** P **P** **22 50 50.8 +1.8**
SCM IAmb IAmb 22 50 51.7
comp=Z,10nm,1.1s
**KNRA Kununurra 52.01 193** P **P** **22 50 52.0 -0.9**
KNRA pP **pP** **22 51 01.8 -0.9**
KNRA IAmb IAmb 22 51 05.2
comp=Z,10nm,0.7s
**FYU Fort Yukon 52.10 29** P **P** **22 50 54.3 +1.2**
FYU IAmb IAmb 22 51 01.3
comp=Z,19nm,1.1s
**J25K Salcha River, 52.17 32** P **P** **22 50 55.9 +2.0**
**BMAR Burnt Mountain 52.31 28** P **P** **22 50 56.8 +2.0**
**N25K Chitina, Valde 52.83 36** P **P** **22 50 59.6 +0.8**
**SCRK Sand Creek 52.83 33** P **P** **22 50 59.6 +0.8**
SCRK IAmb IAmb 22 51 11.3
comp=Z,10nm,1.0s
**DOT Dot Lake 52.84 33** P **P** **22 51 00.3 +1.6**
DOT IAmb IAmb 22 51 12.8
comp=Z,6.3nm,0.8s
**BMRM Bremner River 52.91 36** **P** **22 51 00.7 +1.4**
BMRM IAmb IAmb 22 51 17.2
comp=Z,18nm,1.1s
**L27K Beaver Creek, 53.91 34** P **P** **22 51 07.2 +0.6**
**BCAR Beaver Creek A 53.93 34** P **P** **22 51 08.4 +1.6**
**EGAK Eagle 53.96 31** P **P** **22 51 07.6 +0.8**
EGAK IAmb IAmb 22 51 11.6
comp=Z,6.3nm,1.1s
**M27K Edge Creek, AK 54.00 34** P **P** **22 51 08.5 +1.1**
M27K IAmb IAmb 22 51 22.0
comp=Z,7.2nm,1.1s
**MESA MESA 54.34 37** P **P** **22 51 10.2 +0.3**
**WB0 Warramunga Arr 55.28 186** **P** **22 51 15.9 -0.9**
**WB2 Warramunga Arr 55.45 186** **P** **22 51 17.2 -0.9**
**WR0 Warramunga Arr 55.46 186** P **P** **22 51 17.2 -0.9**
**WRA Warramunga Arr 55.46 186** P **P** **22 51 16.8 -1.4**
comp=Z,7.3nm,0.8s,baz=1.3,slow=7.6,SNR=17
WRA pP **pP** **22 51 26.8 -1.3**
comp=Z,17nm,0.7s,baz=4.7,slow=7.7,SNR=24
**ARU Arti 56.43 319***c* *i* P **P** **22 51 24.4 -0.4**
ARU **PP* **pP** **22 51 36.4 +1.7**
ARU **22 53 29.2**
ARU S **S** **22 59 14.5 +1.2**
ARU SS **SS** **23 03 02.3 +2.2**
ARU pmax pmax
comp=Z,19nm,0.8s
**ABKAR Akbulak array 57.70 310** P **P** **22 51 33.6 -0.3**
**ABKAR Akbulak array 57.70 310** P **P** **22 51 33.5 -0.5**
**AS31 Alice Springs 59.18 186** P **P** **22 51 45.6 +1.1**
**ASAR Alice Springs 59.18 186** P **P** **22 51 43.5 -1.0**
comp=Z,1.2nm,0.8s,baz=19,slow=12,SNR=2.3
ASAR pP **pP** **22 51 53.5 -1.0**
comp=Z,4.5nm,0.6s,baz=13,slow=12,SNR=11
**ASAR Alice Springs 59.18 186** P **P** **22 51 44.4 -0.1**
**C36M Paulatuk 59.36 24** IAmb IAmb 22 51 56.5
comp=Z,6.1nm,0.7s
**PRGR Permogore 61.14 327** *e*P **P** **22 51 56.4 -1.0**
PRGR *e**SP **sP** **22 52 10.2 -1.0**
PRGR pmax pmax
comp=Z,8.0nm,0.9s
**EUNU Eureka 61.82 8** P **P** **22 52 02.0 +0.1**
EUNU IAmb IAmb 22 52 02.4
comp=Z,2.8nm,0.7s
**KLMR Klimovskoe 64.15 328** *e*P **P** **22 52 15.7 -1.7**
KLMR pmax pmax
comp=Z,16nm,1.3s
**KLMR Klimovskoe 64.15 328** *e*P **P** **22 52 15.8 -1.7**
KLMR AMP 22 52 32.2
comp=Z,16nm,1.3s
**RES Resolute Bay 64.36 14** P **P** **22 52 18.9 +0.3**
comp=Z,3.2nm,0.7s,baz=314,slow=6.5,SNR=18
**RES Resolute Bay 64.36 14** P **P** **22 52 19.2 +0.6**
RES pmax pmax
comp=Z,7.0nm,1.0s
**RES Resolute Bay 64.36 14** P **P** **22 52 19.2 +0.6**
RES IAmb IAmb 22 52 19.9
comp=Z,6.8nm,1.0s
**ARCES ARCESS Array B 64.80 339** P **P** **22 52 20.8 -0.8**
comp=Z,4.9nm,0.9s,baz=61,slow=7.5,SNR=7.1
**ARCES ARCESS Array B 64.80 339** *e*P **P** **22 52 21.9 +0.3**
ARCES pmax pmax
comp=Z,5.0nm,0.9s
**YKA Yellowknife Ar 65.80 29** P **P** **22 52 28.4 +0.2**
comp=Z,0.7nm,0.7s,baz=298,slow=6.4,SNR=9.2
YKA pP **pP** **22 52 38.6 +0.4**
comp=Z,1.2nm,0.7s,baz=304,slow=7.0,SNR=8.0
**FORT Forrest 66.90 191** P **P** **22 52 35.7 +0.2**
FORT **pP** **22 52 45.7 +0.1**
**STKA Stephens Creek 67.15 178** pP pP 22 52 46.1 -1.0
comp=Z,2.5nm,0.7s,baz=356,slow=8.7,SNR=2.4
**OBN Obninsk 68.33 323**⇓ *e*P **P** **22 52 44.0 -0.3**
OBN *e* 22 55 13.7
OBN *e*SS SS 23 06 02.2 -3.5
OBN pmax pmax
comp=Z,10.0nm,1.0s
OBN MLR MLR
comp=Z,135nm,15.0s
**LPSR Galich'ya Gora 68.42 320** *e*P **P** **22 52 42.9 -2.1**
**VORR Voronezh 68.75 319** *e*P **P** **22 52 45.2 -1.8**
VORR pmax pmax
comp=Z,30nm,0.4s
**VSR Storozhevoye 69.00 318** *e*P **P** **22 52 47.3 -1.3**
**VORD Divnogorie 69.06 318** *e*P **P** **22 52 48.1 -0.9**
**FINES FINESS Array B 69.37 332** P **P** **22 52 50.2 -0.5**
comp=Z,5.4nm,0.8s,baz=66,slow=5.4,SNR=25
**KBZ Khabaz 70.67 310** P **P** **22 52 58.4 -0.6**
comp=Z,5.6nm,0.8s,baz=28,slow=2.3,SNR=12
**KVAR Kislovodsk Arr 70.68 311** LR LR 23 28 09.9
comp=Z,110nm,18.2s,baz=124,slow=39
**LTY Liberty 70.74 45** P **P** **22 53 00.3 +0.7**
LTY IAmb IAmb 22 53 01.0
comp=Z,3.0nm,0.6s
**SUMG Summit 72.11 359** P **P** **22 53 08.3 +0.6**
**SUMG Summit 72.11 359** P **P** **22 53 08.3 +0.6**
**L04D Klamath Falls 72.42 50** P **P** **22 53 11.3 +1.5**
L04D IAmb IAmb 22 53 23.0
comp=Z,14nm,1.1s
**PINE Pine Mountain 72.42 49** P **P** **22 53 11.9 +2.0**
PINE IAmb IAmb 22 53 23.4
comp=Z,20nm,1.1s
**YBH Yreka Blue Hor 72.42 51** P **P** **22 53 10.9 +1.1**
comp=Z,3.1nm,0.8s,baz=358,slow=3.7,SNR=6.2
**MNK Minsk 72.82 325** *i* P P 22 53 05.6 -6.1
MNK *i* 22 53 22.2
MNK *i* PPP PPP 22 57 32.6
MNK *i* S **S** **23 02 28.8 -6.5**
MNK *i* 23 03 10.5
MNK *i* SS **SS** **23 07 11.9 -2.7**
MNK pmax pmax
comp=E,3.0nm,1.1s
MNK pmax pmax
comp=Z,7.0nm,0.9s
MNK pmax pmax
comp=N,18nm,0.8s
MNK MLR MLR
comp=Z,77nm,17.0s
MNK MLR MLR
comp=E,18nm,16.0s
MNK MLR MLR
comp=N,241nm,16.0s
**NACGM Naroch 73.08 326** *i* P **P** **22 53 12.9 -0.3**
**BMO Blue Mountains 74.02 46** P **P** **22 53 20.5 +1.4**
BMO pmax pmax
comp=Z,3.0nm,0.7s
**BMO Blue Mountains 74.02 46** P **P** **22 53 20.5 +1.4**
**JTMT Jette 74.08 42** P **P** **22 53 20.8 +1.3**
JTMT IAmb IAmb 22 53 21.3
comp=Z,5.9nm,0.8s
**AKASG Malin Array Be 74.49 322** P **P** **22 53 20.8 -0.8**
comp=Z,2.0nm,0.4s,baz=48,slow=6.3,SNR=24
AKASG pP **pP** **22 53 32.4 +0.6**
comp=Z,6.0nm,0.8s,baz=49,slow=6.3,SNR=9.0
AKASG LR LR 23 28 55.2
comp=Z,191nm,18.6s,baz=354,slow=38
**NB2 NORSAR Subarra 74.91 337** P **P** **22 53 23.2 -0.7**
comp=Z,6.9nm,1.0s,baz=41,slow=5.9
**NOA NORSAR Array B 74.91 337** P **P** **22 53 23.4 -0.5**
comp=Z,3.5nm,0.8s,baz=40,slow=5.8,SNR=13
**FFC Flin Flon 75.73 32** P **P** **22 53 28.9 +0.2**
FFC pmax pmax
comp=Z,3.0nm,0.9s
**FFC Flin Flon 75.73 32** P **P** **22 53 28.9 +0.2**
**NVAR Mina Array Bea 77.06 52** P **P** **22 53 37.0 +0.1**
comp=Z,1.7nm,0.4s,baz=289,slow=5.6,SNR=9.4
**LVV L'vov 77.63 323** *e*P **P** **22 53 39.6 +0.1**
**FRB Frobisher Bay 78.50 12** P **P** **22 53 43.3 -0.7**
comp=Z,1.9nm,0.4s,baz=343,slow=6.4,SNR=14
**BRTR Keskin Array B 78.65 311** LR LR 23 32 52.0
comp=Z,49nm,19.0s,baz=46,slow=39
**PDAR Pinedale Array 79.75 44** P **P** **22 53 52.0 +0.3**
comp=Z,0.9nm,0.8s,baz=250,slow=3.0,SNR=4.5
PDAR pP **pP** **22 54 02.2 +0.3**
comp=Z,1.0nm,0.5s,baz=285,slow=2.1,SNR=6.3
**MORC Moravsky Berou 80.72 326** *e*P **P** **22 53 56.5 0.0**
MORC *e*pP **sP** **22 54 09.8 -0.7**
**DPC Dobruska-Polom 80.85 327** *e*P **P** **22 53 57.1 -0.1**
**DPC Dobruska-Polom 80.85 327** *e*P **P** **22 53 57.1 -0.1**
**URZ Urewera 81.31 151** LR LR 23 30 49.1
comp=Z,32nm,18.7s,baz=210,slow=36
**JAVC Velka Javorina 81.31 325** *e*P **P** **22 54 00.6 +0.9**
**VRAC Vranov 81.48 326** *e*P **P** **22 54 00.6 +0.1**
VRAC *e*pP **sP** **22 54 14.3 -0.3**
**CLL Collm 81.57 329** *i* P **P** **22 54 00.3 -0.6**
CLL *e**PP **sP** **22 54 14.0 -0.9**
CLL pmax pmax
comp=Z,7.0nm,1.0s
**CLL Collm 81.57 329** *i* P **P** **22 54 00.3 -0.6**
comp=Z,7.0nm,1.0s
CLL *e*pP **sP** **22 54 14.0 -0.9**
CLL *e*PP **PP** **22 57 05.0 -1.8**
**KRUC Moravsky 81.75 326** *e*P **P** **22 54 01.9 0.0**
KRUC *e*pP **sP** **22 54 15.5 -0.5**
**PRU Pruhonice 81.89 328** *e*P **P** **22 54 02.4 -0.2**
**PRU Pruhonice 81.89 328** *e*P **P** **22 54 02.4 -0.2**
**CKRC Cesky Krumlov 82.86 327** *e*P P 22 54 01.3 -6.5
**KHC Kasperske Hory 82.95 328** *e*P **P** **22 54 07.0 -1.3**
KHC *e* 22 54 22.2
**KHC Kasperske Hory 82.95 328** *e*P **P** **22 54 07.0 -1.3**
KHC *e*pP **sP** **22 54 22.2 -0.1**
**GERES GERESS Array B 83.11 327** P **P** **22 54 08.9 -0.2**
comp=Z,0.5nm,0.5s,baz=49,slow=4.1,SNR=7.1
**TXAR Lajitas Array 92.20 51** P **P** **22 54 54.2 +0.8**
comp=Z,0.6nm,0.7s,baz=305,slow=4.4,SNR=5.2
**LPAZ La Paz 148.73 59** PKPbc **PKPbc** **23 01 32.0 +0.2**
comp=Z,2.5nm,0.7s,baz=18,slow=11,SNR=8.4
**SIV San Ignacio 153.17 49** PKPbc **PKPbc** **23 01 40.4 -1.1**
comp=Z,2.4nm,0.7s,baz=310,slow=3.3,SNR=12

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*IDC **04** 22:45:05.7±0.6, 55.39S×27.51W, h0km, mb4.4/11, mb1 4.4/12, mb1mx4.2/28, mbtmp4.4/12, ML4.1/1, MS3.7/9, Ms1 3.7/9, ms1mx3.4/44, Error ellipse: s-maj=18.9km s-min=17.0km az=44.0*

*NEIC **04** 22:45:09.7±0.9, 55.42S±0.07×27.28W±0.2, h21km±6km, mb4.7/22, Error ellipse: s-maj=13.4km s-min=10.3km az=104.0*

**ISC 04 22:45:07.2±0.5, 55.40S±0.09×27.74W±0.07, h10km, n49, σ0.96/44, mb4.7/17, MS3.7/9, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **5.18** | **279** | Pn | **Pn** | **22 46 25.4** | **+0.7** |
| HOPE | | | | Sn | **Sn** | **22 47 21.9** | **-2.5** |
| **VNA3** | **Neumayer Olymp** | **17.71** | **161** | P | **P** | **22 49 15.1** | **+0.7** |
| **VNA2** | **Neumayer--Watz** | **17.91** | **158** | P | **Pn** | **22 49 13.1** | **-2.9** |
| **SNAA** | **Sanae** | **19.46** | **156** | P | **P** | **22 49 33.5** | **-0.2** |
| **SNAA** | **Sanae** | **19.46** | **156** | P | **P** | **22 49 33.7** | **0.0** |
| | | | | 0.5nm,0.3s,baz=290,slow=11,SNR=20 | | | |
| **SNAA** | **Sanae** | **19.46** | **156** | | **Pn** | **22 49 34.7** | **-0.2** |
| **PMSA** | **Palmer Station** | **20.10** | **228** | P | **P** | **22 49 40.8** | **+0.2** |
| | 24nm,1.0s,baz=100,slow=2.9,SNR=1.1 | | | | | | |
| **PMSA** | **Palmer Station** | **20.10** | **228** | IAmb | IAmb | 22 49 59.9 | |
| | comp=Z,46nm,1.1s | | | | | | |
| **BELA** | **Belgrano 2** | **22.70** | **184** | P | **P** | **22 50 09.3** | **+0.7** |
| **USHA** | **Ushuaia** | **23.05** | **254** | P | **P** | **22 50 12.4** | **0.0** |
| | comp=Z,11nm,0.9s,baz=103,slow=8.6,SNR=3.6 | | | | | | |
| **MG02** | **Cerro Sombrero** | **24.22** | **259** | P | **P** | **22 50 24.0** | **+0.3** |
| **PLCA** | **Paso Flores** | **31.59** | **280** | LR | LR | 23 05 18.9 | |
| | comp=Z,86nm,18.9s,baz=18,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.85** | **180** | P | **P** | **22 51 58.6** | **+0.5** |
| | comp=Z,3.8nm,0.5s,baz=196,slow=2.0,SNR=25 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.85** | **180** | P | **P** | **22 51 60.0** | **+1.8** |
| QSPA | | | | IAmb | IAmb | 22 52 03.6 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **36.15** | **311** | P | **P** | **22 52 10.3** | **+0.8** |
| | comp=Z,2.3nm,0.7s,baz=106,slow=7.5,SNR=1.7 | | | | | | |
| CPUP | | | | LR | LR | 23 06 58.3 | |
| | comp=Z,80nm,19.4s,baz=210,slow=36 | | | | | | |
| **MT09** | **Talagante** | **36.82** | **288** | P | **P** | **22 52 15.0** | **-0.3** |
| MT09 | | | | IAmb | IAmb | 22 52 28.1 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MT01** | **Popeta** | **36.89** | **287** | P | **P** | **22 52 15.8** | **0.0** |
| MT01 | | | | IAmb | IAmb | 22 52 28.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **MT02** | **Curacav** | **37.29** | **288** | P | **P** | **22 52 19.6** | **+0.4** |
| MT02 | | | | IAmb | IAmb | 22 52 26.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **AQDB** | **Aquidauana** | **40.71** | **318** | P | **P** | **22 52 47.9** | **0.0** |
| **LVC** | **Limon Verde** | **44.71** | **300** | P | **P** | **22 53 21.7** | **+0.9** |
| | comp=Z,5.8nm,0.7s,baz=130,slow=5.7,SNR=6.1 | | | | | | |
| **LVC** | **Limon Verde** | **44.71** | **300** | P | **P** | **22 53 21.4** | **+0.6** |
| **BOSA** | **Boshof** | **46.12** | **77** | P | **P** | **22 53 29.7** | **-1.9** |
| | comp=Z,6.5nm,0.9s,baz=210,slow=6.7,SNR=6.2 | | | | | | |
| BOSA | | | | LR | LR | 23 08 20.0 | |
| | comp=Z,120nm,18.1s,baz=192,slow=30 | | | | | | |
| **BOSA** | **Boshof** | **46.12** | **77** | P | **P** | **22 53 30.2** | **-1.4** |
| BOSA | | | | IAmb | IAmb | 22 53 33.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **PB01** | **IPOC Station P** | **46.31** | **301** | P | **P** | **22 53 33.6** | **+0.4** |
| PB01 | | | | IAmb | IAmb | 22 53 36.4 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **46.61** | **316** | P | **P** | **22 53 35.5** | **+0.1** |
| PTLB | | | | IAmb | IAmb | 22 53 41.1 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **PATCX** | **Punta Patache** | **46.83** | **300** | P | **P** | **22 53 37.0** | **-0.2** |
| **SIV** | **San Ignacio** | **46.91** | **314** | P | **P** | **22 53 37.3** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=149,slow=8.6,SNR=4.2 | | | | | | |
| SIV | | | | LR | LR | 23 13 24.9 | |
| | comp=Z,55nm,19.9s,baz=274,slow=36 | | | | | | |
| **PB08** | **IPOC Station P** | **46.92** | **302** | P | **P** | **22 53 39.1** | **+0.9** |
| PB08 | | | | IAmb | IAmb | 22 53 43.2 | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **47.21** | **183** | P | **P** | **22 53 39.0** | **-0.3** |
| | comp=Z,4.4nm,0.7s,baz=188,slow=6.9,SNR=7.4 | | | | | | |
| VNDA | | | | LR | LR | 23 14 27.5 | |
| | comp=Z,70nm,18.2s,baz=182,slow=37 | | | | | | |
| **GO01** | **Chusmiza** | **47.34** | **302** | P | **P** | **22 53 42.6** | **+0.9** |
| **PB11** | **IPOC Station P** | **47.49** | **301** | P | **P** | **22 53 41.4** | **-1.0** |
| **LBTB** | **Lobatse** | **49.12** | **74** | P | **P** | **22 53 53.7** | **-1.2** |
| | comp=Z,4.9nm,0.8s,baz=197,slow=8.6,SNR=4.1 | | | | | | |
| **LBTB** | **Lobatse** | **49.12** | **74** | P | **P** | **22 53 54.6** | **-0.4** |
| LBTB | | | | IAmb | IAmb | 22 53 56.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **TSUM** | **Tsumeb** | **49.64** | **62** | LR | LR | 23 11 57.1 | |
| | comp=Z,74nm,18.5s,baz=200,slow=32 | | | | | | |
| **TSUM** | **Tsumeb** | **49.64** | **62** | P | **P** | **22 54 00.5** | **+1.5** |
| **LPAZ** | **La Paz** | **49.75** | **305** | P | **P** | **22 54 01.5** | **+1.1** |
| | comp=Z,3.8nm,0.8s,baz=172,slow=5.1,SNR=12 | | | | | | |
| **LPAZ** | **La Paz** | **49.75** | **305** | P | **P** | **22 54 00.8** | **+0.4** |
| LPAZ | | | | IAmb | IAmb | 22 54 14.6 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **ETMB** | **Extrema** | **54.61** | **311** | P | **P** | **22 54 36.0** | **+0.2** |
| ETMB | | | | IAmb | IAmb | 22 54 52.5 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **PTGA** | **Pitinga** | **60.47** | **322** | LR | LR | 23 21 52.5 | |
| | comp=Z,54nm,20.4s,baz=163,slow=36 | | | | | | |
| **ROSC** | **El Rosal** | **71.23** | **310** | LR | LR | 23 28 00.1 | |
| | comp=Z,62nm,21.2s,baz=218,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.64** | **30** | P | **P** | **22 56 34.0** | **-0.7** |
| | comp=Z,2.5nm,0.6s,baz=200,slow=6.5,SNR=20 | | | | | | |
| **SDV** | **Santo Domingo** | **73.33** | **315** | LR | LR | 23 30 12.5 | |
| | comp=Z,114nm,19.2s,baz=148,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **125.58** | **111** | PKP | **PKPdf** | **23 04 08.7** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=224,slow=5.3,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **135.48** | **319** | PKP | **PKPdf** | **23 04 25.9** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=125,slow=2.3,SNR=9.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **136.97** | **71** | PKP | **PKPdf** | **23 04 29.4** | **+0.1** |
| | comp=Z,0.2nm,0.8s,baz=261,slow=2.8,SNR=2.1 | | | | | | |
| **RES** | **Resolute Bay** | **137.14** | **339** | PKP | **PKiKP** | **23 04 29.8** | **-0.7** |
| | comp=Z,0.8nm,0.8s,baz=121,slow=7.6,SNR=4.5 | | | | | | |
| **INK** | **Inuvik** | **145.10** | **321** | PKPbc | **PKPdf** | **23 04 43.3** | **+0.2** |
| | comp=Z,10nm,0.8s,baz=85,slow=4.7,SNR=19 | | | | | | |
| **ILAR** | **Eielson Array** | **149.45** | **313** | PKPbc | **PKPbc** | **23 04 55.1** | **+0.2** |
| | comp=Z,7.3nm,0.9s,baz=122,slow=1.5,SNR=48 | | | | | | |
| **SONM** | **Songino Array** | **150.99** | **86** | PKPbc | **PKPbc** | **23 04 59.6** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=225,slow=2.7,SNR=13 | | | | | | |

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*PGC **04** 22:47:32.9±2.6, 50.00N×130.16W, h10km, MLSn3.0/7, Mw3.6/7, 209km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*

*IDC **04** 22:47:36.7±2.3, 50.41N×129.95W, h0km, mb3.9/1, mb1 3.7/5, mb1mx3.1/52, mbtmp3.4/5, ML3.4/4, MS3.7/4, Ms1 3.7/4, ms1mx3.0/92, Error ellipse: s-maj=34.0km s-min=8.5km az=92.0*

**ISC 04 22:47:34.8±3.2, 50.10N±0.07×129.91W±0.09, h13km±17km, n24, σ1.9/47/25, MS3.8/3, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOLB** | **Holberg** | **1.26** | **64** | Sn | **Sg** | **22 48 14.9** | **-0.4** |
| **PACB** | **Port Alice, BC** | **1.58** | **77** | Pn | Pn | 22 48 00.9 | -1.7 |
| PACB | | | | Sn | **Sn** | **22 48 21.8** | **-1.1** |
| **PHC** | **Port Hardy** | **1.69** | **68** | Pn | **Pn** | **22 48 03.0** | **-1.1** |
| PHC | | | | Sn | **Sn** | **22 48 25.9** | **+0.2** |
| **MAYB** | **Maynard** | **1.78** | **79** | Pn | Pn | 22 48 03.7 | -1.8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MAYB | | | | Sn | Sn | 22 48 26.5 | -1.5 | | |
| **WOSB** | **Woss** | **2.15** | **87** | Pn | Pn | **22 48 09.3** | **-1.1** | | |
| **BBB** | **Bella Bella** | **2.37** | **28** | Pn | Pn | **22 48 13.0** | **-0.4** | | |
| | 12nm,0.3s,baz=215,slow=12,SNR=2.1 | | | | | | | | |
| BBB | | | | Sn | Sn | **22 48 41.1** | **-1.2** | | |
| | 26nm,0.3s,baz=314,slow=22,SNR=5.0 | | | | | | | | |
| **BBB** | **Bella Bella** | **2.37** | **28** | Pn | Pn | **22 48 13.1** | **-0.3** | | |
| BBB | | | | Sn | Sn | **22 48 41.3** | **-1.0** | | |
| **NCRB** | **Newcastle Ridg** | **2.49** | **82** | Pn | Pn | **22 48 14.8** | **-0.4** | | |
| NCRB | | | | Sn | Sn | **22 48 45.3** | **-0.2** | | |
| **BTB** | **Buttle Lake** | **2.91** | **101** | Pn | Pn | **22 48 20.3** | **-0.7** | | |
| BTB | | | | Sn | Sn | **22 48 53.7** | **-2.2** | | |
| **BUTB** | **Butedale** | **3.10** | **16** | Pn | Pn | **22 48 23.5** | **0.0** | | |
| BUTB | | | | Sn | Sn | **22 48 59.9** | **-0.5** | | |
| **BNKB** | **Banks Island** | **3.24** | **0** | Pn | Pn | **22 48 23.7** | **-1.6** | | |
| BNKB | | | | Sn | Sn | **22 49 02.6** | **-1.1** | | |
| **MGB** | **Mount Grey** | **3.57** | **106** | Sn | Sn | **22 49 10.9** | **-1.2** | | |
| **SHB** | **Sechelt** | **3.94** | **95** | Pn | Pn | **22 48 35.3** | **+0.3** | | |
| SHB | | | | Sn | Sn | **22 49 20.3** | **-0.8** | | |
| **NEW** | **Newport** | **8.58** | **97** | LR | LR | 22 52 57.9 | | | |
| | comp=Z,155nm,19.3s,baz=271,slow=37 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **14.30** | **140** | Pn | P | **22 51 03.3** | **-1.1** | | |
| | 0.1nm,0.3s,baz=324,slow=12,SNR=1.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.99** | **28** | Pn | Pn | **22 51 06.1** | **0.0** | | |
| | 0.1nm,0.3s,baz=219,slow=11,SNR=5.8 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **15.80** | **110** | Pn | P | **22 51 21.7** | **+0.7** | | |
| | 0.1nm,0.3s,baz=302,slow=8.4,SNR=2.5 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.69** | **76** | P | P | **22 52 30.0** | **+4.8** | | |
| | 5.3nm,0.8s,baz=280,slow=12,SNR=4.6 | | | | | | | | |
| **SADO** | **Sadowa** | **34.20** | **79** | LR | LR | 23 08 35.7 | | | |
| | comp=Z,133nm,18.1s,baz=194,slow=37 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **36.16** | **96** | LR | LR | 23 10 04.9 | | | |
| | comp=Z,132nm,18.1s,baz=276,slow=37 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **57.98** | **263** | T | T | 00 00 02.9 | | | |
| | baz=42,slow=75,SNR=16 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **57.98** | **263** | T | T | 00 00 02.9 | | | |
| | baz=42,slow=75,SNR=16 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **57.99** | **263** | T | T | 00 00 09.7 | | | |
| | baz=42,slow=75,SNR=13 | | | | | | | | |
| **KEST** | **Kesra** | **87.26** | **32** | LR | LR | 23 39 59.2 | | | |
| | comp=Z,55nm,18.2s,baz=233,slow=36 | | | | | | | | |

*IDC* ***04*** *23:20:25.2±1.5,59°.72N×153°.42W,h91km±22km,mb3.6/6, mb1 3.7/10,mb1mx3.2/48,mbtmp3.9/10,Error ellipse: s-maj=24.3km s-min=11.2km az=113.0*

*ANF* ***04*** *23:20:26.8±0.2,59°.64N×153°.32W,h111km±3km,ML3.9/42, Error ellipse: s-maj=2.1km s-min=2.0km az=111.0*

*NEIC* ***04*** *23:20:26.9±1.2,59°.67N±0°.04×153°.38W±0°.07, h115km±4km,Error ellipse: s-maj=5.5km s-min=5.1km az=178.0*

*AEIC* ***04*** *23:20:28±1.1,59°.68N±0°.01×153°.31W±0°.07,h109km±4km, ML3.6/84,ML3.8/110(NEIC),Error ellipse: s-maj=5.1km s-min=1.8km az=82.0*

**ISC 04 23:20:27.1±0.7,59°.66N±0°.03×153°.30W±0°.03, h118km±5km,n248,e0°991/265,mb4.0/6,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.03** | **95** | | **Pn** | **23 20 42.9** | **-0.4** |
| **AUL** | **Augustine Lava** | **0.28** | **194** | | **Pn** | **23 20 43.6** | **-0.2** |
| AUL | | | | | **Sn** | **23 20 55.6** | **-0.6** |
| **AU22** | **Augustine Moun** | **0.29** | **186** | | **Pn** | **23 20 43.4** | **-0.3** |
| AU22 | | | | | **Sn** | **23 20 55.6** | **-0.6** |
| **AUQ** | **Augustine Qik'** | **0.31** | **191** | | **Pn** | **23 20 43.7** | **-0.2** |
| **ILSW** | **Iliamna Southw** | **0.34** | **14** | | **Pn** | **23 20 43.4** | **-0.8** |
| ILSW | | | | Sn | **Sn** | **23 20 55.5** | **-1.4** |
| **O20K** | **Slope Mountain** | **0.55** | **38** | | **Pn** | **23 20 44.8** | **-0.4** |
| **O20K** | **Slope Mountain** | **0.55** | **38** | P | **Pn** | **23 20 44.8** | **-0.4** |
| | baz=221,SNR=27 | | | | | | |
| O20K | | | | S | **Sn** | **23 20 57.9** | **-1.0** |
| | baz=221 | | | | | | |
| **O19K** | **Port Alsworth** | **0.75** | **317** | | **Pn** | **23 20 45.9** | **-0.6** |
| O19K | | | | Sn | **Sn** | **23 20 59.8** | **-1.4** |
| O19K | | | | IAML | | 23 21 00.5 | |
| | comp=N,8μm,0.5s | | | | | | |
| O19K | | | | IAML | | 23 21 01.5 | |
| | comp=E,7μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.75** | **317** | P | **Pn** | **23 20 46.0** | **-0.6** |
| | baz=135,SNR=91 | | | | | | |
| O19K | | | | S | **Sn** | **23 20 59.8** | **-1.4** |
| | baz=135 | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.75** | **194** | | **Pn** | **23 20 46.3** | **-0.4** |
| Q19K | | | | Sn | **Sn** | **23 21 00.6** | **-0.9** |
| Q19K | | | | IAML | | 23 21 01.4 | |
| | comp=E,3μm,0.7s | | | | | | |
| Q19K | | | | IAML | | 23 21 06.3 | |
| | comp=N,4μm,0.8s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.75** | **194** | P | **Pn** | **23 20 46.5** | **-0.2** |
| | baz=12,SNR=14 | | | | | | |
| Q19K | | | | S | **Sn** | **23 21 00.6** | **-0.9** |
| | baz=12 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.81** | **19** | | **Pn** | **23 20 46.7** | **-0.5** |
| RED | | | | | **Sn** | **23 21 01.1** | **-1.4** |
| **HOM** | **Homer** | **0.84** | **89** | | **Pn** | **23 20 47.4** | **0.0** |
| HOM | | | | Sn | **Sn** | **23 21 03.0** | **+0.2** |
| HOM | | | | IAML | | 23 21 03.8 | |
| | comp=N,2μm,0.7s | | | | | | |
| **HOM** | **Homer** | **0.84** | **89** | P | **Pn** | **23 20 47.5** | **+0.1** |
| | baz=272,SNR=18 | | | | | | |
| HOM | | | | S | **Sn** | **23 21 02.6** | **-0.1** |
| | baz=272 | | | | | | |
| **RSO** | **Redoubt South** | **0.85** | **18** | | **Pn** | **23 20 47.4** | **-0.4** |
| **O18K** | **Koktuh Hills** | **0.99** | **282** | | **Pn** | **23 20 48.1** | **-0.7** |
| **O18K** | **Koktuh Hills** | **0.99** | **282** | Sn | **Sn** | **23 21 04.0** | **-1.2** |
| **O18K** | **Koktuh Hills** | **0.99** | **282** | P | **Pn** | **23 20 48.1** | **-0.7** |
| | baz=100,SNR=18 | | | | | | |
| O18K | | | | S | **Sn** | **23 21 03.6** | **-1.7** |
| | baz=100 | | | | | | |
| **DFR** | **Drift River** | **0.99** | **18** | | **Pn** | **23 20 48.5** | **-0.4** |
| DFR | | | | | **Sn** | **23 21 04.4** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.02** | **256** | | **Pn** | **23 20 48.2** | **-0.9** |
| **P18K** | **Big Mountain,** | **1.02** | **256** | Sn | **Sn** | **23 21 04.0** | **-1.9** |
| **P18K** | **Big Mountain,** | **1.02** | **256** | P | **Pn** | **23 20 48.3** | **-0.9** |
| | baz=73,SNR=15 | | | | | | |
| P18K | | | | S | **Sn** | **23 21 03.8** | **-2.0** |
| | baz=73 | | | | | | |
| **RDT** | **Redoubt** | **1.02** | **26** | | **Pn** | **23 20 48.9** | **-0.4** |
| **CNPM** | **China Poot** | **1.06** | **96** | | **Pn** | **23 20 49.1** | **-0.5** |
| CNPM | | | | Sn | **Sn** | **23 21 06.2** | **-0.3** |
| CNPM | | | | IAML | | 23 21 08.0 | |
| | comp=E,996nm,0.3s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.23** | **84** | | **Pn** | **23 20 50.7** | **-0.6** |
| **BRLK** | **Bradley Lake** | **1.23** | **84** | IAML | | 23 21 12.6 | |
| | comp=N,832nm,0.3s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.30** | **85** | | **Pn** | **23 20 51.5** | **-0.6** |
| **BRSE** | **Bradley Lake S** | **1.30** | **85** | P | **Pn** | **23 20 51.7** | **-0.4** |
| | baz=266,SNR=18 | | | | | | |
| BRSE | | | | S | **Sn** | **23 21 10.2** | **-0.9** |
| | baz=268 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.30** | **334** | | **Pn** | **23 20 51.7** | **-0.5** |
| N19K | | | | | **Sn** | **23 21 09.6** | **-1.7** |
| **N19K** | **Bonanza Creek** | **1.30** | **334** | P | **Pn** | **23 20 51.7** | **-0.5** |
| | baz=152 | | | | | | |
| N19K | | | | S | **Sn** | **23 21 09.6** | **-1.7** |
| | baz=152 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.55** | **43** | Pn | **Pn** | **23 20 54.3** | **-0.5** |
| CAPN | | | | | **Sn** | **23 21 15.5** | **-0.5** |
| CAPN | | | | IAML | | 23 21 20.8 | |
| | comp=E,2μm,0.6s | | | | | | |
| **SPU** | **Mount Spurr** | **1.65** | **21** | | **Pn** | **23 20 55.9** | **-0.3** |
| **SPCN** | **Chakachatna No** | **1.67** | **19** | | **Pn** | **23 20 56.4** | **0.0** |
| **SPNN** | **North Nagishla** | **1.74** | **10** | | **Pn** | **23 20 57.3** | **-0.1** |
| **SPCG** | **Spurr Capps Gl** | **1.76** | **21** | | **Pn** | **23 20 57.5** | **-0.1** |
| **SLKM** | **Skilak Lake** | **1.76** | **60** | | **Pn** | **23 20 57.4** | **-0.2** |
| SLKM | | | | | **Sn** | **23 21 19.1** | **-1.7** |
| **SVW2** | **Sparrevohn** | **1.84** | **323** | | **Pn** | **23 20 57.7** | **-0.7** |
| **ANCK** | **Angle Creek** | **1.85** | **219** | | **Pn** | **23 20 58.9** | **+0.2** |
| **CAHL** | **Cahill** | **1.92** | **214** | | **Pn** | **23 20 59.8** | **+0.4** |
| **KDAK** | **Kodiak Island** | **1.92** | **168** | P | **Pn** | **23 20 58.6** | **-0.8** |
| | comp=E,53nm,0.3s,baz=27,slow=7.8,SNR=406 | | | | | | |
| KDAK | | | | S | **Sn** | **23 21 21.9** | **-2.1** |
| | comp=E,51nm,0.3s,baz=139,slow=22,SNR=23 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.92** | **168** | IAML | | 23 21 24.4 | |
| | comp=E,427nm,0.4s | | | | | | |
| KDAK | | | | IAML | | 23 21 24.5 | |
| | comp=E,479nm,0.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.92** | **168** | P | **Pn** | **23 20 58.6** | **-0.8** |
| | baz=349 | | | | | | |
| KDAK | | | | S | **Sn** | **23 21 22.0** | **-2.0** |
| | baz=349 | | | | | | |
| **O22K** | **Cooper Landing** | **1.98** | **64** | | **Pn** | **23 20 60.0** | **-0.1** |
| **O22K** | **Cooper Landing** | **1.98** | **64** | IAML | | 23 21 35.3 | |
| | comp=E,2μm,0.8s | | | | | | |
| **O22K** | **Cooper Landing** | **1.98** | **64** | P | **Pn** | **23 20 60.0** | **-0.1** |
| | baz=248,SNR=25 | | | | | | |
| O22K | | | | S | **Sn** | **23 21 23.7** | **-1.6** |
| | baz=248 | | | | | | |
| **STLK** | **Strandline Lak** | **1.99** | **21** | | **Pn** | **23 21 00.4** | **+0.1** |
| **SEW** | **Seward** | **1.99** | **75** | | **Pn** | **23 20 60.0** | **-0.3** |
| **SEW** | **Seward** | **1.99** | **75** | P | **Pn** | **23 20 60.0** | **-0.3** |
| | baz=259,SNR=8.2 | | | | | | |
| SEW | | | | S | **Sn** | **23 21 23.9** | **-1.7** |
| | baz=259 | | | | | | |
| **FIS** | **Fire Island** | **2.14** | **44** | Pn | **Pn** | **23 21 02.7** | **+0.6** |
| FIS | | | | IAML | | 23 21 31.8 | |
| | comp=E,868nm,0.5s | | | | | | |
| FIS | | | | IAML | | 23 21 34.5 | |
| | comp=N,867nm,0.5s | | | | | | |
| **SUA** | **Susitna One** | **2.21** | **34** | | **Pn** | **23 21 03.2** | **+0.1** |
| SUA | | | | IAML | | 23 21 31.9 | |
| | comp=E,1μm,0.9s | | | | | | |
| SUA | | | | IAML | | 23 21 32.7 | |
| | comp=N,869nm,0.8s | | | | | | |
| **SUA** | **Susitna One** | **2.21** | **34** | P | **Pn** | **23 21 03.3** | **+0.1** |
| | baz=216 | | | | | | |
| SUA | | | | S | **Sn** | **23 21 30.4** | **-0.4** |
| | baz=216 | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.28** | **49** | | **Pn** | **23 21 04.0** | **0.0** |
| **RC01** | **Rabbit Creek A** | **2.28** | **49** | P | **Pn** | **23 21 03.6** | **-0.4** |
| | baz=233,SNR=31 | | | | | | |
| **M19K** | **Big River Lodg** | **2.32** | **347** | | **Pn** | **23 21 03.9** | **-0.5** |
| **M19K** | **Big River Lodg** | **2.32** | **347** | P | **Pn** | **23 21 04.0** | **-0.4** |
| | baz=166,SNR=61 | | | | | | |
| **OHAK** | **Old Harbor** | **2.44** | **180** | Pn | **Pn** | **23 21 04.3** | **-1.7** |
| **OHAK** | **Old Harbor** | **2.44** | **180** | P | **Pn** | **23 21 04.9** | **-1.1** |
| | baz=360,SNR=9.0 | | | | | | |
| **M22K** | **Willow** | **2.62** | **35** | | **Pn** | **23 21 08.4** | **+0.1** |
| M22K | | | | | **Sn** | **23 21 39.8** | **-0.2** |
| **M22K** | **Willow** | **2.62** | **35** | P | **Pn** | **23 21 08.6** | **+0.3** |
| | baz=218,SNR=9.7 | | | | | | |
| M22K | | | | S | **Sn** | **23 21 39.7** | **-0.2** |
| | baz=218 | | | | | | |
| **L19K** | **White Mountain** | **2.65** | **344** | | **Pn** | **23 21 08.2** | **-0.5** |
| **L19K** | **White Mountain** | **2.65** | **344** | P | **Pn** | **23 21 08.2** | **-0.5** |
| | baz=163,SNR=64 | | | | | | |
| **PWL** | **Port Wells** | **2.75** | **62** | | **Pn** | **23 21 09.1** | **-0.9** |
| **PWL** | **Port Wells** | **2.75** | **62** | P | **Pn** | **23 21 09.1** | **-0.9** |
| | baz=247,SNR=9.7 | | | | | | |
| PWL | | | | S | **Sn** | **23 21 40.7** | **-2.5** |
| | baz=247 | | | | | | |
| **PMR** | **Palmer** | **2.83** | **45** | | **Pn** | **23 21 10.1** | **-0.9** |
| PMR | | | | IAML | | 23 21 42.8 | |
| | comp=E,306nm,0.3s | | | | | | |
| PMR | | | | IAML | | 23 21 44.8 | |
| | comp=N,392nm,0.4s | | | | | | |
| **PMR** | **Palmer** | **2.83** | **45** | P | **Pn** | **23 21 10.1** | **-0.9** |
| | baz=229,SNR=5.8 | | | | | | |
| **L20K** | **Farewell, AK** | **2.85** | **355** | | **Pn** | **23 21 11.3** | **0.0** |
| **L20K** | **Farewell, AK** | **2.85** | **355** | P | **Pn** | **23 21 11.3** | **0.0** |
| | baz=174 | | | | | | |
| **KNK** | **Knik Glacier** | **2.97** | **52** | | **Pn** | **23 21 12.2** | **-0.7** |
| **KNK** | **Knik Glacier** | **2.97** | **52** | P | **Pn** | **23 21 12.0** | **-0.9** |
| | baz=236,SNR=7.9 | | | | | | |
| KNK | | | | S | **Sn** | **23 21 45.7** | **-2.5** |
| | baz=236 | | | | | | |
| **GHO** | **Glory Hole Cre** | **3.02** | **43** | | **Pn** | **23 21 13.5** | **-0.1** |
| GHO | | | | IAML | | 23 21 49.8 | |
| | comp=N,562nm,0.4s | | | | | | |
| **CUT** | **Chulitna** | **3.13** | **27** | | **Pn** | **23 21 15.5** | **+0.6** |
| **CUT** | **Chulitna** | **3.13** | **27** | P | **Pn** | **23 21 15.7** | **+0.8** |
| | baz=210,SNR=19 | | | | | | |
| **SII** | **Sitkinak Islan** | **3.14** | **189** | | **Pn** | **23 21 14.1** | **-1.1** |
| **SII** | **Sitkinak Islan** | **3.14** | **189** | IAML | | 23 21 50.7 | |
| | comp=E,269nm,0.8s | | | | | | |
| SII | | | | IAML | | 23 21 51.5 | |
| | comp=N,411nm,0.7s | | | | | | |
| **SII** | **Sitkinak Islan** | **3.14** | **189** | P | **Pn** | **23 21 14.0** | **-1.1** |
| | baz=8.0,SNR=6.0 | | | | | | |
| SII | | | | S | **Sn** | **23 21 49.4** | **-2.8** |
| | baz=8.0 | | | | | | |
| **SML** | **Sawmill** | **3.26** | **46** | Pn | **Pn** | **23 21 15.6** | **-1.1** |
| SML | | | | IAML | | 23 21 54.4 | |
| | comp=N,378nm,0.7s | | | | | | |
| SML | | | | IAML | | 23 21 54.5 | |
| | comp=E,312nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **3.26** | **46** | P | **Pn** | **23 21 15.8** | **-0.9** |
| | baz=231 | | | | | | |
| **PPLA** | **Purkeypile** | **3.30** | **9** | | **Pn** | **23 21 17.9** | **+0.6** |
| **PPLA** | **Purkeypile** | **3.30** | **9** | P | **Pn** | **23 21 17.9** | **+0.6** |
| | baz=190,SNR=16 | | | | | | |
| **GLI** | **Glacier Island** | **3.33** | **66** | | **Pn** | **23 21 16.4** | **-1.1** |
| GLI | | | | IAML | | 23 21 54.9 | |
| | comp=E,347nm,0.4s | | | | | | |
| GLI | | | | IAML | | 23 22 09.1 | |
| | comp=N,223nm,0.7s | | | | | | |
| **GLI** | **Glacier Island** | **3.33** | **66** | P | **Pn** | **23 21 16.7** | **-0.9** |
| | baz=252 | | | | | | |
| **TT01** | **Tatalina** | **3.52** | **339** | | **Pn** | **23 21 19.5** | **-0.6** |
| **TTA** | **Tatalina** | **3.54** | **339** | | **Pn** | **23 21 19.6** | **-0.7** |
| **TTA** | **Tatalina** | **3.54** | **339** | P | **Pn** | **23 21 19.7** | **-0.7** |
| | baz=157,SNR=38 | | | | | | |
| **FID** | **Port Fidalgo** | **3.58** | **69** | | **Pn** | **23 21 19.1** | **-1.8** |
| FID | | | | IAML | | 23 22 00.2 | |
| | comp=E,366nm,0.3s | | | | | | |
| **FID** | **Port Fidalgo** | **3.58** | **69** | | **Sn** | **23 21 59.3** | **-3.2** |
| **JPK** | **Jack Peak** | **3.61** | **64** | | **Pn** | **23 21 21.6** | **+0.2** |
| **SCM** | **Sheep Creek Mo** | **3.66** | **51** | | **Pn** | **23 21 21.5** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **3.66** | **51** | IAML | | 23 22 05.8 | |
| | comp=N,312nm,0.6s | | | | | | |
| SCM | | | | IAML | | 23 22 06.9 | |
| | comp=E,262nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.66** | **51** | P | **Pn** | **23 21 21.4** | **-0.6** |
| | baz=236 | | | | | | |
| **K20K** | **Telida** | **3.73** | **355** | | **Pn** | **23 21 22.8** | **-0.2** |
| **K20K** | **Telida** | **3.73** | **355** | P | **Pn** | **23 21 22.3** | **-0.7** |
| | baz=174 | | | | | | |
| **CAST** | **Castle Rocks** | **3.82** | **8** | | **Pn** | **23 21 24.3** | **+0.2** |
| **CAST** | **Castle Rocks** | **3.82** | **8** | P | **Pn** | **23 21 24.6** | **+0.5** |
| | baz=189,SNR=49 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.88** | **73** | Pn | **Pn** | **23 21 24.9** | **-0.1** |
| **EYAK** | **Cordova Ski Ar** | **3.88** | **73** | P | **Pn** | **23 21 24.1** | **-0.8** |
| | baz=260 | | | | | | |
| **DIV** | **Divide** | **4.02** | **65** | | **Pn** | **23 21 25.9** | **-0.9** |
| **CHIR** | **Chirikof Islan** | **4.04** | **199** | | **Pn** | **23 21 25.7** | **-1.4** |
| **CHIR** | **Chirikof Islan** | **4.04** | **199** | IAML | | 23 23 39.4 | |
| | comp=E,242nm,3.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.04** | **199** | P | **Pn** | **23 21 25.9** | **-1.2** |
| | baz=17 | | | | | | |
| **TRF** | **Thorofare Moun** | **4.07** | **19** | | **Pn** | **23 21 27.4** | **-0.2** |
| TRF | | | | IAML | | 23 22 14.4 | |
| | comp=E,105nm,0.5s | | | | | | |
| TRF | | | | IAML | | 23 22 38.2 | |
| | comp=N,112nm,0.6s | | | | | | |
| **TRF** | **Thorofare Moun** | **4.07** | **19** | P | **Pn** | **23 21 27.4** | **-0.2** |
| | baz=202,SNR=5.9 | | | | | | |
| **KTH** | **Kantishna Hill** | **4.07** | **15** | | **Pn** | **23 21 27.1** | **-0.5** |
| **KTH** | **Kantishna Hill** | **4.07** | **15** | IAML | | 23 22 15.6 | |
| | comp=N,82nm,0.6s | | | | | | |
| KTH | | | | IAML | | 23 22 16.8 | |
| | comp=E,94nm,0.6s | | | | | | |
| **KLU** | **Klutina** | **4.08** | **60** | | **Pn** | **23 21 26.8** | **-0.9** |
| **KLU** | **Klutina** | **4.08** | **60** | IAML | | 23 22 15.1 | |
| | comp=E,223nm,0.4s | | | | | | |
| **KLU** | **Klutina** | **4.08** | **60** | P | **Pn** | **23 21 26.8** | **-0.9** |
| | baz=247,SNR=30 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.26** | **52** | | **Pn** | **23 21 29.9** | **-0.2** |
| **M24K** | **Tolsona, Glenn** | **4.26** | **52** | IAML | | 23 22 28.5 | |
| | comp=N,203nm,0.9s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.26** | **52** | P | **Pn** | **23 21 29.9** | **-0.2** |
| | baz=238,SNR=8.6 | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.27** | **6** | | **Pn** | **23 21 30.3** | **+0.3** |
| **CHUM** | **Lake Minchumin** | **4.27** | **6** | P | **Pn** | **23 21 30.2** | **+0.1** |
| | baz=187,SNR=22 | | | | | | |
| **RND** | **Reindeer** | **4.32** | **28** | | **Pn** | **23 21 30.2** | **-0.7** |
| **RND** | **Reindeer** | **4.32** | **28** | IAML | | 23 22 36.2 | |
| | comp=N,64nm,2.9s | | | | | | |
| RND | | | | IAML | | 23 22 40.0 | |
| | comp=E,64nm,0.8s | | | | | | |
| **CHGN** | **Chignik** | **4.33** | **221** | Pn | **Pn** | **23 21 31.6** | **+0.7** |
| CHGN | | | | IAML | | 23 22 42.3 | |
| | comp=E,134nm,0.1s | | | | | | |
| CHGN | | | | IAML | | 23 22 52.4 | |
| | comp=N,110nm,0.1s | | | | | | |
| **GOAT** | **Goat Mountain** | **4.39** | **74** | | **Pn** | **23 21 30.8** | **-0.9** |
| **RAGM** | **Ragged Mountai** | **4.39** | **77** | Pn | **Pn** | **23 21 32.1** | **+0.3** |
| RAGM | | | | IAML | | 23 24 05.3 | |
| | comp=E,193nm,4.5s | | | | | | |
| **KAIM** | **Kayak Island** | **4.50** | **83** | Pn | **Pn** | **23 21 33.2** | **+0.1** |
| **KAIM** | **Kayak Island** | **4.50** | **83** | P | **Pn** | **23 21 33.4** | **+0.3** |
| | baz=271 | | | | | | |
| **BMRM** | **Bremner River** | **4.52** | **69** | | **Pn** | **23 21 32.3** | **-1.2** |
| **BMRM** | **Bremner River** | **4.52** | **69** | IAML | | 23 22 40.2 | |
| | comp=E,101nm,0.7s | | | | | | |
| BMRM | | | | IAML | | 23 22 45.2 | |
| | comp=N,112nm,0.9s | | | | | | |
| **BMRM** | **Bremner River** | **4.52** | **69** | P | **Pn** | **23 21 33.2** | **-0.3** |
| | baz=257,SNR=9.7 | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.53** | **54** | | **Pn** | **23 21 34.7** | **+1.1** |
| **J20K** | **Nowinta River** | **4.56** | **355** | | **Pn** | **23 21 33.6** | **-0.3** |
| **J20K** | **Nowinta River** | **4.56** | **355** | P | **Pn** | **23 21 33.4** | **-0.5** |
| | baz=175,SNR=16 | | | | | | |
| **MCK** | **McKinley** | **4.59** | **25** | | **Pn** | **23 21 34.4** | **0.0** |
| **MCK** | **McKinley** | **4.59** | **25** | IAML | | 23 22 28.1 | |
| | comp=E,54nm,0.4s | | | | | | |
| MCK | | | | IAML | | 23 22 28.6 | |
| | comp=N,69nm,0.6s | | | | | | |
| **MCK** | **McKinley** | **4.59** | **25** | P | **Pn** | **23 21 34.2** | **-0.2** |
| | baz=209,SNR=8.9 | | | | | | |
| **HMT** | **Hamilton** | **4.59** | **78** | Pn | **Pn** | **23 21 34.1** | **-0.3** |
| **BPAW** | **Bear Paw Mtn.** | **4.59** | **13** | Pn | **Pn** | **23 21 34.5** | **0.0** |
| BPAW | | | | IAML | | 23 22 27.3 | |
| | comp=N,40nm,0.6s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.59** | **13** | P | **Pn** | **23 21 34.1** | **-0.3** |
| | baz=195 | | | | | | |
| **N25K** | **Chitina, Valde** | **4.71** | **62** | | **Pn** | **23 21 35.6** | **-0.5** |
| N25K | | | | IAML | | 23 22 29.7 | |
| | comp=E,128nm,0.6s | | | | | | |
| N25K | | | | IAML | | 23 22 30.7 | |
| | comp=N,124nm,0.6s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.71** | **62** | P | **Pn** | **23 21 36.6** | **+0.5** |
| | baz=250,SNR=30 | | | | | | |
| **HARP** | **HAARP** | **4.82** | **52** | | **Pn** | **23 21 37.3** | **-0.3** |
| **HARP** | **HAARP** | **4.82** | **52** | P | **Pn** | **23 21 37.4** | **-0.1** |
| | baz=239 | | | | | | |
| **BERG** | **Berg Lake** | **4.87** | **77** | Pn | **Pn** | **23 21 38.0** | **-0.2** |
| **BWN** | **Browne** | **4.88** | **20** | Pn | **Pn** | **23 21 38.5** | **+0.2** |
| BWN | | | | IAML | | 23 22 54.2 | |
| | comp=N,91nm,4.0s | | | | | | |
| BWN | | | | IAML | | 23 23 15.6 | |
| | comp=E,82nm,0.8s | | | | | | |
| **GLB** | **Gilahina Butte** | **5.01** | **65** | | **Pn** | **23 21 39.3** | **-0.9** |
| **GLB** | **Gilahina Butte** | **5.01** | **65** | IAML | | 23 22 37.5 | |
| | comp=E,75nm,0.7s | | | | | | |
| GLB | | | | IAML | | 23 22 37.9 | |
| | comp=N,122nm,0.7s | | | | | | |
| **PAX** | **Paxson** | **5.03** | **45** | | **Pn** | **23 21 39.7** | **-0.7** |
| **PAX** | **Paxson** | **5.03** | **45** | P | **Pn** | **23 21 40.2** | **-0.2** |
| | baz=232,SNR=5.5 | | | | | | |
| **KHIT** | **Khitrov Hills** | **5.10** | **77** | | **Pn** | **23 21 41.0** | **-0.3** |
| **VRDI** | **Verde Repeater** | **5.12** | **68** | | **Pn** | **23 21 41.4** | **-0.3** |
| VRDI | | | | IAML | | 23 22 40.8 | |
| | comp=N,60nm,0.6s | | | | | | |
| VRDI | | | | IAML | | 23 22 40.8 | |
| | comp=E,48nm,0.5s | | | | | | |
| **PS10** | **TAPS Pump St10** | **5.22** | **40** | | **Pn** | **23 21 43.6** | **+0.7** |
| **SNH** | **Sunshine Point** | **5.29** | **80** | Pn | **Pn** | **23 21 44.4** | **+0.5** |
| **WAX** | **Waxell Ridge** | **5.30** | **77** | | **Pn** | **23 21 44.1** | **+0.2** |
| **NEA2** | **Nenana** | **5.34** | **20** | | **Pn** | **23 21 43.7** | **-0.7** |
| **NEA2** | **Nenana** | **5.34** | **20** | IAML | | 23 22 32.6 | |
| | comp=E,27nm,4.8s | | | | | | |
| NEA2 | | | | IAML | | 23 22 39.4 | |
| | comp=N,29nm,3.7s | | | | | | |
| **NEA2** | **Nenana** | **5.34** | **20** | P | **Pn** | **23 21 43.6** | **-0.8** |
| | baz=204,SNR=25 | | | | | | |
| **GCSA** | **Galena City Sc** | **5.38** | **343** | | **Pn** | **23 21 44.1** | **-0.8** |
| **GCSA** | **Galena City Sc** | **5.38** | **343** | P | **Pn** | **23 21 43.8** | **-1.1** |
| | baz=160,SNR=7.1 | | | | | | |
| **WRH** | **Wood River Hil** | **5.42** | **25** | | **Pn** | **23 21 44.7** | **-0.8** |
| **MLY** | **Manley** | **5.53** | **11** | P | **Pn** | **23 21 46.4** | **-0.6** |
| | baz=194 | | | | | | |
| **ISLE** | **Juniper Island** | **5.56** | **75** | | **Pn** | **23 21 47.6** | **0.0** |
| **I21K** | **Tanana** | **5.58** | **6** | P | **Pn** | **23 21 47.4** | **-0.2** |
| | baz=187 | | | | | | |
| **KIAG** | **Kiagna River** | **5.59** | **72** | | **Pn** | **23 21 48.1** | **+0.1** |
| **BALM** | **Baldy** | **5.61** | **71** | | **Pn** | **23 21 47.4** | **-0.9** |
| **HDA** | **Harding Lake** | **5.63** | **29** | P | **Pn** | **23 21 47.6** | **-0.7** |
| | baz=215,SNR=13 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.63** | **25** | | **Pn** | **23 21 47.3** | **-1.0** |
| **MENT** | **Mentasta** | **5.67** | **50** | | **Pn** | **23 21 48.8** | **-0.1** |
| **M26K** | **Nabesna, AK** | **5.71** | **57** | | **Pn** | **23 21 50.3** | **+0.7** |
| **M26K** | **Nabesna, AK** | **5.71** | **57** | P | **Pn** | **23 21 50.5** | **+0.9** |
| | baz=246 | | | | | | |
| **MESA** | **MESA** | **5.73** | **80** | | **Pn** | **23 21 50.2** | **+0.3** |
| **MESA** | **MESA** | **5.73** | **80** | P | **Pn** | **23 21 50.3** | **+0.3** |
| | baz=270 | | | | | | |
| **RIDG** | **Independent Ri** | **5.74** | **41** | P | **Pn** | **23 21 50.3** | **+0.4** |
| | baz=228 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.77** | **29** | | **Pn** | **23 21 49.6** | **-0.7** |
| **SDPT** | **Sand Point** | **5.79** | **225** | Pn | **Pn** | **23 21 52.0** | **+1.3** |
| **I23K** | **Minto, Yukon-K** | **5.81** | **17** | | **Pn** | **23 21 50.4** | **-0.3** |
| **I23K** | **Minto, Yukon-K** | **5.81** | **17** | P | **Pn** | **23 21 50.4** | **-0.3** |
| | baz=200,SNR=12 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.82** | **24** | P | **Pn** | **23 21 50.3** | **-0.6** |
| | baz=208,SNR=7.2 | | | | | | |
| **COLA** | **College** | **5.82** | **24** | | **Pn** | **23 21 50.1** | **-0.7** |
| **COLA** | **College** | **5.82** | **24** | P | **Pn** | **23 21 50.3** | **-0.6** |
| | baz=208 | | | | | | |
| **MDM** | **Murphy Dome** | **5.82** | **22** | | **Pn** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BMAR** | **Burnt Mountain** | **8.71** | **23** | Pn | | **Pn** | **23 22 29.3** | **-0.7** |
| **N31M** | **Braeburn, Yuko** | **8.82** | **70** | | | **Pn** | **23 22 31.8** | **+0.3** |
| **N31M** | **Braeburn, Yuko** | **8.82** | **70** | P | | **Pn** | **23 22 31.7** | **+0.2** |
| | baz=266,SNR=5.9 | | | | | | | |
| **TNA** | **Tin City** | **8.96** | **318** | Pn | | **Pn** | **23 22 33.5** | **+0.2** |
| **TNA** | **Tin City** | **8.96** | **318** | P | | **Pn** | **23 22 34.1** | **+0.9** |
| | baz=124 | | | | | | | |
| **SKAG** | **Skagway** | **9.12** | **83** | | | **Pn** | **23 22 36.6** | **+1.0** |
| **SKAG** | **Skagway** | **9.12** | **83** | P | | **Pn** | **23 22 36.5** | **+0.9** |
| | baz=279 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **9.16** | **9** | Pn | | **Pn** | **23 22 36.6** | **+0.5** |
| **TOLK** | **Toolik Lake Re** | **9.16** | **9** | P | | **Pn** | **23 22 35.3** | **-0.8** |
| | baz=192 | | | | | | | |
| **WHY** | **Whitehorse** | **9.24** | **76** | Pn | | **Pn** | **23 22 38.1** | **+0.9** |
| **WHY** | **Whitehorse** | **9.24** | **76** | P | | **Pn** | **23 22 37.0** | **-0.2** |
| | baz=272,SNR=5.8 | | | | | | | |
| **UNV** | **Unalaska Valle** | **9.29** | **237** | Pn | | **Pn** | **23 22 37.1** | **-0.8** |
| **M31M** | **Drury Creek, Y** | **9.54** | **66** | | | **Pn** | **23 22 41.2** | **-0.1** |
| **M31M** | **Drury Creek, Y** | **9.54** | **66** | P | | **Pn** | **23 22 42.0** | **+0.7** |
| | baz=263,SNR=5.4 | | | | | | | |
| **BESE** | **Bessie Mountai** | **9.54** | **88** | Pn | | **Pn** | **23 22 43.0** | **+1.6** |
| **SIT** | **Sitka** | **9.79** | **98** | Pn | | **Pn** | **23 22 45.7** | **+1.1** |
| **JIS** | **Juneau Island** | **9.86** | **90** | Pn | | **Pn** | **23 22 46.5** | **+1.0** |
| **EPYK** | **Eagle Plains** | **10.08** | **41** | Pn | | **Pn** | **23 22 51.1** | **+2.7** |
| **P33M** | **Teslin, Yukon** | **10.29** | **78** | Pn | | **Pn** | **23 22 52.3** | **+0.9** |
| **CRAG** | **Craig** | **11.60** | **102** | Pn | | **Pn** | **23 23 10.1** | **+1.3** |
| **DLBC** | **Dease Lake** | **12.03** | **86** | P | | **Pn** | **23 23 15.8** | **+1.3** |
| | comp=N,0.8nm,0.3s,baz=287,slow=7.3,SNR=12 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.03** | **86** | Pn | | **Pn** | **23 23 17.0** | **+2.4** |
| **INK** | **Inuvik** | **12.21** | **37** | P | | **Pn** | **23 23 16.9** | **+0.2** |
| | comp=N,0.2nm,0.3s,baz=236,slow=14,SNR=1.9 | | | | | | | |
| **INK** | **Inuvik** | **12.21** | **37** | Pn | | **Pn** | **23 23 18.6** | **+1.9** |
| **MOBC** | **Moresby Island** | **13.45** | **110** | Pn | | **Pn** | **23 23 34.6** | **+1.6** |
| **YKA** | **Yellowknife Ar** | **18.73** | **65** | P | | **P** | **23 24 37.1** | **+0.8** |
| | comp=N,0.2nm,0.3s,baz=276,slow=10.0,SNR=13 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **27.36** | **278** | P | | **P** | **23 26 00.9** | **+0.2** |
| | comp=N,1.4nm,0.6s,baz=69,slow=12,SNR=3.6 | | | | | | | |
| **SCHQ** | **Schefferville** | **43.88** | **56** | P | | **P** | **23 28 21.8** | **+0.4** |
| | comp=N,3.2nm,1.0s,baz=319,slow=11,SNR=2.1 | | | | | | | |
| **KSRS** | **Korea Array** | **53.11** | **283** | P | | **P** | **23 29 32.9** | **+0.8** |
| | comp=N,1.0nm,0.6s,baz=31,slow=8.3,SNR=2.2 | | | | | | | |
| **SONM** | **Songino Array** | **54.87** | **306** | P | | **P** | **23 29 45.7** | **+0.7** |
| | comp=N,1.6nm,0.7s,baz=47,slow=6.7,SNR=15 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.66** | **324** | P | | **P** | **23 30 03.9** | **+0.1** |
| | comp=N,1.2nm,0.5s,baz=30,slow=9.1,SNR=5.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.61** | **321** | P | | **P** | **23 30 50.0** | **-1.5** |
| | comp=N,0.1nm,0.6s,baz=30,slow=7.2,SNR=1.7 | | | | | | | |

*NEIC* ***04*** *23:22:25.9±0.8,3˚.31S±0˚.10×146˚.0E±0˚.1,h31km±4km, mb4.4/14, Error ellipse: s-maj=19.3km s-min=9.3km az=127.0*

*IDC* ***04*** *23:22:25.6±1.5,3˚.34S×145˚.25E,h0km,mb3.8/5, mb1 4.1/6,mb1mx3.6/31,mbtmp3.9/6,ML3.8/1,MS3.1/1, Ms1 3.1/1,ms1mx2.5/59, Error ellipse: s-maj=58.2km s-min=23.8km az=107.0*

**ISC 04 23:22:26.0±0.7,3˚.31S±0˚.09×146˚.0E±0˚.1,h35km,n25, σ1s04/23,mb4.0/10,Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **1.85** | **47** | Op | | **Pn** | **23 22 55.1** | **-0.1** |
| **COEN** | **Coen** | **10.95** | **195** | Pn | | **Pn** | **23 24 59.7** | **-0.5** |
| **HNR** | **Honiara** | **15.12** | **114** | LR | | LR | 23 30 50.9 | |
| | comp=Z,64nm,19.8s,baz=312,slow=32 | | | | | | | |
| **MTN** | **Manton Dam** | **17.50** | **236** | | | **Pn** | **23 26 27.4** | **-0.1** |
| **WB0** | **Warramunga Arr** | **19.91** | **214** | P | | **P** | **23 26 54.8** | **0.0** |
| WB0 | | | | IAmb | IAmb | | 23 26 56.3 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.07** | **214** | P | | **P** | **23 26 56.6** | **0.0** |
| WB2 | | | | IAmb | IAmb | | 23 26 58.3 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.08** | **214** | P | | **P** | **23 26 56.4** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=40,slow=12,SNR=45 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.08** | **214** | P | | **P** | **23 26 56.4** | **-0.2** |
| **KNRA** | **Kununurra** | **20.96** | **233** | P | | **P** | **23 27 05.5** | **-0.7** |
| KNRA | | | | IAmb | IAmb | | 23 27 21.9 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **23.38** | **209** | P | | **P** | **23 27 31.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **23.38** | **209** | P | | **P** | **23 27 31.8** | **0.0** |
| | comp=Z,3.4nm,1.0s,baz=38,slow=8.8,SNR=20 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.38** | **209** | P | | **P** | **23 27 31.2** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **24.79** | **232** | P | | **P** | **23 27 44.6** | **-0.2** |
| | comp=Z,3.3nm,0.7s,baz=41,slow=7.5,SNR=9.0 | | | | | | | |
| **TOLI2** | **Tolitoli** | **25.60** | **279** | P | | **P** | **23 27 52.3** | **0.0** |
| TOLI2 | | | | IAmb | IAmb | | 23 28 04.8 | |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **26.25** | **265** | P | | **P** | **23 27 57.1** | **-1.0** |
| KAPI | | | | IAmb | IAmb | | 23 28 02.0 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **LIFNC** | **LIFOU** | **27.00** | **132** | P | | **P** | **23 28 05.4** | **+0.6** |
| **ONTNC** | **Ouen Toro** | **27.38** | **135** | P | | **P** | **23 28 08.2** | **-0.1** |
| ONTNC | | | | IAmb | IAmb | | 23 28 11.9 | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **MARNC** | **Mare, Loyalty** | **28.01** | **132** | P | | **P** | **23 28 11.2** | **-2.7** |
| **STKA** | **Stephens Creek** | **28.72** | **188** | P | | **P** | **23 28 23.2** | **+3.1** |
| | comp=Z,2.5nm,0.8s,baz=352,slow=15,SNR=3.7 | | | | | | | |
| **MBWA** | **Marble Bar** | **31.12** | **233** | P | | **P** | **23 28 41.0** | **-0.5** |
| MBWA | | | | IAmb | IAmb | | 23 28 57.3 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **JGF** | **Kuroka** | **39.55** | **349** | P | | **P** | **23 29 53.7** | **-0.1** |
| JGF | | | | IAmb | IAmb | | 23 30 09.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **JSD** | **Sado** | **41.76** | **351** | P | | **P** | **23 30 11.6** | **-0.4** |
| **NNZ** | **Nelson** | **45.05** | **151** | P | | **P** | **23 30 38.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **74.81** | **320** | P | | **P** | **23 34 04.2** | **+1.3** |
| | comp=Z,0.5nm,0.9s,baz=97,slow=5.9,SNR=3.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.41** | **23** | P | | P | 23 34 57.5 | +7.9 |
| | comp=Z,0.3nm,0.7s,baz=234,slow=5.5,SNR=4.1 | | | | | | | |

*BJI* ***04*** *23:45:32.5±0.0,19˚.18N×146˚.08E,h128km,mb4.3/24, mB5.0/14*

*IDC* ***04*** *23:45:33.0±0.8,19˚.33N×145˚.92E,h102km±6km,mb4.3/32, mb1 4.4/34,mb1mx4.3/48,mbtmp4.7/34,MS3.4/28, Ms1 3.4/28,ms1mx3.2/81,Error ellipse: s-maj=15.5km s-min=7.5km az=97.0*

*GCMT* ***04*** *23:45:35.5±0.4,19˚.33N±0˚.02×146˚.14E±0˚.03, h116km±6km,MW4.8/77,Moment Tensor Solution. s8,c8; s77,c96; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr0.60±.13; Mθθ0.98±.14; Mϕϕ-1.58±.14; Mrθ-1.56±.07; Mθϕ0.52±.13; Mrϕ0.92±.09; Best double couple: M=2.33600×10^16 NP1:ϕs207.00000°,δ37.00000°, λ165.00000°. NP2:ϕs309.00000°,δ81.00000°,λ54.00000°. Principal axes: T 2.3760, Plg43.0000°, Azm185.0000°; N -0.0780, Plg36.0000°, Azm316.0000°; P -2.2970, Plg27.0000°, Azm67.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***04*** *23:45:35.5±1.1,19˚.33N±0˚.06×145˚.8E±0˚.1,h117km±6km, mb4.8/230 Error ellipse: s-maj=15.8km s-min=8.7km az=84.0*

**ISC 04 23:45:33.1±0.3,19˚.35N±0˚.04×145˚.94E±0˚.07,h100km, n413,σ1s00/373,mb4.8/149,1C,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SARN** | **Sarigan** | **2.64** | **183** | P | | Pn | 23 46 20.9 | +6.8 |
| **GUMO** | **Guam** | **5.82** | **190** | P | | **Pn** | **23 46 58.1** | **+1.2** |
| | 72nm,0.3s,baz=333,slow=4.0,SNR=20 | | | | | | | |
| GUMO | | | | S | | **Sn** | **23 48 07.9** | **+5.5** |
| | 46nm,0.3s,baz=232,slow=20,SNR=2.1 | | | | | | | |
| GUMO | | | | LR | | LR | 23 48 28.9 | |
| | comp=Z,144nm,18.9s,baz=338,slow=30 | | | | | | | |
| **GUMO** | **Guam** | **5.82** | **190** | | | **Pn** | **23 46 59.5** | **+2.5** |
| **GUMO** | **Guam** | **5.82** | **190** | P | | **Pn** | **23 47 00.8** | **+3.8** |
| | 292nm,1.1s | | | | | | | |
| **JCJ** | **Chichijima** | **8.45** | **337** | Pn | | **Pn** | **23 47 33.2** | **+0.4** |
| **JCJ** | **Chichijima** | **8.45** | **337** | P | | **Pn** | **23 47 32.1** | **-0.7** |
| | 186nm,0.9s | | | | | | | |
| **JHJ2** | **Mitsune** | **14.76** | **339** | Pn | | **Pn** | **23 48 58.8** | **+1.9** |
| **PATS** | **Pohnpei** | **17.30** | **134** | P | | **P** | **23 49 30.5** | **+2.1** |
| **INU** | **Inuyama** | **17.79** | **335** | P | | **P** | **23 49 33.9** | **+0.3** |
| **JOW** | **Kunigami** | **17.87** | **298** | LR | | LR | 23 54 50.8 | |
| | comp=Z,163nm,21.3s,baz=78,slow=31 | | | | | | | |
| **JOW** | **Kunigami** | **17.87** | **298** | P | | **P** | **23 49 34.3** | **-0.3** |
| **JGF** | **Kuroka** | **17.88** | **337** | P | | **P** | **23 49 35.5** | **+0.8** |
| **JMN** | **Monobe** | **17.91** | **326** | P | | **P** | **23 49 35.7** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **18.43** | **340** | P | | **P** | **23 49 40.4** | **-0.3** |
| | 0.4nm,0.3s,baz=169,slow=9.9,SNR=7.4 | | | | | | | |
| MJAR | | | | S | | **S** | **23 53 04.8** | **-1.2** |
| | 0.1nm,0.3s,baz=185,slow=17,SNR=1.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.43** | **340** | P | | **P** | **23 49 41.0** | **+0.3** |
| **MAJO** | **Matsushiro** | **18.43** | **340** | P | | **P** | **23 49 41.1** | **+0.4** |
| **MJB9** | **Matsu-Tunnel** | **18.43** | **340** | P | | **P** | **23 49 41.7** | **+0.9** |
| **JMM** | **Marumori** | **18.99** | **347** | | | **Pn** | **23 49 49.0** | **+0.5** |
| JMM | | | | IAmb | | IAmb | 23 49 56.8 | |
| | comp=Z,42nm,1.0s | | | | | | | |
| JMM | | | | | | **S** | **23 53 15.4** | **-1.7** |
| **JNU** | **Nakatsue** | **19.23** | **319** | P | | **P** | **23 49 50.0** | **+0.6** |
| **JHS** | **Saijyo** | **19.29** | **327** | P | | **P** | **23 49 51.1** | **+1.0** |
| **H11S3** | **WAKE ISLAND Hy** | **19.64** | **89** | T | | T | 00 10 59.5 | |
| | baz=275,slow=75,SNR=34 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.65** | **89** | T | | T | 00 10 47.0 | |
| | baz=275,slow=75,SNR=30 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.66** | **89** | T | | T | 00 10 47.4 | |
| | baz=275,slow=75,SNR=37 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.75** | **85** | T | | T | 00 11 17.6 | |
| | baz=274,slow=75,SNR=9.2 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.75** | **85** | T | | T | 00 11 24.4 | |
| | baz=274,slow=75,SNR=10.0 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.77** | **85** | T | | T | 00 11 11.3 | |
| | baz=274,slow=75,SNR=9.1 | | | | | | | |
| **JSD** | **Sado** | | **19.79** | **342** | P | | **P** | **23 49 56.4** | **+0.9** |
| JSD | | | | | IAmb | | IAmb | 23 49 59.9 | |
| | comp=Z,61nm,1.1s | | | | | | | |
| **MANU** | **Manus Island** | | **21.30** | **176** | P | | **P** | **23 50 11.9** | **0.0** |
| MANU | | | | | IAmb | | IAmb | 23 50 15.9 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| MANU | | | | | | | **PcP** | **23 54 12.0** | **-0.9** |
| **JTM** | **Tenmabayashi** | | **21.77** | **350** | P | | **P** | **23 50 17.9** | **+1.2** |
| JTM | | | | | IAmb | | IAmb | 23 50 36.6 | |
| | comp=Z,47nm,1.1s | | | | | | | |
| **JAY** | **Jayapura** | | **22.33** | **194** | P | | **P** | **23 50 21.9** | **-0.9** |
| | comp=Z,17nm,0.5s,baz=230,slow=4.8,SNR=7.1 | | | | | | | |
| **ERM** | **Erimo** | | **22.72** | **355** | P | | **P** | **23 50 28.5** | **+2.0** |
| ERM | | | | | IAmb | | IAmb | 23 50 45.9 | |
| | comp=Z,66nm,1.1s | | | | | | | |
| **DAV** | **Davao City (W)** | | **23.24** | **241** | LR | | LR | 23 58 26.8 | |
| | comp=Z,54nm,21.9s,baz=350,slow=33 | | | | | | | |
| **SSLB** | **Suanglung** | | **23.64** | **285** | P | | **P** | **23 50 36.1** | **+0.6** |
| **JEW** | **Eniwo** | | **23.73** | **352** | P | | **P** | **23 50 36.9** | **+0.9** |
| **KSRS** | **Korea Array** | | **23.94** | **323** | P | | **P** | **23 50 37.9** | **-0.1** |
| | comp=Z,6.6nm,0.8s,baz=149,slow=8.9,SNR=23 | | | | | | | |
| KSRS | | | | | pP | | **pP** | **23 51 00.9** | **+2.1** |
| | comp=Z,15nm,1.0s,baz=146,slow=8.6,SNR=5.9 | | | | | | | |
| KSRS | | | | | LR | | LR | 23 59 42.3 | |
| | comp=Z,32nm,20.2s,baz=130,slow=35 | | | | | | | |
| **KSAR** | **Wonju Array Be** | | **23.95** | **323** | P | | **P** | **23 50 37.8** | **-0.3** |
| **KS19** | **Wonju Array Si** | | **24.01** | **323** | P | | **P** | **23 50 38.1** | **-0.5** |
| **SIJI** | **Sorong** | | **24.72** | **217** | P | | **P** | **23 50 46.5** | **+1.2** |
| | comp=Z,5.2nm,0.3s,baz=73,slow=5.7,SNR=4.4 | | | | | | | |
| **ASAJ** | **Asahikawa** | | **24.86** | **354** | P | | **P** | **23 50 46.9** | **+0.6** |
| | comp=Z,22nm,0.8s,baz=194,slow=19,SNR=4.8 | | | | | | | |
| ASAJ | | | | | LR | | LR | 23 59 30.4 | |
| | comp=Z,49nm,20.2s,baz=46,slow=34 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | | **24.86** | **354** | P | | **P** | **23 50 47.4** | **+1.2** |
| JKA | | | | | IAmb | | IAmb | 23 50 51.3 | |
| | comp=Z,41nm,1.1s | | | | | | | |
| **FAKI** | **Fak Fak** | | **25.90** | **213** | P | | **P** | **23 50 55.6** | **-0.4** |
| FAKI | | | | | IAmb | | IAmb | 23 51 02.7 | |
| | comp=Z,24nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | | **27.39** | **338** | P | | **P** | **23 51 10.4** | **+1.3** |
| | comp=Z,4.1nm,0.7s,baz=124,slow=8.9,SNR=5.6 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | | **27.39** | **338** | P | | **P** | **23 51 09.5** | **+0.5** |
| **PMG** | **Port Moresby** | | **28.60** | **177** | P | | **P** | **23 51 21.3** | **+1.3** |
| | comp=Z,10nm,0.5s,baz=351,slow=5.5,SNR=4.1 | | | | | | | |
| **TOLI2** | **Tolitoli** | | **30.59** | **237** | P | | **P** | **23 51 37.8** | **+0.1** |
| TOLI2 | | | | | IAmb | | IAmb | 23 51 38.9 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **HNR** | **Honiara** | | **31.75** | **153** | LR | | LR | 00 03 54.8 | |
| | comp=Z,67nm,20.9s,baz=320,slow=35 | | | | | | | |
| **MPSI** | **Mapaga** | | **31.76** | **237** | P | | **P** | **23 51 49.0** | **+0.9** |
| | comp=Z,2umcomp=Z,11nm,0.9s | | | | | | | |
| **KKM** | **Kota Kinabalu** | | **31.80** | **249** | P | | **P** | **23 51 48.6** | **0.0** |
| KKM | | | | | IAmb | | IAmb | 23 51 56.6 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **KLR** | **Kul'dur** | | **31.92** | **342** | P | | **P** | **23 51 49.7** | **+0.6** |
| | comp=Z,23nm,0.4s,baz=146,slow=7.5,SNR=121 | | | | | | | |
| KLR | | | | | LR | | LR | 00 05 48.0 | |
| | comp=Z,29nm,19.2s,baz=252,slow=38 | | | | | | | |
| **HNS** | **HongShan** | | **32.64** | **310** | P | | **P** | **23 51 56.5** | **+1.0** |
| HNS | | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **COEN** | **Coen** | | **33.21** | **185** | P | | **P** | **23 51 59.5** | **-1.2** |
| COEN | | | | | IAmb | | IAmb | 23 52 01.6 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **TTSI** | **Tana Toraja** | | **33.98** | **232** | P | | **P** | **23 52 08.2** | **+0.8** |
| | comp=Z,37nm,0.9s | | | | | | | |
| **SPSI** | **Sidrap Palu** | | **34.64** | **231** | P | | **P** | **23 52 12.4** | **-0.7** |
| | comp=Z,28nm,1.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | **34.91** | **12** | P | | **P** | **23 52 16.2** | **+1.2** |
| PEA0B | | | | | IAmb | | IAmb | 23 52 16.9 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | | **34.91** | **12** | P | | **P** | **23 52 14.7** | **-0.3** |
| | comp=Z,8.0nm,0.9s,baz=204,slow=6.4,SNR=11 | | | | | | | |
| **PETK** | **Petropavlovsk-** | | **34.91** | **12** | P | | **P** | **23 52 15.7** | **+0.7** |
| **MTN** | **Manton Dam** | | **35.16** | **206** | P | | **P** | **23 52 16.6** | **-0.9** |
| **KAPI** | **Kappang** | | **35.37** | **229** | P | | **P** | **23 52 19.2** | **-0.1** |
| | comp=Z,5.9nm,0.5s,baz=101,slow=1.8,SNR=7.4 | | | | | | | |
| KAPI | | | | | LR | | LR | 00 06 52.3 | |
| | comp=Z,31nm,19.8s,baz=132,slow=36 | | | | | | | |
| **KAPI** | **Kappang** | | **35.37** | **229** | P | | **P** | **23 52 18.9** | **-0.5** |
| KAPI | | | | | IAmb | | IAmb | 23 52 19.9 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | | **35.95** | **218** | P | | **P** | **23 52 22.6** | **-1.9** |
| SOEI | | | | | IAmb | | IAmb | 23 52 32.7 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **MMRI** | **Maumere** | | **36.32** | **222** | P | | **P** | **23 52 25.3** | **-2.1** |
| MMRI | | | | | IAmb | | IAmb | 23 52 28.5 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **BATI** | **Baumata** | | **36.67** | **219** | P | | **P** | **23 52 29.7** | **-0.7** |
| | comp=Z,16nm,0.5s,baz=129,slow=2.0,SNR=5.4 | | | | | | | |
| BATI | | | | | LR | | LR | 00 06 35.5 | |
| | comp=Z,172nm,18.8s,baz=348,slow=34 | | | | | | | |
| **SBUM** | **Sibu** | | **37.00** | **247** | P | | **P** | **23 52 33.1** | **-0.2** |
| SBUM | | | | | IAmb | | IAmb | 23 52 34.7 | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | | **38.69** | **207** | P | | **P** | **23 52 47.0** | **-0.4** |
| **CTA** | **Charters Tower** | | **39.19** | **180** | P | | **P** | **23 52 50.5** | **-1.1** |
| | comp=Z,2.2nm,0.5s,baz=0.3,slow=9.2,SNR=5.9 | | | | | | | |
| CTA | | | | | LR | | LR | 00 08 24.3 | |
| | comp=Z,40nm,20.2s,baz=312,slow=35 | | | | | | | |
| **MA2** | **Magadan** | | **40.33** | **4** | P | | **P** | **23 53 01.5** | **+0.9** |
| MA2 | | | | | IAmb | | IAmb | 23 53 02.7 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | | **40.63** | **197** | P | | **P** | **23 53 02.5** | **-1.0** |
| **WRAB** | **Tennant Creek** | | **40.66** | **197** | P | | **P** | **23 53 03.3** | **-0.4** |
| **WB2** | **Warramunga Arr** | | **40.67** | **197** | P | | **P** | **23 53 03.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | | **40.67** | **197** | P | | **P** | **23 53 03.3** | **-0.5** |
| | comp=Z,24nm,0.4s,baz=18,slow=8.4,SNR=223 | | | | | | | |
| **WRA** | **Warramunga Arr** | | **40.67** | **197** | P | | **P** | **23 53 02.6** | **-1.2** |
| **PZH** | **PanZhiHua** | | **41.17** | **288** | P | | **P** | **23 53 12.6** | **+4.5** |
| PZH | | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| PZH | | | | | pmax | | pmax | | |
| | comp=Z,130nm,4.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | **42.22** | **209** | P | | **P** | **23 53 16.2** | **-0.2** |
| | comp=Z,3.9nm,0.3s,baz=25,slow=23,SNR=58 | | | | | | | |
| FITZ | | | | | LR | | LR | 00 10 46.7 | |
| | comp=Z,39nm,19.4s,baz=63,slow=36 | | | | | | | |
| **ULN** | **Ulaanbaatar** | | **42.41** | **321** | P | | **P** | **23 53 17.1** | **-0.8** |
| **SONM** | **Songino Array** | | **42.79** | **321** | P | | **P** | **23 53 21.0** | **0.0** |
| | comp=Z,1.1nm,0.5s,baz=134,slow=8.3,SNR=12 | | | | | | | |
| SONM | | | | | ScP | | **ScP** | **23 58 48.5** | **-4.1** |
| | comp=Z,0.4nm,0.7s,baz=111,slow=3.3,SNR=3.6 | | | | | | | |
| SONM | | | | | LR | | LR | 00 12 04.6 | |
| | comp=Z,67nm,18.2s,baz=99,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | | **42.79** | **321** | P | | **P** | **23 53 20.6** | **-0.3** |
| **SEY** | **Seymchan** | | **43.78** | **4** | P | | **P** | **23 53 28.7** | **+0.2** |
| | comp=Z,6.7nm,0.5s,baz=181,slow=6.8,SNR=22 | | | | | | | |
| **YAK** | **Yakutsk** | | **44.13** | **349** | P | | **P** | **23 53 30.8** | **-0.6** |
| | comp=Z,13nm,0.3s,baz=124,slow=1.4,SNR=11 | | | | | | | |
| YAK | | | | | LR | | LR | 00 17 10.7 | |
| | comp=Z,21nm,18.6s,baz=231,slow=43 | | | | | | | |
| **YAK** | **Yakutsk** | | **44.13** | **349** | P | | **P** | **23 53 31.1** | **-0.2** |
| **AS31** | **Alice Springs** | | **44.33** | **196** | P | | **P** | **23 53 33.2** | **-0.3** |
| **ASAR** | **Alice Springs** | | **44.34** | **196** | P | | **P** | **23 53 32.5** | **-1.0** |
| | comp=Z,4.3nm,0.4s,baz=11,slow=7.8,SNR=79 | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **23 55 13.4** | **-2.6** |
| | comp=Z,2.1nm,0.8s,baz=18,slow=5.0,SNR=4.1 | | | | | | | |
| ASAR | | | | | ScP | | **ScP** | **23 58 55.3** | **-3.7** |
| | comp=Z,0.8nm,0.8s,baz=29,slow=4.9,SNR=4.5 | | | | | | | |
| ASAR | | | | | LR | | LR | 00 12 59.3 | |
| | comp=Z,32nm,18.0s,baz=30,slow=37 | | | | | | | |
| **ASAR** | **Alice Springs** | | **44.34** | **196** | P | | **P** | **23 53 32.7** | **-0.8** |
| **GTA** | **Gaotai** | | **44.34** | **307** | *e*P | | **P** | **23 53 34.0** | **+0.4** |
| GTA | | | | | pP | | pwP | 23 54 04.4 | +5.8 |
| GTA | | | | | sP | | sP | 23 54 18.2 | +10 |
| **CMAR** | **Chiang Mai Arr** | | **44.37** | **277** | P | | **P** | **23 53 34.5** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=69,slow=6.6,SNR=1.2 | | | | | | | |
| CMAR | | | | | LR | | LR | 00 12 25.3 | |
| | comp=Z,18nm,18.6s,baz=85,slow=36 | | | | | | | |
| **EIDS** | **Eidsvold** | | **44.73** | **173** | P | | **P** | **23 53 35.4** | **-1.1** |
| **LIFNC** | **LIFOU** | | **45.00** | **151** | P | | **P** | **23 53 37.9** | **-0.8** |
| **DZM** | **Mont Dzumac** | | **45.78** | **153** | LR | | LR | 00 11 01.2 | |
| | comp=Z,49nm,18.5s,baz=122,slow=33 | | | | | | | |
| **DZM** | **Mont Dzumac** | | **45.78** | **153** | P | | **P** | **23 53 45.1** | **+0.1** |
| DZM | | | | | IAmb | | IAmb | 23 53 45.7 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **ONTNC** | **Ouen Toro** | | **46.00** | **153** | P | | **P** | **23 53 45.8** | **-0.7** |
| ONTNC | | | | | IAmb | | IAmb | 23 54 04.7 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **KULM** | **Kulim** | | **46.24** | **258** | P | | **P** | **23 53 48.3** | **-0.4** |
| KULM | | | | | IAmb | | IAmb | 23 53 56.4 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **OUENC** | **Ouen Island, N** | | **46.26** | **153** | P | | **P** | **23 53 48.7** | **+0.1** |
| **PINNC** | **Pines Island,** | | **46.70** | **152** | P | | **P** | **23 53 52.6** | **+0.6** |
| PINNC | | | | | IAmb | | IAmb | 23 53 52.7 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **GOMU** | **GeErMu** | | **47.71** | **302** | P | | **P** | **23 54 01.2** | **+0.9** |
| GOMU | | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | | **47.74** | **214** | P | | **P** | **23 53 59.8** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | | **48.02** | **213** | P | | **P** | **23 54 01.4** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | | **48.02** | **213** | P | | **P** | **23 54 01.6** | **-0.7** |
| PSA00 | | | | | IAmb | | IAmb | 23 54 02.3 | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| **UNV** | **Unalaska Valle** | **49.99** | **35** | P | | **P** | **23 54 17.7** | **+0.7** |
| **BILL** | **Bilibino** | **50.34** | **10** | P | | **P** | **23 54 20.6** | **+1.2** |
| **AKUT** | **Akutan** | **50.51** | **35** | P | | **P** | **23 54 21.3** | **+0.4** |
| **GSI** | **Gunungsitoli** | **50.61** | **255** | P | | **P** | **23 54 22.2** | **-0.1** |
| **STKA** | **Stephens Creek** | **51.10** | **185** | P | | **P** | **23 54 23.0** | **-2.6** |
| | comp=Z,2.3nm,0.4s,baz=12,slow=8.4,SNR=7.9 | | | | | | | |
| **STKA** | **Stephens Creek** | **51.10** | **185** | P | | **P** | **23 54 24.1** | **-1.5** |
| **GIRL** | **Giralia** | **51.97** | **218** | P | | **P** | **23 54 32.2** | **0.0** |
| **BBOO** | **Buckleboo** | **52.72** | **190** | P | | **P** | **23 54 37.2** | **-0.4** |
| **FORT** | **Forrest** | **52.72** | **199** | P | | **P** | **23 54 37.0** | **-0.7** |
| **GAMB** | **Gambell** | **52.77** | **22** | P | | **P** | **23 54 38.5** | **+0.9** |
| | baz=233 | | | | | | | |
| **TIXI** | **Tiksi** | **53.26** | **353** | P | | **P** | **23 54 39.0** | **-2.1** |
| | comp=Z,2.5nm,0.6s,baz=267,slow=24,SNR=8.1 | | | | | | | |
| **SDPT** | **Sand Point** | **53.81** | **35** | P | | **P** | **23 54 45.9** | **+0.6** |
| **SDPT** | **Sand Point** | **53.81** | **35** | P | | **P** | **23 54 46.3** | **+1.0** |
| | baz=250 | | | | | | | |
| **WMQ** | **Urumqi** | **54.06** | **311** | *e*P | | **P** | **23 54 49.2** | **+1.7** |
| WMQ | | | | | pP | | pwP | 23 55 15.8 | +1.9 |
| WMQ | | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| WMQ | | | | | pmax | | pmax | | |
| | comp=Z,220nm,5.9s | | | | | | | |
| **CHNA** | **Chernabura Isl** | **54.12** | **36** | P | | **P** | **23 54 47.6** | **0.0** |
| | baz=252 | | | | | | | |
| **ANM** | **Nome** | **55.51** | **23** | IAmb | | IAmb | 23 54 59.3 | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **ANM** | **Nome** | **55.51** | **23** | P | | **P** | **23 54 58.6** | **+1.1** |
| | baz=239 | | | | | | | |

baz=257
**MLY Manley 61.44 26** lAmb lAmb 23 55 40.6
comp=Z,13nm,0.8s
**MLY Manley 61.44 26** P **P** **23 55 39.3 +0.6**
baz=254
**PWL Port Wells 61.50 31** P **P** **23 55 38.3 -0.9**
**KNK Knik Glacier 61.55 30** P **P** **23 55 39.6 +0.1**
**KNK Knik Glacier 61.55 30** P **P** **23 55 39.9 +0.4**
baz=258
**SML Sawmill 61.70 29** P **P** **23 55 40.9 +0.3**
baz=258
**RND Reindeer 61.82 28** P **P** **23 55 41.8 +0.4**
RND lAmb lAmb 23 55 45.2
comp=Z,12nm,1.1s
**MCK McKinley 61.86 27** lAmb lAmb 23 55 42.1
comp=Z,16nm,1.1s
**MCK McKinley 61.86 27** P **P** **23 55 42.0 +0.5**
baz=256
**TAU Tasmania Unive 61.96 179** P **P** **23 55 41.4 -0.9**
TAU lAmb lAmb 23 55 57.8
comp=Z,17nm,1.1s
**NEA2 Nenana 62.01 26** lAmb lAmb 23 55 44.3
comp=Z,15nm,0.8s
**NEA2 Nenana 62.01 26** P **P** **23 55 42.9 +0.4**
baz=256
**I23K Minto, Yukon-K 62.03 26** lAmb lAmb 23 55 43.9
comp=Z,6.5nm,0.8s
**I23K Minto, Yukon-K 62.03 26** P **P** **23 55 43.3 +0.7**
baz=255
**SCM Sheep Creek Mo 62.17 30** P **P** **23 55 44.7 +1.0**
baz=259
**COLD Coldfoot 62.27 23** P **P** **23 55 45.1 +0.9**
COLD lAmb lAmb 23 55 46.5
comp=Z,12nm,1.0s
**COLD Coldfoot 62.27 23** P **P** **23 55 45.1 +0.9**
baz=253
**FID Port Fidalgo 62.37 31** P **P** **23 55 45.2 +0.2**
**WRH Wood River Hil 62.39 27** lAmb lAmb 23 55 46.0
comp=Z,10nm,0.9s
**MDM Murphy Dome 62.45 26** P **P** **23 55 45.6 +0.2**
MDM lAmb lAmb 23 55 47.3
comp=Z,12nm,0.7s
**CCB Clear Creek Bu 62.55 26** P **P** **23 55 45.9 -0.2**
**TCOL CIGO, UAF Yank 62.58 26** P **P** **23 55 47.6 +1.3**
TCOL lAmb lAmb 23 55 49.3
comp=Z,15nm,0.8s
**TCOL CIGO, UAF Yank 62.58 26** P **P** **23 55 47.4 +1.1**
baz=257
**BOOM Boomskoye usch 62.59 308** P **P** **23 55 47.0 0.0**
**COLA College 62.59 26** P **P** **23 55 47.2 +0.9**
COLA lAmb lAmb 23 55 49.3
comp=Z,14nm,0.8s
**COLA College 62.59 26** P **P** **23 55 47.4 +1.1**
baz=257
**M24K Tolsona, Glenn 62.75 29** P **P** **23 55 49.0 +1.4**
M24K lAmb lAmb 23 56 06.0
comp=Z,14nm,0.9s
**KLU Klutina 62.77 30** P **P** **23 55 48.5 +0.8**
KLU lAmb lAmb 23 55 49.2
comp=Z,13nm,0.8s
**KLU Klutina 62.77 30** P **P** **23 55 48.8 +1.1**
baz=260
**DIV Divide 62.78 30** P **P** **23 55 48.7 +1.0**
DIV lAmb lAmb 23 56 05.7
comp=Z,13nm,1.2s
**H24K Noodor Dome 62.80 25** lAmb lAmb 23 55 50.2
comp=Z,9.6nm,0.8s
**H24K Noodor Dome 62.80 25** P **P** **23 55 48.3 +0.4**
baz=256
**POKR Poker Plat Res 62.81 26** P **P** **23 55 47.5 -0.4**
baz=257
**HDA Harding Lake 62.86 27** lAmb lAmb 23 55 48.5
comp=Z,8.2nm,0.9s
**HDA Harding Lake 62.86 27** P **P** **23 55 48.1 -0.1**
baz=258
**TOLK Toolik Lake Re 62.91 22** P **P** **23 55 49.8 +1.3**
baz=253
**IL31 62.97 26** lAmb lAmb 23 55 49.1
comp=Z,9.8nm,0.8s
**ILAR Eielson Array 62.97 26** P **P** **23 55 48.1 -0.8**
comp=Z,8.4nm,0.8s,baz=258,slow=5.2,SNR=70
ILAR LR LR 00 27 05.1
comp=Z,35nm,18.0s,baz=243,slow=40
**PAX Paxson 63.23 28** lAmb lAmb 23 55 52.3
comp=Z,10nm,0.8s
**PAX Paxson 63.23 28** P **P** **23 55 51.5 +0.7**
baz=260
**HARP HAARP 63.27 29** P **P** **23 55 51.8 +0.8**
baz=261
**BMRM Bremner River 63.31 31** P **P** **23 55 52.3 +1.0**
**BMRM Bremner River 63.31 31** P **P** **23 55 51.7 +0.4**
baz=262
**N25K Chitina, Valde 63.41 30** P **P** **23 55 52.8 +0.8**
N25K lAmb lAmb 23 55 53.6
comp=Z,12nm,0.9s
**N25K Chitina, Valde 63.41 30** P **P** **23 55 53.0 +1.0**
baz=262
**J25K Salcha River, 63.57 27** lAmb lAmb 23 55 53.0
comp=Z,5.4nm,0.7s
**J25K Salcha River, 63.57 27** P **P** **23 55 52.7 -0.3**
baz=259
**RIDG Independent Ri 63.64 28** P **P** **23 55 53.4 0.0**
**RIDG Independent Ri 63.64 28** P **P** **23 55 53.5 0.0**
baz=260
**GLB Gilahina Butte 63.76 30** lAmb lAmb 23 55 56.6
comp=Z,20nm,1.0s
**VRDI Verde Repeater 63.90 31** P **P** **23 55 55.7 +0.4**
VRDI lAmb lAmb 23 55 57.0
comp=Z,9.7nm,0.7s
**DOT Dot Lake 63.97 28** lAmb lAmb 23 55 56.4
comp=Z,10nm,0.8s
**FYU Fort Yukon 64.01 25** P **P** **23 55 56.6 +1.0**
FYU lAmb lAmb 23 55 57.4
comp=Z,14nm,0.7s
**SCRK Sand Creek 64.06 27** P **P** **23 55 56.2 0.0**
SCRK lAmb lAmb 23 55 57.6
comp=Z,12nm,0.9s
**SCRK Sand Creek 64.06 27** P **P** **23 55 56.5 +0.3**
baz=261,SNR=6.7
**WAX Waxell Ridge 64.10 31** P **P** **23 55 56.9 +0.4**
**L26K Log Cabin Wild 64.19 29** P **P** **23 55 57.6 +0.6**
L26K lAmb lAmb 23 55 58.8
comp=Z,7.2nm,0.9s
**L26K Log Cabin Wild 64.19 29** P **P** **23 55 57.9 +0.9**
baz=262
**M26K Nabesna, AK 64.27 29** P **P** **23 55 58.5 +0.9**
M26K lAmb lAmb 23 56 07.9
comp=Z,7.6nm,1.1s
**M26K Nabesna, AK 64.27 29** P **P** **23 55 58.3 +0.7**
baz=263
**PALK Pallekele 64.30 269** LR LR 00 23 05.7
comp=Z,26nm,18.2s,baz=241,slow=35
**J26L Joseph Creek 64.32 27** P **P** **23 55 58.1 +0.2**
baz=261
**URZ Urewera 64.34 153** LR LR 00 23 04.1
comp=Z,56nm,18.5s,baz=244,slow=35
**URZ Urewera 64.34 153** P **P** **23 55 57.8 -0.4**
URZ lAmb lAmb 23 55 58.8
comp=Z,20nm,1.1s
**ISLE Juniper Island 64.37 31** P **P** **23 55 58.5 +0.2**
**BARN Barnard Glacie 64.75 31** P **P** **23 56 01.4 +0.5**
BARN lAmb lAmb 23 56 15.1
comp=Z,6.7nm,0.9s
**QRZ Quartz Range 64.77 158** P **P** **23 56 00.5 -0.4**
**M27K Edge Creek, AK 64.78 29** P **P** **23 56 01.9 +0.9**
M27K lAmb lAmb 23 56 02.4
comp=Z,6.0nm,0.8s
**BKZ Black Stump Fm 64.85 154** P **P** **23 56 00.8 -0.8**
BKZ lAmb lAmb 23 56 01.1
comp=Z,15nm,0.8s
**L27K Beaver Creek, 64.89 29** P **P** **23 56 02.1 +0.5**
L27K lAmb lAmb 23 56 02.8
comp=Z,4.7nm,0.7s
**L27K Beaver Creek, 64.89 29** P **P** **23 56 01.9 +0.4**
baz=263
**BCAR Beaver Creek A 64.91 29** P **P** **23 56 02.4 +0.7**
**BVCY Beaver Creek 65.26 29** P **P** **23 56 04.3 +0.4**
baz=264
**EGAK Eagle 65.39 27** P **P** **23 56 05.0 +0.3**
baz=263
**YUK3 Moose Creek 65.39 30** P **P** **23 56 05.4 +0.3**
baz=265
**DAWY Dawson 66.07 28** P **P** **23 56 10.0 +0.8**
baz=265
**BRVK Borovoye 66.19 320** P **P** **23 56 10.2 +0.1**
BRVK lAmb lAmb 23 56 10.9
comp=Z,8.3nm,1.1s

**YUK4 Talbot Arm 66.22 31** P **P** **23 56 11.8 +1.5**
baz=267
**YUK6 Outpost Mounta 66.34 31** P **P** **23 56 12.5 +1.3**
baz=267
**KKAR Karatay Array 66.54 309** P **P** **23 56 11.8 -0.7**
**I29M Ogilvie Camp, 66.65 26** P **P** **23 56 13.0 +0.2**
baz=266
**HYT Haines Junctio 66.76 31** P **P** **23 56 15.3 +1.6**
**HYT Haines Junctio 66.76 31** P **P** **23 56 15.0 +1.3**
baz=268
**EPYK Eagle Plains 67.37 25** lAmb lAmb 23 56 19.0
comp=Z,11nm,0.7s
**EPYK Eagle Plains 67.37 25** P **P** **23 56 18.0 +0.6**
baz=267
**N31M Braeburn, Yuko 67.61 31** P **P** **23 56 20.0 +1.1**
baz=269
**CHGR Chuyangaron 68.05 305** lAmb lAmb 23 56 30.3
comp=Z,7.5nm,0.7s
**M31M Drury Creek, Y 68.27 30** P **P** **23 56 23.4 +0.4**
baz=270
**INK Inuvik 68.69 23** P **P** **23 56 25.4 -0.1**
comp=Z,8.3nm,0.7s,baz=268,slow=6.0,SNR=16
**INK Inuvik 68.69 23** P **P** **23 56 25.6 +0.1**
INK lAmb lAmb 23 56 26.7
comp=Z,10.0nm,0.8s
**INK Inuvik 68.69 23** P **P** **23 56 25.7 +0.3**
baz=269
**P33M Tetlin, Yukon 69.08 32** P **P** **23 56 28.6 +0.4**
baz=272
**MMPY Sheldon Lake, 69.71 29** P **P** **23 56 32.7 +0.6**
baz=273
**A36M Sachs Harbour 71.39 19** lAmb lAmb 23 56 43.4
comp=Z,11nm,0.9s
**A36M Sachs Harbour 71.39 19** P **P** **23 56 42.4 +0.4**
baz=275
**C36M Paulatuk 72.06 22** lAmb lAmb 23 56 46.6
comp=Z,9.2nm,0.7s
**C36M Paulatuk 72.06 22** P **P** **23 56 46.3 +0.3**
baz=277
**ARU Arti 72.68 324** P **P** **23 56 49.2 -0.7**
**ABKAR Akbulak array 73.03 317** P **P** **23 56 50.7 -1.5**
**ABKAR Akbulak array 73.03 317** lAmb lAmb 23 56 57.6
comp=Z,2.6nm,0.8s
**D03D Eldon 76.62 44** P **P** **23 57 14.1 +1.2**
baz=284
**B05A Bryant 77.09 43** P **P** **23 57 16.9 +1.4**
baz=285
**J01E Myrtle Point 77.12 49** P **P** **23 57 17.0 +1.3**
baz=284
**YKA Yellowknife Ar 77.31 28** P **P** **23 57 16.5 +0.1**
comp=Z,9.3nm,0.7s,baz=289,slow=5.5,SNR=96
**L02E Cave Junction 77.61 50** P **P** **23 57 19.9 +1.3**
baz=285
**I04A Tendick Farm, 78.03 48** P **P** **23 57 21.5 +0.6**
baz=285
**M02C Callahan 78.35 50** P **P** **23 57 23.7 +1.0**
baz=286
**J04D Umpqua Nationa 78.39 48** P **P** **23 57 24.3 +1.2**
baz=286
**G05D Wamic, OR 78.39 46** P **P** **23 57 24.1 +1.2**
baz=286
**L04D Klamath Falls 78.52 49** P **P** **23 57 24.9 +1.1**
baz=286
**N02D Trinity Center 78.57 51** P **P** **23 57 25.1 +1.1**
baz=286
**J05D Fort Rock, OR 78.99 48** P **P** **23 57 27.3 +1.0**
baz=286
**E07A Sunnyside 79.01 45** P **P** **23 57 27.5 +1.2**
E07A lAmb lAmb 23 57 27.9
comp=Z,6.9nm,0.7s
**PINE Pine Mountain 79.05 47** lAmb lAmb 23 57 29.1
comp=Z,19nm,0.8s
**K05A Summer Lake 79.38 48** lAmb lAmb 23 57 30.4
comp=Z,10nm,0.6s
**MOD Modoc Plateau 80.04 49** P **P** **23 57 32.6 +0.6**
**NEW Newport 80.28 42** LR LR 00 24 39.3
comp=Z,63nm,21.4s,baz=252,slow=29
**NEW Newport 80.28 42** P **P** **23 57 33.9 +0.8**
baz=288
**MPK Martis Peak 81.01 52** P **P** **23 57 38.1 +0.6**
MPK lAmb lAmb 23 57 39.0
comp=Z,5.8nm,0.6s
**WVOR Wild Horse Val 81.06 48** P **P** **23 57 37.6 +0.1**
WVOR lAmb lAmb 23 57 39.5
comp=Z,11nm,1.1s
**CMB Columbia Colle 81.12 53** P **P** **23 57 37.9 +0.1**
**BMO Blue Mountains 81.23 46** P **P** **23 57 38.9 +0.6**
**PNTR Pine Nut 81.39 52** P **P** **23 57 40.0 +0.6**
PNTR lAmb lAmb 23 57 41.1
comp=Z,8.5nm,0.7s
**YERR Yerington 81.69 52** P **P** **23 57 42.0 +1.0**
YERR lAmb lAmb 23 57 42.5
comp=Z,6.7nm,0.7s
**ARCES ARCESS Array B 81.95 342** P **P** **23 57 41.6 +0.1**
comp=Z,6.8nm,0.9s,baz=71,slow=9.1,SNR=8.2
ARCES LR LR 00 38 58.4
comp=Z,39nm,18.9s,baz=116,slow=39
**WALA Waterton Lakes 82.03 41** P **P** **23 57 43.0 +0.6**
**TULEG Thule 82.05 8** lAmb lAmb 23 57 43.1
comp=Z,9.2nm,0.8s
**RYN Ryan 82.33 52** P **P** **23 57 45.2 +0.9**
RYN lAmb lAmb 23 57 46.3
comp=Z,12nm,1.0s
**LHV Little Huntoon 82.47 52** P **P** **23 57 45.5 +0.7**
**KVN Kaiserville 82.51 51** lAmb lAmb 23 57 47.2
comp=Z,12nm,1.1s
**PKM Mcpherson Peak 82.53 56** P **P** **23 57 46.2 +0.8**
baz=288
**NVAR Mina Array Bea 82.56 52** P **P** **23 57 46.6 +1.1**
comp=Z,8.7nm,0.8s,baz=269,slow=5.8,SNR=43
**NV11 Mina Array Sit 82.67 52** lAmb lAmb 23 57 47.7
comp=Z,12nm,1.1s
**MFID Camas Ranch 82.70 47** lAmb lAmb 23 57 48.5
comp=Z,9.4nm,0.9s
**ARVC Arvin 83.22 55** P **P** **23 57 49.1 +0.4**
baz=289
**ISA Isella, Lake 83.32 55** P **P** **23 57 49.8 +0.5**
baz=289
**CWC Cottonwood Cre 83.37 54** P **P** **23 57 50.2 +0.5**
baz=289
**EDW2 Edwards Air Fo 83.94 55** P **P** **23 57 53.7 +1.2**
baz=289
**MPMC Manual Prospec 83.95 54** P **P** **23 57 53.0 +0.3**
baz=290,SNR=5.9
**LRMC Laurel Mtn Rad 83.99 55** P **P** **23 57 53.6 +0.7**
baz=290
**ELK Elko 84.02 49** P **P** **23 57 54.0 +1.0**
ELK lAmb lAmb 23 57 54.5
comp=Z,7.1nm,0.8s
**FURC Furnace Creek, 84.29 53** P **P** **23 57 55.1 +1.1**
baz=290
**TPNV Topopah Spring 84.59 53** P **P** **23 57 56.4 +0.5**
**TPNV Topopah Spring 84.59 53** P **P** **23 57 56.5 +0.6**
baz=290,SNR=6.8
**R11A Troy Canyon, C 84.60 51** P **P** **23 57 56.2 +0.2**
**R11A Troy Canyon, C 84.60 51** P **P** **23 57 56.6 +0.7**
baz=290,SNR=8.1
**GSC Goldstone, Bar 84.72 55** P **P** **23 57 57.1 +0.6**
baz=290
**BOZ Bozeman (W) 84.73 44** P **P** **23 57 57.0 +0.6**
baz=292,SNR=6.7
**HEC Hector,Ludlow 85.25 55** P **P** **23 57 59.6 +0.5**
baz=290
**SPR3 Spring Creek 3 85.29 50** P **P** **23 58 00.5 +1.0**
SPR3 lAmb lAmb 23 58 01.8
comp=Z,9.9nm,1.1s
**PRN Pahroc Range 85.33 52** P **P** **23 57 59.5 0.0**
PRN lAmb lAmb 23 58 01.6
comp=Z,8.1nm,1.1s
**TUQ Turquoise Moun 85.35 54** P **P** **23 58 00.4 +0.7**
baz=290
**HVU Hansel Valley 85.39 47** lAmb lAmb 23 58 02.0
comp=Z,18nm,1.1s
**YMR Madison River 85.52 44** P **P** **23 58 01.7 +1.2**
**YHH Holmes Hill 85.55 44** P **P** **23 58 00.7 0.0**
YHH lAmb lAmb 23 58 03.7
comp=Z,7.6nm,0.9s
**SHPR Sheep Range 85.56 53** P **P** **23 58 01.5 +0.8**
**PFO Pinyon Flats O 85.57 56** P **P** **23 58 01.2 +0.5**
baz=290
**TPFO Pinon Flats 85.57 56** P **P** **23 58 00.9 +0.1**

baz=290
**YNR Norris Junctio 85.69 44** P **P** **23 58 02.6 +1.3**
**GMRC Granite Mounta 85.78 55** P **P** **23 58 02.4 +0.6**
baz=291
**MONP2 Monument Peak 85.84 57** P **P** **23 58 02.6 +0.3**
baz=290
**H17A Grant Village 85.88 44** P **P** **23 58 03.2 +0.9**
H17A lAmb lAmb 23 58 06.1
comp=Z,14nm,1.0s
**H17A Grant Village 85.88 44** P **P** **23 58 04.1 +1.8**
baz=293,SNR=8.4
**FLWY Flagg Ranch 85.92 45** P **P** **23 58 03.2 +0.8**
**LKWY Lake 85.93 44** P **P** **23 58 02.6 +0.1**
LKWY lAmb lAmb 23 58 06.3
comp=Z,9.2nm,0.9s
**DUG Dugway, Tooele 85.95 49** lAmb lAmb 23 58 03.9
comp=Z,7.6nm,0.8s
**DUG Dugway, Tooele 85.95 49** P **P** **23 58 02.9 +0.3**
baz=292,SNR=9.6
**MOOW Moose Ponds 86.02 45** P **P** **23 58 03.1 +0.1**
MOOW lAmb lAmb 23 58 05.0
comp=Z,6.8nm,0.9s
**YMP Mirror Lake Pl 86.02 44** P **P** **23 58 03.6 +0.6**
**AHID Auburn Hatcher 86.17 46** P **P** **23 58 04.3 +0.7**
AHID lAmb lAmb 23 58 05.4
comp=Z,12nm,0.9s
**LOHW Long Hollow 86.17 45** P **P** **23 58 03.9 +0.2**
**BC3 Big Chuckawall 86.34 56** P **P** **23 58 05.3 +0.7**
baz=291
**FINES FINESS Array B 86.40 335** P **P** **23 58 02.2 -1.9**
comp=Z,2.0nm,0.4s,baz=67,slow=4.2,SNR=35
FINES pP **pP** **23 58 29.2 -0.4**
comp=Z,3.8nm,0.6s,baz=90,slow=7.6,SNR=3.9
FINES LR LR 00 38 49.3
comp=Z,25nm,18.6s,baz=48,slow=37
**IRM Iron Mountain 86.40 55** P **P** **23 58 05.3 +0.5**
baz=291
**FFC Flin Flon 86.42 33** P **P** **23 58 04.9 +0.5**
FFC lAmb lAmb 23 58 05.7
comp=Z,14nm,0.8s
**RLMT Red Lodge 86.45 43** P **P** **23 58 05.6 +0.5**
RLMT lAmb lAmb 23 58 07.4
comp=Z,10nm,0.7s
**RLMT Red Lodge 86.45 43** P **P** **23 58 06.1 +1.1**
baz=294,SNR=8.3
**CTU Camp Tracy 86.51 48** P **P** **23 58 05.7 +0.4**
CTU lAmb lAmb 23 58 06.9
comp=Z,11nm,0.9s
**NLU North Lily Min 86.56 49** P **P** **23 58 05.3 -0.4**
NLU lAmb lAmb 23 58 07.4
comp=Z,9.0nm,1.0s
**TCRU Three Creeks R 86.80 50** P **P** **23 58 08.0 +1.0**
TCRU lAmb lAmb 23 58 20.0
comp=Z,6.8nm,0.4s
**LCMT Little Creek M 86.81 52** lAmb lAmb 23 58 09.0
comp=Z,7.4nm,1.1s
**W13A Hualapai Mount 87.03 54** P **P** **23 58 08.9 +0.9**
**MSU Marysvale 87.03 50** P **P** **23 58 08.5 +0.5**
**PDMCI Parker Dam,Lak 87.13 55** P **P** **23 58 09.5 +1.3**
baz=292
**BW06 Boulder Array 87.21 46** P **P** **23 58 08.5 -0.3**
**BW06 Boulder Array 87.21 46** P **P** **23 58 08.9 +0.1**
baz=294
**MTPU Mount Pierson 87.21 51** P **P** **23 58 09.4 +0.4**
**PD31 Pinedale Array 87.21 46** P **P** **23 58 08.2 -0.5**
**PDAR Pinedale Array 87.21 46** P **P** **23 58 08.8 0.0**
comp=Z,1.6nm,0.7s,baz=213,slow=1.8,SNR=21
**TMUT Trail Mountain 87.43 49** P **P** **23 58 10.5 +0.4**
TMUT lAmb lAmb 23 58 11.7
comp=Z,5.5nm,0.8s
**Q16A Castle Valley 87.61 50** P **P** **23 58 11.2 +0.5**
Q16A lAmb lAmb 23 58 12.8
comp=Z,12nm,0.9s
**P17A Butcher Ranch, 87.70 49** P **P** **23 58 10.9 -0.3**
P17A lAmb lAmb 23 58 13.0
comp=Z,11nm,1.0s
**LAO LASA Array 87.72 41** P **P** **23 58 11.2 +0.3**
LAO lAmb lAmb 23 58 12.6
comp=Z,13nm,1.1s
**LAO LASA Array 87.72 41** P **P** **23 58 11.3 +0.3**
baz=296
**U15A North Rim 87.74 52** P **P** **23 58 11.9 +0.4**
U15A lAmb lAmb 23 58 13.6
comp=Z,8.4nm,0.9s
**FCC Fort Churchill 87.98 27** P **P** **23 58 11.8 0.0**
FCC lAmb lAmb 23 58 12.2
comp=Z,6.9nm,0.8s
**P18A Preston Nutter 87.99 49** P **P** **23 58 12.6 0.0**
P18A lAmb lAmb 23 58 14.3
comp=Z,6.7nm,0.9s
**SRU San Rafael Swe 88.00 49** P **P** **23 58 12.7 +0.1**
**RDMU Red Mountain 88.08 48** P **P** **23 58 13.5 +0.5**
RDMU lAmb lAmb 23 58 14.6
comp=Z,10nm,0.8s
**Y14A Wickenburg 88.14 55** P **P** **23 58 13.2 +0.1**
Y14A lAmb lAmb 23 58 15.1
comp=Z,13nm,1.1s
**WUAZ Wupatki 88.78 53** P **P** **23 58 16.9 +0.6**
**WUAZ Wupatki 88.78 53** P **P** **23 58 17.3 +1.0**
baz=293
**O20A White River Ci 89.19 48** P **P** **23 58 18.0 -0.2**
O20A lAmb lAmb 23 58 19.5
comp=Z,7.8nm,0.8s
**O20A White River Ci 89.19 48** P **P** **23 58 18.5 +0.3**
baz=295
**K22A Casper 89.29 45** P **P** **23 58 18.8 +0.3**
baz=296
**PV23 Carpenter Ridg 89.34 49** P **P** **23 58 19.0 0.0**
**PV10 Paradox Valley 89.35 49** P **P** **23 58 19.4 +0.3**
**PV13 Radium Mtn., P 89.60 50** P **P** **23 58 20.1 -0.1**
**NACGM Naroch 89.82 330** *i* P **P** **23 58 17.3 -3.2**
**W18A Petrified Fore 90.17 53** P **P** **23 58 23.5 +0.7**
baz=294
**MVCO Mesa Verde 90.22 50** P **P** **23 58 23.7 +0.6**
baz=295
**RSSD Black Hills 90.25 43** P **P** **23 58 23.4 +0.4**
RSSD lAmb lAmb 23 58 23.6
comp=Z,3.8nm,0.7s
**RSSD Black Hills 90.25 43** P **P** **23 58 23.5 +0.4**
baz=298
**N23A Red Feather La 90.44 46** P **P** **23 58 24.7 +0.6**
**N23A Red Feather La 90.44 46** P **P** **23 58 25.1 +1.0**
baz=296
**TUC Tucson 90.48 56** P **P** **23 58 25.4 +1.2**
baz=293
**SMCO Snowmass 90.48 48** P **P** **23 58 24.0 -0.4**
SMCO lAmb lAmb 23 58 29.4
comp=Z,6.6nm,0.9s
**AKASG Malin Array Be 90.91 325** LR LR 00 39 27.0
comp=Z,25nm,21.4s,baz=352,slow=36
**ISCO Idaho Springs 91.16 47** P **P** **23 58 27.3 -0.2**
ISCO lAmb lAmb 23 58 32.7
comp=Z,5.1nm,0.8s
**ISCO Idaho Springs 91.16 47** P **P** **23 58 28.2 +0.7**
baz=296
**Q24A Divide 91.85 48** P **P** **23 58 31.0 +0.2**
baz=297
**ULM Lac du Bonnet 91.94 34** P **P** **23 58 30.5 +0.1**
comp=Z,8.0nm,0.8s,baz=304,slow=4.6,SNR=7.2
**ULM Lac du Bonnet 91.94 34** lAmb lAmb 23 58 31.1
comp=Z,6.3nm,0.8s
**NOA NORSAR Array B 92.05 340** LR LR 00 44 16.3
comp=Z,14nm,19.2s,baz=295,slow=38
**SDCO Great Sand Dun 92.15 49** P **P** **23 58 31.9 -0.2**
SDCO lAmb lAmb 23 58 33.7
comp=Z,3.4nm,0.7s
**SDCO Great Sand Dun 92.15 49** P **P** **23 58 32.5 +0.4**
baz=296
**ANMO Albuquerque 92.68 52** P **P** **23 58 34.9 +0.5**
ANMO lAmb lAmb 23 58 36.6
comp=Z,6.0nm,1.1s
**ANMO Albuquerque 92.68 52** P **P** **23 58 35.2 +0.7**
baz=296
**121A Cookes Peak, D 92.71 54** P **P** **23 58 34.3 -0.3**
baz=295
**T25A Trinidad 93.19 49** P **P** **23 58 36.9 +0.1**
baz=297
**MNTX Cornudas Mount 94.91 54** lAmb lAmb 23 58 46.4
comp=Z,4.3nm,0.9s
**MNTX Cornudas Mount 94.91 54** P **P** **23 58 45.2 +0.6**
baz=296
**MLR Muntele Rosu 95.62 322** LR LR 00 44 55.4
comp=Z,47nm,19.9s,baz=342,slow=37
**TXAR Lajitas Array 97.28 56** P **P** **23 58 55.7 +0.2**
comp=Z,0.8nm,0.7s,baz=310,slow=3.3,SNR=6.8
**VRAC Vranov 98.21 329** LR LR 00 46 13.6

comp=Z,33nm,18.1s,baz=348,slow=37
**ABTX** **Abilene, Hawle** **98.78 51** P Pdif 23 59 02.6 +0.5
baz=300
**VNA2** **Neumayer--Watz** **126.04 191** PKPdf **PKPdf** **00 04 21.3 -1.6**
baz=152,slow=1.7
**VNA3** **Neumayer Olymp** **126.14 190** PKPdf **PKPdf** **00 04 21.2 -1.9**
**PLCA** **Paso Flores** **142.27 132** PKP **PKPdf** **00 04 51.0 -3.2**
comp=Z,2.0nm,0.8s,baz=172,slow=24,SNR=3.6
**LPAZ** **La Paz** **147.45 90** PKPbc **PKPbc** **00 05 07.0 -0.1**
comp=Z,1.3nm,0.4s,baz=257,slow=6.1,SNR=7.0

*KRNET **05** 00:16:34.3±0.1,40.94N×74.14E,h35km,mb3.1*
*SOME **05** 00:16:37.8,41.15N×74.03E,h10km*
*KNET **05** 00:16:39.4±0.5,41.21N×74.09E,h6km±2km,ml2.6,Error ellipse: s-maj=3.6km s-min=2.9km az=73.0*
*NNC **05** 00:16:39.6±1.4,41.15N×74.06E,h0km,mb3.9,mpv3.7, Error ellipse: s-maj=9.7km s-min=6.8km az=171.0*
**ISC 05 00:16:36.2±1.2,41.02N±0.04×74.13E±0.02,h12km±9km, n74,σ2.08/118,32C-29D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SALK** | **Salom-Alik** | **0.27** | **238** | ⇑*e*P | Pg | 00 16 41.3 | -0.7 |
| | baz=58 | | | | | | |
| SALK | | | | ⇑*e*S | **Sg** | **00 16 46.6** | **+0.8** |
| | baz=58 | | | | | | |
| **ARLS** | **Aral** | **0.85** | **10** | ⇓*i*P | **Pg** | **00 16 51.9** | **-0.8** |
| | baz=9.0 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **00 17 04.8** | **+0.3** |
| | baz=9.0 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.11** | **205** | ⇑*e*P | Pb | 00 16 53.6 | -4.0 |
| | baz=8.0 | | | | | | |
| SFK | | | | ⇑*e*S | Sb | 00 17 07.7 | -4.4 |
| | baz=8.0 | | | | | | |
| **OHH** | **Osh** | **1.13** | **244** | ⇑*i*P | Pb | 00 16 54.7 | -3.1 |
| | baz=49 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **00 17 09.9** | **-2.6** |
| | baz=49 | | | | | | |
| **AML** | **Almayashu** | **1.15** | **344** | ⇓P | **Pg** | **00 16 58.1** | **-0.5** |
| | 39nm,0.1s,SNR=112 | | | | | | |
| AML | | | | ⇑S | **Sb** | **00 17 13.0** | **-0.4** |
| | 131nm,0.4s | | | | | | |
| **UCH** | **Uchtor** | **1.24** | **13** | ⇑P | **Pg** | **00 17 00.1** | **0.0** |
| | 11nm,0.1s,SNR=20 | | | | | | |
| UCH | | | | ⇓S | **Sb** | **00 17 16.6** | **+0.7** |
| | 48nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **1.24** | **13** | ⇑*i*P | **Pg** | **00 16 58.4** | **-1.7** |
| | baz=12 | | | | | | |
| UCH | | | | ⇑*i*S | **Sg** | **00 17 15.7** | **-0.6** |
| | baz=12 | | | | | | |
| **AAK** | **Ala-Archa** | **1.64** | **10** | ⇑P | **Pb** | **00 17 07.2** | **+0.8** |
| | 7.1nm,0.2s,SNR=17 | | | | | | |
| AAK | | | | ⇓S | **Sg** | **00 17 28.8** | **-0.2** |
| | 30nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **1.64** | **10** | P | **Pb** | **00 17 07.3** | **+0.8** |
| | 5.5nm,0.4s | | | | | | |
| AAK | | | | S | **Sg** | **00 17 28.5** | **-0.5** |
| | 22nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **1.64** | **10** | ⇑*i*P | **Pn** | **00 17 04.2** | **-0.8** |
| | baz=9.0 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **00 17 25.8** | **-0.3** |
| | baz=9.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.66** | **351** | ⇓P | **Pn** | **00 17 07.2** | **+1.9** |
| | 6.9nm,0.2s,SNR=34 | | | | | | |
| EKS2 | | | | ⇑S | **Sg** | **00 17 28.8** | **-0.8** |
| | 14nm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.66** | **351** | ⇓*i*P | **Pn** | **00 17 04.5** | **-0.8** |
| | baz=51 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sn** | **00 17 26.6** | **+0.1** |
| | baz=51 | | | | | | |
| **KBK** | **Karagaybulak** | **1.74** | **20** | ⇑P | **Pb** | **00 17 09.9** | **+1.6** |
| | 17nm,0.1s,SNR=37 | | | | | | |
| KBK | | | | ⇑S | **Sg** | **00 17 32.7** | **+0.3** |
| | 66nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **1.74** | **20** | ⇓*i*P | **Pn** | **00 17 05.6** | **-0.9** |
| | baz=19 | | | | | | |
| KBK | | | | ⇓*i*S | **Sn** | **00 17 28.4** | **-0.3** |
| | baz=19 | | | | | | |
| **ARK** | **Arkit** | **1.80** | **296** | ⇓*i*P | **Pn** | **00 17 06.0** | **-1.2** |
| | baz=99 | | | | | | |
| ARK | | | | ⇓*i*S | **Sn** | **00 17 29.0** | **-1.1** |
| | baz=99 | | | | | | |
| **FRU1** | **Bishkek** | **1.82** | **12** | ⇓*i*P | **Pn** | **00 17 07.0** | **-0.5** |
| | baz=11 | | | | | | |
| FRU1 | | | | ⇓*i*S | **Sn** | **00 17 31.0** | **+0.4** |
| | baz=11 | | | | | | |
| **MRKS** | **Merke** | **1.85** | **339** | *e*P | **Pb** | **00 17 11.2** | **+1.2** |
| | 39nm,0.3s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **00 17 35.4** | **-0.3** |
| | 62nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.85** | **339** | P | **Pb** | **00 17 11.2** | **+1.2** |
| | 39nm,0.3s | | | | | | |
| MRKS | | | | S | **Sg** | **00 17 35.4** | **-0.3** |
| | 62nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **1.90** | **321** | ⇑*i*P | **Pn** | **00 17 07.5** | **-1.1** |
| | baz=22 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sn** | **00 17 32.0** | **-0.5** |
| | baz=22 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.00** | **42** | ⇓*i*P | **Pn** | **00 17 08.8** | **-1.2** |
| | baz=40 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sn** | **00 17 34.4** | **-0.6** |
| | baz=40 | | | | | | |
| **ULHL** | **Ulahol** | **2.00** | **52** | ⇑P | **Pb** | **00 17 14.1** | **+1.4** |
| | 14nm,0.2s,SNR=21 | | | | | | |
| **ULHL** | **Ulahol** | **2.00** | **52** | ⇓*i*P | **Pn** | **00 17 08.6** | **-1.5** |
| | baz=50 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sn** | **00 17 34.2** | **-0.9** |
| | baz=50 | | | | | | |
| **CHMS** | **Chumysh** | **2.03** | **13** | ⇑P | **Pb** | **00 17 14.6** | **+1.6** |
| | 11nm,0.4s,SNR=7.9 | | | | | | |
| CHMS | | | | ⇓S | **Sg** | **00 17 40.4** | **-1.0** |
| | 63nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **2.03** | **13** | ⇓*i*P | **Pn** | **00 17 09.5** | **-0.8** |
| | baz=12 | | | | | | |
| CHMS | | | | ⇓*i*S | **Sn** | **00 17 35.6** | **+0.1** |
| | baz=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.19** | **30** | ⇑P | **Pb** | **00 17 17.3** | **+1.4** |
| | 11nm,0.2s,SNR=16 | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **00 17 46.0** | **-0.7** |
| | 43nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.19** | **30** | ⇑Pn | **Pb** | **00 17 16.7** | **+0.7** |
| | 2.7nm,0.2s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sg** | **00 17 45.9** | **-0.8** |
| | 30nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.19** | **30** | ⇓*i*P | **Pn** | **00 17 11.6** | **-1.1** |
| | baz=28 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sn** | **00 17 39.2** | **-0.6** |
| | baz=28 | | | | | | |
| **USP** | **Ospenovka** | **2.26** | **7** | ⇑P | **Pb** | **00 17 18.3** | **+1.3** |
| | 10nm,0.3s,SNR=12 | | | | | | |
| USP | | | | ⇑S | **Sg** | **00 17 47.9** | **-1.0** |
| | 19nm,0.2s | | | | | | |
| **USP** | **Ospenovka** | **2.26** | **7** | ⇑*i*P | **Pn** | **00 17 12.8** | **-0.7** |
| | baz=6.0 | | | | | | |
| USP | | | | ⇑*i*S | **Sn** | **00 17 41.3** | **0.0** |
| | baz=6.0 | | | | | | |
| **TRKS** | **Terek-Say** | **2.31** | **284** | ⇓*e*P | Pn | 00 17 12.1 | -2.1 |
| | baz=84 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sn** | **00 17 40.2** | **-2.4** |
| | baz=84 | | | | | | |
| **KST** | **Kastek** | **2.44** | **34** | *e*P | **Pb** | **00 17 22.1** | **+1.9** |
| | 26nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sg** | **00 17 53.7** | **-0.9** |
| | 41nm,0.4s | | | | | | |
| **KST** | **Kastek** | **2.44** | **34** | Pg | **Pb** | **00 17 22.1** | **+1.9** |
| | 26nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 00 17 53.7 | |
| | 41nm,0.4s | | | | | | |
| **SGDS** | **Sogindy** | **2.46** | **9** | *e*P | **Pb** | **00 17 21.9** | **+1.5** |
| | 8.6nm,0.3s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **00 17 53.4** | **-1.8** |
| | 25nm,0.5s | | | | | | |
| **SGDS** | **Sogindy** | **2.46** | **9** | Pg | **Pb** | **00 17 21.9** | **+1.5** |
| | 8.6nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 00 17 53.4 | |
| | 25nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.53** | **28** | *e*P | **Pb** | **00 17 23.9** | **+2.2** |
| | 21nm,0.6s | | | | | | |
| DGS | | | | *e*S | **Sg** | **00 17 56.8** | **-0.8** |
| | 38nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **2.53** | **28** | Pg | **Pb** | **00 17 23.9** | **+2.2** |
| | 21nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 00 17 56.8 | |
| | 38nm,0.6s | | | | | | |
| **KDJ** | **Kajisay** | **2.54** | **63** | ⇓*i*P | **Pn** | **00 17 16.0** | **-1.5** |
| | baz=62 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sn** | **00 17 47.0** | **-1.5** |
| | baz=62 | | | | | | |
| **MTBS** | **Maitube** | **2.71** | **38** | *e*P | **Pb** | **00 17 26.6** | **+1.8** |
| | 15nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **00 18 01.4** | **+3.3** |
| | 37nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.71** | **38** | Pg | **Pb** | **00 17 26.6** | **+1.8** |
| | 15nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 00 18 01.3 | |
| | 37nm,0.4s | | | | | | |
| **DZA** | **Taraz** | **2.80** | **313** | *e*P | **Pb** | **00 17 28.0** | **+1.8** |
| | 36nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **00 18 03.8** | **-2.4** |
| | 38nm,0.2s | | | | | | |
| **DZA** | **Taraz** | **2.80** | **313** | Pg | **Pb** | **00 17 28.0** | **+1.8** |
| | 36nm,0.1s | | | | | | |
| DZA | | | | Lg | Lg | 00 18 03.8 | |
| | 38nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **2.91** | **23** | *e*P | **Pb** | **00 17 30.6** | **+2.5** |
| | 17nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **00 18 08.2** | **-1.4** |
| | 23nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **2.91** | **23** | Pg | **Pb** | **00 17 30.6** | **+2.5** |
| | 17nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 00 18 08.2 | |
| | 23nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.91** | **45** | *e*P | **Pb** | **00 17 29.9** | **+1.6** |
| | 15nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **00 18 07.4** | **+3.5** |
| | 18nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.91** | **45** | Pg | **Pb** | **00 17 29.9** | **+1.6** |
| | 15nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 00 18 07.4 | |
| | 18nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **3.04** | **43** | ⇓Pn | **Pb** | **00 17 32.9** | **+2.5** |
| | 19nm,0.6s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 00 18 14.9 | |
| | 36nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.05** | **45** | Pn | **Pb** | **00 17 31.8** | **+1.2** |
| | 6.4nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 00 18 16.6 | |
| | 26nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.13** | **44** | *e*P | **Pb** | **00 17 34.3** | **+2.4** |
| | 18nm,0.6s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **00 18 15.3** | **-1.6** |
| | 37nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.13** | **44** | Pg | **Pb** | **00 17 34.3** | **+2.4** |
| | 18nm,0.6s | | | | | | |
| KOTS | | | | Lg | Lg | 00 18 15.3 | |
| | 37nm,0.5s | | | | | | |
| **ANVS** | **Anan'yevo** | **3.17** | **55** | ⇑*i*P | **Pn** | **00 17 24.9** | **-1.3** |
| | baz=54 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sn** | **00 18 02.3** | **-1.7** |
| | baz=54 | | | | | | |
| **IUG** | **Iuzhnay** | **3.27** | **291** | *e*P | **Pb** | **00 17 36.5** | **+2.3** |
| | 207nm,0.3s | | | | | | |
| IUG | | | | *e*S | **Sb** | **00 18 18.7** | **+4.6** |
| | 91nm,0.6s | | | | | | |
| **IUG** | **Iuzhnay** | **3.27** | **291** | Pg | **Pb** | **00 17 36.5** | **+2.3** |
| | 207nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 00 18 18.7 | |
| | 91nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **3.29** | **34** | *e*P | **Pb** | **00 17 37.1** | **+2.6** |
| | 6.8nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 18 19.3** | **-2.5** |
| | 81nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **3.29** | **34** | Pg | **Pb** | **00 17 37.1** | **+2.6** |
| | 6.8nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 00 18 19.3 | |
| | 81nm,0.8s | | | | | | |
| **KUU** | **Kurty** | **3.30** | **29** | *e*P | **Pb** | **00 17 37.0** | **+2.3** |
| | 6.5nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sg** | **00 18 19.2** | **-3.1** |
| | 24nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.30** | **29** | Pg | **Pb** | **00 17 37.0** | **+2.3** |
| | 6.5nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 00 18 19.2 | |
| | 24nm,0.4s | | | | | | |
| **KK02** | **Karatay Array** | **3.40** | **309** | ⇑Pg | **Pb** | **00 17 36.9** | **+0.5** |
| | 1.4nm,0.3s,baz=128,slow=16 | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 00 18 22.4 | |
| | 7.6nm,0.5s,baz=123,slow=27 | | | | | | |
| **BRLS** | **Boroldav** | **3.77** | **304** | *e*P | **Pb** | **00 17 44.2** | **+1.5** |
| | 3.6nm,0.3s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **00 18 32.0** | **+3.6** |
| | 23nm,0.5s | | | | | | |
| **BRLS** | **Boroldav** | **3.77** | **304** | Pg | **Pb** | **00 17 44.2** | **+1.5** |
| | 3.6nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 00 18 32.0 | |
| | 23nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.78** | **56** | *e*P | **Pb** | **00 17 46.3** | **+3.3** |
| | 10nm,0.7s | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 18 35.8** | **-1.9** |
| | 11nm,0.3s | | | | | | |
| **SATY** | **Saty** | **3.78** | **56** | Pg | **Pb** | **00 17 46.3** | **+3.3** |
| | 10nm,0.7s | | | | | | |
| SATY | | | | Lg | Lg | 00 18 35.8 | |
| | 11nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.86** | **55** | *e*P | **Pb** | **00 17 48.5** | **+4.3** |
| | 9.3nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **00 18 38.9** | **-1.2** |
| | 14nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **3.86** | **55** | Pg | **Pb** | **00 17 48.5** | **+4.3** |
| | 9.3nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 00 18 38.9 | |
| | 14nm,0.2s | | | | | | |
| **BTLS** | **Baital** | **4.02** | **359** | *e*P | **Pb** | **00 17 49.4** | **+2.5** |
| | 1.0nm,0.4s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **00 18 40.3** | **-4.9** |
| | 7.0nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **4.02** | **359** | Pg | **Pb** | **00 17 49.5** | **+2.5** |
| | 1.4nm,0.6s | | | | | | |
| BTLS | | | | Lg | Lg | 00 18 40.6 | |
| | 6.6nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **4.17** | **53** | *e*P | **Pb** | **00 17 52.8** | **+3.2** |
| | 4.0nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 18 47.2** | **-3.0** |
| | 11nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.20** | **39** | *e*P | **Pb** | **00 17 52.5** | **+2.5** |
| | 4.6nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **00 18 46.9** | **-4.1** |
| | 19nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.20** | **39** | Pg | **Pb** | **00 17 52.5** | **+2.5** |
| | 4.6nm,0.5s | | | | | | |
| ARXS | | | | Lg | Lg | 00 18 46.9 | |
| | 19nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **4.22** | **58** | *e*P | **Pb** | **00 17 54.2** | **+3.8** |
| | 11nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 18 49.3** | **-2.3** |
| | 8.7nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **4.22** | **58** | Pg | **Pb** | **00 17 54.2** | **+3.8** |
| | 11nm,0.5s | | | | | | |
| UZB | | | | Lg | Lg | 00 18 49.3 | |
| | 8.7nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **4.45** | **45** | *e*P | **Pb** | **00 17 58.1** | **+3.8** |
| | 12nm,0.4s | | | | | | |
| BLB | | | | *e*S | **Sg** | **00 18 55.7** | **-3.3** |
| | 12nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **4.45** | **45** | Pg | **Pb** | **00 17 58.1** | **+3.8** |
| | 12nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 00 18 55.7 | |
| | 12nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **5.33** | **50** | *e*P | Pb | 00 18 15.0 | +5.7 |
| | 1.7nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **00 19 24.4** | **-2.8** |
| | 4.7nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **5.33** | **50** | Pg | Pb | 00 18 15.0 | +5.7 |
| | 1.7nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 00 19 24.4 | |
| | 4.7nm,0.5s | | | | | | |

**VIE 05 00:18:14.9±0.4,47.28N×11.43E,h7km±4km,mb1.2/1, ml0.8/6,Error ellipse: s-maj=2.1km s-min=0.9km az=179.0 3 km NE of Innsbruck,Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.12** | **62** | *e*Pg | Pg | 00 18 17.6 | +0.1 |
| | 0.3nm,0.0s | | | | | | |
| WATA | | | | *e*Sg | Sg | 00 18 19.5 | +0.2 |
| | 17nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.14** | **97** | *e*Pg | Pg | 00 18 18.4 | +0.4 |
| | 1.1nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.16** | **248** | *e*Pg | Pg | 00 18 18.5 | +0.3 |
| | 0.4nm,0.1s | | | | | | |
| SQTA | | | | *e*Sg | Sg | 00 18 21.0 | +0.5 |
| | 2.8nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **0.23** | **286** | *e*Pg | Pg | 00 18 19.4 | -0.1 |
| | 0.2nm,0.1s | | | | | | |
| MOTA | | | | *e*Sg | Sg | 00 18 23.2 | +0.6 |
| | 1.4nm,0.1s | | | | | | |
| **FETA** | **Feichten** | **0.54** | **242** | *i* Sg | Sg | 00 18 33.0 | +0.5 |
| | 0.2nm,0.1s | | | | | | |

*IDC **05** 00:19:51.9±10.0,40.36N×20.17E,h0km,mb3.8/3, mb1 3.8/4,mb1mx3.4/30,mbtmp3.6/4,ML3.3/1,Error ellipse: s-maj=203.2km s-min=33.5km az=32.0*
*TIR **05** 00:19:52.7,40.04N×19.98E,h21km±2km,Md3.2,Ml2.9*
*ATH **05** 00:19:53.0,40.08N×19.97E,h14km±1km,ML2.7/8,Error ellipse: s-maj=2.7km s-min=1.4km az=276.0*
*THE **05** 00:19:53.3,40.06N×19.96E,h2km±3km,ML2.6/4,Error ellipse: s-maj=3.8km s-min=1.0km az=72.0*
**ISC 05 00:19:52.4±0.8,40.07N±0.02×19.90E±0.02,h17km±6km, n80,σ1.37/107,mb3.6/3,9C-4D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRN** | **Sarande** | **0.20** | **156** | P | **Pg** | **00 19 57.1** | **-0.2** |
| SRN | | | | S | **Sg** | **00 20 00.1** | **-0.5** |
| | 2μm,0.2s | | | | | | |
| **SRN** | **Sarande** | **0.20** | **156** | P | **Pg** | **00 19 57.1** | **-0.2** |
| | baz=174 | | | | | | |
| SRN | | | | S | **Sg** | **00 20 00.6** | **0.0** |
| | baz=174 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,8.0nm,0.2s,baz=174 | | | | | | |
| **KASA** | **Kassiopi** | **0.32** | **174** | P | **Pg** | **00 19 59.1** | **-0.1** |
| KASA | | | | S | **Sb** | **00 20 04.9** | **+0.5** |
| **VLO** | **Vlora** | **0.51** | **323** | P | **Pb** | **00 20 03.1** | **+0.4** |
| VLO | | | | S | **Sn** | **00 20 12.1** | **-0.9** |
| | comp=E,4μm,0.2s | | | | | | |
| **VLO** | **Vlora** | **0.51** | **323** | P | **Pb** | **00 20 03.4** | **+0.6** |
| | baz=320 | | | | | | |
| VLO | | | | S | **Sn** | **00 20 13.2** | **+0.2** |
| | baz=320 | | | | | | |
| **LSK** | **Leskovik** | **0.55** | **81** | P | **Pg** | **00 20 01.9** | **-1.4** |
| **LSK** | **Leskovik** | **0.55** | **81** | P | **Pg** | **00 20 02.1** | **-1.2** |
| | baz=77 | | | | | | |
| LSK | | | | S | **Sg** | **00 20 10.4** | **-0.3** |
| | baz=77 | | | | | | |
| **IGT** | **Igoumenitsa** | **0.63** | **148** | P | **Pg** | **00 20 04.6** | **-0.2** |
| **IGT** | **Igoumenitsa** | **0.63** | **148** | P | **Pg** | **00 20 04.6** | **-0.2** |
| IGT | | | | AML | AML | 00 20 20.2 | |
| | comp=E,1435μm,0.6s | | | | | | |
| IGT | | | | AML | AML | 00 20 21.9 | |
| | comp=N,1477μm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.63** | **148** | P | **Pg** | **00 20 04.6** | **-0.2** |
| | baz=152 | | | | | | |
| IGT | | | | S | **Sb** | **00 20 13.7** | **+0.3** |
| | baz=152 | | | | | | |
| **JAN** | **Janina** | **0.84** | **119** | P | **Pb** | **00 20 07.9** | **-0.6** |
| **JAN** | **Janina** | **0.84** | **119** | P | **Pb** | **00 20 08.0** | **-0.6** |
| JAN | | | | AML | AML | 00 20 25.0 | |
| | comp=E,2030μm,0.4s | | | | | | |
| JAN | | | | AML | AML | 00 20 25.4 | |
| | comp=N,1798μm,0.4s | | | | | | |
| **KBN** | **Korca** | **0.88** | **50** | P | **Pb** | **00 20 08.3** | **-0.9** |
| KBN | | | | S | **Sn** | **00 20 22.8** | **+0.4** |
| | comp=N,510nm,0.6s | | | | | | |
| **KBN** | **Korca** | **0.88** | **50** | P | **Pb** | **00 20 08.4** | **-0.8** |
| | baz=46 | | | | | | |
| KBN | | | | S | **Sn** | **00 20 22.4** | **0.0** |
| | baz=46 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,1.8nm,0.5s,baz=46 | | | | | | |
| **NEST** | **Nestorio** | **0.95** | **68** | P | **Pb** | **00 20 10.1** | **-0.3** |
| NEST | | | | S | **Sn** | **00 20 24.3** | **+0.2** |
| | comp=N,238nm,0.4s | | | | | | |
| **NEST** | **Nestorio** | **0.95** | **68** | P | **Pb** | **00 20 10.0** | **-0.4** |
| NEST | | | | AML | AML | 00 20 28.1 | |
| | comp=N,601μm,0.3s | | | | | | |
| NEST | | | | AML | AML | 00 20 29.2 | |
| | comp=E,582μm,0.4s | | | | | | |
| **PENT** | **Pentalofos** | **0.96** | **82** | P | **Pb** | **00 20 10.0** | **-0.6** |
| **SCTE** | **Santa Cesarea** | **1.10** | **271** | P | **Pg** | **00 20 14.5** | **+0.9** |
| **KPRO** | **Kipourio** | **1.13** | **95** | P | **Pb** | **00 20 13.2** | **-0.3** |
| **KPRO** | **Kipourio** | **1.13** | **95** | P | **Pb** | **00 20 12.8** | **-0.7** |
| KPRO | | | | AML | AML | 00 20 35.6 | |
| | comp=E,948μm,0.5s | | | | | | |
| KPRO | | | | AML | AML | 00 20 39.9 | |
| | comp=N,894μm,0.4s | | | | | | |
| **OHR** | **Ohrid** | **1.25** | **33** | *i* Pn | **Pb** | **00 20 15.7** | **+0.2** |
| **TIR** | **Tirane** | **1.28** | **359** | ⇓S | **Sg** | **00 20 34.9** | **+1.1** |
| **TIR** | **Tirane** | **1.28** | **359** | P | **Pg** | **00 20 17.3** | **+0.2** |
| **TIR** | **Tirane** | **1.28** | **359** | P | **Pg** | **00 20 17.6** | **+0.6** |
| | baz=357 | | | | | | |
| TIR | | | | S | **Sg** | **00 20 37.3** | **+3.5** |
| | baz=357 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,1.1nm,0.5s,baz=357 | | | | | | |
| **TIR** | **Tirane** | **1.28** | **359** | ⇑P | **Pg** | **00 20 17.7** | **+0.6** |
| **TSLK** | **Tsoukalades, L** | **1.37** | **154** | P | **Pg** | **00 20 19.6** | **+0.8** |
| **LKD2** | **Lefkada island** | **1.41** | **155** | P | **Pg** | **00 20 19.0** | **-0.4** |
| LKD2 | | | | AML | AML | 00 20 43.6 | |
| | comp=E,1249μm,0.4s | | | | | | |
| LKD2 | | | | AML | AML | 00 20 44.3 | |
| | comp=N,784μm,0.4s | | | | | | |
| **KZN** | **Kozani** | **1.46** | **80** | P | **Pg** | **00 20 19.7** | **-0.7** |
| KZN | | | | AML | AML | 00 20 47.6 | |
| | comp=N,368μm,0.4s | | | | | | |
| KZN | | | | AML | AML | 00 20 47.8 | |
| | comp=E,527μm,0.4s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **1.48** | **159** | P | **Pg** | **00 20 21.3** | **+0.5** |
| **NYDR** | **Nydri-Lefkada** | **1.49** | **155** | P | **Pb** | **00 20 19.9** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **1.49** | **155** | P | **Pb** | **00 20 19.9** | **+0.4** |
| **EVGI** | **Lefkada island** | **1.56** | **158** | P | **Pg** | **00 20 22.8** | **+0.4** |
| **PHP** | **Peshkopia** | **1.67** | **14** | P | **Pb** | **00 20 22.8** | **+0.2** |
| **PHP** | **Peshkopia** | **1.67** | **14** | P | **Pg** | **00 20 23.8** | **-0.6** |
| | baz=11 | | | | | | |
| PHP | | | | S | **Sg** | **00 20 47.3** | **+1.1** |
| | baz=11 | | | | | | |
| **THL** | **Klokotos Trika** | **1.71** | **106** | P | **Pb** | **00 20 23.9** | **+0.7** |
| THL | | | | AML | AML | 00 20 47.8 | |
| | comp=E,230μm,0.6s | | | | | | |
| THL | | | | AML | AML | 00 20 52.4 | |
| | comp=N,188μm,0.6s | | | | | | |
| **KTI** | **Kastanea** | **1.73** | **78** | P | **Pb** | **00 20 23.0** | **-0.7** |
| **EVR** | **Evrytania** | **1.87** | **127** | P | **Pb** | **00 20 27.1** | **+0.9** |
| EVR | | | | AML | AML | 00 20 59.4 | |
| | comp=E,312μm,0.4s | | | | | | |
| EVR | | | | AML | AML | 00 21 01.2 | |
| | comp=N,235μm,0.5s | | | | | | |
| **VLS** | **Valsamata** | **1.96** | **164** | P | **Pb** | **00 20 27.7** | **+0.1** |
| **LIT** | **Litokhoron** | **1.99** | **88** | P | **Pb** | **00 20 27.1** | **-1.0** |
| **MAKR** | **Makrakomi, Fth** | **2.02** | **121** | P | **Pb** | **00 20 29.1** | **+0.4** |
| **AGG** | **Agios Georgios** | **2.15** | **118** | P | **Pb** | **00 20 30.6** | **-0.3** |
| **SKO** | **Skopje** | **2.23** | **31** | *i* Pn | **Pb** | **00 20 31.4** | **-0.8** |
| **EFP** | **Efpalio** | **2.26** | **136** | P | **Pb** | **00 20 32.0** | **-0.7** |
| **BCI** | **Bajram Curri** | **2.30** | **3** | P | **Pb** | **00 20 31.7** | **-1.7** |
| | baz=1.0 | | | | | | |
| BCI | | | | S | **Sb** | **00 21 03.5** | **+1.9** |
| | baz=1.0 | | | | | | |
| **RLS** | **Riolos of Patr** | **2.35** | **148** | P | **Pb** | **00 20 32.4** | **-1.7** |
| **VAY** | **Valandovo** | **2.39** | **57** | *i* Pn | **Pb** | **00 20 33.5** | **-1.4** |
| **PDG** | **Podgorica** | **2.41** | **349** | ⇑P | **Pn** | **00 20 33.3** | **+2.3** |
| PDG | | | | ⇑S | **Sn** | **00 21 02.5** | **+2.5** |
| **LAKA** | **Lakka** | **2.44** | **138** | P | **Pb** | **00 20 34.1** | **-1.7** |
| **MATE** | **Matera** | **2.51** | **284** | ⇑P | **Pn** | **00 20 35.1** | **+2.9** |
| MATE | | | | ⇓S | **Sb** | **00 21 07.0** | **-0.4** |
| **KNT** | **Kendrikon** | **2.53** | **63** | P | **Pn** | **00 20 34.1** | **+1.4** |
| **DRO** | **Drossia** | **2.54** | **146** | P | **Pn** | **00 20 35.1** | **+2.3** |
| **TIP** | **Timpagrande** | **2.58** | **251** | ⇑P | **Pn** | **00 20 35.4** | **+2.0** |
| **KLV** | **

HERR Herculane 5.16 20 ⇑P Pn 00 21 10.8 +2.1
DUGI Dugi Otok 5.33 319 *e*Pn Pn 00 21 11.4 +0.4
DUGI Sn Sn 00 22 09.3 -2.6
UDBI Udbina 5.41 327 *e*Pn Pn 00 21 13.5 +1.3
UDBI Sn Sn 00 22 12.9 -1.2
BZS Buzias 5.69 12 ⇓P Pn 00 21 18.1 +2.1
GZR Gura Zlata 5.73 21 ⇑P Pn 00 21 18.3 +1.7
PLIT Plitvice 5.75 328 *e*Pn Pn 00 21 17.5 +0.6
PLIT Sn Sn 00 22 19.9 -2.6
NVLJ Novalja 5.84 322 *e*Pn Pn 00 21 17.9 0.0
NVLJ Sn Sn 00 22 20.6 -3.8
OZLJ Ozalj 6.43 331 *e*Pn Pn 00 21 26.3 +0.2
VOIR 6.57 34 ⇑P Pn 00 21 30.5 +2.4
RIY Rijeka 6.59 325 *e*Pn Pn 00 21 28.6 +0.1
BRJN Brijuni 6.63 319 *i* Pn Pn 00 21 28.8 -0.2
BRJN Sn Sn 00 22 40.6 -3.5
LOBO Lobor 6.70 337 *e*Pn Pn 00 21 29.4 -0.5
GERES GERESS Array B 9.83 335 Pn Pn 00 22 12.8 0.0
comp=N,0.1nm,0.3s,baz=157,slow=5.3,SNR=1.6
FINES FINESS Array B 21.74 8 P P 00 24 40.9 -1.6
comp=N,2.3nm,1.0s,baz=184,slow=12,SNR=4.1
ARCES ARCESS Array B 29.68 4 P P 00 25 57.2 +0.4
comp=N,4.8nm,1.1s,baz=193,slow=11,SNR=2.0
MKAR Makanchi Array 44.75 60 P P 00 28 03.9 -0.8
comp=N,0.4nm,0.6s,baz=285,slow=7.1,SNR=4.0

**KRSC 05 00:24:44.7±2.0, 49°92N×155°49E, h356km±16km, ML3.6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDTR | Khodutka, Kamc | 2.50 | 40 | *e*P | Pn | 00 25 40.1 | 0.0 |
| KDTR | | | | *e*S | S | 00 26 24.2 | -0.6 |
| RUS | Russkaya | 3.16 | 36 | *e*P | Pn | 00 25 46.5 | +0.8 |
| RUS | | | | *e*S | S | 00 26 35.3 | +0.3 |
| SPN | Mys Shipunski | 4.26 | 40 | *e*P | Pn | 00 25 58.9 | +2.4 |
| SPN | | | | *e*S | S | 00 26 55.4 | +0.8 |
| MKZ | Mys Kozlova | 6.02 | 37 | *e*P | Pn | 00 26 17.9 | +2.2 |
| MKZ | | | | *e*S | S | 00 27 26.5 | -3.1 |
| KBTR | Krutoberegovo | 7.69 | 32 | *e*P | P | 00 26 37.5 | +1.3 |

*NEIC **05** 00:28:28.4±0.9, 37°.093N×0°.009×98°.04W±0°.01, h5km±1km, Error ellipse: s-maj=2.9km s-min=2.1km az=305.0*
**NEIC 05 00:28:28.2±1.0, 37°.096N×0°.009×98°.03W±0°.01, h5km±4km, mb_Lg2.2/1, ML1.8/18, Error ellipse: s-maj=1.8km s-min=1.2km az=108.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAN10 | Anthony SW Sta | 0.06 | 299 | Pg | Pg | 00 28 29.7 | 0.0 |
| KAN10 | | | | Sg | Sg | 00 28 30.9 | +0.2 |
| KAN05 | Bluff City Nor | 0.13 | 84 | | Pg | 00 28 31.2 | +0.3 |
| KAN05 | | | | Sg | Sg | 00 28 33.2 | +0.6 |
| KAN16 | Harper SW Stat | 0.13 | 349 | | Pg | 00 28 31.2 | +0.3 |
| KAN16 | | | | | Sg | 00 28 33.3 | +0.6 |
| KAN08 | Anthony NE Sta | 0.14 | 21 | | Pg | 00 28 31.3 | +0.3 |
| KAN08 | | | | Sg | Sg | 00 28 33.5 | +0.6 |
| KAN14 | Manchester OK | 0.15 | 158 | Pg | Pg | 00 28 31.4 | +0.2 |
| KAN14 | | | | Sg | Sg | 00 28 33.8 | +0.6 |
| KAN12 | Harper NE Stat | 0.20 | 8 | Pg | Pg | 00 28 32.5 | +0.3 |
| KAN12 | | | | Sg | Sg | 00 28 35.8 | +0.8 |
| KAN06 | Argonia West S | 0.21 | 42 | | Pg | 00 28 32.5 | +0.2 |
| KAN06 | | | | Sg | Sg | 00 28 35.1 | +0.1 |
| KAN17 | Caldwell West | 0.22 | 103 | Pg | Pg | 00 28 32.8 | +0.3 |
| KAN17 | | | | Sg | Sg | 00 28 36.0 | +0.6 |
| KAN01 | Argonia South | 0.23 | 75 | | Pg | 00 28 33.0 | +0.3 |
| KAN01 | | | | | Sg | 00 28 36.2 | +0.6 |
| GC02 | Grant County # | 0.28 | 150 | Pg | Pg | 00 28 33.8 | +0.2 |
| GC02 | | | | Sg | Sg | 00 28 37.8 | +0.5 |
| OK032 | Salt Plains WL | 0.32 | 206 | Pg | Pg | 00 28 34.5 | 0.0 |
| OK032 | | | | Sg | Sg | 00 28 39.3 | +0.6 |
| KAN13 | South Haven SW | 0.45 | 100 | Pg | Pg | 00 28 36.8 | -0.1 |
| KAN13 | | | | Sg | Sg | 00 28 43.0 | +0.2 |
| CROK | Carrier | 0.59 | 176 | Pg | Pg | 00 28 39.8 | +0.2 |
| CROK | | | | Sg | Sg | 00 28 47.7 | +0.4 |
| OK035 | E0210 Rd and N | 0.67 | 235 | Pg | Pg | 00 28 39.9 | -1.1 |
| BLOK | Blackwell | 0.74 | 117 | | Pg | 00 28 42.1 | -0.2 |
| U32A | Winter Ranch, | 1.06 | 228 | Pg | Pg | 00 28 48.2 | -0.2 |
| T35A | Sooner Cattle | 1.23 | 98 | Pg | Pg | 00 28 51.6 | -0.2 |
| OK033 | Mehan | 1.37 | 140 | | Pn | 00 28 53.4 | -0.5 |
| OK029 | Liberty Lake | 1.38 | 160 | | Pn | 00 28 52.8 | -1.2 |
| QUOK | Quay | 1.41 | 130 | | Pn | 00 28 53.6 | -0.9 |
| R32A | Long Quarter, | 1.43 | 338 | | Pn | 00 28 54.2 | -0.6 |
| OK031 | S. Brethren Rd | 1.49 | 140 | | Pn | 00 28 55.2 | -0.4 |
| OK034 | N. Norfolk Rd. | 1.52 | 135 | | Pn | 00 28 55.6 | -0.3 |
| OK030 | Cody Creek RV | 1.54 | 139 | | Pn | 00 28 56.0 | -0.2 |
| OK025 | Westminster Rd | 1.61 | 159 | | Pn | 00 28 57.0 | -0.3 |
| W35A | Tecumseh | 2.15 | 154 | Pn | Pn | 00 29 04.7 | -0.1 |
| TUL1 | Leonard | 2.16 | 123 | Pn | Pn | 00 29 04.4 | -0.4 |
| TUL1 | | | | IAmb_Lg | | 00 29 39.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| CBKS | Cedar Bluff | 2.18 | 322 | Pn | Pn | 00 29 05.9 | +0.7 |
| KSU1 | Kansas State U | 2.29 | 29 | Pn | Pn | 00 29 07.2 | +0.6 |
| U38A | Gravette | 3.00 | 102 | Pn | Pn | 00 29 16.5 | +0.1 |
| X37A | Clayton | 3.31 | 138 | Pn | Pn | 00 29 21.6 | +1.0 |

*IDC **05** 00:38:10.9±0.7, 6°.08N×125°.62E, h140km±11km, mb3.6/4, mb1 3.8/5, mb1mx3.2/46, mbtmp4.2/5, Error ellipse: s-maj=81.7km s-min=16.3km az=75.0*
*NEIC **05** 00:38:11.0±2.0, 6°.1N±0°.1×126°.00E±0°.10, h127km±14km, mb4.4/9, Error ellipse: s-maj=16.1km s-min=12.6km az=222.0*
*MAN **05** 00:38:11.2, 6°.25N×126°.01E, h131km, mb4.5, ML3.4, MS3.2*
**ISC 05 00:38:10.7±0.7, 6°.09N±0°.05×125°.98E±0°.07, h137km±6km, n32, σ1°46/42, mb4.1/8, 3C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DDMP | Don Marcelino, | 0.27 | 273 | ⇓*e*P | Pn | 00 38 28.9 | -0.6 |
| DDMP | | | | *i* S | Sn | 00 38 43.0 | -0.7 |
| MATI | Mati | 0.89 | 18 | ⇑*e*P | Pn | 00 38 32.7 | -0.6 |
| MATI | | | | *e*S | Sn | 00 38 50.7 | +0.2 |
| GSPH | General Santos | 1.02 | 270 | ⇑*e*P | Pn | 00 38 33.7 | -0.9 |
| GSPH | | | | *i* S | Sn | 00 38 51.3 | -1.3 |
| DAV | Davao City (W) | 1.05 | 338 | P | Pn | 00 38 34.8 | +0.2 |
| | 53nm,0.3s,baz=63,slow=18,SNR=8.1 | | | | | | |
| DAV | | | | S | Sn | 00 38 53.1 | +0.2 |
| | 404nm,0.3s,baz=123,slow=17,SNR=16 | | | | | | |
| DAV | Davao City (W) | 1.05 | 338 | | Pn | 00 38 33.5 | -1.2 |
| DAV | | | | Sn | Sn | 00 38 52.7 | -0.3 |
| KCP | Kidapawan | 1.27 | 316 | ⇓*i*P | Pn | 00 38 37.0 | +0.1 |
| KCP | | | | *i* S | Sn | 00 38 56.0 | -0.8 |
| CTBH | Cotabato--PC H | 2.06 | 303 | *e*P | Pn | 00 38 45.5 | -0.2 |
| CTBH | | | | *i* S | Sn | 00 39 12.2 | -0.3 |
| BIPH | Bislig | 2.11 | 10 | ⇑*i*P | Pn | 00 38 45.6 | -0.8 |
| BIPH | | | | *i* S | Sn | 00 39 11.8 | -2.0 |
| BUTP | Butuan | 2.88 | 353 | ⇓*e*P | Pn | 00 38 57.9 | +1.9 |
| TNTI | Ternate | 5.46 | 165 | Pn | Pn | 00 39 30.2 | +0.1 |
| TOLI2 | Tolitoli | 7.17 | 227 | Pn | Pn | 00 39 52.6 | -0.4 |
| TOLI2 | | | | | Sn | 00 41 11.0 | -2.1 |
| MYLDM | Lahad Datu | 7.50 | 263 | Pn | Pn | 00 40 08.4 | +2.9 |
| KAPI | Kappang | 12.66 | 210 | Pn | Pn | 00 41 07.1 | +1.0 |
| BATI | Baumata | 16.35 | 188 | P | Pn | 00 41 52.6 | 0.0 |
| | 5.9nm,0.3s,baz=329,slow=4.4,SNR=3.8 | | | | | | |
| TWG | Pinlang | 17.29 | 345 | P | P | 00 42 03.1 | -0.1 |
| TWG | | | | IAmb | IAmb | 00 42 11.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| MTN | Manton Dam | 19.50 | 165 | P | P | 00 42 28.4 | +1.1 |
| MTN | | | | IAmb | IAmb | 00 42 41.3 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| KNRA | Kununurra | 21.80 | 173 | P | P | 00 42 53.1 | +1.1 |
| KNRA | | | | IAmb | IAmb | 00 43 04.9 | |
| | comp=Z,25nm,1.1s | | | | | | |
| FITZ | Fitzroy Crossi | 24.04 | 181 | P | P | 00 43 13.4 | +0.2 |
| | comp=Z,2.9nm,0.5s,baz=9.6,slow=8.0,SNR=11 | | | | | | |
| COEN | Coen | 26.23 | 140 | P | P | 00 43 34.4 | +1.2 |
| COEN | | | | IAmb | IAmb | 00 43 50.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| WB0 | Warramunga Arr | 27.00 | 162 | P | P | 00 43 39.7 | -0.3 |
| WRA | Warramunga Arr | 27.15 | 163 | P | P | 00 43 35.4 | -6.0 |
| WB2 | Warramunga Arr | 27.15 | 163 | P | P | 00 43 40.0 | -1.3 |
| AS31 | Alice Springs | 30.57 | 166 | P | P | 00 44 12.3 | +0.6 |
| ASAR | Alice Springs | 30.57 | 166 | P | P | 00 44 12.1 | +0.4 |
| | comp=Z,1.8nm,0.4s,baz=340,slow=6.9,SNR=30 | | | | | | |
| ASAR | | | | PcP | PcP | 00 47 06.5 | -0.7 |
| | comp=Z,0.2nm,0.6s,baz=338,slow=2.0,SNR=4.7 | | | | | | |
| FORT | Forrest | 36.72 | 177 | P | P | 00 45 05.3 | +0.6 |
| NWAO | Narrogin (SRO) | 39.68 | 192 | P | P | 00 45 30.2 | +0.6 |
| BBOO | Buckleboo | 39.86 | 167 | P | P | 00 45 32.0 | +1.0 |
| BBOO | | | | IAmb | IAmb | 00 45 41.9 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| STKA | Stephens Creek | 40.59 | 159 | P | P | 00 45 37.2 | +0.2 |
| | comp=Z,1.9nm,0.7s,baz=328,slow=13,SNR=3.3 | | | | | | |
| STKA | Stephens Creek | 40.59 | 159 | P | P | 00 45 37.7 | +0.7 |
| SONM | Songino Array | 44.84 | 341 | P | P | 00 46 11.3 | +0.1 |
| | comp=Z,0.1nm,0.5s,baz=165,slow=6.0,SNR=1.3 | | | | | | |
| MKAR | Makanchi Array | 55.20 | 325 | P | P | 00 47 26.9 | -2.5 |
| | comp=Z,0.1nm,0.4s,baz=123,slow=5.3,SNR=1.9 | | | | | | |
| TORD | Torodi Ar. Bea | 121.46 | 289 | PKP | PKPdf | 00 56 47.9 | -1.1 |
| | comp=Z,0.2nm,0.4s,baz=90,slow=1.3,SNR=5.4 | | | | | | |

*IDC **05** 00:52:09.1±0.6, 37°.02N×137°.22E, h259km±7km, mb3.1/6, mb1 3.2/10, mb1mx2.8/45, mbtmp3.7/10, Error ellipse: s-maj=30.4km s-min=13.2km az=65.0*
*JMA **05** 00:52:10.0±0.2, 36°.90N×137°.33E, h261km±2km, M3.2*
**ISC 05 00:52:09.1±0.8, 36°.97N±0°.07×137°.23E±0°.07, h263km±7km, n23, σ0°77/34, mb3.2/6, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JSZ | Suzu | 0.49 | 13 | P | Pn | 00 52 44.3 | +0.9 |
| MAT | Matsushiro | 0.89 | 118 | P | Pn | 00 52 45.7 | +0.7 |
| MAT | | | | S | S | 00 53 14.1 | +0.8 |
| MAT | Matsushiro | 0.89 | 118 | P | Pn | 00 52 45.7 | +0.7 |
| MAT | | | | *e*S | S | 00 53 13.0 | -0.3 |
| MJAR | Matsushiro Arr | 0.90 | 118 | P | Pn | 00 52 45.7 | +0.6 |
| | 1.6nm,0.3s,baz=290,slow=7.2,SNR=37 | | | | | | |
| MJAR | | | | S | S | 00 53 13.4 | 0.0 |
| | 0.2nm,0.3s,baz=306,slow=11,SNR=8.3 | | | | | | |
| JSD | Sado | 1.35 | 37 | P | Pn | 00 52 48.7 | +1.2 |
| JSD | | | | *e*S | S | 00 53 17.9 | 0.0 |
| JYTA | Yamagatataniai | 1.43 | 196 | P | Pn | 00 52 48.8 | +0.6 |
| JYTA | | | | *e*S | S | 00 53 18.9 | -0.2 |
| JRY | Ryogami san | 1.65 | 125 | P | Pn | 00 52 49.8 | -0.1 |
| JRY | | | | *e*S | S | 00 53 20.5 | -1.5 |
| JYN | Shimob | 1.81 | 144 | P | Pn | 00 52 51.3 | +0.1 |
| JAG | Ashikaga | 1.87 | 106 | P | Pn | 00 52 51.4 | -0.2 |
| JAG | | | | *e*S | S | 00 53 24.0 | -1.1 |
| JWT | Wachi | 2.24 | 222 | P | Pn | 00 52 55.3 | +0.4 |
| JWT | | | | *e*S | S | 00 53 30.2 | -0.9 |
| JOD2 | Odawara 2 | 2.27 | 138 | P | Pn | 00 52 55.5 | +0.3 |
| JOD2 | | | | *e*S | S | 00 53 31.1 | -0.6 |
| JFT | Otama | 2.54 | 77 | P | Pn | 00 52 58.7 | +1.0 |
| JFT | | | | *e*S | S | 00 53 36.2 | 0.0 |
| JIE | Ise | 2.60 | 190 | P | Pn | 00 52 59.2 | +0.8 |
| JIE | | | | *e*S | S | 00 53 37.1 | -0.4 |
| KSRS | Korea Array | 7.44 | 277 | P | Pn | 00 53 53.9 | -1.5 |
| | 0.4nm,0.3s,baz=96,slow=13,SNR=2.6 | | | | | | |
| ASAJ | Asahikawa | 8.23 | 28 | P | Pn | 00 54 03.3 | -1.8 |
| | 3.4nm,0.3s,baz=236,slow=10,SNR=9.6 | | | | | | |
| USRK | Ussuriysk Ar. | 8.25 | 333 | P | Pn | 00 54 04.9 | -0.5 |
| | baz=149,slow=12,SNR=3.9 | | | | | | |
| KLR | Kul'dur | 12.89 | 344 | P | Pn | 00 55 02.9 | -0.2 |
| | 0.4nm,0.3s,baz=158,slow=8.8,SNR=10 | | | | | | |
| SONM | Songino Array | 25.07 | 305 | P | P | 00 57 09.6 | -0.3 |
| | 0.4nm,0.5s,baz=108,slow=10,SNR=4.4 | | | | | | |
| ZALV | Zalesovo Beam | 39.49 | 313 | P | P | 00 59 14.6 | +0.5 |
| | 0.5nm,0.5s,baz=82,slow=10,SNR=2.4 | | | | | | |
| MKAR | Makanchi Array | 41.31 | 302 | P | P | 00 59 29.4 | +0.3 |
| | 0.8nm,0.7s,baz=85,slow=9.3,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 56.67 | 183 | P | P | 01 01 25.9 | +0.5 |
| | 1.4nm,0.6s,baz=358,slow=7.5,SNR=22 | | | | | | |
| ASAR | Alice Springs | 60.39 | 184 | P | P | 01 01 51.2 | +0.2 |
| | 0.3nm,0.7s,baz=0.9,slow=5.9,SNR=3.4 | | | | | | |
| AKASG | Malin Array Be | 72.26 | 321 | P | P | 01 03 05.5 | -0.2 |
| | 0.3nm,0.4s,baz=50,slow=5.6,SNR=1.8 | | | | | | |

*NOU **05** 01:13:51.8, 17°.64S×178°.62W, h573km, MLv4.2/5, Fiji Islands Region*
*NEIC **05** 01:13:51.9±1.3, 17°.8S±0°.1×178°.7W±0°.1, h568km±5km, mb4.4/101, Error ellipse: s-maj=20.8km s-min=11.2km az=148.0*
*IDC **05** 01:13:53.6±1.0, 17°.63S×178°.81W, h591km±10km, mb3.8/11, mb1 4.1/13, mb1mx3.8/32, mbtmp4.7/13, Error ellipse: s-maj=27.2km s-min=13.0km az=138.0*
**ISC 05 01:13:49.8±0.4, 17°.72S±0°.10×178°.62W±0°.08, h547km, n191, σ0°92/149, mb4.4/58, 19C-10D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TAVE | Taveuni | 1.59 | 309 | P | P | 01 15 02.1 | +4.5 |
| DGTI | Dogotuki | 2.12 | 312 | P | P | 01 15 03.7 | +3.9 |
| MSVF | Nonsavu | 3.17 | 269 | P | P | 01 15 10.7 | +4.9 |
| | 68nm,0.3s,baz=122,slow=2.8,SNR=670 | | | | | | |
| MSVF | | | | S | S | 01 16 17.0 | +9.3 |
| | 2.4nm,0.3s,baz=279,slow=21,SNR=8.4 | | | | | | |
| MSVF | Nonsavu | 3.17 | 269 | P | P | 01 15 10.3 | +4.5 |
| NIUE | Niue | 8.36 | 101 | P | P | 01 15 52.9 | +1.8 |
| MARNC | Mare, Loyalty | 13.12 | 251 | P | P | 01 16 39.8 | -0.1 |
| OUENC | Ouen Island, N | 14.43 | 249 | P | P | 01 16 53.7 | +0.2 |
| DZM | Mont Dzumac | 14.70 | 250 | P | P | 01 16 56.5 | +0.2 |
| | 1.1nm,0.3s,baz=159,slow=21,SNR=14 | | | | | | |
| RPZ | Rata Peaks | 27.34 | 196 | P | P | 01 18 51.2 | +0.1 |
| RPZ | Rata Peaks | 27.34 | 196 | | P | 01 18 51.2 | +0.1 |
| ARMA | Armidale | 29.86 | 239 | P | P | 01 19 14.0 | +0.6 |
| COEN | Coen | 36.90 | 270 | P | P | 01 20 13.3 | +0.5 |
| TOO | Toolangi | 37.13 | 231 | P | P | 01 20 15.2 | +0.9 |
| STKA | Stephens Creek | 38.54 | 241 | P | P | 01 20 26.5 | +0.6 |
| | 6.6nm,0.5s,baz=91,slow=9.7,SNR=22 | | | | | | |
| STKA | Stephens Creek | 38.54 | 241 | P | P | 01 20 25.9 | 0.0 |
| KHLU | Kahalu`u | 43.28 | 32 | P | P | 01 21 04.3 | +0.6 |
| BBOO | Buckleboo | 43.32 | 241 | P | P | 01 21 03.6 | -0.2 |
| HMH | Humu'ula Sheep | 43.50 | 33 | P | P | 01 21 06.4 | +0.7 |
| WB2 | Warramunga Arr | 44.46 | 259 | P | P | 01 21 12.2 | -0.6 |
| WB2 | | | | IAmb | IAmb | 01 21 12.6 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.47 | 259 | P | P | 01 21 11.8 | -1.1 |
| | comp=Z,2.9nm,0.5s,baz=91,slow=7.0,SNR=98 | | | | | | |
| AS31 | Alice Springs | 44.65 | 254 | P | P | 01 21 13.9 | -0.4 |
| AS31 | | | | IAmb | IAmb | 01 21 14.5 | |
| | comp=Z,10nm,0.7s | | | | | | |
| ASAR | Alice Springs | 44.65 | 254 | P | P | 01 21 13.9 | -0.3 |
| | comp=Z,35nm,0.6s,baz=88,slow=8.2,SNR=488 | | | | | | |
| FORT | Forrest | 49.90 | 244 | P | P | 01 21 52.9 | -0.7 |
| FORT | | | | IAmb | IAmb | 01 21 56.6 | |
| | comp=Z,18nm,0.9s | | | | | | |
| KNRA | Kununurra | 50.31 | 264 | P | P | 01 21 56.4 | -0.4 |
| SOEI | Soe | 55.87 | 270 | P | P | 01 22 36.5 | +0.1 |
| SOEI | | | | IAmb | IAmb | 01 22 42.1 | |
| | comp=Z,13nm,0.6s | | | | | | |
| PSA00 | Pilbara Seismi | 57.76 | 255 | P | P | 01 22 47.9 | -1.3 |
| PSA00 | | | | IAmb | IAmb | 01 22 49.0 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| MBWA | Marble Bar | 57.92 | 256 | P | P | 01 22 49.5 | -0.8 |
| VNDA | Vanda | 60.61 | 185 | P | P | 01 23 08.0 | +0.8 |
| | comp=Z,3.1nm,0.9s,baz=11,slow=5.2,SNR=2.0 | | | | | | |
| QSPA | South Pole Qui | 72.33 | 180 | P | P | 01 24 20.0 | 0.0 |
| QSPA | | | | IAmb | IAmb | 01 24 20.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| PETK | Petropavlovsk- | 73.45 | 345 | P | P | 01 24 26.0 | -0.4 |
| | comp=Z,4.4nm,0.6s,baz=148,slow=8.7,SNR=6.8 | | | | | | |
| ISA | Isabella, Lake | 77.83 | 46 | P | P | 01 24 52.0 | +0.7 |
| CMB | Columbia Colle | 77.84 | 43 | P | P | 01 24 51.9 | +0.7 |
| RMX | La Rumorosa | 77.95 | 50 | P | P | 01 24 51.9 | -0.2 |
| RMX | | | | IAmb | IAmb | 01 24 53.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| ORV | Oroville | 77.99 | 42 | P | P | 01 24 52.2 | +0.3 |
| MPK | Martis Peak | 78.78 | 42 | P | P | 01 24 57.0 | +0.5 |
| PNTR | Pine Nut | 78.94 | 43 | P | P | 01 24 57.9 | +0.6 |
| PNTR | | | | IAmb | IAmb | 01 24 58.9 | |
| | comp=Z,19nm,0.9s | | | | | | |
| VCNR | Virginia City | 79.03 | 43 | P | P | 01 24 57.8 | +0.1 |
| VCNR | | | | IAmb | IAmb | 01 24 59.6 | |
| | comp=Z,42nm,1.9s | | | | | | |
| YERR | Yerington | 79.12 | 43 | P | P | 01 24 58.7 | +0.6 |
| YERR | | | | IAmb | IAmb | 01 24 59.5 | |
| | comp=Z,11nm,0.6s | | | | | | |
| LHV | Little Huntoon | 79.20 | 44 | P | P | 01 24 59.4 | +1.1 |
| LHV | | | | IAmb | IAmb | 01 25 00.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| LCH | Last Change Ra | 79.23 | 45 | P | P | 01 24 58.9 | +0.1 |
| RYN | Ryan | 79.39 | 44 | P | P | 01 25 00.5 | +0.9 |
| PAHR | Pah Rah Range | 79.42 | 42 | P | P | 01 25 00.3 | +0.6 |
| NVAR | Mina Array Bea | 79.43 | 44 | P | P | 01 25 00.5 | +0.6 |
| | comp=Z,5.1nm,0.7s,baz=225,slow=8.9,SNR=34 | | | | | | |
| NVAR | Mina Array Bea | 79.43 | 44 | P | P | 01 25 00.2 | +0.3 |
| KVN | Kaiserville | 79.90 | 44 | P | P | 01 25 02.8 | +0.5 |
| KVN | | | | IAmb | IAmb | 01 25 03.5 | |
| | comp=Z,17nm,1.3s | | | | | | |
| TPH | Tonopah | 79.96 | 45 | IAmb | IAmb | 01 25 03.6 | |
| | comp=Z,21nm,0.8s | | | | | | |
| TPNV | Topopah Spring | 80.04 | 46 | P | P | 01 25 03.1 | +0.1 |
| MOD | Modoc Plateau | 80.08 | 40 | IAmb | IAmb | 01 25 04.4 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| K05A | Summer Lake | 80.19 | 39 | P | P | 01 25 03.6 | -0.1 |
| K05A | | | | IAmb | IAmb | 01 25 05.4 | |
| | comp=Z,20nm,1.1s | | | | | | |
| SHPR | Sheep Range | 80.57 | 47 | P | P | 01 25 05.6 | -0.2 |
| PRN | Pahroc Range | 81.09 | 46 | P | P | 01 25 09.1 | +0.6 |
| PRN | | | | IAmb | IAmb | 01 25 10.4 | |
| | comp=Z,10nm,0.9s | | | | | | |
| BMN | Battle Mountai | 81.21 | 43 | P | P | 01 25 09.2 | +0.1 |
| BMN | | | | IAmb | IAmb | 01 25 10.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| WVOR | Wild Horse Val | 81.40 | 40 | IAmb | IAmb | 01 25 11.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| I07A | Izee | 81.79 | 39 | P | P | 01 25 11.8 | 0.0 |
| I07A | | | | IAmb | IAmb | 01 25 13.4 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| X16A | Lo Mia Camp, P | 82.22 | 50 | IAmb | IAmb | 01 25 16.4 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| SPR3 | Spring Creek 3 | 82.38 | 45 | P | P | 01 25 14.8 | -0.4 |
| U15A | North Rim | 82.55 | 48 | IAmb | IAmb | 01 25 18.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| ELK | Elko | 82.66 | 43 | P | P | 01 25 16.0 | -0.5 |
| WUAZ | Wupatki | 82.78 | 49 | P | P | 01 25 17.6 | +0.5 |
| G08A | Pilot Rock | 82.79 | 38 | IAmb | IAmb | 01 25 18.1 | |
| | comp=Z,14nm,1.2s | | | | | | |
| E07A | Sunnyside | 82.99 | 36 | IAmb | IAmb | 01 25 18.9 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| PKCU | Pink Cliffs | 83.02 | 47 | IAmb | IAmb | 01 25 20.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| HAWA | Hanford | 83.08 | 37 | IAmb | IAmb | 01 25 19.1 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| MTPU | Mount Pierson | 83.39 | 47 | P | P | 01 25 20.8 | +0.5 |
| CAST | Castle Rocks | 83.49 | 12 | IAmb | IAmb | 01 25 19.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| MFID | Camas Ranch | 83.67 | 41 | P | P | 01 25 22.0 | +0.7 |
| MFID | | | | IAmb | IAmb | 01 25 22.6 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| D08A | Wollman Farm, | 83.80 | 36 | P | P | 01 25 22.4 | +0.7 |
| D08A | | | | IAmb | IAmb | 01 27 13.2 | |
| | comp=Z,35nm,2.0s | | | | | | |
| F10A | Beach Ranch, E | 84.18 | 38 | IAmb | IAmb | 01 25 25.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| B08A | Colville Reser | 84.31 | 35 | IAmb | IAmb | 01 25 24.6 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| HLID | Hailey | 84.62 | 41 | IAmb | IAmb | 01 25 27.7 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| SRU | San Rafael Swe | 85.04 | 46 | IAmb | IAmb | 01 25 29.3 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| IMAR | Indian Mountai | 85.54 | 10 | P | P | 01 25 29.8 | 0.0 |
| IL31 | | 85.75 | 13 | P | P | 01 25 29.7 | -1.1 |
| ILAR | Eielson Array | 85.75 | 13 | P | P | 01 25 29.4 | -1.4 |
| | comp=Z,2.3nm,0.4s,baz=221,slow=5.2,SNR=69 | | | | | | |
| POKR | Poker Flat Res | 85.94 | 13 | IAmb | IAmb | 01 26 55.9 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| J25K | Salcha River, | 85.95 | 14 | IAmb | IAmb | 01 25 32.1 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| TX32 | Lajitas Array | 86.07 | 58 | IAmb | IAmb | 01 25 35.6 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 86.07 | 58 | P | P | 01 25 34.5 | +1.2 |
| | comp=Z,5.6nm,0.7s,baz=217,slow=6.1,SNR=65 | | | | | | |
| TXAR | Lajitas Array | 86.07 | 58 | P | P | 01 25 33.9 | +0.7 |
| ANMO | Albuquerque | 86.14 | 52 | P | P | 01 25 33.7 | +0.1 |
| BILL | Bilibino | 86.23 | 354 | P | P | 01 25 33.1 | +0.1 |
| J26L | Joseph Creek | 86.28 | 14 | IAmb | IAmb | 01 25 34.1 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| RDMU | Red Mountain | 86.36 | 45 | IAmb | IAmb | 01 28 48.2 | |
| | comp=Z,12nm,1.7s | | | | | | |
| REDW | Red Top Meadow | 86.79 | 43 | P | P | 01 25 37.1 | +0.5 |
| REDW | | | | IAmb | IAmb | 01 25 37.9 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| O20A | White River Ci | 87.07 | 46 | IAmb | IAmb | 01 26 16.5 | |
| | comp=Z,13nm,1.6s | | | | | | |
| QLMT | Earthquake Lak | 87.12 | 41 | P | P | 01 25 38.3 | +0.3 |
| FLWY | Flagg Ranch | 87.22 | 42 | IAmb | IAmb | 01 25 40.3 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| COLD | Coldfoot | 87.27 | 11 | IAmb | IAmb | 01 25 38.6 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| BOZ | Bozeman (W) | 87.36 | 40 | IAmb | IAmb | 01 25 40.6 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| BW06 | Boulder Array | 87.36 | 44 | IAmb | IAmb | 01 25 39.9 | |
| | comp=Z,16nm,1.5s | | | | | | |
| PD31 | Pinedale Array | 87.36 | 44 | IAmb | IAmb | 01 25 39.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| PDAR | Pinedale Array | 87.36 | 44 | P | P | 01 25 38.8 | -0.4 |
| | comp=Z,3.3nm,0.5s,baz=214,slow=3.4,SNR=49 | | | | | | |
| H17A | Grant Village | 87.45 | 42 | IAmb | IAmb | 01 25 42.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| YHH | Holmes Hill | 87.46 | 41 | IAmb | IAmb | 01 25 42.6 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| BMAR | Burnt Mountain | 88.52 | 12 | P | P | 01 25 43.8 | 0.0 |
| MSTX | Muleshoe | 88.55 | 54 | IAmb | IAmb | 01 25 45.6 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| SNAA | Sanae | 90.78 | 179 | P | P | 01 25 53.2 | -1.3 |
| VNA3 | Neumayer Olymp | 90.93 | 176 | P | P | 01 25 54.3 | -0.8 |
| VNA2 | Neumayer--Watz | 91.37 | 177 | P | P | 01 25 56.1 | -0.9 |
| | baz=186,slow=4.8 | | | | | | |
| RSSD | Black Hills | 91.57 | 44 | P | P | 01 25 58.6 | -0.2 |
| RSSD | | | | IAmb | IAmb | 01 25 59.2 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| VNA1 | Neumayer--Stat | 91.60 | 177 | P | P | 01 25 57.8 | -0.3 |
| INK | Inuvik | 91.76 | 15 | P | P | 01 25

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DPC | Dobruska-Polom | 145.31 343 | *e*PKP | PKPbc | 01 32 26.6 | 0.0 | |
| KRLC | Kraliky | 145.43 342 | *e*PKP | PKPbc | 01 32 26.4 | -0.5 | |
| BRG | Berggiesshubel baz=15,slow=3.0 | 145.44 346 | *e*PKPbc | PKPbc | 01 32 26.5 | -0.3 | |
| MORC | Moravsky Berou | 145.47 341 | ⇓P | PKPbc | 01 32 27.1 | 0.0 | |
| MORC | Moravsky Berou | 145.47 341 | *e*PKP | PKPbc | 01 32 26.7 | -0.3 | |
| DOPR | Dopca | 145.50 330 | ⇑P | PKPbc | 01 32 27.5 | +0.3 | |
| FBE | Freiberg baz=15,slow=3.0 | 145.53 347 | *e*PKPbc | PKPbc | 01 32 27.2 | +0.1 | |
| MLR | Muntele Rosu | 145.57 329 | ⇓P | PKPbc | 01 32 27.6 | 0.0 | |
| GTTG | Gottingen baz=15,slow=3.0 | 145.57 351 | *e*PKPbc | PKPbc | 01 32 26.8 | -0.4 | |
| NEUB | Neuenburg baz=15,slow=3.0 | 145.58 348 | *e*PKPbc | PKPbc | 01 32 27.0 | -0.2 | |
| PVCC | Panska Ves | 145.61 345 | *e*PKP | PKPbc | 01 32 27.2 | -0.1 | |
| CJR | Cluj-Napoca | 145.76 332 | ⇑P | PKPbc | 01 32 28.0 | 0.0 | |
| VOIR | | 146.05 330 | ⇑P | PKPbc | 01 32 28.9 | 0.0 | |
| DRGR | | 146.09 333 | ⇑P | PKPbc | 01 32 28.5 | -0.4 | |
| PRU | Pruhonice | 146.12 345 | *e*PKP | PKPbc | 01 32 28.4 | -0.4 | |
| PRU | | | *ex* | x | 01 32 30.8 | | |
| VRAC | Vranov | 146.17 342 | *e*PKP | PKPbc | 01 32 28.7 | -0.3 | |
| JAVC | Velka Javorina | 146.24 341 | *e*PKP | PKPbc | 01 32 30.2 | +0.9 | |
| GUNZ | Gunzen baz=15,slow=3.0 | 146.27 347 | *e*PKPbc | PKPbc | 01 32 28.9 | -0.4 | |
| PSZ | Piszkesteto | 146.29 337 | ⇑P | PKPbc | 01 32 29.2 | -0.2 | |
| PSZ | Piszkesteto | 146.29 337 | PKPbc | PKPbc | 01 32 28.6 | -0.9 | |
| ARR | Arges | 146.30 330 | ⇓P | PKPbc | 01 32 30.1 | +0.5 | |
| NKC | Novy Kostel | 146.37 347 | *e*PKP | PKPbc | 01 32 29.5 | 0.0 | |
| KRUC | Moravsky | 146.45 342 | *e*PKP | PKPbc | 01 32 29.3 | -0.4 | |
| ROTZ | Rotzenmuhle baz=15,slow=3.0 | 146.86 347 | *e*PKPbc | PKPbc | 01 32 30.6 | -0.2 | |
| SIRR | Siria | 146.94 334 | ⇓P | PKPbc | 01 32 31.1 | -0.1 | |
| TNS | Taunus Mts baz=15,slow=3.0 | 147.09 352 | *e*PKPbc | PKPbc | 01 32 31.3 | -0.2 | |
| GZR | Gura Zlata | 147.14 332 | ⇑P | PKPbc | 01 32 31.1 | -0.7 | |
| KHC | Kasperske Hory | 147.15 345 | *e*PKP | PKPbc | 01 32 31.5 | -0.2 | |
| KHC | | | *ex* | x | 01 32 35.2 | | |
| CKRC | Cesky Krumlov | 147.25 344 | *e*PKP | PKPbc | 01 32 31.7 | -0.2 | |
| GEC2 | GERESS Array S baz=15,slow=3.0 | 147.38 345 | *e*PKPbc | PKPbc | 01 32 31.9 | -0.5 | |
| GEC2 | GERESS Array S | 147.38 345 | | PKPbc | 01 32 31.7 | -0.6 | |
| GERES | GERESS Array B comp=Z,3.8nm,0.5s,baz=32,slow=3.3,SNR=38 | 147.38 345 | PKPbc | PKPbc | 01 32 31.9 | -0.5 | |
| BZS | Buzias | 147.48 333 | ⇑P | PKPbc | 01 32 31.9 | -0.7 | |
| CONA | Conrad Observa comp=Z,4.8nm,0.6s,SNR=7.5 | 147.63 342 | *i* P | PKPbc | 01 32 33.3 | +0.3 | |
| WLF | Walferdange baz=15,slow=3.0 | 147.91 354 | *e*PKPbc | PKPbc | 01 32 33.8 | +0.3 | |
| FRGS | Fruska Gora | 148.61 335 | ⇓P | PKPbc | 01 32 34.1 | -1.4 | |
| BFO | Black Forest baz=15,slow=3.0 | 148.95 351 | *e*PKPbc | PKPbc | 01 32 35.7 | -0.5 | |
| VTS | Vitosha | 148.99 328 | ⇑P | PKPbc | 01 32 36.3 | -0.3 | |
| RETA | Reutte comp=Z,2.7nm,0.4s,SNR=5.6 | 149.33 347 | *i* P | PKPbc | 01 32 36.7 | -0.5 | |
| WTTA | Wattenberg comp=Z,7.0nm,0.4s | 149.35 346 | *e*P | PKPbc | 01 32 36.9 | -0.5 | |
| MOTA | Moosalm comp=Z,6.9nm,1.2s,SNR=5.7 | 149.40 347 | *i* P | PKPbc | 01 32 37.0 | -0.5 | |
| MYKA | Terra Mystica comp=Z,4.5nm,0.4s | 149.44 343 | *e*P | PKPbc | 01 32 36.5 | -1.0 | |
| SQTA | Sankt Quirin comp=Z,5.8nm,0.5s,SNR=6.2 | 149.49 347 | *i* P | PKPbc | 01 32 37.4 | -0.3 | |
| ABTA | Abfaltersbach comp=Z,6.0nm,0.6s | 149.63 345 | *e*P | PKPbc | 01 32 37.1 | -0.9 | |
| STAL | STALIGIAL | 150.03 344 | | PKPbc | 01 32 37.3 | -1.6 | |
| ESDC | Sonseca Array comp=Z,0.7nm,0.6s,baz=336,slow=3.9,SNR=6.7 | 157.64 11 | PKPab | PKPab | 01 33 19.0 | -0.8 | |
| TORD | Torodi Ar. Bea comp=Z,0.6nm,0.7s,baz=190,slow=3.2,SNR=5.0 | 175.44 184 | PKPab | PKPab | 01 34 37.8 | -0.9 | |

*IDC* ***05*** *01:16:55.3±0.6, 36°.92S×177°.26E, h307km±5km, mb4.1/6, mb1 4.2/8, mb1mx3.9/23, mbtmp4.7/8, Error ellipse: s-maj=16.4km s-min=15.8km az=64.0*

*NOU* ***05*** *01:16:56.9, 36°.91S×177°.09E, h303km, mb4.4/29, Off E. Coast of N. Island, N.Z.*

*NEIC* ***05*** *01:16:56.4±1.8, 36°.86S±0°.10×177°.0E±0°.1, h294km±7km, mb4.5/13, ML4.5(WEL), Error ellipse: s-maj=16.6km s-min=12.0km az=49.0*

*WEL* ***05*** *01:16:58.8±1.1, 37°.5S±6°×17°.7E±°, h291km±7km, M4.5/85, MLv4.5/85, Error ellipse: s-maj=0.0km s-min=0.0km az=45.3*

**ISC 05 01:16:56.8±0.6, 36°.89S±0°.06×177°.04E±0°.06, h312km±5km, n250, σ1°.14/258, mb4.4/13, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MYRZ | Mayor Island | 0.74 | 239 | P | Pn | 01 17 37.4 | 0.0 |
| WHRZ | Whale Island | 0.96 | 183 | P | Pn | 01 17 39.0 | +0.8 |
| WHRZ | | | | S | S | 01 18 11.4 | +0.2 |
| OPRZ | Ohinepanea | 1.02 | 202 | P | Pn | 01 17 38.2 | -0.2 |
| TGRZ | Tauranga | 1.04 | 216 | P | Pn | 01 17 38.7 | +0.2 |
| HAZ | Te Kaha | 1.05 | 146 | P | Pn | 01 17 37.9 | -0.7 |
| KUZ | Kuaotunu | 1.07 | 278 | P | Pn | 01 17 38.0 | -0.8 |
| MARZ | Manawahe | 1.13 | 195 | P | Pn | 01 17 39.2 | +0.2 |
| RUGZ | Raukumara Rang | 1.19 | 155 | P | Pn | 01 17 38.7 | -0.7 |
| RUGZ | | | | S | S | 01 18 09.3 | -4.1 |
| MXZ | Matakaoa Point | 1.21 | 124 | P | Pn | 01 17 38.9 | -0.5 |
| MXZ | | | | S | S | 01 18 10.7 | -2.7 |
| MXZ | Matakaoa Point | 1.21 | 124 | | Pn | 01 17 38.4 | -1.0 |
| EDRZ | Edgecumbe | 1.23 | 191 | P | Pn | 01 17 40.1 | +0.5 |
| KARZ | Kaharoa | 1.29 | 209 | P | Pn | 01 17 40.2 | +0.3 |
| KMRZ | Kaimai | 1.29 | 222 | P | Pn | 01 17 40.3 | +0.4 |
| PKGZ | Pakihiroa | 1.29 | 140 | P | Pn | 01 17 40.2 | +0.2 |
| OMRZ | Omania | 1.32 | 203 | P | Pn | 01 17 40.2 | +0.2 |
| MKRZ | Makatiti | 1.32 | 200 | P | Pn | 01 17 41.0 | +0.9 |
| URZ | Urewera 197nm,0.3s,baz=273,slow=3.6,SNR=848 | 1.36 | 178 | P | Pn | 01 17 39.6 | -0.6 |
| URZ | | | | S | S | 01 18 12.0 | -2.8 |
| | 312nm,0.3s,baz=19,slow=23,SNR=28 | | | | | | |
| URZ | Urewera | 1.36 | 178 | P | Pn | 01 17 39.7 | -0.6 |
| URZ | | | | S | S | 01 18 12.0 | -2.8 |
| URZ | Urewera | 1.36 | 178 | Pn | Pn | 01 17 39.5 | -0.7 |
| URZ | Urewera | 1.36 | 178 | P | Pn | 01 17 40.0 | -0.2 |
| NGRZ | Ngongotaha | 1.38 | 209 | P | Pn | 01 17 41.0 | +0.6 |
| TARZ | Mount Tarawera | 1.40 | 197 | P | Pn | 01 17 41.1 | +0.5 |
| GRZ | Great Barrier | 1.42 | 296 | P | Pn | 01 17 39.5 | -1.2 |
| WMGZ | Waiomatatini S | 1.44 | 130 | P | Pn | 01 17 41.0 | +0.3 |
| WMGZ | | | | S | S | 01 18 13.6 | -2.0 |
| UTU | Utuhina | 1.45 | 207 | P | Pn | 01 17 42.1 | +1.3 |
| HLRZ | Highlands Stat | 1.46 | 202 | P | Pn | 01 17 41.7 | +0.9 |
| TOZ | Tahuroa Road | 1.48 | 235 | P | Pn | 01 17 41.5 | +0.6 |
| TWGZ | Tauwhareparae | 1.48 | 150 | P | Pn | 01 17 41.7 | +0.7 |
| MWZ | Matawai | 1.49 | 165 | P | Pn | 01 17 40.9 | -0.1 |
| RRRZ | Republican Roa | 1.50 | 196 | P | Pn | 01 17 41.2 | +0.1 |
| PUZ | Puketiti | 1.52 | 141 | P | Pn | 01 17 41.4 | +0.2 |
| WIAZ | Waiheke Island | 1.53 | 273 | P | Pn | 01 17 41.0 | +0.3 |
| HSRZ | Hossack Road | 1.55 | 204 | P | Pn | 01 17 42.3 | +0.9 |
| MUGZ | Murupara | 1.59 | 188 | P | Pn | 01 17 41.4 | -0.2 |
| HRRZ | Handcock Road | 1.61 | 202 | P | Pn | 01 17 42.5 | +0.7 |
| RAGZ | Rawiri | 1.63 | 169 | P | Pn | 01 17 42.2 | +0.2 |
| GRRZ | Galatos Road | 1.63 | 207 | P | Pn | 01 17 42.5 | +0.6 |
| TKGZ | Te Karaka | 1.67 | 158 | P | Pn | 01 17 42.6 | +0.4 |
| PRRZ | Plateau Road | 1.68 | 197 | P | Pn | 01 17 42.6 | +0.4 |
| ETAZ | East Tamaki Re | 1.69 | 267 | P | Pn | 01 17 42.5 | +0.1 |
| RTZ | Ruatahuna | 1.72 | 181 | P | Pn | 01 17 42.5 | -0.1 |
| MBAZ | Motutapu North | 1.72 | 274 | P | Pn | 01 17 42.5 | 0.0 |
| ALRZ | Allen Road | 1.75 | 198 | P | Pn | 01 17 43.0 | +0.3 |
| WPRZ | Whakapapatarin | 1.77 | 203 | P | Pn | 01 17 43.2 | +0.4 |
| ABAZ | Army Bay | 1.79 | 279 | P | Pn | 01 17 43.0 | -0.1 |
| EPAZ | Eden Park BICE | 1.84 | 270 | P | Pn | 01 17 43.3 | -0.1 |
| HBAZ | Herne Bay Bore | 1.85 | 271 | P | Pn | 01 17 43.5 | 0.0 |
| KUTZ | Kaahu Road | 1.86 | 211 | P | Pn | 01 17 44.5 | +0.9 |
| TLZ | Tolley Road | 1.86 | 219 | P | Pn | 01 17 44.6 | +1.0 |
| RIGZ | Rimuhau | 1.90 | 163 | P | Pn | 01 17 44.5 | +0.7 |
| SNGZ | Shannon Statio | 1.90 | 173 | P | Pn | 01 17 44.3 | +0.5 |
| AWAZ | Awhitu Peninsu | 1.93 | 264 | P | Pn | 01 17 44.0 | 0.0 |
| MTHZ | Maungataniwha | 1.96 | 184 | P | Pn | 01 17 44.3 | 0.0 |
| WHTZ | Whakaora | 1.96 | 205 | P | Pn | 01 17 45.5 | +1.1 |
| WTAZ | Waiatarua | 1.98 | 268 | P | Pn | 01 17 44.6 | +0.1 |
| RVAZ | Riverhead Bore | 1.98 | 273 | P | Pn | 01 17 43.8 | -0.6 |
| MRHZ | Matea Rd | 2.00 | 194 | P | Pn | 01 17 44.6 | 0.0 |
| HATZ | Hinemaiaia | 2.13 | 200 | P | Pn | 01 17 45.8 | +0.2 |
| PRGZ | Paritu Road | 2.13 | 162 | P | Pn | 01 17 46.0 | +0.4 |
| KNZ | Kokohu | 2.18 | 167 | P | Pn | 01 17 46.3 | +0.4 |
| NMHZ | Naumai | 2.21 | 185 | P | Pn | 01 17 47.2 | +0.9 |
| RATZ | Rangitukua | 2.21 | 207 | P | Pn | 01 17 46.6 | +0.3 |
| RITZ | Rihia Road | 2.28 | 204 | P | Pn | 01 17 47.5 | +0.6 |
| BKZ | Black Stump Fm | 2.31 | 191 | P | Pn | 01 17 47.0 | -0.2 |
| BKZ | Black Stump Fm | 2.31 | 191 | Pn | Pn | 01 17 46.9 | -0.2 |
| BKZ | Black Stump Fm | 2.31 | 191 | P | Pn | 01 17 47.1 | 0.0 |
| KATZ | Kakaramea | 2.33 | 207 | P | Pn | 01 17 47.9 | +0.5 |
| MHGZ | Mahia Peninsul | 2.36 | 163 | P | Pn | 01 17 48.2 | +0.8 |
| ARHZ | Aropaoanui | 2.37 | 181 | P | Pn | 01 17 48.2 | +0.7 |
| HIZ | Hauiti | 2.37 | 226 | P | Pn | 01 17 48.5 | +1.0 |
| HIZ | Hauiti | 2.37 | 226 | Pn | Pn | 01 17 47.4 | -0.2 |
| HIZ | Hauiti | 2.37 | 226 | P | Pn | 01 17 48.7 | +1.2 |
| WCZ | Waipu Caves | 2.37 | 293 | P | Pn | 01 17 47.1 | -0.6 |
| NTVZ | North Tongarir | 2.45 | 206 | P | Pn | 01 17 48.9 | +0.5 |
| TMVZ | Te Maari | 2.46 | 205 | P | Pn | 01 17 48.5 | +0.1 |
| KRVZ | Karewarewa | 2.46 | 206 | P | Pn | 01 17 48.7 | +0.2 |
| ETVZ | East Tongariro | 2.47 | 205 | P | Pn | 01 17 48.9 | +0.3 |
| WTVZ | West Tongariro | 2.50 | 207 | P | Pn | 01 17 49.0 | +0.3 |
| NNVZ | North Ngauruho | 2.50 | 206 | P | Pn | 01 17 49.2 | +0.3 |
| OTVZ | Oturere | 2.51 | 205 | P | Pn | 01 17 49.2 | +0.3 |
| TWVZ | Taurewa | 2.51 | 210 | P | Pn | 01 17 49.2 | +0.3 |
| SNVZ | South Ngauruho | 2.54 | 205 | P | Pn | 01 17 49.5 | +0.2 |
| NGZ | Ngauruhoe | 2.54 | 206 | P | Pn | 01 17 49.7 | +0.4 |
| MCHZ | McNeill Hill | 2.56 | 186 | P | Pn | 01 17 49.9 | +0.7 |
| KWHZ | Kaweka Forest | 2.57 | 191 | P | Pn | 01 17 49.6 | +0.2 |
| TUVZ | Tukino | 2.61 | 204 | P | Pn | 01 17 50.0 | +0.2 |
| FWVZ | Far West T-bar | 2.63 | 206 | P | Pn | 01 17 50.1 | 0.0 |
| WHVZ | Whangaehu Hut | 2.64 | 205 | P | Pn | 01 17 50.4 | +0.2 |
| DRZ | Dome Shelter | 2.65 | 206 | P | Pn | 01 17 50.7 | +0.3 |
| TRVZ | Turoa | 2.67 | 206 | P | Pn | 01 17 50.7 | +0.2 |
| WNVZ | Wahianoa | 2.68 | 205 | P | Pn | 01 17 50.5 | 0.0 |
| BHHZ | Black Hill Sta | 2.70 | 196 | P | Pn | 01 17 50.4 | -0.1 |
| MOVZ | Moawhango | 2.71 | 202 | P | Pn | 01 17 50.3 | -0.3 |
| PKVZ | Pokaka | 2.74 | 209 | P | Pn | 01 17 51.2 | +0.3 |
| CKHZ | Cape Kidnapper | 2.76 | 179 | P | Pn | 01 17 51.5 | +0.5 |
| MTVZ | Mangateitei | 2.78 | 206 | P | Pn | 01 17 51.4 | +0.2 |
| KRHZ | Kereru | 2.79 | 191 | P | Pn | 01 17 51.3 | +0.1 |
| VRZ | Vera Road | 2.86 | 218 | P | Pn | 01 17 53.1 | +1.1 |
| KAHZ | Kahuranaki | 2.90 | 182 | P | Pn | 01 17 52.9 | +0.5 |
| PNHZ | Pukenui | 3.09 | 192 | P | Pn | 01 17 53.8 | -0.3 |
| PXZ | Pawanui | 3.13 | 182 | P | Pn | 01 17 55.0 | +0.5 |
| WPHZ | Waipukurau | 3.20 | 188 | P | Pn | 01 17 55.3 | +0.1 |
| OUZ | Omahuta | 3.25 | 300 | P | Pn | 01 17 55.1 | -0.8 |
| OUZ | Omahuta | 3.25 | 300 | Pn | Pn | 01 17 54.7 | -1.2 |
| OUZ | Omahuta | 3.25 | 300 | P | Pn | 01 17 55.1 | -0.8 |
| TSZ | Takapari Road | 3.27 | 195 | P | Pn | 01 17 55.6 | -0.4 |
| WAZ | Wanganui | 3.28 | 209 | P | Pn | 01 17 56.2 | +0.1 |
| LREZ | Lake Rotokare | 3.30 | 218 | P | Pn | 01 17 57.2 | +1.0 |
| NEZ | North Egmont | 3.32 | 223 | P | Pn | 01 17 58.3 | +1.8 |
| PKE | Pukeiti | 3.33 | 225 | P | Pn | 01 17 58.3 | +1.8 |
| PREZ | Palmer Road | 3.33 | 222 | P | Pn | 01 17 58.4 | +1.7 |
| KHEZ | Kahui Hut | 3.38 | 224 | P | Pn | 01 17 58.3 | +1.1 |
| PRHZ | Porangahau | 3.38 | 185 | P | Pn | 01 17 57.1 | 0.0 |
| NBEZ | Newall Road No | 3.44 | 226 | P | Pn | 01 17 59.9 | +2.2 |
| DVHZ | Dannevirke | 3.47 | 191 | P | Pn | 01 17 57.6 | -0.4 |
| NMEZ | Namu Road | 3.54 | 224 | P | Pn | 01 17 60.0 | +1.3 |
| OHWZ | Ohakea | 3.57 | 202 | P | Pn | 01 17 59.4 | +0.4 |
| ANWZ | Angora Road | 3.59 | 187 | P | Pn | 01 17 59.3 | +0.2 |
| POWZ | Post Office Ro | 3.63 | 195 | P | Pn | 01 17 59.2 | -0.5 |
| PRWZ | Pori Road | 3.75 | 193 | P | Pn | 01 18 00.7 | -0.1 |
| BFZ | Birch Farm | 3.83 | 189 | P | Pn | 01 18 01.5 | -0.3 |
| BFZ | Birch Farm | 3.83 | 189 | | Pn | 01 18 01.1 | -0.7 |
| BFZ | Birch Farm | 3.83 | 189 | P | Pn | 01 18 01.5 | -0.3 |
| MRZ | Mangatainoka R | 3.93 | 196 | P | Pn | 01 18 01.9 | -0.9 |
| TIWZ | Tintock | 3.98 | 193 | P | Pn | 01 18 02.5 | -0.9 |
| CPWZ | Castlepoint | 4.06 | 189 | P | Pn | 01 18 04.6 | +0.4 |
| HOWZ | Holdsworth Sta | 4.17 | 196 | P | Pn | 01 18 04.4 | -1.0 |
| OGWZ | Otaki Gorge | 4.18 | 200 | P | Pn | 01 18 04.7 | -0.8 |
| KIW | Kapiti Island | 4.29 | 202 | P | Pn | 01 18 05.8 | -1.0 |
| TMWZ | Te Maipa | 4.30 | 192 | P | Pn | 01 18 06.3 | -0.6 |
| MTW | Mount Morrison | 4.42 | 195 | P | Pn | 01 18 07.1 | -1.0 |
| CAW | Cannon Point | 4.48 | 196 | P | Pn | 01 18 07.8 | -1.0 |
| DUWZ | D'Urville Isla | 4.60 | 211 | P | Pn | 01 18 08.8 | -1.3 |
| TRWZ | Traveller | 4.62 | 193 | P | Pn | 01 18 09.7 | -0.6 |
| PAWZ | Paruwai Farm | 4.65 | 195 | P | Pn | 01 18 09.8 | -1.0 |
| MSWZ | Moikau Station | 4.72 | 197 | P | Pn | 01 18 10.3 | -1.2 |
| MSWZ | Moikau Station | 4.72 | 197 | | Pn | 01 18 10.2 | -1.4 |
| WEL | Wellington | 4.73 | 201 | P | Pn | 01 18 10.8 | -0.8 |
| SNZO | South Karori | 4.77 | 202 | Pn | Pn | 01 18 10.7 | -1.3 |
| SNZO | South Karori | 4.77 | 202 | P | Pn | 01 18 10.9 | -1.1 |
| BHW | Baring Head | 4.81 | 200 | P | Pn | 01 18 11.3 | -1.2 |
| BHW | Baring Head | 4.81 | 200 | | Pn | 01 18 11.2 | -1.3 |
| TCW | Tory Channel | 4.82 | 206 | P | Pn | 01 18 11.6 | -0.9 |
| PLWZ | Palliser | 4.87 | 196 | P | Pn | 01 18 12.1 | -1.2 |
| PLWZ | Palliser | 4.87 | 196 | | Pn | 01 18 12.2 | -1.0 |
| TUWZ | Tuamarina | 5.13 | 207 | P | Pn | 01 18 15.1 | -1.1 |
| TUWZ | Tuamarina | 5.13 | 207 | | Pn | 01 18 14.7 | -1.4 |
| NNZ | Nelson | 5.17 | 212 | P | Pn | 01 18 15.1 | -1.6 |
| NNZ | Nelson | 5.17 | 212 | | Pn | 01 18 15.1 | -1.6 |
| TKNZ | Takaka Hill | 5.29 | 216 | P | Pn | 01 18 15.2 | -1.9 |
| QRZ | Quartz Range | 5.27 | 220 | P | Pn | 01 18 15.9 | -1.9 |
| QRZ | Quartz Range | 5.27 | 220 | | Pn | 01 18 16.2 | -1.6 |
| QRZ | Quartz Range | 5.27 | 220 | P | Pn | 01 18 16.5 | -1.3 |
| CMWZ | Cape Campbell | 5.32 | 203 | P | Pn | 01 18 18.1 | -0.2 |
| CMWZ | Cape Campbell | 5.32 | 203 | | Pn | 01 18 17.9 | -0.5 |
| BSWZ | Blackbirch Sta | 5.40 | 206 | P | Pn | 01 18 18.5 | -0.8 |
| BSWZ | Blackbirch Sta | 5.40 | 206 | | Pn | 01 18 18.3 | -1.1 |
| MRNZ | Matariki Terra | 5.59 | 215 | P | Pn | 01 18 19.5 | -2.0 |
| THZ | Tophouse | 5.82 | 212 | P | Pn | 01 18 22.9 | -1.4 |
| THZ | Tophouse | 5.82 | 212 | | Pn | 01 18 23.5 | -0.8 |
| KHZ | Kahutara | 6.14 | 205 | P | Pn | 01 18 27.3 | -0.7 |
| KHZ | Kahutara | 6.14 | 205 | Pn | Pn | 01 18 27.3 | -0.7 |
| KHZ | Kahutara | 6.14 | 205 | P | Pn | 01 18 27.5 | -0.4 |
| GVZ | Greta Valley S | 6.80 | 206 | P | Pn | 01 18 35.1 | -0.8 |
| LTZ | Lake Taylor | 6.93 | 210 | P | Pn | 01 18 35.9 | -1.6 |
| LTZ | Lake Taylor | 6.93 | 210 | Pn | Pn | 01 18 36.0 | -1.4 |
| AMCZ | Amberley | 7.12 | 207 | P | Pn | 01 18 36.6 | -1.1 |
| INZ | Inchbonnie | 7.24 | 215 | P | Pn | 01 18 39.9 | -1.3 |
| OKCZ | Okains Bay | 7.47 | 203 | P | Pn | 01 18 43.3 | -0.7 |
| OXZ | Oxford | 7.48 | 209 | P | Pn | 01 18 42.3 | -1.8 |
| MQZ | McQueen's Vall | 7.58 | 205 | P | Pn | 01 18 43.5 | -1.8 |
| AKCZ | Akaroa Harbour | 7.65 | 203 | P | Pn | 01 18 45.2 | -0.9 |
| RACZ | Rakaia | 7.78 | 207 | P | Pn | 01 18 46.5 | -1.2 |
| MHCZ | Mount Hutt | 7.84 | 211 | P | Pn | 01 18 46.6 | -1.9 |
| WVZ | Waitaha Valley | 7.84 | 216 | P | Pn | 01 18 45.5 | -2.9 |
| WACZ | Wakanui South | 8.08 | 208 | P | Pn | 01 18 50.5 | -0.8 |
| RPZ | Rata Peaks | 8.20 | 212 | P | Pn | 01 18 49.9 | -3.0 |
| GCSZ | Gaunt Creek Bo | 8.22 | 217 | P | Pn | 01 18 48.8 | -4.2 |
| ARCZ | Arundel | 8.34 | 211 | P | Pn | 01 18 50.6 | -4.0 |
| TMZ | Timaru | 8.77 | 210 | P | Pn | 01 18 54.9 | -4.9 |
| ODZ | Otahua Downs | 9.46 | 209 | P | Pn | 01 19 08.2 | 0.0 |
| WKZ | Wanaka | 9.98 | 215 | P | Pn | 01 19 13.0 | -1.5 |
| HHSZ | Highcliff Hill | 10.20 | 206 | P | P | 01 19 19.0 | -1.0 |
| DZM | Mont Dzumac 1.1nm,0.3s,baz=147,slow=22,SNR=8.1 | 17.39 | 325 | P | P | 01 20 39.6 | +0.1 |
| DZM | Mont Dzumac comp=Z,18nm,1.0s | 17.39 | 325 | IAmb | IAmb | 01 20 45.1 | |
| DZM | Mont Dzumac | 17.39 | 325 | P | P | 01 20 39.9 | +0.4 |
| MSVF | Nonsavu comp=Z,2.1nm,0.3s,baz=86,slow=24,SNR=8.6 | 19.11 | 3 | P | P | 01 20 56.4 | -1.4 |
| MSVF | Nonsavu | 19.11 | 3 | P | P | 01 20 56.4 | -1.4 |
| MSVF | Nonsavu | 19.11 | 3 | P | P | 01 20 57.9 | +0.1 |
| CMSA | Cobar Meteorol | 26.39 | 272 | P | P | 01 22 07.9 | +2.4 |
| HTT | Hallett | 31.21 | 265 | P | P | 01 22 48.9 | +0.9 |
| CTA | Charters Tower | 31.63 | 293 | P | P | 01 22 53.1 | +1.4 |
| CTAO | Charters Tower comp=Z,8.4nm,0.6s | 31.63 | 293 | P | P | 01 22 52.3 | +0.6 |
| CTAO | | | | IAmb | IAmb | 01 22 53.5 | |
| CTAO | Charters Tower | 31.63 | 293 | P | P | 01 22 53.1 | +1.4 |
| LCRK | Leigh Creek | 32.78 | 270 | P | P | 01 23 03.3 | +1.8 |
| BBOO | Buckleboo | 33.69 | 265 | P | P | 01 23 10.4 | +1.1 |
| BBOO | comp=Z,16nm,1.1s | | | IAmb | IAmb | 01 23 25.8 | |
| BBOO | Buckleboo | 33.69 | 265 | P | P | 01 23 10.3 | +0.9 |
| OOD | Oodnadatta | 35.86 | 273 | P | P | 01 23 29.5 | +1.7 |
| MULG | Mulgathing | 36.17 | 268 | P | P | 01 23 31.2 | +0.8 |
| QIS | Mount Isa | 36.37 | 286 | P | P | 01 23 34.4 | +2.2 |
| COEN | Coen | 37.85 | 298 | P | P | 01 23 44.7 | +0.1 |
| COEN | Coen | 37.85 | 298 | P | P | 01 23 45.4 | +0.8 |
| AS31 | Alice Springs | 39.19 | 277 | P | P | 01 23 56.3 | +0.6 |
| ASAR | Alice Springs comp=Z,14nm,0.5s,baz=119,slow=7.9,SNR=72 | 39.19 | 277 | P | P | 01 23 56.6 | +0.9 |
| ASAR | | | | PcP | PcP | 01 25 56.8 | -1.2 |
| | comp=Z,1.4nm,0.7s,baz=117,slow=4.5,SNR=4.6 | | | | | | |
| ASAR | | | | ScP | ScP | 01 29 13.3 | -2.9 |
| | comp=Z,0.6nm,0.5s,baz=120,slow=3.9,SNR=5.0 | | | | | | |
| ASAR | | | | S | S | 01 29 33.5 | +1.2 |
| | comp=Z,2.4nm,0.8s,baz=120,slow=15,SNR=16 | | | | | | |
| ASAR | Alice Springs | 39.19 | 277 | P | P | 01 23 56.4 | +0.7 |
| FORT | Forrest | 40.78 | 264 | P | P | 01 24 08.8 | +0.3 |
| FORT | comp=Z,25nm,0.8s | | | IAmb | IAmb | 01 24 10.1 | |
| FORT | Forrest | 40.78 | 264 | P | P | 01 24 09.6 | +1.1 |
| WB2 | Warramunga Arr | 40.79 | 283 | P | P | 01 24 08.3 | -0.5 |
| WB2 | | | | IAmb | IAmb | 01 24 09.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 40.80 | 283 | P | P | 01 24 09.2 | +0.4 |
| WRA | Warramunga Arr comp=Z,7.2nm,0.4s,baz=122,slow=7.2,SNR=71 | 40.80 | 283 | P | P | 01 24 09.3 | +0.4 |
| WRA | | | | PcP | PcP | 01 26 03.0 | -0.2 |
| | comp=Z,1.2nm,0.7s,baz=121,slow=3.3,SNR=6.7 | | | | | | |
| WRA | | | | ScP | ScP | 01 29 21.0 | -1.5 |
| | comp=Z,0.8nm,0.7s,baz=116,slow=3.6,SNR=5.5 | | | | | | |
| WB0 | Warramunga Arr | 40.86 | 283 | P | P | 01 24 08.8 | -0.5 |
| WB0 | comp=Z,13nm,0.5s | | | IAmb | IAmb | 01 24 10.2 | |
| WRKA | Warakurna | 43.02 | 272 | P | P | 01 24 26.7 | +0.1 |
| KNRA | Kununurra | 47.59 | 283 | P | P | 01 25 03.0 | +0.8 |
| JAY | Jayapura comp=Z,7.3nm,0.7s,baz=141,slow=2.4,SNR=5.5 | 47.84 | 307 | P | P | 01 25 04.6 | +0.5 |
| NWAO | Narrogin (SRO) | 48.51 | 256 | P | P | 01 25 09.8 | +0.7 |
| KLBR | Kellerberrin | 48.62 | 258 | P | P | 01 25 10.6 | +0.7 |
| MUN | Mundaring | 49.67 | 257 | P | P | 01 25 18.0 | +0.2 |
| BLDU | Ballidu comp=Z,15nm,1.8s | 49.83 | 259 | P | P | 01 25 21.2 | +2.2 |
| MEEK | Meekatharra | 50.04 | 264 | P | P | 01 25 21.3 | +0.6 |
| QSPA | South Pole Qui | 53.23 | 180 | P | P | 01 25 46.5 | +2.9 |
| VNA3 | Neumayer Olymp | 72.06 | 178 | P | P | 01 27 48.1 | +1.2 |
| VNA2 | Neumayer--Watz baz=178,slow=5.2 | 72.44 | 178 | P | P | 01 27 50.6 | +1.5 |
| VNA1 | Neumayer--Stat | 72.69 | 178 | P | P | 01 27 52.2 | +1.6 |
| LL02 | Futaleuf | 78.67 | 136 | P | P | 01 28 26.4 | +1.6 |
| PLCA | Paso Flores comp=Z,3.6nm,0.7s,baz=219,slow=5.2,SNR=8.0 | 81.01 | 135 | P | P | 01 28 40.9 | +3.5 |
| PLCA | Paso Flores | 81.01 | 135 | P | P | 01 28 38.3 | +0.9 |
| PLCA | comp=Z,5.9nm,0.8s | | | IAmb | IAmb | 01 28 41.1 | |
| LC01 | Cunco | 81.45 | 133 | P | P | 01 28 41.1 | +1.5 |
| KSRS | Korea Array comp=Z,2.3nm,0.7s,baz=132,slow=5.6,SNR=7.3 | 86.81 | 323 | P | P | 01 29 07.1 | +1.0 |
| PETK | Petropavlovsk- comp=Z,2.1nm,0.5s,baz=136,slow=6.0,SNR=7.3 | 91.19 | 348 | P | P | 01 29 25.2 | -1.1 |
| CMAR | Chiang Mai Arr comp=Z,2.2nm,0.6s,baz=148,slow=3.5,SNR=9.0 | 91.78 | 292 | P | P | 01 29 30.8 | +0.9 |
| CMAR | Chiang Mai Arr | 91.78 | 292 | P | P | 01 29 30.0 | +0.2 |
| YKA | Yellowknife Ar comp=Z,0.2nm,0.3s,baz=246,slow=1.9,SNR=5.7 | 113.09 | 28 | PKiKP | PKiKP | 01 34 54.6 | -1.6 |
| MKAR | Makanchi Array comp=Z,0.4nm,0.5s,baz=142,slow=0.9,SNR=9.5 | 118.68 | 309 | PKP | PKPdf | 01 35 05.8 | -1.7 |
| MKAR | | | | PKKPab | PKKPab | 01 45 26.5 | +0.9 |
| | comp=Z,0.5nm,0.6s,baz=344,slow=2.5,SNR=7.6 | | | | | | |
| NRIK | Noril'sk comp=Z,2.5nm,0.6s,baz=125,slow=2.9,SNR=6.7 | 123.80 | 335 | PKP | PKPdf | 01 35 15.9 | -0.7 |
| ARCES | ARCESS Array B comp=Z,7.0nm,0.5s,baz=38,slow=2.9,SNR=74 | 143.84 | 343 | PKP | PKPab | 01 35 51.7 | -0.3 |
| SIRT | Sirnak | 144.10 | 285 | PKPdf | PKPbc | 01 35 54.8 | +0.3 |
| ONI | Oni | 144.21 | 294 | PKPdf | PKPdf | 01 35 56.1 | +0.6 |
| GURO | Guroymak-BITLI | 144.64 | 287 | | PKPdf | 01 35 56.8 | +0.4 |
| KBZ | Khabaz comp=Z,6.3nm,0.9s,baz=134,slow=3.9,

**WEL 05 01:45:47.1±0.8,31°S±14″×17°9E±4″0, h267km±39km, M4.1/13, mB4.6/13, MLv4.7/12, Mw(mB)3.9/13, Error ellipse: s-maj=0.1km s-min=0.0km az=108.5, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **3.01** | **58** | P | Pn | 01 46 39.4 | -1.4 |
| GLKZ | | | | S | S | 01 47 22.9 | -0.6 |
| **MXZ** | **Matakaoa Point** | **6.67** | **186** | P | Pn | 01 47 25.4 | +1.6 |
| MXZ | | | | S | S | 01 48 43.9 | +2.4 |
| **RUGZ** | **Raukumara Rang** | **7.14** | **190** | P | Pn | 01 47 30.0 | +0.2 |
| RUGZ | | | | S | S | 01 48 53.1 | +0.7 |
| **TWGZ** | **Tauwhareparae** | **7.31** | **187** | P | Pn | 01 47 34.3 | +2.5 |
| TWGZ | | | | S | S | 01 48 58.4 | +2.3 |
| **MWZ** | **Matawai** | **7.52** | **190** | P | Pn | 01 47 35.5 | +1.1 |
| MWZ | | | | S | S | 01 49 01.8 | +0.8 |
| **TKGZ** | **Te Karaka** | **7.58** | **188** | P | Pn | 01 47 36.0 | +0.9 |
| TKGZ | | | | S | S | 01 49 02.9 | +0.6 |
| **RAGZ** | **Rawiri** | **7.70** | **190** | P | Pn | 01 47 37.7 | +1.0 |
| **MUGZ** | **Murupara** | **7.80** | **194** | P | Pn | 01 47 38.9 | +1.1 |
| **RIGZ** | **Rimuhau** | **7.86** | **188** | P | Pn | 01 47 38.9 | +0.3 |
| RIGZ | | | | S | S | 01 49 09.6 | +0.9 |
| **RTZ** | **Ruatahuna** | **7.89** | **193** | P | Pn | 01 47 39.4 | +0.3 |
| **SNGZ** | **Shannon Statio** | **7.99** | **190** | P | Pn | 01 47 41.0 | +0.7 |
| SNGZ | | | | S | S | 01 49 12.1 | +0.4 |
| **MTHZ** | **Maungataniwha** | **8.14** | **193** | P | Pn | 01 47 43.3 | +1.1 |
| MTHZ | | | | S | S | 01 49 16.4 | +1.2 |
| **KNZ** | **Kokohu** | **8.18** | **188** | P | Pn | 01 47 42.5 | -0.1 |
| KNZ | | | | S | S | 01 49 16.0 | +0.1 |
| **NMHZ** | **Naumai** | **8.39** | **193** | P | Pn | 01 47 45.9 | +0.6 |
| NMHZ | | | | S | S | 01 49 23.2 | +2.3 |
| **ARHZ** | **Aropaoanui** | **8.52** | **191** | P | Pn | 01 47 46.2 | -0.7 |
| ARHZ | | | | S | S | 01 49 22.6 | -1.1 |
| **BKZ** | **Black Stump Fm** | **8.52** | **194** | P | Pn | 01 47 45.9 | -1.1 |
| BKZ | | | | S | S | 01 49 23.6 | -0.2 |
| **TMVZ** | **Te Maari** | **8.66** | **198** | P | Pn | 01 47 49.8 | +1.0 |
| **ETVZ** | **East Tongariro** | **8.68** | **198** | P | Pn | 01 47 49.6 | +0.6 |
| **OTVZ** | **Oturere** | **8.71** | **198** | P | Pn | 01 47 49.5 | 0.0 |
| **SNVZ** | **South Ngauruho** | **8.74** | **198** | P | Pn | 01 47 50.1 | +0.3 |
| **MCHZ** | **McNeill Hill** | **8.75** | **193** | P | Pn | 01 47 49.8 | +0.1 |
| MCHZ | | | | S | S | 01 49 29.6 | +0.6 |
| **KWHZ** | **Kaweka Forest** | **8.78** | **194** | P | Pn | 01 47 49.4 | -0.8 |
| KWHZ | | | | S | S | 01 49 28.4 | -1.5 |
| **TUVZ** | **Tukino** | **8.81** | **198** | P | Pn | 01 47 51.2 | +0.5 |
| **FWVZ** | **Far West T-bar** | **8.83** | **199** | P | Pn | 01 47 51.5 | +0.5 |
| **MOVZ** | **Moawhango** | **8.92** | **197** | P | Pn | 01 47 51.1 | -0.8 |
| MOVZ | | | | S | S | 01 49 32.2 | -0.9 |
| **BHHZ** | **Black Hill Sta** | **8.92** | **196** | P | Pn | 01 47 50.5 | -1.5 |
| BHHZ | | | | S | S | 01 49 31.6 | -1.6 |
| **KRHZ** | **Kereru** | **9.00** | **194** | P | Pn | 01 47 51.0 | -2.0 |
| KRHZ | | | | S | S | 01 49 32.5 | -2.4 |
| **KAHZ** | **Kahuranaki** | **9.05** | **191** | P | Pn | 01 47 51.8 | -1.8 |
| KAHZ | | | | S | S | 01 49 34.5 | -1.6 |

*AEIC **05** 01:48:41±0.1, 52.1°N±0.9×176.0°W±0.3, h102km±8km, Error ellipse: s-maj=126.4km s-min=7.5km az=167.0*
*NEIC **05** 01:48:42.6±0.2, 52°N±1′×176.0°W±0.6, h100km±11km, ML3.4/2(AEIC), Error ellipse: s-maj=220.0km s-min=3.9km az=166.0*
*IDC **05** 01:48:45.0±12.0, 52.09N×175.95W, h140km±123km, mb3.1/4, mb1 3.5/7, mb1mx3.1/45, mbtmp3.7/7, ML4.0/3, Error ellipse: s-maj=78.4km s-min=22.6km az=176.0*

**ISC 05 01:48:41.8±1.0, 52.0°N±0.2×175.99°W±0.07, h108km±9km, n29, σ0s68/23, mb3.4/4, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSIG** | **Igitkin Island** | **0.05** | **57** | | **Pn** | **01 48 56.6** | **-0.1** |
| **GSMY** | **Great Sitkin M** | **0.09** | **334** | | **Pn** | **01 48 56.4** | **-0.3** |
| **GSTD** | **Great Sitkin T** | **0.14** | **315** | | **Pn** | **01 48 56.5** | **-0.3** |
| **GSSP** | **Great Sitkin S** | **0.18** | **319** | | **Pn** | **01 48 56.6** | **-0.3** |
| **ETKA** | **Kagalaska Isla** | **0.28** | **249** | | **Pn** | **01 48 57.3** | **+0.1** |
| **ADAG** | **Mount Adagdak** | **0.38** | **273** | | **Pn** | **01 48 57.8** | **+0.1** |
| **ADK** | **Adak** | **0.44** | **260** | | **Pn** | **01 48 57.8** | **-0.1** |
| **KINC** | **Kanaga Island** | **0.70** | **268** | | **Pn** | **01 48 59.9** | **0.0** |
| **KIWB** | **Kanaga Island** | **0.73** | **262** | | **Pn** | **01 49 00.3** | **+0.1** |
| **KIKV** | **Kanaga Island** | **0.74** | **264** | | **Pn** | **01 49 00.3** | **+0.1** |
| **KIMD** | **Kanaga Island** | **0.80** | **256** | | **Pn** | **01 49 01.1** | **+0.3** |
| **KOKL** | **Mount Kliuchef** | **1.16** | **71** | | **Pn** | **01 49 04.7** | **+0.1** |
| **KOFP** | **Korovin Flat P** | **1.21** | **74** | | **Pn** | **01 49 05.5** | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.24** | **268** | | **Pn** | **01 49 05.4** | **0.0** |
| **TASE** | **Tanaga Southea** | **1.27** | **265** | | **Pn** | **01 49 05.9** | **0.0** |
| **GAEA** | **Gareloi East** | **1.72** | **265** | | **Pn** | **01 49 11.4** | **+0.3** |
| **KDAK** | **Kodiak Island** 2.4nm,0.3s,baz=255,slow=3.3,SNR=15 | **14.64** | **57** | P | **Pn** | **01 52 04.8** | **+1.5** |
| **ILAR** | **Eielson Array** 0.1nm,0.3s,baz=238,slow=10,SNR=2.9 | **19.70** | **38** | P | **P** | **01 53 00.1** | **-2.1** |
| **SEY** | **Seymchan** 1.0nm,0.3s,baz=99,slow=12,SNR=3.8 | **20.02** | **316** | P | **P** | **01 53 06.4** | **+0.7** |
| **H11N2** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=11 | **34.84** | **209** | T | T | 02 32 09.1 | |
| **H11N3** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=14 | **34.85** | **209** | T | T | 02 32 09.5 | |
| **H11N1** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=12 | **34.86** | **209** | T | T | 02 32 10.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=13,slow=74,SNR=4.9 | **36.06** | **209** | T | T | 02 33 43.0 | |
| **H11S2** | **WAKE ISLAND Hy** baz=13,slow=74,SNR=3.6 | **36.07** | **209** | T | T | 02 33 46.4 | |
| **H11S3** | **WAKE ISLAND Hy** baz=13 | **36.07** | **209** | T | T | 02 33 35.3 | |
| **PDAR** | **Pinedale Array** 0.7nm,0.5s,baz=311,slow=3.3,SNR=9.8 | **44.47** | **74** | P | **P** | **01 56 42.1** | **-0.1** |
| **TXAR** | **Lajitas Array** 0.3nm,0.8s,baz=300,slow=5.5,SNR=2.2 | **56.84** | **84** | P | **P** | **01 58 14.6** | **-0.4** |
| **WRA** | **Warramunga Arr** 0.2nm,0.6s,baz=36,slow=6.5,SNR=1.6 | **83.66** | **226** | P | **P** | **02 00 57.5** | **-0.7** |
| **ASAR** | **Alice Springs** 0.3nm,0.6s,baz=26,slow=5.4,SNR=5.5 | **87.12** | **225** | P | **P** | **02 01 15.7** | **+0.4** |

**IDC 05 02:08:20.6±4.0, 5.0°S×151.6°E, h0km, mb3.5/2, mb1 3.8/2, mb1mx2.9/38, mbtmp3.5/2, Error ellipse: s-maj=151.4km s-min=53.0km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.7nm,0.6s,baz=51,slow=10.0,SNR=8.8 | **22.40** | **227** | P | P | 02 13 20.7 | -0.3 |
| **ASAR** | **Alice Springs** 1.3nm,0.7s,baz=56,slow=9.0,SNR=15 | **25.18** | **221** | P | P | 02 13 48.1 | +0.1 |
| **TORD** | **Torodi Ar. Bea** 0.3nm,0.9s,baz=58,slow=2.9,SNR=1.9 | **149.24** | **287** | PKPbc | PKPbc | 02 28 11.8 | -0.5 |

**DJA 05 02:26:37.4±0.4, 9°S±5.5′×11°E±′, h41km±17km, M3.9/15, mb4.4/1, MLv3.7/15, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCJI** | **Pacitan** | **0.58** | **350** | P | Pn | 02 26 50.5 | +1.2 |
| **PWJI** | **Pagerwojo** | **0.91** | **35** | P | Pn | 02 26 53.8 | +0.1 |
| PWJI | | | | S | Sn | 02 27 05.8 | +0.2 |
| **UGM** | **Wanagama** | **1.13** | **319** | P | Pn | 02 26 57.4 | +0.5 |
| UGM | | | | S | Sn | 02 27 12.0 | +0.7 |
| **YOGI** | **Yogyakarta** | **1.36** | **314** | P | Pn | 02 27 00.2 | +0.3 |
| **SMRI** | **Semarang** | **1.90** | **334** | P | Pn | 02 27 07.6 | +0.2 |
| **GRJI** | **Gresik** | **2.19** | **33** | P | Pn | 02 27 11.1 | -0.3 |
| **GMJI** | **Gumukmas** | **2.20** | **77** | P | Pn | 02 27 11.1 | -0.3 |
| **UWJI** | **Ujung Watu** | **2.36** | **352** | P | Pn | 02 27 13.2 | +0.5 |
| **BLJI** | **Banyuglugur** | **2.51** | **66** | P | Pn | 02 27 15.9 | +0.2 |
| **KPJI** | **Karang Pucung** | **2.73** | **301** | P | Pn | 02 27 18.7 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.86** | **84** | P | Pn | 02 27 20.6 | +0.1 |
| **ABJI** | **Asem Bagus** | **3.08** | **72** | P | Pn | 02 27 24.1 | +0.5 |
| **SRBI** | **Singaraja** | **3.95** | **80** | P | Pn | 02 27 35.8 | +0.3 |
| **CNJI** | **Cibinong** | **4.36** | **289** | P | Pn | 02 27 40.7 | -0.4 |
| **KCSI** | **Kotacane, Aceh** | **18.18** | **312** | P | Pn | 02 30 50.8 | +3.9 |

*IDC **05** 02:28:28.5±1.2, 35.54N×3.86W, h0km, mb3.4/4, mb1 3.7/6, mb1mx3.4/42, mbtmp3.4/6, ML3.1/2, Error ellipse: s-maj=37.0km s-min=17.7km az=88.0*
*SFS **05** 02:28:29.0, 35.40N×3.80W, ML3.0, ALBORAN SUR*
*MDD **05** 02:28:29.7±0.7, 35.46N×3.85W, h0km, mbLg3.0/5, Error ellipse: s-maj=7.1km s-min=3.6km az=17.0*

*MDD EMS: II INTENSIDAD MAXIMA.*
*CNRM **05** 02:28:30.1, 35.51N×3.83W, h16km, ml3.4*
*IGIL **05** 02:28:30.5, 35.46N×3.85W, h1km, ML2.6*
*LDG **05** 02:28:30.7±0.3, 35.32N×3.79W, h10km, Ml3.0/7, Error ellipse: s-maj=6.8km s-min=3.0km az=175.0*
*INMG **05** 02:28:30.6±1.4, 35.53N×3.82W, h3km±4km, ML2.8, Error ellipse: s-maj=3.3km s-min=2.3km az=19.0*

**ISC 05 02:28:30.8±1.1, 35.51N±0.02×3.74W±0.02, h19km±3km, n121, σ1s54/193, mb3.5/4, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **210** | P | **Pg** | **02 28 37.0** | **-1.1** |
| **PALE** | **Palemas** | **0.33** | **210** | P | **Pg** | **02 29 36.8** | **-1.3** |
| PALE | | | | S | **Sg** | **02 28 41.9** | **-1.1** |
| **EMEL** | **Melilla** 400nm,0.1s,SNR=127 | **0.67** | **108** | Pg | **Pb** | **02 28 43.9** | **+0.1** |
| EMEL | | | | Lg | Lg | 02 28 52.9 | |
| **EALB** | **Alboran** 282nm,0.1s,SNR=30 | **0.72** | **53** | Pg | **Pb** | **02 28 44.7** | **0.0** |
| EALB | | | | Lg | Lg | 02 28 55.1 | |
| **AKLM** | **AKL** | **1.00** | **186** | P | **Pb** | **02 28 49.2** | **-0.4** |
| **AKLM** | **AKL** | **1.00** | **186** | P | **Pb** | **02 28 49.2** | **-0.4** |
| AKLM | | | | S | **Sb** | **02 29 02.1** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.11** | **106** | P | **Pn** | **02 28 49.7** | **-1.7** |
| CHAS | | | | S | **Sb** | **02 29 04.4** | **-1.2** |
| **EMIJ** | **Mijas** 3.8nm,0.2s,SNR=28 | **1.35** | **322** | Pg | **Pn** | **02 28 53.0** | **-1.6** |
| EMIJ | | | | Lg | Lg | 02 29 11.8 | |
| **SMIR** | **Smir Dam** | **1.35** | **278** | P | **Pn** | **02 28 54.0** | **-0.6** |
| **SMIR** | **Smir Dam** | **1.35** | **278** | P | **Pn** | **02 28 54.0** | **-0.6** |
| SMIR | | | | S | **Sn** | **02 29 09.2** | **-2.8** |
| **ELGU** | **Los Guajares,** SNR=7.9 | **1.36** | **4** | Pn | **Pn** | **02 28 53.4** | **-1.5** |
| ELGU | | | | Sn | **Sn** | **02 29 11.9** | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.37** | **254** | P | **Pn** | **02 28 55.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.37** | **254** | P | **Pn** | **02 28 54.5** | **-0.5** |
| CHEFC | | | | S | **Sn** | **02 29 12.5** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **336** | P | **Pn** | **02 28 53.7** | **-1.2** |
| EMAL | | | | S | **Sn** | **02 29 11.9** | **-0.6** |
| **ECEU** | **Ceuta** 5.0nm,0.1s,SNR=4.0 | **1.39** | **287** | Pg | **Pn** | **02 28 53.0** | **-2.2** |
| ECEU | | | | Lg | Lg | 02 29 10.6 | |
| **JBK** | **JBK** | **1.51** | **140** | P | **Pn** | **02 28 57.2** | **+0.1** |
| **JBK** | **JBK** | **1.51** | **140** | P | **Pn** | **02 28 55.9** | **-1.2** |
| JBK | | | | S | **Sn** | **02 29 15.4** | **-0.9** |
| **EBER** | **Berja** 28nm,0.3s,SNR=54 | **1.55** | **26** | Pn | **Pn** | **02 28 56.6** | **-0.9** |
| EBER | | | | Sn | **Sn** | **02 29 17.5** | **+0.3** |
| **EGOR** | **Sierra Gorda,** SNR=7.9 | **1.63** | **349** | Pn | **Pn** | **02 28 59.1** | **+0.5** |
| EGOR | | | | Sn | **Sb** | **02 29 20.7** | **+0.2** |
| **EJIF** | **Jimena Fronter** SNR=7.9 | **1.69** | **304** | Pg | **Pn** | **02 28 58.6** | **-0.7** |
| EJIF | | | | Lg | Lg | 02 29 21.9 | |
| **EQUE** | **Quentar** 0.2nm,0.1s,SNR=42 | **1.71** | **8** | Pn | **Pn** | **02 29 00.0** | **+0.3** |
| EQUE | | | | Sn | **Sn** | **02 29 21.6** | **+0.5** |
| **SICH** | **Sidi Chahed** | **1.91** | **223** | S | **Pg** | **02 29 09.0** | **+1.4** |
| **SICH** | **Sidi Chahed** | **1.91** | **223** | S | **Sn** | **02 29 26.6** | **+0.8** |
| **ENIJ** | **Nijar** 1.2nm,0.2s,SNR=7.9 | **1.91** | **40** | Pn | **Pn** | **02 29 01.2** | **-1.2** |
| ENIJ | | | | Sn | **Sn** | **02 29 25.4** | **-0.6** |
| **LIJA** | **Lijar** 154nm,0.3s,SNR=7.9 | **1.94** | **316** | P | **Pb** | **02 29 05.5** | **-0.1** |
| LIJA | | | | S | **Sb** | **02 29 30.6** | **+1.1** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pn** | **02 29 05.0** | **+0.8** |
| **LCRM** | **LCR** | **2.04** | **207** | P | **Pn** | **02 29 04.5** | **+0.2** |
| LCRM | | | | S | **Sn** | **02 29 30.4** | **+1.2** |
| **CNIL** | **Conil** | **2.07** | **295** | P | **Pg** | **02 29 09.3** | **-1.3** |
| **IFR** | **Ifrane** | **2.29** | **210** | P | **Pn** | **02 29 07.3** | **-0.4** |
| IFR | | | | S | **Sn** | **02 29 34.2** | **-1.4** |
| **EQES** | **Quesada** 7.0nm,0.3s,SNR=147 | **2.35** | **13** | Pn | **Pn** | **02 29 10.4** | **+1.9** |
| EQES | | | | Sn | **Sb** | **02 29 40.1** | **-1.2** |
| **TLOR** | **Lorca, Murcia** 10nm,0.1s,SNR=7.9 | **2.70** | **37** | Pn | **Pn** | **02 29 13.5** | **+0.2** |
| TLOR | | | | Sn | **Sn** | **02 29 45.0** | **-0.4** |
| **EADA** | **Adamuz** 0.7nm,0.2s,SNR=26 | **2.74** | **346** | Pn | **Pn** | **02 29 14.8** | **+1.1** |
| EADA | | | | Sn | **Sn** | **02 29 48.0** | **+1.7** |
| **MD31** | **MD31** | **2.77** | **198** | P | **Pn** | **02 29 14.4** | **+0.2** |
| MD31 | | | | S | **Sn** | **02 29 47.2** | **+0.1** |
| **MDT** | **Midelt** 2.2nm,0.3s,baz=168,slow=16,SNR=95 | **2.78** | **195** | Pn | **Pn** | **02 29 14.4** | **0.0** |
| MDT | | | | Sn | **Sn** | **02 29 47.3** | **-0.2** |
| **MDT** | **Midelt** | **2.78** | **195** | P | **Pn** | **02 29 14.3** | **0.0** |
| **MDT** | **Midelt** | **2.78** | **195** | P | **Pn** | **02 29 14.3** | **0.0** |
| MDT | | | | S | **Sn** | **02 29 47.2** | **-0.3** |
| **TDRA** | **Tendrara** | **2.84** | **150** | P | **Pn** | **02 29 16.3** | **+1.0** |
| TDRA | | | | S | **Sn** | **02 29 48.6** | **-0.4** |
| **EZAR** | **Zarzadilla de** 1.6nm,0.2s,SNR=7.9 | **2.88** | **34** | Pn | **Pn** | **02 29 15.6** | **-0.2** |
| EZAR | | | | Sn | **Sn** | **02 29 49.5** | **-0.3** |
| **ECAB** | **El Cabril** 0.1nm,0.1s,SNR=17 | **2.90** | **333** | Pn | **Pn** | **02 29 16.4** | **+0.5** |
| ECAB | | | | Sn | **Sn** | **02 29 52.1** | **+1.9** |
| **CART** | **Cartagena** | **3.03** | **46** | P | **Pn** | **02 29 17.8** | **+0.1** |
| CART | | | | S | **Sn** | **02 29 50.0** | **-3.3** |
| **CART** | **Cartagena** | **3.03** | **46** | P | **Pn** | **02 29 16.3** | **-1.4** |
| CART | | | | S | **Sn** | **02 29 50.5** | **-2.8** |
| **EMUR** | **La Murta** 0.4nm,0.2s,SNR=6.6 | **3.07** | **40** | Pn | **Pn** | **02 29 18.4** | **0.0** |
| EMUR | | | | Sn | **Sn** | **02 29 53.3** | **-1.3** |
| **EMIN** | **Mina Concepcio** 1.4nm,0.1s,SNR=21 | **3.27** | **315** | Pn | **Pn** | **02 29 20.5** | **-0.5** |
| EMIN | | | | Sn | **Sn** | **02 29 57.7** | **-1.5** |
| **ETRV** | **Los Montesinos** 87nm,0.3s,SNR=7.9 | **3.46** | **43** | Sn | **Sn** | **02 30 02.1** | **-1.9** |
| **ETOB** | **Tobarra** 9.9nm,0.2s,SNR=219 | **3.59** | **29** | Pn | **Pn** | **02 29 27.4** | **+2.0** |
| ETOB | | | | Sn | **Sn** | **02 30 09.8** | **+2.5** |
| **EGRO** | **El Granado** 2.0nm,0.1s,SNR=33 | **3.63** | **305** | Pn | **Pn** | **02 29 25.5** | **-0.5** |
| EGRO | | | | Sn | **Sn** | **02 30 06.5** | **-1.8** |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | *e*Pn | **Pn** | **02 29 26.6** | **-0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **02 30 09.3** | **-1.3** |
| PVAQ | | | | A | A | 02 30 10.0 | |
| **PVAQ** | **Vaqueiros** 20nm,0.4s | **3.73** | **302** | P | **Pn** | **02 29 26.5** | **-0.8** |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | P | **Pn** | **02 29 26.5** | **-0.8** |
| PVAQ | | | | S | **Sn** | **02 30 09.5** | **-1.1** |
| **AVE** | **Averroes** | **3.75** | **235** | P | **Pn** | **02 29 28.9** | **+1.2** |
| AVE | | | | S | **Sn** | **02 30 07.9** | **-3.5** |
| **PBDV** | **Barranco-do-Ve** | **3.80** | **298** | *e*Pn | **Pn** | **02 29 27.7** | **-0.7** |
| PBDV | | | | *e*Sn | **Sn** | **02 30 11.3** | **-1.2** |
| PBDV | | | | A | A | 02 30 17.4 | |
| **GOLM** | **Goulmima** 0.6nm,0.1s,SNR=7.9 | **3.93** | **195** | P | **Pn** | **02 29 31.8** | **+1.6** |
| **FIGM** | **Figuig** | **3.95** | **148** | P | **Pn** | **02 29 31.8** | **+1.4** |
| **AFON** | **Font Roja** 1.3nm,0.1s,SNR=7.9 | **4.06** | **38** | Pn | **Pn** | **02 29 34.0** | **+2.0** |
| AFON | | | | Sn | **Sn** | **02 30 19.5** | **+0.5** |
| **PAB** | **San Pablo** 0.1nm,0.1s,SNR=7.9 | **4.06** | **353** | Pn | **Pn** | **02 29 33.1** | **+1.1** |
| PAB | | | | Sn | **Sn** | **02 30 18.2** | **-0.8** |
| PAB | 0.3nm,0.1s,SNR=7.9 | | | Lg | Lg | 02 30 38.0 | |
| **PAB** | **San Pablo** 1.7nm,0.2s,SNR=4.0 | **4.06** | **353** | P | **Pn** | **02 29 33.1** | **+1.1** |
| **PCVE** | **Castro Verde** | **4.06** | **303** | *e*Pn | **Pn** | **02 29 31.2** | **-0.7** |
| PCVE | | | | *e*Sn | **Sn** | **02 30 18.4** | **-0.5** |
| PCVE | | | | A | A | 02 30 29.6 | |
| **PBEJ** | **Beja** 11nm,0.9s | **4.16** | **308** | *e*Pn | **Pn** | **02 29 33.0** | **-0.3** |
| PBEJ | | | | *e*Sn | **Sn** | **02 30 20.5** | **-0.9** |
| PBEJ | | | | A | A | 02 30 27.3 | |
| **ESDC** | **Sonseca Array** 0.7nm,0.3s,baz=181,slow=12,SNR=30 | **4.16** | **358** | Pn | **Pn** | **02 29 34.5** | **+1.1** |
| ESDC | | | | Lg | Lg | 02 30 38.8 | |
| **ESDC** | **Sonseca Array** 1.9nm,0.3s,baz=178,slow=13,SNR=195 | **4.16** | **358** | Pn | **Pn** | **02 29 34.8** | **+1.4** |
| **EBAD** | **Badajoz** 0.7nm,0.1s,SNR=18 | **4.17** | **322** | Pn | **Pn** | **02 29 33.1** | **-0.2** |
| EBAD | | | | Sn | **Sn** | **02 30 20.0** | **-1.5** |
| **MESJ** | **Messejana** 19nm,0.2s,SNR=7.9 | **4.29** | **304** | *e*P | **Pn** | **02 29 34.3** | **-0.7** |
| MESJ | | | | *e*S | **Sn** | **02 30 20.8** | **-3.7** |
| MESJ | | | | IAML | | 02 30 24.3 | |
| **MESJ** | **Messejana** comp=E,12nm,0.5s | **4.29** | **304** | *e*Pn | **Pn** | **02 29 34.5** | **-0.5** |
| MESJ | | | | *e*Sn | **Sn** | **02 30 25.5** | **+1.0** |
| MESJ | | | | A | A | 02 30 31.2 | |
| **PFVI** | **Vila Bisbo** comp=E,13nm,0.4s | **4.42** | **293** | *e*Pn | **Pn** | **02 29 37.0** | **+0.2** |
| PFVI | | | | *e*Sn | **Sn** | **02 30 25.6** | **-2.1** |
| PFVI | | | | A | A | 02 30 31.1 | |
| **PFVI** | **Vila Bisbo** comp=E,18nm,0.6s | **4.42** | **293** | Pn | **Pn** | **02 29 36.8** | **0.0** |
| PFVI | comp=E,1.7nm,0.2s,SNR=4.0 | | | Sn | **Sn** | **02 30 25.4** | **-2.3** |
| **PFVI** | **Vila Bisbo** comp=E,3.2nm,0.1s,SNR=7.9 | **4.42** | **293** | P | **Pn** | **02 29 36.4** | **-0.4** |
| **PTEO** | **Sao Teotonio** | **4.50** | **298** | *e*Pn | **Pn** | **02 29 37.7** | **-0.2** |
| PTEO | | | | *e*Sn | **Sn** | **02 30 29.3** | **-0.4** |
| PTEO | | | | A | A | 02 30 45.1 | |
| **PESTR** | **Estremoz** comp=E,13nm,0.8s | **4.55** | **319** | *e*Pn | **Pn** | **02 29 38.7** | **0.0** |
| PESTR | | | | *e*Sn | **Sn** | **02 30 29.6** | **-1.4** |
| PESTR | | | | A | A | 02 30 42.0 | |
| **PESTR** | **Estremoz** comp=E,8.8nm,1.3s | **4.55** | **319** | P | **Pn** | **02 29 38.7** | **0.0** |
| **EVO** | **Evora** | **4.56** | **313** | P | **Pn** | **02 29 38.6** | **-0.1** |
| EVO | | | | S | **Sn** | **02 30 27.9** | **-3.4** |
| **EVO** | **Evora** | **4.56** | **313** | *e*Pn | **Pn** | **02 29 38.5** | **-0.3** |
| EVO | | | | *e*Sn | **Sn** | **02 30 29.2** | **-2.1** |
| EVO | | | | A | A | 02 30 34.2 | |
| **ECHE** | **Chera** comp=E,8.7nm,0.5s | **4.63** | **28** | Pn | **Pn** | **02 29 41.9** | **+2.1** |
| ECHE | comp=E,0.1nm,0.1s,SNR=4.0 | | | Sn | **Sn** | **02 30 32.8** | **-0.2** |
| **PNCL** | **Nicolau / Gran** comp=E,0.4nm,0.2s,SNR=7.9 | **4.64** | **305** | *e*Pn | **Pn** | **02 29 39.3** | **-0.6** |
| PNCL | | | | *e*Sn | **Sn** | **02 30 31.8** | **-1.4** |
| PNCL | | | | A | A | 02 30 36.6 | |
| **UCM** | **Universidad Co** comp=E,8.0nm,0.7s | **4.81** | **4** | P | **Pn** | **02 29 45.5** | **+3.3** |
| UCM | | | | S | **Sn** | **02 30 37.0** | **-0.3** |
| **PMRV** | **Marv??o** | **4.88** | **324** | *e*Pn | **Pn** | **02 29 43.3** | **+0.2** |
| PMRV | | | | *e*Sn | **Sn** | **02 30 37.2** | **-1.8** |
| PMRV | | | | A | A | 02 30 49.7 | |
| **EPLA** | **Plasencia** comp=E,12nm,0.6s | **4.91** | **338** | Pn | **Pn** | **02 29 44.8** | **+1.2** |
| EPLA | comp=E,1.1nm,0.2s,SNR=8.2 | | | Sn | **Sn** | **02 30 39.5** | **-0.5** |
| **PMTG** | **Montargil** comp=E,0.5nm,0.1s,SNR=7.9 | **5.04** | **316** | *e*Pn | **Pn** | **02 29 45.3** | **-0.1** |
| PMTG | | | | *e*Sn | **Sn** | **02 30 41.0** | **-2.1** |
| PMTG | | | | A | A | 02 30 56.0 | |
| **OUZM** | **OUZ** comp=E,7.4nm,0.4s | **5.24** | **210** | P | **Pn** | **02 29 50.0** | **+1.8** |
| **OUZM** | **OUZ** | **5.24** | **210** | P | **Pn** | **02 29 48.9** | **+0.7** |
| **PCBR** | **Castelo Branco** | **5.24** | **327** | *e*Pn | **Pn** | **02 29 48.6** | **+0.5** |
| PCBR | | | | *e*Sn | **Sn** | **02 30 46.1** | **-1.9** |
| PCBR | | | | A | A | 02 30 57.3 | |
| **EIBI** | **Ibiza** comp=E,9.0nm,0.4s | **5.36** | **48** | Pn | **Pn** | **02 29 49.8** | **0.0** |
| EIBI | comp=E,3.2nm,0.2s,SNR=15 | | | Sn | **Sn** | **02 30 47.6** | **-3.3** |
| **ETOR** | **Torete** comp=E,7.9nm,0.3s,SNR=7.9 | **5.47** | **14** | Pn | **Pn** | **02 29 53.9** | **+2.7** |
| **EMOS** | **Mosqueruela** comp=E,2.1nm,0.1s,SNR=15 | **5.49** | **27** | Pn | **Pn** | **02 29 54.5** | **+2.7** |
| **PMAFR** | **Mafra** comp=E,0.1nm,0.1s,SNR=7.9 | **5.61** | **310** | *e*Pn | **Pn** | **02 29 53.1** | **0.0** |
| PMAFR | | | | *e*Sn | **Sn** | **02 30 55.7** | **-1.3** |
| PMAFR | | | | A | A | 02 31 06.1 | |
| **PMAFR** | **Mafra** comp=E,20nm,0.6s | **5.61** | **310** | Pn | **Pn** | **02 29 53.2** | **+0.1** |
| **PSBE** | **So Bento** comp=E,1.9nm,0.2s,SNR=7.9 | **5.67** | **316** | *e*Pn | **Pn** | **02 29 54.4** | **+0.4** |
| PSBE | | | | *e*Sn | **Sn** | **02 30 57.4** | **-1.2** |
| **MTE** | **Manteigas** comp=E,3.5nm,0.2s,SNR=7.9 | **5.74** | **330** | *e*Pn | **Pn** | **02 29 55.5** | **+0.5** |
| MTE | | | | *e*Sn | **Sn** | **02 30 58.0** | **-2.3** |
| **PCAS** | **Casmilo, Conde** | **5.90** | **322** | *e*Pn | **Pn** | **02 29 59.5** | **+2.3** |
| PCAS | | | | *e*Sn | **Sn** | **02 31 01.4** | **-2.8** |
| **COI** | **Coimbra** | **5.97** | **323** | *e*Pn | **Pn** | **02 29 58.4** | **+0.2** |
| **PVIS** | **Viseu** | **6.15** | **329** | *e*Pn | **Pn** | **02 30 01.3** | **+0.7** |
| PVIS | | | | *e*Sn | **Sn** | **02 31 08.4** | **-1.9** |
| PVIS | | | | A | A | 02 31 12.5 | |
| **MVO** | **Moncorvo** comp=E,5.9nm,0.7s | **6.21** | **336** | *e*Pn | **Pn** | **02 30 02.3** | **+0.8** |
| MVO | | | | *e*Sn | **Sn** | **02 31 10.0** | **-2.0** |
| MVO | | | | A | A | 02 31 15.2 | |
| **MVO** | **Moncorvo** comp=E,7.4nm,0.2s comp=E,4.0nm,0.2s,SNR=11 | **6.21** | **336** | Pn | **Pn** | **02 30 02.5** | **+1.0** |
| MVO | | | | Sn | **Sn** | **02 31 10.1** | **-2.0** |
| **ERTA** | **Horta de San J** comp=E,0.6nm,0.2s,SNR=7.9 | **6.31** | **29** | Pn | **Pn** | **02 30 05.0** | **+2.2** |
| **PVRL** | **Vila Real** comp=E,0.2nm,0.1s,SNR=12 | **6.55** | **333** | *e*Pn | **Pn** | **02 30 05.2** | **-0.9** |
| PVRL | | | | *e*Sn | **Sn** | **02 31 18.4** | **-1.9** |
| PVRL | | | | A | A | 02 31 19.4 | |
| **POLO** | **Lamas de Olo** comp=E,9.8nm,0.3s | **6.67** | **333** | *e*Pn | **Pn** | **02 30 08.3** | **+0.5** |
| **PBRG** | **Braganca** | **6.71** | **340** | *e*Pn | **Pn** | **02 30 09.3** | **+0.9** |
| PBRG | | | | *e*Sn | **Sn** | **02 31 23.2** | **-1.1** |
| **ETOS** | **Mallorca** comp=E,4.8nm,0.3s,SNR=18 | **6.71** | **49** | Pn | **Pn** | **02 30 08.7** | **+0.4** |
| **PTO** | **Porto** | **6.80** | **327** | *e*Pn | **Pn** | **02 30 10.0** | **+0.5** |
| **ELOB** | **Lobios** SNR=7.9 | **7.19**

**PDAR Pinedale Array 76.86 313 P P 02 40 21.8 0.0**
comp=E,0.5nm,0.7s,baz=55,slow=6.7,SNR=4.8

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**IDC 05 03:00:52.4±3.9, 6°26'S×153°09'E, h0km, mb3.2/2, mb1 3.5/2, mb1mx3.2/30, mbtmp3.3/2, MS2.9/1, Ms1 2.9/1, ms1mx2.3/23, Error ellipse: s-maj=181.6km s-min=52.2km az=125.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **15.26** | **205** | LR | LR | 03 09 19.5 | |
| | comp=Z,44nm,19.4s,baz=98,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.73** | **231** | P | P | 03 05 56.9 | +0.7 |
| | 0.6nm,0.9s,baz=56,slow=10,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **25.29** | **225** | P | P | 03 06 19.9 | -0.9 |
| | 0.3nm,0.4s,baz=60,slow=9.2,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.00** | **286** | PKPbc | PKPbc | 03 20 48.4 | 0.0 |
| | 0.6nm,0.7s,baz=88,slow=1.8,SNR=4.2 | | | | | | |

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**IDC 05 03:21:49.5±4.0, 5°79'S×152°61'E, h0km, mb3.5/2, mb1 3.9/2, mb1mx3.4/41, mbtmp3.6/2, Error ellipse: s-maj=168.7km s-min=52.7km az=122.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.66** | **230** | P | P | 03 26 52.2 | -0.4 |
| | 1.3nm,0.6s,baz=53,slow=9.7,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **25.30** | **223** | P | P | 03 27 18.0 | 0.0 |
| | 0.9nm,0.6s,baz=60,slow=8.8,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.42** | **286** | PKPbc | PKPbc | 03 41 44.1 | 0.0 |
| | 0.2nm,0.6s,baz=69,slow=2.9,SNR=1.2 | | | | | | |

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*NNC **05** 03:32:19.8±8.4, 38°.09N×72°.07E, h0km±48km, mb4.7, mpv4.7, Error ellipse: s-maj=41.1km s-min=22.2km az=175.0*
*BJI **05** 03:32:20.9±0.0, 38°.06N×72°.56E, h51km, mb4.2/25, mB4.5/15, ML4.4/5, Ms4.1/10, Ms7 3.7/11*
*MOS **05** 03:32:20.4±2.0, 38°.02N×72°.59E, h29km, mb4.5/20, Error ellipse: s-maj=6.7km s-min=4.0km az=88.3*
*IDC **05** 03:32:20.9±4.2, 37°.89N×72°.66E, h33km±30km, mb3.8/15, mb1 4.0/22, mb1mx3.7/55, mbtmp4.0/22, ML3.7/7, MS3.4/26, Ms1 3.4/26, ms1mx3.2/92, Error ellipse: s-maj=22.0km s-min=14.3km az=14.0*
*NEIC **05** 03:32:24.1±2.1, 37°.95N±0°.04×72°.53E±0°.07, h57km±7km, mb4.4/18, Error ellipse: s-maj=8.4km s-min=4.4km az=68.0*

**ISC 05 03:32:19.0±0.3, 37°97N±0°03×72°60E±0°03, h10km, n214, σ2s 49/197, mb4.3/42, MS3.5/25, 18C-13D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAR** | **Garm** | **2.06** | **301** | | **Pn** | **03 32 54.5** | **+0.6** |
| **BTK** | **Batken** | **2.51** | **327** | PN | **Pn** | **03 33 02.5** | **+2.6** |
| **BTK** | **Batken** | **2.51** | **327** | | **Pn** | **03 33 02.5** | **+2.6** |
| **CHGR** | **Chuyangaron** | **2.79** | **285** | | **Pn** | **03 33 05.0** | **+1.1** |
| **KSH** | **Kashi** | **3.06** | **59** | P | **Pn** | **03 33 05.3** | **-2.3** |
| KSH | | | | S | **Sn** | **03 33 38.2** | **-6.2** |
| KSH | | | | *s*max | *s*max | | |
| | comp=N,4μm,1.1s | | | | | | |
| KSH | | | | *s*max | *s*max | | |
| | comp=E,6μm,1.0s | | | | | | |
| **CEP** | **Cherat** | **4.17** | **188** | P | **Pn** | **03 33 27.4** | **+4.5** |
| CEP | | | | S | **Sn** | **03 34 19.0** | **+7.2** |
| **TAS** | **Tashkent** | **4.21** | **324** | PN | **Pn** | **03 33 26.3** | **+3.0** |
| **TAS** | **Tashkent** | **4.21** | **324** | Pn | **Pn** | **03 33 26.3** | **+3.0** |
| **AML** | **Almayashu** | **4.25** | **11** | P | **Pn** | **03 33 26.3** | **+2.2** |
| | SNR=134 | | | | | | |
| **CHCP** | **Chirah Chowk** | **4.33** | **173** | P | **Pn** | **03 33 29.0** | **+4.0** |
| **NIL** | **Nilore** | **4.34** | **173** | PN | **Pn** | **03 33 28.5** | **+3.4** |
| **NIL** | **Nilore** | **4.34** | **173** | Pn | **Pn** | **03 33 28.5** | **+3.4** |
| **KBL** | **Kabul** | **4.46** | **221** | PN | **Pn** | **03 33 30.2** | **+3.3** |
| **KBL** | **Kabul** | **4.46** | **221** | Pn | **Pn** | **03 33 30.2** | **+3.3** |
| **UCH** | **Uchtor** | **4.50** | **18** | P | **Pn** | **03 33 30.2** | **+2.5** |
| | SNR=32 | | | | | | |
| **IUG** | **Iuzhnay** | **4.62** | **336** | *e*PN | **Pb** | **03 33 42.7** | **+2.6** |
| **IUG** | **Iuzhnay** | **4.62** | **336** | *e*Pg | **Pb** | **03 33 42.8** | **+2.6** |
| | baz=336 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.78** | **11** | P | **Pn** | **03 33 33.7** | **+2.6** |
| | SNR=19 | | | | | | |
| **AAK** | **Ala-Archa** | **4.89** | **17** | Pn | **Pn** | **03 33 35.6** | **+2.9** |
| | 3.3nm,0.3s,baz=196,slow=7.7,SNR=67 | | | | | | |
| AAK | | | | LR | LR | 03 35 17.7 | |
| | comp=Z,48nm,20.8s,baz=218,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **4.89** | **17** | P | **Pn** | **03 33 35.6** | **+2.9** |
| | SNR=28 | | | | | | |
| **AAK** | **Ala-Archa** | **4.89** | **17** | PN | **Pn** | **03 33 35.0** | **+2.3** |
| AAK | | | | S | **Sb** | **03 34 48.6** | **+4.9** |
| **AAK** | **Ala-Archa** | **4.89** | **17** | ⇓Pn | **Pn** | **03 33 35.1** | **+2.3** |
| | 125nm,0.7s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 03 34 55.1 | |
| | 214nm,0.9s | | | | | | |
| **DZA** | **Taraz** | **5.01** | **349** | *e*PN | **Pb** | **03 33 50.0** | **+3.1** |
| **DZA** | **Taraz** | **5.01** | **349** | *e*Pg | **Pb** | **03 33 50.0** | **+3.1** |
| | baz=350 | | | | | | |
| **KBK** | **Karagaybulak** | **5.02** | **20** | P | **Pn** | **03 33 38.5** | **+3.9** |
| | SNR=7.7 | | | | | | |
| **FRU1** | **Bishkek** | **5.08** | **17** | PN | **Pn** | **03 33 38.7** | **+3.4** |
| **FRU1** | **Bishkek** | **5.08** | **17** | Pn | **Pn** | **03 33 38.7** | **+3.4** |
| **ULHL** | **Ulahol** | **5.11** | **32** | P | **Pb** | **03 33 51.0** | **+2.4** |
| | SNR=8.4 | | | | | | |
| **BOOM** | **Boomskoye usch** | **5.19** | **28** | PN | **Pn** | **03 33 40.4** | **+3.4** |
| **BOOM** | **Boomskoye usch** | **5.19** | **28** | Pn | **Pn** | **03 33 40.4** | **+3.4** |
| **THW** | **Thamme Wali** | **5.21** | **188** | P | **Pn** | **03 33 39.4** | **+2.4** |
| **CHMS** | **Chumysh** | **5.29** | **17** | P | **Pn** | **03 33 40.9** | **+2.7** |
| | SNR=16 | | | | | | |
| **KK02** | **Karatay Array** | **5.37** | **343** | ⇓Pn | **Pn** | **03 33 40.6** | **+1.4** |
| | 18nm,0.4s,baz=164,slow=12 | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 03 35 03.8 | |
| | 173nm,0.9s,baz=175,slow=27 | | | | | | |
| **KKAR** | **Karatay Array** | **5.37** | **343** | PN | **Pn** | **03 33 40.7** | **+1.5** |
| **KKAR** | **Karatay Array** | **5.37** | **343** | Pn | **Pn** | **03 33 40.7** | **+1.5** |
| **KDJ** | **Kajisay** | **5.45** | **39** | PN | **Pn** | **03 33 44.2** | **+3.8** |
| **KDJ** | **Kajisay** | **5.45** | **39** | | **Pn** | **03 33 44.2** | **+3.8** |
| **TKM2** | **Tokmak 2** | **5.45** | **24** | P | **Pn** | **03 33 43.4** | **+2.9** |
| | SNR=13 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.45** | **24** | PN | **Pn** | **03 33 42.8** | **+2.3** |
| TKM2 | | | | S | **Sb** | **03 35 02.5** | **+2.5** |
| **TKM2** | **Tokmak 2** | **5.45** | **24** | ⇓Pn | **Pn** | **03 33 42.8** | **+2.3** |
| | 48nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 03 35 14.6 | |
| | 174nm,1.2s | | | | | | |
| **BRLS** | **Borolday** | **5.48** | **338** | *e*PN | **Pn** | **03 33 37.5** | **-3.2** |
| BRLS | | | | *e* | | 03 33 55.9 | |
| **BRLS** | **Borolday** | **5.48** | **338** | *e*Pn | **Pn** | **03 33 37.6** | **-3.2** |
| | baz=336 | | | | | | |
| BRLS | | | | *e*Pg | **Pb** | **03 33 55.9** | **+1.1** |
| | baz=336 | | | | | | |
| **USP** | **Ospenovka** | **5.49** | **15** | P | **Pn** | **03 33 43.0** | **+2.1** |
| | SNR=7.9 | | | | | | |
| **SGDS** | **Sogindy** | **5.69** | **15** | *e*Pg | Pb | 03 34 02.7 | +4.3 |
| | baz=16 | | | | | | |
| **TNSS** | **Tian-Shan** | **6.05** | **32** | *e*Pg | Pb | 03 34 10.2 | +5.4 |
| | baz=33 | | | | | | |
| **KNDC** | **Almaty** | **6.21** | **31** | ⇑P | Pn | 03 33 55.7 | +4.9 |
| | 146nm,0.8s | | | | | | |
| **PRZ** | **Przheval'sk** | **6.33** | **43** | PN | **Pn** | **03 33 55.6** | **+3.0** |
| **PRZ** | **Przheval'sk** | **6.33** | **43** | | **Pn** | **03 33 55.6** | **+3.0** |
| **KUU** | **Kurty** | **6.56** | **24** | *e*PN | **Pn** | **03 33 55.5** | **-0.1** |
| **KUU** | **Kurty** | **6.56** | **24** | *e*Pn | **Pn** | **03 33 55.5** | **-0.1** |
| | baz=25 | | | | | | |
| **ZHN** | **Zhinishke** | **6.84** | **39** | *e*PN | **Pn** | **03 34 00.1** | **+0.7** |
| **ZHN** | **Zhinishke** | **6.84** | **39** | *e*Pn | **Pn** | **03 34 00.2** | **+0.7** |
| | baz=40 | | | | | | |
| **BTLS** | **Baital** | **7.15** | **8** | *e*Pg | Pb | 03 34 29.6 | +6.4 |
| | baz=8.9 | | | | | | |
| **PDGK** | **Podgornoye** | **7.49** | **42** | P | **Pn** | **03 34 11.0** | **+2.5** |
| **PDGK** | **Podgornoye** | **7.49** | **42** | ⇑Pn | **Pn** | **03 34 11.0** | **+2.5** |
| | 18nm,0.7s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 03 36 24.0 | |
| | 129nm,1.1s | | | | | | |
| **TDK** | **Taldyqorghan** | **8.27** | **30** | *e*Pg | Pg | 03 34 50.9 | -6.4 |
| | baz=31 | | | | | | |
| **HRA** | **Herat** | **9.10** | **250** | Pn | **Pn** | **03 34 32.8** | **+2.2** |
| **NDI** | **New Delhi** | **10.03** | **156** | *e*P | Pn | 03 34 49.0 | +5.8 |
| NDI | | | | *e*S | **Sn** | **03 36 31.0** | **-4.8** |
| **OTUK** | **Ortayu** | **10.28** | **359** | P | **Pn** | **03 34 45.6** | **-0.9** |
| **OTUK** | **Ortayu** | **10.28** | **359** | ⇑Pn | **Pn** | **03 34 45.7** | **-0.9** |
| | 7.2nm,0.7s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 03 37 38.4 | |
| | 27nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **11.22** | **35** | P | **Pn** | **03 35 03.2** | **+3.7** |
| **MAKZ** | **Makanchi** | **11.22** | **35** | ⇓P | **Pn** | **03 35 03.3** | **+3.7** |
| | 15nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **11.22** | **35** | Pn | **Pn** | **03 35 02.1** | **+2.6** |
| **MK31** | **Makanchi Array** | **11.36** | **36** | *e*P | **Pn** | **03 35 04.2** | **+2.9** |
| **MK31** | **Makanchi Array** | **11.36** | **36** | ⇑P | **Pn** | **03 35 04.2** | **+2.9** |
| | 5.2nm,0.7s,baz=224,slow=13,SNR=29 | | | | | | |
| **MK31** | **Makanchi Array** | **11.36** | **36** | Pn | **Pn** | **03 35 03.5** | **+2.2** |
| **MKAR** | **Makanchi Array** | **11.36** | **36** | Pn | **Pn** | **03 35 03.4** | **+2.1** |
| | 0.2nm,0.3s,baz=230,slow=15,SNR=24 | | | | | | |
| MKAR | | | | Lg | Lg | 03 38 15.5 | |
| | 0.1nm,0.3s,baz=229,slow=28,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.36** | **36** | *i* P | **Pn** | **03 35 03.7** | **+2.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **11.36** | **36** | | **Pn** | **03 35 03.2** | **+1.9** |
| **GEYT** | **Alibeck** | **11.43** | **274** | Pn | **Pn** | **03 35 01.0** | **-1.4** |
| | comp=Z,2.2nm,0.3s,baz=104,slow=10,SNR=8.4 | | | | | | |
| GEYT | | | | LR | LR | 03 40 42.9 | |
| | comp=Z,81nm,20.8s,baz=132,slow=44 | | | | | | |
| **GEYT** | **Alibeck** | **11.43** | **274** | Pn | **Pn** | **03 35 02.1** | **-0.3** |
| **GYA0** | **ALIBECK ARRAY** | **11.43** | **274** | P | **Pn** | **03 35 01.3** | **-1.1** |
| GYA0 | | | | S | **Sn** | **03 37 03.3** | **-6.9** |
| **GYA0B** | **ALIBECK ARRAY** | **11.43** | **274** | ⇓P | **Pn** | **03 35 01.4** | **-1.1** |
| GYA0B | | | | ⇓S | **Sn** | **03 37 03.4** | **-6.8** |
| **GYA0B** | **ALIBECK ARRAY** | **11.43** | **274** | | **Pn** | **03 35 02.3** | **-0.1** |
| **BRZS** | **Berezniki** | **12.01** | **0** | *e*P | **Pn** | **03 35 08.9** | **-1.3** |
| **BRZS** | **Berezniki** | **12.01** | **0** | *e*Pn | **Pn** | **03 35 08.9** | **-1.3** |
| | baz=0.5 | | | | | | |
| **WMQ** | **Urumqi** | **12.83** | **58** | *e*P | **Pn** | **03 35 23.2** | **+1.7** |
| WMQ | | | | pP | | 03 35 33.7 | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,120nm,15.1s | | | | | | |
| **PYUN** | **Piuthan** | **13.14** | **135** | *e*P | Pn | 03 35 21.2 | -4.7 |
| | comp=Z,13nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.34** | **17** | Pn | **Pn** | **03 35 26.8** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=209,slow=12,SNR=15 | | | | | | |
| KURBB | | | | Lg | Lg | 03 39 22.6 | |
| | comp=Z,0.0nm,0.3s,baz=203,slow=28,SNR=4.8 | | | | | | |
| KURBB | | | | LR | LR | 03 40 59.9 | |
| | comp=Z,85nm,21.1s,baz=189,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.34** | **17** | P | **Pn** | **03 35 26.7** | **-1.6** |
| **KURBB** | **Kurchatov Arra** | **13.34** | **17** | ⇑P | **Pn** | **03 35 32.3** | **+4.0** |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **DANN** | **Dangsing** | **13.38** | **132** | *e*P | Pn | 03 35 24.4 | -4.9 |
| | comp=Z,16nm,0.3s | | | | | | |
| **JHNI** | **Jhansi** | **13.45** | **156** | *e*P | **Pn** | **03 35 27.8** | **-2.1** |
| JHNI | | | | *e*S | Sn | 03 37 48.4 | -11 |
| **KURK** | **Kurchatov** | **13.45** | **17** | P | **Pn** | **03 35 28.2** | **-1.6** |
| **KURK** | **Kurchatov** | **13.45** | **17** | ⇓P | **Pn** | **03 35 32.3** | **+2.5** |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **13.45** | **17** | Pn | **Pn** | **03 35 28.2** | **-1.6** |
| **SEM** | **Semipalatinsk** | **13.59** | **21** | *e*P | **Pn** | **03 35 30.5** | **-1.4** |
| **SEM** | **Semipalatinsk** | **13.59** | **21** | *e*Pn | **Pn** | **03 35 30.5** | **-1.4** |
| | baz=22 | | | | | | |
| **KOLN** | **Koldanda** | **13.73** | **135** | *e*P | Pn | 03 35 29.8 | -4.2 |
| | comp=Z,9.6nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.16** | **131** | *e*P | Pn | 03 35 34.2 | -5.6 |
| | comp=Z,8.0nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.51** | **325** | *e*P | **Pn** | **03 35 41.7** | **-2.7** |
| **AB31** | **Akbulak array** | **14.51** | **325** | ⇓Pn | **Pn** | **03 35 41.9** | **-2.5** |
| | comp=Z,3.9nm,0.6s,baz=154,slow=11,SNR=86 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **03 38 19.4** | **-5.8** |
| | comp=Z,12nm,0.8s,baz=142,slow=21,SNR=5.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **14.51** | **325** | Pn | **Pn** | **03 35 41.7** | **-2.7** |
| **KKN** | **Kakani** | **14.70** | **130** | *e*P | Pn | 03 35 41.4 | -5.9 |
| | comp=Z,50nm,0.7s | | | | | | |
| **DMN** | **Daman** | **14.73** | **131** | *e*P | Pn | 03 35 42.1 | -5.6 |
| | comp=Z,4.6nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **14.94** | **130** | *e*P | Pn | 03 35 44.5 | -6.1 |
| | comp=Z,11nm,0.2s | | | | | | |
| **GUN** | **Gumba** | **14.98** | **128** | *e*P | Pn | 03 35 44.9 | -6.3 |
| | comp=Z,8.3nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.14** | **355** | Pn | **Pn** | **03 35 51.0** | **-1.8** |
| | comp=Z,0.7nm,0.3s,baz=128,slow=12,SNR=30 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.14** | **355** | P | **Pn** | **03 35 51.0** | **-1.8** |
| **BRVK** | **Borovoye** | **15.18** | **355** | *i* P | **Pn** | **03 35 51.1** | **-2.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **15.18** | **355** | ⇓P | **Pn** | **03 35 50.5** | **-2.9** |
| | comp=Z,20nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **15.18** | **355** | Pn | **Pn** | **03 35 50.3** | **-3.1** |
| BRVK | | | | lAmb | lAmb | 03 36 08.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **JIRN** | **Jiri** | **15.35** | **128** | *e*P | Pn | 03 35 49.8 | -6.3 |
| | comp=Z,17nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **15.85** | **38** | *i* P | **Pn** | **03 36 04.5** | **+2.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **16.11** | **129** | *e*P | **Pn** | **03 36 00.7** | **-5.2** |
| | comp=Z,54nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.23** | **325** | Pn | **Pn** | **03 36 05.8** | **-1.2** |
| | comp=Z,0.4nm,0.3s,baz=134,slow=15,SNR=14 | | | | | | |
| AKTO | | | | LR | LR | 03 42 18.9 | |
| | comp=Z,82nm,21.0s,baz=141,slow=37 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.23** | **325** | P | **Pn** | **03 36 07.2** | **+0.2** |
| AKTO | | | | S | **Sn** | **03 38 58.1** | **-8.9** |
| **AKTO** | **Aktyubinsk** | **16.23** | **325** | ⇑Pn | **Pn** | **03 36 07.3** | **+0.2** |
| | comp=Z,34nm,0.8s | | | | | | |
| AKTO | | | | ⇓Sn | **Sn** | **03 39 04.4** | **-2.6** |
| | comp=Z,15nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **16.53** | **125** | *e*P | **Pn** | **03 36 10.6** | **-0.7** |
| | comp=Z,26nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **16.67** | **127** | *e*P | Pn | 03 36 07.2 | -5.8 |
| | comp=Z,7.7nm,0.1s | | | | | | |
| **GOMU** | **GeErMu** | **17.81** | **89** | P | **Pn** | **03 36 25.6** | **-1.8** |
| GOMU | | | | pP | sP | 03 36 37.7 | +3.5 |
| GOMU | | | | sP | pP | 03 36 43.1 | +11 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,120nm,5.3s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **18.06** | **24** | ⇑P | **Pn** | **03 36 29.1** | **-0.7** |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.06** | **24** | P | **Pn** | **03 36 28.0** | **-1.9** |
| | comp=Z,0.7nm,0.3s,baz=218,slow=10,SNR=27 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.06** | **24** | | **Pn** | **03 36 28.7** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **18.06** | **24** | | **Pn** | **03 36 28.7** | **-1.2** |
| **WSAR** | **Wadi Sarin** | **18.94** | **223** | LR | LR | 03 46 04.1 | |
| | comp=Z,60nm,18.9s,baz=90,slow=44 | | | | | | |
| **SRSP** | **Sriramsagar** | **19.62** | **164** | *e*P | **P** | **03 36 46.2** | **-1.5** |
| **MAK** | **Makhachkala** | **19.70** | **293** | *e*P | **P** | **03 36 46.6** | **-1.8** |
| MAK | | | | *e*S | **S** | **03 40 26.0** | **-4.5** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,128nm,1.6s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,131nm,14.0s | | | | | | |
| **RPR** | **Rampur** | **19.92** | **161** | *e*P | **P** | **03 36 50.8** | **-0.1** |
| **KLRI** | **Killari** | **20.13** | **169** | *e*P | **P** | **03 36 51.4** | **-1.9** |
| **SHL** | **Shillong** | **20.49** | **122** | P | **P** | **03 36 57.0** | **-0.3** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **SHL** | **Shillong** | **20.49** | **122** | P | **P** | **03 36 57.0** | **-0.3** |
| SHL | | | | lAmb | lAmb | 03 37 23.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **ARU** | **Arti** | **20.71** | **338** | P | **P** | **03 36 59.0** | **-0.3** |
| | comp=Z,3.1nm,0.4s,baz=120,slow=21,SNR=8.4 | | | | | | |
| ARU | | | | LR | LR | 03 44 10.5 | |
| | comp=Z,94nm,19.0s,baz=154,slow=34 | | | | | | |
| **ARU** | **Arti** | **20.71** | **338** | *c i*P | **P** | **03 36 58.3** | **-1.0** |
| ARU | | | | | | 03 37 14.0 | |
| ARU | | | | S | **S** | **03 40 47.1** | **-3.3** |
| ARU | | | | SS | **SnSn** | **03 41 05.3** | **-4.6** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **ARU** | **Arti** | **20.71** | **338** | P | **P** | **03 36 58.4** | **-0.9** |
| ARU | | | | lAmb | lAmb | 03 37 08.6 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **GROC** | **Groznyy** | **20.97** | **293** | *e*P | Pn | 03 37 05.8 | +1.0 |
| GROC | | | | *e* | | 03 37 23.6 | |
| GROC | | | | *e*S | **S** | **03 40 59.0** | **+3.2** |
| GROC | | | | *e*SS | **SnSn** | **03 41 18.7** | **+2.3** |
| GROC | | | | pmax | pmax | | |
| | comp=Z,56nm,0.8s | | | | | | |
| **HYBB** | **Hyderabad (bro** | **21.13** | **164** | *e*P | **P** | **03 37 03.7** | **-0.4** |
| **GTA** | **Gaotai** | **21.27** | **78** | ⇑P | **P** | **03 37 05.4** | **-0.2** |
| GTA | | | | pP | pP | 03 37 12.0 | +2.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,49nm,4.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,260nm,13.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,180nm,13.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,220nm,14.9s | | | | | | |
| **GNI** | **Garni** | **21.71** | **284** | LR | LR | 03 46 27.2 | |
| | comp=Z,41nm,19.9s,baz=66,slow=39 | | | | | | |
| **GNI** | **Garni** | **21.71** | **284** | *i* P | **P** | **03 37 09.7** | **-0.6** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | |
| **GNI** | **Garni** | **21.71** | **284** | P | **P** | **03 37 09.5** | **-0.8** |
| **KNGR** | **Kungurtug, Tuv** | **21.74** | **46** | *i* P | **P** | **03 37 11.3** | **+0.8** |
| **ZEI** | **Tsey** | **22.33** | **292** | *e*P | **P** | **03 37 19.3** | **+2.3** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **SRLM** | **Srisailam** | **22.48** | **164** | *e*P | **P** | **03 37 18.0** | **-0.6** |
| **ONI** | **Oni** | **22.65** | **291** | P | **P** | **03 37 21.0** | **+0.6** |
| ONI | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **ONI** | **Oni** | **22.65** | **291** | P | **P** | **03 37 21.0** | **+0.6** |
| **ADKI** | **Addanki** | **22.98** | **162** | *e*P | **P** | **03 37 23.5** | **-0.3** |
| **RCLA** | **Racherla** | **23.12** | **164** | *e*P | **P** | **03 37 26.4** | **+1.2** |
| **KBZ** | **Khabaz** | **23.12** | **294** | *ce*P | **P** | **03 37 25.7** | **+0.6** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **NEY** | **Neytrino** | **23.21** | **293** | *i* P | **P** | **03 37 25.8** | **-0.5** |
| NEY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **23.29** | **294** | *e*P | **P** | **03 37 27.9** | **+0.9** |
| KIV | | | | *e*S | **S** | **03 41 38.0** | **-1.4** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,30nm,14.0s | | | | | | |
| **KIV** | **Kislovodsk** | **23.29** | **294** | P | **P** | **03 37 26.6** | **-0.4** |
| KIV | | | | lAmb | lAmb | 03 37 53.1 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **SHA1** | **Shidzhatmaz** | **23.29** | **294** | *i* P | **P** | **03 37 28.6** | **+1.4** |
| **URV** | **Uravakonda** | **23.30** | **169** | *e*P | **P** | **03 37 26.2** | **-0.9** |
| **LZH** | **Lanzhou** | **24.96** | **85** | *e*P | **P** | **03 37 43.1** | **+0.3** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,250nm,12.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,270nm,13.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,220nm,14.9s | | | | | | |
| **ZAK** | **Zakamensk** | **25.07** | **50** | *e*P | **P** | **03 37 42.5** | **-1.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **MARD** | **Mardin** | **25.14** | **278** | P | **P** | **03 37 43.9** | **-0.6** |
| MARD | | | | lAmb | lAmb | 03 37 56.5 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **SOC** | **Sochi** | **25.42** | **293** | *e*P | **P** | **03 37 47.6** | **+0.9** |
| SOC | | | | *e* | | 03 38 18.4 | |
| SOC | | | | *e*PPP | PPP | 03 38 31.8 | |
| SOC | | | | *e*S | **S** | **03 42 14.0** | **+0.7** |
| SOC | | | | *e*SSS | SSS | 03 43 18.1 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **KIRV** | **Kirov** | **25.52** | **331** | P | **P** | **03 37 49.9** | **+2.5** |
| | comp=Z,15nm,0.7s,baz=114,slow=12,SNR=5.2 | | | | | | |
| KIRV | | | | LR | LR | 03 48 28.3 | |
| | comp=Z,148nm,18.4s,baz=137,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **26.46** | **57** | P | **P** | **03 37 56.5** | **+0.3** |
| | comp=Z,1.5nm,0.7s,baz=244,slow=11,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **26.46** | **57** | P | **P** | **03 37 56.6** | **+0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **26.46** | **57** | P | **P** | **03 37 56.5** | **+0.3** |
| **VORD** | **Divnogorie** | **26.84** | **310** | *e*P | **P** | **03 38 01.9** | **+2.5** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.91** | **57** | P | **P** | **03 38 01.9** | **+1.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.91** | **57** | P | **P** | **03 38 01.9** | **+1.6** |
| **VSR** | **Storozhevoye** | **26.98** | **310** | *e*P | **P** | **03 38 03.0** | **+2.3** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **27.07** | **106** | P | **P** | **03 38 02.8** | **+0.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,4.6s | | | | | | |
| **VORR** | **Voronezh** | **27.09** | **311** | *e*P | **P** | **03 38 03.8** | **+2.1** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,40nm,0.4s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **27.54** | **313** | *e*P | **P** | **03 38 05.3** | **-0.4** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **28.57** | **108** | ⇓P | **P** | **03 38 15.6** | **+0.1** |
| KMI | | | | pP | sP | 03 38 24.9 | +3.1 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **29.53** | **86** | P | P | 03 38 31.7 | +8.0 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **OBN** | **Obninsk** | **29.70** | **317** | *i* P | **P** | **03 38 24.0** | **-0.9** |
| OBN | | | | *i* | | 03 39 23.0 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,90nm,19.2s,baz=293,slow=38 | | | | | | |
| **CLL** | **Collm** | **43.28** | **308** | *e*Px | Px | 03 40 25.0 | |
| CLL | | | | *ep*P | sP | 03 40 36.0 | +8.9 |
| **TIXI** | **Tiksi** | **43.94** | **22** | P | **P** | **03 40 24.7** | **-0.9** |
| | comp=Z,2.4nm,0.5s,baz=268,slow=23,SNR=7.9 | | | | | | |
| **TIXI** | **Tiksi** | **43.94** | **22** | *ce*P | **P** | **03 40 24.7** | **-0.9** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.99** | **322** | P | **P** | **03 40 25.3** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=92,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.99** | **322** | P | **P** | **03 40 25.3** | **-1.0** |
| | comp=Z,1.5nm,0.8s,baz=93,slow=7.8,SNR=5.7 | | | | | | |
| NOA | | | | LR | LR | 04 00 08.7 | |
| | comp=Z,28nm,20.5s,baz=325,slow=38 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **44.35** | **62** | LR | LR | 04 00 18.4 | |
| | comp=Z,82nm,18.6s,baz=245,slow=38 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **46.05** | **302** | LR | LR | 04 03 03.6 | |
| | comp=Z,126nm,18.6s,baz=78,slow=40 | | | | | | |
| **ASAJ** | **Asahikawa** | **51.71** | **60** | LR | LR | 04 04 37.0 | |
| | comp=Z,80nm,18.1s,baz=76,slow=37 | | | | | | |
| **MBAR** | **Mbarara** | **54.39** | **235** | LR | LR | 04 05 43.4 | |
| | comp=Z,65nm,18.2s,baz=176,slow=37 | | | | | | |
| **BILL** | **Bilibino** | **56.73** | **27** | *i* P | **P** | **03 42 06.6** | **+4.1** |
| BILL | | | | *i* | | 03 42 16.0 | |
| BILL | | | | *i* | | 03 44 05.3 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **57.90** | **298** | P | **P** | **03 42 10.9** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=64,slow=5.9,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.02** | **269** | P | **P** | **03 43 11.1** | **-1.4** |
| | comp=Z,1.9nm,0.7s,baz=49,slow=5.0,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.02** | **269** | IAmb | IAmb | 03 43 13.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **69.18** | **15** | P | **P** | **03 43 24.1** | **-1.2** |
| TOLK | | | | IAmb | IAmb | 03 43 25.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **A36M** | **Sachs Harbour** | **69.62** | **6** | P | **P** | **03 43 26.5** | **-1.4** |
| A36M | | | | IAmb | IAmb | 03 43 36.2 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **70.21** | **16** | P | **P** | **03 43 31.6** | **-0.1** |
| COLD | | | | IAmb | IAmb | 03 43 49.9 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **C36M** | **Paulatuk** | **72.29** | **6** | P | **P** | **03 43 44.8** | **+0.6** |
| C36M | | | | IAmb | IAmb | 03 43 56.2 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **73.02** | **17** | P | **P** | **03 43 47.0** | **-1.6** |
| | comp=Z,0.9nm,0.8s,baz=317,slow=4.3,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **73.02** | **17** | P | **P** | **03 43 47.0** | **-1.6** |
| **ILAR** | **Eielson Array** | **73.02** | **17** | P | **P** | **03 43 46.6** | **-2.0** |
| **BCAR** | **Beaver Creek A** | **75.62** | **15** | P | **P** | **03 44 03.6** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **79.72** | **3** | P | **P** | **03 44 24.0** | **-2.7** |
| | comp=Z,0.9nm,0.7s,baz=348,slow=5.6,SNR=14 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.72** | **3** | *i* P | **P** | **03 44 25.6** | **-1.0** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.72** | **3** | P | **P** | **03 44 25.5** | **-1.1** |
| **WRA** | **Warramunga Arr** | **81.70** | **123** | P | **P** | **03 44 35.5** | **-2.4** |
| | comp=Z,0.7nm,0.6s,baz=327,slow=4.9,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.70** | **123** | IAmb | IAmb | 03 44 42.7 | |
| | comp=Z,0.2nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **81.70** | **123** | *ce*P | **P** | **03 44 38.6** | **+0.7** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | |
| **ASAR** | **Alice Springs** | **84.07** | **126** | P | **P** | **03 44 47.7** | **-2.4** |
| | comp=Z,0.3nm,0.5s,baz=316,slow=3.9,SNR=3.0 | | | | | | |
| **STKA** | **Stephens Creek** | **94.64** | **127** | LR | LR | 04 35 57.8 | |
| | comp=Z,36nm,19.2s,baz=192,slow=40 | | | | | | |

*INET **05** 04:02:54.9±1.8, 12°.78N×87°.11W, h5km±3km, ML4.3*
*SNET **05** 04:02:54.9±1.5, 12°.95N×87°.00W, h10km±22km, ML4.2*
*UCR **05** 04:02:55.2±1.3, 12°.93N×87°.01W, h11km±9km, ML4.2*

**ISC 05 04:02:54.2±1.3, 12°.93N±0°.05×87°.03W±0°.04, h1km±11km, n27, σ0°96/43, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.23** | **186** | *e*P | **Pg** | **04 02 58.5** | **-0.1** |
| CRIN | | | | *e*S | **Sg** | **04 03 01.7** | **+0.1** |
| **CSGN** | **Cosiguina Volc** | **0.52** | **275** | *e*P | **Pg** | **04 03 04.7** | **+0.5** |
| **CNGN** | **Cerro Negro** | **0.53** | **143** | *e*P | **Pg** | **04 03 04.5** | **+0.2** |
| CNGN | | | | *e*S | **Sg** | **04 03 12.0** | **+0.7** |
| **BRAN** | **Las Pilas** | **0.69** | **107** | *e*P | **Pn** | **04 03 12.1** | **+1.0** |
| BRAN | | | | *e*S | **Sn** | **04 03 26.0** | **+3.6** |
| **CNCH** | **Conchagua** | **0.86** | **294** | *e*P | **Pg** | **04 03 11.2** | **+0.5** |
| CNCH | | | | *e*S | **Sb** | **04 03 23.7** | **-0.4** |
| **CNCH** | **Conchagua** | **0.86** | **294** | *e*P | **Pg** | **04 03 11.2** | **+0.5** |
| CNCH | | | | *e*S | **Sb** | **04 03 23.7** | **-0.4** |
| **LCND** | **La Caada** | **0.92** | **294** | *e*P | **Pg** | **04 03 12.0** | **+0.1** |
| LCND | | | | *e*S | **Sb** | **04 03 26.5** | **+0.7** |
| LCND | | | | IAML | | 04 03 28.9 | |
| | comp=Z,11μm,0.5s | | | | | | |
| **LCND** | **La Caada** | **0.92** | **294** | *e*P | **Pg** | **04 03 12.0** | **+0.1** |
| LCND | | | | *e*S | **Sb** | **04 03 26.5** | **+0.7** |
| LCND | | | | IAML | | 04 03 28.9 | |
| | comp=Z,11μm,0.5s | | | | | | |
| **LCY** | **Lacayo** | **1.33** | **292** | *e*P | **Pg** | **04 03 19.0** | **-0.7** |
| **LCY** | **Lacayo** | **1.33** | **292** | *e*P | **Pg** | **04 03 19.0** | **-0.7** |
| **BOAB** | **BOACO BROADBAN** | **1.41** | **110** | *e*P | **Pn** | **04 03 19.2** | **-1.7** |
| BOAB | | | | *e*S | **Sg** | **04 03 39.2** | **-0.3** |
| **ALJI** | **Alcalda de J** | **1.56** | **285** | *e*P | **Pn** | **04 03 22.3** | **-0.7** |
| ALJI | | | | *e*S | **Sn** | **04 03 43.7** | **-0.1** |
| **ALJI** | **Alcalda de J** | **1.56** | **285** | *e*P | **Pn** | **04 03 22.3** | **-0.7** |
| ALJI | | | | *e*S | **Sn** | **04 03 43.7** | **-0.1** |
| **COEB** | **Comit de Eme** | **1.57** | **291** | *e*P | **Pn** | **04 03 22.5** | **-0.8** |
| COEB | | | | *e*S | **Sg** | **04 03 44.9** | **+0.2** |
| COEB | | | | IAML | | 04 03 46.6 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **COEB** | **Comit de Eme** | **1.57** | **291** | *e*P | **Pn** | **04 03 22.8** | **-0.5** |
| **COEB** | **Comit de Eme** | **1.57** | **291** | *e*P | **Pn** | **04 03 22.5** | **-0.8** |
| COEB | | | | *e*S | **Sg** | **04 03 44.9** | **+0.2** |
| COEB | | | | IAML | | 04 03 46.6 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **CONN** | **Concepcion** | **1.93** | **135** | *e*P | **Pg** | **04 03 31.0** | **-0.1** |
| **ACON** | **Acoyapa** | **2.04** | **118** | *e*P | **Pn** | **04 03 29.9** | **+0.1** |
| **ACON** | **Acoyapa** | **2.04** | **118** | *e*P | **Pn** | **04 03 27.4** | **-2.3** |
| ACON | | | | *e*S | **Sb** | **04 03 57.1** | **-1.0** |
| **JAYA** | **Jayaque - finc** | **2.47** | **287** | *e*P | **Pn** | **04 03 36.3** | **+0.7** |
| JAYA | | | | *e*S | **Sn** | **04 04 06.5** | **0.0** |
| **JAYA** | **Jayaque - finc** | **2.47** | **287** | *e*P | **Pn** | **04 03 36.3** | **+0.7** |
| JAYA | | | | *e*S | **Sn** | **04 04 06.5** | **0.0** |
| **ESPN** | **Las Esperanzas** | **2.76** | **105** | *e*P | **Pn** | **04 03 38.3** | **-1.3** |
| **ESPN** | **Las Esperanzas** | **2.76** | **105** | *e*P | **Pn** | **04 03 38.2** | **-1.3** |
| ESPN | | | | IAML | | 04 04 20.3 | |
| | comp=E,997nm,0.7s | | | | | | |
| **GUAI** | **GUAI** | **3.03** | **151** | *i* P | **Pn** | **04 03 43.3** | **0.0** |
| GUAI | | | | *i* S | **Sn** | **04 04 19.8** | **-0.5** |
| **JTS** | **Las Juntas de** | **3.32** | **142** | *e*P | **Pn** | **04 03 46.5** | **-0.7** |
| **LAFE** | **Finca La Fe, P** | **3.73** | **146** | *e*P | **Pn** | **04 03 52.2** | **-0.7** |
| **RIMA** | **Rio Macho** | **4.42** | **135** | *e*P | **Pn** | **04 04 03.1** | **+0.6** |

**IDC 05 04:09:28.3±4.3, 6°.24S×148°.85E, h0km, mb3.5/2, mb1 3.6/3, mb1mx3.3/36, mbtmp3.4/3, ML3.3/1, Error ellipse: s-maj=128.0km s-min=52.8km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.57** | **208** | Sn | Sn | 04 11 10.2 | +2.3 |
| | 5.9nm,0.3s,baz=351,slow=22,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.61** | **225** | P | P | 04 13 58.6 | +0.2 |
| | 0.1nm,0.3s,baz=50,slow=11,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **22.52** | **218** | P | P | 04 14 29.8 | 0.0 |
| | 0.4nm,0.7s,baz=55,slow=8.9,SNR=5.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.53** | **240** | P | P | 04 14 58.7 | -0.2 |
| | 2.8nm,0.9s,baz=82,slow=8.4,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.93** | **284** | PKPbc | PKPbc | 04 29 13.2 | -0.7 |
| | 0.5nm,1.1s,baz=96,slow=1.4,SNR=2.5 | | | | | | |

*IDC **05** 04:12:47.4±1.0, 5°.36S×151°.71E, h0km, mb4.5/9, mb1 4.7/10, mb1mx4.3/39, mbtmp4.5/10, ML2.2/1, MS3.4/11, Ms1 3.4/11, ms1mx3.1/56, Error ellipse: s-maj=37.8km s-min=17.1km az=128.0*
*DJA **05** 04:12:51.8±1.0, 4°.5±5°×15°.1E±°, h35km±10km, M4.9/12, mB6.0/3, mb4.8/12, MLv4.9/3, Mw(mB)5.6/3*
*NEIC **05** 04:12:56.9±1.6, 5°.38S±0°.09×151°.63E±0°.09, h64km±7km, mb4.6/28, Error ellipse: s-maj=15.9km s-min=9.5km az=130.0*

**ISC 05 04:12:55.5±0.6, 5°.48S±0°.07×151°.67E±0°.08, h57km, n62, σ0°95/53, mb4.6/25, MS3.3/8, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.37** | **21** | | **Pn** | **04 13 18.6** | **+0.1** |
| **MANU** | **Manus Island** | **5.49** | **308** | Pn | **Pn** | **04 14 15.9** | **+1.1** |
| **PMG** | **Port Moresby** | **5.94** | **229** | Pn | **Pn** | **04 14 20.0** | **-0.8** |
| | 3.9nm,0.3s,baz=162,slow=7.0,SNR=6.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **04 15 28.5** | **+1.0** |
| | 14nm,0.3s,baz=282,slow=20,SNR=8.1 | | | | | | |
| PMG | | | | LR | LR | 04 16 38.7 | |
| | comp=Z,227nm,21.8s,baz=352,slow=38 | | | | | | |
| **PMG** | **Port Moresby** | **5.94** | **229** | Pn | **Pn** | **04 14 21.2** | **+0.4** |
| **HNR** | **Honiara** | **9.09** | **116** | LR | LR | 04 19 03.9 | |
| | comp=Z,168nm,18.5s,baz=277,slow=41 | | | | | | |
| **CTA** | **Charters Tower** | **15.44** | **199** | LR | LR | 04 22 08.8 | |
| | comp=Z,191nm,18.8s,baz=32,slow=36 | | | | | | |
| **SANVU** | **Saraoutou** | **18.18** | **124** | P | **Pn** | **04 17 05.8** | **+1.7** |
| SANVU | | | | IAmb | IAmb | 04 17 14.9 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **GUMO** | **Guam** | **20.12** | **340** | LR | LR | 04 25 40.2 | |
| | comp=Z,37nm,19.2s,baz=98,slow=39 | | | | | | |
| **MTN** | **Manton Dam** | **21.54** | **249** | P | **P** | **04 17 40.5** | **+0.3** |
| MTN | | | | IAmb | IAmb | 04 17 43.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.82** | **140** | LR | LR | 04 25 12.1 | |
| | comp=Z,222nm,20.6s,baz=284,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.82** | **140** | P | **P** | **04 17 43.9** | **+0.7** |
| DZM | | | | IAmb | IAmb | 04 17 44.1 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.01** | **228** | P | **P** | **04 17 45.2** | **0.0** |
| WB0 | | | | IAmb | IAmb | 04 17 47.7 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.02** | **228** | P | **P** | **04 17 46.3** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 04 17 47.8 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.14** | **228** | P | **P** | **04 17 47.8** | **+1.2** |
| WRAB | | | | IAmb | IAmb | 04 17 49.3 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.15** | **228** | P | **P** | **04 17 47.7** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 04 17 49.3 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.16** | **228** | P | **P** | **04 17 46.0** | **-0.7** |
| | comp=Z,20nm,0.6s,baz=52,slow=9.8,SNR=165 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.16** | **228** | | **P** | **04 17 46.2** | **-0.6** |
| **KNRA** | **Kununurra** | **24.66** | **244** | P | **P** | **04 18 11.3** | **+0.1** |
| **AS31** | **Alice Springs** | **24.89** | **222** | P | **P** | **04 18 13.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **24.89** | **222** | P | **P** | **04 18 13.3** | **+0.1** |
| | comp=Z,9.1nm,0.7s,baz=58,slow=8.6,SNR=84 | | | | | | |
| ASAR | | | | LR | LR | 04 27 30.0 | |
| | comp=Z,102nm,21.0s,baz=50,slow=35 | | | | | | |
| **BATI** | **Baumata** | **28.13** | **259** | LR | LR | 04 31 55.3 | |
| | comp=Z,190nm,20.1s,baz=121,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.35** | **242** | P | **P** | **04 18 43.7** | **-0.6** |
| | comp=Z,12nm,0.6s,baz=60,slow=7.1,SNR=76 | | | | | | |
| **DAV** | **Davao City (W)** | **28.87** | **295** | LR | LR | 04 29 53.9 | |
| | comp=Z,78nm,19.5s,baz=147,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **31.79** | **269** | LR | LR | 04 33 26.4 | |
| | comp=Z,40nm,19.9s,baz=106,slow=39 | | | | | | |
| **FORT** | **Forrest** | **33.55** | **219** | P | **P** | **04 19 29.3** | **-0.8** |
| **MBWA** | **Marble Bar** | **34.66** | **240** | P | **P** | **04 19 38.4** | **-1.4** |
| **MORW** | **Morawa** | **41.05** | **231** | P | **P** | **04 20 33.7** | **+0.2** |
| MORW | | | | IAmb | IAmb | 04 20 54.1 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **NJ2** | **Nanjing** | **48.68** | **322** | *e*P | **P** | **04 21 35.2** | **+1.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **XAN** | **Xi'an** | **56.35** | **317** | P | **P** | **04 22 30.1** | **-0.9** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,160nm,4.5s | | | | | | |
| **CMAR** | **Chiang Mai Ar** | **57.16** | **296** | P | **P** | **04 22 37.4** | **+0.4** |
| | comp=Z,0.7nm,0.3s,baz=119,slow=5.8,SNR=4.5 | | | | | | |
| **CHTO** | **Chiang Mai** | **57.28** | **296** | P | **P** | **04 22 37.2** | **-0.6** |
| CHTO | | | | IAmb | IAmb | 04 22 47.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **PZH** | **PanZhiHua** | **57.85** | **306** | P | **P** | **04 22 43.4** | **+1.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,80nm,5.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.59** | **4** | LR | LR | 04 44 43.9 | |
| | comp=Z,23nm,20.6s,baz=172,slow=33 | | | | | | |
| **XLT** | **XiLinHaoTe** | **58.70** | **331** | *e*P | **P** | **04 22 47.6** | **+0.2** |
| XLT | | | | pP | pP | 04 23 04.1 | +1.0 |
| XLT | | | | sP | sP | 04 23 10.1 | +0.4 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,140nm,4.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.95** | **325** | *e*P | **P** | **04 22 51.2** | **+2.0** |
| **ULN** | **Ulaanbaatar** | **65.99** | **329** | P | **P** | **04 23 35.2** | **-0.9** |
| **SONM** | **Songino Array** | **66.31** | **328** | P | **P** | **04 23 38.3** | **+0.2** |
| | comp=Z,2.6nm,0.6s,baz=147,slow=7.3,SNR=22 | | | | | | |
| **SONM** | **Songino Array** | **66.31** | **328** | P | **P** | **04 23 38.6** | **+0.5** |
| SONM | | | | IAmb | IAmb | 04 23 40.9 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **69.42** | **349** | LR | LR | 04 53 48.8 | |
| | comp=Z,19nm,20.5s,baz=250,slow=36 | | | | | | |
| **WMQ** | **Urumqi** | **75.49** | **318** | *e*P | **P** | **04 24 35.4** | **+1.6** |
| **MK31** | **Makanchi Array** | **80.10** | **319** | P | **P** | **04 24 58.4** | **-1.0** |
| **MKAR** | **Makanchi Array** | **80.10** | **319** | P | **P** | **04 24 58.5** | **-0.9** |
| | comp=Z,1.2nm,0.8s,baz=102,slow=7.2,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.10** | **319** | P | **P** | **04 24 58.2** | **-1.3** |
| **MAKZ** | **Makanchi** | **80.31** | **319** | P | **P** | **04 24 59.3** | **-1.2** |
| **ZAA0** | **Zalesovo Array** | **81.10** | **327** | P | **P** | **04 25 03.8** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **81.10** | **327** | P | **P** | **04 25 03.1** | **-1.4** |
| | comp=Z,1.5nm,0.5s,baz=97,slow=5.7,SNR=7.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.10** | **327** | P | **P** | **04 25 03.3** | **-1.2** |
| **IL31** | | **83.21** | **22** | P | **P** | **04 25 13.7** | **-1.6** |
| **ILAR** | **Eielson Array** | **83.21** | **22** | P | **P** | **04 25 13.4** | **-2.0** |
| | comp=Z,1.2nm,0.6s,baz=245,slow=4.5,SNR=22 | | | | | | |
| **ILAR** | **Eielson Array** | **83.21** | **22** | P | **P** | **04 25 14.8** | **-0.6** |
| **AAK** | **Ala-Archa** | **84.32** | **314** | P | **P** | **04 25 21.6** | **-0.2** |
| AAK | | | | IAmb | IAmb | 04 25 22.5 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **87.28** | **314** | P | **P** | **04 25 35.7** | **-0.5** |
| **VCNR** | **Virginia City** | **92.41** | **51** | P | **P** | **04 26 00.7** | **+0.1** |
| VCNR | | | | IAmb | IAmb | 04 26 02.5 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **A36M** | **Sachs Harbour** | **93.03** | **18** | P | **P** | **04 26 02.7** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **93.39** | **52** | P | **P** | **04 26 06.3** | **+1.2** |
| | comp=Z,3.0nm,0.7s,baz=256,slow=6.4,SNR=28 | | | | | | |
| **QSM** | **Queen of Sheba** | **94.36** | **54** | IAmb | IAmb | 04 26 11.4 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **TPNV** | **Topopah Spring** | **94.92** | **53** | P | **P** | **04 26 12.2** | **+0.1** |
| TPNV | | | | IAmb | IAmb | 04 26 14.5 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **SPR3** | **Spring Creek 3** | **96.52** | **51** | P | **P** | **04 26 19.7** | **+0.1** |
| **PDAR** | **Pinedale Array** | **100.14** | **48** | P | **Pdif** | **04 26 35.2** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=234,slow=2.4,SNR=9.0 | | | | | | |
| **GERES** | **GERESS Array B** | **124.04** | **328** | PKP | **PKPdf** | **04 31 47.2** | **-0.5** |
| | comp=Z,1.0nm,0.6s,baz=85,slow=1.8,SNR=11 | | | | | | |
| **GERES** | **GERESS Array B** | **124.04** | **328** | | **PKPdf** | **04 31 46.8** | **-0.9** |
| **TORD** | **Torodi Ar. Bea** | **149.44** | **287** | PKPbc | **PKPbc** | **04 32 39.0** | **-0.4** |
| | comp=Z,6.0nm,0.6s,baz=25,slow=2.5,SNR=45 | | | | | | |

**IDC 05 04:17:24.9±1.6, 0°.98N×123°.83E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.6/36, mbtmp3.7/4, MS3.5/1, Ms1 3.5/1, ms1mx2.5/73, Error ellipse: s-maj=198.6km s-min=23.2km az=62.0, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **3.18** | **32** | P | Pb | 04 18 22.0 | -0.3 |
| | 8μm691nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.20** | **154** | P | P | 04 22 32.8 | -0.8 |
| | 1.3nm,0.7s,baz=332,slow=11,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **26.38** | **159** | P | P | 04 23 04.5 | +1.3 |
| | 0.6nm,0.7s,baz=339,slow=6.4,SNR=4.0 | | | | | | |
| **STKA** | **Stephens Creek** | **36.76** | **154** | P | P | 04 24 33.9 | -0.3 |
| | 3.0nm,0.7s,baz=338,slow=6.7,SNR=7.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **47.45** | **122** | LR | LR | 04 48 34.1 | |
| | comp=Z,46nm,18.5s,baz=230,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.23** | **328** | P | P | 04 27 20.9 | -0.2 |
| | 0.4nm,0.5s,baz=119,slow=7.8,SNR=7.9 | | | | | | |

*BGR **05** 05:00:38.8±0.0, 13°.21N×124°.29E, h10km, mb5.3*
*BJI **05** 05:00:41.4±0.0, 13°.45N×122°.52E, h10km, mb4.8/84, mB5.0/52, Ms4.5/75, Ms7 4.3/71*
*MOS **05** 05:00:43.4±1.0, 13°.70N×122°.33E, h10km, mb5.4/56, MS4.1/8, Error ellipse: s-maj=8.1km s-min=4.2km az=119.4*

*IDC **05** 05:00:43.9±0.4, 13°.72N×122°.34E, h0km, mb4.8/26, mb1 4.9/26, mb1mx4.8/39, mbtmp4.8/26, MS3.9/43, Ms1 3.9/43, ms1mx3.7/85, Error ellipse: s-maj=14.7km s-min=10.8km az=70.0*
*MAN **05** 05:00:45.7, 13°.78N×122°.28E, h3km, mb5.8, ML4.8, MS5.2*
*MAN INTENSITY V - GUINAYANGAN, QUEZON; INTENSITY IV - LOPEZ, PITOGO, CALUAG & GUMACA, QUEZON; INTENSITY III - MULANAY, QUEZON.*
*GCMT **05** 05:00:46.7±0.3, 13°.88N±0°.03×122°.28E±0°.02, h21km±1km, MW4.9/81, Moment Tensor Solution. s23,c24; s81,c99; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr 2.66±.25; Mθθ -0.09±.14; Mφφ -2.56±.15; Mrθ 0.07±.25; Mrφ 1.36±.08; Mθφ 0.10±.20; Best double couple: M0 2.91500×10^16 NP1: ϕs 153.00000°, δ 44.00000°, λ 86.00000°. NP2: ϕs 339.00000°, δ 46.00000°, λ 94.00000°. Principal axes: T 2.6660, Plg87.0000°, Azm324.0000°; N 0.5040, Plg3.0000°, Azm156.0000°; P -3.1630, Plg1.0000°, Azm66.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **05** 05:00:46.7±1.6, 13°.79N±0°.06×122°.33E±0°.06, h10km±1km, mb5.3/94 Error ellipse: s-maj=10.5km s-min=8.9km az=202.0*
*DJA **05** 05:00:56.0±0.5, 14°.N±3°.×12°.2E±°, h93km±5km, M4.9/83, mB5.4/37, mb4.9/83, Mw(mB)4.9/37, MwMwp5.0/3, Mwp5.3/3*

**ISC 05 05:00:46.5±0.4, 13°.74N±0°.02×122°.32E±0°.02, h13km±2km, h13km:pP-P, n568, σ1°58/606, mb5.2/191, MS4.1/69, 52C-36D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GQP** | **Guinayangan** | **0.21** | **36** | ↓*i*P | **Pg** | **05 00 50.4** | **-0.7** |
| GQP | | | | *i* S | **Sg** | **05 00 53.3** | **-0.9** |
| **AUQP** | **San Andres** | **0.54** | **140** | ↑*e*P | **Pn** | **05 00 59.9** | **-0.1** |
| AUQP | | | | *i* S | **Sn** | **05 01 12.0** | **+3.2** |
| **BOAC** | **Boac** | **0.54** | **239** | ↓*e*P | **Pg** | **05 00 56.5** | **-0.6** |
| BOAC | | | | *e*S | **Sb** | **05 01 06.8** | **+1.2** |
| **JCNP** | **Jose Panganiba** | **0.66** | **34** | ↓*e*P | **Pg** | **05 00 57.6** | **-1.8** |
| **LQP** | **Lukban** | **0.85** | **296** | ↓*e*P | **Pg** | **05 01 00.9** | **-2.1** |
| LQP | | | | *e*S | **Sg** | **05 01 13.5** | **-0.7** |
| **PGP** | **Puerto Galera** | **1.35** | **260** | ↓*e*P | **Pn** | **05 01 09.4** | **-1.8** |
| PGP | | | | *i* S | **Sn** | **05 01 29.4** | **+0.4** |
| **TGY** | **Tagaytay City** | **1.39** | **285** | Pn | **Pn** | **05 01 11.5** | **-0.3** |
| | 2μm,0.3s,baz=114,slow=3.2,SNR=144 | | | | | | |
| TGY | | | | Sn | **Sg** | **05 01 33.0** | **+1.5** |
| | 3μm,0.3s,baz=4.1,slow=24,SNR=11 | | | | | | |
| **TGY** | **Tagaytay City** | **1.39** | **285** | ↓*e*P | **Pb** | **05 01 12.9** | **+0.4** |
| **OTRP** | **Odiongan** | **1.40** | **192** | ↓*e*P | **Pb** | **05 01 12.6** | **+0.1** |
| **QVP** | **Quezon City--P** | **1.55** | **305** | ↓*e*P | **Pn** | **05 01 13.1** | **-0.8** |
| **MACP** | **Maragondon, Ca** | **1.64** | **289** | ↓*e*P | **Pn** | **05 01 14.6** | **-0.5** |
| **SJMP** | **San Jose** | **1.73** | **223** | ↓*e*P | **Pn** | **05 01 17.1** | **+0.8** |
| **MMPH** | **Masbate** | **1.87** | **137** | ↓*e*P | **Pb** | **05 01 20.9** | **+0.4** |
| MMPH | | | | *i* S | **Sg** | **05 01 46.9** | **+0.2** |
| **LUBP** | **Lubang** | **2.02** | **270** | ↓*e*P | **Pn** | **05 01 18.8** | **-1.5** |
| LUBP | | | | *e*S | **Sn** | **05 01 39.1** | **-6.3** |
| **BALP** | **Baler** | **2.12** | **340** | ↑*e*P | **Pn** | **05 01 22.0** | **+0.3** |
| BALP | | | | *e*S | **Sb** | **05 01 52.0** | **+0.9** |
| **PCPH** | **Palayan** | **2.17** | **327** | ↓*e*P | **Pn** | **05 01 22.3** | **-0.1** |
| PCPH | | | | *e*S | **Sb** | **05 01 53.2** | **+0.7** |
| **RCP** | **Roxas** | **2.20** | **169** | ↑*e*P | **Pn** | **05 01 23.7** | **+0.8** |
| RCP | | | | *e*S | **Sb** | **05 01 52.5** | **-1.0** |
| **SMPP** | **San Manuel, Pa** | **2.88** | **327** | ↑*e*P | **Pn** | **05 01 32.5** | **+0.3** |
| SMPP | | | | *e*S | **Sg** | **05 02 27.0** | **+7.9** |
| **JAP** | **San Jose, Anti** | **2.99** | **187** | ↑*e*P | **Pn** | **05 01 36.2** | **+2.4** |
| **CUYO** | **Cuyo Island** | **3.14** | **204** | ↓*e*P | **Pn** | **05 01 35.8** | **0.0** |
| **CAUP** | **Cauayan** | **3.23** | **351** | ↑*e*P | **Pn** | **05 01 37.6** | **+0.6** |
| **OCLP** | **Ormoc** | **3.48** | **140** | ↑*e*P | **Pn** | **05 01 43.2** | **+2.7** |
| OCLP | | | | *e*S | **Sg** | **05 02 37.8** | **-0.7** |
| **BOLP** | **Bolinao** | **3.51** | **319** | ↑*e*P | **Pn** | **05 01 42.6** | **+1.7** |
| **SAMP** | **Sagada Mountai** | **3.59** | **338** | ↑*e*P | **Pn** | **05 01 43.2** | **+1.2** |
| **LLP** | **Lapu-Lapu** | **3.76** | **154** | *e*P | **Pn** | **05 01 45.6** | **+1.3** |
| LLP | | | | *i* S | **Sg** | **05 02 43.7** | **-3.7** |
| **CNOP** | **Candoni, Negro** | **3.90** | **175** | ↓*e*P | **Pn** | **05 01 49.5** | **+

comp=Z,670nm,12.8s
NJ2 LR LR
comp=Z,520nm,15.2s
NJ2 LR LR
comp=Z,640nm,16.1s
**BBKI Banjar Baru 18.63 204** P **Pn** **05 05 09.5 +5.1**
comp=Z,30nm,0.8s
**KAPI Kappang 18.80 188** P **Pn** **05 05 08.7 +2.3**
comp=Z,2.6nm,0.3s,baz=24,slow=9.9,SNR=11
KAPI LR LR 05 12 10.9
comp=Z,216nm,21.9s,baz=25,slow=37
**KAPI Kappang 18.80 188** P **Pn** **05 05 08.5 +2.0**
KAPI pmax pmax
comp=Z,57nm,1.0s
**KAPI Kappang 18.80 188** P **Pn** **05 05 08.5 +2.0**
**BKSI Bulukumba 19.06 187** P **Pn** **05 05 12.6 +3.0**
comp=Z,775nmcomp=Z,55nm,1.2s
**JSU Suzuyama 19.20 22** P **P** **05 05 10.1 -0.2**
JSU IAmb IAmb 05 05 13.4
comp=Z,312nm,1.7s
**FAKI Fak Fak 19.26 149** P **Pn** **05 05 15.0 +3.0**
comp=Z,49nm,0.8s
**GYA Guiyang 19.37 313**⇑*i*P **Pn** **05 05 15.2 +1.7**
GYA S **S** **05 08 53.9 +2.4**
GYA pmax pmax
comp=Z,36nm,1.6s
GYA pmax pmax
comp=Z,230nm,3.5s
GYA LR LR
comp=Z,730nm,15.1s
GYA LR LR
comp=Z,600nm,13.6s
GYA LR LR
comp=Z,830nm,17.3s
**PBKI Pangkalan Bun 19.45 214** P **Pn** **05 05 16.8 +2.5**
comp=Z,3μmcomp=Z,104nm,1.2s
**BSSI Bau Bau, Buton 19.83 185** P **Pn** **05 05 20.9 +2.0**
comp=Z,935nmcomp=Z,70nm,1.6s
**ENH Enshi 20.28 326** P **P** **05 05 21.0 -1.1**
ENH IAmb IAmb 05 05 24.4
comp=Z,156nm,1.6s
**JNU Nakatsue 20.81 21** P **P** **05 05 28.2 +0.3**
JNU IAmb IAmb 05 05 34.1
comp=Z,120nm,1.4s
**KMI Kunming 21.63 304**⇓P **P** **05 05 41.3 +4.3**
KMI pP sP 05 05 44.6 +2.3
KMI S **S** **05 09 34.0 -2.6**
KMI sS sS 05 09 40.2 -2.3
KMI pmax pmax
comp=Z,21nm,1.4s
KMI pmax pmax
comp=Z,190nm,4.4s
KMI LR LR
comp=Z,370nm,14.1s
KMI LR LR
comp=Z,490nm,17.8s
KMI LR LR
comp=Z,470nm,17.8s
MYKOM **Kota Tinggi 21.79 239** P **P** **05 05 39.0 +0.6**
**GUMO Guam 21.91 88** LR LR 05 12 12.6
comp=Z,366nm,20.8s,baz=277,slow=32
**TPI Tanjungpandan 21.91 223** P **P** **05 05 42.7 +2.9**
comp=Z,400nmcomp=Z,34nm,1.2s
**MMRI Maumere 22.23 180** P **P** **05 05 46.8 +3.7**
comp=Z,4μmcomp=Z,70nm,1.4s
**MMRI Maumere 22.23 180** P **P** **05 05 44.7 +1.5**
MMRI IAmb IAmb 05 06 12.9
comp=Z,259nm,1.8s
**KMMI Kalianget 22.25 202** P **P** **05 05 47.0 +3.6**
comp=Z,55nm,1.8s
**JMN Monobe 22.50 26** P **P** **05 05 46.3 +0.3**
JMN IAmb IAmb 05 05 55.9
comp=Z,147nm,1.3s
**PPBI Pangkal Pinang 22.52 227** P **P** **05 05 47.6 +1.3**
comp=Z,39nm,1.0s
**SMPI Sarmi 22.54 133** P **P** **05 05 48.3 +1.7**
comp=Z,2μmcomp=Z,45nm,1.6s
**DSRI Dabo 22.55 233** P **P** **05 05 47.2 +0.6**
comp=Z,5μmcomp=Z,34nm,1.1s
**LYN LuoYang 22.56 338**⇑P **P** **05 05 47.2 +0.6**
LYN sP sP 05 05 54.1 +2.1
LYN PP **PnPn** **05 06 13.3 +3.2**
LYN S **S** **05 09 48.1 -5.6**
LYN sS pS 05 09 56.8 -1.7
LYN pmax pmax
comp=Z,30nm,2.5s
LYN pmax pmax
comp=Z,210nm,4.8s
LYN LR LR
comp=Z,430nm,13.5s
LYN LR LR
comp=Z,330nm,23.0s
**SRBI Singaraja 22.80 198** P **P** **05 05 52.8 +3.6**
comp=Z,90nm,1.1s
**ABJI Asem Bagus 22.85 201** P **P** **05 05 53.2 +3.5**
comp=Z,86nm,0.9s
**SRIT Nakonsritamara 22.86 259** P **P** **05 05 51.7 +1.7**
**TIA Tai'an 22.86 349**⇑P **P** **05 05 49.4 -0.3**
TIA S **S** **05 10 02.8 +3.7**
TIA pmax pmax
comp=Z,17nm,1.0s
TIA pmax pmax
comp=Z,290nm,3.5s
TIA LR LR
comp=Z,300nm,13.4s
TIA LR LR
comp=Z,370nm,9.6s
TIA LR LR
comp=Z,430nm,11.1s
**IPM Ipoh 22.93 248** P **P** **05 05 52.7 +2.0**
IPM IAmb IAmb 05 05 56.1
comp=Z,58nm,1.0s
**CM31 Chiang Mai Arr 22.94 285** P **P** **05 05 50.8 +0.1**
CM31 IAmb IAmb 05 06 04.2
comp=Z,163nm,1.3s
**CMAR Chiang Mai Arr 22.94 285** P **P** **05 05 51.0 +0.3**
comp=Z,34nm,0.9s,baz=96,slow=7.4,SNR=107
CMAR PcP **PcP** **05 09 41.4 +0.3**
comp=Z,3.6nm,0.6s,baz=94,slow=0.8,SNR=4.4
CMAR LR LR 05 15 26.5
comp=Z,238nm,18.2s,baz=115,slow=38
**CHTO Chiang Mai 22.99 286** P **P** **05 05 51.4 +0.1**
CHTO pmax pmax
comp=Z,37nm,1.1s
**CHTO Chiang Mai 22.99 286** P **P** **05 05 51.4 +0.1**
**TJN Taejon 23.00 10** P **P** **05 05 50.0 -1.1**
TJN pmax pmax
comp=Z,301nm,1.3s
**TJN Taejon 23.00 10** P **P** **05 05 50.0 -1.1**
**BLJI Banyuglugur 23.03 203** P **P** **05 05 54.5 +2.8**
comp=Z,25nm,0.9s
**PZH PanZhiHua 23.08 307**⇑P **P** **05 05 52.6 +0.3**
PZH pP **pP** **05 05 56.0 0.0**
PZH sP **sP** **05 05 58.3 +0.6**
PZH S **S** **05 10 01.1 -2.2**
PZH SS **SnSn** **05 10 42.1 +6.1**
PZH pmax pmax
comp=Z,20nm,1.6s
PZH pmax pmax
comp=Z,180nm,4.6s
PZH LR LR
comp=Z,1μm,15.8s
PZH LR LR
comp=Z,1μm,16.3s
PZH LR LR
comp=Z,1μm,17.6s
**SOEI Soe 23.42 175** P **P** **05 06 00.1 +4.4**
comp=Z,66nm,1.2s
**SOEI Soe 23.42 175** P **P** **05 05 56.0 +0.2**
SOEI IAmb IAmb 05 06 20.1
comp=Z,107nm,1.3s
**JAGI Jajag, Banyuwa 23.51 201** P **P** **05 05 59.2 +2.8**
comp=Z,42nm,1.4s
**JAGI Jajag, Banyuwa 23.51 201** P **P** **05 05 57.5 +1.1**
**XAN Xi'an 23.59 331** P **P** **05 05 56.3 -0.9**
XAN pP pP 05 06 00.2 -0.8
XAN S **S** **05 10 09.9 -1.4**
XAN sS pS 05 10 15.8 +0.3
XAN PcS **PcS** **05 13 18.3 -3.4**
XAN pmax pmax
comp=Z,81nm,1.3s
XAN pmax pmax
comp=Z,380nm,3.7s
XAN LR LR
comp=Z,690nm,14.4s
XAN LR LR
comp=Z,790nm,14.1s
XAN LR LR
comp=Z,770nm,16.8s
**BATI Baumata 23.82 177** P **P** **05 05 59.7 +0.1**
comp=Z,86nm,0.6s,baz=210,slow=4.8,SNR=9.3
BATI LR LR 05 16 40.3
comp=Z,231nm,20.9s,baz=351,slow=40
**BATI Baumata 23.82 177** P **P** **05 05 59.7 +0.1**
comp=Z,782nmcomp=Z,79nm,1.0s
**BASI Baing, Sumba 23.86 184** P **P** **05 06 02.3 +2.4**
comp=Z,40nm,1.3s
**JMBI JAMBI 24.00 232** P **P** **05 06 03.2 +1.9**
**PWJI Pagerwojo 24.01 206** P **P** **05 06 03.2 +1.9**
comp=Z,76nm,0.9s
**GENI Genyem 24.01 131** P **P** **05 06 03.8 +2.5**
comp=Z,73nm,1.9s
**PMBI Palembang 24.02 228** P **P** **05 06 03.6 +2.1**
comp=Z,383nm,0.4s
**PMBI Palembang 24.02 228** P **P** **05 06 02.6 +1.1**
**KSAR Wonju Array Be 24.12 11** P **P** **05 06 01.2 -1.0**
**KSAR Wonju Array Be 24.12 11** P **P** **05 06 01.2 -1.0**
**KSRS Korea Array 24.14 11** P **P** **05 06 01.6 -0.8**
comp=Z,8.5nm,0.8s,baz=188,slow=9.1,SNR=16
KSRS LR LR 05 14 54.4
comp=Z,231nm,21.6s,baz=200,slow=35
**CD2 Chengdu 24.16 318**⇓*i*P **P** **05 06 02.9 +0.2**
CD2 S **S** **05 10 22.3 +1.7**
CD2 sS sS 05 10 28.6 +1.5
CD2 pmax pmax
comp=Z,70nm,1.1s
CD2 pmax pmax
comp=Z,970nm,14.7s
CD2 LR LR
comp=Z,100nm,14.4s
CD2 LR LR
comp=Z,680nm,15.2s
CD2 LR LR
comp=Z,970nm,14.7s
**RGRI Rengat 24.25 236** P **P** **05 06 04.1 +0.6**
comp=Z,77μmcomp=Z,263nm,0.4s
**JAY Jayapura 24.36 130** LR LR 05 14 16.2
comp=Z,242nm,19.9s,baz=360,slow=33
**JAY Jayapura 24.36 130** P **P** **05 06 06.7 +2.1**
comp=Z,15nm,1.0s
**PCJI Pacitan 24.44 208** P **P** **05 06 06.9 +1.7**
comp=Z,84nm,1.4s
**HNS HongShan 24.52 345**⇑P **P** **05 06 05.8 0.0**
HNS S **S** **05 10 29.5 +3.4**
HNS pmax pmax
comp=Z,42nm,0.9s
HNS pmax pmax
comp=Z,350nm,4.9s
HNS LR LR
comp=Z,510nm,14.2s
HNS LR LR
comp=Z,520nm,15.9s
**KPJI Karang Pucung 24.80 213** P **P** **05 06 10.0 +1.5**
comp=Z,31nm,0.9s
**BKNI Bangkinang 24.93 239** P **P** **05 06 12.2 +2.4**
comp=Z,3μmcomp=Z,140nm,0.8s
**BKNI Bangkinang 24.93 239** P **P** **05 06 11.5 +1.7**
**JHJ Hachijo jima 2 25.01 37** LR LR 05 14 04.1
comp=Z,513nm,20.2s,baz=260,slow=32
**DL2 Dalian 25.08 359** P **P** **05 06 14.2 +3.4**
DL2 pmax pmax
comp=Z,50nm,1.2s
DL2 LR LR
comp=Z,470nm,14.2s
**LEM Lembang 25.11 216** LR LR 05 17 08.6
comp=Z,155nm,18.0s,baz=353,slow=39
**LEM Lembang 25.11 216** P **P** **05 06 13.7 +2.2**
comp=Z,26nm,1.3s
**INU Inuyama 25.27 29** P **P** **05 06 12.1 -0.5**
INU IAmb IAmb 05 06 17.4
comp=Z,59nm,1.2s
**KLSI 25.30 225** P **P** **05 06 13.7 +0.6**
comp=Z,1μmcomp=Z,140nm,0.9s
**KLI Kotabumi 25.34 224** P **P** **05 06 15.3 +1.9**
**DBJI Dramaga 25.40 218** P **P** **05 06 16.3 +2.3**
comp=Z,25nm,0.6s
**TIY Taiyuan 25.45 342** *e*P **P** **05 06 14.9 +0.6**
TIY pmax pmax
comp=Z,18nm,0.7s
**MDSI Maura Dua 25.54 226** P **P** **05 06 16.6 +1.4**
comp=Z,750nmcomp=Z,47nm,1.6s
**LHSI Lahat 25.54 228** P **P** **05 06 17.3 +2.0**
comp=Z,110nm,1.4s
**PSI Prapat 25.54 247** P **P** **05 06 15.4 0.0**
comp=Z,41nm,1.1s,baz=65,slow=5.2,SNR=14
**TSI Tuntungan 25.57 249** P **P** **05 06 17.2 +1.7**
comp=Z,6μmcomp=Z,239nm,1.1s
**RPSI Rantau Prapat 25.59 247** P **P** **05 06 15.4 -0.3**
**JGF Kuroka 25.64 29** P **P** **05 06 15.2 -0.8**
JGF IAmb IAmb 05 06 48.5
comp=Z,83nm,1.9s
**PPI Padang Panjang 25.90 239** P **P** **05 06 20.2 +1.7**
**MNSI Mandailing Nat 25.92 242** P **P** **05 06 19.1 +0.3**
comp=Z,87nm,1.0s
**KRJI Kerinci 25.98 234** P **P** **05 06 21.4 +2.0**
comp=Z,10μmcomp=Z,175nm,0.9s
**LWLI Liwa 26.00 225** P **P** **05 06 20.7 +1.2**
comp=Z,21μmcomp=Z,174nm,1.0s
**MASI Maura Aman, Be 26.04 231** P **P** **05 06 21.9 +2.0**
comp=Z,3μmcomp=Z,208nm,1.1s
**KASI Kota Agung 26.06 224** P **P** **05 06 22.1 +2.1**
comp=Z,70nm,0.9s
**CGJI Cibinong 26.10 220** P **P** **05 06 22.3 +2.0**
comp=Z,30nm,1.1s
**KCSI Kotacane, Aceh 26.28 250** P **P** **05 06 25.5 +3.5**
comp=Z,47nm,1.4s
**MNAI Manna 26.32 228** P **P** **05 06 24.7 +2.4**
comp=Z,196nm,1.3s
**MNAI Manna 26.32 228** P **P** **05 06 24.0 +1.6**
**BJT Baijiatuau 26.73 349** P **P** **05 06 24.5 -1.3**
BJT pmax pmax
comp=Z,154nm,1.5s
**BJT Baijiatuau 26.73 349** P **P** **05 06 24.5 -1.3**
BJT IAmb IAmb 05 06 28.2
comp=Z,154nm,1.5s
**BJI Beijing 26.75 349** P **P** **05 06 26.1 +0.1**
BJI pP **pP** **05 06 29.4 -0.6**
BJI sP **sP** **05 06 32.8 +1.2**
BJI S **S** **05 11 01.4 -0.1**
BJI pmax pmax
comp=Z,61nm,1.5s
BJI LR LR
comp=Z,300nm,16.7s
BJI LR LR
comp=Z,200nm,16.5s
BJI LR LR
comp=Z,260nm,17.2s
**MAJO Matsushiro 26.80 29** *i*P **P** **05 06 26.1 -0.4**
MAJO pmax pmax
comp=Z,9.0nm,1.1s
**MJAR Matsushiro Arr 26.80 29** P **P** **05 06 27.4 +0.9**
comp=Z,2.0nm,0.6s,baz=197,slow=7.4,SNR=4.8
**MJAR Matsushiro Arr 26.80 29** P **P** **05 06 27.4 +0.9**
MJAR pmax pmax
comp=Z,14nm,1.5s
**GSI Gunungsitoli 27.42 245** P **P** **05 06 33.5 +1.2**
comp=Z,82nm,1.0s
**GSI Gunungsitoli 27.42 245** P **P** **05 06 33.0 +0.6**
GSI IAmb IAmb 05 06 37.5
comp=Z,67nm,0.9s
**SISI Saibi 27.46 239** P **P** **05 06 34.8 +2.1**
comp=Z,69nm,1.0s
**LZH Lanzhou 27.76 327**⇑P **P** **05 06 36.3 +1.0**
LZH pP sP 05 06 41.3 +0.4
LZH sP pP 05 06 44.9 +5.6
LZH S **S** **05 11 18.6 +0.8**
LZH sS sS 05 11 25.5 +1.1
LZH pmax pmax
comp=Z,90nm,1.1s
LZH pmax pmax
comp=Z,220nm,4.1s
LZH LR LR
comp=Z,890nm,14.6s
LZH LR LR
comp=Z,930nm,14.0s
LZH LR LR
comp=Z,980nm,16.8s
**HHC Hu-ho-hao-te 28.60 343** *e*P **P** **05 06 43.1 +0.4**
HHC PP **PnPn** **05 07 30.9 -1.8**
HHC S **S** **05 11 29.3 -1.6**
HHC SS **SnSn** **05 12 56.9 +6.1**
HHC pmax pmax
comp=Z,29nm,1.5s
HHC pmax pmax
comp=Z,230nm,4.8s
HHC LR LR
comp=Z,470nm,17.8s
HHC LR LR
comp=Z,310nm,17.1s
HHC LR LR
comp=Z,490nm,17.1s
**BTO Baotou 28.85 340** *e*P **P** **05 06 42.5 -2.4**
BTO S **S** **05 11 33.1 -1.7**
BTO LR LR
comp=Z,2μm,14.1s
BTO LR LR
comp=Z,1μm,14.7s
**CN2 Changchun 30.08 5** *e*P **P** **05 06 55.2 -0.4**
CN2 *e*S **S** **05 11 52.0 -1.8**
CN2 pmax pmax
comp=Z,10.0nm,1.7s
CN2 pmax pmax
comp=Z,100nm,5.0s
CN2 LR LR
comp=Z,400nm,15.0s
CN2 LR LR
comp=Z,400nm,15.0s
CN2 LR LR
comp=Z,300nm,15.8s
**XLT XiLinHaoTe 30.53 351** *e*P **P** **05 06 59.8 0.0**
XLT pP pP 05 07 03.6 -0.1
XLT sP sP 05 07 06.6 +1.3
XLT S **S** **05 11 53.7 -7.4**
XLT sS sS 05 12 07.6 -0.1
XLT pmax pmax
comp=Z,26nm,1.4s
XLT LR LR
comp=Z,360nm,15.7s
XLT LR LR
comp=Z,430nm,13.8s
XLT LR LR
comp=Z,470nm,14.4s
**SHL Shillong 30.91 297** P **P** **05 07 02.4 -1.0**
SHL pmax pmax
comp=Z,53nm,1.0s
**SHL Shillong 30.91 297** P **P** **05 07 02.4 -1.0**
SHL IAmb IAmb 05 07 07.2
comp=Z,53nm,1.0s
**MDJ Mudanjiang 31.39 10** P **P** **05 07 08.3 +1.1**
MDJ pmax pmax
comp=Z,33nm,1.2s
MDJ pmax pmax
comp=Z,320nm,3.5s
MDJ LR LR
comp=Z,210nm,3.8s
MDJ LR LR
comp=Z,300nm,7.8s
MDJ LR LR
comp=Z,410nm,10.6s
**MDJ Mudanjiang 31.39 10** P **P** **05 07 06.4 -0.8**
**USA0B Ussuriysk Arra 31.47 13** P **P** **05 07 07.4 -0.5**
USA0B pmax pmax
comp=Z,40nm,1.0s
**USA0B Ussuriysk Arra 31.47 13** P **P** **05 07 07.4 -0.5**
USA0B IAmb IAmb 05 07 12.8
comp=Z,40nm,0.9s
**USRK Ussuriysk Ar. 31.47 13** P **P** **05 07 08.2 +0.4**
comp=Z,25nm,0.8s,baz=194,slow=7.9,SNR=26
USRK LR LR 05 21 21.8
comp=Z,148nm,18.1s,baz=185,slow=39
**BNX BinXian 32.19 7**⇓P **P** **05 07 14.2 0.0**
BNX pmax pmax
comp=Z,68nm,1.1s
BNX pmax pmax
comp=Z,360nm,6.4s
**GTA Gaotai 32.36 326**⇑P **P** **05 07 16.4 +0.4**
GTA pP pP 05 07 20.3 +0.3
GTA sP sP 05 07 22.8 +1.2
GTA S **S** **05 12 29.3 -0.6**
GTA pmax pmax
comp=Z,46nm,1.2s
GTA pmax pmax
comp=Z,160nm,4.7s
GTA LR LR
comp=Z,410nm,15.3s
GTA LR LR
comp=Z,440nm,16.4s
GTA LR LR
comp=Z,600nm,15.3s
**GOMU GeErMu 33.29 317** P **P** **05 07 25.6 +1.2**
GOMU pP sP 05 07 30.8 +0.8
GOMU PcP **PcP** **05 10 06.0 -0.6**
GOMU pmax pmax
comp=Z,30nm,1.3s
GOMU pmax pmax
comp=Z,140nm,4.7s
GOMU LR LR
comp=Z,480nm,14.5s
GOMU LR LR
comp=Z,350nm,15.3s
GOMU LR LR
comp=Z,480nm,14.4s
**COEN Coen 34.40 142** P **P** **05 07 32.0 -1.8**
**MBWA Marble Bar 34.77 184** P **P** **05 07 35.8 -1.1**
**ASAJ Asahikawa 34.89 26** LR LR 05 22 16.6
comp=Z,126nm,19.2s,baz=3.0,slow=37
**TAPN Taplejung 34.99 298** *e*P **P** **05 07 39.5 +0.2**
comp=Z,59nm,1.0s
**ODAN Odare 35.14 297** *e*P **P** **05 07 42.1 +1.6**
comp=Z,112nm,0.8s
**PSA00 Pilbara Seismi 35.17 184** P **P** **05 07 38.7 -1.7**
**PSA00 Pilbara Seismi 35.17 184** P **P** **05 07 38.7 -1.7**
PSA00 IAmb IAmb 05 07 42.8
comp=Z,8.9nm,1.2s
**WB0 Warramunga Arr 35.35 160** P **P** **05 07 39.9 -2.0**
**WRAB Tennant Creek 35.49 160***c*eP **P** **05 07 41.7 -1.5**
WRAB pmax pmax
comp=Z,19nm,1.3s
**WRAB Tennant Creek 35.49 160** P **P** **05 07 41.0 -2.2**
WRAB IAmb IAmb 05 07 45.6
comp=Z,40nm,1.6s
**HIA Hailar 35.49 357** P **P** **05 07 42.2 -0.7**
HIA pmax pmax
comp=Z,18nm,1.1s
**HIA Hailar 35.49 357** P **P** **05 07 42.2 -0.7**
**WRA Warramunga Arr 35.50 160** P **P** **05 07 41.3 -1.9**
comp=Z,5.1nm,0.6s,baz=340,slow=9.5,SNR=42
WRA PcP **PcP** **05 10 11.4 -1.3**
comp=Z,1.6nm,0.9s,baz=343,slow=3.1,SNR=4.0
**WRA Warramunga Arr 35.50 160** P **P** **05 07 41.6 -1.6**
**RAMN Ramite 35.84 297** *e*P **P** **05 07 48.3 +1.8**
comp=Z,25nm,0.8s
**KLR Kul'dur 36.23 10** P **P** **05 07 48.7 -0.5**
comp=Z,21nm,1.1s,baz=197,slow=6.1,SNR=25
KLR LR LR 05 22 00.1
comp=Z,180nm,21.9s,baz=188,slow=35
**ULN Ulaanbaatar 36.32 343** P **P** **05 07 50.3 +0.1**
ULN pmax pmax
comp=Z,46nm,1.3s
**ULN Ulaanbaatar 36.32 343** P **P** **05 07 50.3 +0.1**
ULN IAmb IAmb 05 07 55.1
comp=Z,46nm,1.2s
**JIRN Jiri 36.38 298** *e*P **P** **05 07 51.0 -0.2**
comp=Z,60nm,0.9s
**SONM Songino Array 36.49 342** P **P** **05 07 51.7 +0.1**
comp=Z,10.0nm,0.8s,baz=163,slow=9.8,SNR=41
SONM PcP **PcP** **05 10 14.7 -0.6**
comp=Z,0.6nm,0.5s,baz=153,slow=1.9,SNR=5.2
SONM LR LR 05 24 49.0
comp=Z,326nm,18.3s,baz=150,slow=40
**SONM Songino Array 36.49 342** P **P** **05 07 51.0 -0.6**
SONM IAmb IAmb 05 07 56.3
comp=Z,55nm,1.6s
**GUN Gumba 36.71 298** *e*P **P** **05 07 53.7 -0.3**
comp=Z,142nm,1.1s
**PKI Pulchoki 37.03 298** *e*P **P** **05 07 56.9 +0.2**
**YSS Yuzh-Sakhalins 37.28 23** *e*P **P** **05 07 59.3 +1.1**
YSS *e*S **S** **05 13 48.5 +3.3**
YSS pmax pmax
comp=Z,30nm,1.1s
YSS MLR MLR
comp=Z,400nm,16.0s
**YSS Yuzh-Sakhalins 37.28 23** P **P** **05 07 57.0 -1.2**
YSS IAmb IAmb 05 08 02.5
comp=Z,75nm,1.4s
**GKN Gorkha 37.79 298** *e*P **P** **05 08 02.3 -0.7**
comp=Z,2.9nm,0.2s
**DANN Dangsing 38.63 298** *e*P **P** **05 08 09.3 -0.9**

comp=Z,40nm,0.8s
**KOLN Koldanda 38.63 297** *e*P **P** **05 08 10.7 +0.6**
**GRNR Gornyy 38.67 14**⇓ *i*P **P** **05 08 09.5 -0.4**
GRNR pmax pmax
comp=Z,8.0nm,1.1s
GRNR MLR MLR
comp=E,100nm,14.0s
GRNR MLR MLR
comp=N,140nm,17.0s
GRNR MLR MLR
comp=Z,170nm,17.0s
**AS31 Alice Springs 38.86 163** P **P** **05 08 10.8 -1.0**
**ASAR Alice Springs 38.86 163** P **P** **05 08 10.7 -1.1**
comp=Z,3.7nm,0.6s,baz=20,slow=11,SNR=39
ASAR PcP **PcP** **05 10 21.8 -1.1**
comp=Z,1.5nm,0.7s,baz=346,slow=2.7,SNR=3.4
**ASAR Alice Springs 38.86 163** P **P** **05 08 11.0 -0.8**
**PYUN Piuthan 39.23 298** *e*P **P** **05 08 14.4 -0.8**
comp=Z,127nm,1.3s
**ZAK Zakamensk 39.70 341** *e*P **P** **05 08 17.7 -1.0**
ZAK pmax pmax
comp=Z,14nm,1.1s
**ZEA Zeya 40.10 5** *e*P P 05 08 33.6 +12
**PALK Pallekele 41.38 265** LR LR 05 25 46.4
comp=Z,127nm,18.7s,baz=177,slow=36
**MOY Mondy 41.55 340** *e*P **P** **05 08 34.2 +0.3**
MOY pmax pmax
comp=Z,35nm,1.5s
**WMQ Urumqi 42.13 322** *e*P **P** **05 08 40.9 +2.2**
WMQ sP sP 05 08 49.0 +4.6
WMQ pmax pmax
comp=Z,32nm,1.5s
WMQ pmax pmax
comp=Z,170nm,3.7s
WMQ LR LR
comp=Z,640nm,12.5s
WMQ LR LR
comp=Z,750nm,16.1s
WMQ LR LR
comp=Z,350nm,16.1s
**MORW Morawa 42.98 188** P **P** **05 08 46.4 +0.7**
MORW IAmb IAmb 05 08 48.4
comp=Z,64nm,1.9s
**BOD Bodaibo 44.45 354** *e*P **P** **05 08 56.0 -1.1**
BOD pmax pmax
comp=Z,16nm,2.0s
**FORT Forrest 44.60 173** P **P** **05 08 58.5 -0.2**
**DGZ Jazzator, Alta 45.81 329** *i*P **P** **05 09 07.9 -0.4**
DGZ pmax pmax
comp=Z,20nm,1.3s
**ZSN Zaisan 45.83 325** *e*P **P** **05 09 07.2 -1.1**
**ZSN Zaisan 45.83 325** *e*P **P** **05 09 07.2 -1.1**
baz=325
**MK31 Makanchi Array 46.95 323** *i*P **P** **05 09 16.8 -0.3**
**MK31 Makanchi Array 46.95 323** P **P** **05 09 16.5 -0.6**
**MKAR Makanchi Array 46.95 323** P **P** **05 09 17.4 +0.2**
comp=Z,16nm,0.8s,baz=124,slow=8.6,SNR=63
MKAR PcP **PcP** **05 10 48.7 -0.9**
comp=Z,2.7nm,0.7s,baz=135,slow=3.0,SNR=5.1
**MKAR Makanchi Array 46.95 323** P **P** **05 09 16.8 -0.4**
**MAKZ Makanchi 47.14 323** P **P** **05 09 18.5 -0.1**
MAKZ pmax pmax
comp=Z,47nm,1.6s
**MAKZ Makanchi 47.14 323** P **P** **05 09 18.5 -0.1**
MAKZ IAmb IAmb 05 09 20.9
comp=Z,47nm,1.6s
**UZB Uzynbulak 47.28 317** *e*P **P** **05 09 19.2 -0.8**
UZB pmax pmax
comp=Z,33nm,1.4s
**UZB Uzynbulak 47.28 317** *e*P **P** **05 09 19.2 -0.8**
comp=Z,33nm,1.4s,baz=317
**PRZ Przheval'sk 47.42 316** P **P** **05 09 21.9 +0.8**
PRZ pmax pmax
comp=Z,53nm,1.0s
**PRZ Przheval'sk 47.42 316** P **P** **05 09 21.9 +0.8**
**TARG Taragay, Kyrgy 47.54 315** P **P** **05 09 22.6 +0.3**
TARG IAmb IAmb 05 09 25.4
comp=Z,42nm,1.3s
**KPKS Kokpek 47.64 317** *e*P **P** **05 09 21.3 -1.4**
KPKS pmax pmax
comp=Z,32nm,1.4s
**KPKS Kokpek 47.64 317** *e*P **P** **05 09 21.4 -1.4**
comp=Z,32nm,1.4s,baz=317
**SATY Saty 47.66 317** *e*P **P** **05 09 22.0 -0.8**
SATY pmax pmax
comp=Z,25nm,1.4s
**SATY Saty 47.66 317** *e*P **P** **05 09 22.1 -0.8**
comp=Z,25nm,1.4s,baz=316
**ZHN Zhinishke 47.68 317** *e*P **P** **05 09 21.7 -1.3**
**ZHN Zhinishke 47.68 317** *e*P **P** **05 09 21.7 -1.3**
baz=317
**KSH Kashi 48.05 311** P **P** **05 09 28.3 +2.3**
KSH sP sP 05 09 34.8 +3.1
KSH PcP **PcP** **05 10 56.8 +3.0**
KSH PcS **PcS** **05 14 52.2 +2.6**
KSH pmax pmax
comp=Z,26nm,1.3s
KSH LR LR
comp=Z,98nm,6.2s
KSH LR LR
comp=Z,120nm,5.2s
KSH LR LR
comp=Z,140nm,7.6s
**BBOO Buckleboo 48.11 164** P **P** **05 09 25.6 -0.6**
**KDJ Kajisay 48.12 315** P **P** **05 09 27.1 +0.5**
KDJ pmax pmax
comp=Z,37nm,1.0s
**KDJ Kajisay 48.12 315** P **P** **05 09 27.1 +0.5**
KDJ IAmb IAmb 05 09 31.8
comp=Z,37nm,0.9s
**PEA0B Petropavlovsk- 48.24 28** P **P** **05 09 27.0 -0.1**
PEA0B pmax pmax
comp=Z,44nm,1.2s
**PEA0B Petropavlovsk- 48.24 28** P **P** **05 09 27.0 -0.1**
PEA0B IAmb IAmb 05 09 31.7
comp=Z,44nm,1.2s
**PETK Petropavlovsk- 48.24 28** P **P** **05 09 27.0 -0.1**
comp=Z,5.0nm,0.6s,baz=192,slow=4.3,SNR=5.7
PETK LR LR 05 28 44.5
comp=Z,79nm,20.7s,baz=222,slow=35
**PETK Petropavlovsk- 48.24 28** P **P** **05 09 27.0 -0.1**
**PETK Petropavlovsk- 48.24 28** P **P** **05 09 26.5 -0.6**
**TDK Taldyqorghan 48.48 319** *e*P **P** **05 09 28.0 -1.0**
TDK pmax pmax
comp=Z,45nm,1.3s
**TDK Taldyqorghan 48.48 319** *e*P **P** **05 09 28.1 -1.0**
comp=Z,45nm,1.3s,baz=319
**YAK Yakutsk 48.51 5** LR LR 05 32 48.8
comp=Z,179nm,18.6s,baz=241,slow=40
**YAK Yakutsk 48.51 5** *e*P **P** **05 09 28.0 -0.9**
YAK *e**PP **pP** **05 09 32.1 -0.9**
YAK *e* 05 10 53.5
YAK *e* 05 11 19.9
YAK *e*S **S** **05 16 30.6 +0.9**
YAK *e**SS sS 05 16 44.9 +8.4
YAK pmax pmax
comp=Z,29nm,1.1s
YAK pmax pmax
comp=N,16nm,1.2s
YAK pmax pmax
comp=E,4.0nm,1.1s
YAK pmax pmax
comp=Z,70nm,2.8s
YAK pmax pmax
comp=N,60nm,2.8s
YAK pmax pmax
comp=E,57nm,2.8s
YAK smax smax
comp=N,96nm,4.3s
YAK smax smax
comp=E,88nm,4.0s
YAK MLR MLR
comp=Z,283nm,19.0s
YAK MLR MLR
comp=N,264nm,17.0s
YAK MLR MLR
comp=E,71nm,18.0s
**YAK Yakutsk 48.51 5** P **P** **05 09 27.9 -1.1**
YAK IAmb IAmb 05 09 32.5
comp=Z,33nm,1.0s
**ARXS Arharly 48.52 318** *e*P **P** **05 09 29.4 0.0**
**MDOK Medeo 48.61 316** *e*P **P** **05 09 28.9 -1.3**
**MDOK Medeo 48.61 316** *e*P **P** **05 09 29.0 -1.3**
baz=316
**NIL Nilore 48.61 303** P **P** **05 09 29.4 -0.8**
NIL pmax pmax
comp=Z,23nm,1.0s
**NIL Nilore 48.61 303** P **P** **05 09 29.4 -0.8**
NIL IAmb IAmb 05 09 37.0
comp=Z,23nm,0.9s
**TNSS Tian-Shan 48.63 316** *e*P **P** **05 09 29.1 -1.6**
baz=316
**PET Petropavlovsk 48.63 28** *ce*P **P** **05 09 30.1 +0.1**
PET pmax pmax
comp=Z,56nm,2.5s
**PET Petropavlovsk 48.63 28** P **P** **05 09 29.3 -0.7**
**ULHL Ulahol 48.81 315** P **P** **05 09 32.9 +1.0**
SNR=21
**STKA Stephens Creek 48.97 158** P **P** **05 09 32.2 -0.7**
comp=Z,8.3nm,0.7s,baz=327,slow=7.0,SNR=13
STKA LR LR 05 32 25.9
comp=Z,62nm,19.8s,baz=347,slow=39
**BOOM Boomskoye usch 49.11 315** P **P** **05 09 34.0 -0.1**
BOOM pmax pmax
comp=Z,25nm,1.2s
**BOOM Boomskoye usch 49.11 315** P **P** **05 09 34.0 -0.1**
BOOM IAmb IAmb 05 09 39.2
comp=Z,25nm,1.1s
**KUU Kurty 49.37 317** *e*P **P** **05 09 33.5 -2.4**
**KUU Kurty 49.37 317** *e*P **P** **05 09 33.6 -2.4**
baz=317
**TKM2 Tokmak 2 49.50 315** P **P** **05 09 37.9 +0.7**
SNR=14
**TKM2 Tokmak 2 49.50 315** P **P** **05 09 37.3 +0.1**
**ZAA0 Zalesovo Array 49.76 332** P **P** **05 09 37.7 -1.0**
**ZALV Zalesovo Beam 49.76 332** P **P** **05 09 37.8 -0.9**
comp=Z,2.0nm,0.4s,baz=103,slow=6.2,SNR=10
ZALV LR LR 05 32 20.8
comp=Z,233nm,18.3s,baz=90,slow=38
**ZALV Zalesovo Beam 49.76 332** P **P** **05 09 37.5 -1.1**
**KBK Karagaybulak 49.85 315** P **P** **05 09 40.5 +0.7**
SNR=25
**SEM Semipalatinsk 49.99 326** *e*P **P** **05 09 38.9 -1.9**
SEM pmax pmax
comp=Z,19nm,1.3s
**SEM Semipalatinsk 49.99 326** *e*P **P** **05 09 38.1 -2.7**
comp=Z,19nm,1.3s,baz=326
**UCH Uchtor 50.00 314** P **P** **05 09 42.6 +1.3**
SNR=55
**CHMS Chumysh 50.11 315** P **P** **05 09 42.0 +0.4**
SNR=19
**AAK Ala-Archa 50.16 315** LR LR 05 32 11.0
comp=Z,190nm,20.2s,baz=104,slow=38
**AAK Ala-Archa 50.16 315** P **P** **05 09 43.0 +0.9**
SNR=15
**AAK Ala-Archa 50.16 315** P **P** **05 09 42.5 +0.4**
AAK pmax pmax
comp=Z,32nm,1.3s
**AAK Ala-Archa 50.16 315** P **P** **05 09 42.5 +0.4**
AAK IAmb IAmb 05 09 52.1
comp=Z,32nm,1.2s
**SGDS Sogindy 50.35 316** *e*P **P** **05 09 43.3 -0.2**
**SGDS Sogindy 50.35 316** *e*P **P** **05 09 42.2 -1.2**
baz=316
**MA2 Magadan 50.36 18** *ce*P **P** **05 09 43.2 +0.1**
MA2 pmax pmax
comp=Z,18nm,1.3s
**MA2 Magadan 50.36 18** P **P** **05 09 42.3 -0.8**
**USP Ospenovka 50.38 315** P **P** **05 09 44.1 +0.5**
SNR=15
**AML Almayashu 50.55 314** P **P** **05 09 46.5 +1.1**
SNR=28
**EKS2 Erkin-Say 50.66 314** P **P** **05 09 46.6 +0.7**
SNR=24
**KURK Kurchatov 51.04 326** *ce*P **P** **05 09 48.5 +0.1**
KURK pmax pmax
comp=Z,176nm,1.3s
**KURK Kurchatov 51.04 326** P **P** **05 09 47.9 -0.5**
**KURBB Kurchatov Arra 51.04 325** P **P** **05 09 48.4 0.0**
**BTLS Baital 51.32 317** *e*P **P** **05 09 49.3 -1.3**
BTLS pmax pmax
comp=Z,23nm,1.5s
**BTLS Baital 51.32 317** *e*P **P** **05 09 49.4 -1.3**
comp=Z,23nm,1.5s,baz=317
**BTK Batken 52.01 310** P **P** **05 09 56.0 0.0**
BTK pmax pmax
comp=Z,47nm,1.5s
**BTK Batken 52.01 310** P **P** **05 09 56.0 0.0**
BTK IAmb IAmb 05 09 58.2
comp=Z,47nm,1.5s
**GAR Garm 52.12 309** P **P** **05 09 56.4 -0.5**
**KBL Kabul 52.21 303** P **P** **05 09 57.3 -0.4**
KBL pmax pmax
comp=Z,25nm,1.2s
**KBL Kabul 52.21 303** P **P** **05 09 57.3 -0.4**
**DZA Taraz 52.44 314** *e*P **P** **05 09 57.9 -1.2**
DZA pmax pmax
comp=Z,28nm,1.4s
**DZA Taraz 52.44 314** *e*P **P** **05 09 58.0 -1.2**
comp=Z,28nm,1.4s,baz=314
**CHGR Chuyangaron 52.92 308** P **P** **05 10 02.5 -0.3**
CHGR IAmb IAmb 05 10 07.6
comp=Z,30nm,0.8s
**KKAR Karatay Array 53.08 314** P **P** **05 10 03.4 -0.4**
**KKAR Karatay Array 53.08 314** P **P** **05 10 03.4 -0.4**
**IUG luzhnay 53.15 313** *e*P **P** **05 10 03.4 -1.0**
**IUG luzhnay 53.15 313** *e*P **P** **05 10 03.5 -1.0**
baz=313
**SEY Seymchan 53.52 17** LR LR 05 33 02.0
comp=Z,73nm,18.9s,baz=296,slow=36
**SEY Seymchan 53.52 17** *i*P **P** **05 10 06.3 -0.3**
**BRLS Borolday 53.53 314** *e*P **P** **05 10 05.8 -1.3**
**BRLS Borolday 53.53 314** *e*P **P** **05 10 05.8 -1.3**
baz=313
**OTUK Ortayu 53.62 321** P **P** **05 10 08.0 +0.3**
**DGAR Diego Garcia 53.78 250** *ce*P **P** **05 10 07.1 -2.2**
DGAR pmax pmax
comp=Z,231nm,1.3s
**BRZS Berezniki 54.10 323** *e*P **P** **05 10 10.1 -1.0**
BRZS pmax pmax
comp=Z,26nm,1.2s
**BRZS Berezniki 54.10 323** *e*P **P** **05 10 10.2 -1.0**
comp=Z,26nm,1.2s,baz=323
**DZM Mont Dzumac 56.02 129** *e*P **P** **05 10 25.2 -0.3**
comp=Z,20nm,0.9s
**DZM Mont Dzumac 56.02 129** *e*LR LR 05 26 40.5
comp=Z,106nm,26.2s
**BVAR Borovoye Array 56.63 325** P **P** **05 10 29.4 0.0**
comp=Z,9.0nm,0.6s,baz=97,slow=12,SNR=62
BVAR PcP **PcP** **05 11 24.9 -0.6**
comp=Z,2.8nm,0.6s,baz=59,slow=6.8,SNR=3.7
**BRVK Borovoye 56.71 325** *ce*P **P** **05 10 29.9 0.0**
BRVK pmax pmax
comp=Z,93nm,1.3s
**BRVK Borovoye 56.71 325** P **P** **05 10 29.8 0.0**
**HRA Herat 57.76 302** P **P** **05 10 37.3 -0.6**
**TIXI Tiksi 58.02 2** LR LR 05 39 19.4
comp=Z,207nm,18.4s,baz=182,slow=40
**TIXI Tiksi 58.02 2** *ce*P **P** **05 10 37.7 -1.1**
TIXI pmax pmax
comp=Z,31nm,1.3s
**TIXI Tiksi 58.02 2** P **P** **05 10 37.6 -1.2**
TIXI IAmb IAmb 05 10 42.1
comp=Z,27nm,1.1s
**NRIK Noril'sk 59.74 346** P **P** **05 10 50.5 -0.3**
comp=Z,56nm,1.2s,baz=133,slow=6.7,SNR=27
**NRIK Noril'sk 59.74 346** P **P** **05 10 50.2 -0.6**
**WSAR Wadi Sarin 60.74 289** LR LR 05 41 03.9
comp=Z,49nm,18.1s,baz=100,slow=40
**BILL Bilibino 61.20 17** *i*P **P** **05 10 58.9 -1.9**
BILL *e* 05 11 40.8
BILL *i* 05 13 14.0
BILL pmax pmax
comp=Z,17nm,1.3s
BILL MLR MLR
comp=Z,82nm,18.0s
**GEYT Alibeck 61.39 306** P **P** **05 11 03.0 +0.3**
comp=Z,26nm,0.9s,baz=112,slow=6.6,SNR=13
GEYT LR LR 05 40 59.7
comp=Z,138nm,18.5s,baz=124,slow=39
**GEYT Alibeck 61.39 306** P **P** **05 11 02.7 0.0**
GEYT IAmb IAmb 05 11 07.5
comp=Z,36nm,1.0s
**GYA0B ALIBECK ARRAY 61.39 306** P **P** **05 11 02.7 0.0**
**AB31 Akbulak array 61.74 319** *i*P **P** **05 11 03.9 -0.9**
**ABKAR Akbulak array 61.74 319** P **P** **05 11 04.0 -0.8**
ABKAR IAmb IAmb 05 11 06.5
comp=Z,33nm,1.4s
**AKTO Aktyubinsk 63.20 320** LR LR 05 39 53.4
comp=Z,99nm,20.1s,baz=108,slow=37
**SVE Sverdlovsk 63.22 327** *e*P **P** **05 11 14.4 -0.1**
SVE pmax pmax
comp=Z,119nm,1.0s
**MSVF Nonsavu 63.25 118** P **P** **05 11 15.7 +0.3**
MSVF pmax pmax
comp=Z,29nm,1.0s
**MSVF Nonsavu 63.25 118** P **P** **05 11 15.7 +0.3**
MSVF IAmb IAmb 05 11 21.2
comp=Z,29nm,0.9s
**ARU Arti 64.22 326** LR LR 05 41 41.3
comp=Z,129nm,18.2s,baz=166,slow=38
**ARU Arti 64.22 326** *c i*P **P** **05 11 19.7 -1.4**
ARU 05 11 49.0
ARU S **S** **05 20 00.3 +2.1**
ARU SS **SS** **05 24 07.2 -0.3**
ARU pmax pmax
comp=Z,64nm,1.3s
**ARU Arti 64.22 326** P **P** **05 11 20.4 -0.7**
**UNV Unalaska Valle 67.92 37** P **P** **05 11 45.8 +0.9**
baz=263
**KIRV Kirov 69.47 328** LR LR 05 44 60.0
comp=Z,171nm,18.8s,baz=95,slow=38
**KIRV Kirov 69.47 328** *ce*P **P** **05 11 54.1 -0.4**
**ANM Nome 70.10 26** P **P** **05 11 58.0 -0.3**
baz=260
**AFI Afiamalu 70.80 110** LR LR 05 38 07.5
comp=Z,72nm,20.5s,baz=349,slow=32
**GROC Groznyy 70.94 311** *e*P **P** **05 12 03.4 -0.5**
GROC *e* 05 12 26.2
GROC pmax pmax
comp=Z,42nm,1.3s
**RDOG Red Dog Mine 71.66 22** P **P** **05 12 07.7 -0.1**
baz=261
**PRGR Permogore 71.69 331** *e*P **P** **05 12 06.1 -1.9**
PRGR pmax pmax
comp=Z,74nm,1.5s
**GNI Garni 71.83 308** P **P** **05 12 10.1 +0.5**
GNI pmax pmax
comp=Z,60nm,1.7s
**GNI Garni 71.83 308** P **P** **05 12 10.1 +0.5**
GNI IAmb IAmb 05 12 17.1
comp=Z,60nm,1.6s
**ZEI Tsey 72.34 311** *e*P **P** **05 12 09.7 -2.9**
ZEI pmax pmax
comp=Z,24nm,1.3s
**NCK Nalchik 72.54 312** *i*P **P** **05 12 13.3 -0.2**
NCK pmax pmax
comp=Z,12nm,0.8s
**ONI Oni 72.68 311** P **P** **05 12 15.4 +0.9**
ONI pmax pmax
comp=Z,13nm,0.8s
**ONI Oni 72.68 311** P **P** **05 12 15.4 +0.9**
ONI IAmb IAmb 05 12 24.9
comp=Z,13nm,0.8s
**AKH Akhalkalaki 72.72 309**⇑ P **P** **05 12 15.6 +0.8**
**KBZ Khabaz 73.03 312** P **P** **05 12 15.9 -0.4**
comp=Z,18nm,0.9s,baz=88,slow=4.2,SNR=13
KBZ LR LR 05 50 30.2
comp=Z,63nm,18.7s,baz=82,slow=41
**KIV Kislovodsk 73.17 312** *e*P **P** **05 12 16.6 -0.8**
KIV pmax pmax
comp=Z,51nm,1.0s
KIV MLR MLR
comp=Z,95nm,18.0s
**KIV Kislovodsk 73.17 312** P **P** **05 12 16.8 -0.5**
**NEY Neytrino 73.19 311** *i*P **P** **05 12 17.9 +0.3**
NEY pmax pmax
comp=Z,7.0nm,1.2s
**SHA1 Shidzhatmaz 73.21 312** *i*P **P** **05 12 16.4 -1.3**
**GEVA Gevas 73.26 306** P **P** **05 12 17.8 -0.2**
GEVA IAmb IAmb 05 12 19.3
comp=Z,31nm,1.4s
**VRH Novokhopyorsk 73.55 320** *e*P **P** **05 12 16.9 -2.3**
VRH pmax pmax
comp=Z,30nm,0.7s
**GCSA Galena City Sc 73.75 26** P **P** **05 12 20.7 +0.6**
baz=268
**SIRT Sirnak 73.81 305** P **P** **05 12 20.6 -0.6**
**GURO Guroymak-BITLI 74.04 307** P **P** **05 12 22.4 -0.2**
GURO IAmb IAmb 05 12 27.5
comp=Z,24nm,0.9s
**TTA Tatalina 74.08 28** P **P** **05 12 22.4 +0.1**
baz=269
**O18K Koktuh Hills 74.46 31** P **P** **05 12 25.1 +0.6**
baz=271
**KLMR Klimovskoe 74.61 330** *e*P **P** **05 12 21.7 -3.6**
KLMR pmax pmax
comp=Z,59nm,1.5s
**KLMR Klimovskoe 74.61 330** *e*P **P** **05 12 21.7 -3.6**
KLMR AMP 05 12 26.3
comp=Z,59nm,1.5s
**L19K White Mountain 74.61 29** P **P** **05 12 24.8 -0.6**
baz=270
**O19K Port Alsworth 74.90 31** P **P** **05 12 25.3 -1.7**
baz=271
**J20K Nowinta River 74.93 27** P **P** **05 12 27.9 +0.8**
baz=270
**K20K Telida 74.97 28** P **P** **05 12 28.7 +1.4**
baz=271
**L20K Farewell, AK 75.06 29** P **P** **05 12 28.6 +0.6**
baz=271
**VORD Divnogorie 75.08 319** *e*P **P** **05 12 26.9 -1.3**
VORD pmax pmax
comp=Z,10.0nm,0.7s
**VORR Voronezh 75.10 320** *e*P **P** **05 12 26.8 -1.5**
VORR pmax pmax
comp=Z,90nm,0.4s
**MARD Mardin 75.14 305** P **P** **05 12 28.9 -0.2**
MARD IAmb IAmb 05 12 33.3
comp=Z,29nm,0.9s
**VSR Storozhevoye 75.15 320** *e*P **P** **05 12 27.1 -1.5**
VSR pmax pmax
comp=Z,20nm,0.8s
**LPSR Galich'ya Gora 75.22 321** *e*P **P** **05 12 27.5 -1.4**
LPSR pmax pmax
comp=Z,40nm,0.7s
**SOC Sochi 75.34 312** *e*P **P** **05 12 27.3 -2.6**
SOC *e* 05 15 15.7
SOC *e*PPP PPP 05 17 02.8
SOC *e*S **S** **05 22 07.7 -1.7**
SOC *e*SS **SS** **05 27 01.3 +2.1**
SOC *e*SSS SSS 05 30 20.0
SOC pmax pmax
comp=Z,21nm,0.7s
SOC MLR MLR
comp=Z,106nm,18.0s
**H21K Melozitna Rive 75.48 25** P **P** **05 12 30.7 +0.5**
baz=271
**CHUM Lake Minchumin 75.74 27** P **P** **05 12 32.2 +0.5**
baz=272
**PPLA Purkeypile 75.83 28** P **P** **05 12 32.5 0.0**
baz=272
**CAST Castle Rocks 75.86 28** P **P** **05 12 32.9 +0.4**
baz=272
**KDAK Kodiak Island 75.89 33** LR LR 05 44 29.8
comp=Z,37nm,21.9s,baz=240,slow=35
**BPAW Bear Paw Mtn. 76.31 27** P **P** **05 12 36.1 +1.0**
baz=273
**MLY Manley 76.37 26** P **P** **05 12 35.8 +0.4**
baz=273
**OBN Obninsk 76.44 324** *i*P **P** **05 12 34.0 -1.9**
OBN *i* 05 12 43.0
OBN pmax pmax
comp=Z,29nm,1.3s
OBN MLR MLR
comp=Z,114nm,18.0s
**COLD Coldfoot 76.47 24** P **P** **05 12 36.3 +0.5**
baz=273
**SUA Susitna One 76.59 30** P **P** **05 12 36.4 -0.4**
baz=274
**TOLK Toolik Lake Re 76.62 22** P **P** **05 12 36.8 0.0**
baz=273
**TRF Thorofare Moun 76.66 27** P **P** **05 12 36.8 -0.4**
baz=274
**I23K Minto, Yukon-K 76.94 26** P **P** **05 12 37.5 -1.0**
baz=274
**APA Apatity 77.00 337**⇑ *i*P **P** **05 12 37.2 -1.6**
APA pmax pmax
comp=Z,15nm,1.2s
**O22K Cooper Landing 77.16 31** P **P** **05 12 39.0 -0.9**
baz=275
**MCK McKinley 77.24 27** P **P** **05 12 40.5 +0.2**
baz=275
**PMR Palmer 77.35 29** P **P** **05 12 39.0 -1.9**
baz=275
**H24K Noodor Dome 77.50 25** P **P** **05 12 42.8 +1.0**
baz=276
**WRH Wood River Hil 77.54 26** P **P** **05 12 41.9 0.0**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRH | | | | IAmb | IAmb | 05 12 48.2 | |
| | comp=Z,55nm,2.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **77.65** | **26** | P | **P** | **05 12 42.0** | **-0.5** |
| **SML** | **Sawmill** | **77.71** | **29** | P | **P** | **05 12 42.2** | **-0.8** |
| | baz=276 | | | | | | |
| **POKR** | **Poker Plat Res** | **77.76** | **26** | P | **P** | **05 12 43.4** | **+0.2** |
| | baz=276 | | | | | | |
| **ILAR** | **Eielson Array** | **78.03** | **26** | P | **P** | **05 12 43.2** | **-1.4** |
| | comp=Z,1.0nm,0.6s,baz=238,slow=4.2,SNR=34 | | | | | | |
| **HDA** | **Harding Lake** | **78.04** | **26** | P | **P** | **05 12 44.1** | **-0.7** |
| | baz=277 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **78.18** | **29** | P | **P** | **05 12 45.6** | **0.0** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,204nm,2.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **78.18** | **29** | P | **P** | **05 12 45.6** | **0.0** |
| **BMAR** | **Burnt Mountain** | **78.61** | **23** | P | **P** | **05 12 48.8** | **+0.8** |
| **J25K** | **Salcha River,** | **78.69** | **26** | P | **P** | **05 12 47.3** | **-1.2** |
| | baz=278 | | | | | | |
| **PAX** | **Paxson** | **78.89** | **28** | P | **P** | **05 12 49.6** | **0.0** |
| | baz=278 | | | | | | |
| **KLU** | **Klutina** | **78.89** | **29** | P | **P** | **05 12 49.1** | **-0.5** |
| KLU | | | | IAmb | IAmb | 05 14 47.9 | |
| | comp=Z,57nm,1.6s | | | | | | |
| **RIDG** | **Independent Ri** | **79.05** | **27** | P | **P** | **05 12 50.0** | **-0.3** |
| | baz=279 | | | | | | |
| **SCRK** | **Sand Creek** | **79.39** | **27** | P | **P** | **05 12 52.0** | **-0.4** |
| SCRK | | | | IAmb | IAmb | 05 12 53.0 | |
| | comp=Z,30nm,1.6s | | | | | | |
| **SCRK** | **Sand Creek** | **79.39** | **27** | P | **P** | **05 12 51.9** | **-0.4** |
| | baz=279 | | | | | | |
| **J26L** | **Joseph Creek** | **79.48** | **26** | P | **P** | **05 12 52.6** | **-0.2** |
| | baz=280 | | | | | | |
| **ARA0** | **ARCESS Array S** | **79.61** | **339** | *e*P | **P** | **05 12 53.5** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **79.61** | **339** | P | **P** | **05 12 52.9** | **-0.4** |
| | comp=Z,6.0nm,0.5s,baz=75,slow=6.9,SNR=81 | | | | | | |
| ARCES | | | | LR | LR | 05 50 42.0 | |
| | comp=Z,60nm,18.6s,baz=98,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.61** | **339** | P | **P** | **05 12 53.2** | **-0.1** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,87nm,1.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.61** | **339** | P | **P** | **05 12 53.2** | **-0.1** |
| **L26K** | **Log Cabin Wild** | **79.83** | **28** | P | **P** | **05 12 54.9** | **+0.3** |
| | baz=280 | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **79.87** | **348** | P | **P** | **05 12 54.7** | **+0.2** |
| SPB2 | | | | IAmb | IAmb | 05 12 58.4 | |
| | comp=Z,54nm,1.2s | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **79.87** | **348** | *e*P | **P** | **05 12 55.1** | **+0.5** |
| **SPITS** | **Spitsbergen Ar** | **79.87** | **348** | LR | LR | 05 53 41.3 | |
| | comp=Z,174nm,18.1s,baz=238,slow=40 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **79.87** | **348** | P | **P** | **05 12 54.7** | **+0.1** |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,41nm,1.0s | | | | | | |
| **HAMF** | **Hammerfest** | **79.99** | **340** | *e*P | **P** | **05 12 55.3** | **0.0** |
| **M26K** | **Nabesna, AK** | **80.10** | **28** | P | **P** | **05 12 56.0** | **-0.2** |
| | baz=281 | | | | | | |
| **BRTR** | **Keskin Array B** | **80.36** | **309** | P | **P** | **05 12 56.7** | **-1.4** |
| | comp=Z,3.0nm,0.9s,baz=72,slow=5.3,SNR=8.8 | | | | | | |
| **HSPB** | **Hornsund (broa** | **80.43** | **347** | *e*P | **P** | **05 12 57.8** | **+0.2** |
| **KBS** | **Kingsbay** | **80.44** | **349** | *e*P | **P** | **05 12 58.9** | **+1.3** |
| **L27K** | **Beaver Creek,** | **80.51** | **27** | P | **P** | **05 12 58.8** | **+0.5** |
| | baz=282 | | | | | | |
| **KTK1** | **Kautokeino** | **80.51** | **339** | *e*P | **P** | **05 12 58.1** | **-0.1** |
| **M27K** | **Edge Creek, AK** | **80.62** | **28** | P | **P** | **05 12 56.0** | **-3.1** |
| | baz=282 | | | | | | |
| **FINES** | **FINESS Array B** | **81.02** | **331** | P | **P** | **05 12 59.8** | **-1.1** |
| | comp=Z,4.3nm,0.4s,baz=63,slow=5.5,SNR=29 | | | | | | |
| FINES | | | | LR | LR | 05 53 33.3 | |
| | comp=Z,62nm,20.6s,baz=61,slow=39 | | | | | | |
| **EIL** | **Elat** | **81.08** | **298** | LR | LR | 05 54 25.1 | |
| | comp=Z,36nm,18.1s,baz=74,slow=40 | | | | | | |
| **VSU** | **Vasula** | **81.31** | **328** | *i* P | **P** | **05 13 02.6** | **0.0** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,59nm,1.1s | | | | | | |
| **VSU** | **Vasula** | **81.31** | **328** | *e*P | **P** | **05 13 03.0** | **+0.4** |
| **JETT** | **Jettan, Norway** | **81.35** | **340** | *e*P | **P** | **05 13 03.9** | **+1.2** |
| **DAWY** | **Dawson** | **81.35** | **26** | P | **P** | **05 13 02.8** | **0.0** |
| | baz=284 | | | | | | |
| **AKASG** | **Malin Array Be** | **81.45** | **320** | P | **P** | **05 13 01.6** | **-1.9** |
| | comp=Z,4.9nm,0.8s,baz=66,slow=5.4,SNR=8.9 | | | | | | |
| AKASG | | | | LR | LR | 05 52 30.3 | |
| | comp=Z,104nm,18.7s,baz=348,slow=38 | | | | | | |
| **AKBB** | **Malin Array Si** | **81.45** | **320** | *e*P | **P** | **05 12 59.3** | **-4.2** |
| **I29M** | **Ogilvie Camp,** | **81.50** | **25** | P | **P** | **05 13 02.7** | **-0.8** |
| | baz=284 | | | | | | |
| **MNK** | **Minsk** | **81.50** | **324** | *i* P | **P** | **05 13 00.5** | **-3.2** |
| MNK | | | | *i* | | 05 13 08.2 | |
| MNK | | | | *i* | | 05 16 16.2 | |
| MNK | | | | *i* S | **S** | **05 23 12.6** | **-2.4** |
| MNK | | | | pmax | pmax | | |
| | comp=N,29nm,0.9s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,2.0nm,1.0s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,163nm,19.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,89nm,19.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,38nm,20.0s | | | | | | |
| **MNK** | **Minsk** | **81.50** | **324** | *i* P | **P** | **05 13 00.5** | **-3.2** |
| | comp=E,2.0nm,1.0s | | | | | | |
| MNK | | | | *i* P | **P** | **05 13 00.5** | **-3.2** |
| | comp=N,29nm,0.9s | | | | | | |
| MNK | | | | *i* P | **P** | **05 13 00.5** | **-3.2** |
| | comp=Z,24nm,1.0s,baz=78 | | | | | | |
| MNK | | | | *i* PP | **PP** | **05 16 16.2** | **+6.6** |
| MNK | | | | *i* PPP | PPP | 05 18 58.3 | |
| MNK | | | | *i* S | **S** | **05 23 12.7** | **-2.4** |
| MNK | | | | *i* SS | SS | 05 28 56.5 | +25 |
| MNK | | | | *i* SSS | SSS | 05 31 33.9 | |
| MNK | | | | *i* LQ | LQ | 05 40 15.2 | |
| MNK | | | | *i* LR | LR | 05 46 14.2 | |
| MNK | | | | *i* LRM | MLR | 05 51 03.2 | |
| | comp=N,163nm,19.0s | | | | | | |
| MNK | | | | *i* LRM | MLR | 05 51 04.8 | |
| | comp=Z,89nm,19.0s | | | | | | |
| MNK | | | | *i* LRM | MLR | 05 51 23.5 | |
| | comp=E,38nm,19.5s | | | | | | |
| **J29M** | **Klondike Camp** | **81.76** | **26** | P | **P** | **05 13 05.0** | **0.0** |
| | baz=284 | | | | | | |
| **TRO** | **Tromso** | **81.82** | **340** | *e*P | **P** | **05 13 04.1** | **-1.0** |
| **EPYK** | **Eagle Plains** | **81.87** | **24** | P | **P** | **05 13 05.1** | **-0.4** |
| | baz=286 | | | | | | |
| **IDID** | **Didziasalis** | **81.98** | **325** | *e*P | **P** | **05 13 06.4** | **+0.2** |
| **NACGM** | **Naroch** | **82.04** | **325** | *i* P | **P** | **05 13 06.6** | **+0.1** |
| **IIGN** | **Ignalina** | **82.26** | **325** | *e*P | **P** | **05 13 08.2** | **+0.6** |
| **ISAL** | **Salakas** | **82.26** | **325** | *e*P | **P** | **05 13 07.2** | **-0.5** |
| **INK** | **Inuvik** | **82.49** | **21** | LR | LR | 05 51 29.3 | |
| | comp=E,45nm,20.5s,baz=333,slow=37 | | | | | | |
| **INK** | **Inuvik** | **82.49** | **21** | P | **P** | **05 13 09.4** | **+0.8** |
| **INK** | **Inuvik** | **82.49** | **21** | P | **P** | **05 13 09.0** | **+0.4** |
| | baz=288 | | | | | | |
| **SORM** | **Soroca** | **82.52** | **318** | ⇓P | **P** | **05 13 08.1** | **-1.1** |
| **TPGR** | **Topolog** | **83.17** | **314** | ⇓P | **P** | **05 13 13.6** | **+0.9** |
| **CFR** | **Carcaliu** | **83.30** | **315** | ⇓P | **P** | **05 13 13.8** | **+0.6** |
| **PABE** | **Paberze** | **83.47** | **325** | *e*P | **P** | **05 13 13.4** | **-0.5** |
| **STEI** | **Steigen** | **83.65** | **339** | *e*P | **P** | **05 13 14.1** | **-0.5** |
| **PANC** | **Panciu** | **83.82** | **316** | ⇑P | **P** | **05 13 16.6** | **+0.6** |
| **FAUS** | **Fauske** | **83.83** | **338** | *e*P | **P** | **05 13 14.3** | **-1.2** |
| **TESR** | **Tescani** | **84.01** | **316** | ⇓P | **P** | **05 13 16.6** | **-0.3** |
| **M31M** | **Drury Creek, Y** | **84.05** | **27** | P | **P** | **05 13 17.2** | **+0.3** |
| M31M | | | | IAmb | IAmb | 05 15 16.3 | |
| | comp=Z,29nm,1.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **84.05** | **27** | P | **P** | **05 13 17.0** | **+0.2** |
| | baz=288 | | | | | | |
| **VRI** | **Vrincioaia** | **84.11** | **316** | ⇑P | **P** | **05 13 17.7** | **+0.3** |
| **PLOR** | **Plostina** | **84.17** | **316** | ⇓P | **P** | **05 13 17.1** | **-0.7** |
| **SUW** | **Suwalki** | **84.30** | **324** | *e*P | **P** | **05 13 17.2** | **-1.0** |
| **SUW** | **Suwalki** | **84.30** | **324** | *e*P | **P** | **05 13 17.4** | **-0.8** |
| **WHY** | **Whitehorse** | **84.30** | **29** | P | **P** | **05 13 18.3** | **+0.1** |
| | baz=288 | | | | | | |
| **COVR** | **Voineasa-Covas** | **84.47** | **316** | ⇑P | **P** | **05 13 18.2** | **-1.1** |
| **NEHR** | **Nehoiu** | **84.51** | **315** | ⇓P | **P** | **05 13 20.1** | **+0.6** |
| **OZUR** | | **84.69** | **316** | ⇓P | **P** | **05 13 21.1** | **+0.6** |
| **BURAR** | **Bucovina Array** | **84.70** | **318** | ⇑P | **P** | **05 13 19.9** | **-0.6** |
| **BURAR** | **Bucovina Array** | **84.70** | **318** | P | **P** | **05 13 20.7** | **+0.2** |
| BURAR | | | | IAmb | IAmb | 05 13 24.9 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **84.70** | **318** | P | **P** | **05 13 20.4** | **-0.1** |
| BUR08 | | | | IAmb | IAmb | 05 13 24.7 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **MLR** | **Muntele Rosu** | **84.73** | **315** | ⇓P | **P** | **05 13 20.4** | **-0.4** |
| **MLR** | **Muntele Rosu** | **84.73** | **315** | LR | LR | 05 53 36.2 | |
| | comp=Z,120nm,20.7s,baz=34,slow=37 | | | | | | |
| **MLR** | **Muntele Rosu** | **84.73** | **315** | P | **P** | **05 13 20.8** | **0.0** |
| MLR | | | | pmax | pmax | | |
| | comp=Z,79nm,1.7s | | | | | | |
| **MLR** | **Muntele Rosu** | **84.73** | **315** | P | **P** | **05 13 20.8** | **0.0** |
| **LVV** | **L'vov** | **84.89** | **320** | *e*P | **P** | **05 13 21.1** | **-0.2** |
| **DOPR** | **Dopca** | **84.99** | **316** | ⇓P | **P** | **05 13 21.9** | **-0.1** |
| **C36M** | **Paulatuk** | **85.27** | **19** | P | **P** | **05 13 22.0** | **-0.7** |
| | baz=297 | | | | | | |
| **VOIR** | | **85.36** | **316** | ⇓P | **P** | **05 13 23.0** | **-0.8** |
| **ARCR** | **ARCALIA** | **85.40** | **317** | ⇓P | **P** | **05 13 24.6** | **+0.6** |
| **UPP** | **Uppsala** | **85.45** | **331** | *e*P | **P** | **05 13 24.0** | **+0.2** |
| **KMBO** | **Kilima Mbogo** | **85.47** | **268** | LR | LR | 05 51 10.6 | |
| | comp=Z,70nm,18.2s,baz=68,slow=35 | | | | | | |
| **ARR** | **Arges** | **85.66** | **316** | ⇓P | **P** | **05 13 25.1** | **-0.2** |
| **KWP** | **Kalwaria Pacla** | **85.77** | **320** | *e*P | **P** | **05 13 25.6** | **-0.1** |
| **CJR** | **Cluj-Napoca** | **86.00** | **317** | ⇓P | **P** | **05 13 26.8** | **-0.1** |
| **VLAD** | **Vladila** | **86.17** | **314** | ⇑P | **P** | **05 13 28.0** | **+0.2** |
| **NSS** | **Namsos** | **86.18** | **336** | *e*P | **P** | **05 13 25.6** | **-1.8** |
| **LOT** | **Lotru** | **86.22** | **316** | ⇓P | **P** | **05 13 28.2** | **0.0** |
| **TRPA** | **Tarpa** | **86.30** | **319** | ⇑P | **P** | **05 13 27.8** | **-0.5** |
| **BEL** | **Belsk** | **86.30** | **322** | *e*P | **P** | **05 13 28.1** | **-0.2** |
| **UZH** | **Uzhgorod** | **86.31** | **319** | *e*P | **P** | **05 13 25.2** | **-3.2** |
| UZH | | | | *i* | | 05 13 28.4 | |
| **DRGR** | | **86.56** | **317** | ⇑P | **P** | **05 13 29.6** | **-0.2** |
| **CRVS** | **Cervenica-Dubn** | **86.76** | **320** | *e*P | **P** | **05 13 30.7** | **+0.1** |
| **DAG** | **Danmarks Havn** | **86.80** | **352** | *i* P | **P** | **05 13 28.0** | **-2.3** |
| **GZR** | **Gura Zlata** | **86.91** | **316** | ⇑P | **P** | **05 13 31.7** | **+0.2** |
| **DLBC** | **Dease Lake** | **87.38** | **30** | LR | LR | 05 54 54.5 | |
| | comp=Z,74nm,18.1s,baz=299,slow=37 | | | | | | |
| **OJC** | **Ojcow** | **87.39** | **321** | *e*P | **P** | **05 13 33.2** | **-0.5** |
| **SIRR** | **Siria** | **87.41** | **317** | ⇑P | **P** | **05 13 34.0** | **+0.2** |
| **KECS** | **Kecovo** | **87.50** | **319** | *e*P | **P** | **05 13 34.0** | **-0.2** |
| **BZS** | **Buzias** | **87.63** | **316** | ⇑P | **P** | **05 13 34.4** | **-0.5** |
| **NC303** | **NORSAR Array S** | **87.80** | **333** | *e*P | **P** | **05 13 35.0** | **-0.4** |
| **NC602** | **NORSAR Array S** | **87.93** | **333** | *e*P | **P** | **05 13 35.9** | **-0.1** |
| **LANS** | **Liptovska Anna** | **87.94** | **320** | *e*P | **P** | **05 13 37.1** | **+0.8** |
| **NB2** | **NORSAR Subarra** | **87.95** | **333** | P | **P** | **05 13 34.4** | **-1.7** |
| | comp=Z,5.9nm,0.7s,baz=69,slow=4.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.95** | **333** | P | **P** | **05 13 34.4** | **-1.7** |
| | baz=69,slow=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.95** | **333** | P | **P** | **05 13 34.9** | **-1.2** |
| | comp=Z,5.7nm,0.7s,baz=68,slow=4.7,SNR=21 | | | | | | |
| NOA | | | | LR | LR | 05 54 54.6 | |
| | comp=Z,65nm,19.4s,baz=55,slow=37 | | | | | | |
| **PSZ** | **Piszkesteto** | **88.06** | **319** | ⇑P | **P** | **05 13 37.1** | **+0.1** |
| **OSL** | **Oslo** | **88.64** | **332** | *e*P | **P** | **05 13 39.8** | **+0.5** |
| **RES** | **Resolute Bay** | **88.75** | **9** | LR | LR | 05 56 44.3 | |
| | comp=Z,43nm,18.7s,baz=92,slow=38 | | | | | | |
| **NEEM** | **North Greenlan** | **88.91** | **359** | *i* P | **P** | **05 13 39.5** | **-1.2** |
| **MORC** | **Moravsky Berou** | **88.91** | **321** | ⇑P | **P** | **05 13 40.8** | **-0.2** |
| **MORC** | **Moravsky Berou** | **88.91** | **321** | *e*P | **P** | **05 13 40.4** | **-0.6** |
| **JAVC** | **Velka Javorina** | **89.15** | **320** | *e*P | **P** | **05 13 42.8** | **+0.7** |
| **KRLC** | **Kraliky** | **89.27** | **322** | *e*P | **P** | **05 13 42.2** | **-0.4** |
| KRLC | | | | smax | smax | | |
| | comp=N,5.0nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **89.27** | **322** | *e*P | **P** | **05 13 42.2** | **-0.4** |
| **KSP** | **Ksiaz** | **89.29** | **322** | *e*P | **P** | **05 13 41.0** | **-1.7** |
| KSP | | | | *e*PcP | **pP** | **05 13 46.1** | **-0.9** |
| **SKAR** | **Skarslia** | **89.39** | **333** | *e*P | **P** | **05 13 43.2** | **+0.2** |
| **OSTC** | **Ostas** | **89.44** | **322** | *e*P | **P** | **05 13 43.3** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **89.45** | **322** | *e*P | **P** | **05 13 43.4** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **89.45** | **322** | *e*P | **P** | **05 13 43.4** | **-0.1** |
| **CHVC** | **Chvalec** | **89.52** | **322** | *e*P | **P** | **05 13 43.5** | **-0.3** |
| **VRAC** | **Vranov** | **89.66** | **321** | ⇑P | **P** | **05 13 44.7** | **+0.3** |
| **VRAC** | **Vranov** | **89.66** | **321** | LR | LR | 05 55 56.9 | |
| | comp=N,103nm,19.2s,baz=77,slow=37 | | | | | | |
| **VRAC** | **Vranov** | **89.66** | **321** | *e*P | **P** | **05 13 44.1** | **-0.3** |
| **KRUC** | **Moravsky** | **89.87** | **321** | *e*P | **P** | **05 13 45.1** | **-0.3** |
| **CONA** | **Conrad Observa** | **90.60** | **320** | *e*P | **P** | **05 13 49.0** | **0.0** |
| | comp=N,13nm,1.6s | | | | | | |
| **PRU** | **Pruhonice** | **90.65** | **322** | *e*P | **P** | **05 13 49.5** | **+0.5** |
| **PRU** | **Pruhonice** | **90.65** | **322** | *e*P | **P** | **05 13 49.5** | **+0.5** |
| **BRG** | **Berggiesshubel** | **90.66** | **323** | *e*P | **P** | **05 13 48.8** | **-0.3** |
| BRG | | | | Amp | | 05 13 53.0 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **90.66** | **323** | *e*P | **P** | **05 13 48.7** | **-0.3** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **90.66** | **323** | *e*P | **P** | **05 13 48.3** | **-0.7** |
| | comp=Z,13nm,1.0s,baz=64,slow=4.6 | | | | | | |
| **CLL** | **Collm** | **91.04** | **324** | *i* P | **P** | **05 13 50.0** | **-0.8** |
| | comp=Z,16nm,1.4s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **91.23** | **321** | *e*P | **P** | **05 13 50.9** | **-0.9** |
| CKRC | | | | *ex* | x | 05 13 55.1 | |
| **KHC** | **Kasperske Hory** | **91.56** | **322** | *e*P | **P** | **05 13 52.8** | **-0.5** |
| KHC | | | | *e* | | 05 13 56.5 | |
| **KHC** | **Kasperske Hory** | **91.56** | **322** | *e*P | **P** | **05 13 52.8** | **-0.5** |
| KHC | | | | *e*pP | **pP** | **05 13 56.5** | **-1.1** |
| **GEC2** | **GERESS Array S** | **91.59** | **321** | *e*P | **P** | **05 13 52.9** | **-0.7** |
| | comp=Z,12nm,1.0s,baz=64,slow=4.6 | | | | | | |
| **GERES** | **GERESS Array B** | **91.59** | **321** | P | **P** | **05 13 52.7** | **-0.9** |
| | comp=Z,4.8nm,0.8s,baz=76,slow=4.8,SNR=19 | | | | | | |
| **GERES** | **GERESS Array B** | **91.59** | **321** | P | **P** | **05 13 53.2** | **-0.4** |
| **GERES** | **GERESS Array B** | **91.59** | **321** | P | **P** | **05 13 53.2** | **-0.4** |
| **FLTG** | **Flechtingen** | **91.62** | **325** | *e*P | **P** | **05 13 52.1** | **-1.3** |
| | comp=Z,7.9nm,0.8s,baz=64,slow=4.6 | | | | | | |
| **MOA** | **Molln** | **91.63** | **320** | *i* P | **P** | **05 13 53.8** | **+0.2** |
| | comp=Z,26nm,1.1s,SNR=12 | | | | | | |
| **GUNZ** | **Gunzen** | **91.81** | **323** | *e*P | **P** | **05 13 53.9** | **-0.6** |
| | comp=Z,14nm,1.2s,baz=64,slow=4.6 | | | | | | |
| **PLN** | **Plauen** | **91.86** | **323** | *e*P | **P** | **05 13 53.7** | **-0.9** |
| | comp=Z,29nm,1.9s,baz=64,slow=4.6 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **92.12** | **322** | *e*P | **P** | **05 13 55.5** | **-0.4** |
| | comp=Z,3.3nm,1.1s,baz=64,slow=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.13** | **23** | P | **P** | **05 13 54.9** | **-0.7** |
| | comp=Z,1.1nm,0.6s,baz=303,slow=4.3,SNR=24 | | | | | | |
| YKA | | | | PKKP | **PKKPdf** | **05 31 08.6** | **-1.5** |
| | comp=Z,0.4nm,0.7s,baz=130,slow=2.7,SNR=3.2 | | | | | | |
| **PPT** | **Papeete** | **92.30** | **107** | LR | LR | 05 50 27.3 | |
| | comp=Z,43nm,18.1s,baz=251,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **92.30** | **107** | *e*LR | LR | 05 43 23.0 | |
| | comp=Z,127nm,23.5s | | | | | | |
| **CLZ** | **Clausthal** | **92.31** | **325** | *e*P | **P** | **05 13 56.3** | **-0.4** |
| | comp=Z,12nm,0.9s,baz=64,slow=4.6 | | | | | | |
| **GRF** | **Grafenberg Arr** | **92.74** | **323** | *e*P | **P** | **05 13 57.9** | **-0.8** |
| | baz=64,slow=4.6 | | | | | | |
| **SUMG** | **Summit** | **92.95** | **354** | *i* P | **P** | **05 13 58.0** | **-1.7** |
| **UBBA** | **Unterbreizbach** | **92.96** | **324** | *e*P | **P** | **05 13 58.9** | **-0.7** |
| | comp=Z,19nm,1.6s,baz=64,slow=4.6 | | | | | | |
| **ABTA** | **Abfaltersbach** | **93.16** | **320** | *e*P | **P** | **05 13 59.5** | **-1.3** |
| | comp=Z,16nm,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **93.50** | **320** | *i* P | **P** | **05 14 01.6** | **-0.9** |
| | comp=Z,26nm,0.8s,SNR=7.9 | | | | | | |
| **WATA** | **Walderalm** | **93.50** | **320** | *i* P | **P** | **05 14 01.7** | **-0.8** |
| | comp=Z,22nm,1.1s,SNR=5.7 | | | | | | |
| **SQTA** | **Sankt Quirin** | **93.78** | **320** | *i* P | **P** | **05 14 03.1** | **-0.6** |
| | comp=Z,24nm,0.8s,SNR=8.8 | | | | | | |
| **MOTA** | **Moosalm** | **93.79** | **321** | *e*P | **P** | **05 14 03.1** | **-0.7** |
| | comp=Z,20nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **94.16** | **320** | *i* P | **P** | **05 14 05.1** | **-0.4** |
| | comp=Z,27nm,1.0s,SNR=10 | | | | | | |
| **UBR** | **Ueberruh** | **94.26** | **321** | *e*P | **P** | **05 14 05.0** | **-0.9** |
| | comp=Z,19nm,0.9s,baz=64,slow=4.6 | | | | | | |
| **BFO** | **Black Forest** | **95.05** | **322** | *e*P | **P** | **05 14 08.5** | **-0.9** |
| | comp=Z,44nm,2.1s,baz=64,slow=4.6 | | | | | | |
| **BTNL** | **Ternell** | **95.26** | **325** | *d*P | **P** | **05 14 10.6** | **+0.4** |
| **WLF** | **Walferdange** | **95.69** | **324** | *d*P | **P** | **05 14 12.0** | **-0.2** |
| **BMRD** | **Maredsous** | **96.15** | **325** | *d*P | **P** | **05 14 13.5** | **-0.8** |
| **DOU** | **Dourbes** | **96.35** | **325** | *d*P | **P** | **05 14 14.6** | **-0.7** |
| DOU | | | | *d*pP | **pP** | **05 14 17.9** | **-1.6** |
| **YBH** | **Yreka Blue Hor** | **98.66** | **43** | LR | LR | 05 56 10.2 | |
| | comp=Z,63nm,18.4s,baz=288,slow=34 | | | | | | |
| **SYO** | **Syowa Base** | **100.12** | **201** | ⇑*e*Pdiff | **Pdif** | **05 14 34.2** | **+2.6** |
| **PDAR** | **Pinedale Array** | **106.39** | **37** | PKKPab | PKKPab | 05 30 50.5 | +0.6 |
| | comp=Z,0.3nm,0.6s,baz=130,slow=3.6,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.40** | **292** | PKP | **PKPdf** | **05 19 27.3** | **-1.9** |
| | comp=Z,1.5nm,0.8s,baz=33,slow=0.9,SNR=7.9 | | | | | | |
| TORD | | | | PP | **PP** | **05 20 26.0** | **-4.2** |
| | comp=Z,1.6nm,0.9s,baz=66,slow=6.8,SNR=6.9 | | | | | | |
| TORD | | | | PKKPab | **PKKPab** | **05 30 06.8** | **-2.2** |
| | comp=Z,0.6nm,0.7s,baz=270,slow=4.3,SNR=4.2 | | | | | | |
| **DBIC** | **Dimbokro** | **123.78** | **288** | PKP | **PKPdf** | **05 19 44.5** | **-0.8** |
| | comp=Z,3.3nm,0.5s,baz=93,slow=3.2,SNR=8.7 | | | | | | |
| **KIC** | **Kosan Boka** | **123.79** | **287** | *e*P | **PKPdf** | **05 19 43.8** | **-1.6** |
| | comp=Z,12nm,0.5s | | | | | | |
| **TIC** | **Toumodi** | **123.95** | **288** | *e*P | **PKPdf** | **05 19 44.6** | **-1.1** |
| **LIC** | **Lamto** | **124.10** | **287** | *e*P | **PKiKP** | **05 19 47.5** | **+1.3** |
| | comp=Z,24nm,0.7s | | | | | | |
| **PLCA** | **Paso Flores** | **150.84** | **160** | PKPbc | **PKPbc** | **05 20 39.6** | **+0.3** |
| | comp=Z,8.0nm,1.0s,baz=192,slow=4.3,SNR=9.0 | | | | | | |
| **LPAZ** | **La Paz** | **169.59** | **105** | PKP | **PKPdf** | **05 20 55.9** | **+0.2** |
| | comp=Z,4.3nm,1.1s,baz=337,slow=4.7,SNR=7.0 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | **05 22 10.3** | **+1.1** |
| | comp=Z,3.2nm,1.1s,baz=292,slow=4.8,SNR=4.0 | | | | | | |

*CNRM **05** 05:06:38.1,35.65N×4.23W,h0km,ml2.8*
**ISC 05 05:06:36.3±1.5,35.62N±0.05×4.30W±0.07,h6km±13km,n9,σ0.96/16,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.50** | **143** | P | **Pb** | **05 06 47.4** | **-0.1** |
| PALE | | | | S | **Sg** | **05 06 52.0** | **-0.4** |
| **AKLM** | **AKL** | **1.16** | **162** | P | **Pn** | **05 06 59.3** | **+0.2** |
| AKLM | | | | S | **Sn** | **05 07 15.8** | **+0.4** |
| **LCRM** | **LCR** | **1.98** | **194** | P | **Pg** | **05 07 14.9** | **+0.6** |
| LCRM | | | | S | **Sg** | **05 07 41.4** | **+1.5** |
| **IFR** | **Ifrane** | **2.20** | **198** | P | **Pg** | **05 07 18.8** | **+0.3** |
| IFR | | | | S | **Sb** | **05 07 43.8** | **-0.4** |
| **MD31** | **MD31** | **2.77** | **188** | P | **Pb** | **05 07 25.3** | **-1.0** |
| MD31 | | | | S | **Sb** | **05 08 01.7** | **+1.2** |
| **MDT** | **Midelt** | **2.81** | **185** | P | **Pb** | **05 07 25.3** | **-1.6** |
| MDT | | | | S | **Sb** | **05 08 00.4** | **-1.2** |
| **PVAQ** | **Vaqueiros** | **3.28** | **304** | *e*Pn | **Pg** | **05 07 38.9** | **-0.2** |
| PVAQ | | | | *e*Sn | **Sg** | **05 08 21.3** | **-0.3** |
| PVAQ | | | | A | A | 05 08 24.2 | |
| | 3.5nm,0.9s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.35** | **300** | *e*Sn | **Sg** | **05 08 23.1** | **-0.7** |
| **PNCL** | **Nicolau / Gran** | **4.21** | **308** | *e*Pn | **Pb** | **05 07 51.5** | **+0.8** |

*IDC **05** 05:06:39.7±1.1,13.68N×122.46E,h0km,mb3.9/8, mb1 4.1/8,mb1mx3.7/40,mbtmp3.9/8,Error ellipse: s-maj=33.0km s-min=19.2km az=46.0*
*MAN **05** 05:06:42.7,13.82N×122.23E,h1km,mb4.9,ML3.8,MS3.8 MAN INTENSITY III - LOPEZ, QUEZON; INTENSITY II - GUINAYANGAN, QUEZON.*
**ISC 05 05:06:42.3±1.0,13.82N±0.03×122.34E±0.03,h13km±7km,n23,σ1.9/19/36,mb3.9/8,3C-11D,Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GQP** | **Guinayangan** | **0.13** | **50** | ⇓*i*P | **Pb** | **05 06 46.5** | **-0.2** |
| GQP | | | | *i* S | **Sg** | **05 06 49.6** | **+1.5** |
| **JCNP** | **Jose Panganiba** | **0.58** | **36** | ⇓*e*P | **Pb** | **05 06 54.0** | **-0.3** |
| JCNP | | | | *i* S | **Sb** | **05 07 02.5** | **+0.1** |
| **AUQP** | **San Andres** | **0.59** | **147** | ⇓*e*P | **Pn** | **05 06 56.5** | **+0.1** |
| **BOAC** | **Boac** | **0.60** | **234** | ⇑*e*P | **Pg** | **05 06 52.7** | **-1.4** |
| BOAC | | | | *e*S | **Sg** | **05 07 02.2** | **0.0** |
| **LQP** | **Lukban** | **0.83** | **290** | ⇓*e*P | **Pg** | **05 06 57.2** | **-1.3** |
| LQP | | | | *e*S | **Sg** | **05 07 08.4** | **-1.1** |
| **PGP** | **Puerto Galera** | **1.39** | **257** | ⇑*e*P | **Pn** | **05 07 07.0** | **-0.4** |
| PGP | | | | *i* S | **Sg** | **05 07 27.6** | **+0.4** |
| **TGY** | **Tagaytay City** | **1.40** | **282** | Pn | **Pb** | **05 07 08.2** | **0.0** |
| | 204nm,0.3s,baz=74,slow=1.6,SNR=9.4 | | | | | | |
| TGY | | | | Sn | **Sg** | **05 07 30.4** | **+3.1** |
| | 258nm,0.3s,baz=311,slow=22,SNR=10.0 | | | | | | |
| **TGY** | **Tagaytay City** | **1.40** | **282** | ⇓*e*P | **Pb** | **05 07 08.6** | **+0.3** |
| TGY | | | | *i* S | **Sg** | **05 07 30.4** | **+3.1** |
| **QVP** | **Quezon City--P** | **1.52** | **302** | ⇓*e*P | **Pn** | **05 07 09.5** | **+0.2** |
| QVP | | | | *e*S | **Sb** | **05 07 29.8** | **+0.1** |
| **MACP** | **Maragondon, Ca** | **1.64** | **286** | ⇓*e*P | **

*VAO **05** 05:24:40.9±0.5,31°.05S×71°.61W,h26km,mb4.7*
*NEIC **05** 05:24:40.5±1.6,31°.08S±0°.04×71°.79W±0°.06,h25km±4km,*
*mb5.1/50,Mwr4.4/51,Mwr5.0(GUC), Error ellipse:*
*s-maj=7.1km s-min=5.1km az=76.0*

**ISC 05 05:24:40.5±1.0,31°.05S±0°.02×71°.88W±0°.04,h33km±4km,**
**n282,σ1♀60/329,mb5.0/36,11C-6D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.43** | **29** | ⇓*iP* | **Pb** | **05 24 49.4** | **-0.5** |
| CO06 | | | | *e*S | **Sb** | **05 24 56.0** | **-0.4** |
| **CO06** | **Fray Jorge** | **0.43** | **29** | | **Pb** | **05 24 49.5** | **-0.4** |
| CO06 | | | | Sg | **Sb** | **05 24 56.1** | **-0.4** |
| **CO02** | **Combarbal** | **0.77** | **102** | ⇓*iP* | **Pn** | **05 24 53.6** | **-1.5** |
| CO02 | | | | *i* S | **Sn** | **05 25 03.5** | **-2.1** |
| CO02 | | | | IAML | | 05 25 05.3 | |
| | comp=N,199μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **0.77** | **102** | | **Pn** | **05 24 53.9** | **-1.3** |
| CO02 | | | | Sg | **Sn** | **05 25 03.2** | **-2.4** |
| **CO02** | **Combarbal** | **0.77** | **102** | *e*P | **Pn** | **05 24 53.0** | **-2.1** |
| CO02 | | | | IAML | | 05 25 12.3 | |
| | comp=Z,20μm,0.9s | | | | | | |
| **CO03** | **El Pedregal** | **1.04** | **79** | ⇓*iP* | **Pn** | **05 24 58.0** | **-0.7** |
| CO03 | | | | *e*S | **Sn** | **05 25 11.2** | **-1.1** |
| **CO03** | **El Pedregal** | **1.04** | **79** | | **Pn** | **05 24 58.1** | **-0.7** |
| **CO03** | **El Pedregal** | **1.04** | **79** | *e*P | **Pn** | **05 24 58.1** | **-0.7** |
| CO03 | | | | *e*S | **Sn** | **05 25 12.1** | **-0.2** |
| CO03 | | | | IAML | | 05 25 14.5 | |
| | comp=Z,8μm,0.6s | | | | | | |
| **CO05** | **La Serena** | **1.25** | **26** | ⇓*iP* | **Pn** | **05 25 02.4** | **+0.7** |
| CO05 | | | | *e*S | **Sb** | **05 25 18.6** | **-0.7** |
| **CO05** | **La Serena** | **1.25** | **26** | | **Pn** | **05 25 02.3** | **+0.7** |
| **GO04** | **Tololo Observa** | **1.27** | **47** | ⇓*iP* | **Pn** | **05 25 02.4** | **+0.2** |
| GO04 | | | | *e*S | **Sn** | **05 25 19.2** | **+1.0** |
| GO04 | | | | IAML | | 05 25 24.0 | |
| | comp=N,89μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **1.27** | **47** | | **Pn** | **05 25 02.4** | **+0.2** |
| **GO04** | **Tololo Observa** | **1.27** | **47** | *e*P | **Pn** | **05 25 02.6** | **+0.4** |
| GO04 | | | | *e*S | **Sb** | **05 25 20.6** | **+0.4** |
| **VA06** | **Catapilco** | **1.59** | **162** | ⇑*iP* | **Pn** | **05 25 06.3** | **+0.1** |
| VA06 | | | | *e*S | **Sn** | **05 25 26.5** | **+0.8** |
| VA06 | | | | IAML | | 05 25 30.9 | |
| | comp=N,38μm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **1.98** | **174** | ⇑*e*P | **Pn** | **05 25 11.5** | **-0.1** |
| VA01 | | | | *e*S | **Sn** | **05 25 34.2** | **-1.1** |
| **VA01** | **Torpederas** | **1.98** | **174** | | **Pn** | **05 25 10.9** | **-0.8** |
| **VA03** | **San Esteban** | **2.05** | **147** | ⇑*iP* | **Pn** | **05 25 13.7** | **+0.9** |
| VA03 | | | | *e*S | **Sn** | **05 25 38.1** | **+0.8** |
| VA03 | | | | IAML | | 05 25 44.6 | |
| | comp=E,17μm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.05** | **147** | | **Pn** | **05 25 13.4** | **+0.7** |
| **VA03** | **San Esteban** | **2.05** | **147** | *e*P | **Pn** | **05 25 13.8** | **+1.1** |
| VA03 | | | | *e*S | **Sb** | **05 25 42.9** | **+0.6** |
| VA03 | | | | IAML | | 05 25 46.7 | |
| | comp=Z,7μm,0.8s | | | | | | |
| **ROCH** | **El Roble** | **2.06** | **159** | ⇑*iP* | **Pn** | **05 25 13.2** | **+0.3** |
| ROCH | | | | *e*S | **Sn** | **05 25 38.6** | **+1.0** |
| ROCH | | | | IAML | | 05 25 47.4 | |
| | comp=E,20μm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **2.06** | **159** | | **Pn** | **05 25 11.9** | **-1.1** |
| **ROC1** | **El Roble** | **2.06** | **159** | *e*P | **Pn** | **05 25 12.1** | **-0.9** |
| ROC1 | | | | *e*S | **Sb** | **05 25 41.8** | **-0.9** |
| **AROD** | **Rodeo** | **2.25** | **68** | *e*P | **Pb** | **05 25 18.9** | **-1.8** |
| AROD | | | | *e*S | **Sn** | **05 25 42.4** | **-0.1** |
| **LCO** | **Las Campanas** | **2.27** | **27** | P | **Pn** | **05 25 16.8** | **+0.8** |
| **LCO** | **Las Campanas** | **2.27** | **27** | ⇑*iP* | **Pn** | **05 25 16.6** | **+0.7** |
| LCO | | | | *e*S | **Sn** | **05 25 45.6** | **+2.7** |
| **LCO** | **Las Campanas** | **2.27** | **27** | | **Pn** | **05 25 16.8** | **+0.8** |
| **LCO** | **Las Campanas** | **2.27** | **27** | *e*P | **Pn** | **05 25 16.0** | **+0.1** |
| **MT02** | **Curacav** | **2.29** | **164** | ⇑*e*P | **Pn** | **05 25 15.8** | **-0.2** |
| MT02 | | | | *e*S | **Sn** | **05 25 43.5** | **+0.4** |
| **MT02** | **Curacav** | **2.29** | **164** | *e*P | **Pn** | **05 25 15.9** | **-0.1** |
| MT02 | | | | *e*P | **Pn** | **05 25 16.0** | **-0.1** |
| MT02 | | | | *e*S | **Sb** | **05 25 50.6** | **+1.4** |
| MT02 | | | | IAML | | 05 26 00.8 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **2.32** | **154** | P | **Pn** | **05 25 17.1** | **+0.7** |
| **PEL** | **Peldehue** | **2.32** | **154** | ⇑*iP* | **Pn** | **05 25 17.2** | **+0.7** |
| PEL | | | | *e*S | **Sn** | **05 25 45.4** | **+1.5** |
| **PEL** | **Peldehue** | **2.32** | **154** | | **Pn** | **05 25 17.1** | **+0.7** |
| **PEL** | **Peldehue** | **2.32** | **154** | *e*P | **Pn** | **05 25 17.2** | **+0.7** |
| PEL | | | | *e*S | **Sb** | **05 25 48.8** | **-1.3** |
| **AUSP** | **Uspallata** | **2.43** | **120** | *e*P | **Pb** | **05 25 21.4** | **-2.3** |
| AUSP | | | | *e*S | **Sb** | **05 25 55.2** | **+1.9** |
| **ACCO** | **Cerro Coronel** | **2.46** | **80** | *e*P | **Pb** | **05 25 22.2** | **-2.0** |
| ACCO | | | | IAML | | 05 26 08.0 | |
| | comp=Z,2μm,3.9s | | | | | | |
| **MT05** | **Renca** | **2.53** | **158** | ⇑*e*P | **Pn** | **05 25 20.1** | **+0.8** |
| MT05 | | | | *e*S | **Sn** | **05 25 49.8** | **+0.7** |
| MT05 | | | | IAML | | 05 26 04.2 | |
| | comp=E,12μm,0.4s | | | | | | |
| **MT05** | **Renca** | **2.53** | **158** | | **Pn** | **05 25 19.7** | **+0.4** |
| **MT05** | **Renca** | **2.53** | **158** | *e*P | **Pn** | **05 25 20.0** | **+0.7** |
| MT05 | | | | *e*S | **Sn** | **05 25 50.9** | **+1.8** |
| MT05 | | | | IAML | | 05 26 00.4 | |
| | comp=Z,6μm,0.8s | | | | | | |
| **VA05** | **Santo Domingo** | **2.61** | **175** | *e*P | **Pn** | **05 25 19.9** | **-0.4** |
| VA05 | | | | *e*S | **Sn** | **05 25 50.3** | **-0.6** |
| VA05 | | | | IAML | | 05 26 04.5 | |
| | comp=N,6μm,0.4s | | | | | | |
| **VA05** | **Santo Domingo** | **2.61** | **175** | | **Pn** | **05 25 19.7** | **-0.6** |
| **ZON** | **Zonda** | **2.78** | **101** | *e*P | **Pn** | **05 25 26.0** | **+3.2** |
| ZON | | | | *e*S | **Sb** | **05 26 05.6** | **+2.3** |
| ZON | | | | IAML | | 05 26 11.1 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **MT09** | **Talagante** | **2.82** | **165** | ⇑*iP* | **Pn** | **05 25 24.2** | **+0.8** |
| MT09 | | | | *e*S | **Sn** | **05 25 57.2** | **+0.8** |
| MT09 | | | | IAML | | 05 26 11.5 | |
| | comp=N,4μm,0.5s | | | | | | |
| **MT09** | **Talagante** | **2.82** | **165** | | **Pn** | **05 25 23.9** | **+0.4** |
| **MT01** | **Popeta** | **2.86** | **169** | ⇑*e*P | **Pn** | **05 25 23.8** | **0.0** |
| MT01 | | | | *e*S | **Sn** | **05 25 57.7** | **+0.6** |
| **MT01** | **Popeta** | **2.86** | **169** | | **Pn** | **05 25 23.9** | **0.0** |
| **MT01** | **Popeta** | **2.86** | **169** | *e*P | **Pn** | **05 25 23.9** | **+0.2** |
| MT01 | | | | *e*P | **Pn** | **05 25 24.0** | **+0.2** |
| MT01 | | | | *e*S | **Sn** | **05 25 59.9** | **+2.8** |
| MT01 | | | | IAML | | 05 26 12.5 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.92** | **14** | | **Pn** | **05 25 24.8** | **+0.2** |
| **AC04** | **Llanos de Chal** | **2.92** | **14** | *e*P | **Pn** | **05 25 24.0** | **-0.6** |
| AC04 | | | | *e*S | **Sb** | **05 25 55.4** | **-3.1** |
| AC04 | | | | *e*S | **Sn** | **05 26 03.4** | **+4.9** |
| AC04 | | | | IAML | | 05 26 16.4 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.93** | **96** | *e*P | **Pn** | **05 25 28.1** | **+3.3** |
| RTLL | | | | *e*S | **Sb** | **05 26 10.6** | **+3.1** |
| **RTCV** | **Cerro Valdivia** | **2.97** | **107** | *e*P | **Pb** | **05 25 29.0** | **-3.7** |
| RTCV | | | | *e*S | **Sb** | **05 26 13.1** | **+4.6** |
| RTCV | | | | IAML | | 05 26 22.3 | |
| | comp=Z,66nm,1.1s | | | | | | |
| **ASAL** | **Salagasta** | **3.01** | **122** | *e*P | **Pb** | **05 25 30.0** | **-3.5** |
| ASAL | | | | *e*S | **Sb** | **05 26 14.9** | **+5.0** |
| ASAL | | | | IAML | | 05 26 21.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.08** | **126** | *e*P | **Pb** | **05 25 32.0** | **-2.6** |
| ARCO | | | | *e*S | **Sb** | **05 26 12.9** | **+1.0** |
| ARCO | | | | IAML | | 05 26 21.6 | |
| | comp=Z,3μm,1.3s | | | | | | |
| **LMEL** | **Las Melosas** | **3.13** | **154** | *e*P | **Pn** | **05 25 29.2** | **+1.5** |
| LMEL | | | | *e*S | **Sn** | **05 26 05.9** | **+1.9** |
| LMEL | | | | IAML | | 05 26 22.7 | |
| | comp=N,3μm,0.4s | | | | | | |
| **AAGR** | **Agrelo** | **3.29** | **129** | *e*P | **Pn** | **05 25 34.0** | **+4.2** |
| AAGR | | | | *e*S | **Sb** | **05 26 21.8** | **+3.8** |
| AAGR | | | | IAML | | 05 26 39.6 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **BO01** | **Tunca** | **3.40** | **169** | | **Pn** | **05 25 31.7** | **+0.4** |
| **BO01** | **Tunca** | **3.40** | **169** | *e*P | **Pn** | **05 25 31.0** | **-0.2** |
| BO01 | | | | *e*S | **Sn** | **05 26 15.4** | **+4.9** |
| BO01 | | | | IAML | | 05 26 29.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **GO03** | **Copiap** | **3.73** | **23** | | **Pn** | **05 25 36.2** | **+0.4** |
| **GO03** | **Copiap** | **3.73** | **23** | *e*P | **Pn** | **05 25 36.0** | **+0.2** |
| GO03 | | | | *e*S | **Sb** | **05 26 26.4** | **-4.0** |
| **BO02** | **Sierra Bellavi** | **3.85** | **166** | | **Pn** | **05 25 38.1** | **+0.6** |
| **BO02** | **Sierra Bellavi** | **3.85** | **166** | *e*P | **Pn** | **05 25 38.0** | **+0.6** |
| BO02 | | | | *e*S | **Sb** | **05 26 27.9** | **-6.0** |
| BO02 | | | | IAML | | 05 26 39.9 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **VCA** | **Vinchina** | **3.93** | **55** | *e*P | **Pn** | **05 25 43.0** | **+4.3** |
| VCA | | | | *e*S | **Sb** | **05 26 33.4** | **-3.0** |
| VCA | | | | IAML | | 05 26 44.7 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **GO05** | **Huala** | **3.95** | **181** | | **Pn** | **05 25 37.7** | **-1.1** |
| **GO05** | **Huala** | **3.95** | **181** | *e*P | **Pn** | **05 25 38.0** | **-0.9** |
| GO05 | | | | *e*P | **Pn** | **05 25 38.0** | **-0.9** |
| GO05 | | | | *e*S | **Sn** | **05 26 23.1** | **-1.0** |
| **ACLC** | **CERRO LA CRUZ** | **4.56** | **70** | *e*P | **Pn** | **05 25 49.9** | **+2.5** |
| ACLC | | | | *e*S | **Sb** | **05 26 51.7** | **-2.7** |
| ACLC | | | | IAML | | 05 26 54.6 | |
| | comp=Z,3μm,1.1s | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.65** | **83** | *e*P | **Pn** | **05 25 50.0** | **+1.5** |
| APLL | | | | IAML | | 05 27 22.9 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **RFA** | **San Rafael** | **4.69** | **143** | *e*P | **Pn** | **05 25 50.9** | **+1.8** |
| RFA | | | | *e*P | **Pn** | **05 25 51.1** | **+2.1** |
| RFA | | | | *e*S | **Sb** | **05 26 59.9** | **+1.7** |
| RFA | | | | *e*S | Sn | 05 27 04.4 | +22 |
| RFA | | | | IAML | | 05 27 10.4 | |
| | comp=Z,637nm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **4.72** | **175** | | **Pn** | **05 25 49.2** | **-0.2** |
| **AC02** | **Maricunga** | **4.84** | **31** | | **Pn** | **05 25 52.2** | **+0.8** |
| **AC02** | **Maricunga** | **4.84** | **31** | *e*P | **Pn** | **05 25 52.4** | **+0.9** |
| AC02 | | | | *e*S | **Sb** | **05 26 55.4** | **-7.4** |
| AC02 | | | | IAML | | 05 27 14.7 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **H03N1** | **Juan Fernandez** | **6.42** | **246** | Pn | **Pn** | **05 26 12.7** | **+0.2** |
| | baz=268,slow=74,SNR=215 | | | | | | |
| H03N1 | | | | T | T | 05 33 01.0 | |
| | baz=75,slow=72,SNR=2991 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.43** | **246** | Pn | **Pn** | **05 26 12.6** | **-0.1** |
| H03N3 | | | | T | T | 05 32 59.8 | |
| | baz=75,slow=72,SNR=3079 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.43** | **246** | Pn | **Pn** | **05 26 13.1** | **+0.4** |
| | baz=354,slow=74,SNR=134 | | | | | | |
| H03N2 | | | | T | T | 05 33 01.6 | |
| | baz=75,slow=72,SNR=2707 | | | | | | |
| **H03S2** | **Juan Fernandez** | **6.58** | **243** | Pn | **Pn** | **05 26 14.0** | **-0.6** |
| | SNR=8.7 | | | | | | |
| **AHML** | **Horco Molle** | **7.13** | **55** | *e*P | **Pn** | **05 26 24.0** | **+1.4** |
| AHML | | | | *e*P | **Pn** | **05 26 25.1** | **+2.5** |
| AHML | | | | *e*S | **Sn** | **05 27 49.9** | **+7.3** |
| AHML | | | | IAML | | 05 28 16.5 | |
| | comp=Z,285nm,0.9s | | | | | | |
| **LC01** | **Cunco** | **7.83** | **180** | Pn | **Pn** | **05 26 31.4** | **-0.7** |
| **LC01** | **Cunco** | **7.83** | **180** | *e*P | **Pn** | **05 26 31.0** | **-1.1** |
| **PB06** | **IPOC Station P** | **8.56** | **14** | *e*P | **Pn** | **05 26 42.1** | **-0.1** |
| PB06 | | | | *e*P | **Pn** | **05 26 43.0** | **+0.8** |
| **LR03** | **Panguipulli** | **8.58** | **182** | | **Pn** | **05 26 41.7** | **-0.6** |
| **LVC** | **Limon Verde** | **8.81** | **18** | Pn | **Pn** | **05 26 43.5** | **-2.4** |
| | comp=Z,0.5nm,0.3s,baz=209,slow=4.6,SNR=1.8 | | | | | | |
| **LVC** | **Limon Verde** | **8.81** | **18** | P | **Pn** | **05 26 44.3** | **-1.6** |
| **LVC** | **Limon Verde** | **8.81** | **18** | *e*P | **Pn** | **05 26 43.9** | **-2.0** |
| **LVC** | **Limon Verde** | **8.81** | **18** | | **Pn** | **05 26 44.3** | **-1.6** |
| **PB09** | **IPOC Station P** | **9.51** | **15** | | **Pn** | **05 26 56.0** | **+0.7** |
| **PLCA** | **Paso Flores** | **9.73** | **174** | Pn | **Pn** | **05 26 58.6** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=336,slow=12,SNR=33 | | | | | | |
| **PLCA** | **Paso Flores** | **9.73** | **174** | P | **Pn** | **05 26 58.5** | **+0.4** |
| **PLCA** | **Paso Flores** | **9.73** | **174** | *e*P | **Pn** | **05 26 58.3** | **+0.2** |
| **PLCA** | **Paso Flores** | **9.73** | **174** | Pn | **Pn** | **05 26 58.5** | **+0.4** |
| **LL04** | **Puerto Octay** | **9.85** | **182** | | **Pn** | **05 26 58.1** | **-1.6** |
| **GO01** | **Chusmiza** | **11.59** | **13** | | **Pn** | **05 27 24.2** | **+0.2** |
| **MNMC** | **Minye Minye** | **12.04** | **10** | | **Pn** | **05 27 30.0** | **0.0** |
| **PB16** | **IPOC Station P** | **12.84** | **10** | | **Pn** | **05 27 43.8** | **+2.5** |
| **ITQB** | **Itaqui** | **13.24** | **88** | *e*P | **Pn** | **05 27 44.1** | **-2.1** |
| **ITQB** | **Itaqui** | **13.24** | **88** | Pn | **Pn** | **05 27 44.2** | **-2.1** |
| **CPUP** | **Villa Florida** | **13.60** | **73** | Pn | **Pn** | **05 27 48.7** | **-2.5** |
| | comp=Z,0.6nm,0.3s,baz=248,slow=12,SNR=12 | | | | | | |
| **CPUP** | **Villa Florida** | **13.60** | **73** | P | **Pn** | **05 27 48.5** | **-2.6** |
| **CPUP** | **Villa Florida** | **13.60** | **73** | *e*P | **Pn** | **05 27 48.8** | **-2.3** |
| **CPUP** | **Villa Florida** | **13.60** | **73** | | **Pn** | **05 27 48.5** | **-2.6** |
| **LPAZ** | **La Paz** | **15.08** | **14** | Pn | **Pn** | **05 28 13.1** | **+1.2** |
| | comp=Z,0.9nm,0.3s,baz=184,slow=7.4,SNR=44 | | | | | | |
| **LPAZ** | **La Paz** | **15.08** | **14** | *e*P | **Pn** | **05 28 13.3** | **+1.5** |
| **PLTB** | **Pedras Altas** | **15.62** | **97** | *e*P | **Pn** | **05 28 15.4** | **-2.9** |
| **CPSB** | **Cacapava Do Su** | **15.87** | **92** | *e*P | **Pn** | **05 28 20.3** | **-1.1** |
| **ITAB** | **Concordia** | **17.66** | **83** | *e*P | **Pn** | **05 28 41.7** | **-2.3** |
| **ITAB** | **Concordia** | **17.66** | **83** | P | **Pn** | **05 28 43.4** | **-0.6** |
| **SIV** | **San Ignacio** | **17.95** | **36** | P | **Pn** | **05 28 47.5** | **-0.1** |
| | comp=Z,0.8nm,0.3s,baz=222,slow=12,SNR=42 | | | | | | |
| **AQDB** | **Aquidauana** | **17.95** | **58** | *e*P | **Pn** | **05 28 46.4** | **-1.2** |
| **PTGB** | **Pitanga** | **18.60** | **75** | *e*P | **P** | **05 28 55.2** | **0.0** |
| **PTLB** | **Pontes e Lacer** | **19.42** | **40** | *e*P | **P** | **05 29 03.7** | **-0.3** |
| **PTLB** | **Pontes e Lacer** | **19.42** | **40** | P | **P** | **05 29 03.1** | **-0.9** |
| **TER01** | **Tubaro-SC** | **19.90** | **89** | *e*P | **P** | **05 29 09.1** | **-0.1** |
| **PP1B** | **Ponte de Pedra** | **20.43** | **53** | *e*P | **P** | **05 29 14.8** | **-0.4** |
| **PCMB** | **Pacaembu** | **20.70** | **68** | *e*P | **P** | **05 29 17.5** | **-0.5** |
| **TIJ01** | **Guaruva-PR** | **20.94** | **80** | *e*P | **P** | **05 29 19.5** | **-1.1** |
| **VILB** | **Vilhena** | **20.98** | **33** | *e*P | **P** | **05 29 21.0** | **0.0** |
| **VILB** | **Vilhena** | **20.98** | **33** | P | **P** | **05 29 21.8** | **+0.7** |
| VILB | | | | IAmb | IAmb | 05 29 25.1 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **SALV** | **Santo Antonio** | **21.12** | **48** | *e*P | **P** | **05 29 22.0** | **-0.4** |
| **FRTB** | **Fartura** | **21.25** | **74** | *e*P | **P** | **05 29 23.4** | **-0.6** |
| **ETMB** | **Extrema** | **21.77** | **15** | *e*P | **P** | **05 29 30.9** | **+1.4** |
| **ETMB** | **Extrema** | **21.77** | **15** | P | **P** | **05 29 29.6** | **+0.2** |
| **ITRB** | **Iturama** | **22.44** | **65** | *e*P | **P** | **05 29 35.2** | **-1.5** |
| **PET01** | **Itanhaem-SP** | **22.78** | **79** | *e*P | **P** | **05 29 40.9** | **+0.7** |
| **EFI** | **East Falkland** | **23.00** | **158** | P | **P** | **05 29 43.1** | **+0.9** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,136nm,1.4s | | | | | | |
| **EFI** | **East Falkland** | **23.00** | **158** | P | **P** | **05 29 43.1** | **+0.9** |
| EFI | | | | IAmb | IAmb | 05 29 43.5 | |
| | comp=Z,136nm,1.4s | | | | | | |
| **DSPA** | **Despedida** | **23.04** | **175** | P | **P** | **05 29 42.4** | **-0.3** |
| **BB19B** | **Bebedouro** | **23.17** | **70** | *e*P | **P** | **05 29 42.5** | **-1.8** |
| **CZSB** | **Cruzeiro do Su** | **23.21** | **358** | *e*P | **P** | **05 29 46.8** | **+2.1** |
| **CZSB** | **Cruzeiro do Su** | **23.21** | **358** | P | **P** | **05 29 45.0** | **+0.3** |
| **RCLB** | **Rio Claro- Sao** | **23.34** | **74** | *e*P | **P** | **05 29 45.2** | **-0.8** |
| **VAO** | **Valinhos** | **23.56** | **76** | *e*P | **P** | **05 29 46.4** | **-1.7** |
| **ARAG** | **Araguaiana, MT** | **23.86** | **55** | *e*P | **P** | **05 29 51.4** | **+0.4** |
| **PDRB** | **Porto dos Gac** | **23.89** | **39** | *e*P | **P** | **05 29 51.5** | **+0.3** |
| **USHA** | **Ushuaia** | **23.90** | **175** | P | **P** | **05 29 52.3** | **+1.3** |
| | comp=Z,28nm,0.9s,baz=16,slow=9.6,SNR=8.6 | | | | | | |
| **PARB** | **Paraibuna** | **24.54** | **78** | *e*P | **P** | **05 29 56.3** | **-1.1** |
| **CLDB** | **Colider** | **25.01** | **40** | *e*P | **P** | **05 30 01.6** | **+0.1** |
| **IPMB** | **Ipameri, GO** | **25.09** | **64** | *e*P | **P** | **05 30 01.4** | **-0.9** |
| **BSCB** | **Bom Sucesso** | **26.27** | **74** | *e*P | **P** | **05 30 12.0** | **-1.0** |
| **TBTG** | **Tabatinga, AM** | **26.78** | **4** | *e*P | **P** | **05 30 19.5** | **+2.0** |
| **SNDB** | **Serra Nova Dou** | **26.87** | **50** | *e*P | **P** | **05 30 17.7** | **-0.6** |
| **DUB01** | **Friburgo-RJ** | **27.79** | **78** | *e*P | **P** | **05 30 25.6** | **-1.0** |
| **NPGB** | **Novo Progresso** | **28.45** | **36** | *e*P | **P** | **05 30 31.7** | **-0.8** |
| **DIAM** | **Diamantina, MG** | **28.51** | **70** | *e*P | **P** | **05 30 33.1** | **-0.1** |
| **PEXB** | **Peixe** | **28.80** | **54** | *e*P | **P** | **05 30 35.8** | **+0.2** |
| **MACA** | **Manacapuru-AM** | **29.68** | **23** | *e*P | **P** | **05 30 44.1** | **+0.7** |
| **MACA** | **Manacapuru-AM** | **29.68** | **23** | P | **P** | **05 30 43.2** | **-0.1** |
| MACA | | | | IAmb | IAmb | 05 30 44.4 | |
| | comp=Z,23nm,0.6s | | | | | | |
| **JANB** | **Januaria** | **29.83** | **64** | *e*P | **P** | **05 30 44.3** | **-0.5** |
| **SJMB** | **Sao Joao De Ma** | **30.33** | **73** | *e*P | **P** | **05 30 48.8** | **-0.3** |
| **ITTB** | **Itaituba** | **30.58** | **33** | *e*P | **P** | **05 30 50.6** | **-0.8** |
| **RIB01** | **Linhares ES** | **30.69** | **75** | *e*P | **P** | **05 30 51.2** | **-1.1** |
| **SDBA** | **SAO DESIDERIO** | **31.04** | **59** | *e*P | **P** | **05 30 55.3** | **-0.2** |
| **SMTB** | **Santa Maria do** | **31.61** | **51** | *e*P | **P** | **05 31 01.2** | **+0.7** |
| **NAN01** | **Guarapari, ES** | **31.63** | **73** | *e*P | **P** | **05 31 00.4** | **-0.2** |
| **PRPB** | **Parauapebas** | **32.25** | **44** | *e*P | **P** | **05 31 05.5** | **-0.6** |
| **GUA01** | **Guaratinga, BA** | **32.54** | **71** | *e*P | **P** | **05 31 06.7** | **-1.9** |
| **CMC01** | **Camacan, BA** | **33.43** | **70** | *e*P | **P** | **05 31 16.8** | **+0.3** |
| **MALB** | **Monte Alegre** | **33.48** | **33** | *e*P | **P** | **05 31 16.0** | **-0.8** |
| **NBIT** | **Itapeh - BA** | **33.74** | **69** | *e*P | **P** | **05 31 19.9** | **+0.8** |
| **GDU01** | **Guandu, BA** | **34.31** | **67** | *e*P | **P** | **05 31 23.6** | **-0.4** |
| **BOAV** | **Boa Vista** | **34.97** | **20** | *e*P | **P** | **05 31 30.3** | **+0.6** |
| **BOAV** | **Boa Vista** | **34.97** | **20** | P | **P** | **05 31 29.9** | **+0.2** |
| BOAV | | | | IAmb | IAmb | 05 31 31.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **CHIC** | **Chingaza** | **35.52** | **357** | *e*P | **P** | **05 31 36.7** | **+1.8** |
| **NBPN** | **Ponto Novo - B** | **35.56** | **63** | *e*P | **P** | **05 31 34.1** | **-0.8** |
| **MCPB** | **Macapa, AP** | **35.84** | **35** | *e*P | **P** | **05 31 37.0** | **-0.2** |
| **GUY2C** | **Guyana, Caldas** | **36.22** | **354** | *e*P | **P** | **05 31 43.8** | **+2.9** |
| **RUSC** | **La Rusia** | **36.75** | **358** | *e*P | **P** | **05 31 47.9** | **+2.4** |
| **CBOC** | **Ciudad Bolivar** | **36.91** | **353** | *e*P | **P** | **05 31 46.5** | **0.0** |
| **NBLA** | **Lagarto - SE** | **37.33** | **65** | *e*P | **P** | **05 31 48.8** | **-1.1** |
| **NBMA** | **Muriti-CE** | **38.89** | **60** | *e*P | **P** | **05 32 02.4** | **-0.7** |
| **NBPS** | **Pedro II - PI** | **39.02** | **53** | *e*P | **P** | **05 32 04.2** | **-0.1** |
| **NBAN** | **Anadia - AL** | **39.31** | **65** | *e*P | **P** | **05 32 05.6** | **-1.1** |
| **NBPB** | **Pedra_Branca-C** | **39.52** | **57** | *e*P | **P** | **05 32 08.3** | **0.0** |
| **BAUV** | **El Baul** | **39.93** | **6** | P | **P** | **05 32 12.4** | **+0.7** |
| BAUV | | | | IAmb | IAmb | 05 32 13.6 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **BIRV** | **Birongo** | **41.63** | **8** | P | **P** | **05 32 26.4** | **+0.7** |
| **NBPV** | **Pedro Velho** | **42.11** | **62** | *e*P | **P** | **05 32 30.0** | **+0.3** |
| **BIM** | **Bigot** | **46.48** | **15** | P | **P** | **05 33 03.9** | **-0.6** |
| **FDF** | **Fort de France** | **46.67** | **14** | P | **P** | **05 33 05.3** | **-0.8** |
| FDF | | | | pmax | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| **FDF** | **Fort de France** | **46.67** | **14** | P | **P** | **05 33 05.2** | **-0.8** |
| FDF | | | | IAmb | IAmb | 05 33 22.8 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **ICMP** | **Isla Caja de M** | **48.92** | **7** | P | **P** | **05 33 23.8** | **+0.3** |
| **MLPR** | **Magueyes Islan** | **48.95** | **6** | P | **P** | **05 33 23.2** | **-0.5** |
| **CRPR** | **Cabo Rojo, PR** | **48.98** | **6** | P | **P** | **05 33 24.3** | **+0.4** |
| **SJG** | **San Juan** | **49.18** | **7** | P | **P** | **05 33 25.2** | **-0.2** |
| SJG | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| **SJG** | **San Juan** | **49.18** | **7** | P | **P** | **05 33 25.2** | **-0.2** |
| **CBYP** | **Canovanas** | **49.37** | **8** | P | **P** | **05 33 27.0** | **0.0** |
| **STVI** | **Saint Thomas** | **49.56** | **9** | P | **P** | **05 33 28.2** | **-0.1** |
| **VNA3** | **Neumayer Olymp** | **52.05** | **159** | P | **P** | **05 33 47.0** | **+0.5** |
| **VNA2** | **Neumayer--Watz** | **52.69** | **158** | P | **P** | **05 33 51.7** | **+0.4** |
| | baz=279,slow=7.2 | | | | | | |
| **SNAA** | **Sanae** | **54.27** | **159** | P | **P** | **05 34 03.3** | **+0.3** |
| **SNAA** | **Sanae** | **54.27** | **159** | *i* P | **P** | **05 34 03.2** | **+0.3** |
| **SNAA** | **Sanae** | **54.27** | **159** | | **P** | **05 34 03.1** | **+0.2** |
| SNAA | | | | IAmb | IAmb | 05 34 04.5 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **SOR** | **Soroa** | **54.59** | **347** | P | **P** | **05 34 06.9** | **+1.2** |
| SOR | | | | pmax | pmax | | |
| | comp=Z,57nm,1.4s | | | | | | |
| **SOR** | **Soroa** | **54.59** | **347** | P | **P** | **05 34 06.9** | **+1.2** |
| **QSPA** | **South Pole Qui** | **59.18** | **180** | P | **P** | **05 34 38.9** | **+0.9** |
| QSPA | | | | IAmb | IAmb | 05 34 40.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **656A** | **Willston** | **60.93** | **349** | P | **P** | **05 34 50.3** | **+0.2** |
| **GOGA** | **Godfrey** | **65.04** | **349** | P | **P** | **05 35 18.1** | **+0.7** |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **GOGA** | **Godfrey** | **65.04** | **349** | P | **P** | **05 35 18.1** | **+0.7** |
| GOGA | | | | IAmb | IAmb | 05 35 38.9 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **Z47A** | **Carrollton** | **65.71** | **345** | P | **P** | **05 35 22.8** | **+1.2** |
| Z47A | | | | IAmb | IAmb | 05 35 23.9 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **143A** | **Socs Landing,** | **66.04** | **342** | P | **P** | **05 35 25.2** | **+1.4** |
| **Y45A** | **Yeager Farm, C** | **66.68** | **344** | P | **P** | **05 35 29.8** | **+1.9** |
| **TXAR** | **Lajitas Array** | **67.24** | **330** | P | **P** | **05 35 33.8** | **+2.1** |
| | comp=Z,1.3nm,0.8s,baz=156,slow=7.9,SNR=11 | | | | | | |
| **OXF** | **Oxford** | **67.27** | **344** | P | **P** | **05 35 32.3** | **+0.7** |
| OXF | | | | pmax | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **67.27** | **344** | P | **P** | **05 35 32.3** | **+0.7** |
| **CLTN** | **Cedars of Leba** | **68.15** | **347** | P | **P** | **05 35 39.1** | **+2.0** |
| CLTN | | | | IAmb | IAmb | 05 35 39.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WVT

baz=115,slow=75,SNR=139
**H11N3 WAKE ISLAND Hyl 26.24 273** T T 08 02 51.7
baz=116,slow=75,SNR=13
**H11N1 WAKE ISLAND Hyl 26.25 273** T T 08 02 55.1
baz=116,slow=75,SNR=5.5
**H11N2 WAKE ISLAND Hyl 26.25 273** T T 08 02 54.5
baz=116,slow=75,SNR=26
**SHA1 Shidzhatmaz 127.72 56** *e*PKIKP **PKPdf 05 43 41.3 -1.3**
**KIV Kislovodsk 127.78 56** *i* PKIKP **PKPdf 05 43 41.5 -1.0**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**BILL Bilibino 130.23 335** *i* PKIKP **PKiKP 05 43 47.0 -0.1**
BILL pmax pmax
comp=Z,1.0nm,1.2s
**ARU Arti 137.39 39** *i* PKIKP **PKPdf 05 43 57.7 -2.3**
**TIXI Tiksi 137.82 350** *i* PKIKP **PKPdf 05 44 00.6 +0.2**
TIXI pmax pmax
comp=Z,1.0nm,1.0s
**YAK Yakutsk 145.99 342** *e*PKP2 **PKPbc 05 44 15.9 -0.1**
YAK pmax pmax
comp=Z,12nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.9s
**URV Uravakonda 147.53 113** *e*PKiKP **PKPbc 05 44 21.8 0.0**
**KLRI Killari 148.67 107** *e*PKiKP **PKPbc 05 44 24.6 -0.3**
**SKHT Srikalahasti 148.72 117** *e*PKiKP **PKPbc 05 44 25.2 +0.2**
**RCLA Racherla 149.16 114** *e*PKiKP **PKPbc 05 44 26.0 -0.1**
**SRLM Srisailam 149.48 112** *e*PKiKP **PKPbc 05 44 26.6 -0.3**
**HYBB Hyderabad (bro 149.93 110** *e*PKiKP **PKPbc 05 44 28.1 +0.1**
**NJS Nagarjunasagar 150.06 112** *e*PKiKP **PKPbc 05 44 28.2 0.0**
**CUPL Choutuppal 150.16 111** *e*PKiKP **PKPbc 05 44 28.1 -0.4**
**ADKI Addanki 150.18 114** *e*PKiKP **PKPbc 05 44 27.8 -0.8**
**SRSP Sriramsagar 150.53 107** *e*PKiKP **PKPbc 05 44 28.1 -1.3**
**MYLAV Mylavaram 151.22 113** *e*PKPbc **PKPbc 05 44 29.1 -1.9**
**RPR Rampur 151.27 108** *e*PKiKP **PKPbc 05 44 30.0 -1.1**
**ZALV Zalesovo Beam 151.63 29** PKPbc **PKiKP 05 44 31.3 +0.1**
comp=E,9.9nm,0.5s,baz=307,slow=3.1,SNR=39
**KSH Kashi 152.54 63** PKPbc **PKPdf 05 44 26.0 -0.6**
KSH pPKP PKiKP 05 44 34.5 +0.7
**MKAR Makanchi Array 154.64 44** PKP **PKPdf 05 44 29.9 +0.6**
comp=E,0.4nm,0.8s,baz=242,slow=2.6,SNR=4.3
MKAR PKPbc **PKiKP 05 44 38.1 +0.3**
comp=E,1.0nm,0.7s,baz=290,slow=2.0,SNR=9.5
**CHLP Challavanipeta 154.90 114** *e*PKiKP **PKPbc 05 44 37.3 -1.8**
**WMQ Urumqi 159.43 46** *e*PKP **PKPdf 05 44 36.9 +1.4**
WMQ LR LR
comp=E,650nm,15.7s
WMQ LR LR
comp=E,220nm,18.5s
**SONM Songino Array 163.18 4** PKPab **PKPab 05 45 30.6 +1.0**
comp=E,0.5nm,0.8s,baz=331,slow=3.7,SNR=4.0
**CMAR Chiang Mai Arr 164.96 144** PKPab **PKPab 05 45 38.0 -0.1**
comp=E,1.2nm,0.3s,baz=230,slow=6.2,SNR=5.5
**GTA Gaotai 169.24 37** *e*PKP **PKPdf 05 44 45.9 +1.4**
GTA PKPab **PKPab 05 45 58.0 +1.3**
**HHC Hu-ho-hao-te 169.83 345** *e*PKP **PKPdf 05 44 42.4 -2.3**
**NJ2 Nanjing 170.79 279** *e*PKP **PKPdf 05 44 46.9 +1.5**
**PZH PanZhiHua 172.80 127** PKP **PKPdf 05 44 45.9 -0.8**

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*SJA* ***05*** *05:28:02.1±0.8,31.°05S×72.°14W,h7km±3km,ML4.9, MW4.5*

*IDC* ***05*** *05:28:03.5±0.6,31.°04S×71.°75W,h0km,mb4.5/10, mb1 4.7/13,mb1mx4.5/25,mbtmp4.5/13,ML4.5/2,MS4.2/31, Ms1 4.2/31,ms1mx4.0/52,Error ellipse: s-maj=20.0km s-min=17.5km az=113.0*

*BJI* ***05*** *05:28:05.0±0.0,31.°10S×71.°80W,h20km,Ms7 4.7/1*

*GUC* ***05*** *05:28:07.3±0.6,31.°10S×71.°81W,h30km±2km,ML5.1, MW5.1*

*NEIC* ***05*** *05:28:08.1,31.°07S×71.°69W,h29km,Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr0.63; Mθθ-0.15; Mϕϕ-0.49; Mrθ0.32; Mϕϕ0.05; Mθr-1.02; Fault plane solution: M₀1.22000×10¹⁶ NP1:ϕs163.57000°, δ76.23000°,λ87.50000°. NP2:ϕs353.96000°,δ13.99000°, λ100.09000°. Principal axes: T 1.2849, Plg59.0000°, Azm70.0000°; N -0.1452, Plg2.0000°, Azm164.0000°; P -1.1397, Plg31.0000°, Azm256.0000°;*

*NEIC* ***05*** *05:28:08.1±1.6,31.°07S±0.°04×71.°67W±0.°06,h24km±4km, mb5.0/42,Mwr4.7/47,Mwr5.1(GUC) Error ellipse: s-maj=7.8km s-min=5.5km az=83.0*

*VAO* ***05*** *05:28:08.8±0.5,31.°08S×71.°57W,h27km,mb4.7*

*GCMT* ***05*** *05:28:13.1±0.4,31.°00S±0.°02×72.°08W±0.°03,h35km, MW5.0/71,Moment Tensor Solution. s30,c32; s71,c84; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr4.74±.29; Mθθ-0.97±.17; Mϕϕ-3.77±.18; Mrθ-0.02±.15; Mϕθ-0.06±.07; Mθr-1.91±.15; Best double couple: M₀4.66500×10¹⁶ NP1:ϕs1.00000°,δ33.00000°,λ90.00000°. NP2: ϕs181.00000°,δ57.00000°,λ90.00000°. Principal axes: T 5.1490, Plg78.0000°, Azm90.0000°; N -0.9650, Plg0.0000°, Azm181.0000°; P -4.1800, Plg12.0000°, Azm271.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 05 05:28:04.8±1.3,31.°11S±0.°02×71.°94W±0.°04,h11km±8km, n247,σ1§45/260,mb5.0/32,MS4.3/27,4C-9D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.51** | **32** | ||*i* | *i*P | **Pg** | **05 28 16.6** | **+1.9** |
| CO06 | | | | | *i* | S | **Sb** | **05 28 23.2** | **0.0** |
| **CO06** | **Fray Jorge** | **0.51** | **32** | | | Pg | **Pg** | **05 28 16.6** | **+1.9** |
| **CO02** | **Combarbal** | **0.81** | **97** | ||*i* | *i*P | **Pb** | **05 28 20.7** | **-0.4** |
| CO02 | | | | | *e* | S | **Sb** | **05 28 30.4** | **-1.8** |
| CO02 | | | | | IAML | | | 05 28 32.4 | |
| comp=E,149μm,0.2s | | | | | | | | | |
| **CO02** | **Combarbal** | **0.81** | **97** | | | | **Pb** | **05 28 20.2** | **-0.9** |
| **CO02** | **Combarbal** | **0.81** | **97** | | *e* | P | **Pb** | **05 28 21.0** | **-0.1** |
| CO02 | | | | | *e* | P | **Pn** | **05 28 25.4** | **+3.0** |
| CO02 | | | | | *e* | S | **Sb** | **05 28 30.6** | **-1.6** |
| CO02 | | | | | IAML | | | 05 28 31.0 | |
| comp=Z,44μm,0.4s | | | | | | | | | |
| **CO03** | **El Pedregal** | **1.11** | **76** | ||*i* | *i*P | **Pb** | **05 28 25.1** | **-1.0** |
| CO03 | | | | | *e* | S | **Sb** | **05 28 37.9** | **-2.8** |
| **CO03** | **El Pedregal** | **1.11** | **76** | Pn | | | **Pb** | **05 28 24.8** | **-1.3** |
| **CO03** | **El Pedregal** | **1.11** | **76** | *e* | P | | **Pb** | **05 28 25.2** | **-1.0** |
| CO03 | | | | | *e* | S | **Sb** | **05 28 39.2** | **-1.5** |
| CO03 | | | | | IAML | | | 05 28 40.6 | |
| comp=Z,15μm,0.8s | | | | | | | | | |
| **CO05** | **La Serena** | **1.33** | **27** | ||*e* | P | **Pn** | **05 28 29.4** | **-0.1** |
| CO05 | | | | | *e* | S | **Sn** | **05 28 46.1** | **-1.0** |
| **CO05** | **La Serena** | **1.33** | **27** | Pn | | | **Pn** | **05 28 29.6** | **+0.2** |
| **GO04** | **Tololo Observa** | **1.36** | **47** | ||*i* | *i*P | **Pn** | **05 28 29.4** | **-0.6** |
| GO04 | | | | | *e* | S | **Sn** | **05 28 46.4** | **-1.7** |
| GO04 | | | | | IAML | | | 05 28 51.2 | |
| comp=N,78μm,0.4s | | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.36** | **47** | Pn | | | **Pn** | **05 28 29.6** | **-0.4** |
| **GO04** | **Tololo Observa** | **1.36** | **47** | *e* | P | | Pn | 05 28 24.9 | -5.1 |
| GO04 | | | | | *e* | P | **Pb** | **05 28 30.0** | **-0.4** |
| GO04 | | | | | *e* | S | **Sb** | **05 28 47.9** | **0.0** |
| **VA06** | **Catapilco** | **1.55** | **159** | ||*e* | P | **Pn** | **05 28 33.5** | **+1.1** |
| VA06 | | | | | *e* | S | **Sb** | **05 28 53.1** | **-0.2** |
| VA06 | | | | | IAML | | | 05 28 58.1 | |
| comp=N,59μm,0.5s | | | | | | | | | |
| **VA01** | **Torpederas** | **1.93** | **173** | *e* | P | | **Pn** | **05 28 38.8** | **+1.2** |
| VA01 | | | | | *e* | S | **Sn** | **05 29 00.9** | **-1.0** |
| **VA01** | **Torpederas** | **1.93** | **173** | Pn | | | **Pn** | **05 28 39.0** | **+1.4** |
| **VA01** | **Torpederas** | **1.93** | **173** | *e* | P | | **Pn** | **05 28 39.0** | **+1.4** |
| **ROCH** | **El Roble** | **2.02** | **157** | ||*i* | *i*P | **Pn** | **05 28 40.6** | **+1.4** |
| ROCH | | | | | *e* | S | **Sb** | **05 29 05.8** | **-1.2** |
| ROCH | | | | | IAML | | | 05 29 15.4 | |
| comp=N,20μm,0.4s | | | | | | | | | |
| **ROC1** | **El Roble** | **2.02** | **157** | Pn | | | **Pn** | **05 28 40.5** | **+1.4** |
| **ROC1** | **El Roble** | **2.02** | **157** | *e* | P | | **Pn** | **05 28 40.0** | **+0.8** |
| **VA03** | **San Esteban** | **2.03** | **145** | ||*i* | *i*P | **Pn** | **05 28 40.9** | **+1.7** |
| VA03 | | | | | *e* | S | **Sb** | **05 29 06.4** | **-0.9** |
| VA03 | | | | | IAML | | | 05 29 11.8 | |
| comp=E,33μm,0.4s | | | | | | | | | |
| **VA03** | **San Esteban** | **2.03** | **145** | Pn | | | **Pn** | **05 28 40.2** | **+1.0** |
| **VA03** | **San Esteban** | **2.03** | **145** | *e* | P | | **Pb** | **05 28 41.0** | **-0.9** |
| VA03 | | | | | *e* | S | **Sb** | **05 29 07.8** | **+0.6** |
| VA03 | | | | | IAML | | | 05 29 11.2 | |
| comp=Z,9μm,0.5s | | | | | | | | | |
| **MT02** | **Curacav** | **2.25** | **163** | *e* | P | | **Pn** | **05 28 43.1** | **+1.0** |
| MT02 | | | | | *e* | S | **Sb** | **05 29 11.8** | **-1.6** |
| **MT02** | **Curacav** | **2.25** | **163** | Pn | | | **Pn** | **05 28 43.6** | **+1.5** |
| **MT02** | **Curacav** | **2.25** | **163** | *e* | P | | **Pn** | **05 28 41.4** | **-0.7** |
| MT02 | | | | | *e* | P | **Pb** | **05 28 45.0** | **-0.6** |
| MT02 | | | | | IAML | | | 05 29 18.9 | |
| comp=Z,5μm,0.5s | | | | | | | | | |
| **PEL** | **Peldehue** | **2.29** | **153** | ||*e* | P | **Pn** | **05 28 44.5** | **+1.8** |
| PEL | | | | | *e* | S | **Sb** | **05 29 12.6** | **-2.1** |
| **PEL** | **Peldehue** | **2.29** | **153** | Pn | | | **Pn** | **05 28 44.5** | **+1.8** |
| **PEL** | **Peldehue** | **2.29** | **153** | *e* | P | | **Pb** | **05 28 45.0** | **-1.3** |
| PEL | | | | | *e* | S | **Sn** | **05 29 10.4** | **-0.6** |
| **AROD** | **Rodeo** | **2.33** | **67** | *e* | P | | **Pb** | **05 28 46.1** | **-0.9** |
| AROD | | | | | *e* | S | **Sb** | **05 29 17.1** | **+1.2** |
| **LCO** | **Las Campanas** | **2.35** | **28** | *e* | P | | **Pn** | **05 28 43.7** | **0.0** |
| LCO | | | | | *e* | S | **Sn** | **05 29 14.1** | **+1.3** |
| **LCO** | **Las Campanas** | **2.35** | **28** | Pn | | | **Pn** | **05 28 43.6** | **-0.1** |
| **LCO** | **Las Campanas** | **2.35** | **28** | *e* | P | | **Pn** | **05 28 44.0** | **+0.3** |
| **AUSP** | **Uspallata** | **2.45** | **118** | *e* | P | | **Pb** | **05 28 48.9** | **-0.2** |
| AUSP | | | | | *e* | S | **Sg** | **05 29 21.7** | **-1.8** |
| **MT05** | **Renca** | **2.50** | **156** | *e* | P | | **Pn** | **05 28 47.3** | **+1.8** |
| MT05 | | | | | *e* | S | **Sn** | **05 29 16.8** | **+0.8** |
| MT05 | | | | | IAML | | | 05 29 24.2 | |
| comp=E,15μm,0.3s | | | | | | | | | |
| **MT05** | **Renca** | **2.50** | **156** | Pn | | | **Pn** | **05 28 47.1** | **+1.6** |
| **MT05** | **Renca** | **2.50** | **156** | *e* | P | | **Pn** | **05 28 47.4** | **+1.8** |
| MT05 | | | | | *e* | S | **Sb** | **05 29 20.5** | **-0.1** |
| MT05 | | | | | IAML | | | 05 29 27.6 | |
| comp=Z,9μm,0.9s | | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.53** | **79** | *e* | P | | **Pb** | **05 28 49.3** | **-1.2** |
| **VA05** | **Santo Domingo** | **2.56** | **174** | *e* | P | | **Pn** | **05 28 47.0** | **+0.8** |
| VA05 | | | | | *e* | S | **Sn** | **05 29 18.1** | **+0.7** |
| VA05 | | | | | IAML | | | 05 29 30.1 | |
| comp=E,12μm,0.4s | | | | | | | | | |
| **VA05** | **Santo Domingo** | **2.56** | **174** | Pn | | | **Pn** | **05 28 47.4** | **+1.1** |
| **ACDV** | **Cuesta del Vie** | **2.61** | **70** | *e* | P | | **Pb** | **05 28 50.0** | **-1.7** |
| ACDV | | | | | *e* | S | **Sb** | **05 29 24.5** | **+0.7** |
| ACDV | | | | | IAML | | | 05 29 32.4 | |
| comp=Z,3μm,0.6s | | | | | | | | | |
| **MT09** | **Talagante** | **2.78** | **163** | ||*e* | P | **Pn** | **05 28 51.8** | **+2.3** |
| MT09 | | | | | *e* | S | **Sn** | **05 29 25.5** | **+2.4** |
| MT09 | | | | | IAML | | | 05 29 37.1 | |
| comp=N,7μm,0.6s | | | | | | | | | |
| **MT01** | **Popeta** | **2.81** | **168** | ||*e* | P | **Pn** | **05 28 50.9** | **+1.1** |
| MT01 | | | | | *e* | S | **Sn** | **05 29 25.0** | **+1.3** |
| MT01 | | | | | IAML | | | 05 29 37.1 | |
| comp=E,7μm,0.8s | | | | | | | | | |
| **MT01** | **Popeta** | **2.81** | **168** | Pn | | | **Pn** | **05 28 51.1** | **+1.4** |
| **MT01** | **Popeta** | **2.81** | **168** | *e* | P | | **Pn** | **05 28 51.2** | **+1.4** |
| MT01 | | | | | *e* | S | **Sn** | **05 29 25.4** | **+1.7** |
| MT01 | | | | | IAML | | | 05 29 39.6 | |
| comp=Z,4μm,0.7s | | | | | | | | | |
| **ZON** | **Zonda** | **2.83** | **100** | *e* | P | | **Pb** | **05 28 53.8** | **-1.6** |
| ZON | | | | | *e* | S | **Sb** | **05 29 28.4** | **-1.7** |
| ZON | | | | | IAML | | | 05 29 39.3 | |
| comp=Z,3μm,1.3s | | | | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.98** | **95** | *e* | P | | **Pn** | **05 28 55.1** | **+3.0** |
| RTLL | | | | | *e* | S | **Sn** | **05 29 29.9** | **+2.0** |
| RTLL | | | | | *e* | S | **Sb** | **05 29 34.4** | **-0.1** |
| **AC04** | **Llanos de Chal** | **2.99** | **15** | ||*i* | *i*P | **Pn** | **05 28 52.0** | **-0.3** |
| **AC04** | **Llanos de Chal** | **2.99** | **15** | Pn | | | **Pn** | **05 28 52.0** | **-0.3** |
| **AC04** | **Llanos de Chal** | **2.99** | **15** | *e* | P | | **Pn** | **05 28 51.9** | **-0.3** |
| AC04 | | | | | *e* | S | **Sn** | **05 29 29.9** | **+1.8** |
| **RTCV** | **Cerro Valdivia** | **3.00** | **105** | *e* | P | | **Pb** | **05 28 56.0** | **-2.4** |
| RTCV | | | | | *e* | S | **Sb** | **05 29 37.9** | **+2.8** |
| **ASAL** | **Salagasta** | **3.03** | **120** | *e* | P | | **Pb** | **05 28 57.6** | **-1.3** |
| ASAL | | | | | *e* | S | **Sg** | **05 29 43.3** | **+1.1** |
| **BO04** | **La Punta** | **3.09** | **159** | *e* | P | | **Pn** | **05 28 55.8** | **+2.2** |
| BO04 | | | | | *e* | S | **Sn** | **05 29 32.2** | **+1.6** |
| BO04 | | | | | IAML | | | 05 29 44.7 | |
| comp=N,5μm,0.6s | | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.09** | **125** | *e* | P | | **Pb** | **05 28 59.0** | **-0.9** |
| ARCO | | | | | *e* | S | **Sb** | **05 29 39.9** | **+2.2** |
| ARCO | | | | | IAML | | | 05 29 49.1 | |
| comp=Z,4μm,0.7s | | | | | | | | | |
| **LMEL** | **Las Melosas** | **3.10** | **152** | *e* | P | | **Pn** | **05 28 56.4** | **+2.4** |
| LMEL | | | | | *e* | S | **Sn** | **05 29 32.3** | **+1.2** |
| LMEL | | | | | IAML | | | 05 29 46.6 | |
| comp=N,4μm,0.4s | | | | | | | | | |
| **AAGR** | **Agrelo** | **3.30** | **128** | *e* | P | | **Pb** | **05 29 01.0** | **-2.5** |
| AAGR | | | | | *e* | S | **Sb** | **05 29 44.4** | **+0.7** |
| **BO01** | **Tunca** | **3.35** | **168** | *e* | P | | **Pn** | **05 28 58.9** | **+1.7** |
| BO01 | | | | | *e* | S | **Sb** | **05 29 41.4** | **-3.8** |
| BO01 | | | | | IAML | | | 05 29 55.9 | |
| comp=Z,3μm,0.8s | | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **3.80** | **165** | Pn | | | **Pn** | **05 29 05.0** | **+1.5** |
| **BO02** | **Sierra Bellavi** | **3.80** | **165** | *e* | P | | **Pn** | **05 29 05.6** | **+2.1** |
| BO02 | | | | | *e* | S | **Sb** | **05 29 54.4** | **-3.8** |
| **GO03** | **Copiap** | **3.81** | **23** | Pn | | | **Pn** | **05 29 03.4** | **-0.1** |
| **GO03** | **Copiap** | **3.81** | **23** | *e* | P | | **Pn** | **05 29 04.0** | **+0.5** |
| GO03 | | | | | *e* | S | **Sn** | **05 29 51.4** | **+3.0** |
| **GO05** | **Huala** | **3.89** | **180** | Pn | | | **Pn** | **05 29 05.5** | **+0.8** |
| **GO05** | **Huala** | **3.89** | **180** | *e* | P | | **Pn** | **05 29 06.0** | **+1.3** |
| GO05 | | | | | *e* | S | Sn | 05 29 39.4 | -11 |
| **VCA** | **Vinchina** | **4.01** | **55** | *e* | P | | Pn | 05 28 52.9 | -14 |
| VCA | | | | | *e* | S | **Sg** | **05 30 10.9** | **-2.9** |
| **ACLC** | **CERRO LA CRUZ** | **4.63** | **70** | *e* | P | | **Pn** | **05 29 17.2** | **+2.2** |
| ACLC | | | | | *e* | S | **Sn** | **05 30 14.7** | **+5.8** |
| **RFA** | **San Rafael** | **4.68** | **142** | *e* | P | | **Pn** | **05 29 19.1** | **+3.6** |
| RFA | | | | | *e* | P | Pb | 05 29 21.0 | -6.0 |
| RFA | | | | | *e* | S | **Sb** | **05 30 24.9** | **+1.5** |
| RFA | | | | | IAML | | | 05 30 35.5 | |
| comp=Z,1μm,1.4s | | | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.71** | **83** | *e* | P | | **Pn** | **05 29 18.0** | **+2.0** |
| **H03N1** | **Juan Fernandez** | **6.34** | **247** | Pn | | | **Pn** | **05 29 40.1** | **+2.0** |
| H03N1 | | | | | T | | T | 05 36 13.5 | |
| baz=76,slow=72,SNR=1678 | | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.36** | **247** | Pn | | | **Pn** | **05 29 40.2** | **+1.8** |
| SNR=151 | | | | | | | | | |
| H03N3 | | | | | T | | T | 05 36 12.9 | |
| baz=76,slow=72,SNR=1545 | | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.36** | **247** | Pn | | | **Pn** | **05 29 40.3** | **+2.0** |
| H03N2 | | | | | T | | T | 05 36 15.9 | |
| baz=76,slow=72,SNR=1491 | | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.48** | **243** | Pn | | | **Pn** | **05 29 41.2** | **+1.2** |
| **H03S1** | **Juan Fernandez** | **6.49** | **243** | Pn | | | **Pn** | **05 29 41.4** | **+1.4** |
| **H03S2** | **Juan Fernandez** | **6.50** | **243** | Pn | | | **Pn** | **05 29 41.6** | **+1.4** |
| **AHML** | **Horco Molle** | **7.21** | **55** | *e* | P | | **Pn** | **05 29 52.5** | **+2.1** |
| **LC01** | **Cunco** | **7.77** | **180** | Pn | | | **Pn** | **05 29 58.6** | **+0.6** |
| **LR03** | **Panguipulli** | **8.51** | **182** | Pn | | | **Pn** | **05 30 09.7** | **+1.6** |
| **LVC** | **Limon Verde** | **8.88** | **18** | Pn | | | **Pn** | **05 30 10.4** | **-3.2** |
| baz=299,slow=16,SNR=0.7 | | | | | | | | | |
| LVC | | | | | LR | | LR | 05 33 37.8 | |
| comp=Z,1μm,21.7s,baz=213,slow=38 | | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.67** | **174** | Pn | | | **Pn** | **05 30 26.0** | **+1.9** |
| comp=Z,1.4nm,0.3s,baz=337,slow=11,SNR=12 | | | | | | | | | |
| PLCA | | | | | LR | | LR | 05 34 17.9 | |
| comp=Z,1μm,21.3s,baz=349,slow=38 | | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.67** | **174** | *e* | P | | **Pn** | **05 30 26.2** | **+2.1** |
| **CPUP** | **Villa Florida** | **13.68** | **73** | LR | | | LR | 05 36 49.9 | |
| comp=Z,1μm,20.9s,baz=247,slow=39 | | | | | | | | | |
| **LPAZ** | **La Paz** | **15.16** | **14** | Pn | | | **Pn** | **05 31 40.8** | **+1.2** |
| comp=Z,0.7nm,0.3s,baz=189,slow=6.8,SNR=8.6 | | | | | | | | | |
| **LPAZ** | **La Paz** | **15.16** | **14** | *e* | P | | **Pn** | **05 31 40.9** | **+1.3** |
| **LPAZ** | **La Paz** | **15.16** | **14** | Pn | | | **Pn** | **05 31 40.6** | **+1.0** |
| **CPSB** | **Cacapava Do Su** | **15.93** | **92** | *e* | P | | **Pn** | **05 31 46.6** | **-2.4** |
| **SIV** | **San Ignacio** | **18.03** | **36** | P | | | **Pn** | **05 32 15.3** | **-0.2** |
| comp=Z,0.8nm,0.3s,baz=223,slow=11,SNR=9.3 | | | | | | | | | |
| SIV | | | | | LR | | LR | 05 40 34.5 | |
| comp=Z,1μm,18.2s,baz=214,slow=42 | | | | | | | | | |
| **AQDB** | **Aquidauana** | **18.03** | **58** | *e* | P | | **Pn** | **05 32 14.8** | **-0.8** |
| **PTGB** | **Pitanga** | **18.67** | **75** | *e* | P | | **P** | **05 32 22.2** | **-0.9** |
| **PTLB** | **Pontes e Lacer** | **19.50** | **40** | *e* | P | | **P** | **05 32 31.4** | **-0.7** |
| **PTLB** | **Pontes e Lacer** | **19.50** | **40** | P | | | **P** | **05 32 30.5** | **-1.6** |
| **NNA** | **Nana** | **19.56** | **346** | LR | | | LR | 05 38 23.5 | |
| comp=Z,290nm,20.8s,baz=165,slow=32 | | | | | | | | | |
| **PP1B** | **Ponte de Pedra** | **20.52** | **53** | *e* | P | | **P** | **05 32 42.3** | **-0.9** |
| **PCMB** | **Paembu** | **20.78** | **68** | *e* | P | | **P** | **05 32 44.8** | **-1.3** |
| **TIJ01** | **Guaruva-PR** | **21.00** | **80** | *e* | P | | **P** | **05 32 45.8** | **-2.8** |
| **VILB** | **Vilhena** | **21.06** | **34** | *e* | P | | **P** | **05 32 48.7** | **-0.5** |
| **VILB** | **Vilhena** | **21.06** | **34** | | P | | **P** | **05 32 47.9** | **-1.3** |
| VILB | | | | | IAmb | | IAmb | 05 32 53.0 | |
| comp=Z,62nm,1.1s | | | | | | | | | |
| **SALV** | **Santo Antonio** | **21.20** | **48** | *e* | P | | **P** | **05 32 49.2** | **-1.4** |
| **FRTB** | **Fartura** | **21.32** | **74** | *e* | P | | **P** | **05 32 51.2** | **-0.8** |
| **ETMB** | **Extrema** | **21.84** | **15** | *e* | P | | **P** | **05 32 57.7** | **+0.1** |
| **ETMB** | **Extrema** | **21.84** | **15** | P | | | **P** | **05 32 58.4** | **+0.9** |
| **ITRB** | **Iturama** | **22.52** | **65** | *e* | P | | **P** | **05 33 03.5** | **-1.3** |
| **PET01** | **Itanhaem-SP** | **22.84** | **79** | *e* | P | | **P** | **05 33 07.1** | **-1.1** |
| **BB19B** | **Bebedouro** | **23.24** | **70** | *e* | P | | **P** | **05 33 12.3** | **-0.1** |
| **CZSB** | **Cruzeiro do Su** | **23.27** | **358** | *e* | P | | **P** | **05 33 14.2** | **+1.6** |
| **CZSB** | **Cruzeiro do Su** | **23.27** | **358** | P | | | **P** | **05 33 14.3** | **+1.6** |
| **RCLB** | **Rio Claro- Sao** | **23.41** | **74** | *e* | P | | **P** | **05 33 12.6** | **-1.5** |
| **VAO** | **Valinhos** | **23.63** | **76** | *e* | P | | **P** | **05 33 14.2** | **-2.0** |
| **USHA** | **Ushuaia** | **23.84** | **175** | P | | | **P** | **05 33 19.5** | **+1.5** |
| comp=Z,33nm,0.9s,baz=347,slow=3.8,SNR=8.7 | | | | | | | | | |
| USHA | | | | | LR | | LR | 05 43 28.1 | |
| comp=Z,996nm,19.0s,baz=352,slow=39 | | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **23.94** | **55** | *e* | P | | **P** | **05 33 19.0** | **-0.3** |
| **PDRB** | **Porto dos Gac** | **23.97** | **39** | *e* | P | | **P** | **05 33 19.0** | **-0.5** |
| **ATAH** | **Atahualpa** | **24.60** | **344** | LR | | | LR | 05 41 47.9 | |
| comp=Z,263nm,18.5s,baz=179,slow=34 | | | | | | | | | |
| **PARB** | **Paraibuna** | **24.61** | **78** | *e* | P | | **P** | **05 33 24.9** | **-0.5** |
| **CLDB** | **Colider** | **25.09** | **40** | *e* | P | | **P** | **05 33 30.1** | **+0.3** |
| **IPMB** | **Ipameri, GO** | **25.17** | **64** | *e* | P | | **P** | **05 33 27.7** | **-2.8** |
| **BSCB** | **Bom Sucesso** | **26.34** | **74** | *e* | P | | **P** | **05 33 40.0** | **-1.2** |
| **BDFB** | **Brasilia** | **26.74** | **60** | P | | | **P** | **05 33 43.6** | **-1.2** |
| comp=Z,14nm,0.6s,baz=230,slow=7.4,SNR=11 | | | | | | | | | |
| BDFB | | | | | LR | | LR | 05 45 36.3 | |
| comp=Z,1μm,19.6s,baz=252,slow=40 | | | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **26.85** | **4** | *e* | P | | **P** | **05 33 47.5** | **+1.9** |
| **SNDB** | **Serra Nova Dou** | **26.95** | **50** | *e* | P | | **P** | **05 33 46.3** | **-0.3** |
| **NPGB** | **Novo Progresso** | **28.53** | **36** | *e* | P | | **P** | **05 33 59.6** | **-1.1** |
| **CAM01** | **Campos-RJ** | **28.57** | **78** | *e* | P | | **P** | **05 33 59.0** | **-2.0** |
| **DIAM** | **Diamantina, MG** | **28.58** | **70** | *e* | P | | **P** | **05 33 60.0** | **-1.4** |
| **PEXB** | **Peixe** | **28.88** | **54** | *e* | P | | **P** | **05 34 03.1** | **-0.7** |
| **MACA** | **Manacapuru-AM** | **29.76** | **23** | *e* | P | | **P** | **05 34 11.2** | **-0.3** |
| **MACA** | **Manacapuru-AM** | **29.76** | **23** | P | | | **P** | **05 34 10.8** | **-0.8** |
| MACA | | | | | IAmb | | IAmb | 05 34 11.9 | |
| comp=Z,43nm,1.3s | | | | | | | | | |
| **ALF01** | **Guarapari-ES** | **29.88** | **77** | *e* | P | | **P** | **05 34 12.6** | **0.0** |
| **JANB** | **Januaria** | **29.90** | **64** | *e* | P | | **P** | **05 34 12.2** | **-0.7** |
| **SJMB** | **Sao Joao De Ma** | **30.40** | **73** | *e* | P | | **P** | **05 34 16.8** | **-0.5** |
| **ITTB** | **Itaituba** | **30.66** | **33** | *e* | P | | **P** | **05 34 18.4** | **-1.2** |
| **SDBA** | **SAO DESIDERIO** | **31.12** | **59** | *e* | P | | **P** | **05 34 22.9** | **-0.8** |
| **SMTB** | **Santa Maria do** | **31.69** | **51** | *e* | P | | **P** | **05 34 28.7** | **0.0** |
| **NAN01** | **Guarapari, ES** | **31.70** | **73** | *e* | P | | **P** | **05 34 27.5** | **-1.3** |
| **PTGA** | **Pitinga** | **32.27** | **23** | LR | | | LR | 05 49 52.7 | |
| comp=Z,406nm,18.1s,baz=192,slow=41 | | | | | | | | | |
| **PRPB** | **Paraupebas** | **32.34** | **44** | *e* | P | | **P** | **05 34 33.2** | **-1.1** |
| **GUA01** | **Guaratinga, BA** | **32.62** | **71** | *e* | P | | **P** | **05 34 33.7** | **-3.1** |
| **RPN** | **Rapa Nui** | **32.81** | **267** | LR | | | LR | 05 44 46.6 | |
| comp=Z,320nm,18.1s,baz=88,slow=30 | | | | | | | | | |
| **CMC01** | **Camacan, BA** | **33.51** | **70** | *e* | P | | **P** | **05 34 44.1** | **-0.5** |
| **MALB** | **Monte Alegre** | **33.56** | **33** | *e* | P | | **P** | **05 34 43.5** | **-1.5** |
| **NBIT** | **Itapeh - BA** | **33.81** | **69** | *e* | P | | **P** | **05 34 45.7** | **-1.6** |
| **PMSA** | **Palmer Station** | **34.05** | **174** | LR | | | LR | 05 48 26.8 | |
| comp=Z,506nm,19.4s,baz=339,slow=36 | | | | | | | | | |
| **GDU01** | **Guandu, BA** | **34.39** | **67** | *e* | P | | **P** | **05 34 51.1** | **-1.2** |
| **BOAV** | **Boa Vista** | **35.05** | **20** | *e* | P | | **P** | **05 34 58.0** | **+0.1** |
| **BOAV** | **Boa Vista** | **35.05** | **20** | P | | | **P** | **05 34 57.5** | **-0.4** |
| BOAV | | | | | IAmb | | IAmb | 05 34 58.5 | |
| comp=Z,13nm,0.8s | | | | | | | | | |
| **NBPN** | **Ponto Novo - B** | **35.64** | **62** | *e* | P | | **P** | **05 35 01.4** | **-1.8** |
| **MCPB** | **Macapa, AP** | **35.93** | **35** | *e* | P | | **P** | **05 35 04.7** | **-0.8** |
| **NBLA** | **Lagarto - SE** | **37.41** | **65** | *e* | P | | **P** | **05 35 16.4** | **-1.8** |
| **NBMA** | **Muriti-CE** | **38.97** | **60** | *e* | P | | **P** | **05 35 30.4** | **-1.0** |
| **NBPS** | **Pedro II - PI** | **39.10** | **53** | *e* | P | | **P** | **05 35 31.4** | **-1.1** |
| **NBAN** | **Anadia - AL** | **39.39** | **65** | *e* | P | | **P** | **05 35 33.4** | **-1.4** |
| **NBPB** | **Pedra_Branca-C** | **39.60** | **57** | *e* | P | | **P** | **05 35 35.2** | **-1.4** |
| **SDV** | **Santo Domingo** | **39.78** | **2** | LR | | | LR | 05 54 25.8 | |
| comp=Z,242nm,18.1s,baz=154,slow=40 | | | | | | | | | |
| **BAUV** | **El Baul** | **40.00** | **6** | P | | | **P** | **05 35 40.3** | **+0.5** |
| B

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PDAR | | | | LR | LR | 06 12 36.6 | |
| | comp=Z,81nm,19.8s,baz=189,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **81.35** | **118** | P | **P** | **05 40 22.2** | **+0.2** |
| | comp=Z,5.5nm,0.9s,baz=243,slow=4.7,SNR=5.0 | | | | | | |
| BOSA | | | | LR | LR | 06 13 49.2 | |
| | comp=Z,170nm,18.4s,baz=199,slow=34 | | | | | | |
| **B35A** | **Bob, Littlefor** | **81.48** | **346** | P | **P** | **05 40 21.8** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **81.57** | **325** | P | **P** | **05 40 24.1** | **+1.2** |
| | comp=Z,0.8nm,0.7s,baz=150,slow=6.4,SNR=6.8 | | | | | | |
| **ELK** | **Elko** | **81.95** | **328** | LR | LR | 06 12 47.1 | |
| | comp=Z,78nm,18.6s,baz=204,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.16** | **70** | P | **P** | **05 40 30.3** | **-1.1** |
| | comp=Z,11nm,0.8s,baz=254,slow=4.6,SNR=29 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.16** | **70** | P | **P** | **05 40 31.4** | **0.0** |
| **LBTB** | **Lobatse** | **83.45** | **115** | LR | LR | 06 12 45.8 | |
| | comp=Z,315nm,20.6s,baz=225,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **83.45** | **115** | P | **P** | **05 40 32.2** | **-0.8** |
| LBTB | | | | IAmb | IAmb | 05 40 33.3 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **ULM** | **Lac du Bonnet** | **83.73** | **345** | P | **P** | **05 40 33.2** | **-0.3** |
| | comp=Z,6.5nm,0.8s,baz=144,slow=4.6,SNR=5.8 | | | | | | |
| **PLID** | **Pearl Lake** | **85.77** | **330** | P | **P** | **05 40 45.8** | **+1.5** |
| **NEW** | **Newport** | **88.77** | **332** | LR | LR | 06 18 32.8 | |
| | comp=Z,110nm,18.1s,baz=160,slow=34 | | | | | | |
| **MDT** | **Midelt** | **89.94** | **51** | LR | LR | 06 20 33.0 | |
| | comp=Z,100nm,20.3s,baz=223,slow=35 | | | | | | |
| **LSZ** | **Lusaka** | **90.63** | **108** | LR | LR | 06 16 03.4 | |
| | comp=Z,145nm,22.0s,baz=185,slow=32 | | | | | | |
| **AFI** | **Afiamalu** | **91.11** | **253** | LR | LR | 06 14 11.9 | |
| | comp=Z,116nm,18.0s,baz=122,slow=30 | | | | | | |
| **ESDC** | **Sonseca Array** | **94.51** | **46** | LR | LR | 06 24 07.4 | |
| | comp=Z,139nm,18.1s,baz=206,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.35** | **341** | P | **Pdif** | **05 41 46.2** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=148,slow=4.7,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **120.17** | **208** | PKP | **PKPdf** | **05 46 56.1** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=144,slow=2.7,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.31** | **210** | PKP | **PKPdf** | **05 47 01.6** | **-1.0** |
| | comp=Z,1.3nm,0.7s,baz=150,slow=1.6,SNR=9.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.84** | **271** | T | T | 08 06 00.0 | |
| | baz=115,slow=75,SNR=194 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.86** | **271** | T | T | 08 05 42.5 | |
| | baz=115,slow=75,SNR=228 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.86** | **271** | T | T | 08 05 54.3 | |
| | baz=115,slow=75,SNR=180 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.18** | **273** | T | T | 08 06 19.0 | |
| | baz=116,slow=75,SNR=30 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.20** | **273** | T | T | 08 06 19.7 | |
| | baz=116,slow=75,SNR=15 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.20** | **273** | T | T | 08 06 28.9 | |
| | baz=116,slow=75,SNR=76 | | | | | | |
| **URV** | **Uravakonda** | **147.56** | **113** | *e*PKPab | **PKPbc** | **05 47 49.2** | **-0.7** |
| **KLRI** | **Killari** | **148.71** | **107** | *e*PKiKP | **PKPbc** | **05 47 52.5** | **-0.4** |
| **SKHT** | **Srikalahasti** | **148.75** | **117** | *e*PKiKP | **PKPbc** | **05 47 52.6** | **-0.4** |
| **RCLA** | **Racherla** | **149.19** | **114** | *e*PKiKP | **PKPbc** | **05 47 53.9** | **-0.3** |
| **SRLM** | **Srisailam** | **149.50** | **113** | *e*PKPdf | **PKPdf** | **05 47 47.0** | **-3.4** |
| SRLM | | | | *e*PKiKP | **PKPbc** | **05 47 53.8** | **-1.2** |
| **HYBB** | **Hyderabad (bro** | **149.96** | **110** | *e*PKiKP | **PKPbc** | **05 47 55.8** | **-0.2** |
| **NJS** | **Nagarjunasagar** | **150.09** | **112** | *e*PKiKP | **PKPbc** | **05 47 55.6** | **-0.7** |
| **ADKI** | **Addanki** | **150.21** | **114** | *e*PKPbc | **PKPbc** | **05 47 54.7** | **-1.9** |
| **SRSP** | **Sriramsagar** | **150.57** | **107** | *e*PKiKP | **PKPbc** | **05 47 56.7** | **-0.8** |
| **MYLAV** | **Mylavaram** | **151.25** | **113** | *e*PKPbc | **PKPbc** | **05 47 56.4** | **-2.6** |
| **RPR** | **Rampur** | **151.31** | **108** | *e*PKiKP | **PKPbc** | **05 47 58.1** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **151.71** | **29** | PKPbc | **PKPbc** | **05 47 58.5** | **-0.5** |
| | comp=Z,7.3nm,0.5s,baz=312,slow=3.0,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.72** | **44** | PKP | **PKPdf** | **05 47 57.1** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=299,slow=3.0,SNR=2.8 | | | | | | |
| MKAR | | | | PKPbc | **PKPbc** | **05 48 05.8** | **-0.1** |
| | comp=Z,1.8nm,0.9s,baz=338,slow=2.6,SNR=5.3 | | | | | | |
| **WMQ** | **Urumqi** | **159.52** | **46** | *e*PKP | **PKPdf** | **05 48 03.6** | **0.0** |
| WMQ | | | | LR | LR | | |
| | comp=Z,97nm,20.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **164.94** | **145** | PKP | **PKPdf** | **05 48 10.2** | **+0.4** |
| | comp=Z,0.8nm,0.4s,baz=247,slow=1.8,SNR=4.0 | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **05 49 05.5** | **-0.4** |
| | comp=Z,0.8nm,0.4s,baz=234,slow=5.8,SNR=6.5 | | | | | | |
| **GTA** | **Gaotai** | **169.33** | **37** | *e*PKP | **PKPdf** | **05 48 12.9** | **+0.4** |
| GTA | | | | pPKP | sPKPdf | 05 48 21.2 | +4.7 |
| **HHC** | **Hu-ho-hao-te** | **169.87** | **345** | *e*PKP | **PKPdf** | **05 48 11.2** | **-1.6** |
| **NJ2** | **Nanjing** | **170.74** | **279** | *e*PKP | **PKPdf** | **05 48 13.9** | **+0.6** |
| **PZH** | **PanZhiHua** | **172.81** | **128** | PKP | **PKPdf** | **05 48 14.3** | **-0.4** |

*IDC **05** 05:28:22.6±0.8, 13°.69N×122°.39E, h0km, mb4.0/14, mb1 4.1/14, mb1mx3.9/43, mbtmp4.0/14, MS4.0/3, Ms1 4.0/3, ms1mx2.8/86, Error ellipse: s-maj=22.0km s-min=16.4km az=51.0*
*MAN **05** 05:28:24.4, 13°.76N×122°.26E, h2km, mb4.6, ML3.5, MS3.4 MAN INTENSITY II - GUINAYANGAN, QUEZON.*
*NEIC **05** 05:28:24.7±1.7, 13°.75N±0°.07×122°.4E±0°.1, h10km±1km, mb4.4/14, Error ellipse: s-maj=20.0km s-min=9.7km az=111.0*

**ISC 05 05:28:25.2±0.9, 13°.81N±0°.03×122°.33E±0°.03, h15km±5km, n56, σ1s35/68, mb4.1/19, MS4.2/3, 8C-7D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GQP** | **Guinayangan** | **0.14** | **50** | ⇓*i*P | **Pg** | **05 28 29.3** | **+0.2** |
| GQP | | | | *e*S | **Sg** | **05 28 32.9** | **+1.2** |
| **AUQP** | **San Andres** | **0.59** | **145** | ⇑*e*P | **Pn** | **05 28 39.2** | **+0.1** |
| AUQP | | | | *i* S | **Sn** | **05 28 51.5** | **+3.1** |
| **BOAC** | **Boac** | **0.59** | **234** | ⇓*e*P | **Pg** | **05 28 35.2** | **-1.7** |
| BOAC | | | | *e*S | **Sb** | **05 28 47.7** | **+2.3** |
| **JCNP** | **Jose Panganiba** | **0.59** | **37** | ⇑*e*P | **Pb** | **05 28 36.8** | **-0.5** |
| JCNP | | | | *i* S | **Sn** | **05 28 45.9** | **-2.6** |
| **LQP** | **Lukban** | **0.83** | **291** | ⇑*e*P | **Pg** | **05 28 39.6** | **-1.7** |
| **PGP** | **Puerto Galera** | **1.38** | **257** | ⇓*e*P | **Pn** | **05 28 47.9** | **-2.0** |
| PGP | | | | *i* S | **Sn** | **05 29 07.9** | **0.0** |
| **TGY** | **Tagaytay City** | **1.39** | **282** | Pn | **Pn** | **05 28 50.2** | **+0.1** |
| | 538nm,0.3s,baz=38,slow=0.5,SNR=17 | | | | | | |
| TGY | | | | Sn | **Sb** | **05 29 10.9** | **+2.6** |
| | 515nm,0.3s,baz=290,slow=7.7,SNR=9.8 | | | | | | |
| **TGY** | **Tagaytay City** | **1.39** | **282** | ⇓*e*P | **Pn** | **05 28 51.0** | **+0.9** |
| TGY | | | | *i* S | **Sg** | **05 29 12.5** | **+2.5** |
| **QVP** | **Quezon City--P** | **1.52** | **302** | ⇑*e*P | **Pn** | **05 28 51.6** | **-0.2** |
| QVP | | | | *e*S | **Sn** | **05 29 12.1** | **+0.7** |
| **MACP** | **Maragondon, Ca** | **1.63** | **286** | ⇑*e*P | **Pn** | **05 28 53.3** | **0.0** |
| MACP | | | | *e*S | **Sb** | **05 29 16.9** | **+1.6** |
| **SJMP** | **San Jose** | **1.79** | **222** | ⇑*e*P | **Pn** | **05 28 55.6** | **0.0** |
| **LUBP** | **Lubang** | **2.03** | **268** | ⇓*e*P | **Pn** | **05 28 58.5** | **-0.4** |
| LUBP | | | | *e*S | **Sn** | **05 29 25.4** | **+1.5** |
| **BALP** | **Baler** | **2.05** | **339** | ⇑*e*P | **Pb** | **05 29 00.9** | **-1.3** |
| BALP | | | | *e*S | **Sg** | **05 29 29.8** | **-1.6** |
| **PCPH** | **Palayan** | **2.11** | **326** | ⇓*e*P | **Pn** | **05 29 01.2** | **+1.2** |
| PCPH | | | | *e*S | **Sg** | **05 29 32.7** | **-0.6** |
| **RCP** | **Roxas** | **2.27** | **170** | ⇑*e*P | **Pn** | **05 29 02.5** | **+0.3** |
| RCP | | | | *e*S | **Sb** | **05 29 34.5** | **+0.6** |
| **SAMP** | **Sagada Mountai** | **3.53** | **337** | ⇓*e*P | **Pn** | **05 29 22.4** | **+2.9** |
| SAMP | | | | *e*S | **Sb** | **05 30 11.9** | **+1.7** |
| **TWG** | **Pinlang** | **9.04** | **353** | Pn | **Pn** | **05 30 35.3** | **+0.1** |
| **MYLDM** | **Lahad Datu** | **9.37** | **204** | Pn | **Pn** | **05 30 38.4** | **-1.4** |
| **SSLB** | **Suanglung** | **10.01** | **353** | Pn | **Pn** | **05 30 48.5** | **-0.1** |
| **NACB** | **Ninganchiao** | **10.33** | **356** | Pn | **Pn** | **05 30 52.8** | **-0.1** |
| **TOLI2** | **Tolitoli** | **12.71** | **187** | Pn | **Pn** | **05 31 21.7** | **-3.9** |
| **SBUM** | **Sibu** | **15.08** | **222** | | **Pn** | **05 31 59.3** | **+1.4** |
| SBUM | | | | IAmb | IAmb | 05 32 09.9 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **KSM** | **Kuching** | **17.08** | **225** | P | **Pn** | **05 32 22.1** | **-1.5** |
| KSM | | | | IAmb | IAmb | 05 32 31.5 | |
| | comp=Z,34nm,1.3s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **22.93** | **285** | P | **P** | **05 33 27.9** | **-1.1** |
| CM31 | | | | IAmb | IAmb | 05 33 42.5 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.93** | **285** | P | **P** | **05 33 30.6** | **+1.6** |
| | comp=Z,1.5nm,0.3s,baz=98,slow=8.0,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.93** | **285** | P | **P** | **05 33 28.6** | **-0.4** |
| **JHS** | **Saijyo** | **23.24** | **23** | P | **P** | **05 33 32.4** | **+0.5** |
| JHS | | | | IAmb | IAmb | 05 33 34.2 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.05** | **11** | P | **P** | **05 33 40.0** | **+0.2** |
| **PSI** | **Prapat** | **25.58** | **247** | LR | LR | 05 45 44.9 | |
| | comp=Z,84nm,18.8s,baz=234,slow=41 | | | | | | |
| **SHL** | **Shillong** | **30.88** | **297** | P | **P** | **05 34 41.7** | **+0.2** |
| SHL | | | | IAmb | IAmb | 05 34 45.0 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.39** | **13** | P | **P** | **05 34 47.0** | **+1.5** |
| | comp=Z,2.9nm,0.7s,baz=192,slow=10,SNR=4.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.39** | **13** | P | **P** | **05 34 44.5** | **-1.0** |
| **WRA** | **Warramunga Arr** | **35.56** | **160** | P | **P** | **05 35 20.6** | **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=333,slow=10,SNR=7.8 | | | | | | |
| **WB2** | **Warramunga Arr** | **35.57** | **160** | P | **P** | **05 35 20.0** | **-2.1** |
| WB2 | | | | IAmb | IAmb | 05 35 47.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **36.16** | **10** | P | **P** | **05 35 28.5** | **+1.6** |
| | comp=Z,1.0nm,0.5s,baz=194,slow=5.1,SNR=5.2 | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.26** | **343** | P | **P** | **05 35 28.5** | **+0.6** |
| **SONM** | **Songino Array** | **36.42** | **342** | P | **P** | **05 35 30.5** | **+1.1** |
| | comp=Z,0.9nm,0.8s,baz=158,slow=9.9,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **36.42** | **342** | P | **P** | **05 35 30.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **38.93** | **163** | P | **P** | **05 35 49.5** | **-1.2** |
| | comp=Z,0.5nm,0.4s,baz=344,slow=7.4,SNR=8.0 | | | | | | |
| **FORT** | **Forrest** | **44.67** | **173** | P | **P** | **05 36 37.4** | **-0.1** |
| **MK31** | **Makanchi Array** | **46.89** | **323** | P | **P** | **05 36 55.9** | **+0.9** |
| MK31 | | | | IAmb | IAmb | 05 36 57.1 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.89** | **323** | P | **P** | **05 36 56.0** | **+1.0** |
| | comp=Z,1.6nm,0.8s,baz=123,slow=8.2,SNR=16 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 38 27.8** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=114,slow=3.6,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.89** | **323** | P | **P** | **05 36 55.1** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **49.70** | **332** | P | **P** | **05 37 16.9** | **+0.4** |
| | comp=Z,0.6nm,0.4s,baz=116,slow=5.1,SNR=4.5 | | | | | | |
| **KURK** | **Kurchatov** | **50.99** | **326** | P | **P** | **05 37 26.5** | **+0.2** |
| **KKAR** | **Karaganda** | **53.04** | **314** | P | **P** | **05 37 42.0** | **+0.3** |
| **BRVK** | **Borovoye** | **56.65** | **325** | P | **P** | **05 38 07.3** | **-0.4** |
| **ILAR** | **Eielson Array** | **77.96** | **26** | P | **P** | **05 40 21.9** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=239,slow=4.0,SNR=5.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.55** | **339** | P | **P** | **05 40 31.6** | **+0.4** |
| | comp=Z,3.4nm,0.9s,baz=71,slow=6.5,SNR=15 | | | | | | |
| **FINES** | **FINESS Array B** | **80.96** | **331** | P | **P** | **05 40 39.1** | **+0.2** |
| | comp=Z,5.3nm,1.1s,baz=46,slow=5.5,SNR=7.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.89** | **333** | P | **P** | **05 41 14.1** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=68,slow=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.89** | **333** | P | **P** | **05 41 13.5** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=68,slow=4.8,SNR=4.6 | | | | | | |
| **GERES** | **GERESS Array B** | **91.54** | **321** | P | **P** | **05 41 31.8** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=113,slow=3.0,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.06** | **23** | P | **P** | **05 41 34.2** | **+0.7** |
| | comp=Z,0.2nm,0.6s,baz=303,slow=4.3,SNR=5.3 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **94.74** | **320** | LR | LR | 06 29 37.0 | |
| | comp=Z,239nm,18.7s,baz=262,slow=39 | | | | | | |
| **BORG** | **Borgarnes** | **96.97** | **345** | LR | LR | 06 31 07.2 | |
| | comp=Z,78nm,18.6s,baz=259,slow=39 | | | | | | |

*MAN **05** 05:41:01.4, 13°.81N×122°.29E, h1km, mb4.8, ML3.7, MS3.7 MAN INTENSITY III - LOPEZ, QUEZON; INTENSITY II - GUINAYANGAN, QUEZON.*
*IDC **05** 05:41:09.2±0.9, 13°.66N×122°.41E, h0km, mb4.0/12, mb1 4.1/12, mb1mx3.9/45, mbtmp4.0/12, MS3.0/4, Ms1 3.0/4, ms1mx2.6/81, Error ellipse: s-maj=22.0km s-min=17.0km az=54.0*

**ISC 05 05:41:12.8±1.1, 13°.74N±0°.04×122°.28E±0°.04, h19km±3km, n34, σ1s57/37, mb4.1/14, MS2.8/5, 7C-9D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOAC** | **Boac** | **0.51** | **237** | ⇑*e*P | Pg | 05 41 11.6 | -11 |
| BOAC | | | | *e*S | **Sb** | **05 41 31.9** | **+1.8** |
| **AUQP** | **San Andres** | **0.57** | **137** | ⇓*e*P | **Pn** | **05 41 26.0** | **+0.1** |
| AUQP | | | | *i* S | **Sn** | **05 41 38.8** | **+4.1** |
| **JCNP** | **Jose Panganiba** | **0.68** | **37** | ⇑*e*P | Pb | 05 41 12.7 | -13 |
| JCNP | | | | *e*S | **Sb** | **05 41 32.2** | **-2.9** |
| **LQP** | **Lukban** | **0.81** | **297** | ⇓*e*P | Pb | 05 41 16.7 | -12 |
| **PGP** | **Puerto Galera** | **1.31** | **260** | ⇑*e*P | **Pn** | **05 41 36.0** | **-0.1** |
| PGP | | | | *i* S | **Sg** | **05 41 55.9** | **+0.5** |
| **TGY** | **Tagaytay City** | **1.35** | **286** | Pn | **Pb** | **05 41 37.7** | **+0.1** |
| | 366nm,0.3s,baz=47,slow=2.1,SNR=17 | | | | | | |
| TGY | | | | Sn | **Sg** | **05 41 58.4** | **+1.7** |
| | 406nm,0.3s,baz=152,slow=18,SNR=18 | | | | | | |
| **TGY** | **Tagaytay City** | **1.35** | **286** | *e*P | **Pg** | **05 41 38.5** | **-0.5** |
| TGY | | | | *i* S | **Sg** | **05 41 56.9** | **+0.2** |
| **QVP** | **Quezon City--P** | **1.52** | **306** | ⇓*e*P | **Pn** | **05 41 38.9** | **-0.1** |
| QVP | | | | *e*S | **Sb** | **05 41 60.0** | **+0.7** |
| **MACP** | **Maragondon, Ca** | **1.60** | **289** | ⇓*e*P | Pn | 05 41 32.9 | -7.2 |
| MACP | | | | *e*S | **Sb** | **05 42 02.3** | **+0.6** |
| **SJMP** | **San Jose** | **1.70** | **222** | ⇓*e*P | Pn | 05 41 32.7 | -8.8 |
| **LUBP** | **Lubang** | **1.98** | **270** | ⇓*e*P | Pn | 05 41 35.9 | -9.4 |
| LUBP | | | | *e*S | **Sb** | **05 42 12.0** | **-0.4** |
| **LUBP** | **Lubang** | **1.98** | **270** | ⇑*e*P | Pn | 05 41 36.1 | -9.2 |
| LUBP | | | | *e*S | **Sn** | **05 42 05.4** | **-4.1** |
| **BALP** | **Baler** | **2.10** | **341** | ⇓*e*P | Pn | 05 41 37.8 | -9.2 |
| BALP | | | | *e*S | **Sb** | **05 42 17.2** | **+1.1** |
| **PCPH** | **Palayan** | **2.14** | **328** | ⇑*e*P | **Pn** | **05 41 48.9** | **+1.3** |
| PCPH | | | | *e*S | **Sb** | **05 42 18.9** | **+1.6** |
| **RCP** | **Roxas** | **2.21** | **168** | ⇑*e*P | **Pb** | **05 41 51.5** | **-0.8** |
| **SMPP** | **San Manuel, Pa** | **2.85** | **327** | ⇓*e*P | **Pn** | **05 41 58.1** | **+0.7** |
| SMPP | | | | *e*S | **Sn** | **05 42 28.0** | **-3.2** |
| **SAMP** | **Sagada Mountai** | **3.58** | **338** | ⇑*e*P | **Pn** | **05 42 08.3** | **+1.0** |
| SAMP | | | | *e*S | **Sn** | **05 42 51.1** | **+1.9** |
| **CMAR** | **Chiang Mai Arr** | **22.90** | **285** | P | **P** | **05 46 17.0** | **+1.3** |
| | 3.8nm,0.8s,baz=89,slow=7.4,SNR=14 | | | | | | |
| **KSRS** | **Korea Array** | **24.15** | **11** | P | **P** | **05 46 27.9** | **+0.1** |
| | 1.0nm,0.6s,baz=186,slow=9.6,SNR=4.6 | | | | | | |
| KSRS | | | | LR | LR | 05 57 01.4 | |
| | comp=Z,19nm,18.3s,baz=220,slow=39 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **25.03** | **37** | LR | LR | 05 54 49.5 | |
| | comp=Z,30nm,18.3s,baz=120,slow=33 | | | | | | |
| **PSI** | **Prapat** | **25.51** | **247** | LR | LR | 05 57 01.9 | |
| | comp=Z,75nm,19.1s,baz=208,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **26.82** | **29** | LR | LR | 05 55 18.9 | |
| | comp=Z,24nm,21.0s,baz=268,slow=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.47** | **13** | P | **P** | **05 47 33.4** | **+0.2** |
| | 4.8nm,0.7s,baz=150,slow=6.8,SNR=6.3 | | | | | | |
| **GTA** | **Gaotai** | **32.34** | **326** | ⇓P | **P** | **05 47 42.2** | **+1.1** |
| GTA | | | | pP | sP | 05 47 51.2 | +1.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,120nm,4.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,68nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,69nm,17.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,98nm,17.8s | | | | | | |
| **GOMU** | **GeErMu** | **33.26** | **317** | P | **P** | **05 47 49.4** | **-0.1** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.51** | **160** | P | **P** | **05 48 06.7** | **-2.0** |
| | comp=Z,0.8nm,0.7s,baz=339,slow=9.5,SNR=6.4 | | | | | | |
| **SONM** | **Songino Array** | **36.48** | **342** | P | **P** | **05 48 17.1** | **+0.2** |
| | comp=Z,2.8nm,0.7s,baz=164,slow=9.7,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.88** | **163** | P | **P** | **05 48 36.0** | **-1.2** |
| | comp=Z,0.7nm,0.7s,baz=341,slow=6.8,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.92** | **323** | P | **P** | **05 49 42.9** | **+0.7** |
| | comp=Z,1.5nm,0.7s,baz=124,slow=8.3,SNR=5.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **48.26** | **28** | P | **P** | **05 49 52.5** | **0.0** |
| | comp=Z,1.5nm,0.9s,baz=270,slow=1.4,SNR=2.5 | | | | | | |
| **NRIK** | **Noril'sk** | **59.73** | **346** | P | **P** | **05 51 15.6** | **-0.4** |
| | comp=Z,2.9nm,0.8s,baz=96,slow=3.6,SNR=3.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.59** | **339** | P | **P** | **05 53 18.0** | **-0.5** |
| | comp=Z,3.1nm,0.8s,baz=54,slow=6.2,SNR=6.3 | | | | | | |
| **FINES** | **FINESS Array B** | **80.99** | **331** | P | **P** | **05 53 25.6** | **-0.5** |
| | comp=Z,4.3nm,1.1s,baz=20,slow=6.7,SNR=3.7 | | | | | | |
| **GERES** | **GERESS Array B** | **91.57** | **321** | P | **P** | **05 54 18.3** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=58,slow=3.3,SNR=4.3 | | | | | | |

**IDC 05 06:00:44.2±2.8, 13°.61S×66°.78E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/49, mbtmp3.5/3, MS3.3/3, Ms1 3.3/3, ms1mx2.8/56, Error ellipse: s-maj=110.2km s-min=44.3km az=48.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S1** | **Diego Carcia H** | **8.15** | **44** | T | T | 06 10 47.4 | |
| | baz=225,slow=75,SNR=26 | | | | | | |
| **H08S2** | **Diego Garcia H** | **8.16** | **44** | T | T | 06 11 07.3 | |
| | baz=225,slow=75,SNR=25 | | | | | | |
| **H08S3** | **Diego Garcia H** | **8.17** | **44** | T | T | 06 10 59.4 | |
| | baz=225,slow=75,SNR=24 | | | | | | |
| **PALK** | **Pallekele** | **24.93** | **34** | LR | LR | 06 13 12.7 | |
| | comp=Z,80nm,21.1s,baz=323,slow=30 | | | | | | |
| **PSI** | **Prapat** | **35.81** | **65** | LR | LR | 06 20 59.1 | |
| | comp=Z,54nm,18.4s,baz=206,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.95** | **46** | LR | LR | 06 25 31.5 | |
| | comp=Z,23nm,20.8s,baz=190,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **63.90** | **110** | P | P | 06 11 18.8 | -0.6 |
| | 0.3nm,0.8s,baz=258,slow=6.3,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.63** | **106** | P | P | 06 11 24.7 | +0.6 |
| | 1.0nm,1.0s,baz=265,slow=6.7,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **70.62** | **27** | P | P | 06 12 01.4 | -0.1 |
| | 0.3nm,0.7s,baz=205,slow=6.4,SNR=2.7 | | | | | | |
| **ULM** | **Lac du Bonnet** | **140.81** | **342** | PKP | PKPdf | 06 20 17.2 | +1.2 |
| | 2.1nm,0.5s,baz=180,slow=1.4,SNR=3.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **150.78** | **354** | PKPbc | PKPbc | 06 20 38.6 | -0.5 |
| | 0.7nm,0.8s,baz=3.8,slow=2.7,SNR=6.2 | | | | | | |

**IDC 05 06:04:56.1±3.9, 5°.20S×151°.49E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/33, mbtmp3.5/3, Error ellipse: s-maj=125.9km s-min=53.6km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.21** | **227** | P | P | 06 09 55.6 | +1.2 |
| | 0.6nm,0.6s,baz=52,slow=9.8,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **24.98** | **221** | P | P | 06 10 21.6 | -0.1 |
| | 0.3nm,0.6s,baz=60,slow=8.6,SNR=4.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.32** | **241** | P | P | 06 10 50.8 | -1.0 |
| | 0.4nm,0.3s,baz=69,slow=8.6,SNR=8.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.18** | **287** | PKPbc | PKPbc | 06 24 47.5 | -0.2 |
| | 0.3nm,0.6s,baz=53,slow=3.9,SNR=2.6 | | | | | | |

*NEIC **05** 06:09:24.3±0.7, 45°.59N±0°.02×67°.33W±0°.03, h8km±1km, Error ellipse: s-maj=3.9km s-min=2.6km az=51.0*
*OTT **05** 06:09:24.8±0.1, 45°.61N×67°.34W, h1km, MN2.6/19*
*OTT 2km northwest from McAdam, Nb. Felt Northern Appalachians Seismic Zone. Felt at McAdam, Nb.*

**ISC 05 06:09:24.2±1.0, 45°.59N±0°.03×67°.33W±0°.02, h9km±9km, n49, σ0s89/76, Maine**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **G65A** | **Princeton** | **0.43** | **203** | Pg | **Pg** | **06 09 32.5** | **-0.1** |
| G65A | | | | Sg | **Sg** | **06 09 37.8** | **-0.4** |
| **HANN** | **Hanwell** | **0.49** | **54** | PG | **Pg** | **06 09 33.7** | **0.0** |
| HANN | | | | SG | **Sg** | **06 09 40.2** | **+0.1** |
| HANN | | | | Trac | | 06 09 40.7 | |
| | comp=Z,22nm,0.1s | | | | | | |
| **GGN** | **Saint George** | **0.59** | **144** | Pg | **Pg** | **06 09 35.6** | **0.0** |
| GGN | | | | Sg | **Sg** | **06 09 43.3** | **0.0** |
| **GGN** | **Saint George** | **0.59** | **144** | PG | **Pg** | **06 09 35.7** | **+0.2** |
| GGN | | | | SG | **Sg** | **06 09 43.7** | **+0.4** |
| GGN | | | | Trac | | 06 09 50.2 | |
| | comp=Z,52nm,0.2s | | | | | | |
| **F64A** | **Sherman** | **0.76** | **291** | Pg | **Pg** | **06 09 39.2** | **+0.2** |
| F64A | | | | Sg | **Sg** | **06 09 49.5** | **+0.6** |
| **PQI** | **Presque Isle** | **1.18** | **336** | | **Pg** | **06 09 46.4** | **-0.4** |
| PQI | | | | Sg | **Sg** | **06 10 02.4** | **+0.2** |
| **SRNB** | **Snider Mountai** | **1.21** | **78** | PG | **Pg** | **06 09 46.7** | **-0.7** |
| SRNB | | | | SG | **Sg** | **06 10 02.6** | **-0.6** |
| SRNB | | | | Trac | | 06 10 05.5 | |
| | comp=Z,69nm,0.2s | | | | | | |
| **F63A** | **Nahmakanta, Br** | **1.25** | **276** | | **Pg** | **06 09 47.9** | **-0.3** |
| F63A | | | | IAmb_Lg | | 06 10 04.1 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| F63A | | | | | **Sg** | **06 10 04.7** | **+0.3** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | PG | **Pg** | **06 09 48.1** | **-0.7** |
| WCNB | | | | SG | **Sg** | **06 10 04.7** | **-0.7** |
| WCNB | | | | Trac | | 06 10 05.9 | |
| | comp=Z,50nm,0.2s | | | | | | |
| **HKNB** | **

region

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.90** | **299** | P | Pn | 06 22 32.8 | -0.1 |
| | 177nm,0.3s,baz=170,slow=11,SNR=18 | | | | | | |
| HNR | | | | S | Sn | 06 22 55.9 | +0.3 |
| | 786nm,0.3s,baz=216,slow=2.5,SNR=9.3 | | | | | | |
| HNR | | | | LR | LR | 06 23 29.9 | |
| | comp=Z,408nm,21.8s,baz=152,slow=46 | | | | | | |
| **DZM** | **Mont Dzumac** | **12.53** | **159** | LR | LR | 06 28 44.7 | |
| | comp=Z,52nm,20.1s,baz=218,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **14.29** | **273** | LR | LR | 06 31 05.9 | |
| | comp=Z,173nm,18.0s,baz=166,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **17.70** | **235** | LR | LR | 06 31 22.4 | |
| | comp=Z,61nm,20.7s,baz=86,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.98** | **247** | P | P | 06 27 50.0 | +0.1 |
| | 1.3nm,0.7s,baz=75,slow=9.1,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **28.32** | **218** | LR | LR | 06 38 42.8 | |
| | comp=Z,72nm,18.3s,baz=37,slow=35 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.10** | **10** | T | T | 06 57 25.3 | |
| | baz=193 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.10** | **10** | T | T | 06 57 21.0 | |
| | baz=193 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.11** | **10** | T | T | 06 57 00.8 | |
| | baz=193 | | | | | | |
| **ASAR** | **Alice Springs** | **29.56** | **240** | P | P | 06 28 03.6 | -0.4 |
| | 0.5nm,0.8s,baz=64,slow=10,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 06 40 06.8 | |
| | comp=Z,134nm,18.3s,baz=86,slow=37 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.33** | **10** | T | T | 06 58 45.9 | |
| | baz=192,slow=76,SNR=6.1 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.33** | **10** | T | T | 06 58 46.1 | |
| | baz=192,slow=76,SNR=4.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.34** | **10** | T | T | 06 58 52.1 | |
| | baz=192,slow=76,SNR=9.6 | | | | | | |
| **KAPI** | **Kappang** | **41.81** | **274** | LR | LR | 06 48 54.7 | |
| | comp=Z,53nm,19.7s,baz=224,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **75.76** | **325** | P | P | 06 33 44.8 | +0.4 |
| | 0.6nm,0.6s,baz=143,slow=5.5,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **84.19** | **20** | P | P | 06 34 29.3 | -0.2 |
| | 0.3nm,0.7s,baz=244,slow=5.2,SNR=5.8 | | | | | | |

*MOS **05** 07:02:17.8±2.1,36˚.50N×139˚.13E,h152km,mb4.2/6,Error ellipse: s-maj=11.2km s-min=6.7km az=88.4*

*IDC **05** 07:02:18.8±0.4,36˚.33N×138˚.96E,h143km±4km,mb3.9/16, mb1 4.0/19,mb1mx3.7/47,mbtmp4.3/19,Error ellipse: s-maj=15.4km s-min=7.7km az=80.0*

*NEIC **05** 07:02:19.5±2.1,36˚.38N±0˚.05×139˚.12E±0˚.07, h140km±6km,mb4.6/32,Error ellipse: s-maj=8.4km s-min=7.4km az=121.0*

*NIED **05** 07:02:19.3,36˚.36N×139˚.16E,h139km,MW4.2,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.85; Mθθ-1.75; Mφφ0.90; Mrθ0.96; Mθφ0.27; Mφr-1.14; Fault plane solution: M₀2.14000×10¹⁵ NP1: φs130.00000°,δ75.00000°,λ127.00000°. NP2: φs239.00000°,δ39.00000°,λ24.00000°.*

*JMA **05** 07:02:19.3±0.1,36˚.36N×139˚.15E,h139km±1km,M4.0 Broadband fault plane solution: P waves. NP1: φs233.00000°,δ47.00000°,λ24.00000°. NP2: φs126.00000°,δ73.00000°,λ134.00000°. Principal axes: T Plg44.0000°, Azm79.0000°; N Plg42.0000°, Azm290.0000°; P Plg16.0000°, Azm185.0000°;*

*JMA Felt II J1.*

**ISC 05 07:02:18.5±0.6,36˚.41N±0˚.04×139˚.10E±0˚.05,h140km±5km, n129,σ1s56/134,mb4.3/40,9C-7D,Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAG** | **Ashikaga** | **0.29** | **87** | ⇑P | Pn | 07 02 38.4 | +0.6 |
| JAG | | | | eS | Sn | 07 02 53.0 | +0.5 |
| **JKT** | **Katashina** | **0.37** | **19** | ⇓P | Pn | 07 02 39.1 | +0.8 |
| JKT | | | | S | Sn | 07 02 54.2 | +0.9 |
| **JRY** | **Ryogami san** | **0.42** | **202** | ⇑P | Pn | 07 02 39.3 | +0.9 |
| JRY | | | | eS | Sn | 07 02 54.0 | +0.5 |
| **MJAR** | **Matsushiro Arr** | **0.73** | **281** | P | Pn | 07 02 40.9 | +0.7 |
| | 249nm,0.3s,baz=103,slow=5.4,SNR=3984 | | | | | | |
| MJAR | | | | S | Sn | 07 02 57.2 | +0.6 |
| | 30nm,0.3s,baz=86,slow=18,SNR=12 | | | | | | |
| MJAR | | | | LR | LR | 07 02 57.3 | |
| | comp=Z,123nm,19.9s,baz=240,slow=60 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **0.73** | **281** | P | Pn | 07 02 40.9 | +0.7 |
| MJAR | | | | S | Sn | 07 02 57.2 | +0.6 |
| **MAJO** | **Matsushiro** | **0.73** | **281** | P | Pn | 07 02 41.3 | +1.1 |
| **MAJO** | **Matsushiro** | **0.73** | **281** | Pn | Pn | 07 02 41.3 | +1.1 |
| **MAT** | **Matsushiro** | **0.73** | **281** | P | Pn | 07 02 41.0 | +0.8 |
| MAT | | | | S | Sn | 07 02 57.1 | +0.4 |
| **MAT** | **Matsushiro** | **0.73** | **281** | P | Pn | 07 02 41.0 | +0.8 |
| MAT | | | | S | Sn | 07 02 57.6 | +0.9 |
| **MJB9** | **Matsu-Tunnel** | **0.73** | **281** | | Pn | 07 02 41.1 | +0.9 |
| **JYT** | **Yasato** | **0.90** | **101** | Pn | Pn | 07 02 41.9 | +0.5 |
| **JYN** | **Shimob** | **1.02** | **206** | ⇑P | Pn | 07 02 43.0 | +0.4 |
| JYN | | | | S | Sn | 07 03 01.2 | +0.3 |
| **JOD2** | **Odawara 2** | **1.15** | **180** | P | Pn | 07 02 43.5 | -0.2 |
| **JFNN** | **Fujinakano** | **1.26** | **196** | P | Pn | 07 02 45.9 | +1.1 |
| JFNN | | | | eS | Sn | 07 03 05.5 | +0.6 |
| **JNS** | **Sasagawa** | **1.42** | **7** | ⇓P | Pn | 07 02 47.5 | +1.1 |
| JNS | | | | eS | Sn | 07 03 09.5 | +1.7 |
| **JFT** | **Otama** | **1.48** | **42** | ⇓P | Pn | 07 02 48.6 | +1.5 |
| JFT | | | | eS | Sn | 07 03 10.5 | +1.4 |
| **JGF** | **Kuroka** | **1.63** | **241** | Pn | Pn | 07 02 49.3 | +0.5 |
| **JSZ** | **Suzu** | **1.73** | **307** | ⇑P | Pn | 07 02 50.5 | +0.6 |
| **JSD** | **Sado** | **1.75** | **338** | Pn | Pn | 07 02 50.7 | +0.6 |
| **JSG** | **Sagara** | **1.89** | **204** | | Pn | 07 02 53.9 | +2.2 |
| **JMM** | **Marumori** | **1.98** | **42** | | Pn | 07 02 53.7 | +0.9 |
| **INU** | **Inuyama** | **2.00** | **239** | Pn | Pn | 07 02 53.7 | +0.8 |
| **JHJ** | **Hachijo jima 2** | **3.33** | **170** | P | Pn | 07 03 09.6 | -0.2 |
| | 282nm,0.3s,baz=100,slow=1.5,SNR=84 | | | | | | |
| JHJ | | | | S | Sn | 07 03 47.7 | -1.7 |
| | 191nm,0.3s,baz=56,slow=23,SNR=9.1 | | | | | | |
| **JHJ2** | **Mitsune** | **3.34** | **170** | Pn | Pn | 07 03 09.4 | -0.5 |
| **JTM** | **Tenmabayashi** | **4.63** | **19** | Pn | Pn | 07 03 27.1 | +0.3 |
| **JMN** | **Monobe** | **5.05** | **240** | Pn | Pn | 07 03 32.5 | +0.1 |
| **JHS** | **Saijyo** | **5.07** | **256** | Pn | Pn | 07 03 33.5 | +0.8 |
| **ERM** | **Erimo** | **6.42** | **28** | P | Pn | 07 03 49.4 | -1.2 |
| **ERM** | **Erimo** | **6.42** | **28** | Pn | Pn | 07 03 49.4 | -1.2 |
| **JEW** | **Eniwo** | **6.67** | **15** | Pn | Pn | 07 03 53.7 | -0.3 |
| **JNU** | **Nakatsue** | **7.52** | **247** | P | Pn | 07 04 06.6 | +1.2 |
| | 1.0nm,0.3s,baz=44,slow=4.3,SNR=8.2 | | | | | | |
| **JNU** | **Nakatsue** | **7.52** | **247** | Pn | Pn | 07 04 06.4 | +0.9 |
| **ASAJ** | **Asahikawa** | **8.15** | **18** | P | Pn | 07 04 10.9 | -2.8 |
| | 9.2nm,0.3s,baz=235,slow=12,SNR=17 | | | | | | |
| **KSRS** | **Korea Array** | **9.01** | **280** | P | Pn | 07 04 28.3 | +3.0 |
| | 0.5nm,0.3s,baz=93,slow=14,SNR=18 | | | | | | |
| **KSAR** | **Wonju Array Be** | **9.04** | **280** | P | Pn | 07 04 29.7 | +4.0 |
| **KSAR** | **Wonju Array Be** | **9.04** | **280** | Pn | Pn | 07 04 29.7 | +4.0 |
| **KS19** | **Wonju Array Si** | **9.06** | **280** | Pn | Pn | 07 04 29.2 | +3.2 |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **327** | P | Pn | 07 04 33.0 | +1.4 |
| | baz=114,slow=12,SNR=4.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **327** | P | Pn | 07 04 33.0 | +1.4 |
| **SHO** | **Shikotan** | **9.51** | **36** | eP | Pn | 07 04 28.0 | -4.0 |
| SHO | | | | pmax | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **10.88** | **13** | eP | Pn | 07 04 47.5 | -2.7 |
| YSS | | | | eS | Sn | 07 06 45.4 | -4.8 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,0.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **10.93** | **322** | P | Pn | 07 04 52.2 | +1.4 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,170nm,4.6s | | | | | | |
| **KUR** | **Kuril'sk** | **11.03** | **34** | P | Pn | 07 04 49.9 | -2.2 |
| KUR | | | | S | Sn | 07 06 45.6 | -8.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,114nm,0.6s | | | | | | |
| **BNX** | **BinXian** | **12.82** | **320** | ⇑P | Pn | 07 05 12.6 | -2.9 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,210nm,4.9s | | | | | | |
| **JOW** | **Kunigami** | **13.27** | **227** | P | P | 07 05 26.6 | +0.5 |
| **KLR** | **Kul'dur** | **13.89** | **340** | P | Pn | 07 05 28.4 | -0.8 |
| | comp=Z,0.4nm,0.3s,baz=145,slow=12,SNR=9.3 | | | | | | |
| **TYV** | **Tymovskoe** | **14.67** | **9** | eP | Pn | 07 05 34.6 | -4.4 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,5.9s | | | | | | |
| **NJ2** | **Nanjing** | **17.29** | **261** | eP | P | 07 06 11.7 | +1.1 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **HIA** | **Hailar** | **19.07** | **318** | ⇓eP | P | 07 06 27.1 | -2.9 |
| HIA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ZEA** | **Zeya** | **19.19** | **338** | eP | P | 07 06 33.0 | +1.9 |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.4s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **NACB** | **Ninganchiao** | **19.39** | **236** | P | P | 07 06 32.9 | -0.6 |
| NACB | | | | lAmb | lAmb | 07 06 57.5 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **YULB** | **Yu-li** | **20.12** | **235** | P | P | 07 06 42.1 | +0.7 |
| YULB | | | | lAmb | lAmb | 07 06 50.4 | |
| | comp=Z,59nm,1.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **21.18** | **32** | P | P | 07 06 54.8 | +2.3 |
| PEA0B | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **21.18** | **32** | P | P | 07 06 54.8 | +2.3 |
| PEA0B | | | | lAmb | lAmb | 07 07 11.3 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.18** | **32** | P | P | 07 06 54.8 | +2.3 |
| | comp=Z,2.9nm,0.8s,baz=218,slow=9.4,SNR=5.2 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **21.92** | **290** | eP | P | 07 07 00.1 | -0.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,6.0s | | | | | | |
| **MA2** | **Magadan** | **24.39** | **14** | ⇓eP | P | 07 07 18.2 | -5.1 |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **26.61** | **306** | P | P | 07 07 41.6 | -2.1 |
| | comp=Z,0.2nm,0.5s,baz=100,slow=7.9,SNR=1.8 | | | | | | |
| **SONM** | **Songino Array** | **26.61** | **306** | P | P | 07 07 41.6 | -2.1 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.48** | **117** | T | T | 07 38 41.7 | |
| | baz=316 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.49** | **117** | T | T | 07 39 02.8 | |
| | baz=316,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.50** | **117** | T | T | 07 38 32.7 | |
| | baz=316,slow=74,SNR=9.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.14** | **119** | T | T | 07 39 35.3 | |
| | baz=314,slow=76,SNR=5.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.14** | **119** | T | T | 07 39 34.0 | |
| | baz=314,slow=76,SNR=4.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.15** | **119** | T | T | 07 39 35.1 | |
| | baz=314,slow=76,SNR=8.0 | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **32.86** | **309** | ⇑eP | P | 07 08 38.7 | -0.2 |
| **PZH** | **PanZhiHua** | **33.19** | **263** | P | P | 07 08 44.3 | +2.3 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,6.2s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **39.26** | **306** | ⇑eP | P | 07 09 30.1 | -3.2 |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **FAKI** | **Fak Fak** | **39.65** | **191** | P | P | 07 09 36.8 | +0.2 |
| **ZALV** | **Zalesovo Beam** | **40.97** | **313** | P | P | 07 09 46.9 | -0.2 |
| | comp=Z,1.2nm,0.4s,baz=61,slow=15,SNR=4.4 | | | | | | |
| **ANM** | **Nome** | **43.09** | **31** | P | P | 07 10 05.9 | +1.7 |
| ANM | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **ANM** | **Nome** | **43.09** | **31** | P | P | 07 10 05.9 | +1.7 |
| **SDPT** | **Sand Point** | **44.56** | **45** | P | P | 07 10 16.0 | 0.0 |
| **KAPI** | **Kappang** | **45.01** | **208** | P | P | 07 10 19.9 | -0.2 |
| | comp=Z,27nm,0.4s,baz=92,slow=9.1,SNR=4.4 | | | | | | |
| **SVW2** | **Sparrevohn** | **47.14** | **37** | P | P | 07 10 38.3 | +2.1 |
| SVW2 | | | | lAmb | lAmb | 07 10 58.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **O18K** | **Koktuh Hills** | **47.33** | **39** | P | P | 07 10 40.0 | +2.3 |
| O18K | | | | lAmb | lAmb | 07 10 55.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **L19K** | **White Mountain** | **47.50** | **36** | P | P | 07 10 40.5 | +1.5 |
| L19K | | | | lAmb | lAmb | 07 11 03.3 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **47.88** | **33** | P | P | 07 10 43.4 | +1.6 |
| **Q19K** | **Cape Douglas,** | **48.16** | **40** | P | P | 07 10 45.3 | +1.2 |
| **OHAK** | **Old Harbor** | **48.47** | **42** | P | P | 07 10 47.2 | +0.8 |
| **KDAK** | **Kodiak Island** | **48.80** | **41** | P | P | 07 10 49.9 | +0.9 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,52nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **48.80** | **41** | P | P | 07 10 49.9 | +0.9 |
| **KSH** | **Kashi** | **48.96** | **294** | P | P | 07 10 56.3 | +5.6 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.56** | **190** | P | P | 07 10 54.2 | -1.0 |
| MTN | | | | lAmb | lAmb | 07 10 55.3 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **51.01** | **32** | P | P | 07 11 06.0 | +0.4 |
| | comp=Z,1.2nm,0.6s,baz=266,slow=5.1,SNR=22 | | | | | | |
| **ILAR** | **Eielson Array** | **51.01** | **32** | P | P | 07 11 06.0 | +0.4 |
| **KNRA** | **Kununurra** | **52.72** | **193** | P | P | 07 11 18.8 | +0.1 |
| **BCAR** | **Beaver Creek A** | **53.45** | **34** | P | P | 07 11 25.6 | +1.9 |
| **M27K** | **Edge Creek, AK** | **53.53** | **35** | P | P | 07 11 26.6 | +2.2 |
| M27K | | | | lAmb | lAmb | 07 11 32.7 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.69** | **196** | P | P | 07 11 40.5 | +0.3 |
| | comp=Z,9.9nm,0.6s,baz=28,slow=8.0,SNR=12 | | | | | | |
| **WB0** | **Waramunga Arr** | **56.05** | **185** | P | P | 07 11 42.1 | -0.7 |
| **WRAB** | **Tennant Creek** | **56.22** | **185** | deP | P | 07 11 43.3 | -0.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **56.23** | **185** | P | P | 07 11 43.5 | -0.6 |
| | comp=Z,7.4nm,0.6s,baz=360,slow=7.6,SNR=70 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.23** | **185** | P | P | 07 11 43.3 | -0.8 |
| **ABKAR** | **Akbulak array** | **56.91** | **310** | P | P | 07 11 48.1 | -0.5 |
| **ABKAR** | **Akbulak array** | **56.91** | **310** | P | P | 07 11 48.6 | -0.1 |
| ABKAR | | | | lAmb | lAmb | 07 11 49.7 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **M31M** | **Drury Creek, Y** | **56.97** | **34** | P | P | 07 11 50.6 | +1.7 |
| **A36M** | **Sachs Harbour** | **57.52** | **22** | P | P | 07 11 53.9 | +1.3 |
| A36M | | | | lAmb | lAmb | 07 11 54.9 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **KIRV** | **Kirov** | **59.62** | **323** | ⇑eP | P | 07 12 07.4 | +0.2 |
| **AS31** | **Alice Springs** | **59.95** | **186** | P | P | 07 12 10.2 | +0.3 |
| AS31 | | | | lAmb | lAmb | 07 12 13.8 | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **59.95** | **186** | P | P | 07 12 08.9 | -1.0 |
| | comp=Z,2.0nm,0.5s,baz=20,slow=12,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **59.95** | **186** | P | P | 07 12 11.0 | +1.0 |
| **ASAR** | **Alice Springs** | **59.95** | **186** | P | P | 07 12 11.0 | +1.0 |
| **MBWA** | **Marble Bar** | **60.12** | **201** | P | P | 07 12 10.7 | -0.3 |
| **DLBC** | **Dease Lake** | **60.25** | **37** | P | P | 07 12 14.2 | +2.5 |
| DLBC | | | | lAmb | lAmb | 07 12 43.1 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **60.47** | **201** | P | P | 07 12 12.4 | -1.1 |
| PSA00 | | | | lAmb | lAmb | 07 12 13.8 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **63.92** | **339** | P | P | 07 12 36.1 | +0.2 |
| | comp=Z,3.8nm,1.0s,baz=43,slow=5.7,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **63.92** | **339** | P | P | 07 12 36.1 | +0.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,23nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.27** | **29** | P | P | 07 12 45.2 | +0.5 |
| | comp=Z,1.6nm,0.8s,baz=302,slow=6.6,SNR=22 | | | | | | |
| **STKA** | **Stephens Creek** | **67.97** | **178** | P | P | 07 13 02.3 | +0.1 |
| | comp=Z,1.8nm,0.7s,baz=350,slow=9.3,SNR=3.2 | | | | | | |
| **FIA1** | **FINESS Array S** | **68.49** | **332** | P | P | 07 13 05.0 | -0.1 |
| FIA1 | | | | lAmb | lAmb | 07 13 19.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **68.49** | **332** | P | P | 07 13 05.1 | +0.1 |
| | comp=Z,2.1nm,0.7s,baz=64,slow=6.7,SNR=8.9 | | | | | | |
| **KIV** | **Kislovodsk** | **69.90** | **310** | eP | P | 07 13 11.5 | -2.7 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **PINE** | **Pine Mountain** | **72.15** | **49** | P | P | 07 13 29.9 | +2.0 |
| PINE | | | | lAmb | lAmb | 07 13 30.7 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.64** | **321** | P | P | 07 13 36.0 | -0.3 |
| | comp=Z,1.2nm,0.5s,baz=47,slow=6.5,SNR=10 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.64** | **321** | deP | P | 07 13 36.0 | -0.3 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **73.64** | **321** | ⇓eP | P | 07 13 32.8 | -3.5 |
| **NB2** | **NORSAR Subarra** | **74.03** | **336** | P | P | 07 13 38.1 | -0.3 |
| | comp=Z,0.7nm,0.5s,baz=42,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **74.03** | **336** | P | P | 07 13 38.2 | -0.3 |
| | comp=Z,0.5nm,0.5s,baz=56,slow=7.9,SNR=4.9 | | | | | | |
| **YERR** | **Yerington** | **75.92** | **52** | P | Pn | 07 13 51.3 | +1.3 |
| YERR | | | | lAmb | lAmb | 07 13 51.9 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.84** | **52** | P | P | 07 13 56.8 | +1.6 |
| | comp=Z,2.6nm,0.8s,baz=302,slow=5.1,SNR=18 | | | | | | |
| **HVU** | **Hansel Valley** | **78.19** | **47** | P | P | 07 14 04.0 | +1.4 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **HVU** | **Hansel Valley** | **78.19** | **47** | P | P | 07 14 04.0 | +1.4 |
| **PDAR** | **Pinedale Array** | **79.42** | **44** | P | P | 07 14 09.8 | +0.5 |
| | comp=Z,1.0nm,0.7s,baz=298,slow=3.0,SNR=9.8 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **91.96** | **51** | P | P | 07 15 12.4 | +0.9 |
| TX31 | | | | lAmb | lAmb | 07 15 28.0 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.97** | **51** | P | P | 07 15 12.6 | +1.1 |
| | comp=Z,1.2nm,0.5s,baz=288,slow=2.6,SNR=46 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.97** | **51** | P | P | 07 15 12.5 | +1.0 |
| **LPAZ** | **La Paz** | **148.60** | **58** | PKPbc | **PKPbc** | 07 21 50.9 | +0.7 |
| | comp=Z,2.4nm,0.6s,baz=310,slow=2.1,SNR=12 | | | | | | |
| **SIV** | **San Ignacio** | **152.88** | **47** | PKPbc | **PKPbc** | 07 21 59.4 | -0.1 |
| | comp=Z,0.8nm,0.5s,baz=214,slow=1.6,SNR=8.3 | | | | | | |
| SIV | | | | PKPab | **PKPab** | 07 22 11.4 | +0.4 |
| | comp=Z,1.3nm,0.8s,baz=340,slow=3.6,SNR=5.1 | | | | | | |

**IDC 05 07:02:42.1±376.0,52˚.71N×102˚.83E,h0km,Error ellipse: s-maj=179.6km s-min=119.9km az=143.0,Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I34MN** | **SONGINO INFRAS** | **5.43** | **154** | *i* | | 07 37 00.0 | |
| | baz=336,slow=331,SNR=0.5 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **21.00** | **102** | *i* | | 09 11 30.0 | |
| | baz=303,slow=335,SNR=1.1 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **99.98** | **358** | *i* | | 12 07 20.0 | |
| | baz=1.0,slow=347,SNR=1.2 | | | | | | |

*IDC **05** 07:03:50.3±1.1,0˚.70N×125˚.63E,h0km,mb3.8/5, mb1 4.0/5,mb1mx3.7/35,mbtmp3.8/5,Error ellipse: s-maj=66.2km s-min=20.0km az=73.0*

*NEIC **05** 07:03:55.7±1.6,0˚.77N±0˚.10×126˚.11E±0˚.06,h35km±3km, mb4.3/12,Error ellipse: s-maj=14.3km s-min=8.9km az=178.0*

*DJA **05** 07:03:55.5±0.3,1˚.N±3˚×12˚.6E±˚,h10km,M3.7/9,MLv3.7/9*

**ISC 05 07:03:56.4±0.6,0˚.84N±0˚.07×126˚.00E±0˚.06,h44km,n30, σ2s09/33,mb4.1/10,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.36** | **93** | P | Pn | 07 04 20.8 | +1.8 |
| TNTI | | | | S | Sn | 07 04 39.5 | +3.5 |
| **TNTI** | **Ternate** | **1.36** | **93** | | Pn | 07 04 16.6 | -2.5 |
| **KMSI** | **Cibinong** | **2.04** | **262** | P | Pn | 07 04 28.8 | +0.5 |
| **LBMI** | **Labuha** | **2.10** | **134** | P | Pn | 07 04 30.3 | +1.2 |
| LBMI | | | | S | Sn | 07 04 59.5 | +5.4 |
| **SANI** | **Sanana** | **2.87** | **180** | P | Pn | 07 04 42.6 | +2.8 |
| SANI | | | | S | Sn | 07 05 16.3 | +3.2 |
| **GTOI** | **Gorontalo** | **3.00** | **266** | P | Pn | 07 04 45.0 | +3.5 |
| GTOI | | | | S | Sn | 07 05 24.9 | +8.7 |
| **MRSI** | **Marisa** | **4.08** | **265** | P | Pn | 07 04 57.7 | +1.4 |
| **APSI** | **Ampana** | **4.69** | **248** | P | Pn | 07 05 07.1 | +2.4 |
| **TOLI2** | **Tolitoli** | **5.23** | **273** | | Pn | 07 05 12.1 | 0.0 |
| **KAPI** | **Kappang** | **8.54** | **227** | Pn | Pn | 07 05 56.9 | -0.6 |
| **MYLDM** | **Lahad Datu** | **8.64** | **300** | Pn | Pn | 07 06 01.5 | +2.5 |
| **KKM** | **Kota Kinabalu** | **11.05** | **298** | Pn | Pn | 07 06 32.8 | +0.7 |
| **SBUM** | **Sibu** | **13.87** | **277** | Pn | Pn | 07 07 09.5 | -1.0 |
| **JAGI** | **Jajag, Banyuwa** | **15.00** | **232** | Pn | Pn | 07 07 24.9 | -0.8 |
| JAGI | | | | lAmb | lAmb | 07 07 49.0 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **16.64** | **171** | Pn | Pn | 07 07 44.5 | -2.1 |
| **WB0** | **Warramunga Arr** | **22.07** | **159** | P | P | 07 08 45.2 | -2.6 |
| WB0 | | | | lAmb | lAmb | 07 08 51.9 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.21** | **159** | P | P | 07 08 47.9 | -1.5 |
| | comp=Z,5.5nm,0.7s,baz=337,slow=11,SNR=32 | | | | | | |
| **WB2** | **Warramunga Arr** | **22.22** | **159** | P | P | 07 08 48.3 | -1.1 |
| WB2 | | | | lAmb | lAmb | 07 08 53.6 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **23.40** | **116** | P | P | 07 08 59.7 | -1.9 |
| PMG | | | | lAmb | lAmb | 07 09 23.5 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **25.54** | **163** | P | P | 07 09 21.8 | +0.6 |
| AS31 | | | | lAmb | lAmb | 07 09 23.8 | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.55** | **163** | P | P | 07 09 21.3 | 0.0 |
| | comp=Z,0.8nm,0.3s,baz=347,slow=13,SNR=26 | | | | | | |
| **FORT** | **Forrest** | **31.51** | **177** | P | P | 07 10 13.6 | -0.8 |
| **BBOO** | **Buckleboo** | **34.79** | **165** | P | P | 07 10 41.5 | -1.5 |
| **STKA** | **Stephens Creek** | **35.74** | **157** | P | P | 07 10 50.3 | -0.9 |
| **PINNC** | **Pines Island,** | **46.61** | **123** | P | P | 07 12 21.2 | +0.6 |
| **SONM** | **Songino Array** | **49.80** | **343** | P | P | 07 12 46.3 | +1.3 |
| | comp=Z,0.4nm,0.6s,baz=157,slow=8.0,SNR=3.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.36** | **22** | P | P | 07 13 48.9 | +1.8 |
| | comp=Z,0.9nm,0.6s,baz=174,slow=1.5,SNR=4.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.36** | **22** | P | P | 07 13 47.2 | +0.1 |
| **MK31** | **Makanchi Array** | **59.52** | **327** | P | P | 07 13 54.1 | -1.3 |
| MK31 | | | | lAmb | lAmb | 07 14 00.2 | |
| | comp=Z,2.4nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.52** | **327** | P | P | 07 13 54.1 | -1.2 |
| | comp=Z,0.9nm,0.4s,baz=122,slow=7.7,SNR=8.4 | | | | | | |

*IDC **05** 07:05:06.5±0.8,20˚.93S×67˚.14W,h193km±9km,mb3.2/5, mb1 3.5/9,mb1mx3.4

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PB11** | **IPOC Station P** | **2.45** | **298** | P | | **Pn** | **07 05 51.5** | **+0.6** |
| **HMBC** | **Humberstone** | **2.46** | **284** | ⇑*i*P | | **Pn** | **07 05 51.0** | **0.0** |
| HMBC | | | | *e*S | | **S** | **07 06 23.5** | **-1.3** |
| HMBC | | | | IAML | | | 07 06 27.8 | |
| | comp=N,685nm,0.4s | | | | | | | |
| **HMBC** | **Humberstone** | **2.46** | **284** | P | | **Pn** | **07 05 51.1** | **+0.1** |
| **PB07** | **IPOC Station P** | **2.50** | **251** | ⇑*i*P | | **Pn** | **07 05 51.7** | **+0.2** |
| PB07 | | | | *e*S | | **S** | **07 06 24.7** | **-1.0** |
| PB07 | | | | IAML | | | 07 06 25.2 | |
| | comp=N,563nm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.50** | **251** | | | **Pn** | **07 05 51.6** | **+0.1** |
| **PB07** | **IPOC Station P** | **2.50** | **251** | P | | **Pn** | **07 05 52.1** | **+0.6** |
| **PB03** | **IPOC Station P** | **2.51** | **243** | ⇑*i*P | | **Pn** | **07 05 52.0** | **+0.4** |
| PB03 | | | | *e*S | | **S** | **07 06 24.1** | **-1.8** |
| PB03 | | | | IAML | | | 07 06 25.8 | |
| | comp=N,515nm,0.4s | | | | | | | |
| **PB03** | **IPOC Station P** | **2.51** | **243** | | | **Pn** | **07 05 51.7** | **+0.2** |
| **PB03** | **IPOC Station P** | **2.51** | **243** | P | | **Pn** | **07 05 52.1** | **+0.5** |
| PB03 | | | | S | | **S** | **07 06 24.7** | **-1.1** |
| PB03 | | | | IAML | | | 07 06 25.9 | |
| | comp=N,884nm,0.2s | | | | | | | |
| **PATCX** | **Punta Patache** | **2.62** | **271** | ⇑*i*P | | **Pn** | **07 05 52.9** | **+0.2** |
| PATCX | | | | *e*S | | **S** | **07 06 24.9** | **-3.0** |
| PATCX | | | | IAML | | | 07 06 29.4 | |
| | comp=N,562nm,0.3s | | | | | | | |
| **PATCX** | **Punta Patache** | **2.62** | **271** | | | **Pn** | **07 05 52.8** | **+0.1** |
| **TA01** | **Diego Aracena** | **2.67** | **277** | ⇑*i*P | | **Pn** | **07 05 53.1** | **-0.1** |
| TA01 | | | | *e*S | | **S** | **07 06 27.0** | **-1.8** |
| TA01 | | | | IAML | | | 07 06 30.2 | |
| | comp=E,438nm,0.3s | | | | | | | |
| **TA01** | **Diego Aracena** | **2.67** | **277** | Pn | | **Pn** | **07 05 52.5** | **-0.7** |
| **TA02** | **Huaiquique** | **2.68** | **283** | *e*P | | **Pn** | **07 05 53.5** | **+0.1** |
| TA02 | | | | *e*S | | **S** | **07 06 26.9** | **-2.1** |
| TA02 | | | | IAML | | | 07 06 29.7 | |
| | comp=N,909nm,0.1s | | | | | | | |
| **TA02** | **Huaiquique** | **2.68** | **283** | | | **Pn** | **07 05 53.6** | **+0.3** |
| **PB06** | **IPOC Station P** | **2.73** | **229** | ⇑*i*P | | **Pn** | **07 05 54.3** | **+0.3** |
| PB06 | | | | *e*S | | **S** | **07 06 29.3** | **-1.0** |
| PB06 | | | | IAML | | | 07 06 30.9 | |
| | comp=E,514nm,0.1s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.73** | **229** | | | **Pn** | **07 05 54.2** | **+0.1** |
| **PB06** | **IPOC Station P** | **2.73** | **229** | P | | **Pn** | **07 05 54.5** | **+0.5** |
| PB06 | | | | S | | **S** | **07 06 28.0** | **-2.3** |
| PB06 | | | | IAML | | | 07 06 31.4 | |
| | comp=E,2µm,0.2s | | | | | | | |
| **MNMC** | **Minye Minye** | **2.75** | **310** | ⇑*e*P | | **Pn** | **07 05 55.5** | **+1.0** |
| MNMC | | | | *e*S | | **S** | **07 06 31.5** | **+0.4** |
| MNMC | | | | IAML | | | 07 06 35.9 | |
| | comp=N,462nm,0.2s | | | | | | | |
| **MNMC** | **Minye Minye** | **2.75** | **310** | | | **Pn** | **07 05 55.3** | **+0.8** |
| **MNMC** | **Minye Minye** | **2.75** | **310** | P | | **Pn** | **07 05 55.7** | **+1.2** |
| **PB04** | **IPOC Station P** | **2.96** | **241** | ⇑*i*P | | **Pn** | **07 05 56.9** | **+0.2** |
| PB04 | | | | *e*S | | **S** | **07 06 31.9** | **-3.3** |
| PB04 | | | | IAML | | | 07 06 37.4 | |
| | comp=N,183nm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.96** | **241** | | | **Pn** | **07 05 56.4** | **-0.3** |
| **PB04** | **IPOC Station P** | **2.96** | **241** | P | | **Pn** | **07 05 57.0** | **+0.3** |
| **PB15** | **IPOC Station P** | **3.01** | **220** | ⇑*i*P | | **Pn** | **07 05 57.7** | **+0.3** |
| PB15 | | | | *e*S | | **S** | **07 06 35.8** | **-0.6** |
| **PB15** | **IPOC Station P** | **3.01** | **220** | | | **Pn** | **07 05 57.3** | **-0.1** |
| **PB15** | **IPOC Station P** | **3.01** | **220** | P | | **Pn** | **07 05 58.0** | **+0.6** |
| **PB16** | **IPOC Station P** | **3.27** | **321** | ⇑*e*P | | **Pn** | **07 06 02.5** | **+1.6** |
| PB16 | | | | *e*S | | **S** | **07 06 43.8** | **+1.4** |
| **PB16** | **IPOC Station P** | **3.27** | **321** | | | **Pn** | **07 06 02.4** | **+1.6** |
| **PB16** | **IPOC Station P** | **3.27** | **321** | P | | **Pn** | **07 06 02.7** | **+1.9** |
| **PB12** | **IPOC Station P** | **3.62** | **309** | *e*P | | **Pn** | **07 06 03.8** | **-0.7** |
| PB12 | | | | *e*S | | **S** | **07 06 47.0** | **-2.1** |
| **PB12** | **IPOC Station P** | **3.62** | **309** | Pn | | **Pn** | **07 06 03.7** | **-0.7** |
| **PB10** | **IPOC Station P** | **3.94** | **228** | Pn | | **Pn** | **07 06 07.5** | **-0.7** |
| **PB10** | **IPOC Station P** | **3.94** | **228** | P | | **Pn** | **07 06 07.9** | **-0.4** |
| **BBOE** | **La Paz, Chanca** | **4.12** | **352** | P | | **Pn** | **07 06 12.8** | **+1.6** |
| **BBOD** | **La Paz, Gloria** | **4.41** | **344** | P | | **Pn** | **07 06 16.9** | **+2.1** |
| **LPAZ** | **La Paz** | **4.66** | **351** | P | | **Pn** | **07 06 19.4** | **+1.6** |
| | comp=N,4.7nm,0.3s,baz=157,slow=5.7,SNR=131 | | | | | | | |
| LPAZ | | | | S | | **S** | **07 07 13.6** | **+0.3** |
| | comp=N,0.2nm,0.3s,baz=28,slow=22,SNR=4.0 | | | | | | | |
| **LPAZ** | **La Paz** | **4.66** | **351** | Pn | | **Pn** | **07 06 18.7** | **+0.8** |
| **LPAZ** | **La Paz** | **4.66** | **351** | P | | **Pn** | **07 06 19.5** | **+1.6** |
| **AC02** | **Maricunga** | **6.12** | **195** | Pn | | **Pn** | **07 06 35.1** | **-1.2** |
| **GO03** | **Copiap** | **7.15** | **201** | Pn | | **Pn** | **07 06 46.2** | **-3.1** |
| **SIV** | **San Ignacio** | **7.71** | **52** | P | | **Pn** | **07 06 54.3** | **-2.3** |
| | comp=N,2.4nm,0.3s,baz=253,slow=13,SNR=54 | | | | | | | |
| SIV | | | | S | | **S** | **07 08 18.3** | **-5.5** |
| | comp=N,0.4nm,0.3s,baz=151,slow=21,SNR=8.0 | | | | | | | |
| **AC04** | **Llanos de Chal** | **8.01** | **204** | Pn | | **Pn** | **07 06 57.1** | **-3.3** |
| **PTLB** | **Pontes e Lacer** | **9.51** | **57** | *e*P | | **Pn** | **07 07 18.4** | **-1.5** |
| **PTLB** | **Pontes e Lacer** | **9.51** | **57** | | | **Pn** | **07 07 18.8** | **-1.1** |
| **VILB** | **Vilhena** | **10.46** | **42** | *e*P | | **Pn** | **07 07 31.7** | **-0.5** |
| **VILB** | **Vilhena** | **10.46** | **42** | Pn | | **Pn** | **07 07 32.5** | **+0.4** |
| **CPUP** | **Villa Florida** | **10.65** | **122** | P | | **Pn** | **07 07 36.2** | **+1.7** |
| | comp=N,0.3nm,0.3s,baz=298,slow=11,SNR=6.2 | | | | | | | |
| **CPUP** | **Villa Florida** | **10.65** | **122** | Pn | | **Pn** | **07 07 36.4** | **+1.9** |
| **SALV** | **Santo Antonio** | **12.13** | **68** | *e*P | | **Pn** | **07 07 53.3** | **-0.2** |
| **MT02** | **Curacav** | **12.75** | **195** | Pn | | **Pn** | **07 07 59.5** | **-1.5** |
| **PDRB** | **Porto dos Gac** | **13.76** | **49** | *e*P | | **Pn** | **07 08 13.1** | **-0.7** |
| **ARAG** | **Araguaiana, MT** | **15.63** | **73** | *e*P | | **P** | **07 08 37.1** | **+0.6** |
| **SNDB** | **Serra Nova Dou** | **17.77** | **62** | *e*P | | **P** | **07 08 59.5** | **-0.5** |
| **IPMB** | **Ipameri, GO** | **18.28** | **84** | *e*P | | **P** | **07 09 05.5** | **-0.1** |
| **MACA** | **Manacapuru-AM** | **18.80** | **21** | P | | **P** | **07 09 09.7** | **-1.5** |
| **BDFB** | **Brasilia** | **19.09** | **77** | P | | **P** | **07 09 14.2** | **-0.2** |
| | comp=N,1.1nm,0.3s,baz=255,slow=9.8,SNR=13 | | | | | | | |
| **BDFB** | **Brasilia** | **19.09** | **77** | IAmb | IAmb | | 07 09 26.6 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **LR03** | **Panguipulli** | **19.14** | **192** | P | | **P** | **07 09 16.1** | **+1.5** |
| LR03 | | | | IAmb | IAmb | | 07 09 28.6 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **PLCA** | **Paso Flores** | **19.95** | **187** | P | | **Pn** | **07 09 27.4** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=5.1,slow=12,SNR=5.1 | | | | | | | |
| **PLCA** | **Paso Flores** | **19.95** | **187** | P | | **Pn** | **07 09 26.8** | **-0.9** |
| **ITTB** | **Itaituba** | **19.95** | **36** | *e*P | | **P** | **07 09 22.1** | **-1.4** |
| **PEXB** | **Peixe** | **20.24** | **67** | *e*P | | **P** | **07 09 25.9** | **-0.7** |
| **LL04** | **Puerto Octay** | **20.39** | **191** | P | | Pn | 07 09 30.6 | -2.6 |
| LL04 | | | | IAmb | IAmb | | 07 09 42.2 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **PTGA** | **Pitinga** | **21.32** | **21** | P | | **P** | **07 09 36.9** | **-1.1** |
| | comp=Z,1.4nm,0.5s,baz=196,slow=7.4,SNR=6.1 | | | | | | | |
| **PRPB** | **Parauapebas** | **22.44** | **52** | *e*P | | **P** | **07 09 47.5** | **-1.3** |
| **SMTB** | **Santa Maria do** | **22.51** | **61** | *e*P | | **P** | **07 09 49.3** | **-0.3** |
| **JANB** | **Januaria** | **22.66** | **79** | *e*P | | **P** | **07 09 50.1** | **-0.9** |
| **MALB** | **Monte Alegre** | **22.84** | **36** | *e*P | | **P** | **07 09 51.7** | **-0.8** |
| **SDBA** | **SAO DESIDERIO** | **23.09** | **72** | *e*P | | **P** | **07 09 54.4** | **-0.4** |
| **BOAV** | **Boa Vista** | **24.11** | **17** | *e*P | | **P** | **07 10 03.9** | **-0.1** |
| **BOAV** | **Boa Vista** | **24.11** | **17** | P | | **P** | **07 10 04.0** | **0.0** |
| BOAV | | | | IAmb | IAmb | | 07 10 07.8 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **NAN01** | **Guarapari, ES** | **25.85** | **88** | *e*P | | **P** | **07 10 19.0** | **-0.7** |
| **GUA01** | **Guaratinga, BA** | **26.42** | **85** | *e*P | | **P** | **07 10 24.7** | **-0.2** |
| **NBIT** | **Itapeh - BA** | **27.20** | **82** | *e*P | | **P** | **07 10 31.3** | **-0.5** |
| **GDU01** | **Guandu, BA** | **27.44** | **79** | *e*P | | **P** | **07 10 32.8** | **-1.1** |
| **NBLA** | **Lagarto - SE** | **30.04** | **75** | *e*P | | **P** | **07 10 55.5** | **-1.4** |
| **RCBR** | **Riachuelo** | **33.97** | **68** | P | | **P** | **07 11 31.8** | **+0.5** |
| **TXAR** | **Lajitas Array** | **61.00** | **324** | P | | **P** | **07 15 00.3** | **+1.5** |
| | comp=Z,0.2nm,0.6s,baz=134,slow=12,SNR=2.5 | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.34** | **329** | P | | **P** | **07 16 23.9** | **+1.8** |
| | comp=Z,0.2nm,0.5s,baz=104,slow=7.5,SNR=2.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.79** | **70** | P | | **P** | **07 16 30.2** | **-0.4** |
| | comp=Z,1.8nm,0.5s,baz=255,slow=5.7,SNR=16 | | | | | | | |
| **VNDA** | **Vanda** | **77.67** | **190** | P | | **P** | **07 16 39.2** | **-0.9** |
| VNDA | | | | IAmb | IAmb | | 07 16 44.3 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **LBTB** | **Lobatse** | **83.94** | **114** | P | | **P** | **07 17 13.8** | **-0.6** |
| **YKA** | **Yellowknife Ar** | **91.13** | **340** | P | | **P** | **07 17 49.4** | **+1.7** |
| | comp=Z,0.5nm,0.6s,baz=132,slow=4.4,SNR=8.8 | | | | | | | |
| **KSH** | **Kashi** | **143.60** | **51** | PKP | **PKPdf** | | **07 24 17.3** | **-0.1** |
| KSH | | | | pPKP | pPKPdf | | 07 25 11.2 | -1.1 |
| **PZH** | **PanZhiHua** | **168.57** | **59** | PKP | **PKPdf** | | **07 24 49.9** | **+0.2** |

*NNC* ***05*** *07:06:52.2±0.6, 49.°97N×78.°70E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=6.0km s-min=3.1km az=72.0, Suspected Mining explosion.*

**ISC 05 07:06:52.4**±0.8, **50.°00N**±0.°05×**78.°66E**±0.°04, **h0km**, **n12**, **σ2s14**/17, **10C-4D**, **Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **0.63** | **352** | ⇑P | **Pg** | **07 07 04.8** | **+0.3** |
| KURBB | 30nm,0.2s | | | ⇓S | **Sg** | **07 07 14.5** | **+1.9** |
| **KURK** | 102nm,0.5s **Kurchatov** | **0.71** | **358** | ⇑P | **Pg** | **07 07 06.3** | **+0.2** |
| KURK | 14nm,0.4s | | | ⇑S | **Sg** | **07 07 17.3** | **+1.9** |
| | 20nm,0.4s | | | | | | |
| **SEM** | **Semipalatinsk** | **1.10** | **68** | P | **Pg** | **07 07 13.0** | **-0.5** |
| SEM | 13nm,0.2s | | | S | **Sb** | **07 07 28.0** | **-1.4** |
| **BRZS** | 46nm,0.2s **Berezniki** | **3.86** | **272** | Pg | **Pg** | **07 08 04.5** | **-1.9** |
| BRZS | 7.9nm,0.3s | | | Lg | Lg | 07 08 56.2 | |
| **MAKZ** | 7.6nm,0.3s **Makanchi** | **3.88** | **144** | ⇑Pg | **Pb** | **07 08 02.0** | **+0.2** |
| MAKZ | 3.3nm,0.7s | | | ⇑Lg | Lg | 07 08 53.2 | |
| **MK31** | 8.9nm,0.7s **Makanchi Array** | **4.02** | **142** | ⇑Pn | **Pn** | **07 07 57.1** | **+1.8** |
| MK31 | 0.3nm,0.2s,baz=311,slow=12,SNR=192 | | | ⇑Pg | **Pb** | **07 08 04.7** | **+0.6** |
| MK31 | 0.7nm,0.3s,baz=318,slow=14,SNR=36 | | | ⇓Lg | Lg | 07 08 59.5 | |
| **OTUK** | 15nm,0.6s,baz=328,slow=25,SNR=16 **Ortayu** | **4.51** | **249** | ⇑Pn | **Pn** | **07 08 03.8** | **+1.8** |
| OTUK | 1.9nm,0.3s | | | ⇑Lg | Lg | 07 09 17.0 | |
| **KAPS** | 5.4nm,0.6s **Kapalarasan** | **4.74** | **174** | Pg | **Pb** | **07 08 18.4** | **+2.0** |
| KAPS | 3.3nm,0.3s | | | Lg | Lg | 07 09 20.1 | |
| **ZSN** | 15nm,0.5s **Zaisan** | **4.84** | **120** | Pg | **Pb** | **07 08 19.9** | **+1.9** |
| ZSN | 3.1nm,0.3s | | | Lg | Lg | 07 09 22.6 | |
| **DJR** | 12nm,0.6s **Jarkent** | **5.72** | **172** | Pg | **Pb** | **07 08 36.7** | **+3.5** |
| DJR | 2.1nm,0.2s | | | Lg | Lg | 07 09 51.4 | |
| **BRVK** | 5.5nm,0.6s **Borovoye** | **6.06** | **304** | ⇓Pn | **Pn** | **07 08 19.1** | **-4.1** |
| BRVK | 0.8nm,0.6s | | | ⇑Sn | **Sn** | **07 09 35.2** | **+2.0** |
| BRVK | 5.8nm,0.8s | | | ⇓Lg | Lg | 07 10 06.7 | |
| **WMQ** | 3.9nm,1.0s **Urumqi** | **8.74** | **132** | *e*P | **Pg** | **07 09 38.1** | **-1.7** |

**IDC 05 07:56:17.7**±2.7, **10.°51S**×**123.°14E**, **h0km**, **mb3.2**/1, **mb1 3.4**/3, **mb1mx3.3**/21, **mbtmp3.2**/3, **ML3.3**/2, **MS3.6**/1, **Ms1 3.6**/1, **ms1mx2.5**/22, **Error ellipse: s-maj=247.1km s-min=35.1km az=52.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.30** | **132** | Pn | Pn | 07 59 39.8 | -1.9 |
| WRA | 0.1nm,0.3s,baz=306,slow=14,SNR=2.5 | | | Sn | Sn | 08 02 12.1 | -9.1 |
| **ASAR** | 0.1nm,0.3s,baz=308,slow=23,SNR=7.1 **Alice Springs** | **16.64** | **143** | Pn | P | 08 00 14.0 | -1.0 |
| ASAR | 0.1nm,0.3s,baz=319,slow=12,SNR=6.0 | | | Sn | Sn | 08 03 12.4 | -5.5 |
| **HNR** | 0.1nm,0.3s,baz=312,slow=21,SNR=4.4 **Honiara** | **36.26** | **92** | LR | LR | 08 18 30.7 | |
| **MKAR** | comp=Z,87nm,18.3s,baz=131,slow=37 **Makanchi Array** | **67.70** | **331** | P | P | 08 07 16.8 | 0.0 |
| | 0.1nm,0.5s,baz=124,slow=7.1,SNR=2.1 | | | | | | |

*TUL* ***05*** *08:08:56.8±1.0, 36.°48N±0.°02×98.°74W±0.°02, h7km±7km, ML2.9, mb_Lg2.6/39(NEIC), Error ellipse: s-maj=3.2km s-min=1.8km az=131.0*

**NEIC 05 08:08:57.1**±0.8, **36.°47N**±0.°02×**98.°70W**±0.°02, **h5**km±2km, **Error ellipse: s-maj=3.2km s-min=2.9km az=304.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.24** | **358** | Pg | Pg | 08 09 01.6 | -0.2 |
| OK035 | | | | Sg | Sg | 08 09 05.3 | +0.3 |
| **U32A** | **Winter Ranch,** | **0.26** | **251** | Pg | Pg | 08 09 01.8 | -0.3 |
| U32A | | | | Sg | Sg | 08 09 05.5 | -0.1 |
| **OK032** | **Salt Plains WL** | **0.52** | **49** | Pg | Pg | 08 09 07.2 | +0.1 |
| OK032 | | | | Sg | Sg | 08 09 13.5 | -0.3 |
| **CROK** | **Carrier** | **0.58** | **86** | Pg | Pg | 08 09 08.6 | +0.4 |
| **KAN14** | **Manchester OK** | **0.77** | **50** | Pg | Pg | 08 09 11.8 | 0.0 |
| KAN14 | | | | Sg | Sg | 08 09 21.9 | +0.1 |
| **GC02** | **Grant County #** | **0.78** | **60** | Pg | Pg | 08 09 11.8 | -0.2 |
| **KAN10** | **Anthony SW Sta** | **0.82** | **36** | Pg | Pg | 08 09 12.4 | -0.4 |
| **KAN16** | **Harper SW Stat** | **0.91** | **34** | | Pg | 08 09 14.2 | -0.4 |
| **KAN05** | **Bluff City Nor** | **0.92** | **46** | | Pg | 08 09 14.7 | -0.2 |
| **KAN17** | **Caldwell West** | **0.95** | **52** | | Pg | 08 09 14.9 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **0.96** | **37** | | Pg | 08 09 15.1 | -0.4 |
| **KAN13** | **South Haven SW** | **1.12** | **60** | | Pg | 08 09 18.1 | -0.6 |
| **BCOK** | **Bluff Creek, N** | **1.20** | **132** | | Pg | 08 09 19.8 | -0.2 |
| **OK029** | **Liberty Lake** | **1.21** | **123** | | Pg | 08 09 20.1 | -0.1 |
| **BLOK** | **Blackwell** | **1.23** | **76** | Pn | Pg | 08 09 20.2 | -0.4 |
| **OK025** | **Westminster Rd** | **1.41** | **128** | | Pn | 08 09 23.4 | -0.1 |
| **OK033** | **Mehan** | **1.48** | **106** | | Pn | 08 09 24.5 | +0.1 |
| **OK031** | **S. Brethren Rd** | **1.59** | **108** | | Pn | 08 09 25.9 | +0.1 |
| **QUOK** | **Quay** | **1.63** | **100** | | Pn | 08 09 27.0 | +0.5 |
| **X34A** | **Smith Ranch, M** | **1.99** | **159** | IAmb_Lg | | 08 10 06.0 | |
| **TUL1** | comp=Z,26nm,0.7s **Leonard** | **2.41** | **102** | IAmb_Lg | | 08 10 15.1 | |
| **CBKS** | comp=Z,30nm,1.1s **Cedar Bluff** | **2.49** | **341** | Pn | Pn | 08 09 38.9 | +0.6 |
| **LOOK** | **Love County** | **2.76** | **153** | IAmb_Lg | | 08 10 32.1 | |
| **X37A** | comp=Z,21nm,0.7s **Clayton** | **3.29** | **124** | IAmb_Lg | | 08 10 47.4 | |
| **U38A** | comp=Z,25nm,0.7s **Gravette** | **3.48** | **89** | IAmb_Lg | | 08 10 54.6 | |
| **HHAR** | comp=Z,15nm,0.9s **Hobbs** | **3.84** | **91** | IAmb_Lg | | 08 11 04.0 | |
| **KSCO** | comp=Z,12nm,0.8s **Kaye Shedlock'** | **4.02** | **310** | IAmb_Lg | | 08 11 14.4 | |
| **MSTX** | comp=Z,19nm,0.7s **Muleshoe** | **4.16** | **234** | IAmb_Lg | | 08 11 10.6 | |
| **N33A** | comp=Z,11nm,0.8s **J Bar K, Exete** | **4.38** | **13** | IAmb_Lg | | 08 11 19.2 | |
| **S39A** | comp=Z,15nm,0.7s **Bolivar** | **4.47** | **73** | IAmb_Lg | | 08 11 22.9 | |
| **U40A** | comp=Z,11nm,0.7s **Yellville** | **4.71** | **90** | IAmb_Lg | | 08 11 37.3 | |
| **237A** | comp=Z,12nm,0.8s **Washetta, Mont** | **5.05** | **151** | IAmb_Lg | | 08 11 46.9 | |
| **P38A** | comp=Z,14nm,1.0s **Dawn** | **5.15** | **51** | IAmb_Lg | | 08 11 51.5 | |
| **X40A** | comp=Z,9.3nm,0.7s **Basin Creek Fa** | **5.17** | **111** | IAmb_Lg | | 08 11 50.4 | |
| **R40A** | comp=Z,11nm,0.8s **Maddies Statio** | **5.43** | **68** | IAmb_Lg | | 08 11 53.5 | |
| **Q24A** | comp=Z,10.0nm,0.7s **Divide** | **5.69** | **298** | IAmb_Lg | | 08 12 09.8 | |
| **435B** | comp=Z,12nm,1.2s **Jarrell** | **5.74** | **170** | IAmb_Lg | | 08 12 05.1 | |
| **JCT** | comp=Z,12nm,1.0s **Junction City** | **6.04** | **189** | IAmb_Lg | | 08 12 25.8 | |
| **K31A** | comp=Z,12nm,0.9s **O'Neill** | **6.15** | **360** | IAmb_Lg | | 08 12 21.1 | |
| **CCM** | comp=Z,13nm,0.8s **Cathedral Cave** | **6.15** | **73** | IAmb_Lg | | 08 12 26.1 | |
| **FVM** | comp=Z,7.4nm,0.8s **French Village** | **6.77** | **75** | IAmb_Lg | | 08 12 30.8 | |
| | comp=Z,11nm,0.9s | | | | | | |

**IDC 05 08:15:35.9**±3.3, **8.°84S**×**118.°71E**, **h0km**, **mb3.0**/2, **mb1 3.3**/3, **mb1mx3.2**/29, **mbtmp3.1**/3, **ML3.0**/1, **Error ellipse: s-maj=283.7km s-min=29.6km az=50.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.71** | **128** | P | P | 08 19 56.3 | +0.1 |
| **ASAR** | 0.1nm,0.3s,baz=301,slow=13,SNR=2.6 **Alice Springs** | **20.70** | **137** | P | P | 08 20 18.0 | +0.1 |
| **MKAR** | 0.3nm,0.8s,baz=315,slow=10,SNR=2.6 **Makanchi Array** | **64.19** | **333** | P | P | 08 26 12.4 | -0.1 |
| | 0.1nm,0.3s,baz=144,slow=6.4,SNR=4.3 | | | | | | |

*INET* ***05*** *08:24:38.7±1.3, 9.°50N×84.°23W, h16km±7km, MD2.6, ML3.4*
*UPA* ***05*** *08:24:39.6±1.6, 9.°58N×84.°25W, h16km±7km, MW4.0*
*UCR* ***05*** *08:24:39.3±1.8, 9.°53N×84.°25W, h32km±1km, MW3.7*

**ISC 05 08:24:36.9**±1.1, **9.°53N**±0.°03×**84.°26W**±0.°03, **h15km**±10km, **n49**, **σ0s77**/69, **7C-3D**, **Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LCR2** | **La Lucha 2** | **0.32** | **50** | ⇓*e*P | **Pn** | **08 24 47.0** | **-0.3** |
| LCR2 | | | | *e*S | **Sn** | **08 24 53.4** | **-0.5** |
| **JACO** | **JACO, Garabito** | **0.42** | **288** | ⇑*e*P | **Pn** | **08 24 47.9** | **-0.5** |
| JACO | | | | *e*S | **Sn** | **08 24 55.7** | **-0.3** |
| **RIMA** | **Rio Macho** | **0.45** | **59** | ⇓*e*P | **Pn** | **08 24 48.6** | **-0.5** |
| **RIMA** | **Rio Macho** | **0.45** | **59** | *e*P | **Pn** | **08 24 48.6** | **-0.5** |
| RIMA | | | | IAML | | 08 24 57.4 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **EDDO** | **Dominical** | **0.48** | **126** | *e*P | **Pn** | **08 24 48.6** | **-0.6** |
| EDDO | | | | *e*S | **Sn** | **08 24 57.1** | **-0.2** |
| **CDM** | **Cerro de Muert** | **0.49** | **87** | *e*P | **Pn** | **08 24 49.6** | **-0.2** |
| CDM | | | | *e*S | **Sn** | **08 24 58.0** | **-0.2** |
| **HDC** | **Heredia** | **0.49** | **17** | *e*P | **Pn** | **08 24 49.1** | **-0.4** |
| **HDC** | **Heredia** | **0.49** | **17** | ⇓*i*P | **Pn** | **08 24 49.5** | **0.0** |
| HDC | | | | *e*S | **Sn** | **08 24 56.7** | **-1.2** |
| **HDC3** | **Heredia 3** | **0.49** | **17** | *e*P | **Pn** | **08 24 49.5** | **-0.1** |
| HDC3 | | | | *e*S | **Sn** | **08 24 58.1** | **+0.2** |
| **PEZE** | **Perez Zeledon,** | **0.59** | **104** | ⇑*e*P | **Pn** | **08 24 50.7** | **-0.1** |
| **PEZE** | **Perez Zeledon,** | **0.59** | **104** | *e*P | **Pn** | **08 24 50.7** | **-0.1** |
| **SRA1** | **San Ramn** | **0.59** | **338** | ⇑*e*P | **Pn** | **08 24 50.6** | **-0.3** |
| **LAFE** | **Finca La Fe, P** | **0.70** | **293** | *e*P | **Pn** | **08 24 52.2** | **-0.1** |
| **LAFE** | **Finca La Fe, P** | **0.70** | **293** | *e*S | **Sn** | **08 25 03.6** | **+0.7** |
| **SRBA** | **San Rafael, Bu** | **0.93** | **109** | ⇑*e*P | **Pn** | **08 24 55.7** | **+0.1** |
| **EDPN** | **Palmar Norte** | **0.97** | **126** | *e*P | **Pn** | **08 24 56.3** | **+0.3** |
| EDPN | | | | *e*S | **Sn** | **08 25 10.8** | **+1.2** |
| **JTS** | **Las Juntas de** | **1.02** | **318** | ⇑*e*P | **Pn** | **08 24 56.5** | **-0.3** |
| **JTS** | **Las Juntas de** | **1.02** | **318** | *e*P | **Pn** | **08 24 56.9** | **+0.1** |
| JTS | | | | *e*S | **Sn** | **08 25 11.4** | **+0.5** |
| **JTS** | **Las Juntas de** | **1.02** | **318** | *e*P | **Pn** | **08 24 56.8** | **+0.1** |
| **BATAN** | **Batan** | **1.03** | **57** | ⇑*i*P | **Pn** | **08 24 57.9** | **+1.0** |
| BATAN | | | | *e*S | **Sn** | **08 25 11.2** | **0.0** |
| **EDBA** | **Buenos Aires** | **1.04** | **111** | ⇑*i*P | **Pg** | **08 24 56.8** | **-0.2** |
| EDBA | | | | *e*S | **Sn** | **08 25 11.0** | **-0.2** |
| **CEDE** | **Laguna Cedeo** | **1.05** | **335** | *i* P | **Pg** | **08 24 58.2** | **+1.1** |
| CEDE | | | | *i* S | **Sn** | **08 25 14.2** | **+2.7** |
| **RIOS** | **Rincon, Osa** | **1.10** | **138** | *e*P | **Pb** | **08 24 57.4** | **-0.3** |
| RIOS | | | | IAML | | 08 25 17.8 | |
| | comp=N,2µm,0.5s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **1.19** | **353** | *e*P | **Pg** | **08 24 59.6** | **-0.2** |
| **INDI** | **Punta indio, G** | **1.27** | **285** | *e*P | **Pn** | **08 24 59.0** | **-1.1** |
| **DUNO** | **Dulce Nombre,** | **1.33** | **294** | *e*P | **Pb** | **08 25 01.3** | **-0.4** |
| **ACAL** | **Aguas Claras** | **1.34** | **325** | *i* P | **Pg** | **08 25 02.3** | **-0.4** |
| **PTJ1** | **Puerto Jimnez** | **1.37** | **136** | *e*P | **Pg** | **08 25 03.3** | **+0.1** |
| PTJ1 | | | | *e*S | **Sg** | **08 25 22.4** | **+1.4** |
| **PTEN** | **Parque Tenorio** | **1.38** | **329** | *i* P | **Pg** | **08 25 03.1** | **-0.4** |
| **CUI** | **Cuipilapa** | **1.43** | **321** | *i* P | **Pg** | **08 25 03.1** | **-1.0** |
| **GUAI** | **GUAI** | **1.44** | **301** | *i* P | **Pn** | **08 25 02.5** | **+0.1** |
| **PIRO** | **Carate, Puerto** | **1.44** | **141** | *e*P | **Pg** | **08 25 04.3** | **-0.3** |
| PIRO | | | | *e*S | **Sg** | **08 25 24.6** | **+1.2** |
| **ORTG** | **Ortega, Santa** | **1.44** | **305** | *e*P | **Pb** | **08 25 02.8** | **-0.8** |
| **EDSV** | **San Vito** | **1.45** | **119** | *e*P | **Pb** | **08 25 03.8** | **+0.1** |
| **COLC** | **Colonia** | **1.46** | **320** | *i* P | **Pb** | **08 25 03.9** | **0.0** |
| **HORNC** | **Hornillas** | **1.48** | **322** | *i* P | **Pb** | **08 25 04.0** | **-0.2** |
| **LAPC** | **Finca la Perla** | **1.69** | **317** | *i* P | **Pb** | **08 25 06.5** | **-1.2** |
| **BUAI** | **Buenos Aires** | **1.71** | **322** | *i* P | **Pb** | **08 25 06.9** | **-1.1** |
| **BRU2** | **Volcan** | **1.71** | **115** | *e*P | **Pb** | **08 25 07.1** | **-1.1** |
| BRU2 | | | | *e*S | **Sg** | **08 25 30.9** | **-1.2** |
| **GBS3** | **Finca Las Img** | **1.71** | **317** | *i* P | **Pb** | **08 25 08.0** | **-0.2** |
| **CNI2** | **El Empalme, Bo** | **1.77** | **93** | *e*P | **Pb** | **08 25 07.5** | **-1.5** |
| CNI2 | | | | *e*S | **Sn** | **08 25 29.4** | **+0.2** |
| **HZTE** | **Horizontes, Gu** | **1.77** | **312** | *e*P | **Pb** | **08 25 08.6** | **-0.4** |
| **BC3P** | **Paso Ancho** | **1.77** | **114** | *e*P | **Pb** | **08 25 08.0** | **+0.7** |
| BC3P | | | | *e*S | **Sb** | **08 25 32.1** | **+0.6** |
| **BCO2** | **Palmira** | **1.89** | **115** | *e*P | **Pb** | **08 25 09.5** | **+0.7** |
| BCO2 | | | | *e*S | **Sb** | **08 25 35.0** | **+0.3** |
| **PTPM** | **Petroterminale** | **1.90** | **134** | *e*P | **Pg** | **08 25 12.3** | **-1.0** |
| PTPM | | | | *e*S | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PVAQ** | **Vaqueiros** | **3.69** | **300** | P | | **Pn** | **08 48 35.3** | **+1.6** |
| PVAQ | | | | S | | **Sn** | **08 49 16.4** | **-0.7** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **297** | *e*Pn | | **Pn** | **08 48 35.8** | **+0.9** |
| PBDV | | | | *e*Sn | | **Sn** | **08 49 18.6** | **-0.6** |
| **PCVE** | **Castro Verde** | **4.02** | **301** | *e*Pn | | **Pn** | **08 48 40.5** | **+2.2** |
| PCVE | | | | *e*Sn | | **Sn** | **08 49 25.1** | **-0.3** |
| PCVE | | | | A | A | | 08 49 32.3 | |
| | 6.4nm,0.6s | | | | | | | |
| **FIGM** | **Figuig** | **4.03** | **149** | P | | **Pn** | **08 48 40.0** | **+1.5** |
| **MESJ** | **Messejana** | **4.25** | **303** | *e*P | | **Pn** | **08 48 42.4** | **+1.0** |
| MESJ | | | | *e*S | | **Sn** | **08 49 28.9** | **-2.0** |
| MESJ | | | | IAML | | | 08 49 34.8 | |
| | comp=E,7.8nm,0.3s | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **303** | *e*Pn | | **Pn** | **08 48 42.7** | **+1.3** |
| MESJ | | | | *e*Sn | | **Sn** | **08 49 30.3** | **-0.6** |
| MESJ | | | | A | A | | 08 49 37.7 | |
| | comp=E,5.7nm,0.8s | | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **317** | *e*Sn | | **Sn** | **08 49 36.2** | **-0.5** |
| **PESTR** | **Estremoz** | **4.48** | **317** | P | | **Pn** | **08 48 48.7** | **+4.0** |
| **EVO** | **Evora** | **4.51** | **311** | P | | **Pn** | **08 48 47.3** | **+2.3** |
| EVO | | | | S | | **Sn** | **08 49 37.1** | **-0.1** |
| **EVO** | **Evora** | **4.51** | **311** | *e*Pn | | **Pn** | **08 48 46.9** | **+1.9** |
| EVO | | | | *e*Sn | | **Sn** | **08 49 36.5** | **-0.8** |
| EVO | | | | A | A | | 08 49 42.1 | |
| | comp=E,6.6nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **304** | *e*Pn | | **Pn** | **08 48 47.7** | **+1.5** |
| PNCL | | | | *e*Sn | | **Sn** | **08 49 38.8** | **-0.7** |
| PNCL | | | | A | A | | 08 49 41.0 | |
| | comp=E,5.1nm,0.5s | | | | | | | |
| **PMRV** | **Marv??o** | **4.80** | **323** | *e*Pn | | **Pn** | **08 48 51.1** | **+2.1** |
| PMRV | | | | *e*Sn | | **Sn** | **08 49 44.3** | **-0.2** |
| PMRV | | | | A | A | | 08 49 59.0 | |
| | comp=E,4.1nm,0.6s | | | | | | | |
| **PMTG** | **Montargil** | **4.98** | **315** | *e*Pn | | **Pn** | **08 48 53.3** | **+1.8** |
| PMTG | | | | *e*Sn | | **Sn** | **08 49 48.4** | **-0.6** |
| PMTG | | | | A | A | | 08 49 49.6 | |
| | comp=E,4.4nm,0.4s | | | | | | | |

*IDC* ***05*** *08:48:51.1±1.8, 59°.69N×153°.56W, h89km±23km, mb3.5/4, mb1 3.7/7, mb1mx3.1/61, mbtmp3.9/7, Error ellipse: s-maj=21.8km s-min=17.7km az=105.0*

*NEIC* ***05*** *08:48:52.5±1.2, 59°.70N±0°.03×153°.34W±0°.07, h112km±4km, Error ellipse: s-maj=5.2km s-min=4.7km az=120.0*

*AEIC* ***05*** *08:48:53±1.7, 59°.68N±0°.03×153°.31W±0°.07, h109km±3km, ML3.5, ML3.8/96(NEIC), Error ellipse: s-maj=5.2km s-min=4.6km az=120.0*

**ISC 05 08:48:52.8±0.8, 59°.69N±0°.03×153°.28W±0°.03, h115km±5km, n219, σ1=93°/218, mb3.9/4, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.04** | **143** | | | **Pn** | | **08 49 08.2** | **-0.4** |
| **ILS** | **Iliamna Low So** | **0.29** | **21** | | | **Pn** | | **08 49 08.8** | **-0.5** |
| **ILSW** | **Iliamna Southw** | **0.31** | **13** | | | **Pn** | | **08 49 08.7** | **-0.7** |
| **ILSW** | **Iliamna Southw** | **0.31** | **13** | | | **Sn** | | **08 49 20.6** | **-1.3** |
| **ILSW** | **Iliamna Southw** | **0.31** | **13** | IAML | | | | 08 49 10.0 | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **AUL** | **Augustine Lava** | **0.31** | **195** | | | **Pn** | | **08 49 09.0** | **-0.2** |
| AUL | | | | | | **Sn** | | **08 49 20.9** | **-0.7** |
| **AU22** | **Augustine Moun** | **0.32** | **187** | | | **Pn** | | **08 49 08.9** | **-0.3** |
| AU22 | | | | | | **Sn** | | **08 49 20.9** | **-0.7** |
| **AUQ** | **Augustine Qik'** | **0.34** | **192** | | | **Pn** | | **08 49 09.2** | **-0.3** |
| **O20K** | **Slope Mountain** | **0.52** | **39** | P | | **Pn** | | **08 49 10.1** | **-0.3** |
| O20K | | | | | | **Sn** | | **08 49 22.9** | **-0.8** |
| **O20K** | **Slope Mountain** | **0.52** | **39** | P | | **Pn** | | **08 49 10.1** | **-0.3** |
| | baz=221,SNR=23 | | | | | | | | |
| O20K | | | | S | | **Sn** | | **08 49 23.2** | **-0.5** |
| | baz=221 | | | | | | | | |
| **O19K** | **Port Alsworth** | **0.73** | **315** | | | **Pn** | | **08 49 11.2** | **-0.7** |
| O19K | | | | | | **Sn** | | **08 49 24.9** | **-1.4** |
| **O19K** | **Port Alsworth** | **0.73** | **315** | IAML | | | | 08 49 25.8 | |
| | comp=N,3μm,0.5s | | | | | | | | |
| O19K | | | | IAML | | | | 08 49 25.8 | |
| | comp=E,6μm,0.5s | | | | | | | | |
| **O19K** | **Port Alsworth** | **0.73** | **315** | P | | **Pn** | | **08 49 11.3** | **-0.6** |
| | baz=135,SNR=47 | | | | | | | | |
| O19K | | | | S | | **Sn** | | **08 49 24.8** | **-1.4** |
| | baz=135 | | | | | | | | |
| **RED** | **Redoubt Volcan** | **0.78** | **19** | | | **Pn** | | **08 49 12.0** | **-0.5** |
| RED | | | | | | **Sn** | | **08 49 26.1** | **-1.2** |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | | | **Pn** | | **08 49 12.1** | **-0.4** |
| Q19K | | | | | | **Sn** | | **08 49 26.3** | **-0.9** |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | IAML | | | | 08 49 27.0 | |
| | comp=E,2μm,0.7s | | | | | | | | |
| Q19K | | | | IAML | | | | 08 49 31.9 | |
| | comp=N,4μm,0.8s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | P | | **Pn** | | **08 49 12.0** | **-0.4** |
| | baz=12,SNR=26 | | | | | | | | |
| Q19K | | | | S | | **Sn** | | **08 49 26.3** | **-0.9** |
| | baz=12 | | | | | | | | |
| **RSO** | **Redoubt South** | **0.82** | **18** | | | **Pn** | | **08 49 12.5** | **-0.5** |
| **HOM** | **Homer** | **0.83** | **91** | | | **Pn** | | **08 49 12.8** | **0.0** |
| HOM | | | | | | **Sn** | | **08 49 28.1** | **+0.3** |
| **HOM** | **Homer** | **0.83** | **91** | IAML | | | | 08 49 28.9 | |
| | comp=E,2μm,0.7s | | | | | | | | |
| HOM | | | | IAML | | | | 08 49 31.0 | |
| | comp=N,2μm,0.8s | | | | | | | | |
| **HOM** | **Homer** | **0.83** | **91** | P | | **Pn** | | **08 49 12.8** | **0.0** |
| | baz=272,SNR=20 | | | | | | | | |
| HOM | | | | S | | **Sn** | | **08 49 27.7** | **-0.2** |
| | baz=272 | | | | | | | | |
| **NCT** | **North Crescent** | **0.90** | **11** | | | **Pn** | | **08 49 13.1** | **-0.4** |
| **DFR** | **Drift River** | **0.96** | **18** | | | **Pn** | | **08 49 13.8** | **-0.3** |
| DFR | | | | | | **Sn** | | **08 49 29.3** | **-0.9** |
| **O18K** | **Koktuh Hills** | **0.99** | **281** | | | **Pn** | | **08 49 13.5** | **-0.8** |
| **O18K** | **Koktuh Hills** | **0.99** | **281** | P | | **Pn** | | **08 49 13.6** | **-0.8** |
| | baz=100,SNR=7.7 | | | | | | | | |
| O18K | | | | S | | **Sn** | | **08 49 28.8** | **-1.8** |
| | baz=100 | | | | | | | | |
| **RDT** | **Redoubt** | **0.99** | **26** | | | **Pn** | | **08 49 14.1** | **-0.3** |
| **P18K** | **Big Mountain,** | **1.03** | **254** | | | **Pn** | | **08 49 13.9** | **-1.0** |
| P18K | | | | | | **Sn** | | **08 49 29.6** | **-1.9** |
| **P18K** | **Big Mountain,** | **1.03** | **254** | P | | **Pn** | | **08 49 13.8** | **-1.0** |
| | baz=73,SNR=6.5 | | | | | | | | |
| P18K | | | | S | | **Sn** | | **08 49 29.5** | **-1.9** |
| | baz=73 | | | | | | | | |
| **CNPM** | **China Poot** | **1.05** | **98** | | | **Pn** | | **08 49 14.5** | **-0.4** |
| **CNPM** | **China Poot** | **1.05** | **98** | IAML | | | | 08 49 31.6 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| CNPM | | | | IAML | | | | 08 49 31.9 | |
| | comp=E,901nm,0.3s | | | | | | | | |
| **BRLK** | **Bradley Lake** | **1.22** | **85** | | | **Pn** | | **08 49 15.9** | **-0.8** |
| **BRLK** | **Bradley Lake** | **1.22** | **85** | IAML | | | | 08 49 34.8 | |
| | comp=N,1μm,0.1s | | | | | | | | |
| BRLK | | | | IAML | | | | 08 49 36.3 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **1.28** | **333** | | | **Pn** | | **08 49 17.1** | **-0.4** |
| **N19K** | **Bonanza Creek** | **1.28** | **333** | P | | **Pn** | | **08 49 17.1** | **-0.4** |
| | baz=152,SNR=52 | | | | | | | | |
| N19K | | | | S | | **Sn** | | **08 49 34.7** | **-1.6** |
| | baz=152 | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.29** | **86** | | | **Pn** | | **08 49 17.0** | **-0.5** |
| BRSE | | | | | | **Sn** | | **08 49 35.0** | **-1.2** |
| **BRSE** | **Bradley Lake S** | **1.29** | **86** | P | | **Pn** | | **08 49 16.9** | **-0.6** |
| | baz=268,SNR=18 | | | | | | | | |
| BRSE | | | | S | | **Sn** | | **08 49 35.0** | **-1.2** |
| | baz=268 | | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | | | **Pn** | | **08 49 21.6** | **+1.6** |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | IAML | | | | 08 49 44.7 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | P | | **Pn** | | **08 49 21.5** | **+1.4** |
| | baz=226 | | | | | | | | |
| **CKL** | **Chakachamna La** | **1.59** | **17** | | | **Pn** | | **08 49 21.1** | **+0.1** |
| **SPU** | **Mount Spurr** | **1.62** | **22** | | | **Pn** | | **08 49 20.7** | **-0.7** |
| **SPCN** | **Chakachatna No** | **1.64** | **19** | | | **Pn** | | **08 49 21.7** | **+0.1** |
| **SPNN** | **North Nagishla** | **1.71** | **9** | | | **Pn** | | **08 49 22.6** | **0.0** |
| **SPCG** | **Spurr Capps Gl** | **1.73** | **21** | | | **Pn** | | **08 49 22.7** | **-0.1** |
| **SLKM** | **Skilak Lake** | **1.74** | **60** | | | **Pn** | | **08 49 22.6** | **-0.2** |
| **KELA** | **Mount Kelaz** | **1.78** | **227** | | | **Pn** | | **08 49 23.1** | **-0.3** |
| **SVW2** | **Sparrevohn** | **1.82** | **322** | | | **Pn** | | **08 49 23.1** | **-0.7** |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | P | | **Pn** | | **08 49 24.2** | **-1.0** |
| | comp=E,44nm,0.3s,baz=26,slow=7.7,SNR=499 | | | | | | | | |
| KDAK | | | | S | | **Sn** | | **08 49 47.5** | **-2.5** |
| | comp=E,70nm,0.3s,baz=155,slow=22,SNR=30 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | IAML | | | | 08 49 50.1 | |
| | comp=E,531nm,0.6s | | | | | | | | |
| KDAK | | | | IAML | | | | 08 49 50.1 | |
| | comp=E,553nm,0.5s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | P | | **Pn** | | **08 49 24.3** | **-1.0** |
| | baz=349 | | | | | | | | |
| KDAK | | | | S | | **Sn** | | **08 49 47.8** | **-2.3** |
| | baz=349 | | | | | | | | |
| **CAHL** | **Cahill** | **1.94** | **214** | | | **Pn** | | **08 49 25.5** | **+0.1** |
| **O22K** | **Cooper Landing** | **1.95** | **64** | | | **Pn** | | **08 49 25.4** | **-0.1** |
| **O22K** | **Cooper Landing** | **1.95** | **64** | P | | **Pn** | | **08 49 25.3** | **-0.1** |
| | baz=247,SNR=16 | | | | | | | | |
| O22K | | | | S | | **Sn** | | **08 49 49.2** | **-1.1** |
| | baz=247 | | | | | | | | |
| **STLK** | **Strandline Lak** | **1.96** | **21** | | | **Pn** | | **08 49 25.5** | **0.0** |
| **SEW** | **Seward** | **1.98** | **76** | | | **Pn** | | **08 49 25.2** | **-0.4** |
| **SEW** | **Seward** | **1.98** | **76** | P | | **Pn** | | **08 49 25.2** | **-0.4** |
| | baz=259,SNR=10 | | | | | | | | |
| **SUA** | **Susitna One** | **2.18** | **34** | | | **Pn** | | **08 49 28.5** | **+0.2** |
| **SUA** | **Susitna One** | **2.18** | **34** | IAML | | | | 08 49 56.5 | |
| | comp=E,884nm,0.7s | | | | | | | | |
| SUA | | | | IAML | | | | 08 49 57.8 | |
| | comp=N,809nm,0.8s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.25** | **50** | | | **Pn** | | **08 49 29.1** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **2.25** | **50** | P | | **Pn** | | **08 49 28.9** | **-0.3** |
| | baz=233,SNR=15 | | | | | | | | |
| RC01 | | | | S | | **Sn** | | **08 49 55.5** | **-1.6** |
| | baz=233 | | | | | | | | |
| **OHAK** | **Old Harbor** | **2.47** | **180** | | | **Pn** | | **08 49 30.6** | **-1.4** |
| **OHAK** | **Old Harbor** | **2.47** | **180** | IAML | | | | 08 50 05.5 | |
| | comp=N,179nm,2.4s | | | | | | | | |
| **OHAK** | **Old Harbor** | **2.47** | **180** | P | | **Pn** | | **08 49 30.6** | **-1.4** |
| | baz=360,SNR=11 | | | | | | | | |
| OHAK | | | | S | | **Sn** | | **08 49 58.7** | **-3.3** |
| | baz=360 | | | | | | | | |
| **PLK3** | **Peulik 3** | **2.54** | **219** | | | **Pn** | | **08 49 33.2** | **+0.3** |
| **M22K** | **Willow** | **2.59** | **35** | | | **Pn** | | **08 49 33.8** | **+0.3** |
| **M22K** | **Willow** | **2.59** | **35** | P | | **Pn** | | **08 49 33.8** | **+0.3** |
| | baz=218,SNR=18 | | | | | | | | |
| **L19K** | **White Mountain** | **2.62** | **344** | | | **Pn** | | **08 49 33.5** | **-0.4** |
| **L19K** | **White Mountain** | **2.62** | **344** | P | | **Pn** | | **08 49 33.5** | **-0.4** |
| | baz=163,SNR=42 | | | | | | | | |
| **PWL** | **Port Wells** | **2.73** | **62** | | | **Pn** | | **08 49 34.5** | **-0.9** |
| **PWL** | **Port Wells** | **2.73** | **62** | P | | **Pn** | | **08 49 34.5** | **-0.9** |
| | baz=247 | | | | | | | | |
| PWL | | | | S | | **Sn** | | **08 50 05.8** | **-2.4** |
| | baz=247 | | | | | | | | |
| **PMR** | **Palmer** | **2.80** | **45** | | | **Pn** | | **08 49 35.2** | **-1.0** |
| **PMR** | **Palmer** | **2.80** | **45** | IAML | | | | 08 50 08.8 | |
| | comp=N,312nm,0.2s | | | | | | | | |
| PMR | | | | IAML | | | | 08 50 09.3 | |
| | comp=E,236nm,0.2s | | | | | | | | |
| **PMR** | **Palmer** | **2.80** | **45** | P | | **Pn** | | **08 49 35.2** | **-1.0** |
| | baz=229,SNR=12 | | | | | | | | |
| PMR | | | | S | | **Sn** | | **08 50 06.7** | **-3.0** |
| | baz=229 | | | | | | | | |
| **L20K** | **Farewell, AK** | **2.82** | **354** | | | **Pn** | | **08 49 36.6** | **+0.1** |
| **L20K** | **Farewell, AK** | **2.82** | **354** | P | | **Pn** | | **08 49 36.6** | **+0.1** |
| | baz=174 | | | | | | | | |
| **KNK** | **Knik Glacier** | **2.95** | **52** | | | **Pn** | | **08 49 37.2** | **-1.0** |
| **KNK** | **Knik Glacier** | **2.95** | **52** | IAML | | | | 08 50 12.1 | |
| | comp=E,471nm,0.5s | | | | | | | | |
| **KNK** | **Knik Glacier** | **2.95** | **52** | P | | **Pn** | | **08 49 37.2** | **-1.0** |
| | baz=236 | | | | | | | | |
| KNK | | | | S | | **Sn** | | **08 50 10.7** | **-2.5** |
| | baz=236 | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.99** | **44** | | | **Pn** | | **08 49 37.8** | **-1.1** |
| **GHO** | **Glory Hole Cre** | **2.99** | **44** | IAML | | | | 08 50 13.9 | |
| | comp=N,396nm,0.3s | | | | | | | | |
| GHO | | | | IAML | | | | 08 50 13.9 | |
| | comp=E,454nm,0.5s | | | | | | | | |
| **CUT** | **Chulitna** | **3.10** | **27** | | | **Pn** | | **08 49 40.0** | **-0.1** |
| **CUT** | **Chulitna** | **3.10** | **27** | IAML | | | | 08 50 19.9 | |
| | comp=N,382nm,0.3s | | | | | | | | |
| CUT | | | | IAML | | | | 08 50 22.9 | |
| | comp=E,313nm,0.3s | | | | | | | | |
| **CUT** | **Chulitna** | **3.10** | **27** | P | | **Pn** | | **08 49 40.1** | **-0.1** |
| | baz=210,SNR=48 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | | | **Pn** | | **08 49 39.8** | **-1.4** |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | IAML | | | | 08 50 20.4 | |
| | comp=E,349nm,3.3s | | | | | | | | |
| SII | | | | IAML | | | | 08 51 00.6 | |
| | comp=N,323nm,4.2s | | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | P | | **Pn** | | **08 49 39.8** | **-1.4** |
| | baz=8.0 | | | | | | | | |
| **SML** | **Sawmill** | **3.23** | **47** | | | **Pn** | | **08 49 41.0** | **-1.0** |
| **SML** | **Sawmill** | **3.23** | **47** | IAML | | | | 08 50 19.4 | |
| | comp=N,354nm,0.6s | | | | | | | | |
| SML | | | | IAML | | | | 08 50 20.2 | |
| | comp=E,209nm,0.9s | | | | | | | | |
| **SML** | **Sawmill** | **3.23** | **47** | P | | **Pn** | | **08 49 41.0** | **-1.0** |
| | baz=231 | | | | | | | | |
| SML | | | | S | | **Sn** | | **08 50 16.4** | **-3.5** |
| | baz=231 | | | | | | | | |
| **PPLA** | **Purkeypile** | **3.27** | **9** | | | **Pn** | | **08 49 43.3** | **+0.8** |
| **PPLA** | **Purkeypile** | **3.27** | **9** | P | | **Pn** | | **08 49 43.4** | **+0.8** |
| | baz=190,SNR=16 | | | | | | | | |
| **GLI** | **Glacier Island** | **3.31** | **66** | | | **Pn** | | **08 49 41.1** | **-1.8** |
| **GLI** | **Glacier Island** | **3.31** | **66** | IAML | | | | 08 50 19.9 | |
| | comp=N,273nm,0.3s | | | | | | | | |
| **GLI** | **Glacier Island** | **3.31** | **66** | P | | **Pn** | | **08 49 41.2** | **-1.8** |
| | baz=251 | | | | | | | | |
| **TT01** | **Tatalina** | **3.49** | **339** | | | **Pn** | | **08 49 44.9** | **-0.5** |
| **TTA** | **Tatalina** | **3.51** | **339** | | | **Pn** | | **08 49 45.0** | **-0.7** |
| **TTA** | **Tatalina** | **3.51** | **339** | P | | **Pn** | | **08 49 45.0** | **-0.7** |
| | baz=157,SNR=37 | | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.54** | **91** | | | **Pn** | | **08 49 45.5** | **-0.5** |
| **MID** | **Middleton Isla** | **3.54** | **91** | | | **Pn** | | **08 49 45.8** | **-0.3** |
| **FID** | **Port Heiligo** | **3.56** | **70** | | | **Pn** | | **08 49 44.4** | **-1.9** |
| **JPK** | **Jack Peak** | **3.59** | **65** | | | **Pn** | | **08 49 45.7** | **-1.1** |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | | | **Pn** | | **08 49 46.4** | **-0.9** |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | IAML | | | | 08 50 31.6 | |
| | comp=E,266nm,0.6s | | | | | | | | |
| SCM | | | | IAML | | | | 08 50 32.3 | |
| | comp=N,258nm,0.8s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | P | | **Pn** | | **08 49 46.4** | **-0.9** |
| | baz=236 | | | | | | | | |
| **K20K** | **Telida** | **3.71** | **354** | | | **Pn** | | **08 49 48.0** | **-0.3** |
| **K20K** | **Telida** | **3.71** | **354** | P | | **Pn** | | **08 49 47.9** | **-0.3** |
| | baz=174 | | | | | | | | |
| **CAST** | **Castle Rocks** | **3.79** | **8** | | | **Pn** | | **08 49 49.7** | **+0.3** |
| **CAST** | **Castle Rocks** | **3.79** | **8** | P | | **Pn** | | **08 49 49.6** | **+0.2** |
| | baz=189,SNR=52 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.87** | **74** | | | **Pn** | | **08 49 49.0** | **-1.3** |
| **EYAK** | **Cordova Ski Ar** | **3.87** | **74** | P | | **Pn** | | **08 49 49.1** | **-1.2** |
| | baz=260 | | | | | | | | |
| **DIV** | **Divide** | **4.00** | **66** | | | **Pn** | | **08 49 50.8** | **-1.4** |
| **TRF** | **Thorofare Moun** | **4.04** | **19** | P | | **Pn** | | **08 49 52.5** | **-0.3** |
| | baz=202 | | | | | | | | |
| **KTH** | **Kantishna Hill** | **4.04** | **15** | | | **Pn** | | **08 49 52.3** | **-0.5** |
| **KLU** | **Klutina** | **4.06** | **60** | | | **Pn** | | **08 49 51.9** | **-1.1** |
| **KLU** | **Klutina** | **4.06** | **60** | IAML | | | | 08 50 39.4 | |
| | comp=E,223nm,0.2s | | | | | | | | |
| **KLU** | **Klutina** | **4.06** | **60** | P | | **Pn** | | **08 49 52.1** | **-0.9** |
| | baz=247 | | | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.07** | **199** | | | **Pn** | | **08 49 51.4** | **-1.7** |
| **CHIR** | **Chirikof Islan** | **4.07** | **199** | P | | **Pn** | | **08 49 51.8** | **-1.4** |
| | baz=17 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.24** | **52** | | | **Pn** | | **08 49 55.0** | **-0.4** |
| **M24K** | **Tolsona, Glenn** | **4.24** | **52** | IAML | | | | 08 50 44.7 | |
| | comp=N,195nm,1.1s | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.24** | **52** | P | | **Pn** | | **08 49 55.1** | **-0.3** |
| | baz=238 | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.24** | **6** | | | **Pn** | | **08 49 55.3** | **0.0** |
| **CHUM** | **Lake Minchumin** | **4.24** | **6** | P | | **Pn** | | **08 49 55.5** | **+0.2** |
| | baz=187,SNR=30 | | | | | | | | |
| **RND** | **Reindeer** | **4.29** | **28** | | | **Pn** | | **08 49 55.3** | **-0.9** |
| **RND** | **Reindeer** | **4.29** | **28** | IAML | | | | 08 50 46.7 | |
| | comp=E,36nm,0.3s | | | | | | | | |
| RND | | | | IAML | | | | 08 51 22.1 | |
| | comp=N,50nm,4.1s | | | | | | | | |
| **CHGN** | **Chignik** | **4.36** | **221** | | | **Pn** | | **08 49 56.9** | **-0.1** |
| **CHGN** | **Chignik** | **4.36** | **221** | IAML | | | | 08 50 42.1 | |
| | comp=E,101nm,4.8s | | | | | | | | |
| CHGN | | | | IAML | | | | 08 51 14.8 | |
| | comp=N,81nm,4.3s | | | | | | | | |
| **CHGN** | **Chignik** | **4.36** | **221** | P | | **Pn** | | **08 49 56.8** | **-0.1** |
| | baz=36 | | | | | | | | |
| **GOAT** | **Goat Mountain** | **4.37** | **74** | | | **Pn** | | **08 49 56.1** | **-1.1** |
| **BMRM** | **Bremner River** | **4.50** | **70** | | | **Pn** | | **08 49 57.5** | **-1.4** |
| **BMRM** | **Bremner River** | **4.50** | **70** | IAML | | | | 08 50 50.5 | |
| | comp=E,114nm,0.3s | | | | | | | | |
| BMRM | | | | IAML | | | | 08 51 10.8 | |
| | comp=N,124nm,0.9s | | | | | | | | |
| **BMRM** | **Bremner River** | **4.50** | **70** | P | | **Pn** | | **08 49 57.6** | **-1.3** |
| | baz=257,SNR=6.2 | | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.51** | **54** | | | **Pn** | | **08 49 58.6** | **-0.3** |
| **J20K** | **Nowinta River** | **4.53** | **355** | | | **Pn** | | **08 49 59.2** | **0.0** |
| **J20K** | **Nowinta River** | **4.53** | **355** | P | | **Pn** | | **08 49 58.8** | **-0.4** |
| | baz=175 | | | | | | | | |
| **MCK** | **McKinley** | **4.56** | **25** | | | **Pn** | | **08 49 59.3** | **-0.3** |
| **MCK** | **McKinley** | **4.56** | **25** | IAML | | | | 08 50 58.4 | |
| | comp=E,47nm,3.9s | | | | | | | | |
| MCK | | | | IAML | | | | 08 51 28.7 | |
| | comp=N,39nm,4.2s | | | | | | | | |
| **MCK** | **McKinley** | **4.56** | **25** | P | | **Pn** | | **08 49 59.2** | **-0.4** |
| | baz=209,SNR=14 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | | | **Pn** | | **08 49 58.9** | **-0.8** |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | IAML | | | | 08 52 45.3 | |
| | comp=E,29nm,4.7s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | P | | **Pn** | | **08 49 59.1** | **-0.6** |
| | baz=195,SNR=6.2 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | | | **Pn** | | **08 50 00.6** | **-0.8** |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | IAML | | | | 08 50 54.4 | |
| | comp=E,102nm,0.6s | | | | | | | | |
| N25K | | | | IAML | | | | 08 50 54.6 | |
| | comp=N,73nm,0.2s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | P | | **Pn** | | **08 50 00.8** | **-0.6** |
| | baz=250,SNR=7.2 | | | | | | | | |
| **HARP** | **HAARP** | **4.79** | **52** | | | **Pn** | | **08 50 02.5** | **-0.4** |
| **HARP** | **HAARP** | **4.79** | **52** | P | | **Pn** | | **08 50 02.2** | **-0.6** |
| | baz=239 | | | | | | | | |
| **GLB** | **Gilahina Butte** | **4.99** | **65** | | | **Pn** | | **08 50 04.8** | **-0.8** |
| **GLB** | **Gilahina Butte** | **4.99** | **65** | IAML | | | | 08 51 02.8 | |
| | comp=E,72nm,0.8s | | | | | | | | |
| **PAX** | **Paxson** | **5.00** | **45** | | | **Pn** | | **08 50 05.2** | **-0.5** |
| **PAX** | **Paxson** | **5.00** | **45** | P | | **Pn** | | **08 50 05.0** | **-0.6** |
| | baz=232 | | | | | | | | |
| **VRDI** | **Verde Repeater** | **5.11** | **68** | | | **Pn** | | **08 50 06.0** | **-1.1** |
| **VRDI** | **Verde Repeater** | **5.11** | **68** | IAML | | | | 08 51 04.8 | |
| | comp=N,63nm,0.6s | | | | | | | | |
| VRDI | | | | IAML | | | | 08 51 05.5 | |
| | comp=E,54nm,0.8s | | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.28** | **77** | | | **Pn** | | **08 50 08.2** | **-1.2** |
| **NEA2** | **Nenana** | **5.31** | **20** | | | **Pn** | | **08 50 08.8** | **-0.9** |
| **NEA2** | **Nenana** | **5.31** | **20** | IAML | | | | 08 51 13.9 | |
| | comp=E,27nm,4.3s | | | | | | | | |
| NEA2 | | | | IAML | | | | 08 52 42.7 | |
| | comp=N,18nm,4.9s | | | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **20** | P | | **Pn** | | **08 50 08.9** | **-0.8** |
| | baz=204,SNR=13 | | | | | | | | |
| **GCSA** | **Galena City Sc** | **5.35** | **343** | | | **Pn** | | **08 50 09.8** | **-0.5** |
| **GCSA** | **Galena City Sc** | **5.35** | **343** | P | | **Pn** | | **08 50 09.7** | **-0.5** |
| | baz=160,SNR=12 | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.39** | **25** | | | **Pn** | | **08 50 09.6** | **-1.2** |
| **MLY** | **Manley** | **5.50** | **11** | | | **Pn** | | **08 50 11.9** | **-0.4** |
| **I21K** | **Tanana** | **5.55** | **6** | | | **Pn** | | **08 50 12.4** | **-0.5** |
| **I21K** | **Tanana** | **5.55** | **6** | P | | **Pn** | | **08 50 12.0** | **-1.0** |
| | baz=187 | | | | | | | | |
| **KIAG** | **Kiagna River** | **5.57** | **72** | | | **Pn** | | **08 50 13.3** | **-0.2** |
| **BALM** | **Baldy** | **5.59** | **71** | | | **Pn** | | **08 50 12.7** | **-1.0** |
| **HDA** | **Harding Lake** | **5.60** | **29** | | | **Pn** | | **08 50 12.8** | **-0.9** |
| **HDA** | **Harding Lake** | **5.60** | **29** | P | | **Pn** | | **08 50 12.6** | **-1.0** |
| | baz=215,SNR=17 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.60** | **25** | | | **Pn** | | **08 50 12.1** | **-1.5** |
| **BAGL** | **Bagley Icefiel** | **5.66** | **77** | | | **Pn** | | **08 50 15.2** | **+0.8** |
| **M26K** | **Nabesna, AK** | **5.69** | **57** | P | | **Pn** | | **08 50 15.8** | **+0.9** |
| | baz=246 | | | | | | | | |
| **RIDG** | **Independent Ri** | **5.71** | **41** | | | **Pn** | | **08 50 15.0** | **-0.2** |
| **RIDG** | **Independent Ri** | **5.71** | **41** | P | | **Pn** | | **08 50 14.6** | **-0.6** |
| | baz=228,SNR=7.3 | | | | | | | | |
| **MESA** | **MESA** | **5.72** | **80** | P | | **Pn** | | **08 50 15.7** | **+0.3** |
| | baz=270 | | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.74** | **29** | | | **Pn** | | **08 50 14.5** | **-1.0** |
| **I23K** | **Minto, Yukon-K** | **5.78** | **17** | | | **Pn** | | **08 50 15.2** | **-0.8** |
| **I23K** | **Minto, Yukon-K** | **5.78** | **17** | P | | **Pn** | | **08 50 15.4** | **-0.7** |
| | baz=200,SNR=12 | | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.79** | **24** | | | **Pn** | | **08 50 15.4** | **-0.7** |
| **TCOL** | **CIGO, UAF Yank** | **5.79** | **24** | P | | **Pn** | | **08 50 15.4** | **-0.7** |
| | baz=208,SNR=26 | | | | | | | | |
| **COLA** | **College** | **5.79** | **24** | | | **Pn** | | **08 50 15.3** | **-0.9** |
| **COLA** | **College** | **5.79** | **24** | P | | **Pn** | | **08 50 15.5** | **-0.7** |
| | baz=208 | | | | | | | | |
| **MDM** | **Murphy Dome** | **5.79** | **22** | | | **Pn** | | **08 50 15.2** | **-1.1** |
| **YAH** | **Yahtse** | **5.83** | **78** | | | **Pn** | | **08 50 17.1** | **+0.2** |
| **IL31** | | **5.91** | **28** | | | **Pn** | | **08 50 16.6** | **-1.3** |
| **ILAR** | **Eielson Array** | **5.91** | **28** | P | | **Pn** | | **08 50 16.6** | **-1.2** |
| | comp=N,5.7nm,0.3s,baz=216,slow=14,SNR=293 | | | | | | | | |
| ILAR | | | | S | | **Sn** | | **08 51 19.9** | **-4.3** |
| | comp=N,2.3nm,0.3s,baz=286,slow=1.1,SNR=7.0 | | | | | | | | |
| **BARN** | **Barnard Glac

σ1$28/38, **mb4.6**/21, **MS3.9**/36, **Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AIS** | **Amsterdam Isla** | **4.28** | **182** | | **Pn** | **08 59 45.5** | **-2.3** |
| **H08S2** | **Diego Garcia H** | **26.20** | **348** | T | T | 09 31 18.3 | |
| | baz=171,slow=76,SNR=274 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.20** | **348** | T | T | 09 31 18.6 | |
| | baz=171,slow=76,SNR=179 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.22** | **348** | T | T | 09 31 19.8 | |
| | baz=171,slow=76,SNR=351 | | | | | | |
| **VOI** | **Vohitsoka** | **29.65** | **285** | P | **P** | **09 04 46.6** | **-2.0** |
| VOI | | | | IAmb | IAmb | 09 04 52.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **OPO** | **Ambohidratompo** | **31.11** | **291** | LR | LR | 09 14 36.4 | |
| | comp=Z,97nm,19.6s,baz=3.5,slow=31 | | | | | | |
| **MAW** | **Mawson** | **35.22** | **190** | LR | LR | 09 16 38.6 | |
| | comp=Z,313nm,18.4s,baz=47,slow=31 | | | | | | |
| **CASY** | **Casey** | **38.12** | **159** | P | **P** | **09 06 01.4** | **0.0** |
| CASY | | | | IAmb | IAmb | 09 06 08.9 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **LEM** | **Lembang** | **38.33** | **53** | LR | LR | 09 18 53.6 | |
| | comp=Z,149nm,19.2s,baz=333,slow=32 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **38.91** | **83** | P | **P** | **09 06 07.5** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **38.91** | **83** | P | **P** | **09 06 06.6** | **-2.0** |
| PSA00 | | | | IAmb | IAmb | 09 06 11.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **PALK** | **Pallekele** | **40.65** | **4** | LR | LR | 09 19 20.2 | |
| | comp=Z,139nm,20.1s,baz=287,slow=30 | | | | | | |
| **PSI** | **Prapat** | **41.27** | **33** | LR | LR | 09 19 23.1 | |
| | comp=Z,52nm,18.8s,baz=199,slow=30 | | | | | | |
| **BOSA** | **Boshof** | **44.86** | **262** | LR | | 09 22 00.5 | |
| | comp=Z,194nm,18.1s,baz=134,slow=31 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.35** | **83** | LR | LR | 09 23 36.5 | |
| | comp=Z,144nm,19.7s,baz=266,slow=33 | | | | | | |
| **MATP** | **Matopo** | **45.42** | **274** | LR | LR | 09 22 27.5 | |
| | comp=Z,126nm,21.2s,baz=120,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **45.90** | **266** | LR | LR | 09 22 13.1 | |
| | comp=Z,129nm,21.4s,baz=132,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **47.29** | **255** | LR | LR | 09 22 19.2 | |
| | comp=Z,200nm,21.7s,baz=124,slow=30 | | | | | | |
| **SUR** | **Sutherland** | **47.29** | **255** | P | **P** | **09 07 16.2** | **-0.4** |
| **LSZ** | **Lusaka** | **48.19** | **280** | LR | LR | 09 24 24.0 | |
| | comp=Z,140nm,19.3s,baz=126,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **48.19** | **280** | P | **P** | **09 07 22.1** | **-1.5** |
| **KAPI** | **Kappang** | **48.20** | **63** | LR | LR | 09 25 56.1 | |
| | comp=Z,57nm,20.0s,baz=239,slow=34 | | | | | | |
| **KNRA** | **Kununurra** | **49.15** | **82** | P | **P** | **09 07 29.7** | **-1.1** |
| KNRA | | | | IAmb | IAmb | 09 07 33.1 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **49.74** | **94** | P | **P** | **09 07 35.8** | **+0.5** |
| | comp=Z,2.6nm,0.9s,baz=239,slow=6.8,SNR=17 | | | | | | |
| ASAR | | | | LR | LR | 09 27 24.9 | |
| | comp=Z,136nm,18.3s,baz=246,slow=35 | | | | | | |
| **AS31** | **Alice Springs** | **49.74** | **94** | P | **P** | **09 07 33.9** | **-1.4** |
| **WRA** | **Warramunga Arr** | **51.73** | **90** | P | **P** | **09 07 51.0** | **+0.6** |
| | comp=Z,2.8nm,0.9s,baz=244,slow=7.3,SNR=10 | | | | | | |
| WRA | | | | LR | LR | 09 28 15.9 | |
| | comp=Z,106nm,19.6s,baz=231,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **51.89** | **90** | P | **P** | **09 07 50.4** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 09 08 01.0 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **52.96** | **107** | LR | LR | 09 27 26.1 | |
| | comp=Z,156nm,19.9s,baz=210,slow=33 | | | | | | |
| **MBAR** | **Mbarara** | **54.89** | **297** | LR | LR | 09 28 03.6 | |
| | comp=Z,131nm,21.1s,baz=22,slow=32 | | | | | | |
| **TSUM** | **Tsumeb** | **55.10** | **269** | LR | LR | 09 27 52.1 | |
| | comp=Z,251nm,21.2s,baz=152,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.49** | **25** | LR | LR | 09 27 59.0 | |
| | comp=Z,37nm,21.8s,baz=180,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **55.64** | **202** | P | **P** | **09 08 21.7** | **+3.4** |
| SNAA | | | | IAmb | IAmb | 09 08 31.4 | |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **56.28** | **165** | LR | LR | 09 29 28.9 | |
| | comp=Z,133nm,19.8s,baz=270,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **56.64** | **180** | P | **P** | **09 08 26.0** | **+0.3** |
| | comp=Z,3.0nm,0.9s,baz=293,slow=8.1,SNR=11 | | | | | | |
| QSPA | | | | LR | LR | 09 30 37.5 | |
| | comp=Z,148nm,18.4s,baz=276,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **56.64** | **180** | P | **P** | **09 08 26.3** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 09 08 38.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WSAR** | **Wadi Sarin** | **59.31** | **339** | LR | LR | 09 29 17.9 | |
| | comp=Z,67nm,18.3s,baz=158,slow=31 | | | | | | |
| **SIJI** | **Sorong** | **59.65** | **69** | LR | LR | 09 31 37.6 | |
| | comp=Z,36nm,21.4s,baz=236,slow=33 | | | | | | |
| **DAV** | **Davao City (W)** | **60.67** | **58** | LR | LR | 09 32 04.3 | |
| | comp=Z,43nm,21.5s,baz=180,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **61.60** | **96** | LR | LR | 09 33 43.5 | |
| | comp=Z,188nm,19.9s,baz=251,slow=34 | | | | | | |
| **BELA** | **Belgrano 2** | **61.98** | **193** | P | **P** | **09 09 03.3** | **+1.0** |
| BELA | | | | IAmb | IAmb | 09 09 07.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **JAY** | **Jayapura** | **66.19** | **77** | LR | LR | 09 39 20.9 | |
| | comp=Z,33nm,18.8s,baz=194,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **67.70** | **87** | LR | LR | 09 38 32.8 | |
| | comp=Z,178nm,18.1s,baz=198,slow=35 | | | | | | |
| **KBL** | **Kabul** | **68.19** | **352** | P | **P** | **09 09 42.8** | **-0.5** |
| KBL | | | | IAmb | IAmb | 09 09 46.4 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **HRA** | **Herat** | **69.09** | **346** | P | **P** | **09 09 49.1** | **+0.1** |
| HRA | | | | IAmb | IAmb | 09 10 02.2 | |
| | comp=Z,7.9nm,1.5s | | | | | | |
| **CHGR** | **Chuyangaron** | **72.25** | **353** | P | **P** | **09 10 08.4** | **+0.5** |
| **GAR** | **Garm** | **72.47** | **354** | P | **P** | **09 10 09.1** | **-0.2** |
| **DRK** | **Karamyk** | **72.83** | **355** | P | **P** | **09 10 12.4** | **+0.8** |
| DRK | | | | IAmb | IAmb | 09 10 22.2 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **BTK** | **Batken** | **73.48** | **354** | P | **P** | **09 10 15.5** | **+0.3** |
| BTK | | | | IAmb | IAmb | 09 10 18.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **EIL** | **Elat** | **74.77** | **322** | LR | LR | 09 39 02.7 | |
| | comp=Z,56nm,18.8s,baz=134,slow=32 | | | | | | |
| **BOOM** | **Boomskoye usch** | **75.65** | **359** | P | **P** | **09 10 30.0** | **+2.2** |
| **KKAR** | **Karatay Array** | **76.53** | **355** | P | **P** | **09 10 32.4** | **-0.2** |
| **DZM** | **Mont Dzumac** | **77.10** | **108** | LR | LR | 09 40 02.2 | |
| | comp=Z,61nm,20.5s,baz=220,slow=32 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **77.25** | **325** | LR | LR | 09 41 14.7 | |
| | comp=Z,36nm,19.2s,baz=36,slow=33 | | | | | | |
| **HNR** | **Honiara** | **78.36** | **94** | LR | LR | 09 42 53.1 | |
| | comp=Z,101nm,19.2s,baz=212,slow=34 | | | | | | |
| **MK31** | **Makanchi Array** | **80.04** | **3** | P | **P** | **09 10 51.5** | **-0.4** |
| **MKAR** | **Makanchi Array** | **80.04** | **3** | P | **P** | **09 10 51.8** | **-0.2** |
| | comp=Z,2.2nm,0.9s,baz=180,slow=5.3,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.04** | **3** | P | **P** | **09 10 52.0** | **0.0** |
| **KURK** | **Kurchatov** | **83.86** | **1** | P | **P** | **09 11 11.5** | **-0.4** |
| KURK | | | | IAmb | IAmb | 09 11 15.0 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.91** | **348** | P | **P** | **09 11 12.4** | **+0.2** |
| ABKAR | | | | IAmb | IAmb | 09 11 15.0 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.91** | **348** | P | **P** | **09 11 11.5** | **-0.8** |
| **SONM** | **Songino Array** | **84.95** | **19** | P | **P** | **09 11 18.2** | **+0.5** |
| | comp=Z,1.2nm,1.0s,baz=212,slow=5.1,SNR=6.2 | | | | | | |
| SONM | | | | LR | LR | 09 47 09.8 | |
| | comp=Z,56nm,20.8s,baz=240,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **84.95** | **19** | IAmb | IAmb | 09 11 21.5 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **85.39** | **347** | P | **P** | **09 11 21.3** | **+1.6** |
| | comp=Z,4.1nm,0.8s,baz=168,slow=3.5,SNR=8.9 | | | | | | |
| AKTO | | | | LR | LR | 09 46 12.2 | |
| | comp=Z,25nm,22.0s,baz=131,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **85.86** | **289** | P | **P** | **09 11 22.9** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=102,slow=4.0,SNR=11 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **87.31** | **4** | P | **P** | **09 11 29.7** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **87.31** | **4** | P | **P** | **09 11 29.5** | **+0.5** |
| | comp=Z,2.0nm,0.4s,baz=195,slow=4.0,SNR=13 | | | | | | |
| ZALV | | | | LR | LR | 09 47 54.4 | |
| | comp=Z,44nm,21.7s,baz=38,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **87.31** | **4** | P | **P** | **09 11 28.4** | **-0.6** |
| **DBIC** | **Dimbokro** | **87.53** | **280** | LR | LR | 09 46 12.0 | |
| | comp=Z,132nm,21.9s,baz=144,slow=33 | | | | | | |
| **MSVF** | **Nonsavu** | **88.61** | **110** | LR | LR | 09 44 39.6 | |
| | comp=Z,126nm,20.2s,baz=202,slow=31 | | | | | | |
| **ARU** | **Arti** | **91.06** | **349** | LR | LR | 09 51 32.1 | |
| | comp=Z,37nm,21.3s,baz=164,slow=35 | | | | | | |
| **SCHQ** | **Schefferville** | **147.38** | **322** | PKPbc | **PKPbc** | **09 18 27.5** | **+1.5** |
| | comp=Z,4.0nm,0.8s,baz=83,slow=5.5,SNR=3.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **149.95** | **11** | PKPbc | **PKPdf** | **09 18 30.5** | **+3.1** |
| | comp=Z,1.4nm,0.6s,baz=324,slow=3.0,SNR=18 | | | | | | |

*IDC **05** 09:02:57.2±0.9, 35°.53N×3°.83W, h0km, mb4.0/8, mb1 4.0/11, mb1mx3.8/54, mbtmp3.9/11, ML3.5/3, MS3.7/1, Ms1 3.7/1, ms1mx2.5/98, Error ellipse: s-maj=28.1km s-min=17.6km az=103.0*

*SFS **05** 09:02:58.0, 35°.40N×3°.80W, ML3.5, ALBORAN SUR*
*INMG **05** 09:02:59.7±1.4, 35°.49N×3°.80W, h8km±5km, ML3.2, Error ellipse: s-maj=3.8km s-min=2.7km az=20.0*
*IGIL **05** 09:02:59.4, 35°.46N×3°.83W, h0km, ML3.2*
*CNRM **05** 09:02:59.4, 35°.49N×3°.83W, h11km, ml3.6*
*NEIC **05** 09:02:59.0±1.2, 35.6N±0°.1×3°.77W±0°.06, h10km±2km, mb4.4/4, mb_Lg3.5(MDD), Error ellipse: s-maj=19.6km s-min=5.8km az=164.0*
*LDG **05** 09:03:00.2±0.3, 35°.36N×3°.76W, h10km, Ml3.3/3, Error ellipse: s-maj=6.6km s-min=3.3km az=1.0*

**ISC 05 09:02:58.9±1.0, 35°.49N±0°.03×3°.73W±0°.03, h15km±7km, n97, σ1$64/129, mb4.1/10, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.32** | **212** | P | **Pg** | **09 03 05.1** | **-0.5** |
| **PALE** | **Palemas** | **0.32** | **212** | P | **Pg** | **09 03 04.9** | **-0.7** |
| PALE | | | | S | **Sg** | **09 03 09.7** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.10** | **106** | P | **Pb** | **09 03 18.5** | **-1.2** |
| CHAS | | | | S | **Sb** | **09 03 31.9** | **-2.1** |
| **TAF** | **Taforalt** | **1.27** | **122** | P | **Pg** | **09 03 24.0** | **+0.6** |
| **TAF** | **Taforalt** | **1.27** | **122** | P | **Pn** | **09 03 22.6** | **+0.3** |
| TAF | | | | S | **Sg** | **09 03 40.3** | **+0.3** |
| **CHEFC** | **Chefchaouen** | **1.37** | **254** | P | **Pn** | **09 03 23.0** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.37** | **254** | P | **Pn** | **09 03 23.3** | **-0.4** |
| CHEFC | | | | S | **Sg** | **09 03 43.9** | **+0.7** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **336** | P | **Pn** | **09 03 22.6** | **-1.2** |
| EMAL | | | | S | **Sn** | **09 03 40.8** | **-1.2** |
| **JBK** | **JBK** | **1.50** | **140** | P | **Pn** | **09 03 26.0** | **+0.5** |
| **JBK** | **JBK** | **1.50** | **140** | P | **Pn** | **09 03 24.3** | **-1.2** |
| JBK | | | | S | **Sb** | **09 03 46.0** | **+0.5** |
| **SICH** | **Sidi Chahed** | **1.90** | **224** | P | **Pn** | **09 03 31.6** | **+0.7** |
| **LIJA** | **Lijar** | **1.96** | **317** | P | **Pb** | **09 03 34.6** | **+0.2** |
| LIJA | | | | S | **Sb** | **09 03 58.4** | **-0.3** |
| **LCRM** | **LCR** | **2.02** | **208** | P | **Pb** | **09 03 35.1** | **-0.5** |
| **LCRM** | **LCR** | **2.02** | **208** | P | **Pn** | **09 03 33.0** | **+0.3** |
| LCRM | | | | S | **Sb** | **09 04 00.7** | **+0.1** |
| **CNIL** | **Conil** | **2.08** | **296** | P | **Pg** | **09 03 40.0** | **+1.2** |
| **IFR** | **Ifrane** | **2.28** | **211** | P | **Pn** | **09 03 35.9** | **-0.3** |
| IFR | | | | S | **Sn** | **09 04 01.3** | **-2.9** |
| **MD31** | **MD31** | **2.75** | **198** | P | **Pn** | **09 03 42.9** | **+0.3** |
| MD31 | | | | S | **Sn** | **09 04 15.2** | **-0.5** |
| **MDT** | **Midelt** | **2.77** | **196** | Pn | **Pn** | **09 03 44.0** | **+1.2** |
| | 3.7nm,0.3s,baz=17,slow=11,SNR=26 | | | | | | |
| MDT | | | | Sn | **Sn** | **09 04 16.7** | **+0.7** |
| | 8.7nm,0.3s,baz=76,slow=20,SNR=4.8 | | | | | | |
| **MDT** | **Midelt** | **2.77** | **196** | P | **Pn** | **09 03 43.9** | **+1.0** |
| **MDT** | **Midelt** | **2.77** | **196** | P | **Pn** | **09 03 43.9** | **+1.0** |
| MDT | | | | S | **Sn** | **09 04 17.7** | **+1.7** |
| **TDRA** | **Tendrara** | **2.82** | **150** | P | **Pn** | **09 03 45.5** | **+1.8** |
| **CART** | **Cartagena** | **3.04** | **46** | P | **Pn** | **09 03 45.9** | **-0.6** |
| CART | | | | S | **Sn** | **09 04 18.1** | **-4.5** |
| **CART** | **Cartagena** | **3.04** | **46** | Pn | **Pn** | **09 03 45.5** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | *e*Pn | **Pn** | **09 03 55.9** | **-0.2** |
| PVAQ | | | | *e*Sn | **Sn** | **09 04 37.3** | **-2.6** |
| PVAQ | | | | A | A | 09 04 39.6 | |
| | 33nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | Pn | **Pn** | **09 03 55.5** | **-0.7** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | **Pn** | **09 03 55.7** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | **Pn** | **09 03 55.7** | **-0.4** |
| PVAQ | | | | S | **Sn** | **09 04 36.6** | **-3.3** |
| **AVE** | **Averroes** | **3.75** | **235** | P | **Pb** | **09 04 04.2** | **-0.7** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **299** | *e*Pn | **Pn** | **09 03 57.2** | **0.0** |
| PBDV | | | | *e*Sn | **Sn** | **09 04 40.0** | **-1.9** |
| **FIGM** | **Figuig** | **3.93** | **148** | P | **Pn** | **09 04 00.9** | **+2.0** |
| **PCVE** | **Castro Verde** | **4.08** | **303** | *e*Pn | **Pn** | **09 04 00.6** | **-0.2** |
| PCVE | | | | *e*Sn | **Sn** | **09 04 46.2** | **-2.0** |
| PCVE | | | | A | A | 09 04 48.1 | |
| | 43nm,0.5s | | | | | | |
| **PAB** | **San Pablo** | **4.08** | **353** | | **Pn** | **09 03 59.6** | **-1.3** |
| **PAB** | **San Pablo** | **4.08** | **353** | P | **Pn** | **09 04 01.9** | **+1.0** |
| **PBEJ** | **Beja** | **4.18** | **309** | *e*Pn | **Pn** | **09 04 02.5** | **+0.3** |
| PBEJ | | | | *e*Sn | **Sn** | **09 04 48.6** | **-2.1** |
| PBEJ | | | | A | A | 09 04 53.2 | |
| | 19nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | Pn | **Pn** | **09 04 03.4** | **+1.1** |
| | 1.9nm,0.3s,baz=180,slow=12,SNR=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | | **Pn** | **09 04 00.6** | **-1.7** |
| **ESBB** | **Sonseca Array** | **4.18** | **358** | | **Pn** | **09 04 02.8** | **+0.5** |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*P | **Pn** | **09 04 03.5** | **-0.4** |
| MESJ | | | | *e*S | **Sn** | **09 04 50.3** | **-3.6** |
| MESJ | | | | IAML | | 09 04 58.4 | |
| | comp=N,44nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | **Pn** | **09 04 04.2** | **+0.3** |
| MESJ | | | | *e*Sn | **Sn** | **09 04 51.5** | **-2.4** |
| MESJ | | | | A | A | 09 04 53.2 | |
| | comp=N,36nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*S | **Sn** | **09 04 51.6** | **-3.8** |
| MORF | | | | IAML | | 09 04 59.3 | |
| | comp=N,52nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*Pn | **Pn** | **09 04 05.8** | **+1.0** |
| MORF | | | | *e*Sn | **Sn** | **09 04 52.6** | **-2.8** |
| MORF | | | | A | A | 09 05 02.5 | |
| | comp=N,22nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | *e*Pn | **Pn** | **09 04 06.1** | **+0.5** |
| PFVI | | | | *e*Sn | **Sn** | **09 04 54.0** | **-3.0** |
| PFVI | | | | A | A | 09 05 09.9 | |
| | comp=N,39nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | P | **Pn** | **09 04 06.7** | **+1.1** |
| **PESTR** | **Estremoz** | **4.57** | **319** | *e*Pn | **Pn** | **09 04 08.3** | **+0.7** |
| PESTR | | | | *e*Sn | **Sn** | **09 04 57.7** | **-2.7** |
| PESTR | | | | A | A | 09 05 02.8 | |
| | comp=N,19nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.57** | **319** | Pn | **Pn** | **09 04 06.3** | **-1.3** |
| **PESTR** | **Estremoz** | **4.57** | **319** | P | **Pn** | **09 04 07.9** | **+0.4** |
| **EVO** | **Evora** | **4.58** | **313** | P | **Pn** | **09 04 07.6** | **0.0** |
| EVO | | | | S | **Sn** | **09 04 57.2** | **-3.5** |
| **EVO** | **Evora** | **4.58** | **313** | *e*Pn | **Pn** | **09 04 07.7** | **0.0** |
| EVO | | | | *e*Sn | **Sn** | **09 04 57.9** | **-2.8** |
| EVO | | | | A | A | 09 05 01.6 | |
| | comp=N,26nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **306** | *e*Pn | **Pn** | **09 04 08.6** | **-0.1** |
| PNCL | | | | *e*Sn | **Sn** | **09 05 00.1** | **-2.4** |
| PNCL | | | | A | A | 09 05 04.3 | |
| | comp=N,22nm,0.5s | | | | | | |
| **UCM** | **Universidad Co** | **4.83** | **4** | P | Pn | 09 04 05.2 | -5.9 |
| UCM | | | | S | Sn | 09 04 56.8 | +4.0 |
| **PMRV** | **Marv??o** | **4.89** | **325** | *e*Pn | **Pn** | **09 04 12.5** | **+0.5** |
| PMRV | | | | *e*Sn | **Sn** | **09 05 06.4** | **-2.0** |
| PMRV | | | | A | A | 09 05 25.9 | |
| | comp=N,20nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **5.06** | **316** | *e*Pn | **Pn** | **09 04 14.8** | **+0.5** |
| PMTG | | | | *e*Sn | **Sn** | **09 05 09.9** | **-2.6** |
| PMTG | | | | A | A | 09 05 24.0 | |
| | comp=N,20nm,0.6s | | | | | | |
| **OUZM** | **OUZ** | **5.22** | **210** | P | **Pn** | **09 04 18.0** | **+1.3** |
| **OUZM** | **OUZ** | **5.22** | **210** | P | **Pn** | **09 04 16.0** | **-0.7** |
| **PCBR** | **Castelo Branco** | **5.26** | **327** | *e*Pn | **Pn** | **09 04 17.5** | **+0.4** |
| PCBR | | | | *e*Sn | **Sn** | **09 05 15.5** | **-2.0** |
| PCBR | | | | A | A | 09 05 20.2 | |
| | comp=N,21nm,0.5s | | | | | | |
| **OUK** | **Oukaimeden** | **5.50** | **220** | P | **Pn** | **09 04 19.6** | **-1.0** |
| **ZGR** | **Zagora** | **5.58** | **197** | P | **Pn** | **09 04 22.6** | **+0.9** |
| **PMAFR** | **Mafra** | **5.62** | **310** | *e*Pn | **Pn** | **09 04 23.8** | **+1.8** |
| PMAFR | | | | *e*Sn | **Sn** | **09 05 23.4** | **-3.0** |
| PMAFR | | | | A | A | 09 05 33.6 | |
| | comp=N,26nm,0.4s | | | | | | |
| **PSBE** | **So Bento** | **5.69** | **316** | *e*Pn | **Pn** | **09 04 23.6** | **+0.6** |
| **MTE** | **Manteigas** | **5.75** | **330** | *e*Pn | **Pn** | **09 04 25.6** | **+1.7** |
| MTE | | | | *e*Sn | **Sn** | **09 05 27.1** | **-2.6** |
| **MTE** | **Manteigas** | **5.75** | **330** | Pn | **Pn** | **09 04 23.6** | **-0.4** |
| **PCAS** | **Casmilo, Conde** | **5.92** | **322** | *e*Pn | **Pn** | **09 04 28.8** | **+2.7** |
| PCAS | | | | *e*Sn | **Sn** | **09 05 30.1** | **-3.5** |
| **PVIS** | **Viseu** | **6.17** | **329** | *e*Pn | **Pn** | **09 04 30.8** | **+1.3** |
| PVIS | | | | *e*Sn | **Sn** | **09 05 37.5** | **-2.3** |
| **MVO** | **Moncorvo** | **6.23** | **336** | *e*Pn | **Pn** | **09 04 31.1** | **+0.6** |
| MVO | | | | *e*Sn | **Sn** | **09 05 39.4** | **-2.1** |
| **TTIG** | **Tnine Tigouga,** | **6.32** | **220** | P | **Pn** | **09 04 29.4** | **-2.3** |
| **PVRL** | **Vila Real** | **6.57** | **333** | *e*Pn | **Pn** | **09 04 35.7** | **+0.6** |
| PVRL | | | | *e*Sn | **Sn** | **09 05 47.6** | **-2.2** |
| **POLO** | **Lamas de Olo** | **6.69** | **333** | *e*Pn | **Pn** | **09 04 37.5** | **+0.8** |
| POLO | | | | *e*Sn | **Sn** | **09 05 49.5** | **-3.2** |
| **PBRG** | **Braganca** | **6.73** | **340** | *e*Pn | **Pn** | **09 04 38.3** | **+1.0** |
| PBRG | | | | *e*Sn | **Sn** | **09 05 52.2** | **-1.6** |
| **PCAB** | **Cabril** | **7.06** | **333** | *e*Pn | **Pn** | **09 04 44.4** | **+2.6** |
| **PGAV** | **Gavieira, Arco** | **7.38** | **333** | *e*Pn | **Pn** | **09 04 47.5** | **+1.3** |
| **ETSF** | **Etsaut** | **7.80** | **17** | *e*Pn | **Pn** | **09 04 54.8** | **+2.8** |
| **ETSF** | **Etsaut** | **7.80** | **17** | *e*P | Pn | 09 04 59.5 | +7.5 |
| ETSF | | | | *e*Sn | **Sn** | **09 06 20.4** | **+0.4** |
| | comp=N,1.6nm,0.2s | | | | | | |
| **SJPF** | **Ste Jean** | **7.86** | **14** | *e*Pn | **Pn** | **09 04 55.0** | **+2.3** |
| **SJPF** | **Ste Jean** | **7.86** | **14** | *e*P | Pn | 09 04 59.9 | +7.2 |
| **EPF** | **Esparros** | **8.17** | **21** | *e*Pn | **Pn** | **09 04 56.0** | **-1.0** |
| **EPF** | **Esparros** | **8.17** | **21** | *e*P | Pn | 09 05 03.4 | +6.4 |
| EPF | | | | *e*Sn | **Sn** | **09 06 27.6** | **-1.4** |
| | comp=N,3.6nm,0.5s | | | | | | |
| **MTLF** | **Montolieu** | **9.09** | **29** | *e*Pn | **Pn** | **09 05 09.4** | **-0.2** |
| **MTLF** | **Montolieu** | **9.09** | **29** | *e*P | Pn | 09 05 16.2 | +6.6 |
| **CAF** | **Calviac** | **10.41** | **23** | *e*Pn | **Pn** | **09 05 26.9** | **-0.8** |
| **CAF** | **Calviac** | **10.41** | **23** | *e*P | Pn | 09 05 34.2 | +6.5 |
| CAF | | | | *e*Sn | **Sn** | **09 07 20.3** | **-3.8** |
| | comp=N,0.8nm,0.2s | | | | | | |
| **MFF** | **Saint Martin d** | **11.43** | **13** | *e*Pn | **Pn** | **09 05 42.7** | **+1.1** |
| **GERES** | **GERESS Array B** | **18.52** | **39** | P | **Pn** | **09 07 15.2** | **+0.3** |
| | comp=N,0.1nm,0.3s,baz=228,slow=13,SNR=4.6 | | | | | | |
| **CLL** | **Collm** | **19.87** | **32** | *i* P | **Pn** | **09 07 31.4** | **+0.3** |
| | comp=Z,80nm,2.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.78** | **166** | P | **P** | **09 08 02.4** | **+1.4** |
| | comp=Z,1.5nm,0.8s,baz=346,slow=9.8,SNR=9.1 | | | | | | |
| **BURAR** | **Bucovina Array** | **24.67** | **52** | P | **P** | **09 08 19.6** | **+0.4** |
| **ARU** | **Arti** | **46.26** | **43** | P | **P** | **09 11 24.5** | **+1.0** |
| | comp=Z,1.8nm,0.2s,baz=299,slow=10,SNR=4.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **47.64** | **53** | P | **P** | **09 11 36.3** | **+1.9** |
| **SADO** | **Sadowa** | **56.49** | **304** | LR | LR | 09 34 58.7 | |
| | comp=Z,64nm,18.9s,baz=26,slow=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.97** | **47** | P | **P** | **09 12 58.1** | **+0.5** |
| | comp=Z,6.0nm,0.7s,baz=293,slow=7.7,SNR=15 | | | | | | |
| **KURK** | **Kurchatov** | **58.99** | **47** | P | **P** | **09 12 58.1** | **+0.3** |
| **KURK** | **Kurchatov** | **58.99** | **47** | IAmb | IAmb | 09 12 59.1 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.42** | **42** | P | **P** | **09 13 15.2** | **+0.8** |
| | comp=Z,0.9nm,0.4s,baz=283,slow=7.2,SNR=2.1 | | | | | | |
| **MK31** | **Makanchi Array** | **62.69** | **50** | P | **P** | **09 13 22.8** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 09 13 24.5 | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **50** | P | **P** | **09 13 23.3** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=293,slow=5.5,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.86** | **332** | P | **P** | **09 13 56.5** | **+0.2** |
| | comp=Z,1.1nm,0.8s,baz=58,slow=6.5,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **76.24** | **41** | P | **P** | **09 14 48.1** | **+1.2** |
| | comp=Z,0.6nm,0.8s,baz=282,slow=9.0,SNR=3.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.87** | **313** | P | **P** | **09 14 50.4** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=61,slow=7.6,SNR=6.3 | | | | | | |

*IDC **05** 09:04:39.5±1.0, 35°.62N×3°.85W, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.6/50, mbtmp3.8/7, ML2.8/1, MS2.9/4, Ms1 3.0/4, ms1mx2.6/95, Error ellipse: s-maj=32.1km s-min=24.1km az=94.0*

*SFS **05** 09:04:41.0, 35°.49N×3°.80W, ML3.4, ALBORAN SUR*
*NEIC **05** 09:04:41.1±1.8, 35°.62N±0°.06×3°.9W±0°.1, h10km±1km, mb4.3/6, mb_Lg3.4(MDD), Error ellipse: s-maj=14.7km s-min=9.3km az=257.0*
*MDD **05** 09:04:41.4±0.7, 35°.50N×3°.81W, h0km, mbLg3.4/9, Error ellipse: s-maj=6.4km s-min=4.0km az=29.0*
*MDD EMS: II INTENSIDAD MAXIMA.*
*IGIL **05** 09:04:42.2, 35°.49N×3°.81W, h0km, ML3.1*
*CNRM **05** 09:04:42.7, 35°.44N×3°.78W, h22km, ml3.9*
*LDG **05** 09:04:42.3±0.3, 35°.40N×3°.74W, h10km, Ml2.8/3, Error ellipse: s-maj=6.7km s-min=3.9km az=9.0*
*INMG **05** 09:04:42.3±1.4, 35°.40N×3°.77W, h19km±5km, ML3.0, Error ellipse: s-maj=3.7km s-min=2.3km az=21.0*

**ISC 05 09:04:41.7±1.0, 35°.51N±0°.03×3°.71W±0°.02, h17km±7km, n109, σ1$63/139, mb4.0/8, 1D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res IS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EGRO | | | | | Sn | | **Sn** | 09 06 17.2 | **-2.8** |
| | 13nm,0.2s,SNR=5.3 | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | *e*Pn | | **Pn** | | 09 05 38.6 | **-0.1** |
| PVAQ | | | | *e*Sn | | **Sn** | | 09 06 20.3 | **-2.0** |
| PVAQ | | | | A | | A | | 09 06 22.4 | |
| | 36nm,0.3s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | Pn | | **Pn** | | 09 05 35.8 | **-2.8** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | | **Pn** | | 09 05 38.7 | **+0.1** |
| PVAQ | | | | S | | **Sn** | | 09 06 19.7 | **-2.6** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **298** | *e*Pn | | **Pn** | | 09 05 39.0 | **-0.8** |
| PBDV | | | | *e*Sn | | **Sn** | | 09 06 22.6 | **-1.7** |
| PBDV | | | | A | | A | | 09 06 23.8 | |
| | 20nm,0.7s | | | | | | | | |
| **FIGM** | **Figuig** | **3.93** | **148** | P | | **Pn** | | 09 05 42.1 | **+0.7** |
| **AFON** | **Font Roja** | **4.04** | **38** | Pn | | **Pn** | | 09 05 45.4 | **+2.5** |
| | 0.5nm,0.0s,SNR=7.9 | | | | | | | | |
| AFON | | | | Sn | | **Sn** | | 09 06 30.4 | **+0.4** |
| | 50nm,0.6s,SNR=7.9 | | | | | | | | |
| **PAB** | **San Pablo** | **4.06** | **353** | Pn | | **Pn** | | 09 05 44.8 | **+1.7** |
| | 1.2nm,0.1s,SNR=7.9 | | | | | | | | |
| PAB | | | | Sn | | **Sn** | | 09 06 29.6 | **-0.8** |
| | 4.1nm,0.4s,SNR=7.9 | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **303** | *e*Pn | | **Pn** | | 09 05 43.2 | **-0.1** |
| PCVE | | | | *e*Sn | | **Sn** | | 09 06 28.4 | **-2.2** |
| PCVE | | | | A | | A | | 09 06 35.3 | |
| | 25nm,0.4s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.17** | **357** | Pn | | **Pn** | | 09 05 46.0 | **+1.5** |
| | baz=176,slow=13,SNR=1.2 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.17** | **357** | Pn | | **Pn** | | 09 05 45.8 | **+1.3** |
| | 7.4nm,0.5s,baz=177,slow=13,SNR=4.3 | | | | | | | | |
| ESDC | | | | Lg | | | | 09 06 50.6 | |
| | 20nm,0.6s,baz=180,slow=28,SNR=4.7 | | | | | | | | |
| **EBAD** | **Badajoz** | **4.18** | **322** | Pn | | **Pn** | | 09 05 45.5 | **+0.8** |
| | 0.7nm,0.3s | | | | | | | | |
| EBAD | | | | Sn | | **Sn** | | 09 06 31.0 | **-2.1** |
| | 18nm,0.2s,SNR=7.9 | | | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*P | | **Pn** | | 09 05 46.4 | **0.0** |
| MESJ | | | | *e*S | | **Sn** | | 09 06 33.0 | **-3.3** |
| MESJ | | | | IAML | | | | 09 06 41.6 | |
| | comp=N,30nm,0.4s | | | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | | **Pn** | | 09 05 46.6 | **+0.2** |
| MESJ | | | | *e*Sn | | **Sn** | | 09 06 34.5 | **-1.8** |
| MESJ | | | | A | | A | | 09 06 40.1 | |
| | comp=N,23nm,0.5s | | | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*P | | **Pn** | | 09 05 46.9 | **-0.4** |
| MORF | | | | *e*S | | **Sn** | | 09 06 34.4 | **-3.5** |
| MORF | | | | IAML | | | | 09 06 38.1 | |
| | comp=E,54nm,0.3s | | | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*Pn | | **Pn** | | 09 05 47.4 | **+0.1** |
| MORF | | | | *e*Sn | | **Sn** | | 09 06 34.9 | **-3.0** |
| MORF | | | | A | | A | | 09 06 40.9 | |
| | comp=E,18nm,0.2s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.44** | **293** | *e*Pn | | **Pn** | | 09 05 48.4 | **+0.2** |
| PFVI | | | | *e*Sn | | **Sn** | | 09 06 37.1 | **-2.4** |
| PFVI | | | | A | | A | | 09 06 42.3 | |
| | comp=E,16nm,0.8s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.44** | **293** | Pn | | **Pn** | | 09 05 48.8 | **+0.5** |
| | comp=E,4.4nm,0.2s,SNR=7.9 | | | | | | | | |
| PFVI | | | | Sn | | **Sn** | | 09 06 36.7 | **-2.8** |
| | comp=E,12nm,0.2s,SNR=7.9 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.44** | **293** | P | | **Pn** | | 09 05 48.4 | **+0.2** |
| **PESTR** | **Estremoz** | **4.57** | **318** | *e*Pn | | **Pn** | | 09 05 52.0 | **+2.0** |
| PESTR | | | | *e*Sn | | **Sn** | | 09 06 41.5 | **-1.1** |
| PESTR | | | | A | | A | | 09 06 59.2 | |
| | comp=E,14nm,0.7s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.57** | **318** | P | | Pn | | 09 05 54.1 | +4.1 |
| **EVO** | **Evora** | **4.58** | **313** | P | | **Pn** | | 09 05 49.7 | **-0.5** |
| **EVO** | **Evora** | **4.58** | **313** | S | | **Sn** | | 09 06 39.3 | **-3.7** |
| **EVO** | **Evora** | **4.58** | **313** | *e*Pn | | **Pn** | | 09 05 50.3 | **+0.2** |
| EVO | | | | *e*Sn | | **Sn** | | 09 06 40.7 | **-2.2** |
| EVO | | | | A | | A | | 09 06 46.4 | |
| | comp=E,19nm,0.5s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **305** | *e*Pn | | **Pn** | | 09 05 51.3 | **+0.1** |
| PNCL | | | | *e*Sn | | **Sn** | | 09 06 43.4 | **-1.5** |
| PNCL | | | | A | | A | | 09 06 47.5 | |
| | comp=E,13nm,0.3s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.89** | **324** | *e*Pn | | **Pn** | | 09 05 55.7 | **+1.3** |
| PMRV | | | | *e*Sn | | **Sn** | | 09 06 48.3 | **-2.3** |
| **EPLA** | **Plasencia** | **4.92** | **338** | Sn | | **Sn** | | 09 06 49.9 | **-1.5** |
| | comp=E,1.8nm,0.0s,SNR=7.9 | | | | | | | | |
| **PMTG** | **Montargil** | **5.06** | **316** | *e*Pn | | **Pn** | | 09 05 58.8 | **+2.1** |
| PMTG | | | | *e*Sn | | **Sn** | | 09 06 53.4 | **-1.4** |
| PMTG | | | | A | | A | | 09 07 00.8 | |
| | comp=E,9.3nm,0.5s | | | | | | | | |
| **OUZM** | **OUZ** | **5.25** | **210** | P | | **Pn** | | 09 05 59.3 | **-0.2** |
| **PCBR** | **Castelo Branco** | **5.26** | **326** | *e*Pn | | **Pn** | | 09 06 01.5 | **+2.0** |
| **EIBI** | **Ibiza** | **5.35** | **47** | Pn | | **Pn** | | 09 06 01.1 | **+0.4** |
| | comp=E,5.1nm,0.2s | | | | | | | | |
| EIBI | | | | Sn | | **Sn** | | 09 06 59.1 | **-2.8** |
| | comp=E,30nm,0.4s,SNR=5.0 | | | | | | | | |
| **ETOR** | **Torete** | **5.46** | **13** | Pn | | **Pn** | | 09 06 03.9 | **+1.6** |
| | comp=E,19nm,0.5s,SNR=7.9 | | | | | | | | |
| **OUK** | **Oukaimeden** | **5.52** | **220** | P | | **Pn** | | 09 06 03.7 | **+0.3** |
| **PMAFR** | **Mafra** | **5.62** | **309** | *e*Pn | | **Pn** | | 09 06 06.7 | **+2.2** |
| PMAFR | | | | *e*Sn | | **Sn** | | 09 07 05.7 | **-3.0** |
| **PMAFR** | **Mafra** | **5.62** | **309** | Sn | | **Sn** | | 09 07 05.7 | **-3.0** |
| | comp=E,30nm,0.3s,SNR=7.9 | | | | | | | | |
| **PSBE** | **So Bento** | **5.69** | **316** | *e*Pn | | **Pn** | | 09 06 07.8 | **+2.4** |
| **PCAS** | **Casmilo, Conde** | **5.91** | **322** | *e*Pn | | **Pn** | | 09 06 11.4 | **+2.9** |
| PCAS | | | | *e*Sn | | **Sn** | | 09 07 14.4 | **-1.4** |
| PCAS | | | | A | | A | | 09 07 18.6 | |
| | comp=E,9.4nm,0.1s | | | | | | | | |
| **ERTA** | **Horta de San J** | **6.30** | **29** | Sn | | **Sn** | | 09 07 23.8 | **-1.6** |
| | comp=E,0.7nm,0.2s,SNR=7.9 | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.68** | **333** | *e*Pn | | **Pn** | | 09 06 20.7 | **+1.7** |
| **ETOS** | **Mallorca** | **6.70** | **49** | Pn | | **Pn** | | 09 06 20.0 | **+0.7** |
| | comp=E,3.6nm,0.3s,SNR=6.6 | | | | | | | | |
| ETOS | | | | Sn | | **Sn** | | 09 07 32.8 | **-2.4** |
| | comp=E,3.9nm,0.5s,SNR=7.9 | | | | | | | | |
| **PBRG** | **Braganca** | **6.72** | **340** | *e*Pn | | **Pn** | | 09 06 21.7 | **+2.1** |
| **ELOB** | **Lobios** | **7.20** | **333** | Sn | | **Sn** | | 09 07 44.6 | **-3.1** |
| | comp=E,0.4nm,0.0s,SNR=7.9 | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.37** | **332** | *e*Pn | | **Pn** | | 09 06 30.8 | **+2.3** |
| PGAV | | | | *e*Sn | | **Sn** | | 09 07 50.0 | **-1.7** |
| **ETSF** | **Etsaut** | **7.78** | **17** | *e*Pn | | **Pn** | | 09 06 35.3 | **+1.2** |
| **ETSF** | **Etsaut** | **7.78** | **17** | *e*P | | Pn | | 09 06 40.1 | +6.0 |
| ETSF | | | | *e*Sn | | **Sn** | | 09 07 59.8 | **-2.0** |
| | comp=E,0.2nm,0.2s | | | | | | | | |
| **SJPF** | **Ste Jean** | **7.84** | **13** | *e*Pn | | **Pn** | | 09 06 35.4 | **+0.5** |
| **SJPF** | **Ste Jean** | **7.84** | **13** | *e*P | | Pn | | 09 06 42.1 | +7.2 |
| **EPF** | **Esparros** | **8.14** | **21** | *e*Pn | | **Pn** | | 09 06 39.0 | **-0.1** |
| **EPF** | **Esparros** | **8.14** | **21** | *e*P | | Pn | | 09 06 44.6 | +5.5 |
| EPF | | | | *e*Sn | | **Sn** | | 09 08 08.1 | **-2.7** |
| | comp=E,0.3nm,0.2s | | | | | | | | |
| **MTLF** | **Montolieu** | **9.07** | **29** | *e*Pn | | **Pn** | | 09 06 51.6 | **-0.1** |
| **MTLF** | **Montolieu** | **9.07** | **29** | *e*P | | Pn | | 09 06 57.2 | +5.5 |
| **LASF** | **Ste Croix** | **10.35** | **32** | *e*Pn | | **Pn** | | 09 07 09.3 | **0.0** |
| **CAF** | **Calviac** | **10.39** | **23** | *e*Sn | | **Sn** | | 09 09 00.4 | **-5.5** |
| | comp=E,0.6nm,0.2s | | | | | | | | |
| **BGF** | **Bois d'Agland** | **12.09** | **22** | *e*Pn | | **Pn** | | 09 07 32.3 | **-0.8** |
| **DAVOX** | **Davos/Dischmat** | **15.20** | **38** | LR | | LR | | 09 13 54.8 | |
| | comp=E,42nm,19.5s,baz=256,slow=37 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **18.49** | **39** | P | | **P** | | 09 08 55.8 | **-1.1** |
| **GERES** | **GERESS Array B** | **18.49** | **39** | P | | **P** | | 09 08 55.3 | **-1.6** |
| **CLL** | **Colim** | **19.85** | **32** | *e*Px | | Px | | 09 09 14.0 | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **VRAC** | **Vranov** | **20.29** | **41** | LR | | LR | | 09 17 39.4 | |
| | comp=Z,62nm,19.5s,baz=269,slow=38 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.79** | **166** | P | | **P** | | 09 09 45.7 | **+2.2** |
| | comp=Z,1.1nm,0.8s,baz=352,slow=11,SNR=4.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.79** | **166** | P | | **P** | | 09 09 44.4 | **+0.9** |
| TORD | | | | IAmb | | IAmb | | 09 09 47.7 | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **27.28** | **16** | LR | | LR | | 09 21 25.9 | |
| | comp=Z,38nm,20.8s,baz=300,slow=37 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **47.62** | **53** | P | | **P** | | 09 13 17.6 | **+1.0** |
| **KBL** | **Kabul** | **58.26** | **68** | P | | **P** | | 09 14 37.5 | **+1.9** |
| KBL | | | | IAmb | | IAmb | | 09 14 40.1 | |
| | comp=Z,2.5nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Array** | **58.94** | **47** | P | | **P** | | 09 14 40.5 | **+0.7** |
| | comp=Z,3.1nm,0.7s,baz=293,slow=7.7,SNR=9.8 | | | | | | | | |
| **KURK** | **Kurchatov** | **58.97** | **47** | P | | **P** | | 09 14 40.9 | **+0.9** |
| **MK31** | **Makanchi Array** | **62.66** | **50** | P | | **P** | | 09 15 05.9 | **+0.6** |
| MK31 | | | | IAmb | | IAmb | | 09 15 06.2 | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **50** | P | | **P** | | 09 15 05.8 | **+0.6** |
| | comp=Z,0.9nm,0.8s,baz=299,slow=5.9,SNR=7.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **50** | P | | **P** | | 09 15 06.2 | **+0.9** |
| **YKA** | **Yellowknife Ar** | **67.85** | **332** | P | | **P** | | 09 15 38.7 | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=59,slow=6.4,SNR=11 | | | | | | | | |
| **SONM** | **Songino Array** | **76.21** | **41** | P | | **P** | | 09 16 29.5 | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=336,slow=3.2,SNR=2.3 | | | | | | | | |
| **SONM** | **Songino Array** | **76.21** | **41** | IAmb | | IAmb | | 09 16 50.4 | |
| | comp=Z,2.4nm,1.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.87** | **313** | P | | **P** | | 09 16 32.5 | **-0.6** |

comp=Z,0.7nm,0.7s,baz=64,slow=6.8,SNR=6.5

**IDC 05 09:09:12.3±2.3, 23°.85S×67°.03W, h206km±42km, mb3.2/1, mb1 3.2/5, mb1mx3.1/20, mbtmp3.7/5, Error ellipse: s-maj=59.9km s-min=21.9km az=115.0, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.12** | **305** | P | Pn | 09 09 53.1 | +0.2 |
| | 11nm,0.3s,baz=131,slow=7.6,SNR=198 | | | | | | |
| LVC | | | | S | S | 09 10 24.5 | +0.5 |
| | 4.8nm,0.3s,baz=122,slow=4.5,SNR=7.1 | | | | | | |
| **LPAZ** | **La Paz** | **7.59** | **352** | P | Pn | 09 11 02.4 | +1.5 |
| | 1.1nm,0.3s,baz=174,slow=10,SNR=29 | | | | | | |
| **SIV** | **San Ignacio** | **9.62** | **37** | P | Pn | 09 11 26.1 | -0.5 |
| | 0.6nm,0.3s,baz=233,slow=12,SNR=11 | | | | | | |
| **PLCA** | **Paso Flores** | **17.09** | **189** | P | P | 09 12 58.1 | +0.3 |
| | 0.1nm,0.3s,baz=21,slow=9.5,SNR=5.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.54** | **69** | P | P | 09 20 39.7 | -0.5 |
| | 0.4nm,0.5s,baz=260,slow=5.2,SNR=2.3 | | | | | | |

*SFS **05** 09:15:43.0, 35°.53N×3°.79W, h2km, ML2.5, ALBORAN SUR*
*CNRM **05** 09:15:43.7, 35°.47N×3°.80W, h18km, ml2.6*
**ISC 05 09:15:43.1±1.2, 35°.49N±0°.04×3°.77W±0°.04, h17km±8km, n14, σ0°.88/24, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.30** | **207** | P | **Pg** | **09 15 49.7** | **+0.1** |
| PALE | | | | S | **Sg** | **09 15 54.1** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.14** | **105** | P | **Pn** | **09 16 04.1** | **-0.2** |
| CHAS | | | | S | **Sb** | **09 16 18.3** | **-0.5** |
| **TAF** | **Taforalt** | **1.30** | **121** | P | **Pn** | **09 16 06.9** | **+0.4** |
| TAF | | | | S | **Sb** | **09 16 25.3** | **+1.7** |
| **CHEFC** | **Chefchaouen** | **1.34** | **254** | P | **Pb** | **09 16 07.5** | **-0.3** |
| CHEFC | | | | S | **Sg** | **09 16 26.0** | **-0.4** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **338** | P | **Pb** | **09 16 08.0** | **-0.5** |
| EMAL | | | | S | **Sb** | **09 16 25.4** | **-0.5** |
| **JBK** | **JBK** | **1.52** | **139** | P | **Pn** | **09 16 08.9** | **-0.7** |
| JBK | | | | S | **Sn** | **09 16 29.9** | **+0.8** |
| **LCRM** | **LCR** | **2.01** | **207** | P | **Pb** | **09 16 18.9** | **-0.4** |
| LCRM | | | | S | **Sb** | **09 16 43.5** | **-0.5** |
| **IFR** | **Ifrane** | **2.26** | **210** | P | **Pb** | **09 16 22.9** | **-0.7** |
| IFR | | | | S | **Sn** | **09 16 46.5** | **-1.0** |
| **MD31** | **MD31** | **2.74** | **198** | P | **Pn** | **09 16 27.4** | **+1.1** |
| **MDT** | **Midelt** | **2.75** | **195** | P | **Pn** | **09 16 27.8** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | *e*Pn | **Pn** | **09 16 41.7** | **+2.0** |
| PVAQ | | | | *e*Sn | **Sn** | **09 17 22.0** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | P | **Pn** | **09 16 40.3** | **+0.7** |
| PVAQ | | | | S | **Sn** | **09 17 22.9** | **-0.1** |
| **PCVE** | **Castro Verde** | **4.05** | **303** | *e*Sn | **Sn** | **09 17 31.3** | **0.0** |
| **OUK** | **Oukaimeden** | **5.47** | **220** | P | **Pn** | **09 17 04.3** | **+0.1** |

*SFS **05** 09:23:12.0, 35°.51N×3°.84W, h1km, ML2.6, ALBORAN SUR*
*CNRM **05** 09:23:13.1, 35°.54N×3°.70W, h15km, ml2.9*
*INMG **05** 09:23:13.6±1.4, 35°.54N×3°.80W, h6km±3km, ML2.2, Error ellipse: s-maj=4.7km s-min=2.8km az=40.0*
**ISC 05 09:23:12.6±1.2, 35°.54N±0°.03×3°.67W±0°.03, h14km±9km, n21, σ1°.21/39, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.39** | **214** | P | **Pg** | **09 23 20.4** | **0.0** |
| PALE | | | | S | **Sg** | **09 23 25.6** | **-0.1** |
| **CHAS** | **Isla Isabel II** | **1.08** | **109** | P | **Pn** | **09 23 34.0** | **+0.7** |
| CHAS | | | | S | **Sn** | **09 23 47.5** | **-0.5** |
| **TAF** | **Taforalt** | **1.26** | **125** | P | **Pg** | **09 23 36.8** | **-0.1** |
| TAF | | | | S | **Sn** | **09 23 53.1** | **+0.5** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **334** | P | **Pb** | **09 23 38.2** | **+0.3** |
| EMAL | | | | S | **Sn** | **09 23 55.6** | **+0.5** |
| **CHEFC** | **Chefchaouen** | **1.43** | **253** | P | **Pn** | **09 23 39.4** | **+1.2** |
| CHEFC | | | | S | **Sn** | **09 23 58.4** | **+1.5** |
| **JBK** | **JBK** | **1.51** | **143** | P | **Pg** | **09 23 40.7** | **-0.9** |
| JBK | | | | S | **Sn** | **09 23 58.4** | **-0.6** |
| **SICH** | **Sidi Chahed** | **1.97** | **224** | P | **Pn** | **09 23 46.6** | **+1.0** |
| SICH | | | | S | **Sb** | **09 24 12.8** | **+0.1** |
| **LCRM** | **LCR** | **2.09** | **208** | P | **Pb** | **09 23 49.9** | **-0.5** |
| LCRM | | | | S | **Sb** | **09 24 16.0** | **-0.3** |
| **IFR** | **Ifrane** | **2.35** | **211** | P | **Pb** | **09 23 55.2** | **+0.5** |
| IFR | | | | S | **Sn** | **09 24 17.4** | **-2.3** |
| **MD31** | **MD31** | **2.81** | **199** | P | **Pn** | **09 23 57.7** | **+0.5** |
| MD31 | | | | S | **Sn** | **09 24 31.8** | **+0.7** |
| **MDT** | **Midelt** | **2.83** | **196** | P | **Pn** | **09 23 57.7** | **+0.3** |
| MDT | | | | S | **Sn** | **09 24 33.7** | **+2.4** |
| **TDRA** | **Tendrara** | **2.84** | **151** | P | **Pn** | **09 23 59.7** | **+2.0** |
| TDRA | | | | S | **Sb** | **09 24 36.3** | **-1.6** |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | *e*Pn | **Pn** | **09 24 11.0** | **+1.0** |
| PVAQ | | | | *e*Sn | **Sn** | **09 24 52.0** | **-2.0** |
| PVAQ | | | | A | A | 09 24 54.5 | |
| | 5.7nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **301** | P | **Pn** | **09 24 11.5** | **+1.4** |
| PVAQ | | | | S | **Sn** | **09 24 52.7** | **-1.3** |
| **FIGM** | **Figuig** | **3.95** | **149** | P | **Pn** | **09 24 12.8** | **-0.1** |
| FIGM | | | | S | **Sn** | **09 24 59.9** | **+0.9** |
| **PCVE** | **Castro Verde** | **4.09** | **302** | *e*Pn | **Pn** | **09 24 16.0** | **+1.4** |
| PCVE | | | | *e*Sn | **Sn** | **09 25 00.9** | **-1.4** |
| PCVE | | | | A | A | 09 25 09.3 | |
| | 4.8nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **303** | *e*Sn | **Sn** | **09 25 06.7** | **-1.2** |
| MESJ | | | | A | A | 09 25 12.2 | |
| | 3.3nm,0.2s | | | | | | |
| **EVO** | **Evora** | **4.58** | **312** | P | **Pn** | **09 24 23.1** | **+1.7** |
| EVO | | | | S | **Sn** | **09 25 12.3** | **-2.1** |
| **PMRV** | **Marv??o** | **4.88** | **324** | *e*Pn | **Pn** | **09 24 27.1** | **+1.6** |
| **PMTG** | **Montargil** | **5.06** | **316** | *e*Pn | **Pn** | **09 24 28.1** | **+0.1** |
| **OUK** | **Oukaimeden** | **5.56** | **220** | P | **Pn** | **09 24 35.0** | **-0.3** |
| OUK | | | | S | **Sn** | **09 25 38.6** | **-0.7** |

*KRNET **05** 09:42:37.3±0.1, 43°.95N×69°.49E, mb3.0*
*NNC **05** 09:42:37.8±1.2, 43°.60N×69°.71E, h0km, mb3.8, mpv3.3, Error ellipse: s-maj=7.0km s-min=5.8km az=143.0, Suspected Mining explosion.*
*SOME **05** 09:42:39.2, 43°.53N×69°.85E*
**ISC 05 09:42:37.8±1.9, 43°.65N±0°.07×69°.92E±0°.08, h0km, n16, σ1°.24/23, 9C-3D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRLS** | **Borolday** | **0.62** | **186** | P | **Pn** | **09 42 53.1** | **-0.8** |
| | 1.4nm,0.4s | | | | | | |
| BRLS | | | | S | **Sn** | **09 43 03.3** | **-1.2** |
| | 12nm,0.4s | | | | | | |
| **KK02** | **Karatay Array** | **0.69** | **141** | ⇓P | **Pb** | **09 42 52.6** | **-0.2** |
| | 3.0nm,0.4s | | | | | | |
| KK02 | | | | ⇓S | **Sb** | **09 43 03.6** | **+0.7** |
| | 35nm,0.6s | | | | | | |
| **IUG** | **luzhnay** | **1.50** | **177** | P | **Pg** | **09 43 06.6** | **+0.1** |
| | 348nm,0.5s | | | | | | |
| IUG | | | | S | **Sb** | **09 43 26.8** | **+0.6** |
| | 55nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **2.22** | **121** | ⇑*i*P | **Pg** | **09 43 19.7** | **-0.7** |
| | baz=22 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **09 43 50.9** | **+1.8** |
| | baz=22 | | | | | | |
| **TRKS** | **Terek-Say** | **2.30** | **156** | ⇑*i*P | **Pg** | **09 43 21.8** | **-0.1** |
| | baz=53 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **09 43 53.9** | **+2.2** |
| | baz=53 | | | | | | |
| **ARK** | **Arkit** | **2.38** | **140** | ⇑*e*P | **Pb** | **09 43 22.3** | **+0.7** |
| | baz=39 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **09 43 55.1** | **+0.7** |
| | baz=39 | | | | | | |
| **MRKS** | **Merke** | **2.58** | **109** | Pg | **Pg** | **09 43 28.6** | **+1.3** |
| | 6.1nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 09 44 04.0 | |
| | 12nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **2.99** | **108** | ⇑*e*P | **Pb** | **09 43 29.9** | **-2.1** |
| | baz=11 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **09 44 08.6** | **-0.5** |
| | baz=11 | | | | | | |
| **BTLS** | **Baital** | **3.27** | **63** | Pg | **Pg** | **09 43 42.1** | **+1.6** |
| | 9.6nm,0.5s | | | | | | |
| BTLS | | | | Lg | Lg | 09 44 27.2 | |
| | 4.8nm,0.7s | | | | | | |
| **SGDS** | **Sogindy** | **3.43** | **92** | Pg | **Pg** | **09 43 44.0** | **+0.5** |
| | 3.6nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 09 44 30.5 | |
| | 4.4nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **3.50** | **105** | Pg | **Pg** | **09 43 43.3** | **-1.5** |
| | 4.4nm,0.5s | | | | | | |
| AAK | | | | Lg | Lg | 09 44 32.6 | |
| | 3.9nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **4.18** | **87** | Pg | **Pg** | **09 43 56.7** | **-1.2** |
| | 3.9nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 09 44 52.5 | |
| | 5.7nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.21** | **98** | ⇑Pg | **Pb** | **09 43 54.0** | **+1.2** |
| | 3.8nm,0.9s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 09 44 56.6 | |
| | 2.7nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.28** | **93** | Pg | **Pg** | **09 43 58.0** | **-1.9** |
| | 3.3nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 09 44 54.5 | |
| | 5.8nm,0.5s | | | | | | |
| **KST** | **Kastek** | **4.45** | **96** | Pg | **Pg** | **09 44 02.4** | **-0.7** |
| | 3.0nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 09 45 01.7 | |
| | 5.9nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **4.66** | **85** | Pg | **Pg** | **09 44 06.7** | **-0.3** |
| | 1.8nm,0.5s | | | | | | |
| KUU | | | | Lg | Lg | 09 45 09.8 | |
| | 6.7nm,0.6s | | | | | | |

*NEIC **05** 09:58:29.4±2.2, 7°.30S±0°.10×129°.23E±0°.05, h143km±14km, mb4.0/5, Error ellipse: s-maj=14.4km s-min=6.1km az=169.0*
*DJA **05** 09:58:30.0±0.2, 7°.S±2°.×12°.9E±°, h129km±7km, M4.5/7, mb4.5/7, mB5.0/7, MLv4.6/7, Mw(mB)4.3/7*
*IDC **05** 09:58:32.4±7.3, 7°.58S×129°.07E, h171km±78km, mb3.2/1, mb1 3.8/5, mb1mx3.1/46, mbtmp4.2/5, Error ellipse: s-maj=73.0km s-min=23.5km az=38.0*
**ISC 05 09:58:28.7±0.8, 7°.43S±0°.06×129°.20E±0°.05, h131km, n26, σ2°.24/33, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.16** | **105** | P | Pn | 09 59 09.6 | +4.9 |
| SAUI | | | | S | **Sn** | **09 59 37.1** | **+4.9** |
| **SAUI** | **Saumlaki** | **2.16** | **105** | Pn | **Pn** | **09 59 06.6** | **+1.9** |
| **SOEI** | **Soe** | **5.39** | **244** | P | **Pn** | **09 59 49.9** | **+2.7** |
| | 1.5nm2μm172nm,0.7s | | | | | | |
| SOEI | | | | S | **Sn** | **10 00 50.1** | **+1.7** |
| | 1.5nm2μm172nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **5.39** | **244** | | **Pn** | **09 59 49.5** | **+2.3** |
| **FAKI** | **Fak Fak** | **5.42** | **34** | P | **Pn** | **09 59 48.0** | **+0.6** |
| | 0.4nm1μm19nm,1.1s | | | | | | |
| FAKI | | | | S | **Sn** | **10 00 46.3** | **-2.5** |
| | 0.4nm1μm19nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **5.42** | **34** | Pn | **Pn** | **09 59 46.4** | **-1.1** |
| **MTN** | **Manton Dam** | **5.71** | **161** | Pn | **Pn** | **09 59 54.2** | **+2.8** |
| **BATI** | **Baumata** | **6.12** | **243** | P | **Pn** | **09 59 59.8** | **+2.8** |
| | 55nm,0.3s,baz=91,slow=4.8,SNR=26 | | | | | | |
| BATI | | | | S | **Sn** | **10 01 05.3** | **-0.6** |
| | 38nm,0.3s,baz=84,slow=3.9,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **6.12** | **243** | P | **Pn** | **09 59 59.8** | **+2.8** |
| | 0.5nm2μm85nm,0.4s | | | | | | |
| BATI | | | | S | **Sn** | **10 01 06.8** | **+0.9** |
| | 0.5nm2μm85nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **8.21** | **183** | | **Pn** | **10 00 27.3** | **+2.3** |
| **BASI** | **Baing, Sumba** | **8.96** | **251** | P | **Pn** | **10 00 36.2** | **+1.1** |
| | 42nm,1.2s | | | | | | |
| **WBSI** | **Waikubak, Su** | **9.94** | **257** | P | **Pn** | **10 00 49.9** | **+1.5** |
| | 65nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.16** | **198** | P | **Pn** | **10 01 04.4** | **-0.1** |
| | 1.1nm,0.3s,baz=28,slow=11,SNR=36 | | | | | | |
| FITZ | | | | S | **Sn** | **10 03 01.8** | **-5.7** |
| | 2.3nm,0.3s,baz=129,slow=18,SNR=8.3 | | | | | | |
| **WB0** | **Warramunga Arr** | **13.26** | **158** | Pn | **Pn** | **10 01 32.3** | **+0.2** |
| **WRAB** | **Tennant Creek** | **13.40** | **159** | Pn | **Pn** | **10 01 34.2** | **+0.4** |
| **WRA** | **Warramunga Arr** | **13.40** | **159** | P | **Pn** | **10 01 33.5** | **-0.3** |
| | 2.9nm,0.3s,baz=341,slow=11,SNR=49 | | | | | | |
| WRA | | | | S | **Sn** | **10 03 58.3** | **-3.6** |
| | 1.6nm,0.3s,baz=332,slow=23,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.40** | **159** | Pn | **Pn** | **10 01 33.2** | **-0.6** |
| **WB2** | **Warramunga Arr** | **13.41** | **159** | Pn | **Pn** | **10 01 34.0** | **+0.2** |
| **WR0** | **Warramunga Arr** | **13.49** | **158** | Pn | **Pn** | **10 01 35.3** | **+0.4** |
| **COEN** | **Coen** | **15.19** | **116** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BOAC** | **Boac** | **0.65** | **236**↑ | *e*P | Pb | 10 25 43.2 | -1.0 |
| BOAC | | | | *i* S | Sb | 10 25 52.7 | -0.1 |
| **LQP** | **Lukban** | **0.88** | **289**↓ | *e*P | Pb | 10 25 47.3 | -0.9 |

*NEIC **05** 10:27:42.4±2.0, 4.°64S×0.°10×151.°9E×0.°1, h163km×8km, mb4.6/21, Error ellipse: s-maj=16.1km s-min=13.4km az=70.0*
*IDC **05** 10:27:45.0±3.8, 4.°80S×151.°84E, h193km×36km, mb3.9/9, mb1 4.0/10, mb1mx3.5/38, mbtmp4.4/10, Error ellipse: s-maj=21.7km s-min=18.1km az=48.0*

**ISC 05 10:27:41.2**±0.7, **4.725**±0.°08×**151.°86E**±0.°09, **h153**km, **n37**, σ1§**04**/36, **mb4.5**/17, **New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.61** | **30** | Pn | **Pn** | **10 28 05.4** | **+1.9** |
| **MANU** | **Manus Island** | **5.21** | **301** | Pn | **Pn** | **10 28 59.0** | **+1.6** |
| **PMG** | **Port Moresby** | **6.59** | **225** | P | **Pn** | **10 29 18.7** | **+2.9** |
| | 1.4nm,0.3s,baz=39,slow=7.5,SNR=1.9 | | | | | | |
| **COEN** | **Coen** | **12.55** | **222** | Pn | **P** | **10 30 37.7** | **-2.4** |
| **GUMO** | **Guam** | **19.47** | **339** | P | **P** | **10 31 57.3** | **+1.0** |
| **FAKI** | **Fak Fak** | **19.64** | **275** | P | **P** | **10 31 58.9** | **+0.6** |
| FAKI | | | | IAmb | IAmb | 10 32 03.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **20.91** | **280** | P | **P** | **10 32 12.8** | **+0.9** |
| | comp=Z,10nm,0.4s,baz=132,slow=22,SNR=7.0 | | | | | | |
| **LIFNC** | **LIFOU** | **21.87** | **138** | P | **P** | **10 32 22.5** | **+0.5** |
| LIFNC | | | | IAmb | IAmb | 10 32 23.5 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **22.00** | **247** | P | **P** | **10 32 22.2** | **-1.1** |
| MTN | | | | IAmb | IAmb | 10 32 24.1 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.30** | **142** | P | **P** | **10 32 27.0** | **+0.7** |
| | comp=Z,9.2nm,0.6s,baz=294,slow=8.0,SNR=22 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.30** | **142** | P | **P** | **10 32 26.8** | **+0.5** |
| DZM | | | | IAmb | IAmb | 10 32 28.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.65** | **227** | P | **P** | **10 32 29.2** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 10 32 31.0 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.66** | **227** | P | **P** | **10 32 29.4** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 10 32 30.8 | |
| | comp=Z,17nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.79** | **227** | P | **P** | **10 32 30.4** | **-0.5** |
| **WB2** | **Warramunga Arr** | **22.79** | **227** | P | **P** | **10 32 29.9** | **-1.0** |
| **WRA** | **Warramunga Arr** | **22.80** | **227** | P | **P** | **10 32 30.8** | **-0.2** |
| | comp=Z,16nm,0.3s,baz=50,slow=10,SNR=191 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.80** | **227** | P | **P** | **10 32 29.9** | **-1.1** |
| **KNRA** | **Kununurra** | **25.17** | **243** | P | **P** | **10 32 52.8** | **+0.2** |
| **AS31** | **Alice Springs** | **25.58** | **221** | P | **P** | **10 32 56.3** | **0.0** |
| **ASAR** | **Alice Springs** | **25.58** | **221** | P | **P** | **10 32 55.9** | **-0.4** |
| | comp=Z,2.5nm,0.4s,baz=50,slow=8.8,SNR=53 | | | | | | |
| **ASAR** | **Alice Springs** | **25.58** | **221** | P | **P** | **10 32 56.2** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **28.87** | **240** | P | **P** | **10 33 24.8** | **-0.9** |
| | comp=Z,4.3nm,0.3s,baz=57,slow=12,SNR=17 | | | | | | |
| **BBOO** | **Buckleboo** | **31.60** | **206** | P | **P** | **10 33 49.2** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 10 34 03.1 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **MBWA** | **Marble Bar** | **35.20** | **239** | P | **P** | **10 34 20.4** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 10 34 38.6 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **35.26** | **239** | P | **P** | **10 34 20.9** | **-0.6** |
| **GIRL** | **Giralia** | **40.48** | **240** | P | **P** | **10 35 05.6** | **+0.4** |
| **MORW** | **Morawa** | **41.67** | **230** | P | **P** | **10 35 13.9** | **-0.9** |
| MORW | | | | IAmb | IAmb | 10 35 14.7 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **BHW** | **Baring Head** | **41.94** | **154** | P | **P** | **10 35 17.3** | **+0.5** |
| **CM31** | **Chiang Mai Arr** | **56.99** | **295** | P | **P** | **10 37 12.4** | **+1.1** |
| CM31 | | | | IAmb | IAmb | 10 37 12.6 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.99** | **295** | P | **P** | **10 37 11.9** | **+0.6** |
| | comp=Z,2.1nm,0.5s,baz=114,slow=5.1,SNR=15 | | | | | | |
| **SHL** | **Shillong** | **65.46** | **301** | P | **P** | **10 38 07.9** | **-0.5** |
| SHL | | | | IAmb | IAmb | 10 38 08.3 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **65.76** | **328** | P | **P** | **10 38 09.8** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=147,slow=5.2,SNR=9.1 | | | | | | |
| **SONM** | **Songino Array** | **65.76** | **328** | IAmb | IAmb | 10 38 10.2 | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **79.65** | **319** | P | **P** | **10 39 31.3** | **-0.4** |
| **MKAR** | **Makanchi Array** | **79.65** | **319** | P | **P** | **10 39 31.1** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=101,slow=6.8,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **82.44** | **22** | P | **P** | **10 39 45.1** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=248,slow=4.9,SNR=8.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.39** | **288** | PKPbc | **PKPbc** | **10 47 11.7** | **-1.5** |
| | comp=Z,1.2nm,0.5s,baz=56,slow=3.1,SNR=13 | | | | | | |

**DJA 05 10:29:26.6**±0.5, **8.°3S**×**12.°5E**, **h40**km±5km, **M3.9**/6, **mb4.3**/1, **MLv3.6**/6, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **1.90** | **190** | P | Pn | 10 29 56.9 | +0.2 |
| SOEI | | | | S | Sn | 10 30 21.2 | +1.7 |
| **MMRI** | **Maumere** | **2.45** | **252** | P | Pn | 10 30 03.7 | -0.4 |
| MMRI | | | | S | Sn | 10 30 32.0 | -0.8 |
| **BATI** | **Baumata** | **2.50** | **201** | P | Pn | 10 30 04.8 | 0.0 |
| BATI | | | | S | Sn | 10 30 35.9 | +1.9 |
| **BBSI** | **Bau Bau** | **3.10** | **320** | P | Pn | 10 30 14.1 | +1.0 |
| BBSI | | | | S | Sn | 10 30 50.1 | +1.1 |
| **BSSI** | **Bau Bau, Buton** | **4.42** | **293** | P | Pn | 10 30 31.0 | -0.2 |
| **BKSI** | **Bulukumba** | **5.11** | **299** | P | Pn | 10 30 40.0 | -0.7 |

**IDC 05 10:35:22.7**±2.3, **1.°76N**×**126.°88E**, **h0**km, **mb3.4**/3, **mb1 3.7**/3, **mb1mx3.4**/28, **mbtmp3.4**/3, **Error ellipse: s-maj=180.4km s-min=28.2km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.77** | **162** | P | P | 10 40 26.3 | -0.6 |
| | 1.8nm,0.7s,baz=340,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **26.18** | **165** | P | P | 10 40 59.7 | +0.6 |
| | 0.3nm,0.5s,baz=353,slow=15,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.26** | **326** | P | P | 10 45 26.0 | -0.1 |
| | 0.2nm,0.6s,baz=128,slow=7.5,SNR=2.6 | | | | | | |

**NOU 05 10:39:39.0, 15.°53S×167.°49E, h73**km, **MLv4.1**/10, **Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.29** | **287** | P | Pn | 10 39 51.7 | +1.3 |
| **DVP** | **Devils Point** | **2.28** | **163** | P | Pn | 10 40 14.6 | +0.1 |
| **LIFNC** | **LIFOU** | **5.22** | **183** | P | Pn | 10 40 53.7 | -0.9 |
| **YATNC** | **Mamie plateau,** | **6.52** | **185** | P | Pn | 10 41 11.5 | -0.8 |
| **DZM** | **Mont Dzumac** | **6.58** | **188** | P | Pn | 10 41 13.8 | +0.5 |
| **OUENC** | **Ouen Island, N** | **6.88** | **185** | P | Pn | 10 41 17.9 | +0.7 |

**GUC 05 10:42:16.8**±0.5, **36.°28S**×**73.°77W**, **h13**km±7km, **ML3.5, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI05** | **Punta Hualpn** | **0.66** | **135**↑ | *i* P | Pg | 10 42 28.8 | -0.9 |
| BI05 | | | | *e*S | Sg | 10 42 37.5 | -0.9 |
| BI05 | | | | IAML | | 10 42 39.3 | |
| | comp=N,9μm,0.2s | | | | | | |
| **BI05** | **Punta Hualpn** | **0.66** | **135**↑ | *i* P | Pg | 10 42 28.8 | -0.9 |
| BI05 | | | | *i* S | Sg | 10 42 38.1 | -0.4 |
| BI05 | | | | IAML | | 10 42 39.3 | |
| | comp=N,9μm,0.2s | | | | | | |
| **GO05** | **Huala** | **1.96** | **50** | *e*P | Pn | 10 42 49.1 | -0.7 |
| GO05 | | | | *e*S | Sn | 10 43 14.4 | 0.0 |
| GO05 | | | | IAML | | 10 43 20.7 | |
| | comp=N,262nm,0.3s | | | | | | |
| **GO05** | **Huala** | **1.96** | **50**↓ | *e*P | Pn | 10 42 46.2 | -3.7 |
| GO05 | | | | *e*S | Sn | 10 43 11.7 | -2.7 |
| GO05 | | | | IAML | | 10 43 20.8 | |
| | comp=N,265nm,0.2s | | | | | | |
| **ML02** | **Panimavida** | **1.98** | **76** | *e*P | Pn | 10 42 48.4 | -1.6 |
| ML02 | | | | *e*S | Sn | 10 43 14.3 | -0.3 |
| ML02 | | | | IAML | | 10 43 26.0 | |
| | comp=N,670nm,0.5s | | | | | | |
| **ML02** | **Panimavida** | **1.98** | **76** | *e*P | Pn | 10 42 47.6 | -2.4 |
| ML02 | | | | *e*S | Sn | 10 43 12.6 | -2.0 |
| ML02 | | | | IAML | | 10 43 28.9 | |
| | comp=E,791nm,0.5s | | | | | | |
| **LC02** | **Puerto Saavedr** | **2.53** | **173** | *e*S | Sn | 10 43 27.9 | -0.3 |
| **BO02** | **Sierra Bellavi** | **2.85** | **60** | *e*P | Pn | 10 42 59.9 | -2.3 |
| BO02 | | | | *e*S | Sn | 10 43 37.3 | +0.9 |
| BO02 | | | | IAML | | 10 43 45.4 | |
| | comp=E,301nm,0.3s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.85** | **60** | *e*P | Pn | 10 42 59.6 | -2.5 |
| BO02 | | | | *e*S | Sn | 10 43 34.7 | -1.7 |
| **BO01** | **Tunca** | **2.89** | **50** | *e*P | Pn | 10 43 00.5 | -2.1 |
| BO01 | | | | *e*S | Sn | 10 43 37.7 | +0.5 |
| BO01 | | | | IAML | | 10 43 55.3 | |
| | comp=E,69nm,0.5s | | | | | | |
| **BO01** | **Tunca** | **2.89** | **50** | *e*P | Pn | 10 43 00.4 | -2.2 |
| BO01 | | | | *e*S | Sn | 10 43 35.1 | -2.2 |
| BO01 | | | | IAML | | 10 43 55.1 | |
| | comp=E,71nm,0.5s | | | | | | |
| **LC01** | **Cunco** | **3.02** | **151** | *e*P | Pn | 10 43 03.4 | -0.9 |
| LC01 | | | | *e*S | Sn | 10 43 40.4 | +0.1 |
| LC01 | | | | IAML | | 10 43 54.6 | |
| | comp=E,71nm,0.4s | | | | | | |
| **BO04** | **La Punta** | **3.46** | **50** | *e*P | Pn | 10 43 07.8 | -2.6 |
| BO04 | | | | IAML | | 10 44 06.6 | |
| | comp=N,97nm,0.3s | | | | | | |
| **LR03** | **Panguipulli** | **3.53** | **162** | *e*P | Pn | 10 43 10.5 | -0.9 |
| **MT02** | **Curacav** | **3.71** | **37** | *e*P | Pn | 10 43 10.0 | -3.9 |
| **ROCH** | **El Roble** | **4.01** | **35** | *e*P | Pn | 10 43 14.8 | -3.4 |
| **PEL** | **Peldehue** | **4.03** | **40** | *e*P | Pn | 10 43 16.0 | -2.3 |
| **VA06** | **Catapilco** | **4.24** | **30** | *e*P | Pn | 10 43 17.1 | -3.9 |

*VAO **05** 10:44:37.2±1.3, 36.°17S×74.°45W, h13km, mb4.4*
*IDC **05** 10:44:39.7±0.9, 36.°18S×73.°52W, h0km, mb4.1/7, mb1 4.3/8, mb1mx4.1/24, mbtmp4.0/8, ML3.6/1, MS3.3/4, Ms1 3.3/4, ms1mx3.0/49, Error ellipse: s-maj=24.5km s-min=20.8km az=74.0*
*NEIC **05** 10:44:39.1±2.2, 36.°20S±0.°05×73.°7W±0.°1, h10km±1km, mb4.5/13, Mwr4.2/13, ML4.3(GUC), Error ellipse: s-maj=15.2km s-min=8.8km az=283.0*
*NEIC **05** 10:44:40, 36.°27S×73.°86W, h15km, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.35; Mθθ2.05; Mϕϕ-2.40; Mrθ-0.18; Mrϕ 1.36; Mθϕ1.12; Fault plane solution: M₀2.86000×10¹⁵ NP1:ϕ₁210.40000°, δ80.44000°, λ-164.28000°. NP2:ϕ₂117.72000°, δ74.50000°, λ-9.92000°. Principal axes: T 2.4400, Plg4.0000°, Azm343.0000°; N 0.7079, Plg72.0000°, Azm241.0000°; P -3.1479, Plg18.0000°, Azm75.0000°;*
*GUC **05** 10:44:41.0±0.3, 37.°03S×72.°39W, h33km±49km, ML4.2*

**ISC 05 10:44:38.6**±2.3, **36.°19S**±0.°04×**73.°72W**±0.°05, **h3**km±14km, **n95**, σ1§**41**/96, **mb4.5**/13, **Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI05** | **Punta Hualpn** | **0.70** | **143** | *e*P | **Pb** | **10 44 53.6** | **+0.1** |
| BI05 | | | | *i* S | **Sb** | **10 45 03.2** | **-0.5** |
| BI05 | | | | IAML | | 10 45 04.5 | |
| | comp=N,10μm,0.2s | | | | | | |
| **GO05** | **Huala** | **1.88** | **52** | *e*P | **Pn** | **10 45 10.7** | **-0.9** |
| GO05 | | | | *i* S | **Sg** | **10 45 39.1** | **+0.3** |
| GO05 | | | | IAML | | 10 45 49.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| **GO05** | **Huala** | **1.88** | **52** | | **Pn** | **10 45 10.9** | **-0.7** |
| **ML02** | **Panimavida** | **1.92** | **78** | *e*P | **Pn** | **10 45 12.0** | **-0.2** |
| ML02 | | | | *i* S | **Sn** | **10 45 36.5** | **-0.3** |
| ML02 | | | | IAML | | 10 45 47.6 | |
| | comp=E,6μm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **1.92** | **78** | Pn | **Pn** | **10 45 12.1** | **0.0** |
| ML02 | | | | Sn | **Sn** | **10 45 35.7** | **-1.1** |
| **LC02** | **Puerto Saavedr** | **2.61** | **174** | Pn | **Pn** | **10 45 20.3** | **-1.4** |
| **BO02** | **Sierra Bellavi** | **2.77** | **61** | *e*P | **Pn** | **10 45 24.2** | **+0.2** |
| BO02 | | | | *i* S | **Sb** | **10 46 03.5** | **+0.2** |
| BO02 | | | | IAML | | 10 46 14.0 | |
| | comp=N,2μm,0.9s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.77** | **61** | Pn | **Pn** | **10 45 24.4** | **+0.4** |
| **BO01** | **Tunca** | **2.81** | **51** | Pn | **Pn** | **10 45 24.7** | **+0.4** |
| **VA05** | **Santo Domingo** | **3.06** | **35** | *e*P | **Pn** | **10 45 27.0** | **-0.9** |
| **VA05** | **Santo Domingo** | **3.06** | **35** | | **Pn** | **10 45 27.5** | **-0.4** |
| **LC01** | **Cunco** | **3.08** | **152** | Pn | **Pn** | **10 45 26.7** | **-1.5** |
| **MT01** | **Popeta** | **3.08** | **42** | | **Pn** | **10 45 28.0** | **-0.2** |
| **MT09** | **Talagante** | **3.29** | **44** | *e*P | **Pn** | **10 45 31.6** | **+0.4** |
| MT09 | | | | *i* S | **Sn** | **10 46 13.2** | **+2.2** |
| MT09 | | | | IAML | | 10 46 29.6 | |
| | comp=E,980nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **3.29** | **44** | | **Pn** | **10 45 31.2** | **+0.1** |
| **VA01** | **Torpederas** | **3.59** | **29** | Pn | **Pn** | **10 45 34.5** | **-0.6** |
| **LR03** | **Panguipulli** | **3.61** | **163** | *e*P | **Pn** | **10 45 34.7** | **-0.7** |
| **MT02** | **Curacav** | **3.62** | **37** | *e*P | **Pn** | **10 45 34.7** | **-0.8** |
| **MT02** | **Curacav** | **3.62** | **37** | | **Pn** | **10 45 35.1** | **-0.4** |
| **MT05** | **Renca** | **3.72** | **42** | *e*P | **Pn** | **10 45 37.2** | **+0.2** |
| MT05 | | | | *i* S | **Sn** | **10 46 23.7** | **+2.4** |
| **MT05** | **Renca** | **3.72** | **42** | Pn | **Pn** | **10 45 37.5** | **+0.5** |
| **ROCH** | **El Roble** | **3.91** | **36** | Pn | **Pn** | **10 45 38.9** | **-0.8** |
| **ROCH** | **El Roble** | **3.91** | **36** | *e*P | Pb | **10 45 39.0** | **-9.0** |
| ROCH | | | | *e*P | **Pn** | **10 45 38.7** | **-1.1** |
| **PEL** | **Peldehue** | **3.94** | **40** | *e*P | **Pn** | **10 45 40.5** | **+0.5** |
| **PEL** | **Peldehue** | **3.94** | **40** | | **Pn** | **10 45 40.5** | **+0.5** |
| **VA03** | **San Esteban** | **4.30** | **38** | *e*P | **Pn** | **10 45 45.4** | **+0.4** |
| **VA03** | **San Esteban** | **4.30** | **38** | | **Pn** | **10 45 45.5** | **+0.4** |
| **LL04** | **Puerto Octay** | **4.83** | **168** | | **Pn** | **10 45 51.2** | **-1.0** |
| **H03S1** | **Juan Fernandez** | **4.85** | **297** | Pn | **Pn** | **10 45 55.3** | **+3.0** |
| H03S1 | | | | T | T | 10 50 52.7 | |
| | baz=119 | | | | | | |
| **H03S3** | **Juan Fernandez** | **4.87** | **297** | T | T | 10 50 54.6 | |
| | baz=119 | | | | | | |
| **H03S2** | **Juan Fernandez** | **4.87** | **297** | T | T | 10 50 53.0 | |
| | baz=119 | | | | | | |
| **LL03** | **Petrohue** | **5.05** | **169** | | **Pn** | **10 45 52.7** | **-2.5** |
| **H03N1** | **Juan Fernandez** | **5.07** | **301** | Pn | **Pn** | **10 45 56.7** | **+1.4** |
| | baz=85,slow=12,SNR=8.7 | | | | | | |
| H03N1 | | | | T | T | 10 51 16.1 | |
| | baz=145,slow=80 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.07** | **301** | Pn | **Pn** | **10 45 58.1** | **+2.7** |
| | baz=85,slow=12,SNR=29 | | | | | | |
| H03N3 | | | | T | T | 10 51 20.4 | |
| | baz=145,slow=80 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.09** | **301** | Pn | **Pn** | **10 45 57.1** | **+1.7** |
| | baz=85,slow=12,SNR=39 | | | | | | |
| H03N2 | | | | T | T | 10 51 24.3 | |
| | baz=145,slow=80 | | | | | | |
| **PLCA** | **Paso Flores** | **5.18** | **152** | Pn | **Pn** | **10 45 58.4** | **+1.3** |
| | comp=E,0.5nm,0.3s,baz=332,slow=12,SNR=3.5 | | | | | | |
| **PLCA** | **Paso Flores** | **5.18** | **152** | *e*P | **Pn** | **10 45 58.7** | **+1.7** |
| **PLCA** | **Paso Flores** | **5.18** | **152** | Pn | **Pn** | **10 45 57.1** | **+0.1** |
| **CO02** | **Combarbal** | **5.46** | **25** | | **Pn** | **10 46 01.1** | **+0.1** |
| **CO06** | **Fray Jorge** | **5.77** | **18** | | **Pn** | **10 46 03.8** | **-1.4** |
| **CO03** | **El Pedregal** | **5.91** | **26** | Pn | **Pn** | **10 46 07.5** | **+0.4** |
| **ZON** | **Zonda** | **6.25** | **44** | Pn | **Pn** | **10 46 12.3** | **+0.6** |
| **GO04** | **Tololo Observa** | **6.48** | **23** | Pn | **Pn** | **10 46 13.7** | **-1.5** |
| **LL02** | **Futaleuf** | **7.14** | **169** | Pn | **Pn** | **10 46 22.6** | **-1.3** |
| **AC04** | **Llanos de Chal** | **8.27** | **16** | Pn | **Pn** | **10 46 37.2** | **-2.3** |
| **AC02** | **Maricunga** | **10.11** | **24** | | **Pn** | **10 47 04.5** | **-0.7** |
| **PB15** | **IPOC Station P** | **13.45** | **17** | | **Pn** | **10 47 48.0** | **-2.6** |
| **LVC** | **Limon Verde** | **14.16** | **18** | LR | LR | 10 52 43.0 | |
| | comp=E,64nm,21.2s,baz=204,slow=34 | | | | | | |
| **PB11** | **IPOC Station P** | **16.75** | **13** | | **Pn** | **10 48 34.1** | **-0.3** |
| PB11 | | | | IAmb | IAmb | 10 48 48.6 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **17.10** | **59** | LR | LR | 10 55 05.9 | |
| | comp=Z,70nm,18.1s,baz=230,slow=37 | | | | | | |
| **PLTB** | **Pedras Altas** | **17.26** | **81** | *e*P | **P** | **10 48 45.3** | **+3.1** |
| **MNMC** | **Minye Minye** | **17.38** | **13** | P | **Pn** | **10 48 41.9** | **-0.5** |
| **LPAZ** | **La Paz** | **20.43** | **16** | P | Pn | 10 49 20.2 | +0.3 |
| | comp=Z,5.7nm,0.8s,baz=188,slow=6.8,SNR=15 | | | | | | |
| **LPAZ** | **La Paz** | **20.43** | **16** | P | **P** | **10 49 15.7** | **-2.1** |
| **AQDB** | **Aquidauana** | **22.23** | **50** | P | **P** | **10 49 35.3** | **-1.1** |
| AQDB | | | | IAmb | IAmb | 10 50 00.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SIV** | **San Ignacio** | **23.06** | **33** | P | **P** | **10 49 45.7** | **+0.4** |
| | comp=Z,4.8nm,0.9s,baz=219,slow=11,SNR=14 | | | | | | |
| SIV | | | | LR | LR | 11 00 23.2 | |
| | comp=Z,123nm,21.3s,baz=270,slow=41 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **24.41** | **36** | *e*P | **P** | **10 49 59.1** | **+0.6** |
| **PTLB** | **Pontes e Lacer** | **24.41** | **36** | P | **P** | **10 49 57.0** | **-1.4** |
| PTLB | | | | IAmb | IAmb | 10 49 60.0 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **FRTB** | **Fartura** | **24.49** | **65** | *e*P | **P** | **10 50 02.8** | **+3.6** |
| **PP1B** | **Ponte de Pedra** | **24.92** | **47** | *e*P | **P** | **10 50 04.1** | **+1.1** |
| **SALV** | **Santo Antonio** | **25.81** | **43** | *e*P | **P** | **10 50 11.9** | **+0.8** |
| **ITRB** | **Iturama** | **26.27** | **58** | *e*P | **P** | **10 50 17.5** | **+2.2** |
| **VAO** | **Valinhos** | **26.62** | **68** | *e*P | **P** | **10 50 20.5** | **+2.0** |
| **ETMB** | **Extrema** | **27.12** | **16** | P | **P** | **10 50 22.4** | **-0.6** |
| ETMB | | | | IAmb | IAmb | 10 50 25.0 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **ARAG** | **Araguaiana, MT** | **28.23** | **49** | *e*P | **P** | **10 50 35.5** | **+2.5** |
| **BDFB** | **Brasilia** | **30.71** | **55** | P | **P** | **10 50 54.5** | **-0.6** |
| | comp=Z,5.4nm,1.0s,baz=199,slow=6.3,SNR=4.1 | | | | | | |
| **NPGB** | **Novo Progresso** | **33.52** | **34** | *e*P | **P** | **10 51 19.2** | **-0.4** |
| **JANB** | **Januaria** | **33.63** | **59** | *e*P | **P** | **10 51 20.3** | **-0.4** |
| **SDBA** | **SAO DESIDERIO** | **35.12** | **55** | *e*P | **P** | **10 51 33.5** | **0.0** |
| **NBPN** | **Ponto Novo - B** | **39.43** | **59** | *e*P | **P** | **10 52 10.3** | **+0.2** |
| **TMAB** | **Tom-Au,PA,Br** | **41.16** | **41** | *e*P | **P** | **10 52 24.6** | **+0.2** |
| **NBMA** | **Muriti-CE** | **42.91** | **57** | *e*P | **P** | **10 52 39.4** | **+0.7** |
| **BELA** | **Belgrano 2** | **44.99** | **169** | P | **P** | **10 52 54.8** | **+0.1** |
| BELA | | | | IAmb | IAmb | 10 53 04.2 | |
| | comp=Z,9.9nm,1.3s | | | | | | |
| **MDP** | **Montagnes des** | **45.58** | **30** | LR | LR | 11 13 24.7 | |
| | comp=Z,67nm,19.9s,baz=110,slow=38 | | | | | | |
| **BIRV** | **Birongo** | **46.94** | **10** | P | **P** | **10 53 09.2** | **-1.5** |
| **VNA3** | **Neumayer Olymp** | **47.88** | **157** | P | **P** | **10 53 18.6** | **+1.1** |
| **VNA2** | **Neumayer--Watz** | **48.55** | **156** | P | **P** | **10 53 23.8** | **+1.2** |
| | baz=280,slow=8.6 | | | | | | |
| **SNAA** | **Sanae** | **50.10** | **157** | P | **P** | **10 53 35.7** | **+1.1** |
| **SNAA** | **Sanae** | **50.10** | **157** | P | **P** | **10 53 34.1** | **-0.5** |
| **MATN** | **Matagalpa** | **50.19** | **344** | P | **P** | **10 53 34.2** | **-1.7** |
| MATN | | | | IAmb | IAmb | 10 53 58.6 | |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **BBGH** | **Gun Hill** | **50.86** | **18** | P | **P** | **10 53 39.3** | **-1.4** |
| **QSPA** | **South Pole Qui** | **54.05** | **180** | P | **P** | **10 54 05.9** | **+1.7** |
| | comp=Z,4.4nm,1.0s,baz=154,slow=6.0,SNR=9.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **54.05** | **180** | P | **P** | **10 54 06.0** | **+1.9** |
| **TXAR** | **Lajitas Array** | **71.00** | **333** | P | **P** | **10 55 59.7** | **+1.9** |
| | comp=Z,0.9nm,0.6s,baz=152,slow=8.4,SNR=11 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **71.00** | **333** | P | **P** | **10 55 58.7** | **+1.0** |
| TX31 | | | | IAmb | IAmb | 10 56 19.0 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **LCAR** | **Lake Charles** | **73.70** | **345** | P | **P** | **10 56 12.1** | **-1.5** |
| LCAR | | | | IAmb | IAmb | 10 56 15.0 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **77.07** | **333** | P | **P** | **10 56 30.6** | **-2.7** |
| **NVAR** | **Mina Array Bea** | **84.91** | **326** | P | **P** | **10 57 17.5** | **+2.5** |
| | comp=Z,0.6nm,0.8s,baz=158,slow=5.1,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.24** | **71** | P | **P** | **10 57 21.8** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=239,slow=2.4,SNR=4.4 | | | | | | |
| **NRIK** | **Noril'sk** | **145.24** | **12** | PKPbc | **PKPdf** | **11 04 17.3** | **+0.6** |
| | comp=Z,1.6nm,0.6s,baz=4.4,slow=1.8,SNR=5.3 | | | | | | |
| **KSH** | **Kashi** | **155.90** | **73** | PKP | **PKPdf** | **11 04 31.8** | **-2.4** |
| **ZALV** | **Zalesovo Beam** | **156.81** | **33** | PKPab | **PKPab** | **11 05 05.5** | **+1.1** |
| | comp=Z,0.5nm,0.3s,baz=256,slow=4.4,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **156.81** | **33** | PKPdf | **PKPdf** | **11 04 33.8** | **-0.9** |
| **MKAR** | **Makanchi Array** | **159.22** | **52** | PKPab | **PKPab** | **11 05 12.5** | **-2.7** |
| | comp=Z,0.5nm,0.9s,baz=270,slow=0.6,SNR=3.5 | | | | | | |
| **PZH** | **PanZhiHua** | **169.60** | **157** | PKP | **PKPdf** | **11 04 45.7** | **-2.3** |

*TUL **05** 10:48:36.9±0.6, 36.°32N±0.°01×97.°55W±0.°01, h7km±7km, ML2.6, mb_Lg2.3/15(NEIC), Error ellipse: s-maj=2.1km s-min=0.7km az=64.0*

**NEIC 05 10:48:36.8**±0.7, **36.°32N**±0.°01×**97.°55W**±0.°01, **h4**km±7km, **Error ellipse: s-maj=2.1km s-min=0.7km az=211.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.40** | **298** | Pg | Pg | 10 48 44.8 | +0.4 |
| CROK | | | | Sg | Sg | 10 48 50.4 | +0.9 |
| **BLOK** | **Blackwell** | **0.52** | **31** | Pg | Pg | 10 48 47.0 | +0.3 |
| **OK029** | **Liberty Lake** | **0.53** | **171** | Pg | Pg | 10 48 47.1 | +0.2 |
| OK029 | | | | Sg | Sg | 10 48 54.5 | +0.7 |
| **OK033** | **Mehan** | **0.57** | **119** | Pg | Pg | 10 48 47.8 | +0.2 |
| OK033 | | | | Sg | Sg | 10 48 55.7 | +0.7 |
| **BCOK** | **Bluff Creek, N** | **0.66** | **184** | Pg | Pg | 10 48 49.6 | +0.1 |
| BCOK | | | | Sg | Sg | 10 48 58.7 | +0.6 |
| **OK031** | **S. Brethren Rd** | **0.68** | **122** | Pg | Pg | 10 48 50.0 | +0.1 |
| OK031 | | | | IAmb_Lg | | 10 48 58.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| OK031 | | | | Sg | Sg | 10 48 59.4 | +0.6 |
| **KAN13** | **South Haven SW** | **0.69** | **5** | Pg | Pg | 10 48 50.2 | +0.1 |
| **QUOK** | **Quay** | **0.70** | **102** | Pg | Pg | 10 48 50.4 | 0.0 |
| **KAN14** | **Manchester OK** | **0.72** | **333** | Pg | Pg | 10 48 50.4 | -0.1 |
| KAN14 | | | | Sg | Sg | 10 49 00.4 | +0.5 |
| **OK030** | **Cody Creek RV** | **0.73** | **122** | Pg | Pg | 10 48 50.9 | +0.1 |
| OK030 | | | | Sg | Sg | 10 49 01.0 | +0.6 |
| **KAN17** | **Caldwell West** | **0.74** | **347** | | Pg | 10 48 51.1 | 0.0 |
| KAN17 | | | | Sg | Sg | 10 49 01.3 | +0.5 |
| **

comp=N,18μm,0.2s
**GO05 Huala 1.91 52** *e*P **Pn 11 16 23.7 -1.0**
GO05 *i* S **Sg 11 16 52.8 -0.2**
GO05 IAML 11 16 59.0
comp=E,1μm,0.4s
**GO05 Huala 1.91 52 Pn 11 16 23.4 -1.3**
GO05 Sn **Sg 11 16 53.6 +0.6**
**ML02 Panimavida 1.95 78** *e*P **Pn 11 16 24.7 -0.6**
ML02 *i* S **Sn 11 16 48.1 -1.9**
ML02 IAML 11 17 00.1
comp=E,8μm,0.7s
**ML02 Panimavida 1.95 78 Pn 11 16 24.7 -0.6**
ML02 Sn **Sn 11 16 48.1 -1.9**
**LC02 Puerto Saavedr 2.61 173** Pn **Pn 11 16 34.9 +0.6**
**BO02 Sierra Bellavi 2.81 61** *e*P **Pn 11 16 37.3 +0.1**
BO02 *i* S **Sn 11 17 12.2 +0.9**
**BO02 Sierra Bellavi 2.81 61** Pn **Pn 11 16 36.7 -0.5**
**BO01 Tunca 2.83 51** *e*P **Pn 11 16 37.3 -0.1**
BO01 *i* S **Sb 11 17 15.1 -2.5**
BO01 IAML 11 17 32.5
comp=N,449nm,0.6s
**BO01 Tunca 2.83 51 Pn 11 16 37.4 -0.1**
**LC01 Cunco 3.08 151** *e*P **Pn 11 16 40.4 -0.5**
LC01 *i* S **Sn 11 17 17.6 -0.5**
LC01 IAML 11 17 38.0
comp=E,365nm,0.4s
**LC01 Cunco 3.08 151** Pn **Pn 11 16 40.9 -0.1**
**VA05 Santo Domingo 3.09 35** *i* S **Sg 11 17 33.0 +2.0**
VA05 IAML 11 17 37.9
comp=N,632nm,0.7s
**VA05 Santo Domingo 3.09 35 Pn 11 16 40.2 -0.7**
**MT01 Popeta 3.11 42** *e*P **Pn 11 16 40.4 -0.9**
MT01 *i* S **Sb 11 17 27.9 +2.4**
MT01 IAML 11 17 41.8
comp=E,276nm,0.4s
**MT01 Popeta 3.11 42 Pn 11 16 40.3 -0.9**
**MT09 Talagante 3.32 44** *e*P **Pn 11 16 44.2 0.0**
MT09 *i* S **Sb 11 17 34.2 +2.5**
**MT09 Talagante 3.32 44 Pn 11 16 44.4 +0.1**
**BO04 La Punta 3.40 50** *i* S **Sb 11 17 35.3 +1.4**
**LR03 Panguipulli 3.61 162 Pn 11 16 48.6 +0.5**
**VA01 Torpederas 3.61 29** Pn **Pn 11 16 48.2 0.0**
**MT02 Curacav 3.64 37** *i* S **Sn 11 17 31.1 -0.7**
**MT02 Curacav 3.64 37 Pn 11 16 47.9 -0.7**
**LR04 Corral 3.69 176** *e*P **Pn 11 16 47.7 -1.5**
LR04 *i* S **Sn 11 17 28.9 -4.0**
LR04 IAML 11 17 57.6
comp=E,289nm,0.4s
**LMEL Las Melosas 3.74 52 Pn 11 16 50.7 +0.6**
**MT05 Renca 3.74 43** *i* S **Sn 11 17 37.9 +3.5**
**MT05 Renca 3.74 43** Pn **Pn 11 16 50.1 +0.1**
**ROC1 El Roble 3.93 36 Pn 11 16 53.0 +0.2**
**ROCH El Roble 3.94 36** *i* S **Sg 11 17 55.2 -3.1**
ROCH *i* S **Sb 11 17 48.9 -0.7**
**PEL Peldehue 3.96 41** *e*P **Pn 11 16 53.0 0.0**
PEL *i* S **Sb 11 17 50.4 +0.2**
**PEL Peldehue 3.96 41 Pn 11 16 53.0 0.0**
**VA06 Catapilco 4.16 30** *e*P **Pn 11 16 54.3 -1.4**
VA06 *i* S **Sn 11 17 40.5 -4.1**
**VA03 San Esteban 4.33 39** *e*P **Pn 11 16 57.9 -0.3**
**VA03 San Esteban 4.33 39 Pn 11 16 57.4 -0.7**
**LL04 Puerto Octay 4.82 168 Pn 11 17 03.9 -1.0**
**LL03 Petrohue 5.05 168** Pn **Pn 11 17 08.0 +0.1**
**PLCA Paso Flores 5.18 152** Pn **Pn 11 17 09.3 -0.6**
**LL05 Los Muermos 5.21 178** Pn **Pn 11 17 12.9 +2.8**
**CO02 Combarbal 5.49 26 Pn 11 17 12.9 -1.1**
**CO03 El Pedregal 5.93 27 Pn 11 17 19.2 -0.8**
**GO04 Tololo Observa 6.50 23 Pn 11 17 28.0 -0.1**
**AC04 Llanos de Chal 8.29 17** Pn **Pn 11 17 52.4 0.0**
**AC02 Maricunga 10.13 24** Pn **Pn 11 18 16.6 -1.5**
**MNMC Minye Minye 17.39 13** Pn **Pn 11 19 53.8 -1.5**
**MG01 Puerto William 19.21 169 P P 11 20 15.9 -0.2**
**LPAZ La Paz 20.45 16 P 11 20 29.9 -0.7**
**AQDB Aquidauana 22.26 50** P **P 11 20 48.4 -1.0**
AQDB IAmb IAmb 11 20 53.6
comp=Z,16nm,1.3s
**PTLB Pontes e Lacer 24.44 36** P **P 11 21 11.7 +0.4**
PTLB IAmb IAmb 11 21 12.6
comp=Z,11nm,1.4s
**ETMB Extrema 27.14 16** P **P 11 21 35.8 +0.1**
ETMB IAmb IAmb 11 21 38.3
comp=Z,18nm,1.7s
**COVE Coope Vega, Sa 47.73 346** P **P 11 24 30.5 +1.1**
**SNAA Sanae 50.10 157** P **P 11 24 48.0 +0.9**
SNAA IAmb IAmb 11 25 23.2
comp=Z,17nm,1.6s
**QSPA South Pole Qui 54.04 180** P **P 11 25 18.3 +1.7**
QSPA IAmb IAmb 11 26 32.5
comp=Z,20nm,1.8s

*TUL* ***05*** *11:22:12.3±1.1, 36.06N±0.01×97.49W±0.01, h6km±7km, ML2.5, mb_Lg2.3/11(NEIC), Error ellipse: s-maj=1.7km s-min=1.5km az=55.0*

**NEIC 05 11:22:12.4±0.9, 36.071N±0.007×97.49W±0.01, h7km±7km, Error ellipse: s-maj=1.8km s-min=0.8km az=65.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK029** | **Liberty Lake** | **0.28** | **175** | Pg | Pg | 11 22 17.8 | 0.0 |
| **BCOK** | **Bluff Creek, N** | **0.42** | **194** | Pg | Pg | 11 22 20.6 | 0.0 |
| BCOK | | | | Sg | Sg | 11 22 26.8 | +0.6 |
| **OK033** | **Mehan** | **0.45** | **93** | Pg | Pg | 11 22 21.2 | +0.2 |
| OK033 | | | | Sg | Sg | 11 22 27.4 | +0.5 |
| **OK025** | **Westminster Rd** | **0.50** | **166** | Pg | Pg | 11 22 22.2 | +0.1 |
| OK025 | | | | Sg | Sg | 11 22 29.4 | +0.7 |
| **OK031** | **S. Brethren Rd** | **0.54** | **102** | Pg | Pg | 11 22 22.9 | +0.1 |
| OK031 | | | | IAmb_Lg | | 11 22 29.1 | |
| | comp=Z,23nm,0.7s | | | | | | |
| OK031 | | | | Sg | Sg | 11 22 30.3 | +0.5 |
| **OK030** | **Cody Creek RV** | **0.59** | **104** | Pg | Pg | 11 22 23.8 | 0.0 |
| OK030 | | | | IAmb_Lg | | 11 22 31.3 | |
| | comp=Z,19nm,0.7s | | | | | | |
| OK030 | | | | Sg | Sg | 11 22 31.9 | +0.5 |
| **CROK** | **Carrier** | **0.59** | **317** | Pg | Pg | 11 22 23.6 | -0.2 |
| CROK | | | | Sg | Sg | 11 22 32.3 | +0.8 |
| **OK034** | **N. Norfolk Rd.** | **0.63** | **95** | Pg | Pg | 11 22 24.6 | 0.0 |
| **QUOK** | **Quay** | **0.64** | **81** | Pg | Pg | 11 22 24.6 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.66** | **177** | | Pg | 11 22 24.8 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.67** | **177** | Pg | Pg | 11 22 25.1 | -0.1 |
| **BLOK** | **Blackwell** | **0.72** | **18** | Pg | Pg | 11 22 26.3 | 0.0 |
| **FNO** | **Franklin** | **0.81** | **175** | Pg | Pg | 11 22 27.7 | -0.3 |
| **GC02** | **Grant County #** | **0.83** | **339** | Pg | Pg | 11 22 28.3 | -0.2 |
| **KAN13** | **South Haven SW** | **0.94** | **0** | Pg | Pg | 11 22 30.3 | -0.2 |
| **KAN14** | **Manchester OK** | **0.96** | **337** | Pg | Pg | 11 22 30.4 | -0.3 |
| **KAN17** | **Caldwell West** | **1.00** | **347** | | Pg | 11 22 31.3 | -0.3 |
| **W35A** | **Tecumseh** | **1.04** | **151** | | Pg | 11 22 31.5 | -0.9 |
| **KAN05** | **Bluff City Nor** | **1.08** | **343** | | Pg | 11 22 32.8 | -0.4 |
| **KAN01** | **Argonia South** | **1.10** | **349** | | Pg | 11 22 33.2 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.15** | **43** | | Pg | 11 22 34.3 | -0.2 |
| **OK035** | **E0210 Rd and N** | **1.17** | **303** | Pg | Pg | 11 22 34.2 | -0.7 |
| **KAN06** | **Argonia West S** | **1.21** | **346** | | Pg | 11 22 35.2 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.22** | **341** | Pg | Pb | 11 22 35.2 | -0.5 |
| **KAN16** | **Harper SW Stat** | **1.24** | **338** | Pn | Pb | 11 22 35.7 | -0.5 |
| **U32A** | **Winter Ranch,** | **1.26** | **285** | Pn | Pn | 11 22 36.0 | -0.5 |
| **TUL1** | **Leonard** | **1.38** | **96** | | Pn | 11 22 37.4 | -0.7 |
| TUL1 | | | | IAmb_Lg | | 11 23 00.1 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.49** | **191** | Pn | Pb | 11 22 40.0 | -0.4 |
| **WMOK** | **Wichita Mounta** | **1.70** | **219** | Pn | Pn | 11 22 42.8 | +0.4 |
| **LOOK** | **Love County** | **2.09** | **173** | Pn | Pn | 11 22 48.2 | +0.4 |
| LOOK | | | | IAmb_Lg | | 11 23 22.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **X37A** | **Clayton** | **2.27** | **130** | IAmb_Lg | | 11 23 27.7 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.10** | **13** | IAmb_Lg | | 11 23 55.7 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **3.14** | **105** | Pn | Pn | 11 23 03.0 | +0.8 |
| **CBKS** | **Cedar Bluff** | **3.27** | **327** | Pn | Pn | 11 23 03.0 | -1.1 |
| **WHAR** | **Wooly Hollow** | **4.30** | **99** | Pn | Pn | 11 23 18.4 | +0.1 |
| **R40A** | **Maddies Statio** | **4.72** | **60** | Pn | Pn | 11 23 24.6 | +0.6 |
| R40A | | | | IAmb_Lg | | 11 24 39.3 | |
| | comp=Z,10nm,0.9s | | | | | | |

*NNC* ***05*** *11:31:24.7±9.6, 56.70N×62.65E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=82.2km s-min=41.8km az=161.0, Suspected Mining explosion.*
*MIRAS* ***05*** *11:31:25.6±0.0, 56.91N×61.46E, h0km, ML2.7/5*

**ISC 05 11:31:20.4±1.3, 57.07N±0.04×61.85E±0.06, h0km, n9, σ1§20/40, 6C-2D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAUR** | **Kamensk Uralsk** | **0.67** | **197** | *e*P | **Pb** | **11 31 34.3** | **-0.5** |
| | 110nm,0.3s,baz=177 | | | | | | |
| KAUR | | | | *e*P | **Pb** | **11 31 34.3** | **-0.5** |
| | baz=177 | | | | | | |
| KAUR | | | | *e*P | **Pb** | **11 31 34.3** | **-0.5** |
| | baz=177 | | | | | | |
| KAUR | | | | *e*S | **Sg** | **11 31 42.0** | **+0.3** |
| | baz=177 | | | | | | |
| KAUR | | | | *e*S | **Sg** | **11 31 42.0** | **+0.3** |
| | 197nm,0.1s,baz=177 | | | | | | |
| KAUR | | | | *e*S | **Sg** | **11 31 42.0** | **+0.3** |
| | baz=177 | | | | | | |
| KAUR | | | | *i* AML | AML | 11 31 43.2 | |
| | 553nm,0.1s | | | | | | |
| **SVE** | **Sverdlovsk** | **0.71** | **251** | *i* P | **Pg** | **11 31 34.1** | **+0.2** |
| | baz=260 | | | | | | |
| SVE | | | | *i* P | **Pg** | **11 31 34.1** | **+0.2** |
| | baz=260 | | | | | | |
| SVE | | | | *i* P | **Pg** | **11 31 34.1** | **+0.2** |
| | 74nm,0.3s,baz=260 | | | | | | |
| SVE | | | | *e*S | **Sg** | **11 31 40.6** | **-2.4** |
| | 118nm,0.4s,baz=260 | | | | | | |
| SVE | | | | *e*S | **Sg** | **11 31 40.6** | **-2.4** |
| | baz=260 | | | | | | |
| SVE | | | | *e*S | **Sg** | **11 31 40.6** | **-2.4** |
| | baz=260 | | | | | | |
| SVE | | | | *i* AML | AML | 11 31 46.0 | |
| | 170nm,0.8s | | | | | | |
| **ARU** | **Arti** | **1.92** | **252** | *e*P | **Pb** | **11 31 56.2** | **0.0** |
| | baz=254 | | | | | | |
| ARU | | | | *e*P | **Pb** | **11 31 56.2** | **0.0** |
| | 21nm,0.4s,baz=254 | | | | | | |
| ARU | | | | *e*P | **Pb** | **11 31 56.2** | **0.0** |
| | baz=254 | | | | | | |
| ARU | | | | *e*S | **Sn** | **11 32 19.5** | **+0.4** |
| | baz=254 | | | | | | |
| ARU | | | | *e*S | **Sn** | **11 32 19.5** | **+0.4** |
| | baz=254 | | | | | | |
| ARU | | | | *e*S | **Sn** | **11 32 19.5** | **+0.4** |
| | 43nm,0.3s,baz=254 | | | | | | |
| ARU | | | | *i* AML | AML | 11 32 22.2 | |
| | 228nm,0.4s | | | | | | |
| **PR7R** | **Sarany** | **2.23** | **313** | *e*P | **Pg** | **11 32 02.6** | **-0.4** |
| | baz=320 | | | | | | |
| PR7R | | | | *e*P | **Pg** | **11 32 02.6** | **-0.4** |
| | baz=320 | | | | | | |
| PR7R | | | | *e*P | **Pg** | **11 32 02.6** | **-0.4** |
| | 45nm,0.3s,baz=320 | | | | | | |
| PR7R | | | | *e*S | **Sg** | **11 32 31.9** | **+0.1** |
| | baz=320 | | | | | | |
| PR7R | | | | *e*S | **Sg** | **11 32 31.9** | **+0.1** |
| | baz=320 | | | | | | |
| PR7R | | | | *e*S | **Sg** | **11 32 31.9** | **+0.1** |
| | 117nm,0.3s,baz=320 | | | | | | |
| PR7R | | | | *i* AML | AML | 11 32 33.4 | |
| | 220nm,0.2s | | | | | | |
| **PR3R** | **Kungur** | **2.66** | **280** | *e*P | **Pb** | **11 32 07.2** | **-1.5** |
| | baz=284 | | | | | | |
| PR3R | | | | *e*P | **Pb** | **11 32 07.2** | **-1.5** |
| | baz=284 | | | | | | |
| PR3R | | | | *e*P | **Pb** | **11 32 07.2** | **-1.5** |
| | 9.1nm,0.2s,baz=284 | | | | | | |
| PR3R | | | | *e*S | **Sn** | **11 32 38.7** | **+1.4** |
| | 25nm,0.4s,baz=284 | | | | | | |
| PR3R | | | | *e*S | **Sn** | **11 32 38.7** | **+1.4** |
| | baz=284 | | | | | | |
| PR3R | | | | *e*S | **Sn** | **11 32 38.7** | **+1.4** |
| | baz=284 | | | | | | |
| PR3R | | | | *i* AML | AML | 11 32 41.4 | |
| | 54nm,0.8s | | | | | | |
| **PR0R** | **Verkhnechusovs** | **2.77** | **296** | *e*P | **Pb** | **11 32 11.0** | **+0.2** |
| | baz=301 | | | | | | |
| PR0R | | | | *e*P | **Pb** | **11 32 11.0** | **+0.2** |
| | baz=301 | | | | | | |
| PR0R | | | | *e*P | **Pb** | **11 32 11.0** | **+0.2** |
| | baz=301 | | | | | | |
| PR0R | | | | *e*S | **Sb** | **11 32 45.2** | **-0.1** |
| | baz=301 | | | | | | |
| PR0R | | | | *e*S | **Sb** | **11 32 45.2** | **-0.1** |
| | baz=301 | | | | | | |
| PR0R | | | | *e*S | **Sb** | **11 32 45.2** | **-0.1** |
| | baz=301 | | | | | | |
| **BRVK** | **Borovoye** | **6.29** | **126** | ⇓Pg | **Pb** | **11 33 06.6** | **-4.1** |
| | 1.3nm,0.8s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 11 34 23.1 | |
| | 1.5nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **7.02** | **200** | ⇑Pn | Pn | 11 33 08.0 | +3.6 |
| | 1.0nm,0.7s | | | | | | |
| AKTO | | | | ⇑Sn | **Sn** | **11 34 24.9** | **+0.1** |
| | 1.6nm,0.8s | | | | | | |
| AKTO | | | | ⇑Lg | Lg | 11 35 04.1 | |
| | 1.1nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **7.91** | **189** | ⇑Pn | **Pn** | **11 33 18.5** | **+2.0** |
| | 0.3nm,0.6s,baz=13,slow=12,SNR=14 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **11 34 45.9** | **-0.7** |
| | 0.3nm,0.3s,baz=18,slow=23,SNR=5.8 | | | | | | |
| AB31 | | | | ⇓Lg | Lg | 11 35 26.5 | |
| | 0.8nm,0.4s,baz=4.0,slow=25,SNR=3.0 | | | | | | |

**IDC 05 11:34:54.7±11.0, 27.28N×141.56E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.3/52, mbtmp3.2/3, Error ellipse: s-maj=437.2km s-min=36.0km az=69.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **47.47** | **189** | P | P | 11 43 31.1 | -0.3 |
| | 0.3nm,0.5s,baz=10.0,slow=8.5,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.92** | **309** | P | P | 11 43 50.0 | -0.2 |
| | 0.1nm,0.4s,baz=86,slow=9.4,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **51.19** | **189** | P | P | 11 43 59.9 | +0.1 |
| | 0.5nm,1.0s,baz=16,slow=11,SNR=4.2 | | | | | | |

*TUL* ***05*** *11:38:50.0±0.9, 36.32N±0.01×97.55W±0.02, h6km±7km, ML3.1, mb_Lg2.9/54(NEIC), Error ellipse: s-maj=2.3km s-min=1.5km az=57.0*

**NEIC 05 11:38:50.2±0.9, 36.32N±0.01×97.55W±0.02, h5km±7km, Error ellipse: s-maj=2.4km s-min=1.5km az=57.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CROK** | **Carrier** | **0.40** | **298** | Pg | Pg | 11 38 58.0 | +0.1 |
| CROK | | | | Sg | Sg | 11 39 03.7 | +0.7 |
| **BLOK** | **Blackwell** | **0.52** | **31** | Pg | Pg | 11 39 00.3 | +0.2 |
| **OK029** | **Liberty Lake** | **0.53** | **171** | Pg | Pg | 11 39 00.4 | +0.1 |
| OK029 | | | | Sg | Sg | 11 39 07.7 | +0.6 |
| **OK033** | **Mehan** | **0.57** | **119** | Pg | Pg | 11 39 01.0 | 0.0 |
| **GC02** | **Grant County #** | **0.59** | **335** | Pg | Pg | 11 39 01.4 | 0.0 |
| GC02 | | | | Sg | Sg | 11 39 09.6 | +0.5 |
| **BCOK** | **Bluff Creek, N** | **0.66** | **184** | Pg | Pg | 11 39 02.8 | -0.1 |
| BCOK | | | | Sg | Sg | 11 39 12.1 | +0.7 |
| **OK031** | **S. Brethren Rd** | **0.68** | **122** | Pg | Pg | 11 39 03.3 | 0.0 |
| OK031 | | | | Sg | Sg | 11 39 12.5 | +0.4 |
| **KAN13** | **South Haven SW** | **0.70** | **5** | Pg | Pg | 11 39 03.5 | 0.0 |
| **QUOK** | **Quay** | **0.70** | **102** | Pg | Pg | 11 39 03.5 | 0.0 |
| **KAN14** | **Manchester OK** | **0.72** | **333** | Pg | Pg | 11 39 03.8 | -0.1 |
| **OK030** | **Cody Creek RV** | **0.73** | **122** | Pg | Pg | 11 39 04.2 | -0.1 |
| OK030 | | | | Sg | Sg | 11 39 14.2 | +0.5 |
| **KAN17** | **Caldwell West** | **0.74** | **347** | Pg | Pg | 11 39 04.3 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.74** | **114** | Pg | Pg | 11 39 04.4 | 0.0 |
| **OK025** | **Westminster Rd** | **0.76** | **167** | Pg | Pg | 11 39 04.5 | -0.1 |
| OK025 | | | | Sg | Sg | 11 39 15.0 | +0.5 |
| **KAN05** | **Bluff City Nor** | **0.83** | **342** | | Pg | 11 39 05.9 | -0.2 |
| **KAN01** | **Argonia South** | **0.85** | **349** | | Pg | 11 39 06.2 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.91** | **175** | | Pg | 11 39 07.2 | -0.3 |
| **KAN10** | **Anthony SW Sta** | **0.92** | **332** | | Pg | 11 39 07.2 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **0.92** | **174** | Pg | Pg | 11 39 07.5 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **0.97** | **340** | | Pg | 11 39 08.3 | -0.4 |
| **KAN16** | **Harper SW Stat** | **0.99** | **336** | Pg | Pg | 11 39 08.9 | -0.4 |
| **OK035** | **E0210 Rd and N** | **1.01** | **293** | Pg | Pg | 11 39 09.0 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.03** | **54** | | Pg | 11 39 09.4 | -0.5 |
| **FNO** | **Franklin** | **1.07** | **173** | Pg | Pg | 11 39 10.0 | -0.6 |
| **U32A** | **Winter Ranch,** | **1.17** | **273** | | Pg | 11 39 11.8 | -0.8 |
| **W35A** | **Tecumseh** | **1.29** | **154** | Pn | Pn | 11 39 13.7 | -1.1 |
| **TUL1** | **Leonard** | **1.48** | **105** | Pn | Pn | 11 39 16.8 | -0.7 |
| **X34A** | **Smith Ranch, M** | **1.73** | **188** | | Pb | 11 39 21.8 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.87** | **213** | | Pn | 11 39 22.7 | -0.2 |
| WMOK | | | | IAmb_Lg | | 11 39 52.3 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **2.29** | **337** | Pn | Pn | 11 39 29.2 | +0.5 |
| **LOOK** | **Love County** | **2.34** | **172** | Pn | Pn | 11 39 29.4 | +0.1 |
| LOOK | | | | IAmb_Lg | | 11 40 06.9 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.48** | **133** | Pn | Pn | 11 39 30.8 | -0.3 |
| X37A | | | | IAmb_Lg | | 11 40 11.8 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.56** | **86** | Pn | Pn | 11 39 31.9 | -0.4 |
| **KSU1** | **Kansas State U** | **2.88** | **15** | | Pn | 11 39 37.0 | +0.3 |
| **HHAR** | **Hobbs** | **2.92** | **90** | | Pn | 11 39 37.1 | -0.1 |
| **CBKS** | **Cedar Bluff** | **3.04** | **326** | | Pn | 11 39 39.6 | +0.7 |
| **W39A** | **Magazine** | **3.26** | **109** | | Pn | 11 39 42.2 | +0.2 |
| **S39A** | **Bolivar** | **3.65** | **67** | | Pn | 11 39 47.6 | +0.3 |
| S39A | | | | IAmb_Lg | | 11 40 51.3 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.66** | **248** | IAmb_Lg | | 11 40 47.9 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.70** | **117** | | Pn | 11 39 48.8 | +0.8 |
| **Z38A** | **Mt. Pleasant** | **3.71** | **145** | Pn | Pn | 11 39 47.5 | -0.6 |
| **U40A** | **Yellville** | **3.79** | **88** | Pn | Pn | 11 39 49.0 | -0.3 |
| U40A | | | | IAmb_Lg | | 11 40 50.4 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.07** | **206** | Pn | Pn | 11 39 53.0 | -0.1 |
| ABTX | | | | IAmb_Lg | | 11 41 01.4 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.26** | **114** | | Pn | 11 39 55.3 | -0.4 |
| X40A | | | | IAmb_Lg | | 11 41 15.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.32** | **179** | Pn | Pn | 11 39 56.8 | +0.3 |
| **MGMO** | **Mountain Grove** | **4.32** | **77** | Pn | Pn | 11 39 56.5 | -0.1 |
| MGMO | | | | IAmb_Lg | | 11 41 15.3 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.40** | **102** | Pn | Pn | 11 39 57.4 | -0.2 |
| **W41B** | **Gary Mavity, V** | **4.46** | **103** | Pn | Pn | 11 39 59.7 | +1.2 |
| **WLAR** | **White Oak Lake** | **4.49** | **124** | Pn | Pn | 11 39 59.1 | +0.3 |
| WLAR | | | | IAmb_Lg | | 11 41 17.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.58** | **43** | IAmb_Lg | | 11 41 12.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.65** | **63** | Pn | Pn | 11 40 00.7 | -0.3 |
| **N35A** | **Tabor** | **4.78** | **18** | Pn | Pn | 11 40 02.7 | -0.1 |
| N35A | | | | IAmb_Lg | | 11 41 34.6 | |
| | comp=Z,39nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.84** | **305** | IAmb_Lg | | 11 41 32.4 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.88** | **243** | IAmb_Lg | | 11 41 34.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **Z41A** | **Richland Creek** | **4.96** | **127** | IAmb_Lg | | 11 41 37.2 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.10** | **355** | IAmb_Lg | | 11 41 33.9 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.24** | **80** | IAmb_Lg | | 11 41 40.5 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.33** | **69** | IAmb_Lg | | 11 41 47.4 | |
| | comp=Z,37nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.40** | **52** | Pn | Pn | 11 40 11.6 | +0.2 |
| P40A | | | | IAmb_Lg | | 11 41 44.3 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **5.52** | **180** | IAmb_Lg | | 11 41 59.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.57** | **280** | Pn | Pn | 11 40 14.6 | +0.7 |
| **N38A** | **Joes South For** | **5.60** | **36** | Pn | Pn | 11 40 13.9 | -0.3 |
| N38A | | | | IAmb_Lg | | 11 41 59.2 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.71** | **9** | IAmb_Lg | | 11 41 56.3 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.75** | **83** | IAmb_Lg | | 11 41 55.6 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.12** | **199** | IAmb_Lg | | 11 42 21.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.52** | **285** | Pn | Pn | 11 40 27.8 | +0.8 |
| **Q24A** | **Divide** | **6.58** | **296** | Pn | Pn | 11 40 28.0 | +0.1 |
| Q24A | | | | IAmb_Lg | | 11 42 20.8 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.44** | **5** | Pn | Pn | 11 40 38.7 | -0.7 |
| **L40A** | **Anamosa** | **7.55** | **39** | IAmb_Lg | | 11 42 50.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **OLIL** | **Olney** | **7.89** | **69** | IAmb_Lg | | 11 43 12.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **8.66** | **218** | Pn | Pn | 11 40 55.7 | -0.5 |
| **TX31** | **Lajitas Ar. Si** | **8.66** | **218** | Pn | Pn | 11 40 55.5 | -0.7 |
| **TX32** | **Lajitas Array** | **8.66** | **218** | Pn | Pn | 11 40 56.5 | +0.3 |
| **I40A** | **Norwalk** | **9.24** | **33** | IAmb_Lg | | 11 43 41.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **F36A** | **Milaca** | **10.01** | **16** | Pn | Pn | 11 41 14.2 | -0.3 |

**GUC 05 11:38:53.7±0.6, 36.18S×73.88W, h18km±5km, ML3.8, 3C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BI05** | **Punta Hualpn** | **0.80** | **136** | ⇑*i*P | Pb | 11 39 07.8 | -1.3 |
| BI05 | | | | *e*S | Sb | 11 39 17.6 | -1.9 |
| BI05 | | | | IAML | | 11 39 18.4 | |
| | comp=E,5μm,0.2s | | | | | | |
| **GO05** | **Huala** | **1.97** | **54** | *e*P | Pn | 11 39 25.1 | -1.2 |
| GO05 | | | | *e*S | Sn | 11 39 50.9 | +0.4 |
| GO05 | | | | IAML | | 11 39 57.8 | |
| | comp=N,690nm,0.3s | | | | | | |
| **ML02** | **Panimavida** | **2.04** | **79** | *e*P | Pn | 11 39 27.2 | +0.1 |
| ML02 | | | | *e*S | Sn | 11 39 53.0 | +0.8 |
| ML02 | | | | IAML | | 11 39 58.2 | |
| | comp=E,3μm,0.8s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.88** | **62** | *e*P | Pn | 11 39 38.4 | -0.5 |
| BO02 | | | | *e*S | Sn | 11 40 14.1 | +1.0 |
| BO02 | | | | IAML | | 11 40 23.8 | |
| | comp=N,557nm,0.2s | | | | | | |
| **BO01** | **Tunca** | **2.90** | **53** | *e*P | Pn | 11 39 39.4 | +0.4 |
| BO01 | | | | *e*S | Sn | 11 40 14.8 | +1.3 |
| BO01 | | | | IAML | | 11 40 28.7 | |
| | comp=N,182nm,0.4s | | | | | | |
| **LC01** | **Cunco** | **3.15** | **150** | *e*P | Pn | 11 39 42.0 | -0.4 |
| LC01 | | | | *e*S | Sn | 11 40 18.9 | -0.7 |
| LC01 | | | | IAML | | 11 40 33.5 | |
| | comp=E,114nm,0.5s | | | | | | |
| **MT01** | **Popeta** | **3.16** | **44** | *e*P | Pn | 11 39 41.8 | -0.8 |
| MT01 | | | | *e*S | Sn | 11 40 20.4 | +0.5 |
| MT01 | | | | IAML | | 11 40 37.6 | |
| | comp=E,150nm,0.7s | | | | | | |
| **MT09** | **Talagante** | **3.37** | **46** | ⇓*e*P | Pn | 11 39 45.9 | +0.3 |
| MT09 | | | | *e*S | Sn | 11 40 22.6 | -2.7 |
| MT09 | | | | IAML | | 11 40 49.4 | |
| | comp=N,258nm,0.6s | | | | | | |
| **LR03** | **Panguipulli** | **3.66** | **161** | *e*P | Pn | 11 39 50.2 | +0.8 |
| **MT05** | **Renca** | **3.79** | **44** | *e*P | Pn | 11 39 51.5 | +0.1 |
| MT05 | | | | *e*S | Sn | 11 40 35.8 | +0.2 |
| **ROCH** | **El Roble** | **3.98** | **37** | ⇑*e*P | Pn | 11 39 53.8 | -0.3 |
| **VA06** | **Catapilco** | **4.19** | **31** | ⇑*e*P | Pn | 11 39 56.1 | -0.6 |

*HEL* ***05*** *11:44:09.6±0.1, 63.12N×27.73E, h0km, ML2.0, Explosion*
*IDC* ***05*** *11:44:10.0±1.6, 63.06N×27.89E, h0km, mb1 3.3/2, mb1mx2.9/37, mbtmp3.4/2, ML1.7/3, Error ellipse:

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OUL | | | | SG | Sb | 11 45 16.2 | +0.1 | |
| **VAF** | **Ylistaro** | **2.22** | **271** | PG | Pb | **11 44 50.1** | **-0.9** | |
| VAF | | | | MSG | | 11 45 17.8 | | |
| | comp=Z,11nm,0.2s | | | | | | | |
| VAF | | | | SG | Sg | **11 45 20.6** | **-0.6** | |
| **VJF** | **Virojoki** | **2.57** | **180** | PB | Pn | **11 44 54.0** | **+1.1** | |
| VJF | | | | MSG | | 11 45 26.0 | | |
| | comp=Z,4.5nm,0.2s | | | | | | | |
| VJF | | | | SB | Sb | **11 45 28.5** | **-0.6** | |
| **PVF** | **Pernaja** | **2.69** | **198** | PB | Pn | **11 44 56.8** | **+2.4** | |
| | baz=22 | | | | | | | |
| PVF | | | | MSG | | 11 45 29.9 | | |
| | comp=Z,3.2nm,0.2s | | | | | | | |
| PVF | | | | SG | Sb | **11 45 32.9** | **+0.5** | |
| **MSF** | **Maaselka** | **2.90** | **12** | PB | Pn | **11 44 57.4** | **+0.1** | |
| | baz=195 | | | | | | | |
| MSF | | | | SB | Sn | **11 45 34.9** | **+2.1** | |
| **KU6** | **Riekki** | **3.11** | **18** | PB | Pn | **11 45 00.5** | **+0.3** | |
| | baz=203 | | | | | | | |
| KU6 | | | | MSG | | 11 45 39.8 | | |
| | comp=Z,5.3nm,0.2s | | | | | | | |
| KU6 | | | | SB | Sn | **11 45 40.2** | **+2.2** | |
| **BURU** | **Burvik** | **3.11** | **301** | PB | Pb | **11 45 04.3** | **-1.9** | |
| **MEF** | **Metsahovi** | **3.26** | **209** | PG | Pb | **11 45 09.3** | **+0.6** | |
| **TOF** | **Tornio** | **3.30** | **337** | PB | Pn | **11 45 04.5** | **+1.7** | |
| | baz=149 | | | | | | | |
| **RAF** | **Rauma** | **3.43** | **235** | PB | Pb | **11 45 09.7** | **-1.8** | |
| **RNF** | **Rovaniemi** | **3.58** | **350** | PB | Pn | **11 45 10.5** | **+3.7** | |
| RNF | | | | SB | Sb | **11 45 56.1** | **-2.0** | |
| **PAJU** | **Pajala** | **4.36** | **337** | PN | Pn | **11 45 18.2** | **+0.7** | |
| PAJU | | | | SN | Sn | **11 46 09.8** | **+0.8** | |
| **HEMU** | **Hemsoen** | **4.37** | **269** | PN | Pn | **11 45 18.4** | **+0.8** | |
| **KLF** | **Kolari** | **4.42** | **342** | PN | Pn | **11 45 18.7** | **+0.5** | |
| | baz=158 | | | | | | | |
| KLF | | | | SN | Sn | **11 46 10.2** | **0.0** | |
| **ARCES** | **ARCESS Array B** | **6.51** | **354** | Pn | Pn | **11 45 46.1** | **-0.8** | |
| | baz=166,slow=14,SNR=11 | | | | | | | |
| ARCES | | | | Sn | Sn | **11 46 58.7** | **-3.2** | |
| | baz=172,slow=22,SNR=1.3 | | | | | | | |
| **HFS** | **Hagfors** | **7.24** | **252** | Pn | Pn | **11 45 57.3** | **+0.4** | |
| | comp=Z,0.1nm,0.3s,baz=79,slow=11,SNR=1.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **7.94** | **262** | Pn | Pn | **11 46 06.9** | **+0.4** | |
| | comp=Z,0.0nm,0.3s,baz=69,slow=16,SNR=1.2 | | | | | | | |

*IDC **05** 12:06:55.7±5.5,5°.69S×112°.48E,h579km±84km,mb2.8/5, mb1 3.0/6,mb1mx2.5/43,mbtmp3.9/6,Error ellipse: s-maj=135.9km s-min=16.2km az=52.0*

**ISC 05 12:06:53.9±2.6,5.7S±0°.9×111°2E±°,h550km,n6,σ0s47/6, mb3.6/5,Java Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **17.83** | **135** | P | | **P** | | **12 10 29.9** | **-0.3** |
| | 0.4nm,0.3s,baz=307,slow=8.4,SNR=12 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.56** | **126** | P | | **P** | | **12 11 39.9** | **+0.1** |
| | 1.0nm,0.7s,baz=306,slow=9.1,SNR=19 | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.31** | **133** | P | | **P** | | **12 11 54.9** | **-0.2** |
| | 0.6nm,0.4s,baz=306,slow=8.6,SNR=16 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.44** | **331** | P | | **P** | | **12 11 56.6** | **+0.4** |
| | 0.5nm,0.3s,baz=166,slow=7.5,SNR=6.2 | | | | | | | | |
| **STKA** | **Stephens Creek** | **37.70** | **137** | P | | **P** | | **12 13 23.4** | **+0.4** |
| | 2.5nm,0.6s,baz=329,slow=12,SNR=4.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.68** | **336** | P | | **P** | | **12 15 58.5** | **-0.4** |
| | 0.4nm,0.3s,baz=145,slow=7.5,SNR=17 | | | | | | | | |

*FUNV **05** 12:35:06.2,10°.71N×62°.34W,h24km,MW4.0*
*TRN **05** 12:35:06.1,10°.72N×62°.42W,h60km,MD3.8*

**ISC 05 12:35:05.6±1.3,10.71N±0°.05×62.41W±0°.04,h67km±19km, n28,σ1s55/46,1C,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRUV** | **Carupano** | **0.81** | **268⇑** | *e*P | | **Pn** | | **12 35 22.0** | **+0.4** |
| CRUV | | | | *e*S | | **Sn** | | **12 35 33.3** | **-0.1** |
| **TRN** | **Trinidad (W)** | **0.99** | **93** | *e*P | | **Pn** | | **12 35 24.2** | **+0.4** |
| TRN | | | | *e*S | | **Sn** | | **12 35 36.6** | **-0.7** |
| **TPP** | **Pointe-a-Pierr** | **1.02** | **112** | *e*P | | **Pn** | | **12 35 25.4** | **+1.2** |
| **TBH** | **Brigand Hill** | **1.34** | **99** | *e*P | | **Pn** | | **12 35 28.9** | **+0.6** |
| **GRFF** | **Grenada Fort F** | **1.49** | **26** | *e*P | | **Pn** | | **12 35 31.1** | **+0.8** |
| GRFF | | | | *e*S | | **Sn** | | **12 35 49.0** | **+0.1** |
| **COAV** | **Cumanacoa** | **1.50** | **249** | *e*P | | **Pn** | | **12 35 32.0** | **+1.4** |
| **GRGR** | **Grenville** | **1.60** | **27** | *e*P | | **Pn** | | **12 35 32.5** | **+0.7** |
| GRGR | | | | *e*S | | **Sn** | | **12 35 51.7** | **+0.1** |
| **CUMV** | **Cumana_UDO** | **1.78** | **261** | *e*P | | **Pn** | | **12 35 35.9** | **+1.7** |
| CUMV | | | | *e*S | | **Sn** | | **12 35 57.8** | **+1.9** |
| **TOSP** | **Speyside** | **1.93** | **72** | *e*P | | **Pn** | | **12 35 36.5** | **+0.3** |
| TOSP | | | | *e*S | | **Sn** | | **12 36 00.9** | **+1.4** |
| **GCMP** | **Grenada, Carri** | **2.01** | **28** | *e*P | | **Pn** | | **12 35 38.0** | **+0.6** |
| GCMP | | | | *e*S | | **Sn** | | **12 36 01.5** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **2.25** | **257** | *e*P | | **Pn** | | **12 35 41.7** | **+1.1** |
| PCRV | | | | *e*S | | **Sn** | | **12 36 07.9** | **+0.4** |
| **SVB** | **Belmont** | **2.79** | **24** | *e*P | | **Pn** | | **12 35 48.9** | **+0.9** |
| SVB | | | | *e*S | | **Sn** | | **12 36 20.2** | **-0.3** |
| **PRGV** | **PARIAGUAN** | **2.93** | **229** | *e*P | | **Pn** | | **12 35 50.6** | **+0.7** |
| PRGV | | | | *e*S | | **Sn** | | **12 36 24.4** | **+0.4** |
| **MCLT** | **Moule a Chique** | **3.31** | **26** | *e*P | | **Pn** | | **12 35 55.7** | **+0.7** |
| MCLT | | | | *e*S | | **Sn** | | **12 36 32.5** | **-0.8** |
| **SLBI** | **Saint Lucia, B** | **3.58** | **23** | *e*P | | **Pn** | | **12 36 00.2** | **+1.5** |
| SLBI | | | | *e*S | | **Sn** | | **12 36 39.4** | **-0.5** |
| **BIRV** | **Birongo** | **3.80** | **267** | *e*P | | **Pn** | | **12 36 03.2** | **+1.5** |
| BIRV | | | | *e*S | | **Sn** | | **12 36 46.0** | **+0.7** |
| **MPOM** | **Morne Pois Mar** | **4.01** | **22** | *e*P | | **Pn** | | **12 36 05.1** | **+0.5** |
| MPOM | | | | *e*S | | **Sn** | | **12 36 48.4** | **-2.0** |
| **DSLB** | **Salisbury** | **4.80** | **11** | *e*P | | **Pn** | | **12 36 16.6** | **+1.2** |
| **DSLB** | **Salisbury** | **4.80** | **11** | *e*S | | **Sn** | | **12 37 07.8** | **-2.0** |
| **CACV** | **CAICARA DEL OR** | **5.14** | **233** | *e*S | | Sn | | 12 37 07.2 | -11 |
| **BENV** | **Beln** | **5.16** | **262** | *e*P | | **Pn** | | **12 36 21.3** | **+0.9** |
| BENV | | | | *e*S | | **Sn** | | **12 37 17.3** | **-1.4** |
| **TURV** | **Turiamo** | **5.35** | **268** | *e*P | | **Pn** | | **12 36 24.3** | **+1.5** |
| TURV | | | | *e*S | | **Sn** | | **12 37 20.8** | **-2.3** |
| **BAUV** | **El Baul** | **5.82** | **253** | *e*P | | **Pn** | | **12 36 29.9** | **+0.5** |
| **BAUV** | **El Baul** | **5.82** | **253** | *e*P | | **Pn** | | **12 36 29.8** | **+0.4** |
| BAUV | | | | *e*S | | **Sn** | | **12 37 32.7** | **-2.1** |
| **MAPV** | **Macapo** | **6.02** | **262** | *e*P | | **Pn** | | **12 36 32.0** | **-0.1** |
| MAPV | | | | *e*S | | **Sn** | | **12 37 37.8** | **-1.8** |
| **ANBD** | **Bethesda, Anti** | **6.33** | **6** | *e*P | | **Pn** | | **12 36 38.1** | **+1.7** |
| **ANBD** | **Bethesda, Anti** | **6.33** | **6** | *e*S | | **Sn** | | **12 37 43.5** | **-3.9** |
| **PAYV** | **Puerto Ayacuch** | **7.39** | **225** | *e*P | | **Pn** | | **12 36 51.4** | **+0.6** |
| PAYV | | | | *e*S | | **Sn** | | **12 38 07.7** | **-5.5** |

*IDC **05** 12:36:49.0±0.8,6°.75N×72°.93W,h165km±12km,mb2.9/3, mb1 3.4/5,mb1mx3.1/33,mbtmp3.5/5,Error ellipse: s-maj=40.6km s-min=7.8km az=132.0*
*RSNC **05** 12:36:50.4±1.0,6°.82N×73°.17W,h144km±4km,ML3.3, Mw3.7*

**ISC 05 12:36:48.5±0.8,6°.84N±0°.03×73°.12W±0°.03,h159km±6km, n37,σ1s66/68,mb3.2/3,2C-3D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.25** | **194** | *e*S | | **Sn** | | **12 37 24.7** | **-2.3** |
| BARC | | | | *i* | | | | 12 37 26.6 | |
| | comp=Z,901nm,0.2s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.65** | **40⇑** | *i*P | | **Pn** | | **12 37 13.1** | **+0.8** |
| PAMC | | | | *e*S | | **Sn** | | **12 37 29.9** | **-0.5** |
| PAMC | | | | *i* | | | | 12 37 32.6 | |
| | comp=Z,514nm,0.4s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **178⇓** | *i*P | | **Pn** | | **12 37 14.2** | **-0.1** |
| RUSC | | | | *e*S | | **Sn** | | **12 37 32.3** | **-1.7** |
| RUSC | | | | *i* | | | | 12 37 34.1 | |
| | comp=Z,118nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.36** | **257** | *e*P | | **Pn** | | **12 37 16.7** | **-0.7** |
| PTBC | | | | *e*S | | **Sn** | | **12 37 37.5** | **-1.9** |
| PTBC | | | | *i* | | | | 12 37 44.0 | |
| | comp=Z,146nm,0.2s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.38** | **107⇓** | *i*P | | **Pn** | | **12 37 18.6** | **+1.0** |
| TAMC | | | | *e*S | | **Sn** | | **12 37 39.4** | **-0.6** |
| TAMC | | | | *i* | | | | 12 37 39.5 | |
| | comp=Z,97nm,0.4s | | | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **352⇑** | *e*P | | **Pn** | | **12 37 18.3** | **+0.3** |
| OCAC | | | | *e*S | | **Sn** | | **12 37 40.1** | **-0.6** |
| OCAC | | | | *i* | | | | 12 37 45.4 | |
| | comp=Z,478nm,0.2s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.51** | **219⇓** | *e*P | | **Pn** | | **12 37 19.2** | **+0.2** |
| SPBC | | | | *e*S | | **Sn** | | **12 37 41.2** | **-1.2** |
| SPBC | | | | *i* | | | | 12 37 46.3 | |
| | comp=Z,247nm,0.3s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.84** | **291** | *e*P | | **Pn** | | **12 37 22.8** | **+0.3** |
| ZARC | | | | *e*S | | **Sn** | | **12 37 47.2** | **-1.3** |
| ZARC | | | | *i* | | | | 12 37 53.8 | |
| | comp=Z,148nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **234** | *e*P | | **Pn** | | **12 37 26.0** | **0.0** |
| NORC | | | | *e*S | | **Sn** | | **12 37 53.1** | **-1.8** |
| NORC | | | | *i* | | | | 12 37 58.9 | |
| | comp=Z,136nm,0.2s | | | | | | | | |
| **SMLC** | **San Martn de** | **2.17** | **334** | *e*P | | **Pn** | | **12 37 26.3** | **+0.2** |
| SMLC | | | | *e*S | | **Sn** | | **12 37 55.2** | **0.0** |
| SMLC | | | | *i* | | | | 12 38 02.7 | |
| | comp=Z,131nm,0.1s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.28** | **195** | *e*P | | **Pn** | | **12 37 28.3** | **+0.4** |
| CHIC | | | | *e*S | | **Sn** | | **12 37 57.4** | **-0.8** |
| CHIC | | | | *i* | | | | 12 38 01.2 | |
| | comp=Z,111nm,0.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | P | | **Pn** | | **12 37 30.1** | **+1.9** |
| | comp=Z,22nm,0.3s,baz=178,slow=2.9,SNR=60 | | | | | | | | |
| ROSC | | | | S | | **Sn** | | **12 38 00.9** | **+1.9** |
| | comp=Z,88nm,0.3s,baz=41,slow=22,SNR=9.8 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | *e*P | | **Pn** | | **12 37 29.7** | **+1.4** |
| ROSC | | | | *e*S | | **Sn** | | **12 37 58.2** | **-0.8** |
| ROSC | | | | *i* | | | | 12 38 04.1 | |
| | comp=Z,284nm,0.3s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.48** | **255** | *e*P | | **Pn** | | **12 37 31.9** | **+1.7** |
| HELC | | | | *e*S | | **Sn** | | **12 38 01.1** | **-1.1** |
| HELC | | | | *i* | | | | 12 38 09.3 | |
| | comp=Z,70nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.56** | **291** | *e*P | | **Pn** | | **12 37 30.2** | **-0.6** |
| UREC | | | | *e*S | | **Sn** | | **12 38 01.4** | **-2.1** |
| UREC | | | | *i* | | | | 12 38 12.7 | |
| | comp=Z,111nm,0.2s | | | | | | | | |
| **SOCV** | **Socops** | **2.67** | **57** | *e*P | | **Pn** | | **12 37 31.9** | **-0.2** |
| SOCV | | | | *e*S | | **Sn** | | **12 38 03.5** | **-2.4** |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **234** | *e*P | | **Pn** | | **12 37 34.4** | **+0.8** |
| GUY2C | | | | *e*S | | **Sn** | | **12 38 08.4** | **0.0** |
| GUY2C | | | | *i* | | | | 12 38 16.6 | |
| | comp=Z,90nm,0.4s | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.77** | **192** | *e*P | | **Pn** | | **12 37 33.9** | **+0.3** |
| VILC | | | | *e*S | | **Sn** | | **12 38 07.5** | **-0.9** |
| VILC | | | | *i* | | | | 12 38 18.0 | |
| | comp=Z,5μm,0.4s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **159** | *e*P | | **Pn** | | **12 37 33.1** | **-0.7** |
| PTGC | | | | *e*Pg | | | | 12 37 34.3 | |
| PTGC | | | | *e*S | | **Sn** | | **12 38 05.7** | **-3.2** |
| PTGC | | | | *i* | | | | 12 38 09.1 | |
| | comp=Z,58nm,0.2s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **252** | *e*P | | **Pn** | | **12 37 37.5** | **+0.7** |
| CBOC | | | | *e*S | | **Sn** | | **12 38 13.0** | **-1.2** |
| CBOC | | | | *i* | | | | 12 38 21.6 | |
| | comp=Z,20nm,0.4s | | | | | | | | |
| **DBBC** | **Dabeiba** | **3.07** | **274** | *e*P | | **Pn** | | **12 37 37.9** | **+0.7** |
| DBBC | | | | *e*S | | **Sn** | | **12 38 11.7** | **-3.3** |
| DBBC | | | | *i* | | | | 12 38 17.0 | |
| | comp=Z,160nm,0.4s | | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.17** | **308** | *e*P | | **Pn** | | **12 37 37.4** | **-1.0** |
| MOTC | | | | *e*S | | **Sn** | | **12 38 15.5** | **-1.6** |
| MOTC | | | | *i* | | | | 12 38 17.9 | |
| | comp=Z,31nm,0.3s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | P | | **Pn** | | **12 37 39.8** | **+0.9** |
| | comp=Z,8.4nm,0.3s,baz=256,slow=1.6,SNR=19 | | | | | | | | |
| SDV | | | | S | | **Sn** | | **12 38 17.2** | **-0.9** |
| | comp=Z,14nm,0.3s,baz=38,slow=20,SNR=25 | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *e*P | | **Pn** | | **12 37 39.6** | **+0.7** |
| SDV | | | | *e*S | | **Sn** | | **12 38 16.6** | **-1.5** |
| **ANIL** | **Santa Ana** | **3.25** | **224** | *e*P | | **Pn** | | **12 37 40.8** | **+1.0** |
| ANIL | | | | *e*S | | **Sn** | | **12 38 18.1** | **-1.4** |
| ANIL | | | | *i* | | | | 12 38 25.0 | |
| | comp=Z,293nm,0.4s | | | | | | | | |
| **PRAC** | **Prado** | **3.57** | **210** | *e*P | | **Pn** | | **12 37 43.8** | **+0.3** |
| PRAC | | | | *e*S | | **Sn** | | **12 38 25.8** | **-0.4** |
| PRAC | | | | *i* | | | | 12 38 29.2 | |
| | comp=Z,108nm,0.3s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.60** | **216** | *e*P | | **Pn** | | **12 37 44.3** | **+0.4** |
| ORTC | | | | *e*S | | **Sn** | | **12 38 26.2** | **-0.7** |
| ORTC | | | | *i* | | | | 12 38 33.7 | |
| | comp=Z,64nm,0.4s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.66** | **326** | *e*P | | **Pn** | | **12 37 44.3** | **-0.4** |
| SJCC | | | | *e*S | | **Sn** | | **12 38 25.4** | **-3.0** |
| SJCC | | | | *i* | | | | 12 38 33.0 | |
| | comp=Z,43nm,0.3s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.68** | **239** | *e*P | | **Pn** | | **12 37 45.8** | **+0.7** |
| PLMC | | | | *e*S | | **Sn** | | **12 38 26.9** | **-2.1** |
| PLMC | | | | *i* | | | | 12 38 34.1 | |
| | comp=Z,25nm,0.3s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.16** | **3** | *e*P | | **Pn** | | **12 37 50.4** | **-0.8** |
| CRJC | | | | *e*S | | **Sn** | | **12 38 35.9** | **-4.2** |
| CRJC | | | | *i* | | | | 12 38 41.2 | |
| | comp=Z,43nm,0.2s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.72** | **189** | *e*P | | **Pn** | | **12 37 56.9** | **-1.6** |
| MACC | | | | *e*S | | **Sn** | | **12 38 48.3** | **-4.8** |
| MACC | | | | *i* | | | | 12 38 53.0 | |
| | comp=Z,21nm,0.4s | | | | | | | | |
| **MARP** | **Paez Belalcaza** | **4.87** | **216** | *e*P | | **Pn** | | **12 38 00.7** | **0.0** |
| MARP | | | | *e*S | | **Sn** | | **12 38 51.5** | **-5.5** |
| MARP | | | | *i* | | | | 12 39 02.5 | |
| | comp=Z,3.5nm,0.2s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.45** | **312** | P | | **P** | | **12 43 39.4** | **+1.0** |
| | comp=Z,0.2nm,0.7s,baz=123,slow=9.9,SNR=2.5 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.47** | **315** | P | | **P** | | **12 45 39.8** | **+1.8** |
| | comp=Z,0.3nm,0.5s,baz=134,slow=11,SNR=2.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.25** | **340** | P | | **P** | | **12 47 00.6** | **+0.9** |
| | comp=Z,0.5nm,0.6s,baz=135,slow=6.6,SNR=13 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | | **PKPbc** | | **12 56 18.4** | **-0.6** |
| | comp=Z,0.2nm,0.6s,baz=120,slow=3.2,SNR=1.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.34** | **241** | PKPbc | | **PKPbc** | | **12 56 21.6** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=104,slow=3.1,SNR=1.5 | | | | | | | | |

**MAN 05 12:44:25.2,13°.06N×120°.23E,h64km,mb3.9,ML2.6, MS2.2,1D,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.83** | **58⇓** | *e*P | | | Pn | 12 44 42.9 | +1.5 |
| PGP | | | | *i* S | | | Sn | 12 44 55.5 | +2.3 |

*TEH **05** 12:53:49.8,28°.64N×52°.39E,h11km,ML3.9*
*IDC **05** 12:53:49.0±1.2,28°.67N×52°.44E,h0km,mb4.0/12, mb1 4.0/14,mb1mx3.8/42,mbtmp4.0/14,ML3.9/2,MS3.3/7, Ms1 3.3/7,ms1mx2.8/85,Error ellipse: s-maj=27.8km s-min=18.9km az=155.0*
*NEIC **05** 12:53:51.4±1.9,28°.66N±0°.05×52°.38E±0°.06,h10km±1km, mb4.0/20,mb_Lg3.9(TEH),Error ellipse: s-maj=10.5km s-min=6.9km az=220.0*
*DSN **05** 12:53:52.6±0.9,28°.60N×52°.45E,h20km,ML3.7/11,Error ellipse: s-maj=12.4km s-min=7.0km az=6.0*
*OMAN **05** 12:53:55.3±0.9,28°.34N×52°.42E,h16km,mb5.3/6,ml3.9/9, Error ellipse: s-maj=11.1km s-min=6.7km az=26.0*

**ISC 05 12:53:51.6±0.5,28.66N±0°.04×52.43E±0°.04,h16km,n163, σ1s22/173,mb4.0/15,MS3.6/3,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **QIR1** | **Qir** | **0.57** | **109** | *e*Pg | | **Pg** | | **12 54 00.8** | **-2.1** |
| QIR1 | | | | *e*Sg | | **Sg** | | **12 54 10.8** | **+0.3** |
| QIR1 | | | | *e* | | | | 12 54 14.0 | |
| | comp=Z,54μm,0.5s | | | | | | | | |
| **GHIR** | **Ghir-Karzin** | **0.62** | **127** | *e*Pg | | **Pg** | | **12 54 01.6** | **-2.2** |
| **SHI** | **Shiraz** | **0.98** | **4** | *e*Sg | | **Sb** | | **12 54 24.3** | **+1.3** |
| SHI | | | | *e*Pg | | **Pb** | | **12 54 09.0** | **-1.3** |
| SHI | | | | *e* | | | | 12 54 31.3 | |
| | comp=Z,24μm,0.9s | | | | | | | | |
| **JHRM** | **Jahrom** | **1.02** | **99** | *e*Pg | | **Pb** | | **12 54 10.6** | **-0.3** |
| **JHRM** | **Jahrom** | **1.02** | **99** | Pg | | **Pb** | | **12 54 11.0** | **+0.1** |
| **KAZ1** | **Kazerun** | **1.18** | **324** | *e*Pg | | **Pn** | | **12 54 12.6** | **-1.0** |
| KAZ1 | | | | *e* | | | | 12 54 42.2 | |
| | comp=Z,72μm,0.5s | | | | | | | | |
| **KAZ1** | **Kazerun** | **1.18** | **324** | | | **Pb** | | **12 54 14.5** | **+0.8** |
| **LMD1** | **Lamerd** | **1.47** | **154** | *e*Pg | | **Pn** | | **12 54 17.9** | **+0.5** |
| **LMD1** | **Lamerd** | **1.47** | **154** | Pg | | **Pg** | | **12 54 22.6** | **+2.7** |
| **LAR1** | **LAR** | **1.98** | **120** | *e*Pn | | **Pn** | | **12 54 25.8** | **+1.3** |
| **LAR1** | **LAR** | **1.98** | **120** | Pn | | **Pb** | | **12 54 27.7** | **+0.4** |
| **KLNJ** | **Kolanjah** | **2.45** | **343** | *e*Pn | | **Pn** | | **12 54 31.5** | **+0.3** |
| KLNJ | | | | *e* | | | | 12 55 25.4 | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **ABEH** | **Behbahan** | **2.71** | **316** | *e*Pn | | **Pn** | | **12 54 36.0** | **+1.5** |
| **IRAM** | **Ramesheh** | **3.14** | **359** | *e*Pn | | **Pn** | | **12 54 41.6** | **+1.0** |
| IRAM | | | | *e* | | | | 12 55 45.5 | |
| | comp=Z,1μm,0.7s | | | | | | | | |
| **IRAM** | **Ramesheh** | **3.14** | **359** | Pn | | **Pn** | | **12 54 41.1** | **+0.5** |
| **SAKB** | **Bahrain** | **3.16** | **213** | P | | **Pn** | | **12 54 42.2** | **+1.5** |
| **IMEH** | **Mehriz** | **3.31** | **34** | *e*Pn | | **Pn** | | **12 54 45.2** | **+2.2** |
| IMEH | | | | *e* | | | | 12 54 47.3 | |
| | comp=Z,2μm,0.2s | | | | | | | | |
| **IMEH** | **Mehriz** | **3.31** | **34** | Pn | | **Pn** | | **12 54 45.2** | **+2.2** |
| **ISAD** | **Sadrabad** | **3.42** | **18** | *e*Pn | | **Pn** | | **12 54 45.8** | **+1.3** |
| ISAD | | | | *e* | | | | 12 54 48.6 | |
| | comp=Z,3μm,0.3s | | | | | | | | |
| **ISAD** | **Sadrabad** | **3.42** | **18** | Pn | | **Pn** | | **12 54 46.2** | **+1.7** |
| **GENO** | **Geno** | **3.54** | **110** | *e*Pn | | **Pn** | | **12 54 46.4** | **+0.3** |
| GENO | | | | *e* | | | | 12 56 05.8 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| **IGAR** | **Gharneh** | **3.74** | **355** | *e*Pn | | **Pn** | | **12 54 49.2** | **+0.3** |
| **NGRK** | **Negar Kerman** | **3.88** | **74** | *e*Pn | | **Pn** | | **12 54 51.8** | **+0.8** |
| NGRK | | | | *e* | | | | 12 55 43.3 | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| **KHGB** | **Koh Gabri** | **3.92** | **63** | *e*Pn | | **Pn** | | **12 54 52.4** | **+1.1** |
| KHGB | | | | *e* | | | | 12 56 01.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **KHGB** | **Koh Gabri** | **3.92** | **63** | Pn | | **Pn** | | **12 54 52.5** | **+1.1** |
| **ICHK** | **Chekchek** | **3.96** | **25** | *e*Pn | | **Pn** | | **12 54 53.7** | **+1.8** |
| ICHK | | | | *e* | | | | 12 54 54.5 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **ICHK** | **Chekchek** | **3.96** | **25** | Pn | | **Pn** | | **12 54 53.4** | **+1.5** |
| **IBAF** | **Bafgh** | **3.99** | **42** | *e*Pn | | **Pn** | | **12 54 53.5** | **+1.3** |
| IBAF | | | | *e* | | | | 12 55 05.7 | |
| | comp=Z,2μm,0.6s | | | | | | | | |
| **IBAF** | **Bafgh** | **3.99** | **42** | Pn | | **Pn** | | **12 54 53.5** | **+1.3** |
| **TVBK** | **TV Kerman** | **4.00** | **70** | *e*Pn | | **Pn** | | **12 54 53.9** | **+1.3** |
| **AMIS** | **Naft Sefid** | **4.05** | **318** | *e*Pn | | **Pn** | | **12 54 53.5** | **+0.6** |
| **TRNA** | **Turayna** | **4.06** | **196** | P | | **Pn** | | **12 54 53.9** | **+0.9** |
| **YZKH** | **Yazd** | **4.16** | **26** | *e*Pn | | **Pn** | | **12 54 56.3** | **+1.8** |
| **SHME** | **Shamm** | **4.20** | **127** | *e*Pn | | **Pn** | | **12 54 56.3** | **+1.3** |
| **SHME** | **Shamm** | **4.20** | **127** | P | | **Pn** | | **12 54 57.3** | **+2.3** |
| **SHME** | **Shamm** | **4.20** | **127** | P | | **Pn** | | **12 54 55.6** | **+0.5** |
| **IZEF** | **Zefreh** | **4.22** | **359** | *e*Pn | | **Pn** | | **12 54 56.7** | **+1.2** |
| **IPIR** | **Pirpir** | **4.22** | **342** | *e*Pn | | **Pn** | | **12 54 55.9** | **+0.3** |
| **IPIR** | **Pirpir** | **4.22** | **342** | Pn | | **Pn** | | **12 54 56.1** | **+0.5** |
| **BANOM** | **Banah** | **4.39** | **128** | *e*Pn | | **Pn** | | **12 54 58.6** | **+0.9** |
| **BANOM** | **Banah** | **4.39** | **128** | P | | **Pn** | | **12 54 58.5** | **+0.9** |
| | SNR=17 | | | | | | | | |
| BANOM | | | | S | | **Sn** | | **12 55 49.6** | **+1.1** |
| **BANOM** | **Banah** | **4.39** | **128** | *i* P | | **Pn** | | **12 54 57.9** | **+0.2** |
| | SNR=17 | | | | | | | | |
| BANOM | | | | S | | **Sn** | | **12 55 46.5** | **-2.0** |
| **CHMN** | **Cheshme madani** | **4.62** | **74** | *e*Pn | | **Pn** | | **12 55 02.5** | **+1.4** |
| CHMN | | | | *e* | | | | 12 56 27.8 | |
| | comp=Z,519nm,0.8s | | | | | | | | |
| **SLWR** | **Sila** | **4.62** | **188** | *e*Pn | | **Pn** | | **12 55 02.6** | **+1.8** |
| **ANAR** | **Anarak** | **4.65** | **14** | *e*Pn | | **Pn** | | **12 55 01.9** | **+0.6** |
| **NAZ** | **Nazwa, Dubai** | **4.66** | **141** | *e*Pn | | **Pn** | | **12 55 02.7** | **+1.4** |
| **NAZ** | **Nazwa, Dubai** | **4.66** | **141** | P | | **Pn** | | **12 55 03.1** | **+1.7** |
| NAZ | | | | S | | **Sn** | | **12 55 55.5** | **+0.4** |
| **NAZ** | **Nazwa, Dubai** | **4.66** | **141** | P | | **Pn** | | **12 55 01.6** | **+0.3** |
| **MASF** | **Masafi** | **4.67** | **134** | P | | **Pn** | | **12 55 03.0** | **+1.5** |
| | SNR=8.8 | | | | | | | | |
| MASF | | | | S | | **Sn** | | **12 55 56.1** | **+0.7** |
| **MSFE** | **Esma-Masafi** | **4.68** | **134** | *e*Pn | | **Pn** | | **12 55 02.0** | **+0.4** |
| **MSFE** | **Esma-Masafi** | **4.68** | **134** | *i* P | | **Pn** | | **12 55 01.6** | **0.0** |
| | SNR=7.3 | | | | | | | | |
| **AJN** | **Ajban** | **4.68** | **150** | *e*Pn | | **Pn** | | **12 55 03.8** | **+2.2** |
| **GHWR** | **Ruwais** | **4.70** | **175** | *e*Pn | | **Pn** | | **12 55 02.0** | **+0.2** |
| **IKLH** | **Kolahrood** | **4.70** | **351** | *e*Pn | | **Pn** | | **12 55 01.9** | **-0.2** |
| **KHNJ** | **Kahnooj** | **4.71** | **97** | *e*Pn | | **Pn** | | **12 55 03.5** | **+1.5** |
| **ASUD** | **Al Ashush, Dub** | **4.78** | **147** | *e*Pn | | **Pn** | | **12 55 06.7** | **+3.7** |
| **ASUD** | **Al Ashush, Dub** | **4.78** | **147** | P | | **Pn** | | **12 55 04.2** | **+1.2** |
| **FAQ** | **Al Faqa, Dubai** | **4.82** | **143** | *e*Pn | | **Pn** | | **12 55 03.7** | **+0.2** |
| **FAQ** | **Al

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GAR | | | | | IAmb | IAmb | 12 58 10.6 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **BR131** | **Keskin Array S** | **19.02** | **310** | P | | **P** | **12 58 13.3** | **+0.4** |
| BR131 | | | | | IAmb | IAmb | 12 58 17.7 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **19.02** | **310** | P | | **P** | **12 58 13.1** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=139,slow=14,SNR=9.2 | | | | | | | |
| **DRK** | **Karamyk** | **19.30** | **51** | P | | **Pn** | **12 58 17.6** | **+0.5** |
| DRK | | | | | IAmb | IAmb | 12 58 26.4 | |
| | comp=Z,8.7nm,1.1s | | | | | | | |
| **KKAR** | **Karatay Array** | **20.49** | **41** | P | | **P** | **12 58 29.5** | **+0.7** |
| **ABKAR** | **Akbulak array** | **21.36** | **14** | P | | **P** | **12 58 38.4** | **+0.4** |
| **AML** | **Almayashu** | **21.86** | **46** | P | | **P** | **12 58 48.7** | **+4.8** |
| **AML** | **Almayashu** | **21.86** | **46** | *i* P | | **P** | **12 58 44.1** | **+0.1** |
| | SNR=7.9 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.15** | **10** | P | | **P** | **12 58 45.6** | **-1.0** |
| | comp=Z,0.9nm,0.4s,baz=217,slow=9.2,SNR=7.3 | | | | | | | |
| **AAK** | **Ala-Archa** | **22.62** | **46** | P | | **P** | **12 58 51.6** | **-0.4** |
| **BOOM** | **Boomskoye usch** | **23.48** | **48** | P | | **P** | **12 59 01.9** | **+1.1** |
| BOOM | | | | | IAmb | IAmb | 12 59 11.3 | |
| | comp=Z,3.9nm,1.1s | | | | | | | |
| **IDI** | **Anoyia** | **24.23** | **293** | P | | **P** | **12 59 08.5** | **+0.6** |
| | comp=Z,16nm,0.9s,baz=185,slow=3.2,SNR=3.1 | | | | | | | |
| **BRVK** | **Borovoye** | **27.71** | **23** | P | | **P** | **12 59 38.6** | **-0.3** |
| BRVK | | | | | IAmb | IAmb | 12 59 53.1 | |
| | comp=Z,3.6nm,1.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **27.72** | **24** | P | | **P** | **12 59 39.1** | **+0.1** |
| | comp=Z,0.7nm,0.5s,baz=130,slow=2.3,SNR=7.1 | | | | | | | |
| **ARU** | **Arti** | **28.09** | **7** | LR | | LR | 13 11 50.2 | |
| | comp=Z,59nm,19.0s,baz=262,slow=38 | | | | | | | |
| **MAKZ** | **Makanchi** | **29.32** | **44** | P | | **P** | **12 59 53.8** | **+0.4** |
| MAKZ | | | | | IAmb | IAmb | 12 59 54.7 | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.48** | **35** | P | | **P** | **12 59 54.6** | **-0.2** |
| | comp=Z,1.4nm,0.2s,baz=235,slow=9.2,SNR=4.7 | | | | | | | |
| **MK31** | **Makanchi Array** | **29.50** | **44** | P | | **P** | **12 59 55.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **29.50** | **44** | P | | **P** | **12 59 55.1** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=231,slow=8.1,SNR=7.4 | | | | | | | |
| **KURK** | **Kurchatov** | **29.58** | **35** | P | | **P** | **12 59 54.6** | **-1.1** |
| **KURK** | **Kurchatov** | **29.58** | **35** | IAmb | | IAmb | 12 59 58.1 | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **34.56** | **34** | P | | **P** | **13 00 38.5** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **34.56** | **34** | P | | **P** | **13 00 39.0** | **-0.2** |
| | comp=Z,1.1nm,0.3s,baz=260,slow=8.9,SNR=4.4 | | | | | | | |
| **FIA1** | **FINESS Array S** | **37.17** | **339** | P | | **P** | **13 01 01.0** | **-0.5** |
| **FINES** | **FINESS Array B** | **37.17** | **339** | P | | **P** | **13 01 00.7** | **-0.8** |
| | comp=Z,2.7nm,0.8s,baz=136,slow=10,SNR=14 | | | | | | | |
| **HFS** | **Hagfors** | **40.87** | **331** | LR | | LR | 13 21 34.2 | |
| | comp=Z,85nm,18.9s,baz=256,slow=41 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.76** | **347** | P | | **P** | **13 01 55.2** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=134,slow=7.7,SNR=5.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **49.48** | **263** | P | | **P** | **13 02 40.5** | **-1.1** |
| | comp=Z,0.7nm,0.4s,baz=62,slow=8.3,SNR=6.9 | | | | | | | |
| **DBIC** | **Dimbokro** | **58.21** | **260** | P | | **P** | **13 03 46.3** | **+0.9** |
| | comp=Z,2.1nm,0.9s,baz=50,slow=7.3,SNR=3.0 | | | | | | | |
| **DBIC** | **Dimbokro** | **58.21** | **260** | IAmb | | IAmb | 13 03 56.3 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.66** | **8** | P | | **P** | **13 06 29.6** | **+0.4** |
| | comp=Z,0.2nm,0.7s,baz=324,slow=4.5,SNR=2.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.57** | **354** | P | | **P** | **13 06 44.0** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=9.1,slow=5.4,SNR=5.7 | | | | | | | |
| **BBB** | **Bella Bella** | **99.50** | **0** | LR | | LR | 14 00 58.0 | |
| | comp=Z,52nm,19.1s,baz=306,slow=40 | | | | | | | |

**IDC 05 13:13:48.6±7.7, 18°44S×177°27W, h0km, mb3.6/2, mb1 3.8/2, mb1mx3.5/27, mbtmp3.6/2, Error ellipse: s-maj=336.5km s-min=118.5km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.61** | **260** | P | P | 13 22 12.1 | +1.0 |
| | 0.4nm,0.5s,baz=92,slow=8.4,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **45.70** | **255** | P | P | 13 22 10.4 | -1.3 |
| | 0.4nm,0.4s,baz=94,slow=7.3,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **141.53** | **333** | PKP | PKPdf | 13 33 21.1 | -0.6 |
| | 0.3nm,0.4s,baz=42,slow=3.6,SNR=4.8 | | | | | | |

*TUL **05** 13:21:43.6±1.4, 36°18N±0°.01×97°.26W±0°.02, h7km±4km, ML3.1, mb_Lg2.6/22(NEIC), Error ellipse: s-maj=1.9km s-min=1.5km az=52.0*

**NEIC 05 13:21:43.6±1.2, 36°.186N±0°.005×97°.27W±0°.01, h4km±7km, Error ellipse: s-maj=1.7km s-min=0.5km az=66.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK033** | **Mehan** | **0.30** | **118** | Pg | Pg | 13 21 49.6 | +0.1 |
| OK033 | | | | Sg | Sg | 13 21 54.0 | +0.6 |
| **OK029** | **Liberty Lake** | **0.42** | **201** | Pg | Pg | 13 21 51.7 | 0.0 |
| OK029 | | | | Sg | Sg | 13 21 57.3 | +0.3 |
| **OK031** | **S. Brethren Rd** | **0.42** | **124** | Pg | Pg | 13 21 51.9 | +0.2 |
| OK031 | | | | Sg | Sg | 13 21 57.3 | +0.2 |
| **QUOK** | **Quay** | **0.45** | **92** | Pg | Pg | 13 21 52.4 | +0.1 |
| QUOK | | | | Sg | Sg | 13 21 58.6 | +0.4 |
| **OK030** | **Cody Creek RV** | **0.47** | **123** | Pg | Pg | 13 21 52.9 | +0.2 |
| OK030 | | | | Sg | Sg | 13 21 58.9 | +0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.48** | **111** | Pg | Pg | 13 21 52.9 | 0.0 |
| OK034 | | | | Sg | Sg | 13 21 59.1 | 0.0 |
| **BLOK** | **Blackwell** | **0.57** | **4** | Pg | Pg | 13 21 55.0 | +0.3 |
| BLOK | | | | Sg | Sg | 13 22 02.6 | +0.5 |
| **BCOK** | **Bluff Creek, N** | **0.60** | **208** | | Pg | 13 21 55.0 | -0.1 |
| BCOK | | | | Sg | Sg | 13 22 02.4 | -0.4 |
| **OK025** | **Westminster Rd** | **0.61** | **185** | Pg | Pg | 13 21 55.2 | 0.0 |
| OK025 | | | | Sg | Sg | 13 22 03.2 | +0.1 |
| **CROK** | **Carrier** | **0.66** | **299** | Pg | Pg | 13 21 56.5 | +0.2 |
| CROK | | | | Sg | Sg | 13 22 05.1 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.78** | **191** | Pg | Pg | 13 21 58.3 | -0.3 |
| OKCFA | | | | Sg | Sg | 13 22 08.3 | -0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **0.79** | **190** | Pg | Pg | 13 21 57.9 | -0.9 |
| OKCSW | | | | Sg | Sg | 13 22 08.5 | -0.6 |
| **GC02** | **Grant County #** | **0.82** | **324** | Pg | Pg | 13 21 59.3 | 0.0 |
| GC02 | | | | Sg | Sg | 13 22 09.9 | -0.1 |
| **KAN13** | **South Haven SW** | **0.84** | **348** | Pg | Pg | 13 21 59.9 | +0.1 |
| KAN13 | | | | Sg | Sg | 13 22 11.0 | +0.3 |
| **FNO** | **Franklin** | **0.93** | **187** | Pg | Pg | 13 22 00.9 | -0.6 |
| FNO | | | | Sg | Sg | 13 22 13.5 | -0.1 |
| **KAN17** | **Caldwell West** | **0.94** | **335** | Pg | Pg | 13 22 01.7 | -0.1 |
| KAN17 | | | | Sg | Sg | 13 22 14.0 | 0.0 |
| **T35A** | **Sooner Cattle** | **0.95** | **40** | Pg | Pg | 13 22 01.7 | -0.1 |
| T35A | | | | Sg | Sg | 13 22 13.8 | -0.3 |
| **KAN14** | **Manchester OK** | **0.95** | **324** | Pg | Pg | 13 22 01.9 | 0.0 |
| KAN14 | | | | Sg | Sg | 13 22 13.7 | -0.5 |
| **KAN05** | **Bluff City Nor** | **1.04** | **332** | | Pg | 13 22 03.6 | 0.0 |
| KAN05 | | | | Sg | Sg | 13 22 17.6 | +0.5 |
| **KAN01** | **Argonia South** | **1.04** | **338** | | Pg | 13 22 03.2 | -0.5 |
| KAN01 | | | | Sg | Sg | 13 22 17.0 | -0.2 |
| **W35A** | **Tecumseh** | **1.08** | **163** | Pg | Pg | 13 22 03.2 | -1.1 |
| W35A | | | | Sg | Sg | 13 22 17.4 | -0.9 |
| **KAN10** | **Anthony SW Sta** | **1.15** | **325** | Pg | Pg | 13 22 05.4 | -0.3 |
| KAN10 | | | | Sg | Sg | 13 22 20.3 | -0.3 |
| **KAN06** | **Argonia West S** | **1.16** | **336** | | Pg | 13 22 05.6 | -0.3 |
| KAN06 | | | | Sg | Sg | 13 22 20.5 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.18** | **332** | | Pg | 13 22 06.2 | -0.1 |
| KAN08 | | | | Sg | Sg | 13 22 21.4 | -0.3 |
| **KAN16** | **Harper SW Stat** | **1.22** | **329** | | Pg | 13 22 06.7 | -0.3 |
| KAN16 | | | | Sg | Sg | 13 22 22.4 | -0.4 |
| **TUL1** | **Leonard** | **1.23** | **103** | | Pg | 13 22 05.7 | -1.4 |
| TUL1 | | | | Sg | Sg | 13 22 22.1 | -0.9 |
| **KAN12** | **Harper NE Stat** | **1.25** | **332** | | Pg | 13 22 07.0 | -0.7 |
| KAN12 | | | | | Sb | 13 22 24.4 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.41** | **278** | Pn | Pn | 13 22 09.7 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.65** | **196** | Pn | Pn | 13 22 13.8 | +0.4 |
| X34A | | | | IAmb_Lg | | 13 22 38.1 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.90** | **221** | | Pn | 13 22 17.3 | +0.4 |
| **LOOK** | **Love County** | **2.19** | **178** | Pn | Pn | 13 22 22.1 | +1.2 |
| **X37A** | **Clayton** | **2.22** | **135** | Pn | Pn | 13 22 21.4 | +0.1 |
| X37A | | | | IAmb_Lg | | 13 22 59.3 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **U38A** | **Gravette** | **2.34** | **83** | Pn | Pn | 13 22 24.3 | +1.3 |
| **HHAR** | **Hobbs** | **2.69** | **87** | Pn | Pn | 13 22 29.9 | +2.2 |
| **Z35A** | **Perchaven, San** | **2.85** | **180** | Pn | Pn | 13 22 28.8 | -1.1 |
| **KSU1** | **Kansas State U** | **2.96** | **10** | | Pn | 13 22 30.6 | -0.8 |
| **KSU1** | **Kansas State U** | **2.96** | **10** | IAmb_Lg | | 13 23 21.5 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **W39A** | **Magazine** | **3.00** | **108** | Pn | Pn | 13 22 32.5 | +0.5 |
| **CBKS** | **Cedar Bluff** | **3.28** | **324** | | Pn | 13 22 35.5 | -0.3 |
| **MIAR** | **Mount Ida** | **3.43** | **117** | Pn | Pn | 13 22 38.0 | +0.1 |
| MIAR | | | | IAmb_Lg | | 13 23 35.7 | |
| | comp=Z,13nm,0.8s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **S39A** | **Bolivar** | **3.50** | **63** | | Pn | 13 22 38.9 | 0.0 | |
| **U40A** | **Yellville** | **3.57** | **86** | | Pn | 13 22 40.7 | +0.8 | |
| **AMTX** | **Amarillo** | **3.83** | **251** | Pn | Pn | 13 22 43.6 | +0.1 | |
| AMTX | | | | IAmb_Lg | | 13 23 47.4 | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.00** | **114** | Pn | Pn | 13 22 44.9 | -0.9 | |
| **ABTX** | **Abilene, Hawle** | **4.06** | **210** | IAmb_Lg | | 13 23 51.7 | | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.13** | **75** | Pn | Pn | 13 22 48.3 | +0.7 | |
| MGMO | | | | IAmb_Lg | | 13 23 57.1 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.15** | **101** | Pn | Pn | 13 22 47.1 | -0.7 | |
| **FCAR** | **Ozark Folk Cen** | **4.18** | **93** | Pn | Pn | 13 22 48.6 | +0.4 | |
| **W41B** | **Gary Mavity, V** | **4.21** | **102** | Pn | Pn | 13 22 47.8 | -0.9 | |
| **R40A** | **Maddies Statio** | **4.51** | **61** | Pn | Pn | 13 22 53.0 | +0.3 | |
| **P38A** | **Dawn** | **4.53** | **40** | IAmb_Lg | | 13 24 18.0 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **Z41A** | **Richland Creek** | **4.70** | **127** | IAmb_Lg | | 13 24 21.6 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **N35A** | **Tabor** | **4.84** | **15** | Pn | Pn | 13 22 56.2 | -1.0 | |
| **T42A** | **Van Buren** | **5.04** | **79** | Pn | Pn | 13 22 59.9 | -0.2 | |
| **KSCO** | **Kaye Shedlock'** | **5.11** | **305** | IAmb_Lg | | 13 24 38.9 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.16** | **67** | Pn | Pn | 13 23 02.2 | +0.5 | |
| **P40A** | **Paris** | **5.31** | **49** | Pn | Pn | 13 23 02.4 | -1.4 | |
| **PBMO** | **Poplar Bluff** | **5.54** | **82** | Pn | Pn | 13 23 05.9 | -1.0 | |
| **N38A** | **Joes South For** | **5.58** | **33** | Pn | Pn | 13 23 08.1 | +0.6 | |
| **T25A** | **Trinidad** | **5.82** | **282** | Pn | Pn | 13 23 09.6 | -1.4 | |
| **JCT** | **Junction City** | **6.07** | **201** | Pn | Pn | 13 23 14.1 | -0.2 | |
| JCT | | | | IAmb_Lg | | 13 25 06.2 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.77** | **286** | Pn | Pn | 13 23 22.6 | -1.5 | |
| **ISCO** | **Idaho Springs** | **7.51** | **301** | Pn | Pn | 13 23 34.7 | +0.4 | |
| **PLAL** | **Pickwick Lake** | **7.58** | **96** | IAmb_Lg | | 13 26 01.6 | | |
| | comp=Z,5.9nm,1.2s | | | | | | | |

*THE **05** 13:25:25.6, 36°.99N×29°.55E, h0km±1km, ML3.5/3, Error ellipse: s-maj=3.7km s-min=0.9km az=57.0*
*HLW **05** 13:25:25.4, 37°.06N×29°.46E, h16km±20km, Md4.2*
*NIC **05** 13:25:26.8±0.0, 36°.96N×29°.42E, h0km±1km, Ml4.0/4*
*DDA **05** 13:25:26.4±0.0, 36°.95N×29°.37E, h8km±2km, MW4.0*
*ISK **05** 13:25:26.4, 36°.96N×29°.39E, h5km, ML3.7/31*
*GII **05** 13:25:30.5±0.0, 36°.59N×29°.55E, h3km, mb4.1/1, MD3.8/2*
*IDC **05** 13:25:30.8±1.0, 36°.88N×29°.45E, h48km±12km, mb3.6/12, mb1 3.8/20, mb1mx3.5/65, mbtmp3.8/20, ML3.8/8, MS3.3/5, Ms1 3.3/5, ms1mx2.7/81, Error ellipse: s-maj=11.9km s-min=8.6km az=167.0*

**ISC 05 13:25:26.6±0.9, 36°.95N±0°.02×29°.42E±0°.02, h11km±6km, n140, σ1°39/185, mb3.9/12, MS3.5/3, 6C-7D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAME** | **Cameli-Denizli** | **0.10** | **269** | PG | **Pg** | **13 25 28.8** | **-0.5** |
| **CAEL** | **Denizli, Camel** | **0.20** | **335** | P | **Pg** | **13 25 30.2** | **-0.6** |
| CAEL | | | | S | **Sg** | **13 25 33.0** | **-0.8** |
| **GOLH** | **Golhisar** | **0.31** | **21** | P | **Pg** | **13 25 32.9** | **0.0** |
| GOLH | | | | S | **Sb** | **13 25 38.5** | **-1.0** |
| **FETY** | **Fethiye** | **0.41** | **221** | PG | **Pg** | **13 25 34.2** | **-0.5** |
| FETY | | | | SG | **Sg** | **13 25 41.1** | **+0.9** |
| **FETY** | **Fethiye** | **0.41** | **221** | P | **Pg** | **13 25 34.1** | **-0.5** |
| FETY | | | | S | **Sg** | **13 25 40.7** | **+0.6** |
| **ELL** | **Elmali** | **0.44** | **117** | PG | **Pg** | **13 25 35.4** | **+0.2** |
| ELL | | | | SG | **Sb** | **13 25 43.1** | **0.0** |
| **ELL** | **Elmali** | **0.44** | **117** | *i* P | **Pg** | **13 25 35.4** | **+0.2** |
| ELL | | | | S | **Sb** | **13 25 43.5** | **+0.4** |
| **DALY** | **Dalyan (Mula)** | **0.63** | **258** | PG | **Pg** | **13 25 38.5** | **-0.3** |
| DALY | | | | SG | **Sg** | **13 25 47.3** | **+0.3** |
| **TAVA** | **DENIZLI_Tavas** | **0.66** | **322** | P | **Pg** | **13 25 38.2** | **-1.2** |
| TAVA | | | | S | **Sg** | **13 25 47.7** | **-0.3** |
| **AKAS** | **Kas** | **0.73** | **168** | P | **Pg** | **13 25 41.0** | **+0.3** |
| AKAS | | | | S | **Sn** | **13 25 55.4** | **+1.3** |
| **KORT** | **Korkueli** | **0.75** | **86** | P | **Pg** | **13 25 41.1** | **+0.1** |
| KORT | | | | S | **Sn** | **13 25 56.2** | **+1.6** |
| **KSL** | **Kastellorizon** | **0.81** | **171** | P | **Pg** | **13 25 42.4** | **+0.3** |
| KSL | | | | S | **Sn** | **13 25 55.7** | **-0.2** |
| | 4μm,0.8s | | | | | | |
| **KSL** | **Kastellorizon** | **0.81** | **171** | P | **Pg** | **13 25 42.5** | **+0.3** |
| KSL | | | | S | **Sn** | **13 25 57.0** | **+1.1** |
| KSL | | | | AMI | | 13 26 01.5 | |
| | 6.0nm,1.0s | | | | | | |
| KSL | | | | AMI | | 13 26 01.5 | |
| | 6.0nm,1.0s | | | | | | |
| KSL | | | | AMI | | 13 26 03.4 | |
| | 8.6nm,0.6s | | | | | | |
| KSL | | | | AMI | | 13 26 03.4 | |
| | 8.6nm,0.6s | | | | | | |
| **DEMR** | **Demre-Antalya** | **0.81** | **151** | PG | **Pb** | **13 25 42.8** | **+0.1** |
| **BRDR** | **BURDUR-Merkez** | **0.91** | **34** | P | **Pg** | **13 25 43.5** | **-0.5** |
| BRDR | | | | S | **Sn** | **13 25 57.8** | **-0.8** |
| **YER** | **Yerkesik** | **0.93** | **282** | P | **Pb** | **13 25 44.9** | **+0.1** |
| **YER** | **Yerkesik** | **0.93** | **282** | PG | **Pb** | **13 25 45.0** | **+0.1** |
| **MULA** | **Mugla, Merkez-** | **0.93** | **290** | P | **Pg** | **13 25 44.3** | **-0.3** |
| MULA | | | | S | **Sn** | **13 25 58.7** | **-0.6** |
| **TURN** | **Turunc** | **0.96** | **260** | P | **Pg** | **13 25 44.1** | **-0.9** |
| TURN | | | | S | **Sb** | **13 25 59.1** | **+1.2** |
| **AKUM** | **Antalya-Kumluc** | **0.97** | **130** | P | **Pg** | **13 25 45.0** | **-0.2** |
| AKUM | | | | S | **Sn** | **13 26 04.1** | **+4.2** |
| **BUCA** | **Burdur, Bucak-** | **0.99** | **67** | P | **Pb** | **13 25 45.8** | **+0.1** |
| BUCA | | | | S | **Sn** | **13 26 00.8** | **+0.3** |
| **ANTB** | **Antalya** | **0.99** | **92** | PG | **Pn** | **13 25 46.5** | **+0.1** |
| **MRSB** | **Marmaris-Mugla** | **1.01** | **257** | PG | **Pg** | **13 25 45.9** | **-0.1** |
| **BCK** | **Bucak** | **1.06** | **61** | PG | **Pn** | **13 25 47.4** | **-0.2** |
| **BASM** | **Basmaki-Afyon** | **1.09** | **27** | PN | **Pg** | **13 25 47.3** | **-0.3** |
| **ISP** | **Isparta** | **1.24** | **45** | PN | **Pg** | **13 25 50.3** | **-0.1** |
| **ARG** | **Arkhangelos** | **1.27** | **235** | P | **Pn** | **13 25 50.1** | **-0.2** |
| ARG | | | | S | **Sn** | **13 26 10.8** | **+3.4** |
| | 2μm,0.9s | | | | | | |
| **ARG** | **Arkhangelos** | **1.27** | **235** | PN | **Pb** | **13 25 50.9** | **+0.3** |
| **ARG** | **Arkhangelos** | **1.27** | **235** | *i*P | **Pg** | **13 25 51.7** | **+0.7** |
| ARG | | | | S | **Sn** | **13 26 10.7** | **+3.2** |
| **MLSB** | **Milas** | **1.36** | **285** | PN | **Pb** | **13 25 52.2** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **1.37** | **67** | PN | **Pg** | **13 25 52.9** | **+0.1** |
| **KHL** | **Karahalli** | **1.38** | **3** | PN | **Pb** | **13 25 52.6** | **+0.1** |
| **PASA** | **Karahalli, USA** | **1.40** | **2** | P | **Pn** | **13 25 51.8** | **-0.4** |
| PASA | | | | S | **Sg** | **13 26 13.2** | **+1.5** |
| **KZIL** | **AFYON_Kizioren** | **1.43** | **23** | P | **Pb** | **13 25 53.4** | **0.0** |
| KZIL | | | | S | **Sg** | **13 26 14.5** | **+1.9** |
| **BAGO** | **Egridir - ISPA** | **1.51** | **46** | P | **Pg** | **13 25 55.3** | **-0.2** |
| BAGO | | | | S | **Sg** | **13 26 17.1** | **+2.0** |
| **KULA** | **Kula-Manisa** | **1.68** | **339** | P | **Pn** | **13 25 56.4** | **+0.4** |
| KULA | | | | S | **Sn** | **13 26 17.9** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.68** | **339** | PN | **Pn** | **13 25 56.4** | **+0.4** |
| **BODT** | **Bodrum** | **1.69** | **275** | P | **Pb** | **13 25 57.5** | **-0.3** |
| BODT | | | | S | **Sb** | **13 26 20.1** | **+0.9** |
| **BODT** | **Bodrum** | **1.69** | **275** | PN | **Pn** | **13 25 57.1** | **+0.9** |
| **YKAV** | **Yalikavak-Bodr** | **1.72** | **277** | PN | **Pn** | **13 25 57.4** | **+0.9** |
| **USAK** | **Uak-Merkez** | **1.79** | **350** | P | **Pn** | **13 25 58.1** | **+0.5** |
| USAK | | | | S | **Sb** | **13 26 23.0** | **+0.9** |
| **DDIM** | **Aydin, Didim** | **1.81** | **287** | P | **Pn** | **13 25 58.9** | **+1.1** |
| DDIM | | | | S | **Sg** | **13 26 27.4** | **+2.5** |
| **SHUT** | **Suhut-Afyon** | **1.84** | **29** | PN | **Pb** | **13 25 59.4** | **-0.9** |
| **GCAM** | **G?zelcaml?** | **1.90** | **294** | P | **Pn** | **13 25 59.3** | **+0.4** |
| GCAM | | | | S | **Sg** | **13 26 28.2** | **+0.6** |
| **SEDI** | **Konya, Seydise** | **1.93** | **74** | P | **Pb** | **13 26 02.4** | **+0.5** |
| SEDI | | | | S | **Sb** | **13 26 26.8** | **+0.7** |
| **AFYO** | **Afyonkarahisar** | **1.96** | **20** | P | **Pg** | **13 26 03.4** | **-0.9** |
| AFYO | | | | S | **Sg** | **13 26 29.7** | **-0.1** |
| **KOSK** | **Kos Island** | **1.97** | **265** | PN | **Pn** | **13 26 01.0** | **+1.1** |
| **SEYD** | **Seydisehir-KON** | **1.98** | **76** | PN | **Pb** | **13 26 01.9** | **-0.9** |
| **SHAP** | **Saphane-Kutahy** | **2.08** | **356** | PN | **Pn** | **13 26 02.7** | **+1.1** |
| **GEDZ** | **Gediz** | **2.10** | **360** | PN | **Pn** | **13 26 02.9** | **+1.1** |
| **GOMA** | **Golmarmara-Man** | **2.12** | **326** | PN | **Pn** | **13 26 03.1** | **+1.0** |
| **DOGA** | **KONYA_Doganhis** | **2.13** | **56** | P | **Pb** | **13 26 05.6** | **+0.3** |
| **SIMA** | **Simav-Kutahya** | **2.16** | **351** | PN | **Pn** | **13 26 03.1** | **+0.4** |
| **SMAA** | **Simav-Kutahya** | **2.18** | **351** | PN | **Pn** | **13 26 04.1** | **+1.2** |
| **SMG** | **Samos** | **2.20** | **291** | P | **Pn** | **13 26 03.7** | **+0.6** |
| SMG | | | | S | **Sn** | **13 26 31.7** | **+1.4** |
| | 480nm,0.6s | | | | | | |
| **HDMB** | **Hadim** | **2.46** | **89** | PN | **Pn** | **13 26 08.8** | **+2.0** |
| **KMER** | **Konya-Meram** | **2.49** | **70** | P | **Pn** | **13 26 09.2** | **+2.0** |
| **TVSB** | **Tavsanli** | **2.50** | **1** | PN | **Pn** | **13 26 08.5** | **+1.1** |
| **KONT** | **Konya--Tatoy** | **2.54** | **66** | PN | **Pn** | **13 26 09.8** | **+1.9** |
| **KONT** | **Konya--Tatoy** | **2.54** | **66** | P | **Pb** | **13 26 10.9** | **-1.4** |
| **ANDZ** | **Kutahya, Merke** | **2.59** | **8** | P | **Pn** | **13 26 09.6** | **+1.1** |
| **LADK** | **Ladik-KONYA** | **2.65** | **61** | PN | **Pn** | **13 26 11.3** | **+1.8** |
| **ZEYE** | **Izmir, Urla-Ze** | **2.65** | **300** | P | **Pn** | **13 26 09.9** | **+0.6** |
| **CIFT** | **Ciftele, Eski** | **2.74** | **28** | PN | **Pn** | **13 26 11.9** | **+1.3** |
| **ZEDA** | **zmir-Bergama** | **2.74** | **318** | P | **Pn** | **13 26 11.3** | **+0.8** |
| **KKBE** | **Karaman, Kazim** | **2.83** | **83** | P | **Pb** | **13 26 15.3** | **-1.9** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SVRH** | **Sivrihisar-ESK** | **3.00** | **33** | PN | | **Pn** | **13 26 15.8** | **+1.6** |
| **AUSIV** | **SIVRIHISAR** | **3.00** | **33** | PN | | **Pn** | **13 26 15.9** | **+1.7** |
| **AKMS** | **Akamas** | **3.05** | **128** | P | | **Pn** | **13 26 16.6** | **+1.8** |
| AKMS | | | | S | | **Sb** | **13 26 55.7** | **-2.4** |
| AKMS | | | | AMI | | | 13 27 02.0 | |
| | 1.2nm,0.5s | | | | | | | |
| AKMS | | | | AMI | | | 13 27 02.0 | |
| | 1.2nm,0.5s | | | | | | | |
| AKMS | | | | AMI | | | 13 27 14.6 | |
| | 1.5nm,1.1s | | | | | | | |
| AKMS | | | | AMI | | | 13 27 14.6 | |
| | 1.5nm,1.1s | | | | | | | |
| **ALFC** | **Alefka** | **3.13** | **124** | ⇑P | | **Pn** | **13 26 17.8** | **+1.8** |
| ALFC | | | | S | | **Sb** | **13 26 57.8** | **-2.8** |
| ALFC | | | | AMI | | | 13 26 58.2 | |
| | 1.1nm,0.4s | | | | | | | |
| ALFC | | | | AMI | | | 13 26 58.2 | |
| | 1.1nm,0.4s | | | | | | | |
| ALFC | | | | AMI | | | 13 27 04.9 | |
| | 1.2nm,0.6s | | | | | | | |
| ALFC | | | | AMI | | | 13 27 04.9 | |
| | 1.2nm,0.6s | | | | | | | |
| **BUHA** | **Balikesir, Bur** | **3.15** | **325** | P | | **Pn** | **13 26 17.2** | **+1.0** |
| BUHA | | | | S | | **Sn** | **13 26 52.7** | **-1.1** |
| **ZKR** | **Zakros** | **3.18** | **236** | PN | | **Pn** | **13 26 18.5** | **+2.0** |
| **ZKR** | **Zakros** | **3.18** | **236** | P | | **Pn** | **13 26 18.7** | **+2.2** |
| ZKR | | | | S | | **Sb** | **13 26 58.8** | **-3.0** |
| **BILE** | **Bilecik/Merkez** | **3.23** | **6** | P | | **Pn** | **13 26 18.6** | **+1.2** |
| **NATA** | **Nata** | **3.35** | **129** | P | | **Pn** | **13 26 21.6** | **+2.6** |
| **LEF** | **Lefka** | **3.35** | **122** | ⇓P | | **Pn** | **13 26 21.5** | **+2.6** |
| LEF | | | | ⇓S | | **Sn** | **13 27 01.8** | **+3.0** |
| **SZAC** | **Souni** | **3.56** | **127** | ⇑*e*P | | **Pn** | **13 26 24.3** | **+2.5** |
| SZAC | | | | AMI | | | 13 27 15.7 | |
| | 0.8nm,0.7s | | | | | | | |
| SZAC | | | | AMI | | | 13 27 16.1 | |
| | 1.2nm,0.6s | | | | | | | |
| **CSS** | **Mathiatis** | **3.74** | **121** | P | | **Pn** | **13 26 26.5** | **+2.2** |
| **OSC1** | **CSNet OBS 1** | **3.76** | **156** | P | | **Pn** | **13 26 26.2** | **+1.7** |
| **ASGA** | **Asgata** | **3.78** | **124** | P | | **Pn** | **13 26 27.6** | **+2.7** |
| **MVOU** | **Mavrovouni** | **3.92** | **118** | P | | **Pn** | **13 26 28.5** | **+1.7** |
| **IDI** | **Anoyia** | **4.02** | **247** | P | | **Pn** | **13 26 28.9** | **+0.6** |
| | 1.9nm,0.3s,baz=124,slow=5.7,SNR=17 | | | | | | | |
| IDI | | | | S | | **Sn** | **13 27 17.5** | **+2.0** |
| | 4.9nm,0.3s,baz=110,slow=21,SNR=6.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **4.32** | **49** | P | | **Pn** | **13 26 33.8** | **+1.3** |
| | 2.2nm,0.3s,baz=230,slow=14,SNR=28 | | | | | | | |
| BRTR | | | | S | | **Sn** | **13 27 24.9** | **+1.9** |
| | 2.4nm,0.3s,baz=222,slow=23,SNR=7.1 | | | | | | | |
| BRTR | | | | LR | | LR | 13 28 46.4 | |
| | comp=Z,159nm,18.8s,baz=218,slow=45 | | | | | | | |
| **OSC2** | **CSNet OBS 4** | **4.51** | **148** | P | | **Pn** | **13 26 35.8** | **+0.9** |
| **HNTI** | **Hanita** | **6.09** | **128** | Pn | | **Pn** | **13 26 58.3** | **+1.6** |
| **MMA0B** | **Mount Meron ar** | **6.28** | **127** | Pn | | **Pn** | **13 27 00.3** | **+1.0** |
| MMA0B | | | | | | Sn | **13 28 10.2** | **-1.0** |
| **MMAI** | **Mount Meron 

*Error ellipse: s-maj=4.4km s-min=2.0km az=141.0*
**ISC 05 13:28:46.8±0.9, 42°.79N±0°.04×79°.43E±0°.03, h10km, n46, σ1§10/82, 13C-8D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UZB** | **Uzynbulak** 33nm,0.2s | **0.47** | **320** | *eP* | **Pg** | **13 28 55.5** | **-0.5** |
| UZB | 75nm,0.3s | | | *eS* | **Sg** | **13 29 01.8** | **-0.3** |
| **UZB** | **Uzynbulak** 33nm,0.2s | **0.47** | **320** | P | **Pg** | **13 28 55.5** | **-0.5** |
| UZB | 75nm,0.3s | | | S | **Sg** | **13 29 01.8** | **-0.3** |
| **PDGK** | **Podgornoye** 5.8nm,0.4s | **0.54** | **4** | ⇓P | **Pg** | **13 28 56.6** | **-0.8** |
| PDGK | 43nm,0.5s | | | ⇓S | **Sg** | **13 29 03.5** | **-1.0** |
| **SATY** | **Saty** 3.5nm,0.2s | **0.80** | **290** | *eP* | **Pg** | **13 29 01.8** | **-0.5** |
| SATY | 29nm,0.1s | | | *eS* | **Sg** | **13 29 12.6** | **-0.2** |
| **SATY** | **Saty** 3.5nm,0.2s | **0.80** | **290** | P | **Pg** | **13 29 01.8** | **-0.5** |
| SATY | 29nm,0.1s | | | S | **Sg** | **13 29 12.5** | **-0.2** |
| **PRZ** | **Przheval'sk** baz=53 | **0.82** | **248** | ⇑*iP* | **Pg** | **13 29 01.8** | **-0.9** |
| PRZ | baz=53 | | | ⇑*iS* | **Sg** | **13 29 13.4** | **0.0** |
| **ZHN** | **Zhinishke** 7.8nm,0.2s | **0.82** | **297** | *eP* | **Pg** | **13 29 01.9** | **-0.8** |
| ZHN | 49nm,0.2s | | | *eS* | **Sg** | **13 29 12.7** | **-0.8** |
| **ZHN** | **Zhinishke** 7.8nm,0.2s | **0.82** | **297** | P | **Pg** | **13 29 01.9** | **-0.8** |
| ZHN | 49nm,0.2s | | | S | **Sg** | **13 29 12.7** | **-0.8** |
| **KTMS** | **Ketmen** 17nm,0.1s | **0.94** | **46** | *eP* | **Pg** | **13 29 04.1** | **-0.8** |
| KTMS | 12nm,0.1s | | | *eS* | **Sg** | **13 29 16.1** | **-1.0** |
| **KTMS** | **Ketmen** 17nm,0.1s | **0.94** | **46** | P | **Pg** | **13 29 04.1** | **-0.8** |
| KTMS | 12nm,0.1s | | | S | **Sg** | **13 29 16.1** | **-1.0** |
| **KURS** | **Kuram** 0.9nm,0.2s | **1.16** | **307** | *eP* | **Pb** | **13 29 08.2** | **-0.8** |
| KURS | 4.9nm,0.3s | | | *eS* | **Sb** | **13 29 23.4** | **-0.7** |
| **KURS** | **Kuram** 0.9nm,0.2s | **1.16** | **307** | P | **Pb** | **13 29 08.2** | **-0.8** |
| KURS | 4.9nm,0.3s | | | S | **Sb** | **13 29 23.3** | **-0.7** |
| **ANVS** | **Anan'yevo** baz=72 | **1.30** | **270** | ⇑*iP* | **Pn** | **13 29 10.7** | **-0.5** |
| ANVS | baz=72 | | | ⇑*iS* | **Sn** | **13 29 28.7** | **-0.1** |
| **BLB** | **Baldybastay** 25nm,0.2s | **1.48** | **332** | *eP* | **Pb** | **13 29 13.9** | **-0.6** |
| BLB | 22nm,0.3s | | | *eS* | **Sg** | **13 29 33.1** | **-1.2** |
| **BLB** | **Baldybastay** 25nm,0.2s | **1.48** | **332** | P | **Pb** | **13 29 13.9** | **-0.6** |
| BLB | 22nm,0.3s | | | S | **Sg** | **13 29 33.2** | **-1.2** |
| **DJR** | **Jarkent** 2.5nm,0.1s | **1.56** | **9** | *eP* | **Pb** | **13 29 15.3** | **-0.5** |
| DJR | 25nm,0.3s | | | *eS* | **Sg** | **13 29 35.6** | **-1.5** |
| **DJR** | **Jarkent** 2.5nm,0.1s | **1.56** | **9** | P | **Pb** | **13 29 15.3** | **-0.5** |
| DJR | 25nm,0.3s | | | S | **Sg** | **13 29 35.6** | **-1.5** |
| **TARG** | **Taragay, Kyrgy** baz=31 | **1.61** | **229** | ⇓*iP* | **Pn** | **13 29 15.4** | **-0.3** |
| TARG | baz=31 | | | ⇓*iS* | **Sb** | **13 29 37.2** | **-0.2** |
| **KOTS** | **Kotyrbulak** 4.5nm,0.2s | **1.76** | **285** | *eP* | **Pb** | **13 29 19.2** | **-0.1** |
| KOTS | 15nm,0.3s | | | *eS* | **Sg** | **13 29 42.3** | **-1.1** |
| **KOTS** | **Kotyrbulak** 4.5nm,0.2s | **1.76** | **285** | P | **Pb** | **13 29 19.2** | **-0.1** |
| KOTS | 15nm,0.3s | | | S | **Sg** | **13 29 42.3** | **-1.1** |
| **MDOK** | **Medeo** 2.2nm,0.7s | **1.79** | **283** | Pn | **Pb** | **13 29 19.0** | **-0.8** |
| MDOK | 4.1nm,0.5s | | | Sn | **Sg** | **13 29 45.5** | **+1.2** |
| **KDJ** | **Kajisay** baz=51 | **1.79** | **249** | ⇓*eP* | **Pb** | **13 29 18.9** | **-1.0** |
| KDJ | baz=51 | | | ⇓*iS* | **Sb** | **13 29 42.9** | **+0.4** |
| **ARXS** | **Arharly** 6.1nm,0.2s | **1.84** | **321** | *eP* | **Pb** | **13 29 20.2** | **-0.4** |
| ARXS | 22nm,0.3s | | | *eS* | **Sg** | **13 29 44.2** | **-1.8** |
| **ARXS** | **Arharly** 6.1nm,0.2s | **1.84** | **321** | P | **Pb** | **13 29 20.2** | **-0.4** |
| ARXS | 22nm,0.3s | | | S | **Sg** | **13 29 44.2** | **-1.8** |
| **TNSS** | **Tian-Shan** 1.8nm,0.3s | **1.84** | **278** | *eP* | **Pb** | **13 29 20.6** | **-0.2** |
| TNSS | 3.8nm,0.2s | | | *eS* | **Sg** | **13 29 44.8** | **-1.3** |
| **TNSS** | **Tian-Shan** 1.8nm,0.3s | **1.84** | **278** | P | **Pb** | **13 29 20.6** | **-0.2** |
| TNSS | 3.8nm,0.2s | | | S | **Sg** | **13 29 44.8** | **-1.3** |
| **KTBS** | **Karatobe** 2.4nm,0.3s | **2.21** | **296** | *eP* | **Pb** | **13 29 26.6** | **-0.3** |
| KTBS | 27nm,0.3s | | | *eS* | **Sb** | **13 29 55.3** | **+1.0** |
| **KTBS** | **Karatobe** 2.4nm,0.3s | **2.21** | **296** | Pg | **Pb** | **13 29 26.6** | **-0.3** |
| KTBS | 27nm,0.3s | | | Lg | Lg | 13 29 55.3 | |
| **MTBS** | **Maitube** 2.9nm,0.2s | **2.23** | **280** | *eP* | **Pb** | **13 29 27.9** | **+0.6** |
| MTBS | 12nm,0.4s | | | *eS* | **Sg** | **13 29 57.3** | **-1.2** |
| **MTBS** | **Maitube** 2.9nm,0.2s | **2.23** | **280** | Pg | **Pb** | **13 29 27.8** | **+0.6** |
| MTBS | 12nm,0.4s | | | Lg | Lg | 13 29 57.3 | |
| **ULHL** | **Ulahol** baz=59 | **2.42** | **258** | ⇑*iP* | **Pn** | **13 29 28.1** | **+1.4** |
| ULHL | baz=59 | | | ⇑*iS* | **Sb** | **13 29 58.4** | **-2.2** |
| **KAPS** | **Kapalarasan** 0.8nm,0.3s | **2.49** | **359** | *eP* | **Pb** | **13 29 31.8** | **+0.1** |
| KAPS | 16nm,0.3s | | | *eS* | **Sg** | **13 30 04.1** | **-2.8** |
| **KAPS** | **Kapalarasan** 0.8nm,0.3s | **2.49** | **359** | Pg | **Pb** | **13 29 31.8** | **+0.1** |
| KAPS | 16nm,0.3s | | | Lg | Lg | 13 30 04.1 | |
| **KUU** | **Kurty** 1.3nm,0.1s | **2.51** | **297** | *eP* | **Pb** | **13 29 31.9** | **-0.1** |
| KUU | 11nm,0.5s | | | *eS* | **Sb** | **13 30 04.2** | **+1.3** |
| **KUU** | **Kurty** 1.3nm,0.1s | **2.51** | **297** | Pg | **Pb** | **13 29 31.9** | **-0.1** |
| KUU | 11nm,0.5s | | | Lg | Lg | 13 30 04.2 | |
| **KST** | **Kastek** 12nm,0.5s | **2.56** | **277** | *eP* | **Pb** | **13 29 33.4** | **+0.5** |
| KST | 8.1nm,0.8s | | | *eS* | **Sg** | **13 30 07.0** | **-2.1** |
| **KST** | **Kastek** 12nm,0.5s | **2.56** | **277** | Pg | **Pb** | **13 29 33.4** | **+0.5** |
| KST | 8.1nm,0.8s | | | Lg | Lg | 13 30 07.0 | |
| **BOOM** | **Boomskoye usch** baz=66 | **2.59** | **264** | ⇑*iP* | **Pn** | **13 29 30.5** | **+1.5** |
| BOOM | baz=66 | | | ⇑*iS* | **Sn** | **13 30 02.7** | **+2.0** |
| **DGS** | **Degeres** 3.9nm,0.4s | **2.72** | **281** | *eP* | **Pb** | **13 29 36.1** | **+0.4** |
| DGS | 8.9nm,0.5s | | | *eS* | **Sg** | **13 30 11.4** | **-2.9** |
| **DGS** | **Degeres** 3.9nm,0.4s | **2.72** | **281** | Pg | **Pb** | **13 29 36.1** | **+0.4** |
| DGS | 8.9nm,0.5s | | | Lg | Lg | 13 30 11.4 | |
| **TKM2** | **Tokmak 2** 1.3nm,0.5s | **2.82** | **274** | ⇑Pg | **Pb** | **13 29 37.4** | **0.0** |
| TKM2 | 3.4nm,0.6s | | | ⇓Lg | Lg | 13 30 15.5 | |
| **TKM2** | **Tokmak 2** baz=75 | **2.82** | **274** | ⇑*iP* | **Pn** | **13 29 33.9** | **+1.7** |
| TKM2 | baz=75 | | | ⇑*iS* | **Sn** | **13 30 08.3** | **+1.9** |
| **KRBS** | **Karabastau** 0.5nm,0.1s | **2.89** | **289** | *eP* | **Pb** | **13 29 38.3** | **-0.2** |
| KRBS | 5.2nm,0.5s | | | *eS* | **Sb** | **13 30 14.8** | **+0.9** |
| **KRBS** | **Karabastau** 0.5nm,0.1s | **2.89** | **289** | Pg | **Pb** | **13 29 38.3** | **-0.2** |
| KRBS | 5.2nm,0.5s | | | Lg | Lg | 13 30 14.8 | |
| **MAKZ** | **Makanchi** 0.1nm,0.3s | **4.41** | **23** | ⇑Pn | **Pn** | **13 29 56.3** | **+2.5** |
| MAKZ | 0.9nm,0.7s | | | ⇓Lg | Lg | 13 31 01.4 | |
| **MK31** | **Makanchi Array** 0.1nm,0.3s,baz=203,slow=12,SNR=13 | **4.49** | **26** | Pn | **Pn** | **13 29 57.4** | **+2.5** |
| MK31 | 0.5nm,0.5s,baz=202,slow=25,SNR=7.3 | | | ⇑Lg | Lg | 13 31 06.1 | |

*IDC **05** 13:39:16.0±2.2, 7°.69S×128°.03E, h108km±24km, mb3.6/4, mb1 3.8/10, mb1mx3.5/42, mbtmp4.1/10, Error ellipse: s-maj=25.8km s-min=17.1km az=71.0*
*DJA **05** 13:39:19.8±0.6, 8°.5S×12°.8E±°, h163km±21km, M4.3/6, mb4.2/5, mB4.7/1, MLv4.4/6, Mw(mB)3.9/1*
**ISC 05 13:39:19.0±0.7, 7°.89S±0°.07×128°.15E±0°.07, h150km, n15, σ2§57/19, mb3.8/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **3.12** | **92** | P | **Pn** | **13 40 09.6** | **+1.7** |
| **SOEI** | **Soe** | **4.26** | **244** | P | **Pn** | **13 40 24.8** | **+2.0** |
| **BATI** | **Baumata** 2.3nm,0.3s,baz=107,slow=19,SNR=1.6 | **4.99** | **242** | P | **Pn** | **13 40 29.7** | **-2.7** |
| BATI | 11nm,0.3s,baz=148,slow=19,SNR=9.2 | | | S | **Sn** | **13 41 30.9** | **+1.2** |
| **BATI** | **Baumata** 0.1nm18nm,0.6s | **4.99** | **242** | P | **Pn** | **13 40 35.0** | **+2.6** |
| **FAKI** | **Fak Fak** 0.2nm50nm,1.5s | **6.40** | **40** | P | **Pn** | **13 40 50.2** | **-0.9** |
| **SIJI** | **Sorong** 2.6nm,0.3s,baz=201,slow=16,SNR=9.0 | **7.63** | **24** | P | **Pn** | **13 41 02.9** | **-4.7** |
| **WBSI** | **Waikabubak, Su** | **8.83** | **258** | P | **Pn** | **13 41 25.6** | **+2.0** |
| **FITZ** | **Fitzroy Crossi** 1.1nm,0.3s,baz=21,slow=8.7,SNR=38 | **10.44** | **193** | P | **Pn** | **13 41 44.0** | **-0.9** |
| FITZ | 1.6nm,0.3s,baz=110,slow=20,SNR=8.5 | | | S | **Sn** | **13 43 35.8** | **-4.6** |
| **WRA** | **Warramunga Arr** 1.3nm,0.3s,baz=331,slow=13,SNR=44 | **13.40** | **154** | P | **Pn** | **13 42 23.5** | **+0.2** |
| WRA | 1.3nm,0.3s,baz=329,slow=24,SNR=11 | | | S | Sn | 13 44 45.7 | -6.1 |
| **ASAR** | **Alice Springs** 0.6nm,0.3s,baz=341,slow=10,SNR=57 | **16.63** | **161** | P | **Pn** | **13 43 05.8** | **+2.3** |
| ASAR | 0.7nm,0.3s,baz=343,slow=25,SNR=6.5 | | | S | **S** | **13 46 04.9** | **-3.5** |
| **PMG** | **Port Moresby** 0.2nm,0.3s,baz=124,slow=15,SNR=3.6 | **18.85** | **96** | P | **P** | **13 43 29.3** | **+1.6** |
| **STKA** | **Stephens Creek** 2.5nm,0.4s,baz=5.1,slow=14,SNR=11 | **26.95** | **154** | P | **P** | **13 44 50.1** | **+3.6** |
| **SONM** | **Songino Array** 0.4nm,0.5s,baz=157,slow=8.0,SNR=3.7 | **58.72** | **343** | P | **P** | **13 49 01.9** | **+0.9** |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=118,slow=7.2,SNR=14 | **67.98** | **328** | P | **P** | **13 50 01.8** | **-0.1** |
| MKAR | 0.4nm,0.7s,baz=115,slow=8.4,SNR=5.8 | | | pP | **PcP** | **13 50 26.5** | **-0.5** |
| **ZALV** | **Zalesovo Beam** 0.8nm,0.3s,baz=111,slow=6.3,SNR=2.7 | **71.58** | **335** | P | **P** | **13 50 23.1** | **-0.6** |

*IDC **05** 13:42:04.9±1.0, 18°.52S×168°.73E, h0km, mb4.4/12, mb1 4.5/14, mb1mx4.2/34, mbtmp4.4/14, ML4.8/2, MS3.6/6, Ms1 3.5/6, ms1mx3.1/52, Error ellipse: s-maj=30.5km s-min=19.5km az=103.0*
*BJI **05** 13:42:11.4±0.0, 18°.08S×168°.73E, h43km, mb4.6/27, mB5.0/15, Ms5.0/2, Ms7 4.4/2*
*NEIC **05** 13:42:12.2±1.6, 18°.80S±0°.06×168°.26E±0°.09, h42km±6km, mb4.8/21, Error ellipse: s-maj=12.1km s-min=9.3km az=91.0*
**ISC 05 13:42:11.2±0.4, 18°.72S±0°.05×168°.31E±0°.07, h37km, n98, σ1§11/94, mb4.8/29, MS3.5/7, 2C-5D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LIFNC** | **LIFOU** | **2.28** | **206** | | **Pn** | **13 42 46.0** | **-0.3** |
| **MARNC** | **Mare, Loyalty** | **2.76** | **185** | Pn | **Pn** | **13 42 52.4** | **-0.4** |
| **SANVU** | **Saraoutou** | **3.42** | **342** | Pn | **Pn** | **13 43 02.5** | **+0.5** |
| **DZM** | **Mont Dzumac** 154nm,0.7s | **3.77** | **207** | *e*Pn | **Pn** | **13 43 07.5** | **+0.7** |
| DZM | 179nm,0.3s | | | *e*Sn | **Sn** | **13 43 48.4** | **-1.5** |
| DZM | comp=Z,1μm,24.8s | | | *e*LR | LR | 13 44 05.5 | |
| **DZM** | **Mont Dzumac** 26nm,0.3s,baz=62,slow=10,SNR=341 | **3.77** | **207** | Pn | **Pn** | **13 43 07.4** | **+0.7** |
| DZM | 39nm,0.3s,baz=133,slow=20,SNR=9.3 | | | Sn | **Sn** | **13 43 51.2** | **+1.3** |
| **DZM** | **Mont Dzumac** | **3.77** | **207** | Pn | **Pn** | **13 43 07.1** | **+0.3** |
| **OUENC** | **Ouen Island, N** | **3.93** | **200** | Pn | **Pn** | **13 43 09.4** | **+0.5** |
| **PINES** | **Pines Island,** | **3.96** | **192** | | **Pn** | **13 43 10.1** | **+0.8** |
| **ONTNC** | **Ouen Toro** | **3.97** | **206** | Pn | **Pn** | **13 43 09.3** | **-0.1** |
| **MSVF** | **Nonsavu** 0.2nm,0.3s,baz=165,slow=19,SNR=4.5 | **9.31** | **85** | Pn | **Pn** | **13 44 23.5** | **+0.6** |
| **MSVF** | **Nonsavu** | **9.31** | **85** | Pn | **Pn** | **13 44 25.8** | **+2.9** |
| **HNR** | **Honiara** 12nm,0.3s,baz=164,slow=7.4,SNR=6.1 | **12.29** | **318** | Pn | **Pn** | **13 45 02.9** | **-0.7** |
| **HNR** | **Honiara** | **12.29** | **318** | | **Pn** | **13 45 05.6** | **+2.0** |
| **HNR** | **Honiara** | **12.29** | **318** | P | **Pn** | **13 45 04.0** | **+0.4** |
| HNR | | | | S | **P** | **13 45 17.0** | **+1.7** |
| **RAO** | **Raoul Island** | **16.36** | **132** | Pn | **Pn** | **13 45 58.5** | **+0.5** |
| **URZ** | **Urewera** 14nm,0.8s,baz=327,slow=9.2,SNR=5.1 | **20.93** | **160** | P | **P** | **13 46 51.3** | **+0.8** |
| URZ | comp=Z,203nm,20.3s,baz=344,slow=34 | | | LR | LR | 13 53 49.3 | |
| **BKZ** | **Black Stump Fm** | **21.57** | **162** | P | **P** | **13 46 56.8** | **-0.8** |
| **STKA** | **Stephens Creek** 1.1nm,0.5s,baz=54,slow=8.2,SNR=3.4 | **27.39** | **236** | P | **P** | **13 47 57.1** | **+4.0** |
| STKA | comp=Z,43nm,20.3s,baz=35,slow=34 | | | LR | LR | 13 57 57.7 | |
| **STKA** | **Stephens Creek** | **27.39** | **236** | P | **P** | **13 47 53.2** | **0.0** |
| **BBOO** | **Buckleboo** | **32.11** | **238** | P | **P** | **13 48 34.9** | **-0.1** |
| **AS31** | **Alice Springs** | **32.40** | **255** | P | **P** | **13 48 36.7** | **-1.0** |
| **ASAR** | **Alice Springs** 3.8nm,0.7s,baz=80,slow=8.4,SNR=9.1 | **32.40** | **255** | P | **P** | **13 48 39.2** | **+1.5** |
| **ASAR** | **Alice Springs** | **32.40** | **255** | P | **P** | **13 48 36.5** | **-1.2** |
| **MTN** | **Manton Dam** | **36.20** | **274** | P | **P** | **13 49 10.5** | **-0.1** |
| MTN | comp=Z,11nm,1.1s | | | IAmb | IAmb | 13 49 32.4 | |
| **KNRA** | **Kununurra** | **37.85** | **268** | P | **P** | **13 49 24.4** | **-0.3** |
| KNRA | comp=Z,9.1nm,0.9s | | | IAmb | IAmb | 13 49 44.7 | |
| **FORT** | **Forrest** | **38.28** | **244** | P | **P** | **13 49 26.7** | **-1.4** |
| FORT | comp=Z,17nm,0.8s | | | IAmb | IAmb | 13 49 41.6 | |
| **XMAS** | **Kiritimati** | **39.50** | **62** | P | **P** | **13 49 38.6** | **+0.1** |
| **GUMO** | **Guam** comp=Z,80nm,20.8s,baz=114,slow=33 | **39.55** | **323** | LR | LR | 14 03 37.1 | |
| **GUMO** | **Guam** | **39.55** | **323** | P | **P** | **13 49 39.1** | **+0.2** |
| **SOEI** | **Soe** | **43.51** | **276** | P | **P** | **13 50 10.1** | **-1.5** |
| SOEI | comp=Z,31nm,1.5s | | | IAmb | IAmb | 13 50 36.2 | |
| **TAOE** | **Nuku Hiva Isla** comp=Z,197nm,26.2s | **50.85** | **86** | *e*LR | LR | 14 05 28.3 | |
| **MJAR** | **Matsushiro Arr** comp=Z,8.9nm,0.9s,baz=167,slow=7.1,SNR=15 | **61.89** | **333** | P | **P** | **13 52 25.4** | **-1.5** |
| MJAR | comp=Z,29nm,19.1s,baz=34,slow=37 | | | LR | LR | 14 20 08.9 | |
| **MJAR** | **Matsushiro Arr** | **61.89** | **333** | P | **P** | **13 52 26.9** | **0.0** |
| MJAR | comp=Z,7.0nm,1.0s | | | IAmb | IAmb | 13 52 27.3 | |
| **MAJO** | **Matsushiro** comp=Z,11nm,0.9s | **61.89** | **333** | P | **P** | **13 52 26.6** | **-0.3** |
| MAJO | | | | IAmb | IAmb | 13 52 27.0 | |
| **MAT** | **Matsushiro** | **61.89** | **333** | P | **P** | **13 52 26.1** | **-0.8** |
| MAT | | | | S | **S** | **14 00 44.4** | **-3.8** |
| **MJB9** | **Matsu-Tunnel** comp=Z,10nm,0.9s | **61.89** | **333** | P | **P** | **13 52 26.9** | **-0.1** |
| MJB9 | | | | IAmb | IAmb | 13 52 27.0 | |
| **ASAJ** | **Asahikawa** comp=Z,18nm,0.8s,baz=215,slow=7.1,SNR=12 | **66.81** | **340** | P | **P** | **13 52 58.5** | **-0.4** |
| ASAJ | comp=Z,71nm,20.3s,baz=153,slow=33 | | | LR | LR | 14 18 45.2 | |
| **KSRS** | **Korea Array** | **67.59** | **326** | P | **P** | **13 53 04.4** | **+0.4** |
| **NJ2** | **Nanjing** comp=Z,1.7nm,1.0s,baz=157,slow=7.7,SNR=4.3 | **69.23** | **316** | *e*P | **P** | **13 53 15.6** | **+1.2** |
| NJ2 | comp=Z,6.0nm,0.5s | | | pmax | pmax | | |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.0nm,0.8s,baz=106,slow=8.4,SNR=4.7 | **70.88** | **333** | P | **P** | **13 53 23.3** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **70.88** | **333** | P | **P** | **13 53 23.7** | **-0.5** |
| **QSPA** | **South Pole Qui** | **71.33** | **180** | P | **P** | **13 53 27.2** | **+0.3** |
| QSPA | comp=Z,11nm,0.8s | | | IAmb | IAmb | 13 53 27.9 | |
| **PEA0B** | **Petropavlovsk-** | **72.12** | **353** | P | **P** | **13 53 31.6** | **+0.1** |
| **PETK** | **Petropavlovsk-** comp=Z,1.2nm,0.6s,baz=125,slow=7.4,SNR=7.4 | **72.12** | **353** | P | **P** | **13 53 30.4** | **-1.1** |
| **MDJ** | **Mudanjiang** | **72.25** | **332** | P | **P** | **13 53 32.8** | **+0.3** |
| MDJ | comp=Z,12nm,0.8s | | | pmax | pmax | | |
| MDJ | comp=Z,130nm,6.4s | | | pmax | pmax | | |
| **CN2** | **Changchun** | **73.56** | **329** | *e*P | **P** | **13 53 40.5** | **+0.2** |
| CN2 | comp=Z,10.0nm,0.9s | | | pmax | pmax | | |
| **BNX** | **BinXian** | **74.10** | **332** | ⇑P | **P** | **13 53 42.9** | **-0.5** |
| BNX | comp=Z,24nm,0.7s | | | pmax | pmax | | |
| BNX | comp=Z,270nm,4.1s | | | pmax | pmax | | |
| **KLR** | **Kul'dur** comp=Z,1.6nm,0.6s,baz=137,slow=3.7,SNR=6.4 | **75.04** | **336** | P | **P** | **13 53 49.3** | **+0.5** |
| **KMI** | **Kunming** | **77.25** | **302** | ⇓P | **P** | **13 54 04.0** | **+1.8** |
| KMI | | | | pP | pP | 13 54 14.2 | +1.3 |
| KMI | | | | sP | sP | 13 54 18.1 | +2.1 |
| KMI | comp=Z,13nm,0.9s | | | pmax | pmax | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.8nm,0.3s,baz=137,slow=4.6,SNR=13 | **77.49** | **295** | P | **P** | **13 54 05.2** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **77.49** | **295** | P | **P** | **13 54 03.8** | **+0.4** |
| **PZH** | **PanZhiHua** | **78.69** | **303** | P | **P** | **13 54 10.5** | **+0.5** |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | pmax | | |
| PZH | comp=Z,90nm,5.6s | | | pmax | pmax | | |
| **HHC** | **Hu-ho-hao-te** comp=Z,5.0nm,0.8s | **79.26** | **320** | *e*P | **P** | **13 54 13.1** | **+0.3** |
| HHC | | | | pmax | pmax | | |
| HHC | comp=Z,110nm,6.1s | | | pmax | pmax | | |
| **LZH** | **Lanzhou** | **81.73** | **312** | *e*P | **P** | **13 54 27.9** | **+1.6** |
| LZH | | | | pP | sP | 13 54 41.6 | +1.4 |
| LZH | | | | sP | pwP | 13 54 47.0 | +6.8 |
| LZH | comp=Z,10.0nm,0.9s | | | pmax | pmax | | |
| **BELA** | **Belgrano 2** | **82.69** | **175** | P | **P** | **13 54 30.2** | **-0.2** |
| **ULN** | **Ulaanbaatar** comp=Z,5.9nm,0.9s | **85.93** | **324** | P | **P** | **13 54 46.9** | **-0.5** |
| ULN | | | | IAmb | IAmb | 13 54 48.4 | |
| **YAK** | **Yakutsk** comp=Z,58nm,21.2s,baz=252,slow=32 | **86.12** | **343** | LR | LR | 14 27 21.8 | |
| **YAK** | **Yakutsk** | **86.12** | **343** | P | **P** | **13 54 47.5** | **-0.2** |
| **GTA** | **Gaotai** | **86.13** | **314** | ⇑P | **P** | **13 54 49.2** | **+0.6** |
| GTA | | | | pP | pP | 13 54 59.8 | -0.1 |
| GTA | | | | sP | pwP | 13 55 03.7 | +3.8 |
| GTA | comp=Z,3.0nm,1.2s | | | pmax | pmax | | |
| **SONM** | **Songino Array** 0.2nm,0.3s,baz=150,slow=6.1,SNR=20 | **86.28** | **323** | P | **P** | **13 54 49.2** | **+0.1** |
| **SONM** | **Songino Array** | **86.28** | **323** | P | **P** | **13 54 49.2** | **+0.1** |
| SONM | comp=Z,4.4nm,1.0s | | | IAmb | IAmb | 13 54 50.0 | |
| **SNAA** | **Sanae** | **89.64** | **183** | P | **P** | **13 55 03.4** | **-1.4** |
| SNAA | comp=Z,8.3nm,1.2s | | | IAmb | IAmb | 13 55 18.1 | |
| **ILAR** | **Eielson Array** comp=Z,0.9nm,0.7s,baz=235,slow=4.3,SNR=11 | **90.00** | **18** | P | **P** | **13 55 03.1** | **-3.2** |
| **WMQ** | **Ruumqi** | **96.22** | **314** | *e*P | **P** | **13 55 36.9** | **+1.3** |
| **YKA** | **Yellowknife Ar** comp=Z,0.7nm,0.6s,baz=253,slow=4.7,SNR=14 | **100.61** | **27** | P | **Pdif** | **13 55 52.6** | **-2.1** |
| **MKAR** | **Makanchi Array** comp=Z,0.4nm,0.6s,baz=94,slow=5.8,SNR=3.6 | **100.75** | **316** | P | **Pdif** | **13 55 56.5** | **+0.7** |
| **ARCES** | **ARCESS Array B** comp=Z,2.7nm,0.9s,baz=53,slow=1.8,SNR=8.2 | **124.34** | **345** | PKP | **PKPdf** | **14 01 03.0** | **-2.4** |
| **ARCES** | **ARCESS Array B** | **124.34** | **345** | | **PKPdf** | **14 01 05.0** | **-0.5** |
| **CONA** | **Conrad Observa** comp=Z,3.5nm,1.0s | **143.25** | **329** | *e*P | PKPbc | 14 01 38.7 | +0.2 |
| **GERES** | **GERESS Array B** comp=Z,0.7nm,0.6s,baz=46,slow=3.9,SNR=6.3 | **143.62** | **331** | PKhKP | PKPpre | 14 01 38.6 | |
| **GERES** | **GERESS Array B** | **143.62** | **331** | | **PKPdf** | **14 01 43.1** | **+1.0** |
| **ARSA** | **Arzberg** comp=Z,6.0nm,0.9s | **143.87** | **328** | *i* P | PKPab | 14 01 39.5 | -0.1 |
| **GRF** | **Grafenberg Arr** baz=39,slow=3.1 | **144.05** | **334** | *e*PKPbc | PKPbc | 14 01 40.6 | -0.2 |
| **MOA** | **Molln** comp=Z,3.1nm,0.6s | **144.07** | **330** | *i* P | PKPbc | 14 01 40.7 | -0.2 |
| **SOKA** | **Soboth** comp=Z,4.5nm,0.6s | **144.51** | **328** | *i* P | **PKPab** | **14 01 41.9** | **-0.3** |
| **TNS** | **Taunus Mts** baz=39,slow=3.1 | **144.69** | **338** | *e*PKPbc | **PKPab** | **14 01 42.6** | **-0.1** |
| **RJOB** | **Jochberg** baz=39,slow=3.1 | **144.84** | **331** | *e*PKPbc | **PKPab** | **14 01 43.2** | **-0.2** |
| **OBKA** | **Obir** comp=Z,7.2nm,0.9s | **144.87** | **328** | *i* P | **PKPab** | **14 01 42.7** | **-0.8** |
| **AHRW** | **Bad Neuenahr-A** baz=39,slow=3.1 | **144.91** | **339** | *e*PKPbc | **PKPdf** | **14 01 44.2** | **+0.1** |
| **KBA** | **Koelnbreinsper** comp=Z,10nm,1.0s | **145.06** | **330** | *i* P | **PKPbc** | **14 01 43.3** | **-0.9** |
| **BTNL** | **Ternell** | **145.18** | **340** | *d*PKP | **PKPbc** | **14 01 44.2** | **-0.1** |
| **FUR** | **Furstenfeldbru** baz=39,slow=3.1 | **145.20** | **333** | *e*PKPbc | **PKPdf** | **14 01 44.7** | **-0.2** |
| **MEM** | **Membach** | **145.20** | **340** | *d*PKPdf | **PKPbc** | **14 01 43.7** | **-0.6** |
| **MYKA** | **Terra Mystica** comp=Z,12nm,0.8s,SNR=4.2 | **145.24** | **329** | *i* P | **PKPbc** | **14 01 43.8** | **-0.8** |
| **STU** | **Stuttgart** baz=39,slow=3.1 | **145.59** | **335** | *e*PKPbc | **PKPbc** | **14 01 45.7** | **+0.1** |
| **ABTA** | **Abfaltersbach** comp=Z,20nm,0.9s,SNR=10 | **145.70** | **330** | *e*P | **PKPdf** | **14 01 45.0** | **-0.8** |
| **WATA** | **Walderalm** comp=Z,9.3nm,0.7s | **145.70** | **332** | *i* P | **PKPdf** | **14 01 45.7** | **-0.2** |
| **WTTA** | **Wattenberg** comp=Z,9.5nm,0.8s | **145.72** | **331** | *i* P | **PKPdf** | **14 01 45.1** | **-0.8** |
| **BMRD** | **Maredsous** | **145.86** | **341** | *d*PKPdf | **PKPdf** | **14 01 45.6** | **-0.2** |
| **MOTA** | **Moosalm** comp=Z,13nm,0.9s,SNR=6.1 | **145.90** | **332** | *i* P | **PKPdf** | **14 01 46.3** | **+0.1** |
| **RETA** | **Reutte** comp=Z,7.6nm,0.8s | **145.94** | **332** | *i* P | **PKPdf** | **14 01 46.2** | **0.0** |
| **SQTA** | **Sankt Quirin** comp=Z,13nm,0.7s | **145.95** | **332** | *i* P | **PKPbc** | **14 01 46.6** | **-0.4** |
| **WLF** | **Walferdange** baz=39,slow=3.1 | **145.97** | **339** | *e*PKPbc | **PKPab** | **14 01 47.2** | **-0.1** |
| **UBR** | **Ueberruh** baz=39,slow=3.1 | **146.08** | **333** | *e*PKPbc | **PKPbc** | **14 01 47.0** | **-0.3** |
| **DOU** | **Dourbes** | **146.09** | **341** | *d*PKP | **PKPdf** | **14 01 46.6** | **+0.4** |
| **BFO** | **Black Forest** baz=39,slow=3.1 | **146.29** | **336** | *e*PKPbc | **PKPbc** | **14 01 47.4** | **-0.4** |
| **FETA** | **Feichten** comp=Z,11nm,0.7s | **146.31** | **332** | *i* P | **PKPbc** | **14 01 47.9** | **-0.2** |
| **DAVA** | **Damuels** comp=Z,13nm,0.9s | **146.48** | **333** | *i* P | **PKPdf** | **14 01 47.3** | **+0.1** |

*NEIC **05** 13:44:35.6±1.7, 26°.2N±0°.1×129°.7E±0°.1, h7km±6km, mb4.3/5, Error ellipse: s-maj=17.3km s-min=11.3km az=143.0*
*NIED **05** 13:44:36.3, 26°.15N×129°.87E, h46km, MW4.3, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr-0.45; Mθθ1.34; Mφφ-0.89; Mrθ0.41; Mθφ3.19; Mφr0.23; Fault plane solution: M0 3.41000×10¹⁵ NP1: φs100.00000°, δ86.00000°, λ5.00000°. NP2:φs9.00000°, δ85.00000°, λ176.00000°.*
*JMA **05** 13:44:36.2±0.1, 26°.15N×129°.87E, h46km, M4.3*
*IDC **05** 13:44:39.5±1.1, 26°.86N×129°.63E, h0km, mb4.0/11, mb1 4.1/15, mb1mx3.9/42, mbtmp4.1/15, ML3.4/3, MS3.4/7, Ms1 3.4/7, ms1mx2.9/86, Error ellipse: s-maj=21.8km s-min=15.9km az=142.0*
**ISC 05 13:44:35.1±0.6, 26°.19N±0°.05×129°.86E±0°.04, h10km, n64, σ2§03/73

789nm,0.3s,baz=121,slow=21,SNR=1698
JOW LR LR 13 45 19.2
comp=Z,153nm,19.2s,baz=322,slow=33
JOW Sn **Sn** **13 45 20.7 -2.3**
931nm,0.3s,baz=47,slow=29,SNR=33
**JOW Kunigami 1.55 295** P **Pb** **13 45 02.8 -1.1**
JOW S **Sn** **13 45 20.7 -2.3**
**JOKE Okinoerabujima 1.64 316** P **Pb** **13 45 04.2 -1.1**
**JNTH Nagotoyohara 1.68 282** P **Pn** **13 45 04.0 -0.5**
JNTH S **Sn** **13 45 23.8 -2.2**
**JTK Tokunoshima 1.78 333** P **Pb** **13 45 06.2 -1.6**
JTK *e*S **Sn** **13 45 27.0 -1.6**
**JJT3 Tamagusuku3 1.86 269** P **Pb** **13 45 07.0 -2.2**
JJT3 S **Sn** **13 45 29.0 -1.6**
**JIH Iheya 1.89 297** P **Pb** **13 45 07.5 -2.1**
JIH S **Sn** **13 45 29.0 -2.2**
**JZK Kikaishima 2.12 3** S **Sn** **13 45 36.5 -0.4**
**JAMN Amaminishikomi 2.13 344** P **Pn** **13 45 10.9 +0.2**
**JAM Amami Oshima 2.22 354** P **Pn** **13 45 12.2 +0.2**
JAM *e*S **Sn** **13 45 37.0 -2.5**
**JAGN Aguni-jima 2.38 280** P **Pn** **13 45 14.1 0.0**
JAGN S **Sn** **13 45 41.1 -2.2**
**JKE Kume jima 2 2.76 273** P **Pn** **13 45 18.5 -0.9**
JKE S **Sn** **13 45 48.9 -3.8**
**JTAJ Takarajima 3.01 349** P **Pn** **13 45 22.8 0.0**
JTAJ S **Sn** **13 45 55.3 -3.5**
**JNN Nakanoshima 3.64 0** P **Pn** **13 45 32.2 +0.8**
JNN *e*S **Sn** **13 46 11.3 -3.1**
**JYAK Yakushimahirau 4.07 8** P **Pn** **13 45 37.9 +0.5**
JYAK S **Sn** **13 46 21.1 -4.1**
**JSU Suzuyama 5.32 6** S **Sn** **13 45 55.7 +1.1**
**JNU Nakatsue 6.96 7** Pn **Pn** **13 46 15.4 -1.8**
2.3nm,0.3s,baz=192,slow=14,SNR=22
JNU Sn **Sn** **13 47 30.7 -5.8**
3.8nm,0.3s,baz=109,slow=22,SNR=15
**JNU Nakatsue 6.96 7** **Pn** **13 46 18.3 +1.1**
**NACB Ninganchiao 7.75 257** Pn **Pn** **13 46 25.4 -2.6**
**YHNB Yeheng 7.81 261** Pn **Pn** **13 46 29.2 +0.3**
**YULB Yu-li 8.26 252** Pn **Pn** **13 46 30.6 -4.4**
**JMN Monobe 8.28 24** Pn **Pn** **13 46 36.4 +1.1**
**SSLB Suanglung 8.42 255** Pn **Pn** **13 46 34.3 -2.9**
**TPUB Ta-pu 8.87 253** Pn **Pn** **13 46 41.6 -1.7**
**JHS Saijyo 9.22 17** Pn **Pn** **13 46 49.0 +0.9**
**INU Inuyama 11.01 32** Pn **Pn** **13 47 14.7 +2.1**
**JHJ Hachijo jima 2 11.05 49** Pn **Pn** **13 47 15.3 +2.1**
19nm,0.3s,baz=337,slow=22,SNR=22
JHJ LR LR 13 50 36.5
comp=Z,70nm,19.9s,baz=348,slow=33
**JHJ2 Mitsune 11.07 49** Pn **Pn** **13 47 15.6 +2.1**
**KSRS Korea Array 11.35 352** Pn **Pn** **13 47 13.6 -3.7**
0.1nm,0.3s,baz=173,slow=13,SNR=1.7
**MJAR Matsushiro Arr 12.54 33** Pn **Pn** **13 47 34.0 +0.4**
0.1nm,0.3s,baz=235,slow=15,SNR=7.1
**HNS HongShan 17.02 315** ⇓P **P** **13 48 34.4 -0.7**
HNS pmax pmax
comp=Z,20nm,0.8s
**XAN Xi'an 19.70 298** P **P** **13 49 04.2 -0.5**
XAN pP pwP 13 49 15.3 +1.5
XAN pmax pmax
comp=Z,18nm,0.7s
XAN pmax pmax
comp=Z,88nm,3.8s
**KLR Kul'dur 23.05 3** P **P** **13 49 39.9 -0.5**
comp=Z,1.4nm,0.6s,baz=201,slow=8.5,SNR=6.2
**GTA Gaotai 28.34 305** ⇑P **P** **13 50 28.5 -0.8**
GTA pP pwP 13 50 34.9 -3.7
GTA sP sP 13 50 37.7 +6.7
GTA pmax pmax
comp=Z,7.0nm,0.9s
GTA pmax pmax
comp=Z,120nm,4.4s
GTA LR LR
comp=N,110nm,16.7s
GTA LR LR
comp=E,94nm,16.4s
GTA LR LR
comp=Z,92nm,16.7s
**SONM Songino Array 28.39 326** P **P** **13 50 31.4 +1.7**
comp=Z,2.3nm,0.9s,baz=130,slow=8.6,SNR=9.7
**SONM Songino Array 28.39 326** P **P** **13 50 31.8 +2.1**
**CMAR Chiang Mai Arr 29.56 261** P **P** **13 50 46.6 +6.4**
comp=Z,0.5nm,0.7s,baz=53,slow=7.2,SNR=4.9
CMAR LR LR 14 03 30.4
comp=Z,15nm,18.4s,baz=70,slow=38
**CMAR Chiang Mai Arr 29.56 261** P **P** **13 50 40.1 -0.1**
**GOMU GeErMu 31.44 297** P **P** **13 51 00.0 +2.9**
GOMU pmax pmax
comp=Z,3.0nm,0.8s
**PSI Prapat 37.71 237** LR LR 14 08 09.4
comp=Z,63nm,18.2s,baz=233,slow=37
**MK31 Makanchi Array 42.65 312** P **P** **13 52 32.2 +0.4**
MK31 IAmb IAmb 13 52 33.2
comp=Z,2.1nm,0.7s
**MKAR Makanchi Array 42.65 312** P **P** **13 52 32.0 +0.2**
comp=Z,3.1nm,0.6s,baz=93,slow=10,SNR=55
**MKAR Makanchi Array 42.65 312** P **P** **13 52 32.2 +0.4**
**MAKZ Makanchi 42.86 312** P **P** **13 52 33.9 +0.4**
MAKZ IAmb IAmb 13 52 35.1
comp=Z,9.5nm,1.3s
**ZALV Zalesovo Beam 43.16 322** P **P** **13 52 36.6 +0.8**
comp=Z,2.1nm,0.5s,baz=114,slow=7.7,SNR=10
**ZALV Zalesovo Beam 43.16 322** P **P** **13 52 35.2 -0.5**
**KURK Kurchatov 45.85 316** P **P** **13 52 57.1 -0.2**
KURK IAmb IAmb 13 52 58.8
comp=Z,8.4nm,1.1s
**WRA Warramunga Arr 46.06 174** P P 13 53 11.3 +12
comp=Z,1.8nm,0.8s,baz=355,slow=8.6,SNR=7.0
**WR0 Warramunga Arr 46.10 174** P **P** **13 53 00.2 +0.7**
**KSH Kashi 46.54 301** P P 13 53 08.0 +4.9
KSH pmax pmax
comp=Z,3.0nm,0.6s
**AAK Ala-Archa 47.69 305** LR LR 14 13 44.1
comp=Z,30nm,18.9s,baz=32,slow=37
**NRIK Noril'sk 49.74 342** P **P** **13 53 27.1 -0.1**
comp=Z,1.2nm,0.3s,baz=111,slow=7.8,SNR=3.8
**ABKAR Akbulak array 57.73 313** P **P** **13 54 26.7 +0.7**
**ARCES ARCESS Array B 70.57 339** P **P** **13 55 52.7 +2.7**
comp=Z,5.0nm,1.0s,baz=70,slow=11,SNR=2.3
**FINES FINESS Array B 73.61 331** P **P** **13 56 11.2 +2.9**
comp=Z,1.9nm,0.8s,baz=93,slow=3.1,SNR=8.4
**FINES FINESS Array B 73.61 331** P **P** **13 56 10.3 +2.0**
**AKASG Malin Array Be 76.50 320** P **P** **13 56 27.2 +2.0**
comp=Z,0.7nm,0.5s,baz=59,slow=6.1,SNR=2.6
AKASG LR LR 14 31 32.5
comp=Z,93nm,18.2s,baz=350,slow=37
**URZ Urewera 77.92 144** LR LR 14 28 52.3
comp=Z,34nm,18.4s,baz=310,slow=34
**YKA Yellowknife Ar 77.94 25** P **P** **13 56 34.4 +1.3**
comp=Z,0.6nm,0.8s,baz=299,slow=5.5,SNR=7.4
**NOA NORSAR Array B 79.99 334** P **P** **13 56 45.8 +1.4**
comp=Z,30nm,0.6s,baz=55,slow=5.5,SNR=3.6
**KMBO Kilima Mbogo 92.83 270** LR LR 14 40 18.8
comp=Z,50nm,21.6s,baz=114,slow=36

**JMA 05 13:45:43.9±0.1, 26°15N×129°86E, h45km, M4.0, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JMZ** | **Minamidaito 2** | **1.27** | **105** | P | Pn | 13 46 05.5 | +0.3 |
| JMZ | | | | S | Sn | 13 46 20.2 | -0.8 |
| **JKDJ** | **Kitadaitoujima** | **1.31** | **98** | P | Pn | 13 46 06.4 | +0.7 |
| JKDJ | | | | *e*S | Sn | 13 46 21.9 | -0.1 |
| **JYRO** | **Yoronjima** | **1.53** | **305** | P | Pn | 13 46 09.8 | +1.0 |
| JYRO | | | | S | Sn | 13 46 27.6 | +0.1 |
| **JOW** | **Kunigami** | **1.57** | **296** | P | Pn | 13 46 10.3 | +0.9 |
| JOW | | | | S | Sn | 13 46 28.5 | -0.1 |
| **JOKE** | **Okinoerabujima** | **1.67** | **317** | P | Pn | 13 46 11.7 | +1.0 |
| JOKE | | | | *e*S | Sn | 13 46 31.4 | +0.5 |
| **JNTH** | **Nagotoyohara** | **1.69** | **283** | P | Pn | 13 46 11.4 | +0.5 |
| JNTH | | | | *e*S | Sn | 13 46 31.2 | -0.2 |
| **JTK** | **Tokunoshima** | **1.82** | **334** | P | Pn | 13 46 13.9 | +1.1 |
| JTK | | | | S | Sn | 13 46 34.3 | -0.3 |
| **JJT3** | **Tamagusuku3** | **1.87** | **270** | P | Pn | 13 46 14.6 | +1.2 |
| JJT3 | | | | S | Sn | 13 46 36.5 | +0.8 |
| **JIH** | **Iheya** | **1.91** | **298** | P | Pn | 13 46 15.0 | +1.0 |
| JIH | | | | S | Sn | 13 46 36.6 | -0.2 |
| **JZK** | **Kikaishima** | **2.16** | **3** | S | Sn | 13 46 44.8 | +1.9 |
| **JAMN** | **Amaminishikomi** | **2.17** | **344** | P | Pn | 13 46 18.6 | +1.0 |
| JAMN | | | | S | Sn | 13 46 43.3 | 0.0 |
| **JAGN** | **Aguni-jima** | **2.39** | **281** | S | Sn | 13 46 48.7 | +0.1 |
| **JKE** | **Kume jima 2** | **2.77** | **274** | S | Sn | 13 46 56.9 | -1.0 |
| **JTAJ** | **Takarajima** | **3.05** | **349** | P | Pn | 13 46 30.6 | +1.0 |
| JTAJ | | | | S | Sn | 13 47 02.9 | -1.9 |

**IDC 05 13:59:44.4±2.2, 6°00S×130°45E, h164km×33km, mb3.1/1, mb1 3.0/5, mb1mx2.9/27, mbtmp3.5/5, Error ellipse: s-maj=73.2km s-min=16.3km az=88.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.16** | **9** | P | Pn | 14 01 01.6 | +1.4 |
| | 1.9nm,0.3s,baz=219,slow=23,SNR=12 | | | | | | |
| SIJI | | | | S | Sn | 14 01 59.2 | -0.3 |
| | 8.2nm,0.3s,baz=49,slow=24,SNR=17 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.91** | **201** | P | Pn | 14 02 41.8 | -0.3 |
| | 0.1nm,0.3s,baz=21,slow=14,SNR=1.6 | | | | | | |
| FITZ | | | | S | Sn | 14 04 52.0 | -13 |
| | 0.1nm,0.3s,baz=73,slow=11,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.37** | **165** | P | Pn | 14 02 58.9 | -1.6 |
| | 0.0nm,0.3s,baz=348,slow=13,SNR=1.3 | | | | | | |
| WRA | | | | S | Sn | 14 05 31.8 | -8.5 |
| | 0.1nm,0.3s,baz=332,slow=23,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **17.88** | **170** | P | P | 14 03 42.2 | +0.7 |
| | 0.1nm,0.3s,baz=347,slow=11,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.64** | **326** | P | P | 14 10 23.6 | 0.0 |
| | 0.3nm,0.4s,baz=116,slow=8.0,SNR=7.6 | | | | | | |

*DDA **05** 14:01:59.0±0.0, 39°65N×34°33E, h11km, ML2.7*
*ISK **05** 14:01:59.1, 39°61N×34°33E, h4km, ML2.7/12*
**ISC 05 14:01:58.6±0.9, 39°66N±0°03×34°38E±0°02, h13km±6km, n24, σ0°72/33, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CDAG** | **Cicekdag** | **0.04** | **191** | P | **Pg** | **14 02 01.5** | **+0.2** |
| CDAG | | | | S | **Sg** | **14 02 02.9** | **-0.2** |
| CDAG | | | | *i* AML | AML | 14 02 03.0 | |
| | comp=N,8μm,0.6s | | | | | | |
| CDAG | | | | *i* AML | AML | 14 02 03.0 | |
| | comp=E,10μm,0.4s | | | | | | |
| **CORM** | **Corum** | **0.55** | **20** | PG | **Pn** | **14 02 11.4** | **-0.9** |
| CORM | | | | SG | **Sn** | **14 02 20.8** | **-0.5** |
| **BRTR** | **Keskin Array B** | **0.58** | **276** | PG | **Pg** | **14 02 09.9** | **-0.1** |
| **KOZK** | **Kozakli-Nevseh** | **0.59** | **140** | PG | **Pb** | **14 02 10.9** | **+0.1** |
| **KAMT** | **Kaman** | **0.59** | **241** | PG | **Pg** | **14 02 10.0** | **-0.3** |
| KAMT | | | | SG | **Sg** | **14 02 17.9** | **-0.3** |
| **CKRK** | **Yozgat, Cekere** | **0.95** | **64** | P | **Pn** | **14 02 17.9** | **+0.1** |
| CKRK | | | | S | **Sn** | **14 02 31.8** | **+0.5** |
| CKRK | | | | *i* AML | AML | 14 02 36.0 | |
| | comp=N,405nm,0.5s | | | | | | |
| CKRK | | | | *i* AML | AML | 14 02 36.0 | |
| | comp=E,195nm,0.6s | | | | | | |
| **AFSR** | **Afar-Bala (An** | **1.04** | **258** | PG | **Pb** | **14 02 18.7** | **+0.2** |
| **GUNE** | **Kayseri** | **1.23** | **128** | P | **Pg** | **14 02 22.6** | **+0.3** |
| GUNE | | | | *i* AML | AML | 14 02 42.0 | |
| | comp=E,282nm,0.3s | | | | | | |
| GUNE | | | | *i* AML | AML | 14 02 44.0 | |
| | comp=N,149nm,0.3s | | | | | | |
| **KKUL** | **Konya-Kulu** | **1.24** | **247** | P | **Pn** | **14 02 21.5** | **-0.1** |
| KKUL | | | | S | **Sn** | **14 02 38.5** | **+0.3** |
| KKUL | | | | *i* AML | AML | 14 02 41.0 | |
| | comp=N,74nm,0.3s | | | | | | |
| KKUL | | | | *i* AML | AML | 14 02 45.0 | |
| | comp=E,74nm,0.9s | | | | | | |
| **ANTO** | **Ankara** | **1.24** | **280** | PN | **Pg** | **14 02 23.0** | **+0.4** |
| ANTO | | | | SN | **Sg** | **14 02 40.3** | **+1.6** |
| **LOD** | **Lodumlu** | **1.27** | **281** | PN | **Pg** | **14 02 23.5** | **+0.5** |
| **GULA** | **Gulagac** | **1.32** | **185** | PN | **Pg** | **14 02 24.1** | **0.0** |
| **BNN** | **Bunyan** | **1.40** | **125** | PN | **Pg** | **14 02 26.0** | **+0.5** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.46** | **99** | P | **Pb** | **14 02 26.4** | **+0.7** |
| CUSAR | | | | S | **Sg** | **14 02 47.0** | **+1.2** |
| CUSAR | | | | *i* AML | AML | 14 02 49.0 | |
| | comp=N,117nm,0.4s | | | | | | |
| **TOKT** | **Tokat** | **1.79** | **68** | PN | **Pg** | **14 02 32.3** | **-0.6** |
| **ALIN** | **Konya, Altinte** | **1.80** | **221** | P | **Pn** | **14 02 30.2** | **+0.8** |
| **PELI** | **Kastamonı-Ara** | **1.83** | **334** | P | **Pb** | **14 02 32.0** | **0.0** |
| PELI | | | | S | **Sg** | **14 02 57.3** | **-0.2** |
| **SARI** | **SarD1z-Kayseri** | **2.02** | **128** | PN | **Pb** | **14 02 34.9** | **-0.4** |
| **SVSK** | **Karacayir** | **2.03** | **82** | PN | **Pb** | **14 02 35.5** | **+0.1** |
| **CMRD** | **Camardi-Nigde** | **2.05** | **166** | PN | **Pb** | **14 02 35.1** | **-0.7** |
| **KIBS** | **BOLU** | **2.08** | **292** | P | **Pn** | **14 02 34.0** | **+0.7** |
| **KIZT** | **Kizilcal** | **2.09** | **249** | PN | **Pb** | **14 02 35.3** | **-1.2** |
| **LADK** | **Ladik-KONYA** | **2.15** | **228** | PN | **Pb** | **14 02 35.9** | **-1.5** |
| **CUKAN** | **kangal_SIVAS** | **2.41** | **97** | P | **Pb** | **14 02 40.6** | **-1.4** |
| CUKAN | | | | S | **Sg** | **14 03 15.8** | **-0.4** |

**ROM 05 14:09:56.5±0.1, 41°531N±0°009×14°62E±0°02, h10km, ML1.2/2, 1C-1D, Error ellipse: s-maj=1.5km s-min=1.0km az=248.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BSSO** | **Busso** | **0.02** | **311** | P | Pg | 14 09 58.4 | 0.0 |
| BSSO | | | | S | Sg | 14 10 00.0 | +0.2 |
| **SACR** | **S. Croce Del S** | **0.15** | **153** | P | Pg | 14 10 00.4 | +0.5 |
| SACR | | | | S | Sg | 14 10 03.8 | +1.6 |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.15** | **153** | P | Pg | 14 10 00.4 | +0.5 |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,123μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,114μm,1.4s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.23** | **231** | P | Pg | 14 10 02.0 | +0.8 |
| **TRIV** | **Trivento** | **0.24** | **348** | P | Pg | 14 10 02.0 | +0.6 |
| TRIV | | | | S | Sg | 14 10 07.3 | +2.5 |
| **TRIV** | **Trivento** | **0.24** | **348** | ⇓P | Pg | 14 10 02.2 | +0.7 |
| **CIGN** | **Sant'Elia a Pi** | **0.25** | **60** | P | Pg | 14 10 02.5 | +0.9 |
| **MIDA** | **Miranda** | **0.29** | **292** | P | Pg | 14 10 02.7 | +0.3 |
| **MIDA** | **Miranda** | **0.29** | **292** | ⇑P | Pb | 14 10 03.3 | -0.6 |
| **PSB1** | **Pescosannita** | **0.34** | **154** | P | Pg | 14 10 03.4 | +0.1 |
| PSB1 | | | | S | Sb | 14 10 09.7 | -0.5 |
| **MELA** | **Melanico ??? S** | **0.42** | **65** | P | Pg | 14 10 03.4 | -1.4 |
| MELA | | | | S | Sg | 14 10 11.0 | +0.7 |
| **LIK** | **San Giovanni I** | **0.80** | **268** | P | Pn | 14 10 13.4 | -0.3 |

**ROM 05 14:10:25.1±0.1, 42°877N±0°003×12°739E±0°004, h8km, ML1.3/4, 1C, Error ellipse: s-maj=0.3km s-min=0.3km az=323.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOMA** | **Monte Martano** | **0.14** | **240** | P | Pg | 14 10 28.9 | +0.6 |
| MOMA | | | | S | Sg | 14 10 31.3 | +0.9 |
| MOMA | | | | AML | AML | | |
| | comp=E,217μm,0.1s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=N,192μm,0.4s | | | | | | |
| **ASSB** | **Assisi San Ben** | **0.18** | **340** | ⇑P | Pg | 14 10 29.4 | +0.6 |
| ASSB | | | | S | Sg | 14 10 32.5 | +1.1 |
| ASSB | | | | AML | AML | | |
| | comp=E,329μm,0.4s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,278μm,0.4s | | | | | | |
| **NRCA** | **Norcia** | **0.28** | **99** | P | Pg | 14 10 31.5 | +0.8 |
| NRCA | | | | S | Sb | 14 10 36.4 | -0.9 |
| NRCA | | | | AML | AML | | |
| | comp=E,83μm,1.5s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,62μm,1.0s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.30** | **58** | P | Pb | 14 10 32.1 | -0.7 |
| FDMO | | | | S | Sb | 14 10 36.8 | -1.1 |
| **LNSS** | **Leonessa** | **0.35** | **141** | P | Pg | 14 10 32.8 | +0.7 |
| LNSS | | | | S | Sb | 14 10 38.8 | -0.7 |
| LNSS | | | | AML | AML | | |
| | comp=E,46μm,0.9s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=N,42μm,0.7s | | | | | | |

*BJI **05** 14:12:18.0±0.0, 19°10S×169°10E, h115km, mb4.6/47, mB5.0/26*
*IDC **05** 14:12:19.4±1.2, 19°19S×169°03E, h112km±10km, mb4.4/22, mb1 4.5/24, mb1mx4.3/36, mbtmp4.7/24, MS3.3/11, Ms1 3.4/11, ms1mx3.1/49, Error ellipse: s-maj=14.6km s-min=10.7km az=128.0*
*NEIC **05** 14:12:19.7±2.7, 19°08S±0°06×169°06E±0°07, h108km±6km, mb4.9/67, Error ellipse: s-maj=11.0km s-min=7.9km az=122.0*
*NOU **05** 14:12:21.5, 19°18S×168°95E, h113km, mb5.1/51, Vanuatu Islands*
**ISC 05 14:12:18.5±0.3, 19°13S±0°04×169°07E±0°05, h100km, n424, σ1°18/409, mb4.9/72, 31C-17D, Fault plane solution: NP1:**φ56.06833°, δ70.33077°, λ112.17735°. **NP2:**φ185.61552°, δ29.30952°, λ43.43892°. **Principal axes:** T Plg58.7148°, Azm356.9984°; N Plg20.8210°, Azm228.2559°; P Plg22.2460°, Azm129.3073°; **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTV** | **Rentapao** | **1.46** | **335** | P | **Pn** | **14 12 48.5** | **+4.2** |
| **DVP** | **Devils Point** | **1.63** | **329** | P | **Pn** | **14 12 50.2** | **+3.9** |
| **LIFNC** | **LIFOU** | **2.38** | **226** | | **Pn** | **14 12 56.6** | **+0.6** |
| **LIFNC** | **LIFOU** | **2.38** | **226** | P | **Pn** | **14 12 56.8** | **+0.8** |
| **MARNC** | **Mare, Loyalty** | **2.54** | **202** | | **Pn** | **14 12 58.7** | **+0.6** |
| **MARNC** | **Mare, Loyalty** | **2.54** | **202** | P | **Pn** | **14 12 59.0** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **3.56** | **215** | P | **Pn** | **14 13 12.7** | **+1.0** |
| **PINNC** | **Pines Island,** | **3.78** | **203** | | **Pn** | **14 13 15.8** | **+1.0** |
| **PINNC** | **Pines Island,** | **3.78** | **203** | P | **Pn** | **14 13 17.0** | **+2.2** |
| **DZM** | **Mont Dzumac** | **3.82** | **220** | *e*Pn | **Pn** | **14 13 16.7** | **+1.4** |
| | 414nm,0.8s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **14 13 54.3** | **-5.1** |
| | 9μm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **3.82** | **220** | P | **Pn** | **14 13 16.9** | **+1.5** |
| | 154nm,0.3s,baz=57,slow=11,SNR=1101 | | | | | | |
| DZM | | | | S | **Sn** | **14 13 58.2** | **-1.2** |
| | 241nm,0.3s,baz=44,slow=15,SNR=12 | | | | | | |
| **DZM** | **Mont Dzumac** | **3.82** | **220** | | **Pn** | **14 13 16.8** | **+1.4** |
| **DZM** | **Mont Dzumac** | **3.82** | **220** | P | **Pn** | **14 13 17.6** | **+2.2** |
| **OUENC** | **Ouen Island, N** | **3.88** | **212** | | **Pn** | **14 13 17.8** | **+1.8** |
| **OUENC** | **Ouen Island, N** | **3.88** | **212** | P | **Pn** | **14 13 18.3** | **+2.2** |
| **NOUC** | **Port Laguerre** | **3.93** | **221** | P | **Pn** | **14 13 20.1** | **+3.4** |
| **ONTNC** | **Ouen Toro** | **4.00** | **217** | | **Pn** | **14 13 19.7** | **+2.0** |
| **ONTNC** | **Ouen Toro** | **4.00** | **217** | P | **Pn** | **14 13 20.4** | **+2.7** |
| **SANVU** | **Saraoutou** | **4.07** | **334** | | **Pn** | **14 13 19.2** | **+0.5** |
| **SANVU** | **Saraoutou** | **4.07** | **334** | P | **Pn** | **14 13 20.4** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **4.72** | **252** | P | **Pn** | **14 13 30.3** | **+2.9** |
| **MSVF** | **Nonsavu** | **8.64** | **82** | P | **Pn** | **14 14 23.9** | **+3.1** |
| | 0.3nm,0.3s,baz=258,slow=11,SNR=7.0 | | | | | | |
| **MSVF** | **Nonsavu** | **8.64** | **82** | | Pn | 14 14 26.8 | +6.0 |
| **MSVF** | **Nonsavu** | **8.64** | **82** | P | Pn | 14 14 26.7 | +5.9 |
| **NFK** | **Norfolk Island** | **9.92** | **186** | P | **Pn** | **14 14 40.7** | **+2.5** |
| | baz=10,SNR=33 | | | | | | |
| **NFK** | **Norfolk Island** | **9.92** | **186** | P | **Pn** | **14 14 41.2** | **+3.1** |
| **DGTI** | **Dogotuki** | **10.55** | **76** | P | **Pn** | **14 14 51.1** | **+4.4** |
| **HNR** | **Honiara** | **13.07** | **316** | P | **Pn** | **14 15 24.3** | **+3.8** |
| | 24nm,0.3s,baz=153,slow=7.0,SNR=9.0 | | | | | | |
| HNR | | | | LR | LR | 14 20 19.8 | |
| | comp=Z,72nm,18.0s,baz=146,slow=37 | | | | | | |
| **HNR** | **Honiara** | **13.07** | **316** | P | **P** | **14 15 25.6** | **-1.3** |
| **HNR** | **Honiara** | **13.07** | **316** | P | **Pn** | **14 15 22.6** | **+2.2** |
| **LHI** | **Lord Howe Isla** | **15.29** | **214** | P | **P** | **14 15 53.8** | **+2.4** |
| **OUZ** | **Omahuta** | **16.52** | **167** | P | **P** | **14 16 06.9** | **+1.8** |
| **EIDS** | **Eidsvold** | **17.76** | **246** | P | **Pn** | **14 16 21.3** | **+1.9** |
| | baz=18,SNR=3.5 | | | | | | |
| **EIDS** | **Eidsvold** | **17.76** | **246** | P | **Pn** | **14 16 20.4** | **+1.0** |
| **WTAZ** | **Waiatarua** | **18.38** | **166** | P | **P** | **14 16 26.8** | **+1.3** |
| **KUZ** | **Kuaotunu** | **18.50** | **163** | P | **P** | **14 16 28.4** | **+1.6** |
| **TOZ** | **Tahuroa Road** | **19.37** | **164** | P | **P** | **14 16 38.5** | **+2.3** |
| **ARMA** | **Armidale** | **19.39** | **231** | P | **P** | **14 16 38.5** | **+1.8** |
| | baz=20,SNR=6.6 | | | | | | |
| **ARMA** | **Armidale** | **19.39** | **231** | P | **P** | **14 16 39.1** | **+2.4** |
| ARMA | | | | IAmb | IAmb | 14 16 40.2 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **19.39** | **231** | P | **P** | **14 16 38.8** | **+2.1** |
| **NIUE** | **Niue** | **19.85** | **93** | P | **P** | **14 16 40.8** | **-0.9** |
| **TLZ** | **Tolley Road** | **19.94** | **165** | P | **P** | **14 16 44.5** | **+2.0** |
| **OMRZ** | **Omania** | **19.95** | **163** | P | **P** | **14 16 43.6** | **+0.9** |
| **HIZ** | **Hauiti** | **19.96** | **167** | P | **P** | **14 16 45.5** | **+2.8** |
| HIZ | | | | IAmb | IAmb | 14 16 48.9 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **HAZ** | **Te Kaha** | **20.06** | **160** | P | **P** | **14 16 45.2** | **+1.5** |
| **RMQ** | **Roma** | **20.09** | **245** | P | **P** | **14 16 46.7** | **+2.5** |
| | baz=20,SNR=15 | | | | | | |
| **RMQ** | **Roma** | **20.09** | **245** | P | **P** | **14 16 46.0** | **+1.8** |
| **RUGZ** | **Raukumara Rang** | **20.21** | **160** | P | **P** | **14 16 47.0** | **+1.4** |
| **PKGZ** | **Pakihiroa** | **20.28** | **159** | P | **P** | **14 16 48.0** | **+1.8** |
| **URZ** | **Urewera** | **20.31** | **161** | P | **P** | **14 16 47.3** | **+0.9** |
| | comp=Z,45nm,0.8s,baz=317,slow=7.2,SNR=24 | | | | | | |
| **URZ** | **Urewera** | **20.31** | **161** | P | **P** | **14 16 48.0** | **+1.6** |
| **URZ** | **Urewera** | **20.31** | **161** | P | **P** | **14 16 48.5** | **+2.0** |
| URZ | | | | IAmb | IAmb | 14 16 51.9 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **20.31** | **161** | P | **P** | **14 16 48.4** | **+2.0** |
| **WMGZ** | **Waiomatatini S** | **20.33** | **158** | P | **P** | **14 16 47.9** | **+1.2** |
| **PUZ** | **Puketiti** | **20.50** | **159** | P | **P** | **14 16 49.4** | **+0.8** |
| **MWZ** | **Matawai** | **20.50** | **161** | P | **P** | **14 16 50.2** | **+1.6** |
| **TWGZ** | **Tauwhareparae** | **20.51** | **160** | P | **P** | **14 16 50.2** | **+1.6** |
| **RAGZ** | **Rawiri** | **20.62** | **161** | P | **P** | **14 16 51.4** | **+1.5** |
| **SNGZ** | **Shannon Statio** | **20.86** | **162** | P | **P** | **14 16 53.6** | **+1.2** |
| **RIGZ** | **Rimuhau** | **20.92** | **161** | P | **P** | **14 16 53.8** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **20.98** | **164** | P | **P** | **14 16 54.9** | **+1.2** |
| **MGCD** | **Mangrove Creek** | **21.32** | **225** | P | **P** | **14 17 00.5** | **+3.2** |
| | baz=22,SNR=10 | | | | | | |
| **CTA** | **Charters Tower** | **21.51** | **264** | P | **P** | **14 17 00.5** | **+0.9** |
| | comp=Z,4.8nm,0.5s,baz=86,slow=11,SNR=28 | | | | | | |
| **CTAO** | **Charters Tower** | **21.51** | **264** | P | **P** | **14 17 02.0** | **+2.4** |
| **RABL** | **Rabaul** | **22.20** | **310** | P | **P** | **14 17 07.5** | **+0.6** |
| RABL | | | | IAmb | IAmb | 14 17 16.6 | |
| | comp=Z,34nm,0.6s | | | | | | |
| **RABL** | **Rabaul** | **22.20** | **310** | P | **P** | **14 17 09.8** | **+2.9** |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **14 17 18.1** | **+0.3** |
| | comp=Z,24nm,0.9s,baz=132,slow=8.2,SNR=8.0 | | | | | | |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **14 17 18.6** | **+0.8** |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **14 17 18.8** | **+1.0** |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **14 17 19.0** | **+1.2** |
| **MTSU** | **Mount Surprise** | **23.47** | **268** | P | **P** | **14 17 20.6** | **+1.2** |
| | baz=24,SNR=8.0 | | | | | | |
| **MTSU** | **Mount Surprise** | **23.47** | **268** | P | **P** | **14 17 20.8** | **+1.4** |
| **CNB** | **Canberra Magne** | **23.74** | **223** | P | **P** | **14 17 22.7** | **+1.1** |
| | baz=24,SNR=82 | | | | | | |
| **CNB** | **Canberra Magne** | **23.74** | **223** | P | **P** | **14 17 22.8** | **+1.1** |
| **CAN** | **Canberra** | **23.98** | **224** | P | **P** | **14 17 25.0** | **+1.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ARPS | Mount Arapiles | 29.64 | 228 | P | | P | 14 18 15.0 | +0.6 | |
| | baz=30,SNR=9.1 | | | | | | | | |
| ARPS | Mount Arapiles | 29.64 | 228 | P | | P | 14 18 15.1 | +0.6 | |
| LCRK | Leigh Creek | 30.10 | 242 | P | | P | 14 18 19.0 | +0.4 | |
| HTT | Hallett | 30.42 | 236 | P | | P | 14 18 21.7 | +0.2 | |
| | baz=31,SNR=8.6 | | | | | | | | |
| HTT | Hallett | 30.42 | 236 | P | | P | 14 18 21.8 | +0.2 | |
| NAPP | Napperby | 30.95 | 237 | P | | P | 14 18 26.9 | +0.8 | |
| WHYH | Whyalla | 31.36 | 237 | P | | P | 14 18 30.3 | +0.6 | |
| | comp=Z,34nm,0.7s | | | | | | | | |
| OOD | Oodnadatta | 31.73 | 248 | P | | P | 14 18 33.8 | +0.7 | |
| BBOO | Buckleboo | 32.51 | 239 | P | | P | 14 18 39.8 | 0.0 | |
| | baz=33,SNR=29 | | | | | | | | |
| BBOO | Buckleboo | 32.51 | 239 | P | | P | 14 18 38.6 | -1.2 | |
| BBOO | | | | IAmb | | IAmb | 14 18 40.6 | | |
| | comp=Z,21nm,0.6s | | | | | | | | |
| BBOO | Buckleboo | 32.51 | 239 | P | | P | 14 18 39.9 | +0.1 | |
| | comp=Z,34nm,0.7s | | | | | | | | |
| WB0 | Warramunga Arr | 32.67 | 263 | P | | P | 14 18 40.3 | -1.1 | |
| WB2 | Warramunga Arr | 32.70 | 263 | P | | P | 14 18 40.5 | -1.2 | |
| GENI | Genyem | 32.70 | 297 | P | | P | 14 18 41.9 | +0.2 | |
| | comp=Z,2µmcomp=Z,86nm,0.8s | | | | | | | | |
| GENI | Genyem | 32.70 | 297 | P | | P | 14 18 42.7 | +1.0 | |
| | comp=Z,100nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 32.71 | 263 | P | | P | 14 18 39.9 | -1.9 | |
| | comp=Z,2.2nm,0.5s,baz=81,slow=6.0,SNR=40 | | | | | | | | |
| WRA | | | | ScP | | ScP | 14 24 58.5 | -1.8 | |
| | comp=Z,1.3nm,0.8s,baz=89,slow=3.8,SNR=6.4 | | | | | | | | |
| WRA | | | | P3KPbc | | | 14 50 02.2 | | |
| | comp=Z,0.4nm,1.0s,baz=314,slow=1.6,SNR=4.6 | | | | | | | | |
| WRA | Warramunga Arr | 32.71 | 263 | P | | P | 14 18 40.1 | -1.6 | |
| AS31 | Alice Springs | 33.00 | 256 | P | | P | 14 18 43.7 | -0.6 | |
| AS31 | | | | IAmb | | IAmb | 14 18 44.2 | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| ASAR | Alice Springs | 33.00 | 256 | P | | P | 14 18 43.6 | -0.7 | |
| | comp=Z,12nm,0.4s,baz=82,slow=8.6,SNR=881 | | | | | | | | |
| ASAR | | | | ScP | | ScP | 14 24 60.0 | -1.4 | |
| | comp=Z,1.2nm,0.7s,baz=100,slow=4.0,SNR=7.5 | | | | | | | | |
| ASAR | | | | LR | | LR | 14 31 29.0 | | |
| | comp=Z,64nm,18.2s,baz=86,slow=35 | | | | | | | | |
| ASAR | | | | P3KPbc | | | 14 50 00.7 | | |
| | comp=Z,0.5nm,0.8s,baz=275,slow=3.9,SNR=5.2 | | | | | | | | |
| ASAR | Alice Springs | 33.00 | 256 | P | | P | 14 18 44.2 | -0.1 | |
| MULG | Mulgathing | 33.56 | 244 | P | | P | 14 18 49.1 | +0.1 | |
| KDU | Kakadu | 35.72 | 275 | P | | P | 14 19 07.5 | -0.3 | |
| | baz=36,SNR=5.3 | | | | | | | | |
| MTN | Manton Dam | 36.95 | 274 | P | | P | 14 19 18.1 | -0.1 | |
| | baz=37,SNR=8.3 | | | | | | | | |
| MTN | Manton Dam | 36.95 | 274 | P | | P | 14 19 18.1 | -0.1 | |
| MTN | | | | IAmb | | IAmb | 14 19 18.9 | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| WRKA | Warakurna | 38.13 | 254 | P | | P | 14 19 27.6 | -0.5 | |
| | baz=38,SNR=9.8 | | | | | | | | |
| WRKA | Warakurna | 38.13 | 254 | P | | P | 14 19 27.7 | -0.5 | |
| KNRA | Kununurra | 38.56 | 269 | P | | P | 14 19 31.2 | -0.6 | |
| | baz=39,SNR=8.5 | | | | | | | | |
| KNRA | Kununurra | 38.56 | 269 | P | | P | 14 19 31.5 | -0.2 | |
| KNRA | | | | IAmb | | IAmb | 14 19 31.8 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| FORT | Forrest | 38.75 | 244 | P | | P | 14 19 32.9 | -0.3 | |
| | baz=39,SNR=17 | | | | | | | | |
| FORT | Forrest | 38.75 | 244 | P | | P | 14 19 32.8 | -0.5 | |
| FORT | | | | IAmb | | IAmb | 14 20 01.4 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| PPT | Papeete | 39.22 | 95 | LR | | LR | 14 35 32.6 | | |
| | comp=Z,61nm,18.9s,baz=288,slow=36 | | | | | | | | |
| FAKI | Fak Fak | 39.43 | 290 | P | | P | 14 19 38.3 | -0.8 | |
| | comp=Z,39nm,1.4s | | | | | | | | |
| FAKI | Fak Fak | 39.43 | 290 | P | | P | 14 19 38.1 | -1.0 | |
| FITZ | Fitzroy Crossi | 41.09 | 264 | LR | | LR | 14 35 59.8 | | |
| | comp=Z,45nm,18.6s,baz=105,slow=35 | | | | | | | | |
| FITZ | Fitzroy Crossi | 41.09 | 264 | P | | P | 14 19 53.0 | +0.2 | |
| | baz=41,SNR=33 | | | | | | | | |
| SIJI | Sorong | 41.25 | 292 | LR | | LR | 14 37 59.0 | | |
| | comp=Z,52nm,19.4s,baz=127,slow=37 | | | | | | | | |
| SWI | Sorong | 41.26 | 292 | P | | P | 14 19 53.6 | -0.5 | |
| | comp=Z,787nmcomp=Z,38nm,0.8s | | | | | | | | |
| SANI | Sanana | 45.44 | 287 | P | | P | 14 20 27.3 | -0.5 | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| SANI | Sanana | 45.44 | 287 | P | | P | 14 20 27.4 | -0.4 | |
| PSA00 | Pilbara Seismi | 46.06 | 258 | P | | P | 14 20 32.9 | +0.2 | |
| PSA00 | | | | IAmb | | IAmb | 14 20 33.6 | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| MEEK | Meekatharra | 46.84 | 251 | P | | P | 14 20 38.3 | -0.4 | |
| | baz=47,SNR=18 | | | | | | | | |
| MEEK | Meekatharra | 46.84 | 251 | P | | P | 14 20 38.5 | -0.2 | |
| KLBR | Kellerberrin | 47.61 | 244 | P | | P | 14 20 43.5 | -1.1 | |
| | baz=48,SNR=13 | | | | | | | | |
| KLBR | Kellerberrin | 47.61 | 244 | P | | P | 14 20 43.7 | -0.9 | |
| NWAO | Narrogin (SRO) | 48.12 | 243 | P | | P | 14 20 48.0 | -0.5 | |
| NWAO | | | | IAmb | | IAmb | 14 20 48.5 | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| RKGY | Rocky Gully | 48.45 | 240 | P | | P | 14 20 50.8 | -0.2 | |
| | baz=49,SNR=10.0 | | | | | | | | |
| KAPI | Kappang | 50.04 | 280 | P | | P | 14 21 03.8 | +0.5 | |
| KAPI | | | | IAmb | | IAmb | 14 21 05.0 | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| DAV | Davao City (W) | 50.14 | 297 | LR | | LR | 14 41 24.1 | | |
| | comp=Z,27nm,19.5s,baz=111,slow=35 | | | | | | | | |
| KEKH | Kekaha | 51.01 | 38 | P | | P | 14 21 09.7 | -0.7 | |
| TOLI2 | Tolitoli | 51.48 | 287 | P | | P | 14 21 14.3 | +0.1 | |
| TOLI2 | | | | IAmb | | IAmb | 14 21 18.4 | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| OPA | Opana | 51.80 | 40 | P | | P | 14 21 17.0 | +0.6 | |
| HMH | Humu'ula Sheep | 51.87 | 44 | P | | P | 14 21 18.3 | +1.1 | |
| VNDA | Vanda | 58.53 | 182 | P | | P | 14 22 03.0 | -1.0 | |
| | comp=Z,8.8nm,1.0s,baz=5.2,slow=5.7,SNR=7.6 | | | | | | | | |
| MJAR | Matsushiro Arr | 62.58 | 332 | P | | P | 14 22 31.1 | -1.0 | |
| | comp=Z,4.2nm,0.4s,baz=165,slow=5.9,SNR=17 | | | | | | | | |
| MJAR | Matsushiro Arr | 62.58 | 332 | P | | P | 14 22 31.6 | -0.4 | |
| MJAR | | | | IAmb | | IAmb | 14 22 32.2 | | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| MAJO | Matsushiro | 62.58 | 332 | P | | P | 14 22 31.4 | -0.6 | |
| MAJO | | | | IAmb | | IAmb | 14 22 33.0 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| MAT | Matsushiro | 62.58 | 332 | P | | P | 14 22 31.4 | -0.6 | |
| MAT | | | | S | | S | 14 30 51.4 | -0.8 | |
| MJB9 | Matsu-Tunnel | 62.59 | 332 | P | | P | 14 22 31.6 | -0.4 | |
| MJB9 | | | | IAmb | | IAmb | 14 22 33.0 | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| JNU | Nakatsue | 63.48 | 325 | P | | P | 14 22 37.6 | -0.5 | |
| | comp=Z,9.3nm,0.7s,baz=29,slow=1.1,SNR=7.2 | | | | | | | | |
| ASAJ | Asahikawa | 67.44 | 340 | P | | P | 14 23 03.2 | -0.1 | |
| | comp=Z,20nm,0.9s,baz=213,slow=7.1,SNR=9.5 | | | | | | | | |
| ASAJ | | | | LR | | LR | 14 49 19.7 | | |
| | comp=Z,29nm,19.2s,baz=172,slow=33 | | | | | | | | |
| KSRS | Korea Array | 68.33 | 326 | P | | P | 14 23 08.8 | -0.2 | |
| | comp=Z,1.2nm,0.6s,baz=139,slow=5.6,SNR=8.8 | | | | | | | | |
| KSRS | | | | LR | | LR | 14 49 49.7 | | |
| | comp=Z,6.6nm,22.0s,baz=225,slow=33 | | | | | | | | |
| NJ2 | Nanjing | 70.02 | 316 | eP | | P | 14 23 22.3 | +2.7 | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| QSPA | South Pole Qui | 70.92 | 180 | P | | P | 14 23 24.2 | -0.6 | |
| QSPA | | | | IAmb | | IAmb | 14 23 25.2 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| USRK | Ussuriysk Ar. | 71.57 | 333 | P | | P | 14 23 28.4 | -0.3 | |
| | comp=Z,6.4nm,0.8s,baz=171,slow=3.7,SNR=7.2 | | | | | | | | |
| USRK | Ussuriysk Ar. | 71.57 | 333 | P | | P | 14 23 29.8 | +1.1 | |
| PET | Petropavlovsk | 72.42 | 353 | P | | P | 14 23 33.8 | +0.2 | |
| PEA0B | Petropavlovsk- | 72.61 | 353 | P | | P | 14 23 35.2 | +0.5 | |
| PEA0B | | | | IAmb | | IAmb | 14 23 36.0 | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| PETK | Petropavlovsk- | 72.61 | 353 | P | | P | 14 23 34.7 | 0.0 | |
| | comp=Z,16nm,1.0s,baz=167,slow=7.4,SNR=15 | | | | | | | | |
| PETK | Petropavlovsk- | 72.61 | 353 | P | | P | 14 23 34.2 | -0.5 | |
| DL2 | Dalian | 72.83 | 323 | P | | P | 14 23 36.4 | +0.1 | |
| DL2 | | | | pmax | | pmax | | | |
| | comp=Z,40nm,0.7s | | | | | | | | |
| MDJ | Mudanjiang | 72.95 | 332 | P | | P | 14 23 37.4 | +0.5 | |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,200nm,4.4s | | | | | | | | |
| MDJ | Mudanjiang | 72.95 | 332 | P | | P | 14 23 36.5 | -0.5 | |
| MDJ | | | | IAmb | | IAmb | 14 23 38.1 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| CN2 | Changchun | 74.28 | 329 | eP | | P | 14 23 44.2 | -0.6 | |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| NIKH | Nikolski High | 74.31 | 14 | P | | P | 14 23 43.6 | -1.0 | |
| | baz=202 | | | | | | | | |
| BNX | BinXian | 74.80 | 331 | ⇑P | | P | 14 23 47.2 | -0.5 | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,150nm,3.7s | | | | | | | | |
| UNV | Unalaska Valle | 75.66 | 15 | P | | P | 14 23 51.1 | -1.3 | |
| | baz=204 | | | | | | | | |
| KLR | Kul'dur | 75.70 | 336 | P | | P | 14 23 53.2 | +0.4 | |
| | comp=Z,3.9nm,0.8s,baz=145,slow=1.9,SNR=9.2 | | | | | | | | |
| LYN | LuoYang | 75.78 | 315 | ⇓P | | P | 14 23 53.7 | +0.1 | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,90nm,9.1s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,180nm,5.1s | | | | | | | | |
| BJT | Baijiatuau | 76.74 | 321 | P | | P | 14 23 58.0 | -0.9 | |
| BJI | Beijing | 76.75 | 321 | P | | P | 14 23 59.0 | +0.1 | |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| XAN | Xi'an | 77.92 | 313 | P | | P | 14 24 05.4 | -0.3 | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,84nm,4.1s | | | | | | | | |
| KMI | Kunming | 78.08 | 302 | ⇑P | | P | 14 24 08.1 | +1.1 | |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| CMAR | Chiang Mai Arr | 78.31 | 294 | P | | P | 14 24 08.4 | +0.3 | |
| | comp=Z,3.8nm,0.8s,baz=131,slow=4.4,SNR=24 | | | | | | | | |
| CMAR | Chiang Mai Arr | 78.31 | 294 | P | | P | 14 24 07.2 | -0.9 | |
| CHTO | Chiang Mai | 78.46 | 295 | P | | P | 14 24 09.4 | +0.5 | |
| XLT | XiLinHaoTe | 79.26 | 324 | eP | | P | 14 24 12.6 | -0.3 | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,74nm,4.5s | | | | | | | | |
| PZH | PanZhiHua | 79.51 | 303 | P | | P | 14 24 14.0 | -0.7 | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,70nm,5.0s | | | | | | | | |
| MA2 | Magadan | 79.84 | 351 | P | | P | 14 24 13.9 | -1.7 | |
| HHC | Hu-ho-hao-te | 80.03 | 319 | eP | | P | 14 24 17.7 | +0.5 | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,87nm,4.8s | | | | | | | | |
| HHC | Hu-ho-hao-te | 80.03 | 319 | eP | | P | 14 24 17.4 | +0.2 | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,87nm,5.7s | | | | | | | | |
| CD2 | Chengdu | 80.04 | 308 | P | | P | 14 24 18.2 | +0.8 | |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| BELA | Belgrano 2 | 82.22 | 175 | P | | P | 14 24 26.6 | -1.5 | |
| OHAK | Old Harbor | 82.31 | 20 | P | | P | 14 24 28.5 | -0.2 | |
| | baz=216 | | | | | | | | |
| LZH | Lanzhou | 82.53 | 312 | eP | | P | 14 24 31.3 | +0.7 | |
| LZH | | | | pP | | pP | 14 24 55.7 | -0.5 | |
| LZH | | | | sP | | sP | 14 25 10.5 | +3.7 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| KDAK | Kodiak Island | 82.98 | 20 | P | | P | 14 24 31.9 | -0.2 | |
| | baz=216 | | | | | | | | |
| P18K | Big Mountain, | 83.51 | 17 | P | | P | 14 24 34.5 | -0.4 | |
| | baz=214,SNR=13 | | | | | | | | |
| Q19K | Cape Douglas, | 83.59 | 18 | P | | P | 14 24 35.0 | -0.3 | |
| Q19K | Cape Douglas, | 83.59 | 18 | P | | P | 14 24 35.3 | 0.0 | |
| | baz=215 | | | | | | | | |
| O18K | Koktuh Hills | 83.90 | 17 | P | | P | 14 24 36.4 | -0.5 | |
| | baz=214,SNR=5.9 | | | | | | | | |
| GAMB | Gambell | 83.98 | 8 | P | | P | 14 24 37.5 | +0.4 | |
| GAMB | | | | IAmb | | IAmb | 14 24 39.1 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| GAMB | Gambell | 83.98 | 8 | P | | P | 14 24 36.4 | -0.7 | |
| | baz=198 | | | | | | | | |
| O19K | Port Alsworth | 84.44 | 17 | P | | P | 14 24 39.0 | -0.4 | |
| | baz=214,SNR=14 | | | | | | | | |
| HOM | Homer | 84.79 | 19 | P | | P | 14 24 40.9 | -0.3 | |
| | baz=217 | | | | | | | | |
| N19K | Bonanza Creek | 84.90 | 17 | P | | P | 14 24 41.2 | -0.8 | |
| | baz=214 | | | | | | | | |
| RSO | Redoubt South | 85.11 | 18 | P | | P | 14 24 43.6 | +0.5 | |
| BRSE | Bradley Lake S | 85.13 | 19 | P | | P | 14 24 42.7 | -0.4 | |
| | baz=218 | | | | | | | | |
| ANM | Nome | 85.72 | 11 | P | | P | 14 24 45.6 | -0.2 | |
| ANM | | | | IAmb | | IAmb | 14 24 47.3 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| L19K | White Mountain | 85.94 | 16 | P | | P | 14 24 47.1 | +0.1 | |
| L19K | | | | IAmb | | IAmb | 14 24 50.5 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| KMRM | Mail Ridge | 85.94 | 45 | P | | P | 14 24 43.8 | -3.8 | |
| PKM | Mcpherson Peak | 86.21 | 51 | P | | P | 14 24 48.6 | -0.7 | |
| | baz=244 | | | | | | | | |
| TNA | Tin City | 86.22 | 9 | P | | P | 14 24 47.7 | -0.6 | |
| | baz=202 | | | | | | | | |
| TTA | Tatalina | 86.27 | 15 | P | | P | 14 24 47.7 | -1.0 | |
| | baz=213 | | | | | | | | |
| RC01 | Rabbit Creek A | 86.50 | 19 | P | | P | 14 24 48.7 | -1.1 | |
| | baz=219 | | | | | | | | |
| ULN | Ulaanbaatar | 86.68 | 323 | P | | P | 14 24 50.8 | -0.4 | |
| ULN | | | | IAmb | | IAmb | 14 24 52.0 | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| YAK | Yakutsk | 86.72 | 343 | P | | P | 14 24 50.8 | 0.0 | |
| | comp=Z,7.2nm,0.5s,baz=332,slow=0.7,SNR=7.3 | | | | | | | | |
| YAK | Yakutsk | 86.72 | 343 | P | | P | 14 24 49.9 | -0.9 | |
| PWL | Port Wells | 86.75 | 19 | P | | P | 14 24 49.6 | -1.5 | |
| | baz=220 | | | | | | | | |
| M22K | Willow | 86.91 | 18 | P | | P | 14 24 51.1 | -0.6 | |
| | baz=218 | | | | | | | | |
| GTA | Gaotai | 86.93 | 313 | ⇓P | | P | 14 24 52.3 | -0.3 | |
| GTA | | | | pP | | pP | 14 25 24.4 | +6.0 | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| BILL | Bilibino | 86.94 | 359 | P | | P | 14 24 51.1 | -0.6 | |
| N02D | Trinity Center | 86.97 | 45 | P | | P | 14 24 53.5 | +0.9 | |
| N02D | Trinity Center | 86.97 | 45 | P | | P | 14 24 53.0 | +0.3 | |
| | baz=242 | | | | | | | | |
| SONM | Songino Array | 87.03 | 323 | P | | P | 14 24 52.7 | -0.2 | |
| | comp=Z,6.9nm,0.8s,baz=154,slow=6.5,SNR=35 | | | | | | | | |
| SONM | Songino Array | 87.03 | 323 | P | | P | 14 24 52.7 | -0.2 | |
| SONM | | | | IAmb | | IAmb | 14 24 53.5 | | |
| | comp=Z,8.5nm,0.9s | | | | | | | | |
| ARVC | Arvin | 87.04 | 51 | P | | P | 14 24 53.1 | +0.1 | |
| | baz=244 | | | | | | | | |
| M02C | Callahan | 87.08 | 44 | P | | P | 14 24 54.3 | +1.2 | |
| M02C | Callahan | 87.08 | 44 | P | | P | 14 24 53.6 | +0.4 | |
| | baz=241 | | | | | | | | |
| PMR | Palmer | 87.08 | 19 | P | | P | 14 24 51.2 | -1.3 | |
| | baz=219 | | | | | | | | |
| KNK | Knik Glacier | 87.14 | 19 | P | | P | 14 24 52.8 | -0.1 | |
| | baz=220 | | | | | | | | |
| K02D | Willamette Mer | 87.17 | 43 | P | | P | 14 24 53.3 | -0.3 | |
| | baz=241 | | | | | | | | |
| J01E | Myrtle Point | 87.23 | 42 | P | | P | 14 24 53.2 | -0.5 | |
| | baz=241 | | | | | | | | |
| ISA | Isabella, Lake | 87.54 | 51 | P | | P | 14 24 55.1 | -0.4 | |
| | baz=244,SNR=6.2 | | | | | | | | |
| EDW2 | Edwards Air Fo | 87.56 | 52 | P | | P | 14 24 55.4 | -0.2 | |
| | baz=245,SNR=5.3 | | | | | | | | |
| HUMO | Hull Mountain | 87.59 | 43 | P | | P | 14 24 56.1 | +0.6 | |
| HUMO | | | | IAmb | | IAmb | 14 24 57.2 | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| GCSA | Galena City Sc | 87.61 | 14 | P | | P | 14 24 54.5 | -0.5 | |
| | baz=212 | | | | | | | | |
| MURC | Murrieta | 87.62 | 53 | P | | P | 14 24 55.7 | -0.2 | |
| | baz=245 | | | | | | | | |
| CAST | Castle Rocks | 87.69 | 16 | P | | P | 14 24 53.6 | -1.8 | |
| | baz=216 | | | | | | | | |
| J20K | Nowinta River | 87.78 | 15 | P | | P | 14 24 54.4 | -1.4 | |
| J20K | | | | IAmb | | IAmb | 14 24 56.0 | | |
| | comp=Z,5.8nm,0.7s | | | | | | | | |
| J20K | Nowinta River | 87.78 | 15 | P | | P | 14 24 54.4 | -1.4 | |
| | baz=214 | | | | | | | | |
| L04D | Klamath Falls | 87.83 | 44 | P | | P | 14 24 56.7 | -0.2 | |
| | baz=242 | | | | | | | | |
| I03D | Drain, OR | 87.86 | 42 | P | | P | 14 24 55.7 | -1.0 | |
| | baz=241 | | | | | | | | |
| MONP2 | Monument Peak | 87.91 | 54 | P | | P | 14 24 56.7 | -0.8 | |
| | baz=246 | | | | | | | | |
| M04C | Macdoel | 87.93 | 44 | P | | P | 14 24 57.4 | +0.1 | |
| | baz=242 | | | | | | | | |
| KLU | Klutina | 88.00 | 20 | P | | P | 14 24 55.7 | -1.4 | |
| | baz=222 | | | | | | | | |
| CHUM | Lake Minchumin | 88.00 | 16 | P | | P | 14 24 55.7 | -1.2 | |
| | baz=216 | | | | | | | | |
| LRMC | Laurel Mtn Rad | 88.04 | 51 | P | | P | 14 24 57.9 | -0.1 | |
| | baz=245,SNR=5.5 | | | | | | | | |
| IKP | In-Ko-Pah, Jac | 88.06 | 55 | P | | P | 14 24 58.0 | -0.1 | |
| | baz=246 | | | | | | | | |
| CWC | Cottonwood Cre | 88.16 | 50 | P | | P | 14 24 58.6 | +0.1 | |
| | baz=245 | | | | | | | | |
| PFO | Pinyon Flats O | 88.18 | 54 | P | | P | 14 24 58.1 | -0.6 | |
| | baz=246 | | | | | | | | |
| TPFO | Pinon Flats | 88.18 | 54 | P | | P | 14 24 58.0 | -0.7 | |
| | baz=246 | | | | | | | | |
| TRF | Thorofare Moun | 88.20 | 17 | P | | P | 14 24 56.3 | -1.8 | |
| | baz=218 | | | | | | | | |
| SWSC | Sam W. Stewart | 88.41 | 54 | P | | P | 14 24 59.8 | +0.2 | |
| | baz=246 | | | | | | | | |
| MPMC | Manual Prospec | 88.43 | 51 | P | | P | 14 24 59.7 | -0.2 | |
| | baz=245,SNR=8.4 | | | | | | | | |
| J04D | Umpqua Nationa | 88.44 | 43 | P | | P | 14 24 58.9 | -0.8 | |
| | baz=242 | | | | | | | | |
| I04A | Tendick Farm, | 88.51 | 42 | P | | P | 14 24 59.3 | -0.5 | |
| | baz=242 | | | | | | | | |
| N25K | Chitina, Valde | 88.51 | 20 | P | | P | 14 24 58.6 | -0.9 | |
| | baz=223 | | | | | | | | |
| GSC | Goldstone, Bar | 88.62 | 52 | P | | P | 14 25 00.3 | -0.4 | |
| | baz=245 | | | | | | | | |
| H04D | Lebanon | 88.65 | 42 | P | | P | 14 24 59.8 | -0.6 | |
| | baz=241 | | | | | | | | |
| BELC | Belle Mtn. Jos | 88.69 | 53 | P | | P | 14 25 00.6 | -0.5 | |
| | baz=246 | | | | | | | | |
| HEC | Hector Ludlow | 88.77 | 52 | P | | P | 14 25 01.6 | +0.2 | |
| | baz=246 | | | | | | | | |
| MCK | McKinley | 88.80 | 17 | P | | P | 14 24 59.6 | -1.2 | |
| | baz=219 | | | | | | | | |
| QSM | Queen of Sheba | 88.85 | 51 | P | | P | 14 25 02.0 | +0.4 | |
| NVAR | Mina Array Bea | 88.85 | 49 | P | | P | 14 25 02.1 | +0.3 | |
| | comp=Z,3.7nm,0.7s,baz=229,slow=8.5,SNR=29 | | | | | | | | |
| NV11 | Mina Array Sit | 88.95 | 49 | P | | P | 14 25 02.1 | -0.2 | |
| NV11 | | | | IAmb | | IAmb | 14 25 03.0 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| BC3 | Big Chuckawall | 88.97 | 54 | P | | P | 14 25 02.1 | -0.2 | |
| | baz=246 | | | | | | | | |
| K05A | Summer Lake | 88.99 | 44 | P | | P | 14 25 03.2 | +0.8 | |
| J05D | Fort Rock, OR | 89.02 | 43 | P | | P | 14 25 02.1 | -0.3 | |
| | baz=242 | | | | | | | | |
| FURC | Furnace Creek, | 89.06 | 51 | P | | P | 14 25 02.8 | +0.2 | |
| | baz=245 | | | | | | | | |
| GOMU | GeErMu | 89.08 | 309 | P | | P | 14 25 02.2 | -1.0 | |
| GOMU | | | | sP | | sP | 14 25 47.2 | +7.5 | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| I21K | Tanana | 89.14 | 15 | P | | P | 14 25 01.4 | -0.8 | |
| I21K | | | | IAmb | | IAmb | 14 25 02.6 | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| GLA | Glamis | 89.20 | 55 | P | | P | 14 25 03.2 | -0.2 | |
| | baz=247 | | | | | | | | |
| GMRC | Granite Mounta | 89.26 | 53 | P | | P | 14 25 03.4 | -0.3 | |
| | baz=246 | | | | | | | | |
| SNAA | Sanae | 89.26 | 183 | P | | P | 14 25 01.9 | -1.1 | |
| SNAA | Sanae | 89.26 | 183 | pP | | pP | 14 25 30.5 | +1.4 | |
| SNAA | Sanae | 89.26 | 183 | P | | P | 14 25 02.1 | -1.0 | |
| RDOG | Red Dog Mine | 89.32 | 10 | P | | P | 14 25 01.7 | -1.3 | |
| | baz=206 | | | | | | | | |
| H21K | Melozitna Rive | 89.32 | 15 | P | | P | 14 25 01.1 | -2.0 | |
| TUQ | Turquoise Moun | 89.33 | 52 | P | | P | 14 25 04.1 | +0.1 | |
| | baz=246 | | | | | | | | |
| IMAR | Indian Mountai | 89.36 | 14 | P | | P | 14 25 02.4 | -0.9 | |
| IRM | Iron Mountain | 89.40 | 54 | P | | P | 14 25 04.0 | -0.3 | |
| | baz=246 | | | | | | | | |
| NEA2 | Nenana | 89.43 | 17 | P | | P | 14 25 02.9 | -0.7 | |
| | baz=219 | | | | | | | | |
| I05D | Terrebonne, OR | 89.44 | 42 | P | | P | 14 25 04.2 | 0.0 | |
| | baz=242 | | | | | | | | |
| TPNV | Topopah Spring | 89.71 | 51 | P | | P | 14 25 05.2 | -0.6 | |
| | baz=246,SNR=13 | | | | | | | | |
| E04D | Cinebar | 89.72 | 40 | P | | P | 14 24 04.8 | -0.6 | |
| | baz=242 | | | | | | | | |
| I23K | Minto, Yukon-K | 89.79 | 16 | P | | P | 14 25 04.3 | -0.9 | |
| | baz=219 | | | | | | | | |
| CCB | Clear Creek Bu | 89.82 | 17 | P | | P | 14 25 03.4 | -2.1 | |
| CCB | | | | IAmb | | IAmb | 14 25 04.7 | | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| WRAK | Wrangell Islan | 89.83 | 28 | P | | P | 14 25 05.5 | -0.1 | |
| | baz=234 | | | | | | | | |
| VNA3 | Neumayer Olymp | 89.86 | 180 | P | | P | 14 25 04.6 | -1.2 | |
| VNA3 | Neumayer Olymp | 89.86 | 180 | pP | | pP | 14 25 33.0 | +1.1 | |
| G05D | Wamic, OR | 89.88 | 41 | P | | P | 14 25 05.9 | -0.3 | |
| | baz=242 | | | | | | | | |
| D03D | Eldon | 89.88 | 39 | P | | P | 14 25 06.0 | -0.1 | |
| | baz=241 | | | | | | | | |
| HDA | Harding Lake | 89.88 | 18 | P | | P | 14 25 04.4 | -1.4 | |
| | baz=221,SNR=6.4 | | | | | | | | |
| D04E | Lakebay | 89.90 | 39 | P | | P | 14 25 06.1 | -0.1 | |
| | baz=241 | | | | | | | | |
| L26K | Log Cabin Wild | 89.95 | 20 | P | | P | 14 25 05.2 | -0.9 | |
| | baz=224 | | | | | | | | |
| TCOL | CIGO, UAF Yank | 89.98 | 17 | P | | P | 14 25 05.0 | -1.1 | |
| | baz=220 | | | | | | | | |
| COLA | College | 89.98 | 17 | P | | P | 14 25 04.7 | -1.5 | |
| | baz=220 | | | | | | | | |
| RIDG | Independent Ri | 90.00 | 19 | P | | P | 14 25 04.8 | -1.6 | |
| | baz=223 | | | | | | | | |
| YUK3 | Moose Creek | 90.03 | 22 | P | | P | 14 25 05.8 | -1.0 | |
| | baz=227 | | | | | | | | |
| F05D | White Salmon | 90.09 | 41 | P | | P | 14 25 06.7 | -0.4 | |
| | baz=242 | | | | | | | | |
| VNA2 | Neumayer--Watz | 90.15 | 181 | P | | P | 14 25 06.2 | -0.9 | |
| | baz=172,slow=4.4 | | | | | | | | |
| VNA2 | Neumayer--Watz | 90.15 | 181 | pP | | pP | 14 25 34.7 | +1.6 | |
| | baz=200,slow=2.5 | | | | | | | | |
| IL31 | | 90.17 | 17 | P | | P | 14 25 05.0 | -2.0 | |
| IL31 | | | | IAmb | | IAmb | 14 25 06.7 | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| ILAR | Eielson Array | 90.17 | 17 | P | | P | 14 25 05.2 | -2.0 | |
| | comp=Z,4.8nm,0.5s,baz=239,slow=5.0,SNR=56 | | | | | | | | |
| ILAR | | | | LR | | LR | 15 02 37.1 | | |
| | comp=Z,59nm,19.2s,baz=144,slow=33 | | | | | | | | |
| ILAR | Eielson Array | 90.17 | 17 | P | | P | 14 25 05.9 | -1.2 | |
| PDMCI | Parker Dam,Lak | 90.22 | 54 | P | | P | 14 25 08.6 | +0.5 | |
| | baz=247 | | | | | | | | |
| POKR | Poker Flat Res | 90.28 | 17 | P | | P | 14 25 06.3 | -1.3 | |
| | baz=221 | | | | | | | | |
| BVCY | Beaver Creek | 90.33 | 21 | P | | P | 14 25 07.6 | -0.3 | |
| |

baz=249
U15A **North Rim** 92.43 52 P P 14 25 19.6 +1.0
TOLK **Toolik Lake Re** 92.47 14 P P 14 25 17.6 -0.1
baz=219
M31M **Drury Creek, Y** 92.48 23 P P 14 25 17.0 -0.9
baz=232
BMAR **Burnt Mountain** 92.78 16 P P 14 25 18.8 -0.4
WUAZ **Wupatki** 92.79 53 P P 14 25 20.3 +0.1
baz=248
MAYO **Mayo, Yukon** 92.82 22 P P 14 25 18.7 -0.7
baz=231
FARO **Faro, Yukon** 92.89 23 P P 14 25 18.9 -0.9
baz=233
I29M **Ogilvie Camp,** 93.16 19 P P 14 25 20.0 -1.0
baz=229
DUG **Dugway, Tooele** 93.46 49 P P 14 25 22.9 -0.1
baz=248
HLID **Hailey** 93.64 45 P P 14 25 24.0 +0.1
baz=247
NEW **Newport** 93.80 40 P P 14 25 24.3 -0.1
baz=246
MMPY **Sheldon Lake,** 93.90 24 P P 14 25 24.1 -0.4
baz=235
MNTX **Cornudas Mount** 96.19 59 P P 14 25 35.9 +0.3
baz=251
BOZ **Bozeman (W)** 96.24 44 P P 14 25 35.9 +0.2
baz=249
ANMO **Albuquerque** 96.37 55 P P 14 25 36.4 -0.2
baz=251
INK **Inuvik** 96.49 18 P P 14 25 34.9 -1.2
comp=Z,4.8nm,0.7s,baz=230,slow=4.4,SNR=11
INK **Inuvik** 96.49 18 P P 14 25 35.3 -0.7
baz=233
BW06 **Boulder Array** 96.66 47 P P 14 25 37.3 -0.4
baz=250
PDAR **Pinedale Array** 96.66 47 P P 14 25 36.7 -1.1
comp=Z,0.7nm,0.8s,baz=193,slow=2.5,SNR=5.7
O20A **White River Ci** 96.71 50 P P 14 25 37.8 -0.2
baz=251
TXAR **Lajitas Array** 96.86 61 P P 14 25 38.1 -0.7
comp=Z,1.7nm,0.7s,baz=217,slow=5.3,SNR=21
TXAR **Lajitas Array** 96.86 61 P 14 25 39.3 +0.5
S22A **4UR Ranch, Cre** 96.98 53 P P 14 25 39.5 +0.1
baz=251
WMQ **Urumqi** 97.01 314 *eP* P 14 25 40.7 +1.6
RLMT **Red Lodge** 97.64 45 P P 14 25 42.0 -0.2
baz=251
SDCO **Great Sand Dun** 97.98 53 P P 14 25 43.8 -0.2
baz=252
YKA **Yellowknife Ar** 100.64 27 P Pdif P 14 25 54.0 -0.8
comp=Z,5.8nm,0.8s,baz=253,slow=4.7,SNR=55
MKAR **Makanchi Array** 101.55 316 P Pdif P 14 25 58.7 -0.6
comp=Z,1.0nm,0.6s,baz=88,slow=6.3,SNR=16
MKAR PKiKP **PKiKP** 14 30 20.2 -2.5
comp=Z,0.2nm,0.4s,baz=228,slow=1.9,SNR=9.2
ARU **Arti** 117.06 324 PKPdf **PKPdf** 14 30 50.2 -1.1
ARCES **ARCESS Array B** 124.92 345 PKP **PKPdf** 14 31 04.7 -1.5
comp=Z,1.6nm,0.4s,baz=64,slow=2.1,SNR=65
KLMR **Klimovskoe** 125.36 332 *e*PKPdf **PKPdf** 14 31 04.8 -2.4
KLMR AMP 14 31 06.9
comp=Z,15nm,1.3s
FINES **FINESS Array B** 130.42 338 PKhKP PKPpre 14 31 08.0
FINES PKP **PKPdf** 14 31 14.9 -1.9
comp=Z,2.1nm,0.7s,baz=149,slow=1.1,SNR=7.1
FINES SKPbc **SKPab** 14 34 28.3 -3.0
comp=Z,1.5nm,0.7s,baz=75,slow=2.2,SNR=5.4
NOA **NORSAR Array B** 135.30 345 PKP **PKPdf** 14 31 25.4 -0.7
comp=Z,0.4nm,0.6s,baz=62,slow=1.9,SNR=2.6
AKASG **Malin Array Be** 135.31 324 PKP **PKPdf** 14 31 24.6 -1.7
comp=Z,1.0nm,0.5s,baz=48,slow=2.5,SNR=5.9
AKASG SKPbc **SKPbc** 14 34 45.2 -3.1
comp=Z,0.7nm,0.5s,baz=46,slow=3.9,SNR=5.6
AKASG **Malin Array Be** 135.31 324 PKPdf **PKPdf** 14 31 26.5 +0.1
CRVS **Cervenica-Dubn** 140.49 326 *e*PKP **PKiKP** 14 31 38.5 -0.1
MODS **Modra-Piesok** 142.97 328 *e*PKP **PKPdf** 14 31 42.6 +2.1
PRU **Pruhonice** 143.10 332 *e*PKP PKPbc 14 31 38.5 +0.7
FRGS **Fruska Gora** 143.62 322 *e*P PKPab 14 31 37.4 -1.1
MORH **Mrgy, Hungar** 143.65 325 *e*P PKPab 14 31 38.5 0.0
TANN **Tannenbergstha** 143.66 335 *e*PKPbc PKPab 14 31 38.5 -0.1
baz=38,slow=3.1
WERD **Werda** 143.70 335 *e*PKPbc PKPab 14 31 38.5 -0.1
baz=38,slow=3.1
PLN **Plauen** 143.73 335 *e*PKPbc PKPab 14 31 38.6 -0.1
baz=38,slow=3.1
GUNZ **Gunzen** 143.75 335 *e*PKPbc PKPab 14 31 38.9 +0.1
baz=38,slow=3.1
WERN **Wernitzgruen** 143.79 335 *e*PKPbc PKPab 14 31 38.9 -0.1
baz=38,slow=3.1
NKC **Novy Kostel** 143.81 334 *e*PKP PKPab 14 31 39.3 +0.3
MOX **Moxa** 143.82 336 *e*PKPbc PKPab 14 31 38.8 -0.2
baz=38,slow=3.1
CONA **Conrad Observa** 143.97 329 *i* P PKPab 14 31 40.1 +0.3
comp=Z,11nm,0.6s,SNR=6.6
CKRC **Cesky Krumlov** 144.06 331 *e*PKP **PKPab** 14 31 39.9 -0.2
DIVS **Divibare** 144.12 321 *e*P **PKPab** 14 31 39.4 -1.1
KHC **Kasperske Hory** 144.16 332 *e*PKP **PKPab** 14 31 40.3 -0.2
ROTZ **Rotzenmuhle** 144.26 334 *e*PKPbc **PKPab** 14 31 40.8 0.0
baz=38,slow=3.1
GEC2 **GERESS Array S** 144.32 332 *e*PKPbc **PKPab** 14 31 40.5 -0.6
baz=38,slow=3.1
GERES **GERESS Array B** 144.32 332 PKP **PKPab** 14 31 40.8 -0.4
comp=Z,6.7nm,0.7s,baz=41,slow=3.0,SNR=56
GERES **GERESS Array B** 144.32 332 PKPdf **PKPab** 14 31 40.9 -0.2
WET **Wettzell** 144.46 333 *e*PKPbc **PKPab** 14 31 41.2 -0.4
baz=38,slow=3.1
ARSA **Arzberg** 144.60 328 *i* P **PKPab** 14 31 41.9 -0.2
comp=Z,8.6nm,0.6s,SNR=5.9
GRF **Grafenberg Arr** 144.72 335 *e*PKPbc **PKPab** 14 31 42.3 -0.2
baz=38,slow=3.1
RUDO **Rudo** 144.76 321 *e*P **PKPab** 14 31 41.9 -1.0
MOA **Molln** 144.78 330 *i* P **PKPab** 14 31 42.5 -0.3
comp=Z,29nm,0.5s,SNR=9.7
MOSL **Moslavina** 145.05 325 P PKPbc 14 31 43.0 -0.8
PERS **Pernice** 145.22 328 *i* PKPbc **PKPbc** 14 31 43.8 -0.5
SOKA **Soboth** 145.24 328 *i* P **PKPbc** 14 31 43.7 -0.8
comp=Z,18nm,0.5s,SNR=14
TNS **Taunus Mts** 145.34 338 *e*PKPbc **PKPbc** 14 31 44.2 -0.4
baz=38,slow=3.1
MRAK **Mrakovica** 145.35 324 *e*P **PKPbc** 14 31 44.2 -0.6
PDG **Podgorica** 145.49 319 *e*P **PKPdf** 14 31 43.5 -1.5
AHRW **Bad Neuenahr-A** 145.54 340 *e*PKPbc **PKPbc** 14 31 46.0 +0.9
baz=38,slow=3.1
RJOB **Jochberg** 145.54 331 *e*PKPbc **PKPdf** 14 31 44.7 -0.4
baz=38,slow=3.1
OBKA **Obir** 145.59 328 *i* P **PKPdf** 14 31 45.3 +0.1
comp=Z,18nm,0.8s,SNR=6.2
CRES **Cresnjev** 145.60 327 *e*P **PKPdf** 14 31 44.6 -0.5
MGRS **Mrkonjic Grad** 145.62 323 *e*P **PKPab** 14 31 48.4 +2.3
DRME **Dracevica, Mon** 145.66 319 *e*P **PKPdf** 14 31 45.1 -0.2
BRY **Bratogost** 145.67 320 *e*P **PKPdf** 14 31 44.7 -0.8
KBA **Koelnbreinsper** 145.77 330 *i* P **PKPdf** 14 31 44.9 -0.7
comp=Z,7.5nm,0.6s,SNR=6.7
BTNL **Ternell** 145.81 341 *d*PKP **PKPdf** 14 31 45.3 -0.1
MEM **Membach** 145.82 341 *d*PKP **PKPdf** 14 31 45.4 0.0
TREB **Trebinje** 145.89 320 *e*P **PKPdf** 14 31 45.1 -0.6
LJU **Ljubljana** 145.93 328 *e*P **PKPdf** 14 31 44.9 -0.8
LJU **Ljubljana** 145.93 328 *i* PKPbc **PKPdf** 14 31 45.9 +0.2
HCY **Herceg Novi** 145.95 320 *e*P **PKPdf** 14 31 46.0 +0.2
MYKA **Terra Mystica** 145.95 329 *i* P **PKPdf** 14 31 45.3 -0.5
comp=Z,14nm,0.5s,SNR=6.7
CEY **Cerknica** 146.19 327 *e*P **PKPdf** 14 31 46.4 +0.2
CEY **Cerknica** 146.19 327 *i* PKPbc **PKPdf** 14 31 46.5 +0.3
STON **Ston** 146.19 321 *e*P **PKPdf** 14 31 44.1 -2.1
MAKA **Makarska** 146.35 322 P **PKPdf** 14 31 46.0 -0.5
WATA **Walderalm** 146.39 332 *i* P **PKPdf** 14 31 46.9 +0.3
comp=Z,7.3nm,0.5s
ABTA **Abfaltersbach** 146.41 330 *i* P **PKPdf** 14 31 46.4 -0.2
comp=Z,9.2nm,0.5s,SNR=6.6
WTTA **Wattenberg** 146.42 332 *i* P **PKPdf** 14 31 47.3 +0.6
comp=Z,9.4nm,0.6s,SNR=5.9
BMRD **Maredsous** 146.47 342 *d*PKP **PKPdf** 14 31 47.0 +0.5
SKDS **Skadanscina** 146.53 327 *e*P **PKPdf** 14 31 46.4 -0.3
MOTA **Moosalm** 146.60 332 *i* P **PKPdf** 14 31 47.6 +0.6
comp=Z,24nm,1.0s,SNR=9.0
WLF **Walferdange** 146.60 340 *e*PKPbc **PKPdf** 14 31 48.4 +1.7
baz=38,slow=3.1
WLF **Walferdange** 146.60 340 *d*PKP **PKPdf** 14 31 48.4 +1.7
RETA **Reutte** 146.63 333 *i* P **PKPdf** 14 31 47.7 +0.8
comp=Z,5.7nm,0.4s,SNR=5.6
SQTA **Sankt Quirin** 146.64 332 *i* P **PKPdf** 14 31 48.0 +1.0
comp=Z,21nm,0.5s,SNR=12
DOU **Dourbes** 146.71 342 *d*PKP **PKPdf** 14 31 47.9 +1.0
LSTV **Lastovo** 146.73 321 P **PKPdf** 14 31 47.0 -0.1
UBR **Ueberruh** 146.76 334 *e*PKPbc **PKPdf** 14 31 48.2 +1.1
baz=38,slow=3.1
SMRN **Sveta Marina** 146.81 327 P **PKPdf** 14 31 47.6 +0.5
BFO **Black Forest** 146.95 336 *e*PKPbc **PKPdf** 14 31 48.6 +1.3
baz=38,slow=3.1
FETA **Feichten** 147.01 332 *i* P **PKPdf** 14 31 49.2 +1.5
comp=Z,15nm,0.5s,SNR=7.1
DAVA **Damuels** 147.17 334 *i* P **PKPdf** 14 31 49.3 +1.3
comp=Z,9.1nm,0.6s,SNR=7.0
ESDC **Sonseca Array** 158.66 345 PKPab **PKPab** 14 32 39.9 -0.5
comp=Z,1.1nm,0.6s,baz=17,slow=4.5,SNR=7.6
TORD **Torodi Ar. Bea** 166.49 246 PKP **PKPdf** 14 32 11.7 -1.3
comp=Z,1.5nm,0.9s,baz=72,slow=2.6,SNR=7.0

**IDC 05 14:27:09.4±23.0, 56.09°S×147.30°E, h0km, mb3.7/3, mb1 4.0/3, mb1mx3.5/21, mbtmpg3.7/3 Error ellipse: s-maj=828.6km s-min=103.9km az=96.0, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ASAR | **Alice Springs** | 33.85 | 338 | P | P | 14 33 53.5 | +0.1 |
| | 0.8nm,1.0s,baz=160,slow=9.4,SNR=4.7 | | | | | | |
| WRA | **Warramunga Arr** | 37.38 | 340 | P | P | 14 34 23.5 | -0.2 |
| | 1.5nm,0.9s,baz=170,slow=9.0,SNR=6.3 | | | | | | |
| CMAR | **Chiang Mai Arr** | 84.67 | 315 | P | P | 14 39 44.7 | 0.0 |
| | 0.5nm,0.8s,baz=167,slow=4.4,SNR=2.2 | | | | | | |

*ISK **05** 14:44:24.9, 41.87N×24.93E, h5km, ML3.2/7*
*ATH **05** 14:44:25.7, 41.78N×24.83E, h26km±1km, ML2.8/8, Error ellipse: s-maj=2.5km s-min=1.1km az=187.0*
*THE **05** 14:44:26.1, 41.80N×24.82E, h1km±2km, ML2.8/9, Error ellipse: s-maj=2.4km s-min=0.9km az=14.0*
*BEO **05** 14:44:29.3±1.1, 41.94N×24.71E, h0km, ML2.5/5*
**ISC 05 14:44:24.7±0.9, 41.88N±0.02×24.89E±0.02, h17km±8km, n48, σ1°s25/80, 4C-9D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PLD | **Plovdiv** | 0.26 | 329 | PG | **Pg** | 14 44 31.3 | +0.7 |
| PLD | | | | SG | **Sg** | 14 44 35.2 | +0.6 |
| RDO | **Rodhopi** | 0.88 | 146 | P | **Pn** | 14 44 42.1 | -0.1 |
| RDO | | | | S | **Sg** | 14 44 53.8 | +0.4 |
| | 982nm,0.2s | | | | | | |
| RDO | **Rodhopi** | 0.88 | 146 | P | **Pn** | 14 44 42.1 | -0.1 |
| RDO | | | | S | **Sb** | 14 44 53.0 | +0.1 |
| RDO | | | | AML | AML | 14 44 58.7 | |
| | comp=E,1630μm,0.1s | | | | | | |
| RDO | | | | AML | AML | 14 44 59.0 | |
| | comp=N,2285μm,0.2s | | | | | | |
| RDO | **Rodhopi** | 0.88 | 146 | PG | **Pn** | 14 44 42.1 | -0.1 |
| RDO | | | | SG | **Sg** | 14 44 53.5 | +0.1 |
| KAVA | **Kavala** | 0.92 | 198 | P | **Pb** | 14 44 42.1 | -0.1 |
| KAVA | | | | S | **Sg** | 14 44 54.6 | -0.2 |
| | comp=N,915nm,0.2s | | | | | | |
| KAVA | **Kavala** | 0.92 | 198 | P | **Pb** | 14 44 42.0 | -0.1 |
| KAVA | | | | S | **Sb** | 14 44 54.2 | +0.1 |
| KAVA | | | | AML | AML | 14 44 58.5 | |
| | comp=E,2220μm,0.3s | | | | | | |
| KAVA | | | | AML | AML | 14 44 58.9 | |
| | comp=N,2350μm,0.2s | | | | | | |
| NVR | **Nevrokopi** | 0.93 | 236 | P | **Pb** | 14 44 41.8 | -0.5 |
| NVR | | | | S | **Sb** | 14 44 53.6 | -0.8 |
| | comp=N,242nm,0.2s | | | | | | |
| NVR | **Nevrokopi** | 0.93 | 236 | P | **Pb** | 14 44 41.8 | -0.5 |
| NVR | | | | S | **Sb** | 14 44 53.7 | -0.7 |
| SRS | **Serrai** | 1.23 | 232 | P | **Pb** | 14 44 47.6 | +0.1 |
| SRS | | | | S | **Sn** | 14 45 03.7 | +0.4 |
| | comp=N,440nm,0.4s | | | | | | |
| SRS | **Serrai** | 1.23 | 232 | P | **Pb** | 14 44 47.6 | +0.1 |
| SRS | | | | S | **Sn** | 14 45 03.7 | +0.4 |
| SRS | | | | AML | AML | 14 45 07.9 | |
| | comp=E,782μm,0.6s | | | | | | |
| SRS | | | | AML | AML | 14 45 08.2 | |
| | comp=N,970μm,0.3s | | | | | | |
| KOKK | **Kokkinochori,** | 1.25 | 212 | P | **Pb** | 14 44 47.7 | -0.1 |
| KOKK | | | | S | **Sg** | 14 45 04.5 | -0.7 |
| | comp=N,515nm,0.3s | | | | | | |
| KOKK | **Kokkinochori,** | 1.25 | 212 | P | **Pb** | 14 44 47.6 | -0.1 |
| KOKK | | | | S | **Sb** | 14 45 03.4 | -0.2 |
| THAS | **Thassos island** | 1.28 | 186 | P | **Pg** | 14 44 48.8 | -0.5 |
| THAS | | | | S | **Sg** | 14 45 05.3 | -0.7 |
| | comp=N,562nm,0.3s | | | | | | |
| THAS | **Thassos island** | 1.28 | 186 | P | **Pg** | 14 44 48.8 | -0.5 |
| THAS | | | | S | **Sb** | 14 45 04.2 | -0.1 |
| THAS | | | | AML | AML | 14 45 07.7 | |
| | comp=E,1443μm,0.3s | | | | | | |
| THAS | | | | AML | AML | 14 45 08.4 | |
| | comp=N,790μm,0.3s | | | | | | |
| ALN | **Alexandroupoli** | 1.31 | 138 | P | **Pg** | 14 44 50.3 | +0.3 |
| ALN | **Alexandroupoli** | 1.31 | 138 | P | **Pg** | 14 44 50.2 | +0.3 |
| ALN | | | | S | **Sg** | 14 44 06.7 | -0.4 |
| ALN | | | | AML | AML | 14 45 11.0 | |
| | comp=E,700μm,0.3s | | | | | | |
| ALN | | | | AML | AML | 14 45 12.4 | |
| | comp=N,350μm,0.4s | | | | | | |
| EDRB | **Edirne** | 1.39 | 91 | P | **Pg** | 14 44 51.4 | 0.0 |
| EDRB | **Edirne** | 1.39 | 91 | PN | **Pg** | 14 44 51.3 | -0.1 |
| EDRB | | | | SN | **Sg** | 14 45 09.8 | +0.3 |
| VTS | **Vitosha** | 1.43 | 302 | *e*Pg | **Pg** | 14 44 52.1 | -0.2 |
| VTS | | | | *e*Sg | **Sg** | 14 45 10.8 | -0.1 |
| ENEZ | **Enez** | 1.49 | 140 | PN | **Pg** | 14 44 52.5 | -0.8 |
| SMTH | **Samothraki Isl** | 1.49 | 161 | P | **Pg** | 14 44 53.2 | -0.1 |
| SMTH | | | | S | **Sg** | 14 45 12.6 | -0.1 |
| | comp=N,145nm,0.2s | | | | | | |
| SMTH | **Samothraki Isl** | 1.49 | 161 | P | **Pb** | 14 44 51.8 | 0.0 |
| SMTH | | | | S | **Sb** | 14 45 11.1 | +0.7 |
| SMTH | | | | AML | AML | 14 45 16.7 | |
| | comp=N,376μm,0.3s | | | | | | |
| SMTH | | | | AML | AML | 14 45 18.5 | |
| | comp=E,213μm,0.2s | | | | | | |
| UKOP | **Uzunkopru-Edir** | 1.51 | 119 | PN | **Pg** | 14 44 52.8 | -1.0 |
| SOH | **Sokhos** | 1.56 | 228 | P | **Pb** | 14 44 53.4 | +0.3 |
| SOH | | | | S | **Sg** | 14 45 14.1 | -1.0 |
| | comp=E,258nm,0.4s | | | | | | |
| SOH | **Sokhos** | 1.56 | 228 | P | **Pb** | 14 44 52.4 | -0.7 |
| SOH | | | | S | **Sb** | 14 45 12.8 | +0.2 |
| SOH | | | | AML | AML | 14 45 16.2 | |
| | comp=N,742μm,0.5s | | | | | | |
| SOH | | | | AML | AML | 14 45 17.1 | |
| | comp=E,561μm,0.4s | | | | | | |
| KNT | **Kendrikon** | 1.66 | 245 | P | **Pb** | 14 44 54.9 | +0.2 |
| KNT | | | | S | **Sb** | 14 45 16.1 | +0.9 |
| | comp=E,135nm,0.3s | | | | | | |
| KNT | **Kendrikon** | 1.66 | 245 | P | **Pb** | 14 44 54.2 | -0.4 |
| OUR | **Ouranopolis** | 1.69 | 204 | P | **Pb** | 14 44 54.7 | -0.5 |
| OUR | **Ouranopolis** | 1.69 | 204 | P | **Pn** | 14 44 53.7 | +0.4 |
| VAY | **Valandovo** | 1.82 | 253 | *e*Pg | **Pg** | 14 45 00.5 | +0.8 |
| VAY | | | | *e*Sg | **Sg** | 14 45 23.0 | +0.5 |
| VAY | **Valandovo** | 1.82 | 253 | *i* Pn | **Pg** | 14 45 13.3 | +1.6 |
| PLG | **Polygyros** | 1.85 | 216 | P | **Pn** | 14 44 56.3 | +0.6 |
| PLG | | | | AML | AML | 14 45 24.9 | |
| | comp=E,280μm,0.4s | | | | | | |
| PLG | | | | AML | AML | 14 45 25.1 | |
| | comp=N,264μm,0.4s | | | | | | |
| BOSS | **Bosilegrad** | 1.89 | 290 | *e*Pg | **Pg** | 14 45 00.2 | -0.8 |
| BOSS | | | | *e*Sg | **Sg** | 14 45 24.9 | -0.7 |
| LIA | **Limnos Island** | 1.99 | 173 | P | **Pb** | 14 44 58.9 | -1.4 |
| LIA | | | | S | **Sn** | 14 45 22.7 | +0.7 |
| RKY | **Sarkoy-Tekirda** | 2.10 | 124 | PN | **Pb** | 14 45 01.1 | -1.1 |
| MAR6 | **Marsite Statio** | 2.14 | 122 | PN | **Pb** | 14 45 01.9 | -1.1 |
| PAIG | **Paliouri** | 2.15 | 206 | P | **Pn** | 14 45 00.4 | +0.7 |
| ZAPS | **Zavoj** | 2.17 | 311 | *e*Pn | **Pg** | 14 45 04.6 | -1.7 |
| ZAPS | | | | *e*Sn | **Sb** | 14 45 31.3 | +1.2 |
| PRVS | **Prvonek** | 2.18 | 288 | *e*Pn | **Pg** | 14 45 04.9 | -1.6 |
| PRVS | | | | *e*Sn | **Sb** | 14 45 30.9 | +0.5 |
| EZN | **Ezine** | 2.32 | 151 | PN | **Pb** | 14 45 04.5 | -1.5 |
| HUMR | **Humele** | 2.65 | 1 | ||P | **Pb** | 14 45 09.3 | -2.3 |
| ISR | **Istrita** | 3.46 | 20 | ||P | **Pn** | 14 45 20.5 | +2.8 |
| ISR | | | | ||S | **Sg** | 14 46 19.6 | +3.9 |
| HERR | **Herculane** | 3.50 | 330 | ||P | **Pn** | 14 45 19.1 | +0.9 |
| HERR | | | | ||S | **Sg** | 14 46 15.5 | -1.5 |
| MLR | **Muntele Rosu** | 3.69 | 12 | ||P | **Pb** | 14 45 24.7 | -4.8 |
| MLR | | | | ||S | **Sg** | 14 46 25.6 | +2.4 |
| MDVR | **Moldovita** | 3.71 | 322 | ||P | **Pn** | 14 45 21.4 | +0.2 |
| MDVR | | | | ||S | **Sg** | 14 46 20.3 | -3.5 |
| GZR | **Gura Zlata** | 3.83 | 337 | ||P | **Pn** | 14 45 24.6 | +1.7 |
| GZR | | | | ||S | **Sg** | 14 46 27.4 | -0.3 |
| VRI | **Vrincioaia** | 4.20 | 18 | ||P | **Pn** | 14 45 31.4 | +3.5 |
| BZS | **Buzias** | 4.42 | 329 | ||P | **Pn** | 14 45 32.0 | +1.1 |

*BJI **05** 14:54:25.0±0.0, 42.10N×137.50E, h279km, mb4.2/10,*
*mB4.3/9*
*IDC **05** 14:54:26.1±0.9, 42.03N×137.43E, h272km±9km, mb3.3/16, mb1 3.5/22, mb1mx3.3/46, mbtmp3.9/22, Error ellipse: s-maj=10.8km s-min=9.2km az=117.0*
*NEIC **05** 14:54:27.6±1.9, 42.14N±0.08×137.5E±0.1, h279km±7km, mb4.0/20, Error ellipse: s-maj=11.5km s-min=11.1km az=204.0*
*JMA **05** 14:54:27.2±0.4, 42.03N×137.62E, h294km, M3.1*
**ISC 05 14:54:27.2±0.5, 42.07N±0.06×137.58E±0.06, h284km, n86, σ1°s31/96, mb3.7/24, 1D, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JOSM | **Okushiri--Mats** | 1.41 | 89 | P | **Pn** | 14 55 08.7 | +0.5 |
| JOSM | | | | *e*S | **S** | 14 55 41.7 | +1.0 |
| JSH | **Shimam** | 1.92 | 72 | P | **Pn** | 14 55 12.9 | +1.1 |
| JKB | **Kayabe** | 2.58 | 93 | P | **Pn** | 14 55 18.5 | +0.8 |
| JOT | **Ohata** | 2.69 | 104 | P | **Pn** | 14 55 19.2 | +0.5 |
| JTM | **Tenmabayashi** | 2.92 | 115 | Pn | **Pn** | 14 55 21.3 | +0.2 |
| JEW | **Eniwo** | 2.97 | 74 | P | **Pn** | 14 55 22.7 | +1.2 |
| JEW | | | | *e*S | **S** | 14 56 06.4 | +1.7 |
| JEW | **Eniwo** | 2.97 | 74 | | **Pn** | 14 55 22.1 | +0.6 |
| JANG | **Nango** | 3.42 | 118 | P | **Pn** | 14 55 25.8 | -0.5 |
| JANG | | | | *e*S | **S** | 14 56 11.8 | -1.6 |
| JHR | **Hokuryu** | 3.48 | 60 | P | **Pn** | 14 55 28.3 | +1.5 |
| JYK | **Kaneyama** | 3.79 | 145 | P | **Pn** | 14 55 30.2 | -0.2 |
| JOM | **Ohasama** | 3.83 | 131 | P | **Pn** | 14 55 30.7 | -0.1 |
| JNBK | **Urakawa-nobuka** | 3.85 | 85 | P | **Pn** | 14 55 31.0 | +0.1 |
| JNBK | | | | *e*S | **S** | 14 56 20.2 | -1.6 |
| JFR | **Furan** | 3.86 | 72 | P | **Pn** | 14 55 31.1 | +0.1 |
| JFR | | | | *e*S | **S** | 14 56 19.9 | -2.1 |
| JSD | **Sado** | 4.06 | 172 | | **Pn** | 14 55 34.1 | +0.8 |
| ERM | **Erimo** | 4.16 | 89 | | **Pn** | 14 55 35.4 | +1.1 |
| JEM | **Erimo** | 4.16 | 89 | | **Pn** | 14 55 34.9 | +0.6 |
| JMK | **Shimoseki** | 4.17 | 137 | P | **Pn** | 14 55 33.8 | -0.8 |
| ASAJ | **Asahikawa** | 4.21 | 59 | P | **Pn** | 14 55 35.5 | +0.7 |
| | 3.5nm,0.3s,baz=234,slow=13,SNR=39 | | | | | | |
| ASAJ | | | | S | **S** | 14 56 27.8 | -1.1 |
| | 0.5nm,0.3s,baz=343,slow=30,SNR=7.0 | | | | | | |
| JKA | **Kamikawa-asahi** | 4.21 | 59 | | **Pn** | 14 55 35.1 | +0.2 |
| JCH | **Churui** | 4.32 | 81 | P | **Pn** | 14 55 35.7 | -0.5 |
| JCH | | | | *e*S | **S** | 14 56 28.5 | -2.9 |
| USA0B | **Ussuriysk Arra** | 4.61 | 299 | | **Pn** | 14 55 38.3 | -1.2 |
| USRK | **Ussuriysk Ar.** | 4.61 | 299 | P | **Pn** | 14 55 38.0 | -1.5 |
| | baz=105,slow=12,SNR=32 | | | | | | |
| USRK | **Ussuriysk Ar.** | 4.61 | 299 | | **Pn** | 14 55 38.5 | -1.0 |
| JMM | **Marumori** | 4.87 | 148 | Pn | **Pn** | 14 55 41.8 | -0.8 |
| JTKR | **Abashiri--Toko** | 5.01 | 66 | P | **Pn** | 14 55 44.6 | +0.4 |
| JTKR | | | | *e*S | **S** | 14 56 44.9 | -1.1 |
| MJAR | **Matsushiro Arr** | 5.54 | 175 | P | **Pn** | 14 55 50.6 | 0.0 |
| | 0.2nm,0.3s,baz=1.1,slow=12,SNR=9.2 | | | | | | |
| MJAR | **Matsushiro Arr** | 5.54 | 175 | | **Pn** | 14 55 52.1 | +1.4 |
| JRY | **Ryogami san** | 6.13 | 170 | P | **Pn** | 14 55 57.0 | -0.8 |
| NEM2 | **Nemuro 2** | 6.15 | 75 | P | **Pn** | 14 55 56.2 | -1.7 |
| NEM2 | | | | *e*S | **S** | 14 57 04.1 | -6.7 |
| JYT | **Yasato** | 6.18 | 160 | Pn | **Pn** | 14 55 57.2 | -1.0 |
| MDJ | **Mudanjiang** | 6.36 | 296 | P | **Pn** | 14 56 00.2 | -0.1 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,96nm,3.5s | | | | | | |
| MDJ | **Mudanjiang** | 6.36 | 296 | | **Pn** | 14 56 00.3 | -0.1 |
| JGF | **Kuroka** | 6.46 | 182 | | **Pn** | 14 56 04.4 | +2.5 |
| INU | **Inuyama** | 6.72 | 184 | Pn | **Pn** | 14 56 07.6 | +2.6 |
| BNX | **BinXian** | 8.21 | 300 | ||P | **Pn** | 14 56 21.4 | -1.7 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,250nm,4.6s | | | | | | |
| KLR | **Kul'dur** | 8.24 | 332 | P | **Pn** | 14 56 22.7 | -0.8 |
| | 0.8nm,0.3s,baz=162,slow=14,SNR=16 | | | | | | |
| KSRS | **Korea Array** | 8.74 | 241 | P | **Pn** | 14 56 29.1 | -0.8 |
| | 0.2nm,0.3s,baz=54,slow=14,SNR=2.2 | | | | | | |
| JHJ | **Hachijo jima 2** | 9.10 | 168 | P | **Pn** | 14 56 31.9 | -2.5 |
| | 9.8nm,0.3s,baz=322,slow=19,SNR=9.2 | | | | | | |
| MA2 | **Magadan** | 19.34 | 21 | P | **P** | 14 58 31.5 | -0.3 |
| MA2 | | | | IAmb | IAmb | 14 58 32.4 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| SEY | **Seymchan** | 22.65 | 18 | P | **P** | 14 59 04.2 | +0.2 |
| | comp=Z,0.4nm,0.4s,baz=225,slow=22,SNR=4.2 | | | | | | |
| SONM | **Songino Array** | 22.71 | 295 | P | **P** | 14 59 03.8 | -1.1 |
| | comp=Z,0.8nm,0.5s,baz=86,slow=8.7,SNR=8.6 | | | | | | |
| SONM | **Songino Array** | 22.71 | 295 | P | **P** | 14 59 04.8 | -0.1 |
| TIXI | **Tiksi** | 29.97 | 354 | P | **P** | 15 00 09.3 | +0.1 |
| | comp=Z,2.5nm,0.5s,baz=97,slow=23,SNR=13 | | | | | | |
| TIXI | **Tiksi** | 29.97 | 354 | P | **P** | 15 00 09.9 | +0.8 |
| TIXI | | | | IAmb | IAmb | 15 00 10.8 | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| ZALV | **Zalesovo Beam** | 36.41 | 308 | P | **P** | 15 01 04.9 | +0.1 |
| | comp=Z,1.9nm,0.4s,baz=85,slow=8.8,SNR=9.9 | | | | | | |
| MK31 | **Makanchi Array** | 39.07 | 296 | P | **P** | 15 01 26.7 | -0.4 |
| MKAR | **Makanchi Array** | 39.07 | 296 | P | **P** | 15 01 24.8 | -2.3 |
| | comp=Z,1.5nm,0.7s,baz=84,slow=12,SNR=16 | | | | | | |
| MKAR | **Makanchi Array** | 39.07 | 296 | P | **P** | 15 01 25.8 | -1.3 |
| MAKZ | **Makanchi** | 39.28 | 296 | P | **P** | 15 01 28.1 | -0.6 |
| MAKZ | | | | IAmb | IAmb | 15 01 29.7 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| KURK | **Kurchatov** | 40.59 | 303 | P | **P** | 15 01 38.2 | -1.1 |
| KURK | | | | IAmb | IAmb | 15 01 39.9 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| BOOM | **Boomskoye usch** | 44.69 | 292 | P | **P** | 15 02 12.6 | 0.0 |
| KTH | **Kantishna Hill** | 45.36 | 37 | P | **P** | 15 02 19.5 | +2.2 |
| KTH | | | | IAmb | IAmb | 15 02 29.3 | |
| | comp=Z,15nm,1.5s | | | | | | |
| IL31 | | 46.94 | 35 | P | **P** | 15 02 30.0 | +0.7 |
| ILAR | **Eielson Array** | 46.94 | 35 | P | **P** | 15 02 30.2 | +0.8 |
| | comp=Z,1.6nm,0.6s,baz=284,slow=9.3,SNR=33 | | | | | | |
| ILAR | **Eielson Array** | 46.94 | 35 | P | **P** | 15 02 30.6 | +1.2 |
| BMAR | **Burnt Mountain** | 47.44 | 31 | P | **P** | 15 02 33.8 | +0.5 |
| M24K | **Tolsona, Glenn** | 47.75 | 38 | P | **P** | 15 02 36.7 | +1.0 |
| KLU | **Klutina** | 48.00 | 39 | P | **P** | 15 02 39.1 | +1.4 |
| L27K | **Beaver Creek,** | 49.48 | 36 | P | **P** | 15 02 51.1 | +2.3 |
| L27K | | | | IAmb | IAmb | 15 02 51.7 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| BCAR | **Beaver Creek A** | 49.50 | 36 | P | **P** | 15 02 51.2 | +2.2 |
| INK | **Inuvik** | 51.32 | 28 | P | **P** | 15 03 02.7 | +0.4 |
| | comp=Z,1.7nm,0.4s,baz=280,slow=5.1,SNR=4.7 | | | | | | |
| ABKAR | **Akbulak array** | 52.50 | 306 | P | **P** | 15 03 11.4 | +0.1 |
| COEN | **Coen** | 55.98 | 173 | P | **P** | 15 03 36.9 | +

*IDC **05** 15:12:48.5±0.9,2°.37S×140°.21E,h0km,mb3.4/6, mb1 3.8/8,mb1mx3.6/37,mbtmp3.6/8,ML4.0/2,MS3.0/1, Ms1 3.0/1,ms1mx2.4/30,Error ellipse: s-maj=22.4km s-min=8.1km az=14.0*
*DJA **05** 15:12:50.0±0.7,2°.5±8°×14°.0E±°,h10km,M3.9/4,MLv3.9/4*
**ISC 05 15:12:51.3±0.8,2°.39S±0°.10×140°.37E±0°.05,h24km,n15, σ1°04/15,mb3.5/6,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GENI** | **Genyem** | **0.29** | **225** | P | | **Pb** | **15 12 57.1** | **-0.9** |
| **JAY** | **Jayapura** | **0.36** | **110** | Pg | | **Pb** | **15 12 58.7** | **-0.4** |
| | 225nm,0.3s,baz=254,slow=12,SNR=1240 | | | | | | | |
| JAY | | | | Lg | | Lg | 15 13 05.4 | |
| | 506nm,0.3s,baz=98,slow=20,SNR=30 | | | | | | | |
| **JAY** | **Jayapura** | **0.36** | **110** | P | | **Pb** | **15 12 58.8** | **-0.4** |
| JAY | | | | S | | **Sb** | **15 13 03.5** | **-1.0** |
| **SMPI** | **Sarmi** | **1.71** | **283** | P | | **Pn** | **15 13 19.0** | **-0.5** |
| **WAMI** | **Wamena** | **2.23** | **228** | P | | **Pn** | **15 13 28.5** | **+1.8** |
| **SRPI** | **Serui, Papua** | **4.16** | **277** | P | | **Pn** | **15 13 54.1** | **+0.8** |
| **PMG** | **Port Moresby** | **9.70** | **136** | LR | | LR | 15 20 20.0 | |
| | comp=Z,82nm,19.8s,baz=182,slow=46 | | | | | | | |
| **BATI** | **Baumata** | **18.32** | **244** | P | | **Pn** | **15 17 02.6** | **-1.4** |
| | 1.1nm,0.3s,baz=117,slow=4.5,SNR=2.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.41** | **198** | P | | **P** | **15 17 04.3** | **-0.6** |
| | 0.3nm,0.3s,baz=17,slow=12,SNR=11 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.27** | **222** | P | | **P** | **15 17 36.5** | **+0.4** |
| | 1.4nm,0.7s,baz=55,slow=10,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **22.06** | **196** | P | | **P** | **15 17 44.0** | **-0.6** |
| | 1.5nm,0.6s,baz=23,slow=9.8,SNR=20 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.73** | **299** | P | | **P** | **15 21 10.7** | **-0.3** |
| | 0.2nm,0.3s,baz=105,slow=6.9,SNR=1.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.56** | **322** | P | | **P** | **15 24 05.0** | **+0.6** |
| | 0.3nm,0.6s,baz=110,slow=9.0,SNR=4.6 | | | | | | | |
| **BVAR** | **Borovoye Array** | **80.00** | **325** | P | | **P** | **15 25 00.4** | **+1.7** |
| | 0.3nm,0.5s,baz=91,slow=12,SNR=2.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.86** | **24** | P | | **P** | **15 25 23.3** | **-0.4** |
| | 0.2nm,0.6s,baz=269,slow=4.5,SNR=1.5 | | | | | | | |

*IDC **05** 15:32:21.4±0.6,2°.41S×140°.19E,h0km,mb4.4/12, mb1 4.5/15,mb1mx4.1/38,mbtmp4.4/15,ML4.2/2,MS3.5/13, Ms1 3.5/13,ms1mx3.2/63,Error ellipse: s-maj=16.9km s-min=7.2km az=14.0*
*DJA **05** 15:32:24.2±0.3,2°.5±5°×14°.0E±°,h10km,M4.7/8,mB5.6/4, mb4.8/8,MLv4.5/5,Mw(mB)5.1/4*
*NEIC **05** 15:32:25.2±1.9,2°.55S±0°.08×140°.37E±0°.08,h38km±8km, mb4.5/16,Error ellipse: s-maj=11.6km s-min=11.0km az=89.0*
**ISC 05 15:32:23.8±0.5,2°.53S±0°.06×140°.37E±0°.04,h24km,n70, σ1°61/65,mb4.4/20,MS3.5/7,1D,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GENI** | **Genyem** | **0.21** | **252** | P | | **Pn** | **15 32 30.5** | **-1.0** |
| **JAY** | **Jayapura** | **0.34** | **88** | Pg | | **Pn** | **15 32 32.0** | **-1.4** |
| | 2µm,0.3s,baz=249,slow=9.7,SNR=5561 | | | | | | | |
| JAY | | | | Lg | | Lg | 15 32 38.4 | |
| | 6µm,0.3s,baz=121,slow=19,SNR=29 | | | | | | | |
| **JAY** | **Jayapura** | **0.34** | **88** | P | | **Pn** | **15 32 32.2** | **-1.1** |
| JAY | | | | S | | **Sb** | **15 32 36.5** | **-0.1** |
| **SMPI** | **Sarmi** | **1.74** | **288** | P | | **Pn** | **15 32 52.2** | **-0.3** |
| **WAMI** | **Wamena** | **2.13** | **231** | P | | **Pb** | **15 33 01.6** | **-0.2** |
| **SRPI** | **Serui, Papua** | **4.17** | **279** | P | | **Pn** | **15 33 25.7** | **-0.4** |
| **BAKI** | **Biak** | **4.46** | **287** | P | | **Pn** | **15 33 28.9** | **-1.1** |
| **MANU** | **Manus Island** | **7.01** | **86** | Pn | | **Pn** | **15 34 06.0** | **+0.9** |
| **FAKI** | **Fak Fak** | **8.12** | **267** | Pn | | **Pn** | **15 34 21.2** | **+0.9** |
| **SIJI** | **Sorong** | **9.24** | **280** | Pn | | **Pn** | **15 34 38.2** | **+2.4** |
| | 3.9nm,0.3s,baz=78,slow=12,SNR=18 | | | | | | | |
| SIJI | | | | LR | | LR | 15 38 59.2 | |
| | comp=Z,331nm,18.5s,baz=64,slow=44 | | | | | | | |
| **SWI** | **Sorong** | **9.25** | **280** | P | | **Pn** | **15 34 38.6** | **+2.8** |
| | 35nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **9.61** | **136** | Pn | | Pn | 15 34 45.7 | +4.9 |
| | 0.5nm,0.3s,baz=320,slow=11,SNR=4.2 | | | | | | | |
| PMG | | | | LR | | LR | 15 39 33.6 | |
| | comp=Z,496nm,19.6s,baz=328,slow=44 | | | | | | | |
| **PMG** | **Port Moresby** | **9.61** | **136** | Pn | | **Pn** | **15 34 41.5** | **+0.7** |
| **COEN** | **Coen** | **11.69** | **166** | Pn | | **Pn** | **15 35 06.9** | **-2.4** |
| **LBMI** | **Labuha** | **12.99** | **278** | P | | **Pn** | **15 35 29.5** | **+2.4** |
| | 29nm,1.2s | | | | | | | |
| **TNTI** | **Ternate** | **13.40** | **284** | P | | **Pn** | **15 35 35.5** | **+2.8** |
| | 21nm,1.1s | | | | | | | |
| **MTN** | **Manton Dam** | **13.73** | **221** | Pn | | **Pn** | **15 35 37.3** | **+0.1** |
| **SANI** | **Sanana** | **14.37** | **272** | P | | **Pn** | **15 35 47.9** | **+1.9** |
| | 4µm26nm,0.9s | | | | | | | |
| **GUMO** | **Guam** | **16.62** | **15** | LR | | LR | 15 41 30.9 | |
| | comp=Z,38nm,20.5s,baz=162,slow=33 | | | | | | | |
| **KNRA** | **Kununurra** | **17.36** | **220** | P | | **Pn** | **15 36 24.6** | **0.0** |
| KNRA | | | | IAmb | | IAmb | 15 36 41.6 | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **17.53** | **245** | | | **Pn** | **15 36 26.1** | **-0.9** |
| **DAV** | **Davao City (W)** | **17.57** | **303** | LR | | LR | 15 42 19.9 | |
| | comp=Z,73nm,21.3s,baz=124,slow=34 | | | | | | | |
| **WB0** | **Warramunga Arr** | **18.10** | **198** | | | **Pn** | **15 36 32.9** | **-0.9** |
| **WR0** | **Warramunga Arr** | **18.24** | **198** | P | | **P** | **15 36 35.3** | **-0.3** |
| **BATI** | **Baumata** | **18.26** | **245** | P | | **Pn** | **15 36 38.0** | **+2.2** |
| | comp=Z,8.8nm,0.3s,baz=184,slow=2.1,SNR=15 | | | | | | | |
| **WRAB** | **Tennant Creek** | **18.27** | **198** | P | | **P** | **15 36 34.1** | **-1.8** |
| WRAB | | | | IAmb | | IAmb | 15 36 49.7 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **18.28** | **198** | | | **P** | **15 36 35.2** | **-0.8** |
| WB2 | | | | IAmb | | IAmb | 15 36 49.8 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.28** | **198** | P | | **Pn** | **15 36 36.5** | **+0.4** |
| | comp=Z,1.2nm,0.3s,baz=13,slow=12,SNR=50 | | | | | | | |
| WRA | | | | LR | | LR | 15 44 22.1 | |
| | comp=Z,264nm,18.0s,baz=58,slow=39 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.28** | **198** | | | **P** | **15 36 35.2** | **-0.9** |
| **CTA** | **Charters Tower** | **18.38** | **162** | P | | **Pn** | **15 36 39.7** | **+2.5** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=9.6,SNR=6.9 | | | | | | | |
| CTA | | | | LR | | LR | 15 43 48.3 | |
| | comp=Z,169nm,20.0s,baz=340,slow=37 | | | | | | | |
| **HNR** | **Honiara** | **20.64** | **110** | P | | Pn | 15 37 04.0 | -0.2 |
| | comp=Z,49nm,0.8s,baz=306,slow=0.8,SNR=4.3 | | | | | | | |
| **HNR** | **Honiara** | **20.64** | **110** | P | | **P** | **15 37 01.0** | **-0.8** |
| **KAPI** | **Kappang** | **20.71** | **263** | LR | | LR | 15 45 54.2 | |
| | comp=Z,34nm,21.1s,baz=104,slow=40 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.16** | **222** | P | | **P** | **15 37 08.2** | **+0.6** |
| | comp=Z,14nm,0.8s,baz=57,slow=11,SNR=20 | | | | | | | |
| FITZ | | | | LR | | LR | 15 45 04.1 | |
| | comp=Z,100nm,20.7s,baz=51,slow=36 | | | | | | | |
| **AS31** | **Alice Springs** | **21.92** | **196** | P | | **P** | **15 37 13.9** | **-1.8** |
| AS31 | | | | IAmb | | IAmb | 15 37 28.5 | |
| | comp=Z,6.8nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **21.93** | **196** | P | | **P** | **15 37 17.2** | **+1.5** |
| | comp=Z,5.5nm,0.5s,baz=29,slow=10,SNR=58 | | | | | | | |
| ASAR | | | | S | | **S** | **15 41 22.4** | **+5.6** |
| | comp=Z,4.2nm,0.9s,baz=16,slow=26,SNR=5.9 | | | | | | | |
| ASAR | | | | LR | | LR | 15 46 28.1 | |
| | comp=Z,156nm,18.8s,baz=30,slow=38 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.93** | **196** | P | | **P** | **15 37 14.4** | **-1.3** |
| **MBWA** | **Marble Bar** | **27.33** | **226** | P | | **P** | **15 38 06.2** | **-0.9** |
| MBWA | | | | IAmb | | IAmb | 15 38 10.8 | |
| | comp=Z,7.6nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **29.22** | **178** | P | | **P** | **15 38 24.8** | **+1.0** |
| | comp=Z,2.0nm,0.8s,baz=352,slow=9.1,SNR=3.4 | | | | | | | |
| STKA | | | | LR | | LR | 15 51 53.1 | |
| | comp=Z,332nm,18.3s,baz=8.2,slow=40 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.22** | **178** | P | | **P** | **15 38 23.9** | **+0.1** |
| **KSM** | **Kuching** | **30.31** | **277** | P | | **P** | **15 38 30.6** | **-3.1** |
| KSM | | | | IAmb | | IAmb | 15 38 32.2 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **31.93** | **130** | LR | | LR | 15 51 26.6 | |
| | comp=Z,104nm,19.8s,baz=335,slow=36 | | | | | | | |
| **GIRL** | **Giralia** | **32.29** | **230** | P | | **P** | **15 38 49.8** | **-1.2** |
| **MORW** | **Morawa** | **35.10** | **219** | P | | **P** | **15 39 13.9** | **-1.6** |
| MORW | | | | IAmb | | IAmb | 15 39 24.8 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **MSVF** | **Nonsavu** | **39.93** | **115** | LR | | LR | 15 55 09.4 | |
| | comp=Z,104nm,20.6s,baz=286,slow=34 | | | | | | | |
| **PSI** | **Prapat** | **41.76** | **277** | P | | **P** | **15 40 11.1** | **-0.8** |
| | comp=Z,6.0nm,0.6s,baz=75,slow=4.9,SNR=7.8 | | | | | | | |
| **GSI** | **Gunungsitoli** | **42.95** | **275** | P | | **P** | **15 40 18.2** | **-3.2** |
| **CMAR** | **Chiang Mai Arr** | **45.79** | **299** | P | | **P** | **15 40 43.5** | **-0.5** |
| | comp=Z,8.9nm,1.1s,baz=117,slow=5.9,SNR=28 | | | | | | | |
| **XAN** | **Xi'an** | **46.89** | **324** | P | | **P** | **15 40 51.6** | **-0.9** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| **BNX** | **BinXian** | **49.42** | **348** | ↓P | | **P** | **15 41 11.9** | **+0.2** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,180nm,3.7s | | | | | | | |
| **LZH** | **Lanzhou** | **51.34** | **322** | *e*P | | **P** | **15 41 28.9** | **+2.2** |
| LZH | | | | pP | | sP | 15 41 34.7 | -2.5 |
| LZH | | | | sP | | pP | 15 41 38.7 | +4.4 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **GTA** | **Gaotai** | **55.92** | **323** | *e*P | | **P** | **15 42 01.3** | **+1.1** |
| GTA | | | | pP | | pP | 15 42 04.8 | -3.0 |
| GTA | | | | sP | | sP | 15 42 08.0 | -2.7 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **PALK** | **Pallekele** | **60.32** | **280** | LR | | LR | 16 09 47.5 | |
| | comp=Z,46nm,18.5s,baz=256,slow=37 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.66** | **322** | P | | **P** | **15 43 38.6** | **+0.9** |
| | comp=Z,3.9nm,0.8s,baz=108,slow=7.3,SNR=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.66** | **322** | P | | **P** | **15 43 36.5** | **-1.2** |
| **MAKZ** | **Makanchi** | **70.86** | **322** | P | | **P** | **15 43 37.7** | **-1.1** |
| MAKZ | | | | IAmb | | IAmb | 15 43 40.8 | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **KSH** | **Kashi** | **72.17** | **313** | P | | **P** | **15 43 49.8** | **+2.8** |
| KSH | | | | PcP | | **PcP** | **15 44 08.5** | **+3.2** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.62** | **329** | P | | **P** | **15 43 49.3** | **+0.1** |
| | comp=Z,1.1nm,0.4s,baz=112,slow=6.9,SNR=6.6 | | | | | | | |
| **NRIK** | **Noril'sk** | **80.02** | **343** | P | | **P** | **15 44 32.0** | **+1.1** |
| | comp=Z,1.0nm,0.4s,baz=132,slow=8.3,SNR=4.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.99** | **24** | P | | **P** | **15 44 56.8** | **-0.2** |
| | comp=Z,2.1nm,0.8s,baz=272,slow=3.3,SNR=13 | | | | | | | |
| **GEYT** | **Allbeck** | **85.43** | **308** | P | | **P** | **15 44 59.4** | **-0.4** |
| | comp=Z,3.1nm,0.8s,baz=90,slow=5.8,SNR=4.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.15** | **27** | P | | **Pdif** | **15 46 04.2** | **+1.2** |
| | comp=Z,0.7nm,1.1s,baz=273,slow=5.1,SNR=3.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **137.79** | **287** | PKP | | **PKiKP** | **15 51 48.5** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=67,slow=2.8,SNR=5.7 | | | | | | | |
| **KIC** | **Kosan Boka** | **145.01** | **277** | *e*PKP1 | | **PKPdf** | **15 52 00.1** | **-0.2** |
| | comp=Z,14nm,1.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **145.10** | **278** | PKP | | **PKPdf** | **15 52 00.5** | **0.0** |
| | comp=Z,5.7nm,0.6s,baz=88,slow=2.0,SNR=11 | | | | | | | |
| **DBIC** | **Dimbokro** | **145.10** | **278** | | | **PKPdf** | **15 51 59.8** | **-0.7** |
| **TIC** | **Toumodi** | **145.26** | **278** | *e*PKP1 | | **PKPdf** | **15 52 00.9** | **+0.1** |
| **LIC** | **Lamto** | **145.31** | **277** | *e*PKP1 | | **PKPdf** | **15 52 00.8** | **0.0** |
| | comp=Z,58nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **146.20** | **125** | PKPbc | | **PKiKP** | **15 52 07.1** | **-0.2** |
| | comp=Z,4.5nm,0.9s,baz=295,slow=2.4,SNR=9.8 | | | | | | | |
| **CPUP** | **Villa Florida** | **146.60** | **150** | PKPbc | | **PKiKP** | **15 52 06.5** | **-0.6** |
| | comp=Z,2.0nm,0.7s,baz=255,slow=3.9,SNR=3.6 | | | | | | | |

*DJA **05** 15:35:29.9±0.7,0°.N±6°×12°.3E±°,h181km±12km,M4.0/16, mb4.3/6,mB4.5/6,MLv4.2/16,Mw(mB)3.6/6*
*NEIC **05** 15:35:29.7±2.1,0°.1N±0°.1×122°.98E±0°.05,h178km±8km, mb4.4/30,Error ellipse: s-maj=14.8km s-min=6.4km az=188.0*
*IDC **05** 15:35:31.6±2.1,0°.01N×122°.91E,h204km±19km,mb3.7/10, mb1 3.9/12,mb1mx3.5/39,mbtmp4.3/12,Error ellipse: s-maj=29.2km s-min=11.0km az=58.0*
**ISC 05 15:35:30.7±0.9,0°.07N±0°.05×123°.06E±0°.05,h195km±8km, n82,σ1°29/90,mb4.3/25,1C,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GTOI** | **Gorontalo** | **0.56** | **355** | P | | **Pn** | **15 35 56.3** | **-1.2** |
| **KMSI** | **Cibinong** | **1.04** | **62** | P | | **Pn** | **15 36 00.1** | **-0.2** |
| **MRSI** | **Marisa** | **1.19** | **290** | P | | **Pn** | **15 35 58.5** | **-2.9** |
| **APSI** | **Ampana** | **1.72** | **235** | P | | **Pn** | **15 36 03.8** | **-2.2** |
| **TOLI2** | **Tolitoli** | **2.50** | **294** | Pn | | **Pn** | **15 36 12.7** | **-1.7** |
| **MPSI** | **Mapaga** | **3.17** | **275** | P | | **Pn** | **15 36 20.5** | **-1.7** |
| **SANI** | **Sanana** | **3.61** | **126** | P | | **Pn** | **15 36 24.9** | **-2.6** |
| **SANI** | **Sanana** | **3.61** | **126** | P | | **Pn** | **15 36 24.9** | **-2.6** |
| **TNTI** | **Ternate** | **4.36** | **81** | P | | **Pn** | **15 36 35.8** | **-1.1** |
| **TNTI** | **Ternate** | **4.36** | **81** | Pn | | **Pn** | **15 36 35.8** | **-1.1** |
| **TNTI** | **Ternate** | **4.36** | **81** | P | | **Pn** | **15 36 32.3** | **-4.6** |
| **TTSI** | **Tana Toraja** | **4.48** | **226** | P | | **Pn** | **15 36 37.8** | **-0.7** |
| **LBMI** | **Labuha** | **4.50** | **99** | P | | **Pn** | **15 36 37.6** | **-1.0** |
| **SPSI** | **Sidrap Palu** | **5.19** | **219** | P | | **Pn** | **15 36 47.1** | **-0.4** |
| | 0.2nm463nm45nm,0.9s | | | | | | | |
| **BNSI** | **Bone** | **5.34** | **214** | P | | **Pn** | **15 36 48.7** | **-0.7** |
| | 0.2nm920nm52nm,0.9s | | | | | | | |
| **BBSI** | **Bau Bau** | **5.55** | **185** | P | | **Pn** | **15 36 50.9** | **-1.2** |
| | 0.0nm126nm14nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **6.04** | **213** | P | | **Pn** | **15 36 57.3** | **-1.2** |
| | 1.0nm,0.3s,baz=101,slow=10,SNR=19 | | | | | | | |
| **BKSI** | **Bulukumba** | **6.11** | **209** | P | | **Pn** | **15 36 59.3** | **-0.1** |
| | 0.3nm930nm95nm,1.1s | | | | | | | |
| **AAI** | **Ambon** | **6.35** | **126** | P | | **Pn** | **15 37 01.0** | **-1.5** |
| **MYLDM** | **Lahad Datu** | **6.82** | **318** | Pn | | **Pn** | **15 37 11.2** | **+2.6** |
| **KKM** | **Kota Kinabalu** | **9.05** | **311** | Pn | | **Pn** | **15 37 38.3** | **+0.4** |
| **LQP** | **Lukban** | **14.03** | **354** | *e*P | | **P** | **15 38 44.4** | **+0.9** |
| **KNRA** | **Kununurra** | **16.63** | **160** | P | | **P** | **15 39 12.8** | **+0.8** |
| **KNRA** | **Kununurra** | **16.63** | **160** | P | | **Pn** | **15 39 13.0** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **18.23** | **172** | P | | **P** | **15 39 29.6** | **+0.1** |
| | 2.7nm,0.3s,baz=5.4,slow=8.8,SNR=13 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.74** | **188** | P | | **P** | **15 40 04.4** | **-2.5** |
| PSA00 | | | | IAmb | | IAmb | 15 40 20.4 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **IPM** | **Ipoh** | **22.44** | **282** | P | | **P** | **15 40 14.3** | **+0.5** |
| IPM | | | | IAmb | | IAmb | 15 40 16.0 | |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.63** | **151** | P | | **P** | **15 40 14.4** | **-0.9** |
| WB0 | | | | IAmb | | IAmb | 15 40 16.4 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.75** | **152** | P | | **P** | **15 40 16.4** | **-0.1** |
| WRAB | | | | IAmb | | IAmb | 15 40 33.4 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.75** | **152** | P | | **P** | **15 40 16.0** | **-0.4** |
| | comp=Z,7.1nm,0.6s,baz=340,slow=9.6,SNR=28 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.75** | **152** | P | | **P** | **15 40 16.5** | **0.0** |
| **WR0** | **Warramunga Arr** | **22.87** | **151** | P | | **P** | **15 40 16.9** | **-0.6** |
| **TPUB** | **Ta-pu** | **23.21** | **354** | P | | **P** | **15 40 21.3** | **+0.8** |
| **COEN** | **Coen** | **24.31** | **126** | P | | **P** | **15 40 30.4** | **-0.2** |
| COEN | | | | IAmb | | IAmb | 15 40 48.0 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **WRKA** | **Warakurna** | **25.47** | **169** | P | | **P** | **15 40 41.2** | **+0.1** |
| **AS31** | **Alice Springs** | **25.84** | **157** | P | | **P** | **15 40 44.4** | **0.0** |
| AS31 | | | | IAmb | | IAmb | 15 40 46.1 | |
| | comp=Z,2.6nm,0.3s | | | | | | | |
| AS31 | | | | PcP | | **PcP** | **15 44 08.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **25.84** | **157** | P | | **P** | **15 40 43.7** | **-0.7** |
| | comp=Z,1.0nm,0.3s,baz=345,slow=12,SNR=8.7 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15 44 08.8** | **+0.3** |
| | comp=Z,1.5nm,0.3s,baz=341,slow=2.0,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.84** | **157** | P | | **P** | **15 40 45.3** | **+0.9** |
| ASAR | | | | PcP | | **PcP** | **15 44 08.8** | **+0.3** |
| **RABL** | **Rabaul** | **29.38** | **99** | P | | **P** | **15 41 18.1** | **+2.0** |
| **RABL** | **Rabaul** | **29.38** | **99** | P | | **P** | **15 41 18.3** | **+2.2** |
| **MORW** | **Morawa** | **29.75** | **192** | P | | **P** | **15 41 18.3** | **-0.7** |
| MORW | | | | IAmb | | IAmb | 15 41 33.6 | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.92** | **309** | P | | **P** | **15 41 21.1** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=138,slow=7.2,SNR=4.7 | | | | | | | |
| **CTAO** | **Charters Tower** | **30.29** | **133** | P | | **P** | **15 41 25.2** | **+1.3** |
| CTAO | | | | IAmb | | IAmb | 15 41 42.2 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **FORT** | **Forrest** | **31.05** | **172** | P | | **P** | **15 41 30.0** | **-0.4** |
| **FORT** | **Forrest** | **31.05** | **172** | P | | **P** | **15 41 30.0** | **-0.4** |
| **MULG** | **Mulgathing** | **31.95** | **162** | P | | **P** | **15 41 38.5** | **+0.2** |
| **JCJ** | **Chichijima** | **32.56** | **33** | P | | **P** | **15 41 43.6** | **0.0** |
| **QLP** | **Quilpie** | **33.44** | **144** | P | | **P** | **15 41 53.5** | **+2.2** |
| **LCRK** | **Leigh Creek** | **33.60** | **156** | P | | **P** | **15 41 53.1** | **+0.4** |
| **BBOO** | **Buckleboo** | **34.93** | **161** | P | | **P** | **15 42 03.4** | **-0.7** |
| BBOO | | | | IAmb | | IAmb | 15 42 07.7 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **34.93** | **161** | P | | **P** | **15 42 03.9** | **-0.2** |
| **STKA** | **Stephens Creek** | **36.30** | **153** | P | | **P** | **15 42 16.1** | **+0.4** |
| | comp=Z,8.8nm,0.5s,baz=330,slow=8.6,SNR=17 | | | | | | | |
| STKA | | | | PcP | | **PcP** | **15 44 36.2** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=326,slow=3.6,SNR=3.1 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.30** | **153** | P | | **P** | **15 42 16.0** | **+0.4** |
| STKA | | | | PcP | | **PcP** | **15 44 35.9** | **-0.4** |
| **STKA** | **Stephens Creek** | **36.30** | **153** | P | | **P** | **15 42 16.3** | **+0.6** |
| **HTT** | **Hallett** | **36.51** | **157** | P | | **P** | **15 42 18.5** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **38.05** | **148** | P | | **P** | **15 42 31.7** | **+1.2** |
| **ARPS** | **Mount Arapiles** | **40.58** | **157** | P | | **P** | **15 42 52.1** | **+0.8** |
| **ARMA** | **Armidale** | **40.71** | **141** | P | | **P** | **15 42 54.0** | **+1.4** |
| ARMA | | | | IAmb | | IAmb | 15 42 54.6 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **ARMA** | **Armidale** | **40.71** | **141** | P | | **P** | **15 42 54.6** | **+2.0** |
| **MGCD** | **Mangrove Creek** | **42.34** | **144** | P | | **P** | **15 43 08.0** | **+2.3** |
| **CAN** | **Canberra** | **42.72** | **148** | P | | **P** | **15 43 10.6** | **+1.7** |
| CAN | | | | IAmb | | IAmb | 15 43 10.6 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **42.72** | **148** | P | | **P** | **15 43 10.5** | **+1.7** |
| **TOO** | **Toolangi** | **42.80** | **154** | P | | **P** | **15 43 10.2** | **+0.8** |
| **TOO** | **Toolangi** | **42.80** | **154** | P | | **P** | **15 43 11.1** | **+1.7** |
| **DZM** | **Mont Dzumac** | **47.65** | **120** | P | | **P** | **15 43 49.5** | **+1.6** |
| | comp=Z,3.3nm,0.8s,baz=191,slow=1.9,SNR=12 | | | | | | | |
| **OUENC** | **Ouen Island, N** | **48.12** | **121** | P | | **P** | **15 43 51.8** | **+0.5** |
| **SONM** | **Songino Array** | **49.73** | **345** | P | | **P** | **15 44 03.5** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=161,slow=9.0,SNR=7.0 | | | | | | | |
| SONM | | | | ScP | | **ScP** | **15 48 57.4** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=160,slow=2.0,SNR=3.5 | | | | | | | |
| **SONM** | **Songino Array** | **49.73** | **345** | P | | **P** | **15 44 03.5** | **+0.2** |
| **MK31** | **Makanchi Array** | **58.58** | **328** | P | | **P** | **15 45 06.6** | **-0.5** |
| **MKAR** | **Makanchi Array** | **58.58** | **328** | P | | **P** | **15 45 06.8** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=121,slow=8.6,SNR=7.6 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **15 45 54.0** | **-1.1** |
| | comp=Z,0.5nm,0.5s,baz=140,slow=3.8,SNR=6.2 | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **15 49 34.6** | **-2.4** |
| | comp=Z,0.8nm,0.8s,baz=129,slow=4.6,SNR=7.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.58** | **328** | P | | **P** | **15 45 06.7** | **-0.4** |
| **MAKZ** | **Makanchi** | **58.76** | **328** | P | | **P** | **15 45 07.2** | **-1.1** |
| **RPZ** | **Rata Peaks** | **61.03** | **142** | P | | **P** | **15 45 24.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **62.46** | **135** | P | | **P** | **15 45 34.2** | **+0.7** |
| BKZ | | | | IAmb | | IAmb | 15 45 36.6 | |
| | comp=Z,9.7nm,1.1s | | | | | | | |
| **URZ** | **Urewera** | **62.52** | **134** | P | | **P** | **15 45 34.0** | **+0.2** |
| | comp=Z,3.7nm,0.4s,baz=261,slow=3.1,SNR=5.6 | | | | | | | |
| **KURK** | **Kurchatov** | **62.94** | **330** | P | | **P** | **15 45 35.2** | **-1.2** |
| KURK | | | | IAmb | | IAmb | 15 45 36.1 | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| **TIXI** | **Tiksi** | **71.56** | **2** | P | | **P** | **15 46 29.1** | **-1.0** |
| TIXI | | | | IAmb | | IAmb | 15 46 32.9 | |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| **VNDA** | **Vanda** | **80.31** | **172** | P | | **P** | **15 47 19.8** | **+0.2** |
| | comp=Z,4.7nm,0.8s,baz=336,slow=9.1,SNR=2.2 | | | | | | | |
| **VNDA** | **Vanda** | **80.31** | **172** | P | | **P** | **15 47 19.1** | **-0.4** |
| VNDA | | | | IAmb | | IAmb | 15 47 19.5 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.96** | **25** | P | | **P** | **15 48 06.5** | **-1.2** |
| | comp=Z,0.3nm,0.6s,baz=250,slow=5.3,SNR=5.3 | | | | | | | |
| **QSPA** | **South Pole Qui** | **90.01** | **180** | P | | **P** | **15 48 08.0** | **0.0** |
| QSPA | | | | IAmb | | IAmb | 15 48 23.5 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.45** | **285** | PKP | | **PKPdf** | **15 53 58.9** | **-1.1** |
| | comp=Z,0.3nm,0.3s,baz=72,slow=2.0,SNR=4.5 | | | | | | | |

*IDC **05** 15:42:53.3±1.8,6°.63S×129°.43E,h176km±20km,mb3.5/5, mb1 3.7/10,mb1mx3.4/30,mbtmp4.2/10,MS3.4/1, Ms1 3.4/1,ms1mx2.4/40,Error ellipse: s-maj=19.5km s-min=14.4km az=68.0*
*NEIC **05** 15:42:54.1±2.4,6°.70S±0°.06×129°.54E±0°.09,h200km±10km, mb4.0/5,Error ellipse: s-maj=14.7km s-min=5.9km az=116.0*
**ISC 05 15:42:53.6±0.7,6°.70S±0°.05×129°.54E±0°.07,h200km,n42, σ2°19/46,mb3.8/4,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JKO** | **Kozu shima** | **1.16** | **320** | P | **Pn** | **16 02 21.2** | **+0.7** |
| JKO | | | | eS | **Sn** | **16 02 38.1** | **+0.4** |
| **JNIO** | **Niijimaoohara** | **1.23** | **329** | P | **Pn** | **16 02 22.1** | **+0.8** |
| **JTHY** | **Toshimahigashi** | **1.37** | **334** | P | **Pn** | **16 02 23.9** | **+1.0** |
| JTHY | | | | eS | **Sn** | **16 02 42.2** | **+0.2** |
| **JIM2** | **Oshima 3** | **1.50** | **341** | P | **Pn** | **16 02 25.3** | **+0.8** |
| JIM2 | | | | eS | **Sn** | **16 02 44.8** | **-0.1** |
| **BSO3** | **Boso 3** | **1.56** | **15** | P | **Pn** | **16 02 26.3** | **+1.5** |
| **BSO1** | **Boso 1** | **1.57** | **30** | P | **Pn** | **16 02 26.3** | **+1.6** |
| **JIZS** | **Izushimoda** | **1.71** | **326** | P | **Pn** | **16 02 27.9** | **+0.9** |
| **TK02** | **Tokai 2** | **2.00** | **290** | P | **Pn** | **16 02 31.5** | **+1.0** |
| TK02 | | | | eS | **Sn** | **16 02 56.6** | **+1.1** |
| **JSG** | **Sagara** | **2.06** | **312** | P | **Pn** | **16 02 33.0** | **+1.7** |
| **TK04** | **Tokai 4** | **2.10** | **302** | P | **Pn** | **16 02 33.0** | **+1.2** |
| TK04 | | | | eS | **Sn** | **16 02 59.2** | **+1.4** |
| **JOD2** | **Odawara 2** | **2.11** | **339** | P | **Pn** | **16 02 33.2** | **+1.1** |
| JOD2 | | | | eS | **Sn** | **16 02 59.0** | **+0.6** |
| **JFNN** | **Fujinakano** | **2.20** | **330** | P | **Pn** | **16 02 34.7** | **+1.5** |
| **SHZ3** | **Shizuoka 3** | **2.32** | **320** | P | **Pn** | **16 02 36.4** | **+1.5** |
| **JYN** | **Shimob** | **2.52** | **331** | P | **Pn** | **16 02 39.1** | **+1.7** |
| **TTO2** | **TONANKAI O.B.S** | **2.55** | **281** | P | **Pn** | **16 02 38.2** | **+0.8** |
| **JYT** | **Yasato** | **2.93** | **3** | Pn | **Pn** | **16 02 43.2** | **+0.5** |
| **JGF** | **Kuroka** | **3.19** | **317** | | **Pn** | **16 02 47.6** | **+1.4** |
| **INU** | **Inuyama** | **3.23** | **310** | | **Pn** | **16 02 47.8** | **+1.2** |
| **INU** | **Inuyama** | **3.23** | **310** | P | **Pn** | **16 02 48.1** | **+1.4** |
| **MJAR** | **Matsushiro Arr** | **3.57** | **336** | P | **Pn** | **16 02 52.6** | **+1.3** |
| | 4.3nm,0.3s,baz=163,slow=13,SNR=146 | | | | | | |
| MJAR | | | | S | **Sn** | **16 03 33.8** | **+1.1** |
| | 1.0nm,0.3s,baz=326,slow=23,SNR=7.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.57** | **336** | | **Pn** | **16 02 51.1** | **-0.2** |
| **MAJO** | **Matsushiro** | **3.57** | **336** | | **Pn** | **16 02 53.3** | **+2.0** |
| **MAJO** | **Matsushiro** | **3.57** | **336** | P | **Pn** | **16 02 53.0** | **+1.7** |
| **MAT** | **Matsushiro** | **3.57** | **336** | P | **Pn** | **16 02 52.5** | **+1.2** |
| MAT | | | | S | **Sn** | **16 03 31.5** | **-1.2** |
| **MJB9** | **Matsu-Tunnel** | **3.57** | **336** | | **Pn** | **16 02 53.2** | **+1.8** |
| **JMM** | **Marumori** | **4.60** | **8** | Pn | **Pn** | **16 03 04.2** | **-1.0** |
| **JSD** | **Sado** | **4.95** | **344** | Pn | **Pn** | **16 03 09.7** | **-0.1** |
| **JMN** | **Monobe** | **5.16** | **277** | Pn | **Pn** | **16 03 13.4** | **+0.7** |
| **JHS** | **Saijyo** | **5.98** | **288** | Pn | **Pn** | **16 03 25.2** | **+1.4** |
| **JCJ** | **Chichijima** | **6.45** | **163** | Pn | **Pn** | **16 03 27.4** | **-2.8** |
| **JCJ** | **Chichijima** | **6.45** | **163** | P | **Pn** | **16 03 27.6** | **-2.6** |
| **JTM** | **Tenmabayashi** | **7.53** | **6** | Pn | **Pn** | **16 03 43.8** | **-0.9** |
| **JNU** | **Nakatsue** | **7.67** | **271** | P | **Pn** | **16 03 47.3** | **+0.6** |
| | 0.6nm,0.3s,baz=130,slow=6.9,SNR=2.4 | | | | | | |
| **JNU** | **Nakatsue** | **7.67** | **271** | Pn | **Pn** | **16 03 48.3** | **+1.6** |
| **JNU** | **Nakatsue** | **7.67** | **271** | P | **Pn** | **16 03 48.5** | **+1.7** |
| **ERM** | **Erimo** | **9.05** | **15** | Pn | **Pn** | **16 04 04.7** | **-0.6** |
| **ERM** | **Erimo** | **9.05** | **15** | P | **Pn** | **16 04 04.3** | **-1.1** |
| **JEW** | **Eniwo** | **9.60** | **6** | Pn | **Pn** | **16 04 10.9** | **-1.8** |
| **KSRS** | **Korea Array** | **10.72** | **296** | P | **Pn** | **16 04 29.1** | **+1.1** |
| | 0.2nm,0.3s,baz=109,slow=14,SNR=11 | | | | | | |
| KSRS | | | | LR | LR | 16 08 57.1 | |
| | comp=Z,23nm,18.7s,baz=130,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **10.99** | **10** | P | **Pn** | **16 04 30.6** | **-1.0** |
| | 2.4nm,0.3s,baz=213,slow=11,SNR=36 | | | | | | |
| ASAJ | | | | S | **Sn** | **16 06 27.0** | **-5.4** |
| | 0.9nm,0.3s,baz=18,slow=30,SNR=2.5 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **10.99** | **10** | | **Pn** | **16 04 29.5** | **-2.1** |
| **YSS** | **Yuzh-Sakhalins** | **13.80** | **8** | P | **Pn** | **16 05 07.9** | **-0.7** |
| **KLR** | **Kul'dur** | **17.08** | **341** | P | **Pn** | **16 05 48.5** | **-1.2** |
| | 0.5nm,0.3s,baz=153,slow=12,SNR=11 | | | | | | |
| **YHNB** | **Yeheng** | **18.42** | **247** | P | **P** | **16 06 02.2** | **-2.5** |
| YHNB | | | | IAmb | IAmb | 16 06 17.7 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **NACB** | **Ninganchiao** | **18.52** | **245** | P | **P** | **16 06 03.4** | **-2.3** |
| NACB | | | | IAmb | IAmb | 16 06 19.4 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **SSLB** | **Suanglung** | **19.23** | **245** | P | **P** | **16 06 12.2** | **-1.2** |
| **H11N2** | **WAKE ISLAND Hy** | **27.48** | **113** | T | T | 16 36 31.3 | |
| | baz=306,slow=75,SNR=55 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.48** | **113** | T | T | 16 36 38.4 | |
| | baz=306,slow=75,SNR=70 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.50** | **113** | T | T | 16 36 39.2 | |
| | baz=306,slow=75,SNR=60 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.04** | **115** | T | T | 16 36 53.7 | |
| | baz=306,slow=75,SNR=20 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.04** | **115** | T | T | 16 36 53.6 | |
| | baz=306,slow=75,SNR=13 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.06** | **115** | T | T | 16 37 12.7 | |
| | baz=306,slow=75,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **29.12** | **310** | P | **P** | **16 07 48.0** | **-0.4** |
| | comp=Z,1.2nm,0.8s,baz=113,slow=7.8,SNR=7.3 | | | | | | |
| **SONM** | **Songino Array** | **29.12** | **310** | P | **P** | **16 07 49.5** | **+1.1** |
| **ZALV** | **Zalesovo Beam** | **43.68** | **315** | P | **P** | **16 09 51.6** | **0.0** |
| | comp=Z,0.9nm,0.3s,baz=102,slow=6.8,SNR=5.3 | | | | | | |
| ZALV | | | | PcP | **PP** | | |
| | comp=Z,1.6nm,0.5s,baz=100,slow=1.8,SNR=4.0 | | | | | | |
| **MK31** | **Makanchi Array** | **45.24** | **305** | P | **P** | **16 10 03.3** | **-0.9** |
| **MKAR** | **Makanchi Array** | **45.24** | **305** | P | **P** | **16 10 03.8** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=88,slow=10,SNR=19 | | | | | | |
| MKAR | | | | ScP | **ScP** | **16 15 23.7** | **-1.3** |
| | comp=Z,0.4nm,0.9s,baz=70,slow=4.9,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.24** | **305** | P | **P** | **16 10 03.2** | **-1.0** |
| **ANM** | **Nome** | **45.39** | **30** | P | **P** | **16 10 07.3** | **+2.3** |
| ANM | | | | IAmb | IAmb | 16 10 08.8 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **MAKZ** | **Makanchi** | **45.45** | **305** | P | **P** | **16 10 04.7** | **-1.1** |
| **NRIK** | **Nori'sk** | **46.22** | **337** | P | **P** | **16 10 12.6** | **+1.1** |
| | comp=Z,1.2nm,0.4s,baz=126,slow=6.6,SNR=2.9 | | | | | | |
| **COEN** | **Coen** | **47.08** | **176** | P | **P** | **16 10 18.7** | **-0.1** |
| **KURK** | **Kurchatov** | **47.43** | **311** | P | **P** | **16 10 19.9** | **-1.2** |
| KURK | | | | IAmb | IAmb | 16 10 22.6 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **P18K** | **Big Mountain,** | **49.28** | **38** | P | **P** | **16 10 36.5** | **+1.2** |
| P18K | | | | IAmb | IAmb | 16 10 49.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **L19K** | **White Mountain** | **49.62** | **34** | P | **P** | **16 10 39.4** | **+1.6** |
| L19K | | | | IAmb | IAmb | 16 10 40.8 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **K20K** | **Telida** | **50.07** | **32** | P | **P** | **16 10 43.6** | **+2.5** |
| K20K | | | | IAmb | IAmb | 16 10 48.2 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **J20K** | **Nowinta River** | **50.10** | **31** | P | **P** | **16 10 42.6** | **+1.2** |
| J20K | | | | IAmb | IAmb | 16 10 44.8 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **50.45** | **29** | P | **P** | **16 10 46.1** | **+2.1** |
| **KDAK** | **Kodiak Island** | **50.66** | **40** | P | **P** | **16 10 46.5** | **+0.9** |
| | comp=Z,15nm,0.5s,baz=297,slow=4.3,SNR=29 | | | | | | |
| **KDAK** | **Kodiak Island** | **50.66** | **40** | P | **P** | **16 10 46.6** | **+0.9** |
| **H21K** | **Melozitna Rive** | **50.81** | **30** | P | **P** | **16 10 48.9** | **+2.2** |
| **PPLA** | **Purkeypile** | **50.90** | **33** | P | **P** | **16 10 49.4** | **+1.8** |
| **MLY** | **Manley** | **51.63** | **30** | P | **P** | **16 10 55.0** | **+2.2** |
| MLY | | | | IAmb | IAmb | 16 10 56.1 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **52.22** | **30** | P | **P** | **16 10 56.0** | **-1.1** |
| **MCK** | **McKinley** | **52.38** | **32** | P | **P** | **16 11 00.0** | **+1.6** |
| MCK | | | | IAmb | IAmb | 16 11 03.2 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **GHO** | **Glory Hole Cre** | **52.41** | **35** | P | **P** | **16 11 00.6** | **+1.8** |
| **RND** | **Reindeer** | **52.42** | **33** | P | **P** | **16 11 00.3** | **+1.5** |
| **MDM** | **Murphy Dome** | **52.69** | **31** | P | **P** | **16 11 02.2** | **+1.5** |
| **WRH** | **Wood River Hil** | **52.75** | **31** | P | **P** | **16 11 03.0** | **+1.9** |
| WRH | | | | IAmb | IAmb | 16 11 05.2 | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **H24K** | **Noodor Dome** | **52.85** | **29** | P | **P** | **16 11 03.5** | **+1.6** |
| H24K | | | | IAmb | IAmb | 16 11 05.2 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **52.87** | **31** | P | **P** | **16 11 03.0** | **+1.0** |
| **WB0** | **Warramunga Arr** | **53.04** | **187** | P | **P** | **16 11 02.2** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 16 11 02.9 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **53.17** | **34** | P | **P** | **16 11 04.8** | **+0.5** |
| **WRAB** | **Tennant Creek** | **53.20** | **187** | P | **P** | **16 11 02.9** | **-2.0** |
| **WR0** | **Warramunga Arr** | **53.21** | **186** | P | **P** | **16 11 03.6** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 16 11 04.9 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **53.21** | **187** | P | **P** | **16 11 03.5** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 16 11 04.7 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| WB2 | | | | PcP | **PcP** | **16 12 12.4** | **+0.9** |
| **WRA** | **Warramunga Arr** | **53.22** | **187** | P | **P** | **16 11 03.6** | **-1.4** |
| | comp=Z,4.3nm,0.8s,baz=5.7,slow=7.8,SNR=95 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 12 12.4** | **+0.9** |
| | comp=Z,1.3nm,0.5s,baz=359,slow=4.3,SNR=8.8 | | | | | | |
| WRA | | | | ScP | **ScP** | **16 15 58.5** | **-0.7** |
| | comp=Z,0.4nm,1.0s,baz=4.2,slow=4.0,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.22** | **187** | P | **P** | **16 11 03.1** | **-1.9** |
| WRA | | | | PcP | **PcP** | **16 12 11.7** | **+0.1** |
| **IL31** | | **53.27** | **31** | P | **P** | **16 11 05.5** | **+0.6** |
| **ILAR** | **Eielson Array** | **53.27** | **31** | P | **P** | **16 11 05.9** | **+1.0** |
| | comp=Z,2.8nm,0.6s,baz=269,slow=6.9,SNR=56 | | | | | | |
| **ILAR** | **Eielson Array** | **53.27** | **31** | P | **P** | **16 11 04.4** | **-0.5** |
| **BMAR** | **Burnt Mountain** | **54.16** | **27** | P | **P** | **16 11 13.8** | **+2.4** |
| **N25K** | **Chitina, Valde** | **54.48** | **35** | P | **P** | **16 11 15.1** | **+1.2** |
| N25K | | | | IAmb | IAmb | 16 11 16.0 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **DOT** | **Dot Lake** | **54.55** | **32** | P | **P** | **16 11 14.7** | **+0.4** |
| DOT | | | | IAmb | IAmb | 16 11 16.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **SCRK** | **Sand Creek** | **54.56** | **32** | P | **P** | **16 11 15.8** | **+1.3** |
| SCRK | | | | IAmb | IAmb | 16 11 17.3 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **54.71** | **31** | P | **P** | **16 11 15.9** | **+0.4** |
| **L26K** | **Log Cabin Wild** | **54.93** | **33** | P | **P** | **16 11 18.4** | **+1.4** |
| **WAX** | **Waxell Ridge** | **55.45** | **36** | P | **P** | **16 11 22.8** | **+1.9** |
| **L27K** | **Beaver Creek,** | **55.61** | **33** | P | **P** | **16 11 24.3** | **+2.4** |
| L27K | | | | IAmb | IAmb | 16 11 25.0 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **BCAR** | **Beaver Creek A** | **55.63** | **33** | P | **P** | **16 11 24.5** | **+2.4** |
| **M27K** | **Edge Creek, AK** | **55.67** | **34** | P | **P** | **16 11 24.6** | **+2.0** |
| M27K | | | | IAmb | IAmb | 16 11 25.6 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **DAWY** | **Dawson** | **56.56** | **31** | P | **P** | **16 11 30.2** | **+1.5** |
| **I29M** | **Ogilvie Camp,** | **56.84** | **30** | P | **P** | **16 11 32.9** | **+2.3** |
| I29M | | | | IAmb | IAmb | 16 11 34.0 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **56.94** | **187** | P | **P** | **16 11 30.9** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 16 11 32.7 | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **56.94** | **187** | P | **P** | **16 11 30.7** | **-1.1** |
| | comp=Z,1.5nm,0.4s,baz=358,slow=6.0,SNR=150 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 12 27.1** | **+1.2** |
| | comp=Z,1.2nm,0.5s,baz=359,slow=3.7,SNR=8.4 | | | | | | |
| **INK** | **Inuvik** | **58.23** | **26** | P | **P** | **16 11 41.6** | **+1.3** |
| | comp=Z,2.3nm,0.6s,baz=293,slow=7.1,SNR=5.0 | | | | | | |
| **INK** | **Inuvik** | **58.23** | **26** | P | **P** | **16 11 41.5** | **+1.3** |
| INK | | | | IAmb | IAmb | 16 11 42.4 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **WHY** | **Whitehorse** | **59.28** | **35** | P | **P** | **16 11 49.7** | **+1.9** |
| WHY | | | | IAmb | IAmb | 16 11 54.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **59.52** | **312** | P | **P** | **16 11 49.0** | **-0.5** |
| **ABKAR** | **Akbulak array** | **59.52** | **312** | P | **P** | **16 11 48.7** | **-0.8** |
| ABKAR | | | | IAmb | IAmb | 16 11 49.9 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **A36M** | **Sachs Harbour** | **60.15** | **21** | P | **P** | **16 11 55.1** | **+1.8** |
| **C36M** | **Paulatuk** | **61.30** | **24** | P | **P** | **16 12 02.4** | **+1.2** |
| **STKA** | **Stephens Creek** | **64.84** | **179** | P | **P** | **16 12 25.4** | **+0.4** |
| | comp=Z,2.1nm,0.6s,baz=0.5,slow=7.7,SNR=7.1 | | | | | | |
| **STKA** | **Stephens Creek** | **64.84** | **179** | P | **P** | **16 12 24.8** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **67.61** | **29** | P | **P** | **16 12 43.3** | **+0.9** |
| | comp=Z,0.9nm,0.8s,baz=294,slow=6.2,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **71.59** | **332** | P | **P** | **16 13 06.6** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=76,slow=5.4,SNR=9.4 | | | | | | |
| **KBZ** | **Khabaz** | **72.48** | **311** | P | **P** | **16 13 13.2** | **+0.7** |
| | comp=Z,3.6nm,0.8s,baz=16,slow=2.5,SNR=6.4 | | | | | | |
| KBZ | | | | LR | LR | 16 45 28.3 | |
| | comp=Z,91nm,18.2s,baz=30,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.56** | **322** | P | **P** | **16 13 35.5** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=47,slow=6.9,SNR=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **77.19** | **337** | P | **P** | **16 13 39.1** | **-0.3** |
| | comp=Z,13nm,0.4s,baz=47,slow=5.3,SNR=2.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.16** | **52** | P | **P** | **16 13 46.7** | **+1.2** |
| | comp=Z,0.8nm,0.7s,baz=296,slow=5.7,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **80.47** | **311** | P | **P** | **16 13 58.4** | **+0.5** |
| | comp=Z,1.7nm,0.8s,baz=175,slow=3.3,SNR=4.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **81.11** | **44** | P | **P** | **16 14 02.1** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=122,slow=1.9,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **85.27** | **328** | P | **P** | **16 14 22.1** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=39,slow=6.3,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.08** | **312** | PKP | **PKPdf** | **16 20 33.6** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=353,slow=1.7,SNR=1.6 | | | | | | |
| **LPAZ** | **La Paz** | **149.48** | **63** | PKPbc | **PKPbc** | **16 21 36.8** | **+1.2** |
| | comp=Z,1.2nm,0.5s,baz=19,slow=7.6,SNR=3.6 | | | | | | |

*TUL* ***05*** *16:06:24.1±1.0,36.57N±0.02×97.81W±0.02, h5km±7km, ML3.1, mb_Lg3.0/44(NEIC), Error ellipse: s-maj=2.2km s-min=1.9km az=161.0*

**NEIC 05 16:06:24.1±0.8, 36.56N±0.01×97.80W±0.02, h5km±2km, Error ellipse: s-maj=3.1km s-min=2.7km az=314.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.16** | **250** | Pg | Pg | 16 06 27.4 | +0.1 |
| CROK | | | | Sg | Sg | 16 06 29.8 | +0.5 |
| **GC02** | **Grant County #** | **0.30** | **351** | Pg | Pg | 16 06 29.8 | 0.0 |
| **OK032** | **Salt Plains WL** | **0.41** | **307** | Pg | Pg | 16 06 32.0 | 0.0 |
| OK032 | | | | Sg | Sg | 16 06 37.6 | +0.3 |
| **KAN14** | **Manchester OK** | **0.42** | **342** | Pg | Pg | 16 06 32.2 | 0.0 |
| **KAN17** | **Caldwell West** | **0.49** | **3** | Pg | Pg | 16 06 33.5 | 0.0 |
| KAN17 | | | | Sg | Sg | 16 06 40.2 | +0.4 |
| **BLOK** | **Blackwell** | **0.51** | **67** | Pg | Pg | 16 06 34.2 | +0.3 |
| **KAN13** | **South Haven SW** | **0.52** | **30** | Pg | Pg | 16 06 34.2 | +0.1 |
| **KAN05** | **Bluff City Nor** | **0.55** | **354** | | Pg | 16 06 34.5 | -0.2 |
| **KAN01** | **Argonia South** | **0.59** | **3** | | Pg | 16 06 35.4 | -0.1 |
| **KAN10** | **Anthony SW Sta** | **0.61** | **337** | Pg | Pg | 16 06 35.6 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **0.68** | **348** | | Pg | 16 06 37.0 | -0.1 |
| **KAN06** | **Argonia West S** | **0.69** | **356** | Pg | Pg | 16 06 37.0 | -0.3 |
| **KAN16** | **Harper SW Stat** | **0.70** | **342** | Pg | Pg | 16 06 37.2 | -0.3 |
| **OK035** | **E0210 Rd and N** | **0.75** | **282** | Pg | Pg | 16 06 38.1 | -0.3 |
| **KAN12** | **Harper NE Stat** | **0.75** | **348** | Pg | Pg | 16 06 38.3 | -0.3 |
| **OK029** | **Liberty Lake** | **0.81** | **160** | Pg | Pg | 16 06 39.7 | +0.1 |
| **OK033** | **Mehan** | **0.86** | **126** | | Pg | 16 06 40.8 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **0.91** | **170** | | Pg | 16 06 41.5 | -0.1 |
| **QUOK** | **Quay** | **0.96** | **113** | | Pg | 16 06 42.5 | -0.1 |
| **OK031** | **S. Brethren Rd** | **0.98** | **128** | | Pg | 16 06 42.9 | -0.1 |
| **U32A** | **Winter Ranch,** | **0.98** | **260** | | Pg | 16 06 42.4 | -0.6 |
| **OK030** | **Cody Creek RV** | **1.03** | **127** | | Pg | 16 06 43.9 | 0.0 |
| **OK034** | **N. Norfolk Rd.** | **1.03** | **122** | | Pg | 16 06 43.6 | -0.3 |
| **OK025** | **Westminster Rd** | **1.04** | **159** | | Pg | 16 06 44.0 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.09** | **71** | Pn | Pg | 16 06 44.7 | -0.4 |
| **OKCFA** | **Oklahoma City** | **1.18** | **166** | | Pg | 16 06 46.2 | -0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.19** | **166** | | Pg | 16 06 46.4 | -0.4 |
| **FNO** | **Franklin** | **1.34** | **166** | | Pn | 16 06 48.9 | -0.6 |
| **W35A** | **Tecumseh** | **1.59** | **152** | | Pn | 16 06 53.1 | +0.2 |
| **TUL1** | **Leonard** | **1.75** | **111** | | Pn | 16 06 55.4 | +0.4 |
| TUL1 | | | | IAmb | Lg | 16 07 21.6 | |
| | comp=Z,92nm,1.0s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.95** | **181** | | Pb | 16 06 59.2 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.98** | **204** | | Pn | 16 06 58.7 | +0.4 |
| WMOK | | | | IAmb | Lg | 16 07 29.1 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **2.00** | **339** | Pn | Pn | 16 06 59.4 | +0.9 |
| **LOOK** | **Love County** | **2.61** | **169** | | Pn | 16 07 07.4 | +0.5 |
| **CBKS** | **Cedar Bluff** | **2.73** | **326** | | Pn | 16 07 09.4 | +0.8 |
| **X37A** | **Clayton** | **2.79** | **134** | | Pn | 16 07 10.6 | +1.2 |
| **HHAR** | **Hobbs** | **3.13** | **94** | | Pn | 16 07 14.5 | +0.4 |
| HHAR | | | | IAmb | Lg | 16 08 10.0 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **3.57** | **243** | IAmb | Lg | 16 08 23.3 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.75** | **71** | IAmb | Lg | 16 08 29.8 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **MIAR** | **Mont Ida** | **3.99** | **119** | IAmb | Lg | 16 08 39.2 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.02** | **144** | IAmb | Lg | 16 08 38.5 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.21** | **202** | IAmb | Lg | 16 08 39.9 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.48** | **81** | | Pn | 16 07 32.4 | -0.2 |
| **KSCO** | **Kaye Shedlock'** | **4.54** | **304** | IAmb | Lg | 16 08 52.8 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.55** | **116** | IAmb | Lg | 16 08 55.4 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.55** | **46** | IAmb | Lg | 16 08 59.6 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.64** | **97** | IAmb | Lg | 16 08 59.3 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **4.73** | **67** | IAmb | Lg | 16 08 52.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.79** | **125** | IAmb | Lg | 16 08 55.4 | |
| | comp=Z,40nm,1.0s | | | | | | |
| **BGNE** | **Belgrade** | **4.85** | **357** | | Pn | 16 07 36.2 | -1.5 |
| BGNE | | | | IAmb | Lg | 16 09 00.2 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.33** | **278** | Pg | Pg | 16 08 02.8 | -3.5 |
| T25A | | | | IAmb | Lg | 16 09 14.0 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.44** | **72** | Pg | Pg | 16 08 04.4 | -3.8 |
| CCM | | | | IAmb | Lg | 16 09 21.7 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.93** | **86** | IAmb | Lg | 16 09 41.1 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.29** | **196** | IAmb | Lg | 16 09 52.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **6.92** | **78** | IAmb | Lg | 16 10 10.9 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.95** | **300** | IAmb | Lg | 16 10 10.3 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **K38A** | **Parkersburg** | **7.21** | **31** | IAmb | Lg | 16 10 30.0 | |
| | comp=Z,26nm,0.8s | | | | | | |

*TUL* ***05*** *16:09:30.2±1.2,36.57N±0.02×97.82W±0.02, h7km±7km, ML3.5,mb_Lg3.4/63(NEIC), Error ellipse: s-maj=2.3km s-min=1.7km az=149.0*

**NEIC 05 16:09:30.2±0.7, 36.55N±0.01×97.80W±0.02, h5km±2km, Error ellipse: s-maj=3.1km s-min=2.8km az=307.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.15** | **252** | Pg | Pg | 16 09 33.6 | +0.4 |
| **GC02** | **Grant County #** | **0.30** | **351** | Pg | Pg | 16 09 36.1 | +0.1 |
| **OK032** | **Salt Plains WL** | **0.41** | **308** | Pg | Pg | 16 09 38.1 | 0.0 |
| **KAN14** | **Manchester OK** | **0.42** | **342** | Pg | Pg | 16 09 38.3 | -0.1 |
| **KAN17** | **Caldwell West** | **0.49** | **4** | Pg | Pg | 16 09 39.6 | 0.0 |
| **BLOK** | **Blackwell** | **0.52** | **66** | Pg | Pg | 16 09 40.3 | +0.2 |
| **KAN13** | **South Haven SW** | **0.53** | **30** | Pg | Pg | 16 09 40.3 | -0.1 |
| **KAN05** | **Bluff City Nor** | **0.56** | **354** | | Pg | 16 09 40.8 | -0.1 |
| **KAN01** | **Argonia South** | **0.60** | **3** | | Pg | 16 09 41.6 | -0.1 |
| **KAN10** | **Anthony SW Sta** | **0.61** | **338** | Pg | Pg | 16 09 41.8 | -0.2 |
| **KAN08** | **Anthony NE Sta** | **0.69** | **349** | | Pg | 16 09 43.2 | -0.2 |
| **KAN06** | **Argonia West S** | **0.69** | **356** | | Pg | 16 09 43.3 | -0.2 |
| **KAN16** | **Harper SW Stat** | **0.70** | **343** | Pg | Pg | 16 09 43.4 | -0.3 |
| KAN16 | | | | Sg | Sg | 16 09 53.0 | +0.2 |
| **OK035** | **E0210 Rd and N** | **0.74** | **282** | Pg | Pg | 16 09 44.2 | -0.3 |
| OK035 | | | | Sg | Sg | 16 09 54.6 | +0.4 |
| **KAN12** | **Harper NE Stat** | **0.76** | **348** | Pg | Pg | 16 09 44.5 | -0.3 |
| **OK029** | **Liberty Lake** | **0.81** | **159** | Pg | Pg | 16 09 45.8 | +0.2 |
| **BCOK** | **Bluff Creek, N** | **0.91** | **170** | Pg | Pg | 16 09 47.6 | 0.0 |
| **QUOK** | **Quay** | **0.96** | **113** | Pg | Pg | 16 09 48.6 | 0.0 |
| **U32A** | **Winter Ranch,** | **0.98** | **260** | Pg | Pg | 16 09 48.5 | -0.5 |
| **OK031** | **S. Brethren Rd** | **0.98** | **127** | Pg | Pg | 16 09 48.9 | -0.1 |
| **OK030** | **Cody Creek RV** | **1.03** | **127** | Pg | Pg | 16 09 49.9 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **1.03** | **121** | Pg | Pg | 16 09 50.0 | 0.0 |
| **OK025** | **Westminster Rd** | **1.04** | **159** | Pg | Pg | 16 09 50.1 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.10** | **70** | Pg | Pg | 16 09 50.9 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.17** | **166** | | Pg | 16 09 52.4 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.18** | **165** | Pg | Pg | 16 09 52.6 | -0.2 |
| **FNO** | **Franklin** | **1.33** | **166** | | Pn | 16 09 55.2 | -0.3 |
| **W35A** | **Tecumseh** | **1.59** | **151** | | Pn | 16 09 59.3 | +0.3 |
| **TUL1** | **Leonard** | **1.75** | **111** | | Pn | 16 10 01.8 | +0.6 |
| TUL1 | | |

*MOS* ***05*** *16:20:09.5±0.9,27.°99N×85.°39E,h18km,mb5.3/31, MS4.1/6,Error ellipse: s-maj=6.8km s-min=3.3km az=109.7*

*BJI* ***05*** *16:20:09.5±0.0,28.°17N×85.°62E,h7km,mb4.7/66, mB4.9/46,Ms4.4/61,Ms7 4.2/57*

*DMN* ***05*** *16:20:09.5±0.1,27.°95N×85.°52E,h25km,Ml5.5/4,Error ellipse: s-maj=2.5km s-min=1.0km az=12.0*

*BGR* ***05*** *16:20:10.0±0.0,26.°79N×85.°21E,h33km,mb5.1,Ms4.2*

*NEIC* ***05*** *16:20:11.7±1.7,27.°88N±0.°09×85.°34E±0.°10,h24km±4km, mb5.2/120,Error ellipse: s-maj=14.5km s-min=10.0km az=221.0*

*NDI* ***05*** *16:20:13.2±4.0,27.°76N×85.°37E,h20km,ML4.7, mb5.2(NEIC)*

**ISC 05 16:20:11.5±0.6,27.°86N±0.°03×85.°46E±0.°02,h23km±4km, n737,σ1%62/790,mb5.2/234,MS4.1/63,48C-46D,Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KKN** | **Kakani** | **0.17** | **245** | *e*Pg | | **Pb** | | **16 20 16.0** | **-0.9** |
| KKN | | | | *e*Sg | | **Sb** | | **16 20 19.9** | **-0.7** |
| **PKIN** | **Phulchoki** | **0.29** | **191** | *e*Pg | | **Pb** | | **16 20 18.5** | **0.0** |
| PKIN | | | | *e*Sg | | **Sb** | | **16 20 23.6** | **+0.3** |
| **PKI** | **Pulchoki** | **0.29** | **188** | *e*Pg | | **Pb** | | **16 20 18.5** | **-0.1** |
| PKI | | | | *e*Sg | | **Sb** | | **16 20 24.3** | **+0.9** |
| **GUN** | **Gumba** | **0.38** | **83** | *e*Pg | | **Pb** | | **16 20 17.5** | **-2.4** |
| GUN | | | | *e*Sg | | **Sb** | | **16 20 22.7** | **-2.9** |
| **DMN** | **Daman** | **0.40** | **231** | *e*Pg | | **Pb** | | **16 20 20.4** | **+0.2** |
| DMN | | | | *e*Sg | | **Sn** | | **16 20 28.0** | **-1.1** |
| **JIRN** | **Jiri** | **0.68** | **107** | *e*Pg | | **Pb** | | **16 20 23.6** | **-1.4** |
| JIRN | | | | *e*Sg | | **Sb** | | **16 20 32.2** | **-1.9** |
| **GKN** | **Gorkha** | **0.74** | **281** | *e*Pg | | **Pn** | | **16 20 25.3** | **-1.4** |
| GKN | | | | *e*Sg | | **Sn** | | **16 20 35.7** | **-1.6** |
| **RAMN** | **Ramite** | **1.36** | **132** | *e*Pg | | **Pn** | | **16 20 35.8** | **+0.5** |
| RAMN | | | | *e*Sg | | **Sn** | | **16 20 54.0** | **+1.2** |
| | 11μm,0.3s | | | | | | | | |
| **DANN** | **Dangsing** | **1.57** | **288** | *e*Pg | | **Pb** | | **16 20 40.1** | **0.0** |
| DANN | | | | *e*Sg | | **Sb** | | **16 21 00.7** | **+0.9** |
| | 16μm,0.4s | | | | | | | | |
| **KOLN** | **Koldanda** | **1.65** | **267** | *e*Pg | | **Pb** | | **16 20 41.7** | **+0.4** |
| **ODAN** | **Odare** | **1.99** | **120** | *e*Pg | | **Pn** | | **16 20 46.7** | **+2.8** |
| ODAN | | | | *e*Sg | | **Sn** | | **16 21 12.7** | **+4.5** |
| | 7μm,0.3s | | | | | | | | |
| **TAPN** | **Taplejung** | **2.06** | **104** | *e*Pg | | **Pn** | | **16 20 47.6** | **+2.6** |
| TAPN | | | | *e*Sg | | **Sn** | | **16 21 14.4** | **+4.2** |
| | 8μm,0.4s | | | | | | | | |
| **PYUN** | **Piuthan** | **2.19** | **277** | *e*Pg | | **Pb** | | **16 20 51.2** | **+0.6** |
| PYUN | | | | *e*Sg | | **Sb** | | **16 21 20.6** | **+3.1** |
| **GTK** | **Tadong** | **2.84** | **100** | *e*P | | **Pn** | | **16 20 57.8** | **+2.2** |
| GTK | | | | *e*S | | **Sn** | | **16 21 33.1** | **+3.9** |
| GTK | | | | IAML | | | | 16 21 41.9 | |
| | comp=N,3μm,0.5s | | | | | | | | |
| **BOK** | **Bokaro** | **4.07** | **174** | *e*P | | **Pn** | | **16 21 12.0** | **-0.4** |
| **ALBI** | **Allahabad** | **4.14** | **233** | *e*P | | **Pn** | | **16 21 14.7** | **+1.3** |
| **LGTI** | **Lohaghat** | **4.84** | **290** | *e*P | | Pb | | 16 21 41.7 | +6.0 |
| LGTI | | | | *e*S | | Sb | | 16 22 57.6 | +24 |
| **TURI** | **Tura** | **4.93** | **117** | *e*P | | **Pn** | | **16 21 24.6** | **+0.4** |
| TURI | | | | *e*S | | **Sn** | | **16 22 18.4** | **-2.2** |
| **LSA** | **Lhasa** | **5.32** | **69** | P | | **Pn** | | **16 21 32.6** | **+2.6** |
| LSA | | | | S | | Sb | | 16 23 00.3 | +13 |
| LSA | | | | LR | | LR | | | |
| | comp=N,5μm,9.7s | | | | | | | | |
| LSA | | | | LR | | LR | | | |
| | comp=E,2μm,5.5s | | | | | | | | |
| **GUWA** | **GUWAHATI** | **5.80** | **105** | *e*P | | **Pn** | | **16 21 38.1** | **+2.0** |
| GUWA | | | | *e*S | | **Sn** | | **16 22 42.3** | **+0.3** |
| **SHL** | **Shillong** | **6.19** | **110** | P | | **Pn** | | **16 21 41.5** | **-0.1** |
| **SHL** | **Shillong** | **6.19** | **110** | Pn | | **Pn** | | **16 21 41.5** | **-0.1** |
| **JHNI** | **Jhansi** | **6.63** | **250** | *e*P | | **Pn** | | **16 21 46.7** | **-0.9** |
| JHNI | | | | *e*S | | **Sn** | | **16 22 56.6** | **-5.9** |
| **BELO** | **BELONIA** | **7.10** | **129** | *e*P | | **Pn** | | **16 21 55.9** | **+1.9** |
| **NDI** | **New Delhi** | **7.31** | **278** | *e*P | | Pn | | 16 22 01.0 | +4.1 |
| NDI | | | | *e*S | | **Sn** | | **16 23 20.0** | **+0.8** |
| **ITAN** | **ITANAGAR** | **7.38** | **94** | *e*P | | **Pn** | | **16 21 58.8** | **+1.0** |
| ITAN | | | | *e*S | | **Sn** | | **16 23 21.4** | **+0.7** |
| ITAN | | | | IAML | | | | 16 23 29.9 | |
| | comp=N,619nm,0.5s | | | | | | | | |
| **BWNR** | **Bhubaneshwar** | **7.54** | **178** | *e*P | | **Pn** | | **16 22 01.5** | **+1.4** |
| **BRDH** | **Bariadhala** | **7.62** | **131** | Pn | | **Pn** | | **16 22 03.1** | **+2.0** |
| | comp=N,0.3nm,0.3s,baz=180,slow=24,SNR=1.3 | | | | | | | | |
| **KUDL** | **Kundal** | **7.93** | **274** | *e*P | | **Pn** | | **16 22 05.6** | **+0.2** |
| KUDL | | | | *e*S | | **Sn** | | **16 23 31.1** | **-3.3** |
| **KOHI** | **KOHIMA** | **8.02** | **103** | *e*P | | **Pn** | | **16 22 05.7** | **-1.1** |
| KOHI | | | | *e*S | | **Sn** | | **16 23 35.0** | **-1.9** |
| KOHI | | | | IAML | | | | 16 23 41.4 | |
| | comp=E,502nm,0.8s | | | | | | | | |
| KOHI | | | | IAML | | | | 16 23 41.7 | |
| | comp=N,419nm,0.9s | | | | | | | | |
| **IMP** | **Imphal** | **8.19** | **110** | *e*P | | **Pn** | | **16 22 10.5** | **+1.5** |
| **MOKO** | **MOKOCHONG** | **8.22** | **99** | *e*P | | **Pn** | | **16 22 09.0** | **-0.5** |
| MOKO | | | | *e*S | | **Sn** | | **16 23 40.1** | **-1.6** |
| MOKO | | | | IAML | | | | 16 23 41.4 | |
| | comp=N,894nm,0.4s | | | | | | | | |
| **DIBR** | **DIBRUGARH** | **8.39** | **91** | *e*P | | **Pn** | | **16 22 14.1** | **+2.4** |
| DIBR | | | | *e*S | | **Sn** | | **16 23 47.3** | **+1.6** |
| DIBR | | | | IAML | | | | 16 23 49.6 | |
| | comp=E,332nm,0.4s | | | | | | | | |
| **BHK** | **Bhakra** | **8.63** | **296** | *e*P | | **Pn** | | **16 22 14.3** | **-0.6** |
| **LKP** | **Lekhapani** | **9.23** | **91** | *e*P | | **Pn** | | **16 22 23.8** | **+0.6** |
| LKP | | | | *e*S | | **Sn** | | **16 24 01.8** | **-4.6** |
| LKP | | | | IAML | | | | 16 24 10.0 | |
| | comp=N,509nm,0.6s | | | | | | | | |
| **CHLP** | **Challavanipeta** | **9.40** | **188** | *e*P | | **Pn** | | **16 22 25.9** | **+0.3** |
| CHLP | | | | *e*S | | **Sn** | | **16 24 10.8** | **+0.1** |
| **AJM** | **Ajmer** | **9.73** | **264** | *e*P | | **Pn** | | **16 22 29.2** | **-0.9** |
| AJM | | | | *e*S | | **Sn** | | **16 24 11.7** | **-7.0** |
| **JMU** | **Jammu** | **10.32** | **300** | *e*P | | **Pn** | | **16 22 38.4** | **+0.2** |
| **AKL** | **Akola** | **10.49** | **229** | *e*P | | **Pn** | | **16 22 37.6** | **-2.9** |
| **RPR** | **Rampur** | **10.60** | **214** | *e*P | | **Pn** | | **16 22 42.6** | **+0.6** |
| RPR | | | | *e*S | | **Sn** | | **16 24 38.5** | **-1.5** |
| **SRSP** | **Sriramsagar** | **11.03** | **218** | *e*P | | **Pn** | | **16 22 46.7** | **-1.3** |
| SRSP | | | | *e*S | | **Sn** | | **16 24 44.9** | **-5.8** |
| **PVM** | **Polavaram** | **11.14** | **199** | *e*P | | **Pn** | | **16 22 48.8** | **-0.6** |
| PVM | | | | *e*S | | **Sn** | | **16 24 48.2** | **-5.1** |
| **GOMU** | **GeErMu** | **11.49** | **41** | P | | **Pn** | | **16 22 55.0** | **+0.6** |
| GOMU | | | | pmax | | pmax | | | |
| | comp=N,7.0nm,1.0s | | | | | | | | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=N,82nm,4.3s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=N,770nm,11.9s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=N,720nm,10.4s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=N,1μm,12.1s | | | | | | | | |
| **MYLAV** | **Mylavaram** | **11.93** | **203** | *e*P | | **Pn** | | **16 22 59.0** | **-1.1** |
| MYLAV | | | | *e*S | | **Sn** | | **16 25 12.3** | **-0.2** |
| **CHCP** | **Chirah Chowk** | **11.97** | **302** | P | | **Pn** | | **16 22 58.6** | **-2.1** |
| **NIL** | **Nilore** | **11.97** | **302** | P | | **Pn** | | **16 22 58.6** | **-2.2** |
| **NIL** | **Nilore** | **11.97** | **302** | Pn | | **Pn** | | **16 22 58.6** | **-2.2** |
| **CUPL** | **Choutuppal** | **12.12** | **211** | *e*P | | **Pn** | | **16 23 01.1** | **-1.8** |
| CUPL | | | | *e*S | | **Sn** | | **16 25 16.7** | **-0.8** |
| **HYBB** | **Hyderabad (bro** | **12.19** | **213** | *e*P | | **Pn** | | **16 23 01.9** | **-1.9** |
| HYBB | | | | *e*S | | **Sn** | | **16 25 13.7** | **-5.4** |
| **NJS** | **Nagarjunasagar** | **12.61** | **208** | *e*P | | **Pn** | | **16 23 07.1** | **-2.4** |
| NJS | | | | *e*S | | **Sn** | | **16 25 28.0** | **-1.3** |
| **KLRI** | **Killari** | **12.71** | **222** | *e*P | | **Pn** | | **16 23 08.1** | **-2.8** |
| KLRI | | | | *e* | | | | 16 25 21.3 | |
| **THW** | **Thamme Wali** | **12.82** | **296** | P | | **Pn** | | **16 23 08.9** | **-3.5** |
| **ADKI** | **Addanki** | **13.00** | **204** | *e*P | | **Pn** | | **16 23 13.2** | **-1.6** |
| **CEP** | **Cherat** | **13.06** | **300** | P | | **Pn** | | **16 23 12.2** | **-3.6** |
| CEP | | | | S | | **Sn** | | **16 25 35.0** | **-5.4** |
| **SRLM** | **Srisailam** | **13.19** | **209** | *e*P | | **Pn** | | **16 23 14.6** | **-2.9** |
| SRLM | | | | *e*S | | **Sn** | | **16 25 42.5** | **-1.0** |
| **RCLA** | **Racherla** | **13.74** | **207** | *e*P | | **Pn** | | **16 23 21.7** | **-3.3** |
| RCLA | | | | *e*S | | **Sn** | | **16 25 56.0** | **-1.0** |
| **KSH** | **Kashi** | **14.04** | **328** | P | | **Pn** | | **16 23 25.1** | **-3.9** |
| KSH | | | | pP | | P | | 16 23 31.2 | -5.5 |
| KSH | | | | sP | | | | 16 23 34.4 | |
| KSH | | | | S | | Sn | | 16 25 54.9 | -9.3 |
| KSH | | | | SS | | **SnSn** | | **16 26 12.3** | **-4.5** |
| KSH | | | | PcP | | **PcP** | | **16 28 50.0** | **+1.2** |
| KSH | | | | ScP | | **ScP** | | **16 32 21.9** | **+0.9** |
| KSH | | | | pmax | | pmax | | | |
| | comp=N,120nm,0.9s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=N,1μm,11.7s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=N,1μm,9.4s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=N,2μm,10.3s | | | | | | | | |
| **PZH** | **PanZhiHua** | **14.56** | **92** | P | | **Pn** | | **16 23 35.1** | **-1.1** |
| PZH | | | | S | | **Sn** | | **16 26 17.3** | **+0.3** |
| PZH | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,0.5s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=N,170nm,6.0s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=N,640nm,14.1s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=N,2μm,16.6s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=N,2μm,17.2s | | | | | | | | |
| **URV** | **Uravakonda** | **14.94** | **212** | *e*P | | **Pn** | | **16 23 37.7** | **-3.6** |
| URV | | | | *e*S | | **Sn** | | **16 26 24.1** | **-2.1** |
| **SKHT** | **Srikalahasti** | **15.04** | **202** | *e*P | | **Pn** | | **16 23 40.9** | **-1.7** |
| SKHT | | | | *e*S | | **Sn** | | **16 26 22.5** | **-6.1** |
| **CHTO** | **Chiang Mai** | **15.30** | **123** | P | | **P** | | **16 23 50.0** | **-0.8** |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,47nm,0.9s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **15.30** | **123** | | | **P** | | **16 23 50.0** | **-0.8** |
| **CHTO** | **Chiang Mai** | **15.30** | **123** | P | | **Pn** | | **16 23 46.1** | **-0.1** |
| **CM31** | **Chiang Mai Arr** | **15.53** | **124** | Pn | | **Pn** | | **16 23 47.8** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **15.53** | **124** | Pn | | **Pn** | | **16 23 46.9** | **-2.2** |
| | comp=Z,0.3nm,0.3s,baz=304,slow=13,SNR=56 | | | | | | | | |
| CMAR | | | | LR | | LR | | 16 31 43.9 | |
| | comp=Z,261nm,18.9s,baz=305,slow=45 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **15.53** | **124** | P | | **Pn** | | **16 23 48.1** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **15.53** | **124** | Pn | | **Pn** | | **16 23 48.0** | **-1.0** |
| **KBL** | **Kabul** | **15.53** | **299** | P | | **Pn** | | **16 23 43.8** | **-5.4** |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,286nm,1.0s | | | | | | | | |
| **KBL** | **Kabul** | **15.53** | **299** | Pn | | **Pn** | | **16 23 43.8** | **-5.4** |
| **PRZ** | **Przheval'sk** | **15.68** | **340** | P | | **Pn** | | **16 23 48.3** | **-2.7** |
| PRZ | | | | pmax | | pmax | | | |
| | comp=Z,60nm,0.9s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **15.68** | **340** | | | **Pn** | | **16 23 48.3** | **-2.7** |
| **KMI** | **Kunming** | **15.71** | **96** | ⇓P | | **Pn** | | **16 23 52.5** | **+0.8** |
| KMI | | | | pP | | P | | 16 23 56.9 | +1.4 |
| KMI | | | | sP | | pP | | 16 24 00.9 | -1.5 |
| KMI | | | | S | | **Sn** | | **16 26 45.1** | **-0.2** |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,25nm,0.6s | | | | | | | | |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,120nm,5.8s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,350nm,11.1s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,510nm,16.0s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,460nm,14.3s | | | | | | | | |
| **KDJ** | **Kajisay** | **15.75** | **337** | P | | **Pn** | | **16 23 49.9** | **-2.1** |
| KDJ | | | | pmax | | pmax | | | |
| | comp=Z,60nm,0.9s | | | | | | | | |
| **KDJ** | **Kajisay** | **15.75** | **337** | | | **Pn** | | **16 23 49.9** | **-2.1** |
| **WMQ** | **Urumqi** | **16.02** | **6** | *e*P | | **Pn** | | **16 23 56.3** | **+0.9** |
| WMQ | | | | pP | | pP | | 16 24 03.1 | -3.1 |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,92nm,0.9s | | | | | | | | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,250nm,3.9s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,1μm,11.1s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,330nm,12.9s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,540nm,17.1s | | | | | | | | |
| **UZB** | **Uzynbulak** | **16.11** | **343** | *e*P | | **Pn** | | **16 23 54.5** | **-2.1** |
| UZB | | | | *e*S | | **Sn** | | **16 26 53.4** | **-1.3** |
| **UZB** | **Uzynbulak** | **16.11** | **343** | *e*P | | **Pn** | | **16 23 54.5** | **-2.1** |
| | baz=343 | | | | | | | | |
| UZB | | | | *e*S | | **Sn** | | **16 26 53.4** | **-1.3** |
| | baz=343 | | | | | | | | |
| **ULHL** | **Ulahol** | **16.19** | **335** | P | | **Pn** | | **16 23 55.6** | **-2.1** |
| | SNR=24 | | | | | | | | |
| **SATY** | **Saty** | **16.20** | **341** | *e*P | | **Pn** | | **16 23 55.5** | **-2.2** |
| **SATY** | **Saty** | **16.20** | **341** | *e*P | | **Pn** | | **16 23 55.5** | **-2.2** |
| | baz=341 | | | | | | | | |
| **CD2** | **Chengdu** | **16.24** | **75** | P | | **Pn** | | **16 24 00.7** | **+2.5** |
| CD2 | | | | pP | | P | | 16 24 05.2 | +4.1 |
| CD2 | | | | S | | **Sn** | | **16 27 01.7** | **+4.0** |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,70nm,8.4s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,50nm,10.3s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,360nm,14.1s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,410nm,9.5s | | | | | | | | |
| **ZHN** | **Zhinishke** | **16.29** | **341** | *e*P | | **Pn** | | **16 23 57.1** | **-1.8** |
| **ZHN** | **Zhinishke** | **16.29** | **341** | *e*P | | **Pn** | | **16 23 57.1** | **-1.8** |
| | baz=341 | | | | | | | | |
| **KPKS** | **Kokpek** | **16.50** | **342** | *i* P | | **Pn** | | **16 23 59.3** | **-2.2** |
| **KPKS** | **Kokpek** | **16.50** | **342** | *i* P | | **Pn** | | **16 23 59.4** | **-2.2** |
| | baz=342 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **16.52** | **335** | P | | **Pn** | | **16 23 59.1** | **-2.7** |
| BOOM | | | | pmax | | pmax | | | |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **16.52** | **335** | | | **Pn** | | **16 23 59.1** | **-2.7** |
| **GTA** | **Gaotai** | **16.57** | **42** | ⇑P | | **Pn** | | **16 23 58.8** | **-3.7** |
| GTA | | | | pP | | P | | 16 24 04.8 | -0.1 |
| GTA | | | | sP | | pP | | 16 24 08.6 | -3.3 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,120nm,4.8s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,500nm,14.9s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,540nm,13.8s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,640nm,12.4s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **16.64** | **338** | *e*P | | **Pn** | | **16 24 01.2** | **-2.3** |
| | baz=338 | | | | | | | | |
| **MDOK** | **Medeo** | **16.71** | **338** | *e*P | | **Pn** | | **16 24 02.0** | **-2.2** |
| **MDOK** | **Medeo** | **16.71** | **338** | *e*P | | **Pn** | | **16 24 02.0** | **-2.2** |
| | baz=338 | | | | | | | | |
| **AAA** | **Alma-Ata** | **16.80** | **338** | *e*P | | **Pn** | | **16 24 03.6** | **-1.6** |
| **AAA** | **Alma-Ata** | **16.80** | **338** | *e*P | | **Pn** | | **16 24 03.7** | **-1.6** |
| | baz=338 | | | | | | | | |
| **UCH** | **Uchtor** | **16.88** | **331** | P | | **Pn** | | **16 24 03.9** | **-2.7** |
| | SNR=98 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **17.02** | **335** | P | | **Pn** | | **16 24 06.4** | **-1.8** |
| | SNR=9.4 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **17.02** | **335** | P | | **Pn** | | **16 24 05.7** | **-2.4** |
| **KBK** | **Karagaybulak** | **17.05** | **333** | P | | **Pn** | | **16 24 06.6** | **-1.9** |
| | SNR=100 | | | | | | | | |
| **BTK** | **Batken** | **17.16** | **319** | P | | **Pn** | | **16 24 05.6** | **-4.2** |
| BTK | | | | pmax | | pmax | | | |
| | comp=Z,185nm,0.8s | | | | | | | | |
| **BTK** | **Batken** | **17.16** | **319** | | | **Pn** | | **16 24 05.6** | **-4.2** |
| BTK | | | | IAmb | | IAmb | | 16 24 13.2 | |
| | comp=Z,185nm,0.8s | | | | | | | | |
| **AML** | **Almayashu** | **17.16** | **329** | P | | **Pn** | | **16 24 06.9** | **-3.2** |
| | SNR=58 | | | | | | | | |
| **AML** | **Almayashu** | **17.16** | **329** | *i* Pn | | **Pn** | | **16 24 07.0** | **-3.2** |
| | SNR=58 | | | | | | | | |
| **AAK** | **Ala-Archa** | **17.22** | **332** | P | | **Pn** | | **16 24 09.6** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=174,slow=11,SNR=42 | | | | | | | | |
| **AAK** | **Ala-Archa** | **17.22** | **332** | P | | **Pn** | | **16 24 10.4** | **-0.3** |
| | SNR=41 | | | | | | | | |
| **AAK** | **Ala-Archa** | **17.22** | **332** | Pn | | **Pn** | | **16 24 07.0** | **-3.6** |
| **AAK** | **Ala-Archa** | **17.22** | **332** | *i* Pn | | **Pn** | | **16 24 10.4** | **-0.3** |
| | SNR=71 | | | | | | | | |
| **CHMS** | **Chumysh** | **17.41** | **333** | P | | **Pn** | | **16 24 11.0** | **-2.0** |
| | SNR=13 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **17.55** | **330** | P | | **Pn** | | **16 24 13.3** | **-1.3** |
| | SNR=30 | | | | | | | | |
| **KUU** | **Kurty** | **17.60** | **338** | *e*P | | **Pn** | | **16 24 13.4** | **-1.7** |
| KUU | | | | pmax | | pmax | | | |
| | comp=Z,141nm,0.8s | | | | | | | | |
| **KUU** | **Kurty** | **17.60** | **338** | *e*P | | **Pn** | | **16 24 13.5** | **-1.7** |
| | comp=Z,141nm,0.8s,baz=338 | | | | | | | | |
| **USP** | **Ospenovka** | **17.74** | **333** | P | | **Pn** | | **16 24 15.6** | **-1.4** |
| | SNR=21 | | | | | | | | |
| **SGDS** | **Sogindy** | **17.84** | **333** | *e*P | | **Pn** | | **16 24 17.1** | **-1.2** |
| | baz=334 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **18.01** | **344** | *e*P | | **Pn** | | **16 24 18.3** | **-1.8** |
| **TDK** | **Taldyqorghan** | **18.01** | **344** | *e*P | | **Pn** | | **16 24 18.4** | **-1.8** |
| | baz=344 | | | | | | | | |
| **DZA** | **Taraz** | **18.87** | **326** | *e*P | | **P** | | **16 24 27.7** | **-2.3** |
| **DZA** | **Taraz** | **18.87** | **326** | *e*P | | **P** | | **16 24 27.8** | **-2.3** |
| | baz=326 | | | | | | | | |
| **GYA** | **Guiyang** | **18.92** | **89** | ⇑*i*P | | **Pn** | | **16 24 32.8** | **+1.2** |
| GYA | | | | sP | | sP | | 16 24 44.8 | +3.7 |
| GYA | | | | S | | **Sn** | | **16 28 01.9** | **-1.0** |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,82nm,0.5s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,280nm,15.9s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,600nm,11.6s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,810nm,17.0s | | | | | | | | |
| **IUG** | **luzhnay** | **19.00** | **323** | *e*P | | **P** | | **16 24 29.2** | **-2.4** |
| **IUG** | **luzhnay** | **19.00** | **323** | *e*P | | **P** | | **16 24 29.3** | **-2.4** |
| | baz=322 | | | | | | | | |
| **MK31** | **Makanchi Array** | **19.06** | **353** | *d* P | | **P** | | **16 24 32.0** | **-0.1** |
| **MK31** | **Makanchi Array** | **19.06** | **353** | P | | **P** | | **16 24 31.4** | **-0.8** |
| **MKAR** | **Makanchi Array** | **19.06** | **353** | P | | **P** | | **16 24 31.8** | **-0.4** |
| | comp=Z,7.9nm,0.3s,baz=172,slow=12,SNR=637 | | | | | | | | |
| MKAR | | | | LR | | LR | | 16 33 05.8 | |
| | comp=Z,827nm,18.2s,baz=189,slow=41 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **19.06** | **353** | P | | **P** | | **16 24 31.6** | **-0.5** |
| **MAKZ** | **Makanchi** | **19.11** | **353** | P | | **P** | | **16 24 32.3** | **-0.4** |
| MAKZ | | | | pmax | | pmax | | | |
| | comp=Z,86nm,0.8s | | | | | | | | |
| **MAKZ** | **Makanchi** | **19.11** | **353** | P | | **P** | | **16 24 32.2** | **-0.4** |
| MAKZ | | | | IAmb | | IAmb | | 16 24 34.8 | |
| | comp=Z,86nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **19.41** | **335** | *e*P | | **P** | | **16 24 34.5** | **-1.4** |
| **BTLS** | **Baital** | **19.41** | **335** | *e*P | | **P** | | **16 24 34.6** | **-1.4** |
| | baz=335 | | | | | | | | |
| **KKAR** | **Karatay Array** | **19.43** | **325** | P | | **P** | | **16 24 34.3** | **-1.9** |
| **KKAR** | **Karatay Array** | **19.43** | **325** | P | | **P** | | **16 24 34.3** | **-1.9** |
| **ZSN** | **Zaisan** | **19.56** | **359** | *e*P | | **P** | | **16 24 36.9** | **-0.6** |
| **ZSN** | **Zaisan** | **19.56** | **359** | *e*P | | **P** | | **16 24 36.9** | **-0.6** |
| | baz=359 | | | | | | | | |
| **BRLS** | **Boroldaу** | **19.72** | **324** | *e*P | | **P** | | **16 24 36.2** | **-3.2** |
| **BRLS** | **Boroldaу** | **19.72** | **324** | *e*P | | **P** | | **16 24 36.2** | **-3.2** |
| | baz=323 | | | | | | | | |
| **PALK** | **Pallekele** | **20.97** | **193** | P | | Pn | | 16 24 54.8 | -1.0 |
| | comp=Z,15nm,1.0s,baz=110,slow=11,SNR=4.2 | | | | | | | | |
| PALK | | | | LR | | LR | | 16 33 01.6 | |
| | comp=Z,428nm,21.7s,baz=125,slow=37 | | | | | | | | |
| **XAN** | **Xi'an** | **21.02** | **67** | P | | **P** | | **16 24 52.0** | **-1.6** |
| XAN | | | | pP | | pP | | 16 24 59.0 | -1.8 |
| XAN | | | | sP | | sP | | 16 25 02.8 | -1.0 |
| XAN | | | | PP | | **PnPn** | | **16 25 17.4** | **+4.7** |
| XAN | | | | S | | **S** | | **16 28 43.6** | **-3.1** |
| XAN | | | | sS | | Sn | | 16 28 54.5 | +1.2 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,160nm,4.1s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,260nm,10.7s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,340nm,9.8s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,430nm,12.2s | | | | | | | | |
| **ENH** | **Enshi** | **21.13** | **78** | P | | **P** | | **16 24 54.5** | **-0.3** |
| **DGZ** | **Jazzator, Alta** | **21.86** | **3** | *c* P | | **P** | | **16 25 02.6** | **+0.1** |
| DGZ | | | | pmax | | pmax | | | |
| | comp=Z,107nm,0.9s | | | | | | | | |
| **UBPT** | **Khong Chiam** | **22.39** | **120** | P | | **P** | | **16 25 08.2** | **-0.2** |
| **OTUK** | **Ortayu** | **22.76** | **337** | P | | **P** | | **16 25 11.3** | **-0.7** |
| **SEM** | **Semipalatinsk** | **22.86** | **351** | *e*P | | **P** | | **16 25 12.5** | **-0.8** |
| SEM | | | | pmax | | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **22.86** | **351** | *e*P | | **P** | | **16 25 12.6** | **-0.8** |
| | comp=Z,28nm,0.9s,baz=352 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.33** | **349** | P | | **P** | | **16 25 16.9** | **-1.0** |
| | comp=Z,49nm,0.7s,baz=172,slow=9.8,SNR=322 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.33** | **349** | P | | **P** | | **16 25 15.8** | **-2.0** |
| **KURK** | **Kurchatov** | **23.41** | **349** | P | | **P** | | **16 25 17.8** | **-0.7** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,95nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **23.41** | **349** | P | | **P** | | **16 25 17.8** | **-0.7** |
| KURK | | | | IAmb | | IAmb | | 16 25 20.4 | |
| | comp=Z,95nm,0.8s | | | | | | | | |
| **BTO** | **Baotou** | **23.87** | **51** | *e*P | | **P** | | **16 25 21.7** | **-1.6** |
| BTO | | | | S | | **S** | | **16 29 39.2** | **+1.1** |
| BTO | | | | LR | | LR | | | |
| | comp=Z,1μm,9.8s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,1μm,11.0s | | | | | | | | |
| **LYN** | **LuoYang** | **24.00** | **67** | *e*P | | **P** | | **16 25 25.2** | **+0.7** |
| LYN | | | | pP | | pP | | 16 25 30.1 | -1.8 |
| LYN | | | | sP | | sP | | 16 25 31.9 | -3.1 |
| LYN | | | | PP | | **PnPn** | | **16 25 53.2** | **-0.3** |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,120nm,5.5s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,320nm,15.1s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,300nm,13.4s | | | | | | | | |
| **BRZS** | **Berezniki** | **24.15** | **340** | *e*P | | **P** | | **16 25 24.8** | **-0.9** |
| BRZS | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **BRZS** | **Berezniki** | **24.15** | **340** | *e*P | | **P** | | **16 25 24.8** | **-0.9** |
| | comp=Z,20nm,0.8s,baz=340 | | | |

comp=Z,89nm,0.7s
**ULN Ulaanbaatar 26.10 34** P **P** **16 25 44.4 +0.8**
**ZAK Zakamensk 26.27 26** *e*P **P** **16 25 45.2 +0.2**
ZAK pmax pmax
comp=Z,43nm,1.0s
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**MSFE Esma-Masafi 26.29 271** P **P** **16 25 51.3 +6.0**
**HNS HongShan 26.32 61** ⇑P **P** **16 25 46.2 +0.7**
HNS S **S** **16 30 16.7 -0.3**
HNS pmax pmax
comp=Z,40nm,0.9s
HNS LR LR
comp=Z,560nm,13.9s
HNS LR LR
comp=Z,280nm,11.3s
**HATD Hatta, Dubai 26.43 270** P **P** **16 25 49.6 +3.0**
**MOY Mondy 26.49 22** *e*P **P** **16 25 48.4 +1.3**
MOY pmax pmax
comp=Z,40nm,1.9s
**ASHO Ashiyiah 26.52 270** *i* P **P** **16 25 50.4 +2.9**
SNR=8.0
**ALNE Al Ain 26.95 269** P **P** **16 25 53.6 +2.3**
**BVAR Borovoye Array 27.51 340** P **P** **16 25 56.0 -0.1**
comp=Z,3.4nm,0.5s,baz=109,slow=13,SNR=31
BVAR PcP **PcP** **16 29 14.7 +0.9**
comp=Z,1.0nm,0.5s,baz=222,slow=1.9,SNR=2.3
**BRVK Borovoye 27.57 340***c i*P **P** **16 25 56.8 +0.2**
BRVK pmax pmax
comp=Z,20nm,2.5s
**BRVK Borovoye 27.57 340** P **P** **16 25 55.8 -0.8**
**PSI Prapat 28.05 150** LR LR 16 39 20.8
comp=Z,219nm,19.2s,baz=345,slow=41
**BJI Beijing 28.09 56** P **PnPn** **16 26 53.5 +4.4**
BJI PP **PnPn** **16 26 53.5 +4.4**
BJI pmax pmax
comp=Z,8.0nm,1.2s
BJI LR LR
comp=Z,450nm,10.0s
BJI LR LR
comp=Z,370nm,10.4s
BJI LR LR
comp=Z,290nm,14.7s
**AB31 Akbulak array 28.98 324** *e*P **P** **16 26 09.9 +0.7**
**NJ2 Nanjing 29.17 74** *e*P **P** **16 26 12.4 +1.4**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**XLT XiLinHaoTe 29.31 49**⇑ *i*P **P** **16 26 12.9 +0.6**
XLT pP pP 16 26 19.7 -0.4
XLT S **S** **16 31 02.8 -1.5**
XLT pmax pmax
comp=Z,29nm,0.8s
XLT pmax pmax
comp=Z,120nm,3.9s
XLT LR LR
comp=Z,330nm,13.6s
XLT LR LR
comp=Z,340nm,11.2s
XLT LR LR
comp=Z,450nm,13.1s
**AKTO Aktyubinsk 30.69 325** LR LR 16 40 10.0
comp=Z,530nm,20.8s,baz=134,slow=39
**AKTO Aktyubinsk 30.69 325** P **P** **16 26 24.1 -0.3**
**BKNI Bangkinang 31.19 149** P **P** **16 26 28.1 -1.0**
comp=Z,110nm,0.7s
**PPI Padang Panjang 31.60 151** P **P** **16 26 33.7 +1.1**
**DL2 Dalian 31.96 60** P **P** **16 26 36.4 +0.8**
DL2 pmax pmax
comp=Z,22nm,0.8s
DL2 LR LR
comp=Z,250nm,12.1s
DL2 LR LR
comp=Z,320nm,13.4s
DL2 LR LR
comp=Z,290nm,14.0s
**SVE Sverdlovsk 33.89 336***de*P **P** **16 26 53.1 +0.8**
SVE pmax pmax
comp=Z,37nm,0.9s
**MAK Makhachkala 34.09 306** *e*P P 16 26 48.8 -5.3
MAK *e* 16 28 00.5
MAK *e*S **S** **16 32 12.2 -6.4**
MAK pmax pmax
comp=Z,77nm,0.8s
MAK MLR MLR
comp=Z,176nm,16.0s
**ARU Arti 34.39 334** LR LR 16 42 30.0
comp=Z,220nm,18.1s,baz=132,slow=39
**ARU Arti 34.39 334***c i*P **P** **16 26 56.9 +0.3**
ARU 16 29 27.9
ARU S **S** **16 32 26.4 +3.4**
ARU SS **SnSn** **16 34 29.2 -4.5**
ARU pmax pmax
comp=Z,28nm,0.8s
**ARU Arti 34.39 334** P **P** **16 26 55.8 -0.8**
ARU IAmb IAmb 16 26 58.0
comp=Z,26nm,0.8s
**GROC Groznyy 35.36 306** *e*P **P** **16 27 05.8 +0.6**
GROC *e* 16 29 36.7
GROC pmax pmax
comp=Z,89nm,0.7s
**GNI Garni 35.61 301**⇑ *e*P **P** **16 27 09.3 +1.7**
GNI pmax pmax
comp=Z,30nm,1.1s
**GNI Garni 35.61 301** P P 16 27 02.6 -5.0
GNI IAmb IAmb 16 27 36.2
comp=Z,31nm,1.1s
**GNI Garni 35.61 301** P **P** **16 27 10.2 +2.6**
**CN2 Changchun 35.73 53** *e*P **P** **16 27 07.5 -0.8**
CN2 *e*S **S** **16 32 41.5 -2.4**
CN2 pmax pmax
comp=Z,10.0nm,1.3s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,100nm,14.0s
CN2 LR LR
comp=Z,200nm,14.0s
CN2 LR LR
comp=Z,300nm,13.0s
**BOD Bodaibo 36.01 26** *e*P **P** **16 27 11.1 +0.6**
BOD pmax pmax
comp=Z,46nm,0.8s
**RAYN Ar Rayn 36.15 272** P **P** **16 27 12.9 +0.6**
**ZEI Tsey 36.64 305** *e*P **P** **16 27 17.3 +0.9**
ZEI pmax pmax
comp=Z,19nm,0.7s
**KS19 Wonju Array Si 36.70 64** P **P** **16 27 16.0 -0.8**
KS19 IAmb IAmb 16 28 41.1
comp=Z,57nm,1.6s
**KSRS Korea Array 36.75 64** P **P** **16 27 16.4 -0.7**
comp=Z,6.0nm,0.7s,baz=275,slow=8.8,SNR=12
KSRS LR LR 16 42 06.8
comp=Z,41nm,19.1s,baz=245,slow=36
**NCK Nalchik 36.99 306***ce*P **P** **16 27 19.9 +0.7**
NCK pmax pmax
comp=Z,45nm,0.7s
**STKI Sintang 37.24 134** P **P** **16 27 21.9 +0.4**
comp=Z,11nm,0.9s
**BNX BinXian 37.53 50** ⇓P **P** **16 27 23.9 +0.2**
BNX pmax pmax
comp=Z,46nm,0.9s
BNX pmax pmax
comp=Z,300nm,4.2s
**KBZ Khabaz 37.53 306** P **P** **16 27 24.6 +0.9**
comp=Z,12nm,0.8s,baz=125,slow=7.4,SNR=40
**NEY Neytrino 37.57 306**⇓ *e*P **P** **16 27 24.0 -0.3**
NEY pmax pmax
comp=Z,8.0nm,0.7s
**KIV Kislovodsk 37.73 307** *e*P **P** **16 27 26.0 +0.5**
KIV pmax pmax
comp=Z,19nm,1.1s
KIV MLR MLR
comp=Z,73nm,16.0s
**KIV Kislovodsk 37.73 307** P **P** **16 27 26.5 +1.0**
**MDJ Mudanjiang 38.81 53** P **P** **16 27 35.3 +0.8**
MDJ pmax pmax
comp=Z,9.0nm,0.7s
MDJ pmax pmax
comp=Z,170nm,3.5s
**PBKI Pangkalan Bun 39.50 136** P **P** **16 27 39.9 -0.6**
comp=Z,271µmcomp=Z,1µm,1.0s
**KIRV Kirov 39.55 331***c i*P **P** **16 27 40.6 +0.2**
**SOC Sochi 39.79 306** *e*P **P** **16 27 40.3 -2.4**
SOC *e* 16 29 12.8
SOC *e*PPP PPP 16 29 39.6
SOC *e*S **S** **16 33 44.5 -1.0**
SOC *e*SSS SSS 16 37 01.5
**ZEA Zeya 39.99 38** *e*P **P** **16 27 44.6 +0.4**
ZEA pmax pmax
comp=Z,10.0nm,0.6s
ZEA MLR MLR
comp=E,300nm,14.0s
ZEA MLR MLR
comp=N,200nm,18.0s
ZEA MLR MLR
comp=Z,400nm,16.0s
**VRH Novokhopyorsk 40.20 318** *e*P **P** **16 27 45.9 0.0**
VRH pmax pmax
comp=Z,30nm,0.5s
**VLA Vladivostok 40.23 55**⇑ *e*P **P** **16 27 46.7 +0.4**
VLA pmax pmax
comp=Z,16nm,0.9s
**USA0B Ussuriysk Arra 40.44 54** P **P** **16 27 47.4 -0.7**
USA0B pmax pmax
comp=Z,9.0nm,0.8s
**USA0B Ussuriysk Arra 40.44 54** P **P** **16 27 47.4 -0.7**
**USRK Ussuriysk Ar. 40.44 54** P **P** **16 27 48.1 0.0**
comp=Z,3.8nm,0.5s,baz=260,slow=8.6,SNR=34
**USRK Ussuriysk Ar. 40.44 54** P **P** **16 27 48.0 0.0**
**LEM Lembang 40.60 145** LR LR 16 48 50.0
comp=Z,184nm,19.0s,baz=295,slow=42
**KLR Kul'dur 41.23 46** P **P** **16 27 54.6 +0.1**
comp=Z,16nm,0.5s,baz=260,slow=8.6,SNR=87
KLR LR LR 16 48 17.4
comp=Z,106nm,18.8s,baz=260,slow=41
**GAZ Gaziantep 41.35 296** P **P** **16 27 54.6 -1.2**
GAZ IAmb IAmb 16 27 56.9
comp=Z,38nm,0.8s
**NRIK Noril'sk 41.52 1** P **P** **16 27 57.5 +0.9**
comp=Z,41nm,0.7s,baz=170,slow=5.8,SNR=122
NRIK LR LR 16 47 24.0
comp=Z,482nm,19.1s,baz=169,slow=39
**NRIK Noril'sk 41.52 1** P **P** **16 27 57.2 +0.6**
NRIK IAmb IAmb 16 27 58.5
comp=Z,69nm,0.9s
**VORD Divnogorie 41.59 317** *e*P **P** **16 27 56.7 -0.7**
VORD pmax pmax
comp=Z,20nm,0.9s
**VSR Storozhevoye 41.73 317** *e*P **P** **16 27 57.4 -1.2**
VSR pmax pmax
comp=Z,30nm,1.1s
**VORR Voronezh 41.84 318** *e*P **P** **16 27 58.9 -0.5**
VORR pmax pmax
comp=Z,60nm,0.4s
**LPSR Galich'ya Gora 42.27 319** *e*P **P** **16 28 02.7 -0.2**
LPSR pmax pmax
comp=Z,60nm,0.9s
**KBKI Kotabaru 42.83 131** P **P** **16 28 09.5 +1.6**
comp=Z,29nm,0.9s
**PRGR Permogore 42.85 333** *e*P **P** **16 28 07.2 -0.3**
PRGR *e* 16 29 45.6
PRGR *e* 16 29 55.1
PRGR pmax pmax
comp=Z,35nm,0.6s
**MPSI Mapaga 42.87 124** P **P** **16 28 09.2 +0.9**
comp=Z,8.4nm,1.0s
**SNOP Sinop 42.95 303** P P 16 28 03.2 -5.5
**MMAI Mount Meron Ar 43.14 290** LR LR 16 49 49.4
comp=Z,66nm,18.2s,baz=230,slow=41
**DAV Davao City (W) 43.22 111** LR LR 16 49 22.6
comp=Z,104nm,18.6s,baz=341,slow=41
**BR131 Keskin Array S 44.11 299***d i*P **P** **16 28 18.7 +0.5**
**BRTR Keskin Array B 44.11 299** P **P** **16 28 18.4 +0.3**
comp=Z,7.9nm,0.9s,baz=116,slow=7.3,SNR=20
BRTR LR LR 16 48 41.6
comp=Z,99nm,18.3s,baz=96,slow=39
**BRTR Keskin Array B 44.11 299** P **P** **16 28 18.1 0.0**
**MRSI Marisa 44.30 122** P **P** **16 28 20.5 +0.7**
comp=Z,29nm,0.7s
**OBN Obninsk 44.36 322** LR LR 16 48 33.5
comp=Z,101nm,19.2s,baz=104,slow=38
**OBN Obninsk 44.36 322***c i*P **P** **16 28 19.5 -0.2**
OBN *i* 16 28 25.4
OBN *i* 16 30 02.4
OBN *i* 16 30 07.1
OBN *i*S **S** **16 34 59.1 +6.5**
OBN pmax pmax
comp=Z,42nm,1.0s
OBN MLR MLR
comp=Z,314nm,19.0s
**GRNR Gornyy 44.50 45**⇑ *i*P **P** **16 28 21.1 +0.1**
GRNR pmax pmax
comp=E,20nm,0.7s
GRNR pmax pmax
comp=N,6.0nm,0.6s
GRNR pmax pmax
comp=Z,30nm,0.7s
GRNR MLR MLR
comp=N,80nm,18.0s
GRNR MLR MLR
comp=E,90nm,18.0s
GRNR MLR MLR
comp=Z,170nm,15.0s
**CSS Mathiatis 44.63 293** P **P** **16 28 21.8 -0.4**
CSS IAmb IAmb 16 30 07.2
comp=Z,42nm,1.2s
**YAK Yakutsk 44.84 28** LR LR 16 48 29.7
comp=Z,118nm,19.4s,baz=258,slow=38
**YAK Yakutsk 44.84 28***c i*P **P** **16 28 23.5 +0.1**
YAK *e*'PP **pP** **16 28 27.9 -3.5**
YAK *e* 16 30 05.0
YAK *e* 16 30 11.5
YAK *e*S **S** **16 35 00.0 +0.7**
YAK *e*SS **ScS** **16 38 19.7 +0.6**
YAK pmax pmax
comp=Z,38nm,0.8s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=E,6.0nm,1.0s
YAK pmax pmax
comp=Z,196nm,6.0s
YAK pmax pmax
comp=E,73nm,6.0s
YAK pmax pmax
comp=N,49nm,3.0s
YAK smax smax
comp=N,71nm,4.1s
YAK smax smax
comp=E,29nm,3.8s
**YAK Yakutsk 44.84 28** P **P** **16 28 23.7 +0.3**
**MJB9 Matsu-Tunnel 44.99 65** P **P** **16 28 25.8 +0.7**
**MAJO Matsushiro 44.99 65** P **P** **16 28 25.8 +0.6**
MAJO pmax pmax
comp=Z,11nm,0.9s
**MAJO Matsushiro 44.99 65** P **P** **16 28 25.8 +0.6**
**MAT Matsushiro 44.99 65** P **P** **16 28 24.3 -0.8**
**MJAR Matsushiro Arr 44.99 65** P **P** **16 28 25.4 +0.2**
comp=Z,5.0nm,0.8s,baz=278,slow=10,SNR=9.1
MJAR LR LR 16 48 28.7
comp=Z,72nm,19.0s,baz=304,slow=38
**GTOI Gorontalo 45.01 120** P **P** **16 28 25.3 -0.2**
comp=Z,11nm,0.7s
**KLMR Klimovskoe 45.02 330** *e*P **P** **16 28 23.9 -1.1**
KLMR *e* 16 30 05.6
KLMR pmax pmax
comp=Z,26nm,0.7s
**KLMR Klimovskoe 45.02 330** *e*P **P** **16 28 23.9 -1.1**
KLMR AMP 16 28 25.9
comp=Z,26nm,0.7s
KLMR *e*PcP **PcP** **16 30 05.7 +0.1**
**TTSI Tana Toraja 45.15 127** P **P** **16 28 27.2 +0.7**
comp=Z,27nm,1.1s
**SPSI Sidrap Palu 45.76 128** P **P** **16 28 33.0 +1.6**
comp=Z,14nm,0.9s
**SRBI Singaraja 45.88 137** P **P** **16 28 33.3 +1.0**
comp=Z,33nm,1.1s
**KAPI Kappang 46.50 129** LR LR 16 51 27.8
comp=Z,67nm,20.4s,baz=334,slow=40
**JHJ Hachijo jima 2 46.68 70** LR LR 16 50 08.9
comp=Z,112nm,18.4s,baz=344,slow=39
**JMM Marumori 46.94 63** P **P** **16 28 39.7 -0.8**
JMM IAmb IAmb 16 28 41.2
comp=Z,25nm,0.7s
**PURM Purcari 47.02 309** ⇓P **P** **16 28 41.8 +0.9**
**MILM Milestii Mici 47.76 309**⇑ *i*P **P** **16 28 46.3 -0.4**
comp=Z,40nm,0.6s
**MILM Milestii Mici 47.76 309** ⇓P **P** **16 28 46.6 -0.1**
**MILM Milestii Mici 47.76 309***c i*P **P** **16 28 46.3 -0.4**
MILM pmax pmax
comp=Z,40nm,0.6s
**AKASG Malin Array Be 47.80 314** P **P** **16 28 46.4 -0.5**
comp=Z,4.2nm,0.6s,baz=79,slow=7.1,SNR=64
AKASG PP **PP** **16 30 39.0 +0.4**
comp=Z,3.6nm,0.8s,baz=80,slow=8.8,SNR=6.2
AKASG LR LR 16 51 10.4
comp=Z,138nm,18.4s,baz=350,slow=39
**AKASG Malin Array Be 47.80 314** P **P** **16 28 44.8 -2.1**
**AKBB Malin Array Si 47.80 314***ce*P **P** **16 28 46.3 -0.6**
**AKBB Malin Array Si 47.80 314** P **P** **16 28 45.5 -1.4**
AKBB IAmb IAmb 16 28 47.3
comp=Z,16nm,0.7s
**TPGR Topolog 47.98 307**⇑P **P** **16 28 49.0 +0.5**
**ASAJ Asahikawa 48.05 54** LR LR 16 50 04.3
comp=Z,85nm,21.5s,baz=148,slow=37
**SORM Soroca 48.14 311** ⇓P **P** **16 28 49.4 -0.2**
**CFR Carcaliu 48.18 307**⇑P **P** **16 28 50.3 +0.4**
**YSS Yuzh-Sakhalins 48.21 51** *e*P **P** **16 28 50.0 -0.2**
**ICOR Ion Corvin 48.42 306**⇑P **P** **16 28 53.0 +1.2**
**PUL Pulkovo 48.92 327***ce*P **P** **16 28 55.9 +0.5**
PUL pmax pmax
comp=Z,74nm,0.7s
**ODBI Odobesti 48.95 308** ⇓P **P** **16 28 56.5 +0.6**
**MNK Minsk 49.11 319** *i* P **P** **16 28 57.5 +0.5**
MNK *i* 16 30 19.9
MNK *i* 16 30 56.6
MNK *i* PPP PPP 16 31 41.6
MNK *i*S **S** **16 36 02.6 +2.0**
MNK pmax pmax
comp=Z,27nm,1.0s
MNK MLR MLR
comp=N,371nm,17.0s
MNK MLR MLR
comp=Z,347nm,17.0s
MNK MLR MLR
comp=E,37nm,17.0s
**MNK Minsk 49.11 319** *i* P **P** **16 28 57.5 +0.6**
MNK *i* P **P** **16 28 57.5 +0.6**
MNK *i* P **P** **16 28 57.5 +0.6**
comp=Z,27nm,1.0s,baz=98
MNK *i* PcP **PcP** **16 30 20.0 -0.3**
MNK *i* PP **PP** **16 30 56.6 +6.0**
MNK *i* PPP PPP 16 31 41.6
MNK *i*S **S** **16 36 02.6 +2.0**
MNK *i* SS **SS** **16 39 39.0 +7.4**
MNK *i* SSS SSS 16 41 18.9
MNK *i* LQ LQ 16 45 12.5
MNK *i* LR LR 16 47 59.5
MNK *i* LRM MLR 16 52 35.3
comp=N,371nm,17.2s
MNK *i* LRM MLR 16 52 41.4
comp=Z,347nm,17.2s
MNK *i* LRM MLR 16 52 42.1
comp=E,37nm,17.2s
**VRI Vrincioaia 49.18 308** ⇓P **P** **16 28 59.2 +1.6**
**PLOR Plostina 49.23 308**⇑P **P** **16 28 59.7 +1.6**
**TESR Tescani 49.24 309** ⇓P **P** **16 28 58.5 +0.4**
**LBMI Labuha 49.28 118** P **P** **16 29 00.8 +2.0**
comp=E,18nm,0.9s
**NEHR Nehoiu 49.48 307**⇑P **P** **16 29 01.8 +1.7**
**WBSI Waikabubak, Su 49.69 134** P **P** **16 29 01.5 -0.4**
comp=E,24nm,0.7s
**MLR Muntele Rosu 49.73 307** ⇓P **P** **16 29 03.1 +1.1**
**MLR Muntele Rosu 49.73 307** LR LR 16 54 21.1
comp=E,114nm,20.0s,baz=6.0,slow=41
**NACGM Naroch 49.80 320** *i* P **P** **16 29 02.7 +0.5**
**OZUR 49.83 308** ⇓P **P** **16 29 03.5 +0.8**
**TIXI Tiksi 49.86 17** LR LR 16 51 05.4
comp=E,180nm,18.5s,baz=188,slow=37
**TIXI Tiksi 49.86 17** P **P** **16 29 02.6 +0.2**
TIXI pmax pmax
comp=Z,26nm,0.7s
**TIXI Tiksi 49.86 17** P **P** **16 29 02.5 +0.2**
TIXI IAmb IAmb 16 29 03.4
comp=Z,26nm,0.7s
**IDID Didziasalis 49.89 320** *e*P **P** **16 29 02.6 -0.3**
**LVZ Lovozero 50.05 338**⇓ *e*P **P** **16 29 04.2 +0.2**
LVZ pmax pmax
comp=Z,133nm,1.7s
**LVZ Lovozero 50.05 338** P **P** **16 29 03.6 -0.4**
**DOPR Dopca 50.11 308** ⇓P **P** **16 29 05.1 +0.3**
**IIGN Ignalina 50.19 320** *e*P **P** **16 29 05.6 +0.5**
**BUR01 Bucovina Ar. S 50.23 310**⇑P **P** **16 29 06.3 +0.5**
**BUR08 Bucovina Ar. S 50.24 310** P **P** **16 29 05.9 0.0**
**ISAL Salakas 50.27 321** *e*P **P** **16 29 06.5 +0.7**
**APA Apatity 50.34 337**⇓ *i*P **P** **16 29 05.5 -0.6**
APA *i*S **S** **16 36 11.0 -6.4**
APA pmax pmax
comp=Z,31nm,0.6s
APA MLR MLR
comp=Z,800nm,11.0s
**VOIR 50.36 307** ⇓P **P** **16 29 07.3 +0.6**
**VSU Vasula 50.42 324***c i*P **P** **16 29 06.7 -0.2**
VSU pmax pmax
comp=Z,130nm,0.9s
**VSU Vasula 50.42 324** *e*P **P** **16 29 07.1 +0.2**
**ARR Arges 50.65 307**⇑P **P** **16 29 09.4 +0.4**
**ARCR ARCALIA 50.82 309**⇑P **P** **16 29 11.4 +1.3**
**LVV L'vov 51.06 313** *e*P **P** **16 29 11.7 -0.2**
LVV *e*S **S** **16 36 24.8 -3.1**
LVV *e*PS **pS** **16 36 44.0 +6.4**
LVV *e* 16 39 00.6
LVV pmax pmax
comp=Z,60nm,1.3s
**FIA1 FINESS Array S 51.36 328** P **P** **16 29 13.7 -0.1**
**FINES FINESS Array B 51.36 328** P **P** **16 29 14.0 +0.1**
comp=Z,48nm,0.5s,baz=106,slow=8.0,SNR=365
FINES LR LR 16 52 38.1
comp=Z,448nm,18.3s,baz=75,slow=38
**FINES FINESS Array B 51.36 328** P **P** **16 29 14.0 +0.1**
**FINES FINESS Array B 51.36 328** P **P** **16 29 13.7 -0.2**
**BMR Baia Mare 51.40 310** ⇓P **P** **16 29 15.8 +1.4**
**PABE Paberze 51.48 320** *e*P **P** **16 29 15.4 +0.6**
**PABE Paberze 51.48 320** P **P** **16 29 13.6 -1.3**
**SUW Suwalki 51.80 318** *e*P **P** **16 29 17.3 0.0**
**SUW Suwalki 51.80 318** *e*P **P** **16 29 17.1 -0.2**
**VTS Vitosha 51.81 304** ⇓P **P** **16 29 19.3 +1.5**
**KWP Kalwaria Pacla 51.92 313** *e*P P 16 29 13.4 -4.8
**DRGR 51.95 309**⇑P **P** **16 29 19.6 +1.0**
**GZR Gura Zlata 51.96 307** ⇓P **P** **16 29 18.6 -0.1**
**MTSE Matsula 51.97 324** *e*P **P** **16 29 19.1 +0.6**
**TRPA Tarpa 52.03 311** ⇓P **P** **16 29 20.1 +1.0**
**UZH Uzhgorod 52.19 311**⇑ *i*P **P** **16 29 18.7 -1.6**
UZH *e* 16 29 23.0
**HERR Herculane 52.24 307** ⇓P **P** **16 29 20.9 +0.1**
**PBUR Paburge 52.68 321** *e*P **P** **16 29 23.3 -0.4**
**SIRR Siria 52.70 309**⇑P **P** **16 29 25.3 +1.2**
**CRVS Cervenica-Dubn 52.74 312** *e*P **P** **16 29 26.4 +2.0**
**MDVR Moldovita 52.75 307**⇑P **P** **16 29 25.2 +0.6**
**BZS Buzias 52.76 308**⇑P **P** **16 29 25.0 +0.4**
**BATI Baumata 52.92 130** P **P** **16 29 26.4 +0.3**
comp=Z,372nmcomp=Z,19nm,0.6s
**SOEI Soe 53.00 129** P **P** **16 29 27.0 +0.2**
comp=Z,65nm,0.9s
**SOEI Soe 53.00 129** P **P** **16 29 26.1 -0.7**
**BEL Belsk 53.16 316** *e*P **P** **16 29 26.6 -0.8**
**KEV Kevo 53.34 338** P **P** **16 29 28.5 +0.1**
KEV pmax pmax
comp=Z,82nm,0.7s
**KEV Kevo 53.34 338** P **P** **16 29 28.5 +0.1**
**NIE Niedzica 53.49 312** *e*P **P** **16 29 31.3 +1.4**
**ARA0 ARCESS Array S 53.76 338** *e*P **P** **16 29 32.2 +0.6**
**ARCES ARCESS Array B 53.76 338** P **P** **16 29 32.2 +0.6**
comp=Z,86nm,0.7s,baz=84,slow=7.0,SNR=397
ARCES LR LR 16 54 02.1
comp=Z,109nm,21.6s,baz=105,slow=38
**OJC Ojcow 53.79 314** *e*P **P** **16 29 32.3 +0.2**
**PSZ Piszkesteto 53.81 311** ⇓P **P** **16 29 33.3 +0.9**
**MA2 Magadan 53.95 35** P **P** **16 29 33.5 +0.3**
MA2 pmax pmax
comp=Z,28nm,0.9s
**MA2 Magadan 53.95 35** P **P** **16 29 33.5 +0.3**
MA2 IAmb IAmb 16 29 34.4
comp=Z,28nm,0.9s
**DIVS Divibare 54.03 306** P **P** **16 29 29.9 -4.2**
**FRGS Fruska Gora 54.06 307** ⇓P **P** **16 29 34.1 -0.1**
**AAL Aland 54.09 326** *e*P **P** **16 29 33.1 -1.0**
**KTK1 Kautokeino 54.38 337**⇑ *i*P **P** **16 29 35.8 -0.4**
**KMBO Kilima Mbogo 54.49 246** P **P** **16 29 39.8 +1.9**
comp=Z,9.7nm,0.9s,baz=61,slow=6.8,SNR=7.4
KMBO LR LR 16 51 38.9
comp=Z,48nm,18.9s,baz=89,slow=35
**VYHS Vyhne 54.49 311** *e*P **P** **16 29 37.9 +0.6**
**HAMF Hammerfest 54.69 339**⇑ *i*P **P** **16 29 39.3 +0.9**
**PDG Podgorica 54.76 304** ⇓P **P** **16 29 39.2 0.0**

MORH Mrgy, Hungar 54.79 309 ⇑P P 16 29 39.8 +0.4
SRO Srobarova 54.88 311 eP P 16 29 41.5 +1.4
SEY Seymchan 55.10 31 LR LR 16 55 17.0
comp=Z,207nm,19.6s,baz=316,slow=38
SEY Seymchan 55.10 31⇓eP P 16 29 42.2 +0.8
JAVC Velka Javorina 55.24 312 eP P 16 29 43.5 +0.8
UPP Uppsala 55.25 325 eP P 16 29 42.8 +0.3
MORC Moravsky Berou 55.26 313 ⇓P P 16 29 43.5 +0.6
MORC Moravsky Berou 55.26 313 eP P 16 29 42.9 0.0
GKP Gorka Klasztor 55.32 317 eP P 16 29 42.8 -0.3
JETT Jettan, Norway 55.49 337⇑iP P 16 29 45.7 +1.6
MODS Modra-Piesok 55.53 311 eP P 16 29 47.0 +2.2
VIKU Vikbolandet 55.66 324 eP P 16 29 45.8 +0.4
KRLC Kraliky 55.74 313 eP P 16 29 46.0 -0.3
KRLC Kraliky 55.74 313 eP P 16 29 46.0 -0.3
VRAC Vranov 55.91 313 ⇓P P 16 29 48.5 +1.0
VRAC Vranov 55.91 313 LR LR 16 59 20.8
comp=Z,120nm,18.0s,baz=3.0,slow=42
VRAC Vranov 55.91 313 eP P 16 29 48.0 +0.5
KSP Ksiaz 56.00 314 eP P 16 29 48.2 +0.1
TRO Tromso 56.02 337⇑iP P 16 29 48.0 +0.2
KRUC Moravsky 56.06 312 eP P 16 29 48.5 0.0
OSTC Ostas 56.07 314 eP P 16 29 49.1 +0.5
CHVC Chvalec 56.17 314 eP P 16 29 49.7 +0.4
CONA Conrad Observa 56.52 311 iP P 16 29 52.1 +0.2
comp=Z,14nm,0.8s,SNR=7.1
ARSA Arzberg 56.82 310 eP P 16 29 54.1 +0.1
comp=Z,8.3nm,0.8s
FAUS Fauske 56.98 334⇑iP P 16 29 54.7 0.0
STEI Steigen 57.06 335 eP P 16 29 55.3 0.0
BJO1 Bjornoya 57.12 343 eP P 16 29 56.1 +0.5
DEL Delary 57.18 321 eP P 16 29 57.5 +1.1
PRU Pruhonice 57.18 313 eP P 16 29 56.9 +0.4
PRU Pruhonice 57.18 313 eP P 16 29 56.9 +0.4
MOR8 Moi Rana 57.19 333⇑iP P 16 29 55.5 -0.8
SOKA Soboth 57.22 310 iP P 16 29 57.3 +0.3
comp=Z,20nm,1.0s,SNR=9.5
BOJS Bojanci 57.22 308 iP P 16 29 57.1 +0.3
HFS Hagfors 57.24 326 LR LR 16 55 45.5
comp=Z,371nm,18.2s,baz=82,slow=47
RUE Ruedersdorf 57.45 316 eP P 16 29 58.5 +0.2
RUE Ruedersdorf 57.45 316 eP P 16 29 58.5 +0.2
comp=Z,31nm,0.7s,baz=83,slow=6.9
CKRC Cesky Krumlov 57.45 312 eP P 16 29 58.8 +0.3
BRG Berggiesshubel 57.48 315 iP P 16 29 58.9 +0.3
BRG Amp 16 29 59.5
comp=Z,13nm,1.0s
BRG ex x 16 30 05.5
BRG Amp 16 30 11.2
comp=Z,29nm,1.7s
BRG Berggiesshubel 57.48 315 iP P 16 29 58.9 +0.3
BRG e 16 30 05.5
BRG pmax pmax
comp=Z,13nm,1.0s
BRG pmax pmax
comp=Z,29nm,1.7s
BRG Berggiesshubel 57.48 315 eP P 16 29 58.9 +0.3
comp=Z,12nm,0.9s,baz=83,slow=6.9
OBKA Obir 57.57 309 eP P 16 29 59.8 +0.3
comp=Z,14nm,1.0s
MOA Molln 57.59 311 eP P 16 29 59.3 -0.2
comp=Z,9.8nm,0.9s
LOF Lofoten 57.72 335⇑iP P 16 29 59.3 -0.7
PEA0B Petropavlovsk- 57.74 43 P P 16 29 59.4 -1.0
PEA0B pmax pmax
comp=Z,24nm,1.2s
PEA0B Petropavlovsk- 57.74 43 P P 16 29 59.4 -1.0
PEA0B IAmb IAmb 16 30 21.4
comp=Z,24nm,1.2s
PETK Petropavlovsk- 57.74 43 P P 16 29 59.2 -1.2
comp=Z,3.3nm,0.8s,baz=42,slow=1.4,SNR=17
PETK LR LR 16 57 14.3
comp=Z,81nm,18.2s,baz=326,slow=39
PETK Petropavlovsk- 57.74 43 P P 16 29 59.1 -1.3
KONS Konsvik 57.75 333 eP P 16 30 00.2 0.0
CEY Cerknica 57.76 308 iP P 16 30 01.0 +0.3
STOK Stokkvaagen 57.78 333 eP P 16 30 00.5 +0.1
FBE Freiberg 57.85 315 eP P 16 30 01.7 +0.6
comp=Z,21nm,1.0s,baz=83,slow=6.9
GEC2 GERESS Array S 57.85 312 eP P 16 30 01.4 0.0
comp=Z,7.1nm,1.0s,baz=83,slow=6.9
GERES GERESS Array B 57.85 312 P P 16 30 01.6 +0.2
comp=Z,3.9nm,0.6s,baz=91,slow=6.8,SNR=22
KHC Kasperske Hory 57.90 313⇓iP P 16 30 02.1 +0.5
KHC pmax pmax
comp=Z,16nm,1.0s
KHC Kasperske Hory 57.90 313 eP P 16 30 01.7 +0.1
CLL Collm 58.03 315 iP P 16 30 02.0 -0.4
comp=Z,21nm,1.5s
CLL ePP PP 16 32 11.0 +0.1
NSS Namsos 58.13 331 eP P 16 30 02.4 -0.5
CADS Cadrg 58.17 309 iP P 16 30 03.2 -0.4
NC602 NORSAR Array S 58.30 326 eP P 16 30 03.5 -0.7
NC602 NORSAR Array S 58.30 326 P P 16 30 01.5 -2.6
NC602 IAmb IAmb 16 31 52.8
comp=Z,46nm,1.4s
KBA Koelnbreinsper 58.31 310 eP P 16 30 04.2 -0.5
comp=Z,8.1nm,0.9s
WET Wettzell 58.35 313 eP P 16 30 05.1 +0.4
comp=Z,9.0nm,0.9s,baz=83,slow=6.9
NB2 NORSAR Subarra 58.45 327 P P 16 30 04.4 -0.9
comp=Z,9.9nm,0.5s,baz=87,slow=7.4
NB2 NORSAR Subarra 58.45 327 P P 16 30 04.4 -0.9
baz=87,slow=7.4
NOA NORSAR Array B 58.45 327 P P 16 30 04.7 -0.6
comp=Z,12nm,0.3s,baz=100,slow=7.2,SNR=53
NOA LR LR 16 56 49.0
comp=Z,245nm,18.4s,baz=95,slow=38
TANN Tannenbergstha 58.47 314 eP P 16 30 05.8 +0.2
comp=Z,16nm,1.4s,baz=83,slow=6.9
WERN Wernitzgruen 58.54 314 eP P 16 30 06.3 +0.3
comp=Z,8.7nm,1.0s,baz=83,slow=6.9
GUNZ Gunzen 58.56 314 eP P 16 30 06.5 +0.3
comp=Z,20nm,1.2s,baz=83,slow=6.9
HSPB Hornsund (broa 58.56 346⇑iP P 16 30 06.3 +0.6
WERD Werda 58.56 314 eP P 16 30 06.3 +0.1
comp=Z,10nm,1.0s,baz=83,slow=6.9
RJOB Jochberg 58.59 311 eP P 16 30 06.1 -0.4
comp=Z,12nm,1.3s,baz=83,slow=6.9
PLN Plauen 58.65 314 eP P 16 30 07.0 +0.2
comp=Z,8.7nm,0.8s,baz=83,slow=6.9
SPB2 Spitsbergen Ar 58.66 347 P P 16 30 06.4 -0.1
SPA0 Spitsbergen Ar 58.66 347⇑iP P 16 30 07.3 +0.8
SPITS Spitsbergen Ar 58.66 347 LR LR 17 00 31.5
comp=Z,168nm,18.7s,baz=173,slow=41
SPITS Spitsbergen Ar 58.66 347 P P 16 30 07.3 +0.8
SPITS pmax pmax
comp=Z,42nm,0.9s
ROTZ Rotzenmuhle 58.71 313 eP P 16 30 07.9 +0.6
comp=Z,4.5nm,0.9s,baz=83,slow=6.9
OSL Oslo 58.73 325 eP P 16 30 07.3 +0.2
NEUB Neuenburg 58.81 315 eP P 16 30 08.0 +0.1
comp=Z,26nm,0.7s,baz=83,slow=6.9
TBLU Trondheim 58.87 329 eP P 16 30 07.5 -0.5
ABTA Abfaltersbach 58.93 310 eP P 16 30 08.2 -0.7
comp=Z,7.1nm,0.9s
MOX Moxa 58.98 314 eP P 16 30 09.2 +0.1
comp=Z,11nm,0.9s,baz=83,slow=6.9
MOX eL L 16 58 34.1
comp=Z,192nm,20.1s
FLTG Flechtingen 59.01 316 eP P 16 30 08.9 -0.4
comp=Z,21nm,1.0s,baz=83,slow=6.9
OVD Ostervraa, Den 59.15 322 iP P 16 30 10.0 -0.1
OVD IAmb IAmb 16 30 10.9
comp=Z,160nm,0.6s
KONO Kongsberg 59.31 325⇓eP P 16 30 11.2 0.0
KONO pmax pmax
comp=Z,75nm,2.5s
KONO Kongsberg 59.31 325 eP P 16 30 11.0 -0.2
KONO Kongsberg 59.31 325 P P 16 30 09.8 -1.5
GRF Grafenberg Arr 59.35 313 eP P 16 30 12.4 +0.7
comp=Z,24nm,1.3s,baz=83,slow=6.9
GRF eL L 16 58 51.6
comp=Z,174nm,19.0s
BSEG Bad Segeberg 59.39 318 eP P 16 30 12.5 +0.6
comp=Z,51nm,1.1s,baz=83,slow=6.9
WTTA Wattenberg 59.44 311 iP P 16 30 10.6 -1.9
comp=Z,16nm,0.9s
DOMB Dombas 59.45 328 eP P 16 30 11.9 -0.3
WATA Walderalm 59.47 311 iP P 16 30 11.6 -1.1
comp=Z,10nm,0.8s
MURB Monte Urbino 59.51 306 P P 16 30 14.3 +1.3
MBAR Mbarara 59.57 251ceP P 16 30 14.0 +0.1
CLZ Clausthal 59.60 316 eP P 16 30 13.8 +0.4
comp=Z,39nm,0.8s,baz=83,slow=6.9

CTI Castel Tesino 59.63 309 P P 16 30 13.6 -0.2
CTI pmax pmax
comp=Z,14nm,0.8s
CTI Castel Tesino 59.63 309 P P 16 30 13.6 -0.2
CTI IAmb IAmb 16 30 14.2
comp=Z,14nm,0.8s
NRDL Niedersach Rie 59.68 317 eP P 16 30 14.6 +0.8
comp=Z,41nm,1.0s,baz=83,slow=6.9
KBS Kingsbay 59.69 348deP P 16 30 14.2 +0.7
KBS pmax pmax
comp=Z,71nm,2.5s
KBS Kingsbay 59.69 348 iP P 16 30 13.5 -0.1
KBS Kingsbay 59.69 348 eP P 16 30 13.9 +0.4
GOET G??ttrup 59.70 322 iP P 16 30 14.6 +0.7
GOET IAmb IAmb 16 30 16.3
comp=Z,6µm,4.2s
SQTA Sankt Quirin 59.73 311 iP P 16 30 13.6 -1.0
comp=Z,16nm,0.8s
TEOL Teolo 59.73 308 P P 16 30 14.6 +0.1
MOTA Moosalm 59.78 311 iP P 16 30 13.9 -1.0
comp=Z,10nm,0.8s,SNR=7.2
GTTG Gottingen 59.89 316 eP P 16 30 15.7 +0.4
comp=Z,16nm,0.8s,baz=83,slow=6.9
SKAR Skarslia 59.89 326 eP P 16 30 15.7 +0.5
HOMB Homborsund 59.98 324 eP P 16 30 15.8 +0.1
RETA Reutte 59.99 311 iP P 16 30 15.1 -1.1
comp=Z,12nm,0.8s
FITZ Fitzroy Crossi 60.01 135 LR LR 17 00 43.2
comp=Z,67nm,18.4s,baz=294,slow=41
FETA Feichten 60.09 310 eP P 16 30 16.3 -0.8
comp=Z,10.0nm,0.8s,SNR=5.0
MOL Molde 60.13 329⇑iP P 16 30 17.1 +0.3
UBR Ueberruh 60.39 311 eP P 16 30 18.6 -0.4
comp=Z,13nm,0.8s,baz=83,slow=6.9
AKN Aaknes 60.42 328 eP P 16 30 19.0 +0.2
DAVA Damuels 60.62 311 eP P 16 30 20.1 -0.5
comp=Z,29nm,0.9s,SNR=8.7
SNART Snartemo 60.65 324⇑iP P 16 30 20.7 +0.3
DAVOX Davos/Dischmat 60.71 310 LR LR 17 00 07.6
comp=Z,84nm,20.6s,baz=60,slow=40
ODD1 Odda 60.79 326⇑iP P 16 30 21.5 +0.1
STU Stuttgart 60.81 313 eP P 16 30 22.0 +0.3
comp=Z,76nm,0.9s,baz=83,slow=6.9
BLS5 Blasjo 60.93 325 eP P 16 30 23.3 +1.0
TNS Taunus Mts 61.04 314 eP P 16 30 23.4 +0.1
comp=Z,20nm,0.7s,baz=83,slow=6.9
BILL Bilibino 61.06 25diP P 16 30 24.0 +1.0
BILL i 16 30 29.1
BILL e 16 30 34.6
BILL i 16 31 04.6
BILL pmax pmax
comp=Z,18nm,0.9s
BILL MLR MLR
comp=Z,107nm,16.0s
BILL Bilibino 61.06 25 P P 16 30 24.2 +1.2
BILL IAmb IAmb 16 30 25.1
comp=Z,24nm,0.9s
IBBN Ibbenburen 61.13 317 eP P 16 30 24.0 +0.2
comp=Z,23nm,0.8s,baz=83,slow=6.9
BER Bergen 61.38 326 eP P 16 30 25.7 +0.3
FOO Floro 61.39 328 eP P 16 30 25.6 +0.3
ASK Askoy 61.44 326 eP P 16 30 25.6 -0.1
BFO Black Forest 61.45 312 eP P 16 30 25.5 -0.6
baz=83,slow=6.9
KMY Karmoy 61.57 325 eP P 16 30 27.2 +0.6
BUG Bochum--Univer 61.57 316 eP P 16 30 27.0 +0.2
comp=Z,29nm,1.0s,baz=83,slow=6.9
SUE Sulen 61.59 327 eP P 16 30 27.4 +0.7
AHRW Bad Neuenahr-A 61.85 315 eP P 16 30 29.2 +0.5
comp=Z,20nm,0.8s,baz=83,slow=6.9
BTNL Ternell 62.44 315 dP P 16 30 33.0 +0.4
comp=Z,10nm,1.0s
MEM Membach 62.51 315 dP P 16 30 32.8 -0.3
comp=Z,14nm,0.9s
BHOU Hovegnez 62.56 315 dP P 16 30 34.3 +0.8
comp=Z,10nm,1.1s
WLF Walferdange 62.60 314 eP P 16 30 34.5 +0.8
comp=Z,34nm,0.9s,baz=83,slow=6.9
WLF Walferdange 62.60 314 dP P 16 30 34.6 +0.9
comp=Z,21nm,0.9s
BCLA Clavier 62.99 315 dP P 16 30 35.1 -1.2
comp=Z,11nm,0.8s
RCHB Rochefort 63.09 315 dP P 16 30 37.0 +0.1
comp=Z,8.4nm,0.8s
BGES Gesves 63.13 315 dP P 16 30 37.6 +0.4
comp=Z,7.4nm,0.8s
BMRD Maredsous 63.35 315 dP P 16 30 38.6 -0.1
comp=Z,11nm,0.7s
DOU Dourbes 63.50 315 dP P 16 30 39.9 +0.2
comp=Z,6.0nm,0.9s
KEST Kesra 63.69 298 P P 16 30 42.2 +0.9
comp=Z,50nm,0.8s,baz=305,slow=2.3,SNR=36
MORW Morawa 63.74 150 P P 16 30 40.0 -1.4
MORW IAmb IAmb 16 30 42.6
comp=Z,16nm,0.9s
MORW Morawa 63.74 150 P P 16 30 41.8 +0.4
NOR Nord 64.37 351 iP P 16 30 45.0 +0.1
NOR IAmb IAmb 16 30 45.4
comp=Z,12nm,0.6s
ELMS Elmsett, Ipswi 65.26 317 eP P 16 30 51.0 -0.2
ELMS IAmb IAmb 16 30 51.7
comp=Z,57nm,0.6s
WACR West Acre 65.32 318 eP P 16 30 51.1 -0.4
WACR IAmb IAmb 16 30 52.5
comp=Z,123nm,0.8s
BLDU Ballidu 65.36 151 P P 16 30 51.8 -0.2
DAG Danmarks Havn 66.25 346 iP P 16 30 57.0 -0.2
DAG IAmb IAmb 16 30 58.4
comp=Z,24nm,0.9s
MCD Coleburn Disti 66.27 324 eP P 16 30 57.8 +0.2
EDMD Edmundbyers 66.28 321 eP P 16 30 57.5 -0.2
EDMD IAmb IAmb 16 30 58.2
comp=Z,20nm,0.8s
ESY Stoneypath 66.36 322 eP P 16 30 57.6 -0.5
BIGH Upper Bighouse 66.37 325 eP P 16 30 58.2 0.0
KLBR Kellerberrin 66.66 150 P P 16 31 00.2 -0.1
EDI Edinburgh 66.67 322 eP P 16 31 00.3 +0.2
EKA Eskdalemuir Ar 66.81 322 LR LR 17 03 02.1
comp=Z,292nm,20.4s,baz=12,slow=38
ESK Eskdalemuir 66.84 322 eP P 16 31 00.6 -0.7
ESK Eskdalemuir 66.84 322 P P 16 30 58.9 -2.4
ESK pmax pmax
comp=Z,27nm,0.9s
ESK Eskdalemuir 66.84 322 P P 16 30 58.9 -2.4
WRKA Warakurna 66.84 138 P P 16 31 02.8 +1.1
WB0 Warramunga Arr 66.96 129 P P 16 31 02.4 -0.1
WB0 IAmb IAmb 16 31 08.4
comp=Z,16nm,0.6s
KESW Keswick, Cumbr 66.98 321 eP P 16 31 02.2 0.0
WRA Warramunga Arr 67.04 130 P P 16 31 03.9 +0.9
comp=Z,8.3nm,0.6s,baz=323,slow=6.3,SNR=74
WRA Warramunga Arr 67.04 130 P P 16 31 03.6 +0.6
WRAB Tennant Creek 67.04 130diP P 16 31 03.9 +0.9
WRAB pmax pmax
comp=Z,6.0nm,0.9s
WRAB Tennant Creek 67.04 130 P P 16 31 03.1 +0.1
WRAB IAmb IAmb 16 31 09.1
comp=Z,18nm,0.6s
WRAB Tennant Creek 67.04 130 P P 16 31 04.5 +1.5
WB2 Warramunga Arr 67.05 130 P P 16 31 03.5 +0.4
STRD Stroud 67.22 318 eP P 16 31 02.5 -1.3
STRD IAmb IAmb 16 31 03.9
comp=Z,36nm,0.6s
PGBU Glenifferbraes 67.40 322 eP P 16 31 04.0 -0.8
FOEL Foel Wylfa 67.52 319 eP P 16 31 05.8 +0.1
FOEL IAmb IAmb 16 31 06.6
comp=Z,87nm,0.8s
DBG Daneborg 67.53 344 iP P 16 31 05.9 +0.6
DBG IAmb IAmb 16 31 07.0
comp=Z,11nm,0.9s
NWAO Narrogin (SRO) 67.58 151 P P 16 31 06.1 0.0
KPL Plockton 67.58 324 eP P 16 31 05.6 -0.3
KPL IAmb IAmb 16 31 06.8
comp=Z,16nm,0.7s
MONM Monmouth 67.59 318 eP P 16 31 05.7 -0.4
MONM IAmb IAmb 16 31 06.4
comp=Z,57nm,0.7s
MCH1 Michaelchurch 67.66 318 eP P 16 31 06.0 -0.5
MCH1 IAmb IAmb 16 31 07.2
comp=Z,42nm,0.7s
ROSF Rostrenen 68.94 314 eP P 16 31 14.3 -0.3
AS31 Alice Springs 69.34 133 P P 16 31 17.8 +0.4
ASAR Alice Springs 69.34 133 P P 16 31 18.4 +1.0
comp=Z,11nm,0.6s,baz=320,slow=6.1,SNR=121
ASAR LR LR 17 07 33.1
comp=Z,44nm,18.2s,baz=300,slow=41
ASAR Alice Springs 69.34 133 P P 16 31 18.0 +0.6
LSZ Lusaka 70.11 240 LR LR 17 00 14.2
comp=Z,50nm,19.6s,baz=126,slow=34
GAMB Gambell 70.78 27 P P 16 31 25.4 -0.2
baz=294
QIS Mount Isa 71.12 127 P P 16 31 30.0 +1.7
TNA Tin City 71.49 25 P P 16 31 29.9 0.0
baz=297
NEEM North Greenlan 71.75 351 iP P 16 31 32.3 +0.6
NEEM IAmb IAmb 16 31 32.7
comp=Z,74nm,0.8s
RDOG Red Dog Mine 72.05 22 P P 16 31 33.9 +0.6
baz=300
EUNU Eureka 72.21 359 P P 16 31 35.0 +0.8
EUNU IAmb IAmb 16 31 36.0
comp=Z,24nm,0.8s
ESDC Sonseca Array 72.39 306 P P 16 31 36.0 +0.2
comp=Z,12nm,0.8s,baz=58,slow=5.8,SNR=72
SUMG Summit 72.87 345 P P 16 31 38.9 +0.3
SUMG pmax pmax
comp=Z,28nm,0.7s
SUMG Summit 72.87 345 iP P 16 31 39.2 +0.6
SUMG IAmb IAmb 16 31 40.0
comp=Z,30nm,0.8s
SUMG Summit 72.87 345 P P 16 31 38.9 +0.3
OOD Oodnadatta 73.38 135 P P 16 31 42.6 +0.9
PBRG Braganca 73.54 309 eP P 16 31 42.9 +0.3
MVO Moncorvo 73.99 308 eP P 16 31 45.7 +0.4
comp=Z,24nm,0.7s
MULG Mulgathing 74.15 138 P P 16 31 47.2 +1.1
POLO Lamas de Olo 74.43 309 eP P 16 31 48.2 +0.2
PGAV Gavieira, Arco 74.53 309 eP P 16 31 49.1 +0.6
comp=Z,39nm,1.8s
TULEG Thule 74.63 354 iP P 16 31 47.7 -0.6
TULEG IAmb IAmb 16 31 48.6
comp=Z,26nm,0.8s
MTE Manteigas 74.65 308 eP P 16 31 49.9 +0.7
comp=Z,40nm,1.6s
PVIS Viseu 74.77 308 eP P 16 31 50.6 +0.8
comp=Z,28nm,0.9s
PCBR Castelo Branco 74.82 307 eP P 16 31 50.8 +0.7
PMRV Marv??o 74.93 307 eP P 16 31 51.1 +0.3
ICESG Greenland Ices 75.45 342 iP P 16 31 54.4 +0.7
ICESG IAmb IAmb 16 31 55.4
comp=Z,51nm,0.9s
PMTG Montargil 75.67 307 eP P 16 31 55.2 +0.2
EVO Evora 75.73 306 eP P 16 31 56.1 +0.7
comp=Z,25nm,1.2s
PBEJ Beja 75.84 306 eP P 16 31 56.7 +0.7
PSBE So Bento 75.89 307 eP P 16 31 57.0 +0.7
PVAQ Vaqueiros 75.98 305 eP P 16 31 57.3 +0.5
comp=Z,50nm,1.5s
PCVE Castro Verde 76.12 305 eP P 16 31 58.2 +0.6
MESJ Messejana 76.17 306 eP P 16 31 58.3 +0.4
MESJ IAmb IAmb 16 31 59.5
comp=Z,22nm,0.8s
MESJ Messejana 76.17 306 eP P 16 31 58.7 +0.8
comp=Z,42nm,1.7s
MESJ Messejana 76.17 306 eP P 16 31 58.3 +0.4
MESJ pmax pmax
comp=Z,22nm,0.8s
PBDV Barranco-do-Ve 76.21 305 eP P 16 31 59.4 +1.3
PNCL Nicolau / Gran 76.28 306 eP P 16 31 59.4 +0.9
UPNV Upernavik 76.28 349 iP P 16 31 57.4 -0.4
UPNV IAmb IAmb 16 31 58.5
comp=Z,21nm,0.9s
PMAFR Mafra 76.46 307 eP P 16 32 00.3 +0.8
COLD Coldfoot 76.48 19 P P 16 31 59.8 +0.7
COLD IAmb IAmb 16 32 07.5
comp=Z,15nm,1.0s
COLD Coldfoot 76.48 19 P P 16 32 00.0 +0.9
baz=311
LCRK Leigh Creek 76.81 135 P P 16 32 02.8 +1.4
NIKH Nikolski High 76.97 37 P P 16 32 03.5 +1.5
baz=299
BBOO Buckleboo 77.14 138 P P 16 32 03.3 +0.1
BBOO IAmb IAmb 16 32 11.5
comp=Z,21nm,1.1s
J20K Nowinta River 77.19 23 P P 16 32 04.0 +0.9
J20K IAmb IAmb 16 32 13.0
comp=Z,56nm,1.9s
J20K Nowinta River 77.19 23 P P 16 32 04.7 +1.5
baz=309
I21K Tanana 77.27 21 P P 16 32 03.9 +0.3
I21K IAmb IAmb 16 32 11.7
comp=Z,48nm,2.0s
TTA Tatalina 77.29 24 P P 16 32 03.9 0.0
TTA Tatalina 77.29 24 P P 16 32 03.9 0.0
TTA Tatalina 77.29 24 P P 16 32 05.1 +1.2
baz=307
RES Resolute Bay 77.71 0 LR LR 17 09 14.7
comp=Z,142nm,18.9s,baz=44,slow=38
RES Resolute Bay 77.71 0 P P 16 32 05.6 -0.2
RES pmax pmax
comp=Z,17nm,1.4s
RES Resolute Bay 77.71 0 P P 16 32 05.6 -0.2
K20K Telida 77.73 23 P P 16 32 06.8 +0.6
K20K IAmb IAmb 16 32 15.4
comp=Z,16nm,0.8s
K20K Telida 77.73 23 P P 16 32 07.8 +1.6
baz=309
MLY Manley 77.77 21 P P 16 32 06.1 -0.3
BMAR Burnt Mountain 77.91 18 P P 16 32 07.6 +0.4
CHUM Lake Minchumin 78.00 23 P P 16 32 09.1 +1.4
baz=310
LBTB Lobatse 78.00 233 LR LR 17 03 07.2
comp=Z,65nm,20.8s,baz=115,slow=33
LBTB Lobatse 78.00 233 P P 16 32 08.7 +0.3
LBTB pmax pmax
comp=Z,22nm,0.9s
LBTB Lobatse 78.00 233 P P 16 32 08.7 +0.3
LBTB IAmb IAmb 16 32 14.4
comp=Z,22nm,0.9s
H24K Noodor Dome 78.11 20 P P 16 32 07.9 -0.4
H24K IAmb IAmb 16 32 09.7
comp=Z,28nm,1.8s
H24K Noodor Dome 78.11 20 P P 16 32 09.4 +1.1
baz=314
I23K Minto, Yukon-K 78.12 21 P P 16 32 08.3 0.0
I23K IAmb IAmb 16 32 18.1
comp=Z,64nm,1.9s
I23K Minto, Yukon-K 78.12 21 P P 16 32 08.9 +0.6
baz=312,SNR=5.8
A36M Sachs Harbour 78.17 9 P P 16 32 08.8 +0.4
A36M Sachs Harbour 78.17 9 P P 16 32 09.3 +0.8
baz=333,SNR=28
L19K White Mountain 78.18 25 P P 16 32 09.4 +0.7
L19K IAmb IAmb 16 32 18.0
comp=Z,76nm,2.0s
L19K White Mountain 78.18 25 P P 16 32 10.3 +1.6
baz=308
QLP Quilpie 78.23 129 P P 16 32 11.4 +2.0
BPAW Bear Paw Mtn. 78.30 22 P P 16 32 10.1 +0.8
baz=311
CAST Castle Rocks 78.38 23 P P 16 32 10.3 +0.5
CAST IAmb IAmb 16 32 12.1
comp=Z,24nm,0.8s
CAST Castle Rocks 78.38 23 P P 16 32 10.8 +1.0
baz=310,SNR=14
TORD Torodi Ar. Bea 78.53 279 P P 16 32 11.2 -0.2
comp=Z,4.0nm,0.5s,baz=64,slow=4.3,SNR=27
NEA2 Nenana 78.59 21 P P 16 32 11.4 +0.4
baz=313,SNR=8.1
MDM Murphy Dome 78.61 20 P P 16 32 11.9 +0.9
MDM IAmb IAmb 16 32 20.7
comp=Z,33nm,1.3s
PPLA Purkeypile 78.68 23 P P 16 32 12.8 +1.2
PPLA Purkeypile 78.68 23 P P 16 32 12.5 +0.9
baz=310
POKR Poker Plat Res 78.74 20 P P 16 32 12.7 +0.9
POKR IAmb IAmb 16 32 13.7
comp=Z,12nm,0.8s
POKR Poker Plat Res 78.74 20 P P 16 32 12.7 +0.9
baz=314
TCOL CIGO, UAF Yank 78.78 20 P P 16 32 12.7 +0.8
baz=314
COLA College 78.78 20 P P 16 32 12.6 +0.7
baz=314
CCB Clear Creek Bu 78.95 21 P P 16 32 12.6 -0.3
TRF Thorofare Moun 78.97 22 P P 16 32 13.8 +0.6
baz=312
WRH Wood River Hil 78.98 21 P P 16 32 12.4 -0.6
WRH IAmb IAmb 16 34 49.4
comp=Z,30nm,1.8s
PRP Porcupine Dome 79.03 19 P P 16 32 12.4 -1.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PRP | | | | | IAmb | IAmb | 16 32 15.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **PRP** | **Porcupine Dome** | **79.03** | **19** | P | **P** | | **16 32 14.6** | **+1.1** |
| | baz=316,SNR=6.9 | | | | | | | |
| **DY2G** | **Dye2** | **79.09** | **342** | *i* P | **P** | | **16 32 13.2** | **-0.7** |
| DY2G | | | | | IAmb | IAmb | 16 32 14.6 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **IL31** | | **79.15** | **20** | P | **P** | | **16 32 13.6** | **-0.3** |
| **ILAR** | **Eielson Array** | **79.15** | **20** | P | **P** | | **16 32 13.8** | **-0.2** |
| | comp=Z,4.0nm,0.6s,baz=309,slow=4.5,SNR=71 | | | | | | | |
| ILAR | | | | | PP | **PP** | **16 35 11.6** | **-1.2** |
| | comp=Z,1.8nm,0.9s,baz=305,slow=7.6,SNR=6.3 | | | | | | | |
| **N19K** | **Bonanza Creek** | **79.17** | **26** | P | **P** | | **16 32 15.6** | **+1.3** |
| | baz=309 | | | | | | | |
| **MCK** | **McKinley** | **79.22** | **22** | P | **P** | | **16 32 14.1** | **-0.4** |
| MCK | | | | pmax | pmax | | | |
| | comp=Z,48nm,1.8s | | | | | | | |
| **MCK** | **McKinley** | **79.22** | **22** | P | **P** | | **16 32 14.1** | **-0.4** |
| MCK | | | | | IAmb | IAmb | 16 33 02.0 | |
| | comp=Z,48nm,1.8s | | | | | | | |
| **MCK** | **McKinley** | **79.22** | **22** | P | **P** | | **16 32 14.8** | **+0.4** |
| | baz=313 | | | | | | | |
| **HDA** | **Harding Lake** | **79.39** | **20** | P | **P** | | **16 32 13.9** | **-1.4** |
| HDA | | | | | IAmb | IAmb | 16 34 43.0 | |
| | comp=Z,34nm,1.8s | | | | | | | |
| **HDA** | **Harding Lake** | **79.39** | **20** | P | **P** | | **16 32 14.6** | **-0.7** |
| | baz=315 | | | | | | | |
| **RND** | **Reindeer** | **79.47** | **22** | P | **P** | | **16 32 15.2** | **-0.7** |
| RND | | | | pmax | pmax | | | |
| | comp=Z,58nm,2.0s | | | | | | | |
| **RND** | **Reindeer** | **79.47** | **22** | P | **P** | | **16 32 15.2** | **-0.7** |
| RND | | | | IAmb | IAmb | | 16 32 30.0 | |
| | comp=Z,58nm,2.0s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.49** | **27** | P | **P** | | **16 32 16.7** | **+0.8** |
| | baz=308 | | | | | | | |
| **O19K** | **Port Alsworth** | **79.62** | **26** | P | **P** | | **16 32 17.7** | **+1.1** |
| | baz=309 | | | | | | | |
| **CUT** | **Chulitna** | **79.67** | **23** | P | **P** | | **16 32 16.9** | **0.0** |
| **J25K** | **Salcha River,** | **79.72** | **20** | P | **P** | | **16 32 16.0** | **-1.2** |
| J25K | | | | | IAmb | IAmb | 16 32 18.3 | |
| | comp=Z,30nm,1.9s | | | | | | | |
| **J25K** | **Salcha River,** | **79.72** | **20** | P | **P** | | **16 32 16.8** | **-0.4** |
| | baz=316 | | | | | | | |
| **P18K** | **Big Mountain,** | **79.77** | **27** | P | **P** | | **16 32 18.4** | **+0.9** |
| | baz=308 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **79.81** | **344** | P | **P** | | **16 32 17.1** | **-0.4** |
| SFJD | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **79.81** | **344** | *i* P | **P** | | **16 32 16.9** | **-0.6** |
| SFJD | | | | | IAmb | IAmb | 16 32 18.4 | |
| | comp=Z,19nm,0.5s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **79.81** | **344** | P | **P** | | **16 32 17.1** | **-0.4** |
| SFJD | | | | | IAmb | IAmb | 16 32 18.4 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **79.88** | **14** | P | **P** | | **16 32 18.4** | **+0.5** |
| | comp=Z,6.1nm,0.7s,baz=318,slow=3.1 | | | | | | | |
| INK | | | | | LR | LR | 17 12 40.8 | |
| | comp=Z,78nm,19.2s,baz=26,slow=40 | | | | | | | |
| **INK** | **Inuvik** | **79.88** | **14** | P | **P** | | **16 32 17.7** | **-0.2** |
| **INK** | **Inuvik** | **79.88** | **14** | P | **P** | | **16 32 18.1** | **+0.3** |
| | baz=326,SNR=7.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **79.90** | **134** | P | **P** | | **16 32 19.4** | **+0.9** |
| | comp=Z,3.8nm,0.7s,baz=322,slow=5.7,SNR=6.4 | | | | | | | |
| STKA | | | | | LR | LR | 17 12 45.8 | |
| | comp=Z,77nm,18.1s,baz=210,slow=40 | | | | | | | |
| **STKA** | **Stephens Creek** | **79.90** | **134** | P | **P** | | **16 32 17.8** | **-0.7** |
| **J26L** | **Joseph Creek** | **80.34** | **19** | P | **P** | | **16 32 20.9** | **+0.3** |
| **BOSA** | **Boshof** | **80.48** | **231** | P | **P** | | **16 32 22.2** | **+0.3** |
| | comp=Z,7.9nm,0.9s,baz=68,slow=5.0,SNR=8.5 | | | | | | | |
| **BOSA** | **Boshof** | **80.48** | **231** | P | **P** | | **16 32 21.4** | **-0.5** |
| BOSA | | | | | IAmb | IAmb | 16 32 27.5 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **RIDG** | **Independent Ri** | **80.51** | **20** | P | **P** | | **16 32 21.1** | **-0.3** |
| RIDG | | | | | IAmb | IAmb | 16 32 22.4 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **RIDG** | **Independent Ri** | **80.51** | **20** | P | **P** | | **16 32 21.5** | **+0.1** |
| | baz=316 | | | | | | | |
| **GHO** | **Glory Hole Cre** | **80.57** | **23** | P | **P** | | **16 32 21.7** | **-0.1** |
| **SCRK** | **Sand Creek** | **80.60** | **20** | P | **P** | | **16 32 22.4** | **+0.4** |
| SCRK | | | | | IAmb | IAmb | 16 32 23.5 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **SCRK** | **Sand Creek** | **80.60** | **20** | P | **P** | | **16 32 22.3** | **+0.4** |
| | baz=317,SNR=11 | | | | | | | |
| **PMR** | **Palmer** | **80.62** | **23** | P | **P** | | **16 32 22.2** | **+0.3** |
| PMR | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **PMR** | **Palmer** | **80.62** | **23** | P | **P** | | **16 32 22.2** | **+0.3** |
| PMR | | | | | IAmb | IAmb | 16 32 23.5 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **PMR** | **Palmer** | **80.62** | **23** | P | **P** | | **16 32 22.5** | **+0.6** |
| | baz=313 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **80.69** | **27** | P | **P** | | **16 32 22.3** | **-0.2** |
| **C36M** | **Paulatuk** | **80.71** | **10** | P | **P** | | **16 32 22.7** | **+0.3** |
| C36M | | | | | IAmb | IAmb | 16 32 23.9 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **C36M** | **Paulatuk** | **80.71** | **10** | P | **P** | | **16 32 22.2** | **-0.1** |
| | baz=334,SNR=11 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **80.75** | **24** | P | **P** | | **16 32 22.8** | **+0.1** |
| | baz=313 | | | | | | | |
| **SML** | **Sawmill** | **80.75** | **23** | P | **P** | | **16 32 22.9** | **+0.1** |
| **SML** | **Sawmill** | **80.75** | **23** | P | **P** | | **16 32 23.4** | **+0.7** |
| | baz=314,SNR=5.4 | | | | | | | |
| **DOT** | **Dot Lake** | **80.82** | **20** | P | **P** | | **16 32 23.3** | **+0.2** |
| DOT | | | | | IAmb | IAmb | 16 33 03.1 | |
| | comp=Z,38nm,1.8s | | | | | | | |
| **EGAK** | **Eagle** | **80.82** | **18** | P | **P** | | **16 32 23.2** | **+0.2** |
| EGAK | | | | | IAmb | IAmb | 16 32 31.0 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **EGAK** | **Eagle** | **80.82** | **18** | P | **P** | | **16 32 23.4** | **+0.4** |
| | baz=320 | | | | | | | |
| **PAX** | **Paxson** | **80.87** | **21** | P | **P** | | **16 32 23.9** | **+0.5** |
| | baz=316 | | | | | | | |
| **KNK** | **Knik Glacier** | **80.98** | **23** | P | **P** | | **16 32 24.5** | **+0.5** |
| **KNK** | **Knik Glacier** | **80.98** | **23** | P | **P** | | **16 32 23.8** | **-0.2** |
| | baz=314 | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.07** | **22** | P | **P** | | **16 32 25.0** | **+0.5** |
| SCM | | | | pmax | pmax | | | |
| | comp=Z,164nm,1.8s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.07** | **22** | P | **P** | | **16 32 25.0** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **81.07** | **22** | P | **P** | | **16 32 25.3** | **+0.7** |
| | baz=315 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **81.14** | **17** | P | **P** | | **16 32 25.0** | **+0.2** |
| **I29M** | **Ogilvie Camp,** | **81.14** | **17** | P | **P** | | **16 32 24.8** | **+0.1** |
| | baz=322 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **81.27** | **22** | P | **P** | | **16 32 26.5** | **+1.0** |
| **M24K** | **Tolsona, Glenn** | **81.27** | **22** | P | **P** | | **16 32 26.2** | **+0.6** |
| | baz=316 | | | | | | | |
| **HARP** | **HAARP** | **81.39** | **21** | P | **P** | | **16 32 26.9** | **+0.8** |
| | baz=316 | | | | | | | |
| **MENT** | **Mentasta** | **81.45** | **20** | P | **P** | | **16 32 26.9** | **+0.5** |
| MENT | | | | | IAmb | IAmb | 16 34 52.4 | |
| | comp=Z,44nm,2.0s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **81.50** | **20** | P | **P** | | **16 32 28.0** | **+1.3** |
| L26K | | | | | IAmb | IAmb | 16 32 29.4 | |
| | comp=Z,39nm,1.9s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **81.50** | **20** | P | **P** | | **16 32 27.5** | **+0.8** |
| | baz=318 | | | | | | | |
| **KLU** | **Klutina** | **81.79** | **22** | P | **P** | | **16 32 29.3** | **+0.9** |
| | baz=316 | | | | | | | |
| **DAWY** | **Dawson** | **81.86** | **18** | P | **P** | | **16 32 29.3** | **+0.6** |
| **DAWY** | **Dawson** | **81.86** | **18** | P | **P** | | **16 32 29.4** | **+0.8** |
| | baz=321,SNR=5.6 | | | | | | | |
| **KDAK** | **Kodiak Island** | **81.86** | **27** | P | **P** | | **16 32 28.7** | **+0.1** |
| | comp=Z,20nm,0.8s,baz=7.9,slow=5.6,SNR=7.7 | | | | | | | |
| KDAK | | | | | LR | LR | 17 12 22.6 | |
| | comp=Z,236nm,18.2s,baz=303,slow=38 | | | | | | | |
| **KDAK** | **Kodiak Island** | **81.86** | **27** | P | **P** | | **16 32 29.5** | **+0.8** |
| KDAK | | | | pmax | pmax | | | |
| | comp=Z,120nm,1.5s | | | | | | | |
| **KDAK** | **Kodiak Island** | **81.86** | **27** | P | **P** | | **16 32 29.5** | **+0.8** |
| **KDAK** | **Kodiak Island** | **81.86** | **27** | P | **P** | | **16 32 29.1** | **+0.4** |
| | baz=311 | | | | | | | |
| **J29M** | **Klondike Camp** | **81.88** | **18** | P | **P** | | **16 32 29.5** | **+0.8** |
| | baz=322,SNR=5.4 | | | | | | | |
| **L27K** | **Beaver Creek,** | **81.93** | **20** | P | **P** | | **16 32 30.1** | **+1.1** |
| **L27K** | **Beaver Creek,** | **81.93** | **20** | P | **P** | | **16 32 29.7** | **+0.7** |
| | baz=319 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **81.94** | **20** | P | **P** | | **16 32 30.4** | **+1.3** |
| **M26K** | **Nabesna, AK** | **82.07** | **21** | P | **P** | | **16 32 31.1** | **+1.3** |
| M26K | | | | | IAmb | IAmb | 16 33 03.7 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **M26K** | **Nabesna, AK** | **82.07** | **21** | P | **P** | | **16 32 30.1** | **+0.4** |
| | baz=318 | | | | | | | |
| **N25K** | **Chitina, Valde** | **82.15** | **22** | P | **P** | | **16 32 29.9** | **-0.3** |
| N25K | | | | | IAmb | IAmb | 16 32 38.9 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **N25K** | **Chitina, Valde** | **82.15** | **22** | P | **P** | | **16 32 30.7** | **+0.5** |
| | baz=317 | | | | | | | |
| **NUUK** | **Nuuk** | **82.32** | **343** | *i* P | **P** | | **16 32 28.6** | **-2.3** |
| NUUK | | | | | IAmb | IAmb | 16 32 32.1 | |
| | comp=Z,31nm,0.8s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.45** | **20** | P | **P** | | **16 32 32.4** | **+0.5** |
| M27K | | | | | IAmb | IAmb | 16 33 56.2 | |
| | comp=Z,64nm,1.9s | | | | | | | |
| **GLB** | **Gilahina Butte** | **82.52** | **22** | P | **P** | | **16 32 33.4** | **+1.2** |
| GLB | | | | | IAmb | IAmb | 16 35 10.0 | |
| | comp=Z,64nm,1.9s | | | | | | | |
| **NRS** | **Narsarsuaq** | **82.78** | **338** | *i* P | **P** | | **16 32 32.7** | **-0.6** |
| **WAX** | **Waxell Ridge** | **83.58** | **22** | P | **P** | | **16 32 38.6** | **+1.0** |
| **YAH** | **Yahtse** | **84.00** | **22** | P | **P** | | **16 32 40.4** | **+0.4** |
| **M31M** | **Drury Creek, Y** | **84.72** | **18** | P | **P** | | **16 32 43.2** | **-0.2** |
| | baz=326 | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **84.93** | **19** | P | **P** | | **16 32 44.5** | **+0.1** |
| **N31M** | **Braeburn, Yuko** | **84.93** | **19** | P | **P** | | **16 32 44.8** | **+0.4** |
| | baz=324 | | | | | | | |
| **HYT** | **Haines Junctio** | **84.96** | **20** | P | **P** | | **16 32 44.3** | **-0.4** |
| | baz=323 | | | | | | | |
| **SUR** | **Sutherland** | **85.81** | **230** | LR | LR | | 17 08 36.5 | |
| | comp=Z,76nm,19.5s,baz=144,slow=34 | | | | | | | |
| **WHY** | **Whitehorse** | **85.86** | **19** | P | **P** | | **16 32 49.1** | **-0.1** |
| WHY | | | | | IAmb | IAmb | 16 33 02.9 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **WHY** | **Whitehorse** | **85.86** | **19** | P | **P** | | **16 32 48.9** | **-0.3** |
| | baz=325 | | | | | | | |
| **FRB** | **Frobisher Bay** | **86.42** | **349** | LR | LR | | 17 15 58.2 | |
| | comp=Z,135nm,18.7s,baz=158,slow=39 | | | | | | | |
| **SKAG** | **Skagway** | **86.71** | **20** | P | **P** | | **16 32 53.0** | **-0.2** |
| | baz=325 | | | | | | | |
| **P33M** | **Teslin, Yukon** | **86.80** | **18** | P | **P** | | **16 32 53.6** | **-0.2** |
| P33M | | | | | IAmb | IAmb | 16 33 01.8 | |
| | comp=Z,32nm,1.6s | | | | | | | |
| **P33M** | **Teslin, Yukon** | **86.80** | **18** | P | **P** | | **16 32 53.5** | **-0.3** |
| | baz=327 | | | | | | | |
| **DBIC** | **Dimbokro** | **87.20** | **276** | P | **P** | | **16 32 56.7** | **+0.3** |
| | comp=Z,3.8nm,0.5s,baz=61,slow=6.8,SNR=7.6 | | | | | | | |
| **DBIC** | **Dimbokro** | **87.20** | **276** | P | **P** | | **16 32 54.8** | **-1.6** |
| DBIC | | | | | IAmb | IAmb | 16 32 57.7 | |
| | comp=Z,27nm,1.7s | | | | | | | |
| **KIC** | **Kosan Boka** | **87.24** | **276** | *e*P | **P** | | **16 32 56.7** | **0.0** |
| | comp=Z,8.2nm,0.7s | | | | | | | |
| **TIC** | **Toumodi** | **87.36** | **276** | *e*P | **P** | | **16 32 57.3** | **+0.1** |
| **LIC** | **Lamto** | **87.56** | **276** | *e*P | **P** | | **16 32 58.2** | **0.0** |
| | comp=Z,22nm,1.1s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.53** | **9** | P | **P** | | **16 33 01.8** | **-0.1** |
| | comp=Z,3.9nm,0.7s,baz=335,slow=4.9,SNR=59 | | | | | | | |
| YKA | | | | PP | | **PP** | **16 36 33.5** | **+4.2** |
| | comp=Z,0.3nm,0.6s,baz=343,slow=7.3,SNR=3.9 | | | | | | | |
| YKA | | | | PKKPbc | PKKPbc | | 16 50 52.3 | +7.9 |
| | comp=Z,0.1nm,0.4s,baz=160,slow=2.0,SNR=3.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.53** | **9** | P | **P** | | **16 33 01.3** | **-0.6** |
| **FCC** | **Fort Churchill** | **93.70** | **360** | P | **P** | | **16 33 25.5** | **-0.5** |
| FCC | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **FCC** | **Fort Churchill** | **93.70** | **360** | P | **P** | | **16 33 25.5** | **-0.5** |
| FCC | | | | | IAmb | IAmb | 16 33 27.0 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **SCHQ** | **Schefferville** | **94.26** | **344** | P | **P** | | **16 33 28.6** | **-0.1** |
| | comp=Z,3.3nm,0.9s,baz=33,slow=4.5,SNR=5.4 | | | | | | | |
| SCHQ | | | | PP | | **PP** | **16 37 16.4** | **+1.7** |
| | comp=Z,2.5nm,0.7s,baz=2.3,slow=5.5,SNR=4.9 | | | | | | | |
| **SYO** | **Syowa Base** | **102.21** | **195** | *e*Pdiff | | **Pdif** | **16 34 07.0** | **+3.2** |
| **SYO** | **Syowa Base** | **102.21** | **195** | *es*Pdiff | | **Pdif** | **16 34 16.0** | **+12** |
| **K02D** | **Willamette Mer** | **104.84** | **22** | P | | **Pdif** | **16 34 15.6** | **-0.8** |
| | baz=334 | | | | | | | |
| **T25A** | **Trinidad** | **114.68** | **9** | P | | **PKiKP** | **16 38 50.0** | **-0.5** |
| | baz=351 | | | | | | | |
| **TZTN** | **Tazewell** | **115.10** | **350** | P | | **PKiKP** | **16 38 49.8** | **-1.2** |
| | baz=11 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **117.61** | **4** | P | | **PKPdf** | **16 38 54.9** | **-1.0** |
| | baz=356 | | | | | | | |
| **QSPA** | **South Pole Qui** | **117.67** | **180** | PKPdf | | **PKPdf** | **16 38 54.4** | **-0.5** |
| **X40A** | **Basin Creek Fa** | **117.97** | **358** | P | | **PKPdf** | **16 38 55.6** | **-1.0** |
| | baz=1.9 | | | | | | | |
| **NBCL** | **Cascavel-CE** | **121.64** | **283** | *e*P | | **PKiKP** | **16 39 05.5** | **+1.2** |
| **TXAR** | **Lajitas Array** | **122.46** | **9** | PKP | | **PKPdf** | **16 39 05.3** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=128,slow=1.1,SNR=4.8 | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPab** | **16 49 05.0** | **+2.0** |
| | comp=Z,0.4nm,0.9s,baz=185,slow=5.8,SNR=3.6 | | | | | | | |
| **MAN01** | **Angra dos Reis** | **134.28** | **264** | *e*P | | **PKiKP** | **16 39 29.7** | **+0.3** |
| **IPMB** | **Ipameri, GO** | **136.43** | **273** | *e*P | | **PKPdf** | **16 39 32.6** | **+0.5** |
| **PTGB** | **Pitanga** | **141.92** | **265** | *e*P | | **PKPdf** | **16 39 42.7** | **+0.7** |
| **AQDB** | **Aquidauana** | **143.92** | **273** | *e*P | | **PKPdf** | **16 39 44.8** | **-0.7** |
| **PLTB** | **Pedras Altas** | **144.41** | **254** | PKPdf | | PKPbc | 16 39 45.2 | +0.5 |
| **VILB** | **Vilhena** | **144.71** | **288** | *e*P | | **PKPdf** | **16 39 46.9** | **-0.2** |
| **PTLB** | **Pontes e Lacer** | **144.98** | **283** | *e*P | | **PKPdf** | **16 39 47.6** | **+0.2** |
| **TBTG** | **Tabatinga, AM** | **146.76** | **311** | *e*P | | **PKPdf** | **16 39 50.9** | **+0.3** |
| **CPUP** | **Villa Florida** | **146.91** | **264** | PKPbc | | **PKPdf** | **16 39 50.6** | **+0.1** |
| | comp=Z,2.0nm,0.4s,baz=89,slow=6.6,SNR=5.9 | | | | | | | |
| **CPUP** | **Villa Florida** | **146.91** | **264** | *e*P | | **PKPbc** | **16 39 51.8** | **-0.7** |
| **ETMB** | **Extrema** | **147.87** | **298** | *e*P | | **PKPbc** | **16 39 54.9** | **-0.5** |
| **OTAV** | **Otavalo** | **148.07** | **328** | *e*P | | **PKPdf** | **16 39 54.0** | **+0.6** |
| **CZSB** | **Cruzeiro do Su** | **151.23** | **310** | *e*P | | **PKPdf** | **16 39 59.1** | **+1.2** |
| **LPAZ** | **La Paz** | **153.01** | **290** | *e*P | | **PKPdf** | **16 40 02.0** | **+0.9** |
| **LVC** | **Limon Verde** | **156.25** | **277** | *e*P | | **PKPdf** | **16 40 06.2** | **+1.0** |

*EAF **05** 16:33:19.5±2.1,25°.86S×29°.55E,h24km±20km,MD3.7*
**BUL 05 16:33:19.5±1.0,25°.88S×29°.52E,h23km±10km,MD3.9,**
**South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.43** | **100** | *e*P | | Pn | 16 33 58.2 | +0.4 |
| CNG | | | | *e*S | | Sn | 16 34 25.7 | -1.2 |
| **CNG** | **Changalane** | **2.43** | **100** | *e*P | | Pn | 16 33 58.2 | +0.4 |
| CNG | | | | *e*S | | Sn | 16 34 25.7 | -1.2 |
| **MOPA** | **Mopani** | **2.91** | **36** | *e*P | | Pn | 16 34 03.0 | -1.4 |
| MOPA | | | | *e*S | | Sn | 16 34 34.0 | -4.6 |
| **MOPA** | **Mopani** | **2.91** | **36** | *e*P | | Pn | 16 34 03.0 | -1.4 |
| MOPA | | | | *e*S | | Sn | 16 34 34.0 | -4.6 |
| **MSNA** | **Messina** | **3.55** | **8** | *e*P | | Pn | 16 34 13.5 | +0.2 |
| MSNA | | | | *e*S | | Sn | 16 34 52.4 | -2.1 |
| **MSNA** | **Messina** | **3.55** | **8** | *e*P | | Pn | 16 34 13.5 | +0.2 |
| MSNA | | | | *e*S | | Sn | 16 34 52.4 | -2.1 |
| **LBTB** | **Lobatse** | **3.65** | **283** | *e*P | | Pn | 16 34 14.2 | -0.6 |
| LBTB | | | | *e*S | | Sn | 16 34 55.0 | -2.2 |
| **LBTB** | **Lobatse** | **3.65** | **283** | *e*P | | Pn | 16 34 14.2 | -0.6 |
| LBTB | | | | *e*S | | Sn | 16 34 55.0 | -2.2 |
| **BOSA** | **Boshof** | **4.67** | **233** | *e*P | | Pn | 16 34 27.6 | -1.2 |
| BOSA | | | | *e*S | | Sn | 16 35 19.5 | -3.0 |
| **BOSA** | **Boshof** | **4.67** | **233** | *e*P | | Pn | 16 34 27.6 | -1.2 |
| BOSA | | | | *e*S | | Sn | 16 35 19.5 | -3.0 |
| **MATP** | **Matopo** | **5.51** | **350** | *e*P | | Pn | 16 34 40.3 | 0.0 |
| MATP | | | | *e*S | | Sn | 16 35 37.8 | -5.2 |
| **MATP** | **Matopo** | **5.51** | **350** | *e*P | | Pn | 16 34 40.3 | 0.0 |
| MATP | | | | *e*S | | Sn | 16 35 37.8 | -5.2 |
| **BLWY** | **Bulawayo** | **5.77** | **351** | *e*P | | Pn | 16 34 43.4 | -0.6 |
| BLWY | | | | *e*S | | Sn | 16 35 45.1 | -4.6 |
| **BLWY** | **Bulawayo** | **5.77** | **351** | *e*P | | Pn | 16 34 43.4 | -0.6 |
| BLWY | | | | *e*S | | Sn | 16 35 45.1 | -4.6 |

*OTT **05** 17:06:01.7±0.1,52°.75N×67°.42W,h0km,MN3.7/17,*
*Probable blast, west of Fermont, Qc Mining explosion.*
*IDC **05** 17:06:02.3±0.2,53°.12N×68°.56W,h0km,mb3.5/3,*
*mb1 4.1/5,mb1mx3.5/43,mbtmp3.9/5,ML4.5/2,Error*
*ellipse: s-maj=5.1km s-min=0.9km az=124.0*
**ISC 05 17:05:58.3±0.7,52°.80N±0°.04×67°.45W±0°.05,h0km,n24,**
**σ2s36/38,mb3.2/3,Northern Quebec**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **SCHQ** | **Schefferville** | **2.07** | **10** | PN | | **Pb** | **17 06 37.5** | **+0.9** |
| | 135nm,0.3s,baz=201,slow=15,SNR=2007 | | | | | | | |
| SCHQ | | | | Lg | | Lg | 17 07 05.3 | |
| | 230nm,0.3s,baz=328,slow=8.7,SNR=34 | | | | | | | |
| **SCHQ** | **Schefferville** | **2.07** | **10** | PN | | **Pg** | **17 06 37.8** | **0.0** |
| SCHQ | | | | SN | | **Sg** | **17 07 05.7** | **+1.1** |
| SCHQ | | | | Trac | | | 17 07 06.7 | |
| | comp=Z,516nm,0.2s | | | | | | | |
| **SMQ** | **Clarke City** | **2.63** | **169** | PN | | **Pn** | **17 06 43.8** | **+1.9** |
| SMQ | | | | SN | | **Sn** | **17 07 15.2** | **+0.8** |
| SMQ | | | | Trac | | | 17 07 22.6 | |
| | comp=Z,154nm,0.2s | | | | | | | |
| **ICQ** | **Pointe Anglais** | **3.29** | **178** | PN | | **Pn** | **17 06 52.6** | **+1.6** |
| ICQ | | | | SN | | **Sn** | **17 07 32.0** | **+1.3** |
| ICQ | | | | Trac | | | 17 07 48.5 | |
| | comp=Z,151nm,0.2s | | | | | | | |
| **CNQ** | **Baie Comeau** | **3.53** | **187** | PN | | **Pn** | **17 06 56.3** | **+2.0** |
| CNQ | | | | SN | | **Sn** | **17 07 38.6** | **+1.9** |
| CNQ | | | | Trac | | | 17 07 57.0 | |
| | comp=Z,79nm,0.2s | | | | | | | |
| **BACQ** | **Baie-Comeau** | **3.54** | **188** | PN | | **Pn** | **17 06 56.9** | **+2.4** |
| BACQ | | | | SN | | **Sn** | **17 07 37.5** | **+0.5** |
| BACQ | | | | Trac | | | 17 07 52.0 | |
| | comp=Z,81nm,0.2s | | | | | | | |
| **NATG** | **Natashquan Que** | **3.84** | **129** | PN | | **Pn** | **17 07 00.3** | **+1.8** |
| NATG | | | | SN | | **Sn** | **17 07 44.4** | **+0.1** |
| NATG | | | | Trac | | | 17 08 01.2 | |
| | comp=Z,59nm,0.2s | | | | | | | |
| **GSQ** | **Grosses Roches** | **3.90** | **177** | PN | | **Pn** | **17 07 01.7** | **+2.2** |
| GSQ | | | | SN | | **Sn** | **17 07 46.1** | **+0.1** |
| GSQ | | | | Trac | | | 17 08 01.0 | |
| | comp=Z,64nm,0.2s | | | | | | | |
| **LG4Q** | **La Grande 4** | **4.08** | **284** | PN | | **Pn** | **17 07 04.5** | **+2.6** |
| LG4Q | | | | SN | | **Sn** | **17 07 53.5** | **+3.2** |
| LG4Q | | | | Trac | | | 17 08 19.1 | |
| | comp=Z,62nm,0.3s | | | | | | | |
| **PCAQ** | **Pointe Carleto** | **4.18** | **136** | PN | | **Pn** | **17 07 05.0** | **+1.8** |
| PCAQ | | | | SN | | **Sn** | **17 07 50.7** | **-2.0** |
| PCAQ | | | | Trac | | | 17 08 09.5 | |
| | comp=Z,74nm,0.4s | | | | | | | |
| **FORQ** | **Forestville** | **4.19** | **195** | PN | | **Pn** | **17 07 05.9** | **+2.5** |
| FORQ | | | | Trac | | | 17 08 14.4 | |
| | comp=Z,31nm,0.2s | | | | | | | |
| **A21** | **Saint Andre** | **5.30** | **197** | PN | | **Pn** | **17 07 20.4** | **+1.8** |
| A21 | | | | SN | | **Sn** | **17 08 18.5** | **-1.9** |
| A21 | | | | Trac | | | 17 08 22.5 | |
| | comp=Z,70nm,0.2s | | | | | | | |
| **MKVL** | **Makkovik** | **5.39** | **62** | PN | | **Pn** | **17 07 23.1** | **+3.2** |
| MKVL | | | | SN | | **Sn** | **17 08 22.5** | **-0.1** |
| MKVL | | | | Trac | | | 17 08 50.7 | |
| | comp=Z,57nm,0.3s | | | | | | | |
| **LMQ** | **La Malbaie** | **5.58** | **200** | PN | | **Pn** | **17 07 24.2** | **+1.8** |
| LMQ | | | | Trac | | | 17 08 31.2 | |
| | comp=Z,44nm,0.3s | | | | | | | |
| **BATG** | **Bathurst New B** | **5.60** | **170** | PN | | **Pn** | **17 07 23.9** | **+1.1** |
| BATG | | | | Trac | | | 17 08 37.6 | |
| | comp=Z,11nm,0.2s | | | | | | | |
| **A54** | **Misere** | **5.68** | **201** | PN | | **Pn** | **17 07 25.5** | **+1.6** |
| A54 | | | | Trac | | | 17 09 02.3 | |
| | comp=Z,31nm,0.3s | | | | | | | |
| **KJKQ** | **Kuujjuarapik** | **6.55** | **296** | PN | | **Pn** | **17 07 37.8** | **+2.1** |
| KJKQ | | | | Trac | | | 17 08 56.0 | |
| | comp=Z,11nm,0.1s | | | | | | | |
| **DPQ** | **Saint Jean** | **7.03** | **211** | PN | | **Pn** | **17 07 43.8** | **+1.4** |
| DPQ | | | | SN | | **Sn** | **17 09 00.7** | **-2.3** |
| DPQ | | | | Trac | | | 17 09 39.8 | |
| | comp=Z,23nm,0.3s | | | | | | | |
| **FRB** | **Frobisher Bay** | **10.99** | **357** | Pn | | **Pn** | **17 08 36.1** | **-0.4** |
| | 4.4nm,0.3s,baz=179,slow=15,SNR=62 | | | | | | | |
| FRB | | | | | | Sn | **Sn** | **17 10 33.6** | **-6.4** |
| | 2.6nm,0.3s,baz=91,slow=16,SNR=8.3 | | | | | | | |
| FRB | | | | | | Lg | Lg | 17 11 39.8 | |
| | 1.6nm,0.3s,baz=92,slow=20,SNR=4.6 | | | | | | | |
| **SADO** | **Sadowa** | **11.13** | **228** | Pn | | **Pn** | **17 08 38.8** | **+0.2** |
| | 2.5nm,0.3s,baz=71,slow=10,SNR=20 | | | | | | | |
| SADO | | | | | | Sn | **Sn** | **17 10 37.3** | **-6.3** |
| | 2.6nm,0.3s,baz=137,slow=0.2,SNR=6.4 | | | | | | | |
| SADO | | | | | | Lg | Lg | 17 11 44.3 | |
| | 2.4nm,0.3s,baz=71,slow=3.7,SNR=4.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **26.43** | **310** | P | | **P** | **17 11 34.5** | **-1.9** |
| | 0.1nm,0.3s,baz=89,slow=9.4,SNR=2.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **29.62** | **267** | P | | **P** | **17 12 03.6** | **-1.7** |
| | 0.2nm,0.5s,baz=71,slow=12,SNR=2.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **42.88** | **31** | P | | **P** | **17 14 00.4** | **+2.6** |
| | 2.9nm,0.9s,baz=291,slow=7.6,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **146.68** | **323** | PKPbc | | **PKPab** | **17 25 44.4** | **+1.4** |
| | 0.5nm,0.6s,baz=22,slow=2.9,SNR=14 | | | | | | | |

*IDC **05** 16:32:10.2±9.0,22°.86N×143°.50E,h75km±83km,mb3.5/11,*
*mb1 3.6/12,mb1mx3.3/52,mbtmp3.7/12,ML3.2/1,MS2.3/1,*
*Ms1 2.3/1,ms1mx2.1/51,Error ellipse: s-maj=32.6km*
*s-min=17.7km az=91.0*
**ISC 05 16:32:07.3±0.9,22°.8N±0°.1×143°.5E±0°.2,h48km,n16,**
**σ0s67/12,mb3.6/11,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **9.29** | **172** | LR | | LR | 16 37 16.3 | |
| | comp=Z,21nm,20.3s,baz=108,slow=33 | | | | | | | |
| **KSR

**NNA Nana 4.70 207** Pn **Pn** 17 45 57.1 +2.2
NNA Sn **Sn** 17 46 47.6 -1.5
**TBTG Tabatinga, AM 5.92 53** eP **Pn** 17 46 10.6 -0.5
**TBTG Tabatinga, AM 5.92 53** **Pn** 17 46 10.9 -0.1
**ETMB Extrema 8.58 104** Pn **Pn** 17 46 45.0 -1.5
ETMB Sn **Sn** 17 48 16.8 -5.2
**OTAV Otavalo 8.83 334** eP **Pn** 17 46 49.4 -0.9
**OTAV Otavalo 8.83 334** Pn **Pn** 17 46 51.5 +1.2
**LPAZ La Paz 10.58 144** P **Pn** 17 47 13.5 -0.2
4.0nm,0.3s,baz=327,slow=8.2,SNR=50
LPAZ LR 17 52 09.3
comp=Z,63nm,19.3s,baz=40,slow=42
**LPAZ La Paz 10.58 144** eP **Pn** 17 47 13.1 -0.6
**AP01 Chacalluta 11.32 159** Pn **Pn** 17 47 23.8 +1.0
**PB12 IPOC Station P 11.55 159** Pn **Pn** 17 47 28.5 +2.6
**PB16 IPOC Station P 11.62 155** **Pn** 17 47 25.4 -1.7
**MNMC Minye Minye 12.30 157** **Pn** 17 47 35.7 -0.1
**ROSC El Rosal 12.55 2** Pn **Pn** 17 47 41.0 +1.9
**PB11 IPOC Station P 12.85 158** Pn **Pn** 17 47 42.7 0.0
**GO01 Chusmiza 12.94 156** **Pn** 17 47 43.9 -0.4
**PB08 IPOC Station P 13.38 157** **Pn** 17 47 49.3 -0.5
**PB01 IPOC Station P 14.09 160** P **Pn** 17 47 57.4 -1.1
**PB02 IPOC Station P 14.21 162** P **Pn** 17 47 59.3 -0.7
**PB07 IPOC Station P 14.60 162** P **Pn** 17 48 04.6 -0.3
**MACA Manacapuru-AM 14.64 72** eP **Pn** 17 48 03.4 -1.9
**MACA Manacapuru-AM 14.64 72** **Pn** 17 48 03.2 -2.1
**PB09 IPOC Station P 14.87 160** P **Pn** 17 48 07.9 -0.3
**PB03 IPOC Station P 14.94 162** P **Pn** 17 48 07.9 -1.2
**PB04 IPOC Station P 15.10 164** P **Pn** 17 48 11.4 +0.3
PB04 IAmb IAmb 17 48 44.5
comp=Z,87nm,1.7s
**VILB Vilhena 15.11 111** eP **Pn** 17 48 12.0 +0.8
**VILB Vilhena 15.11 111** **Pn** 17 48 11.8 +0.6
**ZARC Zaragoza, Cauc 15.18 359** P **P** 17 48 12.2 -1.4
**SIV San Ignacio 15.58 123** P **Pn** 17 48 17.4 +0.5
comp=Z,3.5nm,0.3s,baz=305,slow=10,SNR=39
**PB06 IPOC Station P 15.62 162** P **Pn** 17 48 15.6 -1.9
PB06 IAmb IAmb 17 48 31.4
comp=Z,14nm,0.6s
**LVC Limon Verde 15.74 160** P **Pn** 17 48 19.0 -0.2
comp=Z,0.3nm,0.3s,baz=103,slow=17,SNR=2.0
**LVC Limon Verde 15.74 160** eP **P** 17 48 21.1 +1.1
**LVC Limon Verde 15.74 160** P **Pn** 17 48 16.5 -2.7
**PB15 IPOC Station P 16.12 163** P **Pn** 17 48 23.9 +0.2
PB15 IAmb IAmb 17 48 40.6
comp=Z,48nm,1.7s
**PB10 IPOC Station P 16.12 166** P **Pn** 17 48 23.8 +0.3
**PTGA Pitinga 16.23 65** P **Pn** 17 48 24.6 -0.3
comp=Z,3.4nm,0.3s,baz=240,slow=14,SNR=26
**PTLB Pontes e Lacer 16.99 118** eP **Pn** 17 48 34.9 +0.8
**PTLB Pontes e Lacer 16.99 118** P **P** 17 48 34.5 +1.1
PTLB IAmb IAmb 17 48 37.3
comp=Z,26nm,0.7s
**SDV Santo Domingo 17.04 14** P **Pn** 17 48 35.0 +0.1
comp=Z,0.7nm,0.3s,baz=204,slow=6.5,SNR=5.4
**SDV Santo Domingo 17.04 14** eP **P** 17 48 32.6 -1.7
**SDV Santo Domingo 17.04 14** P **Pn** 17 48 36.5 +1.6
**BOAV Boa Vista 17.35 55** eP **P** 17 48 37.7 +0.2
**BOAV Boa Vista 17.35 55** P **P** 17 48 36.4 -1.1
**SJCC San Jacinto, C 17.58 358** P **P** 17 48 39.6 -0.4
**BAUV El Baul 17.88 22** P **P** 17 48 41.8 -1.4
**PDRB Porto dos Gac 18.07 104** eP **P** 17 48 46.6 +1.2
**CLDB Colider 18.86 101** eP **P** 17 48 52.6 -1.3
**ITTB Itaituba 19.11 81** eP **P** 17 48 57.5 +0.8
**NPGB Novo Progresso 19.15 89** eP **P** 17 48 57.0 -0.1
**BIRV Birongo 19.97 25** P **P** 17 49 05.8 -0.2
**SALV Santo Antonio 20.22 115** eP **P** 17 49 10.1 +1.6
**MALB Monte Alegre 21.14 75** eP **P** 17 49 19.3 +0.8
**PP1B Ponte de Pedra 21.59 119** eP **P** 17 49 25.5 +2.2
**AQDB Aquidauana 22.25 126** eP **P** 17 49 31.5 +1.5
**AQDB Aquidauana 22.25 126** P **P** 17 49 30.6 +0.6
AQDB IAmb IAmb 17 49 33.4
comp=Z,20nm,0.8s
**SNDB Serra Nova Dou 23.38 102** eP **P** 17 49 40.8 +0.3
**ARAG Araguaiana, MT 23.69 111** eP **P** 17 49 43.9 +0.5
**MCPB Macapa, AP 23.70 73** eP **P** 17 49 43.9 +0.4
**PRPB Paraupebas 24.70 88** eP **P** 17 49 51.8 -0.8
**CPUP Villa Florida 24.73 140** P **P** 17 49 52.7 +0.1
comp=Z,3.9nm,0.7s,baz=331,slow=11,SNR=9.3
**CPUP Villa Florida 24.73 140** P **P** 17 49 51.6 -1.0
CPUP IAmb IAmb 17 49 53.9
comp=Z,40nm,1.8s
**MDP Montagnes des 25.42 60** P **P** 17 50 00.6 +1.5
comp=Z,7.5nm,0.8s,baz=217,slow=12,SNR=4.9
**PEXB Peixe 26.30 102** eP **P** 17 50 07.3 +0.3
**ITRB Iturama 26.36 119** eP **P** 17 50 07.9 +0.4
**PCMB Pacaembu 26.41 124** eP **P** 17 50 06.4 -1.6
**MTO3 Montecristo 26.44 326** P **P** 17 50 09.7 +1.3
MTO3 IAmb IAmb 17 50 12.5
comp=Z,20nm,0.8s
**DR12 Loma Pena Alta 26.92 11** P **P** 17 50 13.2 +0.8
**HUMP Col San Antoni 27.19 19** P **P** 17 50 13.0 -1.9
**BDFB Brasilia 27.20 109** P **P** 17 50 16.5 +1.3
comp=Z,3.4nm,0.5s,baz=269,slow=8.6,SNR=5.5
**BDFB Brasilia 27.20 109** IAmb IAmb 17 50 51.2
comp=Z,7.7nm,0.7s
**MTP Monte Pirata 27.25 19** P **P** 17 50 14.2 -1.1
**PTGB Pitanga 27.37 131** eP **P** 17 50 16.8 +0.2
**CUPR Culebra, Puert 27.53 20** P **P** 17 50 17.4 -0.5
**ITQB Itaqui 27.58 144** eP **P** 17 50 17.6 -0.7
ITQB epP **pP** 17 50 50.5 +0.1
**ITQB Itaqui 27.58 144** P **P** 17 50 16.6 -1.7
ITQB IAmb IAmb 17 50 51.6
comp=Z,33nm,1.3s
**IPMB Ipameri, GO 27.66 114** eP **P** 17 50 19.3 +0.1
**ITAB Concordia 28.80 135** P **P** 17 50 28.3 -0.9
**JANB Januaria 30.58 106** eP **P** 17 50 43.2 -1.8
**PLTB Pedras Altas 30.88 143** P **P** 17 50 45.0 -2.5
PLTB IAmb IAmb 17 51 09.1
comp=Z,31nm,1.7s
**BSCB Bom Sucesso 31.70 118** eP **P** 17 50 54.3 -0.6
**DIAM Diamantina, MG 31.88 112** eP **P** 17 50 56.5 -0.1
DIAM epP **pP** 17 51 31.0 +1.9
**PLCA Paso Flores 33.01 174** P **P** 17 51 08.2 +2.2
comp=Z,0.8nm,0.5s,baz=342,slow=9.6,SNR=3.8
**PLCA Paso Flores 33.01 174** IAmb IAmb 17 51 22.2
comp=Z,14nm,1.6s
**NBPN Ponto Novo - B 34.12 98** eP **P** 17 51 15.6 -0.4
**SJMB Sao Joao De Ma 34.27 112** eP **P** 17 51 17.1 0.0
**GDU01 Guandu, BA 34.93 103** eP **P** 17 51 22.4 -0.5
**CMC01 Camacan, BA 35.19 106** eP **P** 17 51 24.9 -0.1
**NBAN Anadia - AL 37.97 96** eP **P** 17 51 48.3 -0.4
**152A Waverly Hall 41.36 347** P **P** 17 52 16.5 +0.1
152A IAmb IAmb 17 52 17.6
comp=Z,14nm,0.8s
**Y49A Blount Mountai 42.90 346** P **P** 17 52 28.7 -0.1
**W50A Signal Mountai 43.93 347** P **P** 17 52 36.8 -0.3
W50A IAmb IAmb 17 52 37.5
comp=Z,10.0nm,0.7s
**CPCT Cooper Cave 44.00 348** P **P** 17 52 38.0 +0.3
**SWET Sewanee 44.08 347** P **P** 17 52 37.6 -0.7
SWET IAmb IAmb 17 53 05.5
comp=Z,12nm,1.1s
**435B Jarrell 44.21 331** P **P** 17 52 40.9 +1.5
435B IAmb IAmb 17 52 42.3
comp=Z,18nm,0.9s
**U54A Nelsons Funny 44.59 352** P **P** 17 52 43.1 +0.7
U54A IAmb IAmb 17 52 55.1
comp=Z,38nm,1.4s
**T59A Double "B" Far 44.61 357** P **P** 17 52 43.1 +0.7
T59A IAmb IAmb 17 53 00.9
comp=Z,35nm,1.6s
**T57A Hurt 44.76 355** P **P** 17 52 44.5 +0.9
**V48A Smith Brothers 44.79 346** P **P** 17 52 43.7 -0.2
V48A IAmb IAmb 17 52 44.2
comp=Z,11nm,0.6s
**TZTN Tazewell 44.88 350** P **P** 17 52 44.8 +0.1
**BLA Blacksburg 45.09 353** P **P** 17 52 47.3 +1.0
**S57A Dark Hollow, R 45.49 355** P **P** 17 52 50.6 +1.2
S57A IAmb IAmb 17 52 51.0
comp=Z,16nm,0.6s
**R58B Mineral 45.62 356** P **P** 17 52 50.9 +0.5
R58B IAmb IAmb 17 53 20.3
comp=Z,30nm,1.6s
**R55A Marlinton 46.12 354** P **P** 17 52 55.8 +1.5
R55A IAmb IAmb 17 53 27.1
comp=Z,38nm,1.4s
**TX31 Lajitas Ar. Si 46.29 324** P **P** 17 52 57.2 +1.3
TX31 IAmb IAmb 17 52 58.3
comp=Z,13nm,1.1s
**TX32 Lajitas Array 46.29 324** P **P** 17 52 57.1 +1.2
**TXAR Lajitas Array 46.29 324** P **P** 17 52 57.1 +1.1
comp=Z,1.9nm,0.7s,baz=149,slow=8.6,SNR=20
TXAR pP **pP** 17 53 29.2 -1.1
comp=Z,0.4nm,0.6s,baz=153,slow=7.4,SNR=2.7
TXAR PcP **PcP** 17 54 30.1 +1.3
comp=Z,0.5nm,0.6s,baz=138,slow=5.6,SNR=4.2
**TXAR Lajitas Array 46.29 324** P **P** 17 52 57.0 +1.1
TXAR pP **pP** 17 53 29.1 -1.2
TXAR PcP **PcP** 17 54 29.9 +1.0
**X37A Clayton 46.48 336** P **P** 17 52 58.5 +1.2
X37A IAmb IAmb 17 53 35.2
comp=Z,24nm,1.7s
**ABTX Abilene, Hawle 46.71 331** P **P** 17 52 60.0 +0.9
ABTX IAmb IAmb 17 53 01.3
comp=Z,13nm,0.7s
**Q56A Snyder Ridge, 46.78 355** P **P** 17 53 00.9 +1.5
**Q54A Coxs Mills 46.89 353** **P** 17 52 60.0 -0.3
Q54A IAmb IAmb 17 53 39.3
comp=Z,31nm,1.6s
**U40A Yellville 47.12 340** P **P** 17 53 01.5 -0.7
**W35A Tecumseh 47.59 335** P **P** 17 53 05.3 -0.5
W35A IAmb IAmb 17 53 06.9
comp=Z,12nm,0.6s
**O56A Blue Knob Stat 47.95 356** P **P** 17 53 08.6 0.0
O56A IAmb IAmb 17 53 32.3
comp=Z,24nm,1.3s
**SSPA Standing Stone 48.28 357** P **P** 17 53 10.2 -0.8
**S39A Bolivar 48.49 340** P **P** 17 53 12.1 -0.6
**M57A Sunshine Farm, 48.94 358** P **P** 17 53 16.5 +0.5
M57A IAmb IAmb 17 53 23.5
comp=Z,25nm,1.4s
**P43A Skaggs, Pawnee 49.16 345** P **P** 17 53 17.5 -0.2
P43A IAmb IAmb 17 53 18.5
comp=Z,17nm,0.8s
**M55A Ridgway 49.16 356** P **P** 17 53 18.6 +0.9
**M54A Oil Creek Stat 49.27 355** P **P** 17 53 19.4 +0.9
**SFIN Lafayette 49.29 347** P **P** 17 53 17.9 -0.8
**N47A Urbana 49.48 349** P **P** 17 53 19.4 -0.7
**KAN14 Manchester OK 49.58 335** P **P** 17 53 22.2 +1.2
KAN14 IAmb IAmb 17 53 49.3
comp=Z,13nm,1.2s
**HDIL Hopedale 49.96 345** P **P** 17 53 22.8 -1.0
**WVNY West Valley, N 50.08 356** P **P** 17 53 25.2 +0.5
**K57A Scipio Center 50.31 358** P **P** 17 53 26.5 +0.1
**J57A Williamstown 50.97 359** P **P** 17 53 32.1 +0.8
**ANMO Albuquerque 52.05 327** P **P** 17 53 40.7 +0.9
**DELO Deloro Mine 52.13 357** P **P** 17 53 40.0 +0.1
**T25A Trinidad 52.66 330** P **P** 17 53 45.3 +1.1
T25A IAmb IAmb 17 53 47.1
comp=Z,14nm,1.4s
**SDCO Great Sand Dun 53.68 330** P **P** 17 53 52.8 +1.0
SDCO IAmb IAmb 17 53 54.5
comp=Z,20nm,1.6s
**F64A Sherman 53.71 5** P **P** 17 53 52.0 +0.6
**LMN Caledonia Moun 54.12 8** P **P** 17 53 54.9 +0.4
**S22A 4UR Ranch, Cre 54.35 329** P **P** 17 53 57.5 +0.8
**E62A Clayton Lake 54.36 4** P **P** 17 53 56.6 +0.5
**ECSD EROS Data Cent 55.01 341** P **P** 17 54 00.9 -0.1
**COWI Conover 55.19 348** P **P** 17 54 02.0 -0.2
**WUAZ Wupatki 55.24 324** P **P** 17 54 04.1 +1.1
WUAZ IAmb IAmb 17 54 05.6
comp=Z,6.5nm,0.8s
**PV13 Radium Mtn., P 55.70 328** P **P** 17 54 06.3 0.0
PV13 IAmb IAmb 17 54 08.3
comp=Z,9.9nm,0.9s
**F36A Milaca 56.02 344** P **P** 17 54 07.3 -0.8
F36A IAmb IAmb 17 54 39.4
comp=Z,20nm,1.7s
**SRU San Rafael Swe 57.31 327** P **P** 17 54 18.2 +0.6
**EYMN Ely 57.46 347** P **P** 17 54 17.4 -0.7
EYMN IAmb IAmb 17 54 55.3
comp=Z,22nm,1.7s
**MTPU Mount Pierson 57.47 325** P **P** 17 54 19.0 +0.1
MTPU IAmb IAmb 17 54 35.0
comp=Z,8.5nm,1.5s
**RDMU Red Mountain 57.88 329** P **P** 17 54 21.8 +0.2
RDMU IAmb IAmb 17 54 23.3
comp=Z,4.9nm,0.7s
**DRLN Deer Lake 58.76 13** P **P** 17 54 27.4 +0.3
DRLN pP **pP** 17 55 02.0 -1.1
**E28A Huff 58.89 339** P **P** 17 54 28.2 0.0
**AGMN Agassiz Nation 58.89 344** P **P** 17 54 27.6 -0.6
AGMN IAmb IAmb 17 54 28.7
comp=Z,5.8nm,0.7s
**TPNV Topopah Spring 59.13 322** P **P** 17 54 31.9 +1.6
**DUG Dugway, Tooele 59.32 327** P **P** 17 54 32.1 +0.7
DUG IAmb IAmb 17 54 33.9
comp=Z,5.6nm,0.9s
**BW06 Boulder Array 59.52 331** P **P** 17 54 32.9 +0.1
BW06 PcP **PcP** 17 55 18.8 0.0
**PDAR Pinedale Array 59.52 331** P **P** 17 54 33.4 +0.5
comp=Z,0.8nm,0.6s,baz=131,slow=7.6,SNR=7.4
PDAR PcP **PcP** 17 55 19.2 +0.5
comp=Z,0.8nm,0.5s,baz=132,slow=5.4,SNR=9.0
**PDAR Pinedale Array 59.52 331** P **P** 17 54 33.3 +0.5
PDAR PcP **PcP** 17 55 18.7 0.0
**R11A Troy Canyon, C 59.64 323** P **P** 17 54 35.2 +1.5
**LOHW Long Hollow 60.66 331** P **P** 17 54 41.7 +1.1
**ULM Lac du Bonnet 60.67 345** P **P** 17 54 40.0 -0.3
comp=Z,4.0nm,0.4s,baz=135,slow=7.2,SNR=6.4
**ULM Lac du Bonnet 60.67 345** P **P** 17 54 39.4 -0.9
ULM IAmb IAmb 17 54 40.4
comp=Z,6.1nm,0.6s
**MOOW Moose Ponds 60.82 331** P **P** 17 54 42.0 +0.3
**NVAR Mina Array Bea 61.33 322** P **P** 17 54 45.4 +0.2
comp=Z,1.0nm,0.7s,baz=129,slow=7.8,SNR=8.9
NVAR PcP **PcP** 17 55 27.4 +1.3
comp=Z,0.8nm,0.7s,baz=129,slow=5.2,SNR=6.6
**NVAR Mina Array Bea 61.33 322** P **P** 17 54 45.1 -0.1
**YMR Madison River 61.62 331** P **P** 17 54 47.9 +0.9
YMR IAmb IAmb 17 54 49.8
comp=Z,5.6nm,0.8s
**YHH Holmes Hill 61.65 331** P **P** 17 54 48.1 +0.8
YHH IAmb IAmb 17 54 50.3
comp=Z,6.5nm,1.1s
**SCHQ Schefferville 62.73 5** P **P** 17 54 53.7 -0.3
comp=Z,1.4nm,0.5s,baz=198,slow=3.7,SNR=7.5
**SCHQ Schefferville 62.73 5** P **P** 17 54 54.0 0.0
**MFID Camas Ranch 63.17 327** P **P** 17 54 58.3 +1.0
MFID IAmb IAmb 17 54 59.8
comp=Z,7.1nm,0.9s
**HRY Holter Researc 63.54 332** P **P** 17 55 00.8 +1.1
**ORV Oroville 63.99 321** P **P** 17 55 04.1 +1.5
ORV IAmb IAmb 17 55 05.3
comp=Z,8.5nm,1.1s
**PLID Pearl Lake 64.41 329** P **P** 17 55 05.3 -0.2
**I07A Izee 65.61 326** P **P** 17 55 14.2 +1.1
I07A IAmb IAmb 17 55 15.7
comp=Z,7.1nm,1.0s
**EDM Edmonton 69.06 336** P **P** 17 55 34.6 +0.1
EDM IAmb IAmb 17 55 35.8
comp=Z,14nm,0.8s
**LIC Lamto 70.82 81** eP **P** 17 55 45.4 -0.6
comp=Z,7.5nm,0.3s
**TIC Toumodi 70.91 80** eP **P** 17 55 46.0 -0.6
**DBIC Dimbokro 71.07 80** P **P** 17 55 47.6 +0.1
comp=Z,9.9nm,0.4s,baz=265,slow=4.1,SNR=15
**DBIC Dimbokro 71.07 80** P **P** 17 55 46.6 -0.9
DBIC IAmb IAmb 17 55 52.5
comp=Z,17nm,1.1s
**KIC Kosan Boka 71.13 81** eP **P** 17 55 47.7 -0.2
comp=Z,18nm,0.5s
**PPT2 Papeete2 73.36 254** eS **SKiKP** 18 05 09.5 -7.6
comp=Z,213nm,25.5s
PPT2 eLR LR 18 14 11.3
comp=Z,511nm,35.8s
**YKA Yellowknife Ar 76.50 342** P **P** 17 56 18.4 +0.3
comp=Z,1.5nm,0.5s,baz=140,slow=6.0,SNR=17
YKA pP **pP** 17 56 54.1 -1.7
comp=Z,1.0nm,0.9s,baz=141,slow=5.6,SNR=2.5
**TORD Torodi Ar. Bea 78.61 75** P **P** 17 56 30.6 -0.2
comp=Z,2.9nm,0.6s,baz=266,slow=5.4,SNR=23
**RES Resolute Bay 83.27 355** P **P** 17 56 55.1 +0.8
comp=Z,0.9nm,0.9s,baz=137,slow=12,SNR=4.4
**INK Inuvik 86.25 341** P **P** 17 57 09.8 +0.5
comp=Z,0.7nm,0.6s,baz=44,slow=7.2,SNR=3.4
**ILAR Eielson Array 89.55 336** P **P** 17 57 25.5 +0.4
comp=Z,0.5nm,0.5s,baz=134,slow=3.9,SNR=9.8
ILAR pP **pP** 17 58 02.8 -1.0
comp=Z,0.7nm,0.9s,baz=149,slow=4.2,SNR=3.6
**ASAR Alice Springs 138.10 221** PKhKP PKPpre 18 03 46.8
comp=Z,0.4nm,0.5s,baz=138,slow=2.2,SNR=10
ASAR PKP **PKPdf** 18 03 53.9 +0.8
comp=Z,0.5nm,0.5s,baz=125,slow=1.7,SNR=7.5
ASAR pPKP pPKPdf 18 04 33.2 -0.4
comp=Z,0.5nm,0.5s,baz=124,slow=2.1,SNR=2.5
**WRA Warramunga Arr 140.33 226** PKhKP PKPpre 18 03 52.0
comp=Z,1.0nm,0.8s,baz=137,slow=2.7,SNR=4.6
**KSRS Korea Array 144.06 329** PKP PKPbc 18 04 01.9 +0.4
comp=Z,1.2nm,0.5s,baz=42,slow=4.4,SNR=6.6

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*BJI **05** 17:48:42.8±0.0, 4.°20S×153.°78E, h101km, mb4.7/55, mB5.2/35*
*MOS **05** 17:48:42.0±1.0, 4.°40S×153.°51E, h98km, mb4.7/13, Error ellipse: s-maj=10.6km s-min=6.8km az=96.3*
*NEIC **05** 17:48:43.1±2.0, 4.°43S±0.°07×153.°62E±0.°06, h96km±6km, mb5.1/144, Error ellipse: s-maj=11.0km s-min=8.0km az=202.0*
*IDC **05** 17:48:45.2±1.9, 4.°50S×153.°56E, h109km±17km, mb4.3/24, mb1 4.4/28, mb1mx4.2/42, mbtmp4.7/28, MS3.9/44, Ms1 3.9/44, ms1mx3.9/55, Error ellipse: s-maj=13.9km s-min=10.0km az=81.0*
*DJA **05** 17:48:46.0±0.4, 4.°S±3.°×15.°4E±.°, h114km±4km, M4.9/56, mb5.1/56, mB5.4/23, MLv5.4/3, Mw(mB)4.8/23, MwMwp5.0/9, Mwp5.3/9*
*GCMT **05** 17:48:46.1±0.1, 4.°62S±0.°01×153.°49E±0.°01, h96km±1km, MW5.3/134, Moment Tensor Solution. s127,c173; s134,c221; Duration: 1ŝ1 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$0.94±.01; $M_{\theta\theta}$-0.34±.02; $M_{\phi\phi}$-0.59±.02; $M_{r\theta}$-0.35±.01; $M_{r\phi}$0.50±.02; $M_{\theta\phi}$0.41±.01; Best double couple: $M_0$1.10500×$10^{17}$ NP1:$\chi_\phi$144.00000°, δ30.00000°, λ92.00000°. NP2:$\chi_\phi$321.00000°, δ60.00000°, λ89.00000°. Principal axes: T 1.0820, Plg75.0000°, Azm227.0000°; N 0.0450, Plg1.0000°, Azm321.0000°; P -1.1270, Plg15.0000°, Azm52.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 05 17:48:43.2**±0.7, **4.°40S**±0.°04×**153.°63E**±0.°04, **h96**km±6km, **n492,σ1ŝ25/471,mb5.0**/153,**74C-14D,Fault plane solution: NP1**:$\chi_\phi$89.02460°, δ34.79646°, λ56.52786°. **NP2:**$\chi_\phi$307.86429°, δ61.57417°, λ110.97052°. **Principal axes:** T Plg66.5291°, Azm257.3131°; N Plg18.3450°, Azm117.5246°; P Plg14.1267°, Azm22.7375°; **Fault plane solution: NP1**:$\chi_\phi$336.53244°, δ67.60801°, λ74.36721°. **NP2:**$\chi_\phi$192.83174°, δ27.07682°, λ123.18650°. **Principal axes:** T Plg64.0232°, Azm220.7454°; N Plg14.4274°, Azm342.6169°; P Plg21.1149°, Azm78.3185°; **New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.48** | **278** | Pn | **Pn** | **17 49 09.5** | **+0.5** |
| RABL | | | | Sn | **Sn** | **17 49 28.2** | **-0.2** |
| **RABL** | **Rabaul** | **1.48** | **278** | P | **Pn** | **17 49 09.7** | **+1.0** |
| **MANU** | **Manus Island** | **6.68** | **290** | Pn | **Pn** | **17 50 19.7** | **+1.0** |
| **HNR** | **Honiara** | **8.02** | **129** | P | **Pn** | **17 50 39.5** | **+2.5** |
| | 6.0nm,0.3s,baz=244,slow=2.1,SNR=8.8 | | | | | | |
| HNR | | | | S | **Sn** | **17 52 08.5** | **+2.5** |
| | 60nm,0.3s,baz=346,slow=18,SNR=12 | | | | | | |
| **HNR** | **Honiara** | **8.02** | **129** | Pn | **Pn** | **17 50 37.7** | **+0.7** |
| HNR | | | | Sn | **Sn** | **17 52 04.9** | **-1.2** |
| **PMG** | **Port Moresby** | **8.13** | **232** | P | **Pn** | **17 50 39.8** | **+1.4** |
| | 54nm,0.3s,baz=39,slow=6.0,SNR=91 | | | | | | |
| PMG | | | | S | **Sn** | **17 52 09.6** | **+0.9** |
| | 19nm,0.3s,baz=165,slow=22,SNR=20 | | | | | | |
| PMG | | | | LR | LR | 17 54 01.3 | |
| | comp=Z,2µm,21.5s,baz=38,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **8.13** | **232** | *d* | *i* **P** | **17 50 38.5** | **+0.1** |
| **PMG** | **Port Moresby** | **8.13** | **232** | Pn | **Pn** | **17 50 37.9** | **-0.5** |
| PMG | | | | Sn | **Sn** | **17 52 06.4** | **-2.3** |
| **PMG** | **Port Moresby** | **8.13** | **232** | P | **Pn** | **17 50 39.8** | **+1.4** |
| **PMG** | **Port Moresby** | **8.13** | **232** | P | **Pn** | **17 50 40.0** | **+1.6** |
| **PATS** | **Pohnpei** | **12.10** | **23** | P | **Pn** | **17 51 32.9** | **+0.5** |
| | baz=12,SNR=3.2 | | | | | | |
| PATS | | | | S | **Sn** | **17 53 40.4** | **-5.0** |
| | baz=12 | | | | | | |
| **PATS** | **Pohnpei** | **12.10** | **23** | Pn | **Pn** | **17 51 32.6** | **+0.3** |
| **JAY** | **Jayapura** | **13.04** | **278** | P | **Pn** | **17 51 46.2** | **+1.3** |
| | 1.3nm,0.3s,baz=235,slow=8.4,SNR=9.3 | | | | | | |
| **JAY** | **Jayapura** | **13.04** | **278** | P | **Pn** | **17 51 45.5** | **+0.6** |
| | 398nm28nm,0.7s | | | | | | |
| **GENI** | **Genyem** | **13.56** | **277** | P | Pn | 17 51 44.5 | -7.1 |
| **COEN** | **Coen** | **14.02** | **227** | Pn | **Pn** | **17 51 58.4** | **+0.7** |
| **SMPI** | **Sarmi** | **15.09** | **279** | P | **P** | **17 52 12.8** | **-1.5** |
| | 2µm758nm96nm,0.7s | | | | | | |
| **MTSU** | **Mount Surprise** | **16.41** | **213** | P | **P** | **17 52 28.9** | **-0.2** |
| | baz=16,SNR=33 | | | | | | |
| **CTA** | **Charters Tower** | **17.17** | **204** | P | **P** | **17 52 37.5** | **+0.1** |
| | 0.7nm,0.3s,baz=25,slow=12,SNR=13 | | | | | | |
| CTA | | | | LR | LR | 17 58 52.5 | |
| | comp=Z,877nm,18.3s,baz=20,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **17.17** | **204** | P | **P** | **17 52 37.8** | **+0.4** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,81nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **17.17** | **204** | | **P** | **17 52 37.8** | **+0.4** |
| **SANVU** | **Saraoutou** | **17.28** | **130** | Pn | **P** | **17 52 40.6** | **+2.0** |
| **SRPI** | **Serui, Papua** | **17.55** | **278** | P | **P** | **17 52 43.4** | **+1.9** |
| | comp=Z,46nm,0.6s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **19.12** | **189** | P | **Pn** | **17 53 00.2** | **-0.3** |
| **GUMO** | **Guam** | **19.87** | **334** | LR | LR | 17 59 40.2 | |
| | comp=Z,121nm,20.2s,baz=140,slow=33 | | | | | | |
| **GUMO** | **Guam** | **19.87** | **334** | P | **P** | **17 53 07.2** | **+0.2** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,346nm,1.3s | | | | | | |
| **GUMO** | **Guam** | **19.87** | **334** | P | **P** | **17 53 07.2** | **+0.2** |
| **TARA** | **Tarawa** | **20.11** | **74** | P | **P** | **17 53 08.1** | **-1.4** |
| TARA | | | | IAmb | IAmb | 17 53 42.0 | |
| | comp=Z,270nm,1.3s | | | | | | |
| **LIFNC** | **LIFOU** | **20.98** | **142** | P | **P** | **17 53 16.2** | **-2.7** |
| LIFNC | | | | IAmb | IAmb | 17 54 04.9 | |
| | comp=Z,86nm,1.0s | | | | | | |
| **EIDS** | **Eidsvold** | **21.00** | **186** | P | **P** | **17 53 19.4** | **+0.4** |
| | baz=21,SNR=5.8 | | | | | | |
| **EIDS** | **Eidsvold** | **21.00** | **186** | P | **P** | **17 53 19.1** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 17 53 22.6 | |
| | comp=Z,96nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **21.00** | **186** | P | **P** | **17 53 20.1** | **+1.1** |
| **QIS** | **Mount Isa** | **21.08** | **219** | P | **P** | **17 53 19.7** | **-0.2** |
| | baz=21,SNR=40 | | | | | | |
| **QIS** | **Mount Isa** | **21.08** | **219** | P | **P** | **17 53 20.0** | **+0.1** |
| **FAKI** | **Fak Fak** | **21.39** | **273** | P | **P** | **17 53 22.7** | **-0.6** |
| FAKI | | | | IAmb | IAmb | 17 54 13.9 | |
| | comp=Z,60nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **21.39** | **273** | P | **P** | **17 53 23.2** | **-0.1** |
| **DZM** | **Mont Dzumac** | **21.52** | **146** | P | **P** | **17 53 25.6** | **+0.9** |
| | comp=Z,7.6nm,0.6s,baz=244,slow=8.0,SNR=21 | | | | | | |
| DZM | | | | LR | LR | 18 00 49.9 | |
| | comp=Z,325nm,21.7s,baz=26,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.52** | **146** | P | **P** | **17 53 22.9** | **-1.8** |
| **DZM** | **Mont Dzumac** | **21.52** | **146** | P | **P** | **17 53 25.8** | **+1.2** |
| **OUENC** | **Ouen Island, N** | **22.01** | **146** | P | **P** | **17 53 29.0** | **-0.8** |
| OUENC | | | | IAmb | IAmb | 17 54 21.5 | |
| | comp=Z,129nm,1.8s | | | | | | |
| **RMQ** | **Roma** | **22.45** | **192** | P | **P** | **17 53 34.7** | **+0.3** |
| | baz=23,SNR=56 | | | | | | |
| **RMQ** | **Roma** | **22.45** | **192** | P | **P** | **17 53 34.8** | **+0.3** |
| **KDU** | **Kakadu** | **22.47** | **247** | P | **P** | **17 53 33.7** | **-1.0** |
| | baz=22,SNR=66 | | | | | | |
| **KDU** | **Kakadu** | **22.47** | **247** | P | **P** | **17 53 33.8** | **-1.0** |
| **SAUI** | **Saumlaki** | **22.48** | **260** | P | **P** | **17 53 32.3** | **-2.6** |
| SAUI | | | | IAmb | IAmb | 17 53 39.0 | |
| | comp=Z,118nm,0.6s | | | | | | |
| **PINNC** | **Pines Island,** | **22.51** | **145** | P | **P** | **17 53 34.1** | **-1.0** |
| **SIJI** | **Sorong** | **22.61** | **278** | P | **P** | **17 53 35.6** | **-0.7** |
| | comp=Z,33nm,0.5s,baz=28,slow=23,SNR=31 | | | | | | |
| **SWI** | **Sorong** | **22.62** | **278** | P | **P** | **17 53 36.5** | **+0.2** |
| | comp=Z,2µmcomp=Z,898nmcomp=Z,72nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **23.76** | **248** | P | **P** | **17 53 46.6** | **-0.4** |
| | baz=24,SNR=12 | | | | | | |
| **MTN** | **Manton Dam** | **23.76** | **248** | P | **P** | **17 53 46.3** | **-0.8** |
| **MTN** | **Manton Dam** | **23.76** | **248** | P | **P** | **17 53 47.1** | **+0.1** |
| **QLP** | **Quilpie** | **23.82** | **201** | P | **P** | **17 53 47.5** | **0.0** |
| | baz=24,SNR=12 | | | | | | |
| **QLP** | **Quilpie** | **23.82** | **201** | P | **P** | **17 53 47.5** | **0.0** |
| **DRS** | **Darwin Rock St** | **23.84** | **249** | P | **P** | **17 53 47.7** | **-0.1** |
| **WB0** | **Warramunga Arr** | **24.19** | **229** | P | **P** | **17 53 50.2** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 17 53 53.3 | |
| | comp=Z,76nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.19** | **229** | P | **P** | **17 53 50.0** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 17 53 53.4 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.32** | **229** | *c* | *i* **P** | **17 53 51.6** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,49nm,0.6s |

comp=Z,68nm,0.5s
**WRAB Tennant Creek 24.32 229** P **P** **17 53 52.3 +0.2**
**WB2 Warramunga Arr 24.32 229** P **P** **17 53 51.5 -0.7**
WB2 IAmb IAmb 17 53 54.7
comp=Z,82nm,0.6s
**WRA Warramunga Arr 24.33 229** P **P** **17 53 51.8 -0.4**
comp=Z,51nm,0.5s,baz=53,slow=9.8,SNR=329
WRA S **S** **17 58 09.7 +4.9**
comp=Z,7.6nm,0.9s,baz=52,slow=16,SNR=7.7
WRA LR LR 18 03 46.1
comp=Z,560nm,18.6s,baz=32,slow=37
**WRA Warramunga Arr 24.33 229** P **P** **17 53 51.5 -0.7**
WRA pmax pmax
comp=Z,7.0nm,0.6s
**WRA Warramunga Arr 24.33 229** P **P** **17 53 51.5 -0.7**
**FUNA Funafuti 25.73 100** P **P** **17 54 04.8 -0.1**
FUNA IAmb IAmb 17 54 06.5
comp=Z,131nm,1.1s
**ARMA Armidale 25.95 184** P **P** **17 54 07.7 +0.8**
baz=26,SNR=22
**ARMA Armidale 25.95 184** P **P** **17 54 06.5 -0.4**
ARMA IAmb IAmb 17 54 09.9
comp=Z,35nm,0.8s
**ARMA Armidale 25.95 184** P **P** **17 54 07.6 +0.8**
**H11S3 WAKE ISLAND Hy 26.13 29** T T 18 20 22.3
baz=210,slow=76,SNR=46
**H11S2 WAKE ISLAND Hy 26.14 29** T T 18 20 22.8
baz=210,slow=76,SNR=66
**H11S1 WAKE ISLAND Hy 26.15 29** T T 18 20 23.9
baz=210,slow=76,SNR=43
**INKA Innaminka 26.26 207** P **P** **17 54 09.8 +0.2**
**LBMI Labuha 26.37 277** P **P** **17 54 11.4 +0.7**
comp=Z,38nm,0.8s
**TNTI Ternate 26.74 280** P **P** **17 54 10.7 -3.4**
**KNRA Kununurra 26.89 244** P **P** **17 54 14.7 -0.6**
baz=27,SNR=34
**KNRA Kununurra 26.89 244** P **P** **17 54 14.4 -1.0**
KNRA IAmb IAmb 17 54 46.4
comp=Z,42nm,0.7s
**KNRA Kununurra 26.89 244** P **P** **17 54 14.9 -0.5**
**AS31 Alice Springs 27.00 223** P **P** **17 54 15.5 -0.8**
**ASAR Alice Springs 27.01 223** P **P** **17 54 15.6 -0.8**
comp=Z,9.2nm,0.4s,baz=55,slow=9.1,SNR=184
ASAR PcP **PcP** **17 57 35.9 0.0**
comp=Z,4.0nm,0.8s,baz=50,slow=2.7,SNR=6.8
ASAR ScP **ScP** **18 01 08.2 +0.6**
comp=Z,1.6nm,1.0s,baz=37,slow=3.5,SNR=4.3
**ASAR Alice Springs 27.01 223** P **P** **17 54 15.4 -0.9**
ASAR **PcP** **17 57 35.7 -0.1**
**MSVF Nonsavu 27.33 121** P **P** **17 54 20.8 +1.4**
comp=Z,3.5nm,0.6s,baz=252,slow=20,SNR=5.1
MSVF LR LR 18 04 22.6
comp=Z,280nm,20.7s,baz=303,slow=34
**MSVF Nonsavu 27.33 121**⇑ *e*P **P** **17 54 20.9 +1.4**
MSVF pmax pmax
comp=Z,5.0nm,0.7s
**MSVF Nonsavu 27.33 121** P **P** **17 54 18.9 -0.6**
**MSVF Nonsavu 27.33 121** P **P** **17 54 21.9 +2.5**
**LHI Lord Howe Isla 27.46 170** P **P** **17 54 18.0 -2.3**
**SANI Sanana 27.70 274** P **P** **17 54 23.0 +0.4**
comp=Z,14nm,0.7s
**SANI Sanana 27.70 274** P **P** **17 54 23.4 +0.8**
**CMSA Cobar Meteorol 28.01 195** P **P** **17 54 24.9 -0.3**
baz=28,SNR=26
**CMSA Cobar Meteorol 28.01 195** P **P** **17 54 25.2 0.0**
**MGCD Mangrove Creek 28.76 184** P **P** **17 54 33.1 +1.3**
baz=29,SNR=4.0
**MGCD Mangrove Creek 28.76 184** P **P** **17 54 33.3 +1.4**
**OOD Oodnadatta 28.87 214** P **P** **17 54 32.3 -0.6**
**STKA Stephens Creek 29.58 201** P **P** **17 54 38.5 -0.6**
comp=Z,31nm,0.7s,baz=18,slow=9.2,SNR=57
STKA LR LR 18 06 43.9
comp=Z,500nm,18.1s,baz=19,slow=37
**STKA Stephens Creek 29.58 201** P **P** **17 54 38.5 -0.6**
baz=30,SNR=35
**STKA Stephens Creek 29.58 201** P **P** **17 54 38.3 -0.8**
STKA pmax pmax
comp=Z,7.0nm,0.9s
**STKA Stephens Creek 29.58 201** P **P** **17 54 38.3 -0.8**
**STKA Stephens Creek 29.58 201** P **P** **17 54 38.7 -0.4**
**SOEI Soe 29.61 258** P **P** **17 54 37.1 -2.7**
SOEI IAmb IAmb 17 55 08.6
comp=Z,25nm,0.7s
**LCRK Leigh Creek 29.72 208** P **P** **17 54 40.6 +0.2**
**KMSI Cibinong 30.03 279** P **P** **17 54 43.7 +0.3**
comp=Z,123nm,0.7s
**BATI Baumata 30.27 257** LR LR 18 09 18.7
comp=Z,769nm,21.9s,baz=93,slow=41
**BATI Baumata 30.27 257** P **P** **17 54 46.4 +0.9**
comp=Z,28nm,0.5s
**FITZ Fitzroy Crossi 30.58 241** LR LR 18 08 51.1
comp=Z,323nm,19.6s,baz=51,slow=40
**FITZ Fitzroy Crossi 30.58 241** P **P** **17 54 47.1 -1.0**
baz=31,SNR=90
**GTOI Gorontalo 31.00 279** P **P** **17 54 53.2 +1.3**
comp=Z,320nmcomp=Z,40nm,0.6s
**CNB Canberra Magne 31.02 187** P **P** **17 54 52.1 +0.2**
baz=31,SNR=6.5
**CNB Canberra Magne 31.02 187** P **P** **17 54 52.9 +1.0**
**CAN Canberra 31.07 187** P **P** **17 54 52.3 0.0**
CAN pmax pmax
comp=Z,41nm,1.3s
**CAN Canberra 31.07 187** P **P** **17 54 52.3 0.0**
CAN IAmb IAmb 17 55 18.5
comp=Z,40nm,1.3s
**CAN Canberra 31.07 187** P **P** **17 54 52.9 +0.6**
**MMRI Maumere 31.46 261** P **P** **17 54 56.1 +0.1**
comp=Z,60nm,0.8s
**MMRI Maumere 31.46 261** P **P** **17 54 55.1 -0.9**
MMRI IAmb IAmb 17 54 56.9
comp=Z,59nm,1.0s
**MMRI Maumere 31.46 261** P **P** **17 54 56.1 +0.1**
**MULG Mulgathing 31.69 213** P **P** **17 54 56.6 -1.2**
**WRKA Warakurna 31.84 227** P **P** **17 54 57.8 -1.4**
baz=32,SNR=20
**WRKA Warakurna 31.84 227** P **P** **17 54 58.0 -1.2**
**HTT Hallett 31.98 204** P **P** **17 55 00.1 -0.2**
baz=32,SNR=16
**HTT Hallett 31.98 204** P **P** **17 55 00.0 -0.3**
**MRSI Marisa 32.03 278** P **P** **17 54 59.7 -1.3**
comp=Z,28nm,0.7s
**NAPP Napperby 32.08 205** P **P** **17 55 01.5 +0.4**
**APSI Ampana 32.13 275** P **P** **17 55 02.3 +0.5**
comp=Z,467nmcomp=Z,37nm,0.7s
**BBOO Buckleboo 32.70 208** P **P** **17 55 05.9 -0.7**
baz=33,SNR=7.5
**BBOO Buckleboo 32.70 208** P **P** **17 55 05.8 -0.7**
BBOO IAmb IAmb 17 55 06.8
comp=Z,30nm,1.1s
**BBOO Buckleboo 32.70 208** P **P** **17 55 06.2 -0.3**
**MILA Mila 32.76 187** P **P** **17 55 08.8 +1.7**
baz=33,SNR=4.5
**BASI Baing, Sumba 33.27 258** P **P** **17 55 11.8 0.0**
comp=Z,1µmcomp=Z,104nm,0.6s
**TOLI2 Tolitoli 33.28 279** P **P** **17 55 10.7 -1.2**
TOLI2 IAmb IAmb 17 55 13.8
comp=Z,12nm,0.6s
**TOLI2 Tolitoli 33.28 279** P **P** **17 55 13.1 +1.2**
comp=Z,18nm,0.7s
**BKSI Bulukumba 33.40 267** P **P** **17 55 13.8 +0.9**
comp=Z,8.7nm,1.6s
**BNSI Bone 33.42 269** P **P** **17 55 14.1 +1.0**
comp=Z,11nm,0.8s
**TWOA Tennyson Woods 33.52 203** P **P** **17 55 13.9 +0.2**
**KAPI Kappang 33.77 268** LR LR 18 11 19.7
comp=Z,58nm,19.9s,baz=105,slow=40
**TOO Toolangi 33.85 192** P **P** **17 55 15.7 -0.8**
TOO pmax pmax
comp=Z,35nm,1.4s
**TOO Toolangi 33.85 192** P **P** **17 55 15.7 -0.8**
TOO IAmb IAmb 17 55 18.1
comp=Z,35nm,1.4s
**TOO Toolangi 33.85 192** P **P** **17 55 16.8 +0.3**
**ARPS Mount Arapiles 33.99 197** P **P** **17 55 18.1 +0.4**
baz=34,SNR=14
**ARPS Mount Arapiles 33.99 197** P **P** **17 55 18.1 +0.4**
**MPSI Mapaga 34.03 277** P **P** **17 55 17.7 -0.7**
comp=Z,44nm,0.7s
**BRAT Ballarat 34.17 194** P **P** **17 55 20.6 +1.4**
**WBSI Waikabubak, Su 34.37 259** P **P** **17 55 20.4 -0.9**
comp=Z,1µmcomp=Z,152nm,0.7s
**AFI Afiamalu 35.39 108** LR LR 18 06 02.1
comp=Z,346nm,20.9s,baz=291,slow=29
**FORT Forrest 35.62 220** P **P** **17 55 31.2 -0.7**
baz=36,SNR=74
**FORT Forrest 35.62 220** P **P** **17 55 31.1 -0.7**
**FORT Forrest 35.62 220** P **P** **17 55 31.4 -0.5**
**MYLDM Lahad Datu 36.36 285** P **P** **17 55 36.8 -1.6**
MYLDM IAmb IAmb 17 56 04.2
comp=Z,60nm,1.7s
**RAO Raoul Island 36.57 136** LR LR 18 09 35.4
comp=Z,139nm,20.5s,baz=75,slow=34
**GLAD Gladstone 36.77 187** P **P** **17 55 42.9 +1.4**
**MBWA Marble Bar 36.89 240** P **P** **17 55 41.4 -1.4**
MBWA IAmb IAmb 17 55 43.3
comp=Z,48nm,1.1s
**MBWA Marble Bar 36.89 240** P **P** **17 55 42.9 +0.1**
**PSA00 Pilbara Seismi 36.95 239** P **P** **17 55 41.4 -1.9**
PSA00 IAmb IAmb 17 55 43.1
comp=Z,18nm,0.9s
PSA00 **PcP** **17 58 02.0 -0.8**
**PSA00 Pilbara Seismi 36.95 239** P **P** **17 55 41.9 -1.4**
PSA00 IAmb IAmb 17 55 43.7
comp=Z,43nm,0.9s
**PSA00 Pilbara Seismi 36.95 239** P **P** **17 55 42.2 -1.1**
**TAU Tasmania Unive 38.76 187** P **P** **17 55 58.6 +0.4**
TAU pmax pmax
comp=Z,80nm,1.5s
**TAU Tasmania Unive 38.76 187** P **P** **17 55 58.6 +0.4**
TAU IAmb IAmb 17 56 56.6
comp=Z,80nm,1.4s
**TAU Tasmania Unive 38.76 187** P **P** **17 55 59.2 +1.0**
**KKM Kota Kinabalu 38.77 285** P **P** **17 55 57.6 -1.3**
KKM IAmb IAmb 17 56 09.5
comp=Z,34nm,1.1s
**JAGI Jajag, Banyuwa 39.42 262** P **P** **17 56 02.2 -2.0**
JAGI IAmb IAmb 17 56 16.0
comp=Z,58nm,1.4s
**JAGI Jajag, Banyuwa 39.42 262** P **P** **17 56 02.5 -1.7**
**JOW Kunigami 39.56 323** LR LR 18 11 20.7
comp=Z,88nm,18.6s,baz=340,slow=34
**JOW Kunigami 39.56 323** P **P** **17 56 03.1 -2.0**
**JOW Kunigami 39.56 323** P **P** **17 56 07.9 +2.8**
**URZ Urewera 39.92 151** LR LR 18 10 51.4
comp=Z,103nm,18.7s,baz=337,slow=33
**URZ Urewera 39.92 151** P **P** **17 56 06.6 -1.3**
URZ IAmb IAmb 17 57 00.0
comp=Z,98nm,1.8s
**QRZ Quartz Range 40.05 158** P **P** **17 56 07.5 -1.5**
**QRZ Quartz Range 40.05 158** P **P** **17 56 10.7 +1.7**
**MEEK Meekatharra 40.11 233** P **P** **17 56 08.7 -1.0**
baz=40,SNR=28
**MEEK Meekatharra 40.11 233** P **P** **17 56 09.0 -0.7**
**BKZ Black Stump Fm 40.34 152** P **P** **17 56 10.0 -1.5**
BKZ IAmb IAmb 17 57 29.5
comp=Z,68nm,1.8s
**BKZ Black Stump Fm 40.34 152** P **P** **17 56 12.3 +0.8**
**NNZ Nelson 40.71 157** P **P** **17 56 13.6 -0.9**
**THZ Tophouse 41.00 158** P **P** **17 56 15.7 -1.2**
THZ IAmb IAmb 17 57 45.7
comp=Z,102nm,1.9s
**TUWZ Tuamarina 41.12 157** P **P** **17 56 16.6 -1.1**
**BSWZ Blackbirch Sta 41.33 157** P **P** **17 56 18.6 -0.9**
**BFZ Birch Farm 41.46 154** P **P** **17 56 18.7 -1.9**
**FOZ Fox Glacier 41.52 162** P **P** **17 56 19.0 -2.0**
**MSWZ Moikau Station 41.64 155** P **P** **17 56 19.9 -2.1**
**LTZ Lake Taylor 41.66 159** P **P** **17 56 20.5 -1.8**
LTZ IAmb IAmb 17 57 12.1
comp=Z,45nm,1.4s
**TWG Pinlang 41.75 312** P **P** **17 56 21.1 -2.2**
**PLWZ Palliser 41.77 155** P **P** **17 56 21.6 -1.5**
**KHZ Kahutara 41.80 158** P **P** **17 56 21.3 -2.1**
KHZ IAmb IAmb 17 56 21.3
comp=Z,131nm,2.0s
**PBKI Pangkalan Bun 41.91 271** P **P** **17 56 24.7 0.0**
comp=Z,1µmcomp=Z,120nm,0.9s
**YULB Yu-li 41.93 313** P **P** **17 56 22.2 -2.5**
**SBUM Sibu 41.94 279** P **P** **17 56 22.1 -2.8**
**JSU Suzuyama 41.98 330** P **P** **17 56 22.9 -2.1**
**JOHN Johnston Islan 42.03 59** P **P** **17 56 23.6 -1.9**
**OXZ Oxford 42.06 160** P **P** **17 56 23.6 -1.8**
OXZ IAmb IAmb 17 56 54.9
comp=Z,30nm,1.3s
**RPZ Rata Peaks 42.07 161** P **P** **17 56 23.4 -2.1**
**RPZ Rata Peaks 42.07 161** P **P** **17 56 26.4 +0.8**
**GIRL Giralia 42.19 241** P **P** **17 56 26.6 -0.2**
baz=42,SNR=3.7
**GIRL Giralia 42.19 241** P **P** **17 56 24.4 -2.4**
**NACB Ninganchiao 42.19 314** P **P** **17 56 24.5 -2.2**
NACB IAmb IAmb 17 58 02.1
comp=Z,67nm,1.3s
**JYT Yasato 42.33 344** P **P** **17 56 26.2 -1.4**
JYT IAmb IAmb 17 58 03.9
comp=Z,53nm,1.4s
**STKI Sintang 42.35 275** P **P** **17 56 26.4 -1.8**
comp=Z,16nm,0.4s
**PCJI Pacitan 42.35 263** P **P** **17 56 27.0 -1.2**
**TPUB Ta-pu 42.37 312** P **P** **17 56 25.8 -2.4**
**TPUB Ta-pu 42.37 312** P **P** **17 56 29.0 +0.8**
**LBZ Lake Benmore 42.41 162** P **P** **17 56 26.5 -1.8**
**SSLB Suanglung 42.42 313** P **P** **17 56 27.6 -1.0**
SSLB IAmb IAmb 17 57 04.2
comp=Z,111nm,1.7s
**SSLB Suanglung 42.42 313** P **P** **17 56 31.1 +2.4**
**WKZ Wanaka 42.47 164** P **P** **17 56 27.1 -1.7**
**INU Inuyama 42.51 340** P **P** **17 56 28.2 -0.9**
INU IAmb IAmb 17 57 29.9
comp=Z,80nm,2.0s
**DCZ Deep Cove 42.58 166** P **P** **17 56 28.0 -1.6**
DCZ IAmb IAmb 17 57 35.8
comp=Z,107nm,1.6s
**MQZ McQueen's Vall 42.60 160** P **P** **17 56 28.4 -1.5**
**YHNB Yeheng 42.65 314** P **P** **17 56 30.4 -0.2**
**YHNB Yeheng 42.65 314** P **P** **17 56 32.6 +2.0**
**MLZ Mavora Lakes 42.73 165** P **P** **17 56 29.5 -1.4**
**UGM Wanagama 42.99 263** P **P** **17 56 32.0 -1.4**
**UGM Wanagama 42.99 263** P **P** **17 56 33.2 -0.2**
**JNU Nakatsue 43.10 332** P **P** **17 56 34.8 +0.7**
comp=Z,20nm,0.7s,baz=162,slow=3.4,SNR=20
**JNU Nakatsue 43.10 332** P **P** **17 56 33.7 -0.3**
JNU IAmb IAmb 17 56 36.0
comp=Z,23nm,0.6s
**JNU Nakatsue 43.10 332** P **P** **17 56 35.0 +1.0**
**ODZ Otahua Downs 43.14 162** P **P** **17 56 32.2 -2.0**
**ODZ Otahua Downs 43.14 162** P **P** **17 56 36.0 +1.8**
**WHZ Wether Hill Ro 43.17 165** P **P** **17 56 33.0 -1.4**
**KLBR Kellerberrin 43.18 227** P **P** **17 56 33.2 -1.6**
baz=43,SNR=26
**KLBR Kellerberrin 43.18 227** P **P** **17 56 33.1 -1.6**
**MJAR Matsushiro Arr 43.20 342** P **P** **17 56 35.2 +0.4**
comp=Z,1.7nm,0.6s,baz=170,slow=7.7,SNR=5.1
MJAR PcP **PcP** **17 58 23.4 +0.8**
comp=Z,2.1nm,0.6s,baz=149,slow=2.9,SNR=4.3
MJAR LR LR 18 12 45.9
comp=Z,54nm,20.6s,baz=158,slow=33
**MJAR Matsushiro Arr 43.20 342** P **P** **17 56 33.7 -1.1**
MJAR pmax pmax
comp=Z,11nm,1.7s
**MJAR Matsushiro Arr 43.20 342** P **P** **17 56 33.7 -1.1**
**MAJO Matsushiro 43.20 342** P **P** **17 56 33.0 -1.8**
MAJO pmax pmax
comp=Z,30nm,1.8s
**MAJO Matsushiro 43.20 342** P **P** **17 56 33.0 -1.8**
MAJO IAmb IAmb 17 57 25.4
comp=Z,30nm,1.8s
**MAT Matsushiro 43.20 342** P **P** **17 56 35.5 +0.7**
MAT S **S** **18 02 55.6 +1.0**
**MJB9 Matsu-Tunnel 43.21 342** P **P** **17 56 33.0 -1.9**
**MORW Morawa 43.24 231** P **P** **17 56 33.9 -1.4**
baz=43,SNR=29
**MORW Morawa 43.24 231** P **P** **17 56 33.0 -2.2**
MORW IAmb IAmb 17 56 36.0
comp=Z,21nm,0.7s
**MORW Morawa 43.24 231** P **P** **17 56 34.1 -1.2**
**BLDU Ballidu 43.47 229** P **P** **17 56 35.6 -1.4**
baz=44,SNR=48
**BLDU Ballidu 43.47 229** P **P** **17 56 35.7 -1.3**
**KSM Kuching 43.68 277** P **P** **17 56 37.3 -1.7**
KSM IAmb IAmb 17 56 40.4
comp=Z,26nm,0.9s
**KSM Kuching 43.68 277** P **P** **17 56 38.9 -0.1**
**JHS Saijyo 43.68 335** P **P** **17 56 38.2 -0.4**
JHS IAmb IAmb 17 57 25.6
comp=Z,83nm,1.6s
**JMM Marumori 43.71 345** P **P** **17 56 37.6 -1.2**
JMM IAmb IAmb 17 58 13.0
comp=Z,73nm,2.0s
**NWAO Narrogin (SRO) 44.26 226** P **P** **17 56 41.0 -2.4**
NWAO pmax pmax
comp=Z,17nm,0.9s
**NWAO Narrogin (SRO) 44.26 226** P **P** **17 56 41.0 -2.4**
NWAO IAmb IAmb 17 56 50.0
comp=Z,17nm,0.8s
**NWAO Narrogin (SRO) 44.26 226** P **P** **17 56 42.0 -1.4**
**MUN Mundaring 44.51 227** P **P** **17 56 44.6 -0.8**
baz=45,SNR=7.2
**MUN Mundaring 44.51 227** P **P** **17 56 44.6 -0.8**
**JSD Sado 44.57 343** P **P** **17 56 45.6 0.0**
**KNMB Chin-men Tao 44.71 312** P **P** **17 56 44.6 -2.4**
**RKGY Rocky Gully 45.34 224** P **P** **17 56 51.8 -0.1**
baz=46,SNR=9.7
**RKGY Rocky Gully 45.34 224** P **P** **17 56 51.7 -0.2**
**LEM Lembang 45.84 265** LR LR 18 17 36.6
comp=Z,87nm,21.7s,baz=106,slow=38
**JTM Tenmabayashi 46.42 347** P **P** **17 56 59.4 -0.8**
**TJN Taejon 47.42 331** P **P** **17 57 07.9 -0.2**
TJN pmax pmax
comp=Z,66nm,0.7s
**TJN Taejon 47.42 331** P **P** **17 57 07.9 -0.2**
**DLV T Lat 47.73 290** P **P** **17 57 09.2 -2.0**
DLV IAmb IAmb 17 57 23.8
comp=Z,67nm,1.3s
**KSRS Korea Array 48.02 332** P **P** **17 57 13.6 +0.8**
comp=Z,4.6nm,0.7s,baz=149,slow=7.8,SNR=17
KSRS LR LR 18 16 11.0
comp=Z,40nm,20.0s,baz=145,slow=34
**KSAR Wonju Array Be 48.03 332** P **P** **17 57 12.0 -0.8**
**KSAR Wonju Array Be 48.03 332** P **P** **17 57 12.0 -0.8**
**KS19 Wonju Array Si 48.09 332** P **P** **17 57 11.9 -1.3**
KS19 IAmb IAmb 17 57 29.4
comp=Z,96nm,1.7s
**INCN Inchon 48.66 331** P **P** **17 57 16.8 -0.8**
INCN pmax pmax
comp=Z,27nm,0.8s
**INCN Inchon 48.66 331** P **P** **17 57 16.8 -0.8**
INCN IAmb IAmb 17 57 19.9
comp=Z,27nm,0.8s
**QIZ Qiongzhong 48.98 300** P **P** **17 57 19.9 -0.6**
**NJ2 Nanjing 49.06 320** *e*P **P** **17 57 23.3 +2.5**
NJ2 pmax pmax
comp=Z,8.0nm,1.5s
**MDSI Maura Dua 49.30 268** P **P** **17 57 21.1 -1.8**
comp=Z,8.0nm,1.2s
**JKA Kamikawa-asahi 49.30 350** P **P** **17 57 23.2 +0.8**
JKA IAmb IAmb 17 57 40.3
comp=Z,60nm,1.5s
**ASAJ Asahikawa 49.30 350** P **P** **17 57 24.9 +2.5**
comp=Z,7.2nm,0.7s,baz=198,slow=6.5,SNR=9.2
ASAJ LR LR 18 15 22.1
comp=Z,108nm,21.4s,baz=162,slow=32
**ASAJ Asahikawa 49.30 350** P **P** **17 57 23.2 +0.8**
ASAJ pmax pmax
comp=Z,60nm,1.5s
**LWLI Liwa 49.40 267** P **P** **17 57 22.9 -1.0**
comp=Z,16µmcomp=Z,59nm,0.7s
**WHN Wuhan 51.15 315** ⇓P **P** **17 57 35.9 -0.7**
**MASI Maura Aman, Be 51.29 269** P **P** **17 57 36.3 -1.7**
comp=Z,79nm,0.8s
**UBPT Khong Chiam 51.54 293** P **P** **17 57 40.6 +0.8**
**KRJI Kerinci 52.13 271** P **P** **17 57 43.6 -0.7**
comp=Z,123nm,0.9s
**USRK Ussuriysk Ar. 52.14 340** P **P** **17 57 46.4 +2.6**
comp=Z,4.1nm,0.7s,baz=213,slow=8.8,SNR=5.8
USRK LR LR 18 18 48.1
comp=Z,61nm,20.6s,baz=145,slow=34
**USRK Ussuriysk Ar. 52.14 340** P **P** **17 57 42.5 -1.3**
**USRK Ussuriysk Ar. 52.14 340** P **P** **17 57 42.5 -1.3**
**IPM Ipoh 53.29 279** P **P** **17 57 52.5 -0.3**
IPM IAmb IAmb 17 57 53.4
comp=Z,26nm,1.0s
**KULM Kulim 53.78 280** P **P** **17 57 55.9 -0.5**
**MNSI Mandailing Nat 54.25 274** P **P** **17 57 59.1 -0.7**
comp=Z,43nm,0.7s
**ENH Enshi 54.49 312** P **P** **17 58 01.7 +0.4**
ENH IAmb IAmb 17 58 11.9
comp=Z,8.3nm,0.7s
**LYN LuoYang 54.79 318** *e*P **P** **17 58 07.0 +3.7**
LYN S **S** **18 05 38.9 +1.9**
LYN pmax pmax
comp=Z,10.0nm,2.1s
LYN pmax pmax
comp=Z,90nm,4.1s
LYN LR LR
comp=Z,210nm,15.3s
LYN LR LR
comp=Z,160nm,19.6s
**GYA Guiyang 54.81 307** ⇑P **P** **17 58 05.1 +1.3**
GYA pmax pmax
comp=Z,8.0nm,0.6s
**BNX BinXian 55.11 338** ⇓P **P** **17 58 06.0 +0.6**
BNX pmax pmax
comp=Z,14nm,0.6s
BNX pmax pmax
comp=Z,390nm,7.7s
**HNS HongShan 55.13 322** ⇑P **P** **17 58 06.5 +0.8**
HNS pmax pmax
comp=Z,6.0nm,1.6s
**KLR Kul'dur 56.70 343** P **P** **17 58 17.8 +1.1**
comp=Z,2.3nm,0.6s,baz=184,slow=6.4,SNR=15
KLR LR LR 18 22 33.8
comp=Z,35nm,19.3s,baz=151,slow=36
**KLR Kul'dur 56.70 343** *de*P **P** **17 58 17.3 +0.6**
KLR pmax pmax
comp=Z,2.0nm,0.6s
**XAN Xi'an 56.91 316** P **P** **17 58 18.8 +0.3**
XAN pmax pmax
comp=Z,7.0nm,0.9s
XAN pmax pmax
comp=Z,220nm,4.6s
**PET Petropavlovsk 57.36 4**⇑ *i*P **P** **17 58 22.8 +1.6**
PET pmax pmax
comp=Z,6.0nm,0.6s
**PET Petropavlovsk 57.36 4** P **P** **17 58 22.6 +1.4**
PET IAmb IAmb 17 59 20.4
comp=Z,38nm,1.7s
**PETK Petropavlovsk- 57.39 3** P **P** **17 58 23.2 +1.7**
comp=Z,5.5nm,0.7s,baz=182,slow=8.5,SNR=9.6
**PETK Petropavlovsk- 57.39 3** P **P** **17 58 20.3 -1.2**
**PETK Petropavlovsk- 57.39 3** P **P** **17 58 20.3 -1.2**
**LHMI Lhok Sumawe 57.42 279** P **P** **17 58 21.6 -0.8**
**KMI Kunming 57.45 303** ⇑P **P** **17 58 24.5 +1.7**
KMI pP sP 17 58 53.6 -2.5
KMI pmax pmax
comp=Z,18nm,1.2s
**CM31 Chiang Mai Arr 58.46 295** P **P** **17 58 28.6 -1.0**
CM31 IAmb IAmb 17 58 32.2
comp=Z,10nm,0.8s
**CMAR Chiang Mai Arr 58.46 295** P **P** **17 58 31.1 +1.4**
comp=Z,7.2nm,0.7s,baz=117,slow=5.3,SNR=85
**CMAR Chiang Mai Arr 58.46 295** P **P** **17 58 28.6 -1.0**
**CMAR Chiang Mai Arr 58.46 295** P **P** **17 58 28.6 -1.0**
**CHTO Chiang Mai 58.57 295** P **P** **17 58 29.0 -1.4**
CHTO pmax pmax
comp=Z,6.0nm,1.0s
**CHTO Chiang Mai 58.57 295** P **P** **17 58 28.9 -1.4**
**XLT XiLinHaoTe 58.75 329** *e*P **P** **17 58 31.8 +0.5**
XLT pP pwP 17 58 55.7 -2.2
XLT pmax pmax
comp=Z,14nm,0.8s
XLT pmax pmax
comp=Z,190nm,4.2s
**PZH PanZhiHua 58.83 305** P **P** **17 58 33.0 +0.8**
PZH pmax pmax
comp=Z,10.0nm,0.1s
PZH pmax pmax
comp=Z,160nm,5.7s
**CD2 Chengdu 59.11 310**⇑ *i*P **P** **17 58 35.0 +1.0**
CD2 S **S** **18 06 35.4 +1.3**
CD2 pmax pmax
comp=Z,20nm,0.8s
CD2 pmax pmax
comp=Z,170nm,4.3s
**HHC Hu-ho-hao-te 59.21 324** *e*P **P** **17 58 38.9 +4.3**
HHC pmax pmax
comp=Z,5.0nm,0.9s
HHC pmax pmax
comp=Z,160nm,5.1s
HHC LR LR
comp=Z,180nm,17.8s
HHC LR LR
comp=Z,130nm,16.5s
HHC LR LR
comp=Z,280nm,15.9s
**SHEM Shemya Is, Ala 59.49 14** LR LR 18 19 57.3
comp=Z,230nm,21.2s,baz=197,slow=31

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LZH** | **Lanzhou** | **61.52** | **315** | *e*P | **P** | **17 58 52.2** | **+1.7** |
| LZH | | | | pP | pwP | 17 59 14.8 | -2.3 |
| LZH | | | | sP | PcP | 17 59 27.3 | -4.2 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,170nm,16.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,150nm,17.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,140nm,17.4s | | | | | | |
| **ZEA** | **Zeya** | **62.01** | **343** | *e*P | **P** | **17 58 54.7** | **+1.6** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.5s | | | | | | |
| **MA2** | **Magadan** | **63.81** | **358** | *c i*P | **P** | **17 59 05.9** | **+0.9** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **63.81** | **358** | P | **P** | **17 59 05.5** | **+0.4** |
| **GTA** | **Gaotai** | **65.93** | **317** | ⇑P | **P** | **17 59 20.9** | **+1.6** |
| GTA | | | | pP | pwP | 17 59 41.0 | -5.6 |
| GTA | | | | S | **S** | **18 08 01.0** | **+1.5** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,140nm,4.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,98nm,22.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,150nm,21.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,140nm,21.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.10** | **328** | ⇑*e*P | **P** | **17 59 21.5** | **+1.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.10** | **328** | P | **P** | **17 59 20.4** | **+0.2** |
| **SONM** | **Songino Array** | **66.43** | **327** | P | **P** | **17 59 22.9** | **+0.5** |
| | comp=Z,2.9nm,0.6s,baz=148,slow=6.2,SNR=27 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 59 51.6** | **+0.3** |
| | comp=Z,1.6nm,0.5s,baz=147,slow=4.3,SNR=9.4 | | | | | | |
| SONM | | | | LR | LR | 18 27 35.0 | |
| | comp=Z,78nm,20.8s,baz=130,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **66.43** | **327** | P | **P** | **17 59 22.9** | **+0.5** |
| **SHL** | **Shillong** | **66.82** | **300** | P | **P** | **17 59 25.5** | **+0.1** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,37nm,0.7s | | | | | | |
| **SHL** | **Shillong** | **66.82** | **300** | P | **P** | **17 59 25.5** | **+0.1** |
| **UNV** | **Unalaska Valle** | **66.91** | **24** | P | **P** | **17 59 26.0** | **+0.9** |
| **SEY** | **Seymchan** | **67.15** | **359** | P | **P** | **17 59 27.8** | **+1.4** |
| | comp=Z,2.6nm,0.5s,baz=189,slow=6.1,SNR=18 | | | | | | |
| **GOMU** | **GeErMu** | **68.11** | **312** | P | **P** | **17 59 34.7** | **+1.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,120nm,6.2s | | | | | | |
| **YAK** | **Yakutsk** | **68.75** | **348** | LR | LR | 18 28 02.9 | |
| | comp=Z,28nm,20.9s,baz=120,slow=34 | | | | | | |
| **YAK** | **Yakutsk** | **68.75** | **348** | *ce*P | **P** | **17 59 37.6** | **+1.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ZAK** | **Zakamensk** | **69.59** | **328** | *e*P | **P** | **17 59 42.1** | **+0.1** |
| ZAK | | | | *e* | | 18 00 15.9 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **TAPN** | **Taplejung** | **70.91** | **301** | *e*P | **P** | **17 59 51.2** | **+0.3** |
| | comp=Z,26nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **71.06** | **300** | *e*P | **P** | **17 59 52.6** | **+0.9** |
| | comp=Z,93nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **71.76** | **300** | *e*P | **P** | **17 59 56.7** | **+0.8** |
| | comp=Z,17nm,0.4s | | | | | | |
| **CHGN** | **Chignik** | **72.00** | **26** | P | **P** | **17 59 57.3** | **+0.9** |
| | baz=231 | | | | | | |
| **CHLP** | **Challavanipeta** | **72.17** | **291** | *e*P | **P** | **17 59 58.3** | **+0.2** |
| **JIRN** | **Jiri** | **72.30** | **301** | *e*P | **P** | **18 00 00.1** | **+0.8** |
| | comp=Z,47nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **72.62** | **301** | *e*P | **P** | **18 00 02.1** | **+0.9** |
| | comp=Z,122nm,0.7s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **72.81** | **326** | ⇓*e*P | **P** | **18 00 03.0** | **+1.5** |
| **BILL** | **Bilibino** | **72.82** | **5** | *d i*P | **P** | **18 00 02.5** | **+1.5** |
| BILL | | | | *i* | | 18 00 23.5 | |
| BILL | | | | *i* | | 18 02 50.8 | |
| BILL | | | | *i* S | **S** | **18 09 14.7** | **-4.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **BILL** | **Bilibino** | **72.82** | **5** | P | **P** | **18 00 02.0** | **+0.9** |
| **PKI** | **Pulchoki** | **72.94** | **300** | *e*P | **P** | **18 00 03.6** | **+0.5** |
| | comp=Z,25nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **72.96** | **300** | *e*P | **P** | **18 00 03.5** | **+0.5** |
| | comp=Z,23nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **73.11** | **301** | *e*P | **P** | **18 00 04.7** | **+0.8** |
| | comp=Z,50nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **73.20** | **178** | P | **P** | **18 00 03.8** | **+0.6** |
| | comp=Z,8.6nm,0.7s,baz=334,slow=6.7,SNR=11 | | | | | | |
| **DMN** | **Daman** | **73.21** | **300** | *e*P | **P** | **18 00 05.5** | **+0.9** |
| | comp=Z,82nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **73.69** | **279** | LR | LR | 18 34 41.3 | |
| | comp=Z,68nm,18.5s,baz=212,slow=37 | | | | | | |
| **PALK** | **Pallekele** | **73.69** | **279** | P | **P** | **18 00 06.5** | **-0.9** |
| PALK | | | | pmax | pmax | | |
| | comp=Z,39nm,1.4s | | | | | | |
| **PALK** | **Pallekele** | **73.69** | **279** | P | **P** | **18 00 06.5** | **-0.9** |
| PALK | | | | IAmb | IAmb | 18 02 14.2 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **GKN** | **Gorkha** | **73.71** | **301** | *e*P | **P** | **18 00 08.0** | **+0.6** |
| | comp=Z,45nm,0.6s | | | | | | |
| **PVM** | **Polavaram** | **74.22** | **289** | *e*P | **P** | **18 00 10.5** | **+0.2** |
| **DANN** | **Dangsing** | **74.55** | **301** | *e*P | **P** | **18 00 12.7** | **+0.3** |
| | comp=Z,56nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **74.55** | **300** | *e*P | **P** | **18 00 12.9** | **+0.6** |
| **MYLAV** | **Mylavaram** | **75.08** | **289** | *e*P | **P** | **18 00 15.4** | **+0.2** |
| **ANM** | **Nome** | **75.15** | **17** | P | **P** | **18 00 15.2** | **+0.5** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **ANM** | **Nome** | **75.15** | **17** | P | **P** | **18 00 15.2** | **+0.5** |
| **ANM** | **Nome** | **75.15** | **17** | P | **P** | **18 00 16.9** | **+2.2** |
| | baz=223 | | | | | | |
| **PYUN** | **Piuthan** | **75.15** | **300** | *e*P | **P** | **18 00 15.9** | **+0.2** |
| | comp=Z,69nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **75.45** | **27** | LR | LR | 18 27 20.9 | |
| | comp=Z,327nm,19.9s,baz=248,slow=31 | | | | | | |
| **ADKI** | **Addanki** | **75.56** | **287** | *e*P | **P** | **18 00 18.2** | **+0.1** |
| **Q19K** | **Cape Douglas,** | **75.64** | **25** | P | **P** | **18 00 16.9** | **-0.7** |
| **Q19K** | **Cape Douglas,** | **75.64** | **25** | P | **P** | **18 00 18.8** | **+1.2** |
| | baz=235 | | | | | | |
| **WMQ** | **Urumqi** | **76.01** | **317** | *e*P | **P** | **18 00 21.7** | **+1.5** |
| WMQ | | | | PcP | **PcP** | **18 00 33.3** | **+1.2** |
| WMQ | | | | pP | pwP | 18 00 44.3 | -3.5 |
| WMQ | | | | sP | sP | 18 00 56.4 | +2.5 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,110nm,21.7s | | | | | | |
| **NJS** | **Nagarjunasagar** | **76.30** | **288** | *e*P | **P** | **18 00 22.4** | **+0.1** |
| **N19K** | **Bonanza Creek** | **76.39** | **23** | P | **P** | **18 00 23.9** | **+1.9** |
| | baz=234 | | | | | | |
| **RCLA** | **Racherla** | **76.47** | **287** | *e*P | **P** | **18 00 22.5** | **-0.7** |
| **SRLM** | **Srisailam** | **76.63** | **288** | *e*P | **P** | **18 00 23.3** | **-0.9** |
| **RPR** | **Rampur** | **76.68** | **290** | *e*P | **P** | **18 00 24.5** | **+0.2** |
| **L19K** | **White Mountain** | **77.06** | **22** | P | **P** | **18 00 27.0** | **+1.4** |
| **L19K** | **White Mountain** | **77.06** | **22** | P | **P** | **18 00 27.5** | **+1.8** |
| | baz=233 | | | | | | |
| **M19K** | **Big River Lodg** | **77.07** | **22** | P | **P** | **18 00 28.1** | **+2.4** |
| | baz=234 | | | | | | |
| **TTA** | **Tatalina** | **77.10** | **21** | P | **P** | **18 00 27.2** | **+1.4** |
| | baz=232 | | | | | | |
| **HYBB** | **Hyderabad (bro** | **77.15** | **289** | *e*P | **P** | **18 00 25.3** | **-1.7** |
| **SRSP** | **Sriramsagar** | **77.58** | **290** | *e*P | **P** | **18 00 29.1** | **-0.2** |
| **L20K** | **Farewell, AK** | **77.61** | **22** | P | **P** | **18 00 30.7** | **+2.0** |
| | baz=234 | | | | | | |
| **TIXI** | **Tiksi** | **77.61** | **352** | P | **P** | **18 00 29.0** | **+0.6** |
| | comp=Z,2.2nm,0.7s,baz=91,slow=23,SNR=7.7 | | | | | | |
| TIXI | | | | LR | LR | 18 34 37.9 | |
| | comp=Z,32nm,19.2s,baz=180,slow=35 | | | | | | |
| **TIXI** | **Tiksi** | **77.61** | **352** | ⇑*e*P | **P** | **18 00 30.2** | **+1.8** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| **TIXI** | **Tiksi** | **77.61** | **352** | P | **P** | **18 00 28.1** | **-0.4** |
| **URV** | **Uravakonda** | **78.02** | **286** | *e*P | **P** | **18 00 31.8** | **-0.2** |
| **K20K** | **Telida** | **78.06** | **21** | P | **P** | **18 00 32.9** | **+1.8** |
| | baz=234 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **78.27** | **323** | *ce*P | **P** | **18 00 33.5** | **+0.7** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **RDOG** | **Red Dog Mine** | **78.38** | **15** | P | **P** | **18 00 34.1** | **+1.4** |
| **RDOG** | **Red Dog Mine** | **78.38** | **15** | P | **P** | **18 00 35.1** | **+2.4** |
| | baz=224 | | | | | | |
| **RC01** | **Rabbit Creek A** | **78.47** | **24** | P | **P** | **18 00 35.2** | **+1.8** |
| | baz=238 | | | | | | |
| **J20K** | **Nowinta River** | **78.52** | **21** | IAmb | IAmb | 18 01 34.0 | |
| | comp=Z,46nm,1.9s | | | | | | |
| **J20K** | **Nowinta River** | **78.52** | **21** | P | **P** | **18 00 35.7** | **+2.1** |
| | baz=234 | | | | | | |
| **CAST** | **Castle Rocks** | **78.82** | **22** | P | **P** | **18 00 35.5** | **+0.1** |
| | baz=236 | | | | | | |
| **CHUM** | **Lake Minchumin** | **79.00** | **21** | P | **P** | **18 00 37.1** | **+0.8** |
| | baz=235 | | | | | | |
| **KLRI** | **Killari** | **79.09** | **289** | *e*P | **P** | **18 00 37.3** | **-0.5** |
| **SML** | **Sawmill** | **79.42** | **24** | P | **P** | **18 00 39.9** | **+1.2** |
| | baz=239 | | | | | | |
| **TRF** | **Thorofare Moun** | **79.51** | **22** | P | **P** | **18 00 39.4** | **+0.1** |
| | baz=237 | | | | | | |
| **H21K** | **Melozitna Rive** | **79.85** | **20** | IAmb | IAmb | 18 01 51.3 | |
| | comp=Z,31nm,1.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **79.85** | **20** | P | **P** | **18 00 42.3** | **+1.4** |
| | baz=235 | | | | | | |
| **I21K** | **Tanana** | **79.86** | **20** | P | **P** | **18 00 42.0** | **+1.0** |
| I21K | | | | IAmb | IAmb | 18 00 44.6 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **I21K** | **Tanana** | **79.86** | **20** | P | **P** | **18 00 42.3** | **+1.4** |
| | baz=235 | | | | | | |
| **MCK** | **McKinley** | **80.18** | **22** | P | **P** | **18 00 42.6** | **-0.1** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **80.18** | **22** | P | **P** | **18 00 42.6** | **-0.1** |
| MCK | | | | IAmb | IAmb | 18 00 45.0 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **80.18** | **22** | P | **P** | **18 00 43.2** | **+0.5** |
| | baz=238 | | | | | | |
| **MLY** | **Manley** | **80.21** | **21** | P | **P** | **18 00 44.0** | **+1.1** |
| | baz=237 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **80.45** | **24** | P | **P** | **18 00 44.6** | **+0.4** |
| | baz=241 | | | | | | |
| **MK31** | **Makanchi Array** | **80.57** | **319** | *c i*P | **P** | **18 00 45.8** | **+0.6** |
| **MKAR** | **Makanchi Array** | **80.57** | **319** | P | **P** | **18 00 46.0** | **+0.8** |
| | comp=Z,4.1nm,0.5s,baz=97,slow=7.5,SNR=44 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.57** | **319** | P | **P** | **18 00 45.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **80.57** | **319** | P | **P** | **18 00 45.4** | **+0.2** |
| **NEA2** | **Nenana** | **80.58** | **22** | P | **P** | **18 00 45.3** | **+0.5** |
| | baz=238 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **80.77** | **21** | P | **P** | **18 00 46.9** | **+1.2** |
| | baz=238 | | | | | | |
| **MAKZ** | **Makanchi** | **80.78** | **319** | P | **P** | **18 00 46.6** | **+0.3** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **80.78** | **319** | P | **P** | **18 00 46.6** | **+0.3** |
| **TCOL** | **CIGO, UAF Yank** | **81.17** | **22** | IAmb | IAmb | 18 01 18.8 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **COLA** | **College** | **81.17** | **22** | P | **P** | **18 00 48.4** | **+0.5** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,28nm,1.4s | | | | | | |
| **COLA** | **College** | **81.17** | **22** | P | **P** | **18 00 48.4** | **+0.5** |
| COLA | | | | IAmb | IAmb | 18 01 18.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **81.27** | **22** | P | **P** | **18 00 49.8** | **+1.3** |
| | baz=240 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.28** | **326** | P | **P** | **18 00 48.8** | **0.0** |
| | comp=Z,4.0nm,0.5s,baz=110,slow=5.9,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.28** | **326** | P | **P** | **18 00 47.8** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **81.28** | **326** | P | **P** | **18 00 47.8** | **-0.9** |
| **IL31** | | **81.48** | **22** | IAmb | IAmb | 18 01 31.9 | |
| | comp=Z,41nm,1.9s | | | | | | |
| **ILAR** | **Eielson Array** | **81.48** | **22** | P | **P** | **18 00 49.5** | **-0.1** |
| | comp=Z,4.7nm,0.8s,baz=250,slow=5.1,SNR=32 | | | | | | |
| ILAR | | | | LR | LR | 18 30 17.8 | |
| | comp=Z,167nm,20.7s,baz=234,slow=30 | | | | | | |
| **ILAR** | **Eielson Array** | **81.48** | **22** | P | **P** | **18 00 49.2** | **-0.4** |
| **ILAR** | **Eielson Array** | **81.48** | **22** | P | **P** | **18 00 49.1** | **-0.4** |
| **COLD** | **Coldfoot** | **81.61** | **19** | P | **P** | **18 00 51.1** | **+0.9** |
| | baz=237 | | | | | | |
| **H24K** | **Noodor Dome** | **81.66** | **21** | P | **P** | **18 00 51.6** | **+1.0** |
| | baz=239 | | | | | | |
| **RIDG** | **Independent Ri** | **81.76** | **23** | P | **P** | **18 00 51.3** | **+0.2** |
| | baz=242 | | | | | | |
| **J25K** | **Salcha River,** | **81.97** | **22** | P | **P** | **18 00 53.0** | **+0.7** |
| **J25K** | **Salcha River,** | **81.97** | **22** | P | **P** | **18 00 53.4** | **+1.2** |
| | baz=242 | | | | | | |
| **DOT** | **Dot Lake** | **82.03** | **24** | IAmb | IAmb | 18 02 48.3 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **L26K** | **Log Cabin Wild** | **82.04** | **24** | P | **P** | **18 00 54.0** | **+1.4** |
| | baz=244 | | | | | | |
| **PRZ** | **Przheval'sk** | **82.14** | **314** | IAmb | IAmb | 18 00 56.3 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **SCRK** | **Sand Creek** | **82.21** | **23** | P | **P** | **18 00 54.9** | **+1.3** |
| | baz=243 | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.36** | **25** | IAmb | IAmb | 18 00 58.1 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.36** | **25** | P | **P** | **18 00 55.4** | **+1.0** |
| | baz=245 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **82.40** | **313** | P | **P** | **18 00 55.4** | **0.0** |
| **J26L** | **Joseph Creek** | **82.61** | **23** | P | **P** | **18 00 56.3** | **+0.7** |
| | baz=243 | | | | | | |
| **L27K** | **Beaver Creek,** | **82.68** | **24** | P | **P** | **18 00 56.7** | **+0.7** |
| | baz=245 | | | | | | |
| **KDJ** | **Kajisay** | **82.94** | **313** | IAmb | IAmb | 18 01 01.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **83.31** | **310** | P | **P** | **18 01 03.0** | **+3.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **83.97** | **322** | *c i*P | **P** | **18 01 02.8** | **+0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **83.97** | **322** | P | **P** | **18 01 02.6** | **-0.1** |
| **KURBB** | **Kutov Arra** | **84.00** | **322** | LR | LR | 18 39 03.3 | |
| | comp=Z,33nm,19.5s,baz=95,slow=36 | | | | | | |
| **DAWY** | **Dawson** | **84.08** | **24** | P | **P** | **18 01 04.8** | **+1.7** |
| | baz=247 | | | | | | |
| **TKM2** | **Tokmak 2** | **84.25** | **314** | P | **P** | **18 01 06.1** | **+1.4** |
| | SNR=9.8 | | | | | | |
| **NIL** | **Nilore** | **84.44** | **304** | P | **P** | **18 01 05.9** | **+0.3** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,45nm,0.7s | | | | | | |
| **NIL** | **Nilore** | **84.44** | **304** | P | **P** | **18 01 05.8** | **+0.3** |
| **KBK** | **Karagaybulak** | **84.67** | **313** | P | **P** | **18 01 07.9** | **+1.2** |
| | SNR=20 | | | | | | |
| **CHMS** | **Chumysh** | **84.88** | **314** | P | **P** | **18 01 08.6** | **+1.0** |
| | SNR=23 | | | | | | |
| **UCH** | **Uchtor** | **84.91** | **313** | P | **P** | **18 01 09.9** | **+1.6** |
| | SNR=21 | | | | | | |
| **FRU1** | **Bishkek** | **84.93** | **314** | IAmb | IAmb | 18 01 10.1 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **84.99** | **313** | LR | LR | 18 40 10.3 | |
| | comp=Z,65nm,19.9s,baz=94,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **84.99** | **313** | P | **P** | **18 01 09.7** | **+1.3** |
| | SNR=29 | | | | | | |
| **AAK** | **Ala-Archa** | **84.99** | **313** | *c i*P | **P** | **18 01 09.4** | **+1.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **84.99** | **313** | P | **P** | **18 01 08.5** | **+0.2** |
| AAK | | | | IAmb | IAmb | 18 01 10.9 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **85.01** | **23** | P | **P** | **18 01 09.0** | **+1.3** |
| | baz=248 | | | | | | |
| **USP** | **Ospenovka** | **85.11** | **314** | P | **P** | **18 01 09.8** | **+1.1** |
| | SNR=37 | | | | | | |
| **AML** | **Almayashu** | **85.49** | **313** | P | **P** | **18 01 12.2** | **+1.1** |
| | SNR=28 | | | | | | |
| **EKS2** | **Erkin-Say** | **85.52** | **313** | P | **P** | **18 01 12.2** | **+1.3** |
| | SNR=23 | | | | | | |
| **QSPA** | **South Pole Qui** | **85.56** | **180** | LR | LR | 18 38 05.6 | |
| | comp=Z,98nm,19.1s,baz=73,slow=35 | | | | | | |
| **M31M** | **Drury Creek, Y** | **85.56** | **27** | P | **P** | **18 01 12.0** | **+1.4** |
| | baz=252 | | | | | | |
| **NRIK** | **Noril'sk** | **85.85** | **341** | P | **P** | **18 01 12.8** | **+1.0** |
| | comp=Z,6.2nm,0.7s,baz=120,slow=3.5,SNR=6.2 | | | | | | |
| NRIK | | | | LR | LR | 18 38 33.7 | |
| | comp=Z,76nm,20.5s,baz=100,slow=35 | | | | | | |
| **NRIK** | **Noril'sk** | **85.85** | **341** | ⇓*e*P | **P** | **18 01 12.1** | **+0.3** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **NRIK** | **Noril'sk** | **85.85** | **341** | P | **P** | **18 01 12.0** | **+0.3** |
| **MAW** | **Mawson** | **86.26** | **203** | LR | LR | 18 37 56.1 | |
| | comp=Z,112nm,18.1s,baz=78,slow=34 | | | | | | |
| **BBB** | **Bella Bella** | **86.28** | **37** | LR | LR | 18 30 05.3 | |
| | comp=Z,108nm,21.8s,baz=274,slow=29 | | | | | | |
| **DRK** | **Karamyk** | **86.48** | **310** | IAmb | IAmb | 18 01 22.9 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **86.61** | **31** | LR | LR | 18 40 32.9 | |
| | comp=Z,161nm,18.0s,baz=323,slow=36 | | | | | | |
| **BTK** | **Batken** | **87.31** | **310** | IAmb | IAmb | 18 02 08.6 | |
| | comp=Z,28nm,1.8s | | | | | | |
| **INK** | **Inuvik** | **87.78** | **21** | P | **P** | **18 01 22.1** | **+0.9** |
| | comp=Z,1.9nm,0.5s,baz=196,slow=9.3,SNR=4.9 | | | | | | |
| INK | | | | LR | LR | 18 36 15.7 | |
| | comp=Z,174nm,20.1s,baz=244,slow=32 | | | | | | |
| **INK** | **Inuvik** | **87.78** | **21** | P | **P** | **18 01 21.9** | **+0.7** |
| | baz=252 | | | | | | |
| **KKAR** | **Karatay Array** | **87.96** | **313** | P | **P** | **18 01 22.0** | **-0.6** |
| **KKAR** | **Karatay Array** | **87.96** | **313** | P | **P** | **18 01 22.0** | **-0.6** |
| **KBL** | **Kabul** | **88.02** | **305** | P | **P** | **18 01 23.1** | **-0.3** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **KBL** | **Kabul** | **88.02** | **305** | P | **P** | **18 01 23.1** | **-0.3** |
| KBL | | | | IAmb | IAmb | 18 01 25.4 | |
| | comp=Z,5.8nm,0.5s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **88.17** | **48** | LR | LR | 18 33 09.1 | |
| | comp=Z,136nm,21.7s,baz=273,slow=30 | | | | | | |
| **BRVK** | **Borovoye** | **89.48** | **323** | P | **P** | **18 01 29.0** | **-0.5** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **89.48** | **323** | P | **P** | **18 01 29.0** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 18 01 30.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.19** | **52** | P | **P** | **18 01 38.5** | **+0.3** |
| | comp=Z,1.1nm,0.9s,baz=258,slow=6.6,SNR=5.7 | | | | | | |
| NVAR | | | | LR | LR | 18 38 14.8 | |
| | comp=Z,125nm,18.7s,baz=285,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.19** | **52** | P | **P** | **18 01 36.8** | **-1.3** |
| **A36M** | **Sachs Harbour** | **91.40** | **18** | P | **P** | **18 01 37.2** | **-0.8** |
| A36M | | | | IAmb | IAmb | 18 02 04.6 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **PFO** | **Pinyon Flats O** | **92.33** | **57** | LR | LR | 18 36 53.2 | |
| | comp=Z,47nm,18.9s,baz=239,slow=31 | | | | | | |
| **HRA** | **Herat** | **93.60** | **304** | IAmb | IAmb | 18 01 49.9 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **ELK** | **Elko** | **93.69** | **50** | LR | LR | 18 40 45.4 | |
| | comp=Z,97nm,18.3s,baz=270,slow=33 | | | | | | |
| **SYO** | **Syowa Base** | **94.32** | **199** | ⇑*e*P | **P** | **18 01 50.8** | **-0.8** |
| **ABKAR** | **Akbulak array** | **95.71** | **319** | P | **P** | **18 01 57.2** | **-1.2** |
| **ARU** | **Arti** | **96.45** | **326** | LR | LR | 18 45 18.3 | |
| | comp=Z,33nm,22.0s,baz=80,slow=35 | | | | | | |
| **AKTO** | **Aktyubinsk** | **96.95** | **320** | LR | LR | 18 45 27.3 | |
| | comp=Z,46nm,21.8s,baz=80,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **97.03** | **308** | LR | LR | 18 49 31.8 | |
| | comp=Z,56nm,19.1s,baz=60,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **97.97** | **48** | LR | LR | 18 44 26.4 | |
| | comp=Z,71nm,18.0s,baz=272,slow=34 | | | | | | |
| **RES** | **Resolute Bay** | **99.81** | **15** | P | **Pdif** | **18 02 17.6** | **+1.3** |
| | comp=Z,0.8nm,0.7s,baz=1.3,slow=3.5,SNR=4.6 | | | | | | |
| RES | | | | LR | LR | 18 45 46.2 | |
| | comp=Z,56nm,20.1s,baz=276,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **114.65** | **325** | PKP | **PKiKP** | **18 07 12.5** | **+0.2** |
| | comp=Z,1.0nm,0.4s,baz=47,slow=2.4,SNR=8.7 | | | | | | |
| **DPC** | **Dobruska-Polom** | **121.87** | **329** | *e*PKiKP | **PKiKP** | **18 07 27.5** | **+1.0** |
| **DPC** | **Dobruska-Polom** | **121.87** | **329** | *e*PKPDF | **PKiKP** | **18 07 27.5** | **+1.0** |
| **CLL** | **Collm** | **122.90** | **332** | *e*PKiKP | **PKiKP** | **18 07 29.0** | **+0.6** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| CLL | | | | *e*SKPdf | **SKPdf** | **18 10 54.0** | **-1.2** |
| CLL | | | | *e*PS | **PS** | **18 19 06.0** | **+1.3** |
| CLL | | | | *e*PPS | PPS | 18 20 48.0 | |
| CLL | | | | LmV | | 18 59 00.0 | |
| | comp=Z,100nm,19.0s | | | | | | |
| **CONA** | **Conrad Observa** | **123.57** | **327** | *i* P | **PKiKP** | **18 07 31.0** | **+1.0** |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **123.84** | **329** | *e*PKPDF | **PKiKP** | **18 07 31.3** | **+0.9** |
| **KHC** | **Kasperske Hory** | **124.02** | **329** | *e*PKiKP | **PKPdf** | **18 07 30.7** | **+0.2** |
| **KHC** | **Kasperske Hory** | **124.02** | **329** | *e*PKPDF | **PKPdf** | **18 07 30.7** | **+0.2** |
| **GERES** | **GERESS Array B** | **124.14** | **329** | PKP | **PKPdf** | **18 07 30.6** | **-0.2** |
| | comp=Z,1.5nm,0.5s,baz=88,slow=2.6,SNR=13 | | | | | | |
| **GERES** | **GERESS Array B** | **124.14** | **329** | PKiKP | **PKPdf** | **18 07 29.6** | **-1.2** |
| **GERES** | **GERESS Array B** | **124.14** | **329** | | **PKPdf** | **18 07 29.6** | **-1.2** |
| **SOKA** | **Soboth** | **124.76** | **326** | *i* P | **PKiKP** | **18 07 33.1** | **+0.7** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **126.09** | **328** | *e*P | **PKPdf** | **18 07 35.3** | **+0.6** |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | **126.22** | **329** | *i* P | **PKPdf** | **18 07 35.4** | **+0.4** |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **126.44** | **329** | *e*P | **PKPdf** | **18 07 35.5** | **+0.1** |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **126.47** | **329** | *e*P | **PKPdf** | **18 07 35.7** | **+0.3** |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **FETA** | **Feichten** | **126.85** | **329** | *e*P | **PKPdf** | **18 07 36.7** | **+0.5** |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **139.45** | **333** | PKP | **PKiKP** | **18 08 02.2** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=51,slow=1.7,SNR=3.2 | | | | | | |
| **BDFB** | **Brasilia** | **150.75** | **133** | PKPbc | **PKPbc** | **18 08 24.7** | **-0.8** |
| | comp=Z,6.1nm,0.7s,baz=282,slow=3.4,SNR=6.3 | | | | | | |
| **BDFB** | **Brasilia** | **150.75** | **133** | PKiKP | **PKPdf** | **18 08 18.8** | **-1.1** |
| **BDFB** | **Brasilia** | **150.75** | **133** | | **PKPdf** | **18 08 18.8** | **-1.1** |
| **TORD** | **Torodi Ar. Bea** | **150.96** | **289** | PKPbc | **PKPbc** | **18 08 25.4** | **-0.5** |
| | comp=Z,20nm,0.8s,baz=44,slow=2.1,SNR=80 | | | | | | |
| **KIC** | **Kosan Boka** | **158.38** | **276** | *e*PKP2 | **PKPab** | **18 09 05.4** | **+0.1** |
| | comp=Z,7.9nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **158.47** | **277** | PKPab | **PKPab** | **18 09 05.5** | **-0

*IDC **05** 18:08:23.2±2.7,6°.26S×129°.94E,h155km±39km,mb2.9/1, mb1 3.1/5,mb1mx2.8/35,mbtmp3.5/5,Error ellipse: s-maj=75.4km s-min=20.4km az=88.0*

**ISC 05 18:08:23.0**±0.9,**6°.29S**±0°.06×**130°.2E**±0°.1,**h146**km,**n12,** σ**25:56**/14,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **3.95** | **32** | P | **Pn** | **18 09 24.7** | **+2.1** |
| **SIJI** | **Sorong** | **5.50** | **12** | P | **Pn** | **18 09 43.8** | **+0.6** |
| | 1.7nm,0.3s,baz=57,slow=7.2,SNR=50 | | | | | | |
| SIJI | | | | S | **Sn** | **18 10 42.8** | **-2.9** |
| | 2.6nm,0.3s,baz=270,slow=24,SNR=19 | | | | | | |
| **SANI** | **Sanana** | **5.92** | **315** | P | **Pn** | **18 09 51.6** | **+3.0** |
| **DRS** | **Darwin Rock St** | **6.14** | **173** | P | **Pn** | **18 09 54.2** | **+2.6** |
| **MTN** | **Manton Dam** | **6.58** | **172** | P | **Pn** | **18 10 00.0** | **+2.5** |
| **KDU** | **Kakadu** | **6.75** | **160** | P | **Pn** | **18 10 02.3** | **+2.5** |
| **SOEI** | **Soe** | **6.76** | **239** | P | **Pn** | **18 10 02.0** | **+1.9** |
| **KNRA** | **Kununurra** | **9.42** | **188** | P | **Pn** | **18 10 36.2** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.53** | **200** | P | **Pn** | **18 11 15.4** | **-1.0** |
| | 0.2nm,0.3s,baz=14,slow=8.3,SNR=11 | | | | | | |
| FITZ | | | | S | Sn | 18 13 26.2 | -8.7 |
| | 0.2nm,0.3s,baz=163,slow=19,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.16** | **164** | P | **Pn** | **18 11 37.9** | **+0.6** |
| | 0.4nm,0.3s,baz=351,slow=13,SNR=13 | | | | | | |
| WRA | | | | S | **Sn** | **18 14 09.7** | **-4.6** |
| | 0.1nm,0.3s,baz=348,slow=27,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **17.65** | **169** | P | **P** | **18 12 19.9** | **+1.0** |
| | 0.2nm,0.3s,baz=345,slow=9.0,SNR=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.72** | **327** | P | **P** | **18 19 03.0** | **-1.7** |
| | 0.2nm,0.6s,baz=115,slow=6.8,SNR=2.1 | | | | | | |

*IDC **05** 18:24:01.5±0.9,38°.56N×20°.63E,h0km,mb3.4/4, mb1 3.4/4,mb1mx3.1/50,mbtmp3.4/4,MS3.8/1,Ms1 3.8/1, ms1mx2.5/52,Error ellipse: s-maj=24.1km s-min=16.2km az=109.0*

*ATH **05** 18:24:03.6,38°.55N×20°.57E,h10km±1km,ML3.0/15,Error ellipse: s-maj=1.9km s-min=0.6km az=291.0*

*THE **05** 18:24:03.7,38°.55N×20°.52E,h10km,ML3.3/13,Error ellipse: s-maj=1.3km s-min=0.5km az=287.0*

**ISC 05 18:24:03.3**±0.7,**38°.56N**±0°.02×**20°.53E**±0°.03,**h13**km±4km, **n69,** σ**1§16**/102,**mb3.4/4,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FSK** | **Fiskardo** | **0.10** | **167** | P | **Pg** | **18 24 06.1** | **-0.1** |
| FSK | | | | S | **Sg** | **18 24 07.8** | **-0.5** |
| | 134µm,0.2s | | | | | | |
| **FSK** | **Fiskardo** | **0.10** | **167** | P | **Pg** | **18 24 06.1** | **-0.1** |
| FSK | | | | S | **Sg** | **18 24 07.3** | **-0.9** |
| FSK | | | | AML | AML | 18 24 08.3 | |
| FSK | | | | AML | AML | 18 24 08.4 | |
| **EVGI** | **Lefkada island** | **0.12** | **56** | P | **Pg** | **18 24 06.3** | **-0.1** |
| EVGI | | | | S | **Sg** | **18 24 08.9** | **+0.2** |
| | 20µm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.12** | **56** | P | **Pg** | **18 24 06.4** | **0.0** |
| EVGI | | | | S | **Sg** | **18 24 08.6** | **-0.1** |
| **DRAG** | **Dragano-Lefkad** | **0.13** | **14** | P | **Pg** | **18 24 06.5** | **-0.2** |
| DRAG | | | | S | **Sg** | **18 24 09.4** | **+0.3** |
| | 21µm,0.4s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.13** | **14** | P | **Pg** | **18 24 06.5** | **-0.2** |
| DRAG | | | | S | **Sg** | **18 24 08.7** | **-0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.20** | **39** | P | **Pg** | **18 24 07.7** | **0.0** |
| NYDR | | | | S | **Sg** | **18 24 11.2** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.20** | **39** | P | **Pg** | **18 24 07.8** | **0.0** |
| **LKD2** | **Lefkada island** | **0.25** | **23** | P | **Pg** | **18 24 08.9** | **+0.3** |
| LKD2 | | | | S | **Sg** | **18 24 13.9** | **+1.7** |
| | 2µm,0.6s | | | | | | |
| **LKD2** | **Lefkada island** | **0.25** | **23** | P | **Pg** | **18 24 08.9** | **+0.3** |
| LKD2 | | | | S | **Sg** | **18 24 12.9** | **+0.7** |
| LKD2 | | | | AML | AML | 18 24 17.8 | |
| | comp=E,3992µm,0.2s | | | | | | |
| LKD2 | | | | AML | AML | 18 24 19.5 | |
| | comp=N,5587µm,0.6s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.28** | **19** | P | **Pg** | **18 24 09.6** | **+0.4** |
| TSLK | | | | S | **Sb** | **18 24 14.7** | **-0.3** |
| | comp=N,2µm,0.5s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.28** | **19** | P | **Pg** | **18 24 09.4** | **+0.2** |
| TSLK | | | | S | **Sg** | **18 24 14.1** | **+0.9** |
| TSLK | | | | AML | AML | 18 24 17.7 | |
| | comp=E,4943µm,0.3s | | | | | | |
| TSLK | | | | AML | AML | 18 24 21.9 | |
| | comp=N,4146µm,0.4s | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.31** | **196** | P | **Pg** | **18 24 09.6** | **0.0** |
| KEF4 | | | | S | **Sg** | **18 24 14.9** | **+1.0** |
| | comp=N,62µm,0.3s | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.31** | **196** | P | **Pg** | **18 24 09.6** | **0.0** |
| KEF4 | | | | S | **Sg** | **18 24 14.8** | **+1.0** |
| **DMLN** | **Damoulianata-K** | **0.34** | **202** | P | **Pg** | **18 24 10.2** | **0.0** |
| DMLN | | | | S | **Sg** | **18 24 15.8** | **+1.0** |
| | comp=N,10µm,0.4s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.34** | **202** | P | **Pg** | **18 24 10.3** | **+0.1** |
| DMLN | | | | S | **Sg** | **18 24 15.9** | **+1.1** |
| **LXRA** | **Lixouri, Kepha** | **0.36** | **192** | P | **Pg** | **18 24 10.5** | **-0.1** |
| LXRA | | | | S | **Sg** | **18 24 16.4** | **+1.0** |
| **ARGA** | **Argostoli. Kep** | **0.38** | **187** | P | **Pb** | **18 24 11.8** | **-0.1** |
| ARGA | | | | S | **Sb** | **18 24 17.6** | **0.0** |
| **KEF3** | **Kipouria, Keph** | **0.38** | **203** | P | **Pg** | **18 24 10.4** | **-0.5** |
| KEF3 | | | | S | **Sg** | **18 24 16.5** | **+0.5** |
| | comp=N,11µm,0.3s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.38** | **203** | P | **Pg** | **18 24 10.3** | **-0.5** |
| KEF3 | | | | S | **Sg** | **18 24 15.3** | **-0.7** |
| **VLS** | **Valsamata** | **0.38** | **173** | P | **Pg** | **18 24 10.6** | **-0.3** |
| VLS | | | | S | **Sg** | **18 24 16.7** | **+0.7** |
| | comp=N,9µm,0.2s | | | | | | |
| **VLS** | **Valsamata** | **0.38** | **173** | P | **Pg** | **18 24 10.6** | **-0.3** |
| VLS | | | | S | **Sg** | **18 24 16.6** | **+0.5** |
| VLS | | | | AML | AML | 18 24 17.4 | |
| | comp=E,20005µm,0.2s | | | | | | |
| VLS | | | | AML | AML | 18 24 17.4 | |
| | comp=N,14191µm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.44** | **175** | P | **Pg** | **18 24 11.9** | **-0.1** |
| PSDA | | | | S | **Sg** | **18 24 18.8** | **+0.9** |
| | comp=N,1µm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.44** | **175** | P | **Pg** | **18 24 11.9** | **-0.1** |
| PSDA | | | | S | **Sg** | **18 24 18.8** | **+0.9** |
| **VTN** | **Vitineika** | **0.82** | **141** | P | **Pb** | **18 24 19.3** | **-0.1** |
| **LTHK** | **Lithakia** | **0.88** | **164** | P | **Pg** | **18 24 19.2** | **-1.0** |
| **RLS** | **Riolos of Patr** | **0.89** | **124** | P | **Pg** | **18 24 19.7** | **-0.7** |
| RLS | | | | S | **Sn** | **18 24 34.4** | **+0.2** |
| | comp=N,1µm,0.3s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.89** | **124** | P | **Pg** | **18 24 19.8** | **-0.7** |
| RLS | | | | AML | AML | 18 24 37.1 | |
| | comp=N,2577µm,0.2s | | | | | | |
| RLS | | | | AML | AML | 18 24 37.4 | |
| | comp=E,2632µm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.99** | **351** | P | **Pg** | **18 24 22.4** | **+0.1** |
| **IGT** | **Igoumenitsa** | **0.99** | **351** | P | **Pg** | **18 24 21.8** | **-0.5** |
| IGT | | | | AML | AML | 18 24 41.7 | |
| | comp=N,884µm,0.4s | | | | | | |
| IGT | | | | AML | AML | 18 24 43.8 | |
| | comp=E,881µm,0.6s | | | | | | |
| **EVR** | **Evrytania** | **1.06** | **70** | P | **Pb** | **18 24 24.0** | **+0.4** |
| EVR | | | | S | **Sn** | **18 24 39.8** | **+1.1** |
| **EVR** | **Evrytania** | **1.06** | **70** | P | **Pg** | **18 24 23.3** | **-0.4** |
| EVR | | | | AML | AML | 18 24 50.6 | |
| | comp=E,844µm,0.6s | | | | | | |
| EVR | | | | AML | AML | 18 24 54.5 | |
| | comp=N,874µm,0.6s | | | | | | |
| **EFP** | **Efpalio** | **1.08** | **96** | P | **Pg** | **18 24 23.4** | **-0.8** |
| **EFP** | **Efpalio** | **1.08** | **96** | P | **Pg** | **18 24 23.2** | **-0.9** |
| EFP | | | | AML | AML | 18 24 45.2 | |
| | comp=N,948µm,0.4s | | | | | | |
| EFP | | | | AML | AML | 18 24 49.3 | |
| | comp=E,1352µm,0.5s | | | | | | |
| **DRO** | **Drossia** | **1.10** | **123** | P | **Pg** | **18 24 24.1** | **-0.5** |
| DRO | | | | S | **Sn** | **18 24 41.1** | **+1.5** |
| | comp=E,3µm,0.2s | | | | | | |
| **DRO** | **Drossia** | **1.10** | **123** | P | **Pg** | **18 24 24.1** | **-0.5** |
| DRO | | | | AML | AML | 18 24 45.2 | |
| | comp=E,6768µm,0.2s | | | | | | |
| DRO | | | | AML | AML | 18 24 46.8 | |
| | comp=N,6522µm,0.3s | | | | | | |
| **JAN** | **Janina** | **1.13** | **13** | P | **Pg** | **18 24 25.4** | **+0.4** |
| JAN | | | | AML | AML | 18 24 45.8 | |
| | comp=N,658µm,0.4s | | | | | | |
| JAN | | | | AML | AML | 18 24 59.9 | |
| | comp=E,645µm,0.5s | | | | | | |
| **LAKA** | **Lakka** | **1.18** | **105** | P | **Pb** | **18 24 24.8** | **-0.7** |
| LAKA | | | | S | **Sn** | **18 24 42.8** | **+1.3** |
| | comp=E,2µm,0.8s | | | | | | |
| **LAKA** | **Lakka** | **1.18** | **105** | P | **Pb** | **18 24 24.8** | **-0.7** |
| LAKA | | | | S | **Sn** | **18 24 41.7** | **+0.2** |
| LAKA | | | | AML | AML | 18 24 49.8 | |
| | comp=E,3983µm,0.7s | | | | | | |
| LAKA | | | | AML | AML | 18 24 50.2 | |
| | comp=N,3152µm,0.8s | | | | | | |
| **TRIZ** | **Trizonia** | **1.22** | **98** | P | **Pb** | **18 24 25.8** | **-0.5** |
| **TRIZ** | **Trizonia** | **1.22** | **98** | P | **Pb** | **18 24 25.5** | **-0.7** |
| **KASA** | **Kassiopi** | **1.28** | **339** | P | **Pg** | **18 24 28.9** | **+1.1** |
| **KEK** | **Kerkira** | **1.29** | **334** | P | **Pb** | **18 24 28.5** | **+1.1** |
| KEK | | | | AML | AML | 18 24 54.0 | |
| | comp=N,932µm,0.5s | | | | | | |
| KEK | | | | AML | AML | 18 24 57.8 | |
| | comp=E,872µm,0.8s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **1.33** | **69** | P | **Pg** | **18 24 28.7** | **-0.1** |
| **KLV** | **Kalavryta, Ach** | **1.37** | **111** | P | **Pn** | **18 24 28.0** | **-0.2** |
| **KLV** | **Kalavryta, Ach** | **1.37** | **111** | P | **Pn** | **18 24 28.1** | **-0.2** |
| KLV | | | | AML | AML | 18 24 55.6 | |
| | comp=N,380µm,0.2s | | | | | | |
| KLV | | | | AML | AML | 18 24 57.0 | |
| | comp=E,540µm,0.6s | | | | | | |
| **AGG** | **Agios Georgios** | **1.48** | **71** | P | **Pb** | **18 24 30.9** | **+0.2** |
| **AGG** | **Agios Georgios** | **1.48** | **71** | P | **Pb** | **18 24 30.9** | **+0.2** |
| AGG | | | | AML | AML | 18 25 01.1 | |
| | comp=N,750µm,0.4s | | | | | | |
| AGG | | | | AML | AML | 18 25 01.1 | |
| | comp=E,884µm,0.8s | | | | | | |
| **THL** | **Klokotos Trika** | **1.53** | **48** | P | **Pg** | **18 24 32.7** | **0.0** |
| THL | | | | AML | AML | 18 25 02.3 | |
| | comp=E,614µm,0.5s | | | | | | |
| THL | | | | AML | AML | 18 25 03.1 | |
| | comp=N,630µm,1.3s | | | | | | |
| **ITM** | **Ithomi** | **1.76** | **141** | P | **Pb** | **18 24 36.2** | **+0.7** |
| **PYL** | **PYLOS** | **1.91** | **150** | P | **Pb** | **18 24 38.9** | **+0.8** |
| **LTK** | **Loutraki** | **1.99** | **105** | P | **Pb** | **18 24 39.2** | **-0.1** |
| **VLY** | **Voula,Athens** | **2.66** | **104** | P | **Pb** | **18 24 48.6** | **-2.2** |
| **DION** | **Dionisos Attik** | **2.72** | **99** | P | **Pn** | **18 24 49.3** | **+2.6** |
| **IDI** | **Anoyia** | **4.78** | **132** | Sn | **Sn** | **18 26 12.0** | **+1.7** |
| | comp=N,0.8nm,0.3s,baz=325,slow=14,SNR=1.3 | | | | | | |
| **HVAR** | **Hvar** | **5.56** | **327** | *e*Pn | **Pn** | **18 25 26.3** | **+0.6** |
| HVAR | | | | Sn | **Sn** | **18 26 25.5** | **-3.9** |
| **RICI** | **Ricice** | **5.56** | **334** | *e*Pn | **Pn** | **18 25 25.6** | **-0.2** |
| RICI | | | | Sn | **Sn** | **18 26 26.4** | **-3.2** |
| **KIJV** | **Kijevo** | **6.27** | **332** | *e*Pn | **Pn** | **18 25 36.0** | **+0.5** |
| KIJV | | | | Sn | **Sn** | **18 26 44.5** | **-2.5** |
| **ZIRJ** | **Zirje** | **6.29** | **326** | *e*Pn | **Pn** | **18 25 35.5** | **-0.2** |
| ZIRJ | | | | Sn | **Sn** | **18 26 43.0** | **-4.5** |
| **MORI** | **Morici** | **6.43** | **327** | *e*Pn | **Pn** | **18 25 38.3** | **+0.6** |
| MORI | | | | Sn | **Sn** | **18 26 47.4** | **-3.6** |
| **DUGI** | **Dugi Otok** | **6.82** | **325** | *e*Pn | **Pn** | **18 25 44.1** | **+1.1** |
| DUGI | | | | Sn | **Sn** | **18 26 56.2** | **-4.2** |
| **UDBI** | **Udbina** | **6.96** | **331** | *e*Pn | **Pn** | **18 25 46.3** | **+1.4** |
| **SMRN** | **Sveta Marina** | **8.04** | **326** | *e*Pn | **Pn** | **18 25 59.8** | **+0.2** |
| **BRJN** | **Brijuni** | **8.12** | **324** | *e*Pn | **Pn** | **18 26 00.1** | **-0.7** |
| **HFS** | **Hagfors** | **22.03** | **351** | P | **P** | **18 28 57.4** | **+0.2** |
| | comp=N,4.5nm,1.0s,baz=161,slow=14,SNR=4.7 | | | | | | |
| **FINES** | **FINESS Array B** | **23.17** | **7** | P | **P** | **18 29 09.3** | **0.0** |
| | comp=N,0.7nm,0.5s,baz=163,slow=10,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.33** | **219** | P | **P** | **18 30 15.3** | **+0.6** |
| | comp=N,0.3nm,0.6s,baz=22,slow=9.4,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.10** | **59** | P | **P** | **18 32 18.7** | **-0.4** |
| | comp=N,0.2nm,0.5s,baz=281,slow=7.0,SNR=5.6 | | | | | | |
| **TSUM** | **Tsumeb** | **57.52** | **183** | LR | LR | 19 00 46.5 | |
| | comp=N,74nm,19.8s,baz=148,slow=38 | | | | | | |

*IDC **05** 18:28:39.8±1.1,59°.62N×145°.64W,h0km,mb3.9/7, mb1 4.0/10,mb1mx3.6/45,mbtmp3.8/10,ML3.5/3,Error ellipse: s-maj=20.8km s-min=17.9km az=15.0*

*PGC **05** 18:28:39.8±0.7,59°.52N×145°.93W,h10km,ML3.5,ML3.2/8, 179km Sse of Valdez, Ak Gulf Of Alaska Mining induced.*

*ANF **05** 18:28:41.8±0.3,59°.57N×145°.79W,h21km±3km,ML3.9/38, Error ellipse: s-maj=2.9km s-min=1.7km az=179.0*

*NEIC **05** 18:28:41.6±1.5,59°.58N±0°.05×145°.81W±0°.03,h26km±5km, Error ellipse: s-maj=7.2km s-min=1.5km az=162.0*

*AEIC **05** 18:28:42±1.5,59°.56N±0°.05×145°.81W±0°.06,h25km±5km, ML3.5,mb4.2/3(NEIC),ML3.7/142(NEIC),Error ellipse: s-maj=7.2km s-min=4.4km az=173.0*

**ISC 05 18:28:39.1**±0.6,**59°.61N**±0°.03×**145°.74W**±0°.02,**h0**km,**n249,** σ**1§10**/288,**mb4.1/7,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MID** | **Middleton Isla** | **0.35** | **240** | | **Pb** | **18 28 49.1** | **+0.8** |
| **MID** | **Middleton Isla** | **0.35** | **240** | | **Sb** | **18 28 56.3** | **+2.0** |
| **Q23K** | **Middleton Isla** | **0.36** | **241** | | **Pb** | **18 28 48.5** | **+0.2** |
| **Q23K** | **Middleton Isla** | **0.36** | **241** | | **Sb** | **18 28 56.2** | **+1.8** |
| **Q23K** | **Middleton Isla** | **0.36** | **241** | P | **Pb** | **18 28 49.5** | **+1.2** |
| | baz=65,SNR=37 | | | | | | |
| **KAIM** | **Kayak Island** | **0.74** | **64** | Pn | **Pb** | **18 28 56.0** | **+1.1** |
| KAIM | | | | IAML | | 18 29 15.2 | |
| | comp=N,2µm,0.9s | | | | | | |
| **KAIM** | **Kayak Island** | **0.74** | **64** | P | **Pb** | **18 28 56.1** | **+1.1** |
| | baz=243,SNR=11 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **0.95** | **360** | | **Pb** | **18 28 58.7** | **+0.3** |
| **EYAK** | **Cordova Ski Ar** | **0.95** | **360** | | **Sb** | **18 29 11.6** | **+0.2** |
| **EYAK** | **Cordova Ski Ar** | **0.95** | **360** | P | **Pb** | **18 28 58.8** | **+0.5** |
| | baz=182,SNR=27 | | | | | | |
| EYAK | | | | S | **Sb** | **18 29 11.6** | **+0.2** |
| | baz=182 | | | | | | |
| **HMT** | **Hamilton** | **1.04** | **45** | | **Pn** | **18 29 00.9** | **-0.1** |
| **HMT** | **Hamilton** | **1.04** | **45** | | **Sn** | **18 29 16.9** | **+0.6** |
| **NICHA** | **Nichawak Mount** | **1.09** | **54** | | **Pn** | **18 29 01.8** | **+0.1** |
| **SUCK** | **Suckling Hills** | **1.10** | **64** | | **Pn** | **18 29 01.7** | **-0.1** |
| SUCK | | | | IAML | | 18 29 22.8 | |
| | comp=E,2µm,1.0s | | | | | | |
| SUCK | | | | IAML | | 18 29 30.4 | |
| | comp=N,2µm,0.8s | | | | | | |
| **GOAT** | **Goat Mountain** | **1.10** | **27** | | **Pn** | **18 29 02.0** | **+0.1** |
| GOAT | | | | | **Sn** | **18 29 17.8** | **-0.1** |
| **FID** | **Port Fidalgo** | **1.21** | **343** | | **Pb** | **18 29 02.8** | **-0.1** |
| FID | | | | IAML | | 18 29 21.1 | |
| | comp=N,2µm,0.5s | | | | | | |
| **FID** | **Port Fidalgo** | **1.21** | **343** | | **Sb** | **18 29 19.5** | **+0.6** |
| **BERG** | **Berg Lake** | **1.29** | **51** | | **Pg** | **18 29 04.2** | **+0.4** |
| BERG | | | | IAML | | 18 29 35.2 | |
| | comp=N,2µm,0.9s | | | | | | |
| **BGLC** | **Bering Glacier** | **1.34** | **66** | | **Pb** | **18 29 05.8** | **+0.7** |
| **BGLC** | **Bering Glacier** | **1.34** | **66** | P | **Pb** | **18 29 05.7** | **+0.6** |
| | baz=247 | | | | | | |
| BGLC | | | | S | **Sn** | **18 29 25.5** | **+2.0** |
| | baz=247 | | | | | | |
| **GRIN** | **Grindle Hills** | **1.40** | **60** | | **Pb** | **18 29 06.4** | **+0.4** |
| **GLI** | **Glacier Island** | **1.45** | **333** | | **Pn** | **18 29 06.2** | **-0.4** |
| GLI | | | | IAML | | 18 29 31.4 | |
| | comp=E,1µm,0.6s | | | | | | |
| **GLI** | **Glacier Island** | **1.45** | **333** | | **Sn** | **18 29 26.6** | **+0.4** |
| **GLI** | **Glacier Island** | **1.45** | **333** | P | **Pn** | **18 29 06.3** | **-0.2** |
| | baz=154,SNR=18 | | | | | | |
| GLI | | | | S | **Sn** | **18 29 26.4** | **+0.2** |
| | baz=154 | | | | | | |
| **BMRM** | **Bremner River** | **1.48** | **22** | | **Pn** | **18 29 07.2** | **+0.2** |
| BMRM | | | | IAML | | 18 29 36.7 | |
| | comp=N,764nm,0.7s | | | | | | |
| BMRM | | | | IAML | | 18 29 40.5 | |
| | comp=E,1µm,0.8s | | | | | | |
| **BMRM** | **Bremner River** | **1.48** | **22** | P | **Pn** | **18 29 07.3** | **+0.3** |
| | baz=204,SNR=131 | | | | | | |
| BMRM | | | | S | **Sn** | **18 29 27.9** | **+0.8** |
| | baz=204 | | | | | | |
| **KHIT** | **Khitrov Hills** | **1.51** | **55** | | **Pn** | **18 29 07.5** | **+0.1** |
| KHIT | | | | | **Sb** | **18 29 28.1** | **+0.5** |
| **VMT** | **TAPS Tl Valdez** | **1.52** | **348** | | **Pn** | **18 29 07.4** | **0.0** |
| **JPK** | **Jack Peak** | **1.52** | **344** | | **Pn** | **18 29 07.4** | **-0.1** |
| **DIV** | **Divide** | **1.53** | **359** | | **Pn** | **18 29 07.7** | **0.0** |
| **DIV** | **Divide** | **1.53** | **359** | Pn | **Pn** | **18 29 07.8** | **+0.1** |
| DIV | | | | Sn | **Sg** | **18 29 28.1** | **-0.1** |
| **SNH** | **Sunshine Point** | **1.57** | **67** | Pn | **Pn** | **18 29 08.4** | **+0.1** |
| **WAX** | **Waxell Ridge** | **1.68** | **58** | | **Pn** | **18 29 09.9** | **+0.1** |
| **PWL** | **Port Wells** | **1.81** | **315** | | **Pn** | **18 29 10.8** | **-0.6** |
| PWL | | | | IAML | | 18 29 37.0 | |
| | comp=E,976nm,0.3s | | | | | | |
| **PWL** | **Port Wells** | **1.81** | **315** | P | **Pn** | **18 29 10.8** | **-0.6** |
| | baz=135,SNR=27 | | | | | | |
| PWL | | | | S | **Sn** | **18 29 35.4** | **+0.3** |
| | baz=135 | | | | | | |
| **KLU** | **Klutina** | **1.90** | **357** | | **Pn** | **18 29 13.0** | **+0.2** |
| KLU | | | | IAML | | 18 29 44.7 | |
| | comp=N,401nm,0.6s | | | | | | |
| **KLU** | **Klutina** | **1.90** | **357** | | **Sn** | **18 29 37.6** | **+0.2** |
| **KLU** | **Klutina** | **1.90** | **357** | P | **Pn** | **18 29 13.0** | **+0.2** |
| | baz=178,SNR=46 | | | | | | |
| KLU | | | | S | **Sn** | **18 29 37.7** | **+0.3** |
| | baz=178 | | | | | | |
| **SEW** | **Seward** | **1.94** | **287** | Pn | **Pn** | **18 29 12.0** | **-1.3** |
| | baz=105,SNR=11 | | | | | | |
| **SEW** | **Seward** | **1.94** | **287** | P | **Pn** | **18 29 12.5** | **-0.8** |
| SEW | | | | S | **Sn** | **18 29 36.6** | **-1.7** |
| | baz=105 | | | | | | |
| **ISLE** | **Juniper Island** | **1.98** | **58** | | **Pn** | **18 29 14.3** | **+0.4** |
| ISLE | | | | IAML | | 18 29 56.3 | |
| | comp=N,696nm,0.9s | | | | | | |
| **VRDI** | **Verde Repeater** | **1.98** | **34** | Pn | **Pn** | **18 29 14.4** | **+0.3** |
| VRDI | | | | IAML | | 18 29 52.3 | |
| | comp=N,364nm,1.3s | | | | | | |
| **MESA** | **MESA** | **2.00** | **72** | | **Pn** | **18 29 14.0** | **-0.3** |
| MESA | | | | IAML | | 18 29 58.0 | |
| | comp=N,783nm,0.5s | | | | | | |
| MESA | | | | IAML | | 18 30 10.8 | |
| | comp=E,624nm,1.1s | | | | | | |
| **MESA** | **MESA** | **2.00** | **72** | Pn | **Pn** | **18 29 14.2** | **0.0** |
| MESA | | | | Sn | **Sn** | **18 29 39.9** | **-0.2** |
| **MESA** | **MESA** | **2.00** | **72** | P | **Pn** | **18 29 14.3** | **0.0** |
| | baz=254 | | | | | | |
| MESA | | | | S | **Sn** | **18 29 40.5** | **+0.5** |
| | baz=254 | | | | | | |
| **BAGL** | **Bagley Icefiel** | **2.04** | **63** | | **Pn** | **18 29 15.1** | **+0.5** |
| **GLB** | **Gilahina Butte** | **2.08** | **27** | Pn | **Pn** | **18 29 15.8** | **+0.6** |
| GLB | | | | IAML | | 18 29 44.5 | |
| | comp=E,387nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **2.08** | **27** | | **Sn** | **18 29 41.4** | **-0.4** |
| **N25K** | **Chitina, Valde** | **2.08** | **15** | | **Pn** | **18 29 16.1** | **+0.7** |
| N25K | | | | IAML | | 18 29 45.7 | |
| | comp=N,399nm,0.5s | | | | | | |
| N25K | | | | IAML | | 18 29 46.7 | |
| | comp=E,576nm,0.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **2.08** | **15** | P | **Pn** | **18 29 16.1** | **+0.7** |
| | baz=197,SNR=78 | | | | | | |
| N25K | | | | S | **Sn** | **18 29 42.5** | **+0.4** |
| | baz=197 | | | | | | |
| **KIAG** | **Kiagna River** | **2.14** | **50** | | **Pn** | **18 29 16.7** | **+0.4** |
| **KIAG** | **Kiagna River** | **2.14** | **50** | Pn | **Pn** | **18 29 16.7** | **+0.4** |
| KIAG | | | | Sn | **Sn** | **18 29 43.4** | **-0.2** |
| **YAH** | **Yahtse** | **2.15** | **68** | | **Pn** | **18 29 16.6** | **+0.2** |
| YAH | | | | IAML | | 18 29 58.2 | |
| | comp=N,437nm,1.0s | | | | | | |
| **O22K** | **Cooper Landing** | **2.18** | **295** | | **Pn** | **18 29 16.2** | **-0.4** |
| **BALM** | **Baldy** | **2.22** | **48** | | **Pn** | **18 29 17.7** | **+0.5** |
| **BALM** | **Baldy** | **2.22** | **48** | Pn | **Pn** | **18 29 17.8** | **+0.5** |
| BALM | | | | Sn | **Sn** | **18 29 44.9** | **-0.5** |
| **KNK** | **Knik Glacier** | **2.26** | **325** | | **Pn** | **18 29 18.1** | **+0.5** |
| KNK | | | | IAML | | 18 29 48.1 | |
| | comp=E,332nm,0.9s | | | | | | |
| KNK | | | | IAML | | 18 29 55.4 | |
| | comp=N,385nm,0.6s | | | | | | |
| **KNK** | **Knik Glacier** | **2.26** | **325** | P | **Pn** | **18 29 18.2** | **+0.5** |
| | baz=144,SNR=28 | | | | | | |
| KNK | | | | S | **Sn** | **18 29 47.1** | **+0.9** |
| | baz=144 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **2.37** | **341** | | **Pn** | **18 29 19.8** | **+0.5** |
| SCM | | | | IAML | | 18 30 11.6 | |
| | comp=N,290nm,0.9s | | | | | | |
| SCM | | | | IAML | | 18 30 18.9 | |
| | comp=E,412nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **2.37** | **341** | P | **Pn** | **18 29 19.8** | **+0.5** |
| | baz=161,SNR=19 | | | | | | |
| SCM | | | | S | **Sn** | **18 29 49.5** | **+0.5** |
| | baz=161 | | | | | | |
| **SLKM** | **Skilak Lake** | **2.42** | **294** | | **Pn** | **18 29 19.4** | **-0.5** |
| SLKM | | | | | **Sn** | **18 29 48.9** | **-1.4** |
| **TABL** | **Table Mountain** | **2.46** | **68** | | **Pn** | **18 29 21.0** | **+0.4** |
| TABL | | | | IAML | | 18 29 56.1 | |
| | comp=N,394nm,0.7s | | | | | | |
| TABL | | | | IAML | | 18 30 12.1 | |
| | comp=E,472nm,1.0s | | | | | | |
| **TABL** | **Table Mountain** | **2.46** | **68** | Pn | **Pn** | **18 29 21.0** | **+0.4** |
| TABL | | | | Sn | **Sn** | **18 29 50.8** | **-0.6** |
| **RC01** | **Rabbit Creek A** | **2.48** | **309** | | **Pn** | **18 29 20.4** | **-0.4** |
| RC01 | | | | IAML | | 18 29 59.3 | |
| | comp=N,337nm,0.6s | | | | | | |
| RC01 | | | | IAML | | 18 30 05.3 | |
| | comp=E,262nm,0.6s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.48** | **309** | P | **Pn** | **18 29 20.5** | **-0.3** |
| | baz=127,SNR=30 | | | | | | |
| RC01 | | | | S | **Sn** | **18 29 51.0** | **-0.7** |
| | baz=127 | | | | | | |
| **PS11** | **TAPS Pump St11** | **2.49** | **3** | | **Pn** | **18 29 22.2** | **+1.4** |
| **BARN** | **Barnard Glacie** | **2.50** | **53** | | **Pn** | **18 29 21.8** | **+0.7** |
| BARN | | | | IAML | | 18 29 56.6 | |
| | comp=E,277nm,0.6s | | | | | | |
| BARN | | | | IAML | | 18 30 02.8 | |
| | comp=N,245nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **2.52** | **355** | Pn | **Pn** | **18 29 22.5** | **+1.1** |
| M24K | | | | IAML | | 18 30 07.3 | |
| | comp=E,352nm,1.9s | | | | | | |
| M24K | | | | IAML | | 18 30 31.9 | |
| | comp=N,336nm,1.1s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **2.52** | **355** | P | **Pn** | **18 29 22.4** | **+1.1** |
| | baz=176,SNR=33 | | | | | | |
| **BRSE** | **Bradley Lake S** | **2.54** | **275** | | **Pn** | **18 29 20.3** | **-1.2** |
| **BRSE** | **Bradley Lake S** | **2.54** | **275** | S | **Sn** | **18 29 50.9** | **-2.3** |
| | baz=92 | | | | | | |
| **SML** | **Sawmill** | **2.55** | **331** | | **Pn** | **18 29 22.1** | **+0.4** |
| SML | | | | IAML | | 18 30 20.6 | |
| | comp=E,372nm,1.3s | | | | | | |
| **SML** | **Sawmill** | **2.55** | **331** | P | **Pn** | **18 29 22.2** | **+0.4** |
| | baz=150,SNR=17 | | | | | | |
| SML | | | | S | **Sn** | **18 29 54.0** | **+0.5** |
| | baz=150 | | | | | | |
| **SAMH** | **Samovar Hills** | **2.56** | **76** | | **Pn** | **18 29 22.5** | **+0.6** |
| **SAMH** | **Samovar Hills** | **2.56** | **76** | Pn | **Pn** | **18 29 22.4** | **+0.6** |
| S

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,106nm,1.0s | | | | | | | | |
| MENT | | | | | IAML | | | 18 30 43.0 | |
| | comp=E,129nm,0.8s | | | | | | | | |
| **O20K** | **Slope Mountain** | **3.51** | **281** | | | **Pn** | | **18 29 34.7** | **-0.1** |
| **O20K** | **Slope Mountain** | **3.51** | **281** | P | | **Pn** | | **18 29 35.0** | **+0.1** |
| | baz=96 | | | | | | | | |
| O20K | | | | S | | **Sn** | | **18 30 16.4** | **-0.7** |
| | baz=96 | | | | | | | | |
| **SPU** | **Mount Spurr** | **3.51** | **299** | | | **Pn** | | **18 29 34.2** | **-0.7** |
| **SPCG** | **Spurr Capps Gl** | **3.54** | **301** | | | **Pn** | | **18 29 34.7** | **-0.7** |
| **STLK** | **Strandline Lak** | **3.56** | **305** | | | **Pn** | | **18 29 34.9** | **-0.7** |
| **CUT** | **Chulitna** | **3.57** | **324** | | | **Pn** | | **18 29 36.1** | **+0.5** |
| **CUT** | **Chulitna** | **3.57** | **324** | P | | **Pn** | | **18 29 36.3** | **+0.6** |
| | baz=141,SNR=8.4 | | | | | | | | |
| **SPCP** | **Crater Peak Br** | **3.59** | **300** | | | **Pn** | | **18 29 35.6** | **-0.5** |
| **DFR** | **Drift River** | **3.62** | **289** | | | **Pn** | | **18 29 35.5** | **-0.9** |
| **L26K** | **Log Cabin Wild** | **3.62** | **18** | | | **Pn** | | **18 29 36.8** | **+0.3** |
| **L26K** | **Log Cabin Wild** | **3.62** | **18** | P | | **Pn** | | **18 29 37.8** | **+1.4** |
| | baz=200,SNR=12 | | | | | | | | |
| **RSO** | **Redoubt South** | **3.62** | **287** | Pn | | **Pn** | | **18 29 35.4** | **-1.2** |
| **BVCY** | **Beaver Creek** | **3.69** | **38** | | | **Pn** | | **18 29 38.9** | **+1.6** |
| **BVCY** | **Beaver Creek** | **3.69** | **38** | Pn | | **Pn** | | **18 29 38.9** | **+1.6** |
| **BVCY** | **Beaver Creek** | **3.69** | **38** | P | | **Pn** | | **18 29 38.9** | **+1.6** |
| | baz=222,SNR=14 | | | | | | | | |
| BVCY | | | | S | | **Sn** | | **18 30 23.0** | **+1.6** |
| | baz=222 | | | | | | | | |
| **NCT** | **North Crescent** | **3.73** | **288** | | | **Pn** | | **18 29 37.3** | **-0.6** |
| **ILSW** | **Iliamna Southw** | **3.76** | **279** | Pn | | **Pn** | | **18 29 37.8** | **-0.6** |
| **SPNN** | **North Nagishla** | **3.87** | **300** | | | **Pn** | | **18 29 39.6** | **-0.3** |
| **YUK6** | **Outpost Mounta** | **3.91** | **67** | Pn | | **Pn** | | **18 29 41.9** | **+1.2** |
| YUK6 | | | | Sn | | **Sn** | | **18 30 28.0** | **+0.7** |
| **YUK6** | **Outpost Mounta** | **3.91** | **67** | P | | **Pn** | | **18 29 41.3** | **+0.7** |
| | baz=253 | | | | | | | | |
| YUK6 | | | | S | | **Sn** | | **18 30 28.8** | **+1.5** |
| | baz=253 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **3.92** | **61** | Sn | | **Sn** | | **18 30 27.4** | **0.0** |
| **YUK7** | **Dusty Glacier** | **3.92** | **73** | Sn | | **Sn** | | **18 30 28.1** | **+0.6** |
| **L27K** | **Beaver Creek,** | **3.95** | **27** | | | **Pn** | | **18 29 40.5** | **-0.4** |
| **BC03** | | **3.96** | **27** | | | **Pn** | | **18 29 41.8** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **3.96** | **27** | Pn | | **Pn** | | **18 29 40.9** | **-0.2** |
| **KDAK** | **Kodiak Island** | **4.01** | **246** | Pn | | **Pn** | | **18 29 40.5** | **-1.2** |
| | comp=E,1.4nm,0.3s,baz=88,slow=13,SNR=30 | | | | | | | | |
| KDAK | | | | Sn | | **Sn** | | **18 30 24.1** | **-5.3** |
| | comp=E,2.9nm,0.3s,baz=210,slow=20,SNR=14 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **4.01** | **246** | | | **Pn** | | **18 29 40.2** | **-1.5** |
| KDAK | | | | IAML | | | | 18 30 50.6 | |
| | comp=E,96nm,3.5s | | | | | | | | |
| KDAK | | | | IAML | | | | 18 31 03.8 | |
| | comp=E,115nm,5.0s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **4.01** | **246** | P | | **Pn** | | **18 29 40.4** | **-1.4** |
| | baz=60 | | | | | | | | |
| **RND** | **Reindeer** | **4.09** | **340** | Pn | | **Pn** | | **18 29 42.6** | **-0.3** |
| RND | | | | IAML | | | | 18 31 04.3 | |
| | comp=E,86nm,1.1s | | | | | | | | |
| RND | | | | IAML | | | | 18 31 21.6 | |
| | comp=N,99nm,1.4s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **4.11** | **264** | | | **Pn** | | **18 29 42.8** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **4.11** | **264** | P | | **Pn** | | **18 29 43.5** | **+0.3** |
| | baz=78 | | | | | | | | |
| Q19K | | | | S | | **Sn** | | **18 30 30.4** | **-1.6** |
| | baz=78 | | | | | | | | |
| **DOT** | **Dot Lake** | **4.14** | **10** | | | **Pn** | | **18 29 44.1** | **+0.6** |
| **DOT** | **Dot Lake** | **4.14** | **10** | Pn | | **Pn** | | **18 29 44.5** | **+1.0** |
| **RIDG** | **Independent Ri** | **4.17** | **5** | | | **Pn** | | **18 29 44.2** | **+0.2** |
| RIDG | | | | IAML | | | | 18 30 59.8 | |
| | comp=E,89nm,1.1s | | | | | | | | |
| RIDG | | | | IAML | | | | 18 31 11.8 | |
| | comp=N,62nm,2.2s | | | | | | | | |
| **RIDG** | **Independent Ri** | **4.17** | **5** | P | | **Pn** | | **18 29 45.4** | **+1.4** |
| | baz=187,SNR=20 | | | | | | | | |
| **YUK5** | **Granite Creek** | **4.20** | **65** | | | **Pn** | | **18 29 45.8** | **+1.3** |
| **YUK5** | **Granite Creek** | **4.20** | **65** | Pn | | **Pn** | | **18 29 45.8** | **+1.3** |
| YUK5 | | | | Sn | | **Sn** | | **18 30 34.3** | **0.0** |
| **HYT** | **Haines Junctio** | **4.29** | **70** | | | **Pn** | | **18 29 45.7** | **+0.1** |
| **HYT** | **Haines Junctio** | **4.29** | **70** | Pn | | **Pn** | | **18 29 46.3** | **+0.6** |
| HYT | | | | Sn | | **Sn** | | **18 30 36.1** | **-0.3** |
| **O19K** | **Port Alsworth** | **4.36** | **281** | | | **Pn** | | **18 29 46.8** | **+0.3** |
| O19K | | | | IAML | | | | 18 31 07.2 | |
| | comp=N,92nm,0.5s | | | | | | | | |
| **MCK** | **McKinley** | **4.41** | **341** | Pn | | **Pn** | | **18 29 47.5** | **+0.2** |
| MCK | | | | IAML | | | | 18 31 12.7 | |
| | comp=E,86nm,1.3s | | | | | | | | |
| MCK | | | | IAML | | | | 18 31 20.6 | |
| | comp=N,106nm,1.1s | | | | | | | | |
| **MCK** | **McKinley** | **4.41** | **341** | P | | **Pn** | | **18 29 48.5** | **+1.3** |
| | baz=159,SNR=9.5 | | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.43** | **333** | | | **Pn** | | **18 29 48.0** | **+0.3** |
| TRF | | | | IAML | | | | 18 31 19.2 | |
| | comp=E,104nm,2.2s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.43** | **333** | P | | **Pn** | | **18 29 48.9** | **+1.2** |
| | baz=149 | | | | | | | | |
| **SCRK** | **Sand Creek** | **4.47** | **10** | Pn | | **Pn** | | **18 29 47.4** | **-0.7** |
| **SCRK** | **Sand Creek** | **4.47** | **10** | P | | **Pn** | | **18 29 49.0** | **+0.8** |
| | baz=192,SNR=11 | | | | | | | | |
| **N19K** | **Bonanza Creek** | **4.53** | **289** | | | **Pn** | | **18 29 48.3** | **-0.7** |
| **PPLA** | **Purkeypile** | **4.54** | **319** | | | **Pn** | | **18 29 47.7** | **-1.4** |
| **PPLA** | **Purkeypile** | **4.54** | **319** | P | | **Pn** | | **18 29 49.3** | **+0.2** |
| | baz=135 | | | | | | | | |
| **OHAK** | **Old Harbor** | **4.63** | **242** | Pn | | **Pn** | | **18 29 48.0** | **-2.2** |
| **OHAK** | **Old Harbor** | **4.63** | **242** | P | | **Pn** | | **18 29 48.1** | **-2.1** |
| | baz=56 | | | | | | | | |
| **KTH** | **Kantishna Hill** | **4.67** | **330** | | | **Pn** | | **18 29 49.9** | **-0.9** |
| KTH | | | | IAML | | | | 18 31 25.8 | |
| | comp=E,87nm,1.4s | | | | | | | | |
| KTH | | | | IAML | | | | 18 31 31.2 | |
| | comp=N,73nm,1.0s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **4.80** | **277** | Pn | | **Pn** | | **18 29 51.6** | **-1.0** |
| O18K | | | | IAML | | | | 18 31 06.2 | |
| | comp=E,51nm,3.9s | | | | | | | | |
| O18K | | | | IAML | | | | 18 31 54.6 | |
| | comp=N,54nm,3.6s | | | | | | | | |
| **M19K** | **Big River Lodg** | **4.83** | **302** | | | **Pn** | | **18 29 51.7** | **-1.3** |
| M19K | | | | IAML | | | | 18 31 14.2 | |
| | comp=E,37nm,2.8s | | | | | | | | |
| M19K | | | | IAML | | | | 18 31 50.2 | |
| | comp=N,37nm,2.6s | | | | | | | | |
| **P18K** | **Big Mountain,** | **4.84** | **272** | Pn | | **Pn** | | **18 29 53.8** | **+0.6** |
| P18K | | | | IAML | | | | 18 30 29.0 | |
| | comp=E,43nm,4.9s | | | | | | | | |
| P18K | | | | IAML | | | | 18 31 32.9 | |
| | comp=N,48nm,4.5s | | | | | | | | |
| **HDA** | **Harding Lake** | **4.86** | **354** | | | **Pn** | | **18 29 53.0** | **-0.4** |
| HDA | | | | IAML | | | | 18 31 24.4 | |
| | comp=E,64nm,1.0s | | | | | | | | |
| HDA | | | | IAML | | | | 18 31 33.7 | |
| | comp=N,46nm,1.4s | | | | | | | | |
| **CAST** | **Castle Rocks** | **4.88** | **324** | | | **Pn** | | **18 29 52.9** | **-0.8** |
| CAST | | | | IAML | | | | 18 31 22.2 | |
| | comp=E,51nm,1.6s | | | | | | | | |
| CAST | | | | IAML | | | | 18 31 48.8 | |
| | comp=N,52nm,3.8s | | | | | | | | |
| **CAST** | **Castle Rocks** | **4.88** | **324** | P | | **Pn** | | **18 29 54.0** | **+0.3** |
| | baz=139,SNR=7.2 | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.01** | **348** | | | **Pn** | | **18 29 53.9** | **-1.6** |
| WRH | | | | IAML | | | | 18 31 44.8 | |
| | comp=N,47nm,2.1s | | | | | | | | |
| WRH | | | | IAML | | | | 18 31 54.2 | |
| | comp=E,44nm,1.3s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.02** | **11** | | | **Pn** | | **18 29 55.4** | **-0.3** |
| J26L | | | | IAML | | | | 18 31 35.2 | |
| | comp=E,31nm,3.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **5.03** | **2** | | | **Pn** | | **18 29 55.6** | **-0.1** |
| **J25K** | **Salcha River,** | **5.03** | **2** | P | | **Pn** | | **18 29 56.0** | **+0.2** |
| | baz=183,SNR=8.5 | | | | | | | | |
| **SVW2** | **Sparrevohn** | **5.11** | **291** | | | **Pn** | | **18 29 55.8** | **-1.0** |
| SVW2 | | | | IAML | | | | 18 31 59.4 | |
| | comp=E,40nm,4.1s | | | | | | | | |
| SVW2 | | | | IAML | | | | 18 32 04.0 | |
| | comp=N,37nm,3.4s | | | | | | | | |
| **L19K** | **White Mountain** | **5.14** | **304** | | | **Pn** | | **18 29 56.4** | **-0.9** |
| L19K | | | | IAML | | | | 18 31 56.4 | |
| | comp=N,29nm,4.3s | | | | | | | | |
| L19K | | | | IAML | | | | 18 32 16.5 | |
| | comp=E,39nm,4.1s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **5.15** | **333** | | | **Pn** | | **18 29 56.9** | **-0.5** |
| BPAW | | | | IAML | | | | 18 31 45.0 | |
| | comp=E,57nm,1.6s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **5.15** | **333** | P | | **Pn** | | **18 29 57.8** | **+0.4** |
| | baz=149 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.15** | **350** | | | **Pn** | | **18 29 56.8** | **-0.6** |
| CCB | | | | IAML | | | | 18 31 45.4 | |
| | comp=E,46nm,1.3s | | | | | | | | |
| **IL31** | | **5.21** | **355** | | | **Pn** | | **18 29 57.1** | **-1.1** |
| **ILAR** | **Eielson Array** | **5.21** | **355** | Pn | | **Pn** | | **18 29 57.6** | **-0.6** |
| | comp=E,0.8nm,0.3s,baz=178,slow=13,SNR=46 | | | | | | | | |
| ILAR | | | | Sn | | **Sn** | | **18 30 56.0** | **-3.0** |
| | comp=E,1.0nm,0.3s,baz=174,slow=17,SNR=4.4 | | | | | | | | |
| ILAR | | | | Lg | | Lg | | 18 31 24.0 | |
| | comp=E,1.0nm,0.3s,baz=172,slow=26,SNR=5.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **5.21** | **355** | Pn | | **Pn** | | **18 29 56.2** | **-2.0** |
| **NEA2** | **Nenana** | **5.24** | **344** | | | **Pn** | | **18 29 58.3** | **-0.4** |
| NEA2 | | | | IAML | | | | 18 31 44.7 | |
| | comp=N,41nm,3.1s | | | | | | | | |
| NEA2 | | | | IAML | | | | 18 32 00.1 | |
| | comp=E,49nm,4.5s | | | | | | | | |
| **NEA2** | **Nenana** | **5.24** | **344** | P | | **Pn** | | **18 29 58.5** | **-0.2** |
| | baz=162 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **5.27** | **65** | Pn | | **Pn** | | **18 29 59.2** | **+0.2** |
| N31M | | | | IAML | | | | 18 31 44.0 | |
| | comp=E,51nm,2.1s | | | | | | | | |
| N31M | | | | IAML | | | | 18 32 10.5 | |
| | comp=N,38nm,2.9s | | | | | | | | |
| **SKAG** | **Skagway** | **5.30** | **87** | Pn | | **Pn** | | **18 29 59.9** | **+0.4** |
| **CHUM** | **Lake Minchumin** | **5.31** | **327** | | | **Pn** | | **18 30 00.3** | **+0.8** |
| **CHUM** | **Lake Minchumin** | **5.31** | **327** | P | | **Pn** | | **18 30 00.0** | **+0.5** |
| | baz=142,SNR=24 | | | | | | | | |
| **COLA** | **College** | **5.38** | **350** | | | **Pn** | | **18 30 00.1** | **-0.3** |
| **TCOL** | **CIGO, UAF Yank** | **5.38** | **350** | | | **Pn** | | **18 29 59.6** | **-0.9** |
| **DAWY** | **Dawson** | **5.39** | **31** | Pn | | **Pn** | | **18 29 59.9** | **-0.8** |
| **DAWY** | **Dawson** | **5.39** | **31** | Pn | | **Pn** | | **18 30 01.7** | **+1.0** |
| **DAWY** | **Dawson** | **5.39** | **31** | P | | **Pn** | | **18 30 01.8** | **+1.1** |
| | baz=217,SNR=20 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **5.42** | **239** | Pn | | **Pn** | | **18 29 58.9** | **-2.2** |
| **K20K** | **Telida** | **5.48** | **317** | | | **Pn** | | **18 30 01.1** | **-0.8** |
| **MDM** | **Murphy Dome** | **5.50** | **349** | | | **Pn** | | **18 30 01.6** | **-0.5** |
| **WHY** | **Whitehorse** | **5.53** | **74** | Pn | | **Pn** | | **18 30 02.1** | **-0.6** |
| **WHY** | **Whitehorse** | **5.53** | **74** | Pn | | **Pn** | | **18 30 03.3** | **+0.6** |
| WHY | | | | Sn | | **Sn** | | **18 31 05.2** | **-1.8** |
| **WHY** | **Whitehorse** | **5.53** | **74** | P | | **Pn** | | **18 30 03.6** | **+0.8** |
| | baz=263 | | | | | | | | |
| **POKR** | **Poker Flat Res** | **5.59** | **353** | | | **Pn** | | **18 30 01.1** | **-2.3** |
| **POKR** | **Poker Flat Res** | **5.59** | **353** | P | | **Pn** | | **18 30 03.4** | **0.0** |
| | baz=172 | | | | | | | | |
| **EGAK** | **Eagle** | **5.62** | **20** | | | **Pn** | | **18 30 02.9** | **-0.9** |
| **BESE** | **Bessie Mountai** | **5.71** | **96** | Pn | | **Pn** | | **18 30 04.5** | **-0.6** |
| **BESE** | **Bessie Mountai** | **5.71** | **96** | Pn | | **Pn** | | **18 30 05.0** | **-0.1** |
| BESE | | | | Sn | | **Sn** | | **18 31 08.9** | **-2.4** |
| **I23K** | **Minto, Yukon-K** | **5.81** | **345** | | | **Pn** | | **18 30 06.5** | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **5.81** | **345** | P | | **Pn** | | **18 30 06.7** | **+0.3** |
| | baz=162 | | | | | | | | |
| **MLY** | **Manley** | **5.92** | **339** | | | **Pn** | | **18 30 06.7** | **-1.3** |
| **PRP** | **Porcupine Dome** | **5.94** | **1** | Pn | | **Pn** | | **18 30 07.4** | **-0.9** |
| **PRP** | **Porcupine Dome** | **5.94** | **1** | P | | **Pn** | | **18 30 07.7** | **-0.5** |
| | baz=181 | | | | | | | | |
| **TTA** | **Tatalina** | **5.97** | **308** | | | **Pn** | | **18 30 06.5** | **-2.2** |
| **TTA** | **Tatalina** | **5.97** | **308** | P | | **Pn** | | **18 30 08.0** | **-0.7** |
| | baz=120 | | | | | | | | |
| **J29M** | **Klondike Camp** | **6.01** | **33** | | | **Pn** | | **18 30 09.2** | **0.0** |
| **JIS** | **Juneau Island** | **6.03** | **98** | Pn | | **Pn** | | **18 30 09.1** | **-0.4** |
| **SIT** | **Sitka** | **6.05** | **110** | Pn | | **Pn** | | **18 30 09.6** | **-0.1** |
| **J20K** | **Nowinta River** | **6.07** | **323** | | | **Pn** | | **18 30 09.0** | **-0.9** |
| **M31M** | **Drury Creek, Y** | **6.12** | **60** | | | **Pn** | | **18 30 10.2** | **-0.5** |
| **M31M** | **Drury Creek, Y** | **6.12** | **60** | P | | **Pn** | | **18 30 11.7** | **+1.0** |
| | baz=250 | | | | | | | | |
| **I21K** | **Tanana** | **6.30** | **335** | | | **Pn** | | **18 30 13.2** | **+0.1** |
| **I21K** | **Tanana** | **6.30** | **335** | P | | **Pn** | | **18 30 13.7** | **+0.6** |
| | baz=150,SNR=7.5 | | | | | | | | |
| **H24K** | **Noodor Dome** | **6.33** | **352** | | | **Pn** | | **18 30 12.6** | **-1.0** |
| **CHIR** | **Chirikof Islan** | **6.51** | **239** | Pn | | **Pn** | | **18 30 13.7** | **-2.3** |
| **P33M** | **Teslin, Yukon** | **6.53** | **79** | Pn | | **Pn** | | **18 30 14.4** | **-2.0** |
| **I29M** | **Ogilvie Camp,** | **6.72** | **28** | | | **Pn** | | **18 30 18.6** | **-0.3** |
| **H21K** | **Melozitna Rive** | **6.89** | **335** | | | **Pn** | | **18 30 20.6** | **-0.6** |
| **FYU** | **Fort Yukon** | **6.99** | **2** | Pn | | **Pn** | | **18 30 21.0** | **-1.6** |
| **IMAR** | **Indian Mountai** | **7.37** | **334** | Pn | | **Pn** | | **18 30 25.8** | **-2.1** |
| **CHGN** | **Chignik** | **7.51** | **249** | Pn | | **Pn** | | **18 30 28.9** | **-0.8** |
| **MMPY** | **Sheldon Lake,** | **7.63** | **60** | Sn | | **Sn** | | **18 31 54.8** | **-3.8** |
| **MMPY** | **Sheldon Lake,** | **7.63** | **60** | P | | **Pn** | | **18 30 32.5** | **+1.1** |
| | baz=253 | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **7.79** | **108** | Pn | | **Pn** | | **18 30 31.9** | **-1.8** |
| **BMAR** | **Burnt Mountain** | **7.87** | **3** | Pn | | **Pn** | | **18 30 32.9** | **-1.8** |
| **COLD** | **Coldfoot** | **7.91** | **347** | Pn | | **Pn** | | **18 30 33.2** | **-2.0** |
| **COLD** | **Coldfoot** | **7.91** | **347** | Pn | | **Pn** | | **18 30 35.5** | **+0.3** |
| **DLBC** | **Dease Lake** | **8.19** | **91** | Pn | | **Pn** | | **18 30 39.6** | **+0.4** |
| | comp=N,0.7nm,0.3s,baz=313,slow=4.9,SNR=19 | | | | | | | | |
| **DLBC** | **Dease Lake** | **8.19** | **91** | Pn | | **Pn** | | **18 30 38.2** | **-1.0** |
| **DLBC** | **Dease Lake** | **8.19** | **91** | Pn | | **Pn** | | **18 30 39.8** | **+0.6** |
| DLBC | | | | Sn | | **Sn** | | **18 32 06.5** | **-5.9** |
| **SDPT** | **Sand Point** | **9.01** | **248** | Pn | | **Pn** | | **18 30 49.1** | **-1.1** |
| **RUBB** | **Prince Rupert** | **9.96** | **115** | Pn | | **Pn** | | **18 31 01.4** | **-1.9** |
| **INK** | **Inuvik** | **10.23** | **26** | Pn | | **Pn** | | **18 31 05.3** | **-1.6** |
| **GRNB** | **Grenville Isla** | **10.40** | **117** | Pn | | **Pn** | | **18 31 10.3** | **+0.9** |
| **UNV** | **Unalaska Valle** | **12.75** | **252** | Pn | | **Pn** | | **18 31 38.4** | **-3.0** |
| **GAMB** | **Gambell** | **12.96** | **300** | Pn | | **Pn** | | **18 31 42.7** | **-1.5** |
| **A36M** | **Sachs Harbour** | **14.87** | **25** | Pn | | **Pn** | | **18 32 08.0** | **-2.2** |
| **SEY** | **Seymchan** | **28.91** | **303** | P | | **P** | | **18 34 39.4** | **+0.1** |
| | comp=N,0.2nm,0.3s,baz=49,slow=19,SNR=3.5 | | | | | | | | |
| **SONM** | **Songino Array** | **57.91** | **311** | P | | **P** | | **18 38 34.5** | **+1.8** |
| | comp=N,2.5nm,0.7s,baz=39,slow=7.8,SNR=17 | | | | | | | | |
| **SONM** | **Songino Array** | **57.91** | **311** | P | | **P** | | **18 38 32.8** | **+0.1** |
| SONM | | | | IAmb | | IAmb | | 18 38 35.3 | |
| | comp=Z,2.2nm,0.8s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **61.58** | **23** | P | | **P** | | **18 38 58.1** | **+0.5** |
| | comp=Z,0.0nm,0.8s,baz=325,slow=5.2,SNR=4.0 | | | | | | | | |
| **MKAR** | **Manchi Array** | **66.92** | **326** | P | | **P** | | **18 39 32.3** | **-0.5** |
| | comp=Z,0.4nm,0.6s,baz=34,slow=6.4,SNR=6.2 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.97** | **3** | P | | **P** | | **18 39 51.1** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=360,slow=6.3,SNR=4.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.97** | **3** | IAmb | | IAmb | | 18 39 55.1 | |
| | comp=Z,2.5nm,1.4s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.16** | **29** | P | | **P** | | **18 40 30.1** | **+1.5** |
| | comp=Z,0.6nm,0.7s,baz=336,slow=5.5,SNR=4.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.16** | **29** | IAmb | | IAmb | | 18 40 33.6 | |
| | comp=Z,3.5nm,1.4s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **86.30** | **301** | P | | **P** | | **18 41 24.9** | **+2.1** |
| | comp=Z,0.4nm,0.6s,baz=1.9,slow=5.4,SNR=4.7 | | | | | | | | |

*NEIC **05** 18:44:56.1±1.6, 4.°54S±0.°08×153.°81E±0.°08, h78km±7km, mb4.6/29, Error ellipse: s-maj=12.0km s-min=10.8km az=215.0*
*IDC **05** 18:44:58.9±5.1, 4.°50S±153.°74E, h106km±41km, mb3.7/11, mb1 4.0/13, mb1mx3.7/46, mbtmp4.2/13, MS2.7/1, Ms1 2.7/1, ms1mx2.2/61, Error ellipse: s-maj=34.3km s-min=18.8km az=86.0*
*DJA **05** 18:44:59.0±2.2, 4.°S±15.°×15.°4E±2.°1, h108km±9km, M4.6/6, mB4.7/2, mb4.5/6, MLv4.6/1, Mw(mB)3.9/2*

**ISC 05 18:44:58.2±0.6, 4.°46S±0.°06×153.°59E±0.°09, h100km, n51, σ1§02/53, mb4.4/26, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.45** | **280** | | **Pn** | **18 45 24.6** | **+0.7** |
| RABL | | | | Sn | **Sn** | **18 45 41.3** | **-2.1** |
| **HNR** | **Honiara** | **8.01** | **128** | Pn | Pn | 18 46 45.5 | -6.5 |
| **PMG** | **Port Moresby** | **8.06** | **232** | P | **Pn** | **18 46 54.7** | **+2.1** |
| | 17nm,0.3s,baz=3.9,slow=3.6,SNR=54 | | | | | | |
| PMG | | | | S | **Sn** | **18 48 24.1** | **+2.0** |
| | 3.6nm,0.3s,baz=133,slow=20,SNR=13 | | | | | | |
| PMG | | | | LR | LR | 18 50 03.0 | |
| | comp=Z,49nm,20.8s,baz=25,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **8.06** | **232** | | **Pn** | **18 46 53.9** | **+1.3** |
| PMG | | | | Sn | **Sn** | **18 48 19.1** | **-3.0** |
| **PATS** | **Pohnpei** | **12.17** | **23** | Pn | **Pn** | **18 47 47.6** | **-0.6** |
| **JAY** | **Jayapura** | **13.01** | **278** | P | **P** | **18 48 03.6** | **-2.4** |
| | 1.0nm,0.3s,baz=71,slow=5.7,SNR=4.6 | | | | | | |
| **COEN** | **Coen** | **13.95** | **227** | Pn | **Pn** | **18 48 12.2** | **+0.5** |
| **CTAO** | **Charters Tower** | **17.10** | **204** | | **Pn** | **18 48 49.9** | **-1.3** |
| **FAKI** | **Fak Fak** | **21.35** | **273** | P | **P** | **18 49 38.0** | **+0.3** |
| **SIJI** | **Sorong** | **22.58** | **278** | P | **P** | **18 49 50.9** | **+0.2** |
| | 6.2nm,0.6s,baz=89,slow=16,SNR=6.4 | | | | | | |
| **MTN** | **Manton Dam** | **23.70** | **248** | P | **P** | **18 50 01.2** | **0.0** |
| MTN | | | | IAmb | IAmb | 18 50 24.6 | |
| | comp=Z,33nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.12** | **229** | P | **P** | **18 50 05.4** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 18 50 07.3 | |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.12** | **229** | P | **P** | **18 50 04.8** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 18 50 07.4 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.25** | **229** | P | **P** | **18 50 07.1** | **+1.0** |
| WRAB | | | | IAmb | IAmb | 18 50 08.5 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.25** | **229** | P | **P** | **18 50 06.5** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 18 50 08.6 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.26** | **229** | P | **P** | **18 50 07.3** | **+1.1** |
| | comp=Z,7.6nm,0.5s,baz=54,slow=9.8,SNR=113 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.26** | **229** | P | **P** | **18 50 06.3** | **+0.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ARMA** | **Armidale** | **25.89** | **184** | P | | **P** | | **18 50 19.9** | **-1.1** |
| ARMA | | | | IAmb | | IAmb | | 18 50 29.9 | |
| | comp=Z,57nm,1.6s | | | | | | | | |
| **KNRA** | **Kununurra** | **26.83** | **244** | P | | **P** | | **18 50 29.9** | **+0.3** |
| KNRA | | | | IAmb | | IAmb | | 18 50 42.7 | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **AS31** | **Alice Springs** | **26.93** | **223** | P | | **P** | | **18 50 30.3** | **-0.1** |
| **ASAR** | **Alice Springs** | **26.94** | **223** | P | | **P** | | **18 50 30.9** | **+0.5** |
| | comp=Z,0.8nm,0.5s,baz=56,slow=9.0,SNR=24 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **18 53 50.8** | **+0.6** |
| | comp=Z,0.5nm,0.7s,baz=72,slow=2.1,SNR=5.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.94** | **223** | | | **PcP** | | **18 53 50.3** | **+0.1** |
| **LHI** | **Lord Howe Isla** | **27.41** | **170** | P | | **P** | | **18 50 34.3** | **-0.2** |
| **STKA** | **Stephens Creek** | **29.51** | **201** | P | | **P** | | **18 50 53.8** | **+0.6** |
| | comp=Z,3.4nm,0.6s,baz=23,slow=12,SNR=9.5 | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.51** | **201** | P | | **P** | | **18 50 53.6** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **30.52** | **241** | P | | **P** | | **18 51 02.4** | **+0.2** |
| | comp=Z,4.1nm,0.8s,baz=32,slow=8.0,SNR=16 | | | | | | | | |
| **BBOO** | **Buckleboo** | **32.62** | **208** | P | | **P** | | **18 51 20.9** | **+0.3** |
| BBOO | | | | IAmb | | IAmb | | 18 52 03.6 | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **34.32** | **259** | P | | **P** | | **18 51 35.8** | **+0.2** |
| | comp=Z,18nm,0.7s | | | | | | | | |
| **FORT** | **Forrest** | **35.55** | **220** | P | | **P** | | **18 51 45.9** | **0.0** |
| **MBWA** | **Marble Bar** | **36.83** | **240** | P | | **P** | | **18 51 56.7** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **36.88** | **239** | P | | **P** | | **18 51 57.4** | **0.0** |
| PSA00 | | | | IAmb | | IAmb | | 18 52 05.3 | |
| | comp=Z,9.8nm,1.6s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.88** | **239** | P | | **P** | | **18 51 56.4** | **-1.0** |
| PSA00 | | | | IAmb | | IAmb | | 18 51 58.1 | |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **38.70** | **187** | P | | **P** | | **18 52 11.0** | **-1.3** |
| **MORW** | **Morawa** | **43.17** | **231** | P | | **P** | | **18 52 48.1** | **-1.2** |
| MORW | | | | IAmb | | IAmb | | 18 53 26.6 | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| **KSM** | **Kuching** | **43.65** | **277** | P | | **P** | | **18 52 54.6** | **+1.2** |
| KSM | | | | IAmb | | IAmb | | 18 53 23.6 | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **JHS** | **Saijyo** | **43.72** | **335** | P | | **P** | | **18 52 53.4** | **-0.2** |
| **USA0B** | **Ussuriysk Arra** | **52.19** | **340** | P | | **P** | | **18 53 58.0** | **-0.7** |
| USA0B | | | | IAmb | | IAmb | | 18 54 42.3 | |
| | comp=Z,7.4nm,1.1s | | | | | | | | |
| **IPM** | **Ipoh** | **53.26** | **279** | P | | **P** | | **18 54 07.5** | **+0.3** |
| IPM | | | | IAmb | | IAmb | | 18 54 24.0 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **KULM** | **Kulim** | **53.76** | **280** | P | | **P** | | **18 54 11.2** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **57.45** | **3** | P | | **P** | | **18 54 37.1** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** | **58.45** | **295** | P | | **P** | | **18 54 46.0** | **+1.9** |
| | comp=Z,0.9nm,0.8s,baz=118,slow=5.3,SNR=12 | | | | | | | | |
| **MA2** | **Magadan** | **63.87** | **358** | P | | **P** | | **18 55 20.9** | **+1.0** |
| MA2 | | | | IAmb | | IAmb | | 18 56 03.8 | |
| | comp=Z,3.6nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **66.46** | **327** | P | | **P** | | **18 55 38.3** | **+1.1** |
| | comp=Z,0.4nm,0.6s,baz=97,slow=3.7,SNR=2.8 | | | | | | | | |
| **SONM** | **Songino Array** | **66.46** | **327** | IAmb | | IAmb | | 18 55 47.4 | |
| | comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **2.58** | **57** | PN | **Pn** | **19 03 16.8** | **+0.1** |
| **MKZ** | **Mys Kozlova** | **2.58** | **57** | *e*P | **Pn** | **19 03 16.8** | **+0.1** |
| **ESO** | **Esso** | **2.76** | **8** | PN | **Pn** | **19 03 19.7** | **+0.8** |
| **ESO** | **Esso** | **2.76** | **8** | *e*P | **Pn** | **19 03 19.7** | **+0.8** |
| **SKR** | **Severo-Kuril's** | **2.78** | **206** | *e*PN | **Pn** | **19 03 19.9** | **+0.7** |
| SKR | | | | *e*S | **Sn** | **19 03 54.7** | **-0.1** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,94nm,0.8s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,137nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,86nm,0.3s | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.78** | **206** | *e*P | **Pn** | **19 03 19.7** | **+0.5** |
| SKR | | | | *e*S | **Sn** | **19 03 56.1** | **+1.3** |
| **KMNR** | **Kamenistaya** | **2.87** | **26** | PN | **Pn** | **19 03 21.9** | **+1.6** |
| **KMNR** | **Kamenistaya** | **2.87** | **26** | *e*P | **Pn** | **19 03 21.9** | **+1.6** |
| **KPT** | **Kopyto** | **3.05** | **24** | PN | **Pn** | **19 03 23.5** | **+1.0** |
| **KPT** | **Kopyto** | **3.05** | **24** | *e*P | **Pn** | **19 03 23.5** | **+1.0** |
| **KIRR** | **Kirishev** | **3.07** | **25** | PN | **Pn** | **19 03 24.1** | **+1.3** |
| **KIRR** | **Kirishev** | **3.07** | **25** | *e*P | **Pn** | **19 03 24.1** | **+1.3** |
| **KLY** | **Klyuchi** | **3.47** | **25** | PN | **Pn** | **19 03 29.9** | **+2.3** |
| **KLY** | **Klyuchi** | **3.47** | **25** | *e*P | **Pn** | **19 03 29.9** | **+2.3** |
| **BDR** | **Baidarnaya** | **3.84** | **27** | PN | **Pn** | **19 03 34.4** | **+2.0** |
| **BDR** | **Baidarnaya** | **3.84** | **27** | *e*P | **Pn** | **19 03 34.4** | **+2.0** |
| **SRKR** | **Sorokina** | **3.91** | **26** | PN | **Pn** | **19 03 34.4** | **+1.2** |
| **SRKR** | **Sorokina** | **3.91** | **26** | *e*P | **Pn** | **19 03 34.4** | **+1.2** |
| **SMKR** | **Semkarok** | **3.93** | **29** | PN | **Pn** | **19 03 35.1** | **+1.6** |
| **SMKR** | **Semkarok** | **3.93** | **29** | *e*P | **Pn** | **19 03 35.1** | **+1.6** |
| **KBG** | **Krutoberegovo** | **4.09** | **40** | PN | **Pn** | **19 03 35.5** | **+0.1** |
| KBG | | | | S | **Sn** | **19 04 22.1** | **-1.9** |
| **KBG** | **Krutoberegovo** | **4.09** | **40** | *e*P | **Pn** | **19 03 35.5** | **+0.1** |
| KBG | | | | *e*S | **Sn** | **19 04 22.1** | **-1.9** |
| **KBTR** | **Krutoberegovo** | **4.10** | **41** | PN | **Pn** | **19 03 35.7** | **+0.1** |
| KBTR | | | | S | **Sn** | **19 04 20.6** | **-3.7** |
| **KBTR** | **Krutoberegovo** | **4.10** | **41** | *e*P | **Pn** | **19 03 35.7** | **+0.1** |
| KBTR | | | | *e*S | **Sn** | **19 04 20.6** | **-3.7** |
| **BKI** | **Bering** | **5.08** | **64** | PN | **Pn** | **19 03 47.8** | **-0.4** |
| BKI | | | | S | **Sn** | **19 04 42.5** | **-4.4** |
| **BKI** | **Bering** | **5.08** | **64** | *e*P | **Pn** | **19 03 47.8** | **-0.4** |
| BKI | | | | *e*S | **Sn** | **19 04 42.5** | **-4.4** |
| **MA2** | **Magadan** | **7.55** | **331**⇓ | *e*PN | **Pn** | **19 04 20.5** | **-0.1** |
| **MA2** | **Magadan** | **7.55** | **331** | | **Pn** | **19 04 20.3** | **-0.2** |
| **SEY** | **Seymchan** | **10.20** | **345**⇑ | *e*PN | **Pn** | **19 04 53.5** | **-1.8** |
| **KUR** | **Kuril'sk** | **10.37** | **224**⇑ | *e*PN | **Pn** | **19 04 59.4** | **+1.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,241nm,1.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **11.62** | **244**⇑ | *e*PN | **Pn** | **19 05 14.0** | **+0.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **SHO** | **Shikotan** | **11.91** | **223** | *e*PN | **Pn** | **19 05 13.5** | **-4.1** |
| SHO | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,16nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,13nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **12.18** | **226** | *e*PN | **Pn** | **19 05 19.6** | **-1.5** |
| YUK | | | | pmax | pmax | | |
| | comp=N,17nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,118nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,36nm,0.4s | | | | | | |
| **RUSJ** | **Misakicho** | **12.40** | **228** | *e*PN | **Pn** | **19 05 22.9** | **-1.0** |
| **GLVR** | **Golovnino** | **12.57** | **226** | *e*PN | **Pn** | **19 05 25.0** | **-1.0** |
| GLVR | | | | S | **Sn** | **19 07 40.8** | **-4.7** |
| **NMR** | **Nemuro--Hokkai** | **12.78** | **225** | *e*PN | Pn | 19 05 23.2 | -5.5 |
| **JKA** | **Kamikawa-asahi** | **13.63** | **234** | P | **Pn** | **19 05 40.7** | **+1.3** |
| **ASAJ** | **Asahikawa** | **13.63** | **234** | P | **Pn** | **19 05 40.7** | **+1.2** |
| | comp=E,2.3nm,0.3s,baz=64,slow=7.7,SNR=30 | | | | | | |
| **ERM** | **Erimo** | **14.99** | **228**⇑ | *e*P | **Pn** | **19 05 54.7** | **-1.6** |
| **ERM** | **Erimo** | **14.99** | **228** | | **Pn** | **19 05 53.8** | **-2.5** |
| **JEW** | **Eniwo** | **15.14** | **233** | | **Pn** | **19 05 58.1** | **-0.1** |
| **KLR** | **Kul'dur** | **16.89** | **267** | P | **Pn** | **19 06 19.2** | **-0.1** |
| | comp=E,0.2nm,0.3s,baz=70,slow=11,SNR=12 | | | | | | |
| **KLR** | **Kul'dur** | **16.89** | **267**⇑ | *e*P | **Pn** | **19 06 20.4** | **+1.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.9s | | | | | | |
| **JTM** | **Tenmabayashi** | **16.91** | **230** | P | **P** | **19 06 15.6** | **-3.1** |
| **YAK** | **Yakutsk** | **17.43** | **312** | P | **Pn** | **19 06 24.0** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=323,slow=0.5,SNR=25 | | | | | | |
| **YAK** | **Yakutsk** | **17.43** | **312** | *de*P | **P** | **19 06 23.5** | **-0.7** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **17.43** | **312** | P | **P** | **19 06 22.9** | **-1.3** |
| YAK | | | | IAmb | IAmb | 19 06 25.4 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.31** | **253** | P | **Pn** | **19 06 46.0** | **-1.8** |
| | baz=58,slow=13,SNR=4.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.31** | **253** | P | **Pn** | **19 06 46.0** | **-1.8** |
| **JMM** | **Marumori** | **19.43** | **225** | P | **P** | **19 06 46.8** | **+0.6** |
| JMM | | | | IAmb | IAmb | 19 06 47.7 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **JSD** | **Sado** | **20.41** | **230** | P | **P** | **19 06 58.1** | **+1.5** |
| JSD | | | | IAmb | IAmb | 19 07 05.4 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **21.65** | **228** | *e*P | **P** | **19 07 12.0** | **+2.2** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **21.66** | **228** | P | **P** | **19 07 10.0** | **+0.1** |
| MJB9 | | | | IAmb | IAmb | 19 07 14.6 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **21.66** | **228** | P | **P** | **19 07 09.5** | **-0.5** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **21.66** | **228** | P | **P** | **19 07 09.5** | **-0.5** |
| MAJO | | | | IAmb | IAmb | 19 07 14.6 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **21.66** | **228** | P | **P** | **19 07 09.6** | **-0.3** |
| | comp=Z,6.1nm,0.5s,baz=17,slow=10,SNR=10 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **21.66** | **228** | P | **P** | **19 07 10.1** | **+0.2** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **21.66** | **228** | P | **P** | **19 07 10.1** | **+0.2** |
| **ANM** | **Nome** | **21.72** | **44** | P | **P** | **19 07 11.1** | **+0.9** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.6s | | | | | | |
| **ANM** | **Nome** | **21.72** | **44** | P | **P** | **19 07 11.1** | **+0.9** |
| ANM | | | | IAmb | IAmb | 19 07 15.4 | |
| | comp=Z,8.9nm,1.6s | | | | | | |
| **TIXI** | **Tiksi** | **22.47** | **336**⇑ | *e*P | **P** | **19 07 18.2** | **+0.8** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **TIXI** | **Tiksi** | **22.47** | **336** | P | **P** | **19 07 17.1** | **-0.3** |
| **JGF** | **Kuroka** | **22.83** | **228** | P | **P** | **19 07 20.8** | **-0.3** |
| JGF | | | | IAmb | IAmb | 19 07 43.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **HIA** | **Hailar** | **24.09** | **276** | P | **P** | **19 07 32.4** | **0.0** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **HIA** | **Hailar** | **24.09** | **276** | P | **P** | **19 07 32.4** | **0.0** |
| HIA | | | | IAmb | IAmb | 19 07 32.8 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **TTA** | **Tatalina** | **25.63** | **49** | P | **P** | **19 07 46.7** | **+0.5** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.6s | | | | | | |
| **TTA** | **Tatalina** | **25.63** | **49** | P | **P** | **19 07 46.7** | **+0.5** |
| TTA | | | | IAmb | IAmb | 19 08 04.4 | |
| | comp=Z,14nm,1.6s | | | | | | |
| **KSRS** | **Korea Array** | **26.11** | **245** | P | **P** | **19 07 52.5** | **+1.8** |
| | comp=Z,2.0nm,0.6s,baz=40,slow=8.9,SNR=12 | | | | | | |
| **O18K** | **Koktuh Hills** | **26.16** | **57** | P | **P** | **19 07 52.3** | **+1.3** |
| O18K | | | | IAmb | IAmb | 19 08 15.6 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **Q19K** | **Cape Douglas,** | **27.08** | **58** | P | **P** | **19 07 59.5** | **+0.4** |
| **OHAK** | **Old Harbor** | **27.59** | **62** | P | **P** | **19 08 04.1** | **+0.5** |
| **KDAK** | **Kodiak Island** | **27.84** | **61** | P | **P** | **19 08 06.8** | **+0.9** |
| | comp=Z,9.5nm,0.9s,baz=279,slow=2.8,SNR=7.0 | | | | | | |
| **KDAK** | **Kodiak Island** | **27.84** | **61** | P | **P** | **19 08 06.8** | **+0.9** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,40nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **27.84** | **61** | | **P** | **19 08 06.8** | **+0.9** |
| **CNPM** | **China Poot** | **28.20** | **57** | P | **P** | **19 08 08.7** | **-0.5** |
| **GHO** | **Glory Hole Cre** | **29.00** | **52** | P | **P** | **19 08 16.8** | **+0.6** |
| GHO | | | | IAmb | IAmb | 19 08 20.7 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **29.05** | **45** | P | **P** | **19 08 16.6** | **0.0** |
| MDM | | | | IAmb | IAmb | 19 08 34.4 | |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **KNK** | **Knik Glacier** | **29.27** | **52** | P | **P** | **19 08 19.6** | **+1.1** |
| **SML** | **Sawmill** | **29.27** | **51** | P | **P** | **19 08 20.1** | **+1.5** |
| **PWL** | **Port Wells** | **29.41** | **53** | P | **P** | **19 08 21.0** | **+1.1** |
| **IL31** | | **29.63** | **45** | P | **P** | **19 08 22.6** | **+1.0** |
| **ILAR** | **Eielson Array** | **29.63** | **45** | P | **P** | **19 08 22.0** | **+0.3** |
| | comp=Z,0.5nm,0.5s,baz=258,slow=5.2,SNR=6.7 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **29.74** | **51** | P | **P** | **19 08 23.0** | **+0.2** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,35nm,1.4s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **29.74** | **51** | P | **P** | **19 08 23.0** | **+0.2** |
| **L27K** | **Beaver Creek,** | **32.06** | **48** | P | **P** | **19 08 44.1** | **+1.1** |
| L27K | | | | IAmb | IAmb | 19 08 52.7 | |
| | comp=Z,5.5nm,1.5s | | | | | | |
| **BCAR** | **Beaver Creek A** | **32.08** | **48** | P | **P** | **19 08 43.5** | **+0.3** |
| **SONM** | **Songino Array** | **32.66** | **282** | P | **P** | **19 08 48.9** | **+0.3** |
| | comp=Z,0.5nm,0.5s,baz=70,slow=8.4,SNR=6.4 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 11 30.1** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=56,slow=2.8,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **32.66** | **282** | P | **P** | **19 08 47.3** | **-1.3** |
| **DAWY** | **Dawson** | **32.94** | **46** | P | **P** | **19 08 52.5** | **+1.7** |
| DAWY | | | | IAmb | IAmb | 19 09 00.1 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **GTA** | **Gaotai** | **41.35** | **275** | ⇑P | **P** | **19 10 02.2** | **+0.3** |
| GTA | | | | sP | pP | 19 10 09.2 | -31 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **EUNU** | **Eureka** | **42.14** | **14** | P | **P** | **19 10 07.9** | **+0.3** |
| **DGZ** | **Jazzator, Alta** | **42.50** | **295**⇑ | *e*P | **P** | **19 10 11.0** | **0.0** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **43.92** | **42** | P | **P** | **19 10 23.8** | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=301,slow=7.2,SNR=5.6 | | | | | | |
| **KURK** | **Kurchatov** | **46.61** | **301** | *c* P | **P** | **19 10 42.4** | **-1.0** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.61** | **301** | P | **P** | **19 10 42.3** | **-1.0** |
| KURK | | | | IAmb | IAmb | 19 10 43.3 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.82** | **350** | P | **P** | **19 10 44.9** | **+0.3** |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **46.82** | **350** | P | **P** | **19 10 44.6** | **0.0** |
| SPB2 | | | | IAmb | IAmb | 19 11 11.4 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **46.98** | **294**⇑ | *e*P | **P** | **19 10 45.0** | **-1.3** |
| **MK31** | **Makanchi Array** | **46.98** | **294** | P | **P** | **19 10 44.7** | **-1.6** |
| **MKAR** | **Makanchi Array** | **46.98** | **294** | P | **P** | **19 10 45.7** | **-0.6** |
| | comp=Z,0.5nm,0.4s,baz=56,slow=6.2,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.98** | **294** | P | **P** | **19 10 45.5** | **-0.8** |
| **MAKZ** | **Makanchi** | **47.14** | **295** | P | **P** | **19 10 45.9** | **-1.7** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.7s | | | | | | |
| **MAKZ** | **Makanchi** | **47.14** | **295** | P | **P** | **19 10 45.9** | **-1.7** |
| **BRVK** | **Borovoye** | **49.37** | **307**⇑ | *e*P | **P** | **19 11 03.3** | **-1.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **49.37** | **307** | P | **P** | **19 11 03.2** | **-1.3** |
| BRVK | | | | IAmb | IAmb | 19 11 04.3 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **EDM** | **Edmonton** | **49.69** | **52** | P | **P** | **19 11 09.2** | **+2.2** |
| EDM | | | | pmax | pmax | | |
| | comp=Z,12nm,1.6s | | | | | | |
| **EDM** | **Edmonton** | **49.69** | **52** | P | **P** | **19 11 09.2** | **+2.2** |
| EDM | | | | IAmb | IAmb | 19 11 16.1 | |
| | comp=Z,12nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **53.90** | **295**⇑ | *e*P | **P** | **19 11 37.8** | **-0.6** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **53.90** | **295** | P | **P** | **19 11 37.5** | **-0.9** |
| **KKAR** | **Karatay Array** | **55.74** | **298** | P | **P** | **19 11 49.8** | **-1.6** |
| **KKAR** | **Karatay Array** | **55.74** | **298** | P | **P** | **19 11 49.8** | **-1.5** |
| **ABKAR** | **Akbulak array** | **56.77** | **309** | P | **P** | **19 11 57.0** | **-1.5** |
| **ABKAR** | **Akbulak array** | **56.77** | **309** | P | **P** | **19 11 57.1** | **-1.5** |
| ABKAR | | | | IAmb | IAmb | 19 12 06.4 | |
| | comp=Z,2.2nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.87** | **69** | P | **P** | **19 12 02.8** | **+3.1** |
| | comp=Z,0.7nm,0.6s,baz=308,slow=7.8,SNR=6.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.87** | **69** | P | **P** | **19 12 01.5** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **56.99** | **256** | P | **P** | **19 12 00.3** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=27,slow=7.0,SNR=9.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.99** | **256** | *e*P | **P** | **19 12 02.1** | **+1.6** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.99** | **256** | P | **P** | **19 11 59.5** | **-0.9** |
| **BW06** | **Boulder Array** | **58.55** | **60** | P | **P** | **19 12 11.8** | **+0.4** |
| BW06 | | | | IAmb | IAmb | 19 12 36.2 | |
| | comp=Z,3.2nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **58.55** | **60** | P | **P** | **19 12 14.0** | **+2.6** |
| | comp=Z,0.9nm,0.7s,baz=358,slow=1.7,SNR=8.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **58.55** | **60** | P | **P** | **19 12 12.6** | **+1.2** |
| **FINES** | **FINESS Array B** | **59.52** | **335** | P | **P** | **19 12 16.2** | **-1.2** |
| **FINES** | **FINESS Array B** | **59.52** | **335** | P | **P** | **19 12 16.2** | **-1.2** |
| **CHGR** | **Chuyangaron** | **59.59** | **295** | P | **P** | **19 12 17.2** | **-1.1** |
| CHGR | | | | IAmb | IAmb | 19 12 18.2 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **71.74** | **65** | P | **P** | **19 13 38.7** | **+2.5** |
| | comp=Z,0.4nm,0.4s,baz=294,slow=5.0,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **75.67** | **203** | P | **P** | **19 13 59.5** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=12,slow=5.9,SNR=7.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **75.67** | **203** | IAmb | IAmb | 19 14 00.6 | |
| | comp=Z,0.5nm,1.6s | | | | | | |
| **ASAR** | **Alice Springs** | **79.36** | **202** | P | **P** | **19 14 21.0** | **+1.7** |
| | comp=Z,1.1nm,0.7s,baz=16,slow=5.2,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **79.36** | **202** | P | **P** | **19 14 20.4** | **+1.1** |

*CNRM **05** 19:20:12.1,35˚.46N×3˚.76W,h16km,ml2.6*
*SFS **05** 19:20:12.0,35˚.49N×3˚.77W,ML2.1,ALBORAN S.*
*INMG **05** 19:20:12.5±1.4,35˚.51N×3˚.74W,h2km±4km,ML2.1,Error ellipse: s-maj=4.3km s-min=2.6km az=72.0*

**ISC 05 19:20:11.8±1.1,35˚.49N±0˚.03×3˚.73W±0˚.03,h13km±9km, n19,σ1°18/35,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.32** | **213** | P | **Pg** | | **19 20 18.3** | **-0.1** |
| PALE | | | | S | **Sg** | | **19 20 22.4** | **-0.5** |
| **GOG** | **Mont Gurugu** | **0.65** | **114** | P | **Pg** | | **19 20 24.4** | **-0.2** |
| GOG | | | | S | **Sg** | | **19 20 32.7** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.10** | **106** | P | **Pb** | | **19 20 32.6** | **-0.1** |
| CHAS | | | | S | **Sg** | | **19 20 47.2** | **-0.2** |
| **SMIR** | **Smir Dam** | **1.36** | **279** | P | **Pg** | | **19 20 38.3** | **+0.3** |
| SMIR | | | | S | **Sg** | | **19 20 56.1** | **+0.3** |
| **CHEFC** | **Chefchaouen** | **1.38** | **254** | P | **Pn** | | **19 20 36.8** | **0.0** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **336** | P | **Pg** | | **19 20 38.7** | **+0.1** |
| EMAL | | | | S | **Sb** | | **19 20 54.8** | **-0.5** |
| **JBK** | **JBK** | **1.50** | **140** | P | **Pn** | | **19 20 38.5** | **-0.1** |
| JBK | | | | S | **Sn** | | **19 20 56.0** | **-2.1** |
| **IFR** | **Ifrane** | **2.28** | **211** | P | **Pn** | | **19 20 50.6** | **+1.1** |
| IFR | | | | S | **Sn** | | **19 21 15.5** | **-2.1** |
| **MD31** | **MD31** | **2.75** | **198** | P | **Pn** | | **19 20 57.0** | **+1.2** |
| MD31 | | | | S | **Sn** | | **19 21 28.6** | **-0.4** |
| **MDT** | **Midelt** | **2.77** | **196** | P | **Pn** | | **19 20 57.6** | **+1.6** |
| MDT | | | | S | **Sn** | | **19 21 28.8** | **-0.5** |
| **TDRA** | **Tendrara** | **2.82** | **150** | S | **Sn** | | **19 21 33.8** | **+3.0** |
| **ZHG** | **ZHG** | **3.16** | **231** | P | **Pn** | | **19 21 02.1** | **+0.8** |
| ZHG | | | | S | **Sn** | | **19 21 37.8** | **-1.1** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | *e*Pn | **Pn** | | **19 21 10.0** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | | **19 21 52.2** | **-1.0** |
| PVAQ | | | | A | A | | 19 21 55.1 | |
| | 3.8nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | **Pn** | | **19 21 09.4** | **+0.1** |
| PVAQ | | | | S | **Sn** | | **19 21 51.9** | **-1.3** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **298** | *e*Pn | **Pn** | | **19 21 10.7** | **+0.3** |
| PBDV | | | | *e*Sn | **Sn** | | **19 21 54.7** | **-0.5** |
| PBDV | | | | A | A | | 19 21 57.5 | |
| | 4.8nm,0.7s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **303** | *e*Pn | **Pn** | | **19 21 15.3** | **+1.4** |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | **Pn** | | **19 21 19.2** | **+2.1** |
| MESJ | | | | *e*Sn | **Sn** | | **19 22 06.6** | **-0.6** |
| MESJ | | | | A | A | | 19 22 10.7 | |
| | 3.3nm,0.5s | | | | | | | |
| **EVO** | **Evora** | **4.58** | **313** | *e*Pn | **Pn** | | **19 21 22.2** | **+1.4** |
| EVO | | | | *e*Sn | **Sn** | | **19 22 12.4** | **-1.5** |
| EVO | | | | A | A | | 19 22 13.7 | |
| | 3.0nm,0.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **306** | *e*Pn | **Pn** | | **19 21 23.2** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | | **19 22 15.3** | **-0.5** |
| PNCL | | | | A | A | | 19 22 16.2 | |
| | 1.9nm,0.8s | | | | | | | |

**NOU 05 19:29:55.8,15˚.15S×168˚.02E,h7km,MLv4.8/11,Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.84** | **249** | P | Pg | | 19 30 11.9 | -0.1 |
| **DVP** | **Devils Point** | **2.57** | **176** | P | Pn | | 19 30 39.3 | +1.5 |
| **RTV** | **Rentapao** | **2.66** | **172** | P | Pn | | 19 30 37.7 | -1.4 |
| **KOUNC** | **Koumac, New Ca** | **6.44** | **213** | P | Pn | | 19 31 32.6 | +1.5 |
| **YATNC** | **Mamie plateau,** | **6.96** | **189** | P | Pn | | 19 31 37.7 | -0.5 |
| **DZM** | **Mont Dzumac** | **7.04** | **192** | P | Pn | | 19 31 39.0 | -0.5 |

*IDC **05** 19:52:00.0±18.0,21˚.65S×174˚.78W,h0km,mb4.0/5, mb1 4.2/5,mb1mx3.6/52,mbtmp4.0/5,Error ellipse: s-maj=345.2km s-min=151.2km az=78.0*
*NEIC **05** 19:53:24.8±2.1,22˚.8S±0˚.3×179˚.7W±0˚.2,h518km±23km, mb4.3/13,Error ellipse: s-maj=40.2km s-min=27.1km az=193.0*

**ISC 05 19:53:19.0±6.9,22˚.5S±0˚.5×179˚.1W±0˚.7,h500km,n21, σ0°88/22,mb4.2/10,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **12.41** | **267** | | **P** | | **19 56 02.7** | **+0.8** |
| **QRZ** | **Quartz Range** | **19.62** | **199** | P | **P** | | **19 57 14.5** | **+0.6** |
| **THZ** | **Tophouse** | **20.37** | **197** | P | **P** | | **19 57 21.7** | **+0.8** |
| **ARMA** | **Armidale** | **27.30** | **247** | P | **P** | | **19 58 22.4** | **-0.6** |
| **CTA** | **Charters Tower** | **32.31** | **268** | P | **P** | | **19 59 07.1** | **+0.7** |
| | 5.2nm,0.4s,baz=91,slow=11,SNR=22 | | | | | | | |
| **CTAO** | **Charters Tower** | **32.31** | **268** | P | **P** | | **19 59 06.9** | **+0.5** |
| CTAO | | | | IAmb | IAmb | | 19 59 07.7 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.02** | **246** | P | **P** | | **19 59 36.5** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=100,slow=11,SNR=3.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.02** | **246** | P | **P** | | **19 59 36.5** | **-0.9** |
| **BBOO** | **Buckleboo** | **40.76** | **245** | P | **P** | | **20 00 14.1** | **-2.0** |
| BBOO | | | | IAmb | IAmb | | 20 00 38.1 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **43.08** | **259** | P | **P** | | **20 00 34.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **43.08** | **259** | P | **P** | | **20 00 34.0** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=102,slow=6.6,SNR=12 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.08** | **259** | P | **P** | | **20 00 34.0** | **-0.5** |
| **WB0** | **Warramunga Arr** | **43.31** | **265** | P | **P** | | **20 00 35.7** | **-0.7** |
| WB0 | | | | IAmb | IAmb | | 20 00 47.3 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.32** | **264** | P | **P** | | **20 00 35.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | | 20 01 01.6 | |
| | comp=Z,8.7nm,1.4s | | | | | | | |
| WB2 | | | | | **pP** | | **20 02 07.7** | **+0.5** |
| **WRA** | **Warramunga Arr** | **43.33** | **264** | P | **P** | | **20 00 36.0** | **-0.5** |
| | comp=Z,0.6nm,0.4s,baz=96,slow=8.3,SNR=44 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.33** | **264** | P | **P** | | **20 00 35.5** | **-1.0** |
| **FORT** | **Forrest** | **47.58** | **248** | P | **P** | | **20 01 07.6** | **-1.3** |
| FORT | | | | IAmb | IAmb | | 20 01 14.1 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **MTN** | **Manton Dam** | **48.17** | **273** | P | **P** | | **20 01 13.5** | **-0.1** |
| **KNRA** | **Kununurra** | **49.52** | **268** | P | **P** | | **20 01 24.3** | **+0.7** |
| KNRA | | | | IAmb | IAmb | | 20 01 32.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.76** | **264** | P | **P** | | **20 01 40.8** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=90,slow=8.1,SNR=1.4 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.76** | **264** | P | **P** | | **20 01 40.8** | **+0.9** |

*IDC **05** 19:57:24.1±0.3,22˚.88N×120˚.69E,h0km,mb5.5/53, mb1 5.6/57,mb1mx5.5/62,mbtmp5.5/57,ML4.7/4,MS6.3/85, Ms1 6.3/85,ms1mx6.3/94,Error ellipse: s-maj=9.6km s-min=7.6km az=68.0*
*JMA **05** 19:57:24.3±0.4,22˚.81N×120˚.45E,h16km,M6.4*
*NIED **05** 19:57:24.3,22˚.81N×120˚.45E,h16km,MW6.3,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁸Nm; Mrr1.44; Mθθ-0.48; Mφφ-0.96; Mrθ-0.74; Mθφ1.91; Mφr-2.02; Fault plane solution: M₀3.13000×10¹⁸ NP1: φs175.00000°,δ71.00000°,λ131.00000°. NP2: φs286.00000°,δ44.00000°,λ28.00000°.*
*BJI **05** 19:57:25.7±0.0,22˚.94N×120˚.54E,h15km,mb5.7/51, mB6.4/62,ML6.6/8,Ms6.7/80,Ms7 6.7/78*
*MOS **05** 19:57:26.0±0.9,22˚.89N×120˚.63E,h27km,mb6.3/52, MS6.4/80,Error ellipse: s-maj=5.2km s-min=3.4km az=106.8*
*BGR **05** 19:57:26.9±0.0,22˚.86N×120˚.94E,h27km±2km,mb6.4, mB_BB6.7,Ms6.6*
*TAP **05** 19:57:26.1,22˚.92N×120˚.54

| | | |

baz=33
**SXI1 Grass Mountain 2.47 28** *e*P **Pn 19 58 07.4 +1.1**
baz=29
**TNOU National Taiwa 2.48 25** *e*P **Pn 19 58 06.6 +0.3**
baz=27
TNOU *e*S **Sn 19 58 37.2 +1.2**
baz=27
**NWRT Kuosheng 2.48 23** *e*P **Pn 19 58 07.2 +0.8**
baz=24
**KNM Kinmen 2.50 307** *e*P **Pn 19 58 05.5 -1.1**
baz=306
KNM *e*S **Sn 19 58 38.0 +1.5**
baz=306
**PTMZ Houxiangcun 2.52 328**⇓*e*P **Pn 19 58 04.8 -2.2**
baz=328
**TWY Chenhua 2.53 21** *e*P **Pn 19 58 07.9 +0.9**
baz=23
**NSM Shimen 2.54 21** *e*P **Pn 19 58 08.1 +0.9**
baz=22
**KNMB Chin-men Tao 2.56 308**⇓*e*P **Pn 19 58 04.9 -2.6**
baz=308
**KNMB Chin-men Tao 2.56 308** Pn **Pn 19 58 04.8 -2.6**
**JYNG Yonagunijimaku 2.64 54**⇑P **Pn 19 58 11.0 +2.4**
JYNG *e*S **Sb 19 58 43.6 -2.1**
**YOJ Yonaguni jima 2.69 54** P **Pn 19 58 11.5 +2.2**
YOJ *e*S **Sb 19 58 46.0 -1.3**
**YOJ Yonaguni jima 2.69 54** P **Pn 19 58 10.9 +1.6**
**YOJ Yonaguni jima 2.69 54**⇑P **Pn 19 58 11.1 +1.7**
**YOJ Yonaguni jima 2.69 54**⇑*e*P **Pn 19 58 11.1 +1.7**
baz=56
YOJ *e*S **Sn 19 58 44.4 +3.0**
baz=56
**YOJ Yonaguni jima 2.69 54** Pn **Pn 19 58 10.9 +1.6**
**YOJ Yonaguni jima 2.69 54** P **Pb 19 58 12.4 -2.2**
**QZH Quanzhou 2.74 318**⇓*i*Pn **Pn 19 58 07.0 -3.0**
QZH Sn **Sn 19 58 38.1 -4.5**
QZH smax smax
comp=N,108μm,1.1s
QZH smax smax
comp=E,84μm,1.0s
**ZPLA Ao Xicun 2.81 292**⇓*e*P **Pn 19 58 08.6 -2.4**
baz=291
ZPLA *e*S **Sn 19 58 41.2 -3.2**
baz=291
**PCYT Pengchaiyu 3.02 26** *e*P **Pn 19 58 14.8 +0.9**
baz=27
**DSXP Dongshan 3.03 286**⇓*e*P **Pn 19 58 11.4 -2.6**
baz=285
DSXP *e*S **Sb 19 58 55.5 -1.5**
baz=285
**AXDP Jialang 3.12 310**⇓*e*P **Pn 19 58 12.8 -2.4**
baz=310
AXDP *e*S **Sb 19 58 59.2 -0.5**
baz=310
**HATJ Hateruma jima 3.15 68** P **Pn 19 58 17.2 +1.6**
HATJ S **Sn 19 58 56.3 +3.5**
**IRIF Iriomote-Funau 3.20 63**⇑P **Pn 19 58 17.9 +1.6**
IRIF S **Sb 19 58 58.0 -3.8**
**MATB Ma-tsu 3.29 350**⇓*e*P **Pn 19 58 15.8 -1.6**
baz=350
MATB *e*S **Sn 19 58 54.2 -1.8**
baz=350
**MSUT Lienchiang 3.31 349** *e*P **Pn 19 58 16.8 -1.0**
baz=350
**JKRS Kuro-shima 3.39 66** P **Pn 19 58 20.3 +1.4**
JKRS *e*S **Sn 19 59 01.7 +3.0**
**MHZQ Yeshan 3.49 336**⇓*e*P **Pn 19 58 18.4 -1.9**
baz=336
MHZQ *e*S **Sn 19 58 59.5 -1.6**
baz=336
**JIJ Ishigaki jima 3.55 65**⇑P **Pn 19 58 22.1 +0.9**
JIJ S **Sn 19 59 05.2 +2.5**
**LYJJ Jianjiangzhen 3.71 348**⇓*e*P **Pn 19 58 21.9 -1.4**
baz=349
LYJJ *e*S **Sn 19 59 05.8 -0.7**
baz=349
**JISG Ishigakijimahi 3.78 63**⇑P **Pn 19 58 25.2 +0.9**
JISG S **Sn 19 59 11.7 +3.3**
**XPSS Dashiqiu 4.02 355** *e*P **Pn 19 58 26.4 -1.2**
baz=355
**JTJ Tarama 4.13 64** P **Pn 19 58 30.4 +1.3**
JTJ *e*S **Sn 19 59 19.4 +2.5**
**VDOS Pratas Island 4.22 239** *e*P **Pn 19 58 29.1 -1.2**
baz=238
**SXFK Yanhouchang 4.40 323**⇓*e*P **Pn 19 58 30.7 -2.1**
baz=323
SXFK *e*S **Sn 19 59 21.3 -2.3**
baz=323
**JIRB Irabujima 4.60 65** P **Pn 19 58 37.0 +1.5**
JIRB *e*S **Sn 19 59 30.3 +1.9**
**JMJ Miyako jima 2 4.69 65** *e*P **Pn 19 58 38.5 +1.7**
baz=66
JMJ *e*S **Sn 19 59 33.7 +2.9**
baz=66
**JMJ Miyako jima 2 4.69 65** P **Pn 19 58 39.6 +2.8**
**JMJ2 Miyako jima3 4.69 66** P **Pn 19 58 38.5 +1.7**
JMJ2 *e*S **Sn 19 59 33.6 +2.8**
**JIKM Ikemajima 4.70 64** P **Pn 19 58 38.1 +1.2**
JIKM *e*S **Sn 19 59 33.5 +2.6**
**JOGS Gusukube 4.77 66**⇑P **Pn 19 58 40.2 +2.3**
JOGS *e*S **Sn 19 59 36.9 +4.3**
**SIPP Brgy, Tapao 4.96 182**⇓*i*P Pn 19 58 45.6 +5.1
SIPP *e*S **Sb 19 59 47.6 -4.9**
**HKC Hong Kong Obse 5.97 265**⇑P **Pn 19 58 53.0 -1.4**
**HKPS Hong Kong Po S 6.01 265**⇓*e*P **Pn 19 58 53.1 -1.8**
baz=264
HKPS *e*S **Sn 20 00 01.7 -1.5**
baz=264
**HKPS Hong Kong Po S 6.01 265** Pn **Pn 19 58 52.9 -2.0**
**MCO Taipa Grande 6.56 265** P **Pn 19 59 04.0 +1.4**
**JKE Kume jima 2 6.57 58** P **Pn 19 59 03.5 +0.8**
**GZH Guangzhou 6.69 273** P Pn 19 58 58.7 -5.6
GZH S Sn 20 00 10.4 -10
GZH smax smax
comp=N,81μm,1.6s
GZH smax smax
comp=E,69μm,1.3s
**PCPH Palayan 7.32 176**⇓*e*P **Pn 19 59 15.6 +2.6**
**JOW Kunigami 7.99 59** Pn **Pn 19 59 21.8 -0.3**
comp=E,90nm,0.3s,baz=226,slow=9.4,SNR=54
**JOW Kunigami 7.99 59** P **Pn 19 59 19.8 -2.3**
**JOW Kunigami 7.99 59**⇑P **Pn 19 59 21.2 -0.8**
**JOW Kunigami 7.99 59** *e*P **Pn 19 59 21.7 -0.3**
baz=61
**JOW Kunigami 7.99 59** Pn **Pn 19 59 21.5 -0.6**
**JOW Kunigami 7.99 59** P **Pn 19 59 22.7 +0.6**
**SSE Sheshan 8.17 4** P **Pn 19 59 23.1 -1.5**
SSE S **Sn 20 00 56.8 +0.3**
SSE pmax pmax
comp=E,160nm,3.0s
SSE smax smax
comp=E,6μm,1.5s
SSE smax smax
comp=E,9μm,1.2s
SSE LR LR
comp=E,127μm,17.8s
SSE LR LR
comp=E,82μm,12.2s
SSE LR LR
comp=E,151μm,16.8s
**CNSH ChangSha 8.70 309**⇓P Pn 19 59 24.9 -6.9
CNSH S **Sn 20 01 01.2 -8.2**
CNSH smax smax
comp=N,61μm,1.6s
CNSH smax smax
comp=E,55μm,1.4s
CNSH LR LR
comp=N,633μm,13.6s
CNSH LR LR
comp=E,620μm,15.9s
**TGY Tagaytay City 8.76 178** Pn **Pn 19 59 34.6 +1.8**
comp=E,6.9nm,0.3s,baz=354,slow=7.8,SNR=4.1
TGY LR LR 20 03 44.9
comp=E,232μm,18.9s,baz=3.5,slow=44
**LQP Lukban 8.79 174**⇑*e*P **Pn 19 59 36.1 +2.8**
**JCNP Jose Panganiba 8.80 167**⇑*e*P **Pn 19 59 34.0 +0.7**
**GQP Guinayangan 9.12 169**⇓*e*P **Pn 19 59 39.1 +1.4**
**LUBP Lubang 9.13 182**⇓*e*P **Pn 19 59 40.6 +2.8**
**NJ2 Nanjing 9.24 351**⇓P **Pn 19 59 38.1 -1.2**
NJ2 pP 19 59 44.6
NJ2 sP 19 59 49.4
NJ2 S **Sn 20 01 18.4 -4.4**
NJ2 sS 20 01 30.0
NJ2 pmax pmax
comp=Z,250nm,0.8s
NJ2 smax smax
comp=N,24μm,0.8s
NJ2 smax smax
comp=E,16μm,0.9s
NJ2 LR LR
comp=N,294μm,11.7s
NJ2 LR LR
comp=E,218μm,9.5s
NJ2 LR LR
comp=Z,250μm,13.7s
**PGP Puerto Galera 9.36 178**⇓*e*P Pn 19 59 46.9 +5.9
**WHN Wuhan 9.44 325**⇑P **Pn 19 59 40.6 -1.4**
WHN S **Sn 20 01 20.6 -7.0**
WHN pmax pmax
comp=E,630nm,0.6s
WHN LR LR
comp=E,880μm,18.0s
**GULI GuiLin 9.65 286**⇑P **Pn 19 59 44.1 -0.9**
GULI S **Sn 20 01 40.3 +7.4**
GULI LR LR
comp=Z,307μm,15.7s
GULI LR LR
comp=Z,486μm,17.9s
GULI LR LR
comp=Z,634μm,17.9s
**JAM Amami Oshima 9.79 54** P **Pn 19 59 43.8 -3.1**
**JMZ Minamidaito 2 10.10 71** P **Pn 19 59 48.8 -2.3**
**JKDJ Kitadaitoujima 10.20 71** P **Pn 19 59 50.2 -2.3**
JKDJ *e*S **Sn 20 01 43.5 -2.9**
**QIZ Qiongzhong 10.77 251** P **Pn 20 00 00.4 +0.1**
QIZ PP **PnPn 20 00 08.9 +0.9**
QIZ S **Sn 20 02 02.4 +2.0**
QIZ pmax pmax
comp=Z,1μm,1.2s
QIZ pmax pmax
comp=Z,16μm,8.4s
QIZ LR LR
comp=Z,747μm,12.9s
QIZ LR LR
comp=Z,805μm,15.1s
**QIZ Qiongzhong 10.77 251** Pn **Pn 19 59 59.4 -0.9**
**QIZ Qiongzhong 10.77 251** P **Pn 20 00 00.0 -0.3**
**RCP Roxas 11.47 169**⇑*e*P **Pn 20 00 12.2 +2.4**
**JFU Fukue jima 2 12.09 35** P **Pn 20 00 21.3 +3.0**
**JAP San Jose, Anti 12.16 174**⇑*e*P **P 20 00 30.5 -1.3**
**JSU Suzuyama 12.25 44** P **Pn 20 00 24.0 +3.5**
**JSU Suzuyama 12.25 44** Pn **Pn 20 00 19.7 -0.8**
**ENH Enshi 12.36 309** Pn **Pn 20 00 20.1 -1.9**
**CNOP Candoni, Negro 13.15 171**⇓*e*P **Pn 20 00 34.7 +1.8**
**GYA Guiyang 13.16 288**⇓*i*P **Pn 20 00 30.9 -2.2**
GYA S **Sn 20 02 57.3 -1.7**
GYA pmax pmax
comp=Z,210nm,1.0s
GYA pmax pmax
comp=Z,8μm,7.4s
GYA LR LR
comp=Z,186μm,13.5s
GYA LR LR
comp=Z,445μm,17.8s
GYA LR LR
comp=Z,599μm,15.5s
**PPR Puerto Princes 13.18 188**⇑*i*P **Pn 20 00 37.6 +4.4**
**MSLP Maasin 13.34 162**⇑*e*P **Pn 20 00 37.0 +1.6**
**TBP Tagbilaran 13.51 166**⇑*e*P **Pn 20 00 37.7 0.0**
**TIA Tai'an 13.60 348** P **Pn 20 00 38.5 -0.4**
TIA S **Sn 20 03 17.0 +7.5**
TIA pmax pmax
comp=Z,990nm,4.0s
TIA LR LR
comp=Z,178μm,9.9s
TIA LR LR
comp=Z,160μm,7.5s
**LYN LuoYang 13.61 330**⇓P **Pn 20 00 37.8 -1.3**
LYN pP P 20 00 41.7 -6.2
LYN PP **PnPn 20 00 47.8 +0.6**
LYN S **Sn 20 03 09.6 -0.3**
LYN SS **SnSn 20 03 26.4 +3.9**
LYN pmax pmax
comp=Z,2μm,7.1s
LYN LR LR
comp=Z,235μm,17.5s
LYN LR LR
comp=Z,328μm,20.6s
LYN LR LR
comp=Z,215μm,15.7s
**JNU Nakatsue 13.62 39** Pn **Pn 20 00 39.7 +0.4**
comp=Z,0.4nm,0.3s,baz=232,slow=16,SNR=5.3
JNU LR LR 20 07 01.5
comp=Z,230μm,18.3s,baz=224,slow=42
**JNU Nakatsue 13.62 39** P **Pn 20 00 40.5 +1.2**
**JNU Nakatsue 13.62 39**⇑P **Pn 20 00 40.2 +0.9**
**JNU Nakatsue 13.62 39** Pn **Pn 20 00 39.2 -0.1**
**JNU Nakatsue 13.62 39** P **Pn 20 00 41.3 +2.0**
**SNPH Sibulan 13.72 169** *e*P **Pn 20 00 42.0 +1.3**
**SCPH Surigao 13.86 160**⇓*e*P **P 20 00 50.2 -0.6**
**JTU Tsushima 13.90 32** P **Pn 20 00 46.1 +3.1**
**JTU Tsushima 13.90 32**⇑P **Pn 20 00 46.3 +3.3**
**JTU Tsushima 13.90 32** Pn **Pn 20 00 43.5 +0.5**
**TJN Taejon 14.65 22**⇓*i*P **Pn 20 00 54.9 +1.7**
**TJN Taejon 14.65 22** Pn **Pn 20 00 53.3 +0.1**
**TJN Taejon 14.65 22** P **Pn 20 00 55.9 +2.7**
**XAN Xi'an 15.11 320** P **Pn 20 00 57.6 -1.9**
XAN pP P 20 01 03.2 -1.4
XAN sP pP 20 01 07.6 -2.4
XAN PP **sP 20 01 10.4 -2.3**
XAN pmax pmax
comp=Z,170nm,1.2s
XAN pmax pmax
comp=Z,9μm,4.6s
XAN LR LR
comp=Z,327μm,13.9s
XAN LR LR
comp=Z,186μm,13.1s
XAN LR LR
comp=Z,540μm,13.1s
**PAGZ Pagadian 15.21 169**⇓*e*P **P 20 01 07.0 +1.3**
**HNS HongShan 15.31 342**⇑P **Pn 20 01 01.8 -0.3**
HNS PP **pP 20 01 13.2 +1.1**
HNS S **Sn 20 03 53.1 +1.9**
HNS SS **S 20 04 12.3 +4.8**
HNS LR LR
comp=Z,210μm,17.5s
HNS LR LR
comp=Z,184μm,11.6s
**INCN Inchon 15.43 18** P **Pn 20 01 02.0 -1.7**
INCN pmax pmax
comp=Z,547nm,1.1s
**INCN Inchon 15.43 18** P **Pn 20 01 05.0 +1.4**
INCN P **Pn 20 01 05.0 +1.4**
**INCN Inchon 15.43 18**⇑P **Pn 20 01 05.1 +1.4**
**INCN Inchon 15.43 18** Pn **Pn 20 01 02.0 -1.7**
**HJU Haeju 15.71 15** P **Pn 20 01 08.8 +1.4**
HJU pP **P 20 01 13.2 +2.0**
HJU sP **sP 20 01 21.0 +1.9**
HJU S **Sn 20 04 02.6 +1.6**
HJU AMS AMS
comp=N,92μm,13.0s
HJU AMS AMS
comp=E,17μm,2.3s
HJU AMS AMS
comp=Z,31μm,4.4s
**KSAR Wonju Array Be 15.79 22** P **Pn 20 01 08.8 +0.5**
**KSAR Wonju Array Be 15.79 22** Pn **Pn 20 01 08.8 +0.5**
**KSRS Korea Array 15.81 22** Pn **Pn 20 01 09.6 +1.0**
comp=Z,1.7nm,0.3s,baz=207,slow=13,SNR=36
KSRS LR LR 20 07 59.9
comp=Z,76μm,18.9s,baz=210,slow=40
**KS19 Wonju Array Si 15.83 22** Pn **Pn 20 01 07.6 -1.3**
**DLV T Lat 15.88 229** Pn **Pn 20 01 10.1 +0.3**
DLV IAmb IAmb 20 01 25.9
comp=Z,4μm,1.9s
**DLV T Lat 15.88 229** P **P 20 01 11.9 -1.5**
**JMN Monobe 15.88 44** P **Pn 20 01 06.4 -3.2**
**JMN Monobe 15.88 44** Pn **Pn 20 01 06.4 -3.2**
**ZCP Zamboanga City 15.95 175**⇑*e*P **Pn 20 01 12.1 +1.6**
**DL2 Dalian 15.97 3**⇑*i*P **P 20 01 12.6 -1.5**
DL2 PP **sP 20 01 23.4 +1.3**
DL2 S **Sn 20 04 10.5 +3.2**
DL2 SS **S 20 04 25.8 +4.8**
DL2 pmax pmax
comp=Z,220nm,2.0s
DL2 pmax pmax
comp=Z,6μm,6.3s
DL2 LR LR
comp=Z,227μm,12.7s
DL2 LR LR
comp=Z,91μm,13.5s
DL2 LR LR
comp=Z,189μm,11.8s
**CTBH Cotabato--PC H 15.98 167** *e*P **P 20 01 13.9 -0.4**
**UBPT Khong Chiam 16.18 245** P **Pn 20 01 13.6 0.0**
UBPT IAmb IAmb 20 01 31.4
comp=Z,3μm,1.4s
**JHS Saijyo 16.26 39** P **Pn 20 01 14.6 +0.2**
**JHS Saijyo 16.26 39**⇑P **Pn 20 01 10.9 -3.5**
**JHS Saijyo 16.26 39** Pn **Pn 20 01 13.1 -1.3**
**TIY Taiyuan 16.34 336**⇓*i*P **P 20 01 17.1 -1.3**
TIY PP **sP 20 01 26.7 +0.1**
TIY S **S 20 04 24.1 -4.7**
TIY SS **SnSn 20 04 35.4 +5.6**
TIY pmax pmax
comp=Z,280nm,1.8s
TIY pmax pmax
comp=Z,14μm,5.5s
TIY LR LR
comp=Z,334μm,11.6s
TIY LR LR
comp=Z,103μm,10.2s
TIY LR LR
comp=Z,269μm,13.5s
**KCP Kidapawan 16.39 164**⇑*e*P **P 20 01 19.3 +0.4**
**DAV Davao City (W) 16.46 162** Pn **P 20 01 18.5 -1.1**
comp=Z,45nm,0.3s,baz=192,slow=0.7,SNR=7.1
DAV LR LR 20 08 02.7
comp=Z,172μm,21.9s,baz=355,slow=39
**DAV Davao City (W) 16.46 162** **Pn 20 01 16.4 -0.6**
DAV IAmb IAmb 20 02 11.6
comp=Z,5μm,1.9s
**KMI Kunming 16.47 281**⇓P **Pn 20 01 14.9 -2.5**
KMI pP P 20 01 18.9 -1.1
KMI S **Sn 20 04 10.3 -10**
KMI sS S 20 04 29.5 -2.3
KMI SS **SnSn 20 04 39.7 +6.6**
KMI pmax pmax
comp=Z,530nm,2.5s
KMI pmax pmax
comp=Z,21μm,7.3s
KMI LR LR
comp=Z,148μm,8.3s
KMI LR LR
comp=Z,288μm,14.2s
KMI LR LR
comp=Z,415μm,15.6s
**PYAG Pyongyang 16.68 14** P **P 20 01 21.8 -0.1**
PYAG pP **pP 20 01 26.1 -1.4**
PYAG sP **sP 20 01 30.8 +1.0**
PYAG S **Sn 20 04 27.9 +3.4**
PYAG AMS AMS
comp=N,33μm,7.9s
PYAG AMS AMS
comp=E,33μm,7.9s
PYAG AMS AMS
comp=Z,28μm,6.8s
**JAD Aida 16.85 42** P **Pn 20 01 18.1 -3.8**
**CD2 Chengdu 17.00 302**⇑*i*P **Pn 20 01 22.6 -1.2**
CD2 pP pP 20 01 28.4 -2.6
CD2 sP sP 20 01 32.3 -1.7
CD2 PP **PnPn 20 01 36.7 +3.1**
CD2 S **Sn 20 04 30.2 -2.2**
CD2 sS S 20 04 40.1 -2.0
CD2 SS **SnSn 20 04 51.7 +6.0**
CD2 pmax pmax
comp=Z,2μm,1.2s
CD2 pmax pmax
comp=Z,8μm,7.7s
CD2 LR LR
comp=Z,71μm,8.6s
CD2 LR LR
comp=Z,417μm,13.5s
**KKM Kota Kinabalu 17.29 195**⇓P **P 20 01 28.6 -0.4**
**KKM Kota Kinabalu 17.29 195** **Pn 20 01 26.8 -0.8**
**KKM Kota Kinabalu 17.29 195** P **P 20 01 29.9 +0.9**
**SUJ Sinuiju 17.46 10** P **P 20 01 30.6 +0.1**
SUJ pP **pP 20 01 34.4 -1.6**
SUJ sP **sP 20 01 39.7 +1.4**
SUJ S **Sn 20 04 46.9 +3.6**
SUJ AMS AMS
comp=N,19μm,9.2s
SUJ AMS AMS
comp=E,21μm,10.2s
SUJ AMS AMS
comp=Z,5μm,2.5s
**BJT Baijiatuau 17.47 349** P **Pn 20 01 29.7 +0.1**
BJT pmax pmax
comp=Z,3μm,1.7s
**BJT Baijiatuau 17.47 349** P **Pn 20 01 29.7 +0.1**
BJT IAmb IAmb 20 02 07.1
comp=Z,3μm,1.7s
**BJI Beijing 17.49 349** P **Pn 20 01 30.0 +0.2**
BJI S **Sn 20 04 44.7 +0.7**
BJI SS **SnSn 20 05 07.9 +10**
BJI pmax pmax
comp=Z,16μm,7.4s
BJI LR LR
comp=Z,84μm,16.8s
BJI LR LR
comp=Z,119μm,13.4s
**PZH PanZhiHua 17.51 286**⇑P **Pn 20 01 30.8 +0.5**
PZH sP **pP 20 01 35.8 -1.0**
PZH PP **PnPn 20 01 43.2 +2.5**
PZH S **S 20 04 50.6 -2.2**
PZH sS **sS 20 04 57.5 -3.7**
PZH PcP **PcP 20 06 12.9 +2.4**
PZH pmax pmax
comp=Z,950nm,2.2s
PZH pmax pmax
comp=Z,10μm,6.9s
PZH LR LR
comp=Z,277μm,14.5s
PZH LR LR
comp=Z,332μm,15.1s
**MYLDM Lahad Datu 17.74 187**⇑P **P 20 01 36.2 +2.3**
**MYLDM Lahad Datu 17.74 187** **Pn 20 01 33.5 +0.4**
MYLDM IAmb IAmb 20 02 05.4
comp=Z,2μm,1.3s
**JWT Wachi 17.84 43** P **P 20 01 36.7 +1.9**
**HHU Hamhung 17.96 17** P **P 20 01 36.6 +0.5**
HHU pP **pP 20 01 41.0 -0.5**
HHU sP **sP 20 01 48.5 +4.6**
HHU S **S 20 04 59.6 -1.8**
HHU AMS AMS
comp=N,82μm,8.9s
HHU AMS AMS
comp=E,115μm,12.4s
HHU AMS AMS
comp=Z,103μm,11.2s
**JIE Ise 18.16 47** P **P 20 01 40.8 +2.5**
**SPMM Sapulut 18.53 193** P **Pn 20 01 46.0 +3.2**
**INU Inuyama 18.92 45**⇑P **P 20 01 43.6 -3.1**
**INU Inuyama 18.92 45** P **P 20 01 45.5 -1.2**
**INU Inuyama 18.92 45** P **Pn 20 01 47.8 +0.4**
**SNY Shenyang 19.03 7**⇑P **P 20 01 48.2 +0.3**
SNY sP **sP 20 01 59.5 +3.8**
SNY S **Sn 20 05 15.2 -6.1**
SNY pmax pmax
comp=Z,270nm,2.3s
SNY pmax pmax
comp=Z,16μm,5.4s
SNY LR LR
comp=Z,125μm,18.4s
SNY LR LR
comp=Z,242μm,14.5s
**JGF Kuroka 19.29 45** P **P 20 01 51.1 +0.2**
**JGF Kuroka 19.29 45**⇑P **P 20 01 49.9 -1.0**
**JGF Kuroka 19.29 45** P **P 20 01 48.5 -2.3**
**JSG Sagara 19.33 49** P **Pn 20 01 53.7 +1.4**
**JSG Sagara 19.33 49**⇑P **P 20 01 50.6 -0.6**
**JSG Sagara 19.33 49** P **P 20 01 50.1 -1.1**
JSG IAmb IAmb 20 02 07.8
comp=Z,2μm,1.1s
**HHC Hu-ho-hao-te 19.45 339** *e*P **Pn 20 01 54.4 +0.6**
HHC sP sP 20 02 04.7 +3.8
HHC S **Sn 20 05 29.1 -2.4**
HHC sS S 20 05 35.4 +3.7
HHC pmax pmax
comp=Z,240nm,1.4s
HHC pmax pmax
comp=Z,28μm,7.7s

HHC LR LR
comp=Z,68μm,10.2s
HHC LR LR
comp=Z,159μm,12.5s
**LZH Lanzhou 19.59 316** ⇓P **Pn** **20 01 55.2 -0.5**
LZH pP pP 20 02 00.7 +1.0
LZH sP sP 20 02 05.4 +3.1
LZH S **S** **20 05 33.9 -0.9**
LZH sS sS 20 05 43.1 -0.3
LZH pmax pmax
comp=Z,560nm,1.5s
LZH pmax pmax
comp=Z,41μm,7.6s
LZH LR LR
comp=Z,261μm,15.7s
LZH LR LR
comp=Z,227μm,17.4s
LZH LR LR
comp=Z,279μm,16.0s
**JGN Niukaw 19.64 44** P **P** **20 01 54.1 -0.6**
**SGSI Sangihe 19.69 165** P **Pn** **20 01 56.5 -0.3**
comp=Z,7μmcomp=Z,532nm,1.1s
**JHJ Hachijo jima 2 19.72 55** P **Pn** **20 01 56.8 -0.3**
comp=Z,46nm,0.3s,baz=237,slow=5.8,SNR=20
JHJ LR LR 20 10 09.1
comp=Z,39μm,18.1s,baz=248,slow=39
**JHJ2 Mitsune 19.75 55** P **Pn** **20 01 56.6 -0.7**
**JHJ2 Mitsune 19.75 55** ⇑P **Pn** **20 01 58.0 +0.6**
**JHJ2 Mitsune 19.75 55** P **P** **20 01 54.8 -0.9**
**JHJ2 Mitsune 19.75 55** P **Pn** **20 01 58.3 +1.0**
**BTO Baotou 19.78 336** P **Pn** **20 02 00.4 +2.6**
**CBIJ Chichi jima 19.99 74** P **P** **20 01 58.3 -0.2**
**JCJ Chichijima 19.99 74** P **P** **20 01 57.8 -0.7**
JCJ IAmb IAmb 20 02 14.6
comp=Z,2μm,1.3s
**JCJ Chichijima 19.99 74** P **P** **20 01 58.9 +0.4**
**JOD2 Odawara 2 20.27 48** P **P** **20 02 02.3 +0.8**
**MAJO Matsushiro 20.41 44***ce*P **P** **20 02 01.7 -1.3**
MAJO pmax pmax
comp=Z,712nm,1.3s
MAJO MLR MLR
comp=Z,176μm,23.0s
**MAJO Matsushiro 20.41 44** ⇑P **P** **20 02 01.3 -1.7**
**MAJO Matsushiro 20.41 44** P **P** **20 02 01.1 -1.9**
**MAJO Matsushiro 20.41 44** P **P** **20 02 03.7 +0.7**
**MAT Matsushiro 20.41 44** P **P** **20 02 01.5 -1.5**
MAT S Sn 20 05 53.2 -1.4
**MAT Matsushiro 20.41 44** P **P** **20 02 01.0 -2.0**
**MJB9 Matsu-Tunnel 20.41 44** P **P** **20 02 01.2 -1.7**
**MJAR Matsushiro Arr 20.41 44** P **P** **20 02 02.2 -0.7**
comp=Z,130nm,0.8s,baz=248,slow=8.6,SNR=55
MJAR ScP **ScP** **20 09 51.9 +1.1**
comp=Z,8.4nm,1.0s,baz=268,slow=0.9,SNR=5.4
MJAR LR LR 20 10 34.3
comp=Z,132μm,21.1s,baz=226,slow=39
**MJAR Matsushiro Arr 20.41 44** P **P** **20 02 00.9 -2.1**
**JRY Ryogami san 20.56 46** P **P** **20 02 03.1 -1.5**
**CHTO Chiang Mai 20.64 263** P **P** **20 02 05.8 +0.1**
CHTO pmax pmax
comp=Z,3μm,1.3s
CHTO MLR MLR
comp=Z,301μm,18.0s
**CHTO Chiang Mai 20.64 263** P **P** **20 02 06.0 +0.3**
CHTO P **P** **20 02 06.0 +0.3**
CHTO P **P** **20 02 06.0 +0.3**
**CHTO Chiang Mai 20.64 263** ⇑P **P** **20 02 05.9 +0.3**
**CHTO Chiang Mai 20.64 263** P **P** **20 02 05.8 +0.1**
**CHTO Chiang Mai 20.64 263** P Pn 20 02 09.4 +1.4
**CM31 Chiang Mai Arr 20.74 262** P Pn 20 02 08.8 -0.3
SNR=378
CM31 P Pn 20 02 08.8 -0.3
SNR=378
CM31 P Pn 20 02 08.8 -0.3
SNR=378
**CM31 Chiang Mai Arr 20.74 262** P **P** **20 02 06.8 +0.1**
**CMAR Chiang Mai Arr 20.74 262** P **P** **20 02 07.2 +0.5**
comp=Z,140nm,0.8s,baz=68,slow=8.6,SNR=190
CMAR PcP **PcP** **20 06 17.5 +1.4**
comp=Z,9.7nm,0.8s,baz=24,slow=1.0,SNR=5.7
CMAR LR LR 20 11 07.0
comp=Z,266μm,19.1s,baz=75,slow=40
**CMAR Chiang Mai Arr 20.74 262** P **P** **20 02 06.8 +0.1**
**CN2 Changchun 21.22 10***e*P **P** **20 02 09.9 -1.8**
CN2 *e*S **S** **20 06 00.6 -6.2**
CN2 pmax pmax
comp=Z,20nm,2.0s
CN2 pmax pmax
comp=Z,3μm,8.0s
CN2 LR LR
comp=N,73μm,18.0s
CN2 LR LR
comp=E,355μm,18.0s
CN2 LR LR
comp=Z,165μm,17.2s
**XLT XiLinHaoTe 21.27 351** ⇑*i*P **P** **20 02 13.2 +0.9**
XLT pP pP 20 02 18.3 +0.4
XLT sP sP 20 02 21.7 +1.4
XLT S **S** **20 06 08.7 +0.8**
XLT sS Sn 20 06 15.7 +0.4
XLT SS **SnSn** **20 06 34.7 +4.1**
XLT ScP **ScP** **20 09 48.5 -4.3**
XLT pmax pmax
comp=Z,260nm,1.3s
XLT LR LR
comp=Z,164μm,13.7s
XLT LR LR
comp=Z,147μm,13.1s
XLT LR LR
comp=Z,176μm,14.2s
**JSD Sado 21.37 41** P **P** **20 02 13.6 +0.3**
**JSD Sado 21.37 41** ⇑P **P** **20 02 10.9 -2.4**
**JSD Sado 21.37 41** P **P** **20 02 10.7 -2.6**
**MSHR Mys Shultsa 21.50 22**⇑*e*P **P** **20 02 14.8 +0.2**
MSHR pmax pmax
comp=Z,291nm,1.3s
MSHR MLR MLR
comp=Z,73μm,17.0s
**JYT Yasato 21.55 48** P **P** **20 02 12.6 -2.6**
**JYT Yasato 21.55 48** ⇑P **P** **20 02 11.4 -3.8**
**JYT Yasato 21.55 48** P **P** **20 02 11.3 -3.9**
**TOLI2 Tolitoli 21.67 180** P **P** **20 02 16.0 -0.6**
TOLI2 IAmb IAmb 20 02 33.0
comp=Z,2μm,1.5s
**TOLI2 Tolitoli 21.67 180** P **P** **20 02 17.1 +0.5**
**SBUM Sibu 21.90 203** ⇓P **P** **20 02 19.2 0.0**
**SBUM Sibu 21.90 203** P **P** **20 02 18.8 -0.3**
SBUM IAmb IAmb 20 02 40.5
comp=Z,1μm,1.4s
**SBUM Sibu 21.90 203** P **P** **20 02 20.0 +0.8**
**VLA Vladivostok 22.23 22***c i*P **P** **20 02 21.5 -0.9**
VLA pmax pmax
comp=Z,741nm,1.7s
VLA MLR MLR
comp=Z,138μm,17.0s
**GTOI Gorontalo 22.26 174** P **P** **20 02 22.4 -0.6**
comp=Z,26μmcomp=Z,10μmcomp=Z,608nm,1.5s
**MRSI Marisa 22.33 176** P **P** **20 02 26.5 +2.7**
comp=Z,53μmcomp=Z,23μmcomp=Z,1μm,0.8s
**KMSI Cibinong 22.44 171** P **P** **20 02 26.2 +1.2**
comp=Z,2μmcomp=Z,19μmcomp=Z,2μm,0.9s
**MPSI Mapaga 22.44 182** P **P** **20 02 25.8 +0.8**
comp=Z,66μmcomp=Z,12μmcomp=Z,731nm,1.0s
**JYA Atsumi 22.61 42** P **P** **20 02 22.2 -4.4**
**LKP Lekhapani 22.83 286***e*P **P** **20 02 29.1 0.0**
LKP IAmb IAmb 20 02 34.5
comp=Z,1μm,0.8s
**JMM Marumori 22.85 45** ⇑P **P** **20 02 24.6 -4.6**
**JMM Marumori 22.85 45** P **P** **20 02 24.9 -4.3**
**MDJ Mudanjiang 22.88 17** P **P** **20 02 29.5 +0.1**
MDJ pP sP 20 02 36.8 -0.5
MDJ S **S** **20 06 39.0 +0.9**
MDJ SS **SnSn** **20 07 13.8 +4.0**
MDJ pmax pmax
comp=Z,190nm,1.5s
MDJ pmax pmax
comp=Z,8μm,4.6s
MDJ LR LR
comp=Z,117μm,14.5s
MDJ LR LR
comp=Z,259μm,17.5s
MDJ LR LR
comp=Z,218μm,11.0s
**MDJ Mudanjiang 22.88 17** P **P** **20 02 27.6 -1.8**
**MDJ Mudanjiang 22.88 17** P **P** **20 02 31.2 +1.8**
**TNTI Ternate 22.96 162** ⇑P **P** **20 02 27.5 -3.0**
**TNTI Ternate 22.96 162** P **P** **20 02 28.6 -1.9**
comp=Z,23μmcomp=Z,14μmcomp=Z,1μm,1.2s
**TNTI Ternate 22.96 162** P **P** **20 02 27.1 -3.4**
TNTI IAmb IAmb 20 02 47.8
comp=Z,859nm,0.9s
**TNTI Ternate 22.96 162** P **P** **20 02 30.3 -0.2**
**USA0B Ussuriysk Arra 23.21 21** P **P** **20 02 31.0 -1.8**
USA0B pmax pmax
comp=Z,485nm,1.5s
**USA0B Ussuriysk Arra 23.21 21** P **P** **20 02 31.0 -1.8**
**USRK Ussuriysk Ar. 23.21 21** P **P** **20 02 33.0 +0.2**
comp=Z,14nm,0.6s,baz=216,slow=7.9,SNR=26
USRK LR LR 20 13 04.6
comp=Z,105μm,18.8s,baz=191,slow=40
**USRK Ussuriysk Ar. 23.21 21** P **P** **20 02 33.0 +0.2**
**USRK Ussuriysk Ar. 23.21 21** P **P** **20 02 31.4 -1.5**
**BNX BinXian 23.44 12** ⇓P **P** **20 02 33.2 -1.9**
BNX pP **pP** **20 02 37.7 -3.1**
BNX sP **sP** **20 02 39.8 -3.3**
BNX S **S** **20 06 39.7 -7.8**
BNX sS **sS** **20 06 56.0 -0.8**
BNX SS **SnSn** **20 07 27.2 +3.6**
BNX pmax pmax
comp=Z,660nm,1.9s
BNX pmax pmax
comp=Z,9μm,4.0s
BNX LR LR
comp=Z,62μm,9.5s
BNX LR LR
comp=Z,191μm,10.8s
BNX LR LR
comp=Z,173μm,12.5s
**SMKI Samarinda 23.45 189** P **P** **20 02 37.4 +2.0**
comp=Z,66μmcomp=Z,35μmcomp=Z,2μm,1.4s
**KSM Kuching 23.54 207** ⇑P **P** **20 02 35.4 -0.8**
**KSM Kuching 23.54 207** P **P** **20 02 35.0 -1.3**
**KSM Kuching 23.54 207** P **P** **20 02 36.0 -0.3**
**KSM Kuching 23.54 207** P **P** **20 02 38.8 +2.5**
**DIBR DIBRUGARH 23.67 286***e*P **P** **20 02 37.6 0.0**
DIBR IAmb IAmb 20 02 49.9
comp=Z,2μm,0.9s
**APSI Ampana 23.70 177** P **P** **20 02 39.1 +1.3**
comp=Z,30μmcomp=Z,22μmcomp=Z,1μm,1.4s
**MOKO MOKOCHONG 23.95 283***e*P **P** **20 02 38.5 -1.8**
MOKO IAmb IAmb 20 02 53.2
comp=Z,3μm,1.5s
**JOM Ohasama 24.11 42** P **P** **20 02 37.8 -3.8**
**GTA Gaotai 24.14 318** ⇓P **P** **20 02 41.6 -0.4**
GTA pP pP 20 02 48.8 +1.0
GTA sP sP 20 02 52.9 +2.4
GTA S **S** **20 06 57.3 -1.9**
GTA sS sS 20 07 07.9 -0.2
GTA SS **SnSn** **20 07 54.7 +14**
GTA pmax pmax
comp=Z,290nm,1.6s
GTA pmax pmax
comp=Z,8μm,7.3s
GTA LR LR
comp=N,98μm,17.1s
GTA LR LR
comp=E,125μm,17.1s
GTA LR LR
comp=Z,180μm,17.1s
**KOHI KOHIMA 24.30 282***e*P **P** **20 02 41.6 -2.0**
KOHI IAmb IAmb 20 02 53.7
comp=Z,3μm,1.4s
**LBMI Labuha 24.35 163** P **P** **20 02 43.9 0.0**
comp=Z,21μmcomp=Z,32μmcomp=Z,1μm,0.9s
**MTKI Muara Teweh, K 24.35 194** P **P** **20 02 45.6 +1.7**
comp=Z,21μmcomp=Z,12μmcomp=Z,1μm,1.1s
**STKI Sintang 24.38 203** P **P** **20 02 46.3 +2.1**
comp=Z,16μmcomp=Z,980nm,1.0s
**IMP Imphal 24.44 280***e*P **P** **20 02 43.1 -1.8**
IMP IAmb IAmb 20 02 55.7
comp=Z,7μm,2.2s
**SRIT Nakonsritamara 24.67 238** P **P** **20 02 47.1 +0.2**
SRIT IAmb IAmb 20 03 00.8
comp=Z,1μm,1.4s
**ITAN ITANAGAR 24.70 285***e*P **P** **20 02 47.3 +0.1**
**JTM Tenmabayashi 24.80 39** P **P** **20 02 45.7 -2.1**
**JTM Tenmabayashi 24.80 39** ⇑P **P** **20 02 45.2 -2.5**
**JTM Tenmabayashi 24.80 39** P **P** **20 02 45.0 -2.8**
JTM IAmb IAmb 20 03 01.4
comp=Z,1μm,1.8s
**GUMO Guam 24.80 108** P **P** **20 02 47.3 -0.8**
comp=Z,948nm,0.8s,baz=195,slow=11,SNR=22
GUMO LR LR 20 12 02.6
comp=Z,56μm,20.3s,baz=282,slow=36
**GUMO Guam 24.80 108** ⇓P **P** **20 02 47.3 -0.8**
**GUMO Guam 24.80 108** P **P** **20 02 46.9 -1.2**
**GUMO Guam 24.80 108** P **P** **20 02 47.7 -0.4**
**JOT Ohata 25.17 38** P **P** **20 02 50.2 -0.9**
**SANI Sanana 25.35 167** ⇑P **P** **20 02 49.6 -3.4**
**SANI Sanana 25.35 167** P **P** **20 02 50.3 -2.7**
comp=Z,27μmcomp=Z,11μmcomp=Z,539nm,0.8s
**SANI Sanana 25.35 167** P **P** **20 02 53.3 +0.3**
**JSH Shimam 25.47 35** P **P** **20 02 52.5 -1.4**
**TEY Ternei 25.66 27**⇑*e*P **P** **20 02 52.3 -3.2**
TEY *e* 20 02 58.9
TEY pmax pmax
comp=Z,300nm,7.8s
TEY pmax pmax
comp=N,100nm,7.2s
TEY MLR MLR
comp=E,4μm,16.0s
TEY MLR MLR
comp=N,3μm,14.0s
TEY MLR MLR
comp=Z,4μm,15.0s
**JRMM Jerantut 25.79 226** P **P** **20 02 59.0 +1.9**
**SWI Sorong 25.80 155** P **P** **20 02 56.0 -1.1**
comp=Z,28μmcomp=Z,7μmcomp=Z,389nm,0.8s
**TTSI Tana Toraja 25.80 182** P **P** **20 02 58.9 +1.8**
comp=Z,27μmcomp=Z,9μmcomp=Z,504nm,1.1s
**SIJI Sorong 25.81 155** P **P** **20 02 56.1 -1.1**
comp=Z,274nm,0.8s,baz=346,slow=9.7,SNR=46
SIJI LR LR 20 12 55.1
comp=Z,25μm,21.0s,baz=328,slow=36
**GOMU GeErMu 25.96 306** P **P** **20 02 58.2 -0.7**
GOMU pP pP 20 03 05.2 +0.5
GOMU sP sP 20 03 09.2 +1.9
GOMU S **S** **20 07 26.7 -2.0**
GOMU pmax pmax
comp=Z,170nm,1.3s
GOMU pmax pmax
comp=Z,13μm,8.2s
GOMU LR LR
comp=N,119μm,15.2s
GOMU LR LR
comp=E,237μm,16.3s
GOMU LR LR
comp=Z,282μm,14.1s
**KULM Kulim 26.04 231** ⇓P **P** **20 02 59.8 +0.5**
**KULM Kulim 26.04 231** P **P** **20 02 58.5 -0.7**
KULM IAmb IAmb 20 03 16.9
comp=Z,1μm,1.7s
KULM IAMs_20 IAMs_20 20 12 41.8
comp=Z,119μm,21.0s
**KULM Kulim 26.04 231** P **P** **20 03 01.0 +1.7**
**SHL Shillong 26.30 282** P **P** **20 03 00.4 -1.4**
SHL pmax pmax
comp=Z,2μm,1.1s
**SHL Shillong 26.30 282** P **P** **20 03 02.3 +0.5**
SNR=633
**SHL Shillong 26.30 282** P **P** **20 03 00.4 -1.4**
**HIA Hailar 26.32 359***ce*P **P** **20 03 00.5 -1.0**
HIA pmax pmax
comp=Z,292nm,1.1s
HIA MLR MLR
comp=Z,113μm,15.0s
**HIA Hailar 26.32 359** P **P** **20 02 59.9 -1.7**
**IPM Ipoh 26.34 229** P **P** **20 03 00.5 -1.5**
IPM IAmb IAmb 20 03 14.3
comp=Z,1μm,1.5s
IPM IAMs_20 IAMs_20 20 14 34.8
comp=Z,110μm,18.0s
**IPM Ipoh 26.34 229** P **P** **20 03 03.0 +0.9**
**IPM Ipoh 26.34 229** P **P** **20 03 04.3 +2.2**
**JEW Eniwo 26.36 36** P **P** **20 03 02.1 +0.2**
**JEW Eniwo 26.36 36** ⇑P **P** **20 03 00.5 -1.4**
**JEW Eniwo 26.36 36** P **P** **20 03 00.1 -1.8**
JEW IAmb IAmb 20 03 13.1
comp=Z,1μm,1.1s
**KBKI Kotabaru 26.40 190** P **P** **20 03 02.7 +0.2**
comp=Z,1μmcomp=Z,4μmcomp=Z,488nm,1.1s
**GUWA GUWAHATI 26.48 283***e*P **P** **20 03 03.8 +0.6**
GUWA IAmb IAmb 20 03 16.0
comp=Z,2μm,1.3s
**MYKOM Kota Tinggi 26.55 220** ⇓P **P** **20 03 04.4 +0.4**
**MYKOM Kota Tinggi 26.55 220** P **P** **20 03 03.1 -0.8**
MYKOM IAMs_20 IAMs_20 20 13 56.2
comp=Z,96μm,20.0s
**MYKOM Kota Tinggi 26.55 220** P **P** **20 03 05.0 +1.1**
**BRDH Bariadhala 26.69 275** P **P** **20 03 05.9 +0.8**
comp=Z,1.0nm,0.4s,baz=180,slow=24,SNR=14
**SPSI Sidrap Palu 26.72 182** P **P** **20 03 08.1 +2.7**
comp=Z,28μmcomp=Z,7μmcomp=Z,296nm,1.1s
**ERM Erimo 26.79 39**⇓*e*P **P** **20 03 05.8 0.0**
ERM pmax pmax
comp=Z,266nm,1.1s
ERM MLR MLR
comp=Z,158μm,21.0s
**ERM Erimo 26.79 39** ⇑P **P** **20 03 04.8 -1.0**
**ERM Erimo 26.79 39** P **P** **20 03 03.7 -2.1**
**ERM Erimo 26.79 39** IAMs_20 IAMs_20 20 13 38.4
comp=Z,158μm,22.0s
**ERM Erimo 26.79 39** P **P** **20 03 06.7 +0.9**
**JEM Erimo 26.79 39** P **P** **20 03 03.7 -2.1**
**BBKI Banjar Baru 26.81 193** P **P** **20 03 08.4 +2.2**
comp=Z,21μmcomp=Z,10μmcomp=Z,565nm,1.2s
**TPRI Tanjung Pinang 26.87 218** P **P** **20 03 09.2 +2.4**
comp=Z,16μmcomp=Z,1μm,0.9s
**PBKI Pangkalan Bun 26.91 200** P **P** **20 03 08.3 +1.2**
comp=Z,40μmcomp=Z,450nm,1.0s
**BNSI Bone 27.14 181** P **P** **20 03 10.2 +1.0**
comp=Z,8μmcomp=Z,253nm,1.4s
**ULN Ulaanbaatar 27.16 340***di*P **P** **20 03 09.5 +0.2**
ULN pmax pmax
comp=Z,413nm,1.2s
ULN MLR MLR
comp=Z,99μm,17.0s
**ULN Ulaanbaatar 27.16 340** ⇑P **P** **20 03 09.3 -0.1**
**ULN Ulaanbaatar 27.16 340** P **P** **20 03 08.6 -0.8**
**ULN Ulaanbaatar 27.16 340** IAMs_20 IAMs_20 20 15 00.5
comp=Z,93μm,20.0s
**LSA Lhasa 27.21 291** P **P** **20 03 10.9 +0.6**
LSA S **S** **20 07 48.5 -0.3**
LSA LR LR
comp=Z,79μm,14.9s
**MSAI Masohi 27.33 162** P **P** **20 03 09.8 -1.1**
comp=Z,789nmcomp=Z,80nm,1.0s
**SONM Songino Array 27.35 339** P **P** **20 03 11.0 +0.1**
comp=Z,137nm,1.1s,baz=160,slow=8.2,SNR=129
SONM PcP **PcP** **20 06 31.7 +1.8**
comp=Z,24nm,1.0s,baz=169,slow=2.9,SNR=1.5
SONM LR LR 20 15 52.6
comp=Z,80μm,18.0s,baz=150,slow=40
SONM P3KPbc 20 35 43.9
comp=Z,4.0nm,1.1s,baz=324,slow=4.0,SNR=16
**SONM Songino Array 27.35 339** P **P** **20 03 09.6 -1.4**
**AAI Ambon 27.45 163** P **P** **20 03 11.9 -0.1**
comp=Z,33μmcomp=Z,12μmcomp=Z,816nm,1.3s
**KLR Kul'dur 27.71 16** P **P** **20 03 14.7 +0.7**
comp=Z,25nm,0.8s,baz=204,slow=6.7,SNR=63
KLR PcP **PcP** **20 06 30.9 +0.4**
comp=Z,11nm,0.6s,baz=219,slow=3.4,SNR=7.7
KLR LR LR 20 14 54.1
comp=Z,97μm,19.9s,baz=200,slow=38
**KLR Kul'dur 27.71 16***ce*P **P** **20 03 14.4 +0.4**
KLR pmax pmax
comp=Z,189nm,1.5s
KLR MLR MLR
comp=Z,136μm,16.0s
**KAPI Kappang 27.76 182** P **P** **20 03 14.2 -0.6**
comp=Z,28nm,0.8s,baz=29,slow=11,SNR=14
KAPI LR LR 20 16 31.5
comp=Z,46μm,19.6s,baz=31,slow=41
**KAPI Kappang 27.76 182** ⇑P **P** **20 03 14.0 -0.7**
**KAPI Kappang 27.76 182** P **P** **20 03 13.6 -1.2**
KAPI IAmb IAmb 20 03 56.8
comp=Z,696nm,1.4s
**KAPI Kappang 27.76 182** P **P** **20 03 14.7 0.0**
**ASAJ Asahikawa 27.84 35** P **P** **20 03 15.6 +0.4**
comp=Z,30nm,0.6s,baz=262,slow=5.6,SNR=22
ASAJ LR LR 20 14 42.9
comp=Z,195μm,20.6s,baz=238,slow=37
**ASAJ Asahikawa 27.84 35** P **P** **20 03 16.1 +0.9**
**JKA Kamikawa-asahi 27.84 35** P **P** **20 03 15.1 -0.2**
**DSRI Dabo 28.00 216** P **P** **20 03 19.3 +2.4**
comp=Z,14μmcomp=Z,7μmcomp=Z,537nm,0.9s
**BKSI Bulukumba 28.06 181** P **P** **20 03 18.9 +1.5**
comp=Z,20μmcomp=Z,4μmcomp=Z,124nm,1.0s
**FAKI Fak Fak 28.07 155** ⇑P **P** **20 03 15.1 -2.4**
**FAKI Fak Fak 28.07 155** P **P** **20 03 16.7 -0.8**
comp=Z,22μmcomp=Z,5μmcomp=Z,484nm,0.8s
**FAKI Fak Fak 28.07 155** P **P** **20 03 15.1 -2.4**
FAKI IAmb IAmb 20 03 23.0
comp=Z,291nm,0.7s
**FAKI Fak Fak 28.07 155** P **P** **20 03 15.8 -1.7**
**JMP Maruseppu 28.18 36** P **P** **20 03 19.5 +1.2**
**BBSI Bau Bau 28.29 176** P **P** **20 03 22.7 +3.3**
comp=Z,341nmcomp=Z,30nm,1.3s
**JWK2 Keihoku 28.30 33** P **P** **20 03 17.4 -1.9**
**TPI Tanjungpandan 28.47 208** P **P** **20 03 23.9 +2.8**
**PPBI Pangkal Pinang 28.63 211** P **P** **20 03 24.6 +2.0**
comp=Z,23μmcomp=Z,11μmcomp=Z,462nm,2.0s
**BNDI Bandanaira 28.73 160** ⇑P **P** **20 03 25.6 +2.2**
**BNDI Bandanaira 28.73 160** P **P** **20 03 25.2 +1.8**
**TSI Tuntungan 28.77 231** P **P** **20 03 26.7 +2.9**
comp=Z,34μmcomp=Z,22μmcomp=Z,890nm,0.8s
**LHMI Lhok Sumawe 28.82 236** ⇓P **P** **20 03 25.7 +1.5**
**LHMI Lhok Sumawe 28.82 236** P **P** **20 03 27.6 +3.4**
comp=Z,40μmcomp=Z,11μmcomp=Z,398nm,1.6s
**LHMI Lhok Sumawe 28.82 236** P **P** **20 03 22.8 -1.4**
LHMI IAmb IAmb 20 03 58.8
comp=Z,682nm,1.3s
**BSSI Bau Bau, Buton 28.87 180** P **P** **20 03 27.7 +3.1**
comp=Z,11μmcomp=Z,3μmcomp=Z,93nm,1.4s
**SRPI Serui, Papua 28.96 146** P **P** **20 03 25.3 -0.2**
comp=Z,13μmcomp=Z,4μmcomp=Z,143nm,1.1s
**PSI Prapat 29.00 230** P **P** **20 03 26.7 +0.7**
comp=Z,134nm,0.8s,baz=7.4,slow=5.0,SNR=29
PSI LR LR 20 15 08.2
comp=Z,62μm,18.7s,baz=60,slow=37
**RGRI Rengat 29.16 220** P **P** **20 03 29.8 +2.5**
comp=Z,77μmcomp=Z,159nm,0.7s
**GTK Tadong 29.27 285***e*P **P** **20 03 29.4 +1.1**
GTK IAmb IAmb 20 03 44.1
comp=Z,3μm,1.3s
**KCSI Kotacane, Aceh 29.33 232** P **P** **20 03 31.2 +2.4**
comp=Z,5μmcomp=Z,196nm,1.4s
**BKNI Bangkinang 29.43 223** P **P** **20 03 31.4 +1.8**
comp=Z,23μmcomp=Z,10μmcomp=Z,601nm,1.5s
**BKNI Bangkinang 29.43 223** P **P** **20 03 29.1 -0.5**
BKNI IAmb IAmb 20 03 43.3
comp=Z,794nm,1.2s
BKNI IAMs_20 IAMs_20 20 15 19.4
comp=Z,86μm,19.0s
**JMBI JAMBI 29.47 216** P **P** **20 03 31.8 +1.8**
comp=Z,12μmcomp=Z,1μm,1.2s
**CIT Chita 29.57 351***e*P **P** **20 03 31.4 +0.8**
CIT *e* 20 04 21.8
CIT *e* 20 04 46.5
CIT *e* 20 06 43.0
CIT *e* 20 08 24.5
CIT *e* 20 14 02.1
CIT pmax pmax
comp=Z,568nm,2.8s
**YUK Yuzh-Kuril'sk 29.59 39***ci*P **P** **20 03 33.0 +2.2**
YUK *i*S **S** **20 08 28.2 +3.2**
YUK pmax pmax
comp=Z,1μm,1.6s
YUK pmax pmax
comp=N,431nm,1.7s
YUK pmax pmax
comp=E,519nm,1.4s
**YSS Yuzh-Sakhalins 29.89 31***ce*P **P** **20 03 33.3 -0.1**
YSS *e**SP **sP** **20 03 46.0 +4.4**
YSS *e* 20 04 48.1
YSS *e*S **S** **20 08 28.3 -1.3**
YSS *e* 20 10 27.0
YSS pmax pmax
comp=Z,3μm,8.8s
YSS pmax pmax
comp=N,1μm,8.7s
YSS pmax pmax
comp=Z,220nm,0.8s
YSS pmax pmax
comp=Z,8μm,8.5s
YSS pmax pmax
comp=N,3μm,9.0s

YSS MLR MLR
comp=Z,68μm,17.0s
**YSS Yuzh-Sakhalins 29.89 31** ⇑P **P 20 03 33.2 -0.1**
**YSS Yuzh-Sakhalins 29.89 31** P **P 20 03 32.5 -0.9**
YSS IAmb IAmb 20 03 58.3
comp=Z,458nm,1.3s
YSS IAMs_20 IAMs_20 20 17 12.1
comp=Z,82μm,18.0s
**YSS Yuzh-Sakhalins 29.89 31** P **P 20 03 35.1 +1.7**
**PMBI Palembang 29.97 213** P **P 20 03 37.8 +3.4**
comp=Z,23μmcomp=Z,13μmcomp=Z,897nm,1.1s
**PMBI Palembang 29.97 213** P **P 20 03 34.3 0.0**
PMBI IAMs_20 IAMs_20 20 16 07.5
comp=E,65μm,19.0s
**MNSI Mandailing Nat 30.01 226** P **P 20 03 35.4 +0.6**
comp=Z,22μmcomp=Z,13μmcomp=Z,746nm,1.0s
**TAPN Taplejung 30.06 285** *eP* **P 20 03 36.4 +0.9**
**TAPN Taplejung 30.06 285** *eP* **P 20 03 36.7 +1.2**
comp=Z,925nm,0.9s
**ODAN Odare 30.34 284** *eP* **P 20 03 38.0 +0.1**
comp=Z,1μm,1.1s
**ODAN Odare 30.34 284** *eP* **P 20 03 38.9 +1.0**
comp=Z,4μm,1.5s
**SMPI Sarmi 30.39 142** P **P 20 03 38.3 +0.1**
comp=Z,14μmcomp=Z,3μmcomp=Z,159nm,1.6s
**GRNR Gornyy 30.42 20** ⇑*iP* **P 20 03 37.5 -0.6**
GRNR *e* 20 04 38.0
GRNR *eS* **S 20 08 40.1 +2.1**
GRNR *eSS* **SnSn 20 10 11.2 -2.7**
GRNR pmax pmax
comp=E,2.0nm,1.2s
GRNR pmax pmax
comp=N,3.0nm,1.0s
GRNR pmax pmax
comp=Z,6.0nm,1.2s
GRNR smax smax
comp=E,6.0nm,1.2s
GRNR MLR MLR
comp=E,13μm,20.0s
GRNR MLR MLR
comp=N,40μm,17.0s
GRNR MLR MLR
comp=Z,59μm,16.0s
**PPI Padang Panjang 30.43 223** P **P 20 03 39.9 +1.4**
comp=Z,3μmcomp=Z,267nm,1.3s
**KMMI Kalianget 30.47 193** P **P 20 03 42.5 +3.7**
comp=Z,25μmcomp=Z,7μmcomp=Z,226nm,1.6s
**ZAK Zakamensk 30.59 338** *eP* **P 20 03 38.9 -0.8**
ZAK pmax pmax
comp=Z,134nm,1.4s
ZAK pmax pmax
comp=Z,133nm,1.2s
**UWJI Ujung Watu 30.64 199** P **P 20 03 42.9 +2.6**
comp=Z,7μmcomp=Z,490nm,1.6s
**GRJI Gresik 30.69 196** P **P 20 03 42.9 +2.2**
comp=Z,461nmcomp=Z,3μmcomp=Z,265nm,1.2s
**TBJI Tambak Boyo 30.76 197** P **P 20 03 43.9 +2.5**
comp=Z,13μmcomp=Z,9μmcomp=Z,518nm,1.4s
**GSI Gunungsitoli 31.01 229** ⇓P **P 20 03 41.3 -2.3**
**GSI Gunungsitoli 31.01 229** P **P 20 03 46.0 +2.4**
comp=Z,20μmcomp=Z,11μmcomp=Z,159nm,0.9s
**GSI Gunungsitoli 31.01 229** P **P 20 03 41.9 -1.7**
GSI IAmb IAmb 20 03 58.8
comp=Z,1μm,1.9s
GSI IAMs_20 IAMs_20 20 16 30.4
comp=Z,92μm,19.0s
**GSI Gunungsitoli 31.01 229** P **P 20 03 46.3 +2.7**
**RAMN Ramite 31.04 285** *eP* **P 20 03 44.8 +0.6**
comp=Z,467nm,0.9s
**RAMN Ramite 31.04 285** *eP* **P 20 03 45.3 +1.1**
comp=Z,467nm,0.9s
**KRJI Kerinci 31.08 219** P **P 20 03 47.8 +3.5**
comp=Z,25μmcomp=Z,70μmcomp=Z,3μm,1.1s
**SNSI Sinabang, Aceh 31.14 233** P **P 20 03 48.4 +3.7**
comp=Z,12μmcomp=Z,378nm,1.4s
**ABJI Asem Bagus 31.14 192** P **P 20 03 46.5 +1.8**
comp=Z,23μmcomp=Z,6μmcomp=Z,282nm,1.8s
**UGL Uglegorsk 31.15 28** *eP* **P 20 03 45.6 +1.1**
UGL *e* 20 04 57.9
UGL *eS* **S 20 08 49.2 0.0**
UGL pmax pmax
comp=Z,320nm,1.3s
UGL pmax pmax
comp=Z,8μm,16.0s
UGL pmax pmax
comp=E,6μm,11.0s
UGL pmax pmax
comp=N,5μm,12.0s
UGL pmax pmax
comp=Z,9μm,12.0s
UGL smax smax
comp=E,22μm,20.0s
UGL smax smax
comp=Z,21μm,20.0s
UGL smax smax
comp=N,21μm,22.0s
UGL MLR MLR
comp=N,41μm,18.0s
UGL MLR MLR
comp=E,91μm,18.0s
UGL MLR MLR
comp=Z,90μm,16.0s
**ZEA Zeya 31.20 8** *eP* **P 20 03 44.4 -0.5**
ZEA *e* 20 05 07.1
ZEA *eS* **S 20 08 44.8 -5.1**
ZEA pmax pmax
comp=N,1μm,2.6s
ZEA pmax pmax
comp=E,300nm,2.1s
ZEA pmax pmax
comp=Z,2μm,5.0s
ZEA pmax pmax
comp=N,200nm,1.1s
ZEA pmax pmax
comp=Z,430nm,1.1s
ZEA smax smax
comp=E,5μm,16.2s
ZEA smax smax
comp=N,9μm,17.9s
ZEA MLR MLR
comp=N,78μm,14.0s
ZEA MLR MLR
comp=Z,82μm,14.0s
**BLJI Banyuglugur 31.23 193** P **P 20 03 47.3 +1.8**
comp=Z,12μmcomp=Z,3μmcomp=Z,294nm,1.1s
**SRBI Singaraja 31.25 190** P **P 20 03 48.2 +2.5**
comp=Z,20μmcomp=Z,4μmcomp=Z,152nm,1.7s
**LHSI Lahat 31.37 214** P **P 20 03 49.9 +3.1**
comp=Z,12μmcomp=Z,776nm,0.9s
**MMRI Maumere 31.39 177** ⇑P **P 20 03 45.9 -1.0**
**MMRI Maumere 31.39 177** P **P 20 03 47.7 +0.8**
comp=Z,20μmcomp=Z,10μmcomp=Z,798nm,1.6s
**MMRI Maumere 31.39 177** P **P 20 03 45.3 -1.6**
**MMRI Maumere 31.39 177** P **P 20 03 49.7 +2.8**
**SMRI Semarang 31.39 200** P **P 20 03 49.6 +2.7**
comp=Z,27μmcomp=Z,12μmcomp=Z,480nm,1.6s
**SMRI Semarang 31.39 200** P **P 20 03 45.5 -1.4**
SMRI IAMs_20 IAMs_20 20 17 27.8
comp=Z,66μm,18.0s
**JIRN Jiri 31.41 286** *eP* **P 20 03 47.8 +0.2**
comp=Z,628nm,0.8s
**JIRN Jiri 31.41 286** *eP* **P 20 03 48.8 +1.2**
comp=Z,3μm,1.4s
**KUR Kuril'sk 31.46 38** *eP* **P 20 03 46.3 -1.0**
KUR *i S* **S 20 08 53.5 -0.7**
KUR *eSS* **SnSn 20 10 35.4 -3.7**
KUR pmax pmax
comp=Z,729nm,1.6s
KUR pmax pmax
comp=Z,5μm,12.5s
KUR MLR MLR
comp=Z,106μm,17.0s
KUR MLR MLR
comp=N,46μm,16.0s
KUR MLR MLR
comp=E,85μm,16.0s
**MASI Maura Aman, Be 31.49 217** P **P 20 03 49.9 +2.0**
comp=E,24μmcomp=E,20μmcomp=E,2μm,1.3s
**KLSI 31.51 211** P **P 20 03 50.1 +2.1**
comp=E,8μmcomp=E,6μmcomp=E,314nm,1.1s
**KLI Kotabumi 31.60 211** P **P 20 03 50.3 +1.5**
comp=E,19μmcomp=E,13μmcomp=E,986nm,1.1s
**MDSI Maura Dua 31.60 213** P **P 20 03 49.5 +0.7**
comp=E,12μmcomp=E,7μmcomp=E,657nm,1.0s
**GUN Gumba 31.69 286** *eP* **P 20 03 50.1 +0.1**
comp=E,2μm,1.0s
**GUN Gumba 31.69 286** *eP* **P 20 03 51.0 +1.0**
comp=E,1μm,1.0s
**GENI Genyem 31.73 140** ⇑P **P 20 03 48.2 -1.7**
**GENI Genyem 31.73 140** P **P 20 03 51.8 +1.9**
comp=E,20μmcomp=E,6μmcomp=E,342nm,1.1s
**GMJI Gumukmas 31.77 194** P **P 20 03 51.9 +1.6**
comp=E,19μmcomp=E,5μmcomp=E,148nm,1.6s
**JAGI Jajag, Banyuwa 31.82 192** ⇑P **P 20 03 51.7 +1.0**
**JAGI Jajag, Banyuwa 31.82 192** P **P 20 03 52.9 +2.2**
comp=E,19μmcomp=E,5μmcomp=E,142nm,1.1s
**JAGI Jajag, Banyuwa 31.82 192** P **P 20 03 49.6 -1.1**
JAGI IAmb IAmb 20 04 19.5
comp=Z,746nm,1.7s
**JAGI Jajag, Banyuwa 31.82 192** P **P 20 03 52.2 +1.5**
**DNP Denpasar 31.83 190** P **P 20 03 53.1 +2.3**
comp=Z,563nm,1.3s
**BOK Bokaro 31.84 279** *eP* **P 20 03 51.4 +0.4**
BOK IAmb IAmb 20 04 03.8
comp=Z,1μm,1.3s
**BLSI Bandar Lampung 31.86 210** P **P 20 03 54.0 +2.9**
comp=Z,15μmcomp=Z,10μmcomp=Z,318nm,0.9s
**IRK Irkutsk 31.87 341** *eP* **P 20 03 50.8 0.0**
IRK pmax pmax
comp=Z,561nm,0.3s
**PWJI Pagerwojo 31.92 197** P **P 20 03 53.7 +2.1**
comp=Z,7μmcomp=Z,403nm,1.9s
**SISI Saibi 31.93 224** P **P 20 03 53.8 +2.1**
comp=Z,7μmcomp=Z,461nm,1.0s
**TNG Tangerang 31.96 207** P **P 20 03 54.3 +2.3**
comp=Z,19μmcomp=Z,21μmcomp=Z,698nm,0.4s
TNG P **P 20 03 54.2 +2.3**
comp=Z,11μmcomp=Z,14μmcomp=Z,468nm,0.4s
**IGBI Denpasar 31.98 190** P **P 20 03 53.9 +1.8**
comp=Z,11μmcomp=Z,4μmcomp=Z,171nm,1.5s
**JAY Jayapura 31.98 140** P **P 20 03 52.9 +0.6**
comp=Z,31nm,0.9s,baz=292,slow=15,SNR=5.7
JAY LR LR 20 15 03.3
comp=Z,94μm,20.4s,baz=336,slow=33
**JAY Jayapura 31.98 140** P **P 20 03 52.3 +0.1**
comp=Z,1μmcomp=Z,58nm,1.3s
**PKI Pulchoki 32.11 286** *eP* **P 20 03 53.2 -0.4**
**PKI Pulchoki 32.11 286** *eP* **P 20 03 54.1 +0.5**
comp=Z,118nm,0.7s
**PKIN Phulchoki 32.12 286** *eP* **P 20 03 53.2 -0.4**
**PKIN Phulchoki 32.12 286** *eP* **P 20 03 54.1 +0.5**
comp=Z,2μm,1.4s
**MNAI Manna 32.12 215** ⇓P **P 20 03 54.4 +1.0**
**MNAI Manna 32.12 215** P **P 20 03 55.4 +2.0**
comp=Z,18μmcomp=Z,17μmcomp=Z,1μm,1.5s
**MNAI Manna 32.12 215** P **P 20 03 52.4 -1.0**
MNAI IAMs_20 IAMs_20 20 17 27.2
comp=Z,64μm,20.0s
**MNAI Manna 32.12 215** P **P 20 03 56.9 +3.5**
**LWLI Liwa 32.12 212** P **P 20 03 55.6 +2.1**
comp=Z,3μm,0.8s
**KPJI Karang Pucung 32.15 202** P **P 20 03 56.3 +2.7**
comp=Z,30μmcomp=Z,12μmcomp=Z,841nm,1.5s
**YOGI Yogyakarta 32.16 199** P **P 20 03 57.9 +4.2**
comp=Z,11μmcomp=Z,10μmcomp=Z,494nm,1.6s
**LEM Lembang 32.17 205** P **P 20 03 56.2 +2.2**
comp=Z,14μmcomp=Z,9μmcomp=Z,460nm,1.1s
**UGM Wanagama 32.18 199** P **P 20 03 55.9 +2.0**
comp=Z,20μmcomp=Z,18μmcomp=Z,1μm,1.6s
**UGM Wanagama 32.18 199** P **P 20 03 53.4 -0.6**
UGM IAMs_20 IAMs_20 20 17 58.8
comp=Z,61μm,19.0s
**UGM Wanagama 32.18 199** P **P 20 03 57.4 +3.5**
**KKN Kakani 32.22 286** *eP* **P 20 03 54.1 -0.4**
comp=Z,781nm,1.1s
**KKN Kakani 32.22 286** *eP* **P 20 03 55.1 +0.6**
comp=Z,826nm,1.1s
**PCJI Pacitan 32.26 198** P **P 20 03 58.3 +3.8**
comp=Z,16μmcomp=Z,6μmcomp=Z,284nm,1.7s
**DBJI Dramaga 32.27 206** P **P 20 03 57.4 +2.7**
comp=Z,100μmcomp=Z,15μmcomp=Z,554nm,1.3s
**KASI Kota Agung 32.35 211** P **P 20 03 58.0 +2.6**
comp=Z,18μmcomp=Z,8μmcomp=Z,974nm,1.0s
**WBSI Waikabubak, Su 32.37 182** P **P 20 03 57.9 +2.3**
comp=Z,4μmcomp=Z,155nm,0.8s
**DMN Daman 32.38 286** *eP* **P 20 03 55.5 -0.4**
**DMN Daman 32.38 286** *eP* **P 20 03 56.6 +0.7**
comp=Z,2μm,1.1s
**SAUI Saumlaki 32.44 160** ⇑P **P 20 03 53.2 -2.9**
**SAUI Saumlaki 32.44 160** P **P 20 03 57.3 +1.2**
comp=Z,15μmcomp=Z,9μmcomp=Z,781nm,1.3s
**SAUI Saumlaki 32.44 160** P **P 20 03 53.1 -3.0**
**MOY Mondy 32.46 337** *eP* **P 20 03 55.5 -0.7**
MOY pmax pmax
comp=Z,563nm,2.7s
**PPSI Pulau Pagai 32.48 221** P **P 20 03 59.8 +3.3**
comp=Z,24μmcomp=Z,15μmcomp=Z,903nm,1.2s
**SOEI Soe 32.66 173** ⇑P **P 20 03 55.9 -2.3**
**SOEI Soe 32.66 173** P **P 20 03 58.9 +0.7**
comp=Z,16μmcomp=Z,6μmcomp=Z,273nm,1.1s
**SOEI Soe 32.66 173** P **P 20 03 55.0 -3.2**
SOEI IAmb IAmb 20 04 30.2
comp=Z,385nm,1.0s
**SOEI Soe 32.66 173** P **P 20 03 57.9 -0.3**
**CMJI Cimerak 32.74 203** P **P 20 04 02.0 +3.2**
comp=Z,10μmcomp=Z,4μmcomp=Z,98nm,1.0s
**SKJI Sukabumi 32.75 206** P **P 20 04 02.7 +3.8**
comp=Z,4μmcomp=Z,237nm,1.2s
**TYV Tymovskoe 32.76 26** *eP* P 20 04 03.6 +5.0
TYV pmax pmax
comp=Z,3μm,5.9s
TYV pmax pmax
comp=Z,136nm,1.5s
TYV MLR MLR
comp=N,60μm,18.0s
TYV MLR MLR
comp=Z,106μm,18.0s
**CGJI Cibinong 32.77 208** P **P 20 04 02.5 +3.5**
comp=Z,5μmcomp=Z,279nm,1.4s
**GKN Gorkha 32.79 286** *eP* **P 20 03 58.9 -0.5**
**GKN Gorkha 32.79 286** *eP* **P 20 03 59.7 +0.3**
comp=Z,488nm,0.9s
**CNJI Cibinong 32.80 205** P **P 20 04 02.1 +2.8**
comp=Z,17μmcomp=Z,7μmcomp=Z,406nm,1.0s
**BASI Baing, Sumba 32.92 180** P **P 20 04 02.1 +1.8**
comp=Z,7μmcomp=Z,4μmcomp=Z,266nm,0.8s
**KNGR Kungurtug, Tuv 32.99 333** *c iP* **P 20 04 01.3 +0.5**
**BATI Baumata 33.04 174** LR LR 20 19 51.2
comp=Z,29μm,18.6s,baz=22,slow=41
**BATI Baumata 33.04 174** P **P 20 04 02.2 +0.7**
comp=Z,8μmcomp=Z,3μmcomp=Z,258nm,0.9s
**DANN Dangsing 33.57 287** *eP* **P 20 04 06.2 -0.2**
**DANN Dangsing 33.57 287** *eP* **P 20 04 07.0 +0.6**
comp=Z,995nm,1.1s
**KOLN Koldanda 33.71 286** *eP* **P 20 04 07.2 -0.3**
comp=Z,922nm,0.9s
**KOLN Koldanda 33.71 286** *eP* **P 20 04 08.2 +0.7**
comp=Z,922nm,0.9s
**NKL Nikolayevsk 33.84 22** *eP* **P 20 04 07.7 -0.3**
NKL *e* 20 05 22.0
NKL pmax pmax
comp=E,7.0nm,1.3s
NKL pmax pmax
comp=N,301nm,1.1s
NKL pmax pmax
comp=Z,111nm,1.9s
NKL pmax pmax
comp=Z,461nm,2.8s
NKL MLR MLR
comp=E,37nm,17.0s
NKL MLR MLR
comp=N,9μm,11.0s
NKL MLR MLR
comp=Z,92μm,14.0s
**WMQ Urumqi 34.17 316** ⇓*iP* **P 20 04 11.5 +0.3**
WMQ sP sP 20 04 24.1 +4.4
WMQ PP **PP 20 05 27.5 -1.1**
WMQ S **S 20 09 36.3 -0.4**
WMQ pmax pmax
comp=Z,340nm,1.3s
WMQ pmax pmax
comp=Z,7μm,4.5s
WMQ LR LR
comp=Z,53μm,13.7s
WMQ LR LR
comp=Z,90μm,19.9s
WMQ LR LR
comp=Z,63μm,16.9s
**PYUN Piuthan 34.25 287** *eP* **P 20 04 12.0 -0.2**
comp=Z,891nm,0.9s
**PYUN Piuthan 34.25 287** *eP* **P 20 04 13.1 +0.9**
comp=Z,778nm,0.9s
**CHLP Challavanipeta 34.41 270** *eP* **P 20 04 13.8 +0.4**
CHLP IVmB_BB 20 04 26.4
comp=Z,10μm,1.5s
CHLP IVMs_BB IVMs_BB 20 25 19.4
comp=Z,8μm,12.6s
**BOD Bodaibo 35.20 354** *eP* **P 20 04 19.2 -0.6**
BOD pmax pmax
comp=Z,97nm,2.1s
**VIS Vishakhapatnam 35.27 269** *eP* **P 20 04 22.3 +1.4**
VIS IAmb IAmb 20 04 34.3
comp=Z,3μm,1.4s
**MANU Manus Island 35.99 130** P **P 20 04 25.0 -2.1**
**XMI Christmas Isla 36.23 205** ⇓P **P 20 04 30.2 +1.2**
**XMIS Christmas Isla 36.27 205** P **P 20 04 28.2 -1.1**
**DRS Darwin Rock St 36.54 163** P **P 20 04 29.7 -1.9**
**PVM Polavaram 36.97 269** *eP* **P 20 04 35.4 0.0**
PVM IVmB_BB 20 04 47.8
comp=Z,6μm,1.6s
PVM IVMs_BB IVMs_BB 20 22 26.9
comp=Z,9μm,17.9s
**MTN Manton Dam 36.99 163** ⇑P **P 20 04 32.4 -3.1**
**MTN Manton Dam 36.99 163** P **P 20 04 32.4 -3.1**
MTN IAmb IAmb 20 04 39.1
comp=Z,617nm,1.3s
**MTN Manton Dam 36.99 163** P **P 20 04 33.1 -2.4**
**KDU Kakadu 37.23 161** ⇑P **P 20 04 34.7 -2.9**
**KDU Kakadu 37.23 161** P **P 20 04 35.4 -2.1**
**JBP Jabalpur 37.30 279** *eP* **P 20 04 38.5 +0.4**
JBP IAmb IAmb 20 04 50.5
comp=Z,1μm,1.2s
JBP ⇓*eS* **S 20 10 26.4 +1.5**
**DGZ Jazzator, Alta 37.30 324** *d iP* **P 20 04 38.2 +0.2**
DGZ pmax pmax
comp=Z,100nm,0.8s
DGZ MLR MLR
comp=Z,185μm,17.0s
**ZSN Zaisan 37.61 319** *eP* **P 20 04 39.2 -1.3**
ZSN *eS* **S 20 10 29.7 +0.5**
**ZSN Zaisan 37.61 319** *eP* **P 20 04 39.3 -1.3**
baz=319
ZSN *eS* **S 20 10 29.8 +0.5**
baz=319
**MYLAV Mylavaram 38.01 268** *eP* **P 20 04 44.5 +0.3**
MYLAV IVmB_BB 20 04 56.9
comp=Z,5μm,1.5s
MYLAV IVMs_BB IVMs_BB 20 23 00.2
comp=Z,8μm,15.7s
**DDI Dehra Dun 38.58 290** *eP* **P 20 04 49.9 +0.9**
DDI IAmb IAmb 20 05 04.6
comp=Z,2μm,1.2s
**RPR Rampur 38.72 272** *eP* **P 20 04 50.0 -0.2**
RPR IVmB_BB 20 05 02.3
comp=Z,8μm,1.7s
RPR IVMs_BB IVMs_BB 20 23 00.9
comp=Z,8μm,11.5s
**ADKI Addanki 38.88 267** *eP* **P 20 04 52.1 +0.6**
ADKI IVmB_BB 20 05 04.5
comp=Z,6μm,1.4s
ADKI IVMs_BB IVMs_BB 20 24 56.5
comp=Z,7μm,18.6s
**MK31 Makanchi Array 38.90 317** *d iP* **P 20 04 51.2 -0.2**
**MK31 Makanchi Array 38.90 317** P **P 20 04 50.1 -1.3**
**MKAR Makanchi Array 38.90 317** P **P 20 04 52.0 +0.6**
comp=Z,128nm,1.0s,baz=114,slow=8.7,SNR=358
MKAR PcP **PcP 20 07 03.9 +1.8**
comp=Z,23nm,0.9s,baz=93,slow=2.9,SNR=2.5
MKAR LR LR 20 22 17.5
comp=Z,103μm,18.5s,baz=110,slow=38
MKAR P3KPbc 20 34 56.7
comp=Z,0.5nm,0.8s,baz=295,slow=3.5,SNR=4.8
**MKAR Makanchi Array 38.90 317** P **P 20 04 50.6 -0.8**
**SKR Severo-Kuril's 39.10 36** *eP* **P 20 04 52.1 -0.8**
SKR *eS* **S 20 10 50.2 -1.2**
SKR pmax pmax
comp=Z,3μm,9.0s
SKR pmax pmax
comp=Z,515nm,1.3s
SKR smax smax
comp=E,3μm,6.9s
SKR smax smax
comp=N,3μm,13.2s
SKR MLR MLR
comp=Z,53μm,19.0s
**MAKZ Makanchi 39.10 317** P **P 20 04 52.2 -0.9**
MAKZ *PP **pP 20 04 59.1 +0.1**
MAKZ MLR MLR
comp=Z,113μm,18.0s
**MAKZ Makanchi 39.10 317** ⇓P **P 20 04 52.9 -0.2**
**MAKZ Makanchi 39.10 317** P **P 20 04 52.2 -0.9**
MAKZ pP **pP 20 04 59.0 +0.1**
MAKZ IAmb IAmb 20 05 05.4
comp=Z,487nm,1.1s
**KNRA Kununurra 39.17 168** P **P 20 04 51.4 -2.4**
KNRA IAmb IAmb 20 04 57.6
comp=Z,500nm,1.2s
**KNRA Kununurra 39.17 168** P **P 20 04 52.5 -1.3**
**NJS Nagarjunasagar 39.29 268** *eP* **P 20 04 54.9 -0.1**
NJS IVmB_BB 20 05 07.4
comp=Z,5μm,1.9s
NJS IVMs_BB IVMs_BB 20 21 46.0
comp=Z,6μm,19.8s
**NDI New Delhi 39.33 288** *eP* **P 20 04 54.0 -1.2**
**SMLA Simla 39.36 292** *eP* **P 20 04 56.0 +0.7**
SMLA IAmb IAmb 20 05 08.3
comp=Z,3μm,1.4s
**CUPL Choutuppal 39.45 270** *eP* **P 20 04 56.4 0.0**
CUPL IVmB_BB 20 05 08.6
comp=Z,5μm,2.2s
CUPL IVMs_BB IVMs_BB 20 26 52.7
comp=Z,10μm,17.0s
**SRSP Sriramsagar 39.58 272** *eP* **P 20 04 57.2 -0.2**
SRSP IVmB_BB 20 05 09.1
comp=Z,2μm,1.3s
**YAK Yakutsk 39.59 7** P **P 20 04 56.9 0.0**
comp=Z,40nm,0.7s,baz=200,slow=3.7,SNR=44
YAK LR LR 20 22 17.1
comp=Z,39μm,18.5s,baz=184,slow=38
**YAK Yakutsk 39.59 7** *c iP* **P 20 04 55.2 -1.7**
YAK *e*PP **pP 20 05 03.6 +0.7**
YAK *e* 20 06 26.5
YAK *e* 20 06 59.9
YAK *eS* **S 20 10 57.7 -0.9**
YAK *e*SS **sS 20 11 07.2 -1.1**
YAK *e* 20 15 03.4
YAK pmax pmax
comp=Z,117nm,1.3s
YAK pmax pmax
comp=E,11nm,0.9s
YAK pmax pmax
comp=N,36nm,1.0s
YAK pmax pmax
comp=Z,241nm,1.7s
YAK pmax pmax
comp=E,36nm,1.5s
YAK pmax pmax
comp=N,75nm,1.5s
YAK smax smax
comp=N,1μm,4.7s
YAK smax smax
comp=E,2μm,4.0s
YAK MLR MLR
comp=Z,77μm,14.0s
YAK MLR MLR
comp=E,14μm,12.0s
YAK MLR MLR
comp=N,48μm,15.0s
**YAK Yakutsk 39.59 7** ⇑P **P 20 04 55.1 -1.7**
**YAK Yakutsk 39.59 7** P **P 20 04 54.8 -2.1**
**BHPL Bhopal 39.62 279** *eP* **P 20 04 57.8 +0.1**
BHPL IAmb IAmb 20 05 09.5
comp=Z,844nm,1.2s
**PATS Pohnpei 39.63 108** P **P 20 04 55.8 -2.1**
**HYB Hyderabad 39.75 270** *eP* **P 20 04 59.7 +0.8**
HYB IAmb IAmb 20 05 11.5
comp=Z,1μm,1.3s
**HYBB Hyderabad (bro 39.75 270** *eP* **P 20 04 58.7 -0.2**
HYBB IVmB_BB 20 05 15.0
comp=Z,6μm,3.1s
HYBB IVMs_BB IVMs_BB 20 27 08.7
comp=Z,8μm,15.1s
**SKHT Srikalahasti 39.77 264** *eP* **P 20 04 59.7 +0.7**
SKHT IVmB_BB 20 05 12.0
comp=Z,7μm,1.4s
SKHT IVMs_BB IVMs_BB 20 24 17.8
comp=Z,7μm,17.3s
**UZB Uzynbulak 39.78 311** *eP* **P 20 04 57.8 -1.1**
UZB *eS* **S 20 11 03.0 +0.7**

UZB pmax pmax
comp=Z,156nm,1.5s
**UZB Uzynbulak 39.78 311** *e*P **P 20 04 57.9 -1.1**
comp=Z,156nm,1.5s,baz=311
UZB *e*S **S 20 11 03.1 +0.7**
baz=311
**SRLM Srisailam 39.80 268** *e*P **P 20 04 59.1 -0.2**
SRLM IVmB_BB 20 05 11.5
comp=Z,5µm,2.0s
SRLM IVMs_BB IVMs_BB 20 25 58.5
comp=Z,7µm,18.2s
**RCLA Racherla 39.93 267** *e*P **P 20 05 00.1 -0.2**
RCLA IVmB_BB 20 05 12.6
comp=Z,7µm,2.6s
RCLA IVMs_BB IVMs_BB 20 25 35.3
comp=Z,16µm,17.0s
**PRZ Przheval'sk 40.03 309** P **P 20 05 01.5 +0.4**
PRZ pmax pmax
comp=Z,548nm,1.2s
**PRZ Przheval'sk 40.03 309** P **P 20 05 01.5 +0.4**
PRZ IAmb IAmb 20 05 18.0
comp=Z,548nm,1.2s
**KPKS Kokpek 40.11 311** *e*P **P 20 05 00.3 -1.3**
KPKS *e*S **S 20 11 07.6 +0.5**
KPKS pmax pmax
comp=Z,114nm,1.5s
**KPKS Kokpek 40.11 311** *e*P **P 20 05 00.4 -1.3**
comp=Z,114nm,1.5s,baz=311
KPKS *e*S **S 20 11 07.6 +0.5**
baz=311
**DHRM DHARAMSHALA 40.12 293** *e*P **P 20 05 01.8 -0.2**
DHRM IAmb IAmb 20 05 15.6
comp=Z,2µm,1.3s
**SATY Saty 40.19 310** *e*P **P 20 05 01.2 -1.1**
SATY *e*S **S 20 11 09.1 +0.7**
SATY pmax pmax
comp=Z,103nm,1.2s
**SATY Saty 40.19 310** *e*P **P 20 05 01.2 -1.1**
comp=Z,103nm,1.2s,baz=310
SATY *e*S **S 20 11 09.1 +0.7**
baz=310
**ZHN Zhinishke 40.20 310** *e*P **P 20 05 01.4 -1.0**
ZHN *e*S **S 20 11 08.8 +0.3**
**ZHN Zhinishke 40.20 310** *e*P **P 20 05 01.4 -1.0**
baz=310
ZHN *e*S **S 20 11 08.9 +0.3**
baz=310
**TARG Taragay, Kyrgy 40.27 308** P **P 20 05 02.4 -0.9**
**TDK Taldyqorghan 40.77 313** *e*P **P 20 05 05.8 -1.1**
TDK pmax pmax
comp=Z,448nm,1.5s
TDK MLR MLR
comp=Z,34µm,16.0s
**TDK Taldyqorghan 40.77 313** *e*P **P 20 05 05.9 -1.1**
comp=Z,448nm,1.5s,baz=313
TDK LR LR 20 21 30.6
comp=Z,34µm,15.5s,baz=313
**KDJ Kajisay 40.82 309** P **P 20 05 06.6 -1.0**
KDJ pmax pmax
comp=Z,195nm,0.9s
**KDJ Kajisay 40.82 309** P **P 20 05 06.6 -1.0**
**ARXS Arharly 40.92 312** *e*P **P 20 05 07.8 -0.5**
**RABL Rabaul 40.93 127** ⇑P **P 20 05 08.4 -0.2**
**RABL Rabaul 40.93 127** P **P 20 05 07.6 -1.0**
RABL IAmb IAmb 20 05 44.7
comp=Z,576nm,1.2s
**RABL Rabaul 40.93 127** P **P 20 05 09.1 +0.5**
**ZAA0 Zalesovo Array 41.04 328** P **P 20 05 07.6 -1.4**
**ZALV Zalesovo Beam 41.04 328** P **P 20 05 08.9 -0.1**
comp=Z,141nm,1.0s,baz=118,slow=8.1,SNR=142
**ZALV Zalesovo Beam 41.04 328** P **P 20 05 07.5 -1.5**
**FITZ Fitzroy Crossi 41.05 173** P **P 20 05 07.8 -1.6**
comp=Z,108nm,1.0s,baz=6.2,slow=8.9,SNR=40
**KSH Kashi 41.16 304** P **P 20 05 13.3 +2.9**
KSH sP sP 20 05 23.6 +4.5
KSH PcS **PcS 20 10 59.8 -0.9**
KSH S **S 20 11 27.4 +4.4**
KSH SS **SnSn 20 14 31.0 -3.3**
KSH ScS **ScS 20 15 12.4 -1.8**
KSH pmax pmax
comp=Z,150nm,1.8s
KSH pmax pmax
comp=Z,7µm,5.7s
KSH LR LR
comp=Z,59µm,16.8s
KSH LR LR
comp=Z,126µm,17.9s
**MDOK Medeo 41.17 310** *e*P **P 20 05 09.4 -1.1**
MDOK *e*S **S 20 11 23.2 +0.1**
MDOK MLR MLR
comp=Z,32µm,17.0s
**MDOK Medeo 41.17 310** *e*P **P 20 05 09.4 -1.1**
baz=310
MDOK *e*S **S 20 11 23.2 +0.1**
baz=310
MDOK LR LR 20 22 00.8
comp=Z,32µm,16.6s,baz=310
**TNSS Tian-Shan 41.21 310** *e*P **P 20 05 10.4 -0.7**
baz=310
**PEA0B Petropavlovsk- 41.22 33** ⇓*i*P **P 20 05 09.9 -0.6**
**PEA0B Petropavlovsk- 41.22 33** P **P 20 05 08.8 -1.8**
**PETK Petropavlovsk- 41.22 33** P **P 20 05 10.0 -0.6**
comp=Z,18nm,0.7s,baz=185,slow=1.9,SNR=22
PETK LR LR 20 21 56.4
comp=Z,66µm,22.0s,baz=228,slow=36
**PETK Petropavlovsk- 41.22 33** P **P 20 05 09.2 -1.3**
PETK *PP **pP 20 05 14.4 -2.1**
**PETK Petropavlovsk- 41.22 33** P **P 20 05 09.2 -1.3**
PETK pP **pP 20 05 14.4 -2.1**
**AAA Alma-Ata 41.28 310** *e*P **P 20 05 10.7 -0.5**
AAA *e*S **S 20 11 25.2 +0.7**
AAA pmax pmax
comp=Z,338nm,1.2s
AAA MLR MLR
comp=Z,43µm,16.0s
**AAA Alma-Ata 41.28 310** *e*P **P 20 05 10.8 -0.5**
comp=Z,338nm,1.2s,baz=310
AAA *e*S **S 20 11 25.3 +0.7**
baz=310
AAA LR LR 20 22 10.5
comp=Z,43µm,15.8s,baz=310
**PMG Port Moresby 41.32 138** P **P 20 05 10.3 -1.4**
comp=Z,230nm,0.8s,baz=355,slow=6.0,SNR=26
PMG LR LR 20 22 19.1
comp=Z,22µm,19.2s,baz=310,slow=36
**PMG Port Moresby 41.32 138** ⇑P **P 20 05 10.6 -1.1**
**PMG Port Moresby 41.32 138** P **P 20 05 10.1 -1.7**
PMG IAmb IAmb 20 05 17.1
comp=Z,551nm,1.1s
**PMG Port Moresby 41.32 138** P **P 20 05 11.4 -0.3**
**PMG Port Moresby 41.32 138** P **P 20 05 11.3 -0.4**
**PALK Pallekele 41.38 254** P **P 20 05 13.0 +0.7**
comp=Z,31nm,0.9s,baz=176,slow=7.5,SNR=9.2
PALK LR LR 20 24 08.2
comp=Z,94nm,18.7s,baz=166,slow=39
**PALK Pallekele 41.38 254** P **P 20 05 13.0 +0.7**
**PALK Pallekele 41.38 254** P **P 20 05 13.5 +1.2**
PALK P **P 20 05 13.5 +1.2**
**PALK Pallekele 41.38 254** ⇑P **P 20 05 12.0 -0.3**
**PALK Pallekele 41.38 254** P **P 20 05 11.9 -0.4**
PALK pP **pP 20 05 17.6 -0.6**
PALK IAmb IAmb 20 05 26.5
comp=Z,549nm,1.2s
**KLRI Killari 41.39 272** *e*P **P 20 05 12.5 0.0**
KLRI IVmB_BB 20 05 24.4
comp=Z,11µm,1.8s
KLRI IVMs_BB IVMs_BB 20 24 42.2
comp=Z,8µm,20.2s
**ULHL Ulahol 41.52 308** P **P 20 05 14.4 +1.0**
SNR=53
**URV Uravakonda 41.64 267** *e*P **P 20 05 14.6 +0.1**
URV IVmB_BB 20 05 26.8
comp=Z,5µm,2.9s
URV IVMs_BB IVMs_BB 20 30 18.6
comp=Z,6µm,15.4s
**PET Petropavlovsk 41.66 34** *e*P **P 20 05 13.3 -0.8**
PET *e* 20 07 17.3
PET *e*S **S 20 11 27.5 -2.2**
PET pmax pmax
comp=Z,4µm,8.5s
PET pmax pmax
comp=Z,6µm,19.1s
PET pmax pmax
comp=Z,198nm,1.0s
PET MLR MLR
comp=Z,47µm,17.0s
PET MLR MLR
comp=Z,43µm,18.0s
**PET Petropavlovsk 41.66 34** ⇑P **P 20 05 13.3 -0.8**
**PET Petropavlovsk 41.66 34** P **P 20 05 12.8 -1.3**
PET IAmb IAmb 20 05 24.8
comp=Z,767nm,1.3s
PET IAMs_20 IAMs_20 20 22 09.9
comp=Z,71µm,22.0s
**BOOM Boomskoye usch 41.80 309** P **P 20 05 15.1 -0.6**
BOOM pmax pmax
comp=Z,353nm,1.6s
**BOOM Boomskoye usch 41.80 309** P **P 20 05 15.1 -0.6**
**KUU Kurty 41.86 311** *e*P **P 20 05 14.7 -1.3**
KUU *e*S **S 20 11 33.5 +0.5**
KUU pmax pmax
comp=Z,360nm,1.5s
KUU MLR MLR
comp=Z,24µm,13.0s
**KUU Kurty 41.86 311** *e*P **P 20 05 14.7 -1.3**
comp=Z,360nm,1.5s,baz=311
KUU *e*S **S 20 11 33.6 +0.5**
baz=311
KUU LR LR 20 22 35.8
comp=Z,24µm,12.8s,baz=311
**COCO West Island 41.94 216** P **P 20 05 16.4 -0.4**
COCO pmax pmax
comp=Z,620nm,1.1s
COCO MLR MLR
comp=Z,37µm,19.0s
**COCO West Island 41.94 216** P **P 20 05 16.4 -0.4**
COCO IAmb IAmb 20 05 23.0
comp=Z,620nm,1.1s
COCO IAMs_20 IAMs_20 20 23 35.4
comp=Z,37µm,19.0s
**TKM2 Tokmak 2 42.14 309** P **P 20 05 20.0 +1.5**
SNR=50
**TKM2 Tokmak 2 42.14 309** *i*P **P 20 05 18.7 +0.2**
TKM2 pmax pmax
comp=Z,525nm,1.2s
**MA2 Magadan 42.36 22** *i*P **P 20 05 19.2 -0.6**
MA2 pmax pmax
comp=Z,106nm,1.1s
MA2 MLR MLR
comp=Z,80µm,16.0s
**MA2 Magadan 42.36 22** ⇑P **P 20 05 18.6 -1.2**
**MA2 Magadan 42.36 22** P **P 20 05 18.0 -1.8**
**KBK Karagaybulak 42.55 309** P **P 20 05 23.3 +1.5**
SNR=96
**NIL Nilore 42.73 295** P **P 20 05 21.8 -1.4**
NIL **sP 20 05 32.8 +1.0**
**KURK Kurchatov 42.74 321** P **P 20 05 23.7 +0.8**
**KURK Kurchatov 42.74 321** P **P 20 05 23.5 +0.5**
KURK P **P 20 05 23.5 +0.5**
**KURK Kurchatov 42.74 321** ⇓P **P 20 05 22.7 -0.3**
**KURK Kurchatov 42.74 321** P **P 20 05 22.1 -0.8**
KURK IAmb IAmb 20 05 47.9
comp=Z,610nm,1.6s
**KURBB Kurchatov Arra 42.75 321** P **P 20 05 23.7 +0.6**
comp=Z,92nm,1.0s,baz=122,slow=7.3,SNR=134
KURBB LR LR 20 26 07.1
comp=Z,18µm,18.1s,baz=98,slow=40
**CHMS Chumysh 42.77 309** P **P 20 05 24.3 +1.0**
SNR=76
**UCH Uchtor 42.77 308** P **P 20 05 26.0 +2.1**
SNR=218
**COEN Coen 42.79 147** ⇑P **P 20 05 22.2 -1.5**
**COEN Coen 42.79 147** P **P 20 05 21.8 -1.9**
COEN IAmb IAmb 20 05 29.8
comp=Z,541nm,1.0s
**COEN Coen 42.79 147** P **P 20 05 22.6 -1.1**
**FRU1 Bishkek 42.81 309** P **P 20 05 22.9 -0.9**
FRU1 pmax pmax
comp=Z,254nm,1.0s
**FRU1 Bishkek 42.81 309** P **P 20 05 22.9 -0.9**
**AAK Ala-Archa 42.87 309** P **P 20 05 25.2 +0.7**
comp=Z,43nm,1.0s,baz=99,slow=6.4,SNR=64
AAK LR LR 20 25 50.1
comp=Z,94µm,18.7s,baz=104,slow=40
**AAK Ala-Archa 42.87 309** P **P 20 05 25.5 +1.2**
SNR=54
**AAK Ala-Archa 42.87 309** P **P 20 05 24.1 -0.3**
AAK *SP **sP 20 05 35.8 +2.8**
AAK MLR MLR
comp=Z,92µm,19.0s
**AAK Ala-Archa 42.87 309** P **P 20 05 25.1 +0.7**
AAK P **P 20 05 25.1 +0.7**
**AAK Ala-Archa 42.87 309** ⇓P **P 20 05 24.9 +0.5**
**AAK Ala-Archa 42.87 309** P **P 20 05 24.1 -0.3**
AAK **sP 20 05 35.8 +2.8**
**AAK Ala-Archa 42.87 309** *i*P **P 20 05 24.5 +0.1**
SNR=77
**SGDS Sogindy 42.95 310** *e*P **P 20 05 23.3 -1.6**
baz=310
SGDS *e*S **S 20 11 48.7 -0.5**
baz=310
**WAKE Wake Island 42.98 86** P **P 20 05 22.8 -2.5**
**USP Ospenovka 43.01 309** P **P 20 05 26.4 +1.1**
SNR=83
**H11N1 WAKE ISLAND Hy 43.10 85** T T 20 50 44.8
baz=282,slow=74,SNR=360
**H11N2 WAKE ISLAND Hy 43.11 85** T T 20 50 47.0
baz=282,slow=74,SNR=456
**H11N3 WAKE ISLAND Hy 43.12 85** T T 20 51 04.5
baz=282,slow=74,SNR=398
**H11S3 WAKE ISLAND Hy 43.20 87** T T 20 50 53.7
baz=284,slow=74,SNR=378
**H11S1 WAKE ISLAND Hy 43.21 87** T T 20 50 53.4
baz=284,slow=74,SNR=238
**H11S2 WAKE ISLAND Hy 43.22 87** T T 20 50 54.8
baz=284,slow=74,SNR=210
**AML Almayashu 43.35 308** P **P 20 05 30.2 +1.6**
SNR=219
**AML Almayashu 43.35 308** P **P 20 05 30.0 +1.5**
**AML Almayashu 43.35 308** *i*P **P 20 05 28.8 +0.3**
SNR=238
**EKS2 Erkin-Say 43.39 308** P **P 20 05 29.8 +1.2**
SNR=63
**BTLS Baital 43.74 312** *e*P **P 20 05 29.2 -2.0**
BTLS *e*S **S 20 12 00.8 +0.2**
**BTLS Baital 43.74 312** *e*P **P 20 05 29.2 -2.0**
baz=312
BTLS *e*S **S 20 12 00.8 +0.2**
baz=312
**MBWA Marble Bar 43.81 181** P **P 20 05 29.6 -2.2**
MBWA pP **pP 20 05 35.1 -2.8**
MBWA IAmb IAmb 20 05 36.4
comp=Z,350nm,1.1s
**MBWA Marble Bar 43.81 181** P **P 20 05 33.2 +1.4**
**POO Poona 43.81 273** *e*P **P 20 05 32.6 +0.5**
POO IAmb IAmb 20 05 44.4
comp=Z,1µm,1.0s
POO *i*S **S 20 12 00.0 -2.3**
**PSA00 Pilbara Seismi 44.22 181** P **P 20 05 33.4 -1.7**
**PSA00 Pilbara Seismi 44.22 181** P **P 20 05 33.0 -2.2**
PSA00 IAmb IAmb 20 05 39.8
comp=Z,812nm,1.1s
**PSA00 Pilbara Seismi 44.22 181** P **P 20 05 35.2 +0.1**
**DRK Karamyk 44.35 304** P **P 20 05 36.9 +0.4**
**WB0 Warramunga Arr 44.50 161** P **P 20 05 35.2 -2.2**
WB0 IAmb IAmb 20 05 42.1
comp=Z,462nm,1.1s
**WRAB Tennant Creek 44.64 161***c i*P **P 20 05 36.6 -2.0**
WRAB pmax pmax
comp=Z,548nm,1.1s
WRAB MLR MLR
comp=Z,16µm,21.0s
**WRAB Tennant Creek 44.64 161** ⇑P **P 20 05 36.6 -2.0**
**WRAB Tennant Creek 44.64 161** P **P 20 05 36.5 -2.1**
WRAB IAmb IAmb 20 05 43.4
comp=Z,440nm,1.0s
**WRAB Tennant Creek 44.64 161** P **P 20 05 37.0 -1.6**
**GOA Goa 44.64 269** *e*P **P 20 05 40.1 +1.4**
GOA IAmb IAmb 20 05 51.8
comp=Z,1µm,1.1s
**WRA Warramunga Arr 44.65 161** P **P 20 05 37.0 -1.6**
comp=Z,130nm,0.7s,baz=345,slow=8.7,SNR=148
WRA S **S 20 12 11.1 -3.0**
comp=Z,50nm,1.3s,baz=341,slow=13,SNR=10
WRA LR LR 20 25 03.7
comp=Z,15µm,20.8s,baz=350,slow=37
WRA PKPPKP **P'P'df 20 37 09.8 -4.0**
comp=Z,2.9nm,1.1s,baz=118,slow=2.2,SNR=4.9
**WRA Warramunga Arr 44.65 161** P **P 20 05 37.0 -1.6**
**WRA Warramunga Arr 44.65 161** P **P 20 05 36.8 -1.8**
WRA pP **pP 20 05 42.0 -2.6**
**WB2 Warramunga Arr 44.65 161** P **P 20 05 36.5 -2.1**
WB2 IAmb IAmb 20 05 43.4
comp=Z,498nm,1.0s
**WR0 Warramunga Arr 44.72 161** P **P 20 05 37.0 -2.2**
WR0 IAmb IAmb 20 05 42.4
comp=Z,269nm,0.8s
**BTK Batken 45.17 304** P **P 20 05 42.0 -0.8**
BTK pmax pmax
comp=Z,963nm,1.8s
**BTK Batken 45.17 304** P **P 20 05 42.0 -0.8**
**DZA Taraz 45.20 308** *e*P **P 20 05 41.7 -1.2**
DZA *e*S **S 20 12 21.7 -0.3**
**DZA Taraz 45.20 308** *e*P **P 20 05 41.8 -1.2**
baz=308
DZA *e*S **S 20 12 21.8 -0.3**
baz=308
**SEY Seymchan 45.35 20** P **P 20 05 43.2 -0.5**
comp=Z,10nm,0.7s,baz=227,slow=6.9,SNR=43
SEY PcP **PcP 20 07 23.5 +0.5**
comp=Z,11nm,0.5s,baz=245,slow=1.1,SNR=9.7
SEY LR LR 20 26 11.2
comp=Z,28µm,18.6s,baz=219,slow=38
**GAR Garm 45.44 303** P **P 20 05 44.2 -0.9**
**GIRL Giralia 45.70 188** ⇑P **P 20 05 47.7 +0.9**
**GIRL Giralia 45.70 188** P **P 20 05 46.2 -0.7**
**GIRL Giralia 45.70 188** P **P 20 05 47.8 +0.9**
**KKAR Karatay Array 45.83 308** P **P 20 05 47.6 -0.3**
**KKAR Karatay Array 45.83 308** P **P 20 05 47.6 -0.3**
**BRZS Berezniki 46.02 318** *e*P **P 20 05 47.6 -1.6**
BRZS *e*S **S 20 12 33.6 +0.1**
BRZS pmax pmax
comp=Z,86nm,1.4s
**BRZS Berezniki 46.02 318** *e*P **P 20 05 47.7 -1.6**
comp=Z,86nm,1.4s,baz=318
BRZS *e*S **S 20 12 33.6 +0.1**
baz=318
**IUG luzhnay 46.04 307** *e*P **P 20 05 48.0 -1.6**
IUG *e*S **S 20 12 34.1 0.0**
**IUG luzhnay 46.04 307** *e*P **P 20 05 48.0 -1.6**
baz=307
IUG *e*S **S 20 12 34.1 0.0**
baz=307
**KBL Kabul 46.24 296** P **P 20 05 51.5 0.0**
**KBL Kabul 46.24 296** P **P 20 05 52.0 +0.5**
SNR=438
**KBL Kabul 46.24 296** P **P 20 05 51.5 0.0**
**BRLS Borolday 46.31 308** *e*P **P 20 05 50.3 -1.3**
BRLS *e*S **S 20 12 38.9 +1.0**
**BRLS Borolday 46.31 308** *e*P **P 20 05 50.4 -1.3**
baz=308
BRLS *e*S **S 20 12 38.9 +1.0**
baz=308
**CHGR Chuyangaron 46.32 302** P **P 20 05 51.5 -0.4**
CHGR IAmb IAmb 20 06 19.9
comp=Z,389nm,1.0s
**TAS Tashkent 46.47 306** P **P 20 05 52.9 -0.1**
TAS pmax pmax
comp=Z,577nm,1.3s
**TAS Tashkent 46.47 306** P **P 20 05 52.9 -0.1**
TAS IAmb IAmb 20 06 09.2
comp=Z,577nm,1.3s
**BHUJ Bhuj 46.67 281** *e*P **P 20 05 56.1 +1.4**
BHUJ IAmb IAmb 20 06 08.0
comp=Z,1µm,1.0s
**MTSU Mount Surprise 46.91 148** P **P 20 05 56.5 -0.1**
**QIS Mount Isa 47.01 155** P **P 20 05 56.3 -1.0**
**KWAJ Kwajalein Atol 47.13 99** P **P 20 05 57.7 -0.7**
KWAJ pmax pmax
comp=Z,1µm,1.6s
KWAJ MLR MLR
comp=Z,36µm,21.0s
**KWAJ Kwajalein Atol 47.13 99** P **P 20 05 57.7 -0.7**
**KWAJ Kwajalein Atol 47.13 99** IAMs_20 IAMs_20 20 22 01.0
comp=Z,36µm,21.0s
**AS31 Alice Springs 48.06 164** P **P 20 06 03.9 -1.6**
**ASAR Alice Springs 48.06 164** P **P 20 06 04.2 -1.3**
comp=Z,64nm,0.7s,baz=341,slow=6.9,SNR=244
ASAR PcP **PcP 20 07 33.1 -0.1**
comp=Z,28nm,0.8s,baz=345,slow=4.5,SNR=1.8
ASAR S **S 20 13 04.1 +1.0**
comp=Z,47nm,1.3s,baz=358,slow=19,SNR=6.8
ASAR LR LR 20 27 19.3
comp=Z,18µm,21.3s,baz=354,slow=37
ASAR PKPPKP **P'P'df 20 37 11.3 +1.9**
comp=Z,2.3nm,1.0s,baz=116,slow=2.9,SNR=6.4
ASAR P4KPbc 20 43 45.8
comp=Z,1.6nm,0.8s,baz=344,slow=4.4,SNR=12
**ASAR Alice Springs 48.06 164** P **P 20 06 03.8 -1.7**
**WRKA Warakurna 48.24 171** ⇓P **P 20 06 05.6 -1.2**
**WRKA Warakurna 48.24 171** P **P 20 06 05.8 -1.0**
**HMDM Hanimaadhoo 48.33 258** P **P 20 06 06.2 -1.4**
**BRVK Borovoye 48.40 322***d i*P **P 20 06 07.7 -0.1**
BRVK pmax pmax
comp=Z,320nm,1.0s
BRVK MLR MLR
comp=Z,36µm,16.0s
**BRVK Borovoye 48.40 322** P **P 20 06 08.4 +0.7**
**BRVK Borovoye 48.40 322** ⇓P **P 20 06 07.9 +0.1**
**BRVK Borovoye 48.40 322** P **P 20 06 07.3 -0.4**
BRVK pP **pP 20 06 14.8 +1.0**
BRVK IAmb IAmb 20 06 21.3
comp=Z,368nm,1.1s
**BRVK Borovoye 48.40 322** IAMs_20 IAMs_20 20 28 36.8
comp=Z,39µm,18.0s
**TIXI Tiksi 48.99 3** P **P 20 06 10.8 -1.2**
comp=Z,58nm,0.9s,baz=269,slow=22,SNR=65
TIXI LR LR 20 30 02.5
comp=Z,54µm,18.1s,baz=181,slow=40
**TIXI Tiksi 48.99 3** ⇑P **P 20 06 10.3 -1.7**
**TIXI Tiksi 48.99 3** P **P 20 06 10.5 -1.5**
**MEEK Meekatharra 49.29 182** P **P 20 06 14.0 -0.8**
**CTA Charters Tower 49.52 148** P **P 20 06 16.2 -0.5**
comp=Z,124nm,1.0s,baz=332,slow=8.7,SNR=38
CTA LR LR 20 26 23.1
comp=Z,54µm,20.9s,baz=328,slow=35
**CTA Charters Tower 49.52 148** P **P 20 06 16.5 -0.2**
**CTAO Charters Tower 49.52 148** ⇑P **P 20 06 16.2 -0.5**
**CTAO Charters Tower 49.52 148** P **P 20 06 16.1 -0.6**
CTAO IAmb IAmb 20 06 24.4
comp=Z,231nm,1.1s
**CTAO Charters Tower 49.52 148** IAMs_20 IAMs_20 20 26 00.0
comp=Z,52µm,21.0s
**CTAO Charters Tower 49.52 148** P **P 20 06 16.5 -0.2**
**SHEM Shemya Is, Ala 50.15 40** LR LR 20 26 59.6
comp=Z,16µm,21.7s,baz=259,slow=35
**SMY Shemya 50.15 40** P **P 20 06 19.9 -1.2**
SMY pmax pmax
comp=Z,590nm,1.4s
**SMY Shemya 50.15 40** P **P 20 06 19.9 -1.2**
SMY IAmb IAmb 20 06 31.8
comp=Z,590nm,1.4s
**HNR Honiara 50.16 125** P **P 20 06 21.2 -0.5**
comp=Z,84nm,1.0s,baz=210,slow=10,SNR=5.2
HNR LR LR 20 24 42.4
comp=Z,29µm,21.4s,baz=298,slow=33
**HNR Honiara 50.16 125** ⇑P **P 20 06 20.3 -1.4**
**HNR Honiara 50.16 125** P **P 20 06 20.7 -1.0**
**HNR Honiara 50.16 125** IAMs_20 IAMs_20 20 24 20.1
comp=Z,31µm,21.0s
**NRIK Noril'sk 50.50 345** P **P 20 06 23.7 +0.2**
comp=Z,90nm,1.1s,baz=129,slow=7.8,SNR=59
NRIK LR LR 20 29 57.2
comp=Z,45µm,18.7s,baz=150,slow=39
**NRIK Noril'sk 50.50 345** P **P 20 06 22.8 -0.7**
NRIK IAmb IAmb 20 06 42.5
comp=Z,214nm,0.9s
**KAAM Kaadhehdhoo 51.33 251** P **P 20 06 28.7 -1.8**
KAAM IAmb IAmb 20 07 01.4
comp=Z,340nm,1.2s
**MORW Morawa 51.86 185** ⇑P **P 20 06 33.5 -0.7**
**MORW Morawa 51.86 185** P **P 20 06 33.2 -0.9**
MORW pP **pP 20 06 37.7 -2.6**
MORW IAmb IAmb 20 06 39.0
comp=Z,399nm,1.0s
**MORW Morawa 51.86 185** P **P 20 06 33.7 -0.5**
**HRA Herat 51.86 296** IAmb IAmb 20 06 46.6
comp=Z,236nm,1.1s
**OOD Oodnadatta 52.47 163** P **P 20 06 38.2 -0.5**
**BILL Bilibino 53.06 20***d i*P **P 20 06 40.9 -1.7**
BILL *i* 20 07 51.0
BILL *i*S **S 20 14 06.5 -5.0**
BILL pmax pmax
comp=Z,182nm,1.8s
BILL pmax pmax

comp=Z,1µm,3.3s
BILL MLR MLR
comp=Z,63µm,15.0s
**BILL Bilibino 53.06 20** P **P** **20 06 41.0 -1.7**
**BLDU Ballidu 53.35 184** P **P** **20 06 46.1 +1.0**
**FORT Forrest 53.86 172** ⇑P **P** **20 06 48.1 -0.8**
**FORT Forrest 53.86 172** P **P** **20 06 47.9 -0.9**
**FORT Forrest 53.86 172** P **P** **20 06 48.9 0.0**
**ABKAR Akbulak array 53.96 315** ⇓P **P** **20 06 49.5 0.0**
**ABKAR Akbulak array 53.96 315** P **P** **20 06 49.5 0.0**
ABKAR IAmb IAmb 20 06 54.0
comp=Z,289nm,1.3s
**ABKAR Akbulak array 53.96 315** P **P** **20 06 49.4 -0.1**
**INKA Innaminka 53.98 158** P **P** **20 06 50.4 +0.6**
**QLP Quilpie 54.25 154** ⇑P **P** **20 06 50.8 -1.0**
**QLP Quilpie 54.25 154** P **P** **20 06 51.7 -0.1**
**RK1H Rockhampton Ha 54.42 146** P **P** **20 06 53.5 +0.4**
**MULG Mulgathing 54.44 166** P **P** **20 06 52.9 -0.2**
**MUN Mundaring 54.74 185** P **P** **20 06 57.1 +1.8**
**SVE Sverdlovsk 54.76 324** *ce*P **P** **20 06 55.7 +0.5**
SVE *e*S **S** **20 14 35.9 +1.1**
SVE *e* 20 16 42.2
SVE pmax pmax
comp=Z,854nm,1.2s
SVE pmax pmax
comp=Z,2µm,8.0s
SVE MLR MLR
comp=E,53µm,17.0s
SVE MLR MLR
comp=Z,57µm,18.0s
SVE MLR MLR
comp=N,23µm,15.0s
**GEYT Alibeck 54.99 301** P **P** **20 06 58.3 +1.0**
comp=N,165nm,0.9s,baz=107,slow=5.0,SNR=77
GEYT LR LR 20 34 11.7
comp=N,54µm,19.0s,baz=98,slow=40
**GEYT Alibeck 54.99 301** P **P** **20 06 57.8 +0.5**
GEYT **sP** **20 07 08.6 +2.5**
**GYA0B ALIBECK ARRAY 54.99 301** P **P** **20 06 57.6 +0.3**
**TARA Tarawa 55.07 105** P **P** **20 06 55.8 -2.3**
TARA IAmb IAmb 20 07 24.3
comp=Z,642nm,1.7s
**KIWB Kanaga Island 55.26 42** P **P** **20 06 57.6 -1.3**
**AKTO Aktyubinsk 55.32 316** P **P** **20 07 00.0 +0.6**
comp=Z,105nm,1.0s,baz=92,slow=8.0,SNR=64
AKTO LR LR 20 32 20.3
comp=Z,68µm,18.4s,baz=104,slow=38
**NWAO Narrogin (SRO) 55.61 183** P **P** **20 07 01.2 -0.4**
NWAO pmax pmax
comp=Z,465nm,1.1s
NWAO MLR MLR
comp=Z,10µm,20.0s
**NWAO Narrogin (SRO) 55.61 183** P **P** **20 07 01.2 -0.4**
**NWAO Narrogin (SRO) 55.61 183** P **P** **20 07 02.9 +1.3**
**LCRK Leigh Creek 55.68 162** P **P** **20 07 02.0 -0.1**
**MIDW Midway 55.69 71** P **P** **20 07 01.4 -1.0**
MIDW IAmb IAmb 20 07 24.6
comp=Z,170nm,0.9s
**ARU Arti 55.81 324** P **P** **20 07 03.1 +0.3**
comp=Z,68nm,0.8s,baz=115,slow=2.6,SNR=161
ARU LR LR 20 30 55.4
comp=Z,34µm,21.0s,baz=93,slow=36
**ARU Arti 55.81 324** *d i*P **P** **20 07 02.6 -0.2**
ARU 20 08 01.5
ARU S **S** **20 14 51.1 +2.2**
ARU 20 16 47.5
ARU SS **SS** **20 18 37.1 +2.9**
ARU pmax pmax
comp=Z,776nm,1.2s
ARU MLR MLR
comp=Z,34µm,21.0s
**ARU Arti 55.81 324** ⇓P **P** **20 07 02.6 -0.2**
**ARU Arti 55.81 324** P **P** **20 07 02.2 -0.6**
ARU sP **sP** **20 07 13.0 +1.8**
ARU IAMs_20 IAMs_20 20 30 30.6
comp=Z,34µm,21.0s
**DGAR Diego Garcia 55.91 243** P **P** **20 07 02.7 -1.4**
DGAR pmax pmax
comp=Z,528nm,1.6s
DGAR MLR MLR
comp=Z,43µm,20.0s
**DGAR Diego Garcia 55.91 243** P **P** **20 07 02.7 -1.4**
DGAR IAmb IAmb 20 07 31.7
comp=Z,528nm,1.6s
**GSTR Great Sitkin T 55.95 42** P **P** **20 07 02.1 -1.9**
**RMQ Roma 56.15 149** P **P** **20 07 06.1 +0.5**
**EIDS Eidsvold 56.36 147** ⇑P **P** **20 07 06.0 -1.0**
**EIDS Eidsvold 56.36 147** P **P** **20 07 05.5 -1.5**
EIDS pP **pP** **20 07 11.1 -2.1**
EIDS sP **sP** **20 07 17.8 +2.3**
**WBK Wadi Bani Khal 56.45 283** P **P** **20 07 09.7 +1.8**
SNR=31
**WSAR Wadi Sarin 56.61 283** P **P** **20 07 09.6 +0.5**
comp=Z,114nm,1.1s,baz=110,slow=8.9,SNR=18
WSAR LR LR 20 35 36.3
comp=Z,16µm,18.1s,baz=92,slow=40
**WSAR Wadi Sarin 56.61 283** P **P** **20 07 10.8 +1.7**
SNR=29
**BIDO Bidbid 57.00 284** P **P** **20 07 13.6 +1.8**
SNR=35
**ATKA Atka Island 57.11 42** P **P** **20 07 13.7 +1.6**
**SMDO Samad 57.17 283** P **P** **20 07 14.5 +1.3**
SNR=36
SMDO P **P** **20 07 14.5 +1.3**
SNR=36
**JMDO Jabal Madar 57.28 283** P **P** **20 07 15.2 +1.4**
SNR=28
JMDO P **P** **20 07 15.2 +1.4**
SNR=28
**RKGY Rocky Gully 57.30 184** P **P** **20 07 15.3 +1.7**
**BBOO Buckleboo 57.34 165** P **P** **20 07 12.8 -1.0**
BBOO pP **pP** **20 07 17.7 -2.4**
**BBOO Buckleboo 57.34 165** P **P** **20 07 13.5 -0.4**
**HOQ Hoqain 57.72 284** P **P** **20 07 17.9 +1.0**
SNR=63
HOQ P **P** **20 07 17.9 +1.0**
SNR=63
**WHYH Whyalla 57.94 163** P **P** **20 07 18.8 +0.8**
**BSY Bisya 58.01 283** P **P** **20 07 19.9 +0.9**
SNR=40
BSY P **P** **20 07 19.9 +0.9**
SNR=40
**STKA Stephens Creek 58.06 159** P **P** **20 07 18.3 -0.7**
comp=Z,72nm,1.1s,baz=347,slow=7.2,SNR=49
STKA LR LR 20 34 26.3
comp=Z,18µm,19.9s,baz=331,slow=38
STKA PKP2ab 20 37 32.5
comp=Z,2.0nm,0.9s,baz=184,slow=3.3,SNR=3.4
**STKA Stephens Creek 58.06 159** P **P** **20 07 17.6 -1.4**
STKA *PP **pP** **20 07 23.6 -1.6**
**STKA Stephens Creek 58.06 159** P **P** **20 07 17.6 -1.4**
STKA pP **pP** **20 07 23.6 -1.6**
**STKA Stephens Creek 58.06 159** P **P** **20 07 18.9 -0.1**
**BANOM Banah 58.11 287** P **P** **20 07 20.4 +0.7**
SNR=25
**BANOM Banah 58.11 287** *i*P **P** **20 07 19.3 -0.4**
SNR=26
**SHME Shamm 58.22 287** P **P** **20 07 21.3 +0.9**
SNR=28
SHME P **P** **20 07 21.3 +0.9**
SNR=28
**SHME Shamm 58.22 287** *i*P **P** **20 07 21.0 +0.6**
SNR=13
**NAPP Napperby 58.23 163** P **P** **20 07 20.2 +0.1**
**MASF Masafi 58.35 287** P **P** **20 07 22.3 +0.9**
SNR=18
MASF P **P** **20 07 22.3 +0.9**
SNR=18
**MSFE Esma-Masafi 58.35 286** *i*P **P** **20 07 21.2 -0.2**
SNR=19
**UOSS Minazif 58.40 286** P **P** **20 07 21.8 +0.1**
UOSS P **P** **20 07 21.8 +0.1**
**UOSS Minazif 58.40 286** ⇓P **P** **20 07 21.4 -0.3**
**UOSS Minazif 58.40 286** P **P** **20 07 19.5 -2.2**
**UOSS Minazif 58.40 286** *i*P **P** **20 07 20.3 -1.4**
SNR=30
**ARQ Araqi 58.48 284** P **P** **20 07 22.4 +0.2**
SNR=52
ARQ P **P** **20 07 22.4 +0.2**
SNR=52
**HATD Hatta, Dubai 58.49 286** P **P** **20 07 23.0 +0.7**
SNR=43
HATD P **P** **20 07 23.0 +0.7**
SNR=43
**HATD Hatta, Dubai 58.49 286** *i*P **P** **20 07 21.8 -0.5**
SNR=33
**ASHO Ashiyiah 58.59 286** P **P** **20 07 24.1 +1.1**
SNR=62
**ASHO Ashiyiah 58.59 286** *i*P **P** **20 07 22.7 -0.3**
SNR=74
**HTT Hallett 58.68 162** ⇑P **P** **20 07 23.1 -0.3**
**HTT Hallett 58.68 162** P **P** **20 07 23.2 -0.2**
**UMQ Umm Al-Quwin 58.76 287** P **P** **20 07 27.2 +3.1**
SNR=13
UMQ P **P** **20 07 27.2 +3.1**
SNR=13
**UMQ Umm Al-Quwin 58.76 287** *i*P **P** **20 07 25.1 +1.0**
SNR=16
**NAZ Nazwa, Dubai 58.87 286** P **P** **20 07 25.9 +0.9**
SNR=38
**NAZ Nazwa, Dubai 58.87 286** *i*P **P** **20 07 24.3 -0.7**
SNR=18
**FAQ Al Faqa, Dubai 58.99 286** P **P** **20 07 25.8 0.0**
SNR=32
FAQ P **P** **20 07 25.8 0.0**
SNR=32
**FAQ Al Faqa, Dubai 58.99 286** *i*P **P** **20 07 25.6 -0.1**
SNR=42
**ALNE Al Ain 59.00 285** P **P** **20 07 26.6 +0.7**
SNR=109
**ALNE Al Ain 59.00 285** *i*P **P** **20 07 25.4 -0.5**
SNR=87
**CMSA Cobar Meteorol 59.23 155** P **P** **20 07 27.1 0.0**
**ASUD Al Ashush, Dub 59.25 286** P **P** **20 07 28.5 +1.0**
SNR=39
ASUD P **P** **20 07 28.5 +1.0**
SNR=39
**ASUD Al Ashush, Dub 59.25 286** *i*P **P** **20 07 29.1 +1.5**
SNR=21
**SANVU Saraoutou 59.43 126** ⇑P **P** **20 07 28.4 -0.5**
**SANVU Saraoutou 59.43 126** P **P** **20 07 27.6 -1.2**
SANVU pP **pP** **20 07 33.3 -1.7**
SANVU IAmb IAmb 20 07 41.9
comp=Z,297nm,1.1s
**SANVU Saraoutou 59.43 126** P **P** **20 07 28.8 0.0**
**AJN Ajban 59.56 286** P **P** **20 07 29.7 0.0**
SNR=22
AJN P **P** **20 07 29.7 0.0**
SNR=22
**AJN Ajban 59.56 286** *i*P **P** **20 07 31.1 +1.3**
SNR=31
**CLES Cleveland East 59.76 41** P **P** **20 07 29.7 -1.0**
**SPIA Saint Paul Isl 59.78 36** P **P** **20 07 29.1 -1.6**
**SPIA Saint Paul Isl 59.78 36** P **P** **20 07 29.4 -1.2**
baz=266
**UMZA Um Al Zommool 59.84 284** P **P** **20 07 31.4 -0.3**
UMZA P **P** **20 07 31.4 -0.3**
**GAMB Gambell 59.85 28** P **P** **20 07 30.9 -0.2**
GAMB IAmb IAmb 20 07 43.7
comp=Z,444nm,1.8s
**GAMB Gambell 59.85 28** P **P** **20 07 31.0 0.0**
baz=261
GAMB S **S** **20 15 42.1 +0.6**
baz=261
**TWOA Tennyson Woods 60.09 163** P **P** **20 07 34.0 +1.0**
**NIKH Nikolski High 60.40 41** P **P** **20 07 33.6 -1.4**
NIKH IAmb IAmb 20 08 29.3
comp=Z,180nm,1.0s
**NIKH Nikolski High 60.40 41** P **P** **20 07 34.3 -0.7**
baz=269
**SHAO Shalim 60.65 278** P **P** **20 07 37.5 +0.2**
SHAO P **P** **20 07 37.5 +0.2**
**SHAO Shalim 60.65 278** *i*P **P** **20 07 36.7 -0.6**
SNR=6.1
**KOUNC Koumac, New Ca 60.67 132** ⇑P **P** **20 07 36.8 -0.4**
**KOUNC Koumac, New Ca 60.67 132** IAMs_20 IAMs_20 20 29 11.0
comp=Z,31µm,22.0s
**KOUNC Koumac, New Ca 60.67 132** P **P** **20 07 37.4 +0.2**
**MZWR Madinat Zayed 60.73 285** P **P** **20 07 37.0 -0.8**
MZWR P **P** **20 07 37.0 -0.8**
**ARMA Armidale 60.82 149** ⇑P **P** **20 07 38.3 +0.1**
**ARMA Armidale 60.82 149** P **P** **20 07 37.7 -0.5**
**ARMA Armidale 60.82 149** P **P** **20 07 39.3 +1.1**
**KIRV Kirov 60.96 325** LR LR 20 36 30.9
comp=Z,71µm,18.2s,baz=94,slow=38
**KIRV Kirov 60.96 325** *ce*P **P** **20 07 39.3 +0.6**
**DMTO DMTO 61.36 278** P **P** **20 07 43.3 +1.2**
SNR=8.3
DMTO P **P** **20 07 43.3 +1.2**
SNR=8.3
**GHWR Ruwais 61.58 286** P **P** **20 07 43.6 +0.1**
GHWR P **P** **20 07 43.6 +0.1**
**TNA Tin City 61.72 27** ⇑P **P** **20 07 43.5 -0.2**
**TNA Tin City 61.72 27** P **P** **20 07 43.2 -0.5**
TNA IAmb IAmb 20 08 06.6
comp=Z,270nm,1.6s
**TNA Tin City 61.72 27** P **P** **20 07 43.6 -0.1**
baz=263
TNA S **S** **20 16 06.6 +1.3**
baz=263
**UNV Unalaska Valle 61.80 40** P **P** **20 07 44.6 +0.2**
baz=271
**DOK Doka 61.85 280** P **P** **20 07 45.2 -0.2**
SNR=28
DOK P **P** **20 07 45.2 -0.2**
SNR=28
**RBK Rabkut 62.10 278** P **P** **20 07 47.4 +0.2**
SNR=32
**WHFO Wadi Hawf 62.37 279** P **P** **20 07 49.0 0.0**
SNR=27
WHFO P **P** **20 07 49.0 0.0**
SNR=27
**KHOR Al-Khor Airpor 62.39 288** P **P** **20 07 48.6 -0.3**
**SLWR Sila 62.60 286** P **P** **20 07 50.6 +0.3**
SLWR P **P** **20 07 50.6 +0.3**
**MAK Makhachkala 62.64 308** *c i*P **P** **20 07 52.4 +2.1**
MAK *e* 20 10 06.4
MAK *e*PPP PPP 20 11 40.4
MAK *e*S **S** **20 16 22.3 +4.6**
MAK *e*SS **SS** **20 20 23.2 +1.3**
MAK pmax pmax
comp=Z,361nm,1.2s
MAK pmax pmax
comp=Z,3µm,2.9s
MAK smax smax
comp=N,591nm,5.3s
MAK smax smax
comp=E,10µm,7.5s
MAK MLR MLR
comp=Z,25µm,15.0s
MAK MLR MLR
comp=E,28µm,15.0s
MAK MLR MLR
comp=N,713nm,20.0s
**ARPS Mount Arapiles 62.65 161** P **P** **20 07 50.4 +0.1**
**ANM Nome 62.70 28** IAmb IAmb 20 07 55.9
comp=Z,152nm,1.1s
ANM IAMs_20 IAMs_20 20 38 40.6
comp=Z,22µm,18.0s
**SHMA Al-Shehemyia 62.81 288** P **P** **20 07 51.8 +0.1**
**TRNA Turayna 62.86 287** P **P** **20 07 52.6 +0.6**
**LIFNC LIFOU 62.87 130** P **P** **20 07 51.3 -0.8**
LIFNC **pP** **20 07 56.2 -2.0**
**LIFNC LIFOU 62.87 130** P **P** **20 07 51.8 -0.3**
**MGCD Mangrove Creek 62.93 151** P **P** **20 07 52.9 +0.7**
**ABTO Aybut 62.97 278** P **P** **20 07 52.6 -0.4**
SNR=27
**PRGR Permogore 62.99 329** *eP* **P** **20 07 51.0 -1.3**
PRGR *e**SP **sP** **20 08 01.5 +0.7**
PRGR *eS* **S** **20 16 17.3 -4.1**
PRGR pmax pmax
comp=Z,302nm,1.4s
**SAKB Bahrain 63.16 288** P **P** **20 07 54.2 +0.1**
**DZM Mont Dzumac 63.17 132** *eP* **P** **20 07 53.3 -0.9**
comp=Z,688nm,1.5s
DZM *eS* **S** **20 16 23.8 -1.1**
comp=Z,29µm,28.8s
**DZM Mont Dzumac 63.17 132** *e*LR LR 20 26 50.0
comp=Z,56µm,23.5s
**DZM Mont Dzumac 63.17 132** LR LR 20 30 59.4
comp=Z,24µm,21.6s,baz=312,slow=32
**DZM Mont Dzumac 63.17 132** ⇑P **P** **20 07 53.7 -0.5**
**DZM Mont Dzumac 63.17 132** IAmb IAmb 20 08 10.0
comp=Z,443nm,1.5s
**DZM Mont Dzumac 63.17 132** P **P** **20 07 54.2 0.0**
**SYDH Sydney Hard Ro 63.24 152** P **P** **20 07 55.2 +1.0**
comp=Z,165nm,1.4s
**ONTNC Ouen Toro 63.34 132** IAmb IAmb 20 08 08.2
comp=Z,286nm,1.5s
**YATNC Mamie plateau, 63.47 131** P **P** **20 07 56.8 +0.7**
**FALS False Pass 63.58 39** P **P** **20 07 55.9 -0.4**
baz=273
**OUENC Ouen Island, N 63.68 132** P **P** **20 07 57.0 -0.4**
OUENC IAmb IAmb 20 08 12.8
comp=Z,236nm,1.1s
**OUENC Ouen Island, N 63.68 132** P **P** **20 07 57.4 0.0**
**GROC Groznyy 63.85 308** *e*P **P** **20 07 58.4 0.0**
GROC *e* 20 08 33.8
GROC *e* 20 10 17.6
GROC *e*S **S** **20 16 37.5 +4.6**
GROC *e* 20 17 47.9
**CAN Canberra 63.86 154** P **P** **20 07 58.8 +0.4**
CAN pmax pmax
comp=Z,286nm,1.1s
CAN MLR MLR
comp=Z,18µm,19.0s
**CAN Canberra 63.86 154** ⇑P **P** **20 07 58.4 0.0**
**CAN Canberra 63.86 154** P **P** **20 07 58.8 +0.4**
CAN IAmb IAmb 20 08 05.3
comp=Z,286nm,1.1s
CAN IAMs_20 IAMs_20 20 36 58.6
comp=Z,18µm,19.0s
**CAN Canberra 63.86 154** P **P** **20 07 58.9 +0.5**
**RDOG Red Dog Mine 63.92 24** P **P** **20 07 58.1 -0.2**
RDOG **pP** **20 08 03.1 -1.5**
RDOG IAmb IAmb 20 08 11.9
comp=Z,288nm,1.6s
RDOG IAMs_20 IAMs_20 20 39 15.6
comp=Z,27µm,18.0s
**RDOG Red Dog Mine 63.92 24** P **P** **20 07 58.3 0.0**
baz=267
RDOG S **S** **20 16 31.2 -1.7**
baz=267
**SOCY Socotra 63.96 273** P **P** **20 07 59.4 -0.2**
SNR=17
**SOCY Socotra 63.96 273** ⇑P **P** **20 07 58.8 -0.9**
**SOCY Socotra 63.96 273** P **P** **20 07 58.9 -0.7**
SOCY IAMs_20 IAMs_20 20 37 33.9
comp=Z,24µm,19.0s
**CNB Canberra Magne 64.00 154** P **P** **20 08 00.1 +0.7**
**BRAT Ballarat 64.02 160** P **P** **20 08 01.4 +2.1**
**PINNC Pines Island, 64.22 132** P **P** **20 08 00.7 -0.2**
PINNC IAmb IAmb 20 08 20.6
comp=Z,315nm,1.2s
**TOO Toolangi 64.56 158** P **P** **20 08 02.7 -0.2**
TOO *PP **pP** **20 08 08.8 -0.4**
**TOO Toolangi 64.56 158** ⇑P **P** **20 08 03.2 +0.3**
**TOO Toolangi 64.56 158** P **P** **20 08 02.6 -0.2**
TOO pP **pP** **20 08 08.8 -0.4**
**TOO Toolangi 64.56 158** P **P** **20 08 03.5 +0.6**
**GNI Garni 65.09 305** LR LR 20 40 47.5
comp=Z,28µm,18.8s,baz=90,slow=40
**GNI Garni 65.09 305** P **P** **20 08 08.2 +1.4**
GNI pmax pmax
comp=Z,1µm,1.6s
GNI MLR MLR
comp=Z,26µm,19.0s
**GNI Garni 65.09 305** P **P** **20 08 08.5 +1.8**
GNI P **P** **20 08 08.5 +1.8**
**GNI Garni 65.09 305** ⇓P **P** **20 08 07.8 +1.1**
**GNI Garni 65.09 305** P **P** **20 08 08.2 +1.4**
**GNI Garni 65.09 305** IAMs_20 IAMs_20 20 40 36.2
comp=Z,26µm,19.0s
**GNI Garni 65.09 305** P **P** **20 08 08.1 +1.3**
**SDPT Sand Point 65.23 38** P **P** **20 08 05.3 -1.8**
SDPT IAmb IAmb 20 08 51.7
comp=Z,297nm,1.3s
**SDPT Sand Point 65.23 38** P **P** **20 08 06.3 -0.9**
baz=275
**FUNA Funafuti 65.27 112** P **P** **20 08 06.0 -2.0**
**ZEI Tsey 65.29 308** *e*P **P** **20 08 07.4 -0.6**
ZEI pmax pmax
comp=Z,209nm,1.3s
**NCK Nalchik 65.40 309** ⇑*i*P **P** **20 08 09.1 +0.6**
NCK pmax pmax
comp=Z,259nm,1.4s
**MILA Mila 65.43 155** ⇓P **P** **20 08 09.2 +0.5**
**GOF Gofitskoye 65.56 311** ⇓*i*P **P** **20 08 10.0 +0.5**
GOF pmax pmax
comp=Z,593nm,1.4s
**VRH Novokhopyorsk 65.63 317** *e*P **P** **20 08 09.5 -0.3**
VRH *e*S **S** **20 16 52.3 -2.1**
VRH pmax pmax
comp=Z,550nm,1.2s
VRH pmax pmax
comp=Z,550nm,1.2s
VRH smax smax
comp=N,5µm,8.2s
VRH MLR MLR
comp=Z,17µm,17.0s
**CHNA Chernabura Isl 65.79 39** P **P** **20 08 10.3 -0.4**
baz=276
**CNBA Chernabura Isl 65.79 39** P **P** **20 08 10.1 -0.7**
CNBA IAMs_20 IAMs_20 20 36 30.6
comp=Z,35µm,22.0s
**KBZ Khabaz 65.86 309** P **P** **20 08 12.2 +0.8**
comp=Z,182nm,1.0s,baz=92,slow=6.3,SNR=69
KBZ LR LR 20 41 06.1
comp=Z,31µm,18.5s,baz=83,slow=40
**KLMR Klimovskoe 65.96 328** *c i*P **P** **20 08 08.9 -2.8**
KLMR *e* 20 08 40.2
KLMR *e* 20 10 34.7
KLMR *e*S **S** **20 16 55.9 -2.2**
KLMR pmax pmax
comp=Z,668nm,1.4s
KLMR pmax pmax
comp=Z,513nm,1.5s
KLMR MLR MLR
comp=Z,66µm,15.0s
**KLMR Klimovskoe 65.96 328** ⇑*i*P **P** **20 08 09.5 -2.2**
KLMR ⇓*i*P **P** **20 08 09.5 -2.2**
KLMR ⇓*i*P **P** **20 08 09.5 -2.2**
KLMR AMP 20 08 16.4
comp=Z,513nm,1.5s
KLMR *e*PcP **PcP** **20 08 40.2 -2.2**
KLMR *e*PP **PP** **20 10 34.7 -2.0**
KLMR *e*S **S** **20 16 56.0 -2.2**
KLMR *e*S **S** **20 16 56.0 -2.2**
KLMR LQ LQ 20 32 10.9
KLMR LQ LQ 20 32 10.9
KLMR LR LR 20 37 16.0
KLMR AMP 20 39 45.2
comp=Z,66µm,14.9s
**KVAR Kislovodsk Arr 65.97 309** LR LR 20 39 10.2
comp=Z,16µm,19.6s,baz=166,slow=38
**KIV Kislovodsk 65.98 309** *eP* **P** **20 08 12.7 +0.3**
KIV *e* 20 10 39.5
KIV *e*PPP PPP 20 12 16.5
KIV *e*S **S** **20 17 00.9 +1.7**
KIV *e*SS **SS** **20 21 16.8 +2.6**
KIV pmax pmax
comp=Z,472nm,1.1s
KIV pmax pmax
comp=Z,636nm,4.8s
KIV MLR MLR
comp=Z,22µm,17.0s
**KIV Kislovodsk 65.98 309** P **P** **20 08 13.1 +0.8**
KIV P **P** **20 08 13.1 +0.8**
**KIV Kislovodsk 65.98 309** ⇑P **P** **20 08 12.7 +0.3**
**KIV Kislovodsk 65.98 309** P **P** **20 08 12.4 +0.1**
KIV IAMs_20 IAMs_20 20 40 10.1
comp=Z,28µm,19.0s
**KIV Kislovodsk 65.98 309** *i*P **P** **20 08 12.6 +0.3**
SNR=108
**NEY Neytrino 66.07 309** ⇑*i*P **P** **20 08 14.4 +1.4**
NEY pmax pmax
comp=Z,36nm,1.0s
NEY MLR MLR
comp=Z,13µm,17.0s
**A21K Barrow 66.19 20** P **P** **20 08 12.8 -0.2**
baz=271
A21K S **S** **20 17 00.9 +0.3**
baz=271
**KARS Kars 66.26 306** P **P** **20 08 14.8 +0.6**
KARS pmax pmax
comp=Z,2µm,1.4s
**KARS Kars 66.26 306** P **P** **20 08 14.8 +0.6**
**CHGN Chignik 66.30 37** P **P** **20 08 13.1 -0.9**
baz=276
**GCSA Galena City Sc 66.35 28** P **P** **20 08 14.3 +0.1**
baz=274
GCSA S **S** **20 17 01.1 -1.7**
baz=274
**GEVA Gevas 66.71 303** P **P** **20 08 17.4 +0.1**
GEVA IAmb IAmb 20 08 31.4
comp=Z,302nm,1.1s

**VORR Voronezh 67.13 318** *e*P **P** **20 08 19.9 +0.5**
VORR *e*S **S** **20 17 12.6 0.0**
VORR pmax pmax
comp=Z,560nm,1.5s
VORR pmax pmax
comp=Z,560nm,1.3s
VORR smax smax
comp=N,1μm,2.8s
**LPSR Galich'ya Gora 67.16 319** *e*P **P** **20 08 19.4 -0.2**
LPSR *e*S **S** **20 17 12.2 -0.8**
LPSR pmax pmax
comp=Z,450nm,1.3s
LPSR pmax pmax
comp=Z,450nm,1.3s
LPSR smax smax
comp=N,4μm,8.2s
LPSR MLR MLR
comp=Z,9μm,12.0s
**VORD Divnogorie 67.18 317** *e*P **P** **20 08 19.5 -0.2**
VORD *e*S **S** **20 17 10.3 -2.9**
VORD pmax pmax
comp=Z,100nm,1.0s
VORD pmax pmax
comp=Z,100nm,1.0s
VORD smax smax
comp=N,2μm,7.2s
**VSR Storozhevoye 67.22 318** *e*P **P** **20 08 20.0 0.0**
VSR *e*S **S** **20 17 10.3 -3.5**
VSR pmax pmax
comp=Z,370nm,1.2s
VSR pmax pmax
comp=Z,410nm,1.2s
VSR smax smax
comp=N,4μm,8.3s
VSR MLR MLR
comp=Z,17μm,17.0s
**GURO Guroymak-BITLI 67.45 304** P **P** **20 08 23.2 +1.3**
GURO IAmb IAmb 20 08 39.3
comp=Z,434nm,1.6s
**L19K White Mountain 67.48 30** P **P** **20 08 21.7 +0.2**
L19K IAMs_20 IAMs_20 20 37 39.8
comp=Z,24μm,21.0s
**L19K White Mountain 67.48 30** P **P** **20 08 21.6 +0.1**
baz=276,SNR=18
L19K S **S** **20 17 17.9 +1.2**
baz=276
**LVZ Lovozero 67.49 336**⇓ *e*P **P** **20 08 23.0 +1.5**
LVZ pmax pmax
comp=Z,306nm,1.8s
LVZ MLR MLR
comp=Z,44μm,17.0s
**LVZ Lovozero 67.49 336** ⇑P **P** **20 08 24.0 +2.5**
**LVZ Lovozero 67.49 336** P **P** **20 08 21.9 +0.5**
LVZ IAmb IAmb 20 08 40.2
comp=Z,228nm,1.2s
LVZ IAMs_20 IAMs_20 20 42 10.5
comp=Z,28μm,19.0s
**J20K Nowinta River 67.58 28** IAMs_20 IAMs_20 20 40 23.2
comp=Z,25μm,18.0s
**J20K Nowinta River 67.58 28** P **P** **20 08 22.5 +0.5**
baz=276
J20K S **S** **20 17 19.3 +1.6**
baz=276
**O18K Koktuh Hills 67.59 33** IAMs_20 IAMs_20 20 38 38.0
comp=Z,18μm,20.0s
**O18K Koktuh Hills 67.59 33** P **P** **20 08 21.9 -0.3**
baz=277,SNR=7.4
O18K S **S** **20 17 17.4 -0.6**
baz=277
**P18K Big Mountain, 67.64 33** IAmb IAmb 20 08 37.5
comp=Z,261nm,1.1s
**P18K Big Mountain, 67.64 33** P **P** **20 08 23.7 +1.1**
baz=277,SNR=7.7
P18K S **S** **20 17 19.2 +0.6**
baz=277
**K20K Telida 67.71 29** IAMs_20 IAMs_20 20 38 12.0
comp=Z,24μm,20.0s
**K20K Telida 67.71 29** P **P** **20 08 23.3 +0.4**
baz=277,SNR=8.3
**M19K Big River Lodg 67.73 31** IAMs_20 IAMs_20 20 37 46.8
comp=Z,24μm,21.0s
**L20K Farewell, AK 67.90 30** P **P** **20 08 25.0 +0.8**
baz=277
L20K S **S** **20 17 23.0 +1.4**
baz=277
**CHIR Chirikof Islan 67.92 37** IAMs_20 IAMs_20 20 37 32.8
comp=Z,30μm,22.0s
**CHIR Chirikof Islan 67.92 37** P **P** **20 08 24.0 -0.2**
baz=278
CHIR S **S** **20 17 22.1 +0.1**
baz=278
**H21K Melozitna Rive 67.98 27** IAMs_20 IAMs_20 20 37 30.1
comp=Z,19μm,21.0s
**O19K Port Alsworth 67.99 32** P **P** **20 08 24.7 +0.1**
baz=278,SNR=9.6
O19K S **S** **20 17 24.5 +1.9**
baz=278
**APA Apatity 68.00 336**⇑ *i*P **P** **20 08 26.8 +2.2**
APA *i* PPP PPP 20 12 31.0
APA *i* S **S** **20 17 24.0 +1.4**
APA pmax pmax
comp=Z,247nm,1.0s
APA MLR MLR
comp=Z,38μm,14.0s
**SOC Sochi 68.16 309** *d i*P **P** **20 08 24.3 -1.8**
SOC *e**SP **pP** **20 08 32.6 +0.3**
SOC *e* 20 10 54.9
SOC *e*PPP PPP 20 12 35.4
SOC *i* S **S** **20 17 25.4 +0.1**
SOC *e*SS **SS** **20 21 54.2 +6.4**
SOC pmax pmax
comp=Z,103nm,0.8s
SOC MLR MLR
comp=Z,23μm,19.0s
**OBN Obninsk 68.17 322** LR LR 20 40 33.3
comp=Z,5μm,18.9s,baz=81,slow=38
**OBN Obninsk 68.17 322** *d i*P **P** **20 08 25.2 -0.6**
OBN *i* 20 08 34.9
OBN *i* 20 08 50.2
OBN *i* 20 10 55.8
OBN *i* S **S** **20 17 22.8 -2.2**
OBN pmax pmax
comp=Z,494nm,1.3s
OBN pmax pmax
comp=Z,886nm,1.7s
OBN MLR MLR
comp=Z,21μm,15.0s
**OBN Obninsk 68.17 322** ⇑P **P** **20 08 26.1 +0.2**
**OBN Obninsk 68.17 322** P **P** **20 08 25.3 -0.6**
OBN IAMs_20 IAMs_20 20 40 20.6
comp=Z,26μm,21.0s
**RAYN Ar Rayn 68.21 287** P **P** **20 08 26.8 0.0**
RAYN pmax pmax
comp=Z,735nm,1.3s
RAYN MLR MLR
comp=Z,32μm,20.0s
**RAYN Ar Rayn 68.21 287** P **P** **20 08 26.8 0.0**
**RAYN Ar Rayn 68.21 287** P **P** **20 08 26.8 0.0**
**I21K Tanana 68.38 27** IAMs_20 IAMs_20 20 37 54.4
comp=Z,19μm,20.0s
**I21K Tanana 68.38 27** P **P** **20 08 27.1 +0.1**
baz=278
I21K S **S** **20 17 28.2 +1.0**
baz=278
**CHUM Lake Minchumin 68.42 28** P **P** **20 08 27.7 +0.4**
baz=278,SNR=5.5
CHUM S **S** **20 17 29.5 +1.8**
baz=278
**GLAD Gladstone 68.48 158** P **P** **20 08 28.3 +0.5**
**Q19K Cape Douglas, 68.51 34** P **P** **20 08 27.3 -0.7**
Q19K IAmb IAmb 20 08 40.0
comp=Z,348nm,1.3s
**Q19K Cape Douglas, 68.51 34** P **P** **20 08 26.6 -1.4**
baz=279
**CAST Castle Rocks 68.59 29** IAMs_20 IAMs_20 20 38 17.9
comp=Z,24μm,20.0s
**CAST Castle Rocks 68.59 29** P **P** **20 08 28.3 -0.2**
baz=278,SNR=22
CAST S **S** **20 17 33.6 +3.8**
baz=278
**SII Sitkinak Islan 68.60 36** P **P** **20 08 27.9 -0.7**
baz=279
**PPLA Purkeypile 68.61 29** P **P** **20 08 28.8 0.0**
baz=278,SNR=8.9
PPLA S **S** **20 17 29.2 -1.2**
baz=278

**MARD Mardin 68.69 303** P **P** **20 08 30.3 +0.6**
**COLD Coldfoot 68.81 25** P **P** **20 08 30.0 +0.3**
baz=279
COLD S **S** **20 17 31.5 -0.7**
baz=279
**O20K Slope Mountain 68.84 32** P **P** **20 08 29.4 -0.7**
baz=279
**MLY Manley 68.92 27** IAMs_20 IAMs_20 20 38 19.7
comp=Z,22μm,20.0s
**BPAW Bear Paw Mtn. 68.96 28** IAMs_20 IAMs_20 20 42 44.9
comp=Z,20μm,20.0s
**BPAW Bear Paw Mtn. 68.96 28** P **P** **20 08 30.9 +0.2**
baz=279,SNR=25
BPAW S **S** **20 17 35.2 +0.9**
baz=279
**OHAK Old Harbor 68.97 36** P **P** **20 08 31.2 +0.4**
OHAK IAmb IAmb 20 08 44.8
comp=Z,350nm,1.2s
**OHAK Old Harbor 68.97 36** P **P** **20 08 31.3 +0.5**
baz=280
OHAK S **S** **20 17 34.8 +0.4**
baz=280
**KTH Kantishna Hill 69.08 29** IAMs_20 IAMs_20 20 38 32.1
comp=Z,21μm,21.0s
**MSVF Nonsavu 69.16 121** LR LR 20 33 58.9
comp=Z,26μm,21.9s,baz=297,slow=32
**MSVF Nonsavu 69.16 121** *c i*P **P** **20 08 32.4 -0.3**
MSVF pmax pmax
comp=Z,274nm,1.2s
**MSVF Nonsavu 69.16 121** ⇑P **P** **20 08 32.7 0.0**
**MSVF Nonsavu 69.16 121** P **P** **20 08 31.9 -0.8**
MSVF IAmb IAmb 20 08 36.7
comp=Z,186nm,1.0s
**MSVF Nonsavu 69.16 121** IAMs_20 IAMs_20 20 33 26.2
comp=Z,27μm,22.0s
**MSVF Nonsavu 69.16 121** P **P** **20 08 33.5 +0.8**
**MSEY Mahe Island 69.19 255**⇓ P **P** **20 08 35.1 +2.1**
**MSEY Mahe Island 69.19 255** P **P** **20 08 34.6 +1.6**
**HOPEN Hopen 69.20 346** *e*P **P** **20 08 33.1 +1.1**
HOPEN *e*S **S** **20 17 40.3 +3.6**
HOPEN IVMs_BB IVMs_BB 20 39 39.2
comp=Z,15μm,19.9s
**KDAK Kodiak Island 69.25 35** P **P** **20 08 31.9 -0.7**
comp=Z,69nm,0.6s,baz=254,slow=4.7,SNR=10
KDAK LR LR 20 39 38.7
comp=Z,34μm,21.9s,baz=260,slow=37
**KDAK Kodiak Island 69.25 35** P **P** **20 08 32.4 -0.2**
KDAK pmax pmax
comp=Z,430nm,1.1s
KDAK MLR MLR
comp=Z,32μm,21.0s
**KDAK Kodiak Island 69.25 35** ⇑P **P** **20 08 35.6 +3.0**
**KDAK Kodiak Island 69.25 35** P **P** **20 08 32.4 -0.2**
**KDAK Kodiak Island 69.25 35** P **P** **20 08 33.3 +0.7**
baz=280
**TRF Thorofare Moun 69.38 29** IAMs_20 IAMs_20 20 38 31.0
comp=Z,19μm,19.0s
**TRF Thorofare Moun 69.38 29** P **P** **20 08 33.2 -0.4**
baz=280
TRF S **S** **20 17 38.5 -1.0**
baz=280
**HOM Homer 69.40 33** IAMs_20 IAMs_20 20 39 51.8
comp=Z,22μm,21.0s
**HOM Homer 69.40 33** P **P** **20 08 34.1 +0.6**
baz=280
**CAPN Captain Cook N 69.45 32** P **P** **20 08 33.7 0.0**
baz=280
**I23K Minto, Yukon-K 69.48 27** IAMs_20 IAMs_20 20 38 35.5
comp=Z,21μm,19.0s
**I23K Minto, Yukon-K 69.48 27** P **P** **20 08 33.9 0.0**
baz=280,SNR=12
I23K S **S** **20 17 41.1 +0.9**
baz=280
**CUT Chulitna 69.57 30** IAMs_20 IAMs_20 20 39 31.2
comp=Z,24μm,18.0s
**CUT Chulitna 69.57 30** P **P** **20 08 33.7 -0.8**
baz=280,SNR=8.3
CUT S **S** **20 17 41.2 -0.1**
baz=280
**BWN Browne 69.61 28** IAMs_20 IAMs_20 20 41 37.9
comp=Z,19μm,18.0s
**CNPM China Poot 69.63 33** IAMs_20 IAMs_20 20 40 58.9
comp=Z,24μm,20.0s
**NEA2 Nenana 69.70 27** IAMs_20 IAMs_20 20 43 20.7
comp=Z,17μm,19.0s
**NEA2 Nenana 69.70 27** P **P** **20 08 34.8 -0.5**
baz=281,SNR=26
NEA2 S **S** **20 17 44.3 +1.4**
baz=281
**M22K Willow 69.76 30** IAMs_20 IAMs_20 20 39 02.1
comp=Z,21μm,21.0s
**M22K Willow 69.76 30** P **P** **20 08 34.6 -1.0**
baz=281,SNR=6.1
M22K S **S** **20 17 46.2 +2.7**
baz=281
**BRLK Bradley Lake 69.76 33** IAmb IAmb 20 08 50.8
comp=Z,181nm,1.0s
BRLK IAMs_20 IAMs_20 20 40 45.2
comp=Z,23μm,20.0s
**FIS Fire Island 69.83 31** IAMs_20 IAMs_20 20 40 05.1
comp=Z,18μm,19.0s
**BRSE Bradley Lake S 69.84 33** P **P** **20 08 34.4 -1.8**
baz=281,SNR=5.6
**MCK McKinley 69.92 28** IAMs_20 IAMs_20 20 40 14.4
comp=Z,20μm,18.0s
**MCK McKinley 69.92 28** P **P** **20 08 35.7 -1.0**
baz=281,SNR=27
MCK S **S** **20 17 47.6 +2.0**
baz=281
**H24K Noodor Dome 69.96 26** P **P** **20 08 36.5 -0.4**
baz=281
H24K S **S** **20 17 48.3 +2.3**
baz=281
**KEV Kevo 69.96 338** P **P** **20 08 37.9 +1.1**
KEV pmax pmax
comp=Z,288nm,1.1s
KEV MLR MLR
comp=Z,17μm,21.0s
**KEV Kevo 69.96 338** ⇑P **P** **20 08 38.5 +1.8**
**KEV Kevo 69.96 338** P **P** **20 08 37.9 +1.1**
KEV IAmb IAmb 20 08 50.6
comp=Z,288nm,1.1s
**TAU Tasmania Unive 69.97 159** P **P** **20 08 36.9 -0.1**
TAU pmax pmax
comp=Z,670nm,1.3s
TAU MLR MLR
comp=Z,14μm,20.0s
**TAU Tasmania Unive 69.97 159**⇓ P **P** **20 08 38.1 +1.1**
**TAU Tasmania Unive 69.97 159** P **P** **20 08 36.9 -0.1**
**TAU Tasmania Unive 69.97 159** P **P** **20 08 37.6 +0.6**
**MDM Murphy Dome 69.99 27** IAMs_20 IAMs_20 20 38 52.0
comp=Z,17μm,19.0s
**RND Reindeer 70.02 29** IAMs_20 IAMs_20 20 39 55.9
comp=Z,22μm,21.0s
**RC01 Rabbit Creek A 70.07 31** IAMs_20 IAMs_20 20 40 44.2
comp=Z,18μm,22.0s
**RC01 Rabbit Creek A 70.07 31** P **P** **20 08 36.1 -1.4**
baz=281
RC01 S **S** **20 17 46.9 -0.3**
baz=281
**WRH Wood River Hil 70.14 27** IAMs_20 IAMs_20 20 43 43.2
comp=Z,20μm,18.0s
**TCOL CIGO, UAF Yank 70.16 27** IAmb IAmb 20 08 50.7
comp=Z,170nm,1.1s
**TCOL CIGO, UAF Yank 70.16 27** P **P** **20 08 37.0 -1.0**
baz=282
TCOL S **S** **20 17 47.1 -1.0**
baz=282
**COLA College 70.16 27**⇓ *i*P **P** **20 08 37.9 -0.1**
COLA pmax pmax
comp=Z,329nm,2.1s
COLA MLR MLR
comp=Z,17μm,16.0s
**COLA College 70.16 27** ⇓p **P** **20 08 41.9 +3.9**
**COLA College 70.16 27** P **P** **20 08 37.4 -0.7**
COLA IAmb IAmb 20 08 50.7
comp=Z,170nm,1.1s
**COLA College 70.16 27** P **P** **20 08 37.6 -0.4**
baz=282
COLA S **S** **20 17 48.7 +0.5**
baz=282
**O22K Cooper Landing 70.19 32** IAMs_20 IAMs_20 20 40 04.8
comp=Z,22μm,21.0s
**O22K Cooper Landing 70.19 32** P **P** **20 08 36.3 -2.0**
baz=282
O22K S **S** **20 17 46.2 -2.5**
baz=282

**CCB Clear Creek Bu 70.23 27** IAMs_20 IAMs_20 20 42 34.4
comp=Z,17μm,19.0s
**PMR Palmer 70.25 31** P **P** **20 08 37.4 -1.3**
baz=282,SNR=9.0
PMR S **S** **20 17 50.0 +0.6**
baz=282
**POKR Poker Plat Res 70.29 27** P **P** **20 08 38.2 -0.7**
POKR IAmb IAmb 20 08 51.5
comp=Z,278nm,1.1s
POKR IAMs_20 IAMs_20 20 39 00.7
comp=Z,18μm,20.0s
**POKR Poker Plat Res 70.29 27** P **P** **20 08 38.7 -0.1**
baz=282,SNR=26
POKR S **S** **20 17 50.6 +0.8**
baz=282
**GHO Glory Hole Cre 70.31 30** IAMs_20 IAMs_20 20 39 30.6
comp=Z,27μm,22.0s
**SEW Seward 70.40 32** IAmb IAmb 20 08 53.8
comp=Z,347nm,1.1s
**SEW Seward 70.40 32** P **P** **20 08 39.4 -0.2**
baz=282,SNR=7.3
**ARA0 ARCESS Array S 70.52 338** *e*P **P** **20 08 41.6 +1.4**
**ARCES ARCESS Array B 70.52 338** P **P** **20 08 40.9 +0.7**
comp=Z,21nm,0.7s,baz=66,slow=10,SNR=45
ARCES LR LR 20 42 36.5
comp=Z,24μm,18.6s,baz=59,slow=38
**ARCES ARCESS Array B 70.52 338** P **P** **20 08 42.2 +2.0**
ARCES pmax pmax
comp=Z,196nm,1.1s
**ARCES ARCESS Array B 70.52 338** P **P** **20 08 42.2 +2.0**
ARCES IAmb IAmb 20 08 54.1
comp=Z,196nm,1.1s
**SML Sawmill 70.58 30** IAmb IAmb 20 08 55.4
comp=Z,248nm,1.0s
SML IAMs_20 IAMs_20 20 39 39.0
comp=Z,27μm,21.0s
**SML Sawmill 70.58 30** P **P** **20 08 39.8 -0.9**
baz=282,SNR=10
SML S **S** **20 17 55.8 +2.4**
baz=282
**ILAR Eielson Array 70.59 27** P **P** **20 08 40.2 -0.5**
comp=Z,23nm,0.6s,baz=300,slow=8.5,SNR=7.5
ILAR PKPPKP **P'P'df** **20 36 43.5 -1.4**
comp=Z,8.5nm,1.1s,baz=136,slow=1.5,SNR=18
ILAR LR LR 20 44 16.3
comp=Z,10μm,18.5s,baz=292,slow=40
**ILAR Eielson Array 70.59 27** P'P'df 20 36 37.9 -7.0
**KNK Knik Glacier 70.61 31** IAmb IAmb 20 08 54.7
comp=Z,373nm,1.2s
KNK IAMs_20 IAMs_20 20 39 50.5
comp=Z,22μm,20.0s
**KNK Knik Glacier 70.61 31** P **P** **20 08 40.2 -0.7**
baz=282,SNR=9.6
KNK S **S** **20 17 54.5 +0.8**
baz=282
**SPB2 Spitsbergen Ar 70.61 348** P **P** **20 08 41.3 +0.6**
SPB2 IAmb IAmb 20 09 20.8
comp=Z,251nm,1.1s
**SPA0 Spitsbergen Ar 70.61 348** *e*P **P** **20 08 41.3 +0.6**
SPA0 IVmB_BB 20 08 58.3
comp=Z,4μm,3.7s
SPA0 *e*S **S** **20 17 54.6 +1.4**
SPA0 IVMs_BB IVMs_BB 20 44 12.1
comp=Z,15μm,15.1s
**SPITS Spitsbergen Ar 70.61 348** LR LR 20 44 08.7
comp=Z,28μm,18.0s,baz=234,slow=40
**SPITS Spitsbergen Ar 70.61 348** P **P** **20 08 42.8 +2.1**
SPITS pmax pmax
comp=Z,295nm,1.2s
**HDA Harding Lake 70.64 27** IAMs_20 IAMs_20 20 42 46.5
comp=Z,19μm,20.0s
**HDA Harding Lake 70.64 27** P **P** **20 08 39.6 -1.4**
baz=282,SNR=14
HDA S **S** **20 17 53.1 -0.7**
baz=282
HDA S **S** **20 17 53.1 -0.7**
baz=282
**PUL Pulkovo 70.64 328**⇓ *e*P **P** **20 08 41.9 +0.8**
PUL pmax pmax
comp=Z,512nm,1.0s
PUL MLR MLR
comp=Z,100μm,17.0s
**PWL Port Wells 70.78 31** P **P** **20 08 40.2 -1.8**
PWL IAmb IAmb 20 08 56.7
comp=Z,257nm,1.0s
PWL IAMs_20 IAMs_20 20 42 20.4
comp=Z,26μm,19.0s
**PWL Port Wells 70.78 31** P **P** **20 08 41.0 -1.0**
baz=282,SNR=5.9
PWL S **S** **20 17 55.5 -0.2**
baz=282
**HAMF Hammerfest 70.86 339** *e*P **P** **20 08 44.9 +2.7**
HAMF IVmB_BB 20 09 05.6
comp=Z,4μm,5.0s
HAMF *e*S **S** **20 17 57.4 +1.1**
HAMF *e*SS **SS** **20 22 31.6 +3.4**
HAMF IVMs_BB IVMs_BB 20 39 34.1
comp=Z,10μm,21.3s
**PRP Porcupine Dome 70.98 26** IAMs_20 IAMs_20 20 44 52.4
comp=Z,21μm,18.0s
**PRP Porcupine Dome 70.98 26** P **P** **20 08 42.6 -0.7**
baz=283,SNR=6.4
PRP S **S** **20 17 57.1 -1.0**
baz=283
**SCM Sheep Creek Mo 71.04 30** P **P** **20 08 43.0 -0.6**
SCM pmax pmax
comp=Z,546nm,1.2s
SCM MLR MLR
comp=Z,29μm,20.0s
**SCM Sheep Creek Mo 71.04 30** P **P** **20 08 43.0 -0.6**
SCM IAMs_20 IAMs_20 20 40 27.2
comp=Z,29μm,20.0s
**SCM Sheep Creek Mo 71.04 30** P **P** **20 08 42.9 -0.8**
baz=283,SNR=19
SCM S **S** **20 17 59.4 +0.6**
baz=283
**BJO1 Bjornoya 71.16 344** *e*P **P** **20 08 46.1 +2.1**
BJO1 IVmB_BB 20 09 00.8
comp=Z,3μm,3.7s
BJO1 *e*S **S** **20 18 00.8 +1.2**
BJO1 IVMs_BB IVMs_BB 20 51 02.3
comp=Z,10μm,15.0s
**HSPB Hornsund (broa 71.17 347** *e*P **P** **20 08 47.1 +3.1**
HSPB *e*PP **PP** **20 11 25.7 +4.2**
HSPB *e*S **S** **20 18 01.5 +1.8**
HSPB *e*L L 20 43 39.7
comp=Z,46μm,20.3s
**HSPB Hornsund (broa 71.17 347** *e*P **P** **20 08 45.2 +1.1**
HSPB *e*S **S** **20 18 01.6 +1.8**
HSPB *e*SS **SS** **20 22 35.5 +2.8**
HSPB IVMs_BB IVMs_BB 20 44 46.1
comp=Z,15μm,14.5s
**KBS Kingsbay 71.18 349** P **P** **20 08 43.5 -0.6**
KBS pmax pmax
comp=Z,109nm,1.2s
KBS MLR MLR
comp=Z,40μm,19.0s
**KBS Kingsbay 71.18 349** *i*P **P** **20 08 43.5 -0.6**
KBS IAmb IAmb 20 08 58.2
comp=Z,5μm,3.5s
**KBS Kingsbay 71.18 349** *e*P **P** **20 08 45.3 +1.2**
KBS *e*S **S** **20 18 01.4 +1.7**
KBS *e*SS **SS** **20 22 35.0 +2.3**
KBS IVmB_BB 20 44 19.2
comp=Z,27μm,15.7s
**KBS Kingsbay 71.18 349** ⇑P **P** **20 08 46.2 +2.2**
**KBS Kingsbay 71.18 349** P **P** **20 08 43.5 -0.6**
**J25K Salcha River, 71.26 27** IAMs_20 IAMs_20 20 44 24.9
comp=Z,22μm,18.0s
**J25K Salcha River, 71.26 27** P **P** **20 08 43.9 -0.9**
baz=284
J25K S **S** **20 18 00.3 -0.9**
baz=284
**GLI Glacier Island 71.37 31** IAmb IAmb 20 08 59.4
comp=Z,332nm,1.2s
GLI IAMs_20 IAMs_20 20 41 23.9
comp=Z,18μm,21.0s
**GLI Glacier Island 71.37 31** P **P** **20 08 44.8 -0.7**
baz=284,SNR=6.9
GLI S **S** **20 18 02.1 -0.3**
baz=284
**KTK1 Kautokeino 71.43 338** *e*P **P** **20 08 48.6 +2.8**
KTK1 IVmB_BB 20 09 07.7
comp=Z,2μm,9.4s
KTK1 *e*S **S** **20 18 03.8 +0.9**
KTK1 *e*SS **SS** **20 22 35.2 -1.8**

KTK1 IVMs_BB IVMs_BB 20 44 41.7
comp=Z,13µm,13.7s
**GAZ Gaziantep 71.48 303** IAmb IAmb 20 08 58.9
comp=Z,244nm,1.0s
**M24K Tolsona, Glenn 71.51 30** IAMs_20 IAMs_20 20 40 11.3
comp=Z,27µm,21.0s
**M24K Tolsona, Glenn 71.51 30** P **P** **20 08 45.8 -0.6**
baz=284,SNR=8.0
M24K S **S** **20 18 04.1 0.0**
baz=284
**PAX Paxson 71.61 29** P **P** **20 08 46.3 -0.8**
baz=284,SNR=9.6
PAX S **S** **20 18 07.1 +1.7**
baz=284
**FID Port Fidalgo 71.69 31** IAMs_20 IAMs_20 20 42 03.1
comp=Z,23µm,20.0s
**RIDG Independent Ri 71.69 28** IAmb IAmb 20 08 58.4
comp=Z,371nm,1.3s
RIDG IAMs_20 IAMs_20 20 44 14.4
comp=Z,17µm,20.0s
**RIDG Independent Ri 71.69 28** P **P** **20 08 46.5 -1.0**
baz=284,SNR=9.9
RIDG S **S** **20 18 06.0 -0.2**
baz=284
**KLU Klutina 71.77 30** IAMs_20 IAMs_20 20 40 51.4
comp=Z,26µm,20.0s
**KLU Klutina 71.77 30** P **P** **20 08 46.4 -1.7**
baz=284,SNR=9.2
KLU S **S** **20 18 09.2 +1.9**
baz=284
**SIM Simferopol' 71.78 312** P **P** **20 08 48.0 -0.3**
SIM S **S** **20 18 07.9 +0.1**
SIM pmax pmax
comp=Z,530nm,1.2s
**HARP HAARP 71.90 29** P **P** **20 08 48.0 -0.7**
baz=285,SNR=7.0
HARP S **S** **20 18 09.1 +0.6**
baz=285
**DIV Divide 71.93 31** P **P** **20 08 48.3 -0.7**
DIV IAmb IAmb 20 09 04.0
comp=Z,302nm,1.2s
**SCRK Sand Creek 72.00 28** IAMs_20 IAMs_20 20 45 06.5
comp=Z,16µm,18.0s
**SCRK Sand Creek 72.00 28** P **P** **20 08 48.3 -1.1**
baz=285,SNR=21
SCRK S **S** **20 18 10.2 +0.2**
baz=285
**J26L Joseph Creek 72.04 27** IAMs_20 IAMs_20 20 44 50.5
comp=Z,22µm,21.0s
**J26L Joseph Creek 72.04 27** P **P** **20 08 48.9 -0.7**
baz=285
J26L S **S** **20 18 09.6 -0.7**
baz=285
**DOT Dot Lake 72.06 28** IAmb IAmb 20 09 00.5
comp=Z,288nm,1.4s
**Q23K Middleton Isla 72.08 32** IAMs_20 IAMs_20 20 40 30.0
comp=Z,23µm,21.0s
**Q23K Middleton Isla 72.08 32** P **P** **20 08 49.3 -0.5**
baz=285
**EYAK Cordova Ski Ar 72.09 31** P **P** **20 08 48.5 -1.3**
baz=285,SNR=6.3
EYAK S **S** **20 18 11.5 +0.7**
baz=285
**JETT Jettan, Norway 72.24 339** *e*P **P** **20 08 51.9 +1.2**
JETT *e*S **S** **20 18 14.4 +2.1**
JETT IVMs_BB IVMs_BB 20 44 58.4
comp=Z,13µm,14.4s
**FINES FINESS Array B 72.28 330** P **P** **20 08 51.3 +0.4**
comp=Z,66nm,1.0s,baz=84,slow=7.9,SNR=41
FINES LR LR 20 43 31.2
comp=Z,31µm,18.3s,baz=71,slow=38
**FINES FINESS Array B 72.28 330** P **P** **20 08 50.2 -0.7**
FINES pP **sP** **20 09 01.8 +2.3**
**N25K Chitina, Valde 72.36 30** P **P** **20 08 51.7 +0.1**
baz=285,SNR=12
N25K S **S** **20 18 13.8 -0.2**
baz=285
**BMRM Bremner River 72.53 31** IAMs_20 IAMs_20 20 40 32.4
comp=Z,28µm,22.0s
**BMRM Bremner River 72.53 31** P **P** **20 08 52.0 -0.5**
baz=286,SNR=9.6
BMRM S **S** **20 18 16.3 +0.5**
baz=286
**L26K Log Cabin Wild 72.53 28** P **P** **20 08 52.4 -0.1**
baz=286,SNR=19
L26K S **S** **20 18 17.2 +1.3**
baz=286
**KEKH Kekaha 72.70 73** P **P** **20 08 52.9 -1.3**
KEKH IAmb IAmb 20 09 08.4
comp=Z,303nm,1.1s
**TRO Tromso 72.71 339** *e*P **P** **20 08 56.0 +2.6**
TRO *e*S **S** **20 18 19.5 +2.0**
TRO *e*SS **SS** **20 22 56.3 -0.1**
TRO IVMs_BB IVMs_BB 20 47 35.8
comp=Z,12µm,15.4s
**VSU Vasula 72.75 327** *ce*P **P** **20 08 54.3 +0.5**
VSU pmax pmax
comp=Z,998nm,1.5s
VSU MLR MLR
comp=Z,148µm,18.0s
**VSU Vasula 72.75 327** *e*P **P** **20 08 54.8 +1.0**
**VSU Vasula 72.75 327** ⇑P **P** **20 08 54.5 +0.7**
**GLB Gilahina Butte 72.77 30** IAmb IAmb 20 09 08.3
comp=Z,279nm,1.2s
GLB IAMs_20 IAMs_20 20 41 30.7
comp=Z,27µm,21.0s
**HMT Hamilton 72.86 31** IAMs_20 IAMs_20 20 42 42.3
comp=Z,25µm,20.0s
**M26K Nabesna, AK 72.86 29** IAmb IAmb 20 09 06.2
comp=Z,422nm,1.4s
M26K IAMs_20 IAMs_20 20 41 14.3
comp=Z,25µm,21.0s
**M26K Nabesna, AK 72.86 29** P **P** **20 08 54.1 -0.4**
baz=286,SNR=31
**KAIM Kayak Island 72.90 32** IAmb IAmb 20 09 10.4
comp=Z,381nm,1.0s
KAIM IAMs_20 IAMs_20 20 40 50.3
comp=Z,25µm,22.0s
**EGAK Eagle 72.96 26** IAMs_20 IAMs_20 20 45 32.3
comp=Z,16µm,20.0s
**EGAK Eagle 72.96 26** P **P** **20 08 54.3 -0.6**
baz=287
EGAK S **S** **20 18 21.2 +0.7**
baz=287
**VRDI Verde Repeater 72.99 30** P **P** **20 08 54.9 -0.6**
VRDI IAmb IAmb 20 09 08.8
comp=Z,437nm,1.7s
VRDI IAMs_20 IAMs_20 20 42 25.7
comp=Z,25µm,21.0s
**BERG Berg Lake 73.11 31** P **P** **20 08 55.0 -0.9**
BERG IAmb IAmb 20 09 11.5
comp=Z,216nm,1.0s
BERG IAMs_20 IAMs_20 20 42 50.0
comp=Z,26µm,20.0s
**SUCK Suckling Hills 73.17 31** IAMs_20 IAMs_20 20 42 27.4
comp=Z,21µm,19.0s
**L27K Beaver Creek, 73.19 28** IAMs_20 IAMs_20 20 43 47.9
comp=Z,26µm,21.0s
**L27K Beaver Creek, 73.19 28** P **P** **20 08 56.4 0.0**
baz=287
L27K S **S** **20 18 24.1 +0.8**
baz=287
**MNK Minsk 73.21 323** *i* P **P** **20 08 56.2 -0.4**
MNK *i* 20 09 12.5
MNK *i* 20 11 38.9
MNK *i* PPP PPP 20 13 23.5
MNK *i* S **S** **20 18 23.6 -0.1**
MNK *i* 20 19 03.1
MNK pmax pmax
comp=E,27nm,1.0s
MNK pmax pmax
comp=Z,227nm,1.0s
MNK pmax pmax
comp=N,35nm,1.0s
MNK MLR MLR
comp=E,2µm,18.0s
MNK MLR MLR
comp=Z,18µm,18.0s
MNK MLR MLR
comp=N,22µm,18.0s
**MNK Minsk 73.21 323** *i* P **P** **20 08 56.2 -0.4**
comp=E,27nm,1.0s
MNK *i* P **P** **20 08 56.2 -0.4**
comp=N,35nm,1.0s
MNK *i* P **P** **20 08 56.2 -0.4**
comp=Z,227nm,1.0s,baz=74
MNK *i* PcP **PcP** **20 09 12.5 -0.6**
MNK *i* PP **PP** **20 11 39.0 -0.5**
MNK *i* PPP PPP 20 13 23.5
MNK *i* S **S** **20 18 23.7 -0.1**
MNK *i* SS **SS** **20 22 57.6 -7.1**
MNK *i* SSS SSS 20 26 45.9
MNK *i* LQ LQ 20 35 13.8
MNK *i* LR LR 20 39 21.7
MNK *i* LRM MLR 20 43 15.8
comp=E,2µm,18.4s
MNK *i* LRM MLR 20 43 18.8
comp=Z,18µm,18.4s
MNK *i* LRM MLR 20 44 11.2
comp=N,22µm,18.2s
**M27K Edge Creek, AK 73.38 29** IAMs_20 IAMs_20 20 42 33.9
comp=Z,23µm,20.0s
**BGLC Bering Glacier 73.39 31** P **P** **20 08 56.6 -0.9**
baz=287
**AKASG Malin Array Be 73.47 318** P **P** **20 08 57.6 -0.6**
comp=Z,47nm,0.9s,baz=61,slow=5.7,SNR=58
**AKASG Malin Array Be 73.47 318** *i* P **P** **20 08 57.7 -0.6**
AKASG pmax pmax
comp=Z,99nm,1.0s
**AKASG Malin Array Be 73.47 318** P **P** **20 08 57.6 -0.6**
AKASG pP **sP** **20 09 09.4 +2.6**
AKASG IAmb IAmb 20 09 10.7
comp=Z,200nm,0.9s
**AKBB Malin Array Si 73.47 318** *c* i P **P** **20 08 58.0 -0.2**
**WAX Waxell Ridge 73.50 31** IAMs_20 IAMs_20 20 43 14.2
comp=Z,22µm,20.0s
**BR131 Keskin Array S 73.50 307** *c* i P **P** **20 08 59.2 +0.5**
**BR131 Keskin Array S 73.50 307** P **P** **20 08 59.4 +0.5**
SNR=27
**BR131 Keskin Array S 73.50 307** P **P** **20 08 58.7 -0.1**
BR131 IAmb IAmb 20 09 02.3
comp=Z,246nm,1.2s
BR131 pP **sP** **20 09 10.5 +3.1**
**BRTR Keskin Array B 73.50 307** P **P** **20 08 59.3 +0.4**
comp=Z,53nm,1.0s,baz=109,slow=6.0,SNR=51
BRTR LR LR 20 46 21.7
comp=Z,15µm,18.5s,baz=56,slow=40
**NOR Nord 73.55 354** *i* P **P** **20 08 58.5 +0.3**
NOR IAmb IAmb 20 09 14.8
comp=Z,3µm,3.1s
**NOR Nord 73.55 354** ⇓P **P** **20 08 58.3 +0.1**
**SNH Sunshine Point 73.58 31** IAMs_20 IAMs_20 20 41 25.5
comp=Z,21µm,20.0s
**BHL Bhannes 73.60 300** *e*P **P** **20 09 00.2 +0.7**
**IDID Didziasalis 73.62 324** *e*P **P** **20 09 00.3 +1.3**
**SHBL Chebaa 73.69 300** *e*P **P** **20 09 00.9 +0.9**
**ISLE Juniper Island 73.69 31** IAmb IAmb 20 09 11.9
comp=Z,493nm,1.7s
ISLE IAMs_20 IAMs_20 20 42 41.3
comp=Z,26µm,20.0s
**NACGM Naroch 73.71 323** *i* P **P** **20 09 00.5 +0.9**
**BVCY Beaver Creek 73.81 29** P **P** **20 09 00.2 +0.2**
baz=288,SNR=7.4
BVCY S **S** **20 18 31.6 +1.2**
baz=288
**BARN Barnard Glacie 73.87 30** IAmb IAmb 20 09 24.4
comp=Z,460nm,1.6s
**ISAL Salakas 73.88 324** *e*P **P** **20 09 02.0 +1.5**
**IIGN Ignalina 73.89 324** *e*P **P** **20 09 02.2 +1.6**
**DAWY Dawson 73.91 27** ⇓P **P** **20 09 03.2 +2.6**
**DAWY Dawson 73.91 27** IAmb IAmb 20 09 12.1
comp=Z,286nm,1.4s
**DAWY Dawson 73.91 27** P **P** **20 09 00.4 -0.3**
baz=289,SNR=17
DAWY S **S** **20 18 31.0 -0.4**
baz=289
**I29M Ogilvie Camp, 73.92 25** IAMs_20 IAMs_20 20 45 54.7
comp=Z,22µm,19.0s
**I29M Ogilvie Camp, 73.92 25** P **P** **20 09 00.4 -0.2**
baz=290,SNR=6.9
I29M S **SKiKP** **20 18 29.9 +1.5**
baz=290
**MESA MESA 74.01 31** P **P** **20 09 00.6 -0.9**
baz=288
**YAH Yahtse 74.05 31** IAMs_20 IAMs_20 20 42 03.2
comp=Z,22µm,20.0s
**MMAI Mount Meron Ar 74.06 299** LR LR 20 47 57.6
comp=Z,18µm,18.2s,baz=229,slow=41
**ANTO Ankara 74.09 307** P **P** **20 09 01.4 -0.8**
ANTO pmax pmax
comp=Z,211nm,0.9s
ANTO MLR MLR
comp=Z,16µm,19.0s
**ANTO Ankara 74.09 307** P **P** **20 09 01.4 -0.8**
ANTO IAmb IAmb 20 09 15.3
comp=Z,210nm,0.9s
ANTO IAMs_20 IAMs_20 20 45 36.1
comp=Z,15µm,19.0s
**BR231 Keskin MP Arra 74.11 307** P **P** **20 09 02.5 +0.2**
BR231 pP **sP** **20 09 12.9 +2.0**
**MTSE Matsula 74.14 327** *e*P **P** **20 09 03.5 +1.5**
**YUK3 Moose Creek 74.19 29** P **P** **20 09 02.7 +0.1**
baz=289,SNR=14
YUK3 S **S** **20 18 34.6 -0.5**
baz=289
**J29M Klondike Camp 74.26 26** IAMs_20 IAMs_20 20 45 05.8
comp=Z,20µm,20.0s
**J29M Klondike Camp 74.26 26** P **P** **20 09 03.6 +0.8**
baz=290
J29M S **S** **20 18 35.8 +0.3**
baz=290
**OPA Opana 74.30 73** IAmb IAmb 20 09 18.0
comp=Z,195nm,1.1s
**TABL Table Mountain 74.31 31** IAmb IAmb 20 09 15.1
comp=Z,374nm,1.4s
TABL IAMs_20 IAMs_20 20 43 39.5
comp=Z,24µm,20.0s
**KIP Kipapa 74.38 73** ⇑*e*P **P** **20 09 03.1 -1.0**
KIP pmax pmax
comp=Z,214nm,1.6s
**KIP Kipapa 74.38 73** IAMs_20 IAMs_20 20 35 55.1
comp=Z,20µm,21.0s
**ATD Arta Tunnel 74.43 276** LR LR 20 41 28.8
comp=Z,10µm,19.4s,baz=62,slow=36
**ATD Arta Tunnel 74.43 276** P **P** **20 09 04.7 +0.2**
SNR=17
**ATD Arta Tunnel 74.43 276** ⇓P **P** **20 09 05.5 +1.0**
**GHAJ Ghor Haditha 74.43 298** P **P** **20 09 04.5 +0.3**
GHAJ IAmb IAmb 20 09 21.8
comp=Z,248nm,1.2s
GHAJ IAMs_20 IAMs_20 20 48 17.7
comp=Z,24µm,19.0s
**STEI Steigen 74.57 338** *e*P **P** **20 09 06.2 +1.9**
STEI IVmB_BB 20 09 20.8
comp=Z,4µm,5.0s
STEI *e*S **S** **20 18 40.0 +1.4**
STEI IVMs_BB IVMs_BB 20 48 50.8
comp=Z,11µm,21.3s
**INK Inuvik 74.60 22** P **P** **20 09 04.2 -0.3**
comp=Z,84nm,0.8s,baz=289,slow=6.6,SNR=49
INK LR LR 20 44 33.9
comp=Z,17µm,19.1s,baz=292,slow=38
**INK Inuvik 74.60 22** ⇑P **P** **20 09 03.8 -0.7**
**INK Inuvik 74.60 22** P **P** **20 09 03.5 -1.0**
INK IAmb IAmb 20 09 15.7
comp=Z,565nm,1.4s
**INK Inuvik 74.60 22** P **P** **20 09 04.2 -0.3**
baz=293,SNR=43
INK S **S** **20 18 35.8 -3.1**
baz=293
**SORM Soroca 74.75 316** ⇑P **P** **20 09 05.5 -0.2**
**FAUS Fauske 74.77 337** *e*P **P** **20 09 07.3 +1.8**
FAUS IVmB_BB 20 09 21.1
comp=Z,3µm,1.4s
FAUS *e*PP **PP** **20 11 52.4 +0.1**
FAUS *e*S **S** **20 18 42.2 +1.4**
FAUS *e*SS **SS** **20 23 28.3 +0.4**
FAUS IVMs_BB IVMs_BB 20 45 53.4
comp=Z,13µm,14.6s
**KIS Kishinev 74.78 315** *e*P **P** **20 09 05.0 -1.0**
comp=Z,240nm,1.4s
**KIS Kishinev 74.78 315** *e*P **P** **20 09 05.0 -1.0**
KIS *e* 20 11 54.0
KIS *e*S **S** **20 18 39.0 -2.7**
KIS *e*PS **PnS** **20 19 04.0 -13**
KIS *e*SS **SS** **20 23 23.0 -6.1**
KIS pmax pmax
comp=Z,1µm,6.2s
KIS smax smax
comp=N,2µm,7.0s
KIS smax smax
comp=E,1µm,6.8s
KIS MLR MLR
comp=Z,9µm,18.0s
**MILM Milestii Mici 74.81 315** ⇓*i*P **P** **20 09 05.0 -1.1**
comp=Z,2µm,3.4s
**MILM Milestii Mici 74.81 315** *e*PP PP 20 11 52.0 -1.2
MILM *i* S **S** **20 18 39.0 -3.0**
comp=Z,3µm,5.8s
MILM *i* SKS SKiKP 20 18 52.0 +22
**MILM Milestii Mici 74.81 315** ⇓P **P** **20 09 05.7 -0.4**
**MILM Milestii Mici 74.81 315** *d*P **P** **20 09 05.0 -1.1**
MILM *e* 20 11 52.0
MILM *i* S **S** **20 18 39.0 -3.0**
MILM *e*PS **PnS** **20 19 06.0 -11**
MILM *e*SS **SS** **20 23 24.0 -5.5**
MILM pmax pmax
comp=Z,2µm,3.4s
MILM smax smax
comp=N,3µm,5.8s
MILM smax smax
comp=E,3µm,8.4s
MILM MLR MLR
comp=Z,21µm,17.0s
**HARA HARA 74.83 274** *e*P P 20 09 13.6 +6.5
HARA *e*S S 20 18 54.8 +11
HARA IAMs_20 IAMs_20 20 24 26.4
comp=E,5µm,23.0s
**PCA Pinnacle 74.84 31** IAmb IAmb 20 09 18.3
comp=Z,368nm,1.1s
**PINM Pinnacle 74.84 31** P **P** **20 09 06.6 +0.4**
baz=290,SNR=8.0
PINM S **S** **20 18 40.6 -1.4**
baz=290
**PABE Paberze 75.07 324** *e*P **P** **20 09 09.1 +1.6**
**LOF Lofoten 75.08 338** *e*P **P** **20 09 08.9 +1.7**
LOF IVmBBB 20 09 16.1
comp=Z,3µm,3.3s
LOF *e*S **S** **20 18 44.5 +0.3**
LOF IVMs_BB IVMs_BB 20 47 02.9
comp=Z,13µm,12.8s
**CSS Mathiatis 75.12 302** ⇑P **P** **20 09 08.8 +0.6**
**CSS Mathiatis 75.12 302** IAmb IAmb 20 09 24.5
comp=Z,265nm,1.0s
**YUK4 Talbot Arm 75.16 29** P **P** **20 09 08.3 +0.2**
baz=290,SNR=7.2
YUK4 S **S** **20 18 43.7 -2.1**
baz=290
**BCPM Bancas Point 75.18 31** P **P** **20 09 07.2 -0.8**
BCPM IAmb IAmb 20 09 13.6
comp=Z,515nm,1.6s
BCPM IAMs_20 IAMs_20 20 43 57.1
comp=Z,22µm,19.0s
**SLIT Slitere, Latvi 75.26 327** *e*P **P** **20 09 09.2 +0.8**
**TLCR 75.33 313** ⇓P **P** **20 09 10.0 +0.9**
**PNL Peninsula 75.39 31** P **P** **20 09 09.0 -0.2**
baz=290
PNL S **S** **20 18 47.2 -0.9**
baz=290
**JURR Jurilovca 75.42 313** ⇓P **P** **20 09 10.9 +1.3**
**LEF Lefka 75.42 302** ⇓P **P** **20 09 12.1 +2.3**
**YUK6 Outpost Mounta 75.43 30** P **P** **20 09 09.0 -0.7**
baz=291
**EIL Elat 75.44 296** LR LR 20 43 41.9
comp=Z,19µm,19.7s,baz=86,slow=37
**EIL Elat 75.44 296** ⇓P **P** **20 09 10.2 +0.1**
**A36M Sachs Harbour 75.50 17** P **P** **20 09 09.3 -0.3**
baz=300,SNR=39
A36M S **S** **20 18 45.2 -3.6**
baz=300
**AAL Aland 75.50 330** *e*P **P** **20 09 10.9 +1.1**
**MAYO Mayo, Yukon 75.53 27** P **P** **20 09 09.8 -0.1**
baz=292
**MOR8 Moi Rana 75.56 336** *e*P **P** **20 09 11.5 +1.4**
MOR8 IVmBBB 20 09 21.1
comp=Z,3µm,3.1s
MOR8 *e*S **S** **20 18 48.9 -0.8**
MOR8 IVMs_BB IVMs_BB 20 45 59.7
comp=Z,14µm,13.4s
**VASR Vaslui 75.56 315** ⇑P **P** **20 09 11.2 +0.7**
**AFI Afiamalu 75.61 112** LR LR 20 37 05.8
comp=Z,9µm,21.9s,baz=294,slow=32
**AFI Afiamalu 75.61 112** P **P** **20 09 09.0 -2.3**
AFI pmax pmax
comp=Z,280nm,1.2s
AFI MLR MLR
comp=Z,10µm,22.0s
**AFI Afiamalu 75.61 112** P **P** **20 09 09.0 -2.3**
AFI IAmb IAmb 20 09 16.9
comp=Z,280nm,1.2s
**VLDR Vladesti 75.62 314** ⇓P **P** **20 09 11.7 +0.9**
**TPGR Topolog 75.70 313** ⇑P **P** **20 09 12.2 +0.9**
**TATR Tatarca 75.72 314** ⇓P **P** **20 09 12.6 +1.2**
**VARL Varlezi 75.76 314** ⇓P **P** **20 09 11.8 +0.3**
**BIR Birlad 75.79 314** ⇑P **P** **20 09 11.9 +0.1**
**CFR Carcaliu 75.79 313** ⇑P **P** **20 09 12.3 +0.5**
**TIRR Tirgusor 75.83 312** ⇑P **P** **20 09 12.9 +0.9**
**TIRR Tirgusor 75.83 312** ⇑P **P** **20 09 12.0 0.0**
**TIRR Tirgusor 75.83 312** IAmb IAmb 20 09 25.1
comp=Z,280nm,0.9s
**HYT Haines Junctio 75.86 30** IAmb IAmb 20 09 29.8
comp=Z,236nm,1.1s
**HYT Haines Junctio 75.86 30** P **P** **20 09 12.3 +0.2**
baz=292
HYT S **S** **20 18 54.9 +1.4**
baz=292
**KONS Konsvik 75.91 337** *e*P **P** **20 09 14.8 +2.8**
KONS *e*S **S** **20 18 55.8 +2.3**
**IZVR Izvoarele 75.92 314** ⇓P **P** **20 09 13.4 +0.8**
**PBUR Paburge 75.99 325** *e*P **P** **20 09 14.1 +1.4**
**SUW Suwalki 75.99 323** *e*P **P** **20 09 12.6 -0.2**
SUW *e*PcP **PcP** **20 09 24.2 -0.9**
SUW *e*S **S** **20 18 51.3 -3.5**
SUW *e*L L 20 47 12.3
comp=Z,32µm,19.4s
**SUW Suwalki 75.99 323** P **P** **20 09 12.4 -0.4**
SUW pmax pmax
comp=Z,2µm,1.0s
SUW MLR MLR
comp=Z,36µm,19.0s
**SUW Suwalki 75.99 323** *e*P **P** **20 09 12.9 +0.2**
**SUW Suwalki 75.99 323** ⇑P **P** **20 09 13.0 +0.2**
**SUW Suwalki 75.99 323** P **P** **20 09 12.4 -0.4**
**GHRR 76.00 314** ⇑P **P** **20 09 13.4 +0.4**
**STOK Stokkvaagen 76.02 337** *e*P **P** **20 09 14.6 +2.0**
STOK *e*S **S** **20 18 56.4 +1.7**
**HARR Harsova 76.08 313** ⇑P **P** **20 09 14.4 +0.9**
**EUNU Eureka 76.21 5** ⇑P **P** **20 09 13.3 -0.3**
**EUNU Eureka 76.21 5** IAmb IAmb 20 09 25.4
comp=Z,546nm,1.8s
**ODBI Odobesti 76.33 314** ⇓P **P** **20 09 16.8 +1.9**
**ICOR Ion Corvin 76.35 312** ⇑P **P** **20 09 16.0 +1.0**
**TESR Tescani 76.35 315** ⇑P **P** **20 09 15.5 +0.5**
**N31M Braeburn, Yuko 76.39 29** IAmb IAmb 20 09 30.1
comp=Z,237nm,1.2s
N31M IAMs_20 IAMs_20 20 44 16.4
comp=Z,19µm,20.0s
**N31M Braeburn, Yuko 76.39 29** P **P** **20 09 15.4 +0.5**
baz=293
N31M S **S** **20 18 59.4 +0.4**
baz=293
**ISP Isparta 76.39 305** *ce*P **P** **20 09 16.2 +0.7**
ISP pmax pmax
comp=Z,276nm,1.5s
ISP MLR MLR
comp=Z,13µm,22.0s
**AMRR Amara 76.51 313** ⇓P **P** **20 09 18.0 +2.1**
**VRI Vrincioaia 76.51 314** ⇑P **P** **20 09 17.4 +1.5**
**MQOL MQOL 76.55 287** *i* S **PP** **20 12 10.9 +2.3**
**MQOL MQOL 76.55 287** *i* P **P** **20 09 17.2 +0.7**
**MQOL MQOL 76.55 287** AMP 20 09 35.7
comp=E,246nm,4.6s
**PLOR Plostina 76.57 314** ⇑P **P** **20 09 17.4 +1.2**
**M31M Drury Creek, Y 76.71 28** IAMs_20 IAMs_20 20 41 50.9
comp=Z,18µm,22.0s
**M31M Drury Creek, Y 76.71 28** P **P** **20 09 16.6 -0.1**
baz=294
M31M S **S** **20 19 05.1 +2.6**
baz=294
**UPP Uppsala 76.73 330** *e*P **P** **20 09 17.9 +1.2**
**COVR Voineasa-Covas 76.86 314** ⇑P **P** **20 09 18.6 +0.6**
**ISR Istrita 76.88 314** ⇓P **P** **20 09 20.1 +2.1**
**LVV L'vov 76.91 319** *e*P **P** **20 09 18.0 -0.1**
LVV *e* 20 09 30.7
LVV *e* 20 12 07.7
LVV *e*PPP PPP 20 13 55.5
LVV *e*S **S** **20 19 01.4 -3.7**
LVV *e*PS **PnS** **20 19 45.1 +0.7**

LVV pmax pmax
comp=Z,500nm,1.4s
BURAR **Bucovina Array** **76.92 316** ⇓P **P** **20 09 18.9 +0.6**
BURAR **Bucovina Array** **76.92 316** P **P** **20 09 18.3 +0.1**
BURAR pP **PcP** **20 09 30.3 +0.9**
**NEHR** **Nehoiu** **76.94 314** ⇑P **P** **20 09 19.7 +1.3**
**OZUR** **77.05 315** ⇑P **P** **20 09 20.2 +1.2**
**WHY** **Whitehorse** **77.11 29** IAmb IAmb 20 09 31.4
comp=Z,257nm,1.2s
**WHY** **Whitehorse** **77.11 29** P **P** **20 09 19.2 0.0**
baz=294
WHY S **S** **20 19 09.7 +2.5**
baz=294
**FARO** **Faro, Yukon** **77.14 27** P **P** **20 09 18.7 -0.5**
baz=295
FARO S **S** **20 19 08.3 +1.0**
baz=295
**MLR** **Muntele Rosu** **77.15 314** ⇓P **P** **20 09 21.1 +1.4**
**MLR** **Muntele Rosu** **77.15 314** LR LR 20 48 12.8
comp=Z,26µm,19.6s,baz=54,slow=40
**MLR** **Muntele Rosu** **77.15 314** P **P** **20 09 19.3 -0.4**
MLR pmax pmax
comp=Z,238nm,1.1s
MLR MLR MLR
comp=Z,31µm,21.0s
**MLR** **Muntele Rosu** **77.15 314** P **P** **20 09 19.2 -0.4**
MLR IAmb IAmb 20 09 43.2
comp=Z,238nm,1.1s
**C36M** **Paulatuk** **77.18 19** P **P** **20 09 18.1 -1.0**
baz=301,SNR=68
C36M S **S** **20 19 04.3 -3.0**
baz=301
**NSS** **Namsos** **77.20 335** *e*P **P** **20 09 21.1 +1.7**
NSS *e*S **S** **20 19 07.5 -0.2**
NSS IVMs_BB IVMs_BB 20 47 01.2
comp=Z,25µm,15.8s
**SULR** **77.22 313** ⇓P **P** **20 09 21.1 +1.3**
**SECR** **77.22 314** ⇑P **P** **20 09 21.9 +1.9**
**DOPR** **Dopca** **77.36 315** ⇓P **P** **20 09 21.7 +1.0**
**SKAG** **Skagway** **77.39 31** ⇓P **P** **20 09 21.6 +1.1**
**SKAG** **Skagway** **77.39 31** P **P** **20 09 20.5 0.0**
SKAG IAmb IAmb 20 09 40.2
comp=Z,234nm,1.0s
**SKAG** **Skagway** **77.39 31** P **P** **20 09 21.2 +0.6**
baz=294
SKAG S **S** **20 19 12.0 +2.1**
baz=294
**DESE** **Dese** **77.52 277** *e*P **P** **20 09 24.0 +1.5**
DESE *e*S **SKSac** **20 19 29.4 -6.2**
DESE IAMs_20 IAMs_20 20 25 16.9
comp=E,4µm,28.6s
**DAG** **Danmarks Havn** **77.54 351** *i* P **P** **20 09 20.0 -1.1**
DAG IAmb IAmb 20 09 35.8
comp=Z,4µm,3.1s
**DAG** **Danmarks Havn** **77.54 351** ⇑P **P** **20 09 19.0 -2.1**
**SGRR** **Singureni** **77.56 313** ⇓P **P** **20 09 22.4 +0.7**
**ARCR** **ARCALIA** **77.65 316** ⇑P **P** **20 09 23.8 +1.6**
**VOIR** **77.76 314** ⇑P **P** **20 09 23.2 +0.2**
**KWP** **Kalwaria Pacla** **77.78 319** *e*P **P** **20 09 23.7 +0.7**
KWP *e*PcP **PcP** **20 09 32.6 -0.3**
KWP *e*PP PP 20 12 27.0 +8.9
KWP *e*S **S** **20 19 13.6 -1.0**
KWP *e*L L 20 50 29.1
comp=Z,27µm,20.7s
**KWP** **Kalwaria Pacla** **77.78 319** ⇑P **P** **20 09 24.1 +1.1**
**MTUR** **Matau** **77.83 314** ⇑P **P** **20 09 23.7 +0.3**
**MMPY** **Sheldon Lake,** **77.85 27** P **P** **20 09 23.4 +0.2**
baz=296
**SZH** **Strazhica** **77.91 312** *i* P **P** **20 09 26.6 +2.8**
**ANKE** **Ethiopia-Afar** **77.98 275** *e*P **P** **20 09 27.6 +2.5**
ANKE *e*S S 20 19 27.9 +9.4
ANKE IAMs_20 IAMs_20 20 20 07.2
comp=E,1µm,12.9s
**BMR** **Baia Mare** **77.99 317** ⇓P **P** **20 09 24.6 +0.4**
**SBV** **Sambava** **78.04 250** P P 20 09 34.6 +10
**ARR** **Arges** **78.06 314** ⇓P **P** **20 09 25.3 +0.6**
**COPA** **Copaceanca** **78.10 313** ⇓P **P** **20 09 26.7 +1.9**
**BEL** **Belsk** **78.11 321** *e*P **P** **20 09 25.1 +0.4**
BEL *e*SP **PcP** **20 09 37.4 +3.1**
BEL *e*S **S** **20 19 18.5 +0.5**
**BEL** **Belsk** **78.11 321** ⇓P **P** **20 09 26.5 +1.7**
BEL ⇓P **PcP** **20 09 37.2 +2.9**
BEL ⇑P **PcP** **20 09 37.4 +3.1**
**HUMR** **Humele** **78.12 313** ⇑P **P** **20 09 25.3 +0.3**
**P33M** **Teslin, Yukon** **78.23 29** IAmb IAmb 20 09 38.1
comp=Z,566nm,1.9s
P33M IAMs_20 IAMs_20 20 44 38.9
comp=Z,19µm,20.0s
**P33M** **Teslin, Yukon** **78.23 29** P **P** **20 09 24.8 -0.6**
baz=296
P33M S **S** **20 19 18.9 -0.3**
baz=296
**CJR** **Cluj-Napoca** **78.26 316** ⇓P **P** **20 09 27.0 +1.2**
**CBBR** **Cluj-Babes-Bol** **78.27 316** ⇑P **P** **20 09 26.8 +1.1**
**JIS** **Juneau Island** **78.32 31** IAmb IAmb 20 09 41.0
comp=Z,234nm,1.2s
JIS IAMs_20 IAMs_20 20 44 45.2
comp=Z,16µm,19.0s
**PVL** **Pavlikeni** **78.34 312** *i* P **P** **20 09 29.2 +3.0**
**SIT** **Sitka** **78.37 33** P **P** **20 09 25.4 -0.6**
SIT pmax pmax
comp=Z,265nm,1.2s
**SIT** **Sitka** **78.37 33** P **P** **20 09 25.4 -0.6**
SIT IAmb IAmb 20 09 41.1
comp=Z,265nm,1.2s
**SIT** **Sitka** **78.37 33** P **P** **20 09 26.2 +0.2**
baz=294
**UZH** **Uzhgorod** **78.40 318** *e*P **P** **20 09 25.8 -0.6**
UZH *i* 20 09 29.1
UZH *i* 20 09 35.0
UZH *e* 20 12 17.8
UZH *i*S **S** **20 19 16.5 -4.7**
UZH *e*SS **SS** **20 24 17.6 -5.9**
**HFS** **Hagfors** **78.42 331** LR LR 20 47 12.2
comp=Z,52µm,19.2s,baz=62,slow=38
**TRPA** **Tarpa** **78.42 317** ⇓P **P** **20 09 27.4 +0.8**
**TRPA** **Tarpa** **78.42 317** P **P** **20 09 27.1 +0.6**
**TBLU** **Trondheim** **78.46 334** *e*P **P** **20 09 27.9 +1.4**
TBLU IVmB_BB 20 09 36.2
comp=Z,4µm,5.3s
TBLU *e*S **S** **20 19 20.8 -0.6**
TBLU *e*SS **SS** **20 24 26.2 +2.5**
TBLU IVMs_BB IVMs_BB 20 52 02.5
comp=Z,15µm,16.5s
**MESR** **Meseseni** **78.52 316** ⇓P **P** **20 09 28.3 +1.1**
**LOT** **Lotru** **78.60 315** ⇓P **P** **20 09 28.4 +0.6**
**DIM** **Dimitrovgrad** **78.61 311** *i* P **P** **20 09 30.8 +3.1**
**ALN** **Alexandroupoli** **78.65 310** ⇑P **P** **20 09 30.4 +2.5**
ALN ⇑P **PcP** **20 09 39.8 +2.9**
**RAO** **Raoul Island** **78.66 128** LR LR 20 41 58.1
comp=Z,5µm,18.2s,baz=319,slow=34
**VLAD** **Vladila** **78.70 313** ⇑P **P** **20 09 28.8 +0.7**
**STHS** **Stebnicka Huta** **78.75 319** *e*P **P** **20 09 30.6 +2.2**
STHS *e* 20 09 39.9
**DRGR** **78.80 316** ⇑P **P** **20 09 29.7 +1.0**
**CRVS** **Cervenica-Dubn** **78.81 318** *e*P **P** **20 09 29.8 +1.1**
CRVS *e*S **S** **20 19 18.6 -7.1**
CRVS *e*SS **SS** **20 24 36.6 +6.9**
CRVS *e*L L 20 50 25.9
**RDO** **Rodhopi** **78.92 310** ⇑P **P** **20 09 31.9 +2.5**
**LTVH** **Ltavrtes, Hu** **79.10 317** P **P** **20 09 34.0 +3.7**
**NC602** **NORSAR Array S** **79.10 332** *e*P **P** **20 09 31.4 +1.4**
NC602 *e*S **S** **20 19 28.2 -0.1**
**NC602** **NORSAR Array S** **79.10 332** IAmb IAmb 20 09 43.0
comp=Z,567nm,1.4s
**NB2** **NORSAR Subarra** **79.10 332** P **P** **20 09 30.7 +0.6**
comp=Z,605nm,1.4s,baz=62,slow=5.6
**NB2** **NORSAR Subarra** **79.10 332** P **P** **20 09 30.7 +0.6**
baz=62,slow=5.6
**NOA** **NORSAR Array B** **79.10 332** P **P** **20 09 29.9 -0.2**
comp=Z,12nm,0.3s,baz=74,slow=5.7,SNR=31
NOA LR LR 20 48 12.1
comp=Z,82µm,18.1s,baz=65,slow=38
**PLD** **Plovdiv** **79.17 311** *i* P **P** **20 09 32.4 +1.7**
**NC204** **NORSAR Array S** **79.18 332** P **P** **20 09 28.6 -1.9**
**BORR** **Bors** **79.28 317** ⇓P **P** **20 09 31.7 +0.5**
**OJC** **Ojcow** **79.31 320** *e*P **P** **20 09 32.0 +0.6**
OJC *e*S **S** **20 19 29.7 -1.2**
OJC *e*SS **SS** **20 24 38.8 +1.6**
**OJC** **Ojcow** **79.31 320** P **P** **20 09 31.0 -0.4**
**OJC** **Ojcow** **79.31 320** ⇓P **P** **20 09 31.9 +0.6**
OJC ⇑P **sP** **20 09 44.0 +4.0**
**OJC** **Ojcow** **79.31 320** P **P** **20 09 31.0 -0.4**

**NIE** **Niedzica** **79.32 319** *e*P **P** **20 09 33.1 +1.6**
NIE *e*PcP **sP** **20 09 40.5 +0.3**
NIE *e*PP PP 20 12 42.8 +12
NIE *e*S **S** **20 19 31.6 +0.5**
NIE *e*SS **SS** **20 24 40.9 +3.4**
**NAO01** **NORSAR Array S** **79.33 332** IAmb IAmb 20 09 44.2
comp=Z,404nm,1.1s
**PGB** **Panagyurishte** **79.38 312** *i* P **P** **20 09 34.8 +2.8**
**HIZ** **Hauiti** **79.48 140** P **P** **20 09 34.9 +2.6**
**HIZ** **Hauiti** **79.48 140** P **P** **20 09 35.3 +3.0**
**NEZ** **North Egmont** **79.52 141** P P 20 09 37.9 +5.3
**DOMB** **Dombas** **79.53 334** *e*P **P** **20 09 33.2 +0.9**
DOMB IVmB_BB 20 09 45.3
comp=Z,4µm,2.5s
DOMB *e*S **S** **20 19 33.3 +0.4**
DOMB IVMs_BB IVMs_BB 20 47 54.0
comp=Z,25µm,13.2s
**GKP** **Gorka Klasztor** **79.55 324** *e*P **P** **20 09 34.3 +1.8**
GKP *e*pP **sP** **20 09 41.9 +0.7**
GKP *e*S **S** **20 19 34.8 +1.5**
GKP *e*L L 20 48 34.2
comp=Z,47µm,18.9s
**GKP** **Gorka Klasztor** **79.55 324** *e*P **P** **20 09 34.4 +1.8**
**KECS** **Kecovo** **79.56 318** *e*P **P** **20 09 34.4 +1.6**
KECS *e* 20 09 45.2
**PUNG** **Punghina** **79.58 314** ⇑P **P** **20 09 34.2 +1.3**
**NIUE** **Niue** **79.62 116** P **P** **20 09 35.7 +2.2**
comp=Z,282nm,1.6s
**QRZ** **Quartz Range** **79.66 143** P **P** **20 09 33.9 +0.7**
**SIRR** **Siria** **79.67 316** ⇓P **P** **20 09 34.1 +0.7**
**HERR** **Herculane** **79.70 314** ⇓P **P** **20 09 34.3 +0.7**
**NEEM** **North Greenlan** **79.74 358** *i* P **P** **20 09 34.4 +0.7**
NEEM IAmb IAmb 20 09 50.2
comp=Z,492nm,1.0s
**DBG** **Daneborg** **79.75 350** *i* P **P** **20 09 34.4 +1.0**
DBG IAmb IAmb 20 09 48.3
comp=Z,4µm,3.2s
**LREZ** **Lake Rotokare** **79.83 141** P **P** **20 09 37.6 +3.4**
**OSL** **Oslo** **79.83 331** *e*P **P** **20 09 35.3 +1.3**
OSL *e*S **S** **20 19 36.0 -0.1**
OSL IVMs_BB IVMs_BB 20 47 52.6
comp=Z,28µm,17.2s
**MOL** **Molde** **79.88 334** *e*P **P** **20 09 36.2 +2.1**
MOL IVmB_BB 20 09 41.5
comp=Z,2µm,2.5s
MOL *e*S **S** **20 19 37.3 +0.9**
MOL IVMs_BB IVMs_BB 20 48 07.4
comp=Z,15µm,15.3s
**JMIC** **Jan Mayen** **79.92 345** *e*P **P** **20 09 34.8 +0.5**
JMIC *e*S **S** **20 19 38.2 +1.5**
**LANS** **Liptovska Anna** **79.92 319** *e*P **P** **20 09 36.2 +1.4**
LANS *e* 20 09 47.1
**DEL** **Delary** **79.94 327** *e*P **P** **20 09 35.7 +1.0**
**BZS** **Buzias** **79.95 315** ⇓P **P** **20 09 34.6 -0.3**
**VTS** **Vitosha** **79.99 312** ⇓P **P** **20 09 36.7 +1.2**
**VTS** **Vitosha** **79.99 312** ⇓P **P** **20 09 36.2 +0.8**
**VTS** **Vitosha** **79.99 312** IAmb IAmb 20 09 49.3
comp=Z,310nm,0.9s
**VTS** **Vitosha** **79.99 312** *i* P **P** **20 09 36.6 +1.2**
**RES** **Resolute Bay** **80.00 9** P **P** **20 09 34.4 -0.3**
comp=Z,54nm,0.9s,baz=308,slow=5.8,SNR=34
RES LR LR 20 49 49.8
comp=Z,9µm,19.2s,baz=324,slow=39
**RES** **Resolute Bay** **80.00 9** ⇓P **P** **20 09 37.3 +2.6**
**RES** **Resolute Bay** **80.00 9** P **P** **20 09 33.9 -0.8**
RES IAmb IAmb 20 09 46.1
comp=Z,604nm,1.6s
**BSD** **Bornholm Skovb** **80.01 326** *i* P P 20 09 46.9 +12
BSD IAmb IAmb 20 09 48.3
comp=Z,555nm,1.2s
**BSD** **Bornholm Skovb** **80.01 326** *e*P **P** **20 09 36.3 +1.2**
**BSD** **Bornholm Skovb** **80.01 326** ⇑P **P** **20 09 37.4 +2.4**
BSD ⇓s **sP** **20 09 47.0 +3.3**
BSD ⇑s **sP** **20 09 47.3 +3.6**
**MMB** **Musomiste** **80.03 311** *i* P **P** **20 09 37.9 +2.4**
**WTLY** **Watson Lake, Y** **80.06 28** P **P** **20 09 34.8 -0.5**
baz=299
**WRAK** **Wrangell Islan** **80.12 33** P **P** **20 09 35.3 -0.4**
**WRAK** **Wrangell Islan** **80.12 33** IAMs_20 IAMs_20 20 45 06.4
comp=Z,13µm,20.0s
**WRAK** **Wrangell Islan** **80.12 33** P **P** **20 09 35.6 -0.1**
baz=297
**DCZ** **Deep Cove** **80.14 149** IAMs_20 IAMs_20 20 44 29.5
comp=Z,14µm,21.0s
**PSZ** **Piszkesteto** **80.15 318** ⇓P **P** **20 09 36.0 -0.1**
**PSZ** **Piszkesteto** **80.15 318** ⇑P **P** **20 09 36.9 +0.8**
**PSZ** **Piszkesteto** **80.15 318** IAmb IAmb 20 09 50.4
comp=Z,561nm,1.6s
**PSZ** **Piszkesteto** **80.15 318** P **P** **20 09 37.0 +1.0**
**CRAG** **Craig** **80.15 34** P **P** **20 09 34.9 -0.9**
baz=296
**BSZH** **Besenyszg** **80.16 317** ⇑P **P** **20 09 36.8 +0.8**
**BSZH** **Besenyszg** **80.16 317** P **P** **20 09 39.2 +3.2**
**MDVR** **Moldovita** **80.20 314** ⇓P **P** **20 09 36.9 +0.5**
**AMBH** **Ambrzfalva** **80.24 316** ⇓P **P** **20 09 37.4 +1.0**
**AMBH** **Ambrzfalva** **80.24 316** P **P** **20 09 39.8 +3.3**
**PKVZ** **Pokaka** **80.27 140** P **P** **20 09 37.6 +0.9**
**AKN** **Aaknes** **80.30 334** *e*P **P** **20 09 38.3 +1.8**
AKN IVmB_BB 20 09 41.0
comp=Z,2µm,3.1s
AKN *e*S **S** **20 19 42.7 +1.7**
AKN IVMs_BB IVMs_BB 20 48 29.7
comp=Z,25µm,14.2s
**WTVZ** **West Tongariro** **80.30 140** P **P** **20 09 39.4 +2.4**
**RAC** **Raciborz** **80.31 320** *e*P **P** **20 09 38.1 +1.3**
**RAC** **Raciborz** **80.31 320** *e*S **S** **20 19 41.9 +0.5**
RAC LMZ LR 20 45 29.7
comp=Z,22nm,21.8s
**DLBC** **Dease Lake** **80.31 30** P **P** **20 09 35.7 -1.0**
comp=Z,23nm,0.7s,baz=290,slow=5.0,SNR=25
DLBC LR LR 20 45 53.4
comp=Z,23µm,21.1s,baz=320,slow=36
**DLBC** **Dease Lake** **80.31 30** IAmb IAmb 20 09 51.2
comp=Z,657nm,2.0s
**NNVZ** **North Ngauruho** **80.33 140** P **P** **20 09 38.6 +1.5**
**NGZ** **Ngauruhoe** **80.35 140** P **P** **20 09 37.9 +0.6**
**FWVZ** **Far West T-bar** **80.37 140** P **P** **20 09 38.1 +0.7**
**TMVZ** **Te Maari** **80.37 140** P **P** **20 09 38.1 +0.8**
**KKB** **Krupnik** **80.38 311** *i* P **P** **20 09 38.2 +0.8**
**OTVZ** **Oturere** **80.38 140** P **P** **20 09 38.0 +0.6**
**SNVZ** **South Ngauruho** **80.38 140** P **P** **20 09 39.1 +1.7**
**NNZ** **Nelson** **80.40 142** P **P** **20 09 36.0 -1.2**
NNZ IAmb IAmb 20 10 15.4
comp=Z,393nm,1.7s
**MTVZ** **Mangateitei** **80.41 140** P **P** **20 09 40.8 +3.4**
**OKC** **Ostrava-Krasne** **80.44 320** *e*P **P** **20 09 38.3 +0.8**
OKC *e*S **S** **20 19 43.7 +0.9**
OKC MLR MLR
comp=Z,20µm,14.7s
**OKC** **Ostrava-Krasne** **80.44 320** *e*P **P** **20 09 38.3 +0.8**
OKC *e*S **S** **20 19 43.7 +0.9**
OKC AMS AMS 20 48 10.0
comp=Z,20µm,14.7s
**TUVZ** **Tukino** **80.44 140** P **P** **20 09 38.4 +0.7**
**WNVZ** **Wahianoa** **80.44 140** P **P** **20 09 39.2 +1.4**
**DILA** **Dilla** **80.47 273** *e*P **P** **20 09 40.6 +2.0**
DILA *e*S **S** **20 19 51.7 +7.0**
DILA IAMs_20 IAMs_20 20 20 21.1
comp=E,10µm,27.8s
**KONO** **Kongsberg** **80.47 331** *e*P **P** **20 09 38.6 +1.1**
KONO IVmB_BB 20 09 49.4
comp=Z,3µm,4.5s
KONO *e*S **S** **20 19 42.9 +0.1**
KONO IVMs_BB IVMs_BB 20 48 22.8
comp=Z,23µm,15.9s
**THZ** **Tophouse** **80.50 143** IAMs_20 IAMs_20 20 42 37.2
comp=Z,21µm,22.0s
**SKAR** **Skarslia** **80.52 333** IVmB_BB 20 09 36.2
comp=Z,3µm,4.2s
SKAR *e*P **P** **20 09 40.0 +2.2**
SKAR *e*S **S** **20 19 44.1 +0.6**
SKAR *e*SS **SS** **20 24 56.5 +1.7**
SKAR IVMs_BB IVMs_BB 20 48 44.2
comp=Z,33µm,16.8s
**MLZ** **Mavora Lakes** **80.53 148** P **P** **20 09 37.4 -0.5**
MLZ IAmb IAmb 20 10 04.2
comp=Z,288nm,1.6s
MLZ IAMs_20 IAMs_20 20 43 39.9
comp=Z,14µm,21.0s
**VYHS** **Vyhne** **80.57 319** *e*P **P** **20 09 39.3 +1.0**
VYHS *e* 20 09 50.6
VYHS *e*S **S** **20 19 40.0 -4.3**
VYHS *e*L L 20 51 32.5

**MOVZ** **Moawhango** **80.59 140** P **P** **20 09 38.0 -0.4**
**TULEG** **Thule** **80.61 2** *i* P **P** **20 09 37.0 -0.9**
**TULEG** **Thule** **80.61 2** ⇑P **P** **20 09 38.2 +0.3**
TULEG ⇑P **pP** **20 09 39.4 -4.9**
**TULEG** **Thule** **80.61 2** IAmb IAmb 20 09 55.3
comp=Z,539nm,1.8s
**BOVS** **Bovan** **80.65 313** ⇑P **P** **20 09 39.0 +0.2**
**WRGLY** **Wrigley** **80.65 24** P **P** **20 09 38.5 +0.2**
baz=303
**URZ** **Urewera** **80.68 138** P **P** **20 09 38.3 -0.5**
comp=Z,13nm,0.5s,baz=354,slow=1.7,SNR=20
URZ LR LR 20 44 46.0
comp=Z,13µm,19.5s,baz=308,slow=35
**URZ** **Urewera** **80.68 138** ⇓P **P** **20 09 37.9 -0.9**
**URZ** **Urewera** **80.68 138** P **P** **20 09 38.5 -0.3**
**URZ** **Urewera** **80.68 138** P **P** **20 09 38.5 -0.3**
**HAZ** **Te Kaha** **80.78 138** P **P** **20 09 38.5 -0.9**
**KOLL** **Kolacno** **80.80 319** *e*P **P** **20 09 40.6 +1.1**
KOLL *e* 20 09 52.0
**MORC** **Moravsky Berou** **80.82 320** ⇓P **P** **20 09 40.3 +0.7**
**MORC** **Moravsky Berou** **80.82 320** *e*P **P** **20 09 40.1 +0.5**
MORC *e* 20 09 51.7
MORC *e*S **S** **20 19 44.5 -2.4**
**MORC** **Moravsky Berou** **80.82 320** ⇑P **P** **20 09 40.5 +0.9**
**MORC** **Moravsky Berou** **80.82 320** IAmb IAmb 20 09 54.1
comp=Z,365nm,1.2s
**BHHZ** **Black Hill Sta** **80.82 140** P **P** **20 09 39.2 -0.4**
**RTZ** **Ruatahuna** **80.82 139** P **P** **20 09 36.5 -3.2**
**WHZ** **Wether Hill Ro** **80.83 149** IAMs_20 IAMs_20 20 44 48.8
comp=Z,16µm,21.0s
**RPZ** **Rata Peaks** **80.84 146** P **P** **20 09 38.3 -1.2**
RPZ IAmb IAmb 20 09 58.2
comp=Z,226nm,1.1s
**RPZ** **Rata Peaks** **80.84 146** P **P** **20 09 39.8 +0.2**
**RUGZ** **Raukumara Rang** **80.85 138** P **P** **20 09 38.4 -1.4**
**LBZ** **Lake Benmore** **80.86 146** IAmb IAmb 20 10 05.5
comp=Z,348nm,1.5s
LBZ IAMs_20 IAMs_20 20 42 12.6
comp=Z,15µm,22.0s
**BUD** **Budapest** **80.86 318** P **P** **20 09 42.1 +2.3**
**BKZ** **Black Stump Fm** **80.88 139** P **P** **20 09 39.4 -0.5**
**BKZ** **Black Stump Fm** **80.88 139** P **P** **20 09 39.2 -0.7**
BKZ IAMs_20 IAMs_20 20 41 10.2
comp=Z,25µm,22.0s
**BKZ** **Black Stump Fm** **80.88 139** P **P** **20 09 39.6 -0.3**
**MTHZ** **Maungataniwha** **80.89 139** P **P** **20 09 39.5 -0.5**
**VAY** **Valandovo** **80.94 311** *i* P **P** **20 09 40.7 +0.3**
**MWZ** **Matawai** **80.98 138** P **P** **20 09 40.5 0.0**
**MXZ** **Matakaoa Point** **80.99 137** P **P** **20 09 41.5 +1.0**
**KWHZ** **Kaweka Forest** **81.00 140** P **P** **20 09 41.2 +0.7**
**PKGZ** **Pakihiroa** **81.05 138** P **P** **20 09 41.5 +0.7**
**STIP** **Stip** **81.06 311** *i* P **P** **20 09 40.3 -0.7**
**RGN** **Rugen** **81.09 326** *e*P **P** **20 09 42.0 +1.2**
**RGN** **Rugen** **81.09 326** *e*P **P** **20 09 41.8 +1.0**
comp=Z,593nm,1.3s,baz=61,slow=5.0
RGN *e*sP **sP** **20 09 53.0 +3.5**
baz=61,slow=5.1
**OXZ** **Oxford** **81.09 145** IAMs_20 IAMs_20 20 44 08.8
comp=Z,14µm,21.0s
**KSP** **Ksiaz** **81.10 322** *e*P **P** **20 09 41.4 +0.4**
KSP *e*sP **sP** **20 09 52.6 +3.0**
KSP *e*PP PP 20 12 55.1 +9.4
KSP *e*S **S** **20 19 48.6 -1.1**
KSP *e*SS **SS** **20 24 56.3 -7.5**
KSP *e*L L 20 50 49.4
comp=Z,27µm,18.4s
**KSP** **Ksiaz** **81.10 322** ⇓P **P** **20 09 41.7 +0.7**
KSP ⇓s **sP** **20 09 53.7 +4.0**
**KRHZ** **Kereru** **81.11 140** P **P** **20 09 41.8 +0.7**
**JAVC** **Velka Javorina** **81.12 319** *e*P **P** **20 09 43.1 +1.8**
JAVC *e* 20 09 54.7
JAVC *e*S **S** **20 19 49.5 -0.7**
**KRLC** **Kraliky** **81.14 321** *e*P **P** **20 09 42.0 +0.7**
KRLC *e*S **S** **20 19 50.8 +0.5**
KRLC MLR MLR
comp=Z,21µm,14.7s
**KRLC** **Kraliky** **81.14 321** *e*P **P** **20 09 42.0 +0.7**
KRLC *e*S **S** **20 19 50.8 +0.5**
KRLC AMS AMS 20 47 30.0
comp=Z,21µm,14.7s
**SNGZ** **Shannon Statio** **81.15 139** P **P** **20 09 37.3 -4.1**
**TWGZ** **Tauwhareparae** **81.17 138** P **P** **20 09 41.4 -0.1**
**SRO** **Srobarova** **81.17 318** *e*P **P** **20 09 43.2 +1.8**
**PNHZ** **Pukenui** **81.18 140** P **P** **20 09 41.9 +0.4**
**WMGZ** **Waiomatatini S** **81.22 137** P **P** **20 09 42.5 +0.8**
**OSTC** **Ostas** **81.26 321** *e*P **P** **20 09 43.6 +1.7**
OSTC *e*S **S** **20 19 51.4 -0.1**
OSTC AMS AMS 20 51 00.0
comp=Z,22µm,15.1s
**PUZ** **Puketiti** **81.27 138** P **P** **20 09 45.3 +3.3**
**KHZ** **Kahutara** **81.29 143** ⇑P **P** **20 09 40.9 -1.0**
KHZ ⇓P **PcP** **20 09 43.3 -4.7**
**KHZ** **Kahutara** **81.29 143** P **P** **20 09 41.5 -0.4**
**MRZ** **Mangatainoka R** **81.29 141** P **P** **20 09 41.2 -0.9**
**FRGS** **Fruska Gora** **81.30 315** ⇑P **P** **20 09 42.1 -0.2**
**FRGS** **Fruska Gora** **81.30 315** ⇓*i*P **P** **20 09 41.4 -0.8**
**CHVC** **Chvalec** **81.34 321** *e*P **P** **20 09 43.1 +0.7**
CHVC AMS AMS 20 51 00.0
comp=Z,26µm,15.6s
**RIGZ** **Rimuhau** **81.36 138** P **P** **20 09 44.3 +1.8**
**CSKK** **Cskako** **81.38 318** P **P** **20 09 43.5 +0.9**
**FOO** **Floro** **81.39 334** *e*P **P** **20 09 42.1 -0.2**
FOO IVmB_BB 20 09 55.5
comp=Z,5µm,3.5s
FOO *e*S **S** **20 19 52.9 +0.6**
FOO *e*SS **SS** **20 25 13.2 +5.7**
FOO IVMs_BB IVMs_BB 20 49 10.5
comp=Z,24µm,15.2s
**DVHZ** **Dannevirke** **81.40 140** P **P** **20 09 42.0 -0.6**
**UPC** **Upice** **81.40 321** *e*P **P** **20 09 43.5 +0.9**
UPC *e*S **S** **20 19 54.1 +1.2**
UPC MLR MLR
comp=Z,25µm,14.8s
**UPC** **Upice** **81.40 321** *e*P **P** **20 09 43.5 +0.9**
UPC *e*S **S** **20 19 54.1 +1.2**
UPC AMS AMS 20 48 30.0
comp=Z,25µm,14.8s
**SMOL** **Smolenice** **81.41 319** *e*P **P** **20 09 44.1 +1.3**
SMOL *e* 20 09 56.0
**LIT** **Litokhoron** **81.46 310** ⇑P **P** **20 09 44.9 +1.7**
**LIT** **Litokhoron** **81.46 310** IAmb IAmb 20 09 58.8
comp=Z,511nm,1.7s
**SKO** **Skopje** **81.47 312** *i* P **P** **20 09 44.0 +0.8**
**KNZ** **Kokohu** **81.50 139** P **P** **20 09 43.6 +0.5**
**KAHZ** **Kahuranaki** **81.50 140** P **P** **20 09 43.9 +0.7**
**DIB** **Dawson Inlet,** **81.50 36** IAmb IAmb 20 09 57.4
comp=Z,279nm,1.4s
**IDI** **Anoyia** **81.52 305** LR LR 20 52 26.3
comp=Z,6µm,18.1s,baz=82,slow=40
**MODS** **Modra-Piesok** **81.56 319** *e*P **P** **20 09 46.4 +2.8**
MODS *e* 20 09 57.6
MODS *e*PP PP 20 13 02.4 +13
MODS *e*S **S** **20 19 54.0 -0.7**
MODS *e*SS **SS** **20 25 14.6 +3.6**
MODS *e*L L 20 51 57.5
**VRAC** **Vranov** **81.58 320** ⇑P **P** **20 09 45.0 +1.4**
**VRAC** **Vranov** **81.58 320** LR LR 20 48 34.4
comp=Z,18µm,18.2s,baz=68,slow=38
**VRAC** **Vranov** **81.58 320** *e*P **P** **20 09 44.5 +0.9**
VRAC *e* 20 09 56.3
VRAC *e*S **S** **20 19 54.1 -0.7**
**DIVS** **Divibare** **81.60 314** ⇓*i*P **P** **20 09 43.8 -0.2**
**DIVS** **Divibare** **81.60 314** ⇓P **P** **20 09 44.0 0.0**
**DIVS** **Divibare** **81.60 314** P **P** **20 09 42.8 -1.1**
DIVS IAmb IAmb 20 09 57.9
comp=Z,576nm,2.0s
DIVS IAMs_20 IAMs_20 20 48 06.1
comp=Z,13µm,20.0s
**MORH** **Mrgy, Hungar** **81.62 317** ⇓P **P** **20 09 44.3 +0.4**
**MORH** **Mrgy, Hungar** **81.62 317** *e*P **P** **20 09 43.9 +0.1**
**MORH** **Mrgy, Hungar** **81.62 317** P **P** **20 09 44.2 +0.4**
**ODD1** **Odda** **81.63 332** *e*P **P** **20 09 44.1 +0.3**
ODD1 *e*S **S** **20 19 56.4 +1.4**
**HOMB** **Homborsund** **81.65 330** *e*P **P** **20 09 43.8 0.0**
HOMB IVmB_BB 20 09 56.8
comp=Z,3µm,3.7s
HOMB *e*S **S** **20 19 54.7 -0.4**
HOMB IVMs_BB IVMs_BB 20 48 57.0
comp=Z,23µm,14.9s
**PRHZ** **Porangahau** **81.66 140** P P 20 09 37.5 -6.5
**ANWZ** **Angora Road** **81.69 140** P **P** **20 09 44.3 +0.2**
**PLWZ** **Palliser** **81.69 142** P **P** **20 09 42.9 -1.3**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BFZ** | **Birch Farm** | **81.69** | **141** | P | **P** | **20 09 42.9** | **-1.3** |
| **BFZ** | **Birch Farm** | **81.69** | **141** | IAmb | IAmb | 20 10 01.7 | |
| | comp=Z,586nm,1.8s | | | | | | |
| BFZ | | | | IAMs_20 | IAMs_20 | 20 42 38.8 | |
| | comp=Z,13µm,21.0s | | | | | | |
| **BFZ** | **Birch Farm** | **81.69** | **141** | P | **P** | **20 09 43.4** | **-0.8** |
| **MHGZ** | **Mahia Peninsul** | **81.72** | **139** | P | **P** | **20 09 45.2** | **+0.9** |
| **ZST** | **Bratislava** | **81.75** | **319** | *eP* | **P** | **20 09 47.1** | **+2.6** |
| ZST | | | | *e* | | 20 09 56.9 | |
| ZST | | | | *eP* | PP | 20 12 59.8 | +8.7 |
| ZST | | | | *eS* | **S** | **20 19 54.4** | **-2.1** |
| ZST | | | | *eSS* | **SS** | **20 25 13.4** | **-0.2** |
| **RUE** | **Ruedersdorf** | **81.78** | **324** | *eP* | **P** | **20 09 46.1** | **+1.5** |
| **RUE** | **Ruedersdorf** | **81.78** | **324** | *eP* | **P** | **20 09 45.4** | **+0.8** |
| | comp=Z,507nm,1.0s,baz=61,slow=5.0 | | | | | | |
| RUE | | | | *esP* | **sP** | **20 09 56.6** | **+3.3** |
| | baz=61,slow=5.1 | | | | | | |
| **RUE** | **Ruedersdorf** | **81.78** | **324** | ⇑P | **P** | **20 09 47.8** | **+3.2** |
| **XMAS** | **Kiritimati** | **81.79** | **91** | IAMs_20 | IAMs_20 | 20 47 23.3 | |
| | comp=Z,14µm,20.0s | | | | | | |
| **KRUC** | **Moravsky** | **81.80** | **320** | *eP* | **P** | **20 09 45.6** | **+0.8** |
| KRUC | | | | *e* | | 20 09 57.3 | |
| KRUC | | | | *eS* | **S** | **20 19 57.5** | **+0.4** |
| **SUE** | **Sulen** | **81.80** | **334** | *eP* | **P** | **20 09 46.2** | **+1.7** |
| SUE | | | | *eS* | **S** | **20 19 57.3** | **+0.8** |
| SUE | | | | IVMs_BB | IVMs_BB | 20 50 19.3 | |
| | comp=Z,17µm,13.1s | | | | | | |
| **TIH** | **Tihany** | **81.81** | **317** | P | **P** | **20 09 45.5** | **+0.7** |
| **MPLH** | **Magyarpolny** | **81.91** | **318** | P | **P** | **20 09 46.3** | **+0.9** |
| **BER** | **Bergen** | **81.93** | **333** | *eP* | **P** | **20 09 46.0** | **+0.8** |
| BER | | | | IVmB_BB | | 20 09 58.3 | |
| | comp=Z,5µm,3.1s | | | | | | |
| BER | | | | *eS* | **S** | **20 19 58.9** | **+1.0** |
| BER | | | | IVMs_BB | IVMs_BB | 20 49 37.0 | |
| | comp=Z,23µm,14.0s | | | | | | |
| **ASK** | **Askoy** | **81.94** | **333** | *eP* | **P** | **20 09 45.6** | **+0.4** |
| ASK | | | | *eS* | **S** | **20 19 59.4** | **+1.5** |
| **EGYH** | **Egyhazaskeszo** | **81.94** | **318** | P | **P** | **20 09 47.2** | **+1.7** |
| **GOET** | **G??ttrup** | **81.94** | **329** | *i* P | P | 20 09 56.3 | +11 |
| GOET | | | | IAmb | IAmb | 20 09 58.9 | |
| | comp=Z,418nm,1.0s | | | | | | |
| **BLS5** | **Blasjo** | **81.97** | **332** | *eP* | **P** | **20 09 45.9** | **+0.5** |
| BLS5 | | | | IVmB_BB | | 20 10 03.4 | |
| | comp=Z,5µm,4.6s | | | | | | |
| BLS5 | | | | *eS* | **S** | **20 19 58.2** | **-0.2** |
| BLS5 | | | | IVMs_BB | IVMs_BB | 20 49 38.7 | |
| | comp=Z,32µm,17.1s | | | | | | |
| **FNA** | **Florina** | **81.98** | **311** | ⇑P | **P** | **20 09 45.3** | **-0.6** |
| FNA | | | | ⇑s | **sP** | **20 09 57.3** | **+2.7** |
| **FNA** | **Florina** | **81.98** | **311** | *i* P | **P** | **20 09 46.6** | **+0.6** |
| **AGG** | **Agios Georgios** | **81.99** | **309** | ⇑P | **P** | **20 09 45.6** | **-0.4** |
| **KOVH** | **Kovagotottos** | **82.01** | **317** | P | **P** | **20 09 46.3** | **+0.4** |
| **BBLS** | **Lazići** | **82.08** | **314** | *eP* | **P** | **20 09 48.0** | **+1.5** |
| **SNART** | **Snartemo** | **82.20** | **331** | *eP* | **P** | **20 09 46.9** | **+0.2** |
| SNART | | | | *eS* | **S** | **20 20 01.2** | **+0.4** |
| **RUDO** | **Rudo** | **82.21** | **314** | *eP* | **P** | **20 09 46.8** | **-0.3** |
| **PVCC** | **Panska Ves** | **82.22** | **322** | *eS* | **S** | **20 20 02.6** | **+1.3** |
| PVCC | | | | AMS | AMS | 20 51 20.0 | |
| | comp=Z,25µm,17.6s | | | | | | |
| **TREC** | **Trest** | **82.24** | **320** | *eP* | **P** | **20 09 48.9** | **+1.8** |
| TREC | | | | MLR | MLR | | |
| | comp=Z,28µm,18.4s | | | | | | |
| **TREC** | **Trest** | **82.24** | **320** | *eP* | **P** | **20 09 48.9** | **+1.8** |
| TREC | | | | AMS | AMS | 20 50 40.0 | |
| | comp=Z,28µm,18.4s | | | | | | |
| **BCI** | **Bajram Curri** | **82.25** | **313** | *i* P | **P** | **20 09 49.7** | **+2.4** |
| **MUD** | **Monsted U'grnd** | **82.25** | **329** | *i* P | P | 20 09 59.3 | +12 |
| MUD | | | | IAmb | IAmb | 20 10 00.2 | |
| | comp=Z,306nm,1.1s | | | | | | |
| **MUD** | **Monsted U'grnd** | **82.25** | **329** | ⇓P | **P** | **20 09 49.5** | **+2.6** |
| **OHR** | **Ohrid** | **82.25** | **311** | *i* P | **P** | **20 09 49.1** | **+1.7** |
| **PHP** | **Peshkopia** | **82.27** | **312** | *i* P | **P** | **20 09 47.9** | **+0.4** |
| **SOP** | **Sopron** | **82.30** | **319** | P | **P** | **20 09 49.0** | **+1.6** |
| **BRG** | **Berggiesshubel** | **82.42** | **322** | *eP* | **P** | **20 09 48.7** | **+0.7** |
| BRG | | | | Amp | | 20 09 50.1 | |
| | comp=Z,56nm,1.7s | | | | | | |
| BRG | | | | *i* x | x | 20 09 50.9 | |
| BRG | | | | Amp | | 20 09 52.6 | |
| | comp=Z,147nm,1.5s | | | | | | |
| BRG | | | | *i* x | x | 20 10 00.2 | |
| BRG | | | | Amp | | 20 10 01.9 | |
| | comp=Z,244nm,1.2s | | | | | | |
| BRG | | | | PP | PP | 20 12 39.8 | -17 |
| BRG | | | | Amp | | 20 12 47.9 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **82.42** | **322** | *eP* | **P** | **20 09 48.7** | **+0.7** |
| BRG | | | | *i* | | 20 10 00.1 | |
| BRG | | | | S | **S** | **20 20 05.0** | **+1.7** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,56nm,1.7s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,147nm,1.5s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,244nm,1.2s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,29nm,1.5s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,35µm,19.1s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=E,18µm,19.1s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,26µm,16.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **82.42** | **322** | *eP* | **P** | **20 09 48.6** | **+0.6** |
| | comp=Z,242nm,1.2s,baz=61,slow=5.0 | | | | | | |
| BRG | | | | *esP* | **sP** | **20 09 59.8** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **KBN** | **Korca** | **82.45** | **311** | IAmb | IAmb | 20 10 01.3 | |
| | comp=Z,292nm,1.1s | | | | | | |
| **KBN** | **Korca** | **82.45** | **311** | *i* P | **P** | **20 09 49.2** | **+0.7** |
| **PRU** | **Pruhonice** | **82.48** | **321** | *eP* | **P** | **20 09 48.5** | **+0.2** |
| PRU | | | | *e* | | 20 10 00.3 | |
| PRU | | | | *eS* | **S** | **20 20 05.3** | **+1.3** |
| PRU | | | | MLR | MLR | | |
| | comp=Z,25µm,16.2s | | | | | | |
| **PRU** | **Pruhonice** | **82.48** | **321** | *eP* | **P** | **20 09 48.5** | **+0.2** |
| PRU | | | | *ex* | x | 20 10 00.3 | |
| PRU | | | | *eS* | **S** | **20 20 05.3** | **+1.3** |
| PRU | | | | AMS | AMS | 20 52 10.0 | |
| | comp=Z,25µm,16.2s | | | | | | |
| **JAWL** | **J.Aulia** | **82.51** | **283** | *i* | P | 20 09 55.3 | +6.2 |
| | baz=336,slow=18 | | | | | | |
| **JAWL** | **J.Aulia** | **82.51** | **283** | *i* P | **P** | **20 09 52.2** | **+3.1** |
| **GRNB** | **Grenville Isla** | **82.53** | **34** | IAmb | IAmb | 20 10 01.1 | |
| | comp=Z,543nm,1.8s | | | | | | |
| **KMY** | **Karmoy** | **82.60** | **332** | *eP* | **P** | **20 09 49.1** | **+0.4** |
| KMY | | | | *eS* | **S** | **20 20 04.3** | **-0.6** |
| **CONA** | **Conrad Observa** | **82.61** | **319** | *i* P | **P** | **20 09 50.0** | **+0.8** |
| | comp=Z,145nm,1.4s,SNR=58 | | | | | | |
| CONA | | | | *i* S | **sP** | **20 10 01.6** | **+3.7** |
| | comp=Z,243nm,1.5s | | | | | | |
| CONA | | | | *i* P | **P'P'df** | **20 36 24.2** | **+0.7** |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **FBE** | **Freiberg** | **82.73** | **322** | *eP* | **P** | **20 09 50.5** | **+0.9** |
| | comp=Z,650nm,1.3s,baz=61,slow=5.0 | | | | | | |
| FBE | | | | *esP* | **sP** | **20 10 01.7** | **+3.4** |
| | baz=61,slow=5.1 | | | | | | |
| **CLL** | **Collm** | **82.75** | **323** | P | **P** | **20 09 48.9** | **-0.8** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,273nm,0.9s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,34µm,18.0s | | | | | | |
| **CLL** | **Collm** | **82.75** | **323** | *eP* | **P** | **20 09 50.0** | **+0.3** |
| | comp=Z,142nm,1.3s | | | | | | |
| CLL | | | | *eP*max | | 20 09 57.0 | |
| CLL | | | | *i* sP | **sP** | **20 10 01.5** | **+3.2** |
| | comp=Z,358nm,1.0s | | | | | | |
| CLL | | | | *eP*P | **PP** | **20 13 05.0** | **+5.8** |
| CLL | | | | *ex* | x | 20 14 12.0 | |
| CLL | | | | *eP*PP | PPP | 20 15 06.0 | |
| CLL | | | | *ex* | x | 20 16 36.0 | |
| CLL | | | | *eS* | **S** | **20 20 08.0** | **+1.3** |
| | comp=N,7µm,22.6s | | | | | | |
| CLL | | | | *eS* | **S** | **20 20 08.0** | **+1.3** |
| | comp=E,6µm,25.9s | | | | | | |
| CLL | | | | *esS* | **ScS** | **20 20 21.0** | **-0.5** |
| CLL | | | | *eSPP* | SPP | 20 21 13.0 | |
| CLL | | | | *eP*PS | PPS | 20 21 18.0 | |
| CLL | | | | *eSS* | **SS** | **20 25 30.0** | **+1.7** |
| CLL | | | | *eP*KKPbc | **PKKPbc** | **20 28 16.0** | **+1.6** |
| CLL | | | | *eSSS* | SSS | 20 29 06.0 | |
| CLL | | | | *eSSSS* | | 20 31 36.0 | |
| CLL | | | | *eSKPPKPbc* | | 20 39 43.0 | |
| CLL | | | | | LmH | 20 43 00.0 | |
| | comp=N,42µm,21.0s | | | | | | |
| CLL | | | | | LmH | 20 43 00.0 | |
| | comp=E,36µm,20.5s | | | | | | |
| CLL | | | | | LmV | 20 52 00.0 | |
| | comp=Z,30µm,18.6s | | | | | | |
| CLL | | | | | Lmax | 20 52 00.0 | |
| **CLL** | **Collm** | **82.75** | **323** | *eP* | **P** | **20 09 50.0** | **+0.3** |
| | comp=Z,358nm,1.0s,baz=61,slow=5.0 | | | | | | |
| CLL | | | | *esP* | **sP** | **20 10 01.2** | **+2.8** |
| | baz=61,slow=5.1 | | | | | | |
| **CLL** | **Collm** | **82.75** | **323** | P | **P** | **20 09 48.9** | **-0.8** |
| CLL | | | | IAmb | IAmb | 20 10 03.1 | |
| | comp=Z,273nm,0.9s | | | | | | |
| **PDG** | **Podgorica** | **82.77** | **313** | ⇓P | **P** | **20 09 50.3** | **+0.3** |
| **PDG** | **Podgorica** | **82.77** | **313** | *eP* | **P** | **20 09 50.2** | **+0.3** |
| **PDG** | **Podgorica** | **82.77** | **313** | ⇓P | **P** | **20 09 50.6** | **+0.6** |
| **PDG** | **Podgorica** | **82.77** | **313** | IAMs_20 | IAMs_20 | 20 50 40.1 | |
| | comp=Z,14µm,18.0s | | | | | | |
| **LSK** | **Leskovik** | **82.78** | **310** | *i* P | P | 20 09 55.6 | +5.4 |
| **TIR** | **Tirane** | **82.80** | **312** | ⇓P | **P** | **20 09 51.3** | **+1.1** |
| **TIR** | **Tirane** | **82.80** | **312** | ⇑P | **P** | **20 09 52.8** | **+2.6** |
| **TIR** | **Tirane** | **82.80** | **312** | *i* P | **P** | **20 09 51.7** | **+1.5** |
| **ABPO** | **Ambohimpanom** | **82.87** | **246** | P | **P** | **20 09 51.1** | **+0.1** |
| ABPO | | | | pmax | pmax | | |
| | comp=Z,315nm,1.2s | | | | | | |
| ABPO | | | | MLR | MLR | | |
| | comp=Z,12µm,19.0s | | | | | | |
| **ABPO** | **Ambohimpanom** | **82.87** | **246** | P | **P** | **20 09 51.1** | **+0.1** |
| ABPO | | | | IAmb | IAmb | 20 09 56.1 | |
| | comp=Z,315nm,1.1s | | | | | | |
| **ABPO** | **Ambohimpanom** | **82.87** | **246** | IAMs_20 | IAMs_20 | 20 47 23.7 | |
| | comp=Z,12µm,19.0s | | | | | | |
| **DRME** | **Dracevica, Mon** | **82.92** | **313** | ⇓*i*P | **P** | **20 09 51.7** | **+0.9** |
| **BSEG** | **Bad Segeberg** | **82.93** | **326** | *eP* | **P** | **20 09 51.4** | **+0.9** |
| | comp=Z,287nm,1.2s,baz=61,slow=5.0 | | | | | | |
| BSEG | | | | *esP* | **sP** | **20 10 02.6** | **+3.4** |
| | baz=61,slow=5.1 | | | | | | |
| **PBCC** | **Pribram** | **82.93** | **321** | *eP* | **P** | **20 09 51.2** | **+0.5** |
| PBCC | | | | *eP* | **sP** | **20 10 00.5** | **+1.1** |
| **ITM** | **Ithomi** | **83.01** | **307** | ⇓P | **P** | **20 09 50.8** | **-0.6** |
| ITM | | | | ⇓P | **PcP** | **20 09 52.3** | **-3.7** |
| **ITM** | **Ithomi** | **83.01** | **307** | IAmb | IAmb | 20 10 03.1 | |
| | comp=Z,221nm,0.8s | | | | | | |
| **KOGS** | **Kog** | **83.02** | **318** | *i* P | **P** | **20 09 51.8** | **+0.6** |
| KOGS | | | | *i* pP | **sP** | **20 10 02.9** | **+3.1** |
| **BRY** | **Bratogost** | **83.06** | **314** | *eP* | **P** | **20 09 51.7** | **0.0** |
| **ARSA** | **Arzberg** | **83.12** | **319** | *i* P | **P** | **20 09 52.5** | **+0.8** |
| | comp=Z,68nm,1.3s,SNR=32 | | | | | | |
| ARSA | | | | *eS* | **sP** | **20 10 03.7** | **+3.3** |
| | comp=Z,141nm,1.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **83.14** | **320** | *eP* | **P** | **20 09 52.6** | **+0.8** |
| CKRC | | | | *eS* | **S** | **20 20 11.7** | **+0.9** |
| CKRC | | | | AMS | AMS | 20 52 50.0 | |
| | comp=Z,26µm,18.7s | | | | | | |
| **BLY** | **Banja Luka** | **83.17** | **316** | ⇓*i*P | **P** | **20 09 53.9** | **+1.9** |
| **BLY** | **Banja Luka** | **83.17** | **316** | ⇑P | **P** | **20 09 53.9** | **+1.9** |
| **SCO** | **Scoresbysund** | **83.20** | **348** | ⇓P | **P** | **20 09 55.8** | **+4.1** |
| **SCO** | **Scoresbysund** | **83.20** | **348** | IAmb | IAmb | 20 10 05.3 | |
| | comp=Z,260nm,1.3s | | | | | | |
| SCO | | | | IAMs_20 | IAMs_20 | 20 50 07.0 | |
| | comp=Z,18µm,20.0s | | | | | | |
| **FLTG** | **Flechtingen** | **83.23** | **324** | *eP* | **P** | **20 09 52.3** | **+0.2** |
| | comp=Z,265nm,1.1s,baz=61,slow=5.0 | | | | | | |
| FLTG | | | | *esP* | **sP** | **20 10 03.5** | **+2.7** |
| | baz=61,slow=5.1 | | | | | | |
| **FLTG** | **Flechtingen** | **83.23** | **324** | P | **P** | **20 09 53.5** | **+1.4** |
| **MRAK** | **Mrakovica** | **83.23** | **316** | *eP* | **P** | **20 09 52.7** | **+0.3** |
| **TREB** | **Trebinje** | **83.26** | **314** | *eP* | **P** | **20 09 53.5** | **+1.0** |
| **HCY** | **Herceg Novi** | **83.28** | **313** | *eP* | **P** | **20 09 52.3** | **-0.3** |
| **MGRS** | **Mrkonjic Grad** | **83.37** | **315** | *eP* | **P** | **20 09 55.4** | **+2.3** |
| **KHC** | **Kasperske Hory** | **83.43** | **321** | *eP* | **P** | **20 09 53.6** | **+0.3** |
| KHC | | | | *e* | | 20 10 04.9 | |
| KHC | | | | *eS* | **S** | **20 20 13.6** | **-0.2** |
| KHC | | | | MLR | MLR | | |
| | comp=Z,25µm,14.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **83.43** | **321** | *eP* | **P** | **20 09 53.6** | **+0.3** |
| KHC | | | | *ex* | x | 20 10 04.9 | |
| KHC | | | | *eP*P | PP | 20 13 18.3 | +13 |
| KHC | | | | *eS* | **S** | **20 20 13.6** | **-0.2** |
| KHC | | | | AMS | AMS | 20 50 00.0 | |
| | comp=Z,25µm,14.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **83.43** | **321** | ⇓P | **P** | **20 09 53.8** | **+0.5** |
| KHC | | | | ⇑P | **PcP** | **20 09 54.3** | **-3.4** |
| KHC | | | | ⇑P | **pP** | **20 09 55.5** | **-4.2** |
| KHC | | | | ⇓s | **sP** | **20 10 05.6** | **+3.6** |
| KHC | | | | ⇓s | **sP** | **20 10 05.9** | **+3.9** |
| **KHC** | **Kasperske Hory** | **83.43** | **321** | P | **P** | **20 09 52.9** | **-0.4** |
| KHC | | | | IAmb | IAmb | 20 10 07.9 | |
| | comp=Z,305nm,1.3s | | | | | | |
| **ZAG** | **Zagreb** | **83.46** | **317** | *eP* | **P** | **20 09 52.1** | **-1.3** |
| **TANN** | **Tannenbergstha** | **83.47** | **322** | *eP* | **P** | **20 09 54.1** | **+0.6** |
| | comp=Z,369nm,1.7s,baz=61,slow=5.0 | | | | | | |
| TANN | | | | *esP* | **sP** | **20 10 05.3** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **NEUB** | **Neuenburg** | **83.47** | **323** | *eP* | **P** | **20 09 54.1** | **+0.7** |
| | comp=Z,499nm,1.0s,baz=61,slow=5.0 | | | | | | |
| NEUB | | | | *esP* | **sP** | **20 10 05.2** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **GEC2** | **GERESS Array S** | **83.49** | **320** | *eP* | **P** | **20 09 54.3** | **+0.7** |
| | comp=Z,325nm,1.1s,baz=61,slow=5.0 | | | | | | |
| GEC2 | | | | *esP* | **sP** | **20 10 05.5** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **GEC2** | **GERESS Array S** | **83.49** | **320** | IAmb | IAmb | 20 10 07.4 | |
| | comp=Z,262nm,1.0s | | | | | | |
| **GERES** | **GERESS Array B** | **83.49** | **320** | P | **P** | **20 09 54.4** | **+0.7** |
| | comp=Z,47nm,1.0s,baz=66,slow=4.5,SNR=58 | | | | | | |
| GERES | | | | PKKPbc | **PKKPbc** | **20 28 10.9** | **-1.9** |
| | comp=Z,0.7nm,0.7s,baz=90,slow=5.5,SNR=3.5 | | | | | | |
| GERES | | | | PKPPKP | **P'P'df** | **20 36 21.7** | **-0.2** |
| | comp=Z,0.3nm,0.2s,baz=228,slow=1.6,SNR=7.2 | | | | | | |
| **GERES** | **GERESS Array B** | **83.49** | **320** | P | **P** | **20 09 53.5** | **-0.2** |
| GERES | | | | pP | **sP** | **20 10 05.4** | **+3.1** |
| GERES | | | | | **PKKPdf** | **20 28 00.1** | **-3.0** |
| **WERD** | **Werda** | **83.54** | **322** | *eP* | **P** | **20 09 54.4** | **+0.6** |
| | comp=Z,377nm,1.5s,baz=61,slow=5.0 | | | | | | |
| WERD | | | | *esP* | **sP** | **20 10 05.6** | **+3.0** |
| | baz=61,slow=5.1 | | | | | | |
| **NKC** | **Novy Kostel** | **83.56** | **322** | *eP* | **P** | **20 09 55.9** | **+1.9** |
| NKC | | | | *eS* | **S** | **20 20 15.9** | **+0.8** |
| NKC | | | | MLR | MLR | | |
| | comp=Z,27µm,16.2s | | | | | | |
| **NKC** | **Novy Kostel** | **83.56** | **322** | *eP* | **P** | **20 09 55.9** | **+1.9** |
| NKC | | | | *eS* | **S** | **20 20 15.9** | **+0.8** |
| NKC | | | | AMS | AMS | 20 52 10.0 | |
| | comp=Z,27µm,16.2s | | | | | | |
| **GUNZ** | **Gunzen** | **83.57** | **322** | *eP* | **P** | **20 09 54.7** | **+0.7** |
| | comp=Z,518nm,1.5s,baz=61,slow=5.0 | | | | | | |
| GUNZ | | | | *esP* | **sP** | **20 10 05.8** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **WERN** | **Wernitzgruen** | **83.58** | **322** | *eP* | **P** | **20 09 54.8** | **+0.7** |
| | comp=Z,295nm,1.1s,baz=61,slow=5.0 | | | | | | |
| WERN | | | | *esP* | **sP** | **20 10 05.9** | **+3.2** |
| | baz=61,slow=5.1 | | | | | | |
| **PLN** | **Plauen** | **83.61** | **322** | *eP* | **P** | **20 09 54.8** | **+0.6** |
| | comp=Z,220nm,1.2s,baz=61,slow=5.0 | | | | | | |
| PLN | | | | *esP* | **sP** | **20 10 05.9** | **+3.1** |
| | baz=61,slow=5.1 | | | | | | |
| **MOA** | **Molln** | **83.61** | **319** | *i* P | **P** | **20 09 55.1** | **+0.9** |
| | comp=Z,154nm,1.3s,SNR=51 | | | | | | |
| MOA | | | | *eS* | **sP** | **20 10 06.8** | **+3.9** |
| | comp=Z,345nm,1.2s | | | | | | |
| **ASSE** | **Asse, Remlinge** | **83.63** | **324** | *eP* | **P** | **20 09 54.9** | **+0.8** |
| | comp=Z,268nm,1.6s,baz=61,slow=5.0 | | | | | | |
| ASSE | | | | *esP* | **sP** | **20 10 05.8** | **+3.0** |
| | baz=61,slow=5.1 | | | | | | |
| **STON** | **Ston** | **83.63** | **314** | *eP* | **P** | **20 09 51.0** | **-3.4** |
| **SOKA** | **Soboth** | **83.67** | **318** | *i* P | **P** | **20 09 55.0** | **+0.4** |
| | comp=Z,102nm,1.3s,SNR=54 | | | | | | |
| SOKA | | | | *eS* | **sP** | **20 10 06.6** | **+3.3** |
| | comp=Z,223nm,1.4s | | | | | | |
| SOKA | | | | *eP* | **P'P'df** | **20 36 20.9** | **-0.6** |
| | comp=Z,5.8nm,1.6s | | | | | | |
| **SUMG** | **Summit** | **83.71** | **354** | *i* P | **P** | **20 09 55.0** | **+0.3** |
| **SUMG** | **Summit** | **83.71** | **354** | ⇑P | **P** | **20 09 54.8** | **+0.1** |
| **SUMG** | **Summit** | **83.71** | **354** | IAmb | IAmb | 20 10 03.4 | |
| | comp=Z,243nm,1.1s | | | | | | |
| SUMG | | | | IAMs_20 | IAMs_20 | 20 51 59.5 | |
| | comp=Z,20µm,19.0s | | | | | | |
| **RICI** | **Ricice** | **83.74** | **315** | P | **P** | **20 09 56.1** | **+1.1** |
| **NRDL** | **Niedersach Rie** | **83.75** | **325** | *eP* | **P** | **20 09 56.0** | **+1.3** |
| | comp=Z,421nm,1.3s,baz=61,slow=5.0 | | | | | | |
| NRDL | | | | *esP* | **sP** | **20 10 07.1** | **+3.7** |
| | baz=61,slow=5.1 | | | | | | |
| **CRES** | **Cresnjev** | **83.79** | **317** | ⇓*i*P | **P** | **20 09 55.2** | **0.0** |
| **WET** | **Wettzell** | **83.83** | **321** | *eP* | **P** | **20 09 55.2** | **-0.2** |
| | comp=Z,414nm,1.5s,baz=61,slow=5.0 | | | | | | |
| WET | | | | *esP* | **sP** | **20 10 07.5** | **+3.4** |
| | baz=61,slow=5.1 | | | | | | |
| **MOX** | **Moxa** | **83.83** | **323** | *eP* | **P** | **20 09 56.0** | **+0.7** |
| | comp=Z,287nm,1.3s,baz=61,slow=5.0 | | | | | | |
| MOX | | | | *esP* | **sP** | **20 10 07.2** | **+3.2** |
| | baz=61,slow=5.1 | | | | | | |
| MOX | | | | *eL* | L | 20 51 24.3 | |
| | comp=Z,23µm,19.2s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **83.92** | **322** | *eP* | **P** | **20 09 56.8** | **+1.0** |
| | comp=Z,95nm,1.1s,baz=61,slow=5.0 | | | | | | |
| ROTZ | | | | *esP* | **sP** | **20 10 07.9** | **+3.5** |
| | baz=61,slow=5.1 | | | | | | |
| **CLZ** | **Clausthal** | **83.93** | **324** | *eP* | **P** | **20 09 56.9** | **+1.0** |
| | comp=Z,702nm,1.3s,baz=61,slow=5.0 | | | | | | |
| CLZ | | | | *esP* | **sP** | **20 10 08.0** | **+3.5** |
| | baz=61,slow=5.1 | | | | | | |
| **KIJV** | **Kijevo** | **83.99** | **315** | P | **P** | **20 09 58.3** | **+2.1** |
| **RETH** | **Rethem/Aller,** | **84.03** | **325** | *eP* | **P** | **20 09 57.0** | **+0.8** |
| | comp=Z,306nm,1.1s,baz=61,slow=5.0 | | | | | | |
| RETH | | | | *esP* | **sP** | **20 10 08.1** | **+3.2** |
| | baz=61,slow=5.1 | | | | | | |
| **OBKA** | **Obir** | **84.05** | **318** | *i* P | **P** | **20 09 57.3** | **+0.7** |
| | comp=Z,97nm,1.3s,SNR=33 | | | | | | |
| OBKA | | | | *i* S | **sP** | **20 10 08.3** | **+3.1** |
| | comp=Z,239nm,1.3s | | | | | | |
| OBKA | | | | *eP* | **P'P'df** | **20 36 21.6** | **+0.8** |
| | comp=Z,11nm,1.5s | | | | | | |
| **KIBK** | **Kibwezi** | **84.05** | **265** | P | **P** | **20 09 58.8** | **+1.6** |
| | SNR=24 | | | | | | |
| **KIBK** | **Kibwezi** | **84.05** | **265** | IAmb | IAmb | 20 10 15.1 | |
| | comp=Z,288nm,1.7s | | | | | | |
| KIBK | | | | IAMs_20 | IAMs_20 | 20 46 56.9 | |
| | comp=Z,20µm,20.0s | | | | | | |
| **LJU** | **Ljubljana** | **84.27** | **318** | ⇓*i*P | **P** | **20 09 59.3** | **+1.7** |
| **LJU** | **Ljubljana** | **84.27** | **318** | *i* P | **P** | **20 09 58.0** | **+0.3** |
| LJU | | | | *ep*P | **sP** | **20 10 09.6** | **+3.3** |
| LJU | | | | *e* | | 20 13 25.4 | |
| LJU | | | | *e*SKSac | **SKSac** | **20 20 18.1** | **-2.3** |
| LJU | | | | *eS* | **S** | **20 20 20.2** | **-2.1** |
| LJU | | | | *e* | | 20 20 37.6 | |
| LJU | | | | *e* | | 20 25 45.2 | |
| LJU | | | | *e* | | 20 32 11.0 | |
| **GTTG** | **Gottingen** | **84.30** | **324** | *eP* | **P** | **20 09 58.5** | **+0.8** |
| | comp=Z,360nm,1.0s,baz=61,slow=5.0 | | | | | | |
| GTTG | | | | *esP* | **sP** | **20 10 09.6** | **+3.3** |
| | baz=61,slow=5.1 | | | | | | |
| **LODK** | **Lodwar** | **84.30** | **271** | P | **P** | **20 10 00.1** | **+1.6** |
| | SNR=64 | | | | | | |
| **LODK** | **Lodwar** | **84.30** | **271** | IAmb | IAmb | 20 10 15.4 | |
| | comp=Z,387nm,1.9s | | | | | | |
| LODK | | | | IAMs_20 | IAMs_20 | 20 51 39.0 | |
| | comp=Z,13µm,19.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | P | **P** | **20 09 59.1** | **+0.4** |
| | comp=Z,72nm,1.1s,baz=62,slow=5.5,SNR=34 | | | | | | |
| KMBO | | | | LR | LR | 20 48 12.6 | |
| | comp=Z,14µm,19.2s,baz=64,slow=36 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | *i* P | **P** | **20 10 00.7** | **+2.0** |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,67nm,1.1s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | P | **P** | **20 10 00.3** | **+1.6** |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | ⇓P | **P** | **20 09 59.9** | **+1.2** |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | P | **P** | **20 09 58.1** | **-0.5** |
| KMBO | | | | IAmb | IAmb | 20 10 16.8 | |
| | comp=Z,280nm,1.5s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | IAMs_20 | IAMs_20 | 20 48 10.4 | |
| | comp=Z,15µm,19.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.31** | **266** | *i* P | **P** | **20 10 00.0** | **+1.3** |
| | SNR=64 | | | | | | |
| **BBB** | **Bella Bella** | **84.32** | **35** | LR | LR | 20 50 22.3 | |
| | comp=Z,6µm,18.1s,baz=317,slow=38 | | | | | | |
| **HVAR** | **Hvar** | **84.32** | **315** | P | **P** | **20 09 59.7** | **+1.8** |
| **YKA** | **Yellowknife Ar** | **84.35** | **23** | P | **P** | **20 09 57.2** | **-0.4** |
| | comp=Z,23nm,0.6s,baz=315,slow=4.8,SNR=167 | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **20 28 10.6** | **-0.5** |
| | comp=Z,3.2nm,0.8s,baz=132,slow=2.4,SNR=10.0 | | | | | | |
| YKA | | | | PKPPKP | **P'P'df** | **20 36 18.2** | **-1.8** |
| | comp=Z,3.8nm,1.2s,baz=114,slow=1.9,SNR=6.8 | | | | | | |
| YKA | | | | LR | LR | 20 52 58.1 | |
| | comp=Z,12µm,18.0s,baz=316,slow=40 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.35** | **23** | P | **P** | **20 09 56.2** | **-1.4** |
| **CEY** | **Cerknica** | **84.47** | **317** | *eP* | **P** | **20 09 59.2** | **+0.5** |
| **MORI** | **Morici** | **84.50** | **315** | P | **P** | **20 10 00.2** | **+1.4** |
| **GRF** | **Grafenberg Arr** | **84.52** | **322** | *eP* | **P** | **20 09 60.0** | **+1.2** |
| | comp=Z,600nm,1.4s,baz=61,slow=5.0 | | | | | | |
| GRF | | | | *esP* | **sP** | **20 10 11.1** | **+3.6** |
| | baz=61,slow=5.1 | | | | | | |
| GRF | | | | *eL* | L | 20 54 03.3 | |
| | comp=Z,29µm,18.0s | | | | | | |
| **GRFO** | **Grafenberg** | **84.52** | **322** | P | **P** | **20 09 59.0** | **+0.2** |
| GRFO | | | | pmax | pmax | | |
| | comp=Z,435nm,1.2s | | | | | | |
| GRFO | | | | MLR | MLR | | |
| | comp=Z,29µm,18.0s | | | | | | |
| **GRFO** | **Grafenberg** | **84.52** | **322** | P | **P** | **20 09 59.0** | **+0.2** |
| **KBA** | **Koelnbreinsper** | **84.52** | **319** | *i* P | **P** | **20 09 59.4** | **+0.3** |
| | comp=Z,93nm,1.1s,SNR=23 | | | | | | |
| KBA | | | | *eS* | **sP** | **20 10 10.7** | **+3.0** |
| | comp=Z,218nm,1.1s | | | | | | |
| **UPNV** | **Upernavik** | **84.53** | **359** | *i* P | **P** | **20 09 58.3** | **-0.1** |
| **RJOB** | **Jochberg** | **84.54** | **320** | *eP* | **P** | **20 10 00.5** |

comp=Z,213nm,1.2s
**SQTA Sankt Quirin 85.73 320** *i* P **P** **20 10 05.4 +0.3**
comp=Z,130nm,1.2s,SNR=43
SQTA *i* S **sP** **20 10 16.8 +3.0**
comp=Z,247nm,1.1s
SQTA *i* P **P'P'df** **20 36 22.8 +5.1**
comp=Z,3.0nm,0.9s
**MOTA Moosalm 85.73 320** *e*P **P** **20 10 05.3 +0.2**
comp=Z,96nm,1.3s,SNR=22
MOTA *i* S **sP** **20 10 16.7 +2.8**
comp=Z,210nm,1.1s
MOTA *e*P **P'P'df** **20 36 21.0 +3.3**
comp=Z,14nm,1.7s
**BUG Bochum--Univer 85.80 325** *e*P **P** **20 10 05.8 +0.7**
comp=Z,254nm,1.1s,baz=61,slow=5.0
BUG *es*P **sP** **20 10 17.0 +3.1**
baz=61,slow=5.1
**TNS Taunus Mts 85.80 323** *e*P **P** **20 10 04.9 -0.4**
comp=Z,294nm,1.7s,baz=61,slow=5.0
TNS *es*P **sP** **20 10 17.2 +3.2**
baz=61,slow=5.1
**RETA Reutte 85.86 320** *e*P **P** **20 10 06.0 +0.3**
comp=Z,34nm,1.1s,SNR=8.8
RETA *i* S **sP** **20 10 17.3 +2.9**
comp=Z,92nm,1.4s
**TIP Timpagrande 85.87 311** ⇑P **P** **20 10 06.8 +0.9**
**TIP Timpagrande 85.87 311** ⇓P **P** **20 10 07.9 +2.0**
TIP ⇑s **sP** **20 10 17.6 +3.0**
TIP ⇓s **sP** **20 10 18.8 +4.3**
**TIP Timpagrande 85.87 311** P **P** **20 10 05.0 -0.9**
TIP IAMs_20 IAMs_20 20 54 48.4
comp=Z,14µm,20.0s
**CTI Castel Tesino 86.04 319** IAmb IAmb 20 10 20.2
comp=Z,280nm,1.4s
**FETA Feichten 86.11 320** *e*P **P** **20 10 07.3 +0.3**
comp=Z,119nm,1.6s,SNR=38
FETA *i* S **sP** **20 10 19.0 +3.2**
comp=Z,207nm,1.1s
FETA *e*P **P'P'df** **20 36 20.0 +3.0**
comp=Z,8.2nm,1.5s
**STU Stuttgart 86.13 322** *e*P **P** **20 10 07.3 +0.5**
comp=Z,325nm,1.1s,baz=61,slow=5.0
STU *es*P **sP** **20 10 18.4 +2.8**
baz=61,slow=5.1
**UBR Ueberruh 86.15 321** *e*P **P** **20 10 07.5 +0.4**
comp=Z,621nm,1.7s,baz=61,slow=5.0
UBR *es*P **sP** **20 10 18.6 +2.8**
baz=61,slow=5.1
**AHRW Bad Neuenahr-A 86.38 324** *e*P **P** **20 10 09.0 +1.0**
comp=Z,248nm,1.4s,baz=61,slow=5.0
AHRW *es*P **sP** **20 10 20.2 +3.4**
baz=61,slow=5.1
**DAVA Damuels 86.48 320** *e*P **P** **20 10 09.5 +0.6**
comp=Z,51nm,1.3s,SNR=8.3
DAVA *i* S **sP** **20 10 20.6 +3.1**
comp=Z,148nm,1.1s
DAVA *e*P **P'P'df** **20 36 19.6 +3.3**
comp=Z,15nm,1.6s
**AQU L'Aquila 86.70 315** *e*P **P** **20 10 10.2 +0.3**
**AQU L'Aquila 86.70 315** ⇑P **P** **20 10 11.1 +1.3**
**AQU L'Aquila 86.70 315** IAmb IAmb 20 10 24.5
comp=Z,232nm,1.0s
AQU IAMs_20 IAMs_20 20 49 16.8
comp=Z,13µm,22.0s
**DAVOX Davos/Dischmat 86.74 320** LR LR 20 52 19.5
comp=Z,18µm,18.3s,baz=44,slow=38
**MURB Monte Urbino 86.83 316** P **P** **20 10 10.7 +0.1**
**BFO Black Forest 86.85 322** P **P** **20 10 08.6 -1.9**
BFO pmax pmax
comp=Z,76nm,1.2s
BFO MLR MLR
comp=Z,28µm,18.0s
**BFO Black Forest 86.85 322** *e*P **P** **20 10 10.6 +0.1**
comp=Z,413nm,2.1s,baz=61,slow=5.0
BFO *es*P **sP** **20 10 21.7 +2.6**
baz=61,slow=5.1
**BFO Black Forest 86.85 322** P **P** **20 10 08.6 -1.9**
**BTNL Ternell 86.87 324** *d*P **P** **20 10 13.1 +2.6**
comp=Z,35nm,1.1s
**CEL Celeste 86.89 310** ⇓P **P** **20 10 12.6 +1.7**
CEL ⇑s **sP** **20 10 23.1 +3.5**
CEL ⇑s **sP** **20 10 24.9 +5.3**
**CEL Celeste 86.89 310** IAMs_20 IAMs_20 20 55 27.3
comp=Z,17µm,21.0s
**MEM Membach 86.92 325** *d*P **P** **20 10 13.5 +2.8**
comp=Z,44nm,1.0s
**SALO Salr 86.93 319** ⇑P **P** **20 10 13.6 +2.6**
SALO ⇑s **sP** **20 10 23.6 +4.0**
**BEBN Eben Emael 86.99 325** *d*P **P** **20 10 11.4 +0.4**
**BHOU Houvegnez 87.06 324** *d*P **P** **20 10 14.7 +3.3**
comp=Z,34nm,1.2s
**ICESG Greenland Ices 87.15 353** *i* P **P** **20 10 13.2 +1.3**
ICESG IAmb IAmb 20 10 29.8
comp=Z,4µm,2.8s
**BSTI Sart Tilman 87.17 325** *d*P **P** **20 10 15.2 +3.3**
comp=Z,24nm,1.0s
**MCD Coleburn Disti 87.17 333** *e*P **P** **20 10 14.1 +2.3**
**TUE Stuetta 87.21 320** ⇓P **P** **20 10 13.7 +1.2**
TUE ⇑s **sP** **20 10 25.2 +4.0**
TUE ⇓s **sP** **20 10 25.4 +4.2**
**MGAB Montegabbione 87.27 316** ⇓P **P** **20 10 13.2 +0.6**
MGAB ⇑s **sP** **20 10 24.1 +2.8**
MGAB ⇓s **sP** **20 10 25.4 +4.1**
**WLF Walferdange 87.36 324** *e*P **P** **20 10 13.8 +1.0**
comp=Z,498nm,1.8s,baz=61,slow=5.0
WLF *es*P **sP** **20 10 25.0 +3.5**
baz=61,slow=5.1
**WLF Walferdange 87.36 324** ⇑P **P** **20 10 15.2 +2.4**
**WLF Walferdange 87.36 324** IAmb IAmb 20 10 27.6
comp=Z,244nm,1.3s
**WLF Walferdange 87.36 324** *d*P **P** **20 10 14.5 +1.6**
comp=Z,74nm,1.1s
**BCLA Clavier 87.40 325** *d*P **P** **20 10 15.4 +2.4**
comp=Z,42nm,1.1s
**OSSC Osservatorio P 87.52 317** P **P** **20 10 13.2 -0.6**
OSSC IAmb IAmb 20 10 27.7
comp=Z,306nm,1.4s
**BGES Gesves 87.53 325** *d*P **P** **20 10 16.4 +2.7**
comp=Z,29nm,1.1s
**ECH Echery 87.57 322** ⇓P **P** **20 10 16.7 +2.7**
ECH ⇑s **sP** **20 10 25.3 +2.6**
ECH ⇓s **sP** **20 10 25.7 +3.0**
**RCHB Rochefort 87.59 324** *d*P **P** **20 10 16.4 +2.5**
comp=Z,65nm,1.1s
**UCC Uccle 87.69 325** *d*P **P** **20 10 16.7 +2.3**
comp=Z,16nm,1.0s
**BMRD Maredsous 87.75 325** *d*P **P** **20 10 15.8 +1.1**
comp=Z,60nm,1.1s
**BORG Borgarnes 87.81 345** LR LR 20 52 59.8
comp=Z,14µm,19.7s,baz=29,slow=38
**ILULI Ilulissat 87.95 357** IAmb IAmb 20 10 28.3
comp=Z,198nm,1.1s
ILULI IAMs_20 IAMs_20 20 57 30.5
comp=Z,17µm,18.0s
**DOU Dourbes 87.96 325** *d*P **P** **20 10 18.1 +2.4**
comp=Z,47nm,1.2s
**ESY Stoneypath 87.97 332** *e*P **P** **20 10 19.3 +3.7**
**BOB Bobbio (Coli) 88.02 318** ⇑P **P** **20 10 16.9 +0.7**
BOB ⇑s **sP** **20 10 28.2 +3.2**
BOB ⇓s **sP** **20 10 28.5 +3.6**
**GDLE Glaisdale, N Y 88.10 330** *e*P **P** **20 10 19.3 +3.0**
**CASP Castiglione de 88.13 316** IAmb IAmb 20 10 30.4
comp=Z,265nm,1.8s
**EBL Broad Law 88.25 332** *e*P **P** **20 10 19.4 +2.4**
**VAE Valguarnera 88.29 310** LR LR 20 55 53.2
comp=Z,5µm,19.9s,baz=18,slow=40
**EDMD Edmundbyers 88.37 331** *e*P **P** **20 10 19.8 +2.2**
**WACR West Acre 88.45 328** *e*P **P** **20 10 20.7 +2.7**
WACR IAmb IAmb 20 10 30.8
comp=Z,528nm,1.0s
**LMK Market Rasen 88.47 329** *e*P **P** **20 10 21.2 +3.2**
LMK IAmb IAmb 20 10 22.5
comp=Z,372nm,1.2s
**SENIN Lac Senin/Sane 88.48 320** IAMs_20 IAMs_20 20 49 45.8
comp=Z,17µm,21.0s
**EKA Eskdalemuir Ar 88.58 332** LR LR 20 54 24.6
comp=Z,62µm,18.0s,baz=46,slow=39
**ESK Eskdalemuir 88.61 332** *e*P **P** **20 10 22.1 +3.4**
**ELMS Elmsett, Ipswi 88.66 328** *e*P **P** **20 10 21.5 +2.6**
ELMS IAmb IAmb 20 10 22.1
comp=Z,88nm,1.2s
ELMS IAMs_20 IAMs_20 20 53 59.2
comp=Z,84µm,18.2s
**PGC Sidney 88.73 37** P **P** **20 10 18.7 -0.7**
PGC IAmb IAmb 20 10 39.6
comp=Z,139nm,1.2s

**MONC Moncucco Torin 88.79 319** ⇑P **P** **20 10 21.4 +1.7**
MONC ⇑s **sP** **20 10 31.4 +2.9**
MONC ⇑s **sP** **20 10 31.4 +2.9**
**CLTB Caltabellotta 89.08 311** IAMs_20 IAMs_20 20 58 05.3
comp=Z,16µm,20.0s
**RAR Rarotonga 89.10 113** LR LR 20 44 33.1
comp=Z,5µm,21.9s,baz=297,slow=32
**A04D Lummi Island 89.10 36** P **P** **20 10 21.3 +0.2**
baz=305
**LBWR Ladybower, Pea 89.16 330** *e*P **P** **20 10 23.7 +2.4**
LBWR IAmb IAmb 20 10 25.6
comp=Z,141nm,1.2s
LBWR IAMs_20 IAMs_20 20 54 44.8
comp=Z,52µm,17.7s
**NLWA Neilton Lookou 89.20 38** ⇓P **P** **20 10 25.3 +3.6**
**NLWA Neilton Lookou 89.20 38** IAmb IAmb 20 10 33.9
comp=Z,235nm,1.3s
NLWA IAMs_20 IAMs_20 20 54 39.3
comp=Z,12µm,21.0s
**CASY Casey 89.23 184** ⇓P **P** **20 10 21.5 +0.4**
**CASY Casey 89.23 184** ⇑P **P** **20 10 21.2 +0.1**
**CWF Charnwood Fore 89.38 329** *e*P **P** **20 10 25.0 +2.7**
**BNI Bardonecchia 89.55 320** ⇑P **P** **20 10 26.0 +2.5**
BNI ⇑s **sP** **20 10 35.2 +3.0**
BNI ⇓s **sP** **20 10 35.7 +3.5**
**BNI Bardonecchia 89.55 320** IAmb IAmb 20 10 42.6
comp=Z,151nm,1.0s
**D03D Eldon 89.56 37** P **P** **20 10 23.5 +0.2**
baz=304
D03D S **S** **20 21 16.4 +3.1**
baz=304
**B05A Bryant 89.69 36** P **P** **20 10 24.1 +0.2**
baz=305
B05A S **S** **20 21 14.7 +0.2**
baz=305
**E03A Lebam 89.84 38** IAmb IAmb 20 10 36.5
comp=Z,280nm,1.1s
**D04E Lakebay 89.94 38** P **P** **20 10 23.9 -1.2**
baz=305
**MBAR Mbarara 90.11 269** LR LR 20 51 36.3
comp=Z,18µm,19.7s,baz=46,slow=36
**MBAR Mbarara 90.11 269** ⇑*e*P **P** **20 10 27.9 +1.2**
**MBAR Mbarara 90.11 269** P **P** **20 10 26.2 -0.5**
**MBAR Mbarara 90.11 269** IAMs_20 IAMs_20 20 51 53.9
comp=Z,19µm,20.0s
**SFJD Kangerlussuaq 90.13 357** LR LR 20 51 37.7
comp=Z,15µm,19.6s,baz=356,slow=36
**SFJD Kangerlussuaq 90.13 357** P **P** **20 10 23.8 -1.7**
SFJD pmax pmax
comp=Z,303nm,1.5s
SFJD MLR MLR
comp=Z,19µm,20.0s
**SFJD Kangerlussuaq 90.13 357** *i* P **P** **20 10 24.5 -1.0**
**SFJD Kangerlussuaq 90.13 357** P **P** **20 10 23.8 -1.7**
SFJD IAmb IAmb 20 10 30.5
comp=Z,303nm,1.4s
**SFJD Kangerlussuaq 90.13 357** IAMs_20 IAMs_20 20 55 37.1
comp=Z,19µm,20.0s
**FOEL Foel Wylfa 90.17 330** *e*P **P** **20 10 29.6 +3.6**
FOEL IAMs_20 IAMs_20 20 55 15.2
comp=Z,42µm,17.0s
**HLM1 Long Mynd 90.26 329** *e*P **P** **20 10 28.6 +2.1**
HLM1 IAMs_20 IAMs_20 20 55 01.7
comp=Z,55µm,18.1s
**DY2G Dye2 90.34 355** *i* P **P** **20 10 29.2 +2.3**
DY2G IAmb IAmb 20 10 31.1
comp=Z,235nm,0.8s
**STRD Stroud 90.39 329** *e*P **P** **20 10 29.9 +2.8**
STRD IAmb IAmb 20 10 40.6
comp=Z,286nm,1.1s
STRD IAMs_20 IAMs_20 20 55 13.9
comp=Z,50µm,16.1s
**CLF Chambon-Foret 90.40 324** ⇑s **P** **20 10 30.2 +3.0**
CLF ⇓s **sP** **20 10 39.7 +3.8**
**E04D Cinebar 90.40 38** IAmb IAmb 20 10 40.0
comp=Z,230nm,1.3s
**E04D Cinebar 90.40 38** P **P** **20 10 28.0 +0.7**
baz=305
**F04D Rainier, OR 90.42 39** P **P** **20 10 27.3 -0.1**
baz=304
**C06D Leavenworth 90.55 36** P **P** **20 10 28.3 +0.3**
baz=306
C06D S **S** **20 21 22.9 +0.4**
baz=306
**MCH1 Michaelchurch 90.65 329** *e*P **P** **20 10 31.3 +3.0**
MCH1 IAmb IAmb 20 10 41.8
comp=Z,184nm,1.0s
MCH1 IAMs_20 IAMs_20 20 55 13.8
comp=Z,71µm,17.5s
**SSB Saint Sauveur 90.69 321** ⇑P **P** **20 10 31.2 +2.5**
SSB ⇓s **sP** **20 10 40.7 +3.3**
SSB ⇓s **sP** **20 10 40.8 +3.3**
**VSL Villasalto 90.75 314** ⇑P **P** **20 10 31.6 +2.5**
VSL ⇑s **sP** **20 10 41.6 +3.8**
**VSL Villasalto 90.75 314** P **P** **20 10 28.4 -0.7**
**F04A Amboy 90.84 38** IAmb IAmb 20 10 40.8
comp=Z,159nm,0.9s
**I02E Swisshome, OR 91.03 41** P **P** **20 10 29.7 -0.5**
baz=304
**LTY Liberty 91.06 37** IAmb IAmb 20 10 41.7
comp=Z,226nm,1.6s
**B08A Colville Reser 91.13 35** IAmb IAmb 20 10 42.2
comp=Z,272nm,1.4s
**F05D White Salmon 91.42 38** P **P** **20 10 32.1 +0.1**
baz=306
**H04D Lebanon 91.46 40** P **P** **20 10 31.4 -0.8**
baz=305
H04D S **S** **20 21 32.9 +2.0**
baz=305
**J01E Myrtle Point 91.51 41** P **P** **20 10 32.2 -0.2**
J01E IAmb IAmb 20 10 47.8
comp=Z,136nm,0.9s
**J01E Myrtle Point 91.51 41** P **P** **20 10 31.0 -1.5**
baz=304
J01E S **S** **20 21 33.6 +2.2**
baz=304
**I03D Drain, OR 91.56 41** P **P** **20 10 32.0 -0.7**
baz=304
**H04A Detroit Lake 91.69 39** IAmb IAmb 20 10 53.1
comp=Z,273nm,1.5s
**G05D Wamic, OR 91.87 39** P **P** **20 10 31.9 -2.3**
baz=306
**E07A Sunnyside 91.92 37** IAmb IAmb 20 10 54.5
comp=Z,173nm,1.2s
**K02D Willamette Mer 91.93 42** P **P** **20 10 33.1 -1.4**
baz=304
K02D S **S** **20 21 33.6 -1.8**
baz=304
**I04A Tendick Farm, 92.07 40** P **P** **20 10 34.6 -0.6**
baz=305
I04A S **S** **20 21 35.4 -1.2**
baz=305
**HAWA Hanford 92.20 37** ⇓P **P** **20 10 36.7 +1.0**
**HAWA Hanford 92.20 37** P **P** **20 10 35.7 +0.1**
HAWA IAmb IAmb 20 10 55.7
comp=Z,121nm,1.3s
**L02E Cave Junction 92.26 42** IAmb IAmb 20 10 47.6
comp=Z,115nm,1.2s
L02E IAMs_20 IAMs_20 20 57 25.6
comp=Z,10µm,19.0s
**L02E Cave Junction 92.26 42** P **P** **20 10 35.2 -0.9**
baz=304
**KSXB Camp Six Broad 92.28 42** IAmb IAmb 20 10 48.5
comp=Z,176nm,1.3s
**F07A Phinny Hill Vi 92.28 37** IAmb IAmb 20 10 47.9
comp=Z,136nm,1.3s
**NEW Newport 92.35 34** P **P** **20 10 36.8 +0.5**
comp=Z,28nm,0.8s,baz=315,slow=3.3,SNR=12
**NEW Newport 92.35 34** IAmb IAmb 20 10 56.1
comp=Z,163nm,1.4s
**NEW Newport 92.35 34** IAMs_20 IAMs_20 20 53 08.5
comp=Z,15µm,21.0s
**NEW Newport 92.35 34** P **P** **20 10 36.2 -0.2**
baz=309
NEW S **S** **20 21 37.8 -1.2**
baz=309
**I05D Terrebonne, OR 92.39 39** P **P** **20 10 36.3 -0.4**
baz=306
**E08A Dider Farm, El 92.40 37** IAmb IAmb 20 10 55.7
comp=Z,305nm,2.0s
**HUMO Hull Mountain 92.41 41** P **P** **20 10 35.9 -0.9**
HUMO IAmb IAmb 20 10 52.3
comp=Z,154nm,1.6s
**J04D Umpqua Nationa 92.56 41** P **P** **20 10 37.4 -0.2**
baz=305
**KEST Kesra 92.69 311** P **P** **20 10 38.7 +0.4**
comp=Z,40nm,1.1s,baz=4.4,slow=1.8,SNR=16

**KEST Kesra 92.69 311** IAmb IAmb 20 11 11.9
comp=Z,112nm,1.4s
**CRZF Crozet Islands 92.77 220** IAMs_20 IAMs_20 20 50 08.6
comp=Z,11µm,18.0s
**E09A Wood Farm, Sta 92.89 36** IAmb IAmb 20 10 54.3
comp=Z,291nm,1.9s
**NUUK Nuuk 93.00 357** *i* P **P** **20 10 38.1 -0.7**
NUUK IAmb IAmb 20 10 55.5
comp=Z,206nm,1.4s
**L04D Klamath Falls 93.03 41** P **P** **20 10 39.1 -0.6**
baz=305
L04D S **S** **20 21 43.6 -1.8**
baz=305
**YBH Yreka Blue Hor 93.05 42** P **P** **20 10 40.0 +0.2**
comp=Z,26nm,1.1s,baz=18,slow=2.3,SNR=14
YBH LR LR 20 53 39.1
comp=Z,4µm,19.2s,baz=330,slow=36
**YBH Yreka Blue Hor 93.05 42** IAmb IAmb 20 10 51.3
comp=Z,130nm,1.4s
**J05D Fort Rock, OR 93.06 40** P **P** **20 10 39.8 0.0**
baz=306
**K04D Chiloquin, OR 93.13 41** P **P** **20 10 38.7 -1.5**
baz=305
**M02C Callahan 93.16 42** P **P** **20 10 38.3 -2.0**
M02C IAmb IAmb 20 10 46.1
comp=Z,236nm,1.9s
M02C IAMs_20 IAMs_20 20 46 27.6
comp=Z,13µm,22.0s
**M02C Callahan 93.16 42** P **P** **20 10 39.5 -0.8**
baz=304
M02C S **S** **20 21 47.3 +0.9**
baz=304
**FRB Frobisher Bay 93.34 4** P **P** **20 10 39.5 -1.0**
comp=Z,22nm,0.9s,baz=347,slow=6.6,SNR=21
FRB PKKPbc **PKKPbc** **20 27 50.5 +1.4**
comp=Z,1.8nm,0.5s,baz=207,slow=6.9,SNR=3.4
FRB LR LR 20 58 45.4
comp=Z,15µm,18.0s,baz=345,slow=39
**TATN Tataouine 93.43 307** ⇑P **P** **20 10 43.6 +2.0**
TATN ⇑P **P** **20 10 43.7 +2.0**
**WALA Waterton Lakes 93.47 32** IAmb IAmb 20 10 58.1
comp=Z,146nm,1.1s
**N02D Trinity Center 93.48 43** P **P** **20 10 41.7 -0.1**
baz=304
**M04C Macdoel 93.56 42** IAmb IAmb 20 10 53.4
comp=Z,166nm,1.2s
**M04C Macdoel 93.56 42** P **P** **20 10 42.1 -0.1**
baz=305
M04C S **S** **20 21 51.8 +1.7**
baz=305
**CMAH Djebel Manchou 93.56 312** P **P** **20 10 43.1 +0.9**
**K05A Summer Lake 93.59 40** IAmb IAmb 20 10 54.1
comp=Z,188nm,1.2s
**KCPM Cahto Peak 93.65 44** IAmb IAmb 20 11 00.2
comp=Z,104nm,1.5s
**ABSA Djebel Ababsia 93.71 312** P **P** **20 10 41.2 -1.7**
**FCC Fort Churchill 93.72 17** P **P** **20 10 40.9 -1.4**
FCC pmax pmax
comp=Z,152nm,1.3s
**FCC Fort Churchill 93.72 17** P **P** **20 10 40.9 -1.4**
FCC IAmb IAmb 20 10 52.5
comp=Z,152nm,1.2s
**CKFL Kef-Lekhel 94.16 312** P **P** **20 10 47.4 +2.4**
**HOPS Hopland Field 94.36 44** IAMs_20 IAMs_20 20 50 03.3
comp=Z,11µm,21.0s
**BMO Blue Mountains 94.38 37** IAMs_20 IAMs_20 20 55 15.7
comp=Z,11µm,20.0s
**CASM Ain Smara 94.39 312** P **P** **20 10 48.9 +2.9**
**MOD Modoc Plateau 94.42 41** P **P** **20 10 45.1 -1.1**
MOD IAmb IAmb 20 10 57.5
comp=Z,156nm,1.4s
**FFC Flin Flon 94.51 23** P **P** **20 10 44.6 -1.4**
FFC *PP **sP** **20 10 55.3 +0.4**
FFC MLR MLR
comp=Z,13µm,20.0s
**FFC Flin Flon 94.51 23** P **P** **20 10 44.6 -1.4**
FFC pP **sP** **20 10 55.3 +0.4**
FFC IAmb IAmb 20 10 56.5
comp=Z,237nm,1.6s
**FFC Flin Flon 94.51 23** IAMs_20 IAMs_20 20 55 13.9
comp=Z,13µm,20.0s
**J08A Circle Bar Ran 94.64 39** IAmb IAmb 20 10 58.7
comp=Z,114nm,1.3s
**DFRA Djebel Bou Aff 94.66 313** P **P** **20 10 50.3 +3.0**
**MSO Missoula 94.93 34** IAMs_20 IAMs_20 20 54 37.6
comp=Z,14µm,21.0s
**MSO Missoula 94.93 34** P **P** **20 10 48.4 +0.1**
baz=311
**PLID Pearl Lake 94.95 36** IAMs_20 IAMs_20 20 49 57.8
comp=Z,12µm,22.0s
**WVOR Wild Horse Val 95.10 40** P **P** **20 10 47.1 -2.1**
WVOR pmax pmax
comp=Z,138nm,1.6s
WVOR MLR MLR
comp=Z,8µm,20.0s
**WVOR Wild Horse Val 95.10 40** P **P** **20 10 47.1 -2.1**
WVOR IAmb IAmb 20 11 00.8
comp=Z,138nm,1.6s
**CKHR Kef el Ahmar 95.19 313** P **P** **20 10 53.2 +3.4**
**MPK Martis Peak 96.13 43** IAmb IAmb 20 11 05.2
comp=Z,118nm,1.2s
**RUBR Rubicon Trail 96.19 43** IAmb IAmb 20 11 11.6
comp=Z,74nm,1.0s
**EGMT Eagleton 96.20 31** IAMs_20 IAMs_20 21 00 35.2
comp=Z,10µm,19.0s
**EGMT Eagleton 96.20 31** P **P** **20 10 54.3 +0.2**
baz=314
**EMB Emerald Bay 96.27 43** P **P** **20 10 53.3 -1.5**
EMB IAmb IAmb 20 11 05.6
comp=Z,94nm,1.1s
**PPT Papeete 96.51 106** LR LR 20 49 10.2
comp=Z,8µm,19.8s,baz=272,slow=32
**PPT2 Papeete2 96.51 106** *e*S **S** **20 22 11.2 -5.1**
comp=Z,11µm,27.5s
**PPT2 Papeete2 96.51 106** *e*LQ LQ 20 38 14.5
comp=Z,9µm,26.2s
PPT2 *e*LR LR 20 42 23.9
comp=Z,26µm,27.8s
**PPTF Pamatai, Papee 96.52 106** IAMs_20 IAMs_20 20 49 36.9
comp=Z,10µm,20.0s
**DLMT Dillon 96.60 35** IAMs_20 IAMs_20 21 02 18.2
comp=Z,11µm,18.0s
**YERR Yerington 96.81 43** P **P** **20 10 54.9 -2.3**
**HLID Hailey 96.81 37** P **P** **20 10 55.0 -2.0**
HLID IAMs_20 IAMs_20 20 56 50.5
comp=Z,13µm,19.0s
**HLID Hailey 96.81 37** P **P** **20 10 56.9 -0.1**
baz=311
**BOZ Bozeman (W) 96.94 34** IAMs_20 IAMs_20 20 56 04.9
comp=Z,11µm,21.0s
**BOZ Bozeman (W) 96.94 34** P **P** **20 10 57.3 -0.3**
baz=313
**BBGB Big Mountain B 97.06 46** IAmb IAmb 20 11 09.2
comp=Z,79nm,1.0s
**BMN Battle Mountai 97.17 41** IAmb IAmb 20 11 17.8
comp=Z,118nm,1.7s
**KVN Kaiserville 97.47 42** P **P** **20 10 58.5 -1.7**
KVN pmax pmax
comp=Z,76nm,1.5s
**KVN Kaiserville 97.47 42** P **P** **20 10 58.5 -1.7**
**LHV Little Huntoon 97.71 43** IAmb IAmb 20 11 12.5
comp=Z,122nm,1.6s
**NVAR Mina Array Bea 97.72 43** P **P** **20 11 01.0 -0.3**
comp=Z,3.6nm,0.6s,baz=293,slow=3.8,SNR=17
NVAR PP PP 20 15 08.2 +9.4
comp=Z,7.6nm,1.2s,baz=285,slow=5.2,SNR=2.2
NVAR PKKPbc **PKKPdf** **20 27 41.9 +3.3**
comp=Z,0.6nm,0.6s,baz=156,slow=2.9,SNR=4.4
NVAR LR LR 20 49 23.8
comp=Z,8µm,21.7s,baz=312,slow=32
**NVAR Mina Array Bea 97.72 43** P **P** **20 11 00.6 -0.7**
**MLAC Mammoth, Mammo 97.87 44** P Pdif 20 11 02.1 0.0
baz=307
**LSZ Lusaka 97.98 257** LR LR 20 53 05.6
comp=Z,23µm,19.9s,baz=76,slow=34
**PAGB Antelope Grade 98.07 46** IAmb IAmb 20 11 13.6
comp=Z,71nm,1.1s
**ELK Elko 98.15 39** LR LR 20 51 35.9
comp=Z,7µm,21.8s,baz=333,slow=33
**H17A Grant Village 98.31 34** IAmb IAmb 20 11 24.2
comp=Z,135nm,1.8s
**H17A Grant Village 98.31 34** P Pdif 20 11 04.6 +0.7
baz=314
**DGMT Dagmar 98.43 28** P **P** **20 11 02.6 -1.5**
DGMT IAmb IAmb 20 11 14.7
comp=Z,154nm,1.5s
**DGMT Dagmar 98.43 28** IAMs_20 IAMs_20 21 01 31.9

comp=Z,12µm,18.0s
**DGMT Dagmar** 98.43 28 P P 20 11 03.7 -0.3
baz=319
**RLMT Red Lodge** 98.48 33 IAMs_20 IAMs_20 20 57 41.5
comp=Z,14µm,20.0s
**RLMT Red Lodge** 98.48 33 P P 20 11 04.0 -0.6
baz=315
**SMMC Simmler** 98.48 46 P P 20 11 04.4 -0.2
baz=306
**CART Cartagena** 98.56 317 IAMs_20 IAMs_20 21 03 52.9
comp=Z,12µm,19.0s
**FXWY Fox Creek** 98.59 35 IAMs_20 IAMs_20 21 04 15.0
comp=Z,10µm,19.0s
**TIN Tinemaha, Big** 98.60 44 P Pdif 20 11 05.2 +0.1
baz=307
**VES Vestal, Richgr** 98.77 45 P Pdif 20 11 06.2 +0.5
baz=306
**LAO LASA Array** 98.83 31 IAMs_20 IAMs_20 21 00 12.8
comp=Z,15µm,19.0s
**PKM Mcpherson Peak** 98.85 46 P P 20 11 06.3 -0.1
baz=306
**SNOW Snow King Moun** 98.86 35 IAMs_20 IAMs_20 20 57 09.0
comp=Z,9µm,20.0s
**HVU Hansel Valley** 98.89 37 P P 20 11 04.5 -1.9
HVU pmax pmax
comp=Z,16nm,1.2s
**HVU Hansel Valley** 98.89 37 P 20 11 04.5 -1.9
**CWC Cottonwood Cre** 99.06 44 P Pdif 20 11 07.2 -0.1
baz=307
CWC S S 20 22 35.8 -2.0
baz=307
**ESDC Sonseca Array** 99.07 320 P Pdif 20 11 09.1 +2.0
comp=Z,2.9nm,1.1s,baz=35,slow=3.1,SNR=8.2
ESDC PP PP 20 15 17.1 +8.3
comp=Z,15nm,1.1s,baz=48,slow=7.5,SNR=6.3
ESDC PKKPbc PKKPdf 20 27 37.1 +1.2
comp=Z,1.4nm,1.0s,baz=286,slow=2.3,SNR=4.7
ESDC LR LR 20 59 41.9
comp=Z,15µm,18.1s,baz=29,slow=38
**ESDC Sonseca Array** 99.07 320 P Pdif 20 11 04.0 -3.2
**AHID Auburn Hatcher** 99.15 36 IAMs_20 IAMs_20 21 03 32.3
comp=Z,14µm,18.0s
**GRAC Grapevine Rang** 99.18 43 P Pdif 20 11 07.8 +0.1
baz=308
**PBRG Braganca** 99.28 323 *e*Pdif Pdif 20 11 18.6 +11
**PBRG Braganca** 99.28 323 *e*PP PP 20 15 18.6 +8.4
PBRG eSKSac SKSac 20 21 49.7 +4.0
PBRG eSS SS 20 29 36.8 +10
**R11A Troy Canyon, C** 99.45 41 P Pdif 20 11 08.1 -1.0
baz=309
**MATP Matopo** 99.56 252 LR LR 20 55 48.4
comp=Z,6µm,18.3s,baz=67,slow=35
**MPMC Manual Prospec** 99.68 44 P Pdif 20 11 09.5 -0.6
baz=308
**MAW Mawson** 99.72 199 LR LR 20 51 53.3
comp=Z,9µm,20.7s,baz=42,slow=33
**FURC Furnace Creek,** 99.83 44 P Pdif 20 11 10.3 -0.1
baz=306
**MVO Moncorvo** 99.86 323 *e*Pdif Pdif 20 11 22.2 +12
**MVO Moncorvo** 99.86 323 *e*PP PP 20 15 20.3 +5.6
MVO eSKSac SKSac 20 21 49.9 +1.2
MVO eSS SS 20 29 38.6 +3.4
**MVO Moncorvo** 99.86 323 *e*LQ LQ 20 48 03.1
MVO eLR LR 20 50 56.4
comp=Z,20µm,18.0s
**LRMC Laurel Mtn Rad** 99.90 45 P Pdif 20 11 10.2 -0.8
baz=307
**DUG Dugway, Tooele** 99.91 39 P Pdif 20 11 10.3 -0.7
baz=311
**TPNV Topopah Spring** 99.92 43 P Pdif 20 11 10.5 -0.6
baz=309
**BW06 Boulder Array** 99.97 35 P Pdif 20 11 11.1 -0.2
baz=314
**PDAR Pinedale Array** 99.97 35 P Pdif 20 11 12.7 +1.3
comp=Z,0.9nm,0.8s,baz=350,slow=4.7,SNR=5.5
PDAR PP PP 20 15 22.9 +7.2
comp=Z,5.1nm,1.2s,baz=282,slow=9.0,SNR=4.0
PDAR PKKPbc PKKPdf 20 27 33.2 -1.4
comp=Z,3.5nm,1.1s,baz=119,slow=1.9,SNR=7.5
PDAR LR LR 20 59 07.5
comp=Z,4µm,19.2s,baz=343,slow=37
**PDAR Pinedale Array** 99.97 35 Pdif 20 11 09.2 -2.1
**PGAV Gavieira, Arco** 100.01 324 *e*PP PKiKP 20 15 22.9 -16
PGAV eSKSac SKSac 20 21 51.3 +1.8
PGAV eSS SS 20 29 57.4 +20
**PGAV Gavieira, Arco** 100.01 324 eLR LR 20 50 11.3
comp=Z,18µm,18.0s
**EDW2 Edwards Air Fo** 100.06 45 P Pdif 20 11 11.6 0.0
baz=307
**POLO Lamas de Olo** 100.15 323 *e*Pdif Pdif 20 11 23.8 +12
**POLO Lamas de Olo** 100.15 323 *e*PP PKiKP 20 15 24.6 -15
POLO eSKSac SKSac 20 21 53.8 +3.6
POLO eSS SS 20 29 55.8 +17
**ULM Lac du Bonnet** 100.33 23 P Pdif 20 11 13.7 +1.3
comp=Z,2.3nm,0.7s,baz=217,slow=3.9,SNR=3.5
**ULM Lac du Bonnet** 100.33 23 Pdif 20 11 11.2 -1.2
**PASC Pasadena Art C** 100.36 46 IAMs_20 IAMs_20 20 52 14.3
comp=Z,9µm,20.0s
**GSC Goldstone, Bar** 100.58 45 P Pdif 20 11 14.3 +0.3
baz=308
**MTE Manteigas** 100.67 322 *e*Pdif Pdif 20 11 21.1 +6.9
**MTE Manteigas** 100.67 322 *e*PP PP 20 15 22.7 +1.9
MTE eSKSac SKSac 20 21 50.1 -2.6
MTE eSS SS 20 29 53.1 +6.7
**MTE Manteigas** 100.67 322 eLQ LQ 20 48 09.5
MTE eLR LR 20 52 36.6
comp=Z,21µm,20.0s
**EMAL Malaga-Limoner** 101.21 318 P PP 20 15 31.4 +6.4
EMAL S SKSac 20 21 55.1 -0.1
**PMRV Marv??o** 101.24 322 *e*Pdif Pdif 20 11 30.1 +13
**PMRV Marv??o** 101.24 322 *e*PP PKiKP 20 15 39.9 -1.5
PMRV eSKSac SKSac 20 21 57.8 +2.4
PMRV eSS SS 20 30 07.6 +13
**PMRV Marv??o** 101.24 322 eLR LR 20 50 19.1
comp=Z,14µm,18.0s
**COI Coimbra** 101.29 323 *e*Pdif Pdif 20 11 21.4 +4.5
**COI Coimbra** 101.29 323 *e*PP PKiKP 20 15 33.2 -8.2
COI eSKSac SKSac 20 21 57.5 +2.0
COI eSS SS 20 30 03.9 +9.1
**MURC Murrieta** 101.36 46 P Pdif 20 11 16.1 -1.3
baz=307
**PCAS Casmilo, Conde** 101.44 323 *e*Pdif Pdif 20 11 24.7 +7.1
**PCAS Casmilo, Conde** 101.44 323 *e*PP PKiKP 20 15 33.6 -8.1
PCAS eSKSac SKSac 20 21 59.9 +3.6
PCAS eSS SS 20 30 08.3 +11
**GMRC Granite Mounta** 101.64 44 P Pdif 20 11 18.1 -0.6
baz=309
**PESTR Estremoz** 101.73 321 *e*Pdif Pdif 20 11 32.2 +13
**PESTR Estremoz** 101.73 321 *e*PP PKiKP 20 15 37.2 -5.1
PESTR eSKSac SKSac 20 22 01.6 +3.9
PESTR eSS SS 20 30 15.3 +14
**RSSD Black Hills** 101.77 31 IAMs_20 IAMs_20 21 00 47.9
comp=Z,11µm,21.0s
**RSSD Black Hills** 101.77 31 P Pdif 20 11 18.2 -1.0
baz=319
**PFO Pinyon Flats O** 101.84 46 P Pdif 20 11 18.6 -1.1
baz=308
**TPFO Pinon Flats** 101.84 46 P Pdif 20 11 18.4 -1.3
baz=308
**TAOE Nuku Hiva Isla** 101.86 95 *e*PP PP 20 15 29.4 -1.9
comp=Z,2µm,25.8s
TAOE eS Sdif 20 22 56.5 -5.2
comp=Z,7µm,26.5s
**TAOE Nuku Hiva Isla** 101.86 95 eLR LR 20 44 50.4
comp=Z,16µm,28.6s
**BELC Belle Mtn. Jos** 101.90 45 P Pdif 20 11 19.2 -0.7
baz=308
**AGMN Agassiz Nation** 101.95 24 IAMs_20 IAMs_20 21 01 12.9
comp=Z,12µm,19.0s
**AGMN Agassiz Nation** 101.95 24 P Pdif 20 11 18.5 -1.2
baz=326
**PMTG Montargil** 101.95 322 *e*Pdif Pdif 20 11 31.8 +12
**PMTG Montargil** 101.95 322 *e*PP PKiKP 20 15 39.1 -3.5
PMTG eSKSac SKSac 20 22 03.1 +4.3
PMTG eSS SS 20 30 24.7 +21
**RWWY Rawlins** 101.97 35 IAMs_20 IAMs_20 20 58 58.2
comp=Z,17µm,21.0s
**PSBE So Bento** 101.98 322 *e*PP PKiKP 20 15 46.8 +4.1
PSBE eSKSac SKSac 20 22 02.6 +3.7
PSBE eSS SS 20 30 20.9 +16
**EVO Evora** 102.20 321 P PKiKP 20 15 47.0 +3.8
EVO S SKSac 20 22 04.2 +4.2
**EVO Evora** 102.20 321 *e*Pdif Pdif 20 11 39.0 +18
**EVO Evora** 102.20 321 *e*PP PKiKP 20 15 47.5 +4.4
**SCHQ Schefferville** 102.32 4 PP PKiKP 20 15 38.0 -4.9
comp=Z,12nm,1.1s,baz=3.8,slow=9.7,SNR=4.0
SCHQ PKKPbc PKKPbc 20 27 24.9 +0.6
comp=Z,4.5nm,0.7s,baz=98,slow=7.4,SNR=6.5
**SCHQ Schefferville** 102.32 4 Pdif Pdif 20 11 19.2 -2.0
**CEU Ceuta** 102.35 318 P PKiKP 20 15 37.6 -5.8
CEU S SKSac 20 22 00.1 -0.6
**IRM Iron Mountain** 102.36 45 P Pdif 20 11 20.7 -1.2
baz=309
**ARNO Arenosillo** 102.40 319 P PKiKP 20 15 39.1 -4.3
ARNO S SKSac 20 22 05.7 +4.8
**BC3 Big Chuckawall** 102.47 45 P Pdif 20 11 21.0 -1.5
baz=309
**SFS San Fernando** 102.50 319 P PKiKP 20 15 40.5 -3.2
SFS S SKSac 20 22 07.2 +5.9
**PMAFR Mafra** 102.63 322 *e*Pdif Pdif 20 11 37.1 +14
**PMAFR Mafra** 102.63 322 *e*PP PKiKP 20 15 43.5 -0.4
PMAFR eSKSac SKSac 20 22 07.1 +5.1
PMAFR eSS SS 20 30 23.5 +10
**LIS Lisbon** 102.72 322 *e*PP PKiKP 20 15 37.1 -6.9
LIS eSKSac SKSac 20 22 01.4 -1.0
LIS eSS SS 20 30 17.5 +2.8
LIS IAMs_20 IAMs_20 20 53 23.6
comp=E,31µm,17.7s
**PMST Lisbon--Monsan** 102.73 322 *e*PP PKiKP 20 15 55.4 +11
**PNCL Nicolau / Gran** 102.78 321 *e*Pdif Pdif 20 11 29.3 +5.7
**PNCL Nicolau / Gran** 102.78 321 eSKSac SKSac 20 22 08.2 +5.5
PNCL eSS SS 20 30 23.6 +8.1
**PVAQ Vaqueiros** 102.78 320 *e*Pdif Pdif 20 11 38.0 +14
**PVAQ Vaqueiros** 102.78 320 *e*PP PKiKP 20 15 52.3 +8.1
PVAQ eSKSac SKSac 20 22 05.2 +2.5
PVAQ eSS SS 20 30 21.2 +5.5
**PVAQ Vaqueiros** 102.78 320 eLQ LQ 20 49 29.3
PVAQ eLR LR 20 54 12.8
comp=E,17µm,22.0s
**MESJ Messejana** 102.78 321 *e*Pdif Pdif 20 11 23.4 -0.2
MESJ *e*PP PP 20 15 37.7 +1.0
MESJ eSKSac SKSac 20 22 01.7 -1.0
MESJ eSS SS 20 30 18.4 +2.8
MESJ IAMs_20 IAMs_20 20 55 18.5
comp=N,31µm,21.5s
**MESJ Messejana** 102.78 321 *e*Pdif Pdif 20 11 32.9 +9.3
**MESJ Messejana** 102.78 321 *e*PP PKiKP 20 15 38.7 -5.5
**MESJ Messejana** 102.78 321 *i* P Pdif 20 11 23.4 -0.2
MESJ *e* 20 15 37.7
MESJ *e* 20 22 01.6
MESJ eSS SS 20 30 18.4 +2.8
**PCVE Castro Verde** 102.82 321 *e*Pdif Pdif 20 11 42.0 +18
**PCVE Castro Verde** 102.82 321 *e*PP PKiKP 20 15 43.9 -0.4
PCVE eSKSac SKSac 20 22 08.6 +5.7
PCVE eSS SS 20 30 25.1 +9.0
**PBDV Barranco-do-Ve** 103.02 320 *e*Pdif Pdif 20 11 31.8 +7.1
**PBDV Barranco-do-Ve** 103.02 320 *e*PP PKiKP 20 15 45.5 +0.8
PBDV eSKSac SKSac 20 22 06.7 +2.8
PBDV eSS SS 20 30 27.4 +8.4
**PHWY Pilot Hill** 103.15 34 IAMs_20 IAMs_20 21 00 30.6
comp=Z,10µm,20.0s
**N23A Red Feather La** 103.20 34 P Pdif 20 11 25.7 0.0
baz=317
**MORF Marmelete** 103.40 321 *e*Pdif Pdif 20 11 26.3 -0.1
MORF *e*PP PP 20 15 42.2 +0.8
MORF eSKSac SKSac 20 22 04.6 -1.2
MORF eSS SS 20 30 26.8 +2.6
MORF IAMs_20 IAMs_20 20 55 37.3
comp=E,36µm,24.0s
**MORF Marmelete** 103.40 321 *e*Pdif Pdif 20 11 37.4 +11
**MORF Marmelete** 103.40 321 *e*PP PKiKP 20 15 49.0 +3.6
MORF eSKSac SKSac 20 22 08.0 +2.3
MORF eSS SS 20 30 34.3 +10
**MORF Marmelete** 103.40 321 *i* P Pdif 20 11 26.3 -0.1
MORF *e* 20 15 42.1
MORF *e* 20 22 04.5
MORF eSS SS 20 30 26.8 +2.6
**PFVI Vila Bisbo** 103.62 321 *e*Pdif Pdif 20 11 47.4 +20
**PFVI Vila Bisbo** 103.62 321 *e*PP PKiKP 20 15 57.5 +12
PFVI eSKSac SKSac 20 22 08.3 +1.7
PFVI eSS SS 20 30 39.5 +12
**IFR Ifrane** 103.72 316 P PKiKP 20 15 46.4 +0.2
IFR S SKSac 20 22 11.3 +3.7
**EYMN Ely** 103.81 22 IAMs_20 IAMs_20 21 03 41.9
comp=Z,13µm,19.0s
**EYMN Ely** 103.81 22 P Pdif 20 11 28.0 0.0
baz=330
**WUAZ Wupatki** 103.86 41 P Pdif 20 11 28.5 -0.1
baz=312
**SMCO Snowmass** 103.88 36 IAMs_20 IAMs_20 21 06 07.1
comp=Z,12µm,18.0s
**ISCO Idaho Springs** 104.17 35 IAMs_20 IAMs_20 21 01 16.7
comp=Z,16µm,22.0s
**ISCO Idaho Springs** 104.17 35 P Pdif 20 11 29.7 -0.4
baz=317
**MVCO Mesa Verde** 104.41 39 IAMs_20 IAMs_20 21 08 54.4
comp=Z,8µm,18.0s
**MVCO Mesa Verde** 104.41 39 P Pdif 20 11 30.8 -0.4
baz=314
**S22A 4UR Ranch, Cre** 104.98 37 P Pdif 20 11 33.0 -0.8
baz=316
**OGNE Ogallala** 105.14 32 IAMs_20 IAMs_20 21 02 37.2
comp=Z,10µm,19.0s
**AVE Averroes** 105.32 317 P PKiKP 20 15 57.7 +8.7
AVE S SKSac 20 22 17.5 +3.0
**ECSD EROS Data Cent** 105.41 27 IAMs_20 IAMs_20 21 06 04.8
comp=Z,12µm,18.0s
**SDCO Great Sand Dun** 105.72 36 IAMs_20 IAMs_20 21 02 32.7
comp=Z,11µm,21.0s
**SDCO Great Sand Dun** 105.72 36 P PKiKP 20 15 50.2 +0.2
baz=316
**BGNE Belgrade** 106.61 29 P PKiKP 20 15 51.9 +0.7
baz=323
**ANMO Albuquerque** 107.18 39 IAMs_20 IAMs_20 21 05 34.4
comp=Z,10µm,22.0s
**ANMO Albuquerque** 107.18 39 P PKiKP 20 15 52.4 -0.2
baz=315
**Y22D IRIS PASSCAL I** 107.52 40 IAMs_20 IAMs_20 21 06 00.5
comp=Z,12µm,20.0s
**CBKS Cedar Bluff** 107.91 32 IAMs_20 IAMs_20 21 09 36.4
comp=Z,11µm,18.0s
**SYO Syowa Base** 108.01 202 ǁ *e*pPdiff pPdif 20 11 55.0 +2.6
**SCIA State Center** 108.32 26 IAMs_20 IAMs_20 21 05 01.8
comp=Z,10µm,20.0s
**JFWS Jewell Farm** 108.60 23 IAMs_20 IAMs_20 21 11 12.9
comp=Z,11µm,18.0s
**EPT El Paso** 109.37 41 IAMs_20 IAMs_20 21 04 38.7
comp=Z,8µm,20.0s
**OK035 E0210 Rd and N** 110.06 33 IAMs_20 IAMs_20 21 07 09.2
comp=Z,9µm,18.0s
**MNTX Cornudas Mount** 110.10 41 P PKiKP 20 15 57.8 -0.2
baz=315
**OK032 Salt Plains WL** 110.23 32 IAMs_20 IAMs_20 21 07 53.8
comp=Z,8µm,20.0s
**TORD Tomodi Ar. Bea** 110.29 295 Pdiff Pdif 20 11 58.4 +1.0
comp=Z,1.0nm,1.0s,baz=36,slow=4.3,SNR=6.1
TORD PKiKP PKiKP 20 15 59.3 +0.6
comp=Z,2.4nm,0.8s,baz=68,slow=2.2,SNR=4.1
TORD PP PP 20 16 37.4 +4.4
comp=Z,7.1nm,0.8s,baz=52,slow=5.2,SNR=7.0
TORD PKKPbc PKKPbc 20 26 59.9 +1.1
comp=Z,2.0nm,0.7s,baz=267,slow=3.6,SNR=6.3
**PQI Presque Isle** 110.31 6 IAMs_20 IAMs_20 21 05 10.8
comp=Z,14µm,20.0s
**HQIL Hanson Quary C** 110.43 22 IAMs_20 IAMs_20 21 06 25.2
comp=Z,12µm,20.0s
**PMPST Porto Santo, M** 110.82 322 *e*PP PP 20 16 49.9 +14
PMPST eSKSac SKSac 20 22 40.4 +2.2
**HDIL Hopedale** 111.00 24 IAMs_20 IAMs_20 21 10 14.3
comp=Z,12µm,20.0s
**LONY Lake Ozonia** 111.38 12 IAMs_20 IAMs_20 21 03 21.4
comp=Z,15µm,22.0s
**LONY Lake Ozonia** 111.38 12 P PKiKP 20 16 00.4 +0.4
baz=345
**OK029 Liberty Lake** 111.40 33 IAMs_20 IAMs_20 21 10 00.7
comp=Z,11µm,18.0s
**PMAR Madeira** 111.41 322 *e*PP PP 20 16 52.5 +12
PMAR eSKSac SKSac 20 22 50.9 +10
**OK033 Mehan** 111.46 32 IAMs_20 IAMs_20 21 04 05.2
comp=Z,10µm,22.0s
**PMOZ Porto Moniz, M** 111.49 323 *e*PP PP 20 16 53.9 +13
PMOZ eSKSac SKSac 20 22 49.8 +8.6
PMOZ eSS SS 20 32 24.0 +10
**PMOZ Porto Moniz, M** 111.49 323 eLR LR 20 56 15.0
comp=Z,9µm,20.0s
**WMOK Wichita Mounta** 111.55 34 IAMs_20 IAMs_20 21 03 35.2
comp=Z,10µm,22.0s
**WMOK Wichita Mounta** 111.55 34 P PKiKP 20 15 59.8 -0.8
baz=321
**OK031 S. Brethren Rd** 111.58 32 IAMs_20 IAMs_20 21 04 08.5
comp=Z,11µm,22.0s
**OK034 N. Norfolk Rd.** 111.59 32 IAMs_20 IAMs_20 21 04 07.9
comp=Z,10µm,22.0s
**OK030 Cody Creek RV** 111.62 32 IAMs_20 IAMs_20 21 04 10.7
comp=Z,11µm,22.0s
**OK025 Westminster Rd** 111.63 33 IAMs_20 IAMs_20 21 08 55.8
comp=Z,10µm,18.0s
**LBNH Lisbon** 112.20 10 P PKiKP 20 16 02.0 +0.4
baz=348
**ERPA Erie** 112.56 16 P PKiKP 20 16 02.1 -0.2
baz=340
**QSPA South Pole Qui** 112.70 180 IAMs_20 IAMs_20 21 04 28.0
comp=Z,10µm,21.0s
**O48B Farmland** 112.73 21 P PKiKP 20 16 02.7 0.0
baz=334
**TXAR Lajitas Array** 112.82 41 Pdiff Pdif 20 12 14.3 +5.8
comp=Z,1.1nm,0.9s,baz=258,slow=3.6,SNR=7.3
TXAR PKiKP PKiKP 20 16 03.1 -0.2
comp=Z,2.6nm,0.8s,baz=219,slow=1.6,SNR=7.4
**TXAR Lajitas Array** 112.82 41 P Pdif 20 12 03.8 -4.8
**TXAR Lajitas Array** 112.82 41 Pdif Pdif 20 12 03.8 -4.8
**FFD Franklin Falls** 113.00 10 IAMs_20 IAMs_20 21 12 51.9
comp=Z,11µm,18.0s
**M53A WI Miller and** 113.01 17 P PKiKP 20 16 03.3 +0.1
baz=339
**U40A Yellville** 113.11 29 IAMs_20 IAMs_20 21 08 13.0
comp=Z,8µm,20.0s
**U40A Yellville** 113.11 29 P PKiKP 20 16 02.8 -0.8
baz=327
**M54A Oil Creek Stat** 113.21 16 P PKiKP 20 16 03.1 -0.5
baz=340
**TRY Troy** 113.38 11 IAMs_20 IAMs_20 21 10 32.0
comp=Z,13µm,20.0s
**BINY Binghamton** 113.43 13 P PKiKP 20 16 04.1 +0.1
baz=343
**ACSO Alum Creek Sta** 113.45 20 IAMs_20 IAMs_20 21 06 40.1
comp=Z,13µm,21.0s
**ACSO Alum Creek Sta** 113.45 20 P PKiKP 20 16 04.2 +0.1
baz=336
**P49A Miami Univ. Ec** 113.53 21 P PKiKP 20 16 04.1 -0.1
baz=335
**N54A Moraine State** 113.64 17 P PKiKP 20 16 04.2 -0.3
baz=339
**W39A Magazine** 113.65 30 P PKiKP 20 16 04.5 -0.1
baz=326
**L61B Northampton** 113.82 11 IAMs_20 IAMs_20 21 05 56.0
comp=Z,14µm,22.0s
**QUA2 Belchertown** 114.05 10 IAMs_20 IAMs_20 21 08 34.7
comp=Z,13µm,20.0s
**WCI Wyandotte Cave** 114.15 23 IAMs_20 IAMs_20 21 06 06.6
comp=Z,14µm,22.0s
**WCI Wyandotte Cave** 114.15 23 P PKiKP 20 16 04.9 -0.5
baz=333
**JCT Junction City** 114.25 38 IAMs_20 IAMs_20 21 13 16.9
comp=Z,10µm,19.0s
**JCT Junction City** 114.25 38 P PKPdf 20 16 06.1 +0.2
baz=319
**P52A Corning** 114.26 19 P PKPdf 20 16 06.2 +0.5
baz=337
**MIAR Mount Ida** 114.28 31 IAMs_20 IAMs_20 21 14 27.6
comp=Z,12µm,19.0s
**MIAR Mount Ida** 114.28 31 P PKPdf 20 16 06.5 +0.7
baz=326
**W41B Gary Mavity, V** 114.37 29 P PKPdf 20 16 06.4 +0.5
baz=327
**SSPA Standing Stone** 114.48 15 IAMs_20 IAMs_20 21 04 18.1
comp=Z,13µm,21.0s
**SSPA Standing Stone** 114.48 15 P PKiKP 20 16 05.9 -0.1
baz=341
**O56A Blue Knob Stat** 114.66 16 P PKPdf 20 16 06.8 +0.3
baz=341
**N59A State Game Lan** 114.70 14 P PKPdf 20 16 06.7 +0.2
baz=343
**PAL Palisades** 115.00 12 P PKiKP 20 16 06.7 -0.3
baz=345
**435B Jarrell** 115.25 36 IAMs_20 IAMs_20 21 07 46.1
comp=Z,11µm,20.0s
**WVT Waverly** 115.42 25 PKIKP PKiKP 20 16 06.4 -1.5
WVT MLR MLR
comp=Z,8µm,19.0s
**WVT Waverly** 115.42 25 PKiKP 20 16 06.4 -1.5
**WVT Waverly** 115.42 25 IAMs_20 IAMs_20 21 13 04.3
comp=Z,9µm,19.0s
**WVT Waverly** 115.42 25 P PKiKP 20 16 06.8 -1.1
baz=331
**U49A Red Boiling Sp** 115.86 23 PKiKP 20 16 06.5 -2.2
**833A Chaparral WMA,** 116.11 39 P PKiKP 20 16 09.4 -0.1
baz=319
**OXF Oxford** 116.17 27 PKIKP PKiKP 20 16 07.0 -2.4
OXF MLR MLR
comp=Z,10µm,20.0s
**OXF Oxford** 116.17 27 PKiKP 20 16 07.0 -2.4
OXF PP PP 20 17 09.5 -3.9
OXF IAMs_20 IAMs_20 21 13 16.8
comp=Z,10µm,20.0s
**OXF Oxford** 116.17 27 P PKiKP 20 16 09.2 -0.2
baz=329
**TZTN Tazewell** 116.62 22 P PKPdf 20 16 09.8 -0.5
baz=335
**HKT Hockley** 116.84 35 IAMs_20 IAMs_20 21 09 59.8
comp=Z,12µm,20.0s
**X48A Hartselle** 117.19 26 PKPdf PKPdf 20 16 09.4 -2.0
**NVL N'lazarevskaya** 117.61 201 ǁ PKIKP PKiKP 20 16 20.8 +10
NVL pmax pmax
comp=Z,41nm,1.0s
**LRAL Lakeview Retre** 118.45 26 IAMs_20 IAMs_20 21 08 26.6
comp=Z,13µm,22.0s
**LRAL Lakeview Retre** 118.45 26 P PKiKP 20 16 14.2 +0.3
baz=331
**KMSC Kings Mountain** 118.63 20 P PKiKP 20 16 14.7 +0.5
baz=337
**DBIC Dimbokro** 119.13 292 PKP PKiKP 20 16 16.7 +1.0
comp=Z,2.3nm,0.5s,baz=352,slow=5.3,SNR=3.5
DBIC PKKPbc PKKPab 20 26 32.5 +0.4
comp=Z,3.3nm,0.6s,baz=222,slow=4.4,SNR=6.6
**DBIC Dimbokro** 119.13 292 PKIKP PKPdf 20 16 13.3 -2.3
**DBIC Dimbokro** 119.13 292 PKPdf 20 16 13.3 -2.3
DBIC PP PP 20 17 28.7 -6.7
**KIC Kosan Boka** 119.18 292 *e*PKP2 PKiKP 20 16 16.5 +0.7
comp=Z,31nm,0.9s
**TIC Toumodi** 119.28 292 *e*PKP2 PKiKP 20 16 18.2 +2.2
**GOGA Godfrey** 119.48 23 P PKPdf 20 16 15.8 0.0
baz=334
**LIC Lamto** 119.50 292 *e*PKP2 PKiKP 20 16 17.0 +0.6
comp=Z,88nm,1.0s
**CNNC Cliffs of the** 119.57 17 P PKPdf 20 16 15.5 -0.4
baz=340
**BRAL Brewton** 120.05 27 P PKiKP 20 16 17.1 0.0
baz=330
**NHSC New Hope** 120.88 20 P PKPdf 20 16 18.5 0.0
baz=338
**SNAA Sanae** 121.86 198 PKPdf PKiKP 20 16 19.4 0.0
**SNAA Sanae** 121.86 198 PP PP 20 17 53.8 +0.8
**SNAA Sanae** 121.86 198 PKIKP PKPdf 20 16 19.2 0.0
SNAA 20 17 50.7
SNAA MLR MLR
comp=Z,7µm,20.0s
**SNAA Sanae** 121.86 198 PKPdf 20 16 19.2 0.0
SNAA PP PP 20 17 50.7 -2.4
SNAA IAMs_20 IAMs_20 21 06 22.5
comp=Z,7µm,20.0s
**UNM Universidad Na** 122.81 46 IAMs_20 IAMs_20 21 14 00.9
comp=Z,9µm,20.0s
**VNA2 Neumayer--Watz** 123.51 198 PKPdf 20 16 21.4 -0.9
baz=107,slow=2.2
**VNA2 Neumayer--Watz** 123.51 198 PP PP 20 18 01.8 -2.4
baz=110,slow=2.5
**VNA1 Neumayer--Stat** 123.90 198 PKPdf PKiKP 20 16 24.4 +1.1
**VNA3 Neumayer Olymp** 123.99 197 PKPdf PKPdf 20 16 22.1 -1.2
**DWPF Disney Wildern** 125.00 24 P PKPdf 20 16 26.5 0.0
baz=335
**CMIG Matias Romero** 127.23 44 PKP PKiKP 20 16 31.6 0.0
comp=Z,8.3nm,0.8s,baz=156,slow=1.5,SNR=5.8
**TGUH Tegucigalpa,Un** 134.23 39 IAMs_20 IAMs_20 21 22 43.2
comp=Z,5µm,19.0s
**ASCN Ascension** 134.31 282 IAMs_20 IAMs_20 21 22 38.7
comp=Z,6µm,20.0s
**GRTK Grand Turk** 134.39 15 IAMs_20 IAMs_20 21 23 08.4
comp=Z,9µm,20.0s
**GTBY Guantanamo Bay** 134.75 21 IAMs_20 IAMs_20 21 22 43.2
comp=Z,9µm,20.0s
**RPN Rapa Nui** 134.78 106 IAMs_20 IAMs_20 21 04 35.4
comp=Z,10µm,22.0s
**MTDJ Mount Denham** 135.44 25 IAMs_20 IAMs_20 21 18 44.8
comp=Z,10µm,21.0s
**SJG San Juan** 138.70 10 IAMs_20 IAMs_20 21 20 50.7

comp=Z,8µm,22.0s
**SMRT St. Maarten** 139.13 5 *e* **PKiKP** **20 16 55.3 -0.4**
**SMRT St. Maarten** 139.13 5 IAMs_20 IAMs_20 21 24 25.2
comp=Z,6µm,21.0s
**ANWB Willy Bob** 139.61 4 IAMs_20 IAMs_20 21 16 48.6
comp=Z,7µm,22.0s
**SEUS St. Eustatius** 139.69 5 *e* PKPdf 20 16 44.2 -10
**SEUS St. Eustatius** 139.69 5 IAMs_20 IAMs_20 21 19 30.0
comp=Z,9µm,22.0s
**SRBA San Rafael, Bu** 140.37 39 PKPpre 20 16 46.7
**DSLB Salisbury** 141.84 3 *e* **PKPdf** **20 16 55.8 -2.6**
**MDN Morne-Daniel** 141.96 3 *e* **PKiKP** **20 17 00.1 -1.4**
**BCIP Isla Barro Col** 142.36 34 *eP* **PKPdf** **20 16 53.6 -5.7**
**BCIP Isla Barro Col** 142.36 34 IAMs_20 IAMs_20 21 29 35.1
comp=Z,6µm,19.0s
**SVN Savane Anatole** 142.44 3 IAMs_20 IAMs_20 21 25 57.8
comp=Z,9µm,20.0s
**FDF Fort de France** 142.55 3 *e* **PKPdf** **20 16 55.9 -3.8**
**PAYG Puerto Ayora** 142.72 58 IAMs_20 IAMs_20 21 08 42.9
comp=Z,6µm,22.0s
**BIM Bigot** 142.77 3 *e* **PKPdf** **20 16 56.7 -3.4**
**MPOM Morne Pois Mar** 142.85 2 *e* **PKPdf** **20 16 55.9 -4.3**
**SMRC Santa Marta, M** 143.16 25 *eP* PKPab 20 16 56.5 +0.3
**SLBI Saint Lucia, B** 143.27 3 *e* PKPab 20 16 55.5 -1.1
**URIC Uribia, Colomb** 143.46 21 *eP* PKPab 20 16 55.7 -1.7
**MCLT Moule a Chique** 143.58 3 *e* **PKiKP** **20 17 03.7 -1.1**
**CRJC Cerrejon, Guaj** 143.79 23 *eP* PKPab 20 16 58.1 -0.7
**HATO Hato, Curacao** 143.89 16 IAMs_20 IAMs_20 21 19 57.1
comp=Z,9µm,22.0s
**SJCC San Jacinto, C** 143.92 27 *eP* PKPab 20 16 56.5 -2.8
**SVB Belmont** 144.00 3 *e* PKPbc 20 16 59.9 -0.1
**CAPC Capurgana** 144.06 31 *eP* PKPbc 20 17 00.6 +0.4
**BBGH Gun Hill** 144.17 0 *e* PKPab 20 16 52.1 -8.0
**HOPE Hope Point** 144.25 203 IAMs_20 IAMs_20 21 28 51.5
comp=Z,6µm,18.0s
**ARGC Ariguani, Magd** 144.34 26 *eP* PKPab 20 16 51.6 -9.2
**DABV Dabajuro** 144.62 19 *eP* **PKPab** **20 17 00.4 -1.4**
**MOTC Monteria, Cord** 144.71 29 *eP* **PKPab** **20 16 59.8 -2.4**
**GCMP Grenada, Carri** 144.77 3 *e* **PKPab** **20 16 56.4 -5.9**
**LL6C La Loma 6 Bece** 144.83 24 *eP* **PKPab** **20 17 02.0 -0.5**
**LL1C La Loma 1 Cana** 144.90 25 *eP* **PKPdf** **20 17 05.5 +1.7**
**GRGR Grenville** 145.11 4 *e* **PKPab** **20 17 03.7 +0.2**
**GRGR Grenville** 145.11 4 IAMs_20 IAMs_20 21 21 20.4
comp=Z,7µm,21.0s
**PTAC Punta Ardita,** 145.12 33 *eP* **PKPbc** **20 17 00.6 -3.0**
**SMLC San Martn de** 145.37 26 *eP* **PKPbc** **20 17 03.1 -1.3**
**UREC San Jos de Ur** 145.68 29 *eP* **PKPdf** **20 17 03.1 -2.1**
**TOSP Speyside** 145.99 2 *e* **PKPdf** **20 17 05.9 +0.2**
**DBBC Dabeiba** 146.01 31 *eP* **PKPdf** **20 17 06.0 +0.1**
**OCAC Ocana** 146.18 25 *eP* **PKPbc** **20 17 06.9 -0.2**
**ZARC Zaragoza, Cauc** 146.21 28 *eP* **PKPdf** **20 17 05.9 -0.1**
**SDV Santo Domingo** 146.54 20 PKPbc **PKPbc** **20 17 07.7 -0.6**
comp=Z,291nm,0.7s,baz=333,slow=1.6,SNR=71
**SDV Santo Domingo** 146.54 20 *eP* **PKPdf** **20 17 07.5 +0.6**
**SDV Santo Domingo** 146.54 20 *eP* **PKPdf** **20 17 06.1 -0.7**
**SDV Santo Domingo** 146.54 20 PKPdf **PKPdf** **20 17 05.7 -1.2**
**SDV Santo Domingo** 146.54 20 IAMs_20 IAMs_20 21 30 08.6
comp=Z,6µm,19.0s
**TRN Trinidad (W)** 146.59 4 *e* **PKPdf** **20 17 06.9 +0.2**
**PCRV Puerto La Cruz** 146.72 9 PKPbc **PKPdf** **20 17 07.3 +0.4**
comp=Z,77nm,0.6s,baz=347,slow=3.9,SNR=21
**SOCV Socops** 147.03 21 *eP* **PKPdf** **20 17 06.8 -0.7**
**HELC Santa Helena** 147.06 31 *eP* **PKPdf** **20 17 08.5 +0.5**
**CBOC Ciudad Bolivar** 147.11 32 *eP* **PKPdf** **20 17 06.4 -1.4**
**PIZC Pizarro, Choco** 147.20 35 *eP* **PKPdf** **20 17 08.0 +0.3**
**BAUV El Baul** 147.23 16 *e* **PKPbc** **20 17 08.9 -1.1**
**PTBC PUERTO BERRIO** 147.24 28 *eP* **PKPdf** **20 17 07.2 -0.6**
**PAMC Pamplona, Colo** 147.24 25 *eP* **PKPbc** **20 17 09.7 -1.0**
**BARC Barichara** 147.73 26 *eP* **PKPdf** **20 17 09.7 +0.7**
**PLMC San Jos del P** 147.81 33 *eP* **PKPdf** **20 17 09.7 +0.8**
**NORC Norcasia** 147.91 30 *eP* **PKPdf** **20 17 07.2 -1.8**
**GUY2C Guyana, Caldas** 147.98 31 *eP* **PKPbc** **20 17 11.4 -1.2**
**SPBC San Pablo de B** 148.19 29 *eP* **PKPdf** **20 17 10.5 +1.0**
**DSPA Despedida** 148.28 170 **PKPbc** **20 17 10.2 -1.4**
**RUSC La Rusia** 148.40 27 *eP* **PKPdf** **20 17 09.7 -0.7**
**TAMC Tame, Arauca** 148.42 24 *eP* **PKPdf** **20 17 10.5 +0.7**
**GO10 Punta Arenas** 148.52 167 **PKPbc** **20 17 12.7 +0.4**
**YOTC Yotoco, Valle** 148.56 34 *eP* **PKPbc** **20 17 13.1 -0.7**
**ELOV Elorza** 148.68 20 *eP* **PKPbc** **20 17 12.9 -1.0**
**MG04 Isla Riesco** 148.68 166 **PKPbc** **20 17 12.3 -0.4**
**CROSA EL ROSAL, CUNDI** 148.79 30 *eP* **PKiKP** **20 17 16.4 +0.3**
**ROSC El Rosal** 148.80 30 PKPbc **PKiKP** **20 17 15.5 -0.6**
comp=Z,49nm,0.6s,baz=354,slow=0.3,SNR=21
**ROSC El Rosal** 148.80 30 *eP* **PKPbc** **20 17 13.7 -1.0**
**TUMC Tumaco** 149.03 40 *eP* **PKiKP** **20 17 17.1 +1.0**
**CTUM2 Tumaco** 149.03 40 *eP* **PKPbc** **20 17 13.0 -1.8**
**ORTC Ortega, Tolima** 149.18 32 *eP* **PKPdf** **20 17 10.5 -0.6**
**CHIC Chingaza** 149.25 29 *eP* **PKPdf** **20 17 12.9 +1.3**
**PRAC Prado** 149.52 32 *eP* **PKPdf** **20 17 11.3 -0.3**
**POPC Popayan, Colom** 149.60 36 *eP* **PKPdf** **20 17 11.3 -0.7**
**VILC Villavicencio,** 149.73 29 *eP* **PKiKP** **20 17 18.2 +0.5**
**MARP Paez Belalcaza** 149.73 34 *eP* **PKPbc** **20 17 15.1 -1.8**
**PCON Cinco Dias** 149.93 36 *eP* **PKPbc** **20 17 17.1 -0.7**
**SOTA Rioblanco** 149.98 36 *eP* **PKPdf** **20 17 13.4 +0.5**
**BETC Betania** 150.13 34 *eP* **PKPbc** **20 17 15.4 -2.2**
**PAC1 Pacto, Paraso** 150.22 42 *eP* **PKPdf** **20 17 11.4 -1.4**
**CMBC Cumbal** 150.27 40 *eP* **PKPdf** **20 17 15.4 +2.1**
**CCUFI Cufio, Nario** 150.31 38 *eP* **PKPab** **20 17 25.7 +0.9**
**GCUF Volcan Galeras** 150.31 38 *eP* **PKPab** **20 17 22.9 -1.9**
**PTGC Puerto Gaitan,** 150.32 26 *eP* **PKPdf** **20 17 12.1 -0.7**
**CPAS1 Pasto** 150.36 38 *eP* **PKiKP** **20 17 20.9 +1.5**
**CUSE Cuicocha Este** 150.43 41 *eP* **PKPdf** **20 17 15.4 +1.9**
**OTAV Otavalo** 150.45 41 *eP* **PKPdf** **20 17 14.1 +0.5**
**OTAV Otavalo** 150.45 41 *eP* **PKPdf** **20 17 11.9 -1.7**
**OTAV Otavalo** 150.45 41 IAMs_20 IAMs_20 21 30 04.2
comp=Z,6µm,22.0s
**TULM Tulcn-Chalpat** 150.47 40 *eP* **PKPdf** **20 17 14.0 +0.3**
**GARC Garzon, Huila** 150.53 34 *eP* **PKiKP** **20 17 21.3 +1.8**
**CFLOR Florencia** 150.95 35 *eP* **PKPbc** **20 17 17.1 -2.5**
**FLOC Florencia** 150.95 35 *eP* **PKPbc** **20 17 12.9 -0.9**
**MACC Macarena, Meta** 151.39 31 *eP* **PKPbc** **20 17 18.1 -2.5**
**MDP Montagnes des** 151.39 346 PKPbc **PKiKP** **20 17 21.2 +0.2**
comp=Z,117nm,0.9s,baz=43,slow=1.6,SNR=14
**NBPV Pedro Velho** 151.58 301 *eP* **PKPdf** **20 17 13.8 -0.9**
**RCBR Riachuelo** 151.69 303 *eP* **PKPdf** **20 17 14.1 -0.8**
**NBCL Cascavel-CE** 152.41 309 *eP* **PKPdf** **20 17 15.0 -1.0**
**PTLC Puerto Leguiza** 152.60 35 *eP* **PKPdf** **20 17 13.8 -2.5**
**NBRF Rio Formoso -** 152.76 297 *eP* **PKPdf** **20 17 15.8 -0.7**
**NBMO Morrinhos-CE** 152.97 313 *eP* **PKPdf** **20 17 16.0 -0.8**
**NBCA Caruaru-PE** 153.22 299 *eP* **PKPdf** **20 17 16.1 -1.1**
**NBPB Pedra_Branca-C** 154.24 309 *eP* **PKPdf** **20 17 17.6 -1.0**
**NBAN Anadia - AL** 154.25 297 *eP* **PKPdf** **20 17 17.8 -0.8**
**NBPS Pedro II - PI** 154.70 314 *eP* **PKPdf** **20 17 18.7 -0.7**
**BOAV Boa Vista** 154.83 3 *eP* **PKPdf** **20 17 18.5 -1.0**
**BOAV Boa Vista** 154.83 3 PKPdf **PKPdf** **20 17 15.3 -4.1**
BOAV **pPKPdf** **20 17 21.3 -4.8**
**NBMA Muriti-CE** 154.85 305 *eP* **PKPdf** **20 17 18.9 -0.6**
**COYC Coyhaique** 155.14 158 IAMs_20 IAMs_20 21 40 04.2
comp=Z,6µm,20.0s
**ROSB Rosrio** 155.21 321 *eP* **PKPdf** **20 17 18.9 -1.0**
**ATAH Atahualpa** 155.91 52 PKP **PKPdf** **20 17 22.9 +1.5**
comp=Z,40nm,1.2s,baz=40,slow=3.1,SNR=4.5
**NBLA Lagarto - SE** 156.22 296 *eP* **PKPdf** **20 17 19.6 -1.6**
**MCPB Macapa, AP** 156.48 341 *eP* **PKPdf** **20 17 20.9 -0.8**
**PTGA Pitinga** 157.95 2 PKP **PKPdf** **20 17 24.3 +0.7**
comp=Z,32nm,1.1s,baz=330,slow=3.7,SNR=18
**NBPN Ponto Novo - B** 158.10 300 *eP* **PKPdf** **20 17 22.8 -0.9**
**GDU01 Guandu, BA** 159.10 293 *eP* **PKPdf** **20 17 24.1 -0.7**
**NBIT Itapeh - BA** 159.54 289 *eP* **PKPdf** **20 17 24.9 -0.4**
**CMC01 Camacan, BA** 159.79 288 *eP* **PKPdf** **20 17 24.5 -1.1**
**PLCA Paso Flores** 159.89 155 PKP **PKPdf** **20 17 26.2 +1.2**
comp=Z,43nm,1.3s,baz=244,slow=4.6,SNR=12
PLCA PKPab **PKPab** **20 18 05.0 +0.8**
comp=Z,40nm,1.1s,baz=262,slow=5.3,SNR=5.2
**PLCA Paso Flores** 159.89 155 *eP* **PKPdf** **20 17 24.3 -0.8**
**PLCA Paso Flores** 159.89 155 PKPdf **PKPdf** **20 17 24.2 -0.9**
PLCA PKPab **PKPab** **20 18 04.7 +0.5**
**NNA Nana** 160.15 60 PKP **PKPdf** **20 17 27.1 +1.0**
comp=Z,147nm,1.4s,baz=319,slow=2.2,SNR=8.6
**NNA Nana** 160.13 60 PKPdf **PKPdf** **20 17 23.7 -2.4**
**CZSB Cruzeiro do Su** 160.22 42 *eP* **PKPdf** **20 17 25.0 -1.2**
**MACA Manacapuru-AM** 160.33 4 *eP* **PKPdf** **20 17 25.2 -1.1**
**GUA01 Guaratinga, BA** 160.53 285 *eP* **PKPdf** **20 17 25.7 -0.6**
**PRPB Parauapebas** 160.97 330 *eP* **PKPdf** **20 17 26.1 -0.9**
**ITTB Itaituba** 161.23 349 *eP* **PKPdf** **20 17 26.4 -0.9**
**SMTB Santa Maria do** 162.02 319 *eP* **PKPdf** **20 17 27.1 -0.9**
**SJMB Sao Joao De Ma** 162.47 280 *eP* **PKPdf** **20 17 27.8 -0.6**
**SDBA SAO DESIDERIO** 162.71 305 *eP* **PKPdf** **20 17 28.0 -0.8**
**CAM01 Campos-RJ** 163.56 270 *eP* **PKPdf** **20 17 28.4 -0.9**
**JANB Januaria** 163.75 296 *eP* **PKPdf** **20 17 28.7 -1.0**
**NPGB Novo Progresso** 163.76 346 *eP* **PKPdf** **20 17 28.7 -1.0**
**MC01 Montes Claros** 164.21 290 *eP* **PKPdf** **20 17 29.2 -1.0**
**DUB01 Friburgo-RJ** 164.25 270 *eP* **PKPdf** **20 17 29.2 -0.8**
**DIAM Diamantina, MG** 164.59 284 *eP* **PKPdf** **20 17 29.5 -1.1**
**PEXB Peixe** 164.93 314 *eP* **PKPdf** **20 17 29.9 -0.9**
**ETMB Extrema** 165.44 28 *eP* **PKPdf** **20 17 30.3 -0.9**
**MAN01 Angra dos Reis** 165.78 267 *eP* **PKPdf** **20 17 30.5 -0.8**
**BSCB Bom Sucesso** 166.30 275 *eP* **PKPdf** **20 17 31.1 -0.7**
**SNDB Serra Nova Dou** 166.67 323 *eP* **PKPdf** **20 17 31.6 -0.6**
**BDFB Brasilia** 167.06 302 PKP **PKPdf** **20 17 34.2 +1.7**
comp=Z,30nm,1.1s,baz=44,slow=3.7,SNR=21
BDFB PKPab **PKPab** **20 18 37.2 +0.7**
comp=Z,47nm,1.1s,baz=49,slow=4.9,SNR=9.4
**BDFB Brasilia** 167.06 302 **PKPdf** **20 17 31.0 -1.5**
BDFB **PKPab** **20 18 35.8 -0.7**
**PARB Paraibuna** 167.32 265 *eP* **PKPdf** **20 17 31.6 -0.9**
**CLDB Colider** 167.55 343 *eP* **PKPdf** **20 17 31.9 -0.9**
**LPA La Plata** 167.97 186 *c* PKIKP **PKPdf** **20 17 27.3 -5.2**
**IPMB Ipameri, GO** 168.43 293 *eP* **PKPdf** **20 17 32.3 -1.1**
**PDRB Porto dos Gac** 168.48 347 *eP* **PKPdf** **20 17 32.8 -0.7**
**VAO Valinhos** 168.55 267 *eP* **PKPdf** **20 17 32.5 -0.8**
**PET01 Itanhaem-SP** 168.80 261 *eP* **PKPdf** **20 17 33.0 -0.4**
**LPAZ La Paz** 169.46 53 PKP **PKPdf** **20 17 36.2 +1.4**
comp=Z,126nm,1.3s,baz=9.7,slow=3.6,SNR=23
**LPAZ La Paz** 169.46 53 *eP* **PKPdf** **20 17 35.0 +0.2**
**LPAZ La Paz** 169.46 53 *eP* **PKPdf** **20 17 33.3 -1.5**
**LPAZ La Paz** 169.46 53 **PKPdf** **20 17 31.5 -3.3**
**BB19B Bebedouro** 169.75 278 *eP* **PKPdf** **20 17 33.3 -0.9**
**PLTB Pedras Altas** 169.79 209 *eP* **PKPdf** **20 17 32.9 -0.9**
**ARAG Araguaiana, MT** 169.88 314 *eP* **PKPdf** **20 17 33.1 -1.1**
**VILB Vilhena** 170.07 5 *eP* **PKPdf** **20 17 33.7 -0.7**
**CPSB Cacapava Do Su** 170.83 214 *eP* **PKPdf** **20 17 32.6 -1.8**
**FRTB Fartura** 170.94 265 *eP* **PKPdf** **20 17 34.3 -0.5**
**ITRB Iturama** 171.00 289 *eP* **PKPdf** **20 17 35.6 +0.8**
**LVC Limon Verde** 171.21 90 PKP **PKPdf** **20 17 36.5 +1.2**
comp=Z,92nm,1.3s,baz=273,slow=1.1,SNR=8.2
**LVC Limon Verde** 171.21 90 *eP* **PKPdf** **20 17 34.1 -1.2**
**ITAB Concordia** 172.13 235 *eP* **PKPdf** **20 17 34.7 -0.4**
**SALV Santo Antonio** 172.21 333 *eP* **PKPdf** **20 17 34.9 -0.6**
**PCMB Pacaembu** 172.36 278 *eP* **PKPdf** **20 17 34.6 -0.9**
**PTLB Pontes e Lacer** 172.58 358 *eP* **PKPdf** **20 17 34.7 -0.9**
**ITQB Itaqui** 172.82 200 *eP* **PKPdf** **20 17 34.9 -0.5**
**SIV San Ignacio** 172.94 13 PKP **PKPdf** **20 17 36.4 +0.6**
comp=Z,44nm,1.2s,baz=11,slow=0.8,SNR=6.1
**PTGB Pitinga** 173.05 254 *eP* **PKPdf** **20 17 34.7 -1.0**
**PP1B Ponte de Pedra** 173.23 320 *eP* **PKPdf** **20 17 35.2 -0.7**
**AQDB Aquidauana** 175.80 304 *eP* **PKPdf** **20 17 35.8 -0.8**
**CPUP Villa Florida** 176.11 208 PKP **PKPdf** **20 17 37.8 +1.3**
comp=Z,20nm,1.0s,baz=73,slow=1.3,SNR=14
**CPUP Villa Florida** 176.11 208 PKIKP **PKPdf** **20 17 34.3 -2.2**
CPUP 20 19 14.9
**CPUP Villa Florida** 176.11 208 *eP* **PKPdf** **20 17 35.5 -1.0**
**CPUP Villa Florida** 176.11 208 **PKPdf** **20 17 34.3 -2.2**
CPUP PKPab **PKPab** **20 19 14.9 -1.1**

**JMA 05 19:59:25.9±0.1, 31°.14N×130°.37E, h149km±1km, M2.3, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTSR** | **Tashiro 2** | **0.47** | **87** | P | Pn | 19 59 47.0 | 0.0 |
| JTSR | | | | *eS* | Sn | 20 00 02.6 | -0.5 |
| **JTN** | **Tanegashima 3** | **0.71** | **133** | P | Pn | 19 59 48.6 | +0.2 |
| JTN | | | | *eS* | Sn | 20 00 05.9 | +0.4 |
| **JSJ** | **Shimokoshiki** | **0.78** | **314** | P | Pn | 19 59 48.3 | -0.5 |
| **JMTN** | **Minamitane** | **0.87** | **148** | *eS* | Sn | 20 00 07.7 | +0.2 |
| **JYAK** | **Yakushimahirau** | **0.91** | **172** | P | Pn | 19 59 49.9 | +0.1 |
| JYAK | | | | *eS* | Sn | 20 00 07.8 | -0.2 |
| **JTZ** | **Takazaki** | **0.98** | **39** | P | Pn | 19 59 50.4 | +0.1 |
| JTZ | | | | *eS* | Sn | 20 00 09.4 | +0.3 |
| **JIU3** | **Izumi3** | **1.45** | **15** | P | Pn | 19 59 55.0 | +0.1 |

*IDC **05** 20:05:12.6±1.4, 63°.02N×149°.89W, h82km±21km, mb3.5/2, mb1 3.6/6, mb1mx3.1/70, mbtmp3.8/6, MS4.3/1, Ms1 4.3/1, ms1mx3.7/82, Error ellipse: s-maj=28.7km s-min=10.8km az=112.0*
*NEIC **05** 20:05:14.3±1.5, 63°.06N±0°.03×149°.80W±0°.08, h95km±5km, Error ellipse: s-maj=5.1km s-min=4.6km az=103.0*
*ANF **05** 20:05:15.0±0.2, 63°.04N×149°.79W, h89km±3km, ML3.8/53, Error ellipse: s-maj=1.5km s-min=1.4km az=108.0*
*AEIC **05** 20:05:15±1.0, 63°.03N±0°.03×149°.77W±0°.06, h88km±5km, ML3.4, ML3.6/166(NEIC), Error ellipse: s-maj=4.6km s-min=3.6km az=137.0*

**ISC 05 20:05:13.9±0.9, 63°.05N±0°.02×149°.80W±0°.03, h99km±6km, n216, n0 8°87/249, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRF** | **Thorofare Moun** | **0.46** | **331** | | **Pn** | **20 05 30.0** | **+0.5** |
| TRF | | | | Sn | **Sn** | **20 05 40.6** | **-0.5** |
| **TRF** | **Thorofare Moun** | **0.46** | **331** | P | **Pn** | **20 05 30.1** | **+0.5** |
| | baz=151,SNR=626 | | | | | | |
| TRF | | | | S | **Sn** | **20 05 41.2** | **+0.1** |
| | baz=151 | | | | | | |
| **RND** | **Reindeer** | **0.56** | **50** | | **Pn** | **20 05 30.2** | **0.0** |
| RND | | | | Sn | **Sn** | **20 05 41.5** | **-0.7** |
| RND | | | | IAML | | 20 05 42.1 | |
| | comp=N,4µm,0.5s | | | | | | |
| RND | | | | IAML | | 20 05 42.1 | |
| | comp=E,3µm,0.5s | | | | | | |
| **CUT** | **Chulitna** | **0.68** | **199** | | **Pn** | **20 05 31.1** | **0.0** |
| CUT | | | | Sn | **Sn** | **20 05 43.3** | **-0.6** |
| CUT | | | | IAML | | 20 05 46.0 | |
| | comp=N,7µm,0.3s | | | | | | |
| **CUT** | **Chulitna** | **0.68** | **199** | P | **Pn** | **20 05 31.1** | **0.0** |
| | baz=20,SNR=271 | | | | | | |
| CUT | | | | S | **Sn** | **20 05 43.4** | **-0.5** |
| | baz=20 | | | | | | |
| **KTH** | **Kantishna Hill** | **0.71** | **315** | | **Pn** | **20 05 32.0** | **+0.6** |
| KTH | | | | Sn | **Sn** | **20 05 44.2** | **-0.4** |
| KTH | | | | IAML | | 20 05 45.1 | |
| | comp=E,1µm,0.7s | | | | | | |
| **MCK** | **McKinley** | **0.79** | **29** | | **Pn** | **20 05 32.5** | **+0.4** |
| MCK | | | | Sn | **Sn** | **20 05 45.4** | **-0.4** |
| **MCK** | **McKinley** | **0.79** | **29** | P | **Pn** | **20 05 32.6** | **+0.4** |
| | baz=208,SNR=250 | | | | | | |
| MCK | | | | S | **Sn** | **20 05 45.4** | **-0.4** |
| | baz=208 | | | | | | |
| **CAST** | **Castle Rocks** | **1.10** | **291** | | **Pn** | **20 05 35.7** | **+0.3** |
| CAST | | | | Sn | **Sn** | **20 05 50.5** | **-1.0** |
| CAST | | | | IAML | | 20 05 51.1 | |
| | comp=E,689nm,0.4s | | | | | | |
| **CAST** | **Castle Rocks** | **1.10** | **291** | P | **Pn** | **20 05 35.7** | **+0.3** |
| | baz=109,SNR=51 | | | | | | |
| CAST | | | | S | **Sn** | **20 05 50.6** | **-1.0** |
| | baz=109 | | | | | | |
| **PPLA** | **Purkeypile** | **1.10** | **263** | | **Pn** | **20 05 36.6** | **+1.0** |
| **PPLA** | **Purkeypile** | **1.10** | **263** | | **Sn** | **20 05 52.5** | **+0.7** |
| **PPLA** | **Purkeypile** | **1.10** | **263** | P | **Pn** | **20 05 36.6** | **+1.0** |
| | baz=82,SNR=46 | | | | | | |
| PPLA | | | | S | **Sn** | **20 05 52.3** | **+0.5** |
| | baz=82 | | | | | | |
| **BWN** | **Browne** | **1.14** | **7** | | **Pn** | **20 05 36.5** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **1.18** | **334** | | **Pn** | **20 05 37.0** | **+0.6** |
| BPAW | | | | Sn | **Sn** | **20 05 52.7** | **-0.5** |
| BPAW | | | | IAML | | 20 05 53.7 | |
| | comp=N,584nm,0.8s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.18** | **334** | P | **Pn** | **20 05 36.9** | **+0.6** |
| | baz=152,SNR=106 | | | | | | |
| BPAW | | | | S | **Sn** | **20 05 53.1** | **-0.1** |
| | baz=152 | | | | | | |
| **M22K** | **Willow** | **1.31** | **187** | | **Pn** | **20 05 37.9** | **+0.1** |
| M22K | | | | Sn | **Sn** | **20 05 55.9** | **+0.1** |
| **M22K** | **Willow** | **1.31** | **187** | P | **Pn** | **20 05 38.1** | **+0.3** |
| | baz=7.2,SNR=74 | | | | | | |
| M22K | | | | S | **Sn** | **20 05 56.3** | **+0.5** |
| | baz=7.2 | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.35** | **162** | | **Pn** | **20 05 38.5** | **+0.2** |
| GHO | | | | Sn | **Sn** | **20 05 57.3** | **+0.6** |
| GHO | | | | IAML | | 20 05 59.5 | |
| | comp=E,1µm,0.8s | | | | | | |
| GHO | | | | IAML | | 20 06 00.9 | |
| | comp=N,3µm,0.5s | | | | | | |
| **CHUM** | **Lake Minchumin** | **1.41** | **308** | | **Pn** | **20 05 40.0** | **+1.1** |
| CHUM | | | | | **Sn** | **20 05 57.8** | **0.0** |
| **CHUM** | **Lake Minchumin** | **1.41** | **308** | P | **Pn** | **20 05 40.0** | **+1.1** |
| | baz=126,SNR=194 | | | | | | |
| CHUM | | | | S | **Sn** | **20 05 57.8** | **0.0** |
| | baz=126 | | | | | | |
| **SML** | **Sawmill** | **1.42** | **151** | | **Pn** | **20 05 39.5** | **+0.3** |
| SML | | | | Sn | **Sn** | **20 05 58.5** | **+0.1** |
| SML | | | | IAML | | 20 06 01.0 | |
| | comp=E,1µm,0.6s | | | | | | |
| SML | | | | IAML | | 20 06 03.6 | |
| | comp=N,968nm,0.5s | | | | | | |
| **SML** | **Sawmill** | **1.42** | **151** | P | **Pn** | **20 05 39.6** | **+0.4** |
| | baz=332,SNR=77 | | | | | | |
| SML | | | | S | **Sn** | **20 05 58.6** | **+0.2** |
| | baz=332 | | | | | | |
| **PMR** | **Palmer** | **1.50** | **168** | Pn | **Pn** | **20 05 40.4** | **+0.4** |
| PMR | | | | IAML | | 20 06 03.0 | |
| | comp=E,927nm,0.4s | | | | | | |
| PMR | | | | IAML | | 20 06 09.9 | |
| | comp=N,557nm,0.6s | | | | | | |
| **PMR** | **Palmer** | **1.50** | **168** | P | **Pn** | **20 05 40.4** | **+0.4** |
| | baz=349,SNR=132 | | | | | | |
| PMR | | | | S | **Sn** | **20 06 00.4** | **+0.6** |
| | baz=349 | | | | | | |
| **NEA2** | **Nenana** | **1.58** | **12** | | **Pn** | **20 05 41.4** | **+0.2** |
| **NEA2** | **Nenana** | **1.58** | **12** | | **Sn** | **20 06 00.6** | **-1.2** |
| **NEA2** | **Nenana** | **1.58** | **12** | IAML | | 20 06 01.3 | |
| | comp=E,178nm,0.8s | | | | | | |
| NEA2 | | | | IAML | | 20 06 04.7 | |
| | comp=N,179nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **1.58** | **12** | P | **Pn** | **20 05 41.5** | **+0.4** |
| | baz=192,SNR=125 | | | | | | |
| NEA2 | | | | S | **Sn** | **20 06 00.8** | **-1.0** |
| | baz=192 | | | | | | |
| **WRH** | **Wood River Hil** | **1.62** | **27** | | **Pn** | **20 05 42.0** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **1.68** | **136** | | **Pn** | **20 05 42.8** | **+0.4** |
| SCM | | | | IAML | | 20 06 08.1 | |
| | comp=E,698nm,0.7s | | | | | | |
| SCM | | | | IAML | | 20 06 09.8 | |
| | comp=N,729nm,0.5s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.68** | **136** | P | **Pn** | **20 05 42.9** | **+0.4** |
| | baz=318,SNR=34 | | | | | | |
| SCM | | | | S | **Sn** | **20 06 04.2** | **+0.2** |
| | baz=318 | | | | | | |
| **KNK** | **Knik Glacier** | **1.76** | **158** | | **Pn** | **20 05 43.8** | **+0.4** |
| KNK | | | | IAML | | 20 06 12.1 | |
| | comp=N,2µm,0.5s | | | | | | |
| **KNK** | **Knik Glacier** | **1.76** | **158** | P | **Pn** | **20 05 43.9** | **+0.5** |
| | baz=340,SNR=103 | | | | | | |
| KNK | | | | S | **Sn** | **20 06 06.5** | **+0.8** |
| | baz=340 | | | | | | |
| **STLK** | **Strandline Lak** | **1.82** | **212** | | **Pn** | **20 05 44.8** | **+0.6** |
| **CCB** | **Clear Creek Bu** | **1.83** | **28** | | **Pn** | **20 05 44.7** | **+0.4** |
| **HDA** | **Harding Lake** | **1.86** | **42** | | **Pn** | **20 05 44.9** | **+0.2** |
| HDA | | | | IAML | | 20 06 11.9 | |
| | comp=E,287nm,0.6s | | | | | | |
| HDA | | | | IAML | | 20 06 14.4 | |
| | comp=N,360nm,0.3s | | | | | | |
| **HDA** | **Harding Lake** | **1.86** | **42** | P | **Pn** | **20 05 45.2** | **+0.5** |
| | baz=223,SNR=190 | | | | | | |
| HDA | | | | S | **Sn** | **20 06 07.7** | **-0.4** |
| | baz=223 | | | | | | |
| HDA | | | | S | **Sn** | **20 06 07.7** | **-0.4** |
| | baz=223 | | | | | | |
| **PS10** | **TAPS Pump St10** | **1.86** | **77** | | **Pn** | **20 05 46.1** | **+1.4** |
| **FIS** | **Fire Island** | **1.92** | **186** | Pn | **Pn** | **20 05 47.6** | **+2.2** |
| **M24K** | **Tolsona, Glenn** | **1.93** | **118** | Pn | **Pn** | **20 05 46.3** | **+0.8** |
| M24K | | | | IAML | | 20 06 15.2 | |
| | comp=E,751nm,0.7s | | | | | | |
| M24K | | | | IAML | | 20 06 16.8 | |
| | comp=N,579nm,0.5s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **1.93** | **118** | P | **Pn** | **20 05 46.6** | **+1.1** |
| | baz=301,SNR=46 | | | | | | |
| M24K | | | | S | **Sn** | **20 06 11.6** | **+2.0** |
| | baz=301 | | | | | | |
| **K20K** | **Telida** | **1.96** | **281** | | **Pn** | **20 05 46.7** | **+0.8** |
| **K20K** | **Telida** | **1.96** | **281** | P | **Pn** | **20 05 46.8** | **+0.9** |
| | baz=98,SNR=22 | | | | | | |
| K20K | | | | S | **Sn** | **20 06 10.0** | **-0.2** |
| | baz=98 | | | | | | |
| **L20K** | **Farewell, AK** | **1.96** | **255** | | **Pn** | **20 05 46.5** | **+0.6** |
| **L20K** | **Farewell, AK** | **1.96** | **255** | P | **Pn** | **20 05 46.5** | **+0.6** |
| | baz=72 | | | | | | |
| L20K | | | | S | **Sn** | **20 06 10.7** | **+0.3** |
| | baz=72 | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.97** | **179** | | **Pn** | **20 05 46.1** | **+0.1** |
| RC01 | | | | IAML | | 20 06 15.9 | |
| | comp=E,940nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.97** | **179** | P | **Pn** | **20 05 46.6** | **+0.6** |
| | baz=360 | | | | | | |
| RC01 | | | | S | **Sn** | **20 06 10.3** | **-0.2** |
| | baz=360 | | | | | | |
| **PAX** | **Paxson** | **1.98** | **90** | Pn | **Pn** | **20 05 47.2** | **+1.0** |
| **PAX** | **Paxson** | **1.98** | **90** | P | **Pn** | **20 05 47.4** | **+1.1** |
| | baz=274,SNR=92 | | | | | | |
| PAX | | | | S | **Sn** | **20 06 11.2** | **+0.4** |
| | baz=274 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **2.00** | **40** | | **Pn** | **20 05 46.9** | **+0.5** |
| PS08 | | | | | **Sn** | **20 06 10.3** | **-0.9** |
| **TCOL** | **CIGO, UAF Yank** | **2.02** | **24** | | **Pn** | **20 05 46.9** | **+0.3** |
| TCOL | | | | IAML | | 20 06 15.8 | |
| | comp=N,570nm,0.5s | | | | | | |
| TCOL | | | | IAML | | 20 06 18.2 | |
| | comp=E,478nm,0.6s | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **2.02** | **24** | P | **Pn** | **20 05 47.3** | **+0.7** |
| | baz=205,SNR=42 | | | | | | |
| **COLA** | **College** | **2.02** | **24** | | **Pn** | **20 05 47.4** | **+0.7** |
| COLA | | | | IAML | | 20 06 15.8 | |
| | comp=E,541nm,0.5s | | | | | | |
| COLA | | | | IAML | | 20 06 18.2 | |
| | comp=E,496nm,0.6s | | | | | | |
| **COLA** | **College** | **2.02** | **24** | P | **Pn

comp=N,253nm,0.4s
**J25K Salcha River, 2.51 49 P Pn 20 05 53.8 +0.6**
baz=233,SNR=52
**GLI Glacier Island 2.52 148 Pn 20 05 52.7 -0.6**
**GLI Glacier Island 2.52 148 P Pn 20 05 52.9 -0.4**
baz=331,SNR=8.4
**SLKM Skilak Lake 2.56 185 Pn 20 05 54.3 +0.6**
**O22K Cooper Landing 2.58 179 Pn 20 05 54.1 +0.1**
**O22K Cooper Landing 2.58 179 P Pn 20 05 54.4 +0.4**
baz=360
**DOT Dot Lake 2.66 74 Pn 20 05 55.7 +0.6**
**DIV Divide 2.70 134 Pn 20 05 55.0 -0.7**
**SCRK Sand Creek 2.77 68 Pn Pn 20 05 57.2 +0.6**
SCRK IAML 20 06 33.4
comp=N,146nm,0.4s
SCRK IAML 20 06 33.9
comp=E,152nm,0.7s
**SCRK Sand Creek 2.77 68 P Pn 20 05 57.2 +0.6**
baz=252,SNR=72
**RDT Redoubt 2.77 208 Pn 20 05 57.4 +0.7**
**MENT Mentasta 2.78 90 Pn 20 05 57.2 +0.6**
MENT IAML 20 06 41.0
comp=N,345nm,0.5s
MENT IAML 20 06 41.7
comp=E,556nm,0.5s
**FID Port Fidalgo 2.79 144 Pn 20 05 56.5 -0.4**
FID IAML 20 06 42.0
comp=N,367nm,0.4s
**PS06 TAPS Pump Stn6 2.82 1 Pn 20 05 58.3 +1.2**
**DFR Drift River 2.82 210 Pn 20 05 57.7 +0.4**
**N25K Chitina, Valde 2.83 118 Pn 20 05 57.8 +0.4**
N25K IAML 20 06 38.5
comp=E,106nm,0.8s
N25K IAML 20 06 43.2
comp=N,165nm,0.6s
**N25K Chitina, Valde 2.83 118 P Pn 20 05 57.8 +0.4**
baz=303,SNR=24
**TTA Tatalina 2.84 270 Pn Pn 20 05 58.3 +0.9**
**TTA Tatalina 2.84 270 P Pn 20 05 58.4 +0.9**
baz=85,SNR=20
**TT01 Tatalina 2.84 270 Pn 20 05 58.5 +1.1**
**NCT North Crescent 2.91 212 Pn 20 05 59.2 +0.8**
**H24K Noodor Dome 2.92 16 Pn 20 05 59.6 +1.0**
**H21K Melozitna Rive 2.93 335 Pn 20 05 59.6 +1.0**
H21K IAML 20 06 32.9
comp=E,144nm,0.8s
**H21K Melozitna Rive 2.93 335 P Pn 20 05 59.7 +1.1**
baz=152,SNR=61
**L26K Log Cabin Wild 2.94 88 Pn 20 05 59.2 +0.4**
L26K IAML 20 06 42.0
comp=N,505nm,0.4s
L26K IAML 20 06 50.3
comp=E,359nm,0.4s
**L26K Log Cabin Wild 2.94 88 P Pn 20 05 59.7 +0.9**
baz=273,SNR=66
**RSO Redoubt South 2.95 210 Pn 20 05 59.6 +0.5**
**SEW Seward 2.96 177 Pn Pn 20 05 59.0 0.0**
**SEW Seward 2.96 177 P Pn 20 05 59.4 +0.3**
baz=357
**PRP Porcupine Dome 3.10 35 Pn Pn 20 06 01.7 +0.7**
PRP IAML 20 06 43.3
comp=E,79nm,0.7s
PRP IAML 20 06 44.9
comp=N,83nm,0.5s
**PRP Porcupine Dome 3.10 35 P Pn 20 06 01.7 +0.7**
baz=218,SNR=23
**J26L Joseph Creek 3.13 59 Pn 20 06 02.2 +0.9**
J26L IAML 20 06 41.5
comp=E,290nm,0.6s
J26L IAML 20 06 41.8
comp=N,372nm,0.6s
**J26L Joseph Creek 3.13 59 P Pn 20 06 02.5 +1.1**
baz=245
**N19K Bonanza Creek 3.15 227 Pn 20 06 02.3 +0.6**
**EYAK Cordova Ski Ar 3.16 141 Pn 20 06 01.7 0.0**
**EYAK Cordova Ski Ar 3.16 141 P Pn 20 06 01.8 0.0**
baz=324,SNR=16
**M26K Nabesna, AK 3.20 99 Pn 20 06 02.6 +0.3**
M26K IAML 20 06 57.6
comp=N,174nm,0.6s
M26K IAML 20 06 57.8
comp=E,136nm,0.6s
**M26K Nabesna, AK 3.20 99 P Pn 20 06 02.8 +0.4**
baz=284
**BMRM Bremner River 3.22 128 Pn 20 06 01.9 -0.6**
BMRM IAML 20 06 52.3
comp=E,202nm,0.5s
BMRM IAML 20 06 54.6
comp=N,264nm,0.5s
**BMRM Bremner River 3.22 128 P Pn 20 06 02.0 -0.6**
baz=313,SNR=18
**GLB Gilahina Butte 3.23 117 Pn Pn 20 06 02.8 +0.1**
GLB IAML 20 06 52.2
comp=E,120nm,0.6s
GLB IAML 20 06 54.5
comp=N,130nm,0.6s
**BRLK Bradley Lake 3.34 189 Pn 20 06 04.6 +0.5**
BRLK IAML 20 06 55.5
comp=N,244nm,0.7s
BRLK IAML 20 06 57.1
comp=E,194nm,0.5s
**BRSE Bradley Lake S 3.35 188 Pn 20 06 04.9 +0.6**
**BRSE Bradley Lake S 3.35 188 P Pn 20 06 04.9 +0.6**
baz=7.7
**SVW2 Sparrevohn 3.35 237 Pn 20 06 05.0 +0.7**
SVW2 IAML 20 07 00.0
comp=E,65nm,0.6s
SVW2 IAML 20 07 04.2
comp=N,70nm,0.8s
**IM03 3.40 332 Pn 20 06 06.3 +1.4**
**IMAR Indian Mountai 3.40 332 Pn Pn 20 06 06.1 +1.2**
**ILSW Iliamna Southw 3.47 209 Pn 20 06 06.2 +0.2**
ILSW IAML 20 07 04.0
comp=N,68nm,2.5s
ILSW IAML 20 07 19.7
comp=E,106nm,0.7s
**VRDI Verde Repeater 3.50 119 Pn Pn 20 06 06.2 -0.2**
VRDI IAML 20 07 01.5
comp=N,81nm,1.2s
**HOM Homer 3.52 195 Pn Pn 20 06 05.9 -0.6**
**HOM Homer 3.52 195 P Pn 20 06 07.9 +1.4**
baz=14
**GCSA Galena City Sc 3.56 302 Pn 20 06 08.7 +1.6**
**GCSA Galena City Sc 3.56 302 P Pn 20 06 08.6 +1.6**
baz=116
**O19K Port Alsworth 3.58 219 Pn Pn 20 06 07.7 +0.3**
O19K IAML 20 07 02.9
comp=N,134nm,0.5s
O19K IAML 20 07 10.6
comp=E,160nm,0.4s
**O19K Port Alsworth 3.58 219 P Pn 20 06 08.4 +1.0**
baz=35
**CNPM China Poot 3.60 192 Pn 20 06 07.8 +0.1**
CNPM IAML 20 06 53.1
comp=N,257nm,0.4s
CNPM IAML 20 07 11.8
comp=E,193nm,0.9s
**RAGM Ragged Mountai 3.62 135 Pn 20 06 07.8 -0.1**
**L27K Beaver Creek, 3.63 86 Pn 20 06 08.2 +0.1**
L27K IAML 20 07 08.6
comp=N,53nm,1.1s
**BC03 3.65 86 Pn 20 06 08.7 +0.4**
**BCAR Beaver Creek A 3.65 86 Pn Pn 20 06 08.2 -0.2**
**M27K Edge Creek, AK 3.72 97 Pn 20 06 10.0 +0.7**
M27K IAML 20 07 17.4
comp=N,83nm,1.0s
M27K IAML 20 07 17.7
comp=E,58nm,0.8s
**HMT Hamilton 3.79 133 Pn Pn 20 06 09.8 -0.4**
**PS05 TAPS Pump Stn5 3.80 355 Pn 20 06 12.0 +1.8**
**BERG Berg Lake 3.94 130 Pn Pn 20 06 12.1 -0.2**
**Q23K Middleton Isla 4.00 154 Pn Pn 20 06 12.2 -0.7**
**MID Middleton Isla 4.00 154 Pn Pn 20 06 12.1 -0.9**
**FYU Fort Yukon 4.04 27 Pn 20 06 13.1 -0.3**
FYU IAML 20 08 06.4
comp=E,74nm,4.4s
FYU IAML 20 08 12.7
comp=N,84nm,4.5s
**BALM Baldy 4.05 117 Pn 20 06 13.6 -0.2**
**KAIM Kayak Island 4.06 138 Pn Pn 20 06 12.7 -1.1**
**KAIM Kayak Island 4.06 138 P Pn 20 06 14.6 +0.8**
baz=323
**KIAG Kiagna River 4.11 118 Pn 20 06 14.2 -0.5**
**O18K Koktuh Hills 4.12 221 Pn Pn 20 06 15.2 +0.5**
O18K IAML 20 08 38.6
comp=E,95nm,2.5s
O18K IAML 20 08 40.3
comp=N,79nm,2.5s
**O18K Koktuh Hills 4.12 221 P Pn 20 06 15.5 +0.7**
baz=37
**SUCK Suckling Hills 4.15 133 Pn Pn 20 06 15.1 0.0**
SUCK IAML 20 07 19.9
comp=E,193nm,0.7s
**BVCY Beaver Creek 4.16 95 Pn 20 06 15.9 +0.7**
**BVCY Beaver Creek 4.16 95 P Pn 20 06 15.9 +0.7**
baz=282
**EGAK Eagle 4.19 62 Pn Pn 20 06 17.2 +1.7**
EGAK IAML 20 07 06.9
comp=E,106nm,0.9s
EGAK IAML 20 07 20.7
comp=E,119nm,0.5s
**COLD Coldfoot 4.20 358 Pn Pn 20 06 16.6 +0.9**
**COLD Coldfoot 4.20 358 P Pn 20 06 17.1 +1.5**
baz=177,SNR=16
**WAX Waxell Ridge 4.21 125 Pn Pn 20 06 15.1 -0.8**
**ISLE Juniper Island 4.31 121 Pn Pn 20 06 16.5 -0.8**
ISLE IAML 20 07 21.3
comp=E,108nm,1.2s
ISLE IAML 20 07 42.3
comp=N,101nm,1.2s
**BARN Barnard Glacie 4.32 114 Pn 20 06 17.9 +0.4**
BARN IAML 20 09 08.0
comp=N,49nm,1.6s
BARN IAML 20 09 08.1
comp=E,85nm,1.4s
**YUK2 White River 4.35 103 Pn 20 06 19.2 +1.3**
**SNH Sunshine Point 4.40 128 Pn Pn 20 06 18.2 -0.2**
**BAGL Bagley Icefiel 4.47 122 Pn 20 06 19.1 -0.3**
**P18K Big Mountain, 4.51 218 Pn Pn 20 06 20.6 +0.6**
P18K IAML 20 08 47.8
comp=E,67nm,2.5s
P18K IAML 20 09 04.0
comp=N,67nm,4.0s
**P18K Big Mountain, 4.51 218 P Pn 20 06 20.5 +0.5**
baz=34
**YUK3 Moose Creek 4.53 102 Pn 20 06 21.6 +1.2**
**YUK3 Moose Creek 4.53 102 P Pn 20 06 21.4 +1.1**
baz=290
**Q19K Cape Douglas, 4.54 206 Pn 20 06 20.9 +0.6**
**Q19K Cape Douglas, 4.54 206 P Pn 20 06 21.1 +0.8**
baz=23
**YAH Yahtse 4.69 121 Pn Pn 20 06 22.3 -0.2**
YAH IAML 20 09 19.5
comp=E,108nm,2.0s
**MESA MESA 4.73 124 Pn Pn 20 06 23.3 +0.3**
**MESA MESA 4.73 124 P Pn 20 06 23.3 +0.3**
baz=311
**DAWY Dawson 4.77 73 Pn Pn 20 06 23.5 +0.1**
DAWY IAML 20 09 16.4
comp=N,40nm,2.1s
DAWY IAML 20 09 27.5
comp=E,54nm,1.8s
**DAWY Dawson 4.77 73 P Pn 20 06 24.2 +0.8**
baz=262,SNR=36
**TABL Table Mountain 4.88 119 Pn Pn 20 06 24.2 -0.9**
TABL IAML 20 09 19.2
comp=N,112nm,1.5s
**BM03 Burnt Mountain 4.90 24 Pn 20 06 26.3 +1.1**
**BMAR Burnt Mountain 4.91 24 Pn Pn 20 06 26.4 +1.0**
**YUK8 Steele Glacier 5.03 106 Pn 20 06 27.9 +0.7**
**J29M Klondike Camp 5.33 70 Pn 20 06 31.5 +0.4**
**PCA Pinnacle 5.44 119 Pn Pn 20 06 32.3 -0.2**
**PINM Pinnacle 5.44 119 P Pn 20 06 32.4 -0.1**
baz=307
**KDAK Kodiak Island 5.46 196 P Pn 20 06 32.1 -0.7**
comp=N,1.5nm,0.3s,baz=57,slow=7.1,SNR=36
KDAK S Sn 20 07 31.0 -3.2
comp=N,3.9nm,0.3s,baz=141,slow=23,SNR=6.9
KDAK LR LR 20 09 11.0
comp=N,3μm,20.2s,baz=117,slow=44
**KDAK Kodiak Island 5.46 196 Pn 20 06 31.7 -1.1**
**KDAK Kodiak Island 5.46 196 P Pn 20 06 32.1 -0.7**
baz=14
**YUK4 Talbot Arm 5.50 103 P Pn 20 06 34.3 +0.8**
baz=292
**I29M Ogilvie Camp, 5.53 60 Pn 20 06 34.5 +0.8**
**BCPM Bancas Point 5.77 118 Pn Pn 20 06 36.8 -0.2**
**YUK6 Outpost Mounta 5.79 106 P Pn 20 06 37.6 +0.2**
baz=296
**OHAK Old Harbor 6.10 198 Pn Pn 20 06 40.3 -1.1**
**OHAK Old Harbor 6.10 198 P Pn 20 06 40.3 -1.1**
baz=15
**HYT Haines Junctio 6.22 106 Pn Pn 20 06 40.5 -2.7**
**HYT Haines Junctio 6.22 106 P Pn 20 06 43.4 +0.3**
baz=296
**N31M Braeburn, Yuko 6.73 97 Pn Pn 20 06 46.5 -3.5**
**ANM Nome 7.06 289 Pn Pn 20 06 57.2 +2.8**
**M31M Drury Creek, Y 7.16 90 Pn Pn 20 06 55.1 -0.7**
**WHY Whitehorse 7.45 102 Pn Pn 20 06 59.3 -0.6**
**SKAG Skagway 7.84 111 Pn Pn 20 07 02.8 -2.4**
**CHGN Chignik 8.04 217 Pn Pn 20 07 06.8 -1.0**
**INK Inuvik 8.52 45 P Pn 20 07 15.0 +0.8**
comp=N,0.5nm,0.3s,baz=228,slow=17,SNR=12
**INK Inuvik 8.52 45 Pn 20 07 13.6 -0.6**
**BESE Bessie Mountai 8.56 115 Pn Pn 20 07 14.1 -0.8**
**P33M Teslin, Yukon 8.57 102 Pn Pn 20 07 14.9 -0.2**
**JIS Juneau Island 8.94 115 Pn Pn 20 07 19.5 -0.5**
**YKA Yellowknife Ar 16.00 76 P P 20 08 54.0 -0.5**
comp=N,0.1nm,0.3s,baz=283,slow=13,SNR=6.2
**KURBB Kurchatov Arra 60.44 327 P P 20 15 12.4 -0.1**
comp=N,0.5nm,0.6s,baz=31,slow=6.6,SNR=1.1
**MKAR Makanchi Array 62.97 323 P P 20 15 30.1 +0.5**
comp=N,1.9nm,0.9s,baz=35,slow=7.5,SNR=5.9

**TAP 05 20:05:42.8, 23.01N×120.57E, h14km, ML3.2, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGST** | **Jiashian** | **0.07** | **11** | *i* P | Pg | 20 05 46.1 | +0.3 |
| | baz=15 | | | | | | |
| SGST | | | | *i* S | Sg | 20 05 49.1 | +1.4 |
| | baz=15 | | | | | | |
| **SLGT** | **Liugui** | **0.07** | **104** | *i* P | Pg | 20 05 46.5 | +0.8 |
| | baz=105 | | | | | | |
| SLGT | | | | S | Sg | 20 05 49.5 | +1.8 |
| | baz=105 | | | | | | |
| **SHHT** | **Tainan City** | **0.20** | **273** | P | Pb | 20 05 49.5 | +1.3 |
| | baz=273 | | | | | | |
| SHHT | | | | S | Sb | 20 05 56.0 | +4.1 |
| | baz=273 | | | | | | |
| **TWM1** | **Shoushan** | **0.23** | **216** | *e*P | Pb | 20 05 49.9 | +1.2 |
| | baz=210 | | | | | | |
| **WTP** | **Ta-pu** | **0.24** | **10** | P | Pb | 20 05 49.1 | +0.2 |
| | baz=12 | | | | | | |
| WTP | | | | *e*S | Sb | 20 05 54.0 | +1.0 |
| | baz=12 | | | | | | |
| **TWK** | **Hsinying** | **0.27** | **344** | *i* P | Pb | 20 05 49.4 | +0.1 |
| | baz=346 | | | | | | |
| TWK | | | | S | Sb | 20 05 54.4 | +0.6 |
| | baz=346 | | | | | | |
| **SSD** | **Sandimen** | **0.27** | **167** | *i* P | Pb | 20 05 49.1 | -0.2 |
| | baz=161 | | | | | | |
| SSD | | | | S | Sb | 20 05 54.1 | +0.3 |
| | baz=161 | | | | | | |
| **SSHA** | **Shanhua** | **0.29** | **296** | *e*P | Pb | 20 05 50.6 | +0.9 |
| | baz=307 | | | | | | |
| SSHA | | | | *e*S | Sn | 20 05 57.2 | -1.4 |
| | baz=307 | | | | | | |
| **TPUB** | **Ta-pu** | **0.29** | **11** | P | Pb | 20 05 49.7 | -0.2 |
| | baz=11 | | | | | | |
| TPUB | | | | S | Sb | 20 05 55.2 | +0.6 |
| | baz=11 | | | | | | |
| **TSMG** | **Majia** | **0.31** | **167** | P | Pb | 20 05 49.9 | -0.2 |
| | baz=163 | | | | | | |
| TSMG | | | | S | Sb | 20 05 55.3 | +0.2 |
| | baz=163 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.33** | **220** | *e*P | Pb | 20 05 51.6 | +1.1 |
| | baz=237 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.40** | **171** | *i* P | Pb | 20 05 51.3 | -0.3 |
| | baz=169 | | | | | | |
| MASBT | | | | S | Sb | 20 05 57.6 | -0.1 |
| | baz=169 | | | | | | |
| **CHY** | **Chiayi** | **0.50** | **345** | *e*P | Pb | 20 05 54.1 | +0.8 |
| | baz=346 | | | | | | |
| CHY | | | | *e*S | Sb | 20 06 02.1 | +1.6 |
| | baz=346 | | | | | | |
| **SSPT** | **Xinbi** | **0.53** | **180** | *e*P | Pb | 20 05 54.4 | +0.6 |
| | baz=168 | | | | | | |
| SSPT | | | | *e*S | Sb | 20 06 02.3 | +1.1 |
| | baz=168 | | | | | | |
| **ALS** | **Alishan** | **0.54** | **24** | *e*P | Pg | 20 05 52.8 | -0.8 |
| | baz=25 | | | | | | |
| ALS | | | | *e*S | Sb | 20 06 01.7 | -0.3 |
| | baz=25 | | | | | | |
| **ECL** | **Taimali** | **0.55** | **139** | *e*P | Pb | 20 05 54.3 | +0.3 |
| | baz=140 | | | | | | |
| ECL | | | | *e*S | Sb | 20 06 01.8 | +0.1 |
| | baz=140 | | | | | | |
| **SCZT** | **Fangliau** | **0.64** | **176** | *e*P | Pb | 20 05 56.4 | +0.7 |
| | baz=166 | | | | | | |
| SCZT | | | | *e*S | Sn | 20 06 06.4 | -0.8 |
| | baz=166 | | | | | | |
| **EAST** | **Anshuo** | **0.68** | **157** | *e*P | Pb | 20 05 57.1 | +0.7 |
| | baz=151 | | | | | | |
| EAST | | | | *e*S | Sn | 20 06 07.8 | -0.5 |
| | baz=151 | | | | | | |
| **EDH** | **Donghe** | **0.68** | **93** | *e*P | Pb | 20 05 56.8 | +0.4 |
| | baz=93 | | | | | | |
| **FULB** | **Fuli** | **0.69** | **74** | *e*P | Pn | 20 05 57.4 | -0.7 |
| | baz=75 | | | | | | |
| FULB | | | | *e*S | Sn | 20 06 08.2 | -0.5 |
| | baz=75 | | | | | | |
| **TAWH** | **Dawu Township** | **0.73** | **156** | *e*P | Pn | 20 05 58.1 | -0.5 |
| | baz=152 | | | | | | |
| TAWH | | | | *e*S | Sg | 20 06 06.7 | 0.0 |
| | baz=152 | | | | | | |
| **EYUL** | **Yuli** | **0.77** | **64** | *e*P | Pg | 20 05 57.6 | -0.1 |
| | baz=64 | | | | | | |
| **YULB** | **Yu-li** | **0.77** | **60** | *e*P | Pg | 20 05 57.5 | -0.3 |
| | baz=60 | | | | | | |
| **EHY** | **Hungye** | **0.85** | **54** | *e*P | Pb | 20 05 59.7 | +0.4 |
| | baz=54 | | | | | | |

*NEIC* ***05*** *20:11:08.0±2.1, 5.28S±0.04×141.59E±0.07, h4km±3km, mb5.1/87, Error ellipse: s-maj=10.0km s-min=4.8km az=68.0*
*MOS* ***05*** *20:11:10.0±1.2, 5.23S×141.70E, h33km, mb4.6/7, Error ellipse: s-maj=12.4km s-min=6.8km az=100.8*
*IDC* ***05*** *20:11:12.6±0.6, 5.24S×141.81E, h35km±3km, mb3.9/16, mb1 4.2/21, mb1mx3.9/45, mbtmp4.3/21, ML3.7/3, Error ellipse: s-maj=15.3km s-min=12.2km az=95.0*
*BJI* ***05*** *20:11:14.9±0.0, 4.98S×141.26E, h30km, mb4.7/5, mB4.8/3*
*DJA* ***05*** *20:11:17.0±0.2, 5°S±3°×14°2E±°, h10km, M5.2/27, mb4.8/27, mB5.3/2, MLv5.3/6, Mw(mB)4.7/2*

**ISC 05 20:11:11.8±0.3, 5.41S±0.04×141.56E±0.05, h35km, n203, σ1°49/200, mb4.9/67, 6C-4D, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **3.00** | **343** | Pn | **Pn** | **20 11 57.8** | **+0.9** |
| | 156nm,0.3s,baz=170,slow=8.7,SNR=166 | | | | | | |
| JAY | | | | Sn | **Sn** | **20 12 33.5** | **+1.9** |
| | 119nm,0.3s,baz=88,slow=23,SNR=6.3 | | | | | | |
| **JAY** | **Jayapura** | **3.00** | **343** | P | **Pn** | **20 11 57.6** | **+0.7** |
| **GENI** | **Genyem** | **3.12** | **334** | P | **Pn** | **20 12 01.1** | **+2.6** |
| **SMPI** | **Sarmi** | **4.43** | **320** | P | Pn | 20 12 24.9 | +8.4 |
| **SRPI** | **Serui, Papua** | **6.36** | **303** | P | Pn | 20 12 53.6 | +10 |
| | 1.4nm159nm,1.2s | | | | | | |
| **MANU** | **Manus Island** | **6.69** | **60** | Pn | **Pn** | **20 12 46.1** | **-1.5** |
| **PMG** | **Port Moresby** | **6.83** | **126** | Pn | **Pn** | **20 12 50.8** | **+1.3** |
| | 3.1nm,0.3s,baz=324,slow=7.0,SNR=6.8 | | | | | | |
| PMG | | | | Sn | **Sn** | **20 14 05.0** | **-1.1** |
| | 3.7nm,0.3s,baz=254,slow=20,SNR=1.4 | | | | | | |
| **PMG** | **Port Moresby** | **6.83** | **126** | *ce*P | **Pn** | **20 12 50.6** | **+1.1** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,94nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **6.83** | **126** | Pn | **Pn** | **20 12 49.6** | **+0.1** |
| **COEN** | **Coen** | **8.64** | **169** | Pn | **Pn** | **20 13 17.0** | **+2.5** |
| **FAKI** | **Fak Fak** | **9.61** | **285** | P | Pn | 20 13 40.5 | +13 |
| | comp=Z,73nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **9.61** | **285** | Pn | **Pn** | **20 13 28.2** | **+0.5** |
| **SAUI** | **Saumlaki** | **10.51** | **255** | Pn | **Pn** | **20 13 40.3** | **+0.3** |
| **SIJI** | **Sorong** | **11.22** | **293** | Pn | **Pn** | **20 13 53.1** | **+3.3** |
| | comp=Z,0.6nm,0.3s,baz=90,slow=14,SNR=4.9 | | | | | | |
| **SWI** | **Sorong** | **11.23** | **293** | P | Pn | 20 13 59.6 | +10 |
| | comp=Z,46nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **11.52** | **230** | P | **Pn** | **20 13 55.6** | **+1.7** |
| | baz=12,SNR=11 | | | | | | |
| **MTN** | **Manton Dam** | **12.67** | **234** | P | **Pn** | **20 14 11.6** | **+2.0** |
| | baz=13,SNR=6.7 | | | | | | |
| **MTN** | **Manton Dam** | **12.67** | **234** | Pn | **Pn** | **20 14 10.4** | **+0.8** |
| **MTSU** | **Mount Surprise** | **12.93** | **168** | P | Pn | 20 14 18.8 | +5.6 |
| | baz=13,SNR=14 | | | | | | |
| **LBMI** | **Labuha** | **14.81** | **288** | P | P | 20 14 53.5 | +9.2 |
| | comp=Z,46nm,2.2s | | | | | | |
| **QIS** | **Mount Isa** | **15.18** | **187** | P | **Pn** | **20 14 46.0** | **+2.3** |
| | baz=15,SNR=9.2 | | | | | | |
| **CTA** | **Charters Tower** | **15.29** | **163** | Pn | **P** | **20 14 48.4** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=324,slow=14,SNR=1.9 | | | | | | |
| CTA | | | | Lg | Lg | 20 19 20.3 | |
| | comp=Z,0.5nm,0.3s,baz=47,slow=19,SNR=3.0 | | | | | | |
| **CTAO** | **Charters Tower** | **15.29** | **163** | P | **P** | **20 14 48.4** | **-1.2** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,35nm,1.2s | | | | | | |
| **CTAO** | **Charters Tower** | **15.29** | **163** | | **P** | **20 14 48.4** | **-1.2** |
| **WB0** | **Warramunga Arr** | **15.89** | **205** | Pn | **Pn** | **20 14 53.3** | **+0.5** |
| **WR0** | **Warramunga Arr** | **16.00** | **205** | Pn | **Pn** | **20 14 55.3** | **+1.0** |
| **WRAB** | **Tennant Creek** | **16.05** | **205** | P | **Pn** | **20 14 55.4** | **+0.4** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,74nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **16.05** | **205** | Pn | **Pn** | **20 14 55.4** | **+0.4** |
| **WB2** | **Warramunga Arr** | **16.06** | **205** | Pn | **Pn** | **20 14 55.4** | **+0.3** |
| **WRA** | **Warramunga Arr** | **16.07** | **205** | Pn | **Pn** | **20 14 54.9** | **-0.3** |
| | comp=Z,1.6nm,0.3s,baz=28,slow=12,SNR=17 | | | | | | |
| WRA | | | | Sn | **Sn** | **20 17 48.2** | **-4.1** |
| | comp=Z,1.3nm,0.3s,baz=29,slow=22,SNR=3.8 | | | | | | |
| WRA | | | | Lg | Lg | 20 19 49.7 | |
| | baz=26,slow=29,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.07** | **205** | *i* P | **P** | **20 14 58.0** | **-0.2** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.07** | **205** | Pn | **Pn** | **20 14 55.4** | **+0.3** |
| **KNRA** | **Kununurra** | **16.19** | **230** | P | **Pn** | **20 14 56.9** | **+0.2** |
| | baz=16,SNR=9.2 | | | | | | |
| **KNRA** | **Kununurra** | **16.19** | **230** | Pn | **Pn** | **20 14 56.8** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 20 15 16.5 | |
| | comp=Z,90nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **17.67** | **255** | Pn | **Pn** | **20 15 13.6** | **-1.9** |
| SOEI | | | | IAmb | IAmb | 20 15 54.9 | |
| | comp=Z,132nm,1.0s | | | | | | |
| **BATI** | **Baumata** | **18.36** | **254** | P | **Pn** | **20 15 25.8** | **+2.0** |
| | comp=Z,0.8nm,0.3s,baz=178,slow=3.0,SNR=2.5 | | | | | | |
| BATI | | | | S | **Sn** | **20 18 42.8** | **-5.2** |
| | comp=Z,0.8nm,0.3s,baz=114,slow=19,SNR=2.0 | | | | | | |
| **HNR** | **Honiara** | **18.66** | **103** | P | **P** | **20 15 24.0** | **-2.9** |
| HNR | | | | pmax | pmax | | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HNR** | **Honiara** | **18.66** | **103** | | **P** | **20 15 24.0** | **-2.9** |
| **BBSI** | **Bau Bau** | **18.90** | **269** | P | Pn | 20 15 48.1 | +18 |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **19.16** | **10** | P | **P** | **20 15 29.5** | **-2.8** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,695nm,1.6s | | | | | | |
| **GUMO** | **Guam** | **19.16** | **10** | P | **P** | **20 15 29.5** | **-2.8** |
| **MMRI** | **Maumere** | **19.44** | **259** | P | **P** | **20 15 33.7** | **-1.7** |
| **GTOI** | **Gorontalo** | **19.47** | **287** | P | Pn | 20 15 51.1 | +14 |
| | comp=Z,30nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **19.59** | **201** | P | **P** | **20 15 36.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **19.59** | **201** | P | **Pn** | **20 15 40.8** | **+2.1** |
| | comp=Z,6.1nm,0.3s,baz=29,slow=11,SNR=206 | | | | | | |
| ASAR | | | | pP | **sP** | **20 15 50.8** | **-0.1** |
| | comp=Z,2.4nm,0.3s,baz=32,slow=9.6,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **20 19 14.3** | **-2.2** |
| | comp=Z,0.6nm,0.3s,baz=17,slow=29,SNR=5.0 | | | | | | |
| ASAR | | | | Lg | Lg | 20 21 44.6 | |
| | comp=Z,0.1nm,0.3s,baz=106,slow=26,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **19.59** | **201** | P | **P** | **20 15 37.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **19.59** | **201** | P | **P** | **20 15 37.2** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **20.02** | **230** | P | Pn | 20 15 44.1 | +0.4 |
| | comp=Z,24nm,0.9s,baz=66,slow=10,SNR=14 | | | | | | |
| FITZ | | | | pP | sP | 20 15 56.6 | +1.0 |
| | comp=Z,18nm,0.7s,baz=64,slow=8.6,SNR=6.3 | | | | | | |
| FITZ | | | | S | **S** | **20 19 16.9** | **-8.2** |
| | comp=Z,19nm,0.8s,baz=79,slow=10,SNR=4.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.02** | **230** | P | Pn | 20 15 44.4 | +0.7 |
| | baz=20,SNR=6.4 | | | | | | |
| **APSI** | **Ampana** | **20.37** | **282** | P | Pn | 20 16 00.1 | +12 |
| | comp=Z,49nm,0.9s | | | | | | |
| **MRSI** | **Marisa** | **20.44** | **286** | P | Pn | 20 15 59.9 | +11 |
| | comp=Z,39nm,0.6s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **20.97** | **267** | P | Pn | 20 16 10.7 | +16 |
| | comp=Z,36nm,1.0s | | | | | | |
| **QLP** | **Quilpie** | **21.21** | **173** | P | **P** | **20 15 58.0** | **+3.5** |
| | baz=21,SNR=4.5 | | | | | | |

**BASI Baing, Sumba** 21.34 256 P P 20 16 11.2 +15
comp=Z,160nm,0.9s
**BKSI Bulukumba** 21.34 269 P P 20 16 11.1 +15
comp=Z,300nm,1.0s
**BNSI Bone** 21.40 272 P P 20 16 11.4 +15
comp=Z,29nm,1.1s
**KAPI Kappang** 21.72 270 P P 20 16 02.6 +2.5
comp=Z,5.0nm,0.7s,baz=113,slow=8.3,SNR=4.0
KAPI pP sP 20 16 13.5 -0.6
comp=Z,4.4nm,0.7s,baz=90,slow=14,SNR=2.7
**KAPI Kappang** 21.72 270 P P 20 16 01.5 +1.4
KAPI pmax pmax
comp=Z,28nm,1.3s
**KAPI Kappang** 21.72 270 P P 20 16 01.5 +1.4
**TOLI2 Tolitoli** 21.74 287 P P 20 15 59.6 -0.8
**SPSI Sidrap Palu** 21.76 273 P P 20 16 17.8 +17
comp=Z,19nm,0.8s
**TTSI Tana Toraja** 21.80 275 P P 20 16 17.6 +17
comp=Z,27nm,1.3s
**EIDS Eidsvold** 21.85 156 P P 20 16 05.1 +3.7
baz=22,SNR=4.2
**EIDS Eidsvold** 21.85 156 P P 20 16 01.9 +0.5
**RMQ Roma** 22.06 163 P P 20 16 06.4 +2.7
baz=22,SNR=5.0
**WBSI Waikabubak, Su** 22.37 258 P P 20 16 25.9 +19
**WRKA Warakurna** 23.30 212 P P 20 16 18.3 +1.6
baz=23,SNR=32
**MYLDM Lahad Datu** 25.31 294 P P 20 16 33.8 -1.6
MYLDM IAmb IAmb 20 17 16.1
comp=Z,54nm,1.1s
**MBWA Marble Bar** 26.33 231 P P 20 16 44.6 +0.1
**PSA00 Pilbara Seismi** 26.47 231 P P 20 16 45.6 -0.3
**PSA00 Pilbara Seismi** 26.47 231 P P 20 16 46.6 +0.7
PSA00 IAmb IAmb 20 17 38.7
comp=Z,19nm,1.1s
**SANVU Saraoutou** 27.09 114 P P 20 16 52.2 +0.7
SANVU IAmb IAmb 20 16 54.2
comp=Z,37nm,1.2s
**BBOO Buckleboo** 27.74 190 P P 20 16 58.2 +1.0
BBOO IAmb IAmb 20 17 11.7
comp=Z,47nm,1.4s
**FORT Forrest** 28.25 205 P P 20 17 02.0 +0.2
FORT IAmb IAmb 20 18 05.8
comp=Z,36nm,0.8s
**DZM Mont Dzumac** 29.22 127 P P 20 17 10.2 -0.4
comp=Z,6.9nm,1.0s,baz=302,slow=15,SNR=3.0
**DZM Mont Dzumac** 29.22 127 P P 20 17 10.7 +0.1
DZM IAmb IAmb 20 17 59.8
comp=Z,45nm,1.7s
**LIFNC LIFOU** 29.24 124 P P 20 17 11.6 +1.1
LIFNC IAmb IAmb 20 17 17.2
comp=Z,49nm,1.1s
**ONTNC Ouen Toro** 29.35 127 P P 20 17 11.7 +0.1
ONTNC IAmb IAmb 20 17 37.8
comp=Z,26nm,1.1s
**TOO Toolangi** 32.22 174 P P 20 17 38.4 +1.7
TOO pmax pmax
comp=Z,47nm,1.8s
**TOO Toolangi** 32.22 174 P P 20 17 38.4 +1.7
TOO IAmb IAmb 20 18 21.2
comp=Z,47nm,1.8s
**MORW Morawa** 33.72 223 P P 20 17 53.3 +3.3
baz=34,SNR=3.7
**MORW Morawa** 33.72 223 P P 20 17 50.6 +0.7
MORW IAmb IAmb 20 18 01.4
comp=Z,69nm,1.9s
**TAU Tasmania Unive** 37.70 173 P P 20 18 24.8 +1.0
TAU pmax pmax
comp=Z,99nm,1.8s
**TAU Tasmania Unive** 37.70 173 P P 20 18 24.8 +1.0
TAU IAmb IAmb 20 18 32.9
comp=Z,99nm,1.8s
**MJAR Matsushiro Arr** 41.85 356 P P 20 18 57.6 -0.9
comp=Z,1.8nm,0.7s,baz=180,slow=8.7,SNR=4.0
**MJAR Matsushiro Arr** 41.85 356 P P 20 18 57.6 -0.9
MJAR pmax pmax
comp=Z,13nm,1.7s
**MAJO Matsushiro** 41.85 356 P P 20 18 58.3 -0.2
MAJO pmax pmax
comp=Z,42nm,1.9s
**MAJO Matsushiro** 41.85 356 P P 20 18 58.3 -0.2
MAJO IAmb IAmb 20 19 16.7
comp=Z,42nm,1.9s
**MJB9 Matsu-Tunnel** 41.85 356 P P 20 18 57.8 -0.7
**OUZ Omahuta** 41.86 139 P P 20 18 58.1 -0.5
**NJ2 Nanjing** 43.07 331 *e*P P 20 19 10.0 +1.5
NJ2 pmax pmax
comp=Z,15nm,1.2s
**KSRS Korea Array** 44.50 344 P P 20 19 19.6 -0.2
comp=Z,0.7nm,0.4s,baz=159,slow=8.5,SNR=5.1
**QRZ Quartz Range** 44.86 146 P P 20 19 22.6 -0.3
**DCZ Deep Cove** 45.70 155 P P 20 19 31.6 +2.3
**THZ Tophouse** 45.72 147 P P 20 19 31.8 +2.2
**MLZ Mavora Lakes** 46.04 154 P P 20 19 33.5 +1.5
**TUWZ Tuamarina** 46.06 146 P P 20 19 33.2 +0.9
**LTZ Lake Taylor** 46.09 149 P P 20 19 33.4 +0.9
LTZ IAmb IAmb 20 19 35.4
comp=Z,72nm,1.7s
**BKZ Black Stump Fm** 46.10 142 P P 20 19 34.6 +1.9
**RPZ Rata Peaks** 46.15 150 P P 20 19 35.5 +2.6
**BSWZ Blackbirch Sta** 46.21 146 P P 20 19 34.6 +1.1
**SNZO South Karori** 46.41 145 P P 20 19 35.9 +0.9
**KHZ Kahutara** 46.51 147 P P 20 19 36.1 +0.4
**BHW Baring Head** 46.56 145 P P 20 19 36.5 +0.3
**MSWZ Moikau Station** 46.78 145 P P 20 19 38.8 +0.8
**BFZ Birch Farm** 46.89 144 P P 20 19 40.5 +1.7
**ENH Enshi** 46.93 321 P P 20 19 39.4 +0.1
ENH IAmb IAmb 20 20 49.6
comp=Z,40nm,1.9s
**CM31 Chiang Mai Arr** 48.24 301 P P 20 19 47.5 -2.1
**CMAR Chiang Mai Arr** 48.24 301 P P 20 19 50.1 +0.5
comp=Z,0.8nm,0.5s,baz=15,slow=29,SNR=6.6
CMAR pP sP 20 20 02.9 -2.2
comp=Z,2.3nm,0.6s,baz=120,slow=6.2,SNR=11
**CMAR Chiang Mai Arr** 48.24 301 *i*P P 20 19 47.9 -1.7
**CMAR Chiang Mai Arr** 48.24 301 P P 20 19 47.5 -2.1
**USRK Ussuriysk Ar.** 50.13 351 P P 20 20 02.9 -0.6
comp=Z,3.1nm,0.9s,baz=120,slow=9.5,SNR=4.8
USRK pP pP 20 20 12.6 -1.9
comp=Z,3.3nm,0.8s,baz=100,slow=6.6,SNR=3.9
**YSS Yuzh-Sakhalins** 52.14 1⇑*e*P P 20 20 16.3 -2.3
YSS pmax pmax
comp=Z,6.0nm,1.0s
**HHC Hu-ho-hao-te** 53.62 332 *e*P P 20 20 31.5 +1.7
**KLR Kul'dur** 55.08 352 P P 20 20 39.4 -0.7
comp=Z,1.3nm,0.6s,baz=168,slow=10,SNR=4.3
KLR pP pP 20 20 51.6 +0.4
comp=Z,6.4nm,1.0s,baz=170,slow=6.5,SNR=6.0
**GTA Gaotai** 58.91 323 *e*P P 20 21 21.2 +14
GTA pP sP 20 21 27.3 +4.0
GTA pmax pmax
comp=Z,7.0nm,1.4s
**PETK Petropavlovsk-** 59.87 11 P P 20 21 13.3 -0.5
comp=Z,3.5nm,1.0s,baz=180,slow=1.4,SNR=3.3
PETK pP pP 20 21 24.6 -0.7
comp=Z,6.0nm,1.0s,baz=195,slow=11,SNR=4.6
**PETK Petropavlovsk-** 59.87 11 P P 20 21 13.5 -0.4
**PETK Petropavlovsk-** 59.87 11 P P 20 21 13.5 -0.4
**ULN Ulaanbaatar** 61.10 334 P P 20 21 23.2 +0.6
ULN pmax pmax
comp=Z,11nm,1.0s
**ULN Ulaanbaatar** 61.10 334 P P 20 21 23.2 +0.6
ULN IAmb IAmb 20 21 35.9
comp=Z,11nm,1.0s
**SONM Songino Array** 61.37 334 P P 20 21 24.4 +0.1
comp=Z,0.9nm,0.7s,baz=153,slow=4.5,SNR=6.7
SONM pP pP 20 21 35.7 +0.1
comp=Z,1.7nm,0.6s,baz=154,slow=6.4,SNR=7.6
**SONM Songino Array** 61.37 334 P P 20 21 25.1 +0.8
SONM pmax pmax
comp=Z,5.0nm,1.5s
**SONM Songino Array** 61.37 334 P P 20 21 25.1 +0.8
**CASY Casey** 64.48 193 P P 20 21 45.8 +1.3
CASY IAmb IAmb 20 21 47.3
comp=Z,42nm,1.6s
**MA2 Magadan** 65.19 5⇑*i*P P 20 21 48.5 -0.7
MA2 pmax pmax
comp=Z,4.0nm,1.0s
**KNGR Kungurtug, Tuv** 67.42 331⇓*e*P P 20 22 04.9 +1.0
**YAK Yakutsk** 67.86 354 P P 20 22 06.2 -0.1
comp=Z,1.8nm,0.5s,baz=243,slow=2.3,SNR=2.3
**YAK Yakutsk** 67.86 354⇑*e*P P 20 22 06.8 +0.6
YAK pmax pmax
comp=Z,4.0nm,1.1s
**SEY Seymchan** 68.65 5 P P 20 22 10.4 -0.7
comp=Z,2.0nm,0.8s,baz=164,slow=7.2,SNR=7.4
SEY pP pP 20 22 22.9 +0.4
comp=Z,5.6nm,0.9s,baz=180,slow=5.3,SNR=9.4
**SEY Seymchan** 68.65 5⇓*i*P P 20 22 11.3 +0.2
**WMQ Urumqi** 68.88 321 *e*P P 20 22 15.3 +2.2
**MK31 Makanchi Array** 73.65 322 P P 20 22 42.5 +0.6
MK31 pmax pmax
comp=Z,13nm,1.1s
**MK31 Makanchi Array** 73.65 322 P P 20 22 42.5 +0.6
MK31 IAmb IAmb 20 22 56.1
comp=Z,13nm,1.1s
**MKAR Makanchi Array** 73.65 322 P P 20 22 42.8 +1.0
comp=Z,0.5nm,0.6s,baz=96,slow=8.9,SNR=11
MKAR pP pP 20 22 54.7 +1.2
comp=Z,8.3nm,0.9s,baz=99,slow=6.7,SNR=25
**MKAR Makanchi Array** 73.65 322 *i*P P 20 22 42.7 +0.9
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**MKAR Makanchi Array** 73.65 322 P P 20 22 41.2 -0.6
**MAKZ Makanchi** 73.85 322 P P 20 22 44.1 +1.1
MAKZ pmax pmax
comp=Z,15nm,1.2s
**MAKZ Makanchi** 73.85 322 P P 20 22 44.1 +1.1
MAKZ IAmb IAmb 20 22 57.1
comp=Z,15nm,1.1s
**NIL Nilore** 75.20 307 P P 20 22 50.9 -0.3
NIL pmax pmax
comp=Z,13nm,0.8s
**NIL Nilore** 75.20 307 P P 20 22 50.9 -0.3
NIL IAmb IAmb 20 23 07.0
comp=Z,13nm,0.8s
**BILL Bilibino** 75.32 9 *i*P P 20 22 48.9 -2.1
BILL *e* 20 23 00.8
BILL pmax pmax
comp=Z,3.0nm,1.3s
**BILL Bilibino** 75.32 9 P P 20 22 50.8 -0.2
**ZALV Zalesovo Beam** 75.68 329 P P 20 22 54.4 +0.9
comp=Z,0.9nm,0.6s,baz=100,slow=6.3,SNR=1.9
ZALV pP pP 20 23 05.1 0.0
comp=Z,1.9nm,0.5s,baz=109,slow=6.0,SNR=4.7
**BOOM Boomskoye usch** 76.05 316 P P 20 22 54.7 -1.4
BOOM pmax pmax
comp=Z,11nm,1.2s
**BOOM Boomskoye usch** 76.05 316 P P 20 22 54.6 -1.4
BOOM IAmb IAmb 20 23 32.5
comp=Z,11nm,1.2s
**TIXI Tiksi** 77.36 356⇑*e*P P 20 23 02.9 +0.4
TIXI pmax pmax
comp=Z,33nm,3.7s
**TIXI Tiksi** 77.36 356 P P 20 23 02.5 -0.1
**KURBB Kurchatov Arra** 77.56 324 P P 20 23 04.3 +0.2
comp=Z,0.9nm,1.0s,baz=120,slow=4.6,SNR=3.5
KURBB pP pP 20 23 15.9 +0.2
comp=Z,3.5nm,0.9s,baz=104,slow=4.3,SNR=14
**CHIR Chirikof Islan** 79.67 31 P P 20 23 15.4 -0.2
**CHGR Chuyangaron** 79.78 311 P P 20 23 17.1 +0.3
CHGR IAmb IAmb 20 23 31.7
comp=Z,24nm,0.9s
**ANM Nome** 79.98 21 P P 20 23 17.6 +0.5
ANM pmax pmax
comp=Z,40nm,1.8s
**ANM Nome** 79.98 21 P P 20 23 17.6 +0.5
ANM IAmb IAmb 20 23 32.1
comp=Z,40nm,1.8s
**P18K Big Mountain,** 81.42 28 P P 20 23 24.0 -1.0
**OHAK Old Harbor** 81.43 30 P P 20 23 25.6 +0.7
**O18K Koktuh Hills** 81.63 27 P P 20 23 25.6 -0.5
**Q19K Cape Douglas,** 81.96 28 P P 20 23 26.5 -1.3
**SVW2 Sparrevohn** 82.02 26 P P 20 23 27.8 -0.3
SVW2 IAmb IAmb 20 23 42.5
comp=Z,16nm,1.0s
**N19K Bonanza Creek** 82.38 26 P P 20 23 30.7 +0.6
N19K IAmb IAmb 20 23 44.1
comp=Z,27nm,1.1s
**TTA Tatalina** 82.67 24 P P 20 23 29.3 -2.2
TTA pmax pmax
comp=Z,40nm,1.8s
**TTA Tatalina** 82.67 24 P P 20 23 29.3 -2.2
TTA IAmb IAmb 20 23 52.3
comp=Z,40nm,1.8s
**L19K White Mountain** 82.81 25 P P 20 23 31.1 -1.1
L19K IAmb IAmb 20 23 50.9
comp=Z,36nm,1.6s
**M19K Big River Lodg** 82.89 25 P P 20 23 33.1 +0.5
M19K IAmb IAmb 20 24 16.5
comp=Z,55nm,1.9s
**NRIK Noril'sk** 83.10 343⇓*i*P P 20 23 34.0 +0.5
NRIK pmax pmax
comp=Z,3.0nm,1.0s
**BRVK Borovoye** 83.21 325⇑*i*P P 20 23 35.5 +1.1
BRVK pmax pmax
comp=Z,4.0nm,1.1s
**BRVK Borovoye** 83.21 325 P P 20 23 35.0 +0.6
BRVK IAmb IAmb 20 23 48.1
comp=Z,14nm,1.1s
**CNPM China Poot** 83.33 28 P P 20 23 34.2 -0.7
**BRLK Bradley Lake** 83.59 28 P P 20 23 36.7 +0.4
**K20K Telida** 83.65 24 P P 20 23 36.8 +0.3
K20K IAmb IAmb 20 23 50.8
comp=Z,12nm,1.2s
**J20K Nowinta River** 83.97 23 P P 20 23 38.4 +0.2
J20K IAmb IAmb 20 23 53.1
comp=Z,31nm,1.4s
**PPLA Purkeypile** 84.24 25 P P 20 23 39.5 -0.2
**CAST Castle Rocks** 84.49 24 P P 20 23 40.1 -0.7
CAST IAmb IAmb 20 23 53.9
comp=Z,17nm,1.3s
**MLY Manley** 85.67 23 P P 20 23 46.5 -0.2
MLY IAmb IAmb 20 24 00.9
comp=Z,19nm,1.3s
**RND Reindeer** 85.83 25 P P 20 23 46.7 -0.9
RND pmax pmax
comp=Z,26nm,1.1s
**RND Reindeer** 85.83 25 P P 20 23 46.7 -0.9
RND IAmb IAmb 20 24 01.2
comp=Z,26nm,1.1s
**MCK McKinley** 85.91 25 P P 20 23 47.0 -0.9
MCK pmax pmax
comp=Z,16nm,0.9s
**MCK McKinley** 85.91 25 P P 20 23 47.0 -0.9
MCK IAmb IAmb 20 24 01.1
comp=Z,16nm,0.9s
**CCB Clear Creek Bu** 86.70 24 P P 20 23 49.9 -1.7
CCB IAmb IAmb 20 24 04.6
comp=Z,11nm,0.8s
**IL31** 87.11 24 P P 20 23 52.1 -1.6
IL31 IAmb IAmb 20 24 06.6
comp=Z,5.9nm,0.8s
**ILAR Eielson Array** 87.11 24 P P 20 23 52.0 -1.7
comp=Z,2.1nm,0.6s,baz=260,slow=4.5,SNR=33
ILAR pP pP 20 24 03.3 -2.3
comp=Z,5.2nm,0.6s,baz=260,slow=4.6,SNR=17
**ILAR Eielson Array** 87.11 24 P P 20 23 52.3 -1.4
**ILAR Eielson Array** 87.11 24 P P 20 23 52.3 -1.4
**TOLK Toolik Lake Re** 87.46 20 P P 20 23 55.2 -0.2
TOLK IAmb IAmb 20 24 09.7
comp=Z,25nm,1.2s
**J25K Salcha River,** 87.68 24 P P 20 23 56.0 -0.5
J25K IAmb IAmb 20 24 10.2
comp=Z,20nm,1.4s
**DOT Dot Lake** 87.94 25 P P 20 23 59.3 +1.5
DOT IAmb IAmb 20 24 11.3
comp=Z,20nm,1.1s
**J26L Joseph Creek** 88.39 25 P P 20 23 59.6 -0.4
J26L IAmb IAmb 20 24 13.9
comp=Z,16nm,1.2s
**ABKAR Akbulak array** 88.60 320 P P 20 24 00.3 -0.8
**L27K Beaver Creek,** 88.76 26 P P 20 24 02.5 +0.8
L27K IAmb IAmb 20 24 15.9
comp=Z,20nm,1.4s
**BCAR Beaver Creek A** 88.78 26 P P 20 24 02.3 +0.5
**BMAR Burnt Mountain** 88.83 22 P P 20 24 03.4 +1.5
**SYO Syowa Base** 89.26 201⇓*e*P P 20 24 05.0 +1.1
**DAWY Dawson** 90.05 26 P P 20 24 08.8 +1.0
DAWY IAmb IAmb 20 24 23.2
comp=Z,22nm,1.2s
**ARU Arti** 90.59 327 P P 20 24 19.9 +10
**I29M Ogilvie Camp,** 90.77 24 P P 20 24 10.5 -0.5
I29M IAmb IAmb 20 26 07.2
comp=Z,10.0nm,0.9s
**CLL Collm** 117.54 326 *e*PKiKP PKiKP 20 29 55.0 +1.0
**MTO3 Montecristo** 129.15 76 PKPdf PKPdf 20 30 17.1 -0.4
**KIC Kosan Boka** 146.47 273 *e*PKIKP PKPab 20 30 51.2 -0.2
comp=Z,12nm,0.8s
**DBIC Dimbokro** 146.58 274 PKPbc PKPbc 20 30 51.1 +0.3
comp=Z,6.2nm,0.9s,baz=113,slow=3.3,SNR=5.8
**TIC Toumodi** 146.74 274 *e*PKIKP PKPbc 20 30 51.4 +0.2
**LIC Lamto** 146.75 273 *e*PKIKP PKPbc 20 30 51.2 0.0
comp=Z,39nm,1.3s
**SDV Santo Domingo** 147.88 82 PKPbc PKPbc 20 30 53.7 -0.9
comp=Z,7.7nm,0.7s,baz=280,slow=3.0,SNR=7.6
**SIV San Ignacio** 149.12 134 PKPbc PKPbc 20 30 57.7 +0.2
comp=Z,5.1nm,1.0s,baz=208,slow=4.8,SNR=6.2
**SJG San Juan** 150.14 63 PKPbc PKPbc 20 30 58.9 -1.0
comp=Z,4.9nm,0.3s,baz=30,slow=4.4,SNR=5.0

*IDC **05** 20:31:00.4±1.2,0.°73S×96.°78E,h0km,mb4.2/9, mb1 4.2/11,mb1mx3.8/42,mbtmp4.1/11,ML3.6/2,Error ellipse: s-maj=40.1km s-min=20.1km az=56.0*
*DJA **05** 20:31:00.9±1.2,1.°5S±4.°9×9.°7E±1.°1,h10km,M4.8/15, mb4.6/11,mB5.5/1,MLv4.8/15,Mw(mB)5.0/1*
*NEIC **05** 20:31:06.1±2.4,0.°55S±0.°06×97.°00E±0.°09,h28km±5km, mb4.5/29,Error ellipse: s-maj=13.8km s-min=6.9km az=63.0*

**ISC 05 20:31:04.6**±0.6,**0.°50S**±0.°06×**97.°03E**±0.°08,**h21**km,**n70,**
σ1§**47/69,mb4.4/22,1C,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **1.87** | **17** | P | **Pn** | **20 31 35.8** | **+0.4** |
| **GSI** | **Gunungsitoli** | **1.87** | **17** | | **Pn** | **20 31 35.6** | **+0.2** |
| **SISI** | **Saibi** | **2.22** | **112** | P | **Pn** | **20 31 39.7** | **-0.5** |
| **MNSI** | **Mandailing Nat** | **2.85** | **63** | P | **Pn** | **20 31 50.1** | **+1.2** |
| **PPI** | **Padang Panjang** | **3.37** | **89** | P | **Pn** | **20 31 56.4** | **+0.4** |
| **RPSI** | **Rantau Prapat** | **3.69** | **31** | | **Pn** | **20 32 02.2** | **+1.8** |
| RPSI | | | | | **Sn** | **20 32 38.0** | **-5.4** |
| **PPSI** | **Pulau Pagai** | **3.73** | **127** | P | **Pn** | **20 31 59.8** | **-1.2** |
| **PSI** | **Prapat** | **3.78** | **30** | Pn | **Pn** | **20 32 02.2** | **+0.4** |
| | 0.8nm,0.3s,baz=128,slow=21,SNR=4.3 | | | | | | |
| PSI | | | | Sn | **Sn** | **20 32 38.0** | **-7.9** |
| | 4.0nm,0.3s,baz=172,slow=9.9,SNR=4.5 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **4.06** | **10** | P | **Pn** | **20 32 05.4** | **-0.2** |
| **BKNI** | **Bangkinang** | **4.09** | **78** | P | **Pn** | **20 32 07.3** | **+1.3** |
| **BKNI** | **Bangkinang** | **4.09** | **78** | Pn | **Pn** | **20 32 06.9** | **+0.9** |
| **KRJI** | **Kerinci** | **4.70** | **110** | P | **Pn** | **20 32 15.4** | **+0.9** |
| **LHMI** | **Lhok Sumawe** | **5.69** | **359** | Pn | **Pn** | **20 32 28.4** | **+0.4** |
| **MASI** | **Maura Aman, Be** | **5.83** | **117** | P | **Pn** | **20 32 30.0** | **+0.1** |
| | 0.9nm68nm,0.7s | | | | | | |
| **IPM** | **Ipoh** | **6.35** | **39** | Pn | **Pn** | **20 32 37.5** | **+0.4** |
| **KULM** | **Kulim** | **6.79** | **32** | | **Pn** | **20 32 43.2** | **+0.1** |
| **MNAI** | **Manna** | **7.05** | **123** | P | **Pn** | **20 32 46.2** | **-0.5** |
| | 1.5nm161nm,1.2s | | | | | | |
| **MNAI** | **Manna** | **7.05** | **123** | Pn | **Pn** | **20 32 45.9** | **-0.9** |
| **MYKOM** | **Kota Tinggi** | **7.19** | **72** | Pn | **Pn** | **20 32 48.6** | **0.0** |
| **MDSI** | **Maura Dua** | **8.16** | **119** | P | **Pn** | **20 33 03.1** | **+1.1** |
| | 9.2nm,0.5s | | | | | | |
| **LWLI** | **Liwa** | **8.33** | **123** | P | **Pn** | **20 33 04.2** | **-0.2** |
| | 47nm,0.6s | | | | | | |
| **KLSI** | | **8.74** | **119** | P | **Pn** | **20 33 10.1** | **+0.2** |
| | 8.8nm,0.7s | | | | | | |
| **KASI** | **Kota Agung** | **8.97** | **124** | P | **Pn** | **20 33 12.9** | **-0.1** |
| **SBUM** | **Sibu** | **15.46** | **79** | Pn | **Pn** | **20 34 43.8** | **+2.1** |
| **DLV** | **T Lat** | **16.80** | **42** | Pn | **Pn** | **20 34 58.6** | **-0.3** |
| DLV | | | | IAmb | IAmb | 20 35 23.8 | |
| | comp=Z,106nm,1.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.93** | **6** | P | **P** | **20 35 25.5** | **+1.2** |
| | comp=Z,2.0nm,0.3s,baz=196,slow=11,SNR=27 | | | | | | |
| **CHTO** | **Chiang Mai** | **19.28** | **5** | P | **P** | **20 35 27.6** | **-0.6** |
| **KKM** | **Kota Kinabalu** | **20.22** | **71** | P | **P** | **20 35 39.2** | **+0.6** |
| KKM | | | | IAmb | IAmb | 20 36 03.6 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **MYLDM** | **Lahad Datu** | **22.17** | **75** | P | **P** | **20 35 58.5** | **-1.0** |
| MYLDM | | | | IAmb | IAmb | 20 36 21.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.47** | **253** | T | T | 21 02 35.7 | |
| | baz=74,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.47** | **253** | T | T | 21 02 35.7 | |
| | baz=74,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.49** | **253** | T | T | 21 02 37.8 | |
| | baz=74,slow=74 | | | | | | |
| **MMRI** | **Maumere** | **26.38** | **109** | P | **P** | **20 36 40.3** | **+0.5** |
| MMRI | | | | IAmb | IAmb | 20 36 44.1 | |
| | comp=Z,34nm,1.6s | | | | | | |
| **SHL** | **Shillong** | **26.39** | **349** | P | **P** | **20 36 40.3** | **+0.4** |
| SHL | | | | IAmb | IAmb | 20 37 16.3 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **ENH** | **Enshi** | **32.82** | **20** | P | **P** | **20 37 37.0** | **+0.2** |
| ENH | | | | IAmb | IAmb | 20 37 38.5 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **34.76** | **117** | P | **P** | **20 37 53.1** | **-0.7** |
| **FAKI** | **Fak Fak** | **35.28** | **94** | P | **P** | **20 37 57.8** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **35.35** | **44** | P | **P** | **20 37 59.4** | **+0.6** |
| **GTA** | **Gaotai** | **39.80** | **3** | ⇑P | **P** | **20 38 37.6** | **+1.2** |
| GTA | | | | pP | pP | 20 38 42.4 | +1.1 |
| GTA | | | | sP | sP | 20 38 44.8 | +1.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **AIS** | **Amsterdam Isla** | **41.22** | **204** | P | **P** | **20 38 46.0** | **-2.0** |
| **WB0** | **Warramunga Arr** | **41.29** | **120** | P | **P** | **20 38 48.5** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 20 38 54.1 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.31** | **120** | P | **P** | **20 38 48.6** | **-0.5** |
| | comp=Z,1.3nm,1.0s,baz=300,slow=9.4,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.31** | **120** | IAmb | IAmb | 20 38 54.0 | |
| | comp=Z,0.7nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.32** | **120** | P | **P** | **20 38 49.3** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 20 38 57.5 | |
| | comp=Z,13nm,1.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.49** | **120** | P | **P** | **20 38 50.2** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 20 39 17.6 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **42.53** | **126** | P | **P** | **20 38 58.7** | **-0.4** |
| | comp=Z,0.5nm,0.4s,baz=297,slow=7.7,SNR=9.1 | | | | | | |
| **BJT** | **Baijiatuan** | **43.95** | **21** | P | **P** | **20 39 12.2** | **+2.0** |
| BJT | | | | IAmb | IAmb | 20 39 13.2 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **45.49** | **340** | P | **P** | **20 39 24.4** | **+1.4** |
| TARG | | | | IAmb | IAmb | 20 39 24.9 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **46.82** | **339** | P | **P** | **20 39 34.0** | **+0.8** |
| BOOM | | | | IAmb | IAmb | 20 39 59.5 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **COEN** | **Coen** | **47.57** | **108** | P | **P** | **20 39 39.5** | **+0.3** |
| **JHS** | **Saijyo** | **48.81** | **40** | P | **P** | **20 39 49.5** | **+0.9** |
| **SONM** | **Songino Array** | **48.83** | **8** | P | **P** | **20 39 49.9** | **+1.4** |
| | comp=Z,1.1nm,0.4s,baz=189,slow=8.7,SNR=9.6 | | | | | | |
| SONM | | | | PcP | **PcP** | **20 41 13.1** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=166,slow=5.2,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **48.83** | **8** | P | **P** | **20 39 49.7** | **+1.2** |
| **MK31** | **Makanchi Array** | **48.84** | **347** | P | **P** | **20 39 49.5** | **+0.9** |
| MK31 | | | | IAmb | IAmb | 20 39 50.2 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.84** | **347** | P | **P** | **20 39 49.4** | **+0.8** |
| | comp=Z,3.5nm,0.6s,baz=162,slow=8.6,SNR=48 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.84** | **347** | P | **P** | **20 39 49.2** | **+0.6** |
| **MAKZ** | **Makanchi** | **48.93** | **346** | P | **P** | **20 39 49.6** | **+0.4** |
| **KKAR** | **Karatay Array** | **49.50** | **335** | P | **P** | **20 39 52.1** | **-1.6** |
| **USRK** | **Ussuriysk Ar.** | **54.31** | **30** | P | **P** | **20 40 31.1** | **+1.7** |
| | comp=Z,1.6nm,0.7s,baz=261,slow=9.5,SNR=4.1 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **55.20** | **351** | P | **P** | **20 40 36.4** | **+0.7** |
| ZAA0 | | | | IAmb | IAmb | 20 40 36.7 | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.20** | **351** | P | **P** | **20 40 36.3** | **+0.6** |
| | comp=Z,3.8nm,0.3s,baz=174,slow=6.4,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.20** | **351** | P | **P** | **20 40 36.1** | **+0.4** |
| **ABKAR** | **Akbulak array** | **58.93** | **333** | P | **P** | **20 41 01.4** | **-0.8** |
| **FIA1** | **FINESS Array S** | **81.42** | **333** | P | **P** | **20 43 19.1** | **-0.7** |
| **FINES** | **FINESS Array B** | **81.42** | **333** | P | **P** | **20 43 19.4** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=112,slow=5.5,SNR=18 | | | | | | |
| **BKZ** | **Black Stump Fm** | **81.51** | **129** | P | **P** | **20 43 20.4** | **-0.4** |
| **ARCES** | **ARCESS Array B** | **84.07** | **340** | P | **P** | **20 43 32.7** | **-0.7** |
| | comp=Z,3.0nm,0.9s,baz=88,slow=4.6,SNR=6.7 | | | | | | |
| **GERES** | **GERESS Array B** | **85.97** | **319** | P | **P** | **20 43 42.6** | **-0.9** |
| | comp=Z,0.3nm,0.7s,baz=120,slow=5.9,SNR=3.7 | | | | | | |
| **CLL** | **Collm** | **86.64** | **321** | *e*P | **P** | **20 43 46.0** | **-0.6** |
| **TXAR** | **Lajitas Array** | **145.19** | **33** | PKPbc | **PKPbc** | **20 50 41.5** | **+0.5** |
| | comp=Z,2.2nm,0.8s,baz=272,slow=1.6,SNR=15 | | | | | | |

**TAP 05 21:07:17.1,23.°02N×120.°35E,h23**km±1km,**ML3.5,2D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHHT** | **Tainan City** | **0.01** | **343** | P | Pb | 21 07 21.5 | +0.4 |
| | baz=341 | | | | | | |
| **CHN3** | **Shinhua** | **0.06** | **13** | P | Pb | 21 07 21.8 | +0.5 |
| | baz=12 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TAI1 | Yung-k'ang | | 0.12 | 283 | *i* P | Pb | 21 07 21.6 | 0.0 |
| | baz=282 | | | | | | | | |
| SSHA | Shanhua | | 0.13 | 335 | *i* P | Pb | 21 07 22.4 | +0.5 |
| | baz=334 | | | | | | | | |
| SSHA | | | | | S | Sb | 21 07 26.2 | +1.1 |
| | baz=334 | | | | | | | | |
| SCST | Cishan | | 0.18 | 134 | *e*P | Pb | 21 07 22.4 | 0.0 |
| | baz=134 | | | | | | | | |
| TWM1 | Shoushan | | 0.20 | 161 | P | Pb | 21 07 23.6 | +0.9 |
| | baz=158 | | | | | | | | |
| SCLT | Jiali | | 0.21 | 318 | *i* P | Pb | 21 07 23.0 | +0.2 |
| | baz=319 | | | | | | | | |
| SGST | Jiashian | | 0.23 | 73 | P | Pb | 21 07 22.8 | -0.2 |
| | baz=73 | | | | | | | | |
| CHN1 | Nanshi | | 0.24 | 44 | ⇓*i* P | Pb | 21 07 23.6 | +0.5 |
| | baz=44 | | | | | | | | |
| SNST | Tainan City | | 0.24 | 34 | *i* P | Pb | 21 07 23.7 | +0.5 |
| | baz=33 | | | | | | | | |
| SLGT | Liugui | | 0.27 | 94 | P | Pb | 21 07 23.9 | +0.2 |
| | baz=94 | | | | | | | | |
| TWK | Hsinying | | 0.28 | 27 | *i* P | Pb | 21 07 24.4 | +0.6 |
| | baz=28 | | | | | | | | |
| SGLT | Jiouru | | 0.32 | 156 | P | Pn | 21 07 25.4 | -0.8 |
| | baz=154 | | | | | | | | |
| WTP | Ta-pu | | 0.34 | 47 | *i* P | Pb | 21 07 25.1 | +0.5 |
| | baz=47 | | | | | | | | |
| ICHU | Yijhu | | 0.35 | 349 | *e*P | Pb | 21 07 25.2 | +0.4 |
| | baz=349 | | | | | | | | |
| CHN8 | Yiju | | 0.35 | 339 | *e*P | Pb | 21 07 25.2 | +0.3 |
| | baz=340 | | | | | | | | |
| SSD | Sandimen | | 0.37 | 136 | P | Pb | 21 07 25.5 | +0.3 |
| | baz=135 | | | | | | | | |
| TPUB | Ta-pu | | 0.38 | 42 | ⇓P | Pb | 21 07 25.7 | +0.3 |
| | baz=42 | | | | | | | | |
| CHN4 | Tsaushan | | 0.40 | 34 | P | Pb | 21 07 26.0 | +0.4 |
| | baz=33 | | | | | | | | |
| TSMG | Majia | | 0.41 | 139 | *e*P | Pb | 21 07 26.0 | +0.3 |
| | baz=138 | | | | | | | | |
| STYH | Taoyuan | | 0.42 | 68 | *i* P | Pn | 21 07 26.9 | -0.9 |
| | baz=67 | | | | | | | | |
| MASBT | Mashibuluo | | 0.48 | 147 | P | Pb | 21 07 27.3 | +0.4 |
| | baz=146 | | | | | | | | |
| WSL | Shuilin Townsh | | 0.52 | 347 | *e*P | Pb | 21 07 27.9 | +0.3 |
| | baz=347 | | | | | | | | |
| SSPT | Xinbi | | 0.57 | 159 | *e*P | Pn | 21 07 29.7 | 0.0 |
| | baz=159 | | | | | | | | |
| ELDTW | Lidau | | 0.64 | 74 | *e*P | Pn | 21 07 30.5 | -0.3 |
| | baz=74 | | | | | | | | |
| CHN5 | Tsauling | | 0.65 | 27 | P | Pn | 21 07 30.7 | -0.4 |
| | baz=27 | | | | | | | | |
| WTK | Tuku | | 0.67 | 3 | *e*P | Pn | 21 07 30.9 | -0.3 |
| | baz=3.0 | | | | | | | | |
| SCZT | Fangliau | | 0.69 | 159 | *e*P | Pn | 21 07 31.0 | -0.4 |
| | baz=158 | | | | | | | | |
| ECL | Taimali | | 0.69 | 127 | *e*P | Pb | 21 07 31.0 | +0.4 |
| | baz=126 | | | | | | | | |
| TWGBT | Beinan | | 0.70 | 106 | *e*P | Pn | 21 07 31.2 | -0.4 |
| | baz=106 | | | | | | | | |

*JMA* ***05*** *21:07:15.0±0.4, 22°.76N×120°.38E, h0km, M3.8*
*TAP* ***05*** *21:07:18.9, 23°.01N×120°.36E, h21km, ML4.3, B*
*IDC* ***05*** *21:08:26.8±3.6, 14°.85N×124°.17E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.3/48, mbtmp3.6/3, Error ellipse: s-maj=278.6km s-min=28.6km az=63.0*

**ISC 05 21:07:19.6±0.8, 23°.01N±0°.02×120°.32E±0°.02, h26km±4km, n150, σ0s77/217, 13C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SHHT | Tainan City | 0.03 | 69 | P | | | Pb | 21 07 23.5 | -0.6 |
| | baz=317 | | | | | | | | |
| SHHT | | | | S | | | Sb | 21 07 27.4 | +0.3 |
| | baz=317 | | | | | | | | |
| CHN3 | Shinhua | 0.08 | 33 | *e*P | | | Pb | 21 07 23.9 | -0.4 |
| | baz=350 | | | | | | | | |
| CHN3 | | | | S | | | Sb | 21 07 27.9 | +0.4 |
| | baz=350 | | | | | | | | |
| TAI1 | Yung-k'ang | 0.09 | 289 | ⇑*i* P | | | Pb | 21 07 23.8 | -0.5 |
| | baz=285 | | | | | | | | |
| TAI1 | | | | S | | | Sb | 21 07 27.6 | +0.2 |
| | baz=285 | | | | | | | | |
| SSHA | Shanhua | 0.13 | 347 | *i* P | | | Pb | 21 07 24.5 | -0.1 |
| | baz=333 | | | | | | | | |
| SSHA | | | | S | | | Sb | 21 07 29.0 | +1.0 |
| | baz=333 | | | | | | | | |
| SCLT | Jiali | 0.20 | 325 | ⇑*i* P | | | Pb | 21 07 25.1 | -0.3 |
| | baz=319 | | | | | | | | |
| SCLT | | | | *i* S | | | Sb | 21 07 30.4 | +1.1 |
| | baz=319 | | | | | | | | |
| SCST | Cishan | 0.20 | 128 | *e*P | | | Pb | 21 07 25.9 | +0.4 |
| | baz=135 | | | | | | | | |
| TWM1 | Shoushan | 0.21 | 153 | *e*P | | | Pb | 21 07 25.6 | 0.0 |
| | baz=151 | | | | | | | | |
| TWM1 | | | | *e*S | | | Sb | 21 07 31.5 | +1.9 |
| | baz=151 | | | | | | | | |
| SGST | Jiashian | 0.25 | 74 | *i* P | | | Pb | 21 07 24.8 | -1.3 |
| | baz=81 | | | | | | | | |
| SGST | | | | *i* S | | | Sb | 21 07 29.8 | -0.7 |
| | baz=81 | | | | | | | | |
| SNJT | Kaohsiung City | 0.26 | 177 | P | | | Pb | 21 07 25.8 | -0.3 |
| | baz=195 | | | | | | | | |
| SNJT | | | | S | | | Sb | 21 07 32.1 | +1.6 |
| | baz=195 | | | | | | | | |
| CHN1 | Nanshi | 0.26 | 48 | *i* P | | | Pb | 21 07 25.7 | -0.5 |
| | baz=41 | | | | | | | | |
| CHN1 | | | | *i* S | | | Sb | 21 07 30.5 | -0.1 |
| | baz=41 | | | | | | | | |
| SNST | Tainan City | 0.26 | 38 | *i* P | | | Pb | 21 07 25.9 | -0.4 |
| | baz=31 | | | | | | | | |
| SNST | | | | *i* S | | | Sb | 21 07 30.9 | +0.2 |
| | baz=31 | | | | | | | | |
| TWK | Hsinying | 0.30 | 31 | ⇓*i* P | | | Pb | 21 07 26.5 | -0.3 |
| | baz=27 | | | | | | | | |
| TWK | | | | *i* S | | | Sb | 21 07 32.4 | +0.8 |
| | baz=27 | | | | | | | | |
| SLGT | Liugui | 0.30 | 93 | P | | | Pb | 21 07 25.9 | -0.8 |
| | baz=102 | | | | | | | | |
| SLGT | | | | *e*S | | | Sb | 21 07 30.9 | -0.8 |
| | baz=102 | | | | | | | | |
| SGLT | Jiouru | 0.33 | 151 | ⇑*i* P | | | Pb | 21 07 27.6 | +0.5 |
| | baz=156 | | | | | | | | |
| SGLT | | | | *e*S | | | Sn | 21 07 35.0 | +0.5 |
| | baz=156 | | | | | | | | |
| CHN8 | Yiju | 0.35 | 343 | P | | | Pb | 21 07 27.3 | -0.2 |
| | baz=341 | | | | | | | | |
| CHN8 | | | | *e*S | | | Sb | 21 07 33.7 | +0.9 |
| | baz=341 | | | | | | | | |
| ICHU | Yijhu | 0.35 | 354 | P | | | Pb | 21 07 27.2 | -0.3 |
| | baz=349 | | | | | | | | |
| ICHU | | | | S | | | Sb | 21 07 34.3 | +1.4 |
| | baz=349 | | | | | | | | |
| WTP | Ta-pu | 0.36 | 49 | ⇓*i* P | | | Pb | 21 07 27.2 | -0.5 |
| | baz=38 | | | | | | | | |
| WTP | | | | *i* S | | | Sb | 21 07 33.1 | -0.1 |
| | baz=38 | | | | | | | | |
| TSPT | Pingtung City | 0.37 | 154 | P | | | Pb | 21 07 28.0 | +0.2 |
| | baz=159 | | | | | | | | |
| TSPT | | | | *e*S | | | Sn | 21 07 35.4 | -0.3 |
| | baz=159 | | | | | | | | |
| SSD | Sandimen | 0.39 | 132 | ⇑*i* P | | | Pb | 21 07 27.6 | -0.6 |
| | baz=128 | | | | | | | | |
| SSD | | | | S | | | Sb | 21 07 33.8 | -0.1 |
| | baz=128 | | | | | | | | |
| TPUB | Ta-pu | 0.41 | 45 | ⇓P | | | Pb | 21 07 27.7 | -0.6 |
| | baz=41 | | | | | | | | |
| TPUB | | | | *i* S | | | Sb | 21 07 34.0 | -0.3 |
| | baz=41 | | | | | | | | |
| CHN4 | Tsaushan | 0.42 | 37 | P | | | Pb | 21 07 28.2 | -0.4 |
| | baz=33 | | | | | | | | |
| CHN4 | | | | S | | | Sb | 21 07 34.9 | +0.2 |
| | baz=33 | | | | | | | | |
| TSMG | Majia | 0.43 | 135 | *e*P | | | Pb | 21 07 27.8 | -0.9 |
| | baz=136 | | | | | | | | |
| KAU | Kaohsiung | 0.44 | 181 | *e*P | | | Pb | 21 07 29.2 | +0.3 |
| | baz=185 | | | | | | | | |
| KAU | | | | *e*S | | | Sn | 21 07 37.2 | -0.2 |
| | baz=185 | | | | | | | | |
| STYH | Taoyuan | 0.45 | 69 | *i* P | | | Pb | 21 07 28.9 | -0.1 |
| | baz=68 | | | | | | | | |
| STYH | | | | *i* S | | | Sb | 21 07 35.9 | +0.4 |
| | baz=68 | | | | | | | | |
| MASBT | Mashibuluo | 0.49 | 144 | P | | | Pb | 21 07 29.2 | -0.5 |
| | baz=134 | | | | | | | | |
| MASBT | | | | S | | | Sb | 21 07 36.7 | +0.1 |
| | baz=134 | | | | | | | | |
| CHY | Chiayi | 0.49 | 11 | *e*P | | | Pb | 21 07 29.7 | -0.1 |
| | baz=9.0 | | | | | | | | |
| CHY | | | | *e*S | | | Sb | 21 07 37.6 | +0.9 |
| | baz=9.0 | | | | | | | | |
| WSL | Shuilin Townsh | 0.52 | 351 | *e*P | | | Pb | 21 07 29.9 | -0.3 |
| | baz=347 | | | | | | | | |
| CHN2 | Minshiung | 0.54 | 15 | *e*P | | | Pb | 21 07 30.6 | +0.1 |
| | baz=13 | | | | | | | | |
| CHN2 | | | | *e*S | | | Sb | 21 07 38.9 | +0.9 |
| | baz=13 | | | | | | | | |
| SSPT | Xinbi | 0.57 | 156 | *i* P | | | Pn | 21 07 31.6 | -0.4 |
| | baz=144 | | | | | | | | |
| SSPT | | | | S | | | Sn | 21 07 41.3 | +0.7 |
| | baz=144 | | | | | | | | |
| WSF | Szhu | 0.63 | 352 | *e*P | | | Pb | 21 07 32.1 | +0.1 |
| | baz=350 | | | | | | | | |
| WSF | | | | S | | | Sb | 21 07 41.9 | +1.4 |
| | baz=350 | | | | | | | | |
| WDGT | Dungji | 0.66 | 292 | P | | | Pb | 21 07 32.1 | -0.3 |
| | baz=291 | | | | | | | | |
| WDGT | | | | *i* S | | | Sb | 21 07 41.2 | 0.0 |
| | baz=291 | | | | | | | | |
| WLCH | Liuqiu | 0.66 | 175 | *e*P | | | Pn | 21 07 34.0 | +0.8 |
| | baz=195 | | | | | | | | |
| TWP | Hsiaoliuchiu | 0.66 | 177 | *e*P | | | Pn | 21 07 33.9 | +0.5 |
| | baz=196 | | | | | | | | |
| TWP | | | | *e*S | | | Sn | 21 07 44.9 | +2.0 |
| | baz=196 | | | | | | | | |
| ELDTW | Lidau | 0.67 | 74 | *i* P | | | Pb | 21 07 32.5 | -0.3 |
| | baz=74 | | | | | | | | |
| ELDTW | | | | S | | | Sb | 21 07 42.0 | +0.4 |
| | baz=74 | | | | | | | | |
| ALS | Alishan | 0.67 | 42 | P | | | Pb | 21 07 32.5 | -0.4 |
| | baz=48 | | | | | | | | |
| ALS | | | | S | | | Sb | 21 07 42.3 | +0.4 |
| | baz=48 | | | | | | | | |
| CHN5 | Tsauling | 0.67 | 29 | *i* P | | | Pb | 21 07 32.4 | -0.4 |
| | baz=27 | | | | | | | | |
| CHN5 | | | | *e*S | | | Sb | 21 07 42.3 | +0.5 |
| | baz=27 | | | | | | | | |
| WTK | Tuku | 0.68 | 5 | *e*P | | | Pb | 21 07 32.8 | 0.0 |
| | baz=348 | | | | | | | | |
| SCZT | Fangliau | 0.69 | 156 | *i* P | | | Pb | 21 07 33.0 | -0.1 |
| | baz=146 | | | | | | | | |
| SCZT | | | | *i* S | | | Sn | 21 07 43.3 | -0.3 |
| | baz=146 | | | | | | | | |
| WDLH | Douliu | 0.70 | 17 | *e*P | | | Pb | 21 07 33.5 | +0.2 |
| | baz=13 | | | | | | | | |
| WGK | Gukeng | 0.71 | 18 | *e*P | | | Pb | 21 07 33.5 | +0.2 |
| | baz=16 | | | | | | | | |
| ECL | Taimali | 0.72 | 125 | P | | | Pb | 21 07 33.2 | -0.3 |
| | baz=126 | | | | | | | | |
| ECL | | | | S | | | Sb | 21 07 42.4 | -0.5 |
| | baz=126 | | | | | | | | |
| TWGBT | Beinan | 0.73 | 105 | ⇑P | | | Pb | 21 07 33.3 | -0.4 |
| | baz=106 | | | | | | | | |
| TWGBT | | | | S | | | Sb | 21 07 42.4 | -0.9 |
| | baz=106 | | | | | | | | |
| YUS | Yu-Shan | 0.75 | 51 | P | | | Pb | 21 07 34.1 | -0.3 |
| | baz=50 | | | | | | | | |
| YUS | | | | S | | | Sb | 21 07 44.8 | +0.3 |
| | baz=50 | | | | | | | | |
| LONT | Longtian | 0.75 | 98 | ⇑P | | | Pb | 21 07 34.0 | -0.1 |
| | baz=98 | | | | | | | | |
| LONT | | | | *e*S | | | Sb | 21 07 43.7 | -0.4 |
| | baz=98 | | | | | | | | |
| EAST | Anshuo | 0.79 | 142 | *i* P | | | Pb | 21 07 34.8 | 0.0 |
| | baz=132 | | | | | | | | |
| EAST | | | | *i* S | | | Sn | 21 07 46.8 | +0.6 |
| | baz=132 | | | | | | | | |
| WMLT | Mailiao | 0.79 | 354 | *e*P | | | Pn | 21 07 35.1 | 0.0 |
| | baz=351 | | | | | | | | |
| TTN | Taitung | 0.81 | 108 | *i* P | | | Pn | 21 07 35.7 | +0.4 |
| | baz=109 | | | | | | | | |
| TTN | | | | *e*S | | | Sn | 21 07 47.5 | +1.1 |
| | baz=109 | | | | | | | | |
| ECS | Chishang | 0.83 | 84 | *e*P | | | Pn | 21 07 35.5 | -0.2 |
| | baz=84 | | | | | | | | |
| ECS | | | | S | | | Sn | 21 07 46.9 | -0.2 |
| | baz=84 | | | | | | | | |
| TAW | Tawu | 0.84 | 141 | *i* P | | | Pn | 21 07 35.2 | -0.6 |
| | baz=131 | | | | | | | | |
| TAW | | | | *i* S | | | Sn | 21 07 46.8 | -0.5 |
| | baz=131 | | | | | | | | |
| VCHM | Qimei | 0.84 | 284 | *e*P | | | Pn | 21 07 35.1 | -0.7 |
| | baz=293 | | | | | | | | |
| VCHM | | | | *e*S | | | Sb | 21 07 46.0 | -0.5 |
| | baz=293 | | | | | | | | |
| WTCT | Ta-ch'eng | 0.85 | 358 | *e*P | | | Pn | 21 07 36.2 | +0.4 |
| | baz=357 | | | | | | | | |
| WTCT | | | | *e*S | | | Sb | 21 07 47.4 | +0.6 |
| | baz=357 | | | | | | | | |
| PHUB | P'eng-hu | 0.85 | 306 | P | | | Pn | 21 07 34.7 | -1.2 |
| | baz=317 | | | | | | | | |
| PHUB | | | | *e*S | | | Sb | 21 07 45.6 | -1.1 |
| | baz=317 | | | | | | | | |
| TAWH | Dawu Township | 0.85 | 142 | P | | | Pn | 21 07 35.6 | -0.3 |
| | baz=133 | | | | | | | | |
| TAWH | | | | S | | | Sn | 21 07 47.2 | -0.3 |
| | baz=133 | | | | | | | | |
| WRL | Guolierlin Hig | 0.89 | 3 | *e*P | | | Pn | 21 07 35.8 | -0.6 |
| | baz=15 | | | | | | | | |
| WJS | Zhushan | 0.89 | 25 | *e*P | | | Pn | 21 07 36.2 | -0.2 |
| | baz=24 | | | | | | | | |
| WJS | | | | S | | | Sn | 21 07 49.4 | +0.8 |
| | baz=24 | | | | | | | | |
| PNG | Penghu | 0.90 | 308 | *e*P | | | Pn | 21 07 35.3 | -1.2 |
| | baz=319 | | | | | | | | |
| PNG | | | | *e*S | | | Sn | 21 07 47.3 | -1.3 |
| | baz=319 | | | | | | | | |
| SLIU | Shizi | 0.91 | 151 | P | | | Pb | 21 07 36.9 | +0.1 |
| | baz=153 | | | | | | | | |
| EDH | Donghe | 0.91 | 92 | P | | | Pn | 21 07 36.7 | +0.1 |
| | baz=87 | | | | | | | | |
| EDH | | | | *e*S | | | Sn | 21 07 49.5 | +0.6 |
| | baz=87 | | | | | | | | |
| FULB | Fuli | 0.92 | 78 | *e*P | | | Pn | 21 07 37.1 | +0.2 |
| | baz=78 | | | | | | | | |
| FULB | | | | *e*S | | | Sn | 21 07 50.3 | +1.1 |
| | baz=78 | | | | | | | | |
| WNT | Mingjian | 0.93 | 21 | *e*P | | | Pn | 21 07 36.2 | -0.7 |
| | baz=20 | | | | | | | | |
| WNT | | | | *e*S | | | Sb | 21 07 50.4 | +1.4 |
| | baz=20 | | | | | | | | |
| WNT1 | Nantou City | 0.95 | 20 | *e*P | | | Pn | 21 07 37.0 | -0.3 |
| | baz=6.0 | | | | | | | | |
| TWF1 | Yuli | 0.96 | 69 | ⇑*i* P | | | Pn | 21 07 37.3 | -0.1 |
| | baz=69 | | | | | | | | |
| TWF1 | | | | *i* S | | | Sn | 21 07 50.1 | -0.2 |
| | baz=69 | | | | | | | | |
| CHKT | Chengkung | 0.97 | 85 | ⇑*i* P | | | Pn | 21 07 37.5 | 0.0 |
| | baz=85 | | | | | | | | |
| CHKT | | | | S | | | Sb | 21 07 51.8 | +1.6 |
| | baz=85 | | | | | | | | |
| SSLB | Suanglung | 0.97 | 37 | *e*P | | | Pn | 21 07 37.2 | -0.3 |
| | baz=25 | | | | | | | | |
| SSLB | | | | *e*S | | | Sn | 21 07 50.1 | -0.4 |
| | baz=25 | | | | | | | | |
| WYL | Yuanlin Townsh | 0.97 | 14 | *e*P | | | Pn | 21 07 37.1 | -0.5 |
| | baz=12 | | | | | | | | |
| YULB | Yu-li | 0.98 | 67 | ⇑*i* P | | | Pn | 21 07 37.3 | -0.4 |
| | baz=67 | | | | | | | | |
| YULB | | | | *i* S | | | Sn | 21 07 49.8 | -0.9 |
| | baz=67 | | | | | | | | |
| EYUL | Yuli | 0.98 | 70 | P | | | Pn | 21 07 37.7 | +0.1 |
| | baz=70 | | | | | | | | |
| EYUL | | | | S | | | Sn | 21 07 50.3 | -0.4 |
| | baz=70 | | | | | | | | |
| TYC | Yuchr | 1.02 | 29 | *e*P | | | Pn | 21 07 38.0 | -0.1 |
| | baz=27 | | | | | | | | |
| SMLT | Sun Moon Lake | 1.02 | 31 | *e*P | | | Pn | 21 07 37.8 | -0.5 |
| | baz=30 | | | | | | | | |
| EHY | Hungye | 1.04 | 62 | ⇑P | | | Pn | 21 07 38.6 | 0.0 |
| | baz=62 | | | | | | | | |
| EHY | | | | S | | | Sb | 21 07 52.9 | +0.5 |
| | baz=62 | | | | | | | | |
| VWDT | VWDT | 1.06 | 45 | *e*P | | | Pn | 21 07 38.9 | +0.2 |
| | baz=45 | | | | | | | | |
| VWDT | | | | *e*S | | | Sn | 21 07 52.0 | -0.6 |
| | baz=45 | | | | | | | | |
| HEN | Hengchun | 1.07 | 159 | *e*P | | | Pb | 21 07 39.9 | +0.4 |
| | baz=159 | | | | | | | | |
| HEN | | | | *e*S | | | Sb | 21 07 53.8 | +0.6 |
| | baz=159 | | | | | | | | |
| WWF | Wufeng | 1.08 | 19 | *e*P | | | Pn | 21 07 39.3 | +0.1 |
| | baz=16 | | | | | | | | |
| ECBN | Changbin | 1.08 | 74 | *e*P | | | Pn | 21 07 39.6 | +0.5 |
| | baz=74 | | | | | | | | |
| WCHH | Zhanghua | 1.09 | 12 | *e*P | | | Pn | 21 07 39.2 | +0.1 |
| | baz=9.0 | | | | | | | | |
| SMST | Manzhou Townsh | 1.10 | 154 | *e*P | | | Pb | 21 07 40.1 | +0.2 |
| | baz=155 | | | | | | | | |
| LDUT | Ludao | 1.11 | 107 | *e*P | | | Pn | 21 07 39.3 | -0.2 |
| | baz=108 | | | | | | | | |
| LDUT | | | | *e*S | | | Sb | 21 07 55.3 | +1.1 |
| | baz=108 | | | | | | | | |
| SNW | Nanwan | 1.12 | 159 | *e*P | | | Pb | 21 07 41.4 | +1.1 |
| | baz=161 | | | | | | | | |
| HGSD | Ruisui | 1.12 | 65 | ⇑*i* P | | | Pn | 21 07 40.2 | +0.6 |
| | baz=65 | | | | | | | | |
| HGSD | | | | *i* S | | | Sb | 21 07 55.6 | +1.0 |
| | baz=65 | | | | | | | | |
| TWK1 | Hengchun | 1.15 | 157 | ⇑*i* P | | | Pn | 21 07 39.7 | -0.4 |
| | baz=158 | | | | | | | | |
| WPL | Puli Township | 1.16 | 30 | P | | | Pn | 21 07 40.0 | -0.1 |
| | baz=19 | | | | | | | | |
| TWKBT | Hengchun | 1.16 | 157 | ⇑P | | | Pn | 21 07 39.7 | -0.4 |
| | baz=158 | | | | | | | | |
| DPDB | Guoxing | 1.16 | 29 | *e*P | | | Pn | 21 07 39.9 | -0.4 |
| | baz=16 | | | | | | | | |
| WCS | Beigang Elemen | 1.17 | 27 | *e*P | | | Pn | 21 07 39.4 | -1.0 |
| | baz=43 | | | | | | | | |
| WCS | | | | *e*S | | | Sn | 21 07 55.1 | -0.4 |
| | baz=43 | | | | | | | | |
| TCU | Taichung | 1.18 | 16 | *e*P | | | Pn | 21 07 40.4 | 0.0 |
| | baz=14 | | | | | | | | |
| EGFH | Guangfu | 1.21 | 57 | *e*P | | | Pn | 21 07 41.1 | +0.3 |
| | baz=58 | | | | | | | | |
| EGFH | | | | S | | | Sb | 21 07 57.7 | +0.6 |
| | baz=58 | | | | | | | | |
| WUSB | Renai | 1.22 | 37 | *e*P | | | Pn | 21 07 41.2 | +0.1 |
| | baz=28 | | | | | | | | |
| WUSB | | | | *e*S | | | Sb | 21 07 57.9 | +0.4 |
| | baz=28 | | | | | | | | |
| TSEB | Hengchuen, Pin | 1.23 | 154 | *e*P | | | Pn | 21 07 40.4 | -0.7 |
| | baz=157 | | | | | | | | |
| ESL | Shilin | 1.30 | 52 | *e*P | | | Pn | 21 07 42.3 | +0.2 |
| | baz=53 | | | | | | | | |
| ESL | | | | *e*S | | | Sb | 21 07 60.0 | +0.3 |
| | baz=53 | | | | | | | | |
| CHGB | Renai | 1.31 | 37 | *e*P | | | Pn | 21 07 42.2 | -0.2 |
| | baz=27 | | | | | | | | |
| WDJ | Dajia District | 1.36 | 12 | *e*P | | | Pn | 21 07 43.9 | +1.0 |
| | baz=10.0 | | | | | | | | |
| WHP | Taichung City | 1.39 | 24 | *e*P | | | Pn | 21 07 43.7 | +0.3 |
| | baz=5.0 | | | | | | | | |
| TWQ1 | Liyutan | 1.39 | 17 | *e*P | | | Pn | 21 07 43.9 | +0.5 |
| | baz=3.0 | | | | | | | | |
| WHF | Hehuan Shan | 1.42 | 37 | *e*P | | | Pb | 21 07 46.1 | +0.3 |
| | baz=29 | | | | | | | | |
| ETM | Tongmen | 1.44 | 48 | *e*P | | | Pn | 21 07 44.2 | +0.3 |
| | baz=49 | | | | | | | | |
| TEYL | Yanliau Villag | 1.45 | 54 | *e*P | | | Pn | 21 07 43.3 | -0.8 |
| | baz=54 | | | | | | | | |
| NSY | Sanyi | 1.46 | 16 | *e*P | | | Pn | 21 07 45.1 | +0.9 |
| | baz=13 | | | | | | | | |
| TDCB | Techi | 1.46 | 32 | *e*P | | | Pn | 21 07 43.8 | -0.6 |
| | baz=30 | | | | | | | | |
| TWT | Tachien | 1.47 | 32 | *e*P | | | Pn | 21 07 44.6 | 0.0 |
| | baz=30 | | | | | | | | |
| FUSS | Fushou | 1.49 | 34 | *e*P | | | Pn | 21 07 45.8 | +0.8 |
| | baz=33 | | | | | | | | |
| LAY | Lan-yu | 1.50 | 130 | *e*P | | | Pn | 21 07 43.6 | -1.2 |
| | baz=130 | | | | | | | | |
| HWA | Hwalien | 1.52 | 51 | *e*P | | | Pn | 21 07 45.3 | +0.2 |
| | baz=52 | | | | | | | | |
| LYUB | Lan-yu | 1.54 | 130 | *e*P | | | Pn | 21 07 42.7 | -2.7 |
| | baz=130 | | | | | | | | |
| NMLH | Miaoli | 1.58 | 16 | *e*P | | | Pn | 21 07 46.1 | +0.1 |
| | baz=13 | | | | | | | | |
| TWD | Chiawan | 1.58 | 48 | *e*P | | | Pn | 21 07 46.1 | +0.2 |
| | baz=61 | | | | | | | | |
| ETLH | Xiulin Townshi | 1.60 | 42 | *e*P | | | Pn | 21 07 47.3 | +1.0 |
| | baz=42 | | | | | | | | |
| NACB | Ninganchiao | 1.65 | 45 | *e*P | | | Pn | 21 07 47.2 | +0.4 |
| | baz=62 | | | | | | | | |
| ETL | Fush Village | 1.65 | 46 | *e*P | | | Pn | 21 07 48.1 | +1.1 |
| | baz=48 | | | | | | | | |
| NNSB | Datong | 1.71 | 34 | *e*P | | | Pn | 21 07 48.1 | +0.2 |
| | baz=33 | | | | | | | | |
| NNS | Nan Shan | 1.72 | 34 | *e*P | | | Pn | 21 07 48.5 | +0.6 |
| | baz=33 | | | | | | | | |
| LIOB | Emei | 1.75 | 21 | *e*P | | | Pn | 21 07 48.9 | +0.6 |
| | baz=18 | | | | | | | | |
| NFF | Wufeng Townshi | 1.77 | 24 | *e*P | | | Pn | 21 07 48.9 | +0.2 |
| | baz=6.0 | | | | | | | | |
| SBCB | Hsinchu | 1.88 | 19 | *e*P | | | Pn | 21 07 51.1 | +1.1 |
| | baz=15 | | | | | | | | |
| LATG | Datong | 1.88 | 36 | *e*P | | | Pn | 21 07 51.1 | +1.0 |
| | baz=34 | | | | | | | | |
| NSK | Sanguang | 1.91 | 30 | *e*P | | | Pn | 21 07 52.0 | +1.4 |
| | baz=9.0 | | | | | | | | |
| YHNB | Yeheng | 1.91 | 30 | *e*P | | | Pn | 21 07 51.2 | +0.6 |
| | baz=10.0 | | | | | | | | |
| ENA | Nanau | 1.92 | 42 | *e*P | | | Pn | 21 07 51.5 | +0.9 |
| | baz=59 | | | | | | | | |
| NDT | Datong Townshi | 1.92 | 34 | *e*P | | | Pn | 21 07 52.3 | +1.6 |
| | baz=33 | | | | | | | | |
| EWUT | Wuta | 1.96 | 43 | *e*P | | | Pn | 21 07 51.6 | +0.5 |
| | baz=59 | | | | | | | | |
| ENTT | Nioudou | 1.98 | 35 | *e*P | | | Pn | 21 07 53.2 | +1.7 |
| | baz=34 | | | | | | | | |
| NDS | Dongshan | 2.06 | 38 | *e*P | | | Pn | 21 07 54.9 | +2.4 |
| | baz=38 | | | | | | | | |
| NWLT | Wulai | 2.06 | 31 | *e*P | | | Pn | 21 07 53.6 | +0.9 |
| | baz=29 | | | | | | | | |
| FUSB | Fushanzhiwuyua | 2.09 | 33 | *e*P | | | Pn | 21 07 54.2 | +1.1 |
| | baz=31 | | | | | | | | |
| TWE | Neicheng | 2.10 | 36 | *e*P | | | Pn | 21 07 55.3 | +2.2 |
| | baz=36 | | | | | | | | |
| TWC | Suao | 2.12 | 41 | *e*P | | | Pn | 21 07 56.0 | -1.4 |
| | baz=58 | | | | | | | | |
| KNM | Kinmen | 2.22 | 309 | *e*P | | | Pn | 21 07 55.9 | +1.1 |
| | baz=305 | | | | | | | | |
| TWA | Mucha | 2.28 | 30 | *e*P | | | Pn | 21 07 57.2 | +1.7 |
| | baz=11 | | | | | | | | |
| KNMB | Chin-men Tao | 2.29 | 310 | *e*P | | | Pn | 21 07 55.7 | 0.0 |
| | baz=308 | | | | | | | | |
| PTMZ | Houxiangcun | 2.30 | 332 | *e*P | | | Pn | 21 07 55.2 | -0.6 |
| | baz=329 | | | | | | | | |
| TIPB | Shuangxi | 2.39 | 35 | *e*P | | | Pn | 21 07 58.0 | +0.9 |
| | baz=14 | | | | | | | | |
| YM01 | YM01 | 2.41 | 28 | *e*P | | | Pn | 21 07 57.1 | -0.3 |
| | baz=9.0 | | | | | | | | |
| TWB1 | Santiao Chiao | 2.51 | 37 | *e*P | | | Pn | 21 07 59.2 | +0.6 |
| | baz=35 | | | | | | | | |
| SXI1 | Grass Mountain | 2.51 | 34 | *e*P | | | Pn | 21 07 59.8 | +0.9 |
| | baz=15 | | | | | | | | |
| ZPLA | Ao Xicun | 2.53 | 292 | *e*P | | | Pn | 21 07 59.9 | +0.9 |
| | baz=290 | | | | | | | | |
| AXDP | Jialang | 2.86 | 312 | *e*P | | | Pn | 21 08 04.8 | +1.3 |
| | baz=311 | | | | | | | | |
| MATB | Ma-tsu | 3.15 | 354 | *e*P | | | Pn | 21 08 07.8 | +0.3 |
| | baz=350 | | | | | | | | |
| MSUT | Lienchiang | 3.16 | 354 | *e*P | | | Pn | 21 08 07.6 | -0.1 |
| | baz=350 | | | | | | | | |
| MHZQ | Yesham | 3.29 | 339 | *e*P | | | Pn | 21 08 09.9 | +0.4 |
| | baz=336 | | | | | | | | |
| HATJ | Hateruma jima | 3.36 | 71 | P | | | Pn | 21 08 11.0 | +0.5 |
| HATJ | | | | S | | | Sn | 21 08 50.6 | +1.0 |
| IRIF | Iriomote-Funau | 3.39 | 66 | P | | | Pn | 21 08 11.9 | +1.0 |
| LYJJ | Jianjiangzhen | 3.56 | 352 | *e*P | | | Pn | 21 08 12.4 | -0.7 |
| | baz=349 | | | | | | | | |
| JKRS | Kuro-shima | 3.60 | 69 | P | | | Pn | 21 08 14.6 | +0.9 |
| JIJ | Ishigaki jima | 3.75 | 68 | P | | | Pn | 21 08 16.1 | +0.3 |
| JIJ | | | | S | | | Sn | 21 08 59.0 | -0.2 |
| XPSS | Dashiqiu | 3.90 | 358 | *e*P | | | Pn | 21 08 18.1 | +0.2 |
| | baz=355 | | | | | | | | |
| JISG | Ishigakijimahi | 3.98 | 66 | P | | | Pn | 21 08 18.9 | 0.0 |
| JISG | | | | S | | | Sn | 21 09 06.6 | +1.9 |
| SXFK | Yanhouchang | 4.16 | 325 | *e*P | | | Pn | 21 08 22.5 | +1.1 |
| | baz=322 | | | | | | | | |
| JTJ | Tarama | 4.33 | 67 | P | | | Pn | 21 08 25.0 | +1.3 |
| JMJ | Miyako jima 2 | 4.89 | 67 | *e*P | | | Pn | 21 08 31.0 | -0.5 |
| | baz=69 | | | | | | | | |
| WRA | Warramunga Arr | 44.83 | 161 | P | | | P | 21 15 29.9 | -1.8 |
| | 0.9nm,0.7s,baz=346,slow=8.9,SNR=6.9 | | | | | | | | |
| ASAR | Alice Springs | 48.24 | 163 | P | | | P | 21 15 58.5 | +0.1 |
| | 0.3nm,0.4s,baz=337,slow=7.1,SNR=9.8 | | | | | | | | |

*JMA* ***05*** *21:11:35.5±0.3, 22°.87N×120°.60E, h9km, M3.5*
*IASPEI* ***05*** *21:11:36.7±0.8, 22°.94N±0°.01×120°.57E±0°.02, h16km±4km, Error ellipse: s-maj=2.3km s-min=1.8km az=88.0, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground tru

*studies, Seism. Res. Let., 80, 465-472, 2009*

*TAP* ***05*** *21:11:36.0,22.95N×120.58E,h16km,ML3.4,B*

**ISC 05 21:11:36.6±0.7,22.94N±0.01×120.58E±0.01,h16km±3km, n121,σ0.97/237,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLGT** | **Liugui** baz=64 | **0.08** | **48** | P | **Pb** | **21 11 39.7** | **-0.2** |
| SLGT | | | | S | **Sb** | **21 11 43.0** | **+0.9** |
| **SCST** | **Cishan** baz=231 | **0.09** | **237** | P | **Pg** | **21 11 40.0** | **0.0** |
| SCST | | | | S | **Sg** | **21 11 43.2** | **+1.0** |
| **SGST** | **Jiashian** baz=6.0 | **0.14** | **2** | *e*P | **Pg** | **21 11 39.5** | **-1.1** |
| SGST | | | | S | **Sg** | **21 11 43.2** | **0.0** |
| **TWM1** | **Shoushan** baz=229 | **0.18** | **232** | P | **Pb** | **21 11 41.8** | **+0.1** |
| TWM1 | | | | S | **Sb** | **21 11 46.8** | **+1.9** |
| **SSD** | **Sandimen** baz=157 | **0.20** | **165** | *i* P | **Pb** | **21 11 41.4** | **-0.4** |
| SSD | | | | *i* S | **Sb** | **21 11 45.4** | **0.0** |
| **SGLT** | **Jiouru** baz=193 | **0.23** | **201** | P | **Pb** | **21 11 42.9** | **+0.5** |
| SGLT | | | | S | **Sb** | **21 11 48.7** | **+2.5** |
| **SHHT** | **Tainan City** baz=290 | **0.23** | **292** | P | **Pb** | **21 11 42.8** | **+0.4** |
| SHHT | | | | S | **Sb** | **21 11 48.0** | **+1.7** |
| **TSMG** | **Majia** baz=165 | **0.24** | **165** | P | **Pb** | **21 11 42.0** | **-0.5** |
| TSMG | | | | S | **Sb** | **21 11 46.2** | **-0.4** |
| **CHN3** | **Shinhua** baz=310 | **0.24** | **305** | P | **Pb** | **21 11 42.8** | **+0.2** |
| CHN3 | | | | S | **Sb** | **21 11 48.6** | **+2.0** |
| **CHN1** | **Nanshi** baz=355 | **0.25** | **349** | P | **Pb** | **21 11 42.3** | **-0.5** |
| CHN1 | | | | S | **Sb** | **21 11 47.5** | **+0.6** |
| **TSPT** | **Pingtung City** baz=191 | **0.27** | **196** | P | **Pb** | **21 11 44.0** | **+0.9** |
| TSPT | | | | *e*S | **Sb** | **21 11 50.9** | **+3.4** |
| **SNJT** | **Kaohsiung City** baz=230 | **0.29** | **231** | *e*P | **Pb** | **21 11 43.8** | **+0.4** |
| SNJT | | | | *e*S | **Sn** | **21 11 50.9** | **-1.3** |
| **SNST** | **Tainan City** baz=358 | **0.29** | **345** | P | **Pb** | **21 11 43.1** | **-0.4** |
| SNST | | | | S | **Sb** | **21 11 49.0** | **+0.9** |
| **STYH** | **Taoyuan** baz=48 | **0.29** | **38** | P | **Pb** | **21 11 43.2** | **-0.3** |
| STYH | | | | S | **Sb** | **21 11 48.4** | **+0.2** |
| **WTP** | **Ta-pu** baz=8.0 | **0.31** | **6** | P | **Pb** | **21 11 43.3** | **-0.6** |
| WTP | | | | S | **Sb** | **21 11 49.0** | **+0.3** |
| **MASBT** | **Mashibuluo** baz=171 | **0.33** | **171** | P | **Pb** | **21 11 43.6** | **-0.5** |
| MASBT | | | | *e*S | **Sb** | **21 11 48.8** | **-0.3** |
| **SSHA** | **Shanhua** baz=306 | **0.33** | **307** | P | **Pb** | **21 11 44.5** | **+0.4** |
| SSHA | | | | S | **Sn** | **21 11 51.6** | **-1.6** |
| **TWK** | **Hsinying** baz=348 | **0.34** | **346** | P | **Pg** | **21 11 43.6** | **-0.1** |
| TWK | | | | S | **Sb** | **21 11 50.4** | **+0.9** |
| **TAI1** | **Yung-k'ang** baz=287 | **0.34** | **288** | *e*P | **Pb** | **21 11 44.5** | **+0.3** |
| TAI1 | | | | *e*S | **Sb** | **21 11 51.0** | **+1.6** |
| **TPUB** | **Ta-pu** baz=8.0 | **0.36** | **7** | P | **Pg** | **21 11 44.1** | **-0.1** |
| TPUB | | | | S | **Sb** | **21 11 50.0** | **-0.2** |
| **CHN4** | **Tsaushan** baz=2.0 | **0.41** | **2** | P | **Pb** | **21 11 45.0** | **-0.5** |
| CHN4 | | | | S | **Sb** | **21 11 52.0** | **+0.4** |
| **SCLT** | **Jiali** baz=304 | **0.43** | **304** | P | **Pb** | **21 11 45.4** | **-0.3** |
| SCLT | | | | S | **Sb** | **21 11 53.2** | **+1.3** |
| **KAU** | **Kaohsiung** baz=222 | **0.44** | **214** | *e*S | **Sn** | **21 11 55.8** | **-0.1** |
| **SSPT** | **Xinbi** baz=169 | **0.45** | **181** | *e*P | **Pn** | **21 11 46.6** | **-1.8** |
| SSPT | | | | *e*S | **Sn** | **21 11 54.4** | **-1.7** |
| **ELDTW** | **Lidau** baz=59 | **0.47** | **58** | P | **Pb** | **21 11 46.4** | **-0.3** |
| ELDTW | | | | *e*S | **Sb** | **21 11 54.7** | **+1.2** |
| **TWGBT** | **Beinan** baz=108 | **0.48** | **104** | P | **Pb** | **21 11 46.7** | **0.0** |
| TWGBT | | | | S | **Sb** | **21 11 54.4** | **+1.0** |
| **ECL** | **Taimali** baz=139 | **0.48** | **134** | P | **Pb** | **21 11 46.4** | **-0.4** |
| ECL | | | | S | **Sb** | **21 11 54.0** | **+0.3** |
| **ICHU** | **Yijhu** baz=340 | **0.50** | **327** | P | **Pb** | **21 11 46.8** | **-0.3** |
| ICHU | | | | *e*S | **Sb** | **21 11 54.5** | **+0.3** |
| **LONT** | **Longtian** baz=93 | **0.51** | **93** | P | **Pb** | **21 11 47.3** | **+0.1** |
| LONT | | | | *e*S | **Sn** | **21 11 56.3** | **-1.3** |
| **TTN** | **Taitung** baz=109 | **0.56** | **109** | *e*P | **Pn** | **21 11 49.2** | **-0.7** |
| TTN | | | | *e*S | **Sn** | **21 11 58.7** | **0.0** |
| **SCZT** | **Fangliau** baz=167 | **0.56** | **176** | *e*P | **Pb** | **21 11 48.0** | **-0.2** |
| SCZT | | | | *e*S | **Sn** | **21 11 57.5** | **-1.4** |
| **CHY** | **Chiayi** baz=347 | **0.58** | **346** | P | **Pg** | **21 11 47.9** | **-0.1** |
| CHY | | | | S | **Sb** | **21 11 57.4** | **+1.1** |
| **CHN2** | **Minshiung** baz=351 | **0.60** | **351** | P | **Pb** | **21 11 49.0** | **+0.3** |
| CHN2 | | | | S | **Sb** | **21 11 58.3** | **+1.4** |
| **EAST** | **Anshuo** baz=150 | **0.60** | **156** | *e*P | **Pg** | **21 11 47.1** | **-1.5** |
| EAST | | | | *e*S | **Sn** | **21 11 59.0** | **-1.0** |
| **ALS** | **Alishan** baz=21 | **0.61** | **20** | P | **Pg** | **21 11 48.4** | **-0.3** |
| ALS | | | | S | **Sb** | **21 11 58.1** | **+0.7** |
| **ECS** | **Chishang** baz=75 | **0.61** | **75** | P | **Pn** | **21 11 49.3** | **-1.3** |
| ECS | | | | *e*S | **Sn** | **21 12 00.4** | **+0.3** |
| **WLCH** | **Liuqiu** baz=198 | **0.61** | **198** | P | **Pn** | **21 11 50.9** | **+0.3** |
| WLCH | | | | S | **Sn** | **21 12 02.9** | **+2.7** |
| **TAWH** | **Dawu Township** baz=149 | **0.66** | **154** | *e*P | **Pb** | **21 11 49.5** | **-0.2** |
| TAWH | | | | *e*S | **Sn** | **21 12 00.8** | **-0.5** |
| **CHN5** | **Tsauling** baz=8.0 | **0.66** | **8** | *e*P | **Pb** | **21 11 49.6** | **-0.3** |
| CHN5 | | | | *e*S | **Sb** | **21 12 00.0** | **+1.1** |
| **WSL** | **Shuilin Townsh** baz=331 | **0.67** | **331** | P | **Pg** | **21 11 49.4** | **-0.3** |
| WSL | | | | *e*S | **Sb** | **21 11 59.3** | **+0.4** |
| **EDH** | **Donghe** baz=78 | **0.67** | **87** | P | **Pn** | **21 11 50.3** | **-1.2** |
| EDH | | | | *e*S | **Sn** | **21 12 02.3** | **+0.8** |
| **FULB** | **Fuli** baz=68 | **0.71** | **68** | P | **Pn** | **21 11 51.2** | **-0.8** |
| FULB | | | | S | **Sn** | **21 12 01.3** | **-1.3** |
| **CHKT** | **Chengkung** baz=77 | **0.74** | **77** | *e*P | **Pn** | **21 11 51.6** | **-0.8** |
| CHKT | | | | *e*S | **Sn** | **21 12 05.4** | **+2.0** |
| **WGK** | **Gukeng** baz=360 | **0.74** | **359** | P | **Pb** | **21 11 51.2** | **0.0** |
| WGK | | | | S | **Sb** | **21 12 02.7** | **+1.6** |
| **SLIU** | **Shizi** baz=164 | **0.75** | **164** | *e*P | **Pn** | **21 11 51.0** | **-1.5** |
| SLIU | | | | *e*S | **Sn** | **21 12 03.6** | **+0.1** |
| **WDLH** | **Douliu** baz=357 | **0.75** | **357** | P | **Pg** | **21 11 50.9** | **-0.3** |
| WDLH | | | | S | **Sb** | **21 12 02.5** | **+1.3** |
| **WTK** | **Tuku** baz=347 | **0.77** | **347** | P | **Pg** | **21 11 51.0** | **-0.6** |
| WTK | | | | *e*S | **Sb** | **21 12 02.4** | **+0.6** |
| **WSF** | **Szhu** baz=336 | **0.77** | **335** | P | **Pg** | **21 11 51.1** | **-0.6** |
| WSF | | | | S | **Sb** | **21 12 02.8** | **+0.9** |
| **TWF1** | **Yuli** baz=66 | **0.78** | **58** | P | **Pb** | **21 11 51.4** | **-0.5** |
| TWF1 | | | | *e*S | **Sb** | **21 12 03.0** | **+0.8** |
| **EYUL** | **Yuli** baz=59 | **0.80** | **59** | P | **Pb** | **21 11 51.9** | **-0.2** |
| EYUL | | | | S | **Sb** | **21 12 02.6** | **0.0** |
| **YULB** | **Yu-li** baz=50 | **0.80** | **55** | P | **Pb** | **21 11 51.9** | **-0.3** |
| YULB | | | | S | **Sb** | **21 12 03.4** | **+0.6** |
| **LDUT** | **Ludao** baz=107 | **0.86** | **108** | *e*P | **Pn** | **21 11 55.3** | **+1.2** |
| LDUT | | | | *e*S | **Sn** | **21 12 08.2** | **+1.8** |
| **ECBN** | **Changbin** baz=64 | **0.89** | **65** | *e*P | **Pn** | **21 11 54.2** | **-0.3** |
| **EHY** | **Hungye** baz=50 | **0.89** | **50** | P | **Pb** | **21 11 53.5** | **-0.2** |
| EHY | | | | S | **Sn** | **21 12 06.6** | **-0.4** |
| **WJS** | **Zhushan** baz=355 | **0.89** | **9** | P | **Pn** | **21 11 54.1** | **-0.4** |
| WJS | | | | *e*S | **Sb** | **21 12 06.1** | **+0.8** |
| **WDGT** | **Dungji** baz=291 | **0.91** | **291** | *e*P | **Pg** | **21 11 52.4** | **-1.8** |
| WDGT | | | | *e*S | **Sg** | **21 12 04.7** | **-1.5** |
| **SSLB** | **Suanglung** baz=22 | **0.91** | **22** | P | **Pg** | **21 11 53.2** | **-1.2** |
| SSLB | | | | *e*S | **Sg** | **21 12 06.2** | **-0.3** |
| **HEN** | **Hengchun** baz=159 | **0.94** | **171** | P | **Pn** | **21 11 55.7** | **+0.6** |
| HEN | | | | S | **Sn** | **21 12 10.5** | **+2.3** |
| **WNT** | **Mingjian** baz=353 | **0.94** | **6** | P | **Pg** | **21 11 54.7** | **-0.2** |
| WNT | | | | S | **Sb** | **21 12 07.9** | **+1.1** |
| **SMST** | **Manzhou Townsh** baz=155 | **0.94** | **165** | P | **Pn** | **21 11 55.3** | **+0.1** |
| SMST | | | | S | **Sn** | **21 12 09.7** | **+1.3** |
| **HGSD** | **Ruisui** baz=49 | **0.95** | **54** | P | **Pn** | **21 11 55.2** | **-0.2** |
| HGSD | | | | S | **Sn** | **21 12 09.0** | **+0.4** |
| **VWDT** | **VWDT** baz=24 | **0.96** | **32** | P | **Pb** | **21 11 54.5** | **-0.4** |
| VWDT | | | | S | **Sn** | **21 12 08.5** | **-0.4** |
| **WNT1** | **Nantou City** baz=352 | **0.97** | **5** | *e*P | **Pb** | **21 11 53.9** | **-1.2** |
| WNT1 | | | | *e*S | **Sg** | **21 12 08.6** | **+0.4** |
| **WRL** | **Guolierlin Hig** baz=349 | **0.98** | **349** | P | **Pb** | **21 11 54.3** | **-0.9** |
| WRL | | | | S | **Sb** | **21 12 07.8** | **0.0** |
| **SMLT** | **Sun Moon Lake** baz=18 | **0.99** | **17** | P | **Pg** | **21 11 55.4** | **-0.4** |
| SMLT | | | | S | **Sn** | **21 12 10.2** | **+0.7** |
| **TYC** | **Yuchr** baz=15 | **1.00** | **15** | P | **Pn** | **21 11 55.8** | **-0.1** |
| TYC | | | | S | **Sn** | **21 12 10.5** | **+0.9** |
| **TWK1** | **Hengchun** baz=167 | **1.01** | **168** | P | **Pn** | **21 11 56.4** | **+0.2** |
| TWK1 | | | | S | **Sn** | **21 12 11.6** | **+1.6** |
| **TWKBT** | **Hengchun** baz=167 | **1.01** | **168** | P | **Pn** | **21 11 57.1** | **+1.0** |
| TWKBT | | | | S | **Sn** | **21 12 12.1** | **+2.0** |
| **WYL** | **Yuanlin Townsh** | **1.02** | **0** | *e*P | **Pn** | **21 11 56.4** | **+0.2** |
| WYL | | | | *e*S | **Sn** | **21 12 11.0** | **+0.7** |
| **EGFH** | **Guangfu** baz=38 | **1.07** | **47** | P | **Pn** | **21 11 57.0** | **+0.1** |
| EGFH | | | | *e*S | **Sn** | **21 12 13.6** | **+2.1** |
| **PHUB** | **P'eng-hu** baz=314 | **1.09** | **302** | P | **Pb** | **21 11 54.7** | **-2.4** |
| PHUB | | | | S | **Sb** | **21 12 08.7** | **-2.3** |
| **VCHM** | **Qimei** baz=296 | **1.09** | **285** | P | **Pb** | **21 11 55.3** | **-1.9** |
| VCHM | | | | S | **Sb** | **21 12 10.0** | **-1.2** |
| **WWF** | **Wufeng** baz=354 | **1.11** | **6** | *e*P | **Pb** | **21 11 56.8** | **-0.6** |
| WWF | | | | *e*S | **Sn** | **21 12 13.2** | **+0.8** |
| **DPDB** | **Guoxing** baz=16 | **1.14** | **16** | *e*P | **Pb** | **21 11 57.7** | **-0.3** |
| DPDB | | | | *e*S | **Sn** | **21 12 13.8** | **+0.6** |
| **WCHH** | **Zhanghua** baz=359 | **1.14** | **359** | *e*P | **Pb** | **21 11 57.8** | **-0.1** |
| WCHH | | | | *e*S | **Sg** | **21 12 13.2** | **-0.3** |
| **WCS** | **Beigang Elemen** baz=15 | **1.16** | **15** | *e*P | **Pn** | **21 11 56.1** | **-2.0** |
| WCS | | | | *e*S | **Sb** | **21 12 12.4** | **-0.6** |
| **WUSB** | **Renai** baz=25 | **1.16** | **25** | P | **Pb** | **21 11 58.0** | **-0.3** |
| WUSB | | | | S | **Sg** | **21 12 14.1** | **-0.2** |
| **ESL** | **Shilin** baz=42 | **1.17** | **42** | P | **Pg** | **21 11 58.6** | **-0.7** |
| ESL | | | | S | **Sn** | **21 12 15.6** | **+1.5** |
| **TCU** | **Taichung** baz=4.0 | **1.21** | **4** | *e*P | **Pb** | **21 11 59.0** | **-0.2** |
| TCU | | | | *e*S | **Sb** | **21 12 15.1** | **+0.6** |
| **CHGB** | **Renai** baz=26 | **1.24** | **26** | P | **Pb** | **21 11 59.9** | **0.0** |
| CHGB | | | | S | **Sn** | **21 12 16.4** | **+0.3** |
| **LYUB** | **Lan-yu** baz=134 | **1.32** | **135** | *e*P | **Pn** | **21 11 58.4** | **-1.9** |
| LYUB | | | | *e*S | **Sb** | **21 12 16.5** | **-1.1** |
| **ETM** | **Tongmen** baz=39 | **1.32** | **39** | *e*P | **Pb** | **21 12 00.9** | **-0.2** |
| ETM | | | | *e*S | **Sg** | **21 12 19.6** | **+0.1** |
| **WHF** | **Hehuan Shan** baz=13 | **1.36** | **28** | *e*P | **Pn** | **21 12 00.9** | **-0.4** |
| WHF | | | | *e*S | **Sg** | **21 12 20.6** | **0.0** |
| **WHP** | **Taichung City** baz=14 | **1.38** | **14** | P | **Pn** | **21 12 01.3** | **0.0** |
| WHP | | | | S | **Sg** | **21 12 20.9** | **-0.2** |
| **WDJ** | **Dajia District** baz=2.0 | **1.41** | **2** | P | **Pn** | **21 11 01.2** | **-0.3** |
| WDJ | | | | S | **Sb** | **21 12 21.1** | **+1.0** |
| **TDCB** | **Techi** baz=22 | **1.41** | **22** | *e*P | **Pb** | **21 12 02.2** | **-0.5** |
| TDCB | | | | *e*S | **Sb** | **21 12 21.1** | **+0.6** |
| **TWQ1** | **Liyutan** baz=7.0 | **1.42** | **7** | P | **Pb** | **21 12 02.2** | **-0.4** |
| TWQ1 | | | | S | **Sb** | **21 12 21.2** | **+0.7** |
| **TWT** | **Tachien** baz=22 | **1.42** | **23** | *e*P | **Pb** | **21 12 02.4** | **-0.4** |
| TWT | | | | *e*S | **Sb** | **21 12 21.6** | **+0.9** |
| **FUSS** | **Fushou** baz=25 | **1.44** | **25** | *e*P | **Pb** | **21 12 02.7** | **-0.5** |
| FUSS | | | | *e*S | **Sg** | **21 12 23.9** | **+0.7** |
| **TWD** | **Chiawan** baz=39 | **1.47** | **39** | *e*P | **Pb** | **21 12 03.8** | **+0.2** |
| TWD | | | | *e*S | **Sn** | **21 12 21.9** | **+0.5** |
| **NSY** | **Sanyi** baz=6.0 | **1.48** | **6** | *e*P | **Pn** | **21 12 03.0** | **+0.4** |
| NSY | | | | *e*S | **Sb** | **21 12 23.4** | **+1.0** |
| **ETLH** | **Xiulin Townshi** baz=33 | **1.51** | **33** | *e*P | **Pb** | **21 12 04.5** | **+0.2** |
| ETLH | | | | *e*S | **Sg** | **21 12 25.4** | **-0.1** |
| **NACB** | **Ninganchiao** baz=36 | **1.54** | **37** | *e*P | **Pb** | **21 12 04.9** | **+0.1** |
| NACB | | | | S | **Sb** | **21 12 24.8** | **+0.7** |
| **ETL** | **Fush Village** baz=38 | **1.55** | **38** | *e*P | **Pg** | **21 12 06.0** | **-0.5** |
| ETL | | | | *e*S | **Sg** | **21 12 25.8** | **-0.8** |
| **NMLH** | **Miaoli** baz=6.0 | **1.60** | **7** | *e*P | **Pb** | **21 12 05.1** | **-0.8** |
| NMLH | | | | *e*S | **Sb** | **21 12 27.2** | **+1.3** |
| **NNSB** | **Datong** baz=12 | **1.66** | **26** | *e*P | **Pn** | **21 12 05.8** | **+0.7** |
| NNSB | | | | *e*S | **Sb** | **21 12 28.4** | **+0.9** |
| **NNS** | **Nan Shan** baz=12 | **1.66** | **26** | P | **Pb** | **21 12 06.6** | **-0.3** |
| NNS | | | | *e*S | **Sb** | **21 12 27.4** | **-0.4** |
| **LIOB** | **Emei** baz=356 | **1.75** | **13** | *e*P | **Pn** | **21 12 06.2** | **-0.1** |
| LIOB | | | | *e*S | **Sn** | **21 12 27.5** | **-0.7** |
| **NFF** | **Wufeng Townshi** baz=359 | **1.76** | **16** | *e*P | **Pb** | **21 12 08.1** | **-0.5** |
| NFF | | | | *e*S | **Sb** | **21 12 30.7** | **+0.3** |
| **LATG** | **Datong** baz=28 | **1.81** | **28** | *e*P | **Pb** | **21 12 08.6** | **-0.9** |
| LATG | | | | *e*S | **Sb** | **21 12 32.4** | **+0.4** |
| **ENA** | **Nanau** baz=35 | **1.83** | **35** | *e*P | **Pb** | **21 12 08.7** | **-0.9** |
| ENA | | | | *e*S | **Sb** | **21 12 32.1** | **-0.2** |
| **EWUT** | **Wuta** baz=36 | **1.86** | **36** | *e*P | **Pb** | **21 12 10.2** | **0.0** |
| EWUT | | | | *e*S | **Sb** | **21 12 33.5** | **+0.2** |
| **NDT** | **Datong Townshi** baz=27 | **1.87** | **27** | *e*P | **Pb** | **21 12 09.8** | **-0.6** |
| NDT | | | | *e*S | **Sb** | **21 12 34.9** | **+1.4** |
| **NSK** | **Sanguang** baz=6.0 | **1.87** | **22** | *e*P | **Pb** | **21 12 10.2** | **-0.3** |
| NSK | | | | *e*S | **Sb** | **21 12 34.9** | **+1.2** |
| **YHNB** | **Yeheng** baz=6.0 | **1.87** | **23** | *e*P | **Pb** | **21 12 09.5** | **-1.0** |
| YHNB | | | | *e*S | **Sb** | **21 12 34.3** | **+0.6** |
| **ENTT** | **Nioudou** baz=28 | **1.92** | **28** | *e*P | **Pb** | **21 12 10.9** | **-0.4** |
| ENTT | | | | *e*S | **Sg** | **21 12 37.0** | **-1.5** |
| **NDS** | **Dongshan** baz=18 | **1.98** | **31** | *e*P | **Pb** | **21 12 11.1** | **-1.2** |
| NDS | | | | *e*S | **Sb** | **21 12 37.6** | **+0.8** |
| **NWLT** | **Wulai** baz=24 | **2.02** | **25** | *e*P | **Pb** | **21 12 12.3** | **-0.7** |
| NWLT | | | | *e*S | **Sb** | **21 12 37.7** | **-0.2** |
| **TWC** | **Suao** baz=35 | **2.03** | **35** | *e*P | **Pn** | **21 12 11.0** | **+0.8** |
| TWC | | | | *e*S | **Sb** | **21 12 38.4** | **+0.2** |
| **FUSB** | **Fushanzhiwuyua** baz=26 | **2.04** | **27** | *e*P | **Pb** | **21 12 13.0** | **-0.3** |
| FUSB | | | | *e*S | **Sb** | **21 12 38.3** | **-0.1** |
| **TWE** | **Neicheng** baz=29 | **2.04** | **29** | *e*P | **Pb** | **21 12 12.3** | **-0.9** |
| TWE | | | | *e*S | **Sb** | **21 12 39.6** | **+1.2** |
| **TIPB** | **Shuangxi** baz=11 | **2.33** | **29** | *e*P | **Pb** | **21 12 16.6** | **-1.5** |
| TIPB | | | | *e*S | **Sb** | **21 12 46.1** | **-0.6** |
| **YM01** | **YM01** baz=6.0 | **2.38** | **22** | *e*P | **Pn** | **21 12 16.4** | **+1.5** |
| YM01 | | | | *e*S | **Sb** | **21 12 46.8** | **-1.5** |
| **SXI1** | **Grass Mountain** baz=11 | **2.45** | **29** | *e*P | **Pn** | **21 12 17.4** | **+1.4** |
| SXI1 | | | | *e*S | **Sb** | **21 12 49.4** | **-1.1** |
| **PTMZ** | **Houxiangcun** baz=327 | **2.48** | **328** | *e*P | **Pn** | **21 12 16.8** | **+0.4** |
| PTMZ | | | | *e*S | **Sn** | **21 12 47.7** | **+1.4** |
| **KNMB** | **Chin-men Tao** baz=309 | **2.52** | **308** | *e*P | **Pn** | **21 12 17.1** | **+0.2** |
| **IRIF** | **Iriomote-Funau** | **3.21** | **64** | P | **Pn** | **21 12 27.7** | **+1.4** |
| **JKRS** | **Kuro-shima** | **3.40** | **67** | P | **Pn** | **21 12 30.5** | **+1.5** |
| **JIJ** | **Ishigaki jima** | **3.56** | **66** | P | **Pn** | **21 12 32.5** | **+1.3** |
| JIJ | | | | *e*S | **Sn** | **21 13 14.3** | **+1.3** |
| **JISG** | **Ishigakijimahi** | **3.79** | **64** | P | **Pn** | **21 12 35.4** | **+1.0** |
| JISG | | | | *e*S | **Sn** | **21 13 19.3** | **+0.6** |
| **JTJ** | **Tarama** | **4.14** | **65** | P | **Pn** | **21 12 40.8** | **+1.6** |
| JTJ | | | | *e*S | **Sn** | **21 13 29.7** | **+2.4** |

*NEIC* ***05*** *21:13:49.7±1.6,23.7S±0.1×179.8W±0.2,h532km±11km, mb4.2/20,Error ellipse: s-maj=24.5km s-min=14.5km az=130.0*

*IDC* ***05*** *21:13:51.5±2.1,23.61S×180.00E,h545km±20km, mb3.4/12,mb1 3.6/15,mb1mx3.3/53,mbtmp4.3/15,Error ellipse: s-maj=30.5km s-min=15.5km az=146.0*

**ISC 05 21:13:50.6±0.6,23.79S±0.09×179.89W±0.08,h550km, n61,σ1.922/66,mb4.2/19,1D,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** 2.2nm,0.3s,baz=299,slow=23,SNR=12 | **6.32** | **342** | P | **P** | **21 15 31.3** | **-1.1** |
| **NIUE** | **Niue** | **10.39** | **65** | P | **P** | **21 16 11.1** | **-1.5** |
| **MARNC** | **Mare, Loyalty** | **11.39** | **279** | P | **P** | **21 16 23.1** | **+0.2** |
| **PINNC** | **Pines Island,** | **11.71** | **273** | P | **P** | **21 16 27.5** | **+1.3** |
| **LIFNC** | **LIFOU** | **12.29** | **282** | P | **P** | **21 16 31.2** | **-1.0** |
| **OUENC** | **Ouen Island, N** | **12.29** | **274** | P | **P** | **21 16 32.9** | **+0.7** |
| **DZM** | **Mont Dzumac** 0.4nm,0.3s,baz=90,slow=17,SNR=3.1 | **12.71** | **275** | P | **P** | **21 16 36.5** | **-0.1** |
| **DZM** | **Mont Dzumac** | **12.71** | **275** | P | **P** | **21 16 36.9** | **+0.3** |
| **OUZ** | **Omahuta** | **12.72** | **205** | P | **P** | **21 16 35.8** | **-0.6** |
| **URZ** | **Urewera** 0.5nm,0.3s,baz=56,slow=6.8,SNR=3.7 | **14.65** | **189** | P | **P** | **21 16 57.5** | **+1.2** |
| URZ | | | | S | **S** | **21 19 26.3** | **-3.0** |
| **URZ** | **Urewera** 0.1nm,0.3s,baz=348,slow=19,SNR=1.6 | **14.65** | **189** | P | **P** | **21 16 57.0** | **+0.7** |
| **BKZ** | **Black Stump Fm** | **15.64** | **190** | P | **P** | **21 17 06.0** | **-0.5** |
| BKZ | | | | IAmb | IAmb | 21 17 14.8 | |

comp=Z,7.8nm,1.2s
**BFZ Birch Farm 17.16 190** P **P** 21 17 20.9 +0.4
**QRZ Quartz Range 18.15 199** P **P** 21 17 32.1 +2.5
**NNZ Nelson 18.27 196** P **P** 21 17 31.8 +1.0
**TUWZ Tuamarina 18.34 195** P **P** 21 17 32.6 +1.3
**THZ Tophouse 18.91 197** P **P** 21 17 38.4 +1.8
THZ IAmb IAmb 21 17 41.6
comp=Z,9.4nm,1.2s
**KHZ Kahutara 19.37 195** P **P** 21 17 42.9 +2.2
KHZ IAmb IAmb 21 18 01.3
comp=Z,12nm,1.2s
**LTZ Lake Taylor 20.03 197** P **P** 21 17 47.3 +0.5
**CTA Charters Tower 31.58 270** P **P** 21 19 29.4 +0.7
comp=Z,3.9nm,0.4s,baz=95,slow=10,SNR=25
**CTAO Charters Tower 31.58 270** P **P** 21 19 30.0 +1.2
**STKA Stephens Creek 34.86 248** P **P** 21 19 57.4 +1.1
comp=Z,0.6nm,0.4s,baz=90,slow=20,SNR=1.9
**COEN Coen 36.20 279** P **P** 21 20 07.7 +0.1
**BBOO Buckleboo 39.58 247** P **P** 21 20 35.4 +0.5
BBOO IAmb IAmb 21 20 42.0
comp=Z,8.0nm,1.1s
**AS31 Alice Springs 42.15 260** P **P** 21 20 56.2 +0.7
**ASAR Alice Springs 42.16 260** P **P** 21 20 56.0 +0.4
comp=Z,2.7nm,0.7s,baz=100,slow=7.2,SNR=37
ASAR PcP **pwP** 21 22 37.6 -0.5
comp=Z,0.5nm,0.7s,baz=91,slow=5.6,SNR=2.4
ASAR S **S** 21 26 34.9 -1.3
comp=Z,0.3nm,0.6s,baz=94,slow=15,SNR=5.2
**WR0 Warramunga Arr 42.33 266** P **P** 21 20 56.7 -0.2
**WB2 Warramunga Arr 42.51 266** P **P** 21 20 58.3 0.0
WB2 IAmb IAmb 21 20 58.5
comp=Z,5.5nm,0.5s
**WRAB Tennant Creek 42.51 266** P **P** 21 20 58.2 -0.1
WRAB IAmb IAmb 21 20 58.5
comp=Z,4.1nm,0.5s
**WB0 Warramunga Arr 42.51 266** P **P** 21 20 58.3 0.0
WB0 IAmb IAmb 21 20 58.7
comp=Z,4.8nm,0.7s
**WRA Warramunga Arr 42.52 266** P **P** 21 20 58.2 -0.2
comp=Z,2.9nm,0.4s,baz=91,slow=8.4,SNR=54
WRA PcP **PcP** 21 22 38.5 +0.2
comp=Z,1.2nm,1.1s,baz=103,slow=3.6,SNR=3.4
WRA S **S** 21 26 37.6 -3.7
comp=Z,1.2nm,0.9s,baz=106,slow=13,SNR=6.1
**WRA Warramunga Arr 42.52 266** P **P** 21 20 58.0 -0.3
**FORT Forrest 46.45 249** P **P** 21 21 28.8 +0.3
**KNRA Kununurra 48.79 270** P **P** 21 21 46.7 +0.5
KNRA IAmb IAmb 21 21 59.3
comp=Z,9.1nm,1.1s
**SIJI Sorong 52.50 288** P **P** 21 22 12.5 -0.7
comp=Z,13nm,0.7s,baz=114,slow=6.2,SNR=5.6
**MBWA Marble Bar 55.49 260** P **P** 21 22 34.4 +0.2
MBWA IAmb IAmb 21 22 35.0
comp=Z,9.5nm,1.0s
**MORW Morawa 57.01 250** P **P** 21 22 45.2 +0.6
**TOLI2 Tolitoli 62.65 284** P **P** 21 23 23.6 +1.4
TOLI2 IAmb IAmb 21 23 23.9
comp=Z,6.5nm,0.6s
**PETK Petropavlovsk- 79.01 346** P **P** 21 24 57.1 -0.4
comp=Z,2.9nm,0.7s,baz=139,slow=4.9,SNR=4.8
**USRK Ussuriysk Ar. 80.72 327** P **P** 21 25 07.1 +0.5
comp=Z,10nm,0.7s,baz=134,slow=15,SNR=15
**USRK Ussuriysk Ar. 80.72 327** P **P** 21 25 06.8 +0.2
**USRK Ussuriysk Ar. 80.72 327** P **P** 21 25 06.8 +0.2
**NVAR Mina Array Bea 84.60 44** P **P** 21 25 27.4 +0.8
comp=Z,0.4nm,0.7s,baz=227,slow=6.0,SNR=2.4
**SEY Seymchan 89.18 348** P **P** 21 25 47.6 +0.3
comp=Z,2.8nm,0.9s,baz=173,slow=18,SNR=13
**CMAR Chiang Mai Arr 89.58 290** P **P** 21 25 52.2 +1.9
comp=Z,1.3nm,0.8s,baz=134,slow=3.3,SNR=11
**TXAR Lajitas Array 90.28 58** P **P** 21 25 55.5 +2.1
comp=Z,0.6nm,0.7s,baz=212,slow=4.4,SNR=6.5
**PDAR Pinedale Array 92.54 44** P **P** 21 26 04.8 +1.1
comp=Z,0.4nm,0.7s,baz=236,slow=5.4,SNR=3.1
**ARCES ARCESS Array B 131.79 348** PKP **PKiKP** 21 32 00.4 -1.4
comp=Z,5.3nm,1.1s,baz=33,slow=2.2,SNR=4.1
**FINES FINESS Array B 138.37 342** PKP **PKiKP** 21 32 14.0 -1.3
comp=Z,2.4nm,1.0s,baz=22,slow=1.5,SNR=3.5
**NB2 NORSAR Subarra141.98 351** PKP **PKPdf** 21 32 15.9 -3.8
comp=Z,0.6nm,0.6s,baz=14,slow=3.1
**AKASG Malin Array Be 144.93 327** PKP **PKPab** 21 32 25.5 -1.2
comp=Z,4.2nm,0.6s,baz=42,slow=4.3,SNR=6.8
**BRTR Keskin Array B 147.59 307** PKPbc **PKiKP** 21 32 33.9 -1.3
comp=Z,1.0nm,0.6s,baz=150,slow=5.4,SNR=5.7
**OSTC Ostas 150.49 339** *e*PKP **PKiKP** 21 32 41.6 +0.9
**DPC Dobruska-Polom 150.63 339** *e*PKP **PKiKP** 21 32 41.7 +0.7
**KRLC Kraliky 150.71 338** *e*PKP **PKiKP** 21 32 41.6 +0.4
**CLL Collm 150.78 343**↓ *i*PKPbc **PKiKP** 21 32 41.5 +0.3
comp=Z,9.0nm,0.8s
**PRU Pruhonice 151.52 340** *e*PKP **PKiKP** 21 32 43.5 +0.7
**KHC Kasperske Hory 152.57 341** *e*PKP **PKiKP** 21 32 44.8 -0.2
**CKRC Cesky Krumlov 152.61 339** *e*PKP **PKiKP** 21 32 45.7 +0.6
**GERES GERESS Array B 152.78 340** PKPbc **PKiKP** 21 32 45.8 +0.3
comp=Z,0.8nm,0.8s,baz=17,slow=1.4,SNR=5.8
**ESDC Sonseca Array 163.79 11** PKPab **PKPab** 21 33 46.9 -0.2
comp=Z,1.0nm,1.1s,baz=329,slow=1.6,SNR=4.1

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*MOS* ***05*** *21:22:50.5± 1.4, 36.˚77N× 139.˚63E, h115km, mb4.3/5, Error ellipse: s-maj=8.3km s-min=5.3km az=86.5*
*IDC* ***05*** *21:22:52.5± 0.7, 36.˚72N× 139.˚41E, h119km± 6km, mb3.7/23, mb1 3.9/26, mb1mx3.7/45, mbtmp4.1/26, MS4.4/4, Ms1 4.4/4, ms1mx3.9/95, Error ellipse: s-maj=13.0km s-min=10.3km az=98.0*
*NEIC* ***05*** *21:22:52.6± 1.8, 36.˚70N± 0.˚05× 139.˚49E± 0.˚06, h113km± 4km, mb4.4/69, Error ellipse: s-maj=7.9km s-min=7.0km az=141.0*
*JMA* ***05*** *21:22:52.2± 0.1, 36.˚65N× 139.˚55E, h113km± 1km, M4.2 Broadband fault plane solution: P waves. NP1: ϕs142.00000°, δ33.00000°, λ-17.00000°. NP2: ϕs247.00000°, δ81.00000°, λ-122.00000°. Principal axes: T Plg29.0000°, Azm2.0000°; N Plg31.0000°, Azm252.0000°; P Plg45.0000°, Azm125.0000°;*
*JMA Felt II J1.*
**ISC 05 21:22:51.8± 0.6, 36.˚74N± 0.˚04× 139.˚64E± 0.˚04, h115km± 5km, n198, σ1s50/215, mb4.3/74, 6C-13D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKT** | **Katashina** | **0.31** | **275** | ↓P | **Pn** | **21 23 08.3** | **0.0** |
| JKT | | | | S | **Sn** | **21 23 20.3** | **-0.5** |
| **JAG** | **Ashikaga** | **0.34** | **205** | ↑P | **Pn** | **21 23 08.1** | **-0.3** |
| **JFY** | **Yanaizu** | **0.67** | **5** | ↓P | **Pn** | **21 23 11.4** | **+0.9** |
| **JYT** | **Yasato** | **0.68** | **138** | | **Pn** | **21 23 10.8** | **+0.4** |
| JYT | | | | Sn | **Sn** | **21 23 24.5** | **0.0** |
| **JRY** | **Ryogami san** | **0.93** | **220** | ↑P | **Pn** | **21 23 12.4** | **-0.4** |
| JRY | | | | *e*S | **Sn** | **21 23 27.4** | **-1.2** |
| **JFT** | **Otama** | **0.96** | **35** | ↓P | **Pn** | **21 23 14.8** | **+1.8** |
| JFT | | | | *e*S | **Sn** | **21 23 31.8** | **+2.7** |
| **JNS** | **Sasagawa** | **1.11** | **347** | ↓P | **Pn** | **21 23 15.2** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **1.17** | **261** | P | **Pn** | **21 23 14.3** | **-0.8** |
| | 23nm,0.3s,baz=68,slow=8.6,SNR=1698 | | | | | | |
| MJAR | | | | S | **Sn** | **21 23 30.9** | **-2.0** |
| | 14nm,0.3s,baz=76,slow=30,SNR=5.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.17** | **261** | | **Pn** | **21 23 14.4** | **-0.7** |
| **MAJO** | **Matsushiro** | **1.17** | **261** | P | **Pn** | **21 23 14.6** | **-0.6** |
| **MAJO** | **Matsushiro** | **1.17** | **261** | | **Pn** | **21 23 14.6** | **-0.6** |
| **MAT** | **Matsushiro** | **1.17** | **261** | P | **Pn** | **21 23 14.7** | **-0.5** |
| MAT | | | | S | **Sn** | **21 23 31.7** | **-1.1** |
| **MAT** | **Matsushiro** | **1.17** | **261** | P | **Pn** | **21 23 14.6** | **-0.6** |
| MAT | | | | *e*S | **Sn** | **21 23 31.8** | **-1.1** |
| **MJB9** | **Matsu-Tunnel** | **1.17** | **261** | | **Pn** | **21 23 14.7** | **-0.5** |
| **JMM** | **Marumori** | **1.46** | **39** | | **Pn** | **21 23 20.4** | **+2.0** |
| **JYN** | **Shimob** | **1.52** | **216** | ↑P | **Pn** | **21 23 18.8** | **-0.4** |
| **JOD2** | **Odawara 2** | **1.54** | **197** | P | **Pn** | **21 23 18.0** | **-1.4** |
| **JSD** | **Sado** | **1.70** | **320** | ↓P | **Pn** | **21 23 21.1** | **-0.2** |
| JSD | | | | *e*S | **Sn** | **21 23 43.3** | **-0.4** |
| **JSD** | **Sado** | **1.70** | **320** | Pn | **Pn** | **21 23 21.0** | **-0.3** |
| **JFNN** | **Fujinakano** | **1.72** | **207** | P | **Pn** | **21 23 21.4** | **-0.2** |
| **JAW** | **Awa shima** | **1.74** | **350** | ↓P | **Pn** | **21 23 23.0** | **+1.2** |
| JAW | | | | *e*S | **Sn** | **21 23 46.5** | **+1.8** |
| **JSZ** | **Suzu** | **1.95** | **292** | ↓P | **Pn** | **21 23 23.8** | **-0.5** |
| **JGF** | **Kuroka** | **2.17** | **239** | Pn | **Pn** | **21 23 26.9** | **-0.3** |
| **JSG** | **Sagara** | **2.37** | **210** | | **Pn** | **21 23 30.1** | **+0.4** |
| **INU** | **Inuyama** | **2.54** | **238** | Pn | **Pn** | **21 23 31.3** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **3.61** | **178** | P | **Pn** | **21 23 45.5** | **-0.6** |
| | 244nm,0.3s,baz=326,slow=19,SNR=64 | | | | | | |
| JHJ | | | | S | **Sn** | **21 24 26.9** | **-1.1** |
| | 313nm,0.3s,baz=67,slow=23,SNR=7.8 | | | | | | |
| JHJ | | | | LR | LR | 21 25 14.2 | |
| | comp=Z,2μm,18.0s,baz=311,slow=39 | | | | | | |
| **JHJ2** | **Mitsune** | **3.62** | **178** | Pn | **Pn** | **21 23 45.5** | **-0.6** |
| **JTM** | **Tenmabayashi** | **4.20** | **15** | Pn | **Pn** | **21 23 54.2** | **+0.4** |
| **JHS** | **Saijyo** | **5.57** | **254** | | **Pn** | **21 24 11.8** | **-0.6** |
| **JMN** | **Monobe** | **5.59** | **239** | Pn | **Pn** | **21 24 12.0** | **-0.6** |
| **ERM** | **Erimo** | **5.93** | **26** | P | **Pn** | **21 24 17.7** | **+0.6** |
| **ERM** | **Erimo** | **5.93** | **26** | Pn | **Pn** | **21 24 17.7** | **+0.6** |
| **JEW** | **Eniwo** | **6.25** | **12** | | **Pn** | **21 24 21.9** | **+0.4** |
| **ASAJ** | **Asahikawa** | **7.71** | **16** | P | **Pn** | **21 24 39.9** | **-1.3** |
| | 8.5nm,0.3s,baz=221,slow=8.9,SNR=53 | | | | | | |
| ASAJ | | | | S | **Sn** | **21 26 05.1** | **-1.7** |
| | 1.5nm,0.3s,baz=52,slow=19,SNR=1.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.71** | **16** | *P* | **Pn** | **21 24 40.8** | **-0.4** |
| **JKA** | **Kamikawa-asahi** | **7.71** | **16** | | **Pn** | **21 24 40.8** | **-0.4** |
| **JNU** | **Nakatsue** | **8.05** | **246** | P | **Pn** | **21 24 45.3** | **-0.6** |
| | 0.8nm,0.3s,baz=91,slow=6.7,SNR=5.1 | | | | | | |
| JNU | | | | LR | LR | 21 28 04.0 | |
| | comp=Z,2μm,20.2s,baz=186,slow=40 | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **8.10** | **33** | *e*P | **Pn** | **21 24 43.7** | **-2.8** |
| NMR | | | | *e*S | **Sn** | **21 26 08.4** | **-8.0** |
| **RUSJ** | **Misakicho** | **8.51** | **28** | *e*P | **Pn** | **21 24 50.5** | **-1.5** |
| RUSJ | | | | *e*S | **Sn** | **21 26 21.8** | **-4.4** |
| **YUK** | **Yuzh-Kuril'sk** | **8.70** | **31**↓ *i*P | | **Pn** | **21 24 52.8** | **-1.7** |
| YUK | | | | *e*S | **Sn** | **21 26 23.7** | **-7.1** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,139nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,22nm,0.1s | | | | | | |
| **SHO** | **Shikotan** | **8.99** | **35** | *e*P | **Pn** | **21 24 56.1** | **-2.5** |
| SHO | | | | pmax | pmax | | |
| | comp=N,12nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,17nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **9.39** | **278** | P | **Pn** | **21 25 06.2** | **+2.2** |
| | comp=Z,0.4nm,0.3s,baz=94,slow=14,SNR=13 | | | | | | |
| **KSAR** | **Wonju Array Be** | **9.42** | **278** | P | **Pn** | **21 25 05.2** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **9.42** | **278** | Pn | **Pn** | **21 25 05.2** | **+0.8** |
| **KS19** | **Wonju Array Si** | **9.43** | **278** | Pn | **Pn** | **21 25 05.5** | **+0.9** |
| **USA0B** | **Ussuriysk Arra** | **9.46** | **324** | P | **Pn** | **21 25 07.0** | **+2.1** |
| **USA0B** | **Ussuriysk Arra** | **9.46** | **324** | | **Pn** | **21 25 07.0** | **+2.1** |
| **YSS** | **Yuzh-Sakhalins** | **10.47** | **12** | *e*P | **Pn** | **21 25 17.4** | **-1.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **10.47** | **12** | Pn | **Pn** | **21 25 18.4** | **-0.1** |
| **MDJ** | **Mudanjiang** | **10.95** | **319** | Pn | **Pn** | **21 25 25.1** | **0.0** |
| **BNX** | **BinXian** | **12.86** | **318** | ↑P | **Pn** | **21 25 50.8** | **+0.7** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **KLR** | **Kul'dur** | **13.74** | **338** | P | **Pn** | **21 26 00.5** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=155,slow=11,SNR=7.3 | | | | | | |
| **KLR** | **Kul'dur** | **13.74** | **338**↓ *e*P | | **Pn** | **21 26 01.1** | **-0.5** |
| **BJT** | **Baijiatuau** | **18.68** | **287** | P | **P** | **21 26 59.5** | **-1.3** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **BJT** | **Baijiatuau** | **18.68** | **287** | P | **P** | **21 26 59.5** | **-1.3** |
| **ZEA** | **Zeya** | **19.06** | **337** | *e*P | **Pn** | **21 27 06.9** | **+0.1** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **YHNB** | **Yeheng** | **19.74** | **238** | P | **P** | **21 27 11.9** | **-0.7** |
| YHNB | | | | IAmb | IAmb | 21 27 17.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **20.68** | **32** | P | **P** | **21 27 23.1** | **+0.8** |
| PEA0B | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **20.68** | **32** | P | **P** | **21 27 23.1** | **+0.8** |
| PEA0B | | | | IAmb | IAmb | 21 27 39.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.68** | **32** | P | **P** | **21 27 22.9** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=216,slow=7.3,SNR=2.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.68** | **32** | P | **P** | **21 27 23.4** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **20.68** | **32** | P | **P** | **21 27 23.4** | **+1.1** |
| **PET** | **Petropavlovsk** | **21.03** | **33**↓ *e*P | | **P** | **21 27 27.1** | **+1.0** |
| PET | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **22.22** | **289** | *e*P | **P** | **21 27 38.2** | **-0.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,610nm,7.1s | | | | | | |
| **MA2** | **Magadan** | **23.96** | **14**‖ *e*P | | **P** | **21 27 56.1** | **+0.9** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,27nm,1.7s | | | | | | |
| **MA2** | **Magadan** | **23.96** | **14** | P | **P** | **21 27 56.0** | **+0.9** |
| MA2 | | | | IAmb | IAmb | 21 27 56.7 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **XAN** | **Xi'an** | **25.13** | **273** | P | **P** | **21 28 04.2** | **-1.9** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **ENH** | **Enshi** | **25.89** | **264** | P | **P** | **21 28 11.4** | **-1.5** |
| ENH | | | | IAmb | IAmb | 21 28 14.4 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **26.07** | **349** | P | **P** | **21 28 12.9** | **-1.3** |
| | comp=Z,3.2nm,0.5s,baz=1,3,slow=0.3,SNR=2.6 | | | | | | |
| **YAK** | **Yakutsk** | **26.07** | **349**‖ *e*P | | **P** | **21 28 13.4** | **-0.8** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.35** | **305** | P | **P** | **21 28 17.0** | **-0.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.35** | **305** | P | **P** | **21 28 17.0** | **-0.1** |
| **SONM** | **Songino Array** | **26.78** | **305** | P | **P** | **21 28 18.9** | **-2.0** |
| | comp=Z,1.5nm,0.5s,baz=109,slow=9.1,SNR=24 | | | | | | |
| SONM | | | | PcP | **PcP** | **21 31 41.0** | **+0.1** |
| | comp=Z,0.3nm,0.7s,baz=99,slow=2.7,SNR=2.1 | | | | | | |
| SONM | | | | ScP | **ScP** | **21 35 07.9** | **-2.4** |
| | comp=Z,0.6nm,1.0s,baz=129,slow=2.0,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **26.78** | **305** | P | **P** | **21 28 19.8** | **-1.1** |
| **SEY** | **Seymchan** | **27.37** | **13** | P | **P** | **21 28 26.4** | **+0.6** |
| | comp=Z,0.8nm,0.8s,baz=182,slow=23,SNR=7.4 | | | | | | |
| **SMY** | **Shemya** | **28.89** | **45** | P | **P** | **21 28 38.7** | **-0.7** |
| SMY | | | | pmax | pmax | | |
| | comp=Z,93nm,0.6s | | | | | | |
| **SMY** | **Shemya** | **28.89** | **45** | P | **P** | **21 28 38.7** | **-0.7** |
| **WAKE** | **Wake Island** | **29.37** | **119** | P | **P** | **21 28 45.6** | **+1.6** |
| **GTA** | **Gaotai** | **31.29** | **287** | *e*P | **P** | **21 29 00.2** | **-0.7** |
| GTA | | | | pP | pP | 21 29 23.1 | -3.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **33.65** | **263** | P | **P** | **21 29 20.4** | **-1.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **35.43** | **354** | P | **P** | **21 29 36.5** | **+0.3** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **35.43** | **354** | P | **P** | **21 29 36.5** | **+0.3** |
| TIXI | | | | IAmb | IAmb | 21 29 37.1 | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **39.41** | **306**↓ *i*P | | **P** | **21 30 10.9** | **+0.6** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **WMQ** | **Urumqi** | **39.70** | **297** | *e*P | **P** | **21 30 14.6** | **+1.9** |
| **CMAR** | **Chiang Mai Arr** | **40.05** | **254** | P | **P** | **21 30 14.4** | **-1.3** |
| | comp=Z,0.4nm,0.5s,baz=47,slow=7.6,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.05** | **254** | *ce*P | **P** | **21 30 16.8** | **+1.1** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **40.05** | **192** | P | **P** | **21 30 15.5** | **-0.3** |
| **ZAA0** | **Zalesovo Array** | **41.06** | **313** | P | **P** | **21 30 24.3** | **+0.6** |
| ZAA0 | | | | IAmb | IAmb | 21 30 37.7 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.06** | **313** | P | **P** | **21 30 22.9** | **-0.8** |
| | comp=Z,2.1nm,0.4s,baz=95,slow=8.0,SNR=9.5 | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 32 20.7** | **-0.5** |
| | comp=Z,1.9nm,0.5s,baz=122,slow=3.7,SNR=4.4 | | | | | | |
| ZALV | | | | ScP | **ScP** | **21 35 59.2** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=353,slow=10,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.06** | **313** | P | **P** | **21 30 24.8** | **+1.1** |
| **ANM** | **Nome** | **42.59** | **32** | P | **P** | **21 30 38.4** | **+2.4** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ANM** | **Nome** | **42.59** | **32** | P | **P** | **21 30 38.4** | **+2.4** |
| **NRIK** | **Noril'sk** | **42.95** | **336** | P | **P** | **21 30 39.3** | **+0.5** |
| | comp=Z,1.4nm,0.4s,baz=170,slow=6.1,SNR=1.6 | | | | | | |
| **MK31** | **Makanchi Array** | **43.07** | **302** | P | **P** | **21 30 40.2** | **+0.1** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **43.07** | **302** | P | **P** | **21 30 40.2** | **+0.1** |
| **MKAR** | **Makanchi Array** | **43.07** | **302** | P | **P** | **21 30 39.9** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=84,slow=9.6,SNR=38 | | | | | | |
| MKAR | | | | ScP | **ScP** | **21 36 07.8** | **-0.6** |
| | comp=Z,0.2nm,0.6s,baz=80,slow=5.9,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.07** | **302** | *i* P | **P** | **21 30 40.0** | **-0.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **43.28** | **302** | P | **P** | **21 30 42.2** | **+0.4** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **43.28** | **302** | P | **P** | **21 30 42.2** | **+0.4** |
| **KSM** | **Kuching** | **44.33** | **224** | P | **P** | **21 30 50.3** | **-0.2** |
| KSM | | | | IAmb | IAmb | 21 30 57.9 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **TAPN** | **Taplejung** | **44.54** | **273** | *e*P | **P** | **21 30 51.7** | **-0.7** |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **44.99** | **308** | P | **P** | **21 30 55.2** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **44.99** | **308** | P | **P** | **21 30 55.2** | **-0.2** |
| **ODAN** | **Odare** | **45.01** | **273** | *e*P | **P** | **21 30 55.4** | **-0.7** |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **45.60** | **273** | *e*P | **P** | **21 31 00.8** | **0.0** |
| | comp=Z,16nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **45.62** | **275** | *e*P | **P** | **21 31 00.9** | **-0.2** |
| | comp=Z,14nm,0.7s | | | | | | |
| **GKN** | **Gorkha** | **46.72** | **276** | *e*P | **P** | **21 31 09.4** | **0.0** |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **O18K** | **Koktuh Hills** | **46.80** | **39** | P | **P** | **21 31 11.5** | **+2.0** |
| O18K | | | | IAmb | IAmb | 21 31 11.8 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **47.25** | **296** | IAmb | IAmb | 21 31 16.9 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **47.27** | **277** | *e*P | **P** | **21 31 13.9** | **0.0** |
| | comp=Z,21nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **47.37** | **33** | P | **P** | **21 31 15.5** | **+1.7** |
| **K20K** | **Telida** | **47.37** | **34** | P | **P** | **21 31 16.4** | **+2.5** |
| **KDJ** | **Kajisay** | **47.60** | **297** | P | **P** | **21 31 16.2** | **+0.1** |
| KDJ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KDJ** | **Kajisay** | **47.60** | **297** | P | **P** | **21 31 16.2** | **+0.1** |
| KDJ | | | | IAmb | IAmb | 21 31 25.2 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **Q19K** | **Cape Douglas,** | **47.63** | **40** | P | **P** | **21 31 16.9** | **+1.0** |
| **OHAK** | **Old Harbor** | **47.94** | **42** | P | **P** | **21 31 19.9** | **+1.7** |
| OHAK | | | | IAmb | IAmb | 21 31 20.7 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **PYUN** | **Piuthan** | **47.99** | **277** | *e*P | **P** | **21 31 20.6** | **+1.2** |
| | comp=Z,10nm,0.6s | | | | | | |
| **PPLA** | **Purkeypile** | **48.22** | **35** | P | **P** | **21 31 23.5** | **+2.9** |
| PPLA | | | | IAmb | IAmb | 21 31 31.7 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| **CAST** | **Castle Rocks** | **48.27** | **34** | P | **P** | **21 31 23.7** | **+2.9** |
| **KDAK** | **Kodiak Island** | **48.27** | **42** | P | **P** | **21 31 22.4** | **+1.6** |
| | comp=Z,5.6nm,0.7s,baz=262,slow=3.1,SNR=7.2 | | | | | | |
| **KDAK** | **Kodiak Island** | **48.27** | **42** | P | **P** | **21 31 22.4** | **+1.6** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **48.27** | **42** | P | **P** | **21 31 22.4** | **+1.6** |
| **BOOM** | **Boomskoye usch** | **48.39** | **298** | P | **P** | **21 31 23.0** | **+0.8** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **BOOM** | **Boomskoye usch** | **48.39** | **298** | P | **P** | **21 31 23.0** | **+0.8** |
| BOOM | | | | IAmb | IAmb | 21 31 33.6 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **48.45** | **200** | P | **P** | **21 31 22.8** | **+0.1** |
| SOEI | | | | IAmb | IAmb | 21 31 37.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **49.22** | **294** | P | **P** | **21 31 31.6** | **+3.1** |
| **AAK** | **Ala-Archa** | **49.37** | **298** | P | **P** | **21 31 30.2** | **+0.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **49.37** | **298** | P | **P** | **21 31 30.2** | **+0.5** |
| **TOLK** | **Toolik Lake Re** | **49.38** | **27** | P | **P** | **21 31 31.7** | **+2.5** |
| **RND** | **Reindeer** | **49.72** | **34** | P | **P** | **21 31 33.4** | **+1.5** |
| RND | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **49.72** | **34** | P | **P** | **21 31 33.4** | **+1.5** |
| RND | | | | IAmb | IAmb | 21 31 39.2 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **49.92** | **32** | P | **P** | **21 31 35.3** | **+2.0** |
| MDM | | | | IAmb | IAmb | 21 31 40.3 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **MTN** | **Manton Dam** | **49.96** | **191** | P | **P** | **21 31 34.4** | **+0.3** |
| **WRH** | **Wood River Hil** | **50.00** | **33** | P | **P** | **21 31 36.8** | **+2.9** |
| WRH | | | | IAmb | IAmb | 21 31 44.1 | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **50.04** | **31** | P | **P** | **21 31 36.9** | **+2.6** |
| **HDA** | **Harding Lake** | **50.50** | **33** | P | **P** | **21 31 38.9** | **+1.2** |
| HDA | | | | IAmb | IAmb | 21 31 40.5 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **IL31** | | **50.51** | **32** | P | **P** | **21 31 39.6** | **+2.0** |
| IL31 | | | | IAmb | IAmb | 21 31 40.8 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **50.51** | **32** | P | **P** | **21 31 38.5** | **+0.8** |
| | comp=Z,0.6nm,0.6s,baz=278,slow=5.0,SNR=9.0 | | | | | | |
| ILAR | | | | LR | LR | 21 55 57.5 | |
| | comp=Z,512nm,18.2s,baz=108,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **50.51** | **32** | P | **P** | **21 31 38.8** | **+1.1** |
| **ILAR** | **Eielson Array** | **50.51** | **32** | P | **P** | **21 31 38.8** | **+1.1** |
| **COEN** | **Coen** | **50.53** | **176** | P | **P** | **21 31 39.0** | **+0.6** |
| **SCM** | **Sheep Creek Mo** | **50.55** | **36** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **60.32** | **186** | P | **P** | **21 32 48.7 +0.3** |
| **ASAR** | **Alice Springs** | **60.32** | **186** | P | **P** | **21 32 48.7 +0.3** |
| **MBWA** | **Marble Bar** | **60.58** | **201** | P | **P** | **21 32 49.7 -0.4** |
| **PSA00** | **Pilbara Seismi** | **60.93** | **201** | P | **P** | **21 32 52.1 -0.4** |
| **PSA00** | **Pilbara Seismi** | **60.93** | **201** | P | **P** | **21 32 51.9 -0.6** |
| PSA00 | | | | IAmb | IAmb | 21 32 52.5 |
| | comp=Z,2.1nm,0.7s | | | | | |
| **DZM** | **Mont Dzumac** | **63.73** | **152** | P | **P** | **21 33 13.1 +1.8** |
| DZM | | | | IAmb | IAmb | 21 33 14.1 |
| | comp=Z,7.4nm,0.8s | | | | | |
| **ARCES** | **ARCESS Array B** | **63.77** | **339** | P | **P** | **21 33 11.0 +0.1** |
| | comp=Z,3.0nm,0.8s,baz=54,slow=7.9,SNR=15 | | | | | |
| **ARCES** | **ARCESS Array B** | **63.77** | **339** | P | **P** | **21 33 11.0 +0.1** |
| ARCES | | | | pmax | pmax | |
| | comp=Z,7.0nm,1.2s | | | | | |
| **ARCES** | **ARCESS Array B** | **63.77** | **339** | P | **P** | **21 33 11.0 +0.1** |
| ARCES | | | | IAmb | IAmb | 21 33 29.6 |
| | comp=Z,7.0nm,1.1s | | | | | |
| **YKA** | **Yellowknife Ar** | **64.77** | **30** | P | **P** | **21 33 18.5 +0.9** |
| | comp=Z,0.5nm,0.6s,baz=297,slow=6.9,SNR=9.3 | | | | | |
| **STKA** | **Stephens Creek** | **68.28** | **178** | P | **P** | **21 33 40.4 +0.3** |
| | comp=Z,4.4nm,0.6s,baz=348,slow=7.0,SNR=12 | | | | | |
| **FINES** | **FINESS Array B** | **68.41** | **332** | P | **P** | **21 33 40.4 -0.2** |
| | comp=Z,0.7nm,0.4s,baz=53,slow=6.0,SNR=11 | | | | | |
| **AKASG** | **Malin Array Be** | **73.65** | **322** | P | **P** | **21 34 11.8 -0.7** |
| | comp=Z,0.8nm,0.4s,baz=49,slow=5.8,SNR=5.4 | | | | | |
| **NB2** | **NORSAR Subarra** | **73.90** | **337** | P | **P** | **21 34 13.8 0.0** |
| | comp=Z,0.6nm,0.5s,baz=42,slow=6.2 | | | | | |
| **NOA** | **NORSAR Array B** | **73.90** | **337** | P | **P** | **21 34 13.8 0.0** |
| | comp=Z,17nm,0.4s,baz=53,slow=6.7,SNR=8.2 | | | | | |
| **KVN** | **Kaiserville** | **76.06** | **52** | P | **P** | **21 34 29.1 +2.2** |
| KVN | | | | pmax | pmax | |
| | comp=Z,4.0nm,1.0s | | | | | |
| **KVN** | **Kaiserville** | **76.06** | **52** | P | **P** | **21 34 29.1 +2.2** |
| KVN | | | | IAmb | IAmb | 21 34 30.2 |
| | comp=Z,3.7nm,1.0s | | | | | |
| **NVAR** | **Mina Array Bea** | **76.30** | **52** | P | **P** | **21 34 30.3 +2.1** |
| | comp=Z,1.4nm,0.7s,baz=282,slow=5.0,SNR=12 | | | | | |
| **BRTR** | **Keskin Array B** | **77.97** | **311** | P | **P** | **21 34 37.4 -0.1** |
| | comp=Z,2.1nm,1.1s,baz=55,slow=4.9,SNR=2.7 | | | | | |
| **PDAR** | **Pinedale Array** | **78.88** | **45** | P | **P** | **21 34 43.3 +0.8** |
| | comp=Z,0.4nm,0.7s,baz=256,slow=3.1,SNR=4.8 | | | | | |
| **GERES** | **GERESS Array B** | **82.20** | **327** | P | **P** | **21 34 59.7 -0.3** |
| | comp=Z,0.5nm,0.4s,baz=38,slow=6.8,SNR=6.4 | | | | | |
| **IDI** | **Anoyia** | **86.14** | **312** | LR | LR | 22 17 45.5 |
| | comp=Z,378nm,20.6s,baz=260,slow=38 | | | | | |
| **TXAR** | **Lajitas Array** | **91.42** | **51** | P | **P** | **21 35 47.0 +1.8** |
| | comp=Z,0.5nm,0.6s,baz=294,slow=2.9,SNR=7.4 | | | | | |

**TAP 05 21:31:24.5, 23.22N×120.74E, h8km±1km, ML1.1, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.06** | **148** | *i* | P | | Pg | 21 31 26.7 | +0.5 |
| | baz=137 | | | | | | | | |
| STYH | | | | *i* | S | | Sg | 21 31 28.2 | +0.7 |
| | baz=137 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.12** | **283** | *i* | P | | Pg | 21 31 27.8 | +0.6 |
| | baz=283 | | | | | | | | |
| WTP | | | | *e* | S | | Sg | 21 31 30.5 | +1.4 |
| | baz=283 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.13** | **308** | *i* | P | | Pg | 21 31 28.2 | +0.8 |
| | baz=308 | | | | | | | | |
| TPUB | | | | *e* | S | | Sg | 21 31 30.8 | +1.4 |
| | baz=308 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.19** | **314** | *e* | P | | Pg | 21 31 29.3 | +0.9 |
| | baz=314 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.20** | **261** | *e* | P | | Pg | 21 31 29.4 | +0.8 |
| | baz=260 | | | | | | | | |

**TAP 05 21:31:27.0, 23.23N×120.79E, h12km, ML1.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.06** | **196** | *i* | P | | Pg | 21 31 30.0 | +0.5 |
| | baz=192 | | | | | | | | |
| STYH | | | | *i* | S | | Sg | 21 31 31.8 | +0.6 |
| | baz=192 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.17** | **277** | P | | | Pg | 21 31 31.4 | +0.5 |
| | baz=276 | | | | | | | | |
| WTP | | | | S | | | Sg | 21 31 34.8 | +1.2 |
| | baz=276 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.17** | **296** | P | | | Pb | 21 31 31.8 | -0.3 |
| | baz=295 | | | | | | | | |
| TPUB | | | | S | | | Sg | 21 31 34.4 | +0.7 |
| | baz=295 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.21** | **100** | P | | | Pb | 21 31 32.3 | -0.5 |
| | baz=100 | | | | | | | | |
| ELDTW | | | | *e* | S | | Sg | 21 31 36.7 | +1.8 |
| | baz=100 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.22** | **304** | P | | | Pb | 21 31 32.4 | -0.6 |
| | baz=304 | | | | | | | | |
| CHN4 | | | | *e* | S | | Sg | 21 31 37.0 | +1.9 |
| | baz=304 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.22** | **304** | *e* | S | | Pb | 21 31 32.5 | -0.5 |
| | baz=314 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.25** | **260** | *e* | P | | Pb | 21 31 33.1 | -0.4 |
| | baz=260 | | | | | | | | |
| CHN1 | | | | *e* | S | | Sg | 21 31 37.1 | +1.3 |
| | baz=260 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.25** | **260** | *e* | S | | Pb | 21 31 33.0 | -0.4 |
| | baz=260 | | | | | | | | |
| **TWK** | **Hsinying** | **0.28** | **278** | *e* | P | | Pg | 21 31 33.0 | +0.1 |
| | baz=277 | | | | | | | | |
| TWK | | | | *e* | S | | Sb | 21 31 38.4 | -0.4 |
| | baz=277 | | | | | | | | |

**WEL 05 21:32:41.4±1.0, 34°S±6°×17°9E±1°8, h33km, M3.9/7, ML4.1/15, MLv3.9/7, Error ellipse: s-maj=0.0km s-min=0.0km az=99.9, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.43** | **185** | P | | | Pn | 21 33 34.1 | +1.6 |
| MXZ | | | | S | | | Sn | 21 34 15.5 | +3.6 |
| **WMGZ** | **Waiomatatini S** | **3.67** | **184** | P | | | Pn | 21 33 35.2 | -0.6 |
| WMGZ | | | | S | | | Sn | 21 34 22.1 | +4.0 |
| **HAZ** | **Te Kaha** | **3.68** | **192** | P | | | Pn | 21 33 37.3 | +1.3 |
| HAZ | | | | S | | | Sn | 21 34 20.7 | +2.6 |
| **PKGZ** | **Pakihiroa** | **3.77** | **188** | P | | | Pn | 21 33 37.0 | -0.3 |
| PKGZ | | | | S | | | Sn | 21 34 22.1 | +1.6 |
| **RUGZ** | **Raukumara Rang** | **3.90** | **192** | P | | | Pn | 21 33 40.0 | +0.9 |
| RUGZ | | | | S | | | Sn | 21 34 25.6 | +1.7 |
| **PUZ** | **Puketiti** | **3.94** | **185** | P | | | Pn | 21 33 38.4 | -1.1 |
| PUZ | | | | S | | | Sn | 21 34 24.8 | +0.2 |
| **TWGZ** | **Tauwhareparae** | **4.07** | **188** | P | | | Pn | 21 33 43.3 | +2.0 |
| TWGZ | | | | S | | | Sn | 21 34 29.8 | +2.0 |
| **OPRZ** | **Ohinepanea** | **4.08** | **205** | P | | | Pn | 21 33 43.3 | +1.8 |
| **MWZ** | **Matawai** | **4.29** | **193** | P | | | Pn | 21 33 44.0 | -0.4 |
| MWZ | | | | S | | | Sn | 21 34 33.3 | +0.1 |
| **URZ** | **Urewera** | **4.30** | **197** | P | | | Pn | 21 33 45.2 | +0.7 |
| URZ | | | | S | | | Sn | 21 34 34.1 | +0.6 |
| **TKGZ** | **Te Karaka** | **4.34** | **189** | P | | | Pn | 21 33 45.7 | +0.7 |
| TKGZ | | | | S | | | Sn | 21 34 34.7 | +0.2 |
| **MUGZ** | **Murupara** | **4.60** | **199** | P | | | Pn | 21 33 49.4 | +0.8 |
| MUGZ | | | | S | | | Sn | 21 34 44.6 | +3.7 |
| **RIGZ** | **Rimuhau** | **4.62** | **189** | P | | | Pn | 21 33 48.3 | -0.5 |
| RIGZ | | | | S | | | Sn | 21 34 40.2 | -1.2 |
| **RTZ** | **Ruatahuna** | **4.67** | **197** | P | | | Pn | 21 33 48.4 | -1.3 |
| RTZ | | | | S | | | Sn | 21 34 41.9 | -0.9 |
| **SNGZ** | **Shannon Statio** | **4.76** | **193** | P | | | Pn | 21 33 51.2 | +0.4 |
| SNGZ | | | | S | | | Sn | 21 34 45.1 | +0.3 |
| **MTHZ** | **Maungataniwha** | **4.93** | **197** | P | | | Pn | 21 33 53.6 | +0.3 |
| MTHZ | | | | S | | | Sn | 21 34 49.6 | +0.4 |
| **KNZ** | **Kokohu** | **4.94** | **189** | P | | | Pn | 21 33 51.1 | -2.1 |
| KNZ | | | | S | | | Sn | 21 34 46.7 | -2.5 |
| **MHGZ** | **Mahia Peninsul** | **5.04** | **187** | P | | | Pn | 21 33 53.8 | -0.8 |
| MHGZ | | | | S | | | Sn | 21 34 48.6 | -3.1 |
| **ARHZ** | **Aropaoanui** | **5.29** | **195** | P | | | Pn | 21 33 54.7 | -3.3 |
| ARHZ | | | | S | | | Sn | 21 34 57.5 | -0.4 |

**IDC 05 21:58:07.3±5.6, 54°34N×158°50E, h127km±77km, mb3.0/2, mb1 3.3/2, mb1mx2.8/30, mbtmpg3.3/2, Error ellipse: s-maj=131.0km s-min=33.1km az=5.0, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **1.33** | **201** | P | | | Pn | 21 58 33.1 | -0.2 |
| | 7.4nm,0.3s,baz=62,slow=11,SNR=190 | | | | | | | | |
| PETK | | | | S | | | Sn | 21 58 53.0 | 0.0 |
| | 1.1nm,0.3s,baz=34,slow=27,SNR=5.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.77** | **294** | P | | | P | 22 06 23.4 | -0.1 |
| | 0.3nm,0.5s,baz=44,slow=6.7,SNR=10 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.01** | **66** | P | | | P | 22 09 11.2 | 0.0 |
| | 0.1nm,0.5s,baz=322,slow=5.7,SNR=1.8 | | | | | | | | |

**TAP 05 22:03:49.8, 23.11N×120.48E, h16km, ML1.3, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHN1** | **Nanshi** | **0.09** | **32** | P | | | Pg | 22 03 53.6 | +0.4 |
| | baz=31 | | | | | | | | |
| CHN1 | | | | *i* | S | | Sg | 22 03 56.0 | +0.6 |
| | baz=31 | | | | | | | | |
| **SGST** | **Jiashian** | **0.10** | **104** | P | | | Pb | 22 03 53.5 | +0.1 |
| | baz=104 | | | | | | | | |
| SGST | | | | S | | | Sb | 22 03 56.8 | +1.1 |
| | baz=104 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.11** | **253** | P | | | Pb | 22 03 54.6 | +1.2 |
| | baz=252 | | | | | | | | |
| **SNST** | **Tainan City** | **0.11** | **10** | *e* | P | | Pb | 22 03 53.7 | +0.1 |
| | baz=9.0 | | | | | | | | |
| SNST | | | | *e* | S | | Sb | 22 03 56.9 | +0.8 |
| | baz=9.0 | | | | | | | | |
| **TWK** | **Hsinying** | **0.16** | **4** | *e* | P | | Pb | 22 03 54.7 | +0.3 |
| | baz=8.0 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.19** | **43** | P | | | Pb | 22 03 55.1 | +0.2 |
| | baz=44 | | | | | | | | |
| WTP | | | | *e* | S | | Sb | 22 03 58.9 | +0.6 |
| | baz=44 | | | | | | | | |
| **SLGT** | **Liugui** | **0.19** | **126** | *e* | P | | Pb | 22 03 54.9 | -0.1 |
| | baz=125 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.24** | **36** | *e* | P | | Pb | 22 03 55.6 | -0.2 |
| | baz=36 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.27** | **24** | *e* | P | | Pb | 22 03 56.3 | +0.1 |
| | baz=24 | | | | | | | | |
| **TAI** | **Tainan** | **0.28** | **247** | *e* | P | | Pb | 22 03 56.2 | -0.2 |
| | baz=246 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.28** | **77** | *e* | P | | Pb | 22 03 56.7 | +0.3 |
| | baz=75 | | | | | | | | |
| **TWM1** | **Shoushan** | **0.29** | **190** | *e* | P | | Pb | 22 03 56.5 | -0.1 |
| | baz=188 | | | | | | | | |
| TWM1 | | | | *e* | S | | Sb | 22 04 01.6 | +0.5 |
| | baz=188 | | | | | | | | |
| **TSPT** | **Pingtung City** | **0.43** | **178** | *e* | S | | Sb | 22 04 05.8 | +0.7 |
| | baz=178 | | | | | | | | |

**TAP 05 22:03:51.7, 23.04N×120.35E, h26km, ML1.9, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SHHT** | **Tainan City** | **0.01** | **169** | *e* | P | | Pb | 22 03 56.4 | +0.3 |
| | baz=169 | | | | | | | | |
| SHHT | | | | *e* | S | | Sb | 22 04 00.2 | +1.3 |
| | baz=169 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.04** | **24** | *e* | P | | Pb | 22 03 56.7 | +0.5 |
| | baz=23 | | | | | | | | |
| CHN3 | | | | *e* | S | | Sb | 22 04 00.8 | +1.7 |
| | baz=23 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.04** | **24** | S | | | Pb | 22 03 56.7 | +0.5 |
| | baz=252 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.11** | **273** | P | | | Pb | 22 03 56.7 | +0.2 |
| | baz=271 | | | | | | | | |
| TAI1 | | | | *e* | S | | Sb | 22 04 00.1 | +0.5 |
| | baz=271 | | | | | | | | |
| **SSHA** | **Shanhua** | **0.11** | **332** | *e* | P | | Pb | 22 03 57.1 | +0.6 |
| | baz=332 | | | | | | | | |
| **TAI** | **Tainan** | **0.14** | **254** | *e* | P | | Pb | 22 03 57.0 | +0.2 |
| | baz=254 | | | | | | | | |
| TAI | | | | S | | | Sb | 22 04 01.0 | +0.8 |
| | baz=254 | | | | | | | | |
| **TAI** | **Tainan** | **0.14** | **254** | *e* | S | | Pn | 22 04 01.0 | +2.7 |
| | baz=246 | | | | | | | | |
| **SCLT** | **Jiali** | **0.20** | **315** | P | | | Pb | 22 03 57.7 | +0.3 |
| | baz=316 | | | | | | | | |
| SCLT | | | | *e* | S | | Sb | 22 04 02.5 | +1.3 |
| | baz=316 | | | | | | | | |
| **SGST** | **Jiashian** | **0.22** | **78** | *e* | P | | Pb | 22 03 58.1 | +0.4 |
| | baz=78 | | | | | | | | |
| SGST | | | | *e* | S | | Sb | 22 04 02.8 | +0.9 |
| | baz=78 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.23** | **48** | P | | | Pb | 22 03 58.1 | +0.4 |
| | baz=48 | | | | | | | | |
| CHN1 | | | | *i* | S | | Sb | 22 04 03.0 | +1.1 |
| | baz=48 | | | | | | | | |
| **SNST** | **Tainan City** | **0.23** | **37** | *e* | P | | Pb | 22 03 58.6 | +0.8 |
| | baz=37 | | | | | | | | |
| SNST | | | | *e* | S | | Sb | 22 04 03.5 | +1.5 |
| | baz=37 | | | | | | | | |
| **TWK** | **Hsinying** | **0.27** | **30** | P | | | Pb | 22 03 59.1 | +0.7 |
| | baz=31 | | | | | | | | |
| TWK | | | | *e* | S | | Sn | 22 04 04.3 | -1.0 |
| | baz=31 | | | | | | | | |
| **SLGT** | **Liugui** | **0.28** | **98** | *e* | P | | Pb | 22 03 58.9 | +0.4 |
| | baz=98 | | | | | | | | |
| SLGT | | | | *e* | S | | Sb | 22 04 04.3 | +1.2 |
| | baz=98 | | | | | | | | |
| **SLGT** | **Liugui** | **0.28** | **98** | *e* | S | | Pn | 22 03 58.9 | -1.3 |
| | baz=125 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.33** | **50** | *e* | P | | Pb | 22 03 59.7 | +0.5 |
| | baz=50 | | | | | | | | |
| WTP | | | | *e* | S | | Sn | 22 04 05.7 | -1.1 |
| | baz=50 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.33** | **349** | *e* | P | | Pb | 22 03 59.7 | +0.5 |
| | baz=349 | | | | | | | | |
| ICHU | | | | *e* | S | | Sn | 22 04 05.7 | -1.1 |
| | baz=349 | | | | | | | | |
| **SGLT** | **Jiouru** | **0.34** | **156** | *e* | P | | Pb | 22 03 59.8 | +0.5 |
| | baz=155 | | | | | | | | |
| SGLT | | | | *e* | S | | Sn | 22 04 05.8 | -1.2 |
| | baz=155 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.37** | **45** | P | | | Pb | 22 04 00.2 | +0.3 |
| | baz=44 | | | | | | | | |
| TPUB | | | | S | | | Sb | 22 04 06.5 | +1.0 |
| | baz=44 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.39** | **36** | *e* | P | | Pb | 22 04 00.8 | +0.6 |
| | baz=35 | | | | | | | | |
| CHN4 | | | | *e* | S | | Sn | 22 04 07.7 | -0.7 |
| | baz=35 | | | | | | | | |
| **SSD** | **Sandimen** | **0.39** | **137** | P | | | Pb | 22 04 00.7 | +0.5 |
| | baz=136 | | | | | | | | |
| SSD | | | | *e* | S | | Sn | 22 04 07.6 | -0.8 |
| | baz=136 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.42** | **71** | *e* | P | | Pn | 22 04 01.6 | -0.5 |
| | baz=70 | | | | | | | | |
| STYH | | | | *e* | S | | Sn | 22 04 08.3 | -0.7 |
| | baz=70 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.42** | **71** | *e* | S | | Pn | 22 04 01.7 | -0.4 |
| | baz=75 | | | | | | | | |
| **TSMG** | **Majia** | **0.43** | **140** | *e* | P | | Pb | 22 04 00.8 | 0.0 |
| | baz=139 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.50** | **148** | P | | | Pn | 22 04 02.6 | -0.6 |
| | baz=147 | | | | | | | | |
| MASBT | | | | *e* | S | | Sn | 22 04 10.6 | -0.4 |
| | baz=147 | | | | | | | | |
| **ALS** | **Alishan** | **0.64** | **42** | *e* | P | | Pn | 22 04 05.0 | -0.3 |
| | baz=42 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.64** | **76** | *e* | P | | Pb | 22 04 04.6 | +0.3 |
| | baz=76 | | | | | | | | |
| ELDTW | | | | *e* | S | | Sn | 22 04 14.5 | -0.1 |
| | baz=76 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.64** | **29** | *e* | P | | Pn | 22 04 05.0 | -0.2 |
| | baz=28 | | | | | | | | |
| CHN5 | | | | *e* | S | | Sn | 22 04 14.5 | -0.1 |
| | baz=28 | | | | | | | | |
| **WLCH** | **Liuqiu** | **0.68** | **177** | *e* | P | | Pn | 22 04 06.7 | +1.0 |
| | baz=177 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.71** | **159** | *e* | P | | Pn | 22 04 06.5 | +0.4 |
| | baz=158 | | | | | | | | |
| SCZT | | | | *e* | S | | Sn | 22 04 16.4 | +0.3 |
| | baz=158 | | | | | | | | |
| **ECL** | **Taimali** | **0.71** | **128** | *e* | P | | Pn | 22 04 06.0 | -0.1 |
| | baz=127 | | | | | | | | |
| ECL | | | | *e* | S | | Sn | 22 04 16.3 | +0.1 |
| | baz=127 | | | | | | | | |
| **EAST** | **Anshuo** | **0.80** | **144** | *e* | P | | Pn | 22 04 07.6 | +0.2 |
| | baz=144 | | | | | | | | |
| EAST | | | | *e* | S | | Sn | 22 04 20.0 | +1.6 |
| | baz=144 | | | | | | | | |
| **SLIU** | **Shizi** | **0.92** | **153** | *e* | P | | Pb | 22 04 09.8 | +0.8 |
| | baz=152 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.94** | **37** | *e* | P | | Pn | 22 04 08.9 | -0.4 |
| | baz=36 | | | | | | | | |
| SSLB | | | | *e* | S | | Sn | 22 04 22.8 | +0.9 |
| | baz=36 | | | | | | | | |

*TAP 05 22:05:24.2, 24.37N×121.94E, h27km, ML3.9, C*
*JMA 05 22:05:24.2±0.1, 24.39N×121.97E, h0km, M3.1*
**ISC 05 22:05:24.3±1.0, 24.36N±0.02×121.97E±0.02, h15km±9km, n106, g086/182, 1C-13D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.19** | **296** | ⇓*i* | P | | Pb | 22 05 29.9 | +0.3 |
| | baz=305 | | | | | | | | |
| EWUT | | | | | S | | Sb | 22 05 33.6 | +0.6 |
| | baz=305 | | | | | | | | |
| **EHP** | **Heping Village** | **0.21** | **256** | P | | | Pb | 22 05 30.2 | +0.3 |
| | baz=251 | | | | | | | | |
| EHP | | | | | S | | Sb | 22 05 34.7 | +1.1 |
| | baz=251 | | | | | | | | |
| **ENA** | **Nanau** | **0.22** | **288** | ⇓*i* | P | | Pb | 22 05 30.0 | +0.1 |
| | baz=288 | | | | | | | | |
| ENA | | | | *i* | S | | Sb | 22 05 34.3 | +0.6 |
| | baz=288 | | | | | | | | |
| **NDS** | **Dongshan** | **0.36** | **320** | P | | | Pb | 22 05 32.4 | +0.1 |
| | baz=323 | | | | | | | | |
| NDS | | | | | S | | Sb | 22 05 37.7 | 0.0 |
| | baz=323 | | | | | | | | |
| **ETL** | **Fush Village** | **0.38** | **238** | P | | | Pb | 22 05 32.8 | +0.2 |
| | baz=238 | | | | | | | | |
| ETL | | | | | S | | Sb | 22 05 39.2 | +1.0 |
| | baz=238 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.39** | **241** | ⇓*i* | P | | Pb | 22 05 32.6 | -0.2 |
| | baz=242 | | | | | | | | |
| NACB | | | | *i* | S | | Sb | 22 05 39.4 | +0.8 |
| | baz=242 | | | | | | | | |
| **LATG** | **Datong** | **0.44** | **293** | ⇓*i* | P | | Pb | 22 05 33.5 | -0.3 |
| | baz=301 | | | | | | | | |
| LATG | | | | | S | | Sb | 22 05 40.0 | -0.2 |
| | baz=301 | | | | | | | | |
| **TWD** | **Chiawan** | **0.44** | **231** | ⇓*i* | P | | Pb | 22 05 33.7 | 0.0 |
| | baz=233 | | | | | | | | |
| TWD | | | | | S | | Sb | 22 05 40.8 | +0.7 |
| | baz=233 | | | | | | | | |
| **ILA** | **Ilan** | **0.45** | **333** | P | | | Pb | 22 05 33.9 | 0.0 |
| | baz=332 | | | | | | | | |
| ILA | | | | | S | | Sb | 22 05 41.0 | +0.6 |
| | baz=332 | | | | | | | | |
| **TWE** | **Neicheng** | **0.45** | **323** | ⇓*i* | P | | Pb | 22 05 33.8 | -0.1 |
| | baz=326 | | | | | | | | |
| TWE | | | | *i* | S | | Sb | 22 05 40.3 | -0.1 |
| | baz=326 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.46** | **307** | ⇓*i* | P | | Pb | 22 05 33.9 | -0.2 |
| | baz=309 | | | | | | | | |
| ENTT | | | | *i* | S | | Sb | 22 05 40.8 | +0.1 |
| | baz=309 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **251** | P | | | Pb | 22 05 34.1 | -0.2 |
| | baz=253 | | | | | | | | |
| ETLH | | | | | S | | Sb | 22 05 41.1 | 0.0 |
| | baz=253 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.48** | **300** | P | | | Pb | 22 05 34.3 | -0.1 |
| | baz=307 | | | | | | | | |
| NDT | | | | | S | | Sb | 22 05 41.1 | -0.1 |
| | baz=307 | | | | | | | | |
| **HWA** | **Hwalien** | **0.51** | **221** | *e*P | | | Pb | 22 05 35.5 | +0.6 |
| | baz=217 | | | | | | | | |
| HWA | | | | *e* | S | | Sn | 22 05 46.2 | +0.9 |
| | baz=217 | | | | | | | | |
| **NTC** | **Toucheng** | **0.51** | **346** | P | | | Pb | 22 05 34.8 | -0.1 |
| | baz=349 | | | | | | | | |
| NTC | | | | | S | | Sb | 22 05 42.1 | 0.0 |
| | baz=349 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.53** | **319** | P | | | Pb | 22 05 35.1 | -0.2 |
| | baz=321 | | | | | | | | |
| FUSB | | | | | S | | Sb | 22 05 41.9 | -0.8 |
| | baz=321 | | | | | | | | |
| **NNSB** | **Datong** | **0.54** | **277** | *i* | P | | Pb | 22 05 35.2 | -0.3 |
| | baz=283 | | | | | | | | |
| NNSB | | | | | S | | Sb | 22 05 42.5 | -0.6 |
| | baz=283 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.55** | **278** | *i* | P | | Pb | 22 05 35.3 | -0.4 |
| | baz=284 | | | | | | | | |
| NNS | | | | *e* | S | | Sb | 22 05 43.6 | +0.3 |
| | baz=284 | | | | | | | | |
| **ETM** | **Tongmen** | **0.59** | **228** | P | | | Pg | 22 05 36.0 | +0.2 |
| | baz=235 | | | | | | | | |
| ETM | | | | *e* | S | | Sb | 22 05 45.1 | +0.8 |
| | baz=235 | | | | | | | | |
| **NWLT** | **Wulai** | **0.59** | **314** | P | | | Pb | 22 05 36.1 | -0.3 |
| | baz=316 | | | | | | | | |
| NWLT | | | | | S | | Sb | 22 05 44.1 | -0.5 |
| | baz=316 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.62** | **300** | ⇓*i* | P | | Pb | 22 05 36.5 | -0.4 |
| | baz=301 | | | | | | | | |
| YHNB | | | | | S | | Sb | 22 05 45.2 | -0.3 |
| | baz=301 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.62** | **348** | P | | | Pb | 22 05 37.0 | +0.1 |
| | baz=355 | | | | | | | | |
| TIPB | | | | | S | | Sb | 22 05 45.3 | -0.1 |
| | baz=355 | | | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **299** | ⇓*i* | P | | Pb | 22 05 36.6 | -0.5 |
| | baz=300 | | | | | | | | |
| NSK | | | | *i* | S | | Sb | 22 05 45.6 | -0.3 |
| | baz=300 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.64** | **2** | P | | | Pb | 22 05 37.5 | +0.3 |
| TWB1 | | | | | S | | Sb | 22 05 45.8 | -0.2 |
| **FUSS** | **Fushou** | **0.67** | **260** | P | | | Pb | 22 05 37.8 | 0.0 |
| | baz=259 | | | | | | | | |
| FUSS | | | | | S | | Sb | 22 05 47.0 | 0.0 |
| | baz=259 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.68** | **252** | ⇓*i* | P | | Pb | 22 05 37.8 | -0.2 |
| | baz=250 | | | | | | | | |
| WHF | | | | *i* | S | | Sb | 22 05 47.5 | +0.1 |
| | baz=250 | | | | | | | | |
| **TWA** | **Mucha** | **0.71** | **330** | P | | | Pb | 22 05 38.7 | +0.4 |
| | baz=324 | | | | | | | | |
| TWA | | | | | S | | Sb | 22 05 48.5 | +0.6 |
| | baz=324 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.72** | **326** | *e*P | | | Pn | 22 05 39.2 | -0.7 |
| | baz=321 | | | | | | | | |
| NHDH | | | | *e* | S | | Sb | 22 05 48.6 | +0.4 |
| | baz=321 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.73** | **346** | P | | | Pb | 22 05 39.0 | +0.3 |
| | baz=342 | | | | | | | | |
| NWF | | | | | S | | Sb | 22 05 48.7 | +0.2 |
| | baz=342 | | | | | | | | |
| **ESL** | **Shilin** | **0.73** | **222** | ⇓*i* | P | | Pg | 22 05 38.1 | -0.5 |
| | baz=234 | | | | | | | | |
| ESL | | | | | S | | Sb | 22 05 49.9 | +1.4 |
| | baz=234 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.73** | **353** | P | | | Pn | 22 05 39.4 | -0.8 |
| | baz=358 | | | | | | | | |
| SXI1 | | | | *e* | S | | Sb | 22 05 49.2 | +0.6 |
| | baz=358 | | | | | | | | |
| **TDCB** | **Techi** | **0.75** | **262** | P | | | Pb | 22 05 38.8 | -0.2 |
| | baz=261 | | | | | | | | |
| TDCB | | | | | S | | Sg | 22 05 48.6 | -0.2 |
| | baz=261 | | | | | | | | |
| **CHGB** | **Renai** | **0.79** | **248** | P | | | Pb | 22 05 39.6 | -0.2 |
| | baz=237 | | | | | | | | |
| CHGB | | | | *e* | S | | Sb | 22 05 50.5 | +0.2 |
| | baz=237 | | | | | | | | |
| **TAP** | **Taipei** | **0.80** | **328** | *e*P | | | Pn | 22 05 40.2 | -0.7 |
| | baz=330 | | | | | | | | |
| TAP | | | | | S | | Sn | 22 05 51.6 | -0.8 |
| | baz=330 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.82** | **289** | *e*P | | | Pb | 22 05 40.3 | 0.0 |
| | baz=294 | | | | | | | | |
| NFF | | | | *e* | S | | Sn | 22 05 52.2 | -1.0 |
| | baz=294 | | | | | | | | |
| **WUSB** | **Renai** | **0.86** | **245** | P | | | Pg | 22 05 40.8 | -0.2 |
| | baz=235 | | | | | | | | |
| WUSB | | | | *e* | S | | Sb | 22 05 52.4 | +0.1 |
| | baz=235 | | | | | | | | |
| **YM01** | **YM01** | **0.86** | **335** | *e*P | | | Pn | 22 05 41.6 | -0.3 |
| | baz=348 | | | | | | | | |
| YM01 | | | | *e* | S | | Sb | 22 05 52.3 | -0.1 |
| | baz=348 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.89** | **326** | *e*P | | | Pn | 22 05 42.6 | +0.3 |
| | baz=337 | | | | | | | | |
| TWS1 | | | | *e* | S | | Sn | 22 05 54.9 | +0.1 |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=340 | | | | | | |
| **NCU** | **National Centr** | **0.93** | **311** | P | **Pn** | **22 05 43.0** | **+0.1** |
| | baz=298 | | | | | | |
| NCU | | | | S | **Sn** | **22 05 56.6** | **+0.6** |
| | baz=298 | | | | | | |
| **NCUH** | **Zhongli** | **0.94** | **310** | *eP* | **Pn** | **22 05 43.0** | **+0.2** |
| | baz=297 | | | | | | |
| NCUH | | | | *eS* | **Sn** | **22 05 57.1** | **+1.1** |
| | baz=297 | | | | | | |
| **WHP** | **Taichung City** | **0.94** | **265** | *eP* | **Pn** | **22 05 42.7** | **-0.2** |
| | baz=264 | | | | | | |
| WHP | | | | *eS* | **Sb** | **22 05 54.8** | **+0.3** |
| | baz=264 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.95** | **84** | P | **Pg** | **22 05 42.9** | **+0.1** |
| YOJ | | | | S | **Sn** | **22 05 56.5** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.95** | **84** | *eP* | **Pb** | **22 05 41.1** | **-1.4** |
| | baz=78 | | | | | | |
| **VWDT** | **VWDT** | **0.97** | **232** | P | **Pb** | **22 05 41.9** | **-0.8** |
| | baz=230 | | | | | | |
| VWDT | | | | S | **Sg** | **22 05 56.1** | **+0.4** |
| | baz=230 | | | | | | |
| **TWY** | **Chenhua** | **0.97** | **340** | *eP* | **Pn** | **22 05 43.2** | **-0.1** |
| | baz=342 | | | | | | |
| **SBCB** | **Hsinchu** | **0.99** | **296** | *eP* | **Pn** | **22 05 43.7** | **0.0** |
| | baz=296 | | | | | | |
| SBCB | | | | S | **Sn** | **22 05 58.5** | **+1.1** |
| | baz=296 | | | | | | |
| **HGSD** | **Ruisui** | **1.00** | **210** | *eP* | **Pg** | **22 05 43.8** | **+0.2** |
| | baz=224 | | | | | | |
| **HSN** | **Hsinchu** | **1.01** | **296** | *eP* | **Pb** | **22 05 42.9** | **-0.5** |
| | baz=298 | | | | | | |
| HSN | | | | *eS* | **Sn** | **22 05 58.2** | **+0.4** |
| | baz=298 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.01** | **253** | *eP* | **Pb** | **22 05 41.7** | **-1.8** |
| | baz=243 | | | | | | |
| **EHY** | **Hungye** | **1.04** | **215** | P | **Pb** | **22 05 42.5** | **-1.5** |
| | baz=213 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.09** | **244** | ⇓*i* | **Pb** | **22 05 44.4** | **-0.4** |
| | baz=236 | | | | | | |
| SMLT | | | | S | **Sg** | **22 05 59.5** | **0.0** |
| | baz=236 | | | | | | |
| **NMLH** | **Miaoli** | **1.09** | **280** | *eP* | **Pn** | **22 05 45.4** | **+0.5** |
| | baz=279 | | | | | | |
| NMLH | | | | *eS* | **Sn** | **22 06 00.3** | **+0.6** |
| | baz=279 | | | | | | |
| **SSLB** | **Suanglung** | **1.09** | **239** | ⇑*i* | **Pb** | **22 05 43.9** | **-0.9** |
| | baz=229 | | | | | | |
| SSLB | | | | S | **Sb** | **22 05 57.9** | **-0.9** |
| | baz=229 | | | | | | |
| **TWQ1** | **Liyutan** | **1.09** | **270** | P | **Pg** | **22 05 45.4** | **+0.1** |
| | baz=268 | | | | | | |
| TWQ1 | | | | S | **Sn** | **22 06 00.1** | **+0.3** |
| | baz=268 | | | | | | |
| **NSY** | **Sanyi** | **1.10** | **273** | P | **Pg** | **22 05 45.6** | **+0.1** |
| | baz=272 | | | | | | |
| NSY | | | | *eS* | **Sn** | **22 06 02.0** | **+1.9** |
| | baz=272 | | | | | | |
| **TYC** | **Yuchr** | **1.11** | **246** | ⇓*i* | **Pb** | **22 05 44.7** | **-0.5** |
| | baz=234 | | | | | | |
| TYC | | | | S | **Sn** | **22 06 02.5** | **+2.2** |
| | baz=234 | | | | | | |
| **YULB** | **Yu-li** | **1.14** | **213** | *eP* | **Pb** | **22 05 44.2** | **-1.5** |
| | baz=211 | | | | | | |
| **EYUL** | **Yuli** | **1.17** | **211** | *eP* | **Pn** | **22 05 45.6** | **-0.5** |
| | baz=224 | | | | | | |
| **TCU** | **Taichung** | **1.20** | **260** | *eP* | **Pb** | **22 05 46.6** | **0.0** |
| | baz=259 | | | | | | |
| TCU | | | | *eS* | **Sg** | **22 06 04.7** | **+1.6** |
| | baz=259 | | | | | | |
| **WDJ** | **Dajia District** | **1.21** | **270** | *eP* | **Pb** | **22 05 46.7** | **-0.2** |
| | baz=269 | | | | | | |
| WDJ | | | | *eS* | **Sg** | **22 06 04.5** | **+1.0** |
| | baz=269 | | | | | | |
| **WJS** | **Zhushan** | **1.25** | **245** | *eP* | **Pg** | **22 05 48.1** | **-0.4** |
| | baz=244 | | | | | | |
| WJS | | | | *eS* | **Sg** | **22 06 06.4** | **+1.5** |
| | baz=244 | | | | | | |
| **WNT** | **Mingjian** | **1.27** | **248** | *eP* | **Pg** | **22 05 48.4** | **-0.4** |
| | baz=247 | | | | | | |
| WNT | | | | *eS* | **Sg** | **22 06 06.8** | **+1.5** |
| | baz=247 | | | | | | |
| **FULB** | **Fuli** | **1.31** | **208** | *eP* | **Pn** | **22 05 48.5** | **+0.4** |
| | baz=191 | | | | | | |
| **WCHH** | **Zhanghua** | **1.32** | **258** | *eP* | **Pn** | **22 05 47.9** | **-0.2** |
| | baz=257 | | | | | | |
| **ALS** | **Alishan** | **1.36** | **232** | P | **Pn** | **22 05 48.9** | **0.0** |
| | baz=220 | | | | | | |
| ALS | | | | *eS* | **Sg** | **22 06 07.8** | **-0.5** |
| | baz=220 | | | | | | |
| **CHKT** | **Chengkung** | **1.37** | **204** | *eP* | **Pn** | **22 05 45.3** | **-3.5** |
| | baz=186 | | | | | | |
| **CHN5** | **Tsauling** | **1.41** | **237** | P | **Pb** | **22 05 50.1** | **-0.1** |
| | baz=237 | | | | | | |
| CHN5 | | | | S | **Sg** | **22 06 11.5** | **+1.9** |
| | baz=237 | | | | | | |
| **ELDTW** | **Lidau** | **1.46** | **217** | P | **Pn** | **22 05 49.1** | **-1.0** |
| | baz=216 | | | | | | |
| ELDTW | | | | *eS* | **Sn** | **22 06 08.6** | **-0.4** |
| | baz=216 | | | | | | |
| **WDLH** | **Douliu** | **1.47** | **243** | *eP* | **Pb** | **22 05 51.1** | **-0.1** |
| | baz=242 | | | | | | |
| WDLH | | | | *eS* | **Sg** | **22 06 11.9** | **+0.2** |
| | baz=242 | | | | | | |
| **EDH** | **Donghe** | **1.51** | **204** | *eP* | **Pn** | **22 05 48.9** | **-1.8** |
| | baz=190 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.52** | **253** | *eP* | **Pn** | **22 05 50.7** | **-0.3** |
| | baz=252 | | | | | | |
| WRL | | | | *eS* | **Sb** | **22 06 11.5** | **+0.1** |
| | baz=252 | | | | | | |
| **WTK** | **Tuku** | **1.59** | **245** | *eP* | **Pb** | **22 05 52.9** | **-0.5** |
| | baz=244 | | | | | | |
| WTK | | | | *eS* | **Sg** | **22 06 14.6** | **-1.1** |
| | baz=244 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.61** | **91** | P | **Pn** | **22 05 52.3** | **+0.2** |
| IRIF | | | | S | **Sn** | **22 06 12.4** | **-0.1** |
| **CHN4** | **Tsaushan** | **1.61** | **232** | P | **Pb** | **22 05 53.4** | **-0.3** |
| | baz=231 | | | | | | |
| CHN4 | | | | S | **Sg** | **22 06 15.3** | **-0.9** |
| | baz=231 | | | | | | |
| **STYH** | **Taoyuan** | **1.61** | **223** | *eP* | **Pn** | **22 05 52.9** | **+0.8** |
| | baz=212 | | | | | | |
| STYH | | | | *eS* | **Sb** | **22 06 14.9** | **+1.1** |
| | baz=212 | | | | | | |
| **TPUB** | **Ta-pu** | **1.62** | **230** | P | **Pn** | **22 05 53.2** | **+0.9** |
| | baz=229 | | | | | | |
| TPUB | | | | S | **Sb** | **22 06 14.6** | **+0.5** |
| | baz=229 | | | | | | |
| **LONT** | **Longtian** | **1.64** | **208** | *eP* | **Pn** | **22 05 48.6** | **-3.9** |
| | baz=207 | | | | | | |
| **CHY** | **Chiayi** | **1.66** | **239** | *eP* | **Pb** | **22 05 54.2** | **-0.2** |
| | baz=238 | | | | | | |
| CHY | | | | *eS* | **Sg** | **22 06 16.4** | **-1.2** |
| | baz=238 | | | | | | |
| **WTP** | **Ta-pu** | **1.67** | **228** | *eP* | **Pn** | **22 05 53.6** | **+0.7** |
| | baz=228 | | | | | | |
| WTP | | | | *eS* | **Sb** | **22 06 16.4** | **+0.9** |
| | baz=228 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.70** | **100** | *eS* | **Sb** | **22 06 16.9** | **+0.4** |
| **TWGBT** | **Beinan** | **1.74** | **208** | *eP* | **Pn** | **22 05 52.3** | **-1.6** |
| | baz=194 | | | | | | |
| **TWK** | **Hsinying** | **1.74** | **232** | P | **Pb** | **22 05 55.2** | **-0.8** |
| | baz=232 | | | | | | |
| **CHN1** | **Nanshi** | **1.77** | **229** | P | **Pb** | **22 05 55.5** | **-0.8** |
| | baz=228 | | | | | | |
| CHN1 | | | | *eS* | **Sg** | **22 06 20.0** | **-1.1** |
| | baz=228 | | | | | | |
| **SGST** | **Jiashian** | **1.80** | **225** | *eP* | **Pn** | **22 05 54.7** | **0.0** |
| | baz=212 | | | | | | |
| SGST | | | | *eS* | **Sb** | **22 06 19.4** | **+0.1** |
| | baz=212 | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.80** | **243** | *eP* | **Pb** | **22 05 56.0** | **-0.9** |
| | baz=242 | | | | | | |
| WSL | | | | *eS* | **Sb** | **22 06 20.3** | **+1.0** |
| | baz=242 | | | | | | |
| **SLGT** | **Liugui** | **1.82** | **222** | *eP* | **Pn** | **22 05 55.5** | **+0.5** |
| | baz=222 | | | | | | |
| **ICHU** | **Yijhu** | **1.84** | **238** | *eP* | **Pn** | **22 05 56.2** | **+0.9** |
| | baz=238 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.87** | **93** | P | **Pn** | **22 05 56.9** | **+1.3** |
| JKRS | | | | S | **Sb** | **22 06 20.9** | **-0.3** |
| **JIJ** | **Ishigaki jima** | **1.98** | **89** | P | **Pn** | **22 05 57.8** | **+0.6** |
| JIJ | | | | *eS* | **Sn** | **22 06 19.9** | **-1.9** |
| **SSD** | **Sandimen** | **2.02** | **218** | *eP* | **Pn** | **22 05 59.0** | **+1.2** |
| | baz=218 | | | | | | |
| **TSMG** | **Majia** | **2.05** | **217** | *eP* | **Pn** | **22 05 58.4** | **+0.2** |
| | baz=218 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.13** | **215** | *eP* | **Pn** | **22 06 00.5** | **+1.2** |
| | baz=217 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.15** | **84** | P | **Pn** | **22 05 59.6** | **+0.1** |
| JISG | | | | S | **Sn** | **22 06 26.4** | **+0.6** |
| **EAST** | **Anshuo** | **2.22** | **208** | *eP* | **Pn** | **22 06 02.0** | **+1.4** |
| | baz=195 | | | | | | |
| **SCZT** | **Fangliau** | **2.34** | **212** | *eP* | **Pn** | **22 06 03.3** | **+1.2** |
| | baz=196 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.35** | **249** | *eP* | **Pn** | **22 06 01.5** | **-0.8** |
| | baz=249 | | | | | | |
| **JTJ** | **Tarama** | **2.50** | **83** | *eS* | **Sn** | **22 06 36.5** | **+1.8** |
| **PTMZ** | **Houxiangcun** | **2.68** | **285** | *eP* | **Pn** | **22 06 05.4** | **-1.4** |
| | baz=282 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.96** | **318** | *eP* | **Pn** | **22 06 09.3** | **-1.4** |
| | baz=316 | | | | | | |
| **MHZQ** | **Yeshan** | **3.17** | **304** | *eP* | **Pn** | **22 06 12.8** | **-0.8** |
| | baz=299 | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.27** | **273** | *eP* | **Pn** | **22 06 13.6** | **-1.3** |
| | baz=269 | | | | | | |
| **AXDP** | **Jialang** | **3.68** | **279** | *eP* | **Pn** | **22 06 18.5** | **-2.0** |
| | baz=275 | | | | | | |

*IDC **05** 22:09:04.2±0.6,24°.59N×142°.38E,h0km,mb4.1/18, mb1 4.3/18,mb1mx3.9/64,mbtmp4.1/18,Error ellipse: s-maj=28.0km s-min=13.1km az=87.0*

*NEIC **05** 22:09:12.4±1.1,24°.50N±0°.05×142°.4E±0°.2,h55km±9km, mb4.6/13,Error ellipse: s-maj=29.5km s-min=6.0km az=84.0*

**ISC 05 22:09:07.9±0.6,24°.57N±0°.08×142°.4E±0°.1,h25km,n47, σ0s81/46,mb4.5/32,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **2.52** | **355** | | **Pb** | **22 09 52.2** | **-0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **23.34** | **100** | T | T | 22 39 47.1 | |
| | baz=289,slow=75,SNR=5.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.35** | **100** | T | T | 22 39 43.8 | |
| | baz=289,slow=75,SNR=4.3 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.36** | **100** | T | T | 22 39 55.3 | |
| | baz=289,slow=75,SNR=3.6 | | | | | | |
| **KLR** | **Kul'dur** | **26.00** | **344** | P | **P** | **22 14 38.6** | **-0.1** |
| | 2.2nm,0.5s,baz=169,slow=9.0,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **36.72** | **318** | P | **P** | **22 16 13.2** | **+0.1** |
| | 0.2nm,0.4s,baz=131,slow=9.8,SNR=1.9 | | | | | | |
| SONM | | | | PcP | **PcP** | **22 18 33.6** | **-1.7** |
| | 0.3nm,0.7s,baz=93,slow=2.9,SNR=2.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.79** | **270** | P | **P** | **22 16 48.8** | **+1.3** |
| | 1.0nm,0.3s,baz=76,slow=7.5,SNR=5.5 | | | | | | |
| **CTA** | **Charters Tower** | **44.54** | **175** | P | **P** | **22 17 18.3** | **+0.5** |
| | 3.4nm,0.8s,baz=338,slow=7.0,SNR=2.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.93** | **191** | P | **P** | **22 17 20.8** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 22 17 21.6 | |
| | comp=Z,9.3nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.94** | **191** | P | **P** | **22 17 20.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 22 17 21.6 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.94** | **191** | P | **P** | **22 17 20.9** | **0.0** |
| | comp=Z,5.4nm,0.6s,baz=12,slow=8.6,SNR=51 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.94** | **191** | P | **P** | **22 17 20.7** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **45.46** | **203** | P | **P** | **22 17 25.5** | **+0.5** |
| | comp=Z,2.0nm,0.4s,baz=23,slow=7.9,SNR=18 | | | | | | |
| **SHL** | **Shillong** | **45.57** | **282** | P | **P** | **22 17 25.9** | **-0.4** |
| **AS31** | **Alice Springs** | **48.66** | **190** | P | **P** | **22 17 49.7** | **-0.3** |
| **ASAR** | **Alice Springs** | **48.66** | **190** | P | **P** | **22 17 50.1** | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=14,slow=11,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 19 14.2** | **-1.0** |
| | comp=Z,0.6nm,1.1s,baz=82,slow=2.0,SNR=4.1 | | | | | | |
| **TAPN** | **Taplejung** | **48.95** | **286** | *eP* | **P** | **22 17 53.4** | **+0.7** |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **49.32** | **285** | *eP* | **P** | **22 17 56.4** | **+0.9** |
| | comp=Z,5.5nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **49.99** | **285** | *eP* | **P** | **22 18 02.0** | **+1.4** |
| | comp=Z,6.4nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **50.23** | **286** | *eP* | **P** | **22 18 03.8** | **+1.3** |
| | comp=Z,21nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **50.46** | **287** | *eP* | **P** | **22 18 05.3** | **+1.1** |
| | comp=Z,7.9nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **51.52** | **287** | *eP* | **P** | **22 18 12.5** | **+0.5** |
| | comp=Z,1.1nm,0.2s | | | | | | |
| **DANN** | **Dangsing** | **52.22** | **288** | *eP* | **P** | **22 18 18.4** | **+1.0** |
| | comp=Z,38nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **311** | P | **P** | **22 18 16.7** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=92,slow=8.8,SNR=8.1 | | | | | | |
| MKAR | | | | PcP | **PcP** | **22 19 27.4** | **-1.0** |
| | comp=Z,0.3nm,0.6s,baz=88,slow=5.7,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **311** | P | **P** | **22 18 16.2** | **-1.0** |
| **KOLN** | **Koldanda** | **52.47** | **287** | *eP* | **P** | **22 18 19.9** | **+0.8** |
| **MAKZ** | **Makanchi** | **52.49** | **311** | P | **P** | **22 18 19.0** | **+0.2** |
| **PYUN** | **Piuthan** | **52.94** | **288** | *eP* | **P** | **22 18 22.9** | **+0.3** |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **56.13** | **181** | P | **P** | **22 18 45.2** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=19,slow=5.7,SNR=3.6 | | | | | | |
| **STKA** | **Stephens Creek** | **56.13** | **181** | IAmb | IAmb | 22 19 27.9 | |
| | comp=Z,7.5nm,2.0s | | | | | | |
| **ILAR** | **Eielson Array** | **59.82** | **28** | P | **P** | **22 19 11.5** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=256,slow=5.8,SNR=7.2 | | | | | | |
| **KKAR** | **Karatay Array** | **60.76** | **307** | P | **P** | **22 19 17.4** | **-0.2** |
| **SCRK** | **Sand Creek** | **61.01** | **29** | P | **P** | **22 19 20.5** | **+1.3** |
| **GAR** | **Garm** | **61.51** | **302** | P | **P** | **22 19 23.4** | **+0.5** |
| GAR | | | | IAmb | IAmb | 22 19 23.6 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron** | **62.46** | **302** | P | **P** | **22 19 29.6** | **+0.3** |
| **KBL** | **Kabul** | **63.37** | **298** | P | **P** | **22 19 36.0** | **+0.4** |
| KBL | | | | IAmb | IAmb | 22 19 36.9 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **67.02** | **315** | P | **P** | **22 19 58.1** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 22 19 58.6 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **72.90** | **350** | P | **P** | **22 20 36.1** | **+1.7** |
| | comp=Z,6.4nm,0.9s,baz=101,slow=3.5,SNR=7.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.25** | **28** | P | **P** | **22 20 43.0** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=292,slow=5.9,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **75.99** | **341** | P | **P** | **22 20 53.5** | **+1.0** |
| | comp=Z,3.2nm,0.8s,baz=77,slow=7.4,SNR=12 | | | | | | |
| **KBZ** | **Khabaz** | **79.89** | **313** | P | **P** | **22 21 14.4** | **-0.2** |
| | comp=Z,2.6nm,0.8s,baz=47,slow=3.0,SNR=6.5 | | | | | | |
| **FINES** | **FINESS Array B** | **80.30** | **334** | P | **P** | **22 21 16.2** | **-0.3** |
| | comp=Z,2.2nm,0.5s,baz=67,slow=5.2,SNR=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **84.78** | **324** | P | **P** | **22 21 39.1** | **-0.9** |
| | comp=Z,1.7nm,0.5s,baz=52,slow=4.8,SNR=3.7 | | | | | | |
| **HFS** | **Hagfors** | **85.82** | **337** | P | **P** | **22 21 44.0** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=108,slow=4.8,SNR=7.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.03** | **338** | P | **P** | **22 21 45.2** | **-0.9** |
| | comp=Z,20nm,0.4s,baz=45,slow=5.0,SNR=2.6 | | | | | | |
| **GERES** | **GERESS Array B** | **93.78** | **329** | P | **P** | **22 22 21.9** | **-1.0** |
| | comp=Z,0.8nm,0.9s,baz=85,slow=2.8,SNR=4.2 | | | | | | |
| **PLCA** | **Paso Flores** | **148.12** | **128** | PKPbc | **PKiKP** | **22 28 53.0** | **-0.4** |
| | comp=Z,1.4nm,0.8s,baz=69,slow=12,SNR=2.1 | | | | | | |

*ANF **05** 22:13:01.8±0.3,47°.29N×122°.27W,h25km,ML2.8/7,Error ellipse: s-maj=3.1km s-min=2.6km az=102.0*

*NEIC **05** 22:13:02.0±1.9,47°.30N±0°.01×122°.28W±0°.03,h27km±7km, Error ellipse: s-maj=3.4km s-min=1.5km az=64.0*

*IASPEI **05** 22:13:02.1±0.9,47°.29N±0°.02×122°.28W±0°.02,h26km±4km, Error ellipse: s-maj=2.5km s-min=2.5km az=103.9,GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*PNSN **05** 22:13:02.4,47°.28N×122°.29W,h25km,MD2.7, Fault plane solution: NP1:φs105.00000°,δ60.00000°,λ120.00000°.*

*SEA **05** 22:13:02.4±1.8,47°.28N±0°.02×122°.29W±0°.03,h25km±6km, ML2.6/96,ML2.6/44(NEIC),Error ellipse: s-maj=3.4km s-min=3.0km az=223.0*

*PGC **05** 22:13:02.6±0.8,47°.28N×122°.27W,h21km,ML2.6, ML2.4/14,35km south of Seattle, Wa Washington*

**ISC 05 22:13:02.3±0.8,47°.29N±0°.01×122°.29W±0°.01,h19km±1km, n141,σ0s70/192,Washington**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TBPA** | **Tacoma Substat** | **0.06** | **235** | | **Pg** | **22 13 06.2** | **+0.5** |
| TBPA | | | | | **Sg** | **22 13 10.0** | **+2.0** |
| **KNEL** | **Kent Elementar** | **0.09** | **17** | | **Sg** | **22 13 10.6** | **+2.1** |
| **HICC** | **Highline Commu** | **0.10** | **356** | | **Pg** | **22 13 06.5** | **+0.5** |
| **SMNR** | **Sumner High Sc** | **0.10** | **156** | | **Pg** | **22 13 06.4** | **+0.3** |
| SMNR | | | | | **Sg** | **22 13 10.1** | **+1.4** |
| **PAYL** | **Puyallup Schoo** | **0.10** | **189** | | **Pg** | **22 13 06.4** | **+0.3** |
| PAYL | | | | | **Sg** | **22 13 10.1** | **+1.5** |
| **UPS** | **University of** | **0.14** | **257** | | **Pg** | **22 13 06.9** | **+0.5** |
| **VVHS** | **Vashon High Sc** | **0.17** | **319** | | **Pg** | **22 13 07.3** | **+0.4** |
| **MPL** | **Maple valley S** | **0.19** | **22** | | **Pg** | **22 13 07.5** | **+0.4** |
| MPL | | | | | **Sg** | **22 13 11.7** | **+1.3** |
| **D05A** | **Enumclaw** | **0.23** | **117** | | **Pg** | **22 13 08.0** | **+0.2** |
| **D05A** | **Enumclaw** | **0.23** | **117** | P | **Pb** | **22 13 07.8** | **+0.3** |
| D05A | | | | S | **Sb** | **22 13 10.6** | **-0.3** |
| **GHW** | **Garrison Hill** | **0.25** | **177** | | **Pb** | **22 13 07.9** | **-0.1** |
| GHW | | | | | **Sb** | **22 13 12.2** | **+0.4** |
| **SP2** | **Seward Park 2** | **0.26** | **6** | | **Pg** | **22 13 08.8** | **+0.5** |
| **ALKI** | **Alki Wastewate** | **0.29** | **343** | | **Pb** | **22 13 09.2** | **+0.3** |
| **B941** | **Kapowsin** | **0.31** | **171** | | **Pg** | **22 13 08.6** | **-0.5** |
| B941 | | | | | **Sg** | **22 13 13.2** | **-0.5** |
| **PCFR** | **Pierce County** | **0.32** | **199** | | **Pg** | **22 13 09.2** | **0.0** |
| **D04E** | **Lakebay** | **0.35** | **251** | | **Pb** | **22 13 10.3** | **+0.4** |
| **D04E** | **Lakebay** | **0.35** | **251** | P | **Pg** | **22 13 09.9** | **+0.2** |
| | baz=73,SNR=14 | | | | | | |
| D04E | | | | S | **Sb** | **22 13 15.4** | **+0.4** |
| | baz=73 | | | | | | |
| **ELW** | **Echo Lake** | **0.35** | **55** | | **Pg** | **22 13 09.5** | **-0.2** |
| **GSM** | **Grass Mountain** | **0.35** | **105** | | **Pg** | **22 13 09.7** | **-0.1** |
| **GSM** | **Grass Mountain** | **0.35** | **105** | | **Sg** | **22 13 15.3** | **+0.4** |
| **RATT** | **Rattlesnake La** | **0.36** | **68** | | **Pg** | **22 13 09.7** | **-0.2** |
| RATT | | | | | **Sg** | **22 13 15.4** | **+0.4** |
| **CDMR** | **Cedar Moraine** | **0.38** | **70** | | **Pg** | **22 13 10.2** | **-0.1** |
| CDMR | | | | | **Sg** | **22 13 16.2** | **+0.4** |
| **KIMR** | **Kitsap County** | **0.39** | **303** | | **Pg** | **22 13 10.3** | **-0.1** |
| KIMR | | | | | **Sb** | **22 13 16.7** | **+0.5** |
| **GMW** | **Gold Mountain** | **0.42** | **307** | | **Pg** | **22 13 10.6** | **-0.4** |
| **GNW** | **Green Mountain** | **0.45** | **307** | | **Pg** | **22 13 10.9** | **-0.6** |
| GNW | | | | | **Sg** | **22 13 17.8** | **0.0** |
| **GNW** | **Green Mountain** | **0.45** | **307** | P | **Pg** | **22 13 10.9** | **-0.6** |
| GNW | | | | S | **Sg** | **22 13 17.4** | **-0.3** |
| **FMW** | **Mount Fremont** | **0.56** | **130** | | **Pb** | **22 13 12.8** | **-0.6** |
| **FMW** | **Mount Fremont** | **0.56** | **130** | P | **Pb** | **22 13 12.8** | **-0.6** |
| FMW | | | | S | **Sb** | **22 13 19.5** | **-1.6** |
| **REMR** | **Mount Rainier-** | **0.57** | **147** | | **Pb** | **22 13 12.8** | **-0.7** |
| REMR | | | | | **Sb** | **22 13 20.5** | **-0.8** |
| **C05A** | **Tolt Reservoir** | **0.57** | **45** | | **Pb** | **22 13 13.0** | **-0.6** |
| **C05A** | **Tolt Reservoir** | **0.57** | **45** | P | **Pb** | **22 13 12.9** | **-0.6** |
| C05A | | | | S | **Sb** | **22 13 20.5** | **-0.8** |
| **RCS** | **Mount Rainier-** | **0.57** | **138** | | **Pb** | **22 13 13.1** | **-0.7** |
| **D03D** | **Eldon** | **0.59** | **294** | | **Pb** | **22 13 13.4** | **-0.6** |
| **D03D** | **Eldon** | **0.59** | **294** | P | **Pb** | **22 13 13.4** | **-0.6** |
| | baz=115,SNR=76 | | | | | | |
| D03D | | | | S | **Sb** | **22 13 22.0** | **+0.1** |
| | baz=115 | | | | | | |
| **HTW** | **Haystack Looko** | **0.62** | **35** | | **Pb** | **22 13 13.8** | **-0.7** |
| **PANH** | **Panhandle Gap,** | **0.62** | **134** | | **Pb** | **22 13 13.9** | **-0.7** |
| **C04A** | **Brinnon** | **0.63** | **313** | | **Pb** | **22 13 13.9** | **-0.6** |
| C04A | | | | | **Sb** | **22 13 23.0** | **+0.1** |
| **HDW** | **Hoodsport** | **0.63** | **305** | | **Pb** | **22 13 14.0** | **-0.6** |
| **HDW** | **Hoodsport** | **0.63** | **305** | P | **Pb** | **22 13 14.0** | **-0.6** |
| HDW | | | | S | **Sb** | **22 13 22.7** | **-0.3** |
| **LON** | **Longmire** | **0.64** | **149** | | **Pb** | **22 13 13.8** | **-0.9** |
| **CPW** | **Capitol Peak** | **0.66** | **241** | P | **Pb** | **22 13 14.7** | **-0.5** |
| CPW | | | | S | **Sb** | **22 13 23.5** | **-0.4** |
| **B013** | **Quilcene** | **0.67** | **321** | | **Pb** | **22 13 14.5** | **-0.7** |
| B013 | | | | | **Sb** | **22 13 24.0** | **-0.1** |
| **SMW** | **South Mountain** | **0.72** | **272** | P | **Pb** | **22 13 15.5** | **-0.6** |
| SMW | | | | S | **Sg** | **22 13 26.4** | **+0.4** |
| **E04D** | **Cinebar** | **0.76** | **195** | | **Pb** | **22 13 16.2** | **-0.7** |
| E04D | | | | IAML | | 22 13 27.4 | |
| | comp=E,246nm,0.4s | | | | | | |
| **E04D** | **Cinebar** | **0.76** | **195** | P | **Pb** | **22 13 16.2** | **-0.7** |
| | baz=15,SNR=6.9 | | | | | | |
| E04D | | | | S | **Sb** | **22 13 27.0** | **+0.2** |
| | baz=15 | | | | | | |
| **BLN** | **Blyn Mountain** | **0.85** | **327** | | **Pb** | **22 13 17.6** | **-0.9** |
| **JCW** | **Jim Creek** | **0.93** | **15** | | **Pb** | **22 13 19.1** | **-0.7** |
| **JCW** | **Jim Creek** | **0.93** | **15** | P | **Pb** | **22 13 19.1** | **-0.7** |
| JCW | | | | S | **Sb** | **22 13 31.2** | **-0.6** |
| **SQM** | **Sequim** | **0.93** | **327** | | **Pb** | **22 13 19.3** | **-0.5** |
| **TDL** | **Tradedollar La** | **0.94** | **177** | | **Pb** | **22 13 19.1** | **-1.0** |
| **B05A** | **Bryant** | **0.98** | **8** | | **Pb** | **22 13 19.6** | **-0.8** |
| **B05A** | **Bryant** | **0.98** | **8** | P | **Pb** | **22 13 19.6** | **-1.0** |
| | baz=188,SNR=8.5 | | | | | | |
| B05A | | | | S | **Sb** | **22 13 32.7** | **-0.4** |
| | baz=188 | | | | | | |
| **ERK** | **Elk Rock** | **0.99** | **182** | | **Pb** | **22 13 19.8** | **-1.0** |
| **B201** | **Coldwater, Mou** | **0.99** | **179** | | **Pb** | **22 13 19.8** | **-1.1** |
| **WISH** | **Wishkah** | **1.02** | **261** | | **Pb** | **22 13 21.6** | **+0.3** |
| WISH | | | | IAML | | 22 13 43.9 | |
| | comp=N,170nm,3.4s | | | | | | |
| WISH | | | | IAML | | 22 13 46.8 | |
| | comp=E,175nm,3.3s | | | | | | |
| **WISH** | **Wishkah** | **1.02** | **261** | P | **Pb** | **22 13 21.5** | **+0.1** |
| WISH | | | | S | **Sb** | **22 13 35.3** | **+0.9** |
| **BMW** | **Boistfort Moun** | **1.04** | **218** | | **Pb** | **22 13 20.8** | **-0.9** |
| **SOSW** | **Source of Smit** | **1.06** | **174** | | **Pb** | **22 13 21.2** | **-0.8** |
| **NLWA** | **Neilton Lookou** | **1.08** | **276** | | **Pn** | **22 13 23.1** | **+0.7** |
| **BOLM** | **Sugar Bowl** | **1.08** | **176** | | **Pb** | **22 13 22.3** | **-0.2** |
| **OSD** | **Olympics--Snow** | **1.09** | **299** | P | **Pb** | **22 13 22.0** | **-0.7** |
| OSD | | | | S | **Sb** | **22 13 36.9** | **+0.2** |
| **SEPW** | **September Lobe** | **1.10** | **176** | | **Pb** | **22 13 22.2** | **-0.6** |
| **FL2** | **Flat Top 2** | **1.10** | **182** | | **Pb** | **22 13 21.6** | **-1.2** |
| **LTY** | **Liberty** | **1.10** | **91** | | **Pn** | **22 13 22.9** | **+0.1** |
| **LTY** | **Liberty** | **1.10** | **91** | P | **Pn** | **22 13 22.1** | **-0.7** |
| LTY | | | | S | **Sb** | **22 13 36.2** | **-0.7** |
| **SWF2** | **Southwest Flan**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **B010** | **North Saanich** | **1.56** | **331** | Pn | **Pn** | **22 13 28.3** | **-0.7** |
| B010 | | | | Sn | **Sn** | **22 13 47.5** | **-1.3** |
| **PGC** | **Sidney** | **1.56** | **331** | Pn | **Pn** | **22 13 28.4** | **-0.6** |
| PGC | | | | IAML | | 22 13 58.1 | |
| | comp=E,59nm,2.4s | | | | | | |
| PGC | | | | IAML | | 22 14 20.2 | |
| | comp=N,65nm,4.5s | | | | | | |
| **PGC** | **Sidney** | **1.56** | **331** | Pn | **Pn** | **22 13 28.4** | **-0.6** |
| PGC | | | | Sn | **Sn** | **22 13 48.0** | **-0.8** |
| **SNB** | **Saturna Island** | **1.59** | **339** | Pn | **Pn** | **22 13 29.8** | **+0.3** |
| SNB | | | | Sn | **Sn** | **22 13 49.7** | **+0.1** |
| **CBSW** | **Chelan Butte S** | **1.61** | **71** | | **Pn** | **22 13 31.0** | **-0.4** |
| **APM** | **Augspurger Mou** | **1.61** | **165** | | **Pn** | **22 13 30.7** | **+0.9** |
| **C03A** | **Quillayute Air** | **1.67** | **294** | Pn | **Pn** | **22 13 31.8** | **+1.3** |
| **A05A** | **Maple Falls** | **1.71** | **5** | Pn | **Pn** | **22 13 31.6** | **+0.6** |
| A05A | | | | Sn | **Sn** | **22 13 52.6** | **+0.2** |
| **VDB** | **Vedder Mountai** | **1.74** | **4** | | **Pn** | **22 13 32.5** | **+1.0** |
| **VDB** | **Vedder Mountai** | **1.74** | **4** | Pn | **Pn** | **22 13 31.2** | **-0.2** |
| VDB | | | | Sn | **Sn** | **22 13 53.8** | **+0.7** |
| **E07A** | **Sunnyside** | **1.82** | **113** | | **Pn** | **22 13 32.2** | **-0.5** |
| E07A | | | | IAML | | 22 13 59.2 | |
| | comp=N,59nm,0.6s | | | | | | |
| **DHW2** | **Dyer Hill 2** | **1.84** | **67** | | **Pn** | **22 13 34.0** | **+1.1** |
| **GOBB** | **Galiano Island** | **1.85** | **334** | Pn | **Pn** | **22 13 33.5** | **+0.6** |
| GOBB | | | | Sn | **Sn** | **22 13 56.0** | **+0.3** |
| **BENWA** | **Benson Ranch** | **1.93** | **113** | | **Pb** | **22 13 36.2** | **-0.5** |
| **B926** | **Mesachie Lake** | **1.96** | **322** | Pn | **Pn** | **22 13 34.8** | **+0.2** |
| B926 | | | | Sn | **Sn** | **22 13 57.5** | **-1.1** |
| **CLRS** | **Cowichan Lake** | **1.96** | **322** | Pn | **Pn** | **22 13 35.1** | **+0.6** |
| CLRS | | | | IAML | | 22 14 10.2 | |
| | comp=N,78nm,3.2s | | | | | | |
| CLRS | | | | IAML | | 22 14 19.3 | |
| | comp=E,68nm,4.8s | | | | | | |
| **CLRS** | **Cowichan Lake** | **1.96** | **322** | Pn | **Pn** | **22 13 34.6** | **+0.1** |
| **HNBB** | **Haney** | **2.00** | **355** | Pn | **Pn** | **22 13 35.5** | **+0.4** |
| HNBB | | | | Sn | **Sn** | **22 14 00.0** | **+0.4** |
| **HOOD** | **Mount Hood Mea** | **2.02** | **167** | | **Pn** | **22 13 36.7** | **+1.2** |
| HOOD | | | | IAML | | 22 13 51.3 | |
| | comp=E,35nm,2.3s | | | | | | |
| HOOD | | | | IAML | | 22 14 08.6 | |
| | comp=N,38nm,1.4s | | | | | | |
| **RSW** | **Rattlesnake Hi** | **2.06** | **115** | | **Pb** | **22 13 38.3** | **-0.8** |
| **HAWA** | **Hanford** | **2.10** | **114** | Pn | **Pn** | **22 13 36.2** | **-0.1** |
| HAWA | | | | IAML | | 22 14 07.3 | |
| | comp=N,55nm,0.3s | | | | | | |
| **G05D** | **Wamic, OR** | **2.16** | **161** | Pb | **Pb** | **22 13 39.9** | **-0.9** |
| | baz=342 | | | | | | |
| **HOPB** | **Hope** | **2.17** | **15** | Pn | **Pn** | **22 13 37.1** | **-0.3** |
| HOPB | | | | Sn | **Sn** | **22 14 04.0** | **+0.2** |
| **G03D** | **McMinnville, O** | **2.19** | **198** | Pn | **Pn** | **22 13 38.3** | **+0.6** |
| G03D | | | | IAML | | 22 14 23.1 | |
| | comp=E,67nm,2.6s | | | | | | |
| **BIB** | **Bowen Island** | **2.22** | **343** | Pn | **Pn** | **22 13 38.7** | **+0.7** |
| **NLLB** | **Nanaimo Lost L** | **2.24** | **330** | Sn | **Sn** | **22 14 05.6** | **+0.1** |
| **B08A** | **Colville Reser** | **2.26** | **61** | | **Pb** | **22 13 41.9** | **-0.6** |
| B08A | | | | IAML | | 22 13 56.9 | |
| | comp=N,27nm,4.8s | | | | | | |
| **B08A** | **Colville Reser** | **2.26** | **61** | Pn | **Pn** | **22 13 38.1** | **-0.5** |
| B08A | | | | Sn | **Sn** | **22 14 05.9** | **-0.1** |
| **MGB** | **Mount Grey** | **2.34** | **318** | Sn | **Sn** | **22 14 08.2** | **0.0** |
| **WPB** | **Watts Point** | **2.44** | **346** | Pn | **Pn** | **22 13 40.8** | **-0.3** |
| **SHB** | **Sechelt** | **2.53** | **336** | Pn | **Pn** | **22 13 42.4** | **0.0** |
| SHB | | | | Sn | **Sn** | **22 14 12.7** | **-0.2** |
| **H04A** | **Detroit Lake** | **2.61** | **178** | | **Pn** | **22 13 45.4** | **+1.9** |
| H04A | | | | IAML | | 22 14 24.9 | |
| | comp=N,32nm,0.4s | | | | | | |
| H04A | | | | IAML | | 22 14 43.9 | |
| | comp=E,40nm,5.0s | | | | | | |
| **PNT** | **Penticton** | **2.70** | **40** | | **Pn** | **22 13 45.2** | **+0.5** |
| **PNT** | **Penticton** | **2.70** | **40** | Sn | **Sn** | **22 14 16.0** | **-0.8** |
| PNT | | | | Sg | **Sb** | **22 14 24.8** | **+2.2** |
| **C09A** | **Chrisman Ranch** | **2.77** | **78** | Sn | **Sn** | **22 14 18.1** | **-0.4** |
| **H04D** | **Lebanon** | **2.79** | **187** | Pn | **Pn** | **22 13 46.9** | **+1.0** |
| **WSLR** | **Whistler** | **2.87** | **352** | Pn | **Pn** | **22 13 47.3** | **+0.3** |
| WSLR | | | | Sn | **Sn** | **22 14 20.9** | **-0.1** |
| **LLLB** | **Lillooet** | **3.33** | **4** | Pn | **Pn** | **22 13 53.0** | **-0.3** |
| **PINE** | **Pine Mountain** | **3.63** | **164** | Pn | **Pn** | **22 13 57.8** | **+0.2** |
| **F10A** | **Beach Ranch, E** | **3.73** | **109** | | **Pn** | **22 14 00.2** | **+1.3** |

**IDC 05 22:15:09.3**±1.5,**4°24.5S**×**129°25.6E**,**h0**km,**mb3.8**/1,
**mb1 3.7**/4,**mb1mx3.3**/41,**mbtmp3.6**/4,**ML3.8**/2,**MS4.3**/2,
**Ms1 4.3**/2,**ms1mx3.4**/72,**Error ellipse: s-maj=53.3km**
**s-min=26.3km az=80.0**,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **3.91** | **31** | Pn | Pn | 22 16 09.9 | -0.8 |
| | 6.8nm,0.3s,baz=231,slow=14,SNR=15 | | | | | | |
| SIJI | | | | Sn | Sn | 22 16 53.8 | -3.5 |
| | 2.1nm,0.3s,baz=338,slow=23,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.22** | **194** | LR | LR | 22 24 19.6 | |
| | comp=Z,459nm,18.2s,baz=204,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.38** | **163** | Pn | Pn | 22 18 58.6 | -2.2 |
| | baz=346,slow=13,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **19.83** | **167** | P | Pn | 22 19 42.6 | -0.7 |
| | 0.2nm,0.3s,baz=336,slow=10,SNR=14 | | | | | | |
| **PALK** | **Pallekele** | **49.77** | **283** | LR | LR | 22 44 19.2 | |
| | comp=Z,917nm,21.5s,baz=338,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.52** | **327** | P | P | 22 25 54.8 | +0.2 |
| | 0.4nm,0.5s,baz=114,slow=7.2,SNR=13 | | | | | | |

*CNRM **05** 22:16:01.3,35°.50N×3°.71W,h15km,ml2.9*
*SFS **05** 22:16:01.0,35°.40N×3°.81W,ML2.4,ALBORAN SUR*
*INMG **05** 22:16:02.2±1.8,35°.35N×3°.76W,h17km±7km,ML2.2,Error ellipse: s-maj=4.7km s-min=3.3km az=30.0*

**ISC 05 22:16:02.3**±1.0,**35°37N**±0°.04×**3°75W**±0°.03,**h28**km±8km,
**n23**,σ1§**84**/39,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.22** | **225** | P | **Pb** | **22 16 08.1** | **-0.5** |
| PALE | | | | S | **Sb** | **22 16 12.6** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.63** | **104** | P | **Pb** | **22 16 14.2** | **-0.7** |
| GOG | | | | S | **Sb** | **22 16 22.9** | **-0.6** |
| **AKLM** | **AKL** | **0.87** | **186** | P | **Pn** | **22 16 20.1** | **+1.3** |
| **CHAS** | **Isla Isabel II** | **1.09** | **100** | P | **Pb** | **22 16 22.3** | **-0.3** |
| CHAS | | | | S | **Sb** | **22 16 35.1** | **-1.3** |
| **CHEFC** | **Chefchaouen** | **1.33** | **259** | P | **Pb** | **22 16 26.6** | **-0.1** |
| CHEFC | | | | S | **Sb** | **22 16 46.9** | **+3.5** |
| **JBK** | **JBK** | **1.42** | **137** | P | **Pn** | **22 16 27.2** | **+0.7** |
| JBK | | | | S | **Sb** | **22 16 50.8** | **+4.8** |
| **CEU** | **Ceuta** | **1.43** | **292** | P | **Pn** | **22 16 24.2** | **-2.2** |
| CEU | | | | S | **Sn** | **22 16 40.9** | **-3.3** |
| **EMAL** | **Malaga-Limoner** | **1.49** | **338** | P | **Pb** | **22 16 28.6** | **-0.8** |
| EMAL | | | | S | **Sn** | **22 16 44.3** | **-1.6** |
| **LCRM** | **LCR** | **1.92** | **209** | P | **Pb** | **22 16 37.7** | **+1.0** |
| LCRM | | | | S | **Sb** | **22 17 02.9** | **+2.6** |
| **IFR** | **Ifrane** | **2.17** | **212** | P | **Pb** | **22 16 39.3** | **-1.8** |
| IFR | | | | S | **Sb** | **22 17 05.8** | **-1.9** |
| **MD31** | **MD31** | **2.64** | **199** | P | **Pb** | **22 16 46.5** | **-2.5** |
| **MDT** | **Midelt** | **2.65** | **196** | P | **Pb** | **22 16 47.4** | **-1.8** |
| **PVAQ** | **Vaqueiros** | **3.79** | **303** | *e*Pn | **Pn** | **22 16 59.7** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **22 17 41.7** | **-0.9** |
| PVAQ | | | | A | A | 22 17 43.3 | |
| | 6.8nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.79** | **303** | P | **Pn** | **22 16 59.0** | **+0.2** |
| PVAQ | | | | S | **Sn** | **22 17 41.6** | **-0.9** |
| **PCVE** | **Castro Verde** | **4.13** | **304** | *e*Sn | **Sn** | **22 17 49.3** | **-1.6** |
| PCVE | | | | A | A | 22 17 57.2 | |
| | 3.0nm,0.4s | | | | | | |
| **PBEJ** | **Beja** | **4.24** | **310** | *e*Sn | **Sn** | **22 17 54.0** | **+0.4** |
| **MESJ** | **Messejana** | **4.36** | **306** | *e*Pn | **Pn** | **22 17 08.7** | **+2.0** |
| MESJ | | | | *e*Sn | **Sn** | **22 17 56.1** | **-0.5** |
| MESJ | | | | A | A | 22 18 00.3 | |
| | 3.7nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **297** | *e*Sn | **Sn** | **22 17 56.8** | **-1.0** |
| MORF | | | | A | A | 22 17 59.6 | |
| | 4.6nm,0.8s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.56** | **300** | *e*Pn | **Pn** | **22 17 12.0** | **+2.5** |
| PTEO | | | | *e*Sn | **Sn** | **22 18 01.5** | **0.0** |
| **EVO** | **Evora** | **4.65** | **314** | *e*Pn | **Pn** | **22 17 13.8** | **+3.1** |
| EVO | | | | *e*Sn | **Sn** | **22 18 03.0** | **-0.7** |
| EVO | | | | A | A | 22 18 05.9 | |
| | 2.4nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.71** | **307** | *e*Pn | **Pn** | **22 17 12.5** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **22 18 04.5** | **-0.8** |
| PNCL | | | | A | A | 22 18 05.5 | |
| | 2.1nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **5.14** | **317** | *e*Pn | **Pn** | **22 17 19.5** | **+2.1** |
| PMTG | | | | *e*Sn | **Sn** | **22 18 14.0** | **-1.7** |
| PMTG | | | | A | A | 22 18 19.9 | |
| | 1.8nm,0.5s | | | | | | |
| **OUK** | **Oukaimeden** | **5.40** | **221** | P | **Pn** | **22 17 21.6** | **+0.3** |

*NEIC **05** 22:20:48.8±2.3,6°.37S×107°.47E±10°.1,h10km±2km,*
*mb4.0/11,Error ellipse: s-maj=21.1km s-min=9.9km*
*az=249.0*
*IDC **05** 22:20:57.4±6.7,6°.67S×147°.69E,h93km±47km,mb3.6/3,*
*mb1 3.7/5,mb1mx3.2/43,mbtmp3.9/5,Error ellipse:*
*s-maj=59.6km s-min=50.3km az=68.0*

**ISC 05 22:20:53.7**±1.7,**6°.4S**×**147°.7E**±0°.2,**h63**km,**n20**,
σ1§**02**/21,**mb3.8**/6,**Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.02** | **190** | P | **Pn** | **22 21 39.8** | **+0.6** |
| | 2.8nm,0.3s,baz=166,slow=16,SNR=2.0 | | | | | | |
| PMG | | | | S | **Sn** | **22 22 13.5** | **-0.7** |
| | 9.1nm,0.3s,baz=20,slow=23,SNR=3.6 | | | | | | |
| **PMG** | **Port Moresby** | **3.02** | **190** | Pn | **Pn** | **22 21 39.2** | **0.0** |
| **COEN** | **Coen** | **8.71** | **210** | Pn | **Pn** | **22 22 57.6** | **+0.5** |
| **MTN** | **Manton Dam** | **17.52** | **247** | | **Pn** | **22 24 53.8** | **-0.1** |
| MTN | | | | IAmb | IAmb | 22 25 06.6 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **18.52** | **223** | P | **P** | **22 25 05.2** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 22 25 24.2 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **18.56** | **222** | P | **P** | **22 25 05.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 22 25 12.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **18.67** | **223** | P | **P** | **22 25 07.7** | **+0.8** |
| WB2 | | | | IAmb | IAmb | 22 25 12.2 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.68** | **223** | P | **P** | **22 25 07.5** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=51,slow=11,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.68** | **223** | P | **P** | **22 25 07.3** | **+0.3** |
| **AS31** | **Alice Springs** | **21.68** | **216** | P | **P** | **22 25 40.0** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 22 25 59.7 | |
| | comp=Z,1.9nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **21.68** | **216** | P | **P** | **22 25 39.1** | **-0.4** |
| | comp=Z,1.6nm,0.5s,baz=54,slow=8.7,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **21.68** | **216** | P | **P** | **22 25 41.5** | **+2.1** |
| **ARMA** | **Armidale** | **24.17** | **172** | P | **P** | **22 26 02.6** | **-1.7** |
| ARMA | | | | IAmb | IAmb | 22 26 07.2 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **OUENC** | **Ouen Island, N** | **24.39** | **133** | P | **P** | **22 26 07.1** | **+0.8** |
| OUENC | | | | IAmb | IAmb | 22 26 15.7 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.44** | **240** | P | **P** | **22 26 05.0** | **-1.8** |
| | comp=Z,4.0nm,0.8s,baz=58,slow=6.6,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **25.97** | **192** | P | **P** | **22 26 19.6** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=5.7,slow=10,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **25.97** | **192** | P | **P** | **22 26 20.6** | **+0.1** |
| **BBOO** | **Buckleboo** | **28.41** | **201** | P | **P** | **22 26 43.8** | **+1.3** |
| **FORT** | **Forrest** | **30.45** | **215** | P | **P** | **22 27 01.8** | **+1.3** |
| **TORD** | **Torodi Ar. Bea** | **145.85** | **284** | PKPbc | **PKPab** | **22 40 27.1** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=90,slow=4.2,SNR=4.1 | | | | | | |

*IDC **05** 22:31:06.2±1.4,5°.14S×130°.49E,h208km±16km,mb3.3/5,*
*mb1 3.7/9,mb1mx3.3/39,mbtmp4.1/9,Error ellipse:*
*s-maj=29.7km s-min=10.1km az=79.0*
*NEIC **05** 22:31:06.7±2.1,5°.30S±0°.05×130°.1E±0°.1,h199km±14km,*
*mb4.3/13,Error ellipse: s-maj=20.3km s-min=4.9km*
*az=103.0*
*DJA **05** 22:31:10.1±0.6,5°.5±5°×13°.0E±°,h193km±9km,M4.0/7,*
*MLv4.0/7*

**ISC 05 22:31:05.6**±0.6,**5°26S**±0°.05×**130°06E**±0°.06,**h200**km,**n48**,
σ1§**81**/54,**mb4.0**/8,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **2.21** | **329** | P | **Pn** | **22 31 46.4** | **0.0** |
| MSAI | | | | S | **Sn** | **22 32 15.0** | **-3.2** |
| **SAUI** | **Saumlaki** | **2.97** | **156** | P | Pn | 22 32 04.3 | +9.3 |
| **SAUI** | **Saumlaki** | **2.97** | **156** | Pn | **Pn** | **22 31 55.7** | **+0.8** |
| SAUI | | | | Sn | **Sn** | **22 32 30.7** | **-2.9** |
| **FAKI** | **Fak Fak** | **3.19** | **43** | P | **Pn** | **22 31 58.3** | **+0.7** |
| FAKI | | | | S | **Sn** | **22 32 36.7** | **-1.5** |
| **FAKI** | **Fak Fak** | **3.19** | **43** | Pn | **Pn** | **22 31 58.2** | **+0.7** |
| FAKI | | | | Sn | **Sn** | **22 32 36.5** | **-1.7** |
| **FAKI** | **Fak Fak** | **3.19** | **43** | P | **Pn** | **22 31 58.4** | **+0.8** |
| **SIJI** | **Sorong** | **4.52** | **15** | P | **Pn** | **22 32 13.9** | **-0.1** |
| | 13nm,0.3s,baz=210,slow=10,SNR=25 | | | | | | |
| SIJI | | | | S | **Sn** | **22 33 03.1** | **-4.8** |
| | 12nm,0.3s,baz=258,slow=24,SNR=25 | | | | | | |
| **SWI** | **Sorong** | **4.53** | **15** | P | **Pn** | **22 32 13.0** | **-1.1** |
| **SANI** | **Sanana** | **5.17** | **308** | P | **Pn** | **22 32 22.1** | **-0.1** |
| **SANI** | **Sanana** | **5.17** | **308** | P | **Pn** | **22 32 22.5** | **+0.3** |
| **LBMI** | **Labuha** | **5.25** | **331** | P | **Pn** | **22 32 22.2** | **-1.2** |
| **SOEI** | **Soe** | **7.28** | **232** | Pn | **Pn** | **22 32 52.2** | **+2.6** |
| **MTN** | **Manton Dam** | **7.61** | **172** | Pn | **Pn** | **22 32 54.0** | **+0.2** |
| **BATI** | **Baumata** | **8.02** | **232** | P | Pn | 22 33 05.5 | +6.2 |
| | 4.6nm,0.3s,baz=26,slow=5.3,SNR=4.1 | | | | | | |
| BATI | | | | S | **Sn** | **22 34 27.9** | **-1.9** |
| | 1.6nm,0.3s,baz=265,slow=23,SNR=5.6 | | | | | | |
| **KNRA** | **Kununurra** | **10.43** | **187** | Pn | **Pn** | **22 33 30.0** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **13.47** | **198** | P | **Pn** | **22 34 08.7** | **-0.4** |
| | 0.5nm,0.3s,baz=22,slow=12,SNR=14 | | | | | | |
| FITZ | | | | S | S | 22 36 29.5 | -10 |
| | 0.8nm,0.3s,baz=102,slow=23,SNR=11 | | | | | | |
| **WRAB** | **Tennant Creek** | **15.17** | **164** | P | **Pn** | **22 34 30.3** | **+0.3** |
| **WRA** | **Warramunga Arr** | **15.18** | **164** | P | **Pn** | **22 34 29.9** | **-0.2** |
| | 0.8nm,0.3s,baz=346,slow=12,SNR=29 | | | | | | |
| WRA | | | | S | **S** | **22 37 11.0** | **-7.8** |
| | 0.4nm,0.3s,baz=337,slow=22,SNR=2.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.18** | **164** | P | **Pn** | **22 34 28.0** | **-2.1** |
| **WB2** | **Warramunga Arr** | **15.18** | **164** | | **Pn** | **22 34 29.9** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 22 34 33.5 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.25** | **164** | | **Pn** | **22 34 30.8** | **-0.2** |
| **COEN** | **Coen** | **15.54** | **125** | | **P** | **22 34 34.9** | **+0.3** |
| COEN | | | | IAmb | IAmb | 22 34 37.2 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **COEN** | **Coen** | **15.54** | **125** | P | **P** | **22 34 36.5** | **+1.8** |
| **QIS** | **Mount Isa** | **17.81** | **149** | P | **Pn** | **22 35 01.7** | **+0.1** |
| **AS31** | **Alice Springs** | **18.67** | **169** | P | **Pn** | **22 35 11.0** | **-0.7** |
| **ASAR** | **Alice Springs** | **18.67** | **169** | P | **P** | **22 35 10.6** | **+1.7** |
| | comp=Z,2.4nm,0.3s,baz=350,slow=11,SNR=137 | | | | | | |
| ASAR | | | | S | **S** | **22 38 28.9** | **-2.1** |
| | comp=Z,0.2nm,0.3s,baz=352,slow=22,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **18.67** | **169** | P | **P** | **22 35 10.8** | **+1.9** |
| **MBWA** | **Marble Bar** | **18.72** | **211** | P | **P** | **22 35 09.7** | **+0.4** |
| MBWA | | | | IAmb | IAmb | 22 35 10.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **18.72** | **211** | P | **P** | **22 35 09.3** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **19.00** | **210** | P | **P** | **22 35 13.0** | **+0.6** |
| PSA00 | | | | IAmb | IAmb | 22 35 13.2 | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **19.00** | **210** | P | **P** | **22 35 13.0** | **+0.6** |
| **WRKA** | **Warakurna** | **19.74** | **185** | P | **P** | **22 35 21.4** | **+1.1** |
| **OOD** | **Oodnadatta** | **23.04** | **167** | P | **P** | **22 35 54.9** | **+1.5** |
| **MEEK** | **Meekatharra** | **23.91** | **206** | P | **P** | **22 36 01.2** | **-0.1** |
| **MULG** | **Mulgathing** | **25.17** | **172** | P | **P** | **22 36 15.3** | **+2.6** |
| **FORT** | **Forrest** | **25.45** | **184** | P | **P** | **22 36 13.3** | **-2.0** |
| **FORT** | **Forrest** | **25.45** | **184** | P | **P** | **22 36 16.0** | **+0.7** |
| **MORW** | **Morawa** | **27.15** | **208** | P | **P** | **22 36 30.6** | **+0.1** |
| MORW | | | | IAmb | IAmb | 22 36 42.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **DLV** | **T Lat** | **27.43** | **309** | P | **P** | **22 36 35.1** | **+1.8** |
| **BBOO** | **Buckleboo** | **27.98** | **169** | P | **P** | **22 36 37.8** | **0.0** |
| BBOO | | | | IAmb | IAmb | 22 36 44.3 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **28.60** | **159** | P | **P** | **22 36 44.6** | **+1.3** |
| | comp=Z,0.6nm,0.3s,baz=330,slow=12,SNR=3.9 | | | | | | |
| **STKA** | **Stephens Creek** | **28.60** | **159** | P | **P** | **22 36 44.1** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **30.02** | **202** | P | **P** | **22 36 56.0** | **+0.2** |
| NWAO | | | | IAmb | IAmb | 22 36 58.0 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.69** | **308** | P | **P** | **22 38 11.2** | **+0.8** |
| | comp=Z,1.5nm,0.3s,baz=128,slow=5.9,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **56.82** | **341** | P | **P** | **22 40 30.1** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=152,slow=5.2,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.82** | **326** | P | **P** | **22 41 36.4** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=115,slow=8.5,SNR=9.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.82** | **326** | P | **P** | **22 41 36.6** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **71.07** | **328** | P | **P** | **22 42 02.5** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=126,slow=5.2,SNR=7.8 | | | | | | |

**IDC 05 22:37:57.5**±2.8,**6°.16S**×**130°.26E**,**h126**km±36km,**mb3.4**/1,
**mb1 3.4**/5,**mb1mx2.9**/45,**mbtmp3.7**/5,**Error ellipse:**
**s-maj=71.7km s-min=20.9km az=87.0**,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.35** | **11** | P | Pn | 22 39 15.1 | -0.1 |
| | 3.3nm,0.3s,baz=191,slow=23,SNR=19 | | | | | | |
| SIJI | | | | S | Sn | 22 40 11.9 | -3.9 |
| | 4.0nm,0.3s,baz=174,slow=22,SNR=13 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.70** | **200** | P | Pn | 22 40 53.5 | -0.1 |
| | 0.1nm,0.3s,baz=28,slow=17,SNR=1.9 | | | | | | |
| FITZ | | | | S | Sn | 22 43 03.4 | -10 |
| | 0.2nm,0.3s,baz=201,slow=13,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.27** | **164** | P | Pn | 22 41 15.0 | +1.2 |
| | 0.3nm,0.3s,baz=347,slow=13,SNR=8.2 | | | | | | |
| WRA | | | | S | Sn | 22 43 39.9 | -12 |
| | 0.4nm,0.3s,baz=68,slow=30,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **17.76** | **169** | P | P | 22 41 55.2 | -0.7 |
| | 0.3nm,0.3s,baz=346,slow=10,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.67** | **327** | P | P | 22 48 41.1 | +0.1 |
| | 0.5nm,0.5s,baz=113,slow=9.0,SNR=14 | | | | | | |

**IDC 05 22:43:12.7**±1.4,**15°18S**×**173°29W**,**h0**km,**mb3.7**/3,
**mb1 3.8**/3,**mb1mx3.4**/43,**mbtmp3.7**/3,**MS4.2**/2,**Ms1 4.2**/2,
**ms1mx3.5**/70,**Error ellipse: s-maj=59.6km**
**s-min=25.0km az=140.0**,**Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.94** | **49** | Pn | Pn | 22 43 46.1 | -0.8 |
| | 107nm,0.3s,baz=193,slow=3.1,SNR=54 | | | | | | |
| AFI | | | | Sn | Sn | 22 44 04.5 | -7.5 |
| | 62nm,0.3s,baz=237,slow=16,SNR=3.9 | | | | | | |
| **RAR** | **Rarotonga** | **14.17** | **117** | LR | LR | 22 51 12.5 | |
| | comp=Z,455nm,18.6s,baz=242,slow=34 | | | | | | |
| **URZ** | **Urewera** | **24.50** | **198** | P | P | 22 48 34.0 | +0.3 |
| | 5.1nm,0.8s,baz=18,slow=12,SNR=1.3 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.84** | **329** | T | T | 23 31 09.6 | |
| | baz=146,slow=76,SNR=9.1 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.85** | **329** | T | T | 23 31 06.1 | |
| | baz=146,slow=76,SNR=8.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.85** | **329** | T | T | 23 31 06.3 | |
| | baz=146,slow=76,SNR=8.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.78** | **330** | T | T | 23 33 28.4 | |
| | baz=152 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.78** | **330** | T | T | 23 33 31.1 | |
| | baz=152 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.80** | **330** | T | T | 23 33 32.9 | |
| | baz=152 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.00** | **257** | P | P | 22 52 08.3 | -0.9 |
| | 0.2nm,0.4s,baz=93,slow=6.4,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **50.28** | **252** | P | P | 22 52 10.9 | -0.4 |
| | 0.4nm,0.4s,baz=90,slow=8.2,SNR=7.0 | | | | | | |
| **CMIG** | **Matias Romero** | **83.71** | **70** | LR | LR | 23 26 07.6 | |
| | comp=Z,203nm,18.2s,baz=254,slow=31 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.06** | **321** | PKPbc | PKPab | 23 02 55.8 | +0.1 |
| | 1.3nm,0.8s,baz=30,slow=2.4,SNR=3.9 | | | | | | |

*IDC **05** 22:44:12.9±11.0,51°.93N×178°.35E,h98km±109km,*
*mb3.2/7,mb1 3.4/7,mb1mx3.2/50,mbtmp3.6/7,Error*
*ellipse: s-maj=64.0km s-min=21.5km az=176.0*
*NEIC **05** 22:44:15.7±0.4,52°.1N±0°.5×178°.4E±0°.1,h122km±20km,*
*Error ellipse: s-maj=67.1km s-min=2.9km az=189.0*
*AEIC **05** 22:44:17.3±0.7,52°.4N±0°.3×178°.4E±0°.1,h108km±9km,*
*ML3.2/16,Error ellipse: s-maj=42.2km s-min=7.0km*
*az=194.0*
*NEIC **05** 22:44:22.0±1.6,52°.0N±0°.2×179°.2E±0°.2,h139km±18km,*
*mb4.0/22,ML3.2/7(AEIC),Error ellipse: s-maj=35.5km*
*s-min=9.5km az=158.0*

**ISC 05 22:44:14.9**±1.0,**51°9N**±0°.2×**178°27E**±0°.05,**h113**km,**n56**,
σ0§**88**/57,**mb3.6**/8,**Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GASW** | **Gareloi Southw** | **1.79** | **93** | | **Sn** | **22 45 08.6** | **+0.1** |
| **GANO** | **Gareloi North** | **1.82** | **92** | | **Pn** | **22 44 46.8** | **+1.1** |
| **GALAA** | **Gareloi Lava P** | **1.84** | **94** | | **Pn** | **22 44 48.0** | **+2.1** |
| GALAA | | | | | **Sn** | **22 45 10.1** | **+0.3** |
| **TASE** | **Tanaga Southea** | **2.29** | **91** | | **Pn** | **22 44 52.4** | **+0.7** |
| **TAFP** | **Tanaga Falls P** | **2.32** | **89** | | **Pn** | **22 44 52.5** | **+0.5** |
| TAFP | | | | | **Sn** | **22 45 20.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **64.83** | **346** | P | | **P** | | **22 54 40.7** | **-0.4** |
| | comp=Z,4.3nm,1.1s,baz=20,slow=6.3,SNR=3.7 | | | | | | | | |

*JMA **05** 22:46:34.7±0.1,25°.83N×126°.36E,h62km±3km,M3.4*
*IDC **05** 22:46:40.0±3.1,27°.20N×129°.19E,h192km±17km,mb3.1/4, mb1 3.3/4,mb1mx2.7/49,mbtmp3.6/4,Error ellipse: s-maj=92.7km s-min=20.2km az=65.0*
**ISC 05 22:46:34.9**±1.0,**25°.86N**±0°.09×**126°.32E**±0°.07,**h64**km±11km, **n21**,σ0**69**/36,**mb3.6**/4,**Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JKE** | **Kume jima 2** | **0.62** | **42** | P | | **Pn** | **22 46 48.4** | **-0.1** |
| JKE | | | | S | | **Sn** | **22 46 58.0** | **-0.5** |
| **JAGN** | **Aguni-jima** | **1.10** | **49** | P | | **Pn** | **22 46 54.4** | **0.0** |
| JAGN | | | | S | | **Sn** | **22 47 09.1** | **+0.2** |
| **JJT3** | **Tamagusuku3** | **1.35** | **78** | P | | **Pn** | **22 46 57.7** | **+0.1** |
| JJT3 | | | | *e*S | | **Sn** | **22 47 15.5** | **+0.8** |
| **JIKM** | **Ikemajima** | **1.35** | **226** | P | | **Pn** | **22 46 57.9** | **+0.3** |
| JIKM | | | | S | | **Sn** | **22 47 15.0** | **+0.3** |
| **JOGS** | **Gusukube** | **1.38** | **217** | P | | **Pn** | **22 46 58.4** | **+0.4** |
| JOGS | | | | S | | **Sn** | **22 47 16.1** | **+0.7** |
| **JMJ2** | **Miyako jima3** | **1.43** | **219** | P | | **Pn** | **22 46 59.3** | **+0.5** |
| JMJ2 | | | | S | | **Sn** | **22 47 17.2** | **+0.4** |
| **JIRB** | **Irabujima** | **1.46** | **225** | P | | **Pn** | **22 46 59.2** | **0.0** |
| JIRB | | | | S | | **Sn** | **22 47 17.0** | **-0.5** |
| **JNTH** | **Nagotoyohara** | **1.66** | **67** | P | | **Pn** | **22 47 01.5** | **-0.4** |
| JNTH | | | | *e*S | | **Sn** | **22 47 20.9** | **-1.4** |
| **JIH** | **Iheya** | **1.88** | **51** | P | | **Pn** | **22 47 05.4** | **+0.6** |
| JIH | | | | S | | **Sn** | **22 47 27.1** | **-0.4** |
| **JTJ** | **Tarama** | **1.91** | **231** | P | | **Pn** | **22 47 05.7** | **+0.6** |
| JTJ | | | | S | | **Sn** | **22 47 28.3** | **+0.2** |
| **JOW** | **Kunigami** | **2.00** | **61** | P | | **Pn** | **22 47 07.6** | **+1.2** |
| | 19nm,0.3s,baz=200,slow=12,SNR=22 | | | | | | | |
| JOW | | | | S | | **Sn** | **22 47 30.9** | **+0.4** |
| | 40nm,0.3s,baz=143,slow=27,SNR=9.3 | | | | | | | |
| **JOW** | **Kunigami** | **2.00** | **61** | P | | **Pn** | **22 47 07.3** | **+0.8** |
| JOW | | | | S | | **Sn** | **22 47 31.6** | **+1.1** |
| **JISG** | **Ishigakijimahi** | **2.22** | **235** | P | | **Pn** | **22 47 09.4** | **0.0** |
| JISG | | | | S | | **Sn** | **22 47 34.6** | **-1.2** |
| **JYRO** | **Yoronjima** | **2.23** | **58** | P | | **Pn** | **22 47 08.8** | **-0.8** |
| JYRO | | | | *e*S | | **Sn** | **22 47 35.9** | **-0.2** |
| **JIJ** | **Ishigaki jima** | **2.48** | **233** | P | | **Pn** | **22 47 12.9** | **0.0** |
| JIJ | | | | S | | **Sn** | **22 47 40.9** | **-1.1** |
| **JOKE** | **Okinoerabujima** | **2.51** | **53** | P | | **Pn** | **22 47 14.0** | **+0.7** |
| **JKRS** | **Kuro-shima** | **2.65** | **233** | P | | **Pn** | **22 47 15.6** | **+0.4** |
| JKRS | | | | *e*S | | **Sn** | **22 47 46.9** | **+0.7** |
| **MKAR** | **Makanchi Array** | **40.51** | **313** | P | | **P** | **22 54 08.2** | **+0.6** |
| | 0.4nm,0.5s,baz=98,slow=9.2,SNR=7.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.20** | **170** | P | | **P** | **22 54 52.2** | **-1.3** |
| | 0.5nm,0.8s,baz=350,slow=8.3,SNR=2.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.78** | **171** | P | | **P** | **22 55 21.1** | **-0.1** |
| | 0.3nm,0.5s,baz=355,slow=9.2,SNR=5.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **72.33** | **330** | P | | P | 22 57 46.0 | -7.5 |
| | 2.6nm,1.1s,baz=46,slow=6.0,SNR=2.0 | | | | | | | |

*BJI **05** 23:01:18.4±0.0,34°.76N×25°.02E,h5km,mb4.7/50, mB5.1/20,Ms4.8/10,Ms7 4.5/10*
*DDA **05** 23:01:24.0±0.0,34°.64N×25°.83E,h25km,MW4.7*
*MOS **05** 23:01:24.3±1.3,34°.73N×25°.77E,h11km,mb4.7/14,Error ellipse: s-maj=5.3km s-min=3.0km az=88.1*
*HLW **05** 23:01:25.9,35°.19N×25°.96E,h32km±22km,Md4.6*
*NEIC **05** 23:01:26.9±2.3,34°.87N±0°.07×25°.81E±0°.06,h10km±1km, mb4.7/107,ML4.6(THE),Error ellipse: s-maj=12.2km s-min=6.9km az=202.0*
*MED_RC **05** 23:01:26.0±0.9,34°.78N×25°.80E,h21km±4km,MW4.6/9, Moment Tensor Solution.Mantle waves: s9,c10; Duration: 1ŝ1 Moment tensor: Scale 10^16^Nm; Mrr~0.36±.18; Mθθ0.15±.11; Mθϕ0.21±.11; Mrθ0.10±.09; Mϕϕ~0.02±.11; Mϕr~0.96±.28; Best double couple: M0 1.01000×10^16^ NP1:ϕs354.00000°,δ82.00000°,λ~89.00000°. NP2: ϕs169.00000°,δ8.00000°,λ~95.00000°. Principal axes: T 0.9400, Plg37.0000°, Azm83.0000°; N 0.1500, Plg1.0000°, Azm174.0000°; P -1.0900, Plg53.0000°, Azm265.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=30s.*
*IDC **05** 23:01:28.6±2.5,34°.91N×25°.85E,h25km±16km,mb4.4/25, mb1 4.5/39,mb1mx4.4/54,mbtmp4.5/39,ML4.3/12, MS3.9/12,Ms1 3.9/12,ms1mx3.5/90 Error ellipse: s-maj=12.1km s-min=8.7km az=175.0*
*THE **05** 23:01:28.7,34°.91N×25°.88E,h16km±1km,ML4.6/11,Error ellipse: s-maj=2.9km s-min=0.8km az=8.0*
*NIC **05** 23:01:28.3±0.0,34°.73N×26°.19E,h4km±7km,Ml4.9/5*
*GII **05** 23:01:29.8±0.0,34°.83N×26°.25E,h15km,mb4.6/2, MD4.5/2,Mm4.5/3*
*ISK **05** 23:01:29.0,35°.01N×25°.84E,h12km,ML4.6/16*
*ATH **05** 23:01:29.2,34°.98N×25°.83E,h17km±1km,ML4.5/13,Error ellipse: s-maj=2.6km s-min=1.2km az=353.0*
**ISC 05 23:01:28.1**±0.3,**34°.85N**±0°.03×**25°.90E**±0°.02,**h20**km±2km, **n734**,σ1**978**/771,**mb4.7**/128,**MS4.3**/10,**42C-41D,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FRMA** | **Ierapetra Chan** | **0.21** | **319** | P | | **Pb** | **23 01 32.9** | **-0.9** |
| FRMA | | | | S | | **Sb** | **23 01 36.1** | **-1.7** |
| | 211µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.37** | **45** | P | | **Pb** | **23 01 35.9** | **0.0** |
| ZKR | | | | S | | **Sb** | **23 01 41.6** | **+0.5** |
| | 65µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.37** | **45** | P | | **Pb** | **23 01 36.1** | **+0.3** |
| ZKR | | | | S | | **Sb** | **23 01 41.6** | **+0.5** |
| ZKR | | | | AML | AML | | 23 01 44.2 | |
| ZKR | | | | AML | AML | | 23 01 46.1 | |
| | comp=N,95982µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.37** | **45** | PG | | **Pb** | **23 01 36.1** | **+0.3** |
| ZKR | | | | SG | | **Sb** | **23 01 41.3** | **+0.2** |
| **ZKR** | **Zakros** | **0.37** | **45** | ↑P | | **Pb** | **23 01 35.8** | **0.0** |
| ZKR | | | | S | | **Sb** | **23 01 41.6** | **+0.5** |
| ZKR | | | | AMI | | | 23 01 42.9 | |
| | comp=N,154nm,0.4s | | | | | | | |
| ZKR | | | | AMI | | | 23 01 42.9 | |
| | comp=N,154nm,0.4s | | | | | | | |
| **STIA** | **Sitia Lasithi** | **0.38** | **24** | P | | **Pb** | **23 01 35.8** | **-0.2** |
| STIA | | | | S | | **Sb** | **23 01 41.7** | **+0.2** |
| **NPS** | **Neapolis** | **0.47** | **330** | P | | **Pb** | **23 01 36.8** | **-0.9** |
| NPS | | | | S | | **Sb** | **23 01 43.2** | **-1.0** |
| | comp=N,175µm,0.3s | | | | | | | |
| **NPS** | **Neapolis** | **0.47** | **330** | P | | **Pb** | **23 01 36.7** | **-1.0** |
| NPS | | | | S | | **Sb** | **23 01 41.9** | **-2.3** |
| NPS | | | | AML | AML | | 23 01 44.5 | |
| NPS | | | | AML | AML | | 23 01 44.6 | |
| **HRKL** | **Herakleio** | **0.80** | **305** | P | | **Pb** | **23 01 42.2** | **-1.1** |
| HRKL | | | | S | | **Sb** | **23 01 54.2** | **+0.6** |
| | comp=N,89µm,0.6s | | | | | | | |
| **HRKL** | **Herakleio** | **0.80** | **305** | PG | | **Pb** | **23 01 42.5** | **-0.8** |
| HRKL | | | | SG | | **Sb** | **23 01 52.8** | **-0.8** |
| **KSTL** | **Kastelli Herak** | **0.82** | **304** | P | | Pb | 23 01 38.4 | -5.1 |
| KSTL | | | | S | | **Sb** | **23 01 46.8** | **-7.3** |
| **IACM** | **Heraklion** | **0.82** | **304** | P | | **Pb** | **23 01 42.4** | **-1.2** |
| IACM | | | | S | | **Sb** | **23 01 54.5** | **+0.4** |
| **IACM** | **Heraklion** | **0.82** | **304** | P | | **Pb** | **23 01 42.2** | **-1.3** |
| IACM | | | | S | | **Sb** | **23 01 51.9** | **-2.2** |
| **SIVA** | **Sivas** | **0.91** | **281** | P | | **Pb** | **23 01 45.0** | **-0.2** |
| SIVA | | | | S | | **Sn** | **23 01 57.8** | **-0.4** |
| | comp=N,83µm,0.8s | | | | | | | |
| **SIVA** | **Sivas** | **0.91** | **281** | P | | **Pb** | **23 01 44.8** | **-0.3** |
| SIVA | | | | S | | **Sb** | **23 01 57.2** | **+0.3** |
| SIVA | | | | AML | AML | | 23 02 09.0 | |
| SIVA | | | | AML | AML | | 23 02 13.9 | |
| **IDI** | **Anoyia** | **0.94** | **298** | Pn | | **Pb** | **23 01 43.9** | **-1.7** |
| | comp=N,385nm,0.3s,baz=153,slow=10,SNR=682 | | | | | | | |
| IDI | | | | Sn | | **Sb** | **23 01 56.7** | **-1.0** |
| | comp=N,2µm,0.3s,baz=175,slow=21,SNR=36 | | | | | | | |
| IDI | | | | LR | | LR | 23 02 26.5 | |
| | comp=N,6µm,19.7s,baz=118,slow=66 | | | | | | | |
| **IDI** | **Anoyia** | **0.94** | **298** | P | | **Pb** | **23 01 44.6** | **-1.0** |
| IDI | | | | S | | **Sn** | **23 01 58.6** | **-0.3** |
| | comp=N,24µm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **0.94** | **298** | P | | **Pb** | **23 01 45.2** | **-0.5** |
| IDI | | | | S | | **Sb** | **23 01 56.6** | **-1.0** |
| IDI | | | | AML | AML | | 23 02 00.7 | |
| | comp=E,48298µm,0.7s | | | | | | | |
| IDI | | | | AML | AML | | 23 02 02.5 | |
| | comp=N,48654µm,0.4s | | | | | | | |
| **TMBK** | **Timbaki Herakl** | **0.96** | **283** | P | | **Pb** | **23 01 45.3** | **-0.7** |
| TMBK | | | | S | | **Sn** | **23 02 00.2** | **+0.9** |
| | comp=N,21µm,0.6s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **1.26** | **294** | P | | **Pb** | **23 01 51.2** | **+0.2** |
| PRNS | | | | S | | **Sb** | **23 02 09.0** | **+2.2** |
| | comp=N,7µm,0.6s | | | | | | | |
| **GVD** | **Gavdhos** | **1.49** | **270** | P | | **Pb** | **23 01 56.8** | **+1.7** |
| GVD | | | | S | | **Sb** | **23 02 15.3** | **+1.8** |
| GVD | | | | AML | AML | | 23 02 28.8 | |
| | comp=E,27284µm,0.9s | | | | | | | |
| GVD | | | | AML | AML | | 23 02 31.6 | |
| | comp=N,23142µm,0.5s | | | | | | | |
| **GVD** | **Gavdhos** | **1.49** | **270** | PN | | **Pb** | **23 01 55.8** | **+0.7** |
| **VAM** | **Vamos** | **1.50** | **292** | P | | **Pb** | **23 01 54.8** | **-0.4** |
| VAM | | | | S | | **Sb** | **23 02 13.8** | **0.0** |
| | comp=N,29µm,0.7s | | | | | | | |
| **VAM** | **Vamos** | **1.50** | **292** | P | | **Pb** | **23 01 54.7** | **-0.4** |
| VAM | | | | AML | AML | | 23 02 25.0 | |
| | comp=E,21567µm,0.6s | | | | | | | |
| VAM | | | | AML | AML | | 23 02 25.4 | |
| | comp=N,32259µm,0.9s | | | | | | | |
| **SANT** | **Santorini** | **1.56** | **347** | P | | **Pb** | **23 01 56.2** | **+0.1** |
| SANT | | | | S | | **Sn** | **23 02 14.7** | **+0.5** |
| SANT | | | | AML | AML | | 23 02 19.0 | |
| | comp=E,57472µm,0.4s | | | | | | | |
| SANT | | | | AML | AML | | 23 02 20.1 | |
| | comp=N,21987µm,0.3s | | | | | | | |
| **SANT** | **Santorini** | **1.56** | **347** | PN | | **Pn** | **23 01 55.2** | **+0.6** |
| **SANT** | **Santorini** | **1.56** | **347** | | | **Pn** | **23 01 54.1** | **-0.6** |
| **SANT** | **Santorini** | **1.56** | **347** | P | | **Pb** | **23 01 56.3** | **+0.1** |
| **SFIR** | **Foira Santorin** | **1.61** | **346** | P | | **Pn** | **23 01 55.8** | **+0.4** |
| **THT2** | **Imerovigli** | **1.63** | **346** | P | | **Pn** | **23 01 56.2** | **+0.6** |
| THT2 | | | | S | | **Sb** | **23 02 17.4** | **-0.1** |
| | comp=N,23µm,0.7s | | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.66** | **346** | P | | **Pn** | **23 01 56.6** | **+0.5** |
| CMBO | | | | S | | **Sb** | **23 02 18.7** | **+0.2** |
| | comp=N,31µm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.69** | **292** | P | | **Pb** | **23 01 59.4** | **+1.0** |
| IMMV | | | | AML | AML | | 23 02 30.1 | |
| | comp=N,26577µm,0.6s | | | | | | | |
| IMMV | | | | AML | AML | | 23 02 30.1 | |
| | comp=E,41367µm,0.9s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.69** | **292** | PN | | **Pb** | **23 01 57.8** | **-0.6** |
| **KNDR** | **Palaiochora Ch** | **1.86** | **282** | P | | **Pb** | **23 02 00.7** | **-0.6** |
| **KNDR** | **Palaiochora Ch** | **1.86** | **282** | PN | | **Pb** | **23 02 01.3** | **0.0** |
| **NISR** | **Nisiros** | **2.02** | **29** | P | | **Pn** | **23 02 02.0** | **+1.1** |
| NISR | | | | AML | AML | | 23 02 41.5 | |
| | comp=E,15682µm,0.5s | | | | | | | |
| NISR | | | | AML | AML | | 23 02 43.2 | |
| | comp=N,18968µm,1.1s | | | | | | | |
| **KOSK** | **Kos Island** | **2.09** | **25** | P | | **Pb** | **23 02 03.6** | **-1.6** |
| **KOSK** | **Kos Island** | **2.09** | **25** | PN | | **Pn** | **23 02 03.1** | **+1.2** |
| **MHLO** | **Agia Marina, M** | **2.20** | **327** | P | | **Pn** | **23 02 04.4** | **+1.0** |
| **MHLO** | **Agia Marina, M** | **2.20** | **327** | P | | **Pn** | **23 02 05.0** | **+1.5** |
| MHLO | | | | AML | AML | | 23 02 42.2 | |
| | comp=N,6429µm,11.7s | | | | | | | |
| MHLO | | | | AML | AML | | 23 02 44.2 | |
| | comp=E,38740µm,0.4s | | | | | | | |
| **ARG** | **Arkhangelos** | **2.27** | **53** | P | | **Pb** | **23 02 08.0** | **-0.3** |
| ARG | | | | AML | AML | | 23 02 52.2 | |
| | comp=N,6111µm,0.7s | | | | | | | |
| ARG | | | | AML | AML | | 23 02 52.3 | |
| | comp=E,8813µm,1.0s | | | | | | | |
| **ARG** | **Arkhangelos** | **2.27** | **53** | PN | | **Pb** | **23 02 06.8** | **-1.5** |
| **ARG** | **Arkhangelos** | **2.27** | **53** | S | | **Sn** | **23 02 33.7** | **+2.0** |
| **ANKY** | **Antikythira Is** | **2.35** | **296** | P | | **Pb** | **23 02 08.9** | **-0.9** |
| ANKY | | | | AML | AML | | 23 02 53.8 | |
| | comp=E,10684µm,0.6s | | | | | | | |
| ANKY | | | | AML | AML | | 23 02 58.0 | |
| | comp=N,5686µm,1.0s | | | | | | | |
| **BODT** | **Bodrum** | **2.48** | **27** | P | | **Pn** | **23 02 09.1** | **+1.8** |
| **BODT** | **Bodrum** | **2.48** | **27** | P | | **Pn** | **23 02 09.2** | **+1.9** |
| **YKAV** | **Yalikavak-Bodr** | **2.53** | **26** | PN | | **Pn** | **23 02 09.7** | **+1.8** |
| **MRSB** | **Marmaris-Mugla** | **2.63** | **44** | PN | | **Pn** | **23 02 11.8** | **+2.4** |
| **TURN** | **Turunc** | **2.70** | **44** | P | | **Pn** | **23 02 12.4** | **+2.1** |
| **KTHA** | **Kythira Island** | **2.71** | **302** | P | | **Pn** | **23 02 11.2** | **+0.8** |
| **KTHA** | **Kythira Island** | **2.71** | **302** | P | | **Pn** | **23 02 11.9** | **+1.5** |
| KTHA | | | | AML | AML | | 23 02 55.4 | |
| | comp=E,6778µm,0.6s | | | | | | | |
| KTHA | | | | AML | AML | | 23 03 00.8 | |
| | comp=N,4636µm,0.5s | | | | | | | |
| **KTHR** | **Kythira** | **2.75** | **302** | P | | **Pn** | **23 02 11.9** | **+0.9** |
| **DDIM** | **Aydin, Didim** | **2.81** | **22** | P | | **Pn** | **23 02 13.3** | **+1.4** |
| **MLSB** | **Milas** | **2.87** | **31** | PN | | **Pn** | **23 02 14.6** | **+1.9** |
| **MLSB** | **Milas** | **2.87** | **31** | P | | **Pn** | **23 02 15.0** | **+2.3** |
| **SMG** | **Samos** | **2.95** | **15** | P | | **Pn** | **23 02 14.5** | **+0.7** |
| **DALY** | **Dalyan (Mula)** | **2.97** | **48** | PN | | **Pn** | **23 02 16.5** | **+2.5** |
| **YER** | **Yerkesik** | **2.98** | **40** | P | | **Pn** | **23 02 16.8** | **+2.5** |
| **YER** | **Yerkesik** | **2.98** | **40** | PN | | **Pn** | **23 02 16.5** | **+2.2** |
| **YER** | **Yerkesik** | **2.98** | **40** | P | | **Pn** | **23 02 16.8** | **+2.5** |
| YER | | | | S | | **Sn** | **23 02 50.1** | **+0.6** |
| **GCAM** | **G?zelcaml?** | **3.04** | **20** | P | | **Pb** | **23 02 19.2** | **-2.3** |
| **VLI** | **Veliai** | **3.04** | **309** | P | | **Pn** | **23 02 15.5** | **+0.5** |
| **VLI** | **Veliai** | **3.04** | **309** | P | | **Pn** | **23 02 15.7** | **+0.6** |
| **MULA** | **Mugla, Merkez-** | **3.10** | **39** | P | | **Pn** | **23 02 18.4** | **+2.5** |
| **FETY** | **Fethiye** | **3.14** | **55** | P | | **Pn** | **23 02 17.8** | **+1.4** |
| **FETY** | **Fethiye** | **3.14** | **55** | PN | | **Pn** | **23 02 17.9** | **+1.5** |
| **KSL** | **Kastellorizon** | **3.27** | **66** | P | | **Pn** | **23 02 18.5** | **+0.4** |
| KSL | | | | AMI | | | 23 03 09.4 | |
| | comp=N,1.6nm,0.8s | | | | | | | |
| **AKAS** | **Kas** | **3.32** | **64** | | | **Pn** | **23 02 19.9** | **+1.0** |
| **AKAS** | **Kas** | **3.32** | **64** | P | | **Pn** | **23 02 19.2** | **+0.3** |
| **SLUM** | **Salum** | **3.40** | **190** | P | | **Pn** | **23 02 21.2** | **+1.3** |
| | baz=190 | | | | | | | |
| SLUM | | | | S | | **Sn** | **23 03 01.7** | **+2.0** |
| | baz=190 | | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **3.41** | **8** | P | | **Pn** | **23 02 21.4** | **+1.3** |
| **URLA** | **Izmir** | **3.54** | **9** | P | | **Pn** | **23 02 23.3** | **+1.4** |
| **TAVA** | **DENIZLI_Tavas** | **3.57** | **42** | P | | **Pn** | **23 02 24.4** | **+2.1** |
| **CAEL** | **Denizli, Camel** | **3.58** | **50** | P | | **Pn** | **23 02 25.1** | **+2.5** |
| **MATC** | **Matruh** | **3.67** | **162** | P | | **Pn** | **23 02 25.6** | **+2.0** |
| | baz=164 | | | | | | | |
| **ELL** | **Elmali** | **3.77** | **59** | P | | **Pn** | **23 02 26.4** | **+1.3** |
| **ELL** | **Elmali** | **3.77** | **59** | P | | **Pn** | **23 02 26.9** | **+1.9** |
| ELL | | | | S | | **Sn** | **23 03 09.8** | **+0.9** |
| **ELL** | **Elmali** | **3.77** | **59** | | | **Pn** | **23 02 26.4** | **+1.3** |
| **ELL** | **Elmali** | **3.77** | **59** | P | | **Pn** | **23 02 27.5** | **+2.4** |
| **GOLH** | **Golhisar** | **3.80** | **50** | P | | **Pn** | **23 02 28.0** | **+2.4** |
| **AKUM** | **Antalya-Kumluc** | **3.91** | **67** | P | | **Pn** | **23 02 27.4** | **+0.6** |
| **VILL** | **Villia** | **3.91** | **328** | P | | **Pn** | **23 02 28.5** | **+1.5** |
| **LTK** | **Loutraki** | **3.95** | **324** | P | | **Pn** | **23 02 28.8** | **+1.3** |
| **ITM** | **Ithomi** | **3.97** | **307** | P | | **Pn** | **23 02 28.7** | **+0.9** |
| **ITM** | **Ithomi** | **3.97** | **307** | PN | | **Pn** | **23 02 28.9** | **+1.1** |
| **ITM** | **Ithomi** | **3.97** | **307** | | | **Pn** | **23 02 28.1** | **+0.3** |
| **KORT** | **Korkueli** | **4.20** | **58** | P | | **Pn** | **23 02 33.7** | **+2.7** |
| **ZEDA** | **zmir-Bergama** | **4.21** | **13** | P | | **Pn** | **23 02 32.6** | **+1.5** |
| **KULA** | **Kula-Manisa** | **4.27** | **30** | PN | | **Pn** | **23 02 34.3** | **+2.3** |
| **KULA** | **Kula-Manisa** | **4.27** | **30** | P | | **Pn** | **23 02 34.4** | **+2.4** |
| **DKL** | **Dikili** | **4.29** | **11** | P | | **Pn** | **23 02 33.0** | **+0.9** |
| **BRDR** | **BURDUR-Merkez** | **4.40** | **49** | P | | **Pn** | **23 02 33.5** | **-0.3** |
| **LKR** | **Lokris** | **4.45** | **329** | P | | **Pn** | **23 02 35.8** | **+1.5** |
| **AYVA** | **Ayvalik** | **4.49** | **8** | P | | **Pn** | **23 02 36.8** | **+1.8** |
| **BUCA** | **Burdur, Bucak-** | **4.51** | **55** | P | | **Pn** | **23 02 37.7** | **+2.5** |
| **PASA** | **Karahalli, USA** | **4.53** | **39** | P | | **Pn** | **23 02 35.6** | **+0.1** |
| **BASM** | **Basmaki-Afyon** | **4.53** | **46** | P | | **Pn** | **23 02 36.3** | **+0.7** |
| **USAK** | **Uak-Merkez** | **4.59** | **32** | P | | **Pn** | **23 02 38.7** | **+2.3** |
| **KOCA** | **Canakkale, Ayv** | **4.64** | **2** | P | | **Pn** | **23 02 36.2** | **-0.8** |
| **OSC1** | **CSNet OBS 1** | **4.66** | **105** | P | | **Pn** | **23 02 36.7** | **-0.4** |
| OSC1 | | | | S | | **Sn** | **23 03 29.1** | **-1.6** |
| **BUHA** | **Balikesir, Bur** | **4.73** | **11** | P | | **Pn** | **23 02 38.4** | **+0.1** |
| **STEP** | **BALIKESIR_Sava** | **4.74** | **17** | P | | **Pn** | **23 02 39.3** | **+0.9** |
| **ISP** | **Isparta** | **4.76** | **50** | ‖*e*P | | **Pn** | **23 02 41.8** | **+3.0** |
| ISP | | | | pmax | pmax | | | |
| | comp=Z,24nm,0.4s | | | | | | | |
| **ISP** | **Isparta** | **4.76** | **50** | | | **Pn** | **23 02 41.5** | **+2.7** |
| **KZIL** | **AFYON_Kizioren** | **4.81** | **44** | P | | **Pn** | **23 02 41.1** | **+1.6** |
| **SIMA** | **Simav-Kutahya** | **4.89** | **29** | P | | **Pn** | **23 02 42.9** | **+2.4** |
| **EZN** | **Ezine** | **4.97** | **4** | P | | **Pn** | **23 02 41.2** | **-0.4** |
| **BAGO** | **Egridir - ISPA** | **5.03** | **50** | P | | **Pn** | **23 02 44.1** | **+1.6** |
| **AGG** | **Agios Georgios** | **5.05** | **327** | P | | **Pn** | **23 02 43.6** | **+1.0** |
| **AGG** | **Agios Georgios** | **5.05** | **327** | Pn | | **Pn** | **23 02 43.6** | **+1.0** |
| **AGG** | **Agios Georgios** | **5.05** | **327** | P | | **Pn** | **23 02 43.8** | **+1.1** |
| **BALY** | **Balya** | **5.07** | **15** | P | | **Pn** | **23 02 43.9** | **+1.0** |
| **SHUT** | **Suhut-Afyon** | **5.25** | **44** | P | | **Pn** | **23 02 47.1** | **+1.6** |
| **AFYO** | **Afyonkarahisar** | **5.28** | **41** | P | | **Pn** | **23 02 47.1** | **+1.3** |
| **AKMS** | **Akamas** | **5.29** | **86** | P | | **Pn** | **23 02 45.5** | **-0.4** |
| AKMS | | | | S | | **Sn** | **23 03 46.3** | **0.0** |
| AKMS | | | | AMI | | | 23 03 56.8 | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| AKMS | | | | AMI | | | 23 03 56.8 | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| AKMS | | | | AMI | | | 23 04 00.7 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| AKMS | | | | AMI | | | 23 04 00.7 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **GADA** | **Gvkgeada** | **5.33** | **360** | PN | | **Pn** | **23 02 49.1** | **+2.7** |
| **TVSB** | **Tavsanli** | **5.40** | **31** | P | | **Pn** | **23 02 49.7** | **+2.3** |
| **SEDI** | **Konya, Seydise** | **5.40** | **60** | P | | **Pn** | **23 02 49.3** | **+1.8** |
| SEDI | | | | S | | **Sn** | **23 03 51.2** | **+2.0** |
| SEDI | | | | *i* AML | AML | | 23 03 54.0 | |
| | comp=Z,154nm,1.0s | | | | | | | |
| SEDI | | | | *i* AML | AML | | 23 03 55.0 | |
| | comp=Z,192nm,1.1s | | | | | | | |
| **GAZI** | **Gazipasa** | **5.41** | **73** | P | | **Pn** | **23 02 45.0** | **-2.6** |
| GAZI | | | | S | | **Sn** | **23 03 41.3** | **-7.9** |
| **NATA** | **Nata** | **5.49** | **89** | P | | **Pn** | **23 02 48.3** | **-0.3** |
| NATA | | | | AMI | | | 23 03 59.9 | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| NATA | | | | AMI | | | 23 04 01.8 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **ALFC** | **Alefka** | **5.51** | **85** | P | | **Pn** | **23 02 48.6** | **-0.3** |
| ALFC | | | | AMI | | | 23 03 51.9 | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| ALFC | | | | AMI | | | 23 04 01.4 | |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **GELI** | **Tayfur-Gelibol** | **5.55** | **5** | PN | | **Pn** | **23 02 50.8** | **+1.3** |
| **SWA2** | | **5.61** | **184** | P | | **Pn** | **23 02 51.3** | **+1.1** |
| | baz=185 | | | | | | | |
| SWA2 | | | | S | | **Sn** | **23 03 53.9** | **-0.2** |
| | baz=185 | | | | | | | |
| **ANDZ** | **Kutahya, Merke** | **5.64** | **33** | P | | **Pn** | **23 02 53.2** | **+2.4** |
| **LEF** | **Lefka** | **5.74** | **85** | ↑P | | **Pn** | **23 02 52.2** | **+0.1** |
| **SZAC** | **Souni** | **5.74** | **89** | P | | **Pn** | **23 02 52.2** | **0.0** |
| **ULDT** | **Uludag** | **5.87** | **25** | P | | **Pn** | **23 02 56.8** | **+2.7** |
| **LIT** | **Litokhoron** | **5.90** | **334** | P | | **Pn** | **23 02 54.4** | **+0.1** |
| **LIT** | **Litokhoron** | **5.90** | **334** | Pn | | **Pn** | **23 02 54.4** | **+0.1** |
| **ERMK** | **Ermenek** | **5.97** | **71** | P | | **Pn** | **23 02 56.5** | **+0.9** |
| ERMK | | | | S | | **Sn** | **23 03 56.6** | **-6.8** |
| ERMK | | | | *i* AML | AML | | 23 04 14.0 | |
| | comp=Z,204nm,0.8s | | | | | | | |
| ERMK | | | | *i* AML | AML | | 23 04 26.0 | |
| | comp=Z,294nm,0.7s | | | | | | | |
| **KMER** | **Konya-Meram** | **5.98** | **59** | P | | **Pn** | **23 02 58.6** | **+3.2** |
| **IGD** | **Bursa** | **6.00** | **25** | P | | **Pn** | **23 02 57.5** | **+1.9** |
| **ALN** | **Alexandroupoli** | **6.04** | **1** | P | | **Pn** | **23 02 57.4** | **+1.3** |
| **ALN** | **Alexandroupoli** | **6.04** | **1** | | | **Pn** | **23 02 57.4** | **+1.3** |
| **ASGA** | **Asgata** | **6.04** | **89** | P | | **Pn** | **23 02 55.6** | **-0.7** |
| **CSS** | **Mathiatis** | **6.11** | **87** | P | | **Pn** | **23 02 56.6** | **-0.6** |
| **CSS** | **Mathiatis** | **6.11** | **87** | | | **Pn** | **23 02 56.8** | **-0.4** |
| **KKBE** | **Karaman, Kazim** | **6.17** | **65** | P | | **Pn** | **23 02 59.2** | **+1.0** |
| KKBE | | | | *i* AML | AML | | 23 04 02.0 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| KKBE | | | | S | | **Sn** | **23 04 05.9** | **-2.2** |
| KKBE | | | | *i* AML | AML | | 23 04 39.0 | |
| | comp=Z,96nm,1.0s | | | | | | | |
| **LADK** | **Ladik-KONYA** | **6.18** | **55** | P | | **Pn** | **23 02 59.2** | **+0.9** |
| **KDHN** | **Kadinhani** | **6.19** | **52** | P | | **Pn** | **23 02 57.0** | **-1.4** |
| **KIZT** | **Kizilcal** | **6.25** | **48** | P | | **Pn** | **23 02 59.2** | **-0.1** |
| **MVOU** | **Mavrovouni** | **6.35** | **86** | P | | **Pn** | **23 03 00.4** | **-0.1** |
| **HMYD** | **Mayadein** | **6.53** | **139** | P | | **Pn** | **23 03 03.5** | **+0.5** |
| | baz=141 | | | | | | | |
| **HNAT** | **Natroun** | **6.56** | **141** | P | | **Pn** | **23 03 04.4** | **+1.0** |
| | baz=143 | | | | | | | |
| **KDZ** | **Kurdzhali** | **6.80** | **357** | *i* P | | **Pn** | **23 03 11.0** | **+4.4** |
| **RYAN** | **Fayoum** | **6.85** | **146** | P | | **Pn** | **23 03 08.2** | **+0.9** |
| | baz=147 | | | | | | | |
| **RZN** | **Rozhen** | **6.89** | **353** | *i* P | | Pn | 23 03 12.8 | +4.8 |
| **FNA** | **Florina** | **6.92** | **330** | P | | **Pn** | **23 03 08.7** | **+0.4** |
| **FNA** | **Florina** | **6.92** | **330** | | | **Pn** | **23 03 08.7** | **+0.4** |
| **MMB** | **Musomiste** | **6.94** | **346** | *i* P | | **Pn** | **23 03 11.0** | **+2.4** |
| **VAY** | **Valandovo** | **6.97** | **339** | *i* Pg | | **Pn** | **23 03 13.4** | **+4.4** |
| **MDUB** | **Mudurnu** | **7.00** | **35** | Pn | | **Pn** | **23 03 11.4** | **+1.8** |
| **KOT** | **Kottamia** | **7.02** | **133** | P | | **Pn** | **23 03 09.9** | **+0.2** |
| | baz=135 | | | | | | | |
|

EIL Sn **Sn** **23 05 19.3 -4.2**
**BOVS Bovan 9.35 341** ⇑P **Pn** **23 03 43.7 +2.1**
**HBST Basata 9.37 124** P **Pn** **23 03 42.0 +0.1**
baz=126
**ICOR Ion Corvin 9.37 8** ⇓P **Pn** **23 03 44.5 +2.7**
**NUB Nuweibaa 9.43 126** P **Pn** **23 03 42.8 0.0**
baz=127
**GAZ Gaziantep 9.45 73** Pn **Pn** **23 03 43.6 +0.5**
**HCY Herceg Novi 9.54 325** *e*Pn **Pn** **23 03 41.1 -3.1**
**ASF Jabal al Asfar 9.56 103** Pn **Pn** **23 03 44.1 -0.5**
comp=Z,3.2nm,0.3s,baz=300,slow=6.9,SNR=30
**RAFF Raffo Rosso 9.64 288** **Pn** **23 03 44.8 -0.8**
**VAE Valguarnera 9.65 289** Pn **Pn** **23 03 46.8 +1.0**
comp=Z,7.4nm,0.3s,baz=275,slow=1.7,SNR=23
VAE LR LR 23 07 50.3
comp=Z,629nm,20.3s,baz=110,slow=40
**TIRR Tirgusor 9.79 11** ⇓P **Pn** **23 03 47.9 +0.4**
**TIRR Tirgusor 9.79 11** P **Pn** **23 03 48.4 +0.8**
**TIRR Tirgusor 9.79 11** Pn **Pn** **23 03 48.4 +0.8**
**TREB Trebinje 9.81 325** *e*Pn **Pn** **23 03 44.8 -3.2**
**TLBR Topalu 9.82 9** ⇑P **Pn** **23 03 51.6 +3.6**
**BRY Bratogost 9.87 327** *e*Pn **Pn** **23 03 45.3 -3.6**
**HHRG Al Ghardaqah 10.05 137** P **Pn** **23 03 52.7 +1.3**
baz=139
**RUDO Rudo 10.11 332** *e*Pn **Pn** **23 03 48.2 -3.8**
**GTR Jabal at Tayr 10.14 155** P **Pn** **23 03 53.1 +0.5**
baz=156
**TPGR Topolog 10.18 10** ⇑P **Pn** **23 03 57.5 +4.5**
**STON Ston 10.24 324** *e*Pn **Pn** **23 03 49.4 -4.4**
**STON Ston 10.24 324** *e*Pn **Pn** **23 03 49.2 -4.6**
STON Sn Sn 23 05 35.5 -12
**ISR Istrita 10.27 3** ⇑P **Pn** **23 03 57.5 +3.3**
**ISR Istrita 10.27 3** ⇑P **Pn** **23 03 57.5 +3.3**
**DIVS Divibare 10.30 335** *e*Pn **Pn** **23 03 57.3 +2.6**
**DIVS Divibare 10.30 335** Pn **Pn** **23 03 54.9 +0.2**
**BBLS Lazići 10.30 333** *e*Pn **Pn** **23 03 52.7 -2.1**
**HERR Herculane 10.37 346** ⇓P **Pn** **23 03 57.1 +1.6**
**MTUR Matau 10.38 357** ⇓P **Pn** **23 03 59.8 +4.0**
**MTUR Matau 10.38 357** ⇓P **Pn** **23 03 59.8 +4.0**
**MDVR Moldovita 10.42 343** ⇑P **Pn** **23 03 59.0 +2.6**
**CFR Carcaliu 10.45 9** ⇓P **Pn** **23 03 58.3 +1.6**
**CFR Carcaliu 10.45 9** ⇓P **Pn** **23 03 58.3 +1.6**
**SGRT San Giovanni R 10.54 314** Pn **Pn** **23 03 55.2 -2.8**
**ARR Arges 10.55 355** ⇑P **Pn** **23 04 01.5 +3.4**
**LSTV Lastovo 10.57 321** *e*Pn **Pn** **23 03 53.9 -4.4**
**VOIR 10.59 357** ⇑P **Pn** **23 04 02.1 +3.4**
**VOIR 10.59 357** ⇑P **Pn** **23 04 02.1 +3.4**
**CLTB Caltabellotta 10.60 289** Pn **Pn** **23 03 58.2 -0.7**
**MLR Muntele Rosu 10.62 0** ⇑P **Pn** **23 04 02.4 +3.2**
**MLR Muntele Rosu 10.62 0** Pn **Pn** **23 04 01.1 +2.0**
comp=Z,0.4nm,0.3s,baz=311,slow=20,SNR=2.7
**MLR Muntele Rosu 10.62 0** ⇑P **Pn** **23 04 02.4 +3.2**
**MLR Muntele Rosu 10.62 0** Pn **Pn** **23 04 00.8 +1.6**
**GISR Galati 10.70 8** ⇓P **Pn** **23 04 04.8 +4.7**
**LOT Lotru 10.71 352** ⇓P **Pn** **23 04 04.0 +3.7**
**GZR Gura Zlata 10.79 348** ⇑P **Pn** **23 04 03.8 +2.3**
**GZR Gura Zlata 10.79 348** ⇑P **Pn** **23 04 03.8 +2.3**
**PAOL Paolisi 10.86 308** **Pn** **23 04 02.7 +0.3**
**MAKA Makarska 10.88 323** *e*Pn Pn 23 03 57.2 -5.4
**COVR Voineasa-Covas 10.98 1** ⇓P **Pn** **23 04 07.9 +3.9**
**RICI Ricice 10.98 324** *e*Pn **Pn** **23 03 59.7 -4.3**
**PLOR Plostina 11.00 3** ⇑P **Pn** **23 04 07.9 +3.7**
**PLOR Plostina 11.00 3** ⇑P **Pn** **23 04 07.9 +3.7**
**VRI Vrincioaia 11.02 3** ⇓P **Pn** **23 04 08.4 +3.9**
**VRI Vrincioaia 11.02 3** ⇓P **Pn** **23 04 08.4 +3.9**
**HVAR Hvar 11.09 321** *e*Pn **Pn** **23 04 00.8 -4.6**
HVAR Sn Sn 23 05 54.6 -14
**DOPR Dopca 11.11 358** ⇓P **Pn** **23 04 09.3 +3.6**
**BZS Buzias 11.24 344** ⇓P **Pn** **23 04 09.0 +1.6**
**BZS Buzias 11.24 344** ⇓P **Pn** **23 04 09.0 +1.6**
**FRGS Fruska Gora 11.30 337** ⇑P **Pn** **23 04 10.2 +1.9**
**FRGS Fruska Gora 11.30 337** *e*Pn Pn 23 04 01.1 -7.2
**KIJV Kijevo 11.71 324** *e*Pn **Pn** **23 04 09.6 -4.4**
KIJV Sn Sn 23 06 11.0 -13
**MGRS Mrkonjic Grad 11.71 327** *e*Pn **Pn** **23 04 09.8 -4.2**
**ZIRJ Zirje 11.84 321** *e*Pn **Pn** **23 04 11.6 -4.1**
**SIRR Siria 11.85 346** ⇑P **Pn** **23 04 17.1 +1.3**
**SIM Simferopol' 11.88 30** P Pn 23 04 21.1 +4.8
SIM pmax pmax
comp=Z,63nm,0.3s
**BLY Banja Luka 11.93 329** *e*Pn Pn 23 04 12.2 -4.8
**MORI Morici 11.96 322** *e*Pn **Pn** **23 04 13.0 -4.3**
MORI Sn Sn 23 06 16.9 -13
**DRGR 12.17 350** ⇑P **Pn** **23 04 22.8 +2.6**
**DRGR 12.17 350** ⇑P **Pn** **23 04 22.8 +2.6**
**MILM Milestii Mici 12.25 9** *e*P **Pn** **23 04 24.0 +2.7**
comp=Z,20nm,0.5s
**MILM Milestii Mici 12.25 9** *e*PP **P** **23 04 30.0 -3.5**
MILM *e*S **Sn** **23 06 39.0 +1.9**
**MILM Milestii Mici 12.25 9** ⇑P **Pn** **23 04 24.3 +3.0**
**MILM Milestii Mici 12.25 9** *e*P **Pn** **23 04 24.0 +2.7**
MILM *e*S **Sn** **23 06 39.0 +1.9**
MILM pmax pmax
comp=Z,20nm,0.5s
**MRAK Mrakovica 12.27 329** *e*Pn **Pn** **23 04 18.1 -3.5**
**MARD Mardin 12.29 74** Pn **Pn** **23 04 21.9 0.0**
**AQU L'Aquila 12.31 311** P **Pn** **23 04 21.2 -0.9**
**AQU L'Aquila 12.31 311** Pn **Pn** **23 04 21.2 -0.9**
**DUGI Dugi Otok 12.38 321** *e*Pn **Pn** **23 04 19.2 -3.9**
DUGI Sn Sn 23 06 26.7 -14
**UDBI Udbina 12.41 324** *e*Pn **Pn** **23 04 20.0 -3.5**
**MORH Mrgy, Hungar 12.61 336** *e*Pn **Pn** **23 04 24.3 -1.9**
**PLIT Plitvice 12.74 325** *e*Pn **Pn** **23 04 24.3 -3.7**
**NRCA Norcia 12.75 312** **Pn** **23 04 26.6 -1.6**
**BURAR Bucovina Array 12.76 358** ⇓P **Pn** **23 04 32.5 +4.2**
**BURAR Bucovina Array 12.76 358** ⇓P **Pn** **23 04 32.5 +4.2**
**BURAR Bucovina Array 12.76 358** Pn **Pn** **23 04 29.2 +0.9**
**BUR08 Bucovina Ar. S 12.79 358** Pn **Pn** **23 04 30.9 +2.1**
**NVLJ Novalja 12.88 322** *e*Pn **Pn** **23 04 25.4 -4.4**
**BMR Baia Mare 12.94 353** ⇓P **P** **23 04 38.9 -2.3**
**BMR Baia Mare 12.94 353** ⇓P **P** **23 04 38.9 -2.3**
**MURB Monte Urbino 13.35 313** Pn **Pn** **23 04 35.5 -0.8**
**SORM Soroca 13.39 7** ⇑P **Pn** **23 04 41.0 +4.1**
**SORM Soroca 13.39 7** ⇑P **Pn** **23 04 41.0 +4.1**
**GURO Guroymak-BITLI 13.46 69** **Pn** **23 04 38.5 +0.5**
**TRPA Tarpa 13.50 350** ⇑P **Pn** **23 04 40.4 +2.1**
**TRPA Tarpa 13.50 350** PN **P** **23 04 47.0 -0.4**
**CRES Cresnjev 13.53 327** *e*Pn Pn 23 04 38.9 -4.9
**KEST Kesra 13.55 278** Pn **Pn** **23 04 40.1 +0.8**
comp=Z,0.3nm,0.3s,baz=68,slow=14,SNR=7.5
KEST LR LR 23 10 49.3
comp=Z,550nm,20.9s,baz=0.5,slow=42
**KEST Kesra 13.55 278** P **Pn** **23 04 38.9 -0.3**
KEST P **Pn** **23 04 38.9 -0.3**
**KEST Kesra 13.55 278** **Pn** **23 04 39.2 0.0**
**SMRN Sveta Marina 13.57 322** *e*Pn Pn 23 04 34.6 -4.7
**RIY Rijeka 13.61 324** *e*Pn **Pn** **23 04 36.3 -3.6**
**SIRT Sirnak 13.62 74** **Pn** **23 04 40.7 +0.6**
**BRJN Brijuni 13.69 321** *e*Pn Pn 23 04 35.8 -5.1
BRJN Sn Sn 23 06 59.8 -12
**SOC Sochi 13.79 47** *e*P **Pn** **23 04 42.3 -0.1**
SOC *e* 23 07 18.0
SOC MLR MLR
comp=Z,190nm,15.0s
**PSZ Piszkesteto 13.80 343** ⇑P **Pn** **23 04 44.0 +1.4**
**PSZ Piszkesteto 13.80 343** ⇑P **Pn** **23 04 44.0 +1.4**
**PSZ Piszkesteto 13.80 343** Pn **Pn** **23 04 41.8 -0.7**
**PSZ Piszkesteto 13.80 343** PN **Pn** **23 04 46.7 +4.1**
**MPLH Magyarpolny 13.82 335** PN **Pn** **23 04 44.3 +1.7**
**CEY Cerknica 13.94 325** *e*Pn **Pn** **23 04 40.3 -4.1**
**VSL Villasalto 13.96 294** Pn Pn 23 04 39.8 -5.0
**SKDS Skadanscina 14.00 323** *e*Pn Pn 23 04 39.8 -5.5
**UZH Uzhgorod 14.03 350** *e*P **P** **23 04 49.8 -3.4**
**CASP Castiglione de 14.13 309** Pn **Pn** **23 04 46.3 -0.8**
**GEVA Gevas 14.21 71** Pn **Pn** **23 04 49.4 +1.1**
**OSSC Osservatorio P 14.27 312** **Pn** **23 04 48.0 -1.0**
**SOKA Soboth 14.38 328** *e*Pn **Pn** **23 04 47.6 -2.8**
comp=Z,14nm,1.3s
**CRVS Cervenica-Dubn 14.42 348** *e*P **P** **23 04 57.5 -0.1**
**OBKA Obir 14.46 327** *e*Pn **Pn** **23 04 51.4 -0.2**
comp=Z,8.0nm,1.1s
**SOP Sopron 14.60 334** PN **P** **23 04 58.1 -1.5**
**ARSA Arzberg 14.63 331** *e*Pn **Pn** **23 04 55.0 +1.1**
comp=Z,5.5nm,0.8s
**KARS Kars 14.76 62** P **Pn** **23 04 57.6 +1.9**
**KARS Kars 14.76 62** **Pn** **23 04 57.6 +1.9**
**CHVG Ch'k'valeri 14.85 53** ⇑P **P** **23 05 00.2 -2.3**
**CHVG Ch'k'valeri 14.85 53** ⇑P **P** **23 05 00.2 -2.3**
**ZCCA Zocca 14.89 314** **Pn** **23 04 56.9 -0.4**
**MODS Modra-Piesok 14.95 337** *e*P **P** **23 05 05.9 +2.3**
**SMOL Smolenice 15.03 338** *e*P **P** **23 05 05.0 +0.6**

**CONA Conrad Observa 15.06 333** *e*Pn **Pn** **23 05 02.0 +2.3**
comp=Z,9.0nm,1.1s
**TEOL Teolo 15.10 318** P **P** **23 05 03.4 -1.8**
TEOL IAmb IAmb 23 05 20.2
comp=Z,21nm,0.6s
**NIE Niedzica 15.13 346** *e*P **P** **23 05 04.8 -0.7**
**VLC Villacollemand 15.14 312** P **P** **23 05 03.3 -2.4**
**STAL STALIGIAL 15.15 323** **Pn** **23 05 01.2 +0.3**
**AKH Akhalkalaki 15.30 59** ⇓P **P** **23 05 05.6 -2.1**
**KBA Koelnbreinsper 15.44 326** *e*Pn **Pn** **23 05 06.5 +1.8**
comp=Z,7.7nm,1.1s
**NEY Neytrino 15.51 52**⇑ *i*P **Pn** **23 05 07.4 +1.8**
NEY pmax pmax
comp=Z,3.0nm,0.9s
**CTI Castel Tesino 15.55 320** P **Pn** **23 05 05.8 -0.4**
CTI pmax pmax
comp=Z,11nm,0.9s
**CTI Castel Tesino 15.55 320** Pn **Pn** **23 05 05.8 -0.4**
**ABTA Abfaltersbach 15.59 324** *e*Pn **Pn** **23 05 04.9 -1.8**
comp=Z,9.4nm,0.7s
**MOA Molln 15.62 330** *e*Pn **Pn** **23 05 04.6 -2.4**
comp=Z,6.5nm,1.4s
**ONI Oni 15.71 55** P **P** **23 05 10.4 -1.7**
ONI pmax pmax
comp=Z,23nm,0.8s
**ONI Oni 15.71 55** P **P** **23 05 10.4 -1.7**
ONI IAmb IAmb 23 05 16.6
comp=Z,23nm,0.8s
**MSSA Maissana 15.75 312** Pn **Pn** **23 05 06.3 -2.3**
**KIV Kislovodsk 15.82 50** ⇓P **P** **23 05 14.2 +0.9**
**KIV Kislovodsk 15.82 50** ⇓P **P** **23 05 14.2 +0.9**
**KIV Kislovodsk 15.82 50** Pn **Pn** **23 05 11.1 +1.5**
KIV IAmb IAmb 23 05 16.6
comp=Z,30nm,1.0s
**KIV Kislovodsk 15.82 50** *i* P **P** **23 05 14.6 +1.3**
SNR=13
**KVAR Kislovodsk Arr 15.82 50** Pn **P** **23 05 13.2 -0.2**
baz=264,slow=22,SNR=7.3
**KRUC Moravsky 15.84 337** *e*PN **Pn** **23 05 11.1 +1.3**
**KBZ Khabaz 15.84 51** Pn **P** **23 05 14.4 +1.0**
comp=Z,0.8nm,0.3s,baz=245,slow=8.1,SNR=59
KBZ LR LR 23 12 35.8
comp=Z,229nm,18.4s,baz=322,slow=42
**GNI Garni 15.85 65** Pn **P** **23 05 12.8 -0.9**
comp=Z,0.9nm,0.3s,baz=283,slow=4.4,SNR=8.0
GNI LR LR 23 12 36.2
comp=Z,702nm,18.4s,baz=258,slow=42
**GNI Garni 15.85 65** Pn **Pn** **23 05 11.7 +1.6**
**GNI Garni 15.85 65** P **P** **23 05 13.6 -0.2**
**SALO Salr 15.89 317** P **Pn** **23 05 10.5 0.0**
SALO IAmb IAmb 23 05 15.0
comp=Z,45nm,1.0s
**VRAC Vranov 15.99 337** ⇓P **Pn** **23 05 12.2 +0.5**
**VRAC Vranov 15.99 337** Pn **Pn** **23 05 13.3 +1.6**
comp=Z,0.8nm,0.3s,baz=138,slow=11,SNR=5.8
**VRAC Vranov 15.99 337** *e*PN **Pn** **23 05 13.2 +1.5**
**OJC Ojcow 15.99 346** *e*P **Pn** **23 05 12.2 +0.6**
**AKASG Malin Array Be 16.02 8** Pn **Pn** **23 05 11.7 -0.3**
comp=Z,5.9nm,0.3s,baz=194,slow=11,SNR=24
**AKASG Malin Array Be 16.02 8** *i* P **P** **23 05 14.1 -1.3**
AKASG pmax pmax
comp=Z,9.0nm,0.6s
**AKASG Malin Array Be 16.02 8** **P** **23 05 14.0 -1.3**
**AKBB Malin Array Si 16.02 8** P **P** **23 05 14.0 -1.4**
AKBB pmax pmax
comp=Z,23nm,0.9s
**AKBB Malin Array Si 16.02 8** **P** **23 05 14.0 -1.4**
**ZEI Tsey 16.09 55** *e*P **P** **23 05 15.0 -1.5**
ZEI pmax pmax
comp=Z,13nm,1.2s
**MORC Moravsky Berou 16.13 340** ⇑P **Pn** **23 05 13.4 -0.1**
**MORC Moravsky Berou 16.13 340** P **Pn** **23 05 13.6 +0.1**
MORC pmax pmax
comp=Z,24nm,1.7s
**MORC Moravsky Berou 16.13 340** Pn **Pn** **23 05 13.6 +0.1**
**NCK Nalchik 16.19 53**⇑ *e*P **P** **23 05 18.5 +1.2**
NCK pmax pmax
comp=Z,46nm,1.0s
**WTTA Wattenberg 16.38 323** *e*Pn **Pn** **23 05 16.4 -0.4**
comp=Z,17nm,1.1s
**CKRC Cesky Krumlov 16.38 332** *e*P **Pn** **23 05 15.7 -1.0**
**WATA Walderalm 16.46 324** *e*Pn **Pn** **23 05 15.5 -2.4**
comp=Z,15nm,1.2s
**SQTA Sankt Quirin 16.56 323** *e*Pn **Pn** **23 05 18.4 -0.8**
comp=Z,8.6nm,0.8s
**GOF Gofitskoye 16.60 47**⇑ *e*P **P** **23 05 22.4 +0.6**
GOF pmax pmax
comp=Z,21nm,0.7s
**KRLC Kraliky 16.61 339** *e*P **P** **23 05 21.0 -1.0**
**KRLC Kraliky 16.61 339** *e*P **P** **23 05 21.0 -1.0**
**GEC2 GERESS Array S 16.64 331** P **Pn** **23 05 21.0 +0.9**
**GERES GERESS Array B 16.64 331** Pn **Pn** **23 05 21.1 +0.9**
comp=Z,0.4nm,0.3s,baz=150,slow=11,SNR=15
**GERES GERESS Array B 16.64 331** P **Pn** **23 05 20.6 +0.5**
**FETA Feichten 16.67 321** *e*Pn **Pn** **23 05 19.8 -0.7**
comp=Z,15nm,0.8s
**MOTA Moosalm 16.70 323** *e*Pn **Pn** **23 05 18.9 -2.0**
comp=Z,15nm,1.3s
**KHC Kasperske Hory 16.92 331** *e*P **P** **23 05 26.5 +1.1**
**KHC Kasperske Hory 16.92 331** *e*P **P** **23 05 26.5 +1.1**
KHC *ex* x 23 05 31.0
**KHC Kasperske Hory 16.92 331** **Pn** **23 05 22.1 -1.4**
**DAVOX Davos/Dischmat 16.96 319** Pn **Pn** **23 05 24.1 -0.1**
comp=Z,0.8nm,0.3s,baz=184,slow=13,SNR=11
DAVOX LR LR 23 13 38.3
comp=Z,293nm,18.1s,baz=124,slow=43
**RETA Reutte 16.97 323** *e*Pn **Pn** **23 05 23.3 -0.8**
comp=Z,5.1nm,0.7s
**TUE Stuetta 17.06 318** P **Pn** **23 05 25.4 -0.1**
**OSTC Ostas 17.21 339** *e*P **P** **23 05 28.0 -0.6**
**UPC Upice 17.23 338** *e*P **Pn** **23 05 28.0 +0.7**
**UPC Upice 17.23 338** *e*P **Pn** **23 05 28.0 +0.7**
**PRU Pruhonice 17.26 335** *e*P **Pn** **23 05 26.0 -1.8**
**PRU Pruhonice 17.26 335** *e*P **Pn** **23 05 26.0 -1.8**
**CHVC Chvalec 17.28 338** *e*P **Pn** **23 05 27.6 -0.5**
**DAVA Damuels 17.28 321** *e*Pn **Pn** **23 05 28.5 +0.3**
comp=Z,14nm,0.9s
**KSP Ksiaz 17.44 339** *e*P **Pn** **23 05 26.5 -3.4**
**GROC Groznyy 17.53 56** *e*P **Pn** **23 05 31.3 +0.1**
GROC pmax pmax
comp=Z,11nm,0.8s
**BNI Bardonecchia 17.87 311** P **Pn** **23 05 35.5 0.0**
BNI pmax pmax
comp=Z,21nm,1.3s
**BNI Bardonecchia 17.87 311** P **Pn** **23 05 35.5 0.0**
**SENIN Lac Senin/Sane 18.16 315** P **Pn** **23 05 38.0 -1.1**
**BRG Berggiesshubel 18.21 335** *e*P **P** **23 05 45.1 +5.5**
BRG Amp 23 05 47.4
comp=Z,7.3nm,1.1s
BRG *ex* x 23 06 05.3
BRG Amp 23 06 07.4
comp=Z,4.8nm,0.8s
**BRG Berggiesshubel 18.21 335** *e*P **P** **23 05 45.1 +5.5**
BRG pmax pmax
comp=Z,7.0nm,1.1s
BRG pmax pmax
comp=Z,5.0nm,0.8s
**NKC Novy Kostel 18.24 331** *e*P **P** **23 05 41.4 +1.4**
**NKC Novy Kostel 18.24 331** *e*P **P** **23 05 41.4 +1.4**
**GRA1 Grafenberg Arr 18.33 328** P **P** **23 05 39.0 -1.9**
**GRF Grafenberg Arr 18.33 328** P **P** **23 05 39.0 -1.9**
GRF pmax pmax
comp=Z,17nm,1.0s
**GRFO Grafenberg 18.33 328** P **P** **23 05 39.2 -1.7**
GRFO pmax pmax
comp=Z,15nm,0.9s
**GRFO Grafenberg 18.33 328** P **P** **23 05 39.2 -1.7**
**MAK Makhachkala 18.63 58** *e*P **P** **23 05 40.8 -3.4**
MAK *e*S **Sn** **23 09 11.2 -1.0**
MAK pmax pmax
comp=Z,258nm,1.3s
MAK MLR MLR
comp=Z,232nm,18.0s
**BFO Black Forest 18.75 321** P **P** **23 05 44.6 -1.1**
BFO pmax pmax
comp=Z,10.0nm,0.9s
**BFO Black Forest 18.75 321** P **P** **23 05 44.6 -1.1**
**CLL Collm 18.91 334** P **P** **23 05 46.4 -0.8**
CLL pmax pmax
comp=Z,12nm,1.1s
**CLL Collm 18.91 334** *e*P **P** **23 05 46.0 -1.2**
comp=Z,11nm,1.3s
CLL *ex* x 23 05 52.0
CLL *e*PP **PnPn** **23 06 01.0 +0.7**

**CLL Collm 18.91 334** P **P** **23 05 46.4 -0.8**
**VSR Storozhevoye 18.96 26** *e*P **Pn** **23 05 55.3 +6.7**
VSR pmax pmax
comp=Z,6.0nm,0.4s
**SUW Suwalki 19.25 355** *e*P **P** **23 05 51.1 +0.1**
**SUW Suwalki 19.25 355** *e*P **P** **23 05 51.1 +0.1**
**SUW Suwalki 19.25 355** IAmb IAmb 23 06 06.2
comp=Z,57nm,0.9s
**ECH Echery 19.30 319** P **P** **23 05 51.5 -0.1**
ECH pmax pmax
comp=Z,29nm,1.5s
**ECH Echery 19.30 319** P **P** **23 05 51.5 -0.1**
**SSB Saint Sauveur 19.33 309** P **P** **23 05 52.0 0.0**
SSB pmax pmax
comp=Z,13nm,1.1s
**SSB Saint Sauveur 19.33 309** P **P** **23 05 52.0 0.0**
**VORR Voronezh 19.35 26** *e*P **P** **23 05 50.3 -1.8**
VORR pmax pmax
comp=Z,10.0nm,0.4s
**GKP Gorka Klasztor 19.41 344** *e*P **P** **23 05 50.7 -2.0**
**GKP Gorka Klasztor 19.41 344** *e*P **P** **23 05 50.2 -2.5**
**MNK Minsk 19.70 3** *i* P **P** **23 05 55.2 -0.6**
MNK *i* S **Sn** **23 09 38.6 +0.8**
MNK pmax pmax
comp=Z,6.0nm,0.9s
MNK pmax pmax
comp=N,8.0nm,0.9s
MNK pmax pmax
comp=E,1.0nm,0.9s
**MNK Minsk 19.70 3** *i* P **P** **23 05 55.2 -0.6**
comp=E,1.0nm,0.8s
MNK *i* P **P** **23 05 55.2 -0.6**
comp=N,8.0nm,0.8s
MNK *i* P **P** **23 05 55.2 -0.6**
comp=Z,6.0nm,0.8s,baz=185
MNK *i* PP **PnPn** **23 06 13.2 +2.1**
MNK *i* S **Sn** **23 09 38.7 +0.8**
MNK *i* SS **SnSn** **23 09 54.4 +2.2**
MNK *i* LR LR 23 13 23.5
**VRH Novokhopyorsk 19.95 30** *e*P **P** **23 05 58.0 -0.6**
VRH pmax pmax
comp=Z,10.0nm,0.6s
**LPSR Galich'ya Gora 20.03 24** *e*P Pn 23 06 03.1 +1.8
LPSR pmax pmax
comp=Z,20nm,1.4s
**NACGM Naroch 20.06 1** *i* P Pn 23 06 01.9 +0.3
**RAYN Ar Rayn 20.46 118** P Pn 23 06 06.9 +0.2
RAYN pmax pmax
comp=Z,16nm,1.0s
**RAYN Ar Rayn 20.46 118** P Pn 23 06 06.9 +0.2
**RAYN Ar Rayn 20.46 118** P Pn 23 06 07.3 +0.6
**IDID Didziasalis 20.47 1** *e*P **P** **23 06 04.3 +0.1**
**IIGN Ignalina 20.50 1** *e*P **P** **23 06 04.4 -0.1**
**PABE Paberze 20.70 357** *e*P **P** **23 06 05.7 -1.0**
**PABE Paberze 20.70 357** P **P** **23 06 06.2 -0.5**
PABE IAmb IAmb 23 06 17.4
comp=Z,118nm,1.6s
**WLF Walferdange 20.71 322** P **P** **23 06 06.4 -0.5**
WLF pmax pmax
comp=Z,21nm,0.9s
**WLF Walferdange 20.71 322** P **P** **23 06 06.4 -0.5**
WLF IAmb IAmb 23 06 08.6
comp=Z,21nm,0.9s
**WLF Walferdange 20.71 322** *d*P **P** **23 06 06.1 -0.8**
comp=Z,13nm,1.0s
**ISAL Salakas 20.72 0** *e*P **P** **23 06 07.5 +0.6**
**BHOU Houvegnez 21.21 323** *d*P **P** **23 06 12.8 +0.4**
**BTNL Ternell 21.30 324** *d*P **P** **23 06 13.2 -0.2**
**MEM Membach 21.38 324** *d*P **P** **23 06 13.0 -1.1**
**RCHB Rochefort 21.48 322** *d*P **P** **23 06 14.6 -0.6**
**OBN Obninsk 21.57 17** *i* P **P** **23 06 19.3 +3.2**
OBN *i* 23 06 40.8
OBN *i* 23 06 55.3
OBN pmax pmax
comp=Z,52nm,2.5s
**BSTI Sart Tilman 21.58 323** *d*P **P** **23 06 15.7 -0.5**
**BCLA Clavier 21.61 322** *d*P **P** **23 06 15.0 -1.5**
**BSD Bornholm Skovb 21.65 343** *i* P **P** **23 06 15.1 -1.9**
**DOU Dourbes 21.77 321** *d*P **P** **23 06 16.7 -1.7**
comp=Z,18nm,1.2s
**BMRD Maredsous 21.81 322** *d*P **P** **23 06 18.0 -0.7**
**CART Cartagena 21.85 285** P **P** **23 06 17.9 -1.3**
CART IAmb IAmb 23 06 32.9
comp=Z,50nm,1.3s
**CLF Chambon-Foret 21.97 314** P **P** **23 06 20.1 -0.4**
**BLEU Blekinge 22.54 345** *i* P **P** **23 06 19.8 -6.6**
**SAKB Bahrain 22.97 106** P **P** **23 06 31.9 +0.6**
**DEL Delary 23.13 343** *i* P **P** **23 06 28.0 -4.6**
**DEL Delary 23.13 343** *e*P **P** **23 06 29.0 -3.6**
**SHMA Al-Shehemyia 23.36 106** P **P** **23 06 36.3 +1.0**
**VSU Vasula 23.62 1** *e*P **P** **23 06 38.7 +1.2**
**TRNA Turayna 24.11 108** P **P** **23 06 43.7 +1.2**
**ESBB Sonseca Array 24.19 290** IAmb IAmb 23 06 43.4
comp=Z,22nm,1.1s
**ESDC Sonseca Array 24.19 290** P **P** **23 06 42.5 -0.7**
comp=Z,4.0nm,0.4s,baz=81,slow=9.4,SNR=109
ESDC LR LR 23 16 59.6
comp=Z,139nm,19.5s,baz=90,slow=39
**ESDC Sonseca Array 24.19 290** P **P** **23 06 42.2 -1.0**
**VIKU Vikbolandet 24.44 348** *e*P **P** **23 06 42.2 -2.9**
**BORU Boraas 24.44 343** *i* P **P** **23 06 43.1 -2.0**
**PAB San Pablo 24.48 290** P **P** **23 06 45.0 -0.9**
PAB pmax pmax
comp=Z,25nm,1.4s
**PAB San Pablo 24.48 290** P **P** **23 06 45.0 -0.9**
PAB IAmb IAmb 23 07 00.4
comp=Z,25nm,1.4s
**SLWR Sila 24.83 109** P **P** **23 06 50.0 +1.1**
**MDT Midelt 25.38 274** P **P** **23 06 53.4 -0.7**
comp=Z,7.3nm,0.7s,baz=85,slow=12,SNR=21
MDT LR LR 23 19 29.7
comp=Z,396nm,19.9s,baz=100,slow=43
**AAL Aland 25.63 353** *e*P **P** **23 06 53.9 -2.0**
**GHWR Ruwais 25.81 108** P **P** **23 06 59.9 +2.0**
**GEYT Alibeck 26.05 74** P **P** **23 07 00.3 +0.3**
comp=Z,7.1nm,0.5s,baz=260,slow=18,SNR=12
**GEYT Alibeck 26.05 74** IAmb IAmb 23 07 11.8
comp=Z,17nm,0.8s
**GYA0B ALIBECK ARRAY 26.05 74** P **P** **23 07 00.3 +0.3**
GYA0B IAmb IAmb 23 07 11.7
comp=Z,32nm,1.0s
**PBRG Braganca 26.42 295** *e*P **P** **23 07 02.3 -1.1**
comp=Z,47nm,1.4s
**HFS Hagfors 26.51 346** P **P** **23 07 02.3 -1.6**
comp=Z,3.9nm,0.8s,baz=178,slow=10,SNR=3.2
**MVO Moncorvo 26.59 294** *e*P **P** **23 07 04.9 -0.1**
comp=Z,36nm,0.8s
**FINES FINESS Array B 26.61 0** P **P** **23 07 02.9 -1.9**
comp=Z,1.1nm,0.3s,baz=160,slow=11,SNR=17
FINES PcP **PcP** **23 10 28.2 -0.2**
comp=Z,1.9nm,0.9s,baz=144,slow=5.0,SNR=1.0
**FINES FINESS Array B 26.61 0** P **P** **23 07 03.6 -1.1**
**FIA1 FINESS Array S 26.61 0** P **P** **23 07 03.2 -1.5**
FIA1 IAmb IAmb 23 07 31.4
comp=Z,22nm,1.2s
**MZWR Madinat Zayed 26.70 107** P **P** **23 07 07.4 +1.5**
**PMRV Marv??o 26.84 290** *e*P **P** **23 07 05.8 -1.3**
comp=Z,29nm,1.4s
**PCBR Castelo Branco 26.90 291** *e*P **P** **23 07 07.7 +0.1**
comp=Z,19nm,1.6s
**MTE Manteigas 26.96 292** *e*P **P** **23 07 07.8 -0.4**
comp=Z,32nm,2.0s
**MTE Manteigas 26.96 292** P **P** **23 07 07.1 -1.1**
MTE IAmb IAmb 23 07 39.6
comp=Z,21nm,1.2s
**PESTR Estremoz 27.01 288** *e*P **P** **23 07 07.9 -0.7**
**KONO Kongsberg 27.01 342** P **P** **23 07 06.7 -1.7**
KONO pmax pmax
comp=Z,31nm,1.3s
**KONO Kongsberg 27.01 342** P **P** **23 07 06.7 -1.7**
KONO IAmb IAmb 23 07 07.7
comp=Z,31nm,1.2s
**PVRL Vila Real 27.12 294** *e*P **P** **23 07 09.0 -0.6**
comp=Z,29nm,1.9s
**POLO Lamas de Olo 27.18 294** *e*P **P** **23 07 09.7 -0.6**
comp=Z,13nm,1.9s
**PVAQ Vaqueiros 27.19 285** *e*P **P** **23 07 09.6 -0.7**
**PVAQ Vaqueiros 27.19 285** P **P** **23 07 08.1 -2.2**
PVAQ IAmb IAmb 23 07 10.0
comp=Z,13nm,0.9s
**PVIS Viseu 27.23 292** *e*P **P** **23 07 09.8 -0.9**
comp=Z,28nm,1.7s
**PBEJ Beja 27.26 287** *e*P **P** **23 07 12.0 +1.1**
**EVO Evora 27.35 288** *e*P **P** **23 07 11.4 -0.3**

**PCAB Cabril 27.37 295** *e*P P **23 07 11.9 0.0**
comp=Z,40nm,1.5s
**ASUD Al Ashush, Dub 27.42 104** P P **23 07 14.2 +1.7**
SNR=9.9
**ASUD Al Ashush, Dub 27.42 104** *i* P P **23 07 14.0 +1.5**
SNR=9.9
**SHME Shamm 27.42 100** P P **23 07 13.2 +0.7**
**SHME Shamm 27.42 100** P P **23 07 13.1 +0.7**
**KLMR Klimovskoe 27.46 14** *e*P P **23 07 12.4 +0.1**
KLMR pmax pmax
comp=Z,9.0nm,0.9s
**KLMR Klimovskoe 27.46 14** *e*P P **23 07 12.5 +0.1**
KLMR AMP 23 07 25.1
comp=Z,9.0nm,0.9s
**PMTG Montargil 27.49 289** *e*P P **23 07 11.7 -1.3**
**NC602 NORSAR Array S 27.51 345** P P **23 07 12.4 -0.4**
**NAZ Nazwa, Dubai 27.52 103** P P **23 07 14.8 +1.5**
**NAZ Nazwa, Dubai 27.52 103** *i* P P **23 07 14.7 +1.3**
SNR=17
**MESJ Messejana 27.56 286** *e*P P **23 07 13.0 -0.5**
comp=Z,39nm,1.4s
**PGAV Gavieira, Arco 27.57 295** *e*P P **23 07 12.0 -1.8**
**FAQ Al Faqa, Dubai 27.57 103** P P **23 07 15.1 +1.3**
**FAQ Al Faqa, Dubai 27.57 103** *i* P P **23 07 15.1 +1.3**
SNR=6.4
**BANOM Banah 27.61 100** P P **23 07 14.7 +0.5**
**BANOM Banah 27.61 100** P P **23 07 14.8 +0.7**
**PCAS Casmilo, Conde 27.69 291** *e*P P **23 07 17.4 +2.7**
**MASF Masafi 27.74 102** P P **23 07 16.6 +1.3**
SNR=5.5
**MSFE Esma-Masafi 27.75 102** P P **23 07 16.5 +1.1**
**NAO01 NORSAR Array S 27.75 344** P P **23 07 13.4 -1.7**
**PNCL Nicolau / Gran 27.78 287** *e*P P **23 07 16.5 +1.0**
comp=Z,24nm,1.7s
**NC405 NORSAR Array S 27.81 345** P P **23 07 14.3 -1.3**
**NB201 NORSAR Array S 27.84 345** P P **23 07 15.3 -0.6**
**NB2 NORSAR Subarra 27.85 345** P P **23 07 14.1 -1.9**
comp=Z,5.2nm,1.1s,baz=160,slow=10
**NOA NORSAR Array B 27.85 345** P P **23 07 14.5 -1.5**
comp=Z,10nm,0.3s,baz=37,slow=24,SNR=6.6
NOA LR LR 23 19 02.4
comp=Z,116nm,18.9s,baz=155,slow=38
**NBO00 NORSAR Array S 27.94 344** P P **23 07 15.5 -1.3**
**HATD Hatta, Dubai 27.97 103** *i* P P **23 07 18.4 +1.0**
SNR=15
**UOSS Minazif 27.97 102** P P **23 07 18.3 +0.8**
**UOSS Minazif 27.97 102** P P **23 07 17.9 +0.5**
UOSS IAmb IAmb 23 07 19.0
comp=Z,23nm,0.8s
**UOSS Minazif 27.97 102** *i* P P **23 07 18.2 +0.8**
SNR=8.6
**ASHO Ashiyiah 27.98 103** P P **23 07 18.5 +1.0**
SNR=13
**ASHO Ashiyiah 27.98 103** *i* P P **23 07 18.2 +0.8**
SNR=13
**NC303 NORSAR Array S 27.99 345** P P **23 07 16.2 -1.0**
NC303 IAmb IAmb 23 07 35.8
comp=Z,16nm,1.2s
**AKTO Aktyubinsk 28.02 46** P P **23 07 16.4 -1.1**
comp=Z,3.2nm,0.4s,baz=251,slow=3.6,SNR=12
**ALNE Al Ain 28.03 105** P P **23 07 19.4 +1.5**
**ALNE Al Ain 28.03 105** *i* P P **23 07 19.3 +1.3**
SNR=20
**NC204 NORSAR Array S 28.16 344** P P **23 07 17.2 -1.6**
**UMZA Um Al Zommool 28.25 108** P P **23 07 21.3 +1.4**
**KIRV Kirov 28.41 26** P P **23 07 19.6 -1.3**
comp=Z,3.6nm,0.3s,baz=219,slow=23,SNR=1.8
**KIRV Kirov 28.41 26**⇑ *e*P P **23 07 23.3 +2.5**
**EKA Eskdalemuir Ar 28.64 325** P P **23 07 22.5 -0.5**
comp=Z,2.5nm,0.5s,baz=120,slow=10,SNR=15
EKA LR LR 23 22 24.7
comp=Z,254nm,19.0s,baz=174,slow=44
**ESK Eskdalemuir 28.65 325** P P **23 07 23.5 +0.4**
ESK pmax pmax
comp=Z,106nm,1.7s
**ESK Eskdalemuir 28.65 325** P P **23 07 23.5 +0.4**
**ABKAR Akbulak array 28.80 50** P P **23 07 24.6 +0.1**
**ABKAR Akbulak array 28.80 50** IAmb IAmb 23 08 00.5
comp=Z,6.1nm,0.8s
**ARQ Araqi 29.00 105** P P **23 07 28.2 +1.6**
SNR=39
**HOQ Hoqain 29.51 104** P P **23 07 32.0 +0.9**
SNR=8.3
**PRGR Permogore 29.60 19** *e*P P **23 07 34.1 +2.7**
PRGR pmax pmax
comp=Z,11nm,0.8s
**DOK Doka 29.81 116** P P **23 07 34.8 +1.1**
**HRA Herat 29.81 80** P P **23 07 34.5 +0.6**
**BSY Bisya 29.84 105** P P **23 07 35.3 +1.3**
**WHFO Wadi Hawf 29.98 117** P P **23 07 36.4 +1.0**
**ABTO Aybut 30.00 118** P P **23 07 37.0 +1.5**
SNR=8.5
**SMDO Samad 30.36 104** P P **23 07 39.8 +1.1**
**RBK Rabkut 30.57 117** P P **23 07 42.4 +1.9**
**JMDO Jabal Madar 30.75 105** P P **23 07 43.0 +1.0**
**TORD Torodi Ar. Bea 30.77 231** P P **23 07 42.2 0.0**
comp=Z,22nm,0.6s,baz=36,slow=9.5,SNR=168
**ARU Arti 30.94 36***d i* P P **23 07 43.0 -0.4**
ARU 23 08 42.2
ARU S S **23 12 49.4 +2.9**
ARU SS SnSn **23 14 30.3 +3.4**
ARU pmax pmax
comp=Z,8.0nm,1.4s
**ARU Arti 30.94 36** P P **23 07 42.7 -0.7**
ARU IAmb IAmb 23 08 43.1
comp=Z,7.6nm,1.0s
**DMTO DMTO 30.98 116** P P **23 07 45.1 +1.1**
SNR=9.7
**WBK Wadi Bani Khal 31.32 104** P P **23 07 49.4 +2.3**
SNR=9.6
**JLN Jalan Bani Buh 31.90 104** P P **23 07 53.2 +1.0**
**SVE Sverdlovsk 32.14 36** *e*P P **23 07 54.1 +0.2**
**LODK Lodwar 32.49 162** P P **23 07 56.9 -0.5**
LODK IAmb IAmb 23 08 03.1
comp=Z,13nm,1.9s
**APA Apatity 33.05 5**⇓ *i* P P 23 08 11.3 +10
APA pmax pmax
comp=Z,8.0nm,1.0s
APA MLR MLR
comp=Z,600nm,13.0s
**LVZ Lovozero 33.47 6** P P **23 08 06.4 +1.0**
LVZ pmax pmax
comp=Z,129nm,1.6s
**LVZ Lovozero 33.47 6** P P **23 08 06.4 +1.0**
**KOWA Kowa 33.70 241** P P **23 08 07.9 -0.1**
KOWA IAmb IAmb 23 08 09.2
comp=Z,13nm,0.8s
**CHGR Chuyangaron 34.63 71** P P **23 08 16.3 +0.3**
CHGR IAmb IAmb 23 08 17.5
comp=Z,23nm,1.0s
**ARCES ARCESS Array B 34.74 360** P P **23 08 16.4 0.0**
comp=Z,1.0nm,0.3s,baz=184,slow=9.0,SNR=15
**ARCES ARCESS Array B 34.74 360** P P **23 08 16.6 +0.2**
ARCES pmax pmax
comp=Z,111nm,1.9s
**ARCES ARCESS Array B 34.74 360** P P **23 08 16.6 +0.2**
**KEV Kevo 34.96 1** P P **23 08 18.7 +0.4**
KEV pmax pmax
comp=Z,139nm,1.9s
**KEV Kevo 34.96 1** P P **23 08 18.7 +0.4**
**KBL Kabul 35.27 78** P P **23 08 22.4 +0.7**
KBL pmax pmax
comp=Z,3.0nm,1.0s
**KBL Kabul 35.27 78** P P **23 08 22.8 +1.2**
**KBL Kabul 35.27 78** P P **23 08 22.4 +0.7**
**KKAR Karatay Array 35.30 63** P P **23 08 21.9 +0.3**
**KKAR Karatay Array 35.30 63** P P **23 08 21.9 +0.3**
**GAR Garm 35.48 70** IAmb IAmb 23 08 27.7
comp=Z,14nm,0.8s
**BTK Batken 35.74 68** IAmb IAmb 23 09 07.6
comp=Z,9.9nm,1.4s
**BRVK Borovoye 36.06 46** P P **23 08 28.1 +0.1**
BRVK pmax pmax
comp=Z,8.0nm,1.0s
**BRVK Borovoye 36.06 46** P P **23 08 28.2 +0.1**
**BRVK Borovoye 36.06 46** P P **23 08 28.1 +0.1**
BRVK IAmb IAmb 23 08 46.2
comp=Z,8.1nm,1.0s
**KMBO Kilima Mbogo 37.34 161** P P **23 08 42.0 +2.5**
KMBO pmax pmax
comp=Z,17nm,1.9s
**KMBO Kilima Mbogo 37.34 161** P P **23 08 42.0 +2.5**
KMBO IAmb IAmb 23 08 53.4
comp=Z,17nm,1.9s
**AML Almayashu 37.70 64** P P **23 08 43.1 +0.5**

**AAK Ala-Archa 38.25 63** P P **23 08 48.1 +1.2**
AAK pmax pmax
comp=Z,11nm,1.0s
**AAK Ala-Archa 38.25 63** P P **23 08 48.1 +1.2**
AAK IAmb IAmb 23 08 49.0
comp=Z,11nm,1.0s
**AAK Ala-Archa 38.25 63** *i* P P **23 08 48.1 +1.2**
SNR=13
**FRU1 Bishkek 38.33 63** P P **23 08 49.0 +1.5**
FRU1 pmax pmax
comp=Z,9.0nm,1.0s
**FRU1 Bishkek 38.33 63** P P **23 08 49.0 +1.5**
FRU1 IAmb IAmb 23 09 07.5
comp=Z,9.5nm,0.9s
**NIL Nilore 38.87 78** P P **23 08 53.1 +1.0**
NIL pmax pmax
comp=Z,14nm,0.6s
**NIL Nilore 38.87 78** P P **23 08 53.3 +1.2**
**NIL Nilore 38.87 78** P P **23 08 53.1 +1.0**
NIL IAmb IAmb 23 08 53.6
comp=Z,14nm,0.6s
**BOOM Boomskoye usch 39.33 63** P P **23 08 57.2 +1.2**
BOOM pmax pmax
comp=Z,5.0nm,0.9s
**BOOM Boomskoye usch 39.33 63** P P **23 08 57.1 +1.2**
**KSH Kashi 39.75 68** P P **23 08 58.8 -0.7**
KSH pP pP 23 09 03.8 -1.7
KSH sP sP 23 09 06.6 -1.6
KSH PP **PnPn** **23 10 33.2 -0.8**
KSH ScP **ScP** **23 14 52.7 -0.6**
KSH pmax pmax
comp=Z,6.0nm,0.5s
**DBIC Dimbokro 39.86 232** P P **23 08 59.9 -0.5**
comp=Z,14nm,0.8s,baz=46,slow=7.5,SNR=24
**DBIC Dimbokro 39.86 232** P P **23 08 59.9 -0.5**
DBIC pmax pmax
comp=Z,20nm,0.9s
**DBIC Dimbokro 39.86 232** P P **23 08 59.9 -0.5**
DBIC IAmb IAmb 23 09 00.8
comp=Z,20nm,0.8s
**TIC Toumodi 39.98 233** *e*P P **23 09 00.8 -0.7**
**KIC Kosan Boka 40.01 232** *e*P P **23 09 01.2 -0.5**
comp=Z,38nm,0.6s
**KDJ Kajisay 40.28 64** IAmb IAmb 23 09 06.6
comp=Z,10nm,0.9s
**LIC Lamto 40.30 232** *e*P P **23 09 03.6 -0.5**
comp=Z,84nm,0.9s
**TARG Taragay, Kyrgy 40.80 64** P P **23 09 09.9 +1.4**
**KURK Kurchatov 40.90 51** P P **23 09 08.8 +0.1**
KURK pmax pmax
comp=Z,14nm,1.0s
**KURK Kurchatov 40.90 51** P P **23 09 08.9 +0.2**
**KURK Kurchatov 40.90 51** P P **23 09 08.8 +0.1**
KURK IAmb IAmb 23 09 09.7
comp=Z,14nm,1.0s
**MAKZ Makanchi 43.22 56** P P **23 09 28.0 +0.3**
MAKZ pmax pmax
comp=Z,9.0nm,0.9s
**MAKZ Makanchi 43.22 56** P P **23 09 28.0 +0.3**
MAKZ IAmb IAmb 23 09 29.0
comp=Z,8.6nm,0.9s
**MK31 Makanchi Array 43.44 56***c i* P P **23 09 29.5 0.0**
**MK31 Makanchi Array 43.44 56** IAmb IAmb 23 09 30.7
comp=Z,12nm,0.8s
**MKAR Makanchi Array 43.44 56** P P **23 09 29.9 +0.4**
comp=Z,13nm,0.7s,baz=280,slow=6.3,SNR=175
MKAR ScP **ScP** **23 15 06.3 -1.4**
comp=Z,1.0nm,0.9s,baz=289,slow=3.7,SNR=4.4
**MKAR Makanchi Array 43.44 56** P P **23 09 29.6 +0.2**
**SPB2 Spitsbergen Ar 43.62 357** P P **23 09 29.8 -0.7**
SPB2 IAmb IAmb 23 10 25.2
comp=Z,27nm,1.1s
**SPITS Spitsbergen Ar 43.62 357** P P **23 09 30.9 +0.4**
SPITS pmax pmax
comp=Z,25nm,1.1s
**SCO Scoresbysund 43.84 339** P P **23 09 32.0 -0.3**
SCO pmax pmax
comp=Z,129nm,1.6s
**SCO Scoresbysund 43.84 339** P P **23 09 32.0 -0.3**
**KBS Kingsbay 44.56 356** P P **23 09 37.7 -0.3**
**KBS Kingsbay 44.56 356** P P **23 09 37.7 -0.3**
**ZAA0 Zalesovo Array 44.78 46** IAmb IAmb 23 09 47.7
comp=Z,12nm,1.4s
**ZALV Zalesovo Beam 44.78 46** P P **23 09 39.4 -0.6**
comp=Z,3.9nm,0.3s,baz=267,slow=8.8,SNR=18
**DGZ Jazzator, Alta 46.59 52***c i* P P **23 09 54.9 +0.3**
DGZ pmax pmax
comp=Z,5.0nm,1.0s
**WMQ Urumqi 47.63 60** *e*P P **23 10 04.0 +1.2**
WMQ pP pP 23 10 10.2 +1.3
WMQ PP **PP** **23 11 54.4 +0.2**
WMQ S **S** **23 16 58.1 +0.8**
WMQ pmax pmax
comp=Z,15nm,1.5s
**NRIK Noril'sk 47.90 25** P P **23 10 04.5 +0.2**
comp=Z,6.9nm,0.9s,baz=224,slow=7.3,SNR=6.0
**NRIK Noril'sk 47.90 25**⇑ *i* P P **23 10 05.7 +1.4**
NRIK pmax pmax
comp=Z,5.0nm,1.1s
**NRIK Noril'sk 47.90 25** P P **23 10 05.2 +0.9**
NRIK IAmb IAmb 23 10 11.8
comp=Z,6.4nm,0.8s
**ANGG Ammassalik, Gr 47.96 330** P P **23 10 04.4 -0.4**
**PYUN Piuthan 48.60 81** *e*P P **23 10 11.3 +0.7**
comp=Z,58nm,0.5s
**DANN Dangsing 49.13 81** *e*P P **23 10 15.5 +0.7**
comp=Z,77nm,0.5s
**ICESG Greenland Ices 49.22 334** *i* P P **23 10 14.8 -0.2**
ICESG IAmb IAmb 23 10 16.6
comp=Z,33nm,1.6s
**KOLN Koldanda 49.23 82** *e*P P **23 10 15.7 +0.3**
comp=Z,7.4nm,0.4s
**NOR Nord 49.33 352** *e*P P **23 10 12.4 -2.8**
NOR IAmb IAmb 23 11 02.6
comp=Z,11nm,1.2s
**SUMG Summit 49.48 339** P P **23 10 16.0 -0.9**
SUMG pmax pmax
comp=Z,2.0nm,0.7s
**SUMG Summit 49.48 339** *i* P P **23 10 14.0 -3.0**
SUMG IAmb IAmb 23 10 18.6
comp=Z,5.2nm,0.7s
**SUMG Summit 49.48 339** P P **23 10 16.0 -0.9**
**GKN Gorkha 49.98 81** *e*P P **23 10 21.2 +0.1**
comp=Z,29nm,0.4s
**DMN Daman 50.51 81** *e*P P **23 10 25.5 +0.2**
comp=Z,33nm,0.4s
**KKN Kakani 50.58 81** *e*P P **23 10 25.7 0.0**
comp=Z,42nm,0.6s
**PKIN Phulchoki 50.76 81** *e*P P **23 10 27.1 -0.1**
comp=Z,47nm,0.8s
**PKI Pulchoki 50.77 81** *e*P P **23 10 27.2 -0.1**
**GUN Gumba 51.02 80** *e*P P **23 10 29.2 0.0**
comp=Z,52nm,0.7s
**JIRN Jiri 51.37 80** *e*P P **23 10 32.1 +0.2**
comp=Z,90nm,0.2s
**DY2G Dye2 51.53 331** *i* P P **23 10 29.9 -2.4**
DY2G IAmb IAmb 23 10 32.0
comp=Z,9.4nm,0.6s
**RAMN Ramite 51.99 81** *e*P P **23 10 36.1 -0.3**
comp=Z,23nm,0.5s
**ODAN Odare 52.67 81** *e*P P **23 10 41.1 -0.3**
comp=Z,11nm,0.5s
**TAPN Taplejung 52.73 80** *e*P P **23 10 41.8 -0.1**
comp=Z,20nm,0.5s
**KNGR Kungurtug, Tuv 52.86 49**⇑ *e*P P **23 10 43.3 +1.0**
**SFJD Kangerlussuaq 53.24 332** P P **23 10 43.4 -1.3**
SFJD pmax pmax
comp=Z,64nm,1.9s
**SFJD Kangerlussuaq 53.24 332** P P **23 10 43.4 -1.3**
**NEEM North Greenlan 53.44 345** *i* P P **23 10 44.4 -2.0**
NEEM IAmb IAmb 23 10 46.1
comp=Z,9.2nm,1.1s
**MOY Mondy 54.77 47** *e*P P **23 11 00.3 +4.0**
**GOMU GeErMu 54.98 67** P P **23 10 58.9 +0.6**
GOMU pmax pmax
comp=Z,5.0nm,1.1s
**ZAK Zakamensk 56.49 49** *e*P P **23 11 08.5 -0.1**
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**TULEG Thule 57.51 344** P P **23 11 13.6 -1.6**
TULEG IAmb IAmb 23 11 14.7
comp=Z,11nm,0.8s
**GTA Gaotai 57.57 62** ⇑P P **23 11 16.7 +0.2**
GTA pP pP 23 11 21.9 -0.8
GTA sP sP 23 11 25.2 -0.2

GTA pmax pmax
comp=Z,6.0nm,0.9s
GTA pmax pmax
comp=Z,120nm,5.5s
GTA LR LR
comp=Z,220nm,18.9s
GTA LR LR
comp=Z,240nm,17.8s
GTA LR LR
comp=Z,300nm,20.0s
**SONM Songino Array 59.21 51** P P **23 11 28.1 +0.3**
comp=Z,2.4nm,0.7s,baz=288,slow=7.5,SNR=20
SONM ScP **ScP** **23 16 14.5 -1.1**
comp=Z,0.2nm,0.3s,baz=116,slow=32,SNR=6.1
**SONM Songino Array 59.21 51** P P **23 11 28.2 +0.4**
SONM IAmb IAmb 23 11 49.2
comp=Z,5.8nm,1.3s
**EUNU Eureka 59.61 349** P P **23 11 29.4 -0.5**
EUNU IAmb IAmb 23 11 49.7
comp=Z,8.7nm,1.1s
**ULN Ulaanbaatar 59.62 50** P P **23 11 31.2 +0.5**
ULN pmax pmax
comp=Z,5.0nm,1.1s
**ULN Ulaanbaatar 59.62 50** P P **23 11 31.2 +0.5**
ULN IAmb IAmb 23 11 52.6
comp=Z,4.7nm,1.1s
**BOD Bodaibo 60.32 38** *e*P P **23 11 33.7 -1.4**
BOD pmax pmax
comp=Z,8.0nm,1.1s
**DRLN Deer Lake 60.55 312** P P **23 11 35.6 -1.2**
**TIXI Tiksi 61.24 21** P P **23 11 41.0 -0.1**
TIXI pmax pmax
comp=Z,4.0nm,0.8s
**TIXI Tiksi 61.24 21** P P **23 11 41.0 -0.1**
TIXI IAmb IAmb 23 11 47.5
comp=Z,3.6nm,0.8s
**LZH Lanzhou 61.79 64** *e*P P **23 11 46.5 +0.9**
LZH pP pP 23 11 53.4 +1.5
LZH sP sP 23 11 59.3 +5.2
LZH pmax pmax
comp=Z,11nm,1.1s
LZH pmax pmax
comp=Z,98nm,6.0s
LZH LR LR
comp=Z,440nm,15.7s
LZH LR LR
comp=Z,400nm,15.4s
LZH LR LR
comp=Z,420nm,16.1s
**BOSA Boshof 63.13 181** P P **23 11 55.3 +0.9**
comp=Z,1.0nm,0.5s,baz=1.9,slow=7.8,SNR=7.0
**BOSA Boshof 63.13 181** P P **23 11 55.1 +0.7**
**SCHQ Schefferville 63.81 320** P P **23 11 57.6 -1.0**
comp=Z,5.2nm,0.4s,baz=72,slow=4.6,SNR=39
**SCHQ Schefferville 63.81 320** P P **23 11 57.8 -0.9**
**CD2 Chengdu 63.93 69** P P **23 11 59.9 +0.1**
CD2 pP pP 23 12 01.8 -4.3
CD2 pmax pmax
comp=Z,20nm,0.9s
**PZH PanZhiHua 64.36 75** P P **23 12 02.3 -0.5**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,150nm,5.1s
**GBN Guysborough 64.54 309** P P **23 12 03.0 -0.5**
**HHC Hu-ho-hao-te 65.30 56** *e*P P **23 12 08.9 +0.2**
HHC pmax pmax
comp=Z,10.0nm,0.9s
HHC pmax pmax
comp=Z,400nm,6.1s
**KMI Kunming 65.80 75**⇓ P P **23 12 12.1 -0.2**
KMI pP pP 23 12 17.6 -1.0
KMI sP sP 23 12 19.9 -1.0
KMI pmax pmax
comp=Z,6.0nm,0.8s
KMI LR LR
comp=Z,360nm,20.2s
KMI LR LR
comp=Z,290nm,22.7s
KMI LR LR
comp=Z,670nm,23.5s
**CHTO Chiang Mai 65.82 83** P P **23 12 12.1 -0.2**
CHTO pmax pmax
comp=Z,19nm,1.7s
**CHTO Chiang Mai 65.82 83** P P **23 12 12.1 -0.2**
CHTO IAmb IAmb 23 12 33.0
comp=Z,19nm,1.7s
**CMAR Chiang Mai Arr 66.00 84** P P **23 12 13.4 0.0**
comp=Z,4.6nm,0.8s,baz=297,slow=8.1,SNR=23
**XAN Xi'an 66.42 64** P P **23 12 15.7 -0.3**
XAN pmax pmax
comp=Z,9.0nm,0.8s
XAN pmax pmax
comp=Z,160nm,4.0s
**GYA Guiyang 68.26 72**⇓ P P **23 12 27.7 -0.1**
GYA pmax pmax
comp=Z,11nm,0.9s
**BNX BinXian 73.07 46**⇓ P P **23 12 56.2 -0.4**
BNX pmax pmax
comp=Z,15nm,1.1s
BNX pmax pmax
comp=Z,330nm,4.8s
**BILL Bilibino 73.21 15** *i* P P **23 12 57.8 +0.7**
BILL *i* 23 13 10.3
BILL pmax pmax
comp=Z,2.0nm,1.0s
**KLR Kul'dur 73.60 41**⇓ *e*P P **23 12 59.5 -0.2**
KLR pmax pmax
comp=Z,6.0nm,1.0s
**C36M Paulatuk 73.78 349** P P **23 13 01.4 +1.0**
C36M IAmb IAmb 23 13 06.6
comp=Z,6.2nm,0.8s
**TSI Tuntungan 73.79 97** P P **23 13 00.4 -0.9**
comp=Z,66nm,0.6s
**GSI Gunungsitoli 74.25 100** P P **23 13 03.1 -1.0**
comp=Z,32nm,1.2s
**NJ2 Nanjing 74.66 62** *e*P P **23 13 05.1 -1.1**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**USRK Ussuriysk Ar. 76.62 45** P P **23 13 16.8 -0.4**
comp=Z,3.7nm,0.5s,baz=297,slow=4.5,SNR=21
**USRK Ussuriysk Ar. 76.62 45** P P **23 13 16.5 -0.7**
**YKA Yellowknife Ar 77.92 342** P P **23 13 22.9 -1.3**
comp=Z,0.8nm,0.4s,baz=32,slow=5.5,SNR=24
**KSRS Korea Array 77.98 53** P P **23 13 24.6 -0.4**
comp=Z,3.4nm,0.9s,baz=297,slow=5.1,SNR=6.2
**COLD Coldfoot 78.19 358** IAmb IAmb 23 13 46.6
comp=Z,9.1nm,1.2s
**PPSI Pulau Pagai 78.60 101** P P **23 13 27.5 -1.2**
comp=Z,148nm,1.2s
**CMC01 Camacan, BA 79.61 243** *e*P P **23 13 35.4 +1.3**
**FFC Flin Flon 80.18 332** P P **23 13 36.2 -0.5**
FFC pmax pmax
comp=Z,11nm,1.3s
**FFC Flin Flon 80.18 332** P P **23 13 36.2 -0.5**
FFC IAmb IAmb 23 13 53.3
comp=Z,11nm,1.2s
**MDM Murphy Dome 80.41 357** IAmb IAmb 23 13 45.2
comp=Z,7.5nm,1.0s
**ILAR Eielson Array 80.54 357** P P **23 13 37.9 -0.6**
comp=Z,0.6nm,0.5s,baz=341,slow=3.5,SNR=8.3
**GUA01 Guaratinga, BA 80.61 242** *e*P P **23 13 40.3 +0.8**
**DAWY Dawson 80.73 354** P P **23 13 39.6 +0.1**
DAWY IAmb IAmb 23 14 58.3
comp=Z,30nm,1.9s
**YSS Yuzh-Sakhalins 80.80 38** *e*P P **23 13 40.5 +0.4**
YSS pmax pmax
comp=Z,20nm,1.1s
**HDA Harding Lake 80.91 357** IAmb IAmb 23 13 49.2
comp=Z,5.9nm,0.8s
**SMTB Santa Maria do 81.73 253** *e*P P **23 13 46.0 +0.4**
**PRPB Parauapebas 81.89 257** *e*P P **23 13 46.9 +0.4**
**MDSI Maura Dua 82.97 100** P P **23 13 50.8 -1.2**
**SJMB Sao Joao De Ma 82.98 242** *e*P P **23 13 52.5 +0.6**
**JANB Januaria 82.99 246** *e*P P **23 13 52.5 +0.3**
**PEXB Peixe 84.23 251** *e*P P **23 13 59.2 +0.7**
**MJAR Matsushiro Arr 85.08 48** P P **23 14 02.6 +0.1**
comp=Z,2.2nm,0.6s,baz=328,slow=5.0,SNR=4.2
**ITTB Itaituba 85.63 262** *e*P P **23 14 06.0 +0.4**
**BDFB Brasilia 86.15 248** P P **23 14 08.6 +0.4**
comp=Z,6.8nm,0.8s,baz=86,slow=5.4,SNR=13
BDFB LR LR 23 52 49.7
comp=Z,86nm,18.6s,baz=136,slow=36
**BDFB Brasilia 86.15 248** P P **23 14 08.5 +0.3**
BDFB IAmb IAmb 23 14 10.1
comp=Z,7.4nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NPGB** | **Novo Progresso** | **86.86** | **259** | *e*P | **P** | **23 14 12.0** | **+0.3** |
| **LRAL** | **Lakeview Retre** | **87.72** | **309** | P | **P** | **23 14 14.8** | **-0.8** |
| **ARAG** | **Araguaiana, MT** | **89.11** | **250** | *e*P | **P** | **23 14 23.5** | **+1.3** |
| **PET01** | **Itanhaem-SP** | **90.89** | **241** | *e*P | **P** | **23 14 31.1** | **+0.7** |
| **SRU** | **San Rafael Swe** | **96.09** | **327** | P | **P** | **23 14 55.7** | **+1.2** |
| SRU | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| **SRU** | **San Rafael Swe** | **96.09** | **327** | P | **P** | **23 14 55.6** | **+1.2** |
| **ELK** | **Elko** | **96.70** | **331** | LR | LR | 00 02 26.1 | |
| | comp=Z,174nm,18.6s,baz=308,slow=38 | | | | | | |
| **PKCU** | **Pink Cliffs** | **98.26** | **328** | P | **P** | **23 15 04.0** | **-0.5** |
| **WRA** | **Warramunga Arr** | **115.95** | **97** | PKP | **PKPdf** | **23 20 09.1** | **-0.7** |
| | comp=Z,0.1nm,0.4s,baz=316,slow=1.4,SNR=1.3 | | | | | | |
| **ASAR** | **Alice Springs** | **117.39** | **101** | PKP | **PKPdf** | **23 20 12.2** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=304,slow=1.7,SNR=2.1 | | | | | | |

*TUL **05** 23:06:16.8±1.1,36°.572N±0°.010×97°.81W±0°.02,h5$^{km}$±7$^{km}$, ML2.6,ML2.4/56(NEIC),Error ellipse: s-maj=1.9km s-min=1.4km az=87.0*

**NEIC 05 23:06:16.9±1.1,36°.56N±0°.01×97°.81W±0°.02,h6$^{km}$±6$^{km}, Error ellipse: s-maj=2.0km s-min=1.5km az=78.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.15** | **247** | | Pg | 23 06 20.2 | +0.2 |
| CROK | | | | Sg | Sg | 23 06 22.6 | +0.5 |
| **GC02** | **Grant County #** | **0.29** | **352** | | Pg | 23 06 22.6 | 0.0 |
| GC02 | | | | | Sg | 23 06 27.0 | +0.4 |
| **OK032** | **Salt Plains WL** | **0.40** | **307** | | Pg | 23 06 24.7 | 0.0 |
| OK032 | | | | Sg | Sg | 23 06 30.4 | +0.4 |
| **KAN14** | **Manchester OK** | **0.41** | **343** | | Pg | 23 06 24.9 | 0.0 |
| KAN14 | | | | Sg | Sg | 23 06 30.8 | +0.4 |
| KAN14 | | | | IAML | | 23 06 30.9 | |
| | comp=E,519nm,0.2s | | | | | | |
| KAN14 | | | | IAML | | 23 06 33.8 | |
| | comp=N,315nm,0.1s | | | | | | |
| **KAN17** | **Caldwell West** | **0.48** | **5** | Pg | Pg | 23 06 26.1 | -0.2 |
| KAN17 | | | | Sg | Sg | 23 06 33.1 | +0.5 |
| KAN17 | | | | IAML | | 23 06 38.0 | |
| | comp=N,269nm,0.3s | | | | | | |
| **BLOK** | **Blackwell** | **0.52** | **67** | | Pg | 23 06 26.9 | -0.1 |
| BLOK | | | | | Sg | 23 06 34.1 | +0.4 |
| BLOK | | | | IAML | | 23 06 34.6 | |
| | comp=N,435nm,0.2s | | | | | | |
| BLOK | | | | IAML | | 23 06 38.4 | |
| | comp=E,319nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.52** | **31** | Pg | Pg | 23 06 27.0 | 0.0 |
| KAN13 | | | | Sg | Sg | 23 06 34.2 | +0.3 |
| KAN13 | | | | IAML | | 23 06 38.3 | |
| | comp=N,418nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 23 06 38.8 | |
| | comp=E,346nm,0.3s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.55** | **355** | Pg | Pg | 23 06 27.4 | -0.1 |
| KAN05 | | | | IAML | | 23 06 41.1 | |
| | comp=N,211nm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.59** | **4** | | Pg | 23 06 28.2 | -0.1 |
| **KAN10** | **Anthony SW Sta** | **0.60** | **338** | Pg | Pg | 23 06 28.7 | +0.1 |
| KAN10 | | | | IAML | | 23 06 40.4 | |
| | comp=E,220nm,0.2s | | | | | | |
| KAN10 | | | | IAML | | 23 06 41.3 | |
| | comp=N,193nm,0.1s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.68** | **349** | Pg | Pg | 23 06 29.7 | -0.2 |
| KAN08 | | | | IAML | | 23 06 41.3 | |
| | comp=E,152nm,0.1s | | | | | | |
| KAN08 | | | | IAML | | 23 06 43.2 | |
| | comp=N,205nm,0.1s | | | | | | |
| **KAN06** | **Argonia West S** | **0.69** | **357** | Pg | Pg | 23 06 29.8 | -0.4 |
| KAN06 | | | | IAML | | 23 06 42.0 | |
| | comp=E,186nm,0.1s | | | | | | |
| KAN06 | | | | IAML | | 23 06 42.2 | |
| | comp=N,215nm,0.1s | | | | | | |
| **KAN16** | **Harper SW Stat** | **0.69** | **343** | Pg | Pg | 23 06 30.2 | 0.0 |
| **OK035** | **E0210 Rd and N** | **0.74** | **282** | | Pg | 23 06 30.9 | -0.2 |
| OK035 | | | | IAML | | 23 06 41.5 | |
| | comp=N,207nm,0.3s | | | | | | |
| OK035 | | | | IAML | | 23 06 44.0 | |
| | comp=N,194nm,0.2s | | | | | | |
| **KAN12** | **Harper NE Stat** | **0.75** | **349** | Pg | Pg | 23 06 30.9 | -0.4 |
| KAN12 | | | | IAML | | 23 06 53.7 | |
| | comp=N,189nm,0.4s | | | | | | |
| KAN12 | | | | IAML | | 23 06 55.5 | |
| | comp=E,189nm,0.3s | | | | | | |
| **OK029** | **Liberty Lake** | **0.82** | **159** | Pg | Pg | 23 06 32.8 | +0.2 |
| OK029 | | | | IAML | | 23 06 48.1 | |
| | comp=E,144nm,0.4s | | | | | | |
| **OK033** | **Mehan** | **0.88** | **126** | Pg | Pg | 23 06 34.0 | +0.2 |
| **BCOK** | **Bluff Creek, N** | **0.92** | **170** | Pg | Pg | 23 06 33.8 | -0.8 |
| **QUOK** | **Quay** | **0.97** | **113** | Pg | Pg | 23 06 34.7 | -0.9 |
| QUOK | | | | IAML | | 23 06 50.0 | |
| | comp=E,98nm,0.2s | | | | | | |
| **U32A** | **Winter Ranch,** | **0.98** | **260** | Pg | Pg | 23 06 35.1 | -0.6 |
| U32A | | | | IAML | | 23 06 55.1 | |
| | comp=E,85nm,0.1s | | | | | | |
| **OK030** | **Cody Creek RV** | **1.04** | **127** | Pg | Pg | 23 06 36.6 | -0.4 |
| **OK034** | **N. Norfolk Rd.** | **1.04** | **122** | Pg | Pg | 23 06 36.6 | -0.4 |
| OK034 | | | | IAML | | 23 06 52.7 | |
| | comp=E,149nm,0.1s | | | | | | |
| OK034 | | | | IAML | | 23 06 53.1 | |
| | comp=E,112nm,0.1s | | | | | | |
| **OK025** | **Westminster Rd** | **1.05** | **158** | Pg | Pg | 23 06 36.8 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.10** | **71** | | Pg | 23 06 37.5 | -0.6 |
| T35A | | | | IAML | | 23 06 52.4 | |
| | comp=N,78nm,0.3s | | | | | | |
| T35A | | | | IAML | | 23 06 53.6 | |
| | comp=E,69nm,0.1s | | | | | | |
| **OKCFA** | **Oklahoma City** | **1.18** | **166** | | Pg | 23 06 39.4 | -0.2 |
| OKCFA | | | | IAML | | 23 06 48.1 | |
| | comp=N,60nm,3.9s | | | | | | |
| OKCFA | | | | IAML | | 23 06 59.3 | |
| | comp=E,65nm,0.5s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.19** | **165** | Pg | Pg | 23 06 39.1 | -0.7 |
| **FNO** | **Franklin** | **1.34** | **165** | | Pn | 23 06 41.7 | -0.6 |
| **W35A** | **Tecumseh** | **1.60** | **151** | Pn | Pn | 23 06 45.7 | 0.0 |
| **TUL1** | **Leonard** | **1.76** | **111** | Pn | Pn | 23 06 48.3 | +0.4 |
| **X34A** | **Smith Ranch, M** | **1.96** | **180** | Pn | Pn | 23 06 51.0 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.98** | **204** | Pn | Pn | 23 06 50.4 | -0.6 |
| **R32A** | **Long Quarter,** | **1.99** | **339** | Pn | Pn | 23 06 49.0 | -2.1 |
| **LOOK** | **Love County** | **2.62** | **168** | Pn | Pn | 23 06 59.0 | -0.7 |
| **KSU1** | **Kansas State U** | **2.71** | **20** | Pn | Pn | 23 07 01.6 | +0.6 |
| **CBKS** | **Cedar Bluff** | **2.72** | **326** | Pn | Pn | 23 07 02.1 | +0.9 |
| **U38A** | **Gravette** | **2.76** | **92** | Pn | Pn | 23 07 01.9 | +0.1 |
| **HHAR** | **Hobbs** | **3.14** | **94** | Pn | Pn | 23 07 07.9 | +1.0 |

**IDC 05 23:07:35.0±2.6,2°.79S×141°.94E,h0$^{km}$,mb3.0/2, mb1 3.2/3,mb1mx2.8/34,mbtmp3.1/3,ML3.4/1,Error ellipse: s-maj=42.8km s-min=27.3km az=52.0,Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.27** | **282** | Pn | Pn | 23 08 00.4 | +0.4 |
| | 6.1nm,0.3s,baz=138,slow=11,SNR=40 | | | | | | |
| JAY | | | | Sn | Sn | 23 08 18.4 | +0.6 |
| | 14nm,0.3s,baz=101,slow=10,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.59** | **203** | P | P | 23 11 51.8 | -2.1 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **22.16** | **200** | P | P | 23 12 34.2 | +1.5 |
| | 0.1nm,0.4s,baz=23,slow=12,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **71.84** | **321** | P | P | 23 18 59.5 | -0.3 |
| | 0.3nm,0.9s,baz=100,slow=7.9,SNR=2.3 | | | | | | |

**TAP 05 23:09:48.3,22°.92N×120°.54E,h18$^{km}$±1$^{km}$,ML1.4,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCST** | **Cishan** | **0.05** | **233** | *e*P | Pg | 23 09 51.6 | +0.1 |
| | baz=233 | | | | | | |
| SCST | | | | *e*S | Sg | 23 09 54.4 | +0.8 |
| | baz=233 | | | | | | |
| **SLGT** | **Liugui** | **0.13** | **52** | P | Pg | 23 09 52.4 | +0.1 |
| | baz=52 | | | | | | |
| SLGT | | | | S | Sg | 23 09 56.0 | +1.1 |
| | baz=52 | | | | | | |
| **SGST** | **Jiashian** | **0.17** | **15** | P | Pg | 23 09 52.6 | -0.3 |
| | baz=16 | | | | | | |
| SGST | | | | S | Sb | 23 09 57.3 | +1.2 |
| | baz=16 | | | | | | |
| **SSD** | **Sandimen** | **0.19** | **152** | P | Pb | 23 09 53.7 | +0.4 |
| | baz=150 | | | | | | |
| SSD | | | | *e*S | Sb | 23 09 57.9 | +1.3 |
| | baz=150 | | | | | | |
| **SHHT** | **Tainan City** | **0.20** | **301** | *e*P | Pb | 23 09 54.0 | +0.6 |
| | baz=301 | | | | | | |
| **TSMG** | **Majia** | **0.23** | **154** | P | Pb | 23 09 54.1 | +0.1 |
| | baz=154 | | | | | | |
| TSMG | | | | S | Sb | 23 09 58.7 | +0.9 |
| | baz=154 | | | | | | |
| **CHN1** | **Nanshi** | **0.27** | **358** | *e*P | Pb | 23 09 54.8 | +0.2 |
| | baz=358 | | | | | | |
| **SNST** | **Tainan City** | **0.30** | **353** | *e*P | Pb | 23 09 55.6 | +0.3 |
| | baz=353 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.32** | **163** | P | Pb | 23 09 55.7 | +0.2 |
| | baz=163 | | | | | | |
| MASBT | | | | *e*S | Sb | 23 10 01.2 | +1.0 |
| | baz=163 | | | | | | |
| **WTP** | **Ta-pu** | **0.34** | **12** | P | Pb | 23 09 56.2 | +0.3 |
| | baz=13 | | | | | | |
| WTP | | | | *e*S | Sb | 23 10 02.2 | +1.3 |
| | baz=13 | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **13** | *e*P | Pb | 23 09 57.0 | +0.2 |
| | baz=12 | | | | | | |

**TAP 05 23:09:53.8,23°.00N×120°.37E,h25$^{km}$,ML2.3,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHHT** | **Tainan City** | **0.03** | **320** | *e*P | Pb | 23 09 58.2 | +0.1 |
| | baz=319 | | | | | | |
| SHHT | | | | *e*S | Sb | 23 10 01.9 | +0.8 |
| | baz=319 | | | | | | |
| **CHN3** | **Shinhua** | **0.08** | **357** | S | Sb | 23 10 03.0 | +1.5 |
| | baz=356 | | | | | | |
| **SSHA** | **Shanhua** | **0.16** | **332** | *e*S | Sb | 23 10 04.3 | +1.8 |
| | baz=331 | | | | | | |
| **TAI** | **Tainan** | **0.16** | **269** | *e*P | Pb | 23 09 58.7 | -0.3 |
| | baz=268 | | | | | | |
| TAI | | | | *e*S | Sb | 23 10 02.8 | +0.3 |
| | baz=268 | | | | | | |
| **SGST** | **Jiashian** | **0.21** | **67** | *e*S | Sb | 23 10 05.1 | +1.4 |
| | baz=68 | | | | | | |
| **CHN1** | **Nanshi** | **0.24** | **38** | *e*P | Pb | 23 10 00.3 | +0.3 |
| | baz=38 | | | | | | |
| CHN1 | | | | *e*S | Sb | 23 10 05.9 | +1.7 |
| | baz=38 | | | | | | |
| **CHN1** | **Nanshi** | **0.24** | **38** | *e*S | Pb | 23 10 00.3 | +0.3 |
| | baz=358 | | | | | | |
| **SCLT** | **Jiali** | **0.24** | **318** | *e*P | Pb | 23 09 59.9 | -0.1 |
| | baz=318 | | | | | | |
| SCLT | | | | *e*S | Sb | 23 10 05.4 | +1.1 |
| | baz=318 | | | | | | |
| **SLGT** | **Liugui** | **0.26** | **91** | *e*P | Pb | 23 10 00.3 | 0.0 |
| | baz=91 | | | | | | |
| SLGT | | | | *e*S | Sb | 23 10 05.6 | +1.0 |
| | baz=91 | | | | | | |
| **WTP** | **Ta-pu** | **0.33** | **42** | *e*S | Sn | 23 10 08.3 | -1.0 |
| | baz=43 | | | | | | |
| **SSD** | **Sandimen** | **0.35** | **136** | *e*P | Pb | 23 10 01.7 | +0.1 |
| | baz=135 | | | | | | |
| SSD | | | | *e*S | Sb | 23 10 08.1 | +1.1 |
| | baz=135 | | | | | | |
| **ICHU** | **Yijhu** | **0.37** | **347** | *e*S | Sn | 23 10 09.7 | -0.3 |
| | baz=347 | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **38** | *e*P | Pb | 23 10 02.2 | 0.0 |
| | baz=38 | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **38** | *e*S | Pb | 23 10 02.3 | +0.1 |
| | baz=12 | | | | | | |
| **TSMG** | **Majia** | **0.39** | **139** | *e*P | Pb | 23 10 02.4 | +0.1 |
| | baz=138 | | | | | | |
| TSMG | | | | *e*S | Sb | 23 10 08.9 | +1.0 |
| | baz=138 | | | | | | |
| **STYH** | **Taoyuan** | **0.41** | **65** | *e*P | Pb | 23 10 02.9 | +0.2 |
| | baz=64 | | | | | | |
| STYH | | | | *e*S | Sn | 23 10 10.2 | -0.9 |
| | baz=64 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.46** | **148** | P | Pn | 23 10 04.2 | -0.6 |
| | baz=147 | | | | | | |
| MASBT | | | | S | Sn | 23 10 11.4 | -0.7 |
| | baz=147 | | | | | | |
| **CHY** | **Chiayi** | **0.50** | **6** | *e*P | Pb | 23 10 04.4 | +0.3 |
| | baz=6.0 | | | | | | |
| CHY | | | | *e*S | Sn | 23 10 12.2 | -1.0 |
| | baz=6.0 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.54** | **346** | *e*P | Pb | 23 10 05.1 | +0.4 |
| | baz=345 | | | | | | |
| WSL | | | | *e*S | Sb | 23 10 12.8 | +0.7 |
| | baz=345 | | | | | | |
| **SSPT** | **Xinbi** | **0.54** | **160** | *e*S | Pn | 23 10 06.0 | 0.0 |
| | baz=176 | | | | | | |
| **SSPT** | **Xinbi** | **0.54** | **160** | P | Pn | 23 10 06.0 | 0.0 |
| | baz=160 | | | | | | |
| **ELDTW** | **Lidau** | **0.63** | **72** | *e*P | Pn | 23 10 06.9 | -0.3 |
| | baz=72 | | | | | | |
| ELDTW | | | | *e*S | Sn | 23 10 16.2 | -0.3 |
| | baz=72 | | | | | | |
| **ALS** | **Alishan** | **0.65** | **38** | *e*P | Pb | 23 10 07.2 | +0.4 |
| | baz=38 | | | | | | |
| ALS | | | | *e*S | Sn | 23 10 17.4 | +0.1 |
| | baz=38 | | | | | | |
| **CHN5** | **Tsauling** | **0.66** | **25** | P | Pn | 23 10 07.3 | -0.4 |
| | baz=25 | | | | | | |
| CHN5 | | | | *e*S | Sn | 23 10 17.5 | +0.1 |
| | baz=25 | | | | | | |
| **SCZT** | **Fangliau** | **0.67** | **160** | P | Pn | 23 10 07.6 | -0.1 |
| | baz=159 | | | | | | |
| SCZT | | | | *e*S | Sn | 23 10 17.6 | +0.3 |
| | baz=159 | | | | | | |
| **ECL** | **Taimali** | **0.67** | **126** | *e*P | Pn | 23 10 07.6 | -0.1 |
| | baz=126 | | | | | | |
| **LONT** | **Longtian** | **0.71** | **97** | *e*P | Pn | 23 10 08.2 | -0.1 |
| | baz=97 | | | | | | |
| **EAST** | **Anshuo** | **0.76** | **144** | P | Pn | 23 10 09.2 | +0.2 |
| | baz=143 | | | | | | |
| **SLIU** | **Shizi** | **0.87** | **153** | *e*P | Pn | 23 10 11.2 | +0.6 |
| | baz=152 | | | | | | |

*SFS **05** 23:11:58.0,35°.51N×3°.69W,h2$^{km}$,ML2.4,ALBORAN SUR*
*INMG **05** 23:11:59.3±1.5,35°.51N×3°.72W,h3$^{km}$±6$^{km}$,ML2.0,Error ellipse: s-maj=5.1km s-min=4.4km az=31.0*
*CNRM **05** 23:12:00.0,35°.53N×3°.64W,h32$^{km}$,ml2.7*

**ISC 05 23:11:58.9±1.1,35°.50N±0°.03×3°.62W±0°.03,h20$^{km}$±7$^{km}, n30,σ1°62/53,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.39** | **223** | P | **Pb** | **23 12 08.0** | **+1.0** |
| PALE | | | | S | **Sn** | **23 12 15.5** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.58** | **118** | P | **Pb** | **23 12 11.5** | **+0.9** |
| GOG | | | | S | **Sb** | **23 12 18.9** | **+0.5** |
| **AKLM** | **AKL** | **1.01** | **191** | P | **Pn** | **23 12 20.4** | **+2.4** |
| AKLM | | | | S | **Sn** | **23 12 31.4** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.02** | **108** | P | **Pb** | **23 12 17.3** | **-0.6** |
| CHAS | | | | S | **Sb** | **23 12 29.9** | **-1.0** |
| **EMAL** | **Malaga-Limoner** | **1.42** | **333** | P | **Pn** | **23 12 23.4** | **-0.1** |
| EMAL | | | | S | **Sn** | **23 12 41.0** | **-0.6** |
| **JBK** | **JBK** | **1.45** | **143** | P | **Pn** | **23 12 24.8** | **+0.6** |
| JBK | | | | S | **Sn** | **23 12 42.1** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.46** | **255** | P | **Pb** | **23 12 26.8** | **+1.3** |
| CHEFC | | | | S | **Sn** | **23 12 42.7** | **-0.1** |
| **LCRM** | **LCR** | **2.08** | **210** | P | **Pb** | **23 12 35.5** | **-0.5** |
| LCRM | | | | S | **Sb** | **23 13 02.1** | **+0.7** |
| **IFR** | **Ifrane** | **2.34** | **213** | P | **Pb** | **23 12 39.0** | **-1.4** |
| IFR | | | | S | **Sb** | **23 13 08.2** | **-0.8** |
| **MD31** | **MD31** | **2.79** | **200** | P | **Pb** | **23 12 46.7** | **-1.4** |
| MD31 | | | | S | **Sn** | **23 13 15.9** | **+0.3** |
| **MDT** | **Midelt** | **2.80** | **197** | P | **Pb** | **23 12 46.1** | **-2.2** |
| MDT | | | | S | **Sn** | **23 13 16.5** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.81** | **301** | *e*Pn | **Pn** | **23 12 57.3** | **+0.9** |
| PVAQ | | | | *e*Sn | **Sn** | **23 13 39.8** | **-0.8** |
| PVAQ | | | | A | A | 23 13 43.5 | |
| | 2.8nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.81** | **301** | P | **Pn** | **23 12 57.4** | **+1.0** |
| PVAQ | | | | S | **Sn** | **23 13 38.5** | **-2.1** |
| **PCVE** | **Castro Verde** | **4.14** | **302** | *e*Pn | **Pn** | **23 13 02.6** | **+1.6** |
| PCVE | | | | *e*Sn | **Sn** | **23 13 48.4** | **-0.5** |
| PCVE | | | | A | A | 23 13 51.4 | |
| | 2.7nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.37** | **304** | *e*Pn | **Pn** | **23 13 05.9** | **+1.8** |
| MESJ | | | | *e*Sn | **Sn** | **23 13 53.4** | **-1.1** |
| MESJ | | | | A | A | 23 13 55.5 | |
| | 1.8nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.59** | **298** | *e*Sn | **Sn** | **23 13 59.2** | **-0.6** |
| **PESTR** | **Estremoz** | **4.62** | **318** | *e*Sn | **Sn** | **23 14 00.1** | **-0.5** |
| **PESTR** | **Estremoz** | **4.62** | **318** | P | **Pn** | **23 13 09.1** | **+1.5** |
| PESTR | | | | S | **Sn** | **23 13 57.5** | **-3.0** |
| **EVO** | **Evora** | **4.64** | **312** | P | **Pn** | **23 13 09.1** | **+1.3** |
| EVO | | | | S | **Sn** | **23 13 57.2** | **-3.8** |
| **EVO** | **Evora** | **4.64** | **312** | *e*Pn | **Pn** | **23 13 09.3** | **+1.5** |
| EVO | | | | *e*Sn | **Sn** | **23 13 59.7** | **-1.3** |
| EVO | | | | A | A | 23 14 02.6 | |
| | 2.1nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.72** | **305** | *e*Pn | **Pn** | **23 13 10.2** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **23 14 01.6** | **-1.5** |
| PNCL | | | | A | A | 23 14 03.5 | |
| | 1.8nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **4.94** | **324** | *e*Pn | **Pn** | **23 13 13.4** | **+1.5** |
| PMRV | | | | *e*Sn | **Sn** | **23 14 07.9** | **-0.5** |
| **PMTG** | **Montargil** | **5.12** | **315** | *e*Pn | **Pn** | **23 13 16.4** | **+2.1** |
| PMTG | | | | *e*Sn | **Sn** | **23 14 12.0** | **-0.8** |
| **PACT** | **Alcochete** | **5.29** | **310** | *e*Pn | **Pn** | **23 13 18.9** | **+2.2** |
| **PCBR** | **Castelo Branco** | **5.30** | **326** | *e*Pn | **Pn** | **23 13 19.1** | **+2.2** |
| **OUK** | **Oukaimeden** | **5.56** | **221** | P | **Pn** | **23 13 22.6** | **+1.7** |
| OUK | | | | S | **Sn** | **23 14 23.9** | **-0.5** |
| **PSBE** | **So Bento** | **5.74** | **316** | *e*Pn | **Pn** | **23 13 25.2** | **+2.2** |
| **PVIS** | **Viseu** | **6.20** | **328** | *e*Pn | **Pn** | **23 13 31.7** | **+2.4** |
| **MVO** | **Moncorvo** | **6.26** | **336** | *e*Pn | **Pn** | **23 13 32.4** | **+2.3** |
| **TTIG** | **Tnine Tigouga,** | **6.39** | **221** | P | **Pn** | **23 13 30.4** | **-1.6** |
| TTIG | | | | S | **Sn** | **23 14 40.4** | **-4.0** |

*IDC **05** 23:16:45.0±2.0,38°.26N×141°.97E,h54$^{km}$±19$^{km}$,mb3.4/6, mb1 3.7/10,mb1mx3.3/46,mbtmp3.8/10,ML3.2/4,Error ellipse: s-maj=21.5km s-min=10.6km az=105.0*
*NEIC **05** 23:16:45.2±2.1,38°.28N±0°.03×141°.7E±0°.1,h45$^{km}$±10$^{km}$, mb4.5/9,Error ellipse: s-maj=12.2km s-min=2.7km az=103.0*
*JMA **05** 23:16:45.9,38°.31N×141°.59E,h55$^{km}$±1$^{km}$,M3.8*
*JMA Felt II J1.*

**ISC 05 23:16:45.3±1.0,38°.29N±0°.04×141°.72E±0°.06,h48$^{km}$±7$^{km}, n55,σ1°33/70,mb4.1/11,7C-4D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.20** | **278** | ⇑P | **Pn** | **23 16 54.4** | **+1.0** |
| JIKH | | | | S | **Sn** | **23 17 00.2** | **+1.0** |
| **JIO** | **Ouri** | **0.33** | **301** | ⇑P | **Pn** | **23 16 55.2** | **+0.6** |
| JIO | | | | *i* S | **Sn** | **23 17 01.4** | **+0.2** |
| **JKMT** | **Kesennumamotoy** | **0.56** | **340** | ⇑P | **Pn** | **23 16 57.6** | **+0.4** |
| JKMT | | | | S | **Sn** | **23 17 05.6** | **-0.1** |
| **JOFO** | **Osakifurukawao** | **0.71** | **297** | ⇓P | **Pn** | **23 16 59.0** | **0.0** |
| JOFO | | | | S | **Sn** | **23 17 08.7** | **-0.3** |
| **JMK** | **Ichinoseki** | **0.77** | **330** | ⇑P | **Pn** | **23 17 00.2** | **+0.3** |
| JMK | | | | S | **Sn** | **23 17 10.1** | **-0.4** |
| **OFUJ** | **Ofunato** | **0.80** | **357** | ⇑P | **Pn** | **23 17 00.6** | **+0.3** |
| OFUJ | | | | S | **Sn** | **23 17 11.2** | **+0.1** |
| **JOU** | **Okura** | **0.83** | **276** | ⇓P | **Pn** | **23 17 00.5** | **-0.2** |
| JOU | | | | S | **Sn** | **23 17 11.0** | **-1.0** |
| **JMM** | **Marumori** | **0.84** | **240** | ⇑P | **Pn** | **23 17 00.5** | **-0.3** |
| JMM | | | | S | **Sn** | **23 17 11.1** | **-1.1** |
| **JMM** | **Marumori** | **0.84** | **240** | | **Pn** | **23 17 00.5** | **-0.3** |
| JMM | | | | Sn | **Sn** | **23 17 11.0** | **-1.1** |
| **JFK** | **Kawauchi** | **1.13** | **216** | ⇑P | **Pn** | **23 17 05.0** | **+0.2** |
| JFK | | | | S | **Sn** | **23 17 19.1** | **-0.2** |
| **JOM** | **Ohasama** | **1.23** | **345** | P | **Pn** | **23 17 06.5** | **+0.4** |
| JOM | | | | S | **Sn** | **23 17 21.2** | **-0.4** |
| **JYK** | **Kaneyama** | **1.24** | **301** | P | **Pn** | **23 17 05.9** | **-0.3** |
| JYK | | | | S | **Sn** | **23 17 21.3** | **-0.5** |
| **JYS** | **Shirataka** | **1.30** | **268** | ⇓P | **Pn** | **23 17 07.0** | **-0.1** |
| JYS | | | | S | **Sn** | **23 17 22.9** | **-0.4** |
| **JFT** | **Otama** | **1.33** | **235** | P | **Pn** | **23 17 07.8** | **+0.3** |
| JFT | | | | S | **Sn** | **23 17 23.3** | **-0.8** |
| **JRG** | **Rokugo** | **1.39** | **323** | ⇓P | **Pn** | **23 17 08.6** | **+0.2** |
| JRG | | | | S | **Sn** | **23 17 26.2** | **+0.6** |
| **JYA** | **Atsumi** | **1.60** | **282** | P | **Pn** | **23 17 11.0** | **-0.2** |
| JYA | | | | *e*S | **Sn** | **23 17 30.6** | **-0.1** |
| **JYT** | **Yasato** | **2.38** | **211** | | **Pn** | **23 17 22.2** | **+0.4** |
| JYT | | | | Sn | **Sn** | **23 17 50.3** | **+0.4** |
| **JTM** | **Tenmabayashi** | **2.55** | **349** | | **Pn** | **23 17 24.9** | **+0.8** |
| **JSD** | **Sado** | **2.73** | **266** | | **Pn** | **23 17 25.8** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **3.29** | **239** | P | **Pn** | **23 17 36.0** | **+1.6** |
| | 0.7nm,0.3s,baz=37,slow=14,SNR=19 | | | | | | |
| MJAR | | | | S | **Sn** | **23 18 17.7** | **+5.5** |
| | 0.4nm,0.3s,baz=287,slow=12,SNR=4.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.29** | **239** | | **Pn** | **23 17 35.7** | **+1.3** |
| **MAJO** | **Matsushiro** | **3.29** | **239** | | **Pn** | **23 17 35.7** | **+1.4** |
| **MAT** | **Matsushiro** | **3.29** | **239** | P | **Pn** | **23 17 35.9** | **+1.5** |
| MAT | | | | *e*S | **Sn** | **23 18 18.6** | **+6.4** |
| **MJB9** | **Matsu-Tunnel** | **3.29** | **239** | | **Pn** | **23 17 36.0** | **+1.6** |
| **ERM** | **Erimo** | **3.89** | **16** | Pn | **Pn** | **23 17 43.8** | **+1.3** |
| **JGF** | **Kuroka** | **4.40** | **234** | | **Pn** | **23 17 50.9** | **+1.3** |
| **INU** | **Inuyama** | **4.77** | **234** | | **Pn** | **23 17 56.5** | **+1.8** |
| **JHJ** | **Hachijo jima 2** | **5.39** | **198** | P | **Pn** | **23 18 02.6** | **-0.5** |
| | 7.5nm,0.3s,baz=348,slow=20,SNR=11 | | | | | | |
| JHJ | | | | S | **Sn** | **23 19 02.5** | **-1.4** |
| | 12nm,0.3s,baz=248,slow=22,SNR=1.9 | | | | | | |
| **JHJ2** | **Mitsune** | **5.39** | **197** | Pn | **Pn** | **23 18 03.5** | **+0.4** |
| **ASAJ** | **Asahikawa** | **5.86** | **6** | P | **Pn** | **23 18 09.2** | **-0.4** |
| | 0.8nm,0.3s,baz=46,slow=27,SNR=2.0 | | | | | | |
| ASAJ | | | | S | **Sn** | **23 19 16.4** | **+0.9** |
| | 1.1nm,0.3s,baz=105,slow=19,SNR=4.4 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **5.86** | **6** | Pn | **Pn** | **23 18 09.3** | **-0.3** |
| **USA0B** | **Ussuriysk Arra** | **9.41** | **312** | Pn | **Pn** | **23 18 58.9** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **9.41** | **312** | P | **Pn** | **23 18 58.8** | **+0.6** |
| | baz=120,slow=14,SNR=9.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.41** | **312** | Pn | **Pn** | **23 18 59.3** | **+1.2** |
| **SONM** | **Songino Array** | **27.31** | **302** | P | **P** | **23 22 25.8** | **+0.3** |
| | 0.3nm,0.6s,baz=100,slow=9.6,SNR=3.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.61** | **123** | T | T | 23 52 50.6 | |
| | baz=316,slow=75,SNR=187 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.61** | **123** | T | T | 23 52 51.3 | |
| | baz=316,slow=75,SNR=298 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.62** | **123** | T | T | 23 52 51.9 | |
| | baz=316,slow=75,SNR=264 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.36** | **125** | T | T | 23 53 52.6 | |
| | baz=318,slow=76,SNR=116 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.36** | **125** | T | T | 23 53 49.1 | |
| | baz=318,slow=76,SNR=148 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.38** | **125** | T | T | 23 53 46.0 | |
| | baz=318,slow=76,SNR=69 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.26** | **311** | P | **P** | **23 24 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PB15** | **IPOC Station P** | **1.88** | **346** | ⇑ | *i* P | **Pn** | **23 31 14.6** | **+0.9** |
| PB15 | | | | | *i* S | **Sn** | **23 31 39.1** | **+1.3** |
| **PB10** | **IPOC Station P** | **2.09** | **317** | ⇑ | *e* P | **Pn** | **23 31 16.9** | **+0.7** |
| PB10 | | | | | IAML | | 23 31 51.0 | |
| | comp=N,836nm,0.3s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.39** | **347** | ⇑ | *i* P | **Pn** | **23 31 21.1** | **+0.9** |
| PB06 | | | | | *i* S | **Sn** | **23 31 50.0** | **+0.6** |
| PB06 | | | | | IAML | | 23 31 51.9 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **2.43** | **2** | | P | **Pn** | **23 31 21.7** | **+0.8** |
| | comp=N,51nm,0.3s,baz=151,slow=11,SNR=530 | | | | | | | |
| LVC | | | | | S | **Sn** | **23 31 49.5** | **-1.0** |
| | comp=N,74nm,0.3s,baz=201,slow=6.0,SNR=8.6 | | | | | | | |
| **LVC** | **Limon Verde** | **2.43** | **2** | ⇑ | *i* P | **Pn** | **23 31 21.4** | **+0.6** |
| LVC | | | | | *e* S | **Sn** | **23 31 51.3** | **+0.8** |
| **GO03** | **Copiap** | **2.77** | **204** | | *e* P | **Pn** | **23 31 24.3** | **-0.8** |
| **PB04** | **IPOC Station P** | **2.90** | **338** | | *i* P | **Pn** | **23 31 26.8** | **-0.1** |
| PB04 | | | | | *e* S | **Sn** | **23 32 01.6** | **+0.1** |
| PB04 | | | | | IAML | | 23 32 14.7 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **PB03** | **IPOC Station P** | **3.07** | **347** | ⇑ | *i* P | **Pn** | **23 31 29.2** | **+0.2** |
| PB03 | | | | | IAML | | 23 32 14.7 | |
| | comp=N,832nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **3.24** | **356** | ⇑ | *i* P | **Pn** | **23 31 32.5** | **+1.0** |
| **PB07** | **IPOC Station P** | **3.41** | **346** | ⇑ | *e* P | **Pn** | **23 31 33.3** | **-0.3** |
| PB07 | | | | | IAML | | 23 32 27.9 | |
| | comp=E,569nm,0.6s | | | | | | | |
| **AC04** | **Llanos de Chal** | **3.66** | **210** | | *e* P | **Pn** | **23 31 34.7** | **-2.1** |
| **VCA** | **Vinchina** | **3.74** | **169** | ⇑ | *i* P | **Pn** | **23 31 39.3** | **+1.3** |
| VCA | | | | | *i* S | **Sn** | **23 32 22.4** | **+1.1** |
| **LPAZ** | **La Paz** | **8.75** | **5** | | P | **Pn** | **23 32 45.4** | **-1.0** |
| | comp=E,0.8nm,0.3s,baz=177,slow=3.7,SNR=15 | | | | | | | |
| **SIV** | **San Ignacio** | **11.66** | **41** | | P | **Pn** | **23 33 21.0** | **-4.2** |
| | comp=E,2.3nm,0.3s,baz=239,slow=8.9,SNR=25 | | | | | | | |
| SIV | | | | | S | Sn | 23 35 21.8 | -12 |
| | comp=E,0.2nm,0.3s,baz=276,slow=19,SNR=1.4 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **12.04** | **224** | | T | T | 23 46 06.8 | |
| | baz=43,slow=72,SNR=3.6 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **12.05** | **224** | | T | T | 23 46 08.1 | |
| | baz=43,slow=72,SNR=3.2 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **12.05** | **224** | | T | T | 23 46 07.0 | |
| | baz=43,slow=72,SNR=4.5 | | | | | | | |
| **PLCA** | **Paso Flores** | **15.70** | **184** | | P | **Pn** | **23 34 17.7** | **+0.6** |
| | comp=E,0.1nm,0.3s,baz=359,slow=13,SNR=3.4 | | | | | | | |
| **ATAH** | **Atahualpa** | **19.96** | **332** | | P | **P** | **23 35 04.7** | **-1.5** |
| | comp=E,0.5nm,0.3s,baz=149,slow=16,SNR=2.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.14** | **331** | | P | **P** | **23 42 25.4** | **+1.5** |
| | comp=E,0.1nm,0.3s,baz=139,slow=8.4,SNR=1.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.63** | **70** | | P | **P** | **23 42 33.1** | **+0.6** |
| | comp=E,1.1nm,0.5s,baz=261,slow=5.1,SNR=19 | | | | | | | |
| TORD | | | | | pP | **pP** | **23 43 01.2** | **-0.5** |
| | comp=E,0.6nm,0.7s,baz=255,slow=4.4,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **126.73** | **206** | | PKP | **PKPdf** | **23 49 34.0** | **+0.5** |
| | comp=E,0.2nm,0.4s,baz=132,slow=1.5,SNR=5.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **129.85** | **209** | | PKP | **PKPdf** | **23 49 40.4** | **+0.9** |
| | comp=E,0.2nm,0.3s,baz=166,slow=1.4,SNR=5.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **145.15** | **27** | | PKPbc | **PKPdf** | **23 50 07.1** | **+0.7** |
| | comp=E,0.8nm,0.4s,baz=301,slow=3.6,SNR=2.5 | | | | | | | |
| ZALV | | | | | pPKPbc | pPKPab | 23 50 35.9 | -0.4 |
| | comp=E,1.7nm,0.5s,baz=313,slow=4.1,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **148.48** | **39** | | PKPbc | **PKiKP** | **23 50 17.5** | **0.0** |
| | comp=E,0.6nm,0.5s,baz=324,slow=2.6,SNR=15 | | | | | | | |
| MKAR | | | | | pPKPbc | **pPKPdf** | **23 50 45.5** | **+2.3** |
| | comp=E,0.5nm,0.7s,baz=296,slow=3.1,SNR=4.2 | | | | | | | |

*HLW **05** 23:34:09.6,29°.51N×35°.15E,h11km±1km,Md2.6*
*GII **05** 23:34:12.0±0.2,29°.57N×34°.80E,h10km,MD1.8/2,*
*Mm2.0/3*

**ISC 05 23:34:11.1±1.1,29°.52N±0°.04×35°.0E±0°.1,h16km,n19,**
**σ0s74/28,Egypt**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EIL** | **Elat** | **0.15** | **1** | Pg | **Pb** | **23 34 15.9** | **+0.2** |
| EIL | | | | Sg | **Sb** | **23 34 19.6** | **+0.9** |
| **MBRI** | **Mt Berech** | **0.28** | **354** | Pg | **Pb** | **23 34 17.8** | **-0.1** |
| MBRI | | | | Sg | **Sb** | **23 34 22.3** | **-0.1** |
| **HBST** | **Basata** | **0.35** | **212** | P | **Pg** | **23 34 19.0** | **+0.6** |
| | baz=232 | | | | | | |
| HBST | | | | S | **Sb** | **23 34 25.7** | **+1.4** |
| | baz=232 | | | | | | |
| **HRFI** | **Mount Harif** | **0.53** | **8** | Pg | **Pb** | **23 34 21.6** | **-0.4** |
| HRFI | | | | Sg | **Sb** | **23 34 29.6** | **+0.2** |
| **NUB** | **Nuweibaa** | **0.55** | **208** | P | **Pg** | **23 34 22.6** | **+0.5** |
| | baz=222 | | | | | | |
| **KRMI** | **Paran Flat** | **0.63** | **342** | Pg | **Pg** | **23 34 23.3** | **-0.3** |
| KRMI | | | | Sg | **Sg** | **23 34 31.7** | **-0.3** |
| **PRNI** | **Paran** | **0.83** | **3** | Pg | **Pb** | **23 34 27.1** | **-0.2** |
| PRNI | | | | Sg | **Sg** | **23 34 38.9** | **+0.5** |
| **HDHB** | **Dhahab** | **0.84** | **200** | P | **Pb** | **23 34 27.0** | **-0.4** |
| | baz=211 | | | | | | |
| **ZFRI** | **Zfri** | **1.05** | **11** | Pg | **Pn** | **23 34 31.1** | **-0.1** |
| ZFRI | | | | Sg | **Sn** | **23 34 46.0** | **+0.4** |
| **HKAT** | **Jabal Katrina** | **1.29** | **220** | P | **Pn** | **23 34 33.4** | **-1.3** |
| | baz=227 | | | | | | |
| HKAT | | | | S | **Sb** | **23 34 51.3** | **-0.4** |
| | baz=227 | | | | | | |
| **KZIT** | **Kziot** | **1.47** | **341** | Pn | **Pn** | **23 34 37.0** | **+0.1** |
| **TR2** | **Tor 2** | **1.56** | **224** | P | **Pn** | **23 34 38.4** | **+0.2** |
| | baz=229 | | | | | | |
| **HRDS** | **Abu Rudays** | **1.65** | **241** | P | **Pn** | **23 34 39.9** | **+0.5** |
| | baz=245 | | | | | | |
| **YTIR** | **Yattir** | **1.85** | **4** | Pn | **Pb** | **23 34 43.5** | **-1.1** |
| YTIR | | | | Sn | **Sb** | **23 35 07.7** | **+0.2** |
| **GHAJ** | **Ghor Haditha** | **1.86** | **17** | Pn | **Pb** | **23 34 44.3** | **-0.5** |
| **AMAZ** | **Amatzia** | **2.01** | **359** | Pn | **Pn** | **23 34 45.3** | **+0.8** |
| **DSI** | **Dead Sea** | **2.08** | **10** | Pn | **Pb** | **23 34 47.0** | **-1.5** |
| **ZAF** | **Zafarana** | **2.11** | **264** | P | **Pn** | **23 34 46.1** | **+0.3** |
| | baz=265 | | | | | | |
| **GRB** | **Gharib** | **2.27** | **237** | P | **Pn** | **23 34 46.4** | **-1.6** |
| | baz=240 | | | | | | |

**TAP 05 23:49:40.5,24°.02N×121°.59E,h9km,ML1.4,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HWA** | **Hwalien** | **0.04** | **163** | *i* P | Pg | 23 49 42.8 | +0.5 |
| | baz=154 | | | | | | |
| HWA | | | | *e* S | Sg | 23 49 44.8 | +1.1 |
| | baz=154 | | | | | | |
| **TWD** | **Chiawan** | **0.06** | **4** | *i* P | Pg | 23 49 43.3 | +0.7 |
| | baz=11 | | | | | | |
| TWD | | | | S | Sg | 23 49 44.8 | +0.8 |
| | baz=11 | | | | | | |
| **ETM** | **Tongmen** | **0.10** | **240** | *i* P | Pg | 23 49 43.7 | +0.6 |
| | baz=239 | | | | | | |
| **ETL** | **Fush Village** | **0.14** | **12** | *e* P | Pg | 23 49 43.5 | -0.3 |
| | baz=11 | | | | | | |
| ETL | | | | *e* S | Sg | 23 49 46.7 | +0.7 |
| | baz=11 | | | | | | |
| **NACB** | **Ninganchiao** | **0.15** | **1** | *i* P | Pg | 23 49 44.7 | +0.7 |
| | baz=1.0 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.21** | **332** | *i* P | Pg | 23 49 46.0 | +1.0 |
| | baz=331 | | | | | | |
| ETLH | | | | *e* S | Sg | 23 49 49.6 | +1.6 |
| | baz=331 | | | | | | |
| **ESL** | **Shilin** | **0.25** | **215** | *e* P | Pg | 23 49 46.0 | +0.4 |
| | baz=213 | | | | | | |
| ESL | | | | *e* S | Sg | 23 49 50.9 | +1.9 |
| | baz=213 | | | | | | |

**TAP 05 23:49:43.6,24°.02N×121°.59E,h9km,ML2.1,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HWA** | **Hwalien** | **0.05** | **163** | *e* P | Pg | 23 49 45.9 | +0.5 |
| | baz=155 | | | | | | |
| HWA | | | | *e* S | Sg | 23 49 47.8 | +0.9 |
| | baz=155 | | | | | | |
| **TWD** | **Chiawan** | **0.06** | **7** | *i* P | Pg | 23 49 46.3 | +0.8 |
| | baz=14 | | | | | | |
| TWD | | | | S | Sg | 23 49 47.8 | +0.8 |
| | baz=14 | | | | | | |
| **ETM** | **Tongmen** | **0.11** | **237** | P | Pg | 23 49 46.9 | +0.7 |
| | baz=236 | | | | | | |
| ETM | | | | S | Sg | 23 49 48.7 | +0.6 |
| | baz=236 | | | | | | |
| **ETL** | **Fush Village** | **0.14** | **13** | *e* P | Pg | 23 49 47.5 | +0.8 |
| | baz=13 | | | | | | |
| ETL | | | | *e* S | Sg | 23 49 49.9 | +1.0 |
| | baz=13 | | | | | | |
| **NACB** | **Ninganchiao** | **0.15** | **2** | P | Pg | 23 49 47.7 | +0.8 |
| | baz=1.0 | | | | | | |
| NACB | | | | S | Sg | 23 49 50.2 | +1.0 |
| | baz=1.0 | | | | | | |
| **NACB** | **Ninganchiao** | **0.15** | **2** | *e* S | Pg | 23 49 47.7 | +0.8 |
| | baz=1.0 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.21** | **332** | P | Pg | 23 49 49.0 | +1.1 |
| | baz=331 | | | | | | |
| ETLH | | | | S | Sg | 23 49 52.5 | +1.6 |
| | baz=331 | | | | | | |
| **ESL** | **Shilin** | **0.25** | **214** | *e* P | Pg | 23 49 49.0 | +0.3 |
| | baz=212 | | | | | | |
| ESL | | | | *e* S | Sg | 23 49 52.0 | -0.2 |
| | baz=212 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.32** | **292** | *e* P | Pb | 23 49 51.3 | -0.4 |
| | baz=292 | | | | | | |
| WHF | | | | *e* S | Sb | 23 49 56.0 | -1.1 |
| | baz=292 | | | | | | |
| **CHGB** | **Renai** | **0.38** | **276** | *e* P | Pb | 23 49 52.6 | 0.0 |
| | baz=275 | | | | | | |
| CHGB | | | | *e* S | Sb | 23 49 58.3 | -0.4 |
| | baz=275 | | | | | | |
| **FUSS** | **Fushou** | **0.39** | **305** | *e* P | Pb | 23 49 52.9 | +0.2 |
| | baz=305 | | | | | | |
| FUSS | | | | *e* S | Sb | 23 49 58.6 | -0.2 |
| | baz=305 | | | | | | |
| **ENA** | **Nanau** | **0.42** | **19** | P | Pb | 23 49 52.7 | -0.5 |
| | baz=20 | | | | | | |
| ENA | | | | *e* S | Sg | 23 49 58.6 | +1.1 |
| | baz=20 | | | | | | |
| **WUSB** | **Renai** | **0.43** | **266** | *e* P | Pb | 23 49 53.4 | -0.1 |
| | baz=265 | | | | | | |
| WUSB | | | | *e* S | Sb | 23 49 59.7 | -0.3 |
| | baz=265 | | | | | | |
| **NNSB** | **Datong** | **0.44** | **335** | *e* P | Pb | 23 49 53.8 | +0.1 |
| | baz=334 | | | | | | |
| NNSB | | | | *e* S | Sb | 23 49 59.8 | -0.6 |
| | baz=334 | | | | | | |
| **EWUT** | **Wuta** | **0.45** | **22** | *e* P | Pb | 23 49 53.3 | -0.5 |
| | baz=22 | | | | | | |
| EWUT | | | | *e* S | Sg | 23 49 59.2 | +0.7 |
| | baz=22 | | | | | | |
| **NNS** | **Nan Shan** | **0.46** | **335** | *e* P | Pb | 23 49 54.0 | +0.1 |
| | baz=335 | | | | | | |
| NNS | | | | *e* S | Sb | 23 50 00.3 | -0.6 |
| | baz=335 | | | | | | |
| **VWDT** | **VWDT** | **0.49** | **237** | *e* P | Pb | 23 49 54.3 | -0.1 |
| | baz=236 | | | | | | |
| VWDT | | | | *e* S | Sb | 23 50 01.8 | +0.2 |
| | baz=236 | | | | | | |
| **LATG** | **Datong** | **0.51** | **354** | *e* P | Pb | 23 49 54.5 | -0.3 |
| | baz=353 | | | | | | |
| LATG | | | | *e* S | Sb | 23 50 02.5 | +0.2 |
| | baz=353 | | | | | | |
| **HGSD** | **Ruisui** | **0.55** | **196** | *e* P | Pb | 23 49 56.2 | +0.9 |
| | baz=195 | | | | | | |
| HGSD | | | | *e* S | Sn | 23 50 05.7 | -1.2 |
| | baz=195 | | | | | | |
| **NDT** | **Datong Townshi** | **0.58** | **353** | *e* P | Pb | 23 49 56.4 | +0.5 |
| | baz=353 | | | | | | |
| NDT | | | | *e* S | Sb | 23 50 04.5 | +0.3 |
| | baz=353 | | | | | | |
| **ENTT** | **Nioudou** | **0.61** | **358** | *e* P | Pb | 23 49 56.9 | +0.4 |
| | baz=358 | | | | | | |
| ENTT | | | | *e* S | Sb | 23 50 05.1 | -0.1 |
| | baz=358 | | | | | | |
| **NDS** | **Dongshan** | **0.62** | **11** | *e* P | Pb | 23 49 56.6 | +0.1 |
| | baz=10.0 | | | | | | |
| NDS | | | | *e* S | Sb | 23 50 05.1 | -0.2 |
| | baz=10.0 | | | | | | |
| **SSLB** | **Suanglung** | **0.63** | **248** | *e* P | Pb | 23 49 57.0 | +0.3 |
| | baz=247 | | | | | | |
| SSLB | | | | *e* S | Sb | 23 50 05.2 | -0.3 |
| | baz=247 | | | | | | |
| **TWC** | **Suao** | **0.63** | **22** | *e* P | Pb | 23 49 56.7 | 0.0 |
| | baz=22 | | | | | | |
| TWC | | | | *e* S | Sb | 23 50 04.9 | -0.7 |
| | baz=22 | | | | | | |
| **WHP** | **Taichung City** | **0.64** | **293** | *e* P | Pn | 23 49 58.0 | -0.9 |
| | baz=293 | | | | | | |
| WHP | | | | *e* S | Sb | 23 50 07.2 | +1.2 |
| | baz=293 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.65** | **258** | *e* P | Pb | 23 49 57.7 | +0.6 |
| | baz=257 | | | | | | |
| SMLT | | | | *e* S | Sb | 23 50 06.5 | +0.2 |
| | baz=257 | | | | | | |
| **YHNB** | **Yeheng** | **0.67** | **343** | *e* P | Pb | 23 49 58.2 | +0.7 |
| | baz=343 | | | | | | |
| YHNB | | | | *e* S | Sb | 23 50 07.1 | +0.2 |
| | baz=343 | | | | | | |
| **TYC** | **Yuchr** | **0.68** | **260** | *e* P | Pb | 23 49 58.1 | +0.5 |
| | baz=259 | | | | | | |
| TYC | | | | *e* S | Sb | 23 50 06.8 | -0.3 |
| | baz=259 | | | | | | |
| **NSK** | **Sanguang** | **0.68** | **342** | *e* P | Pb | 23 49 58.5 | +0.8 |
| | baz=342 | | | | | | |
| NSK | | | | *e* S | Sb | 23 50 07.9 | +0.7 |
| | baz=342 | | | | | | |
| **YULB** | **Yu-li** | **0.68** | **203** | *e* P | Pg | 23 49 56.9 | +0.1 |
| | baz=203 | | | | | | |
| YULB | | | | *e* S | Sb | 23 50 07.9 | +0.7 |
| | baz=203 | | | | | | |
| **TWE** | **Neicheng** | **0.70** | **6** | *e* P | Pb | 23 49 58.3 | +0.5 |
| | baz=7.0 | | | | | | |
| TWE | | | | *e* S | Sb | 23 50 08.5 | +0.9 |
| | baz=7.0 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.73** | **360** | *e* P | Pb | 23 49 59.1 | +0.6 |
| | baz=359 | | | | | | |
| FUSB | | | | *e* S | Sb | 23 50 09.3 | +0.7 |
| | baz=359 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.74** | **325** | *e* P | Pn | 23 49 59.8 | -0.5 |
| | baz=324 | | | | | | |
| NFF | | | | *e* S | Sb | 23 50 09.8 | +0.8 |
| | baz=324 | | | | | | |
| **NWLT** | **Wulai** | **0.75** | **354** | *e* P | Pb | 23 49 59.6 | +0.7 |
| | baz=353 | | | | | | |
| NWLT | | | | *e* S | Sb | 23 50 09.7 | +0.4 |
| | baz=353 | | | | | | |

*ISK **05** 23:54:33.1,38°.33N×38°.99E,h5km,ML2.7/6*
*DDA **05** 23:54:34.8±0.0,38°.34N×39°.06E,h17km±2km,ML2.3*

**ISC 05 23:54:34.5±1.0,38°.36N±0°.03×39°.03E±0°.03,h13km±9km,**
**n15,σ0s93/25,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVRC** | **Sivrice-ELAZID** | **0.22** | **86** | PG | **Pb** | **23 54 39.5** | **-1.0** |
| SVRC | | | | SG | **Sg** | **23 54 43.9** | **+1.1** |
| **KOVA** | **Elazig, Kovanc** | **0.70** | **61** | P | **Pg** | **23 54 48.2** | **0.0** |
| KOVA | | | | S | **Sn** | **23 55 01.5** | **+0.4** |
| **ARPR** | **Arapgir-MALATY** | **0.91** | **324** | PG | **Pg** | **23 54 51.9** | **-0.2** |
| ARPR | | | | SG | **Sn** | **23 55 05.9** | **-0.3** |
| **SANL** | **SANLIURFA_Merk** | **1.19** | **182** | P | **Pg** | **23 54 58.3** | **+0.8** |
| SANL | | | | S | **Sn** | **23 55 15.0** | **+2.0** |
| SANL | | | | *i* AML | AML | 23 55 16.0 | |
| | comp=E,81nm,0.7s | | | | | | |
| **DARE** | **Darende-Malaty** | **1.23** | **280** | PN | **Pb** | **23 54 57.3** | **-0.4** |
| **MAZI** | **Mazidag** | **1.44** | **128** | PN | **Pg** | **23 55 01.7** | **-0.5** |
| MAZI | | | | SN | **Sg** | **23 55 21.9** | **+1.0** |
| **SURC** | **SANLIURFA_SURC** | **1.52** | **193** | P | **Pg** | **23 55 02.6** | **-1.1** |
| **GZT** | **Gaziantep** | **1.54** | **229** | P | **Pb** | **23 55 02.1** | **-0.8** |
| GZT | | | | S | **Sg** | **23 55 24.4** | **+0.4** |
| **CUKAN** | **kangal_SIVAS** | **1.55** | **308** | P | **Pn** | **23 55 02.4** | **+0.5** |
| CUKAN | | | | S | **Sb** | **23 55 23.3** | **+0.6** |
| **YEDI** | **Yedisu-Bingol** | **1.60** | **47** | PN | **Pb** | **23 55 04.2** | **+0.2** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **96** | PN | **Pb** | **23 55 05.7** | **-0.3** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **96** | P | **Pb** | **23 55 05.7** | **-0.3** |
| SVAN | | | | S | **Sg** | **23 55 28.9** | **-1.0** |
| **GAZ** | **Gaziantep** | **1.87** | **231** | PN | **Pb** | **23 55 06.8** | **-1.7** |
| **MUSM** | **Mu-Merkez** | **1.98** | **79** | P | **Pb** | **23 55 09.7** | **-0.8** |
| MUSM | | | | S | **Sg** | **23 55 37.1** | **-1.1** |
| **MIDY** | **Mardin/Midyat-** | **2.10** | **116** | P | **Pb** | **23 55 11.7** | **-0.8** |
| MIDY | | | | S | **Sb** | **23 55 38.6** | **0.0** |
| MIDY | | | | *i* AML | AML | 23 55 41.0 | |
| | comp=N,37nm,0.4s | | | | | | |
| MIDY | | | | *i* AML | AML | 23 55 48.0 | |
| | comp=E,34nm,0.5s | | | | | | |

*NEIC **06** 00:08:39.7±1.1,59°.66N±0°.03×153°.40W±0°.06,*
*h116km±5km,Error ellipse: s-maj=5.6km s-min=3.8km*
*az=222.0*
*AEIC **06** 00:08:40±1.3,59°.65N±0°.03×153°.35W±0°.06,h112km±4km,*
*ML3.2,ML3.5/110(NEIC),Error ellipse: s-maj=5.5km*
*s-min=2.9km az=47.0*
*IDC **06** 00:08:42.5±8.6,60°.06N×153°.35W,h106km±76km,mb3.2/1,*
*mb1 3.3/3,mb1mx2.6/43,mbtmp3.5/3,ML3.3/2,Error*
*ellipse: s-maj=66.7km s-min=36.6km az=17.0*

**ISC 06 00:08:40.1±1.0,59°.67N±0°.04×153°.30W±0°.04,**
**h115km±6km,n191,σ0s88/189,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.04** | **115** | | **Pn** | **00 08 55.7** | **-0.1** |
| **OPT** | **Oil Point** | **0.04** | **115** | P | **Pn** | **00 08 55.7** | **-0.1** |
| | baz=254 | | | | | | |
| **AUL** | **Augustine Lava** | **0.29** | **193** | | **Pn** | **00 08 56.6** | **+0.2** |
| AUL | | | | | **Sn** | **00 09 08.5** | **-0.1** |
| **AU2** | **Augustine Isla** | **0.30** | **187** | | **Pn** | **00 08 56.5** | **+0.1** |
| **AUH** | **Augustine H** | **0.31** | **193** | | **Pn** | **00 08 56.7** | **+0.1** |
| AUH | | | | | **Sn** | **00 09 08.3** | **-0.7** |
| **AGU** | **Augustine-Summ** | **0.32** | **192** | | **Pn** | **00 08 56.9** | **+0.2** |
| **AUQ** | **Augustine Qik'** | **0.32** | **190** | | **Pn** | **00 08 56.7** | **+0.1** |
| **ILSW** | **Iliamna Southw** | **0.33** | **14** | | **Pn** | **00 08 56.1** | **-0.6** |
| ILSW | | | | Sn | **Sn** | **00 09 07.7** | **-1.5** |
| **O20K** | **Slope Mountain** | **0.54** | **39** | | **Pn** | **00 08 57.7** | **-0.1** |
| **O20K** | **Slope Mountain** | **0.54** | **39** | P | **Pn** | **00 08 57.7** | **-0.1** |
| | baz=220 | | | | | | |
| **O19K** | **Port Alsworth** | **0.74** | **316** | | **Pn** | **00 08 58.8** | **-0.4** |
| O19K | | | | Sn | **Sn** | **00 09 12.6** | **-1.0** |
| O19K | | | | IAML | | 00 09 13.5 | |
| | comp=N,3μm,0.4s | | | | | | |
| O19K | | | | IAML | | 00 09 14.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.74** | **316** | P | **Pn** | **00 08 58.8** | **-0.4** |
| | baz=139 | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.76** | **193** | | **Pn** | **00 08 59.5** | **0.0** |
| Q19K | | | | Sn | **Sn** | **00 09 12.8** | **-1.3** |
| Q19K | | | | IAML | | 00 09 19.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.76** | **193** | P | **Pn** | **00 08 59.5** | **0.0** |
| | baz=11 | | | | | | |
| Q19K | | | | S | **Sn** | **00 09 13.6** | **-0.5** |
| | baz=11 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.80** | **19** | | **Pn** | **00 08 59.6** | **-0.3** |
| **HOM** | **Homer** | **0.84** | **90** | | **Pn** | **00 09 00.3** | **+0.2** |
| HOM | | | | Sn | **Sn** | **00 09 15.7** | **+0.4** |
| HOM | | | | IAML | | 00 09 17.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| HOM | | | | IAML | | 00 09 17.3 | |
| | comp=N,2μm,0.4s | | | | | | |
| **HOM** | **Homer** | **0.84** | **90** | P | **Pn** | **00 09 00.3** | **+0.2** |
| | baz=269 | | | | | | |
| **RSO** | **Redoubt South** | **0.84** | **19** | | **Pn** | **00 09 00.1** | **-0.3** |
| **O18K** | **Koktuh Hills** | **0.98** | **282** | Pn | **Pn** | **00 09 01.0** | **-0.5** |
| O18K | | | | Sn | **Sn** | **00 09 16.4** | **-1.3** |
| **O18K** | **Koktuh Hills** | **0.98** | **282** | P | **Pn** | **00 09 00.9** | **-0.5** |
| | baz=103 | | | | | | |
| O18K | | | | S | **Sn** | **00 09 16.8** | **-0.9** |
| | baz=103 | | | | | | |
| **RDT** | **Redoubt** | **1.01** | **26** | | **Pn** | **00 09 01.7** | **-0.2** |
| **P18K** | **Big Mountain,** | **1.02** | **255** | Pn | **Pn** | **00 09 00.8** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.02** | **255** | P | **Pn** | **00 09 01.3** | **-0.6** |
| | baz=75 | | | | | | |
| **CNPM** | **China Poot** | **1.06** | **97** | | **Pn** | **00 09 02.1** | **-0.2** |
| **CNPM** | **China Poot** | **1.06** | **97** | IAML | | 00 09 19.3 | |
| | comp=N,606nm,0.4s | | | | | | |
| CNPM | | | | IAML | | 00 09 22.0 | |
| | comp=E,576nm,0.4s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.23** | **84** | | **Pn** | **00 09 03.5** | **-0.6** |
| **BRLK** | **Bradley Lake** | **1.23** | **84** | | **Sn** | **00 09 21.3** | **-1.0** |
| **BRLK** | **Bradley Lake** | **1.23** | **84** | IAML | | 00 09 22.4 | |
| | comp=N,861nm,0.1s | | | | | | |
| BRLK | | | | IAML | | 00 09 23.1 | |
| | comp=E,578nm,0.1s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.29** | **333** | | **Pn** | **00 09 04.6** | **-0.3** |
| **N19K** | **Bonanza Creek** | **1.29** | **333** | P | **Pn** | **00 09 04.5** | **-0.3** |
| | baz=154 | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.30** | **86** | | **Pn** | **00 09 04.5** | **-0.3** |
| **BRSE** | **Bradley Lake S** | **1.30** | **86** | P | **Pn** | **00 09 04.5** | **-0.3** |
| | baz=266 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.54** | **43** | Pn | **Pn** | **00 09 09.1** | **+1.5** |
| CAPN | | | | IAML | | 00 09 32.6 | |
| | comp=N,970nm,0.5s | | | | | | |
| CAPN | | | | IAML | | 00 09 33.5 | |
| | comp=E,718nm,0.3s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.54** | **43** | P | **Pn** | **00 09 09.2** | **+1.6** |
| | baz=225 | | | | | | |
| CAPN | | | | S | **Sn** | **00 09 30.9** | **+2.4** |
| | baz=225 | | | | | | |
| **CKT** | **Bend** | **1.63** | **19** | | **Pn** | **00 09 08.8** | **0.0** |
| **SPU** | **Mount Spurr** | **1.64** | **22** | | **Pn** | **00 09 08.7** | **-0.2** |
| **SPCN** | **Chakachatna No** | **1.66** | **19** | | **Pn** | **00 09 09.3** | **+0.2** |
| **SPBG** | **Spurr Blockage** | **1.66** | **16** | | **Pn** | **00 09 09.5** | **+0.3** |
| SPBG | | | | | **Sn** | **00 09 31.7** | **+0.3** |
| **SPNN** | **North Nagishla** | **1.73** | **10** | | **Pn** | **00 09 10.2** | **+0.1** |
| **SPCG** | **Spurr Capps Gl** | **1.75** | **21** | | **Pn** | **00 09 10.3** | **+0.1** |
| **SLKM** | **Skilak Lake** | **1.76** | **60** | | **Pn** | **00 09 10.4** | **+0.1** |
| SLKM | | | | | **Sn** | **00 09 32.2** | **-1.1** |
| **SVW2** | **Sparrevohn** | **1.83** | **323** | | **Pn** | **00 09 10.6** | **-0.5** |
| **CAHL** | **Cahill** | **1.93** | **214** | | **Pn** | **00 09 12.9** | **+0.5** |
| **KDAK** | **Kodiak Island** | **1.93** | **168** | | **Pn** | **00 09 11.7** | **-0.7** |
| **KDAK** | **Kodiak Island** | **1.93** | **168** | IAML | | 00 09 37.5 | |
| | comp=E,494nm,0.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.93** | **168** | S | **Sn** | **00 09 34.9** | **-2.0** |
| | baz=348 | | | | | | |
| **O22K** | **Cooper Landing** | **1.97** | **64** | | **Pn** | **00 09 13.2** | **+0.4** |
| **O22K** | **Cooper Landing** | **1.97** | **64** | P | **Pn** | **00 09 13.3** | **+0.4** |
| | baz=247 | | | | | | |
| **SEW** | **Seward** | **1.99** | **76** | Pn | **Pn** | **00 09 12.4** | **-0.7** |
| **SEW** | **Seward** | **1.99** | **76** | P | **Pn** | **00 09 12.8** | **-0.2** |
| | baz=258 | | | | | | |
| **KJL** | **Kejulik** | **2.00** | **217** | | **Pn** | **00 09 14.1** | **+0.8** |
| **FIS** | **Fire Island** | **2.13** | **45** | Pn | **Pn** | **00 09 16.2** | **+1.3** |
| FIS | | | | IAML | | 00 09 46.2 | |
| | comp=E,327nm,0.7s | | | | | | |
| FIS | | | | IAML | | 00 09 52.1 | |
| | comp=N,349nm,0.5s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.27** | **50** | | **Pn** | **00 09 17.0** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **2.27** | **50** | P | **Pn** | **00 09 16.9** | **+0.1** |
| | baz=233 | | | | | | |
| **M19K** | **Big River Lodg** | **2.31** | **347** | | **Pn** | **00 09 16.9** | **-0.3** |
| **M19K** | **Big River Lodg** | **2.31** | **347** | P | **Pn** | **00 09 17.0** | **-0.2** |
| | baz=167 | | | | | | |
| **OHAK** | **Old Harbor** | **2.45** | **180** | Pn | **Pn** | **00 09 18.0** | **-1.0** |
| **OHAK** | **Old Harbor** | **2.45** | **180** | P | **Pn** | **00 09 18.0** | **-1.0** |
| | baz=359 | | | | | | |
| **PLK3** | **Peulik 3** | **2.52** | **219** | | **Pn** | **00 09 20.6** | **+0.7** |
| **M22K** | **Willow** | **2.61** | **35** | | **Pn** | **00 09 20.9** | **-0.1** |
| **M22K** | **Willow** | **2.61** | **35** | P |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=231 | | | | | | | |
| **PPLA** | **Purkeypile** | **3.28** | **9** | | | **Pn** | **00 09 30.8** | **+0.8** |
| **PPLA** | **Purkeypile** | **3.28** | **9** | P | | **Pn** | **00 09 31.3** | **+1.3** |
| | baz=190 | | | | | | | |
| **GLI** | **Glacier Island** | **3.32** | **66** | Pn | | **Pn** | **00 09 29.9** | **-0.5** |
| GLI | | | | IAML | | | 00 10 07.5 | |
| | comp=E,202nm,0.4s | | | | | | | |
| GLI | | | | IAML | | | 00 10 07.7 | |
| | comp=N,126nm,0.4s | | | | | | | |
| **GLI** | **Glacier Island** | **3.32** | **66** | P | | **Pn** | **00 09 28.8** | **-1.6** |
| | baz=251 | | | | | | | |
| **TTA** | **Tatalina** | **3.52** | **339** | Pn | | **Pn** | **00 09 32.5** | **-0.6** |
| **TTA** | **Tatalina** | **3.52** | **339** | P | | **Pn** | **00 09 32.6** | **-0.5** |
| | baz=158 | | | | | | | |
| **FID** | **Port Fidalgo** | **3.57** | **69** | Pn | | **Pn** | **00 09 32.7** | **-1.1** |
| FID | | | | IAML | | | 00 10 12.9 | |
| | comp=E,195nm,0.3s | | | | | | | |
| FID | | | | IAML | | | 00 10 15.3 | |
| | comp=N,203nm,0.4s | | | | | | | |
| **JPK** | **Jack Peak** | **3.61** | **64** | | | **Pn** | **00 09 34.4** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **3.65** | **51** | | | **Pn** | **00 09 34.1** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **3.65** | **51** | IAML | | | 00 10 18.1 | |
| | comp=E,156nm,0.6s | | | | | | | |
| SCM | | | | IAML | | | 00 10 18.4 | |
| | comp=N,144nm,0.6s | | | | | | | |
| **K20K** | **Telida** | **3.72** | **355** | | | **Pn** | **00 09 35.9** | **+0.2** |
| **K20K** | **Telida** | **3.72** | **355** | P | | **Pn** | **00 09 35.9** | **+0.2** |
| | baz=175 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.88** | **74** | Pn | | **Pn** | **00 09 37.4** | **-0.5** |
| **EYAK** | **Cordova Ski Ar** | **3.88** | **74** | P | | **Pn** | **00 09 36.9** | **-0.9** |
| | baz=260 | | | | | | | |
| **DIV** | **Divide** | **4.01** | **65** | | | **Pn** | **00 09 39.5** | **-0.1** |
| **CHIR** | **Chirikof Islan** | **4.05** | **199** | Pn | | **Pn** | **00 09 38.4** | **-1.8** |
| **CHIR** | **Chirikof Islan** | **4.05** | **199** | P | | **Pn** | **00 09 39.1** | **-1.1** |
| | baz=17 | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.06** | **19** | | | **Pn** | **00 09 40.0** | **-0.4** |
| TRF | | | | IAML | | | 00 10 30.4 | |
| | comp=E,28nm,1.0s | | | | | | | |
| TRF | | | | IAML | | | 00 10 50.9 | |
| | comp=N,31nm,1.2s | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.06** | **19** | P | | **Pn** | **00 09 40.0** | **-0.4** |
| | baz=202 | | | | | | | |
| **KTH** | **Kantishna Hill** | **4.06** | **15** | | | **Pn** | **00 09 40.0** | **-0.4** |
| **KLU** | **Klutina** | **4.07** | **60** | | | **Pn** | **00 09 39.6** | **-0.9** |
| **KLU** | **Klutina** | **4.07** | **60** | IAML | | | 00 10 27.1 | |
| | comp=E,127nm,0.2s | | | | | | | |
| **KLU** | **Klutina** | **4.07** | **60** | P | | **Pn** | **00 09 39.6** | **-0.9** |
| | baz=246 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.25** | **6** | | | **Pn** | **00 09 43.5** | **+0.7** |
| **CHUM** | **Lake Minchumin** | **4.25** | **6** | P | | **Pn** | **00 09 43.5** | **+0.7** |
| | baz=187 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.25** | **52** | | | **Pn** | **00 09 42.7** | **-0.2** |
| **M24K** | **Tolsona, Glenn** | **4.25** | **52** | IAML | | | 00 10 34.8 | |
| | comp=E,113nm,0.6s | | | | | | | |
| M24K | | | | IAML | | | 00 10 44.3 | |
| | comp=N,86nm,3.1s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.25** | **52** | P | | **Pn** | **00 09 42.7** | **-0.2** |
| | baz=238 | | | | | | | |
| **RND** | **Reindeer** | **4.31** | **28** | | | **Pn** | **00 09 43.5** | **-0.2** |
| **RND** | **Reindeer** | **4.31** | **28** | IAML | | | 00 11 11.6 | |
| | comp=E,24nm,4.1s | | | | | | | |
| **CHGN** | **Chignik** | **4.34** | **221** | Pn | | **Pn** | **00 09 43.6** | **-0.4** |
| CHGN | | | | IAML | | | 00 10 15.3 | |
| | comp=N,43nm,1.9s | | | | | | | |
| CHGN | | | | IAML | | | 00 11 18.3 | |
| | comp=E,58nm,1.3s | | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.39** | **77** | Pn | | **Pn** | **00 09 45.1** | **+0.4** |
| **KAIM** | **Kayak Island** | **4.50** | **83** | Pn | | **Pn** | **00 09 46.6** | **+0.6** |
| **BMRM** | **Bremner River** | **4.52** | **70** | | | **Pn** | **00 09 46.4** | **-0.1** |
| BMRM | | | | IAML | | | 00 10 37.0 | |
| | comp=E,68nm,0.4s | | | | | | | |
| BMRM | | | | IAML | | | 00 10 40.4 | |
| | comp=N,66nm,0.4s | | | | | | | |
| **BMRM** | **Bremner River** | **4.52** | **70** | P | | **Pn** | **00 09 46.1** | **-0.3** |
| | baz=257 | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.53** | **54** | | | **Pn** | **00 09 46.3** | **-0.2** |
| **J20K** | **Nowinta River** | **4.54** | **355** | IAML | | | 00 11 12.2 | |
| | comp=N,21nm,3.5s | | | | | | | |
| **MCK** | **McKinley** | **4.58** | **25** | Pn | | **Pn** | **00 09 47.8** | **+0.6** |
| MCK | | | | IAML | | | 00 10 39.0 | |
| | comp=N,34nm,4.1s | | | | | | | |
| MCK | | | | IAML | | | 00 11 15.1 | |
| | comp=E,25nm,4.0s | | | | | | | |
| **MCK** | **McKinley** | **4.58** | **25** | P | | **Pn** | **00 09 47.3** | **+0.1** |
| | baz=209 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.58** | **13** | | | **Pn** | **00 09 46.6** | **-0.6** |
| **BPAW** | **Bear Paw Mtn.** | **4.58** | **13** | IAML | | | 00 10 32.1 | |
| | comp=N,22nm,4.3s | | | | | | | |
| BPAW | | | | IAML | | | 00 10 46.0 | |
| | comp=E,25nm,3.7s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.58** | **13** | P | | **Pn** | **00 09 46.6** | **-0.6** |
| | baz=195 | | | | | | | |
| **HMT** | **Hamilton** | **4.59** | **78** | Pn | | **Pn** | **00 09 47.5** | **+0.1** |
| **N25K** | **Chitina, Valde** | **4.71** | **62** | | | **Pn** | **00 09 49.6** | **+0.6** |
| **N25K** | **Chitina, Valde** | **4.71** | **62** | IAML | | | 00 10 42.0 | |
| | comp=E,63nm,0.7s | | | | | | | |
| N25K | | | | IAML | | | 00 10 43.4 | |
| | comp=N,64nm,0.8s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.71** | **62** | P | | **Pn** | **00 09 49.6** | **+0.6** |
| | baz=249 | | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.73** | **79** | | | **Pn** | **00 09 49.3** | **+0.1** |
| **SUCK** | **Suckling Hills** | **4.82** | **81** | Pn | | **Pn** | **00 09 50.2** | **-0.2** |
| **BWN** | **Browne** | **4.87** | **20** | IAML | | | 00 11 21.9 | |
| | comp=N,50nm,5.0s | | | | | | | |
| BWN | | | | IAML | | | 00 11 37.7 | |
| | comp=E,44nm,3.1s | | | | | | | |
| **BERG** | **Berg Lake** | **4.87** | **77** | Pn | | **Pn** | **00 09 51.1** | **0.0** |
| **GLB** | **Gilahina Butte** | **5.01** | **65** | | | **Pn** | **00 09 53.3** | **+0.2** |
| **GLB** | **Gilahina Butte** | **5.01** | **65** | IAML | | | 00 10 50.6 | |
| | comp=E,54nm,0.9s | | | | | | | |
| **PAX** | **Paxson** | **5.02** | **45** | Pn | | **Pn** | **00 09 52.7** | **-0.5** |
| **PAX** | **Paxson** | **5.02** | **45** | P | | **Pn** | **00 09 52.9** | **-0.3** |
| | baz=232 | | | | | | | |
| **VRDI** | **Verde Repeater** | **5.12** | **68** | | | **Pn** | **00 09 54.7** | **+0.1** |
| **VRDI** | **Verde Repeater** | **5.12** | **68** | IAML | | | 00 10 53.6 | |
| | comp=E,24nm,0.4s | | | | | | | |
| VRDI | | | | IAML | | | 00 10 54.3 | |
| | comp=N,36nm,0.6s | | | | | | | |
| **SNH** | **Sunshine Point** | **5.29** | **80** | Pn | | **Pn** | **00 09 56.5** | **-0.4** |
| **WAX** | **Waxell Ridge** | **5.29** | **77** | Pn | | **Pn** | **00 09 57.1** | **+0.2** |
| **NEA2** | **Nenana** | **5.33** | **20** | | | **Pn** | **00 09 56.5** | **-0.7** |
| **NEA2** | **Nenana** | **5.33** | **20** | IAML | | | 00 10 39.0 | |
| | comp=E,16nm,4.7s | | | | | | | |
| NEA2 | | | | IAML | | | 00 13 22.4 | |
| | comp=N,17nm,4.4s | | | | | | | |
| **NEA2** | **Nenana** | **5.33** | **20** | P | | **Pn** | **00 09 56.5** | **-0.7** |
| | baz=204 | | | | | | | |
| **WRH** | **Wood River Hil** | **5.41** | **25** | | | **Pn** | **00 09 57.5** | **-0.8** |
| **ISLE** | **Juniper Island** | **5.56** | **76** | Pn | | **Pn** | **00 10 00.8** | **+0.2** |
| **KIAG** | **Kiagna River** | **5.59** | **72** | | | **Pn** | **00 10 01.3** | **+0.4** |
| **BALM** | **Baldy** | **5.61** | **71** | | | **Pn** | **00 10 01.2** | **0.0** |
| **HDA** | **Harding Lake** | **5.62** | **29** | | | **Pn** | **00 10 00.3** | **-0.9** |
| **HDA** | **Harding Lake** | **5.62** | **29** | P | | **Pn** | **00 10 00.3** | **-0.9** |
| | baz=215 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.62** | **25** | | | **Pn** | **00 10 00.2** | **-0.9** |
| **MENT** | **Mentasta** | **5.66** | **51** | | | **Pn** | **00 10 01.8** | **0.0** |
| **BAGL** | **Bagley Icefiel** | **5.67** | **77** | | | **Pn** | **00 10 02.5** | **+0.6** |
| **M26K** | **Nabesna, AK** | **5.71** | **57** | | | **Pn** | **00 10 03.4** | **+1.0** |
| **RIDG** | **Independent Ri** | **5.73** | **41** | | | **Pn** | **00 10 03.4** | **+0.6** |
| **RIDG** | **Independent Ri** | **5.73** | **41** | P | | **Pn** | **00 10 03.3** | **+0.6** |
| | baz=228 | | | | | | | |
| **MESA** | **MESA** | **5.73** | **80** | Pn | | **Pn** | **00 10 02.9** | **-0.1** |
| **MESA** | **MESA** | **5.73** | **80** | P | | **Pn** | **00 10 03.2** | **+0.2** |
| | baz=270 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.79** | **17** | | | **Pn** | **00 10 03.4** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **5.79** | **17** | P | | **Pn** | **00 10 03.4** | **-0.1** |
| | baz=200 | | | | | | | |
| **SDPT** | **Sand Point** | **5.80** | **225** | Pn | | **Pn** | **00 10 02.8** | **-0.9** |
| **TCOL** | **CHOO, UAF Yank** | **5.81** | **24** | | | **Pn** | **00 10 03.6** | **-0.1** |
| **COLA** | **College** | **5.81** | **24** | | | **Pn** | **00 10 03.0** | **-0.7** |
| **MDM** | **Murphy Dome** | **5.81** | **22** | | | **Pn** | **00 10 03.2** | **-0.6** |
| **YAH** | **Yahtse** | **5.84** | **78** | | | **Pn** | **00 10 04.8** | **+0.5** |
| **L26K** | **Log Cabin Wild** | **5.85** | **51** | | | **Pn** | **00 10 05.2** | **+0.8** |
| **IL31** | | **5.93** | **28** | | | **Pn** | **00 10 04.5** | **-0.8** |
| **ILAR** | **Eielson Array** | **5.93** | **28** | P | | **Pn** | **00 10 04.2** | **-1.2** |
| | comp=N,2.7nm,0.3s,baz=216,slow=14,SNR=157 | | | | | | | |
| ILAR | | | | S | | **Sn** | **00 11 06.1** | **-5.9** |
| | comp=N,1.2nm,0.3s,baz=218,slow=22,SNR=6.1 | | | | | | | |
| **DOT** | **Dot Lake** | **5.94** | **44** | Pn | | **Pn** | **00 10 05.6** | **+0.1** |
| **BARN** | **Barnard Glacie** | **5.94** | **71** | | | **Pn** | **00 10 06.5** | **+0.7** |
| **POKR** | **Poker Plat Res** | **6.11** | **24** | | | **Pn** | **00 10 07.6** | **-0.2** |
| **POKR** | **Poker Plat Res** | **6.11** | **24** | P | | **Pn** | **00 10 07.6** | **-0.2** |
| | baz=209 | | | | | | | |
| **TABL** | **Table Mountain** | **6.14** | **78** | | | **Pn** | **00 10 09.0** | **+0.5** |
| **SCRK** | **Sand Creek** | **6.17** | **42** | | | **Pn** | **00 10 07.9** | **-0.9** |
| | baz=230 | | | | | | | |
| **J25K** | **Salcha River,** | **6.20** | **33** | | | **Pn** | **00 10 08.3** | **-0.7** |
| **J25K** | **Salcha River,** | **6.20** | **33** | P | | **Pn** | **00 10 08.3** | **-0.7** |
| | baz=220 | | | | | | | |
| **IMAR** | **Indian Mountai** | **6.34** | **358** | Pn | | **Pn** | **00 10 11.4** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.48** | **53** | Pn | | **Pn** | **00 10 13.2** | **+0.3** |
| **BCAR** | **Beaver Creek A** | **6.50** | **53** | Pn | | **Pn** | **00 10 13.5** | **+0.4** |
| **PCA** | **Pinnacle** | **6.58** | **81** | Pn | | **Pn** | **00 10 14.6** | **+0.3** |
| **BCPM** | **Bancas Point** | **6.90** | **82** | Pn | | **Pn** | **00 10 16.8** | **-1.7** |
| **COLD** | **Coldfoot** | **7.71** | **9** | Pn | | **Pn** | **00 10 28.7** | **-0.8** |
| **DAWY** | **Dawson** | **7.91** | **50** | Pn | | **Pn** | **00 10 32.0** | **-0.2** |
| **HYT** | **Haines Junctio** | **7.95** | **75** | Pn | | **Pn** | **00 10 32.9** | **+0.1** |
| **M30M** | **Minto, Yukon** | **8.50** | **63** | Pn | | **Pn** | **00 10 40.7** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **8.70** | **23** | Pn | | **Pn** | **00 10 41.6** | **-1.2** |
| **N31M** | **Braeburn, Yuko** | **8.81** | **71** | Pn | | **Pn** | **00 10 45.3** | **+0.8** |
| **TNA** | **Tin City** | **8.95** | **318** | Pn | | **Pn** | **00 10 46.2** | **+0.1** |
| **TOLK** | **Toolik Lake Re** | **9.15** | **9** | Pn | | **Pn** | **00 10 49.5** | **+0.5** |
| **WHY** | **Whitehorse** | **9.23** | **76** | Pn | | **Pn** | **00 10 51.5** | **+1.3** |
| **M31M** | **Drury Creek, Y** | **9.54** | **66** | Pn | | **Pn** | **00 10 54.9** | **+0.6** |
| **BESE** | **Bessie Mountai** | **9.54** | **89** | Pn | | **Pn** | **00 10 55.8** | **+1.5** |
| **JIS** | **Juneau Island** | **9.87** | **90** | Pn | | **Pn** | **00 11 00.8** | **+2.3** |
| **P33M** | **Teslin, Yukon** | **10.29** | **78** | Pn | | **Pn** | **00 11 05.5** | **+1.1** |
| **DLBC** | **Dease Lake** | **12.03** | **86** | Pn | | **Pn** | **00 11 30.4** | **+2.7** |
| **YKA** | **Yellowknife Ar** | **18.73** | **65** | P | | **Pn** | **00 12 50.9** | **-0.3** |
| | comp=N,0.1nm,0.3s,baz=276,slow=9.8,SNR=8.1 | | | | | | | |
| **SONM** | **Songino Array** | **54.86** | **306** | P | | **P** | **00 17 59.7** | **+1.5** |
| | comp=N,0.1nm,0.5s,baz=48,slow=7.3,SNR=4.6 | | | | | | | |

*GUC **06** 00:20:49.6±0.7, 19.81S×69.12W, h101km±3km, ML3.8*
*VAO **06** 00:20:51.3±0.8, 19.84S×69.02W, h139km±10km, mb4.1*

**ISC 06 00:20:48.6**±0.9, **19.83S**±0.04×**69.21W**±0.07, **h106**km±7km, **n22**,σ1°**30**/35, **Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **GO01** | **Chusmiza** | **0.16** | **5** | *e*P | | **Pn** | **00 21 04.1** | | | **0.0** |
| GO01 | | | | *i* S | | **Sn** | **00 21 15.5** | | | **-0.1** |
| GO01 | | | | IAML | | | 00 21 16.4 | | | |
| | comp=E,14μm,0.1s | | | | | | | | | |
| **PB08** | **IPOC Station P** | **0.32** | **170** | *e*P | | **Pn** | **00 21 04.8** | | | **+0.3** |
| PB08 | | | | *i* S | | **Sn** | **00 21 16.6** | | | **+0.2** |
| PB08 | | | | IAML | | | 00 21 17.0 | | | |
| | comp=E,10μm,0.2s | | | | | | | | | |
| **HMBC** | **Humberstone** | **0.78** | **235** | *e*P | | **Pn** | **00 21 07.8** | | | **+0.3** |
| HMBC | | | | *i* S | | **Sn** | **00 21 22.4** | | | **+0.7** |
| **MNMC** | **Minye Minye** | **0.78** | **332** | *e*P | | **Pn** | **00 21 08.4** | | | **+0.7** |
| MNMC | | | | *i* S | | **Sn** | **00 21 23.0** | | | **+1.0** |
| MNMC | | | | IAML | | | 00 21 26.5 | | | |
| | comp=N,8μm,0.2s | | | | | | | | | |
| **TA02** | **Huaiquique** | **0.97** | **243** | *e*P | | **Pn** | **00 21 09.7** | | | **+0.5** |
| TA02 | | | | *i* S | | **Sn** | **00 21 25.9** | | | **+1.2** |
| TA02 | | | | IAML | | | 00 21 26.7 | | | |
| | comp=N,9μm,0.1s | | | | | | | | | |
| **TA01** | **Diego Aracena** | **1.17** | **231** | *e*P | | **Pn** | **00 21 11.8** | | | **+0.5** |
| TA01 | | | | *i* S | | **Sn** | **00 21 29.1** | | | **+0.6** |
| TA01 | | | | IAML | | | 00 21 35.9 | | | |
| | comp=N,641nm,0.4s | | | | | | | | | |
| **PB01** | **IPOC Station P** | **1.24** | **192** | *e*P | | **Pn** | **00 21 12.8** | | | **+0.6** |
| PB01 | | | | *i* S | | **Sn** | **00 21 31.0** | | | **+0.9** |
| PB01 | | | | IAML | | | 00 21 32.5 | | | |
| | comp=N,3μm,0.4s | | | | | | | | | |
| **PATCX** | **Punta Patache** | **1.33** | **222** | *e*P | | **Pn** | **00 21 13.6** | | | **+0.4** |
| PATCX | | | | *i* S | | **Sn** | **00 21 33.2** | | | **+1.4** |
| PATCX | | | | IAML | | | 00 21 40.6 | | | |
| | comp=N,892nm,0.3s | | | | | | | | | |
| **PB16** | **IPOC Station P** | **1.51** | **349** | *e*P | | **Pn** | **00 21 17.1** | | | **+1.2** |
| PB16 | | | | *i* S | | **Sn** | **00 21 38.4** | | | **+1.8** |
| PB16 | | | | IAML | | | 00 21 39.7 | | | |
| | comp=N,267nm,0.3s | | | | | | | | | |
| **PB12** | **IPOC Station P** | **1.60** | **319** | *e*P | | **Pn** | **00 21 16.9** | | | **+0.4** |
| PB12 | | | | *i* S | | **Sn** | **00 21 38.6** | | | **+0.8** |
| **PB02** | **IPOC Station P** | **1.62** | **203** | *e*P | | **Pn** | **00 21 17.6** | | | **+0.8** |
| PB02 | | | | *i* S | | **Sn** | **00 21 39.3** | | | **+1.2** |
| PB02 | | | | IAML | | | 00 21 46.1 | | | |
| | comp=E,1μm,0.3s | | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.96** | **181** | *e*P | | **Pn** | **00 21 22.3** | | | **+1.2** |
| PB09 | | | | *i* S | | **Sn** | **00 21 47.0** | | | **+1.1** |
| PB09 | | | | IAML | | | 00 21 53.1 | | | |
| | comp=E,375nm,0.2s | | | | | | | | | |
| **PB07** | **IPOC Station P** | **1.99** | **198** | *e*P | | **Pn** | **00 21 22.2** | | | **+0.6** |
| PB07 | | | | *i* S | | **Sn** | **00 21 47.5** | | | **+0.9** |
| **PB03** | **IPOC Station P** | **2.27** | **193** | *e*P | | **Pn** | **00 21 25.3** | | | **+0.3** |
| **LVC** | **Limon Verde** | **2.78** | **174** | *e*P | | **Pn** | **00 21 35.1** | | | **+3.1** |
| **LPAZ** | **La Paz** | **3.67** | **16** | *e*P | | **Pn** | **00 21 46.8** | | | **+2.8** |
| **SNDB** | **Serra Nova Dou** | **18.91** | **68** | *e*P | | **P** | **00 24 59.5** | | | **-1.6** |
| **ITTB** | **Itaituba** | **20.21** | **42** | *e*P | | **P** | **00 25 13.2** | | | **-2.1** |
| **SMTB** | **Santa Maria do** | **23.58** | **66** | *e*P | | **P** | **00 25 49.3** | | | **-0.6** |
| **BOAV** | **Boa Vista** | **23.68** | **22** | *e*P | | **P** | **00 25 49.9** | | | **-0.8** |
| **JANB** | **Januaria** | **24.21** | **83** | *e*P | | **P** | **00 25 53.5** | | | **-2.1** |
| **SDBA** | **SAO DESIDERIO** | **24.47** | **76** | *e*P | | **P** | **00 25 56.2** | | | **-1.7** |

*SFS **06** 00:27:15.0, 35.60N×3.60W, ML2.7, ALBORAN SUR*
*INMG **06** 00:27:17.4±1.2, 35.60N×3.64W, h19km±9km, ML2.6, Error ellipse: s-maj=5.1km s-min=3.1km az=158.0*
*IGIL **06** 00:27:17.0, 35.68N×3.69W, h0km, ML2.7*
*CNRM **06** 00:27:18.0, 35.68N×3.65W, h21km, ml3.1*

**ISC 06 00:27:16.2**±1.4, **35.72N**±0.04×**3.55W**±0.04, **h23**km±15km, **n43**,σ1°**38**/72, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **PALE** | **Palemas** | **0.60** | **212** | P | | **Pb** | **00 27 28.1** | | | **+0.1** |
| PALE | | | | S | | **Sb** | **00 27 36.3** | | | **+0.3** |
| **GOG** | **Mont Gurugu** | **0.67** | **138** | P | | **Pb** | **00 27 29.2** | | | **-0.1** |
| GOG | | | | S | | **Sn** | **00 27 41.0** | | | **+0.7** |
| **CHAS** | **Isla Isabel II** | **1.06** | **120** | P | | **Pn** | **00 27 33.9** | | | **-1.7** |
| CHAS | | | | S | | **Sb** | **00 27 47.9** | | | **-1.3** |
| **AKLM** | **AKL** | **1.24** | **192** | P | | **Pn** | **00 27 38.6** | | | **+0.4** |
| AKLM | | | | S | | **Sb** | **00 27 55.3** | | | **+0.8** |
| **EMAL** | **Malaga-Limoner** | **1.26** | **326** | P | | **Pn** | **00 27 38.0** | | | **-0.3** |
| EMAL | | | | S | | **Sn** | **00 27 54.5** | | | **-0.1** |
| **CEU** | **Ceuta** | **1.49** | **277** | P | | **Pn** | **00 27 38.9** | | | **-2.7** |
| CEU | | | | S | | **Sn** | **00 27 56.5** | | | **-3.8** |
| **CHEFC** | **Chefchaouen** | **1.59** | **248** | P | | **Pn** | **00 27 44.0** | | | **+1.0** |
| CHEFC | | | | S | | **Sn** | **00 28 03.5** | | | **+0.6** |
| **JBK** | **JBK** | **1.60** | **150** | P | | **Pn** | **00 27 43.0** | | | **-0.3** |
| JBK | | | | S | | **Sn** | **00 28 02.9** | | | **-0.4** |
| **LCRM** | **LCR** | **2.30** | **208** | P | | **Pb** | **00 27 56.0** | | | **-1.1** |
| LCRM | | | | S | | Sb | 00 28 42.0 | | | +17 |
| **TDRA** | **Tendrara** | **2.96** | **154** | P | | **Pn** | **00 28 02.2** | | | **+0.3** |
| **MD31** | **MD31** | **3.02** | **200** | P | | **Pn** | **00 28 03.6** | | | **+0.9** |
| MD31 | | | | S | | **Sn** | **00 28 40.1** | | | **+1.9** |
| **MDT** | **Midelt** | **3.03** | **197** | P | | **Pn** | **00 28 03.5** | | | **+0.7** |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | *e*Pn | | **Pn** | **00 28 13.2** | | | **+0.6** |
| PVAQ | | | | *e*Sn | | **Sn** | **00 28 55.3** | | | **-0.8** |
| PVAQ | | | | A | | A | 00 28 56.7 | | | |
| | 7.5nm,0.2s | | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | P | | **Pn** | **00 28 13.2** | | | **+0.6** |
| PVAQ | | | | S | | **Sn** | **00 28 55.5** | | | **-0.6** |
| **PAB** | **San Pablo** | **3.87** | **351** | P | | **Pn** | **00 28 16.8** | | | **+2.4** |
| **PCVE** | **Castro Verde** | **4.08** | **299** | *e*Pn | | **Pn** | **00 28 17.8** | | | **+0.6** |
| PCVE | | | | *e*Sn | | **Sn** | **00 29 03.7** | | | **-0.5** |
| PCVE | | | | A | | A | 00 29 06.3 | | | |
| | 11nm,0.8s | | | | | | | | | |
| **PBEJ** | **Beja** | **4.16** | **305** | *e*Sn | | **Sn** | **00 29 05.2** | | | **-0.9** |
| PBEJ | | | | A | | A | 00 29 10.0 | | | |
| | 5.3nm,0.7s | | | | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*P | | **Pn** | **00 28 20.8** | | | **+0.6** |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*Pn | | **Pn** | **00 28 21.0** | | | **+0.8** |
| MESJ | | | | *e*Sn | | **Sn** | **00 29 09.1** | | | **-0.6** |
| MESJ | | | | A | | A | 00 29 13.7 | | | |
| | 7.3nm,0.3s | | | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*P | | **Pn** | **00 28 22.0** | | | **+0.3** |
| MORF | | | | *e*S | | **Sn** | **00 29 09.5** | | | **-2.8** |
| MORF | | | | IAML | | | 00 29 17.1 | | | |
| | comp=N,16nm,0.5s | | | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*Pn | | **Pn** | **00 28 22.1** | | | **+0.4** |
| MORF | | | | *e*Sn | | **Sn** | **00 29 11.1** | | | **-1.2** |
| MORF | | | | A | | A | 00 29 14.8 | | | |
| | comp=N,6.1nm,0.3s | | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | *e*Pn | | **Pn** | **00 28 23.7** | | | **+1.0** |
| PFVI | | | | *e*Sn | | **Sn** | **00 29 13.0** | | | **-1.1** |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | P | | **Pn** | **00 28 23.9** | | | **+1.2** |
| **PESTR** | **Estremoz** | **4.50** | **315** | *e*Pn | | **Pn** | **00 28 24.5** | | | **+1.6** |
| PESTR | | | | *e*Sn | | **Sn** | **00 29 14.4** | | | **-0.1** |
| PESTR | | | | A | | A | 00 29 27.1 | | | |
| | comp=N,4.9nm,0.6s | | | | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **315** | P | | **Pn** | **00 28 24.1** | | | **+1.2** |
| **EVO** | **Evora** | **4.54** | **309** | *e*Pn | | **Pn** | **00 28 24.6** | | | **+1.2** |
| EVO | | | | *e*Sn | | **Sn** | **00 29 15.3** | | | **-0.2** |
| EVO | | | | A | | A | 00 29 17.1 | | | |
| | comp=N,9.1nm,0.3s | | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.54** | **295** | *e*Pn | | **Pn** | **00 28 24.7** | | | **+1.2** |
| PTEO | | | | *e*Sn | | **Sn** | **00 29 14.9** | | | **-0.7** |
| PTEO | | | | A | | A | 00 29 20.0 | | | |
| | comp=N,13nm,0.6s | | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.65** | **302** | *e*Pn | | **Pn** | **00 28 26.1** | | | **+1.1** |
| PNCL | | | | *e*Sn | | **Sn** | **00 29 17.7** | | | **-0.5** |
| PNCL | | | | A | | A | 00 29 20.4 | | | |
| | comp=N,4.4nm,0.5s | | | | | | | | | |
| **PMRV** | **Marv??o** | **4.79** | **322** | *e*Pn | | **Pn** | **00 28 28.7** | | | **+1.7** |
| PMRV | | | | *e*Sn | | **Sn** | **00 29 21.9** | | | **0.0** |
| PMRV | | | | A | | A | 00 29 44.9 | | | |
| | comp=N,5.3nm,0.5s | | | | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **313** | *e*Pn | | **Pn** | **00 28 31.5** | | | **+1.7** |
| PMTG | | | | *e*Sn | | **Sn** | **00 29 26.6** | | | **-0.3** |
| PMTG | | | | A | | A | 00 29 27.8 | | | |
| | comp=N,3.6nm,0.2s | | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.15** | **324** | *e*Pn | | **Pn** | **00 28 34.1** | | | **+2.2** |
| PCBR | | | | *e*Sn | | **Sn** | **00 29 30.5** | | | **-0.2** |
| PCBR | | | | A | | A | 00 29 32.0 | | | |
| | comp=N,5.0nm,0.5s | | | | | | | | | |
| **PACT** | **Alcochete** | **5.20** | **307** | *e*Pn | | **Pn** | **00 28 34.2** | | | **+1.7** |
| PACT | | | | *e*Sn | | **Sn** | **00 29 31.8** | | | **+0.1** |
| PACT | | | | A | | A | 00 29 37.2 | | | |
| | comp=N,8.1nm,0.8s | | | | | | | | | |
| **TZRR** | **Tazzarine** | **5.21** | **200** | P | | **Pn** | **00 28 33.5** | | | **+0.7** |
| **PMAFR** | **Mafra** | **5.59** | **307** | *e*Pn | | **Pn** | **00 28 39.6** | | | **+1.6** |
| PMAFR | | | | *e*Sn | | **Sn** | **00 29 40.4** | | | **-1.1** |
| PMAFR | | | | A | | A | 00 29 45.4 | | | |
| | comp=N,9.6nm,0.6s | | | | | | | | | |
| **PSBE** | **So Bento** | **5.63** | **314** | *e*Pn | | **Pn** | **00 28 40.6** | | | **+2.2** |
| PSBE | | | | *e*Sn | | **Sn** | **00 29 41.9** | | | **-0.5** |
| **OUK** | **Oukaimeden** | **5.77** | **220** | P | | **Pn** | **00 28 40.5** | | | **-0.2** |
| **PCAS** | **Casmilo, Conde** | **5.83** | **319** | *e*Pn | | **Pn** | **00 28 43.1** | | | **+1.9** |
| PCAS | | | | *e*Sn | | **Sn** | **00 29 45.8** | | | **-1.6** |
| PCAS | | | | A | | A | 00 29 48.9 | | | |
| | comp=N,3.3nm,0.4s | | | | | | | | | |
| **ZGR** | **Zagora** | **5.85** | **198** | P | | **Pn** | **00 28 42.8** | | | **+1.1** |
| **PVIS** | **Viseu** | **6.04** | **327** | *e*Pn | | **Pn** | **00 28 46.3** | | | **+2.1** |
| PVIS | | | | *e*Sn | | **Sn** | **00 29 51.3** | | | **-1.4** |
| PVIS | | | | A | | A | 00 29 56.5 | | | |
| | comp=N,4.4nm,0.5s | | | | | | | | | |
| **MVO** | **Moncorvo** | **6.08** | **334** | *e*Pn | | **Pn** | **00 28 47.3** | | | **+2.6** |
| **PVRL** | **Vila Real** | **6.43** | **331** | *e*Pn | | **Pn** | **00 28 52.5** | | | **+3.0** |
| PVRL | | | | *e*Sn | | **Sn** | **00 30 02.4** | | | **+0.1** |
| PVRL | | | | A | | A | 00 30 04.5 | | | |
| | comp=N,4.1nm,0.1s | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.55** | **331** | *e*Pn | | **Pn** | **00 28 53.5** | | | **+2.3** |
| **PBRG** | **Braganca** | **6.56** | **339** | *e*Pn | | **Pn** | **00 28 53.2** | | | **+1.9** |

*REN **06** 00:33:04.9±2.5, 37.18N±0.03×112.77W±0.03, h12km±5km, Error ellipse: s-maj=5.0km s-min=2.5km az=199.0*
*UUSS **06** 00:33:04.4±3.0, 37.15N±0.02×112.74W±0.03, h18km±6km, ML2.8/6, ML2.2/5(REN), ML2.6/75(NEIC), Error ellipse: s-maj=3.9km s-min=3.4km az=69.0*

**NEIC 06 00:33:05.0**±2.0, **37.16N**±0.02×**112.76W**±0.01, **h5**km±2km, **Error ellipse: s-maj=3.1km s-min=3.0km az=202.0, Utah**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PV23 | | | | | Pg | Pg | 00 34 05.7 | -1.4 |
| **PV13** | **Radium Mtn., P** | **3.28** | **71** | | | Pn | 00 33 57.9 | +0.6 |
| PV13 | | | | | Pg | Pb | 00 34 05.8 | +1.9 |
| **PV11** | **David Mesa, Pa** | **3.29** | **68** | | | Pn | 00 33 57.8 | +0.5 |
| **GWY** | **Greenwater Val** | **3.29** | **254** | | | Pn | 00 33 59.6 | +2.3 |
| GWY | | | | | IAML | | 00 34 22.5 | |
| | comp=E,10nm,4.9s | | | | | | | |
| GWY | | | | | IAML | | 00 34 49.8 | |
| | comp=N,11nm,0.5s | | | | | | | |
| **PV03** | **Paradox Valley** | **3.29** | **69** | | Pg | Pb | 00 34 04.8 | +0.8 |
| PV03 | | | | | IAML | | 00 35 56.2 | |
| | comp=E,22nm,4.9s | | | | | | | |
| **MVCO** | **Mesa Verde** | **3.40** | **88** | | | Pn | 00 33 58.6 | -0.4 |
| **PV01** | **Paradox Valley** | **3.47** | **72** | Pn | | Pn | 00 34 00.6 | +0.8 |
| PV01 | | | | | Pg | Pb | 00 34 08.1 | +1.1 |
| PV01 | | | | | IAML | | 00 34 54.1 | |
| | comp=N,15nm,0.8s | | | | | | | |
| PV01 | | | | | IAML | | 00 35 16.5 | |
| | comp=E,19nm,4.7s | | | | | | | |
| **X18A** | **Snowflake** | **3.47** | **138** | | | Pb | 00 34 08.3 | +1.2 |
| **PV07** | **Paradox Valley** | **3.50** | **67** | Pn | | Pn | 00 33 59.9 | -0.4 |
| PV07 | | | | | IAML | | 00 34 56.7 | |
| | comp=N,19nm,0.7s | | | | | | | |
| PV07 | | | | | IAML | | 00 34 57.3 | |
| | comp=E,17nm,0.9s | | | | | | | |
| **QSM** | **Queen of Sheba** | **3.52** | **251** | | | Pb | 00 34 09.8 | +2.1 |
| QSM | | | | | IAML | | 00 35 00.3 | |
| | comp=N,8.2nm,4.4s | | | | | | | |
| QSM | | | | | IAML | | 00 35 52.7 | |
| | comp=E,8.3nm,4.6s | | | | | | | |
| **JLU** | **Jordanelle** | **3.59** | **16** | | | Pn | 00 33 59.3 | -2.3 |
| JLU | | | | | Pg | Pb | 00 34 11.2 | +2.0 |
| JLU | | | | | IAML | | 00 34 40.2 | |
| | comp=E,15nm,5.0s | | | | | | | |
| JLU | | | | | IAML | | 00 35 35.9 | |
| | comp=N,13nm,4.8s | | | | | | | |
| **PV15** | **Paradox Valley** | **3.59** | **69** | | | Pn | 00 34 03.4 | +1.8 |

*UPP* ***06*** *00:34:30.5±0.1, 67.85N×20.20E, h0km, ML2.6, Explosion*
*KOLA* ***06*** *00:34:30.1, 67.68N×20.08E, h0km, ML2.2*
*IDC* ***06*** *00:34:31.9±1.5, 67.83N×20.86E, h0km, mb1 4.0/2, mb1mx3.1/41, mbtmp3.9/2, ML2.1/2, Error ellipse: s-maj=23.8km s-min=8.2km az=118.0*
*HEL* ***06*** *00:34:31.1±0.1, 67.85N×20.22E, h0km, ML2.0, ML2.6(UPP), Explosion*

**ISC 06 00:34:30.6±0.8, 67.84N±0.02×20.26E±0.02, h0km, n36, σ1s04/55, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KOVU** | **Salmi** | **0.38** | **355** | P | | | **Pg** | **00 34 37.8** | **-0.1** |
| KOVU | | | | S | | | **Sg** | **00 34 42.8** | **-0.1** |
| **KOVU** | **Salmi** | **0.38** | **355** | *i* P | | | **Pg** | **00 34 37.8** | **-0.1** |
| KOVU | | | | *i* S | | | **Sg** | **00 34 42.8** | **-0.1** |
| **NIKU** | **Nikkaluokta** | **0.46** | **273** | P | | | **Pg** | **00 34 39.0** | **-0.4** |
| NIKU | | | | S | | | **Sg** | **00 34 45.4** | **0.0** |
| **NIKU** | **Nikkaluokta** | **0.46** | **273** | *i* P | | | **Pg** | **00 34 39.0** | **-0.4** |
| NIKU | | | | *i* S | | | **Sg** | **00 34 45.4** | **0.0** |
| **LANU** | **Lannavaara** | **0.69** | **72** | P | | | **Pg** | **00 34 43.9** | **+0.2** |
| LANU | | | | S | | | **Sg** | **00 34 53.0** | **+0.5** |
| **LANU** | **Lannavaara** baz=260 | **0.69** | **72** | *e*P | | | **Pg** | **00 34 43.5** | **-0.2** |
| LANU | | | | *e*S | | | **Sg** | **00 34 53.3** | **+0.8** |
| **MASU** | **Masugnsbyn** | **0.77** | **120** | P | | | **Pg** | **00 34 45.5** | **+0.1** |
| **MASU** | **Masugnsbyn** | **0.77** | **120** | *i* P | | | **Pg** | **00 34 45.5** | **+0.1** |
| **SALU** | **Saltoluokta** | **0.82** | **236** | P | | | **Pg** | **00 34 45.6** | **-0.6** |
| **SALU** | **Saltoluokta** | **0.82** | **236** | *i* P | | | **Pg** | **00 34 45.6** | **-0.6** |
| **KIF** | **Kilpisjarvi** | **1.18** | **10** | *e*P | | | **Pb** | **00 34 53.6** | **-0.3** |
| **KIF** | **Kilpisjarvi** baz=191 | **1.18** | **10** | *e*PB | | | **Pg** | **00 34 53.2** | **0.0** |
| KIF | | | | MSG | | | | 00 35 04.9 | |
| | comp=Z,12nm,0.2s | | | | | | | | |
| KIF | | | | *e*SB | | | **Sb** | **00 35 09.3** | **-0.4** |
| **PAJU** | **Pajala** | **1.38** | **125** | P | | | **Pg** | **00 34 56.1** | **-0.8** |
| **PAJU** | **Pajala** | **1.38** | **125** | *e*P | | | **Pg** | **00 34 54.2** | **-2.7** |
| PAJU | | | | *e*SB | | | **Sg** | **00 35 14.6** | **-0.1** |
| **HEF** | **Hetta** | **1.40** | **64** | *e*P | | | **Pn** | **00 34 56.1** | **-1.2** |
| **HEF** | **Hetta** | **1.40** | **64** | *e*PG | | | **Pn** | **00 34 56.4** | **-0.9** |
| HEF | | | | MSG | | | | 00 35 13.2 | |
| | comp=Z,13nm,0.2s | | | | | | | | |
| HEF | | | | *e*SB | | | **Sg** | **00 35 15.1** | **-0.3** |
| **ERTU** | **Ertsjaerv** | **1.50** | **149** | P | | | **Pn** | **00 34 58.1** | **-0.5** |
| **ERTU** | **Ertsjaerv** | **1.50** | **149** | *e*PG | | | **Pn** | **00 34 58.6** | **-0.1** |
| ERTU | | | | *e*SN | | | **Sg** | **00 35 18.8** | **+0.2** |
| **KLF** | **Kolari** baz=299 | **1.55** | **112** | *e*PG | | | **Pn** | **00 34 59.1** | **-0.3** |
| KLF | | | | *e*SN | | | **Sg** | **00 35 20.7** | **+0.4** |
| **HARU** | **Harads** | **1.71** | **170** | P | | | **Pn** | **00 35 01.6** | **0.0** |
| **HARU** | **Harads** | **1.71** | **170** | *e*P | | | **Pn** | **00 35 01.6** | **0.0** |
| **KALU** | **Kalix** | **2.34** | **147** | *e*PB | | | **Pn** | **00 35 11.5** | **+1.3** |
| KALU | | | | *e*SB | | | **Sb** | **00 35 42.3** | **-0.6** |
| **TOF** | **Tornio** | **2.39** | **136** | *e*PB | | | **Pn** | **00 35 12.4** | **+1.6** |
| TOF | | | | MSG | | | | 00 35 43.5 | |
| | comp=Z,11nm,0.2s | | | | | | | | |
| TOF | | | | *e*SG | | | **Sb** | **00 35 44.7** | **+0.4** |
| **ARCES** | **ARCESS Array B** baz=225,slow=16,SNR=26 | **2.56** | **46** | Pg | | | **Pn** | **00 35 13.9** | **+0.6** |
| ARCES | | | | Lg | | | Lg | 00 35 48.1 | |
| | baz=224,slow=26,SNR=14 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.56** | **46** | P | | | **Pn** | **00 35 14.1** | **+0.8** |
| ARCES | | | | S | | | **Sb** | **00 35 48.0** | **-1.3** |
| **RNF** | **Rovaniemi** | **2.56** | **116** | *e*PB | | | **Pn** | **00 35 15.2** | **+2.0** |
| RNF | | | | *e*SG | | | **Sb** | **00 35 49.3** | **0.0** |
| **KEV** | **Kevo** | **3.11** | **49** | *e*P | | | **Pn** | **00 35 22.2** | **+1.4** |
| KEV | | | | *e*S | | | **Sn** | **00 36 00.1** | **+1.5** |
| KEV | | | | MSG | | | | 00 36 01.6 | |
| | comp=Z,5.5nm,0.2s | | | | | | | | |
| **VRF** | **Varrio** baz=277 | **3.55** | **87** | *e*PB | | | **Pn** | **00 35 30.2** | **+3.3** |
| VRF | | | | *e*SG | | | **Sg** | **00 36 22.2** | **-2.3** |
| **OUL** | **Oulu** | **3.58** | **138** | *e*PG | | | **Pb** | **00 35 35.4** | **+0.8** |
| OUL | | | | *e*SG | | | **Sb** | **00 36 19.6** | **+1.2** |
| **MSF** | **Maaselka** baz=306 | **3.97** | **115** | *e*P | | | **Pn** | **00 35 33.9** | **+1.3** |
| **KU6** | **Riekki** baz=303 | **4.21** | **111** | *e*P | | | **Pn** | **00 35 36.8** | **+0.9** |
| **PRVG** | **Vayda Guba** | **4.73** | **61** | S | | | **Sn** | **00 36 38.3** | **-0.2** |
| **APA0** | **Apatity Array** | **4.85** | **87** | P | | | **Pn** | **00 35 44.6** | **-0.1** |
| APA0 | | | | S | | | **Sn** | **00 36 39.5** | **-2.0** |
| **TERR** | **Teriberka** | **5.62** | **69** | S | | | **Sn** | **00 36 58.9** | **-1.5** |
| **FINES** | **FINESS Array B** comp=Z,0.1nm,0.3s,baz=350,slow=15,SNR=4.2 | **6.89** | **156** | Pn | | | **Pn** | **00 36 13.5** | **+0.8** |
| FINES | | | | Lg | | | Lg | 00 38 04.4 | |
| | comp=Z,0.3nm,0.3s,baz=346,slow=27,SNR=2.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** comp=Z,0.0nm,0.3s,baz=13,slow=12,SNR=1.1 | **7.86** | **214** | Pn | | | **Pn** | **00 36 26.8** | **+0.8** |

*SOME* ***06*** *00:35:57.3, 39.13N×73.27E, h10km*
*NNC* ***06*** *00:36:00.1±0.8, 39.23N×73.24E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=6.2km s-min=3.3km az=175.0*
*KRNET* ***06*** *00:36:07.7±0.1, 39.49N×73.47E, mb2.8*

**ISC 06 00:36:10.2±1.7, 39.66N±0.06×73.29E±0.03, h2km±13km, n36, σ1s80/57, 18C-4D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** baz=3.0 | **0.39** | **25** | ⇓*e*P | | | **Pg** | **00 36 18.0** | **+0.2** |
| SFK | | | | ⇓*e*S | | | **Sb** | **00 36 25.8** | **-0.8** |
| **DRK** | **Karamyk** baz=70 | **1.17** | **262** | ⇑*i*P | | | **Pb** | **00 36 32.5** | **-0.7** |
| DRK | | | | ⇑*i*S | | | **Sn** | **00 36 50.3** | **-0.1** |
| **BTK** | **Batken** baz=86 | **1.94** | **283** | ⇑*e*P | | | **Pb** | **00 36 46.7** | **+0.3** |
| BTK | | | | ⇑*i*S | | | **Sg** | **00 37 15.1** | **+2.4** |
| **ARLS** | **Aral** baz=15 | **2.34** | **19** | ⇑*e*P | | | **Pb** | **00 36 51.2** | **-1.9** |
| ARLS | | | | ⇑*i*S | | | **Sb** | **00 37 23.0** | **+0.5** |
| **ARK** | **Arkit** baz=34 | **2.36** | **335** | ⇑*i*P | | | **Pb** | **00 36 52.9** | **-0.7** |
| ARK | | | | ⇑*i*S | | | **Sg** | **00 37 26.0** | **-0.2** |
| **GAR** | **Garm** baz=60 | **2.40** | **255** | ⇑*e*P | | | **Pb** | **00 36 52.0** | **-2.1** |
| GAR | | | | ⇑*i*S | | | **Sb** | **00 37 24.1** | **-0.1** |
| **TRKS** | **Terek-Say** baz=19 | **2.49** | **320** | ⇑*e*P | | | **Pb** | **00 36 53.8** | **-1.9** |
| TRKS | | | | ⇑*i*S | | | **Sb** | **00 37 27.5** | **+0.7** |
| **UCH** | **Uchtor** baz=16 | **2.73** | **19** | ⇑*i*P | | | **Pn** | **00 36 56.7** | **+1.2** |
| UCH | | | | ⇑*i*S | | | **Sb** | **00 37 32.5** | **-1.6** |
| **MRKS** | **Merke** 2.0nm,0.4s | **3.08** | **359** | *e*P | | | **Pb** | **00 37 04.6** | **-1.2** |
| MRKS | | | | *e*S | | | **Sg** | **00 37 53.0** | **+3.6** |
| **MRKS** | **Merke** 2.0nm,0.4s | **3.08** | **359** | Pg | | | **Pb** | **00 37 04.6** | **-1.2** |
| MRKS | | | | Lg | | | Lg | 00 37 53.0 | |
| **AAK** | **Ala-Archa** 2.4nm,0.8s | **3.11** | **17** | ⇓Pg | | | **Pb** | **00 37 03.6** | **-2.7** |
| AAK | | | | ⇑Lg | | | Lg | 00 37 51.5 | |
| **IUG** | **Iuzhnay** 110nm,0.4s | **3.50** | **316** | *e*P | | | **Pb** | **00 37 09.4** | **-3.6** |
| IUG | | | | *e*S | | | **Sg** | **00 38 01.1** | **-1.7** |
| **IUG** | **Iuzhnay** 110nm,0.4s | **3.50** | **316** | Pg | | | **Pb** | **00 37 09.4** | **-3.6** |
| IUG | | | | Lg | | | Lg | 00 38 01.1 | |
| **KST** | **Kastek** 4.4nm,1.0s | **3.94** | **30** | *e*P | | | **Pb** | **00 37 18.7** | **-1.7** |
| KST | | | | *e*S | | | **Sg** | **00 38 17.1** | **+0.4** |
| **KST** | **Kastek** 4.4nm,1.0s | **3.94** | **30** | Pg | | | **Pb** | **00 37 18.7** | **-1.7** |
| KST | | | | Lg | | | Lg | 00 38 17.0 | |
| **KK02** | **Karatay Array** 0.3nm,0.3s | **4.03** | **330** | ⇑Pg | | | **Pb** | **00 37 19.0** | **-2.8** |
| KK02 | | | | ⇓Lg | | | Lg | 00 38 20.1 | |
| **DGS** | **Degeres** 2.1nm,0.4s | **4.04** | **27** | *e*P | | | **Pb** | **00 37 21.5** | **-0.6** |
| DGS | | | | *e*S | | | **Sg** | **00 38 22.1** | **+2.2** |
| **DGS** | **Degeres** 2.1nm,0.4s | **4.04** | **27** | Pg | | | **Pb** | **00 37 21.5** | **-0.6** |
| DGS | | | | Lg | | | Lg | 00 38 22.1 | |
| **BRLS** | **Boroldav** 0.6nm,0.2s | **4.26** | **323** | *e*P | | | **Pb** | **00 37 21.6** | **-4.2** |
| BRLS | | | | *e*S | | | **Sb** | **00 38 22.2** | **+4.6** |
| **BRLS** | **Boroldav** 0.6nm,0.2s | **4.26** | **323** | Pg | | | **Pb** | **00 37 21.5** | **-4.2** |
| BRLS | | | | Lg | | | Lg | 00 38 22.2 | |
| **TNSS** | **Tian-Shan** 1.1nm,0.3s | **4.36** | **38** | *e*P | | | **Pb** | **00 37 26.2** | **-1.5** |
| TNSS | | | | *e*S | | | **Sg** | **00 38 29.9** | **-0.3** |
| **TNSS** | **Tian-Shan** 1.1nm,0.3s | **4.36** | **38** | Pg | | | **Pb** | **00 37 26.2** | **-1.5** |
| TNSS | | | | Lg | | | Lg | 00 38 29.9 | |
| **KRBS** | **Karabastau** 1.7nm,0.3s | **4.41** | **23** | *e*P | | | **Pb** | **00 37 28.5** | **0.0** |
| KRBS | | | | *e*S | | | **Sg** | **00 38 33.9** | **+2.0** |
| **KRBS** | **Karabastau** 1.7nm,0.3s | **4.41** | **23** | Pg | | | **Pb** | **00 37 28.5** | **0.0** |
| KRBS | | | | Lg | | | Lg | 00 38 33.9 | |
| **MDOK** | **Medeo** 2.1nm,0.8s | **4.50** | **38** | *e*P | | | **Pb** | **00 37 28.8** | **-1.2** |
| MDOK | | | | *e*S | | | **Sg** | **00 38 34.7** | **-0.1** |
| **MDOK** | **Medeo** 1.9nm,0.6s | **4.50** | **38** | Pg | | | **Pb** | **00 37 29.8** | **-0.2** |
| MDOK | | | | ⇑Lg | | | Lg | 00 38 34.8 | |
| **MDOK** | **Medeo** 2.1nm,0.8s | **4.50** | **38** | Pg | | | **Pb** | **00 37 28.8** | **-1.2** |
| MDOK | | | | Lg | | | Lg | 00 38 34.7 | |
| **KOTS** | **Kotyrbulak** 2.4nm,0.5s | **4.58** | **38** | *e*P | | | **Pb** | **00 37 30.2** | **-1.2** |
| KOTS | | | | *e*S | | | **Sg** | **00 38 37.0** | **-0.5** |
| **KOTS** | **Kotyrbulak** 2.4nm,0.5s | **4.58** | **38** | Pg | | | **Pb** | **00 37 30.2** | **-1.2** |
| KOTS | | | | Lg | | | Lg | 00 38 37.0 | |
| **KTBS** | **Karatobe** 0.8nm,0.2s | **4.78** | **31** | *e*P | | | **Pb** | **00 37 34.0** | **-0.7** |
| KTBS | | | | *e*S | | | **Sg** | **00 38 43.5** | **-0.2** |
| **KTBS** | **Karatobe** 0.8nm,0.2s | **4.78** | **31** | Pg | | | **Pb** | **00 37 34.1** | **-0.7** |
| KTBS | | | | Lg | | | Lg | 00 38 43.5 | |
| **KUU** | **Kurty** 1.4nm,0.5s | **4.81** | **27** | *e*P | | | **Pb** | **00 37 34.6** | **-0.5** |
| KUU | | | | ⇑*i*S | | | **Sg** | **00 38 44.8** | **+0.2** |
| **KUU** | **Kurty** 1.4nm,0.5s | **4.81** | **27** | Pg | | | **Pb** | **00 37 34.6** | **-0.5** |
| KUU | | | | Lg | | | Lg | 00 38 44.8 | |
| **SATY** | **Saty** 3.7nm,0.5s | **5.13** | **47** | *e*P | | | **Pb** | **00 37 40.3** | **-0.5** |
| SATY | | | | *e*S | | | **Sg** | **00 38 54.2** | **-0.9** |
| **SATY** | **Saty** 3.7nm,0.5s | **5.13** | **47** | Pg | | | **Pb** | **00 37 40.3** | **-0.5** |
| SATY | | | | Lg | | | Lg | 00 38 54.2 | |
| **KPKS** | **Kokpek** 3.9nm,0.7s | **5.55** | **45** | *e*P | | | **Pb** | **00 37 47.9** | **0.0** |
| KPKS | | | | *e*S | | | **Sg** | **00 39 07.3** | **-1.3** |
| | 2.3nm,0.6s | | | | | | | | |

**TAP 06 00:37:33.6, 24.03N×121.61E, h10km, ML2.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HWA** | **Hwalien** baz=179 | **0.05** | **188** | *i* P | | | Pg | 00 37 36.0 | +0.5 |
| HWA | | | | S | | | Sg | 00 37 37.9 | +0.9 |
| **TWD** | **Chiawan** baz=352 | **0.06** | **344** | *i* P | | | Pg | 00 37 36.3 | +0.7 |
| TWD | | | | S | | | Sg | 00 37 37.7 | +0.6 |
| **ETM** | **Tongmen** baz=240 | **0.13** | **241** | *i* P | | | Pg | 00 37 37.0 | +0.5 |
| ETM | | | | S | | | Sg | 00 37 39.1 | +0.4 |
| **ETL** | **Fush Village** baz=4.0 | **0.13** | **4** | *i* P | | | Pg | 00 37 37.4 | +0.7 |
| ETL | | | | S | | | Sg | 00 37 39.3 | +0.5 |
| **NACB** | **Ninganchiao** baz=353 | **0.15** | **353** | P | | | Pg | 00 37 37.6 | +0.7 |
| NACB | | | | S | | | Sg | 00 37 42.2 | +3.0 |
| **TEYL** | **Yanliau Villag** baz=184 | **0.16** | **185** | P | | | Pg | 00 37 37.2 | +0.1 |
| TEYL | | | | S | | | Sg | 00 37 40.3 | +0.8 |
| **ETLH** | **Xiulin Townshi** baz=326 | **0.21** | **326** | P | | | Pb | 00 37 38.9 | -0.8 |
| ETLH | | | | S | | | Sg | 00 37 42.5 | +1.3 |
| **ESL** | **Shilin** baz=216 | **0.27** | **218** | P | | | Pg | 00 37 39.5 | +0.4 |
| ESL | | | | *e*S | | | Sg | 00 37 43.8 | +1.1 |
| **WHF** | **Hehuan Shan** baz=290 | **0.34** | **290** | *i* P | | | Pb | 00 37 41.4 | -0.6 |
| WHF | | | | *e*S | | | Sb | 00 37 46.5 | -1.1 |
| **EGFH** | **Guangfu** baz=205 | **0.40** | **206** | P | | | Pb | 00 37 42.2 | -0.5 |
| EGFH | | | | S | | | Sb | 00 37 48.1 | -0.6 |
| **FUSS** | **Fushou** baz=303 | **0.40** | **303** | *i* P | | | Pb | 00 37 42.9 | -0.1 |
| FUSS | | | | S | | | Sb | 00 37 48.9 | -0.4 |
| | baz=303 | | | | | | | | |
| **CHGB** | **Renai** baz=274 | **0.40** | **275** | P | | | Pb | 00 37 42.6 | -0.3 |
| CHGB | | | | S | | | Sb | 00 37 48.8 | -0.5 |
| **ENA** | **Nanau** baz=17 | **0.42** | **16** | P | | | Pg | 00 37 42.3 | +0.5 |
| ENA | | | | *e*S | | | Sg | 00 37 48.1 | +0.9 |
| **NNSB** | **Datong** baz=332 | **0.45** | **332** | P | | | Pb | 00 37 43.4 | -0.3 |
| NNSB | | | | S | | | Sb | 00 37 50.1 | -0.5 |
| **WUSB** | **Renai** baz=265 | **0.45** | **266** | P | | | Pb | 00 37 43.8 | 0.0 |
| WUSB | | | | *e*S | | | Sb | 00 37 49.8 | -0.9 |
| **TWT** | **Tachien** baz=298 | **0.46** | **300** | P | | | Pb | 00 37 43.9 | +0.1 |
| TWT | | | | *e*S | | | Sb | 00 37 51.2 | +0.4 |
| **NNS** | **Nan Shan** baz=332 | **0.47** | **332** | P | | | Pg | 00 37 42.4 | -0.3 |
| NNS | | | | *e*S | | | Sb | 00 37 50.4 | -0.6 |
| **TDCB** | **Techi** baz=298 | **0.47** | **299** | P | | | Pb | 00 37 44.0 | -0.1 |
| TDCB | | | | S | | | Sb | 00 37 51.1 | 0.0 |
| **VWDT** | **VWDT** baz=237 | **0.51** | **238** | *e*S | | | Sb | 00 37 51.9 | -0.2 |
| **LATG** | **Datong** baz=351 | **0.51** | **351** | P | | | Pb | 00 37 44.2 | -0.5 |
| LATG | | | | S | | | Sb | 00 37 51.8 | -0.5 |
| **HGSD** | **Ruisui** baz=198 | **0.56** | **198** | P | | | Pb | 00 37 45.6 | +0.1 |
| **NDT** | **Datong Townshi** baz=350 | **0.58** | **351** | P | | | Pb | 00 37 45.9 | +0.1 |
| NDT | | | | *e*S | | | Sb | 00 37 54.4 | +0.2 |
| **WPL** | **Puli Township** baz=268 | **0.60** | **269** | P | | | Pb | 00 37 46.0 | -0.2 |
| WPL | | | | *e*S | | | Sb | 00 37 54.4 | -0.3 |
| **NDS** | **Dongshan** baz=8.0 | **0.61** | **9** | P | | | Pb | 00 37 46.2 | -0.2 |
| NDS | | | | *e*S | | | Sb | 00 37 54.4 | -0.6 |
| **ENTT** | **Nioudou** baz=356 | **0.61** | **356** | P | | | Pb | 00 37 46.4 | 0.0 |
| ENTT | | | | *e*S | | | Sb | 00 37 55.9 | +0.9 |
| **TWC** | **Suao** baz=21 | **0.62** | **20** | *e*P | | | Pb | 00 37 46.2 | -0.2 |
| TWC | | | | *e*S | | | Sb | 00 37 55.1 | -0.2 |
| **DPDB** | **Guoxing** baz=270 | **0.63** | **271** | P | | | Pb | 00 37 46.9 | +0.2 |
| DPDB | | | | *e*S | | | Sb | 00 37 56.1 | +0.5 |
| **WCS** | **Beigang Elemen** baz=272 | **0.64** | **273** | P | | | Pb | 00 37 47.1 | +0.3 |
| WCS | | | | *e*S | | | Sb | 00 37 56.4 | +0.5 |
| **SSLB** | **Suanglung** baz=248 | **0.65** | **249** | P | | | Pg | 00 37 46.0 | -0.1 |
| SSLB | | | | *e*S | | | Sg | 00 37 55.1 | +0.4 |
| **WHP** | **Taichung City** baz=292 | **0.66** | **292** | P | | | Pb | 00 37 47.6 | +0.4 |
| WHP | | | | S | | | Sb | 00 37 57.5 | +1.0 |
| **SMLT** | **Sun Moon Lake** baz=257 | **0.67** | **258** | P | | | Pb | 00 37 47.5 | +0.1 |
| SMLT | | | | S | | | Sb | 00 37 57.4 | +0.6 |
| **YHNB** | **Yeheng** baz=341 | **0.68** | **341** | P | | | Pb | 00 37 48.0 | +0.5 |
| YHNB | | | | *e*S | | | Sg | 00 37 55.8 | +0.3 |
| **NSK** | **Sanguang** baz=340 | **0.69** | **340** | P | | | Pb | 00 37 48.3 | +0.6 |
| NSK | | | | *e*S | | | Sb | 00 37 57.1 | -0.2 |
| **TWE** | **Neicheng** baz=5.0 | **0.69** | **4** | P | | | Pb | 00 37 47.7 | -0.1 |
| TWE | | | | *e*S | | | Sb | 00 37 57.6 | +0.2 |
| **YULB** | **Yu-li** baz=204 | **0.69** | **205** | P | | | Pg | 00 37 47.3 | +0.3 |
| YULB | | | | *e*S | | | Sb | 00 37 57.1 | -0.4 |
| **TYC** | **Yuchr** baz=259 | **0.70** | **260** | P | | | Pb | 00 37 48.2 | +0.3 |
| TYC | | | | *e*S | | | Sg | 00 37 56.1 | -0.2 |
| **FUSB** | **Fushanzhiwuyua** baz=358 | **0.73** | **358** | P | | | Pb | 00 37 48.6 | +0.2 |
| FUSB | | | | *e*S | | | Sb | 00 37 58.4 | -0.2 |
| **TWF1** | **Yuli** baz=202 | **0.73** | **203** | P | | | Pb | 00 37 48.1 | -0.3 |
| **NFF** | **Wufeng Townshi** baz=323 | **0.75** | **323** | P | | | Pb | 00 37 49.4 | +0.6 |
| NFF | | | | *e*S | | | Sb | 00 38 00.1 | +0.9 |
| **NWLT** | **Wulai** baz=352 | **0.75** | **352** | P | | | Pb | 00 37 49.2 | +0.4 |
| NWLT | | | | *e*S | | | Sb | 00 37 59.1 | -0.1 |
| **YUS** | **Yu-Shan** baz=228 | **0.81** | **229** | P | | | Pb | 00 37 50.3 | +0.3 |
| YUS | | | | *e*S | | | Sb | 00 38 00.9 | -0.2 |
| **LIOB** | **Emei** baz=318 | **0.82** | **319** | P | | | Pb | 00 37 50.5 | +0.5 |
| LIOB | | | | *e*S | | | Sb | 00 38 02.0 | +0.8 |
| **CHN5** | **Tsauling** baz=243 | **0.96** | **244** | P | | | Pn | 00 37 53.8 | +0.7 |
| CHN5 | | | | *e*S | | | Sn | 00 38 08.8 | +1.9 |
| **TIPB** | **Shuangxi** baz=11 | **0.96** | **12** | *e*P | | | Pn | 00 37 53.1 | -0.1 |
| TIPB | | | | *e*S | | | Sn | 00 38 06.8 | -0.1 |
| **STYH** | **Taoyuan** baz=222 | **1.15** | **222** | *e*P | | | Pn | 00 37 57.0 | +1.3 |
| **TWY** | **Chenhua** baz=359 | **1.24** | **359** | *e*S | | | Sn | 00 38 15.3 | +1.4 |
| **TWGBT** | **Beinan** baz=202 | **1.30** | **202** | *e*P | | | Pn | 00 37 57.6 | -0.1 |

**TAP 06 00:37:49.8, 23.04N×120.35E, h24km, ML2.1, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SHHT** | **Tainan City** baz=175 | **0.02** | **177** | P | | | Pb | 00 37 54.1 | +0.2 |
| SHHT | | | | S | | | Sb | 00 37 57.6 | +0.9 |
| **CHN3** | **Shinhua** baz=23 | **0.04** | **23** | *e*S | | | Sb | 00 37 56.6 | -0.2 |
| **TAI1** | **Yung-k'ang** baz=270 | **0.11** | **272** | *e*S | | | Sb | 00 37 58.0 | +0.6 |
| **SSHA** | **Shanhua** baz=331 | **0.11** | **331** | *e*P | | | Pb | 00 37 54.5 | 0.0 |
| SSHA | | | | *e*S | | | Sb | 00 37 59.0 | +1.5 |
| **SCLT** | **Jiali** baz=315 | **0.20** | **314** | P | | | Pb | 00 37 55.6 | +0.3 |
| SCLT | | | | S | | | Sb | 00 38 00.5 | +1.4 |
| **CHN1** | **Nanshi** baz=48 | **0.22** | **48** | P | | | Pb | 00 37 56.1 | +0.4 |
| CHN1 | | | | S | | | Sb | 00 38 00.9 | +1.2 |
| **SGST** | **Jiashian** baz=79 | **0.22** | **78** | P | | | Pb | 00 37 55.4 | -0.3 |
| SGST | | | | S | | | Sb | 00 38 00.4 | +0.7 |
| **TWM1** | **Shoushan** baz=160 | **0.22** | **162** | *e*P | | | Pb | 00 37 56.6 | +0.9 |
| **SNST** | **Tainan City** baz=37 | **0.23** | **37** | P | | | Pb | 00 37 56.4 | +0.6 |
| SNST | | | | S | | | Sb | 00 38 01.6 | +1.8 |
| **TWK** | **Hsinying** | **0.26** | **30** | P | | | Pb | 00 37 57.1 | +0.8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | baz=233 | | | | | | |
| **TWK** | **Hsinying** | **0.26** | **30** | P | Pb | 00 37 57.2 | +0.9 | |
| | baz=31 | | | | | | | |
| TWK | | | | S | Sn | 00 38 02.3 | -1.3 | |
| | baz=31 | | | | | | | |
| **SLGT** | **Liugui** | **0.28** | **99** | P | Pb | 00 37 57.0 | +0.5 | |
| | baz=98 | | | | | | | |
| SLGT | | | | S | Sb | 00 38 02.3 | +1.3 | |
| | baz=98 | | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **50** | P | Pb | 00 37 57.5 | +0.4 | |
| | baz=229 | | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **50** | P | Pb | 00 37 57.6 | +0.4 | |
| | baz=50 | | | | | | | |
| WTP | | | | S | Sb | 00 38 03.2 | +1.1 | |
| | baz=50 | | | | | | | |
| **ICHU** | **Yijhu** | **0.33** | **349** | P | Pb | 00 37 57.4 | +0.2 | |
| | baz=349 | | | | | | | |
| ICHU | | | | S | Sb | 00 38 03.5 | +1.3 | |
| | baz=349 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.37** | **45** | P | Pb | 00 37 57.9 | +0.1 | |
| | baz=231 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.37** | **45** | P | Pb | 00 37 58.0 | +0.2 | |
| | baz=44 | | | | | | | |
| TPUB | | | | S | Sb | 00 38 04.4 | +1.0 | |
| | baz=44 | | | | | | | |
| **SSD** | **Sandimen** | **0.39** | **138** | P | Pb | 00 37 58.6 | +0.4 | |
| | baz=137 | | | | | | | |
| SSD | | | | S | Sn | 00 38 05.4 | -1.3 | |
| | baz=137 | | | | | | | |
| **STYH** | **Taoyuan** | **0.42** | **71** | P | Pb | 00 37 59.4 | +0.8 | |
| | baz=70 | | | | | | | |
| STYH | | | | S | Sn | 00 38 06.1 | -1.1 | |
| | baz=70 | | | | | | | |
| **TSMG** | **Majia** | **0.43** | **140** | P | Pb | 00 37 58.9 | +0.1 | |
| | baz=140 | | | | | | | |
| TSMG | | | | *e*S | Sn | 00 38 06.4 | -1.1 | |
| | baz=140 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.50** | **347** | *e*P | Pb | 00 37 59.5 | -0.4 | |
| | baz=347 | | | | | | | |
| WSL | | | | S | Sb | 00 38 07.6 | +0.8 | |
| | baz=347 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.50** | **148** | P | Pb | 00 38 00.6 | +0.6 | |
| | baz=148 | | | | | | | |
| MASBT | | | | *e*S | Sn | 00 38 08.8 | -0.5 | |
| | baz=148 | | | | | | | |
| **ALS** | **Alishan** | **0.63** | **42** | P | Pb | 00 38 02.9 | +0.5 | |
| | baz=42 | | | | | | | |
| ALS | | | | S | Sn | 00 38 13.1 | 0.0 | |
| | baz=42 | | | | | | | |
| **SCZT** | **Fangliau** | **0.71** | **159** | P | Pn | 00 38 04.0 | -0.3 | |
| | baz=158 | | | | | | | |
| SCZT | | | | S | Sn | 00 38 13.7 | -0.8 | |
| | baz=158 | | | | | | | |
| **ECL** | **Taimali** | **0.71** | **128** | P | Pn | 00 38 04.0 | -0.3 | |
| | baz=127 | | | | | | | |
| ECL | | | | S | Sn | 00 38 14.1 | -0.4 | |
| | baz=127 | | | | | | | |
| **EAST** | **Anshuo** | **0.80** | **145** | P | Pn | 00 38 05.6 | 0.0 | |
| | baz=144 | | | | | | | |
| EAST | | | | S | Sn | 00 38 18.0 | +1.3 | |
| | baz=144 | | | | | | | |
| **SLIU** | **Shizi** | **0.92** | **153** | P | Pn | 00 38 07.8 | +0.6 | |
| | baz=152 | | | | | | | |
| SLIU | | | | S | Sn | 00 38 21.0 | +1.4 | |
| | baz=152 | | | | | | | |

**SKHL 06 00:47:29.0±0.2, 44°90N×144°70E, h21km±3km, mb3.6/4, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YUK** | **Yuzh-Kuril'sk** | **1.20** | **136** | *e*P | Pn | 00 47 49.6 | -0.9 |
| YUK | | | | AMB | AMB | 00 47 52.9 | |
| | 10.0nm,0.3s | | | | | | |
| YUK | | | | *e*S | Sb | 00 48 04.9 | -1.1 |
| YUK | | | | A | A | 00 48 10.7 | |
| | 40nm,0.5s | | | | | | |
| YUK | | | | A | A | 00 48 10.7 | |
| | 140nm,0.5s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **1.70** | **154** | *e*P | Pn | 00 47 57.0 | -0.4 |
| NMR | | | | AMB | AMB | 00 47 58.0 | |
| | 20nm,0.2s | | | | | | |
| NMR | | | | *e*S | Sn | 00 48 18.0 | -0.5 |
| NMR | | | | A | A | 00 48 25.0 | |
| | 20nm,0.3s | | | | | | |
| NMR | | | | A | A | 00 48 25.0 | |
| | 20nm,0.3s | | | | | | |
| **AKK** | **Akkeshi** | **1.89** | **177** | *e*P | Pn | 00 47 59.9 | 0.0 |
| AKK | | | | AMB | AMB | 00 48 00.6 | |
| | 10.0nm,0.4s | | | | | | |
| AKK | | | | *e*S | Sn | 00 48 23.3 | +0.3 |
| AKK | | | | A | A | 00 48 28.6 | |
| | 20nm,0.3s | | | | | | |
| AKK | | | | A | A | 00 48 28.6 | |
| | 30nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **2.27** | **80** | *e*P | Pn | 00 48 03.9 | -1.3 |
| KUR | | | | AMB | AMB | 00 48 04.4 | |
| | 10.0nm,0.2s | | | | | | |
| KUR | | | | *e*S | Sn | 00 48 29.7 | -2.8 |
| KUR | | | | A | A | 00 48 31.9 | |
| | 20nm,0.2s | | | | | | |
| KUR | | | | A | A | 00 48 31.9 | |
| | 50nm,0.2s | | | | | | |

**JMA 06 00:47:32.2±0.5, 46°22N×145°25E, h20km, M3.1, Sea of Okhotsk**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JRA** | **Rausu** | **2.28** | **182** | P | Pn | 00 48 10.1 | +1.4 |
| **JTKR** | **Abashiri--Toko** | **2.44** | **203** | P | Pn | 00 48 12.1 | +1.2 |
| JTKR | | | | *e*S | Sn | 00 48 42.0 | +1.9 |
| **JMP** | **Maruseppu** | **2.59** | **212** | P | Pn | 00 48 13.9 | +1.0 |
| **JNK** | **Nakash** | **2.66** | **188** | P | Pn | 00 48 15.1 | +1.2 |
| **NEM2** | **Nemuro 2** | **2.88** | **173** | P | Pn | 00 48 17.9 | +1.0 |
| NEM2 | | | | *e*S | Sn | 00 48 52.4 | +1.6 |
| **JAR** | **Ashorobuto** | **3.11** | **200** | P | Pn | 00 48 22.2 | +2.1 |
| **JAK** | **Akkeshi** | **3.25** | **187** | P | Pn | 00 48 23.6 | +1.6 |

*IDC **06** 00:53:14.0±27.0, 21°87S×173°84W, h0km, mb4.4/4, mb1 4.5/4, mb1mx3.8/35, mbtmp4.4/4, Error ellipse: s-maj=494.9km s-min=151.7km az=76.0*
*NEIC **06** 00:54:42.5±1.4, 23°4S±0°1×179°1W±0°2, h519km±17km, mb4.5/33, Error ellipse: s-maj=23.4km s-min=12.7km az=113.0*

**ISC 06 00:54:41.1±0.9, 23°4S±0°1×179°2W±0°1, h500km, n49, σ0°991/49, mb4.4/15, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **9.65** | **66** | P | **P** | **00 56 55.5** | **+0.7** |
| **AFI** | **Afiamalu** | **11.73** | **38** | P | **P** | **00 57 16.2** | **-0.9** |
| **PINNC** | **Pines Island,** | **12.31** | **271** | P | **P** | **00 57 23.5** | **+0.5** |
| **OUZ** | **Omahuta** | **13.38** | **206** | | **P** | **00 57 35.5** | **+1.4** |
| **SANVU** | **Saraoutou** | **15.03** | **299** | P | **P** | **00 57 53.0** | **+1.3** |
| **URZ** | **Urewera** | **15.19** | **191** | P | **P** | **00 57 54.3** | **+1.2** |
| URZ | | | | IAmb | IAmb | 00 58 04.1 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **HIZ** | **Hauiti** | **15.94** | **197** | P | **P** | **00 58 04.3** | **+3.3** |
| **BKZ** | **Black Stump Fm** | **16.19** | **192** | P | **P** | **00 58 03.1** | **-0.5** |
| BKZ | | | | IAmb | IAmb | 00 58 17.1 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **BFZ** | **Birch Farm** | **17.70** | **191** | P | **P** | **00 58 18.0** | **-0.6** |
| **MSWZ** | **Moikau Station** | **18.61** | **193** | P | **P** | **00 58 26.9** | **0.0** |
| **PLWZ** | **Palliser** | **18.75** | **193** | P | **P** | **00 58 28.0** | **-0.2** |
| **QRZ** | **Quartz Range** | **18.76** | **200** | P | **P** | **00 58 28.6** | **+0.4** |
| **NNZ** | **Nelson** | **18.87** | **197** | P | **P** | **00 58 29.1** | **-0.2** |
| NNZ | | | | IAmb | IAmb | 00 58 33.5 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **TUWZ** | **Tuamarina** | **18.92** | **196** | P | **P** | **00 58 29.0** | **-0.7** |
| **CMWZ** | **Cape Campbell** | **19.16** | **195** | P | **P** | **00 58 33.8** | **+2.0** |
| **BSWZ** | **Blackbirch Sta** | **19.21** | **196** | P | **P** | **00 58 32.7** | **+0.3** |
| **THZ** | **Tophouse** | **19.51** | **198** | P | **P** | **00 58 35.5** | **+0.3** |
| THZ | | | | IAmb | IAmb | 00 58 41.2 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **19.95** | **196** | P | **P** | **00 58 38.5** | **-0.6** |
| KHZ | | | | IAmb | IAmb | 00 58 49.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **20.63** | **198** | P | **P** | **00 58 46.5** | **+1.1** |
| **LHI** | **Lord Howe Isla** | **20.90** | **242** | P | **P** | **00 58 48.7** | **+0.8** |
| **RPZ** | **Rata Peaks** | **21.84** | **199** | P | **P** | **00 58 56.3** | **+0.1** |
| RPZ | | | | IAmb | IAmb | 00 59 08.5 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **FOZ** | **Fox Glacier** | **22.08** | **202** | P | **P** | **00 58 58.9** | **+0.6** |
| **LBZ** | **Lake Benmore** | **22.72** | **200** | P | **P** | **00 59 03.0** | **-1.1** |
| LBZ | | | | IAmb | IAmb | 00 59 05.2 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **ODZ** | **Otahua Downs** | **23.17** | **198** | P | **P** | **00 59 07.3** | **-0.9** |
| ODZ | | | | IAmb | IAmb | 00 59 17.6 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **MLZ** | **Mavora Lakes** | **24.27** | **202** | P | **P** | **00 59 18.2** | **+0.3** |
| MLZ | | | | IAmb | IAmb | 00 59 19.6 | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **DCZ** | **Deep Cove** | **24.70** | **203** | P | **P** | **00 59 21.3** | **-0.4** |
| DCZ | | | | IAmb | IAmb | 00 59 32.2 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **24.79** | **202** | P | **P** | **00 59 23.0** | **+0.5** |
| WHZ | | | | IAmb | IAmb | 00 59 24.4 | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **26.89** | **249** | P | **P** | **00 59 41.8** | **+0.3** |
| ARMA | | | | IAmb | IAmb | 00 59 47.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **27.11** | **260** | P | **P** | **00 59 43.5** | **+0.2** |
| **CAN** | **Canberra** | **30.04** | **239** | P | **P** | **01 00 08.3** | **-0.5** |
| CAN | | | | IAmb | IAmb | 01 00 09.9 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **32.20** | **269** | P | **P** | **01 00 28.4** | **+0.9** |
| | comp=Z,4.1nm,0.3s,baz=96,slow=11,SNR=13 | | | | | | |
| **CTA** | **Charters Tower** | **32.20** | **269** | P | **P** | **01 00 28.4** | **+0.9** |
| **CTAO** | **Charters Tower** | **32.20** | **269** | P | **P** | **01 00 28.4** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 01 00 29.1 | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| **TOO** | **Toolangi** | **33.35** | **237** | P | **P** | **01 00 36.8** | **-0.4** |
| **RABL** | **Rabaul** | **33.57** | **300** | P | **P** | **01 00 39.4** | **+0.2** |
| **TAU** | **Tasmania Unive** | **33.84** | **227** | P | **P** | **01 00 39.0** | **-2.1** |
| **STKA** | **Stephens Creek** | **35.60** | **247** | P | **P** | **01 00 56.1** | **+0.1** |
| | comp=Z,2.2nm,0.7s,baz=106,slow=7.4,SNR=4.6 | | | | | | |
| **STKA** | **Stephens Creek** | **35.60** | **247** | P | **P** | **01 00 55.3** | **-0.7** |
| **BBOO** | **Buckleboo** | **40.32** | **246** | P | **P** | **01 01 33.5** | **-1.2** |
| BBOO | | | | IAmb | IAmb | 01 01 34.4 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **42.84** | **260** | P | **P** | **01 01 54.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **42.84** | **260** | P | **P** | **01 01 54.6** | **-0.2** |
| | comp=Z,3.7nm,0.8s,baz=96,slow=8.0,SNR=32 | | | | | | |
| **ASAR** | **Alice Springs** | **42.84** | **260** | P | **P** | **01 01 54.6** | **-0.2** |
| **WB2** | **Warramunga Arr** | **43.16** | **265** | P | **P** | **01 01 57.1** | **-0.2** |
| **WB0** | **Warramunga Arr** | **43.16** | **266** | P | **P** | **01 01 57.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 01 01 57.5 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.17** | **265** | P | **P** | **01 01 56.9** | **-0.5** |
| | comp=Z,2.7nm,0.5s,baz=96,slow=8.5,SNR=49 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.17** | **265** | P | **P** | **01 01 57.0** | **-0.4** |
| **FORT** | **Forrest** | **47.18** | **249** | P | **P** | **01 02 27.3** | **-0.8** |
| FORT | | | | IAmb | IAmb | 01 02 28.0 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **57.74** | **249** | P | **P** | **01 03 43.6** | **-0.4** |
| **JCJ** | **Chichijima** | **62.50** | **321** | P | **P** | **01 04 15.7** | **+0.2** |

*ISK **06** 00:54:51.4, 34°77N×25°85E, h10km, ML3.7/10*
*IDC **06** 00:54:52.9±2.4, 34°95N×25°88E, h24km±15km, mb3.7/8, mb1 3.8/13, mb1mx3.6/44, mbtmp3.8/13, ML3.5/5, MS3.6/1, Ms1 3.6/1, ms1mx2.4/91, Error ellipse: s-maj=22.1km s-min=14.5km az=9.0*
*NIC **06** 00:54:52.9±0.0, 34°76N×26°02E, h16km±2km, Ml3.4/1*
*HLW **06** 00:54:52.1, 34°93N×25°90E, h10km±24km, Md3.9*
*ATH **06** 00:54:53.4, 34°89N×25°83E, h13km±1km, ML3.7/5, Error ellipse: s-maj=3.0km s-min=1.2km az=353.0*
*GII **06** 00:54:54.1±0.0, 34°47N×26°09E, h5km, MD3.7/1, Mm3.7/3*
*THE **06** 00:54:54.5, 34°99N×25°81E, h18km±1km, ML3.5/4, Error ellipse: s-maj=2.6km s-min=0.8km az=10.0*
*DDA **06** 00:54:58.0±0.0, 35°13N×26°69E, h10km, ML3.1*

**ISC 06 00:54:51.8±0.8, 34°85N±0°03×25°87E±0°02, h19km±2km, n110, σ1°886/147, mb3.7/8, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRMA** | **Ierapetra Chan** | **0.20** | **326** | P | **Pb** | **00 54 57.5** | **+1.1** |
| FRMA | | | | S | **Sg** | **00 55 00.9** | **+0.7** |
| **ZKR** | **Zakros** | **0.39** | **46** | P | **Pb** | **00 55 01.0** | **+0.8** |
| ZKR | | | | S | **Sb** | **00 55 07.3** | **+1.4** |
| | 11μm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.39** | **46** | P | **Pb** | **00 55 01.2** | **+0.9** |
| ZKR | | | | S | **Sb** | **00 55 06.8** | **+0.9** |
| ZKR | | | | AML | AML | 00 55 07.9 | |
| | comp=E,28338μm,0.2s | | | | | | |
| ZKR | | | | AML | AML | 00 55 08.0 | |
| | comp=N,14974μm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.39** | **46** | PG | **Pb** | **00 55 00.8** | **+0.6** |
| ZKR | | | | SG | **Sb** | **00 55 07.7** | **+1.8** |
| **ZKR** | **Zakros** | **0.39** | **46** | P | **Pb** | **00 55 00.7** | **+0.6** |
| ZKR | | | | AMI | | 00 55 06.4 | |
| | comp=N,13nm,0.8s | | | | | | |
| ZKR | | | | AMI | | 00 55 06.4 | |
| | comp=N,13nm,0.8s | | | | | | |
| ZKR | | | | AMI | | 00 55 06.5 | |
| | comp=N,26nm,0.6s | | | | | | |
| ZKR | | | | AMI | | 00 55 06.5 | |
| | comp=N,26nm,0.6s | | | | | | |
| ZKR | | | | S | **Sb** | **00 55 07.4** | **+1.4** |
| **STIA** | **Sitia Lasithi** | **0.40** | **27** | P | **Pb** | **00 55 00.8** | **+0.5** |
| STIA | | | | S | **Sb** | **00 55 07.4** | **+1.3** |
| **NPS** | **Neapolis** | **0.47** | **333** | P | **Pg** | **00 55 01.4** | **+0.1** |
| NPS | | | | S | **Sg** | **00 55 06.5** | **-1.2** |
| | comp=N,15μm,0.3s | | | | | | |
| **NPS** | **Neapolis** | **0.47** | **333** | P | **Pg** | **00 55 01.4** | **+0.1** |
| NPS | | | | S | **Sg** | **00 55 07.4** | **-0.3** |
| NPS | | | | AML | AML | 00 55 08.1 | |
| | comp=E,35065μm,0.3s | | | | | | |
| NPS | | | | AML | AML | 00 55 08.5 | |
| | comp=N,22856μm,0.3s | | | | | | |
| **HRKL** | **Herakleio** | **0.78** | **307** | P | **Pb** | **00 55 07.0** | **+0.2** |
| **HRKL** | **Herakleio** | **0.78** | **307** | PG | **Pg** | **00 55 07.6** | **+0.5** |
| **KSTL** | **Kastelli Herak** | **0.80** | **305** | P | **Pb** | **00 55 03.0** | **-4.1** |
| KSTL | | | | S | **Sb** | **00 55 10.2** | **-7.4** |
| **IACM** | **Heraklion** | **0.80** | **305** | P | **Pg** | **00 55 07.7** | **+0.2** |
| IACM | | | | S | **Sb** | **00 55 17.3** | **-0.3** |
| **IACM** | **Heraklion** | **0.80** | **305** | P | **Pn** | **00 55 08.2** | **+0.1** |
| IACM | | | | S | **Sg** | **00 55 18.7** | **+0.6** |
| **SIVA** | **Sivas** | **0.89** | **281** | P | **Pn** | **00 55 09.4** | **+0.1** |
| **SIVA** | **Sivas** | **0.89** | **281** | P | **Pn** | **00 55 09.8** | **+0.5** |
| SIVA | | | | S | **Sn** | **00 55 21.8** | **+0.1** |
| SIVA | | | | AML | AML | 00 55 30.8 | |
| | comp=E,18723μm,0.4s | | | | | | |
| SIVA | | | | AML | AML | 00 55 32.2 | |
| | comp=N,10284μm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **0.92** | **299** | Pg | **Pb** | **00 55 09.0** | **-0.1** |
| | comp=N,44nm,0.3s,baz=158,slow=8.3,SNR=71 | | | | | | |
| IDI | | | | Lg | Lg | 00 55 21.9 | |
| | comp=N,424nm,0.3s,baz=12,slow=23,SNR=47 | | | | | | |
| IDI | | | | LR | LR | 00 55 49.7 | |
| | comp=N,405nm,19.6s,baz=86,slow=64 | | | | | | |
| **IDI** | **Anoyia** | **0.92** | **299** | P | **Pb** | **00 55 09.2** | **0.0** |
| IDI | | | | S | **Sb** | **00 55 21.4** | **+0.4** |
| | comp=N,6μm,0.6s | | | | | | |
| **IDI** | **Anoyia** | **0.92** | **299** | P | **Pb** | **00 55 09.2** | **0.0** |
| IDI | | | | S | **Sb** | **00 55 21.7** | **+0.7** |
| IDI | | | | AML | AML | 00 55 23.4 | |
| | comp=N,18428μm,0.6s | | | | | | |
| IDI | | | | AML | AML | 00 55 25.6 | |
| | comp=E,7318μm,0.7s | | | | | | |
| **TMBK** | **Timbaki Herakl** | **0.94** | **284** | P | **Pn** | **00 55 10.4** | **+0.5** |
| TMBK | | | | S | **Sb** | **00 55 22.3** | **+0.9** |
| | comp=E,3μm,0.8s | | | | | | |
| **PRNS** | **Prines Rethymn** | **1.24** | **295** | P | **Pg** | **00 55 15.7** | **0.0** |
| **GVD** | **Gavdhos** | **1.47** | **270** | P | **Pg** | **00 55 20.6** | **+0.6** |
| **VAM** | **Vamos** | **1.48** | **293** | P | **Pb** | **00 55 19.2** | **+0.5** |
| **VAM** | **Vamos** | **1.48** | **293** | P | **Pb** | **00 55 19.5** | **+0.8** |
| VAM | | | | AML | AML | 00 55 45.8 | |
| | comp=E,3807μm,0.7s | | | | | | |
| VAM | | | | AML | AML | 00 55 50.2 | |
| | comp=N,3322μm,0.6s | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.67** | **347** | P | **Pg** | **00 55 24.4** | **+0.6** |
| **IMMV** | **Iera Moni Meta** | **1.67** | **292** | P | **Pg** | **00 55 23.6** | **-0.2** |
| **IMMV** | **Iera Moni Meta** | **1.67** | **292** | P | **Pg** | **00 55 23.8** | **-0.1** |
| IMMV | | | | S | **Sg** | **00 55 45.9** | **+0.3** |
| **KOSK** | **Kos Island** | **2.10** | **25** | PN | **Pb** | **00 55 28.6** | **-0.7** |
| KOSK | | | | SN | **Sb** | **00 55 55.8** | **+0.7** |
| **MHLO** | **Agia Marina, M** | **2.19** | **327** | P | **Pb** | **00 55 30.2** | **-0.7** |
| **ARG** | **Arkhangelos** | **2.29** | **53** | P | **Pb** | **00 55 32.6** | **+0.1** |
| **ARG** | **Arkhangelos** | **2.29** | **53** | PN | **Pb** | **00 55 31.1** | **-1.4** |
| **ARG** | **Arkhangelos** | **2.29** | **53** | S | **Sn** | **00 55 57.9** | **+1.6** |
| **ANKY** | **Antikythira Is** | **2.33** | **297** | P | **Pb** | **00 55 33.4** | **+0.2** |
| **BODT** | **Bodrum** | **2.50** | **27** | PN | **Pb** | **00 55 34.2** | **-1.9** |
| **BODT** | **Bodrum** | **2.50** | **27** | P | **Pb** | **00 55 36.0** | **-0.1** |
| **KTHA** | **Kythira Island** | **2.69** | **302** | P | **Pn** | **00 55 37.0** | **+2.9** |
| **TURN** | **Turunc** | **2.73** | **44** | P | **Pn** | **00 55 35.9** | **+1.4** |
| **MLSB** | **Milas** | **2.89** | **32** | PN | **Pn** | **00 55 39.9** | **+3.0** |
| **MLSB** | **Milas** | **2.89** | **32** | P | **Pn** | **00 55 36.5** | **-0.3** |
| **DALY** | **Dalyan (Mula)** | **3.00** | **48** | PN | **Pb** | **00 55 41.7** | **-2.8** |
| **YER** | **Yerkesik** | **3.01** | **40** | PN | **Pn** | **00 55 41.4** | **+2.9** |
| **YER** | **Yerkesik** | **3.01** | **40** | P | **Pn** | **00 55 40.4** | **+1.9** |
| YER | | | | S | **Sn** | **00 56 13.3** | **-0.7** |
| **MULA** | **Mugla, Merkez-** | **3.12** | **39** | P | **Pn** | **00 55 43.3** | **+3.3** |
| MULA | | | | S | **Sn** | **00 56 16.6** | **-0.2** |
| **FETY** | **Fethiye** | **3.16** | **55** | PN | **Pn** | **00 55 42.7** | **+2.1** |
| **FETY** | **Fethiye** | **3.16** | **55** | P | **Pn** | **00 55 42.6** | **+1.9** |
| **SLUM** | **Salum** | **3.39** | **190** | P | **Pn** | **00 55 46.9** | **+3.2** |
| | baz=190 | | | | | | |
| SLUM | | | | S | **Sn** | **00 56 24.8** | **+1.4** |
| | baz=190 | | | | | | |
| **CAME** | **Cameli-Denizli** | **3.48** | **52** | PN | **Pn** | **00 55 47.9** | **+2.8** |
| **TAVA** | **DENIZLI_Tavas** | **3.59** | **42** | P | **Pb** | **00 55 51.3** | **-3.4** |
| **CAEL** | **Denizli, Camel** | **3.60** | **50** | P | **Pb** | **00 55 52.2** | **-2.8** |
| **ELL** | **Elmali** | **3.79** | **59** | PN | **Pn** | **00 55 52.4** | **+3.1** |
| **ELL** | **Elmali** | **3.79** | **59** | P | **Pn** | **00 55 51.3** | **+2.0** |
| **ELL** | **Elmali** | **3.79** | **59** | P | **Pn** | **00 55 48.6** | **-0.7** |
| **GOLH** | **Golhisar** | **3.83** | **50** | P | **Pn** | **00 55 50.5** | **+0.8** |
| GOLH | | | | S | **Sn** | **00 56 33.5** | **-0.8** |
| GOLH | | | | *i* AML | AML | 00 56 52.0 | |
| | comp=N,65nm,1.3s | | | | | | |
| **KORT** | **Korkueli** | **4.22** | **58** | P | **Pn** | **00 55 57.9** | **+2.7** |
| **KULA** | **Kula-Manisa** | **4.29** | **31** | PN | **Pn** | **00 55 59.4** | **+3.2** |
| **KULA** | **Kula-Manisa** | **4.29** | **31** | P | **Pn** | **00 55 58.5** | **+2.3** |
| **BRDR** | **BURDUR-Merkez** | **4.42** | **49** | P | **Pn** | **00 56 00.6** | **+2.6** |
| **PASA** | **Karahalli, USA** | **4.55** | **39** | P | **Pn** | **00 56 01.9** | **+2.3** |
| **BASM** | **Basmaki-Afyon** | **4.56** | **46** | PN | **Pn** | **00 56 03.3** | **+3.5** |
| **USAK** | **Uak-Merkez** | **4.61** | **32** | P | **Pn** | **00 55 58.7** | **-1.9** |
| **OSC1** | **CSNet OBS 1** | **4.68** | **105** | P | **Pn** | **00 56 01.9** | **+0.6** |
| **SUTC** | **Sutluce-Ispart** | **4.91** | **56** | PN | **Pn** | **00 56 08.5** | **+3.8** |
| **NATA** | **Nata** | **5.51** | **89** | P | **Pn** | **00 56 13.5** | **+0.6** |
| NATA | | | | S | **Sn** | **00 57 16.2** | **+0.5** |
| **SWA2** | | **5.60** | **184** | P | **Pn** | **00 56 16.1** | **+2.1** |
| | baz=184 | | | | | | |
| SWA2 | | | | S | **Sn** | **00 57 18.0** | **+0.2** |
| | baz=184 | | | | | | |
| **SZAC** | **Souni** | **5.77** | **89** | P | **Pn** | **00 56 16.7** | **+0.3** |
| **ASGA** | **Asgata** | **6.07** | **88** | P | **Pn** | **00 56 22.2** | **+1.7** |
| **CSS** | **Mathiatis** | **6.13** | **87** | P | **Pn** | **00 56 22.1** | **+0.7** |
| **MVOU** | **Mavrovouni** | **6.38** | **86** | P | **Pn** | **00 56 25.8** | **+1.1** |
| **HMYD** | **Mayadein** | **6.54** | **139** | P | **Pn** | **00 56 29.6** | **+2.6** |
| | baz=139 | | | | | | |
| **RYAN** | **Fayoum** | **6.86** | **146** | P | **Pn** | **00 56 33.0** | **+1.6** |
| | baz=146 | | | | | | |
| RYAN | | | | S | **Sn** | **00 57 48.5** | **-0.4** |
| | baz=146 | | | | | | |
| **KOT** | **Kottamia** | **7.03** | **133** | P | **Pn** | **00 56 35.5** | **+1.7** |
| | baz=133 | | | | | | |
| **GLL** | **Jalalah** | **7.21** | **135** | P | **Pn** | **00 56 37.4** | **+1.1** |
| | baz=135 | | | | | | |
| **BRTR** | **Keskin Array B** | **7.88** | **50** | Pn | **Pn** | **00 56 47.6** | **+2.1** |
| | comp=N,0.1nm,0.3s,baz=211,slow=15,SNR=2.2 | | | | | | |
| **OFRI** | **`Ofer** | **7.91** | **104** | Pn | **Pn** | **00 56 46.2** | **+0.4** |
| **SLTI** | **Sal'it** | **8.08** | **106** | Pn | **Pn** | **00 56 48.1** | **-0.1** |
| SLTI | | | | Sn | **Sn** | **00 58 16.9** | **-2.2** |
| **MMA0B** | **Mount Meron ar** | **8.13** | **100** | Pn | **Pn** | **00 56 50.3** | **+1.4** |
| MMA0B | | | | Sn | **Sn** | **00 58 20.6** | **+0.3** |
| **MMAI** | **Mount Meron Ar** | **8.13** | **100** | Pn | **Pn** | **00 56 48.9** | **0.0** |
| | comp=N,4.5nm,0.3s,baz=266,slow=12,SNR=46 | | | | | | |
| MMAI | | | | Sn | **Sn** | **00 58 21.0** | **+0.7** |
| | comp=N,2.4nm,0.3s,baz=263,slow=23,SNR=2.3 | | | | | | |
| **KZIT** | **Kziot** | **8.18** | **116** | Pn | **Pn** | **00 56 48.7** | **-0.8** |
| KZIT | | | | Sn | **Sn** | **00 58 19.4** | **-2.0** |
| **AMAZ** | **Amatzia** | **8.27** | **111** | Pn | **Pn** | **00 56 50.6** | **-0.1** |
| AMAZ | | | | Sn | **Sn** | **00 58 21.1** | **-2.6** |
| **MMLI** | **Mount Malkishu** | **8.32** | **104** | Pn | **Pn** | **00 56 51.5** | **+0.1** |
| MMLI | | | | Sn | **Sn** | **00 58 23.7** | **-1.2** |
| **HMDT** | **Nahal Hemdat** | **8.46** | **105** | Pn | **Pn** | **00 56 53.7** | **+0.3** |
| HMDT | | | | Sn | **Sn** | **00 58 28.4** | **0.0** |
| **YTIR** | **Yattir** | **8.50** | **112** | Pn | **Pn** | **00 56 54.1** | **+0.2** |
| YTIR | | | | Sn | **Sn** | **00 58 27.2** | **-2.2** |
| **DSI** | **Dead Sea** | **8.61** | **110** | Pn | **Pn** | **00 56 55.3** | **-0.1** |
| DSI | | | | Sn | **Sn** | **00 58 30.9** | **-1.1** |
| **KRMI** | **Paran Flat** | **8.84** | **120** | Pn | **Pn** | **00 56 58.8** | **+0.2** |
| KRMI | | | | Sn | **Sn** | **00 58 34.4** | **-3.3** |
| **GHAJ** | **Ghor Haditha** | **8.87** | **111** | Pn | **Pn** | **00 56 59.8** | **+0.9** |
| **PRNI** | **Paran** | **8.91** | **118** | Pn | **Pn** | **00 56 59.4** | **-0.2** |
| PRNI | | | | Sn | **Sn** | **00 58 36.4** | **-3.1** |
| **ZFRI** | **Zfri** | **8.93** | **116** | Pn | **Pn** | **00 56 59.0** | **-0.8** |
| ZFRI | | | | Sn | **Sn** | **00 58 36.4** | **-3.5** |
| **HRFI** | **Mount Harif** | **9.11** | **119** | Pn | **Pn** | **00 57 02.7** | **+0.4** |
| HRFI | | | | Sn | **Sn** | **00 58 42.2** | **-2.1** |
| **MBRI** | **Mt Berech** | **9.16** | **121** | Pn | **Pn** | **00 57 03.2** | **+0.2** |
| **EIL** | **Elat** | **9.26** | **121** | Pn | **Pn** | **00 57 04.9** | **+0.6** |
| | comp=N,0.9nm,0.3s,baz=349,slow=2.0,SNR=22 | | | | | | |
| **EIL** | **Elat** | **9.26** | **121** | Pn | **Pn** | **00 57 04.6** | **+0.3** |
| EIL | | | | Sn | **Sn** | **00 58 44.7** | **-3.2** |
| **VAE** | **Valguarnera** | **9.63** | **289** | Pn | **Pn** | **00 57 11.1** | **+1.7** |
| | comp=N,0.8nm,0.3s,baz=289,slow=15,SNR=2.2 | | | | | | |
| **LSTV** | **Lastovo** | **10.56** | **321** | *e*Pn | **Pn** | **00 57 18.9** | **-3.2** |
| LSTV | | | | Sn | Sn | 00 59 07.0 | -13 |
| **RICI** | **Ricice** | **10.97** | **324** | *e*Pn | **Pn** | **00 57 23.7** | **-4.1** |
| RICI | | | | Sn | Sn | 00 59 19.6 | -10 |
| **HVAR** | **Hvar** | **11.08** | **321** | *e*Pn | **Pn** | **00 57 25.7** | **-3.5** |
| **KIJV** | **Kijevo** | **11.71** | **324** | *e*Pn | **Pn** | **00 57 35.2** | **-2.6** |
| **ZIRJ** | **Zirje** | **11.83** | **321** | *e*Pn | **Pn** | **00 57 36.1** | **-3.4** |
| **MORI** | **Morici** | **11.95** | **322** | *e*Pn

| | | | | | | |
|---|---|---|---|---|---|---|
| JBK | JBK | 1.51 139 | P | Pn | 01 39 43.6 | +1.0 |
| JBK | | | S | Sn | 01 39 59.7 | -2.7 |
| LCRM | LCR | 2.01 207 | P | Pb | 01 39 52.0 | -0.2 |
| LCRM | | | S | Sb | 01 40 15.6 | -1.7 |
| MD31 | MD31 | 2.74 198 | P | Pn | 01 40 00.3 | +0.8 |
| MDT | Midelt | 2.76 195 | P | Pn | 01 40 01.3 | +1.6 |
| PVAQ | Vaqueiros | 3.72 302 | *e*Pn | Pn | 01 40 13.7 | +0.9 |
| PVAQ | | | *e*Sn | Sn | 01 40 55.5 | -1.2 |
| PVAQ | | | A | A | 01 40 59.6 | |
| | 6.2nm,0.4s | | | | | |
| PVAQ | Vaqueiros | 3.72 302 | P | Pn | 01 40 13.6 | +0.7 |
| PCVE | Castro Verde | 4.06 303 | *e*Sn | Sn | 01 41 04.0 | -1.0 |
| PCVE | | | A | A | 01 41 08.3 | |
| | 4.4nm,0.5s | | | | | |
| MESJ | Messejana | 4.29 304 | *e*P | Pn | 01 40 21.5 | +0.9 |
| MESJ | Messejana | 4.29 304 | *e*Pn | Pn | 01 40 21.8 | +1.2 |
| MESJ | | | *e*Sn | Sn | 01 41 09.7 | -0.9 |
| MESJ | | | A | A | 01 41 13.2 | |
| | 3.1nm,0.4s | | | | | |
| MORF | Marmelete | 4.34 296 | *e*S | Sn | 01 41 08.4 | -3.8 |
| MORF | | | IAML | | 01 41 13.7 | |
| | comp=N,9.5nm,0.5s | | | | | |
| MORF | Marmelete | 4.34 296 | *e*Pn | Pn | 01 40 22.6 | +1.1 |
| MORF | | | *e*Sn | Sn | 01 41 10.1 | -2.0 |
| MORF | | | A | A | 01 41 13.2 | |
| | comp=N,3.6nm,0.2s | | | | | |
| PFVI | Vila Bisbo | 4.41 293 | *e*Pn | Pn | 01 40 23.5 | +1.2 |
| PFVI | | | *e*Sn | Sn | 01 41 11.6 | -2.1 |
| PTEO | Sao Teotonio | 4.50 299 | *e*Pn | Pn | 01 40 25.5 | +2.0 |
| PTEO | | | *e*Sn | Sn | 01 41 14.5 | -1.3 |
| EVO | Evora | 4.56 313 | *e*Pn | Pn | 01 40 25.6 | +1.2 |
| EVO | | | *e*Sn | Sn | 01 41 16.3 | -1.2 |
| EVO | | | A | A | 01 41 23.8 | |
| | comp=N,2.9nm,0.3s | | | | | |
| PNCL | Nicolau / Gran | 4.64 306 | *e*Pn | Pn | 01 40 25.8 | +0.4 |
| PNCL | | | *e*Sn | Sn | 01 41 18.2 | -1.1 |
| PNCL | | | A | A | 01 41 23.2 | |
| | comp=N,2.8nm,0.5s | | | | | |
| PMRV | Marv??o | 4.88 325 | *e*Pn | Pn | 01 40 30.6 | +1.8 |
| PMTG | Montargil | 5.05 316 | *e*Pn | Pn | 01 40 32.5 | +1.4 |
| PMTG | | | *e*Sn | Sn | 01 41 28.5 | -0.8 |
| PMTG | | | A | A | 01 41 37.0 | |
| | comp=N,1.8nm,0.4s | | | | | |
| OUK | Oukaimeden | 5.48 220 | P | Pn | 01 40 37.6 | +0.2 |
| PSBE | So Bento | 5.67 317 | *e*Pn | Pn | 01 40 42.2 | +2.5 |
| TTIG | Tnine Tigouga, | 6.30 220 | P | Pn | 01 40 43.6 | -4.8 |

**SOME 06 01:39:15.8,41.75N×76.55E,h20km, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SATY** | **Saty** | **1.90** | **46** | *e*P | Pb | 01 39 48.9 | -0.9 |
| | 1.6nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.30** | **52** | *e*P | Pb | 01 39 56.0 | -0.7 |
| | 3.7nm,0.2s | | | | | | |
| UZB | | | | *e*S | Sb | 01 40 25.0 | +0.2 |
| | 2.3nm,0.1s | | | | | | |
| **ARXS** | **Arharly** | **2.63** | **20** | *e*P | Pb | 01 40 03.9 | +1.5 |
| | 1.3nm,0.4s | | | | | | |
| ARXS | | | | *e*S | Sb | 01 40 38.5 | +4.2 |
| | 2.4nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **2.74** | **30** | *e*P | Pb | 01 40 04.8 | +0.6 |
| | 3.1nm,0.1s | | | | | | |
| BLB | | | | *e*S | Sb | 01 40 40.0 | +2.6 |
| | 11nm,0.2s | | | | | | |

*IDC* ***06*** *01:39:16.5±0.5,17.01S×174.81E,h0km,mb5.0/19, mb1 5.1/21,mb1mx4.9/31,mbtmp5.0/21,ML5.3/2,MS4.8/40, Ms1 4.8/40,ms1mx4.8/47,Error ellipse: s-maj=16.4km s-min=14.0km az=166.0*

*BJI* ***06*** *01:39:17.6±0.0,16.71S×175.18E,h7km,mb5.1/67, mB5.6/53,Ms5.3/63,Ms7 5.1/63*

*NEIC* ***06*** *01:39:18.5,17.00S×174.94E,h7km,Moment Tensor Solution. Moment tensor: Scale 10^17^Nm; Mrr0.05; Mθθ1.25; Mφφ-1.29; Mrθ0.63; Mθφ2.20; Mφr0.07; Fault plane solution: Mo2.62000×10^17^ NP1:ϕs105.56000°, δ85.08000°,λ,12.92000°. NP2:ϕs14.43000°,δ77.13000°, λ174.96000°. Principal axes: T 2.6451, Plg13.0000°, Azm331.0000°; N -0.0583, Plg76.0000°, Azm126.0000°; P -2.5868, Plg6.0000°, Azm239.0000°;*

*BGR* ***06*** *01:39:19.0±0.0,18.12S×175.51E,h33km,Ms5.1*

*NEIC* ***06*** *01:39:18.6±1.6,16.99S±0.05×174.94E±0.06,h10km±1km, mb5.5/183,Ms_20 5.1/72,Mwb5.5/18,Mww5.7,Error ellipse: s-maj=10.3km s-min=9.2km az=92.0*

*MOS* ***06*** *01:39:20.5±1.1,17.14S×174.80E,h35km,mb5.5/43, MS5.0/11,Error ellipse: s-maj=9.5km s-min=7.5km az=38.2*

*NOU* ***06*** *01:39:23.4,17.18S×174.87E,h30km,ML5.6/77,Fiji Islands Region*

*NEIC* ***06*** *01:39:24,17.00S×174.95E,h22km,Moment Tensor Solution. Duration: 120 Moment tensor: Scale 10^17^Nm; Mrr-0.29; Mθθ1.34; Mφφ-1.06; Mrθ0.53; Mθφ3.60; Mφr-1.11; Fault plane solution: Mo4.00000×10^17^ NP1: ϕs278.00000°,δ75.00000°,λ-10.00000°. NP2:ϕs11.00000°, δ80.00000°,λ-164.00000°. Principal axes: T 3.9555, Plg3.0000°, Azm144.0000°; N 0.0926, Plg72.0000°, Azm44.0000°; P -4.0482, Plg18.0000°, Azm235.0000°;*

*GCMT* ***06*** *01:39:24.5±0.1,16.84S±0.01×174.78E±0.01,h23km, MW5.7/158,Moment Tensor Solution. s135,c258; s158,c321; Duration: 1?6 Moment tensor: Scale 10^17^ Nm; Mrr-0.01±.04; Mθθ0.96±.04; Mφφ-0.94±.04; Mrθ-0.21±.06; Mθφ3.62±.04; Mφr-0.82±.06; Best double couple: Mo3.83700×10^17^ NP1:ϕs278.00000°,δ77.00000°, λ1.00000°. NP2:ϕs187.00000°,δ89.00000°,λ167.00000°. Principal axes: T 3.8650, Plg10.0000°, Azm142.0000°; N -0.0550, Plg77.0000°, Azm1.0000°; P -3.8100, Plg8.0000°, Azm233.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 06 01:39:22.3±0.2,17.21S±0.04×174.93E±0.04,h35km,n695, σ1?86/661,mb5.4/173,MS5.0/104,37C-64D,Fault plane solution: NP1:ϕs121.68008°,δ79.76020°,λ-14.55971°. NP2:ϕs214.32365°,δ75.67719°,λ-169.42799°. Principal axes:** T Plg2.8216°, Azm168.4264°; N Plg72.2640°, Azm267.2909°; P Plg17.4954°, Azm77.5363°; **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.03** | **100** | Pn | **Pn** | **01 40 07.3** | **-0.5** |
| | 14nm,0.3s,baz=264,slow=9.4,SNR=167 | | | | | | |
| **MSVF** | **Nonsavu** | **3.03** | **100** | P | **Pn** | **01 40 07.0** | **-0.9** |
| **MSVF** | **Nonsavu** | **3.03** | **100** | P | **Pn** | **01 40 08.8** | **+1.0** |
| **DGTI** | **Dogotuki** | **4.70** | **80** | P | **Pn** | **01 40 32.5** | **+1.8** |
| **TAVE** | **Taveuni** | **4.97** | **85** | P | **Pn** | **01 40 35.6** | **+1.1** |
| **LKBA** | **Tubou, Lakemba** | **6.05** | **101** | P | **Pn** | **01 40 52.9** | **+3.6** |
| **RTV** | **Rentapao** | **6.23** | **264** | P | **Pn** | **01 40 52.2** | **+0.4** |
| **DVP** | **Devils Point** | **6.45** | **264** | P | **Pn** | **01 40 55.6** | **+0.8** |
| **SANVU** | **Saraoutou** | **7.62** | **282** | Pn | **Pn** | **01 41 09.4** | **-1.4** |
| **SANVU** | **Saraoutou** | **7.62** | **282** | P | **Pn** | **01 41 10.9** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **7.77** | **236** | Pn | **Pn** | **01 41 13.4** | **+0.5** |
| **MARNC** | **Mare, Loyalty** | **7.77** | **236** | P | **Pn** | **01 41 14.1** | **+1.1** |
| **LIFNC** | **LIFOU** | **8.09** | **243** | Pn | **Pn** | **01 41 16.2** | **-1.1** |
| **LIFNC** | **LIFOU** | **8.09** | **243** | P | **Pn** | **01 41 18.1** | **+0.8** |
| **PINNC** | **Pines Island,** | **8.85** | **231** | | **Pn** | **01 41 28.2** | **+0.5** |
| **PINNC** | **Pines Island,** | **8.85** | **231** | P | **Pn** | **01 41 30.5** | **+2.7** |
| **YATNC** | **Mamie plateau,** | **8.98** | **236** | P | **Pn** | **01 41 30.0** | **+0.5** |
| **OUENC** | **Ouen Island, N** | **9.21** | **234** | Pn | **Pn** | **01 41 33.8** | **+1.2** |
| **OUENC** | **Ouen Island, N** | **9.21** | **234** | P | **Pn** | **01 41 34.6** | **+2.0** |
| **DZM** | **Mont Dzumac** | **9.34** | **237** | *e*Pn | **Pn** | **01 41 35.2** | **+0.6** |
| | 3µm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **9.34** | **237** | Pn | **Pn** | **01 41 35.5** | **+0.9** |
| | 3.1nm,0.3s,baz=67,slow=15,SNR=150 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.34** | **237** | Pn | **Pn** | **01 41 35.0** | **+0.5** |
| **DZM** | **Mont Dzumac** | **9.34** | **237** | P | **Pn** | **01 41 36.4** | **+1.8** |
| **ONTNC** | **Ouen Toro** | **9.45** | **236** | Pn | **Pn** | **01 41 37.1** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **9.45** | **236** | P | **Pn** | **01 41 38.1** | **+2.1** |
| **NOUC** | **Port Laguerre** | **9.47** | **238** | P | **Pn** | **01 41 38.0** | **+1.8** |
| **FUNA** | **Funafuti** | **9.58** | **26** | Pn | Pn | 01 41 32.6 | -5.2 |
| **KOUNC** | **Koumac, New Ca** | **10.61** | **250** | P | **Pn** | **01 41 53.1** | **+3.3** |
| **AFI** | **Afiamalu** | **13.23** | **77** | LR | LR | 01 46 37.5 | |
| | comp=Z,6µm,19.1s,baz=252,slow=33 | | | | | | |
| **RAO** | **Raoul Island** | **13.67** | **153** | LR | LR | 01 46 50.7 | |
| | comp=Z,13µm,18.8s,baz=354,slow=33 | | | | | | |
| **RAO** | **Raoul Island** | **13.67** | **153** | P | **Pn** | **01 42 34.9** | **+1.2** |
| **RAO** | **Raoul Island** | **13.67** | **153** | Pn | **Pn** | **01 42 34.9** | **+1.2** |
| **NIUE** | **Niue** | **14.52** | **100** | P | **P** | **01 42 49.6** | **-1.9** |
| **HNR** | **Honiara** | **16.49** | **296** | Pn | **Pn** | **01 43 09.0** | **-2.0** |
| | 10nm,0.3s,baz=170,slow=2.9,SNR=9.1 | | | | | | |
| **HNR** | **Honiara** | **16.49** | **296** | P | **Pn** | **01 43 09.0** | **-2.0** |
| **HNR** | **Honiara** | **16.49** | **296** | | **Pn** | **01 43 08.8** | **-2.2** |
| HNR | | | | IAmb | IAmb | 01 43 17.4 | |
| | comp=Z,635nm,1.2s | | | | | | |
| **HNR** | **Honiara** | **16.49** | **296** | P | **P** | **01 43 12.8** | **-0.6** |
| **OUZ** | **Omahuta** | **17.98** | **184** | P | **P** | **01 43 31.0** | **+1.3** |
| **MXZ** | **Matakana Point** | **20.50** | **172** | P | **P** | **01 43 58.2** | **+1.0** |
| **URZ** | **Urewera** | **21.06** | **175** | P | **P** | **01 44 05.9** | **+2.5** |
| | comp=Z,250nm,1.1s,baz=24,slow=5.2,SNR=41 | | | | | | |
| URZ | | | | LR | LR | 01 50 21.8 | |
| | comp=Z,6µm,20.3s,baz=350,slow=31 | | | | | | |
| **URZ** | **Urewera** | **21.06** | **175** | P | **P** | **01 44 05.1** | **+1.7** |
| URZ | | | | IAMs_20 | IAMs_20 | 01 50 40.8 | |
| | comp=Z,7µm,19.0s | | | | | | |
| **HIZ** | **Hauiti** | **21.23** | **180** | P | **P** | **01 44 06.6** | **+1.5** |
| HIZ | | | | IAMs_20 | IAMs_20 | 01 50 09.3 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.92** | **177** | P | **P** | **01 44 13.4** | **+0.8** |
| BKZ | | | | IAmb | IAmb | 01 44 18.7 | |
| | comp=Z,255nm,1.3s | | | | | | |
| BKZ | | | | IAMs_20 | IAMs_20 | 01 50 47.6 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.92** | **177** | P | **P** | **01 44 16.3** | **+3.7** |
| **BFZ** | **Birch Farm** | **23.42** | **177** | IAMs_20 | IAMs_20 | 01 51 18.3 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **BFZ** | **Birch Farm** | **23.42** | **177** | P | **P** | **01 44 28.5** | **+0.3** |
| **EIDS** | **Eidsvold** | **23.63** | **246** | P | **P** | **01 44 30.2** | **-0.2** |
| | baz=24,SNR=16 | | | | | | |
| **EIDS** | **Eidsvold** | **23.63** | **246** | P | **P** | **01 44 29.9** | **-0.5** |
| **EIDS** | **Eidsvold** | **23.63** | **246** | P | **P** | **01 44 30.8** | **+0.4** |
| **QRZ** | **Quartz Range** | **23.63** | **185** | IAMs_20 | IAMs_20 | 01 52 06.8 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **23.71** | **251** | P | **P** | **01 44 32.2** | **+1.1** |
| **NNZ** | **Nelson** | **23.97** | **183** | IAMs_20 | IAMs_20 | 01 51 56.8 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **SNZO** | **South Karori** | **24.02** | **180** | P | **P** | **01 44 32.8** | **-1.0** |
| SNZO | | | | IAmb | IAmb | 01 44 36.7 | |
| | comp=Z,169nm,1.1s | | | | | | |
| **SNZO** | **South Karori** | **24.02** | **180** | IAMs_20 | IAMs_20 | 01 52 00.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **SNZO** | **South Karori** | **24.02** | **180** | P | **P** | **01 44 37.0** | **+3.1** |
| **RAR** | **Rarotonga** | **24.21** | **104** | P | **P** | **01 44 37.3** | **+1.5** |
| | comp=Z,65nm,1.0s,baz=260,slow=9.4,SNR=5.9 | | | | | | |
| **RAR** | **Rarotonga** | **24.21** | **104** | P | **P** | **01 44 35.3** | **-0.6** |
| RAR | | | | IAmb | IAmb | 01 44 51.9 | |
| | comp=Z,144nm,1.2s | | | | | | |
| **RAR** | **Rarotonga** | **24.21** | **104** | P | **P** | **01 44 38.3** | **+2.4** |
| **THZ** | **Tophouse** | **24.54** | **184** | IAMs_20 | IAMs_20 | 01 52 44.8 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **ARMA** | **Armidale** | **24.98** | **234** | P | **P** | **01 44 43.8** | **+0.9** |
| | baz=25,SNR=13 | | | | | | |
| **ARMA** | **Armidale** | **24.98** | **234** | P | **P** | **01 44 43.2** | **+0.4** |
| **ARMA** | **Armidale** | **24.98** | **234** | P | **P** | **01 44 44.0** | **+1.1** |
| **KHZ** | **Kahutara** | **25.16** | **182** | IAMs_20 | IAMs_20 | 01 52 09.2 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.59** | **185** | IAMs_20 | IAMs_20 | 01 53 19.8 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **RABL** | **Rabaul** | **25.79** | **298** | P | **P** | **01 44 48.0** | **-2.3** |
| **RMQ** | **Roma** | **25.94** | **245** | P | **P** | **01 44 52.3** | **+0.8** |
| | baz=26,SNR=31 | | | | | | |
| **RMQ** | **Roma** | **25.94** | **245** | P | **P** | **01 44 52.9** | **+1.4** |
| **OXZ** | **Oxford** | **26.15** | **185** | IAMs_20 | IAMs_20 | 01 52 56.6 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **MQZ** | **McQueen's Vall** | **26.49** | **184** | IAMs_20 | IAMs_20 | 01 53 50.5 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **26.63** | **186** | IAMs_20 | IAMs_20 | 01 54 18.2 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **CTA** | **Charters Tower** | **27.30** | **259** | P | **P** | **01 45 03.1** | **-0.7** |
| | comp=Z,43nm,1.0s,baz=76,slow=10,SNR=22 | | | | | | |
| CTA | | | | LR | LR | 01 55 02.0 | |
| | comp=Z,4µm,18.5s,baz=82,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **27.30** | **259** | P | **P** | **01 45 04.3** | **+0.4** |
| **CTAO** | **Charters Tower** | **27.30** | **259** | P | **P** | **01 45 02.9** | **-1.0** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,88nm,1.1s | | | | | | |
| CTAO | | | | MLR | MLR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CTAO** | **Charters Tower** | **27.30** | **259** | P | **P** | **01 45 02.9** | **-1.0** |
| CTAO | | | | IAmb | IAmb | 01 45 11.1 | |
| | comp=Z,88nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **27.30** | **259** | IAMs_20 | IAMs_20 | 01 54 50.2 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CTAO** | **Charters Tower** | **27.30** | **259** | P | **P** | **01 45 05.3** | **+1.4** |
| **WKZ** | **Wanaka** | **27.98** | **189** | IAMs_20 | IAMs_20 | 01 54 46.0 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **ODZ** | **Otahua Downs** | **27.98** | **186** | IAMs_20 | IAMs_20 | 01 55 33.1 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **PMG** | **Port Moresby** | **28.08** | **282** | P | **P** | **01 45 10.0** | **-0.9** |
| | comp=Z,14nm,0.7s,baz=159,slow=3.4,SNR=4.4 | | | | | | |
| PMG | | | | LR | LR | 01 53 23.9 | |
| | comp=Z,4µm,18.7s,baz=80,slow=30 | | | | | | |
| **PMG** | **Port Moresby** | **28.08** | **282** | P | **P** | **01 45 10.0** | **-0.9** |
| **PMG** | **Port Moresby** | **28.08** | **282** | P | **P** | **01 45 09.2** | **-1.7** |
| PMG | | | | IAmb | IAmb | 01 45 20.2 | |
| | comp=Z,116nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **28.08** | **282** | IAMs_20 | IAMs_20 | 01 53 02.8 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **PMG** | **Port Moresby** | **28.08** | **282** | P | **P** | **01 45 13.5** | **+2.6** |
| **PMG** | **Port Moresby** | **28.08** | **282** | P | **P** | **01 45 13.8** | **+2.9** |
| **DCZ** | **Deep Cove** | **28.91** | **191** | IAMs_20 | IAMs_20 | 01 54 43.7 | |
| | comp=Z,9µm,19.0s | | | | | | |
| **PATS** | **Pohnpei** | **28.99** | **324** | IAMs_20 | IAMs_20 | 01 53 28.2 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **CNB** | **Canberra Magne** | **29.03** | **227** | P | **P** | **01 45 18.3** | **-0.9** |
| | baz=29,SNR=4.2 | | | | | | |
| **MTSU** | **Mount Surprise** | **29.16** | **264** | P | **P** | **01 45 19.6** | **-0.9** |
| | baz=29,SNR=8.9 | | | | | | |
| **MTSU** | **Mount Surprise** | **29.16** | **264** | P | **P** | **01 45 19.9** | **-0.6** |
| **QLP** | **Quilpie** | **29.90** | **246** | P | **P** | **01 45 26.7** | **-0.3** |
| | baz=30,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **29.90** | **246** | P | **P** | **01 45 28.6** | **+1.7** |
| **CMSA** | **Cobar Meteorol** | **30.09** | **236** | P | **P** | **01 45 28.5** | **-0.1** |
| | baz=30,SNR=44 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **30.09** | **236** | P | **P** | **01 45 29.0** | **+0.4** |
| **COEN** | **Coen** | **30.73** | **272** | P | **P** | **01 45 33.0** | **-1.4** |
| COEN | | | | IAmb | IAmb | 01 45 43.3 | |
| | comp=Z,56nm,1.3s | | | | | | |
| **COEN** | **Coen** | **30.73** | **272** | P | **P** | **01 45 36.0** | **+1.6** |
| **MANU** | **Manus Island** | **30.99** | **296** | P | **P** | **01 45 34.5** | **-2.2** |
| MANU | | | | IAmb | IAmb | 01 46 01.1 | |
| | comp=Z,67nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **32.87** | **226** | P | **P** | **01 45 53.2** | **+0.2** |
| | baz=33,SNR=4.1 | | | | | | |
| **TOO** | **Toolangi** | **32.87** | **226** | P | **P** | **01 45 52.8** | **-0.2** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,76nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **32.87** | **226** | P | **P** | **01 45 52.8** | **-0.2** |
| TOO | | | | IAmb | IAmb | 01 46 08.1 | |
| | comp=Z,76nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **32.87** | **226** | P | **P** | **01 45 54.2** | **+1.2** |
| **INKA** | **Innaminka** | **33.18** | **245** | P | **P** | **01 45 58.4** | **+2.7** |
| **STKA** | **Stephens Creek** | **33.49** | **238** | P | **P** | **01 45 58.6** | **+0.1** |
| | comp=Z,46nm,0.9s,baz=66,slow=9.3,SNR=76 | | | | | | |
| STKA | | | | LR | LR | 01 58 33.1 | |
| | comp=Z,3µm,19.2s,baz=69,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **33.49** | **238** | P | **P** | **01 45 58.6** | **+0.1** |
| | baz=34,SNR=52 | | | | | | |
| **STKA** | **Stephens Creek** | **33.49** | **238** | P | **P** | **01 45 57.7** | **-0.8** |
| **STKA** | **Stephens Creek** | **33.49** | **238** | P | **P** | **01 45 59.3** | **+0.8** |
| **QIS** | **Mount Isa** | **33.55** | **259** | P | **P** | **01 45 57.8** | **-1.3** |
| | baz=34,SNR=7.3 | | | | | | |
| **PPT2** | **Papeete2** | **33.85** | **96** | *e*S | **S** | **01 51 25.3** | **+1.3** |
| | comp=Z,1µm,22.5s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 01 53 32.2 | |
| | comp=Z,17µm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 01 54 56.8 | |
| | comp=Z,5µm,23.2s,baz=256 | | | | | | |
| **PPT** | **Papeete** | **33.85** | **96** | LR | LR | 01 56 18.1 | |
| | comp=Z,3µm,21.9s,baz=261,slow=30 | | | | | | |
| **TAU** | **Tasmania Unive** | **34.74** | **217** | IAMs_20 | IAMs_20 | 01 57 01.2 | |
| | comp=Z,3µm,21.0s | | | | | | |
| **ARPS** | **Mount Arapiles** | **35.09** | **230** | P | **P** | **01 46 13.2** | **+1.0** |
| | baz=10,SNR=10 | | | | | | |
| **ARPS** | **Mount Arapiles** | **35.09** | **230** | P | **P** | **01 46 14.2** | **+2.0** |
| **LCRK** | **Leigh Creek** | **35.91** | **242** | P | **P** | **01 46 20.2** | **+0.8** |
| **HTT** | **Hallett** | **36.12** | **237** | P | **P** | **01 46 21.2** | **+0.1** |
| | baz=36,SNR=20 | | | | | | |
| **HTT** | **Hallett** | **36.12** | **237** | P | **P** | **01 46 22.8** | **+1.6** |
| **JAY** | **Jayapura** | **36.64** | **290** | LR | LR | 02 01 33.3 | |
| | comp=Z,2µm,18.8s,baz=109,slow=37 | | | | | | |
| **JAY** | **Jayapura** | **36.64** | **290** | P | **P** | **01 46 23.1** | **-2.7** |
| | comp=Z,22nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **37.09** | **289** | P | **P** | **01 46 29.1** | **-0.5** |
| | comp=Z,4µmcomp=Z,147nm,2.0s | | | | | | |
| **GENI** | **Genyem** | **37.09** | **289** | P | **P** | **01 46 32.4** | **+2.8** |
| **OOD** | **Oodnadatta** | **37.61** | **247** | P | **P** | **01 46 34.6** | **+0.8** |
| **BBOO** | **Buckleboo** | **38.26** | **239** | P | **P** | **01 46 39.0** | **-0.2** |
| | baz=38,SNR=13 | | | | | | |
| **BBOO** | **Buckleboo** | **38.26** | **239** | P | **P** | **01 46 38.1** | **-1.2** |
| BBOO | | | | IAmb | IAmb | 01 46 40.4 | |
| | comp=Z,80nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **38.26** | **239** | P | **P** | **01 46 39.8** | **+0.5** |
| **WR0** | **Warramunga Arr** | **38.31** | **259** | P | **P** | **01 46 37.2** | **-2.7** |
| **WRAB** | **Tennant Creek** | **38.49** | **259** | P | **P** | **01 46 38.6** | **-2.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,49nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.49** | **259** | P | **P** | **01 46 38.6** | **-2.8** |
| **WRAB** | **Tennant Creek** | **38.49** | **259** | IAMs_20 | IAMs_20 | 02 00 51.4 | |
| | comp=Z,2µm,18.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.49** | **259** | P | **P** | **01 46 42.1** | **+0.6** |
| **WRA** | **Warramunga Arr** | **38.51** | **259** | P | **P** | **01 46 38.7** | **-2.9** |
| | comp=Z,24nm,0.9s,baz=91,slow=8.8,SNR=80 | | | | | | |
| WRA | | | | PP | **PnPn** | **01 48 12.9** | **+0.8** |
| | comp=Z,11nm,1.1s,baz=89,slow=9.8,SNR=4.7 | | | | | | |
| WRA | | | | LR | LR | 02 01 02.8 | |
| | comp=Z,2µm,19.4s,baz=82,slow=34 | | | | | | |
| **SMPI** | **Sarmi** | **38.66** | **289** | P | **P** | **01 46 39.1** | **-3.8** |
| | comp=Z,2µmcomp=Z,138nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **38.87** | **254** | P | **P** | **01 46 42.8** | **-1.8** |
| **ASAR** | **Alice Springs** | **38.87** | **254** | P | **P** | **01 46 42.9** | **-1.7** |
| | comp=Z,87nm,1.0s,baz=81,slow=9.1,SNR=293 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 48 54.9** | **-0.4** |
| | comp=Z,7.1nm,1.0s,baz=102,slow=3.5,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 02 01 46.4 | |
| | comp=Z,3µm,19.8s,baz=90,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **38.87** | **254** | P | **P** | **01 46 42.6** | **-2.0** |
| **MULG** | **Mulgathing** | **39.40** | **243** | P | **P** | **01 46 48.9** | **0.0** |
| **SRPI** | **Serui, Papua** | **40.95** | **288** | P | **P** | **01 46 59.2** | **-2.8** |
| **MTN** | **Manton Dam** | **42.45** | **270** | P | **P** | **01 47 12.7** | **-1.5** |
| | baz=42,SNR=4.3 | | | | | | |
| **MTN** | **Manton Dam** | **42.45** | **270** | P | **P** | **01 47 12.3** | **-1.9** |
| MTN | | | | IAmb | IAmb | 01 47 39.6 | |
| | comp=Z,111nm,1.5s | | | | | | |
| **GUMO** | **Guam** | **42.63** | **314** | LR | LR | 02 03 56.6 | |
| | comp=Z,1µm,18.5s,baz=146,slow=35 | | | | | | |
| **GUMO** | **Guam** | **42.63** | **314** | IAMs_20 | IAMs_20 | 02 01 22.4 | |
| | comp=Z,2µm,21.0s | | | | | | |
| **SAUI** | **Saumlaki** | **43.46** | **277** | P | **P** | **01 47 20.3** | **-2.1** |
| **WRKA** | **Warakurna** | **44.02** | **252** | P | **P** | **01 47 25.5** | **-1.3** |
| | baz=44,SNR=38 | | | | | | |
| **WRKA** | **Warakurna** | **44.02** | **252** | P | **P** | **01 47 28.2** | **+1.4** |
| **FAKI** | **Fak Fak** | **44.22** | **284** | P | **P** | **01 47 25.0** | **-3.5** |
| | comp=Z,1µmcomp=Z,84nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **44.22** | **284** | P | **P** | **01 47 25.4** | **-3.1** |
| FAKI | | | | IAmb | IAmb | 01 47 30.8 | |
| | comp=Z,98nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **44.22** | **284** | P | **P** | **01 47 31.7** | **+3.2** |
| **KNRA** | **Kununurra** | **44.22** | **265** | P | **P** | **01 47 26.2** | **-2.2** |
| | baz=44,SNR=4.0 | | | | | | |
| **KNRA** | **Kununurra** | **44.22** | **265** | P | **P** | **01 47 25.9** | **-2.6** |
| KNRA | | | | IAmb | IAmb | 01 47 27.6 | |
| | comp=Z,86nm,1.2s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **44.46** | **85** | *e*S | **S** | **01 54 03.0** | **-0.7** |
| | comp=Z,552nm,26.5s | | | | | | |
| TAOE | | | | *e*LQ | LQ | 01 57 54.4 | |
| | comp=Z,6µm,29.3s | | | | | | |
| TAOE | | | | *e*LR | LR | 01 59 49.8 | |
| | comp=Z,4µm,27.9s | | | | | | |
| **FORT** | **Forrest** | **44.59** | **243** | P | **P** | **01 47 31.6** | **+0.3** |
| | baz=45,SNR=11 | | | | | | |
| **FORT** | **Forrest** | **44.59** | **243** | P | **P** | **01 47 29.9** | **-1.4** |
| **FORT** | **Forrest** | **44.59** | **243** | P | **P** | **01 47 32.9** | **+1.6** |
| **SIJI** | **Sorong** | **45.91** | **286** | LR | LR | 02 07 10.3 | |
| | comp=Z,2µm,18.1s,baz=76,slow=37 | | | | | | |
| **SWI** | **Sorong** | **45.91** | **286** | P | **P** | **01 47 40.5** | **-1.5** |
| | comp=Z,2µmcomp=Z,162nm,1.2s | | | | | | |
| **KIP** | **Kipapa** | **46.66** | **36** | *e*P | **P** | **01 47 44.7** | **-2.9** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,369nm,3.7s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **46.73** | **40** | P | **P** | **01 47 46.5** | **-2.0** |
| **FITZ** | **Fitzroy Crossi** | **46.86** | **261** | LR | LR | 02 06 20.2 | |
| | comp=Z,2µm,20.8s,baz=94,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.86** | **261** | P | **P** | **01 47 48.4** | **-1.0** |
| | baz=47,SNR=6.1 | | | | | | |
| **MSAI** | **Masohi** | **47.16** | **282** | P | **P** | **01 47 51.1** | **-0.7** |
| | comp=Z,895nmcomp=Z,5.2nm,0.5s | | | | | | |
| **AAI** | **Ambon** | **47.73** | **281** | P | **P** | **01 47 54.4** | **-1.8** |
| | comp=Z,92nm,1.4s | | | | | | |
| **LBMI** | **Labuha** | **49.47** | **284** | P | **P** | **01 48 08.0** | **-1.6** |
| | comp=Z,1µmcomp=Z,45nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **49.70** | **272** | P | **P** | **01 48 11.0** | **-0.5** |
| | comp=Z,48nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **49.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,78nm,1.4s | | | | | | | |
| KAPI | **Kappang** | **55.30** | **276** | P | **P** | **01** | **48** | **50.1 -2.7** |
| KAPI | | | | IAmb | IAmb | 01 | 48 | 59.9 |
| | comp=Z,78nm,1.4s | | | | | | | |
| KAPI | **Kappang** | **55.30** | **276** | P | **P** | **01** | **48** | **52.6 -0.2** |
| | comp=Z,47nm,1.4s | | | | | | | |
| SPSI | **Sidrap Palu** | **55.60** | **277** | P | **P** | **01** | **48** | **51.8 -3.2** |
| | comp=Z,785nmcomp=Z,21nm,1.0s | | | | | | | |
| TTSI | **Tana Toraja** | **55.84** | **278** | P | **P** | **01** | **48** | **55.1 -1.6** |
| | comp=Z,2µmcomp=Z,20nm,0.5s | | | | | | | |
| TOLI2 | **Tolitoli** | **56.35** | **283** | P | **P** | **01** | **48** | **57.4 -3.0** |
| TOLI2 | **Tolitoli** | **56.35** | **283** | P | **P** | **01** | **49** | **00.5 +0.1** |
| MPSI | **Mapaga** | **56.90** | **282** | P | **P** | **01** | **49** | **03.5 -0.8** |
| | comp=Z,870nmcomp=Z,57nm,1.4s | | | | | | | |
| GIRL | **Giralia** | **56.99** | **254** | P | **P** | **01** | **49** | **03.2 -1.6** |
| IGBI | **Denpasar** | **58.65** | **270** | P | **P** | **01** | **49** | **16.0 -0.6** |
| SRBI | **Singaraja** | **58.77** | **271** | P | **P** | **01** | **49** | **15.8 -1.6** |
| SMKI | **Samarinda** | **59.15** | **280** | P | **P** | **01** | **49** | **21.8 +1.7** |
| KBKI | **Kotabaru** | **59.22** | **277** | P | **P** | **01** | **49** | **19.6 -0.9** |
| JAGI | **Jajag, Banyuwa** | **59.69** | **270** | P | **P** | **01** | **49** | **26.1 +2.3** |
| JAGI | **Jajag, Banyuwa** | **59.69** | **270** | P | **P** | **01** | **49** | **20.8 -3.0** |
| JAGI | | | | IAmb | IAmb | 01 | 49 | 28.5 |
| | comp=Z,53nm,1.1s | | | | | | | |
| JAGI | **Jajag, Banyuwa** | **59.69** | **270** | P | **P** | **01** | **49** | **24.9 +1.1** |
| MYLDM | **Lahad Datu** | **59.99** | **287** | P | **P** | **01** | **49** | **24.6 -1.2** |
| JHJ | **Hachijo jima 2** | **60.26** | **326** | LR | LR | 02 | 11 | 52.1 |
| | comp=Z,523nm,20.2s,baz=98,slow=33 | | | | | | | |
| BBKI | **Banjar Baru** | **60.43** | **276** | P | **P** | **01** | **49** | **29.0 +0.1** |
| VNDA | **Vanda** | **60.69** | **183** | LR | LR | 02 | 11 | 37.7 |
| | comp=Z,407nm,21.4s,baz=19,slow=32 | | | | | | | |
| MTKI | **Muara Teweh, K** | **61.17** | **279** | P | **P** | **01** | **49** | **33.4 -0.5** |
| TGY | **Tagaytay City** | **61.70** | **297** | LR | LR | 02 | 17 | 10.1 |
| | comp=Z,556nm,18.1s,baz=118,slow=37 | | | | | | | |
| KKM | **Kota Kinabalu** | **62.42** | **287** | P | **P** | **01** | **49** | **40.8 -1.6** |
| KKM | **Kota Kinabalu** | **62.42** | **287** | P | **P** | **01** | **49** | **45.7 +3.3** |
| | comp=Z,50nm,1.8s | | | | | | | |
| UGM | **Wanagama** | **63.30** | **270** | P | **P** | **01** | **49** | **50.0 +1.8** |
| INU | **Inuyama** | **63.44** | **326** | IAMs_20 | IAMs_20 | 02 | 15 | 24.5 |
| | comp=Z,1µm,19.0s | | | | | | | |
| YOGI | **Yogyakarta** | **63.55** | **270** | P | **P** | **01** | **49** | **51.1 +1.3** |
| SMRI | **Semarang** | **63.61** | **271** | P | **P** | **01** | **49** | **52.0 +1.7** |
| PBKI | **Pangkalan Bun** | **63.68** | **276** | P | **P** | **01** | **49** | **50.7 0.0** |
| MJAR | **Matsushiro Arr** | **63.72** | **328** | P | **P** | **01** | **49** | **48.1 -2.4** |
| | comp=Z,11nm,1.0s,baz=165,slow=7.0,SNR=9.6 | | | | | | | |
| MAJO | **Matsushiro** | **63.72** | **328** | ⇑*iP* | **P** | **01** | **49** | **51.0 +0.5** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.5s | | | | | | | |
| MAJO | **Matsushiro** | **63.72** | **328** | P | **P** | **01** | **49** | **48.3 -2.2** |
| MAJO | | | | IAmb | IAmb | 01 | 49 | 54.7 |
| | comp=Z,43nm,1.4s | | | | | | | |
| MAJO | **Matsushiro** | **63.72** | **328** | P | **P** | **01** | **49** | **53.0 +2.5** |
| | comp=Z,17nm,1.5s | | | | | | | |
| MAT | **Matsushiro** | **63.72** | **328** | P | **P** | **01** | **49** | **47.3 -3.2** |
| MAT | | | | S | **S** | **01** | **58** | **22.2 -0.6** |
| MJB9 | **Matsu-Tunnel** | **63.73** | **328** | P | **P** | **01** | **49** | **48.1 -2.4** |
| MJB9 | | | | IAmb | IAmb | 01 | 49 | 54.7 |
| | comp=Z,40nm,1.4s | | | | | | | |
| CASY | **Casey** | **64.15** | **204** | P | **P** | **01** | **49** | **53.4 +0.5** |
| CASY | | | | IAmb | IAmb | 01 | 50 | 15.7 |
| | comp=Z,52nm,1.1s | | | | | | | |
| STKI | **Sintang** | **64.73** | **278** | P | **P** | **01** | **50** | **00.3 +2.7** |
| | comp=Z,26nm,1.2s | | | | | | | |
| SBUM | **Sibu** | **64.82** | **281** | P | **P** | **01** | **49** | **56.4 -1.8** |
| SBUM | | | | IAmb | IAmb | 01 | 50 | 02.4 |
| | comp=Z,27nm,1.1s | | | | | | | |
| KPJI | **Karang Pucung** | **64.98** | **270** | P | **P** | **01** | **49** | **57.7 -1.5** |
| JNU | **Nakatsue** | **65.38** | **320** | P | **P** | **01** | **49** | **59.8 -1.6** |
| JNU | **Nakatsue** | **65.38** | **320** | P | **P** | **01** | **50** | **02.2 +0.8** |
| JCJI | **Jatiwangi** | **65.83** | **271** | P | **P** | **01** | **50** | **03.4 -1.3** |
| KSM | **Kuching** | **66.29** | **279** | P | **P** | **01** | **50** | **10.2 +2.5** |
| NACB | **Ninganchiao** | **66.32** | **307** | IAMs_20 | IAMs_20 | 02 | 13 | 11.7 |
| | comp=Z,2µm,22.0s | | | | | | | |
| LEM | **Lembang** | **66.37** | **270** | LR | LR | 02 | 19 | 26.6 |
| | comp=Z,501nm,19.1s,baz=160,slow=36 | | | | | | | |
| LEM | **Lembang** | **66.37** | **270** | P | **P** | **01** | **50** | **08.8 +0.4** |
| | comp=Z,62nm,1.1s | | | | | | | |
| TPUB | **Ta-pu** | **66.59** | **306** | P | **P** | **01** | **50** | **09.5 +0.1** |
| CBJI | **Citeko** | **67.21** | **270** | P | **P** | **01** | **50** | **12.0 -1.5** |
| DBJI | **Dramaga** | **67.27** | **270** | P | **P** | **01** | **50** | **14.0 0.0** |
| | comp=Z,9µmcomp=Z,108nm,1.6s | | | | | | | |
| SKJI | **Sukabumi** | **67.33** | **269** | P | **P** | **01** | **50** | **13.9 -0.4** |
| | comp=Z,139nm,1.1s | | | | | | | |
| ASAJ | **Asahikawa** | **67.80** | **335** | LR | LR | 02 | 14 | 45.1 |
| | comp=Z,2µm,21.6s,baz=148,slow=32 | | | | | | | |
| CGJI | **Cibinong** | **68.26** | **270** | P | **P** | **01** | **50** | **16.9 -3.3** |
| | comp=Z,3µmcomp=Z,48nm,0.8s | | | | | | | |
| BLSI | **Bandar Lampung** | **69.03** | **271** | P | **P** | **01** | **50** | **24.5 -0.5** |
| KLI | **Kotabumi** | **69.55** | **271** | P | **P** | **01** | **50** | **28.6 +0.4** |
| SKR | **Severo-Kuril's** | **69.59** | **347** | *eP* | **P** | **01** | **50** | **28.4 +0.8** |
| SKR | | | | *eS* | **S** | **01** | **59** | **39.5 +6.4** |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,50nm,1.3s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,100nm,2.7s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,500nm,2.6s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=Z,500nm,19.0s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=Z,600nm,17.0s | | | | | | | |
| KASI | **Kota Agung** | **69.71** | **270** | P | **P** | **01** | **50** | **28.0 -1.2** |
| | comp=Z,1µmcomp=Z,116nm,1.1s | | | | | | | |
| RPN | **Rapa Nui** | **69.93** | **113** | LR | LR | 02 | 13 | 28.7 |
| | comp=Z,906nm,21.3s,baz=258,slow=29 | | | | | | | |
| KSRS | **Korea Array** | **70.08** | **322** | P | **P** | **01** | **50** | **29.1 -1.8** |
| | comp=Z,6.6nm,1.1s,baz=137,slow=6.2,SNR=7.6 | | | | | | | |
| KSRS | | | | LR | LR | 02 | 19 | 40.4 |
| | comp=Z,459nm,18.8s,baz=115,slow=35 | | | | | | | |
| KSAR | **Wonju Array Be** | **70.09** | **322** | P | **P** | **01** | **50** | **29.4 -1.6** |
| KSAR | **Wonju Array Be** | **70.09** | **322** | P | **P** | **01** | **50** | **29.4 -1.6** |
| YSS | **Yuzh-Sakhalins** | **70.12** | **337** | *eP* | **P** | **01** | **50** | **30.0 -0.9** |
| YSS | | | | *e**SP | **pP** | **01** | **50** | **35.7 -5.3** |
| YSS | | | | *e* | | 01 | 53 | 05.1 |
| YSS | | | | *eS* | **S** | **01** | **59** | **40.7 +1.2** |
| YSS | | | | *eSS* | **SS** | **02** | **04** | **15.0 +4.7** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| PMBI | **Palembang** | **70.18** | **273** | P | **P** | **01** | **50** | **31.7 -0.4** |
| PMBI | **Palembang** | **70.18** | **273** | P | **P** | **01** | **50** | **31.3 -0.8** |
| LWLI | **Liwa** | **70.27** | **271** | P | **P** | **01** | **50** | **28.3 -4.5** |
| | comp=Z,93nm,1.0s | | | | | | | |
| MDSI | **Maura Dua** | **70.30** | **271** | P | **P** | **01** | **50** | **30.8 -2.0** |
| SSE | **Sheshan** | **70.50** | **313** | P | **P** | **01** | **50** | **33.0 -0.6** |
| SSE | | | | S | **S** | **01** | **59** | **47.6 +3.1** |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,150nm,4.3s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=Z,240nm,22.5s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=Z,280nm,23.4s | | | | | | | |
| DSRI | **Dabo** | **71.10** | **276** | P | **P** | **01** | **50** | **37.1 -0.6** |
| PET | **Petropavlovsk** | **71.34** | **350** | *eP* | **P** | **01** | **50** | **38.5 +0.3** |
| PET | | | | *eS* | **S** | **01** | **59** | **54.2 +0.8** |
| PET | | | | *e*PPS | PPS | 02 | 00 | 35.0 |
| PET | | | | *eSS* | **SS** | **02** | **04** | **33.5 +4.7** |
| PET | | | | *e*SSS | SSS | 02 | 07 | 40.1 |
| PET | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.3s | | | | | | | |
| PET | **Petropavlovsk** | **71.34** | **350** | P | **P** | **01** | **50** | **36.8 -1.4** |
| PEA0B | **Petropavlovsk-** | **71.59** | **349** | ⇓*eP* | **P** | **01** | **50** | **37.7 -2.0** |
| PEA0B | **Petropavlovsk-** | **71.59** | **349** | P | **P** | **01** | **50** | **37.3 -2.5** |
| PETK | **Petropavlovsk-** | **71.59** | **349** | P | **P** | **01** | **50** | **38.0 -1.7** |
| | comp=Z,32nm,1.1s,baz=115,slow=8.4,SNR=11 | | | | | | | |
| PETK | | | | LR | LR | 02 | 18 | 18.3 |
| | comp=Z,320nm,20.2s,baz=164,slow=33 | | | | | | | |
| PETK | **Petropavlovsk-** | **71.59** | **349** | P | **P** | **01** | **50** | **38.2 -1.6** |
| PETK | **Petropavlovsk-** | **71.59** | **349** | P | **P** | **01** | **50** | **38.2 -1.6** |
| JMBI | **JAMBI** | **71.64** | **274** | P | **P** | **01** | **50** | **44.8 +3.8** |
| | comp=Z,80nm,0.5s | | | | | | | |
| DLV | **T Lat** | **71.73** | **289** | P | **P** | **01** | **50** | **39.9 -1.7** |
| MYKOM | **Kota Tinggi** | **72.50** | **278** | P | **P** | **01** | **50** | **46.6 +0.5** |
| MASI | **Maura Aman, Be** | **72.54** | **272** | P | **P** | **01** | **50** | **48.5 +2.1** |
| USA0B | **Ussuriysk Arra** | **72.60** | **329** | P | **P** | **01** | **50** | **46.2 +0.2** |
| USA0B | | | | pmax | pmax | | | |
| | comp=Z,35nm,1.5s | | | | | | | |
| USA0B | **Ussuriysk Arra** | **72.60** | **329** | P | **P** | **01** | **50** | **46.2 +0.2** |
| USRK | **Ussuriysk Ar.** | **72.60** | **329** | P | **P** | **01** | **50** | **44.6 -1.4** |
| | comp=Z,2.2nm,0.8s,baz=149,slow=40,SNR=3.3 | | | | | | | |
| USRK | **Ussuriysk Ar.** | **72.60** | **329** | P | **P** | **01** | **50** | **44.1 -1.8** |
| NJ2 | **Nanjing** | **72.68** | **312** | *eP* | **P** | **01** | **50** | **49.0 +2.3** |
| NJ2 | | | | S | **SKiKP** | **02** | **00** | **19.5 +1.0** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,380nm,3.9s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,800nm,22.7s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,640nm,20.4s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,1µm,23.7s | | | | | | | |
| QSPA | **South Pole Qui** | **72.84** | **180** | P | **P** | **01** | **50** | **47.4 0.0** |
| | comp=Z,34nm,1.1s,baz=23,slow=3.7,SNR=32 | | | | | | | |
| QSPA | **South Pole Qui** | **72.84** | **180** | P | **P** | **01** | **50** | **47.0 -0.4** |
| QSPA | | | | IAmb | IAmb | 01 | 50 | 58.8 |
| | comp=Z,59nm,1.1s | | | | | | | |
| RGRI | **Rengat** | **73.28** | **275** | P | **P** | **01** | **50** | **51.0 +0.3** |
| QIZ | **Qiongzhong** | **73.40** | **296** | P | **P** | **01** | **50** | **49.7 -1.6** |
| QIZ | | | | S | **S** | **02** | **00** | **16.8 -1.6** |
| QIZ | | | | LR | LR | | | |
| | comp=Z,700nm,28.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,660nm,28.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,800nm,25.5s | | | | | | | |
| KRJI | **Kerinci** | **73.59** | **273** | P | **P** | **01** | **50** | **54.9 +2.2** |
| MDJ | **Mudanjiang** | **74.09** | **328** | P | **P** | **01** | **50** | **56.0 +1.2** |
| MDJ | | | | pP | pP | 01 | 50 | 59.4 -5.5 |
| MDJ | | | | sP | pwP | 01 | 51 | 00.5 -7.5 |
| MDJ | | | | PP | **PP** | **01** | **53** | **39.3 -1.5** |
| MDJ | | | | S | **S** | **02** | **00** | **29.0 +3.8** |
| MDJ | | | | SS | **SS** | **02** | **05** | **13.4 +2.2** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.7s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,510nm,3.9s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,540nm,19.6s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,420nm,21.8s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,760nm,19.0s | | | | | | | |
| MDJ | **Mudanjiang** | **74.09** | **328** | P | **P** | **01** | **50** | **54.5 -0.2** |
| MDJ | | | | IAmb | IAmb | 01 | 51 | 05.6 |
| | comp=Z,69nm,1.8s | | | | | | | |
| BKNI | **Bangkinang** | **74.72** | **275** | P | **P** | **01** | **51** | **01.8 +2.7** |
| BKNI | **Bangkinang** | **74.72** | **275** | P | **P** | **01** | **50** | **58.4 -0.8** |
| PPSI | **Pulau Pagai** | **74.78** | **272** | P | **P** | **01** | **51** | **01.5 +2.0** |
| WHN | **Wuhan** | **75.14** | **309** | P | **P** | **01** | **51** | **03.3 +2.1** |
| WHN | | | | sP | **pP** | **01** | **51** | **09.9 -1.5** |
| WHN | | | | S | **S** | **02** | **00** | **44.0 +6.5** |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,100nm,1.3s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,2µm,19.3s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,1µm,13.6s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,4µm,21.9s | | | | | | | |
| SNY | **Shenyang** | **75.47** | **323** | ⇑P | **P** | **01** | **51** | **04.9 +2.1** |
| SNY | | | | S | **S** | **02** | **00** | **48.6 +7.9** |
| SNY | | | | SKS | **SKSac** | **02** | **01** | **06.3 -3.6** |
| SNY | | | | pmax | pmax | | | |
| | comp=Z,28nm,2.2s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=Z,570nm,20.4s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=Z,510nm,18.2s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=Z,840nm,17.8s | | | | | | | |
| GRNR | **Gornyy** | **75.65** | **336** | ⇑*iP* | **P** | **01** | **51** | **03.5 -0.2** |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| CN2 | **Changchun** | **75.71** | **325** | *eP* | **P** | **01** | **51** | **03.1 -1.0** |
| CN2 | | | | *e*pP | pP | 01 | 51 | 07.8 -6.5 |
| CN2 | | | | PcP | **pwP** | **01** | **51** | **17.5 +0.1** |
| CN2 | | | | *eS* | **S** | **02** | **00** | **43.9 +0.6** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,50nm,1.1s | | | | | | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,400nm,3.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,500nm,17.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,400nm,17.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,600nm,23.0s | | | | | | | |
| GULI | **GuiLin** | **75.71** | **302** | ⇑P | **P** | **01** | **51** | **08.6 +4.0** |
| BNX | **BinXian** | **75.98** | **328** | ⇓P | **P** | **01** | **51** | **05.8 +0.1** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.2s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,690nm,3.8s | | | | | | | |
| IPM | **Ipoh** | **76.03** | **279** | P | **P** | **01** | **51** | **04.7 -2.0** |
| NKL | **Nikolayevsk** | **76.04** | **340** | *eP* | **P** | **01** | **51** | **05.1 -0.7** |
| NKL | | | | pmax | pmax | | | |
| | comp=E,3.0nm,0.9s | | | | | | | |
| NKL | | | | pmax | pmax | | | |
| | comp=N,644nm,0.7s | | | | | | | |
| NKL | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | | |
| NKL | | | | MLR | MLR | | | |
| | comp=E,8.0nm,10.0s | | | | | | | |
| NKL | | | | MLR | MLR | | | |
| | comp=N,36µm,12.0s | | | | | | | |
| NKL | | | | MLR | MLR | | | |
| | comp=Z,351nm,17.0s | | | | | | | |
| SISI | **Saibi** | **76.08** | **273** | P | **P** | **01** | **51** | **09.5 +2.5** |
| TIA | **Tai'an** | **76.17** | **315** | ⇑P | **P** | **01** | **51** | **09.0 +2.0** |
| TIA | | | | S | **S** | **02** | **00** | **55.3 +6.5** |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,290nm,4.1s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,280nm,22.4s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,370nm,25.0s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,1µm,25.0s | | | | | | | |
| MNSI | **Mandailing Nat** | **76.25** | **275** | P | **P** | **01** | **51** | **10.0 +2.1** |
| KLR | **Kul'dur** | **76.41** | **333** | LR | LR | 02 | 19 | 11.0 |
| | comp=Z,560nm,21.4s,baz=148,slow=31 | | | | | | | |
| KLR | **Kul'dur** | **76.41** | **333** | ⇓*eP* | **P** | **01** | **51** | **07.4 -0.6** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.5s | | | | | | | |
| KULM | **Kulim** | **76.64** | **280** | P | **P** | **01** | **51** | **09.0 -1.1** |
| KULM | | | | IAmb | IAmb | 01 | 51 | 14.6 |
| | comp=Z,54nm,1.2s | | | | | | | |
| PSI | **Prapat** | **77.49** | **277** | LR | LR | 02 | 27 | 48.6 |
| | comp=Z,339nm,18.3s,baz=127,slow=38 | | | | | | | |
| TSI | **Tuntungan** | **78.05** | **277** | P | **P** | **01** | **51** | **20.0 +2.0** |
| GSI | **Gunungsitoli** | **78.31** | **275** | P | **P** | **01** | **51** | **21.9 +2.5** |
| GSI | **Gunungsitoli** | **78.31** | **275** | P | **P** | **01** | **51** | **22.0 +2.5** |
| HNS | **HongShan** | **78.45** | **315** | ⇓P | **P** | **01** | **51** | **22.0 +2.3** |
| HNS | | | | S | S | 02 | 01 | 22.9 +10 |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.6s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,510nm,19.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,530nm,19.0s | | | | | | | |
| LYN | **LuoYang** | **78.53** | **312** | ⇑P | **P** | **01** | **51** | **20.6 +0.4** |
| LYN | | | | S | **S** | **02** | **01** | **18.6 +4.2** |
| LYN | | | | SS | **SS** | **02** | **06** | **24.0 +5.2** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,240nm,4.5s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,750nm,21.4s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,800nm,20.6s | | | | | | | |
| ENH | **Enshi** | **78.68** | **307** | P | **P** | **01** | **51** | **20.9 -0.3** |
| ENH | | | | IAMs_20 | IAMs_20 | 02 | 19 | 59.3 |
| | comp=Z,1µm,22.0s | | | | | | | |
| KCSI | **Kotacane, Aceh** | **78.80** | **277** | P | **P** | **01** | **51** | **23.6 +1.4** |
| BJT | **Baijiatuau** | **78.91** | **318** | P | **P** | **01** | **51** | **21.2 -1.0** |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.4s | | | | | | | |
| BJT | **Baijiatuau** | **78.91** | **318** | P | **P** | **01** | **51** | **21.2 -1.0** |
| BJT | | | | IAmb | IAmb | 01 | 51 | 25.5 |
| | comp=Z,43nm,1.4s | | | | | | | |
| BJI | **Beijing** | **78.91** | **318** | P | **P** | **01** | **51** | **21.4 -0.8** |
| BJI | | | | pP | **PcP** | **01** | **51** | **24.6 -6.1** |
| BJI | | | | sP | **pP** | **01** | **51** | **26.6 -5.8** |
| BJI | | | | S | **S** | **02** | **01** | **25.3 +7.1** |
| BJI | | | | SS | **SS** | **02** | **06** | **21.1 -3.2** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.8s | | | | | | | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,270nm,4.2s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,320nm,18.2s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,310nm,19.5s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,810nm,33.2s | | | | | | | |
| MA2 | **Magadan** | **79.00** | **348** | ⇑*eP* | **P** | **01** | **51** | **21.5 -0.7** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.2s | | | | | | | |
| MA2 | | | | MLR | MLR | | | |
| | comp=Z,462nm,20.0s | | | | | | | |
| MA2 | **Magadan** | **79.00** | **348** | P | **P** | **01** | **51** | **20.9 -1.3** |
| GYA | **Guiyang** | **79.22** | **302** | ⇑P | **P** | **01** | **51** | **21.4 -2.9** |
| GYA | | | | pP | PcP | 01 | 51 | 26.9 -5.7 |
| GYA | | | | S | **S** | **02** | **01** | **25.8 +3.5** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,590nm,23.6s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,620nm,24.9s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,920nm,22.4s | | | | | | | |
| KDAK | **Kodiak Island** | **79.42** | **17** | LR | LR | 02 | 20 | 59.2 |
| | comp=Z,331nm,19.4s,baz=224,slow=32 | | | | | | | |
| SNSI | **Sinabang, Aceh** | **79.83** | **276** | P | **P** | **01** | **51** | **30.1 +2.3** |
| LHMI | **Lhok Sumawe** | **80.12** | **279** | P | **P** | **01** | **51** | **32.0 +2.7** |
| P18K | **Big Mountain,** | **80.12** | **15** | P | **P** | **01** | **51** | **26.8 -1.6** |
| P18K | | | | IAmb | IAmb | 01 | 51 | 36.1 |
| | comp=Z,47nm,1.2s | | | | | | | |
| P18K | **Big Mountain,** baz=209 | **80.12** | **15** | P | **P** | **01** | **51** | **29.7 +1.3** |
| TIY | **Taiyuan** | **80.15** | **314** | ⇑P | **P** | **01** | **51** | **32.0 +2.9** |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,300nm,3.8s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,410nm,24.0s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,490nm,21.3s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,730nm,24.0s | | | | | | | |
| PKM | **Mcpherson Peak** baz=242 | **80.71** | **49** | P | **P** | **01** | **51** | **33.7 +1.3** |
| XAN | **Xi'an** | **80.85** | **310** | P | **P** | **01** | **51** | **35.0 +2.1** |
| XAN | | | | pP | pwP | 01 | 51 | 45.2 -1.0 |
| XAN | | | | S | **S** | **02** | **01** | **42.3 +3.2** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,380nm,5.4s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,720nm,24.4s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,940nm,25.0s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,2µm,25.0s | | | | | | | |
| O19K | **Port Alsworth** | **81.05** | **15** | IAmb | IAmb | 01 | 51 | 47.6 |
| | comp=Z,38nm,1.0s | | | | | | | |
| O19K | **Port Alsworth** baz=210 | **81.05** | **15** | P | **P** | **01** | **51** | **32.4 -0.9** |
| XLT | **XiLinHaoTe** | **81.12** | **321** | ⇑*iP* | **P** | **01** | **51** | **36.6 +2.4** |
| XLT | | | | pP | PcP | 01 | 51 | 41.4 +1.0 |
| XLT | | | | sP | pP | 01 | 51 | 45.4 +0.9 |
| XLT | | | | S | **SKSac** | **02** | **01** | **50.4 -0.2** |
| XLT | | | | sS | sS | 02 | 01 | 58.1 -0.5 |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.3s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,430nm,4.1s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,480nm,16.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,600nm,15.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,1µm,23.3s | | | | | | | |
| GAMB | **Gambell** | **81.39** | **6** | IAmb | IAmb | 01 | 51 | 51.6 |
| | comp=Z,44nm,1.2s | | | | | | | |
| GAMB | **Gambell** baz=193 | **81.39** | **6** | P | **P** | **01** | **51** | **36.4 +1.4** |
| BRSE | **Bradley Lake S** baz=213 | **81.59** | **17** | P | **P** | **01** | **51** | **38.6 +2.3** |
| ZEA | **Zeya** | **81.61** | **334** | ⇓*eP* | **P** | **01** | **51** | **38.4 +2.0** |
| ZEA | | | | *eS* | **SKSac** | **02** | **01** | **55.0 +1.7** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,200nm,4.4s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| ZEA | | | | smax | smax | | | |
| | comp=N,300nm,8.2s | | | | | | | |
| N02D | **Trinity Center** baz=239 | **81.75** | **43** | P | **P** | **01** | **51** | **39.7 +2.2** |
| SEY | **Seymchan** | **81.81** | **350** | ⇑*eP* | **P** | **01** | **51** | **35.5 -1.7** |
| ORV | **Oroville** | **81.81** | **44** | P | **P** | **01** | **51** | **36.8 -1.0** |
| ORV | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.2s | | | | | | | |
| ORV | **Oroville** | **81.81** | **44** | P | **P** | **01** | **51** | **36.8 -1.0** |
| M02C | **Callahan** baz=239 | **81.86** | **42** | P | **P** | **01** | **51** | **42.3 +4.2** |
| KMI | **Kunming** | **81.90** | **299** | ⇓P | **P** | **01** | **51** | **42.0 +3.1** |
| KMI | | | | sP | pP | 01 | 51 | 48.2 -1.0 |
| KMI | | | | PP | **PP** | **01** | **54** | **49.4 +2.6** |
| KMI | | | | S | **S** | **02** | **01** | **51.8 +1.2** |
| KMI | | | | sS | pS | 02 | 02 | 02.0 -1.4 |
| KMI | | | | SS | **SS** | **02** | **07** | **10.3 +0.3** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,320nm,3.5s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,590nm,21.2s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,610nm,22.2s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,820nm,21.7s | | | | | | | |
| EDW2 | **Edwards Air Fo** baz=243,SNR=12 | **82.03** | **50** | P | **P** | **01** | **51** | **40.0 +0.8** |
| ISA | **Isabella, Lake** baz=242 | **82.04** | **49** | P | **P** | **01** | **51** | **40.2 +1.0** |
| MURC | **Murrieta** baz=243 | **82.04** | **51** | P | **P** | **01** | **51** | **40.3 +1.1** |
| YBH | **Yreka Blue Hor** | **82.13** | **42** | LR | LR | 02 | 24 | 42.7 |
| | comp=Z,225nm,18.4s,baz=242,slow=33 | | | | | | | |
| HIA | **Hailar** | **82.22** | **327** | *de*P | **P** | **01** | **51** | **41.0 +1.2** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.2s | | | | | | | |
| HIA | **Hailar** | **82.22** | **327** | P | **P** | **01** | **51** | **38.9 -0.8** |
| HIA | **Hailar** | **82.22** | **327** | IAMs_20 | IAMs_20 | 02 | 27 | 34.1 |
| | comp=Z,903nm,20.0s | | | | | | | |
| MONP2 | **Monument Peak** baz=244 | **82.31** | **52** | P | **P** | **01** | **51** | **41.9 +1.1** |
| HHC | **Hu-ho-hao-te** | **82.33** | **317** | ⇑P | **P** | **01** | **51** | **43.5 +2.9** |
| HHC | | | | sP | pP | 01 | 51 | 50.8 -0.1 |
| HHC | | | | S | **S** | **02** | **02** | **02.0 +7.8** |
| HHC | | | | sS | ScS | 02 | 02 | 09.0 -0.7 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.0s | | | | | | | |
| HHC | | | | pmax | pmax | | |

**CMAR Chiang Mai Arr** 82.69 292 P **P** 01 51 42.6 -0.3
**CHTO Chiang Mai** 82.81 292 P **P** 01 51 42.6 -0.9
CHTO pmax pmax
comp=Z,45nm,1.1s
**CHTO Chiang Mai** 82.81 292 P **P** 01 51 42.6 -0.9
CHTO IAmb IAmb 01 51 47.8
comp=Z,44nm,1.1s
**CHTO Chiang Mai** 82.81 292 IAMs_20 IAMs_20 02 24 37.2
comp=Z,608nm,22.0s
**TIN Tinemaha, Big** 82.86 48 P **P** 01 51 44.6 +1.1
baz=242
**PNTR Pine Nut** 82.87 46 IAmb IAmb 01 52 01.5
comp=Z,62nm,1.5s
**ANM Nome** 82.91 8 P **P** 01 51 45.4 +2.4
baz=199
**MPMC Manual Prospec** 82.93 49 P **P** 01 51 44.9 +0.8
baz=243,SNR=9.5
**VCNR Virginia City** 82.94 45 P **P** 01 51 43.2 -0.8
**TTA Tatalina** 83.06 13 P **P** 01 51 46.7 +2.8
baz=208,SNR=8.9
**YERR Yerington** 83.06 46 IAmb IAmb 01 52 01.6
comp=Z,24nm,1.1s
**GSC Goldstone, Bar** 83.09 50 IAmb IAmb 01 52 13.8
comp=Z,74nm,1.9s
**GSC Goldstone, Bar** 83.09 50 P **P** 01 51 45.7 +1.0
baz=244
**BELC Belle Mtn. Jos** 83.11 51 P **P** 01 51 45.8 +0.9
baz=244,SNR=11
**L20K Farewell, AK** 83.14 14 P **P** 01 51 43.8 -0.5
baz=210,SNR=17
**HEC Hector,Ludlow** 83.23 51 P **P** 01 51 46.1 +0.7
baz=244,SNR=14
**LHV Little Huntoon** 83.23 47 IAmb IAmb 01 52 06.8
comp=Z,51nm,1.2s
**PZH PanZhiHua** 83.26 300 P **P** 01 51 48.0 +2.2
PZH S **S** 02 02 06.4 +2.1
PZH pmax pmax
comp=Z,20nm,1.3s
PZH pmax pmax
comp=Z,180nm,5.1s
PZH LR LR
comp=Z,1μm,23.7s
PZH LR LR
comp=Z,1μm,21.6s
PZH LR LR
comp=Z,1μm,20.8s
**LCH Last Change Ra** 83.36 48 IAmb IAmb 01 52 16.0
comp=Z,48nm,1.7s
**BC3 Big Chuckawall** 83.37 52 P **P** 01 51 47.4 +1.2
baz=244
**RYN Ryan** 83.39 46 IAmb IAmb 01 52 04.0
comp=Z,60nm,1.6s
**CD2 Chengdu** 83.40 305 P **P** 01 51 45.6 -0.8
CD2 S **S** 02 02 13.5 +8.1
CD2 SS **SS** 02 07 34.0 +2.2
CD2 pmax pmax
comp=Z,40nm,1.2s
CD2 pmax pmax
comp=Z,170nm,4.7s
CD2 LR LR
comp=Z,910nm,25.6s
CD2 LR LR
comp=Z,1μm,22.7s
**GRAC Grapevine Rang** 83.45 48 IAmb IAmb 01 52 03.9
comp=Z,46nm,1.1s
**GRAC Grapevine Rang** 83.45 48 P **P** 01 51 47.7 +1.2
baz=243,SNR=7.8
**M22K Willow** 83.45 16 P **P** 01 51 45.7 -0.1
baz=213
**NVAR Mina Array Bea** 83.45 47 P **P** 01 51 46.6 0.0
comp=Z,9.1nm,1.1s,baz=228,slow=8.1,SNR=26
NVAR LR LR 02 20 39.0
comp=Z,564nm,21.8s,baz=234,slow=30
**TNA Tin City** 83.53 7 P **P** 01 51 48.6 +2.5
baz=196
**NV11 Mina Array Sit** 83.55 47 P **P** 01 51 46.5 -0.6
**FURC Furnace Creek,** 83.57 49 P **P** 01 51 48.2 +1.2
baz=243
**PMR Palmer** 83.58 16 P **P** 01 51 46.6 +0.2
baz=214
**GLA Glamis** 83.59 53 P **P** 01 51 48.6 +1.3
baz=245
**BELA Belgrano 2** 83.59 174 P **P** 01 51 45.5 -1.0
**LPIG La Paz** 83.68 63 LR LR 02 21 41.1
comp=Z,760nm,19.1s,baz=224,slow=30
**GMRC Granite Mounta** 83.71 51 P **P** 01 51 48.7 +0.8
baz=244,SNR=11
**TUQ Turquoise Moun** 83.80 50 P **P** 01 51 49.2 +0.8
baz=244
**IRM Iron Mountain** 83.82 52 P **P** 01 51 49.7 +1.3
baz=245,SNR=11
**K20K Telida** 83.86 14 P **P** 01 51 50.1 +2.2
baz=210
**J05D Fort Rock, OR** 83.87 41 P **P** 01 51 48.9 +0.3
baz=240
**CUT Chulitna** 83.96 16 P **P** 01 51 50.1 +1.8
baz=213
**SMAI San Martin Ant** 83.99 161 P **P** 01 51 48.5 -0.2
**BLYC Blythe** 84.11 52 IAmb IAmb 01 52 08.1
comp=Z,37nm,1.3s
**TPNV Topopah Spring** 84.23 49 P **P** 01 51 51.4 +0.8
baz=244,SNR=15
**SCM Sheep Creek Mo** 84.27 17 P **P** 01 51 52.4 +2.3
baz=216
**113A Mohawk Valley,** 84.28 53 IAmb IAmb 01 52 09.0
comp=Z,52nm,1.8s
**CAST Castle Rocks** 84.37 14 IAmb IAmb 01 52 04.5
comp=Z,23nm,1.0s
**CAST Castle Rocks** 84.37 14 P **P** 01 51 51.4 +0.9
baz=212,SNR=9.7
**GCSA Galena City Sc** 84.50 12 P **P** 01 51 53.9 +2.8
baz=207
**J20K Nowinta River** 84.56 13 P **P** 01 51 53.8 +2.4
baz=210
**PDMCI Parker Dam,Lak** 84.63 52 P **P** 01 51 53.6 +1.1
baz=245
**214A Organ Pipe Nat** 84.68 54 IAmb IAmb 01 52 09.5
comp=Z,26nm,1.3s
**214A Organ Pipe Nat** 84.68 54 P **P** 01 51 53.9 +1.0
baz=246
**CHUM Lake Minchumin** 84.72 14 P **P** 01 51 53.8 +1.6
baz=211
**M24K Tolsona, Glenn** 84.82 17 P **P** 01 51 54.3 +1.5
baz=217
**SHPR Sheep Range** 84.82 49 P **P** 01 51 51.2 -2.4
SHPR IAmb IAmb 01 52 23.8
comp=Z,49nm,1.5s
**N25K Chitina, Valde** 84.88 18 P **P** 01 51 55.4 +2.3
baz=218
**WVOR Wild Horse Val** 85.11 43 P **P** 01 51 53.8 -1.1
WVOR pmax pmax
comp=Z,29nm,1.1s
**WVOR Wild Horse Val** 85.11 43 P **P** 01 51 53.8 -1.1
WVOR IAmb IAmb 01 52 11.9
comp=Z,29nm,1.1s
**BMN Battle Mountai** 85.12 45 P **P** 01 51 53.2 -1.8
BMN pmax pmax
comp=Z,33nm,1.1s
**BMN Battle Mountai** 85.12 45 P **P** 01 51 53.2 -1.8
BMN IAmb IAmb 01 52 12.2
comp=Z,33nm,1.1s
**RND Reindeer** 85.15 15 P **P** 01 51 53.7 -0.8
RND pmax pmax
comp=Z,31nm,1.1s
**RND Reindeer** 85.15 15 P **P** 01 51 53.7 -0.8
RND IAmb IAmb 01 52 23.8
comp=Z,31nm,1.1s
**W13A Hualapai Mount** 85.16 51 IAmb IAmb 01 52 12.8
comp=Z,33nm,1.5s
**BILL Bilibino** 85.24 357 *c*eP **P** 01 51 56.2 +1.5
BILL *e*S **S** 02 02 24.4 +2.3
BILL *i* SS **SS** 02 07 59.0 +1.7
BILL *e*SSS SSS 02 11 28.1
BILL pmax pmax
comp=Z,41nm,2.0s
BILL MLR MLR
comp=Z,153nm,18.0s
**BILL Bilibino** 85.24 357 P **P** 01 51 54.9 +0.1
BILL IAmb IAmb 01 52 09.6
comp=Z,84nm,2.0s
**PRN Pahroc Range** 85.29 49 IAmb IAmb 01 52 14.1
comp=Z,54nm,1.5s
**R11A Troy Canyon, C** 85.32 48 P **P** 01 51 56.4 +0.3
baz=244,SNR=9.4
**Y14A Wickenburg** 85.34 53 IAmb IAmb 01 52 14.2
comp=Z,41nm,1.8s
**I07A Izee** 85.35 41 IAmb IAmb 01 52 16.9
comp=Z,29nm,1.2s
**BARN Barnard Glacie** 85.36 20 P **P** 01 51 54.7 -1.1
**MCK McKinley** 85.40 15 P **P** 01 51 58.8 +3.1
baz=214
**LZH Lanzhou** 85.49 310 *e*P **P** 01 51 57.7 +0.7
LZH S **S** 02 02 27.0 +0.7
LZH sS ScS 02 02 35.6 -0.5
LZH SS **SS** 02 08 01.1 -1.6
LZH pmax pmax
comp=Z,46nm,1.3s
LZH pmax pmax
comp=Z,550nm,7.5s
LZH LR LR
comp=Z,710nm,16.7s
LZH LR LR
comp=Z,1μm,16.5s
LZH LR LR
comp=Z,2μm,18.6s
**I21K Tanana** 85.90 13 P **P** 01 52 00.6 +2.5
baz=212
**H21K Melozitna Rive** 86.13 13 P **P** 01 52 00.8 +1.5
baz=211
**M27K Edge Creek, AK** 86.28 19 P **P** 01 51 59.9 -0.3
baz=221
**YUK3 Moose Creek** 86.28 20 P **P** 01 52 03.0 +2.6
baz=222
**TUC Tucson** 86.40 55 P **P** 01 52 01.5 0.0
TUC pmax pmax
comp=Z,35nm,1.6s
**TUC Tucson** 86.40 55 P **P** 01 52 01.5 0.0
TUC IAmb IAmb 01 52 08.9
comp=Z,35nm,1.6s
**TUC Tucson** 86.40 55 P **P** 01 52 02.4 +1.0
baz=247
**HDA Harding Lake** 86.46 16 P **P** 01 52 01.0 +0.1
baz=216
**SPR3 Spring Creek 3** 86.48 47 P **P** 01 52 01.3 -0.7
**RDOG Red Dog Mine** 86.54 8 P **P** 01 52 03.1 +1.8
baz=201
**CCUT Cedar City** 86.56 49 IAmb IAmb 01 52 31.0
comp=Z,54nm,1.8s
**ELK Elko** 86.61 46 LR LR 02 23 37.4
comp=Z,403nm,20.3s,baz=240,slow=31
**ELK Elko** 86.61 46 P **P** 01 52 01.6 -0.9
ELK pmax pmax
comp=Z,17nm,1.1s
**ELK Elko** 86.61 46 P **P** 01 52 01.6 -0.9
**COLA College** 86.61 15⇑ *e*P **P** 01 51 59.5 -2.1
COLA pmax pmax
comp=Z,3.0nm,1.1s
**YAK Yakutsk** 86.67 340 LR LR 02 25 49.0
comp=Z,368nm,21.8s,baz=94,slow=32
**YAK Yakutsk** 86.67 340⇓ *e*P **P** 01 52 00.3 -1.6
YAK pmax pmax
comp=Z,36nm,1.4s
**YAK Yakutsk** 86.67 340 P **P** 01 52 01.4 -0.5
YAK IAMs_20 IAMs_20 02 23 51.3
comp=Z,585nm,22.0s
**KNB Kanab** 86.74 50 IAmb IAmb 01 52 21.5
comp=Z,48nm,1.5s
**IL31** 86.77 15 P **P** 01 52 00.6 -1.7
**ILAR Eielson Array** 86.77 15 P **P** 01 52 00.3 -2.1
comp=Z,2.1nm,0.9s,baz=232,slow=6.0,SNR=14
**J25K Salcha River,** 87.04 16 P **P** 01 52 05.5 +1.8
baz=218
**BMO Blue Mountains** 87.10 41 IAmb IAmb 01 52 29.7
comp=Z,42nm,1.7s
**WUAZ Wupatki** 87.20 52 P **P** 01 52 05.0 -0.4
**WUAZ Wupatki** 87.20 52 P **P** 01 52 06.1 +0.6
baz=247
**MFID Camas Ranch** 87.39 43 P **P** 01 52 05.0 -1.1
MFID IAmb IAmb 01 52 23.0
comp=Z,26nm,1.1s
**F10A Beach Ranch, E** 87.67 40 IAmb IAmb 01 52 22.6
comp=Z,31nm,1.1s
**PLID Pearl Lake** 88.03 41 IAmb IAmb 01 52 31.2
comp=Z,35nm,1.4s
**DUG Dugway, Tooele** 88.05 47 P **P** 01 52 09.6 +0.3
baz=246,SNR=8.4
**DAWY Dawson** 88.31 18 P **P** 01 52 10.6 +0.7
**DAWY Dawson** 88.31 18 P **P** 01 52 11.8 +1.9
baz=223
**EGAK Eagle** 88.32 17 P **P** 01 52 11.1 +1.3
baz=222
**SYO Syowa Base** 88.32 195⇑ *e*P **P** 01 52 09.2 -0.7
**SYO Syowa Base** 88.32 195⇑ *e*sP P 01 52 16.2 +6.3
**HLID Hailey** 88.39 43 IAmb IAmb 01 52 27.6
comp=Z,17nm,0.9s
**HLID Hailey** 88.39 43 P **P** 01 52 11.7 +0.8
baz=244,SNR=9.6
**NLU North Lily Min** 88.47 47 IAmb IAmb 01 52 40.5
comp=Z,38nm,1.7s
**ULN Ulaanbaatar** 88.56 321 P **P** 01 52 10.4 -1.2
ULN pmax pmax
comp=Z,33nm,1.2s
ULN MLR MLR
comp=Z,500nm,21.0s
**ULN Ulaanbaatar** 88.56 321 P **P** 01 52 10.4 -1.2
ULN IAmb IAmb 01 52 14.9
comp=Z,33nm,1.2s
**HPIG** 88.61 61 P **P** 01 52 12.2 -0.1
HPIG IAmb IAmb 01 52 30.3
comp=Z,34nm,1.6s
**Q16A Castle Valley** 88.69 49 IAmb IAmb 01 52 35.1
comp=Z,43nm,1.2s
**HVU Hansel Valley** 88.73 45 IAmb IAmb 01 52 29.8
comp=Z,38nm,1.1s
**NEW Newport** 88.80 38 P **P** 01 52 11.7 -0.8
baz=242
**TMUT Trail Mountain** 88.82 48 IAmb IAmb 01 52 25.8
comp=Z,30nm,1.1s
**121A Cookes Peak, D** 88.84 56 P **P** 01 52 14.3 +1.0
baz=249
**SONM Songino Array** 88.94 321 P **P** 01 52 12.0 -1.3
comp=Z,16nm,1.1s,baz=125,slow=3.7,SNR=34
SONM PKKPbc **PKKPbc** 02 09 52.7 -1.4
comp=Z,0.3nm,0.7s,baz=251,slow=4.5,SNR=3.8
SONM LR LR 02 32 54.1
comp=Z,370nm,18.1s,baz=126,slow=36
**SONM Songino Array** 88.94 321 P **P** 01 52 12.4 -1.0
SONM pmax pmax
comp=Z,31nm,1.3s
**SONM Songino Array** 88.94 321 P **P** 01 52 12.4 -1.0
SONM IAmb IAmb 01 52 16.5
comp=Z,31nm,1.3s
**CTU Camp Tracy** 88.99 47 IAmb IAmb 01 52 34.6
comp=Z,32nm,1.2s
**P17A Butcher Ranch,** 89.22 48 IAmb IAmb 01 52 25.8
comp=Z,24nm,1.3s
**SRU San Rafael Swe** 89.23 49 IAmb IAmb 01 52 20.3
comp=Z,26nm,1.2s
**GTA Gaotai** 89.75 312 ⇓P **P** 01 52 17.3 0.0
GTA pP PcP 01 52 20.7 +2.1
GTA sP pP 01 52 23.6 -4.1
GTA PP **PP** 01 55 46.8 -3.3
GTA SKS **SKSac** 02 02 49.6 +4.1
GTA S **ScS** 02 03 12.1 +0.9
GTA sS pS 02 03 19.4 -0.7
GTA SS **SS** 02 09 02.0 -2.7
GTA pmax pmax
comp=Z,4.0nm,1.3s
GTA pmax pmax
comp=Z,260nm,5.1s
GTA LR LR
comp=Z,420nm,19.3s
GTA LR LR
comp=Z,390nm,20.0s
GTA LR LR
comp=Z,470nm,19.3s
**ZAIG Zacatecas** 89.89 66 P **P** 01 52 18.6 +0.1
ZAIG IAmb IAmb 01 52 36.6
comp=Z,49nm,1.8s
**MG05 Puerto Natales** 89.91 145 P **P** 01 52 17.5 -0.3
**BOD Bodaibo** 89.99 332 *e*P **P** 01 52 19.1 +1.3
BOD pmax pmax
comp=Z,24nm,1.9s
**MVCO Mesa Verde** 89.99 51 P **P** 01 52 18.1 -0.6
MVCO IAmb IAmb 01 52 47.1
comp=Z,32nm,1.5s
**MVCO Mesa Verde** 89.99 51 P **P** 01 52 18.5 -0.2
baz=248
**PV23 Carpenter Ridg** 90.08 50 IAmb IAmb 01 52 29.9
comp=Z,49nm,1.3s
**BNM Barren Site** 90.32 54 P **P** 01 52 18.9 -1.3
**DLMT Dillon** 90.32 42 IAmb IAmb 01 52 37.0
comp=Z,27nm,1.1s
**PV07 Paradox Valley** 90.34 50 P **P** 01 52 18.4 -1.8
PV07 IAmb IAmb 01 52 38.2
comp=Z,31nm,1.3s
**PV15 Paradox Valley** 90.42 50 IAmb IAmb 01 52 41.6
comp=Z,34nm,1.3s
**MNTX Cornudas Mount** 90.46 57 P **P** 01 52 21.3 +0.6
baz=250
**RDMU Red Mountain** 90.47 48 IAmb IAmb 01 52 40.7
comp=Z,28nm,1.3s
**REDW Red Top Meadow** 90.67 45 IAmb IAmb 01 52 32.2
comp=Z,24nm,1.1s
**ANMO Albuquerque** 90.73 54 LR LR 02 24 36.2
comp=Z,304nm,21.1s,baz=250,slow=30
**ANMO Albuquerque** 90.73 54⇓ *e*P **P** 01 52 21.3 -0.8
ANMO pmax pmax
comp=Z,15nm,1.3s
**ANMO Albuquerque** 90.73 54 P **P** 01 52 20.6 -1.5
ANMO IAmb IAmb 01 52 40.0
comp=Z,26nm,1.2s
**ANMO Albuquerque** 90.73 54 P **P** 01 52 22.5 +0.5
baz=250
**SNOW Snow King Moun** 90.77 45 IAmb IAmb 01 53 09.8
comp=Z,26nm,1.3s
**MG01 Puerto William** 90.81 149 P **P** 01 52 21.5 -0.3
**LOHW Long Hollow** 90.93 44 IAmb IAmb 01 52 57.6
comp=Z,29nm,1.8s
**TX32 Lajitas Array** 91.07 60 IAmb IAmb 01 53 00.1
comp=Z,36nm,1.4s
**TXAR Lajitas Array** 91.07 60 P **P** 01 52 24.5 +0.8
comp=Z,9.5nm,1.2s,baz=223,slow=5.1,SNR=12
TXAR LR LR 02 24 59.4
comp=Z,795nm,20.7s,baz=240,slow=30
**TXAR Lajitas Array** 91.07 60 P **P** 01 52 23.5 -0.2
**SHL Shillong** 91.24 296 P **P** 01 52 24.5 -0.1
SHL pmax pmax
comp=Z,45nm,1.2s
**SHL Shillong** 91.24 296 P **P** 01 52 24.5 -0.1
**O20A White River Ci** 91.25 48 IAmb IAmb 01 52 52.6
comp=Z,41nm,1.4s
**O20A White River Ci** 91.25 48 P **P** 01 52 25.4 +1.0
baz=249
**BW06 Boulder Array** 91.31 45 P **P** 01 52 24.6 -0.1
baz=248
**PDAR Pinedale Array** 91.31 45 P **P** 01 52 24.0 -0.7
comp=Z,3.7nm,1.2s,baz=215,slow=1.8,SNR=12
PDAR LR LR 02 31 34.3
comp=Z,249nm,18.6s,baz=254,slow=34
**SNAA Sanae** 91.33 181 P **P** 01 52 23.0 -1.1
**SNAA Sanae** 91.33 181 P **P** 01 52 23.0 -1.1
SNAA pmax pmax
comp=Z,39nm,1.2s
**SNAA Sanae** 91.33 181 P **P** 01 52 23.0 -1.1
SNAA IAmb IAmb 01 52 24.5
comp=Z,39nm,1.2s
**S22A 4UR Ranch, Cre** 91.42 51 IAmb IAmb 01 52 43.7
comp=Z,39nm,1.2s
**S22A 4UR Ranch, Cre** 91.42 51 P **P** 01 52 26.4 +1.0
baz=250
**NVL N'lazarevskaya** 91.47 186 *e*P P 01 52 29.6 +5.0
NVL pmax pmax
comp=Z,81nm,1.6s
**VNA3 Neumayer Olymp** 91.72 179 P **P** 01 52 24.5 -1.3
**SMCO Snowmass** 91.82 50 IAmb IAmb 01 52 45.1
comp=Z,30nm,1.6s
**ZAK Zakamensk** 91.90 323 *e*P **P** 01 52 24.9 -2.1
ZAK pmax pmax
comp=Z,26nm,1.2s
**VNA2 Neumayer--Watz** 92.08 179 P **P** 01 52 26.7 -0.8
baz=182,slow=3.4
**IRK Irkutsk** 92.13 325 *e*P **P** 01 52 27.0 -0.9
IRK pmax pmax
comp=Z,45nm,2.5s
**GOMU GeErMu** 92.30 307 P **P** 01 52 29.4 -0.2
GOMU pP PcP 01 52 32.6 +2.3
GOMU SKS **SKSac** 02 03 04.2 +3.4
GOMU S **ScS** 02 03 31.9 -1.1
GOMU SS **SS** 02 09 43.6 +1.5
GOMU pmax pmax
comp=Z,8.0nm,1.4s
GOMU pmax pmax
comp=Z,180nm,5.7s
GOMU LR LR
comp=Z,300nm,24.5s
GOMU LR LR
comp=Z,670nm,24.4s
GOMU LR LR
comp=Z,820nm,23.7s
**VNA1 Neumayer--Stat** 92.34 179 P **P** 01 52 28.0 -0.7
**RLMT Red Lodge** 92.39 43 P **P** 01 52 30.2 +0.6
baz=248
**SDCO Great Sand Dun** 92.41 51 IAmb IAmb 01 52 39.5
comp=Z,18nm,1.4s
**SDCO Great Sand Dun** 92.41 51 P **P** 01 52 30.7 +0.8
baz=250
**T25A Trinidad** 93.03 52 P **P** 01 52 33.0 +0.2
baz=251
**COYC Coyhaique** 93.04 140 **P** 01 52 33.0 +0.6
COYC IAmb IAmb 01 52 35.4
comp=Z,36nm,1.3s
**Q24A Divide** 93.08 50 IAmb IAmb 01 53 07.7
comp=Z,28nm,1.4s
**Q24A Divide** 93.08 50 P **P** 01 52 33.3 +0.3
baz=250
**MSTX Muleshoe** 93.28 56 IAmb IAmb 01 52 47.4
comp=Z,14nm,0.9s
**MSTX Muleshoe** 93.28 56 P **P** 01 52 34.0 +0.2
baz=252
**MOY Mondy** 93.74 323 *e*P **P** 01 52 37.4 +1.9
MOY pmax pmax
comp=Z,38nm,2.4s
**TIXI Tiksi** 93.94 347 P **P** 01 52 33.6 -2.2
TIXI pmax pmax
comp=Z,10.0nm,1.1s
**TIXI Tiksi** 93.94 347 P **P** 01 52 33.5 -2.2
**CMIG Matias Romero** 95.10 74 LR LR 02 26 33.0
comp=Z,698nm,20.4s,baz=246,slow=30
**ABTX Abilene, Hawle** 95.37 58 P **P** 01 52 42.2 -1.1
**ABTX Abilene, Hawle** 95.37 58 P **P** 01 52 43.9 +0.6
baz=253
**KNGR Kungurtug, Tuv** 95.38 321⇑ *e*P **P** 01 52 42.3 -0.8
**RSSD Black Hills** 95.55 46 P **P** 01 52 43.1 -1.0
RSSD pmax pmax
comp=Z,15nm,1.0s
**RSSD Black Hills** 95.55 46 P **P** 01 52 43.1 -1.0
RSSD IAmb IAmb 01 53 00.3
comp=Z,15nm,1.0s
**RSSD Black Hills** 95.55 46 P **P** 01 52 44.2 +0.1
baz=252
**LC01 Cunco** 96.31 134 P **P** 01 52 48.0 +0.4
**YKA Yellowknife Ar** 96.43 26 P **P** 01 52 46.5 -0.9
comp=Z,1.6nm,1.0s,baz=252,slow=4.4,SNR=8.4
YKA PP **PP** 01 56 41.2 -0.6
comp=Z,1.4nm,1.0s,baz=245,slow=7.1,SNR=4.2
**APG El Apazote** 98.62 77 LR LR 02 28 58.9
comp=Z,554nm,19.4s,baz=282,slow=30
**WMQ Urumqi** 99.75 313 *e*P **Pdif** 01 53 05.4 +2.5
WMQ sP pP 01 53 12.3 -1.0
WMQ pmax pmax
comp=Z,16nm,1.3s
WMQ LR LR
comp=Z,590nm,23.7s
WMQ LR LR
comp=Z,960nm,26.3s
**DGZ Jazzator, Alta** 101.33 319⇓ *e*P **Pdif** 01 53 08.2 -1.7
DGZ pmax pmax
comp=Z,6.0nm,1.1s
**ZALV Zalesovo Beam** 103.78 323 Pdiff **Pdif** 01 53 19.7 -0.7
comp=Z,0.6nm,0.6s,baz=100,slow=3.3,SNR=4.9
**MKAR Makanchi Array** 104.11 315 Pdiff **Pdif** 01 53 23.6 +1.5
comp=Z,3.0nm,1.1s,baz=92,slow=6.1,SNR=13
MKAR PP **PKiKP** 01 57 39.6 +0.4
comp=Z,1.9nm,1.1s,baz=106,slow=8.1,SNR=5.1
MKAR PKKPbc **PKKPbc** 02 09 11.1 -1.1
comp=Z,0.6nm,0.8s,baz=94,slow=3.6,SNR=4.1
**KURK Kurchatov** 107.08 319 IAMs_20 IAMs_20 02 44 22.1
comp=Z,407nm,19.0s
**AAK Ala-Archa** 109.03 310 IAMs_20 IAMs_20 02 46 23.5
comp=Z,635nm,21.0s
**BRVK Borovoye** 112.35 321⇑ *i*PKIKP **PKiKP** 01 57 56.3 +2.0
**BRVK Borovoye** 112.35 321 IAMs_20 IAMs_20 02 47 41.6
comp=Z,648nm,21.0s
**ARU Arti** 118.70 325 *i* PKIKP **PKPdf** 01 58 05.7 -0.7
ARU 01 59 21.3
ARU 02 05 17.7
ARU SS SS 02 15 37.0 -3.6
**KIRV Kirov** 122.77 330⇑ *i*PKIKP **PKPdf** 01 58 12.6 -1.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PRGR** | **Permogore** | **123.19** | **334** | *e*PKIKP | **PKPdf** | **01 58 12.2** | **-2.6** |
| PRGR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **APA** | **Apatity** | **123.96** | **343** | ⇓*i*PKIKP | **PKiKP** | **01 58 24.0** | **+7.5** |
| APA | | | | *i* | | 02 00 00.4 | |
| APA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.38** | **347** | PKP | **PKPdf** | **01 58 16.3** | **-0.7** |
| | comp=Z,4.1nm,1.0s,baz=270,slow=1.7,SNR=2.1 | | | | | | |
| **SMRT** | **St. Maarten** | **124.92** | **80** | IAMs_20 | IAMs_20 | 02 42 11.8 | |
| | comp=Z,429nm,19.0s | | | | | | |
| **SEUS** | **St. Eustatius** | **124.92** | **80** | IAMs_20 | IAMs_20 | 02 46 33.0 | |
| | comp=Z,382nm,18.0s | | | | | | |
| **KLMR** | **Klimovskoe** | **126.13** | **335** | *e*PKIKP | **PKPdf** | **01 58 18.2** | **-2.3** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| **KLMR** | **Klimovskoe** | **126.13** | **335** | *e*PKPdf | **PKPdf** | **01 58 18.2** | **-2.3** |
| KLMR | | | | AMP | | 01 58 35.0 | |
| | comp=Z,22nm,1.3s | | | | | | |
| KLMR | | | | *ex* | x | 01 59 43.5 | |
| KLMR | | | | LQ | LQ | 02 38 19.3 | |
| KLMR | | | | LQ | LQ | 02 38 19.3 | |
| KLMR | | | | LR | LR | 02 43 35.8 | |
| **MAK** | **Makhachkala** | **128.76** | **312** | *i* P | **Pdif** | **01 55 07.7** | **-4.0** |
| MAK | | | | *e* | | 02 00 27.9 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,296nm,1.7s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,685nm,19.0s | | | | | | |
| **VRH** | **Novokhopyorsk** | **129.81** | **323** | *e*PKIKP | **PKPdf** | **01 58 25.5** | **-2.3** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **OBN** | **Obninsk** | **130.62** | **330** | ⇓*i*PKIKP | **PKiKP** | **01 58 30.2** | **+0.1** |
| OBN | | | | *i* | | 01 58 41.5 | |
| OBN | | | | *i* SS | SS | 02 18 29.6 | +19 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,381nm,23.0s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **130.72** | **326** | *e*PKIKP | **PKPdf** | **01 58 27.3** | **-2.2** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **VORR** | **Voronezh** | **131.01** | **325** | *e*PKIKP | **PKPdf** | **01 58 30.3** | **+0.2** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **VSR** | **Storozhevoye** | **131.24** | **324** | *e*PKIKP | **PKPdf** | **01 58 29.9** | **-0.7** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **ZEI** | **Tsey** | **131.36** | **312** | *i* PKIKP | **PKiKP** | **01 58 36.2** | **+3.9** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **GNI** | **Garni** | **131.42** | **309** | IAMs_20 | IAMs_20 | 02 55 02.0 | |
| | comp=Z,280nm,21.0s | | | | | | |
| **KIV** | **Kislovodsk** | **131.87** | **314** | *i* PKIKP | **PKPdf** | **01 58 31.6** | **-0.5** |
| KIV | | | | *e*PS | **PS** | **02 11 06.1** | **-2.7** |
| KIV | | | | *e*SS | SS | 02 18 28.4 | +1.7 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ATD** | **Arta Tunnel** | **133.33** | **270** | IAMs_20 | IAMs_20 | 02 52 07.1 | |
| | comp=Z,394nm,21.0s | | | | | | |
| **SOC** | **Sochi** | **134.02** | **315** | *i* PKIKP | **PKPdf** | **01 58 34.5** | **-1.5** |
| SOC | | | | *e* | | 02 01 01.8 | |
| SOC | | | | *e*PPP | PPP | 02 03 56.9 | |
| SOC | | | | *e*SS | SS | 02 18 44.7 | -7.9 |
| SOC | | | | *e*SSS | SSS | 02 23 48.4 | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,363nm,20.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **134.49** | **251** | ⇓*i*PKIKP | **PKPdf** | **01 58 38.0** | **-0.2** |
| **MNK** | **Minsk** | **134.96** | **333** | *i* PKIKP | **PKiKP** | **01 58 42.2** | **+3.4** |
| MNK | | | | MLR | MLR | | |
| | comp=N,331nm,21.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,67nm,20.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,703nm,22.0s | | | | | | |
| **MNK** | **Minsk** | **134.96** | **333** | *i* PKP | **PKiKP** | **01 58 42.3** | **+3.4** |
| MNK | | | | *i* PKP | **PKiKP** | **01 58 42.3** | **+3.4** |
| MNK | | | | *i* PKP | **PKiKP** | **01 58 42.3** | **+3.4** |
| | baz=226 | | | | | | |
| MNK | | | | *i* PPP | PPP | 02 04 29.9 | |
| MNK | | | | *i* SKS | **SKSdf** | **02 05 51.3** | **+5.5** |
| MNK | | | | *i* PPS | PPS | 02 17 29.8 | |
| MNK | | | | *i* SSS | SSS | 02 24 28.5 | |
| MNK | | | | *i* LR | LR | 02 54 15.1 | |
| MNK | | | | *i* LRM | MLR | 02 56 43.3 | |
| | comp=N,331nm,20.9s | | | | | | |
| MNK | | | | *i* LRM | MLR | 02 56 56.0 | |
| | comp=E,67nm,20.2s | | | | | | |
| MNK | | | | *i* LRM | MLR | 02 57 02.4 | |
| | comp=Z,703nm,22.4s | | | | | | |
| **NACGM** | **Naroch** | **135.14** | **334** | *i* PKP | **PKPdf** | **01 58 36.8** | **-1.0** |
| **AKASG** | **Malin Array Be** | **136.80** | **328** | PKP | **PKPdf** | **01 58 39.6** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=63,slow=1.6,SNR=2.0 | | | | | | |
| **AKBB** | **Malin Array Si** | **136.80** | **328** | ⇓*i*PKIKP | **PKPdf** | **01 58 40.8** | **-0.2** |
| **MBAR** | **Mbarara** | **140.53** | **247** | ⇑*i*PKIKP | **PKiKP** | **01 58 52.8** | **+1.0** |
| **OJC** | **Ojcow** | **141.48** | **334** | *e*PKPdf | PKiKP | 01 59 01.5 | +9.1 |
| **UZH** | **Uzhgorod** | **141.55** | **331** | *e*PKIKP | **PKPdf** | **01 58 48.2** | **-1.5** |
| UZH | | | | *e* | | 01 58 54.6 | |
| **CRVS** | **Cervenica-Dubn** | **141.74** | **332** | *e*PKP | **PKiKP** | **01 58 52.5** | **-0.5** |
| CRVS | | | | *e* | | 02 00 12.8 | |
| **VOIR** | | **142.26** | **325** | ⇑P | **PKPdf** | **01 58 52.3** | **+1.0** |
| **KSP** | **Ksiaz** | **142.34** | **338** | *e*PKPdf | **PKPdf** | **01 58 50.9** | **-0.2** |
| **ARR** | **Arges** | **142.54** | **325** | ⇑P | **PKPdf** | **01 58 52.6** | **+0.9** |
| **OSTC** | **Ostas** | **142.61** | **338** | *e*PKP | **PKPdf** | **01 58 51.7** | **+0.1** |
| OSTC | | | | *ex* | x | 01 59 04.6 | |
| **CHVC** | **Chvalec** | **142.64** | **338** | *e*PKP | **PKPdf** | **01 58 49.6** | **-2.1** |
| **MORC** | **Moravsky Berou** | **142.73** | **336** | *e*PKP | **PKPdf** | **01 58 50.1** | **-1.8** |
| **KRLC** | **Kraliky** | **142.79** | **337** | *e*PKIKP | **PKPdf** | **01 58 50.5** | **-1.5** |
| KRLC | | | | *e* | | 01 59 04.8 | |
| **KRLC** | **Kraliky** | **142.79** | **337** | *e*PKP | **PKPdf** | **01 58 50.5** | **-1.5** |
| KRLC | | | | *ex* | x | 01 59 04.8 | |
| **CLL** | **Collm** | **143.05** | **341** | *e*PKPdf | **PKPdf** | **01 58 51.0** | **-1.3** |
| CLL | | | | *e*PKiKP | **PKiKP** | **01 58 57.0** | **+1.4** |
| CLL | | | | *ex* | x | 01 59 06.0 | |
| CLL | | | | *e*PP | **PP** | **02 02 00.0** | **-1.7** |
| CLL | | | | *e*PKSdf | **PKSdf** | **02 02 32.0** | **+4.1** |
| CLL | | | | *e*SKSdf | **SKSdf** | **02 06 00.0** | **+0.6** |
| CLL | | | | *e*(SKKSac) | | 02 09 06.0 | |
| CLL | | | | *e*SS | **SS** | **02 20 30.0** | **-7.6** |
| CLL | | | | *e*SSS | SSS | 02 26 00.0 | |
| CLL | | | | *e*SSSS | | 02 29 48.0 | |
| **BRG** | **Berggiesshubel** | **143.13** | **340** | *e*PKP | **PKPdf** | **01 58 51.3** | **-1.2** |
| BRG | | | | Amp | | 01 58 56.7 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| BRG | | | | *ex* | x | 01 59 06.6 | |
| BRG | | | | Amp | | 01 59 08.8 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **143.13** | **340** | *e*PKIKP | **PKPdf** | **01 58 51.3** | **-1.2** |
| BRG | | | | *e* | | 01 59 06.5 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,22nm,1.6s | | | | | | |
| **JAVC** | **Velka Javorina** | **143.41** | **335** | *e*PKP | **PKPdf** | **01 58 53.0** | **-0.1** |
| JAVC | | | | *e* | | 02 00 17.3 | |
| **VRAC** | **Vranov** | **143.48** | **336** | *e*PKP | PKPbc | 01 58 51.2 | +0.7 |
| **KRUC** | **Moravsky** | **143.76** | **336** | *e*PKP | **PKPdf** | **01 58 53.0** | **-0.7** |
| **SMOL** | **Smolenice** | **143.78** | **334** | *e*PKP | **PKPdf** | **01 58 52.8** | **-0.9** |
| SMOL | | | | *e* | | 02 00 17.8 | |
| **MODS** | **Modra-Piesok** | **143.95** | **334** | *e*PKP | **PKPdf** | **01 58 55.4** | **+1.3** |
| MODS | | | | *e* | | 02 00 18.1 | |
| **BZS** | **Buzias** | **143.98** | **328** | ⇓P | **PKPdf** | **01 58 53.2** | **-0.9** |
| **HERR** | **Herculane** | **144.05** | **326** | ⇓P | **PKPdf** | **01 58 54.9** | **+0.6** |
| **MOX** | **Moxa** | **144.06** | **342** | *e*L | L | 02 59 55.1 | |
| | comp=Z,393nm,21.8s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **144.65** | **341** | *e*PKPbc | **PKPab** | **01 58 53.4** | **-0.4** |
| | baz=27,slow=3.2 | | | | | | |
| **KHC** | **Kasperske Hory** | **144.74** | **339** | *e*PKIKP | **PKPab** | **01 58 53.5** | **-0.8** |
| KHC | | | | *e* | | 01 59 08.5 | |
| KHC | | | | MLR | MLR | | |
| | comp=Z,900nm,20.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **144.74** | **339** | *e*PKP | **PKPab** | **01 58 53.5** | **-0.8** |
| KHC | | | | *ex* | x | 01 59 08.5 | |
| KHC | | | | AMS | AMS | 03 00 40.0 | |
| | comp=Z,900nm,20.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **144.74** | **339** | PKPdf | **PKPab** | **01 58 53.5** | **-0.8** |
| **CKRC** | **Cesky Krumlov** | **144.74** | **338** | *e*PKP | **PKPab** | **01 58 53.6** | **-0.7** |
| **CONA** | **Conrad Observa** | **144.88** | **335** | *e*P | **PKPab** | **01 58 54.9** | **0.0** |
| | comp=Z,19nm,1.1s | | | | | | |
| **GEC2** | **GERESS Array S** | **144.94** | **338** | *e*PKPbc | **PKPab** | **01 58 54.2** | **-0.9** |
| | baz=27,slow=3.2 | | | | | | |
| **GERES** | **GERESS Array B** | **144.94** | **338** | PKP | **PKPab** | **01 58 54.0** | **-1.1** |
| | comp=Z,10nm,1.0s,baz=46,slow=3.9,SNR=21 | | | | | | |
| **GERES** | **GERESS Array B** | **144.94** | **338** | PKIKP | **PKPab** | **01 58 54.2** | **-0.9** |
| **GERES** | **GERESS Array B** | **144.94** | **338** | PKPdf | **PKPab** | **01 58 54.2** | **-0.9** |
| **WET** | **Wettzell** | **144.97** | **339** | *e*PKPbc | **PKPab** | **01 58 54.6** | **-0.5** |
| | baz=27,slow=3.2 | | | | | | |
| **MORH** | **Mrgy, Hungar** | **145.00** | **331** | *e*P | **PKPbc** | **01 58 54.1** | **-1.1** |
| **GRF** | **Grafenberg Arr** | **145.02** | **341** | *e*PKPbc | **PKPbc** | **01 58 54.8** | **-0.4** |
| | baz=27,slow=3.2 | | | | | | |
| GRF | | | | *e*L | L | 03 05 43.0 | |
| | comp=Z,248nm,19.7s | | | | | | |
| **GRFO** | **Grafenberg** | **145.02** | **341** | PKIKP | **PKPbc** | **01 58 54.6** | **-0.6** |
| **GRFO** | **Grafenberg** | **145.02** | **341** | PKPdf | **PKPbc** | **01 58 54.6** | **-0.6** |
| **VTS** | **Vitosha** | **145.03** | **322** | ⇑P | **PKPdf** | **01 58 56.4** | **+0.1** |
| **VTS** | **Vitosha** | **145.03** | **322** | PKIKP | **PKPbc** | **01 58 54.7** | **-1.0** |
| **VTS** | **Vitosha** | **145.03** | **322** | PKPdf | **PKPbc** | **01 58 54.7** | **-1.0** |
| **FRGS** | **Fruska Gora** | **145.21** | **329** | ⇑P | **PKPbc** | **01 58 55.4** | **-0.6** |
| **FRGS** | **Fruska Gora** | **145.21** | **329** | *e*P | **PKPbc** | **01 58 54.6** | **-1.4** |
| **TNS** | **Taunus Mts** | **145.31** | **345** | *e*PKPbc | **PKPbc** | **01 58 55.1** | **-1.1** |
| | baz=27,slow=3.2 | | | | | | |
| **BTNL** | **Ternell** | **145.51** | **347** | *d*PKP | **PKPdf** | **01 58 55.3** | **-1.4** |
| BTNL | | | | *d*PKiKP | **PKiKP** | **01 58 59.7** | **-1.0** |
| **MEM** | **Membach** | **145.51** | **348** | *d*PKP | **PKPdf** | **01 58 56.4** | **-0.2** |
| MEM | | | | *d*PKiKP | **PKiKP** | **01 58 59.3** | **-1.4** |
| **ARSA** | **Arzberg** | **145.56** | **335** | *e*P | **PKPdf** | **01 58 56.0** | **-0.9** |
| | comp=Z,32nm,1.2s,SNR=10 | | | | | | |
| **MOA** | **Molln** | **145.56** | **337** | *i* P | **PKPbc** | **01 58 57.0** | **0.0** |
| | comp=Z,70nm,1.2s,SNR=28 | | | | | | |
| **BSTI** | **Sart Tilman** | **145.62** | **348** | *d*PKP | **PKPdf** | **01 58 55.5** | **-1.3** |
| BSTI | | | | *d*PKiKP | **PKiKP** | **01 59 00.3** | **-0.6** |
| **UCC** | **Uccle** | **145.65** | **349** | PKP2 | **PKPdf** | **01 58 55.2** | **-1.7** |
| **UCC** | **Uccle** | **145.65** | **349** | PKPbc | **PKPdf** | **01 58 55.2** | **-1.7** |
| **BHOU** | **Houvegnez** | **145.75** | **347** | *d*PKP | **PKPdf** | **01 58 57.2** | **+0.1** |
| BHOU | | | | *d*PKiKP | **PKiKP** | **01 59 00.4** | **-0.8** |
| **BCLA** | **Clavier** | **145.83** | **348** | *d*PKP | **PKPdf** | **01 58 56.6** | **-0.6** |
| BCLA | | | | *d*PKiKP | **PKiKP** | **01 59 00.0** | **-1.3** |
| **DIVS** | **Divibare** | **145.86** | **327** | *e*P | **PKPdf** | **01 58 57.3** | **-0.3** |
| **BGES** | **Gesves** | **145.91** | **348** | *d*PKP | **PKPdf** | **01 58 57.4** | **0.0** |
| BGES | | | | *d*PKiKP | **PKiKP** | **01 59 00.5** | **-1.0** |
| **BMRS** | **Maredsous** | **146.05** | **349** | *d*PKP | **PKPbc** | **01 58 58.0** | **-0.4** |
| BMRD | | | | *d*PKiKP | **PKiKP** | **01 59 01.1** | **-0.7** |
| **RCHB** | **Rochefort** | **146.10** | **348** | *d*PKP | **PKPdf** | **01 58 57.1** | **-0.5** |
| RCHB | | | | *d*PKiKP | **PKiKP** | **01 59 01.4** | **-0.5** |
| **RJOB** | **Jochberg** | **146.20** | **338** | *e*PKPbc | **PKPdf** | **01 58 58.4** | **+0.4** |
| | baz=27,slow=3.2 | | | | | | |
| **STIP** | **Stip** | **146.22** | **322** | *i* P | **PKPdf** | **01 58 58.6** | **+0.5** |
| **SOKA** | **Soboth** | **146.22** | **335** | *e*P | **PKPbc** | **01 58 58.7** | **-0.5** |
| | comp=Z,55nm,1.4s,SNR=21 | | | | | | |
| **DOU** | **Dourbes** | **146.28** | **349** | *d*PKP | **PKPbc** | **01 58 58.7** | **-0.4** |
| DOU | | | | *d*PKiKP | **PKiKP** | **01 59 01.3** | **-0.9** |
| **BBLS** | **Lazići** | **146.32** | **327** | *e*P | **PKPbc** | **01 58 59.9** | **+0.3** |
| **FUR** | **Furstenfeldbru** | **146.35** | **340** | *e*PKPbc | **PKPbc** | **01 58 59.1** | **-0.3** |
| | baz=27,slow=3.2 | | | | | | |
| **WLF** | **Walferdange** | **146.37** | **347** | PKP2 | **PKPdf** | **01 58 57.8** | **-0.3** |
| **WLF** | **Walferdange** | **146.37** | **347** | *e*PKPbc | **PKPbc** | **01 58 59.3** | **-0.1** |
| | baz=27,slow=3.2 | | | | | | |
| **WLF** | **Walferdange** | **146.37** | **347** | PKPbc | **PKPdf** | **01 58 57.8** | **-0.3** |
| **WLF** | **Walferdange** | **146.37** | **347** | *d*PKP | **PKPdf** | **01 58 58.5** | **+0.3** |
| WLF | | | | *d*PKiKP | **PKiKP** | **01 59 02.6** | **+0.1** |
| **STU** | **Stuttgart** | **146.44** | **343** | *e*PKPbc | **PKPbc** | **01 58 59.5** | **-0.2** |
| | baz=27,slow=3.2 | | | | | | |
| **ZAG** | **Zagreb** | **146.50** | **333** | *e*P | **PKPbc** | **01 58 59.5** | **-0.4** |
| **RUDO** | **Rudo** | **146.52** | **327** | *e*P | **PKPdf** | **01 58 58.4** | **-0.2** |
| **KBA** | **Koelnbreinsper** | **146.55** | **337** | *i* P | **PKPdf** | **01 58 59.3** | **+0.6** |
| | comp=Z,28nm,1.4s | | | | | | |
| **OBKA** | **Obir** | **146.56** | **335** | *e*P | **PKPdf** | **01 58 59.2** | **+0.5** |
| | comp=Z,24nm,1.4s,SNR=5.2 | | | | | | |
| **GCIS** | **Gornji Cirnik** | **146.62** | **333** | *e*PKPdf | **PKPbc** | **01 58 59.6** | **-0.6** |
| **MRAK** | **Mrakovica** | **146.72** | **331** | *e*P | **PKPdf** | **01 58 57.6** | **-1.4** |
| **CRES** | **Cresnjev** | **146.73** | **333** | *e*P | **PKPdf** | **01 58 56.2** | **-2.7** |
| **BLY** | **Banja Luka** | **146.78** | **330** | *e*P | **PKPbc** | **01 59 00.3** | **-0.5** |
| **MYKA** | **Terra Mystica** | **146.81** | **336** | *i* P | **PKPdf** | **01 58 59.9** | **+0.8** |
| | comp=Z,19nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **146.97** | **339** | *e*P | **PKPbc** | **01 59 00.8** | **-0.6** |
| | comp=Z,30nm,1.1s,SNR=7.9 | | | | | | |
| **LIT** | **Litokhoron** | **146.99** | **319** | PKP2 | **PKPdf** | **01 58 59.4** | **-0.1** |
| **LIT** | **Litokhoron** | **146.99** | **319** | PKPbc | **PKPdf** | **01 58 59.4** | **-0.1** |
| **WTTA** | **Wattenberg** | **147.01** | **339** | *e*P | **PKPbc** | **01 59 01.3** | **-0.3** |
| | comp=Z,44nm,1.1s,SNR=9.9 | | | | | | |
| **MGRS** | **Mrkonjic Grad** | **147.08** | **330** | *e*P | **PKiKP** | **01 59 04.0** | **-0.1** |
| **BFO** | **Black Forest** | **147.08** | **343** | *e*PKPbc | **PKPbc** | **01 59 01.0** | **-0.6** |
| | baz=27,slow=3.2 | | | | | | |
| **RETA** | **Reutte** | **147.11** | **340** | *e*P | **PKPbc** | **01 59 01.4** | **-0.3** |
| | comp=Z,38nm,1.3s,SNR=9.3 | | | | | | |
| **MOTA** | **Moosalm** | **147.12** | **340** | *e*P | **PKPbc** | **01 59 01.3** | **-0.6** |
| | comp=Z,57nm,1.2s,SNR=15 | | | | | | |
| **ABTA** | **Abfaltersbach** | **147.14** | **337** | *e*P | **PKPbc** | **01 59 00.8** | **-1.0** |
| | comp=Z,32nm,1.1s,SNR=12 | | | | | | |
| **UBR** | **Ueberruh** | **147.15** | **341** | *e*PKPbc | **PKPbc** | **01 59 01.2** | **-0.6** |
| | baz=27,slow=3.2 | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.19** | **339** | *e*P | **PKPbc** | **01 59 01.7** | **-0.3** |
| | comp=Z,47nm,1.1s,SNR=13 | | | | | | |
| **CEY** | **Cerknica** | **147.23** | **334** | *e*P | **PKPdf** | **01 59 00.0** | **+0.2** |
| **FNA** | **Florina** | **147.26** | **321** | PKP2 | **PKPdf** | **01 59 00.1** | **+0.1** |
| **FNA** | **Florina** | **147.26** | **321** | PKPbc | **PKPdf** | **01 59 00.1** | **+0.1** |
| **OHR** | **Ohrid** | **147.39** | **322** | *i* P | **PKPbc** | **01 59 02.1** | **-0.6** |
| **PDG** | **Podgorica** | **147.40** | **326** | ⇑P | **PKPbc** | **01 59 02.6** | **0.0** |
| **STAL** | **STALIGIAL** | **147.48** | **337** | | **PKPdf** | **01 59 00.5** | **+0.3** |
| **ECH** | **Echery** | **147.49** | **345** | PKP2 | **PKPbc** | **01 59 01.5** | **-1.2** |
| **ECH** | **Echery** | **147.49** | **345** | PKPbc | **PKPbc** | **01 59 01.5** | **-1.2** |
| **FETA** | **Feichten** | **147.53** | **340** | *e*P | **PKPbc** | **01 59 02.8** | **-0.2** |
| | comp=Z,40nm,1.2s,SNR=13 | | | | | | |
| **SKDS** | **Skadanscina** | **147.56** | **335** | *e*P | **PKPab** | **01 59 04.3** | **-0.8** |
| **DAVA** | **Damuels** | **147.57** | **341** | *e*P | **PKPbc** | **01 59 02.8** | **-0.3** |
| | comp=Z,61nm,1.2s,SNR=14 | | | | | | |
| **DRME** | **Dracevica, Mon** | **147.60** | **325** | *e*P | **PKPab** | **01 59 10.8** | **+5.5** |
| **STON** | **Ston** | **147.91** | **328** | *e*P | **PKPab** | **01 59 06.2** | **-0.3** |
| **TUE** | **Stuetta** | **148.46** | **341** | PKPbc | **PKPbc** | **01 59 04.2** | **-1.4** |
| **SENIN** | **Lac Senin/Sane** | **149.16** | **343** | PKPbc | **PKPbc** | **01 59 06.4** | **-1.0** |
| **PRMA** | **PARMA** | **149.63** | **338** | PKPbc | **PKPdf** | **01 59 05.5** | **+1.9** |
| **MURB** | **Monte Urbino** | **150.03** | **334** | PKPbc | **PKPdf** | **01 59 06.7** | **+2.3** |
| **NRCA** | **Norcia** | **150.13** | **333** | PKPbc | **PKPbc** | **01 59 08.7** | **-1.0** |
| **AQU** | **L'Aquila** | **150.38** | **332** | *e*P | **PKPbc** | **01 59 10.4** | **+0.1** |
| **PAOL** | **Paolisi** | **150.84** | **329** | PKPdf | **PKPdf** | **01 59 03.7** | **-2.0** |
| **TIP** | **Timpagrande** | **151.00** | **323** | ⇑P | **PKPbc** | **01 59 09.5** | **-2.4** |
| **ESDC** | **Sonseca Array** | **157.59** | **358** | PKPab | **PKPab** | **01 59 46.5** | **-0.7** |
| | comp=Z,4.7nm,1.1s,baz=3.8,slow=3.9,SNR=8.9 | | | | | | |
| **DBIC** | **Dimbokro** | **169.53** | **181** | PKPab | **PKPab** | **02 00 39.5** | **-0.5** |
| | comp=Z,8.7nm,1.2s,baz=163,slow=8.4,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.32** | **239** | PKP | **PKPdf** | **01 59 27.2** | **-1.3** |
| | comp=Z,7.8nm,1.1s,baz=337,slow=1.5,SNR=23 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **02 00 52.3** | **-0.4** |
| | comp=Z,3.3nm,1.1s,baz=75,slow=1.5,SNR=2.1 | | | | | | |

*SOME **06** 01:39:58.7, 42°.73N×78°.13E, h20km*
**NNC 06 01:39:57.9±2.8, 42°.67N×78°.23E, h0km, mpv2.6, Error ellipse: s-maj=17.0km s-min=15.1km az=83.0, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SATY** | **Saty** | **0.41** | **18** | *e*P | | Pg | 01 40 06.8 | +1.0 |
| | 1.0nm,0.2s | | | | | | | |
| SATY | | | | *e*S | | Sg | 01 40 12.7 | +1.5 |
| | 18nm,0.2s | | | | | | | |
| **SATY** | **Saty** | **0.41** | **18** | P | | Pg | 01 40 06.8 | +1.0 |
| | 1.0nm,0.2s | | | | | | | |
| SATY | | | | S | | Sg | 01 40 12.7 | +1.5 |
| | 18nm,0.2s | | | | | | | |
| SATY | | | | S | | Sg | 01 40 12.7 | +1.5 |
| | 17nm,0.2s | | | | | | | |
| **SATY** | **Saty** | **0.41** | **18** | *e*S | | Sb | 01 40 12.7 | -2.4 |
| | 17nm,0.2s | | | | | | | |
| **UZB** | **Uzynbulak** | **0.76** | **50** | *e*P | | Pg | 01 40 12.8 | +0.5 |
| | 3.7nm,0.2s | | | | | | | |
| UZB | | | | *e*S | | Sg | 01 40 23.0 | +0.8 |
| | 2.3nm,0.1s | | | | | | | |
| **UZB** | **Uzynbulak** | **0.76** | **50** | P | | Pg | 01 40 12.8 | +0.5 |
| | 3.7nm,0.2s | | | | | | | |
| UZB | | | | S | | Sg | 01 40 23.0 | +0.8 |
| | 2.3nm,0.1s | | | | | | | |
| **KPKS** | **Kokpek** | **0.86** | **23** | *e*P | | Pg | 01 40 13.9 | -0.6 |
| | 1.8nm,0.1s | | | | | | | |
| KPKS | | | | *e*S | | Sg | 01 40 24.9 | -0.8 |
| | 11nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **1.44** | **7** | *e*P | | Pn | 01 40 24.5 | -0.9 |
| | 1.8nm,0.1s | | | | | | | |
| BLB | | | | *e*S | | Sg | 01 40 43.0 | -1.1 |
| | 13nm,0.2s | | | | | | | |
| **BLB** | **Baldybastay** | **1.44** | **7** | P | | Pn | 01 40 24.5 | -0.9 |
| | 1.8nm,0.1s | | | | | | | |
| BLB | | | | S | | Sg | 01 40 43.0 | -1.1 |
| | 13nm,0.2s | | | | | | | |

*IDC **06** 01:40:37.0±1.4, 15°.08S×173°.62W, h0km, mb4.7/7, mb1 5.0/7, mb1mx4.4/31, mbtmp4.7/7, MS4.5/3, Ms1 4.5/3, ms1mx4.0/50, Error ellipse: s-maj=59.0km s-min=23.4km az=143.0*
*NEIC **06** 01:40:39.7±2.0, 14°.90S±0°.08×172°.90W±0°.10, h13km±4km, mb5.0/20, Error ellipse: s-maj=14.4km s-min=9.8km az=116.0*
**ISC 06 01:40:41.6±0.5, 14°.91S±0°.07×172°.93W±0°.09, h29km, n68, σ1s34/50, mb4.9/15, MS4.5/3, Samoa Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.49** | **49** | Pn | | **Pn** | **01 41 05.0** | **-1.6** |
| | 200nm,0.3s,baz=250,slow=18,SNR=100 | | | | | | | |
| AFI | | | | Sn | | **Sn** | **01 41 24.1** | **-1.1** |
| | 1um,0.3s,baz=84,slow=20,SNR=11 | | | | | | | |
| **AFI** | **Afiamalu** | **1.49** | **49** | | | **Pn** | **01 41 05.0** | **-1.6** |
| **NIUE** | **Niue** | **5.05** | **146** | | | **Pn** | **01 41 53.8** | **-1.6** |
| **RAR** | **Rarotonga** | **13.99** | **119** | Pn | | **Pn** | **01 43 56.9** | **-1.1** |
| | 5.2nm,0.3s,baz=296,slow=7.9,SNR=7.2 | | | | | | | |
| **RAR** | **Rarotonga** | **13.99** | **119** | | | **Pn** | **01 43 59.4** | **+1.4** |
| **OUENC** | **Ouen Island, N** | **20.55** | **246** | P | | **P** | **01 45 17.0** | **-1.1** |
| OUENC | | | | IAmb | | IAmb | 01 45 23.7 | |
| | comp=Z,59nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.80** | **247** | LR | | LR | 01 51 58.0 | |
| | comp=Z,1um,20.9s,baz=102,slow=34 | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.80** | **247** | P | | **P** | **01 45 20.5** | **-0.4** |
| DZM | | | | IAmb | | IAmb | 01 45 26.6 | |
| | comp=Z,68nm,1.1s | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.78** | **328** | T | | T | 02 29 10.1 | |
| | baz=148,slow=76,SNR=25 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.79** | **328** | T | | T | 02 29 02.4 | |
| | baz=148,slow=76,SNR=30 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.80** | **328** | T | | T | 02 29 11.5 | |
| | baz=148,slow=76,SNR=30 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.71** | **329** | T | | T | 02 30 12.1 | |
| | baz=150,slow=76,SNR=18 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.72** | **329** | T | | T | 02 30 15.8 | |
| | baz=150,slow=76,SNR=33 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.73** | **329** | T | | T | 02 30 10.9 | |
| | baz=150,slow=76,SNR=21 | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.40** | **256** | P | | P | 01 49 30.8 | -6.0 |
| | comp=Z,8.5nm,0.7s,baz=90,slow=7.2,SNR=23 | | | | | | | |
| **AS31** | **Alice Springs** | **50.69** | **252** | P | | P | 01 49 32.5 | -6.5 |
| AS31 | | | | IAmb | | IAmb | 01 49 33.6 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **50.69** | **252** | P | | P | 01 49 32.7 | -6.3 |
| | comp=Z,41nm,0.7s,baz=86,slow=8.2,SNR=43 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.86** | **319** | P | | **P** | **01 51 41.9** | **-1.8** |
| | comp=Z,1.9nm,0.6s,baz=152,slow=4.4,SNR=4.5 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.86** | **319** | IAmb | | IAmb | 01 51 43.5 | |
| | comp=Z,6.5nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.86** | **319** | P | | **P** | **01 51 41.6** | **-2.1** |
| **PETK** | **Petropavlovsk-** | **72.30** | **342** | P | | **P** | **01 52 04.0** | **-0.3** |
| | comp=Z,8.1nm,0.8s,baz=123,slow=10,SNR=7.2 | | | | | | | |
| **QSPA** | **South Pole Qui** | **75.14** | **180** | P | | **P** | **01 52 20.4** | **-0.6** |
| QSPA | | | | IAmb | | IAmb | 01 52 25.2 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **WRH** | **Wood River Hil** | **81.39** | **11** | P | | **P** | **01 52 55.7** | **+0.5** |
| WRH | | | | IAmb | | IAmb | 01 52 58.0 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.60** | **11** | P | | **P** | **01 52 57.2** | **+0.8** |
| CCB | | | | IAmb | | IAmb | 01 53 05.5 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **PD31** | **Pinedale Array** | **81.60** | **42

| | | | | | | |
|---|---|---|---|---|---|---|
| **MDT** | **Midelt** | **2.80** | **195** | P | **Pn** | **01 46 27.6 +1.4** |
| MDT | | | | S | **Sn** | **01 46 59.7 -0.2** |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | *e*Pn | **Pn** | **01 46 39.1 +0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **01 47 21.9 -0.1** |
| PVAQ | | | | A | A | 01 47 29.3 |
| | 4.3nm,0.8s | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | P | **Pn** | **01 46 38.3 -0.2** |
| PVAQ | | | | S | **Sn** | **01 47 21.1 -0.9** |
| **PCVE** | **Castro Verde** | **4.04** | **303** | *e*Pn | **Pn** | **01 46 43.5 +0.4** |
| PCVE | | | | A | A | 01 47 33.1 |
| | 2.8nm,0.3s | | | | | |
| **MESJ** | **Messejana** | **4.27** | **304** | *e*P | **Pn** | **01 46 46.7 +0.5** |
| **MESJ** | **Messejana** | **4.27** | **304** | *e*Pn | **Pn** | **01 46 46.9 +0.7** |
| MESJ | | | | *e*Sn | **Sn** | **01 47 35.8 -0.1** |
| MESJ | | | | A | A | 01 47 40.4 |
| | 4.2nm,0.4s | | | | | |
| **MORF** | **Marmelete** | **4.33** | **296** | *e*P | **Pn** | **01 46 47.7 +0.6** |
| MORF | | | | *e*S | **Sn** | **01 47 35.0 -2.6** |
| MORF | | | | IAML | | 01 47 38.9 |
| | comp=E,9.9nm,0.4s | | | | | |
| **MORF** | **Marmelete** | **4.33** | **296** | *e*Pn | **Pn** | **01 46 47.9 +0.7** |
| MORF | | | | *e*Sn | **Sn** | **01 47 37.3 -0.3** |
| MORF | | | | A | A | 01 47 47.2 |
| | comp=E,3.4nm,1.0s | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **293** | *e*Pn | **Pn** | **01 46 49.7 +1.6** |
| PFVI | | | | *e*Sn | **Sn** | **01 47 37.5 -1.7** |
| **PTEO** | **Sao Teotonio** | **4.48** | **298** | *e*Pn | **Pn** | **01 46 50.7 +1.5** |
| PTEO | | | | *e*Sn | **Sn** | **01 47 40.7 -0.5** |
| **EVO** | **Evora** | **4.54** | **313** | *e*Pn | **Pn** | **01 46 50.8 +0.8** |
| **PNCL** | **Nicolau / Gran** | **4.62** | **305** | *e*Pn | **Pn** | **01 46 51.3 +0.2** |
| PNCL | | | | *e*Sn | **Sn** | **01 47 43.6 -1.0** |
| PNCL | | | | A | A | 01 47 48.9 |
| | comp=E,1.6nm,0.4s | | | | | |
| **PMRV** | **Marv??o** | **4.85** | **324** | *e*Pn | **Pn** | **01 46 56.2 +1.9** |
| **PMTG** | **Montargil** | **5.02** | **316** | *e*Pn | **Pn** | **01 46 57.8 +1.2** |
| **PACT** | **Alcochete** | **5.19** | **310** | *e*Pn | **Pn** | **01 47 00.4 +1.5** |
| **PCBR** | **Castelo Branco** | **5.22** | **327** | *e*Pn | **Pn** | **01 47 01.0 +1.7** |
| **OUK** | **Oukaimeden** | **5.52** | **220** | P | **Pn** | **01 47 03.2 -0.6** |
| **PSBE** | **So Bento** | **5.65** | **316** | *e*Pn | **Pn** | **01 47 06.9 +1.7** |
| **MVO** | **Moncorvo** | **6.19** | **336** | *e*Pn | **Pn** | **01 47 15.4 +2.8** |

**KRSC 06 02:23:08.9±2.0, 50°80'N×158°12'E, *h*82$_{km}$±28$_{km}$, ML3.6, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **1.01** | **358** | *e*P | Pn | 02 23 29.9 | +1.8 |
| KDTR | | | | *e*S | Sn | 02 23 44.1 | +1.6 |
| **PAU** | **Pauzhetka** | **1.06** | **310** | *e*P | Pn | 02 23 30.7 | +1.9 |
| PAU | | | | *e*S | Sn | 02 23 45.1 | +1.5 |
| **SKR** | **Severo-Kuril's** | **1.28** | **266** | *e*P | Pn | 02 23 32.1 | +0.7 |
| SKR | | | | *e*S | Sn | 02 23 48.1 | -0.2 |
| **RUS** | **Russkaya** | **1.66** | **8** | *e*P | Pn | 02 23 38.0 | +1.8 |
| RUS | | | | *e*S | Sn | 02 23 58.3 | +1.3 |
| **MTVR** | **Mutnovka** | **1.69** | **1** | *e*P | Pn | 02 23 39.3 | +2.5 |
| MTVR | | | | *e*S | Sn | 02 23 59.9 | +1.9 |
| **GRL** | **Gorelyy** | **1.76** | **359** | *e*P | Pn | 02 23 40.6 | +2.9 |
| GRL | | | | *e*S | Sn | 02 24 02.3 | +2.7 |
| **KRMR** | **Karymshinskiy** | **2.04** | **0** | *e*P | Pn | 02 23 44.3 | +3.1 |
| **PET** | **Petropavlovsk** | **2.25** | **8** | *e*P | Pn | 02 23 46.7 | +2.6 |
| PET | | | | *e*S | Sn | 02 24 12.8 | +1.7 |
| **DALK** | **Dalny** | **2.27** | **10** | *e*P | Pn | 02 23 46.9 | +2.5 |
| DALK | | | | *e*S | Sn | 02 24 13.5 | +2.0 |
| **UGLR** | **Uglovaya** | **2.45** | **10** | *e*P | Pn | 02 23 49.8 | +2.8 |
| **NLC** | **Nalytchevo** | **2.49** | **17** | *e*S | Sn | 02 24 15.5 | -1.4 |
| **AVH** | **Avacha** | **2.50** | **9** | *e*P | Pn | 02 23 50.9 | +3.4 |
| AVH | | | | *e*S | Sn | 02 24 20.4 | +3.2 |
| **SMAR** | **Somma** | **2.50** | **9** | *e*P | Pn | 02 23 50.4 | +2.7 |
| **KOK** | **Koryaka** | **2.52** | **7** | *e*P | Pn | 02 23 51.4 | +3.6 |
| KOK | | | | *e*S | Sn | 02 24 20.1 | +2.5 |
| **SDLR** | **Sedlovina** | **2.53** | **10** | *e*P | Pn | 02 23 50.5 | +2.5 |
| **KRER** | **Koryakskii** | **2.54** | **9** | *e*P | Pn | 02 23 51.3 | +3.1 |
| KRER | | | | *e*S | Sn | 02 24 20.9 | +2.6 |
| **SPN** | **Mys Shipunski** | **2.59** | **26** | *e*P | Pn | 02 23 50.9 | +2.3 |
| SPN | | | | *e*S | Sn | 02 24 19.9 | +0.8 |
| **GNL** | **Ganaly** | **2.90** | **358** | *e*P | Pn | 02 23 56.3 | +3.3 |
| **MKZ** | **Mys Kozlova** | **4.36** | **29** | *e*P | Pn | 02 24 14.4 | +1.8 |
| MKZ | | | | *e*S | Sn | 02 25 00.8 | -1.2 |
| **KBTR** | **Krutoberegovo** | **6.10** | **26** | *e*P | Pn | 02 24 38.4 | +2.1 |

*IDC **06** 02:28:05.1±1.5, 1°.99N×96°.53E, h0$_{km}$, mb4.1/7, mb1 4.2/8, mb1mx3.7/44, mbtmp4.1/8, ML4.6/1, MS4.1/2, Ms1 4.1/2, ms1mx3.0/85, Error ellipse: s-maj=45.7km s-min=20.4km az=51.0*
*DJA **06** 02:28:09.5±1.5, 2°.5×9°.7E±2°.6, h38$_{km}$±38$_{km}$, M3.6/4, MLv3.6/4*
*NEIC **06** 02:28:11.7±1.1, 2°.22N±0°.06×96°.81E±0°.09, h34$_{km}$±7$_{km}$, mb4.4/11, Error ellipse: s-maj=13.6km s-min=8.1km az=67.0*

**ISC 06 02:28:09.4±0.8, 2°.05N±0°.07×96°.62E±0°.07, h28$_{km}$, n37, σ0$^{s}$78/34, mb4.3/18, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **0.46** | **321** | P | **Pn** | **02 28 20.5** | **+0.3** |
| SNSI | | | | S | **Sn** | **02 28 28.9** | **+1.4** |
| **GSI** | **Gunungsitoli** | **1.21** | **128** | P | **Pn** | **02 28 30.8** | **+0.3** |
| **GSI** | **Gunungsitoli** | **1.21** | **128** | Pn | **Pn** | **02 28 30.1** | **-0.4** |
| **KCSI** | **Kotacane, Aceh** | **1.86** | **38** | P | **Pn** | **02 28 40.2** | **+0.7** |
| KCSI | | | | S | **Sn** | **02 29 03.9** | **+1.8** |
| **RPSI** | **Rantau Prapat** | **2.39** | **74** | | **Pn** | **02 28 46.8** | **+0.1** |
| **PSI** | **Prapat** | **2.42** | **72** | Pn | **Pn** | **02 28 46.8** | **-0.4** |
| | 0.8nm,0.3s,baz=243,slow=12,SNR=6.0 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **3.18** | **6** | Pn | **Pn** | **02 28 56.4** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **16.47** | **8** | Pn | **P** | **02 32 00.1** | **-1.0** |
| | 0.9nm,0.3s,baz=198,slow=12,SNR=17 | | | | | | |
| **SHL** | **Shillong** | **23.82** | **349** | P | **P** | **02 33 19.1** | **-1.4** |
| SHL | | | | IAmb | IAmb | 02 33 36.2 | |
| | comp=Z,12nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **24.81** | **11** | P | **P** | **02 33 29.1** | **-0.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.92** | **248** | T | T | 03 00 30.3 | |
| | baz=69,slow=75,SNR=152 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.93** | **248** | T | T | 03 00 29.8 | |
| | baz=69,slow=75,SNR=262 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.94** | **248** | T | T | 03 00 30.6 | |
| | baz=69,slow=75,SNR=83 | | | | | | |
| **LZH** | **Lanzhou** | **34.52** | **10** | *e*P | **P** | **02 34 54.1** | **-1.5** |
| LZH | | | | pP | pP | 02 34 58.8 | -5.1 |
| LZH | | | | sP | sP | 02 35 01.4 | -5.8 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **GTA** | **Gaotai** | **37.30** | **4** | *e*P | **P** | **02 35 18.7** | **-0.6** |
| GTA | | | | pP | pP | 02 35 24.0 | -3.6 |
| GTA | | | | sP | sP | 02 35 27.6 | -3.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **JOW** | **Kunigami** | **39.10** | **48** | LR | LR | 02 50 38.3 | |
| | comp=Z,111nm,20.5s,baz=96,slow=34 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **40.92** | **17** | *e*P | **P** | **02 35 49.2** | **-0.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,230nm,5.8s | | | | | | |
| **KSH** | **Kashi** | **41.77** | **336** | P | **P** | **02 35 56.1** | **-0.4** |
| KSH | | | | pP | sP | 02 36 06.4 | -1.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **WMQ** | **Urumqi** | **42.35** | **350** | *e*P | **P** | **02 36 02.4** | **+1.3** |
| **WRA** | **Warramunga Arr** | **42.98** | **122** | P | **P** | **02 36 06.3** | **-0.2** |
| | comp=Z,0.6nm,0.7s,baz=300,slow=9.2,SNR=4.9 | | | | | | |
| **DRK** | **Karamyk** | **43.57** | **332** | P | **P** | **02 36 11.5** | **+0.1** |
| **GAR** | **Garm** | **43.92** | **330** | P | **P** | **02 36 14.9** | **+0.9** |
| GAR | | | | IAmb | IAmb | 02 36 18.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.37** | **127** | P | **P** | **02 36 18.3** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=296,slow=6.7,SNR=4.9 | | | | | | |
| **MK31** | **Makanchi Array** | **46.29** | **346** | P | **P** | **02 36 32.2** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 02 36 34.0 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.29** | **346** | P | **P** | **02 36 32.5** | **-0.1** |
| | comp=Z,4.4nm,0.7s,baz=162,slow=7.6,SNR=47 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.29** | **346** | P | **P** | **02 36 32.7** | **+0.1** |
| **MAKZ** | **Makanchi** | **46.37** | **346** | P | **P** | **02 36 33.2** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 02 36 34.5 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **46.39** | **9** | P | **P** | **02 36 33.9** | **+0.4** |
| | comp=Z,1.8nm,0.8s,baz=188,slow=8.6,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **46.39** | **9** | P | **P** | **02 36 32.5** | **-0.9** |
| **KKAR** | **Karatay Array** | **47.05** | **334** | P | **P** | **02 36 39.1** | **+0.5** |
| **ZAA0** | **Zalesovo Array** | **52.64** | **351** | P | **P** | **02 37 20.3** | **-0.6** |
| ZAA0 | | | | IAmb | IAmb | 02 37 21.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.64** | **351** | P | **P** | **02 37 20.8** | **0.0** |
| | comp=Z,3.8nm,0.6s,baz=178,slow=7.2,SNR=22 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.64** | **351** | P | **P** | **02 37 20.6** | **-0.3** |
| **ABKAR** | **Akbulak array** | **56.50** | **332** | P | **P** | **02 37 48.8** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 02 37 54.5 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **78.98** | **333** | P | **P** | **02 40 10.5** | **+0.1** |
| | comp=Z,2.7nm,1.0s,baz=73,slow=9.0,SNR=3.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.55** | **340** | P | **P** | **02 40 25.1** | **+0.9** |
| | comp=Z,4.8nm,1.0s,baz=72,slow=5.8,SNR=3.9 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **93.89** | **326** | LR | LR | 03 29 54.2 | |
| | comp=Z,178nm,18.6s,baz=183,slow=40 | | | | | | |

*IDC **06** 02:33:46.4±9.3, 30°.76S×179°.64W, h338$_{km}$±89$_{km}$, mb2.7/2, mb1 3.1/3, mb1mx2.6/26, mbtmp3.7/3, Error ellipse: s-maj=98.0km s-min=37.7km az=18.0*

**ISC 06 02:33:48.3±0.9, 30°.85S±0°.08×179°.8W±0°.2, h350$_{km}$, n43, σ1$^{s}$50/57, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **2.30** | **47** | P | Pn | 02 34 43.9 | +2.0 |
| GLKZ | | | | S | **S** | **02 35 25.6** | **+0.8** |
| **RIZ** | **Raoul Island** | **2.30** | **47** | P | Pn | 02 34 44.5 | +2.6 |
| RIZ | | | | S | **S** | **02 35 27.5** | **+2.6** |
| **MXZ** | **Matakaoa Point** | **6.87** | **192** | P | **Pn** | **02 35 31.0** | **+2.0** |
| MXZ | | | | S | **S** | **02 36 49.6** | **-1.3** |
| **WMGZ** | **Waiomatatini S** | **7.10** | **191** | P | **Pn** | **02 35 34.6** | **+2.9** |
| WMGZ | | | | S | **S** | **02 36 54.7** | **-1.2** |
| **HAZ** | **Te Kaha** | **7.16** | **195** | P | **Pn** | **02 35 33.9** | **+1.4** |
| HAZ | | | | S | **S** | **02 36 57.1** | **-0.1** |
| **PKGZ** | **Pakihiroa** | **7.23** | **193** | P | **Pn** | **02 35 35.3** | **+2.0** |
| PKGZ | | | | S | **S** | **02 36 57.9** | **-0.8** |
| **PUZ** | **Puketiti** | **7.37** | **192** | P | **Pn** | **02 35 37.3** | **+2.3** |
| PUZ | | | | S | **S** | **02 36 59.9** | **-1.9** |
| **RUGZ** | **Raukumara Rang** | **7.39** | **195** | P | **Pn** | **02 35 36.9** | **+1.7** |
| RUGZ | | | | S | **S** | **02 37 01.0** | **-1.3** |
| **TWGZ** | **Tauwhareparae** | **7.53** | **193** | P | **Pn** | **02 35 39.8** | **+3.0** |
| TWGZ | | | | S | **S** | **02 37 06.0** | **+0.8** |
| **OPRZ** | **Ohinepanea** | **7.59** | **202** | P | Pn | 02 35 43.4 | +6.0 |
| **MWZ** | **Matawai** | **7.77** | **195** | P | **Pn** | **02 35 39.9** | **+0.2** |
| MWZ | | | | S | **S** | **02 37 08.4** | **-2.1** |
| **TKGZ** | **Te Karaka** | **7.81** | **193** | P | **Pn** | **02 35 39.2** | **-0.8** |
| TKGZ | | | | S | **S** | **02 37 11.3** | **+0.2** |
| **URZ** | **Urewera** | **7.81** | **198** | P | **Pn** | **02 35 39.7** | **-0.3** |
| | 3.6nm,0.3s,baz=272,slow=4.9,SNR=25 | | | | | | |
| URZ | | | | S | **S** | **02 37 11.8** | **+0.8** |
| | 8.2nm,0.3s,baz=212,slow=17,SNR=6.2 | | | | | | |
| **URZ** | **Urewera** | **7.81** | **198** | P | **Pn** | **02 35 39.7** | **-0.3** |
| URZ | | | | S | **S** | **02 37 11.5** | **+0.5** |
| **TOZ** | **Tahuroa Road** | **7.87** | **208** | P | Pn | 02 35 47.3 | +6.6 |
| **RAGZ** | **Rawiri** | **7.96** | **196** | P | **P** | **02 35 45.6** | **+3.7** |
| **RIGZ** | **Rimuhau** | **8.08** | **193** | P | **P** | **02 35 44.8** | **-1.5** |
| RIGZ | | | | S | **S** | **02 37 15.2** | **-1.9** |
| **MUGZ** | **Murupara** | **8.10** | **199** | P | **P** | **02 35 46.2** | **-0.4** |
| MUGZ | | | | S | **S** | **02 37 17.8** | **+0.2** |
| **HRRZ** | **Handcock Road** | **8.17** | **202** | P | **P** | **02 35 49.0** | **+1.7** |
| **RTZ** | **Ruatahuna** | **8.18** | **198** | P | **P** | **02 35 45.8** | **-1.6** |
| RTZ | | | | S | **S** | **02 37 19.1** | **-0.1** |
| **SNGZ** | **Shannon Statio** | **8.24** | **196** | P | **Pn** | **02 35 45.4** | **+0.2** |
| SNGZ | | | | S | **S** | **02 37 21.0** | **+0.3** |
| **PRGZ** | **Paritu Road** | **8.27** | **192** | P | **P** | **02 35 48.5** | **+0.1** |
| **TLZ** | **Tolley Road** | **8.38** | **206** | P | **P** | **02 35 52.6** | **+3.0** |
| **KNZ** | **Kokohu** | **8.40** | **193** | P | **Pn** | **02 35 47.8** | **+0.7** |
| **MTHZ** | **Maungataniwha** | **8.44** | **198** | P | **P** | **02 35 49.5** | **-0.8** |
| MTHZ | | | | S | **S** | **02 37 23.0** | **-1.9** |
| **MHGZ** | **Mahia Peninsul** | **8.49** | **192** | P | **Pn** | **02 35 47.2** | **-0.8** |
| **NMHZ** | **Naumai** | **8.68** | **198** | P | **P** | **02 35 54.9** | **+2.0** |
| **ARHZ** | **Aropaoanui** | **8.78** | **196** | P | **P** | **02 35 52.6** | **-1.5** |
| **BKZ** | **Black Stump Fm** | **8.82** | **199** | P | **P** | **02 35 53.3** | **-1.3** |
| **TMVZ** | **Te Maari** | **9.02** | **203** | P | **P** | **02 35 58.2** | **+1.4** |
| **WTVZ** | **West Tongariro** | **9.06** | **203** | P | **P** | **02 35 57.3** | **0.0** |
| **TWVZ** | **Taurewa** | **9.07** | **204** | P | **P** | **02 35 59.2** | **+1.8** |
| **OTVZ** | **Oturere** | **9.07** | **203** | P | **Pn** | **02 35 55.5** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **9.08** | **199** | P | **Pn** | **02 35 55.9** | **+0.6** |
| **NGZ** | **Ngauruhoe** | **9.11** | **203** | P | **P** | **02 35 58.7** | **+0.8** |
| **MOVZ** | **Moawhango** | **9.27** | **202** | P | **P** | **02 35 58.5** | **-1.0** |
| **KRHZ** | **Kereru** | **9.30** | **198** | P | **P** | **02 35 58.9** | **-1.0** |
| **ASAR** | **Alice Springs** | **41.50** | **268** | P | **P** | **02 41 02.9** | **+0.2** |
| | 0.1nm,0.4s,baz=108,slow=7.8,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.53** | **274** | P | **P** | **02 41 11.4** | **+0.4** |
| | 0.4nm,0.4s,baz=111,slow=8.0,SNR=10.0 | | | | | | |
| **KBZ** | **Khabaz** | **144.03** | **303** | PKP | **PKPdf** | **02 52 41.7** | **-0.6** |
| | 0.6nm,0.3s,baz=188,slow=3.6,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **145.00** | **339** | PKP | **PKPab** | **02 52 43.2** | **-0.9** |
| | 4.3nm,0.7s,baz=61,slow=4.0,SNR=26 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.67** | **321** | PKPbc | **PKPbc** | **02 52 56.9** | **-2.0** |
| | 0.2nm,0.3s,baz=60,slow=2.6,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.40** | **297** | PKPbc | **PKiKP** | **02 53 00.9** | **-0.6** |
| | 0.5nm,0.5s,baz=142,slow=4.0,SNR=5.3 | | | | | | |

*CNRM **06** 02:34:40.1, 35°.48N×3°.48W, h15$_{km}$, ml2.5*

**ISC 06 02:34:38.8±1.3, 35°.47N±0°.08×3°.48W±0°.04, h14$_{km}$, n8, σ1$^{s}$25/12, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.45** | **236** | P | **Pg** | **02 34 48.3** | **+0.5** |
| PALE | | | | S | **Sb** | **02 34 55.5** | **+0.3** |
| **CHAS** | **Isla Isabel II** | **0.91** | **108** | P | **Pb** | **02 34 56.0** | **-0.3** |
| CHAS | | | | S | **Sb** | **02 35 08.5** | **+0.3** |
| **AKLM** | **AKL** | **1.01** | **198** | P | **Pn** | **02 34 59.6** | **+0.9** |
| **JBK** | **JBK** | **1.36** | **146** | P | **Pg** | **02 35 05.3** | **+0.3** |
| JBK | | | | S | **Sn** | **02 35 20.9** | **-0.6** |
| **LCRM** | **LCR** | **2.11** | **213** | P | **Pb** | **02 35 17.2** | **+0.2** |
| LCRM | | | | S | **Sb** | **02 35 44.6** | **+1.5** |
| **MD31** | **MD31** | **2.81** | **203** | P | **Pb** | **02 35 26.4** | **-2.3** |
| **MDT** | **Midelt** | **2.81** | **200** | P | **Pb** | **02 35 26.7** | **-2.1** |
| **PVAQ** | **Vaqueiros** | **3.92** | **301** | P | **Pn** | **02 35 38.6** | **0.0** |

*SNET **06** 02:49:53.9±1.1, 13°.98N×89°.90W, h6$_{km}$±3$_{km}$, ML3.2*
*GCG **06** 02:49:55.9±0.3, 14°.12N×89°.99W, h1$_{km}$±2$_{km}$, MD3.4*

**ISC 06 02:49:53.5±1.0, 13°.98N±0°.05×89°.90W±0°.04, h16$_{km}$±6$_{km}$, n25, σ0$^{s}$69/33, 5C, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLOZ** | **Alcaldia de Sa** | **0.12** | **69** | ↑*i*P | **Pg** | **02 49 57.5** | **+0.3** |
| SLOZ | | | | *e*S | **Sg** | **02 49 59.8** | **+0.1** |
| SLOZ | | | | IAML | | 02 50 04.5 | |
| | comp=Z,6μm,0.6s | | | | | | |
| **NUBE** | **Las Nubes** | **0.14** | **123** | ↑*i*P | **Pg** | **02 49 57.4** | **-0.1** |
| NUBE | | | | *e*S | **Sg** | **02 49 59.9** | **-0.3** |
| NUBE | | | | IAML | | 02 50 00.9 | |
| | comp=Z,11μm,0.4s | | | | | | |
| **RTR** | **El Retiro** | **0.26** | **108** | ↑*e*P | **Pb** | **02 50 00.0** | **0.0** |
| **SBLS** | **San Blas** | **0.31** | **117** | *e*P | **Pb** | **02 50 00.7** | **-0.1** |
| **SNJE** | **San Jose** | **0.31** | **111** | ↑*i*P | **Pb** | **02 50 00.8** | **0.0** |
| **CEVE** | **Cerro Verde** | **0.31** | **119** | *e*P | **Pb** | **02 50 00.5** | **-0.4** |
| CEVE | | | | *e*S | **Sb** | **02 50 06.5** | **+0.6** |
| CEVE | | | | IAML | | 02 50 07.2 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **CEDA** | **San Andres** | **0.52** | **110** | *e*P | **Pb** | **02 50 04.2** | **-0.2** |
| CEDA | | | | *e*S | **Sb** | **02 50 13.0** | **+1.2** |
| **TACO** | **Tacachico** | **0.53** | **91** | ↑*i*P | **Pb** | **02 50 04.5** | **-0.1** |
| **JAYA** | **Jayaque - finc** | **0.55** | **126** | *e*P | **Pb** | **02 50 04.3** | **-0.6** |
| JAYA | | | | *e*S | **Sb** | **02 50 12.8** | **+0.2** |
| JAYA | | | | IAML | | 02 50 16.9 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **BOQS** | **Boqueron** | **0.65** | **112** | *e*P | **Pb** | **02 50 07.0** | **+0.3** |
| **MTO3** | **Montecristo** | **0.67** | **52** | *e*P | **Pn** | **02 50 07.1** | **-1.5** |
| **UEES** | **Universidad Ev** | **0.70** | **112** | *e*P | **Pb** | **02 50 07.2** | **-0.2** |
| **NBG** | **Las Nubes** | **0.74** | **325** | *e*P | **Pn** | **02 50 09.1** | **-0.6** |
| **ESQI** | **Esquipulas** | **0.79** | **43** | *e*P | **Pn** | **02 50 09.4** | **-0.8** |
| ESQI | | | | *e*S | **Sn** | **02 50 20.8** | **-0.9** |
| **PCG** | **Pacaya** | **0.80** | **301** | *e*P | **Pb** | **02 50 08.4** | **-0.8** |
| **LFU** | **La Fuente** | **0.80** | **107** | *e*P | **Pn** | **02 50 09.0** | **-0.5** |
| **LFRS** | **El Faro** | **0.89** | **113** | *e*P | **Pn** | **02 50 11.3** | **-0.2** |
| LFRS | | | | *e*S | **Sn** | **02 50 24.8** | **+0.6** |
| **PAVA** | **Las Pavas** | **0.97** | **106** | *e*P | **Pn** | **02 50 12.5** | **-0.2** |
| **FUG** | **Fuego 3** | **1.02** | **297** | *e*P | **Pn** | **02 50 13.9** | **+0.5** |
| FUG | | | | *e*S | **Sn** | **02 50 27.8** | **+0.3** |
| **COEG** | **Centro de Oper** | **1.06** | **110** | *e*P | **Pn** | **02 50 14.0** | **+0.2** |
| **MRL** | **Marmol** | **1.11** | **11** | *e*P | **Pn** | **02 50 15.9** | **+1.1** |
| MRL | | | | *e*S | **Sn** | **02 50 31.5** | **+1.6** |
| **SCLA** | **Alcaldia de Sa** | **1.17** | **104** | *e*P | **Pn** | **02 50 15.9** | **+0.6** |
| **TECO** | **Alcaldia de Te** | **1.18** | **112** | *e*P | **Pn** | **02 50 15.7** | **+0.3** |
| **COEB** | **Comit de Eme** | **1.42** | **110** | *e*P | **Pg** | **02 50 19.8** | **-1.0** |
| **LCND** | **La Caada** | **2.07** | **109** | IAML | | 02 51 07.9 | |
| | comp=Z,210nm,0.4s | | | | | | |

*IDC **06** 03:12:44.7±1.2, 3°.82N×126°.96E, h0$_{km}$, mb3.9/7, mb1 4.1/7, mb1mx3.6/44, mbtmp3.9/7, MS3.6/2, Ms1 3.6/2, ms1mx2.7/76, Error ellipse: s-maj=108.3km s-min=17.9km az=72.0*
*NEIC **06** 03:12:47.1±0.8, 3°.83N±0°.08×126°.96E±0°.09, h10$_{km}$±1$_{km}$, mb4.3/10, Error ellipse: s-maj=18.2km s-min=9.4km az=55.0*

**ISC 06 03:12:46.6±0.8, 3°.76N±0°.06×126°.9E±0°.1, h10$_{km}$, n20, σ1$^{s}$09/18, mb4.0/13, 1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **3.01** | **171** | Pn | **Pb** | **03 13 39.2** | **-1.1** |
| **DAV** | **Davao City (W)** | **3.54** | **339** | Pn | **Pn** | **03 13 44.2** | **+2.6** |
| **KCP** | **Kidapawan** | **3.69** | **331** | ↓*e*P | **Pb** | **03 13 50.0** | **-2.0** |
| **TOLI2** | **Tolitoli** | **6.64** | **247** | Pn | **Pn** | **03 14 25.8** | **+1.5** |
| **BATI** | **Baumata** | **14.24** | **193** | LR | LR | 03 21 55.6 | |
| | comp=Z,121nm,19.6s,baz=267,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.75** | **183** | P | **P** | **03 17 38.8** | **+0.3** |
| | 1.2nm,0.5s,baz=22,slow=11,SNR=8.5 | | | | | | |
| **WB0** | **Warramunga Arr** | **24.52** | **163** | P | **P** | **03 18 06.7** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 03 18 20.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.67** | **163** | P | **P** | **03 18 07.8** | **0.0** |
| | comp=Z,2.2nm,0.6s,baz=342,slow=10,SNR=22 | | | | | | |
| **WB2** | **Warramunga Arr** | **24.67** | **163** | P | **P** | **03 18 07.6** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 03 18 13.6 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.74** | **163** | P | **P** | **03 18 08.6** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 03 18 37.2 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **28.11** | **166** | P | **P** | **03 18 39.1** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=347,slow=7.6,SNR=3.9 | | | | | | |
| **BJT** | **Baijiatuau** | **37.37** | **346** | P | **P** | **03 20 00.5** | **+1.0** |
| BJT | | | | IAmb | IAmb | 03 20 05.6 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.10** | **160** | P | **P** | **03 20 05.4** | **-0.4** |
| | comp=Z,1.1nm,0.4s,baz=340,slow=8.9,SNR=4.9 | | | | | | |
| **SHL** | **Shillong** | **39.98** | **306** | P | **P** | **03 20 21.9** | **0.0** |
| **SONM** | **Songino Array** | **47.32** | **341** | P | **P** | **03 21 19.5** | **-1.1** |
| | comp=Z,0.4nm,0.7s,baz=188,slow=8.7,SNR=3.2 | | | | | | |
| **MK31** | **Makanchi Array** | **57.62** | **325** | P | **P** | **03 22 36.0** | **-1.0** |
| MK31 | | | | IAmb | IAmb | 03 22 56.6 | |
| | comp=Z,2.5nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.62** | **325** | P | **P** | **03 22 36.5** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=118,slow=7.5,SNR=9.1 | | | | | | |
| **KURK** | **Kurchatov** | **61.80** | **327** | P | **P** | **03 23 05.2** | **-0.3** |
| KURK | | | | IAmb | IAmb | 03 23 32.9 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **OPO** | **Ambohidratompo** | **81.45** | **251** | LR | LR | 03 59 49.1 | |
| | comp=Z,60nm,18.5s,baz=214,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **90.47** | **340** | P | **P** | **03 25 48.5** | **+0.2** |
| | comp=Z,3.8nm,0.9s,baz=81,slow=7.5,SNR=4.9 | | | | | | |

*SFS **06** 03:33:42.0, 35°.40N×3°.80W, ML2.6, ALBORAN SUR*
*INMG **06** 03:33:43.9±1.3, 35°.35N×3°.78W, h21$_{km}$±14$_{km}$, ML2.3, Error ellipse: s-maj=10.4km s-min=4.1km az=158.0*
*CNRM **06** 03:33:47.2, 35°.33N×3°.63W, h30$_{km}$, ml2.5*

**ISC 06 03:33:42.7±1.5, 35°.51N±0°.03×3°.69W±0°.03, h19$_{km}$±4$_{km}$, n30, σ1$^{s}$64/50, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHEFC | | | | S | Sb | 03 59 53.2 | +6.3 |
| **EMAL** | **Malaga-Limoner** | **1.40** | **336** | P | Pn | 03 59 28.0 | -0.7 |
| EMAL | | | | S | Sn | 03 59 44.5 | -1.8 |
| **CEU** | **Ceuta** | **1.40** | **288** | P | Pn | 03 59 27.4 | -1.3 |
| CEU | | | | S | Sn | 03 59 42.1 | -4.3 |
| **JBK** | **JBK** | **1.49** | **140** | P | Pn | 03 59 30.1 | -0.1 |
| JBK | | | | S | Sb | 03 59 53.0 | +2.4 |
| **LCRM** | **LCR** | **2.02** | **208** | P | Pb | 03 59 42.0 | +1.1 |
| LCRM | | | | S | Sb | 04 00 04.3 | -1.3 |
| **MD31** | **MD31** | **2.74** | **198** | P | Pn | 03 59 48.1 | +0.8 |
| **MDT** | **Midelt** | **2.76** | **196** | P | Pn | 03 59 48.5 | +1.0 |
| **TDRA** | **Tendrara** | **2.81** | **149** | P | Pn | 03 59 48.7 | +0.3 |
| **CART** | **Cartagena** | **3.04** | **45** | P | Pn | 03 59 51.2 | -0.1 |
| CART | | | | S | Sn | 04 00 22.6 | -4.3 |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | *e*Pn | Pn | 04 00 00.8 | -0.2 |
| PVAQ | | | | *e*Sn | Sn | 04 00 42.5 | -1.7 |
| PVAQ | | | | A | A | 04 00 52.5 | |
| | 8.0nm,0.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | Pn | 04 00 00.6 | -0.3 |
| PVAQ | | | | S | Sn | 04 00 42.6 | -1.6 |
| **PCVE** | **Castro Verde** | **4.08** | **303** | *e*Pn | Pn | 04 00 05.3 | -0.3 |
| PCVE | | | | *e*Sn | Sn | 04 00 51.0 | -1.5 |
| PCVE | | | | A | A | 04 01 00.8 | |
| | 7.8nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*P | Pn | 04 00 09.1 | +0.3 |
| MESJ | | | | *e*S | Sn | 04 00 55.4 | -2.7 |
| MESJ | | | | IAML | | 04 01 05.0 | |
| | comp=N,7.8nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **304** | *e*Pn | Pn | 04 00 09.4 | +0.7 |
| MESJ | | | | *e*Sn | Sn | 04 00 57.1 | -1.1 |
| MESJ | | | | A | A | 04 01 05.0 | |
| | comp=N,4.8nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **296** | *e*Pn | Pn | 04 00 09.7 | +0.1 |
| MORF | | | | *e*Sn | Sn | 04 00 57.8 | -1.9 |
| MORF | | | | A | A | 04 01 06.4 | |
| | comp=N,4.1nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | *e*Pn | Pn | 04 00 11.1 | +0.7 |
| PFVI | | | | *e*Sn | Sn | 04 00 59.4 | -1.8 |
| PFVI | | | | A | A | 04 01 06.9 | |
| | comp=N,7.2nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | P | Pn | 04 00 10.0 | -0.5 |
| **PTEO** | **Sao Teotonio** | **4.52** | **299** | *e*Sn | Sn | 04 01 01.2 | -2.1 |
| PTEO | | | | A | A | 04 01 16.6 | |
| | comp=N,5.4nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.57** | **319** | P | Pn | 04 00 12.4 | 0.0 |
| **EVO** | **Evora** | **4.58** | **313** | *e*Pn | Pn | 04 00 13.2 | +0.7 |
| EVO | | | | *e*Sn | Sn | 04 01 03.4 | -1.6 |
| EVO | | | | A | A | 04 01 24.8 | |
| | comp=N,6.2nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **306** | *e*Pn | Pn | 04 00 13.5 | -0.1 |
| PNCL | | | | *e*Sn | Sn | 04 01 05.5 | -1.3 |
| PNCL | | | | A | A | 04 01 19.3 | |
| | comp=N,3.6nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **4.90** | **325** | *e*Pn | Pn | 04 00 17.7 | +0.8 |
| **PMTG** | **Montargil** | **5.07** | **316** | *e*Pn | Pn | 04 00 20.9 | +1.8 |
| PMTG | | | | *e*Sn | Sn | 04 01 15.1 | -1.7 |
| PMTG | | | | A | A | 04 01 25.5 | |
| | comp=N,3.2nm,0.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.27** | **327** | *e*Pn | Pn | 04 00 23.1 | +1.2 |
| **OUK** | **Oukaimeden** | **5.49** | **220** | P | Pn | 04 00 25.4 | +0.1 |
| **PSBE** | **So Bento** | **5.69** | **317** | *e*Pn | Pn | 04 00 28.8 | +1.0 |
| **MTE** | **Manteigas** | **5.76** | **330** | *e*Pn | Pn | 04 00 30.4 | +1.6 |
| **MVO** | **Moncorvo** | **6.24** | **336** | *e*Pn | Pn | 04 00 36.9 | +1.6 |
| **PBRG** | **Braganca** | **6.74** | **340** | *e*Pn | Pn | 04 00 44.0 | +1.8 |
| PBRG | | | | *e*Sn | Sn | 04 01 57.7 | -0.4 |

**NNC 06 04:23:54.7±3.1, 36°45N×80°91E, h0km, mb4.4, mpv4.2, 3C-1D, Error ellipse: s-maj=33.7km s-min=16.0km az=135.0, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOTS** | **Kotyrbulak** | **7.37** | **338** | P | Pn | 04 25 43.6 | -0.2 |
| | 1.7nm,0.2s | | | | | | |
| **KST** | **Kastek** | **7.60** | **331** | Lg | Lg | 04 27 19.6 | |
| | 2.5nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **7.84** | **331** | P | Pn | 04 25 51.1 | +0.9 |
| | 1.5nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **7.92** | **354** | P | Pn | 04 25 52.0 | +0.9 |
| | 7.7nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **8.10** | **344** | P | Pn | 04 25 54.2 | +0.6 |
| | 5.2nm,0.3s | | | | | | |
| **IUG** | **Iuzhnay** | **10.16** | **307** | P | Pn | 04 26 20.9 | -1.0 |
| | 55nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **10.38** | **4** | ⇑Pn | Pn | 04 26 24.3 | -0.5 |
| | 1.3nm,0.6s | | | | | | |
| MAKZ | | | | ⇑Sn | Sn | 04 28 22.4 | +0.7 |
| | 2.2nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **10.38** | **5** | ⇓Pn | Pn | 04 26 24.4 | -0.5 |
| | 0.4nm,0.3s,baz=184,slow=12,SNR=40 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 04 28 23.4 | +1.5 |
| | 0.8nm,0.5s,baz=187,slow=25,SNR=4.7 | | | | | | |

**IDC 06 04:28:33.9±10.0, 8°09S×153°00E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.3/32, mbtmp3.6/3, Error ellipse: s-maj=178.7km s-min=95.2km az=17.0, D'Entrecasteaux Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.58** | **235** | P | P | 04 33 25.2 | -0.1 |
| | 0.9nm,0.9s,baz=63,slow=11,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **23.98** | **228** | P | P | 04 33 50.2 | -0.2 |
| | 1.2nm,0.7s,baz=59,slow=10,SNR=9.5 | | | | | | |
| **STKA** | **Stephens Creek** | **25.95** | **203** | P | P | 04 34 08.3 | +0.2 |
| | 1.5nm,0.5s,baz=16,slow=13,SNR=5.2 | | | | | | |

**IDC 06 04:28:54.5±7.8, 3°52S×127°52E, h87km±88km, mb2.9/2, mb1 3.2/4, mb1mx2.9/36, mbtmp3.4/4, ML3.4/2, Error ellipse: s-maj=70.8km s-min=22.6km az=89.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.58** | **55** | P | Pn | 04 29 59.6 | -1.8 |
| | 4.7nm,0.3s,baz=210,slow=20,SNR=5.6 | | | | | | |
| SIJI | | | | S | Sn | 04 30 55.2 | +1.8 |
| | 2.1nm,0.3s,baz=234,slow=23,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.62** | **158** | P | P | 04 32 54.3 | 0.0 |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **20.95** | **163** | P | P | 04 33 30.9 | +0.4 |
| | 1.3nm,0.8s,baz=342,slow=11,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.98** | **327** | P | P | 04 39 18.7 | -0.1 |
| | 0.1nm,0.4s,baz=134,slow=8.3,SNR=1.6 | | | | | | |

*SFS **06** 04:44:16.0, 35°60N×3°60W, ML2.4, ALBORAN SUR*
*INMG **06** 04:44:17.7±1.1, 35°67N×3°65W, h5km, ML2.2, Error ellipse: s-maj=3.3km s-min=2.5km az=9.0*
*IGIL **06** 04:44:18.2, 35°66N×3°70W, h1km*
*CNRM **06** 04:44:20.3, 35°52N×4°46W, h6km, ml2.5*
**ISC 06 04:44:15.7±1.0, 35°71N±0°05×3°53W±0°05, h14km, n21, σ1§25/31, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.59** | **214** | P | Pn | 04 44 30.0 | +0.2 |
| **CHAS** | **Isla Isabel II** | **1.04** | **120** | P | Pb | 04 44 34.7 | -0.8 |
| CHAS | | | | S | Sb | 04 44 48.8 | -0.2 |
| **AKLM** | **AKL** | **1.23** | **193** | P | Pg | 04 44 39.4 | 0.0 |
| **EMAL** | **Malaga-Limoner** | **1.28** | **326** | P | Pn | 04 44 38.9 | -0.2 |
| EMAL | | | | S | Sb | 04 44 55.6 | -0.2 |
| **JBK** | **JBK** | **1.58** | **150** | P | Pn | 04 44 44.0 | +0.4 |
| **CHEFC** | **Chefchaouen** | **1.60** | **248** | P | Pb | 04 44 45.0 | -0.1 |
| **SFS** | **San Fernando** | **2.29** | **290** | P | Pn | 04 44 50.1 | -3.0 |
| **LCRM** | **LCR** | **2.30** | **209** | P | Pn | 04 44 55.0 | +1.6 |
| **MDT** | **Midelt** | **3.02** | **197** | P | Pn | 04 45 04.3 | +1.1 |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Pn | Pn | 04 45 14.6 | +1.2 |
| PVAQ | | | | *e*Sn | Sn | 04 45 56.5 | -1.1 |
| PVAQ | | | | A | A | 04 46 03.9 | |
| | 4.3nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | Pn | 04 45 14.1 | +0.7 |
| **PCVE** | **Castro Verde** | **4.10** | **299** | *e*Pn | Pn | 04 45 19.2 | +1.2 |
| PCVE | | | | *e*Sn | Sn | 04 46 04.5 | -1.2 |
| PCVE | | | | A | A | 04 46 07.3 | |
| | 4.4nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*P | Pn | 04 45 21.9 | +0.9 |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*Pn | Pn | 04 45 22.3 | +1.3 |
| MESJ | | | | *e*Sn | Sn | 04 46 11.1 | -0.1 |
| MESJ | | | | A | A | 04 46 13.3 | |
| | 2.6nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.42** | **293** | *e*Pn | Pn | 04 45 23.8 | +1.4 |
| MORF | | | | *e*Sn | Sn | 04 46 12.6 | -1.1 |
| MORF | | | | A | A | 04 46 19.1 | |
| | 2.1nm,0.6s | | | | | | |
| **EVO** | **Evora** | **4.56** | **309** | *e*Pn | Pn | 04 45 25.6 | +1.4 |
| EVO | | | | *e*Sn | Sn | 04 46 16.2 | -0.8 |
| EVO | | | | A | A | 04 46 17.9 | |
| | 3.1nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.56** | **295** | *e*Pn | Pn | 04 45 25.6 | +1.3 |
| PTEO | | | | *e*Sn | Sn | 04 46 16.7 | -0.4 |
| PTEO | | | | A | A | 04 46 21.1 | |
| | 6.3nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.67** | **302** | *e*Pn | Pn | 04 45 26.9 | +1.2 |
| PNCL | | | | *e*Sn | Sn | 04 46 19.3 | -0.4 |
| PNCL | | | | A | A | 04 46 21.0 | |
| | 2.4nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **322** | *e*Pn | Pn | 04 45 29.9 | +2.1 |
| PMRV | | | | *e*Sn | Sn | 04 46 23.0 | -0.4 |
| **PMTG** | **Montargil** | **5.02** | **313** | *e*Pn | Pn | 04 45 32.3 | +1.7 |
| **PSBE** | **So Bento** | **5.65** | **314** | *e*Pn | Pn | 04 45 41.5 | +2.3 |

*IDC **06** 04:51:31.9±0.6, 17°18S×174°81E, h0km, mb4.7/14, mb1 4.9/15, mb1mx4.7/27, mbtmp4.6/15, ML5.5/1, MS4.3/53, Ms1 4.3/53, ms1mx4.2/60, Error ellipse: s-maj=24.7km s-min=14.5km az=166.0*
*NOU **06** 04:51:34.3, 17°13S×174°99E, h0km, mb5.4/22, Fiji Islands Region*
*BJI **06** 04:51:34.0±0.0, 16°87S×174°97E, h10km, mb4.7/49, mB5.3/25, Ms4.9/15, Ms7 4.6/18*
*NEIC **06** 04:51:36.0±1.9, 17°27S±0°10×174°95E±0°06, h10km±1km, mb5.1/141, Error ellipse: s-maj=16.8km s-min=10.0km az=179.0*
*MOS **06** 04:51:37.1±1.8, 17°35S×174°82E, h36km, mb5.0/24, Error ellipse: s-maj=11.5km s-min=9.4km az=178.7*
*GCMT **06** 04:51:37.0±0.1, 16°87S±0°01×174°82E±0°01, h23km, MW5.3/135, Moment Tensor Solution. s84,c118; s135,c239; Duration: 1§1 Moment tensor: Scale 10^17 Nm; Mrr-0.08±.02; Mθθ-0.13±.02; Mϕϕ0.21±.02; Mrθ0.16±.03; Mθϕ1.00±.02; Mϕr-0.10±.03; Best double couple: Mo1.03000×10^17 NP1:ϕs356.00000°, δ81.00000°, λ-173.00000°. NP2:ϕs265.00000°, δ83.00000°, λ-9.00000°. Principal axes: T 1.0510, Plg1.0000°, Azm310.0000°; N -0.0410, Plg78.0000°, Azm46.0000°; P -1.0100, Plg11.0000°, Azm220.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 06 04:51:38.4±0.3, 17°30S±0°06×174°89E±0°05, h35km, n302, σ1§51/223, mb5.0/113, MS4.4/59, 18C-11D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.05** | **99** | Pn | Pn | 04 52 21.8 | -2.4 |
| | 25nm,0.3s,baz=266,slow=9.3,SNR=133 | | | | | | |
| MSVF | | | | Sn | Sn | 04 53 00.4 | +0.8 |
| | 30nm,0.3s,baz=331,slow=21,SNR=2.4 | | | | | | |
| MSVF | | | | LR | LR | 04 53 43.7 | |
| | comp=Z,15μm,20.4s,baz=267,slow=42 | | | | | | |
| **MSVF** | **Nonsavu** | **3.05** | **99** | Pn | Pn | 04 52 21.7 | -2.5 |
| **MSVF** | **Nonsavu** | **3.05** | **99** | P | Pn | 04 52 22.3 | -2.0 |
| **DGTI** | **Dogotuki** | **4.75** | **79** | P | Pn | 04 52 45.7 | -1.9 |
| **TAVE** | **Taveuni** | **5.02** | **84** | P | Pn | 04 52 49.5 | -1.8 |
| **LKBA** | **Tubou, Lakemba** | **6.08** | **100** | P | Pn | 04 53 04.8 | -1.0 |
| **RTV** | **Rentapao** | **6.18** | **264** | P | Pn | 04 53 07.7 | +0.5 |
| **DVP** | **Devils Point** | **6.41** | **265** | P | Pn | 04 53 11.1 | +0.8 |
| **SANVU** | **Saraoutou** | **7.60** | **283** | Pn | Pn | 04 53 26.2 | -0.5 |
| **SANVU** | **Saraoutou** | **7.60** | **283** | P | Pn | 04 53 26.7 | 0.0 |
| **MARNC** | **Mare, Loyalty** | **7.69** | **236** | Pn | Pn | 04 53 29.4 | +1.4 |
| **MARNC** | **Mare, Loyalty** | **7.69** | **236** | P | Pn | 04 53 29.7 | +1.7 |
| **LIFNC** | **LIFOU** | **8.02** | **243** | Pn | Pn | 04 53 32.3 | -0.1 |
| **LIFNC** | **LIFOU** | **8.02** | **243** | P | Pn | 04 53 33.0 | +0.6 |
| **PINNC** | **Pines Island,** | **8.77** | **232** | | Pn | 04 53 44.3 | +1.6 |
| **PINNC** | **Pines Island,** | **8.77** | **232** | P | Pn | 04 53 44.8 | +2.1 |
| **YATNC** | **Mamie plateau,** | **8.89** | **237** | P | Pn | 04 53 46.8 | +2.3 |
| **OUENC** | **Ouen Island, N** | **9.12** | **235** | Pn | Pn | 04 53 49.3 | +1.7 |
| **OUENC** | **Ouen Island, N** | **9.12** | **235** | P | Pn | 04 53 50.5 | +2.9 |
| **DZM** | **Mont Dzumac** | **9.26** | **238** | *e*Pn | Pn | 04 53 51.0 | +1.4 |
| | 616nm,1.5s | | | | | | |
| DZM | | | | *e*LR | LR | 04 56 02.8 | |
| | comp=Z,7μm,26.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **9.26** | **238** | Pn | Pn | 04 53 50.2 | +0.7 |
| | 1.9nm,0.3s,baz=70,slow=13,SNR=41 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.26** | **238** | Pn | Pn | 04 53 51.2 | +1.6 |
| **DZM** | **Mont Dzumac** | **9.26** | **238** | P | Pn | 04 53 52.2 | +2.6 |
| **ONTNC** | **Ouen Toro** | **9.37** | **237** | Pn | Pn | 04 53 52.9 | +2.0 |
| **ONTNC** | **Ouen Toro** | **9.37** | **237** | P | Pn | 04 53 53.6 | +2.6 |
| **NOUC** | **Port Laguerre** | **9.39** | **238** | P | Pn | 04 53 53.9 | +2.6 |
| **KOUNC** | **Koumac, New Ca** | **10.54** | **250** | P | Pn | 04 54 08.3 | +1.3 |
| **RAO** | **Raoul Island** | **13.61** | **152** | LR | LR | 04 59 05.1 | |
| | comp=Z,3μm,18.9s,baz=352,slow=33 | | | | | | |
| **HNR** | **Honiara** | **16.49** | **296** | LR | LR | 05 00 45.4 | |
| | comp=Z,861nm,19.8s,baz=134,slow=34 | | | | | | |
| **MXZ** | **Matakaoa Point** | **20.41** | **172** | P | Pn | 04 56 13.0 | -1.7 |
| MXZ | | | | IAmb | IAmb | 04 56 15.7 | |
| | comp=Z,147nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **20.97** | **175** | LR | LR | 05 03 06.8 | |
| | comp=Z,1μm,19.1s,baz=350,slow=33 | | | | | | |
| **TUWZ** | **Tuamarina** | **24.06** | **182** | P | P | 04 56 51.6 | +1.2 |
| **RAR** | **Rarotonga** | **24.23** | **103** | P | P | 04 56 51.3 | -0.8 |
| | comp=Z,10nm,0.4s,baz=294,slow=9.5,SNR=4.1 | | | | | | |
| RAR | | | | LR | LR | 05 04 24.9 | |
| | comp=Z,461nm,20.2s,baz=282,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **24.23** | **103** | P | P | 04 56 50.6 | -1.6 |
| RAR | | | | IAmb | IAmb | 04 56 55.0 | |
| | comp=Z,95nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **27.25** | **260** | P | P | 04 57 18.6 | -0.9 |
| | comp=Z,6.4nm,0.9s,baz=95,slow=11,SNR=6.5 | | | | | | |
| CTA | | | | LR | LR | 05 07 08.8 | |
| | comp=Z,892nm,18.6s,baz=82,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **27.25** | **260** | P | P | 04 57 18.9 | -0.6 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **27.25** | **260** | P | P | 04 57 18.9 | -0.6 |
| **PMG** | **Port Moresby** | **28.07** | **283** | LR | LR | 05 07 26.4 | |
| | comp=Z,1μm,18.4s,baz=84,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **28.07** | **283** | *e*P | P | 04 57 28.0 | +1.1 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.2s | | | | | | |
| **STKA** | **Stephens Creek** | **33.41** | **238** | P | P | 04 58 13.7 | -0.2 |
| | comp=Z,14nm,0.8s,baz=70,slow=8.4,SNR=30 | | | | | | |
| STKA | | | | LR | LR | 05 10 48.5 | |
| | comp=Z,937nm,19.4s,baz=66,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **33.41** | **238** | P | P | 04 58 13.7 | -0.2 |
| STKA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **33.41** | **238** | P | P | 04 58 13.7 | -0.2 |
| **PPT2** | **Papeete2** | **33.88** | **96** | *e*S | S | 05 03 42.0 | +1.5 |
| | comp=Z,217nm,27.0s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 05 05 48.8 | |
| | comp=Z,4μm,27.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 05 07 13.6 | |
| | comp=Z,2μm,24.8s | | | | | | |
| **PPT** | **Papeete** | **33.88** | **96** | LR | LR | 05 08 41.9 | |
| | comp=Z,742nm,21.9s,baz=259,slow=30 | | | | | | |
| **JAY** | **Jayapura** | **36.63** | **290** | LR | LR | 05 12 43.8 | |
| | comp=Z,309nm,21.1s,baz=355,slow=35 | | | | | | |
| **WR0** | **Warramunga Arr** | **38.26** | **260** | P | P | 04 58 53.0 | -2.7 |
| **WB0** | **Warramunga Arr** | **38.41** | **260** | P | P | 04 58 54.2 | -2.6 |
| **WB2** | **Warramunga Arr** | **38.44** | **260** | P | P | 04 58 54.3 | -2.8 |
| **WRAB** | **Tennant Creek** | **38.44** | **260** | P | P | 04 58 55.2 | -1.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.44** | **260** | P | P | 04 58 55.2 | -1.9 |
| **WRA** | **Warramunga Arr** | **38.45** | **260** | P | P | 04 58 53.8 | -3.4 |
| | comp=Z,6.3nm,0.7s,baz=91,slow=9.1,SNR=31 | | | | | | |
| WRA | | | | LR | LR | 05 13 59.6 | |
| | comp=Z,628nm,18.1s,baz=78,slow=35 | | | | | | |
| **AS31** | **Alice Springs** | **38.81** | **254** | P | P | 04 58 58.2 | -2.0 |
| **ASAR** | **Alice Springs** | **38.81** | **254** | P | P | 04 58 57.9 | -2.4 |
| | comp=Z,15nm,0.7s,baz=83,slow=9.0,SNR=171 | | | | | | |
| ASAR | | | | LR | LR | 05 14 02.8 | |
| | comp=Z,804nm,19.3s,baz=92,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **38.81** | **254** | P | P | 04 58 58.0 | -2.3 |
| **ASAR** | **Alice Springs** | **38.81** | **254** | P | P | 04 58 58.0 | -2.3 |
| **GUMO** | **Guam** | **42.66** | **314** | LR | LR | 05 16 02.7 | |
| | comp=Z,256nm,18.6s,baz=134,slow=35 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **44.51** | **85** | *e*LR | LR | 05 12 04.0 | |
| | comp=Z,674nm,26.4s | | | | | | |
| **SIJI** | **Sorong** | **45.89** | **286** | LR | LR | 05 19 26.0 | |
| | comp=Z,587nm,18.1s,baz=152,slow=37 | | | | | | |
| **KIP** | **Kipapa** | **46.76** | **36** | ⇑*e*P | P | 05 00 03.9 | -0.6 |
| KIP | | | | pmax | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.81** | **261** | LR | LR | 05 18 37.0 | |
| | comp=Z,429nm,20.4s,baz=93,slow=35 | | | | | | |
| **BATI** | **Baumata** | **50.13** | **271** | LR | LR | 05 20 36.2 | |
| | comp=Z,355nm,20.1s,baz=126,slow=35 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **51.86** | **256** | P | P | 05 00 42.7 | -1.0 |
| **MBWA** | **Marble Bar** | **52.01** | **256** | P | P | 05 00 43.5 | -1.3 |
| **NWAO** | **Narrogin (SRO)** | **53.86** | **242** | P | P | 05 00 58.2 | -0.1 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,55nm,1.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **53.86** | **242** | P | P | 05 00 58.2 | -0.1 |
| **DAV** | **Davao City (W)** | **54.40** | **292** | LR | LR | 05 23 24.6 | |
| | comp=Z,175nm,19.4s,baz=149,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **55.27** | **276** | LR | LR | 05 24 22.2 | |
| | comp=Z,90nm,21.1s,baz=114,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **55.27** | **276** | P | P | 05 01 07.2 | -1.6 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,22nm,1.2s | | | | | | |
| **KAPI** | **Kappang** | **55.27** | **276** | P | P | 05 01 07.2 | -1.6 |
| KAPI | | | | IAmb | IAmb | 05 01 24.8 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TOLI2** | **Tolitoli** | **56.33** | **283** | P | P | 05 01 14.4 | -2.0 |
| TOLI2 | | | | IAmb | IAmb | 05 01 28.1 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **60.32** | **326** | LR | LR | 05 24 07.4 | |
| | comp=Z,111nm,20.0s,baz=112,slow=32 | | | | | | |
| **VNDA** | **Vanda** | **60.60** | **183** | LR | LR | 05 24 47.5 | |
| | comp=Z,81nm,18.0s,baz=15,slow=33 | | | | | | |
| **JOW** | **Kunigami** | **63.02** | **313** | LR | LR | 05 27 51.8 | |
| | comp=Z,125nm,19.2s,baz=62,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **63.78** | **328** | LR | LR | 05 25 41.1 | |
| | comp=Z,116nm,21.4s,baz=142,slow=32 | | | | | | |
| **MAJO** | **Matsushiro** | **63.78** | **328** | ⇑*e*P | P | 05 02 07.3 | +0.3 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **LEM** | **Lembang** | **66.33** | **270** | LR | LR | 05 31 34.5 | |
| | comp=Z,139nm,19.1s,baz=204,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **67.87** | **335** | LR | LR | 05 27 01.2 | |
| | comp=Z,310nm,21.5s,baz=116,slow=31 | | | | | | |
| **RPN** | **Rapa Nui** | **69.93** | **113** | LR | LR | 05 25 31.5 | |
| | comp=Z,477nm,22.0s,baz=256,slow=29 | | | | | | |
| **KSRS** | **Korea Array** | **70.13** | **322** | LR | LR | 05 32 14.2 | |
| | comp=Z,87nm,18.7s,baz=130,slow=35 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **70.19** | **337** | *e*P | P | 05 02 46.1 | -1.4 |
| YSS | | | | *e*S | S | 05 11 57.5 | +1.1 |
| YSS | | | | *e*SS | SS | 05 16 28.2 | +0.7 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **PET** | **Petropavlovsk** | **71.42** | **350** | *e*P | P | 05 02 56.8 | +2.0 |
| PET | | | | *e*S | S | 05 12 13.4 | +2.9 |
| PET | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **71.67** | **349** | ⇑*e*P | P | 05 02 54.1 | -2.3 |
| **PETK** | **Petropavlovsk-** | **71.67** | **349** | P | P | 05 02 54.7 | -1.7 |
| | comp=Z,5.7nm,0.9s,baz=162,slow=11,SNR=4.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.67** | **349** | P | P | 05 02 56.8 | +0.4 |
| **PETK** | **Petropavlovsk-** | **71.67** | **349** | P | P | 05 02 56.8 | +0.4 |
| **USRK** | **Ussuriysk Ar.** | **72.66** | **329** | LR | LR | 05 31 17.4 | |
| | comp=Z,85nm,19.7s,baz=100,slow=33 | | | | | | |
| **NJ2** | **Nanjing** | **72.71** | **312** | *e*P | P | 05 03 02.8 | -0.2 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.75** | **180** | P | P | 05 03 02.8 | -0.1 |
| | comp=Z,6.5nm,1.0s,baz=352,slow=2.0,SNR=7.6 | | | | | | |
| QSPA | | | | LR | LR | 05 29 22.8 | |
| | comp=Z,133nm,21.4s,baz=44,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.75** | **180** | P | P | 05 03 03.7 | +0.7 |
| **MDJ** | **Mudanjiang** | **74.15** | **328** | P | P | 05 03 14.2 | +2.9 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,51nm,4.2s | | | | | | |
| **CNBA** | **Chernabura Isl** | **75.06** | **15** | P | P | 05 03 17.5 | +1.3 |
| **CN2** | **Changchun** | **75.76** | **325** | *e*P | P | 05 03 18.4 | -2.2 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **IPM** | **Ipoh** | **76.00** | **279** | P | P | 05 03 23.4 | +0.7 |
| **KLR** | **Kul'dur** | **76.48** | **333** | LR | LR | 05 30 54.3 | |
| | comp=Z,130nm,21.9s,baz=149,slow=31 | | | | | | |
| **KLR** | **Kul'dur** | **76.48** | **333** | ⇑*e*P | P | 05 03 25.3 | +0.8 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **KULM** | **Kulim** | **76.62** | **280** | P | P | 05 03 27.0 | +0.9 |
| KULM | | | | IAmb | IAmb | 05 03 36.6 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **PSI** | **Prapat** | **77.46** | **277** | LR | LR | 05 36 25.5 | |
| | comp=Z,117nm,21.9s,baz=134,slow=35 | | | | | | |
| **HNS** | **HongShan** | **78.48** | **315** | ⇑P | P | 05 03 37.2 | +1.2 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| **LYN** | **LuoYang** | **78.56** | **312** | ⇑P | P | 05 03 34.3 | -2.2 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,200nm,17.3s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,270nm,19.2s | | | | | | |
| **ENH** | **Enshi** | **78.71** | **307** | P | P | 05 03 37.9 | +0.4 |
| ENH | | | | IAmb | IAmb | 05 03 50.0 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **BJI** | **Beijing** | **78.96** | **318** | P | P | 05 03 37.5 | -1.0 |
| BJI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.2s | | | | | | |
| **MA2** | **Magadan** | **79.08** | **348** | P | P | 05 03 40.0 | +1.2 |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **79.08** | **348** | P | P | 05 03 40.0 | +1.2 |
| **GYA** | **Guiyang** | **79.23** | **302** | ⇑P | P | 05 03 41.5 | +0.9 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.6s | | | | | | |
| **KDAK** | **K

comp=Z,120nm,5.0s
**RUBR Rubicon Trail 82.57 45 P P 05 03 58.6 +0.4**
RUBR IAmb IAmb 05 04 06.6
comp=Z,29nm,1.4s
**YUH Yuha Desert 82.67 53 P P 05 04 00.2 +1.6**
**PFO Pinyon Flats O 82.69 52 LR LR** 05 31 52.4
comp=Z,223nm,20.8s,baz=248,slow=29
**CM31 Chiang Mai Arr 82.69 292 P P 05 03 59.6 +0.6**
CM31 IAmb IAmb 05 04 06.5
comp=Z,22nm,1.2s
**CMAR Chiang Mai Arr 82.69 292 P P 05 03 58.2 -0.8**
comp=Z,10nm,1.0s,baz=117,slow=3.6,SNR=21
**CMAR Chiang Mai Arr 82.69 292** *ce*P **P 05 04 01.3 +2.3**
CMAR pmax pmax
comp=Z,10.0nm,1.0s
**CMAR Chiang Mai Arr 82.69 292 P P 05 03 59.3 +0.3**
**PMD Palm Desert 82.76 52 P P 05 04 00.9 +1.8**
PMD IAmb IAmb 05 04 06.5
comp=Z,15nm,1.4s
**MPK Martis Peak 82.77 45 P P 05 04 00.1 +0.8**
MPK IAmb IAmb 05 04 07.6
comp=Z,15nm,1.1s
**CHTO Chiang Mai 82.81 292 P P 05 04 00.2 +0.6**
CHTO pmax pmax
comp=Z,27nm,1.5s
**CHTO Chiang Mai 82.81 292 P P 05 04 00.2 +0.6**
CHTO IAmb IAmb 05 04 02.5
comp=Z,27nm,1.4s
**PNTR Pine Nut 82.96 46 P P 05 04 01.1 +0.9**
PNTR IAmb IAmb 05 04 12.6
comp=Z,16nm,0.9s
**YERR Yerington 83.16 46 P P 05 04 02.1 +0.9**
YERR IAmb IAmb 05 04 13.3
comp=Z,22nm,1.4s
**PZH PanZhiHua 83.28 300 P P 05 04 03.7 +1.7**
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,90nm,4.0s
**LHV Little Huntoon 83.32 47** IAmb IAmb 05 04 14.5
comp=Z,23nm,1.1s
**PAHR Pah Rah Range 83.41 45** IAmb IAmb 05 04 10.7
comp=Z,14nm,1.1s
**CD2 Chengdu 83.42 305 P P 05 04 03.5 +0.9**
CD2 pmax pmax
comp=Z,20nm,1.3s
**QSM Queen of Sheba 83.43 49** IAmb IAmb 05 04 07.9
comp=Z,13nm,1.2s
**BELA Belgrano 2 83.51 174 P P 05 04 02.1 -0.1**
BELA IAmb IAmb 05 04 08.5
comp=Z,26nm,1.4s
**NVAR Mina Array Bea 83.54 47 P P 05 04 01.8 -1.4**
comp=Z,7.2nm,1.0s,baz=228,slow=8.0,SNR=30
NVAR LR LR 05 34 03.6
comp=Z,245nm,20.5s,baz=242,slow=30
**TNA Tin City 83.63 7 P P 05 04 03.8 +1.0**
**NV11 Mina Array Sit 83.64 47** IAmb IAmb 05 04 11.1
comp=Z,17nm,1.2s
**LPIG La Paz 83.75 63** LR LR 05 34 13.3
comp=Z,258nm,18.5s,baz=224,slow=31
**MOD Modoc Plateau 83.86 43** IAmb IAmb 05 04 28.7
comp=Z,14nm,1.3s
**KVN Kaiserville 83.97 46** IAmb IAmb 05 04 17.4
comp=Z,13nm,1.1s
**TPNV Topopah Spring 84.31 49** IAmb IAmb 05 04 14.8
comp=Z,12nm,0.9s
**113A Mohawk Valley, 84.36 53 P P 05 04 08.4 +1.1**
113A IAmb IAmb 05 04 15.2
comp=Z,12nm,1.0s
**CAST Castle Rocks 84.47 14** IAmb IAmb 05 04 09.9
comp=Z,16nm,1.2s
**J20K Nowinta River 84.66 13** IAmb IAmb 05 04 15.1
comp=Z,14nm,1.2s
**214A Organ Pipe Nat 84.77 54** IAmb IAmb 05 04 17.5
comp=Z,14nm,1.1s
**SHPR Sheep Range 84.91 49 P P 05 04 09.7 -0.5**
SHPR IAmb IAmb 05 04 18.1
comp=Z,13nm,1.0s
**TRF Thorofare Moun 84.93 15** IAmb IAmb 05 04 17.1
comp=Z,12nm,1.0s
**S11A Rachel 84.98 48** IAmb IAmb 05 04 20.3
comp=Z,16nm,0.9s
**BBB Bella Bella 84.98 31** LR LR 05 33 39.6
comp=Z,136nm,20.8s,baz=238,slow=30
**WVOR Wild Horse Val 85.21 43** IAmb IAmb 05 04 23.6
comp=Z,22nm,1.3s
**W13A Hualapai Mount 85.25 51** IAmb IAmb 05 04 19.8
comp=Z,12nm,1.2s
**RND Reindeer 85.25 15** IAmb IAmb 05 04 14.7
comp=Z,14nm,1.1s
**BILL Bilibino 85.33 357**⇑ *e*P **P 05 04 10.8 -0.5**
BILL *i* *SP **PcP 05 04 16.8 +2.5**
BILL *i* 05 04 28.5
BILL S **S 05 14 34.0 -5.1**
BILL SS **SS 05 20 22.0 +7.2**
BILL SSS SSS 05 23 46.0
BILL pmax pmax
comp=Z,2.0nm,1.1s
**R11A Troy Canyon, C 85.41 48** P **P 05 04 13.4 +0.7**
**I07A Izee 85.45 41** IAmb IAmb 05 04 19.6
comp=Z,12nm,0.9s
**LZH Lanzhou 85.52 310** *e*P **P 05 04 13.5 +0.2**
LZH pP PcP 05 04 16.3 +0.1
LZH sP pP 05 04 19.3 -4.2
LZH pmax pmax
comp=Z,17nm,1.3s
LZH LR LR
comp=Z,260nm,17.3s
LZH LR LR
comp=Z,370nm,15.2s
LZH LR LR
comp=Z,470nm,14.6s
**J08A Circle Bar Ran 85.75 42** IAmb IAmb 05 04 21.5
comp=Z,13nm,1.0s
**I21K Tanana 86.00 13** IAmb IAmb 05 04 24.3
comp=Z,15nm,1.2s
**TUC Tucson 86.49 55** P **P 05 04 18.6 +0.6**
TUC pmax pmax
comp=Z,12nm,1.1s
**TUC Tucson 86.49 55** P **P 05 04 18.6 +0.6**
TUC IAmb IAmb 05 04 26.3
comp=Z,12nm,1.1s
**HDA Harding Lake 86.56 16** IAmb IAmb 05 04 28.4
comp=Z,13nm,1.3s
**SPR3 Spring Creek 3 86.57 47** IAmb IAmb 05 04 27.8
comp=Z,14nm,1.0s
**ELK Elko 86.70 46** LR LR 05 35 18.9
comp=Z,192nm,21.0s,baz=248,slow=30
**COLA College 86.71 15**⇑ *e*P **P 05 04 19.5 +1.3**
COLA pmax pmax
comp=Z,3.0nm,1.0s
**YAK Yakutsk 86.75 340** LR LR 05 40 14.7
comp=Z,60nm,18.6s,baz=130,slow=34
**YAK Yakutsk 86.75 340** *e*P **P 05 04 18.9 +0.5**
YAK pmax pmax
comp=Z,6.0nm,0.8s
**PMSA Palmer Station 86.80 158** LR LR 05 36 26.7
comp=Z,198nm,20.5s,baz=310,slow=31
**X16A Lo Mia Camp, P 86.81 53** IAmb IAmb 05 04 28.3
comp=Z,15nm,1.0s
**KNB Kanab 86.82 50** IAmb IAmb 05 04 28.6
comp=Z,29nm,1.5s
**IL31 86.87 15** P **P 05 04 20.1 +1.1**
**ILAR Eielson Array 86.87 15** P **P 05 04 16.4 -2.6**
comp=Z,1.9nm,0.9s,baz=234,slow=4.3,SNR=7.8
ILAR LR LR 05 36 49.7
comp=Z,153nm,19.3s,baz=222,slow=31
**E08A Dider Farm, El 86.89 39 P P 05 04 20.7 +1.2**
E08A IAmb IAmb 05 04 28.2
comp=Z,24nm,1.4s
**U15A North Rim 86.97 50** IAmb IAmb 05 04 28.6
comp=Z,16nm,1.0s
**BMO Blue Mountains 87.20 41 P P 05 04 21.4 +0.2**
BMO pmax pmax
comp=Z,6.0nm,1.0s
**BMO Blue Mountains 87.20 41 P P 05 04 21.4 +0.2**
**WUAZ Wupatki 87.29 52** IAmb IAmb 05 04 29.9
comp=Z,17nm,0.9s
**TCRU Three Creeks R 87.75 48** IAmb IAmb 05 04 32.4
comp=Z,12nm,1.0s
**F10A Beach Ranch, E 87.77 40 P P 05 04 24.8 +0.9**
**X18A Snowflake 87.98 53** IAmb IAmb 05 04 33.3
comp=Z,9.9nm,1.1s
**PLID Pearl Lake 88.13 41** IAmb IAmb 05 04 32.7
comp=Z,12nm,1.1s
**DUG Dugway, Tooele 88.14 47** IAmb IAmb 05 04 35.3
comp=Z,9.5nm,1.1s
**SYO Syowa Base 88.22 195**⇑ *e*P **P 05 04 27.2 +1.6**
**W18A Petrified Fore 88.37 53** IAmb IAmb 05 04 35.7
comp=Z,14nm,1.1s
**ULN Ulaanbaatar 88.61 321 P P 05 04 26.5 -1.4**
ULN pmax pmax
comp=Z,7.0nm,1.1s
**ULN Ulaanbaatar 88.61 321 P P 05 04 26.5 -1.4**
**NEW Newport 88.89 38** LR LR 05 40 39.5
comp=Z,120nm,18.5s,baz=246,slow=33
**NEW Newport 88.89 38** IAmb IAmb 05 04 36.5
comp=Z,18nm,1.4s
**121A Cookes Peak, D 88.92 56** IAmb IAmb 05 04 38.5
comp=Z,11nm,0.9s
**SONM Songino Array 88.99 321 P P 05 04 27.2 -2.5**
comp=Z,3.3nm,1.1s,baz=125,slow=5.0,SNR=9.7
SONM LR LR 05 44 52.2
comp=Z,70nm,18.5s,baz=154,slow=36
**SONM Songino Array 88.99 321 P P 05 04 30.6 +0.9**
SONM pmax pmax
comp=Z,6.0nm,1.2s
**SONM Songino Array 88.99 321 P P 05 04 30.6 +0.9**
**P17A Butcher Ranch, 89.31 48** IAmb IAmb 05 04 40.8
comp=Z,15nm,1.1s
**P18A Preston Nutter 89.72 48** IAmb IAmb 05 04 41.1
comp=Z,17nm,0.9s
**GTA Gaotai 89.78 312** *e*P **P 05 04 32.3 -1.3**
GTA pP PcP 05 04 38.3 +3.4
GTA pmax pmax
comp=Z,5.0nm,1.9s
GTA pmax pmax
comp=Z,110nm,5.5s
GTA LR LR
comp=Z,170nm,18.2s
GTA LR LR
comp=Z,140nm,18.5s
GTA LR LR
comp=Z,180nm,18.5s
**ZAIG Zacatecas 89.96 66 P P 05 04 34.5 -0.5**
ZAIG IAmb IAmb 05 04 44.4
comp=Z,12nm,1.3s
**MVCO Mesa Verde 90.08 51 P P 05 04 36.7 +1.5**
MVCO IAmb IAmb 05 04 43.4
comp=Z,10.0nm,1.1s
**PV23 Carpenter Ridg 90.17 50 P P 05 04 35.9 +0.3**
**AHID Auburn Hatcher 90.36 45 P P 05 04 36.0 -0.3**
AHID IAmb IAmb 05 05 02.3
comp=Z,18nm,1.3s
**JTMT Jette 90.37 40** IAmb IAmb 05 04 42.8
comp=Z,11nm,1.0s
**USHA Ushuaia 90.41 149** LR LR 05 36 12.3
comp=Z,108nm,21.9s,baz=219,slow=30
**RDMU Red Mountain 90.56 48** IAmb IAmb 05 04 44.8
comp=Z,16nm,1.1s
**REDW Red Top Meadow 90.76 45** IAmb IAmb 05 04 45.9
comp=Z,16nm,1.0s
**ANMO Albuquerque 90.81 54** LR LR 05 38 10.0
comp=Z,114nm,19.1s,baz=260,slow=31
**ANMO Albuquerque 90.81 54 P P 05 04 39.5 +0.9**
ANMO pmax pmax
comp=Z,15nm,1.0s
**ANMO Albuquerque 90.81 54 P P 05 04 39.5 +0.9**
ANMO IAmb IAmb 05 04 46.3
comp=Z,16nm,1.0s
**SNOW Snow King Moun 90.86 45** IAmb IAmb 05 04 46.5
comp=Z,17nm,1.1s
**LOHW Long Hollow 91.02 44** IAmb IAmb 05 04 46.8
comp=Z,10.0nm,1.1s
**TXAR Lajitas Array 91.15 60 P P 05 04 39.7 -0.5**
comp=Z,5.1nm,1.0s,baz=208,slow=11,SNR=10
TXAR LR LR 05 37 11.7
comp=Z,258nm,20.6s,baz=236,slow=30
**TXAR Lajitas Array 91.15 60 P P 05 04 39.0 -1.2**
**SNAA Sanae 91.24 181 P P 05 04 37.5 -2.4**
**SNAA Sanae 91.24 181**⇓ *e*P **P 05 04 41.0 +1.2**
SNAA pmax pmax
comp=Z,258nm,1.2s
**SNAA Sanae 91.24 181 P P 05 04 40.2 +0.4**
SNAA IAmb IAmb 05 04 46.7
comp=Z,12nm,1.1s
**H17A Grant Village 91.35 44** IAmb IAmb 05 04 49.5
comp=Z,9.3nm,0.9s
**BW06 Boulder Array 91.40 46** IAmb IAmb 05 04 48.8
comp=Z,18nm,1.2s
**PD31 Pinedale Array 91.40 46** IAmb IAmb 05 04 48.8
comp=Z,16nm,1.2s
**PDAR Pinedale Array 91.40 46 P P 05 04 41.7 +0.5**
comp=Z,4.8nm,1.1s,baz=208,slow=2.9,SNR=13
PDAR LR LR 05 43 12.6
comp=Z,96nm,19.0s,baz=273,slow=34
**VNA3 Neumayer Olymp 91.63 179 P P 05 04 42.4 +0.8**
**SMCO Snowmass 91.91 50 P P 05 04 45.2 +1.3**
SMCO IAmb IAmb 05 04 55.9
comp=Z,13nm,1.3s
**ZAK Zakamensk 91.95 323** *e*P **P 05 04 40.0 -3.4**
ZAK pmax pmax
comp=Z,7.0nm,1.4s
**VNA2 Neumayer--Watz 91.99 179 P P 05 04 42.0 -1.2**
baz=195,slow=1.9
**GOMU GeErMu 92.32 307 P P 05 04 45.7 -0.1**
GOMU pmax pmax
comp=Z,2.0nm,1.2s
GOMU pmax pmax
comp=Z,120nm,5.0s
**INK Inuvik 93.08 17** LR LR 05 39 23.3
comp=Z,79nm,21.9s,baz=222,slow=31
**T25A Trinidad 93.12 52** IAmb IAmb 05 04 57.1
comp=Z,8.1nm,1.0s
**Q24A Divide 93.17 50** IAmb IAmb 05 04 57.2
comp=Z,12nm,1.1s
**TIXI Tiksi 94.03 347**⇑ *i*P **P 05 04 52.0 -0.3**
TIXI pmax pmax
comp=Z,7.0nm,1.4s
**TIXI Tiksi 94.03 347 P P 05 04 51.2 -1.2**
**CMIG Matias Romero 95.16 74** LR LR 05 38 45.8
comp=Z,201nm,20.5s,baz=252,slow=30
**KNGR Kungurtug, Tuv 95.43 321**⇓ *e*P **P 05 04 59.6 +0.2**
**RSSD Black Hills 95.64 46 P P 05 05 00.3 -0.4**
RSSD pmax pmax
comp=Z,16nm,1.0s
**RSSD Black Hills 95.64 46 P P 05 05 00.3 -0.4**
**PALK Pallekele 96.10 276** LR LR 05 49 32.5
comp=Z,70nm,19.2s,baz=225,slow=36
**PLCA Paso Flores 96.30 136** LR LR 05 39 30.0
comp=Z,195nm,21.9s,baz=230,slow=30
**YKA Yellowknife Ar 96.53 26 P P 05 05 04.1 +0.2**
comp=Z,1.8nm,0.9s,baz=249,slow=4.6,SNR=10
**APG El Apazote 98.68 77** LR LR 05 41 02.0
comp=Z,204nm,20.0s,baz=277,slow=30
**WMQ Urumqi 99.79 313** *e*P **Pdif 05 05 22.4 +3.2**
WMQ LR LR
comp=Z,220nm,22.5s
**BRVK Borovoye 112.40 321** *i* PKIKP **PKiKP 05 10 13.0 +2.5**
**AKASG Malin Array Be 136.86 328** PKP **PKPdf 05 10 55.1 -2.1**
comp=Z,0.1nm,0.3s,baz=44,slow=1.5,SNR=2.7
**AKASG Malin Array Be 136.86 328** *c* *i* PKIKP **PKiKP 05 11 02.7 +3.7**
**KRLC Kraliky 142.86 337** *e*PKIKP **PKiKP 05 11 10.4 -1.0**
**KRLC Kraliky 142.86 337** *e*PKP **PKiKP 05 11 10.4 -1.0**
**CLL Collm 143.13 341** *e*(PKPdf) **PKPdf 05 11 08.0 -0.6**
CLL *ex* x 05 11 14.0
CLL Lm MLR 06 11 00.0
comp=Z,200nm,19.6s
**SMOL Smolenice 143.84 334** *e*PKP **PKPdf 05 11 11.8 +1.8**
**MODS Modra-Piesok 144.02 334** *e*PKP **PiKiKP 05 11 14.3 +0.5**
**ROTZ Rotzenmuhle 144.72 340** *e*PKPbc **PiKiKP 05 11 13.6 -1.6**
baz=28,slow=2.8
**KHC Kasperske Hory 144.81 339** *e*PKIKP **PKPdf 05 11 11.8 +0.1**
KHC *e* 05 11 17.5
**KHC Kasperske Hory 144.81 339** *e*PKP **PKPdf 05 11 11.8 +0.1**
KHC *ep*PKP **PiKiKP 05 11 17.5 +2.0**
**KHC Kasperske Hory 144.81 339** PKPbc 05 11 11.3 +0.5
**CKRC Cesky Krumlov 144.81 338** *e*PKP **PKPdf 05 11 12.4 +0.7**
**CONA Conrad Observa 144.95 335** *e*P **PKPbc 05 11 10.1 -1.2**
comp=Z,8.4nm,1.3s
**GERES GERESS Array B 145.01 338** PKP **PKPbc 05 11 09.6 -1.9**
comp=Z,2.9nm,1.0s,baz=336,slow=2.9,SNR=12
**GERES GERESS Array B 145.01 338** PKIKP **PKPbc 05 11 11.4 -0.1**
**GERES GERESS Array B 145.01 338** PKPbc **PKPbc 05 11 11.4 -0.1**
**WET Wettzell 145.04 339** *e*PKPbc **PKPdf 05 11 13.4 +1.3**
baz=28,slow=2.8
**GRF Grafenberg Arr 145.09 341** *e*PKPbc **PKPdf 05 11 13.8 +1.6**
baz=28,slow=2.8
**GRFO Grafenberg 145.10 341** PKIKP **PKPdf 05 11 13.8 +1.7**
**GRFO Grafenberg 145.10 341** PKPbc **PKPdf 05 11 13.8 +1.7**
**BTNL Ternell 145.59 347** *d*PKP **PKPdf 05 11 13.1 +0.1**
**MEM Membach 145.59 347** *d*PKP **PKPab 05 11 14.4 +1.0**
**ARSA Arzberg 145.63 335** *e*P **PKPdf 05 11 12.0 -1.1**
comp=Z,20nm,1.6s
**MOA Molln 145.63 337** *e*P **PKPdf 05 11 12.0 -1.1**
comp=Z,29nm,1.6s,SNR=8.1
**BSTI Sart Tilman 145.71 348** *d*PKP **PKPab 05 11 15.6 +1.8**
**BHOU Houvegnez 145.84 347** *d*PKP **PKPab 05 11 15.8 +1.5**
**BCLA Clavier 145.91 348** *d*PKP **PKPab 05 11 14.9 +0.3**
**DIVS Divibare 145.92 327** PKPbc **PKPab 05 11 15.2 +0.3**
**BGES Gesves 145.99 348** *d*PKP **PKPab 05 11 16.2 +1.3**
**RCHB Rochefort 146.18 348** *d*PKP **PKPab 05 11 16.3 +0.7**
**SOKA Soboth 146.29 335** *e*P **PKPdf 05 11 13.7 -0.6**
comp=Z,28nm,1.6s,SNR=7.2
**DOU Dourbes 146.36 349** *d*PKP **PKPab 05 11 16.9 +0.6**
**FUR Furstenfeldbru 146.42 340** *e*PKPbc **PKPab 05 11 18.0 +1.3**
baz=28,slow=2.8
**WLF Walferdange 146.45 347** PKP2 **PKPbc 05 11 16.1 +0.3**
**WLF Walferdange 146.45 347** *e*PKPbc **PiKiKP 05 11 18.3 -0.5**
baz=28,slow=2.8
**WLF Walferdange 146.45 347** PKPbc **PKPbc 05 11 16.1 +0.3**
**WLF Walferdange 146.45 347** *d*PKP **PKPdf 05 11 14.8 +0.3**
**OBKA Obir 146.62 335** *i* P **PKPdf 05 11 15.2 +0.3**
comp=Z,12nm,1.4s
**KBA Koelnbreinsper 146.62 337** *e*P **PKPdf 05 11 15.3 +0.3**
comp=Z,7.5nm,0.9s
**MYKA Terra Mystica 146.88 336** *e*P **PKPdf 05 11 15.8 +0.5**
comp=Z,5.4nm,0.8s
**WATA Walderalm 147.04 339** *i* P **PKPdf 05 11 16.4 +0.7**
comp=Z,21nm,1.5s
**WTTA Wattenberg 147.08 339** *e*P **PKPdf 05 11 16.3 +0.5**
comp=Z,17nm,1.2s
**BFO Black Forest 147.16 343** PKP2 **PKPbc 05 11 17.8 -0.1**
**BFO Black Forest 147.16 343** *e*PKPbc **PKPab 05 11 19.9 +0.3**
baz=28,slow=2.8
**BFO Black Forest 147.16 343** PKPbc **PKPbc 05 11 17.8 -0.1**
**RETA Reutte 147.18 340** *e*P **PKPdf 05 11 16.3 +0.4**
comp=Z,18nm,1.3s,SNR=6.0
**MOTA Moosalm 147.19 339** *e*P **PKPdf 05 11 16.5 +0.6**
comp=Z,28nm,1.3s
**ABTA Abfaltersbach 147.21 337** *e*P **PKPdf 05 11 15.8 -0.1**
comp=Z,9.9nm,0.9s
**UBR Ueberruh 147.22 341** *e*PKPbc **PKPab 05 11 19.9 0.0**
baz=28,slow=2.8
**SQTA Sankt Quirin 147.26 339** *e*P **PKPdf 05 11 16.7 +0.6**
comp=Z,19nm,1.1s
**FNA Florina 147.31 321** PKP2 **PKPbc 05 11 18.4 -0.2**
**FNA Florina 147.31 321** PKPbc **PKPbc 05 11 18.4 -0.2**
**ECH Echery 147.57 345** PKP2 **PiKiKP 05 11 20.4 -0.8**
**ECH Echery 147.57 345** PKPbc **PiKiKP 05 11 20.4 -0.8**
**FETA Feichten 147.60 340** *e*P **PKPdf 05 11 15.5 -1.1**
comp=Z,14nm,1.1s
**DAVA Damuels 147.64 341** *e*P **PKPdf 05 11 16.9 +0.2**
comp=Z,28nm,1.3s
**TUE Stuetta 148.53 341** PKPbc **PiKiKP 05 11 23.0 -0.4**
**TEOL Teolo 148.70 337** PKPbc **PKPbc 05 11 21.4 -0.6**
**TORD Torodi Ar. Bea 172.24 239** PKP **PKPdf 05 11 42.7 -1.9**
comp=Z,2.2nm,1.1s,baz=169,slow=2.9,SNR=6.2
**TORD Torodi Ar. Bea 172.24 239 PKPdf 05 11 42.1 -2.5**
TORD PKPab **PKPab 05 13 07.7 -0.8**

*IDC **06** 05:18:34.7±0.8,34°20′N×37°52′W,h0km,mb3.7/12, mb1 4.0/12,mb1mx3.8/32,mbtmp3.7/12,MS3.8/23, Ms1 3.8/23,ms1mx3.4/89,Error ellipse: s-maj=24.2km s-min=19.5km az=180.0*
**ISC 06 05:18:36.7±0.7,34°2′N±0.1×37°5′W±0.1,h13km,n38, σ0°82/13,mb3.9/12,MS3.9/23,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ESDC** | **Sonseca Array** | **27.25** | **69** | P | **P** | **05 24 22.0** | **+1.4** |
| | 1.5nm,1.1s,baz=282,slow=6.4,SNR=5.1 | | | | | | |
| ESDC | | | | LR | LR | 05 32 28.0 | |
| | comp=Z,91nm,20.4s,baz=272,slow=31 | | | | | | |
| **SCHQ** | **Schefferville** | **29.05** | **324** | LR | LR | 05 34 50.6 | |
| | comp=Z,163nm,21.9s,baz=88,slow=34 | | | | | | |
| **SJG** | **San Juan** | **30.16** | **245** | LR | LR | 05 36 08.7 | |
| | comp=Z,47nm,19.6s,baz=61,slow=35 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **31.77** | **38** | LR | LR | 05 34 28.3 | |
| | comp=Z,117nm,21.3s,baz=246,slow=30 | | | | | | |
| **MDP** | **Montagnes des** | **32.17** | **209** | LR | LR | 05 34 36.6 | |
| | comp=Z,158nm,20.7s,baz=84,slow=30 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **37.61** | **56** | LR | LR | 05 38 50.1 | |
| | comp=Z,58nm,19.6s,baz=272,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **40.71** | **125** | LR | LR | 05 40 55.8 | |
| | comp=Z,88nm,21.0s,baz=340,slow=33 | | | | | | |
| **NOA** | **NORSAR Array B** | **40.99** | **34** | LR | LR | 05 40 01.4 | |
| | comp=Z,61nm,19.8s,baz=245,slow=31 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **41.20** | **111** | P | **P** | **05 26 19.9** | **-1.4** |
| | 0.4nm,0.9s,baz=303,slow=7.2,SNR=1.8 | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.95** | **309** | LR | LR | 05 46 34.3 | |
| | comp=Z,140nm,18.0s,baz=288,slow=37 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **47.12** | **148** | T | T | 06 17 09.4 | |
| | baz=334,slow=75,SNR=661 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **47.13** | **148** | T | T | 06 17 08.2 | |
| | baz=334,slow=75,SNR=651 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **47.14** | **148** | T | T | 06 17 10.8 | |
| | baz=334,slow=75,SNR=682 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.05** | **149** | T | T | 06 18 19.1 | |
| | baz=246,slow=74,SNR=163 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.07** | **149** | T | T | 06 18 17.5 | |
| | baz=334,slow=74,SNR=102 | | | | | | |
| **AKASG** | **Malin Array Be** | **50.20** | **49** | P | **P** | **05 27 32.5** | **+0.5** |
| | 1.1nm,0.8s,baz=278,slow=7.4,SNR=4.4 | | | | | | |
| **BDFB** | **Brasilia** | **50.55** | **193** | P | **P** | **05 27 35.1** | **+0.1** |
| | 1.8nm,0.7s,baz=343,slow=14,SNR=3.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.47** | **326** | P | **P** | **05 28 03.3** | **-0.3** |
| | 1.3nm,1.0s,baz=84,slow=7.2,SNR=9.8 | | | | | | |
| YKA | | | | PcP | **PcP** | **05 29 06.1** | **-0.8** |
| | 0.5nm,0.7s,baz=88,slow=4.5,SNR=8.1 | | | | | | |
| **SIV** | **San Ignacio** | **54.72** | **208** | LR | LR | 05 49 58.7 | |
| | comp=Z,136nm,19.3s,baz=262,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **55.51** | **302** | P | **P** | **05 28 11.0** | **-0.7** |
| | 1.3nm,0.9s,baz=69,slow=8.1,SNR=7.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **55.60** | **285** | P | **P** | **05 28 12.6** | **+0.2** |
| | 0.3nm,0.7s,baz=88,slow=7.3,SNR=3.6 | | | | | | |
| **ANMO** | **Albuquerque** | **55.72** | **292** | LR | LR | 05 50 25.4 | |
| | comp=Z,77nm,20.0s,baz=288,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **58.06** | **215** | P | **P** | **05 28 31.3** | **+0.9** |
| | 0.9nm,0.9s,baz=8.3,slow=8.0,SNR=3.6 | | | | | | |
| **NEW** | **Newport** | **58.95** | **310** | LR | LR | 05 53 00.1 | |
| | comp=Z,100nm,18.0s,baz=50,slow=35 | | | | | | |
| **ELK** | **Elko** | **60.18** | **301** | LR | LR | 05 54 16.6 | |
| | comp=Z,74nm,19.0s,baz=62,slow=36 | | | | | | |
| **DLBC** | **Dease Lake** | **62.85** | **324** | LR | LR | 05 56 16.1 | |
| | comp=Z,180nm,18.9s,baz=67,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **63.25** | **300** | P | **P** | **05 29 05.0** | **-0.2** |
| | 0.6nm,0.8s,baz=81,slow=9.5,SNR=5.8 | | | | | | |
| NVAR | | | | LR | LR | 05 56 41.6 | |
| | comp=Z,113nm,18.3s,baz=20,slow=36 | | | | | | |
| **BBB** | **Bella Bella** | **64.21** | **317** | LR | LR | 05 56 12.0 | |
| | comp=Z,94nm,19.4s,baz=130,slow=35 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **65.00** | **305** | LR | LR | 05 58 16.7 | |
| | comp=Z,62nm,18.8s,baz=28,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **67.21** | **334** | P | **P** | **05 29 30.6** | **+0.4** |
| | 0.8nm,1.0s,baz=36,slow=4.4,SNR=4.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.72** | **43** | LR | LR | 05 58 21.5 | |
| | comp=Z,107nm,20.9s,baz=70,slow=35 | | | | | | |
| **KDAK** | **Kodiak Island** | **73.51** | **330** | LR | LR | 06 00 40.0 | |
| | comp=Z,84nm,20.4s,baz=78,slow=34 | | | | | | |
| **GEYT** | **Alibeck** | **73.84** | **55** | LR | LR | 06 02 22.3 | |
| | comp=Z,116nm,21.9s,baz=103,slow=36 | | | | | | |
| **ATD** | **Arta Tunnel** | **75.67** | **86** | LR | LR | 06 04 34.1 | |
| | comp=Z,105nm,20.7s,baz=98,slow=36 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **78.04** | **100** | LR | LR | 06 05 56.6 | |
| | comp=Z,137nm,19.1s,baz=90,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.09** | **31** | P | **P** | **05 30 40.0** | **-0.6** |
| | 0.3nm,0.3s,baz=264,slow=5.8,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.91** | **37** | P | **P** | **05 31 01.5** | **+0.3** |
| | 0.9nm,0.9s,baz=344,slow=4.0,SNR=6.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **92.07** | **351** | LR | LR | 06 12 21.6 | |
| | comp=Z,34nm,19.1s,baz=8.1,slow=35 | | | | | | |

**IDC 06 05:27:13.1±2.2,6°72S×129°38E,h0km,mb3.7/1, mb1 3.7/3,mb1mx3.5/21,mbtmp3.5/3,ML3.7/2,MS3.1/1, Ms1 3.1/1,ms1mx2.4/68,Error ellipse: s-maj=145.9km s-min=31.0km az=68.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.11** | **18** | LR | LR | 05 30 57.1 | |
| | comp=Z,190nm,20.5s,baz=224,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.99** | **160** | Pn | Pn | 05 30 33.2 | +0.3 |
| | 0.5nm,0.3s,baz=343,slow=13,SNR=23 | | | | | | |
| WRA | | | | Sn | Sn | 05 32 53.6 | -15 |

0.6nm,0.3s,baz=337,slow=22,SNR=8.3
**ASAR Alice Springs 17.40 166** P Pn 05 31 17.3 -0.2
0.2nm,0.3s,baz=338,slow=10,SNR=14
**MKAR Makanchi Array 67.66 327** P P 05 38 12.1 0.0
0.6nm,0.7s,baz=124,slow=7.4,SNR=8.4

**SCB 06 05:56:12.4±1.4,20.51S×66.97W,h220km±15km,ML3.6/4, Error ellipse: s-maj=7.1km s-min=3.6km az=1.0, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOCB** | **Mochara** | **1.45** | **121** | P | Pn | 05 56 48.1 | +0.1 |
| **PB08** | **IPOC Station P** | **2.08** | **280** | P | Pn | 05 56 55.1 | +1.4 |
| **PB01** | **IPOC Station P** | **2.42** | **257** | P | Pn | 05 56 57.7 | +0.9 |
| PB01 | | | | S | S | 05 57 31.6 | +0.3 |
| PB01 | | | | IAML | | 05 57 34.6 | |
| | 150nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **2.48** | **238** | P | Pn | 05 56 58.8 | +1.3 |
| **PB11** | **IPOC Station P** | **2.63** | **286** | P | Pn | 05 56 59.6 | +0.4 |
| **HMBC** | **Humberstone** | **2.75** | **274** | P | Pn | 05 57 00.7 | +0.3 |
| HMBC | | | | S | S | 05 57 36.8 | -1.0 |
| **LVC** | **Limon Verde** | **2.77** | **220** | P | Pn | 05 57 01.7 | +0.8 |
| **PB02** | **IPOC Station P** | **2.86** | **253** | P | Pn | 05 57 02.4 | +0.8 |
| PB02 | | | | S | S | 05 57 39.5 | -0.4 |
| PB02 | | | | IAML | | 05 57 42.0 | |
| | 235nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.98** | **245** | P | Pn | 05 57 04.2 | +1.1 |
| **PB03** | **IPOC Station P** | **3.02** | **239** | P | Pn | 05 57 04.5 | +1.0 |
| **PB16** | **IPOC Station P** | **3.23** | **312** | P | Pn | 05 57 07.5 | +1.2 |
| **PB06** | **IPOC Station P** | **3.27** | **227** | P | Pn | 05 57 07.1 | +0.8 |
| PB06 | | | | S | S | 05 57 47.3 | -1.2 |
| PB06 | | | | IAML | | 05 57 50.4 | |
| | 57nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **3.48** | **238** | P | Pn | 05 57 09.5 | +0.7 |
| PB04 | | | | S | S | 05 57 51.6 | -1.4 |
| PB04 | | | | IAML | | 05 57 53.7 | |
| | 60nm,0.2s | | | | | | |
| **PB15** | **IPOC Station P** | **3.56** | **220** | P | Pn | 05 57 10.4 | +0.6 |
| **BBOE** | **La Paz, Chanca** | **3.80** | **345** | P | Pn | 05 57 13.7 | +0.6 |
| **BBOD** | **La Paz, Gloria** | **4.15** | **338** | P | Pn | 05 57 17.7 | +0.4 |
| **LPAZ** | **La Paz** | **4.34** | **345** | P | Pn | 05 57 19.5 | -0.2 |
| **PB10** | **IPOC Station P** | **4.48** | **227** | P | Pn | 05 57 20.6 | -0.2 |

*IDC **06** 06:11:29.7±2.2,2.69S×128.45E, h0km, mb3.3/2, mb1 3.8/4, mb1mx3.1/43, mbtmp3.6/4, ML3.7/2, MS2.9/2, Ms1 3.0/2, ms1mx2.4/32, Error ellipse: s-maj=108.4km s-min=27.2km az=71.0*
*DJA **06** 06:11:40.1±0.6,3°S±3°×12°8E±°, h34km±14km, M3.9/12, mb4.2/4, MLv3.8/12*
**ISC 06 06:11:38.8±0.8,3.30S±0.07×127.50E±0.06, h35km, n23, σ2s17/24, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.80** | **119** | P | Pn | **06 11 55.3** | **+1.8** |
| AAI | | | | S | Sn | **06 12 06.8** | **+2.6** |
| **MSAI** | **Masohi** | **1.43** | **92** | P | Pn | **06 12 03.9** | **+1.6** |
| MSAI | | | | S | Sn | **06 12 21.6** | **+1.7** |
| **SANI** | **Sanana** | **1.95** | **309** | P | Pn | **06 12 10.0** | **+0.6** |
| **SANI** | **Sanana** | **1.95** | **309** | P | Pn | **06 12 10.2** | **+0.8** |
| **LBMI** | **Labuha** | **2.64** | **0** | P | Pn | **06 12 19.7** | **+0.8** |
| LBMI | | | | S | Sn | **06 12 51.9** | **+2.1** |
| **BNDI** | **Bandanaira** | **2.69** | **117** | P | Pn | **06 12 21.1** | **+1.5** |
| **TNTI** | **Ternate** | **4.04** | **358** | P | Pn | **06 12 38.6** | **+0.4** |
| **SWI** | **Sorong** | **4.47** | **57** | P | Pn | **06 12 44.1** | **0.0** |
| **FAKI** | **Fak Fak** | **4.76** | **86** | P | Pn | **06 12 48.1** | **0.0** |
| **FAKI** | **Fak Fak** | **4.76** | **86** | P | Pn | **06 12 48.1** | **0.0** |
| **BBSI** | **Bau Bau** | **5.37** | **246** | P | Pn | **06 12 58.6** | **+2.1** |
| | 0.1nm17nm,0.9s | | | | | | |
| **GTOI** | **Gorontalo** | **5.95** | **311** | P | Pn | **06 13 09.0** | **+4.6** |
| | 0.0nm8.2nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **7.17** | **206** | P | Pn | **06 13 23.5** | **+2.1** |
| **KDU** | **Kakadu** | **10.55** | **152** | P | Pn | **06 14 09.9** | **+2.3** |
| **JAY** | **Jayapura** | **13.21** | **87** | LR | LR | 06 19 43.5 | |
| | comp=Z,56nm,19.3s,baz=306,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.82** | **187** | Pn | Pn | **06 15 09.5** | **+3.6** |
| | 0.1nm,0.3s,baz=5.4,slow=13,SNR=2.0 | | | | | | |
| **WRAB** | **Tennant Creek** | **17.84** | **158** | P | Pn | **06 15 43.1** | **-1.3** |
| **WRA** | **Warramunga Arr** | **17.84** | **159** | P | Pn | **06 15 42.7** | **-1.7** |
| | 0.4nm,0.3s,baz=341,slow=12,SNR=17 | | | | | | |
| **COEN** | **Coen** | **18.76** | **125** | P | P | **06 15 51.8** | **-3.2** |
| **ASAR** | **Alice Springs** | **21.18** | **164** | P | P | **06 16 19.9** | **-1.4** |
| | 0.9nm,0.4s,baz=345,slow=12,SNR=21 | | | | | | |
| **WRKA** | **Warakurna** | **21.63** | **178** | P | P | **06 16 25.2** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **35.47** | **309** | LR | LR | 06 34 50.7 | |
| | comp=Z,18nm,18.3s,baz=70,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.78** | **327** | P | P | **06 22 04.3** | **-3.1** |
| | 0.2nm,0.7s,baz=115,slow=7.7,SNR=2.2 | | | | | | |

*IDC **06** 06:20:22.3±0.5,8.82S×74.45W,h147km±4km, mb3.8/13, mb1 4.0/18, mb1mx3.9/38, mbtmp4.3/18, Error ellipse: s-maj=17.0km s-min=10.5km az=49.0*
*VAO **06** 06:20:22.8±0.5,8.915S×74.45W,h150km, mb4.3*
*NEIC **06** 06:20:22.2±1.9,8.93S±0.07×74.50W±0.08,h145km±5km, mb4.6/35, Error ellipse: s-maj=12.9km s-min=9.5km az=126.0*
**ISC 06 06:20:21.8±0.5,8.91S±0.06×74.52W±0.05,h148km±4km, h148km:pP-P,n116,σ0s89/128, mb4.4/23, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CZSB** | **Cruzeiro do Su** | **2.15** | **57** | *eP* | **Pn** | **06 20 58.9** | **+0.4** |
| CZSB | | | | *eS* | **Sn** | **06 21 27.6** | **+0.8** |
| **CZSB** | **Cruzeiro do Su** | **2.15** | **57** | | **Pn** | **06 20 59.0** | **+0.5** |
| **NNA** | **Nana** | **3.82** | **216** | P | **Pn** | **06 21 19.9** | **+0.2** |
| | 34nm,0.3s,baz=37,slow=6.8,SNR=77 | | | | | | |
| NNA | | | | S | **Sn** | **06 22 02.6** | **-2.0** |
| | 73nm,0.3s,baz=0.5,slow=6.9,SNR=6.4 | | | | | | |
| **ATAH** | **Atahualpa** | **4.22** | **294** | P | **Pn** | **06 21 25.0** | **-0.2** |
| | 50nm,0.3s,baz=104,slow=5.2,SNR=470 | | | | | | |
| ATAH | | | | S | **Sn** | **06 22 11.4** | **-3.1** |
| | 20nm,0.3s,baz=6.4,slow=11,SNR=5.9 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **6.56** | **45** | *eP* | **Pn** | **06 21 54.9** | **-1.0** |
| **TBTG** | **Tabatinga, AM** | **6.56** | **45** | | **Pn** | **06 21 55.1** | **-0.8** |
| **ETMB** | **Extrema** | **8.25** | **97** | *eP* | **Pn** | **06 22 16.3** | **-2.3** |
| **ETMB** | **Extrema** | **8.25** | **97** | Pn | **Pn** | **06 22 16.2** | **-2.3** |
| **LPAZ** | **La Paz** | **9.63** | **140** | P | **Pn** | **06 22 39.1** | **+1.6** |
| | 0.1nm,0.3s,baz=339,slow=20,SNR=1.2 | | | | | | |
| **LPAZ** | **La Paz** | **9.63** | **140** | *eP* | **Pn** | **06 22 36.4** | **-1.1** |
| **VILB** | **Vilhena** | **14.62** | **107** | *eP* | **Pn** | **06 23 41.9** | **+0.1** |
| **VILB** | **Vilhena** | **14.62** | **107** | Pn | **Pn** | **06 23 41.2** | **-0.6** |
| **LVC** | **Limon Verde** | **14.65** | **159** | *eP* | **Pn** | **06 23 41.7** | **-0.7** |
| **MACA** | **Manacapuru-AM** | **14.89** | **68** | Pn | **Pn** | **06 23 42.4** | **-2.7** |
| **SIV** | **San Ignacio** | **14.90** | **120** | P | **Pn** | **06 23 45.1** | **0.0** |
| | 1.3nm,0.3s,baz=299,slow=11,SNR=60 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **16.38** | **115** | *eP* | **P** | **06 24 03.4** | **-0.2** |
| **PTLB** | **Pontes e Lacer** | **16.38** | **115** | P | **P** | **06 24 03.3** | **-0.2** |
| PTLB | | | | IAmb | IAmb | 06 24 06.6 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **PTGA** | **Pitinga** | **16.61** | **62** | P | **P** | **06 24 05.5** | **-0.6** |
| | comp=Z,2.6nm,0.3s,baz=333,slow=22,SNR=21 | | | | | | |
| **PDRB** | **Porto dos Gac** | **17.71** | **100** | *eP* | **Pn** | **06 24 18.9** | **-0.6** |
| **BOAV** | **Boa Vista** | **17.91** | **52** | *eP* | **P** | **06 24 20.6** | **+0.2** |
| **BOAV** | **Boa Vista** | **17.91** | **52** | P | **P** | **06 24 20.7** | **+0.3** |
| BOAV | | | | IAmb | IAmb | 06 24 21.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **CLDB** | **Colider** | **18.55** | **98** | *eP* | **P** | **06 24 27.5** | **+0.1** |
| **BAUV** | **El Baul** | **18.87** | **20** | P | **P** | **06 24 31.2** | **+0.4** |
| BAUV | | | | IAmb | IAmb | 06 24 34.1 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **NPGB** | **Novo Progresso** | **19.07** | **86** | *eP* | **P** | **06 24 33.2** | **+0.2** |
| **ITTB** | **Itaituba** | **19.20** | **78** | *eP* | **P** | **06 24 34.8** | **+0.4** |
| **SALV** | **Santo Antonio** | **19.65** | **113** | *eP* | **P** | **06 24 38.7** | **-0.6** |
| **SRBA** | **San Rafael, Bu** | **20.05** | **334** | P | **P** | **06 24 45.1** | **+1.4** |
| **BIRV** | **Birongo** | **20.93** | **23** | P | **P** | **06 24 53.6** | **+0.6** |
| BIRV | | | | IAmb | IAmb | 06 24 59.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **PP1B** | **Ponte de Pedra** | **20.96** | **116** | *eP* | **P** | **06 24 53.3** | **-0.1** |
| **MALB** | **Monte Alegre** | **21.34** | **72** | *eP* | **P** | **06 24 57.2** | **-0.2** |
| **AQDB** | **Aquidauana** | **21.51** | **124** | *eP* | **P** | **06 24 58.9** | **-0.3** |
| **SNDB** | **Serra Nova Dou** | **23.04** | **100** | *eP* | **P** | **06 25 14.6** | **+0.2** |
| **ARAG** | **Araguaiana, MT** | **23.18** | **109** | *eP* | **P** | **06 25 14.7** | **-0.9** |
| **CPUP** | **Villa Florida** | **23.80** | **139** | P | **P** | **06 25 21.0** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=350,slow=9.6,SNR=4.0 | | | | | | |
| **CPUP** | **Villa Florida** | **23.80** | **139** | *eP* | **P** | **06 25 20.6** | **-0.5** |
| **MCPB** | **Macapa, AP** | **23.93** | **70** | *eP* | **P** | **06 25 22.5** | **+0.1** |
| **GRGR** | **Grenville** | **24.50** | **32** | P | **P** | **06 25 27.4** | **-0.2** |
| **PRPB** | **Parauapebas** | **24.64** | **85** | *eP* | **P** | **06 25 28.5** | **-0.4** |
| **PCMB** | **Pacaembu** | **25.70** | **122** | *eP* | **P** | **06 25 38.0** | **-0.4** |
| **ITRB** | **Iturama** | **25.72** | **117** | *eP* | **P** | **06 25 38.4** | **-0.2** |
| **PEXB** | **Peixe** | **25.97** | **99** | *eP* | **P** | **06 25 40.8** | **-0.2** |
| **PTGB** | **Pitanga** | **26.56** | **129** | *eP* | **P** | **06 25 46.6** | **+0.4** |
| **ITQB** | **Itaqui** | **26.61** | **143** | *eP* | **P** | **06 25 46.8** | **+0.3** |
| **ITQB** | **Itaqui** | **26.61** | **143** | P | **P** | **06 25 47.5** | **+1.0** |
| ITQB | | | | IAmb | IAmb | 06 26 20.0 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **SMTB** | **Santa Maria do** | **26.61** | **92** | *eP* | **P** | **06 25 46.0** | **-0.7** |
| **BDFB** | **Brasilia** | **26.73** | **107** | P | **P** | **06 25 49.8** | **+1.9** |
| | comp=Z,5.8nm,0.6s,baz=268,slow=10,SNR=12 | | | | | | |
| **BDFB** | **Brasilia** | **26.73** | **107** | P | **P** | **06 25 49.1** | **+1.2** |
| BDFB | | | | IAmb | IAmb | 06 25 50.8 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | **27.07** | **78** | *eP* | **P** | **06 25 51.2** | **+0.4** |
| **IPMB** | **Ipameri, GO** | **27.10** | **112** | *eP* | **P** | **06 25 51.0** | **-0.1** |
| **BB19B** | **Bebedouro** | **27.82** | **119** | *eP* | **P** | **06 25 57.5** | **+0.1** |
| **FRTB** | **Fartura** | **27.88** | **124** | *eP* | **P** | **06 25 58.5** | **+0.6** |
| **CELP** | **Cerrillos** | **27.93** | **16** | P | **P** | **06 25 58.4** | **0.0** |
| **ITAB** | **Concordia** | **27.94** | **134** | *eP* | **P** | **06 25 59.8** | **+1.5** |
| **SDBA** | **SAO DESIDERIO** | **29.31** | **99** | *eP* | **P** | **06 26 11.9** | **+1.2** |
| **VAO** | **Valinhos** | **29.89** | **121** | *eP* | **P** | **06 26 16.5** | **+0.7** |
| **JANB** | **Januaria** | **30.16** | **105** | *eP* | **P** | **06 26 18.9** | **+0.7** |
| **ROSB** | **Rosrio** | **30.80** | **81** | *eP* | **P** | **06 26 24.1** | **+0.3** |
| **DIAM** | **Diamantina, MG** | **31.36** | **111** | *eP* | **P** | **06 26 29.6** | **+0.7** |
| **NBPS** | **Pedro II - PI** | **33.15** | **84** | *eP* | **P** | **06 26 44.5** | **0.0** |
| **NBPN** | **Ponto Novo - B** | **33.86** | **96** | *eP* | **P** | **06 26 50.8** | **+0.2** |
| **NAN01** | **Guarapari, ES** | **34.57** | **109** | *eP* | **P** | **06 26 58.6** | **+1.9** |
| **GDU01** | **Guandu, BA** | **34.58** | **101** | *eP* | **P** | **06 26 56.8** | **0.0** |
| **RIB01** | **Linhares ES** | **34.61** | **111** | *eP* | **P** | **06 26 56.8** | **-0.2** |
| **ALF01** | **Guarapari-ES** | **34.61** | **113** | *eP* | **P** | **06 26 57.3** | **+0.3** |
| **NBMO** | **Morrinhos-CE** | **34.72** | **83** | *eP* | **P** | **06 26 58.8** | **+0.9** |
| **CMC01** | **Camacan, BA** | **34.78** | **104** | *eP* | **P** | **06 27 00.1** | **+1.7** |
| **NBIT** | **Itapeh - BA** | **34.82** | **103** | *eP* | **P** | **06 26 59.9** | **+1.1** |
| **NBMA** | **Muriti-CE** | **35.42** | **90** | *eP* | **P** | **06 27 03.9** | **-0.2** |
| **NBLA** | **Lagarto - SE** | **36.23** | **96** | *eP* | **P** | **06 27 11.3** | **+0.5** |
| **NBAN** | **Anadia - AL** | **37.74** | **94** | *eP* | **P** | **06 27 23.8** | **+0.1** |
| **TXAR** | **Lajitas Array** | **47.27** | **325** | P | **P** | **06 28 41.1** | **+0.7** |
| | comp=Z,3.7nm,0.7s,baz=150,slow=8.9,SNR=47 | | | | | | |
| TXAR | | | | pP | **pP** | **06 29 15.5** | **+1.6** |
| | comp=Z,0.6nm,0.6s,baz=148,slow=7.7,SNR=2.7 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **47.27** | **325** | P | **P** | **06 28 41.3** | **+0.9** |
| TX31 | | | | IAmb | IAmb | 06 28 41.7 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **TX32** | **Lajitas Array** | **47.27** | **325** | P | **P** | **06 28 41.5** | **+1.0** |
| **X37A** | **Clayton** | **47.55** | **337** | P | **P** | **06 28 43.2** | **+0.8** |
| X37A | | | | IAmb | IAmb | 06 29 15.2 | |
| | comp=Z,40nm,1.9s | | | | | | |
| **HHAR** | **Hobbs** | **48.52** | **339** | P | **P** | **06 28 49.2** | **-0.7** |
| HHAR | | | | IAmb | IAmb | 06 28 50.1 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **P53A** | **Whipple** | **48.57** | **353** | P | **P** | **06 28 49.6** | **-0.6** |
| **OK029** | **Liberty Lake** | **49.44** | **335** | P | **P** | **06 28 56.8** | **-0.1** |
| OK029 | | | | IAmb | IAmb | 06 28 57.3 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| **S39A** | **Bolivar** | **49.58** | **340** | P | **P** | **06 28 57.2** | **-0.7** |
| S39A | | | | IAmb | IAmb | 06 28 58.3 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **MNTX** | **Cornudas Mount** | **50.02** | **325** | P | **P** | **06 29 02.6** | **+1.3** |
| **BINY** | **Binghamton** | **50.87** | **359** | P | **P** | **06 29 07.7** | **+0.1** |
| **SDCO** | **Great Sand Dun** | **54.70** | **330** | P | **P** | **06 29 36.5** | **+0.4** |
| **X16A** | **Lo Mia Camp, P** | **55.49** | **323** | P | **P** | **06 29 42.6** | **+0.9** |
| X16A | | | | IAmb | IAmb | 06 29 43.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **60.55** | **331** | P | **P** | **06 30 16.3** | **-0.5** |
| | comp=Z,0.9nm,0.7s,baz=134,slow=7.4,SNR=8.2 | | | | | | |
| PDAR | | | | pP | **pP** | **06 30 52.5** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=120,slow=8.0,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.28** | **322** | P | **P** | **06 30 29.8** | **+1.3** |
| | comp=Z,0.7nm,0.7s,baz=140,slow=8.0,SNR=6.0 | | | | | | |
| **L04D** | **Klamath Falls** | **67.03** | **323** | P | **P** | **06 30 59.6** | **+0.5** |
| **DBIC** | **Dimbokro** | **71.14** | **80** | P | **P** | **06 31 23.6** | **-1.2** |
| | comp=Z,2.3nm,0.5s,baz=245,slow=4.3,SNR=2.3 | | | | | | |
| DBIC | | | | pP | **pP** | **06 31 59.9** | **-1.0** |
| | comp=Z,3.2nm,0.7s,baz=251,slow=6.3,SNR=3.2 | | | | | | |
| **DBIC** | **Dimbokro** | **71.14** | **80** | IAmb | IAmb | 06 32 27.5 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **75.87** | **162** | P | **P** | **06 31 52.6** | **+1.0** |
| | comp=Z,2.1nm,1.0s,baz=250,slow=10.0,SNR=9.7 | | | | | | |
| SNAA | | | | pP | **pP** | **06 32 29.1** | **+1.1** |
| | comp=Z,2.6nm,0.7s,baz=280,slow=6.8,SNR=3.8 | | | | | | |
| **SNAA** | **Sanae** | **75.87** | **162** | P | **P** | **06 31 51.5** | **0.0** |
| SNAA | | | | pP | **pP** | **06 32 27.7** | **-0.3** |
| SNAA | | | | IAmb | IAmb | 06 32 54.1 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.60** | **342** | P | **P** | **06 32 00.9** | **-0.3** |
| | comp=Z,2.3nm,0.6s,baz=142,slow=5.8,SNR=60 | | | | | | |
| YKA | | | | pP | **pP** | **06 32 38.0** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=142,slow=6.0,SNR=9.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.78** | **75** | P | **P** | **06 32 08.2** | **-0.6** |
| | comp=Z,2.6nm,0.6s,baz=267,slow=4.0,SNR=4.8 | | | | | | |
| TORD | | | | pP | **pP** | **06 32 43.9** | **-1.6** |
| | comp=Z,2.5nm,0.8s,baz=289,slow=6.5,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.78** | **75** | P | **P** | **06 32 08.4** | **-0.4** |
| **ESDC** | **Sonseca Array** | **81.03** | **47** | P | **P** | **06 32 21.0** | **+0.6** |
| | comp=Z,1.1nm,1.0s,baz=258,slow=5.1,SNR=4.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **81.21** | **180** | P | **P** | **06 32 22.6** | **+1.6** |
| | comp=Z,2.4nm,0.7s,baz=153,slow=2.1,SNR=14 | | | | | | |
| **QSPA** | **South Pole Qui** | **81.21** | **180** | IAmb | IAmb | 06 32 23.4 | |
| | comp=Z,41nm,2.0s | | | | | | |
| **SUMG** | **Summit** | **84.61** | **10** | *i* P | **P** | **06 32 38.0** | **-0.6** |
| **INK** | **Inuvik** | **87.34** | **341** | P | **P** | **06 32 51.8** | **+0.3** |
| | comp=Z,2.4nm,0.9s,baz=85,slow=4.5,SNR=6.8 | | | | | | |
| INK | | | | pP | **pP** | **06 33 29.6** | **+0.7** |
| | comp=Z,2.7nm,0.9s,baz=104,slow=6.4,SNR=4.7 | | | | | | |
| **INK** | **Inuvik** | **87.34** | **341** | IAmb | IAmb | 06 34 25.1 | |
| | comp=Z,16nm,1.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **87.63** | **334** | P | **P** | **06 32 53.7** | **+0.4** |
| **VRDI** | **Verde Repeater** | **87.86** | **333** | P | **P** | **06 32 54.7** | **+0.2** |
| **BCAR** | **Beaver Creek A** | **87.88** | **335** | P | **P** | **06 32 54.8** | **+0.4** |
| **L27K** | **Beaver Creek,** | **87.90** | **335** | P | **P** | **06 32 55.0** | **+0.6** |
| L27K | | | | IAmb | IAmb | 06 33 34.3 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **89.15** | **336** | P | **P** | **06 33 00.4** | **+0.1** |
| SCRK | | | | pP | **pP** | **06 33 38.6** | **+0.7** |
| SCRK | | | | IAmb | IAmb | 06 33 39.3 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **89.18** | **336** | P | **P** | **06 33 00.8** | **+0.3** |
| J26L | | | | IAmb | IAmb | 06 33 40.0 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **89.94** | **336** | P | **P** | **06 33 04.4** | **+0.4** |
| **ILAR** | **Eielson Array** | **90.61** | **336** | P | **P** | **06 33 07.0** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=116,slow=3.7,SNR=8.7 | | | | | | |
| ILAR | | | | pP | **pP** | **06 33 45.0** | **+0.4** |
| | comp=Z,2.2nm,0.9s,baz=149,slow=3.6,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **90.61** | **336** | P | **P** | **06 33 07.0** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **132.11** | **16** | PKP | **PKPdf** | **06 39 18.1** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=278,slow=3.1,SNR=6.2 | | | | | | |
| ZALV | | | | pPKP | **pPKPdf** | **06 39 57.9** | **+0.7** |
| | comp=Z,4.7nm,0.7s,baz=294,slow=1.5,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **137.34** | **220** | PKP | **PKPdf** | **06 39 28.6** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=128,slow=1.9,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **137.38** | **24** | PKP | **PKPdf** | **06 39 28.0** | **0.0** |
| | comp=Z,0.7nm,0.8s,baz=28,slow=2.3,SNR=5.9 | | | | | | |
| MKAR | | | | pPKP | **pPKPdf** | **06 40 07.7** | **+0.4** |
| | comp=Z,1.9nm,0.8s,baz=327,slow=1.8,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **139.64** | **225** | PKP | **PKPdf** | **06 39 33.3** | **+0.4** |
| | comp=Z,1.2nm,0.3s,baz=122,slow=2.1,SNR=31 | | | | | | |
| **KSRS** | **Korea Array** | **145.07** | **328** | PKPbc | **PKPbc** | **06 39 41.7** | **0.0** |
| | comp=Z,5.4nm,0.9s,baz=57,slow=3.0,SNR=9.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **146.59** | **217** | PKPbc | **PKPbc** | **06 39 47.5** | **+0.6** |
| | comp=Z,7.0nm,0.9s,baz=177,slow=6.2,SNR=9.6 | | | | | | |
| **GTA** | **Gaotai** | **149.21** | **9** | *e*PKPbc | **PKPbc** | **06 39 54.1** | **+0.7** |
| GTA | | | | pPKP | pPKPbc | 06 40 32.7 | +0.3 |
| GTA | | | | sPKP | | 06 40 50.5 | |
| **LZH** | **Lanzhou** | **152.90** | **3** | *e*PKPbc | **PKPdf** | **06 39 53.8** | **-1.1** |
| LZH | | | | sPKP | | 06 40 43.3 | |
| **PZH** | **PanZhiHua** | **162.14** | **11** | PKP | **PKPdf** | **06 40 04.7** | **-1.8** |

**IDC 06 06:22:05.3±9.4,4.35S×153.52E,h117km±67km, mb3.4/3, mb1 3.6/4, mb1mx3.2/44, mbtmp3.9/4, Error ellipse: s-maj=80.7km s-min=56.3km az=102.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **8.07** | **231** | P | Pn | 06 24 00.1 | +0.3 |
| | 2.2nm,0.3s,baz=51,slow=13,SNR=3.9 | | | | | | |
| PMG | | | | S | Sn | 06 25 29.8 | +0.4 |
| | 1.3nm,0.3s,baz=129,slow=16,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.28** | **229** | P | P | 06 27 12.1 | +0.2 |
| | 2.2nm,0.5s,baz=54,slow=10.0,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **26.96** | **223** | P | P | 06 27 35.9 | -0.4 |
| | 0.3nm,0.5s,baz=56,slow=9.3,SNR=6.0 | | | | | | |
| **STKA** | **Stephens Creek** | **29.59** | **201** | P | P | 06 27 59.4 | 0.0 |
| | 0.9nm,0.6s,baz=17,slow=15,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.84** | **289** | PKPbc | PKPbc | 06 41 44.9 | -0.3 |
| | 0.7nm,0.8s,baz=82,slow=1.9,SNR=4.1 | | | | | | |

**KRSC 06 07:01:31.5±2.6,49.06N×157.26E,h18km±60km, ML3.6, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **2.42** | **353** | *e*S | Sn | 07 02 41.1 | +1.8 |
| **KDTR** | **Khodutka, Kamc** | **2.80** | **10** | *e*S | Sb | 07 02 53.6 | -1.2 |
| **RUS** | **Russkaya** | **3.47** | **13** | *e*P | Pn | 07 02 27.7 | +3.2 |
| RUS | | | | *e*S | Sn | 07 03 08.5 | +3.5 |
| **MTVR** | **Mutnovka** | **3.47** | **9** | *e*P | Pn | 07 02 28.4 | +3.7 |
| MTVR | | | | *e*S | Sn | 07 03 09.9 | +4.4 |
| **GRL** | **Gorelyy** | **3.53** | **8** | *e*P | Pn | 07 02 29.1 | +3.6 |
| **UGLR** | **Uglovaya** | **4.27** | **13** | *e*P | Pn | 07 02 39.1 | +3.5 |
| **KOK** | **Koryaka** | **4.32** | **11** | *e*P | Pn | 07 02 41.5 | +5.2 |
| **SDLR** | **Sedlovina** | **4.34** | **13** | *e*P | Pn | 07 02 40.6 | +4.0 |

*KRSC **06** 07:41:43.6±1.4,56.23N×163.61E, h18km±12km, ML3.9*
*IDC **06** 07:41:45.3±2.2,56.08N×164.09E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.4/41, mbtmp3.6/5, ML2.4/1, MS3.0/1, Ms1 3.0/1, ms1mx2.3/98, Error ellipse: s-maj=81.0km s-min=24.7km az=154.0*
**ISC 06 07:41:43.7±1.4,56.25N±0.04×163.58E±0.03, h5km±10km, n50, σ1s61/47, mb3.6/4, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBTR** | **Krutoberegovo** | **0.43** | **264** | *e*P | **Pg** | **07 41 52.2** | **+0.3** |
| KBTR | | | | *e*S | **Sg** | **07 41 57.6** | **+0.2** |
| **KBG** | **Krutoberegovo** | **0.49** | **271** | *e*P | **Pg** | **07 41 53.1** | **+0.1** |
| KBG | | | | *e*S | **Sg** | **07 41 59.9** | **+0.6** |
| **SMKR** | **Semkarok** | **1.22** | **287** | *e*P | **Pb** | **07 42 07.0** | **-0.2** |
| **BDR** | **Baidarnaya** | **1.35** | **284** | *e*P | **Pb** | **07 42 09.0** | **-0.5** |
| **SRKR** | **Sorokina** | **1.40** | **288** | *e*P | **Pn** | **07 42 08.5** | **-1.4** |
| **ZLN** | **Zelenaya** | **1.57** | **262** | *e*P | **Pb** | **07 42 12.8** | **-0.4** |
| ZLN | | | | *e*S | **Sg** | **07 42 34.0** | **-0.1** |
| **CIRR** | **Tsirk** | **1.59** | **266** | *e*P | **Pb** | **07 42 13.2** | **-0.4** |
| **LGNR** | **Loginova** | **1.62** | **265** | *e*P | **Pb** | **07 42 13.9** | **-0.4** |
| LGNR | | | | *e*S | **Sb** | **07 42 35.2** | **0.0** |
| **KLY** | **Klyuchi** | **1.63** | **273** | *e*S | **Sn** | **07 42 32.0** | **-2.4** |
| **BZGR** | **Bezymyannyi-Gr** | **1.65** | **260** | P | **Pb** | **07 42 14.6** | **+0.1** |
| **KRSR** | **Krestovskiy** | **1.68** | **270** | *e*P | **Pb** | **07 42 13.9** | **-1.2** |
| KRSR | | | | *e*S | **Sb** | **07 42 36.6** | **-0.1** |
| **BKI** | **Bering** | **1.71** | **127** | *e*P | **Pb** | **07 42 14.3** | **-1.3** |
| BKI | | | | *e*S | **Sb** | **07 42 36.2** | **-1.2** |
| **BZWR** | **Bezymyannyi-We** | **1.75** | **262** | *e*P | **Pb** | **07 42 15.4** | **-0.9** |
| BZWR | | | | *e*S | **Sb** | **07 42 38.3** | **-0.4** |
| **KIRR** | **Kirishev** | **1.84** | **262** | *e*P | **Pb** | **07 42 16.9** | **-0.9** |
| KIRR | | | | *e*S | **Sb** | **07 42 40.7** | **-0.5** |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMSA** | **Cobar Meteorol** | **26.01** | **199** | P | **P** | **08 03 59.9** | **+0.9** | |
| **ASAR** | **Alice Springs** | **26.28** | **228** | P | **P** | **08 04 00.5** | **-1.2** | |
| | 2.4nm,0.7s,baz=60,slow=9.1,SNR=36 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 07 27.4** | **0.0** | |
| | 0.4nm,0.6s,baz=69,slow=2.4,SNR=4.6 | | | | | | | |
| ASAR | | | | LR | LR | 08 12 52.2 | | |
| | comp=Z,45nm,18.8s,baz=121,slow=33 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.73** | **24** | T | T | 08 32 42.4 | | |
| | baz=203,slow=75,SNR=10 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.74** | **24** | T | T | 08 32 41.3 | | |
| | baz=203,slow=75,SNR=12 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.75** | **24** | T | T | 08 32 45.5 | | |
| | baz=203,slow=75,SNR=5.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.83** | **205** | P | **P** | **08 04 14.1** | **-1.3** | |
| | 2.6nm,0.4s,baz=24,slow=12,SNR=15 | | | | | | | |
| STKA | | | | LR | LR | 08 15 39.8 | | |
| | comp=Z,26nm,18.5s,baz=27,slow=37 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.83** | **205** | P | **P** | **08 04 17.6** | **+2.2** | |
| **CMAR** | **Chiang Mai Arr** | **60.84** | **295** | P | **P** | **08 08 39.6** | **+1.1** | |
| | 2.1nm,0.3s,baz=121,slow=5.7,SNR=6.9 | | | | | | | |
| **SONM** | **Songino Array** | **69.33** | **327** | P | **P** | **08 09 33.0** | **-0.2** | |
| | 0.6nm,0.8s,baz=125,slow=7.8,SNR=3.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.28** | **21** | P | **P** | **08 10 51.0** | **-0.9** | |
| | 1.0nm,0.8s,baz=252,slow=5.4,SNR=8.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.41** | **319** | P | **P** | **08 10 52.9** | **-0.2** | |
| | 0.6nm,0.7s,baz=99,slow=6.6,SNR=5.5 | | | | | | | |
| **INK** | **Imuvik** | **99.62** | **21** | P | **P** | **08 11 22.8** | **-0.1** | |
| | 0.8nm,0.5s,baz=274,slow=3.9,SNR=6.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.61** | **52** | P | **P** | **08 11 34.0** | **+0.9** | |
| | 0.7nm,0.9s,baz=250,slow=6.0,SNR=4.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.24** | **28** | P | **P** | **08 11 53.1** | **-0.3** | |
| | 0.7nm,0.8s,baz=262,slow=4.6,SNR=8.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.09** | **285** | PKPbc | **PKPbc** | **08 18 23.3** | **-0.8** | |
| | 0.4nm,0.4s,baz=48,slow=2.1,SNR=5.2 | | | | | | | |

*IDC **06** 08:07:41.8±3.3,39°.21N×144°.01E,h0km,mb3.4/2,*
*mb1 3.7/3,mb1mx2.9/53,mbtmp3.5/3,ML2.9/1,Error*
*ellipse: s-maj=71.7km s-min=43.5km az=66.0*
*NIED **06** 08:07:45.6,39°.39N×143°.47E,h33km,MW3.5,Moment*
*Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm;*
*$M_{rr}$1.03; $M_{\theta\theta}$0.01; $M_{\phi\phi}$-1.04; $M_{r\theta}$0.90; $M_{\theta\phi}$-0.53; $M_{\phi r}$1.24;*
*Fault plane solution: $M_0$1.92000×$10^{14}$ NP1:$\chi_s$34.00000°,*
*$\delta$72.00000°,$\lambda$99.00000°. NP2:$\chi_s$187.00000°,$\delta$20.00000°,*
*$\lambda$65.00000°.*
*JMA **06** 08:07:45.6±0.1,39°.39N×143°.47E,h33km,M3.5*
**ISC 06 08:07:45.0**±1.9**,39°43N**±0°.09×**143°4E**±0°.1**,h11**km**,n14,**
**$\sigma$1$^s$44/15,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MIYJ** | **Miyakonagasawa** | **1.26** | **277** | P | | **Pn** | **08 08 08.1** | **-0.4** |
| MIYJ | | | | *e*S | | **Sn** | **08 08 24.4** | **-1.0** |
| **JTH** | **Tanohata** | **1.31** | **293** | P | | **Pn** | **08 08 08.9** | **-0.4** |
| JTH | | | | *e*S | | **Sn** | **08 08 25.9** | **-0.9** |
| **OFUJ** | **Ofunato** | **1.42** | **256** | P | | **Pn** | **08 08 10.1** | **-0.5** |
| **JOM** | **Ohasama** | **1.66** | **272** | P | | **Pn** | **08 08 14.2** | **+0.2** |
| **JMK** | **Ichinoseki** | **1.79** | **255** | P | | **Pn** | **08 08 15.7** | **0.0** |
| **JIO** | **Ouri** | **1.90** | **240** | P | | **Pn** | **08 08 16.6** | **-0.6** |
| JIO | | | | *e*S | | **Sn** | **08 08 39.2** | **-1.9** |
| **JRG** | **Rokugo** | **2.17** | **270** | P | | **Pn** | **08 08 21.7** | **+0.7** |
| **MAT** | **Matsushiro** | **5.04** | **237** | P | | **Pn** | **08 09 02.0** | **+1.5** |
| MAT | | | | *e*S | | **Sn** | **08 09 59.9** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **5.04** | **237** | Pn | | **Pn** | **08 09 02.1** | **+1.7** |
| | 0.4nm,0.3s,baz=35,slow=14,SNR=16 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.98** | **129** | T | | T | 08 44 31.7 | |
| | baz=312,slow=75,SNR=14 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.98** | **129** | T | | T | 08 44 32.2 | |
| | baz=312,slow=75,SNR=12 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.00** | **129** | T | | T | 08 44 32.8 | |
| | baz=312,slow=75,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.24** | **300** | P | | **P** | **08 15 56.6** | **+2.4** |
| | 0.4nm,0.6s,baz=89,slow=7.4,SNR=4.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.67** | **190** | P | | **P** | **08 17 47.0** | **-2.3** |
| | 0.5nm,1.1s,baz=8.5,slow=7.0,SNR=2.4 | | | | | | | |

*SFS **06** 08:10:04.0,35°.70N×3°.60W,ML2.2,ALBORAN SUR*
*INMG **06** 08:10:05.3±1.3,35°.71N×3°.68W,h0km,ML2.3,Error*
*ellipse: s-maj=3.1km s-min=2.4km az=179.0*
*CNRM **06** 08:10:06.2,35°.71N×3°.55W,h32km,ml2.8*
*IGIL **06** 08:10:06.4,35°.71N×3°.68W,h0km*
**ISC 06 08:10:05.6**±1.5**,35°.71N**±0°.04×**3°.54W**±0°.05**,h27**km±14km**,**
**n27,$\sigma$1$^s$32/47,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.59** | **214** | P | | **Pb** | **08 10 17.2** | **-0.2** |
| PALE | | | | S | | **Sb** | **08 10 25.8** | **+0.4** |
| **CHAS** | **Isla Isabel II** | **1.04** | **120** | P | | **Pn** | **08 10 23.8** | **-0.6** |
| CHAS | | | | S | | **Sn** | **08 10 37.0** | **-1.0** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **326** | P | | **Pn** | **08 10 27.4** | **-0.2** |
| EMAL | | | | S | | **Sn** | **08 10 43.7** | **-0.1** |
| **CEU** | **Ceuta** | **1.50** | **278** | P | | **Pn** | **08 10 28.4** | **-2.3** |
| CEU | | | | S | | **Sn** | **08 10 46.3** | **-3.1** |
| **JBK** | **JBK** | **1.58** | **150** | P | | **Pn** | **08 10 32.0** | **0.0** |
| JBK | | | | S | | **Sn** | **08 10 51.2** | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.59** | **248** | P | | **Pn** | **08 10 33.0** | **+1.0** |
| **SICH** | **Sidi Chahed** | **2.17** | **223** | P | | **Pb** | **08 10 42.9** | **-1.2** |
| SICH | | | | S | | **Sn** | **08 11 08.3** | **+2.5** |
| **TDRA** | **Tendrara** | **2.94** | **154** | P | | **Pn** | **08 10 51.0** | **+0.4** |
| **MD31** | **MD31** | **3.01** | **200** | P | | **Pn** | **08 10 53.2** | **+1.7** |
| MD31 | | | | S | | **Sn** | **08 11 25.0** | **-1.7** |
| **MDT** | **Midelt** | **3.02** | **197** | P | | **Pn** | **08 10 52.8** | **+1.1** |
| MDT | | | | S | | **Sn** | **08 11 28.0** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Pn | | **Pn** | **08 11 02.4** | **+0.5** |
| PVAQ | | | | *e*Sn | | **Sn** | **08 11 44.4** | **-0.9** |
| PVAQ | | | | A | | A | 08 11 53.1 | |
| | 5.6nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | | **Pn** | **08 11 02.3** | **+0.5** |
| **PCVE** | **Castro Verde** | **4.10** | **299** | *e*Pn | | **Pn** | **08 11 07.1** | **+0.7** |
| PCVE | | | | *e*Sn | | **Sn** | **08 11 53.0** | **-0.4** |
| PCVE | | | | A | | A | 08 11 55.1 | |
| | 6.1nm,0.4s | | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*P | | **Pn** | **08 11 10.2** | **+0.7** |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*Pn | | **Pn** | **08 11 10.5** | **+1.1** |
| MESJ | | | | *e*Sn | | **Sn** | **08 11 58.4** | **-0.5** |
| MESJ | | | | A | | A | 08 12 03.5 | |
| | 4.1nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.42** | **293** | *e*P | | **Pn** | **08 11 11.2** | **+0.4** |
| **MORF** | **Marmelete** | **4.42** | **293** | *e*Pn | | **Pn** | **08 11 11.2** | **+0.4** |
| MORF | | | | *e*Sn | | **Sn** | **08 12 00.4** | **-1.0** |
| MORF | | | | A | | A | 08 12 05.7 | |
| | 4.5nm,0.1s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.50** | **290** | P | | **Pn** | **08 11 12.9** | **+1.0** |
| PFVI | | | | S | | **Sn** | **08 12 01.5** | **-1.8** |
| **PESTR** | **Estremoz** | **4.51** | **316** | *e*Pn | | **Pn** | **08 11 12.9** | **+0.8** |
| PESTR | | | | *e*Sn | | **Sn** | **08 12 03.1** | **-0.6** |
| PESTR | | | | A | | A | 08 12 05.8 | |
| | 3.5nm,0.6s | | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **316** | P | | **Pn** | **08 11 13.4** | **+1.2** |
| PESTR | | | | S | | **Sn** | **08 12 03.1** | **-0.6** |
| **EVO** | **Evora** | **4.55** | **310** | *e*Pn | | **Pn** | **08 11 14.3** | **+1.7** |
| EVO | | | | *e*Sn | | **Sn** | **08 12 04.4** | **-0.3** |
| EVO | | | | A | | A | 08 12 07.1 | |
| | 3.9nm,0.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **302** | *e*Pn | | **Pn** | **08 11 15.2** | **+1.0** |
| PNCL | | | | *e*Sn | | **Sn** | **08 12 06.8** | **-0.6** |
| PNCL | | | | A | | A | 08 12 09.1 | |
| | 2.1nm,0.8s | | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **322** | *e*Pn | | **Pn** | **08 11 18.2** | **+2.0** |
| PMRV | | | | *e*Sn | | **Sn** | **08 12 11.3** | **+0.2** |
| **PMTG** | **Montargil** | **5.02** | **313** | *e*Pn | | **Pn** | **08 11 20.7** | **+1.7** |
| PMTG | | | | *e*Sn | | **Sn** | **08 12 15.1** | **-1.0** |
| PMTG | | | | A | | A | 08 12 17.1 | |
| | 2.2nm,0.4s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.17** | **324** | *e*Pn | | **Pn** | **08 11 23.2** | **+2.1** |
| PCBR | | | | *e*Sn | | **Sn** | **08 12 19.4** | **-0.5** |
| PCBR | | | | A | | A | 08 12 21.1 | |
| | 2.6nm,0.5s | | | | | | | |
| **PSBE** | **So Bento** | **5.64** | **314** | *e*Pn | | **Pn** | **08 11 29.8** | **+2.1** |
| **MVO** | **Moncorvo** | **6.10** | **334** | *e*Pn | | **Pn** | **08 11 36.8** | **+2.9** |

*IDC **06** 08:18:05.0±3.5,53°.76N×90°.92E,h0km,mb1 3.7/3,*
*mb1mx2.9/46,mbtmp3.7/3,ML3.2/3,Error ellipse:*
*s-maj=33.2km s-min=24.5km az=62.0*
*NNC **06** 08:18:07.0±1.7,53°.78N×90°.55E,h0km,mb4.0,mpv3.7,*
*Error ellipse: s-maj=12.9km s-min=10.2km az=71.0,*
*Suspected Mining explosion.*
**ISC 06 08:18:06.5**±4.1**,53°.7N**±0°.1×**90°.7E**±0°.2**,h0**km**,n10,**
**$\sigma$0$^s$94/14,6C-7D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.49** | **276** | *i* | | | 08 44 30.0 | |
| | baz=89,slow=346,SNR=0.7 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.49** | **276** | ⇓Pg | | **Pb** | **08 19 08.5** | **-0.6** |
| | 4.8nm,0.8s | | | | | | | |
| ZAA0 | | | | ⇑Lg | | Lg | 08 19 55.2 | |
| | 24nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.49** | **276** | Pn | | **Pn** | **08 19 03.3** | **+1.4** |
| | 4.1nm,0.3s,baz=95,slow=18,SNR=28 | | | | | | | |
| ZALV | | | | Pg | | **Pb** | **08 19 08.1** | **-1.0** |
| | 4.1nm,0.3s,baz=101,slow=16,SNR=22 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 19 58.3 | |
| | 4.3nm,0.3s,baz=92,slow=26,SNR=13 | | | | | | | |
| **KURK** | **Kurchatov** | **8.01** | **253** | ⇓Pn | | **Pn** | **08 20 03.9** | **-0.1** |
| | 8.5nm,1.0s | | | | | | | |
| KURK | | | | ⇑Sn | | **Sn** | **08 21 36.6** | **+1.3** |
| | 20nm,0.9s | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | 08 22 20.5 | |
| | 55nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.11** | **252** | Pn | | **Pn** | **08 20 05.6** | **+0.3** |
| | 0.3nm,0.3s,baz=64,slow=14,SNR=19 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 22 25.2 | |
| | 0.2nm,0.3s,baz=59,slow=29,SNR=3.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.11** | **252** | ⇓Pn | | **Pn** | **08 20 05.1** | **-0.2** |
| | 8.4nm,0.7s | | | | | | | |
| KURBB | | | | ⇑Sn | | **Sn** | **08 21 36.3** | **-1.3** |
| | 54nm,0.8s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 08 22 21.9 | |
| | 110nm,0.9s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.79** | **221** | Pn | | **Pn** | **08 20 15.1** | **+0.3** |
| | 1.1nm,0.5s,baz=41,slow=13,SNR=32 | | | | | | | |
| MK31 | | | | ⇓Sn | | **Sn** | **08 21 54.6** | **+0.1** |
| | 3.4nm,0.7s,baz=39,slow=23,SNR=3.0 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 08 22 45.7 | |
| | 19nm,0.8s,baz=34,slow=31,SNR=5.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.79** | **221** | Pn | | **Pn** | **08 20 14.7** | **-0.1** |
| | 0.5nm,0.3s,baz=41,slow=13,SNR=35 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **08 21 55.0** | **+0.4** |
| | 0.3nm,0.3s,baz=31,slow=20,SNR=2.5 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 22 40.0 | |
| | 0.1nm,0.3s,baz=33,slow=28,SNR=1.6 | | | | | | | |
| **MAKZ** | **Makanchi** | **8.90** | **222** | ⇑Pn | | **Pn** | **08 20 16.1** | **-0.2** |
| | 2.1nm,0.8s | | | | | | | |
| MAKZ | | | | ⇓Sn | | **Sn** | **08 21 58.9** | **+1.6** |
| | 6.4nm,0.8s | | | | | | | |
| MAKZ | | | | ⇓Lg | | Lg | 08 22 48.8 | |
| | 27nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **11.55** | **114** | Lg | | Lg | 08 23 58.0 | |
| | 0.2nm,0.3s,baz=294,slow=25,SNR=6.5 | | | | | | | |

*IDC **06** 08:31:32.8±1.0,9°.82S×126°.90E,h0km,mb4.3/6,*
*mb1 4.5/8,mb1mx4.1/26,mbtmp4.3/8,ML4.6/2,MS3.4/9,*
*Ms1 3.4/9,ms1mx2.9/67,Error ellipse: s-maj=29.4km*
*s-min=20.1km az=68.0*
*NEIC **06** 08:31:33.6±2.1,10°.02S±0°.07×127°.03E±0°.06,h10km±1km,*
*mb4.5/10,Error ellipse: s-maj=12.6km s-min=9.4km*
*az=194.0*
*DJA **06** 08:31:37.0±0.2,10°.S±3°.×12°.7E±°,h80km±8km,M4.6/10,*
*mB5.2/7,mb4.6/10,MLv4.7/10,Mw(mB)4.6/7*
**ISC 06 08:31:36.6**±0.5**,10°.04S**±0°.05×**126°.82E**±0°.05**,h35**km**,n69,**
**$\sigma$2$^s$25/68,mb4.4/12,MS3.3/7,Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.53** | **276** | P | | **Pn** | **08 32 15.1** | **-0.3** |
| SOEI | | | | S | | **Sn** | **08 32 41.0** | **-4.1** |
| **SOEI** | **Soe** | **2.53** | **276** | Pn | | **Pn** | **08 32 17.6** | **+2.2** |
| **BATI** | **Baumata** | **3.12** | **267** | Pn | | **Pn** | **08 32 25.9** | **+2.6** |
| BATI | | | | Sn | | **Sn** | **08 33 04.0** | **+4.6** |
| | 90nm,0.3s,baz=280,slow=23,SNR=9.3 | | | | | | | |
| **BATI** | **Baumata** | **3.12** | **267** | P | | **Pn** | **08 32 22.3** | **-1.0** |
| BATI | | | | S | | **Sn** | **08 32 58.8** | **-0.6** |
| **DRS** | **Darwin Rock St** | **4.65** | **121** | P | | **Pn** | **08 32 46.8** | **+2.4** |
| **MMRI** | **Maumere** | **4.74** | **287** | P | | **Pn** | **08 32 42.9** | **-2.7** |
| MMRI | | | | S | | **Sn** | **08 33 38.2** | **-1.1** |
| **MMRI** | **Maumere** | **4.74** | **287** | | | **Pn** | **08 32 47.6** | **+2.0** |
| **SAUI** | **Saumlaki** | **4.87** | **66** | P | | **Pn** | **08 32 50.9** | **+3.5** |
| **SAUI** | **Saumlaki** | **4.87** | **66** | Pn | | **Pn** | **08 32 44.6** | **-2.8** |
| **MTN** | **Manton Dam** | **5.06** | **124** | P | | **Pn** | **08 32 53.3** | **+3.2** |
| **KNRA** | **Kununurra** | **5.92** | **162** | P | | **Pn** | **08 33 04.5** | **+2.7** |
| **KDU** | **Kakadu** | **6.13** | **116** | P | | **Pn** | **08 33 06.2** | **+1.4** |
| **BASI** | **Baing, Sumba** | **6.15** | **268** | P | | **Pn** | **08 33 03.4** | **-1.7** |
| | 0.6nm919nm52nm,0.9s | | | | | | | |
| BASI | | | | S | | **Sn** | **08 34 12.0** | **-2.2** |
| | 0.6nm919nm52nm,0.9s | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **7.33** | **272** | P | | **Pn** | **08 33 19.9** | **-1.5** |
| | 0.4nm873nm60nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.10** | **188** | Pn | | **Pn** | **08 33 33.4** | **+1.7** |
| | 11nm,0.3s,baz=13,slow=10,SNR=192 | | | | | | | |
| FITZ | | | | Sn | | **Sn** | **08 35 01.6** | **-0.5** |
| | 8.4nm,0.3s,baz=299,slow=20,SNR=6.9 | | | | | | | |
| **BKSI** | **Bulukumba** | **8.13** | **305** | P | | Pn | 08 33 27.0 | -5.2 |
| | 11nm,0.8s | | | | | | | |
| **KAPI** | **Kappang** | **8.60** | **305** | LR | | LR | 08 36 54.3 | |
| | comp=Z,104nm,20.5s,baz=146,slow=38 | | | | | | | |
| **FAKI** | **Fak Fak** | **8.89** | **38** | Pn | | **Pn** | **08 33 39.5** | **-3.2** |
| **FAKI** | **Fak Fak** | **8.89** | **38** | P | | **Pn** | **08 33 43.0** | **+0.3** |
| **WB0** | **Warramunga Arr** | **12.12** | **144** | Pn | | Pn | 08 34 23.3 | -3.7 |
| **WRAB** | **Tennant Creek** | **12.23** | **144** | | | **Pn** | **08 34 25.9** | **-2.6** |
| **WRA** | **Warramunga Arr** | **12.23** | **144** | Pn | | **Pn** | **08 34 26.6** | **-1.8** |
| | 5.5nm,0.3s,baz=317,slow=14,SNR=126 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **08 36 37.6** | **-6.0** |
| | 3.4nm,0.3s,baz=321,slow=25,SNR=4.5 | | | | | | | |
| WRA | | | | LR | | LR | 08 39 51.1 | |
| | comp=Z,236nm,18.1s,baz=280,slow=40 | | | | | | | |
| **WRA** | **Warramunga Arr** | **12.23** | **144** | Pn | | **Pn** | **08 34 26.0** | **-2.5** |
| **WB2** | **Warramunga Arr** | **12.24** | **144** | Pn | | **Pn** | **08 34 26.1** | **-2.4** |
| **MBWA** | **Marble Bar** | **12.99** | **211** | Pn | | **Pn** | **08 34 37.6** | **-1.2** |
| **MBWA** | **Marble Bar** | **12.99** | **211** | P | | **Pn** | **08 34 38.5** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.29** | **209** | Pn | | **Pn** | **08 34 41.9** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.29** | **209** | | | **Pn** | **08 34 42.2** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **13.29** | **209** | P | | **Pn** | **08 34 42.6** | **-0.2** |
| **AS31** | **Alice Springs** | **15.15** | **154** | Pn | | **Pn** | **08 35 06.0** | **-2.1** |
| **ASAR** | **Alice Springs** | **15.15** | **154** | Pn | | **Pn** | **08 35 06.6** | **-1.5** |
| | 4.1nm,0.3s,baz=324,slow=10,SNR=223 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **08 37 51.4** | **-3.5** |
| | 1.4nm,0.3s,baz=307,slow=20,SNR=4.2 | | | | | | | |
| ASAR | | | | LR | | LR | 08 41 46.1 | |
| | comp=Z,263nm,19.3s,baz=343,slow=40 | | | | | | | |
| **ASAR** | **Alice Springs** | **15.15** | **154** | Pn | | **Pn** | **08 35 06.5** | **-1.6** |
| **PCJI** | **Pacitan** | **15.56** | **275** | P | | **Pn** | **08 35 10.1** | **-3.4** |
| | 31nm,1.4s | | | | | | | |
| **MEEK** | **Meekatharra** | **18.25** | **204** | P | | **Pn** | **08 35 48.1** | **+0.9** |
| **MTSU** | **Mount Surprise** | **18.77** | **117** | P | | **Pn** | **08 35 55.1** | **+1.5** |
| **SBUM** | **Sibu** | **19.11** | **310** | P | | **P** | **08 35 57.0** | **+0.3** |
| **OOD** | **Oodnadatta** | **19.54** | **156** | P | | **P** | **08 36 02.9** | **+1.7** |
| **PMG** | **Port Moresby** | **20.05** | **90** | LR | | LR | 08 44 16.2 | |
| | comp=Z,87nm,20.2s,baz=281,slow=38 | | | | | | | |
| **FORT** | **Forrest** | **20.67** | **177** | P | | **P** | **08 36 15.5** | **+2.0** |
| **CTA** | **Charters Tower** | **21.23** | **120** | LR | | LR | 08 43 45.8 | |
| | comp=Z,65nm,19.1s,baz=282,slow=34 | | | | | | | |
| **MULG** | **Mulgathing** | **21.24** | **163** | P | | **P** | **08 36 22.7** | **+3.0** |
| **BLDU** | **Ballidu** | **22.54** | **203** | P | | **P** | **08 36 36.8** | **+3.2** |
| **LCRK** | **Leigh Creek** | **22.92** | **154** | P | | **P** | **08 36 41.3** | **+3.7** |
| **BBOO** | **Buckleboo** | **24.21** | **161** | P | | **P** | **08 36 53.5** | **+3.4** |
| **STKA** | **Stephens Creek** | **25.68** | **150** | P | | **P** | **08 37 06.6** | **+3.2** |
| | 12nm,0.8s,baz=322,slow=9.7,SNR=22 | | | | | | | |
| STKA | | | | LR | | LR | 08 48 18.7 | |
| | comp=Z,98nm,19.6s,baz=21,slow=39 | | | | | | | |
| **STKA** | **Stephens Creek** | **25.68** | **150** | P | | **P** | **08 37 04.3** | **+0.9** |
| STKA | | | | | IAmb | IAmb | 08 37 13.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **25.68** | **150** | P | | **P** | **08 37 06.7** | **+3.3** |
| **HTT** | **Hallett** | **25.81** | **156** | P | | **P** | **08 37 08.3** | **+3.7** |
| **CMSA** | **Cobar Meteorol** | **27.64** | **143** | P | | **P** | **08 37 23.5** | **+2.4** |
| **CM31** | **Chiang Mai Arr** | **39.48** | **316** | P | | **P** | **08 39 05.3** | **+1.3** |
| CM31 | | | | | IAmb | IAmb | 08 39 11.9 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.48** | **316** | P | | **P** | **08 39 05.1** | **+1.1** |
| | comp=Z,4.0nm,0.6s,baz=143,slow=6.8,SNR=17 | | | | | | | |
| CMAR | | | | LR | | LR | 08 57 08.9 | |
| | comp=Z,28nm,19.8s,baz=140,slow=39 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.48** | **316** | P | | **P** | **08 39 02.9** | **-1.1** |
| **SANVU** | **Saraoutou** | **39.71** | **102** | P | | **P** | **08 39 06.3** | **+0.3** |
| **CHTO** | **Chiang Mai** | **39.72** | **316** | P | | **P** | **08 39 06.9** | **+0.8** |
| CHTO | | | | | IAmb | IAmb | 08 39 12.7 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **39.79** | **112** | LR | | LR | 08 56 02.3 | |
| | comp=Z,65nm,18.5s,baz=338,slow=37 | | | | | | | |
| **SHL** | **Shillong** | **49.09** | **317** | P | | **P** | **08 40 21.8** | **+0.7** |
| SHL | | | | | IAmb | IAmb | 08 40 26.8 | |
| | comp=Z,7.4nm,1.1s | | | | | | | |
| **URZ** | **Urewera** | **52.98** | **131** | LR | | LR | 09 02 26.0 | |
| | comp=Z,50nm,21.7s,baz=260,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.18** | **5** | P | | **P** | **08 40 59.1** | **+0.6** |
| | comp=Z,3.7nm,0.7s,baz=158,slow=9.2,SNR=2.4 | | | | | | | |
| **SONM** | **Songino Array** | **60.40** | **344** | P | | **P** | **08 41 43.1** | **+0.5** |
| | comp=Z,1.6nm,0.8s,baz=151,slow=8.2,SNR=9.0 | | | | | | | |
| **SONM** | **Songino Array** | **60.40** | **344** | P | | **P** | **08 41 43.5** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **68.19** | **19** | P | | **P** | **08 42 34.2** | **+0.9** |
| **KSH** | **Kashi** | **68.21** | **320** | P | | P | 08 42 41.0 | +7.1 |
| KSH | | | | sP | | sP | 08 42 48.7 | +0.4 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **69.11** | **329** | P | | **P** | **08 42 39.0** | **-0.2** |
| MK31 | | | | | IAmb | IAmb | 08 42 46.0 | |
| | comp=Z,3.7nm,1.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.11** | **329** | P | | **P** | **08 42 39.2** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=122,slow=7.6,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.11** | **329** | P | | **P** | **08 42 39.5** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **72.97** | **336** | P | | **P** | **08 43 01.9** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=113,slow=3.4,SNR=4.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.97** | **336** | P | | **P** | **08 43 01.8** | **-0.6** |
| **KURK** | **Kurchatov** | **73.52** | **330** | P | | **P** | **08 43 05.0** | **-0.7** |
| KURK | | | | | IAmb | IAmb | 08 43 12.1 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **MATP** | **Matopo** | **94.22** | **249** | LR | | LR | 09 21 09.7 | |
| | comp=Z,359nm,21.8s,baz=170,slow=32 | | | | | | | |

*CNRM **06** 08:47:13.2,35°.50N×3°.77W,h21km,ml2.5*
**ISC 06 08:47:12.3**±1.6**,35°.52N**±0°.05×**3°.72W**±0°.04**,h20**km±5km**,**
**n12,$\sigma$1$^s$01/22,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.35** | **211** | P | | **Pg** | **08 47 19.5** | **-0.4** |
| PALE | | | | S | | **Sg** | **08 47 24.5** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.10** | **107** | P | | **Pn** | **08 47 32.4** | **-0.3** |
| CHAS | | | | S | | **Sb** | **08 47 46.3** | **-0.4** |
| **CHEFC** | **Chefchaouen** | **1.39** | **253** | P | | **Pn** | **08 47 37.4** | **+0.8** |
| CHEFC | | | | S | | **Sn** | **08 47 54.2** | **-0.3** |
| **JBK** | **JBK** | **1.52** | **141** | P | | **Pb** | **08 47 41.2** | **+1.3** |
| JBK | | | | S | | **Sn** | **08 47 56.6** | **-1.2** |
| **SICH** | **Sidi Chahed** | **1.93** | **223** | P | | **Pb** | **08 47 46.2** | **-0.6** |
| SICH | | | | S | | **Sb** | **08 48 10.2** | **-0.2** |
| **MD31** | **MD31** | **2.78** | **198** | P | | **Pn** | **08 47 57.5** | **+1.6** |
| MD31 | | | | S | | **Sn** | **08 48 28.3** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | *e*Pn | | **Pn** | **08 48 09.9** | **+1.1** |
| PVAQ | | | | *e*Sn | | **Sn** | **08 48 51.3** | **-0.8** |
| PVAQ | | | | A | | A | 08 48 52.7 | |
| | 3.0nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | P | | **Pn** | **08 48 09.6** | **+0.9** |
| PVAQ | | | | S | | **Sn** | **08 48 50.9** | **-1.2** |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*Sn | | **Sn** | **08 49 05.3** | **-0.7** |
| MESJ | | | | A | | A | 08 49 14.4 | |
| | 1.7nm,0.7s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | *e*Sn | | **Sn** | **08 49 07.6** | **-1.7** |
| PFVI | | | | A | | A | 08 49 15.6 | |
| | 6.3nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **293** | P | | **Pn** | **08 48 19.4** | **+1.0** |
| PFVI | | | | S | | **Sn** | **08 49 09.2** | **-0.1** |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | | **Pn** | **08 48 22.6** | **+1.3** |
| PNCL | | | | *e*Sn | | **Sn** | **08 49 14.1** | **-0.6** |
| PNCL | | | | A | | A | 08 49 16.4 | |
| | 1.6nm,0.9s | | | | | | | |

*PRE **06** 09:00:00.6±1.5,29°.80S×31°.37E,h5km,ML3.8*
*EAF **06** 09:00:

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSNA** | **Messina** | **7.40** | **352** | *e*P | **Pn** | **09 01 50.5** | **-1.0** |
| MSNA | | | | *e*S | Sn | 09 03 05.9 | -10 |
| **UPI** | **Upington** | **8.81** | **276** | *e*P | **Pn** | **09 02 10.4** | **-0.5** |
| UPI | | | | *e*S | **Sn** | **09 03 48.2** | **-2.2** |
| UPI | | | | IAML | | 09 05 00.2 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **KEIM** | **Keimoes** | **9.00** | **274** | *e*P | **Pn** | **09 02 13.3** | **-0.2** |
| KEIM | | | | *e*S | **Sn** | **09 03 52.9** | **-2.1** |
| KEIM | | | | IAML | | 09 04 49.8 | |
| | comp=Z,23nm,0.6s | | | | | | |
| **SUR** | **Sutherland** | **9.30** | **251** | *e*P | **Pn** | **09 02 18.8** | **+1.0** |
| SUR | | | | *e*S | **Sn** | **09 03 57.8** | **-4.9** |
| SUR | | | | IAML | | 09 05 19.0 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **9.30** | **251** | Pn | **Pn** | **09 02 19.7** | **+1.9** |
| **MATP** | **Matopo** | **9.55** | **345** | *e*P | **Pn** | **09 02 18.6** | **-2.6** |
| MATP | | | | *e*S | Sn | 09 03 55.5 | -13 |
| **MATP** | **Matopo** | **9.55** | **345** | *e*P | **Pn** | **09 02 18.6** | **-2.6** |
| MATP | | | | *e*S | Sn | 09 03 55.5 | -13 |
| **AUGR** | **Augrabies** | **9.56** | **274** | *e*S | **Sn** | **09 04 07.6** | **-1.2** |
| **MATJ** | **Matjiesfontein** | **9.74** | **246** | *e*P | **Pn** | **09 02 24.4** | **+0.8** |
| MATJ | | | | *e*S | **Sn** | **09 04 08.1** | **-5.1** |
| MATJ | | | | IAML | | 09 05 26.4 | |
| | comp=Z,97nm,0.6s | | | | | | |
| **BLWY** | **Bulawayo** | **9.80** | **346** | *e*P | **Pn** | **09 02 24.6** | **0.0** |
| BLWY | | | | *e*S | **Sn** | **09 04 13.1** | **-1.8** |
| BLWY | | | | IAML | | 09 05 13.0 | |
| | comp=Z,101nm,0.7s | | | | | | |
| **BLWY** | **Bulawayo** | **9.80** | **346** | *e*P | **Pn** | **09 02 22.7** | **-1.9** |
| BLWY | | | | *e*S | Sn | 09 04 00.8 | -14 |
| **BLWY** | **Bulawayo** | **9.80** | **346** | *e*P | **Pn** | **09 02 22.7** | **-1.9** |
| BLWY | | | | *e*S | Sn | 09 04 00.8 | -14 |
| **CVNA** | **Calvinia** | **10.02** | **257** | *e*P | **Pn** | **09 02 28.0** | **+0.5** |
| CVNA | | | | *e*S | **Sn** | **09 04 16.9** | **-3.1** |
| CVNA | | | | IAML | | 09 05 33.5 | |
| | comp=Z,42nm,0.6s | | | | | | |
| **ELIM** | **Elim** | **10.87** | **240** | *e*S | **Sn** | **09 04 36.1** | **-4.5** |
| ELIM | | | | IAML | | 09 05 53.7 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **VOI** | **Vohitsoka** | **16.03** | **65** | | **P** | **09 03 57.5** | **+4.9** |
| VOI | | | | IAmb | IAmb | 09 04 01.2 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **28.99** | **13** | P | P | 09 06 09.4 | +5.7 |
| **TORD** | **Torodi Ar. Bea** | **51.23** | **322** | P | **P** | **09 09 09.5** | **+2.2** |
| **QSPA** | **South Pole Qui** | **60.49** | **180** | P | P | 09 10 21.7 | +8.3 |
| QSPA | | | | IAmb | IAmb | 09 10 27.7 | |
| | comp=Z,0.4nm,0.8s | | | | | | |

*TUL **06** 09:13:47.6±0.9,35°.98N±0°.01×97°.18W±0°.01,h8km,ML3.1, mb_Lg2.9/58(NEIC),Error ellipse: s-maj=1.7km s-min=1.5km az=167.0*

**NEIC 06 09:13:47.7±1.0,35°.98N±0°.01×97°.19W±0°.01,h5km±2km, Error ellipse: s-maj=3.0km s-min=2.1km az=312.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.21** | **73** | Pg | Pg | 09 13 52.3 | +0.4 |
| OK033 | | | | Sg | Sg | 09 13 55.5 | +0.9 |
| **OK031** | **S. Brethren Rd** | **0.28** | **96** | Pg | Pg | 09 13 53.5 | +0.3 |
| OK031 | | | | Sg | Sg | 09 13 57.8 | +0.8 |
| **OK029** | **Liberty Lake** | **0.29** | **229** | | Pg | 09 13 53.4 | +0.1 |
| OK029 | | | | Sg | Sg | 09 13 57.6 | +0.6 |
| **OK005** | **Luther M Schoo** | **0.33** | **180** | Pg | Pg | 09 13 54.2 | +0.1 |
| OK005 | | | | Sg | Sg | 09 13 58.9 | +0.5 |
| **OK030** | **Cody Creek RV** | **0.33** | **99** | Pg | Pg | 09 13 54.4 | +0.2 |
| **OK034** | **N. Norfolk Rd.** | **0.39** | **86** | | Pg | 09 13 55.4 | +0.2 |
| **OK025** | **Westminster Rd** | **0.42** | **197** | | Pg | 09 13 55.9 | +0.1 |
| **QUOK** | **Quay** | **0.43** | **64** | | Pg | 09 13 56.2 | +0.2 |
| QUOK | | | | Sg | Sg | 09 14 02.1 | +0.5 |
| **BCOK** | **Bluff Creek, N** | **0.47** | **227** | | Pg | 09 13 56.8 | 0.0 |
| BCOK | | | | Sg | Sg | 09 14 03.4 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.61** | **201** | | Pg | 09 13 59.2 | -0.2 |
| OKCFA | | | | Sg | Sg | 09 14 07.7 | +0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **200** | | Pg | 09 13 59.3 | -0.2 |
| OKCSW | | | | Sg | Sg | 09 14 07.9 | +0.5 |
| **FNO** | **Franklin** | **0.74** | **194** | | Pg | 09 14 01.6 | -0.4 |
| FNO | | | | Sg | Sg | 09 14 11.9 | +0.2 |
| **BLOK** | **Blackwell** | **0.78** | **358** | Pg | Pg | 09 14 02.7 | +0.1 |
| **CROK** | **Carrier** | **0.83** | **309** | Pg | Pg | 09 14 03.4 | -0.1 |
| **W35A** | **Tecumseh** | **0.87** | **163** | | Pg | 09 14 03.3 | -1.0 |
| **GC02** | **Grant County #** | **1.02** | **328** | Pg | Pg | 09 14 07.0 | -0.3 |
| **KAN13** | **South Haven SW** | **1.05** | **347** | Pg | Pg | 09 14 07.6 | -0.4 |
| KAN13 | | | | lAmb_Lg | | 09 14 23.1 | |
| | comp=Z,78nm,0.7s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.08** | **30** | | Pg | 09 14 07.8 | -0.6 |
| **TUL1** | **Leonard** | **1.14** | **93** | | Pg | 09 14 08.1 | -1.3 |
| **KAN14** | **Manchester OK** | **1.16** | **327** | Pg | Pg | 09 14 09.3 | -0.5 |
| **KAN17** | **Caldwell West** | **1.16** | **336** | Pg | Pg | 09 14 09.4 | -0.5 |
| **KAN05** | **Bluff City Nor** | **1.25** | **334** | | Pg | 09 14 11.2 | -0.5 |
| **KAN01** | **Argonia South** | **1.25** | **339** | | Pg | 09 14 11.2 | -0.6 |
| **KAN10** | **Anthony SW Sta** | **1.35** | **328** | | Pn | 09 14 12.9 | -0.4 |
| **KAN06** | **Argonia West S** | **1.37** | **337** | | Pn | 09 14 13.1 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.39** | **333** | | Pn | 09 14 13.4 | -0.4 |
| **OK035** | **E0210 Rd and N** | **1.43** | **301** | | Pn | 09 14 13.7 | -0.6 |
| **KAN16** | **Harper SW Stat** | **1.43** | **331** | | Pn | 09 14 13.9 | -0.4 |
| **X34A** | **Smith Ranch, M** | **1.48** | **201** | | Pn | 09 14 14.9 | -0.1 |
| X34A | | | | lAmb_Lg | | 09 14 35.3 | |
| | comp=Z,80nm,1.0s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.52** | **286** | | Pn | 09 14 15.3 | -0.3 |
| **WMOK** | **Wichita Mounta** | **1.80** | **227** | | Pn | 09 14 19.5 | +0.1 |
| WMOK | | | | lAmb_Lg | | 09 14 46.6 | |
| | comp=Z,74nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **1.99** | **180** | Pn | Pn | 09 14 22.1 | +0.2 |
| LOOK | | | | lAmb_Lg | | 09 14 55.7 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.04** | **133** | Pn | Pn | 09 14 22.6 | 0.0 |
| **U38A** | **Gravette** | **2.31** | **78** | | Pn | 09 14 26.4 | -0.1 |
| U38A | | | | lAmb_Lg | | 09 15 04.1 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **2.65** | **83** | | Pn | 09 14 30.4 | -0.7 |
| **Z35A** | **Perchaven, San** | **2.65** | **181** | Pn | Pn | 09 14 30.9 | -0.1 |
| Z35A | | | | lAmb_Lg | | 09 15 17.4 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **KSU1** | **Kansas State U** | **3.15** | **8** | lAmb_Lg | | 09 15 31.7 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.27** | **146** | | Pn | 09 14 38.9 | -0.7 |
| Z38A | | | | lAmb_Lg | | 09 15 29.9 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.29** | **115** | | Pn | 09 14 40.2 | +0.4 |
| MIAR | | | | lAmb_Lg | | 09 15 39.3 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **U40A** | **Yellville** | **3.53** | **83** | Pn | Pn | 09 14 42.8 | -0.4 |
| U40A | | | | lAmb_Lg | | 09 15 47.3 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.54** | **60** | Pn | Pn | 09 14 43.2 | -0.1 |
| S39A | | | | lAmb_Lg | | 09 15 49.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.83** | **255** | | Pn | 09 14 46.8 | -0.6 |
| AMTX | | | | lAmb_Lg | | 09 15 48.9 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.86** | **111** | Pn | Pn | 09 14 48.1 | +0.4 |
| X40A | | | | lAmb_Lg | | 09 15 55.2 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.05** | **98** | Pn | Pn | 09 14 50.2 | -0.1 |
| WHAR | | | | lAmb_Lg | | 09 15 56.8 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.11** | **100** | Pn | Pn | 09 14 51.4 | +0.3 |
| W41B | | | | lAmb_Lg | | 09 16 04.4 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **90** | Pn | Pn | 09 14 50.7 | -0.5 |
| FCAR | | | | lAmb_Lg | | 09 16 01.0 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.13** | **72** | lAmb_Lg | | 09 16 09.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **4.13** | **164** | Pn | Pn | 09 14 50.6 | -0.8 |
| **Z41A** | **Richland Creek** | **4.52** | **126** | Pn | Pn | 09 14 55.7 | -1.1 |
| **R40A** | **Maddies Statio** | **4.55** | **58** | | Pn | 09 14 57.2 | -0.1 |
| R40A | | | | lAmb_Lg | | 09 16 10.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.65** | **37** | | Pn | 09 14 56.7 | -1.8 |
| P38A | | | | lAmb_Lg | | 09 16 18.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **4.89** | **87** | lAmb_Lg | | 09 16 29.8 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **N35A** | **Tabor** | **5.02** | **14** | lAmb_Lg | | 09 16 35.8 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.02** | **76** | lAmb_Lg | | 09 16 26.5 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.20** | **184** | lAmb_Lg | | 09 16 42.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.28** | **307** | lAmb_Lg | | 09 16 35.8 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.39** | **47** | lAmb_Lg | | 09 16 43.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **N38A** | **Joes South For** | **5.72** | **32** | lAmb_Lg | | 09 16 60.0 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.91** | **202** | lAmb_Lg | | 09 16 55.0 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.24** | **324** | lAmb_Lg | | 09 17 12.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.74** | **350** | lAmb_Lg | | 09 17 31.2 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.08** | **57** | lAmb_Lg | | 09 17 32.9 | |
| | comp=Z,28nm,0.9s | | | | | | |

*TUL **06** 09:19:18.1±1.2,35°.97N±0°.01×97°.18W±0°.02,h7km±7km, ML3.1,mb_Lg3.2/89(NEIC),Error ellipse: s-maj=1.9km s-min=1.7km az=103.0*

**NEIC 06 09:19:18.2±1.2,35°.98N±0°.01×97°.19W±0°.01,h5km±2km, Error ellipse: s-maj=3.0km s-min=2.0km az=177.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.21** | **73** | Pg | Pg | 09 19 22.7 | +0.3 |
| OK033 | | | | Sg | Sg | 09 19 26.0 | +0.8 |
| **OK029** | **Liberty Lake** | **0.28** | **229** | Pg | Pg | 09 19 24.0 | +0.3 |
| OK029 | | | | Sg | Sg | 09 19 28.1 | +0.6 |
| **OK031** | **S. Brethren Rd** | **0.28** | **96** | Pg | Pg | 09 19 23.9 | +0.2 |
| OK031 | | | | Sg | Sg | 09 19 28.1 | +0.6 |
| **OK005** | **Luther M Schoo** | **0.33** | **180** | Pg | Pg | 09 19 24.7 | +0.1 |
| OK005 | | | | Sg | Sg | 09 19 29.4 | +0.6 |
| **OK030** | **Cody Creek RV** | **0.33** | **99** | Pg | Pg | 09 19 24.8 | +0.1 |
| OK030 | | | | Sg | Sg | 09 19 29.6 | +0.6 |
| **OK034** | **N. Norfolk Rd.** | **0.39** | **86** | Pg | Pg | 09 19 25.8 | +0.1 |
| **OK025** | **Westminster Rd** | **0.42** | **197** | Pg | Pg | 09 19 26.4 | +0.2 |
| OK025 | | | | Sg | Sg | 09 19 32.4 | +0.7 |
| **QUOK** | **Quay** | **0.43** | **64** | Pg | Pg | 09 19 26.8 | +0.2 |
| QUOK | | | | Sg | Sg | 09 19 32.9 | +0.6 |
| **BCOK** | **Bluff Creek, N** | **0.47** | **227** | Pg | Pg | 09 19 27.4 | +0.1 |
| BCOK | | | | Sg | Sg | 09 19 34.1 | +0.6 |
| **OKCFA** | **Oklahoma City** | **0.60** | **201** | | Pg | 09 19 29.8 | 0.0 |
| OKCFA | | | | Sg | Sg | 09 19 38.4 | +0.7 |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **199** | Pg | Pg | 09 19 29.9 | 0.0 |
| OKCSW | | | | Sg | Sg | 09 19 38.6 | +0.7 |
| **FNO** | **Franklin** | **0.74** | **193** | Pg | Pg | 09 19 32.2 | -0.3 |
| **BLOK** | **Blackwell** | **0.78** | **358** | Pg | Pg | 09 19 33.1 | -0.1 |
| BLOK | | | | Sg | Sg | 09 19 43.8 | +0.6 |
| **CROK** | **Carrier** | **0.83** | **309** | Pg | Pg | 09 19 34.2 | +0.1 |
| **W35A** | **Tecumseh** | **0.87** | **163** | Pg | Pg | 09 19 33.8 | -1.0 |
| W35A | | | | Sg | Sg | 09 19 45.9 | -0.1 |
| **GC02** | **Grant County #** | **1.02** | **328** | Pg | Pg | 09 19 37.5 | -0.3 |
| **KAN13** | **South Haven SW** | **1.05** | **347** | Pg | Pg | 09 19 38.2 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.08** | **30** | Pg | Pg | 09 19 38.4 | -0.5 |
| **TUL1** | **Leonard** | **1.14** | **93** | Pg | Pg | 09 19 38.9 | -1.1 |
| **KAN14** | **Manchester OK** | **1.16** | **328** | Pg | Pg | 09 19 39.9 | -0.5 |
| **KAN17** | **Caldwell West** | **1.16** | **337** | Pg | Pg | 09 19 39.9 | -0.5 |
| **KAN05** | **Bluff City Nor** | **1.25** | **334** | | Pg | 09 19 41.8 | -0.4 |
| **KAN01** | **Argonia South** | **1.25** | **339** | | Pg | 09 19 41.7 | -0.6 |
| **KAN10** | **Anthony SW Sta** | **1.35** | **328** | Pn | Pn | 09 19 43.6 | -0.2 |
| **KAN06** | **Argonia West S** | **1.37** | **337** | | Pn | 09 19 43.9 | -0.2 |
| **KAN08** | **Anthony NE Sta** | **1.39** | **333** | | Pn | 09 19 44.2 | -0.1 |
| **OK035** | **E0210 Rd and N** | **1.43** | **301** | Pn | Pn | 09 19 44.5 | -0.3 |
| **KAN16** | **Harper SW Stat** | **1.43** | **331** | Pn | Pn | 09 19 44.6 | -0.2 |
| **KAN12** | **Harper NE Stat** | **1.47** | **334** | | Pn | 09 19 45.5 | +0.1 |
| KAN12 | | | | lAmb_Lg | | 09 20 05.9 | |
| | comp=Z,177nm,1.1s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.48** | **201** | | Pn | 09 19 45.5 | +0.1 |
| X34A | | | | lAmb_Lg | | 09 20 06.0 | |
| | comp=Z,116nm,1.0s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.52** | **286** | Pn | Pn | 09 19 46.1 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.80** | **227** | | Pn | 09 19 50.4 | +0.5 |
| WMOK | | | | lAmb_Lg | | 09 20 15.2 | |
| | comp=Z,143nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **1.99** | **180** | Pn | Pn | 09 19 52.9 | +0.4 |
| LOOK | | | | lAmb_Lg | | 09 20 26.3 | |
| | comp=Z,107nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.04** | **133** | Pn | Pn | 09 19 53.4 | +0.3 |
| **U38A** | **Gravette** | **2.31** | **78** | Pn | Pn | 09 19 57.2 | +0.3 |
| U38A | | | | lAmb_Lg | | 09 20 34.6 | |
| | comp=Z,86nm,0.9s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.65** | **181** | | Pn | 09 20 01.0 | -0.6 |
| Z35A | | | | lAmb_Lg | | 09 20 44.6 | |
| | comp=Z,80nm,1.3s | | | | | | |
| **HHAR** | **Hobbs** | **2.65** | **83** | | Pn | 09 20 01.5 | -0.1 |
| **W39A** | **Magazine** | **2.88** | **105** | | Pn | 09 20 05.4 | +0.6 |
| W39A | | | | lAmb_Lg | | 09 20 50.9 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.15** | **8** | lAmb_Lg | | 09 21 02.3 | |
| | comp=Z,108nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.27** | **146** | | Pn | 09 20 10.0 | -0.1 |
| **MIAR** | **Mount Ida** | **3.29** | **115** | | Pn | 09 20 10.8 | +0.5 |
| MIAR | | | | lAmb_Lg | | 09 21 09.9 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.48** | **325** | | Pn | 09 20 13.5 | +0.5 |
| **U40A** | **Yellville** | **3.53** | **83** | | Pn | 09 20 13.5 | -0.2 |
| **S39A** | **Bolivar** | **3.54** | **60** | | Pn | 09 20 13.7 | -0.1 |
| S39A | | | | lAmb_Lg | | 09 21 16.4 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.83** | **255** | lAmb_Lg | | 09 21 30.8 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.86** | **111** | | Pn | 09 20 18.5 | +0.2 |
| X40A | | | | lAmb_Lg | | 09 21 21.6 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.05** | **98** | | Pn | 09 20 21.1 | +0.2 |
| WHAR | | | | lAmb_Lg | | 09 21 31.1 | |
| | comp=Z,79nm,1.1s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.11** | **100** | | Pn | 09 20 21.8 | +0.2 |
| W41B | | | | lAmb_Lg | | 09 21 33.8 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **90** | Pn | Pn | 09 20 21.9 | +0.2 |
| FCAR | | | | lAmb_Lg | | 09 21 29.1 | |
| | comp=Z,77nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.13** | **72** | Pn | Pn | 09 20 22.2 | +0.2 |
| MGMO | | | | lAmb_Lg | | 09 21 36.6 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **237A** | **Washetta, Mont** | **4.13** | **164** | Pn | Pn | 09 20 21.2 | -0.7 |
| **Z41A** | **Richland Creek** | **4.52** | **126** | Pn | Pn | 09 20 25.9 | -1.4 |
| Z41A | | | | lAmb_Lg | | 09 21 49.1 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.56** | **58** | | Pn | 09 20 27.3 | -0.5 |
| R40A | | | | lAmb_Lg | | 09 21 40.8 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.65** | **37** | | Pn | 09 20 29.2 | +0.1 |
| P38A | | | | lAmb_Lg | | 09 21 49.2 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.75** | **358** | Pn | Pn | 09 20 29.5 | -1.1 |
| N33A | | | | lAmb_Lg | | 09 21 49.1 | |
| | comp=Z,43nm,1.1s | | | | | | |
| **LCAR** | **Lake Charles** | **4.89** | **87** | Pn | Pn | 09 20 31.6 | -0.8 |
| LCAR | | | | lAmb_Lg | | 09 21 59.5 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **CCAR** | **Cane Creek** | **4.90** | **113** | Pn | Pn | 09 20 31.9 | -0.6 |
| CCAR | | | | lAmb_Lg | | 09 22 03.5 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **N35A** | **Tabor** | **5.02** | **14** | Pn | Pn | 09 20 34.2 | 0.0 |
| **T42A** | **Van Buren** | **5.02** | **76** | | Pn | 09 20 33.5 | -0.7 |
| **CCM** | **Cathedral Cave** | **5.19** | **65** | lAmb_Lg | | 09 22 00.7 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.20** | **184** | lAmb_Lg | | 09 22 13.1 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.28** | **307** | lAmb_Lg | | 09 22 20.3 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.40** | **47** | Pn | Pn | 09 20 39.0 | -0.3 |
| P40A | | | | lAmb_Lg | | 09 22 14.8 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.51** | **80** | lAmb_Lg | | 09 22 12.3 | |
| | comp=Z,58nm,0.7s | | | | | | |
| **N38A** | **Joes South For** | **5.72** | **32** | Pn | Pn | 09 20 42.7 | -1.1 |
| **FVM** | **French Village** | **5.77** | **68** | Pn | Pn | 09 20 43.2 | -1.3 |
| FVM | | | | lAmb_Lg | | 09 22 20.4 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **143A** | **Socs Landing,** | **5.80** | **123** | lAmb_Lg | | 09 22 31.6 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **JCT** | **Junction City** | **5.91** | **202** | lAmb_Lg | | 09 22 28.6 | |
| | comp=Z,40nm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **5.93** | **283** | lAmb_Lg | | 09 22 30.9 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **PARMO** | **Parma** | **6.04** | **81** | Pn | Pn | 09 20 47.1 | -1.1 |
| **SLM** | **Saint Louis** | **6.14** | **62** | lAmb_Lg | | 09 22 32.7 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.24** | **324** | lAmb_Lg | | 09 22 43.4 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **6.53** | **101** | lAmb_Lg | | 09 22 49.8 | |
| | comp=Z,33nm,1.0s | | | | | | |
| **S44A** | **Carbondale** | **6.59** | **73** | Pn | Pn | 09 20 54.5 | -1.2 |
| **Y45A** | **Yeager Farm, C** | **6.63** | **106** | lAmb_Lg | | 09 23 01.4 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **SCIA** | **State Center** | **6.68** | **26** | Pn | Pn | 09 20 56.0 | -1.0 |
| **N41A** | **Harden Midland** | **6.86** | **45** | lAmb_Lg | | 09 23 00.2 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.08** | **57** | Pn | Pn | 09 21 01.9 | -0.6 |
| **Q44A** | **Meyer Farm, Va** | **7.12** | **63** | lAmb_Lg | | 09 23 08.6 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **735A** | **Kenedy** | **7.13** | **184** | lAmb_Lg | | 09 23 17.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PLAL** | **Pickwick Lake** | **7.50** | **95** | lAmb_Lg | | 09 23 17.1 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **146A** | **Union** | **7.51** | **114** | Pn | Pn | 09 21 07.3 | -1.1 |
| **HDIL** | **Hopedale** | **7.71** | **51** | Pn | Pn | 09 21 10.7 | -0.3 |
| HDIL | | | | lAmb_Lg | | 09 23 41.5 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.75** | **3** | Pn | Pn | 09 21 10.8 | -0.9 |
| **833A** | **Chaparral WMA,** | **7.86** | **194** | Pn | Pn | 09 21 12.1 | -1.1 |
| 833A | | | | lAmb_Lg | | 09 23 37.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **T47A** | **Sharon Grove** | **8.18** | **80** | Pn | Pn | 09 21 16.5 | -1.1 |
| **L42A** | **Oliver, Polo** | **8.39** | **42** | Pn | Pn | 09 21 19.9 | -0.6 |
| L42A | | | | lAmb_Lg | | 09 23 50.3 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.76** | **36** | Pn | Pn | 09 21 24.2 | -1.3 |
| **I40A** | **Norwalk** | **9.37** | **31** | Pn | Pn | 09 21 32.5 | -1.4 |
| **K22A** | **Casper** | **9.83** | **315** | lAmb_Lg | | 09 24 38.0 | |
| | comp=Z,14nm,1.0s | | | | | | |

**IDC 06 09:20:00.8±2.2,7°.08S×128°.18E,h0km,mb3.3/1, mb1 3.1/3,mb1mx3.1/34,mbtmp3.0/3,ML2.9/2,Error ellipse: s-maj=139.8km s-min=33.7km az=65.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.12** | **156** | Pn | Pn | 09 23 22.1 | -0.1 |
| | 0.1nm,0.3s,baz=335,slow=12,SNR=1.3 | | | | | | |
| WRA | | | | S | Sn | 09 25 43.4 | -16 |
| | 0.3nm,0.3s,baz=332,slow=23,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **17.39** | **162** | P | Pn | 09 24 04.8 | -0.2 |
| | 0.1nm,0.3s,baz=336,slow=11,SNR=6.2 | | | | | | |
| ASAR | | | | S | Sn | 09 27 05.3 | -14 |
| | 0.1nm,0.3s,baz=315,slow=17,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.31** | **328** | P | P | 09 30 57.7 | +0.1 |
| | 0.1nm,0.4s,baz=114,slow=6.5,SNR=1.9 | | | | | | |

*PRU **06** 09:20:10.0±0.0,51°.46N×16°.10E,h0km*
*VIE **06** 09:20:11.7±1.0,51°.29N×16°.06E,h0km,mb2.4/4,ml2.7/3, Error ellipse: s-maj=7.6km s-min=6.0km az=75.0 69 km WNW of Wroclaw Suspected Mining induced.*

**ISC 06 09:20:09.1±1.2,51°.50N±0°.05×16°.09E±0°.03,h0km,n27, σ0°.76/55,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.67** | **169** | *e*Pg | **Pg** | **09 20 21.9** | **-0.1** |
| KSP | | | | *e*Sg | **Sg** | **09 20 30.4** | **-0.2** |
| **CHVC** | **Chvalec** | **0.91** | **181** | *e*PG | **Pg** | **09 20 26.7** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **09 20 38.2** | **-0.1** |
| **OSTC** | **Ostas** | **0.95** | **175** | *e*PG | **Pg** | **09 20 27.3** | **+0.1** |
| OSTC | | | | *e*SG | **Sg** | **09 20 39.6** | **+0.1** |
| | comp=Z,47nm,0.4s | | | | | | |
| **UPC** | **Upice** | **0.99** | **183** | *e*PG | **Pg** | **09 20 28.0** | **-0.1** |
| UPC | | | | *e*SG | **Sg** | **09 20 40.5** | **-0.5** |
| | 164nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **225** | *e*PG | **Pg** | **09 20 35.1** | **-0.2** |
| PVCC | | | | *e*SG | **Sg** | **09 20 53.2** | **+0.3** |
| | comp=Z,98nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.49** | **246** | Pn | **Pn** | **09 20 36.2** | **-1.0** |
| BRG | | | | Pg | **Pg** | **09 20 37.6** | **-0.1** |
| BRG | | | | Sg | **Sn** | **09 20 57.5** | **+0.3** |
| BRG | | | | Amp | | 09 20 58.7 | |
| | comp=Z,26nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.49** | **163** | *e*PG | **Pn** | **09 20 37.0** | **-0.2** |
| KRLC | | | | *e*SG | **Sg** | **09 20 55.2** | **-1.8** |
| | comp=Z,40nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **1.80** | **214** | *e*PG | **Pn** | **09 20 41.8** | **+0.4** |
| PRU | | | | *e*SG | **Sg** | **09 21 07.5** | **+0.5** |
| | comp=Z,22nm,0.3s | | | | | | |
| **CLL** | **Collm** | **1.94** | **266** | *e*Pn | **Pn** | **09 20 43.0** | **-0.3** |
| CLL | | | | *i* Pg | **Pg** | **09 20 45.8** | **-0.5** |
| CLL | | | | *i* x | x | 09 20 48.6 | |
| CLL | | | | *e*Sg | **Sg** | **09 21 11.0** | **-0.5** |
| | comp=Z,11nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.96** | **151** | *e*PN | **Pn** | **09 20 42.9** | **-0.7** |
| MORC | | | | *e*SG | **Sn** | **09 21 09.3** | **+0.4** |
| **OKC** | **Ostrava-Krasne** | **2.12** | **141** | *e*PG | **Pb** | **09 20 48.0** | **-0.3** |
| OKC | | | | *e*SG | **Sb** | **09 21 14.4** | **-0.7** |
| | comp=Z,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RTV | Rentapao | 3.15 | 164 | P | | Pn | 09 36 30.7 | -0.6 |
| LIFNC | LIFOU | 6.00 | 183 | P | | Pn | 09 37 07.1 | -1.7 |
| KOUNC | Koumac, New Ca | 6.54 | 208 | P | | Pn | 09 37 16.0 | 0.0 |
| MARNC | Mare, Loyalty | 6.71 | 176 | P | | Pn | 09 37 16.4 | -1.9 |
| YATNC | Mamie plateau, | 7.29 | 185 | P | | Pn | 09 37 24.8 | -1.3 |
| DZM | Mont Dzumac | 7.35 | 188 | Pn | | Pn | 09 37 26.7 | -0.2 |
| | 2.8nm,0.3s,baz=360,slow=19,SNR=35 | | | | | | | |
| DZM | | | | Sn | | Sn | 09 38 48.2 | -1.1 |
| | 1.8nm,0.3s,baz=159,slow=15,SNR=4.3 | | | | | | | |
| ONTNC | Ouen Toro | 7.59 | 187 | P | | Pn | 09 37 30.9 | +1.0 |
| EIDS | Eidsvold | 18.69 | 233 | P | | Pn | 09 39 50.8 | -0.2 |
| MGCD | Mangrove Creek | 23.66 | 216 | P | | P | 09 40 41.6 | +1.8 |
| BKZ | Black Stump Fm | 25.57 | 164 | P | | P | 09 40 59.0 | +1.8 |
| CMSA | Cobar Meteorol | 26.03 | 226 | P | | P | 09 41 02.1 | +0.7 |
| CNB | Canberra Magne | 26.18 | 215 | P | | P | 09 41 03.8 | +1.1 |
| STKA | Stephens Creek | 29.16 | 230 | P | | P | 09 41 30.4 | +1.1 |
| | 6.0nm,0.5s,baz=55,slow=11,SNR=23 | | | | | | | |
| STKA | Stephens Creek | 29.16 | 230 | P | | P | 09 41 30.4 | +1.1 |
| WRA | Warramunga Arr | 32.06 | 256 | P | | P | 09 41 53.4 | -1.4 |
| | 0.3nm,0.6s,baz=86,slow=9.1,SNR=6.7 | | | | | | | |
| OOD | Oodnadatta | 32.27 | 241 | P | | P | 09 41 57.2 | +0.6 |
| ASAR | Alice Springs | 32.89 | 249 | P | | P | 09 42 01.2 | -1.0 |
| | 2.5nm,0.7s,baz=77,slow=9.0,SNR=51 | | | | | | | |
| BBOO | Buckleboo | 33.76 | 230 | P | | P | 09 42 10.2 | +0.7 |
| MULG | Mulgathing | 34.40 | 238 | P | | P | 09 42 15.1 | 0.0 |
| WRKA | Warakurna | 38.16 | 248 | P | | P | 09 42 46.6 | -0.5 |
| FORT | Forrest | 39.49 | 239 | P | | P | 09 42 58.1 | 0.0 |

*IDC* ***06*** *09:43:10.7±0.8,30.60N×132.70E,h0km,mb3.7/7, mb1 3.9/9,mb1mx3.6/36,mbtmp3.7/9,ML3.0/2,MS2.6/1, Ms1 2.6/1,ms1mx2.2/91,Error ellipse: s-maj=36.5km s-min=17.8km az=80.0*

*JMA* ***06*** *09:43:12.9±0.1,30.59N×132.81E,h65km,M3.3*

**ISC 06 09:43:11.9±2.1,30.76N±0.05×132.75E±0.05,h9km±13km, n25,σ1965/31,mb3.6/7,Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JNAR | Kushima--Naru | 1.48 | 302 | P | Pb | 09 43 40.0 | +0.5 |
| JNAR | | | | eS | Sb | 09 44 00.1 | +1.7 |
| JNKG | Nichinankitago | 1.48 | 308 | P | Pg | 09 43 40.2 | -0.1 |
| JNKG | | | | eS | Sb | 09 44 00.1 | +1.6 |
| JTN | Tanegashima 3 | 1.53 | 267 | P | Pb | 09 43 39.0 | -1.3 |
| JTN | | | | eS | Sn | 09 43 58.5 | -0.8 |
| JTSR | Tashiro 2 | 1.62 | 285 | P | Pb | 09 43 41.1 | -0.9 |
| JMTN | Minamitane | 1.63 | 258 | P | Pb | 09 43 40.4 | -1.8 |
| JMTN | | | | eS | Sn | 09 44 00.7 | -1.2 |
| JTZ | Takazaki | 1.82 | 309 | P | Pb | 09 43 44.8 | -0.5 |
| JTZ | | | | eS | Sb | 09 44 08.6 | +0.3 |
| JTO | Tosashimizu | 2.10 | 1 | P | Pn | 09 43 47.5 | +0.4 |
| JTO | | | | eS | Sn | 09 44 11.2 | -2.1 |
| JNN | Nakanoshima | 2.65 | 251 | eS | Sn | 09 44 24.5 | -2.5 |
| JSJ | Shimokoshiki | 2.75 | 290 | P | Pn | 09 43 56.8 | +0.6 |
| JSJ | | | | eS | Sn | 09 44 29.7 | +0.1 |
| JNA | Nagahama | 2.80 | 355 | P | Pn | 09 43 58.4 | +1.6 |
| JNU | Nakatsue | 2.84 | 326 | Pn | Pb | 09 44 00.5 | -2.3 |
| | 3.8nm,0.3s,baz=197,slow=2.0,SNR=31 | | | | | | |
| JNU | | | | Sn | Sb | 09 44 36.1 | -1.6 |
| | 2.9nm,0.3s,baz=168,slow=7.4,SNR=3.7 | | | | | | |
| JMN | Monobe | 3.11 | 18 | P | Pn | 09 44 02.9 | +1.7 |
| JMN | | | | eS | Sn | 09 44 35.9 | -2.6 |
| JAI | Aioi | 3.35 | 25 | P | Pn | 09 44 05.3 | +0.9 |
| JAI | | | | eS | Sn | 09 44 40.5 | -3.8 |
| JHJ | Hachijo jima 2 | 6.42 | 67 | LR | LR | 09 46 52.5 | |
| | comp=Z,50nm,21.2s,baz=150,slow=34 | | | | | | |
| MJAR | Matsushiro Arr | 7.35 | 37 | Pn | Pn | 09 45 02.1 | +2.8 |
| | 0.1nm,0.3s,baz=268,slow=20,SNR=2.2 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 32.66 | 102 | T | T | 10 24 01.9 | |
| | baz=296,slow=74 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 32.66 | 102 | T | T | 10 24 02.1 | |
| | baz=296 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 32.68 | 102 | T | T | 10 24 02.9 | |
| | baz=296,slow=74 | | | | | | |
| WRA | Warramunga Arr | 50.43 | 178 | P | P | 09 52 08.8 | -1.1 |
| | 0.4nm,0.7s,baz=354,slow=8.6,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 54.13 | 179 | P | P | 09 52 36.5 | -0.8 |
| | 0.2nm,0.5s,baz=9.5,slow=2.2,SNR=8.2 | | | | | | |
| STKA | Stephens Creek | 62.86 | 172 | P | P | 09 53 37.6 | -0.4 |
| | 1.1nm,0.6s,baz=326,slow=9.0,SNR=3.6 | | | | | | |
| FINES | FINESS Array B | 70.88 | 331 | P | P | 09 54 29.4 | +0.5 |
| | 2.0nm,0.9s,baz=74,slow=4.9,SNR=5.5 | | | | | | |
| YKA | Yellowknife Ar | 72.73 | 27 | P | P | 09 54 41.0 | +1.0 |
| | 0.5nm,0.9s,baz=302,slow=5.9,SNR=5.2 | | | | | | |
| AKASG | Malin Array Be | 74.65 | 320 | P | P | 09 54 52.1 | +0.6 |
| | 0.5nm,0.5s,baz=50,slow=5.6,SNR=4.2 | | | | | | |
| NVAR | Mina Array Bea | 84.52 | 48 | P | P | 09 55 46.9 | +1.2 |
| | 0.1nm,0.4s,baz=296,slow=5.3,SNR=4.9 | | | | | | |

*DDA* ***06*** *09:46:28.5±0.0,38.77N×27.81E,h10km±1km,ML2.5*

*ISK* ***06*** *09:46:28.3,38.78N×27.82E,h5km,ML2.8/10*

**ISC 06 09:46:28.5±0.9,38.78N±0.03×27.80E±0.02,h8km±6km, n26,σ0963/41,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.10 | 5 | P | Pg | 09 46 31.1 | +0.3 |
| AKHS | | | | *i* AML | AML | 09 46 33.0 | |
| | comp=E,3μm,0.8s | | | | | | |
| AKS | Akhisar | 0.10 | 5 | PG | Pg | 09 46 30.5 | -0.3 |
| AKS | | | | SG | Sg | 09 46 32.9 | +0.4 |
| GOMA | Golmarmara-Man | 0.12 | 130 | PG | Pg | 09 46 30.9 | -0.2 |
| GOMA | | | | SG | Sg | 09 46 32.9 | -0.1 |
| STEP | BALIKESIR_Sava | 0.59 | 354 | P | Pg | 09 46 39.6 | -0.4 |
| STEP | | | | S | Sb | 09 46 49.7 | -0.1 |
| ZEDA | zmir-Bergama | 0.59 | 288 | P | Pb | 09 46 41.0 | -0.1 |
| ZEDA | | | | S | Sb | 09 46 49.4 | -0.3 |
| KULA | Kula-Manisa | 0.72 | 112 | PG | Pg | 09 46 42.6 | +0.2 |
| DKL | Dikili | 0.76 | 293 | PG | Pb | 09 46 43.7 | -0.2 |
| DKL | | | | SG | Sb | 09 46 55.0 | +0.7 |
| FOCM | Foa | 0.84 | 265 | PG | Pb | 09 46 45.4 | +0.1 |
| BUHA | Balikesir, Bur | 0.91 | 322 | P | Pb | 09 46 46.5 | -0.1 |
| BUHA | | | | S | Sn | 09 47 00.6 | -0.4 |
| BUHA | | | | *i* AML | AML | 09 47 02.0 | |
| | comp=E,128nm,0.6s | | | | | | |
| USAK | Uak-Merkez | 0.95 | 94 | P | Pb | 09 46 47.3 | 0.0 |
| USAK | | | | S | Sg | 09 46 58.2 | -1.0 |
| BALY | Balya | 0.96 | 352 | P | Pg | 09 46 47.0 | 0.0 |
| BALY | | | | S | Sb | 09 47 00.4 | 0.0 |
| SIMA | Simav-Kutahya | 0.97 | 72 | PG | Pb | 09 46 47.3 | -0.3 |
| SIMA | | | | SG | Sb | 09 47 01.1 | +0.6 |
| DURS | Dursunbey | 0.97 | 32 | P | Pg | 09 46 47.2 | +0.1 |
| DURS | | | | S | Sb | 09 47 00.5 | -0.1 |
| DURS | | | | *i* AML | AML | 09 47 02.0 | |
| | comp=E,152nm,0.4s | | | | | | |
| DURS | | | | *i* AML | AML | 09 47 02.0 | |
| | comp=N,116nm,0.7s | | | | | | |
| AYVA | Ayvalik | 1.01 | 301 | P | Pg | 09 46 48.1 | +0.1 |
| DST | Dursunbey | 1.04 | 38 | PG | Pb | 09 46 48.8 | +0.1 |
| DST | | | | SG | Sn | 09 47 03.6 | -0.5 |
| URLA | Izmir | 1.04 | 246 | P | Pg | 09 46 48.4 | 0.0 |
| URLA | | | | S | Sb | 09 47 03.1 | +0.7 |
| ZEYE | Izmir, Urla-Ze | 1.16 | 242 | P | Pb | 09 46 50.8 | +0.2 |
| ZEYE | | | | S | Sn | 09 47 06.5 | -0.4 |
| ZEYE | | | | *i* AML | AML | 09 47 08.0 | |
| | comp=E,91nm,0.7s | | | | | | |
| ZEYE | | | | *i* AML | AML | 09 47 08.0 | |
| | comp=N,165nm,0.4s | | | | | | |
| GEDZ | Gediz | 1.28 | 78 | PN | Pg | 09 46 53.2 | +0.1 |
| GDZ | Gediz | 1.34 | 76 | P | Pg | 09 46 54.5 | +0.2 |
| PASA | Karahalli, USA | 1.39 | 108 | P | Pg | 09 46 55.5 | +0.3 |
| TVSB | Tavsanli | 1.45 | 62 | PN | Pb | 09 46 55.7 | -0.1 |
| ULDT | Uludag | 1.71 | 37 | P | Pn | 09 46 57.4 | -1.3 |
| ULDT | | | | *i* AML | AML | 09 47 27.0 | |
| | comp=E,46nm,0.4s | | | | | | |
| STBT | Saitabat | 1.75 | 39 | P | Pg | 09 47 01.6 | -0.6 |
| STBT | | | | S | Sb | 09 47 24.0 | +0.8 |
| STBT | | | | *i* AML | AML | 09 47 28.0 | |
| | comp=N,67nm,0.4s | | | | | | |
| IGD | Bursa | 1.83 | 36 | P | Pg | 09 47 03.1 | -0.5 |
| IGD | | | | S | Sg | 09 47 27.3 | -0.1 |
| AVDN | Avdancik/Bursa | 1.84 | 35 | P | Pg | 09 47 06.2 | +2.4 |
| YLV | Yalova | 2.15 | 34 | PN | Pn | 09 47 06.2 | +1.4 |

*CNRM* ***06*** *09:59:44.1,35.62N×3.65W,h12km,ml3.1*

*SFS* ***06*** *09:59:45.0,35.60N×3.80W,ML2.8,ALBORAN SUR*

*INMG* ***06*** *09:59:45.8±1.5,35.64N×3.85W,h0km,ML2.8,Error ellipse: s-maj=3.2km s-min=2.8km az=151.0*

*IGIL* ***06*** *09:59:46.6,35.61N×3.84W,h0km,ML2.6*

**ISC 06 09:59:44.0±1.1,35.65N±0.03×3.69W±0.03,h15km±9km, n45,σ1974/69,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.48 | 205 | P | Pg | 09 59 52.9 | -0.6 |
| PALE | | | | S | Sg | 09 59 59.0 | -1.0 |
| CHAS | Isla Isabel II | 1.13 | 114 | P | Pb | 10 00 05.1 | 0.0 |
| CHAS | | | | S | Sg | 10 00 19.5 | -0.9 |
| EMAL | Malaga-Limoner | 1.26 | 332 | P | Pg | 10 00 07.7 | -0.6 |
| EMAL | | | | S | Sn | 10 00 23.8 | +0.1 |
| SMIR | Smir Dam | 1.38 | 272 | S | Sg | 10 00 31.4 | +2.9 |
| CEU | Ceuta | 1.39 | 281 | P | Pn | 10 00 06.5 | -2.2 |
| CEU | | | | S | Sb | 10 00 22.9 | -4.2 |
| CHEFC | Chefchaouen | 1.45 | 249 | P | Pg | 10 00 13.1 | +1.1 |
| CHEFC | Chefchaouen | 1.45 | 249 | P | Pn | 10 00 10.2 | +0.4 |
| CHEFC | | | | S | Sg | 10 00 30.2 | -0.6 |
| JBK | JBK | 1.60 | 145 | P | Pn | 10 00 11.9 | 0.0 |
| JBK | | | | S | Sn | 10 00 30.5 | -1.8 |
| SICH | Sidi Chahed | 2.04 | 221 | S | Pg | 10 00 27.0 | +3.8 |
| SICH | Sidi Chahed | 2.04 | 221 | P | Pb | 10 00 21.1 | +0.4 |
| SICH | | | | S | Sb | 10 00 46.3 | +0.4 |
| CART | Cartagena | 2.90 | 47 | P | Pn | 10 00 31.2 | +1.7 |
| CART | | | | S | Sn | 10 01 04.8 | +0.6 |
| MD31 | MD31 | 2.91 | 198 | P | Pn | 10 00 30.5 | +0.7 |
| MDT | Midelt | 2.93 | 195 | P | Pg | 10 00 40.6 | +0.5 |
| MDT | Midelt | 2.93 | 195 | P | Pg | 10 00 40.6 | +0.5 |
| TDRA | Tendrara | 2.94 | 152 | P | Pg | 10 00 47.0 | +6.6 |
| TDRA | Tendrara | 2.94 | 152 | P | Pn | 10 00 31.7 | +1.4 |
| ZHG | ZHG | 3.28 | 229 | P | Pn | 10 00 34.8 | 0.0 |
| PVAQ | Vaqueiros | 3.69 | 300 | *e*Pn | Pn | 10 00 41.4 | +1.1 |
| PVAQ | | | | *e*Sn | Sn | 10 01 22.3 | -1.2 |
| PVAQ | | | | A | A | 10 01 31.7 | |
| | 17nm,0.4s | | | | | | |
| PVAQ | Vaqueiros | 3.69 | 300 | P | Pn | 10 00 41.1 | +0.7 |
| PVAQ | Vaqueiros | 3.69 | 300 | P | Pn | 10 00 41.1 | +0.7 |
| PVAQ | | | | S | Sn | 10 01 23.1 | -0.4 |
| PAB | San Pablo | 3.92 | 353 | P | Pb | 10 00 48.9 | -4.0 |
| PCVE | Castro Verde | 4.02 | 301 | *e*Pn | Pn | 10 00 46.3 | +1.4 |
| PCVE | | | | *e*Sn | Sn | 10 01 31.0 | -0.7 |
| PCVE | | | | A | A | 10 01 40.0 | |
| | 10nm,0.4s | | | | | | |
| PBEJ | Beja | 4.11 | 307 | *e*Pn | Pn | 10 00 47.6 | +1.5 |
| PBEJ | | | | *e*Sn | Sn | 10 01 33.5 | -0.4 |
| PBEJ | | | | A | A | 10 01 38.5 | |
| | 5.7nm,0.3s | | | | | | |
| MESJ | Messejana | 4.25 | 302 | *e*P | Pn | 10 00 49.6 | +1.6 |
| MESJ | | | | *e*S | Sn | 10 01 35.3 | -2.0 |
| MESJ | | | | IAML | | 10 01 40.3 | |
| | comp=N,13nm,0.3s | | | | | | |
| MESJ | Messejana | 4.25 | 302 | *e*Pn | Pn | 10 00 49.8 | +1.8 |
| MESJ | | | | *e*Sn | Sn | 10 01 37.1 | -0.2 |
| MESJ | | | | A | A | 10 01 41.2 | |
| | comp=N,13nm,0.3s | | | | | | |
| MORF | Marmelete | 4.33 | 294 | *e*P | Pn | 10 00 50.5 | +1.3 |
| MORF | Marmelete | 4.33 | 294 | *e*Pn | Pn | 10 00 50.8 | +1.6 |
| MORF | | | | *e*Sn | Sn | 10 01 38.5 | -0.9 |
| MORF | | | | A | A | 10 01 48.2 | |
| | comp=N,7.6nm,0.2s | | | | | | |
| PFVI | Vila Bisbo | 4.40 | 291 | *e*Pn | Pn | 10 00 51.4 | +1.2 |
| PFVI | | | | *e*Sn | Sn | 10 01 40.3 | -0.8 |
| PFVI | Vila Bisbo | 4.40 | 291 | P | Pn | 10 00 51.1 | +1.0 |
| PESTR | Estremoz | 4.47 | 317 | *e*Pn | Pn | 10 00 53.8 | +2.6 |
| PESTR | | | | *e*Sn | Sn | 10 01 43.5 | +0.6 |
| PESTR | | | | A | A | 10 01 57.6 | |
| | comp=N,7.7nm,0.5s | | | | | | |
| PESTR | Estremoz | 4.47 | 317 | P | Pn | 10 00 53.8 | +2.6 |
| EVO | Evora | 4.50 | 311 | *e*Pn | Pn | 10 00 53.5 | +2.0 |
| EVO | | | | *e*Sn | Sn | 10 01 43.1 | -0.4 |
| EVO | | | | A | A | 10 01 48.1 | |
| | comp=N,17nm,0.4s | | | | | | |
| PNCL | Nicolau / Gran | 4.59 | 304 | *e*Pn | Pn | 10 00 54.0 | +1.2 |
| PNCL | | | | *e*Sn | Sn | 10 01 44.7 | -1.1 |
| PNCL | | | | A | A | 10 01 50.1 | |
| | comp=N,5.7nm,0.5s | | | | | | |
| PMRV | Marv??o | 4.78 | 323 | *e*Pn | Pn | 10 00 57.9 | +2.4 |
| PMRV | | | | *e*Sn | Sn | 10 01 50.6 | 0.0 |
| PMRV | | | | A | A | 10 02 23.5 | |
| | comp=N,9.7nm,0.6s | | | | | | |
| PMTG | Montargil | 4.97 | 315 | *e*Pn | Pn | 10 01 00.1 | +2.1 |
| PMTG | | | | *e*Sn | Sn | 10 01 54.3 | -0.9 |
| PCBR | Castelo Branco | 5.15 | 325 | *e*Pn | Pn | 10 01 03.3 | +2.9 |
| PCBR | | | | *e*Sn | Sn | 10 01 59.4 | -0.2 |
| PCBR | | | | A | A | 10 02 02.1 | |
| | comp=N,11nm,0.4s | | | | | | |
| PACT | Alcochete | 5.15 | 309 | *e*Pn | Pn | 10 01 02.7 | +2.2 |
| PACT | | | | *e*Sn | Sn | 10 02 00.4 | +0.8 |
| PMAFR | Mafra | 5.55 | 308 | *e*Pn | Pn | 10 01 08.3 | +2.4 |
| PMAFR | | | | *e*Sn | Sn | 10 02 09.3 | -0.1 |
| PMAFR | | | | A | A | 10 02 12.2 | |
| | comp=N,14nm,0.4s | | | | | | |
| MTE | Manteigas | 5.63 | 328 | *e*Sn | Sn | 10 02 12.8 | +1.2 |
| MTE | | | | A | A | 10 02 15.3 | |
| | comp=N,16nm,0.4s | | | | | | |
| PCAS | Casmilo, Conde | 5.81 | 321 | *e*Sn | Sn | 10 02 14.7 | -1.3 |
| PCAS | | | | A | A | 10 02 18.1 | |
| | comp=N,7.7nm,0.4s | | | | | | |
| PVIS | Viseu | 6.05 | 328 | *e*Pn | Pn | 10 01 16.3 | +3.5 |
| PVIS | | | | *e*Sn | Sn | 10 02 21.7 | 0.0 |
| PVIS | | | | A | A | 10 02 23.7 | |
| | comp=N,9.7nm,0.6s | | | | | | |
| MVO | Moncorvo | 6.10 | 336 | *e*Pn | Pn | 10 01 17.1 | +3.5 |
| PVRL | Vila Real | 6.44 | 332 | *e*Sn | Sn | 10 02 31.9 | +0.4 |
| PVRL | | | | A | A | 10 02 37.5 | |
| | comp=N,11nm,0.8s | | | | | | |
| POLO | Lamas de Olo | 6.56 | 332 | *e*Sn | Sn | 10 02 34.0 | -0.4 |
| POLO | | | | A | A | 10 02 36.4 | |
| | comp=N,2.8nm,0.4s | | | | | | |
| PBRG | Braganca | 6.59 | 340 | *e*Pn | Pn | 10 01 24.3 | +4.0 |

*INET* ***06*** *10:12:06.2±0.6,13.12N×89.79W,h15km±11km,MW4.2*

*SNET* ***06*** *10:12:06.8±0.8,13.17N×89.79W,h29km±2km,ML4.3*

*UCR* ***06*** *10:12:07.6±1.1,13.23N×89.78W,h32km±3km,ML4.2, mb4.6(NEIC)*

*IDC* ***06*** *10:12:09.7±1.2,13.45N×89.39W,h69km±9km,mb3.9/17, mb1 4.1/20,mb1mx3.9/45,mbtmp4.2/20,MS3.7/45, Ms1 3.7/45,ms1mx3.6/68,Error ellipse: s-maj=24.3km s-min=8.2km az=49.0*

*NEIC* ***06*** *10:12:10.3±1.6,13.34N±0.07×89.57W±0.07,h69km±7km, mb4.6/97,Md4.4(SNET),Error ellipse: s-maj=11.6km s-min=8.0km az=221.0*

*GCG* ***06*** *10:12:16.4±0.3,15.15N×90.98W,h68km,MD4.1*

**ISC 06 10:12:08.2±0.8,13.30N±0.05×89.71W±0.05,h59km±6km, n322,σ1826/270,mb4.6/51,MS3.8/42,5C-58D,El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAYA | Jayaque - finc | 0.43 | 35 | *i*P | Pn | 10 12 19.0 | -0.5 |
| JAYA | | | | eS | Sn | 10 12 27.1 | -0.6 |
| JAYA | Jayaque - finc | 0.43 | 35 | *i*P | Pn | 10 12 19.0 | -0.5 |
| JAYA | | | | eS | Sn | 10 12 27.1 | -0.6 |
| CEVE | Cerro Verde | 0.53 | 9 | *i*P | Pn | 10 12 20.3 | -0.4 |
| CEVE | Cerro Verde | 0.53 | 9 | *i*P | Pn | 10 12 20.3 | -0.4 |
| SBLS | San Blas | 0.55 | 9 | *i*P | Pn | 10 12 20.4 | -0.4 |
| SBLS | San Blas | 0.55 | 9 | *i*P | Pn | 10 12 20.4 | -0.4 |
| ITCA | Escuela Especi | 0.56 | 48 | *i*P | Pn | 10 12 20.5 | -0.3 |
| ITCA | Escuela Especi | 0.56 | 48 | *i*P | Pn | 10 12 20.5 | -0.3 |
| MAGS | Ministerio de | 0.56 | 47 | *e*P | Pn | 10 12 20.6 | -0.3 |
| PMON | Piamonte | 0.56 | 43 | *i*P | Pn | 10 12 20.7 | -0.2 |
| PMON | Piamonte | 0.56 | 43 | *i*P | Pn | 10 12 20.7 | -0.2 |
| SNJE | San Jose | 0.58 | 10 | *i*P | Pn | 10 12 20.8 | -0.3 |
| SNJE | San Jose | 0.58 | 10 | *i*P | Pn | 10 12 20.8 | -0.3 |
| CEDA | San Andres | 0.59 | 31 | *i*P | Pn | 10 12 21.1 | 0.0 |
| CEDA | San Andres | 0.59 | 31 | *e*P | Pn | 10 12 21.0 | 0.0 |
| CEDA | | | | *e*S | Sn | 10 12 32.5 | +2.0 |
| CEDA | San Andres | 0.59 | 31 | *i*P | Pn | 10 12 21.1 | 0.0 |
| RTR | El Retiro | 0.60 | 6 | *i*P | Pn | 10 12 21.2 | -0.2 |
| RTR | El Retiro | 0.60 | 6 | *i*P | Pn | 10 12 21.2 | -0.2 |
| BOQS | Boqueron | 0.60 | 44 | *i*P | Pn | 10 12 21.4 | 0.0 |
| BOQS | Boqueron | 0.60 | 44 | *i*P | Pn | 10 12 21.4 | 0.0 |
| SNET | Serv Nac Est T | 0.60 | 50 | *i*P | Pn | 10 12 21.1 | -0.2 |
| SNET | | | | *e*S | Sn | 10 12 31.9 | +1.1 |
| SNET | | | | IAML | | 10 12 35.0 | |
| | comp=Z,7μm,0.4s | | | | | | |
| SNET | Serv Nac Est T | 0.60 | 50 | | Pn | 10 12 21.2 | -0.1 |
| SNET | | | | Sn | Sn | 10 12 31.7 | +0.9 |
| SNET | Serv Nac Est T | 0.60 | 50 | *e*P | Pn | 10 12 21.1 | -0.2 |
| SNET | | | | *e*S | Sn | 10 12 32.1 | +1.2 |
| SNET | Serv Nac Est T | 0.60 | 50 | *i*P | Pn | 10 12 21.1 | -0.2 |
| SNET | | | | *e*S | Sn | 10 12 31.9 | +1.1 |
| SNET | | | | IAML | | 10 12 35.0 | |
| | comp=Z,7μm,0.4s | | | | | | |
| NUBE | Las Nubes | 0.61 | 353 | *i*P | Pn | 10 12 20.7 | -0.7 |
| NUBE | | | | IAML | | 10 12 32.9 | |
| | comp=Z,10μm,0.4s | | | | | | |
| NUBE | Las Nubes | 0.61 | 353 | *i*P | Pn | 10 12 20.7 | -0.7 |
| NUBE | | | | IAML | | 10 12 32.9 | |
| | comp=Z,10μm,0.4s | | | | | | |
| UEES | Universidad Ev | 0.62 | 47 | *i*P | Pn | 10 12 21.4 | -0.1 |
| UEES | Universidad Ev | 0.62 | 47 | *i*P | Pn | 10 12 21.4 | -0.1 |
| SEMO | Seminario San | 0.62 | 49 | *e*P | Pn | 10 12 21.4 | -0.1 |
| OPAM | Oficina de Pla | 0.64 | 50 | *i*eP | Pn | 10 12 21.8 | 0.0 |
| OPAM | Oficina de Pla | 0.64 | 50 | *i*eP | Pn | 10 12 21.8 | 0.0 |
| UESS | Universidad de | 0.65 | 49 | *i*eP | Pn | 10 12 21.9 | 0.0 |
| UESS | | | | IAML | | 10 12 35.2 | |
| | comp=Z,9μm,0.2s | | | | | | |
| UESS | Universidad de | 0.65 | 49 | *i*eP | Pn | 10 12 21.9 | 0.0 |
| UESS | | | | IAML | | 10 12 35.2 | |
| | comp=Z,9μm,0.2s | | | | | | |
| IGN | Direccin Gen | 0.67 | 51 | *i*P | Pn | 10 12 22.1 | 0.0 |
| IGN | Direccin Gen | 0.67 | 51 | *i*P | Pn | 10 12 22.1 | 0.0 |
| UNIC | Universidad Ca | 0.70 | 13 | *e*P | Pn | 10 12 22.5 | +0.1 |
| UNIC | Universidad Ca | 0.70 | 13 | *e*P | Pn | 10 12 22.5 | +0.1 |
| LOAL | Lomas de Alarc | 0.70 | 354 | *e*P | Pn | 10 12 22.4 | 0.0 |
| LOAL | Lomas de Alarc | 0.70 | 354 | *e*P | Pn | 10 12 22.4 | 0.0 |
| LFRS | El Faro | 0.71 | 63 | *i*P | Pn | 10 12 22.4 | -0.1 |
| LFRS | El Faro | 0.71 | 63 | *i*P | Pn | 10 12 22.4 | -0.1 |
| SLOZ | Alcaldia de Sa | 0.73 | 354 | *i*eP | Pn | 10 12 22.6 | -0.1 |
| SLOZ | | | | *e*S | Sn | 10 12 35.1 | +1.7 |
| SLOZ | | | | IAML | | 10 12 44.5 | |
| | comp=Z,7μm,0.5s | | | | | | |
| LFU | La Fuente | 0.73 | 52 | *i*P | Pn | 10 12 23.2 | +0.4 |
| LFU | La Fuente | 0.73 | 52 | *i*P | Pn | 10 12 23.2 | +0.4 |
| SJTE | Alcalda de S | 0.75 | 65 | *i*eP | Pn | 10 12 23.0 | -0.1 |
| SJTE | Alcalda de S | 0.75 | 65 | *i*eP | Pn | 10 12 23.0 | -0.1 |
| TACO | Tacachico | 0.75 | 27 | *i*P | Pn | 10 12 23.3 | +0.3 |
| TACO | Tacachico | 0.75 | 27 | *i*P | Pn | 10 12 23.3 | +0.3 |
| LBRS | Las Brisas | 0.78 | 56 | *i*P | Pn | 10 12 23.9 | +0.5 |
| LBRS | Las Brisas | 0.78 | 56 | *i*P | Pn | 10 12 23.9 | +0.5 |
| PAVA | Las Pavas | 0.85 | 61 | *i*eP | Pn | 10 12 25.0 | +0.6 |
| PAVA | Las Pavas | 0.85 | 61 | *e*P | Pn | 10 12 25.1 | +0.6 |
| PAVA | Las Pavas | 0.85 | 61 | *i*eP | Pn | 10 12 25.0 | +0.6 |
| COEG | Centro de Oper | 0.87 | 68 | *i*eP | Pn | 10 12 24.6 | +0.1 |
| COEG | | | | IAML | | 10 12 43.5 | |
| | comp=Z,17μm,0.3s | | | | | | |
| COEG | Centro de Oper | 0.87 | 68 | *i*eP | Pn | 10 12 24.6 | +0.1 |
| COEG | | | | IAML | | 10 12 43.5 | |
| | comp=Z,17μm,0.3s | | | | | | |
| SNVI | San Vicente | 0.90 | 70 | *e*P | Pn | 10 12 25.4 | +0.3 |
| SNVI | San Vicente | 0.90 | 70 | *e*P | Pn | 10 12 25.4 | +0.3 |
| TECO | Alcaldia de Te | 0.93 | 75 | *i*eP | Pn | 10 12 25.1 | -0.2 |
| TECO | Alcaldia de Te | 0.93 | 75 | *i*eP | Pn | 10 12 25.1 | -0.2 |
| UESV | Universidad de | 0.96 | 69 | *e*P | Pn | 10 12 26.0 | +0.4 |
| UESV | Universidad de | 0.96 | 69 | *e*P | Pn | 10 12 26.0 | +0.4 |
| SCLA | Alcaldia de Sa | 1.03 | 67 | *i*P | Pn | 10 12 27.5 | +0.8 |
| SCLA | | | | *e*S | Sn | 10 12 44.2 | +3.8 |
| SCLA | Alcaldia de Sa | 1.03 | 67 | *i*P | Pn | 10 12 27.5 | +0.8 |
| SCLA | | | | *e*S | Sn | 10 12 44.2 | +3.8 |
| ALJI | Alcalda de J | 1.11 | 88 | *i*P | Pn | 10 12 27.2 | -0.3 |
| ALJI | | | | IAML | | 10 12 49.2 | |
| | comp=Z,6μm,0.3s | | | | | | |
| ALJI | Alcalda de J | 1.11 | 88 | *i*P | Pn | 10 12 27.2 | -0.3 |
| ALJI | | | | IAML | | 10 12 49.2 | |
| | comp=Z,6μm,0.3s | | | | | | |
| LLGN | La Laguna | 1.14 | 41 | *e*P | Pn | 10 12 29.1 | +1.1 |
| LLGN | La Laguna | 1.14 | 41 | *e*P | Pn | 10 12 29.1 | +1.1 |
| MTO3 | Montecristo | 1.15 | 17 | *i*P | Pn | 10 12 29.3 | +0.9 |
| MTO3 | Montecristo | 1.15 | 17 | | Pn | 10 12 29.3 | +0.9 |
| MTO3 | Montecristo | 1.15 | 17 | *e*P | Pn | 10 12 29.2 | +0.9 |
| MTO3 | Montecristo | 1.15 | 17 | *i*P | Pn | 10 12 29.3 | +0.9 |
| COEB | Comit de Eme | 1.16 | 80 | *i*P | Pn | 10 12 28.3 | -0.1 |
| COEB | | | | IAML | | 10 12 48.1 | |
| | comp=Z,6μm,0.5s | | | | | | |
| COEB | Comit de Eme | 1.16 | 80 | *e*P | Pn | 10 12 28.4 | -0.1 |
| COEB | Comit de Eme | 1.16 | 80 | *i*P | Pn | 10 12 28.3 | -0.1 |
| COEB | | | | IAML | | 10 12 48.1 | |
| | comp=Z,6μm,0.5s | | | | | | |
| PQSS | Presa 15 de Se | 1.16 | 74 | *i*eP | Pn | 10 12 28.8 | +0.5 |
| PQSS | Presa 15 de Se | 1.16 | 74 | *i*eP | Pn | 10 12 28.8 | +0.5 |
| ESQI | Esquipulas | 1.30 | 16 | | Pn | 10 12 31.7 | +1.3 |
| ESQI | Esquipulas | 1.30 | 16 | *i*P | Pn | 10 12 31.6 | +1.3 |
| PACA | Pacayal | 1.36 | 83 | *e*P | Pn | 10 12 32.3 | +1.2 |
| PACA | Pacayal | 1.36 | 83 | *e*P | Pn | 10 12 32.3 | +1.2 |
| LCY | Lacayo | 1.38 | 85 | *e*P | Pn | 10 12 31.9 | +0.5 |
| LCY | Lacayo | 1.38 | 85 | *e*P | Pn | 10 12 31.9 | +0.5 |
| RANC | El Ranchito | 1.39 | 84 | *e*P | Pn | 10 12 32.0 | +0.5 |
| RANC | El Ranchito | 1.39 | 84 | *e*P | Pn | 10 12 32.0 | +0.5 |
| PCG | Pacaya | 1.40 | 321 | *e*P | Pn | 10 12 31.7 | 0.0 |
| NBG | Las Nubes | 1.43 | 334 | *i*P | Pn | 10 12 33.6 | +1.5 |
| CNRM | Centro Naciona | 1.50 | 83 | *e*P | Pn | 10 12 33.9 | +0.9 |
| CNRM | Centro Naciona | 1.50 | 83 | *e*P | Pn | 10 12 33.9 | +0.9 |
| FUG | Fuego 3 | 1.59 | 316 | *i*eP | Pn

**ROSC El Rosal 17.35 118** LR LR 10 23 43.3
comp=Z,84nm,20.1s,baz=340,slow=40
**833A Chaparral WMA, 17.46 330** P **P** **10 16 12.7 +4.4**
baz=147,SNR=7.5
**441A DeRidder 17.66 350** IAmb IAmb 10 16 30.7
comp=Z,72nm,1.1s
**344A Westbrook Farm 18.09 357** IAmb IAmb 10 16 24.6
comp=Z,30nm,0.8s
**FLOC Florencia 18.14 129** *e*P **Pn** **10 16 18.1 +1.9**
**342A Flagon Creek P 18.15 353** IAmb IAmb 10 16 25.2
comp=Z,62nm,0.8s
**VBMS Vicksburg 18.85 358** P **Pn** **10 16 26.8 +2.3**
baz=177,SNR=5.3
**435B Jarrell 18.86 339** P **Pn** **10 16 25.9 +1.2**
baz=155
**NATX Nacogdoches 18.93 347** P **Pn** **10 16 25.5 -0.1**
NATX IAmb IAmb 10 16 44.6
comp=Z,30nm,1.1s
**NATX Nacogdoches 18.93 347** P **Pn** **10 16 27.8 +2.3**
baz=185
**SOCV Socops 19.17 103** *e*P **P** **10 16 24.9 -2.3**
**MACC Macarena, Meta 19.21 124** *e*P **Pn** **10 16 28.7 -0.3**
**SDV Santo Domingo 19.22 101** P **P** **10 16 27.0 -0.9**
comp=Z,0.5nm,0.3s,baz=303,slow=3.4,SNR=8.0
SDV LR LR 10 24 24.7
comp=Z,159nm,21.0s,baz=273,slow=39
**SDV Santo Domingo 19.22 101** *e*P **P** **10 16 26.8 -1.1**
**SDV Santo Domingo 19.22 101** P **P** **10 16 27.2 -0.7**
**146A Union 19.26 2** P **P** **10 16 28.5 +0.5**
**143A Socs Landing, 19.38 356** P **P** **10 16 30.2 +0.9**
143A IAmb IAmb 10 16 49.6
comp=Z,33nm,0.8s
**JCT Junction City 19.48 333** P **Pn** **10 16 31.5 -0.6**
**JCT Junction City 19.48 333** P **Pn** **10 16 31.6 -0.5**
baz=149
**GRTK Grand Turk 19.50 63** P **P** **10 16 31.1 +0.4**
**LRAL Lakeview Retre 19.80 7** P **Pn** **10 16 36.9 +1.1**
baz=187
**WHTX Lake Whitney, 19.92 340** P **P** **10 16 36.1 +1.0**
WHTX IAmb IAmb 10 16 38.4
comp=Z,24nm,0.7s
**WHTX Lake Whitney, 19.92 340** P **P** **10 16 35.8 +0.6**
baz=157,SNR=7.1
**Z41A Richland Creek 20.07 352** P Pn 10 16 43.4 +4.4
baz=171,SNR=6.6
**Z51A Franklin 20.35 11** P Pn 10 16 41.7 -0.7
**Z38A Mt. Pleasant 20.45 347** P Pn 10 16 43.1 -0.4
Z38A IAmb IAmb 10 17 05.6
comp=Z,27nm,1.0s
**WLAR White Oak Lake 20.54 352** P Pn 10 16 43.9 -0.5
WLAR IAmb IAmb 10 17 08.1
comp=Z,46nm,1.0s
**TX31 Lajitas Ar. Si 20.55 323** P Pn 10 16 44.1 -0.8
TX31 IAmb IAmb 10 16 45.8
comp=Z,20nm,0.8s
**TX32 Lajitas Array 20.55 323** P Pn 10 16 44.0 -0.9
**TXAR Lajitas Array 20.55 323** P Pn 10 16 45.3 +0.5
comp=Z,3.8nm,0.5s,baz=147,slow=11,SNR=98
TXAR PcP **PcP** **10 20 51.9 +0.4**
comp=Z,0.7nm,0.7s,baz=146,slow=3.8,SNR=7.6
TXAR LR LR 10 26 08.7
comp=Z,90nm,18.8s,baz=115,slow=41
**Y49A Blount Mountai 20.69 8** P **P** **10 16 44.0 +0.6**
Y49A IAmb IAmb 10 17 05.5
comp=Z,30nm,1.1s
**GOGA Godfrey 20.82 15** P Pn 10 16 48.5 +0.7
baz=197
**Z35A Perchaven, San 21.10 342** P **P** **10 16 47.7 -0.1**
Z35A IAmb IAmb 10 17 06.5
comp=Z,43nm,1.1s
**OXF Oxford 21.12 1** P **P** **10 16 49.9 +1.8**
**OXF Oxford 21.12 1** P **P** **10 16 50.3 +2.2**
baz=180,SNR=5.8
**X48A Hartselle 21.20 6** P **P** **10 16 49.2 +0.3**
X48A IAmb IAmb 10 17 10.7
comp=Z,27nm,1.0s
**ABTX Abilene, Hawle 21.28 336** P **P** **10 16 51.1 +1.2**
**MIAR Mount Ida 21.44 351** P **P** **10 16 52.8 +1.2**
MIAR IAmb IAmb 10 17 10.5
comp=Z,107nm,2.0s
**MIAR Mount Ida 21.44 351** P **P** **10 16 53.9 +2.4**
baz=169
**LOOK Love County 21.70 343** P **P** **10 16 54.9 +0.7**
LOOK IAmb IAmb 10 17 28.7
comp=Z,41nm,1.3s
**X37A Clayton 21.81 347** IAmb IAmb 10 17 23.5
comp=Z,59nm,1.4s
**W41B Gary Mavity, V 21.90 354** IAmb IAmb 10 17 23.9
comp=Z,38nm,1.3s
**W41B Gary Mavity, V 21.90 354** P **P** **10 16 59.1 +2.6**
baz=173
**WHAR Wooly Hollow 22.02 354** P **P** **10 16 58.3 +0.6**
WHAR IAmb IAmb 10 17 25.2
comp=Z,65nm,1.4s
**SWET Sewanee 22.09 8** P **P** **10 16 58.4 -0.1**
SWET IAmb IAmb 10 17 20.3
comp=Z,75nm,1.8s
**LPIG La Paz 22.25 302** LR LR 10 24 59.4
comp=Z,83nm,21.5s,baz=104,slow=34
**FCAR Ozark Folk Cen 22.60 355** P **P** **10 17 04.2 +0.2**
**LCAR Lake Charles 22.71 357** P **P** **10 17 05.9 +0.7**
LCAR IAmb IAmb 10 17 20.6
comp=Z,39nm,1.5s
**WVT Waverly 22.80 4** P **P** **10 17 06.8 +0.8**
**WVT Waverly 22.80 4** P **P** **10 17 07.3 +1.3**
baz=184
**BIRD Birdtown, Kers 22.85 20** P **P** **10 17 06.4 -0.1**
BIRD IAmb IAmb 10 17 28.9
comp=Z,45nm,1.3s
**WMOK Wichita Mounta 22.88 340** P **P** **10 17 05.6 -1.3**
baz=156,SNR=7.7
**TKL Tuckaleechee C 22.90 12** P **P** **10 17 06.1 -1.0**
comp=Z,6.1nm,0.7s,baz=194,slow=11,SNR=12
TKL LR LR 10 26 07.3
comp=Z,365nm,22.0s,baz=198,slow=37
**TKL Tuckaleechee C 22.90 12** IAmb IAmb 10 17 22.4
comp=Z,21nm,1.0s
**CLTN Cedars of Leba 22.90 7** P **P** **10 17 07.6 +0.6**
**KMSC Kings Mountain 23.03 18** P **P** **10 17 09.4 +1.0**
baz=201
**U40A Yellville 23.14 354** IAmb IAmb 10 17 33.2
comp=Z,22nm,1.1s
**U40A Yellville 23.14 354** P **P** **10 17 11.6 +2.1**
baz=172
**TUL1 Leonard 23.17 347** P **P** **10 17 10.2 +0.4**
baz=164
**ATAH Atahualpa 23.20 150** LR LR 10 25 09.2
comp=Z,191nm,19.9s,baz=317,slow=34
**MNTX Cornudas Mount 23.30 324** P **P** **10 17 11.4 +0.4**
baz=138,SNR=8.7
**U49A Red Boiling Sp 23.39 8** IAmb IAmb 10 17 27.6
comp=Z,24nm,1.1s
**OK029 Liberty Lake 23.47 344** IAmb IAmb 10 17 25.1
comp=Z,37nm,0.8s
**V55A Taylorsville 23.73 17** IAmb IAmb 10 17 45.3
comp=Z,26nm,1.2s
**MSTX Muleshoe 23.76 332** P **P** **10 17 15.8 +0.4**
baz=147
**AMTX Amarillo 24.07 335** IAmb IAmb 10 17 50.9
comp=Z,35nm,1.7s
**AMTX Amarillo 24.07 335** P **P** **10 17 19.7 +1.5**
baz=150
**U54A Nelsons Funny 24.18 16** IAmb IAmb 10 17 35.1
comp=Z,31nm,1.4s
**BLOK Blackwell 24.32 345** IAmb IAmb 10 17 33.6
comp=Z,25nm,1.0s
**CCM Cathedral Cave 24.70 357** P **P** **10 17 23.9 +0.1**
CCM IAmb IAmb 10 17 38.1
comp=Z,16nm,0.9s
**CCM Cathedral Cave 24.70 357** P **P** **10 17 23.9 +0.1**
baz=176
**WCI Wyandotte Cave 25.02 6** P **P** **10 17 27.0 +0.3**
WCI IAmb IAmb 10 17 44.0
comp=Z,28nm,1.0s
**WCI Wyandotte Cave 25.02 6** P **P** **10 17 27.0 +0.3**
baz=188
**121A Cookes Peak, D 25.30 322** P **P** **10 17 31.5 +1.9**
baz=135
**Q44A Meyer Farm, Va 25.51 1** IAmb IAmb 10 17 48.1
comp=Z,26nm,0.9s
**ANMO Albuquerque 26.35 328** P **P** **10 17 40.2 +1.2**
comp=Z,1.0nm,0.6s,baz=142,slow=11,SNR=5.8
ANMO LR LR 10 28 51.7
comp=Z,56nm,21.8s,baz=118,slow=38
**N35A Tabor 27.95 350** IAmb IAmb 10 18 08.6
comp=Z,14nm,0.8s
**NNA Nana 28.18 153** LR LR 10 27 23.0
comp=Z,66nm,20.6s,baz=314,slow=32
**L34A Svendsen Farm, 29.15 350** IAmb IAmb 10 18 04.9
comp=Z,13nm,0.6s
**PDMCI Parker Dam,Lak 30.46 318** P **P** **10 18 17.6 +2.2**
baz=127,SNR=5.6
**ECSD EROS Data Cent 30.91 350** IAmb IAmb 10 18 33.3
comp=Z,9.6nm,1.1s
**BC3 Big Chuckawall 30.97 315** P **P** **10 18 22.3 +2.3**
baz=125,SNR=5.2
**IRM Iron Mountain 31.05 316** P **P** **10 18 23.0 +2.3**
baz=126
**MONP2 Monument Peak 31.22 313** P **P** **10 18 24.7 +2.3**
baz=122
**PFO Pinyon Flats O 31.64 314** LR LR 10 32 08.5
comp=Z,126nm,20.0s,baz=127,slow=38
**GMRC Granite Mounta 31.76 317** P **P** **10 18 29.2 +2.1**
baz=126
**SPMN Marine on St. 31.93 356** IAmb IAmb 10 18 43.9
comp=Z,20nm,1.2s
**HEC Hector,Ludlow 32.23 316** P **P** **10 18 33.6 +2.5**
baz=125
**BBRC Big Bear Solar 32.31 315** P **P** **10 18 34.6 +2.6**
baz=124,SNR=5.9
**SHPR Sheep Range 32.48 320** P **P** **10 18 34.8 +1.4**
**PTGA Pitinga 32.61 113** LR LR 10 34 38.5
comp=Z,35nm,19.2s,baz=302,slow=42
**SADO Sadowa 32.64 14** LR LR 10 32 10.4
comp=Z,209nm,20.9s,baz=200,slow=37
**SADO Sadowa 32.64 14** P **P** **10 18 34.0 -0.4**
**ETMB Extrema 32.73 133** P **P** **10 18 35.8 +0.2**
ETMB IAmb IAmb 10 18 39.4
comp=Z,12nm,0.8s
**GSC Goldstone, Bar 32.82 317** P **P** **10 18 38.6 +2.3**
baz=125
**EDW2 Edwards Air Fo 33.39 315** P **P** **10 18 43.0 +1.8**
baz=123
**TPNV Topopah Spring 33.44 319** P **P** **10 18 43.2 +1.5**
**TPNV Topopah Spring 33.44 319** P **P** **10 18 44.5 +2.7**
baz=128
**LRMC Laurel Mtn Rad 33.51 316** P **P** **10 18 44.4 +2.0**
baz=124
**FURC Furnace Creek, 33.54 318** P **P** **10 18 44.7 +2.3**
baz=126
**S11A Rachel 33.56 321** IAmb IAmb 10 18 46.3
comp=Z,8.6nm,0.8s
**MPMC Manual Prospec 33.71 317** P **P** **10 18 46.2 +2.0**
baz=125,SNR=12
**R11A Troy Canyon, C 33.91 322** P **P** **10 18 48.3 +2.5**
baz=130
**PDAR Pinedale Array 34.01 333** P **P** **10 18 47.5 +0.8**
comp=Z,0.3nm,0.7s,baz=192,slow=8.3,SNR=2.3
PDAR PcP **PcP** **10 21 23.7 +0.1**
comp=Z,1.0nm,0.6s,baz=128,slow=4.3,SNR=9.9
PDAR ScP **ScP** **10 25 02.7 -1.0**
comp=Z,0.4nm,1.0s,baz=138,slow=5.5,SNR=2.2
PDAR LR LR 10 34 28.4
comp=Z,100nm,19.3s,baz=156,slow=39
**PDAR Pinedale Array 34.01 333** P **P** **10 18 46.9 +0.1**
**ARVC Arvin 34.10 315** P **P** **10 18 50.1 +2.7**
baz=122
**ISA Isabella, Lake 34.15 316** P **P** **10 18 49.5 +1.7**
**ISA Isabella, Lake 34.15 316** P **P** **10 18 50.6 +2.8**
baz=123
**CWC Cottonwood Cre 34.32 317** P **P** **10 18 51.3 +1.9**
baz=125
**VES Vestal, Richgr 34.66 316** P **P** **10 18 54.7 +2.5**
baz=123,SNR=6.6
**PKM Mcpherson Peak 34.67 314** P **P** **10 18 54.6 +2.1**
baz=121
**SNOW Snow King Moun 35.09 333** IAmb IAmb 10 19 14.1
comp=Z,5.6nm,0.8s
**AGMN Agassiz Nation 35.27 353** IAmb IAmb 10 19 13.0
comp=Z,11nm,0.8s
**ELK Elko 35.31 325** LR LR 10 35 03.4
comp=Z,83nm,18.1s,baz=134,slow=39
**NV11 Mina Array Sit 35.54 320** IAmb IAmb 10 19 03.3
comp=Z,7.6nm,0.8s
**NVAR Mina Array Bea 35.63 320** P **P** **10 19 03.0 +2.3**
comp=Z,9.8nm,0.7s,baz=133,slow=8.7,SNR=104
NVAR PcP **PcP** **10 21 29.4 +1.1**
comp=Z,3.4nm,0.8s,baz=137,slow=3.9,SNR=12
NVAR LR LR 10 34 51.9
comp=Z,125nm,21.3s,baz=171,slow=38
**LPAZ La Paz 36.32 143** P **P** **10 19 07.3 +0.1**
comp=Z,0.7nm,0.6s,baz=302,slow=8.9,SNR=3.6
LPAZ LR LR 10 34 15.9
comp=Z,138nm,20.6s,baz=312,slow=37
**YERR Yerington 36.55 320** IAmb IAmb 10 19 11.6
comp=Z,4.4nm,0.7s
**PNTR Pine Nut 36.84 320** IAmb IAmb 10 19 14.9
comp=Z,5.3nm,0.7s
**DGMT Dagmar 37.07 344** P **P** **10 19 13.3 +0.7**
baz=156
**EMB Emerald Bay 37.09 319** IAmb IAmb 10 19 16.5
comp=Z,8.1nm,0.8s
**ULM Lac du Bonnet 37.19 353** P **P** **10 19 12.0 -1.6**
comp=Z,3.6nm,0.6s,baz=153,slow=9.4,SNR=4.9
ULM LR LR 10 36 45.1
comp=Z,182nm,18.0s,baz=149,slow=40
**ULM Lac du Bonnet 37.19 353** IAmb IAmb 10 19 37.0
comp=Z,18nm,1.4s
**MPK Martis Peak 37.23 320** IAmb IAmb 10 19 17.7
comp=Z,7.7nm,0.8s
**ORV Oroville 38.31 319** IAmb IAmb 10 19 26.5
comp=Z,14nm,1.6s
**VILB Vilhena 39.19 131** P **P** **10 19 30.7 -0.2**
**YBH Yreka Blue Hor 40.30 321** LR LR 10 38 44.2
comp=Z,95nm,19.9s,baz=138,slow=40
**SIV San Ignacio 40.60 135** LR LR 10 35 21.4
comp=Z,154nm,18.2s,baz=326,slow=34
**LVC Limon Verde 41.09 150** LR LR 10 35 43.5
comp=Z,61nm,20.1s,baz=286,slow=34
**NEW Newport 41.63 332** LR LR 10 40 11.9
comp=Z,100nm,19.5s,baz=86,slow=40
**RPN Rapa Nui 44.47 205** LR LR 10 33 59.4
comp=Z,126nm,19.7s,baz=34,slow=29
**SCHQ Schefferville 45.14 18** P **P** **10 20 17.5 -1.3**
comp=Z,10nm,0.6s,baz=218,slow=6.8,SNR=30
SCHQ PcP **PcP** **10 21 57.5 -0.9**
comp=Z,2.2nm,0.6s,baz=193,slow=4.6,SNR=3.7
SCHQ LR LR 10 38 36.6
comp=Z,117nm,19.8s,baz=160,slow=35
**SCHQ Schefferville 45.14 18** P **P** **10 20 17.7 -1.1**
**FCC Fort Churchill 45.50 357** P **P** **10 20 20.8 -0.7**
**H03N2 Juan Fernandez 47.60 168** T T 11 11 30.0
baz=346,slow=76,SNR=8.1
**H03N1 Juan Fernandez 47.60 168** T T 11 11 29.1
baz=346,slow=76,SNR=7.9
**H03N3 Juan Fernandez 47.62 168** T T 11 11 22.3
baz=346,slow=76,SNR=8.5
**BBB Bella Bella 49.48 330** LR LR 10 45 15.6
comp=Z,68nm,18.0s,baz=135,slow=40
**CPUP Villa Florida 50.43 141** P **P** **10 20 58.9 -1.2**
comp=Z,0.8nm,0.3s,baz=346,slow=5.7,SNR=3.9
CPUP LR LR 10 44 09.6
comp=Z,62nm,18.4s,baz=246,slow=38
**CPUP Villa Florida 50.43 141** P **P** **10 20 59.4 -0.7**
CPUP IAmb IAmb 10 20 59.5
comp=Z,9.1nm,1.3s
**YKA Yellowknife Ar 52.24 346** P **P** **10 21 12.0 -1.1**
comp=Z,3.9nm,0.8s,baz=146,slow=7.7,SNR=61
YKA PcP **PcP** **10 22 23.9 +0.1**
comp=Z,0.8nm,0.7s,baz=146,slow=4.1,SNR=5.8
**FRB Frobisher Bay 52.52 12** LR LR 10 43 16.7
comp=Z,221nm,21.1s,baz=198,slow=36
**DLBC Dease Lake 54.21 335** LR LR 10 49 25.8
comp=Z,79nm,18.1s,baz=323,slow=41
**PLCA Paso Flores 56.61 163** P **P** **10 21 45.1 -0.1**
comp=Z,4.3nm,1.2s,baz=320,slow=7.2,SNR=3.4
PLCA LR LR 10 41 29.7
comp=Z,64nm,19.2s,baz=182,slow=31
**SFJD Kangerlussuaq 59.53 17** LR LR 10 48 50.5
comp=Z,102nm,18.3s,baz=154,slow=37
**RES Resolute Bay 61.45 358** LR LR 10 50 13.0
comp=Z,89nm,18.1s,baz=110,slow=37
**RES Resolute Bay 61.45 358** P **P** **10 22 17.3 -0.8**
**INK Inuvik 61.75 343** P **P** **10 22 19.5 -0.7**
comp=Z,1.9nm,0.7s,baz=120,slow=6.6,SNR=11
INK LR LR 10 52 54.6
comp=Z,71nm,19.2s,baz=130,slow=40
**INK Inuvik 61.75 343** P **P** **10 22 19.7 -0.5**
**ILAR Eielson Array 64.37 336** P **P** **10 22 37.0 -0.7**
comp=Z,1.3nm,1.0s,baz=167,slow=4.9,SNR=7.0
ILAR LR LR 10 53 21.8
comp=Z,72nm,20.1s,baz=123,slow=38
**PPT Papeete 66.57 244** LR LR 10 43 25.7
comp=Z,153nm,18.0s,baz=78,slow=28
**EUNU Eureka 66.79 1** P **P** **10 22 52.7 -0.5**
EUNU IAmb IAmb 10 22 53.3
comp=Z,3.8nm,0.7s
**USHA Ushuaia 70.22 167** LR LR 10 50 01.5
comp=Z,95nm,19.6s,baz=212,slow=32
**ESDC Sonseca Array 78.40 52** P **P** **10 24 00.7 -2.1**
comp=Z,0.7nm,0.7s,baz=281,slow=4.4,SNR=4.5
ESDC LR LR 10 51 05.2
comp=Z,50nm,21.1s,baz=284,slow=30
**MDT Midelt 78.86 59** LR LR 10 53 18.9
comp=Z,58nm,19.8s,baz=300,slow=32
**SPITS Spitsbergen Ar 80.33 12** LR LR 11 00 51.1
comp=Z,46nm,19.4s,baz=18,slow=36
**SHEM Shemya Is, Ala 83.25 322** LR LR 11 02 04.8
comp=Z,22nm,18.3s,baz=310,slow=36
**NOA NORSAR Array B 83.69 29** LR LR 10 59 43.1
comp=Z,56nm,20.6s,baz=295,slow=34
**HFS Hagfors 85.13 29** LR LR 11 00 26.0
comp=Z,56nm,21.0s,baz=316,slow=34
**ARCES ARCESS Array B 86.10 19** P **P** **10 24 41.5 -0.9**
comp=Z,9.3nm,1.3s,baz=280,slow=5.1,SNR=3.6
**TORD Torodi Ar. Bea 88.37 77** P **P** **10 24 52.2 -2.3**
comp=Z,0.6nm,0.6s,baz=293,slow=5.6,SNR=4.4
**TORD Torodi Ar. Bea 88.37 77** P **P** **10 24 52.1 -2.3**
TORD IAmb IAmb 10 26 38.1
comp=Z,11nm,2.0s
**SEY Seymchan 90.30 336** P **P** **10 25 02.9 +0.4**
comp=Z,0.3nm,0.2s,baz=74,slow=5.6,SNR=4.6
**VRAC Vranov 90.35 39** LR LR 11 04 16.4
comp=Z,40nm,18.4s,baz=300,slow=35
**TIXI Tiksi 91.39 349** LR LR 11 10 31.4
comp=Z,44nm,19.7s,baz=358,slow=38
**VAE Valguarnera 92.89 51** LR LR 11 04 24.9
comp=Z,66nm,18.9s,baz=300,slow=34
**NRIK Noril'sk 97.55 1** LR LR 11 10 39.1
comp=Z,102nm,21.9s,baz=355,slow=36
**YAK Yakutsk 98.81 342** LR LR 11 17 40.5
comp=Z,28nm,18.7s,baz=118,slow=40
**ZALV Zalesovo Beam 112.86 4** PKiKP **PKiKP** **10 30 37.7 -0.7**
comp=Z,1.1nm,0.5s,baz=278,slow=3.3,SNR=4.4
**MKAR Makanchi Array 119.76 6** PKP **PKPdf** **10 30 50.9 -1.1**
comp=Z,0.6nm,0.7s,baz=23,slow=2.1,SNR=5.8
**WRA Warramunga Arr 137.38 255** PKhKP PKPpre 10 31 17.8
comp=Z,0.4nm,0.9s,baz=92,slow=3.1,SNR=4.7
WRA PKP **PKPdf** **10 31 26.9 +0.8**
comp=Z,1.9nm,0.7s,baz=87,slow=2.2,SNR=15
**ASAR Alice Springs 137.52 249** PKhKP PKPpre 10 31 18.2
comp=Z,0.4nm,0.8s,baz=92,slow=3.7,SNR=3.3
ASAR PKP **PKPdf** **10 31 26.7 +0.5**
comp=Z,0.9nm,0.7s,baz=84,slow=1.8,SNR=7.8
**PZH PanZhiHua 138.90 344** PKP **PKPdf** **10 31 28.8 -0.1**
**CMAR Chiang Mai Arr 147.31 345** PKPbc **PKPbc** **10 31 45.7 -0.5**
comp=Z,5.7nm,0.6s,baz=339,slow=3.4,SNR=27
**CMAR Chiang Mai Arr 147.31 345** **PKPbc** **10 31 47.0 +0.9**

*IDC **06** 10:22:00.8±1.3, 40.70N×145.09E, h0km, mb3.7/9, mb1 3.8/11, mb1mx3.6/45, mbtmp3.7/11, ML3.2/2, MS2.6/3, Ms1 2.7/3, ms1mx2.3/89, Error ellipse: s-maj=30.4km s-min=24.7km az=122.0*

*JMA **06** 10:22:03.1±0.2, 40.82N×145.21E, h65km±4km, M3.8*

**ISC 06 10:22:05.2±0.9, 40.75N±0.05×145.11E±0.07, h35km, n32, σ2s 00/44, mb3.6/9, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **JEM** | **Erimo** | **1.94** | **311** | P | | **Pn** | **10 22 34.8** | **-0.8** |
| JEM | | | | *e*S | | **Sn** | **10 22 56.8** | **-1.8** |
| **JTHR** | **Tokachihiroo** | **2.05** | **319** | P | | **Pn** | **10 22 36.2** | **-0.9** |
| JTHR | | | | *e*S | | **Sn** | **10 22 59.2** | **-2.3** |
| **JAK** | **Akkeshi** | **2.26** | **352** | P | | **Pn** | **10 22 38.5** | **-1.5** |
| JAK | | | | *e*S | | **Sn** | **10 23 03.7** | **-3.0** |
| **JCH** | **Churui** | **2.27** | **325** | P | | **Pn** | **10 22 39.1** | **-1.1** |
| JCH | | | | *e*S | | **Sn** | **10 23 04.7** | **-2.3** |
| **JKHN** | **Kushirohamanak** | **2.33** | **1** | P | | **Pn** | **10 22 39.2** | **-1.7** |
| JKHN | | | | *e*S | | **Sn** | **10 23 05.6** | **-2.7** |
| **JNBK** | **Urakawa-nobuka** | **2.34** | **312** | P | | **Pn** | **10 22 41.0** | **-0.1** |
| JNBK | | | | *e*S | | **Sn** | **10 23 08.3** | **-0.2** |
| **JOB** | **Onbets** | **2.35** | **336** | P | | **Pn** | **10 22 40.3** | **-0.9** |
| **NEM2** | **Nemuro 2** | **2.65** | **10** | P | | **Pn** | **10 22 43.2** | **-2.2** |
| **JAR** | **Ashorobuto** | **2.73** | **339** | P | | **Pn** | **10 22 44.8** | **-1.7** |
| JAR | | | | *e*S | | **Sn** | **10 23 14.8** | **-3.5** |
| **JANG** | **Nango** | **2.77** | **263** | P | | **Pn** | **10 22 45.1** | **-1.9** |
| JANG | | | | *e*S | | **Sn** | **10 23 14.6** | **-4.5** |
| **JNK** | **Nakash** | **2.84** | **354** | P | | **Pn** | **10 22 45.7** | **-2.4** |
| JNK | | | | *e*S | | **Sn** | **10 23 16.6** | **-4.5** |
| **JFR** | **Furan** | **3.05** | **323** | P | | **Pn** | **10 22 50.0** | **-0.9** |
| **JOT** | **Ohata** | **3.13** | **283** | P | | **Pn** | **10 22 51.0** | **-1.0** |
| JOT | | | | *e*S | | **Sn** | **10 23 25.0** | **-3.2** |
| **JOM** | **Ohasama** | **3.19** | **248** | P | | **Pn** | **10 22 51.8** | **-1.1** |
| JOM | | | | *e*S | | **Sn** | **10 23 26.8** | **-2.9** |
| **JKB** | **Kayabe** | **3.27** | **292** | P | | **Pn** | **10 22 53.1** | **-0.8** |
| **JTKR** | **Abashiri--Toko** | **3.34** | **345** | P | | **Pn** | **10 22 54.1** | **-0.7** |
| JTKR | | | | *e*S | | **Sn** | **10 23 30.7** | **-2.5** |
| **JEW** | **Eniwo** | **3.44** | **308** | P | | **Pn** | **10 22 56.5** | **+0.3** |
| JEW | | | | *e*S | | **Sn** | **10 23 35.1** | **-0.7** |
| **JMK** | **Ichinoseki** | **3.49** | **240** | P | | **Pn** | **10 22 55.7** | **-1.3** |
| JMK | | | | *e*S | | **Sn** | **10 23 33.2** | **-3.9** |
| **JKK2** | **Kamakawa 2** | **3.58** | **331** | P | | **Pn** | **10 22 58.3** | **+0.2** |
| **ASAJ** | **Asahikawa** | **3.84** | **332** | Pn | | **Pn** | **10 23 02.0** | **+0.3** |
| | 1.9nm,0.3s,baz=180,slow=9.3,SNR=16 | | | | | | | |
| ASAJ | | | | Sn | | **Sn** | **10 23 44.4** | **-1.2** |
| | 1.7nm,0.3s,baz=106,slow=33,SNR=6.2 | | | | | | | |
| ASAJ | | | | LR | | LR | 10 24 42.9 | |
| | comp=Z,44nm,20.5s,baz=90,slow=42 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.84** | **234** | Pn | | **Pn** | **10 23 42.5** | **-0.6** |
| | 0.2nm,0.3s,baz=43,slow=12,SNR=8.2 | | | | | | | |
| **KSRS** | **Korea Array** | **13.75** | **262** | LR | | LR | 10 30 34.2 | |
| | comp=Z,12nm,18.1s,baz=220,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **28.37** | **298** | P | | **P** | **10 27 57.3** | **+1.3** |
| | 0.9nm,0.8s,baz=76,slow=9.4,SNR=6.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.66** | **309** | P | | **P** | **10 29 50.9** | **+0.9** |
| | 0.3nm,0.3s,baz=86,slow=7.4,SNR=1.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.69** | **300** | P | | **P** | **10 30 15.3** | **+0.8** |
| | 0.2nm,0.7s,baz=80,slow=7.5,SNR=2.2 | | | | | | | |
| **INK** | **Inuvik** | **49.75** | **29** | P | | P | 10 30 55.7 | +2.1 |
| | 0.8nm,0.5s,baz=273,slow=7.8,SNR=6.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.14** | **32** | P | | **P** | **10 32 02.8** | **+0.9** |
| | 0.2nm,0.7s,baz=303,slow=6.6,SNR=2.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **61.21** | **192** | P | | **P** | **10 32 16.9** | **+0.5** |
| | 0.6nm,0.7s,baz=9.2,slow=6.8,SNR=2.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.53** | **340** | LR | | LR | 11 01 17.5 | |
| | comp=Z,22nm,20.5s,baz=320,slow=38 | | | | | | | |
| **FINES** | **FINESS Array B** | **66.85** | **333** | P | | **P** | **10 32 54.3** | **+1.3** |
| | 0.9nm,0.5s,baz=53,slow=7.4,SNR=10.0 | | | | | | | |
| **HFS** | **Hagfors** | **71.85** | **337** | P | | **P** | **10 33 25.0** | **+1.0** |
| | 3.8nm,1.0s,baz=49,slow=14,SNR=4.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.08** | **323** | P | | **P** | **10 33 32.3** | **+0.8** |
| | 0.3nm,0.4s,baz=45,slow=5.9,SNR=5.4 | | | | | | | |

**RSNC 06 10:23:28.9±0.8, 6.82N×73.10W, h152km±3km, ML3.1, Mw3.5,3D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **200** | ↓*i*P | | Pn | 10 23 49.4 | -0.5 |
| BARC | | | | *e*S | | Sn | 10 24 05.0 | -0.8 |
| BARC | | | | *i* | | | 10 24 06.4 | |
| | comp=Z,177nm,0.2s | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.65** | **38** | ↓*i*P | | Pn | 10 23 52.1 | +0.2 |
| PAMC | | | | *e*S | | Sn | 10 24 09.5 | +0.1 |
| PAMC | | | | *i* | | | 10 24 11.5 | |
| | comp=Z,192nm,0.6s | | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **179** | *e*P | | Pn | 10 23 53.3 | -0.5 |
| RUSC | | | | *e*S | | Sn | 10 24 12.4 | -0.4 |
| RUSC | | | | *i* | | | 10 24 14.6 | |
| | comp=Z,140nm,0.5s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.38** | **258** | *e*P | | Pn | 10 23 56.1 | -1.2 |
| PTBC | | | | *e*S | | Sn | 10 24 17.7 | -1.5 |
| PTBC | | | | *i* | | | 10 24 24.9 | |
| | comp=Z,195nm,0.4s | | | | | | | |
| **OCAC** | **Ocana** | **1.43** | **351** | *e*P | | Pn | 10 23 57.8 | -0.3 |
| OCAC | | | | *e*S | | Sn | 10 24 20.1 | -0.3 |
| OCAC | | | | *i* | | | 10 24 31.5 | |
| | comp=Z,144nm,0.3s | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.51** | **220** | *e*P | | Pn | 10 23 58.1 | -0.7 |
| SPBC | | | | *e*S | | Sn | 10 24 20.9 | -0.9 |
| SPBC | | | | *i* | | | 10 24 25.4 | |
| | comp=Z,208nm,0.2s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **291** | *e*P | | Pn | 10 24 02.0 | -0.7 |
| ZARC | | | | *e*S | | Sn | 10 24 28.0 | -0.5 |
| ZARC | | | | *i* | | | 10 24 33.2 | |
| | comp=Z,152nm,0.6s | | | | | | | |
| **NORC** | **Norcasia** | **2.16** | **235** | *e*P | | Pn | 10 24 05.2 | -0.8 |
| NORC | | | | *e*S | | Sn | 10 24 34.1 | -0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NORC | | | | *i* | | | 10 24 35.6 | |
| | comp=Z,85nm,0.3s | | | | | | | |
| **SMLC** | **San Martn de** | **2.19** | **334** | *e*P | | Pn | 10 24 05.8 | -0.6 |
| SMLC | | | | *e*S | | Sn | 10 24 34.5 | -0.8 |
| SMLC | | | | *i* | | | 10 24 36.4 | |
| | comp=Z,108nm,0.1s | | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **196** | *e*P | | Pn | 10 24 07.3 | -0.5 |
| CHIC | | | | *e*S | | Sn | 10 24 37.1 | -0.6 |
| CHIC | | | | *i* | | | 10 24 42.7 | |
| | comp=Z,58nm,0.3s | | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **256** | *e*P | | Pn | 10 24 11.0 | +0.6 |
| HELC | | | | *e*S | | Sn | 10 24 42.3 | 0.0 |
| HELC | | | | *i* | | | 10 24 47.7 | |
| | comp=Z,75nm,0.3s | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | *e*P | | Pn | 10 24 09.3 | -1.8 |
| UREC | | | | *e*S | | Sn | 10 24 40.1 | -3.7 |
| UREC | | | | *i* | | | 10 24 54.5 | |
| | comp=Z,82nm,0.2s | | | | | | | |
| **VILC** | **Villavicencio,** | **2.76** | **192** | *e*P | | Pn | 10 24 13.5 | +0.1 |
| VILC | | | | *e*S | | Sn | 10 24 47.5 | -0.4 |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **235** | *e*P | | Pn | 10 24 13.9 | +0.1 |
| GUY2C | | | | *e*S | | Sn | 10 24 51.3 | +2.9 |
| GUY2C | | | | *i* | | | 10 24 56.0 | |
| | comp=Z,78nm,0.7s | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.78** | **160** | *i* P | | Pn | 10 24 12.6 | -1.0 |
| PTGC | | | | *e*S | | Sn | 10 24 45.6 | -2.6 |
| PTGC | | | | *i* | | | 10 24 50.4 | |
| | comp=Z,51nm,0.3s | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.90** | **357** | *e*P | | Pn | 10 24 14.3 | -0.8 |
| LL6C | | | | *e*S | | Sn | 10 24 49.7 | -1.2 |
| LL6C | | | | *i* | | | 10 24 57.4 | |
| | comp=Z,24nm,0.3s | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **252** | *e*P | | Pn | 10 24 17.0 | -0.1 |
| CBOC | | | | *e*S | | Sn | 10 24 54.1 | -0.3 |
| CBOC | | | | *i* | | | 10 24 59.9 | |
| | comp=Z,26nm,0.4s | | | | | | | |
| **DBBC** | **Dabeiba** | **3.09** | **274** | *e*P | | Pn | 10 24 17.1 | -0.6 |
| DBBC | | | | *e*S | | Sn | 10 24 54.3 | -1.1 |
| **MOTC** | **Monteria, Cord** | **3.20** | **308** | *e*P | | Pn | 10 24 16.6 | -2.4 |
| MOTC | | | | *e*S | | Sn | 10 24 54.9 | -2.8 |
| MOTC | | | | *i* | | | 10 25 12.0 | |
| | comp=Z,23nm,0.5s | | | | | | | |
| **ANIL** | **Santa Ana** | **3.26** | **225** | *e*P | | Pn | 10 24 20.7 | +0.7 |
| ANIL | | | | *e*S | | Sn | 10 24 59.5 | +0.1 |
| ANIL | | | | *i* | | | 10 25 06.2 | |
| | comp=Z,147nm,0.4s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.60** | **217** | *e*P | | Pn | 10 24 23.6 | -0.5 |
| ORTC | | | | *e*S | | Sn | 10 25 06.8 | -0.1 |
| ORTC | | | | *i* | | | 10 25 13.2 | |
| | comp=Z,34nm,0.2s | | | | | | | |
| **CVALL** | **Valledupar, Ce** | **3.67** | **358** | *e*S | | Sn | 10 25 06.4 | -2.0 |
| CVALL | | | | *i* | | | 10 25 10.2 | |
| | comp=Z,36nm,0.6s | | | | | | | |
| **PLMC** | **San Jos del P** | **3.69** | **239** | ‖*e*P | | Pn | 10 24 24.9 | -0.4 |
| PLMC | | | | *e*S | | Sn | 10 25 09.3 | +0.1 |
| PLMC | | | | *i* | | | 10 25 12.9 | |
| | comp=Z,27nm,0.2s | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | *e*P | | Pn | 10 24 29.3 | -2.4 |
| CRJC | | | | *e*S | | Sn | 10 25 15.3 | -5.2 |
| CRJC | | | | *i* | | | 10 25 23.8 | |
| | comp=Z,31nm,0.2s | | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.46** | **346** | *e*P | | Pn | 10 24 34.9 | -0.3 |
| SMRC | | | | *e*Pg | | | 10 25 22.8 | |
| SMRC | | | | *e*S | | Sn | 10 25 23.5 | -3.4 |
| SMRC | | | | *i* | | | 10 25 26.9 | |
| | comp=Z,26nm,0.2s | | | | | | | |

*ISK **06** 10:26:09.3, 38°.78N×27°.79E, h6km, ML3.7/23*
*DDA **06** 10:26:09.5±0.0, 38°.76N×27°.81E, h7km±1km, ML3.5*
*THE **06** 10:26:10.6, 38°.79N×27°.91E, h12km±4km, ML3.4/5, Error ellipse: s-maj=4.6km s-min=1.0km az=106.0*

**ISC 06 10:26:09.6±0.8, 38°.78N±0°.02×27°.82E±0°.02, h10km±5km, n72, σ0°58/98, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.10** | **358** | P | **Pg** | **10 26 12.2** | **-0.1** |
| AKHS | | | | S | **Sg** | **10 26 14.0** | **-0.2** |
| **AKS** | **Akhisar** | **0.10** | **358** | PG | **Pg** | **10 26 11.8** | **-0.5** |
| AKS | | | | SG | **Sg** | **10 26 14.0** | **-0.2** |
| **GOMA** | **Golmarmara-Man** | **0.10** | **132** | PG | **Pg** | **10 26 12.3** | **+0.1** |
| GOMA | | | | SG | **Sg** | **10 26 14.6** | **+0.5** |
| **STEP** | **BALIKESIR_Sava** | **0.60** | **353** | P | **Pg** | **10 26 20.9** | **-0.5** |
| STEP | | | | S | **Sb** | **10 26 30.4** | **-0.5** |
| STEP | | | | *i* AML | AML | 10 26 31.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| STEP | | | | *i* AML | AML | 10 26 32.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.61** | **288** | P | **Pg** | **10 26 21.7** | **+0.2** |
| ZEDA | | | | S | **Sb** | **10 26 30.5** | **-0.5** |
| ZEDA | | | | *i* AML | AML | 10 26 31.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KULA** | **Kula-Manisa** | **0.71** | **111** | P | **Pg** | **10 26 23.2** | **-0.1** |
| KULA | | | | S | **Sg** | **10 26 32.1** | **-0.5** |
| **KULA** | **Kula-Manisa** | **0.71** | **111** | PG | **Pb** | **10 26 23.9** | **-0.2** |
| **DEMI** | **Demirci** | **0.75** | **69** | P | **Pb** | **10 26 24.5** | **-0.3** |
| DEMI | | | | *i* AML | AML | 10 26 38.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| DEMI | | | | *i* AML | AML | 10 26 38.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **DKL** | **Dikili** | **0.77** | **293** | PG | **Pg** | **10 26 24.2** | **-0.3** |
| DKL | | | | SG | **Sb** | **10 26 35.8** | **+0.2** |
| **FOCM** | **Foa** | **0.85** | **266** | PG | **Pg** | **10 26 25.8** | **-0.3** |
| FOCM | | | | SG | **Sb** | **10 26 37.5** | **-0.5** |
| **BUHA** | **Balikesir, Bur** | **0.93** | **322** | P | **Pg** | **10 26 27.2** | **-0.2** |
| BUHA | | | | S | **Sn** | **10 26 41.6** | **-0.4** |
| BUHA | | | | *i* AML | AML | 10 26 43.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| BUHA | | | | *i* AML | AML | 10 26 44.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **USAK** | **Uak-Merkez** | **0.94** | **93** | P | **Pg** | **10 26 27.1** | **-0.6** |
| **SIMA** | **Simav-Kutahya** | **0.96** | **71** | PG | **Pb** | **10 26 28.3** | **-0.1** |
| **DURS** | **Dursunbey** | **0.97** | **32** | P | **Pg** | **10 26 28.3** | **0.0** |
| DURS | | | | S | **Sb** | **10 26 42.4** | **+0.9** |
| DURS | | | | *i* AML | AML | 10 26 43.0 | |
| | comp=E,3μm,0.4s | | | | | | |
| DURS | | | | *i* AML | AML | 10 26 44.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **BALY** | **Balya** | **0.97** | **351** | P | **Pb** | **10 26 28.5** | **-0.1** |
| BALY | | | | S | **Sb** | **10 26 42.1** | **+0.5** |
| BALY | | | | *i* AML | AML | 10 26 43.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| BALY | | | | *i* AML | AML | 10 26 44.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **AYVA** | **Ayvalik** | **1.03** | **301** | P | **Pg** | **10 26 29.3** | **-0.1** |
| AYVA | | | | S | **Sb** | **10 26 43.8** | **+0.8** |
| AYVA | | | | *i* AML | AML | 10 26 49.0 | |
| | comp=N,911nm,0.6s | | | | | | |
| **DST** | **Dursunbey** | **1.03** | **37** | PG | **Pn** | **10 26 30.2** | **-0.1** |
| **URLA** | **Izmir** | **1.04** | **247** | P | **Pg** | **10 26 29.0** | **-0.7** |
| URLA | | | | S | **Sb** | **10 26 43.6** | **+0.1** |
| URLA | | | | *i* AML | AML | 10 26 45.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| URLA | | | | *i* AML | AML | 10 26 45.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **SHAP** | **Saphane-Kutahy** | **1.12** | **77** | PN | **Pn** | **10 26 31.9** | **+0.4** |
| **ZEYE** | **Izmir, Urla-Ze** | **1.16** | **243** | P | **Pg** | **10 26 31.0** | **-0.9** |
| ZEYE | | | | S | **Sb** | **10 26 47.5** | **+0.6** |
| ZEYE | | | | *i* AML | AML | 10 26 49.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| ZEYE | | | | *i* AML | AML | 10 26 50.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| **GEDZ** | **Gediz** | **1.27** | **77** | PN | **Pg** | **10 26 34.6** | **+0.6** |
| **GONE** | **Gonen-Balikesi** | **1.27** | **355** | PN | **Pb** | **10 26 33.8** | **+0.1** |
| **PRK** | **Paraskevi** | **1.29** | **292** | P | **Pg** | **10 26 34.8** | **+0.3** |
| PRK | | | | S | **Sn** | **10 26 51.9** | **+0.8** |
| | 2μm,0.6s | | | | | | |
| **SMG** | **Samos** | **1.32** | **216** | P | **Pn** | **10 26 33.8** | **-0.3** |
| SMG | | | | S | **Sn** | **10 26 53.0** | **+1.3** |
| | 2μm,0.6s | | | | | | |
| **PASA** | **Karahalli, USA** | **1.38** | **108** | P | **Pn** | **10 26 34.7** | **-0.2** |
| **DDIM** | **Aydin, Didim** | **1.39** | **199** | P | **Pg** | **10 26 36.1** | **-0.2** |
| **CHOS** | **Chios island** | **1.44** | **255** | P | **Pn** | **10 26 35.5** | **-0.3** |
| CHOS | | | | S | **Sg** | **10 26 55.6** | **-0.2** |
| | 1μm,0.3s | | | | | | |
| **TVSB** | **Tavsanli** | **1.44** | **62** | PN | **Pg** | **10 26 37.1** | **-0.2** |
| **MLSB** | **Milas** | **1.48** | **181** | PN | **Pb** | **10 26 37.1** | **-0.1** |
| **KOCA** | **Canakkale, Ayv** | **1.49** | **300** | P | **Pn** | **10 26 36.1** | **-0.4** |
| KOCA | | | | S | **Sn** | **10 26 55.7** | **-0.4** |
| **KNL** | **Balıkesir** | **1.51** | **351** | P | **Pn** | **10 26 37.1** | **+0.4** |
| KNL | | | | S | **Sn** | **10 26 56.3** | **-0.2** |
| KNL | | | | *i* AML | AML | 10 26 59.0 | |
| | comp=E,986nm,0.5s | | | | | | |
| KNL | | | | *i* AML | AML | 10 27 00.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| **ORLT** | **Orhaneli** | **1.52** | **33** | PN | **Pb** | **10 26 38.0** | **+0.1** |
| **EZN** | **Ezine** | **1.56** | **313** | P | **Pn** | **10 26 37.6** | **+0.2** |
| EZN | | | | S | **Sn** | **10 26 57.9** | **+0.2** |
| **EZN** | **Ezine** | **1.56** | **313** | PN | **Pn** | **10 26 37.9** | **+0.5** |
| **TAVA** | **DENIZLI_Tavas** | **1.57** | **146** | P | **Pn** | **10 26 37.4** | **-0.2** |
| **EDC** | **Edincik** | **1.57** | **1** | PN | **Pn** | **10 26 37.9** | **+0.3** |
| **MULA** | **Mugla, Merkez-** | **1.57** | **165** | P | **Pn** | **10 26 37.9** | **+0.3** |
| **SIGR** | **SIGRI** | **1.59** | **286** | P | **Pn** | **10 26 37.5** | **-0.3** |
| SIGR | | | | S | **Sg** | **10 27 00.6** | **-0.2** |
| | 730nm,0.5s | | | | | | |
| **KRBG** | **Karabiga-Canak** | **1.66** | **346** | PN | **Pn** | **10 26 39.7** | **+0.9** |
| **YER** | **Yerkesik** | **1.68** | **167** | PN | **Pb** | **10 26 40.1** | **-0.6** |
| **ULDT** | **Uludag** | **1.70** | **36** | P | **Pn** | **10 26 39.1** | **-0.4** |
| ULDT | | | | *i* AML | AML | 10 27 07.0 | |
| | comp=N,392nm,0.5s | | | | | | |
| ULDT | | | | *i* AML | AML | 10 27 08.0 | |
| | comp=E,766nm,0.4s | | | | | | |
| **YYLC** | **Yaylacik** | **1.71** | **27** | P | **Pb** | **10 26 41.6** | **+0.4** |
| YYLC | | | | S | **Sg** | **10 27 04.9** | **+0.3** |
| YYLC | | | | *i* AML | AML | 10 27 08.0 | |
| | comp=N,673nm,0.4s | | | | | | |
| YYLC | | | | *i* AML | AML | 10 27 08.0 | |
| | comp=E,2μm,0.7s | | | | | | |
| **BOZC** | **Bozcaada** | **1.73** | **308** | P | **Pn** | **10 26 39.7** | **-0.1** |
| **STBT** | **Saitabat** | **1.75** | **38** | P | **Pn** | **10 26 39.9** | **-0.3** |
| STBT | | | | *i* AML | AML | 10 27 09.0 | |
| | comp=E,1μm,0.6s | | | | | | |
| STBT | | | | *i* AML | AML | 10 27 10.0 | |
| | comp=N,879nm,0.9s | | | | | | |
| **BODT** | **Bodrum** | **1.76** | **193** | P | **Pn** | **10 26 40.4** | **+0.2** |
| **BODT** | **Bodrum** | **1.76** | **193** | PN | **Pn** | **10 26 41.1** | **+0.9** |
| **ANDZ** | **Kutahya, Merke** | **1.78** | **65** | P | **Pn** | **10 26 40.5** | **0.0** |
| ANDZ | | | | *i* AML | AML | 10 27 10.0 | |
| | comp=E,341nm,0.5s | | | | | | |
| ANDZ | | | | *i* AML | AML | 10 27 11.0 | |
| | comp=N,304nm,0.4s | | | | | | |
| **ECEA** | **Canakkale, Ece** | **1.80** | **315** | P | **Pn** | **10 26 41.4** | **+0.8** |
| ECEA | | | | *i* AML | AML | 10 27 15.0 | |
| | comp=E,399nm,0.5s | | | | | | |
| **IGD** | **Bursa** | **1.83** | **35** | P | **Pn** | **10 26 40.3** | **-0.8** |
| **AVDN** | **Avdancik/Bursa** | **1.84** | **34** | P | **Pn** | **10 26 42.0** | **+0.8** |
| AVDN | | | | *i* AML | AML | 10 27 12.0 | |
| | comp=N,279nm,0.4s | | | | | | |
| AVDN | | | | *i* AML | AML | 10 27 13.0 | |
| | comp=E,307nm,0.7s | | | | | | |
| **KZIL** | **AFYON_Kizioren** | **1.89** | **105** | P | **Pb** | **10 26 45.0** | **+0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.92** | **328** | PN | **Pn** | **10 26 43.3** | **+0.9** |
| **AFYO** | **Afyonkarahisar** | **1.94** | **89** | P | **Pn** | **10 26 42.2** | **-0.5** |
| **GEMT** | **Gemlik** | **1.97** | **32** | PN | **Pn** | **10 26 44.4** | **+1.4** |
| **RKY** | **Sarkoy-Tekirda** | **1.97** | **346** | PN | **Pn** | **10 26 44.2** | **+1.1** |
| **MAR6** | **Marsite Statio** | **1.97** | **348** | PN | **Pn** | **10 26 44.3** | **+1.2** |
| **SART** | **Tekirdag** | **1.97** | **346** | P | **Pn** | **10 26 43.1** | **-0.1** |
| SART | | | | *i* AML | AML | 10 27 13.0 | |
| | comp=E,308nm,0.8s | | | | | | |
| SART | | | | *i* AML | AML | 10 27 14.0 | |
| | comp=N,261nm,0.3s | | | | | | |
| **GZKV** | **Gazikoy-Tekird** | **2.00** | **349** | PN | **Pn** | **10 26 44.7** | **+1.2** |
| **MAR3** | **Marsite Statio** | **2.00** | **349** | PN | **Pn** | **10 26 44.6** | **+1.1** |
| **CAEL** | **Denizli, Camel** | **2.03** | **144** | P | **Pg** | **10 26 49.2** | **+0.6** |
| CAEL | | | | *i* AML | AML | 10 27 26.0 | |
| | comp=N,271nm,0.9s | | | | | | |
| CAEL | | | | *i* AML | AML | 10 27 33.0 | |
| | comp=E,226nm,0.8s | | | | | | |
| **GADA** | **Gvkgeada** | **2.05** | **314** | P | **Pn** | **10 26 44.5** | **+0.4** |
| GADA | | | | S | **Sn** | **10 27 09.1** | **-0.7** |
| **GADA** | **Gvkgeada** | **2.05** | **314** | PN | **Pn** | **10 26 44.1** | **0.0** |
| **ESNK** | **Esenköy** | **2.05** | **25** | P | **Pg** | **10 26 48.0** | **-0.9** |
| **BRDR** | **BURDUR-Merkez** | **2.07** | **121** | P | **Pn** | **10 26 44.3** | **-0.2** |
| **KURT** | **Yalova, Merkez** | **2.11** | **30** | P | **Pb** | **10 26 48.3** | **+0.4** |
| KURT | | | | S | **Sg** | **10 27 16.6** | **-0.7** |
| KURT | | | | *i* AML | AML | 10 27 19.0 | |
| | comp=N,332nm,0.3s | | | | | | |
| KURT | | | | *i* AML | AML | 10 27 19.0 | |
| | comp=E,456nm,0.4s | | | | | | |
| **BILE** | **Bilecik/Merkez** | **2.11** | **48** | P | **Pg** | **10 26 49.3** | **-0.8** |
| BILE | | | | S | **Sg** | **10 27 17.4** | **0.0** |
| BILE | | | | *i* AML | AML | 10 27 20.0 | |
| | comp=N,350nm,0.4s | | | | | | |
| BILE | | | | *i* AML | AML | 10 27 20.0 | |
| | comp=E,317nm,0.6s | | | | | | |
| **CAVK** | **Edirne/Enez-Ca** | **2.30** | **327** | P | **Pn** | **10 26 48.1** | **+0.6** |
| CAVK | | | | *i* AML | AML | 10 27 24.0 | |
| | comp=N,333nm,0.6s | | | | | | |
| CAVK | | | | *i* AML | AML | 10 27 25.0 | |
| | comp=E,387nm,0.5s | | | | | | |
| **ENEZ** | **Enez** | **2.34** | **327** | P | **Pn** | **10 26 49.1** | **+1.0** |
| **ENEZ** | **Enez** | **2.34** | **327** | PN | **Pn** | **10 26 48.8** | **+0.7** |
| **ISK** | **Istanbul-Kandi** | **2.48** | **22** | P | **Pn** | **10 26 49.3** | **-0.7** |
| ISK | | | | S | **Sn** | **10 27 19.5** | **-0.8** |
| | 222nm,1.1s | | | | | | |
| **ALN** | **Alexandroupoli** | **2.52** | **328** | P | **Pn** | **10 26 50.3** | **-0.3** |
| **UKOP** | **Uzunkopru-Edir** | **2.52** | **339** | PN | **Pn** | **10 26 52.0** | **+1.4** |

*EAF **06** 10:27:06.9±0.9, 25°.44S×29°.69E, h10km, MD3.8*
*BUL **06** 10:27:07.1±1.1, 25°.45S×29°.66E, h10km, MD4.0*

**ISC 06 10:27:05.4±1.2, 25°.43S±0°.04×29°.64E±0°.04, h10km, n14, σ1s65/28, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.45** | **111** | *e*P | **Pn** | **10 27 46.1** | **+0.6** |
| CNG | | | | *e*S | **Sn** | **10 28 14.8** | **-0.7** |
| **CNG** | **Changalane** | **2.45** | **111** | *e*P | **Pn** | **10 27 46.1** | **+0.6** |
| CNG | | | | *e*S | **Sn** | **10 28 14.8** | **-0.7** |
| **MOPA** | **Mopani** | **2.49** | **40** | *e*P | **Pn** | **10 27 46.9** | **+0.9** |
| MOPA | | | | *e*S | **Sn** | **10 28 15.7** | **-0.7** |
| **MOPA** | **Mopani** | **2.49** | **40** | *e*P | **Pn** | **10 27 46.9** | **+0.9** |
| MOPA | | | | *e*S | **Sn** | **10 28 15.7** | **-0.7** |
| **MSNA** | **Messina** | **3.09** | **7** | *e*P | **Pn** | **10 27 56.6** | **+2.3** |
| MSNA | | | | *e*S | **Sn** | **10 28 31.2** | **-0.2** |
| **MSNA** | **Messina** | **3.09** | **7** | *e*P | **Pn** | **10 27 56.6** | **+2.3** |
| MSNA | | | | *e*S | **Sn** | **10 28 31.2** | **-0.2** |
| **LBTB** | **Lobatse** | **3.69** | **276** | *e*P | **Pn** | **10 28 03.8** | **+1.2** |
| LBTB | | | | *e*S | **Sn** | **10 28 46.5** | **+0.3** |
| **LBTB** | **Lobatse** | **3.69** | **276** | *e*P | **Pn** | **10 28 03.8** | **+1.2** |
| LBTB | | | | *e*S | **Sn** | **10 28 46.5** | **+0.3** |
| **BOSA** | **Boshof** | **5.03** | **230** | *e*P | **Pn** | **10 28 21.8** | **+0.7** |
| BOSA | | | | *e*S | **Sn** | **10 29 17.7** | **-1.7** |
| **BOSA** | **Boshof** | **5.03** | **230** | *e*P | **Pn** | **10 28 21.8** | **+0.7** |
| BOSA | | | | *e*S | **Sn** | **10 29 17.7** | **-1.7** |
| **MATP** | **Matopo** | **5.09** | **348** | *e*P | **Pn** | **10 28 22.9** | **+1.0** |
| MATP | | | | *e*S | **Sn** | **10 29 17.9** | **-3.0** |
| **MATP** | **Matopo** | **5.09** | **348** | *e*P | **Pn** | **10 28 22.9** | **+1.0** |
| MATP | | | | *e*S | **Sn** | **10 29 17.9** | **-3.0** |
| **BLWY** | **Bulawayo** | **5.35** | **350** | *e*P | **Pn** | **10 28 27.0** | **+1.5** |
| BLWY | | | | *e*S | **Sn** | **10 29 24.2** | **-3.1** |
| **BLWY** | **Bulawayo** | **5.35** | **350** | *e*P | **Pn** | **10 28 27.0** | **+1.5** |
| BLWY | | | | *e*S | **Sn** | **10 29 24.2** | **-3.1** |

*IDC **06** 10:45:14.4±3.7, 36°.43N×71°.35E, h192km±31km, mb3.2/8, mb1 3.3/11, mb1mx3.1/51, mbtmp3.7/11, Error ellipse: s-maj=28.0km s-min=19.6km az=22.0*
*NNC **06** 10:45:23.5±3.9, 37°.32N×71°.09E, h300km±38km, mb2.3, mpv3.5, Error ellipse: s-maj=40.9km s-min=24.6km az=18.0*

**ISC 06 10:45:15.7±1.0, 36°.6N±0°.1×71°.3E±0°.1, h200km, n19, σ1s24/21, mb3.6/9, 5C-3D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **6.52** | **21** | P | **Pn** | **10 46 51.9** | **+2.1** |
| | 0.7nm,0.3s,baz=192,slow=10.0,SNR=7.6 | | | | | | |
| AAK | | | | S | **Sn** | **10 48 04.0** | **-0.4** |
| | 0.6nm,0.3s,baz=154,slow=23,SNR=17 | | | | | | |
| **AAK** | **Ala-Archa** | **6.52** | **21** | ⇑P | **Pn** | **10 46 51.5** | **+1.8** |
| | 2.2nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **10 48 02.8** | **-1.6** |
| | 28nm,1.1s | | | | | | |
| **KK02** | **Karatay Array** | **6.54** | **355** | ⇑P | **Pn** | **10 46 50.8** | **+0.9** |
| | 3.2nm,0.7s,baz=173,slow=12 | | | | | | |
| KK02 | | | | ⇓S | **Sn** | **10 48 01.4** | **-3.1** |
| | 16nm,0.7s,baz=177,slow=22 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.13** | **26** | ⇑P | **Pn** | **10 46 58.7** | **+0.9** |
| | 2.1nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **12.94** | **35** | ⇓P | **Pn** | **10 48 12.2** | **-0.1** |
| | 3.2nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **13.07** | **35** | ⇓P | **Pn** | **10 48 14.6** | **+0.6** |
| | 1.2nm,0.7s,baz=234,slow=12,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.07** | **35** | P | **Pn** | **10 48 14.8** | **+0.8** |
| | 0.2nm,0.3s,baz=217,slow=15,SNR=12 | | | | | | |
| **AB31** | **Akbulak array** | **15.13** | **330** | ⇑S | S | 10 51 10.4 | -17 |
| | 2.3nm,0.6s,baz=360,slow=26,SNR=8.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.83** | **329** | P | **Pn** | **10 48 59.8** | **+0.1** |
| | 0.3nm,0.3s,baz=130,slow=13,SNR=6.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **33.09** | **309** | P | **P** | **10 51 32.9** | **+0.5** |
| | 0.6nm,0.4s,baz=78,slow=6.9,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **37.55** | **326** | P | **P** | **10 52 10.9** | **+0.6** |
| | 0.8nm,0.4s,baz=122,slow=9.8,SNR=7.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.16** | **337** | P | **P** | **10 52 40.8** | **+0.8** |
| | 0.4nm,0.3s,baz=120,slow=8.9,SNR=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.46** | **323** | P | **P** | **10 53 06.5** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=97,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.46** | **323** | P | **P** | **10 53 07.1** | **+0.4** |
| | comp=Z,90nm,0.5s,baz=102,slow=7.2,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.97** | **269** | P | **P** | **10 55 40.0** | **-0.9** |
| | comp=Z,0.6nm,0.5s,baz=48,slow=6.0,SNR=7.1 | | | | | | |
| **INK** | **Inuvik** | **73.78** | **9** | P | **P** | **10 56 28.1** | **+0.6** |
| | comp=Z,0.6nm,0.5s,baz=342,slow=7.2,SNR=6.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.14** | **3** | P | **P** | **10 57 08.7** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=351,slow=5.4,SNR=28 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.83** | **122** | P | **P** | **10 57 11.2** | **-1.5** |
| | comp=Z,0.2nm,0.8s,baz=327,slow=4.8,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **84.10** | **125** | P | **P** | **10 57 23.7** | **-0.5** |
| | comp=Z,0.2nm,0.7s,baz=310,slow=5.7,SNR=1.7 | | | | | | |

*IDC **06** 11:15:05.8±2.4, 6°.37S×129°.95E, h0km, mb3.2/1, mb1 3.8/3, mb1mx3.5/41, mbtmp3.6/3, ML3.8/2, Error ellipse: s-maj=126.8km s-min=32.9km az=69.0*

**ISC 06 11:15:22.4±1.4, 7°.4S±0°.1×128°.9E±0°.2, h131km, n12, σ3s38/14, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRS** | **Darwin Rock St** | **5.35** | **158** | P | **Pn** | **11 16 44.7** | **+4.4** |
| **MTN** | **Manton Dam** | **5.82** | **158** | P | **Pn** | **11 16 50.1** | **+3.6** |
| **KDU** | **Kakadu** | **6.31** | **146** | P | **Pn** | **11 16 55.2** | **+2.1** |
| **KNRA** | **Kununurra** | **8.20** | **181** | P | **Pn** | **11 17 22.4** | **+3.8** |
| **WRAB** | **Tennant Creek** | **13.51** | **157** | P | **Pn** | **11 18 28.8** | **-0.2** |
| **WRA** | **Warramunga Arr** | **13.52** | **157** | Pn | **Pn** | **11 18 27.7** | **-1.3** |
| | 0.3nm,0.3s,baz=343,slow=9.1,SNR=17 | | | | | | |
| WRA | | | | Sn | **Sn** | **11 20 51.7** | **-6.7** |
| | 0.4nm,0.3s,baz=330,slow=22,SNR=7.5 | | | | | | |
| **QIS** | **Mount Isa** | **16.68** | **143** | P | **P** | **11 19 09.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **16.85** | **164** | P | **Pn** | **11 19 12.7** | **+2.1** |
| | 0.5nm,0.3s,baz=344,slow=11,SNR=54 | | | | | | |
| ASAR | | | | S | **Sn** | **11 22 16.2** | **-2.3** |
| | 0.1nm,0.3s,baz=353,slow=23,SNR=3.5 | | | | | | |
| **WRKA** | **Warakurna** | **17.52** | **182** | P | **Pn** | **11 19 21.1** | **+2.4** |
| **MTSU** | **Mount Surprise** | **18.42** | **127** | P | **Pn** | **11 19 31.5** | **+2.1** |
| **OOD** | **Oodnadatta** | **21.26** | **163** | P | **P** | **11 19 59.3** | **+1.0** |
| **MKAR** | **Makanchi Array** | **67.98** | **327** | P | **P** | **11 26 04.9** | **-2.5** |
| | 0.1nm,0.3s,baz=117,slow=7.3,SNR=2.2 | | | | | | |

*ISK **06** 11:16:50.7, 36°.72N×33°.54E, h8km, ML2.5/11*
*DDA **06** 11:16:51.6±0.0, 36°.65N×33°.56E, h7km±2km, ML1.4*

**ISC 06 11:16:51.5±1.1, 36°.67N±0°.03×33°.55E±0°.03, h16km±10km, n16, σ0s55/23, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEVE** | **Tevekalti-Mers** | **0.25** | **199** | PG | **Pg** | **11 16 56.9** | **-0.2** |
| TEVE | | | | SG | **Sb** | **11 17 01.6** | **-0.1** |
| **KEBE** | **Keben-Mersin** | **0.26** | **149** | PG | **Pg** | **11 16 57.2** | **-0.1** |
| KEBE | | | | SG | **Sb** | **11 17 01.6** | **-0.5** |
| **BERE** | **Bereket-Mersin** | **0.41** | **219** | PG | **Pg** | **11 16 59.9** | **-0.1** |
| BERE | | | | SG | **Sb** | **11 17 06.7** | **+0.1** |
| **SLFK** | **Silifke-Mersin** | **0.42** | **130** | PG | **Pg** | **11 17 00.1** | **0.0** |
| **SILI** | **Silifke-Mersin** | **0.43** | **135** | PG | **Pg** | **11 17 00.3** | **+0.1** |
| **YESI** | **Yesilovacik-Me** | **0.48** | **171** | PG | **Pb** | **11 17 01.4** | **-0.1** |
| **GULN** | **MERSIN_Gulnar** | **0.48** | **180** | P | **Pg** | **11 17 00.8** | **-0.4** |
| GULN | | | | S | **Sg** | **11 17 07.8** | **+0.1** |
| GULN | | | | *i* AML | AML | 11 17 10.0 | |
| | comp=E,19nm,0.7s | | | | | | |
| **AKKU** | **Akkuyu-Mersin** | **0.51** | **179** | PG | **Pg** | **11 17 01.8** | **+0.1** |
| **KIZK** | **Mersin** | **0.52** | **111** | P | **Pb** | **11 17 02.0** | **-0.2** |
| KIZK | | | | S | **Sg** | **11 17 08.9** | **+0.1** |
| KIZK | | | | *i* AML | AML | 11 17 12.0 | |
| | comp=N,46nm,0.9s | | | | | | |
| KIZK | | | | *i* AML | AML | 11 17 13.0 | |
| | comp=E,29nm,0.8s | | | | | | |
| **TISA** | **Tisan-Mersin** | **0.52** | **168** | PG | **Pb** | **11 17 02.1** | **-0.1** |
| **TEKE** | **Tekeli-Mersin** | **0.63** | **214** | PG | **Pg** | **11 17 04.0** | **+0.1** |
| **KKBE** | **Karaman, Kazim** | **0.73** | **319** | P | **Pn** | **11 17 07.2** | **0.0** |
| KKBE | | | | S | **Sb** | **11 17 17.5** | **+1.7** |
| **MERS** | **Mersin** | **0.81** | **76** | PG | **Pg** | **11 17 06.5** | **-0.8** |
| **KERG** | **Konya-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.86** | **345** | P | | **P** | **11 26 11.5** | **-1.2** |
| | 1.8nm,0.3s,baz=252,slow=21,SNR=8.3 | | | | | | | |
| **MSVF** | **Nonsavu** | **6.86** | **345** | P | | **P** | **11 26 12.3** | **-0.5** |
| **MARNC** | **Mare, Loyalty** | **11.34** | **282** | P | | **P** | **11 26 59.3** | **+0.5** |
| **PINNC** | **Pines Island,** | **11.59** | **276** | P | | **P** | **11 27 03.4** | **+2.1** |
| **DZM** | **Mont Dzumac** | **12.62** | **278** | P | | **P** | **11 27 13.5** | **+1.3** |
| | 0.9nm,0.3s,baz=85,slow=16,SNR=13 | | | | | | | |
| **URZ** | **Urewera** | **14.02** | **189** | P | | **P** | **11 27 26.2** | **-0.4** |
| | 0.6nm,0.3s,baz=56,slow=7.3,SNR=2.4 | | | | | | | |
| **URZ** | **Urewera** | **14.02** | **189** | P | | **P** | **11 27 25.8** | **-0.8** |
| **CTAO** | **Charters Tower** | **31.42** | **271** | | | **P** | **11 30 06.3** | **+0.6** |
| **STKA** | **Stephens Creek** | **34.48** | **249** | P | | **P** | **11 30 31.8** | **+0.2** |
| | 2.1nm,0.4s,baz=84,slow=8.6,SNR=3.5 | | | | | | | |
| **PMG** | **Port Moresby** | **34.60** | **290** | P | | **P** | **11 30 32.7** | **-0.1** |
| **AS31** | **Alice Springs** | **41.89** | **261** | | | **P** | **11 31 31.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **41.89** | **261** | P | | **P** | **11 31 31.6** | **-0.5** |
| | 1.6nm,0.5s,baz=90,slow=6.9,SNR=46 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **11 36 18.5** | **+1.6** |
| | 0.4nm,0.6s,baz=113,slow=4.3,SNR=5.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **41.89** | **261** | | | **P** | **11 31 31.5** | **-0.6** |
| **WR0** | **Warramunga Arr** | **42.12** | **267** | P | | **P** | **11 31 33.1** | **-0.8** |
| **WB2** | **Warramunga Arr** | **42.30** | **267** | | | **P** | **11 31 34.6** | **-0.7** |
| WB2 | | | | IAmb | | IAmb | 11 31 35.0 | |
| | comp=Z,5.8nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **42.30** | **267** | P | | **P** | **11 31 34.4** | **-1.0** |
| WRAB | | | | IAmb | | IAmb | 11 31 35.5 | |
| | comp=Z,9.9nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **42.31** | **267** | | | **P** | **11 31 34.2** | **-1.1** |
| WB0 | | | | IAmb | | IAmb | 11 31 35.0 | |
| | comp=Z,7.1nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.31** | **267** | P | | **P** | **11 31 34.5** | **-0.9** |
| | comp=Z,5.3nm,0.5s,baz=100,slow=8.2,SNR=92 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **11 36 21.4** | **+2.8** |
| | comp=Z,1.8nm,0.8s,baz=100,slow=3.6,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.31** | **267** | | | **P** | **11 31 34.7** | **-0.7** |
| **FAKI** | **Fak Fak** | **50.67** | **287** | P | | **P** | **11 32 38.3** | **-0.6** |
| **MBWA** | **Marble Bar** | **55.23** | **260** | P | | **P** | **11 33 09.9** | **-1.4** |
| MBWA | | | | IAmb | | IAmb | 11 33 17.8 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **65.68** | **180** | P | | **P** | **11 34 20.4** | **+0.6** |
| QSPA | | | | IAmb | | IAmb | 11 34 21.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **84.17** | **179** | P | | **P** | **11 36 02.8** | **-0.4** |
| SNAA | | | | IAmb | | IAmb | 11 36 28.1 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.16** | **44** | P | | **P** | **11 36 09.1** | **+0.4** |
| | comp=Z,0.6nm,0.8s,baz=226,slow=9.7,SNR=5.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.75** | **58** | P | | **P** | **11 36 35.9** | **+0.8** |
| | comp=Z,1.3nm,0.7s,baz=212,slow=6.1,SNR=14 | | | | | | | |
| **PDAR** | **Pinedale Array** | **93.09** | **44** | P | | **P** | **11 36 45.8** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=190,slow=2.7,SNR=3.9 | | | | | | | |
| **CLL** | **Collm** | **151.31** | **343** | *e*PKPbc | | **PKPbc** | **11 43 21.0** | **-0.7** |

*NOU **06** 11:28:43.5, 25°.44S × 176°.60W, h191 km, mb4.9/18, South of Fiji Islands*
*NEIC **06** 11:28:49.5 ± 1.4, 25°.36S ± 0°.08 × 177°.5W ± 0°.2, h186 km ± 7km, mb4.2/15, Error ellipse: s-maj=22.9km s-min=3.7km az=59.0*
*IDC **06** 11:28:56.4 ± 2.6, 25°.31S × 177°.77W, h251 km ± 24km, mb3.7/12, mb1 3.9/14, mb1mx3.8/30, mbtmp4.3/14, Error ellipse: s-maj=20.6km s-min=17.7km az=156.0*

**ISC 06 11:28:50.2** ± 0.5, **25°.52S** ± 0°.06 × **177°.5W** ± 0°.1, **h200** km, **n89,** σ **1**§**87**/78, **mb4.0**/22, **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RIZ** | **Raoul Island** | **3.73** | **185** | S | Sn | 11 30 27.2 | -7.4 |
| **RAO** | **Raoul Island** | **3.73** | **185** | P | Pn | 11 29 59.6 | +11 |
| | 89nm,0.3s,baz=248,slow=20,SNR=1.9 | | | | | | |
| RAO | | | | S | **Sn** | **11 30 28.8** | **-5.8** |
| | 290nm,0.3s,baz=254,slow=23,SNR=9.4 | | | | | | |
| **GLKZ** | **Green Lake** | **3.75** | **185** | P | Pn | 11 29 41.8 | -7.0 |
| GLKZ | | | | S | Sn | 11 30 28.0 | -6.9 |
| **MSVF** | **Nonsavu** | **8.77** | **331** | P | **Pn** | **11 30 50.1** | **-3.6** |
| | 0.8nm,0.3s,baz=138,slow=13,SNR=17 | | | | | | |
| **MSVF** | **Nonsavu** | **8.77** | **331** | | **Pn** | **11 30 50.6** | **-3.0** |
| **MSVF** | **Nonsavu** | **8.77** | **331** | P | **Pn** | **11 30 50.7** | **-3.0** |
| **DGTI** | **Dogotuki** | **9.52** | **344** | P | **Pn** | **11 30 59.5** | **-3.8** |
| **AFI** | **Afiamalu** | **12.75** | **26** | P | Pn | 11 31 32.4 | -12 |
| | 3.1nm,0.3s,baz=212,slow=5.9,SNR=8.2 | | | | | | |
| AFI | | | | S | Sn | 11 33 39.9 | -27 |
| | 3.8nm,0.3s,baz=280,slow=18,SNR=2.6 | | | | | | |
| **AFI** | **Afiamalu** | **12.75** | **26** | P | Pn | 11 31 32.8 | -12 |
| **TWGZ** | **Tauwhareparae** | **13.18** | **196** | P | Pn | 11 31 44.7 | -5.2 |
| TWGZ | | | | S | S | 11 34 01.0 | -16 |
| **MWZ** | **Matawai** | **13.45** | **197** | P | Pn | 11 31 48.9 | -4.3 |
| MWZ | | | | S | S | 11 34 08.1 | -15 |
| **URZ** | **Urewera** | **13.49** | **198** | P | **Pn** | **11 31 54.3** | **+0.6** |
| | 5.0nm,0.3s,baz=314,slow=0.7,SNR=23 | | | | | | |
| URZ | | | | S | S | 11 34 10.2 | -14 |
| | 4.2nm,0.3s,baz=138,slow=22,SNR=18 | | | | | | |
| **URZ** | **Urewera** | **13.49** | **198** | P | **Pn** | **11 31 52.0** | **-1.7** |
| **TOZ** | **Tahuroa Road** | **13.54** | **204** | P | **P** | **11 31 57.7** | **+1.0** |
| **RIGZ** | **Rimuhau** | **13.74** | **196** | P | **Pn** | **11 31 55.7** | **-1.1** |
| RIGZ | | | | S | S | 11 34 13.2 | -17 |
| **MARNC** | **Mare, Loyalty** | **13.85** | **284** | | **P** | **11 32 00.6** | **+0.2** |
| **SNGZ** | **Shannon Statio** | **13.92** | **197** | P | **Pn** | **11 31 58.0** | **-1.0** |
| SNGZ | | | | S | S | 11 34 17.2 | -17 |
| **PINNC** | **Pines Island,** | **14.03** | **279** | P | **P** | **11 32 04.3** | **+1.9** |
| **MTHZ** | **Maungataniwha** | **14.12** | **198** | P | **Pn** | **11 31 59.1** | **-2.4** |
| MTHZ | | | | S | S | 11 34 24.6 | -14 |
| **NMHZ** | **Naumai** | **14.36** | **198** | P | **Pn** | **11 32 01.4** | **-3.1** |
| NMHZ | | | | S | S | 11 34 29.8 | -14 |
| **HIZ** | **Hauiti** | **14.47** | **205** | P | **Pn** | **11 32 06.6** | **+0.8** |
| **HIZ** | **Hauiti** | **14.47** | **205** | P | **Pn** | **11 32 06.7** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **14.51** | **199** | P | Pn | 11 31 59.5 | -6.9 |
| BKZ | | | | S | S | 11 34 30.0 | -18 |
| **MCHZ** | **McNeill Hill** | **14.71** | **198** | P | Pn | 11 32 04.3 | -4.4 |
| MCHZ | | | | S | S | 11 34 34.4 | -18 |
| **WTVZ** | **West Tongariro** | **14.75** | **201** | P | **Pn** | **11 32 06.7** | **-2.6** |
| **OTVZ** | **Oturere** | **14.76** | **201** | P | Pn | 11 32 04.2 | -5.4 |
| OTVZ | | | | S | S | 11 34 41.0 | -13 |
| **LIFNC** | **LIFOU** | **14.78** | **285** | P | **P** | **11 32 11.8** | **+1.1** |
| **SNVZ** | **South Ngauruho** | **14.79** | **201** | P | **Pn** | **11 32 07.2** | **-2.7** |
| **NGZ** | **Ngauruhoe** | **14.80** | **201** | P | **Pn** | **11 32 08.9** | **-1.1** |
| **BHHZ** | **Black Hill Sta** | **14.94** | **200** | P | **Pn** | **11 32 07.0** | **-4.6** |
| BHHZ | | | | S | S | 11 34 39.6 | -18 |
| **KRHZ** | **Kereru** | **14.99** | **199** | P | **Pn** | **11 32 09.3** | **-2.9** |
| **MTVZ** | **Mangateitei** | **15.03** | **201** | P | **Pn** | **11 32 11.2** | **-1.5** |
| **VRZ** | **Vera Road** | **15.04** | **204** | P | **Pn** | **11 32 11.0** | **-1.8** |
| **DZM** | **Mont Dzumac** | **15.07** | **280** | P | **P** | **11 32 15.8** | **+1.8** |
| | 0.3nm,0.3s,baz=77,slow=13,SNR=4.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.07** | **280** | P | **P** | **11 32 16.9** | **+2.9** |
| **RTV** | **Rentapao** | **15.15** | **298** | P | **P** | **11 32 17.8** | **+3.0** |
| **DVP** | **Devils Point** | **15.38** | **297** | P | **P** | **11 32 19.0** | **+1.7** |
| **BFZ** | **Birch Farm** | **15.99** | **197** | P | **P** | **11 32 20.0** | **-3.9** |
| **QRZ** | **Quartz Range** | **17.37** | **206** | P | **P** | **11 32 36.4** | **-2.6** |
| **SANVU** | **Saraoutou** | **17.45** | **302** | P | **Pn** | **11 32 41.9** | **0.0** |
| **RPZ** | **Rata Peaks** | **20.41** | **204** | P | **P** | **11 33 10.1** | **-1.7** |
| **ODZ** | **Otahua Downs** | **21.70** | **203** | P | **P** | **11 33 24.5** | **-0.8** |
| **CTAO** | **Charters Tower** | **33.76** | **272** | P | **P** | **11 35 13.5** | **+0.4** |
| CTAO | | | | | IAmb | IAmb | 11 35 17.3 | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.26** | **250** | P | **P** | **11 35 34.5** | **+0.2** |
| | comp=Z,1.0nm,0.3s,baz=101,slow=10,SNR=1.4 | | | | | | | |
| **AS31** | **Alice Springs** | **44.01** | **262** | P | **P** | **11 36 38.2** | **0.0** |
| **ASAR** | **Alice Springs** | **44.01** | **262** | P | **P** | **11 36 37.8** | **-0.5** |
| | comp=Z,2.0nm,0.6s,baz=92,slow=6.8,SNR=42 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.01** | **262** | P | **P** | **11 36 37.6** | **-0.6** |
| **WR0** | **Warramunga Arr** | **44.37** | **267** | P | **P** | **11 36 40.7** | **-0.3** |
| WR0 | | | | | IAmb | IAmb | 11 36 56.5 | |
| | comp=Z,5.7nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.55** | **267** | P | **P** | **11 36 41.9** | **-0.5** |
| WB2 | | | | | IAmb | IAmb | 11 37 01.9 | |
| | comp=Z,7.0nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.55** | **267** | P | **P** | **11 36 41.9** | **-0.6** |
| WRAB | | | | | IAmb | IAmb | 11 36 49.0 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **267** | P | **P** | **11 36 41.3** | **-1.2** |
| | comp=Z,1.3nm,0.7s,baz=104,slow=7.6,SNR=14 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **267** | P | **P** | **11 36 41.6** | **-1.0** |
| **WB0** | **Warramunga Arr** | **44.56** | **267** | P | **P** | **11 36 42.2** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **52.96** | **266** | P | **P** | **11 37 46.4** | **0.0** |
| | comp=Z,0.8nm,0.5s,baz=98,slow=6.4,SNR=6.7 | | | | | | | |
| **VNDA** | **Vanda** | **52.98** | **186** | P | **P** | **11 37 48.3** | **+2.7** |
| | comp=Z,2.4nm,0.8s,baz=3.4,slow=8.3,SNR=1.1 | | | | | | | |
| **VNDA** | **Vanda** | **52.98** | **186** | P | **P** | **11 37 48.7** | **+3.0** |
| **FAKI** | **Fak Fak** | **53.20** | **287** | P | **P** | **11 37 48.4** | **+0.1** |
| FAKI | | | | | IAmb | IAmb | 11 38 07.7 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **64.57** | **180** | P | **P** | **11 39 07.7** | **+1.9** |
| **MJAR** | **Matsushiro Arr** | **74.51** | **324** | P | **P** | **11 40 06.5** | **-0.3** |
| | comp=Z,1.0nm,0.6s,baz=152,slow=5.9,SNR=4.3 | | | | | | | |
| **MAW** | **Mawson** | **77.02** | **200** | P | **P** | **11 40 22.6** | **+2.1** |
| | comp=Z,7.5nm,0.5s,baz=139,slow=6.5,SNR=2.4 | | | | | | | |
| **MAW** | **Mawson** | **77.02** | **200** | P | **P** | **11 40 22.1** | **+1.5** |
| **PEA0B** | **Petropavlovsk-** | **81.21** | **345** | P | **P** | **11 40 43.0** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **81.21** | **345** | P | **P** | **11 40 42.3** | **-1.0** |
| | comp=Z,8.6nm,0.6s,baz=158,slow=4.7,SNR=35 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **81.21** | **345** | P | **P** | **11 40 42.8** | **-0.5** |
| **SNAA** | **Sanae** | **83.00** | **178** | P | **P** | **11 40 53.1** | **+0.5** |
| **SNAA** | **Sanae** | **83.00** | **178** | P | **P** | **11 40 53.8** | **+1.2** |
| SNAA | | | | | IAmb | IAmb | 11 40 54.8 | |
| | comp=Z,9.2nm,1.2s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **83.13** | **176** | P | **P** | **11 40 53.9** | **+0.6** |
| **VNA2** | **Neumayer--Watz** | **83.57** | **177** | P | **P** | **11 40 56.4** | **+1.0** |
| | baz=185,slow=4.4 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **83.80** | **176** | P | **P** | **11 40 56.9** | **+0.3** |
| **YERR** | **Yerington** | **84.16** | **42** | P | **P** | **11 40 59.5** | **+0.4** |
| YERR | | | | | IAmb | IAmb | 11 41 13.8 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.38** | **43** | P | **P** | **11 41 00.6** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=223,slow=8.0,SNR=11 | | | | | | | |
| **PLCA** | **Paso Flores** | **85.52** | **133** | P | **P** | **11 41 06.9** | **+1.0** |
| PLCA | | | | | IAmb | IAmb | 11 41 24.4 | |
| | comp=Z,4.2nm,1.2s | | | | | | | |
| **KLR** | **Kul'dur** | **87.05** | **329** | P | **P** | **11 41 12.6** | **-0.3** |
| | comp=Z,2.3nm,0.7s,baz=108,slow=2.8,SNR=11 | | | | | | | |
| **L19K** | **White Mountain** | **89.27** | **10** | P | **P** | **11 41 23.4** | **+0.4** |
| L19K | | | | | IAmb | IAmb | 11 41 26.8 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.19** | **289** | P | **P** | **11 41 40.9** | **+3.3** |
| | comp=Z,1.2nm,0.3s,baz=142,slow=3.5,SNR=6.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **92.31** | **43** | P | **P** | **11 41 37.8** | **-0.1** |
| | comp=Z,0.5nm,0.7s,baz=186,slow=4.2,SNR=4.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **92.31** | **43** | P | **P** | **11 41 36.9** | **-1.0** |
| **ILAR** | **Eielson Array** | **93.09** | **13** | P | **P** | **11 41 39.9** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=232,slow=5.4,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **114.90** | **312** | PKP | **PKiKP** | **11 47 06.5** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=176,slow=1.0,SNR=11 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.91** | **349** | PKP | **PKiKP** | **11 47 42.6** | **-1.3** |
| | comp=Z,1.7nm,0.6s,baz=11,slow=1.8,SNR=8.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **140.68** | **342** | PKhKP | PKPpre | 11 47 49.1 | | |
| | comp=Z,3.3nm,1.0s,baz=251,slow=5.8,SNR=6.2 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.99** | **353** | PKP | PKPbc | 11 47 58.8 | -0.9 | |
| | comp=Z,1.4nm,0.6s,baz=12,slow=3.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **143.99** | **353** | PKP | PKPbc | 11 47 59.4 | -0.4 | |
| | comp=Z,17nm,0.4s,baz=59,slow=1.5,SNR=8.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **147.54** | **328** | PKPbc | **PKPbc** | **11 48 09.8** | **-0.6** | |
| | comp=Z,3.5nm,0.6s,baz=42,slow=4.2,SNR=12 | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.35** | **306** | PKPbc | **PKiKP** | **11 48 17.6** | **-1.2** | |
| | comp=Z,1.7nm,0.8s,baz=128,slow=4.2,SNR=5.5 | | | | | | | |
| **CLL** | **Collm** | **153.02** | **345** | *e*PKPbc | **PKiKP** | **11 48 24.0** | **+0.3** | |
| **GERES** | **GERESS Array B** | **155.11** | **342** | PKPab | **PKPab** | **11 48 44.8** | **0.0** | |
| | comp=Z,0.4nm,0.7s,baz=0.0,slow=2.9,SNR=3.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.67** | **176** | PKPab | **PKPab** | **11 49 41.3** | **+1.0** | |
| | comp=Z,1.7nm,1.1s,baz=173,slow=4.5,SNR=5.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.67** | **176** | PKPdf | **PKPdf** | **11 48 33.0** | **-0.2** | |
| TORD | | | | | **PKPab** | **11 49 41.0** | **+0.8** | |

*MAN **06** 11:54:49.4, 13°.63N × 119°.03E, h33 km, mb5.0, ML3.9, MS3.9*
*IDC **06** 11:54:54.3 ± 1.0, 13°.04N × 119°.78E, h0 km, mb3.6/7, mb1 3.8/7, mb1mx3.4/41, mbtmp3.6/7, Error ellipse: s-maj=21.0km s-min=14.7km az=121.0*

**ISC 06 11:54:51.2** ± 2.0, **13°.55N** ± 0°.04 × **119°.32E** ± 0°.08, **h17** km ± 11km, **n19,** σ **1**§**49**/21, **mb3.6**/7, **6C-4D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUBP** | **Lubang** | **0.92** | **78** | ⇓*e*P | **Pg** | **11 55 08.4** | **-0.8** |
| LUBP | | | | *e*S | **Sb** | **11 55 20.7** | **0.0** |
| **MACP** | **Maragondon, Ca** | **1.54** | **62** | ⇑*i*P | **Pn** | **11 55 17.9** | **+0.1** |
| MACP | | | | *e*S | **Sg** | **11 55 42.8** | **+1.9** |
| **PGP** | **Puerto Galera** | **1.59** | **91** | ⇑*e*P | **Pn** | **11 55 19.7** | **+1.1** |
| PGP | | | | *i* S | **Sg** | **11 55 44.9** | **+2.2** |
| **TGY** | **Tagaytay City** | **1.67** | **71** | Pg | **Pg** | **11 55 22.8** | **-0.5** |
| | 194nm,0.3s,baz=214,slow=2.8,SNR=15 | | | | | | |
| TGY | | | | Lg | Lg | 11 55 43.0 | |
| | 232nm,0.3s,baz=320,slow=19,SNR=6.4 | | | | | | |
| **TGY** | **Tagaytay City** | **1.67** | **71** | *e*P | Pn | 11 55 09.7 | -10 |
| TGY | | | | *i* S | **Sg** | **11 55 43.8** | **-1.3** |
| **SJMP** | **San Jose** | **2.06** | **121** | ⇓*i*P | **Pn** | **11 55 26.1** | **+1.0** |
| SJMP | | | | *e*S | **Sg** | **11 55 54.9** | **-2.8** |
| **LQP** | **Lukban** | **2.23** | **75** | ⇑*e*P | **Pn** | **11 55 29.0** | **+1.4** |
| **ENPP** | **El Nido** | **2.33** | **177** | ⇑*i*P | **Pg** | **11 55 36.5** | **+0.5** |
| ENPP | | | | *e*S | **Sn** | **11 55 54.4** | **-2.6** |
| **PCPH** | **Palayan** | **2.64** | **41** | ⇓*e*P | **Pn** | **11 55 33.0** | **0.0** |
| **SMPP** | **San Manuel, Pa** | **2.90** | **27** | ⇑*i*P | **Pn** | **11 55 36.2** | **-0.4** |
| SMPP | | | | *e*S | **Sn** | **11 56 09.7** | **-1.5** |
| **JAP** | **San Jose, Anti** | **3.79** | **137** | ⇑*e*P | **Pn** | **11 55 50.5** | **+1.7** |
| **SAMP** | **Sagada Mountai** | **3.83** | **23** | ⇓*e*P | **Pn** | **11 55 50.1** | **+0.6** |
| SAMP | | | | *e*S | **Sn** | **11 56 35.1** | **+1.0** |
| **SONM** | **Songino Array** | **35.84** | **345** | P | P | 12 02 00.8 | +11 |
| | 0.2nm,0.6s,baz=154,slow=11,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.42** | **156** | P | **P** | **12 01 55.0** | **-0.1** |
| | 0.7nm,0.7s,baz=333,slow=9.7,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **39.64** | **159** | P | **P** | **12 02 22.9** | **+0.6** |
| | 0.6nm,0.6s,baz=339,slow=6.7,SNR=9.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.36** | **324** | P | P | 12 03 19.6 | +11 |
| | 0.4nm,0.7s,baz=134,slow=8.3,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.57** | **327** | P | P | 12 03 52.0 | +11 |
| | 0.5nm,0.8s,baz=118,slow=8.2,SNR=5.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.74** | **339** | P | P | 12 07 02.0 | +10 |
| | 2.6nm,0.9s,baz=70,slow=7.0,SNR=4.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.42** | **22** | P | P | 12 08 12.9 | +7.4 |
| | 0.3nm,0.9s,baz=306,slow=4.1,SNR=2.3 | | | | | | |

*IDC **06** 12:05:31.4 ± 0.6, 6°.75N × 72°.93W, h162 km ± 6km, mb3.6/13, mb1 3.9/17, mb1mx3.7/33, mbtmp4.2/17, Error ellipse: s-maj=13.4km s-min=6.8km az=130.0*
*VAO **06** 12:05:31.8 ± 0.7, 6°.64N × 72°.99W, h134 km ± 8km, mb4.3*
*RSNC **06** 12:05:31.6 ± 0.6, 6°.83N × 73°.12W, h153 km ± 2km, ML4.5, Mw4.5, Fault plane solution: NP1: ϕ ϸ 28.00000°, δ 61.00000°, λ 17.00000°.*
*NEIC **06** 12:05:31.1 ± 2.1, 6°.83N ± 0°.06 × 73°.04W ± 0°.05, h145 km ± 5km, mb4.4/41, Mw4.3(RSNC), Error ellipse: s-maj=9.6km s-min=6.3km az=147.0*

**ISC 06 12:05:30.7** ± 0.5, **6°.84N** ± 0°.03 × **73°.06W** ± 0°.03, **h155** km ± 5km, **n163,** σ **1**§**51**/216, **mb4.2**/31, **6C-4D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.28** | **206** | ⇑*i*P | **Pn** | **12 05 52.4** | **+0.2** |
| BARC | | | | *e*S | **Sn** | **12 06 08.1** | **-0.3** |
| BARC | | | | *i* | | 12 06 10.2 | |
| | comp=Z,7μm,0.4s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.61** | **36** | ⇑*e*P | **Pn** | **12 05 55.2** | **+1.4** |
| PAMC | | | | *e*S | **Sn** | **12 06 12.2** | **+0.8** |
| PAMC | | | | *i* | | 12 06 14.6 | |
| | comp=Z,10μm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **181** | ⇓*e*P | **Pn** | **12 05 56.3** | **+0.2** |
| RUSC | | | | *e*S | **Sn** | **12 06 15.4** | **-0.1** |
| RUSC | | | | *i* | | 12 06 16.2 | |
| | comp=Z,6μm,0.4s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.32** | **108** | ⇑*i*P | **Pn** | **12 06 00.8** | **+1.9** |
| TAMC | | | | *e*S | **Sn** | **12 06 21.7** | **+1.1** |
| TAMC | | | | *i* | | 12 06 28.9 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **350** | Pn | **Pn** | **12 06 00.9** | **+1.0** |
| **PTBC** | **PUERTO BERRIO,** | **1.42** | **258** | *e*P | **Pn** | **12 05 58.8** | **-1.0** |
| PTBC | | | | *e*S | **Sn** | **12 06 21.1** | **-1.0** |
| PTBC | | | | *i* | | 12 06 23.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.55** | **220** | *e*P | **Pn** | **12 06 01.1** | **-0.2** |
| SPBC | | | | *e*S | **Sn** | **12 06 23.6** | **-1.2** |
| SPBC | | | | *i* | | 12 06 25.9 | |
| | comp=Z,7μm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.90** | **290** | *e*P | **Pn** | **12 06 04.9** | **-0.1** |
| ZARC | | | | *e*S | **Sn** | **12 06 30.4** | **-0.9** |
| ZARC | | | | *i* | | 12 06 36.0 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.90** | **290** | | **Pn** | **12 06 04.4** | **-0.6** |
| **SMLC** | **San Martn de** | **2.19** | **333** | *e*P | **Pn** | **12 06 08.3** | **0.0** |
| SMLC | | | | *e*S | **Sn** | **12 06 37.0** | **-0.4** |
| SMLC | | | | *i* | | 12 06 40.6 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.20** | **235** | *e*P | **Pn** | **12 06 08.0** | **-0.6** |
| NORC | | | | *e*S | **Sn** | **12 06 36.9** | **-0.8** |
| NORC | | | | *i* | | 12 06 44.0 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **CHIC** | **Chingaza** | **2.30** | **197** | ⇓*e*P | **Pn** | **12 06 10.2** | **+0.1** |
| CHIC | | | | *e*S | **Sn** | **12 06 40.2** | **-0.2** |
| CHIC | | | | *i* | | 12 06 46.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **ROSC** | **El Rosal** | **2.35** | **212** | P | **Pn** | **12 06 12.2** | **+1.5** |
| | comp=Z,978nm,0.3s,baz=274,slow=17,SNR=1056 | | | | | | |
| ROSC | | | | S | **Sn** | **12 06 43.4** | **+1.9** |
| | comp=Z,2μm,0.3s,baz=55,slow=19,SNR=9.9 | | | | | | |
| **ROSC** | **El Rosal** | **2.35** | **212** | *e*P | **Pn** | **12 06 11.9** | **+1.2** |
| ROSC | | | | *e*S | **Sn** | **12 06 43.7** | **+2.2** |
| ROSC | | | | *i* | | 12 06 47.0 | |
| | comp=Z,4μm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.35** | **212** | | **Pn** | **12 06 11.7** | **+1.0** |
| **HELC** | **Santa Helena** | **2.54** | **255** | *e*P | **Pn** | **12 06 12.7** | **-0.1** |
| HELC | | | | *e*S | **Sn** | **12 06 44.5** | **-0.9** |
| HELC | | | | *i* | | 12 06 52.6 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **SOCV** | **Socops** | **2.61** | **57** | ⇑*i*P | **Pn** | **12 06 14.2** | **+0.7** |
| SOCV | | | | *e*S | **Sn** | **12 06 46.6** | **0.0** |
| **UREC** | **San Jos de Ur** | **2.61** | **290** | *e*P | **Pn** | **12 06 11.9** | **-1.5** |
| UREC | | | | *e*S | **Sn** | **12 06 44.2** | **-2.3** |
| UREC | | | | *i* | | 12 06 54.6 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.73** | **350** | *e*P | **Pn** | **12 06 16.9** | **+2.0** |
| LL1C | | | | *e*S | **Sn** | **12 06 53.1** | **+4.1** |
| **PTGC** | **Puerto Gaitan,** | **2.78** | **161** | ⇓*e*P | **Pn** | **12 06 15.5** | **-0.1** |
| PTGC | | | | *e*S | **Sn** | **12 06 49.0** | **-1.3** |
| PTGC | | | | *i* | | 12 06 53.8 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **VILC** | **Villavicencio,** | **2.79** | **193** | *e*P | **Pn** | **12 06 15.6** | **-0.2** |
| VILC | | | | *e*S | **Sn** | **12 06 50.2** | **-0.4** |
| **GUY2C** | **Guyana, Caldas** | **2.80** | **235** | *e*P | **Pn** | **12 06 17.1** | **+0.8** |
| GUY2C | | | | *e*S | **Sn** | **12 06 51.8** | **+0.4** |
| GUY2C | | | | *i* | | 12 07 02.5 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.88** | **356** | *e*P | **Pn** | **12 06 16.8** | **0.0** |
| LL6C | | | | *e*S | **Sn** | **12 06 52.2** | **-0.3** |
| LL6C | | | | *i* | | 12 07 06.2 | |
| | comp=Z,858nm,0.5s | | | | | | |
| **LL5C** | **La Loma 5 El P** | **2.96** | **347** | *e*P | **Pn** | **12 06 19.2** | **+1.4** |
| LL5C | | | | *e*S | **Sn** | **12 06 54.3** | **0.0** |
| LL5C | | | | *i* | | 12 06 57.7 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.09** | **252** | *e*P | **Pn** | **12 06 19.4** | **-0.2** |
| CBOC | | | | *e*S | **Sn** | **12 06 56.9** | **-0.6** |
| CBOC | | | | *i* | | 12 07 07.3 | |
| | comp=Z,549nm,0.5s | | | | | | |
| **DBBC** | **Dabeiba** | **3.13** | **273** | ⇑*i*P | **Pn** | **12 06 19.6** | **-0.4** |
| DBBC | | | | *e*S | **Sn** | **12 06 58.0** | **-0.2** |
| DBBC | | | | *i* | | 12 06 59.9 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **SDV** | **Santo Domingo** | **3.15** | **50** | P | **Pn** | **12 06 21.7** | **+1.4** |
| | comp=Z,256nm,0.3s,baz=180,slow=3.3,SNR=

baz=351,slow=19,SNR=1.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GTBY** | **Guantanamo Bay** | **13.16** | **351** | | | **P** | **12 08 35.6** | **-0.5** |
| **BOAV** | **Boa Vista** | **13.25** | **109** | *eP* | | **Pn** | **12 08 32.1** | **-0.9** |
| **BOAV** | **Boa Vista** | **13.25** | **109** | Pn | | **Pn** | **12 08 32.6** | **-0.4** |
| **GCPR** | **Guaynabo City** | **13.27** | **30** | | | **Pn** | **12 08 33.4** | **+0.2** |
| **CBYP** | **Canovanas** | **13.35** | **31** | Pn | | **Pn** | **12 08 34.8** | **+0.5** |
| **MTP** | **Monte Pirata** | **13.37** | **33** | Pn | | **Pn** | **12 08 33.5** | **-1.0** |
| **CZSB** | **Cruzeiro do Su** | **14.48** | **179** | *eP* | | **Pn** | **12 08 48.9** | **+0.3** |
| **CZSB** | **Cruzeiro do Su** | **14.48** | **179** | | | **P** | **12 08 49.4** | **-1.5** |
| **ATAH** | **Atahualpa** | **14.87** | **201** | | P | **Pn** | **12 08 53.7** | **-0.1** |

comp=Z,0.3nm,0.3s,baz=36,slow=8.7,SNR=2.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PTGA** | **Pitinga** | **15.08** | **119** | P | | **P** | **12 08 58.9** | **+1.4** |

comp=Z,0.5nm,0.3s,baz=330,slow=20,SNR=1.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PTGA | | | | | S | **Sn** | **12 11 38.0** | **-5.8** |

comp=Z,1.7nm,0.3s,baz=329,slow=20,SNR=3.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ETMB** | **Extrema** | **17.90** | **158** | *eP* | | **P** | **12 09 28.6** | **-0.1** |
| **ETMB** | **Extrema** | **17.90** | **158** | | | **P** | **12 09 28.5** | **-0.1** |
| **PAYG** | **Puerto Ayora** | **18.74** | **247** | P | | **Pn** | **12 09 39.0** | **-1.1** |
| **ITTB** | **Itaituba** | **20.57** | **122** | *eP* | | Pn | 12 09 59.2 | -2.5 |
| **NPGB** | **Novo Progresso** | **22.41** | **128** | *eP* | | **P** | **12 10 16.6** | **-0.1** |
| **LPAZ** | **La Paz** | **23.49** | **168** | P | | **P** | **12 10 26.4** | **-0.9** |

comp=Z,0.8nm,0.3s,baz=0.0,slow=7.1,SNR=3.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **23.49** | **168** | P | | **P** | **12 10 26.8** | **-0.5** |
| **PDRB** | **Porto dos Gac** | **24.50** | **138** | *eP* | | **P** | **12 10 37.8** | **+2.0** |
| **V48A** | **Smith Brothers** | **31.41** | **338** | P | | **P** | **12 11 38.1** | **+0.9** |
| V48A | | | | IAmb | | IAmb | 12 11 40.2 | |

comp=Z,11nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **S54A** | **Dingess, Beckl** | **31.71** | **348** | P | | **P** | **12 11 42.6** | **+2.8** |
| **WVT** | **Waverly** | **32.13** | **337** | P | | **P** | **12 11 45.0** | **+1.6** |
| **WHAR** | **Wooly Hollow** | **33.38** | **331** | P | | **P** | **12 11 55.9** | **+1.5** |
| WHAR | | | | IAmb | | IAmb | 12 11 58.9 | |

comp=Z,10.0nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PAL** | **Palisades** | **34.03** | **359** | P | | **P** | **12 12 01.2** | **+1.4** |
| **U40A** | **Yellville** | **34.51** | **331** | P | | **P** | **12 12 05.3** | **+1.3** |
| **M54A** | **Oil Creek Stat** | **35.02** | **351** | P | | **P** | **12 12 09.3** | **+0.9** |
| **CCM** | **Cathedral Cave** | **35.18** | **335** | P | | **P** | **12 12 10.5** | **+0.7** |
| CCM | | | | IAmb | | IAmb | 12 12 12.4 | |

comp=Z,10.0nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WVNY** | **West Valley, N** | **35.76** | **353** | P | | **P** | **12 12 16.9** | **+2.2** |
| **TXAR** | **Lajitas Array** | **36.49** | **312** | P | | **P** | **12 12 22.1** | **+0.9** |

comp=Z,2.0nm,0.6s,baz=127,slow=9.3,SNR=31

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TXAR | | | | | PcP | **PcP** | **12 14 43.2** | **+1.4** |

comp=Z,1.2nm,0.8s,baz=132,slow=5.7,SNR=8.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **36.49** | **312** | P | | **P** | **12 12 22.6** | **+1.4** |
| **TX31** | **Lajitas Ar. Si** | **36.49** | **312** | P | | **P** | **12 12 22.2** | **+1.0** |
| TX31 | | | | IAmb | | IAmb | 12 12 22.7 | |

comp=Z,6.3nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TX32** | **Lajitas Array** | **36.49** | **312** | P | | **P** | **12 12 22.3** | **+1.0** |
| **G62A** | **West of Eustis** | **38.29** | **3** | P | | **P** | **12 12 39.1** | **+3.1** |
| **MNTX** | **Cornudas Mount** | **39.00** | **314** | P | | **P** | **12 12 43.2** | **+1.1** |
| MNTX | | | | IAmb | | IAmb | 12 12 44.5 | |

comp=Z,3.9nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LMN** | **Caledonia Moun** | **39.51** | **9** | P | | **P** | **12 12 47.2** | **+1.0** |
| **LMQ** | **La Malbaie** | **40.63** | **3** | P | | **P** | **12 12 57.0** | **+1.7** |
| LMQ | | | | IAmb | | IAmb | 12 13 09.0 | |

comp=Z,15nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BATG** | **Bathurst New B** | **40.73** | **7** | P | | **P** | **12 12 57.6** | **+1.4** |
| **VLDQ** | **Val d'Or** | **41.29** | **356** | P | | **P** | **12 13 03.1** | **+2.3** |
| VLDQ | | | | IAmb | | IAmb | 12 13 11.3 | |

comp=Z,17nm,1.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EYMN** | **Ely** | **43.87** | **342** | P | | **P** | **12 13 21.7** | **+0.2** |
| EYMN | | | | IAmb | | IAmb | 12 13 36.4 | |

comp=Z,14nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **X16A** | **Lo Mia Camp, P** | **44.76** | **313** | P | | **P** | **12 13 29.5** | **+0.4** |
| **PV13** | **Radium Mtn., P** | **44.93** | **319** | P | | **P** | **12 13 32.0** | **+1.6** |
| PV13 | | | | IAmb | | IAmb | 12 13 32.3 | |

comp=Z,3.9nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WUAZ** | **Wupatki** | **45.25** | **315** | P | | **P** | **12 13 34.4** | **+1.5** |
| WUAZ | | | | IAmb | | IAmb | 12 13 36.2 | |

comp=Z,7.4nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Y14A** | **Wickenburg** | **45.68** | **312** | P | | **P** | **12 13 37.7** | **+1.5** |
| Y14A | | | | IAmb | | IAmb | 12 13 38.1 | |

comp=Z,4.7nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KNB** | **Kanab** | **47.01** | **316** | P | | **P** | **12 13 48.1** | **+1.4** |
| KNB | | | | IAmb | | IAmb | 12 13 49.1 | |

comp=Z,4.9nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | | **P** | **12 13 48.5** | **+0.1** |

comp=Z,3.1nm,0.4s,baz=129,slow=5.8,SNR=5.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | | **P** | **12 13 48.8** | **+0.5** |
| ULM | | | | IAmb | | IAmb | 12 13 50.1 | |

comp=Z,6.1nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PLCA** | **Paso Flores** | **47.40** | **177** | P | | **P** | **12 13 47.3** | **-2.1** |

comp=Z,1.1nm,1.0s,baz=355,slow=11,SNR=1.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **48.09** | **324** | P | | **P** | **12 13 55.6** | **+0.6** |

comp=Z,0.8nm,0.6s,baz=130,slow=8.6,SNR=9.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **48.09** | **324** | P | | **P** | **12 13 55.4** | **+0.4** |
| **SCHQ** | **Schefferville** | **48.11** | **5** | P | | **P** | **12 13 55.3** | **+0.6** |

comp=Z,5.7nm,0.8s,baz=194,slow=7.6,SNR=11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SCHQ** | **Schefferville** | **48.11** | **5** | P | | **P** | **12 13 55.7** | **+1.1** |
| SCHQ | | | | IAmb | | IAmb | 12 14 03.6 | |

comp=Z,15nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DGMT** | **Dagmar** | **49.16** | **333** | P | | **P** | **12 14 04.3** | **+1.5** |
| **REDW** | **Red Top Meadow** | **49.21** | **324** | P | | **P** | **12 14 04.7** | **+1.2** |
| REDW | | | | IAmb | | IAmb | 12 14 05.2 | |

comp=Z,3.6nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MOOW** | **Moose Ponds** | **49.38** | **324** | P | | **P** | **12 14 04.8** | **0.0** |
| **R11A** | **Troy Canyon, C** | **49.57** | **316** | P | | **P** | **12 14 07.8** | **+1.5** |
| **HLID** | **Hailey** | **51.46** | **322** | P | | **P** | **12 14 21.3** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **51.51** | **315** | P | | **P** | **12 14 21.8** | **+0.9** |

comp=Z,1.0nm,0.7s,baz=125,slow=6.9,SNR=13

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NVAR | | | | | PcP | **PcP** | **12 15 33.7** | **+0.8** |

comp=Z,0.6nm,0.5s,baz=128,slow=5.2,SNR=5.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YERR** | **Yerington** | **52.41** | **315** | P | | **P** | **12 14 28.5** | **+1.0** |
| YERR | | | | IAmb | | IAmb | 12 14 31.3 | |

comp=Z,4.5nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WVOR** | **Wild Horse Val** | **53.55** | **319** | P | | **P** | **12 14 36.5** | **+0.8** |
| WVOR | | | | IAmb | | IAmb | 12 14 39.9 | |

comp=Z,2.9nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | | **P** | **12 15 42.9** | **+0.4** |

comp=Z,4.2nm,0.7s,baz=132,slow=6.8,SNR=89

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YKA | | | | | PcP | **pP** | **12 16 20.3** | **+0.8** |

comp=Z,0.7nm,0.6s,baz=132,slow=6.9,SNR=4.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | | **P** | **12 15 42.7** | **+0.2** |
| **DLBC** | **Dease Lake** | **67.33** | **331** | P | | **P** | **12 16 10.1** | **+1.3** |
| DLBC | | | | IAmb | | IAmb | 12 16 24.5 | |

comp=Z,15nm,1.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **67.67** | **86** | P | | **P** | **12 16 10.8** | **-1.0** |

comp=Z,1.9nm,0.6s,baz=289,slow=3.0,SNR=5.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **67.67** | **86** | P | | **P** | **12 16 11.0** | **-0.8** |
| DBIC | | | | IAmb | | IAmb | 12 16 28.9 | |

comp=Z,7.9nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SUMG** | **Summit** | **68.96** | **11** | *i* P | | **P** | **12 16 19.0** | **-0.1** |
| **SUMG** | **Summit** | **68.96** | **11** | P | | **P** | **12 16 19.6** | **+0.5** |
| SUMG | | | | IAmb | | IAmb | 12 16 21.7 | |

comp=Z,7.3nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NEEM** | **North Greenlan** | **71.52** | **5** | *eP* | | **P** | **12 16 35.3** | **+0.8** |
| **INK** | **Inuvik** | **73.03** | **340** | P | | **P** | **12 16 43.9** | **+0.7** |

comp=Z,0.9nm,0.4s,baz=110,slow=6.2,SNR=12

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **73.03** | **340** | P | | **P** | **12 16 43.7** | **+0.5** |
| **DAWY** | **Dawson** | **73.64** | **335** | P | | **P** | **12 16 48.4** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **73.67** | **78** | P | | **P** | **12 16 46.9** | **-1.2** |

comp=Z,0.2nm,0.5s,baz=289,slow=4.8,SNR=5.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **M27K** | **Edge Creek, AK** | **74.21** | **333** | P | | **P** | **12 16 51.9** | **+1.5** |
| M27K | | | | IAmb | | IAmb | 12 16 51.9 | |

comp=Z,7.0nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BCAR** | **Beaver Creek A** | **74.37** | **334** | P | | **P** | **12 16 52.6** | **+1.4** |
| **BMAR** | **Burnt Mountain** | **76.66** | **338** | P | | **P** | **12 17 05.5** | **+1.3** |
| **ILAR** | **Eielson Array** | **76.97** | **335** | P | | **P** | **12 17 06.3** | **+0.5** |

comp=Z,0.5nm,0.7s,baz=106,slow=4.5,SNR=8.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **76.97** | **335** | P | | **P** | **12 17 07.0** | **+1.1** |
| **IMAR** | **Indian Mountai** | **79.99** | **336** | P | | **P** | **12 17 23.1** | **+0.7** |
| **ARCES** | **ARCESS Array B** | **86.63** | **20** | P | | **P** | **12 17 56.8** | **+0.4** |

comp=Z,1.3nm,0.7s,baz=263,slow=4.4,SNR=1.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARCES** | **ARCESS Array B** | **86.63** | **20** | P | | **P** | **12 17 56.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | **122.28** | **20** | PKP | | **PKiKP** | **12 24 07.0** | **-0.6** |

comp=Z,0.3nm,0.4s,baz=306,slow=2.8,SNR=9.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **122.28** | **20** | | | **PKPdf** | **12 24 06.4** | **-1.1** |
| **SONM** | **Songino Array** | **125.56** | **0** | PKP | | **PKiKP** | **12 24 14.2** | **-0.1** |

comp=Z,0.2nm,0.4s,baz=75,slow=1.6,SNR=1.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **146.47** | **8** | PKPbc | | **PKPbc** | **12 24 54.0** | **-0.5** |
| **ASAR** | **Alice Springs** | **149.17** | **234** | PKP | | **PKPdf** | **12 24 57.1** | **-0.2** |

comp=Z,4.7nm,0.7s,baz=116,slow=3.5,SNR=41

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | PKPbc | | **PKPbc** | **12 25 00.8** | **-1.0** |

comp=Z,5.6nm,0.7s,baz=117,slow=3.5,SNR=21

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **149.17** | **234** | | | **PKPdf** | **12 24 56.6** | **-0.8** |
| ASAR | | | | PKPbc | | **PKPbc** | **12 25 00.5** | **-1.3** |
| ASAR | | | | PKPab | | **PKPab** | **12 25 06.7** | **+0.1** |
| **WRA** | **Warramunga Arr** | **150.40** | **241** | PKP | | **PKPdf** | **12 24 59.4** | **0.0** |

comp=Z,3.6nm,0.4s,baz=106,slow=2.8,SNR=9.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | PKPbc | | **PKPbc** | **12 25 04.1** | **-0.7** |

comp=Z,3.7nm,0.4s,baz=105,slow=2.7,SNR=33

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **150.40** | **241** | PKPdf | | **PKPdf** | **12 24 58.8** | **-0.6** |
| WRA | | | | | | **PKPbc** | **12 25 04.1** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **153.65** | **17** | PKPbc | | **PKiKP** | **12 25 12.4** | **+0.2** |

comp=Z,0.8nm,0.5s,baz=316,slow=3.7,SNR=4.8

*IDC **06** 12:10:31.6±4.5,29.°86N×140.°94E,h76km±42km, mb3.0/7, mb1 3.3/8,mb1mx3.0/47,mbtmp3.3/8,ML2.9/1, Error ellipse: s-maj=39.2km s-min=19.0km az=101.0*

**ISC 06 12:10:31.8±1.0,29.°9N±0.°1×140.°9E±0.°2,h78km,n11, σ0s37/9,mb3.4/8,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ** | **Hachijo jima 2** | **3.38** | **344** | P | Pn | 12 11 18.0 | -4.3 |

9.5nm,0.3s,baz=91,slow=22,SNR=10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JHJ | | | | S | Sn | 12 11 52.4 | -8.9 |

14nm,0.3s,baz=91,slow=23,SNR=5.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **7.03** | **342** | P | | **Pn** | **12 12 11.9** | **-0.2** |

0.2nm,0.3s,baz=166,slow=15,SNR=11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KLR** | **Kul'dur** | **20.56** | **343** | P | | Pn | 12 15 07.0 | +0.1 |

0.7nm,0.6s,baz=155,slow=12,SNR=2.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **47.87** | **308** | P | | **P** | **12 19 02.0** | **+0.1** |

0.3nm,0.8s,baz=97,slow=4.6,SNR=1.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **49.92** | **188** | P | | **P** | **12 19 17.4** | **-0.3** |

0.2nm,0.3s,baz=5.7,slow=7.7,SNR=11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **53.65** | **188** | P | | **P** | **12 19 45.4** | **0.0** |

0.1nm,0.4s,baz=356,slow=4.7,SNR=4.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **55.85** | **30** | P | | **P** | **12 20 00.3** | **-0.6** |

0.6nm,1.1s,baz=260,slow=5.4,SNR=4.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **61.00** | **25** | P | | **P** | **12 20 36.3** | **-0.2** |

0.3nm,0.5s,baz=286,slow=7.7,SNR=1.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **70.25** | **29** | P | | **P** | **12 21 36.4** | **+0.1** |

0.1nm,0.5s,baz=301,slow=6.4,SNR=2.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **74.97** | **333** | P | | **P** | **12 22 04.5** | **+0.2** |

14nm,1.3s,baz=224,slow=5.3,SNR=4.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **79.69** | **52** | P | | **P** | **12 22 31.9** | **+0.5** |

0.2nm,0.6s,baz=324,slow=5.6,SNR=2.4

*IDC **06** 12:44:53.9±1.8,9.°85S×127.°13E,h0km,mb3.4/2, mb1 4.0/6,mb1mx3.5/42,mbtmp3.7/6,ML3.9/4,Error ellipse: s-maj=46.8km s-min=24.7km az=63.0*

**ISC 06 12:44:58.2±1.2,9.°99S±0.°09×127.°1E±0.°1,h35km,n6, σ1s51/10,Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **3.37** | **266** | Pn | **Pn** | **12 45 48.6** | **+0.2** |

6.7nm,0.3s,baz=188,slow=3.1,SNR=6.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BATI | | | | Sn | **Sn** | **12 46 25.5** | **-1.6** |

6.2nm,0.3s,baz=64,slow=18,SNR=1.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **8.18** | **190** | Pn | **Pn** | **12 46 56.1** | **+1.6** |

1.7nm,0.3s,baz=3.6,slow=11,SNR=44

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FITZ | | | | Sn | **Sn** | **12 48 25.4** | **-0.4** |

1.5nm,0.3s,baz=151,slow=22,SNR=8.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **12.13** | **146** | Pn | **Pn** | **12 47 49.1** | **+0.5** |

0.7nm,0.3s,baz=324,slow=13,SNR=34

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | Sn | **Sn** | **12 50 00.3** | **-2.5** |

0.6nm,0.3s,baz=319,slow=25,SNR=7.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **15.09** | **155** | Pn | **Pn** | **12 48 30.0** | **+1.1** |

0.8nm,0.3s,baz=323,slow=11,SNR=76

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | Sn | **Sn** | **12 51 13.4** | **-1.6** |

0.3nm,0.3s,baz=317,slow=20,SNR=7.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **39.62** | **315** | P | **P** | **12 52 27.0** | **+0.3** |

0.5nm,0.7s,baz=142,slow=7.7,SNR=4.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **69.19** | **329** | P | **P** | **12 56 01.8** | **+0.5** |

0.2nm,0.5s,baz=130,slow=7.2,SNR=2.4

*TUL **06** 12:46:04.9±1.3,35.°974N±0.°010×97.°182W±0.°009, h8km±4km,ML2.5,mb_Lg2.3/5(NEIC),Error ellipse: s-maj=1.7km s-min=0.5km az=148.0*

**NEIC 06 12:46:05±1.1,35.°987N±0.°010×97.°19W±0.°01,h4km±3km, Error ellipse: s-maj=1.5km s-min=1.4km az=214.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK033** | **Mehan** | **0.21** | **74** | Pg | Pg | 12 46 09.6 | +0.4 |
| OK033 | | | | Sg | Sg | 12 46 12.3 | +0.4 |
| **OK031** | **S. Brethren Rd** | **0.29** | **97** | Pg | Pg | 12 46 10.7 | +0.2 |
| OK031 | | | | Sg | Sg | 12 46 14.7 | +0.4 |
| **OK029** | **Liberty Lake** | **0.29** | **229** | Pg | Pg | 12 46 10.7 | +0.1 |
| OK029 | | | | Sg | Sg | 12 46 14.3 | 0.0 |
| **OK030** | **Cody Creek RV** | **0.33** | **100** | Pg | Pg | 12 46 11.6 | +0.1 |
| OK030 | | | | Sg | Sg | 12 46 16.4 | +0.6 |
| **OK034** | **N. Norfolk Rd.** | **0.39** | **86** | Pg | Pg | 12 46 12.7 | +0.2 |
| OK034 | | | | Sg | Sg | 12 46 17.3 | -0.3 |
| **OK025** | **Westminster Rd** | **0.42** | **197** | Pg | Pg | 12 46 12.9 | 0.0 |
| OK025 | | | | Sg | Sg | 12 46 18.3 | -0.4 |
| **QUOK** | **Quay** | **0.43** | **65** | Pg | Pg | 12 46 13.5 | +0.2 |
| QUOK | | | | Sg | Sg | 12 46 19.3 | +0.3 |
| **BCOK** | **Bluff Creek, N** | **0.47** | **226** | Pg | Pg | 12 46 14.1 | -0.1 |
| BCOK | | | | Sg | Sg | 12 46 20.0 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.61** | **201** | | Pg | 12 46 16.5 | -0.2 |
| OKCFA | | | | | Sg | 12 46 24.2 | -0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **199** | | Pg | 12 46 16.7 | -0.1 |
| OKCSW | | | | | Sg | 12 46 24.3 | -0.5 |
| **FNO** | **Franklin** | **0.75** | **193** | | Pg | 12 46 19.0 | -0.3 |
| FNO | | | | | Sg | 12 46 28.9 | -0.1 |
| **BLOK** | **Blackwell** | **0.77** | **358** | | Pg | 12 46 19.7 | -0.1 |
| BLOK | | | | | Sg | 12 46 29.6 | -0.2 |
| **CROK** | **Carrier** | **0.82** | **309** | | Pg | 12 46 20.8 | 0.0 |
| CROK | | | | | Sg | 12 46 32.6 | -0.8 |
| **W35A** | **Tecumseh** | **0.87** | **163** | | Pg | 12 46 22.6 | -1.1 |
| W35A | | | | | Sg | 12 46 32.9 | -0.1 |
| **GC02** | **Grant County #** | **1.02** | **328** | | Pg | 12 46 24.3 | -0.3 |
| GC02 | | | | | Sg | 12 46 38.2 | +0.5 |
| **KAN13** | **South Haven SW** | **1.05** | **347** | | Pg | 12 46 25.3 | +0.2 |
| KAN13 | | | | | Sg | 12 46 38.8 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.08** | **30** | | Pg | 12 46 25.2 | -0.5 |
| T35A | | | | | Sg | 12 46 38.8 | -0.8 |
| **TUL1** | **Leonard** | **1.14** | **93** | | Pg | 12 46 26.0 | -0.8 |
| TUL1 | | | | | Sg | 12 46 40.5 | -1.0 |
| **KAN14** | **Manchester OK** | **1.15** | **327** | Pg | Pg | 12 46 26.9 | -0.2 |
| KAN14 | | | | Sg | Sg | 12 46 41.8 | -0.2 |
| **KAN17** | **Caldwell West** | **1.15** | **336** | Pg | Pg | 12 46 27.1 | -0.1 |
| KAN17 | | | | Sg | Sg | 12 46 41.9 | -0.2 |
| **KAN05** | **Bluff City Nor** | **1.25** | **334** | | Pg | 12 46 28.6 | -0.3 |
| KAN05 | | | | Sg | Sg | 12 46 45.1 | 0.0 |
| **KAN01** | **Argonia South** | **1.25** | **339** | | Pg | 12 46 27.4 | -1.6 |
| KAN01 | | | | Sg | Sg | 12 46 45.2 | -0.1 |
| **KAN10** | **Anthony SW Sta** | **1.35** | **328** | Pn | Pn | 12 46 30.1 | -0.6 |
| **KAN16** | **Harper SW Stat** | **1.42** | **331** | Pn | Pn | 12 46 30.6 | -1.0 |
| **OK035** | **E0210 Rd and N** | **1.42** | **301** | | Pn | 12 46 31.3 | -0.3 |
| **KAN12** | **Harper NE Stat** | **1.46** | **334** | | Pb | 12 46 32.9 | +0.1 |
| **X34A** | **Smith Ranch, M** | **1.48** | **201** | | Pn | 12 46 32.3 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.52** | **285** | | Pn | 12 46 32.8 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.80** | **227** | | Pn | 12 46 37.1 | +0.3 |
| WMOK | | | | IAmb_Lg | | 12 47 06.4 | |

comp=Z,14nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LOOK** | **Love County** | **1.99** | **180** | Pn | Pn | 12 46 38.3 | -1.1 |
| **X37A** | **Clayton** | **2.04** | **133** | | Pn | 12 46 40.6 | +0.5 |
| **U38A** | **Gravette** | **2.31** | **78** | | Pn | 12 46 44.2 | +0.3 |
| **HHAR** | **Hobbs** | **2.65** | **83** | Pn | Pn | 12 46 50.0 | +1.6 |
| **R32A** | **Long Quarter,** | **2.72** | **334** | | Pn | 12 46 51.5 | +2.0 |
| **W39A** | **Magazine** | **2.88** | **105** | | Pn | 12 46 53.5 | +1.8 |
| **KSU1** | **Kansas State U** | **3.14** | **8** | | Pn | 12 46 54.8 | -0.5 |
| **MIAR** | **Mount Ida** | **3.29** | **115** | | Pn | 12 46 56.9 | -0.4 |
| **CBKS** | **Cedar Bluff** | **3.48** | **325** | Pn | Pn | 12 47 02.3 | +2.4 |
| **U40A** | **Yellville** | **3.53** | **83** | | Pn | 12 47 00.4 | -0.1 |
| U40A | | | | IAmb_Lg | | 12 48 04.6 | |

comp=Z,6.9nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **S39A** | **Bolivar** | **3.54** | **60** | | Pn | 12 47 01.1 | +0.4 |
| **AMTX** | **Amarillo** | **3.83** | **255** | Pn | Pn | 12 47 04.8 | 0.0 |
| **X40A** | **Basin Creek Fa** | **3.87** | **112** | | Pn | 12 47 05.0 | -0.2 |
| **WHAR** | **Wooly Hollow** | **4.05** | **98** | | Pn | 12 47 07.0 | -0.8 |
| **W41B** | **Gary Mavity, V** | **4.11** | **100** | Pn | Pn | 12 47 08.6 | +0.1 |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **90** | Pn | Pn | 12 47 09.3 | +0.7 |
| **MGMO** | **Mountain Grove** | **4.13** | **72** | Pn | Pn | 12 47 09.6 | +0.7 |
| **R40A** | **Maddies Statio** | **4.55** | **58** | Pn | Pn | 12 47 15.7 | +1.0 |
| **P38A** | **Dawn** | **4.64** | **37** | | Pn | 12 47 16.6 | +0.7 |
| **MSTX** | **Muleshoe** | **5.01** | **248** | Pn | Pn | 12 47 22.9 | +1.9 |
| **N35A** | **Tabor** | **5.02** | **14** | Pn | Pn | 12 47 21.6 | +0.6 |
| **T42A** | **Van Buren** | **5.02** | **76** | Pn | Pn | 12 47 21.6 | +0.5 |
| **CCM** | **Cathedral Cave** | **5.18** | **65** | Pn | Pn | 12 47 23.7 | +0.4 |
| **T25A** | **Trinidad** | **5.92** | **283** | Pn | Pn | 12 47 32.1 | -1.6 |
| **K38A** | **Parkersburg** | **7.48** | **26** | IAmb_Lg | | 12 50 12.8 | |

comp=Z,4.0nm,0.9s

*NOU **06** 12:55:56.1,18.°86S×177.°52W,h622km,mb4.4/42,Fiji Islands Region*

*IDC **06** 12:55:57.1±0.9,18.°92S×177.°63W,h624km±10km, mb3.5/13,mb1 3.7/17,mb1mx3.4/44,mbtmp4.6/17,Error ellipse: s-maj=18.7km s-min=10.1km az=152.0*

*NEIC **06** 12:55:57.5±1.6,18.°83S±0.°08×177.°7W±0.°1,h618km±7km, mb4.4/25,Error ellipse: s-maj=19.6km s-min=9.9km az=112.0*

**ISC 06 12:55:55.5±0.5,18.°95S±0.°08×177.°56W±0.°07,h600km, n126,σ1s55/133,mb4.4/25,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAVE** | **Taveuni** | **3.15** | **315** | P | **P** | **12 57 18.3** | **+2.6** |
| **DGTI** | **Dogotuki** | **3.68** | **315** | P | **P** | **12 57 20.9** | **+1.9** |
| **MSVF** | **Nonsavu** | **4.34** | **285** | P | **P** | **12 57 26.4** | **+2.9** |

21nm,0.3s,baz=229,slow=22,SNR=164

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MSVF | | | | | S | **S** | **12 58 39.3** | **+4.1** |

baz=301,slow=19,SNR=1.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.34** | **285** | P | | **P** | **12 57 26.3** | **+2.7** |
| **MSVF** | **Nonsavu** | **4.34** | **285** | P | | **P** | **12 57 26.

comp=Z,0.2nm,0.5s,baz=234,slow=4.9,SNR=4.2
**PDAR Pinedale Array 87.55 43** P **P** **13 07 40.4 -0.7**
comp=Z,0.6nm,0.8s,baz=188,slow=3.2,SNR=5.5
**PDAR Pinedale Array 87.55 43** P **P** **13 07 41.0 -0.1**
**HHC Hu-ho-hao-te 88.57 314** *eP* **P** **13 07 47.3 +1.6**
HHC pmax pmax
comp=Z,6.0nm,1.1s
HHC pmax pmax
comp=Z,87nm,5.8s
**SNAA Sanae 89.54 178** P **P** **13 07 49.3 -0.4**
SNAA IAmb IAmb 13 08 11.3
comp=Z,8.9nm,1.4s
**CMAR Chiang Mai Arr 89.99 289** P **P** **13 07 53.0 +0.4**
comp=Z,0.8nm,0.8s,baz=133,slow=2.3,SNR=6.5
**CMAR Chiang Mai Arr 89.99 289** P **P** **13 07 52.2 -0.4**
**PZH PanZhiHua 90.35 298** P **P** **13 07 54.4 +0.1**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,6.4s
**MKAR Makanchi Array 110.43 314** PKiKP **PKiKP** **13 13 18.5 -2.1**
comp=Z,0.3nm,0.5s,baz=174,slow=0.7,SNR=12
**ARCES ARCESS Array B 127.47 350** PKP **PKPdf** **13 13 51.3 -1.3**
comp=Z,3.1nm,0.9s,baz=46,slow=3.5,SNR=9.3
**ARCES ARCESS Array B 127.47 350** **PKPdf** **13 13 51.9 -0.7**
**FINES FINESS Array B 134.40 344** PKP **PKPdf** **13 14 03.4 -2.5**
comp=Z,0.9nm,0.6s,baz=282,slow=1.8,SNR=4.4
**FINES FINESS Array B 134.40 344** **PKPdf** **13 14 03.7 -2.1**
**BRTR Keskin Array B 146.08 314** PKPbc **PKPdf** **13 14 28.3 +0.6**
comp=Z,1.3nm,0.7s,baz=131,slow=4.3,SNR=4.2
**BRTR Keskin Array B 146.08 314** **PKPdf** **13 14 28.0 +0.3**
**CLL Collm 146.64 348** *i* PKPbc **PKPdf** **13 14 30.0 +2.0**
**GERES GERESS Array B 148.81 346** PKPbc **PKPdf** **13 14 35.2 +3.5**
comp=Z,1.2nm,0.8s,baz=5.7,slow=2.7,SNR=7.6
**GERES GERESS Array B 148.81 346** **PKPdf** **13 14 35.6 +3.8**
**CONA Conrad Observa 149.09 342** *eP* **PKPbc** **13 14 36.7 -0.5**
comp=Z,5.4nm,1.2s
**KBA Koelnbreinsper 150.55 345** *eP* **PKPdf** **13 14 39.3 +4.6**
comp=Z,2.5nm,0.5s
**WATA Walderalm 150.71 347** *eP* **PKPbc** **13 14 40.2 -0.9**
comp=Z,2.0nm,0.4s
**WTTA Wattenberg 150.77 347** *i* P **PKPbc** **13 14 40.6 -0.7**
comp=Z,5.0nm,0.4s
**MYKA Terra Mystica 150.89 344** *i* P **PKPbc** **13 14 39.9 -1.5**
comp=Z,2.7nm,0.5s
**SQTA Sankt Quirin 150.90 348** *i* P **PKPbc** **13 14 40.7 -0.8**
comp=Z,2.8nm,0.6s
**ABTA Abfaltersbach 151.06 346** *i* P **PKPbc** **13 14 40.5 -1.3**
comp=Z,4.7nm,0.5s
**FETA Feichten 151.18 348** *i* P **PKPbc** **13 14 41.6 -0.6**
comp=Z,2.3nm,0.7s

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*IDC **06** 12:59:39.5±1.7,37.49N×142.69E,h0km,mb3.5/3, mb1 3.6/6,mb1mx3.3/48,mbtmp3.6/6,ML3.1/3,Error ellipse: s-maj=36.2km s-min=25.8km az=84.0*
*JMA **06** 12:59:44.2±0.1,37.66N×142.20E,h35km±3km,M3.5*
**ISC 06 12:59:39.1±2.3,37.61N±0.05×142.41E±0.08,h0km±13km, n25,σ2s19/29,mb3.6/3,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakibobu** | **1.02** | **314** | P | **Pg** | **13 00 00.2** | **+1.4** |
| JIKH | | | | S | **Sg** | **13 00 11.5** | **-0.5** |
| **JIO** | **Ouri** | **1.19** | **316** | P | **Pg** | **13 00 02.8** | **+0.9** |
| JIO | | | | S | **Sg** | **13 00 16.1** | **-1.3** |
| **JMST** | **Minamisoumatoc** | **1.21** | **276** | P | **Pg** | **13 00 02.6** | **+0.2** |
| JMST | | | | *e*S | **Sg** | **13 00 15.9** | **-2.2** |
| **JFK** | **Kawauchi** | **1.24** | **259** | P | **Pg** | **13 00 03.4** | **+0.5** |
| JFK | | | | S | **Sg** | **13 00 17.3** | **-1.8** |
| **JMM** | **Marumori** | **1.31** | **282** | P | **Pg** | **13 00 04.1** | **-0.1** |
| JMM | | | | S | **Sg** | **13 00 18.4** | **-2.7** |
| **JOU** | **Okura** | **1.57** | **299** | P | **Pn** | **13 00 08.5** | **+0.2** |
| JOU | | | | *e*S | **Sn** | **13 00 26.2** | **-3.2** |
| **JMK** | **Ichinoseki** | **1.64** | **326** | P | **Pn** | **13 00 09.7** | **+0.6** |
| **JFT** | **Otama** | **1.65** | **268** | P | **Pn** | **13 00 10.0** | **+0.7** |
| JFT | | | | *e*S | **Sn** | **13 00 28.6** | **-2.6** |
| **JYS** | **Shirataka** | **1.95** | **289** | P | **Pn** | **13 00 14.4** | **+0.9** |
| **JOM** | **Ohasama** | **2.06** | **335** | P | **Pn** | **13 00 15.6** | **+0.6** |
| **JYK** | **Kaneyama** | **2.08** | **310** | P | **Pn** | **13 00 15.9** | **+0.7** |
| **JFY** | **Yanaizu** | **2.16** | **266** | P | **Pn** | **13 00 17.6** | **+1.2** |
| **JRG** | **Rokugo** | **2.27** | **323** | P | **Pn** | **13 00 18.8** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **3.52** | **254** | Pn | **Pn** | **13 00 37.5** | **+2.4** |
| | 0.2nm,0.3s,baz=66,slow=16,SNR=7.7 | | | | | | |
| MJAR | | | | Sn | **Sn** | **13 01 21.6** | **+4.1** |
| | 0.2nm,0.3s,baz=82,slow=11,SNR=2.4 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **4.96** | **206** | Pn | **Pn** | **13 00 55.1** | **+0.3** |
| | 4.4nm,0.3s,baz=343,slow=19,SNR=7.7 | | | | | | |
| JHJ | | | | Sn | **Sn** | **13 01 47.5** | **-5.5** |
| | 9.2nm,0.3s,baz=52,slow=12,SNR=1.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **6.50** | **1** | Pn | **Pn** | **13 01 16.8** | **+0.8** |
| | 0.8nm,0.3s,baz=180,slow=24,SNR=11 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **13 02 27.4** | **-3.6** |
| | baz=192,slow=9.7,SNR=2.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.78** | **123** | T | T | 13 34 44.8 | |
| | baz=319 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.79** | **123** | T | T | 13 34 51.4 | |
| | baz=319 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.80** | **123** | T | T | 13 34 47.0 | |
| | baz=319 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.52** | **125** | T | T | 13 35 43.4 | |
| | baz=316,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.52** | **125** | T | T | 13 35 41.6 | |
| | baz=316 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.54** | **125** | T | T | 13 35 43.1 | |
| | baz=316 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.49** | **302** | P | **P** | **13 07 55.4** | **+3.3** |
| | 0.5nm,0.9s,baz=60,slow=8.4,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.74** | **189** | P | **P** | **13 09 31.4** | **-0.4** |
| | 0.9nm,0.6s,baz=5.5,slow=7.2,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **61.47** | **189** | P | **P** | **13 09 57.5** | **-0.1** |
| | 0.3nm,0.7s,baz=10,slow=5.7,SNR=4.1 | | | | | | |

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**IDC 06 13:04:32.4±2.9,6.07S×131.67E,h0km,mb3.0/1, mb1 3.3/4,mb1mx3.1/28,mbtmp3.1/4,ML2.7/3,Error ellipse: s-maj=115.6km s-min=31.9km az=80.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **206** | Pn | Pn | 13 07 42.5 | -0.5 |
| | 0.1nm,0.3s,baz=34,slow=11,SNR=1.0 | | | | | | |
| FITZ | | | | Sn | Sn | 13 10 00.5 | -12 |
| | 0.0nm,0.3s,baz=41,slow=20,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.03** | **170** | Pn | Pn | 13 07 53.1 | +0.4 |
| | 0.0nm,0.3s,baz=355,slow=14,SNR=1.6 | | | | | | |
| WRA | | | | Sn | Sn | 13 10 16.9 | -12 |
| | 0.1nm,0.3s,baz=355,slow=24,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **17.63** | **173** | P | Pn | 13 08 39.8 | +0.1 |
| | 0.0nm,0.3s,baz=354,slow=9.1,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.38** | **326** | P | P | 13 15 36.0 | 0.0 |
| | 0.1nm,0.4s,baz=121,slow=7.0,SNR=1.3 | | | | | | |

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*ATH **06** 13:10:50.9,38.32N×20.41E,h13km±2km,ML2.9/2,Error ellipse: s-maj=2.5km s-min=0.8km az=253.0*
**ISC 06 13:10:49.9±0.9,38.33N±0.03×20.36E±0.05,h18km±4km, n23,σ1s26/36,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KEF4** | **Livadi, Kephal** | **0.09** | **142** | P | **Pg** | **13 10 53.3** | **-0.1** |
| KEF4 | | | | S | **Sg** | **13 10 55.2** | **-0.6** |
| **DMLN** | **Damoulianata-K** | **0.09** | **171** | P | **Pg** | **13 10 53.7** | **+0.3** |
| DMLN | | | | S | **Sg** | **13 10 55.6** | **-0.3** |
| **KEF3** | **Kipouria, Keph** | **0.13** | **182** | P | **Pg** | **13 10 53.9** | **+0.1** |
| KEF3 | | | | S | **Sg** | **13 10 56.1** | **-0.3** |
| **LXRA** | **Lixouri, Kepha** | **0.14** | **153** | P | **Pg** | **13 10 54.3** | **+0.3** |
| LXRA | | | | S | **Sg** | **13 10 56.8** | **0.0** |
| **ARGA** | **Argostoli. Kep** | **0.18** | **147** | P | **Pb** | **13 10 55.2** | **+0.9** |
| **FSK** | **Fiskardo** | **0.21** | **51** | P | **Pg** | **13 10 55.4** | **+0.4** |
| FSK | | | | S | **Sg** | **13 10 58.1** | **-0.3** |
| FSK | | | | AML | AML | 13 10 58.8 | |
| | comp=E,16157μm,0.1s | | | | | | |
| FSK | | | | AML | AML | 13 11 00.4 | |
| | comp=N,4741μm,0.2s | | | | | | |
| **VLS** | **Valsamata** | **0.24** | **129** | P | **Pg** | **13 10 55.1** | **-0.3** |
| VLS | | | | S | **Sg** | **13 10 58.2** | **-1.0** |
| VLS | | | | AML | AML | 13 10 58.5 | |
| | comp=E,8756μm,0.1s | | | | | | |
| VLS | | | | AML | AML | 13 10 58.5 | |
| | comp=N,10980μm,0.1s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.28** | **140** | P | **Pg** | **13 10 56.0** | **0.0** |
| **EVGI** | **Lefkada island** | **0.38** | **39** | P | **Pg** | **13 10 58.1** | **+0.4** |
| EVGI | | | | S | **Sg** | **13 11 03.1** | **+0.1** |
| **DRAG** | **Dragano-Lefkad** | **0.39** | **26** | P | **Pg** | **13 10 58.4** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.47** | **35** | P | **Pg** | **13 10 59.3** | **-0.1** |
| **LKD2** | **Lefkada island** | **0.52** | **27** | P | **Pg** | **13 11 00.2** | **-0.1** |
| **TSLK** | **Tsoukalades, L** | **0.55** | **25** | P | **Pg** | **13 11 01.2** | **+0.4** |
| **RLS** | **Riolos of Patr** | **0.92** | **107** | P | **Pg** | **13 11 07.3** | **-0.4** |
| **KLV** | **Kalavryta, Ach** | **1.44** | **101** | P | **Pn** | **13 11 15.9** | **+0.7** |
| **AGG** | **Agios Georgios** | **1.69** | **65** | P | **Pb** | **13 11 21.1** | **+0.5** |
| **STON** | **Ston** | **4.97** | **337** | *e*Pn | **Pn** | **13 12 04.1** | **+0.6** |
| STON | | | | Sn | **Sn** | **13 12 59.5** | **-1.0** |
| **LSTV** | **Lastovo** | **5.16** | **330** | *e*Pn | **Pn** | **13 12 07.1** | **+0.9** |
| LSTV | | | | Sn | **Sn** | **13 13 02.2** | **-3.0** |
| **RICI** | **Ricice** | **5.71** | **336** | *e*Pn | **Pn** | **13 12 15.0** | **+1.3** |
| RICI | | | | Sn | **Sn** | **13 13 15.9** | **-2.9** |
| **ZIRJ** | **Zirje** | **6.40** | **328** | *e*Pn | **Pn** | **13 12 24.4** | **+1.1** |
| ZIRJ | | | | Sn | **Sn** | **13 13 32.9** | **-3.0** |
| **KIJV** | **Kijevo** | **6.41** | **334** | *e*Pn | **Pn** | **13 12 25.4** | **+2.1** |
| KIJV | | | | Sn | **Sn** | **13 13 34.9** | **-1.1** |
| **MORI** | **Morici** | **6.55** | **329** | *e*Pn | **Pn** | **13 12 27.2** | **+2.0** |
| MORI | | | | Sn | **Sn** | **13 13 37.9** | **-1.6** |
| **DUGI** | **Dugi Otok** | **6.92** | **326** | *e*Pn | **Pn** | **13 12 32.4** | **+1.9** |

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**IDC 06 13:29:24.7±2.1,55.36S×26.69W,h0km,mb4.0/1, mb1 4.0/1,mb1mx3.1/19,mbtmp4.0/1,Error ellipse: s-maj=108.4km s-min=65.7km az=149.0,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **72.32** | **29** | P | P | 13 40 52.0 | 0.0 |
| | 0.8nm,0.6s,baz=204,slow=6.1,SNR=7.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **135.85** | **318** | PKP | PKPdf | 13 48 45.8 | 0.0 |
| | 0.1nm,0.4s,baz=134,slow=2.5,SNR=1.5 | | | | | | |
| **INK** | **Inuvik** | **145.45** | **321** | PKPbc | PKPdf | 13 49 02.0 | -0.9 |
| | 0.9nm,0.7s,baz=118,slow=1.8,SNR=6.1 | | | | | | |
| **ILAR** | **Eielson Array** | **149.86** | **312** | PKPbc | PKPbc | 13 49 14.8 | -0.4 |
| | 0.4nm,0.8s,baz=126,slow=3.3,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **150.40** | **85** | PKPbc | PKPbc | 13 49 16.8 | -0.4 |
| | 0.3nm,0.6s,baz=246,slow=3.4,SNR=2.3 | | | | | | |

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*NEIC **06** 13:31:07.9±2.5,6.44S±0.08×130.1E±0.1,h156km±9km, mb4.3/18,Error ellipse: s-maj=15.8km s-min=11.0km az=78.0*
*IDC **06** 13:31:08.2±1.6,6.48S×129.91E,h164km±16km,mb3.9/8, mb1 4.0/14,mb1mx3.7/39,mbtmp4.4/14,MS3.7/2, Ms1 3.7/2,ms1mx2.5/69,Error ellipse: s-maj=17.4km s-min=12.4km az=56.0*
*DJA **06** 13:31:08.8±0.2,7.5±2.2°×13.0°E±°,h147km±4km,M4.5/25, mB5.1/10,mb4.5/25,MLv4.6/13,Mw(mB)4.4/10*
**ISC 06 13:31:06.7±0.4,6.50S±0.05×130.02E±0.05,h150km,n80, σ2s12/78,mb4.4/21,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.94** | **139** | P | **Pn** | **13 31 42.9** | **+1.7** |
| **SAUI** | **Saumlaki** | **1.94** | **139** | Pn | **Pn** | **13 31 42.6** | **+1.4** |
| **MSAI** | **Masohi** | **3.32** | **341** | P | **Pn** | **13 32 01.8** | **+3.6** |
| **AAI** | **Ambon** | **3.33** | **321** | P | **Pn** | **13 32 01.1** | **+2.7** |
| **FAKI** | **Fak Fak** | **4.20** | **32** | P | **Pn** | **13 32 10.3** | **+0.6** |
| **FAKI** | **Fak Fak** | **4.20** | **32** | Pn | **Pn** | **13 32 10.3** | **+0.6** |
| **SIJI** | **Sorong** | **5.74** | **13** | P | **Pn** | **13 32 30.1** | **+0.1** |
| | 7.6nm,0.3s,baz=240,slow=22,SNR=30 | | | | | | |
| SIJI | | | | S | **Sn** | **13 33 30.3** | **-4.7** |
| | 19nm,0.3s,baz=275,slow=23,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **5.74** | **13** | P | **Pn** | **13 32 31.4** | **+1.4** |
| | 0.7nm2μm38nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **5.97** | **318** | P | **Pn** | **13 32 35.9** | **+2.8** |
| | 0.1nm34nm,0.5s | | | | | | |
| **LBMI** | **Labuha** | **6.34** | **337** | P | **Pn** | **13 32 40.5** | **+2.4** |
| | 0.2nm43nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **6.54** | **240** | P | Pn | 13 32 47.9 | +7.1 |
| **SOEI** | **Soe** | **6.54** | **240** | Pn | **Pn** | **13 32 42.8** | **+2.0** |
| **BATI** | **Baumata** | **7.28** | **239** | P | **Pn** | **13 32 52.0** | **+1.4** |
| | 11nm,0.3s,baz=99,slow=3.5,SNR=15 | | | | | | |
| BATI | | | | S | **Sn** | **13 34 08.5** | **-3.6** |
| | 30nm,0.3s,baz=81,slow=19,SNR=12 | | | | | | |
| **BATI** | **Baumata** | **7.28** | **239** | P | **Pn** | **13 32 50.8** | **+0.2** |
| | 0.4nm30nm,0.7s | | | | | | |
| **APSI** | **Ampana** | **10.03** | **303** | P | Pn | 13 33 32.4 | +5.3 |
| | 312nm32nm,1.1s | | | | | | |
| **BNSI** | **Bone** | **10.08** | **281** | P | Pn | 13 33 35.0 | +7.1 |
| **SPSI** | **Sidrap Palu** | **10.51** | **283** | P | Pn | 13 33 44.9 | +11 |
| **MRSI** | **Marisa** | **10.63** | **310** | P | **Pn** | **13 33 38.6** | **+3.5** |
| | 896nm122nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **10.97** | **253** | P | **Pn** | **13 33 39.9** | **+0.2** |
| | 23nm,0.6s | | | | | | |
| **JAY** | **Jayapura** | **11.37** | **70** | P | **Pn** | **13 33 48.8** | **+3.9** |
| | 0.6nm,0.3s,baz=307,slow=10,SNR=1.5 | | | | | | |
| **PCI** | **Palu** | **11.58** | **298** | P | P | 13 34 01.6 | +6.6 |
| **FITZ** | **Fitzroy Crossi** | **12.29** | **200** | P | **Pn** | **13 33 56.0** | **-0.8** |
| | 1.5nm,0.3s,baz=23,slow=9.9,SNR=52 | | | | | | |
| FITZ | | | | S | Sn | 13 36 00.8 | -12 |
| | 0.3nm,0.3s,baz=75,slow=12,SNR=3.2 | | | | | | |
| **WB0** | **Warramunga Arr** | **13.85** | **163** | Pn | **Pn** | **13 34 14.9** | **-1.9** |
| **WRAB** | **Tennant Creek** | **14.00** | **163** | | **Pn** | **13 34 16.9** | **-1.7** |
| **WRA** | **Warramunga Arr** | **14.00** | **163** | P | **Pn** | **13 34 16.5** | **-2.2** |
| | 1.1nm,0.3s,baz=336,slow=14,SNR=49 | | | | | | |
| WRA | | | | S | Sn | 13 36 43.9 | -10 |
| | 3.2nm,0.3s,baz=354,slow=20,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.00** | **163** | Pn | **Pn** | **13 34 16.8** | **-1.9** |
| **WB2** | **Warramunga Arr** | **14.01** | **163** | Pn | **Pn** | **13 34 18.1** | **-0.7** |
| **WR0** | **Warramunga Arr** | **14.08** | **162** | | **Pn** | **13 34 18.2** | **-1.5** |
| **KBKI** | **Kotabaru** | **14.16** | **282** | P | **Pn** | **13 34 21.6** | **+0.9** |
| | 26nm,0.9s | | | | | | |
| **BBKI** | **Banjar Baru** | **15.41** | **281** | P | **P** | **13 34 39.9** | **+2.3** |
| | 17μm41nm,1.1s | | | | | | |
| **KMMI** | **Kalianget** | **15.95** | **267** | P | P | 13 34 52.0 | +8.5 |
| **BLJI** | **Banyuglugur** | **16.34** | **265** | P | **P** | **13 34 50.7** | **+2.8** |
| | 2μm40nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **17.22** | **101** | P | **Pn** | **13 35 00.5** | **+2.1** |
| | 0.6nm,0.3s,baz=269,slow=5.2,SNR=4.4 | | | | | | |
| PMG | | | | S | **S** | **13 38 04.7** | **-4.9** |
| | 0.4nm,0.3s,baz=323,slow=20,SNR=1.3 | | | | | | |
| **AS31** | **Alice Springs** | **17.47** | **168** | | **P** | **13 35 02.0** | **+1.7** |
| **ASAR** | **Alice Springs** | **17.47** | **168** | P | **P** | **13 35 01.5** | **+1.2** |
| | 1.9nm,0.3s,baz=339,slow=10,SNR=156 | | | | | | |
| ASAR | | | | S | **S** | **13 38 08.3** | **-6.3** |
| | 0.6nm,0.3s,baz=349,slow=27,SNR=6.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **13 42 51.8** | **-2.9** |
| | 0.1nm,0.3s,baz=0.2,slow=2.1,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **17.47** | **168** | | **P** | **13 35 01.8** | **+1.5** |
| **MBWA** | **Marble Bar** | **17.65** | **213** | P | **P** | **13 35 02.4** | **+0.2** |
| MBWA | | | | IAmb | IAmb | 13 35 04.0 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.92** | **212** | P | **P** | **13 35 05.0** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 13 35 07.4 | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.92** | **212** | P | **P** | **13 35 05.8** | **+0.6** |
| PSA00 | | | | IAmb | IAmb | 13 35 07.1 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **SBUM** | **Sibu** | **19.87** | **296** | P | **P** | **13 35 29.2** | **+2.8** |
| SBUM | | | | IAmb | IAmb | 13 35 29.9 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **20.76** | **132** | P | **P** | **13 35 37.6** | **+1.7** |
| | comp=Z,13nm,0.8s,baz=302,slow=11,SNR=22 | | | | | | |
| CTA | | | | S | **S** | **13 39 25.9** | **+6.3** |
| | comp=Z,1.9nm,0.9s,baz=5.3,slow=20,SNR=1.7 | | | | | | |
| **CTAO** | **Charters Tower** | **20.76** | **132** | P | **P** | **13 35 37.4** | **+1.5** |
| CTAO | | | | IAmb | IAmb | 13 35 41.3 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **LEM** | **Lembang** | **22.25** | **268** | P | **P** | **13 35 52.7** | **+0.9** |
| | comp=Z,12nm,0.4s,baz=14,slow=14,SNR=2.0 | | | | | | |
| **STKA** | **Stephens Creek** | **27.46** | **158** | P | **P** | **13 36 39.2** | **+0.4** |
| | comp=Z,3.3nm,0.4s,baz=333,slow=8.4,SNR=13 | | | | | | |
| STKA | | | | S | **S** | **13 41 13.1** | **+4.6** |
| | comp=Z,0.8nm,0.6s,baz=324,slow=19,SNR=1.2 | | | | | | |
| **STKA** | **Stephens Creek** | **27.46** | **158** | P | **P** | **13 36 39.6** | **+0.8** |
| **HNR** | **Honiara** | **29.78** | **98** | LR | LR | 13 49 46.0 | |
| | comp=Z,40nm,20.1s,baz=310,slow=37 | | | | | | |
| **KULM** | **Kulim** | **31.57** | **291** | P | **P** | **13 37 13.4** | **-1.9** |
| KULM | | | | IAmb | IAmb | 13 37 19.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **PSI** | **Prapat** | **32.39** | **286** | P | **P** | **13 37 20.1** | **-2.5** |
| | comp=Z,3.1nm,0.6s,baz=106,slow=18,SNR=2.2 | | | | | | |
| **UBPT** | **Khong Chiam** | **32.56** | **312** | P | **P** | **13 37 23.6** | **-0.3** |
| **CAN** | **Canberra** | **33.58** | **151** | P | **P** | **13 37 34.6** | **+2.0** |
| **JNU** | **Nakatsue** | **39.41** | **1** | LR | LR | 13 54 42.7 | |
| | comp=Z,475nm,21.5s,baz=123,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.43** | **310** | P | **P** | **13 38 21.7** | **-0.6** |
| | comp=Z,2.6nm,0.6s,baz=135,slow=7.1,SNR=25 | | | | | | |
| **ODAN** | **Odare** | **52.95** | **311** | *e*P | **P** | **13 40 07.8** | **-0.4** |
| | comp=Z,12nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **52.97** | **311** | *e*P | **P** | **13 40 08.1** | **-0.3** |
| | comp=Z,9.4nm,0.5s | | | | | | |
| **GTA** | **Gaotai** | **53.55** | **331** | *e*P | **P** | **13 40 12.8** | **+0.6** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **53.59** | **310** | *e*P | **P** | **13 40 12.7** | **-0.2** |
| | comp=Z,26nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **54.27** | **311** | *e*P | **P** | **13 40 17.7** | **-0.3** |
| **GUN** | **Gumba** | **54.64** | **311** | *e*P | **P** | **13 40 20.0** | **-0.6** |
| | comp=Z,20nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **55.62** | **310** | *e*P | **P** | **13 40 26.7** | **-0.8** |
| | comp=Z,10nm,0.3s | | | | | | |
| **PYUN** | **Piuthan** | **56.93** | **310** | *e*P | **P** | **13 40 36.5** | **-0.3** |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **57.98** | **341** | P | **P** | **13 40 42.1** | **-1.5** |
| | comp=Z,0.6nm,0.8s,baz=178,slow=3.9,SNR=3.7 | | | | | | |
| **KSH** | **Kashi** | **67.67** | **317** | P | **P** | **13 41 49.2** | **+1.3** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **67.82** | **327** | IAmb | IAmb | 13 41 49.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.82** | **327** | P | **P** | **13 41 49.2** | **+0.6** |
| | comp=Z,6.8nm,0.5s,baz=114,slow=8.5,SNR=124 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.82** | **327** | P | **P** | **13 41 49.4** | **+0.7** |
| **MAKZ** | **Makanchi** | **68.00** | **327** | P | **P** | **13 41 49.7** | **-0.1** |
| **KDJ** | **Kajisay** | **68.20** | **320** | P | **P** | **13 41 51.1** | **-0.2** |
| KDJ | | | | IAmb | IAmb | 13 41 53.0 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **69.18** | **320** | P | **P** | **13 41 58.1** | **+0.7** |
| BOOM | | | | IAmb | IAmb | 13 41 59.0 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **UCH** | **Uchtor** | **69.96** | **319** | P | **P** | **13 42 04.0** | **+1.5** |
| | SNR=7.9 | | | | | | |
| **AAK** | **Ala-Archa** | **70.17** | **320** | P | **P** | **13 42 04.7** | **+1.3** |
| | SNR=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **70.17** | **320** | P | **P** | **13 42 04.0** | **+0.6** |
| AAK | | | | IAmb | IAmb | 13 42 05.3 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **AML** | **Almayashu** | **70.45** | **319** | P | **P** | **13 42 06.0** | **+0.6** |
| | SNR=12 | | | | | | |
| **USP** | **Ospenovka** | **70.48** | **320** | P | **P** | **13 42 05.8** | **+0.7** |
| | SNR=9.7 | | | | | | |
| **EKS2** | **Erkin-Say** | **70.65** | **319** | P | **P** | **13 42 07.5** | **+1.2** |
| | SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.15** | **334** | P | **P** | **13 42 07.5** | **-1.3** |
| | comp=Z,1.2nm,0.6s,baz=106,slow=4.8,SNR=4.9 | | | | | | |
| **GAR** | **Garm** | **71.33** | **315** | P | **P** | **13 42 09.8** | **-0.7** |
| **KURK** | **Kurchatov** | **72.10** | **329** | P | **P** | **13 42 13.8** | **-0.8** |
| KURK | | | | IAmb | IAmb | 13 42 15.2 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **72.98** | **319** | P | **P** | **13 42 20.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **83.47** | **180** | P | **P** | **13 43 15.3** | **-2.1** |
| **TORD** | **Torodi Ar. Bea** | **128.73** | **282** | PKP | **PKPdf** | **13 49 56.6** | **-0.7** |
| | comp=Z,0.3nm,0.5s,baz=80,slow=1.3,SNR=2.2 | | | | | | |

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*NEIC **06** 13:41:55.9±2.8,22.88N±0.06×120.32E±0.05,h26km±3km, mb4.1/5,ML4.1(TAP),Error ellipse: s-maj=9.0km s-min=6.8km az=194.0*
*TAP **06** 13:41:56.6,22.96N×120.37E,h23km,ML3.5,B*
**ISC 06 13:41:56.4±0.8,22.96N±0.02×120.33E±0.02,h33km±1km, n108,σ1s35/172,13C-7D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHHT** | **Tainan City** | **0.06** | **16** | ⇑*i*P | **Pn** | **13 42 01.9** | **-0.1** |
| | baz=342 | | | | | | |
| SHHT | | | | *e*S | **Sb** | **13 42 06.0** | **+0.2** |
| | baz=342 | | | | | | |
| **CHN3** | **Shinhua** | **0.12** | **16** | ⇑P | **Pn** | **13 42 02.5** | **+2.6** |
| | baz=349 | | | | | | |
| CHN3 | | | | *e*S | **Sb** | **13 42 07.1** | **+0.7** |
| | baz=349 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.12** | **311** | ⇑*i*P | **Pb** | **13 42 02.1** | **-0.2** |
| | baz=302 | | | | | | |
| TAI1 | | | | S | **Sb** | **13 42 06.8** | **+0.5** |
| | baz=302 | | | | | | |
| **TWM1** | **Shoushan** | **0.16** | **148** | ⇓*i*P | **Pn** | **13 42 03.0** | **+1.8** |
| | baz=151 | | | | | | |
| TWM1 | | | | *e*S | **Sb** | **13 42 08.8** | **+1.8** |
| | baz=151 | | | | | | |
| **SCST** | **Cishan** | **0.17** | **116** | P | **Pn** | **13 42 02.5** | **+1.2** |
| | baz=115 | | | | | | |
| SCST | | | | *e*S | **Sb** | **13 42 05.6** | **-1.4** |
| | baz=115 | | | | | | |
| **SSHA** | **Shanhua** | **0.18** | **348** | ⇑*i*P | **Pb** | **13 42 03.1** | **+0.3** |
| | baz=337 | | | | | | |
| SSHA | | | | *e*S | **Sb** | **13 42 08.4** | **+1.2** |
| | baz=337 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.21** | **178** | ⇑*i*P | **Pn** | **13 42 03.3** | **+1.0** |
| | baz=195 | | | | | | |
| SNJT | | | | *e*S | **Sb** | **13 42 08.8** | **+1.3** |
| | baz=195 | | | | | | |
| **SCLT** | **Jiali** | **0.25** | **330** | ⇑*i*P | **Pb** | **13 42 03.7** | **+0.2** |
| | baz=324 | | | | | | |
| SCLT | | | | S | **Sn** | **13 42 09.3** | **+2.5** |
| | baz=324 | | | | | | |
| **SGST** | **Jiashian** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=145 | | | | | | | | |
| SCZT | | | | | *e*S | | **Sn** | **13 42 20.1** | **+2.0** |
| | baz=145 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.67** | **70** | ⇑ | *i*P | | **Pn** | **13 42 10.5** | **+0.9** |
| | baz=70 | | | | | | | | |
| ELDTW | | | | | *e*S | | **Sn** | **13 42 20.6** | **+1.5** |
| | baz=70 | | | | | | | | |
| **ECL** | **Taimali** | **0.68** | **122** | | *e*P | | **Pn** | **13 42 10.3** | **+0.7** |
| | baz=130 | | | | | | | | |
| ECL | | | | | *e*S | | **Sn** | **13 42 19.5** | **+0.5** |
| | baz=130 | | | | | | | | |
| **WSF** | **Szhu** | **0.68** | **352** | | P | | **Pb** | **13 42 10.2** | **+0.2** |
| | baz=349 | | | | | | | | |
| WSF | | | | | *e*S | | **Sn** | **13 42 21.1** | **+1.9** |
| | baz=349 | | | | | | | | |
| **WDGT** | **Dungji** | **0.69** | **296** | | P | | **Pb** | **13 42 10.3** | **+0.3** |
| | baz=294 | | | | | | | | |
| WDGT | | | | | *e*S | | **Sb** | **13 42 19.7** | **+0.4** |
| | baz=294 | | | | | | | | |
| **TWG** | **Pinlang** | **0.70** | **101** | | P | | **Pn** | **13 42 10.7** | **+0.8** |
| | baz=102 | | | | | | | | |
| TWG | | | | | *e*S | | **Sn** | **13 42 20.7** | **+1.1** |
| | baz=102 | | | | | | | | |
| **TWG** | **Pinlang** | **0.70** | **101** | | | | **Pn** | **13 42 10.2** | **+0.3** |
| **ALS** | **Alishan** | **0.70** | **39** | ⇓ | *i*P | | **Pn** | **13 42 10.9** | **+0.7** |
| | baz=46 | | | | | | | | |
| ALS | | | | | *e*S | | **Sb** | **13 42 19.9** | **-0.2** |
| | baz=46 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.71** | **101** | | P | | **Pn** | **13 42 10.7** | **+0.7** |
| | baz=102 | | | | | | | | |
| TWGBT | | | | | S | | **Sn** | **13 42 20.6** | **+0.9** |
| | baz=102 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.71** | **27** | | P | | **Pb** | **13 42 10.9** | **+0.5** |
| | baz=12 | | | | | | | | |
| CHN5 | | | | | *e*S | | **Sn** | **13 42 21.6** | **+1.6** |
| | baz=12 | | | | | | | | |
| **WTK** | **Tuku** | **0.73** | **4** | | *e*P | | **Pb** | **13 42 10.9** | **+0.2** |
| | baz=348 | | | | | | | | |
| WTK | | | | | *e*S | | **Sb** | **13 42 21.0** | **+0.6** |
| | baz=348 | | | | | | | | |
| **LONT** | **Longtian** | **0.74** | **94** | | *e*P | | **Pn** | **13 42 11.7** | **+1.2** |
| | baz=95 | | | | | | | | |
| LONT | | | | | *e*S | | **Sn** | **13 42 21.7** | **+1.1** |
| | baz=95 | | | | | | | | |
| **EAST** | **Anshuo** | **0.75** | **140** | ⇑ | *i*P | | **Pn** | **13 42 12.1** | **+1.4** |
| | baz=130 | | | | | | | | |
| EAST | | | | | *e*S | | **Sn** | **13 42 23.1** | **+2.3** |
| | baz=130 | | | | | | | | |
| **WDLH** | **Douliu** | **0.75** | **15** | | *e*P | | **Pb** | **13 42 11.4** | **+0.4** |
| | baz=14 | | | | | | | | |
| WDLH | | | | | *e*S | | **Sn** | **13 42 22.9** | **+2.1** |
| | baz=14 | | | | | | | | |
| **TTN** | **Taitung** | **0.78** | **105** | | *e*P | | **Pn** | **13 42 12.7** | **+1.7** |
| | baz=106 | | | | | | | | |
| TTN | | | | | *e*S | | **Sn** | **13 42 25.2** | **+3.6** |
| | baz=106 | | | | | | | | |
| **TAW** | **Tawu** | **0.80** | **139** | | P | | **Pn** | **13 42 12.9** | **+1.7** |
| | baz=129 | | | | | | | | |
| TAW | | | | | *e*S | | **Sn** | **13 42 24.7** | **+2.7** |
| | baz=129 | | | | | | | | |
| **TAWH** | **Dawu Township** | **0.81** | **140** | | P | | **Pn** | **13 42 13.0** | **+1.6** |
| | baz=131 | | | | | | | | |
| TAWH | | | | | *e*S | | **Sn** | **13 42 24.5** | **+2.3** |
| | baz=131 | | | | | | | | |
| **SLIU** | **Shizi** | **0.86** | **150** | | P | | **Pn** | **13 42 13.6** | **+1.5** |
| | baz=151 | | | | | | | | |
| SLIU | | | | | *e*S | | **Sn** | **13 42 25.5** | **+2.1** |
| | baz=151 | | | | | | | | |
| **VCHM** | **Qimei** | **0.86** | **287** | | *e*P | | **Pb** | **13 42 12.8** | **-0.2** |
| | baz=286 | | | | | | | | |
| VCHM | | | | | *e*S | | **Sb** | **13 42 24.3** | **0.0** |
| | baz=286 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **0.89** | **308** | | *e*P | | **Pb** | **13 42 12.9** | **-0.5** |
| | baz=317 | | | | | | | | |
| PHUB | | | | | *e*S | | **Sb** | **13 42 24.3** | **-0.7** |
| | baz=317 | | | | | | | | |
| **EDH** | **Donghe** | **0.90** | **89** | | *e*P | | **Pn** | **13 42 14.6** | **+1.9** |
| | baz=105 | | | | | | | | |
| EDH | | | | | *e*S | | **Sn** | **13 42 27.3** | **+2.9** |
| | baz=105 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.90** | **357** | | *e*P | | **Pb** | **13 42 13.6** | **0.0** |
| | baz=345 | | | | | | | | |
| WTCT | | | | | *e*S | | **Sn** | **13 42 26.9** | **+2.3** |
| | baz=345 | | | | | | | | |
| **FULB** | **Fuli** | **0.92** | **75** | | *e*P | | **Pn** | **13 42 15.3** | **+2.3** |
| | baz=75 | | | | | | | | |
| **WJS** | **Zhushan** | **0.93** | **23** | | P | | **Pb** | **13 42 14.5** | **+0.4** |
| | baz=23 | | | | | | | | |
| WJS | | | | | *e*S | | **Sn** | **13 42 27.6** | **+2.3** |
| | baz=23 | | | | | | | | |
| **PNG** | **Penghu** | **0.93** | **310** | | *e*P | | **Pn** | **13 42 13.8** | **+0.6** |
| | baz=318 | | | | | | | | |
| PNG | | | | | *e*S | | **Sb** | **13 42 25.8** | **-0.4** |
| | baz=318 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.94** | **3** | | *e*P | | **Pn** | **13 42 14.1** | **+0.9** |
| | baz=352 | | | | | | | | |
| WRL | | | | | *e*S | | **Sb** | **13 42 26.8** | **+0.5** |
| | baz=352 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.96** | **82** | | *e*P | | **Pn** | **13 42 13.7** | **+0.1** |
| | baz=83 | | | | | | | | |
| CHKT | | | | | *e*S | | **Sn** | **13 42 29.7** | **+3.6** |
| | baz=83 | | | | | | | | |
| **WNT** | **Mingjian** | **0.97** | **20** | | *e*P | | **Pb** | **13 42 15.0** | **+0.3** |
| | baz=20 | | | | | | | | |
| WNT | | | | | *e*S | | **Sn** | **13 42 28.6** | **+2.3** |
| | baz=20 | | | | | | | | |
| **EYUL** | **Yuli** | **0.99** | **67** | | P | | **Pb** | **13 42 15.5** | **+0.5** |
| | baz=67 | | | | | | | | |
| EYUL | | | | | *e*S | | **Sn** | **13 42 27.9** | **+1.2** |
| | baz=67 | | | | | | | | |
| **YULB** | **Yu-li** | **0.99** | **64** | | *e*P | | **Pb** | **13 42 15.2** | **+0.1** |
| | baz=64 | | | | | | | | |
| YULB | | | | | *e*S | | **Sn** | **13 42 28.5** | **+1.7** |
| | baz=64 | | | | | | | | |
| **YULB** | **Yu-li** | **0.99** | **64** | | Pn | | **Pb** | **13 42 14.8** | **-0.2** |
| **SSLB** | **Suanglung** | **1.00** | **35** | | *e*P | | **Pb** | **13 42 15.4** | **+0.1** |
| | baz=25 | | | | | | | | |
| SSLB | | | | | *e*S | | **Sn** | **13 42 29.6** | **+2.4** |
| | baz=25 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.00** | **35** | | Pn | | **Pn** | **13 42 15.3** | **+1.1** |
| **HEN** | **Hengchun** | **1.02** | **158** | | *e*P | | **Pb** | **13 42 15.9** | **+0.3** |
| | baz=159 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.05** | **153** | | *e*P | | **Pb** | **13 42 16.9** | **+0.9** |
| | baz=155 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.06** | **30** | | *e*P | | **Pb** | **13 42 16.4** | **+0.1** |
| | baz=30 | | | | | | | | |
| **EHY** | **Hungye** | **1.06** | **59** | | P | | **Pb** | **13 42 17.1** | **+0.8** |
| | baz=67 | | | | | | | | |
| EHY | | | | | *e*S | | **Sn** | **13 42 30.6** | **+2.0** |
| | baz=67 | | | | | | | | |
| **VWDT** | **VWDT** | **1.09** | **43** | | *e*P | | **Pb** | **13 42 17.2** | **+0.6** |
| | baz=44 | | | | | | | | |
| VWDT | | | | | *e*S | | **Sb** | **13 42 31.6** | **+1.1** |
| | baz=44 | | | | | | | | |
| **LDUT** | **Ludao** | **1.09** | **105** | | *e*P | | **Pn** | **13 42 15.9** | **+0.6** |
| | baz=106 | | | | | | | | |
| LDUT | | | | | *e*S | | **Sn** | **13 42 31.3** | **+2.1** |
| | baz=106 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.10** | **156** | | *e*P | | **Pb** | **13 42 16.9** | **-0.1** |
| | baz=157 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.11** | **156** | | *e*P | | **Pb** | **13 42 16.9** | **-0.2** |
| | baz=157 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.13** | **11** | | *e*P | | **Pn** | **13 42 17.2** | **+1.3** |
| | baz=11 | | | | | | | | |
| WCHH | | | | | *e*S | | **Sb** | **13 42 33.0** | **+1.0** |
| | baz=11 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.14** | **62** | | P | | **Pb** | **13 42 18.3** | **+0.8** |
| | baz=64 | | | | | | | | |
| HGSD | | | | | *e*S | | **Sb** | **13 42 34.3** | **+2.3** |
| | baz=64 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.22** | **26** | | *e*P | | **Pb** | **13 42 18.8** | **-0.1** |
| | baz=42 | | | | | | | | |
| WCS | | | | | *e*S | | **Sb** | **13 42 35.0** | **+0.7** |
| | baz=42 | | | | | | | | |
| **TCU** | **Taichung** | **1.22** | **15** | | *e*P | | **Pb** | **13 42 20.0** | **+1.0** |
| | baz=360 | | | | | | | | |
| **WUSB** | **Renai** | **1.26** | **35** | | *e*P | | **Pb** | **13 42 19.7** | **+0.1** |
| | baz=28 | | | | | | | | |
| **ESL** | **Shilin** | **1.32** | **50** | | *e*P | | **Pb** | **13 42 21.4** | **+0.7** |
| | baz=52 | | | | | | | | |
| ESL | | | | | *e*S | | **Sb** | **13 42 38.4** | **+1.1** |
| | baz=52 | | | | | | | | |
| **CHGB** | **Renai** | **1.34** | **35** | | *e*P | | **Pb** | **13 42 21.2** | **+0.1** |
| | baz=38 | | | | | | | | |
| CHGB | | | | | *e*S | | **Sn** | **13 42 37.3** | **+1.5** |
| | baz=38 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.41** | **12** | | *e*P | | **Pb** | **13 42 22.3** | **+0.1** |
| | baz=13 | | | | | | | | |
| WDJ | | | | | *e*S | | **Sb** | **13 42 41.2** | **+1.4** |
| | baz=13 | | | | | | | | |
| **WHP** | **Taichung City** | **1.43** | **23** | | *e*P | | **Pb** | **13 42 22.7** | **+0.2** |
| | baz=27 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.44** | **16** | | *e*P | | **Pb** | **13 42 22.2** | **-0.5** |
| | baz=2.0 | | | | | | | | |
| TWQ1 | | | | | *e*S | | **Sb** | **13 42 41.3** | **+0.7** |
| | baz=2.0 | | | | | | | | |
| **TDCB** | **Techi** | **1.50** | **30** | | *e*P | | **Pn** | **13 42 23.0** | **+2.0** |
| | baz=34 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.50** | **129** | | *e*P | | **Pn** | **13 42 19.6** | **-1.3** |
| | baz=129 | | | | | | | | |
| **NSY** | **Sanyi** | **1.50** | **15** | | *e*P | | **Pb** | **13 42 23.8** | **+0.1** |
| | baz=19 | | | | | | | | |
| **TWT** | **Tachien** | **1.50** | **31** | | *e*P | | **Pb** | **13 42 23.3** | **-0.5** |
| | baz=34 | | | | | | | | |
| **FUSS** | **Fushou** | **1.53** | **33** | | *e*P | | **Pb** | **13 42 24.1** | **-0.2** |
| | baz=36 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.63** | **40** | | *e*P | | **Pb** | **13 42 26.1** | **+0.2** |
| | baz=44 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.68** | **44** | | *e*P | | **Pb** | **13 42 26.0** | **-0.6** |
| | baz=62 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.68** | **44** | | Pn | | **Pb** | **13 42 26.4** | **-0.2** |
| **NNSB** | **Datong** | **1.75** | **33** | | *e*P | | **Pb** | **13 42 27.3** | **-0.7** |
| | baz=37 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.76** | **33** | | *e*P | | **Pb** | **13 42 28.7** | **+0.6** |
| | baz=37 | | | | | | | | |
| **LIOB** | **Emei** | **1.79** | **20** | | *e*P | | **Pn** | **13 42 26.4** | **+1.5** |
| | baz=26 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.81** | **23** | | *e*P | | **Pn** | **13 42 27.4** | **+2.0** |
| | baz=7.0 | | | | | | | | |
| **LATG** | **Datong** | **1.91** | **35** | | *e*P | | **Pb** | **13 42 29.6** | **-1.1** |
| | baz=40 | | | | | | | | |
| **NSK** | **Sanguang** | **1.95** | **29** | | *e*P | | **Pb** | **13 42 31.3** | **0.0** |
| | baz=16 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.95** | **29** | | *e*P | | **Pb** | **13 42 30.3** | **-1.1** |
| | baz=16 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.95** | **29** | | Pn | | **Pb** | **13 42 30.1** | **-1.3** |
| **EWUT** | **Wuta** | **1.99** | **42** | | *e*P | | **Pb** | **13 42 31.3** | **-0.6** |
| | baz=60 | | | | | | | | |
| **ENTT** | **Nioudou** | **2.02** | **34** | | *e*P | | **Pb** | **13 42 32.0** | **-0.5** |
| | baz=39 | | | | | | | | |
| **NDS** | **Dongshan** | **2.10** | **37** | | *e*P | | **Pb** | **13 42 33.9** | **+0.2** |
| | baz=43 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.13** | **32** | | *e*P | | **Pb** | **13 42 33.3** | **-1.1** |
| | baz=38 | | | | | | | | |
| **TWE** | **Neicheng** | **2.14** | **35** | | *e*P | | **Pb** | **13 42 34.3** | **-0.1** |
| | baz=41 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.33** | **310** | | Pn | | **Pn** | **13 42 33.6** | **+1.3** |
| **TIPB** | **Shuangxi** | **2.43** | **34** | | *e*P | | **Pn** | **13 42 36.7** | **+2.9** |
| | baz=24 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.88** | **58** | | Pn | | **Pn** | **13 42 39.1** | **-0.8** |
| **QIZ** | **Qiongzhong** | **10.55** | **250** | | Pn | | **Pn** | **13 44 23.0** | **-2.3** |
| **JHS** | **Saijyo** | **16.38** | **40** | | Pn | | **Pn** | **13 45 40.7** | **-3.2** |
| **MYLDM** | **Lahad Datu** | **17.76** | **186** | | | | **Pn** | **13 46 01.1** | **0.0** |
| MYLDM | | | | | | IAmb | IAmb | 13 46 07.2 | |
| | comp=Z,9.5nm,1.0s | | | | | | | | |
| **PALK** | **Pallekele** | **41.14** | **254** | | P | | **P** | **13 49 38.0** | **+0.2** |
| **KURK** | **Kurchatov** | **42.54** | **321** | | P | | **P** | **13 49 47.8** | **-0.9** |
| **WB0** | **Warramunga Arr** | **44.63** | **161** | | P | | **P** | **13 50 04.1** | **-1.8** |
| WB0 | | | | | | IAmb | IAmb | 13 50 04.8 | |
| | comp=Z,3.5nm,1.1s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.86** | **161** | | P | | **P** | **13 50 07.7** | **+0.1** |
| WR0 | | | | | | IAmb | IAmb | 13 50 10.9 | |
| | comp=Z,3.4nm,1.1s | | | | | | | | |

*IDC **06** 13:45:12.7±1.1, 19°14S×174°50W, h0km, mb3.9/9, mb1 4.2/11, mb1mx3.9/35, mbtmp3.9/11, ML3.9/2, MS3.4/2, Ms1 3.4/2, ms1mx2.7/61, Error ellipse: s-maj=48.2km s-min=18.5km az=141.0*

**ISC 06 13:45:16.8±0.8, 19°2S±0.1×174°2W±0.1, h35km, n17, σ2s33/12, mb3.9/8, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.75** | **24** | Pn | **Pn** | **13 46 41.1** | **+1.3** |
| | 5.4nm,0.3s,baz=246,slow=10.0,SNR=8.0 | | | | | | |
| AFI | | | | Sn | **Sn** | **13 47 40.2** | **-4.5** |
| | 4.5nm,0.3s,baz=286,slow=22,SNR=1.8 | | | | | | |
| **MSVF** | **Nonsavu** | **7.51** | **280** | Pn | Pn | 13 47 12.5 | +8.6 |
| | 0.8nm,0.3s,baz=38,slow=19,SNR=11 | | | | | | |
| MSVF | | | | LR | LR | 13 49 38.6 | |
| | comp=Z,113nm,18.7s,baz=100,slow=37 | | | | | | |
| **RAR** | **Rarotonga** | **13.68** | **101** | Pn | **Pn** | **13 48 26.5** | **-1.9** |
| | 2.2nm,0.3s,baz=261,slow=8.5,SNR=2.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.34** | **258** | P | **P** | **13 49 26.9** | **-1.6** |
| | 0.3nm,0.3s,baz=97,slow=12,SNR=4.0 | | | | | | |
| **URZ** | **Urewera** | **20.44** | **200** | P | Pn | 13 49 51.7 | -1.6 |
| | 3.2nm,0.3s,baz=92,slow=15,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **48.31** | **255** | P | **P** | **13 53 54.4** | **-0.8** |
| | 1.2nm,0.4s,baz=85,slow=8.3,SNR=54 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.34** | **260** | P | **P** | **13 53 53.2** | **-2.2** |
| | 0.6nm,0.5s,baz=96,slow=7.2,SNR=18 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.76** | **261** | P | **P** | **13 54 56.7** | **-1.0** |
| | 1.0nm,0.6s,baz=48,slow=12,SNR=1.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.66** | **42** | P | **P** | **13 57 12.2** | **+2.1** |
| | 0.9nm,0.9s,baz=219,slow=7.0,SNR=5.6 | | | | | | |
| **H03S2** | **Juan Fernandez** | **83.74** | **124** | T | T | 15 30 12.8 | |
| | SNR=42 | | | | | | |
| **H03S1** | **Juan Fernandez** | **83.75** | **124** | T | T | 15 30 13.9 | |
| | SNR=37 | | | | | | |
| **H03S3** | **Juan Fernandez** | **83.75** | **124** | T | T | 15 30 12.6 | |
| | SNR=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.59** | **42** | P | **P** | **13 57 53.8** | **+1.9** |
| | 0.4nm,0.8s,baz=200,slow=7.7,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **86.31** | **11** | P | **P** | **13 57 56.1** | **+1.5** |
| | 0.6nm,0.7s,baz=215,slow=5.4,SNR=10 | | | | | | |
| **SNAA** | **Sanae** | **89.16** | **177** | LR | LR | 14 36 26.4 | |
| | comp=Z,47nm,19.4s,baz=354,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.09** | **288** | P | **P** | **13 58 28.9** | **+1.3** |
| | 0.6nm,0.2s,baz=87,slow=19,SNR=2.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.87** | **24** | P | **P** | **13 58 31.7** | **+1.6** |
| | 0.1nm,0.3s,baz=246,slow=4.0,SNR=3.1 | | | | | | |

*IDC **06** 13:56:19.3±1.9, 7°41S×129°54E, h0km, mb3.4/1, mb1 3.7/5, mb1mx3.4/32, mbtmp3.6/5, ML3.6/4, Error ellipse: s-maj=48.7km s-min=26.9km az=81.0*

**ISC 06 13:56:26.4±1.5, 7°9S±0.1×129°2E±0.1, h35km, n5, σ3s39/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.95** | **247** | Pn | **Pn** | **13 57 55.8** | **+3.6** |
| | 3.0nm,0.3s,baz=38,slow=5.5,SNR=8.7 | | | | | | |
| BATI | | | | Sn | **Sn** | **13 58 57.6** | **-1.6** |
| | 2.0nm,0.3s,baz=156,slow=17,SNR=1.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.71** | **199** | Pn | **Pn** | **13 59 00.1** | **+2.7** |
| | 0.6nm,0.3s,baz=20,slow=12,SNR=39 | | | | | | |
| FITZ | | | | Sn | **Sn** | **14 00 51.5** | **-4.5** |
| | 0.2nm,0.3s,baz=352,slow=14,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.93** | **158** | Pn | **Pn** | **13 59 30.9** | **+3.1** |
| | 0.3nm,0.3s,baz=341,slow=11,SNR=18 | | | | | | |
| WRA | | | | Sn | **Sn** | **14 01 48.8** | **-1.9** |
| | 0.8nm,0.3s,baz=331,slow=22,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **16.29** | **165** | Pn | **P** | **14 00 15.4** | **+0.1** |
| | 0.1nm,0.3s,baz=344,slow=11,SNR=16 | | | | | | |
| ASAR | | | | Sn | **Sn** | **14 03 11.0** | **-1.3** |
| | 0.1nm,0.3s,baz=335,slow=39,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.58** | **327** | P | **P** | **14 07 22.4** | **-3.3** |
| | 0.2nm,0.4s,baz=124,slow=8.0,SNR=11 | | | | | | |

*INMG **06** 13:59:49.9±1.6, 35°54N×3°84W, h5km±4km, ML2.2, Error ellipse: s-maj=4.9km s-min=3.2km az=2.0*
*CNRM **06** 13:59:49.7, 35°50N×3°82W, h9km, ml2.9*

**ISC 06 13:59:48.8±1.1, 35°53N±0°03×3°74W±0°03, h15km±8km, n29, σ1s36/50, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.35** | **208** | P | **Pg** | **13 59 55.7** | **-0.3** |
| **PALE** | **Palemas** | **0.35** | **208** | P | **Pg** | **13 59 55.8** | **-0.2** |
| PALE | | | | S | **Sg** | **13 59 59.7** | **-1.2** |
| **GOG** | **Mont Gurugu** | **0.68** | **117** | P | **Pg** | **14 00 03.1** | **+1.0** |
| GOG | | | | S | **Sg** | **14 00 14.0** | **+2.8** |
| **GOG** | **Mont Gurugu** | **0.68** | **117** | P | **Pg** | **14 00 02.7** | **+0.6** |
| GOG | | | | S | **Sg** | **14 00 11.5** | **+0.3** |
| **CHAS** | **Isla Isabel II** | **1.12** | **107** | P | **Pg** | **14 00 08.7** | **-1.8** |
| CHAS | | | | S | **Sg** | **14 00 23.0** | **-2.1** |
| **TAF** | **Taforalt** | **1.30** | **123** | P | **Pn** | **14 00 15.0** | **+2.6** |
| **TAF** | **Taforalt** | **1.30** | **123** | P | **Pn** | **14 00 12.8** | **+0.4** |
| TAF | | | | S | **Sb** | **14 00 28.9** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.37** | **253** | P | **Pn** | **14 00 13.7** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.37** | **253** | P | **Pn** | **14 00 13.5** | **+0.1** |
| CHEFC | | | | S | **Sn** | **14 00 32.1** | **+0.7** |
| **JBK** | **JBK** | **1.53** | **141** | P | **Pn** | **14 00 14.7** | **-1.0** |
| JBK | | | | S | **Sn** | **14 00 33.0** | **-2.5** |
| **LCRM** | **LCR** | **2.06** | **207** | P | **Pn** | **14 00 24.5** | **+1.6** |
| LCRM | | | | S | **Sb** | **14 00 51.2** | **-0.1** |
| **MD31** | **MD31** | **2.79** | **198** | P | **Pn** | **14 00 33.4** | **+0.5** |
| MD31 | | | | S | **Sn** | **14 01 05.5** | **-0.7** |
| **MDT** | **Midelt** | **2.80** | **195** | P | **Pn** | **14 00 33.6** | **+0.5** |
| MDT | | | | S | **Sn** | **14 01 08.1** | **+1.5** |
| **TDRA** | **Tendrara** | **2.86** | **150** | P | **Pn** | **14 00 33.9** | **-0.1** |
| TDRA | | | | S | **Sn** | **14 01 08.8** | **+0.6** |
| **CART** | **Cartagena** | **3.01** | **46** | P | **Pn** | **14 00 37.5** | **+1.6** |
| CART | | | | S | **Sn** | **14 01 11.1** | **-0.6** |
| **ZHG** | **ZHG** | **3.17** | **230** | P | **Pn** | **14 00 40.5** | **+2.3** |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | *e*Pn | **Pn** | **14 00 46.4** | **+1.0** |
| PVAQ | | | | *e*Sn | **Sn** | **14 01 27.4** | **-1.5** |
| PVAQ | | | | A | A | 14 01 29.0 | |
| | 5.2nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | P | **Pn** | **14 00 46.5** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | P | **Pn** | **14 00 46.5** | **+1.0** |
| PVAQ | | | | S | **Sn** | **14 01 28.2** | **-0.7** |
| **PCVE** | **Castro Verde** | **4.05** | **302** | *e*Pn | **Pn** | **14 00 52.0** | **+1.9** |
| PCVE | | | | *e*Sn | **Sn** | **14 01 35.3** | **-1.9** |
| PCVE | | | | A | A | 14 01 40.5 | |
| | 2.8nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Pn | **Pn** | **14 00 54.5** | **+1.3** |
| MESJ | | | | *e*Sn | **Sn** | **14 01 41.7** | **-1.1** |
| MESJ | | | | A | A | 14 01 47.1 | |
| | 3.0nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.34** | **296** | *e*Pn | **Pn** | **14 00 55.6** | **+1.4** |
| MORF | | | | *e*Sn | **Sn** | **14 01 43.2** | **-1.3** |
| MORF | | | | A | A | 14 01 45.8 | |
| | 3.4nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.49** | **298** | *e*Pn | **Pn** | **14 00 58.1** | **+1.9** |
| PTEO | | | | *e*Sn | **Sn** | **14 01 47.8** | **-0.3** |
| **PESTR** | **Estremoz** | **4.53** | **318** | *e*Sn | **Sn** | **14 01 48.6** | **-0.6** |
| **PESTR** | **Estremoz** | **4.53** | **318** | P | **Pn** | **14 00 56.9** | **+0.1** |
| PESTR | | | | S | **Sn** | **14 01 47.5** | **-1.7** |
| **EVO** | **Evora** | **4.54** | **313** | *e*Sn | **Sn** | **14 01 49.1** | **-0.4** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **305** | *e*Pn | **Pn** | **14 00 58.6** | **+0.6** |
| PNCL | | | | *e*Sn | **Sn** | **14 01 49.1** | **-2.3** |
| **PMRV** | **Marv??o** | **4.86** | **324** | *e*Pn | **Pn** | **14 01 03.0** | **+1.8** |
| **PMTG** | **Montargil** | **5.03** | **316** | *e*Pn | **Pn** | **14 01 05.0** | **+1.4** |
| PMTG | | | | *e*Sn | **Sn** | **14 02 01.3** | **0.0** |

*IDC **06** 14:13:52.5±1.5, 21°33S×179°23W, h637km±17km, mb3.2/8, mb1 3.4/11, mb1mx3.0/34, mbtmp4.2/11, Error ellipse: s-maj=23.8km s-min=15.0km az=142.0*

**ISC 06 14:13:50.0±1.0, 21°3S±0°1×179°2W±0°1, h602km, n15, σ1s82/17, mb3.8/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.43** | **323** | P | **P** | **14 15 22.0** | **+3.2** |
| | 24nm,0.3s,baz=88,slow=23,SNR=178 | | | | | | |
| **DZM** | **Mont Dzumac** | **13.39** | **264** | P | **P** | **14 16 43.5** | **+0.7** |
| | 0.2nm,0.3s,baz=83,slow=19,SNR=1.4 | | | | | | |
| **URZ** | **Urewera** | **17.17** | **190** | P | **P** | **14 17 17.5** | **-0.2** |
| | 0.7nm,0.3s,baz=276,slow=4.4,SNR=6.4 | | | | | | |
| URZ | | | | S | **S** | **14 20 08.1** | **+1.4** |
| | 0.8nm,0.3s,baz=78,slow=17,SNR=5.8 | | | | | | |
| **CTA** | **Charters Tower** | **32.32** | **266** | P | **P** | **14 19 32.6** | **+1.1** |
| | 3.5nm,0.4s,baz=88,slow=10,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **43.26** | **259** | P | **P** | **14 21 00.8** | **+0.6** |
| | 3.1nm,0.8s,baz=93,slow=7.8,SNR=66 | | | | | | |
| ASAR | | | | S | **S** | **14 26 42.6** | **-2.5** |
| | 0.7nm,0.7s,baz=96,slow=16,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.40** | **263** | P | **P** | **14 21 01.2** | **0.0** |
| | 1.8nm,0.5s,baz=97,slow=7.7,SNR=23 | | | | | | |
| WRA | | | | S | **S** | **14 26 43.0** | **-4.1** |
| | 0.4nm,1.1s,baz=84,slow=12,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.83** | **263** | P | **P** | **14 22 04.7** | **+0.7** |
| | 0.6nm,0.3s,baz=88,slow=4.7,SNR=9.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.23** | **325** | P | **P** | **14 24 03.0** | **-0.8** |
| | 1.3nm,0.6s,baz=152,slow=5.4,SNR=4.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.80** | **346** | P | **P** | **14 24 40.2** | **-0.3** |
| | 4.2nm,0.9s,baz=103,slow=5.2,SNR=2.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.36** | **290** | P | **P** | **14 25 44.4** | **+0.5** |
| | 0.4nm,0.3s,baz=134,slow=3.2,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **89.37** | **13** | P | **P** | **14 25 42.0** | **-0.9** |
| | 0.3nm,0.6s,baz=210,slow=4.8,SNR=5.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.53** | **349** | PKP | **PKPdf** | **14 31 48.2** | **-2.4** |
| | 1.4nm,0.7s,baz=311,slow=5.8,SNR=1.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.19** | **330** | PKP | PKPab | 14 32 13.3 | -1.2 |
| | 2.2nm,0.6s,baz=42,slow=4.5,SNR=17 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.56** | **311** | PKPbc | **PKPbc** | **14 32 24.6** | **-0.7** |
| | 0.5nm,0.7s,baz=106,slow=2.7,SNR=1.4 | | | | | | |
| **GERES** | **GERESS Array B** | **150.68** | **343** | PKPbc | **PKPbc** | **14 32 34.5** | **-0.6** |
| | 0.2nm,0.3s,baz=62,slow=6.8,SNR=1.8 | | | | | | |

**RSNC 06 14:34:41.4±0.7, 6°82N×73°12W, h150km±3km, ML3.3, Mw3.5, 1C-1D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **196** | ⇓ *i*P | Pn | 14 35 01.5 | -0.6 |
| BARC | | | | *e*S | Sn | 14 35 17.0 | -0.9 |
| BARC | | | | *i* | | 14 35 19.3 | |
| | comp

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MOTC | | | | *eS* | Sn | 14 36 06.5 | -3.2 |
| MOTC | | | | *i* | | 14 36 09.4 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *eP* | Pn | 14 35 33.1 | +0.8 |
| ANIL | | | | *eS* | Sn | 14 36 12.8 | +1.3 |
| ANIL | | | | *i* | | 14 36 18.6 | |
| | comp=Z,203nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | *eP* | Pn | 14 35 36.1 | -0.3 |
| ORTC | | | | *eS* | Sn | 14 36 18.9 | -0.2 |
| ORTC | | | | *i* | | 14 36 25.5 | |
| | comp=Z,41nm,0.3s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | *eP* | Pn | 14 35 42.1 | -2.0 |
| CRJC | | | | *eS* | Sn | 14 36 29.7 | -3.2 |
| CRJC | | | | *i* | | 14 36 36.4 | |
| | comp=Z,35nm,0.5s | | | | | | |

*EAF **06** 14:48:15.5±28.0, 25°.39S×29°.88E, h10km±234km, MD3.7*
*BUL **06** 14:48:15.9±0.5, 25°.43S×29°.85E, h10km, MD3.9*

**ISC 06 14:48:13.1**±1.0, **25°.45S**±0°.04×**29°.90E**±0°.04, **h10km, n14,**
σ1**56**/28, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.23** | **113** | *eP* | **Pb** | **14 48 53.1** | **-0.3** |
| CNG | | | | *eS* | **Sb** | **14 49 20.6** | **-0.5** |
| **CNG** | **Changalane** | **2.23** | **113** | *eP* | **Pb** | **14 48 53.1** | **-0.3** |
| CNG | | | | *eS* | **Sb** | **14 49 20.6** | **-0.5** |
| **MOPA** | **Mopani** | **2.36** | **36** | *eP* | **Pn** | **14 48 53.0** | **+1.0** |
| MOPA | | | | *eS* | **Sn** | **14 49 20.4** | **-0.7** |
| **MOPA** | **Mopani** | **2.36** | **36** | *eP* | **Pn** | **14 48 53.0** | **+1.0** |
| MOPA | | | | *eS* | **Sn** | **14 49 20.4** | **-0.7** |
| **MSNA** | **Messina** | **3.10** | **2** | *eP* | **Pn** | **14 49 04.3** | **+2.2** |
| MSNA | | | | *eS* | **Sn** | **14 49 39.7** | **+0.5** |
| **MSNA** | **Messina** | **3.10** | **2** | *eP* | **Pn** | **14 49 04.3** | **+2.2** |
| MSNA | | | | *eS* | **Sn** | **14 49 39.7** | **+0.5** |
| **LBTB** | **Lobatse** | **3.92** | **275** | *eP* | **Pn** | **14 49 14.9** | **+1.4** |
| LBTB | | | | *eS* | **Sn** | **14 49 58.8** | **-0.9** |
| **LBTB** | **Lobatse** | **3.92** | **275** | *eP* | **Pn** | **14 49 14.9** | **+1.4** |
| LBTB | | | | *eS* | **Sn** | **14 49 58.8** | **-0.9** |
| **MATP** | **Matopo** | **5.17** | **345** | *eP* | **Pn** | **14 49 31.7** | **+1.0** |
| MATP | | | | *eS* | **Sn** | **14 50 28.3** | **-2.2** |
| **MATP** | **Matopo** | **5.17** | **345** | *eP* | **Pn** | **14 49 31.7** | **+1.0** |
| MATP | | | | *eS* | **Sn** | **14 50 28.3** | **-2.2** |
| **BOSA** | **Boshof** | **5.20** | **232** | *eP* | **Pn** | **14 49 33.0** | **+1.9** |
| BOSA | | | | *eS* | **Sn** | **14 50 29.5** | **-1.8** |
| **BOSA** | **Boshof** | **5.20** | **232** | *eP* | **Pn** | **14 49 33.0** | **+1.9** |
| BOSA | | | | *eS* | **Sn** | **14 50 29.5** | **-1.8** |
| **BLWY** | **Bulawayo** | **5.42** | **347** | *eP* | **Pn** | **14 49 35.6** | **+1.4** |
| BLWY | | | | *eS* | **Sn** | **14 50 34.3** | **-2.4** |
| **BLWY** | **Bulawayo** | **5.42** | **347** | *eP* | **Pn** | **14 49 35.6** | **+1.4** |
| BLWY | | | | *eS* | **Sn** | **14 50 34.3** | **-2.4** |

**KRSC 06 14:54:40.5**±1.6, **53°.82N**×**162°.68E, h59**km±27km, **ML3.9,**
**Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.92** | **323** | *eP* | Pn | 14 54 58.7 | +1.3 |
| MKZ | | | | *eS* | Sn | 14 55 09.9 | 0.0 |
| **SPN** | **Mys Shipunski** | **1.75** | **246** | *eP* | Pn | 14 55 10.9 | +2.4 |
| SPN | | | | *eS* | Sn | 14 55 30.7 | +1.1 |
| **TUMD** | **Tumrok D** | **1.92** | **317** | *eP* | Pn | 14 55 12.6 | +1.8 |
| TUMD | | | | *eS* | Sn | 14 55 35.3 | +1.5 |
| **KII** | **Karymskiy** | **1.92** | **278** | *eP* | Pn | 14 55 13.5 | +2.6 |
| KII | | | | *eS* | Sn | 14 55 35.5 | +1.5 |
| **TUMR** | **Tumrok** | **2.08** | **316** | *eP* | Pn | 14 55 15.8 | +2.7 |
| **NLC** | **Nalytchevo** | **2.10** | **253** | *eP* | Pn | 14 55 16.6 | +3.4 |
| NLC | | | | *eS* | Sn | 14 55 40.2 | +2.1 |
| **SDLR** | **Sedlovina** | **2.33** | **258** | *eP* | Pn | 14 55 19.8 | +3.3 |
| SDLR | | | | *eS* | Sn | 14 55 46.9 | +2.9 |
| **BKI** | **Bering** | **2.37** | **53** | *eP* | Pn | 14 55 19.5 | +2.6 |
| BKI | | | | *eS* | Sn | 14 55 45.4 | +0.7 |
| **SMAR** | **Somma** | **2.38** | **258** | *eP* | Pn | 14 55 20.5 | +3.2 |
| SMAR | | | | *eS* | Sn | 14 55 48.2 | +2.8 |
| **UGLR** | **Uglovaya** | **2.38** | **257** | *eP* | Pn | 14 55 20.8 | +3.5 |
| UGLR | | | | *eS* | Sn | 14 55 48.6 | +3.3 |
| **KBTR** | **Krutoberegovo** | **2.39** | **2** | *eP* | Pn | 14 55 19.2 | +1.9 |
| **KMNR** | **Kamenistaya** | **2.40** | **325** | *eP* | Pn | 14 55 20.7 | +3.3 |
| KMNR | | | | *eS* | Sn | 14 55 49.4 | +3.7 |
| **KRER** | **Koryakskii** | **2.40** | **259** | *eP* | Pn | 14 55 21.2 | +3.6 |
| KRER | | | | *eS* | Sn | 14 55 48.4 | +2.5 |
| **BZGR** | **Bezymyannyi-Gr** | **2.41** | **332** | *eP* | Pn | 14 55 21.9 | +4.3 |
| **AVH** | **Avacha** | **2.42** | **258** | *eP* | Pn | 14 55 21.4 | +3.7 |
| AVH | | | | *eS* | Sn | 14 55 48.8 | +2.7 |
| **KBG** | **Krutoberegovo** | **2.44** | **0** | *eP* | Pn | 14 55 19.3 | +1.4 |
| KBG | | | | *eS* | Sn | 14 55 47.8 | +1.4 |
| **ZLN** | **Zelenaya** | **2.45** | **335** | *eP* | Pn | 14 55 21.9 | +3.7 |
| **KOK** | **Koryaka** | **2.47** | **259** | *eP* | Pn | 14 55 21.9 | +3.5 |
| KOK | | | | *eS* | Sn | 14 55 50.3 | +2.9 |
| **DALK** | **Dalny** | **2.48** | **253** | *eP* | Pn | 14 55 21.7 | +3.3 |
| DALK | | | | *eS* | Sn | 14 55 49.5 | +2.0 |
| **BZWR** | **Bezymyannyi-We** | **2.49** | **330** | *eP* | Pn | 14 55 22.6 | +3.9 |
| **KIRR** | **Kirishev** | **2.52** | **329** | *eP* | Pn | 14 55 22.5 | +3.3 |
| **LGNR** | **Loginova** | **2.54** | **334** | *eS* | Sn | 14 55 53.9 | +4.5 |
| **PET** | **Petropavlovsk** | **2.54** | **253** | *eP* | Pn | 14 55 22.8 | +3.6 |
| PET | | | | *eS* | Sn | 14 55 50.5 | +1.6 |
| **KPT** | **Kopyto** | **2.57** | **328** | *eP* | Pn | 14 55 23.3 | +3.5 |
| **KRSR** | **Krestovskiy** | **2.69** | **334** | *eP* | Pn | 14 55 24.5 | +3.1 |
| **KLY** | **Klyuchi** | **2.75** | **336** | *eP* | Pn | 14 55 25.2 | +3.0 |
| KLY | | | | *eS* | Sn | 14 55 55.9 | +1.7 |
| **KOZ** | **Kozyrevsk** | **2.76** | **325** | *eP* | Pn | 14 55 25.3 | +3.0 |
| KOZ | | | | *eS* | Sn | 14 55 57.3 | +2.8 |
| **GNL** | **Ganaly** | **2.81** | **269** | *eP* | Pn | 14 55 27.6 | +4.4 |
| GNL | | | | *eS* | Sn | 14 56 00.4 | +4.5 |
| **RUS** | **Russkaya** | **2.87** | **243** | *eP* | Pn | 14 55 27.2 | +3.4 |
| RUS | | | | *eS* | Sn | 14 55 59.5 | +2.4 |
| **KRMR** | **Karymshinskiy** | **2.90** | **252** | *eP* | Pn | 14 55 27.7 | +3.5 |
| KRMR | | | | *eS* | Sn | 14 56 01.0 | +3.1 |
| **MTVR** | **Mutnovka** | **3.02** | **245** | *eP* | Pn | 14 55 30.0 | +4.0 |
| MTVR | | | | *eS* | Sn | 14 56 03.8 | +2.8 |
| **GRL** | **Gorelyy** | **3.05** | **247** | *eP* | Pn | 14 55 30.6 | +4.2 |
| GRL | | | | *eS* | Sn | 14 56 04.0 | +2.3 |
| **ESO** | **Esso** | **3.12** | **314** | *eP* | Pn | 14 55 29.9 | +2.7 |
| ESO | | | | *eS* | Sn | 14 56 05.1 | +1.9 |
| **KDTR** | **Khodutka, Kamc** | **3.44** | **236** | *eP* | Pn | 14 55 34.9 | +3.3 |
| KDTR | | | | *eS* | Sn | 14 56 12.2 | +1.0 |
| **SKR** | **Severo-Kuril's** | **5.11** | **235** | P | Pn | 14 55 58.5 | +4.0 |
| SKR | | | | *eS* | Sn | 14 56 52.2 | +0.1 |

*CNRM **06** 14:56:03.5, 35°.65N×3°.51W, h28km, ml2.7*

**ISC 06 14:56:00.7**±1.3, **35°.69N**±0°.07×**3°.52W**±0°.05, **h14km, n8,**
σ1**°03**/14, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.58** | **216** | P | **Pn** | **14 56 14.2** | **-0.4** |
| PALE | | | | S | **Sn** | **14 56 23.0** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.64** | **137** | P | **Pn** | **14 56 15.4** | **0.0** |
| GOG | | | | S | **Sn** | **14 56 24.6** | **-0.8** |
| **CHAS** | **Isla Isabel II** | **1.03** | **119** | P | **Pn** | **14 56 20.7** | **+0.1** |
| CHAS | | | | S | **Sg** | **14 56 34.1** | **+0.2** |
| **JBK** | **JBK** | **1.56** | **150** | P | **Pn** | **14 56 29.0** | **+0.7** |
| JBK | | | | S | **Sn** | **14 56 48.2** | **-0.3** |
| **MD31** | **MD31** | **3.00** | **200** | P | **Pn** | **14 56 49.5** | **+1.6** |
| **MDT** | **Midelt** | **3.01** | **198** | P | **Pn** | **14 56 48.9** | **+0.8** |
| **PVAQ** | **Vaqueiros** | **3.79** | **298** | *e*Pn | **Pn** | **14 56 59.8** | **+1.2** |
| PVAQ | | | | *e*Sn | **Sn** | **14 57 41.6** | **-1.4** |
| PVAQ | | | | A | A | 14 57 45.2 | |
| | 3.7nm,0.7s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.68** | **303** | *e*Pn | **Pn** | **14 57 11.9** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **14 58 03.7** | **-1.4** |

*TUL **06** 15:12:29.2±1.1, 36°.13N±0°.01×97°.28W±0°.01, h6km±7km,*
*ML2.9, mb_Lg3.0/69(NEIC), Error ellipse: s-maj=1.6km*
*s-min=1.5km az=61.0*

**NEIC 06 15:12:29.2**±0.8, **36°.14N**±0°.01×**97°.28W**±0°.01, **h5**km±7km,
**Error ellipse: s-maj=2.1km s-min=1.5km az=194.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.29** | **109** | Pg | Pg | 15 12 35.4 | +0.4 |
| **OK029** | **Liberty Lake** | **0.37** | **202** | Pg | Pg | 15 12 36.2 | -0.2 |
| OK029 | | | | Sg | Sg | 15 12 41.5 | +0.4 |
| **OK031** | **S. Brethren Rd** | **0.41** | **117** | Pg | Pg | 15 12 37.2 | +0.2 |
| OK031 | | | | Sg | Sg | 15 12 42.6 | +0.2 |
| **OK030** | **Cody Creek RV** | **0.46** | **117** | Pg | Pg | 15 12 38.3 | +0.2 |
| **QUOK** | **Quay** | **0.47** | **86** | Pg | Pg | 15 12 38.5 | +0.3 |
| **OK034** | **N. Norfolk Rd.** | **0.48** | **105** | Pg | Pg | 15 12 38.6 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **0.55** | **209** | Pg | Pg | 15 12 39.8 | 0.0 |
| **OK025** | **Westminster Rd** | **0.56** | **185** | Pg | Pg | 15 12 40.0 | +0.1 |
| **BLOK** | **Blackwell** | **0.62** | **5** | Pg | Pg | 15 12 41.5 | +0.3 |
| **CROK** | **Carrier** | **0.67** | **303** | Pg | Pg | 15 12 42.3 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.73** | **191** | | Pg | 15 12 43.2 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.74** | **190** | Pg | Pg | 15 12 43.3 | -0.2 |
| **GC02** | **Grant County #** | **0.85** | **327** | Pg | Pg | 15 12 45.5 | 0.0 |
| **FNO** | **Franklin** | **0.89** | **186** | Pg | Pg | 15 12 45.8 | -0.4 |
| **KAN13** | **South Haven SW** | **0.89** | **350** | Pg | Pg | 15 12 45.9 | -0.3 |
| KAN13 | | | | IAmb_Lg | | 15 12 58.7 | |
| | comp=Z,88nm,0.7s | | | | | | |
| **KAN14** | **Manchester OK** | **0.98** | **326** | Pg | Pg | 15 12 48.2 | +0.2 |
| **KAN17** | **Caldwell West** | **0.98** | **337** | Pg | Pg | 15 12 48.0 | -0.1 |
| **T35A** | **Sooner Cattle** | **0.99** | **38** | Pg | Pg | 15 12 48.2 | -0.1 |
| **OK032** | **Salt Plains WL** | **1.00** | **312** | Pg | Pg | 15 12 48.2 | -0.2 |
| **W35A** | **Tecumseh** | **1.04** | **161** | Pg | Pg | 15 12 48.1 | -1.1 |
| **KAN01** | **Argonia South** | **1.08** | **339** | | Pg | 15 12 50.0 | -0.1 |
| **KAN10** | **Anthony SW Sta** | **1.18** | **327** | Pg | Pg | 15 12 51.5 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.22** | **333** | | Pg | 15 12 52.0 | -0.6 |
| **TUL1** | **Leonard** | **1.23** | **100** | Pg | Pg | 15 12 51.8 | -1.0 |
| **KAN16** | **Harper SW Stat** | **1.25** | **330** | | Pg | 15 12 52.8 | -0.4 |
| **KAN12** | **Harper NE Stat** | **1.29** | **334** | | Pg | 15 12 52.6 | -1.4 |
| **U32A** | **Winter Ranch,** | **1.41** | **280** | Pn | Pn | 15 12 55.1 | -0.5 |
| **X34A** | **Smith Ranch, M** | **1.60** | **196** | | Pn | 15 12 58.6 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.86** | **222** | | Pn | 15 13 02.2 | +0.4 |
| WMOK | | | | IAmb_Lg | | 15 13 30.2 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **2.14** | **178** | | Pn | 15 13 06.2 | +0.5 |
| LOOK | | | | IAmb_Lg | | 15 13 39.4 | |
| | comp=Z,59nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **2.20** | **134** | Pn | Pn | 15 13 06.8 | +0.4 |
| **U38A** | **Gravette** | **2.36** | **82** | Pn | Pn | 15 13 09.4 | +0.7 |
| **R32A** | **Long Quarter,** | **2.55** | **334** | | Pn | 15 13 11.7 | +0.3 |
| R32A | | | | IAmb_Lg | | 15 13 49.1 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **3.00** | **107** | IAmb_Lg | | 15 14 13.0 | |
| | comp=Z,67nm,1.2s | | | | | | |
| **KSU1** | **Kansas State U** | **3.00** | **10** | IAmb_Lg | | 15 14 12.2 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.31** | **325** | | Pn | 15 13 22.1 | +0.4 |
| CBKS | | | | IAmb_Lg | | 15 14 22.0 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.42** | **117** | Pn | Pn | 15 13 23.8 | +0.5 |
| **S39A** | **Bolivar** | **3.53** | **63** | | Pn | 15 13 25.3 | +0.5 |
| S39A | | | | IAmb_Lg | | 15 14 27.7 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **3.59** | **85** | IAmb_Lg | | 15 14 28.1 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.80** | **252** | IAmb_Lg | | 15 14 35.5 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.99** | **113** | IAmb_Lg | | 15 14 38.0 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.15** | **100** | IAmb_Lg | | 15 14 45.0 | |
| | comp=Z,46nm,1.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.16** | **74** | IAmb_Lg | | 15 14 42.5 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.19** | **92** | IAmb_Lg | | 15 14 44.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.21** | **124** | IAmb_Lg | | 15 14 50.6 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.21** | **102** | IAmb_Lg | | 15 14 49.5 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **60** | IAmb_Lg | | 15 14 53.4 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.57** | **39** | IAmb_Lg | | 15 15 00.8 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **4.68** | **127** | IAmb_Lg | | 15 15 09.7 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **LCAR** | **Lake Charles** | **4.96** | **89** | IAmb_Lg | | 15 15 10.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.19** | **67** | IAmb_Lg | | 15 15 21.9 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **5.30** | **353** | IAmb_Lg | | 15 15 24.5 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.35** | **183** | IAmb_Lg | | 15 15 32.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.35** | **49** | IAmb_Lg | | 15 15 17.6 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.56** | **81** | IAmb_Lg | | 15 15 30.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.79** | **69** | IAmb_Lg | | 15 15 35.1 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.82** | **282** | IAmb_Lg | | 15 15 41.3 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **201** | IAmb_Lg | | 15 15 47.6 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **6.07** | **324** | IAmb_Lg | | 15 15 44.6 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **SLM** | **Saint Louis** | **6.14** | **64** | IAmb_Lg | | 15 15 49.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **6.86** | **297** | IAmb_Lg | | 15 16 11.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **K38A** | **Parkersburg** | **7.38** | **27** | IAmb_Lg | | 15 16 44.1 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.68** | **37** | IAmb_Lg | | 15 17 21.8 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **I40A** | **Norwalk** | **9.28** | **31** | IAmb_Lg | | 15 17 23.6 | |
| | comp=Z,15nm,1.1s | | | | | | |

*IDC **06** 15:38:26.3±0.9, 9°.91S×126°.98E, h0km, mb3.8/6,*
*mb1 4.2/11, mb1mx3.9/35, mbtmp4.1/11, ML4.3/5, MS3.0/2,*
*Ms1 3.0/2, ms1mx2.5/63, Error ellipse: s-maj=27.7km*
*s-min=17.1km az=61.0*
*DJA **06** 15:38:31.0±0.4, 10°.5±4°×12°.7E±°, h86km±32km, M4.4/11,*
*mB5.0/5, mb4.2/7, MLv4.6/11, Mw(mB)4.2/5*

**ISC 06 15:38:30.4**±0.6, **9°.99S**±0°.06×**127°.01E**±0°.06, **h35km, n41,**
σ1**°63**/41, **mb3.9**/8, **Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.71** | **275** | P | **Pn** | **15 39 12.2** | **+0.6** |
| **SOEI** | **Soe** | **2.71** | **275** | P | **Pn** | **15 39 12.3** | **+0.6** |
| **BATI** | **Baumata** | **3.30** | **266** | Pn | **Pn** | **15 39 20.5** | **+0.8** |
| | 24nm,0.3s,baz=110,slow=2.2,SNR=46 | | | | | | |
| BATI | | | | Sn | **Sn** | **15 39 57.2** | **-0.6** |
| | 45nm,0.3s,baz=290,slow=2.1,SNR=10 | | | | | | |
| **BATI** | **Baumata** | **3.30** | **266** | P | **Pn** | **15 39 20.2** | **+0.5** |
| **DRS** | **Darwin Rock St** | **4.52** | **123** | P | Pn | 15 39 41.5 | +5.1 |
| **SAUI** | **Saumlaki** | **4.68** | **65** | P | **Pn** | **15 39 36.3** | **-2.4** |
| **MMRI** | **Maumere** | **4.90** | **286** | P | **Pn** | **15 39 41.5** | **-0.1** |
| **MMRI** | **Maumere** | **4.90** | **286** | P | **Pn** | **15 39 42.1** | **+0.5** |
| **MTN** | **Manton Dam** | **4.94** | **125** | P | Pn | 15 39 47.7 | +5.5 |
| **KNRA** | **Kununurra** | **5.91** | **163** | P | **Pn** | **15 39 59.0** | **+3.5** |
| **KDU** | **Kakadu** | **5.99** | **117** | P | **Pn** | **15 40 00.4** | **+3.8** |
| **BASI** | **Baing, Sumba** | **6.34** | **267** | P | **Pn** | **15 40 01.1** | **-0.3** |
| | 0.5nm48nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **6.37** | **11** | P | **Pn** | **15 39 59.6** | **-2.3** |
| | 0.1nm1μm32nm,1.1s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **7.52** | **272** | P | **Pn** | **15 40 18.6** | **+0.9** |
| | 0.3nm592nm20nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.17** | **189** | Pn | **Pn** | **15 40 28.4** | **+1.8** |
| | 2.3nm,0.3s,baz=28,slow=11,SNR=36 | | | | | | |
| FITZ | | | | Sn | **Sn** | **15 41 57.3** | **-0.5** |
| | 7.0nm,0.3s,baz=328,slow=10,SNR=10 | | | | | | |
| **KAPI** | **Kappang** | **8.73** | **304** | LR | LR | 15 43 36.9 | |
| | comp=Z,52nm,20.4s,baz=143,slow=36 | | | | | | |
| **FAKI** | **Fak Fak** | **8.74** | **37** | P | **Pn** | **15 40 31.2** | **-3.2** |
| **FAKI** | **Fak Fak** | **8.74** | **37** | P | **Pn** | **15 40 34.4** | **0.0** |
| **SIJI** | **Sorong** | **10.00** | **25** | Pn | **Pn** | **15 40 52.4** | **+0.7** |
| | 2.8nm,0.3s,baz=212,slow=15,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.16** | **145** | Pn | **Pn** | **15 41 21.7** | **+0.3** |
| | 1.8nm,0.3s,baz=320,slow=13,SNR=70 | | | | | | |
| WRA | | | | Sn | **Sn** | **15 43 31.6** | **-4.2** |
| | 3.3nm,0.3s,baz=330,slow=20,SNR=3.2 | | | | | | |
| **MBWA** | **Marble Bar** | **13.13** | **211** | P | **Pn** | **15 41 35.8** | **+1.3** |
| **PSA00** | **Pilbara Seismi** | **13.42** | **210** | P | **Pn** | **15 41 37.3** | **-1.1** |
| **WRKA** | **Warakurna** | **15.02** | **175** | P | **Pn** | **15 42 00.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **15.11** | **155** | Pn | **Pn** | **15 42 01.4** | **0.0** |
| | 2.1nm,0.3s,baz=320,slow=10,SNR=158 | | | | | | |
| ASAR | | | | Sn | **Sn** | **15 44 43.9** | **-3.9** |
| | 1.0nm,0.3s,baz=323,slow=20,SNR=3.8 | | | | | | |
| **QIS** | **Mount Isa** | **16.05** | **132** | P | **Pn** | **15 42 14.7** | **+1.1** |
| **COEN** | **Coen** | **16.30** | **106** | P | **Pn** | **15 42 17.2** | **+0.4** |
| **UGM** | **Wanagama** | **16.42** | **276** | P | **Pn** | **15 42 16.9** | **-1.4** |
| **PMG** | **Port Moresby** | **19.87** | **90** | LR | LR | 15 52 25.6 | |
| | comp=Z,96nm,18.1s,baz=294,slow=42 | | | | | | |
| **CTA** | **Charters Tower** | **21.10** | **121** | P | **P** | **15 43 13.3** | **+1.1** |
| | 1.8nm,0.9s,baz=300,slow=14,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **25.63** | **150** | P | **P** | **15 43 58.2** | **+1.4** |
| | 1.3nm,0.5s,baz=310,slow=9.9,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.58** | **315** | P | **P** | **15 45 58.7** | **+0.1** |
| | 2.2nm,0.7s,baz=144,slow=6.8,SNR=28 | | | | | | |
| **ODAN** | **Odare** | **53.10** | **315** | *e*P | **P** | **15 47 44.6** | **-0.5** |
| **TAPN** | **Taplejung** | **53.18** | **315** | *e*P | **P** | **15 47 45.9** | **+0.2** |
| **JIRN** | **Jiri** | **54.44** | **315** | *e*P | **P** | **15 47 55.2** | **+0.2** |
| **GUN** | **Gumba** | **54.81** | **315** | *e*P | **P** | **15 47 57.6** | **0.0** |
| | 3.9nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **54.93** | **314** | *e*P | **P** | **15 47 57.8** | **-0.7** |
| **PKIN** | **Phulchoki** | **54.95** | **314** | *e*P | **P** | **15 47 57.9** | **-0.7** |
| **GKN** | **Gorkha** | **55.74** | **314** | *e*P | **P** | **15 48 03.9** | **-0.2** |
| | 5.6nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **60.41** | **344** | P | **P** | **15 48 36.5** | **+0.1** |
| | 0.3nm,0.4s,baz=169,slow=4.9,SNR=2.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **68.09** | **19** | P | **P** | **15 49 28.1** | **+1.6** |
| | 2.3nm,0.8s,baz=209,slow=4.6,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.17** | **329** | P | **P** | **15 49 33.5** | **+0.1** |
| | 0.5nm,0.6s,baz=126,slow=7.8,SNR=7.7 | | | | | | |

*IDC **06** 15:39:17.4±0.8, 9°.79S×127°.05E, h0km, mb4.1/11,*
*mb1 4.4/15, mb1mx4.2/34, mbtmp4.3/15, ML4.5/4, MS3.1/7,*
*Ms1 3.1/7, ms1mx2.8/64, Error ellipse: s-maj=27.0km*
*s-min=15.9km az=65.0*

**ISC 06 15:39:21.7**±0.6, **10°.03S**±0°.06×**127°.03E**±0°.07, **h35km, n19,**
σ2**°03**/22, **mb4.1**/11, **Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **3.31** | **267** | Pn | **Pn** | **15 40 11.6** | **+0.5** |
| | 26nm,0.3s,baz=250,slow=22,SNR=6.4 | | | | | | |
| BATI | | | | Sn | **Sn** | **15 40 48.4** | **-0.9** |
| | 60nm,0.3s,baz=58,slow=2.1,SNR=5.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.13** | **189** | Pn | **Pn** | **15 41 19.9** | **+2.5** |
| | 4.7nm,0.3s,baz=27,slow=9.5,SNR=12 | | | | | | |
| FITZ | | | | Sn | **Sn** | **15 42 46.2** | **-1.9** |
| | 13nm,0.3s,baz=81,slow=22,SNR=8.0 | | | | | | |
| FITZ | | | | LR | LR | 15 45 13.6 | |
| | comp=Z,124nm,20.6s,baz=10,slow=42 | | | | | | |
| **SIJI** | **Sorong** | **10.03** | **25** | Pn | **Pn** | **15 41 45.0** | **+1.6** |
| | 3.3nm,0.3s,baz=286,slow=11,SNR=8.2 | | | | | | |
| SIJI | | | | Sn | **Sn** | **15 43 34.4** | **-0.4** |
| | 0.5nm,0.3s,baz=91,slow=23,SNR=1.4 | | | | | | |
| SIJI | | | | LR | LR | 15 46 32.9 | |
| | comp=Z,34nm,18.3s,baz=181,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.12** | **145** | Pn | **Pn** | **15 42 12.5** | **+0.4** |
| | 3.4nm,0.3s,baz=320,slow=13,SNR=20 | | | | | | |
| WRA | | | | Sn | **Sn** | **15 44 21.2** | **-4.9** |
| | 3.2nm,0.3s,baz=319,slow=24,SNR=2.0 | | | | | | |
| WRA | | | | LR | LR | 15 46 53.0 | |
| | comp=Z,128nm,20.6s,baz=20,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **15.07** | **155** | Pn | **Pn** | **15 42 53.0** | **+0.9** |
| | 4.2nm,0.3s,baz=318,slow=11,SNR=23 | | | | | | |
| ASAR | | | | Sn | **Sn** | **15 45 34.7** | **-3.3** |
| | 2.7nm,0.3s,baz=318,slow=20,SNR=6.5 | | | | | | |
| ASAR | | | | LR | LR | 15 49 56.4 | |
| | comp=Z,216nm,19.7s,baz=338,slow=42 | | | | | | |
| **DAV** | **Davao City (W)** | **17.05** | **355** | LR | LR | 15 50 16.4 | |
| | comp=Z,65nm,20.1s,baz=242,slow=39 | | | | | | |
| **LEM** | **Lembang** | **19.46** | **278** | LR | LR | 15 52 45.4 | |
| | comp=Z,82nm,18.5s,baz=250,slow=42 | | | | | | |
| **CTA** | **Charters Tower** | **21.07** | **121** | P | **P** | **15 44 04.0** | **+1.0** |
| | 8.6nm,1.1s,baz=270,slow=12,SNR=2.5 | | | | | | |
| CTA | | | | LR | LR | 15 51 21.9 | |
| | comp=Z,53nm,21.6s,baz=298,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **25.59** | **150** | P | **P** | **15 44 50.8** | **+3.1** |
| | 4.5nm,0.6s,baz=329,slow=11,SNR=6.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.61** | **316** | P | **P** | **15 46 49.9** | **-0.3** |
| | 6.5nm,0.7s,baz=144,slow=6.7,SNR=37 | | | | | | |
| **KSRS** | **Korea Array** | **47.24** | **1** | P | **P** | **15 47 49.7** | **-1.6** |
| | 1.7nm,0.8s,baz=182,slow=8.7,SNR=4.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **47.50** | **12** | P | **P** | **15 47 51.3** | **-2.2** |
| | 1.8nm,0.6s,baz=195,slow=8.5,SNR=5.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.16** | **4** | P | **P** | **15 48 43.2** | **-0.2** |
| | 2.8nm,0.7s,baz=194,slow=8.4,SNR=4.0 |

comp=Z,2.7nm,0.6s
**WR0 Warramunga Arr 39.80 196** P **P** **15 58 47.4 +1.2**
WR0 IAmb IAmb 15 58 55.0
comp=Z,4.2nm,1.1s
**WRAB Tennant Creek 39.83 197** P **P** **15 58 47.4 +1.0**
WRAB IAmb IAmb 15 58 48.2
comp=Z,3.0nm,0.7s
**WB2 Warramunga Arr 39.84 197** P **P** **15 58 48.0 +1.4**
WB2 IAmb IAmb 15 58 48.3
comp=Z,3.5nm,0.6s
**WRA Warramunga Arr 39.84 197** P **P** **15 58 46.9 +0.3**
comp=Z,2.1nm,0.6s,baz=16,slow=9.1,SNR=30
**WRA Warramunga Arr 39.84 197** P **P** **15 58 46.7 +0.1**
**AS31 Alice Springs 43.51 196** P **P** **15 59 17.6 +1.4**
**ASAR Alice Springs 43.51 196** P **P** **15 59 17.4 +1.1**
comp=Z,0.4nm,0.5s,baz=11,slow=6.6,SNR=22
**MKAR Makanchi Array 58.47 314** P **P** **16 01 07.2 +0.2**
comp=Z,0.1nm,0.5s,baz=86,slow=11,SNR=4.2
**MKAR Makanchi Array 58.47 314** P **P** **16 01 07.4 +0.4**
**ILAR Eielson Array 63.80 26** P **P** **16 01 41.8 -0.5**
comp=Z,0.6nm,0.7s,baz=252,slow=5.4,SNR=13
**INK Inuvik 69.52 23** P **P** **16 02 18.9 +0.7**
comp=Z,1.9nm,0.8s,baz=294,slow=3.7,SNR=5.0
**YKA Yellowknife Ar 78.14 28** P **P** **16 03 08.9 +0.6**
comp=Z,0.2nm,0.6s,baz=289,slow=5.5,SNR=7.2
**FINES FINESS Array B 86.94 335** P **P** **16 03 51.4 -2.2**
comp=Z,3.5nm,1.0s,baz=64,slow=3.2,SNR=3.9

**TAP 06 16:01:41.8, 22.99N×120.41E, h14km, ML1.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHHT** | **Tainan City** | **0.06** | **303** | *i* P | Pg | 16 01 45.9 | +1.3 |
| | baz=298 | | | | | | |
| SHHT | | | | S | Sg | 16 01 49.5 | +2.9 |
| | baz=298 | | | | | | |
| **CHN3** | **Shinhua** | **0.10** | **337** | *e*P | Pg | 16 01 46.2 | +1.2 |
| | baz=337 | | | | | | |
| CHN3 | | | | *e*S | Sg | 16 01 50.3 | +3.2 |
| | baz=337 | | | | | | |
| **CHN1** | **Nanshi** | **0.23** | **30** | *e*P | Pb | 16 01 48.2 | +0.4 |
| | baz=19 | | | | | | |
| **TWK** | **Hsinying** | **0.29** | **15** | *e*P | Pb | 16 01 49.4 | +0.5 |
| | baz=17 | | | | | | |
| TWK | | | | *e*S | Sb | 16 01 54.5 | +0.9 |
| | baz=17 | | | | | | |
| **SSD** | **Sandimen** | **0.32** | **139** | *e*P | Pb | 16 01 49.7 | +0.4 |
| | baz=132 | | | | | | |
| SSD | | | | *e*S | Sb | 16 01 55.4 | +1.1 |
| | baz=132 | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **36** | *e*P | Pb | 16 01 50.2 | +0.7 |
| | baz=37 | | | | | | |
| WTP | | | | *e*S | Sb | 16 01 55.6 | +1.1 |
| | baz=37 | | | | | | |
| **TSMG** | **Majia** | **0.36** | **142** | *e*P | Pb | 16 01 50.3 | +0.4 |
| | baz=136 | | | | | | |
| TSMG | | | | *e*S | Sb | 16 01 55.9 | +0.5 |
| | baz=136 | | | | | | |
| **TPUB** | **Ta-pu** | **0.38** | **33** | *e*P | Pb | 16 01 50.6 | +0.3 |
| | baz=33 | | | | | | |
| **STYH** | **Taoyuan** | **0.39** | **62** | *e*P | Pb | 16 01 51.6 | +1.1 |
| | baz=61 | | | | | | |
| STYH | | | | *e*S | Sb | 16 01 57.1 | +0.8 |
| | baz=61 | | | | | | |
| **CHN4** | **Tsaushan** | **0.40** | **25** | *e*P | Pb | 16 01 51.1 | +0.4 |
| | baz=24 | | | | | | |
| CHN4 | | | | *e*S | Sb | 16 01 57.9 | +1.2 |
| | baz=24 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.43** | **151** | P | Pb | 16 01 51.7 | +0.5 |
| | baz=152 | | | | | | |
| MASBT | | | | *e*S | Sb | 16 01 58.9 | +1.4 |
| | baz=152 | | | | | | |
| **ELDTW** | **Lidau** | **0.60** | **70** | *e*P | Pn | 16 01 55.3 | -0.7 |
| | baz=71 | | | | | | |
| ELDTW | | | | *e*S | Sn | 16 02 04.3 | -1.2 |
| | baz=71 | | | | | | |
| **ELDTW** | **Lidau** | **0.60** | **70** | *e*P | Pn | 16 01 55.6 | -0.4 |
| | baz=72 | | | | | | |
| ELDTW | | | | *e*S | Sn | 16 02 04.5 | -1.0 |
| | baz=72 | | | | | | |
| **CHN5** | **Tsauling** | **0.66** | **22** | *e*P | Pb | 16 01 55.2 | +0.1 |
| | baz=21 | | | | | | |
| CHN5 | | | | *e*S | Sb | 16 02 05.3 | +1.1 |
| | baz=21 | | | | | | |

**TAP 06 16:01:46.5, 23.05N×120.56E, h8km, ML0.9, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGST** | **Jiashian** | **0.04** | **29** | *i* P | Pg | 16 01 48.3 | +0.1 |
| | baz=39 | | | | | | |
| SGST | | | | *i* S | Sg | 16 01 50.2 | +0.9 |
| | baz=39 | | | | | | |
| **CHN1** | **Nanshi** | **0.14** | **346** | *i* P | Pg | 16 01 50.4 | +0.9 |
| | baz=346 | | | | | | |
| CHN1 | | | | S | Sg | 16 01 52.9 | +1.3 |
| | baz=346 | | | | | | |
| **SNST** | **Tainan City** | **0.18** | **340** | *e*P | Pg | 16 01 51.3 | +1.0 |
| | baz=340 | | | | | | |
| SNST | | | | *e*S | Sg | 16 01 54.4 | +1.6 |
| | baz=340 | | | | | | |
| **WTP** | **Ta-pu** | **0.20** | **13** | *e*P | Pg | 16 01 51.8 | +1.1 |
| | baz=15 | | | | | | |
| WTP | | | | *e*S | Sg | 16 01 55.1 | +1.6 |
| | baz=15 | | | | | | |
| **TWK** | **Hsinying** | **0.23** | **342** | *e*P | Pg | 16 01 52.3 | +1.2 |
| | baz=344 | | | | | | |
| TWK | | | | *e*S | Sg | 16 01 56.1 | +1.9 |
| | baz=344 | | | | | | |
| **STYH** | **Taoyuan** | **0.23** | **58** | *e*P | Pg | 16 01 52.5 | +1.3 |
| | baz=57 | | | | | | |
| STYH | | | | *e*S | Sg | 16 01 56.4 | +2.1 |
| | baz=57 | | | | | | |
| **TPUB** | **Ta-pu** | **0.26** | **14** | *e*P | Pb | 16 01 52.7 | -0.8 |
| | baz=13 | | | | | | |
| TPUB | | | | *e*S | Sb | 16 01 57.2 | -0.9 |
| | baz=13 | | | | | | |
| **TPUB** | **Ta-pu** | **0.26** | **14** | *e*S | Sb | 16 01 57.2 | -1.0 |
| | baz=33 | | | | | | |

*TUL **06** 16:22:48.6±0.9, 36.13N±0.01×97.27W±0.02, h6km±1km, ML2.5, mb_Lg2.3/9(NEIC), Error ellipse: s-maj=2.0km s-min=1.9km az=158.0*
**NEIC 06 16:22:48.6±1.1, 36.14N±0.01×97.27W±0.02, h6km±7km, Error ellipse: s-maj=2.1km s-min=1.7km az=143.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.28** | **109** | Pg | Pg | 16 22 53.8 | -0.4 |
| OK033 | | | | Sg | Sg | 16 22 58.9 | +0.9 |
| **OK029** | **Liberty Lake** | **0.37** | **204** | Pg | Pg | 16 22 55.9 | 0.0 |
| OK029 | | | | Sg | Sg | 16 23 01.2 | +0.4 |
| **OK031** | **S. Brethren Rd** | **0.40** | **118** | Pg | Pg | 16 22 56.6 | +0.3 |
| OK031 | | | | Sg | Sg | 16 23 02.0 | +0.5 |
| **OK030** | **Cody Creek RV** | **0.45** | **118** | Pg | Pg | 16 22 57.6 | +0.4 |
| **QUOK** | **Quay** | **0.46** | **86** | Pg | Pg | 16 22 57.9 | +0.4 |
| **OK034** | **N. Norfolk Rd.** | **0.47** | **106** | Pg | Pg | 16 22 58.0 | +0.4 |
| **BCOK** | **Bluff Creek, N** | **0.56** | **210** | Pg | Pg | 16 22 59.2 | -0.1 |
| BCOK | | | | IAmb_Lg | | 16 23 06.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **OK025** | **Westminster Rd** | **0.56** | **186** | Pg | Pg | 16 22 59.4 | 0.0 |
| **BLOK** | **Blackwell** | **0.62** | **4** | Pg | Pg | 16 23 01.2 | +0.6 |
| **CROK** | **Carrier** | **0.68** | **303** | Pg | Pg | 16 23 01.8 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.74** | **192** | | Pg | 16 23 02.6 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.74** | **191** | Pg | Pg | 16 23 02.7 | -0.2 |
| **GC02** | **Grant County #** | **0.85** | **326** | Pg | Pg | 16 23 05.0 | 0.0 |
| **FNO** | **Franklin** | **0.89** | **187** | Pg | Pg | 16 23 05.2 | -0.4 |
| **KAN13** | **South Haven SW** | **0.89** | **349** | Pg | Pg | 16 23 05.8 | +0.1 |
| **T35A** | **Sooner Cattle** | **0.99** | **38** | Pg | Pg | 16 23 07.5 | -0.1 |
| **KAN14** | **Manchester OK** | **0.99** | **326** | Pg | Pg | 16 23 07.4 | -0.2 |
| **OK032** | **Salt Plains WL** | **1.01** | **311** | Pg | Pg | 16 23 07.7 | -0.3 |
| **W35A** | **Tecumseh** | **1.04** | **162** | Pg | Pg | 16 23 07.5 | -1.0 |
| **KAN10** | **Anthony SW Sta** | **1.19** | **326** | Pg | Pg | 16 23 09.6 | -1.7 |
| **TUL1** | **Leonard** | **1.22** | **100** | Pg | Pg | 16 23 11.0 | -1.1 |
| **KAN08** | **Anthony NE Sta** | **1.22** | **333** | | Pg | 16 23 11.6 | -0.5 |
| **KAN16** | **Harper SW Stat** | **1.26** | **330** | Pn | Pg | 16 23 12.4 | -0.4 |
| **KAN12** | **Harper NE Stat** | **1.29** | **333** | Pn | Pn | 16 23 13.0 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.42** | **280** | Pn | Pn | 16 23 14.8 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.60** | **197** | Pn | Pb | 16 23 18.1 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.86** | **222** | | Pn | 16 23 21.6 | +0.5 |
| WMOK | | | | IAmb_Lg | | 16 23 49.4 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **LOOK** | **Love County** | **2.14** | **178** | Pn | Pn | 16 23 24.9 | -0.1 |
| **X37A** | **Clayton** | **2.19** | **134** | Pn | Pn | 16 23 26.3 | +0.8 |
| **R32A** | **Long Quarter,** | **2.55** | **334** | IAmb_Lg | | 16 24 10.7 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.98** | **113** | | Sg | 16 24 54.1 | -2.5 |
| **CCM** | **Cathedral Cave** | **5.18** | **67** | IAmb_Lg | | 16 25 39.0 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **FVM** | **French Village** | **5.78** | **69** | IAmb_Lg | | 16 25 49.0 | |
| | comp=Z,5.5nm,1.1s | | | | | | |

*DDA **06** 16:26:39.3±0.0, 42.48N×45.78E, h7km±4km, ML2.6*
*DRS **06** 16:26:41.7±0.0, 42.06N×45.97E, h13km*
*TIF **06** 16:26:45.6, 42.05N×45.96E, h18km±2km*
*MOS **06** 16:26:45.7±0.0, 42.09N×46.07E, h17km, MPVA3.4*
*NORS **06** 16:26:46.9±0.0, 42.08N×46.12E, h20km, MPVA3.3*
**ISC 06 16:26:46.0±1.0, 42.06N±0.02×45.96E±0.02, h16km±8km, n26, σ1s50/51, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LGD** | **Lagodekhi** | **0.31** | **137** | P | **Pb** | **16 26 52.7** | **-0.5** |
| LGD | | | | S | **Sg** | **16 26 57.3** | **+0.2** |
| **DDFL** | **Dedoflistskaro** | **0.63** | **169** | P | **Pn** | **16 27 00.7** | **+0.3** |
| DDFL | | | | S | **Sn** | **16 27 13.6** | **+3.5** |
| **DDFL** | **Dedoflistskaro** | **0.63** | **169** | P | **Pn** | **16 27 00.6** | **+0.3** |
| DDFL | | | | S | **Sn** | **16 27 15.3** | **+5.3** |
| DDFL | | | | *i* AML | AML | 16 27 20.0 | |
| | comp=E,179nm,1.2s | | | | | | |
| DDFL | | | | *i* AML | AML | 16 27 21.0 | |
| | comp=N,196nm,0.5s | | | | | | |
| **BTLR** | **Botlikh** | **0.63** | **18** | *i* Pg | **Pb** | **16 26 58.8** | **+0.1** |
| BTLR | | | | *e*Sg | **Sb** | **16 27 07.8** | **+0.4** |
| **XNZR** | **Khunzakh** | **0.73** | **49** | *e*Pg | **Pn** | **16 27 00.5** | **-1.4** |
| XNZR | | | | *e*Sg | **Sb** | **16 27 10.4** | **+0.1** |
| **DGRG** | **David-gareji** | **0.75** | **216** | P | **Pn** | **16 27 02.0** | **+0.1** |
| DGRG | | | | S | **Sg** | **16 27 11.6** | **+0.9** |
| **GNBR** | **Gunib** | **0.81** | **66** | *e*Pg | **Pg** | **16 27 01.6** | **-0.3** |
| GNBR | | | | *e*Sg | **Sn** | **16 27 12.9** | **-1.8** |
| **KMKR** | **Kumukh** | **0.85** | **85** | *e*Pg | **Pg** | **16 27 02.2** | **-0.4** |
| KMKR | | | | *e*Sg | **Sg** | **16 27 13.6** | **-0.3** |
| **UNCR** | **Uncukul** | **0.90** | **43** | *e*Pg | **Pn** | **16 27 03.5** | **-0.5** |
| UNCR | | | | *e*Sg | **Sn** | **16 27 15.7** | **-1.0** |
| **DVE** | **Vedeno** | **0.90** | **8** | *e*Pg | **Pn** | **16 27 04.1** | **0.0** |
| DVE | | | | *e*Sg | **Sn** | **16 27 16.9** | **+0.1** |
| **ARKR** | **Arakani** | **0.94** | **55** | *e*Pg | **Pn** | **16 27 03.9** | **-0.6** |
| ARKR | | | | *e*Sg | **Sn** | **16 27 16.9** | **-0.8** |
| **BTNK** | **Botanikuri** | **0.94** | **247** | P | **Pb** | **16 27 00.6** | **-3.4** |
| BTNK | | | | S | **Sb** | **16 27 15.9** | **-0.4** |
| BTNK | | | | *i* AML | AML | 16 27 18.0 | |
| | comp=E,123nm,0.1s | | | | | | |
| **KRNR** | **Karanay** | **1.04** | **42** | *e*Pg | **Pg** | **16 27 06.3** | **+0.2** |
| KRNR | | | | *e*Sg | **Sn** | **16 27 19.4** | **-0.8** |
| **BUJR** | **Buynaksk** | **1.14** | **48** | *e*Pg | **Pg** | **16 27 08.7** | **+0.6** |
| BUJR | | | | *e*Sg | **Sg** | **16 27 23.8** | **+0.8** |
| **GROC** | **Groznyy** | **1.15** | **354** | *e*Pg | **Pg** | **16 27 09.1** | **+1.0** |
| GROC | | | | *e*Sg | **Sg** | **16 27 26.7** | **+3.8** |
| **PNSH** | **Pansheti** | **1.15** | **300** | P | **Pg** | **16 27 07.4** | **-0.8** |
| **DBC** | **Dubki** | **1.15** | **34** | *e*Pg | **Pg** | **16 27 07.8** | **-0.5** |
| DBC | | | | *e*Sg | **Sg** | **16 27 24.3** | **+0.9** |
| **SGKR** | **Sergokala** | **1.32** | **72** | *e*Pg | **Pb** | **16 27 10.3** | **-0.1** |
| SGKR | | | | *e*Sg | **Sg** | **16 27 28.3** | **-0.4** |
| **LACR** | **Lac** | **1.45** | **302** | *e*Pg | **Pg** | **16 27 15.4** | **+1.5** |
| LACR | | | | *e*Sg | **Sg** | **16 27 36.0** | **+3.3** |
| **AKT** | **Akhty** | **1.45** | **113** | *e*Pg | **Pb** | **16 27 12.6** | **-0.1** |
| AKT | | | | *e*Sg | **Sg** | **16 27 33.2** | **+0.5** |
| **TRLG** | **Trialeti** | **1.48** | **250** | P | **Pb** | **16 27 13.0** | **-0.2** |
| TRLG | | | | S | **Sg** | **16 27 33.3** | **-0.6** |
| **DMNI** | **Dmanisi** | **1.51** | **242** | P | **Pb** | **16 27 13.4** | **-0.4** |
| DMNI | | | | S | **Sg** | **16 27 33.8** | **-1.1** |
| **BRNG** | **Burnasheti** | **1.65** | **255** | P | **Pb** | **16 27 16.1** | **-0.1** |
| BRNG | | | | S | **Sg** | **16 27 38.5** | **-0.8** |
| **ARNR** | **Ardon** | **1.67** | **313** | *e*Pg | **Pg** | **16 27 16.8** | **-1.2** |
| ARNR | | | | *e*Sg | **Sg** | **16 27 41.3** | **+1.7** |
| **KSMR** | **Kasumkent** | **1.69** | **105** | *e*Pg | **Pb** | **16 27 16.6** | **-0.1** |
| KSMR | | | | *e*Sg | **Sg** | **16 27 38.5** | **-1.8** |
| **ONI** | **Oni** | **1.93** | **287** | P | **Pg** | **16 27 21.7** | **-1.4** |
| ONI | | | | S | **Sg** | **16 27 47.0** | **-1.2** |

*DJA **06** 16:30:23.4±0.8, 9.7S±5.2×112.3E±7.1, h83km±21km, M3.8/10, mb4.1/1, MLv3.6/10*
*IDC **06** 16:30:35.2±6.2, 8.03S×125.81E, h228km±67km, mb3.0/1, mb1 3.0/3, mb1mx2.7/30, mbtmp3.5/3, Error ellipse: s-maj=192.2km s-min=21.8km az=63.0*
**ISC 06 16:30:22.5±1.1, 9.19S±0.07×123.07E±0.07, h100km, n11, σ1s31/11, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **0.99** | **304** | P | **Pn** | **16 30 42.2** | **-0.7** |
| **BATI** | **Baumata** | **1.17** | **150** | P | **Pn** | **16 30 45.6** | **+0.7** |
| **SOEI** | **Soe** | **1.31** | **116** | P | **Pn** | **16 30 47.3** | **+0.7** |
| **BASI** | **Baing, Sumba** | **2.66** | **247** | P | **Pn** | **16 31 04.0** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **3.66** | **263** | P | **Pn** | **16 31 17.8** | **+0.6** |
| **BBSI** | **Bau Bau** | **3.71** | **352** | P | **Pn** | **16 31 18.1** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **3.96** | **320** | P | **Pn** | **16 31 21.4** | **+0.1** |
| **BKSI** | **Bulukumba** | **4.83** | **323** | P | **Pn** | **16 31 33.7** | **+0.7** |
| **WRA** | **Warramunga Arr** | **15.26** | **136** | P | **Pn** | **16 33 49.6** | **-3.1** |
| | 0.3nm,0.3s,baz=322,slow=14,SNR=13 | | | | | | |
| WRA | | | | S | Sn | 16 36 31.2 | -10 |
| | 0.5nm,0.3s,baz=312,slow=27,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **17.74** | **146** | P | **P** | **16 34 23.6** | **+0.9** |
| | 0.3nm,0.3s,baz=324,slow=12,SNR=14 | | | | | | |
| ASAR | | | | S | Sn | 16 37 29.6 | -12 |
| | 0.2nm,0.3s,baz=310,slow=21,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.52** | **331** | P | **P** | **16 41 02.6** | **+0.9** |
| | 0.4nm,0.6s,baz=133,slow=7.6,SNR=5.9 | | | | | | |

**TEH 06 16:35:52.2, 34.65N×51.54E, h9km, ML4.0, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GHVR** | **GHOM** | **0.26** | **230** | *e*Pg | Pb | 16 35 59.1 | 0.0 |
| **IVRN** | **Varamin** | **0.38** | **24** | *e*Pg | Pb | 16 36 01.3 | +0.2 |
| **IQOM** | **Qom** | **0.43** | **297** | *e*Pg | Pg | 16 36 00.8 | +0.1 |
| **ISFB** | **Sefidab** | **0.65** | **117** | *e*Pg | Pb | 16 36 05.6 | -0.2 |
| **IHSB** | **Hasanabad** | **0.81** | **345** | *e*Pg | Pb | 16 36 08.5 | -0.1 |
| **KRSH** | **Karshahi** | **0.84** | **144** | *e* | | 16 36 20.5 | |
| | comp=Z,86μm,0.2s | | | | | | |
| KRSH | | | | *e*Pg | Pg | 16 36 08.6 | +0.2 |
| **QJF1** | **Jafarie** | **0.86** | **278** | *e*Pg | Pb | 16 36 09.4 | +0.1 |
| **QAMS** | **Qamsar** | **0.92** | **187** | *e* | | 16 36 10.6 | |
| | comp=Z,54μm,0.1s | | | | | | |
| QAMS | | | | *e*Pg | Pg | 16 36 09.9 | 0.0 |
| **DAMV** | **Damavand** | **1.04** | **20** | *e*Pg | Pb | 16 36 12.5 | 0.0 |
| **TEH** | **Tehran** | **1.09** | **353** | *e*Pg | Pg | 16 36 13.2 | 0.0 |
| TEH | | | | *e*Sg | Sn | 16 36 28.4 | -0.7 |
| TEH | | | | *e* | | 16 36 34.1 | |
| | comp=Z,28μm,0.3s | | | | | | |
| **TEHA** | **Amirabad Tehra** | **1.10** | **354** | *e*Pg | Pg | 16 36 13.2 | -0.2 |
| TEHA | | | | *e* | | 16 36 30.2 | |
| | comp=Z,32μm,0.2s | | | | | | |
| **ASAO** | **Ashtian** | **1.25** | **266** | *e*Pg | Pn | 16 36 15.1 | -1.0 |
| **IMHD** | **Mahdasht** | **1.25** | **326** | *e*Pg | Pn | 16 36 15.2 | -0.8 |
| IMHD | | | | *e* | | 16 36 36.2 | |
| | comp=Z,44μm,0.1s | | | | | | |
| **CHTH** | **Charan** | **1.30** | **345** | *e*Pn | Pn | 16 36 16.4 | -0.3 |
| **IKLH** | **Kolahrood** | **1.33** | **178** | *e*Pg | Pn | 16 36 16.7 | -0.4 |
| **THKV** | **Tehran--Karaj** | **1.37** | **337** | *e*Pn | Pn | 16 36 15.3 | -2.4 |
| **ILAS** | **Lasjerd** | **1.38** | **58** | *e*Pg | Pg | 16 36 18.6 | 0.0 |
| ILAS | | | | *e* | | 16 36 41.7 | |
| | comp=Z,34μm,0.2s | | | | | | |
| **IRAZ** | **Razeghan** | **1.52** | **300** | *e*Pn | Pn | 16 36 19.3 | -0.4 |
| IRAZ | | | | *e* | | 16 36 45.8 | |
| | comp=Z,14μm,0.4s | | | | | | |
| **KHMZ** | **Khomeyn** | **1.59** | **236** | *e*Pg | Pn | 16 36 20.2 | -0.5 |
| **IPRN** | **Peran** | **1.72** | **22** | *e*Pn | Pb | 16 36 24.1 | +0.1 |
| IPRN | | | | *e* | | 16 36 53.0 | |
| | comp=Z,24μm,0.8s | | | | | | |
| **ISHM** | **Shahmirzad** | **1.84** | **51** | *e*Pn | Pb | 16 36 26.3 | +0.1 |
| ISHM | | | | *e* | | 16 36 54.2 | |
| | comp=Z,31μm,0.4s | | | | | | |
| **IZEF** | **Zefreh** | **1.87** | **159** | *e*Pn | Pb | 16 36 26.0 | -0.7 |
| IZEF | | | | *e* | | 16 36 52.5 | |
| | comp=Z,12μm,0.1s | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **1.92** | **304** | *e*Pn | Pn | 16 36 24.8 | -0.4 |
| **QALM** | **Alamut, Qazvin** | **1.92** | **338** | *e*Pn | Pb | 16 36 26.7 | -0.8 |
| QALM | | | | *e* | | 16 36 55.2 | |
| | comp=Z,24μm,0.5s | | | | | | |
| **HAGD** | **Aghdareh** | **1.98** | **276** | *e*Pn | Pb | 16 36 27.6 | -1.0 |
| HAGD | | | | *e* | | 16 36 55.6 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **2.03** | **196** | *e*Pn | Pb | 16 36 29.6 | +0.1 |
| IPIR | | | | *e* | | 16 36 31.0 | |
| | comp=Z,7μm,0.2s | | | | | | |
| **IGZV** | **Ghazvin** | **2.04** | **329** | *e*Pn | Pb | 16 36 28.5 | -1.0 |
| IGZV | | | | *e* | | 16 36 59.4 | |
| | comp=Z,10μm,0.3s | | | | | | |
| **QCNT** | **Qazvin** | **2.06** | **323** | *e*Pn | Pn | 16 36 28.4 | +1.4 |
| QCNT | | | | *e* | | 16 37 06.8 | |
| | comp=Z,8μm,0.3s | | | | | | |
| **IANJ** | **Anjilo** | **2.11** | **67** | *e*Pn | Pn | 16 36 29.3 | +1.4 |
| IANJ | | | | *e* | | 16 37 00.4 | |
| | comp=Z,11μm,0.2s | | | | | | |
| **NASN** | **Na'in** | **2.13** | **150** | *e*Pn | Pb | 16 36 29.8 | -1.3 |
| **IGAR** | **Gharneh** | **2.28** | **169** | *e*Pn | Pb | 16 36 32.9 | -0.7 |
| **ANAR** | **Anarak** | **2.33** | **128** | *e*Pn | Pb | 16 36 32.9 | -1.6 |
| **SHK1** | **Shahrekord** | **2.38** | **193** | *e*Pn | Pb | 16 36 34.5 | -0.8 |
| **HSAM** | **Samen** | **2.46** | **261** | *e*Pn | Pb | 16 36 35.3 | -1.5 |
| HSAM | | | | *e* | | 16 37 13.3 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **IGLO** | **Ghaloghah** | **2.63** | **45** | *e*Pn | Pb | 16 36 37.5 | -2.1 |
| IGLO | | | | *e* | | 16 37 21.5 | |
| | comp=Z,7μm,0.8s | | | | | | |
| **IBRJ** | **Brojen** | **2.75** | **185** | *e*Pn | Pb | 16 36 39.3 | -2.3 |
| **LHJ2** | **Lahijan - Gila** | **2.78** | **335** | *e*Pn | Pn | 16 36 38.9 | +2.0 |
| **IDOB** | **Doab** | **2.91** | **254** | *e*Pn | Pn | 16 36 40.3 | +1.4 |
| **IRAM** | **Ramesheh** | **2.92** | **166** | *e*Pn | Pn | 16 36 41.4 | +2.4 |
| **ZNJK** | **Zanjan** | **3.07** | **312** | *e*Pn | Pn | 16 36 42.7 | +1.6 |
| **IKFM** | **Kafar-mosalman** | **3.26** | **251** | *e*Pn | Pn | 16 36 46.4 | +2.9 |
| **ISAD** | **Sadrabad** | **3.27** | **146** | *e*Pn | Pn | 16 36 46.4 | +2.5 |
| ISAD | | | | *e* | | 16 37 50.6 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **ICHK** | **Chekchek** | **3.39** | **134** | *e*Pn | Pn | 16 36 47.4 | +1.9 |
| ICHK | | | | *e* | | 16 37 40.5 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **YZKH** | **Yazd** | **3.41** | **131** | *e*Pn | Pn | 16 36 47.5 | +2.0 |
| **SNGE** | **Sanandaj** | **3.47** | **278** | *e*Pn | Pn | 16 36 48.1 | +1.5 |
| **AMIS** | **Naft Sefid** | **3.52** | **213** | *e*Pn | Pn | 16 36 48.4 | +1.3 |
| **KLNJ** | **Kolanjah** | **3.63** | **179** | *e*Pn | Pn | 16 36 50.6 | +1.7 |
| **SHRO** | **Shahrood** | **3.89** | **69** | *e*Pn | Pn | 16 36 54.7 | +2.4 |
| **IMEH** | **Mehriz** | **4.15** | **141** | *e*Pn | Pn | 16 36 58.2 | +2.2 |
| **TNSJ** | **Nastanj** | **4.25** | **98** | *e*Pn | Pn | 16 36 59.3 | +2.1 |
| TNSJ | | | | *e* | | 16 38 20.2 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **ISRB** | **Sarab** | **4.45** | **316** | *e*Pn | Pn | 16 37 01.5 | +1.5 |
| **TPRV** | **Parvadeh(Tabas** | **4.58** | **109** | *e*Pn | Pn | 16 37 03.5 | +1.8 |
| TPRV | | | | *e* | | 16 38 31.7 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **TABS** | **Tabas** | **4.74** | **101** | *e*Pn | Pn | 16 37 06.2 | +2.4 |
| **TKDS** | **Koohdasht(Taba** | **4.75** | **101** | *e* | | 16 37 06.7 | |
| | comp=Z,855nm,0.3s | | | | | | |
| TKDS | | | | *e*Pn | Pn | 16 37 06.3 | +2.3 |
| **IBST** | **Bostanabad** | **4.83** | **310** | *e*Pn | Pn | 16 37 06.4 | +1.1 |
| **GRMI** | **Germi** | **5.08** | **326** | *e*Pn | Pn | 16 37 11.3 | +2.8 |
| **SBZV** | **Sabzevar** | **5.25** | **69** | *e*Pn | Pn | 16 37 13.1 | +2.1 |
| **ISFR** | **Sfrayin** | **5.77** | **64** | *e*Pn | Pn | 16 37 20.6 | +2.4 |
| **ITEG** | **Tejag** | **6.25** | **104** | *e*Pn | Pn | 16 37 27.2 | +2.4 |
| **AFRZ** | **Afriz** | **6.33** | **99** | *e*Pn | Pn | 16 37 28.0 | +2.2 |
| **IPAY** | **Payeh** | **6.34** | **71** | *e*Pn | Pn | 16 37 28.9 | +2.9 |
| **GHIR** | **Ghir-Karzin** | **6.47** | **169** | *e*Pn | Pn | 16 37 29.3 | +1.7 |
| **IKOO** | **Kooshah** | **6.62** | **108** | *e*Pn | Pn | 16 37 31.9 | +2.0 |
| **IKRD** | **Kardeh** | **6.83** | **70** | *e*Pn | Pn | 16 37 34.6 | +1.9 |
| **BSRN** | **Basiran** | **6.89** | **111** | *e*Pn | Pn | 16 37 35.5 | +2.0 |
| **IMON** | **Monand** | **6.91** | **100** | *e*Pn | Pn | 16 37 36.4 | +2.5 |
| **TBJM** | **Torbat-e-JAM** | **7.25** | **83** | *e*Pn | Pn | 16 37 40.3 | +1.9 |
| **SHRT** | **Shahrakht** | **7.33** | **95** | *e*Pn | Pn | 16 37 41.5 | +2.1 |

*IDC **06** 16:36:49.5±0.7, 8.95S×158.65E, h0km, mb4.2/15, mb1 4.4/19, mb1mx4.2/35, mbtmp4.3/19, ML1.4/1, MS3.6/17, Ms1 3.6/17, ms1mx3.3/60, Error ellipse: s-maj=17.3km s-min=14.4km az=172.0*
**ISC 06 16:36:54.1±0.5, 8.97S±0.08×158.69E±0.06, h29km, n59, σ0s96/51, mb4.5/21, MS3.5/14, 2C, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.32** | **110** | Pn | **Pn** | **16 37 16.6** | **0.0** |
| | 3μm,0.3s,baz=235,slow=5.1,SNR=263 | | | | | | |
| HNR | | | | Sn | **Sb** | **16 37 35.0** | **+0.1** |
| | 712nm,0.3s,baz=345,slow=20,SNR=5.9 | | | | | | |
| **SANVU** | **Saraoutou** | **10.52** | **129** | P | **Pn** | **16 39 24.3** | **+1.3** |
| **PMG** | **Port Moresby** | **11.39** | **267** | Pn | **Pn** | **16 39 33.3** | **-1.6** |
| | 0.1nm,0.3s,baz=74,slow=7.4,SNR=1.2 | | | | | | |
| PMG | | | | LR | LR | 16 43 52.5 | |
| | comp=Z,575nm,18.6s,baz=166,slow=37 | | | | | | |
| **LIFNC** | **LIFOU** | **14.35** | **146** | P | **Pn** | **16 40 15.7** | **+0.4** |
| **NOUC** | **Port Laguerre** | **14.97** | **152** | P | **P** | **16 40 26.9** | **-2.0** |
| **DZM** | **Mont Dzumac** | **15.01** | **151** | Pn | **Pn** | **16 40 25.6** | **+1.2** |
| | 0.3nm,0.3s,baz=131,slow=19,SNR=2.5 | | | | | | |
| DZM | | | | LR | LR | 16 45 40.6 | |
| | comp=Z,267nm,19.6s,baz=36,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.01** | **151** | P | **P** | **16 40 28.0** | **-1.5** |
| **COEN** | **Coen** | **15.99** | **251** | P | **Pn** | **16 40 36.4** | **-0.7** |
| **CTA** | **Charters Tower** | **16.33** | **226** | Pn | **Pn** | **16 40 41.0** | **-0.4** |
| | 1.2nm,0.3s,baz=40,slow=14,SNR=25 | | | | | | |
| CTA | | | | LR | LR | 16 46 42.7 | |
| | comp=Z,137nm,18.7s,baz=60,slow=36 | | | | | | |
| **CTA** | **Charters T

1.5nm,0.9s,baz=144,slow=5.4,SNR=3.9
**CN2 Changchun 60.56 333** *e*P P 16 47 06.3 +4.4
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**BNX BinXian 61.27 335** ⇑P **P 16 47 06.7 +0.1**
BNX pmax pmax
comp=Z,5.0nm,0.8s
BNX pmax pmax
comp=Z,170nm,4.0s
**PETK Petropavlovsk- 61.84 359** P **P 16 47 11.3 +1.0**
comp=Z,2.4nm,0.9s,baz=149,slow=5.9,SNR=1.7
**XAN Xi'an 63.67 315** P **P 16 47 22.8 -0.2**
XAN pP pP 16 47 29.7 -1.9
XAN pmax pmax
comp=Z,4.0nm,0.9s
**CMAR Chiang Mai Arr 64.93 295** P **P 16 47 31.4 -0.1**
comp=Z,2.9nm,0.8s,baz=125,slow=5.2,SNR=25
CMAR LR LR 17 14 24.4
comp=Z,13nm,20.7s,baz=110,slow=35
**LZH Lanzhou 68.29 315** *e*P **P 16 47 53.4 +0.6**
LZH sP sP 16 48 08.3 +3.5
LZH pmax pmax
comp=Z,16nm,1.3s
**GTA Gaotai 72.68 316** ⇑P **P 16 48 20.0 +0.5**
GTA sP PcP 16 48 51.9 +15
GTA pmax pmax
comp=Z,6.0nm,0.8s
**SONM Songino Array 72.98 326** P **P 16 48 21.7 +0.5**
comp=Z,4.6nm,0.8s,baz=140,slow=5.9,SNR=34
**ILAR Eielson Array 83.89 21** P **P 16 49 20.9 +0.1**
comp=Z,0.6nm,0.7s,baz=234,slow=5.2,SNR=8.9
**MKAR Makanchi Array 87.30 318** P **P 16 49 37.4 -0.8**
comp=Z,1.2nm,0.6s,baz=103,slow=6.0,SNR=16
**ZALV Zalesovo Beam 87.86 325** P **P 16 49 38.6 -2.0**
comp=Z,0.5nm,0.5s,baz=90,slow=2.9,SNR=2.1
**NVAR Mina Array Bea 90.08 51** P **P 16 49 51.4 -0.4**
comp=Z,0.2nm,0.6s,baz=237,slow=9.5,SNR=2.5
**PFO Pinyon Flats O 90.65 56** LR LR 17 22 16.0
comp=Z,52nm,20.7s,baz=248,slow=30
**YKA Yellowknife Ar 96.36 28** P **P 16 50 19.0 -0.8**
comp=Z,0.1nm,0.3s,baz=264,slow=4.9,SNR=1.6

*IDC **06** 16:46:35.5±4.4,27.°67N×141.°96E,h48km±40km,mb3.7/8, mb1 3.9/9,mb1mx3.5/49,mbtmp3.9/9,ML2.6/1,Error ellipse: s-maj=44.6km s-min=17.7km az=86.0*
*NEIC **06** 16:46:36.0±1.6,27.°75N±0.°08×141.°8E±0.°2,h56km±8km, mb4.0/6,Error ellipse: s-maj=29.6km s-min=10.8km az=79.0*
*JMA **06** 16:46:37.6±0.1,27.°70N×142.°47E,h48km,M4.3*
*JMA Felt I J1.*
**ISC 06 16:46:35.2**±0.6,**27.°79N**±0.°06×**141.°8E**±0.°1,**h42**km,**n33,** σ1$^{s}$**51**/34,**mb3.8**/9,**Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **0.77** | **153** | P | | **Pn** | **16 46 50.7** | **+1.1** |
| CBIJ | | | | S | | **Sn** | **16 47 00.2** | **+0.1** |
| **JCJ** | **Chichijima** | **0.77** | **153** | | | **Pn** | **16 46 50.4** | **+0.8** |
| **JHH2** | **Haha-jima-NKT2** | **1.20** | **163** | P | | **Pn** | **16 46 56.8** | **+1.3** |
| JHH2 | | | | *e*S | | **Sn** | **16 47 11.1** | **+0.6** |
| **JAG** | **Ashikaga** | **8.84** | **348** | P | | **Pn** | **16 48 42.3** | **+1.9** |
| JAG | | | | *e*S | | **Sn** | **16 50 18.4** | **-0.2** |
| **JHO** | **Hitachi** | **8.86** | **354** | P | | **Pn** | **16 48 43.0** | **+2.4** |
| JHO | | | | *e*S | | **Sn** | **16 50 19.6** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **9.24** | **342** | P | | **Pn** | **16 48 48.1** | **+2.2** |
| | 0.1nm,0.3s,baz=166,slow=14,SNR=4.1 | | | | | | | |
| MJAR | | | | S | | **Sn** | **16 50 29.5** | **+0.9** |
| | 0.1nm,0.3s,baz=67,slow=28,SNR=2.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **9.24** | **342** | | | **Pn** | **16 48 48.0** | **+2.0** |
| **JMM** | **Marumori** | **10.09** | **355** | Pn | | **Pn** | **16 48 58.6** | **+1.2** |
| **JSU** | **Suzuyama** | **10.54** | **293** | Pn | | **Pn** | **16 49 03.6** | **0.0** |
| **JMK** | **Ichinoseki** | **11.15** | **358** | P | | **Pn** | **16 49 13.5** | **+1.6** |
| JMK | | | | S | | **Sn** | **16 51 10.5** | **-4.7** |
| **JKA** | **Kamikawa-asahi** | **16.31** | **2** | Pn | | **Pn** | **16 50 21.7** | **+0.6** |
| JKA | | | | IAmb | | IAmb | 16 50 25.2 | |
| | comp=Z,28nm,1.3s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **18.18** | **337** | P | | **P** | **16 50 42.7** | **-1.5** |
| USA0B | | | | IAmb | | IAmb | 16 51 04.8 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **18.18** | **337** | P | | **P** | **16 50 43.0** | **-1.1** |
| **H11N2** | **WAKE ISLAND Hy** | **24.30** | **104** | T | | T | 17 16 45.4 | |
| | baz=294,slow=75,SNR=19 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **24.31** | **104** | T | | T | 17 16 47.0 | |
| | baz=294,slow=75,SNR=12 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **24.32** | **104** | T | | T | 17 16 44.1 | |
| | baz=294,slow=75,SNR=17 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **24.65** | **107** | T | | T | 17 17 12.4 | |
| | baz=297,slow=75,SNR=35 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **24.66** | **107** | T | | T | 17 17 12.1 | |
| | baz=297,slow=75,SNR=43 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **24.67** | **107** | T | | T | 17 17 13.0 | |
| | baz=297,slow=75,SNR=44 | | | | | | | |
| **TOLI2** | **Tolitoli** | **33.29** | **221** | P | | **P** | **16 53 08.7** | **-0.3** |
| **WRA** | **Warramunga Arr** | **47.99** | **189** | P | | **P** | **16 55 09.2** | **-0.8** |
| | comp=Z,2.1nm,0.4s,baz=13,slow=8.8,SNR=49 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **16 56 36.5** | **-1.2** |
| | comp=Z,0.2nm,0.5s,baz=0.4,slow=3.9,SNR=1.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **47.99** | **189** | P | | **P** | **16 55 08.2** | **-1.9** |
| **MKAR** | **Makanchi Array** | **49.77** | **309** | P | | **P** | **16 55 23.9** | **+0.3** |
| | comp=Z,0.4nm,0.7s,baz=91,slow=9.7,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.77** | **309** | P | | **P** | **16 55 22.5** | **-1.0** |
| **AS31** | **Alice Springs** | **51.71** | **189** | P | | **P** | **16 55 36.8** | **-1.5** |
| AS31 | | | | IAmb | | IAmb | 16 56 00.2 | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **51.72** | **189** | P | | **P** | **16 55 37.1** | **-1.2** |
| | comp=Z,0.3nm,0.4s,baz=7.5,slow=6.2,SNR=23 | | | | | | | |
| **ASAR** | **Alice Springs** | **51.72** | **189** | P | | **P** | **16 55 36.6** | **-1.7** |
| **YKA** | **Yellowknife Ar** | **71.70** | **28** | P | | **P** | **16 57 51.9** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=293,slow=6.0,SNR=9.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **72.78** | **341** | P | | **P** | **16 58 00.2** | **+1.4** |
| | comp=Z,1.8nm,0.8s,baz=67,slow=7.2,SNR=1.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **77.18** | **334** | P | | **P** | **16 58 25.6** | **+1.3** |
| | comp=Z,1.6nm,0.3s,baz=75,slow=4.3,SNR=24 | | | | | | | |
| **FINES** | **FINESS Array B** | **77.18** | **334** | P | | **P** | **16 58 24.2** | **0.0** |
| **KBZ** | **Khabaz** | **77.28** | **313** | P | | **P** | **16 58 25.6** | **+0.4** |
| | comp=Z,2.5nm,1.0s,baz=22,slow=5.4,SNR=1.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **81.86** | **324** | P | | **P** | **16 58 50.2** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=54,slow=5.1,SNR=4.4 | | | | | | | |

*TRN **06** 16:56:13.9,19.°02N×64.°54W,h82km,MD4.3*
*RSPR **06** 16:56:17.5,18.°91N×64.°46W,h44km±6km,MD3.6/11*
*NEIC **06** 16:56:17.1±0.8,18.°9N±0.°2×64.°49W±0.°08,h51km±47km, Error ellipse: s-maj=24.2km s-min=9.3km az=192.0*
**ISC 06 16:56:17.2**±1.4,**18.°94N**±0.°08×**64.°51W**±0.°03,**h42**km,**n55,** σ0$^{s}$**70**/69,**9C-5D,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TBVI** | **Tortola** | **0.53** | **191** | ⇑*i*P | | **Pn** | **16 56 27.5** | **-0.9** |
| **TBVI** | **Tortola** | **0.53** | **191** | *e*S | | **Sn** | **16 56 35.4** | **-0.9** |
| **STVI** | **Saint Thomas** | **0.72** | **216** | ‖*e*P | | **Pn** | **16 56 30.2** | **-0.7** |
| **STVI** | **Saint Thomas** | **0.72** | **216** | *e*S | | **Sn** | **16 56 39.9** | **-0.9** |
| **STVI** | **Saint Thomas** | **0.72** | **216** | | | **Pn** | **16 56 30.2** | **-0.7** |
| STVI | | | | | | **Sn** | **16 56 39.9** | **-0.9** |
| **STVI** | **Saint Thomas** | **0.72** | **216** | IAML | | | 16 56 41.8 | |
| | comp=N,5μm,0.2s | | | | | | | |
| **CUPR** | **Culebra, Puert** | **0.96** | **229** | ‖*e*P | | **Pn** | **16 56 33.9** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **0.96** | **229** | *e*S | | **Sn** | **16 56 46.5** | **-0.2** |
| **CUPR** | **Culebra, Puert** | **0.96** | **229** | | | **Pn** | **16 56 33.9** | **-0.3** |
| CUPR | | | | | | **Sn** | **16 56 46.5** | **-0.2** |
| **CDVI** | **St. Croix** | **1.21** | **191** | *e*P | | **Pn** | **16 56 38.5** | **+0.9** |
| CDVI | | | | *e*S | | **Sn** | **16 56 55.3** | **+2.6** |
| **MTP** | **Monte Pirata** | **1.29** | **230** | ⇑*e*P | | **Pn** | **16 56 38.7** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.29** | **230** | *e*S | | **Sn** | **16 56 55.2** | **+0.3** |
| **MTP** | **Monte Pirata** | **1.29** | **230** | | | **Pn** | **16 56 38.7** | **-0.1** |
| MTP | | | | | | **Sn** | **16 56 55.2** | **+0.3** |
| **CBYP** | **Canovanas** | **1.44** | **243** | ⇑*e*P | | **Pn** | **16 56 40.9** | **+0.1** |
| **CBYP** | **Canovanas** | **1.44** | **243** | | | **Pn** | **16 56 40.9** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.50** | **238** | ⇑*e*P | | **Pn** | **16 56 41.2** | **-0.3** |
| **HUMP** | **Col San Antoni** | **1.50** | **238** | *e*S | | **Sn** | **16 56 59.6** | **-0.2** |
| **HUMP** | **Col San Antoni** | **1.50** | **238** | | | **Pn** | **16 56 41.2** | **-0.3** |
| HUMP | | | | | | **Sn** | **16 56 59.6** | **-0.2** |
| **GCPR** | **Guaynabo City** | **1.61** | **247** | ⇑*e*P | | **Pn** | **16 56 43.1** | **-0.1** |
| **GCPR** | **Guaynabo City** | **1.61** | **247** | *e*S | | **Sn** | **16 57 02.6** | **-0.2** |
| **GCPR** | **Guaynabo City** | **1.61** | **247** | | | **Pn** | **16 56 43.1** | **-0.1** |
| GCPR | | | | | | **Sn** | **16 57 02.6** | **-0.2** |
| **SMRT** | **St. Maarten** | **1.63** | **123** | *e*P | | **Pn** | **16 56 43.8** | **+0.5** |
| SMRT | | | | *e*S | | **Sn** | **16 57 04.1** | **+0.9** |
| **SMRT** | **St. Maarten** | **1.63** | **123** | | | **Pn** | **16 56 43.9** | **+0.5** |
| SMRT | | | | IAML | | | 16 57 09.2 | |
| | comp=N,1μm,0.3s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SJG** | **San Juan** | **1.76** | **242** | | | **Pn** | **16 56 44.7** | **-0.4** |
| SJG | | | | IAML | | | 16 57 14.4 | |
| | comp=N,447nm,0.4s | | | | | | | |
| **IGPR** | **InterUniversit** | **1.80** | **238** | ‖*e*P | | **Pn** | **16 56 46.1** | **+0.4** |
| **IGPR** | **InterUniversit** | **1.80** | **238** | *e*S | | **Sn** | **16 57 07.1** | **-0.1** |
| **IGPR** | **InterUniversit** | **1.80** | **238** | | | **Sn** | **16 57 07.1** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **1.96** | **257** | ‖*e*P | | **Pn** | **16 56 48.1** | **+0.2** |
| **EMPR** | **Esperanza - Ma** | **1.96** | **257** | *e*S | | **Sn** | **16 57 11.8** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.96** | **257** | | | **Pn** | **16 56 48.1** | **+0.2** |
| EMPR | | | | | | **Sn** | **16 57 11.8** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **2.18** | **246** | ‖*e*P | | **Pn** | **16 56 50.4** | **-0.5** |
| **OBIP** | **Obispado Ponce** | **2.18** | **246** | *e*S | | **Sn** | **16 57 17.0** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **2.18** | **246** | | | **Sn** | **16 56 50.4** | **-0.5** |
| OBIP | | | | | | **Sn** | **16 57 17.0** | **+0.4** |
| **ICMP** | **Isla Caja de M** | **2.18** | **242** | ‖*e*P | | **Pn** | **16 56 52.3** | **+1.4** |
| **ICMP** | **Isla Caja de M** | **2.18** | **242** | *e*S | | **Sn** | **16 57 16.6** | **-0.1** |
| **ICMP** | **Isla Caja de M** | **2.18** | **242** | | | **Pn** | **16 56 52.3** | **+1.4** |
| ICMP | | | | | | **Sn** | **16 57 16.6** | **-0.1** |
| **SKI** | **Saint Kitts** | **2.33** | **133** | *e*P | | **Pn** | **16 56 51.6** | **-1.4** |
| **AGPR** | **Aguadilla, PR** | **2.51** | **260** | ‖*e*P | | **Pn** | **16 56 55.4** | **-0.1** |
| **AGPR** | **Aguadilla, PR** | **2.51** | **260** | *e*S | | **Sn** | **16 57 25.0** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **2.51** | **260** | | | **Sn** | **16 56 55.4** | **-0.1** |
| AGPR | | | | | | **Sn** | **16 57 25.0** | **+0.2** |
| **LSP** | **Las Mesas** | **2.56** | **253** | ⇑*e*P | | **Pn** | **16 56 57.0** | **+0.9** |
| **MLPR** | **Magueyes Islan** | **2.59** | **248** | ‖*e*P | | **Pn** | **16 56 56.0** | **-0.6** |
| **MLPR** | **Magueyes Islan** | **2.59** | **248** | *e*S | | **Sn** | **16 57 26.7** | **-0.1** |
| **MLPR** | **Magueyes Islan** | **2.59** | **248** | | | **Pn** | **16 56 56.0** | **-0.6** |
| MLPR | | | | | | **Sn** | **16 57 26.7** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **2.63** | **250** | ‖*e*P | | **Pn** | **16 56 57.8** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.63** | **250** | *e*S | | **Sn** | **16 57 28.9** | **+1.0** |
| **CRPR** | **Cabo Rojo, PR** | **2.63** | **250** | | | **Pn** | **16 56 57.8** | **+0.7** |
| CRPR | | | | | | **Sn** | **16 57 28.9** | **+1.0** |
| **ANWB** | **Willy Bob** | **2.88** | **116** | *e*P | | **Pn** | **16 57 00.2** | **-0.5** |
| ANWB | | | | *e*S | | **Sn** | **16 57 33.7** | **-0.4** |
| **ANBD** | **Bethesda, Anti** | **3.22** | **125** | *e*P | | **Pn** | **16 57 05.7** | **+0.4** |
| ANBD | | | | *e*S | | **Sn** | **16 57 43.2** | **+0.7** |
| **TBG** | **Guadaloupe-3** | **4.12** | **138** | *e*P | | **Pn** | **16 57 17.8** | **+0.2** |
| **TDBA** | **Terre de Bas,** | **4.12** | **138** | *e*P | | **Pn** | **16 57 16.4** | **-1.3** |
| **MAGL** | **Barre de l'ile** | **4.29** | **133** | *e*P | | **Pn** | **16 57 19.0** | **-0.9** |
| **DR12** | **Loma Pena Alta** | **4.61** | **269** | | | **Pn** | **16 57 24.5** | **+0.1** |
| **SDDR** | **Presa de Saban** | **6.41** | **271** | | | **Pn** | **16 57 50.4** | **+1.2** |
| **GRTK** | **Grand Turk** | **6.72** | **293** | Pn | | **Pn** | **16 57 52.1** | **-1.2** |

*IDC **06** 17:05:04.9±2.4,5.°82S×130.°00E,h0km,mb3.5/1, mb1 3.7/3,mb1mx3.4/23,mbtmp3.5/3,ML3.6/2,MS2.8/1, Ms1 2.8/1,ms1mx2.1/38,Error ellipse: s-maj=144.0km s-min=31.3km az=70.0*
**ISC 06 17:05:30.3**±2.7,**7.°3S**±0.°2×**129.°20E**±0.°09,**h131**km,**n9,** σ1$^{s}$**99**/10,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.18** | **107** | P | | **Pn** | **17 06 06.0** | **-0.5** |
| **DRS** | **Darwin Rock St** | **5.33** | **162** | P | | **Pn** | **17 06 51.0** | **+3.2** |
| **SOEI** | **Soe** | **5.43** | **243** | P | | **Pn** | **17 06 48.5** | **-0.8** |
| **MTN** | **Manton Dam** | **5.79** | **161** | P | | **Pn** | **17 06 56.3** | **+2.3** |
| **KDU** | **Kakadu** | **6.21** | **149** | P | | **Pn** | **17 07 00.3** | **+0.6** |
| **KNRA** | **Kununurra** | **8.29** | **183** | P | | **Pn** | **17 07 30.1** | **+2.4** |
| **WRA** | **Warramunga Arr** | **13.48** | **159** | Pn | | **Pn** | **17 08 34.9** | **-1.5** |
| | 0.3nm,0.3s,baz=347,slow=13,SNR=15 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **17 11 04.8** | **-0.6** |
| | 0.4nm,0.3s,baz=338,slow=22,SNR=9.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.85** | **165** | P | | **Pn** | **17 09 17.8** | **-0.6** |
| | 0.1nm,0.3s,baz=353,slow=13,SNR=28 | | | | | | | |
| ASAR | | | | S | | **Sn** | **17 12 24.9** | **-1.5** |
| | 0.1nm,0.3s,baz=350,slow=24,SNR=3.3 | | | | | | | |
| ASAR | | | | LR | | LR | 17 16 15.9 | |
| | comp=Z,26nm,18.2s,baz=205,slow=37 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.08** | **327** | P | | P | 17 16 01.2 | -15 |
| | 0.2nm,0.4s,baz=134,slow=6.3,SNR=4.9 | | | | | | | |

*SOME **06** 17:07:05.5,42.°45N×84.°43E,h20km*
*NNC **06** 17:07:08.4±2.3,42.°50N×84.°21E,h7km±12km,mb3.5, mpv3.2,Error ellipse: s-maj=16.9km s-min=9.0km az=141.0*
**ISC 06 17:07:08.9**±2.6,**42.°6N**±0.°1×**84.°17E**±0.°09,**h10**km,**n17,** σ2$^{s}$**29**/25,**4C-2D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **3.65** | **301** | *e*P | | **Pb** | **17 08 15.6** | **+2.0** |
| | 1.8nm,0.2s | | | | | | | |
| DJR | | | | *e*S | | **Sg** | **17 09 05.9** | **-0.2** |
| | 8.9nm,0.4s | | | | | | | |
| **DJR** | **Jarkent** | **3.65** | **301** | Pg | | **Pb** | **17 08 15.6** | **+2.0** |
| | 1.8nm,0.2s | | | | | | | |
| DJR | | | | Lg | | Lg | 17 09 05.9 | |
| | 8.9nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **3.83** | **281** | *e*P | | **Pb** | **17 08 17.9** | **+1.2** |
| | 3.8nm,0.3s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **17 09 09.3** | **-2.6** |
| | 8.4nm,0.5s | | | | | | | |
| **UZB** | **Uzynbulak** | **3.83** | **281** | Pg | | **Pb** | **17 08 17.9** | **+1.2** |
| | 3.8nm,0.3s | | | | | | | |
| UZB | | | | Lg | | Lg | 17 09 09.3 | |
| | 8.4nm,0.5s | | | | | | | |
| **SATY** | **Saty** | **4.27** | **279** | *e*P | | **Pg** | **17 08 28.7** | **-2.0** |
| | 4.3nm,0.3s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **17 09 28.2** | **+2.2** |
| | 13nm,0.3s | | | | | | | |
| **SATY** | **Saty** | **4.27** | **279** | Pg | | **Pg** | **17 08 28.7** | **-2.0** |
| | 4.3nm,0.3s | | | | | | | |
| SATY | | | | Lg | | Lg | 17 09 28.2 | |
| | 13nm,0.3s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.42** | **310** | *e*P | | **Pb** | **17 08 28.6** | **+2.0** |
| | 2.5nm,0.5s | | | | | | | |
| KAPS | | | | *e*S | | **Sg** | **17 09 28.4** | **-2.4** |
| | 8.4nm,0.5s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.42** | **310** | Pg | | **Pb** | **17 08 28.6** | **+2.0** |
| | 2.5nm,0.5s | | | | | | | |
| KAPS | | | | Lg | | Lg | 17 09 28.4 | |
| | 8.4nm,0.5s | | | | | | | |
| **BLB** | **Baldybastay** | **4.43** | **292** | *e*P | | **Pg** | **17 08 31.3** | **-2.4** |
| | 5.7nm,0.3s | | | | | | | |
| BLB | | | | *e*S | | **Sg** | **17 09 32.5** | **+1.4** |
| | 12nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **4.43** | **292** | Pg | | **Pg** | **17 08 31.3** | **-2.4** |
| | 5.7nm,0.3s | | | | | | | |
| BLB | | | | Lg | | Lg | 17 09 32.5 | |
| | 12nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.45** | **343** | ‖Pn | | **Pn** | **17 08 17.6** | **+1.2** |
| | 0.4nm,0.6s,baz=200,slow=9.5,SNR=4.2 | | | | | | | |
| MK31 | | | | Pg | | **Pb** | **17 08 30.1** | **+3.0** |
| | 3.2nm,0.7s,baz=156,slow=17,SNR=15 | | | | | | | |
| MK31 | | | | ‖Lg | | Lg | 17 09 32.7 | |
| | 3.7nm,0.4s,baz=160,slow=30,SNR=10 | | | | | | | |
| **MAKZ** | **Makanchi** | **4.53** | **341** | ⇑Pn | | **Pn** | **17 08 17.7** | **+0.1** |
| | 1.4nm,0.9s | | | | | | | |
| MAKZ | | | | ⇑Pg | | **Pb** | **17 08 31.4** | **+2.9** |
| | 1.3nm,0.6s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 17 09 36.0 | |
| | 7.5nm,0.8s | | | | | | | |
| **ARXS** | **Arharly** | **4.91** | **292** | *e*P | | **Pg** | **17 08 40.3** | **-2.6** |
| | 1.6nm,0.5s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **17 09 48.1** | **+1.6** |
| | 11nm,0.6s | | | | | | | |
| **ARXS** | **Arharly** | **4.91** | **292** | Pg | | **Pg** | **17 08 40.3** | **-2.6** |
| | 1.6nm,0.5s | | | | | | | |
| ARXS | | | | Lg | | Lg | 17 09 48.1 | |
| | 11nm,0.6s | | | | | | | |
| **ZSN** | **Zaisan** | **4.92** | **6** | *e*P | | **Pg** | **17 08 39.8** | **-3.3** |
| | 1.6nm,0.4s | | | | | | | |
| ZSN | | | | *e*S | | **Sg** | **17 09 47.5** | **+0.7** |
| | 14nm,0.6s | | | | | | | |
| **ZSN** | **Zaisan** | **4.92** | **6** | Pg | | **Pg** | **17 08 39.8** | **-3.3** |
| | 1.6nm,0.4s | | | | | | | |
| ZSN | | | | Lg | | Lg | 17 09 47.5 | |
| | 14nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **9.01** | **337** | ⇑Lg | | Lg | 17 11 56.0 | |
| | 4.3nm,0.8s | | | | | | | |

*IDC **06** 17:14:58.8±0.8,6.°74N×72.°95W,h161km±10km,mb3.1/2, mb1 3.6/4,mb1mx3.1/32,mbtmp3.7/4,Error ellipse: s-maj=38.0km s-min=7.8km az=131.0*
*RSNC **06** 17:15:00.5±0.6,6.°79N×73.°09W,h151km±3km,ML3.3, Mw3.7*
**ISC 06 17:14:59.5**±0.9,**6.°89N**±0.°03×**73.°12W**±0.°04,**h154**km±6km, **n28,**σ1$^{s}$**12**/52,**2C,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.30** | **192** | *i* P | | **Pn** | **17 15 20.5** | **-0.3** |
| BARC | | | | *e*S | | **Sn** | **17 15 36.1** | **-1.0** |
| BARC | | | | *i* | | | 17 15 37.4 | |
| | comp=Z,264nm,0.4s | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.61** | **43** | *e*P | | **Pn** | **17 15 23.2** | **+0.7** |
| PAMC | | | | *e*S | | **Sn** | **17 15 40.7** | **+0.8** |
| PAMC | | | | *i* | | | 17 15 42.8 | |
| | comp=Z,298nm,0.5s | | | | | | | |
| **RUSC** | **La Rusia** | **0.99** | **178** | *e*P | | **Pn** | **17 15 24.3** | **-0.8** |
| RUSC | | | | *e*S | | **Sn** | **17 15 43.7** | **-1.0** |
| RUSC | | | | *i* | | | 17 15 45.8 | |
| | comp=Z,129nm,0.5s | | | | | | | |
| **OCAC** | **Ocana** | **1.36** | **352** | *e*P | | **Pn** | **17 15 29.4** | **+1.2** |
| OCAC | | | | *e*S | | **Sn** | **17 15 52.1** | **+2.0** |
| OCAC | | | | *i* | | | 17 15 56.6 | |
| | comp=Z,442nm,0.3s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.38** | **255** | *i* P | | **Pn** | **17 15 27.6** | **-0.5** |
| PTBC | | | | *e*S | | **Sn** | **17 15 49.1** | **-0.9** |
| PTBC | | | | *i* | | | 17 15 54.4 | |
| | comp=Z,284nm,0.5s | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.55** | **218** | ⇑*i*P | | **Pn** | **17 15 29.6** | **-0.5** |
| SPBC | | | | *e*S | | **Sn** | **17 15 52.4** | **-1.0** |
| SPBC | | | | *i* | | | 17 15 58.7 | |
| | comp=Z,411nm,0.3s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **289** | *e*P | | **Pn** | **17 15 33.3** | **+0.3** |
| ZARC | | | | *e*S | | **Sn** | **17 15 59.6** | **+1.0** |
| ZARC | | | | *i* | | | 17 16 05.2 | |
| | comp=Z,363nm,0.5s | | | | | | | |
| **NORC** | **Norcasia** | **2.18** | **233** | *e*P | | **Pn** | **17 15 36.7** | **-0.4** |
| NORC | | | | *e*S | | **Sn** | **17 16 05.2** | **-0.8** |
| NORC | | | | *i* | | | 17 16 06.8 | |
| | comp=Z,146nm,0.3s | | | | | | | |
| **CHIC** | **Chingaza** | **2.33** | **195** | *e*P | | **Pn** | **17 15 38.5** | **-0.7** |
| CHIC | | | | *e*S | | **Sn** | **17 16 08.2** | **-1.5** |
| CHIC | | | | *i* | | | 17 16 12.0 | |
| | comp=Z,87nm,0.4s | | | | | | | |
| **ROSC** | **El Rosal** | **2.36** | **211** | P | | **Pn** | **17 15 40.4** | **+0.8** |
| | comp=Z,34nm,0.3s,baz=80,slow=14,SNR=18 | | | | | | | |
| ROSC | | | | S | | **Sn** | **17 16 09.7** | **-0.7** |
| | comp=Z,61nm,0.3s,baz=83,slow=18,SNR=8.5 | | | | | | | |
| **ROSC** | **El Rosal** | **2.36** | **211** | *e*P | | **Pn** | **17 15 40.2** | **+0.6** |
| ROSC | | | | *e*S | | **Sn** | **17 16 11.4** | **+1.0** |
| ROSC | | | | *i* | | | 17 16 14.1 | |
| | comp=Z,182nm,0.4s | | | | | | | |
| **HELC** | **Santa Helena** | **2.50** | **254** | *e*P | | **Pn** | **17 15 41.9** | **+0.7** |
| HELC | | | | *e*S | | **Sn** | **17 16 14.1** | **+0.9** |
| HELC | | | | *i* | | | 17 16 19.3 | |
| | comp=Z,122nm,0.3s | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.54** | **290** | *e*P | | **Pn** | **17 15 41.1** | **-0.3** |
| UREC | | | | *e*S | | **Sn** | **17 16 12.1** | **-1.6** |
| UREC | | | | *i* | | | 17 16 21.5 | |
| | comp=Z,121nm,0.3s | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.78** | **234** | *e*P | | **Pn** | **17 15 45.0** | **+0.2** |
| GUY2C | | | | *e*S | | **Sn** | **17 16 22.1** | **+2.4** |
| GUY2C | | | | *i* | | | 17 16 27.6 | |
| | comp=Z,130nm,0.4s | | | | | | | |
| **VILC** | **Villavicencio,** | **2.82** | **192** | *e*P | | **Pn** | **17 15 44.2** | **-0.7** |
| VILC | | | | *e*S | | **Sn** | **17 16 20.3** | **+0.2** |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **251** | *e*P | | **Pn** | **17 15 48.4** | **+0.5** |
| CBOC | | | | *e*S | | **Sn** | **17 16 26.7** | **+1.4** |
| CBOC | | | | *i* | | | 17 16 36.1 | |
| | comp=Z,42nm,0.5s | | | | | | | |
| **DBBC** | **Dabeiba** | **3.07** | **273** | ⇑*i*P | | **Pn** | **17 15 48.0** | **0.0** |
| DBBC | | | | *e*S | | **Sn** | **17 16 24.7** | **-0.9** |
| DBBC | | | | *i* | | | 17 16 26.6 | |
| | comp=Z,282nm,0.4s | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.15** | **307** | *e*P | | **Pn** | **17 15 47.6** | **-1.3** |
| MOTC | | | | *e*S | | **Sn** | **17 16 27.2** | **+0.1** |
| MOTC | | | | *i* | | | 17 16 29.0 | |
| | comp=Z,51nm,0.4s | | | | | | | |
| **SDV** | **Santo Domingo** | **3.16** | **51** | P | | **Pn** | **17 15 49.9** | **+0.7** |
| | comp=Z,18nm,0.3s,baz=225,slow=3.0,SNR=38 | | | | | | | |
| SDV | | | | S | | **Sn** | **17 16 27.0** | **-0.8** |
| | comp=Z,22nm,0.3s,baz=66,slow=21,SNR=29 | | | | | | | |
| **ANIL** | **Santa Ana** | **3.29** | **224** | *e*P | | **Pn** | **17 15 52.1** | **+1.0** |
| ANIL | | | | *e*S | | **Sn** | **17 16 32.2** | **+1.2** |
| ANIL | | | | *i* | | | 17 16 36.7 | |
| | comp=Z,268nm,0.4s | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.62** | **326** | *i* P | | **Pn** | **17 15 54.9** | **-0.2** |
| SJCC | | | | *e*S | | **Sn** | **17 16 35.9** | **-2.3** |
| SJCC | | | | *i* | | | 17 16 40.3 | |
| | comp=Z,29nm,0.5s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.64** | **216** | *e*P | | **Pn** | **17 15 54.6** | **-0.7** |
| ORTC | | | | *e*S | | **Sn** | **17 16 39.0** | **+0.3** |
| ORTC | | | | *i* | | | 17 16 42.2 | |
| | comp=Z,53nm,0.3s | | | | |

**ERM Erimo 1.71 110 Pn 17 30 14.8 +1.4**
**JCH Churui 1.74 89** P **Pn 17 30 14.1 +0.3**
JCH eS **Sn 17 30 38.0 -0.4**
**JKK2 Kamakawa 2 1.80 45** P **Pn 17 30 14.9 +0.5**
JKK2 eS **Sn 17 30 39.3 -0.2**
**JTM Tenmabayashi 1.82 178 Pn 17 30 15.5 +0.8**
JTM Sn **Sn 17 30 40.4 +0.4**
**JYG Yagishiri 1.84 10** P **Pn 17 30 14.9 0.0**
**ASAJ Asahikawa 1.90 37** P **Pn 17 30 16.2 +0.6**
comp=Z,52nm,0.3s,baz=245,slow=12,SNR=355
ASAJ S **Sn 17 30 41.6 -0.1**
comp=Z,13nm,0.3s,baz=288,slow=33,SNR=16
**JKA Kamikawa-asahi 1.91 37** Pn **Pn 17 30 16.2 +0.6**
JKA Sn **Sn 17 30 41.3 -0.4**
**JAR Ashorobuto 2.15 70** P **Pn 17 30 18.6 +0.2**
JAR eS **Sn 17 30 45.8 -0.9**
**AKK Akkeshi 2.86 81** *i* P **Pn 17 30 27.0 -0.1**
AKK AMB AMB 17 30 27.4
comp=Z,150nm,0.2s
AKK eS **Sn 17 31 01.6 -0.7**
AKK A A 17 31 03.2
comp=Z,440nm,0.3s
AKK A A 17 31 03.2
comp=Z,1µm,0.3s
**RUSJ Misakicho 3.44 63** *e*PN **Pn 17 30 36.8 +2.3**
RUSJ S **Sn 17 31 16.3 +0.7**
**GLVR Golovnino 3.49 70** *e*PN **Pn 17 30 35.9 +0.7**
GLVR eS **Sn 17 31 16.4 -0.4**
GLVR pmax pmax
comp=Z,84nm,0.1s
GLVR smax smax
comp=E,311nm,0.3s
GLVR smax smax
comp=N,267nm,0.1s
**GLVR Golovnino 3.49 70** *e*P **Pn 17 30 35.9 +0.7**
GLVR AMB AMB 17 30 39.0
comp=N,80nm,0.2s
GLVR eS **Sn 17 31 16.4 -0.4**
GLVR A A 17 31 21.2
comp=N,270nm,0.2s
GLVR A A 17 31 21.2
comp=N,310nm,0.2s
**NMR Nemuro--Hokkai 3.55 76** *i* P **Pn 17 30 35.6 -0.4**
NMR AMB AMB 17 30 36.2
comp=N,50nm,0.2s
NMR *i* S **Sn 17 31 16.1 -2.0**
NMR A A 17 31 18.6
comp=N,190nm,0.3s
NMR A A 17 31 18.6
comp=N,300nm,0.3s
**YUK Yuzh-Kuril'sk 3.82 66** *e*PN **Pn 17 30 40.7 +1.2**
YUK eS **Sn 17 31 25.1 +0.7**
YUK pmax pmax
comp=Z,91nm,0.4s
YUK smax smax
comp=N,273nm,0.4s
YUK smax smax
comp=E,257nm,0.4s
**YUK Yuzh-Kuril'sk 3.82 66** *i* P **Pn 17 30 40.5 +1.0**
YUK AMB AMB 17 30 41.2
comp=E,90nm,0.4s
YUK eS **Sn 17 31 24.6 +0.2**
YUK A A 17 31 27.9
comp=E,270nm,0.4s
YUK A A 17 31 27.9
comp=E,260nm,0.4s
**TEY Ternei 4.00 309** ⇑ *i* PN **Pn 17 30 42.0 +0.2**
TEY pmax pmax
comp=N,100nm,0.6s
TEY pmax pmax
comp=E,100nm,0.6s
TEY pmax pmax
comp=Z,100nm,0.6s
TEY pmax pmax
comp=N,90nm,0.6s
TEY pmax pmax
comp=E,130nm,0.6s
TEY pmax pmax
comp=Z,160nm,0.6s
**TEY Ternei 4.00 309** *i* P **Pn 17 30 42.0 +0.2**
TEY AMB AMB 17 30 42.3
comp=Z,100nm,0.6s
**SHO Shikotan 4.44 72** *e*PN **Pn 17 30 47.2 -0.4**
SHO eS **Sn 17 31 35.0 -3.9**
SHO pmax pmax
comp=Z,29nm,0.1s
SHO smax smax
comp=E,241nm,0.4s
SHO smax smax
comp=N,175nm,0.2s
**SHO Shikotan 4.44 72** *e*P **Pn 17 30 47.4 -0.2**
SHO AMB AMB 17 30 49.8
comp=N,30nm,0.2s
SHO *i* S **Sn 17 31 35.1 -3.9**
SHO A A 17 31 42.2
comp=N,120nm,0.4s
SHO A A 17 31 42.2
comp=N,270nm,0.4s
**YSS Yuzh-Sakhalins 4.52 15** *ce*PN **Pn 17 30 49.5 +0.9**
YSS eS **Sn 17 31 39.1 -1.7**
YSS pmax pmax
comp=Z,80nm,0.6s
YSS smax smax
comp=E,20nm,0.6s
**YSS Yuzh-Sakhalins 4.52 15** **Pn 17 30 49.4 +0.7**
**YSS Yuzh-Sakhalins 4.52 15** *i* P **Pn 17 30 49.5 +0.9**
YSS AMB AMB 17 30 49.9
comp=E,420nm,0.6s
YSS eS **Sn 17 31 41.0 +0.2**
YSS A A 17 31 47.7
comp=E,20nm,0.6s
YSS A A 17 31 47.7
comp=E,20nm,0.6s
**JMM Marumori 4.74 182 Pn 17 30 51.4 -0.3**
JMM Sn **Sn 17 31 43.9 -2.3**
**JSD Sado 5.02 206** Pn **Pn 17 30 57.2 +1.8**
**KUR Kuril'sk 5.61 60** *e*PN **Pn 17 31 04.2 +1.1**
KUR S **Sn 17 32 08.5 +1.8**
KUR pmax pmax
comp=Z,36nm,0.4s
KUR smax smax
comp=E,46nm,0.5s
**KUR Kuril'sk 5.61 60** *i* P **Pn 17 31 03.7 +0.6**
KUR AMB AMB 17 31 04.9
comp=E,40nm,0.3s
KUR eS **Sn 17 32 06.3 -0.4**
KUR A A 17 32 18.5
comp=E,40nm,0.5s
KUR A A 17 32 18.5
comp=E,50nm,0.5s
**JYT Yasato 6.41 186 Pn 17 31 13.4 -0.3**
**MJB9 Matsu-Tunnel 6.43 201 Pn 17 31 14.4 +0.3**
**MAJO Matsushiro 6.43 200** *i* PN **Pn 17 31 15.5 +1.3**
**MAJO Matsushiro 6.43 200 Pn 17 31 14.4 +0.3**
**MAT Matsushiro 6.43 201** P **Pn 17 31 15.5 +1.3**
MAT eS **Sn 17 32 26.8 +0.3**
**MJAR Matsushiro Arr 6.43 200** P **Pn 17 31 16.1 +1.9**
comp=E,0.7nm,0.3s,baz=344,slow=23,SNR=37
**MJAR Matsushiro Arr 6.43 200 Pn 17 31 14.8 +0.6**
**UGL Uglegorsk 6.51 6** *e*P **Pn 17 31 16.4 +1.4**
UGL AMB AMB 17 31 21.8
comp=E,30nm,0.4s
**GRTR Gornotajezhnoj 6.56 283** *i* P **Pn 17 31 16.6 +0.8**
GRTR AMB AMB 17 31 18.1
comp=E,10.0nm,0.6s
**VLA Vladivostok 6.72 277** *i* PN **Pn 17 31 18.8 +1.0**
**VLA Vladivostok 6.72 277** *i* P **Pn 17 31 18.8 +1.0**
**USRK Ussuriysk Ar. 6.75 287** P **Pn 17 31 17.9 -0.4**
baz=77,slow=16,SNR=7.0
**KHBR Khabarovsk 7.20 327** *e*P **Pn 17 31 25.7 +1.5**
KHBR AMB AMB 17 31 26.1
comp=E,10.0nm,0.8s
**JGF Kuroka 7.55 203 Pn 17 31 30.9 +1.8**
**INU Inuyama 7.88 204** Pn **Pn 17 31 34.2 +0.7**
**JSG Sagara 8.22 196** Pn **Pn 17 31 39.7 +1.6**
**TYV Tymovskoe 8.33 7** *e*PN **Pn 17 33 15.0 +3.0**
TYV eS **Sn 17 33 15.0 +3.0**
TYV pmax pmax
comp=Z,9.0nm,0.6s
TYV pmax pmax
comp=Z,200nm,3.9s
TYV smax smax
comp=E,9.0nm,0.6s
TYV smax smax
comp=N,800nm,4.6s
TYV smax smax
comp=E,700nm,4.6s
**TYV Tymovskoe 8.33 7** *e*P **Pn 17 31 40.0 +0.7**
TYV AMB AMB 17 31 41.6
comp=E,200nm,3.9s
TYV AMB AMB 17 31 42.0
comp=E,20nm,0.4s
TYV *e*S **Sn 17 33 10.5 -1.5**
TYV A A 17 33 18.2
comp=E,800nm,4.5s
TYV A A 17 33 18.2
comp=E,700nm,4.5s
TYV A A 17 33 20.5
comp=E,30nm,0.4s
TYV A A 17 33 20.5
comp=E,40nm,0.4s
**MDJ Mudanjiang 8.52 287 Pn 17 31 39.6 -2.3**
**GRNR Gornyy 8.74 341** *i* P **Pn 17 31 45.3 +0.4**
GRNR AMB AMB 17 31 48.3
comp=E,10.0nm,0.5s
**KLR Kul'dur 9.23 319** P **Pn 17 31 51.6 +0.2**
comp=E,0.3nm,0.3s,baz=132,slow=12,SNR=11
**JHJ Hachijo jima 2 9.52 186** P **Pn 17 31 53.6 -1.7**
comp=E,26nm,0.3s,baz=345,slow=21,SNR=13
JHJ S **Sn 17 33 32.6 -8.3**
comp=E,4.3nm,0.3s,baz=218,slow=22,SNR=1.6
**JHJ2 Mitsune 9.53 186** Pn **Pn 17 31 53.5 -1.9**
**BNX BinXian 10.26 292** ⇓ P **Pn 17 32 05.2 +0.3**
BNX pmax pmax
comp=E,10.0nm,0.8s
BNX pmax pmax
comp=Z,190nm,4.8s
**OKH Okha 11.02 6** *e*P **Pn 17 32 16.5 +1.6**
OKH AMB AMB 17 32 19.2
comp=Z,20nm,0.8s
**KSRS Korea Array 11.27 247** P **Pn 17 32 18.0 -0.3**
comp=Z,0.1nm,0.3s,baz=62,slow=13,SNR=4.5
**KSRS Korea Array 11.27 247** PN **Pn 17 32 18.0 -0.3**
**KSRS Korea Array 11.27 247** *e*P **Pn 17 32 18.0 -0.3**
**CN2 Changchun 11.42 281** *e*P **Pn 17 32 21.2 +1.0**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
**SKR Severo-Kuril's 13.14 47** *e*P **Pn 17 32 42.2 -0.2**
SKR AMB AMB 17 32 46.2
comp=Z,70nm,0.6s
**JSU Suzuyama 13.90 221** Pn **Pn 17 32 52.7 +0.3**
**ZEA Zeya 14.39 325** *e*P **P 17 32 59.7 -1.3**
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax
comp=N,10.0nm,0.8s
ZEA pmax pmax
comp=Z,10.0nm,0.7s
**ZEA Zeya 14.39 325** *e*P **Pn 17 32 57.2 -1.1**
ZEA AMB AMB 17 33 01.0
comp=Z,10.0nm,0.7s
**PEA0B Petropavlovsk- 15.32 41** Pn **Pn 17 33 09.8 -0.1**
PEA0B IAmb IAmb 17 33 39.0
comp=Z,45nm,1.4s
**PETK Petropavlovsk- 15.32 41** P **Pn 17 33 09.9 0.0**
comp=Z,0.3nm,0.3s,baz=222,slow=16,SNR=6.3
**HIA Hailar 16.19 302 Pn 17 33 19.8 -0.8**
**MA2 Magadan 18.03 16** *ce*P **P 17 33 40.9 0.0**
MA2 pmax pmax
comp=Z,14nm,2.5s
**MA2 Magadan 18.03 16** P **P 17 33 40.3 -0.6**
**JOW Kunigami 18.86 218** P **P 17 33 48.7 -1.6**
**YAK Yakutsk 20.59 345** P **P 17 34 07.3 -1.3**
comp=Z,8.0nm,0.5s,baz=354,slow=4.5,SNR=9.1
YAK S **S 17 37 43.3 -6.9**
comp=Z,1.3nm,0.5s,baz=208,slow=10,SNR=7.4
**YAK Yakutsk 20.59 345** *e*P **P 17 34 06.7 -1.8**
YAK *e* 17 37 42.0
YAK pmax pmax
comp=Z,20nm,1.0s
YAK pmax pmax
comp=N,5.0nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.9s
**YAK Yakutsk 20.59 345 P 17 34 03.7 -4.8**
YAK IAmb IAmb 17 34 09.0
comp=Z,19nm,0.7s
**SEY Senchan 21.43 14** P **P 17 34 16.6 -0.9**
comp=Z,6.1nm,0.6s,baz=205,slow=8.6,SNR=46
**ULN Ulaanbaatar 24.35 294** *ce*P **P 17 34 43.9 -1.8**
ULN pmax pmax
comp=Z,2.0nm,0.6s
**ULN Ulaanbaatar 24.35 294** P **P 17 34 45.0 -0.7**
**ULN Ulaanbaatar 24.35 294** *e*P **P 17 34 43.9 -1.8**
**SONM Songino Array 24.79 294** P **P 17 34 50.4 +0.7**
comp=Z,4.8nm,0.8s,baz=82,slow=8.5,SNR=36
**SONM Songino Array 24.79 294** P **P 17 34 49.7 +0.1**
SONM IAmb IAmb 17 34 51.8
comp=Z,5.5nm,0.8s
**ZAK Zakamensk 26.87 300** *e*P **P 17 35 09.0 +0.7**
ZAK pmax pmax
comp=Z,3.0nm,0.9s
**ZAK Zakamensk 26.87 300** *e*P **P 17 35 09.0 +0.7**
**BILL Bilibino 28.82 19** ⇑ *e*P **P 17 35 24.6 -0.8**
BILL pmax pmax
comp=Z,9.0nm,2.0s
BILL MLR MLR
comp=Z,26nm,14.0s
**BILL Bilibino 28.82 19** P **P 17 35 24.9 -0.5**
**H11N2 WAKE ISLAND Hy 31.57 128** T T 18 08 00.5
baz=322,slow=75,SNR=15
**H11N1 WAKE ISLAND Hy 31.59 128** T T 18 08 02.0
baz=322,slow=75,SNR=8.9
**H11N3 WAKE ISLAND Hy 31.59 128** T T 18 08 02.5
baz=322,slow=75,SNR=13
**H11S1 WAKE ISLAND Hy 32.43 130** T T 18 09 09.0
baz=328,slow=76,SNR=11
**H11S3 WAKE ISLAND Hy 32.43 130** T T 18 09 11.5
baz=328,slow=76,SNR=14
**H11S2 WAKE ISLAND Hy 32.45 130** T T 18 09 10.7
baz=328,slow=76,SNR=8.6
**TNA Tin City 36.26 33** P **P 17 36 30.7 +0.7**
TNA IAmb IAmb 17 37 08.8
comp=Z,6.0nm,1.5s
**DGZ Jazzator, Alta 37.09 300** *i* P **P 17 36 36.5 -1.0**
DGZ pmax pmax
comp=Z,4.0nm,0.9s
**ZAA0 Zalesovo Array 38.10 307 P 17 36 46.0 +0.4**
ZAA0 IAmb IAmb 17 36 47.9
comp=Z,8.7nm,0.8s
**ZALV Zalesovo Beam 38.10 307** P **P 17 36 46.9 +1.2**
comp=Z,4.4nm,0.3s,baz=86,slow=8.1,SNR=36
**ZALV Zalesovo Beam 38.10 307 P 17 36 46.6 +0.9**
**MK31 Makanchi Array 41.10 297** *i* P **P 17 37 11.2 +0.6**
**MK31 Makanchi Array 41.10 297 P 17 37 10.2 -0.4**
**MKAR Makanchi Array 41.10 297** P **P 17 37 11.2 +0.5**
comp=Z,2.3nm,0.9s,baz=82,slow=9.6,SNR=12
**MKAR Makanchi Array 41.10 297 P 17 37 10.8 +0.1**
**MAKZ Makanchi 41.30 297 P 17 37 11.9 -0.4**
**J20K Nowinta River 41.94 36** P **P 17 37 18.4 +1.2**
**K20K Telida 42.00 38** P **P 17 37 19.1 +1.3**
K20K IAmb IAmb 17 37 55.0
comp=Z,9.6nm,1.4s
**IMAR Indian Mountai 42.10 34** P **P 17 37 18.9 +0.4**
**KURK Kurchatov 42.41 303** P **P 17 37 22.4 +1.2**
**KURK Kurchatov 42.41 303** P **P 17 37 21.2 0.0**
KURK IAmb IAmb 17 37 24.8
comp=Z,10nm,0.9s
**KURK Kurchatov 42.41 303** *e*P **P 17 37 22.4 +1.2**
**H21K Melozitna Rive 42.49 34** P **P 17 37 22.2 +0.6**
**KURBB Kurchatov Arra 42.49 303** P **P 17 37 22.4 +0.6**
comp=Z,5.8nm,0.4s,baz=76,slow=9.0,SNR=52
**PPLA Purkeypile 42.88 38** P **P 17 37 26.1 +1.1**
**CAST Castle Rocks 42.89 37** P **P 17 37 26.1 +1.1**
**SPU Mount Spurr 43.10 41** P **P 17 37 28.3 +1.6**
**MLY Manley 43.38 35** P **P 17 37 29.5 +0.6**
MLY IAmb IAmb 17 37 36.6
comp=Z,9.9nm,1.6s
**KTH Kantishna Hill 43.40 37** P **P 17 37 29.9 +0.8**
KTH IAmb IAmb 17 37 54.7
comp=Z,9.1nm,1.4s
**COLD Coldfoot 43.51 32** P **P 17 37 29.8 0.0**
**CNPM China Poot 43.72 43** P **P 17 37 32.2 +0.6**
**I23K Minto, Yukon-K 43.95 35** P **P 17 37 32.5 -0.8**
**NEA2 Nenana 44.12 36** P **P 17 37 35.6 +0.8**
NEA2 IAmb IAmb 17 37 44.4
comp=Z,6.9nm,1.4s
**RND Reindeer 44.34 37** P **P 17 37 35.9 -0.7**
RND IAmb IAmb 17 38 13.5
comp=Z,10.0nm,1.3s
**MDM Murphy Dome 44.45 35** P **P 17 37 38.0 +0.6**
MDM IAmb IAmb 17 37 54.7
comp=Z,7.6nm,1.6s
**H24K Noodor Dome 44.52 34** P **P 17 37 38.5 +0.6**
H24K IAmb IAmb 17 38 07.4
comp=Z,7.1nm,1.6s
**GHO Glory Hole Cre 44.52 40** P **P 17 37 38.0 0.0**
**WRH Wood River Hil 44.56 36** P **P 17 37 37.6 -0.6**
**COLA College 44.62 35** *i* P **P 17 37 39.4 +0.8**
COLA pmax pmax
comp=Z,3.0nm,1.0s
**CCB Clear Creek Bu 44.66 35** P **P 17 37 38.8 -0.2**
**SML Sawmill 44.79 40** P **P 17 37 40.9 +0.8**
SML IAmb IAmb 17 37 47.9
comp=Z,16nm,1.3s
**KNK Knik Glacier 44.79 40** P **P 17 37 41.1 +1.0**
**IL31 45.04 35** P **P 17 37 42.0 +0.1**
IL31 IAmb IAmb 17 38 13.2
comp=Z,6.5nm,1.4s
**ILAR Eielson Array 45.04 35** P **P 17 37 43.1 +1.1**
comp=Z,0.6nm,0.7s,baz=239,slow=5.2,SNR=10
**HDA Harding Lake 45.06 36** P **P 17 37 41.9 -0.3**
HDA IAmb IAmb 17 37 48.5
comp=Z,13nm,1.4s
**TOLI2 Tolitoli 45.12 209** P **P 17 37 41.8 -1.3**
TOLI2 IAmb IAmb 17 37 44.2
comp=Z,10nm,1.2s
**FYU Fort Yukon 45.51 33** P **P 17 37 45.8 +0.2**
FYU IAmb IAmb 17 37 52.0
comp=Z,18nm,1.4s
**BMAR Burnt Mountain 45.67 31** P **P 17 37 48.1 +1.1**
**J25K Salcha River, 45.71 35** P **P 17 37 49.3 +2.0**
J25K IAmb IAmb 17 38 13.8
comp=Z,9.4nm,1.6s
**M24K Tolsona, Glenn 45.75 39** P **P 17 37 48.8 +1.1**
**FID Port Fidalgo 45.85 41** P **P 17 37 47.9 -0.5**
**KLU Klutina 45.98 40** P **P 17 37 49.6 +0.1**
**FAKI Fak Fak 46.01 192** P **P 17 37 51.9 +1.8**
FAKI IAmb IAmb 17 37 52.9
comp=Z,8.8nm,0.8s
**RIDG Independent Ri 46.07 36** P **P 17 37 50.9 +0.8**
RIDG IAmb IAmb 17 38 17.0
comp=Z,21nm,1.6s
**SCRK Sand Creek 46.40 36** P **P 17 37 53.2 +0.4**
SCRK IAmb IAmb 17 38 28.0
comp=Z,6.9nm,1.6s
**BRVK Borovoye 46.77 309** *e*P **P 17 37 56.5 +0.8**
BRVK pmax pmax
comp=Z,5.0nm,0.9s
**BRVK Borovoye 46.77 309** P **P 17 37 56.3 +0.6**
BRVK IAmb IAmb 17 38 00.1
comp=Z,15nm,1.4s
**BRVK Borovoye 46.77 309** *e*P **P 17 37 56.5 +0.8**
**BOOM Boomskoye usch 46.83 293** P **P 17 37 57.5 +1.0**
**GLB Gilahina Butte 46.98 39** P **P 17 37 56.7 -0.6**
GLB IAmb IAmb 17 38 14.3
comp=Z,20nm,1.5s
**M26K Nabesna, AK 47.15 38** P **P 17 37 58.5 -0.1**
M26K IAmb IAmb 17 38 20.8
comp=Z,9.7nm,1.6s
**VRDI Verde Repeater 47.20 40** P **P 17 38 00.7 +1.6**
**EGAK Eagle 47.46 35** P **P 17 38 01.2 +0.3**
EGAK IAmb IAmb 17 38 19.0
comp=Z,5.8nm,1.4s
**L27K Beaver Creek, 47.53 37** P **P 17 38 03.1 +1.6**
L27K IAmb IAmb 17 38 08.9
comp=Z,7.2nm,1.4s
**BCAR Beaver Creek A 47.55 37** P **P 17 38 03.1 +1.4**
**WAX Waxell Ridge 47.67 41** P **P 17 38 04.2 +1.6**
**M27K Edge Creek, AK 47.67 38** P **P 17 38 03.7 +1.0**
M27K IAmb IAmb 17 38 04.6
comp=Z,15nm,1.5s
**SNH Sunshine Point 47.74 41** P **P 17 38 05.8 +2.7**
**AAK Ala-Archa 47.75 294** P **P 17 38 04.9 +1.3**
comp=Z,0.6nm,0.3s,baz=111,slow=5.8
**AAK Ala-Archa 47.75 294** P **P 17 38 04.3 +0.7**
**BARN Barnard Glacie 48.08 40** P **P 17 38 06.7 +0.8**
BARN IAmb IAmb 17 38 41.8
comp=Z,18nm,1.5s
**INK Inuvik 49.62 29** P **P 17 38 10.8 +0.8**
INK IAmb IAmb 17 38 24.9
comp=Z,5.4nm,1.4s
**M30M Minto, Yukon 49.89 37** P **P 17 38 21.2 +1.7**
M30M IAmb IAmb 17 38 27.8
comp=Z,5.6nm,1.3s
**TARA Tarawa 50.04 136** P **P 17 38 19.9 -1.2**
**HYT Haines Junctio 50.10 39** P **P 17 38 22.9 +1.7**
HYT IAmb IAmb 17 38 24.3
comp=Z,6.3nm,1.1s
**KKAR Karatay Array 50.22 296** P **P 17 38 19.5 -2.7**
**SVE Sverdlovsk 50.85 316** *e*P **P 17 38 27.8 +1.1**
SVE pmax pmax
comp=Z,8.0nm,0.7s
**SVE Sverdlovsk 50.85 316** *e*P **P 17 38 27.8 +1.1**
**KULM Kulim 51.53 235** P **P 17 38 33.8 +1.5**
**ARU Arti 52.06 316** P **P 17 38 36.3 +0.6**
comp=Z,1.1nm,0.3s,baz=87,slow=7.6
**ARU Arti 52.06 316** *d* *i* P **P 17 38 34.7 -1.0**
ARU 17 40 33.1
ARU S **S 17 45 49.6 +2.0**
ARU pmax pmax
comp=Z,4.0nm,0.9s
**CHGR Chuyangaron 53.15 292** P **P 17 38 43.9 -0.2**
CHGR IAmb IAmb 17 38 53.1
comp=Z,6.2nm,1.0s
**ABKAR Akbulak array 54.21 307** P **P 17 38 52.3 +0.7**
**ABKAR Akbulak array 54.21 307** P **P 17 38 51.6 0.0**
ABKAR IAmb IAmb 17 38 58.9
comp=Z,2.3nm,0.8s
**SOEI Soe 54.31 200** P **P 17 38 53.1 +0.4**
**AKTO Aktyubinsk 54.81 309** P **P 17 38 56.8 +0.9**
comp=Z,0.6nm,0.4s,baz=75,slow=12
**RES Resolute Bay 57.30 15** P **P 17 39 14.0 +0.9**
RES IAmb IAmb 17 39 34.0
comp=Z,3.1nm,1.1s
**UGM Wanagama 57.45 217** P **P 17 39 14.9 -0.1**
**ARCES ARCESS Array B 58.69 338** P **P 17 39 23.8 +0.9**
comp=Z,1.9nm,0.7s,baz=46,slow=7.1,SNR=5.6
**YKA Yellowknife Ar 59.19 32** P **P 17 39 27.6 +1.2**
comp=Z,0.5nm,0.7s,baz=306,slow=6.3,SNR=12
**WB0 Warramunga Arr 62.36 187** P **P 17 39 49.1 +0.7**
WB0 IAmb IAmb 17 39 54.3
comp=Z,8.0nm,1.4s
**WRAB Tennant Creek 62.53 187** P **P 17 39 50.2 +0.8**
WRAB IAmb IAmb 17 39 51.3
comp=Z,2.7nm,0.9s
**WB2 Warramunga Arr 62.54 187** P **P 17 39 49.9 +0.4**
WB2 IAmb IAmb 17 39 54.4
comp=Z,12nm,1.6s
**WR0 Warramunga Arr 62.54 187** P **P 17 39 49.9 +0.4**
WR0 IAmb IAmb 17 39 51.5
comp=Z,8.3nm,1.4s
**WRA Warramunga Arr 62.54 187** P **P 17 39 50.5 +1.0**
comp=Z,1.4nm,0.6s,baz=5.5,slow=7.0,SNR=24
**WRA Warramunga Arr 62.54 187** P **P 17 39 49.6 +0.1**
**CTAO Charters Tower 62.57 174** P **P 17 39 50.4 +0.7**
CTAO IAmb IAmb 17 40 19.9
comp=Z,9.2nm,1.2s
**FIA1 FINESS Array S 63.76 331** P **P 17 39 57.0 0.0**
**FINES FINESS Array B 63.76 331** P **P 17 39 57.3 +0.2**
comp=Z,2.7nm,0.6s,baz=48,slow=8.0,SNR=20
**FINES FINESS Array B 63.76 331** P **P 17 39 57.2 +0.1**
**AS31 Alice Springs 66.27 187** P **P 17 40 14.4 +0.7**
**ASAR Alice Springs 66.27 187** P **P 17 40 15.3 +1.6**
comp=Z,1.1nm,0.7s,baz=2.3,slow=5.2,SNR=23
**ASAR Alice Springs 66.27 187** P **P 17 40 14.8 +1.1**
**NC405 NORSAR Array S 68.73 336** P **P 17 40 28.3 -0.5**
**NC303 NORSAR Array S 68.75 336** P **P 17 40 28.3 -0.6**
**NC204 NORSAR Array S 68.88 337** P **P 17 40 30.3 +0.5**
**NB2 NORSAR Subarra 68.94 336** P **P 17 40 30.0 -0.1**
comp=Z,0.5nm,0.5s,baz=36,slow=6.5
**NOA NORSAR Array B 68.94 336** P **P 17 40 29.8 -0.3**
comp=Z,13nm,0.4s,baz=45,slow=8.1,SNR=4.9
**AKASG Malin Array Be 69.73 321** P **P 17 40 35.1 +0.1**
comp=Z,0.5nm,0.3s,baz=43,slow=6.7,SNR=6.8
**AKASG Malin Array Be 69.73 321** P **P 17 40 36.3 +1.3**
**AKBB Malin Array Si 69.73 321** P **P 17 40 37.6 +2.5**
AKBB IAmb IAmb 17 41 05.7
comp=Z,9.8nm,1.5s
**NVAR Mina Array Bea 71.95 54** P **P 17 40 49.9 +0.9**
comp=Z,0.6nm,0.7s,baz=297,slow=4.6,SNR=5.2
**PDAR Pinedale Array 74.01 46** P **P 17 41 02.8 +1.6**
comp=Z,0.3nm,0.6s,baz=294,slow=1.6,SNR=4.0
**PDAR Pinedale Array 74.01 46** P **P 17 41 02.6 +1.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **86.97** | **52** | P | | **P** | | **17 42 11.9** | **+1.7** |
| | comp=Z,0.2nm,0.6s,baz=286,slow=2.9,SNR=5.1 | | | | | | | | |

**IDC 06 17:29:51.1**±1.9,**0°45S**×**124°63E**,**h0**km,**mb3.5**/3,
**mb1 3.8**/3,**mb1mx3.3**/36,**mbtmp3.6**/3,**Error ellipse:**
**s-maj=186.5km s-min=27.9km az=63.0,Southern**
**Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.58** | **154** | P | P | 17 34 41.1 | -1.5 |
| | 0.9nm,0.4s,baz=332,slow=11,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **24.77** | **159** | P | P | 17 35 15.8 | +1.0 |
| | 0.9nm,0.5s,baz=331,slow=7.4,SNR=62 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.85** | **328** | P | P | 17 39 58.4 | -0.2 |
| | 0.2nm,0.5s,baz=115,slow=8.0,SNR=2.6 | | | | | | |

*NOU **06** 18:03:13.7, 14°.94S×167°.97E,h1km,MLv4.9/16, Vanuatu Islands*
*IDC **06** 18:03:18.0±2.6, 15°.13S×168°.13E,h44km±26km,mb3.7/8,*
*mb1 3.9/11,mb1mx3.7/29,mbtmp4.0/11,ML4.3/3,MS3.5/16,*
*Ms1 3.5/16,ms1mx3.2/60,Error ellipse: s-maj=26.9km*
*s-min=20.5km az=138.0*
*NEIC **06** 18:03:17.3±2.5, 15°.01S±0°.07×167°.92E±0°.04,h35km±8km,*
*mb4.4/15,Error ellipse: s-maj=10.3km s-min=5.2km*
*az=189.0*

**ISC 06 18:03:17.1**±0.6,**15°03S**±0°.06×**167°95E**±0°.06,**h36**km,**n60,**
σ1ş**55**/56,**mb4.0**/13,**MS3.5**/13,**Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.83** | **240** | | **Pn** | **18 03 30.4** | **-1.8** |
| SANVU | | | | Sn | **Sn** | **18 03 41.1** | **-2.1** |
| **SANVU** | **Saraoutou** | **0.83** | **240** | P | **Pn** | **18 03 30.6** | **-1.6** |
| **DVP** | **Devils Point** | **2.69** | **175** | P | **Pn** | **18 03 59.8** | **+2.0** |
| **RTV** | **Rentapao** | **2.79** | **171** | P | **Pn** | **18 03 59.5** | **+0.4** |
| **LIFNC** | **LIFOU** | **5.76** | **187** | Pn | **Pn** | **18 04 40.0** | **0.0** |
| LIFNC | | | | Sn | **Sn** | **18 05 40.9** | **-3.9** |
| **LIFNC** | **LIFOU** | **5.76** | **187** | P | **Pn** | **18 04 41.4** | **+1.4** |
| **MARNC** | **Mare, Loyalty** | **6.42** | **179** | Pn | **Pn** | **18 04 48.1** | **-1.0** |
| **MARNC** | **Mare, Loyalty** | **6.42** | **179** | P | **Pn** | **18 04 50.6** | **+1.5** |
| | 0.8nm,1.0s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **6.51** | **212** | P | **Pn** | **18 04 52.2** | **+1.9** |
| **YATNC** | **Mamie plateau,** | **7.07** | **188** | P | **Pn** | **18 04 58.5** | **+0.5** |
| **DZM** | **Mont Dzumac** | **7.15** | **191** | *e*Pn | **Pn** | **18 04 59.4** | **+0.2** |
| | 25nm,0.7s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **18 06 16.3** | **-3.0** |
| | 60nm,0.8s | | | | | | |
| DZM | | | | *e*LR | LR | 18 06 33.9 | |
| | comp=Z,197nm,22.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **7.15** | **191** | P | **Pn** | **18 04 59.5** | **+0.2** |
| | 1.7nm,0.3s,baz=86,slow=7.0,SNR=34 | | | | | | |
| DZM | | | | S | **Sn** | **18 06 18.3** | **-1.0** |
| | 0.7nm,0.3s,baz=308,slow=23,SNR=1.2 | | | | | | |
| DZM | | | | LR | LR | 18 07 32.2 | |
| | comp=Z,265nm,18.1s,baz=56,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **7.15** | **191** | | **Pn** | **18 05 00.2** | **+1.0** |
| DZM | | | | Sn | **Sn** | **18 06 17.5** | **-1.8** |
| **DZM** | **Mont Dzumac** | **7.15** | **191** | P | **Pn** | **18 05 00.8** | **+1.6** |
| **NOUC** | **Port Laguerre** | **7.21** | **192** | P | **Pn** | **18 05 01.3** | **+1.4** |
| **ONTNC** | **Ouen Toro** | **7.38** | **191** | Pn | **Pn** | **18 05 02.0** | **-0.3** |
| **ONTNC** | **Ouen Toro** | **7.38** | **191** | P | **Pn** | **18 05 03.9** | **+1.7** |
| **OUENC** | **Ouen Island, N** | **7.43** | **188** | Pn | **Pn** | **18 05 04.7** | **+1.8** |
| OUENC | | | | Sn | **Sn** | **18 06 25.2** | **-0.7** |
| **OUENC** | **Ouen Island, N** | **7.43** | **188** | P | **Pn** | **18 05 05.1** | **+2.2** |
| **PINNC** | **Pines Island,** | **7.56** | **184** | Pn | **Pn** | **18 05 05.0** | **+0.3** |
| **PINNC** | **Pines Island,** | **7.56** | **184** | P | **Pn** | **18 05 07.0** | **+2.3** |
| **HNR** | **Honiara** | **9.59** | **305** | P | **Pn** | **18 05 37.2** | **+4.5** |
| | 2.9nm,0.3s,baz=90,slow=19,SNR=1.7 | | | | | | |
| HNR | | | | LR | LR | 18 08 40.6 | |
| | comp=Z,107nm,19.9s,baz=172,slow=33 | | | | | | |
| **HNR** | **Honiara** | **9.59** | **305** | Pn | **Pn** | **18 05 32.6** | **-0.1** |
| **MSVF** | **Nonsavu** | **10.06** | **107** | P | **Pn** | **18 05 37.6** | **-1.5** |
| | 0.1nm,0.3s,baz=257,slow=18,SNR=1.4 | | | | | | |
| MSVF | | | | LR | LR | 18 08 34.3 | |
| | comp=Z,237nm,18.8s,baz=306,slow=32 | | | | | | |
| **TARA** | **Tarawa** | **17.01** | **17** | P | **Pn** | **18 07 12.6** | **+0.4** |
| **AFI** | **Afiamalu** | **19.67** | **89** | LR | LR | 18 13 29.2 | |
| | comp=Z,79nm,21.3s,baz=202,slow=31 | | | | | | |
| **AFI** | **Afiamalu** | **19.67** | **89** | P | **P** | **18 07 42.3** | **-0.9** |
| AFI | | | | IAmb | IAmb | 18 08 03.9 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **OUZ** | **Omahuta** | **20.74** | **167** | P | **P** | **18 07 55.4** | **+0.8** |
| **PMG** | **Port Moresby** | **21.06** | **283** | LR | LR | 18 14 56.0 | |
| | comp=Z,160nm,19.6s,baz=20,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **21.28** | **253** | P | **P** | **18 08 03.0** | **+2.4** |
| | comp=Z,3.6nm,1.0s,baz=224,slow=21,SNR=2.5 | | | | | | |
| CTA | | | | LR | LR | 18 14 58.8 | |
| | comp=Z,110nm,21.6s,baz=76,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **21.28** | **253** | P | **P** | **18 08 02.2** | **+1.6** |
| CTAO | | | | IAmb | IAmb | 18 08 20.7 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **URZ** | **Urewera** | **24.52** | **162** | LR | LR | 18 16 17.0 | |
| | comp=Z,146nm,19.8s,baz=4.0,slow=32 | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.19** | **164** | P | **P** | **18 08 39.2** | **-0.1** |
| **MSWZ** | **Moikau Station** | **27.05** | **168** | P | **P** | **18 08 56.6** | **+0.7** |
| **STKA** | **Stephens Creek** | **29.30** | **230** | P | **P** | **18 09 17.0** | **+0.8** |
| | comp=Z,2.4nm,1.0s,baz=85,slow=7.8,SNR=2.8 | | | | | | |
| STKA | | | | LR | LR | 18 21 18.2 | |
| | comp=Z,73nm,18.0s,baz=30,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **29.30** | **230** | P | **P** | **18 09 16.7** | **+0.4** |
| **WR0** | **Warramunga Arr** | **32.20** | **256** | P | **P** | **18 09 42.0** | **0.0** |
| WR0 | | | | IAmb | IAmb | 18 09 51.2 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.33** | **257** | P | **P** | **18 09 43.0** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 18 09 53.9 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.38** | **256** | P | **P** | **18 09 43.8** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 18 10 15.5 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.38** | **256** | P | **P** | **18 09 43.6** | **0.0** |
| WRAB | | | | IAmb | IAmb | 18 10 21.9 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.39** | **256** | P | **P** | **18 09 43.9** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=84,slow=9.1,SNR=7.8 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 12 32.1** | **+1.3** |
| | comp=Z,0.8nm,1.1s,baz=86,slow=3.4,SNR=2.9 | | | | | | |
| WRA | | | | LR | LR | 18 21 34.6 | |
| | comp=Z,128nm,21.7s,baz=77,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.39** | **256** | P | **P** | **18 09 41.9** | **-1.7** |
| **AS31** | **Alice Springs** | **33.18** | **250** | P | **P** | **18 09 49.5** | **-1.1** |
| AS31 | | | | IAmb | IAmb | 18 09 52.7 | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **33.18** | **250** | P | **P** | **18 09 51.6** | **+1.0** |
| | comp=Z,4.3nm,0.8s,baz=77,slow=9.1,SNR=62 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 12 34.0** | **+1.0** |
| | comp=Z,0.4nm,0.7s,baz=102,slow=1.7,SNR=3.2 | | | | | | |
| ASAR | | | | LR | LR | 18 22 25.5 | |
| | comp=Z,133nm,20.4s,baz=84,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **33.18** | **250** | P | **P** | **18 09 50.6** | **+0.1** |
| **GUMO** | **Guam** | **36.47** | **320** | LR | LR | 18 24 35.1 | |
| | comp=Z,42nm,21.3s,baz=176,slow=35 | | | | | | |
| **SIJI** | **Sorong** | **38.86** | **288** | LR | LR | 18 28 59.9 | |
| | comp=Z,46nm,18.2s,baz=92,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.60** | **260** | LR | LR | 18 27 37.8 | |
| | comp=Z,152nm,18.1s,baz=96,slow=36 | | | | | | |
| **PPT2** | **Papeete2** | **40.79** | **100** | *e*LR | LR | 18 22 01.7 | |
| | comp=Z,94nm,27.5s | | | | | | |
| **PPT** | **Papeete** | **40.79** | **100** | LR | LR | 18 26 13.8 | |
| | comp=Z,43nm,18.7s,baz=200,slow=34 | | | | | | |
| **MBWA** | **Marble Bar** | **46.10** | **255** | P | **P** | **18 11 38.0** | **-0.1** |
| **ASAJ** | **Asahikawa** | **63.24** | **340** | LR | LR | 18 38 56.8 | |
| | comp=Z,34nm,19.4s,baz=278,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **75.00** | **180** | P | **P** | **18 14 55.5** | **+0.9** |
| QSPA | | | | IAmb | IAmb | 18 14 57.0 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **83.12** | **323** | P | **P** | **18 15 39.2** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=123,slow=5.3,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **83.12** | **323** | IAmb | IAmb | 18 15 45.5 | |
| | comp=Z,5.6nm,1.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **85.17** | **45** | LR | LR | 18 49 54.8 | |
| | comp=Z,38nm,18.4s,baz=18,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **86.61** | **18** | P | **P** | **18 15 55.8** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=246,slow=4.3,SNR=7.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.51** | **27** | P | **P** | **18 16 46.5** | **-0.4** |
| | comp=Z,0.4nm,0.9s,baz=257,slow=4.5,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.87** | **316** | P | Pdif | 18 16 50.7 | +1.6 |
| | comp=Z,0.2nm,0.6s,baz=92,slow=4.3,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.87** | **316** | P | **P** | **18 16 46.0** | **-3.0** |

*PRE **06** 18:40:37.6±1.1, 26°.43S×27°.69E,h2km,ML2.2*
*BUL **06** 18:40:48.2±1.2, 26°.31S×27°.42E,h10km,MD3.5*
*EAF **06** 18:40:48.2±1.2, 26°.30S×27°.42E,h10km,MD3.4*

**ISC 06 18:40:38.4**±0.8,**26°42S**±0°.03×**27°67E**±0°.03,**h5**km,**n18,**
σ2ş**42**/32,**South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HRAO** | **HartRAO** | **0.52** | **2** | *e*P | **Pg** | **18 40 48.7** | **+0.2** |
| HRAO | | | | *e*S | **Sg** | **18 40 55.0** | **-0.3** |
| HRAO | | | | IAML | | 18 40 57.5 | |
| | comp=Z,77nm,0.1s | | | | | | |
| **KSR** | **Koster** | **0.89** | **309** | *e*P | **Pg** | **18 40 55.7** | **+0.1** |
| KSR | | | | *e*S | **Sg** | **18 41 07.6** | **+0.4** |
| KSR | | | | IAML | | 18 41 15.9 | |
| | comp=Z,121nm,0.1s | | | | | | |
| **SWZ** | **Schweizer** | **2.22** | **249** | *e*P | **Pn** | **18 41 16.9** | **+0.8** |
| SWZ | | | | *e*S | **Sn** | **18 41 44.5** | **+0.5** |
| SWZ | | | | IAML | | 18 41 48.9 | |
| | comp=Z,20nm,0.3s | | | | | | |
| **LBTB** | **Lobatse** | **2.33** | **306** | *e*P | **Pb** | **18 41 21.9** | **+0.9** |
| LBTB | | | | *e*S | **Sb** | **18 41 48.6** | **-1.6** |
| **LBTB** | **Lobatse** | **2.33** | **306** | *e*P | **Pb** | **18 41 21.9** | **+0.9** |
| LBTB | | | | *e*S | **Sb** | **18 41 48.6** | **-1.6** |
| **BOSA** | **Boshof** | **3.06** | **224** | *e*P | **Pg** | **18 41 36.1** | **-1.0** |
| BOSA | | | | *e*S | **Sb** | **18 42 09.8** | **-1.4** |
| **BOSA** | **Boshof** | **3.06** | **224** | *e*P | **Pg** | **18 41 36.1** | **-1.0** |
| BOSA | | | | *e*S | **Sb** | **18 42 09.8** | **-1.4** |
| **POGA** | **Pongola** | **3.72** | **105** | *e*P | **Pn** | **18 41 36.1** | **-0.5** |
| POGA | | | | *e*S | **Sn** | **18 42 19.7** | **-1.2** |
| POGA | | | | IAML | | 18 42 36.7 | |
| | comp=Z,21nm,6.1s | | | | | | |
| **CNG** | **Changalane** | **4.06** | **89** | *e*P | **Pb** | **18 41 52.2** | **+1.8** |
| CNG | | | | *e*S | **Sb** | **18 42 40.8** | **+1.0** |
| **CNG** | **Changalane** | **4.06** | **89** | *e*P | **Pb** | **18 41 52.2** | **+1.8** |
| CNG | | | | *e*S | **Sb** | **18 42 40.8** | **+1.0** |
| **MOPA** | **Mopani** | **4.45** | **50** | *e*P | **Pb** | **18 41 57.2** | **+0.2** |
| MOPA | | | | *e*S | **Sb** | **18 42 45.8** | **-5.2** |
| **MOPA** | **Mopani** | **4.45** | **50** | *e*P | **Pb** | **18 41 57.2** | **+0.2** |
| MOPA | | | | *e*S | **Sb** | **18 42 45.8** | **-5.2** |
| **MSNA** | **Messina** | **4.59** | **28** | *e*P | **Pb** | **18 41 56.6** | **-2.8** |
| MSNA | | | | *e*S | **Sn** | **18 42 48.0** | **+5.7** |
| **MSNA** | **Messina** | **4.59** | **28** | *e*P | **Pb** | **18 41 56.6** | **-2.8** |
| MSNA | | | | *e*S | **Sn** | **18 42 48.0** | **+5.7** |
| **MATP** | **Matopo** | **6.01** | **7** | *e*P | Pb | 18 42 16.6 | -7.2 |
| MATP | | | | *e*S | **Sn** | **18 43 19.1** | **+1.5** |
| **MATP** | **Matopo** | **6.01** | **7** | *e*P | Pb | 18 42 16.6 | -7.2 |
| MATP | | | | *e*S | **Sn** | **18 43 19.1** | **+1.5** |
| **BLWY** | **Bulawayo** | **6.31** | **8** | *e*P | Pn | 18 42 20.0 | +7.7 |
| BLWY | | | | *e*S | **Sn** | **18 43 26.3** | **+1.5** |
| **BLWY** | **Bulawayo** | **6.31** | **8** | *e*P | Pn | 18 42 20.0 | +7.7 |
| BLWY | | | | *e*S | **Sn** | **18 43 26.3** | **+1.5** |

*IDC **06** 19:05:59.1±1.1, 20°.18N×65°.00W,h0km,mb3.7/5,*
*mb1 3.9/6,mb1mx3.6/33,mbtmp3.7/6,ML3.8/1,MS2.5/1,*
*Ms1 2.5/1,ms1mx2.3/82,Error ellipse: s-maj=38.1km*
*s-min=22.3km az=77.0*
*NEIC **06** 19:06:00±1.4, 20°.29N±0°.07×65°.00W±0°.02,h18km±7km,*
*mb4.4/3,Error ellipse: s-maj=10.3km s-min=1.3km*
*az=189.0*
*TRN **06** 19:06:01.6, 20°.31N×64°.74W,h36km*
*OSPL **06** 19:06:03.7±2.7, 20°.20N×65°.17W,h0km±693km, ML3.3*

**ISC 06 19:05:57.9**±3.2,**20°22N**±0°.06×**65°01W**±0°.04,**h1**km±22km,
**n57**,σ1ş**91**/66,**mb3.8**/5,**North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STVI** | **Saint Thomas** | **1.86** | **178** | | **Pn** | **19 06 32.0** | **+1.1** |
| STVI | | | | Sn | **Sn** | **19 06 53.8** | **-1.3** |
| **CUPR** | **Culebra, Puert** | **1.92** | **188** | | **Pn** | **19 06 33.0** | **+1.2** |
| CUPR | | | | Sn | **Sn** | **19 06 55.9** | **-0.7** |
| **CBYP** | **Canovanas** | **2.10** | **202** | | **Pn** | **19 06 35.1** | **+0.9** |
| CBYP | | | | Sn | **Sn** | **19 06 58.7** | **-2.3** |
| **GCPR** | **Guaynabo City** | **2.16** | **208** | | **Pn** | **19 06 35.7** | **+0.7** |
| **MTP** | **Monte Pirata** | **2.17** | **194** | | **Pn** | **19 06 36.6** | **+1.4** |
| **HUMP** | **Col San Antoni** | **2.22** | **201** | | **Pn** | **19 06 36.7** | **+0.9** |
| **EMPR** | **Esperanza - Ma** | **2.25** | **220** | Pn | **Pn** | **19 06 37.3** | **+1.0** |
| **SJG** | **San Juan** | **2.36** | **207** | Pn | **Pn** | **19 06 38.8** | **+1.0** |
| | 25nm,0.3s,baz=34,slow=15,SNR=19 | | | | | | |
| SJG | | | | Sn | **Sn** | **19 07 04.0** | **-3.4** |
| | 39nm,0.3s,baz=19,slow=17,SNR=13 | | | | | | |
| SJG | | | | LR | LR | 19 08 02.4 | |
| | comp=Z,102nm,19.1s,baz=246,slow=53 | | | | | | |
| **SJG** | **San Juan** | **2.36** | **207** | | **Pn** | **19 06 38.6** | **+0.8** |
| **PDPR** | **Patillas Dam,** | **2.39** | **204** | | **Pn** | **19 06 39.0** | **+0.8** |
| **CDVI** | **St. Croix** | **2.47** | **175** | *e*P | **Pb** | **19 06 42.2** | **-0.9** |
| CDVI | | | | *e*S | **Sn** | **19 07 11.4** | **+1.3** |
| **CDVI** | **St. Croix** | **2.47** | **175** | | **Pn** | **19 06 42.0** | **+2.7** |
| **CELP** | **Cerrillos** | **2.60** | **215** | | **Pn** | **19 06 42.0** | **+0.9** |
| **AGPR** | **Aguadilla, PR** | **2.64** | **229** | Pn | **Pn** | **19 06 41.5** | **-0.1** |
| **AGPR** | **Aguadilla, PR** | **2.64** | **229** | *e*P | **Pn** | **19 06 42.9** | **+1.2** |
| AGPR | | | | IAML | | 19 07 40.7 | |
| | comp=Z,94nm,1.2s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.64** | **215** | | **Pn** | **19 06 41.7** | **0.0** |
| **ICMP** | **Isla Caja de M** | **2.73** | **212** | | **Pn** | **19 06 44.0** | **+1.1** |
| **SMRT** | **St. Maarten** | **2.83** | **139** | *e*P | **Pn** | **19 06 45.7** | **+1.4** |
| SMRT | | | | *e*S | **Sn** | **19 07 17.1** | **-2.0** |
| **SMRT** | **St. Maarten** | **2.83** | **139** | Pn | **Pn** | **19 06 45.3** | **+1.0** |
| **MLPR** | **Magueyes Islan** | **2.95** | **221** | | **Pn** | **19 06 46.0** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **2.96** | **222** | | **Pn** | **19 06 47.2** | **+1.1** |
| **CRPR** | **Cabo Rojo, PR** | **2.96** | **222** | *i* P | **Pn** | **19 06 47.5** | **+1.4** |
| CRPR | | | | *e*S | **Sn** | **19 07 22.8** | **+0.4** |
| CRPR | | | | IAML | | 19 07 27.9 | |
| | comp=Z,96nm,0.4s | | | | | | |
| **SKI** | **Saint Kitts** | **3.59** | **143** | *e*P | **Pn** | **19 06 56.2** | **+1.4** |
| **ANWB** | **Willy Bob** | **3.97** | **129** | *e*P | **Pn** | **19 06 59.4** | **-0.6** |
| ANWB | | | | *e*S | **Sn** | **19 07 42.4** | **-4.8** |
| **ANWB** | **Willy Bob** | **3.97** | **129** | Pn | **Pn** | **19 06 58.2** | **-1.8** |
| **DR12** | **Loma Pena Alta** | **4.36** | **252** | | **Pn** | **19 07 05.8** | **+0.4** |
| **ANBD** | **Bethesda, Anti** | **4.41** | **135** | *e*P | **Pn** | **19 07 06.1** | **+0.1** |
| **ANBD** | **Bethesda, Anti** | **4.41** | **135** | *e*S | **Sn** | **19 07 54.0** | **-4.0** |
| **GDHS** | **Morne Mazeau,** | **5.00** | **141** | Pn | **Pn** | **19 07 15.0** | **+0.9** |
| **ABD** | **La Joyeuse, An** | **5.01** | **138** | *e*P | **Pn** | **19 07 14.4** | **+0.1** |
| **ABD** | **La Joyeuse, An** | **5.01** | **138** | Pn | **Pn** | **19 07 14.0** | **-0.2** |
| **TBG** | **Guadaloupe-3** | **5.40** | **143** | *e*P | **Pn** | **19 07 21.2** | **+1.6** |
| **TBG** | **Guadaloupe-3** | **5.40** | **143** | *e*S | **Sn** | **19 08 18.8** | **-3.6** |
| **TDBA** | **Terre de Bas,** | **5.41** | **143** | *e*P | **Pn** | **19 07 21.2** | **+1.5** |
| **TDBA** | **Terre de Bas,** | **5.41** | **143** | Pn | **Pn** | **19 07 19.9** | **+0.2** |
| **MAGL** | **Barre de l'ile** | **5.54** | **140** | *e*P | **Pn** | **19 07 23.1** | **+1.6** |
| **MAGL** | **Barre de l'ile** | **5.54** | **140** | *e*S | **Sn** | **19 08 22.5** | **-3.3** |
| **DSLB** | **Salisbury** | **5.86** | **144** | *e*P | **Pn** | **19 07 27.3** | **+1.3** |
| **DSLB** | **Salisbury** | **5.86** | **144** | *e*S | **Sn** | **19 08 29.8** | **-4.0** |
| **GRTK** | **Grand Turk** | **5.87** | **284** | Pn | **Pn** | **19 07 24.4** | **-1.6** |
| **SDDR** | **Presa de Saban** | **6.04** | **259** | Pn | **Pn** | **19 07 30.3** | **+1.8** |
| **SDDR** | **Presa de Saban** | **6.04** | **259** | *e*P | **Pn** | **19 07 30.7** | **+2.2** |
| SDDR | | | | *e*S | **Sn** | **19 08 32.8** | **-5.6** |
| SDDR | | | | IAML | | 19 08 42.2 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **LONE2** | **Loma La Sidra** | **6.32** | **256** | *i* P | **Pn** | **19 07 35.1** | **+2.7** |
| **BIM** | **Bigot** | **6.81** | **146** | *e*P | **Pn** | **19 07 40.6** | **+1.6** |
| **BIM** | **Bigot** | **6.81** | **146** | Pn | **Pn** | **19 07 40.3** | **+1.3** |
| **MPOM** | **Morne Pois Mar** | **6.98** | **145** | *e*P | **Pn** | **19 07 42.9** | **+1.5** |
| **MPOM** | **Morne Pois Mar** | **6.98** | **145** | Pn | **Pn** | **19 07 42.6** | **+1.2** |
| **SLBI** | **Saint Lucia, B** | **7.27** | **147** | *e*P | **Pn** | **19 07 46.0** | **+0.7** |
| **BBSR** | **BB Station** | **12.10** | **1** | Pn | **Pn** | **19 08 49.4** | **-2.1** |
| **Y60A** | **Bolivia** | **18.05** | **322** | P | **Pn** | **19 10 09.8** | **-0.2** |
| Y60A | | | | IAmb | IAmb | 19 10 15.0 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **BOAV** | **Boa Vista** | **18.25** | **166** | | **Pn** | **19 10 12.0** | **-0.7** |
| BOAV | | | | IAmb | IAmb | 19 10 19.3 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **656A** | **Willston** | **18.31** | **303** | | **Pn** | **19 10 12.1** | **-1.2** |
| 656A | | | | IAmb | IAmb | 19 10 29.9 | |
| | comp=Z,104nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **21.40** | **166** | P | **P** | **19 10 46.4** | **-0.8** |
| | comp=Z,3.6nm,0.3s,baz=307,slow=20,SNR=3.5 | | | | | | |
| **BDFB** | **Brasilia** | **39.36** | **154** | P | **P** | **19 13 31.5** | **+2.2** |
| | comp=Z,1.5nm,0.5s,baz=326,slow=15,SNR=3.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.06** | **334** | P | **P** | **19 15 24.7** | **+0.9** |
| | comp=Z,0.3nm,0.8s,baz=106,slow=7.4,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **63.93** | **85** | P | **P** | **19 16 34.4** | **+1.2** |
| | comp=Z,0.2nm,0.6s,baz=294,slow=8.3,SNR=1.8 | | | | | | |
| **ILAR** | **Eielson Array** | **68.45** | **333** | P | **P** | **19 17 03.4** | **+2.1** |
| | comp=Z,0.6nm,1.0s,baz=115,slow=3.5,SNR=5.3 | | | | | | |

*NEIC **06** 19:11:50.9±1.1, 43°.72N±0°.06×105°.28W±0°.08,h0km±2km,*
*ML3.4/54,Error ellipse: s-maj=10.3km s-min=9.8km*
*az=313.0*
*IDC **06** 19:11:51.7±0.9, 43°.97N×105°.74W,h0km,mb3.8/2,*
*mb1 3.6/7,mb1mx3.4/46,mbtmp3.4/7,ML2.9/4,MS3.0/3,*
*Ms1 2.9/3,ms1mx2.6/92,Error ellipse: s-maj=21.9km*
*s-min=8.4km az=145.0*

**ISC 06 19:11:50.2**±0.8,**43°72N**±0°.06×**105°29W**±0°.06,**h0**km,**n54,**
σ0ş**78**/52,**Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.99** | **66** | Pg | **Pb** | **19 12 09.8** | **-0.6** |
| **K22A** | **Casper** | **1.40** | **220** | | **Pg** | **19 12 15.6** | **-1.4** |
| K22A | | | | IAML | | 19 12 37.4 | |
| | comp=E,802nm,0.8s | | | | | | |
| K22A | | | | IAML | | 19 12 39.7 | |
| | comp=N,745nm,0.3s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.42** | **183** | | **Pn** | **19 12 31.7** | **+0.4** |
| PHWY | | | | IAML | | 19 13 07.9 | |
| | comp=N,193nm,0.4s | | | | | | |
| PHWY | | | | IAML | | 19 13 09.1 | |
| | comp=N,176nm,0.3s | | | | | | |
| **RWWY** | **Rawlins** | **2.47** | **215** | | **Pn** | **19 12 32.6** | **+0.6** |
| **N23A** | **Red Feather La** | **2.87** | **190** | Pn | **Pn** | **19 12 38.4** | **+1.0** |
| N23A | | | | IAML | | 19 13 27.5 | |
| | comp=E,157nm,0.9s | | | | | | |
| N23A | | | | IAML | | 19 13 31.3 | |
| | comp=N,159nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **3.17** | **298** | | **Pn** | **19 12 41.8** | **+0.2** |
| RLMT | | | | IAML | | 19 13 46.1 | |
| | comp=N,82nm,1.2s | | | | | | |
| **BW06** | **Boulder Array** | **3.26** | **254** | | **Pn** | **19 12 43.1** | **+0.3** |
| BW06 | | | | IAML | | 19 13 32.4 | |
| | comp=N,83nm,0.7s | | | | | | |
| BW06 | | | | IAML | | 19 13 45.6 | |
| | comp=N,94nm,1.2s | | | | | | |
| **PD31** | **Pinedale Array** | **3.26** | **254** | | **Pn** | **19 12 42.9** | **+0.1** |
| **PDAR** | **Pinedale Array** | **3.26** | **254** | Pn | **Pn** | **19 12 42.9** | **+0.1** |
| | comp=N,7.6nm,0.3s,baz=70,slow=16,SNR=26 | | | | | | |
| PDAR | | | | Lg | Lg | 19 13 27.4 | |
| | comp=N,9.8nm,0.3s,baz=80,slow=29,SNR=14 | | | | | | |
| PDAR | | | | LR | LR | 19 14 06.1 | |
| | comp=N,116nm,20.6s,baz=74,slow=44 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.26** | **254** | Pn | **Pn** | **19 12 43.2** | **+0.4** |
| **OGNE** | **Ogallala** | **3.68** | **138** | Pn | **Pn** | **19 12 48.8** | **+0.3** |
| **LKWY** | **Lake** | **3.77** | **285** | | **Pn** | **19 12 51.3** | **+1.5** |
| LKWY | | | | IAML | | 19 14 04.1 | |
| | comp=N,52nm,1.4s | | | | | | |
| LKWY | | | | IAML | | 19 14 25.4 | |
| | comp=N,64nm,1.1s | | | | | | |
| **LOHW** | **Long Hollow** | **3.85** | **270** | | **Pn** | **19 12 52.1** | **+1.1** |
| LOHW | | | | IAML | | 19 14 14.3 | |
| | comp=N,41nm,1.1s | | | | | | |
| **H17A** | **Grant Village** | **3.87** | **282** | | **Pn** | **19 12 52.6** | **+1.5** |
| H17A | | | | IAML | | 19 13 54.8 | |
| | comp=N,55nm,0.6s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.92** | **277** | | **Pn** | **19 12 52.6** | **+0.7** |
| FLWY | | | | IAML | | 19 14 02.4 | |
| | comp=N,69nm,1.4s | | | | | | |
| FLWY | | | | IAML | | 19 14 08.8 | |
| | comp=N,67nm,2.6s | | | | | | |
| **ISCO** | **Idaho Springs** | **3.92** | **184** | | **Pn** | **19 12 52.6** | **+0.6** |
| ISCO | | | | IAML | | 19 13 57.5 | |
| | comp=N,44nm,1.4s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.95** | **272** | | **Pn** | **19 12 53.6** | **+1.3** |
| **SNOW** | **Snow King Moun** | **3.98** | **268** | Pn | **Pn** | **19 12 54.1** | **+1.5** |
| SNOW | | | | IAML | | 19 14 14.3 | |
| | comp=N,79nm,1.1s | | | | | | |
| SNOW | | | | IAML | | 19 14 38.8 | |
| | comp=N,73nm,1.4s | | | | | | |
| **YNR** | **Norris Junctio** | **4.00** | **286** | | **Pn** | **19 12 54.4** | **+1.4** |
| **REDW** | **Red Top Meadow** | **4.06** | **267** | | **Pn** | **19 12 54.5** | **+0.7** |
| **O20A** | **White River Ci** | **4.20** | **213** | Pn | **Pn** | **19 12 56.3** | **+0.5** |
| **E28A** | **Huff** | **4.33** | **47** | | **Pn** | **19 12 58.1** | **+0.8** |
| **AHID** | **Auburn Hatcher** | **4.35** | **259** | | **Pn** | **19 12 58.3** | **+0.6** |
| AHID | | | | IAML | | 19 14 12.5 | |
| | comp=N,62nm,1.1s | | | | | | |
| **RDMU** | **Red Mountain** | **4.47** | **227** | | **Pn** | **19 12 59.6** | **+0.1** |
| **SMCO** | **Snowmass** | **4.71** | **196** | Pn | **Pn** | **19 13 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **18.46** | **334** | P | **P** | **19 33 20.1** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=157,slow=11,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.46** | **334** | P | **P** | **19 33 20.0** | **-0.5** |
| **MAJO** | **Matsushiro** | **18.46** | **334** | P | **P** | **19 33 20.3** | **-0.3** |
| **MAT** | **Matsushiro** | **18.46** | **334** | P | **Pn** | **19 33 21.1** | **+0.3** |
| MAT | | | | *e*S | **Sn** | **19 36 39.5** | **-6.7** |
| **JMM** | **Marumori** | **18.73** | **342** | P | **Pn** | **19 33 24.1** | **+0.1** |
| JMM | | | | IAmb | IAmb | 19 33 26.2 | |
| | comp=Z,60nm,1.5s | | | | | | |
| **JSU** | **Suzuyama** | **19.49** | **309** | P | **P** | **19 33 32.9** | **+1.1** |
| JSU | | | | IAmb | IAmb | 19 33 53.7 | |
| | comp=Z,52nm,1.5s | | | | | | |
| **JNU** | **Nakatsue** | **20.07** | **313** | P | **P** | **19 33 39.7** | **+1.5** |
| JNU | | | | IAmb | IAmb | 19 34 00.1 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **JTM** | **Tenmabayashi** | **21.39** | **345** | P | **P** | **19 33 54.1** | **+1.9** |
| **TJN** | **Taejon** | **24.32** | **316** | P | **P** | **19 34 22.1** | **0.0** |
| **KSRS** | **Korea Array** | **24.61** | **319** | P | **P** | **19 34 25.7** | **+0.9** |
| | comp=Z,2.9nm,0.7s,baz=136,slow=7.9,SNR=12 | | | | | | |
| KSRS | | | | LR | LR | 19 43 22.7 | |
| | comp=Z,25nm,21.0s,baz=135,slow=35 | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.63** | **319** | P | **P** | **19 34 25.2** | **+0.3** |
| **KS19** | **Wonju Array Si** | **24.68** | **319** | P | **P** | **19 34 25.7** | **+0.3** |
| KS19 | | | | IAmb | IAmb | 19 34 39.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **DAV** | **Davao City (W)** | **25.51** | **242** | LR | LR | 19 43 41.7 | |
| | comp=Z,37nm,20.9s,baz=344,slow=34 | | | | | | |
| **SIJI** | **Sorong** | **26.72** | **220** | LR | LR | 19 43 43.9 | |
| | comp=Z,54nm,18.7s,baz=155,slow=33 | | | | | | |
| **FAKI** | **Fak Fak** | **27.80** | **216** | P | **P** | **19 34 54.1** | **+0.3** |
| **HNR** | **Honiara** | **31.65** | **157** | LR | LR | 19 47 04.9 | |
| | comp=Z,58nm,20.4s,baz=348,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **31.80** | **339** | LR | LR | 19 48 11.6 | |
| | comp=Z,19nm,21.3s,baz=350,slow=36 | | | | | | |
| **ENH** | **Enshi** | **36.25** | **294** | P | **P** | **19 36 08.9** | **+1.1** |
| ENH | | | | IAmb | IAmb | 19 36 36.2 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **HIA** | **Hailar** | **36.82** | **329** | P | **P** | **19 36 13.2** | **+0.8** |
| HIA | | | | IAmb | IAmb | 19 36 25.3 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.97** | **200** | P | **P** | **19 36 55.6** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 19 37 08.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.15** | **200** | P | **P** | **19 36 57.2** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 19 37 10.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.15** | **200** | P | **P** | **19 36 57.4** | **+0.4** |
| | comp=Z,4.9nm,0.8s,baz=20,slow=8.3,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.15** | **200** | P | **P** | **19 36 57.3** | **+0.3** |
| **SONM** | **Songino Array** | **43.48** | **319** | P | **P** | **19 37 09.4** | **+1.7** |
| | comp=Z,0.9nm,0.7s,baz=137,slow=8.6,SNR=8.1 | | | | | | |
| SONM | | | | LR | LR | 19 56 30.3 | |
| | comp=Z,35nm,18.1s,baz=251,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **43.48** | **319** | P | **P** | **19 37 08.5** | **+0.8** |
| **YAK** | **Yakutsk** | **43.71** | **347** | LR | LR | 19 54 30.4 | |
| | comp=Z,24nm,21.1s,baz=250,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **45.66** | **156** | P | **P** | **19 37 24.3** | **-0.9** |
| **AS31** | **Alice Springs** | **45.78** | **198** | P | **P** | **19 37 26.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **45.78** | **198** | P | **P** | **19 37 26.8** | **+0.6** |
| | comp=Z,1.3nm,0.7s,baz=22,slow=7.2,SNR=26 | | | | | | |
| **ASAR** | **Alice Springs** | **45.78** | **198** | P | **P** | **19 37 26.3** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **46.36** | **277** | P | **P** | **19 37 32.8** | **+1.9** |
| | comp=Z,1.2nm,0.9s,baz=97,slow=4.8,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **46.36** | **277** | P | **P** | **19 37 32.2** | **+1.4** |
| **J20K** | **Nowinta River** | **58.08** | **26** | P | **P** | **19 38 58.1** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **58.27** | **322** | P | **P** | **19 38 59.0** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=123,slow=37,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.27** | **322** | P | **P** | **19 38 57.9** | **-0.8** |
| **CAST** | **Castle Rocks** | **58.69** | **27** | P | **P** | **19 39 01.7** | **+0.2** |
| CAST | | | | IAmb | IAmb | 19 39 17.4 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **58.89** | **24** | P | **P** | **19 39 02.4** | **-0.4** |
| **MK31** | **Makanchi Array** | **59.13** | **313** | P | **P** | **19 39 03.3** | **-1.6** |
| **MKAR** | **Makanchi Array** | **59.13** | **313** | P | **P** | **19 39 05.7** | **+0.8** |
| | comp=Z,0.5nm,0.7s,baz=90,slow=7.3,SNR=6.3 | | | | | | |
| MKAR | | | | PcP | **PcP** | **19 39 53.8** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=84,slow=8.0,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.13** | **313** | P | **P** | **19 39 04.1** | **-0.8** |
| **H21K** | **Melozitna Rive** | **59.13** | **24** | P | **P** | **19 39 04.6** | **0.0** |
| H21K | | | | IAmb | IAmb | 19 39 31.0 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **59.36** | **26** | P | **P** | **19 39 04.9** | **-1.3** |
| **MLY** | **Manley** | **59.75** | **25** | P | **P** | **19 39 08.8** | **0.0** |
| **RND** | **Reindeer** | **60.08** | **28** | P | **P** | **19 39 09.7** | **-1.5** |
| **I23K** | **Minto, Yukon-K** | **60.34** | **26** | P | **P** | **19 39 12.9** | **+0.1** |
| I23K | | | | IAmb | IAmb | 19 39 37.7 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **61.13** | **25** | P | **P** | **19 39 17.4** | **-0.9** |
| H24K | | | | IAmb | IAmb | 19 39 47.2 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| **IL31** | | **61.26** | **26** | P | **P** | **19 39 17.7** | **-1.3** |
| IL31 | | | | IAmb | IAmb | 19 39 32.0 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **61.26** | **26** | P | **P** | **19 39 18.7** | **-0.4** |
| | comp=Z,0.6nm,0.8s,baz=252,slow=6.4,SNR=6.9 | | | | | | |
| **ILAR** | **Eielson Array** | **61.26** | **26** | P | **P** | **19 39 18.3** | **-0.8** |
| **KURK** | **Kurchatov** | **61.73** | **317** | | **P** | **19 39 21.0** | **-1.5** |
| KURK | | | | IAmb | IAmb | 19 39 36.7 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.78** | **317** | P | **P** | **19 39 23.6** | **+0.7** |
| | comp=Z,1.2nm,0.6s,baz=90,slow=7.4,SNR=21 | | | | | | |
| **J25K** | **Salcha River,** | **61.85** | **27** | P | **P** | **19 39 21.7** | **-1.6** |
| J25K | | | | IAmb | IAmb | 19 39 25.5 | |
| | comp=Z,7.2nm,1.5s | | | | | | |
| **SCRK** | **Sand Creek** | **62.32** | **27** | P | **P** | **19 39 25.8** | **-0.6** |
| SCRK | | | | IAmb | IAmb | 19 39 44.9 | |
| | comp=Z,4.6nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **62.60** | **27** | P | **P** | **19 39 26.5** | **-1.7** |
| J26L | | | | IAmb | IAmb | 19 39 52.0 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **62.80** | **24** | P | **P** | **19 39 28.4** | **-1.0** |
| **BCAR** | **Beaver Creek A** | **63.14** | **29** | P | **P** | **19 39 30.3** | **-1.5** |
| **NIL** | **Nilore** | **66.85** | **299** | P | **P** | **19 39 56.5** | **0.0** |
| **INK** | **Inuvik** | **67.06** | **23** | P | **P** | **19 39 58.6** | **+1.5** |
| | comp=Z,1.0nm,1.0s,baz=248,slow=5.4,SNR=1.4 | | | | | | |
| **CHGR** | **Chuyangaron** | **69.29** | **305** | P | **P** | **19 40 11.5** | **-0.2** |
| **KBL** | **Kabul** | **70.13** | **300** | P | **P** | **19 40 17.4** | **+0.2** |
| KBL | | | | IAmb | IAmb | 19 40 30.3 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.84** | **317** | P | **P** | **19 40 39.1** | **+0.3** |
| **YKA** | **Yellowknife A** | **75.55** | **28** | P | **P** | **19 40 48.7** | **+0.2** |
| | comp=Z,0.3nm,0.8s,baz=282,slow=5.4,SNR=3.0 | | | | | | |
| **KIRV** | **Kirov** | **77.43** | **328** | LR | LR | 20 18 58.0 | |
| | comp=Z,30nm,18.3s,baz=165,slow=39 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.36** | **53** | P | **P** | **19 41 18.3** | **+2.3** |
| | comp=Z,0.1nm,0.4s,baz=255,slow=6.4,SNR=1.7 | | | | | | |
| NVAR | | | | LR | LR | 20 12 32.9 | |
| | comp=Z,37nm,18.9s,baz=224,slow=32 | | | | | | |
| **FINES** | **FINESS Array B** | **86.48** | **336** | P | **P** | **19 41 46.5** | **-0.2** |
| | comp=Z,3.0nm,1.1s,baz=76,slow=5.9,SNR=1.0 | | | | | | |
| **FINES** | **FINESS Array B** | **86.48** | **336** | P | **P** | **19 41 46.7** | **0.0** |
| **NOA** | **NORSAR Array B** | **91.95** | **341** | LR | LR | 20 28 55.1 | |
| | comp=Z,6.6nm,20.5s,baz=295,slow=39 | | | | | | |
| **LPAZ** | **La Paz** | **145.34** | **90** | PKPbc | **PKPdf** | **19 48 44.6** | **+1.1** |
| | comp=Z,1.6nm,0.6s,baz=314,slow=4.6,SNR=3.6 | | | | | | |

*IDC **06** 19:37:26.5±7.6, 5.°51S×145.°94E, h56km±65km, mb3.5/3, mb1 3.7/5, mb1mx3.3/38, mbtmp3.8/5, ML4.1/1, Error ellipse: s-maj=75.7km s-min=42.5km az=50.0*

**ISC 06 19:37:26.0±4.6, 5.°5S±0.°4×145.°9E±0.°3, h50km, n12, σ1°38/12, mb3.6/3, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.10** | **163** | P | **Pn** | **19 38 27.2** | **+1.0** |
| | 2.8nm,0.3s,baz=355,slow=14,SNR=9.2 | | | | | | |
| PMG | | | | S | **Sn** | **19 39 12.7** | **-0.2** |
| | 3.3nm,0.3s,baz=203,slow=22,SNR=9.8 | | | | | | |
| **PMG** | **Port Moresby** | **4.10** | **163** | P | **Pn** | **19 38 26.9** | **+0.7** |
| **COEN** | **Coen** | **8.86** | **198** | P | Pn | 19 39 37.1 | +5.6 |
| **WRAB** | **Tennant Creek** | **18.26** | **217** | P | **Pn** | **19 41 36.7** | **+0.7** |
| **WRA** | **Warramunga Arr** | **18.27** | **217** | P | **P** | **19 41 35.9** | **+0.1** |
| | 0.6nm,0.3s,baz=37,slow=11,SNR=58 | | | | | | |
| **KNRA** | **Kununurra** | **19.67** | **238** | P | **Pn** | **19 41 54.1** | **+1.3** |
| **ASAR** | **Alice Springs** | **21.48** | **211** | P | **P** | **19 42 10.3** | **-0.3** |
| | 0.7nm,0.4s,baz=46,slow=7.9,SNR=24 | | | | | | |
| **INKA** | **Innaminka** | **22.69** | **192** | P | **P** | **19 42 20.5** | **-3.0** |
| **FITZ** | **Fitzroy Crossi** | **23.45** | **236** | P | **P** | **19 42 30.5** | **-0.8** |
| | 1.6nm,0.4s,baz=58,slow=12,SNR=13 | | | | | | |
| **OOD** | **Oodnadatta** | **24.24** | **203** | P | **P** | **19 42 37.1** | **-1.3** |
| **WRKA** | **Warakurna** | **25.78** | **219** | P | **P** | **19 42 51.1** | **-1.4** |
| **STKA** | **Stephens Creek** | **26.58** | **188** | P | **P** | **19 42 59.8** | **+0.2** |
| | 1.1nm,0.6s,baz=349,slow=16,SNR=3.1 | | | | | | |

*TIR **06** 20:13:11.9, 41.°69N×19.°98E, h5km±1km, Md2.5, Ml2.4*
*PDG **06** 20:13:11.4±0.1, 41.°71N×20.°04E, h7km, ML2.0/11, Error ellipse: s-maj=0.1km s-min=0.1km az=0.0*
*RHSSO **06** 20:13:12.1±0.9, 41.°64N×19.°95E, h8km±3km, ML2.2/7*
*BEO **06** 20:13:13.6±0.3, 41.°72N×20.°00E, h0km, ML2.0/6*

**ISC 06 20:13:12.2±1.0, 41.°71N±0.°02×19.°94E±0.°02, h9km±9km, n41, σ1°01/81, 6C-2D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.36** | **188** | *e*Pg | **Pg** | **20 13 20.5** | **-0.3** |
| TIR | | | | *e*Sg | **Sg** | **20 13 25.3** | **+1.2** |
| **TIR** | **Tirane** | **0.36** | **188** | P | **Pg** | **20 13 19.7** | **+0.3** |
| | baz=195 | | | | | | |
| TIR | | | | S | **Sb** | **20 13 25.8** | **-0.8** |
| | baz=195 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.8nm,0.1s,baz=195 | | | | | | |
| **PHP** | **Peshkopia** | **0.38** | **93** | P | **Pg** | **20 13 19.7** | **-0.1** |
| | baz=91 | | | | | | |
| PHP | | | | S | **Sb** | **20 13 25.3** | **-1.9** |
| | baz=91 | | | | | | |
| PHP | | | | AMP | | | |
| | comp=N,5.3nm,0.1s,baz=91 | | | | | | |
| **ULC** | **Ulcinj** | **0.58** | **297** | *e*Pg | **Pg** | **20 13 23.4** | **0.0** |
| ULC | | | | *e*Sg | **Sb** | **20 13 33.3** | **+0.5** |
| **BCI** | **Bajram Curri** | **0.67** | **8** | P | **Pb** | **20 13 25.3** | **-0.8** |
| | baz=5.0 | | | | | | |
| BCI | | | | S | **Sb** | **20 13 35.7** | **+0.2** |
| | baz=5.0 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,0.8nm,0.4s,baz=5.0 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.74** | **311** | *e*Pg | **Pg** | **20 13 26.2** | **-0.3** |
| DRME | | | | *e*Sg | **Sb** | **20 13 37.9** | **+0.4** |
| **DRME** | **Dracevica, Mon** | **0.74** | **311** | *i*Pg | **Pg** | **20 13 26.2** | **-0.3** |
| DRME | | | | *e*Sg | **Sb** | **20 13 38.7** | **+1.2** |
| **OHR** | **Ohrid** | **0.88** | **132** | *e*Pg | **Pb** | **20 13 30.0** | **+0.3** |
| OHR | | | | *e*Sg | **Sg** | **20 13 40.1** | **-0.5** |
| **PDG** | **Podgorica** | **0.88** | **325** | *e*Pg | **Pb** | **20 13 29.2** | **-0.5** |
| PDG | | | | *e*Sg | **Sb** | **20 13 41.9** | **+0.3** |
| **PDG** | **Podgorica** | **0.88** | **325** | *i*Pg | **Pg** | **20 13 28.9** | **-0.4** |
| PDG | | | | *e*Sg | **Sb** | **20 13 42.2** | **+0.6** |
| **TTG** | **Podgorica** | **0.88** | **325** | *i*Pg | **Pg** | **20 13 28.6** | **-0.7** |
| TTG | | | | *i* Sg | **Sn** | **20 13 43.0** | **-0.8** |
| **PVY** | **Plav** | **0.89** | **1** | *e*Pg | **Pg** | **20 13 27.8** | **-1.6** |
| PVY | | | | *i* Sg | **Sb** | **20 13 41.8** | **-0.1** |
| **BUM** | **Brajici-Budva** | **0.98** | **308** | *i*Pg | **Pg** | **20 13 30.5** | **-0.6** |
| BUM | | | | *e*Sg | **Sn** | **20 13 46.7** | **+0.5** |
| **CEME** | **Cevo** | **1.13** | **318** | *i*Pg | **Pg** | **20 13 33.2** | **-0.8** |
| CEME | | | | *i* Sg | **Sn** | **20 13 51.4** | **+1.4** |
| **IVA** | **Berane** | **1.17** | **358** | *i*Pg | **Pg** | **20 13 32.9** | **-1.8** |
| IVA | | | | *e*Sg | **Sn** | **20 13 51.7** | **+0.8** |
| **KOME** | **Kolasin** | **1.19** | **345** | *e*Pg | **Pg** | **20 13 33.5** | **-1.5** |
| KOME | | | | *i* Sg | **Sn** | **20 13 52.6** | **+1.2** |
| **HCY** | **Herceg Novi** | **1.30** | **305** | *e*Pg | **Pg** | **20 13 36.7** | **-0.6** |
| HCY | | | | *e*Sg | **Sn** | **20 13 55.2** | **+1.0** |
| **HCY** | **Herceg Novi** | **1.30** | **305** | *i*Pg | **Pg** | **20 13 36.5** | **-0.8** |
| HCY | | | | *i* Sg | **Sn** | **20 13 56.8** | **+2.6** |
| **FNA** | **Florina** | **1.42** | **130** | P | **Pn** | **20 13 38.0** | **-0.3** |
| | baz=130 | | | | | | |
| FNA | | | | S | **Sn** | **20 13 58.0** | **+0.8** |
| | baz=130 | | | | | | |
| **TREB** | **Trebinje** | **1.55** | **311** | *e*Pn | **Pg** | **20 13 42.4** | **+0.4** |
| TREB | | | | *e*Sn | **Sg** | **20 14 05.0** | **+2.8** |
| **TREB** | **Trebinje** | **1.55** | **311** | *e*Pn | **Pn** | **20 13 40.2** | **+0.2** |
| TREB | | | | *e*Sn | **Sg** | **20 14 01.9** | **-0.3** |
| **SJES** | **Sjenica** | **1.56** | **1** | *e*Pn | **Pg** | **20 13 41.9** | **-0.2** |
| SJES | | | | *e*Sn | **Sg** | **20 14 04.0** | **+1.7** |
| **BRY** | **Bratogost** | **1.58** | **320** | *e*Pn | **Pn** | **20 13 41.1** | **+0.5** |
| BRY | | | | *e*Sn | **Sg** | **20 14 02.6** | **-0.5** |
| **BRY** | **Bratogost** | **1.58** | **320** | *i*Pn | **Pb** | **20 13 41.5** | **-0.2** |
| BRY | | | | *e*Sn | **Sg** | **20 14 05.2** | **+2.1** |
| **PLE** | **Pljevlja** | **1.67** | **346** | *e*Pn | **Pn** | **20 13 42.4** | **+0.6** |
| PLE | | | | *e*Sn | **Sg** | **20 14 07.0** | **+0.9** |
| **UPM** | **Unac-Piva** | **1.68** | **333** | *e*Pn | **Pb** | **20 13 42.7** | **-0.7** |
| UPM | | | | *e*Sn | **Sg** | **20 14 05.3** | **-1.0** |
| **UPM** | **Unac-Piva** | **1.68** | **333** | *e*Pn | **Pn** | **20 13 42.6** | **+0.6** |
| UPM | | | | *e*Sn | **Sg** | **20 14 07.6** | **+1.3** |
| **IVAS** | **Ivanjica** | **1.88** | **5** | *e*Pn | **Pn** | **20 13 45.3** | **+0.7** |
| IVAS | | | | *e*Sn | **Sb** | **20 14 10.5** | **+0.2** |
| **RUDO** | **Rudo** | **1.96** | **348** | *e*Pn | **Pb** | **20 13 47.0** | **-1.0** |
| RUDO | | | | *e*Sn | **Sb** | **20 14 12.6** | **+0.1** |
| **STON** | **Ston** | **2.03** | **306** | *e*Pn | **Pb** | **20 13 49.0** | **-0.2** |
| STON | | | | *e*Sn | **Sg** | **20 14 16.0** | **-1.4** |
| **STON** | **Ston** | **2.03** | **306** | *e*Pn | **Pn** | **20 13 46.5** | **0.0** |
| STON | | | | *e*Sn | **Sb** | **20 14 13.8** | **-0.7** |
| **STON** | **Ston** | **2.03** | **306** | *e*Pn | **Pn** | **20 13 45.1** | **-1.4** |
| STON | | | | Sn | **Sn** | **20 14 12.5** | **+0.6** |
| **BBLS** | **Lazići** | **2.19** | **350** | *e*Pn | **Pb** | **20 13 52.1** | **0.0** |
| BBLS | | | | *e*Sn | **Sb** | **20 14 18.0** | **-0.8** |
| **BBLS** | **Lazići** | **2.19** | **350** | *e*Pn | **Pn** | **20 13 50.2** | **+1.3** |
| BBLS | | | | *e*Sn | **Sn** | **20 14 17.4** | **+1.2** |
| **DIVS** | **Divibare** | **2.39** | **1** | *e*Pn | **Pn** | **20 13 53.2** | **+1.5** |
| DIVS | | | | *e*Sn | **Sn** | **20 14 22.5** | **+1.4** |
| **LSTV** | **Lastovo** | **2.50** | **296** | *e*Pn | **Pn** | **20 13 52.4** | **-0.6** |
| LSTV | | | | Sn | **Sn** | **20 14 21.2** | **-2.4** |
| **MAKA** | **Makarska** | **2.67** | **307** | *e*Pn | **Pn** | **20 13 54.7** | **-0.7** |
| **RICI** | **Ricice** | **2.73** | **312** | *e*Pn | **Pn** | **20 13 56.0** | **-0.3** |
| RICI | | | | Sn | **Sn** | **20 14 29.8** | **+0.3** |
| **KIJV** | **Kijevo** | **3.47** | **313** | *e*Pn | **Pn** | **20 14 06.7** | **+0.3** |
| KIJV | | | | Sn | **Sn** | **20 14 47.4** | **-0.1** |
| **ZIRJ** | **Zirje** | **3.71** | **303** | *e*Pn | **Pn** | **20 14 08.7** | **-1.1** |
| ZIRJ | | | | Sn | **Sn** | **20 14 53.8** | **+0.2** |
| **MORI** | **Morici** | **3.79** | **306** | *e*Pn | **Pn** | **20 14 09.8** | **-0.9** |
| MORI | | | | Sn | **Sn** | **20 14 54.7** | **-0.7** |

*IDC **06** 20:14:41.2±1.1, 5.°48S×151.°58E, h0km, mb4.1/8, mb1 4.3/9, mb1mx4.0/34, mbtmp4.1/9, ML2.0/1, MS3.1/3, Ms1 3.1/3, ms1mx2.6/59, Error ellipse: s-maj=45.4km s-min=18.9km az=125.0*
*NEIC **06** 20:14:46.7±1.9, 5.°5S±0.°1×151.°5E±0.°2, h25km±4km, mb4.1/10, Error ellipse: s-maj=30.5km s-min=13.8km az=126.0*

**ISC 06 20:14:49.4±0.8, 5.°6S±0.°1×151.°5E±0.°2, h57km, n31, σ0°82/33, mb4.0/12, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.72** | **228** | Pn | **Pn** | **20 16 10.4** | **-1.3** |
| | 2.5nm,0.3s,baz=40,slow=9.8,SNR=7.6 | | | | | | |
| PMG | | | | Sn | **Sn** | **20 17 16.1** | **0.0** |
| | 9.3nm,0.3s,baz=154,slow=23,SNR=11 | | | | | | |
| PMG | | | | LR | LR | 20 18 24.4 | |
| | comp=Z,144nm,20.6s,baz=342,slow=38 | | | | | | |
| **PMG** | **Port Moresby** | **5.72** | **228** | | **Pn** | **20 16 12.4** | **+0.7** |
| PMG | | | | Sn | **Sn** | **20 17 16.6** | **+0.5** |
| **CTA** | **Charters Tower** | **15.28** | **199** | LR | LR | 20 23 57.6 | |
| | comp=Z,79nm,18.1s,baz=53,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **15.28** | **199** | | **P** | **20 18 24.7** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 20 18 32.4 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **SAUI** | **Saumlaki** | **20.17** | **262** | P | **P** | **20 19 20.7** | **+1.3** |
| **WR0** | **Warramunga Arr** | **21.80** | **228** | P | **P** | **20 19 36.7** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 20 19 39.7 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.94** | **228** | P | **P** | **20 19 37.9** | **-0.4** |
| | comp=Z,5.4nm,0.5s,baz=53,slow=9.8,SNR=52 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 23 36.0** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=34,slow=2.1,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.94** | **228** | P | **P** | **20 19 38.2** | **-0.1** |
| **AS31** | **Alice Springs** | **24.68** | **222** | P | **P** | **20 20 05.6** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 20 20 09.0 | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.68** | **222** | P | **P** | **20 20 05.5** | **+0.2** |
| | comp=Z,2.6nm,0.6s,baz=60,slow=8.5,SNR=54 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 23 42.2** | **+0.7** |
| | comp=Z,0.2nm,0.6s,baz=55,slow=3.4,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **24.68** | **222** | P | **P** | **20 20 06.0** | **+0.7** |
| **SOEI** | **Soe** | **27.27** | **260** | P | **P** | **20 20 28.0** | **-0.9** |
| SOEI | | | | IAmb | IAmb | 20 20 46.4 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **27.74** | **198** | P | **P** | **20 20 33.3** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **28.12** | **242** | P | **P** | **20 20 36.0** | **-0.3** |
| | comp=Z,5.1nm,0.3s,baz=57,slow=12,SNR=42 | | | | | | |
| **KAPI** | **Kappang** | **31.59** | **270** | LR | LR | 20 35 06.8 | |
| | comp=Z,39nm,19.5s,baz=12,slow=39 | | | | | | |
| **MBWA** | **Marble Bar** | **34.44** | **240** | P | **P** | **20 21 31.3** | **-0.5** |
| **SONM** | **Songino Array** | **66.29** | **329** | P | **P** | **20 25 32.6** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=142,slow=4.6,SNR=7.6 | | | | | | |
| **SONM** | **Songino Array** | **66.29** | **329** | P | **P** | **20 25 32.5** | **+0.5** |
| SONM | | | | IAmb | IAmb | 20 25 34.0 | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.05** | **319** | P | **P** | **20 26 53.2** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=90,slow=8.5,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.05** | **319** | P | **P** | **20 26 52.8** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **81.07** | **327** | P | **P** | **20 26 57.0** | **-1.3** |
| | comp=Z,0.6nm,0.3s,baz=113,slow=3.4,SNR=3.9 | | | | | | |
| **ILAR** | **Eielson Array** | **83.38** | **22** | P | **P** | **20 27 07.8** | **-2.4** |
| | comp=Z,0.7nm,0.6s,baz=248,slow=5.0,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **83.38** | **22** | P | **P** | **20 27 09.5** | **-0.7** |
| **J25K** | **Salcha River,** | **83.89** | **23** | P | **P** | **20 27 12.8** | **0.0** |
| J25K | | | | IAmb | IAmb | 20 27 37.4 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.44** | **20** | P | **P** | **20 27 22.0** | **+1.5** |
| **KKAR** | **Karatay Array** | **87.21** | **314** | P | **P** | **20 27 29.4** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **93.61** | **52** | P | **P** | **20 28 01.0** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=251,slow=6.3,SNR=8.5 | | | | | | |
| **GERES** | **GERESS Array B** | **124.02** | **328** | PKP | **PKPdf** | **20 33 41.1** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=72,slow=4.3,SNR=4.9 | | | | | | |
| **GERES** | **GERESS Array B** | **124.02** | **328** | | **PKPdf** | **20 33 41.6** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **149.27** | **286** | PKPbc | **PKPbc** | **20 34 32.6** | **-0.3** |
| | comp=Z,3.2nm,0.5s,baz=80,slow=2.1,SNR=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.27** | **286** | | **PKPbc** | **20 34 32.2** | **-0.6** |

*IDC **06** 20:17:03.5±2.7, 31.°64S×179.°86E, h383km±24km, mb3.8/7, mb1 3.9/7, mb1mx3.6/27, mbtmp4.5/7, Error ellipse: s-maj=23.1km s-min=17.6km az=33.0*
*WEL **06** 20:17:03.7±0.5, 32.°5S±7.°1×17.°9W±1.°7, h325km±8km, M4.8/49, mB5.2/40, ML5.5/47, MLv5.5/49, Mw(mB)4.7/40, Error ellipse: s-maj=0.0km s-min=0.0km az=111.7*

**ISC 06 20:17:00.4±0.5, 31.°85S±0.°04×179.°92E±0.°09, h350km, n134, σ1°76/158, mb4.0/7, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.18** | **36** | P | **Pn** | **20 18 02.0** | **+0.6** |
| GLKZ | | | | S | **S** | **20 18 49.6** | **-1.0** |
| **RIZ** | **Raoul Island** | **3.19** | **36** | S | **S** | **20 18 50.7** | **-0.1** |
| **MXZ** | **Matakaoa Point** | **5.85** | **193** | P | **Pn** | **20 18 30.8** | **+1.4** |
| MXZ | | | | S | **S** | **20 19 40.9** | **-0.6** |
| **WMGZ** | **Waiomatatini S** | **6.08** | **191** | P | **Pn** | **20 18 33.7** | **+1.7** |
| **HAZ** | **Te Kaha** | **6.15** | **196** | P | **Pn** | **20 18 34.3** | **+1.6** |
| HAZ | | | | S | **S** | **20 19 47.8** | **+0.1** |
| **PKGZ** | **Pakihiroa** | **6.21** | **194** | P | **Pn** | **20 18 34.8** | **+1.2** |

PKGZ S **S** **20 19 48.2 -1.0**
**TWGZ Tauwhareparae 6.51 194** P **Pn** **20 18 39.5 +2.6**
**MWZ Matawai 6.76 196** P **Pn** **20 18 41.1 +1.3**
**EDRZ Edgecumbe 6.76 202** P Pn 20 18 44.5 +4.6
**TKGZ Te Karaka 6.79 194** P **Pn** **20 18 41.7 +1.6**
**URZ Urewera 6.80 199** P **Pn** **20 18 39.7 -0.5**
17nm,0.3s,baz=275,slow=4.3,SNR=101
URZ S **S** **20 19 59.3 -2.1**
16nm,0.3s,baz=24,slow=22,SNR=12
**URZ Urewera 6.80 199** P **Pn** **20 18 40.2 -0.1**
URZ S **S** **20 19 59.6 -1.8**
**KARZ Kaharoa 6.86 205** P Pn 20 18 46.2 +5.2
**OMRZ Omania 6.89 204** P Pn 20 18 46.0 +4.6
**RAGZ Rawiri 6.94 196** P **Pn** **20 18 45.6 +3.6**
RAGZ S **S** **20 20 05.4 +0.8**
**TARZ Mount Tarawera 6.96 203** P Pn 20 18 47.0 +4.8
**HLRZ Highlands Stat 7.02 204** P Pn 20 18 47.9 +4.9
**RRRZ Republican Roa 7.05 202** P **Pn** **20 18 46.6 +3.3**
**RIGZ Rimuhau 7.06 194** P **Pn** **20 18 44.0 +0.6**
RIGZ S **S** **20 20 06.3 -0.9**
**MUGZ Murupara 7.10 200** P **Pn** **20 18 45.6 +1.9**
MUGZ S **S** **20 20 05.9 -2.0**
**RTZ Ruatahuna 7.17 199** P **Pn** **20 18 45.4 +0.8**
**HRRZ Handcock Road 7.17 204** P **Pn** **20 18 49.0 +4.3**
**GRRZ Galatos Road 7.20 205** P Pn 20 18 50.0 +5.1
**SNGZ Shannon Statio 7.23 196** P **Pn** **20 18 45.5 +0.1**
SNGZ S **S** **20 20 10.9 +0.1**
**PRRZ Plateau Road 7.23 203** P **Pn** **20 18 47.4 +2.0**
**PRGZ Paritu Road 7.25 193** P **Pn** **20 18 49.4 +3.8**
PRGZ S **S** **20 20 11.7 +0.5**
**ALRZ Allen Road 7.31 203** P **Pn** **20 18 49.5 +3.3**
**WPRZ Whakapapatarin 7.33 204** P **Pn** **20 18 51.0 +4.5**
**KNZ Kokohu 7.39 194** P **Pn** **20 18 47.7 +0.6**
KNZ S **S** **20 20 12.4 -1.6**
**TLZ Tolley Road 7.39 208** P Pn 20 18 52.9 +5.7
**KUTZ Kaahu Road 7.42 206** P Pn 20 18 52.7 +5.1
**MTHZ Maungataniwha 7.42 199** P **Pn** **20 18 48.7 +1.1**
MTHZ S **S** **20 20 13.4 -1.6**
**MHGZ Mahia Peninsul 7.47 192** P **Pn** **20 18 49.7 +1.6**
MHGZ S **S** **20 20 14.4 -1.5**
**MRHZ Matea Rd 7.53 201** P **Pn** **20 18 52.2 +3.3**
**WATZ Wairara 7.65 205** P **Pn** **20 18 54.0 +3.7**
**NMHZ Naumai 7.66 198** P **Pn** **20 18 51.6 +1.1**
NMHZ S **S** **20 20 21.1 +0.9**
**HATZ Hinemaiaia 7.69 203** P **Pn** **20 18 53.8 +3.1**
HATZ S **S** **20 20 22.6 +1.8**
**ARHZ Aropaoanui 7.77 197** P **Pn** **20 18 52.6 +1.0**
ARHZ S **S** **20 20 21.1 -1.3**
**BKZ Black Stump Fm 7.81 200** P **Pn** **20 18 52.3 0.0**
BKZ S **S** **20 20 22.3 -1.1**
**HIZ Hauiti 7.83 211** P **Pn** **20 18 56.8 +4.4**
**KATZ Kakaramea 7.90 205** P **Pn** **20 18 56.1 +2.8**
**NTVZ North Tongarir 8.02 204** P **P** **20 18 56.9 -0.8**
NTVZ S **S** **20 20 28.3 +0.4**
**MCHZ McNeill Hill 8.02 198** P **Pn** **20 18 55.2 +0.6**
MCHZ S **S** **20 20 27.5 -0.3**
**TMVZ Te Maari 8.02 204** P **Pn** **20 18 55.7 +1.0**
TMVZ S **S** **20 20 28.6 +0.6**
**ETVZ East Tongariro 8.04 204** P **Pn** **20 18 56.1 +1.1**
ETVZ S **S** **20 20 29.0 +0.6**
**WTVZ West Tongariro 8.06 205** P **Pn** **20 18 56.7 +1.5**
**NNVZ North Ngauruho 8.07 205** P **P** **20 18 57.5 -0.9**
**KWTZ Kaweka Forest 8.07 200** P **Pn** **20 18 54.8 -0.6**
KWHZ S **S** **20 20 27.9 -1.2**
**OTVZ Oturere 8.08 204** P **Pn** **20 18 55.3 -0.2**
OTVZ S **S** **20 20 28.8 -0.5**
**TWVZ Taurewa 8.08 206** P **Pn** **20 18 57.1 +1.7**
**SNVZ South Ngauruho 8.11 204** P **Pn** **20 18 55.9 0.0**
**NGZ Ngauruhoe 8.11 204** P **Pn** **20 18 57.5 +1.7**
NGZ S **S** **20 20 32.4 +2.4**
**CKHZ Cape Kidnapper 8.13 196** P **Pn** **20 18 57.3 +1.4**
CKHZ S **S** **20 20 28.4 -1.7**
**FWVZ Far West T-bar 8.20 204** P **Pn** **20 18 58.0 +1.0**
**WHVZ Whangaehu Hut 8.21 204** P **Pn** **20 18 58.9 +1.8**
**DRZ Dome Shelter 8.21 204** P **P** **20 18 59.9 -0.2**
**TRVZ Turoa 8.24 204** P **Pn** **20 18 59.1 +1.7**
**BHHZ Black Hill Sta 8.24 201** P **Pn** **20 18 56.3 -1.0**
BHHZ P **P** **20 18 57.1 -3.1**
**WNVZ Wahianoa 8.25 204** P **Pn** **20 18 56.9 -0.6**
**MOVZ Moawhango 8.27 203** P **Pn** **20 18 57.2 -0.4**
**KRHZ Kereru 8.29 199** P **Pn** **20 18 56.8 -1.1**
**KAHZ Kahuranaki 8.30 196** P **Pn** **20 18 58.3 +0.3**
KAHZ S **S** **20 20 30.3 -3.8**
**PKVZ Pokaka 8.30 205** P **Pn** **20 18 59.1 +1.1**
**MTVZ Mangateitei 8.34 204** P **P** **20 19 00.8 -0.5**
**VRZ Vera Road 8.39 209** P **P** **20 19 02.3 +0.5**
**PXZ Pawanui 8.53 196** P **Pn** **20 19 00.0 -0.6**
**PNHZ Pukenui 8.59 199** P **Pn** **20 18 59.6 -1.9**
**WPHZ Waipukurau 8.67 198** P **Pn** **20 19 03.5 +1.2**
**DREZ Durham Road 8.68 211** P **P** **20 19 07.9 +2.9**
**PKE Pukeiti 8.78 212** P **P** **20 19 09.4 +3.3**
**NEZ North Egmont 8.79 211** P **P** **20 19 09.0 +2.7**
**TSZ Takapari Road 8.80 200** P **Pn** **20 19 04.6 +0.8**
**PRHZ Porangahau 8.81 197** P **Pn** **20 19 03.5 -0.5**
**LREZ Lake Rotokare 8.82 209** P **P** **20 19 08.1 +1.6**
**PREZ Palmer Road 8.82 210** P **P** **20 19 09.2 +2.6**
**WAZ Wanganui 8.85 206** P **P** **20 19 06.6 -0.3**
**KHEZ Kahui Hut 8.85 211** P **P** **20 19 09.4 +2.4**
**NBEZ Newall Road No 8.89 212** P **P** **20 19 09.4 +3.5**
**DVHZ Dannevirke 8.96 199** P **Pn** **20 19 05.4 -0.4**
**ANWZ Angora Road 9.03 197** P **Pn** **20 19 07.4 +0.8**
**OHWZ Ohakea 9.13 203** P **Pn** **20 19 09.2 +1.4**
**POWZ Post Office Ro 9.16 200** P **Pn** **20 19 09.0 +0.8**
**PRWZ Pori Road 9.25 199** P **Pn** **20 19 10.4 +1.2**
**BFZ Birch Farm 9.30 198** P **Pn** **20 19 08.7 -1.1**
**MRZ Mangatainoka R 9.46 200** P **Pn** **20 19 09.6 -2.2**
**TIWZ Tintock 9.48 199** P **Pn** **20 19 12.7 +0.7**
**CPWZ Castlepoint 9.52 197** P **P** **20 19 14.2 -0.1**
**HOWZ Holdsworth Sta 9.70 200** P **Pn** **20 19 12.4 -2.2**
**OGWZ Otaki Gorge 9.73 202** P **Pn** **20 19 13.4 -1.6**
**TMWZ Te Maipa 9.79 198** P **Pn** **20 19 16.3 +0.6**
**KIW Kapiti Island 9.86 203** P **Pn** **20 19 15.4 -1.0**
**MTW Mount Morrison 9.95 200** P **Pn** **20 19 17.1 -0.4**
**CAW Cannon Point 10.03 202** P **Pn** **20 19 18.4 -0.1**
**TRWZ Traveller 10.12 198** P **Pn** **20 19 19.8 +0.2**
**PAWZ Paruwai Farm 10.17 199** P **Pn** **20 19 20.1 -0.2**
**MSWZ Moikau Station 10.26 200** P **Pn** **20 19 20.0 -1.2**
**WEL Wellington 10.28 202** P **Pn** **20 19 21.4 -0.1**
**BHW Baring Head 10.36 202** P **Pn** **20 19 20.8 -1.7**
**TCW Tory Channel 10.38 204** P **Pn** **20 19 21.4 -1.3**
**PLWZ Palliser 10.39 200** P **Pn** **20 19 21.9 -1.0**
**CMWZ Cape Campbell 10.88 203** P **Pn** **20 19 29.3 +0.6**
**BSWZ Blackbirch Sta 10.97 204** P **Pn** **20 19 29.2 -0.5**
**GVZ Greta Valley S 12.37 204** P **P** **20 19 45.8 -0.1**
**OKCZ Okains Bay 13.03 203** P **P** **20 19 54.0 +0.8**
**AKCZ Akaroa Harbour 13.21 203** P **Pn** **20 19 56.4 +0.1**
**MSVF Nonsavu 14.16 353** P **Pn** **20 20 08.5 +0.8**
0.6nm,0.3s,baz=255,slow=16,SNR=4.6
**CTA Charters Tower 32.32 283** P **P** **20 22 59.1 +0.9**
9.7nm,0.5s,baz=116,slow=10,SNR=31
**STKA Stephens Creek 32.43 260** P **P** **20 23 00.4 +1.3**
2.5nm,0.4s,baz=98,slow=10,SNR=18
**ASAR Alice Springs 41.28 270** P **P** **20 24 12.2 -0.7**
5.0nm,0.7s,baz=110,slow=8.0,SNR=39
ASAR ScP **ScP** **20 29 16.0 -4.0**
0.6nm,0.8s,baz=119,slow=4.5,SNR=4.1
ASAR S **S** **20 29 57.2 -3.2**
0.6nm,0.9s,baz=117,slow=15,SNR=6.1
**WRA Warramunga Arr 42.40 275** P **P** **20 24 20.9 -1.1**
8.8nm,0.7s,baz=113,slow=7.9,SNR=40
WRA ScP **ScP** **20 29 21.0 -3.6**
0.7nm,0.9s,baz=115,slow=3.4,SNR=3.7
WRA S **S** **20 30 11.5 -5.3**
0.6nm,0.8s,baz=111,slow=15,SNR=1.6
**FITZ Fitzroy Crossi 50.60 272** P **P** **20 25 23.9 -1.1**
5.9nm,0.8s,baz=154,slow=6.3,SNR=8.7
**QSPA South Pole Qui 58.26 180** P **P** **20 26 20.7 +1.6**
3.9nm,0.5s,baz=238,slow=0.9,SNR=34
**SNAA Sanae 76.75 179** P **P** **20 28 13.9 +0.4**
**VNA3 Neumayer Olymp 76.97 177** P **P** **20 28 15.1 +0.5**
**VNA2 Neumayer--Watz 77.38 178** P **P** **20 28 17.6 +0.7**
baz=181,slow=5.1
**VNA1 Neumayer--Stat 77.62 177** P **P** **20 28 19.0 +0.8**
**NVAR Mina Array Bea 90.52 44** P **P** **20 29 23.0 -0.4**
0.6nm,0.8s,baz=217,slow=6.6,SNR=4.5
**MKAR Makanchi Array 117.33 310** PKP **PKPdf** **20 35 02.5 -1.7**
1.5nm,0.9s,baz=204,slow=1.0,SNR=11
**ZALV Zalesovo Beam 117.92 318** PKP **PKPdf** **20 35 02.8 -2.3**
0.7nm,0.5s,baz=169,slow=1.5,SNR=4.9
**ARCES ARCESS Array B 139.60 346** PKhKP PKPpre 20 35 38.9
2.5nm,0.8s,baz=42,slow=1.4,SNR=7.6

**FINES FINESS Array B 145.85 338** PKPbc **PKPdf** **20 35 57.0 0.0**
24nm,0.7s,baz=40,slow=3.4,SNR=67
**VSU Vasula 147.77 334** *eP* **PKPdf** **20 36 02.0 +1.8**
**AAL Aland 148.69 341** *eP* **PKPdf** **20 36 03.8 +2.1**
**NB2 NORSAR Subarra 149.87 349** PKP **PKPbc** **20 36 07.4 -1.4**
comp=Z,2.4nm,0.6s,baz=20,slow=2.7
**NOA NORSAR Array B 149.87 349** PKPbc **PKPbc** **20 36 07.0 -1.8**
comp=Z,14nm,0.4s,baz=32,slow=1.8,SNR=7.4
**IDID Didziasalis 149.88 329** *eP* **PKPbc** **20 36 07.6 -1.3**
**ISAL Salakas 149.98 330** *eP* **PKPbc** **20 36 08.0 -1.2**
**IIGN Ignalina 150.09 330** *eP* **PKPbc** **20 36 08.6 -0.8**
**PABE Paberze 150.93 332** *eP* **PKPbc** **20 36 09.2 -2.2**
**VIKU Vikbolandet 151.01 342** *eP* **PKPbc** **20 36 10.2 -1.3**
**AKASG Malin Array Be 151.30 320** PKPbc **PKPbc** **20 36 11.1 -1.3**
comp=Z,5.5nm,0.7s,baz=67,slow=2.2,SNR=27
**BRTR Keskin Array B 151.66 296** PKPbc **PKPbc** **20 36 12.3 -1.5**
comp=Z,2.8nm,0.9s,baz=152,slow=4.3,SNR=7.0
**SUW Suwalki 152.29 330** *eP* **PKPbc** **20 36 13.1 -1.5**
**TORD Torodi Ar. Bea 161.31 185** PKP **PKPdf** **20 36 19.7 -0.3**
comp=Z,0.9nm,0.8s,baz=290,slow=0.5,SNR=4.0
TORD PKPab **PKPab** **20 37 05.6 -0.3**
comp=Z,0.9nm,0.5s,baz=188,slow=3.0,SNR=7.0

*IDC **06** 20:35:40.9±1.5,4.°09S×137.°23E,h156km±17km,mb3.3/8, mb1 3.5/13,mb1mx3.3/42,mbtmp3.9/13,Error ellipse: s-maj=20.6km s-min=14.7km az=127.0*
*DJA **06** 20:35:41.7±0.2,4.°S±3.°×13.°7E±.°,h147km±5km,M4.2/13, mb4.2/13,mB5.1/4,MLv4.1/7,Mw(mB)4.4/4*
**ISC 06 20:35:40.2**±0.6,**4.°10S**±0.°07×**137.°22E**±0.°06,**h150**km,**n24,** σ1§**31**/30,**mb3.6**/8,**Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SRPI** | **Serui, Papua** | **2.42** | **336** | P | **P** | | **Pn** | **20 36 21.0** | **+0.6** |
| SRPI | | | | S | S | | **Sn** | **20 36 51.5** | **+0.2** |
| **SMPI** | **Sarmi** | **2.57** | **35** | P | **P** | | **Pn** | **20 36 38.0** | **+0.8** |
| SMPI | | | | S | S | | **Sn** | **20 36 54.9** | **+0.3** |
| **GENI** | **Genyem** | **3.30** | **63** | P | **P** | | **Pn** | **20 36 32.3** | **+0.9** |
| GENI | | | | S | S | | **Sn** | **20 37 10.6** | **-0.5** |
| **JAY** | **Jayapura** | **3.82** | **66** | P | **P** | | **Pn** | **20 36 37.8** | **-0.4** |
| | 6.5nm,0.3s,baz=224,slow=12,SNR=28 | | | | | | | | |
| JAY | | | | S | S | | **Sn** | **20 37 24.6** | **+1.5** |
| | 3.9nm,0.3s,baz=63,slow=16,SNR=4.7 | | | | | | | | |
| **JAY** | **Jayapura** | **3.82** | **66** | P | **P** | | **Pn** | **20 36 37.9** | **-0.2** |
| **FAKI** | **Fak Fak** | **5.10** | **283** | P | **P** | | **Pn** | **20 36 55.3** | **+0.3** |
| | 0.1nm30nm,1.8s | | | | | | | | |
| **SIJI** | **Sorong** | **6.76** | **298** | P | **P** | | **Pn** | **20 37 17.5** | **+0.4** |
| | 7.4nm,0.3s,baz=136,slow=8.3,SNR=32 | | | | | | | | |
| SIJI | | | | S | S | | **Sn** | **20 38 30.3** | **-2.7** |
| | 0.2nm,0.3s,baz=304,slow=23,SNR=1.5 | | | | | | | | |
| **SWI** | **Sorong** | **6.76** | **298** | P | **P** | | **Pn** | **20 37 17.8** | **+0.6** |
| | 0.2nm49nm,0.7s | | | | | | | | |
| **MSAI** | **Masohi** | **8.31** | **275** | P | **P** | | **Pn** | **20 37 39.0** | **+1.2** |
| | 216nm4.9nm,0.7s | | | | | | | | |
| **SGSI** | **Sangihe** | **14.01** | **303** | P | **P** | | **Pn** | **20 38 49.0** | **-3.4** |
| **SOEI** | **Soe** | **14.03** | **246** | P | **P** | | **P** | **20 38 57.7** | **+1.8** |
| | 21nm,0.6s | | | | | | | | |
| **BATI** | **Baumata** | **14.75** | **245** | P | **P** | | **P** | **20 39 05.5** | **+1.7** |
| | 6.0nm,0.3s,baz=32,slow=5.7,SNR=12 | | | | | | | | |
| **BATI** | **Baumata** | **14.75** | **245** | P | **P** | | **P** | **20 39 06.0** | **+2.2** |
| | 16nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.00** | **190** | P | **P** | | **Pn** | **20 39 16.8** | **-0.3** |
| | 1.0nm,0.3s,baz=10,slow=12,SNR=49 | | | | | | | | |
| WRA | | | | S | S | | | 20 42 03.4 | -12 |
| | 0.0nm,0.3s,baz=7.9,slow=24,SNR=3.7 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.95** | **218** | P | **P** | | **Pn** | **20 39 40.2** | **-0.3** |
| | 0.2nm,0.3s,baz=11,slow=9.0,SNR=7.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **19.72** | **189** | P | **P** | | **P** | **20 39 59.3** | **+1.0** |
| | 0.6nm,0.3s,baz=14,slow=10,SNR=53 | | | | | | | | |
| ASAR | | | | S | S | | **S** | **20 43 30.4** | **-2.2** |
| | 0.1nm,0.3s,baz=12,slow=22,SNR=11 | | | | | | | | |
| **KSRS** | **Korea Array** | **42.23** | **349** | P | **P** | | **P** | **20 43 20.1** | **+1.6** |
| | 0.9nm,0.7s,baz=164,slow=7.2,SNR=4.7 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.87** | **302** | P | **P** | | **P** | **20 43 32.1** | **+0.1** |
| | 0.6nm,0.3s,baz=116,slow=6.1,SNR=4.2 | | | | | | | | |
| **KLR** | **Kul'dur** | **53.32** | **356** | P | **P** | | **P** | **20 44 44.3** | **+0.5** |
| | 0.9nm,0.8s,baz=170,slow=6.1,SNR=4.3 | | | | | | | | |
| **SONM** | **Songino Array** | **58.35** | **336** | P | **P** | | **P** | **20 45 19.4** | **-0.3** |
| | 0.1nm,0.3s,baz=160,slow=4.6,SNR=1.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.99** | **323** | P | **P** | | **P** | **20 46 35.7** | **+0.2** |
| | 1.1nm,0.8s,baz=108,slow=7.2,SNR=15 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **74.01** | **326** | P | **P** | | **P** | **20 46 58.6** | **-0.7** |
| | 0.2nm,0.5s,baz=114,slow=4.4,SNR=3.0 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **79.60** | **326** | P | **P** | | **P** | **20 47 30.2** | **-0.5** |
| | 0.8nm,0.6s,baz=83,slow=12,SNR=5.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **87.70** | **25** | P | **P** | | **P** | **20 48 10.9** | **-0.7** |
| | 1.0nm,0.8s,baz=262,slow=4.2,SNR=8.4 | | | | | | | | |

*IDC **06** 20:38:10.1±0.9,2.°22N×126.°72E,h0km,mb3.7/8, mb1 3.9/8,mb1mx3.7/41,mbtmp3.8/8,MS2.8/1,Ms1 2.8/1, ms1mx2.3/73,Error ellipse: s-maj=78.3km s-min=15.7km az=72.0*
**ISC 06 20:38:17.9**±0.9,**2.°2N**±0.°2×**126.°8E**±0.°4,**h63**km,**n9,** σ0§**89**/9, **mb3.8**/7,**Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.42** | **124** | LR | **LR** | | | 20 42 01.4 | |
| | comp=Z,109nm,21.3s,baz=1.5,slow=42 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.21** | **183** | P | **P** | | **P** | **20 42 46.8** | **-1.1** |
| | 1.2nm,0.5s,baz=9.3,slow=11,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.23** | **162** | P | **P** | | **P** | **20 43 18.5** | **-1.4** |
| | 1.4nm,0.3s,baz=339,slow=11,SNR=8.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.64** | **165** | P | **P** | | **P** | **20 43 51.9** | **+1.0** |
| | 0.6nm,0.4s,baz=341,slow=9.8,SNR=7.1 | | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **P** | **20 47 14.3** | **+0.6** |
| | 0.2nm,0.3s,baz=342,slow=2.3,SNR=2.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **35.09** | **2** | P | **P** | | **P** | **20 45 04.8** | **-0.3** |
| | 0.8nm,0.6s,baz=176,slow=9.2,SNR=2.4 | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.70** | **159** | P | **P** | | **P** | **20 45 19.3** | **+0.3** |
| | 0.8nm,0.5s,baz=306,slow=7.8,SNR=5.0 | | | | | | | | |
| **SONM** | **Songino Array** | **48.75** | **342** | P | **P** | | **P** | **20 46 56.4** | **-0.1** |
| | 0.4nm,0.5s,baz=157,slow=8.9,SNR=2.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.84** | **326** | P | **P** | | **P** | **20 48 09.9** | **-0.1** |
| | 0.3nm,0.3s,baz=120,slow=7.8,SNR=17 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.05** | **328** | P | **P** | | **P** | **20 48 38.8** | **+0.3** |
| | 0.7nm,0.5s,baz=128,slow=6.0,SNR=18 | | | | | | | | |

*IDC **06** 20:39:08.6±1.0,36.°86N×97.°75W,h0km,mb3.5/2, mb1 3.8/7,mb1mx3.5/51,mbtmp3.5/7,ML3.7/5,MS3.2/1, Ms1 3.2/1,ms1mx2.5/64,Error ellipse: s-maj=15.8km s-min=14.1km az=177.0*
*ANF **06** 20:39:09.8±0.2,36.°82N×97.°73W,h5km,ML4.8/19,Error ellipse: s-maj=2.6km s-min=2.1km az=9.0*
*TUL **06** 20:39:09±1.3,36.°83N±0.°01×97.°78W±0.°04,h6km±5km, ML4.0,mb_Lg3.8/111(NEIC),Mwr3.4/18(SLM),Error ellipse: s-maj=4.3km s-min=1.7km az=74.0*
*NEIC **06** 20:39:09.2±0.9,36.°82N±0.°01×97.°754W±0.°008,h5km±6km, Error ellipse: s-maj=1.9km s-min=0.9km az=182.0*
*NEIC **06** 20:39:09,36.°81N×97.°76W,h3km,Moment Tensor Solution. Moment tensor: Scale 10^14^Nm; Mrr0.08; Mθθ1.24; Mφφ-1.32; Mrθ0.42; Mθφ-0.19; Mφr0.23; Fault plane solution: M0 1.38000×10^14^ NP1:φ≡140.00000°, δ70.00000°,λ.5.00000°. NP2:φ≡48.00000°,δ85.00000°, λ160.00000°. Principal axes: T 1.3810, Plg17.0000°, Azm2.0000°; N 0.0004, Plg69.0000°, Azm216.0000°; P -1.3814, Plg11.0000°, Azm96.0000°;*
**ISC 06 20:39:09.2**±0.9,**36.°81N**±0.°02×**97.°75W**±0.°02,**h8**km±7km, **n165,** σ1§**26**/171,**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GC02** | **Grant County #** | **0.10** | **294** | Pg | **Pg** | | **Pg** | **20 39 11.1** | **-0.6** |
| **KAN14** | **Manchester OK** | **0.23** | **310** | Pg | **Pg** | | **Pg** | **20 39 13.4** | **-0.4** |
| KAN14 | | | | Sg | **Sg** | | **Sg** | **20 39 16.4** | **-0.6** |
| **KAN17** | **Caldwell West** | **0.23** | **357** | Pg | **Pg** | | **Pg** | **20 39 13.8** | **-0.2** |
| KAN17 | | | | Sg | **Sg** | | **Sg** | **20 39 17.2** | **0.0** |
| **KAN13** | **South Haven SW** | **0.30** | **47** | Pg | **Pg** | | **Pg** | **20 39 15.3** | **+0.2** |
| KAN13 | | | | Sg | **Sg** | | **Sg** | **20 39 19.7** | **+0.6** |
| **KAN05** | **Bluff City Nor** | **0.31** | **341** | | | | **Pg** | **20 39 15.2** | **-0.2** |
| KAN05 | | | | Sg | | | **Sg** | **20 39 19.4** | **-0.2** |
| **KAN01** | **Argonia South** | **0.34** | **358** | | | | **Pg** | **20 39 15.8** | **-0.2** |
| KAN01 | | | | Sg | | | **Sg** | **20 39 20.7** | **+0.1** |
| **CROK** | **Carrier** | **0.36** | **212** | Pg | **Pg** | | **Pg** | **20 39 16.2** | **-0.1** |
| CROK | | | | Sg | **Sg** | | **Sg** | **20 39 21.3** | **+0.2** |
| **OK032** | **Salt Plains WL** | **0.37** | **269** | | | | **Pg** | **20 39 16.1** | **-0.5** |
| OK032 | | | | Sg | **Sg** | | **Sg** | **20 39 21.2** | **-0.2** |
| **KAN10** | **Anthony SW Sta** | **0.42** | **318** | Pg | **Pg** | | **Pg** | **20 39 17.1** | **-0.4** |
| KAN10 | | | | Sg | **Sg** | | **Sg** | **20 39 22.6** | **-0.3** |

**BLOK Blackwell 0.43 97** Pg **Pg** **20 39 17.9 +0.3**
BLOK Sg **Sg** **20 39 24.4 +1.1**
**KAN06 Argonia West S 0.45 349** **Pg** **20 39 17.6 -0.3**
KAN06 Sg **Sg** **20 39 23.7 -0.1**
**KAN08 Anthony NE Sta 0.45 337** **Pg** **20 39 17.8 -0.3**
KAN08 Sg **Sg** **20 39 23.8 -0.2**
**KAN16 Harper SW Stat 0.49 329** Pg **Pg** **20 39 18.3 -0.4**
KAN16 Sg **Sg** **20 39 25.0 -0.1**
**KAN12 Harper NE Stat 0.53 338** Pg **Pg** **20 39 19.1 -0.4**
KAN12 Sg **Sg** **20 39 26.1 -0.2**
**OK035 E0210 Rd and N 0.78 263** Pg **Pg** **20 39 23.5 -0.7**
OK035 Sg **Sg** **20 39 33.9 -0.5**
**T35A Sooner Cattle 1.00 84** **Pg** **20 39 28.2 -0.2**
**OK033 Mehan 1.01 139** **Pg** **20 39 28.5 0.0**
**OK029 Liberty Lake 1.04 167** **Pg** **20 39 29.0 -0.2**
OK029 Sg **Sg** **20 39 43.1 +0.4**
**QUOK Quay 1.05 127** **Pg** **20 39 29.3 -0.2**
**U32A Winter Ranch, 1.10 247** Pg **Pg** **20 39 29.3 -1.0**
**OK031 S. Brethren Rd 1.13 139** **Pg** **20 39 30.7 -0.2**
**OK034 N. Norfolk Rd. 1.16 133** **Pg** **20 39 31.1 -0.3**
**BCOK Bluff Creek, N 1.16 174** Pg **Pg** **20 39 30.9 -0.5**
**OK030 Cody Creek RV 1.18 138** **Pg** **20 39 31.5 -0.3**
**OK005 Luther M Schoo 1.24 159** **Pg** **20 39 32.5 -0.5**
**OK009 Oakdale Elemen 1.25 168** **Pg** **20 39 32.8 -0.5**
**OK025 Westminster Rd 1.27 165** **Pn** **20 39 33.1 -0.1**
**OK001 Jones High Sch 1.30 163** Pn **Pn** **20 39 33.7 0.0**
**OKCFA Oklahoma City 1.41 170** **Pn** **20 39 35.6 +0.4**
**OKCSW OKLAHOMA CITY 1.43 170** Pn **Pn** **20 39 35.8 +0.4**
**FNO Franklin 1.58 170** Pn **Pn** **20 39 38.1 +0.6**
**R32A Long Quarter, 1.78 335** Pn **Pn** **20 39 40.9 +0.6**
**W35A Tecumseh 1.80 157** Pn **Pn** **20 39 41.3 +0.8**
**TUL1 Leonard 1.82 119** Pn **Pn** **20 39 41.5 +0.7**
**TUL1 Leonard 1.82 119** P **Pn** **20 39 41.5 +0.7**
baz=300,SNR=128
TUL1 S **Sb** **20 40 06.9 +1.3**
baz=300
**X34A Smith Ranch, M 2.21 182** Pn **Pn** **20 39 47.2 +1.1**
**WMOK Wichita Mounta 2.23 202** Pn **Pn** **20 39 46.9 +0.3**
WMOK IAmb_Lg 20 40 18.4
comp=Z,316nm,0.8s
**WMOK Wichita Mounta 2.23 202** P **Pn** **20 39 47.0 +0.5**
baz=21
WMOK S **Sb** **20 40 17.7 +0.1**
baz=21
**KSU1 Kansas State U 2.46 21** Pn **Pn** **20 39 50.4 +0.8**
KSU1 IAmb_Lg 20 40 31.3
comp=Z,243nm,0.7s
**KSU1 Kansas State U 2.46 21** Pn **Pn** **20 39 50.3 +0.8**
baz=202,SNR=67
KSU1 Pb **Pb** **20 39 54.3 +0.6**
baz=202
**CBKS Cedar Bluff 2.55 322** Pn **Pn** **20 39 51.2 +0.4**
**CBKS Cedar Bluff 2.55 322** P **Pn** **20 39 51.5 +0.7**
baz=141,SNR=34
**U38A Gravette 2.73 97** Pn **Pn** **20 39 54.3 +1.0**
**LOOK Love County 2.85 170** Pn **Pn** **20 39 56.0 +1.0**
**X37A Clayton 2.94 138** Pn **Pn** **20 39 57.5 +1.2**
X37A IAmb_Lg 20 40 44.5
comp=Z,410nm,0.8s
**HHAR Hobbs 3.11 99** **Pn** **20 39 59.8 +1.2**
HHAR IAmb_Lg 20 40 52.7
comp=Z,169nm,0.7s
**Z35A Perchaven, San 3.50 173** **Pn** **20 40 04.8 +1.0**
**W39A Magazine 3.59 115** Pn **Pn** **20 40 06.5 +1.2**
**W39A Magazine 3.59 115** Pn **Pn** **20 40 06.4 +1.2**
baz=298
W39A Pb **Pb** **20 40 14.1 +1.1**
baz=298,SNR=21
W39A Sb **Sg** **20 41 01.8 -2.9**
baz=298
**S39A Bolivar 3.64 75** Pn **Pn** **20 40 06.2 +0.4**
**AMTX Amarillo 3.73 240** Pn **Pn** **20 40 08.4 +1.2**
AMTX IAmb_Lg 20 41 08.4
comp=Z,328nm,0.7s
**AMTX Amarillo 3.73 240** Pn **Pn** **20 40 08.8 +1.6**
baz=57
AMTX Pb **Pb** **20 40 16.4 +1.1**
baz=57
AMTX Sn **Sn** **20 40 54.2 +2.9**
baz=57
AMTX Sb **Sb** **20 41 05.1 +4.3**
baz=57
**N33A J Bar K, Exete 3.93 3** **Pn** **20 40 09.5 -0.4**
**U40A Yellville 3.96 95** **Pn** **20 40 11.0 +0.6**
U40A IAmb_Lg 20 41 18.0
comp=Z,280nm,0.8s
**U40A Yellville 3.96 95** Pn **Pn** **20 40 10.9 +0.6**
baz=278,SNR=22
U40A Pb **Pb** **20 40 20.0 +0.7**
baz=278
**MIAR Mount Ida 4.08 122** **Pn** **20 40 11.9 0.0**
MIAR IAmb_Lg 20 41 20.2
comp=Z,241nm,0.9s
**MIAR Mount Ida 4.08 122** P **Pn** **20 40 13.0 +1.1**
baz=305,SNR=7.3
MIAR Sb **Sg** **20 41 16.7 -3.6**
baz=305
**Z38A Mt. Pleasant 4.21 147** Pn **Pn** **20 40 14.3 +0.6**
**P38A Dawn 4.35 48** Pn **Pn** **20 40 15.9 +0.3**
P38A IAmb_Lg 20 41 29.2
comp=Z,232nm,0.8s
**N35A Tabor 4.37 21** **Pn** **20 40 16.4 +0.6**
**MGMO Mountain Grove 4.40 84** **Pn** **20 40 17.5 +1.1**
MGMO IAmb_Lg 20 41 30.8
comp=Z,175nm,0.8s
**KSCO Kaye Shedlock' 4.44 301** **Pn** **20 40 17.1 +0.2**
KSCO IAmb_Lg 20 41 41.6
comp=Z,296nm,0.7s
**KSCO Kaye Shedlock' 4.44 301** Pn **Pn** **20 40 17.7 +0.7**
baz=118
KSCO Pb **Pb** **20 40 29.1 +1.6**
baz=118,SNR=12
KSCO Sb **Sg** **20 41 28.5 -3.3**
baz=118
**ABTX Abilene, Hawle 4.46 201** Pn **Pn** **20 40 17.7 +0.6**
**ABTX Abilene, Hawle 4.46 201** P **Pn** **20 40 18.1 +1.0**
baz=20
**R40A Maddies Statio 4.60 70** **Pn** **20 40 19.2 +0.2**
R40A IAmb_Lg 20 41 36.6
comp=Z,134nm,0.8s
**BGNE Belgrade 4.60 356** Pn **Pn** **20 40 19.0 -0.1**
BGNE IAmb_Lg 20 41 45.9
comp=Z,277nm,0.8s
**BGNE Belgrade 4.60 356** P **Pn** **20 40 19.3 +0.2**
baz=176
**X40A Basin Creek Fa 4.62 119** **Pn** **20 40 19.7 +0.3**
X40A IAmb_Lg 20 41 42.1
comp=Z,175nm,0.7s
**X40A Basin Creek Fa 4.62 119** P **Pn** **20 40

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CCM** | **Cathedral Cave** | **5.32** | **75** | P | | **Pn** | **20 40 29.0** | **0.0** |
| | baz=259 | | | | | | | |
| **T25A** | **Trinidad** | **5.34** | **276** | Pn | | **Pn** | **20 40 29.7** | **+0.2** |
| T25A | | | | lAmb_Lg | | | 20 42 04.5 | |
| | comp=Z,132nm,0.7s | | | | | | | |
| **T25A** | **Trinidad** | **5.34** | **276** | P | | **Pn** | **20 40 30.8** | **+1.3** |
| | baz=91 | | | | | | | |
| T25A | | | | Sb | | **Sg** | **20 41 54.4** | **-6.5** |
| | baz=91 | | | | | | | |
| **LCAR** | **Lake Charles** | **5.37** | **96** | Pn | | **Pn** | **20 40 30.1** | **+0.5** |
| **Z41A** | **Richland Creek** | **5.39** | **130** | | | **Pn** | **20 40 29.9** | **0.0** |
| Z41A | | | | lAmb_Lg | | | 20 42 11.5 | |
| | comp=Z,172nm,0.8s | | | | | | | |
| **Z41A** | **Richland Creek** | **5.39** | **130** | S | | **Sn** | **20 41 29.9** | **-2.2** |
| | baz=313 | | | | | | | |
| **NATX** | **Nacogdoches** | **5.65** | **152** | lAmb_Lg | | | 20 42 21.1 | |
| | comp=Z,110nm,0.9s | | | | | | | |
| **CCAR** | **Cane Creek** | **5.67** | **119** | Pn | | **Pn** | **20 40 33.4** | **-0.4** |
| CCAR | | | | lAmb_Lg | | | 20 42 21.6 | |
| | comp=Z,212nm,0.9s | | | | | | | |
| **K31A** | **O'Neill** | **5.86** | **353** | | | **Pn** | **20 40 36.5** | **+0.1** |
| **PBMO** | **Poplar Bluff** | **5.87** | **88** | Pn | | **Pn** | **20 40 37.1** | **+0.6** |
| PBMO | | | | lAmb_Lg | | | 20 42 17.0 | |
| | comp=Z,166nm,0.7s | | | | | | | |
| **FVM** | **French Village** | **5.95** | **76** | Pn | | **Pn** | **20 40 37.2** | **-0.3** |
| FVM | | | | lAmb_Lg | | | 20 42 19.8 | |
| | comp=Z,131nm,1.0s | | | | | | | |
| **435B** | **Jarrell** | **6.01** | **179** | | | **Pn** | **20 40 38.1** | **-0.4** |
| 435B | | | | lAmb_Lg | | | 20 42 26.6 | |
| | comp=Z,121nm,0.8s | | | | | | | |
| **435B** | **Jarrell** | **6.01** | **179** | P | | **Pn** | **20 40 39.0** | **+0.5** |
| | baz=359 | | | | | | | |
| 435B | | | | S | | **Sn** | **20 41 45.2** | **-2.4** |
| | baz=359 | | | | | | | |
| **SCIA** | **State Center** | **6.18** | **33** | S | | **Sn** | **20 41 50.1** | **-1.5** |
| | baz=216 | | | | | | | |
| **Q24A** | **Divide** | **6.24** | **292** | | | **Pn** | **20 40 41.3** | **-0.5** |
| Q24A | | | | lAmb_Lg | | | 20 42 33.6 | |
| | comp=Z,132nm,0.8s | | | | | | | |
| **Q24A** | **Divide** | **6.24** | **292** | P | | **Pn** | **20 40 42.7** | **+0.8** |
| | baz=108 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.25** | **281** | | | **Pn** | **20 40 42.5** | **+0.5** |
| **SDCO** | **Great Sand Dun** | **6.25** | **281** | P | | **Pn** | **20 40 43.3** | **+1.2** |
| | baz=96 | | | | | | | |
| **GNAR** | **Gosnell** | **6.29** | **95** | lAmb_Lg | | | 20 42 36.1 | |
| | comp=Z,188nm,0.8s | | | | | | | |
| **JCT** | **Junction City** | **6.54** | **196** | Pn | | **Pn** | **20 40 45.3** | **-0.5** |
| **JCT** | **Junction City** | **6.54** | **196** | P | | **Pn** | **20 40 45.3** | **-0.5** |
| | baz=14 | | | | | | | |
| **MET** | **Memphis--Engin** | **6.56** | **103** | lAmb_Lg | | | 20 42 42.3 | |
| | comp=Z,123nm,0.8s | | | | | | | |
| **143A** | **Socs Landing,** | **6.64** | **126** | lAmb_Lg | | | 20 42 49.8 | |
| | comp=Z,88nm,0.8s | | | | | | | |
| **N41A** | **Harden Midland** | **6.64** | **52** | | | **Pn** | **20 40 46.7** | **-0.4** |
| **S44A** | **Carbondale** | **6.83** | **80** | | | **Pn** | **20 40 50.6** | **+0.9** |
| S44A | | | | lAmb_Lg | | | 20 42 45.7 | |
| | comp=Z,112nm,0.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.87** | **298** | Pn | | **Pn** | **20 40 51.0** | **+0.6** |
| ISCO | | | | lAmb_Lg | | | 20 42 45.9 | |
| | comp=Z,85nm,0.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.87** | **298** | P | | **Pn** | **20 40 51.5** | **+1.0** |
| | baz=113 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.97** | **7** | Pn | | **Pn** | **20 40 50.6** | **-1.0** |
| **ECSD** | **EROS Data Cent** | **6.97** | **7** | P | | **Pn** | **20 40 50.5** | **-1.0** |
| | baz=188,SNR=8.3 | | | | | | | |
| **K38A** | **Parkersburg** | **6.98** | **32** | | | **Pn** | **20 40 51.0** | **-0.6** |
| K38A | | | | lAmb_Lg | | | 20 43 07.9 | |
| | comp=Z,154nm,0.8s | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.07** | **64** | | | **Pn** | **20 40 53.1** | **+0.3** |
| **W45A** | **Hickory Valley** | **7.13** | **101** | lAmb_Lg | | | 20 42 57.5 | |
| | comp=Z,156nm,0.8s | | | | | | | |
| **OXF** | **Oxford** | **7.16** | **106** | Pn | | **Pn** | **20 40 54.9** | **+0.7** |
| OXF | | | | lAmb_Lg | | | 20 43 17.4 | |
| | comp=Z,64nm,0.8s | | | | | | | |
| **OXF** | **Oxford** | **7.16** | **106** | P | | **Pn** | **20 40 55.7** | **+1.4** |
| | baz=291 | | | | | | | |
| **UTMT** | **University of** | **7.16** | **91** | lAmb_Lg | | | 20 43 12.2 | |
| | comp=Z,125nm,0.8s | | | | | | | |
| **L40A** | **Anamosa** | **7.28** | **42** | | | **Pn** | **20 40 55.5** | **-0.3** |
| **T45A** | **Paducah** | **7.30** | **86** | lAmb_Lg | | | 20 43 05.3 | |
| | comp=Z,151nm,0.8s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **7.30** | **280** | Pn | | **Pn** | **20 40 56.2** | **-0.2** |
| **ANMO** | **Albuquerque** | **7.31** | **258** | Pn | | **Pn** | **20 40 58.4** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=77,slow=13,SNR=5.8 | | | | | | | |
| ANMO | | | | Lg | | Pg | 20 41 23.7 | -5.5 |
| | comp=Z,1.7nm,0.3s,baz=75,slow=19,SNR=10 | | | | | | | |
| ANMO | | | | Lg | | Lg | 20 42 57.2 | |
| | comp=Z,3.5nm,0.3s,baz=334,slow=21,SNR=3.1 | | | | | | | |
| **ANMO** | **Albuquerque** | **7.31** | **258** | Pn | | **Pn** | **20 40 58.1** | **+1.7** |
| **Y45A** | **Yeager Farm, C** | **7.32** | **111** | lAmb_Lg | | | 20 43 08.1 | |
| | comp=Z,91nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.49** | **309** | | | **Pn** | **20 40 58.0** | **-1.0** |
| PHWY | | | | lAmb_Lg | | | 20 43 06.1 | |
| | comp=Z,89nm,0.9s | | | | | | | |
| **HDIL** | **Hopedale** | **7.59** | **58** | Pn | | **Pn** | **20 41 00.2** | **+0.1** |
| **SUSD** | **Miller** | **7.68** | **354** | lAmb_Lg | | | 20 43 21.2 | |
| | comp=Z,98nm,0.9s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **7.92** | **23** | lAmb_Lg | | | 20 43 36.3 | |
| | comp=Z,62nm,0.8s | | | | | | | |
| **735A** | **Kenedy** | **7.93** | **180** | lAmb_Lg | | | 20 43 30.4 | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **O44A** | **Mansfield** | **8.01** | **63** | lAmb_Lg | | | 20 43 24.3 | |
| | comp=Z,135nm,0.8s | | | | | | | |
| **WVT** | **Waverly** | **8.02** | **92** | | | **Pn** | **20 41 06.1** | **+0.1** |
| **MNTX** | **Cornudas Mount** | **8.12** | **233** | Pn | | **Pn** | **20 41 07.3** | **-0.1** |
| MNTX | | | | lAmb_Lg | | | 20 43 38.4 | |
| | comp=Z,56nm,1.0s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.12** | **233** | P | | **Pn** | **20 41 07.8** | **+0.4** |
| | baz=49 | | | | | | | |
| **L42A** | **Oliver, Polo** | **8.12** | **48** | | | **Pn** | **20 41 07.4** | **0.0** |
| **146A** | **Union** | **8.28** | **118** | lAmb_Lg | | | 20 43 54.7 | |
| | comp=Z,69nm,1.0s | | | | | | | |
| **JFWS** | **Jewell Farm** | **8.39** | **41** | | | **Pn** | **20 41 10.1** | **-0.9** |
| JFWS | | | | lAmb_Lg | | | 20 43 48.2 | |
| | comp=Z,82nm,0.7s | | | | | | | |
| **JFWS** | **Jewell Farm** | **8.39** | **41** | P | | **Pn** | **20 41 10.9** | **-0.1** |
| | baz=226 | | | | | | | |
| **T47A** | **Sharon Grove** | **8.53** | **86** | Pn | | **Pn** | **20 41 13.3** | **+0.3** |
| **833A** | **Chaparral WMA,** | **8.58** | **190** | Pn | | **Pn** | **20 41 13.1** | **-0.6** |
| **Z47A** | **Carrollton** | **8.72** | **112** | lAmb_Lg | | | 20 44 07.5 | |
| | comp=Z,61nm,1.1s | | | | | | | |
| **RSSD** | **Black Hills** | **8.73** | **329** | Pn | | **Pn** | **20 41 16.6** | **+0.6** |
| RSSD | | | | lAmb_Lg | | | 20 43 52.1 | |
| | comp=Z,50nm,0.9s | | | | | | | |
| **RSSD** | **Black Hills** | **8.73** | **329** | P | | **Pn** | **20 41 16.8** | **+0.8** |
| | baz=145 | | | | | | | |
| **RWWY** | **Rawlins** | **8.81** | **306** | lAmb_Lg | | | 20 44 08.6 | |
| | comp=Z,66nm,1.0s | | | | | | | |
| **M44A** | **Midewin, Midew** | **8.82** | **56** | lAmb_Lg | | | 20 43 57.8 | |
| | comp=Z,115nm,1.0s | | | | | | | |
| **I40A** | **Norwalk** | **8.92** | **35** | Pn | | **Pn** | **20 41 17.9** | **-0.4** |
| I40A | | | | lAmb_Lg | | | 20 43 56.9 | |
| | comp=Z,74nm,1.0s | | | | | | | |
| **K22A** | **Casper** | **8.93** | **313** | lAmb_Lg | | | 20 43 59.7 | |
| | comp=Z,107nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **8.96** | **215** | Pn | | **Pn** | **20 41 17.5** | **-1.5** |
| | comp=Z,0.3nm,0.3s,baz=41,slow=11,SNR=24 | | | | | | | |
| TXAR | | | | Lg | | Lg | 20 43 47.5 | |
| | comp=Z,3.3nm,0.3s,baz=31,slow=32,SNR=7.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **8.96** | **215** | | | **Pn** | **20 41 17.6** | **-1.4** |
| **TX32** | **Lajitas Array** | **8.96** | **215** | | | **Pn** | **20 41 17.8** | **-1.2** |
| **SPMN** | **Marine on St.** | **9.20** | **22** | lAmb_Lg | | | 20 44 00.7 | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **K43A** | **Burlington** | **9.34** | **48** | lAmb_Lg | | | 20 44 15.2 | |
| | comp=Z,100nm,0.9s | | | | | | | |
| **E28A** | **Huff** | **10.00** | **348** | lAmb_Lg | | | 20 44 30.2 | |
| | comp=Z,77nm,0.9s | | | | | | | |
| **PD31** | **Pinedale Array** | **10.86** | **307** | | | **Pn** | **20 41 45.3** | **+0.2** |
| **PDAR** | **Pinedale Array** | **10.86** | **307** | Pn | | **Pn** | **20 41 45.1** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=108,slow=14,SNR=5.3 | | | | | | | |
| PDAR | | | | Pg | | | 20 42 29.1 | |
| | comp=Z,0.6nm,0.3s,baz=114,slow=15,SNR=5.3 | | | | | | | |
| PDAR | | | | Lg | | Lg | 20 44 47.5 | |
| | comp=Z,1.9nm,0.3s,baz=103,slow=23,SNR=2.8 | | | | | | | |
| **S51A** | **Beattyville** | **11.32** | **82** | | | **Pn** | **20 41 50.9** | **-0.3** |
| **TKL** | **Tuckaleechee C** | **11.35** | **92** | Pn | | **Pn** | **20 41 51.6** | **0.0** |
| | comp=Z,0.7nm,0.3s,baz=243,slow=7.9,SNR=7.4 | | | | | | | |
| TKL | | | | Lg | | Lg | 20 45 02.4 | |
| | comp=Z,0.8nm,0.3s,baz=176,slow=20,SNR=8.3 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **13.50** | **5** | Lg | | Lg | 20 46 07.7 | |
| | comp=Z,0.2nm,0.3s,baz=88,slow=19,SNR=3.6 | | | | | | | |
| **SADO** | **Sadowa** | **16.16** | **55** | Lg | | Lg | 20 47 31.5 | |
| | comp=Z,0.7nm,0.3s,baz=311,slow=11,SNR=3.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.37** | **282** | Pn | | **P** | **20 43 01.6** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=114,slow=9.0,SNR=4.2 | | | | | | | |
| **CMIG** | **Matias Romero** | **19.81** | **172** | LR | | LR | 20 53 22.9 | |
| | comp=Z,66nm,18.8s,baz=38,slow=43 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.75** | **343** | P | | **P** | **20 44 58.0** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=149,slow=8.9,SNR=3.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.18** | **330** | P | | **P** | **20 46 46.2** | **+0.7** |
| | comp=Z,0.8nm,0.7s,baz=111,slow=7.2,SNR=11 | | | | | | | |

*IDC* ***06*** *20:53:55.6±1.0,54˚.95S×134˚.06W,h0km,mb3.9/5, mb1 4.1/5,mb1mx3.8/26,mbtmp3.9/5,MS3.9/33, Ms1 3.9/33,ms1mx3.8/51,Error ellipse: s-maj=49.9km s-min=29.2km az=178.0*

*GCMT* ***06*** *20:54:00.0±0.3,54˚.23S±0˚.02×133˚.33W±0˚.03,h21km±2km, MW5.0/78,Moment Tensor Solution. s26,c29; s78,c102; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-0.46±.20; Mθθ2.71±.20; Mϕϕ-2.26±.17; Mrθ-0.75±.29; Mϕθ2.17±.13; Mϕr1.03±.29; Best double couple: Mo3.55900×10¹⁶ NP1:ϕ206.00000°,δ71.00000°,λ-168.00000°. NP2: ϕ112.00000°,δ79.00000°,λ-19.00000°. Principal axes: T 3.5550, Pl95.0000°, Azm160.0000°; N 0.0010, Pl68.0000°, Azm263.0000°; P -3.5630, Plg22.0000°, Azm68.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 06 20:53:57.4±0.9, 54.7S±0˚.2×134.0W±0˚.2, h10km, n51, σ1§85/9, mb3.6/5, MS4.0/35, 1C, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **31.84** | **202** | LR | LR | LR | 21 09 49.8 | |
| | comp=Z,91nm,19.1s,baz=70,slow=30 | | | | | | | |
| **RPN** | **Rapa Nui** | **32.89** | **43** | LR | LR | LR | 21 10 05.2 | |
| | comp=Z,279nm,20.4s,baz=156,slow=29 | | | | | | | |
| **PMSA** | **Palmer Station** | **34.83** | **135** | P | **P** | **P** | **21 00 45.7** | **-2.3** |
| | 12nm,0.7s,baz=321,slow=2.5,SNR=1.5 | | | | | | | |
| PMSA | | | | LR | LR | LR | 21 10 52.9 | |
| | comp=Z,402nm,20.9s,baz=278,slow=29 | | | | | | | |
| **QSPA** | **South Pole Qui** | **35.50** | **180** | LR | LR | LR | 21 13 10.3 | |
| | comp=Z,79nm,21.0s,baz=77,slow=33 | | | | | | | |
| **RAR** | **Rarotonga** | **38.67** | **319** | LR | LR | LR | 21 13 41.0 | |
| | comp=Z,219nm,19.4s,baz=121,slow=30 | | | | | | | |
| **PPT2** | **Papeete2** | **38.91** | **336** | *e*S | S | S | 21 07 07.6 | -14 |
| | 143nm,26.0s | | | | | | | |
| PPT2 | | | | *e*LR | LR | LR | 21 11 34.5 | |
| | comp=Z,742nm,27.0s | | | | | | | |
| **PPT** | **Papeete** | **38.93** | **336** | LR | LR | LR | 21 13 01.9 | |
| | comp=Z,249nm,19.4s,baz=182,slow=29 | | | | | | | |
| **VAH** | **Vaihoa** | **40.76** | **340** | *e*T | T | T | 21 43 59.2 | |
| | 11nm,0.3s | | | | | | | |
| **H03S2** | **Juan Fernandez** | **43.27** | **84** | T | T | T | 21 47 37.8 | |
| | baz=221 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **43.28** | **84** | T | T | T | 21 47 51.2 | |
| | baz=221,SNR=4.0 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **43.29** | **84** | T | T | T | 21 48 20.2 | |
| | baz=221 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **43.55** | **84** | T | T | T | 21 48 04.7 | |
| | baz=226,slow=72,SNR=24 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **43.55** | **84** | T | T | T | 21 47 58.2 | |
| | baz=226,slow=72,SNR=24 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **43.56** | **84** | T | T | T | 21 48 01.5 | |
| | baz=226,slow=72,SNR=22 | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **45.96** | **352** | *e*LR | LR | LR | 21 14 53.0 | |
| | comp=Z,450nm,26.8s | | | | | | | |
| **SNAA** | **Sanae** | **49.36** | **162** | LR | LR | LR | 21 23 42.0 | |
| | comp=Z,107nm,19.3s,baz=186,slow=36 | | | | | | | |
| **AFI** | **Afiamalu** | **50.20** | **309** | LR | LR | LR | 21 20 27.6 | |
| | comp=Z,65nm,18.6s,baz=55,slow=32 | | | | | | | |
| **MSVF** | **Nonsavu** | **51.90** | **296** | LR | LR | LR | 21 19 20.4 | |
| | comp=Z,31nm,20.6s,baz=86,slow=29 | | | | | | | |
| **DZM** | **Mont Dzumac** | **54.76** | **282** | *e*LR | LR | LR | 21 18 59.2 | |
| | comp=Z,118nm,24.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **54.76** | **282** | LR | LR | LR | 21 22 51.2 | |
| | comp=Z,87nm,18.6s,baz=80,slow=32 | | | | | | | |
| **SYO** | **Syowa Base** | **56.54** | **177** | *e*P | **P** | **P** | **21 03 41.6** | **+2.3** |
| **MAW** | **Mawson** | **57.40** | **188** | LR | LR | LR | 21 25 11.4 | |
| | comp=Z,140nm,18.2s,baz=132,slow=33 | | | | | | | |
| **LVC** | **Limon Verde** | **57.49** | **84** | LR | LR | LR | 21 23 39.6 | |
| | comp=Z,32nm,21.6s,baz=206,slow=31 | | | | | | | |
| **CPUP** | **Villa Florida** | **61.35** | **96** | LR | LR | LR | 21 26 27.5 | |
| | comp=Z,80nm,18.5s,baz=223,slow=32 | | | | | | | |
| **NNA** | **Nana** | **61.55** | **69** | LR | LR | LR | 21 23 45.6 | |
| | comp=Z,216nm,21.0s,baz=215,slow=29 | | | | | | | |
| **STKA** | **Stephens Creek** | **61.59** | **254** | LR | LR | LR | 21 27 34.3 | |
| | comp=Z,57nm,19.3s,baz=197,slow=33 | | | | | | | |
| **LPAZ** | **La Paz** | **62.93** | **80** | P | **P** | **P** | **21 04 25.6** | **+0.9** |
| | 1.2nm,0.7s,baz=263,slow=8.1,SNR=2.2 | | | | | | | |
| LPAZ | | | | LR | LR | LR | 21 25 12.4 | |
| | comp=Z,52nm,20.5s,baz=234,slow=30 | | | | | | | |
| **ATAH** | **Atahualpa** | **64.77** | **65** | LR | LR | LR | 21 24 39.5 | |
| | comp=Z,73nm,20.1s,baz=227,slow=28 | | | | | | | |
| **CTA** | **Charters Tower** | **67.98** | **266** | LR | LR | LR | 21 29 41.1 | |
| | comp=Z,51nm,21.3s,baz=130,slow=32 | | | | | | | |
| **ASAR** | **Alice Springs** | **72.23** | **254** | P | **P** | **P** | **21 05 21.0** | **-1.7** |
| | 0.4nm,0.7s,baz=137,slow=7.0,SNR=3.3 | | | | | | | |
| ASAR | | | | LR | LR | LR | 21 33 41.8 | |
| | comp=Z,76nm,18.3s,baz=142,slow=33 | | | | | | | |
| **WRA** | **Warramunga Arr** | **74.93** | **257** | P | **P** | **P** | **21 05 37.0** | **-1.7** |
| | 0.4nm,0.8s,baz=151,slow=5.2,SNR=3.0 | | | | | | | |
| WRA | | | | LR | LR | LR | 21 35 23.3 | |
| | comp=Z,75nm,18.4s,baz=176,slow=33 | | | | | | | |
| **ROSC** | **El Rosal** | **77.05** | **62** | LR | LR | LR | 21 33 38.7 | |
| | comp=Z,107nm,18.1s,baz=224,slow=31 | | | | | | | |
| **PTGA** | **Pitinga** | **80.20** | **77** | LR | LR | LR | 21 35 20.6 | |
| | comp=Z,92nm,21.1s,baz=152,slow=31 | | | | | | | |
| **LPIG** | **La Paz** | **81.05** | **22** | LR | LR | LR | 21 33 34.9 | |
| | comp=Z,90nm,18.6s,baz=22,slow=29 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **81.27** | **251** | LR | LR | LR | 21 39 35.7 | |
| | comp=Z,88nm,18.2s,baz=154,slow=34 | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.64** | **26** | P | **P** | **P** | **21 06 45.2** | **-0.6** |
| | 0.3nm,0.9s,baz=224,slow=3.8,SNR=2.7 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **88.58** | **305** | T | T | T | 22 45 18.4 | |
| | baz=147 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **88.60** | **305** | T | T | T | 22 45 08.9 | |
| | baz=147 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **88.60** | **305** | T | T | T | 22 45 07.6 | |
| | baz=147 | | | | | | | |
| **MDP** | **Montagnes des** | **89.13** | **80** | LR | LR | LR | 21 42 24.7 | |
| | comp=Z,60nm,18.3s,baz=186,slow=33 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.21** | **15** | LR | LR | LR | 21 36 42.5 | |
| | comp=Z,72nm,20.2s,baz=52,slow=29 | | | | | | | |
| **SUR** | **Sutherland** | **90.62** | **159** | LR | LR | LR | 21 41 30.1 | |
| | comp=Z,87nm,20.2s,baz=198,slow=32 | | | | | | | |
| **BOSA** | **Boshof** | **95.15** | **162** | LR | LR | LR | 21 45 51.4 | |
| | comp=Z,84nm,18.8s,baz=198,slow=33 | | | | | | | |
| **KAPI** | **Kappang** | **95.25** | **254** | LR | LR | LR | 21 48 07.8 | |
| | comp=Z,40nm,18.9s,baz=191,slow=34 | | | | | | | |
| **ELK** | **Elko** | **96.39** | **14** | LR | LR | LR | 21 43 34.4 | |
| | comp=Z,41nm,18.1s,baz=62,slow=31 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **96.51** | **8** | LR | LR | LR | 21 40 18.8 | |
| | comp=Z,58nm,21.7s,baz=182,slow=29 | | | | | | | |
| **LBTB** | **Lobatse** | **98.72** | **161** | LR | LR | LR | 21 47 36.8 | |
| | comp=Z,63nm,19.9s,baz=190,slow=33 | | | | | | | |
| **PDAR** | **Pinedale Array** | **99.28** | **18** | LR | LR | LR | 21 45 24.4 | |
| | comp=Z,39nm,18.2s,baz=33,slow=31 | | | | | | | |
| **ILAR** | **Eielson Array** | **119.53** | **354** | PKP | | **PKiKP** | **21 12 46.5** | **+0.7** |
| | 0.3nm,0.6s,baz=200,slow=1.8,SNR=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **142.65** | **285** | PKP | | **PKPdf** | **21 13 30.7** | **+0.7** |
| | 0.2nm,0.5s,baz=212,slow=0.3,SNR=1.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **155.95** | **266** | PKPab | | **PKPab** | **21 14 19.6** | **+1.4** |
| | 0.4nm,0.8s,baz=127,slow=3.2,SNR=3.7 | | | | | | | |

*TUL* ***06*** *21:08:02.4±1.0,36˚.66N±0˚.02×98˚.45W±0˚.02,h5km±7km, ML2.7,mb_Lg2.6/21(NEIC),Error ellipse: s-maj=2.3km s-min=1.7km az=153.0*

**NEIC 06 21:08:02.5±0.8, 36.65N±0˚.02×98.45W±0˚.02, h5km±2km, Error ellipse: s-maj=3.0km s-min=3.0km az=152.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.22** | **286** | | | Pg | 21 08 07.0 | +0.1 |
| OK035 | | | | | Sg | Sg | 21 08 10.2 | +0.4 |
| **OK032** | **Salt Plains WL** | **0.25** | **50** | | | Pg | 21 08 07.6 | +0.3 |
| OK032 | | | | | Sg | Sg | 21 08 11.4 | +0.9 |
| **CROK** | **Carrier** | **0.40** | **111** | | | Pg | 21 08 10.6 | +0.5 |
| CROK | | | | | Sg | Sg | 21 08 16.5 | +1.1 |
| **KAN14** | **Manchester OK** | **0.50** | **51** | | | Pg | 21 08 12.1 | +0.1 |
| KAN14 | | | | | Sg | Sg | 21 08 19.2 | +0.7 |
| **GC02** | **Grant County #** | **0.51** | **66** | | | Pg | 21 08 12.6 | +0.2 |
| GC02 | | | | | Sg | Sg | 21 08 19.6 | +0.6 |
| **U32A** | **Winter Ranch,** | **0.52** | **240** | | | Pg | 21 08 12.5 | 0.0 |
| U32A | | | | | Sg | Sg | 21 08 19.9 | +0.6 |
| **KAN10** | **Anthony SW Sta** | **0.55** | **30** | | | Pg | 21 08 13.2 | 0.0 |
| KAN10 | | | | | Sg | Sg | 21 08 20.8 | +0.4 |
| **KAN05** | **Bluff City Nor** | **0.65** | **45** | | | Pg | 21 08 15.0 | 0.0 |
| KAN05 | | | | | Sg | Sg | 21 08 23.8 | +0.3 |
| **KAN16** | **Harper SW Stat** | **0.65** | **28** | | | Pg | 21 08 15.0 | 0.0 |
| **KAN17** | **Caldwell West** | **0.68** | **54** | | | Pg | 21 08 15.3 | -0.1 |
| **KAN08** | **Anthony NE Sta** | **0.69** | **33** | | | Pg | 21 08 15.5 | -0.3 |
| **KAN12** | **Harper NE Stat** | **0.74** | **29** | | | Pg | 21 08 16.4 | -0.3 |
| **KAN01** | **Argonia South** | **0.75** | **47** | | | Pg | 21 08 16.6 | -0.2 |
| **KAN06** | **Argonia West S** | **0.76** | **38** | | | Pg | 21 08 17.1 | -0.1 |
| **KAN13** | **South Haven SW** | **0.86** | **64** | Pg | | Pg | 21 08 18.8 | -0.2 |
| **BLOK** | **Blackwell** | **0.99** | **83** | | | Pg | 21 08 21.2 | -0.3 |
| **OK029** | **Liberty Lake** | **1.17** | **136** | | | Pg | 21 08 24.7 | -0.1 |
| **BCOK** | **Bluff Creek, N** | **1.20** | **145** | Pg | | Pg | 21 08 24.7 | -0.7 |
| **OK033** | **Mehan** | **1.36** | **116** | | | Pn | 21 08 27.7 | -0.3 |
| **OK025** | **Westminster Rd** | **1.39** | **140** | | | Pn | 21 08 28.2 | -0.4 |
| **OKCFA** | **Oklahoma City** | **1.47** | **146** | Pn | | Pn | 21 08 29.2 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.47** | **118** | Pn | | Pn | 21 08 29.3 | -0.4 |
| **QUOK** | **Quay** | **1.48** | **108** | | | Pn | 21 08 29.8 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **146** | Pn | | Pn | 21 08 30.1 | +0.2 |
| **OK030** | **Cody Creek RV** | **1.52** | **118** | Pn | | Pn | 21 08 30.2 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **1.54** | **114** | | | Pn | 21 08 30.5 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.57** | **80** | Pn | | Pn | 21 08 31.1 | +0.1 |
| **FNO** | **Franklin** | **1.62** | **148** | | | Pn | 21 08 32.0 | +0.2 |
| **R32A** | **Long Quarter,** | **1.79** | **353** | | | Pn | 21 08 34.2 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.92** | **188** | Pn | | Pn | 21 08 36.1 | +0.2 |
| **W35A** | **Tecumseh** | **1.96** | **139** | Pn | | Pn | 21 08 36.8 | +0.4 |
| **X34A** | **Smith Ranch, M** | **2.10** | **166** | | | Pn | 21 08 39.5 | +1.2 |
| X34A | | | | lAmb_Lg | | | 21 09 11.9 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **TUL1** | **Leonard** | **2.27** | **108** | | | Pn | 21 08 41.1 | +0.5 |
| TUL1 | | | | lAmb_Lg | | | 21 09 17.1 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.40** | **335** | Pn | | Pn | 21 08 41.6 | -0.8 |
| **AMTX** | **Amarillo** | **3.17** | **237** | Pn | | Pn | 21 08 54.2 | +1.2 |
| **U38A** | **Gravette** | **3.27** | **92** | Pn | | Pn | 21 08 54.2 | -0.2 |
| U38A | | | | lAmb_Lg | | | 21 09 50.1 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **Z35A** | **Perchaven, San** | **3.45** | **163** | Pn | | Pn | 21 08 56.0 | -0.8 |
| **HHAR** | **Hobbs** | **3.65** | **94** | | | Pn | 21 09 00.1 | +0.4 |
| **W39A** | **Magazine** | **4.05** | **110** | lAmb_Lg | | | 21 10 13.7 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.07** | **307** | lAmb_Lg | | | 21 10 16.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **U40A** | **Yellville** | **4.51** | **92** | lAmb_Lg | | | 21 10 26.9 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.16** | **97** | lAmb_Lg | | | 21 10 50.1 | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **Q24A** | **Divide** | **5.79** | **296** | lAmb_Lg | | | 21 11 05.9 | |
| | comp=Z,9.7nm,0.8s | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.91** | **74** | lAmb_Lg | | | 21 11 11.6 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **L40A** | **Anamosa** | **7.78** | **44** | lAmb_Lg | | | 21 12 10.3 | |
| | comp=Z,8.1nm,0.9s | | | | | | | |

*TUL* ***06*** *21:15:49.5±1.0,35˚.99N±0˚.01×97˚.184W±0˚.009,h7km±7km, ML2.8,mb_Lg2.6/29(NEIC),Error ellipse: s-maj=1.8km s-min=0.8km az=155.0*

**NEIC 06 21:15:49.5±1.1, 35.99N±0˚.01×97.19W±0˚.01, h5km±2km, Error ellipse: s-maj=3.0km s-min=2.0km az=132.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.21** | **74** | | | Pg | 21 15 54.1 | +0.4 |
| OK033 | | | | | Sg | Sg | 21 15 57.3 | +0.8 |
| **OK029** | **Liberty Lake** | **0.28** | **229** | | | Pg | 21 15 55.3 | +0.2 |
| OK029 | | | | | Sg | Sg | 21 15 59.2 | +0.4 |
| **OK031** | **S. Brethren Rd** | **0.29** | **96** | | | Pg | 21 15 55.4 | +0.4 |
| OK031 | | | | | Sg | Sg | 21 15 59.6 | +0.8 |
| **OK030** | **Cody Creek RV** | **0.34** | **100** | | | Pg | 21 15 56.3 | +0.3 |
| OK030 | | | | | Sg | Sg | 21 16 01.1 | +0.7 |
| **OK034** | **N. Norfolk Rd.** | **0.39** | **86** | | | Pg | 21 15 57.3 | +0.3 |
| OK034 | | | | | Sg | Sg | 21 16 02.8 | +0.7 |
| **OK025** | **Westminster Rd** | **0.42

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **OK030** | **Cody Creek RV** | **0.34** | **99** | Pg | Pg | 21 20 10.6 | 0.0 |
| OK030 | | | | | Sg | 21 20 15.5 | +0.4 |
| **OK034** | **N. Norfolk Rd.** | **0.39** | **86** | Pg | Pg | 21 20 11.6 | 0.0 |
| OK034 | | | | | Sg | 21 20 17.0 | +0.3 |
| **OK025** | **Westminster Rd** | **0.42** | **196** | Pg | Pg | 21 20 12.1 | 0.0 |
| OK025 | | | | | Sg | 21 20 17.9 | +0.4 |
| **QUOK** | **Quay** | **0.44** | **64** | Pg | Pg | 21 20 12.5 | 0.0 |
| QUOK | | | | | Sg | 21 20 18.5 | +0.3 |
| **BCOK** | **Bluff Creek, N** | **0.47** | **226** | Pg | Pg | 21 20 13.0 | -0.1 |
| BCOK | | | | | Sg | 21 20 19.4 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.60** | **200** | | Pg | 21 20 15.4 | -0.2 |
| OKCFA | | | | | Sg | 21 20 23.8 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **199** | Pg | Pg | 21 20 14.7 | -1.0 |
| OKCSW | | | | | Sg | 21 20 24.0 | +0.3 |
| **FNO** | **Franklin** | **0.74** | **193** | | Pg | 21 20 17.8 | -0.5 |
| **BLOK** | **Blackwell** | **0.78** | **359** | Pg | Pg | 21 20 18.7 | -0.3 |
| **CROK** | **Carrier** | **0.82** | **310** | Pg | Pg | 21 20 19.6 | -0.2 |
| **W35A** | **Tecumseh** | **0.87** | **162** | Pg | Pg | 21 20 19.5 | -1.1 |
| **GC02** | **Grant County #** | **1.02** | **328** | | Pg | 21 20 22.9 | -0.8 |
| **KAN13** | **South Haven SW** | **1.05** | **348** | | Pg | 21 20 23.7 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.08** | **30** | Pg | Pg | 21 20 24.1 | -0.7 |
| **TUL1** | **Leonard** | **1.14** | **93** | | Pg | 21 20 24.4 | -1.5 |
| **KAN14** | **Manchester OK** | **1.15** | **328** | | Pg | 21 20 25.5 | -0.7 |
| **KAN17** | **Caldwell West** | **1.16** | **337** | | Pg | 21 20 25.2 | -1.0 |
| **OK032** | **Salt Plains WL** | **1.16** | **315** | | Pg | 21 20 25.4 | -0.8 |
| **KAN05** | **Bluff City Nor** | **1.25** | **334** | Pn | Pg | 21 20 25.9 | -2.1 |
| **KAN01** | **Argonia South** | **1.25** | **339** | | Pg | 21 20 27.0 | -1.1 |
| **KAN10** | **Anthony SW Sta** | **1.35** | **328** | | Pn | 21 20 29.1 | -0.5 |
| **KAN06** | **Argonia West S** | **1.37** | **337** | | Pn | 21 20 29.4 | -0.5 |
| **KAN08** | **Anthony NE Sta** | **1.39** | **334** | Pn | Pn | 21 20 29.3 | -0.9 |
| **KAN16** | **Harper SW Stat** | **1.43** | **331** | | Pn | 21 20 30.3 | -0.4 |
| **KAN12** | **Harper NE Stat** | **1.46** | **334** | | Pn | 21 20 30.5 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.47** | **201** | Pn | Pn | 21 20 30.9 | -0.4 |
| **U32A** | **Winter Ranch,** | **1.52** | **286** | Pn | Pn | 21 20 31.2 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.79** | **227** | | Pn | 21 20 35.6 | -0.1 |
| WMOK | | | | IAmb_Lg | | 21 21 05.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **LOOK** | **Love County** | **1.98** | **180** | Pn | Pn | 21 20 38.4 | +0.1 |
| LOOK | | | | IAmb_Lg | | 21 21 11.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.04** | **132** | Pn | Pn | 21 20 39.1 | +0.1 |
| **U38A** | **Gravette** | **2.32** | **78** | Pn | Pn | 21 20 42.8 | 0.0 |
| U38A | | | | IAmb_Lg | | 21 21 17.6 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **2.65** | **83** | Pn | Pn | 21 20 47.7 | +0.2 |
| **R32A** | **Long Quarter,** | **2.72** | **334** | Pn | Pn | 21 20 49.3 | +0.9 |
| R32A | | | | IAmb_Lg | | 21 21 32.1 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **2.89** | **105** | Pn | Pn | 21 20 50.6 | -0.1 |
| **KSU1** | **Kansas State U** | **3.15** | **8** | IAmb_Lg | | 21 21 49.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.29** | **115** | Pn | Pn | 21 20 56.3 | +0.1 |
| **X40A** | **Basin Creek Fa** | **3.87** | **111** | IAmb_Lg | | 21 22 11.6 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.12** | **90** | IAmb_Lg | | 21 22 17.7 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.92** | **283** | IAmb_Lg | | 21 23 22.1 | |
| | comp=Z,8.0nm,0.8s | | | | | | |

**IDC 06 21:28:51.2**±3.5,**5°16S**×**104°05E**, **h0**km, **mb3.6**/5, **mb1 3.7**/5, **mb1mx3.5**/31, **mbtmp3.6**/5, **MS3.0**/1, **Ms1 3.0**/1, **ms1mx2.3**/78, **Error ellipse: s-maj=157.4km s-min=22.4km az=53.0**, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **32.93** | **119** | P | P | 21 35 28.0 | +0.3 |
| | 0.2nm,0.6s,baz=294,slow=11,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **34.14** | **126** | P | P | 21 35 38.0 | -0.3 |
| | 0.4nm,0.6s,baz=295,slow=8.2,SNR=8.5 | | | | | | |
| **KSRS** | **Korea Array** | **47.87** | **26** | LR | LR | 21 56 09.2 | |
| | comp=Z,20nm,22.0s,baz=165,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **52.80** | **2** | P | P | 21 38 08.5 | +0.1 |
| | 0.2nm,0.4s,baz=163,slow=5.7,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.20** | **342** | P | P | 21 38 26.3 | +0.4 |
| | 0.4nm,0.4s,baz=152,slow=8.7,SNR=22 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.06** | **347** | P | P | 21 39 05.9 | -0.8 |
| | 1.0nm,0.4s,baz=148,slow=5.2,SNR=6.3 | | | | | | |

*IDC **06** 21:34:29.7±1.4, 11°.72N×87°.04W, h0km, mb3.7/7, mb1 4.0/9, mb1mx3.7/37, mbtmp3.7/9, ML3.6/2, MS3.4/2, Ms1 3.4/2, ms1mx2.6/68, Error ellipse: s-maj=46.1km s-min=19.4km az=42.0*

*INET **06** 21:34:32.3±0.5, 11°.36N×87°.28W, h15km, ML3.6*

**ISC 06 21:34:34.9**±0.8, **11°48N**±0°.09×**87°18W**±0°.09, **h49**km, **n23**, σ0**°99**/23, **mb3.8**/7, **1C**, **Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOMN** | **Momotombo** | **1.11** | **34** | *eP* | **Pn** | **21 34 54.2** | **0.0** |
| **CNGN** | **Cerro Negro** | **1.11** | **25** | *eP* | **Pn** | **21 34 54.1** | **-0.1** |
| CNGN | | | | IAML | | 21 35 22.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **MGAN** | **Managua** | **1.13** | **54** | *eP* | **Pn** | **21 34 54.4** | **+0.1** |
| MGAN | | | | *eP* | **Pn** | **21 34 54.4** | **+0.1** |
| **CRIN** | **San Cristobal** | **1.22** | **6** | ⇑*iP* | **Pn** | **21 34 55.3** | **-0.3** |
| **MATN** | **Matagalpa** | **1.89** | **40** | *eP* | **Pn** | **21 35 05.1** | **+0.3** |
| **ACON** | **Acoyapa** | **2.02** | **76** | *eP* | **Pn** | **21 35 05.6** | **-0.9** |
| **PACA** | **Pacayal** | **2.27** | **331** | *eP* | **Pn** | **21 35 09.2** | **-0.8** |
| **JTS** | **Las Juntas de** | **2.49** | **118** | Pn | **Pn** | **21 35 12.6** | **-0.4** |
| | comp=N,10.0nm,0.3s,baz=20,slow=17,SNR=16 | | | | | | |
| JTS | | | | Sn | **Sn** | **21 35 42.1** | **-0.1** |
| | comp=N,15nm,0.3s,baz=24,slow=13,SNR=6.0 | | | | | | |
| **CMIG** | **Matias Romero** | **9.32** | **308** | Pn | **Pn** | **21 36 44.2** | **-2.4** |
| | comp=N,0.7nm,0.3s,baz=152,slow=11,SNR=7.6 | | | | | | |
| **SDV** | **Santo Domingo** | **16.49** | **97** | Pn | **P** | **21 38 24.2** | **-0.9** |
| | comp=N,0.5nm,0.3s,baz=245,slow=8.4,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.49** | **322** | P | **P** | **21 39 41.0** | **+0.6** |
| | comp=N,1.0nm,0.6s,baz=133,slow=9.9,SNR=17 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.27** | **7** | P | **P** | **21 39 48.0** | **+0.6** |
| | comp=N,5.6nm,0.8s,baz=169,slow=14,SNR=6.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **36.74** | **332** | P | **P** | **21 41 38.0** | **+0.2** |
| | comp=N,0.7nm,0.5s,baz=128,slow=9.8,SNR=7.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.60** | **319** | P | **P** | **21 41 55.4** | **+1.8** |
| | comp=N,0.2nm,0.6s,baz=115,slow=8.0,SNR=2.1 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **43.26** | **321** | LR | LR | 22 05 09.2 | |
| | comp=N,45nm,18.3s,baz=50,slow=43 | | | | | | |
| **SCHQ** | **Schefferville** | **46.12** | **16** | P | **P** | **21 42 53.0** | **-1.2** |
| | comp=N,2.0nm,0.9s,baz=220,slow=6.4,SNR=5.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.61** | **345** | P | **P** | **21 43 57.5** | **-0.7** |
| | comp=N,0.8nm,0.7s,baz=142,slow=7.4,SNR=20 | | | | | | |
| **ILAR** | **Eielson Array** | **67.01** | **336** | P | **P** | **21 45 22.2** | **-0.2** |
| | comp=N,0.4nm,0.6s,baz=147,slow=4.2,SNR=6.5 | | | | | | |
| **OBN** | **Obninsk** | **98.68** | **29** | LR | LR | 22 31 56.6 | |
| | comp=N,13nm,19.4s,baz=356,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **119.72** | **350** | PKP | **PKiKP** | **21 53 20.7** | **+0.7** |
| | comp=N,0.1nm,0.3s,baz=252,slow=1.2,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **139.15** | **247** | PKP | **PKiKP** | **21 54 01.0** | **+1.6** |
| | comp=N,0.3nm,0.7s,baz=121,slow=2.6,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **139.25** | **253** | PKP | **PKiKP** | **21 54 01.1** | **+1.5** |
| | comp=N,0.3nm,0.6s,baz=84,slow=1.5,SNR=5.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.64** | **348** | PKPbc | **PKiKP** | **21 54 21.6** | **+0.5** |
| | comp=N,1.0nm,0.7s,baz=336,slow=3.9,SNR=5.8 | | | | | | |

*BJI **06** 21:49:44.5±0.0, 25°.05N×123°.40E, h156km, mb4.2/29, mB4.6/14*

*IDC **06** 21:49:45.6±0.8, 25°.24N×123°.29E, h141km±8km, mb3.6/15, mb1 3.8/18, mb1mx3.6/51, mbtmp4.1/18, MS2.9/1, Ms1 3.1/1, ms1mx2.3/90, Error ellipse: s-maj=15.5km s-min=11.6km az=75.0*

*NEIC **06** 21:49:45.9±1.8, 25°.12N±0°.07×123°.36E±0°.07, h148km±2km, mb4.2/39, Error ellipse: s-maj=11.0km s-min=8.6km az=157.0*

*JMA **06** 21:49:46.8±0.2, 25°.07N×123°.31E, h143km±3km, M4.1*

**ISC 06 21:49:45.8**±0.5, **25°15N**±0°.05×**123°31E**±0°.03, **h148**km±5km, **n113**, σ1**°07**/139, **mb4.2**/38, **1C-2D**, **Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **0.74** | **202** | P | **Pn** | **21 50 08.5** | **+0.2** |
| YOJ | | | | *eS* | **Sn** | **21 50 24.9** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **0.74** | **202** | | **Pn** | **21 50 08.4** | **0.0** |
| YOJ | | | | Sn | **Sn** | **21 50 24.6** | **-0.9** |
| **YOJ** | **Yonaguni jima** | **0.74** | **202** | P | **Pn** | **21 50 08.6** | **+0.2** |
| **JYNG** | **Yonagunijimaku** | **0.77** | **205** | P | **Pn** | **21 50 08.8** | **+0.2** |
| JYNG | | | | S | **Sn** | **21 50 25.4** | **-0.5** |
| **IRIF** | **Iriomote-Funau** | **0.90** | **155** | P | **Pn** | **21 50 09.3** | **-0.2** |
| IRIF | | | | *eS* | **Sn** | **21 50 27.2** | **-0.4** |
| **JISG** | **Ishigakijimahi** | **1.07** | **122** | P | **Pn** | **21 50 11.1** | **+0.2** |
| JISG | | | | S | **Sn** | **21 50 29.5** | **-0.6** |
| **JIJ** | **Ishigaki jima** | **1.09** | **136** | P | **Pn** | **21 50 11.1** | **0.0** |
| JIJ | | | | S | **Sn** | **21 50 29.1** | **-1.4** |
| **JKRS** | **Kuro-shima** | **1.11** | **145** | P | **Pn** | **21 50 11.6** | **+0.3** |
| JKRS | | | | S | **Sn** | **21 50 30.2** | **-0.6** |
| **HATJ** | **Hateruma jima** | **1.18** | **157** | P | **Pn** | **21 50 12.1** | **+0.1** |
| HATJ | | | | *eS* | **Sn** | **21 50 31.9** | **-0.1** |
| **JTJ** | **Tarama** | **1.36** | **112** | P | **Pn** | **21 50 14.3** | **+0.6** |
| JTJ | | | | S | **Sn** | **21 50 35.2** | **+0.1** |
| **TATO** | **Taipei** | **1.66** | **264** | Pn | **Pn** | **21 50 18.1** | **+1.2** |
| TATO | | | | Sn | **Sn** | **21 50 41.8** | **+1.1** |
| **JIRB** | **Irabujima** | **1.72** | **100** | P | **Pn** | **21 50 18.4** | **+0.9** |
| JIRB | | | | S | **Sn** | **21 50 41.1** | **-0.8** |
| **JIKM** | **Ikemajima** | **1.77** | **97** | P | **Pn** | **21 50 19.2** | **+1.1** |
| JIKM | | | | S | **Sn** | **21 50 43.0** | **+0.1** |
| **YHNB** | **Yeheng** | **1.82** | **255** | Pn | **Pn** | **21 50 19.8** | **+1.0** |
| YHNB | | | | Sn | **Sn** | **21 50 44.7** | **+0.7** |
| **YHNB** | **Yeheng** | **1.82** | **255** | P | **Pn** | **21 50 20.1** | **+1.3** |
| **JMJ** | **Miyako jima 2** | **1.83** | **100** | P | **Pn** | **21 50 20.7** | **+1.9** |
| **NACB** | **Ninganchiao** | **1.84** | **238** | | **Pn** | **21 50 18.6** | **-0.4** |
| **JMJ2** | **Miyako jima3** | **1.88** | **102** | P | **Pn** | **21 50 20.5** | **+1.2** |
| JMJ2 | | | | S | **Sn** | **21 50 45.4** | **+0.4** |
| **JOGS** | **Gusukube** | **1.94** | **101** | P | **Pn** | **21 50 21.4** | **+1.3** |
| JOGS | | | | S | **Sn** | **21 50 46.9** | **+0.5** |
| **YULB** | **Yu-li** | **2.54** | **227** | Pn | **Pn** | **21 50 26.4** | **-0.9** |
| YULB | | | | Sn | **Sn** | **21 50 57.0** | **-2.2** |
| **SSLB** | **Suanglung** | **2.54** | **238** | | **Pn** | **21 50 27.7** | **+0.3** |
| **SSLB** | **Suanglung** | **2.54** | **238** | P | **Pn** | **21 50 27.9** | **+0.6** |
| **TPUB** | **Ta-pu** | **3.06** | **234** | | **Pn** | **21 50 34.5** | **+0.6** |
| **TPUB** | **Ta-pu** | **3.06** | **234** | P | **Pn** | **21 50 34.9** | **+1.0** |
| **TWG** | **Pinlang** | **3.10** | **222** | | **Pn** | **21 50 33.3** | **-1.0** |
| **JKE** | **Kume jima 2** | **3.35** | **69** | P | **Pn** | **21 50 38.0** | **+0.6** |
| JKE | | | | S | **Sn** | **21 51 18.6** | **+1.1** |
| **QZH** | **Quanzhou** | **4.28** | **268** | P | **Pn** | **21 50 48.6** | **-1.1** |
| QZH | | | | pmax | pmax | | |
| | comp=Z,82nm,0.8s | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.52** | **262** | Pn | **Pn** | **21 50 52.7** | **-0.1** |
| **JOW** | **Kunigami** | **4.77** | **68** | P | **Pn** | **21 50 55.4** | **-0.7** |
| | 42nm,0.3s,baz=121,slow=24,SNR=33 | | | | | | |
| JOW | | | | S | **Sn** | **21 51 47.0** | **-3.9** |
| | 26nm,0.3s,baz=131,slow=25,SNR=2.3 | | | | | | |
| **JOW** | **Kunigami** | **4.77** | **68** | P | **Pn** | **21 50 55.3** | **-0.8** |
| **JNU** | **Nakatsue** | **10.33** | **38** | P | **Pn** | **21 52 11.1** | **+0.9** |
| | 0.9nm,0.3s,baz=236,slow=11,SNR=9.4 | | | | | | |
| **JNU** | **Nakatsue** | **10.33** | **38** | | **Pn** | **21 52 11.3** | **+1.1** |
| **JNU** | **Nakatsue** | **10.33** | **38** | P | **Pn** | **21 52 08.3** | **-1.9** |
| **KSRS** | **Korea Array** | **12.88** | **17** | P | **P** | **21 52 46.4** | **-2.0** |
| | 0.3nm,0.3s,baz=196,slow=12,SNR=12 | | | | | | |
| **KS19** | **Wonju Array Si** | **12.91** | **16** | | **P** | **21 52 47.2** | **-1.6** |
| **ENH** | **Enshi** | **13.26** | **296** | | **P** | **21 52 54.3** | **+1.5** |
| **LYN** | **LuoYang** | **13.27** | **317** | ⇓*iP* | **P** | **21 52 55.7** | **+2.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **15.32** | **309** | P | **P** | **21 53 17.8** | **+2.2** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **BJT** | **Baijiatuau** | **15.99** | **340** | P | **P** | **21 53 24.2** | **+1.3** |
| BJT | | | | IAmb | IAmb | 21 53 26.1 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.08** | **45** | P | **Pn** | **21 53 36.7** | **+1.0** |
| | comp=Z,0.0nm,0.3s,baz=228,slow=9.1,SNR=2.1 | | | | | | |
| **CN2** | **Changchun** | **18.69** | **5** | *eP* | **Pn** | **21 53 54.5** | **-0.1** |
| CN2 | | | | *es*P | sP | 21 54 34.9 | -2.1 |
| CN2 | | | | *eS* | **S** | **21 57 14.7** | **-2.7** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,200nm,3.0s | | | | | | |
| **PZH** | **PanZhiHua** | **19.46** | **279** | P | **P** | **21 54 02.7** | **+1.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,4.4s | | | | | | |
| **XLT** | **XiLinHaoTe** | **19.61** | **344** | *eP* | **P** | **21 54 03.4** | **+0.8** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,140nm,3.8s | | | | | | |
| **LZH** | **Lanzhou** | **19.95** | **308** | *eP* | **P** | **21 54 08.2** | **+1.8** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BNX** | **BinXian** | **20.80** | **8** | ⇓P | **P** | **21 54 17.5** | **+2.2** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,250nm,4.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **23.44** | **259** | P | **P** | **21 54 41.9** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **23.56** | **258** | P | **P** | **21 54 43.9** | **+0.9** |
| | comp=Z,2.6nm,0.9s,baz=60,slow=8.4,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 22 03 43.8 | |
| | comp=Z,30nm,18.6s,baz=25,slow=36 | | | | | | |
| **HIA** | **Hailar** | **24.23** | **354** | P | **P** | **21 54 49.2** | **+0.4** |
| HIA | | | | IAmb | IAmb | 21 54 51.7 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **24.33** | **311** | ⇑P | **P** | **21 54 48.9** | **-1.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **KLR** | **Kul'dur** | **24.93** | **13** | P | **P** | **21 54 54.5** | **-0.5** |
| | comp=Z,1.6nm,0.8s,baz=185,slow=6.5,SNR=5.6 | | | | | | |
| KLR | | | | PcP | **PcP** | **21 58 27.4** | **+0.9** |
| | comp=Z,1.4nm,0.7s,baz=282,slow=2.7,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **26.29** | **334** | P | **P** | **21 55 06.9** | **-0.7** |
| | comp=Z,1.2nm,0.7s,baz=144,slow=8.5,SNR=12 | | | | | | |
| SONM | | | | pP | **pP** | **21 55 38.5** | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=130,slow=13,SNR=1.6 | | | | | | |
| SONM | | | | PcP | **PcP** | **21 58 30.4** | **+0.5** |
| | comp=Z,0.9nm,1.1s,baz=142,slow=4.9,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **26.29** | **334** | P | **P** | **21 55 06.6** | **-1.0** |
| **GOMU** | **GeErMu** | **26.77** | **301** | P | **P** | **21 55 13.1** | **+0.8** |
| GOMU | | | | pP | pP | 21 55 44.8 | +1.6 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **37.12** | **5** | P | **P** | **21 56 41.0** | **-0.7** |
| **MK31** | **Makanchi Array** | **39.02** | **314** | P | **P** | **21 56 57.4** | **-0.4** |
| MK31 | | | | IAmb | IAmb | 21 56 58.8 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.02** | **314** | P | **P** | **21 56 57.9** | **0.0** |
| | comp=Z,3.5nm,0.6s,baz=98,slow=9.0,SNR=90 | | | | | | |
| MKAR | | | | PcP | **PcP** | **21 59 05.2** | **+0.2** |
| | comp=Z,0.9nm,0.7s,baz=88,slow=5.4,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.02** | **314** | P | **P** | **21 56 57.7** | **-0.2** |
| **MAKZ** | **Makanchi** | **39.23** | **314** | P | **P** | **21 56 59.6** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 21 57 00.6 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.52** | **326** | P | **P** | **21 57 09.3** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **40.52** | **326** | P | **P** | **21 57 09.2** | **-0.8** |
| | comp=Z,2.0nm,0.7s,baz=106,slow=7.5,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.52** | **326** | P | **P** | **21 57 09.4** | **-0.7** |
| **KDJ** | **Kajisay** | **41.44** | **306** | P | **P** | **21 57 17.8** | **-0.2** |
| KDJ | | | | IAmb | IAmb | 21 57 20.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **42.02** | **302** | P | **P** | **21 57 26.9** | **+4.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **BOOM** | **Boomskoye usch** | **42.40** | **306** | P | **P** | **21 57 25.8** | **-0.1** |
| BOOM | | | | IAmb | IAmb | 21 57 27.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **42.62** | **319** | P | **P** | **21 57 26.9** | **-0.4** |
| KURK | | | | IAmb | IAmb | 21 57 28.1 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.93** | **165** | P | **P** | **21 57 54.5** | **+0.6** |
| **WRA** | **Warramunga Arr** | **46.09** | **166** | P | **P** | **21 57 56.2** | **+1.1** |
| | comp=Z,1.9nm,0.5s,baz=348,slow=8.8,SNR=24 | | | | | | |
| WRA | | | | pP | **pP** | **21 58 27.1** | **-1.2** |
| | comp=Z,2.8nm,0.9s,baz=349,slow=8.5,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.09** | **166** | P | **P** | **21 57 54.8** | **-0.3** |
| **GAR** | **Garm** | **46.37** | **301** | P | **P** | **21 57 57.9** | **+0.6** |
| **KBL** | **Kabul** | **47.51** | **295** | P | **P** | **21 58 07.4** | **+1.0** |
| KBL | | | | IAmb | IAmb | 21 58 08.4 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **48.24** | **320** | P | **P** | **21 58 11.4** | **0.0** |
| BRVK | | | | IAmb | IAmb | 21 58 11.7 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **49.60** | **167** | P | **P** | **21 58 23.6** | **+1.5** |
| | comp=Z,0.6nm,0.5s,baz=350,slow=7.6,SNR=12 | | | | | | |
| ASAR | | | | pP | **pP** | **21 58 55.2** | **-0.5** |
| | comp=Z,1.4nm,1.1s,baz=353,slow=6.1,SNR=4.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 59 41.8** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=358,slow=3.8,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **49.60** | **167** | P | **P** | **21 58 22.4** | **+0.3** |
| **ABKAR** | **Akbulak array** | **54.16** | **314** | P | **P** | **21 58 55.7** | **+0.1** |
| **ABKAR** | **Akbulak array** | **54.16** | **314** | P | **P** | **21 58 55.7** | **+0.1** |
| ABKAR | | | | IAmb | IAmb | 21 58 56.9 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **ARU** | **Arti** | **55.51** | **322** | P | **P** | **21 59 04.5** | **-0.7** |
| ARU | | | | IAmb | IAmb | 21 59 06.7 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **GEYT** | **Alibeck** | **55.98** | **300** | P | **P** | **21 59 10.1** | **+1.1** |
| | comp=Z,3.9nm,0.8s,baz=230,slow=9.3,SNR=5.3 | | | | | | |
| **GEYT** | **Alibeck** | **55.98** | **300** | P | **P** | **21 59 09.6** | **+0.6** |
| **GYA0B** | **ALIBECK ARRAY** | **55.98** | **300** | P | **P** | **21 59 09.7** | **+0.7** |
| **STKA** | **Stephens Creek** | **59.34** | **162** | P | **P** | **21 59 32.6** | **+0.4** |
| **J20K** | **Nowinta River** | **64.44** | **29** | P | **P** | **22 00 06.6** | **+0.6** |
| J20K | | | | IAmb | IAmb | 22 00 14.0 | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **K20K** | **Telida** | **64.55** | **30** | P | **P** | **22 00 06.6** | **-0.1** |
| **H21K** | **Melozitna Rive** | **64.87** | **27** | P | **P** | **22 00 09.1** | **+0.3** |
| H21K | | | | IAmb | IAmb | 22 00 11.6 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **MLY** | **Manley** | **65.80** | **28** | P | **P** | **22 00 15.4** | **+0.7** |
| MLY | | | | IAmb | IAmb | 22 00 41.2 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **SOCY** | **Socotra** | **66.33** | **273** | P | **P** | **22 00 18.0** | **-1.0** |
| **RND** | **Reindeer** | **66.87** | **29** | P | **P** | **22 00 21.9** | **+0.3** |
| RND | | | | IAmb | IAmb | 22 00 23.4 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **67.47** | **28** | P | **P** | **22 00 24.3** | **-0.9** |
| | comp=Z,0.3nm,0.7s,baz=307,slow=8.7,SNR=6.1 | | | | | | |
| **ILAR** | **Eielson Array** | **67.47** | **28** | P | **P** | **22 00 25.4** | **+0.1** |
| **BMAR** | **Burnt Mountain** | **67.85** | **25** | P | **P** | **22 00 29.4** | **+1.7** |
| **SCRK** | **Sand Creek** | **68.87** | **28** | P | **P** | **22 00 34.4** | **+0.2** |
| SCRK | | | | IAmb | IAmb | 22 00 41.4 | |
| | comp=Z,2.8nm,1.2s | | | | | | |
| **GLB** | **Gilahina Butte** | **69.58** | **31** | P | **P** | **22 00 39.5** | **+0.9** |
| **M26K** | **Nabesna, AK** | **69.70** | **30** | P | **P** | **22 00 40.1** | **+0.8** |
| **L27K** | **Beaver Creek,** | **70.04** | **29** | P | **P** | **22 00 42.4** | **+1.1** |
| L27K | | | | IAmb | IAmb | 22 01 06.7 | |
| | comp=Z,5.5nm,1.5s | | | | | | |
| **BCAR** | **Beaver Creek A** | **70.06** | **29** | P | **P** | **22 00 42.6** | **+1.2** |
| **DAWY** | **Dawson** | **70.79** | **28** | P | **P** | **22 00 47.0** | **+1.1** |
| DAWY | | | | IAmb | IAmb | 22 00 54.9 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **71.59** | **330** | P | **P** | **22 00 50.5** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=90,slow=2.1,SNR=6.4 | | | | | | |
| **INK** | **Inuvik** | **71.60** | **22** | P | **P** | **22 00 50.4** | **-0.1** |
| **M30M** | **Minto, Yukon** | **72.39** | **29** | P | **P** | **22 00 57.3** | **+1.9** |
| M30M | | | | IAmb | IAmb | 22 00 57.5 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.43** | **319** | P | **P** | **22 01 01.1** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=58,slow=6.3,SNR=4.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.43** | **319** | P | **P** | **22 01 00.7** | **-1.0** |
| **M31M** | **Drury Creek, Y** | **73.57** | **29** | P | **P** | **22 01 02.8** | **+0.4** |
| M31M | | | | IAmb | IAmb | 22 01 03.9 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.15** | **307** | P | **P** | **22 01 06.6** | **+0.2** |
| | comp=Z,1.0nm,0.8s,baz=54,slow=6.3,SNR=2.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.15** | **307** | P | **P** | **22 01 05.8** | **-0.5** |
| **BURAR** | **Bucovina Array** | **77.00** | **317** | P | **P** | **22 01 22.4** | **0.0** |
| **NC405** | **NORSAR Array S** | **78.02** | **333** | P | **P** | **22 01 26.5** | **-1.1** |
| **NOA** | **NORSAR Array B** | **78.27** | **333** | P | **P** | **22 01 27.9** | **-1.1** |
| | comp=Z,0.0nm,0.6s,baz=68,slow=9.3,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.32** | **23** | P | **P** | **22 01 45.8** | **+0.4** |
| | comp=Z,4.4nm,0.7s,baz=310,slow=5.0,SNR=90 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.32** | **23** | P | **P** | **22 01 44.9** | **-0.4** |
| **SUMG** | **Summit** | **81.74** | **355** | P | **P** | **22 01 48.6** | **+0.7** |
| **GERES** | **GERESS Array B** | **83.31** | **321** | P | **P** | **22 01 55.9**

X34A **Smith Ranch, M** 1.48 202 Pn Pn 22 00 21.3 +0.4
X34A IAmb_Lg 22 00 41.3
comp=Z,247nm,0.7s
U32A **Winter Ranch,** 1.53 286 Pn Pn 22 00 21.7 0.0
WMOK **Wichita Mounta** 1.81 227 Pn Pn 22 00 26.1 +0.6
WMOK IAmb_Lg 22 00 53.0
comp=Z,331nm,0.7s
LOOK **Love County** 1.98 180 Pn Pn 22 00 28.4 +0.6
X37A **Clayton** 2.02 133 Pn Pn 22 00 29.0 +0.6
X37A IAmb_Lg 22 01 03.6
comp=Z,183nm,1.0s
U38A **Gravette** 2.30 78 Pn Pn 22 00 32.9 +0.7
U38A IAmb_Lg 22 01 10.6
comp=Z,150nm,0.8s
HHAR **Hobbs** 2.63 83 Pn 22 00 37.5 +0.7
Z35A **Perchaven, San** 2.65 181 Pn 22 00 37.6 +0.7
Z35A IAmb_Lg 22 01 21.0
comp=Z,140nm,1.1s
R32A **Long Quarter,** 2.73 334 Pn 22 00 38.7 +0.6
W39A **Magazine** 2.87 105 Pn 22 00 40.5 +0.5
W39A IAmb_Lg 22 01 29.1
comp=Z,125nm,0.8s
KSU1 **Kansas State U** 3.15 8 Pn 22 00 44.4 +0.5
Z38A **Mt. Pleasant** 3.26 146 Pn 22 00 44.8 -0.5
MIAR **Mount Ida** 3.27 115 Pn 22 00 46.4 +0.9
MIAR IAmb_Lg 22 01 45.8
comp=Z,178nm,1.1s
CBKS **Cedar Bluff** 3.49 325 Pn 22 00 49.0 +0.4
U40A **Yellville** 3.51 83 Pn 22 00 49.1 +0.2
U40A IAmb_Lg 22 01 48.7
comp=Z,157nm,1.0s
S39A **Bolivar** 3.53 60 Pn 22 00 49.8 +0.7
S39A IAmb_Lg 22 01 52.4
comp=Z,95nm,0.9s
AMTX **Amarillo** 3.84 255 Pn 22 00 54.8 +1.3
AMTX IAmb_Lg 22 01 55.0
comp=Z,87nm,0.8s
X40A **Basin Creek Fa** 3.85 112 Pn 22 00 54.1 +0.6
ABTX **Abilene, Hawle** 3.92 212 Pn 22 00 55.2 +0.6
WHAR **Wooly Hollow** 4.04 98 Pn 22 00 56.6 +0.6
WHAR IAmb_Lg 22 02 07.0
comp=Z,165nm,1.0s
WLAR **White Oak Lake** 4.05 123 Pn Pn 22 00 56.4 +0.1
W41B **Gary Mavity, V** 4.09 100 Pn 22 00 57.3 +0.4
W41B IAmb_Lg 22 02 04.8
comp=Z,139nm,0.7s
FCAR **Ozark Folk Cen** 4.10 90 Pn Pn 22 00 56.5 -0.4
FCAR IAmb_Lg 22 02 07.4
comp=Z,152nm,0.7s
MGMO **Mountain Grove** 4.12 72 Pn 22 00 57.5 +0.3
MGMO IAmb_Lg 22 02 16.0
comp=Z,105nm,0.8s
237A **Washetta, Mont** 4.13 164 Pn 22 00 56.9 -0.4
237A IAmb_Lg 22 02 15.4
comp=Z,77nm,0.8s
R40A **Maddies Statio** 4.54 58 Pn 22 01 03.3 +0.3
R40A IAmb_Lg 22 02 18.5
comp=Z,141nm,1.1s
P38A **Dawn** 4.64 37 Pn 22 01 05.1 +0.7
N33A **J Bar K, Exete** 4.75 357 IAmb_Lg 22 02 25.0
comp=Z,80nm,0.8s
LCAR **Lake Charles** 4.88 87 IAmb_Lg 22 02 35.9
comp=Z,66nm,0.8s
CCAR **Cane Creek** 4.89 113 IAmb_Lg 22 02 43.1
comp=Z,77nm,0.8s
N35A **Tabor** 5.02 13 Pn 22 01 09.3 -0.3
CCM **Cathedral Cave** 5.17 65 Pn Pn 22 01 11.6 -0.1
CCM IAmb_Lg 22 02 38.5
comp=Z,69nm,0.9s
435B **Jarrell** 5.20 184 IAmb_Lg 22 02 45.6
comp=Z,83nm,0.7s
KSCO **Kaye Shedlock'** 5.29 307 Pn 22 01 14.6 +1.2
KSCO IAmb_Lg 22 02 56.2
comp=Z,65nm,0.9s
P40A **Paris** 5.39 47 Pn 22 01 13.9 -0.7
P40A IAmb_Lg 22 02 50.1
comp=Z,64nm,0.9s
N38A **Joes South For** 5.71 32 Pn Pn 22 01 18.3 -0.8
FVM **French Village** 5.76 68 IAmb_Lg 22 02 56.3
comp=Z,77nm,0.8s
143A **Socs Landing,** 5.78 123 IAmb_Lg 22 03 05.7
comp=Z,52nm,0.9s
JCT **Junction City** 5.91 203 Pn Pn 22 01 22.1 +0.2
JCT IAmb_Lg 22 03 12.9
comp=Z,77nm,0.8s
T25A **Trinidad** 5.94 283 Pn 22 01 22.2 -0.3
T25A IAmb_Lg 22 03 12.3
comp=Z,84nm,0.8s
SLM **Saint Louis** 6.13 62 IAmb_Lg 22 03 06.3
comp=Z,82nm,0.7s
OGNE **Ogallala** 6.25 324 Pn Pn 22 01 26.7 +0.1
OGNE IAmb_Lg 22 03 20.3
comp=Z,51nm,0.7s
OXF **Oxford** 6.52 101 Pn Pn 22 01 30.5 +0.3
OXF IAmb_Lg 22 03 30.0
comp=Z,65nm,0.9s
S44A **Carbondale** 6.57 73 Pn Pn 22 01 30.2 -0.7
Y45A **Yeager Farm, C** 6.61 106 IAmb_Lg 22 03 37.9
comp=Z,54nm,0.9s
SCIA **State Center** 6.67 26 Pn Pn 22 01 32.4 +0.1
SCIA IAmb_Lg 22 03 27.1
comp=Z,64nm,0.8s
K31A **O'Neill** 6.75 350 Pn Pn 22 01 34.0 +0.7
N41A **Harden Midland** 6.85 45 Pn Pn 22 01 35.0 +0.3
N41A IAmb_Lg 22 03 29.1
comp=Z,64nm,0.7s
SDCO **Great Sand Dun** 6.91 287 Pn 22 01 36.1 +0.4
P43A **Skaggs, Pawnee** 7.07 57 Pn Pn 22 01 37.7 -0.1
Q44A **Meyer Farm, Va** 7.11 63 Pn Pn 22 01 39.0 +0.7
Q44A IAmb_Lg 22 03 44.5
comp=Z,80nm,0.8s
735A **Kenedy** 7.13 185 IAmb_Lg 22 03 58.0
comp=Z,49nm,0.9s
PLAL **Pickwick Lake** 7.49 95 IAmb_Lg 22 03 57.9
comp=Z,44nm,0.9s
L40A **Anamosa** 7.63 36 Pn Pn 22 01 45.8 +0.3
L40A IAmb_Lg 22 03 58.2
comp=Z,36nm,0.8s
ANMO **Albuquerque** 7.65 265 Pg Pb 22 02 10.9 +3.7
comp=Z,0.2nm,0.3s,baz=84,slow=17,SNR=2.7
ANMO Lg Lg 22 03 49.7
comp=Z,1.9nm,0.3s,baz=358,slow=19,SNR=4.3
ANMO **Albuquerque** 7.65 265 Pn 22 01 46.1 +0.2
ISCO **Idaho Springs** 7.69 302 Pn Pn 22 01 46.0 -0.5
HDIL **Hopedale** 7.70 51 Pn 22 01 45.6 -0.7
HDIL IAmb_Lg 22 04 17.4
comp=Z,64nm,0.7s
OLIL **Olney** 7.73 66 IAmb_Lg 22 04 15.4
comp=Z,76nm,0.9s
ECSD **EROS Data Cent** 7.75 3 Pn Pn 22 01 46.4 -0.7
ECSD IAmb_Lg 22 04 11.3
comp=Z,41nm,1.2s
833A **Chaparral WMA,** 7.86 194 IAmb_Lg 22 04 13.2
comp=Z,49nm,0.9s
S22A **4UR Ranch, Cre** 7.94 286 Pn Pn 22 01 50.2 +0.2
O44A **Mansfield** 8.03 56 IAmb_Lg 22 04 09.2
comp=Z,58nm,0.8s
MNTX **Cornudas Mount** 8.05 240 Pn Pn 22 01 51.1 -0.2
T47A **Sharon Grove** 8.17 80 Pn Pn 22 01 52.2 -0.6
L42A **Oliver, Polo** 8.38 42 Pn 22 01 55.2 -0.5
L42A IAmb_Lg 22 04 25.8
comp=Z,54nm,0.9s
N23A **Red Feather La** 8.45 308 Pn Pn 22 01 56.6 -0.3
N23A IAmb_Lg 22 04 27.0
comp=Z,38nm,0.8s
I37A **Lemond, Waseca** 8.53 19 IAmb_Lg 22 04 41.0
comp=Z,52nm,0.8s
SUSD **Miller** 8.56 351 IAmb_Lg 22 04 28.4
comp=Z,44nm,0.8s
TX31 **Lajitas Ar. Si** 8.60 221 Pn 22 01 57.9 -0.9
TXAR **Lajitas Array** 8.60 221 Pn Pn 22 01 59.8 +0.9
comp=Z,0.1nm,0.3s,baz=42,slow=11,SNR=7.2
TXAR Pg Pg 22 02 28.9 -10
comp=Z,1.0nm,0.3s,baz=43,slow=14,SNR=9.5
TXAR Lg Lg 22 04 20.4
comp=Z,0.9nm,0.3s,baz=107,slow=30,SNR=2.4
TXAR **Lajitas Array** 8.60 221 Pn 22 01 58.3 -0.5
JFWS **Jewell Farm** 8.75 36 Pn Pn 22 02 00.6 -0.1
M44A **Midewin, Midew** 8.95 50 IAmb_Lg 22 04 38.9
comp=Z,46nm,1.0s
K43A **Burlington** 9.58 43 IAmb_Lg 22 05 04.4
comp=Z,39nm,0.8s
SPMN **Marine on St.** 9.81 18 IAmb_Lg 22 05 14.9
comp=Z,26nm,1.0s
K22A **Casper** 9.84 315 IAmb_Lg 22 05 28.6
comp=Z,34nm,1.0s
TKL **Tuckaleechee C** 10.88 88 Lg Lg 22 05 32.9
comp=Z,0.8nm,0.3s,baz=327,slow=23,SNR=8.6
PDAR **Pinedale Array** 11.73 309 Pn Pn 22 02 42.0 +0.2
comp=Z,0.3nm,0.3s,baz=128,slow=14,SNR=6.3
PDAR Pg 22 03 29.2
comp=Z,0.3nm,0.3s,baz=115,slow=17,SNR=8.5
PDAR Lg Lg 22 05 57.3
comp=Z,0.2nm,0.3s,baz=99,slow=34,SNR=2.4
PDAR **Pinedale Array** 11.73 309 Pn 22 02 41.8 -0.1
ULM **Lac du Bonnet** 14.29 3 Pn Pn 22 03 15.8 -0.8
comp=Z,0.2nm,0.3s,baz=180,slow=2.0,SNR=1.3
ULM Lg Lg 22 07 16.8
comp=Z,0.3nm,0.3s,baz=300,slow=12,SNR=3.8

*ASRS **06** 22:01:13.0±0.3,48.7°N±2.2°×8.7°4E±*°, *h10*km, *MLh3.1/9, Error ellipse: s-maj=6.0km s-min=2.5km az=137.2, confirmed*
*SOME **06** 22:01:15.4,48.02N×84.08E, h10*km
*NNC **06** 22:01:16.9±2.0,48.14N×84.28E, h2*km*±17*km*, mb3.4, mpv2.9, Error ellipse: s-maj=23.4km s-min=6.3km az=84.0*

**ISC 06 22:01:16.5±0.8, 47.97N±0.04×84.24E±0.03, h10km, n17, σ2.53/32, 4C-2D, Kazakhstan-Xinjiang border region**

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**ZSN Zaisan** 0.67 141 *e*P **Pg** 22 01 27.4 -2.1
7.6nm,0.1s
ZSN *e*S **Sg** 22 01 35.6 -2.7
76nm,0.4s
**MK31 Makanchi Array** 1.77 229 Pn **Pg** 22 01 49.9 -0.5
0.8nm,0.1s,baz=54,slow=21,SNR=361
MK31 Sn **Sg** 22 02 15.9 +2.6
16nm,0.3s,baz=52,slow=34,SNR=32
**MKAR Makanchi Array** 1.77 229 Pg **Pg** 22 01 49.9 -0.5
MKAR Sg **Sg** 22 02 16.4 +3.0
**MAKZ Makanchi** 1.93 234 ⇑Pn **Pg** 22 01 52.5 -0.9
4.8nm,0.3s
MAKZ ⇓Sn **Sg** 22 02 19.3 +1.0
19nm,0.4s
**MAKZ Makanchi** 1.93 234 Pg **Pg** 22 01 52.7 -0.7
MAKZ Sg **Sg** 22 02 20.2 +1.9
**DGZ Jazzator, Alta** 2.73 49 Pg **Pb** 22 02 04.1 -1.4
DGZ Sg **Sn** 22 02 36.6 +2.9
**UKR Ust'-Kan** 2.99 7 Pg **Pn** 22 02 05.0 +1.0
UKR Sg **Sb** 22 02 42.4 -4.1
**CHBI Chibit, Altay** 3.18 41 Pg **Pb** 22 02 13.6 +0.5
CHBI Sg **Sb** 22 02 51.2 -0.7
**AKAR Aktash** 3.23 42 Pg **Pb** 22 02 13.3 -0.7
AKAR Sg **Sb** 22 02 51.7 -1.8
**CUR Chagan-Uzun** 3.44 50 Pg **Pb** 22 02 16.9 -0.7
CUR Sg **Sb** 22 03 00.2 +0.6
**ULGR Ulagan, Altay** 3.60 41 Pg **Pb** 22 02 22.4 +2.0
ULGR Sg **Sb** 22 03 05.8 +1.7
**KAPS Kapalarasan** 4.30 233 *e*P **Pg** 22 02 34.7 -4.2
1.4nm,0.2s
KAPS *e*S **Sg** 22 03 31.0 -3.5
4.4nm,0.4s
**ARTR Artybash** 4.31 26 Pg **Pb** 22 02 33.8 +1.5
ARTR Sg **Sb** 22 03 27.2 +3.0
**KURBB Kurchatov Arra** 4.58 308 ⇑Pn **Pn** 22 02 26.2 +0.4
1.0nm,0.5s
KURBB Sn **Sn** 22 03 20.3 +1.3
KURBB Lg Lg 22 03 40.0
**KURK Kurchatov** 4.58 309 ⇑Pn **Pn** 22 02 27.2 +1.4
2.0nm,0.9s
KURK ⇑Sn **Sn** 22 03 19.1 0.0
3.5nm,1.1s
KURK ⇓Lg Lg 22 03 38.2
6.8nm,0.6s
**KURK Kurchatov** 4.58 309 Sg **Sg** 22 03 37.8 -5.8
**TASR Tashtagol** 5.33 25 Sg **Sb** 22 03 59.4 +5.7

**IDC 06 22:14:21.3±3.6, 17.52S×176.54W, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.7/28, mbtmp3.8/3, ML3.5/1, MS3.4/1, Ms1 3.4/1, ms1mx2.5/58, Error ellipse: s-maj=145.7km s-min=34.6km az=147.0, Fiji Islands region**

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**MSVF Nonsavu** 5.16 267 Pn Pn 22 15 39.1 -0.9
0.1nm,0.3s,baz=292,slow=3.7,SNR=3.8
MSVF Sn Sn 22 16 22.9 -17
0.4nm,0.3s,baz=118,slow=12,SNR=4.8
**WRA Warramunga Arr** 46.45 259 P P 22 22 50.3 -0.2
0.5nm,0.6s,baz=97,slow=7.0,SNR=9.4
**ASAR Alice Springs** 46.61 254 P P 22 22 51.9 +0.2
1.4nm,0.4s,baz=90,slow=8.4,SNR=40
ASAR LR LR 22 42 22.8
comp=Z,40nm,18.6s,baz=176,slow=36
**ILAR Eielson Array** 85.12 12 P P 22 26 58.7 -0.1
0.2nm,0.4s,baz=226,slow=5.3,SNR=5.3

*TUL **06** 22:22:09.9±1.1,35.97N±0.01×97.18W±0.01, h8km, ML2.7, mb_Lg2.5/16(NEIC), Error ellipse: s-maj=1.7km s-min=1.4km az=157.0*

**NEIC 06 22:22:10.1±1.0, 35.98N±0.01×97.18W±0.01, h8**km±7km, **Error ellipse: s-maj=1.7km s-min=1.5km az=156.0, Oklahoma**

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**OK033 Mehan** 0.21 72 Pg Pg 22 22 14.4 +0.1
OK033 Sg Sg 22 22 17.6 +0.4
**OK031 S. Brethren Rd** 0.28 96 Pg Pg 22 22 15.7 +0.1
OK031 Sg Sg 22 22 19.8 +0.4
**OK029 Liberty Lake** 0.29 230 Pg Pg 22 22 15.7 -0.1
OK029 Sg Sg 22 22 19.9 +0.3
**OK030 Cody Creek RV** 0.33 99 Pg Pg 22 22 16.6 0.0
OK030 Sg Sg 22 22 21.3 +0.3
**OK034 N. Norfolk Rd.** 0.38 86 Pg Pg 22 22 17.6 0.0
OK034 Sg Sg 22 22 22.9 +0.2
**OK025 Westminster Rd** 0.42 198 Pg Pg 22 22 18.1 -0.1
OK025 Sg Sg 22 22 24.1 +0.4
**QUOK Quay** 0.43 64 Pg Pg 22 22 18.5 +0.1
QUOK Sg Sg 22 22 24.4 +0.3
**BC01 Bluff Creek, N** 0.47 227 Pg Pg 22 22 19.1 -0.2
**OKCFA Oklahoma City** 0.61 201 Pg 22 22 21.5 -0.3
OKCFA Sg Sg 22 22 30.0 +0.3
**OKCSW OKLAHOMA CITY** 0.61 200 Pg Pg 22 22 21.6 -0.3
**FNO Franklin** 0.74 194 Pg 22 22 23.8 -0.6
**BLOK Blackwell** 0.78 358 Pg 22 22 24.9 -0.2
**CROK Carrier** 0.83 309 Pg Pg 22 22 25.8 -0.3
**W35A Tecumseh** 0.86 163 Pg Pg 22 22 25.6 -1.1
**GC02 Grant County #** 1.03 328 Pg Pg 22 22 29.4 -0.4
**KAN13 South Haven SW** 1.06 347 Pg 22 22 29.9 -0.5
**T35A Sooner Cattle** 1.08 30 Pg Pg 22 22 30.1 -0.7
**TUL1 Leonard** 1.13 93 Pg Pg 22 22 30.2 -1.6
**KAN14 Manchester OK** 1.16 327 Pg Pg 22 22 31.7 -0.7
**KAN17 Caldwell West** 1.16 336 Pg 22 22 31.5 -0.9
**OK032 Salt Plains WL** 1.17 315 Pg Pb 22 22 31.7 -0.8
**KAN05 Bluff City Nor** 1.25 334 Pn Pn 22 22 33.5 -0.4
**KAN01 Argonia South** 1.26 339 Pn Pn 22 22 33.1 -0.9
**KAN10 Anthony SW Sta** 1.36 327 Pn Pn 22 22 35.2 -0.1
**KAN06 Argonia West S** 1.38 337 Pn 22 22 35.7 +0.1
**KAN16 Harper SW Stat** 1.43 331 Pn 22 22 36.2 -0.1
**OK035 E0210 Rd and N** 1.43 301 Pn 22 22 35.7 -0.7
**X34A Smith Ranch, M** 1.48 201 Pn 22 22 37.1 +0.1
X34A IAmb_Lg 22 22 57.6
comp=Z,20nm,1.0s
**U32A Winter Ranch,** 1.52 286 Pn Pn 22 22 37.4 -0.2
**WMOK Wichita Mounta** 1.80 227 Pn Pn 22 22 41.9 +0.4
WMOK IAmb_Lg 22 23 11.6
comp=Z,21nm,0.8s
**LOOK Love County** 1.98 180 Pn Pn 22 22 44.8 +0.9
LOOK IAmb_Lg 22 23 17.0
comp=Z,23nm,0.9s
**X37A Clayton** 2.03 133 Pn 22 22 44.9 +0.4
**U38A Gravette** 2.31 78 Pn Pn 22 22 48.6 +0.2
**HHAR Hobbs** 2.64 83 Pn Pn 22 22 54.1 +1.1
**MIAR Mount Ida** 3.28 115 Pn Pn 22 23 01.2 -0.5
**U40A Yellville** 3.52 83 Pn Pn 22 23 04.2 -0.9
**S39A Bolivar** 3.54 60 Pn Pn 22 23 05.5 +0.2
**AMTX Amarillo** 3.83 255 IAmb_Lg 22 24 10.9
comp=Z,7.1nm,0.8s
**X40A Basin Creek Fa** 3.86 111 Pn 22 23 09.2 -0.5
**W41B Gary Mavity, V** 4.10 100 Pn Pn 22 23 13.6 +0.6
**MGMO Mountain Grove** 4.12 72 IAmb_Lg 22 24 20.4
comp=Z,7.9nm,0.8s
**PBMO Poplar Bluff** 5.51 80 IAmb_Lg 22 25 04.0
comp=Z,12nm,0.8s
**JCT Junction City** 5.91 203 IAmb_Lg 22 25 17.3
comp=Z,8.8nm,1.1s

*DJA **06** 22:23:41.4±0.6,4.7°S±4.7°×15.7°4E±*°, *h112*km*±5*km, *M4.5/24, mB5.4/4, mb4.6/24, MLv4.3/1, Mw(mB)4.8/4*
*NEIC **06** 22:23:42.3±1.1,4.51S±0.07×153.6E±0.1, h117*km*±6*km, *mb4.4/27, Error ellipse: s-maj=16.1km s-min=9.7km az=68.0*
*IDC **06** 22:23:43.9±2.6,4.50S×153.44E, h135*km*±23*km, *mb3.8/15, mb1 4.0/18, mb1mx3.9/38, mbtmp4.3/18, MS3.1/4, Ms1 3.1/4, ms1mx2.6/58, Error ellipse: s-maj=16.6km s-min=15.3km az=62.0*

**ISC 06 22:23:40.2±0.4, 4.42S±0.06×153.54E±0.06, h100**km, **n89, σ1.22/90, mb4.3/36, 2C, New Ireland region**

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**RABL Rabaul** 1.39 280 P Pn 22 24 05.8 +0.7
**PMG Port Moresby** 8.04 232 P Pn 22 25 35.9 +1.7
13nm,0.3s,baz=46,slow=7.9,SNR=20
PMG S Sn 22 27 04.1 +0.7
3.6nm,0.3s,baz=133,slow=21,SNR=13
PMG LR LR 22 28 57.1
comp=Z,66nm,20.9s,baz=262,slow=40
**PMG Port Moresby** 8.04 232 Pn Pn 22 25 35.5 +1.3
**PMG Port Moresby** 8.04 232 P Pn 22 25 35.9 +1.7
**HNR Honiara** 8.08 128 P Pn 22 25 39.3 +4.6
17nm,0.3s,baz=120,slow=5.7,SNR=2.6
HNR S Sn 22 27 04.1 -0.4
25nm,0.3s,baz=0.9,slow=21,SNR=6.8
**HNR Honiara** 8.08 128 Pn 22 25 35.7 +0.9
**JAY Jayapura** 12.95 278 P Pn 22 26 41.8 +1.3
10nm,1.1s
**MMPI Merauke** 13.67 252 P Pn 22 26 50.7 +0.8
336nm,0.6s
**SMPI Sarmi** 15.00 279 P Pn 22 27 09.4 +2.4
10nm,0.7s
**MTSU Mount Surprise** 16.34 213 P P 22 27 26.2 +1.3
**CTA Charters Tower** 17.11 204 P Pn 22 27 34.7 +1.4
0.2nm,0.3s,baz=22,slow=14,SNR=4.3
CTA LR LR 22 34 06.5
comp=Z,70nm,18.2s,baz=40,slow=37
**RK1H Rockhampton Ha** 19.08 189 P P 22 27 56.5 +1.6
45nm,0.7s
**QIS Mount Isa** 21.00 219 P P 22 28 15.3 -0.4
**FAKI Fak Fak** 21.30 273 P P 22 28 18.1 -0.9
FAKI IAmb IAmb 22 28 41.7
comp=Z,17nm,1.2s
**DZM Mont Dzumac** 21.55 146 P P 22 28 22.8 +1.1
comp=Z,4.9nm,0.9s,baz=182,slow=18,SNR=6.5
**DZM Mont Dzumac** 21.55 146 P P 22 28 21.2 -0.5
DZM IAmb IAmb 22 28 24.8
comp=Z,21nm,1.5s
**KDU Kakadu** 22.37 247 P P 22 28 29.7 -0.6
**RMQ Roma** 22.41 191 P P 22 28 31.2 +0.6
comp=Z,31nm,0.8s
**SIJI Sorong** 22.52 278 P P 22 28 32.3 +0.4
comp=Z,10nm,0.7s,baz=80,slow=12,SNR=3.8
**QLP Quilpie** 23.76 201 P P 22 28 43.5 -0.1
**WB0 Warramunga Arr** 24.10 229 P P 22 28 46.2 -0.5
WB0 IAmb IAmb 22 28 48.0
comp=Z,19nm,0.6s
**WRAB Tennant Creek** 24.23 229 P P 22 28 47.9 0.0
**WB2 Warramunga Arr** 24.23 229 P P 22 28 47.7 -0.2
WB2 IAmb IAmb 22 28 49.4
comp=Z,19nm,0.6s
**WRA Warramunga Arr** 24.24 229 P P 22 28 47.7 -0.3
comp=Z,13nm,0.5s,baz=54,slow=10.0,SNR=127
WRA PcP PcP 22 32 24.8 -1.3
comp=Z,1.1nm,0.7s,baz=54,slow=2.0,SNR=4.8
WRA LR LR 22 38 43.6
comp=Z,44nm,18.9s,baz=96,slow=37
**WRA Warramunga Arr** 24.24 229 P P 22 28 46.7 -1.3
**H11S3 WAKE ISLAND Hy** 26.20 29 T T 22 56 33.7
baz=208,slow=74,SNR=5.2
**H11S2 WAKE ISLAND Hy** 26.21 29 T T 22 56 40.4
baz=208,slow=74,SNR=3.5
**H11S1 WAKE ISLAND Hy** 26.22 29 T T 22 56 39.0
baz=208,slow=74,SNR=3.5
**AS31 Alice Springs** 26.92 223 P P 22 29 11.6 -0.6
**ASAR Alice Springs** 26.92 223 P P 22 29 11.5 -0.7
comp=Z,2.1nm,0.7s,baz=55,slow=9.0,SNR=33
ASAR PcP PcP 22 32 31.4 -0.7
comp=Z,0.9nm,0.7s,baz=63,slow=2.7,SNR=6.7
**ASAR Alice Springs** 26.92 223 P P 22 29 11.1 -1.2
ASAR PcP 22 32 31.3 -0.8
**MSVF Nonsavu** 27.40 121 LR LR 22 38 25.8
comp=Z,50nm,19.8s,baz=39,slow=32
**CMSA Cobar Meteorol** 27.96 194 P P 22 29 21.4 0.0
**OOD Oodnadatta** 28.80 214 P P 22 29 28.5 -0.3
**STKA Stephens Creek** 29.52 201 P P 22 29 34.4 -0.8
comp=Z,6.9nm,0.6s,baz=12,slow=10,SNR=21
**STKA Stephens Creek** 29.52 201 P P 22 29 33.9 -1.3
STKA IAmb IAmb 22 29 36.5
comp=Z,1.4nm,0.6s
**STKA Stephens Creek** 29.52 201 P P 22 29 34.6 -0.6
**FITZ Fitzroy Crossi** 30.48 241 P P 22 29 42.8 -1.1
comp=Z,4.9nm,0.7s,baz=53,slow=6.1,SNR=14
**CAN Canberra** 31.03 187 P P 22 29 47.7 -0.9
**MULG Mulgathing** 31.62 213 P P 22 29 52.6 -1.1
**HTT Hallett** 31.91 204 P P 22 29 56.2 -0.2
**ARPS Mount Arapiles** 33.94 197 P P 22 30 14.3 +0.4
**WBSI Waikabubak, Su** 34.27 259 P P 22 30 16.3 -0.8
comp=Z,31nm,0.7s
**FORT Forrest** 35.54 220 P P 22 30 27.2 -0.6
**MBWA Marble Bar** 36.79 240 P P 22 30 37.9 -0.7
**PSA00 Pilbara Seismi** 36.85 239 P P 22 30 37.6 -1.5
PSA00 IAmb IAmb 22 30 38.9
comp=Z,2.6nm,0.8s
**PSA00 Pilbara Seismi** 36.85 239 P P 22 30 37.5 -1.6
PSA00 IAmb IAmb 22 30 38.9
comp=Z,9.4nm,0.8s
**LTZ Lake Taylor** 41.67 159 P P 22 31 17.9 -1.0
LTZ IAmb IAmb 22 31 40.4
comp=Z,8.4nm,1.1s
**PCJI Pacitan** 42.25 263 P P 22 31 23.6 -0.4
comp=Z,19nm,1.2s
**USRK Ussuriysk Ar.** 52.14 340 P P 22 32 40.6 +0.4
comp=Z,1.1nm,0.8s,baz=134,slow=10,SNR=2.3
**PPI Padang Panjang** 53.22 273 P P 22 32 48.0 -0.8
comp=Z,10nm,0.8s
**KULM Kulim** 53.69 280 P P 22 32 51.8 -0.5
**KMI Kunming** 57.39 303 ⇑P P 22 33 21.0 +2.2
KMI pmax pmax
comp=Z,6.0nm,1.2s
**CMAR Chiang Mai Arr** 58.38 295 P P 22 33 26.6 +0.9
comp=Z,1.0nm,0.3s,baz=112,slow=4.4,SNR=7.6
**CMAR Chiang Mai Arr** 58.38 295 P P 22 33 25.8 +0.1
**PZH PanZhiHua** 58.76 305 P P 22 33 32.0 +3.7
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,150nm,4.9s
**HHC Hu-ho-hao-te** 59.17 324 *e*P P 22 33 35.0 +4.1
HHC pmax pmax
comp=Z,6.0nm,1.0s
HHC pmax pmax
comp=Z,100nm,5.7s
**LZH Lanzhou** 61.48 315 ⇑P P 22 33 47.4 +0.7
LZH pP pP 22 34 12.2 +1.4
LZH pmax pmax
comp=Z,15nm,1.2s
**SONM Songino Array** 66.40 327 P P 22 34 18.7 0.0
comp=Z,0.6nm,0.6s,baz=152,slow=5.9,SNR=5.4
**SONM Songino Array** 66.40 327 P P 22 34 19.0 +0.3
**SHL Shillong** 66.75 300 P P 22 34 21.3 -0.1
SHL IAmb IAmb 22 34 22.4
comp=Z,10nm,0.9s
**CASY Casey** 68.59 197 P P 22 34 31.3 -0.7
CASY IAmb IAmb 22 34 44.9
comp=Z,8.0nm,1.1s
**BILL Bilibino** 72.85 5 P P 22 34 58.1 +0.3
BILL IAmb IAmb 22 34 59.0
comp=Z,2.9nm,0.6s
**VNDA Vanda** 73.18 178 P P 22 34 59.5 -0.1
comp=Z,13nm,1.2s,baz=320,slow=6.5,SNR=5.6
**VNDA Vanda** 73.18 178 P P 22 34 59.1 -0.5
**WMQ Urumqi** 75.97 317 *e*P P 22 35 17.4 +1.0
**CNPM China Poot** 77.06 25 P P 22 35 22.5 +0.3
**J20K Nowinta River** 78.58 21 P P 22 35 30.8 +0.3
J20K IAmb IAmb 22 35 59.8
comp=Z,4.0nm,1.2s
**CAST Castle Rocks** 78.88 22 P P 22 35 32.1 -0.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CAST | | | | IAmb | IAmb | 22 35 33.2 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **80.53 319** | | P | **P** | **22 35 41.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **80.53 319** | | P | **P** | **22 35 40.9** | **-0.6** |
| | comp=Z,1.5nm,0.9s,baz=102,slow=6.0,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.53 319** | | P | **P** | **22 35 41.2** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **81.25 326** | | P | **P** | **22 35 43.8** | **-1.3** |
| | comp=Z,0.9nm,0.6s,baz=104,slow=6.3,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.25 326** | | P | **P** | **22 35 44.1** | **-0.9** |
| **KSH** | **Kashi** | **83.25 310** | | P | **P** | **22 35 58.3** | **+2.3** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **NIL** | **Nilore** | **84.37 304** | | P | **P** | **22 36 01.8** | **0.0** |
| **AAK** | **Ala-Archa** | **84.94 313** | | P | **P** | **22 36 05.0** | **+0.3** |
| AAK | | | | IAmb | IAmb | 22 36 06.0 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **85.53 180** | | P | **P** | **22 36 05.2** | **-1.8** |
| **NRIK** | **Noril'sk** | **85.85 341** | | P | **P** | **22 36 08.4** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=87,slow=7.7,SNR=3.6 | | | | | | |
| **GAR** | **Garm** | **87.49 309** | | P | **P** | **22 36 16.8** | **-0.4** |
| GAR | | | | IAmb | IAmb | 22 36 18.1 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **KKAR** | **Karatay Array** | **87.91 313** | | P | **P** | **22 36 18.1** | **-0.8** |
| **CHGR** | **Chuyangaron** | **88.35 309** | | P | **P** | **22 36 21.0** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **91.28 52** | | P | **P** | **22 36 35.8** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=289,slow=5.6,SNR=2.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.75 28** | | P | **P** | **22 36 49.3** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=270,slow=5.5,SNR=5.0 | | | | | | |
| **GERES** | **GERESS Array B** | **124.11 329** | | PKP | **PKPdf** | **22 42 26.5** | **-0.7** |
| | comp=Z,0.6nm,0.6s,baz=90,slow=2.7,SNR=5.4 | | | | | | |
| **GERES** | **GERESS Array B** | **124.11 329** | | | **PKPdf** | **22 42 26.9** | **-0.4** |
| **BDFB** | **Brasilia** | **150.80 133** | | PKPbc | **PKPbc** | **22 43 20.7** | **-1.5** |
| | comp=Z,1.2nm,0.5s,baz=249,slow=13,SNR=1.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.88 289** | | PKPbc | **PKPbc** | **22 43 21.0** | **-1.2** |
| | comp=Z,4.8nm,0.7s,baz=55,slow=2.2,SNR=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.88 289** | | | **PKPbc** | **22 43 20.7** | **-1.5** |

*OSPL **06** 22:49:05.5±1.0, 18.9°N×66.5°7W, h5km±10km, ML3.3*
*NEIC **06** 22:49:06.7±1.0, 19.0°2N±0.0°3×66.7°6W±0.0°3, h33km±4km, Error ellipse: s-maj=4.9km s-min=4.4km az=171.0*
*RSPR **06** 22:49:06.2, 19.1°2N×66.7°7W, h45km±5km, MD3.2/20*
**ISC 06 22:49:06.0±1.2, 19°03N±0°06×66°73W±0°03, h28km, n70, σ0°72/77, 17C-3D, Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMPR** | **Esperanza - Ma** | **0.58** | **161** | ↑*e*P | **Pn** | **22 49 18.8** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **0.58** | **161** | *e*S | **Sn** | **22 49 28.2** | **+1.2** |
| **EMPR** | **Esperanza - Ma** | **0.58** | **161** | | **Pn** | **22 49 18.8** | **+0.4** |
| EMPR | | | | | **Sn** | **22 49 28.2** | **+1.2** |
| **EMPR** | **Esperanza - Ma** | **0.58** | **161** | IAML | | 22 49 28.5 | |
| | comp=E,2µm,0.6s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.67** | **213** | ↑*e*P | **Pb** | **22 49 18.8** | **-0.4** |
| **AGPR** | **Aguadilla, PR** | **0.67** | **213** | *e*S | **Sn** | **22 49 28.5** | **-0.7** |
| **AGPR** | **Aguadilla, PR** | **0.67** | **213** | | **Pb** | **22 49 18.8** | **-0.4** |
| AGPR | | | | | **Sn** | **22 49 28.5** | **-0.7** |
| **AGPR** | **Aguadilla, PR** | **0.67** | **213** | *i* P | **Pb** | **22 49 18.4** | **-0.8** |
| **UUPR** | **Utuado, UPR, P** | **0.77** | **180** | ↑*e*P | **Pb** | **22 49 20.8** | **-0.2** |
| **UUPR** | **Utuado, UPR, P** | **0.77** | **180** | *e*S | **Sn** | **22 49 32.0** | **+0.2** |
| **UUPR** | **Utuado, UPR, P** | **0.77** | **180** | | **Pb** | **22 49 20.8** | **-0.2** |
| UUPR | | | | | **Sn** | **22 49 32.0** | **+0.2** |
| **PRSN** | **Puerto Rico Se** | **0.90** | **206** | ↑*e*P | **Pn** | **22 49 22.0** | **-0.8** |
| **PRSN** | **Puerto Rico Se** | **0.90** | **206** | *e*S | **Sn** | **22 49 35.0** | **+0.1** |
| **PRSN** | **Puerto Rico Se** | **0.90** | **206** | | **Pn** | **22 49 22.0** | **-0.8** |
| PRSN | | | | | **Sn** | **22 49 35.0** | **+0.1** |
| **LSP** | **Las Mesas** | **0.92** | **202** | ‖*e*P | **Pn** | **22 49 22.5** | **-0.6** |
| **LSP** | **Las Mesas** | **0.92** | **202** | *e*S | **Sn** | **22 49 36.1** | **+0.8** |
| **GCPR** | **Guaynabo City** | **0.94** | **140** | ↑*e*P | **Pn** | **22 49 23.4** | **0.0** |
| **GCPR** | **Guaynabo City** | **0.94** | **140** | *e*S | **Sn** | **22 49 37.1** | **+1.2** |
| **GCPR** | **Guaynabo City** | **0.94** | **140** | | **Pn** | **22 49 23.4** | **0.0** |
| GCPR | | | | | **Sn** | **22 49 37.1** | **+1.2** |
| **GCPR** | **Guaynabo City** | **0.94** | **140** | IAML | | 22 49 37.5 | |
| | comp=E,302nm,0.6s | | | | | | |
| **IDE** | **Isla Desecheo** | **0.96** | **228** | ↑*e*P | **Pn** | **22 49 22.6** | **-1.0** |
| **IDE** | **Isla Desecheo** | **0.96** | **228** | *e*S | **Sb** | **22 49 35.7** | **-0.5** |
| **CELP** | **Cerrillos** | **0.96** | **172** | ↑*e*P | **Pb** | **22 49 24.0** | **-0.1** |
| **CELP** | **Cerrillos** | **0.96** | **172** | *e*S | **Sn** | **22 49 37.2** | **+0.8** |
| **CELP** | **Cerrillos** | **0.96** | **172** | | **Pb** | **22 49 24.0** | **-0.1** |
| CELP | | | | | **Sn** | **22 49 37.2** | **+0.8** |
| **CELP** | **Cerrillos** | **0.96** | **172** | IAML | | 22 49 39.8 | |
| | comp=E,361nm,0.5s | | | | | | |
| **OBIP** | **Obispado Ponce** | **0.99** | **173** | ↑*e*P | **Pb** | **22 49 24.3** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **0.99** | **173** | *e*S | **Sb** | **22 49 37.5** | **+0.3** |
| **OBIP** | **Obispado Ponce** | **0.99** | **173** | | **Pb** | **22 49 24.3** | **-0.2** |
| OBIP | | | | | **Sb** | **22 49 37.5** | **+0.3** |
| **OBIP** | **Obispado Ponce** | **0.99** | **173** | IAML | | 22 49 40.4 | |
| | comp=N,410nm,0.3s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **1.06** | **188** | ↑*e*P | **Pn** | **22 49 25.3** | **+0.3** |
| **GBPR** | **Guanica, Bosqu** | **1.06** | **188** | *e*S | **Sb** | **22 49 39.4** | **+0.2** |
| **SJG** | **San Juan** | **1.06** | **149** | | **Pn** | **22 49 25.0** | **-0.1** |
| SJG | | | | IAML | | 22 49 44.2 | |
| | comp=N,378nm,0.2s | | | | | | |
| SJG | | | | IAML | | 22 49 45.2 | |
| | comp=N,444nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.08** | **200** | ↑*e*P | **Pn** | **22 49 25.0** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.08** | **200** | | **Pn** | **22 49 25.0** | **-0.3** |
| CRPR | | | | | **Sn** | **22 49 39.0** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.08** | **200** | IAML | | 22 49 42.0 | |
| | comp=N,315nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.08** | **200** | *e*P | **Pn** | **22 49 24.9** | **-0.4** |
| CRPR | | | | *e*S | **Sn** | **22 49 39.1** | **-0.3** |
| CRPR | | | | IAML | | 22 49 42.7 | |
| | comp=Z,328nm,0.2s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.10** | **196** | ‖*e*P | **Pn** | **22 49 24.3** | **-1.3** |
| **MLPR** | **Magueyes Islan** | **1.10** | **196** | *e*S | **Sn** | **22 49 38.8** | **-0.9** |
| **MLPR** | **Magueyes Islan** | **1.10** | **196** | | **Pn** | **22 49 24.3** | **-1.3** |
| MLPR | | | | | **Sn** | **22 49 38.8** | **-0.9** |
| **CBYP** | **Canovanas** | **1.12** | **132** | ↑*e*P | **Pn** | **22 49 25.9** | **0.0** |
| **CBYP** | **Canovanas** | **1.12** | **132** | *e*S | **Sb** | **22 49 40.7** | **-0.2** |
| **CBYP** | **Canovanas** | **1.12** | **132** | | **Pn** | **22 49 25.9** | **0.0** |
| CBYP | | | | | **Sb** | **22 49 40.7** | **-0.2** |
| **ICMP** | **Isla Caja de M** | **1.15** | **171** | ↑*e*P | **Pb** | **22 49 27.6** | **+0.3** |
| **ICMP** | **Isla Caja de M** | **1.15** | **171** | | **Pb** | **22 49 27.6** | **+0.3** |
| **ICMP** | **Isla Caja de M** | **1.15** | **171** | IAML | | 22 49 53.4 | |
| | comp=E,239nm,0.9s | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.21** | **146** | | **Pn** | **22 49 27.3** | **+0.2** |
| PDPR | | | | IAML | | 22 49 49.0 | |
| | comp=E,282nm,0.1s | | | | | | |
| **IGPR** | **InterUniversit** | **1.21** | **151** | ↑*e*P | **Pn** | **22 49 27.6** | **+0.5** |
| **IGPR** | **InterUniversit** | **1.21** | **151** | *e*S | **Sb** | **22 49 43.3** | **-0.3** |
| **HUMP** | **Col San Antoni** | **1.21** | **137** | ↑*e*P | **Pn** | **22 49 27.2** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.21** | **137** | *e*S | **Sb** | **22 49 43.5** | **-0.2** |
| **HUMP** | **Col San Antoni** | **1.21** | **137** | | **Pn** | **22 49 27.2** | **+0.1** |
| HUMP | | | | | **Sb** | **22 49 43.5** | **-0.2** |
| **MTP** | **Monte Pirata** | **1.45** | **130** | ↑*e*P | **Pn** | **22 49 30.4** | **0.0** |
| **MTP** | **Monte Pirata** | **1.45** | **130** | *e*S | **Sn** | **22 49 49.2** | **+0.7** |
| **MTP** | **Monte Pirata** | **1.45** | **130** | | **Pn** | **22 49 30.4** | **0.0** |
| MTP | | | | | **Sn** | **22 49 49.2** | **+0.7** |
| **MTP** | **Monte Pirata** | **1.45** | **130** | IAML | | 22 49 55.7 | |
| | comp=N,154nm,0.2s | | | | | | |
| **CUPR** | **Culebra, Puert** | **1.55** | **117** | ‖*e*P | **Pn** | **22 49 31.4** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **1.55** | **117** | *e*S | **Sn** | **22 49 50.4** | **-0.5** |
| **CUPR** | **Culebra, Puert** | **1.55** | **117** | | **Pn** | **22 49 31.4** | **-0.3** |
| CUPR | | | | | **Sn** | **22 49 50.4** | **-0.5** |
| **STVI** | **Saint Thomas** | **1.81** | **112** | ↑*e*P | **Pn** | **22 49 35.4** | **0.0** |
| **STVI** | **Saint Thomas** | **1.81** | **112** | *e*S | **Sn** | **22 49 56.8** | **-0.6** |
| **STVI** | **Saint Thomas** | **1.81** | **112** | | **Pn** | **22 49 35.4** | **0.0** |
| STVI | | | | | **Sn** | **22 49 56.8** | **-0.6** |
| **STVI** | **Saint Thomas** | **1.81** | **112** | IAML | | 22 50 03.6 | |
| | comp=N,124nm,0.3s | | | | | | |
| **TBVI** | **Tortola** | **2.09** | **107** | ↑*e*P | **Pb** | **22 49 41.9** | **-1.3** |
| **DR12** | **Loma Pena Alta** | **2.52** | **265** | | **Pn** | **22 49 45.0** | **-0.2** |
| **BANI** | **BANI** | **3.50** | **260** | Pn | **Pn** | **22 49 58.3** | **-0.4** |
| **BANI** | **BANI** | **3.50** | **260** | *i* P | **Pn** | **22 50 01.1** | **+2.3** |
| BANI | | | | IAML | | 22 50 55.6 | |
| | comp=Z,81nm,2.8s | | | | | | |
| **SDDR** | **Presa de Saban** | **4.32** | **270** | | **Pn** | **22 50 10.1** | **+0.3** |
| **SDDR** | **Presa de Saban** | **4.32** | **270** | *i* P | **Pn** | **22 50 11.3** | **+1.4** |
| SDDR | | | | IAML | | 22 51 20.6 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **LONE2** | **Loma La Sidra** | **4.52** | **265** | *e*P | **Pn** | **22 50 15.3** | **+2.6** |

*IDC **06** 22:52:38.3±7.0, 19.0°2N×108.8°6W, h0km, mb3.5/5, mb1 3.9/7, mb1mx3.8/39, mbtmp3.6/7, ML3.2/2, MS3.2/5, Ms1 3.2/5, ms1mx2.9/44, Error ellipse: s-maj=115.0km s-min=65.0km az=149.0*
**ISC 06 22:52:44.0±6.1, 19°1N±0°6×108°9W±0°4, h35km, n14, σ0°74/7, mb3.5/4, Revilla Gigedo Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **5.17** | **345** | LR | LR | 22 55 25.7 | |
| | comp=Z,206nm,19.7s,baz=212,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **11.25** | **24** | Pn | **Pn** | **22 55 22.6** | **+0.1** |
| | 0.1nm,0.3s,baz=206,slow=16,SNR=10 | | | | | | |
| **CMIG** | **Matias Romero** | **13.45** | **96** | LR | LR | 23 00 54.6 | |
| | comp=Z,119nm,18.2s,baz=124,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **15.94** | **7** | Pn | **Pn** | **22 56 26.5** | **+0.7** |
| | 0.1nm,0.3s,baz=195,slow=9.8,SNR=4.5 | | | | | | |
| ANMO | | | | LR | LR | 23 01 23.8 | |
| | comp=Z,73nm,21.5s,baz=198,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **15.97** | **336** | LR | LR | 23 01 18.5 | |
| | comp=Z,109nm,19.5s,baz=169,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **20.95** | **339** | P | **P** | **22 57 23.6** | **-0.5** |
| | 2.3nm,0.9s,baz=164,slow=12,SNR=11 | | | | | | |
| **ELK** | **Elko** | **22.27** | **347** | P | **P** | **22 57 38.0** | **-0.3** |
| | 1.9nm,1.0s,baz=173,slow=9.3,SNR=5.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **23.61** | **359** | P | **P** | **22 57 51.8** | **-0.3** |
| | 0.8nm,0.7s,baz=158,slow=10,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **43.55** | **356** | P | **P** | **23 00 43.4** | **-0.7** |
| | 0.7nm,0.8s,baz=170,slow=8.0,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **52.19** | **340** | P | **P** | **23 01 51.9** | **+0.8** |
| | 0.6nm,0.7s,baz=140,slow=7.6,SNR=6.5 | | | | | | |
| **H03N2** | **Juan Fernandez** | **59.54** | **151** | T | T | 00 08 12.8 | |
| | baz=329,slow=78,SNR=20 | | | | | | |
| **H03N1** | **Juan Fernandez** | **59.55** | **151** | T | T | 00 08 12.8 | |
| | baz=329,slow=78,SNR=28 | | | | | | |
| **H03N3** | **Juan Fernandez** | **59.56** | **151** | T | T | 00 08 12.8 | |
| | baz=329,slow=78,SNR=24 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.95** | **25** | LR | LR | 23 43 38.1 | |
| | comp=Z,11nm,18.7s,baz=290,slow=35 | | | | | | |

*SFS **06** 22:57:40.0, 35.5°0N×3.8°0W, ML2.5, ALBORAN SUR*
*CNRM **06** 22:57:40.0, 35.5°2N×3.7°4W, h17km, ml3.1*
**ISC 06 22:57:40.3±1.0, 35°50N±0°03×3°76W±0°03, h24km±10km, n33, σ2s08/41, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.32** | **207** | P | **Pb** | **22 57 47.1** | **-0.4** |
| PALE | | | | S | **Sb** | **22 57 52.1** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.68** | **114** | P | **Pb** | **22 57 53.7** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.68** | **114** | P | **Pb** | **22 57 53.7** | **+0.1** |
| GOG | | | | S | **Sb** | **22 58 03.1** | **+0.4** |
| **CHAS** | **Isla Isabel II** | **1.13** | **106** | P | **Pn** | **22 58 00.1** | **-0.6** |
| CHAS | | | | S | **Sn** | **22 58 14.1** | **-1.3** |
| **CHEFC** | **Chefchaouen** | **1.35** | **254** | P | **Pb** | **22 58 04.6** | **-0.4** |
| CHEFC | | | | S | **Sb** | **22 58 24.1** | **+2.3** |
| **CEU** | **Ceuta** | **1.37** | **287** | P | **Pn** | **22 58 02.3** | **-1.6** |
| CEU | | | | S | **Sn** | **22 58 16.0** | **-5.3** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **337** | P | **Pb** | **22 58 04.9** | **-0.4** |
| EMAL | | | | S | **Sb** | **22 58 22.1** | **-0.2** |
| **JBK** | **JBK** | **1.52** | **139** | P | **Pn** | **22 58 06.3** | **+0.1** |
| **JBK** | **JBK** | **1.52** | **139** | P | **Pn** | **22 58 06.3** | **+0.1** |
| JBK | | | | S | **Sn** | **22 58 25.6** | **+0.3** |
| **SICH** | **Sidi Chahed** | **1.89** | **223** | S | Sn | 22 58 19.0 | -15 |
| **SICH** | **Sidi Chahed** | **1.89** | **223** | P | **Pb** | **22 58 13.3** | **-0.8** |
| SICH | | | | S | **Sb** | **22 58 40.0** | **+2.6** |
| **LCRM** | **LCR** | **2.02** | **207** | P | **Pb** | **22 58 15.0** | **-1.5** |
| **LCRM** | **LCR** | **2.02** | **207** | P | **Pb** | **22 58 15.0** | **-1.5** |
| LCRM | | | | S | **Sb** | **22 58 40.6** | **-0.7** |
| **MD31** | **MD31** | **2.75** | **198** | P | **Pn** | **22 58 24.6** | **+1.5** |
| **MDT** | **Midelt** | **2.77** | **195** | P | **Pn** | **22 58 24.5** | **+1.2** |
| **MDT** | **Midelt** | **2.77** | **195** | P | **Pn** | **22 58 24.5** | **+1.2** |
| **TDRA** | **Tendrara** | **2.84** | **149** | P | **Pn** | **22 58 25.1** | **+0.7** |
| **ZHG** | **ZHG** | **3.14** | **230** | P | **Pn** | **22 58 28.9** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | *e*Pn | **Pn** | **22 58 38.5** | **+2.4** |
| PVAQ | | | | *e*Sn | **Sn** | **22 59 19.7** | **+0.6** |
| PVAQ | | | | A | A | 22 59 25.3 | |
| | 5.4nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **302** | P | **Pn** | **22 58 36.7** | **+0.5** |
| PVAQ | | | | S | **Sn** | **22 59 18.3** | **-0.8** |
| **FIGM** | **Figuig** | **3.95** | **148** | P | **Pn** | **22 58 40.2** | **+0.7** |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Pn | **Pn** | **22 58 46.6** | **+2.7** |
| **PESTR** | **Estremoz** | **4.54** | **319** | P | **Pn** | **22 58 49.8** | **+2.2** |
| **EVO** | **Evora** | **4.55** | **313** | *e*Pn | **Pn** | **22 58 49.2** | **+1.5** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | **Pn** | **22 58 50.7** | **+2.0** |
| **TZRR** | **Tazzarine** | **4.94** | **198** | P | **Pn** | **22 58 55.6** | **+2.4** |
| **OUK** | **Oukaimeden** | **5.49** | **220** | P | **Pn** | **22 59 01.3** | **+0.4** |
| **SMRN** | **Sveta Marina** | **16.63** | **50** | P | Pn | 23 01 19.9 | -12 |
| **HVAR** | **Hvar** | **17.39** | **58** | P | Pn | 23 01 33.1 | -8.2 |
| **LSTV** | **Lastovo** | **17.57** | **59** | P | **Pn** | **23 01 41.6** | **-1.8** |
| **KLUV** | **Kijevo** | **17.65** | **55** | P | **Pn** | **23 01 37.8** | **-6.7** |
| **RICI** | **Ricice** | **17.95** | **57** | P | **Pn** | **23 01 48.3** | **-0.1** |
| **STON** | **Ston** | **18.16** | **60** | P | **P** | **23 01 55.6** | **+4.7** |

*IDC **06** 23:09:09.4±0.7, 37.0°6N×105.0°5W, h0km, mb4.0/6, mb1 4.0/13, mb1mx3.6/52, mbtmp3.8/13, ML3.9/6, MS3.2/6, Ms1 3.2/6, ms1mx2.8/83, Error ellipse: s-maj=12.7km s-min=8.2km az=68.0*
*NEIC **06** 23:09:11.0±1.9, 37.0°9N±0.0°4×104.9°6W±0.0°2, h2km±8km, mb4.0/21, mb_Lg3.8/118, ML4.0/63, Error ellipse: s-maj=5.9km s-min=1.7km az=201.0*
*ANF **06** 23:09:10.8±0.4, 37.0°7N×104.9°6W, h2km, ML4.4/19, Error ellipse: s-maj=3.9km s-min=3.4km az=5.0*
**ISC 06 23:09:10.4±0.5, 37°10N±0°02×105°03W±0°02, h10km, n175, σ2s27/188, mb4.1/7, MS3.5/3, Colorado**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T25A** | **Trinidad** | **0.49** | **85** | Pg | **Pg** | **23 09 18.6** | **-1.4** |
| T25A | | | | | **Sg** | **23 09 24.6** | **-2.0** |
| **T25A** | **Trinidad** | **0.49** | **85** | P | **Pg** | **23 09 18.6** | **-1.4** |
| | baz=263 | | | | | | |
| T25A | | | | S | **Sg** | **23 09 24.7** | **-2.0** |
| | baz=263 | | | | | | |
| **SDCO** | **Great Sand Dun** | **0.75** | **330** | Pg | **Pg** | **23 09 25.0** | **0.0** |
| SDCO | | | | Sg | **Sg** | **23 09 35.7** | **+1.0** |
| **SDCO** | **Great Sand Dun** | **0.75** | **330** | P | **Pg** | **23 09 25.0** | **0.0** |
| | baz=147,SNR=1000 | | | | | | |
| SDCO | | | | S | **Sb** | **23 09 35.9** | **-0.3** |
| | baz=147 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **1.57** | **295** | Pn | **Pg** | **23 09 40.5** | **-0.2** |
| S22A | | | | Sn | **Sg** | **23 10 01.9** | **+0.9** |
| S22A | | | | IAML | | 23 10 07.5 | |
| | comp=N,2µm,0.7s | | | | | | |
| S22A | | | | IAML | | 23 10 07.8 | |
| | comp=E,1µm,0.7s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **1.57** | **295** | P | **Pg** | **23 09 40.5** | **-0.2** |
| | baz=113,SNR=1000 | | | | | | |
| S22A | | | | S | **Sg** | **23 10 02.0** | **+0.9** |
| | baz=113 | | | | | | |
| **Q24A** | **Divide** | **1.86** | **357** | Pn | **Pb** | **23 09 44.9** | **+0.1** |
| Q24A | | | | IAML | | 23 10 10.8 | |
| | comp=N,2µm,0.3s | | | | | | |
| **Q24A** | **Divide** | **1.86** | **357** | P | **Pb** | **23 09 45.0** | **+0.2** |
| | baz=175,SNR=613 | | | | | | |
| Q24A | | | | S | **Sg** | **23 10 09.8** | **-0.7** |
| | baz=175 | | | | | | |
| **ANMO** | **Albuquerque** | **2.44** | **209** | Pn | **Pb** | **23 09 52.0** | **-2.6** |
| | comp=N,9.5nm,0.3s,baz=19,slow=13,SNR=81 | | | | | | |
| ANMO | | | | Pg | **Pg** | **23 09 54.3** | **-2.9** |
| | comp=N,17nm,0.3s,baz=41,slow=18,SNR=45 | | | | | | |
| ANMO | | | | Lg | Lg | 23 10 23.3 | |
| | comp=N,6.6nm,0.3s,baz=90,slow=7.7,SNR=4.4 | | | | | | |
| ANMO | | | | LR | LR | 23 10 54.3 | |
| | comp=N,175nm,18.7s,baz=38,slow=44 | | | | | | |
| **ANMO** | **Albuquerque** | **2.44** | **209** | Pn | **Pn** | **23 09 51.8** | **+1.3** |
| **ANMO** | **Albuquerque** | **2.44** | **209** | P | **Pn** | **23 09 51.8** | **+1.3** |
| | baz=29 | | | | | | |
| ANMO | | | | S | **Sb** | **23 10 23.5** | **-1.2** |
| | baz=29 | | | | | | |
| **SMCO** | **Snowmass** | **2.58** | **324** | Pn | **Pn** | **23 09 54.1** | **+1.4** |
| **KSCO** | **Kaye Shedlock'** | **2.69** | **44** | | **Pn** | **23 09 55.9** | **+2.0** |
| **KSCO** | **Kaye Shedlock'** | **2.69** | **44** | Pn | **Pb** | **23 09 56.3** | **-2.4** |
| | baz=224,SNR=151 | | | | | | |
| KSCO | | | | Pb | **Pg** | **23 09 59.1** | **-2.9** |
| | baz=224 | | | | | | |
| KSCO | | | | Sb | **Sb** | **23 10 32.7** | **+0.9** |
| | baz=224 | | | | | | |
| **ISCO** | **Idaho Springs** | **2.74** | **350** | Pn | **Pb** | **23 09 57.6** | **-2.0** |
| **ISCO** | **Idaho Springs** | **2.74** | **350** | P | **Pb** | **23 09 58.2** | **-1.5** |
| | baz=169,SNR=242 | | | | | | |
| **MVCO** | **Mesa Verde** | **2.78** | **273** | Pn | **Pb** | **23 09 58.1** | **-2.1** |
| MVCO | | | | IAML | | 23 10 41.0 | |
| | comp=N,679nm,0.9s | | | | | | |
| **MVCO** | **Mesa Verde** | **2.78** | **273** | Pn | **Pb** | **23 09 58.2** | **-2.1** |
| | baz=91,SNR=216 | | | | | | |
| MVCO | | | | Pb | **Pg** | **23 10 02.2** | **-1.4** |
| | baz=91 | | | | | | |
| MVCO | | | | Sb | **Sg** | **23 10 38.6** | **-1.0** |
| | baz=91 | | | | | | |
| **PV15** | **Paradox Valley** | **3.01** | **295** | | **Pb** | **23 10 01.2** | **-3.0** |
| PV15 | | | | IAML | | 23 10 50.9 | |
| | comp=N,297nm,0.9s | | | | | | |
| PV15 | | | | IAML | | 23 10 54.0 | |
| | comp=E,571nm,0.8s | | | | | | |
| **PV07** | **Paradox Valley** | **3.17** | **296** | | **Pn** | **23 10 03.4** | **+2.8** |
| PV07 | | | | IAML | | 23 10 54.1 | |
| | comp=N,323nm,1.0s | | | | | | |
| **PV13** | **Radium Mtn., P** | **3.19** | **290** | | **Pn** | **23 10 03.6** | **+2.7** |
| PV13 | | | | IAML | | 23 11 00.3 | |
| | comp=N,297nm,1.0s | | | | | | |
| PV13 | | | | IAML | | 23 11 04.9 | |
| | comp=E,342nm,1.2s | | | | | | |
| **BNM** | **Barren Site** | **3.22** | **204** | Pn | **Pn** | **23 10 02.2** | **+0.9** |
| **Y22D** | **IRIS PASSCAL I** | **3.39** | **208** | | **Pn** | **23 10 05.2** | **+1.7** |
| **Y22D** | **IRIS PASSCAL I** | **3.39** | **208** | Pb | **Pb** | **23 10 11.2** | **+0.5** |
| | baz=27,SNR=26 | | | | | | |
| Y22D | | | | Sb | **Sg** | **23 10 54.8** | **-4.5** |
| | baz=27 | | | | | | |
| **PV10** | **Paradox Valley** | **3.43** | **293** | | **Pn** | **23 10 06.6** | **+2.5** |
| PV10 | | | | IAML | | 23 11 13.6 | |
| | comp=N,263nm,1.0s | | | | | | |
| **PV23** | **Carpenter Ridg** | **3.44** | **294** | | **Pn** | **23 10 06.7** | **+2.4** |
| **AMTX** | **Amarillo** | **3.50** | **128** | Pn | **Pn** | **23 10 05.2** | **+0.2** |
| **AMTX** | **Amarillo** | **3.50** | **128** | Pn | **Pn** | **23 10 05.5** | **+0.5** |
| | baz=311 | | | | | | |
| AMTX | | | | Pb | **Pb** | **23 10 12.7** | **+0.3** |
| | baz=311 | | | | | | |
| AMTX | | | | Sb | **Sb** | **23 10 54.4** | **-0.7** |
| | baz=311 | | | | | | |
| **MSTX** | **Muleshoe** | **3.62** | **149** | | **Pn** | **23 10 07.1** | **+0.5** |
| **MSTX** | **Muleshoe** | **3.62** | **149** | Pn | **Pn** | **23 10 09.0** | **+2.4** |
| | baz=331 | | | | | | |
| MSTX | | | | Pb | **Pb** | **23 10 15.3** | **+0.7** |
| | baz=331 | | | | | | |
| **N23A** | **Red Feather La** | **3.86** | **350** | | **Pn** | **23 10 13.1** | **+3.0** |
| **N23A** | **Red Feather La** | **3.86** | **350** | Pn | **Pb** | **23 10 14.9** | **-3.9** |
| | baz=168,SNR=56 | | | | | | |
| N23A | | | | Pb | **Pg** | **23 10 22.0** | **-2.3** |
| | baz=168 | | | | | | |
| N23A | | | | Sb | **Sg** | **23 11 14.2** | **-0.1** |
| | baz=168 | | | | | | |
| **O20A** | **White River Ci** | **3.94** | **321** | | **Pn** | **23 10 14.9** | **+3.8** |
| O20A | | | | IAML | | 23 11 34.7 | |
| | comp=E,180nm,0.9s | | | | | | |
| O20A | | | | IAML | | 23 11 38.0 | |
| | comp=N,189nm,1.1s | | | | | | |
| **O20A** | **White River Ci** | **3.94** | **321** | P | **Pn** | **23 10 15.4** | **+4.2** |
| | baz=139,SNR=24 | | | | | | |
| **PHWY** | **Pilot Hill** | **4.21** | **356** | | **Pn** | **23 10 17.5** | **+2.5** |
| PHWY | | | | IAML | | 23 11 31.1 | |
| | comp=N,157nm,0.4s | | | | | | |
| **W18A** | **Petrified Fore** | **4.30** | **244** | Sb | **Sg** | **23 11 24.4** | **-4.0** |
| | baz=62 | | | | | | |
| **OGNE** | **Ogallala** | **4.49** | **30** | Pn | **Pn** | **23 10 20.4** | **+1.8** |
| OGNE | | | | IAmb_Lg | | 23 11 44.9 | |
| | comp=Z,266nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **4.49** | **30** | Pn | **Pn** | **23 10 21.0** | **+2.4** |
| | baz=211,SNR=8.9 | | | | | | |
| OGNE | | | | Pb | **Pb** | **23 10 32.2** | **+2.8** |
| | baz=211 | | | | | | |
| **CBKS** | **Cedar Bluff** | **4.52** | **66** | Pn | **Pn** | **23 10 19.3** | **+0.4** |
| **CBKS** | **Cedar Bluff** | **4.52** | **66** | P | **Pn** | **23 10 19.4** | **+0.4** |
| | baz=249,SNR=8.8 | | | | | | |
| CBKS | | | | Sb | **Sb** | **23 11 29.1** | **+4.8** |
| | baz=249 | | | | | | |
| **X18A** | **Snowflake** | **4.75** | **239** | | **Pn** | **23 10 23.8** | **+1.5** |
| X18A | | | | IAML | | 23 12 01.0 | |
| | comp=N,91nm,0.9s | | | | | | |
| **SRU** | **San Rafael Swe** | **4.78** | **297** | | **Pn** | **23 10 25.7** | **+3.1** |
| SRU | | | | IAML | | 23 11 52.3 | |
| | comp=N,139nm,1.4s | | | | | | |
| **P18A** | **Preston Nutter** | **4.82** | **303** | | **Pn** | **23 10 26.8** | **+3.5** |
| P18A | | | | IAML | | 23 11 50.6 | |
| | comp=N,86nm,0.9s | | | | | | |
| P18A | | | | IAML | | 23 12 03.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,136nm,1.1s | | | | | | | |
| **OK025** | **Westminster Rd** | **6.39** | **101** | Pn | **Pn** | **23 10 44.5** | **-0.1** |
| **FNO** | **Franklin** | **6.43** | **104** | IAmb_Lg | | 23 12 36.4 | |
| | comp=Z,104nm,0.9s | | | | | | |
| **OK033** | **Mehan** | **6.59** | **97** | Pn | **Pn** | **23 10 46.9** | **-0.5** |
| **PD31** | **Pinedale Array** | **6.65** | **330** | | **Pn** | **23 10 50.6** | **+2.3** |
| **PDAR** | **Pinedale Array** | **6.65** | **330** | Pn | **Pn** | **23 10 50.7** | **+2.3** |
| | comp=Z,1.1nm,0.3s,baz=134,slow=15,SNR=28 | | | | | | |
| PDAR | | | | Pg | **Pg** | **23 11 14.9** | **-2.8** |
| | comp=Z,5.5nm,0.3s,baz=124,slow=14,SNR=46 | | | | | | |
| PDAR | | | | Lg | Lg | 23 12 38.9 | |
| | comp=Z,2.0nm,0.3s,baz=131,slow=32,SNR=4.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **6.65** | **330** | | **Pn** | **23 10 51.0** | **+2.7** |
| **319A** | **Douglas** | **6.71** | **213** | Pn | **Pn** | **23 10 50.3** | **+1.2** |
| **TUC** | **Tucson** | **6.73** | **226** | | **Pn** | **23 10 51.6** | **+2.2** |
| **QUOK** | **Quay** | **6.75** | **95** | | **Pn** | **23 10 50.0** | **+0.4** |
| **T35A** | **Sooner Cattle** | **6.81** | **89** | Pn | **Pn** | **23 10 50.0** | **-0.5** |
| T35A | | | | IAmb_Lg | | 23 12 50.7 | |
| | comp=Z,89nm,0.9s | | | | | | |
| **BGNE** | **Belgrade** | **6.85** | **49** | Pn | **Pn** | **23 10 51.2** | **+0.2** |
| **BGNE** | **Belgrade** | **6.85** | **49** | P | **Pn** | **23 10 52.4** | **+1.4** |
| | baz=233 | | | | | | |
| BGNE | | | | Sb | **Sg** | **23 12 41.3** | **-9.0** |
| | baz=233 | | | | | | |
| **W35A** | **Tecumseh** | **6.88** | **104** | IAmb_Lg | | 23 13 02.2 | |
| | comp=Z,106nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **6.93** | **71** | Pn | **Pn** | **23 10 52.5** | **+0.5** |
| KSU1 | | | | IAmb_Lg | | 23 13 01.0 | |
| | comp=Z,113nm,0.7s | | | | | | |
| **N33A** | **J Bar K, Exete** | **6.93** | **56** | IAmb_Lg | | 23 12 60.0 | |
| | comp=Z,142nm,0.9s | | | | | | |
| **RSSD** | **Black Hills** | **7.05** | **6** | Pn | **Pn** | **23 10 55.1** | **+1.2** |
| RSSD | | | | IAmb_Lg | | 23 13 07.4 | |
| | comp=Z,147nm,1.1s | | | | | | |
| **RSSD** | **Black Hills** | **7.05** | **6** | P | **Pn** | **23 10 55.9** | **+2.0** |
| | baz=186 | | | | | | |
| RSSD | | | | Sb | **Sg** | **23 12 49.6** | **-7.2** |
| | baz=186 | | | | | | |
| **K31A** | **O'Neill** | **7.33** | **39** | | **Pn** | **23 10 59.0** | **+1.5** |
| **AHID** | **Auburn Hatcher** | **7.33** | **322** | | **Pn** | **23 11 00.5** | **+2.8** |
| **W13A** | **Hualapai Mount** | **7.45** | **257** | Pn | **Pn** | **23 11 01.8** | **+2.5** |
| **TUL1** | **Leonard** | **7.53** | **96** | Pn | **Pn** | **23 10 59.9** | **-0.4** |
| TUL1 | | | | IAmb_Lg | | 23 13 18.6 | |
| | comp=Z,107nm,0.8s | | | | | | |
| **SPR3** | **Spring Creek 3** | **7.58** | **287** | | **Pn** | **23 11 04.4** | **+3.1** |
| **REDW** | **Red Top Meadow** | **7.68** | **326** | Pn | **Pn** | **23 11 06.4** | **+3.9** |
| **TPAW** | **Teton Pass** | **7.83** | **326** | Pn | **Pn** | **23 11 07.9** | **+3.3** |
| **TX31** | **Lajitas Ar. Si** | **7.83** | **171** | | **Pn** | **23 11 05.4** | **+1.0** |
| **TXAR** | **Lajitas Array** | **7.83** | **171** | Pn | **Pn** | **23 11 05.4** | **+1.0** |
| | comp=Z,0.6nm,0.3s,baz=3.4,slow=12,SNR=22 | | | | | | |
| TXAR | | | | Pg | Pb | 23 11 31.6 | +5.3 |
| | comp=Z,5.6nm,0.3s,baz=351,slow=14,SNR=18 | | | | | | |
| TXAR | | | | Lg | Lg | 23 13 09.6 | |
| | comp=Z,2.2nm,0.3s,baz=319,slow=22,SNR=3.0 | | | | | | |
| TXAR | | | | LR | LR | 23 13 26.0 | |
| | comp=Z,77nm,20.0s,baz=40,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **7.83** | **171** | | **Pn** | **23 11 05.5** | **+1.1** |
| **JCT** | **Junction City** | **7.90** | **145** | Pn | **Pn** | **23 11 06.8** | **+1.3** |
| JCT | | | | IAmb_Lg | | 23 13 33.2 | |
| | comp=Z,130nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **8.06** | **127** | Pn | **Pn** | **23 11 08.0** | **+0.6** |
| WHTX | | | | IAmb_Lg | | 23 13 23.8 | |
| | comp=Z,104nm,1.2s | | | | | | |
| **X37A** | **Clayton** | **8.23** | **105** | Pn | **Pn** | **23 11 09.0** | **-0.8** |
| **U38A** | **Gravette** | **8.56** | **91** | Pn | **Pn** | **23 11 13.6** | **-0.9** |
| **RLMT** | **Red Lodge** | **8.63** | **340** | Pn | **Pn** | **23 11 19.0** | **+3.5** |
| **ELK** | **Elko** | **8.75** | **298** | Pn | **Pn** | **23 11 18.5** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=208,slow=19,SNR=2.0 | | | | | | |
| ELK | | | | Pg | Pg | 23 11 51.8 | -6.2 |
| | comp=Z,0.1nm,0.3s,baz=97,slow=12,SNR=4.0 | | | | | | |
| ELK | | | | Lg | Lg | 23 13 47.2 | |
| | comp=Z,0.1nm,0.3s,baz=32,slow=15,SNR=1.9 | | | | | | |
| **HHAR** | **Hobbs** | **8.94** | **92** | | **Pn** | **23 11 19.1** | **-0.6** |
| **Z38A** | **Mt. Pleasant** | **9.07** | **112** | IAmb_Lg | | 23 14 12.1 | |
| | comp=Z,117nm,1.2s | | | | | | |
| **237A** | **Washetta, Mont** | **9.14** | **121** | Pn | **Pn** | **23 11 23.4** | **+1.0** |
| **ECSD** | **EROS Data Cent** | **9.22** | **41** | Pn | **Pn** | **23 11 24.5** | **+1.1** |
| **ECSD** | **EROS Data Cent** | **9.22** | **41** | P | **Pn** | **23 11 24.7** | **+1.3** |
| | baz=226,SNR=5.8 | | | | | | |
| **W39A** | **Magazine** | **9.29** | **98** | Pn | **Pn** | **23 11 23.9** | **-0.4** |
| **S39A** | **Bolivar** | **9.33** | **83** | | **Pn** | **23 11 24.4** | **-0.6** |
| **P38A** | **Dawn** | **9.37** | **71** | Pn | **Pn** | **23 11 23.9** | **-1.6** |
| **BCYI** | **Bear Canyon** | **9.61** | **321** | Pn | **Pn** | **23 11 31.1** | **+2.2** |
| **MIAR** | **Mount Ida** | **9.64** | **102** | Pn | **Pn** | **23 11 27.8** | **-1.3** |
| **HLID** | **Hailey** | **9.64** | **315** | Pn | **Pn** | **23 11 32.5** | **+3.2** |
| **833A** | **Chaparral WMA,** | **9.95** | **150** | IAmb_Lg | | 23 14 32.5 | |
| | comp=Z,67nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **10.18** | **79** | | **Pn** | **23 11 34.7** | **-1.9** |
| **MGMO** | **Mountain Grove** | **10.19** | **86** | Pn | **Pn** | **23 11 35.2** | **-1.5** |
| **X40A** | **Basin Creek Fa** | **10.24** | **101** | Pn | **Pn** | **23 11 38.6** | **+1.2** |
| **P40A** | **Paris** | **10.48** | **73** | | **Pn** | **23 11 38.4** | **-2.3** |
| **NVAR** | **Mina Array Bea** | **10.60** | **281** | Pn | **Pn** | **23 11 44.7** | **+2.2** |
| | comp=Z,0.2nm,0.3s,baz=72,slow=9.5,SNR=4.3 | | | | | | |
| NVAR | | | | Pg | | 23 12 33.5 | |
| | comp=Z,0.1nm,0.3s,baz=91,slow=16,SNR=5.9 | | | | | | |
| NVAR | | | | Lg | Lg | 23 14 42.8 | |
| | comp=Z,0.0nm,0.3s,baz=64,slow=28,SNR=3.9 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **10.91** | **34** | Pn | **Pn** | **23 11 45.8** | **-0.8** |
| **CCM** | **Cathedral Cave** | **10.98** | **81** | Pn | **Pn** | **23 11 46.8** | **-0.7** |
| **LCAR** | **Lake Charles** | **11.20** | **91** | Pn | **Pn** | **23 11 48.7** | **-1.9** |
| **L40A** | **Anamosa** | **11.74** | **91** | Pn | **Pn** | **23 11 56.0** | **-2.0** |
| **SPMN** | **Marine on St.** | **12.27** | **45** | | **Pn** | **23 12 04.2** | **-0.9** |
| **F36A** | **Milaca** | **12.28** | **41** | Pn | **Pn** | **23 12 04.7** | **-0.6** |
| **P43A** | **Skaggs, Pawnee** | **12.43** | **73** | | **Pn** | **23 12 05.7** | **-1.7** |
| **JFWS** | **Jewell Farm** | **12.72** | **58** | | **Pn** | **23 12 08.4** | **-3.0** |
| **G40A** | **Rib Lake** | **13.81** | **49** | Pn | **Pn** | **23 12 26.6** | **+0.3** |
| **I42A** | **Draeger Farm,** | **14.00** | **56** | Pn | **Pn** | **23 12 26.4** | **-2.4** |
| **NEW** | **Newport** | **14.25** | **325** | LR | LR | 23 18 05.5 | |
| | comp=Z,90nm,20.2s,baz=82,slow=38 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **14.43** | **294** | Pn | **P** | **23 12 39.5** | **-2.1** |
| | comp=Z,0.1nm,0.3s,baz=64,slow=4.2,SNR=6.9 | | | | | | |
| **ULM** | **Lac du Bonnet** | **14.70** | **24** | Lg | Lg | 23 16 42.7 | |
| | comp=Z,0.2nm,0.3s,baz=281,slow=12,SNR=3.1 | | | | | | |
| **EYMN** | **Ely** | **14.71** | **38** | Pn | **Pn** | **23 12 36.0** | **-2.5** |
| **COWI** | **Conover** | **14.88** | **48** | Pn | **Pn** | **23 12 38.3** | **-2.6** |
| **LRAL** | **Lakeview Retre** | **15.31** | **100** | Pn | **Pn** | **23 12 45.0** | **-1.6** |
| LRAL | | | | IAmb | IAmb | 23 13 08.0 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **U49A** | **Red Boiling Sp** | **15.43** | **86** | Pn | **Pn** | **23 12 47.1** | **-1.0** |
| U49A | | | | IAmb | IAmb | 23 13 12.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **P48A** | **Milroy** | **15.57** | **75** | Pn | **Pn** | **23 12 46.4** | **-3.6** |
| P48A | | | | IAmb | IAmb | 23 13 04.3 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **D41A** | **Chassel** | **15.73** | **46** | Pn | **Pn** | **23 12 49.2** | **-2.8** |
| **CPCT** | **Cooper Cave** | **16.62** | **90** | Pn | **Pn** | **23 13 01.7** | **-1.7** |
| CPCT | | | | IAmb | IAmb | 23 13 23.0 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **V51A** | **Loudon** | **16.69** | **88** | Pn | **P** | **23 13 05.2** | **-1.4** |
| **S51A** | **Beattyville** | **17.05** | **82** | Pn | **Pn** | **23 13 07.7** | **-1.1** |
| **TKL** | **Tuckaleechee C** | **17.17** | **88** | Pn | **Pn** | **23 13 09.9** | **-0.6** |
| | comp=Z,0.4nm,0.3s,baz=191,slow=2.6,SNR=5.1 | | | | | | |
| TKL | | | | Lg | Lg | 23 18 06.6 | |
| | comp=Z,0.4nm,0.3s,baz=65,slow=6.9,SNR=4.7 | | | | | | |
| **TKL** | **Tuckaleechee C** | **17.17** | **88** | Pn | **Pn** | **23 13 09.6** | **-0.8** |
| **Q51A** | **Peebles** | **17.18** | **77** | Pn | **P** | **23 13 10.8** | **-1.4** |
| Q51A | | | | IAmb | IAmb | 23 13 22.9 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **TZTN** | **Tazewell** | **17.20** | **85** | Pn | **Pn** | **23 13 11.0** | **+0.2** |
| TZTN | | | | IAmb | IAmb | 23 13 24.5 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **V52A** | **Sevierville** | **17.28** | **88** | Pn | **Pn** | **23 13 10.7** | **-1.1** |
| V52A | | | | IAmb | IAmb | 23 13 27.6 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **V53A** | **Saluda** | **17.94** | **88** | Pn | **Pn** | **23 13 18.7** | **-1.4** |
| **Q52A** | **Bidwell** | **18.02** | **77** | | **P** | **23 13 21.3** | **0.0** |
| **P52A** | **Corning** | **18.12** | **75** | Pn | **Pn** | **23 13 21.0** | **-1.2** |
| **S54A** | **Dingess, Beckl** | **18.84** | **81** | P | **Pn** | **23 13 30.8** | **-0.2** |
| **O53A** | **New Philadelph** | **18.84** | **73** | P | **P** | **23 13 30.1** | **-0.4** |
| O53A | | | | IAmb | IAmb | 23 13 36.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **R55A** | **Marlinton** | **19.73** | **79** | P | **P** | **23 13 40.4** | **+0.1** |
| **N54A** | **Moraine State** | **19.81** | **71** | P | **Pn** | **23 13 41.4** | **-1.1** |
| N54A | | | | IAmb | IAmb | 23 14 02.7 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **M55A** | **Ridgway** | **20.76** | **70** | P | **P** | **23 13 51.8** | **+0.4** |
| **O56A** | **Blue Knob Stat** | **20.87** | **73** | P | **P** | **23 13 52.5** | **-0.1** |
| O56A | | | | IAmb | IAmb | 23 14 03.4 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **SSPA** | **Standing Stone** | **21.39** | **72** | P | **P** | **23 13 58.7** | **+0.6** |
| SSPA | | | | IAmb | IAmb | 23 14 15.0 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **BBB** | **Bella Bella** | **22.16** | **320** | LR | LR | 23 22 03.7 | |
| | comp=Z,101nm,18.5s,baz=98,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **26.10** | **350** | P | **P** | **23 14 45.5** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=162,slow=9.2,SNR=7.4 | | | | | | |
| **DLBC** | **Dease Lake** | **26.88** | **331** | LR | LR | 23 26 27.3 | |
| | comp=Z,142nm,19.0s,baz=127,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **37.07** | **332** | P | **P** | **23 16 22.9** | **+2.5** |
| | comp=Z,0.5nm,0.6s,baz=124,slow=7.2,SNR=8.2 | | | | | | |
| **YAK** | **Yakutsk** | **71.83** | **336** | LR | LR | 23 56 33.2 | |
| | comp=Z,32nm,18.4s,baz=74,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **74.09** | **22** | P | **P** | **23 20 46.6** | **+0.3** |
| | comp=Z,4.6nm,1.0s,baz=284,slow=5.6,SNR=2.7 | | | | | | |
| **CPUP** | **Villa Florida** | **77.41** | **137** | P | **P** | **23 21 05.9** | **+0.2** |
| | comp=Z,2.3nm,0.7s,baz=290,slow=3.7,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **88.92** | **354** | P | **P** | **23 22 05.8** | **+0.9** |
| | comp=Z,0.7nm,0.6s,baz=3.7,slow=3.0,SNR=4.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **90.16** | **3** | P | **P** | **23 22 12.0** | **+1.3** |
| | comp=Z,1.0nm,0.7s,baz=34,slow=11,SNR=9.1 | | | | | | |

**IDC 06 23:46:28.5±9.8, 2°.29N×128°.21E, h251km±94km, mb3.3/5, mb1 3.4/5, mb1mx3.0/41, mbtmp3.9/5, Error ellipse: s-maj=88.4km s-min=20.6km az=61.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.42** | **187** | P | P | 23 50 47.5 | +0.4 |
| | 1.9nm,1.0s,baz=7.8,slow=11,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.90** | **165** | P | P | 23 51 10.3 | -0.5 |
| | 2.3nm,0.4s,baz=344,slow=10,SNR=38 | | | | | | |
| **ASAR** | **Alice Springs** | **26.39** | **168** | P | P | 23 51 42.1 | -0.1 |
| | 1.5nm,0.5s,baz=353,slow=7.6,SNR=50 | | | | | | |
| ASAR | | | | PcP | PcP | 23 55 00.9 | -0.1 |
| | 0.4nm,0.4s,baz=354,slow=2.4,SNR=7.4 | | | | | | |
| **STKA** | **Stephens Creek** | **36.28** | **161** | P | P | 23 53 08.3 | 0.0 |
| | 1.6nm,0.4s,baz=333,slow=8.6,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.57** | **325** | P | P | 23 56 05.9 | -0.1 |
| | 0.4nm,0.5s,baz=114,slow=8.0,SNR=8.7 | | | | | | |

*TUL **07** 00:06:41.2±1.2, 36°.52N±0°.01×98°.10W±0°.02, h6km±5km, ML2.5, mb_Lg2.2/8(NEIC), Error ellipse: s-maj=2.7km s-min=1.6km az=81.0*

**NEIC 07 00:06:41.2±0.8, 36°.51N±0°.01×98°.09W±0°.02, h10km±6km, Error ellipse: s-maj=2.5km s-min=1.7km az=87.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.08** | **94** | | Pg | 00 06 43.5 | -0.1 |
| CROK | | | | Sg | Sg | 00 06 45.2 | -0.1 |
| **OK032** | **Salt Plains WL** | **0.31** | **341** | | Pg | 00 06 47.4 | -0.1 |
| **GC02** | **Grant County #** | **0.39** | **28** | | Pg | 00 06 48.9 | +0.1 |
| **KAN14** | **Manchester OK** | **0.46** | **12** | | Pg | 00 06 50.1 | 0.0 |
| KAN14 | | | | Sg | Sg | 00 06 56.5 | +0.2 |
| **OK035** | **E0210 Rd and N** | **0.54** | **292** | Pg | Pg | 00 06 51.5 | -0.2 |
| **KAN17** | **Caldwell West** | **0.59** | **26** | | Pg | 00 06 52.6 | -0.2 |
| **KAN10** | **Anthony SW Sta** | **0.61** | **359** | | Pg | 00 06 53.0 | -0.2 |
| **KAN05** | **Bluff City Nor** | **0.62** | **16** | | Pg | 00 06 53.0 | -0.3 |
| **KAN01** | **Argonia South** | **0.69** | **22** | | Pg | 00 06 54.3 | -0.4 |
| **KAN13** | **South Haven SW** | **0.70** | **44** | | Pg | 00 06 54.6 | -0.1 |
| **KAN16** | **Harper SW Stat** | **0.71** | **1** | | Pg | 00 06 54.9 | -0.1 |
| KAN16 | | | | Sg | Sg | 00 07 04.7 | +0.3 |
| **KAN08** | **Anthony NE Sta** | **0.72** | **7** | | Pg | 00 06 55.0 | -0.2 |
| **BLOK** | **Blackwell** | **0.74** | **70** | | Pg | 00 06 55.5 | -0.1 |
| BLOK | | | | Sg | Sg | 00 07 05.9 | +0.6 |
| **U32A** | **Winter Ranch,** | **0.75** | **260** | Pg | Pg | 00 06 55.4 | -0.3 |
| U32A | | | | Sg | Sg | 00 07 05.8 | +0.2 |
| **KAN06** | **Argonia West S** | **0.76** | **14** | | Pg | 00 06 55.7 | -0.2 |
| **OK029** | **Liberty Lake** | **0.88** | **144** | Pg | Pg | 00 06 57.9 | -0.2 |
| **BCOK** | **Bluff Creek, N** | **0.94** | **156** | Pg | Pg | 00 06 58.7 | -0.5 |
| **OK025** | **Westminster Rd** | **1.11** | **147** | Pg | Pb | 00 07 02.0 | -0.5 |
| **OK031** | **S. Brethren Rd** | **1.15** | **119** | | Pb | 00 07 03.0 | -0.3 |
| **QUOK** | **Quay** | **1.16** | **107** | | Pb | 00 07 03.1 | -0.4 |
| **OK030** | **Cody Creek RV** | **1.20** | **119** | | Pb | 00 07 03.9 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.21** | **155** | Pg | Pb | 00 07 03.2 | -1.0 |
| **OK034** | **N. Norfolk Rd.** | **1.22** | **114** | | Pn | 00 07 04.2 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.33** | **72** | Pn | Pn | 00 07 06.0 | +0.1 |
| **FNO** | **Franklin** | **1.37** | **156** | Pn | Pn | 00 07 06.1 | -0.3 |
| **W35A** | **Tecumseh** | **1.68** | **144** | Pn | Pn | 00 07 11.2 | +0.6 |
| **WMOK** | **Wichita Mounta** | **1.86** | **198** | Pn | Pn | 00 07 14.0 | +0.8 |
| WMOK | | | | IAmb_Lg | | 00 07 43.9 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.92** | **174** | | Pb | 00 07 15.8 | -0.6 |
| **TUL1** | **Leonard** | **1.95** | **107** | Pn | Pb | 00 07 15.9 | -0.9 |
| TUL1 | | | | IAmb_Lg | | 00 07 47.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **1.97** | **346** | | Pb | 00 07 16.4 | -0.9 |
| **LOOK** | **Love County** | **2.62** | **163** | Pn | Pn | 00 07 24.6 | +0.9 |
| **X37A** | **Clayton** | **2.93** | **130** | Pn | Pn | 00 07 29.2 | +1.4 |
| **AMTX** | **Amarillo** | **3.35** | **242** | Pn | Pn | 00 07 35.5 | +1.7 |
| AMTX | | | | IAmb_Lg | | 00 08 34.4 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.98** | **71** | | Pn | 00 07 43.5 | +1.1 |
| **MIAR** | **Mount Ida** | **4.17** | **117** | Pn | Pn | 00 07 46.6 | +1.7 |
| **U40A** | **Yellville** | **4.22** | **91** | | Pn | 00 07 46.3 | +0.7 |
| **WHAR** | **Wooly Hollow** | **4.86** | **103** | IAmb_Lg | | 00 09 24.1 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.96** | **67** | Pn | Pn | 00 07 56.7 | +0.9 |
| **T25A** | **Trinidad** | **5.11** | **279** | Pn | Pn | 00 07 59.1 | +0.9 |

*NOU **07** 00:08:24.4, 20°.89S×178°.46W, h588km, ML5.3/11, Fiji Islands Region*
*IDC **07** 00:08:27.8±1.6, 20°.19S×178°.76W, h613km±18km, mb3.3/10, mb1 3.6/12, mb1mx3.2/27, mbtmp4.3/12, Error ellipse: s-maj=25.0km s-min=12.8km az=147.0*
*NEIC **07** 00:08:27.0±1.9, 20°.31S±0°.10×178°.6W±0°.2, h605km±8km, mb4.1/26, Error ellipse: s-maj=20.6km s-min=14.1km az=92.0*

**ISC 07 00:08:26.2±0.6, 20°.44S±0°.09×178°.56W±0°.09, h600km, n56, σ1°.24/58, mb4.1/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LKBA** | **Tubou, Lakemba** | **2.21** | **354** | P | **P** | **00 09 41.7** | **+0.2** |
| **TAVE** | **Taveuni** | **3.93** | **341** | P | **P** | **00 09 51.8** | **+0.5** |
| **MSVF** | **Nonsavu** | **4.19** | **310** | P | **P** | **00 09 52.9** | **-0.2** |
| | 5.7nm,0.3s,baz=103,slow=5.0,SNR=43 | | | | | | |
| **MSVF** | **Nonsavu** | **4.19** | **310** | P | **P** | **00 09 53.6** | **+0.5** |
| **MSVF** | **Nonsavu** | **4.19** | **310** | P | **P** | **00 09 53.9** | **+0.7** |
| **DGTI** | **Dogotuki** | **4.42** | **338** | P | **P** | **00 09 55.0** | **+0.2** |
| **NIUE** | **Niue** | **8.25** | **82** | P | **P** | **00 10 26.6** | **-1.3** |
| **MARNC** | **Mare, Loyalty** | **12.57** | **263** | P | **P** | **00 11 10.2** | **-0.5** |
| **DVP** | **Devils Point** | **12.81** | **280** | P | **P** | **00 11 13.5** | **+0.3** |
| **PINNC** | **Pines Island,** | **13.20** | **258** | P | **P** | **00 11 17.0** | **0.0** |
| **DZM** | **Mont Dzumac** | **14.07** | **261** | P | **P** | **00 11 27.5** | **+1.6** |
| | 2.7nm,0.3s,baz=88,slow=21,SNR=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.07** | **261** | P | **P** | **00 11 28.0** | **+2.1** |
| **SANVU** | **Saraoutou** | **14.42** | **288** | P | **P** | **00 11 29.1** | **-0.1** |
| **OUZ** | **Omahuta** | **16.26** | **204** | P | **P** | **00 11 48.7** | **+2.9** |
| **URZ** | **Urewera** | **18.15** | **191** | P | **P** | **00 12 02.3** | **-0.7** |
| | 0.6nm,0.3s,baz=318,slow=20,SNR=1.3 | | | | | | |
| URZ | | | | S | **S** | **00 14 53.4** | **-5.5** |
| | 0.1nm,0.3s,baz=290,slow=5.8,SNR=2.7 | | | | | | |
| **URZ** | **Urewera** | **18.15** | **191** | P | **P** | **00 12 02.6** | **-0.4** |
| **BKZ** | **Black Stump Fm** | **19.14** | **192** | P | **P** | **00 12 11.2** | **-0.9** |
| **CTAO** | **Charters Tower** | **32.97** | **264** | P | **P** | **00 14 13.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **37.34** | **244** | P | **P** | **00 14 49.7** | **+0.4** |
| | 1.4nm,0.4s,baz=96,slow=13,SNR=6.2 | | | | | | |
| **STKA** | **Stephens Creek** | **37.34** | **244** | P | **P** | **00 14 50.0** | **+0.7** |
| **AS31** | **Alice Springs** | **44.02** | **257** | P | **P** | **00 15 42.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **44.02** | **257** | P | **P** | **00 15 42.5** | **+0.2** |
| | 5.3nm,0.6s,baz=92,slow=7.5,SNR=61 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 17 14.3** | **0.0** |
| | 0.6nm,0.7s,baz=99,slow=4.8,SNR=3.3 | | | | | | |
| ASAR | | | | S | **S** | **00 21 30.5** | **-1.7** |
| | 0.6nm,1.0s,baz=96,slow=15,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.02** | **257** | P | **P** | **00 15 42.3** | **0.0** |
| **WB0** | **Warramunga Arr** | **44.06** | **262** | P | **P** | **00 15 42.4** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 00 15 43.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **262** | P | **P** | **00 15 42.3** | **-0.6** |
| | comp=Z,2.6nm,0.4s,baz=97,slow=7.7,SNR=119 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **262** | P | **P** | **00 15 41.9** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **57.17** | **257** | P | **P** | **00 17 17.2** | **-0.4** |
| **MBWA** | **Marble Bar** | **57.35** | **257** | P | **P** | **00 17 18.2** | **-0.7** |
| MBWA | | | | IAmb | IAmb | 00 17 45.4 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **57.92** | **185** | P | **P** | **00 17 23.8** | **+2.0** |
| | comp=Z,1.9nm,0.9s,baz=271,slow=7.6,SNR=6.9 | | | | | | |
| **VNDA** | **Vanda** | **57.92** | **185** | P | **P** | **00 17 23.5** | **+1.8** |
| VNDA | | | | IAmb | IAmb | 00 17 49.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.62** | **180** | P | **P** | **00 18 37.6** | **+1.3** |
| QSPA | | | | IAmb | IAmb | 00 18 58.3 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.08** | **346** | P | **P** | **00 19 12.6** | **-0.5** |
| | comp=Z,1.6nm,0.7s,baz=120,slow=8.8,SNR=1.8 | | | | | | |
| **M02C** | **Callahan** | **80.28** | **39** | P | **P** | **00 19 37.2** | **+1.3** |
| M02C | | | | IAmb | IAmb | 00 19 49.5 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.58** | **39** | P | **P** | **00 19 37.7** | **+0.3** |
| YBH | | | | IAmb | IAmb | 00 19 39.7 | |
| | comp=Z,9.9nm,1.5s | | | | | | |
| **YERR** | **Yerington** | **81.06** | **43** | P | **P** | **00 19 40.5** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **81.35** | **44** | P | **P** | **00 19 42.1** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=226,slow=9.1,SNR=9.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.35** | **44** | P | **P** | **00 19 41.5** | **-0.1** |
| **K05A** | **Summer Lake** | **82.25** | **39** | P | **P** | **00 19 46.9** | **+0.8** |
| K05A | | | | IAmb | IAmb | 00 20 06.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **I07A** | **Izee** | **83.87** | **38** | P | **P** | **00 19 54.4** | **+0.4** |
| I07A | | | | IAmb | IAmb | 00 20 06.1 | |
| | comp=Z,5.3nm,1.3s | | | | | | |
| **U15A** | **North Rim** | **84.31** | **48** | P | **P** | **00 19 57.2** | **+0.7** |
| **SEY** | **Seymchan** | **86.20** | **347** | P | **P** | **00 20 03.9** | **-0.7** |
| | comp=Z,1.8nm,0.2s,baz=194,slow=21,SNR=1.9 | | | | | | |
| **GLB** | **Gilahina Butte** | **86.23** | **16** | P | **P** | **00 20 04.4** | **-0.4** |
| **F10A** | **Beach Ranch, E** | **86.28** | **38** | P | **P** | **00 20 05.1** | **-0.4** |
| F10A | | | | IAmb | IAmb | 00 20 06.4 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **86.76** | **13** | P | **P** | **00 20 06.7** | **-0.6** |
| **TXAR** | **Lajitas Array** | **87.47** | **58** | P | **P** | **00 20 12.4** | **+0.9** |
| | comp=Z,0.9nm,0.8s,baz=218,slow=6.9,SNR=9.5 | | | | | | |
| **MLY** | **Manley** | **87.84** | **11** | P | **P** | **00 20 11.0** | **-1.3** |
| **WRH** | **Wood River Hil** | **87.86** | **13** | P | **P** | **00 20 11.1** | **-1.3** |
| WRH | | | | IAmb | IAmb | 00 20 25.6 | |
| | comp=Z,4.6nm,1.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **88.08** | **13** | P | **P** | **00 20 11.8** | **-1.5** |
| CCB | | | | IAmb | IAmb | 00 20 12.7 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **88.19** | **10** | P | **P** | **00 20 13.2** | **-0.7** |
| **MDM** | **Murphy Dome** | **88.27** | **12** | P | **P** | **00 20 12.8** | **-1.5** |
| MDM | | | | IAmb | IAmb | 00 20 20.1 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **IL31** | | **88.38** | **13** | P | **P** | **00 20 13.4** | **-1.3** |
| IL31 | | | | IAmb | IAmb | 00 20 15.6 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **88.38** | **13** | P | **P** | **00 20 13.2** | **-1.6** |
| | comp=Z,0.6nm,0.5s,baz=216,slow=5.4,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **88.38** | **13** | P | **P** | **00 20 13.5** | **-1.3** |
| **J25K** | **Salcha River,** | **88.57** | **14** | P | **P** | **00 20 14.9** | **-0.8** |
| J25K | | | | IAmb | IAmb | 00 20 41.5 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **89.28** | **43** | P | **P** | **00 20 19.8** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=200,slow=3.4,SNR=8.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.71** | **331** | PKhKP | PKPpre | 00 26 47.6 | |
| | comp=Z,4.5nm,0.3s,baz=46,slow=4.0,SNR=80 | | | | | | |

**HEL 07 00:18:07.

σ1§01/10, **mb3.6/8, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.83** | **230** | Pn | **Pn** | **00 37 46.5** | **+1.3** |
| | 6.4nm,0.3s,baz=16,slow=13,SNR=1.9 | | | | | | |
| GUMO | | | | Sn | **Sn** | **00 38 17.5** | **-0.7** |
| | 5.2nm,0.3s,baz=221,slow=19,SNR=1.7 | | | | | | |
| GUMO | | | | LR | LR | 00 39 06.0 | |
| | comp=Z,172nm,18.5s,baz=107,slow=45 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **19.00** | **78** | T | T | 01 00 38.6 | |
| | baz=267,slow=73,SNR=8.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.01** | **78** | T | T | 01 00 45.1 | |
| | baz=267,slow=73,SNR=5.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.01** | **78** | T | T | 01 00 46.5 | |
| | baz=267,slow=73,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.33** | **200** | P | **P** | **00 44 10.8** | **-1.0** |
| | 0.6nm,0.9s,baz=27,slow=9.8,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **40.95** | **199** | P | **P** | **00 44 41.8** | **-0.4** |
| | 0.3nm,0.7s,baz=22,slow=8.7,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **46.51** | **323** | P | **P** | **00 45 25.4** | **-1.3** |
| | 0.3nm,0.5s,baz=123,slow=10,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.40** | **323** | P | **P** | **00 47 14.8** | **-0.3** |
| | 0.4nm,0.4s,baz=126,slow=7.3,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.67** | **315** | P | **P** | **00 47 18.3** | **+1.0** |
| | 0.4nm,0.4s,baz=91,slow=8.1,SNR=13 | | | | | | |
| **ILAR** | **Eielson Array** | **65.98** | **25** | P | **P** | **00 47 44.9** | **-0.3** |
| | 0.2nm,0.4s,baz=252,slow=6.2,SNR=7.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.23** | **28** | P | **P** | **00 49 10.1** | **+0.7** |
| | 0.4nm,0.5s,baz=283,slow=5.4,SNR=7.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.98** | **343** | P | **P** | **00 49 39.6** | **+0.6** |
| | 6.9nm,1.2s,baz=61,slow=7.3,SNR=5.0 | | | | | | |

*IDC **07** 00:37:10.6±1.3, 18.67N×39.65E, h0km, mb3.7/8,*
*mb1 3.8/9, mb1mx3.6/47, mbtmp3.7/9, ML3.3/1, MS3.6/27,*
*Ms1 3.6/27, ms1mx3.4/78, Error ellipse: s-maj=31.5km*
*s-min=26.2km az=148.0*
*SGS **07** 00:37:11.6, 18.50N×40.01E, h7km, Ml3.0*
**ISC 07 00:37:10.8±0.8, 18°50N±0.06×39°92E±0.06, h10km, n53,**
**σ1§56/30, mb3.8/8, MS3.6/23, Red Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMGES** | **AMGES** | **1.53** | **91** | S | **Sn** | **00 37 54.9** | **-3.3** |
| AMGES | | | | P | **Pn** | **00 37 36.1** | **-2.1** |
| **QNF01** | **Al Qunfudhah** | **1.56** | **55** | P | **Pn** | **00 37 38.3** | **-1.5** |
| **QNFDS** | **Al Qunfudhah** | **1.61** | **36** | P | **Pn** | **00 37 38.2** | **-1.1** |
| **LTHS** | **Al Lith** | **1.83** | **14** | P | **Pn** | **00 37 41.6** | **-0.7** |
| **GHMGH** | **GHMGH** | **2.15** | **15** | P | **Pn** | **00 37 46.2** | **-0.5** |
| **DRBS** | **Ad Darb** | **2.36** | **106** | P | **Pn** | **00 37 48.8** | **-0.8** |
| **FRSS2** | **Sair Farasan I** | **2.42** | **132** | P | **Pn** | **00 37 48.5** | **-1.9** |
| **FRSS2** | **Sair Farasan I** | **2.42** | **132** | S | **Sn** | **00 38 18.2** | **-2.0** |
| **LBNS** | **Jabal Laban** | **2.53** | **360** | P | **Pn** | **00 37 50.5** | **-1.6** |
| **ENMS** | **ENMS** | **2.57** | **77** | P | **Pn** | **00 37 53.5** | **+0.8** |
| **FRAS** | **Faraa** | **2.61** | **12** | P | **Pn** | **00 37 53.1** | **-0.2** |
| **FRSS** | **Farasan al Kab** | **2.73** | **130** | P | **Pn** | **00 37 53.0** | **-1.7** |
| **MKHL** | **Mahalah** | **2.86** | **113** | P | **Pn** | **00 37 55.1** | **-1.4** |
| **SHMS** | | **2.94** | **356** | P | **Pn** | **00 37 56.9** | **-0.8** |
| **BESHS** | **BESHS** | **3.00** | **112** | P | **Pn** | **00 37 57.6** | **-0.8** |
| **JAZS** | **Jizan** | **3.19** | **116** | P | **Pn** | **00 38 00.3** | **-0.7** |
| **JURS** | **JURS** | **3.35** | **358** | P | **Pn** | **00 38 02.1** | **-1.3** |
| **KNGHS** | **KNGHS** | **3.40** | **93** | P | **Pn** | **00 38 05.5** | **+1.4** |
| **JAZS2** | **Jazan** | **3.44** | **120** | P | **Pg** | **00 38 20.6** | **+3.7** |
| **MQOL** | **MQOL** | **3.46** | **309** | *i* P | **Pn** | **00 38 05.3** | **+0.5** |
| MQOL | | | | AMP | | 00 38 42.1 | |
| | comp=Z,972nm,0.6s | | | | | | |
| **DJNS** | **Zahran al Janu** | **3.53** | **102** | P | **Pn** | **00 38 06.7** | **+0.7** |
| **ATD** | **Arta Tunnel** | **7.48** | **157** | Pn | Pn | 00 39 05.7 | +5.6 |
| | comp=Z,0.5nm,0.3s,baz=114,slow=23,SNR=1.2 | | | | | | |
| ATD | | | | LR | LR | 00 41 31.0 | |
| | comp=Z,179nm,19.8s,baz=354,slow=34 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **15.02** | **345** | LR | LR | 00 45 42.4 | |
| | comp=Z,121nm,18.5s,baz=344,slow=35 | | | | | | |
| **WSAR** | **Wadi Sarin** | **18.10** | **72** | LR | LR | 00 49 00.1 | |
| | comp=Z,149nm,20.2s,baz=298,slow=39 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **19.68** | **188** | LR | LR | 00 48 50.2 | |
| | comp=Z,148nm,19.2s,baz=5.0,slow=35 | | | | | | |
| **MBAR** | **Mbarara** | **21.02** | **206** | LR | LR | 00 48 48.2 | |
| | comp=Z,105nm,20.7s,baz=3.0,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **21.84** | **347** | P | **P** | **00 42 03.5** | **-0.2** |
| | comp=Z,4.6nm,1.1s,baz=168,slow=15,SNR=4.3 | | | | | | |
| BRTR | | | | LR | LR | 00 50 17.9 | |
| | comp=Z,71nm,18.6s,baz=176,slow=36 | | | | | | |
| **GNI** | **Garni** | **21.97** | **10** | LR | LR | 00 51 18.9 | |
| | comp=Z,93nm,20.4s,baz=214,slow=39 | | | | | | |
| **GEYT** | **Alibeck** | **25.05** | **36** | LR | LR | 00 53 26.4 | |
| | comp=Z,199nm,21.6s,baz=232,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **25.28** | **5** | LR | LR | 00 53 23.6 | |
| | comp=Z,100nm,18.6s,baz=190,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **33.24** | **348** | P | **P** | **00 43 47.7** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=169,slow=7.1,SNR=5.1 | | | | | | |
| **LSZ** | **Lusaka** | **35.50** | **200** | LR | LR | 00 58 41.3 | |
| | comp=Z,178nm,19.0s,baz=30,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **37.11** | **267** | P | **P** | **00 44 21.1** | **-0.8** |
| | comp=Z,1.2nm,0.9s,baz=80,slow=6.0,SNR=7.3 | | | | | | |
| **AAK** | **Ala-Archa** | **37.87** | **43** | LR | LR | 01 01 55.9 | |
| | comp=Z,100nm,18.9s,baz=256,slow=39 | | | | | | |
| **ARU** | **Arti** | **40.38** | **16** | LR | LR | 01 04 05.0 | |
| | comp=Z,58nm,20.1s,baz=241,slow=40 | | | | | | |
| **KIRV** | **Kirov** | **40.63** | | LR | LR | 01 04 38.5 | |
| | comp=Z,64nm,19.7s,baz=210,slow=41 | | | | | | |
| **PALK** | **Pallekele** | **41.19** | **100** | LR | LR | 01 00 08.4 | |
| | comp=Z,55nm,18.4s,baz=36,slow=33 | | | | | | |
| **MDT** | **Midelt** | **42.29** | **299** | LR | LR | 01 05 26.5 | |
| | comp=Z,86nm,18.2s,baz=94,slow=40 | | | | | | |
| **TSUM** | **Tsumeb** | **43.41** | **212** | LR | LR | 01 04 12.9 | |
| | comp=Z,53nm,20.3s,baz=56,slow=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.32** | **35** | LR | LR | 01 05 30.1 | |
| | comp=Z,58nm,20.1s,baz=243,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.69** | **41** | P | **P** | **00 45 26.6** | **+2.6** |
| | comp=Z,1.1nm,0.8s,baz=237,slow=7.5,SNR=9.3 | | | | | | |
| MKAR | | | | LR | LR | 01 06 26.8 | |
| | comp=Z,83nm,21.3s,baz=230,slow=39 | | | | | | |
| **DBIC** | **Dimbokro** | **45.13** | **261** | LR | LR | 01 03 13.7 | |
| | comp=Z,110nm,19.9s,baz=106,slow=35 | | | | | | |
| **LBTB** | **Lobatse** | **45.45** | **198** | LR | LR | 01 05 04.0 | |
| | comp=Z,70nm,20.9s,baz=12,slow=37 | | | | | | |
| **BOSA** | **Boshof** | **48.94** | **197** | LR | LR | 01 06 33.3 | |
| | comp=Z,101nm,18.7s,baz=20,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.33** | **33** | P | **P** | **00 46 00.8** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=243,slow=8.2,SNR=10 | | | | | | |
| ZALV | | | | LR | LR | 01 08 03.8 | |
| | comp=Z,43nm,18.7s,baz=300,slow=38 | | | | | | |
| **SUR** | **Sutherland** | **53.80** | **200** | LR | LR | 01 09 32.0 | |
| | comp=Z,127nm,18.9s,baz=34,slow=36 | | | | | | |
| **NRIK** | **Noril'sk** | **58.55** | **18** | LR | LR | 01 16 16.1 | |
| | comp=Z,76nm,18.2s,baz=276,slow=40 | | | | | | |
| **PSI** | **Prapat** | **59.77** | **98** | LR | LR | 01 11 49.6 | |
| | comp=Z,66nm,18.1s,baz=212,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **60.77** | **45** | P | **P** | **00 47 24.2** | **+1.1** |
| | comp=Z,0.5nm,0.9s,baz=270,slow=4.3,SNR=4.3 | | | | | | |
| **KSRS** | **Korea Array** | **77.45** | **55** | LR | LR | 01 27 30.1 | |
| | comp=Z,62nm,18.4s,baz=75,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **90.86** | **32** | LR | LR | 01 36 23.6 | |
| | comp=Z,50nm,18.8s,baz=53,slow=39 | | | | | | |
| **INK** | **Inuvik** | **93.31** | **358** | P | **P** | **00 50 25.0** | **-0.6** |
| | comp=Z,2.0nm,1.1s,baz=315,slow=4.3,SNR=3.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.80** | **348** | P | **P** | **00 50 41.3** | **-0.3** |
| | comp=Z,0.1nm,0.4s,baz=38,slow=4.1,SNR=1.5 | | | | | | |

*KRNET **07** 00:45:53.7±0.1, 40.40N×73.54E, h14km, mb2.8*
*SOME **07** 00:45:55.3, 40.45N×73.50E, h10km*
*NNC **07** 00:45:57.6±2.0, 40.58N×73.57E, h0km, mb3.6, mpv3.2,*
*Error ellipse: s-maj=15.9km s-min=7.8km az=168.0*
**ISC 07 00:45:52.5±1.0, 40°43N±0.03×73°50E±0.02, h18km±10km,**
**n54, σ1§25/84, 18C-16D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.41** | **179** | ⇑*e*P | **Pg** | **00 46 01.0** | **0.0** |
| | baz=84 | | | | | | |
| SFK | | | | ⇑*e*S | **Sg** | **00 46 06.3** | **-0.5** |
| | baz=84 | | | | | | |
| **SALK** | **Salom-Alik** | **0.52** | **28** | ⇓*e*P | **Pb** | **00 46 03.8** | **+0.6** |
| | baz=24 | | | | | | |
| SALK | | | | ⇓*e*S | **Sb** | **00 46 10.9** | **+0.5** |
| | baz=24 | | | | | | |
| **OHH** | **Osh** | **0.55** | **281** | ⇑*i*P | **Pn** | **00 46 05.4** | **-0.2** |
| | baz=82 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **00 46 13.0** | **+1.7** |
| | baz=82 | | | | | | |
| **ARLS** | **Aral** | **1.56** | **23** | ⇓*i*P | **Pg** | **00 46 22.9** | **+0.3** |
| | baz=22 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sg** | **00 46 44.1** | **+1.1** |
| | baz=22 | | | | | | |
| **DRK** | **Karamyk** | **1.61** | **235** | ⇑*e*P | **Pg** | **00 46 23.8** | **+0.3** |
| | baz=36 | | | | | | |
| DRK | | | | ⇑*i*S | **Sg** | **00 46 45.5** | **+1.0** |
| | baz=36 | | | | | | |
| **AML** | **Almayashu** | **1.71** | **5** | P | **Pg** | **00 46 27.0** | **+1.6** |
| | SNR=77 | | | | | | |
| **ARK** | **Arkit** | **1.79** | **320** | ⇑*i*P | **Pg** | **00 46 27.7** | **+0.7** |
| | baz=20 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **00 46 51.8** | **+1.5** |
| | baz=20 | | | | | | |
| **UCH** | **Uchtor** | **1.96** | **23** | P | **Pg** | **00 46 31.2** | **+1.1** |
| | SNR=19 | | | | | | |
| **UCH** | **Uchtor** | **1.96** | **23** | ⇓*i*P | **Pg** | **00 46 29.9** | **-0.2** |
| | baz=22 | | | | | | |
| UCH | | | | ⇓*i*S | **Sg** | **00 46 56.0** | **+0.4** |
| | baz=22 | | | | | | |
| **BTK** | **Batken** | **2.08** | **261** | ⇑*e*P | **Pg** | **00 46 31.9** | **-0.5** |
| | baz=62 | | | | | | |
| BTK | | | | ⇑*e*S | **Sg** | **00 46 59.1** | **-0.4** |
| | baz=62 | | | | | | |
| **TRKS** | **Terek-Say** | **2.10** | **303** | ⇑*i*P | **Pg** | **00 46 31.5** | **-1.2** |
| | baz=1.0 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **00 46 58.5** | **-1.5** |
| | baz=1.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.24** | **5** | P | **Pg** | **00 46 35.8** | **+0.2** |
| | SNR=5.5 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.24** | **5** | ⇓*e*P | **Pg** | **00 46 34.1** | **-1.4** |
| | baz=4.0 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sg** | **00 47 02.8** | **-1.9** |
| | baz=4.0 | | | | | | |
| **MRKS** | **Merke** | **2.33** | **355** | *e*P | **Pg** | **00 46 38.5** | **+1.4** |
| | 21nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **00 47 10.1** | **+2.8** |
| | 42nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **2.33** | **355** | Pg | **Pg** | **00 46 38.5** | **+1.4** |
| | 21nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 00 47 10.1 | |
| | 42nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **2.33** | **18** | P | **Pg** | **00 46 37.1** | **-0.1** |
| | SNR=9.6 | | | | | | |
| **AAK** | **Ala-Archa** | **2.33** | **18** | ⇑Pg | **Pg** | **00 46 36.8** | **-0.4** |
| | 3.8nm,0.3s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 00 47 08.5 | |
| | 13nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.33** | **18** | ⇓*e*P | **Pg** | **00 46 35.2** | **-2.1** |
| | baz=18 | | | | | | |
| AAK | | | | ⇓*i*S | **Sg** | **00 47 04.8** | **-2.7** |
| | baz=18 | | | | | | |
| **KBK** | **Karagaybulak** | **2.48** | **26** | P | **Pg** | **00 46 39.7** | **-0.3** |
| | SNR=15 | | | | | | |
| **KBK** | **Karagaybulak** | **2.48** | **26** | ⇑*i*P | **Pb** | **00 46 37.1** | **+0.5** |
| | baz=25 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **00 47 08.3** | **+1.3** |
| | baz=25 | | | | | | |
| **ULHL** | **Ulahol** | **2.75** | **48** | P | **Pg** | **00 46 45.8** | **+0.5** |
| | SNR=6.7 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.76** | **41** | ⇓*i*P | **Pb** | **00 46 40.9** | **-0.5** |
| | baz=40 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sb** | **00 47 15.0** | **0.0** |
| | baz=40 | | | | | | |
| **GAR** | **Garm** | **2.83** | **241** | ⇑*i*P | **Pb** | **00 46 42.2** | **-0.4** |
| | baz=42 | | | | | | |
| GAR | | | | ⇑*i*S | **Sb** | **00 47 16.8** | **-0.3** |
| | baz=42 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.95** | **32** | ⇑Pg | **Pg** | **00 46 49.5** | **+0.5** |
| | 3.7nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 00 47 27.4 | |
| | 2.6nm,0.3s | | | | | | |
| **IUG** | **Iuzhnay** | **3.13** | **305** | *e*P | **Pg** | **00 46 52.6** | **+0.3** |
| | 92nm,0.2s | | | | | | |
| IUG | | | | *e*S | **Sg** | **00 47 34.1** | **+1.2** |
| | 27nm,0.4s | | | | | | |
| **IUG** | **Iuzhnay** | **3.13** | **305** | Pg | **Pg** | **00 46 52.6** | **+0.3** |
| | 92nm,0.2s | | | | | | |
| IUG | | | | Lg | Lg | 00 47 34.1 | |
| | 27nm,0.4s | | | | | | |
| **SGDS** | **Sogindy** | **3.14** | **15** | *e*P | **Pg** | **00 46 51.5** | **-1.1** |
| | 1.7nm,0.3s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **00 47 32.0** | **-1.3** |
| | 6.6nm,0.4s | | | | | | |
| **SGDS** | **Sogindy** | **3.14** | **15** | Pg | **Pg** | **00 46 51.5** | **-1.1** |
| | 1.7nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 00 47 32.0 | |
| | 6.6nm,0.4s | | | | | | |
| **KST** | **Kastek** | **3.20** | **34** | *e*P | **Pg** | **00 46 53.5** | **-0.4** |
| | 1.4nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sg** | **00 47 35.4** | **+0.1** |
| | 4.2nm,0.4s | | | | | | |
| **KST** | **Kastek** | **3.20** | **34** | Pg | **Pg** | **00 46 53.5** | **-0.4** |
| | 1.4nm,0.2s | | | | | | |
| KST | | | | Lg | Lg | 00 47 35.4 | |
| | 4.2nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **3.29** | **30** | *e*P | **Pg** | **00 46 55.9** | **+0.5** |
| | 3.8nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sg** | **00 47 39.6** | **+1.5** |
| | 7.3nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.29** | **30** | Pg | **Pg** | **00 46 55.9** | **+0.5** |
| | 3.8nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 00 47 39.6 | |
| | 7.3nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.48** | **38** | *e*P | **Pg** | **00 46 58.5** | **-0.6** |
| | 3.1nm,0.4s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **00 47 44.1** | **-0.2** |
| | 5.6nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **3.48** | **38** | Pg | **Pg** | **00 46 58.5** | **-0.6** |
| | 3.1nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 00 47 44.1 | |
| | 5.6nm,0.4s | | | | | | |
| **KK08** | **Karatay Array** | **3.50** | **321** | ⇓Pg | **Pg** | **00 46 58.7** | **-0.7** |
| | 1.0nm,0.5s,baz=131,slow=16 | | | | | | |
| KK08 | | | | ⇓Lg | Lg | 00 47 44.1 | |
| | 1.3nm,0.3s,baz=129,slow=30 | | | | | | |
| **KRBS** | **Karabastau** | **3.65** | **26** | *e*P | **Pg** | **00 47 01.1** | **-1.2** |
| | 2.3nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **00 47 48.5** | **-1.1** |
| | 4.6nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.65** | **26** | Pg | **Pg** | **00 47 01.1** | **-1.2** |
| | 2.3nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 00 47 48.5 | |
| | 4.6nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.67** | **44** | *e*P | **Pg** | **00 47 02.4** | **-0.5** |
| | 1.7nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 47 50.6** | **+0.2** |
| | 6.3nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.67** | **44** | Pg | **Pg** | **00 47 02.3** | **-0.5** |
| | 1.7nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 00 47 50.6 | |
| | 6.3nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **3.78** | **315** | *e*P | **Pg** | **00 47 03.2** | **-1.6** |
| | 3.9nm,0.3s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **00 47 52.0** | **-1.7** |
| | 4.4nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **3.78** | **315** | Pg | **Pg** | **00 47 03.2** | **-1.6** |
| | 3.9nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 00 47 52.0 | |
| | 4.4nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **3.81** | **43** | *e*P | **Pg** | **00 47 04.9** | **-0.6** |
| | 2.3nm,0.4s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **00 47 55.0** | **+0.1** |
| | 7.7nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.81** | **43** | Pg | **Pg** | **00 47 04.9** | **-0.6** |
| | 2.3nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 00 47 55.0 | |
| | 7.7nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.90** | **43** | *e*P | **Pg** | **00 47 06.5** | **-0.5** |
| | 2.1nm,0.6s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **00 47 57.8** | **+0.2** |
| | 20nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.90** | **43** | Pg | **Pg** | **00 47 06.5** | **-0.5** |
| | 2.1nm,0.6s | | | | | | |
| KOTS | | | | Lg | Lg | 00 47 57.8 | |
| | 20nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **4.05** | **35** | *e*P | **Pg** | **00 47 08.6** | **-1.4** |
| | 1.4nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 48 01.3** | **-1.2** |
| | 8.8nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.05** | **35** | Pg | **Pg** | **00 47 08.6** | **-1.4** |
| | 1.4nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 00 48 01.3 | |
| | 8.8nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **4.06** | **30** | *e*P | **Pg** | **00 47 08.8** | **-1.4** |
| | 2.5nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sg** | **00 48 01.6** | **-1.2** |
| | 4.1nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **4.06** | **30** | Pg | **Pg** | **00 47 08.7** | **-1.4** |
| | 2.5nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 00 48 01.6 | |
| | 4.1nm,0.4s | | | | | | |
| **SATY** | **Saty** | **4.52** | **53** | *e*P | **Pg** | **00 47 19.7** | **+0.7** |
| | 0.5nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 48 20.4** | **+2.9** |
| | 4.4nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **4.60** | **52** | Pg | **Pb** | **00 47 14.8** | **+2.1** |
| | 1.8nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 00 48 12.0 | |
| | 12nm,0.1s | | | | | | |
| **KPKS** | **Kokpek** | **4.92** | **50** | *e*P | **Pg** | **00 47 24.6** | **-2.0** |
| | 0.7nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 48 28.8** | **-1.5** |
| | 4.1nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.96** | **39** | *e*P | **Pg** | **00 47 24.9** | **-2.6** |
| | 1.2nm,0.7s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **00 48 29.2** | **-2.5** |
| | 3.1nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.96** | **39** | Pg | **Pg** | **00 47 24.9** | **-2.6** |
| | 1.2nm,0.7s | | | | | | |
| ARXS | | | | Lg | Lg | 00 48 29.2 | |
| | 3.1nm,0.5s | | | | | | |

*IDC **07** 00:50:02.8±0.6, 45.02N×39.37E, h0km, mb3.7/7,*
*mb1 3.8/15, mb1mx3.6/50, mbtmp3.7/15, ML3.4/6, Error*
*ellipse: s-maj=11.8km s-min=6.6km az=27.0*
*MOS **07** 00:50:06.8±0.0, 44.93N×39.46E, h22km, MPVA4.6, Felt*
*II-III MSK at Maikop*
**ISC 07 00:50:05.9±1.2, 45°05N±0.03×39°42E±0.02, h26km±11km,**
**n79, σ2§72/126, mb3.7/8, 7C-8D,**
**Ukraine-Moldova-Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KGUR** | **Krasnodar** | **0.28** | **264** | *i* Pg | **Pn** | **00 50 15.4** | **+1.0** |
| KGUR | | | | *e*Sg | **Sn** | **00 50 21.2** | **+1.5** |
| **GOYR** | **Goytkh** | **0.81** | **182** | *e*Pg | **Pb** | **00 50 21.1** | **-0.3** |
| GOYR | | | | *e*Sg | **Sb** | **00 50 30.8** | **-1.0** |
| **ERBR** | **Yeremizino-Bor** | **1.00** | **48** | *i* Pg | **Pb** | **00 50 26.9** | **+2.3** |
| ERBR | | | | *e*Sg | **Sn** | **00 50 41.5** | **+4.0** |
| **SPGR** | **Shapsug** | **1.01** | **253** | *e*Pg | **Pb** | **00 50 26.2** | **+1.4** |
| SPGR | | | | *e*Sg | **Sn** | **00 50 41.3** | **+3.6** |
| **LABN** | **Labinsk** | **1.01** | **114** | *i* Pg | **Pb** | **00 50 25.9** | **+1.1** |
| LABN | | | | *e*Sg | **Sn** | **00 50 40.8** | **+2.9** |
| **GL1R** | **Gelendzhik** | **1.09** | **243** | *i* Pg | **Pb** | **00 50 27.8** | **+1.8** |
| GL1R | | | | *e*Sg | **Sn** | **00 50 43.4** | **+3.8** |
| **LZRR** | **Lazarevskoye** | **1.12** | **182** | *e*Pg | **Pb** | **00 50 27.2** | **+0.6** |
| LZRR | | | | *e*Sg | **Sn** | **00 50 42.8** | **+2.4** |
| **GUZR** | **Guzeripl'** | **1.17** | **155** | *i* Pg | **Pn** | **00 50 26.7** | **+0.1** |
| GUZR | | | | *e*Sg | **Sn** | **00 50 40.8** | **-1.0** |
| **AHMR** | **Akhmetovskaya** | **1.46** | **127** | *i* Pg | **Pn** | **00 50 30.9** | **+0.2** |
| AHMR | | | | *i* Sg | **Sb** | **00 50 50.6** | **-0.1** |
| **RPOR** | **Krasnaya Polya** | **1.48** | **156** | *i* Pg | **Pn** | **00 50 31.6** | **+0.6** |
| RPOR | | | | *i* Sg | **Sn** | **00 50 49.7** | **+0.2** |
| **SOC** | **Sochi** | **1.48** | **172** | *i* Pg | **Pb** | **00 50 32.4** | **-0.5** |
| SOC | | | | *e*Sg | **Sb** | **00 50 51.4** | **+0.1** |
| **VSLR** | **Vesyoloye** | **1.65** | **164** | *e*Pg | **Pb** | **00 50 35.0** | **-0.7** |
| VSLR | | | | *i* Sg | **Sn** | **00 50 54.5** | **+0.9** |
| **NVNR** | **Nevinnomyssk** | **1.86** | **103** | *i* Pg | **Pn** | **00 50 37.8** | **+1.6** |
| NVNR | | | | *e*Sg | **Sb** | **00 51 00.8** | **-1.2** |
| **ARXR** | **Arkhyz** | **2.00** | **138** | *e*Pg | **Pb** | **00 50 40.2** | **-1.4** |
| ARXR | | | | *i* Sg | **Sn** | **00 51 03.9** | **+1.5** |
| **DOMR** | **Dombai** | **2.37** | **137** | *i* Pn | **Pb** | **00 50 46.0** | **-2.0** |
| DOMR | | | | *e*Sn | **Sn** | **00 51 12.6** | **+1.0** |
| **ALER** | **Alexandrovskoy** | **2.50** | **95** | *e*Pn | **Pn** | **00 50 46.3** | **+1.4** |
| ALER | | | | *e*Sn | **Sn** | **00 51 17.2** | **+2.7** |
| **GOF** | **Gofitskoye** | **2.56** | **89** | *e*Pn | **Pn** | **00 50 47.6** | **+1.8** |
| GOF | | | | *e*Sn | **Sn** | **00 51 19.4** | **+3.2** |
| **KIV** | **Kislovodsk** | **2.58** | **114** | *e*Pn | **Pn** | **00 50 47.4** | **+1.3** |
| KIV | | | | *e*Sn | **Sn** | **00 51 19.2** | **+2.5** |
| **KIV0** | **Kislovodsk Arr** | **2.58** | **114** | *e*Pn | **Pn** | **00 50 47.5** | **+1.4** |
| KIV0 | | | | *e*Sn | **Sb** | **00 51 20.3** | **-2.7** |
| **KVAR** | **Kislovodsk Arr** | **2.58** | **114** | Pn | **Pn** | **00 50 48.0** | **+1.8** |
| | baz=67,slow=22,SNR=15 | | | | | | |
| KVAR | | | | Sn | **Sn** | **00 51 19.4** | **+2.5** |
| | baz=251,slow=20,SNR=13 | | | | | | |
| **BEYR** | **Belyy Ugol+** | **2.64** | **112** | *e*Pn | **Pn** | **00 50 48.6** | **+1.7** |
| BEYR | | | | *e*Sn | **Sn** | **00 51 21.0** | **+3.0** |
| **SHA1** | **Shidzhatmaz** | **2.67** | **118** | *e*Pn | **Pn** | **00 50 48.8** | **+1.4** |
| SHA1 | | | | *e*Sn | **Sn** | **00 51 20.9** | **+2.0** |
| **PYA1** | **Pyatigorsk** | **2.81** | **109** | *e*Pn | **Pn** | **00 50 50.1** | **+1.0** |
| PYA1 | | | | *e*Sn | **Sn** | **00 51 24.6** | **+2.4** |
| **KBZ** | **Khabaz** | **2.82** | **117** | Pn | **Pn** | **00 50 50.3** | **+1.1** |
| | 6.2nm,0.3s,baz=274,slow=7.6,SNR=142 | | | | | | |
| KBZ | | | | Sn | **Sn** | **00 51 24.9** | **+2.5** |
| | 37nm,0.3s,baz=8.1,slow=18,SNR=9.8 | | | | | | |
| **KBZ** | **Khabaz** | **2.82** | **117** | *e*Pn | **Pn** | **00 50 50.8** | **+1.5** |
| KBZ | | | | *e*Sn | **Sn** | **00 51 24.5** | **+2.1** |
| **NEY** | **Neytrino** | **2.98** | **126** | *e*Pn | **Pn** | **00 50 54.6** | **+3.0** |
| NEY | | | | *e*Sn | **Sn** | **00 51 27.6** | **+1.0** |
| **SUDU** | **Sudak** | **3.14** | **269** | *e*Pn | **Pn** | **00 50 55.3** | **+1.6** |
| SUDU | | | | *e*Sn | **Sn** | **00 51 32.7** | **+2.3** |
| **NCK** | **Nalchik** | **3.38** | **116** | *e*Pn | **Pn** | **00 51 00.5** | **+3.5** |
| NCK | | | | *e*Sn | **Sn** | **00 51 33.8** | **-2.4** |

MLR Sn **Sn** **00 54 04.3 -3.1**
0.5nm,0.3s,baz=195,slow=20,SNR=2.1
**DOPR Dopca 9.90 280** ⇓P **Pn** **00 52 26.9 +0.4**
**VOIR 10.15 277** ⇓P **Pn** **00 52 29.9 0.0**
**BURAR Bucovina Array 10.15 290** ⇓P **Pn** **00 52 30.6 +0.5**
**AKTO Aktyubinsk 13.61 60** Pn **Pn** **00 53 13.4 -3.7**
0.5nm,0.3s,baz=252,slow=7.0,SNR=6.1
AKTO Sn Sn 00 55 34.7 -13
0.2nm,0.3s,baz=205,slow=16,SNR=2.0
**FINES FINESS Array B 18.19 339** Pn **Pn** **00 54 11.3 -5.1**
0.4nm,0.3s,baz=154,slow=14,SNR=12
**HFS Hagfors 21.52 324** P **P** **00 54 52.1 -0.6**
2.2nm,0.5s,baz=122,slow=14,SNR=2.6
**BVAR Borovoye Array 21.68 57** P **P** **00 54 54.8 +0.4**
0.4nm,0.7s,baz=282,slow=6.8,SNR=2.2
**NOA NORSAR Array B 23.04 324** P **P** **00 55 07.8 -1.1**
19nm,0.5s,baz=121,slow=9.9,SNR=1.8
**ARCES ARCESS Array B 25.54 349** P **P** **00 55 32.8 +0.7**
3.4nm,1.1s,baz=161,slow=6.6,SNR=6.5
**KURBB Kurchatov Arra 26.60 64** P **P** **00 55 42.6 +0.7**
1.7nm,0.2s,baz=267,slow=10,SNR=2.0
**MKAR Makanchi Array 29.60 71** P **P** **00 56 09.8 +1.0**
0.6nm,0.5s,baz=289,slow=7.7,SNR=16
**ZALV Zalesovo Beam 30.32 56** P **P** **00 56 14.2 -0.8**
0.3nm,0.4s,baz=266,slow=8.5,SNR=2.0
**TORD Torodi Ar. Bea 45.13 237** P **P** **00 58 20.5 +0.2**
0.4nm,0.6s,baz=37,slow=8.2,SNR=2.6

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*IDC* ***07*** *00:58:43.0±6.0, 14.˚34S×167.˚24E, h92km±57km, mb3.4/7, mb1 3.6/8, mb1mx3.2/36, mbtmp3.8/8, ML3.6/1, Error ellipse: s-maj=57.0km s-min=29.3km az=153.0*
**ISC 07 00:58:43.3±1.1, 14.˚54S±0.˚10×167.˚4E±0.˚2, h100km, n9, σ1§57/11, mb3.7/6, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **7.55** | **187** | P | | **Pn** | **Pn** | **01 00 32.6** | **+1.9** |
| | 1.0nm,0.3s,baz=292,slow=20,SNR=16 | | | | | | | | |
| DZM | | | | S | | **Sn** | **Sn** | **01 01 52.0** | **-2.8** |
| | 0.4nm,0.3s,baz=315,slow=23,SNR=1.3 | | | | | | | | |
| **CTA** | **Charters Tower** | **20.90** | **252** | P | | **P** | **P** | **01 03 18.4** | **+0.6** |
| | 4.4nm,0.8s,baz=75,slow=12,SNR=6.2 | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.19** | **229** | P | | **P** | **P** | **01 04 36.4** | **+0.9** |
| | 1.3nm,0.4s,baz=43,slow=9.0,SNR=7.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.97** | **256** | P | | **P** | **P** | **01 04 59.7** | **-0.3** |
| | 0.1nm,0.3s,baz=85,slow=9.7,SNR=5.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.84** | **249** | P | | **P** | **P** | **01 05 07.5** | **-0.1** |
| | 0.6nm,0.4s,baz=77,slow=9.4,SNR=22 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **PcP** | **01 07 49.3** | **-1.2** |
| | 0.2nm,0.5s,baz=84,slow=2.1,SNR=2.2 | | | | | | | | |
| **SONM** | **Songino Array** | **82.40** | **324** | P | | **P** | **P** | **01 10 52.3** | **-2.2** |
| | 0.3nm,1.0s,baz=114,slow=3.6,SNR=1.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.31** | **18** | P | | **P** | **P** | **01 11 13.9** | **+0.3** |
| | 0.5nm,0.8s,baz=229,slow=4.1,SNR=4.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **97.13** | **316** | P | | **P** | **P** | **01 12 05.0** | **+0.6** |
| | 0.2nm,0.6s,baz=104,slow=6.1,SNR=1.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.09** | **345** | PKP | | **PKiKP** | **PKiKP** | **01 17 22.8** | **+0.9** |
| | 2.1nm,0.9s,baz=81,slow=1.5,SNR=11 | | | | | | | | |

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*NEIC* ***07*** *01:09:48.7±1.8, 36.˚77N±0.˚06×140.˚55E±0.˚08, h5km±4km, mb4.6/105, Error ellipse: s-maj=9.1km s-min=7.8km az=114.0*
*NIED* ***07*** *01:09:48.9, 36.˚74N×140.˚58E, h10km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr-1.43; Mθθ-0.01; Mϕϕ1.45; Mrθ0.49; Mθϕ0.34; Mϕr0.71; Fault plane solution: M₀1.71000×10¹⁵ NP1: ϕs203.00000°, δ60.00000°, λ-78.00000°. NP2:ϕs1.00000°, δ32.00000°, λ-109.00000°.*
*JMA* ***07*** *01:09:48.9, 36.˚74N×140.˚58E, h10km, M4.4 Broadband fault plane solution: P waves. NP1:ϕs26.00000°, δ38.00000°, λ-101.00000°. NP2:ϕs220.00000°, δ52.00000°, λ-81.00000°. Principal axes: T Plg7.0000°, Azm304.0000°; N Plg7.0000°, Azm35.0000°; P Plg80.0000°, Azm169.0000°;*
*JMA Felt IV J1.*
*MOS* ***07*** *01:09:49.1±1.1, 36.˚73N×140.˚75E, h37km, mb4.7/15 Error ellipse: s-maj=10.2km s-min=5.8km az=94.7*
*IDC* ***07*** *01:09:53.9±2.2, 36.˚71N×140.˚35E, h53km±20km, mb4.0/26, mb1 4.1/28, mb1mx3.9/59, mbtmp4.2/28, ML3.6/2, MS3.3/7, Ms1 3.3/7, ms1mx2.8/93, Error ellipse: s-maj=14.6km s-min=12.4km az=74.0*
**ISC 07 01:09:48.5±0.8, 36.˚76N±0.˚02×140.˚67E±0.˚04, h12km±5km, n204, σ1§58/183, mb4.5/95, MS3.9/7, 16C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.17** | **209** | ⇑P | | **Pg** | **Pg** | **01 09 51.9** | **-0.5** |
| JHO | | | | S | | **Sg** | **Sg** | **01 09 54.1** | **-0.9** |
| **JFFD** | **Fukushimafurud** | **0.34** | **345** | ⇑P | | **Pg** | **Pg** | **01 09 55.8** | **+0.4** |
| JFFD | | | | S | | **Sg** | **Sg** | **01 10 00.6** | **+0.5** |
| **ONAJ** | **Iwakimizuishiy** | **0.36** | **17** | P | | **Pb** | **Pb** | **01 09 56.9** | **0.0** |
| ONAJ | | | | S | | **Sb** | **Sb** | **01 10 02.6** | **+0.1** |
| **JHYU** | **Hitachinakayam** | **0.42** | **189** | ⇑P | | **Pg** | **Pg** | **01 09 56.8** | **-0.1** |
| JHYU | | | | S | | **Sg** | **Sg** | **01 10 02.4** | **-0.1** |
| **JFK** | **Kawauchi** | **0.63** | **15** | ⇑P | | **Pb** | **Pb** | **01 10 01.5** | **0.0** |
| JFK | | | | S | | **Sb** | **Sb** | **01 10 10.2** | **0.0** |
| **JSB** | **Shiboa** | **0.64** | **289** | ⇑P | | **Pg** | **Pg** | **01 10 00.5** | **-0.4** |
| **JYT** | **Yasato** | **0.66** | **216** | ⇓P | | **Pg** | **Pg** | **01 10 00.3** | **-0.9** |
| JYT | | | | S | | **Sg** | **Sg** | **01 10 08.8** | **-1.1** |
| **JYT** | **Yasato** | **0.66** | **216** | Pg | | **Pg** | **Pg** | **01 10 00.5** | **-0.8** |
| **JFT** | **Otama** | **0.80** | **341** | ⇑P | | **Pg** | **Pg** | **01 10 04.1** | **0.0** |
| JFT | | | | S | | **Sg** | **Sg** | **01 10 14.8** | **+0.2** |
| **JMM** | **Marumori** | **1.11** | **5** | | | **Pb** | **Pb** | **01 10 09.5** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **1.99** | **264** | P | | **Pn** | **Pn** | **01 10 21.6** | **-0.5** |
| | 17nm,0.3s,baz=81,slow=11,SNR=361 | | | | | | | | |
| MJAR | | | | S | | **Sn** | **Sn** | **01 10 45.7** | **-1.2** |
| | 42nm,0.3s,baz=43,slow=24,SNR=5.8 | | | | | | | | |
| MJAR | | | | LR | | LR | LR | 01 11 08.0 | |
| | comp=Z,89nm,19.0s,baz=72,slow=43 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.99** | **264** | | | **Pn** | **Pn** | **01 10 22.2** | **+0.2** |
| **MAJO** | **Matsushiro** | **1.99** | **265** | *c* | *i*P | **Pn** | **Pn** | **01 10 21.6** | **-0.5** |
| **MAJO** | **Matsushiro** | **1.99** | **265** | | | **Pn** | **Pn** | **01 10 22.4** | **+0.3** |
| **MAT** | **Matsushiro** | **1.99** | **265** | P | | **Pn** | **Pn** | **01 10 22.2** | **+0.1** |
| MAT | | | | S | | **Sn** | **Sn** | **01 10 46.9** | **-0.1** |
| **MJB9** | **Matsu-Tunnel** | **2.00** | **265** | | | **Pn** | **Pn** | **01 10 22.4** | **+0.3** |
| **JSD** | **Sado** | **2.31** | **304** | Pn | | **Pn** | **Pn** | **01 10 26.4** | **+0.1** |
| **JGF** | **Kuroka** | **2.92** | **248** | | | **Pn** | **Pn** | **01 10 35.6** | **+0.8** |
| **INU** | **Inuyama** | **3.28** | **246** | | | **Pn** | **Pn** | **01 10 40.6** | **+0.9** |
| **JHJ** | **Hachijo jima 2** | **3.70** | **192** | P | | **Pn** | **Pn** | **01 10 46.2** | **+0.7** |
| | 33nm,0.3s,baz=99,slow=24,SNR=6.1 | | | | | | | | |
| JHJ | | | | S | | **Sn** | **Sn** | **01 11 30.6** | **+1.5** |
| | 34nm,0.3s,baz=253,slow=23,SNR=1.7 | | | | | | | | |
| **JTM** | **Tenmabayashi** | **4.03** | **4** | | | **Pn** | **Pn** | **01 10 52.5** | **+2.4** |
| **ERM** | **Erimo** | **5.59** | **19** | *i* P | | **Pn** | **Pn** | **01 11 12.8** | **+1.3** |
| **ERM** | **Erimo** | **5.59** | **19** | Pn | | **Pn** | **Pn** | **01 11 12.7** | **+1.3** |
| **JEW** | **Eniwo** | **6.10** | **5** | Pn | | **Pn** | **Pn** | **01 11 21.1** | **+2.6** |
| **JHS** | **Saijyo** | **6.38** | **256** | | | **Pn** | **Pn** | **01 11 22.8** | **+0.4** |
| **ASAJ** | **Asahikawa** | **7.49** | **11** | P | | **Pn** | **Pn** | **01 11 38.6** | **+1.0** |
| | 3.1nm,0.3s,baz=274,slow=5.9,SNR=10 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **7.49** | **11** | | | **Pn** | **Pn** | **01 11 40.0** | **+2.4** |
| **NMR** | **Nemuro--Hokkai** | **7.66** | **29** | *e*P | | **Pn** | **Pn** | **01 11 38.6** | **-1.2** |
| NMR | | | | *e*S | | **Sn** | **Sn** | **01 13 01.1** | **-5.3** |
| **RUSJ** | **Misakicho** | **8.12** | **24** | *e*P | | **Pn** | **Pn** | **01 11 46.9** | **+0.7** |
| RUSJ | | | | *e*S | | **Sn** | **Sn** | **01 13 15.8** | **-2.1** |
| **YUK** | **Yuzh-Kuril'sk** | **8.27** | **27** | *e*P | | **Pn** | **Pn** | **01 11 47.9** | **-0.4** |
| YUK | | | | *e*S | | **Sn** | **Sn** | **01 13 17.8** | **-3.8** |
| YUK | | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.2s | | | | | | | | |
| **SHO** | **Shikotan** | **8.52** | **32** | *e*P | | **Pn** | **Pn** | **01 11 49.7** | **-1.9** |
| SHO | | | | *e*S | | **Sn** | **Sn** | **01 13 21.1** | **-6.5** |
| **USRK** | **Ussuriysk Ar.** | **9.94** | **321** | P | | Pn | Pn | 01 12 17.8 | +6.7 |
| | baz=123,slow=14,SNR=12 | | | | | | | | |
| USRK | | | | LR | | LR | LR | 01 15 58.0 | |
| | comp=Z,131nm,19.6s,baz=176,slow=37 | | | | | | | | |
| **KUR** | **Kuril'sk** | **10.06** | **30** | P | | Pn | Pn | 01 12 06.8 | -5.9 |
| KUR | | | | S | | **Sn** | **Sn** | **01 14 02.0** | **-3.4** |
| **KSRS** | **Korea Array** | **10.21** | **278** | P | | **Pn** | **Pn** | **01 12 17.5** | **+2.7** |
| | comp=Z,0.2nm,0.3s,baz=90,slow=14,SNR=4.9 | | | | | | | | |
| KSRS | | | | LR | | LR | LR | 01 15 53.5 | |
| | comp=Z,100nm,19.8s,baz=115,slow=36 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **10.30** | **8** | *e*P | | **Pn** | **Pn** | **01 12 17.2** | **+1.1** |
| YSS | | | | *e*S | | **Sn** | **Sn** | **01 14 06.1** | **-5.4** |
| YSS | | | | | MLR | MLR | | | |
| | comp=Z,300nm,10.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=N,200nm,15.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=E,200nm,16.0s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **YSS** | **Yuzh-Sakhalins** | **10.30** | **8** | | | **Pn** | **Pn** | **01 12 17.6** | **+1.5** |
| **MDJ** | **Mudanjiang** | **11.49** | **316** | P | | Pn | Pn | 01 12 40.5 | +8.1 |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,200nm,5.9s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **11.49** | **316** | Pn | | **Pn** | **Pn** | **01 12 32.5** | **+0.1** |
| **BNX** | **BinXian** | **13.40** | **316** | ⇑P | | **P** | **P** | **01 13 04.0** | **-4.0** |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,270nm,4.9s | | | | | | | | |
| **KLR** | **Kul'dur** | **14.05** | **335** | P | | **Pn** | **Pn** | **01 13 10.7** | **+3.3** |
| | comp=Z,0.1nm,0.3s,baz=128,slow=12,SNR=5.8 | | | | | | | | |
| KLR | | | | | LR | LR | | 01 17 42.5 | |
| | comp=Z,59nm,20.8s,baz=146,slow=34 | | | | | | | | |
| **TYV** | **Tymovskoe** | **14.17** | **5** | *e*P | | **Pn** | **Pn** | **01 13 10.1** | **+1.2** |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,200nm,3.7s | | | | | | | | |
| **NJ2** | **Nanjing** | **18.59** | **262** | *e*P | | **P** | **P** | **01 14 05.1** | **-0.5** |
| NJ2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **TIA** | **Tai'an** | **18.94** | **275** | P | | **Pn** | **Pn** | **01 14 13.9** | **+3.9** |
| TIA | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **ZEA** | **Zeya** | **19.37** | **335** | *e*P | | **P** | **P** | **01 14 10.0** | **-3.9** |
| ZEA | | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.3s | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.3s | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| **BJT** | **Baijiatuan** | **19.46** | **287** | P | | **P** | **P** | **01 14 12.6** | **-2.4** |
| **XLT** | **XiLinHaoTe** | **20.01** | **298** | *e*P | | **P** | **P** | **01 14 19.1** | **-2.0** |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,170nm,6.3s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.23** | **31** | P | | Pn | | 01 14 27.9 | +2.7 |
| | comp=Z,1.9nm,0.5s,baz=242,slow=9.2,SNR=2.0 | | | | | | | | |
| **HNS** | **HongShan** | **20.71** | **280** | ⇓P | | **P** | **P** | **01 14 28.2** | **-0.4** |
| HNS | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **WHN** | **Wuhan** | **22.73** | **262** | ⇑P | | **P** | **P** | **01 14 50.9** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **23.00** | **289** | *e*P | | **P** | **P** | **01 14 50.7** | **-2.5** |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,110nm,6.2s | | | | | | | | |
| **MA2** | **Magadan** | **23.75** | **13** | *ce*P | | **P** | **P** | **01 15 00.4** | **0.0** |
| MA2 | | | | | pmax | pmax | | | |
| | comp=Z,36nm,1.7s | | | | | | | | |
| **MA2** | **Magadan** | **23.75** | **13** | P | | **P** | **P** | **01 15 00.4** | **0.0** |
| MA2 | | | | | IAmb | IAmb | | 01 15 04.7 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **YAK** | **Yakutsk** | **26.21** | **348** | *ce*P | | **P** | **P** | **01 15 22.7** | **-0.2** |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **YAK** | **Yakutsk** | **26.21** | **348** | P | | **P** | **P** | **01 15 22.6** | **-0.2** |
| YAK | | | | | IAmb | IAmb | | 01 15 38.2 | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **ENH** | **Enshi** | **26.72** | **265** | P | | **P** | **P** | **01 15 26.9** | **-0.9** |
| ENH | | | | | IAmb | IAmb | | 01 15 30.2 | |
| | comp=Z,9.6nm,0.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.02** | **305** | *ce*P | | **P** | **P** | **01 15 30.1** | **-0.4** |
| ULN | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.02** | **305** | P | | **P** | **P** | **01 15 30.2** | **-0.3** |
| **SEY** | **Seymchan** | **27.18** | **12** | P | | **P** | **P** | **01 15 32.5** | **+0.9** |
| | comp=Z,5.4nm,0.8s,baz=207,slow=6.9,SNR=8.7 | | | | | | | | |
| **SONM** | **Songino Array** | **27.45** | **305** | P | | **P** | **P** | **01 15 33.0** | **-1.3** |
| | comp=Z,3.1nm,0.7s,baz=105,slow=9.0,SNR=21 | | | | | | | | |
| SONM | | | | | LR | LR | | 01 26 17.8 | |
| | comp=Z,60nm,19.1s,baz=216,slow=36 | | | | | | | | |
| **SONM** | **Songino Array** | **27.45** | **305** | P | | **P** | **P** | **01 15 33.8** | **-0.6** |
| **BOD** | **Bodaibo** | **27.45** | **329** | *e*P | | **P** | **P** | **01 15 35.2** | **+1.1** |
| BOD | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.6s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.53** | **119** | T | | T | T | 01 45 30.5 | |
| | baz=312,slow=75,SNR=2972 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.53** | **119** | T | | T | T | 01 45 30.9 | |
| | baz=312,slow=75,SNR=3343 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.54** | **119** | T | | T | T | 01 45 31.8 | |
| | baz=312,slow=75,SNR=2797 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.22** | **121** | T | | T | T | 01 46 20.1 | |
| | baz=314,slow=76,SNR=4201 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.22** | **121** | T | | T | T | 01 46 22.3 | |
| | baz=314,slow=76,SNR=2529 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.23** | **121** | T | | T | T | 01 46 21.0 | |
| | baz=314,slow=76,SNR=2261 | | | | | | | | |
| **LZH** | **Lanzhou** | **29.53** | **280** | *e*P | | **P** | **P** | **01 15 49.8** | **-3.2** |
| LZH | | | | | sP | pP | | 01 15 56.0 | -0.8 |
| LZH | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **GTA** | **Gaotai** | **32.08** | **287** | *e*P | | **P** | **P** | **01 16 17.6** | **+2.2** |
| GTA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **KMI** | **Kunming** | **34.33** | **261** | ⇓P | | **P** | **P** | **01 16 35.0** | **-0.4** |
| KMI | | | | | pP | pP | | 01 16 37.1 | -2.1 |
| KMI | | | | | PP | PnPn | | **01 17 48.7** | **-1.0** |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **BILL** | **Bilibino** | **34.46** | **17** | *e*P | | **P** | **P** | **01 16 36.3** | **+0.6** |
| BILL | | | | | *e* | | | 01 17 50.6 | |
| BILL | | | | | *e*PPP | PPP | | 01 18 04.4 | |
| BILL | | | | | *e* | | | 01 19 13.2 | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **BILL** | **Bilibino** | **34.46** | **17** | P | | **P** | **P** | **01 16 36.9** | **+1.1** |
| BILL | | | | | IAmb | IAmb | | 01 16 40.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | | | |
| **PZH** | **PanZhiHua** | **34.48** | **264** | P | | **P** | **P** | **01 16 37.5** | **+1.0** |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,120nm,4.6s | | | | | | | | |
| **TIXI** | **Tiksi** | **35.49** | **354** | P | | **P** | **P** | **01 16 44.0** | **-0.5** |
| | comp=Z,2.5nm,0.3s,baz=270,slow=21,SNR=6.2 | | | | | | | | |
| **TIXI** | **Tiksi** | **35.49** | **354** | P | | **P** | **P** | **01 16 45.2** | **+0.6** |
| **DGZ** | **Jazzator, Alta** | **40.07** | **306** | *i* P | | **P** | **P** | **01 17 24.0** | **+0.2** |
| DGZ | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **40.43** | **297** | *e*P | | **P** | **P** | **01 17 28.9** | **+2.2** |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,180nm,4.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.85** | **255** | LR | | LR | LR | 01 36 20.8 | |
| | comp=Z,15nm,19.8s,baz=250,slow=39 | | | | | | | | |
| **TNA** | **Tin City** | **41.39** | **29** | P | | **P** | **P** | **01 17 35.1** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **41.66** | **313** | P | | **P** | **P** | **01 17 35.4** | **-1.2** |
| | comp=Z,4.5nm,0.7s,baz=95,slow=7.0,SNR=24 | | | | | | | | |
| ZALV | | | | | PcP | **PcP** | | **01 19 31.9** | **-1.3** |
| | comp=Z,1.7nm,0.7s,baz=79,slow=1.5,SNR=5.0 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.66** | **313** | P | | **P** | **P** | **01 17 36.3** | **-0.3** |
| **NRIK** | **Noril'sk** | **43.27** | **336** | *i* P | | **P** | **P** | **01 17 48.0** | **-1.5** |
| NRIK | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **MK31** | **Makanchi Array** | **43.76** | **302** | *i* P | | **P** | **P** | **01 17 52.5** | **-1.3** |
| **MK31** | **Makanchi Array** | **43.76** | **302** | P | | **P** | **P** | **01 17 53.8** | **0.0** |
| **MKAR** | **Makanchi Array** | **43.76** | **302** | P | | **P** | **P** | **01 17 52.6** | **-1.2** |
| | comp=Z,1.7nm,0.7s,baz=89,slow=10,SNR=20 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.76** | **302** | P | | **P** | **P** | **01 17 53.9** | **+0.1** |
| **MAKZ** | **Makanchi** | **43.97** | **302** | P | | **P** | **P** | **01 17 56.1** | **+0.7** |
| **RDOG** | **Red Dog Mine** | **44.02** | **27** | P | | **P** | **P** | **01 17 55.9** | **+0.4** |
| **KURK** | **Kurchatov** | **45.63** | **308** | P | | **P** | **P** | **01 18 08.3** | **-0.3** |
| KURK | | | | | | | | 01 19 45.4 | |
| **KURK** | **Kurchatov** | **45.63** | **308** | P | | **P** | **P** | **01 18 08.0** | **-0.6** |
| **KURBB** | **Kurchatov Arra** | **45.70** | **308** | P | | **P** | **P** | **01 18 08.3** | **-0.9** |
| | comp=Z,6.0nm,0.7s,baz=84,slow=7.8,SNR=27 | | | | | | | | |
| KURBB | | | | | PcP | **PcP** | | **01 19 45.4** | **-1.5** |
| | comp=Z,0.8nm,0.3s,baz=90,slow=3.5,SNR=2.0 | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **47.99** | **296** | IAmb | | IAmb | IAmb | 01 18 38.3 | |
| | comp=Z,5.8nm,0.9s | | | | | | | | |
| **MLY** | **Manley** | **48.40** | **32** | IAmb | | IAmb | IAmb | 01 18 40.8 | |
| | comp=Z,6.7nm,1.2s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **49.11** | **298** | P | | **P** | **P** | **01 18 37.2** | **+1.2** |
| BOOM | | | | | | IAmb | IAmb | 01 18 49.7 | |
| | comp=Z,6.4nm,1.2s | | | | | | | | |
| **MDM** | **Murphy Dome** | **49.46** | **32** | IAmb | | IAmb | IAmb | 01 18 44.5 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **KSH** | **Kashi** | **49.97** | **294** | P | | P | P | 01 18 49.3 | +6.7 |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IL31** | | **50.04** | **32** | IAmb | | IAmb | | 01 18 47.4 | |
| | comp=Z,9.3nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **50.04** | **32** | P | | **P** | | **01 18 43.5** | **+0.9** |
| | comp=Z,1.9nm,0.8s,baz=271,slow=6.2,SNR=19 | | | | | | | | |
| **ILAR** | **Eielson Array** | **50.04** | **32** | P | | **P** | | **01 18 44.8** | **+2.2** |
| **AAK** | **Ala-Archa** | **50.09** | **298** | LR | | LR | | 01 41 07.4 | |
| | comp=Z,72nm,19.0s,baz=74,slow=38 | | | | | | | | |
| **AAK** | **Ala-Archa** | **50.09** | **298** | *i* P | | **P** | | **01 18 41.1** | **-2.4** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,3.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | **50.09** | **298** | P | | **P** | | **01 18 44.0** | **+0.4** |
| **BVAR** | **Borovoye Array** | **50.32** | **312** | P | | **P** | | **01 18 44.0** | **-0.8** |
| | comp=Z,2.0nm,0.8s,baz=74,slow=16,SNR=8.0 | | | | | | | | |
| **BRVK** | **Borovoye** | **50.37** | **312** | *ce*P | | **P** | | **01 18 44.7** | **-0.6** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **50.37** | **312** | P | | **P** | | **01 18 44.6** | **-0.6** |
| **L27K** | **Beaver Creek,** | **52.44** | **34** | IAmb | | IAmb | | 01 19 03.8 | |
| | comp=Z,7.4nm,1.0s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **52.45** | **34** | P | | **P** | | **01 19 02.4** | **+1.6** |
| **KKAR** | **Karatay Array** | **52.75** | **300** | P | | **P** | | **01 19 03.2** | **0.0** |
| **I29M** | **Ogilvie Camp,** | **53.59** | **31** | IAmb | | IAmb | | 01 19 14.8 | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **INK** | **Inuvik** | **54.90** | **27** | P | | **P** | | **01 19 20.1** | **+1.6** |
| **SVE** | **Sverdlovsk** | **54.96** | **319** | *e*P | | **P** | | **01 19 19.1** | **0.0** |
| SVE | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **ARU** | **Arti** | **56.17** | **319** | P | | **P** | | **01 19 27.0** | **-0.9** |
| | comp=Z,2.2nm,0.7s,baz=9.6,slow=3.0,SNR=7.6 | | | | | | | | |
| **ARU** | **Arti** | **56.17** | **319** | *c* *i*P | | **P** | | **01 19 27.0** | **-0.9** |
| ARU | | | | | S | **S** | | **01 27 18.7** | **+2.0** |
| ARU | | | | | SS | **SS** | | **01 30 58.2** | **-4.4** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **56.17** | **319** | P | | **P** | | **01 19 27.1** | **-0.8** |
| ARU | | | | | IAmb | IAmb | | 01 19 31.2 | |
| | comp=Z,7.5nm,0.9s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **56.53** | **187** | P | | **P** | | **01 19 30.2** | **-0.5** |
| WB0 | | | | | IAmb | IAmb | | 01 19 39.6 | |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **56.70** | **187** | *i* P | | **P** | | **01 19 30.7** | **-1.3** |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **56.71** | **187** | P | | **P** | | **01 19 31.3** | **-0.7** |
| WR0 | | | | | IAmb | IAmb | | 01 19 32.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **56.71** | **187** | P | | **P** | | **01 19 31.5** | **-0.5** |
| WB2 | | | | | IAmb | IAmb | | 01 19 32.4 | |
| | comp=Z,9.3nm,1.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.71** | **187** | P | | **P** | | **01 19 31.2** | **-0.8** |
| | comp=Z,2.8nm,0.6s,baz=2.5,slow=7.5,SNR=29 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.66** | **310** | P | | **P** | | **01 19 37.9** | **-0.7** |
| **C36M** | **Paulatuk** | **57.93** | **25** | P | | **P** | | **01 19 41.5** | **+1.5** |
| **AKTO** | **Aktyubinsk** | **58.41** | **312** | P | | **P** | | **01 19 42.3** | **-1.5** |
| | comp=Z,1.0nm,0.8s,baz=63,slow=9.0,SNR=2.2 | | | | | | | | |
| **KIRV** | **Kirov** | **60.11** | **323** | *ce*P | | **P** | | **01 19 54.7** | **-0.6** |
| **AS31** | **Alice Springs** | **60.44** | **187** | P | | **P** | | **01 19 58.5** | **+0.5** |
| **ASAR** | **Alice Springs** | **60.44** | **187** | P | | **P** | | **01 19 57.6** | **-0.4** |
| | comp=Z,2.9nm,1.0s,baz=14,slow=6.3,SNR=19 | | | | | | | | |
| **ASAR** | **Alice Springs** | **60.44** | **187** | P | | **P** | | **01 19 57.3** | **-0.7** |
| **HRA** | **Herat** | **62.08** | **294** | P | | **P** | | **01 20 10.5** | **+1.0** |
| HRA | | | | | IAmb | IAmb | | 01 20 12.9 | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| **RES** | **Resolute Bay** | **63.01** | **14** | IAmb | | IAmb | | 01 20 15.6 | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| **GEYT** | **Alibeck** | **63.45

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,2.4nm,0.6s | | | | | | |
| **RLMT** | **Red Lodge** | **76.95** | **43** | IAmb | IAmb | 01 22 01.3 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **HVU** | **Hansel Valley** | **77.03** | **47** | IAmb | IAmb | 01 21 44.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **AHID** | **Auburn Hatcher** | **77.40** | **46** | P | **P** | **01 21 45.2 +1.5** | |
| AHID | | | | IAmb | IAmb | 01 21 49.3 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **DUG** | **Dugway, Tooele** | **77.98** | **49** | IAmb | IAmb | 01 21 50.0 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **GWY** | **Greenwater Val** | **78.00** | **54** | IAmb | IAmb | 01 21 49.7 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **QSM** | **Queen of Sheba** | **78.00** | **54** | IAmb | IAmb | 01 21 49.7 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **78.14** | **321** | P | **P** | **01 21 47.8 +0.2** | |
| BUR08 | | | | IAmb | IAmb | 01 22 11.2 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **BW06** | **Boulder Array** | **78.28** | **45** | IAmb | IAmb | 01 21 50.8 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **78.28** | **45** | P | **P** | **01 21 49.1 +0.4** | |
| PD31 | | | | IAmb | IAmb | 01 21 50.8 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **78.28** | **45** | P | **P** | **01 21 50.0 +1.3** | |
| | comp=Z,2.3nm,0.6s,baz=271,slow=1.8,SNR=28 | | | | | | |
| **PRN** | **Pahroc Range** | **78.30** | **52** | IAmb | IAmb | 01 22 00.3 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **NLU** | **North Lily Min** | **78.58** | **48** | IAmb | IAmb | 01 21 53.2 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.59** | **311** | P | **P** | **01 21 49.3 -0.9** | |
| | comp=Z,1.2nm,0.8s,baz=31,slow=5.8,SNR=3.7 | | | | | | |
| **SHPR** | **Sheep Range** | **78.78** | **53** | P | **P** | **01 21 52.9 +1.5** | |
| **CRVS** | **Cervenica-Dubn** | **79.10** | **324** | *eP* | P | 01 21 57.6 +4.9 | |
| **LCMT** | **Little Creek M** | **79.69** | **51** | P | **P** | **01 21 57.8 +1.5** | |
| LCMT | | | | IAmb | IAmb | 01 21 59.5 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **MTPU** | **Mount Pierson** | **79.70** | **50** | IAmb | IAmb | 01 22 00.2 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **Q16A** | **Castle Valley** | **79.77** | **49** | IAmb | IAmb | 01 22 04.2 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **LANS** | **Liptovska Anna** | **79.85** | **325** | *eP* | **P** | **01 21 58.5 +1.7** | |
| **P18A** | **Preston Nutter** | **79.88** | **48** | IAmb | IAmb | 01 22 01.2 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **KNB** | **Kanab** | **79.95** | **51** | IAmb | IAmb | 01 22 04.2 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **U15A** | **North Rim** | **80.65** | **51** | P | **P** | **01 22 02.6 +0.9** | |
| U15A | | | | IAmb | IAmb | 01 22 04.9 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **O20A** | **White River Ci** | **80.73** | **46** | IAmb | IAmb | 01 22 07.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **CLL** | **Collm** | **81.03** | **330** | *eP* | **P** | **01 22 05.0 +1.9** | |
| **PRU** | **Pruhonice** | **81.40** | **328** | *eP* | **P** | **01 22 07.7 +2.6** | |
| **PRU** | **Pruhonice** | **81.40** | **328** | *eP* | **P** | **01 22 07.7 +2.6** | |
| **WUAZ** | **Wupatki** | **81.80** | **52** | P | **P** | **01 22 09.1 +1.4** | |
| WUAZ | | | | IAmb | IAmb | 01 22 13.3 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **82.39** | **328** | *eP* | **P** | **01 22 10.2 -0.1** | |
| **KHC** | **Kasperske Hory** | **82.46** | **328** | *eP* | **P** | **01 22 11.0 +0.2** | |
| **KHC** | **Kasperske Hory** | **82.46** | **328** | *eP* | **P** | **01 22 11.0 +0.2** | |
| **GERES** | **GERESS Array B** | **82.63** | **328** | P | **P** | **01 22 11.0 -0.7** | |
| | comp=Z,0.9nm,0.4s,baz=34,slow=5.9,SNR=11 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **83.11** | **36** | P | **P** | **01 22 15.4 +1.3** | |
| **S22A** | **4UR Ranch, Cre** | **83.13** | **48** | IAmb | IAmb | 01 22 21.0 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **83.91** | **47** | IAmb | IAmb | 01 22 21.7 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **84.50** | **38** | P | **P** | **01 22 22.3 +1.0** | |
| ECSD | | | | IAmb | IAmb | 01 22 25.4 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **85.22** | **49** | *ce* | **P** | **01 22 26.9 +1.6** | |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **85.22** | **49** | P | **P** | **01 22 25.4 0.0** | |
| ANMO | | | | IAmb | IAmb | 01 22 31.2 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **TX32** | **Lajitas Array** | **90.76** | **52** | IAmb | IAmb | 01 22 57.1 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.76** | **52** | P | **P** | **01 22 53.1 +1.3** | |
| | comp=Z,1.9nm,0.6s,baz=300,slow=3.1,SNR=23 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.76** | **52** | P | **P** | **01 22 53.0 +1.1** | |
| **LPAZ** | **La Paz** | **147.34** | **59** | PKPbc | **PKPbc** | **01 29 32.8 -0.5** | |
| | comp=Z,3.4nm,0.7s,baz=353,slow=4.5,SNR=9.6 | | | | | | |
| **LPAZ** | **La Paz** | **147.34** | **59** | PKPbc | **PKPbc** | **01 29 33.6 +0.3** | |
| **H03N2** | **Juan Fernandez** | **147.59** | **96** | T | T | 04 14 27.4 | |
| | baz=291,slow=76,SNR=58 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.60** | **96** | T | T | 04 14 28.6 | |
| | baz=291,slow=76,SNR=82 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.60** | **96** | T | T | 04 14 32.4 | |
| | baz=291,slow=76,SNR=84 | | | | | | |
| **VILB** | **Vilhena** | **149.80** | **44** | PKPbc | **PKPbc** | **01 29 38.4 -0.6** | |

**JMA 07 01:11:00.5, 36.76N×140.57E, h8km, M3.5, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHO** | **Hitachi** | **0.15** | **180** | P | Pg | 01 11 03.6 | -0.1 |
| JHO | | | | S | Sg | 01 11 05.8 | 0.0 |
| **JFFD** | **Fukushimafurud** | **0.33** | **359** | P | Pg | 01 11 07.1 | +0.1 |
| JFFD | | | | S | Sg | 01 11 11.6 | +0.2 |
| **ONAJ** | **Iwakimizuishiy** | **0.39** | **28** | P | Pg | 01 11 08.3 | +0.2 |
| ONAJ | | | | S | Sg | 01 11 13.6 | +0.4 |
| **JHYU** | **Hitachinakayam** | **0.42** | **178** | P | Pg | 01 11 08.8 | +0.2 |
| **JSB** | **Shiboa** | **0.56** | **292** | P | Pg | 01 11 11.7 | +0.3 |
| JSB | | | | S | Sg | 01 11 19.6 | +0.9 |
| **JYT** | **Yasato** | **0.61** | **210** | S | Sg | 01 11 20.3 | 0.0 |
| **JFK** | **Kawauchi** | **0.65** | **22** | S | Sg | 01 11 21.4 | -0.2 |
| **JFT** | **Otama** | **0.78** | **346** | S | Sg | 01 11 26.2 | +0.5 |
| **MAT** | **Matsushiro** | **1.91** | **264** | P | Pn | 01 11 34.1 | +0.7 |
| MAT | | | | S | Sb | 01 11 58.8 | -0.9 |

*IDC **07** 01:11:56.0±2.7, 32.97S×178.39W, h0km, mb4.0/3, mb1 4.1/4, mb1mx3.6/37, mbtmp4.0/4, ML3.8/1, MS3.4/1, Ms1 3.4/1, ms1mx2.5/57, Error ellipse: s-maj=61.2km s-min=34.9km az=118.0*
*WEL **07** 01:11:56.7±0.8, 33°S±15'×17°9W±4'0, h0km, M4.3/6, mB4.7/4, ML4.7/11, MLv4.5/6, Mw(mB)4.0/4, Error ellipse: s-maj=0.1km s-min=0.0km az=110.6*
**ISC 07 01:11:55.9±1.9, 32.9S±0.1×178.2W±0.3, h10km, n18, σ1s58/30, mb4.0/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.65** | **3** | P | **Pn** | **01 12 51.5** | **-1.0** |
| GLKZ | | | | S | **Sn** | **01 13 33.1** | **-2.5** |
| **MXZ** | **Matakaoa Point** | **5.46** | **211** | P | **Pn** | **01 13 19.2** | **+1.9** |
| MXZ | | | | S | **Sn** | **01 14 20.5** | **+0.3** |
| **WMGZ** | **Waiomatatini S** | **5.63** | **209** | P | **Pn** | **01 13 22.0** | **+2.3** |
| WMGZ | | | | S | **Sn** | **01 14 23.3** | **-1.2** |
| **PKGZ** | **Pakihiroa** | **5.83** | **211** | P | **Pn** | **01 13 22.3** | **-0.2** |
| PKGZ | | | | S | **Sn** | **01 14 27.7** | **-1.8** |
| **HAZ** | **Te Kaha** | **5.86** | **213** | P | **Pn** | **01 13 24.5** | **+1.7** |
| HAZ | | | | S | **Sn** | **01 14 29.9** | **-0.1** |
| **PUZ** | **Puketiti** | **5.91** | **209** | P | Pn | 01 13 27.4 | +3.8 |
| PUZ | | | | S | **Sn** | **01 14 28.7** | **-2.7** |
| **RUGZ** | **Raukumara Rang** | **6.07** | **213** | P | **Pn** | **01 13 26.6** | **+0.7** |
| RUGZ | | | | S | **Sn** | **01 14 35.2** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **6.12** | **210** | P | **Pn** | **01 13 27.1** | **+0.7** |
| TWGZ | | | | S | **Sn** | **01 14 36.5** | **+0.1** |
| **TKGZ** | **Te Karaka** | **6.39** | **209** | P | **Pn** | **01 13 31.3** | **+1.2** |
| TKGZ | | | | S | **Sn** | **01 14 39.2** | **-4.0** |
| **OPRZ** | **Ohinepanea** | **6.54** | **220** | P | **Pn** | **01 13 34.0** | **+1.9** |
| **URZ** | **Urewera** | **6.57** | **215** | Pn | **Pn** | **01 13 32.5** | **-0.1** |
| | 2.2nm,0.3s,baz=251,slow=1.9,SNR=17 | | | | | | |
| URZ | | | | Sn | **Sn** | **01 14 45.4** | **-2.3** |
| | 6.4nm,0.3s,baz=134,slow=24,SNR=9.4 | | | | | | |
| **URZ** | **Urewera** | **6.57** | **215** | P | **Pn** | **01 13 32.5** | **-0.1** |
| URZ | | | | S | **Sn** | **01 14 46.1** | **-1.6** |
| **RIGZ** | **Rimuhau** | **6.66** | **209** | P | **Pn** | **01 13 34.6** | **+0.8** |
| RIGZ | | | | S | **Sn** | **01 14 49.0** | **-0.8** |
| **SNGZ** | **Shannon Statio** | **6.90** | **211** | P | **Pn** | **01 13 37.8** | **+0.7** |
| SNGZ | | | | S | **Sn** | **01 14 54.6** | **-1.0** |
| **CTA** | **Charters Tower** | **34.15** | **283** | P | **P** | **01 18 42.6** | **+1.3** |
| | 1.5nm,0.7s,baz=117,slow=6.8,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **42.90** | **270** | P | **P** | **01 19 55.4** | **+0.5** |
| | 0.7nm,0.6s,baz=112,slow=7.9,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.11** | **275** | P | **P** | **01 20 03.7** | **-1.0** |
| | 1.5nm,0.4s,baz=115,slow=7.8,SNR=13 | | | | | | |
| WRA | | | | LR | LR | 01 38 27.6 | |
| | comp=Z,41nm,18.8s,baz=195,slow=36 | | | | | | |
| **FINES** | **FINESS Array B** | **147.44** | **338** | PKPbc | **PKPbc** | **01 31 40.2 +0.8** | |
| | 1.3nm,0.4s,baz=53,slow=4.2,SNR=16 | | | | | | |

*TUL **07** 01:21:25.1±0.6, 36.80N±0.01×97.86W±0.03, h5km±7km, ML2.8, mb_Lg2.4/12(NEIC), Error ellipse: s-maj=3.3km s-min=1.7km az=103.0*
**NEIC 07 01:21:25.2±0.8, 36.79N±0.02×97.84W±0.02, h6km±7km, Error ellipse: s-maj=2.7km s-min=2.3km az=122.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GC02** | **Grant County #** | **0.07** | **349** | Pg | Pg | 01 21 26.8 | -0.1 |
| **KAN14** | **Manchester OK** | **0.20** | **331** | Pg | Pg | 01 21 29.1 | -0.1 |
| **KAN17** | **Caldwell West** | **0.27** | **14** | Pg | Pg | 01 21 30.5 | 0.0 |
| **OK032** | **Salt Plains WL** | **0.29** | **274** | | Pg | 01 21 30.9 | -0.1 |
| **CROK** | **Carrier** | **0.30** | **202** | Pg | Pg | 01 21 31.4 | +0.3 |
| **KAN05** | **Bluff City Nor** | **0.32** | **356** | | Pg | 01 21 31.5 | -0.1 |
| **KAN13** | **South Haven SW** | **0.37** | **52** | Pg | Pg | 01 21 32.7 | +0.2 |
| **KAN01** | **Argonia South** | **0.37** | **10** | | Pg | 01 21 32.5 | 0.0 |
| **KAN10** | **Anthony SW Sta** | **0.39** | **329** | Pg | Pg | 01 21 32.7 | -0.2 |
| **KAN08** | **Anthony NE Sta** | **0.45** | **347** | | Pg | 01 21 33.9 | -0.1 |
| **KAN06** | **Argonia West S** | **0.46** | **358** | | Pg | 01 21 34.1 | 0.0 |
| **KAN16** | **Harper SW Stat** | **0.47** | **338** | Pg | Pg | 01 21 34.1 | -0.3 |
| **BLOK** | **Blackwell** | **0.51** | **93** | Pg | Pg | 01 21 35.2 | +0.2 |
| **KAN12** | **Harper NE Stat** | **0.53** | **346** | Pg | Pg | 01 21 35.0 | -0.4 |
| **U32A** | **Winter Ranch,** | **1.02** | **247** | Pg | Pg | 01 21 44.3 | -0.4 |
| **OK029** | **Liberty Lake** | **1.03** | **162** | Pg | Pg | 01 21 45.0 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.08** | **83** | Pg | Pg | 01 21 45.6 | -0.2 |
| **QUOK** | **Quay** | **1.10** | **123** | Pg | Pg | 01 21 46.2 | -0.2 |
| **BCOK** | **Bluff Creek, N** | **1.14** | **170** | Pg | Pg | 01 21 46.7 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.16** | **135** | | Pg | 01 21 47.2 | -0.3 |
| **OK034** | **N. Norfolk Rd.** | **1.20** | **130** | Pg | Pg | 01 21 47.7 | -0.5 |
| **OK030** | **Cody Creek RV** | **1.21** | **135** | | Pg | 01 21 48.2 | -0.2 |
| **OKCFA** | **Oklahoma City** | **1.40** | **167** | Pn | Pn | 01 21 50.5 | -0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **1.42** | **166** | | Pn | 01 21 51.2 | -0.3 |
| **FNO** | **Franklin** | **1.57** | **167** | Pn | Pn | 01 21 54.1 | +0.5 |
| FNO | | | | IAmb_Lg | | 01 22 17.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.77** | **337** | | Pn | 01 21 56.5 | -0.1 |
| R32A | | | | IAmb_Lg | | 01 22 22.2 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **W35A** | **Tecumseh** | **1.81** | **154** | Pn | Pn | 01 21 56.9 | -0.1 |
| **TUL1** | **Leonard** | **1.87** | **117** | | Pn | 01 21 58.6 | +0.7 |
| TUL1 | | | | IAmb_Lg | | 01 22 26.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.18** | **180** | | Pn | 01 22 02.5 | +0.4 |
| X34A | | | | IAmb_Lg | | 01 22 40.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.18** | **201** | Pn | Pn | 01 22 02.7 | +0.6 |
| **KSU1** | **Kansas State U** | **2.51** | **23** | Pn | Pn | 01 22 06.2 | -0.4 |
| KSU1 | | | | IAmb_Lg | | 01 22 42.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.52** | **324** | Pn | Pn | 01 22 07.0 | +0.2 |
| **U38A** | **Gravette** | **2.80** | **96** | Pn | Pn | 01 22 10.3 | -0.4 |
| **X37A** | **Clayton** | **2.98** | **137** | Pn | Pn | 01 22 13.5 | +0.5 |
| **HHAR** | **Hobbs** | **3.18** | **98** | | Pn | 01 22 16.1 | +0.1 |
| **S39A** | **Bolivar** | **3.72** | **75** | Pn | Pn | 01 22 22.8 | -0.5 |
| **U40A** | **Yellville** | **4.04** | **95** | Pn | Pn | 01 22 28.1 | +0.4 |
| U40A | | | | IAmb_Lg | | 01 23 32.7 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **4.13** | **122** | Pn | Pn | 01 22 29.4 | +0.5 |
| **ABTX** | **Abilene, Hawle** | **4.41** | **200** | Pn | Pn | 01 22 34.1 | +1.4 |
| **P38A** | **Dawn** | **4.42** | **49** | Pn | Pn | 01 22 34.5 | +1.6 |
| **MGMO** | **Mountain Grove** | **4.48** | **84** | Pn | Pn | 01 22 34.4 | +0.6 |
| **R40A** | **Maddies Statio** | **4.68** | **70** | Pn | Pn | 01 22 36.2 | -0.2 |
| **FCAR** | **Ozark Folk Cen** | **4.70** | **99** | Pn | Pn | 01 22 37.2 | +0.4 |
| **W41B** | **Gary Mavity, V** | **4.81** | **108** | Pn | Pn | 01 22 38.8 | +0.5 |

*IDC **07** 01:24:36.0±1.6, 12.41N×86.54W, h0km, mb3.3/3, mb1 3.8/5, mb1mx3.5/37, mbtmp3.5/5, ML3.4/2, MS3.2/3, Ms1 3.2/3, ms1mx2.8/33, Error ellipse: s-maj=92.5km s-min=20.8km az=52.0*
*INET **07** 01:24:38.8±0.7, 11.72N×87.07W, h24km±3km, ML3.4*
**ISC 07 01:24:40.9±1.1, 11.89N±0.07×87.03W±0.08, h50km, n14, σ1s73/16, mb3.3/3, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNGN** | **Cerro Negro** | **0.69** | **28** | *eP* | **Pn** | **01 24 54.0** | **-0.6** |
| CNGN | | | | IAML | | 01 25 12.8 | |
| | comp=E,3μm,0.2s | | | | | | |
| **MOMN** | **Momotombo** | **0.71** | **43** | *eP* | **Pn** | **01 24 54.1** | **-0.7** |
| MOMN | | | | *eS* | **Sn** | **01 25 06.2** | **+1.4** |
| MOMN | | | | IAML | | 01 25 06.9 | |
| | comp=E,699nm,0.5s | | | | | | |
| **CRIN** | **San Cristobal** | **0.81** | **359** | *eP* | **Pn** | **01 24 55.8** | **-0.4** |
| CRIN | | | | *eS* | **Sn** | **01 25 09.5** | **+2.2** |
| **MGAN** | **Managua** | **0.81** | **71** | *eP* | **Pn** | **01 24 55.1** | **-1.0** |
| MGAN | | | | *eS* | **Sn** | **01 25 07.0** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **1.45** | **67** | *eP* | **Pn** | **01 25 03.7** | **-1.0** |
| **MATN** | **Matagalpa** | **1.50** | **46** | *eP* | **Pn** | **01 25 05.3** | **-0.2** |
| **ACON** | **Acoyapa** | **1.82** | **87** | *eP* | **Pn** | **01 25 08.0** | **-1.8** |
| **JTS** | **Las Juntas de** | **2.58** | **128** | Pn | **Pn** | **01 25 18.9** | **-1.4** |
| | comp=E,18nm,0.3s,baz=16,slow=15,SNR=37 | | | | | | |
| JTS | | | | Sn | **Sn** | **01 25 54.9** | **+4.3** |
| | comp=E,12nm,0.3s,baz=336,slow=22,SNR=6.5 | | | | | | |
| **CMIG** | **Matias Romero** | **9.20** | **305** | Pn | **Pn** | **01 26 50.0** | **-1.0** |
| | comp=E,0.1nm,0.3s,baz=151,slow=8.5,SNR=1.5 | | | | | | |
| CMIG | | | | LR | LR | 01 30 19.3 | |
| | comp=E,112nm,18.0s,baz=77,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.27** | **321** | P | **P** | **01 29 45.1** | **+0.8** |
| | comp=E,1.0nm,0.7s,baz=131,slow=9.7,SNR=12 | | | | | | |
| **PTGA** | **Pitinga** | **29.66** | **113** | LR | LR | 01 43 24.6 | |
| | comp=E,62nm,21.6s,baz=52,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **36.46** | **332** | P | **P** | **01 31 42.2** | **+0.8** |
| | comp=E,0.3nm,0.8s,baz=139,slow=8.4,SNR=2.3 | | | | | | |
| **RPN** | **Rapa Nui** | **44.41** | **209** | LR | LR | 01 46 51.1 | |
| | comp=E,31nm,19.2s,baz=166,slow=30 | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.26** | **345** | P | **P** | **01 34 00.1** | **-1.5** |
| | comp=E,0.3nm,0.9s,baz=139,slow=8.0,SNR=5.2 | | | | | | |

*IDC **07** 01:28:17.1±1.5, 7.81S×131.18E, h0km, mb3.7/3, mb1 4.2/8, mb1mx3.8/33, mbtmp4.1/8, ML4.1/5, Error ellipse: s-maj=45.9km s-min=22.3km az=92.0*
**ISC 07 01:28:23.2±0.7, 7.96S±0.06×131.04E±0.07, h50km, n21, σ3s27/22, mb3.7/4, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **0.26** | **94** | P | Pn | 01 28 36.5 | +4.5 |
| **DRS** | **Darwin Rock St** | **4.44** | **182** | P | Pn | 01 29 33.1 | +5.0 |
| **MTN** | **Manton Dam** | **4.85** | **179** | P | Pn | 01 29 38.8 | +5.1 |
| **KDU** | **Kakadu** | **4.90** | **163** | P | **Pn** | **01 29 38.8** | **+4.4** |
| **FAKI** | **Fak Fak** | **5.15** | **14** | P | **Pn** | **01 29 35.2** | **-2.7** |
| **SOEI** | **Soe** | **6.92** | **255** | P | **Pn** | **01 30 05.9** | **+3.7** |
| | 32nm,0.8s | | | | | | |
| **SIJI** | **Sorong** | **7.05** | **2** | Pn | **Pn** | **01 30 00.1** | **-3.7** |
| | 6.9nm,0.3s,baz=235,slow=23,SNR=14 | | | | | | |
| SIJI | | | | Sn | Sn | 01 31 10.0 | -13 |
| | 3.6nm,0.3s,baz=77,slow=22,SNR=7.3 | | | | | | |
| **BATI** | **Baumata** | **7.62** | **252** | Pn | **Pn** | **01 30 14.1** | **+2.4** |
| | 2.8nm,0.3s,baz=207,slow=1.5,SNR=10 | | | | | | |
| BATI | | | | Sn | **Sn** | **01 31 34.8** | **-1.9** |
| | 2.6nm,0.3s,baz=108,slow=21,SNR=2.4 | | | | | | |
| **KNRA** | **Kununurra** | **7.98** | **196** | P | **Pn** | **01 30 20.5** | **+3.8** |
| **FITZ** | **Fitzroy Crossi** | **11.36** | **207** | Pn | **Pn** | **01 31 03.7** | **+0.8** |
| | 1.1nm,0.3s,baz=29,slow=12,SNR=66 | | | | | | |
| FITZ | | | | Sn | **Sn** | **01 33 04.1** | **-4.4** |
| | 3.8nm,0.3s,baz=232,slow=14,SNR=14 | | | | | | |
| **WRAB** | **Tennant Creek** | **12.33** | **165** | P | **Pn** | **01 31 18.1** | **+2.0** |
| **WRA** | **Warramunga Arr** | **12.33** | **165** | Pn | **Pn** | **01 31 15.8** | **-0.4** |
| | 0.7nm,0.3s,baz=346,slow=13,SNR=46 | | | | | | |
| WRA | | | | Sn | **Sn** | **01 33 26.6** | **-5.6** |
| | 0.8nm,0.3s,baz=346,slow=24,SNR=3.1 | | | | | | |
| **COEN** | **Coen** | **13.32** | **118** | P | **Pn** | **01 31 30.0** | **+0.3** |
| | 7.6nm,2.4s | | | | | | |
| **QIS** | **Mount Isa** | **15.02** | **147** | P | **Pn** | **01 31 53.6** | **+1.2** |
| | 6.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **15.86** | **170** | Pn | **Pn** | **01 32 02.8** | **-0.4** |
| | 0.7nm,0.3s,baz=345,slow=8.3,SNR=103 | | | | | | |
| ASAR | | | | Sn | **Sn** | **01 34 51.8** | **-6.2** |
| | 0.1nm,0.3s,baz=359,slow=27,SNR=3.7 | | | | | | |
| **MTSU** | **Mount Surprise** | **16.41** | **129** | P | **P** | **01 32 12.0** | **-0.3** |
| | 2.6nm,1.1s | | | | | | |
| **WRKA** | **Warakurna** | **17.18** | **188** | P | **P** | **01 32 23.2** | **+2.3** |
| **STKA** | **Stephens Creek** | **25.75** | **159** | P | **P** | **01 33 53.9** | **+4.7** |
| | 2.0nm,0.8s,baz=336,slow=8.6,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **59.68** | **341** | P | **P** | **01 38 23.2** | **+0.7** |
| | 0.1nm,0.4s,baz=164,slow=8.6,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.59** | **327** | P | **P** | **01 39 28.1** | **+1.0** |
| | 1.0nm,0.6s,baz=126,slow=8.1,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.90** | **333** | P | **P** | **01 39 45.9** | **-0.9** |
| | 0.6nm,0.6s,baz=100,slow=1.6,SNR=2.8 | | | | | | |

*IPEC **07** 01:30:31.2±0.2, 50.22N×18.90E, h0km±1km, ML1.6/3, Error ellipse: s-maj=4.4km s-min=0.8km az=164.0*
*PRU **07** 01:30:31.4±0.0, 50.24N×18.86E, h0km*
**ISC 07 01:30:31.0±1.0, 50.25N±0.05×18.87E±0.03, h0km, n23, σ0s53/32, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OJC** | **Ojcow** | **0.60** | **92** | *e*Pg | **Pg** | **01 30 42.2** | **-0.3** |
| OJC | | | | *e*Sg | **Sg** | **01 30 50.2** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **0.62** | **229** | *e*PG | **Pg** | **01 30 42.6** | **-0.2** |
| OKC | | | | *e*SG | **Sg** | **01 30 51.3** | **+0.5** |
| | comp=Z,8.7nm,0.5s | | | | | | |
| **ANAC** | **Anensky vrch** | **0.97** | **260** | *e*Pg | **Pg** | **01 30 50.1** | **+0.5** |
| | baz=81 | | | | | | |
| **MORC** | **Moravsky Berou** | **0.98** | **242** | *e*Pg | **Pg** | **01 30 50.0** | **+0.4** |
| | baz=63 | | | | | | |
| MORC | | | | *e*Sg | **Sg** | **01 31 02.3** | **0.0** |
| | 11nm,0.3s,baz=63 | | | | | | |
| **LOSC** | **Losov** | **1.15** | **238** | *e*Pg | **Pb** | **01 30 53.6** | **-0.1** |
| | baz=58 | | | | | | |
| **LANS** | **Liptovska Anna** | **1.17** | **160** | *e*PG | **Pg** | **01 30 53.3** | **0.0** |
| LANS | | | | *e*SG | **Sg** | **01 31 08.8** | **+0.4** |
| LANS | | | | *e*LG | Lg | 01 31 14.1 | |
| **NIE** | **Niedzica** | **1.25** | **131** | *e*Pg | **Pb** | **01 30 55.7** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **01 31 12.8** | **-0.4** |
| **KRLC** | **Kraliky** | **1.35** | **263** | *e*PG | **Pg** | **01 30 55.2** | **-1.7** |
| KRLC | | | | *e*SG | **Sg** | **01 31 14.8** | **+0.4** |
| | comp=Z,10nm,0.4s | | | | | | |
| **OSTC** | **Ostas** | **1.72** | **281** | *e*PG | **Pn** | **01 31 01.8** | **-0.4** |
| OSTC | | | | *e*SG | **Sg** | **01 31 26.6** | **+0.3** |
| **KSP** | **Ksiaz** | **1.75** | **291** | *e*Pg | **Pg** | **01 31 04.5** | **+0.1** |
| KSP | | | | *e*Sg | **Sg** | **01 31 28.0** | **+1.0** |
| **VRAC** | **Vranov** | **1.75** | **238** | *e*Pn | **Pn** | **01 31 03.0** | **+0.4** |
| | baz=58 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **01 31 26.2** | **-0.2** |
| | 6.1nm,0.4s,baz=58 | | | | | | |
| **VYHS** | **Vyhne** | **1.76** | **181** | *e*SN | **Sn** | **01 31 25.8** | **+0.1** |
| VYHS | | | | *e*LG | Lg | 01 31 29.4 | |
| **CHVC** | **Chvalec** | **1.83** | **282** | *e*PG | **Pn** | **01 31 03.7** | **0.0** |
| CHVC | | | | *e*SG | **Sg** | **01 31 30.0** | **+0.3** |
| **UPC** | **Upice** | **1.84** | **279** | *e*SG | **Sg** | **01 31 30.9** | **+0.7** |
| **KRUC** | **Moravsky** | **2.00** | **234** | *e*Pn | **Pn** | **01 31 06.1** | **+0.1** |
| | baz=54 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **01 31 33.6** | **+0.1** |
| | 3.3nm,0.3s,baz=54 | | | | | | |
| **PRU** | **Pruhonice** | **2.79** | **266** | *e*SG | **Sg** | **01 32 01.0** | **+0.3** |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **PRU** | **Pruhonice** | **2.79** | **266** | smax | smax | | |
| | comp=N,9.0nm,1.2s | | | | | | |
| **PRU** | **Pruhonice** | **2.79** | **266** | *e* | **Sg** | **01 32 01.0** | **+0.3** |
| **PBCC** | **Pribram** | **3.19** | **262** | *e*SG | **Sg** | **01 32 13.7** | **+0.2** |
| | comp=N,3.8nm,1.1s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.29** | **246** | *e*SG | **Sg** | **01 32 15.4** | **-1.3** |
| **KHC** | **Kasperske Hory** | **3.61** | **254** | *e*SG | **Sg** | **01 32 27.0** | **+0.1** |
| | comp=N,5.7nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.61** | **254** | smax | smax | | |
| | comp=N,6.0nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.61** | **254** | *e* | **Sg** | **01 32 27.0** | **+0.1** |

**IDC 07 01:36:06.4±2.0, 10.06S×126.89E, h0km, mb3.1/1, mb1 3.5/5, mb1mx3.2/31, mbtmp3.3/5, ML3.3/4, Error ellipse: s-maj=40.4km s-min=27.2km az=46.0, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **3.18** | **267** | Pn | Pn | 01 36 57.3 | -0.5 |
| | 3.6nm,0.3s,baz=259,slow=22,SNR=2.5 | | | | | | |
| BATI | | | | Sn | Sn | 01 37 37.0 | +0.5 |
| | 4.0nm,0.3s,baz=247,slow=4.7,SNR=2.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.08** | **188** | Pn | Pn | 01 38 06.9 | +

ESML AML AML
comp=E,3840µm,0.7s
ESML AML AML
comp=N,3025µm,0.6s
**ESLN Serra La Nave 0.72 5** P **Pn** **01 42 13.7 -0.7**
ESLN S **Sn** **01 42 24.7 -0.4**
ESLN AML AML
comp=E,6720µm,0.3s
ESLN AML AML
comp=N,5290µm,0.3s
**CAGR Agira 0.72 334** ⇓P **Pb** **01 42 13.7 +0.8**
CAGR AML AML
comp=N,2550µm,0.4s
CAGR AML AML
comp=E,3895µm,0.8s
**CLTA Licata 0.77 284** P **Pg** **01 42 14.2 +0.3**
CLTA AML AML
comp=E,12250µm,0.3s
CLTA AML AML
comp=N,10485µm,0.5s
**GALF Gagliano Caste 0.78 340** ⇓P **Pb** **01 42 14.7 +0.8**
GALF AML AML
comp=N,2955µm,0.4s
GALF AML AML
comp=E,3875µm,0.5s
**EMSG Monte Spagnolo 0.84 3** P **Pn** **01 42 16.4 +0.4**
EMSG AML AML
comp=E,10450µm,0.5s
EMSG AML AML
comp=N,7730µm,0.3s
**EPZF Pizzo Felice 0.85 358** P **Pn** **01 42 16.7 +0.6**
EPZF AML AML
comp=N,6120µm,0.3s
EPZF AML AML
comp=E,15850µm,0.5s
**RESU Resuttano 0.95 315** P **Pb** **01 42 18.1 +1.3**
RESU AML AML
comp=E,788µm,0.6s
RESU AML AML
comp=N,976µm,0.6s
**MNO Monte Soro 0.97 350** P **Pn** **01 42 18.6 +0.7**
MNO AML AML
comp=E,7265µm,0.5s
MNO AML AML
comp=N,5345µm,1.6s
MNO AML AML
comp=E,7270µm,0.5s
**AIO Antillo 1.03 15** ⇑P **Pn** **01 42 19.0 +0.5**
AIO AML AML
comp=E,8015µm,0.4s
AIO AML AML
comp=N,3530µm,0.3s
**FAVR Favara 1.03 287** P **Pg** **01 42 19.2 +0.6**
FAVR AML AML
comp=N,3350µm,0.4s
FAVR AML AML
comp=E,3665µm,0.7s
**PETRA Petralia Sopra 1.06 324** P **Pg** **01 42 19.3 -0.1**
PETRA AML AML
comp=N,1510µm,0.6s
PETRA AML AML
comp=E,1560µm,0.5s
**MUCR Ucria 1.07 359** ⇓P **Pn** **01 42 19.7 +0.6**
MUCR AML AML
comp=N,2500µm,0.4s
MUCR AML AML
comp=E,3100µm,0.6s
**NOV Novara 1.07 10** P **Pn** **01 42 19.7 +0.7**
NOV AML AML
comp=N,4555µm,1.2s
NOV AML AML
comp=E,10500µm,0.7s
**MSFR San Fratello 1.08 347** ⇓P **Pn** **01 42 19.8 +0.6**
MSFR AML AML
comp=E,1216µm,0.9s
MSFR AML AML
comp=N,1440µm,0.5s
**MCSR Castroreale 1.12 14** ⇑P **Pn** **01 42 20.2 +0.4**
MCSR AML AML
comp=E,5410µm,0.5s
MCSR AML AML
comp=N,5500µm,0.3s
**CSLB Castelbuono 1.17 325** P **Pg** **01 42 20.8 -0.6**
CSLB AML AML
comp=E,747µm,1.2s
CSLB AML AML
comp=N,784µm,0.7s
**PLLN Pollina 1.18 330** P **Pb** **01 42 21.4 +0.6**
PLLN AML AML
comp=E,2490µm,0.7s
PLLN AML AML
comp=N,3385µm,0.8s
**ALJA Alia 1.20 311** P **Pg** **01 42 21.9 0.0**
ALJA AML AML
comp=E,892µm,0.6s
ALJA AML AML
comp=N,1033µm,0.6s
**MTTG Motta San Giov 1.20 31** ⇑P **Pn** **01 42 21.8 +0.9**
MTTG AML AML
comp=E,1018µm,0.5s
MTTG AML AML
comp=N,1200µm,0.6s
**MPNC Port Mandanici 1.22 17** P **Pn** **01 42 21.9 +0.8**
MPNC AML AML
comp=E,4150µm,0.5s
MPNC AML AML
comp=N,3100µm,0.4s
**GIB Gibilmanna 1.23 326** P **Pg** **01 42 22.0 -0.5**
GIB AML AML
comp=N,2625µm,0.5s
GIB AML AML
comp=E,2035µm,0.6s
**MILZ Milazzo 1.32 11** P **Pn** **01 42 24.2 +1.8**
MILZ AML AML
comp=E,2515µm,0.4s
MILZ AML AML
comp=N,1980µm,1.0s
**MSRU Castanea 1.37 20** P **Pn** **01 42 24.3 +1.1**
MSRU AML AML
comp=N,1675µm,1.0s
MSRU AML AML
comp=E,1980µm,0.3s
**VPL Vulcano Piano 1.40 3** P **Pn** **01 42 24.4 +0.8**
VPL AML AML
comp=E,7305µm,0.4s
VPL AML AML
comp=N,6965µm,0.5s
**SOI Samo 1.43 40** P **Pn** **01 42 24.6 +0.7**
SOI AML AML
comp=E,300µm,0.5s
SOI AML AML
comp=N,258µm,0.6s
**LLI Lipari 1.47 1** P **Pg** **01 42 27.0 0.0**
LLI AML AML
comp=E,9315µm,0.4s
LLI AML AML
comp=N,14000µm,0.5s
**SOLUN Solunto 1.56 316** ⇓P **Pn** **01 42 27.3 +1.6**
SOLUN AML AML
comp=N,521µm,0.9s
SOLUN AML AML
comp=E,748µm,0.7s
**IFIL Filicudi I Eol 1.61 351** P **Pn** **01 42 27.0 +0.7**
IFIL AML AML
comp=E,8035µm,0.6s
IFIL AML AML
comp=N,3735µm,0.6s
**IACL Alicudi 1.62 345** P **Pn** **01 42 27.1 +0.6**
IACL AML AML
comp=N,1395µm,0.5s
IACL AML AML
comp=E,1790µm,0.5s
**MPG Monte Pellegri 1.71 314** P **Pn** **01 42 29.1 +1.4**
**JOPP Joppolo 1.81 25** P **Pb** **01 42 30.8 -0.6**
JOPP AML AML
comp=E,246µm,0.4s
JOPP AML AML
comp=N,302µm,0.5s
**ISTR Stromboli Gino 1.82 7** P **Pn** **01 42 30.3 +0.9**
ISTR AML AML
comp=N,610µm,0.6s
ISTR AML AML
comp=E,542µm,0.6s
**PLAC Placanica 1.91 39** P **Pb** **01 42 32.2 -1.0**
PLAC AML AML
comp=N,267µm,0.5s
PLAC AML AML
comp=E,227µm,0.6s
**GRI Girifalco 2.20 33** P **Pb** **01 42 37.0 -1.1**
GRI AML AML
comp=E,140µm,0.5s
GRI AML AML
comp=N,192µm,0.4s
**USI Ustica 2.20 322** P **Pn** **01 42 34.9 +0.3**
USI AML AML
comp=N,1337µm,0.8s
USI AML AML
comp=E,1091µm,1.6s
**SERS Sersale 2.50 34** P **Pb** **01 42 40.6 -2.5**
SERS AML AML
comp=N,62µm,0.6s
SERS AML AML
comp=E,74µm,1.4s
**TIP Timpagrande 2.64 33** P **Pn** **01 42 42.2 +1.5**
TIP AML AML
comp=E,47µm,0.8s
TIP AML AML
comp=N,54µm,1.2s
**CET2 Cetraro 2.68 18** P **Pn** **01 42 42.2 +1.0**
CET2 AML AML
comp=E,602µm,0.5s
CET2 AML AML
comp=N,560µm,0.4s
**T0702 Acquaformosa ( 2.90 18** P **Pn** **01 42 45.5 +1.4**
**PIPA Pietrapaola 2.92 30** P **Pn** **01 42 46.8 +2.3**
PIPA AML AML
comp=N,73µm,1.1s
PIPA AML AML
comp=E,84µm,1.2s
**SALB San Lorenzo Be 3.11 21** P **Pn** **01 42 49.3 +2.1**
SALB AML AML
comp=E,65µm,1.1s
SALB AML AML
comp=N,47µm,0.6s
**LTRZ Laterza 3.92 22** P **Pn** **01 42 59.1 +1.0**
**AMUR Altamura 4.14 18** P **Pn** **01 43 02.1 +0.9**
AMUR AML AML
comp=E,30µm,0.9s
AMUR AML AML
comp=N,26µm,1.1s
**NOCI Noci 4.17 23** P **Pn** **01 43 02.1 +0.6**
NOCI AML AML
comp=E,41µm,0.3s
NOCI AML AML
comp=N,46µm,1.6s
**KEF3 Kipouria, Keph 4.50 73** P **Pn** **01 43 06.0 -0.1**
KEF3 S **Sn** **01 43 57.3 -0.7**
comp=N,242nm,0.9s
**DMLN Damoulianata-K 4.52 72** P **Pn** **01 43 06.4 -0.1**
DMLN S **Sn** **01 43 57.3 -1.4**
comp=N,132nm,1.4s
**VLS Valsamata 4.67 73** P **Pn** **01 43 07.9 -0.6**
VLS S **Sn** **01 44 01.0 -1.4**
comp=N,55nm,0.4s
**KEK Kerkira 4.72 53** P **Pn** **01 43 08.1 -1.1**
KEK S **Sn** **01 44 00.3 -3.2**
comp=N,80nm,0.5s
**FSK Fiskardo 4.73 70** P **Pn** **01 43 09.8 +0.6**
FSK S **Sn** **01 44 02.6 -1.0**
**EVGI Lefkada island 4.84 68** P **Pn** **01 43 11.0 +0.1**
EVGI S **Sn** **01 44 05.8 -0.8**
**TSLK Tsoukalades, L 4.91 66** P **Pn** **01 43 11.7 -0.1**
**IGT Igoumenitsa 4.98 57** P **Pn** **01 43 12.3 -0.4**
IGT S **Sn** **01 44 05.4 -4.5**
**VVLD Villa Vallelon 4.99 349** P **Pg** **01 43 31.4 -2.8**
**VSL Villasalto 5.03 302** P **Pn** **01 43 13.7 +0.4**
**RMP Rome, Mte Porz 5.12 341** ⇑P **Pb** **01 43 27.7 -0.2**
**JAN Janina 5.39 58** P **Pn** **01 43 17.5 -0.9**
JAN S **Sn** **01 44 16.7 -3.4**
comp=N,50nm,0.4s
**PYL PYLOS 5.48 89** P **Pn** **01 43 20.2 +0.6**
**DRO Drossia 5.50 78** P **Pn** **01 43 20.9 +1.0**
DRO S **Sn** **01 44 22.9 +0.1**
comp=N,70nm,0.4s
**ITM Ithomi 5.62 86** P **Pn** **01 43 22.7 +1.2**
ITM S **Sn** **01 44 25.1 -0.6**
**EFP Efpalio 5.74 73** P **Pn** **01 43 23.7 +0.6**
**LSTV Lastovo 5.99 14** *e*Pn **Pn** **01 43 26.2 -0.3**
LSTV Sn **Sn** **01 44 33.5 -1.2**
**STON Ston 6.27 19** *e*Pn **Pn** **01 43 30.3 -0.1**
STON Sn **Sn** **01 44 38.8 -2.8**
**FNA Florina 6.32 51** P **Pn** **01 43 31.3 +0.1**
**ARCI Arcidosso 6.43 337** P **Pn** **01 43 32.4 -0.4**
**MMUR Monte Murano 6.62 348** P **Pb** **01 43 55.2 +1.8**
**RICI Ricice 6.73 14** *e*Pn **Pn** **01 43 37.2 +0.4**
**TRIF Trifonti 6.86 335** ⇑P **Pn** **01 43 43.0 +4.5**
**KIJV Kijevo 7.12 9** *e*Pn **Pn** **01 43 44.1 +2.1**

*IDC* ***07*** *02:03:32.4±0.4, 15˚.20S×173˚.53W, h0km, mb5.0/23, mb1 5.2/25, mb1mx5.1/36, mbtmp5.0/25, ML5.0/2, MS5.1/67, Ms1 5.1/67, ms1mx5.1/68, Error ellipse: s-maj=15.3km s-min=12.2km az=128.0*

*BJI* ***07*** *02:03:33.2±0.0, 14˚.47S×173˚.10W, h7km, mb5.1/55, mB5.8/48, Ms5.2/53, Ms7 5.0/53*

*MOS* ***07*** *02:03:37.3±1.0, 15˚.01S×173˚.44W, h35km, mb5.5/29, MS5.1/7, Error ellipse: s-maj=12.8km s-min=9.0km az=110.0*

*BGR* ***07*** *02:03:39.2±0.0, 15˚.91S×173˚.54W, h52km, Ms5.5*

*NEIC* ***07*** *02:03:40.4, 15˚.22S×173˚.40W, h47km, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr3.73; Mθθ-3.13; Mϕϕ-0.60; Mrθ-3.83; Mϕθ 0.74; Mϕr 3.92; Fault plane solution: M₀6.53000×10¹⁷ NP1:ϕs94.19000°, δ18.92000°, λ56.15000°. NP2:ϕs309.53000°, δ74.38000°, λ100.81000°. Principal axes: T 6.9500, Plg59.0000°, Azm235.0000°; N -0.9516, Plg10.0000°, Azm127.0000°; P -5.9984, Plg29.0000°, Azm31.0000°;*

*NEIC* ***07*** *02:03:40.4±1.8, 15˚.22S±0˚.08×173˚.40W±0˚.09, h51km±1km, mb5.4/345, Mwb5.8/73, Mww5.8 Error ellipse: s-maj=15.1km s-min=12.8km az=135.0*

*NOU* ***07*** *02:03:40.6, 15˚.05S×173˚.00W, h100km, mb5.3/72, Samoa Islands Region*

*GCMT* ***07*** *02:03:45.4±0.1, 15˚.20S±0˚.01×173˚.18W±0˚.01, h68km, MW5.8/160, Moment Tensor Solution. s155,c327; s160,c379; Duration: 1s9 Moment tensor: Scale 10¹⁷ Nm; Mrr2.07±.04; Mθθ-0.66±.06; Mϕϕ-1.41±.05; Mrθ-4.30±.04; Mθϕ 1.10±.04; Mϕr 3.24±.04; Best double couple: M₀5.79200×10¹⁷ NP1:ϕs160.00000°, δ12.00000°, λ121.00000°. NP2:ϕs308.00000°, δ80.00000°, λ84.00000°. Principal axes: T 5.8190, Plg55.0000°, Azm211.0000°; N -0.0530, Plg6.0000°, Azm309.0000°; P -5.7660, Plg34.0000°, Azm44.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***07*** *02:03:46, 15˚.08S×173˚.37W, h60km, Moment Tensor Solution. Duration: 22s0 Moment tensor: Scale 10¹⁷Nm; Mrr2.22; Mθθ-0.16; Mϕϕ-2.06; Mrθ-5.42; Mθϕ 0.41; Mϕr 3.90; Fault plane solution: M₀7.03000×10¹⁷ NP1: ϕs178.00000°, δ11.00000°, λ139.00000°. NP2: ϕs309.00000°, δ82.00000°, λ81.00000°. Principal axes: T 7.4521, Plg52.0000°, Azm209.0000°; N -0.9458, Plg9.0000°, Azm310.0000°; P -6.5063, Plg37.0000°, Azm46.0000°;*

**ISC 07 02:03:38.8±0.3, 15˚.20S±0˚.04×173˚.33W±0˚.04, h44km±1km, h45km:pP-P, n1195, σ1970/1116, mb5.4/227, MS5.0/96, 151C-70D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.97** | **50** | Pn | **Pn** | **02 04 07.9** | **-1.9** |
| | 2µm,0.3s,baz=163,slow=0.9,SNR=832 | | | | | | |
| AFI | | | | Sn | **Sn** | **02 04 28.2** | **-5.2** |
| | 9µm,0.3s,baz=126,slow=23,SNR=26 | | | | | | |
| AFI | | | | LR | LR | 02 04 52.0 | |
| | comp=Z,76µm,21.7s,baz=148,slow=37 | | | | | | |
| **AFI** | **Afiamalu** | **1.97** | **50** | P | **Pn** | **02 04 07.9** | **-1.9** |
| **AFI** | **Afiamalu** | **1.97** | **50** | ⇑P | **Pn** | **02 04 07.9** | **-1.9** |
| **AFI** | **Afiamalu** | **1.97** | **50** | | **Pn** | **02 04 08.1** | **-1.7** |
| AFI | | | | Sn | **Sn** | **02 04 30.8** | **-2.6** |
| **AFI** | **Afiamalu** | **1.97** | **50** | P | **Pn** | **02 04 09.0** | **-0.8** |
| **AFI** | **Afiamalu** | **1.97** | **50** | P | **Pn** | **02 04 08.7** | **-1.1** |
| **AFI** | **Afiamalu** | **1.97** | **50** | P | **Pn** | **02 04 08.2** | **-1.7** |
| **NIUE** | **Niue** | **5.05** | **140** | P | **Pn** | **02 04 51.4** | **-0.7** |
| | baz=5.0,SNR=742 | | | | | | |

**NIUE Niue 5.05 140** ⇑P **Pn** **02 04 51.3 -0.7**
**NIUE Niue 5.05 140** P **Pn** **02 04 52.3 +0.3**
**NIUE Niue 5.05 140** P **Pn** **02 04 51.9 -0.1**
**LKBA Tubou, Lakemba 6.07 239** P Pn 02 05 12.6 +6.6
**TAVE Taveuni 6.50 256** P Pn 02 05 19.6 +7.5
**DGTI Dogotuki 6.77 260** P Pn 02 05 22.7 +7.0
**MSVF Nonsavu 8.65 252** Pn Pn 02 05 48.9 +7.4
3.1nm,0.3s,baz=87,slow=11,SNR=97
MSVF LR LR 02 08 32.6
comp=Z,35µm,21.7s,baz=115,slow=36
**MSVF Nonsavu 8.65 252** Pn Pn 02 05 48.4 +6.9
**MSVF Nonsavu 8.65 252** P Pn 02 05 49.0 +7.4
**MSVF Nonsavu 8.65 252** P Pn 02 05 49.5 +7.9
**MSVF Nonsavu 8.65 252** P Pn 02 05 48.8 +7.2
**RAR Rarotonga 14.20 117** Pn **Pn** **02 06 55.6 -1.7**
20nm,0.3s,baz=274,slow=6.8,SNR=24
RAR Sn Sn 02 09 21.3 -12
8.2nm,0.3s,baz=134,slow=19,SNR=1.5
RAR LR LR 02 11 12.2
comp=Z,3µm,21.2s,baz=286,slow=32
**RAR Rarotonga 14.20 117** P **Pn** **02 06 55.6 -1.7**
**RAR Rarotonga 14.20 117** ⇑P **Pn** **02 06 56.1 -1.2**
**RAR Rarotonga 14.20 117** **Pn** **02 06 56.6 -0.7**
**RAR Rarotonga 14.20 117** P **Pn** **02 06 54.6 -2.7**
**RAR Rarotonga 14.20 117** P **Pn** **02 06 56.3 -1.0**
**RAO Raoul Island 14.62 196** Sn Sn 02 09 33.1 -11
46nm,0.3s,baz=76,slow=20,SNR=4.4
**RTV Rentapao 17.69 259** P **P** **02 07 45.0 +2.5**
**MARNC Mare, Loyalty 18.76 248** ⇑P **P** **02 07 52.4 -1.9**
**MARNC Mare, Loyalty 18.76 248** P **P** **02 07 51.6 -2.7**
**MARNC Mare, Loyalty 18.76 248** P **Pn** **02 07 55.5 +0.4**
**MARNC Mare, Loyalty 18.76 248** P **Pn** **02 07 55.1 0.0**
**SANVU Saraoutou 18.78 267** ⇑P **P** **02 07 54.4 -0.2**
**SANVU Saraoutou 18.78 267** P **P** **02 07 54.0 -0.6**
SANVU IAmb IAmb 02 08 22.6
comp=Z,348nm,1.4s
**SANVU Saraoutou 18.78 267** P **Pn** **02 07 56.4 +1.0**
**SANVU Saraoutou 18.78 267** P **Pn** **02 07 56.2 +0.8**
**SANVU Saraoutou 18.78 267** P **P** **02 07 54.1 -0.5**
**LIFNC LIFOU 19.29 250** **P** **02 07 59.0 -1.1**
LIFNC IAmb IAmb 02 08 05.1
comp=Z,253nm,0.8s
**LIFNC LIFOU 19.29 250** P **Pn** **02 08 02.0 +0.5**
**LIFNC LIFOU 19.29 250** P **Pn** **02 08 01.6 +0.1**
**PINNC Pines Island, 19.62 245** P **P** **02 08 02.3 -1.4**
**PINNC Pines Island, 19.62 245** P **P** **02 08 04.5 +0.8**
**YATNC Mamie plateau, 19.94 247** P **Pn** **02 08 08.3 -0.9**
**YATNC Mamie plateau, 19.94 247** P **Pn** **02 08 08.2 -0.9**
**OUENC Ouen Island, N 20.09 246** P **P** **02 08 08.3 -0.5**
**OUENC Ouen Island, N 20.09 246** P **P** **02 08 09.7 +0.9**
**OUENC Ouen Island, N 20.09 246** P **P** **02 08 08.9 +0.1**
**DZM Mont Dzumac 20.34 247** *e*P **P** **02 08 09.5 -2.2**
comp=Z,789nm,1.8s
DZM *e*S **S** **02 11 49.5 -7.9**
comp=Z,4µm,31.1s
DZM *e*LR LR 02 13 03.4
comp=Z,40µm,26.9s
**DZM Mont Dzumac 20.34 247** P **P** **02 08 07.8 -3.9**
comp=Z,12nm,0.9s,baz=67,slow=20,SNR=26
DZM LR LR 02 14 58.2
comp=Z,15µm,21.1s,baz=98,slow=34
**DZM Mont Dzumac 20.34 247** ⇑P **P** **02 08 09.5 -2.2**
**DZM Mont Dzumac 20.34 247** P **P** **02 08 11.3 -0.4**
DZM IAmb IAmb 02 08 18.3
comp=Z,225nm,1.0s
**DZM Mont Dzumac 20.34 247** P **P** **02 08 10.4 -1.3**
**DZM Mont Dzumac 20.34 247** P **P** **02 08 12.4 +0.7**
**DZM Mont Dzumac 20.34 247** P **P** **02 08 11.4 -0.3**
DZM pP **sP** **02 08 27.4 +0.2**
**ONTNC Ouen Toro 20.40 247** P **P** **02 08 11.1 -1.1**
**ONTNC Ouen Toro 20.40 247** P **P** **02 08 13.1 +0.9**
**ONTNC Ouen Toro 20.40 247** P **P** **02 08 13.4 +1.2**
**NOUC Port Laguerre 20.48 247** P **P** **02 08 12.1 -0.9**
**NOUC Port Laguerre 20.48 247** P **P** **02 08 12.7 -0.3**
**NOUC Port Laguerre 20.48 247** P **P** **02 08 14.0 +1.0**
NOUC pP **pwP** **02 08 25.8 +0.4**
**TARA Tarawa 21.34 319** P **P** **02 08 22.4 0.0**
TARA IAmb IAmb 02 08 27.1
comp=Z,208nm,0.9s
**KOUNC Koumac, New Ca 21.95 253** ⇓P **P** **02 08 27.5 -1.4**
**KOUNC Koumac, New Ca 21.95 253** P **P** **02 08 27.9 -1.0**
comp=Z,58nm,1.2s
**PPT Papeete 22.91 99** P **P** **02 08 40.3 +1.2**
comp=Z,53nm,1.0s,baz=258,slow=23,SNR=2.8
PPT LR LR 02 15 08.9
comp=Z,2µm,20.0s,baz=272,slow=30
**PPT Papeete 22.91 99** P **P** **02 08 40.3 +1.2**
**PAE Paea 22.91 99** *e*T T 02 31 57.0
comp=Z,24nm,0.4s
**PPT2 Papeete2 22.91 99** *e*S **S** **02 12 42.4 -3.7**
comp=Z,2µm,27.0s
PPT2 *e*LR LR 02 14 03.2
comp=Z,16µm,27.5s,baz=269
**PPT2 Papeete2 22.91 99** *e*T T 02 32 01.2
comp=Z,35nm,0.4s
**OUZ Omahuta 23.14 208** ⇓P **P** **02 08 41.4 +0.1**
**OUZ Omahuta 23.14 208** P **P** **02 08 40.8 -0.5**
**OUZ Omahuta 23.14 208** P **P** **02 08 41.1 -0.2**
**XMAS Kiritimati 23.25 44** P **P** **02 08 41.4 -1.1**
**MXZ Matakaoa Point 23.48 197** P **P** **02 08 44.0 -0.6**
MXZ IAmb IAmb 02 08 45.4
comp=Z,118nm,1.0s
**PUZ Puketiti 23.97 197** P **P** **02 08 48.9 -0.3**
PUZ S **S** **02 13 03.1 +0.1**
**RUGZ Raukumara Rang 24.04 198** P **P** **02 08 50.6 +0.7**
RUGZ S **S** **02 13 04.3 +0.1**
**TWGZ Tauwhareparae 24.15 197** P **P** **02 08 52.7 +1.9**
TWGZ S **S** **02 13 10.0 +4.2**
**TGRZ Tauranga 24.27 200** P **P** **02 08 54.2 +2.4**
**OPRZ Ohinepanea 24.27 200** P **P** **02 08 54.2 +2.3**
**MWZ Matawai 24.42 198** P **P** **02 08 54.2 +0.9**
MWZ S **S** **02 13 15.1 +4.9**
**TKGZ Te Karaka 24.43 197** P **P** **02 08 54.8 +1.5**
**EDRZ Edgecumbe 24.45 199** P **P** **02 08 57.1 +3.4**
EDRZ S S 02 13 21.6 +11
**URZ Urewera 24.48 198** P **P** **02 08 51.5 -2.3**
comp=Z,48nm,0.5s,baz=309,slow=2.4,SNR=35
URZ S **S** **02 13 10.9 -0.2**
comp=Z,8.7nm,0.6s,baz=88,slow=3.5,SNR=2.0
URZ LR LR 02 17 15.0
comp=Z,10µm,21.0s,baz=30,slow=34
**URZ Urewera 24.48 198** ⇓P **P** **02 08 52.1 -1.7**
**URZ Urewera 24.48 198** P **P** **02 08 53.0 -0.7**
URZ S **S** **02 13 13.9 +2.9**
**URZ Urewera 24.48 198** P **P** **02 08 52.0 -1.7**
URZ IAmb IAmb 02 09 03.6
comp=Z,91nm,0.6s
**URZ Urewera 24.48 198** P **P** **02 08 52.8 -1.0**
**URZ Urewera 24.48 198** P **P** **02 08 53.0 -0.7**
**KMRZ Kaimai 24.48 201** P **P** **02 08 54.9 +1.0**
**PMOR Pomariorio Ree 24.55 93** *e*P **P** **02 08 56.0 +1.3**
comp=Z,221nm,0.9s
**PMOR Pomariorio Ree 24.55 93** *e*T T 02 34 22.2
comp=Z,17nm,0.2s
**OMRZ Omania 24.57 200** P **P** **02 08 57.6 +3.0**
**RAGZ Rawiri 24.61 198** P **P** **02 08 56.8 +1.7**
**UTU Utuhina 24.70 200** P **P** **02 09 00.4 +4.7**
**RIGZ Rimuhau 24.70 197** P **P** **02 08 56.7 +0.8**
RIGZ S **S** **02 13 16.7 +2.0**
**HLRZ Highlands Stat 24.71 200** P **P** **02 08 58.4 +2.5**
**RRRZ Republican Roa 24.74 199** P **P** **02 08 58.4 +2.3**
RRRZ S S 02 12 58.7 -17
**VAH Vaihoa 24.80 93** *e*P **P** **02 08 57.9 +1.0**
comp=Z,64nm,0.8s
**VAH Vaihoa 24.80 93** *e*T T 02 34 36.4
comp=Z,35nm,0.4s
**RTZ Ruatahuna 24.85 198** P **P** **02 08 58.4 +1.1**
RTZ S **S** **02 13 22.9 +5.7**
**HRRZ Handcock Road 24.86 200** P **P** **02 08 58.7 +1.4**
**GRRZ Galatos Road 24.88 200** P **P** **02 08 59.5 +2.0**
**SNGZ Shannon Statio 24.89 198** P **P** **02 09 00.7 +3.1**
SNGZ S **S** **02 13 20.7 +2.9**
**PRRZ Plateau Road 24.92 199** P **P** **02 08 58.6 +0.7**
**ALRZ Allen Road 25.00 199** P **P** **02 08 60.0 +1.5**
**KNZ Kokohu 25.02 197** P **P** **02 09 01.9 +3.3**
KNZ S S 02 13 30.9 +11
**MHGZ Mahia Peninsul 25.08 196** P **P** **02 09 02.3 +3.1**
**KUTZ Kaahu Road 25.10 200** P **P** **02 09 01.5 +2.1**
**MTHZ Maungataniwha 25.11 198** P **P** **02 09 01.7 +2.2**
MTHZ S **S** **02 13 29.8 +8.5**
**ARHZ Aropaoanui 25.44 198** P **P** **02 09 05.9 +3.5**
**HIZ Hauiti 25.46 202** P **P** **02 09 04.1 +1.4**
**HIZ Hauiti 25.46 202** P **P** **02 09 02.5 -0.2**

HIZ Hauiti 25.46 202 P P 02 09 03.5 +0.8
RATZ Rangitukua 25.46 200 P P 02 09 03.8 +1.0
BKZ Black Stump Fm 25.50 199 P P 02 09 02.6 -0.5
BKZ S S 02 13 30.7 +3.2
BKZ Black Stump Fm 25.50 199 P P 02 09 01.9 -1.2
BKZ Black Stump Fm 25.50 199 P P 02 09 03.3 +0.2
BKZ Black Stump Fm 25.50 199 P P 02 09 01.4 -1.7
RITZ Rihia Road 25.53 200 P P 02 09 04.1 +0.8
KATZ Kakaramea 25.58 200 P P 02 09 05.0 +1.1
MCHZ McNeill Hill 25.70 198 P P 02 09 05.6 +0.8
MCHZ S S 02 13 42.6 +12
NTVZ North Tongarir 25.70 200 P P 02 09 06.1 +1.1
TMVZ Te Maari 25.71 200 P P 02 09 04.5 -0.5
ETVZ East Tongariro 25.72 200 P P 02 09 04.8 -0.4
WTVZ West Tongariro 25.74 200 P P 02 09 05.1 -0.4
NNVZ North Ngauruho 25.75 200 P P 02 09 06.2 +0.7
TWVZ Taurewa 25.75 200 P P 02 09 06.0 +0.5
KWHZ Kaweka Forest 25.76 198 P P 02 09 04.9 -0.6
KWHZ S S 02 13 40.1 +8.5
OTVZ Oturere 25.76 200 P P 02 09 04.0 -1.6
CKHZ Cape Kidnapper 25.78 197 P P 02 09 08.1 +2.5
SNVZ South Ngauruho 25.79 200 P P 02 09 05.7 -0.2
NGZ Ngauruhoe 25.80 200 P P 02 09 06.0 +0.1
FWVZ Far West T-bar 25.88 200 P P 02 09 06.6 -0.2
WHVZ Whangaehu Hut 25.89 200 P P 02 09 08.0 +1.1
TRVZ Turoa 25.92 200 P P 02 09 06.7 -0.5
BHHZ Black Hill Sta 25.93 199 P P 02 09 06.8 -0.2
BHHZ S S 02 13 38.5 +4.2
WNVZ Wahianoa 25.93 200 P P 02 09 06.7 -0.5
MOVZ Moawhango 25.95 200 P P 02 09 07.5 +0.3
KAHZ Kahuranaki 25.96 197 P P 02 09 08.7 +1.4
KAHZ S S 02 13 41.2 +6.4
KRHZ Kereru 25.98 198 P P 02 09 07.1 -0.3
KRHZ S S 02 13 40.6 +5.6
PKVZ Pokaka 25.98 200 P P 02 09 06.6 -0.9
VRZ Vera Road 26.04 201 P P 02 09 10.9 +3.0
PXZ Pawanui 26.19 197 P P 02 09 10.7 +1.4
PXZ S S 02 13 52.2 +14
PNHZ Pukenui 26.28 198 P P 02 09 11.7 +1.6
WPHZ Waipukurau 26.34 198 P P 02 09 12.6 +2.0
WPHZ S S 02 13 56.9 +16
PKE Pukeiti 26.38 203 P P 02 09 14.1 +3.1
NEZ North Egmont 26.41 202 P P 02 09 14.8 +3.5
PREZ Palmer Road 26.45 202 P P 02 09 14.9 +3.2
KHEZ Kahui Hut 26.46 202 P P 02 09 15.4 +3.6
LREZ Lake Rotokare 26.46 202 P P 02 09 13.8 +2.1
PRHZ Porangahau 26.47 197 P P 02 09 14.2 +2.4
TSZ Takapari Road 26.48 199 P P 02 09 13.4 +1.5
NMEZ Namu Road 26.61 203 P P 02 09 15.2 +2.2
DVHZ Dannevirke 26.64 198 P P 02 09 14.8 +1.4
ANWZ Angora Road 26.70 198 P P 02 09 09.3 -4.6
HNR Honiara 26.72 279 LR LR 02 18 20.9
comp=Z,3µm,20.4s,baz=122,slow=34
POWZ Post Office Ro 26.85 199 P P 02 09 18.2 +2.9
BFZ Birch Farm 26.97 198 P P 02 09 14.9 -1.4
BFZ Birch Farm 26.97 198 P P 02 09 13.4 -2.9
BFZ Birch Farm 26.97 198 P P 02 09 14.6 -1.7
MRZ Mangatainoka R 27.15 199 P P 02 09 15.5 -2.4
CPWZ Castlepoint 27.19 198 P P 02 09 19.5 +1.2
HOWZ Holdsworth Sta 27.39 199 P P 02 09 19.1 -1.0
OGWZ Otaki Gorge 27.42 199 P P 02 09 21.1 +0.8
TMWZ Te Maipa 27.46 198 P P 02 09 21.0 +0.2
TRWZ Traveller 27.79 198 P P 02 09 25.1 +1.4
MSWZ Moikau Station 27.94 199 P P 02 09 24.9 -0.1
MSWZ Moikau Station 27.94 199 P P 02 09 24.4 -0.6
SNZO South Karori 28.02 199 P P 02 09 24.8 -0.8
SNZO IAmb IAmb 02 10 26.5
comp=Z,218nm,1.6s
SNZO South Karori 28.02 199 P P 02 09 24.4 -1.2
comp=Z,108nm,1.1s
BHW Baring Head 28.05 199 P P 02 09 27.1 +1.2
TCW Tory Channel 28.07 200 P P 02 09 26.3 +0.2
QRZ Quartz Range 28.35 203 P P 02 09 28.0 -0.6
comp=Z,221nm,1.9s
QRZ Quartz Range 28.35 203 P P 02 09 27.8 -0.8
KHZ Kahutara 29.39 200 ⇓P P 02 09 37.7 -0.1
KHZ Kahutara 29.39 200 P P 02 09 37.4 -0.4
KHZ Kahutara 29.39 200 P P 02 09 37.6 -0.2
RPZ Rata Peaks 31.40 202 P P 02 09 54.7 -0.9
ODZ Otahua Downs 32.70 201 ⇑P P 02 10 06.0 -1.0
ODZ Otahua Downs 32.70 201 P P 02 10 05.8 -1.1
ODZ IAmb IAmb 02 10 53.1
comp=Z,127nm,1.9s
ODZ Otahua Downs 32.70 201 P P 02 10 06.0 -1.0
comp=Z,30nm,2.1s
TAOE Nuku Hiva Isla 33.03 83 eLR LR 02 18 37.7
comp=Z,16µm,28.6s,baz=259
TAOE Nuku Hiva Isla 33.03 83 eT T 02 44 46.4
comp=Z,280nm,0.2s
EIDS Eidsvold 34.79 247 P P 02 10 25.2 -0.3
baz=35,SNR=3.7
PYZ Puysegur Point 35.13 204 P P 02 10 27.7 -0.4
PYZ IAmb IAmb 02 10 30.9
comp=Z,49nm,0.7s
ARMA Armidale 35.51 239 P P 02 10 29.6 -2.1
baz=36,SNR=9.6
ARMA Armidale 35.51 239 ⇑P P 02 10 29.0 -2.7
ARMA Armidale 35.51 239 P P 02 10 29.4 -2.3
ARMA Armidale 35.51 239 P P 02 10 30.3 -1.4
comp=Z,23nm,0.6s
MGCD Mangrove Creek 36.83 234 P P 02 10 41.5 -1.3
baz=37,SNR=9.6
MGCD Mangrove Creek 36.83 234 P P 02 10 41.6 -1.3
comp=Z,30nm,0.8s
RMQ Roma 37.04 246 P P 02 10 44.7 -0.1
baz=37,SNR=20
RMQ Roma 37.04 246 P P 02 10 44.7 -0.1
RMQ Roma 37.04 246 P P 02 10 45.0 +0.2
SYDH Sydney Hard Ro 37.31 234 P P 02 10 46.2 -0.7
CTA Charters Tower 38.76 257 LR LR 02 24 39.3
comp=Z,3µm,20.7s,baz=87,slow=33
CTA Charters Tower 38.76 257 P P 02 10 58.2 -1.1
CTA Charters Tower 38.76 257 P P 02 10 57.8 -1.5
CTAO Charters Tower 38.76 257 ⇓P P 02 10 57.2 -2.2
CTAO Charters Tower 38.76 257 P P 02 10 57.1 -2.2
CTAO Charters Tower 38.76 257 P P 02 10 58.0 -1.3
comp=Z,19nm,0.9s
CTAO Charters Tower 38.76 257 P P 02 10 57.5 -1.8
CTAO Charters Tower 38.76 257 P P 02 10 57.1 -2.2
CTAO pP sP 02 11 20.2 +4.6
HMH Humu'ula Sheep 38.78 27 P P 02 10 59.8 0.0
POHA Pohakuloa 38.89 27 P P 02 11 00.8 +0.3
CNB Canberra Magne 38.93 232 P P 02 10 58.2 -2.4
baz=39,SNR=60
CNB Canberra Magne 38.93 232 P P 02 10 58.5 -2.1
PMG Port Moresby 38.99 274 LR LR 02 24 54.6
comp=Z,2µm,20.7s,baz=91,slow=33
PMG Port Moresby 38.99 274 ceP P 02 11 00.4 -0.9
PMG pmax pmax
comp=Z,22nm,0.7s
PMG Port Moresby 38.99 274 P P 02 11 00.4 -0.9
PMG IAmb IAmb 02 11 25.4
comp=Z,50nm,1.1s
CAN Canberra 39.21 232 ⇑P P 02 11 00.2 -2.8
CAN Canberra 39.21 232 P P 02 11 00.6 -2.4
CAN IAmb IAmb 02 11 01.9
comp=Z,33nm,0.6s
CAN Canberra 39.21 232 P P 02 11 00.8 -2.2
CAN Canberra 39.21 232 P P 02 11 00.9 -2.1
CAN Canberra 39.21 232 P P 02 11 00.1 -2.9
CAN pP sP 02 11 19.4 -0.4
KIP Kipapa 39.37 23 ceP P 02 11 05.3 +1.0
KIP pmax pmax
comp=Z,203nm,1.7s
KIP Kipapa 39.37 23 P P 02 11 01.6 -2.7
KIP Kipapa 39.37 23 P P 02 11 01.3 -3.0
H11N3 WAKE ISLAND Hy 39.77 330 T T 02 52 54.5
baz=148,slow=76,SNR=94
H11N1 WAKE ISLAND Hy 39.77 330 T T 02 52 53.0
baz=148,slow=76,SNR=9.7
H11N2 WAKE ISLAND Hy 39.79 330 T T 02 52 55.3
baz=148,slow=76,SNR=9.0
MTSU Mount Surprise 40.62 260 P P 02 11 13.0 -1.9
baz=41,SNR=73
MTSU Mount Surprise 40.62 260 P P 02 11 12.9 -1.9
MTSU Mount Surprise 40.62 260 P P 02 11 13.3 -1.5
CMSA Cobar Meteorol 40.72 239 P P 02 11 13.0 -2.4
baz=41,SNR=47
CMSA Cobar Meteorol 40.72 239 P P 02 11 13.2 -2.3
QLP Quilpie 41.06 247 P P 02 11 16.8 -1.5
baz=41,SNR=6.5
QLP Quilpie 41.06 247 ⇑P P 02 11 15.5 -2.8
QLP Quilpie 41.06 247 P P 02 11 17.0 -1.4
QLP Quilpie 41.06 247 P P 02 11 17.3 -1.1
COEN Coen 42.07 266 ⇑P P 02 11 25.3 -1.4
COEN Coen 42.07 266 P P 02 11 25.8 -0.9
COEN Coen 42.07 266 P P 02 11 25.6 -1.1
GLAD Gladstone 42.19 225 P P 02 11 25.4 -2.0
GLAD Gladstone 42.19 225 P P 02 11 25.7 -1.7
TOO Toolangi 42.65 231 P P 02 11 28.7 -2.5
baz=43,SNR=34
TOO Toolangi 42.65 231 ⇑P P 02 11 28.7 -2.5
TOO Toolangi 42.65 231 P P 02 11 29.1 -2.1
CORO Coronation Par 42.98 225 P P 02 11 32.1 -1.7
TAU Tasmania Unive 43.52 223 P P 02 11 36.3 -1.8
comp=Z,27nm,1.8s
GEXS Deakin Univers 43.76 230 P P 02 11 39.7 -0.4
BRAT Ballarat 43.81 231 P P 02 11 38.8 -1.7
BRAT Ballarat 43.81 231 P P 02 11 39.9 -0.6
STKA Stephens Creek 44.20 240 P P 02 11 41.6 -2.2
comp=Z,27nm,0.7s,baz=96,slow=11,SNR=49
STKA LR LR 02 28 07.2
comp=Z,3µm,21.9s,baz=89,slow=34
STKA Stephens Creek 44.20 240 P P 02 11 42.0 -1.8
baz=44,SNR=44
STKA Stephens Creek 44.20 240 P P 02 11 41.6 -2.2
STKA Stephens Creek 44.20 240 P P 02 11 42.0 -1.8
STKA Stephens Creek 44.20 240 P P 02 11 41.6 -2.2
STKA Stephens Creek 44.20 240 P P 02 11 42.6 -1.2
QIS Mount Isa 44.99 256 P P 02 11 48.0 -2.2
baz=45,SNR=13
QIS Mount Isa 44.99 256 P P 02 11 47.6 -2.7
QIS Mount Isa 44.99 256 P P 02 11 47.9 -2.4
ARPS Mount Arapiles 45.17 233 P P 02 11 49.6 -1.8
baz=45,SNR=20
ARPS Mount Arapiles 45.17 233 P P 02 11 49.0 -2.4
ARPS Mount Arapiles 45.17 233 P P 02 11 48.8 -2.6
HTT Hallett 46.71 238 P P 02 12 01.6 -2.0
baz=47,SNR=20
HTT Hallett 46.71 238 ⇑P P 02 12 01.2 -2.5
HTT Hallett 46.71 238 P P 02 12 01.4 -2.3
comp=Z,64nm,1.7s
HTT Hallett 46.71 238 P P 02 12 01.7 -2.0
LCRK Leigh Creek 46.82 242 P P 02 12 02.6 -1.9
LCRK Leigh Creek 46.82 242 P P 02 12 02.4 -2.1
JAY Jayapura 47.02 281 LR LR 02 30 32.5
comp=Z,2µm,21.6s,baz=132,slow=35
TWOA Tennyson Woods 47.31 236 P P 02 12 05.9 -2.4
TWOA Tennyson Woods 47.31 236 P P 02 12 06.3 -2.0
WHYH Whyalla 47.75 239 P P 02 12 09.0 -2.7
OOD Oodnadatta 48.76 246 P P 02 12 17.8 -1.7
OOD Oodnadatta 48.76 246 P P 02 12 17.9 -1.6
BBOO Buckleboo 48.98 240 P P 02 12 18.9 -2.3
baz=49,SNR=22
BBOO Buckleboo 48.98 240 P P 02 12 19.3 -1.9
BBOO Buckleboo 48.98 240 P P 02 12 19.1 -2.1
WB0 Warramunga Arr 49.92 257 P P 02 12 25.1 -3.5
WRAB Tennant Creek 49.95 257 iP P 02 12 22.4 -6.4
WRAB pmax pmax
comp=Z,82nm,1.5s
WRAB Tennant Creek 49.95 257 ⇑P P 02 12 22.4 -6.4
WRAB Tennant Creek 49.95 257 P P 02 12 26.0 -2.8
WRAB Tennant Creek 49.95 257 P P 02 12 26.5 -2.3
WRAB Tennant Creek 49.95 257 P P 02 12 22.2 -6.6
WRAB pP pP 02 12 40.6 +0.1
WRA Warramunga Arr 49.96 257 P P 02 12 25.6 -3.3
comp=Z,16nm,0.5s,baz=90,slow=6.7,SNR=136
WRA PcP PcP 02 13 47.8 -0.8
comp=Z,5.2nm,0.6s,baz=91,slow=3.6,SNR=2.7
WRA LR LR 02 31 38.9
comp=Z,3µm,21.9s,baz=95,slow=34
WRA Warramunga Arr 49.96 257 P P 02 12 25.6 -3.3
WRA 02 13 47.8
WRA Warramunga Arr 49.96 257 P P 02 12 25.9 -3.0
WRA pP pP 02 12 41.5 +0.9
AS31 Alice Springs 50.24 252 IAmb IAmb 02 12 30.8
comp=Z,33nm,0.7s
ASAR Alice Springs 50.24 252 P P 02 12 28.2 -2.8
comp=Z,135nm,0.6s,baz=85,slow=8.1,SNR=736
ASAR LR LR 02 32 11.8
comp=Z,8µm,21.6s,baz=98,slow=34
ASAR Alice Springs 50.24 252 P P 02 12 28.2 -2.8
ASAR Alice Springs 50.24 252 P P 02 12 28.5 -2.5
GUMO Guam 50.28 303 LR LR 02 31 35.5
comp=Z,344nm,19.7s,baz=116,slow=34
MULG Mulgathing 50.37 243 P P 02 12 29.5 -2.4
MULG Mulgathing 50.37 243 P P 02 12 29.4 -2.4
KDU Kakadu 52.56 266 P P 02 12 46.6 -1.7
baz=53,SNR=21
KDU Kakadu 52.56 266 ⇑P P 02 12 45.7 -2.6
KDU Kakadu 52.56 266 P P 02 12 46.1 -2.3
MTN Manton Dam 53.82 265 P P 02 12 56.1 -1.6
baz=54,SNR=5.3
MTN Manton Dam 53.82 265 ⇑P P 02 12 53.7 -4.0
MTN Manton Dam 53.82 265 P P 02 12 55.3 -2.4
DRS Darwin Rock St 54.11 266 P P 02 12 58.4 -1.4
DRS Darwin Rock St 54.11 266 P P 02 12 58.6 -1.2
WRKA Warakurna 55.33 250 P P 02 13 05.8 -2.8
baz=55,SNR=50
WRKA Warakurna 55.33 250 ⇑P P 02 13 05.7 -2.9
WRKA Warakurna 55.33 250 P P 02 13 06.3 -2.3
WRKA Warakurna 55.33 250 P P 02 13 06.0 -2.6
FORT Forrest 55.57 243 P P 02 13 07.4 -2.7
baz=56,SNR=36
FORT Forrest 55.57 243 ⇑P P 02 13 06.7 -3.5
FORT Forrest 55.57 243 P P 02 13 07.5 -2.7
FORT Forrest 55.57 243 P P 02 13 07.4 -2.7
KNRA Kununurra 55.67 261 P P 02 13 09.4 -1.6
baz=56,SNR=11
KNRA Kununurra 55.67 261 P P 02 13 08.9 -2.1
FITZ Fitzroy Crossi 58.32 258 LR LR 02 36 46.5
comp=Z,2µm,21.9s,baz=104,slow=34
FITZ Fitzroy Crossi 58.32 258 P P 02 13 28.6 -1.2
baz=58,SNR=14
TNTI Ternate 60.71 280 P P 02 13 46.1 -0.2
TNTI IAmb IAmb 02 14 15.6
comp=Z,41nm,0.9s
SOEI Soe 61.01 267 ⇑P P 02 13 47.3 -1.2
SOEI Soe 61.01 267 P P 02 13 47.8 -0.7
SOEI Soe 61.01 267 P P 02 13 48.3 -0.2
SOEI Soe 61.01 267 P P 02 13 48.7 +0.2
BATI Baumata 61.50 267 LR LR 02 38 23.7
comp=Z,1µm,20.8s,baz=114,slow=34
MMRI Maumere 63.20 268 P P 02 14 01.9 -1.2
MMRI Maumere 63.20 268 P P 02 14 02.7 -0.4
PSA00 Pilbara Seismi 63.33 253 P P 02 14 01.5 -2.3
PSA00 pP pP 02 14 16.6 +0.8
PSA00 IAmb IAmb 02 14 27.1
comp=Z,85nm,1.8s
PSA00 Pilbara Seismi 63.33 253 P P 02 14 01.9 -2.0
PSA00 Pilbara Seismi 63.33 253 P P 02 14 01.6 -2.3
MBWA Marble Bar 63.49 254 P P 02 14 03.0 -1.9
MBWA Marble Bar 63.49 254 P P 02 14 03.6 -1.3
MBWA Marble Bar 63.49 254 P P 02 14 03.3 -1.6
VNDA Vanda 63.59 186 P P 02 14 05.5 +1.0
comp=Z,10.0nm,0.8s,baz=2.9,slow=6.4,SNR=16
VNDA LR LR 02 37 14.0
comp=Z,549nm,21.8s,baz=16,slow=32
VNDA Vanda 63.59 186 P P 02 14 05.6 +1.0
VNDA Vanda 63.59 186 P P 02 14 05.0 +0.4
MEEK Meekatharra 63.96 248 P P 02 14 05.8 -2.2
baz=64,SNR=4.8
MEEK Meekatharra 63.96 248 P P 02 14 06.0 -2.0
MEEK Meekatharra 63.96 248 P P 02 14 06.4 -1.6
DAV Davao City (W) 64.45 286 LR LR 02 40 39.3
comp=Z,587nm,18.9s,baz=114,slow=35
NWAO Narrogin (SRO) 64.78 241 P P 02 14 11.5 -1.7
NWAO IAmb IAmb 02 14 34.5
comp=Z,96nm,1.6s
NWAO Narrogin (SRO) 64.78 241 P P 02 14 11.6 -1.6
NWAO Narrogin (SRO) 64.78 241 P P 02 14 10.7 -2.5
RKGY Rocky Gully 64.94 239 P P 02 14 13.2 -1.0
baz=65,SNR=8.5
RKGY Rocky Gully 64.94 239 P P 02 14 14.9 +0.7
BLDU Ballidu 65.34 243 P P 02 14 15.7 -1.2
baz=65,SNR=9.8
BLDU Ballidu 65.34 243 P P 02 14 16.2 -0.7
BLDU Ballidu 65.34 243 P P 02 14 15.1 -1.8
JHJ Hachijo jima 2 65.67 318 LR LR 02 38 24.3
comp=Z,179nm,21.8s,baz=116,slow=32
MUN Mundaring 65.69 242 P P 02 14 17.5 -1.6
baz=66,SNR=6.2
MUN Mundaring 65.69 242 P P 02 14 18.2 -0.9
MORW Morawa 66.03 245 P P 02 14 19.7 -1.7
baz=66,SNR=3.9
MORW Morawa 66.03 245 P P 02 14 20.7 -0.7
KAPI Kappang 66.44 271 LR LR 02 41 42.3
comp=Z,306nm,20.8s,baz=135,slow=35
KAPI Kappang 66.44 271 P P 02 14 22.4 -1.8
KAPI IAmb IAmb 02 14 49.4
comp=Z,77nm,1.8s
TOLI2 Tolitoli 67.09 278 P P 02 14 26.9 -1.4
TOLI2 Tolitoli 67.09 278 P P 02 14 26.1 -2.2
JYT Yasato 67.40 321 P P 02 14 30.1 +0.3
GIRL Giralia 68.36 251 P P 02 14 35.9 -0.3
baz=68,SNR=3.5
GIRL Giralia 68.36 251 P P 02 14 35.6 -0.6
comp=Z,108nm,1.2s
SHEM Shemya Is, Ala 68.51 352 LR LR 02 37 52.3
comp=Z,3µm,21.7s,baz=142,slow=30
CCD Concordia, Ant 68.68 194 P P 02 14 37.5 -0.3
CCD pP pwP 02 14 53.0 +0.6
MJAR Matsushiro Arr 68.83 320 P P 02 14 37.8 -1.0
comp=Z,11nm,0.9s,baz=152,slow=5.0,SNR=12
MJAR LR LR 02 39 27.3
comp=Z,1µm,21.7s,baz=122,slow=31
MJAR Matsushiro Arr 68.83 320 P P 02 14 37.8 -1.0
MJAR Matsushiro Arr 68.83 320 P P 02 14 38.4 -0.4
MJAR pP pwP 02 14 53.6 -0.1
MAJO Matsushiro 68.83 320 iP P 02 14 38.7 -0.1
MAJO pmax pmax
comp=Z,60nm,1.8s
MAJO Matsushiro 68.83 320 P P 02 14 38.9 +0.1
MAT Matsushiro 68.83 320 P P 02 14 38.1 -0.7
MAT S S 02 23 40.2 +0.6
MJB9 Matsu-Tunnel 68.83 320 P P 02 14 37.6 -1.2
MJB9 IAmb IAmb 02 14 40.2
comp=Z,55nm,1.4s
KUR Kuril'sk 69.68 332 eP P 02 14 46.9 +3.1
KUR S S 02 23 54.3 +5.2
KUR pmax pmax
comp=Z,1µm,3.2s
KUR MLR MLR
comp=Z,700nm,19.0s
JOW Kunigami 70.42 306 LR LR 02 40 04.2
comp=Z,666nm,21.4s,baz=124,slow=31
CASY Casey 70.62 205 P P 02 14 48.4 -1.0
CASY IAmb IAmb 02 14 49.2
comp=Z,99nm,1.8s
SKR Severo-Kuril's 70.86 340 eP P 02 14 50.0 -0.9
SKR ePPP PPP 02 17 31.7
SKR eS S 02 23 54.6 -8.1
SKR pmax pmax
comp=Z,400nm,3.6s
SKR pmax pmax
comp=Z,200nm,4.5s
SKR MLR MLR
comp=Z,400nm,16.0s
SKR MLR MLR
comp=Z,600nm,16.0s
JAGI Jajag, Banyuwa 71.04 266 IAmb IAmb 02 14 53.2
comp=Z,34nm,0.7s
JAGI Jajag, Banyuwa 71.04 266 P P 02 14 50.5 -2.3
PKM Mcpherson Peak 71.12 44 P P 02 14 54.8 +1.7
baz=235
SAO San Andreas Ge 71.13 42 ⇑P P 02 14 54.6 +1.7
SAO San Andreas Ge 71.13 42 P P 02 14 53.5 +0.6
SAO IAmb IAmb 02 15 17.4
comp=Z,99nm,1.9s
TGY Tagaytay City 71.22 291 LR LR 02 41 13.1
comp=Z,1µm,20.9s,baz=129,slow=32
PMPB Monarch Peak 71.23 43 P P 02 14 53.7 +0.1
PMPB IAmb IAmb 02 15 29.2
comp=Z,85nm,1.5s
BBGB Big Mountain B 71.29 42 P P 02 14 53.8 -0.2
BBGB IAmb IAmb 02 15 31.4
comp=Z,98nm,1.4s
PAGB Antelope Grade 71.31 43 P P 02 14 54.4 +0.3
PAGB IAmb IAmb 02 15 21.8
comp=Z,77nm,1.8s
JKA Kamikawa-asahi 71.40 328 P P 02 14 54.6 +0.3
JKA IAmb IAmb 02 14 57.2
comp=Z,34nm,0.9s
ASAJ Asahikawa 71.40 328 LR LR 02 43 21.0
comp=Z,256nm,19.4s,baz=157,slow=34
BCW Bitter Crk WRg 71.42 44 P P 02 14 55.8 +1.0
BCW IAmb IAmb 02 15 22.6
comp=Z,88nm,1.7s
HOPS Hopland Field 71.47 39 P P 02 14 55.7 +0.8
HOPS IAmb IAmb 02 14 57.6
comp=Z,83nm,1.4s
GDXM Geysers 71.52 39 P P 02 14 56.2 +0.8
GDXM IAmb IAmb 02 15 32.1
comp=Z,69nm,2.0s
KCPM Cahto Peak 71.59 38 P P 02 14 55.8 0.0
JNU Nakatsue 71.71 313 LR LR 02 40 13.0
comp=Z,443nm,22.0s,baz=124,slow=31
JNU Nakatsue 71.71 313 P P 02 14 54.9 -1.6
KMPM Mount Pierce 71.74 37 P P 02 14 57.9 +1.3
KMPM IAmb IAmb 02 14 59.6
comp=Z,46nm,1.0s
KMRM Mail Ridge 71.86 38 P P 02 14 58.4 +1.1
KMRM IAmb IAmb 02 15 00.2
comp=Z,61nm,0.9s
109C Camp Elliot, M 71.89 47 P P 02 14 57.9 +0.3
109C IAmb IAmb 02 15 32.8
comp=Z,92nm,1.9s
ARVC Arvin 71.92 45 P P 02 14 58.6 +0.9
baz=236
ELS Elsinore Mount 72.07 47 P P 02 14 59.2 +0.5
ELS IAmb IAmb 02 15 14.7
comp=Z,70nm,1.8s
PET Petropavlovsk 72.11 343 eP P 02 14 59.1 +0.8
PET eS S 02 24 19.6 +2.6
PET Petropavlovsk 72.11 343 P P 02 14 58.0 -0.3
VES Vestal, Richgr 72.15 44 P P 02 15 00.3 +1.2
baz=235,SNR=11
MURC Murrieta 72.20 47 P P 02 15 00.8 +1.3
baz=237,SNR=6.5
KHMM Horse Mountain 72.26 37 P P 02 15 00.0 +0.2
KHMM IAmb IAmb 02 15 05.5
comp=Z,48nm,1.1s
EDW2 Edwards Air Fo 72.35 45 P P 02 15 01.5 +1.1
baz=236,SNR=14
MONP2 Monument Peak 72.38 48 P P 02 15 01.9 +1.1
baz=238,SNR=5.5
ISA Isabella, Lake 72.46 44 IAmb IAmb 02 15 03.6
comp=Z,84nm,1.9s
ISA Isabella, Lake 72.46 44 P P 02 15 02.3 +1.3
baz=236,SNR=8.6
PEA0B Petropavlovsk- 72.46 342 iP P 02 15 01.4 +0.9
PETK Petropavlovsk- 72.46 342 P P 02 15 00.3 -0.2
comp=Z,20nm,0.7s,baz=163,slow=10,SNR=25
PETK LR LR 02 42 27.4
comp=Z,614nm,21.1s,baz=147,slow=32
PETK Petropavlovsk- 72.46 342 P P 02 15 00.3 -0.2
RMX La Rumorosa 72.47 48 P P 02 15 01.8 +0.6
IKP In-Ko-Pah, Jac 72.47 48 P P 02 15 02.4 +1.2
baz=238,SNR=5.7
CCAC Calif City Air 72.48 45 P P 02 15 01.7 +0.5
CMB Columbia Colle 72.56 41 P P 02 15 02.0 +0.5
YUH Yuha Desert 72.61 48 P P 02 15 02.4 +0.6
PFO Pinyon Flats O 72.73 47 LR LR 02 39 05.4
comp=Z,5µm,21.4s,baz=280,slow=29
PFO Pinyon Flats O 72.73 47 P P 02 15 03.2 +0.4
PFO Pinyon Flats O 72.73 47 P P 02 15 03.6 +0.9
baz=238,SNR=5.2
WDC Whiskeytown Da 72.77 38 IAmb IAmb 02 15 18.8
comp=Z,71nm,1.6s
PMD Palm Desert 72.81 47 P P 02 15 03.5 +0.4
SWSC Sam W. Stewart 72.85 48 P P 02 15 04.2 +0.9
baz=238
LPIG La Paz 72.87 58 LR LR 02 38 45.3
comp=Z,2µm,21.1s,baz=227,slow=29
LRMC Laurel Mtn Rad 72.89 45 P P 02 15 04.8 +1.1
baz=236,SNR=12
N02D Trinity Center 72.92 38 P P 02 15 04.8 +1.2
N02D IAmb IAmb 02 15 37.2
comp=Z,109nm,1.8s
N02D Trinity Center 72.92 38 P P 02 15 05.3 +1.6
baz=231,SNR=8.6
M02C Callahan 73.10 37 IAmb IAmb 02 15 43.0
comp=Z,77nm,1.8s
M02C Callahan 73.10 37 P P 02 15 06.4 +1.8
baz=231,SNR=10
L02E Cave Junction 73.15 36 IAmb IAmb 02 15 37.2
comp=Z,118nm,1.9s
L02E Cave Junction 73.15 36 P P 02 15 06.8 +1.9
baz=230
CWC Cottonwood Cre 73.16 44 P P 02 15 06.1 +0.8
baz=236

BELC **Belle Mtn. Jos** 73.26 47 P P 02 15 06.9 +1.1
baz=238,SNR=9.0
EMB **Emerald Bay** 73.30 41 IAmb IAmb 02 15 44.8
comp=Z,73nm,1.9s
RUBR **Rubicon Trail** 73.31 41 P P 02 15 07.0 +0.8
RUBR IAmb IAmb 02 15 47.2
comp=Z,119nm,1.8s
MPMC **Manual Prospec** 73.34 44 P P 02 15 07.6 +1.2
baz=236,SNR=26
YSS **Yuzh-Sakhalins** 73.34 330 *ce*P P 02 15 06.5 +0.7
YSS *e* 02 15 15.7
YSS *e* 02 17 57.4
YSS *e*S S 02 24 31.8 +0.4
YSS *e*SS SS 02 29 17.4 +2.8
YSS pmax pmax
comp=Z,1.0nm,3.7s
YSS pmax pmax
comp=Z,70nm,0.8s
YSS smax smax
comp=N,500nm,13.0s
YSS smax smax
comp=E,800nm,13.0s
YSS MLR MLR
comp=Z,400nm,15.0s
YSS MLR MLR
comp=N,300nm,16.0s
YSS **Yuzh-Sakhalins** 73.34 330 P P 02 15 06.2 +0.3
YSS IAmb IAmb 02 15 08.1
comp=Z,57nm,0.8s
YSS **Yuzh-Sakhalins** 73.34 330 P P 02 15 05.6 -0.2
YBH **Yreka Blue Hor** 73.39 37 LR LR 02 39 41.8
comp=Z,4µm,21.8s,baz=263,slow=30
YBH **Yreka Blue Hor** 73.39 37 pP pP 02 15 21.1 +2.9
YBH sP pwP 02 15 27.5 +4.2
GSC **Goldstone, Bar** 73.39 45 P P 02 15 07.6 +1.1
baz=237,SNR=11
TIN **Tinemaha, Big** 73.40 43 P P 02 15 08.2 +1.6
baz=236,SNR=11
K02D **Willamette Mer** 73.45 36 P P 02 15 08.7 +1.9
baz=230,SNR=5.2
BC3 **Big Chuckawall** 73.47 47 P P 02 15 08.4 +1.3
baz=238,SNR=8.4
HEC **Hector,Ludlow** 73.47 46 P P 02 15 08.1 +1.1
baz=238,SNR=6.3
MPK **Martis Peak** 73.53 40 IAmb IAmb 02 15 10.0
comp=Z,97nm,1.5s
GLA **Glamis** 73.60 48 P P 02 15 09.1 +1.3
baz=239
PNTR **Pine Nut** 73.68 41 IAmb IAmb 02 15 32.8
comp=Z,46nm,1.2s
HUMO **Hull Mountain** 73.80 36 ⇓P P 02 15 10.4 +1.7
HUMO **Hull Mountain** 73.80 36 P P 02 15 09.9 +1.1
HUMO IAmb IAmb 02 15 42.3
comp=Z,108nm,1.8s
YERR **Yerington** 73.85 41 IAmb IAmb 02 15 42.2
comp=Z,89nm,1.7s
LCH **Last Change Ra** 73.89 43 IAmb IAmb 02 15 41.6
comp=Z,65nm,1.8s
LHV **Little Huntoon** 73.90 42 IAmb IAmb 02 15 41.9
comp=Z,124nm,1.8s
GMRC **Granite Mounta** 73.91 46 P P 02 15 10.8 +1.2
baz=238,SNR=5.6
L04D **Klamath Falls** 73.93 37 IAmb IAmb 02 15 32.5
comp=Z,75nm,1.3s
L04D **Klamath Falls** 73.93 37 P P 02 15 11.0 +1.4
baz=231,SNR=10
M04C **Macdoel** 73.94 38 IAmb IAmb 02 15 12.3
comp=Z,116nm,1.8s
M04C **Macdoel** 73.94 38 P P 02 15 11.1 +1.5
baz=232,SNR=10
GRAC **Grapevine Rang** 73.94 44 P P 02 15 11.2 +1.5
baz=236,SNR=10
IRM **Iron Mountain** 73.95 47 P P 02 15 11.0 +1.2
baz=238,SNR=15
DBO **Dodson Butte** 73.97 36 IAmb IAmb 02 15 12.5
comp=Z,151nm,2.0s
FURC **Furnace Creek,** 73.99 44 P P 02 15 11.3 +1.4
baz=237,SNR=5.5
TUQ **Turquoise Moun** 74.07 46 P P 02 15 12.0 +1.3
baz=238,SNR=9.9
RYN **Ryan** 74.10 42 IAmb IAmb 02 15 42.9
comp=Z,128nm,1.9s
NVAR **Mina Array Bea** 74.13 42 P P 02 15 11.9 +1.0
comp=Z,11nm,0.7s,baz=228,slow=10,SNR=124
NVAR LR LR 02 40 09.2
comp=Z,4µm,21.7s,baz=242,slow=30
NVAR **Mina Array Bea** 74.13 42 P P 02 15 12.0 +1.0
NVAR PcP 02 15 25.7 -0.2
PAHR **Pah Rah Range** 74.18 40 IAmb IAmb 02 15 44.4
comp=Z,94nm,1.9s
NV11 **Mina Array Sit** 74.23 42 IAmb IAmb 02 15 31.2
comp=Z,80nm,1.6s
I03D **Drain, OR** 74.28 35 P P 02 15 12.9 +1.5
baz=230
K04D **Chiloquin, OR** 74.51 37 P P 02 15 14.7 +1.8
baz=232,SNR=5.9
214A **Organ Pipe Nat** 74.53 50 IAmb IAmb 02 15 15.8
comp=Z,71nm,1.6s
214A **Organ Pipe Nat** 74.53 50 P P 02 15 14.8 +1.6
baz=241
UGM **Wanagama** 74.66 266 P P 02 15 11.6 -2.8
TPNV **Topopah Spring** 74.66 44 ⇓P P 02 15 15.0 +1.0
TPNV **Topopah Spring** 74.66 44 P P 02 15 15.2 +1.1
baz=237,SNR=15
J04D **Umpqua Nationa** 74.68 36 P P 02 15 15.5 +1.4
baz=231,SNR=18
KDAK **Kodiak Island** 74.71 11 LR LR 02 41 01.1
comp=Z,3µm,21.9s,baz=230,slow=30
PDMCI **Parker Dam,Lak** 74.73 47 P P 02 15 15.7 +1.5
baz=239,SNR=10
QSPA **South Pole Qui** 74.85 180 P P 02 15 15.4 +0.8
comp=Z,38nm,0.9s,baz=37,slow=1.6,SNR=83
QSPA LR LR 02 43 24.0
comp=Z,874nm,21.8s,baz=46,slow=32
QSPA **South Pole Qui** 74.85 180 P P 02 15 14.3 -0.3
QSPA **South Pole Qui** 74.85 180 P P 02 15 14.8 +0.2
QSPA pP pwP 02 15 30.9 +1.4
I04A **Tendick Farm,** 74.86 36 P P 02 15 16.1 +1.2
baz=231,SNR=6.9
H04D **Lebanon** 75.14 35 IAmb IAmb 02 15 32.5
comp=Z,92nm,1.4s
H04D **Lebanon** 75.14 35 P P 02 15 18.2 +1.7
baz=230
SHPR **Sheep Range** 75.17 45 P P 02 15 17.6 +0.6
SHPR IAmb IAmb 02 15 19.8
comp=Z,66nm,1.7s
UGL **Uglegorsk** 75.18 331 *e*P P 02 15 12.8 -3.7
UGL *e*S S 02 24 49.5 -2.4
UGL pmax pmax
comp=Z,630nm,4.0s
TEY **Ternei** 75.19 326 *e*P P 02 15 13.7 -2.9
TEY *e* 02 24 52.9
J05D **Fort Rock, OR** 75.21 37 P P 02 15 18.6 +1.6
baz=232,SNR=23
H04A **Detroit Lake** 75.55 35 IAmb IAmb 02 15 41.1
comp=Z,41nm,1.0s
PINE **Pine Mountain** 75.69 36 IAmb IAmb 02 15 53.1
comp=Z,51nm,0.9s
PRN **Pahroc Range** 75.72 44 ⇓P P 02 15 21.6 +1.5
P18K **Big Mountain,** 75.77 9 IAmb IAmb 02 15 47.3
comp=Z,40nm,1.1s
P18K **Big Mountain,** 75.77 9 P P 02 15 19.8 +0.1
baz=198
I05D **Terrebonne, OR** 75.80 36 P P 02 15 21.8 +1.5
baz=232,SNR=7.0
R11A **Troy Canyon, C** 75.86 43 P P 02 15 21.7 +0.7
baz=237,SNR=16
KSRS **Korea Array** 76.06 315 P P 02 15 22.3 +0.5
comp=Z,6.0nm,0.7s,baz=128,slow=5.9,SNR=23
KSRS LR LR 02 43 11.4
comp=Z,449nm,21.8s,baz=115,slow=31
KSRS **Korea Array** 76.06 315 P P 02 15 22.3 +0.5
KSAR **Wonju Array Be** 76.08 315 P P 02 15 22.9 +0.9
KSAR pP pwP 02 15 37.6 +0.1
TYV **Tymovskoe** 76.20 333 *e*P P 02 15 22.6 +0.3
TYV *e*S S 02 25 07.8 +4.7
TYV pmax pmax
comp=Z,500nm,3.0s
TYV pmax pmax
comp=Z,36nm,1.2s
TYV smax smax
comp=N,500nm,6.6s
TYV smax smax
comp=E,600nm,6.6s
TUC **Tucson** 76.21 51 ⇓P P 02 15 24.3 +1.4
TUC **Tucson** 76.21 51 P P 02 15 23.5 +0.6
TUC IAmb IAmb 02 15 25.6
comp=Z,112nm,1.9s
TUC **Tucson** 76.21 51 P P 02 15 24.3 +1.4
baz=242
TUC **Tucson** 76.21 51 P P 02 15 25.1 +2.2
WVOR **Wild Horse Val** 76.23 38 ⇑P P 02 15 23.9 +1.0
WVOR **Wild Horse Val** 76.23 38 IAmb IAmb 02 15 54.9
comp=Z,116nm,1.8s
HOOD **Mount Hood Mea** 76.24 35 P P 02 15 23.1 +0.3
HOOD IAmb IAmb 02 15 51.2
comp=Z,31nm,0.9s
G05D **Wamic, OR** 76.38 35 P P 02 15 24.7 +1.2
baz=231
E04D **Cinebar** 76.53 33 P P 02 15 25.6 +1.4
baz=230
ILSW **Iliamna Southw** 76.68 10 P P 02 15 25.2 +0.2
ILSW IAmb IAmb 02 15 53.2
comp=Z,49nm,1.1s
I07A **Izee** 76.69 37 IAmb IAmb 02 15 41.7
comp=Z,53nm,1.3s
F05D **White Salmon** 76.70 34 IAmb IAmb 02 15 51.4
comp=Z,49nm,1.4s
F05D **White Salmon** 76.70 34 P P 02 15 26.7 +1.4
baz=231
LCMT **Little Creek M** 76.74 45 IAmb IAmb 02 15 52.5
comp=Z,55nm,1.8s
MSHR **Mys Shultsa** 76.81 321 *ce*P P 02 15 26.7 +0.7
MSHR pmax pmax
comp=Z,42nm,1.7s
D04E **Lakebay** 76.82 33 P P 02 15 28.4 +2.5
baz=230
J08A **Circle Bar Ran** 76.87 38 IAmb IAmb 02 15 59.3
comp=Z,46nm,1.2s
D03D **Eldon** 76.89 32 P P 02 15 27.9 +1.6
baz=230
319A **Douglas** 76.91 52 IAmb IAmb 02 15 29.6
comp=Z,36nm,0.8s
INCN **Inchon** 76.95 315 P P 02 15 27.5 +0.6
INCN IAmb IAmb 02 15 29.5
comp=Z,36nm,0.9s
SPR3 **Spring Creek 3** 77.04 43 IAmb IAmb 02 15 46.9
comp=Z,71nm,1.9s
SZCU **Shurtz Canyon** 77.15 45 IAmb IAmb 02 15 48.3
comp=Z,71nm,1.6s
D05A **Enumclaw** 77.24 33 P P 02 15 29.6 +1.4
N19K **Bonanza Creek** 77.24 9 IAmb IAmb 02 15 56.4
comp=Z,41nm,1.3s
N19K **Bonanza Creek** 77.24 9 P P 02 15 27.8 -0.3
baz=199
USRK **Ussuriysk Ar.** 77.26 323 P P 02 15 28.1 -0.4
comp=Z,9.5nm,0.9s,baz=103,slow=4.1,SNR=20
USRK LR LR 02 43 05.4
comp=Z,1µm,21.7s,baz=114,slow=31
USRK **Ussuriysk Ar.** 77.26 323 P P 02 15 28.1 -0.4
USRK **Ussuriysk Ar.** 77.26 323 P P 02 15 29.2 +0.8
WUAZ **Wupatki** 77.31 48 ⇑P P 02 15 31.1 +1.9
WUAZ **Wupatki** 77.31 48 P P 02 15 29.1 0.0
WUAZ IAmb IAmb 02 15 56.8
comp=Z,72nm,1.7s
WUAZ **Wupatki** 77.31 48 P P 02 15 30.7 +1.6
baz=241
ELK **Elko** 77.38 41 LR LR 02 42 08.9
comp=Z,2µm,21.9s,baz=224,slow=30
QZH **Quanzhou** 77.41 300 *e*P P 02 15 31.6 +1.9
QZH S S 02 25 22.9 +5.5
QZH LR LR
comp=Z,590nm,21.8s
BBB **Bella Bella** 77.67 27 LR LR 02 41 59.7
comp=Z,2µm,21.1s,baz=235,slow=30
LEM **Lembang** 77.72 266 LR LR 02 49 08.1
comp=Z,1µm,21.6s,baz=108,slow=35
A04D **Lummi Island** 77.85 32 P P 02 15 32.7 +1.1
baz=230
HPIG 77.86 58 IAmb IAmb 02 16 04.2
comp=Z,52nm,1.5s
B05A **Bryant** 77.87 32 P P 02 15 32.9 +1.2
baz=230
SSE **Sheshan** 77.89 307 P P 02 15 31.2 -1.1
SSE S S 02 25 23.2 +0.9
SSE pmax pmax
comp=Z,9.0nm,2.0s
SSE pmax pmax
comp=Z,270nm,6.3s
SSE LR LR
comp=Z,190nm,22.8s
SSE LR LR
comp=Z,170nm,22.5s
LTY **Liberty** 77.98 34 P P 02 15 33.7 +1.1
LTY IAmb IAmb 02 16 05.4
comp=Z,108nm,2.0s
MTPU **Mount Pierson** 77.99 45 P P 02 15 33.9 +0.7
E07A **Sunnyside** 77.99 35 IAmb IAmb 02 15 48.6
comp=Z,73nm,1.7s
HAWA **Hanford** 78.07 35 ⇓P P 02 15 33.9 +1.0
HAWA **Hanford** 78.07 35 P P 02 15 33.9 +1.0
TCRU **Three Creeks R** 78.10 44 P P 02 15 34.6 +1.0
TCRU IAmb IAmb 02 16 00.5
comp=Z,116nm,1.9s
W18A **Petrified Fore** 78.30 49 P P 02 15 35.0 +0.3
W18A IAmb IAmb 02 16 07.9
comp=Z,74nm,1.8s
W18A **Petrified Fore** 78.30 49 P P 02 15 36.3 +1.6
baz=242
E08A **Dider Farm, El** 78.39 35 P P 02 15 35.0 +0.3
BMO **Blue Mountains** 78.42 37 IAmb IAmb 02 16 06.8
comp=Z,106nm,1.9s
L19K **White Mountain** 78.49 9 P P 02 15 35.8 +0.8
baz=198
121A **Cookes Peak, D** 78.56 52 P P 02 15 36.4 +0.2
121A **Cookes Peak, D** 78.56 52 P P 02 15 37.9 +1.6
baz=244
DUG **Duguy, Tooele** 78.66 43 P P 02 15 37.4 +0.9
baz=239,SNR=17
NKL **Nikolayevsk** 78.69 334 *e*P P 02 15 34.1 -2.1
NKL pmax pmax
comp=N,403nm,1.0s
NKL pmax pmax
comp=E,3.0nm,1.0s
NKL pmax pmax
comp=Z,29nm,1.9s
GAMB **Gambell** 78.73 1 IAmb IAmb 02 15 55.8
comp=Z,59nm,1.6s
GAMB **Gambell** 78.73 1 P P 02 15 37.6 +1.5
baz=182
ZAIG **Zacatecas** 78.85 63 P P 02 15 38.8 +0.7
ZAIG IAmb IAmb 02 16 04.4
comp=Z,84nm,1.8s
M22K **Willow** 78.87 11 P P 02 15 37.3 +0.4
baz=203
KNK **Knik Glacier** 78.88 12 P P 02 15 37.7 +0.6
baz=204
MDJ **Mudanjiang** 78.91 322 P P 02 15 37.8 +0.2
MDJ S S 02 25 39.1 +6.4
MDJ pmax pmax
comp=Z,32nm,2.1s
MDJ pmax pmax
comp=Z,900nm,4.0s
MDJ LR LR
comp=Z,610nm,23.4s
MDJ LR LR
comp=Z,970nm,19.7s
MDJ LR LR
comp=Z,2µm,23.7s
MDJ **Mudanjiang** 78.91 322 P P 02 15 38.2 +0.6
MDJ IAmb IAmb 02 15 40.1
comp=Z,104nm,1.7s
PMR **Palmer** 78.91 12 P P 02 15 37.3 +0.1
baz=204
L20K **Farewell, AK** 78.92 9 P P 02 15 37.3 0.0
baz=199
MOIG **Morelia** 78.94 66 P P 02 15 38.8 +0.2
MOIG IAmb IAmb 02 15 54.7
comp=Z,22nm,0.6s
GRNR **Gornyy** 79.00 330 ⇑*i*P P 02 15 38.3 +0.3
GRNR *e*S S 02 25 41.7 +8.2
GRNR pmax pmax
comp=Z,20nm,1.0s
GRNR smax smax
comp=N,2.0nm,0.7s
TTA **Tatalina** 79.04 8 ⇑P P 02 15 39.4 +1.3
TTA **Tatalina** 79.04 8 P P 02 15 39.3 +1.3
baz=197,SNR=10.0
F10A **Beach Ranch, E** 79.11 36 ⇑P P 02 15 39.5 +0.7
F10A **Beach Ranch, E** 79.11 36 IAmb IAmb 02 16 10.3
comp=Z,123nm,1.6s
GHO **Glory Hole Cre** 79.11 12 IAmb IAmb 02 16 06.2
comp=Z,67nm,1.3s
Q16A **Castle Valley** 79.11 45 P P 02 15 40.3 +1.2
Q16A IAmb IAmb 02 16 06.1
comp=Z,110nm,1.7s
WRAK **Wrangell Islan** 79.14 22 P P 02 15 39.9 +1.4
baz=220
DIV **Divide** 79.18 13 IAmb IAmb 02 16 07.2
comp=Z,51nm,1.1s
TMUT **Trail Mountain** 79.28 44 P P 02 15 40.7 +0.5
TMUT IAmb IAmb 02 15 45.0
comp=Z,39nm,0.9s
BMRM **Bremner River** 79.30 14 IAmb IAmb 02 15 54.7
comp=Z,66nm,1.2s
BMRM **Bremner River** 79.30 14 P P 02 15 39.7 +0.2
baz=208
B08A **Colville Reser** 79.37 33 IAmb IAmb 02 16 11.3
comp=Z,70nm,1.7s
HLID **Hailey** 79.42 39 P P 02 15 41.9 +1.2
baz=237,SNR=70
CUT **Chulitna** 79.44 11 P P 02 15 39.9 -0.2
baz=202,SNR=6.1
SCM **Sheep Creek Mo** 79.48 12 IAmb IAmb 02 15 43.0
comp=Z,27nm,0.7s
SCM **Sheep Creek Mo** 79.48 12 P P 02 15 40.9 +0.4
baz=205
C09A **Chrisman Ranch** 79.60 34 IAmb IAmb 02 16 13.0
comp=Z,115nm,2.0s
CTU **Camp Tracy** 79.61 43 P P 02 15 41.3 -0.5
SRU **San Rafael Swe** 79.65 45 P P 02 15 42.4 +0.4
P17A **Butcher Ranch,** 79.68 44 P P 02 15 43.1 +1.0
P17A IAmb IAmb 02 16 07.4
comp=Z,77nm,1.7s
K20K **Telida** 79.72 9 P P 02 15 42.3 +0.7
baz=199,SNR=6.1
ANM **Nome** 79.75 3 P P 02 15 43.0 +1.3
baz=188
PNT **Penticton** 79.81 32 ⇑P P 02 15 43.3 +0.9
N25K **Chitina, Valde** 79.87 13 IAmb IAmb 02 16 14.3
comp=Z,137nm,2.0s
N25K **Chitina, Valde** 79.87 13 P P 02 15 42.9 +0.4
baz=208
GLB **Gilahina Butte** 79.90 14 IAmb IAmb 02 16 13.2
comp=Z,66nm,1.6s
M24K **Tolsona, Glenn** 79.97 13 P P 02 15 44.0 +0.9
baz=206
MA2 **Magadan** 79.99 342 *ce*P P 02 15 42.9 -0.3
MA2 pmax pmax
comp=Z,72nm,2.5s
MA2 **Magadan** 79.99 342 P P 02 15 42.9 -0.3
MA2 IAmb IAmb 02 16 04.9
comp=Z,120nm,2.0s
MA2 **Magadan** 79.99 342 P P 02 15 42.8 -0.4
MA2 pP pP 02 15 55.8 0.0
MNTX **Cornudas Mount** 80.05 53 IAmb IAmb 02 16 10.4
comp=Z,110nm,1.9s
MNTX **Cornudas Mount** 80.05 53 P P 02 15 45.5 +1.4
baz=245
CAST **Castle Rocks** 80.08 10 P P 02 15 42.5 -1.1
baz=201,SNR=8.9
NJ2 **Nanjing** 80.10 307 *e*P P 02 15 42.9 -1.4
NJ2 S S 02 25 53.4 +7.6
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
NJ2 pmax pmax
comp=Z,710nm,6.7s
NJ2 LR LR
comp=Z,1µm,20.6s
MVCO **Mesa Verde** 80.15 47 IAmb IAmb 02 16 21.2
comp=Z,70nm,1.7s
MVCO **Mesa Verde** 80.15 47 P P 02 15 45.9 +1.1
baz=242
PV23 **Carpenter Ridg** 80.37 46 IAmb IAmb 02 15 51.3
comp=Z,37nm,0.8s
KLR **Kulʹdur** 80.39 327 LR LR 02 45 41.9
comp=Z,604nm,21.7s,baz=130,slow=32
KLR **Kulʹdur** 80.39 327 *ce*P P 02 15 45.4 -0.1
KLR pmax pmax
comp=Z,46nm,1.9s
PV11 **David Mesa, Pa** 80.40 46 P P 02 15 46.5 +0.4
KTH **Kantishna Hill** 80.40 10 IAmb IAmb 02 16 16.1
comp=Z,125nm,1.9s
TRF **Thorofare Moun** 80.41 10 IAmb IAmb 02 16 15.5
comp=Z,106nm,1.6s
TRF **Thorofare Moun** 80.41 10 P P 02 15 45.2 -0.4
baz=202,SNR=8.1
TX31 **Lajitas Ar. Si** 80.44 56 P P 02 15 46.9 +0.5
TX32 **Lajitas Array** 80.44 56 P P 02 15 46.6 +0.2
TX32 IAmb IAmb 02 16 13.9
comp=Z,138nm,1.9s
TXAR **Lajitas Array** 80.44 56 P P 02 15 47.8 +1.4
comp=Z,12nm,0.8s,baz=216,slow=9.2,SNR=44
TXAR LR LR 02 43 24.8
comp=Z,2µm,21.9s,baz=242,slow=30
TXAR **Lajitas Array** 80.44 56 P P 02 15 47.8 +1.4
TXAR **Lajitas Array** 80.44 56 P P 02 15 47.9 +1.5
TXAR pP pwP 02 16 01.3 -0.3
HARP **HAARP** 80.45 13 P P 02 15 47.0 +1.4
baz=207
CHUM **Lake Minchumin** 80.48 9 P P 02 15 45.6 -0.1
baz=200,SNR=6.7
J20K **Nowinta River** 80.49 8 IAmb IAmb 02 16 01.6
comp=Z,59nm,1.4s
J20K **Nowinta River** 80.49 8 P P 02 15 46.2 +0.5
baz=199
NEW **Newport** 80.50 34 LR LR 02 43 49.6
comp=Z,2µm,21.3s,baz=222,slow=30
NEW **Newport** 80.50 34 P P 02 15 47.5 +1.3
NEW **Newport** 80.50 34 P P 02 15 46.1 -0.1
baz=234
SKAG **Skagway** 80.53 19 P P 02 15 45.6 -0.4
baz=217
ANMO **Albuquerque** 80.62 50 LR LR 02 43 34.4
comp=Z,3µm,21.7s,baz=227,slow=30
ANMO **Albuquerque** 80.62 50 *ce*P P 02 15 47.9 +0.6
ANMO pmax pmax
comp=Z,19nm,1.0s
ANMO **Albuquerque** 80.62 50 ⇓P P 02 15 48.7 +1.3
ANMO **Albuquerque** 80.62 50 P P 02 15 48.2 +0.8
ANMO **Albuquerque** 80.62 50 P P 02 15 48.6 +1.3
baz=244
TNA **Tin City** 80.62 2 ⇓P P 02 15 47.6 +1.2
TNA ⇓s 02 16 01.1
TNA **Tin City** 80.62 2 IAmb IAmb 02 16 06.1
comp=Z,90nm,1.6s
TNA **Tin City** 80.62 2 P P 02 15 47.6 +1.2
baz=185
PV07 **Paradox Valley** 80.62 46 P P 02 15 47.3 0.0
RND **Reindeer** 80.62 11 IAmb IAmb 02 16 17.2
comp=Z,78nm,1.6s
GCSA **Galena City Sc** 80.68 7 P P 02 15 48.0 +1.3
baz=196
PV15 **Paradox Valley** 80.69 46 IAmb IAmb 02 16 13.6
comp=Z,143nm,2.0s
BNX **BinXian** 80.82 322 ⇑P P 02 15 47.5 -0.4
BNX pP PcP 02 15 51.7 -2.7
BNX sP pP 02 15 53.9 -6.3
BNX S S 02 25 55.1 +2.3
BNX sS SKSac 02 26 03.8 +1.0
BNX pmax pmax
comp=Z,81nm,1.0s
BNX pmax pmax
comp=Z,960nm,8.7s
BNX LR LR
comp=Z,970nm,17.6s
BNX LR LR
comp=Z,2µm,23.1s
BNX LR LR
comp=Z,3µm,26.1s
PAX **Paxson** 80.89 12 P P 02 15 48.0 -0.1
baz=207
BPAW **Bear Paw Mtn.** 80.90 10 P P 02 15 47.3 -0.7
baz=202
MCK **McKinley** 80.91 11 IAmb IAmb 02 15 49.4
comp=Z,34nm,0.8s
MCK **McKinley** 80.91 11 P P 02 15 48.4 +0.3
baz=204,SNR=16
M26K **Nabesna, AK** 80.93 14 IAmb IAmb 02 16 17.1
comp=Z,39nm,1.1s
M26K **Nabesna, AK** 80.93 14 P P 02 15 49.0 +0.8
baz=210
CN2 **Changchun** 80.98 320 *e*P P 02 15 48.5 -0.3
CN2 *e*PP PP 02 18 55.5 +1.3
CN2 *e*S S 02 25 55.8 +1.3
CN2 *e*SS SS 02 31 13.1 +3.1
CN2 pmax pmax
comp=Z,40nm,1.3s
CN2 pmax pmax
comp=Z,640nm,4.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CN2 | | | | | LR | LR | | |
| | comp=Z,370nm,24.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,610nm,24.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,1μm,26.0s | | | | | | | |
| **HYT** | **Haines Junctio** | **81.00** | **17** | | IAmb | IAmb | 02 16 21.1 | |
| | comp=Z,103nm,1.7s | | | | | | | |
| **HYT** | **Haines Junctio** | **81.00** | **17** | | P | **P** | **02 15 49.8** | **+1.1** |
| | baz=215 | | | | | | | |
| **RDMU** | **Red Mountain** | **81.00** | **44** | | IAmb | IAmb | 02 16 17.8 | |
| | comp=Z,67nm,1.7s | | | | | | | |
| **YUK3** | **Moose Creek** | **81.00** | **15** | | P | **P** | **02 15 50.2** | **+1.4** |
| | baz=212 | | | | | | | |
| **ECR** | **Eagle Creek** | **81.05** | **41** | | P | **P** | **02 15 50.8** | **+1.3** |
| **AHID** | **Auburn Hatcher** | **81.08** | **41** | | IAmb | IAmb | 02 16 12.1 | |
| | comp=Z,47nm,1.4s | | | | | | | |
| **DL2** | **Dalian** | **81.09** | **314** | | P | **P** | **02 15 49.4** | **-0.1** |
| DL2 | | | | | S | **S** | **02 25 59.8** | **+3.9** |
| DL2 | | | | | SS | **SS** | **02 31 10.5** | **-1.4** |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | | |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,710nm,6.7s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,460nm,26.4s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,330nm,21.1s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,700nm,23.4s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **81.16** | **14** | | P | **P** | **02 15 50.6** | **+1.0** |
| | baz=211 | | | | | | | |
| **SNY** | **Shenyang** | **81.17** | **318** | ⇑ | P | **P** | **02 15 50.1** | **+0.2** |
| SNY | | | | | S | **SKSac** | **02 26 04.1** | **-1.3** |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,52nm,2.0s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,310nm,22.6s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,450nm,23.0s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,900nm,22.7s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **81.40** | **13** | | P | **P** | **02 15 51.2** | **+0.5** |
| | baz=209 | | | | | | | |
| **BVCY** | **Beaver Creek** | **81.45** | **15** | | P | **P** | **02 15 51.6** | **+0.7** |
| | baz=212 | | | | | | | |
| **MSO** | **Missoula** | **81.48** | **37** | | P | **P** | **02 15 53.1** | **+1.6** |
| | baz=237,SNR=15 | | | | | | | |
| **DLBC** | **Dease Lake** | **81.48** | **21** | | LR | LR | 02 44 06.5 | |
| | comp=Z,2μm,21.4s,baz=236,slow=30 | | | | | | | |
| **DLMT** | **Dillon** | **81.48** | **38** | | IAmb | IAmb | 02 16 07.9 | |
| | comp=Z,66nm,1.6s | | | | | | | |
| **TPAW** | **Teton Pass** | **81.54** | **41** | | IAmb | IAmb | 02 15 55.4 | |
| | comp=Z,36nm,0.9s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **81.58** | **47** | | P | **P** | **02 15 54.3** | **+1.8** |
| | baz=243,SNR=37 | | | | | | | |
| **WHY** | **Whitehorse** | **81.62** | **18** | | P | **P** | **02 15 53.0** | **+1.0** |
| | baz=217 | | | | | | | |
| **SNOW** | **Snow King Moun** | **81.65** | **41** | | IAmb | IAmb | 02 15 57.0 | |
| | comp=Z,40nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** | **81.68** | **10** | | P | **P** | **02 15 52.7** | **+0.7** |
| | baz=204,SNR=12 | | | | | | | |
| **O20A** | **White River Ci** | **81.69** | **45** | | IAmb | IAmb | 02 16 44.0 | |
| | comp=Z,60nm,1.5s | | | | | | | |
| **O20A** | **White River Ci** | **81.69** | **45** | | P | **P** | **02 15 55.8** | **+2.9** |
| | baz=242,SNR=4 | | | | | | | |
| **RIDG** | **Independent Ri** | **81.71** | **12** | | IAmb | IAmb | 02 16 22.9 | |
| | comp=Z,54nm,1.4s | | | | | | | |
| **RIDG** | **Independent Ri** | **81.71** | **12** | | P | **P** | **02 15 52.2** | **-0.1** |
| | baz=208 | | | | | | | |
| **WRH** | **Wood River Hil** | **81.74** | **11** | | IAmb | IAmb | 02 16 12.4 | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **I21K** | **Tanana** | **81.75** | **9** | | IAmb | IAmb | 02 16 23.2 | |
| | comp=Z,81nm,1.9s | | | | | | | |
| **I21K** | **Tanana** | **81.75** | **9** | | P | **P** | **02 15 53.0** | **+0.6** |
| | baz=201 | | | | | | | |
| **L27K** | **Beaver Creek,** | **81.78** | **14** | | IAmb | IAmb | 02 16 22.8 | |
| | comp=Z,52nm,1.6s | | | | | | | |
| **L27K** | **Beaver Creek,** | **81.78** | **14** | | P | **P** | **02 15 53.5** | **+0.8** |
| | baz=211 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **81.79** | **14** | | P | **P** | **02 15 53.7** | **+1.0** |
| BCAR | | | | | pP | **pwP** | **02 16 07.4** | **-0.4** |
| **MLY** | **Manley** | **81.81** | **9** | | P | **P** | **02 15 52.7** | **0.0** |
| | baz=202 | | | | | | | |
| **LOHW** | **Long Hollow** | **81.82** | **41** | | IAmb | IAmb | 02 16 19.7 | |
| | comp=Z,59nm,1.6s | | | | | | | |
| **HDA** | **Harding Lake** | **81.89** | **11** | | IAmb | IAmb | 02 15 55.9 | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **HDA** | **Harding Lake** | **81.89** | **11** | | P | **P** | **02 15 53.3** | **+0.1** |
| | baz=206 | | | | | | | |
| **P33M** | **Teslin, Yukon** | **81.90** | **19** | | P | **P** | **02 15 54.1** | **+0.6** |
| | baz=219 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.95** | **11** | | IAmb | IAmb | 02 15 54.7 | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **82.02** | **17** | | P | **P** | **02 15 55.1** | **+1.2** |
| | baz=216 | | | | | | | |
| **BW06** | **Boulder Array** | **82.07** | **42** | | P | **P** | **02 15 55.4** | **+0.5** |
| | baz=241,SNR=26 | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.07** | **42** | | P | **P** | **02 15 55.2** | **+0.4** |
| | comp=Z,14nm,0.8s,baz=212,slow=3.1,SNR=70 | | | | | | | |
| PDAR | | | | | LR | LR | 02 46 32.0 | |
| | comp=Z,2μm,19.9s,baz=236,slow=31 | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.07** | **42** | | P | **P** | **02 15 55.4** | **+0.4** |
| PDAR | | | | | pP | **pP** | **02 16 08.7** | **+1.3** |
| **H21K** | **Melozitna Rive** | **82.08** | **8** | | P | **P** | **02 15 55.2** | **+1.0** |
| | baz=200 | | | | | | | |
| **SCRK** | **Sand Creek** | **82.10** | **13** | | P | **P** | **02 15 54.8** | **+0.3** |
| | baz=208,SNR=13 | | | | | | | |
| **SMCO** | **Snowmass** | **82.12** | **46** | ⇓ | P | **P** | **02 15 56.8** | **+1.3** |
| SMCO | | | | ⇓ | s | | 02 16 10.9 | |
| **YMR** | **Madison River** | **82.12** | **40** | | IAmb | IAmb | 02 16 18.5 | |
| | comp=Z,79nm,1.3s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **82.14** | **10** | | IAmb | IAmb | 02 16 13.2 | |
| | comp=Z,88nm,1.6s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **82.14** | **10** | | P | **P** | **02 15 54.7** | **+0.3** |
| | baz=203,SNR=12 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **82.15** | **11** | | P | **P** | **02 15 54.8** | **+0.3** |
| | baz=205,SNR=14 | | | | | | | |
| **COLA** | **College** | **82.15** | **11** | *c* | *i*P | **P** | **02 15 54.6** | **+0.1** |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,43nm,0.9s | | | | | | | |
| **COLA** | **College** | **82.15** | **11** | ⇓ | P | **P** | **02 15 54.5** | **+0.1** |
| **COLA** | **College** | **82.15** | **11** | | P | **P** | **02 15 54.3** | **-0.2** |
| **COLA** | **College** | **82.15** | **11** | | P | **P** | **02 15 54.0** | **-0.4** |
| COLA | | | | | pP | sP | 02 16 29.6 | +18 |
| **MDM** | **Murphy Dome** | **82.16** | **10** | | IAmb | IAmb | 02 16 09.7 | |
| | comp=Z,91nm,1.6s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **82.19** | **39** | | IAmb | IAmb | 02 16 18.1 | |
| | comp=Z,46nm,1.3s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **82.19** | **39** | | P | **P** | **02 15 56.3** | **+0.9** |
| | baz=239,SNR=15 | | | | | | | |
| **H17A** | **Grant Village** | **82.22** | **40** | | P | **P** | **02 15 58.3** | **+2.6** |
| | baz=240,SNR=10.0 | | | | | | | |
| **IL31** | | **82.23** | **11** | | IAmb | IAmb | 02 16 13.7 | |
| | comp=Z,74nm,1.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.23** | **11** | | P | **P** | **02 15 54.8** | **-0.2** |
| | comp=Z,5.7nm,0.6s,baz=225,slow=6.1,SNR=95 | | | | | | | |
| ILAR | | | | | LR | LR | 02 45 53.0 | |
| | comp=Z,1μm,21.6s,baz=214,slow=31 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.23** | **11** | | P | **P** | **02 15 54.8** | **-0.2** |
| **ILAR** | **Eielson Array** | **82.23** | **11** | | P | **P** | **02 15 54.2** | **-0.8** |
| ILAR | | | | | pP | **pP** | **02 16 08.2** | **+0.7** |
| **IMAR** | **Indian Mountai** | **82.26** | **8** | | P | **P** | **02 15 55.9** | **+0.8** |
| IMAR | | | | | pP | **pP** | **02 16 09.3** | **+1.7** |
| **SEY** | **Seymchan** | **82.34** | **345** | | LR | LR | 02 47 08.9 | |
| | comp=Z,1μm,21.4s,baz=146,slow=32 | | | | | | | |
| **SEY** | **Seymchan** | **82.34** | **345** | *i* | P | **P** | **02 15 55.4** | **-0.1** |
| **J25K** | **Salcha River,** | **82.38** | **12** | | P | **P** | **02 15 56.2** | **+0.4** |
| | baz=207,SNR=13 | | | | | | | |
| **LKWY** | **Lake** | **82.42** | **40** | | IAmb | IAmb | 02 16 03.5 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **POKR** | **Poker Plat Res** | **82.44** | **11** | | IAmb | IAmb | 02 15 57.5 | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **POKR** | **Poker Plat Res** | **82.44** | **11** | | P | **P** | **02 15 56.3** | **+0.2** |
| | baz=205,SNR=19 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **82.53** | **48** | | P | **P** | **02 15 57.6** | **+0.1** |
| SDCO | | | | | IAmb | IAmb | 02 16 22.6 | |
| | comp=Z,78nm,1.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **82.53** | **48** | | P | **P** | **02 15 58.8** | **+1.3** |
| | baz=244,SNR=18 | | | | | | | |
| **M30M** | **Minto, Yukon** | **82.63** | **16** | | IAmb | IAmb | 02 16 12.7 | |
| | comp=Z,85nm,1.9s | | | | | | | |
| **M30M** | **Minto, Yukon** | **82.63** | **16** | | P | **P** | **02 15 57.7** | **+0.6** |
| | baz=215 | | | | | | | |
| **J26L** | **Joseph Creek** | **82.65** | **13** | | IAmb | IAmb | 02 16 13.4 | |
| | comp=Z,92nm,1.6s | | | | | | | |
| **J26L** | **Joseph Creek** | **82.65** | **13** | | P | **P** | **02 15 58.5** | **+1.2** |
| | baz=209 | | | | | | | |
| **YMP** | **Mirror Lake Pl** | **82.66** | **40** | | IAmb | IAmb | 02 16 23.8 | |
| | comp=Z,77nm,1.5s | | | | | | | |
| **WALA** | **Waterton Lakes** | **82.71** | **35** | ⇓ | P | **P** | **02 15 59.7** | **+1.7** |
| **WALA** | **Waterton Lakes** | **82.71** | **35** | | IAmb | IAmb | 02 16 21.4 | |
| | comp=Z,50nm,1.6s | | | | | | | |
| **QIZ** | **Qiongzhong** | **82.90** | **292** | | P | **P** | **02 16 01.2** | **+1.8** |
| QIZ | | | | | S | **SKSac** | **02 26 23.0** | **+5.0** |
| QIZ | | | | | LR | LR | | |
| | comp=Z,540nm,23.5s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,840nm,26.5s | | | | | | | |
| **MSTX** | **Muleshoe** | **82.98** | **52** | | IAmb | IAmb | 02 16 03.1 | |
| | comp=Z,52nm,1.1s | | | | | | | |
| **MSTX** | **Muleshoe** | **82.98** | **52** | | P | **P** | **02 16 00.9** | **+1.2** |
| | baz=246,SNR=18 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **82.99** | **17** | | P | **P** | **02 15 59.6** | **+0.6** |
| | baz=218 | | | | | | | |
| **H24K** | **Noodor Dome** | **83.02** | **10** | | P | **P** | **02 15 58.6** | **-0.5** |
| | baz=205 | | | | | | | |
| **WHN** | **Wuhan** | **83.04** | **304** | ⇓ | P | **P** | **02 16 03.6** | **+3.7** |
| **T25A** | **Trinidad** | **83.05** | **49** | | IAmb | IAmb | 02 16 26.3 | |
| | comp=Z,45nm,1.3s | | | | | | | |
| **T25A** | **Trinidad** | **83.05** | **49** | | P | **P** | **02 16 01.2** | **+1.0** |
| | baz=245,SNR=11 | | | | | | | |
| **RWWY** | **Rawlins** | **83.10** | **44** | | P | **P** | **02 16 00.4** | **+0.1** |
| **TIA** | **Tai'an** | **83.13** | **310** | | P | **P** | **02 16 00.3** | **0.0** |
| TIA | | | | | S | **SKSac** | **02 26 21.6** | **+2.7** |
| TIA | | | | | SS | **SS** | **02 31 37.9** | **-4.5** |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,610nm,3.5s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,500nm,18.5s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,560nm,16.4s | | | | | | | |
| **PRP** | **Porcupine Dome** | **83.16** | **11** | | IAmb | IAmb | 02 16 15.7 | |
| | comp=Z,64nm,1.3s | | | | | | | |
| **PRP** | **Porcupine Dome** | **83.16** | **11** | | P | **P** | **02 16 00.7** | **+0.7** |
| | baz=207,SNR=9.0 | | | | | | | |
| **DAWY** | **Dawson** | **83.21** | **14** | ⇓ | P | **P** | **02 16 00.8** | **+0.7** |
| **DAWY** | **Dawson** | **83.21** | **14** | | P | **P** | **02 16 00.9** | **+0.8** |
| | baz=213,SNR=9.5 | | | | | | | |
| **Q24A** | **Divide** | **83.30** | **47** | | P | **P** | **02 16 03.6** | **+2.1** |
| | baz=244,SNR=7.6 | | | | | | | |
| **FARO** | **Faro, Yukon** | **83.32** | **18** | | P | **P** | **02 16 01.2** | **+0.5** |
| | baz=219 | | | | | | | |
| **ISCO** | **Idaho Springs** | **83.34** | **46** | | IAmb | IAmb | 02 16 28.0 | |
| | comp=Z,69nm,1.6s | | | | | | | |
| **ISCO** | **Idaho Springs** | **83.34** | **46** | | P | **P** | **02 16 03.4** | **+1.7** |
| | baz=244 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **83.36** | **4** | | IAmb | IAmb | 02 16 20.7 | |
| | comp=Z,81nm,1.8s | | | | | | | |
| **RLMT** | **Red Lodge** | **83.39** | **40** | | IAmb | IAmb | 02 16 24.6 | |
| | comp=Z,55nm,1.3s | | | | | | | |
| **RLMT** | **Red Lodge** | **83.39** | **40** | | P | **P** | **02 16 03.2** | **+1.5** |
| | baz=241,SNR=20 | | | | | | | |
| **EGAK** | **Eagle** | **83.41** | **13** | | IAmb | IAmb | 02 16 30.1 | |
| | comp=Z,105nm,1.9s | | | | | | | |
| **EGAK** | **Eagle** | **83.41** | **13** | | P | **P** | **02 16 01.9** | **+0.9** |
| | baz=211,SNR=6.7 | | | | | | | |
| **833A** | **Chaparral WMA,** | **83.53** | **58** | | P | **P** | **02 16 03.9** | **+1.4** |
| | baz=249,SNR=7.9 | | | | | | | |
| **N23A** | **Red Feather La** | **83.59** | **45** | | P | **P** | **02 16 02.9** | **-0.1** |
| **N23A** | **Red Feather La** | **83.59** | **45** | | P | **P** | **02 16 04.3** | **+1.4** |
| | baz=244,SNR=11 | | | | | | | |
| **CMIG** | **Matas Romero** | **83.75** | **70** | | LR | LR | 02 44 24.2 | |
| | comp=Z,2μm,20.9s,baz=249,slow=29 | | | | | | | |
| **COLD** | **Coldfoot** | **83.93** | **9** | | IAmb | IAmb | 02 16 20.2 | |
| | comp=Z,55nm,1.4s | | | | | | | |
| **COLD** | **Coldfoot** | **83.93** | **9** | | P | **P** | **02 16 05.8** | **+2.1** |
| | baz=202,SNR=9.9 | | | | | | | |
| **JCT** | **Junction City** | **83.98** | **56** | ⇑ | P | **P** | **02 16 06.2** | **+1.3** |
| **JCT** | **Junction City** | **83.98** | **56** | | P | **P** | **02 16 06.1** | **+1.3** |
| | baz=248,SNR=8.6 | | | | | | | |
| **K22A** | **Casper** | **83.99** | **43** | | IAmb | IAmb | 02 16 29.5 | |
| | comp=Z,60nm,1.3s | | | | | | | |
| **K22A** | **Casper** | **83.99** | **43** | | P | **P** | **02 16 05.6** | **+0.8** |
| | baz=243 | | | | | | | |
| **FYU** | **Fort Yukon** | **84.15** | **11** | | IAmb | IAmb | 02 16 57.0 | |
| | comp=Z,67nm,1.8s | | | | | | | |
| **AMTX** | **Amarillo** | **84.17** | **52** | | IAmb | IAmb | 02 16 08.8 | |
| | comp=Z,44nm,0.9s | | | | | | | |
| **AMTX** | **Amarillo** | **84.17** | **52** | | P | **P** | **02 16 06.5** | **+0.7** |
| | baz=247 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **84.24** | **18** | | P | **P** | **02 16 06.3** | **+0.9** |
| | baz=220,SNR=7.9 | | | | | | | |
| **BILL** | **Bilibino** | **84.32** | **352** | *ce* | P | **P** | **02 16 04.6** | **-1.0** |
| BILL | | | | *e* | | | 02 16 17.6 | |
| BILL | | | | *e* | | | 02 19 19.0 | |
| BILL | | | | *e* | PPP | PPP | 02 21 14.3 | |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,39nm,1.7s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,867nm,20.0s | | | | | | | |
| **BILL** | **Bilibino** | **84.32** | **352** | | P | **P** | **02 16 05.9** | **+0.3** |
| BILL | | | | | pP | **pP** | **02 16 20.0** | **+1.6** |
| BILL | | | | | IAmb | IAmb | 02 16 24.5 | |
| | comp=Z,55nm,1.5s | | | | | | | |
| **PMSA** | **Palmer Station** | **84.33** | **156** | | LR | LR | 02 44 48.5 | |
| | comp=Z,885nm,21.6s,baz=276,slow=29 | | | | | | | |
| **EGMT** | **Eagleton** | **84.53** | **37** | | IAmb | IAmb | 02 16 29.6 | |
| | comp=Z,47nm,1.2s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **84.55** | **14** | | IAmb | IAmb | 02 16 22.4 | |
| | comp=Z,67nm,1.6s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **84.55** | **14** | | P | **P** | **02 16 07.3** | **+0.5** |
| | baz=214 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **84.89** | **54** | | P | **P** | **02 16 10.1** | **+0.7** |
| | baz=248,SNR=49 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.04** | **11** | | P | **P** | **02 16 10.3** | **+0.9** |
| BMAR | | | | | pP | **pwP** | **02 16 24.5** | **-0.2** |
| **KSCO** | **Kaye Shedlock'** | **85.11** | **48** | | P | **P** | **02 16 11.4** | **+0.9** |
| KSCO | | | | | pP | **pwP** | **02 16 26.3** | **+0.4** |
| **H03S2** | **Juan Fernandez** | **85.26** | **124** | | T | T | 03 50 09.4 | |
| | baz=251 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **85.27** | **124** | | T | T | 03 50 08.4 | |
| | baz=251 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **85.27** | **124** | | T | T | 03 50 11.0 | |
| | baz=251 | | | | | | | |
| **EDM** | **Edmonton** | **85.28** | **31** | | IAmb | IAmb | 02 16 36.1 | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **ZEA** | **Zeya** | **85.28** | **329** | *e* | P | **P** | **02 16 10.4** | **-0.4** |
| ZEA | | | | *e* | S | **S** | **02 26 38.7** | **+0.9** |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,100nm,7.1s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,200nm,5.2s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,300nm,5.8s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=E,400nm,9.5s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **85.33** | **9** | | P | **P** | **02 16 11.8** | **+1.0** |
| | baz=203 | | | | | | | |
| **BJT** | **Baijiatuau** | **85.38** | **313** | | pP | pP | 02 16 26.8 | +2.7 |
| **BJI** | **Beijing** | **85.38** | **313** | | P | **P** | **02 16 11.5** | **-0.1** |
| BJI | | | | | PP | **PP** | **02 19 29.4** | **-1.0** |
| BJI | | | | | S | **S** | **02 26 44.6** | **+5.3** |
| BJI | | | | | SS | **SS** | **02 32 18.2** | **+2.8** |
| BJI | | | | | pmax | pmax | | |
| | comp=E,30nm,1.7s | | | | | | | |
| BJI | | | | | pmax | pmax | | |
| | comp=E,710nm,6.1s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=E,180nm,16.9s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=E,290nm,16.0s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=E,570nm,25.2s | | | | | | | |
| **HNS** | **HongShan** | **85.38** | **311** | ⇑ | P | **P** | **02 16 11.5** | **-0.2** |
| HNS | | | | | S | **S** | **02 26 47.0** | **+7.5** |
| HNS | | | | | pmax | pmax | | |
| | comp=E,29nm,1.7s | | | | | | | |
| HNS | | | | | pmax | pmax | | |
| | comp=E,740nm,6.4s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=E,580nm,17.1s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=E,550nm,24.0s | | | | | | | |
| **GO08** | **Villa O'Higgin** | **85.74** | **139** | | P | **P** | **02 16 14.7** | **+1.3** |
| GO08 | | | | | IAmb | IAmb | 02 16 43.6 | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **BKNI** | **Bangkinang** | **85.87** | **271** | | P | **P** | **02 16 14.2** | **-0.5** |
| **435B** | **Jarrell** | **85.87** | **57** | | P | **P** | **02 16 15.2** | **+1.0** |
| | baz=250 | | | | | | | |
| **LYN** | **LuoYang** | **85.99** | **307** | ⇑ | P | **P** | **02 16 14.8** | **0.0** |
| LYN | | | | | pP | PcP | 02 16 18.4 | +1.0 |
| LYN | | | | | S | **S** | **02 26 51.7** | **+6.1** |
| LYN | | | | | sS | pS | 02 27 02.5 | +1.0 |
| LYN | | | | | SS | **SS** | **02 32 27.3** | **+2.6** |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.5s | | | | | | | |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,350nm,6.1s | | | | | | | |
| LYN | | | | | LR | LR | | |
| | comp=Z,360nm,19.9s | | | | | | | |
| LYN | | | | | LR | LR | | |
| | comp=Z,650nm,34.3s | | | | | | | |
| **USHA** | **Ushuaia** | **86.05** | **146** | | LR | LR | 02 45 22.7 | |
| | comp=Z,1μm,21.8s,baz=248,slow=29 | | | | | | | |
| **RSSD** | **Black Hills** | **86.26** | **42** | ⇑ | P | **P** | **02 16 16.6** | **+0.4** |
| **RSSD** | **Black Hills** | **86.26** | **42** | | P | **P** | **02 16 16.3** | **+0.1** |
| **RSSD** | **Black Hills** | **86.26** | **42** | | P | **P** | **02 16 16.3** | **+0.1** |
| | baz=245 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **86.32** | **53** | | IAmb | IAmb | 02 16 41.6 | |
| | comp=Z,40nm,1.8s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **86.32** | **53** | | P | **P** | **02 16 17.1** | **+0.6** |
| | baz=249 | | | | | | | |
| **ENH** | **Enshi** | **86.87** | **302** | | P | **P** | **02 16 19.6** | **+0.4** |
| **HKT** | **Hockley** | **87.02** | **58** | *i* | P | **P** | **02 16 19.5** | **-0.3** |
| HKT | | | | | pmax | pmax | | |
| | comp=Z,77nm,1.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **87.02** | **317** | ⇑ | *i*P | **P** | **02 16 19.8** | **+0.1** |
| XLT | | | | | pP | PcP | 02 16 23.9 | +2.0 |
| XLT | | | | | sP | pP | 02 16 26.3 | -6.0 |
| XLT | | | | | S | **S** | **02 26 59.3** | **+3.9** |
| XLT | | | | | sS | ScS | 02 27 01.4 | -1.5 |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,46nm,1.5s | | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,720nm,3.8s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,300nm,17.8s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,510nm,16.7s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,890nm,24.0s | | | | | | | |
| **HIA** | **Hailar** | **87.08** | **323** | *c* | *i*P | **P** | **02 16 19.9** | **+0.1** |
| HIA | | | | | pmax | pmax | | |
| | comp=Z,44nm,1.5s | | | | | | | |
| **HIA** | **Hailar** | **87.08** | **323** | | P | **P** | **02 16 20.0** | **+0.1** |
| HIA | | | | | pP | **pP** | **02 16 33.9** | **+1.6** |
| **WRGLY** | **Wrigley** | **87.16** | **20** | | P | **P** | **02 16 20.9** | **+1.1** |
| | baz=228 | | | | | | | |
| **TIY** | **Taiyuan** | **87.17** | **310** | ⇑ | P | **P** | **02 16 21.2** | **+0.6** |
| TIY | | | | | S | **S** | **02 27 00.7** | **+3.6** |
| TIY | | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **APG** | **El Apazote** | **87.20** | **74** | | LR | LR | 02 45 07.3 | |
| | comp=Z,1μm,21.4s,baz=267,slow=29 | | | | | | | |
| **OK032** | **Salt Plains WL** | **87.50** | **51** | | IAmb | IAmb | 02 16 24.6 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **FNO** | **Franklin** | **87.57** | **53** | | IAmb | IAmb | 02 16 25.3 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **R32A** | **Long Quarter,** | **87.71** | **49** | | IAmb | IAmb | 02 16 26.6 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **LL02** | **Futaleuf** | **87.87** | **134** | | P | **P** | **02 16 24.8** | **+0.9** |
| **MAW** | **Mawson** | **88.01** | **199** | | P | **P** | **02 16 24.4** | **+0.4** |
| | comp=Z,34nm,0.9s,baz=140,slow=6.4,SNR=12 | | | | | | | |
| MAW | | | | | LR | LR | 02 53 15.1 | |
| | comp=Z,3μm,20.1s,baz=118,slow=34 | | | | | | | |
| **MAW** | **Mawson** | **88.01** | **199** | | P | **P** | **02 16 22.0** | **-2.0** |
| | baz=88,SNR=7.9 | | | | | | | |
| **MAW** | **Mawson** | **88.01** | **199** | | P | **P** | **02 16 24.4** | **+0.4** |
| **MAW** | **Mawson** | **88.01** | **199** | | IAmb | IAmb | 02 16 30.3 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **GYA** | **Guiyang** | **88.01** | **298** | ⇑ | *i*P | **P** | **02 16 25.3** | **+0.4** |
| GYA | | | | | SKS | **SKSac** | **02 26 52.2** | **+1.9** |
| GYA | | | | | S | **ScS** | **02 27 14.0** | **+2.1** |
| GYA | | | | | pmax | pmax | | |
| | comp=Z,610nm,3.5s | | | | | | | |
| GYA | | | | | LR | LR | | |
| | comp=Z,580nm,25.2s | | | | | | | |
| **DGMT** | **Dagmar** | **88.02** | **38** | | P | **P** | **02 16 25.7** | **+1.3** |
| | baz=244 | | | | | | | |
| **INK** | **Inuvik** | **88.05** | **14** | | LR | LR | 02 48 41.5 | |
| | comp=Z,2μm,21.9s,baz=210,slow=31 | | | | | | | |
| **INK** | **Inuvik** | **88.05** | **14** | | P | **P** | **02 16 24.5** | **+0.6** |
| | baz=218 | | | | | | | |
| **LL04** | **Puerto Octay** | **88.20** | **132** | | P | **P** | **02 16 26.6** | **+1.1** |
| **PSI** | **Prapat** | **88.56** | **273** | | LR | LR | 02 56 28.1 | |
| | comp=Z,417nm,21.6s,baz=126,slow=36 | | | | | | | |
| **NATX** | **Nacogdoches** | **88.56** | **57** | | P | **P** | **02 16 29.5** | **+2.3** |
| | baz=251 | | | | | | | |
| **XAN** | **Xi'an** | **88.57** | **306** | | P | **P** | **02 16 27.1** | **-0.2** |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,17nm,2.3s | | | | | | | |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,510nm,7.0s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,390nm,21.0s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,380nm,20.8s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,610nm,21.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **88.94** | **313** | *e* | P | **P** | **02 16 28.9** | **-0.1** |
| HHC | | | | | sP | pP | 02 16 41.8 | +0.2 |
| HHC | | | | | S | **S** | **02 27 16.1** | **+2.2** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,47nm,1.4s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,610nm,6.5s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,250nm,17.7s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,260nm,17.1s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,560nm,18.6s | | | | | | | |
| **YAK** | **Yakutsk** | **88.95** | **337** | | LR | LR | 02 49 43.2 | |
| | comp=Z,432nm,21.7s,baz=94,slow=31 | | | | | | | |
| **YAK** | **Yakutsk** | **88.95** | **337** | *e* | P | **P** | **02 16 27.5** | **-0.8** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **88.95** | **337** | ⇑ | P | **P** | **02 16 26.5** | **-1.9** |
| **YAK** | **Yakutsk** | **88.95** | **337** | | P | **P** | **02 16 28.0** | **-0.3** |
| YAK | | | | | IAmb | IAmb | 02 16 28.6 | |
| | comp=Z,36nm,1.2s | | | | | | | |
| **K31A** | **O'Neill** | **89.21** | **45** | | IAmb | IAmb | 02 16 52.4 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **LC01** | **Cunco** | **89.24** | **130** | | P | **P** | **02 16 31.5** |

KMI SS **SS** **02 33 37.7 -0.8**
KMI pmax pmax
comp=Z,8.0nm,1.6s
KMI pmax pmax
comp=Z,380nm,6.5s
KMI LR LR
comp=Z,250nm,23.5s
KMI LR LR
comp=Z,300nm,22.6s
KMI LR LR
comp=Z,580nm,30.7s
**ECSD EROS Data Cent 91.06 45** P **P** **02 16 39.3 +0.6**
ECSD lAmb lAmb 02 16 59.9
comp=Z,40nm,1.7s
**JTS Las Juntas de 91.10 80** LR LR 02 47 35.2
comp=Z,2µm,21.5s,baz=342,slow=29
**JTS Las Juntas de 91.10 80** *i* P **P** **02 16 40.0 +0.4**
JTS pmax pmax
comp=Z,15nm,1.0s
**JTS Las Juntas de 91.10 80** P **P** **02 16 41.0 +1.4**
**C36M Paulatuk 91.14 16** P **P** **02 16 38.9 +0.5**
baz=227
**BO01 Tunca 91.31 126** P **P** **02 16 40.4 +0.2**
**U40A Yellville 91.42 53** P **P** **02 16 42.4 +1.9**
baz=252
**WHAR Wooly Hollow 91.53 54** P **P** **02 16 41.9 +0.8**
**MT09 Talagante 91.59 126** lAmb lAmb 02 16 43.4
comp=Z,24nm,1.2s
**CD2 Chengdu 91.77 301** P **P** **02 16 43.5 +1.2**
CD2 pmax pmax
comp=Z,1.0nm,1.0s
**CIT Chita 91.81 324** *e*P **P** **02 16 39.8 -2.2**
CIT *e* 02 16 58.0
CIT pmax pmax
comp=Z,138nm,2.0s
**ROC1 El Roble 91.83 125** P **P** **02 16 42.4 -0.5**
ROC1 lAmb lAmb 02 16 47.5
comp=Z,21nm,1.1s
**FCAR Ozark Folk Cen 91.84 53** P **P** **02 16 43.3 +0.8**
FCAR pP **pwP** **02 16 58.1 +0.2**
**F33A 5 Mile Ranch, 92.00 43** lAmb lAmb 02 17 04.8
comp=Z,23nm,1.5s
**PEL Peldehue 92.04 125** ⇓P **P** **02 16 47.9 +4.3**
**PZH PanZhiHua 92.25 297** P **P** **02 16 46.4 +1.7**
PZH SKS **SKSac** **02 27 18.5 +3.6**
PZH S **S** **02 27 39.6 -5.2**
PZH SS **SS** **02 33 57.6 +1.5**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,240nm,10.6s
PZH LR LR
comp=Z,1µm,23.0s
PZH LR LR
comp=Z,1µm,22.6s
PZH LR LR
comp=Z,2µm,23.5s
**CMAR Chiang Mai Arr 92.62 288** P **P** **02 16 46.4 -0.1**
comp=Z,1.6nm,0.4s,baz=92,slow=3.0,SNR=8.0
CMAR LR LR 02 53 06.9
comp=Z,240nm,21.5s,baz=125,slow=32
**CMAR Chiang Mai Arr 92.62 288** P **P** **02 16 46.4 -0.1**
**CMAR Chiang Mai Arr 92.62 288** P **P** **02 16 45.6 -0.9**
**LCAR Lake Charles 92.64 53** P **P** **02 16 46.2 0.0**
**A36M Sachs Harbour 92.69 13** lAmb lAmb 02 16 47.2
comp=Z,19nm,0.8s
**SYO Syowa Base 92.81 191**⇑ *e*pP pP 02 17 01.6 +2.7
**ATAH Atahualpa 92.88 98** LR LR 02 48 36.3
comp=Z,1µm,21.1s,baz=261,slow=29
**NNA Nana 93.03 103** LR LR 02 48 42.5
comp=Z,500nm,21.4s,baz=257,slow=29
**VNA3 Neumayer Olymp 93.05 175** P **P** **02 16 47.2 -0.2**
**SNAA Sanae 93.11 177** P **P** **02 16 47.6 -0.2**
**SNAA Sanae 93.11 177** P **P** **02 16 48.2 +0.4**
comp=Z,9.0nm,0.8s,baz=193,slow=12,SNR=17
SNAA LR LR 02 55 37.5
comp=Z,454nm,21.3s,baz=176,slow=34
**SNAA Sanae 93.11 177** P **P** **02 16 48.2 +0.4**
**LZH Lanzhou 93.16 306** *e*P **P** **02 16 47.5 -1.3**
LZH pP PcP 02 16 53.0 +3.6
LZH sP pP 02 16 56.1 -5.3
LZH SKS **SKSac** **02 27 19.4 -0.3**
LZH S **ScS** **02 27 57.8 +3.4**
LZH SS **SS** **02 34 04.8 -4.2**
LZH pmax pmax
comp=Z,21nm,1.4s
LZH pmax pmax
comp=Z,350nm,7.1s
LZH LR LR
comp=Z,420nm,16.8s
LZH LR LR
comp=Z,410nm,17.2s
LZH LR LR
comp=Z,860nm,19.5s
**LCO Las Campanas 93.39 121** ⇓P **P** **02 16 54.4 +4.2**
**VNA2 Neumayer--Watz 93.55 175** P **P** **02 16 50.0 +0.3**
baz=171,slow=2.9
**ULM Lac du Bonnet 93.73 39** P **P** **02 16 50.0 -0.8**
comp=Z,4.1nm,0.7s,baz=249,slow=6.5,SNR=5.6
ULM LR LR 02 53 49.0
comp=Z,3µm,19.6s,baz=250,slow=32
**ULM Lac du Bonnet 93.73 39** P **P** **02 16 50.0 -0.8**
**ULM Lac du Bonnet 93.73 39** P **P** **02 16 50.1 -0.7**
ULM pP **pwP** **02 17 05.5 -0.9**
**VNA1 Neumayer--Stat 93.75 175** P **P** **02 16 51.1 +0.5**
**BOD Bodaibo 93.79 329** *e*P **P** **02 16 51.1 +0.2**
BOD pmax pmax
comp=Z,17nm,2.0s
**SPMN Marine on St. 94.12 44** lAmb lAmb 02 17 09.2
comp=Z,24nm,1.3s
**ZON Zonda 94.18 124** P **P** **02 16 52.8 -0.8**
ZON lAmb lAmb 02 17 20.2
comp=Z,38nm,1.8s
**ULN Ulaanbaatar 94.33 318***ce*P **P** **02 16 52.7 -1.2**
ULN pmax pmax
comp=Z,22nm,1.9s
**ULN Ulaanbaatar 94.33 318** P **P** **02 16 53.4 -0.4**
ULN lAmb lAmb 02 16 55.5
comp=Z,37nm,1.8s
**ULN Ulaanbaatar 94.33 318** P **P** **02 16 52.9 -0.9**
ULN pP **pwP** **02 17 09.5 +0.1**
**SONM Songino Array 94.74 318** P **P** **02 16 55.5 -0.2**
comp=Z,1.5nm,0.8s,baz=138,slow=3.8,SNR=12
SONM PP **PP** **02 20 42.4 -2.4**
comp=Z,0.9nm,0.9s,baz=108,slow=8.3,SNR=3.8
SONM LR LR 02 54 43.6
comp=Z,383nm,21.6s,baz=106,slow=32
**SONM Songino Array 94.74 318** P **P** **02 16 55.5 -0.2**
**SONM Songino Array 94.74 318** P **P** **02 16 55.0 -0.8**
SONM lAmb lAmb 02 16 56.2
comp=Z,30nm,2.0s
SONM pP **pwP** **02 17 11.0 -0.3**
**TIXI Tiksi 94.83 344** LR LR 02 55 28.6
comp=Z,770nm,21.3s,baz=175,slow=33
**TIXI Tiksi 94.83 344***ce*P **P** **02 16 55.0 -0.4**
TIXI pmax pmax
comp=Z,36nm,2.8s
**TIXI Tiksi 94.83 344** P **P** **02 16 54.9 -0.4**
TIXI pP **pP** **02 17 10.1 +2.2**
**LVC Limon Verde 97.04 116** LR LR 02 51 28.5
comp=Z,307nm,20.3s,baz=256,slow=30
**GTA Gaotai 97.11 309** *e*P **P** **02 17 03.4 -3.3**
GTA SKS **SKSac** **02 27 38.7 -1.8**
GTA SS **SS** **02 34 59.8 -5.0**
GTA pmax pmax
comp=Z,2.0nm,1.3s
GTA pmax pmax
comp=Z,130nm,5.1s
GTA LR LR
comp=Z,210nm,18.2s
GTA LR LR
comp=Z,410nm,21.1s
GTA LR LR
comp=Z,610nm,20.7s
**ZAK Zakamensk 97.41 320** *e*P **P** **02 17 05.9 -1.9**
ZAK pmax pmax
comp=Z,5.0nm,1.4s
**TKL Tuckaleechee C 98.34 55** LR LR 02 54 16.2
comp=Z,1µm,21.3s,baz=262,slow=31
**LPAZ La Paz 99.81 110** P **Pdif** **02 17 24.1 +4.1**
comp=Z,1.6nm,0.7s,baz=275,slow=1.5,SNR=5.2
LPAZ LR LR 02 55 46.7
comp=Z,246nm,18.6s,baz=258,slow=31
**ZALV Zalesovo Beam 109.11 322** Pdiff **Pdif** **02 17 59.5 -0.1**
comp=Z,0.6nm,0.8s,baz=90,slow=5.9,SNR=4.5

ZALV PKiKP **PKiKP** **02 22 02.8 -0.8**
comp=Z,1.1nm,0.5s,baz=160,slow=2.3,SNR=9.6
**ZALV Zalesovo Beam 109.11 322** Pdif **Pdif** **02 17 58.8 -0.8**
**MKAR Makanchi Array 110.73 315** Pdiff **Pdif** **02 18 07.4 +0.3**
comp=Z,0.2nm,0.8s,baz=70,slow=4.7,SNR=1.8
MKAR PKiKP **PKiKP** **02 22 06.2 -0.7**
comp=Z,1.7nm,0.6s,baz=120,slow=0.2,SNR=23
**MKAR Makanchi Array 110.73 315** *i* PKiKP **PKiKP** **02 22 06.3 -0.7**
**KURK Kurchatov 113.03 319** *i* PKiKP **PKiKP** **02 22 09.9 -1.2**
**KSH Kashi 115.41 307** PKP **PKiKP** **02 22 17.8 +1.6**
KSH SKKS 02 30 18.3
KSH SS **SS** **02 39 19.2 +5.3**
KSH LR LR
comp=Z,230nm,19.1s
KSH LR LR
comp=Z,330nm,17.0s
KSH LR LR
comp=Z,250nm,17.5s
**BRVK Borovoye 117.82 322***c i* PKIKP **PKPdf** **02 22 19.6 -0.7**
BRVK pmax pmax
comp=Z,13nm,1.7s
**BRVK Borovoye 117.82 322** PKPdf **PKPdf** **02 22 19.9 -0.4**
**DRK Karamyk 118.64 307** PKPdf **PKPdf** **02 22 22.1 -0.5**
**KKAR Karatay Array 119.28 311** PKPdf **PKiKP** **02 22 23.7 +0.2**
**KBL Kabul 121.11 301** PKPdf **PKPdf** **02 22 27.2 -0.3**
**ARU Arti 123.20 329** *i* PKIKP **PKPdf** **02 22 29.8 -0.7**
ARU 02 24 06.8
ARU 02 29 41.5
ARU SP SP 02 33 55.0 -6.6
**ARU Arti 123.20 329** PKPdf **PKPdf** **02 22 30.0 -0.5**
**ARCES ARCESS Array B 124.42 352** PKP **PKPdf** **02 22 32.5 0.0**
comp=Z,12nm,0.7s,baz=112,slow=0.7,SNR=37
**ARCES ARCESS Array B 124.42 352** PKIKP **PKPdf** **02 22 32.5 0.0**
**ARCES ARCESS Array B 124.42 352** PKPdf **PKPdf** **02 22 32.4 -0.1**
**APA Apatity 124.85 348**⇓ *i*PKIKP **PKPdf** **02 22 32.3 -1.0**
APA pmax pmax
comp=Z,9.0nm,0.7s
**ABKAR Akbulak array 125.11 320** PKPdf **PKPdf** **02 22 33.5 -0.9**
**PRGR Permogore 125.97 338** *e*PKIKP **PKPdf** **02 22 35.2 -0.4**
PRGR pmax pmax
comp=Z,132nm,1.8s
**KIRV Kirov 126.39 334***c i* PKIKP **PKPdf** **02 22 36.4 -0.1**
**HRA Herat 126.72 302** PKPdf **PKPdf** **02 22 38.2 0.0**
**KLMR Klimovskoe 128.62 340** *e*PKIKP **PKPdf** **02 22 39.0 -1.7**
KLMR pmax pmax
comp=Z,37nm,1.5s
KLMR pmax pmax
comp=Z,15nm,0.7s
KLMR pmax pmax
comp=Z,19nm,1.3s
KLMR pmax pmax
comp=Z,11nm,1.0s
KLMR pmax pmax
comp=Z,27nm,1.5s
**KLMR Klimovskoe 128.62 340** *e*PKPdf **PKPdf** **02 22 39.0 -1.7**
KLMR AMP 02 22 41.6
comp=Z,37nm,1.5s
KLMR LQ LQ 03 06 34.2
KLMR LQ LQ 03 06 34.2
KLMR LR LR 03 10 41.7
**GEYT Alibeck 129.44 307** PKPdf **PKPdf** **02 22 43.1 0.0**
**FINES FINESS Array B 131.76 348** PKP **PKPdf** **02 22 47.1 +0.4**
comp=Z,8.1nm,0.7s,baz=95,slow=4.6,SNR=15
**FINES FINESS Array B 131.76 348** PKIKP **PKPdf** **02 22 47.1 +0.4**
**FINES FINESS Array B 131.76 348** **PKPdf** **02 22 46.2 -0.5**
**BOSA Boshof 132.88 202** PKP **PKiKP** **02 22 51.0 -0.3**
comp=Z,1.7nm,0.7s,baz=247,slow=7.7,SNR=3.5
**BOSA Boshof 132.88 202** PKIKP **PKiKP** **02 22 51.0 -0.3**
**OBN Obninsk 133.95 337** *e*PKIKP **PKPdf** **02 22 50.9 -0.1**
OBN *e* 02 23 07.0
OBN *e* 02 25 20.2
OBN *e*PPP PPP 02 28 14.1
OBN pmax pmax
comp=Z,9.0nm,0.9s
**OBN Obninsk 133.95 337** PKPdf **PKPdf** **02 22 50.9 -0.1**
**NB2 NORSAR Subarra134.10 357** P **PKiKP** **02 22 52.6 +0.1**
comp=Z,6.9nm,1.1s,baz=37,slow=5.9
**NOA NORSAR Array B134.10 357** PKP **PKPdf** **02 22 51.3 +0.1**
comp=Z,1.5nm,0.7s,baz=14,slow=3.7,SNR=3.4
**NOA NORSAR Array B 134.10 357** PKIKP **PKPdf** **02 22 51.3 +0.1**
**MAK Makhachkala 135.49 317** *i* P **Pdif** **02 19 51.8 -5.4**
MAK *e* 02 29 57.1
MAK *e*PS PS 02 35 56.7 +1.6
MAK *e*SS SS 02 43 26.2 +1.4
MAK *e*SSS SSS 02 48 29.9
MAK pmax pmax
comp=Z,115nm,0.9s
**NACGM Naroch 137.41 343** *i* PKP **PKPdf** **02 22 52.7 -4.8**
**MNK Minsk 137.44 342** *i* PKIKP **PKPdf** **02 22 55.2 -2.3**
MNK *i* 02 25 40.8
MNK *i* PPP PPP 02 28 43.3
MNK *i* 02 30 09.2
MNK *i* SS SS 02 43 50.7 +4.2
MNK *i* SSS SSS 02 49 01.1
MNK pmax pmax
comp=Z,9.0nm,1.0s
MNK pmax pmax
comp=E,3.0nm,1.6s
MNK pmax pmax
comp=N,15nm,1.2s
**MNK Minsk 137.44 342** *i* PKP **PKPdf** **02 22 55.3 -2.3**
comp=E,3.0nm,1.6s
MNK *i* PKP **PKPdf** **02 22 55.3 -2.3**
comp=N,15nm,1.2s
MNK *i* PKP **PKPdf** **02 22 55.3 -2.3**
comp=Z,9.0nm,0.9s,baz=31
MNK *i* PP **PP** **02 25 40.9 -1.9**
MNK *i* PKS 02 26 32.7
MNK *i* PPP PPP 02 28 43.3
MNK *i* SKS **SKSdf** **02 30 09.2 +4.6**
MNK *i* SKKS **SKKSdf** **02 39 41.4 -1.6**
MNK *i* SS **SS** **02 43 50.7 +4.2**
MNK *i* SSS SSS 02 49 01.1
MNK *i* LR LR 03 21 24.9
MNK *i* LRM MLR 03 26 17.4
comp=Z,520nm,17.8s
MNK *i* LRM MLR 03 26 40.3
comp=N,629nm,25.4s
MNK *i* LRM MLR 03 26 44.2
comp=E,76nm,19.1s
**KIV Kislovodsk 138.09 321** *i* PKIKP **PKPdf** **02 22 59.9 +0.7**
KIV *e* 02 25 46.2
KIV *e*PS PS 02 36 13.4 -3.8
KIV *e*SS SS 02 43 58.0 +2.2
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,501nm,24.0s
**SOC Sochi 140.09 322** *i* PKIKP **PKiKP** **02 23 04.1 -1.1**
SOC *e* 02 25 58.6
SOC *e*PPP PPP 02 29 05.1
SOC *e*SS SS 02 44 18.2 -0.8
SOC *e*SSS SSS 02 49 33.6
SOC MLR MLR
comp=Z,634nm,20.0s
**AKASG Malin Array Be 140.18 338** PKhKP PKPpre 02 22 55.2
comp=Z,1.6nm,0.6s,baz=36,slow=3.4,SNR=11
**AKASG Malin Array Be 140.18 338** PKPdf **PKPdf** **02 23 00.3 -2.4**
AKASG pPKPdf **pPKPdf** **02 23 17.0 +1.2**
**AKBB Malin Array Si 140.18 338** *i* PKIKP **PKPdf** **02 23 02.1 -0.5**
**GURO Guroymak-BITLI 141.17 314** PKPdf **PKPdf** **02 23 03.4 -1.7**
**SORM Soroca 142.60 336** ⇓P **PKPdf** **02 23 05.4 -1.7**
**SORM Soroca 142.60 336** ⇓PKIKP **PKPdf** **02 23 05.4 -1.7**
**MARD Mardin 142.62 313** **PKPdf** **02 23 05.6 -2.1**
**LVV L'vov 142.69 341** *e*PKIKP **PKPdf** **02 23 05.9 -1.3**
LVV MLR MLR
comp=E,400nm,22.0s
LVV MLR MLR
comp=N,500nm,23.0s
LVV MLR MLR
comp=Z,800nm,23.0s
**PURM Purcari 143.24 333** ⇓P PKPbc 02 23 05.4 +0.2
**KWP Kalwaria Pacla 143.25 343** *e*PKPdf PKPbc 02 23 05.6 +0.3
**MILM Milestii Mici 143.39 334** *e*PKP PKPab 02 23 05.0 +0.4
comp=Z,100nm,3.9s
MILM *e*LR LR 03 15 20.0
comp=Z,600nm,22.0s
**MILM Milestii Mici 143.39 334** *e*PKIKP PKPab 02 23 05.0 +0.4
MILM pmax pmax
comp=Z,100nm,3.9s
**OJC Ojcow 143.48 346** *e*PKPdf PKPbc 02 23 05.9 +0.1
**KSP Ksiaz 143.60 350** *e*PKPdf PKPbc 02 23 06.2 0.0
**CLL Collm 143.62 353** *i* PKPdf PKPbc 02 23 06.7 +0.5
comp=Z,13nm,0.9s

CLL *e*PP **PP** **02 26 21.0 +0.6**
CLL *e*pPP 02 26 36.0
CLL *e*PKSdf PKSdf 02 26 43.0 -1.3
CLL *e*SKKSac SKKSac 02 33 12.0 +1.8
CLL *e*PSKS 02 36 42.0
CLL *e*PPS PPS 02 38 54.0
CLL *e*SS **SS** **02 44 48.0 -10**
CLL *e*PSPS 02 46 00.0
CLL *e*SSS SSS 02 50 12.0
CLL *e*SSSS 02 54 36.0
CLL LmH 03 27 00.0
comp=N,500nm,21.8s
CLL LmH 03 27 00.0
comp=E,600nm,19.2s
CLL LmV 03 30 00.0
comp=Z,700nm,20.1s
**CHVC Chvalec 143.89 350** *e*PKP PKPbc 02 23 07.7 +0.6
**OSTC Ostas 143.89 350** *e*PKP PKPbc 02 23 08.0 +0.9
**BRG Berggiesshubel 143.93 352** *e*PKP PKPbc 02 23 07.6 +0.5
BRG Amp 02 23 10.0
comp=Z,48nm,1.8s
BRG *ex* x 02 23 29.1
BRG Amp 02 23 37.4
comp=Z,239nm,3.0s
**BRG Berggiesshubel 143.93 352** *e*PKIKP PKPbc 02 23 07.6 +0.4
BRG pmax pmax
comp=Z,48nm,1.8s
BRG pmax pmax
comp=Z,239nm,3.0s
**UPC Upice 143.98 350** *e*PKIKP **PKPdf** **02 23 08.5 -1.0**
**UPC Upice 143.98 350** *e*PKP **PKPdf** **02 23 08.5 -1.0**
**PRAR RASCA 144.05 337** ⇑P **PKPdf** **02 23 09.1 -0.6**
**NIE Niedzica 144.10 345** *e*PKPdf **PKPdf** **02 23 09.3 -0.4**
**PVCC Panska Ves 144.18 351** *e*PKIKP **PKPdf** **02 23 08.9 -0.9**
**PVCC Panska Ves 144.18 351** *e*PKP **PKPdf** **02 23 08.9 -0.9**
**BURAR Bucovina Array 144.21 338** ⇑P PKPbc 02 23 08.8 +0.5
**BURAR Bucovina Array 144.21 338** ⇑PKIKP PKPbc 02 23 08.8 +0.5
**BURAR Bucovina Array 144.21 338** PKPdf **PKPab** **02 23 08.0 +0.1**
**OKC Ostrava-Krasne 144.21 347** *e*PKIKP **PKPdf** **02 23 09.2 -0.7**
**OKC Ostrava-Krasne 144.21 347** *e*PKP **PKPdf** **02 23 09.2 -0.7**
**CRVS Cervenica-Dubn 144.26 343** *e*PKP PKPbc 02 23 09.0 +0.7
**UZH Uzhgorod 144.27 342** *e*PKHKP PKPpre 02 23 05.9
UZH *i* 02 23 09.9
UZH *i* 02 23 25.7
UZH *e* 02 29 47.5
**MORC Moravsky Berou 144.39 348** ⇑P **PKPdf** **02 23 09.7 -0.5**
**MORC Moravsky Berou 144.39 348** ⇑PKIKP **PKPdf** **02 23 09.7 -0.5**
**MORC Moravsky Berou 144.39 348** *e*PKP PKPbc 02 23 08.7 0.0
**KIBK Kibwezi 144.40 243** PKPdf **PKPab** **02 23 09.3 -0.3**
**MOX Moxa 144.42 355** *e*L L 03 30 31.1
comp=Z,853nm,21.2s
**UCC Uccle 144.44 3** PKPdf **PKPdf** **02 23 09.7 -0.5**
**UCC Uccle 144.44 3** *d*PKPdf PKPbc 02 23 09.2 +0.4
**BEBN Eben Emael 144.48 1** *d*PKPdf PKPbc 02 23 09.3 +0.4
BEBN *dp*PKPdf pPKPdf 02 23 25.0 +1.5
**PLN Plauen 144.52 354** *e*PKPbc PKPbc 02 23 09.1 0.0
baz=8.2,slow=3.1
PLN *ep*PKPbc pPKPdf 02 23 24.3 +0.7
baz=6.6,slow=3.2
**LANS Liptovska Anna 144.55 345** *e*PKP **PKPdf** **02 23 10.6 0.0**
**TANN Tannenbergstha 144.56 354** *e*PKPbc **PKPab** **02 23 08.5 -0.6**
baz=8.2,slow=3.1
TANN *ep*PKPbc **pPKPdf** **02 23 24.1 +0.3**
baz=6.6,slow=3.2
**TESR Tescani 144.59 336** ⇑P PKPbc 02 23 09.8 +0.4
**TRPA Tarpa 144.64 342** ⇑P **PKPdf** **02 23 10.3 -0.3**
**GHRR 144.66 335** ⇓P **PKPdf** **02 23 11.4 +0.6**
**MEM Membach 144.67 1** *d*PKPdf PKPbc 02 23 10.0 +0.5
**BSTI Sart Tilman 144.69 1** *d*PKPdf PKPbc 02 23 09.7 +0.1
**WERN Wernitzgruen 144.69 354** *e*PKPbc PKPbc 02 23 09.9 +0.2
baz=8.2,slow=3.1
WERN *ep*PKPbc pPKPdf 02 23 25.3 +1.3
baz=6.6,slow=3.2
**BTNL Ternell 144.70 1** *d*PKPdf PKPbc 02 23 10.1 +0.4
BTNL *dp*PKPdf pPKPdf 02 23 25.7 +1.8
**PRU Pruhonice 144.71 351** *e*PKIKP PKPbc 02 23 09.9 +0.2
**PRU Pruhonice 144.71 351** *e*PKP PKPbc 02 23 09.9 +0.2
PRU *ex* x 02 23 31.5
**BMR Baia Mare 144.74 340** ⇓P PKPbc 02 23 10.2 +0.4
**BMR Baia Mare 144.74 340** ⇓PKIKP PKPbc 02 23 10.2 +0.4
**NKC Novy Kostel 144.74 354** *e*PKIKP **PKPdf** **02 23 10.6 -0.2**
**NKC Novy Kostel 144.74 354** *e*PKP **PKPdf** **02 23 10.6 -0.2**
**AHRW Bad Neuenahr-A 144.74 360** *e*PKPbc **PKPdf** **02 23 10.3 -0.4**
baz=8.2,slow=3.1
AHRW *ep*PKPbc **pPKPdf** **02 23 24.9 +0.9**
baz=6.6,slow=3.2
**TLCR 144.74 332** ⇓P **PKPdf** **02 23 11.3 +0.4**
**TLCR 144.74 332** ⇓PKIKP **PKPdf** **02 23 11.3 +0.4**
**BCLA Clavier 144.85 2** *d*PKPdf **PKPab** **02 23 09.9 -0.1**
BCLA *dp*PKPdf **pPKPdf** **02 23 25.6 +1.4**
BCLA *ds*PKP 02 23 31.5
**BGES Gesves 144.88 2** *d*PKPdf PKPbc 02 23 10.4 +0.2
**SLCR Slobozia Conac 144.88 334** ⇑P **PKPdf** **02 23 11.6 +0.4**
**PANC Panciu 144.91 335** ⇑P **PKPdf** **02 23 11.0 -0.2**
**IZVR Izvoarele 144.92 334** ⇑P PKPbc 02 23 10.7 +0.2
**BHOU Houvegnez 144.93 1** *d*PKPdf **PKPdf** **02 23 11.2 0.0**
**BMRD Maredsous 144.95 2** *d*PKPdf PKPbc 02 23 10.6 +0.2
BMRD *d*PKiKP **PKiKP** **02 23 13.8 -1.2**
**ARCR ARCALIA 144.96 339** ⇑P PKPbc 02 23 10.9 +0.3
**VRAC Vranov 145.02 349** ⇑P **PKPdf** **02 23 11.1 -0.2**
**VRAC Vranov 145.02 349** ⇑PKIKP **PKPdf** **02 23 11.1 -0.2**
**VRAC Vranov 145.02 349** *e*PKP **PKPbc** **02 23 10.6 -0.1**
**TNS Taunus Mts 145.03 358** *e*PKPbc **PKPbc** **02 23 10.5 -0.3**
baz=8.2,slow=3.1
TNS *ep*PKPbc **pPKPdf** **02 23 26.1 +1.5**
baz=6.6,slow=3.2
**ODBI Odobesti 145.04 335** ⇑P **PKPdf** **02 23 12.5 +1.1**
**JURR Jurilovca 145.04 332** ⇑P **PKPbc** **02 23 10.7 -0.2**
**CFR Carcaliu 145.05 333** ⇑P **PKPdf** **02 23 11.5 +0.1**
**CFR Carcaliu 145.05 333** ⇑PKIKP **PKPdf** **02 23 11.5 +0.1**
**CEI Carei 145.06 341** ⇑P **PKPdf** **02 23 12.0 +0.6**
**CEI Carei 145.06 341** ⇑PKIKP **PKPdf** **02 23 12.0 +0.6**
**PBCC Pribram 145.09 352** *e*PKP **PKPab** **02 23 11.0 +0.1**
**VRI Vrincioaia 145.09 335** ⇑P **PKPbc** **02 23 10.6 -0.5**
**VRI Vrincioaia 145.09 335** ⇑PKIKP **PKPbc** **02 23 10.6 -0.5**
**RCHB Rochefort 145.11 2** *d*PKPdf **PKPbc** **02 23 10.3 -0.6**
**PLOR Plostina 145.13 335** ⇑P **PKPbc** **02 23 10.7 -0.5**
**PLOR Plostina 145.13 335** ⇑PKIKP **PKPbc** **02 23 10.7 -0.5**
**DOU Dourbes 145.15 2** *d*PKPdf **PKPbc** **02 23 10.9 -0.1**
DOU *dp*PKPdf **pPKPdf** **02 23 26.9 +2.2**
**TPGR Topolog 145.18 333** ⇓P **PKPdf** **02 23 12.2 +0.5**
**GAZ Gaziantep 145.18 315** **PKPbc** **02 23 10.9 -0.8**
**ROTZ Rotzenmuhle 145.23 354** *e*PKPbc **PKPdf** **02 23 11.6 -0.1**
baz=8.2,slow=3.1
ROTZ *ep*PKPbc **pPKPdf** **02 23 27.0 +2.2**
baz=6.6,slow=3.2
**JAVC Velka Javorina 145.24 347** *e*PKP **PKPdf** **02 23 12.6 +0.8**
**OZUR 145.27 336** ⇑P **PKPdf** **02 23 12.1 +0.2**
**KRUC Moravsky 145.30 349** *e*PKP **PKPbc** **02 23 11.5 -0.1**
**COVR Voineasa-Covas 145.32 336** ⇓P **PKPab** **02 23 12.1 +0.2**
**VYHS Vyhne 145.32 346** *e*PKP **PKPab** **02 23 11.9 +0.1**
**MESR Meseseni 145.38 340** ⇓P **PKPab** **02 23 12.4 +0.3**
**GRER 145.38 335** ⇑P **PKPab** **02 23 13.8 +1.7**
**GRF Grafenberg Arr 145.40 355** *e*PKPbc **PKPab** **02 23 12.3 +0.2**
baz=8.2,slow=3.1
GRF *ep*PKPbc **pPKPdf** **02 23 27.8 +2.6**
baz=6.6,slow=3.2
GRF *eL* L 03 26 30.6
comp=Z,729nm,22.0s
**TIRR Tirgusor 145.49 332** ⇑P **PKPab** **02 23 12.5 -0.1**
**TIRR Tirgusor 145.49 332** ⇑PKIKP **PKPab** **02 23 12.5 -0.1**
**LTVH Ltavrtes, Hu 145.50 342** ⇑P **PKPab** **02 23 13.6 +1.1**
**LTVH Ltavrtes, Hu 145.50 342** ⇑PKP **PKPbc** **02 23 14.0 +1.8**
LTVH PKPDF **PKPab** **02 23 13.5 +1.1**
**CBBR Cluj-Babes-Bol 145.51 339** ⇑P **PKPdf** **02 23 12.2 0.0**
**HARR Harsova 145.52 333** ⇓P **PKPab** **02 23 13.8 +1.1**
**HARR Harsova 145.52 333** ⇓PKIKP **PKPab** **02 23 13.8 +1.1**
**DOPR Dopca 145.53 337** ⇑P **PKPab** **02 23 13.7 +0.6**
**CJR Cluj-Napoca 145.54 339** ⇓P **PKPbc** **02 23 12.6 +0.1**
**CJR Cluj-Napoca 145.54 339** ⇓PKIKP **PKPbc** **02 23 12.6 +0.1**
**PSZ Piszkesteto 145.59 344** ⇑P **PKPab** **02 23 14.1 +1.2**
**PSZ Piszkesteto 145.59 344** ⇑PKIKP **PKPab** **02 23 14.1 +1.2**
**PSZ Piszkesteto 145.59 344** ⇑PKP **PKPbc** **02 23 13.7 +1.1**
PSZ PKPDF **PKPab** **02 23 13.1 +0.2**
**TLBR Topalu 145.59 333** ⇑P **PKPab** **02 23 13.1 +0.2**
**SMOL Smolenice 145.61 347** *e*PKP **PKPbc** **02 23 14.1 +1.2**
**WLF Walferdange 145.62 1** *e*PKPbc **PKPab** **02 23 13.3 +0.5**
baz=8.2,slow=3.1
WLF *ep*PKPbc pPKPab 02 23 28.5 +2.8
baz=6.6,slow=3.2
**WLF Walferdange 145.62 1** PKPbc **PKPab** **02 23 13.6 +0.7**
**WLF Walferdange 145.62 1** *d*PKP **PKPab** **02 23 13.0 +0.1**

WLF dPKiKP **PKiKP** 02 23 16.2 -0.2
WLF dpPKP pPKPab 02 23 27.0 +1.3
**EFOR EFORIE 145.68 331** ⇑P **PKPab 02 23 14.4 +1.1**
**KHC Kasperske Hory 145.69 352** *e*PKiKP **PKPbc 02 23 12.8 -0.1**
KHC *e* 02 23 28.0
**KHC Kasperske Hory 145.69 352** *e*PKP **PKPbc 02 23 12.8 -0.1**
KHC *ex* x 02 23 28.0
**KMBO Kilima Mbogo 145.69 244** PKPbc **PKPdf 02 23 13.8 -0.1**
comp=Z,9.8nm,0.8s,baz=132,slow=5.2,SNR=25
**KMBO Kilima Mbogo 145.69 244** PKP2 **PKPdf 02 23 13.8 -0.1**
**KMBO Kilima Mbogo 145.69 244** PKPbc **PKPdf 02 23 14.0 +0.1**
**MFTR Murfatlar 145.70 332** ⇑P **PKPab 02 23 13.3 -0.1**
**MLR Muntele Rosu 145.71 336** ⇓P **PKPab 02 23 13.7 +0.2**
**MLR Muntele Rosu 145.71 336** ⇓PKiKP **PKPab 02 23 13.7 +0.2**
**CVDA Cernavoda 145.75 332** ⇓P **PKPab 02 23 14.2 +0.7**
**PGOR Pogoanele 145.76 334** ⇑P **PKPab 02 23 14.3 +0.8**
**MDB Medias 145.76 338** ⇑P **PKiKP 02 23 15.5 -1.3**
**MDB Medias 145.76 338** ⇑PKP2 **PKiKP 02 23 15.5 -1.3**
**WET Wettzell 145.76 353** *e*PKPbc **PKPbc 02 23 13.2 +0.1**
baz=8.2,slow=3.1
WET *ep*PKPbc **sPKPdf 02 23 29.0 -1.6**
baz=6.6,slow=3.2
**DRGR 145.77 340** ⇑P **PKPbc 02 23 13.1 -0.2**
**DRGR 145.77 340** ⇑PKP2 **PKPbc 02 23 13.1 -0.2**
**ISR Istrita 145.77 335** ⇑P **PKPab 02 23 13.5 -0.2**
**ISR Istrita 145.77 335** ⇑PKP2 **PKPab 02 23 13.5 -0.2**
**MODS Modra-Piesok 145.78 347** *e*PKP **PKPab 02 23 13.0 +1.4**
MODS *e* 02 23 31.6
**BORR Bors 145.80 342** ⇑P **PKPab 02 23 14.1 +0.4**
**AMRR Amara 145.85 333** ⇑P **PKPab 02 23 14.3 +0.4**
**AMRR Amara 145.85 333** ⇑PKP2 **PKPab 02 23 14.3 +0.4**
**CKRC Cesky Krumlov 145.89 351** *e*PKP **PKPbc 02 23 13.5 0.0**
**MANR Mangalia 145.90 331** ⇑P **PKPab 02 23 14.3 +0.1**
**GEC2 GERESS Array S 145.95 352** *e*PKPbc **PKPbc 02 23 13.9 +0.1**
baz=8.2,slow=3.1
GEC2 *ep*PKPbc pPKPab 02 23 29.1 +2.1
baz=6.6,slow=3.2
**GEC2 GERESS Array S 145.95 352** PKPdf **PKPbc 02 23 13.9 +0.1**
**GERES GERESS Array B 145.95 352** PKPbc **PKPab 02 23 14.1 -0.2**
comp=Z,15nm,0.7s,baz=30,slow=3.5,SNR=120
**GERES GERESS Array B 145.95 352** PKP2 **PKPab 02 23 14.1 -0.2**
**GERES GERESS Array B 145.95 352** PKPdf **PKPbc 02 23 13.4 -0.3**
**ZST Bratislava 145.98 347** *e*PKP **PKPab 02 23 15.7 +1.4**
ZST *e* 02 23 30.4
**ICOR Ion Corvin 146.03 332** ⇓P **PKPab 02 23 15.2 +0.6**
**SECR 146.04 335** ⇓P **PKPab 02 23 14.7 0.0**
**BRTR Keskin Array B 146.04 321** PKPbc **PKPbc 02 23 14.3 -0.1**
comp=Z,20nm,0.7s,baz=128,slow=1.5,SNR=60
**BRTR Keskin Array B 146.04 321** PKP2 **PKPbc 02 23 14.3 -0.1**
**BRTR Keskin Array B 146.04 321** PKPdf **PKPdf 02 23 12.7 -0.9**
BRTR **sPKPdf 02 23 30.4 -1.0**
**BSZH Besenyszg 146.05 343** PKPDF **PKPab 02 23 15.1 +0.6**
**BSZH Besenyszg 146.05 343** ⇑PKP **PKiKP 02 23 17.3 0.0**
**VOIR 146.11 337** ⇑P **PKPbc 02 23 14.6 +0.3**
**VOIR 146.11 337** ⇑PKP2 **PKPbc 02 23 14.6 +0.3**
**PLAR PLOIESTI 146.15 335** ⇓P **PKPab 02 23 15.7 +0.7**
**PSN Preselentsi 146.19 331** *i* P **PKPab 02 23 16.2 +1.0**
**BUD Budapest 146.21 345** PKPDF **PKPbc 02 23 14.6 +0.2**
**BUD Budapest 146.21 345** ⇑PKP **PKPab 02 23 15.3 +0.2**
**RASA Rasa 146.24 333** ⇑P **PKPab 02 23 15.8 +0.4**
**SULR 146.25 335** ⇑P **PKPab 02 23 16.1 +0.7**
**MTUR Matau 146.28 336** ⇑P **PKPab 02 23 16.5 +0.9**
**MTUR Matau 146.28 336** ⇑PKP2 **PKPab 02 23 16.5 +0.9**
**ARR Arges 146.32 337** ⇓P **PKPab 02 23 15.8 0.0**
**STU Stuttgart 146.45 357** *e*PKPbc **PKPbc 02 23 15.6 +0.5**
baz=8.2,slow=3.1
STU *ep*PKPbc **sPKPdf 02 23 31.2 -0.5**
baz=6.6,slow=3.2
**ANTO Ankara 146.46 322** PKPbc **PKPbc 02 23 15.2 -0.4**
**BR231 Keskin MP Arra 146.49 322** PKPbc **PKPab 02 23 16.4 -0.3**
**CONA Conrad Observa 146.49 349** *e*P **PKPbc 02 23 15.9 +0.5**
comp=Z,46nm,0.9s,SNR=26
**DEV Deva 146.50 339** ⇑P **PKPab 02 23 16.5 +0.1**
**CSKK Cskako 146.51 346** PKPDF **PKPbc 02 23 15.8 +0.5**
**CSKK Cskako 146.51 346** ⇑PKP **PKiKP 02 23 18.0 -0.3**
**SIRR Siria 146.57 341** ⇑P **PKPab 02 23 17.1 +0.5**
**LOT Lotru 146.58 338** ⇑P **PKPdf 02 23 14.9 +0.6**
**SOP Sopron 146.59 348** PKPDF **PKiKP 02 23 17.6 -0.8**
**EGYH Egyhazaskeszo 146.67 347** PKPDF **PKPbc 02 23 16.4 +0.5**
**EGYH Egyhazaskeszo 146.67 347** ⇑PKP **PKPab 02 23 17.4 +0.5**
**SGRR Singureni 146.74 334** ⇓P **PKPbc 02 23 15.9 -0.2**
**AMBH Ambrzfalva 146.78 342** ⇑P **PKPab 02 23 16.8 -0.6**
**AMBH Ambrzfalva 146.78 342** PKPDF **PKPbc 02 23 16.4 +0.2**
**AMBH Ambrzfalva 146.78 342** PKiKP **PKPbc 02 23 18.2 -0.6**
**MOA Molln 146.84 351** *e*P **PKPbc 02 23 16.5 +0.2**
comp=Z,24nm,0.9s,SNR=12
**MPLH Magyarpolny 146.86 346** PKPDF **PKPbc 02 23 15.9 -0.5**
**MPLH Magyarpolny 146.86 346** ⇑PKP **PKPab 02 23 17.5 -0.2**
**HUMR Humele 146.89 336** ⇑P **PKPdf 02 23 14.9 +0.3**
**FUR Furstenfeldbru 146.90 354** *e*PKPbc **PKPbc 02 23 16.7 +0.2**
baz=8.2,slow=3.1
FUR *ep*PKPbc **sPKPdf 02 23 32.5 0.0**
baz=6.6,slow=3.2
**PRD Provadia 146.93 332** *i* P **PKPab 02 23 18.3 +0.2**
**BFO Black Forest 146.93 358** *e*PKPbc **PKPbc 02 23 16.7 +0.1**
baz=8.2,slow=3.1
BFO *ep*PKPbc pPKPab 02 23 32.0 +1.2
baz=6.6,slow=3.2
**BFO Black Forest 146.93 358** **PKPbc 02 23 16.8 +0.3**
**MDUB Mudurnu 146.98 324** PKPbc **PKPbc 02 23 17.7 +0.7**
**COPA Copaceanca 147.12 335** ⇑P **PKPbc 02 23 17.6 +0.4**
**RJOB Jochberg 147.16 352** *e*PKPbc **PKPbc 02 23 17.4 +0.1**
baz=8.2,slow=3.1
RJOB *ep*PKPbc **sPKPdf 02 23 32.9 0.0**
baz=6.6,slow=3.2
**BZS Buzias 147.17 341** ⇓P **PKPab 02 23 18.3 -0.6**
**BZS Buzias 147.17 341** ⇓PKP2 **PKPab 02 23 18.3 -0.6**
**ARSA Arzberg 147.20 349** *e*P **PKPbc 02 23 17.4 +0.1**
comp=Z,32nm,1.1s,SNR=10
**SRE Strehaia 147.46 338** ⇑P **PKPab 02 23 19.3 -0.8**
**SRE Strehaia 147.46 338** ⇑PKP2 **PKPab 02 23 19.3 -0.8**
**UBR Ueberruh 147.48 356** *e*PKPbc **PKPbc 02 23 18.0 -0.2**
baz=8.2,slow=3.1
UBR *ep*PKPbc **pPKPab 02 23 33.6 +0.8**
baz=6.6,slow=3.2
**MORH Mrgy, Hungar 147.49 344** ⇑ *i* P **PKPbc 02 23 17.0 -1.1**
**BANR Banloc 147.53 341** ⇓P **PKPab 02 23 19.9 -0.4**
**HERR Herculane 147.55 339** ⇓P **PKPbc 02 23 18.2 -0.2**
**RETA Reutte 147.62 355** *e*P **PKPbc 02 23 18.6 0.0**
comp=Z,63nm,1.8s,SNR=10.0
**WATA Walderalm 147.69 354** *e*P **PKPbc 02 23 18.7 -0.2**
comp=Z,27nm,1.1s,SNR=7.6
**KBA Koelnbreinsper 147.73 351** *e*P **PKPbc 02 23 18.3 -0.8**
comp=Z,16nm,0.8s,SNR=6.5
**MOTA Moosalm 147.73 354** *e*P **PKPbc 02 23 18.6 -0.4**
comp=Z,25nm,1.0s,SNR=9.6
**KOVH Kovagotottos 147.74 345** PKPDF **PKPdf 02 23 17.0 +1.0**
**WTTA Wattenberg 147.75 354** *i* P **PKPbc 02 23 18.8 -0.3**
comp=Z,44nm,0.7s,SNR=19
**KOGS Kog 147.83 348** *e*PKPbc **PKPbc 02 23 18.6 -0.5**
**SOKA Soboth 147.84 349** *e*P **PKPbc 02 23 18.7 -0.5**
comp=Z,45nm,0.9s,SNR=10
**SQTA Sankt Quirin 147.85 354** *i* P **PKPbc 02 23 18.9 -0.4**
comp=Z,24nm,0.9s,SNR=9.6
**MDVR Moldovita 147.87 340** ⇑P **PKPbc 02 23 19.3 -0.1**
**DAVA Damuels 147.89 356** *i* P **PKPbc 02 23 19.4 0.0**
comp=Z,36nm,0.8s,SNR=11
**KALN Kalnik 148.09 347** P **PKPbc 02 23 19.0 -0.8**
**FETA Feichten 148.09 355** *e*P **PKPbc 02 23 19.4 -0.5**
comp=Z,43nm,1.4s,SNR=9.5
**OBKA Obir 148.09 350** *e*P **PKPbc 02 23 19.1 -0.8**
comp=Z,12nm,0.8s,SNR=6.8
**MYKA Terra Mystica 148.12 351** *e*P **PKPbc 02 23 18.9 -1.0**
comp=Z,26nm,0.8s,SNR=9.1
**FRGS Fruska Gora 148.14 342** ⇓P **PKPdf 02 23 17.2 +0.5**
**FRGS Fruska Gora 148.14 342** ⇑ *i* P **PKPbc 02 23 18.5 -1.5**
**LOBO Lobor 148.14 348** P **PKPbc 02 23 19.2 -0.8**
**ABTA Abfaltersbach 148.17 352** *e*P **PKPbc 02 23 19.4 -0.7**
comp=Z,31nm,0.7s
**ZAG Zagreb 148.47 348** ⇑ *i* P **PKPbc 02 23 21.0 +0.2**
**CADS Cadrg 148.50 351** *e*PKPbc **PKPbc 02 23 19.6 -1.4**
**LJU Ljubljana 148.55 349** ⇑ *i* P **PKPbc 02 23 20.6 -0.4**
**CRES Cresnjev 148.58 348** ⇑ *i* P **PKPbc 02 23 20.8 -0.3**
**OZLJ Ozalj 148.78 348** P **PKPbc 02 23 21.2 -0.4**
**CEY Cerknica 148.86 349** ⇑ *i* P **PKPbc 02 23 21.2 -0.6**
**BOVS Bovan 148.88 339** ⇑P **PKPbc 02 23 21.4 -0.5**
**BOJS Bojanci 148.93 348** *e*PKPbc **PKPbc 02 23 22.0 0.0**
**ASCN Ascension 148.97 136** PKPbc **PKPbc 02 23 22.7 -0.3**
**PLD Plovdiv 149.00 333** *i* P **PKiKP 02 23 23.2 -0.4**
**CSS Mathiatis 149.01 314** PKPbc **PKPbc 02 23 22.7 +0.1**
**DIVS Divibare 149.04 341** ⇑ *i* P **PKPbc 02 23 22.2 -0.2**
**MRAK Mrakovica 149.04 346** ⇑ *i* P **PKPbc 02 23 22.1 -0.3**
**KDZ Kurdzhali 149.05 332** *i* P **PKiKP 02 23 23.4 -0.3**

**SKDS Skadanscina 149.12 350** ⇑ *i* P **PKPbc 02 23 21.8 -0.7**
**VTS Vitosha 149.19 336** ⇑P **PKPbc 02 23 23.1 +0.2**
**VTS Vitosha 149.19 336** ⇑PKP2 **PKPbc 02 23 23.1 +0.2**
**VTS Vitosha 149.19 336** *i* P **PKiKP 02 23 24.2 +0.1**
**BLY Banja Luka 149.22 345** ⇑ *i* P **PKPbc 02 23 22.7 0.0**
**RIY Rijeka 149.25 349** ⇑ *i* P **PKPbc 02 23 22.0 -0.8**
**ALN Alexandroupoli 149.35 330** PKPbc **PKPbc 02 23 22.4 -0.7**
**BBLS Lazići 149.43 342** ⇑ *i* P **PKPbc 02 23 23.2 -0.2**
**SALO Salr 149.50 355** **PKPbc 02 23 22.5 -0.9**
**MGRS Mrkonjic Grad 149.56 345** ⇑ *i* P **PKPbc 02 23 23.5 -0.1**
**SMRN Sveta Marina 149.59 349** *i* P **PKPbc 02 23 23.2 -0.4**
**RUDO Rudo 149.67 342** ⇑ *i* P **PKPbc 02 23 23.4 -0.5**
**UDBI Udbina 149.76 347** *i* P **PKPbc 02 23 23.8 -0.3**
**BRJN Brijuni 149.78 350** *i* P **PKPbc 02 23 24.0 0.0**
**MMB Musomiste 149.84 334** *i* P **PKiKP 02 23 25.3 -0.1**
**KKB Krupnik 149.88 335** *i* P **PKiKP 02 23 25.8 +0.4**
**NVLJ Novalja 149.91 348** P **PKPbc 02 23 23.8 -0.6**
**KIJV Kijevo 150.11 346** P **PKPbc 02 23 24.7 -0.3**
**UPM Unac-Piva 150.19 342** ⇑ *i* P **PKPbc 02 23 24.4 -1.0**
**PGAV Gavieira, Arco 150.37 23** *e*PKPbc **PKPbc 02 23 24.6 -1.2**
**PGAV Gavieira, Arco 150.37 23** *e*LR LR 03 14 12.5
comp=Z,2µm,20.0s
**STIP Stip 150.38 336** *i* P **PKPbc 02 23 24.6 -1.0**
**MORI Morici 150.40 347** P **PKPbc 02 23 25.0 -0.6**
**RICI Ricice 150.41 344** P **PKPbc 02 23 24.5 -1.2**
**DUGI Dugi Otok 150.42 348** P **PKPbc 02 23 25.8 +0.1**
**SKO Skopje 150.43 337** *i* P **PKPbc 02 23 25.7 0.0**
**VAY Valandovo 150.54 335** *i* P **PKPbc 02 23 25.4 -0.6**
**BRY Bratogost 150.57 342** ⇑ *i* P **PKPbc 02 23 25.4 -0.9**
**ZIRJ Zirje 150.62 347** P **PKPbc 02 23 24.7 -1.4**
**MAKA Makarska 150.63 344** P **PKPbc 02 23 25.8 -0.4**
**PCAB Cabril 150.68 23** *e*PKPbc **PKiKP 02 23 27.6 +0.5**
**PDG Podgorica 150.78 341** ⇑P **PKiKP 02 23 26.9 -0.3**
**PDG Podgorica 150.78 341** ⇑P **PKiKP 02 23 25.7 -0.8**
**PDG Podgorica 150.78 341** **PKPdf 02 23 19.9 -1.1**
PDG **PKPbc 02 23 26.0 -0.5**
**TREB Trebinje 150.79 342** ⇑ *i* P **PKPbc 02 23 26.0 -0.6**
**STON Ston 150.84 343** ⇑ *i* P **PKPbc 02 23 25.4 -1.3**
**STON Ston 150.84 343** P **PKPbc 02 23 23.9 -2.7**
**HVAR Hvar 150.88 345** P **PKPbc 02 23 26.7 -0.1**
**HCY Herceg Novi 151.00 342** ⇑ *i* P **PKPbc 02 23 26.3 -0.8**
**DRME Dracevica, Mon 151.02 341** ⇑ *i* P **PKPbc 02 23 26.7 -0.5**
**POLO Lamas de Olo 151.06 23** *e*PKPbc **PKiKP 02 23 28.1 +0.1**
**LSTV Lastovo 151.15 344** P **PKPbc 02 23 26.9 -0.5**
**PVRL Vila Real 151.17 23** *e*PKPbc **PKPbc 02 23 27.3 -0.3**
**OHR Ohrid 151.41 337** *i* P **PKPbc 02 23 27.9 -0.3**
**MBAR Mbarara 151.50 239** **PKPbc 02 23 27.6 -1.7**
**MVO Moncorvo 151.52 22** *e*PKPbc **PKiKP 02 23 29.4 +0.5**
**MVO Moncorvo 151.52 22** *e*LR LR 03 14 51.3
comp=Z,1µm,22.0s
**PVIS Viseu 151.59 24** *e*PKPbc **PKiKP 02 23 29.4 +0.4**
**PCAS Casmilo, Conde 151.91 25** *e*PKPbc **PKiKP 02 23 29.8 +0.2**
**MTE Manteigas 151.99 24** *e*LR LR 03 14 59.8
comp=Z,2µm,20.0s
**PMOZ Porto Moniz, M 152.12 47** *e*LR LR 03 15 18.8
comp=Z,904nm,22.0s
**PSBE So Bento 152.24 26** *e*PKPbc **PKiKP 02 23 31.2 +0.8**
**PSBE So Bento 152.24 26** *e*PKPab **PKPab 02 23 40.6 +0.7**
**AQU L'Aquila 152.32 349** ⇑ *i* P **PKPbc 02 23 29.8 -0.4**
**PMRV Marv??o 152.89 24** *e*PKPab **PKPab 02 23 43.6 +1.0**
**PMRV Marv??o 152.89 24** *e*LR LR 03 14 53.0
comp=Z,1µm,20.0s
**MATE Matera 153.18 343** ⇓P **PKiKP 02 23 32.2 0.0**
**PESTR Estremoz 153.28 25** *e*PKPbc **PKiKP 02 23 34.3 +1.8**
**ESDC Sonseca Array 153.89 19** PKPbc **PKiKP 02 23 34.1 +0.3**
comp=Z,1.4nm,0.8s,baz=346,slow=2.9,SNR=5.4
ESDC PKPab **pPKPbc 02 23 47.5 +0.6**
comp=Z,2.8nm,0.7s,baz=331,slow=3.9,SNR=10
**PVAQ Vaqueiros 154.46 27** *e*LR LR 03 15 26.7
comp=Z,1µm,22.0s
**TIP Timpagrande 154.52 342** ⇑P **PKiKP 02 23 35.9 +0.7**
**TIP Timpagrande 154.52 342** **PKPbc 02 23 34.2 -1.0**
TIP PKPab **PKPab 02 23 49.8 +0.3**
**KEST Kesra 159.41 354** PKPab **PKPab 02 24 11.2 +0.6**
comp=Z,6.7nm,0.9s,baz=146,slow=1.7,SNR=7.4
**LIC Lamto 165.46 127** *e*PKP2 **PKPab 02 24 40.0 +2.2**
comp=Z,24nm,1.0s
**TIC Toumodi 165.72 125** *e*PKP2 **PKPab 02 24 41.1 +2.1**
**KIC Kosan Boka 165.77 127** *e*PKP2 **PKPab 02 24 41.2 +2.0**
comp=Z,14nm,0.9s
**DBIC Dimbokro 165.87 126** PKP **PKPdf 02 23 37.6 -2.3**
comp=Z,27nm,0.8s,baz=334,slow=1.6,SNR=4.6
**DBIC Dimbokro 165.87 126** PKIKP **PKPdf 02 23 37.6 -2.3**
**DBIC Dimbokro 165.87 126** **PKPdf 02 23 37.8 -2.1**
DBIC PKPab **PKPab 02 24 41.0 +1.4**
**TORD Torodi Ar. Bea 174.76 112** PKP **PKPdf 02 23 42.8 -2.0**
comp=Z,1.3nm,0.7s,baz=347,slow=0.8,SNR=12
TORD PKPab **PKPab 02 25 19.0 0.0**
comp=Z,2.7nm,0.7s,baz=266,slow=5.5,SNR=7.5
**TORD Torodi Ar. Bea 174.76 112** **PKPdf 02 23 42.2 -2.6**
TORD pPKPdf **pPKPdf 02 23 59.2 +1.3**
TORD PKPab **PKPab 02 25 19.9 +0.8**

**RSNC 07 02:19:33.2±0.8, 6.81N×73.19W, h146km±4km, ML3.0, Mw3.5, 2C-1D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | h m s | ISC |
| **BARC** | **Barichara** | **0.22** | **178** | ⇑ *e*P | Pn | 02 19 53.0 | -0.4 |
| BARC | | | | *e*S | Sn | 02 20 07.9 | -0.7 |
| BARC | | | | *i* | | 02 20 11.4 | |
| | comp=Z,198nm,0.3s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.71** | **43** | ⇑ *i* P | Pn | 02 19 55.7 | -0.2 |
| PAMC | | | | *e*S | Sn | 02 20 13.0 | -0.2 |
| PAMC | | | | *i* | | 02 20 16.0 | |
| | comp=Z,96nm,0.7s | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **173** | ⇓ *e*P | Pn | 02 19 56.8 | -0.7 |
| RUSC | | | | *e*S | Sn | 02 20 15.9 | -0.1 |
| RUSC | | | | *i* | | 02 20 16.6 | |
| | comp=Z,83nm,0.2s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.29** | **258** | *e*P | Pn | 02 19 59.5 | -0.8 |
| PTBC | | | | *e*S | Sn | 02 20 20.3 | -0.6 |
| PTBC | | | | *i* | | 02 20 28.2 | |
| | comp=Z,127nm,0.3s | | | | | | |
| **OCAC** | **Ocana** | **1.42** | **355** | *e*P | Pn | 02 20 01.3 | -0.5 |
| OCAC | | | | *i* | | 02 20 28.7 | |
| | comp=Z,143nm,0.2s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.45** | **217** | *e*P | Pn | 02 20 01.8 | -0.2 |
| SPBC | | | | *e*S | Sn | 02 20 23.3 | -0.7 |
| SPBC | | | | *i* | | 02 20 26.7 | |
| | comp=Z,156nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.79** | **292** | *e*P | Pn | 02 20 05.5 | -0.1 |
| ZARC | | | | *e*S | Sn | 02 20 30.9 | +0.5 |
| ZARC | | | | *i* | | 02 20 36.6 | |
| | comp=Z,74nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.08** | **233** | *e*P | Pn | 02 20 08.7 | -0.4 |
| NORC | | | | *e*S | Sn | 02 20 35.9 | -0.7 |
| NORC | | | | *i* | | 02 20 40.8 | |
| | comp=Z,70nm,0.2s | | | | | | |
| **SMLC** | **San Martn de** | **2.16** | **336** | *e*P | Pn | 02 20 09.2 | -0.8 |
| SMLC | | | | *e*S | Sn | 02 20 37.5 | -0.8 |
| SMLC | | | | *i* | | 02 20 41.2 | |
| | comp=Z,69nm,0.1s | | | | | | |
| **CHIC** | **Chingaza** | **2.24** | **194** | *e*P | Pn | 02 20 10.9 | -0.4 |
| CHIC | | | | *e*S | Sn | 02 20 39.5 | -1.1 |
| CHIC | | | | *i* | | 02 20 50.1 | |
| | comp=Z,36nm,0.3s | | | | | | |
| **ROSC** | **El Rosal** | **2.26** | **210** | *e*P | Pn | 02 20 12.6 | +1.0 |
| ROSC | | | | *e*S | Sn | 02 20 41.6 | +0.5 |
| ROSC | | | | *i* | | 02 20 48.9 | |
| | comp=Z,77nm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.40** | **255** | *e*P | Pn | 02 20 14.8 | +1.5 |
| HELC | | | | *e*S | Sn | 02 20 43.3 | -0.8 |
| HELC | | | | *i* | | 02 20 52.0 | |
| | comp=Z,42nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.50** | **292** | *e*P | Pn | 02 20 12.9 | -1.3 |
| UREC | | | | *e*S | Sn | 02 20 43.8 | -1.9 |
| UREC | | | | *i* | | 02 20 57.1 | |
| | comp=Z,48nm,0.2s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.68** | **234** | *e*P | Pn | 02 20 17.9 | +1.2 |
| GUY2C | | | | *e*S | Sn | 02 20 50.4 | +0.1 |
| GUY2C | | | | *i* | | 02 21 01.8 | |
| | comp=Z,56nm,0.5s | | | | | | |
| **VILC** | **Villavicencio,** | **2.73** | **191** | *e*P | Pn | 02 20 16.6 | -0.6 |
| VILC | | | | *e*S | Sn | 02 20 50.6 | -0.4 |
| VILC | | | | *i* | | 02 20 56.3 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **SOCV** | **Socops** | **2.74** | **58** | *e*P | Pn | 02 20 14.5 | -2.6 |
| SOCV | | | | *e*S | Sn | 02 20 46.0 | -4.9 |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **158** | *e*P | Pn | 02 20 15.9 | -2.1 |
| PTGC | | | | *e*S | Sn | 02 20 49.1 | -3.4 |
| PTGC | | | | *i* | | 02 20 51.8 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.96** | **252** | *e*P | Pn | 02 20 20.8 | +0.7 |
| CBOC | | | | *e*S | Sn | 02 20 55.3 | -0.8 |
| CBOC | | | | *i* | | 02 21 02.2 | |
| | comp=Z,18nm,0.4s | | | | | | |
| **DBBC** | **Dabeiba** | **3.00** | **274** | *e*P | Pn | 02 20 20.5 | 0.0 |
| DBBC | | | | *e*S | Sn | 02 20 56.2 | -0.8 |
| DBBC | | | | *i* | | 02 21 00.9 | |
| | comp=Z,104nm,0.3s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.13** | **309** | *e*P | Pn | 02 20 20.0 | -2.1 |
| MOTC | | | | *e*S | Sn | 02 20 58.2 | -1.8 |
| MOTC | | | | *i* | | 02 21 02.6 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **ANIL** | **Santa Ana** | **3.19** | **224** | *e*P | Pn | 02 20 23.1 | 0.0 |
| ANIL | | | | *e*S | Sn | 02 21 01.7 | +0.1 |
| ANIL | | | | *i* | | 02 21 09.1 | |
| | comp=Z,97nm,0.3s | | | | | | |
| **SDV** | **Santo Domingo** | **3.27** | **51** | *e*P | Pn | 02 20 22.0 | -2.0 |
| SDV | | | | *e*S | Sn | 02 20 55.0 | -8.3 |
| SDV | | | | *i* | | 02 21 01.6 | |
| | comp=Z,19nm,0.4s | | | | | | |
| **PRAC** | **Prado** | **3.51** | **209** | *e*P | Pn | 02 20 26.5 | -0.5 |
| PRAC | | | | *e*S | Sn | 02 21 06.3 | -2.5 |
| PRAC | | | | *i* | | 02 21 17.3 | |
| | comp=Z,31nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.54** | **215** | *e*P | Pn | 02 20 27.4 | 0.0 |
| ORTC | | | | *e*S | Sn | 02 21 09.2 | -0.2 |
| ORTC | | | | *i* | | 02 21 16.6 | |
| | comp=Z,23nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.61** | **239** | *e*P | Pn | 02 20 28.6 | +0.2 |
| PLMC | | | | *e*S | Sn | 02 21 10.9 | -0.2 |
| PLMC | | | | *i* | | 02 21 17.7 | |
| | comp=Z,17nm,0.4s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.64** | **327** | *e*P | Pn | 02 20 26.8 | -1.9 |
| SJCC | | | | *e*Pg | Sn | 02 20 27.3 | -1.4 |
| SJCC | | | | *e*S | Sn | 02 21 07.1 | -4.7 |
| SJCC | | | | *i* | | 02 21 11.9 | |
| | comp=Z,13nm,0.3s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.68** | **188** | *e*P | Pn | 02 20 39.7 | -2.7 |
| MACC | | | | *e*S | Sn | 02 21 28.9 | -7.4 |
| MACC | | | | *i* | | 02 21 40.2 | |
| | comp=Z,5.2nm,0.3s | | | | | | |
| **GARC** | **Garzon, Huila** | **5.14** | **207** | *e*P | Pn | 02 20 47.1 | -1.6 |
| GARC | | | | *e*S | Sn | 02 21 40.0 | -7.5 |
| GARC | | | | *i* | | 02 21 49.6 | |
| | comp=Z,10nm,0.2s | | | | | | |

*TUL* **07** *02:25:47.2±0.9, 36.69N±0.02×98.00W±0.02, h6km±7km, ML2.5, mb_Lg2.2/5(NEIC), Error ellipse: s-maj=2.9km s-min=1.8km az=136.0*

**NEIC 07 02:25:47.3±1.4, 36.66N±0.02×97.96W±0.02, h5km±7km, Error ellipse: s-maj=2.6km s-min=1.7km az=136.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | h m s | ISC |
| **CROK** | **Carrier** | **0.16** | **187** | | Pg | | Pg | 02 25 51.2 | +0.8 |
| **GC02** | **Grant County #** | **0.21** | **23** | | Pg | | Pg | 02 25 51.5 | +0.2 |
| **OK032** | **Salt Plains WL** | **0.25** | **306** | | Pg | | Pg | 02 25 51.6 | -0.5 |
| **KAN17** | **Caldwell West** | **0.41** | **22** | | Pg | | Pg | 02 25 55.0 | -0.1 |
| **KAN05** | **Bluff City Nor** | **0.45** | **9** | | Pg | | Pg | 02 25 55.6 | -0.4 |
| **KAN10** | **Anthony SW Sta** | **0.48** | **347** | | Pg | | Pg | 02 25 56.0 | -0.5 |
| **KAN01** | **Argonia South** | **0.52** | **18** | | | | Pg | 02 25 57.0 | -0.2 |
| **KAN13** | **South Haven SW** | **0.52** | **47** | | Pg | | Pg | 02 25 57.4 | 0.0 |
| **KAN16** | **Harper SW Stat** | **0.57** | **351** | | Pg | | Pg | 02 25 57.8 | -0.5 |
| **KAN06** | **Argonia West S** | **0.59** | **8** | | | | Pg | 02 25 58.4 | -0.4 |
| **BLOK** | **Blackwell** | **0.61** | **80** | | Pg | | Pg | 02 25 59.4 | +0.5 |
| **OK035** | **E0210 Rd and N** | **0.61** | **275** | | Pg | | Pg | 02 25 58.2 | -0.8 |
| **U32A** | **Winter Ranch,** | **0.89** | **252** | | Pg | | Pg | 02 26 03.2 | -1.1 |
| **OK029** | **Liberty Lake** | **0.95** | **155** | | Pg | | Pg | 02 26 05.7 | +0.1 |
| **OK033** | **Mehan** | **1.03** | **126** | | | | Pg | 02 26 07.1 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **1.04** | **164** | | Pg | | Pg | 02 26 06.7 | -0.6 |
| **QUOK** | **Quay** | **1.12** | **115** | | Pg | | Pg | 02 26 08.8 | +0.1 |
| **OK031** | **S. Brethren Rd** | **1.15** | **128** | | Pg | | Pg | 02 26 09.4 | +0.1 |
| **OK025** | **Westminster Rd** | **1.19** | **155** | | Pg | | Pg | 02 26 08.9 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.19** | **77** | | Pg | | Pg | 02 26 09.3 | -0.8 |
| **OK034** | **N. Norfolk Rd.** | **1.20** | **122** | | | | Pg | 02 26 09.6 | -0.7 |
| **OK030** | **Cody Creek RV** | **1.20** | **127** | | | | Pg | 02 26 10.3 | 0.0 |
| **FNO** | **Franklin** | **1.47** | **162** | | Pn | | Pn | 02 26 14.8 | +0.3 |
| **W35A** | **Tecumseh** | **1.74** | **149** | | | | Pn | 02 26 18.6 | +0.4 |
| W35A | | | | | IAmb_Lg | | | 02 26 45.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **1.86** | **341** | | | | Pn | 02 26 19.3 | -0.6 |
| **TUL1** | **Leonard** | **1.90** | **112** | | | | Pn | 02 26 20.8 | +0.4 |
| TUL1 | | | | | IAmb_Lg | | | 02 26 52.0 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.03** | **199** | | Pn | | Pn | 02 26 22.9 | +0.7 |
| **X34A** | **Smith Ranch, M** | **2.06** | **177** | | Pn | | Pb | 02 26 24.1 | -1.0 |
| **CBKS** | **Cedar Bluff** | **2.57** | **327** | | Pn | | Pn | 02 26 29.3 | -0.4 |
| **KSU1** | **Kansas State U** | **2.66** | **23** | | Pn | | Pn | 02 26 31.2 | +0.3 |
| **U38A** | **Gravette** | **2.88** | **93** | | Pn | | Pn | 02 26 34.5 | +0.5 |
| **X37A** | **Clayton** | **2.95** | **134** | | Pn | | Pn | 02 26 36.1 | +1.2 |
| **HHAR** | **Hobbs** | **3.26** | **95** | | Pn | | Pn | 02 26 40.0 | +0.8 |
| **W39A** | **Magazine** | **3.69** | **112** | | Pn | | Pn | 02 26 44.9 | -0.2 |
| **S39A** | **Bolivar** | **3.84** | **73** | | IAmb_Lg | | | 02 27 56.1 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.38** | **304** | | Pn | | Pn | 02 26 53.6 | -1.0 |
| **N35A** | **Tabor** | **4.57** | **23** | | Pn | | Pn | 02 26 56.9 | -0.2 |

*IDC* **07** *02:38:06.5±2.3, 38.28N×142

baz=316,slow=75,SNR=38
**H11S1 WAKE ISLAND Hy 29.14 126** T T 03 15 13.7
baz=318,slow=76,SNR=9.8
**H11S3 WAKE ISLAND Hy 29.14 126** T T 03 15 14.4
baz=318,slow=76,SNR=11
**H11S2 WAKE ISLAND Hy 29.15 126** T T 03 15 14.3
baz=318,slow=76,SNR=8.6
**ZALV Zalesovo Beam 41.47 311** P **P 02 45 46.6 +0.5**
1.1nm,0.5s,baz=84,slow=8.4,SNR=8.3
**MKAR Makanchi Array 43.90 301** P **P 02 46 05.9 -0.1**
1.3nm,0.7s,baz=87,slow=9.6,SNR=16
**ILAR Eielson Array 48.19 33** P **P 02 46 39.1 -0.3**
0.7nm,1.1s,baz=278,slow=6.3,SNR=2.1
**WRA Warramunga Arr 58.35 189** P **P 02 47 54.1 -0.3**
1.1nm,0.8s,baz=7.7,slow=7.1,SNR=4.7
**ASAR Alice Springs 62.07 188** P **P 02 48 19.9 +0.1**
0.6nm,1.0s,baz=357,slow=2.8,SNR=4.1
**YKA Yellowknife Ar 62.50 31** P **P 02 48 22.2 0.0**
0.1nm,0.4s,baz=298,slow=5.4,SNR=2.7
**FINES FINESS Array B 67.96 332** P **P 02 48 56.9 -0.7**
3.0nm,1.0s,baz=57,slow=6.5,SNR=1.9
**PDAR Pinedale Array 76.45 46** P **P 02 49 49.1 +0.2**
0.4nm,0.5s,baz=280,slow=2.0,SNR=5.2
**TXAR Lajitas Array 88.98 53** P **P 02 50 54.9 +1.0**
0.3nm,0.6s,baz=261,slow=2.5,SNR=4.4

*IDC **07** 02:39:12.9±2.4,22°.64S×114°.22W,h0km,mb3.5/4, mb1 3.9/4,mb1mx3.7/25,mbtmp3.5/4,Error ellipse: s-maj=85.1km s-min=42.4km az=37.0*
**ISC 07 02:39:13.9±2.6,22°.7S±0°.6×114°.3W±0°.4,h10km,n10, σ0s78/7,mb3.7/4,Easter Island region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H03N2** | **Juan Fernandez** | **32.82** | **117** | T | | | T | 03 20 34.2 | |
| | baz=284,slow=76 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **32.83** | **117** | T | | | T | 03 20 28.9 | |
| | baz=284,slow=76 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **32.84** | **117** | T | | | T | 03 20 34.5 | |
| | baz=284,slow=76 | | | | | | | | |
| **LPAZ** | **La Paz** | **43.84** | **90** | P | | | **P** | **02 47 21.5 +0.3** | |
| | 0.8nm,0.5s,baz=222,slow=9.1,SNR=1.9 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.96** | **356** | P | | | **P** | **02 49 28.5 +1.1** | |
| | 0.6nm,0.8s,baz=173,slow=8.2,SNR=4.8 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **65.32** | **4** | P | | | **P** | **02 49 55.5 -0.8** | |
| | 0.3nm,0.6s,baz=174,slow=8.7,SNR=2.5 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.93** | **360** | P | | | **P** | **02 51 48.2 -0.5** | |
| | 0.1nm,0.4s,baz=176,slow=5.7,SNR=4.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **145.65** | **340** | PKPbc | | | **PKPab** | **02 58 53.2 +0.4** | |
| | 0.4nm,0.4s,baz=25,slow=3.8,SNR=2.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.99** | **51** | PKPbc | | | **PKPbc** | **02 58 59.5 -0.4** | |
| | 0.9nm,0.9s,baz=208,slow=2.8,SNR=2.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **152.52** | **335** | PKPbc | | | **PKiKP** | **02 59 10.7 0.0** | |
| | 0.3nm,0.6s,baz=45,slow=0.6,SNR=6.3 | | | | | | | | |

**IDC 07 02:43:28.8±3.5,6°.38S×149°.83E,h0km,mb3.1/2, mb1 3.5/3,mb1mx3.1/31,mbtmp3.3/3,ML1.5/1,Error ellipse: s-maj=136.5km s-min=38.5km az=120.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.00** | **221** | Pn | | | Pn | 02 44 30.4 | -1.1 |
| | 2.3nm,0.3s,baz=251,slow=19,SNR=1.9 | | | | | | | | |
| PMG | | | | Sn | | | Sn | 02 45 20.2 | +1.1 |
| | 6.1nm,0.3s,baz=13,slow=10,SNR=2.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.20** | **227** | P | | | P | 02 48 05.8 | +0.4 |
| | 1.3nm,0.8s,baz=52,slow=11,SNR=7.2 | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **220** | P | | | P | 02 48 35.8 | +0.2 |
| | 0.3nm,0.7s,baz=56,slow=9.5,SNR=2.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.91** | **285** | PKPbc | | | PKPbc | 03 03 16.3 | -0.8 |
| | 0.2nm,0.3s,baz=77,slow=2.0,SNR=5.2 | | | | | | | | |

*IDC **07** 02:49:33.7±1.2,31°.74S×71°.84W,h0km,mb3.8/3, mb1 3.9/5,mb1mx3.7/25,mbtmp3.7/5,ML3.9/2,Error ellipse: s-maj=42.6km s-min=32.3km az=111.0*
*SJA **07** 02:49:34.9±0.7,31°.76S×72°.19W,h40km±17km,ML3.8, MW4.1*
*NEIC **07** 02:49:34.7±1.5,31°.79S±0°.04×72°.2W±0°.1,h12km±5km, mb4.4/4,ML3.9(GUC),Error ellipse: s-maj=14.9km s-min=6.1km az=94.0*
*GUC **07** 02:49:37.0±0.7,31°.77S×71°.91W,h36km±2km,ML3.9*
**ISC 07 02:49:32.9±2.8,31°.78S±0°.02×72°.18W±0°.05,h5km±19km, n76,σ1s57/112,mb4.2/3,9C-4D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VA06** | **Catapilco** | **1.08** | **136** | ⇓*iP* | | | **Pb** | **02 49 54.3 +0.3** | |
| VA06 | | | | | *eS* | | **Sb** | **02 50 06.9 -1.5** | |
| VA06 | | | | | IAML | | | 02 50 09.4 | |
| | comp=E,8μm,0.5s | | | | | | | | |
| **CO02** | **Combarbal** | **1.16** | **60** | ⇓*iP* | | | **Pb** | **02 49 55.1 -0.4** | |
| CO02 | | | | | *eS* | | **Sb** | **02 50 07.3 -3.6** | |
| CO02 | | | | | IAML | | | 02 50 10.8 | |
| | comp=N,8μm,0.4s | | | | | | | | |
| **CO02** | **Combarbal** | **1.16** | **60** | | *eP* | | **Pb** | **02 49 55.2 -0.3** | |
| **CO02** | **Combarbal** | **1.16** | **60** | | *eP* | | Sg | 02 50 03.5 -6.6 | |
| CO02 | | | | | *eP* | | **Sn** | **02 50 08.5 -3.7** | |
| **CO06** | **Fray Jorge** | **1.20** | **23** | ⇑*iP* | | | **Pb** | **02 49 56.9 +0.8** | |
| CO06 | | | | | *eS* | | **Sb** | **02 50 11.6 -0.2** | |
| **CO06** | **Fray Jorge** | **1.20** | **23** | | | | **Pb** | **02 49 56.9 +0.8** | |
| **VA01** | **Torpederas** | **1.31** | **160** | ⇑*eP* | | | **Pn** | **02 49 59.0 +1.0** | |
| VA01 | | | | | *eS* | | **Sb** | **02 50 14.3 -1.0** | |
| **VA01** | **Torpederas** | **1.31** | **160** | Pn | | | **Pn** | **02 49 58.9 +1.0** | |
| **ROCH** | **El Roble** | **1.54** | **141** | ⇑*iP* | | | **Pn** | **02 50 02.0 +0.7** | |
| ROCH | | | | | *eS* | | **Sn** | **02 50 20.3 -1.5** | |
| ROCH | | | | | IAML | | | 02 50 22.2 | |
| | comp=N,3μm,0.4s | | | | | | | | |
| **ROC1** | **El Roble** | **1.54** | **141** | | | | **Pn** | **02 50 00.8 -0.5** | |
| **ROC1** | **El Roble** | **1.54** | **141** | *eP* | | | **Pn** | **02 50 00.8 -0.5** | |
| ROC1 | | | | | *eS* | | **Sn** | **02 50 20.0 -1.9** | |
| **CO03** | **El Pedregal** | **1.58** | **54** | ⇓*iP* | | | **Pn** | **02 50 02.1 +0.5** | |
| CO03 | | | | | *eS* | | **Sn** | **02 50 19.8 -2.8** | |
| CO03 | | | | | IAML | | | 02 50 21.0 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.58** | **54** | | | | **Pn** | **02 50 02.2 +0.5** | |
| **CO03** | **El Pedregal** | **1.58** | **54** | *eP* | | | **Pn** | **02 50 02.1 +0.5** | |
| CO03 | | | | | *eS* | | **Sn** | **02 50 21.8 -0.8** | |
| CO03 | | | | | IAML | | | 02 50 22.0 | |
| | comp=Z,1μm,0.5s | | | | | | | | |
| **VA03** | **San Esteban** | **1.69** | **126** | ⇓*eP* | | | **Pn** | **02 50 03.5 +0.3** | |
| VA03 | | | | | *eS* | | **Sn** | **02 50 23.5 -1.7** | |
| VA03 | | | | | IAML | | | 02 50 29.3 | |
| | comp=E,3μm,0.2s | | | | | | | | |
| **VA03** | **San Esteban** | **1.69** | **126** | | | | **Pn** | **02 50 03.1 -0.1** | |
| **VA03** | **San Esteban** | **1.69** | **126** | *eP* | | | **Pn** | **02 50 03.7 +0.5** | |
| VA03 | | | | | *eS* | | **Sn** | **02 50 24.5 -0.8** | |
| VA03 | | | | | *eS* | | Sg | 02 50 26.7 -0.4 | |
| VA03 | | | | | IAML | | | 02 50 29.7 | |
| | comp=Z,1μm,0.5s | | | | | | | | |
| **MT02** | **Curacav** | **1.71** | **150** | ⇑*eP* | | | **Pn** | **02 50 04.3 +0.9** | |
| MT02 | | | | | *eS* | | **Sn** | **02 50 22.9 -2.8** | |
| **MT02** | **Curacav** | **1.71** | **150** | | | | **Pn** | **02 50 04.2 +0.8** | |
| **MT02** | **Curacav** | **1.71** | **150** | *eP* | | | Pn | 02 49 59.0 -4.4 | |
| MT02 | | | | | *eP* | | **Pb** | **02 50 04.0 -0.9** | |
| MT02 | | | | | *eS* | | **Sn** | **02 50 26.7 +1.0** | |
| MT02 | | | | | IAML | | | 02 50 31.7 | |
| | comp=Z,588nm,0.3s | | | | | | | | |
| **PEL** | **Peldehue** | **1.85** | **138** | ⇑*iP* | | | **Pn** | **02 50 06.4 +1.1** | |
| PEL | | | | | *eS* | | **Sn** | **02 50 28.6 -0.6** | |
| PEL | | | | | IAML | | | 02 50 33.4 | |
| | comp=E,2μm,0.4s | | | | | | | | |
| **PEL** | **Peldehue** | **1.85** | **138** | | | | **Pn** | **02 50 05.6 +0.2** | |
| **PEL** | **Peldehue** | **1.85** | **138** | *eP* | | | **Pn** | **02 50 06.5 +1.1** | |
| PEL | | | | | *eS* | | **Sb** | **02 50 32.4 +1.6** | |
| **VA05** | **Santo Domingo** | **1.93** | **166** | *eP* | | | **Pn** | **02 50 07.7 +1.4** | |
| VA05 | | | | | *eS* | | **Sn** | **02 50 30.3 -0.7** | |
| VA05 | | | | | IAML | | | 02 50 42.4 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **VA05** | **Santo Domingo** | **1.93** | **166** | | | | **Pn** | **02 50 07.0 +0.6** | |
| **GO04** | **Tololo Observa** | **1.99** | **37** | *eP* | | | **Pn** | **02 50 08.2 +0.7** | |
| GO04 | | | | | *eS* | | **Sn** | **02 50 32.8 -0.2** | |
| GO04 | | | | | IAML | | | 02 50 40.3 | |
| | comp=N,5μm,0.4s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.99** | **37** | | | | **Pn** | **02 50 08.3 +0.8** | |
| **GO04** | **Tololo Observa** | **1.99** | **37** | *eP* | | | Pn | 02 50 03.5 -4.0 | |
| GO04 | | | | | *eP* | | **Pn** | **02 50 08.3 +0.8** | |
| GO04 | | | | | *eS* | | **Sb** | **02 50 36.7 +1.7** | |
| **MT05** | **Renca** | **2.01** | **143** | ⇑*eP* | | | **Pn** | **02 50 08.8 +1.1** | |
| MT05 | | | | | *eS* | | **Sn** | **02 50 33.3 +0.1** | |
| MT05 | | | | | IAML | | | 02 50 41.3 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **MT05** | **Renca** | **2.01** | **143** | | | | **Pn** | **02 50 08.7 +1.1** | |
| **MT05** | **Renca** | **2.01** | **143** | *eP* | | | **Pn** | **02 50 08.7 +1.1** | |
| MT05 | | | | | *eS* | | **Sn** | **02 50 32.0 -1.2** | |
| MT05 | | | | | IAML | | | 02 50 41.1 | |
| | comp=Z,555nm,0.7s | | | | | | | | |
| **CO05** | **La Serena** | **2.02** | **24** | ⇑*eP* | | | **Pb** | **02 50 11.1 +0.9** | |
| CO05 | | | | | *eS* | | **Sn** | **02 50 31.2 -2.1** | |
| **CO05** | **La Serena** | **2.02** | **24** | | | | **Pn** | **02 50 08.5 +0.9** | |
| **MT01** | **Popeta** | **2.22** | **160** | ⇑*eP* | | | **Pn** | **02 50 11.7 +1.4** | |
| MT01 | | | | | *eS* | | **Sn** | **02 50 36.2 -1.9** | |
| **MT01** | **Popeta** | **2.22** | **160** | | | | **Pn** | **02 50 11.1 +0.7** | |
| **MT01** | **Popeta** | **2.22** | **160** | *eP* | | | Pn | 02 50 06.5 -3.9 | |
| MT01 | | | | | *eP* | | **Pn** | **02 50 11.9 +1.5** | |
| MT01 | | | | | *eS* | | **Sn** | **02 50 38.1 -0.1** | |
| MT01 | | | | | IAML | | | 02 50 48.4 | |
| | comp=Z,463nm,0.5s | | | | | | | | |
| **MT09** | **Talagante** | **2.23** | **154** | ⇑*eP* | | | **Pn** | **02 50 12.7 +2.1** | |
| MT09 | | | | | *eS* | | **Sn** | **02 50 38.9 +0.4** | |
| MT09 | | | | | IAML | | | 02 50 49.5 | |
| | comp=N,696nm,0.4s | | | | | | | | |
| **MT09** | **Talagante** | **2.23** | **154** | | | | **Pn** | **02 50 11.9 +1.4** | |
| **BO04** | **La Punta** | **2.56** | **150** | *eP* | | | **Pn** | **02 50 17.0 +1.8** | |
| BO04 | | | | | *eS* | | **Sn** | **02 50 46.1 -0.7** | |
| **LMEL** | **Las Melosas** | **2.65** | **142** | *eP* | | | **Pn** | **02 50 18.2 +1.8** | |
| LMEL | | | | | *eS* | | **Sn** | **02 50 48.5 -0.5** | |
| LMEL | | | | | IAML | | | 02 50 59.6 | |
| | comp=N,643nm,0.2s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.65** | **142** | | | | **Pn** | **02 50 17.9 +1.5** | |
| **BO01** | **Tunca** | **2.76** | **161** | | | | **Pn** | **02 50 19.1 +1.3** | |
| **BO01** | **Tunca** | **2.76** | **161** | *eP* | | | **Pn** | **02 50 19.0 +1.3** | |
| BO01 | | | | | *eS* | | **Sn** | **02 50 51.5 0.0** | |
| BO01 | | | | | IAML | | | 02 51 04.9 | |
| | comp=Z,261nm,0.5s | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.94** | **112** | *eP* | | | **Pb** | **02 50 24.9 -1.0** | |
| ARCO | | | | | *eS* | | **Sn** | **02 50 59.0 +2.7** | |
| ARCO | | | | | IAML | | | 02 51 11.4 | |
| | comp=Z,460nm,0.9s | | | | | | | | |
| **ASAL** | **Salagasta** | **2.94** | **107** | *eP* | | | **Pn** | **02 50 24.0 +3.6** | |
| ASAL | | | | | *eP* | | **Pb** | **02 50 24.5 -1.4** | |
| ASAL | | | | | *eS* | | **Sn** | **02 50 56.5 +0.2** | |
| **ZON** | **Zonda** | **2.99** | **86** | *eP* | | | **Pn** | **02 50 24.5 +3.5** | |
| **LCO** | **Las Campanas** | **3.04** | **25** | Pn | | | **Pn** | **02 50 23.0 +1.1** | |
| **LCO** | **Las Campanas** | **3.04** | **25** | *eP* | | | **Pn** | **02 50 23.0 +1.1** | |
| **RTCV** | **Cerro Valdivia** | **3.10** | **92** | *eP* | | | **Pb** | **02 50 28.0 -0.5** | |
| **AAGR** | **Agrelo** | **3.11** | **116** | *eP* | | | **Pb** | **02 50 27.0 -1.8** | |
| AAGR | | | | | *eS* | | **Sb** | **02 51 10.5 +3.3** | |
| AAGR | | | | | IAML | | | 02 51 19.7 | |
| | comp=Z,429nm,2.6s | | | | | | | | |
| **RTLL** | **Cerro Villicun** | **3.19** | **83** | *eP* | | | **Pn** | **02 50 22.0 -1.8** | |
| RTLL | | | | | *eP* | | Pb | 02 50 26.6 -3.5 | |
| RTLL | | | | | *eS* | | **Sn** | **02 51 03.5 +1.2** | |
| RTLL | | | | | *eS* | | **Sb** | **02 51 07.5 -1.8** | |
| **BO02** | **Sierra Bellavi** | **3.22** | **159** | | | | **Pn** | **02 50 25.4 +1.1** | |
| **BO02** | **Sierra Bellavi** | **3.22** | **159** | *eP* | | | **Pn** | **02 50 26.0 +1.8** | |
| BO02 | | | | | *eS* | | **Sb** | **02 51 07.5 -2.7** | |
| BO02 | | | | | IAML | | | 02 51 17.5 | |
| | comp=Z,313nm,0.4s | | | | | | | | |
| **GO05** | **Huala** | **3.23** | **176** | | | | **Pn** | **02 50 25.3 +1.0** | |
| **GO05** | **Huala** | **3.23** | **176** | *eP* | | | **Pn** | **02 50 26.0 +1.8** | |
| GO05 | | | | | *eS* | | **Sn** | **02 51 01.8 -1.2** | |
| **AC04** | **Llanos de Chal** | **3.69** | **15** | | | | **Pn** | **02 50 31.0 +0.4** | |
| **AC04** | **Llanos de Chal** | **3.69** | **15** | *eP* | | | **Pn** | **02 50 31.2 +0.6** | |
| AC04 | | | | | *eS* | | **Sb** | **02 51 22.0 -1.7** | |
| **ML02** | **Panimavida** | **4.02** | **171** | | | | **Pn** | **02 50 35.9 +0.8** | |
| **RFA** | **San Rafael** | **4.30** | **135** | *eP* | | | **Pn** | **02 50 41.0 +1.9** | |
| RFA | | | | | *eS* | | **Sb** | **02 51 43.5 +2.1** | |
| **APLL** | **PUNTA DE LOS L** | **5.04** | **76** | *eP* | | | **Pn** | **02 50 52.0 +2.8** | |
| APLL | | | | | *eS* | | **Sn** | **02 51 51.0 +3.1** | |
| **MRA** | **San Martin** | **5.52** | **98** | *eP* | | | Pn | 02 50 51.5 -4.3 | |
| MRA | | | | | *eP* | | **Pn** | **02 50 56.8 +1.0** | |
| **AC02** | **Maricunga** | **5.60** | **29** | Pn | | | **Pn** | **02 50 57.3 0.0** | |
| **AC02** | **Maricunga** | **5.60** | **29** | *eP* | | | **Pn** | **02 50 58.0 +0.7** | |
| **TCA** | **Tanti** | **6.49** | **88** | *eP* | | | **Pn** | **02 51 11.0 +1.9** | |
| **LC01** | **Cunco** | **7.10** | **178** | *eP* | | | **Pn** | **02 51 20.0 +2.5** | |
| **PLCA** | **Paso Flores** | **9.03** | **172** | Pn | | | **Pn** | **02 51 46.0 +2.1** | |
| | comp=Z,0.4nm,0.3s,baz=335,slow=8.9,SNR=5.4 | | | | | | | | |
| **SIV** | **San Ignacio** | **18.69** | **35** | P | | | **P** | **02 53 51.2 -1.0** | |
| | comp=Z,0.1nm,0.3s,baz=204,slow=11,SNR=4.6 | | | | | | | | |
| **ETMB** | **Extrema** | **22.55** | **15** | P | | | **P** | **02 54 32.1 -1.8** | |
| **BDFB** | **Brasilia** | **27.25** | **59** | P | | | **P** | **02 55 17.4 -0.8** | |
| | comp=Z,1.5nm,0.5s,baz=236,slow=4.5,SNR=4.1 | | | | | | | | |
| **BDFB** | **Brasilia** | **27.25** | **59** | P | | | **P** | **02 55 14.7 -3.6** | |
| BDFB | | | | | | IAmb | IAmb | 02 55 18.5 | |
| | comp=Z,9.9nm,1.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.45** | **180** | P | | | **P** | **02 59 28.5 -1.1** | |
| **TXAR** | **Lajitas Array** | **67.75** | **330** | P | | | **P** | **03 00 34.2 +2.6** | |
| | comp=Z,0.2nm,0.6s,baz=146,slow=8.3,SNR=2.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.57** | **70** | P | | | **P** | **03 02 02.7 +0.2** | |
| | comp=Z,1.3nm,0.8s,baz=258,slow=4.3,SNR=7.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.57** | **70** | P | | | IAmb | IAmb | 03 02 26.2 |
| | comp=Z,3.8nm,1.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **122.63** | **210** | PKP | | | **PKiKP** | **03 08 31.4 +0.9** | |
| | comp=Z,0.2nm,0.5s,baz=122,slow=3.1,SNR=1.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.39** | **30** | PKPbc | | | **PKiKP** | **03 09 30.8 +0.9** | |
| | comp=Z,1.9nm,0.5s,baz=309,slow=3.2,SNR=12 | | | | | | | | |

**IDC 07 02:53:47.7±5.5,5°.75S×148°.66E,h96km±54km,mb3.3/3, mb1 3.5/5,mb1mx3.2/25,mbtmp3.6/5,Error ellipse: s-maj=84.4km s-min=30.5km az=133.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.93** | **202** | P | | | Pn | 02 54 47.3 | +1.4 |
| | 1.1nm,0.3s,baz=166,slow=14,SNR=1.9 | | | | | | | | |
| PMG | | | | S | | | Sn | 02 55 31.1 | +0.1 |
| | 2.3nm,0.3s,baz=85,slow=8.9,SNR=3.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.83** | **223** | P | | | P | 02 58 11.4 | +0.5 |
| | 0.2nm,0.3s,baz=49,slow=10,SNR=10.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.79** | **217** | P | | | P | 02 58 42.8 | +0.3 |
| | 1.8nm,0.5s,baz=52,slow=9.2,SNR=61 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.61** | **239** | P | | | P | 02 59 08.0 | -0.3 |
| | 0.9nm,0.5s,baz=76,slow=10.0,SNR=9.6 | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.60** | **23** | P | | | P | 03 06 09.8 | -0.3 |
| | 0.2nm,0.5s,baz=270,slow=4.8,SNR=5.1 | | | | | | | | |

**TRN 07 03:03:10.1,10°.68N×62°.56W,h81km,MD3.6,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.14** | **92** | *eP* | | | Pn | 03 03 31.9 | +1.0 |
| TRN | | | | | *eS* | | Sn | 03 03 46.2 | -0.3 |
| **GRFF** | **Grenada Fort F** | **1.58** | **31** | *eP* | | | Pn | 03 03 37.2 | +0.6 |
| GRFF | | | | | *eS* | | Sn | 03 03 56.1 | -0.4 |
| **GRGR** | **Grenville** | **1.69** | **32** | *eP* | | | Pn | 03 03 38.4 | +0.4 |
| GRGR | | | | | *eS* | | Sn | 03 03 58.0 | -1.2 |
| **TOSP** | **Speyside** | **2.08** | **73** | *eP* | | | Pn | 03 03 42.6 | -0.5 |
| TOSP | | | | | *eS* | | Sn | 03 04 07.7 | -0.6 |
| **GCMP** | **Grenada, Carri** | **2.11** | **32** | *eP* | | | Pn | 03 03 44.2 | +0.7 |
| GCMP | | | | | *eS* | | Sn | 03 04 08.8 | -0.2 |
| **BAUV** | **El Baul** | **5.67** | **253** | *eP* | | | Pn | 03 04 32.1 | +0.2 |
| **BAUV** | **El Baul** | **5.67** | **253** | *eS* | | | Sn | 03 05 32.4 | -3.3 |

*IDC **07** 03:21:17.1±4.5,2°.28N×128°.32E,h72km±49km,mb3.5/6, mb1 3.7/7,mb1mx3.4/35,mbtmp3.9/7,ML4.0/1,Error ellipse: s-maj=50.8km s-min=30.3km az=60.0*
**ISC 07 03:21:15.1±1.3,2°.3N±0°.2×128°.2E±0°.3,h50km,n14, σ0s86/9,mb4.0/6,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.40** | **136** | P | | | **Pn** | **03 22 19.6 +0.2** | |
| | 8.9nm,0.3s,baz=325,slow=19,SNR=11 | | | | | | | | |
| SIJI | | | | | S | | **Sn** | **03 23 09.6 +0.2** | |
| | 3.0nm,0.3s,baz=221,slow=19,SNR=1.7 | | | | | | | | |
| **KSRS** | **Korea Array** | **34.95** | **360** | P | | | **P** | **03 28 02.0 -0.3** | |
| | 2.0nm,0.6s,baz=175,slow=9.5,SNR=16 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.95** | **64** | T | | | T | 04 12 34.7 | |
| | baz=252,slow=75,SNR=7.9 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.96** | **64** | T | | | T | 04 12 31.5 | |
| | baz=252,slow=75,SNR=4.0 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.96** | **64** | T | | | T | 04 12 32.9 | |
| | baz=252,slow=75,SNR=3.9 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.53** | **63** | T | | | T | 04 12 49.1 | |
| | baz=251,slow=75 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.54** | **63** | T | | | T | 04 12 53.4 | |
| | baz=251 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.54** | **63** | T | | | T | 04 12 46.8 | |
| | baz=251,slow=75 | | | | | | | | |
| **SONM** | **Songino Array** | **49.09** | **341** | P | | | **P** | **03 29 58.7 +1.0** | |
| | 0.5nm,0.6s,baz=154,slow=8.2,SNR=5.0 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **56.16** | **21** | P | | | **P** | **03 30 50.5 +0.8** | |
| | 1.3nm,0.5s,baz=212,slow=8.0,SNR=1.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.55** | **325** | P | | | **P** | **03 31 13.6 0.0** | |
| | 0.9nm,0.5s,baz=115,slow=8.1,SNR=13 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.50** | **333** | P | | | **P** | **03 31 33.6 +0.2** | |
| | 0.3nm,0.4s,baz=134,slow=6.2,SNR=2.0 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.71** | **25** | P | | | **P** | **03 33 47.0 -1.5** | |
| | 0.3nm,0.6s,baz=253,slow=5.1,SNR=4.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.77** | **288** | PKP | | | **PKPdf** | **03 40 09.9 -0.5** | |
| | 0.3nm,0.7s,baz=60,slow=3.0,SNR=1.5 | | | | | | | | |

*IDC **07** 03:21:52.2±0.9,11°.32S×116°.87E,h0km,mb4.1/6, mb1 4.2/8,mb1mx3.8/33,mbtmp4.1/8,ML4.5/2,Error ellipse: s-maj=38.6km s-min=19.1km az=45.0*
*DJA **07** 03:21:52.6±0.2,12°.S±2°×11°.7E±°,h10km,M4.7/19, mB5.1/6,mb4.7/19,MLv4.8/19,Mw(mB)4.5/6*
*NEIC **07** 03:21:55.1±2.5,11°.66S±0°.08×116°.77E±0°.09,h29km±5km, mb4.3/9,Error ellipse: s-maj=13.4km s-min=10.5km az=46.0*
**ISC 07 03:21:54.3±0.5,11°.58S±0°.06×116°.92E±0°.06,h26km,n74, σ2s21/76,mb4.3/7,South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **3.10** | **52** | P | | | **Pn** | **03 22 43.3 +1.7** | |
| **IGBI** | **Denpasar** | **3.26** | **327** | P | | | **Pn** | **03 22 43.2 -0.5** | |
| **DNP** | **Denpasar** | **3.34** | **330** | P | | | **Pn** | **03 22 44.5 -0.4** | |
| **BASI** | **Baing, Sumba** | **3.84** | **70** | P | | | **Pn** | **03 22 54.4 +2.7** | |
| **SRBI** | **Singaraja** | **3.86** | **334** | P | | | **Pn** | **03 22 53.2 +1.1** | |
| **JAGI** | **Jajag, Banyuwa** | **4.12** | **318** | P | | | **Pn** | **03 22 54.6 -1.1** | |
| **JAGI** | **Jajag, Banyuwa** | **4.12** | **318** | | | | **Pn** | **03 22 54.6 -1.1** | |
| **JAGI** | **Jajag, Banyuwa** | **4.12** | **318** | P | | | **Pn** | **03 22 54.9 -0.8** | |
| **ABJI** | **Asem Bagus** | **4.60** | **325** | P | | | **Pn** | **03 23 03.0 +0.8** | |
| **GMJI** | **Gumukmas** | **4.75** | **313** | P | | | **Pn** | **03 23 03.2 -1.1** | |
| **BLJI** | **Banyuglugur** | **5.03** | **319** | P | | | **Pn** | **03 23 08.2 +0.1** | |
| **KMMI** | **Kalianget** | **5.37** | **327** | P | | | **Pn** | **03 23 12.3 -0.4** | |
| | 0.3nm2μm82nm,0.8s | | | | | | | | |
| **MMRI** | **Maumere** | **6.00** | **61** | Pn | | | **Pn** | **03 23 23.1 +1.7** | |
| **PWJI** | **Pagerwojo** | **6.16** | **305** | P | | | **Pn** | **03 23 21.9 -1.8** | |
| **BSSI** | **Bau Bau, Buton** | **6.45** | **33** | P | | | **Pn** | **03 23 27.8 +0.1** | |
| | 0.3nm40nm,0.6s | | | | | | | | |
| **PCJI** | **Pacitan** | **6.59** | **300** | P | | | **Pn** | **03 23 28.3 -1.2** | |
| | 0.6nm1μm61nm,0.7s | | | | | | | | |
| **BATI** | **Baumata** | **6.76** | **79** | Pn | | | **Pn** | **03 23 34.0 +2.1** | |
| | 7.6nm,0.3s,baz=216,slow=3.3,SNR=5.3 | | | | | | | | |
| BATI | | | | | | | Sn | **Sn** | **03 24 47.3 -0.8** |
| | 21nm,0.3s,baz=354,slow=22,SNR=13 | | | | | | | | |
| **BATI** | **Baumata** | **6.76** | **79** | P | | | **Pn** | **03 23 34.7 +2.8** | |
| | 0.2nm15nm,0.6s | | | | | | | | |
| **BKSI** | **Bulukumba** | **6.98** | **27** | P | | | **Pn** | **03 23 35.7 +0.8** | |
| | 0.2nm628nm50nm,0.5s | | | | | | | | |
| **KAPI** | **Kappang** | **7.10** | **23** | Pn | | | **Pn** | **03 23 39.8 +3.2** | |
| | 1.7nm,0.3s,baz=289,slow=3.5,SNR=8.6 | | | | | | | | |
| KAPI | | | | | | | Sn | **Sn** | **03 24 52.0 -4.4** |
| | 1.4nm,0.3s,baz=106,slow=23,SNR=1.8 | | | | | | | | |
| **KAPI** | **Kappang** | **7.10** | **23** | | | | **Pn** | **03 23 40.0 +3.4** | |
| **UGM** | **Wanagama** | **7.29** | **299** | P | | | **Pn** | **03 23 39.0 -0.2** | |
| | 0.7nm84nm,0.6s | | | | | | | | |
| **UGM** | **Wanagama** | **7.29** | **299** | | | | **Pn** | **03 23 37.3 -1.8** | |
| **UGM** | **Wanagama** | **7.29** | **299** | P | | | **Pn** | **03 23 38.3 -0.9** | |
| | 83nm,0.6s | | | | | | | | |
| **SOEI** | **Soe** | **7.44** | **77** | P | | | **Pn** | **03 23 44.7 +3.3** | |
| | 0.3nm33nm,0.6s | | | | | | | | |
| **SOEI** | **Soe** | **7.44** | **77** | Pn | | | **Pn** | **03 23 42.6 +1.2** | |
| **SOEI** | **Soe** | **7.44** | **77** | P | | | **Pn** | **03 23 45.2 +3.8** | |
| | 33nm,0.7s | | | | | | | | |
| **BNSI** | **Bone** | **7.80** | **24** | P | | | **Pn** | **03 23 44.7 -1.5** | |
| | 0.1nm24nm,0.7s | | | | | | | | |
| **KPJI** | **Karang Pucung** | **8.94** | **297** | P | | | **Pn** | **03 24 01.9 0.0** | |
| | 788nm34nm,0.5s | | | | | | | | |
| **CMJI** | **Cimerak** | **9.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TUMD | | | | *e*S | Sn | 03 50 45.1 | +3.1 |
| **BZGR** | **Bezymyannyi-Gr** | **1.97** | **303** | *e*P | Pn | 03 50 25.2 | +4.7 |
| **TUMR** | **Tumrok** | **2.04** | **282** | *e*P | Pn | 03 50 24.9 | +3.4 |
| **KMNR** | **Kamenistaya** | **2.12** | **295** | *e*P | Pn | 03 50 26.0 | +3.4 |
| **KRSR** | **Krestovskiy** | **2.18** | **308** | *e*P | Pn | 03 50 26.2 | +2.8 |
| KRSR | | | | *e*S | Sn | 03 50 51.7 | +2.3 |
| **KII** | **Karymskiy** | **2.59** | **252** | *e*P | Pn | 03 50 32.9 | +3.9 |
| **SPN** | **Mys Shipunski** | **2.80** | **231** | *e*P | Pn | 03 50 34.6 | +2.8 |
| SPN | | | | *e*S | Sn | 03 51 04.8 | +0.5 |
| **NLC** | **Nalytchevo** | **3.07** | **237** | *e*P | Pn | 03 50 38.8 | +3.4 |
| NLC | | | | *e*S | Sn | 03 51 12.3 | +1.4 |
| **SDLR** | **Sedlovina** | **3.24** | **242** | *e*P | Pn | 03 50 42.2 | +4.3 |
| SDLR | | | | *e*S | Sn | 03 51 17.9 | +2.6 |
| **SMAR** | **Somma** | **3.29** | **242** | *e*P | Pn | 03 50 42.8 | +4.1 |
| SMAR | | | | *e*S | Sn | 03 51 18.9 | +2.3 |
| **KRER** | **Koryakskii** | **3.29** | **243** | *e*P | Pn | 03 50 43.8 | +5.1 |
| KRER | | | | *e*S | Sn | 03 51 19.1 | +2.4 |
| **UGLR** | **Uglovaya** | **3.31** | **241** | *e*P | Pn | 03 50 43.4 | +4.6 |
| UGLR | | | | *e*S | Sn | 03 51 19.9 | +3.0 |
| **AVH** | **Avacha** | **3.32** | **242** | *e*P | Pn | 03 50 43.8 | +4.8 |
| AVH | | | | *e*S | Sn | 03 51 20.6 | +3.4 |
| **KOK** | **Koryaka** | **3.36** | **243** | *e*P | Pn | 03 50 44.3 | +4.8 |
| KOK | | | | *e*S | Sn | 03 51 21.6 | +3.4 |
| **DALK** | **Dalny** | **3.44** | **239** | *e*S | Sn | 03 51 22.3 | +2.3 |
| **PET** | **Petropavlovsk** | **3.50** | **239** | *e*S | Sn | 03 51 23.5 | +2.2 |
| **GNL** | **Ganaly** | **3.55** | **252** | *e*P | Pn | 03 50 46.9 | +4.8 |
| **KRMR** | **Karymshinskiy** | **3.87** | **240** | *e*S | Sn | 03 51 33.8 | +3.3 |
| **RUS** | **Russkaya** | **3.93** | **233** | *e*P | Pn | 03 50 50.7 | +3.5 |
| RUS | | | | *e*S | Sn | 03 51 33.2 | +1.3 |
| **MTVR** | **Mutnovka** | **4.05** | **235** | *e*P | Pn | 03 50 53.4 | +4.4 |
| MTVR | | | | *e*S | Sn | 03 51 37.6 | +2.4 |
| **KDTR** | **Khodutka, Kamc** | **4.55** | **229** | *e*P | Pn | 03 50 59.2 | +3.5 |
| KDTR | | | | *e*S | Sn | 03 51 47.3 | +0.1 |

*IDC* ***07*** *03:52:37.1±0.9, 13°.09N×122°.59E, h0km, mb3.8/10, mb1 3.9/10, mb1mx3.6/46, mbtmp3.8/10, Error ellipse: s-maj=29.3km s-min=17.1km az=62.0*
*MAN* ***07*** *03:52:39.0, 13°.18N×122°.56E, h11km, mb4.7, ML3.5, MS3.4*
**ISC 07 03:52:37.6±1.4, 13°.09N±0°.04×122°.51E±0°.04, h5km±9km, n21, σ0°.83/26, mb3.8/10, 5C-5D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUQP** | **San Andres** | **0.29** | **35** | *e*P | **Pg** | **03 52 44.8** | **+1.6** |
| **BOAC** | **Boac** | **0.74** | **300** | *e*P | **Pg** | **03 52 52.5** | **+0.6** |
| BOAC | | | | *e*S | **Sb** | **03 53 03.5** | **-0.1** |
| **GQP** | **Guinayangan** | **0.82** | **356** | *i*P | **Pg** | **03 52 53.1** | **-0.2** |
| GQP | | | | *e*S | **Sg** | **03 53 02.9** | **-1.0** |
| **JCNP** | **Jose Panganiba** | **1.21** | **9** | *e*P | **Pg** | **03 52 59.3** | **-1.6** |
| **LQP** | **Lukban** | **1.39** | **317** | *e*P | **Pn** | **03 53 03.2** | **-0.7** |
| LQP | | | | *i* S | **Sg** | **03 53 21.1** | **-1.2** |
| **SJMP** | **San Jose** | **1.49** | **245** | *i*P | **Pg** | **03 53 06.1** | **-0.1** |
| **RCP** | **Roxas** | **1.53** | **171** | *e*P | **Pg** | **03 53 06.6** | **-0.5** |
| **PGP** | **Puerto Galera** | **1.57** | **285** | *e*P | **Pb** | **03 53 07.5** | **+0.3** |
| PGP | | | | *i* S | **Sn** | **03 53 26.6** | **-0.3** |
| **TGY** | **Tagaytay City** | **1.83** | **304** | Pn | **Pb** | **03 53 11.6** | **-0.1** |
| | 246nm,0.3s,baz=110,slow=1.2,SNR=20 | | | | | | |
| TGY | | | | Sn | **Sg** | **03 53 36.8** | **+0.3** |
| | 124nm,0.3s,baz=156,slow=20,SNR=20 | | | | | | |
| **MACP** | **Maragondon, Ca** | **2.09** | **304** | *e*P | **Pn** | **03 53 14.7** | **+1.3** |
| **PCPH** | **Palayan** | **2.81** | **331** | *e*P | **Pn** | **03 53 24.0** | **+0.6** |
| **KSRS** | **Korea Array** | **24.75** | **10** | P | **P** | **03 58 00.1** | **-0.1** |
| | 1.4nm,0.8s,baz=187,slow=11,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.83** | **160** | P | **P** | **03 59 28.4** | **-1.4** |
| | 0.2nm,0.7s,baz=347,slow=10,SNR=1.4 | | | | | | |
| **ASAJ** | **Asahikawa** | **35.40** | **25** | P | **P** | **03 59 35.1** | **+0.7** |
| | 3.7nm,0.7s,baz=229,slow=20,SNR=1.7 | | | | | | |
| **SONM** | **Songino Array** | **37.16** | **342** | P | **P** | **03 59 49.4** | **-0.3** |
| | 0.4nm,0.8s,baz=153,slow=11,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.19** | **163** | P | **P** | **03 59 59.4** | **+0.8** |
| | 0.4nm,0.5s,baz=347,slow=6.9,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.57** | **323** | P | **P** | **04 01 15.2** | **+0.8** |
| | 0.6nm,0.8s,baz=117,slow=6.8,SNR=4.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **48.73** | **28** | P | **P** | **04 01 23.1** | **-0.1** |
| | 1.8nm,0.8s,baz=217,slow=4.7,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.68** | **326** | P | **P** | **04 01 46.0** | **+0.4** |
| | 1.4nm,0.9s,baz=122,slow=7.7,SNR=7.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.28** | **339** | P | **P** | **04 04 49.1** | **-0.2** |
| | 2.5nm,0.8s,baz=51,slow=7.1,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **81.67** | **331** | P | **P** | **04 04 56.5** | **-0.4** |
| | 2.9nm,1.0s,baz=29,slow=3.2,SNR=3.8 | | | | | | |

*IDC* ***07*** *03:52:58.6±1.4, 32°.61N×105°.06E, h0km, mb3.3/4, mb1 3.4/6, mb1mx3.2/53, mbtmp3.2/6, ML3.0/1, Error ellipse: s-maj=45.6km s-min=25.4km az=63.0*
**ISC 07 03:53:00.9±1.3, 32°.6N±0°.2×105°.1E±0°.2, h15km, n6, σ0°.99/6, mb3.3/4, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **15.22** | **3** | Pn | **Pn** | **03 56 35.5** | **+0.2** |
| | 0.1nm,0.3s,baz=182,slow=15,SNR=2.4 | | | | | | |
| **KSRS** | **Korea Array** | **19.27** | **69** | P | **Pn** | **03 57 26.6** | **+0.7** |
| | baz=258,slow=10,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **22.44** | **316** | P | **P** | **03 57 59.9** | **+0.7** |
| | 0.4nm,0.6s,baz=118,slow=11,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **59.28** | **148** | P | **P** | **04 03 01.8** | **-0.3** |
| | 0.4nm,0.7s,baz=340,slow=7.9,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **62.37** | **150** | P | **P** | **04 03 23.6** | **+0.6** |
| | 0.4nm,0.9s,baz=338,slow=6.4,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.98** | **18** | P | **P** | **04 05 07.9** | **-1.3** |
| | 0.1nm,0.5s,baz=326,slow=4.3,SNR=1.9 | | | | | | |

**IDC 07 04:13:34.5±15.0, 19°.48S×178°.04W, h289km±103km, mb2.9/2, mb1 3.1/3, mb1mx2.9/28, mbtmp3.5/3, Error ellipse: s-maj=296.8km s-min=53.0km az=145.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.10** | **294** | P | Pn | 04 14 41.3 | -0.1 |
| | 1.2nm,0.3s,baz=90,slow=20,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **261** | P | P | 04 21 20.0 | +0.1 |
| | 0.3nm,0.3s,baz=97,slow=7.7,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.73** | **256** | P | P | 04 21 19.5 | -0.4 |
| | 0.5nm,0.6s,baz=93,slow=7.8,SNR=9.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.11** | **332** | PKP | PKPdf | 04 32 31.6 | -0.6 |
| | 0.6nm,0.4s,baz=45,slow=3.9,SNR=11 | | | | | | |

*IDC* ***07*** *04:15:16.6±0.7, 30°.63N×132°.82E, h0km, mb3.7/13, mb1 3.8/18, mb1mx3.7/56, mbtmp3.7/18, ML3.3/5, Error ellipse: s-maj=22.6km s-min=14.3km az=77.0*
*JMA* ***07*** *04:15:18.7±0.2, 30°.56N×132°.84E, h67km, M3.8*
**ISC 07 04:15:21.4±0.7, 30°.61N±0°.05×132°.82E±0°.06, h35km, n29, σ1°.55/37, mb3.8/13, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTN** | **Tanegashima 3** | **1.58** | **272** | P | **Pn** | **04 15 45.2** | **-1.8** |
| JTN | | | | *e*S | **Sn** | **04 16 04.6** | **-1.6** |
| **JNAR** | **Kushima--Naru** | **1.61** | **305** | P | **Pn** | **04 15 46.2** | **-1.1** |
| JNAR | | | | S | **Sn** | **04 16 06.6** | **-0.2** |
| **JNKG** | **Nichinankitago** | **1.62** | **311** | P | **Pn** | **04 15 46.4** | **-1.1** |
| **JMTN** | **Minamitane** | **1.67** | **263** | P | **Pn** | **04 15 46.7** | **-1.4** |
| **JTSR** | **Tashiro 2** | **1.72** | **289** | P | **Pn** | **04 15 47.3** | **-1.6** |
| **JTZ** | **Takazaki** | **1.96** | **311** | P | **Pn** | **04 15 50.9** | **-1.3** |
| JTZ | | | | *e*S | **Sn** | **04 16 14.5** | **-1.0** |
| **JTO** | **Tosashimizu** | **2.24** | **360** | P | **Pn** | **04 15 53.7** | **-2.4** |
| JTO | | | | *e*S | **Sn** | **04 16 17.1** | **-5.4** |
| **JNA** | **Nagahama** | **2.95** | **355** | P | **Pn** | **04 16 04.4** | **-1.4** |
| **JNU** | **Nakatsue** | **3.00** | **327** | Pn | **Pn** | **04 16 06.2** | **-0.2** |
| | 9.8nm,0.3s,baz=184,slow=5.2,SNR=104 | | | | | | |
| JNU | | | | Sn | **Sn** | **04 16 42.2** | **+1.0** |
| | 30nm,0.3s,baz=201,slow=23,SNR=15 | | | | | | |
| **JAI** | **Aioi** | **3.46** | **23** | P | **Pn** | **04 16 11.3** | **-1.5** |
| **JTNC** | **Tanabenakahech** | **3.98** | **36** | P | **Pn** | **04 16 18.5** | **-1.5** |
| **JHT** | **Toyohira** | **4.05** | **355** | P | **Pn** | **04 16 20.1** | **-0.9** |
| **JOW** | **Kunigami** | **5.48** | **228** | Pn | **Pn** | **04 16 39.6** | **-1.0** |
| | 5.5nm,0.3s,baz=107,slow=17,SNR=9.9 | | | | | | |
| JOW | | | | Sn | **Sn** | **04 17 38.9** | **-3.6** |
| | 1.9nm,0.3s,baz=136,slow=28,SNR=1.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.43** | **36** | Pn | **Pn** | **04 17 07.7** | **+0.4** |
| | 0.2nm,0.3s,baz=206,slow=13,SNR=13 | | | | | | |
| **KSRS** | **Korea Array** | **7.94** | **331** | Pn | **Pn** | **04 17 14.3** | **0.0** |
| | 0.1nm,0.3s,baz=145,slow=14,SNR=2.8 | | | | | | |
| KSRS | | | | Sn | **Sn** | **04 18 41.4** | **-1.5** |
| | 0.4nm,0.3s,baz=146,slow=24,SNR=5.2 | | | | | | |
| **KLR** | **Kul'dur** | **18.61** | **358** | P | **Pn** | **04 19 37.1** | **+1.0** |
| | 0.1nm,0.3s,baz=192,slow=6.9,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **26.54** | **318** | P | **P** | **04 20 57.0** | **+1.0** |
| | 0.7nm,1.0s,baz=117,slow=8.7,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.86** | **307** | P | **P** | **04 23 08.2** | **+0.1** |
| | 0.2nm,0.5s,baz=102,slow=9.4,SNR=1.6 | | | | | | |
| MKAR | | | | PcP | **PcP** | **04 25 03.6** | **+0.1** |
| | 0.1nm,0.3s,baz=87,slow=3.0,SNR=1.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.67** | **313** | P | **P** | **04 23 30.0** | **-0.6** |
| | 0.3nm,0.5s,baz=97,slow=8.6,SNR=2.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **49.85** | **316** | P | **P** | **04 24 11.7** | **+0.8** |
| | 1.0nm,0.6s,baz=79,slow=15,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.28** | **178** | P | **P** | **04 24 14.6** | **+0.1** |
| | 0.7nm,0.6s,baz=353,slow=8.4,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **53.98** | **179** | P | **P** | **04 24 43.3** | **+1.3** |
| | 0.6nm,0.6s,baz=9.6,slow=12,SNR=20 | | | | | | |
| **ILAR** | **Eielson Array** | **58.66** | **30** | P | **P** | **04 25 14.6** | **-0.4** |
| | 0.2nm,0.6s,baz=257,slow=6.7,SNR=5.7 | | | | | | |
| **STKA** | **Stephens Creek** | **62.70** | **172** | P | **P** | **04 25 43.8** | **+1.1** |
| | 1.5nm,0.5s,baz=349,slow=7.1,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **71.03** | **331** | P | **P** | **04 26 35.3** | **-0.1** |
| | 0.9nm,0.5s,baz=84,slow=5.7,SNR=11 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.84** | **27** | P | **P** | **04 26 46.8** | **+0.6** |
| | 0.6nm,0.9s,baz=299,slow=5.7,SNR=7.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.80** | **320** | P | **P** | **04 26 58.4** | **+0.5** |
| | 9.9nm,1.1s,baz=54,slow=6.5,SNR=6.9 | | | | | | |
| **GERES** | **GERESS Array B** | **84.07** | **325** | P | **P** | **04 27 48.8** | **+0.2** |
| | 0.3nm,0.6s,baz=46,slow=4.2,SNR=2.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.58** | **48** | P | **P** | **04 27 51.9** | **+0.3** |
| | 0.5nm,0.6s,baz=302,slow=4.9,SNR=6.5 | | | | | | |

*WEL* ***07*** *04:39:22.3±1.1, 38°.5±7°.×17°.6E±°, h178km±9km, M2.8/31, MLv2.8/31, Error ellipse: s-maj=0.0km s-min=0.0km az=156.0*
*NOU* ***07*** *04:39:24.8, 38°.36S×175°.86E, h177km, MLv3.8/6, North Island, New Zealand*
**ISC 07 04:39:16.2±2.2, 37°.97S±0°.09×176°.10E±0°.06, h226km±12km, n117, σ1°.89/122, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMRZ** | **Kaimai** | **0.18** | **314** | P | **Pn** | **04 39 46.9** | **+1.2** |
| **OMRZ** | **Omania** | **0.25** | **123** | P | **Pn** | **04 39 47.0** | **+1.3** |
| **TGRZ** | **Tauranga** | **0.27** | **27** | P | **Pn** | **04 39 46.8** | **+1.0** |
| **MKRZ** | **Makatiti** | **0.33** | **121** | P | **Pn** | **04 39 47.8** | **+1.8** |
| **OPRZ** | **Ohinepanea** | **0.38** | **71** | P | **Pn** | **04 39 46.9** | **+1.0** |
| **TARZ** | **Mount Tarawera** | **0.41** | **130** | P | **Pn** | **04 39 47.9** | **+1.7** |
| **MARZ** | **Manawahe** | **0.45** | **92** | P | **Pn** | **04 39 48.3** | **+2.2** |
| **TOZ** | **Tahuroa Road** | **0.53** | **296** | P | **Pn** | **04 39 47.8** | **+1.4** |
| **KUTZ** | **Kaahu Road** | **0.56** | **203** | P | **Pn** | **04 39 48.1** | **+1.6** |
| **TLZ** | **Tolley Road** | **0.57** | **231** | P | **Pn** | **04 39 48.2** | **+1.6** |
| **PRRZ** | **Plateau Road** | **0.58** | **157** | P | **Pn** | **04 39 48.2** | **+1.6** |
| **MUGZ** | **Murupara** | **0.73** | **134** | P | **Pn** | **04 39 48.4** | **+1.2** |
| **WATZ** | **Wairara** | **0.79** | **201** | P | **Pn** | **04 39 49.5** | **+1.9** |
| **URZ** | **Urewera** | **0.84** | **110** | P | **Pn** | **04 39 48.8** | **+1.0** |
| URZ | | | | S | S | 04 40 09.5 | -2.9 |
| **MRHZ** | **Matea Rd** | **0.90** | **164** | P | **Pn** | **04 39 49.6** | **+1.5** |
| MRHZ | | | | S | **S** | **04 40 11.9** | **-1.3** |
| **RATZ** | **Rangitukua** | **0.93** | **196** | P | **Pn** | **04 39 50.1** | **+1.8** |
| **RTZ** | **Ruatahuna** | **0.94** | **133** | P | **Pn** | **04 39 49.8** | **+1.4** |
| RTZ | | | | S | **S** | **04 40 11.3** | **-2.3** |
| **RITZ** | **Rihia Road** | **1.03** | **191** | P | **Pn** | **04 39 51.1** | **+2.2** |
| **KATZ** | **Kakaramea** | **1.05** | **198** | P | **Pn** | **04 39 51.2** | **+2.1** |
| **MTHZ** | **Maungatanziwha** | **1.06** | **147** | P | **Pn** | **04 39 50.7** | **+1.6** |
| MTHZ | | | | S | **S** | **04 40 12.3** | **-2.5** |
| **HIZ** | **Hauiti** | **1.12** | **241** | P | **Pn** | **04 39 51.4** | **+2.0** |
| **HIZ** | **Hauiti** | **1.12** | **241** | P | **Pn** | **04 39 51.4** | **+2.0** |
| **RAGZ** | **Rawiri** | **1.16** | **117** | P | **Pn** | **04 39 51.5** | **+1.8** |
| RAGZ | | | | S | **S** | **04 40 13.4** | **-2.5** |
| **MWZ** | **Matawai** | **1.18** | **108** | P | **Pn** | **04 39 51.4** | **+1.6** |
| MWZ | | | | S | **S** | **04 40 13.3** | **-2.8** |
| **KRVZ** | **Karewarewa** | **1.18** | **198** | P | **Pn** | **04 39 51.8** | **+1.9** |
| **TMVZ** | **Te Maari** | **1.19** | **195** | P | **Pn** | **04 39 51.9** | **+1.9** |
| **ETVZ** | **East Tongariro** | **1.21** | **195** | P | **Pn** | **04 39 52.1** | **+2.0** |
| **WTVZ** | **West Tongariro** | **1.21** | **199** | P | **Pn** | **04 39 52.1** | **+1.9** |
| **TWVZ** | **Taurewa** | **1.22** | **205** | P | **Pn** | **04 39 52.2** | **+2.0** |
| **NNVZ** | **North Ngauruho** | **1.22** | **198** | P | **Pn** | **04 39 52.4** | **+2.2** |
| **BKZ** | **Black Stump Fm** | **1.23** | **166** | P | **Pn** | **04 39 51.9** | **+1.7** |
| **BKZ** | **Black Stump Fm** | **1.23** | **166** | P | **Pn** | **04 39 52.0** | **+1.8** |
| **OTVZ** | **Oturere** | **1.24** | **196** | P | **Pn** | **04 39 52.5** | **+2.0** |
| **RUGZ** | **Raukumara Rang** | **1.24** | **90** | P | **Pn** | **04 39 51.2** | **+0.8** |
| RUGZ | | | | S | S | 04 40 12.8 | -4.2 |
| **NMHZ** | **Naumai** | **1.25** | **154** | P | **Pn** | **04 39 53.0** | **+2.6** |
| **SNGZ** | **Shannon Statio** | **1.27** | **130** | P | **Pn** | **04 39 52.6** | **+2.2** |
| SNGZ | | | | S | **S** | **04 40 15.8** | **-1.4** |
| **NGZ** | **Ngauruhoe** | **1.27** | **198** | P | **Pn** | **04 39 52.7** | **+2.1** |
| **SNVZ** | **South Ngauruho** | **1.27** | **197** | P | **Pn** | **04 39 52.6** | **+1.9** |
| **TUVZ** | **Tukino** | **1.34** | **195** | P | **Pn** | **04 39 53.2** | **+2.0** |
| **HAZ** | **Te Kaha** | **1.34** | **81** | P | **Pn** | **04 39 52.6** | **+1.6** |
| HAZ | | | | S | **S** | **04 40 15.2** | **-2.8** |
| **FWVZ** | **Far West T-bar** | **1.35** | **198** | P | **Pn** | **04 39 53.6** | **+2.2** |
| **WHWZ** | **Whangaehu Hut** | **1.37** | **197** | P | **Pn** | **04 39 53.6** | **+2.1** |
| **TRVZ** | **Turoa** | **1.40** | **198** | P | **Pn** | **04 39 53.7** | **+2.0** |
| **WNVZ** | **Wahianoa** | **1.41** | **196** | P | **Pn** | **04 39 53.6** | **+1.9** |
| **PKVZ** | **Pokaka** | **1.45** | **204** | P | **Pn** | **04 39 53.9** | **+2.1** |
| **TKGZ** | **Te Karaka** | **1.45** | **109** | P | **Pn** | **04 39 53.9** | **+2.1** |
| **MOVZ** | **Moawhango** | **1.46** | **191** | P | **Pn** | **04 39 53.6** | **+1.6** |
| **ARHZ** | **Aropaoanui** | **1.47** | **152** | P | **Pn** | **04 39 54.4** | **+2.5** |
| **KWHZ** | **Kaweka Forest** | **1.48** | **170** | P | **Pn** | **04 39 54.1** | **+2.0** |
| **TWGZ** | **Tauwhareparae** | **1.50** | **99** | P | **Pn** | **04 39 54.7** | **+2.4** |
| **RIGZ** | **Rimuhau** | **1.50** | **120** | P | **Pn** | **04 39 54.5** | **+2.3** |
| **MTVZ** | **Mangateitei** | **1.50** | **199** | P | **Pn** | **04 39 54.4** | **+2.1** |
| **BHHZ** | **Black Hill Sta** | **1.52** | **181** | P | **Pn** | **04 39 54.1** | **+1.7** |
| **MCHZ** | **McNeill Hill** | **1.54** | **163** | P | **Pn** | **04 39 55.2** | **+2.7** |
| **PKGZ** | **Pakihiroa** | **1.56** | **88** | P | **Pn** | **04 39 55.1** | **+2.3** |
| **VRZ** | **Vera Road** | **1.56** | **222** | P | **Pn** | **04 39 55.4** | **+2.7** |
| **KNZ** | **Kokohu** | **1.62** | **131** | P | **Pn** | **04 39 55.4** | **+2.3** |
| **KRHZ** | **Kereru** | **1.69** | **173** | P | **Pn** | **04 39 55.9** | **+2.1** |
| **PUZ** | **Puketiti** | **1.70** | **94** | P | **Pn** | **04 39 56.3** | **+2.3** |
| **MXZ** | **Matakaoa Point** | **1.79** | **78** | P | **Pn** | **04 39 57.5** | **+2.8** |
| **WMGZ** | **Waiomatatini S** | **1.83** | **86** | P | **Pn** | **04 39 57.6** | **+2.4** |
| **MHGZ** | **Mahia Peninsul** | **1.84** | **130** | P | **Pn** | **04 39 57.9** | **+2.8** |
| **CKHZ** | **Cape Kidnapper** | **1.85** | **156** | P | **Pn** | **04 39 58.0** | **+2.7** |
| **KAHZ** | **Kahuranaki** | **1.92** | **162** | P | **Pn** | **04 39 58.6** | **+2.7** |
| **PNHZ** | **Pukenui** | **1.94** | **178** | P | **Pn** | **04 39 58.1** | **+1.9** |
| **WAZ** | **Wanganui** | **1.99** | **206** | P | **Pn** | **04 39 58.8** | **+2.3** |
| **NEZ** | **North Egmont** | **2.04** | **230** | P | **Pn** | **04 40 00.9** | **+3.7** |
| **PKE** | **Pukeiti** | **2.06** | **233** | P | **Pn** | **04 40 01.0** | **+3.7** |
| **TSZ** | **Takapari Road** | **2.09** | **183** | P | **Pn** | **04 39 59.5** | **+2.0** |
| **WPHZ** | **Waipukurau** | **2.11** | **173** | P | **Pn** | **04 39 59.9** | **+2.2** |
| **PXZ** | **Pawanui** | **2.14** | **164** | P | **Pn** | **04 40 00.4** | **+2.4** |
| **DVHZ** | **Dannevirke** | **2.33** | **179** | P | **Pn** | **04 40 01.7** | **+1.8** |
| **PRHZ** | **Porangahau** | **2.33** | **170** | P | **Pn** | **04 40 02.4** | **+2.4** |
| **POWZ** | **Post Office Ro** | **2.43** | **186** | P | **Pn** | **04 40 02.8** | **+1.8** |
| **ANWZ** | **Angora Road** | **2.50** | **174** | P | **Pn** | **04 40 04.0** | **+2.3** |
| **PRWZ** | **Pori Road** | **2.58** | **182** | P | **Pn** | **04 40 04.7** | **+2.0** |
| **BFZ** | **Birch Farm** | **2.71** | **178** | P | **Pn** | **04 40 05.7** | **+1.7** |
| **BFZ** | **Birch Farm** | **2.71** | **178** | P | **Pn** | **04 40 05.8** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **2.72** | **188** | P | **Pn** | **04 40 05.6** | **+1.5** |
| **TIWZ** | **Tintock** | **2.81** | **183** | P | **Pn** | **04 40 06.8** | **+1.8** |
| **OGWZ** | **Otaki Gorge** | **2.94** | **194** | P | **Pn** | **04 40 08.1** | **+1.6** |
| **CPWZ** | **Castlepoint** | **2.94** | **179** | P | **Pn** | **04 40 08.7** | **+2.2** |
| **HOWZ** | **Holdsworth Sta** | **2.96** | **189** | P | **Pn** | **04 40 08.0** | **+1.3** |
| **KIW** | **Kapiti Island** | **3.03** | **197** | P | **Pn** | **04 40 08.8** | **+1.2** |
| **TMWZ** | **Te Maipa** | **3.14** | **183** | P | **Pn** | **04 40 10.2** | **+1.4** |
| **MTW** | **Mount Morrison** | **3.22** | **188** | P | **Pn** | **04 40 10.7** | **+1.0** |
| **CAW** | **Cannon Point** | **3.24** | **194** | P | **Pn** | **04 40 11.2** | **+1.4** |
| **DUWZ** | **D'Urville Isla** | **3.30** | **210** | P | **Pn** | **04 40 11.9** | **+1.3** |
| **TRWZ** | **Traveller** | **3.44** | **185** | P | **Pn** | **04 40 13.6** | **+1.3** |
| **PAWZ** | **Paruwai Farm** | **3.45** | **189** | P | **Pn** | **04 40 13.4** | **+1.1** |
| **WEL** | **Wellington** | **3.47** | **197** | P | **Pn** | **04 40 13.9** | **+1.4** |
| **MSWZ** | **Moikau Station** | **3.51** | **191** | P | **Pn** | **04 40 13.9** | **+0.9** |
| **SNZO** | **South Karori** | **3.51** | **197** | P | **Pn** | **04 40 13.9** | **+0.9** |
| **TCW** | **Tory Channel** | **3.53** | **203** | P | **Pn** | **04 40 14.5** | **+1.2** |
| **BHW** | **Baring Head** | **3.56** | **195** | P | **Pn** | **04 40 14.6** | **+1.0** |
| **PLWZ** | **Palliser** | **3.66** | **190** | P | **Pn** | **04 40 15.7** | **+0.9** |
| **TUWZ** | **Tuamarina** | **3.84** | **205** | P | **Pn** | **04 40 18.0** | **+1.1** |
| **NNZ** | **Nelson** | **3.87** | **212** | P | **Pn** | **04 40 18.3** | **+1.1** |
| **TKNZ** | **Takaka Hill** | **3.91** | **217** | P | **Pn** | **04 40 19.4** | **+1.6** |
| **QRZ** | **Quartz Range** | **3.98** | **223** | P | **Pn** | **04 40 19.2** | **+0.6** |
| **QRZ** | **Quartz Range** | **3.98** | **223** | P | **Pn** | **04 40 20.6** | **+2.0** |
| **BSWZ** | **Blackbirch Sta** | **4.12** | **204** | P | **Pn** | **04 40 21.7** | **+1.4** |
| **MRNZ** | **Matariki Terra** | **4.29** | **216** | P | **Pn** | **04 40 23.7** | **+1.3** |
| **THZ** | **Tophouse** | **4.52** | **212** | P | **Pn** | **04 40 26.8** | **+1.5** |
| **KHZ** | **Kahutara** | **4.86** | **203** | P | **Pn** | **04 40 30.9** | **+1.5** |
| **KHZ** | **Kahutara** | **4.86** | **203** | P | **Pn** | **04 40 31.0** | **+1.6** |
| **DSZ** | **Denniston Nort** | **5.02** | **220** | P | **Pn** | **04 40 32.2** | **+0.8** |
| **GVZ** | **Greta Valley S** | **5.51** | **204** | P | **Pn** | **04 40 38.7** | **+1.0** |
| **LTZ** | **Lake Taylor** | **5.63** | **210** | P | **Pn** | **04 40 40.1** | **+1.0** |
| **OXZ** | **Oxford** | **6.18** | **209** | P | **Pn** | **04 40 46.6** | **+0.5** |
| **OKCZ** | **Okains Bay** | **6.20** | **201** | P | **Pn** | **04 40 47.2** | **+0.9** |
| **MQZ** | **McQueen's Vall** | **6.30** | **203** | P | **Pn** | **04 40 47.7** | **+0.1** |
| **GCSZ** | **Gaunt Creek Bo** | **6.92** | **218** | P | **Pn** | **04 40 56.8** | **+1.3** |
| **ARCZ** | **Arundel** | **7.04** | **210** | P | **Pn** | **04 40 58.0** | **+0.9** |
| **TMZ** | **Timaru** | **7.47** | **209** | P | **Pn** | **04 41 03.8** | **+1.2** |
| **ODZ** | **Otahua Downs** | **8.17** | **208** | P | **Pn** | **04 41 13.2** | **+1.7** |
| **JCZ** | **Jackson Bay** | **8.23** | **220** | P | **Pn** | **04 41 13.6** | **+1.2** |

*TUL* ***07*** *04:49:57.6±0.6, 35°.49N±0°.02×97°.12W±0°.02, h6km±7km, ML2.5, mb_Lg2.3/5(NEIC), Error ellipse: s-maj=3.2km s-min=1.3km az=142.0*
**NEIC 07 04:49:57.9±0.9, 35°.50N±0°.02×97°.11W±0°.02, h8km±7km, Error ellipse: s-maj=3.2km s-min=1.6km az=126.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK025** | **Westminster Rd** | **0.20** | **294** | Pg | Pg | 04 50 02.0 | 0.0 |
| OK025 | | | | Sg | Sg | 04 50 05.3 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **251** | Pg | Pg | 04 50 03.2 | -0.3 |
| OKCSW | | | | Sg | Sg | 04 50 07.5 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.29** | **254** | | Pg | 04 50 03.6 | -0.1 |
| **FNO** | **Franklin** | **0.34** | **225** | Pg | Pg | 04 50 04.3 | -0.2 |
| FNO | | | | Sg | Sg | 04 50 09.1 | +0.2 |
| **W35A** | **Tecumseh** | **0.39** | **151** | Pg | Pg | 04 50 05.5 | 0.0 |
| **OK029** | **Liberty Lake** | **0.41** | **317** | Pg | Pg | 04 50 05.9 | 0.0 |
| **BCOK** | **Bluff Creek, N** | **0.44** | **292** | Pg | Pg | 04 50 06.3 | -0.1 |
| BCOK | | | | Sg | Sg | 04 50 12.7 | +0.5 |
| **OK030** | **Cody Creek RV** | **0.51** | **32** | Pg | Pg | 04 50 07.1 | -0.6 |
| **OK031** | **S. Brethren Rd** | **0.51** | **26** | Pg | Pg | 04 50 07.8 | +0.1 |
| OK031 | | | | Sg | Sg | 04 50 14.9 | +0.6 |
| **OK033** | **Mehan** | **0.56** | **14** | Pg | Pg | 04 50 08.7 | 0.0 |
| **OK034** | **N. Norfolk Rd.** | **0.61** | **32** | Pg | Pg | 04 50 09.3 | -0.3 |
| OK034 | | | | Sg | Sg | 04 50 17.9 | +0.4 |
| **QUOK** | **Quay** | **0.75** | **26** | Pg | Pg | 04 50 11.5 | -0.8 |
| QUOK | | | | Sg | Sg | 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | | | | Lg | Lg | 05 03 27.5 | |
| | 0.1nm,0.3s,baz=71,slow=35,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.23** | **253** | ⇑Pn | **Pn** | **05 01 47.8** | **+0.9** |
| | 0.7nm,0.3s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **05 02 59.8** | **+1.0** |
| | 8.6nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 05 03 31.9 | |
| | 6.4nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **7.07** | **213** | ⇓Pn | **Pn** | **05 01 59.5** | **+0.9** |
| | 0.2nm,0.2s,baz=30,slow=12,SNR=50 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **05 03 18.6** | **-1.0** |
| | 1.1nm,0.6s,baz=36,slow=26,SNR=3.1 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 05 03 54.9 | |
| | 1.2nm,0.6s,baz=38,slow=31,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.07** | **213** | Pn | **Pn** | **05 01 59.5** | **+0.9** |
| | 1.1nm,0.3s,baz=28,slow=12,SNR=60 | | | | | | |
| MKAR | | | | Sn | **Sn** | **05 03 19.3** | **-0.3** |
| | 0.5nm,0.3s,baz=36,slow=28,SNR=6.7 | | | | | | |
| MKAR | | | | Lg | Lg | 05 03 52.2 | |
| | 0.3nm,0.3s,baz=34,slow=31,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **33.38** | **310** | P | **P** | **05 06 53.2** | **-0.4** |
| | 8.4nm,1.2s,baz=81,slow=8.6,SNR=1.8 | | | | | | |
| **BORG** | **Borgarnes** | **50.75** | **328** | LR | LR | 05 35 50.2 | |
| | comp=Z,64nm,18.2s,baz=1.1,slow=42 | | | | | | |

*RSNC **07** 05:15:13.7±1.0,6°.82N×73°.17W,h149km±4km,ML3.3, Mw3.6*
*IDC **07** 05:15:14.3±2.7,6°.67N×73°.13W,h179km±22km,mb2.9/3, mb1 3.2/4,mb1mx3.0/26,mbtmp3.5/4,Error ellipse: s-maj=62.2km s-min=29.4km az=101.0*
**ISC 07 05:15:12.0±0.8,6°.81N±0°.03×73°.10W±0°.03,h161km±6km, n41,σ1$70/76,mb3.0/3,5C-4D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.23** | **200** | ⇑*i* | P | | **Pn** | **05 15 34.0** | **-0.1** |
| BARC | | | | | eS | | **Sn** | **05 15 49.0** | **-1.8** |
| BARC | | | | | *i* | | | 05 15 51.0 | |
| | comp=Z,416nm,0.2s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.66** | **37** | ⇑*i* | P | | **Pn** | **05 15 36.8** | **+0.8** |
| PAMC | | | | | eS | | **Sn** | **05 15 54.0** | **-0.3** |
| PAMC | | | | | *i* | | | 05 15 58.9 | |
| | comp=Z,176nm,0.5s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **179** | ⇑*e*P | P | | **Pn** | **05 15 37.9** | **+0.1** |
| RUSC | | | | | eS | | **Sn** | **05 15 56.5** | **-1.0** |
| RUSC | | | | | *i* | | | 05 15 57.6 | |
| | comp=Z,237nm,0.3s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.36** | **106** | ⇓*i* | P | | **Pn** | **05 15 42.1** | **+1.1** |
| TAMC | | | | | eS | | **Sn** | **05 16 03.7** | **+0.4** |
| TAMC | | | | | *i* | | | 05 16 07.2 | |
| | comp=Z,84nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **259** | *e*P | P | | **Pn** | **05 15 40.4** | **-0.8** |
| PTBC | | | | | eS | | **Sn** | **05 16 02.0** | **-1.6** |
| PTBC | | | | | *i* | | | 05 16 03.6 | |
| | comp=Z,260nm,0.2s | | | | | | | | |
| **OCAC** | **Ocana** | **1.43** | **351** | ⇓*e*P | P | | **Pn** | **05 15 42.1** | **+0.2** |
| OCAC | | | | | eS | | **Sn** | **05 16 04.0** | **-1.0** |
| OCAC | | | | | *i* | | | 05 16 09.9 | |
| | comp=Z,554nm,0.2s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.50** | **220** | ⇑*i* | P | | **Pn** | **05 15 42.7** | **+0.1** |
| SPBC | | | | | eS | | **Sn** | **05 16 04.4** | **-1.7** |
| SPBC | | | | | *i* | | | 05 16 12.1 | |
| | comp=Z,336nm,0.2s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **291** | *e*P | P | | **Pn** | **05 15 46.3** | **0.0** |
| ZARC | | | | | eS | | **Sn** | **05 16 11.5** | **-1.2** |
| ZARC | | | | | *i* | | | 05 16 18.1 | |
| | comp=Z,347nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **235** | *e*P | P | | **Pn** | **05 15 49.7** | **+0.1** |
| NORC | | | | | eS | | **Sn** | **05 16 17.5** | **-1.1** |
| NORC | | | | | *i* | | | 05 16 25.3 | |
| | comp=Z,190nm,0.2s | | | | | | | | |
| **SMLC** | **San Martn de** | **2.20** | **334** | *e*P | P | | **Pn** | **05 15 50.0** | **0.0** |
| SMLC | | | | | eS | | **Sn** | **05 16 18.8** | **-0.8** |
| SMLC | | | | | *i* | | | 05 16 22.0 | |
| | comp=Z,202nm,0.1s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.26** | **196** | *e*P | P | | **Pn** | **05 15 51.9** | **+0.7** |
| CHIC | | | | | eS | | **Sn** | **05 16 21.2** | **-0.3** |
| CHIC | | | | | *i* | | | 05 16 27.2 | |
| | comp=Z,109nm,0.3s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.30** | **212** | P | P | | **Pn** | **05 15 53.6** | **+1.8** |
| | comp=Z,26nm,0.3s,baz=209,slow=3.7,SNR=39 | | | | | | | | |
| ROSC | | | | S | | | **Sn** | **05 16 24.4** | **+2.0** |
| | comp=Z,101nm,0.3s,baz=52,slow=12,SNR=17 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.30** | **212** | *e*P | P | | **Pn** | **05 15 53.5** | **+1.8** |
| ROSC | | | | | eS | | **Sn** | **05 16 22.0** | **-0.5** |
| ROSC | | | | | *i* | | | 05 16 27.6 | |
| | comp=Z,232nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **256** | *e*P | P | | **Pn** | **05 15 54.6** | **+0.7** |
| HELC | | | | | eS | | **Sn** | **05 16 24.5** | **-1.7** |
| HELC | | | | | *i* | | | 05 16 32.9 | |
| | comp=Z,82nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | *e*P | P | | **Pn** | **05 15 53.9** | **-0.8** |
| UREC | | | | | eS | | **Sn** | **05 16 24.7** | **-3.0** |
| UREC | | | | | *i* | | | 05 16 35.0 | |
| | comp=Z,182nm,0.3s | | | | | | | | |
| **SOCV** | **Socops** | **2.66** | **57** | *e*P | P | | **Pn** | **05 15 55.5** | **-0.3** |
| SOCV | | | | | eS | | **Sn** | **05 16 27.1** | **-2.4** |
| **VILC** | **Villavicencio,** | **2.75** | **192** | *e*P | P | | **Pn** | **05 15 57.3** | **+0.5** |
| VILC | | | | | eS | | **Sn** | **05 16 30.6** | **-1.0** |
| VILC | | | | | *i* | | | 05 16 37.1 | |
| | comp=Z,3μm,0.3s | | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **235** | *e*P | P | | **Pn** | **05 15 58.1** | **+0.9** |
| GUY2C | | | | | eS | | **Sn** | **05 16 32.2** | **+0.1** |
| GUY2C | | | | | *i* | | | 05 16 42.8 | |
| | comp=Z,101nm,0.3s | | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.75** | **351** | *e*P | P | | **Pn** | **05 15 59.2** | **+2.5** |
| LL1C | | | | | eS | | **Sn** | **05 16 32.0** | **+0.6** |
| LL1C | | | | | *i* | | | 05 16 41.8 | |
| | comp=Z,251nm,0.4s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **160** | ⇓*i* | P | | **Pn** | **05 15 56.7** | **-0.3** |
| PTGC | | | | | eS | | **Sn** | **05 16 30.2** | **-1.7** |
| PTGC | | | | | *i* | | | 05 16 32.6 | |
| | comp=Z,72nm,0.2s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.91** | **357** | *e*P | P | | **Pn** | **05 15 58.5** | **-0.2** |
| LL6C | | | | | eS | | **Sn** | **05 16 34.0** | **-1.0** |
| LL6C | | | | | *i* | | | 05 16 42.0 | |
| | comp=Z,30nm,0.4s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | *e*P | P | | **Pn** | **05 16 01.6** | **+1.1** |
| CBOC | | | | | eS | | **Sn** | **05 16 36.8** | **-1.3** |
| CBOC | | | | | *i* | | | 05 16 40.0 | |
| | comp=Z,35nm,0.4s | | | | | | | | |
| **DBBC** | **Dabeiba** | **3.09** | **274** | *e*P | P | | **Pn** | **05 16 01.6** | **+0.5** |
| DBBC | | | | | eS | | **Sn** | **05 16 37.6** | **-1.4** |
| DBBC | | | | | *i* | | | 05 16 40.0 | |
| | comp=Z,437nm,0.3s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *e*P | P | | **Pn** | **05 16 03.5** | **+1.0** |
| SDV | | | | | eS | | **Sn** | **05 16 40.3** | **-1.4** |
| **MOTC** | **Monteria, Cord** | **3.20** | **308** | ⇓*e*P | P | | **Pn** | **05 16 01.0** | **-1.4** |
| MOTC | | | | | eS | | **Sn** | **05 16 39.5** | **-2.0** |
| MOTC | | | | | *i* | | | 05 16 55.4 | |
| | comp=Z,85nm,0.5s | | | | | | | | |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *e*P | P | | **Pn** | **05 16 05.0** | **+1.8** |
| ANIL | | | | | eS | | **Sn** | **05 16 43.6** | **+0.5** |
| ANIL | | | | | *i* | | | 05 16 50.8 | |
| | comp=Z,308nm,0.3s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **217** | *e*P | P | | **Pn** | **05 16 08.0** | **+0.7** |
| ORTC | | | | | eS | | **Sn** | **05 16 50.3** | **-0.1** |
| ORTC | | | | | *i* | | | 05 16 55.8 | |
| | comp=Z,48nm,0.4s | | | | | | | | |
| **ELOV** | **Elorza** | **3.60** | **87** | *e*P | P | | **Pn** | **05 16 07.7** | **+0.3** |
| ELOV | | | | | eS | | **Sn** | **05 16 47.0** | **-3.5** |
| **PLMC** | **San Jos del P** | **3.69** | **239** | ⇑*e*P | P | | **Pn** | **05 16 09.4** | **+0.8** |
| PLMC | | | | | eS | | **Sn** | **05 16 50.4** | **-2.2** |
| PLMC | | | | | *i* | | | 05 17 05.1 | |
| | comp=Z,36nm,0.4s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.69** | **326** | *e*P | P | | **Pn** | **05 16 07.6** | **-1.1** |
| SJCC | | | | | eS | | **Sn** | **05 16 48.8** | **-3.9** |
| SJCC | | | | | *i* | | | 05 16 53.7 | |
| | comp=Z,35nm,0.5s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.19** | **3** | *e*Pn | P | | **Pn** | **05 16 14.3** | **-0.8** |
| CRJC | | | | | eS | | **Sn** | **05 17 00.2** | **-4.1** |
| CRJC | | | | | *i* | | | 05 17 08.4 | |
| | comp=Z,37nm,0.2s | | | | | | | | |
| **GUVC** | **San Jose del G** | **4.27** | **174** | *e*P | P | | **Pn** | **05 16 14.0** | **-2.1** |
| GUVC | | | | | eS | | **Sn** | **05 17 04.7** | **-1.4** |
| GUVC | | | | | *i* | | | 05 17 10.8 | |
| | comp=Z,80nm,0.2s | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.28** | **229** | *e*P | P | | **Pn** | **05 16 16.4** | **0.0** |
| YOTC | | | | | eS | | **Sn** | **05 17 05.2** | **-1.3** |
| YOTC | | | | | *i* | | | 05 17 13.5 | |
| | comp=Z,4.4nm,0.3s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.70** | **189** | *e*P | P | | **Pn** | **05 16 20.4** | **-1.3** |
| MACC | | | | | eS | | **Sn** | **05 17 12.4** | **-3.7** |
| MACC | | | | | *i* | | | 05 17 20.9 | |
| | comp=Z,16nm,0.2s | | | | | | | | |
| **GARC** | **Garzon, Huila** | **5.18** | **208** | *e*P | P | | **Pn** | **05 16 27.6** | **-0.6** |
| GARC | | | | | eS | | **Sn** | **05 17 20.7** | **-7.1** |
| GARC | | | | | *i* | | | 05 17 31.6 | |
| | comp=Z,22nm,0.3s | | | | | | | | |
| **FLOC** | **Florencia** | **5.79** | **206** | *e*P | P | | **Pn** | **05 16 36.5** | **+0.4** |
| FLOC | | | | | eS | | Sn | 05 17 28.4 | -14 |
| FLOC | | | | | *i* | | | 05 17 50.2 | |
| | comp=Z,3.8nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.48** | **312** | P | P | | **P** | **05 22 03.0** | **+1.1** |
| | comp=Z,0.1nm,0.6s,baz=116,slow=8.1,SNR=2.0 | | | | | | | | |
| **SCHQ** | **Schefferville** | **48.15** | **5** | P | P | | **P** | **05 23 37.1** | **+1.4** |
| | comp=Z,2.0nm,0.6s,baz=202,slow=5.9,SNR=5.5 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.28** | **340** | P | P | | **P** | **05 25 24.4** | **+1.2** |
| | comp=Z,0.1nm,0.5s,baz=131,slow=6.7,SNR=2.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | | | **PKPbc** | **05 34 41.4** | **-0.9** |
| | comp=Z,0.1nm,0.5s,baz=122,slow=4.8,SNR=1.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35** | **241** | PKPbc | | | **PKPbc** | **05 34 44.9** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=109,slow=2.6,SNR=2.1 | | | | | | | | |

**KRSC 07 05:20:38.3±0.9,53°.77N×159°.14E,h180km±8km,ML3.8, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KII** | **Karymskiy** | **0.33** | **34** | *e*P | P | | **Pn** | 05 21 03.6 | +1.1 |
| **SDLR** | **Sedlovina** | **0.51** | **197** | *e*P | P | | **Pn** | 05 21 04.5 | +1.3 |
| **KRER** | **Koryakskii** | **0.52** | **207** | *e*P | P | | **Pn** | 05 21 05.0 | +1.6 |
| **SMAR** | **Somma** | **0.54** | **202** | *e*P | P | | **Pn** | 05 21 04.8 | +1.3 |
| **AVH** | **Avacha** | **0.56** | **206** | *e*P | P | | **Pn** | 05 21 04.8 | +1.4 |
| **KOK** | **Koryaka** | **0.56** | **212** | *e*P | P | | **Pn** | 05 21 04.8 | +1.4 |
| **UGLR** | **Uglovaya** | **0.59** | **199** | *e*P | P | | **Pn** | 05 21 05.0 | +1.4 |
| **NLC** | **Nalytchevo** | **0.61** | **168** | *e*P | P | | **Pn** | 05 21 04.7 | +1.2 |
| NLC | | | | | eS | | Sn | 05 21 23.8 | +1.0 |
| **GNL** | **Ganaly** | **0.71** | **265** | *e*P | P | | **Pn** | 05 21 04.6 | +0.4 |
| GNL | | | | | eS | | Sn | 05 21 23.7 | -0.4 |
| **DALK** | **Dalny** | **0.77** | **197** | *e*P | P | | **Pn** | 05 21 05.6 | +1.2 |
| DALK | | | | | eS | | Sn | 05 21 25.2 | +0.8 |
| **PET** | **Petropavlovsk** | **0.80** | **201** | *e*P | P | | **Pn** | 05 21 05.7 | +1.2 |
| PET | | | | | eS | | Sn | 05 21 25.7 | +1.0 |
| **SPN** | **Mys Shipunski** | **0.85** | **141** | *e*P | P | | **Pn** | 05 21 05.9 | +1.0 |
| SPN | | | | | eS | | Sn | 05 21 25.3 | -0.1 |
| **KRMR** | **Karymshinskiy** | **1.11** | **213** | *e*P | P | | **Pn** | 05 21 07.9 | +1.1 |
| KRMR | | | | | eS | | Sn | 05 21 29.8 | +1.0 |
| **GRL** | **Gorelyy** | **1.37** | **208** | *e*P | P | | **Pn** | 05 21 11.0 | +1.8 |
| **RUS** | **Russkaya** | **1.39** | **196** | *e*P | P | | **Pn** | 05 21 09.9 | +0.8 |
| RUS | | | | | eS | | Sn | 05 21 33.1 | +0.2 |
| **MTVR** | **Mutnovka** | **1.41** | **204** | *e*P | P | | **Pn** | 05 21 11.4 | +1.9 |
| **APC** | **Apacha** | **1.46** | **235** | *e*P | P | | **Pn** | 05 21 10.9 | +1.2 |
| **TUMD** | **Tumrok D** | **1.62** | **27** | *e*P | P | | **Pn** | 05 21 12.5 | +1.2 |
| TUMD | | | | | eS | | Sn | 05 21 37.8 | +0.8 |
| **TUMR** | **Tumrok** | **1.63** | **21** | *e*P | P | | **Pn** | 05 21 13.2 | +1.7 |
| TUMR | | | | | eS | | Sn | 05 21 38.7 | +1.3 |
| **MKZ** | **Mys Kozlova** | **1.72** | **62** | *e*P | P | | **Pn** | 05 21 13.5 | +1.3 |
| MKZ | | | | | eS | | Sn | 05 21 38.2 | -0.4 |
| **KDTR** | **Khodutka, Kamc** | **2.06** | **199** | *e*P | P | | **Pn** | 05 21 16.5 | +0.6 |
| KDTR | | | | | eS | | Sn | 05 21 44.2 | -1.0 |
| **KMNR** | **Kamenistaya** | **2.09** | **17** | *e*P | P | | **Pn** | 05 21 18.0 | +1.6 |
| **ESO** | **Esso** | **2.18** | **354** | *e*P | P | | **Pn** | 05 21 17.6 | +0.4 |
| **KPT** | **Kopyto** | **2.29** | **15** | *e*P | P | | **Pn** | 05 21 19.6 | +1.0 |
| **KIRR** | **Kirishev** | **2.30** | **17** | *e*P | P | | **Pn** | 05 21 19.8 | +1.1 |
| **BZWR** | **Bezymyannyi-We** | **2.34** | **19** | *e*P | P | | **Pn** | 05 21 20.8 | +1.6 |
| **KRSR** | **Krestovskiy** | **2.59** | **18** | *e*P | P | | **Pn** | 05 21 23.2 | +1.2 |
| **KBG** | **Krutoberegovo** | **3.23** | **38** | *e*S | S | | Sn | 05 22 10.2 | +0.5 |
| **KBTR** | **Krutoberegovo** | **3.24** | **39** | *e*P | P | | **Pn** | 05 21 30.6 | +0.9 |
| KBTR | | | | | eS | | Sn | 05 22 09.9 | 0.0 |
| **BKI** | **Bering** | **4.24** | **67** | *e*P | P | | **Pn** | 05 21 44.0 | +1.8 |

**IDC 07 05:46:09.0±1.4,3°.81N×126°.30E,h0km,mb3.5/5, mb1 3.6/5,mb1mx3.5/41,mbtmp3.5/5,MS3.3/2,Ms1 3.3/2, ms1mx2.5/40,Error ellipse: s-maj=154.3km s-min=21.2km az=68.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **3.32** | **347** | LR | LR | | | 05 48 06.7 | |
| | comp=Z,13nm,19.3s,baz=154,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.89** | **162** | P | P | | | 05 51 33.6 | -0.1 |
| | 0.5nm,0.4s,baz=341,slow=11,SNR=10 | | | | | | | | |
| **ASAR** | **Alice Springs** | **28.29** | **165** | P | P | | | 05 52 04.3 | -0.1 |
| | 0.3nm,0.6s,baz=347,slow=7.1,SNR=4.5 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.35** | **159** | P | P | | | 05 53 31.8 | 0.0 |
| | 1.8nm,0.7s,baz=330,slow=6.1,SNR=4.4 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **42.65** | **17** | LR | LR | | | 06 14 53.7 | |
| | comp=Z,19nm,18.7s,baz=321,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **47.09** | **342** | P | P | | | 05 54 43.0 | +0.2 |
| | 0.3nm,0.5s,baz=142,slow=7.3,SNR=1.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.25** | **325** | P | P | | | 05 55 58.1 | -0.3 |
| | 0.1nm,0.4s,baz=117,slow=8.2,SNR=4.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.45** | **328** | LR | LR | | | 06 24 36.5 | |
| | comp=Z,47nm,18.6s,baz=342,slow=38 | | | | | | | | |

*CNRM **07** 05:57:33.8,35°.49N×3°.83W,h15km,ml2.8*
*SFS **07** 05:57:33.0,35°.56N×3°.75W,ML2.2,ALBORAN SUR*
*INMG **07** 05:57:33.0±1.2,35°.55N×3°.76W,h4km±4km,ML2.0,Error ellipse: s-maj=4.8km s-min=2.1km az=26.0*
**ISC 07 05:57:30.8±1.4,35°.49N±0°.04×3°.76W±0°.04,h4km±12km, n16,σ1$43/30,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.31** | **208** | P | P | | **Pb** | **05 57 38.6** | **-0.4** |
| PALE | | | | S | S | | **Sb** | **05 57 44.9** | **+0.5** |
| **AKLM** | **AKL** | **0.98** | **185** | P | P | | **Pb** | **05 57 50.8** | **+0.4** |
| AKLM | | | | S | S | | **Sb** | **05 58 05.0** | **-0.9** |
| **CHAS** | **Isla Isabel II** | **1.13** | **105** | P | P | | **Pg** | **05 57 52.3** | **-0.1** |
| CHAS | | | | S | S | | **Sg** | **05 58 05.7** | **-1.4** |
| **CHEFC** | **Chefchaouen** | **1.35** | **254** | P | P | | **Pn** | **05 57 56.7** | **+0.2** |
| CHEFC | | | | S | S | | **Sn** | **05 58 15.3** | **+0.4** |
| **SICH** | **Sidi Chahed** | **1.89** | **223** | P | P | | **Pb** | **05 58 04.6** | **-1.2** |
| SICH | | | | S | S | | **Sg** | **05 58 30.7** | **-0.7** |
| **LCRM** | **LCR** | **2.02** | **207** | P | P | | **Pg** | **05 58 10.2** | **+0.7** |
| LCRM | | | | S | S | | **Sg** | **05 58 35.4** | **-0.2** |
| **IFR** | **Ifrane** | **2.27** | **210** | P | P | | **Pn** | **05 58 09.5** | **+0.2** |
| IFR | | | | S | S | | **Sn** | **05 58 34.9** | **-3.0** |
| **MD31** | **MD31** | **2.75** | **198** | P | P | | **Pn** | **05 58 16.9** | **+1.1** |
| MD31 | | | | S | S | | **Sn** | **05 58 50.0** | **+0.6** |
| **MDT** | **Midelt** | **2.76** | **195** | P | P | | **Pn** | **05 58 17.3** | **+1.3** |
| MDT | | | | S | S | | **Sn** | **05 58 50.4** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.72** | **302** | *e*Sn | S | | **Sn** | **05 59 11.0** | **-2.2** |
| PVAQ | | | | A | A | | | 05 59 21.0 | |
| | 3.3nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **302** | P | P | | **Pn** | **05 58 30.3** | **+1.3** |
| PVAQ | | | | S | S | | **Sn** | **05 59 11.7** | **-1.5** |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Pn | P | | **Pn** | **05 58 38.6** | **+1.8** |
| MESJ | | | | *e*Sn | S | | **Sn** | **05 59 26.6** | **-0.6** |
| **PESTR** | **Estremoz** | **4.55** | **319** | *e*Sn | S | | **Sn** | **05 59 32.7** | **-1.1** |
| **PESTR** | **Estremoz** | **4.55** | **319** | P | P | | **Pn** | **05 58 42.5** | **+2.1** |
| PESTR | | | | S | S | | **Sn** | **05 59 36.2** | **+2.4** |
| **EVO** | **Evora** | **4.56** | **313** | *e*Pn | P | | **Pn** | **05 58 41.8** | **+1.2** |
| EVO | | | | *e*Sn | S | | **Sn** | **05 59 31.4** | **-2.6** |
| EVO | | | | A | A | | | 05 59 34.0 | |
| | 1.6nm,0.2s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | P | | **Pn** | **05 58 42.2** | **+0.6** |
| PNCL | | | | *e*Sn | S | | **Sn** | **05 59 34.3** | **-1.5** |

*IGIL **07** 06:02:38.1,36°.51N×4°.54W,h32km,ML2.1*
*SFS **07** 06:02:38.0,36°.51N×3°.54W,h59km,ML3.1, FUENGIROLA (MALAGA)*
*MDD **07** 06:02:38.9±0.7,36°.60N×4°.63W,h59km±6km,mb3.3/12, Error ellipse: s-maj=8.5km s-min=4.7km az=168.0*
*MDD EMS: II INTENSIDAD MAXIMA.*
*INMG **07** 06:02:39.0±1.4,36°.63N×4°.61W,h58km±7km,ML2.1,Error ellipse: s-maj=6.3km s-min=3.9km az=165.0*
*CNRM **07** 06:02:40.1,36°.75N×4°.75W,h75km,ml2.3*
**ISC 07 06:02:39.7±1.2,36°.76N±0°.03×4°.63W±0°.03,h45km±7km, n42,σ1$46/79,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EMAL** | **Malaga-Limoner** | **0.16** | **88** | P | P | | **Pn** | **06 02 46.5** | **-0.8** |
| EMAL | | | | S | S | | **Sn** | **06 02 52.1** | **-0.5** |
| **EMIJ** | **Mijas** | **0.22** | **211** | P | P | | **Pn** | **06 02 47.4** | **-0.4** |
| | 10nm,0.1s,SNR=56 | | | | | | | | |
| EMIJ | | | | S | | | **Sn** | **06 02 54.2** | **+0.8** |
| | 18nm,0.2s,SNR=16 | | | | | | | | |
| **EGOR** | **Sierra Gorda,** | **0.55** | **50** | P | P | | **Pn** | **06 02 51.9** | **+0.5** |
| | 9.0nm,0.2s,SNR=7.9 | | | | | | | | |
| EGOR | | | | S | | | **Sn** | **06 03 01.2** | **+1.4** |
| | 16nm,0.2s,SNR=7.9 | | | | | | | | |
| **ELGU** | **Los Guajares,** | **0.81** | **82** | P | P | | **Pn** | **06 02 53.7** | **-1.2** |
| | 16nm,0.2s,SNR=7.9 | | | | | | | | |
| ELGU | | | | S | | | **Sn** | **06 03 05.7** | **-0.3** |
| | 36nm,0.2s,SNR=7.9 | | | | | | | | |
| **EQUE** | **Quentar** | **1.05** | **65** | P | P | | **Pn** | **06 02 58.5** | **+0.3** |
| | 2.3nm,0.1s,SNR=12 | | | | | | | | |
| EQUE | | | | S | | | **Sn** | **06 03 13.5** | **+1.8** |
| | 9.1nm,0.4s,SNR=12 | | | | | | | | |
| **EBER** | **Berja** | **1.41** | **84** | P | P | | **Pn** | **06 03 01.6** | **-1.4** |
| | 5.5nm,0.3s,SNR=6.4 | | | | | | | | |
| EBER | | | | S | | | **Sn** | **06 03 23.1** | **+2.6** |
| | 19nm,0.7s,SNR=5.0 | | | | | | | | |
| **EADA** | **Adamuz** | **1.41** | **2** | P | P | | **Pn** | **06 03 05.2** | **+2.2** |
| | 4.4nm,0.1s,SNR=35 | | | | | | | | |
| EADA | | | | S | | | **Sn** | **06 03 24.6** | **+4.2** |
| | 8.1nm,0.3s,SNR=14 | | | | | | | | |
| **ECAB** | **El Cabril** | **1.46** | **335** | P | P | | **Pn** | **06 03 06.9** | **+3.3** |
| | 1.1nm,0.1s,SNR=30 | | | | | | | | |
| ECAB | | | | S | | | **Sn** | **06 03 26.2** | **+4.6** |
| | 18nm,0.3s,SNR=6.8 | | | | | | | | |
| **EQES** | **Quesada** | **1.62** | **50** | P | P | | **Pn** | **06 03 06.0** | **+0.1** |
| | 1.8nm,0.1s,SNR=7.9 | | | | | | | | |
| EQES | | | | S | | | **Sn** | **06 03 25.7** | **0.0** |
| | 10.0nm,0.3s,SNR=12 | | | | | | | | |
| **PALE** | **Palemas** | **1.64** | **160** | P | P | | **Pn** | **06 03 06.5** | **+0.4** |
| PALE | | | | S | S | | **Sn** | **06 03 27.4** | **+1.4** |
| **EMIN** | **Mina Concepcio** | **1.92** | **302** | P | P | | **Pn** | **06 03 09.6** | **-0.3** |
| | 0.8nm,0.1s,SNR=7.0 | | | | | | | | |
| EMIN | | | | S | | | **Sn** | **06 03 31.6** | **-1.1** |
| | 7.3nm,0.6s,SNR=11 | | | | | | | | |
| **ENIJ** | **Nijar** | **1.96** | **83** | P | P | | **Pn** | **06 03 09.9** | **-0.5** |
| | 0.8nm,0.2s,SNR=7.9 | | | | | | | | |
| **AKLM** | **AKL** | **2.33** | **164** | P | P | | **Pn** | **06 03 15.9** | **+0.3** |
| AKLM | | | | S | S | | **Sn** | **06 03 44.7** | **+1.7** |
| **EGRO** | **El Granado** | **2.41** | **290** | P | P | | **Pn** | **06 03 16.5** | **-0.1** |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | | | |
| EGRO | | | | S | | | **Sn** | **06 03 44.4** | **-0.5** |
| | 13nm,1.6s,SNR=7.9 | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.55** | **286** | *e*P | P | | **Pn** | **06 03 18.3** | **-0.3** |
| PVAQ | | | | *e*S | S | | **Sn** | **06 03 47.4** | **-1.0** |
| PVAQ | | | | A | A | | | 06 03 49.1 | |
| | 5.0nm,0.2s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.55** | **286** | P | P | | **Pn** | **06 03 18.7** | **+0.1** |
| PVAQ | | | | S | S | | **Sn** | **06 03 47.5** | **-0.9** |
| **EBAD** | **Badajoz** | **2.75** | **317** | P | P | | **Pn** | **06 03 20.9** | **-0.3** |
| | 2.2nm,0.1s,SNR=12 | | | | | | | | |
| EBAD | | | | S | | | **Sn** | **06 03 51.8** | **-1.4** |
| | 3.3nm,0.6s,SNR=7.3 | | | | | | | | |
| **PAB** | **San Pablo** | **2.79** | **4** | P | P | | **Pn** | **06 03 22.9** | **+0.9** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| PAB | | | | S | | | **Sn** | **06 03 54.1** | **-0.4** |
| | 0.2nm,0.3s,SNR=7.9 | | | | | | | | |
| **PCVE** | **Castro Verde** | **2.86** | **289** | *e*P | P | | **Pn** | **06 03 22.7** | **-0.1** |
| PCVE | | | | *e*S | S | | **Sn** | **06 03 55.4** | **-0.6** |
| PCVE | | | | A | A | | | 06 04 28.7 | |
| | 3.2nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **2.96** | **10** | P | P | | **Pn** | **06 03 24.8** | **+0.6** |
| | 0.3nm,0.3s,baz=188,slow=12,SNR=4.6 | | | | | | | | |
| ESDC | | | | S | | | **Sn** | **06 03 57.9** | **-0.7** |
| | 0.3nm,0.4s,baz=194,slow=23,SNR=3.9 | | | | | | | | |
| **MESJ** | **Messejana** | **3.06** | **292** | *e*P | P | | **Pn** | **06 03 25.4** | **-0.2** |
| MESJ | | | | *e*S | S | | **Sn** | **06 03 59.8** | **-1.1** |
| MESJ | | | | IAML | | | | 06 04 02.0 | |
| | comp=N,5.3nm,0.3s | | | | | | | | |
| **MESJ** | **Messejana** | **3.06** | **292** | *e*P | P | | **Pn** | **06 03 25.5** | **-0.1** |
| MESJ | | | | *e*S | S | | **Sn** | **06 04 00.5** | **-0.4** |
| MESJ | | | | A | A | | | 06 04 22.6 | |
| | comp=N,4.2nm,0.7s | | | | | | | | |
| **ETOB** | **Tobarra** | **3.09** | **51** | P | P | | **Pn** | **06 03 25.0** | **-1.0** |
| | comp=N,0.3nm,0.2s,SNR=7.9 | | | | | | | | |
| ETOB | | | | S | | | **Sn** | **06 03 57.7** | **-4.0** |
| | comp=N,0.2nm,0.3s,SNR=7.9 | | | | | | | | |
| **PESTR** | **Estremoz** | **3.15** | **313** | *e*P | P | | **Pn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EMAL** | **Malaga-Limoner** | **1.38** | **336** | P | | **Pg** | **06 50 46.4** | **-0.3** |
| EMAL | | | | S | | **Sb** | **06 51 03.1** | **+0.2** |
| **SICH** | **Sidi Chahed** | **1.91** | **224** | P | | **Pn** | **06 50 52.9** | **+1.1** |
| SICH | | | | S | | **Sb** | **06 51 18.8** | **+0.9** |
| **MD31** | **MD31** | **2.76** | **198** | P | | **Pn** | **06 51 04.7** | **+1.1** |
| MD31 | | | | S | | **Sn** | **06 51 35.8** | **-0.9** |
| **MDT** | **Midelt** | **2.77** | **195** | P | | **Pn** | **06 51 06.0** | **+2.2** |
| MDT | | | | S | | **Sn** | **06 51 35.3** | **-1.8** |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | *e*Pn | | **Pn** | **06 51 17.6** | **+0.6** |
| PVAQ | | | | *e*Sn | | **Sn** | **06 51 59.1** | **-1.6** |
| PVAQ | | | | A | | A | 06 52 03.7 | |
| | 4.2nm,0.7s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **302** | P | | **Pn** | **06 51 18.8** | **+1.9** |
| PVAQ | | | | S | | **Sn** | **06 51 59.9** | **-0.8** |
| **MESJ** | **Messejana** | **4.30** | **304** | *e*Pn | | **Pn** | **06 51 25.9** | **+1.1** |
| **EVO** | **Evora** | **4.58** | **313** | *e*Pn | | **Pn** | **06 51 29.2** | **+0.7** |
| **PNCL** | **Nicolau / Gran** | **4.65** | **306** | *e*Pn | | **Pn** | **06 51 29.9** | **+0.3** |
| PNCL | | | | *e*Sn | | **Sn** | **06 52 22.7** | **-0.5** |

*IDC **07** 07:05:01.3±1.0,50.°05N×78.°59E,h0km,mb1 3.1/2, mb1mx2.4/54,mbtmp3.1/2,ML2.7/2,Error ellipse: s-maj=11.9km s-min=6.1km az=69.0*

*NNC **07** 07:05:02.7±0.8,50.°06N×78.°53E,h0km,mb3.5,mpv3.0, Error ellipse: s-maj=7.3km s-min=4.0km az=81.0, Suspected Mining explosion.*

**ISC 07 07:05:02.2**±0.8,**50.00N**±0.03×**78.61E**±0.05,**h0km,n24,** σ1ᵖ**33**/38,**18C-8D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.58** | **354** | ⇑P | **Pg** | **07 05 12.5** | **-0.8** |
| KUR07 | | | | ⇑S | **Sg** | **07 05 21.0** | **+0.2** |
| **KUR06** | **Kurchatov Arra** | **0.60** | **355** | ⇑P | **Pg** | **07 05 12.8** | **-0.9** |
| KUR06 | | | | ⇑S | **Sg** | **07 05 21.6** | **+0.2** |
| **KUR14** | **Kurchatov Arra** | **0.61** | **359** | ⇑P | **Pg** | **07 05 12.7** | **-1.2** |
| KUR14 | | | | ⇑S | **Sg** | **07 05 21.4** | **-0.4** |
| **KUR15** | **Kurchatov Arra** | **0.62** | **357** | ⇑P | **Pg** | **07 05 12.8** | **-1.1** |
| KUR15 | | | | ⇓S | **Sg** | **07 05 21.9** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **0.62** | **356** | Pg | **Pg** | **07 05 11.6** | **-2.5** |
| | 3.1nm,0.3s,baz=174,slow=18,SNR=93 | | | | | | |
| KURBB | | | | Lg | Lg | 07 05 21.8 | |
| | 3.6nm,0.3s,baz=176,slow=32,SNR=21 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.62** | **356** | ⇑P | **Pg** | **07 05 13.2** | **-0.8** |
| | 12nm,0.2s | | | | | | |
| KURBB | | | | ⇑S | **Sg** | **07 05 22.4** | **+0.3** |
| | 57nm,0.6s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.63** | **354** | ⇓P | **Pg** | **07 05 13.3** | **-0.8** |
| KUR16 | | | | ⇑S | **Sg** | **07 05 22.5** | **+0.2** |
| **KUR17** | **Kurchatov Arra** | **0.63** | **352** | ⇑P | **Pg** | **07 05 13.6** | **-0.7** |
| KUR17 | | | | ⇓S | **Sb** | **07 05 23.0** | **-2.5** |
| **KUR05** | **Kurchatov Arra** | **0.64** | **356** | ⇑P | **Pg** | **07 05 13.3** | **-1.1** |
| KUR05 | | | | ⇑S | **Sg** | **07 05 22.1** | **-0.6** |
| **KUR04** | **Kurchatov Arra** | **0.66** | **357** | ⇓P | **Pg** | **07 05 14.0** | **-0.8** |
| KUR04 | | | | ⇑S | **Sg** | **07 05 22.8** | **-0.6** |
| **KURK** | **Kurchatov** | **0.71** | **1** | ⇑P | **Pg** | **07 05 14.6** | **-1.2** |
| | 5.6nm,0.3s | | | | | | |
| KURK | | | | ⇑S | **Sg** | **07 05 24.5** | **-0.5** |
| | 13nm,0.4s | | | | | | |
| **SEM** | **Semipalatinsk** | **1.13** | **68** | P | **Pn** | **07 05 27.6** | **+2.2** |
| | 7.1nm,0.1s | | | | | | |
| SEM | | | | S | **Sb** | **07 05 41.1** | **+1.0** |
| | 39nm,0.1s | | | | | | |
| **BRZS** | **Berezniki** | **3.83** | **272** | Pg | **Pg** | **07 06 16.6** | **+1.2** |
| | 2.1nm,0.3s | | | | | | |
| BRZS | | | | Lg | Lg | 07 07 03.0 | |
| | 1.8nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **4.04** | **141** | ⇓Pn | **Pn** | **07 06 05.5** | **+0.2** |
| | 0.1nm,0.1s,baz=323,slow=9.9,SNR=27 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **07 06 17.6** | **+3.4** |
| | 0.1nm,0.1s,baz=321,slow=13,SNR=7.6 | | | | | | |
| MK31 | | | | Lg | Lg | 07 07 06.7 | |
| | 1.7nm,0.3s,baz=336,slow=25,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.04** | **141** | Pn | **Pn** | **07 06 05.4** | **+0.1** |
| | 0.5nm,0.3s,baz=325,slow=10,SNR=27 | | | | | | |
| MKAR | | | | Pg | **Pb** | **07 06 13.0** | **-1.2** |
| | 0.4nm,0.3s,baz=327,slow=16,SNR=17 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 06 53.8** | **+0.5** |
| | 0.4nm,0.3s,baz=328,slow=23,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 07 07 05.0 | |
| | 1.7nm,0.3s,baz=331,slow=25,SNR=13 | | | | | | |
| **OTUK** | **Ortayu** | **4.48** | **249** | ⇑Pn | **Pn** | **07 06 12.5** | **+1.2** |
| | 1.1nm,0.3s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 07 23.8 | |
| | 1.4nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.75** | **174** | Pg | **Pg** | **07 06 32.6** | **-0.5** |
| | 0.5nm,0.1s | | | | | | |
| KAPS | | | | Lg | Lg | 07 07 31.0 | |
| | 4.7nm,0.5s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.51** | **42** | *i* | | 07 35 40.0 | |
| | baz=223,slow=318,SNR=3.1 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **5.51** | **42** | ⇑Pn | **Pn** | **07 06 25.9** | **+0.5** |
| | 0.1nm,0.3s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 07 07 56.1 | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.51** | **42** | Pn | **Pn** | **07 06 25.8** | **+0.5** |
| | 1.2nm,0.3s,baz=232,slow=14,SNR=18 | | | | | | |
| ZALV | | | | Sn | **Sn** | **07 07 29.0** | **-0.3** |
| | 0.2nm,0.3s,baz=222,slow=23,SNR=2.0 | | | | | | |
| ZALV | | | | Lg | Lg | 07 07 55.6 | |
| | 0.4nm,0.3s,baz=226,slow=27,SNR=4.4 | | | | | | |
| **ARXS** | **Arharly** | **5.82** | **186** | Pg | **Pg** | **07 06 50.8** | **-2.8** |
| | 0.8nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 07 08 03.7 | |
| | 8.4nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **5.91** | **181** | Pg | **Pg** | **07 06 52.9** | **-2.5** |
| | 2.7nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 07 08 06.6 | |
| | 3.3nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **5.96** | **304** | Pn | **Pn** | **07 06 32.5** | **+1.0** |
| | 0.1nm,0.3s,baz=210,slow=29,SNR=1.7 | | | | | | |
| **DGS** | **Degeres** | **7.04** | **197** | Pg | **Pg** | **07 07 15.9** | **-1.1** |
| | 1.2nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 07 08 46.1 | |
| | 4.3nm,0.6s | | | | | | |

*VIE **07** 07:05:47.7±0.9,51.°52N×16.°23E,h0km,mb2.1/1,ml2.6/2, Error ellipse: s-maj=9.6km s-min=7.1km az=16.0 72 km NW of Wroclaw Suspected Mining induced.*

*IPEC **07** 07:05:48.8±0.3,51.°47N×16.°22E,h1km,ML1.9/3,Error ellipse: s-maj=3.1km s-min=1.4km az=50.0*

*PRU **07** 07:05:49.9±0.0,51.°42N×16.°06E,h0km*

**ISC 07 07:05:49.6**±1.2,**51.39N**±0.06×**16.08E**±0.03,**h0km,n21,** σ0ᵖ**57**/43,**Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.56** | **166** | *e*Pg | **Pb** | **07 06 01.3** | **-1.1** |
| KSP | | | | *e*Sg | **Sb** | **07 06 09.8** | **-1.1** |
| **CHVC** | **Chvalec** | **0.80** | **181** | *e*PG | **Pb** | **07 06 05.9** | **-0.5** |
| CHVC | | | | *e*SG | **Sg** | **07 06 16.0** | **+0.7** |
| | comp=Z,14nm,0.4s | | | | | | |
| **OSTC** | **Ostas** | **0.84** | **174** | *e*PG | **Pb** | **07 06 06.6** | **-0.4** |
| OSTC | | | | *e*SG | **Sb** | **07 06 18.3** | **-0.5** |
| | comp=Z,29nm,0.5s | | | | | | |
| **UPC** | **Upice** | **0.89** | **183** | *e*PG | **Pb** | **07 06 07.3** | **-0.5** |
| UPC | | | | *e*SG | **Sb** | **07 06 19.8** | **-0.3** |
| | comp=Z,58nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.29** | **228** | *e*PG | **Pb** | **07 06 14.4** | **-0.2** |
| PVCC | | | | *e*SG | **Sn** | **07 06 32.5** | **-0.2** |
| | comp=Z,72nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.39** | **161** | *e*PG | **Pg** | **07 06 15.9** | **-0.3** |
| KRLC | | | | *e*SG | **Sb** | **07 06 34.3** | **-0.4** |
| | comp=Z,18nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.44** | **250** | Pg | **Pg** | **07 06 17.1** | **-0.1** |
| BRG | | | | Sg | **Sn** | **07 06 37.0** | **+0.5** |
| BRG | | | | Amp | | 07 06 38.3 | |
| | comp=Z,19nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **1.71** | **215** | *e*PG | **Pn** | **07 06 20.3** | **-0.3** |
| PRU | | | | *e*SG | **Sg** | **07 06 45.6** | **+1.1** |
| | comp=Z,8.7nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.86** | **149** | *e*Pn | **Pn** | **07 06 22.2** | **-0.6** |
| | baz=334 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **07 06 48.1** | **-0.3** |
| | comp=Z,7.2nm,0.3s,baz=334 | | | | | | |
| **CLL** | **Collm** | **1.93** | **269** | *e*Pg | **Pb** | **07 06 25.0** | **-0.6** |
| CLL | | | | *ex* | x | 07 06 28.0 | |
| CLL | | | | *ex* | x | 07 06 45.0 | |
| CLL | | | | *e*Sg | **Sg** | **07 06 51.0** | **-0.6** |
| **OKC** | **Ostrava-Krasne** | **2.04** | **139** | *e*SG | **Sg** | **07 06 55.0** | **0.0** |
| | comp=Z,24nm,1.0s | | | | | | |
| **VRAC** | **Vranov** | **2.11** | **171** | *e*Pn | **Pn** | **07 06 26.2** | **+0.1** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **07 06 56.9** | **-0.4** |
| | comp=Z,7.1nm,0.5s,baz=354 | | | | | | |
| **VRAC** | **Vranov** | **2.11** | **171** | *e*PN | **Pn** | **07 06 26.3** | **+0.1** |
| VRAC | | | | *e*SG | **Sg** | **07 06 57.0** | **-0.4** |
| **KRUC** | **Moravsky** | **2.34** | **175** | *e*Pn | **Pn** | **07 06 29.2** | **0.0** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | **07 07 04.5** | **-0.1** |
| | comp=Z,7.4nm,0.6s,baz=357 | | | | | | |
| **KRUC** | **Moravsky** | **2.34** | **175** | *e*PN | **Pn** | **07 06 29.3** | **0.0** |
| KRUC | | | | *e*SG | **Sg** | **07 07 04.6** | **-0.1** |
| **NKC** | **Novy Kostel** | **2.58** | **245** | *e*PN | **Pn** | **07 06 32.6** | **0.0** |
| NKC | | | | *e*PG | **Pb** | **07 06 36.6** | **-0.1** |
| NKC | | | | *e*SG | **Sg** | **07 07 12.6** | **+0.3** |
| | comp=Z,12nm,0.3s | | | | | | |
| **OJC** | **Ojcow** | **2.63** | **115** | *e*Pg | **Pg** | **07 06 40.6** | **+0.6** |
| OJC | | | | *e*Sg | **Sg** | **07 07 15.3** | **+1.2** |
| **KHC** | **Kasperske Hory** | **2.77** | **216** | *e*PN | **Pn** | **07 06 35.5** | **+0.2** |
| KHC | | | | *e*PG | **Pb** | **07 06 41.2** | **+1.2** |
| KHC | | | | *e*SN | **Sn** | **07 07 10.1** | **+0.7** |
| KHC | | | | *e*SG | **Sg** | **07 07 18.4** | **-0.2** |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.81** | **205** | *e*PN | **Pn** | **07 06 36.1** | **+0.3** |
| CKRC | | | | *e*PG | **Pb** | **07 06 41.6** | **+0.9** |
| CKRC | | | | *e*SG | **Sg** | **07 07 20.2** | **+0.3** |
| **CONA** | **Conrad Observa** | **3.47** | **182** | *e*Pn | **Pn** | **07 06 45.9** | **+1.0** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **MOA** | **Molln** | **3.73** | **199** | *e*Pn | **Pn** | **07 06 48.3** | **-0.2** |
| | comp=Z,0.2nm,0.2s | | | | | | |

*JMA **07** 07:08:05.9±0.1,32.°66N×136.°94E,h465km,M3.4*

*IDC **07** 07:08:10.7±1.7,32.°85N×136.°66E,h402km±19km,mb3.2/6, mb1 3.3/9,mb1mx2.7/64,mbtmp3.9/9,Error ellipse: s-maj=37.5km s-min=20.3km az=76.0*

**ISC 07 07:08:10.9**±1.0,**32.9N**±0.1×**136.99E**±0.09,**h400km,n28,** σ2ᵖ**09**/32,**mb3.5/7,Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TTO1** | **TONANKAI O.B.S** | **0.75** | **347** | P | **Pn** | **07 09 04.3** | **+3.5** |
| **TK02** | **Tokai 2** | **1.24** | **31** | P | **Pn** | **07 09 06.3** | **+3.8** |
| **JKN2** | **Miekihoku** | **1.47** | **336** | P | **Pn** | **07 09 06.3** | **+2.4** |
| **JTNC** | **Tanabenakahech** | **1.48** | **309** | P | **Pn** | **07 09 06.1** | **+2.1** |
| **JIE** | **Ise** | **1.52** | **351** | P | **Pn** | **07 09 06.9** | **+2.8** |
| **JWY** | **Kouya** | **1.77** | **319** | P | **Pn** | **07 09 07.9** | **+2.4** |
| **JAI** | **Aioi** | **2.31** | **294** | P | **Pn** | **07 09 10.9** | **+2.1** |
| **JYTA** | **Yamagatataniai** | **2.71** | **356** | P | **Pn** | **07 09 14.2** | **+2.5** |
| **JWT** | **Wachi** | **2.73** | **332** | P | **Pn** | **07 09 14.0** | **+2.1** |
| **JMN** | **Monobe** | **2.74** | **289** | P | **Pn** | **07 09 14.1** | **+2.1** |
| **JOD2** | **Odawara 2** | **2.94** | **36** | P | **Pn** | **07 09 16.6** | **+3.0** |
| **BSO4** | **Boso 4** | **3.48** | **52** | P | **Pn** | **07 09 20.2** | **+2.1** |
| **JRY** | **Ryogami san** | **3.50** | **26** | S | **S** | **07 10 14.8** | **+1.8** |
| **JHU** | **Hanno** | **3.51** | **32** | P | **Pn** | **07 09 20.2** | **+1.8** |
| JHU | | | | S | **S** | **07 10 13.3** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **3.78** | **15** | P | **Pn** | **07 09 23.3** | **+2.4** |
| | 0.7nm,0.3s,baz=194,slow=9.0,SNR=20 | | | | | | |
| MJAR | | | | S | **S** | **07 10 18.9** | **+1.2** |
| | baz=186,slow=16,SNR=1.8 | | | | | | |
| **MAT** | **Matsushiro** | **3.78** | **15** | P | **Pn** | **07 09 22.7** | **+1.8** |
| MAT | | | | S | **S** | **07 10 18.3** | **+0.6** |
| **JAG** | **Ashikaga** | **4.07** | **29** | P | **Pn** | **07 09 23.6** | **0.0** |
| **JYT** | **Yasato** | **4.25** | **38** | P | **Pn** | **07 09 25.9** | **+0.6** |
| JYT | | | | S | **S** | **07 10 22.8** | **-3.0** |
| **JHO** | **Hitachi** | **4.74** | **37** | P | **Pn** | **07 09 30.7** | **+0.5** |
| **ASAJ** | **Asahikawa** | **12.04** | **20** | P | **P** | **07 10 52.7** | **+1.9** |
| | 0.5nm,0.3s,baz=33,slow=18,SNR=2.6 | | | | | | |
| **KLR** | **Kul'dur** | **16.79** | **348** | P | **P** | **07 11 41.8** | **-0.6** |
| | 0.1nm,0.3s,baz=32,slow=23,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.39** | **305** | P | **P** | **07 15 34.0** | **-1.8** |
| | 0.2nm,0.5s,baz=90,slow=7.3,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.82** | **311** | P | **P** | **07 15 52.0** | **-2.6** |
| | 1.2nm,0.2s,baz=92,slow=9.8,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.59** | **183** | P | **P** | **07 16 44.6** | **-1.0** |
| | 0.1nm,0.3s,baz=358,slow=7.6,SNR=5.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **66.58** | **339** | P | **P** | **07 18 18.3** | **-0.9** |
| | 4.4nm,0.9s,baz=46,slow=7.7,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **70.75** | **332** | P | **P** | **07 18 43.9** | **-0.8** |
| | 3.1nm,1.0s,baz=56,slow=4.8,SNR=7.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **76.54** | **336** | P | **P** | **07 19 17.7** | **-0.4** |
| | 0.4nm,0.6s,baz=45,slow=5.6,SNR=1.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.55** | **50** | P | **P** | **07 20 52.1** | **0.0** |
| | 0.4nm,0.9s,baz=260,slow=5.2,SNR=2.5 | | | | | | |

*NEIC **07** 07:08:48.0±0.8,24.°17S±0.°08×67.°1W±0.°2,h234km±19km, mb4.1/3,Md3.6(SJA),ML4.2(GUC),Error ellipse: s-maj=22.0km s-min=10.2km az=78.0*

*IDC **07** 07:08:48.3±2.1,24.°06S×66.°74W,h189km±15km,mb3.2/4, mb1 3.4/9,mb1mx3.2/33,mbtmp3.7/9,Error ellipse: s-maj=31.7km s-min=18.9km az=177.0*

*GUC **07** 07:08:49.1±0.5,23.°98S×67.°21W,h241km±7km,ML4.2*

**ISC 07 07:08:48.2**±0.9,**24.08S**±0.06×**66.89W**±0.09, **h200km**±10**km,n51,**σ1ᵖ**24**/68,**mb3.5/6,11C,Salta Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.37** | **308** | P | **Pn** | **07 09 31.8** | **+0.7** |
| | 27nm,0.3s,baz=107,slow=6.4,SNR=42 | | | | | | |
| LVC | | | | S | **S** | **07 10 05.0** | **+1.3** |
| | 31nm,0.3s,baz=287,slow=20,SNR=23 | | | | | | |
| **LVC** | **Limon Verde** | **2.37** | **308** | *e*P | **Pn** | **07 09 31.4** | **+0.4** |
| LVC | | | | *e*S | **S** | **07 10 04.5** | **+0.8** |
| **PB15** | **IPOC Station P** | **2.52** | **290** | ⇑*i*P | **Pn** | **07 09 33.1** | **+0.5** |
| PB15 | | | | *e*S | **S** | **07 10 06.1** | **-0.3** |
| **PB15** | **IPOC Station P** | **2.52** | **290** | Pn | **Pn** | **07 09 32.9** | **+0.3** |
| PB15 | | | | Sn | **S** | **07 10 06.2** | **-0.2** |
| **PB06** | **IPOC Station P** | **2.82** | **299** | ⇑*i*P | **Pn** | **07 09 36.4** | **+0.4** |
| PB06 | | | | *e*S | **S** | **07 10 11.5** | **-0.9** |
| PB06 | | | | IAML | | 07 10 14.3 | |
| | comp=N,383nm,0.1s | | | | | | |
| **PB06** | **IPOC Station P** | **2.82** | **299** | | **Pn** | **07 09 36.2** | **+0.2** |
| **PB09** | **IPOC Station P** | **3.14** | **316** | ⇑*i*P | **Pn** | **07 09 40.5** | **+0.7** |
| PB09 | | | | *e*S | **S** | **07 10 19.1** | **-0.3** |
| **PB09** | **IPOC Station P** | **3.14** | **316** | | **Pn** | **07 09 41.0** | **+1.3** |
| **PB14** | **IPOC Station P** | **3.25** | **260** | Pn | **Pn** | **07 09 40.4** | **-0.8** |
| **PB03** | **IPOC Station P** | **3.33** | **307** | ⇑*i*P | **Pn** | **07 09 41.9** | **0.0** |
| PB03 | | | | *e*S | **S** | **07 10 22.0** | **-1.3** |
| **PB03** | **IPOC Station P** | **3.33** | **307** | | **Pn** | **07 09 42.0** | **+0.1** |
| **PB10** | **IPOC Station P** | **3.41** | **279** | ⇑*i*P | **Pn** | **07 09 42.5** | **-0.2** |
| PB10 | | | | *i* S | **S** | **07 10 23.2** | **-1.4** |
| **PB10** | **IPOC Station P** | **3.41** | **279** | Pn | **Pn** | **07 09 42.4** | **-0.4** |
| **AC02** | **Maricunga** | **3.41** | **216** | Pn | **Pn** | **07 09 42.6** | **-0.6** |
| **PB04** | **IPOC Station P** | **3.47** | **299** | ⇑*e*P | **Pn** | **07 09 43.5** | **-0.2** |
| PB04 | | | | *e*S | **S** | **07 10 24.8** | **-1.5** |
| **PB04** | **IPOC Station P** | **3.47** | **299** | | **Pn** | **07 09 43.7** | **0.0** |
| **PB07** | **IPOC Station P** | **3.62** | **310** | ⇑*i*P | **Pn** | **07 09 45.5** | **-0.1** |
| PB07 | | | | *i* S | **S** | **07 10 27.9** | **-1.9** |
| **PB07** | **IPOC Station P** | **3.62** | **310** | | **Pn** | **07 09 45.4** | **-0.1** |
| **PB01** | **IPOC Station P** | **3.86** | **321** | ⇑*e*P | **Pn** | **07 09 48.2** | **-0.3** |
| PB01 | | | | *e*S | **S** | **07 10 33.3** | **-1.7** |
| **PB01** | **IPOC Station P** | **3.86** | **321** | | **Pn** | **07 09 48.2** | **-0.3** |
| **PB02** | **IPOC Station P** | **3.91** | **314** | ⇑*e*P | **Pn** | **07 09 48.5** | **-0.5** |
| PB02 | | | | *e*S | **S** | **07 10 34.0** | **-2.1** |
| **PB02** | **IPOC Station P** | **3.91** | **314** | | **Pn** | **07 09 48.7** | **-0.3** |
| **PATCX** | **Punta Patache** | **4.43** | **316** | *e*P | **Pn** | **07 09 54.4** | **-1.1** |
| PATCX | | | | *e*S | **S** | **07 10 44.6** | **-3.3** |
| **PATCX** | **Punta Patache** | **4.43** | **316** | Pn | **Pn** | **07 09 55.0** | **-0.5** |
| **PB08** | **IPOC Station P** | **4.45** | **331** | ⇑*e*P | **Pn** | **07 09 56.6** | **+0.6** |
| PB08 | | | | *e*S | **S** | **07 10 48.6** | **-0.1** |
| **PB08** | **IPOC Station P** | **4.45** | **331** | | **Pn** | **07 09 56.6** | **+0.6** |
| **GO03** | **Copiap** | **4.62** | **220** | Pn | **Pn** | **07 09 55.8** | **-1.9** |
| **TA01** | **Diego Aracena** | **4.64** | **318** | | **Pn** | **07 09 57.5** | **-0.6** |
| **HMBC** | **Humberstone** | **4.70** | **323** | ⇑*e*P | **Pn** | **07 09 57.4** | **-1.5** |
| HMBC | | | | *e*S | **S** | **07 10 51.0** | **-3.1** |
| **TA02** | **Huaiquique** | **4.84** | **321** | | **Pn** | **07 10 00.1** | **-0.5** |
| **GO01** | **Chusmiza** | **4.89** | **334** | *e*P | **Pn** | **07 10 01.8** | **+0.1** |
| GO01 | | | | *e*S | **S** | **07 10 57.7** | **-1.3** |
| **GO01** | **Chusmiza** | **4.89** | **334** | | **Pn** | **07 10 01.6** | **-0.1** |
| **PB11** | **IPOC Station P** | **5.01** | **329** | Pn | **Pn** | **07 10 01.9** | **-1.0** |
| **MNMC** | **Minye Minye** | **5.53** | **332** | | **Pn** | **07 10 10.9** | **+1.1** |
| **AC04** | **Llanos de Chal** | **5.57** | **222** | Pn | **Pn** | **07 10 07.8** | **-2.1** |
| **PB16** | **IPOC Station P** | **6.22** | **336** | | **Pn** | **07 10 19.1** | **+0.1** |
| **PB12** | **IPOC Station P** | **6.32** | **329** | Pn | **Pn** | **07 10 18.5** | **-1.2** |
| **LPAZ** | **La Paz** | **7.84** | **351** | P | **Pn** | **07 10 41.4** | **+1.4** |
| | comp=N,0.3nm,0.3s,baz=173,slow=7.7,SNR=4.5 | | | | | | |
| LPAZ | | | | S | **S** | **07 12 06.9** | **-2.0** |
| | comp=N,0.1nm,0.3s,baz=41,slow=24,SNR=2.1 | | | | | | |
| **SIV** | **San Ignacio** | **9.73** | **35** | P | **Pn** | **07 11 04.0** | **0.0** |
| | comp=N,0.2nm,0.3s,baz=199,slow=10,SNR=5.6 | | | | | | |
| **PLTB** | **Pedras Altas** | **14.01** | **126** | | **Pn** | **07 11 58.1** | **-0.2** |
| **NNA** | **Nana** | **15.30** | **320** | P | **P** | **07 12 16.8** | **+2.3** |
| | comp=N,0.5nm,0.3s,baz=255,slow=13,SNR=1.8 | | | | | | |
| **BDFB** | **Brasilia** | **19.62** | **68** | P | **P** | **07 13 01.4** | **-0.4** |
| | comp=N,0.6nm,0.3s,baz=244,slow=8.3,SNR=7.8 | | | | | | |
| **BDFB** | **Brasilia** | **19.62** | **68** | P | **P** | **07 13 01.1** | **-0.7** |
| BDFB | | | | IAmb | IAmb | 07 13 02.6 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **MACA** | **Manacapuru-AM** | **21.64** | **17** | P | **P** | **07 13 21.0** | **-2.0** |
| MACA | | | | IAmb | IAmb | 07 13 43.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **27.04** | **14** | P | **P** | **07 14 09.5** | **-2.6** |
| BOAV | | | | IAmb | IAmb | 07 14 17.7 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.80** | **324** | P | **P** | **07 19 00.9** | **+1.7** |
| | comp=Z,0.3nm,0.8s,baz=154,slow=6.6,SNR=3.0 | | | | | | |
| **ANMO** | **Albuquerque** | **69.67** | **326** | P | **P** | **07 19 38.9** | **+2.6** |
| | comp=Z,0.2nm,0.3s,baz=162,slow=6.4,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.50** | **69** | P | **P** | **07 20 16.0** | **-0.5** |
| | comp=Z,0.4nm,0.6s,baz=245,slow=3.6,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.24** | **340** | P | **P** | **07 21 44.8** | **+0.8** |
| | comp=Z,0.2nm,0.5s,baz=134,slow=4.7,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.60** | **207** | PKP | **PKiKP** | **07 27 38.7** | **-0.1** |
| | comp=Z,0.2nm,0.5s,baz=154,slow=1.8,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.52** | **40** | PKPbc | **PKPbc** | **07 28 06.7** | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=284,slow=2.8,SNR=5.7 | | | | | | |

*MOS **07** 07:11:41.3±1.0,9.°26S×158.°91E,h10km,mb4.9/21,Error ellipse: s-maj=20.8km s-min=13.6km az=109.2*

*IDC **07** 07:11:43.0±0.4,9.°07S×158.°71E,h0km,mb4.5/27, mb1 4.6/30,mb1mx4.4/54,mbtmp4.5/30,ML4.2/3,MS3.9/21, Ms1 3.9/21,ms1mx3.7/53,Error ellipse: s-maj=13.6km s-min=11.6km az=41.0*

*BJI **07** 07:11:45.7±0.0,9.°10S×158.°70E,h10km,mb4.7/49, mB5.2/30,Ms4.8/9,Ms7 4.5/10*

*NEIC **07** 07:11:45.1±1.3,9.°06S±0.°08×158.°69E±0.°08,h10km±1km, mb5.0/70,Error ellipse: s-maj=14.7km s-min=11.6km az=31.0*

**ISC 07 07:11:44.7**±0.3,**9.04S**±0.05×**158.72E**±0.05,**h10km,n299,** σ1ᵖ**02**/281,**mb4.9/95,MS4.0**/23,**8C-13D, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **1.27** | **108** | Pn | **Pn** | **07 12 08.0** | **-0.5** |
| | 4µm,0.3s,baz=229,slow=5.0,SNR=447 | | | | | | |
| HNR | | | | Sn | **Sb** | **07 12 25.8** | **+0.7** |
| | 16µm,0.3s,baz=97,slow=23,SNR=14 | | | | | | |
| HNR | | | | LR | LR | 07 12 34.7 | |
| | comp=Z,4µm,18.4s,baz=268,slow=40 | | | | | | |
| **HNR** | **Honiara** | **1.27** | **108** | | **Pn** | **07 12 08.7** | **+0.2** |
| **HNR** | **Honiara** | **1.27** | **108** | P | **Pn** | **07 12 08.4** | **-0.1** |
| **SANVU** | **Saraoutou** | **10.45** | **128** | Pn | **Pn** | **07 14 15.0** | **+0.3** |
| SANVU | | | | Sn | **Sn** | **07 16 09.4** | **-2.5** |
| **SANVU** | **Saraoutou** | **10.45** | **128** | P | **Pn** | **07 14 15.3** | **+0.6** |
| **PMG** | **Port Moresby** | **11.42** | **267** | LR | LR | 07 18 39.6 | |
| | comp=Z,1µm,20.1s,baz=108,slow=36 | | | | | | |
| **DVP** | **Devils Point** | **12.61** | **134** | P | **Pn** | **07 14 45.6** | **+1.3** |
| **RTV** | **Rentapao** | **12.83** | **134** | P | **Pn** | **07 14 48.5** | **+1.2** |
| **LIFNC** | **LIFOU** | **14.27** | **146** | Pn | **Pn** | **07 15 06.0** | **-1.0** |
| **LIFNC** | **LIFOU** | **14.27** | **146** | P | **Pn** | **07 15 07.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **14.93** | **151** | *e*Pn | **Pn** | **07 15 17.8** | **+1.7** |
| | 57nm,1.4s | | | | | | |
| DZM | | | | *e*LR | LR | 07 18 41.2 | |
| | comp=Z,818nm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **14.93** | **151** | Pn | **Pn** | **07 15 16.8** | **+0.8** |
| | 0.5nm,0.3s,baz=328,slow=13,SNR=4.9 | | | | | | |
| DZM | | | | LR | LR | 07 20 35.2 | |
| | comp=Z,851nm,18.2s,baz=34,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.93** | **151** | | **Pn** | **07 15 18.9** | **+2.9** |
| **DZM** | **M

**BBOO Buckleboo 31.60 218** P **P** **07 18 08.0 +0.2**
**WRKA Warakurna 33.04 237** P **P** **07 18 19.2 -1.4**
baz=33,SNR=13
**WRKA Warakurna 33.04 257** P **P** **07 18 19.2 -1.4**
**FITZ Fitzroy Crossi 33.35 251** LR LR 07 30 53.0
comp=Z,123nm,21.2s,baz=60,slow=34
**FITZ Fitzroy Crossi 33.35 251** P **P** **07 18 22.4 -0.9**
baz=33,SNR=6.9
**HAZ Te Kaha 33.37 152** P **P** **07 18 24.0 +0.8**
**URZ Urewera 33.47 153** P **P** **07 18 23.9 -0.2**
comp=Z,13nm,0.9s,baz=10,slow=3.2,SNR=5.8
URZ LR LR 07 29 24.0
comp=Z,395nm,21.4s,baz=326,slow=32
**URZ Urewera 33.47 153** P **P** **07 18 24.7 +0.6**
**URZ Urewera 33.47 153** P **P** **07 18 24.8 +0.6**
**RUGZ Raukumara Rang 33.49 152** P **P** **07 18 23.3 -1.2**
**PKGZ Pakihiroa 33.61 152** P **P** **07 18 25.8 +0.3**
**WMGZ Waiomatatini S 33.71 151** P **P** **07 18 26.9 +0.6**
**MWZ Matawai 33.72 153** P **P** **07 18 28.1 +1.7**
**RAGZ Rawiri 33.80 153** P **P** **07 18 27.0 -0.1**
**PUZ Puketiti 33.84 152** P **P** **07 18 28.0 +0.6**
**BKZ Black Stump Fm 33.96 155** P **P** **07 18 28.8 +0.4**
BKZ IAmb IAmb 07 18 30.6
comp=Z,21nm,0.6s
**BKZ Black Stump Fm 33.96 155** P **P** **07 18 29.0 +0.6**
**SNGZ Shannon Statio 34.00 154** P **P** **07 18 29.6 +0.8**
**RIGZ Rimuhau 34.13 153** P **P** **07 18 30.3 +0.4**
**BATI Baumata 34.58 265** LR LR 07 33 42.7
comp=Z,186nm,19.4s,baz=88,slow=38
**THZ Tophouse 34.91 161** P **P** **07 18 36.0 -0.7**
**TUWZ Tuamarina 34.95 160** P **P** **07 18 37.3 +0.4**
**BFZ Birch Farm 35.14 157** P **P** **07 18 38.5 -0.1**
**KHZ Kahutara 35.70 161** P **P** **07 18 44.3 +0.9**
**FORT Forrest 35.83 229** P **P** **07 18 44.2 -0.5**
**MMRI Maumere 36.05 268** P **P** **07 18 48.6 +1.9**
comp=Z,24µmcomp=Z,40nm,0.8s
**KAPI Kappang 38.87 273** P **P** **07 19 11.4 +0.7**
comp=Z,4.1nm,0.7s,baz=206,slow=3.5,SNR=3.0
KAPI LR LR 07 36 53.8
comp=Z,77nm,18.6s,baz=106,slow=39
**TOLI2 Tolitoli 39.12 283** P **P** **07 19 11.8 -1.0**
TOLI2 IAmb IAmb 07 19 23.0
comp=Z,30nm,1.1s
**PSA00 Pilbara Seismi 39.39 247** P **P** **07 19 13.3 -1.7**
**PSA00 Pilbara Seismi 39.39 247** P **P** **07 19 14.8 -0.2**
PSA00 IAmb IAmb 07 19 22.6
comp=Z,6.3nm,0.8s
**MBWA Marble Bar 39.41 248** P **P** **07 19 14.2 -0.9**
**MBWA Marble Bar 39.41 248** P **P** **07 19 14.2 -0.9**
**RAR Rarotonga 41.72 112** LR LR 07 35 22.6
comp=Z,69nm,20.6s,baz=280,slow=34
**MYLDM Lahad Datu 42.51 288** P **P** **07 19 39.1 -1.7**
MYLDM IAmb IAmb 07 19 54.4
comp=Z,31nm,1.1s
**JAGI Jajag, Banyuwa 44.04 267** P **P** **07 19 51.3 -1.8**
JAGI IAmb IAmb 07 19 59.9
comp=Z,26nm,0.6s
**JOW Kunigami 46.31 321** LR LR 07 37 28.1
comp=Z,72nm,21.7s,baz=0.5,slow=33
**MJAR Matsushiro Arr 49.27 338** P **P** **07 20 33.6 -0.3**
comp=Z,1.4nm,0.6s,baz=166,slow=8.4,SNR=4.1
**MAT Matsushiro 49.28 338** P **P** **07 20 33.8 0.0**
**JNU Nakatsue 49.61 329** P **P** **07 20 34.5 -2.0**
comp=Z,7.9nm,0.9s,baz=23,slow=14,SNR=2.5
**LEM Lembang 50.63 269** P **P** **07 20 44.5 -0.2**
comp=Z,15nm,0.4s,baz=30,slow=22,SNR=1.5
LEM LR LR 07 43 31.3
comp=Z,59nm,18.6s,baz=324,slow=38
**PPT Papeete 50.89 105** LR LR 07 38 03.6
comp=Z,125nm,20.8s,baz=265,slow=31
**PPT2 Papeete2 50.89 105** *e*LR LR 07 35 36.2
comp=Z,257nm,23.2s
**KSRS Korea Array 54.51 330** P **P** **07 21 13.1 +0.3**
comp=Z,2.9nm,0.9s,baz=155,slow=9.3,SNR=9.7
**ASAJ Asahikawa 54.89 346** P **P** **07 21 16.3 +0.8**
comp=Z,8.7nm,1.0s,baz=337,slow=24,SNR=2.1
**NJ2 Nanjing 55.86 319** *e*P **P** **07 21 24.1 +1.4**
NJ2 pmax pmax
comp=Z,5.0nm,0.6s
**YSS Yuzh-Sakhalins 57.54 347** *e*P P 07 21 40.1 +5.8
YSS pmax pmax
comp=Z,10.0nm,0.9s
**USRK Ussuriysk Ar. 58.27 338** P **P** **07 21 41.1 +1.6**
comp=Z,2.1nm,0.5s,baz=134,slow=46,SNR=3.6
**CN2 Changchun 60.65 333** *e*P **P** **07 21 56.0 0.0**
CN2 *e*PP **PP** **07 24 12.1 +2.3**
CN2 *e*S **S** **07 30 11.1 -1.3**
CN2 *e*SS **SS** **07 34 11.3 0.0**
CN2 pmax pmax
comp=Z,10.0nm,1.3s
CN2 LR LR
comp=Z,220nm,8.0s
CN2 LR LR
comp=Z,210nm,8.0s
CN2 LR LR
comp=Z,250nm,10.0s
**TYV Tymovskoe 61.27 348** *e*P P 07 22 09.3 +9.3
TYV pmax pmax
comp=Z,10.0nm,1.0s
TYV pmax pmax
comp=Z,200nm,4.0s
**BNX BinXian 61.35 335** ⇑P **P** **07 22 01.5 +0.8**
BNX pmax pmax
comp=Z,13nm,1.3s
BNX pmax pmax
comp=Z,300nm,6.5s
**PET Petropavlovsk 61.82 360**⇓ *e*P **P** **07 22 04.2 +0.5**
**HNS HongShan 61.88 321** ⇑P **P** **07 22 04.7 +0.2**
HNS pmax pmax
comp=Z,6.0nm,1.3s
**PETK Petropavlovsk- 61.91 359** P **P** **07 22 04.4 0.0**
comp=Z,6.9nm,0.9s,baz=178,slow=7.5,SNR=9.3
**PETK Petropavlovsk- 61.91 359** P **P** **07 22 04.6 +0.2**
**KLR Kul'dur 62.67 340** P **P** **07 22 10.3 +0.7**
comp=Z,0.5nm,0.4s,baz=86,slow=14,SNR=2.4
**KLR Kul'dur 62.67 340**⇓ *e*P **P** **07 22 08.2 -1.3**
KLR pmax pmax
comp=Z,11nm,1.4s
**XAN Xi'an 63.74 315** P **P** **07 22 16.9 -0.2**
XAN pP sP 07 22 24.8 +3.9
XAN pmax pmax
comp=Z,7.0nm,0.8s
**KMI Kunming 64.22 303** ⇑P **P** **07 22 22.5 +1.9**
KMI pP sP 07 22 25.9 +1.4
KMI sP pP 07 22 28.2 +4.8
KMI pmax pmax
comp=Z,4.0nm,1.3s
KMI LR LR
comp=Z,130nm,28.7s
**CMAR Chiang Mai Arr 64.99 295** P **P** **07 22 26.4 +0.9**
comp=Z,1.2nm,0.4s,baz=119,slow=5.9,SNR=8.6
**CMAR Chiang Mai Arr 64.99 295** *i* P **P** **07 22 26.3 +0.8**
CMAR pmax pmax
comp=Z,1.0nm,0.2s
**CMAR Chiang Mai Arr 64.99 295** P **P** **07 22 24.8 -0.7**
**XLT XiLinHaoTe 65.33 327**⇑ *i*P **P** **07 22 27.1 -0.2**
XLT pmax pmax
comp=Z,35nm,1.2s
XLT pmax pmax
comp=Z,230nm,7.2s
**PZH PanZhiHua 65.61 304** P **P** **07 22 31.7 +2.2**
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,90nm,5.1s
**HHC Hu-ho-hao-te 65.94 322** *e*P **P** **07 22 31.7 +0.4**
HHC pmax pmax
comp=Z,5.0nm,0.8s
HHC pmax pmax
comp=Z,210nm,6.4s
**HIA Hailar 67.36 333**⇓ *e*P **P** **07 22 40.7 +0.6**
HIA pmax pmax
comp=Z,9.0nm,1.0s
**HIA Hailar 67.36 333** P **P** **07 22 40.0 -0.1**
HIA IAmb IAmb 07 22 49.7
comp=Z,12nm,0.8s
**ZEA Zeya 67.99 340** *e*P **P** **07 22 45.0 +1.1**
ZEA pmax pmax
comp=N,10.0nm,0.9s
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**LZH Lanzhou 68.36 315** *e*P **P** **07 22 48.0 +1.1**
LZH pP sP 07 22 52.5 +1.7
LZH sP pP 07 22 54.8 +5.1
LZH PP **PP** **07 25 21.5 +3.6**
LZH pmax pmax
comp=Z,24nm,1.3s
LZH LR LR
comp=Z,190nm,15.1s
LZH LR LR
comp=Z,380nm,17.6s
**VNDA Vanda 68.47 179** P **P** **07 22 46.9 +0.2**
comp=Z,6.7nm,0.9s,baz=344,slow=7.8,SNR=14
**VNDA Vanda 68.47 179** P **P** **07 22 46.7 +0.1**
VNDA IAmb IAmb 07 22 48.3
comp=Z,14nm,1.1s
**MA2 Magadan 68.69 356**⇓ *i*P **P** **07 22 48.1 -0.1**
MA2 pmax pmax
comp=Z,12nm,1.0s
**MA2 Magadan 68.69 356** P **P** **07 22 48.4 +0.2**
MA2 IAmb IAmb 07 22 57.0
comp=Z,9.8nm,0.9s
**SBA Scott Base 68.91 178** P **P** **07 22 49.7 +0.3**
**UNV Unalaska Valle 69.21 21** P **P** **07 22 51.5 0.0**
**SEY Seymchan 71.93 357**⇓ *i*P **P** **07 23 08.4 +0.5**
**ULN Ulaanbaatar 72.72 326** *d i*P **P** **07 23 14.4 +1.2**
ULN pmax pmax
comp=Z,12nm,1.0s
**ULN Ulaanbaatar 72.72 326** P **P** **07 23 14.0 +0.8**
ULN IAmb IAmb 07 23 23.2
comp=Z,18nm,1.0s
**GTA Gaotai 72.76 316** ⇓P **P** **07 23 14.7 +1.1**
GTA sP sP 07 23 22.6 +5.1
GTA pmax pmax
comp=Z,8.0nm,0.7s
GTA pmax pmax
comp=Z,70nm,4.4s
GTA LR LR
comp=Z,180nm,14.9s
GTA LR LR
comp=Z,220nm,16.4s
GTA LR LR
comp=Z,230nm,17.1s
**SONM Songino Array 73.06 326** P **P** **07 23 16.0 +0.8**
comp=Z,10nm,0.8s,baz=140,slow=5.8,SNR=53
**SONM Songino Array 73.06 326** P **P** **07 23 15.5 +0.3**
SONM IAmb IAmb 07 23 24.9
comp=Z,18nm,0.8s
**SHL Shillong 73.51 300** P **P** **07 23 18.2 -0.2**
SHL IAmb IAmb 07 23 27.7
comp=Z,26nm,1.1s
**YAK Yakutsk 74.37 346** P **P** **07 23 23.5 +1.1**
comp=Z,7.8nm,0.3s,baz=232,slow=1.3,SNR=2.7
**YAK Yakutsk 74.37 346**⇑ *e*P **P** **07 23 23.2 +0.8**
YAK pmax pmax
comp=Z,15nm,1.0s
**YAK Yakutsk 74.37 346** P **P** **07 23 22.8 +0.4**
**GOMU GeErMu 74.96 311** P **P** **07 23 26.9 0.0**
GOMU pmax pmax
comp=Z,1.0nm,0.7s
GOMU pmax pmax
comp=Z,150nm,5.0s
**BOD Bodaibo 75.90 337** *e*P **P** **07 23 30.3 -1.0**
BOD pmax pmax
comp=Z,8.0nm,1.9s
**BILL Bilibino 77.08 3** *de*P **P** **07 23 38.2 +0.4**
BILL *e* 07 23 46.8
BILL *e* 07 26 32.4
BILL *e*PPP PPP 07 28 22.8
BILL pmax pmax
comp=Z,12nm,0.9s
**BILL Bilibino 77.08 3** P **P** **07 23 37.9 +0.1**
BILL IAmb IAmb 07 23 48.3
comp=Z,19nm,0.9s
**TAPN Taplejung 77.62 301** *e*P P 07 23 50.3 +8.2
comp=Z,22nm,1.0s
**ODAN Odare 77.75 300** *e*P P 07 23 50.3 +7.5
comp=Z,38nm,0.9s
**Q19K Cape Douglas, 77.78 23** P **P** **07 23 41.9 0.0**
baz=228
**ANM Nome 78.19 15** P **P** **07 23 45.1 +1.1**
baz=216
**TNA Tin City 78.39 14** P **P** **07 23 45.3 +0.2**
**TNA Tin City 78.39 14** P **P** **07 23 46.0 +0.9**
baz=214
**JIRN Jiri 79.00 300** *e*P P 07 23 58.1 +8.3
comp=Z,27nm,0.9s
**GUN Gumba 79.33 301** *e*P P 07 23 59.7 +8.1
comp=Z,24nm,0.8s
**L19K White Mountain 79.54 20** P **P** **07 23 52.2 +0.6**
L19K IAmb IAmb 07 24 07.2
comp=Z,13nm,0.9s
**L19K White Mountain 79.54 20** P **P** **07 23 52.3 +0.7**
baz=227
**PKI Pulchoki 79.64 300** *e*P P 07 24 01.1 +7.8
comp=Z,30nm,1.0s
**PKIN Phulchoki 79.65 300** *e*P P 07 24 01.3 +8.0
comp=Z,21nm,0.8s
**TTA Tatalina 79.68 19** P **P** **07 23 53.0 +0.7**
baz=226
**KKN Kakani 79.81 300** *e*P P 07 24 02.2 +8.1
comp=Z,16nm,0.7s
**DMN Daman 79.91 300** *e*P P 07 24 02.9 +8.2
comp=Z,34nm,0.9s
**L20K Farewell, AK 80.08 20** P **P** **07 23 55.6 +1.1**
baz=228
**O22K Cooper Landing 80.30 23** P **P** **07 23 57.8 +2.1**
baz=232
**GKN Gorkha 80.41 300** *e*P P 07 24 05.4 +8.1
comp=Z,84nm,1.2s
**K20K Telida 80.61 20** P **P** **07 23 58.1 +0.8**
baz=227
**RC01 Rabbit Creek A 80.67 23** P **P** **07 23 57.4 -0.3**
baz=232
**QSPA South Pole Qui 80.95 180** P **P** **07 23 59.5 +0.2**
QSPA IAmb IAmb 07 24 00.5
comp=Z,16nm,1.1s
**PWL Port Wells 81.07 23** P **P** **07 24 00.5 +0.7**
baz=233
**J20K Nowinta River 81.14 19** P **P** **07 24 01.0 +0.9**
**J20K Nowinta River 81.14 19** P **P** **07 24 01.0 +0.9**
baz=227
**PMR Palmer 81.22 22** P **P** **07 24 00.8 +0.2**
baz=232
**KOLN Koldanda 81.24 300** *e*P P 07 24 09.5 +7.8
comp=Z,41nm,0.9s
**DANN Dangsing 81.25 301** *e*P P 07 24 09.4 +7.5
comp=Z,38nm,1.1s
**CUT Chulitna 81.30 21** P **P** **07 24 00.9 -0.1**
**CAST Castle Rocks 81.32 20** P **P** **07 24 00.9 -0.2**
CAST IAmb IAmb 07 24 15.4
comp=Z,8.9nm,0.8s
**CAST Castle Rocks 81.32 20** P **P** **07 24 01.1 0.0**
baz=229
**KNK Knik Glacier 81.36 23** P **P** **07 24 01.6 +0.2**
**CHUM Lake Minchumin 81.55 20** P **P** **07 24 02.7 +0.4**
baz=229
**RDOG Red Dog Mine 81.58 14** P **P** **07 24 02.8 +0.4**
RDOG IAmb IAmb 07 24 15.2
comp=Z,12nm,0.8s
**RDOG Red Dog Mine 81.58 14** P **P** **07 24 03.2 +0.8**
baz=218
**SML Sawmill 81.65 23** P **P** **07 24 03.7 +0.7**
SML IAmb IAmb 07 24 13.9
comp=Z,20nm,0.9s
**SML Sawmill 81.65 23** P **P** **07 24 03.6 +0.6**
baz=233
**PYUN Piuthan 81.84 300** *e*P P 07 24 12.3 +7.4
comp=Z,38nm,1.0s
**TRF Thorofare Moun 81.96 21** P **P** **07 24 03.9 -0.8**
TRF IAmb IAmb 07 24 21.6
comp=Z,16nm,1.1s
**TRF Thorofare Moun 81.96 21** P **P** **07 24 04.2 -0.5**
baz=231
**SCM Sheep Creek Mo 82.05 23** P **P** **07 24 04.9 -0.2**
baz=284
**BPAW Bear Paw Mtn. 82.13 20** P **P** **07 24 05.0 -0.4**
baz=230
**KLU Klutina 82.39 23** P **P** **07 24 07.5 +0.7**
baz=235
**RND Reindeer 82.44 21** P **P** **07 24 07.1 0.0**
**I21K Tanana 82.51 19** P **P** **07 24 08.2 +0.9**
I21K IAmb IAmb 07 24 17.6
comp=Z,7.8nm,0.9s
**I21K Tanana 82.51 19** P **P** **07 24 07.9 +0.6**
baz=229
**H21K Melozitna Rive 82.57 18** P **P** **07 24 08.1 +0.4**
**H21K Melozitna Rive 82.57 18** P **P** **07 24 08.0 +0.4**
baz=228
**MCK McKinley 82.61 21** P **P** **07 24 07.8 -0.1**
**MCK McKinley 82.61 21** P **P** **07 24 07.7 -0.2**
baz=232
**M24K Tolsona, Glenn 82.65 23** P **P** **07 24 09.4 +1.2**
baz=235
**BGLC Bering Glacier 82.71 25** P **P** **07 24 07.3 -1.1**
baz=238
**MLY Manley 82.81 19** P **P** **07 24 09.5 +0.5**
MLY IAmb IAmb 07 24 21.0
comp=Z,8.4nm,1.1s
**MLY Manley 82.81 19** P **P** **07 24 09.5 +0.5**
baz=230
**WMQ Urumqi 82.84 316** *e*P **P** **07 24 08.9 -0.7**
WMQ sP PcP 07 24 19.5 +5.1
WMQ pmax pmax
comp=Z,8.0nm,1.1s
WMQ pmax pmax
comp=Z,64nm,3.6s
WMQ LR LR
comp=Z,81nm,22.1s
**TIXI Tiksi 82.92 351**⇑ *e*P **P** **07 24 09.8 +0.5**
TIXI pmax pmax
comp=Z,8.0nm,1.8s
**N25K Chitina, Valde 82.98 24** P **P** **07 24 10.9 +0.9**
**N25K Chitina, Valde 82.98 24** P **P** **07 24 09.8 -0.1**
baz=236
**NEA2 Nenana 83.09 20** P **P** **07 24 09.8 -0.6**
NEA2 IAmb IAmb 07 24 19.9
comp=Z,15nm,1.2s
**NEA2 Nenana 83.09 20** P **P** **07 24 10.1 -0.3**
baz=232
**HARP HAARP 83.21 23** P **P** **07 24 10.6 -0.4**
baz=236
**I23K Minto, Yukon-K 83.34 20** P **P** **07 24 11.9 +0.3**
I23K IAmb IAmb 07 25 21.0
comp=Z,34nm,1.9s
**I23K Minto, Yukon-K 83.34 20** P **P** **07 24 11.8 +0.3**
baz=232
**WRH Wood River Hil 83.35 20** P **P** **07 24 11.4 -0.3**
WRH IAmb IAmb 07 24 23.1
comp=Z,8.0nm,1.0s
**PAX Paxson 83.41 22** P **P** **07 24 12.4 +0.2**
baz=235
**CCB Clear Creek Bu 83.56 20** P **P** **07 24 11.9 -0.8**
**MDM Murphy Dome 83.60 20** P **P** **07 24 13.0 0.0**
MDM IAmb IAmb 07 24 22.5
comp=Z,12nm,1.0s
**TCOL CIGO, UAF Yank 83.68 20** P **P** **07 24 13.1 -0.2**
**TCOL CIGO, UAF Yank 83.68 20** P **P** **07 24 12.5 -0.8**
baz=233
**COLA College 83.68 20**⇑ *e*P **P** **07 24 12.7 -0.6**
COLA pmax pmax
comp=Z,14nm,0.8s
**COLA College 83.68 20** P **P** **07 24 13.0 -0.4**
**HDA Harding Lake 83.71 21** P **P** **07 24 12.9 -0.7**
HDA IAmb IAmb 07 24 29.1
comp=Z,6.1nm,0.8s
**HDA Harding Lake 83.71 21** P **P** **07 24 13.6 0.0**
baz=234
**IL31 83.95 21** P **P** **07 24 14.1 -0.6**
IL31 IAmb IAmb 07 24 26.1
comp=Z,9.1nm,1.1s
**ILAR Eielson Array 83.95 21** P **P** **07 24 13.8 -0.9**
comp=Z,1.9nm,0.7s,baz=258,slow=4.1,SNR=19
**ILAR Eielson Array 83.95 21** P **P** **07 24 14.5 -0.3**
**M26K Nabesna, AK 84.05 23** P **P** **07 24 15.8 +0.4**
baz=238
**RIDG Independent Ri 84.08 22** P **P** **07 24 16.1 +0.6**
RIDG IAmb IAmb 07 24 28.4
comp=Z,19nm,1.2s
**RIDG Independent Ri 84.08 22** P **P** **07 24 15.4 -0.1**
baz=236
**L26K Log Cabin Wild 84.25 23** P **P** **07 24 16.9 +0.5**
baz=237
**H24K Noodor Dome 84.25 19** P **P** **07 24 16.9 +0.6**
baz=233
**DOT Dot Lake 84.32 22** P **P** **07 24 17.1 +0.3**
DOT IAmb IAmb 07 24 29.0
comp=Z,12nm,0.9s
**J25K Salcha River, 84.39 21** P **P** **07 24 17.3 +0.2**
J25K IAmb IAmb 07 24 27.6
comp=Z,22nm,1.4s
**J25K Salcha River, 84.39 21** P **P** **07 24 17.4 +0.2**
baz=235
**COLD Coldfoot 84.39 18** P **P** **07 24 18.3 +1.3**
baz=230
**M27K Edge Creek, AK 84.47 24** P **P** **07 24 18.5 +0.9**
baz=239
**SCRK Sand Creek 84.53 22** P **P** **07 24 18.5 +0.6**
SCRK IAmb IAmb 07 24 28.4
comp=Z,9.7nm,1.0s
**SCRK Sand Creek 84.53 22** P **P** **07 24 18.3 +0.4**
baz=237
**PRP Porcupine Dome 84.85 20** P **P** **07 24 20.8 +1.3**
baz=235
**L27K Beaver Creek, 84.86 23** P **P** **07 24 20.6 +1.1**
baz=239
**J26L Joseph Creek 84.97 22** P **P** **07 24 20.8 +0.7**
**J26L Joseph Creek 84.97 22** P **P** **07 24 20.7 +0.6**
baz=237
**DGZ Jazzator, Alta 85.01 322**⇓ *e*P **P** **07 24 20.3 -0.4**
DGZ pmax pmax
comp=Z,4.0nm,0.8s
**SKAG Skagway 85.91 28** P **P** **07 24 25.9 +1.2**
baz=245
**EGAK Eagle 86.00 22** P **P** **07 24 26.6 +1.5**
EGAK IAmb IAmb 07 24 52.4
comp=Z,18nm,1.4s
**DAWY Dawson 86.31 23** P **P** **07 24 28.0 +1.3**
baz=241
**N31M Braeburn, Yuko 86.58 26** P **P** **07 24 29.3 +1.3**
**N31M Braeburn, Yuko 86.58 26** P **P** **07 24 29.7 +1.6**
baz=244
**I29M Ogilvie Camp, 87.34 22** P **P** **07 24 33.0 +1.3**
I29M IAmb IAmb 07 24 43.8
comp=Z,8.8nm,1.0s
**I29M Ogilvie Camp, 87.34 22** P **P** **07 24 32.5 +0.8**
baz=242
**N02D Trinity Center 87.35 48** P **P** **07 24 33.1 +0.8**
baz=256
**MK31 Makanchi Array 87.38 318**⇓ *i*P **P** **07 24 31.9 -0.4**
**MK31 Makanchi Array 87.38 318** P **P** **07 24 32.1 -0.2**
**MKAR Makanchi Array 87.38 318** P **P** **07 24 31.9 -0.3**
comp=Z,3.0nm,0.6s,baz=98,slow=5.8,SNR=50
**MKAR Makanchi Array 87.38 318** *i* P **P** **07 24 32.0 -0.3**
MKAR pmax pmax
comp=Z,3.0nm,0.6s
**MKAR Makanchi Array 87.38 318** P **P** **07 24 32.1 -0.2**
**RPN Rapa Nui 87.65 117** LR LR 07 56 05.5
comp=Z,62nm,19.6s,baz=202,slow=30
**ZALV Zalesovo Beam 87.94 325** P **P** **07 24 33.3 -1.4**
comp=Z,1.9nm,0.6s,baz=118,slow=6.9,SNR=7.2
**ZALV Zalesovo Beam 87.94 325** *i* P **P** **07 24 33.2 -1.5**
ZALV pmax pmax
comp=Z,2.0nm,0.6s
**ZALV Zalesovo Beam 87.94 325** P **P** **07 24 33.7 -1.0**
**EPYK Eagle Plains 88.39 21** P **P** **07 24 38.0 +1.3**
**EPYK Eagle Plains 88.39 21** P **P** **07 24 37.7 +1.0**
baz=243
**EDW2 Edwards Air Fo 89.65 55** P **P** **07 24 44.1 +0.8**
baz=259
**CWC Cottonwood Cre 89.88 53** P **P** **07 24 46.1 +1.6**
baz=259
**RYN Ryan 89.97 51** P **P** **07 24 44.5 -0.4**
**109C Camp Elliot, M 90.00 57** P **P** **07 24 46.6 +1.7**
baz=259
**LRMC Laurel Mtn Rad 90.02 54** P **P** **07 24 46.7 +1.6**
baz=259
**NVAR Mina Array Bea 90.10 51** P **P** **07 24 46.9 +1.3**
comp=Z,3.4nm,1.1s,baz=244,slow=5.7,SNR=12
**NVAR Mina Array Bea 90.10 51** P **P** **07 24 45.8 +0.2**
**NV11 Mina Array Sit 90.21 51** P **P** **07 24 44.4 -1.6**
NV11 IAmb IAmb 07 25 05.0
comp=Z,12nm,1.4s
**PFO Pinyon Flats O 90.66 56** LR LR 07 57 51.2
comp=Z,161nm,20.2s,baz=284,slow=30
**KURK Kurchatov 90.72 321**⇓ *e*P **P** **07 24 45.1 -2.8**
KURK pmax pmax
comp=Z,3.0nm,1.6s
**KURBB Kurchatov Arra 90.76 321** P **P** **07 24 46.2 -1.8**
comp=Z,0.2nm,0.2s,baz=91,slow=3.8,SNR=4.8
**BOOM Boomskoye usch 90.76 313** P **P** **07 24 47.4 -1.2**
**FURC Furnace Creek, 90.85 53** P **P** **07 24 50.0 +1.2**
baz=259
**BELC Belle Mtn. Jos 91.11 56** P **P** **07 24 51.7 +1.4**
baz=260
**GMRC Granite Mounta 91.52 55** P **P** **07 24 53.3 +1.1**
baz=260

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IRM | Iron Mountain | 91.83 | 56 | P | P | 07 24 54.9 | +1.4 | |
| | baz=260 | | | | | | | |
| AAK | Ala-Archa | 91.84 | 313 | P | P | 07 24 52.3 | -1.2 | |
| | comp=Z,0.5nm,0.4s,baz=204,slow=18,SNR=1.9 | | | | | | | |
| AAK | Ala-Archa | 91.84 | 313 | *eP* | P | 07 24 52.3 | -1.2 | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,11nm,3.7s | | | | | | | |
| R11A | Troy Canyon, C | 92.19 | 52 | P | P | 07 24 56.3 | +1.0 | |
| | baz=260 | | | | | | | |
| ELK | Elko | 92.85 | 49 | P | P | 07 24 59.3 | +1.0 | |
| | comp=Z,1.8nm,1.1s,baz=263,slow=5.8,SNR=3.5 | | | | | | | |
| LPIG | La Paz | 94.51 | 66 | LR | LR | 08 02 06.6 | | |
| | comp=Z,92nm,18.4s,baz=194,slow=32 | | | | | | | |
| BRVK | Borovoye | 96.22 | 323 | *eP* | P | 07 25 11.2 | -1.9 | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,13nm,4.4s | | | | | | | |
| YKA | Yellowknife Ar | 96.41 | 28 | P | P | 07 25 12.8 | -1.0 | |
| | comp=Z,0.4nm,0.7s,baz=260,slow=4.9,SNR=7.5 | | | | | | | |
| YKA | | | | PKiKP | PKiKP | 07 29 50.2 | -1.2 | |
| | comp=Z,0.2nm,0.7s,baz=255,slow=1.5,SNR=5.5 | | | | | | | |
| PDAR | Pinedale Array | 97.32 | 48 | P | P | 07 25 18.6 | -0.2 | |
| | comp=Z,0.3nm,0.6s,baz=252,slow=4.6,SNR=2.8 | | | | | | | |
| ANMO | Albuquerque | 99.04 | 56 | LR | LR | 08 08 40.4 | | |
| | comp=Z,72nm,18.1s,baz=279,slow=34 | | | | | | | |
| ARCES | ARCESS Array B | 112.59 | 344 | PKiKP | PKiKP | 07 30 19.8 | -1.1 | |
| | comp=Z,1.7nm,0.7s,baz=48,slow=5.4,SNR=4.4 | | | | | | | |
| OBN | Obninsk | 115.46 | 327 | *e*PKiKP | PKiKP | 07 30 22.1 | -4.7 | |
| OBN | | | | *e*PPP | PPP | 07 33 57.1 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| FINES | FINESS Array B | 117.29 | 337 | PKP | PKPdf | 07 30 28.9 | -1.2 | |
| | comp=Z,1.8nm,0.7s,baz=119,slow=1.7,SNR=4.7 | | | | | | | |
| TKL | Tuckaleechee C | 117.52 | 55 | PKP | PKPdf | 07 30 30.3 | -1.2 | |
| | comp=Z,3.0nm,0.7s,baz=160,slow=7.6,SNR=5.4 | | | | | | | |
| AKASG | Malin Array Be | 121.33 | 325 | PKP | PKPdf | 07 30 37.3 | -0.9 | |
| | comp=Z,2.3nm,0.6s,baz=53,slow=2.3,SNR=16 | | | | | | | |
| BOSA | Boshof | 121.54 | 228 | PKP | PKPdf | 07 30 38.1 | -1.4 | |
| | comp=Z,1.4nm,0.6s,baz=92,slow=9.3,SNR=6.3 | | | | | | | |
| NB2 | NORSAR Subarra | 122.81 | 342 | PKPdf | PKPdf | 07 30 39.7 | -1.2 | |
| | comp=Z,0.7nm,0.6s,baz=38,slow=1.7 | | | | | | | |
| NOA | NORSAR Array B | 122.81 | 342 | PKP | PKPdf | 07 30 39.7 | -1.2 | |
| | comp=Z,12nm,0.3s,baz=38,slow=1.7,SNR=3.2 | | | | | | | |
| ROSC | El Rosal | 127.22 | 91 | PKP | PKPdf | 07 30 51.0 | -0.2 | |
| | comp=Z,7.3nm,0.6s,baz=162,slow=23,SNR=6.7 | | | | | | | |
| LPAZ | La Paz | 127.24 | 118 | PKP | PKPdf | 07 30 51.5 | +0.1 | |
| | comp=Z,2.9nm,0.8s,baz=106,slow=0.7,SNR=8.9 | | | | | | | |
| CPUP | Villa Florida | 130.37 | 136 | PKP | PKPdf | 07 30 55.1 | -1.2 | |
| | comp=Z,2.7nm,1.0s,baz=177,slow=1.9,SNR=4.1 | | | | | | | |
| GERES | GERESS Array B | 130.68 | 330 | PKP | PKPdf | 07 30 56.9 | +0.6 | |
| | comp=Z,1.6nm,0.7s,baz=81,slow=1.9,SNR=15 | | | | | | | |
| BDFB | Brasilia | 143.90 | 133 | PKP | PKPab | 07 31 18.8 | +0.1 | |
| | comp=Z,5.3nm,0.8s,baz=172,slow=2.8,SNR=13 | | | | | | | |
| TORD | Torodi Ar. Bea | 157.10 | 282 | PKP | PKPdf | 07 31 42.1 | +0.2 | |
| | comp=Z,0.9nm,1.1s,baz=44,slow=1.1,SNR=2.7 | | | | | | | |

*IDC* ***07*** *07:12:07.0±0.8, 13°.56N×121°.18E, h112km±5km, mb3.4/9, mb1 3.6/9, mb1mx3.3/49, mbtmp3.8/9, Error ellipse: s-maj=52.7km s-min=15.1km az=63.0*

*MAN* ***07*** *07:12:08.1, 13°.48N×120°.69E, h90km, mb4.5, ML3.3, MS3.1*

**ISC 07 07:12:07.5±0.8, 13°.52N±0°.06×120°.86E±0°.10, h110km±6km, n21, σ1°.42/25, mb3.8/9, 5C-4D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PGP | Puerto Galera | 0.09 | 98 | *eP* | | | Pn | 07 12 22.6 | -0.1 |
| PGP | | | | *i* | S | | Sn | 07 12 33.7 | -0.5 |
| TGY | Tagaytay City | 0.59 | 8 | P | | | Pn | 07 12 26.1 | +1.0 |
| | 997nm,0.3s,baz=192,slow=1.1,SNR=42 | | | | | | | | |
| TGY | | | | S | | | Sn | 07 12 39.5 | +1.1 |
| | 560nm,0.3s,baz=79,slow=20,SNR=8.7 | | | | | | | | |
| TGY | Tagaytay City | 0.59 | 8 | *eP* | | | Pn | 07 12 25.9 | +0.8 |
| TGY | | | | *i* | S | | Sn | 07 12 38.3 | 0.0 |
| MACP | Maragondon, Ca | 0.76 | 350 | *i* | P | | Pn | 07 12 26.7 | +0.3 |
| LQP | Lukban | 0.89 | 48 | *eP* | | | Pn | 07 12 29.5 | +1.6 |
| LQP | | | | *i* | S | | Sn | 07 12 39.4 | -3.8 |
| BOAC | Boac | 0.96 | 93 | *i* | P | | Pn | 07 12 30.1 | +1.8 |
| SJMP | San Jose | 1.08 | 166 | *eP* | | | Pn | 07 12 30.3 | +0.7 |
| PCPH | Palayan | 2.05 | 6 | *eP* | | | Pn | 07 12 41.7 | +0.6 |
| SCZP | Santa Cruz | 2.43 | 338 | *eP* | | | Pn | 07 12 46.3 | +0.3 |
| CUYO | Cuyo Island | 2.65 | 177 | *eP* | | | Pn | 07 12 49.5 | +0.5 |
| RCP | Roxas | 2.68 | 136 | *eP* | | | Pn | 07 12 51.4 | +2.0 |
| CMAR | Chiang Mai Arr | 21.62 | 286 | P | | | P | 07 16 51.4 | +2.4 |
| | 0.7nm,0.3s,baz=91,slow=9.0,SNR=1.3 | | | | | | | | |
| WRA | Warramunga Arr | 35.80 | 158 | P | | | P | 07 18 54.5 | -1.9 |
| | 0.5nm,0.4s,baz=334,slow=11,SNR=6.9 | | | | | | | | |
| SONM | Songino Array | 36.28 | 343 | P | | | P | 07 19 00.1 | -0.2 |
| | 0.2nm,0.5s,baz=157,slow=7.7,SNR=2.1 | | | | | | | | |
| ASAR | Alice Springs | 39.09 | 161 | P | | | P | 07 19 23.1 | -1.1 |
| | 0.9nm,0.4s,baz=335,slow=6.7,SNR=7.8 | | | | | | | | |
| MEEK | Meekatharra | 39.97 | 183 | P | | | P | 07 19 30.7 | -0.7 |
| | baz=42,SNR=10 | | | | | | | | |
| MKAR | Makanchi Array | 46.27 | 324 | P | | | P | 07 20 22.3 | +0.4 |
| | 0.4nm,0.5s,baz=128,slow=7.9,SNR=6.8 | | | | | | | | |
| ZALV | Zalesovo Beam | 49.29 | 333 | P | | | P | 07 20 44.8 | -0.3 |
| | 0.6nm,0.3s,baz=129,slow=4.2,SNR=4.0 | | | | | | | | |
| AAK | Ala-Archa | 49.30 | 315 | P | | | P | 07 20 47.1 | +1.5 |
| | 0.7nm,0.4s,baz=111,slow=11,SNR=1.8 | | | | | | | | |
| KURBB | Kurchatov Arra | 50.43 | 326 | P | | | P | 07 20 53.8 | +0.1 |
| | 0.4nm,0.4s,baz=116,slow=9.0,SNR=4.5 | | | | | | | | |
| ARCES | ARCESS Array B | 79.31 | 339 | P | | | P | 07 24 00.7 | 0.0 |
| | 3.7nm,0.9s,baz=89,slow=5.7,SNR=2.0 | | | | | | | | |

**IDC 07 07:22:58.2±1.7, 2°.80N×128°.63E, h0km, mb3.8/5, mb1 4.0/5, mb1mx3.3/51, mbtmp3.8/5, Error ellipse: s-maj=98.1km s-min=22.1km az=69.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| FITZ | Fitzroy Crossi | 20.98 | 188 | P | | | Pn | 07 27 44.7 | -1.0 |
| | 1.2nm,0.7s,baz=34,slow=12,SNR=2.3 | | | | | | | | |
| WRA | Warramunga Arr | 23.29 | 166 | P | | | P | 07 28 07.7 | -0.1 |
| | 1.7nm,0.4s,baz=344,slow=10.0,SNR=26 | | | | | | | | |
| ASAR | Alice Springs | 26.81 | 169 | P | | | P | 07 28 39.8 | -0.6 |
| | 1.1nm,0.5s,baz=352,slow=7.4,SNR=42 | | | | | | | | |
| STKA | Stephens Creek | 36.62 | 161 | P | | | P | 07 30 05.7 | -0.7 |
| | 1.0nm,0.4s,baz=339,slow=6.1,SNR=5.8 | | | | | | | | |
| MKAR | Makanchi Array | 59.40 | 325 | P | | | P | 07 33 02.9 | +0.4 |
| | 0.5nm,0.6s,baz=117,slow=7.5,SNR=9.5 | | | | | | | | |

*BJI* ***07*** *07:25:30.3±0.0, 13°.67N×145°.86E, h80km, mb4.8/66, mB5.2/37, Ms4.4/13, Ms7 4.2/13*

*DJA* ***07*** *07:25:35.6±0.8, 14°.N±5°.×14°.6E±°, h77km±5km, M5.1/19, mB5.5/5, mb4.8/19, MLv5.3/1, Mw(mB)5.0/5*

*MOS* ***07*** *07:25:38.1±1.2, 14°.15N×145°.15E, h101km, mb4.9/16, Error ellipse: s-maj=13.1km s-min=6.0km az=102.8*

*IDC* ***07*** *07:25:38.4±0.5, 14°.12N×145°.27E, h90km±4km, mb4.5/36, mb1 4.5/37, mb1mx4.3/61, mbtmp4.8/37, MS3.7/25, Ms1 3.7/25, ms1mx3.4/60, Error ellipse: s-maj=13.0km s-min=7.4km az=95.0*

*NEIC* ***07*** *07:25:39.5±1.2, 14°.09N±0°.06×145°.22E±0°.09, h89km±5km, mb5.1/236, Error ellipse: s-maj=13.0km s-min=7.4km az=115.0*

*GCMT* ***07*** *07:25:41.5±0.3, 13°.98N±0°.03×145°.27E±0°.03, h95km±5km, MW4.9/85, Moment Tensor Solution. s21,c23; s85,c102; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=1.37±.13; Mθθ=0.76±.15; Mφφ=2.13±.13; Mrθ=1.35±.06; Mrφ=-1.71±.16; Mθφ=-0.18±.08; Best double couple: M=2.87200×10^16 NP1:φs=12.00000°, δ56.00000°, λ=-30.00000°. NP2: φs=119.00000°, δ66.00000°, λ=-142.00000°. Principal axes: T 2.9650, Plg6.0000°, Azm243.0000°; N -0.1900, Plg46.0000°, Azm147.0000°; P -2.7790, Plg43.0000°, Azm339.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 07 07:25:37.5±0.4, 14°.14N±0°.04×145°.32E±0°.06, h82km±3km, h83km:pP-P, n516, σ1°.23/522, mb5.0/176, 10C-15D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| GUMO | Guam | 0.70 | 218 | P | | | Pn | 07 25 55.1 | +1.8 |
| | 4μm,0.3s,baz=160,slow=1.8,SNR=1358 | | | | | | | | |
| GUMO | | | | S | | | Sn | 07 26 05.9 | +0.8 |
| | 4μm,0.3s,baz=14,slow=17,SNR=10 | | | | | | | | |
| GUMO | | | | LR | | | LR | 07 26 15.7 | |
| | comp=Z,13μm,20.6s,baz=41,slow=57 | | | | | | | | |
| GUMO | Guam | 0.70 | 218 | Pn | | | Pn | 07 25 55.2 | +1.8 |
| GUMO | | | | | | | Sn | 07 26 06.3 | +1.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GUMO | Guam | 0.70 | 218 | P | | Pn | 07 25 55.3 | +2.0 |
| PATS | Pohnpei | 14.69 | 118 | Pn | | Pn | 07 29 00.3 | -0.8 |
| JAY | Jayapura | 17.17 | 196 | P | | P | 07 29 33.5 | +0.9 |
| JAY | 0.7nm,0.3s,baz=33,slow=4.9,SNR=8.7 | | | LR | | LR | 07 34 44.7 | |
| | comp=Z,338nm,21.2s,baz=14,slow=32 | | | | | | | |
| JAY | Jayapura | 17.17 | 196 | P | | P | 07 29 34.1 | +1.5 |
| | 44nm,1.0s | | | | | | | |
| SMPI | Sarmi | 17.31 | 203 | P | | P | 07 29 36.1 | +1.9 |
| | 2um50nm,1.3s | | | | | | | |
| JHJ2 | Mitsune | 19.54 | 346 | P | | P | 07 30 00.2 | +1.7 |
| JOW | Kunigami | 20.32 | 311 | P | | Pn | 07 30 08.9 | -0.9 |
| | 32nm,0.5s,baz=130,slow=12,SNR=7.3 | | | | | | | |
| JOW | Kunigami | 20.32 | 311 | P | | Pn | 07 30 10.4 | +0.6 |
| JOW | | | | IAmb | | IAmb | 07 30 12.1 | |
| | comp=Z,118nm,1.2s | | | | | | | |
| SIJI | Sorong | 20.40 | 224 | P | | P | 07 30 09.3 | +1.3 |
| | comp=Z,22nm,0.8s,baz=143,slow=23,SNR=5.2 | | | | | | | |
| SWI | Sorong | 20.40 | 224 | P | | Pn | 07 30 11.4 | +0.7 |
| | comp=Z,43nm,1.0s | | | | | | | |
| FAKI | Fak Fak | 21.33 | 218 | P | | P | 07 30 19.3 | +1.3 |
| | comp=Z,56nm,0.9s | | | | | | | |
| FAKI | Fak Fak | 21.33 | 218 | P | | P | 07 30 19.0 | +1.0 |
| FAKI | | | | IAmb | | IAmb | 07 30 21.6 | |
| | comp=Z,40nm,0.6s | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 21.36 | 72 | T | | T | 07 53 51.6 | |
| | baz=257,slow=75,SNR=22 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 21.37 | 72 | T | | T | 07 53 33.8 | |
| | baz=257,slow=75,SNR=13 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 21.38 | 72 | T | | T | 07 53 52.8 | |
| | baz=257,slow=75,SNR=21 | | | | | | | |
| JSU | Suzuyama | 22.01 | 324 | P | | P | 07 30 28.5 | +3.4 |
| JMN | Monobe | 22.09 | 334 | P | | P | 07 30 29.3 | +3.3 |
| JMN | | | | IAmb | | IAmb | 07 30 32.0 | |
| | comp=Z,51nm,0.7s | | | | | | | |
| INU | Inuyama | 22.40 | 342 | P | | P | 07 30 31.1 | +1.9 |
| INU | | | | IAmb | | IAmb | 07 30 33.5 | |
| | comp=Z,97nm,1.0s | | | | | | | |
| INU | Inuyama | 22.40 | 342 | P | | P | 07 30 31.3 | +2.1 |
| JGF | Kuroka | 22.54 | 343 | P | | P | 07 30 32.2 | +1.5 |
| JNU | Nakatsue | 23.02 | 328 | P | | P | 07 30 36.4 | +0.8 |
| | comp=Z,17nm,0.5s,baz=102,slow=1.2,SNR=16 | | | | | | | |
| JNU | Nakatsue | 23.02 | 328 | P | | P | 07 30 36.9 | +1.2 |
| JNU | Nakatsue | 23.02 | 328 | P | | P | 07 30 36.9 | +1.2 |
| MJAR | Matsushiro Arr | 23.20 | 345 | P | | P | 07 30 37.9 | +0.6 |
| | comp=Z,18nm,0.5s,baz=181,slow=11,SNR=74 | | | | | | | |
| MJAR | | | | LR | | LR | 07 38 34.6 | |
| | comp=Z,278nm,22.0s,baz=172,slow=33 | | | | | | | |
| MJAR | Matsushiro Arr | 23.20 | 345 | IAmb | | IAmb | 07 30 40.0 | |
| | comp=Z,31nm,0.7s | | | | | | | |
| MAJO | Matsushiro | 23.20 | 345 | *d* | *i*P | P | 07 30 38.8 | +1.5 |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,44nm,0.6s | | | | | | | |
| MAJO | Matsushiro | 23.20 | 345 | P | | P | 07 30 37.9 | +0.5 |
| MAJO | | | | IAmb | | IAmb | 07 30 40.7 | |
| | comp=Z,122nm,1.2s | | | | | | | |
| MAJO | Matsushiro | 23.20 | 345 | P | | P | 07 30 37.8 | +0.5 |
| MAT | Matsushiro | 23.20 | 345 | P | | P | 07 30 37.4 | +0.1 |
| MAT | | | | S | | S | 07 34 33.4 | -9.3 |
| MJB9 | Matsu-Tunnel | 23.20 | 345 | P | | P | 07 30 37.9 | +0.5 |
| MJB9 | | | | IAmb | | IAmb | 07 30 40.0 | |
| | comp=Z,56nm,0.6s | | | | | | | |
| PMG | Port Moresby | 23.46 | 175 | P | | P | 07 30 39.8 | -0.1 |
| | comp=Z,11nm,0.6s,baz=354,slow=7.2,SNR=4.6 | | | | | | | |
| PMG | | | | pP | | pwP | 07 30 57.8 | -2.6 |
| | comp=Z,19nm,0.7s,baz=346,slow=12,SNR=3.6 | | | | | | | |
| PMG | | | | LR | | LR | 07 39 06.1 | |
| | comp=Z,123nm,18.4s,baz=336,slow=34 | | | | | | | |
| JHS | Saijyo | 23.50 | 334 | P | | P | 07 30 40.2 | +0.1 |
| JHS | | | | IAmb | | IAmb | 07 30 43.1 | |
| | comp=Z,50nm,0.8s | | | | | | | |
| JMM | Marumori | 23.97 | 351 | P | | P | 07 30 45.4 | +1.2 |
| YULB | Yu-li | 24.50 | 296 | P | | P | 07 30 50.1 | +0.8 |
| JSD | Sado | 24.61 | 347 | P | | P | 07 30 50.8 | +0.7 |
| JSD | | | | IAmb | | IAmb | 07 30 55.5 | |
| | comp=Z,70nm,0.7s | | | | | | | |
| KSRS | Korea Array | 27.91 | 329 | P | | P | 07 31 20.9 | +1.1 |
| | comp=Z,6.8nm,0.8s,baz=141,slow=9.7,SNR=26 | | | | | | | |
| KSAR | Wonju Array Be | 27.92 | 329 | P | | P | 07 31 21.8 | +1.9 |
| KS19 | Wonju Array Si | 27.97 | 329 | P | | P | 07 31 22.1 | +1.8 |
| JKA | Kamikawa-asahi | 29.96 | 356 | P | | P | 07 31 38.6 | +0.6 |
| JKA | Kamikawa-asahi | 29.96 | 356 | IAmb | | IAmb | 07 31 41.6 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| ASAJ | Asahikawa | 29.97 | 356 | P | | P | 07 31 38.6 | +0.6 |
| | comp=Z,8.6nm,0.8s,baz=191,slow=8.6,SNR=6.0 | | | | | | | |
| TARA | Tarawa | 30.11 | 113 | P | | P | 07 31 39.4 | -0.1 |
| MSHR | Mys Shultsa | 30.86 | 339 | *de*P | | P | 07 31 47.2 | +1.3 |
| MSHR | | | | pmax | | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | | |
| VLA | Vladivostok | 31.11 | 341 | *c* | *i*P | P | 07 31 50.1 | +2.1 |
| VLA | | | | pmax | | pmax | | |
| | comp=Z,98nm,1.5s | | | | | | | |
| SOEI | Soe | 31.62 | 222 | P | | P | 07 31 52.6 | -0.4 |
| USA0B | Ussuriysk Arra | 32.05 | 342 | P | | P | 07 31 58.0 | +1.7 |
| USA0B | | | | IAmb | | IAmb | 07 31 60.0 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| USRK | Ussuriysk Ar. | 32.05 | 342 | P | | P | 07 31 57.8 | +1.5 |
| | comp=Z,14nm,0.7s,baz=142,slow=8.1,SNR=22 | | | | | | | |
| USRK | Ussuriysk Ar. | 32.05 | 342 | P | | P | 07 31 58.1 | +1.8 |
| YSS | Yuzh-Sakhalins | 32.78 | 357 | *eP* | | P | 07 32 04.6 | +1.9 |
| MDJ | Mudanjiang | 33.20 | 339 | P | | P | 07 32 07.7 | +1.4 |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,190nm,7.1s | | | | | | | |
| MDJ | Mudanjiang | 33.20 | 339 | P | | P | 07 32 07.4 | +1.1 |
| MDJ | | | | IAmb | | IAmb | 07 32 08.7 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| CTA | Charters Tower | 34.03 | 178 | P | | P | 07 32 14.2 | +0.5 |
| | comp=Z,1.5nm,0.4s,baz=357,slow=9.6,SNR=3.7 | | | | | | | |
| CTA | | | | pP | | pwP | 07 32 33.8 | -1.2 |
| | comp=Z,2.3nm,0.6s,baz=5.0,slow=6.3,SNR=2.4 | | | | | | | |
| CTA | | | | LR | | LR | 07 45 23.9 | |
| | comp=Z,74nm,19.6s,baz=2.0,slow=35 | | | | | | | |
| CTAO | Charters Tower | 34.03 | 178 | P | | P | 07 32 15.3 | +1.5 |
| CN2 | Changchun | 34.10 | 334 | *eP* | | P | 07 32 13.8 | -0.4 |
| CN2 | | | | *e*PP | | PnPn | 07 33 30.4 | -0.1 |
| CN2 | | | | *e*S | | S | 07 37 33.8 | -0.4 |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,250nm,7.5s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,220nm,10.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,210nm,10.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,250nm,12.0s | | | | | | | |
| SBUM | Sibu | 34.69 | 253 | P | | P | 07 32 19.7 | 0.0 |
| BNX | BinXian | 34.94 | 338 | P | | P | 07 32 22.5 | +1.1 |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,79nm,0.7s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,460nm,6.9s | | | | | | | |
| WB0 | Warramunga Arr | 35.37 | 198 | P | | P | 07 32 24.9 | -0.4 |
| WR0 | Warramunga Arr | 35.51 | 198 | P | | P | 07 32 26.0 | -0.5 |
| WB2 | Warramunga Arr | 35.55 | 198 | P | | P | 07 32 26.3 | -0.5 |
| WB2 | | | | IAmb | | IAmb | 07 32 52.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 35.55 | 198 | P | | P | 07 32 26.5 | -0.4 |
| | comp=Z,5.0nm,0.7s,baz=23,slow=10.0,SNR=34 | | | | | | | |
| WRA | | | | pP | | pP | 07 32 46.4 | +0.5 |
| | comp=Z,6.9nm,0.8s,baz=22,slow=9.9,SNR=5.4 | | | | | | | |
| WRA | | | | PcP | | PcP | 07 34 55.2 | +0.7 |
| | comp=Z,2.7nm,0.7s,baz=9.6,slow=3.4,SNR=5.6 | | | | | | | |
| WRA | | | | ScP | | ScP | 07 38 30.6 | -2.6 |
| | comp=Z,2.6nm,1.0s,baz=21,slow=4.3,SNR=7.8 | | | | | | | |
| WRA | | | | PKiKP | | PKiKP | 07 42 14.0 | -1.5 |
| | comp=Z,0.3nm,0.5s,baz=310,slow=1.4,SNR=5.3 | | | | | | | |
| WRA | | | | LR | | LR | 07 46 05.0 | |
| | comp=Z,156nm,21.9s,baz=44,slow=34 | | | | | | | |
| WRA | Warramunga Arr | 35.55 | 198 | P | | P | 07 32 25.7 | -1.2 |
| HNS | HongShan | 35.73 | 316 | ⇓P | | P | 07 32 29.3 | +1.0 |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| LYN | LuoYang | 35.93 | 310 | ⇓P | | P | 07 32 30.9 | +0.8 |
| LYN | | | | sP | | sP | 07 32 57.3 | -0.9 |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| BJT | Baijiatuau | 36.28 | 321 | P | | P | 07 32 33.6 | +0.6 |
| BJT | | | | IAmb | | IAmb | 07 32 34.7 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| BJI | Beijing | 36.29 | 321 | P | | P | 07 32 33.5 | +0.5 |
| BJI | | | | pP | | pwP | 07 32 55.5 | +0.6 |
| BJI | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ENH | Enshi | 36.66 | 302 | P | | P | 07 32 36.3 | -0.1 |
| KLR | Kul'dur | 36.73 | 345 | P | | P | 07 32 37.0 | +0.3 |
| | comp=Z,15nm,0.7s,baz=152,slow=5.6,SNR=47 | | | | | | | |
| KLR | | | | PcP | | PcP | 07 34 57.3 | -0.2 |
| | comp=Z,4.9nm,1.0s,baz=286,slow=1.9,SNR=3.8 | | | | | | | |
| KLR | | | | LR | | LR | 07 46 53.9 | |
| | comp=Z,109nm,19.0s,baz=156,slow=35 | | | | | | | |
| KSM | Kuching | 36.82 | 253 | P | | P | 07 32 37.0 | -0.9 |
| MIDW | Midway | 37.34 | 62 | P | | P | 07 32 41.2 | -0.9 |
| TIY | Taiyuan | 37.44 | 315 | *eP* | | P | 07 32 44.6 | +1.6 |
| TIY | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| FITZ | Fitzroy Crossi | 37.45 | 212 | P | | P | 07 32 42.8 | -0.2 |
| | comp=Z,7.2nm,0.9s,baz=41,slow=10,SNR=14 | | | | | | | |
| FITZ | | | | pP | | pP | 07 33 02.8 | +0.5 |
| | comp=Z,6.9nm,0.8s,baz=47,slow=9.4,SNR=6.2 | | | | | | | |
| FITZ | | | | PcP | | PcP | 07 35 01.0 | +0.8 |
| | comp=Z,3.3nm,0.7s,baz=108,slow=19,SNR=3.5 | | | | | | | |
| FITZ | | | | LR | | LR | 07 47 46.5 | |
| | comp=Z,47nm,21.2s,baz=40,slow=36 | | | | | | | |
| GYA | Guiyang | 38.12 | 295 | ⇓P | | P | 07 32 51.9 | +3.0 |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.6s | | | | | | | |
| XAN | Xi'an | 38.40 | 308 | P | | P | 07 32 51.6 | +0.5 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| XLT | XiLinHaoTe | 38.77 | 326 | *eP* | | P | 07 32 54.8 | +0.7 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,23nm,0.7s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,240nm,6.5s | | | | | | | |
| AS31 | Alice Springs | 39.20 | 197 | P | | P | 07 32 57.3 | -0.4 |
| ASAR | Alice Springs | 39.20 | 197 | P | | P | 07 32 57.2 | -0.5 |
| | comp=Z,2.0nm,0.7s,baz=23,slow=9.6,SNR=27 | | | | | | | |
| ASAR | | | | pP | | pwP | 07 33 17.6 | -1.7 |
| | comp=Z,3.2nm,0.6s,baz=24,slow=12,SNR=9.3 | | | | | | | |
| ASAR | | | | PcP | | PcP | 07 35 06.3 | +0.7 |
| | comp=Z,3.2nm,0.9s,baz=44,slow=4.1,SNR=5.9 | | | | | | | |
| ASAR | | | | ScP | | ScP | 07 38 45.3 | -1.6 |
| | comp=Z,0.6nm,0.9s,baz=21,slow=3.8,SNR=4.3 | | | | | | | |
| ASAR | | | | PKiKP | | PKiKP | 07 42 16.4 | -2.0 |
| | comp=Z,0.0nm,100.0s,baz=4.1,slow=1.3,SNR=4.7 | | | | | | | |
| ASAR | | | | LR | | LR | 07 48 31.5 | |
| | comp=Z,134nm,21.6s,baz=16,slow=35 | | | | | | | |
| ASAR | Alice Springs | 39.20 | 197 | P | | P | 07 32 57.1 | -0.7 |
| HHC | Hu-ho-hao-te | 39.64 | 319 | *eP* | | P | 07 33 02.4 | +1.0 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| PWJI | Pagerwojo | 39.88 | 239 | P | | P | 07 33 01.9 | -1.6 |
| | comp=Z,26nm,0.8s | | | | | | | |
| PEA0B | Petropavlovsk- | 40.10 | 12 | P | | P | 07 33 05.6 | +0.7 |
| PEA0B | | | | IAmb | | IAmb | 07 33 09.8 | |
| | comp=Z,50nm,1.4s | | | | | | | |
| PETK | Petropavlovsk- | 40.10 | 12 | P | | P | 07 33 05.0 | +0.1 |
| | comp=Z,2.2nm,0.7s,baz=160,slow=9.1,SNR=6.6 | | | | | | | |
| PETK | | | | LR | | LR | 07 47 14.7 | |
| | comp=Z,86nm,20.3s,baz=185,slow=32 | | | | | | | |
| BTO | Baotou | 40.52 | 317 | *eP* | | P | 07 33 06.2 | -2.4 |
| HIA | Hailar | 40.83 | 334 | P | | P | 07 33 11.7 | +0.7 |
| HIA | | | | IAmb | | IAmb | 07 33 13.1 | |
| | comp=Z,33nm,0.9s | | | | | | | |
| KMI | Kunming | 41.41 | 292 | ⇑P | | P | 07 33 17.3 | +1.0 |
| KMI | | | | pP | | sP | 07 33 40.5 | -4.3 |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=Z,130nm,28.7s | | | | | | | |
| DZM | Mont Dzumac | 41.52 | 150 | P | | P | 07 33 18.4 | +1.3 |
| | comp=Z,2.7nm,0.8s,baz=27,slow=14,SNR=2.0 | | | | | | | |
| DZM | Mont Dzumac | 41.52 | 150 | P | | P | 07 33 17.9 | +0.8 |
| ZEA | Zeya | 42.00 | 344 | *eP* | | P | 07 33 20.4 | 0.0 |
| ZEA | | | | pmax | | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | | |
| ZEA | | | | pmax | | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | | |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| PZH | PanZhiHua | 42.48 | 294 | P | | P | 07 33 25.5 | +0.6 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,240nm,6.5s | | | | | | | |
| MYKOM | Kota Tinggi | 42.77 | 257 | P | | P | 07 33 27.0 | -0.2 |
| LZH | Lanzhou | 43.02 | 308 | ⇑P | | P | 07 33 31.0 | +1.8 |
| LZH | | | | pP | | pwP | 07 33 50.2 | -1.1 |
| LZH | | | | sP | | sP | 07 33 57.3 | -0.2 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | | |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,140nm,5.2s | | | | | | | |
| MBWA | Marble Bar | 43.15 | 216 | P | | P | 07 33 30.3 | +0.1 |
| CMAR | Chiang Mai Arr | 44.63 | 282 | P | | P | 07 33 43.0 | +0.8 |
| | comp=Z,2.2nm,0.3s,baz=86,slow=6.4,SNR=6.5 | | | | | | | |
| CMAR | | | | ScP | | ScP | 07 39 06.9 | -1.8 |
| | comp=Z,1.3nm,0.3s,baz=98,slow=3.1,SNR=4.7 | | | | | | | |
| CMAR | Chiang Mai Arr | 44.63 | 282 | P | | P | 07 33 43.0 | +0.8 |
| CMAR | Chiang Mai Arr | 44.63 | 282 | P | | P | 07 33 41.9 | -0.2 |
| MDSI | Maura Dua | 44.80 | 249 | P | | P | 07 33 41.5 | -2.0 |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| MSVF | Nonsavu | 45.23 | 133 | LR | | LR | 07 49 43.4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FALS | **False Pass** | 56.70 | 33 | P | | P | | 07 35 13.1 | +0.8 |
| | baz=245 | | | | | | | | | |
| WMQ | **Urumqi** | 57.08 | 313 | *e*P | | P | | 07 35 16.5 | +1.2 |
| WMQ | | | | sP | | sP | | 07 35 49.4 | +4.8 |
| WMQ | | | | pmax | | pmax | | | | |
| | comp=Z,19nm,1.1s | | | | | | | | | |
| WMQ | | | | pmax | | pmax | | | | |
| | comp=Z,160nm,5.1s | | | | | | | | | |
| WMQ | | | | LR | | LR | | | | |
| | comp=Z,76nm,22.1s | | | | | | | | | |
| GAMB | **Gambell** | 57.81 | 21 | P | | P | | 07 35 20.5 | +0.6 | |
| GAMB | **Gambell** | 57.81 | 21 | P | | P | | 07 35 20.2 | +0.2 | |
| | baz=231 | | | | | | | | | |
| TIXI | **Tiksi** | 58.34 | 354⇓ | *e*P | | P | | 07 35 24.0 | +0.5 | |
| TIXI | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | |
| SDPT | **Sand Point** | 58.45 | 33 | P | | P | | 07 35 25.4 | +0.8 | |
| | baz=247,SNR=5.6 | | | | | | | | | |
| DGZ | **Jazzator, Alta** | 58.70 | 320⇓ | *e*P | | P | | 07 35 27.3 | +0.6 | |
| DGZ | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | | |
| ZSN | **Zaisan** | 59.80 | 317 | *e*P | | P | | 07 35 33.6 | -0.6 | |
| ZSN | **Zaisan** | 59.80 | 317 | *e*P | | P | | 07 35 33.6 | -0.6 | |
| | baz=317 | | | | | | | | | |
| TNA | **Tin City** | 60.18 | 20 | P | | P | | 07 35 36.8 | +0.4 | |
| TNA | **Tin City** | 60.18 | 20 | P | | P | | 07 35 36.1 | -0.3 | |
| | baz=235,SNR=6.1 | | | | | | | | | |
| ANM | **Nome** | 60.52 | 22 | P | | P | | 07 35 39.4 | +0.6 | |
| ANM | | | | IAmb | | IAmb | | 07 35 39.9 | | |
| | comp=Z,9.9nm,0.7s | | | | | | | | | |
| ANM | **Nome** | 60.52 | 22 | P | | P | | 07 35 39.0 | +0.2 | |
| | baz=238 | | | | | | | | | |
| CHIR | **Chirikof Islan** | 61.19 | 34 | P | | P | | 07 35 45.0 | +1.6 | |
| | baz=252 | | | | | | | | | |
| MK31 | **Makanchi Array** | 61.40 | 316 | *c i*P | | P | | 07 35 45.8 | +0.7 | |
| MK31 | **Makanchi Array** | 61.40 | 316 | P | | P | | 07 35 45.4 | +0.3 | |
| MKAR | **Makanchi Array** | 61.40 | 316 | P | | P | | 07 35 45.3 | +0.2 | |
| | comp=Z,4.2nm,0.3s,baz=92,slow=8.3,SNR=167 | | | | | | | | | |
| ZAA0 | **Zalesovo Array** | 61.43 | 324 | P | | P | | 07 35 44.3 | -0.7 | |
| ZALV | **Zalesovo Beam** | 61.43 | 324 | P | | P | | 07 35 44.9 | -0.2 | |
| | comp=Z,3.7nm,0.6s,baz=101,slow=7.7,SNR=17 | | | | | | | | | |
| ZALV | **Zalesovo Beam** | 61.43 | 324 | P | | P | | 07 35 44.8 | -0.3 | |
| MAKZ | **Makanchi** | 61.61 | 316 | P | | P | | 07 35 46.8 | +0.3 | |
| MAKZ | | | | IAmb | | IAmb | | 07 35 47.9 | | |
| | comp=Z,12nm,0.5s | | | | | | | | | |
| SII | **Sitkinak Islan** | 62.19 | 33 | P | | P | | 07 35 51.4 | +1.3 | |
| | baz=253 | | | | | | | | | |
| RDOG | **Red Dog Mine** | 63.22 | 19 | P | | P | | 07 35 56.9 | +0.1 | |
| RDOG | **Red Dog Mine** | 63.22 | 19 | P | | P | | 07 35 56.9 | +0.1 | |
| | baz=239 | | | | | | | | | |
| KDAK | **Kodiak Island** | 63.38 | 32 | LR | | LR | | 08 04 25.3 | | |
| | comp=Z,75nm,18.5s,baz=60,slow=37 | | | | | | | | | |
| KPKS | **Kokpek** | 63.48 | 312 | *e*P | | P | | 07 35 58.3 | -0.8 | |
| KPKS | **Kokpek** | 63.48 | 312 | *e*P | | P | | 07 35 58.3 | -0.8 | |
| | baz=312 | | | | | | | | | |
| ZHN | **Zhinishke** | 63.63 | 311 | *e*P | | P | | 07 35 59.0 | -1.1 | |
| ZHN | **Zhinishke** | 63.63 | 311 | *e*P | | P | | 07 35 59.0 | -1.1 | |
| | baz=311 | | | | | | | | | |
| SATY | **Saty** | 63.64 | 311 | *e*P | | P | | 07 35 59.0 | -1.2 | |
| SATY | **Saty** | 63.64 | 311 | *e*P | | P | | 07 35 59.0 | -1.2 | |
| | baz=311 | | | | | | | | | |
| TDK | **Taldyqorghan** | 63.83 | 313 | *e*P | | P | | 07 36 00.7 | -0.6 | |
| TDK | **Taldyqorghan** | 63.83 | 313 | *e*P | | P | | 07 36 00.8 | -0.6 | |
| | baz=313 | | | | | | | | | |
| KURK | **Kurchatov** | 64.45 | 320 | *d i*P | | P | | 07 36 04.4 | -0.7 | |
| KURK | | | | pmax | | pmax | | | | |
| | comp=Z,22nm,1.3s | | | | | | | | | |
| KURK | **Kurchatov** | 64.45 | 320 | P | | P | | 07 36 05.1 | 0.0 | |
| KURK | | | | IAmb | | IAmb | | 07 36 05.8 | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| K20K | **Telida** | 64.45 | 26 | P | | P | | 07 36 06.2 | +1.2 | |
| | baz=250 | | | | | | | | | |
| KDJ | **Kajisay** | 64.47 | 310 | P | | P | | 07 36 05.6 | -0.1 | |
| CNPM | **China Poot** | 64.54 | 30 | P | | P | | 07 36 06.3 | +0.7 | |
| MDOK | **Medeo** | 64.64 | 311 | *e*P | | P | | 07 36 06.0 | -0.8 | |
| MDOK | **Medeo** | 64.64 | 311 | *e*P | | P | | 07 36 06.0 | -0.8 | |
| | baz=311 | | | | | | | | | |
| KUU | **Kurty** | 65.21 | 312 | *e*P | | P | | 07 36 08.8 | -1.4 | |
| KUU | **Kurty** | 65.21 | 312 | *e*P | | P | | 07 36 08.9 | -1.4 | |
| | baz=312 | | | | | | | | | |
| KSH | **Kashi** | 65.26 | 307 | P | | P | | 07 36 14.7 | +3.9 | |
| KSH | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | | |
| CAST | **Castle Rocks** | 65.31 | 26 | P | | P | | 07 36 11.2 | +0.6 | |
| | baz=252 | | | | | | | | | |
| BOOM | **Boomskoye usch** | 65.41 | 310 | P | | P | | 07 36 11.8 | 0.0 | |
| NRIK | **Noril'sk** | 65.76 | 341 | P | | P | | 07 36 12.8 | -0.4 | |
| | comp=Z,10nm,0.5s,baz=109,slow=7.2,SNR=25 | | | | | | | | | |
| NRIK | **Noril'sk** | 65.76 | 341 | P | | P | | 07 36 12.9 | -0.4 | |
| NRIK | | | | IAmb | | IAmb | | 07 36 14.6 | | |
| | comp=Z,34nm,1.2s | | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 65.99 | 26 | P | | P | | 07 36 15.2 | +0.3 | |
| | baz=252 | | | | | | | | | |
| PWL | **Port Wells** | 66.29 | 29 | P | | P | | 07 36 17.6 | +0.8 | |
| | baz=256 | | | | | | | | | |
| MLY | **Manley** | 66.38 | 25 | P | | P | | 07 36 17.7 | +0.3 | |
| MLY | **Manley** | 66.38 | 25 | P | | P | | 07 36 17.8 | +0.3 | |
| | baz=252 | | | | | | | | | |
| AAK | **Ala-Archa** | 66.48 | 311⇓ | *i*P | | P | | 07 36 20.1 | +1.4 | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | |
| BTLS | **Baital** | 66.92 | 313 | *e*P | | P | | 07 36 20.4 | -0.7 | |
| BTLS | **Baital** | 66.92 | 313 | *e*P | | P | | 07 36 20.5 | -0.7 | |
| | baz=313 | | | | | | | | | |
| I23K | **Minto, Yukon-K** | 66.97 | 25 | P | | P | | 07 36 21.5 | +0.4 | |
| | baz=253 | | | | | | | | | |
| COLD | **Coldfoot** | 67.28 | 22 | P | | P | | 07 36 23.6 | +0.6 | |
| | baz=252,SNR=5.1 | | | | | | | | | |
| NIL | **Nilore** | 67.47 | 301 | P | | P | | 07 36 24.8 | -0.2 | |
| NIL | | | | IAmb | | IAmb | | 07 36 52.1 | | |
| | comp=Z,10nm,0.7s | | | | | | | | | |
| COLA | **College** | 67.51 | 25⇑ | *e*P | | P | | 07 36 25.2 | +0.7 | |
| COLA | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| H24K | **Noodor Dome** | 67.76 | 24 | P | | P | | 07 36 26.6 | +0.4 | |
| | baz=254 | | | | | | | | | |
| IL31 | | 67.89 | 25 | P | | P | | 07 36 25.7 | -1.1 | |
| IL31 | | | | IAmb | | IAmb | | 07 36 26.2 | | |
| | comp=Z,11nm,0.5s | | | | | | | | | |
| ILAR | **Eielson Array** | 67.89 | 25 | P | | P | | 07 36 25.4 | -1.5 | |
| | comp=Z,8.1nm,0.5s,baz=254,slow=5.3,SNR=22 | | | | | | | | | |
| ILAR | | | | pP | | pwP | | 07 36 50.6 | +0.6 | |
| | comp=Z,2.3nm,0.5s,baz=264,slow=5.2,SNR=3.4 | | | | | | | | | |
| PAX | **Paxson** | 68.09 | 27 | P | | P | | 07 36 28.8 | +0.5 | |
| | baz=258 | | | | | | | | | |
| SCRK | **Sand Creek** | 68.94 | 26 | P | | P | | 07 36 33.4 | -0.3 | |
| | baz=259 | | | | | | | | | |
| L26K | **Log Cabin Wild** | 69.05 | 28 | P | | P | | 07 36 34.6 | +0.4 | |
| | baz=260 | | | | | | | | | |
| ISLE | **Juniper Island** | 69.13 | 30 | P | | P | | 07 36 36.2 | +1.3 | |
| ISLE | | | | IAmb | | IAmb | | 07 36 44.5 | | |
| | comp=Z,29nm,0.8s | | | | | | | | | |
| J26L | **Joseph Creek** | 69.22 | 26 | P | | P | | 07 36 35.3 | -0.1 | |
| | baz=259 | | | | | | | | | |
| MESA | **MESA** | 69.26 | 31 | P | | P | | 07 36 37.1 | +1.3 | |
| | baz=262 | | | | | | | | | |
| YAH | **Yahtse** | 69.38 | 31 | P | | P | | 07 36 37.9 | +1.3 | |
| KKAR | **Karatay Array** | 69.42 | 311 | P | | P | | 07 36 36.4 | -0.5 | |
| BMAR | **Burnt Mountain** | 69.43 | 23 | P | | P | | 07 36 37.6 | +1.1 | |
| M27K | **Edge Creek, AK** | 69.61 | 28 | P | | P | | 07 36 38.8 | +0.9 | |
| M27K | **Edge Creek, AK** | 69.61 | 28 | P | | P | | 07 36 38.3 | +0.5 | |
| | baz=261 | | | | | | | | | |
| TABL | **Table Mountain** | 69.69 | 30 | P | | P | | 07 36 39.7 | +1.2 | |
| L27K | **Beaver Creek,** | 69.74 | 28 | P | | P | | 07 36 38.9 | +0.4 | |
| L27K | **Beaver Creek,** | 69.74 | 28 | P | | P | | 07 36 38.7 | +0.3 | |
| | baz=261 | | | | | | | | | |
| BCAR | **Beaver Creek A** | 69.76 | 28 | P | | P | | 07 36 40.1 | +1.5 | |
| BRVK | **Borovoye** | 69.83 | 322⇓ | *i*P | | P | | 07 36 38.3 | -0.9 | |
| BRVK | | | | pmax | | pmax | | | | |
| | comp=Z,17nm,1.7s | | | | | | | | | |
| BRVK | **Borovoye** | 69.83 | 322 | P | | P | | 07 36 39.8 | +0.6 | |
| BVCY | **Beaver Creek** | 70.08 | 28 | P | | P | | 07 36 40.9 | +0.3 | |
| | baz=262 | | | | | | | | | |
| PINM | **Pinnacle** | 70.09 | 31 | P | | P | | 07 36 41.8 | +1.0 | |
| | baz=264 | | | | | | | | | |
| YUK3 | **Moose Creek** | 70.19 | 29 | P | | P | | 07 36 42.5 | +1.0 | |
| | baz=263 | | | | | | | | | |
| EGAK | **Eagle** | 70.29 | 26 | P | | P | | 07 36 43.2 | +1.4 | |
| EGAK | **Eagle** | 70.29 | 26 | P | | P | | 07 36 43.0 | +1.2 | |
| | baz=261 | | | | | | | | | |
| PNL | **Peninsula** | 70.48 | 31 | P | | P | | 07 36 44.0 | +0.9 | |
| | baz=265 | | | | | | | | | |
| DAWY | **Dawson** | 70.95 | 27 | P | | P | | 07 36 46.8 | +0.9 | |
| DAWY | **Dawson** | 70.95 | 27 | P | | P | | 07 36 46.4 | +0.5 | |
| | baz=263 | | | | | | | | | |
| YUK4 | **Talbot Arm** | 71.00 | 30 | P | | P | | 07 36 48.1 | +1.6 | |
| | baz=265 | | | | | | | | | |
| YUK6 | **Outpost Mounta** | 71.10 | 30 | P | | P | | 07 36 47.9 | +0.8 | |
| | baz=265 | | | | | | | | | |
| J29M | **Klondike Camp** | 71.51 | 26 | P | | P | | 07 36 50.4 | +1.2 | |
| J29M | | | | IAmb | | IAmb | | 07 36 50.4 | | |
| | comp=Z,9.7nm,0.6s | | | | | | | | | |
| HYT | **Haines Junctio** | 71.51 | 30 | P | | P | | 07 36 51.5 | +2.0 | |
| HYT | | | | IAmb | | IAmb | | 07 36 52.2 | | |
| | comp=Z,25nm,0.8s | | | | | | | | | |
| HYT | **Haines Junctio** | 71.51 | 30 | P | | P | | 07 36 50.5 | +1.1 | |
| | baz=266 | | | | | | | | | |
| I29M | **Ogilvie Camp,** | 71.57 | 25 | P | | P | | 07 36 49.7 | +0.2 | |
| I29M | **Ogilvie Camp,** | 71.57 | 25 | P | | P | | 07 36 49.8 | +0.2 | |
| | baz=264 | | | | | | | | | |
| EPYK | **Eagle Plains** | 72.32 | 24 | P | | P | | 07 36 54.1 | 0.0 | |
| | baz=265 | | | | | | | | | |
| N31M | **Braeburn, Yuko** | 72.39 | 30 | P | | P | | 07 36 55.9 | +1.3 | |
| N31M | | | | IAmb | | IAmb | | 07 36 57.3 | | |
| | comp=Z,28nm,1.2s | | | | | | | | | |
| N31M | **Braeburn, Yuko** | 72.39 | 30 | P | | P | | 07 36 56.8 | +2.3 | |
| | baz=267 | | | | | | | | | |
| WHY | **Whitehorse** | 72.79 | 30 | P | | P | | 07 36 58.0 | +1.0 | |
| | baz=268 | | | | | | | | | |
| JIS | **Juneau Island** | 73.00 | 33 | P | | P | | 07 36 59.1 | +1.0 | |
| JIS | | | | IAmb | | IAmb | | 07 37 00.3 | | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| M31M | **Drury Creek, Y** | 73.08 | 29 | P | | P | | 07 36 59.2 | +0.6 | |
| M31M | **Drury Creek, Y** | 73.08 | 29 | P | | P | | 07 36 59.3 | +0.6 | |
| | baz=268 | | | | | | | | | |
| FARO | **Faro, Yukon** | 73.56 | 29 | P | | P | | 07 37 01.9 | +0.4 | |
| | baz=269 | | | | | | | | | |
| INK | **Inuvik** | 73.69 | 23 | P | | P | | 07 37 01.8 | -0.3 | |
| | comp=Z,12nm,0.8s,baz=272,slow=5.8,SNR=45 | | | | | | | | | |
| INK | | | | LR | | LR | | 08 08 24.7 | | |
| | comp=Z,32nm,20.6s,baz=168,slow=35 | | | | | | | | | |
| INK | **Inuvik** | 73.69 | 23 | P | | P | | 07 37 01.7 | -0.3 | |
| INK | **Inuvik** | 73.69 | 23 | P | | P | | 07 37 01.6 | -0.4 | |
| | baz=267,SNR=16 | | | | | | | | | |
| P33M | **Teslin, Yukon** | 73.81 | 31 | P | | P | | 07 37 03.6 | +0.6 | |
| | baz=270 | | | | | | | | | |
| MMPY | **Sheldon Lake,** | 74.54 | 28 | P | | P | | 07 37 08.0 | +0.8 | |
| | baz=271 | | | | | | | | | |
| DLBC | **Dease Lake** | 75.29 | 33 | P | | P | | 07 37 11.7 | +0.1 | |
| | comp=Z,11nm,0.6s,baz=289,slow=4.5,SNR=16 | | | | | | | | | |
| DLBC | | | | pP | | sP | | 07 37 36.6 | -4.8 | |
| | comp=Z,5.9nm,0.8s,baz=68,slow=5.6,SNR=2.5 | | | | | | | | | |
| DLBC | **Dease Lake** | 75.29 | 33 | P | | P | | 07 37 12.9 | +1.3 | |
| DLBC | | | | IAmb | | IAmb | | 07 37 14.6 | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| ABKAR | **Akbulak array** | 76.43 | 318 | P | | P | | 07 37 16.7 | -1.4 | |
| ABKAR | **Akbulak array** | 76.43 | 318 | P | | P | | 07 37 16.9 | -1.3 | |
| ABKAR | | | | IAmb | | IAmb | | 07 37 18.0 | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | | |
| A36M | **Sachs Harbour** | 76.49 | 19 | P | | P | | 07 37 17.6 | -0.4 | |
| A36M | | | | IAmb | | IAmb | | 07 37 18.3 | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| A36M | **Sachs Harbour** | 76.49 | 19 | P | | P | | 07 37 17.5 | -0.5 | |
| | baz=274 | | | | | | | | | |
| ARU | **Arti** | 76.56 | 325 | *d i*P | | P | | 07 37 17.7 | -1.1 | |
| ARU | | | | | | | | 07 40 08.4 | | |
| ARU | | | | S | | S | | 07 46 53.2 | -5.1 | |
| ARU | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | |
| ARU | **Arti** | 76.56 | 325 | P | | P | | 07 37 18.8 | +0.1 | |
| BBB | **Bella Bella** | 76.88 | 39 | P | | P | | 07 37 21.1 | +0.5 | |
| | comp=Z,21nm,0.8s,baz=238,slow=5.7,SNR=4.1 | | | | | | | | | |
| BBB | **Bella Bella** | 76.88 | 39 | P | | P | | 07 37 21.8 | +1.2 | |
| HOLB | **Holberg** | 77.04 | 41 | P | | P | | 07 37 23.6 | +2.0 | |
| C36M | **Paulatuk** | 77.10 | 21 | P | | P | | 07 37 21.1 | -0.4 | |
| C36M | **Paulatuk** | 77.10 | 21 | P | | P | | 07 37 20.7 | -0.8 | |
| | baz=276 | | | | | | | | | |
| WRGLY | **Wrigley** | 78.05 | 28 | P | | P | | 07 37 27.3 | +0.3 | |
| | baz=276,SNR=9.4 | | | | | | | | | |
| CBB | **Campbell River** | 78.87 | 41 | P | | P | | 07 37 33.9 | +2.1 | |
| GEYT | **Alibeck** | 79.28 | 306 | LR | | LR | | 08 17 56.1 | | |
| | comp=Z,31nm,18.1s,baz=3.0,slow=40 | | | | | | | | | |
| CLRS | **Cowichan Lake** | 79.86 | 42 | P | | P | | 07 37 39.0 | +1.8 | |
| CLRS | | | | IAmb | | IAmb | | 07 37 39.6 | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| NLWA | **Neilton Lookou** | 80.29 | 44 | P | | P | | 07 37 41.5 | +2.0 | |
| NLWA | | | | IAmb | | IAmb | | 07 37 42.0 | | |
| | comp=Z,26nm,0.7s | | | | | | | | | |
| PGC | **Sidney** | 80.34 | 42 | P | | P | | 07 37 40.8 | +1.2 | |
| PGC | | | | IAmb | | IAmb | | 07 37 42.0 | | |
| | comp=Z,21nm,0.8s | | | | | | | | | |
| WISH | **Wishkah** | 80.40 | 44 | P | | P | | 07 37 42.5 | +2.5 | |
| B04A | **Port Angeles** | 80.41 | 43 | P | | P | | 07 37 41.4 | +1.3 | |
| B04A | | | | IAmb | | IAmb | | 07 37 42.9 | | |
| | comp=Z,33nm,0.9s | | | | | | | | | |
| RADR | **Rader Ridge** | 80.51 | 45 | P | | P | | 07 37 42.9 | +2.1 | |
| E03A | **Lebam** | 80.64 | 44 | P | | P | | 07 37 42.6 | +1.3 | |
| D03D | **Eldon** | 80.78 | 43 | P | | P | | 07 37 44.3 | +2.2 | |
| | baz=281 | | | | | | | | | |
| A04D | **Lummi Island** | 80.81 | 42 | P | | P | | 07 37 43.7 | +1.5 | |
| | baz=281 | | | | | | | | | |
| I02E | **Swisshome, OR** | 80.90 | 47 | P | | P | | 07 37 44.7 | +1.9 | |
| | baz=281 | | | | | | | | | |
| LLLB | **Lillooet** | 80.97 | 40 | P | | P | | 07 37 44.2 | +1.1 | |
| LLLB | | | | IAmb | | IAmb | | 07 37 45.3 | | |
| | comp=Z,17nm,1.0s | | | | | | | | | |
| J01E | **Myrtle Point** | 81.02 | 48 | P | | P | | 07 37 45.2 | +1.8 | |
| J01E | **Myrtle Point** | 81.02 | 48 | P | | P | | 07 37 45.3 | +1.8 | |
| | baz=281 | | | | | | | | | |
| G03D | **McMinnville, O** | 81.10 | 46 | P | | P | | 07 37 45.1 | +1.3 | |
| | baz=281 | | | | | | | | | |
| KIRV | **Kirov** | 81.11 | 328⇓ | *e*P | | P | | 07 37 42.7 | -0.9 | |
| B05A | **Bryant** | 81.30 | 42 | P | | P | | 07 37 46.4 | +1.6 | |
| | baz=281 | | | | | | | | | |
| K02D | **Willamette Mer** | 81.30 | 48 | P | | P | | 07 37 46.4 | +1.3 | |
| | baz=281 | | | | | | | | | |
| E04D | **Cinebar** | 81.32 | 44 | P | | P | | 07 37 46.6 | +1.6 | |
| E04D | | | | IAmb | | IAmb | | 07 37 47.7 | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| E04D | **Cinebar** | 81.32 | 44 | P | | P | | 07 37 46.8 | +1.8 | |
| | baz=281 | | | | | | | | | |
| I03D | **Drain, OR** | 81.33 | 47 | P | | P | | 07 37 46.8 | +1.7 | |
| | baz=281 | | | | | | | | | |
| L02E | **Cave Junction** | 81.45 | 49 | P | | P | | 07 37 47.5 | +1.7 | |
| L02E | **Cave Junction** | 81.45 | 49 | P | | P | | 07 37 47.7 | +1.9 | |
| | baz=281 | | | | | | | | | |
| BUCK | **Buck Mountain** | 81.49 | 47 | P | | P | | 07 37 47.4 | +1.3 | |
| DBO | **Dodson Butte** | 81.52 | 48 | P | | P | | 07 37 48.0 | +1.7 | |
| DBO | | | | IAmb | | IAmb | | 07 37 48.3 | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| F04A | **Amboy** | 81.54 | 45 | P | | P | | 07 37 47.8 | +1.6 | |
| F04A | | | | IAmb | | IAmb | | 07 37 48.5 | | |
| | comp=Z,35nm,1.0s | | | | | | | | | |
| D05A | **Enumclaw** | 81.58 | 44 | P | | P | | 07 37 47.9 | +1.5 | |
| D05A | | | | IAmb | | IAmb | | 07 37 48.6 | | |
| | comp=Z,23nm,0.8s | | | | | | | | | |
| H04D | **Lebanon** | 81.60 | 46 | P | | P | | 07 37 48.0 | +1.5 | |
| H04D | | | | IAmb | | IAmb | | 07 37 49.3 | | |
| | comp=Z,38nm,1.1s | | | | | | | | | |
| H04D | **Lebanon** | 81.60 | 46 | P | | P | | 07 37 48.2 | +1.7 | |
| | baz=282,SNR=5.7 | | | | | | | | | |
| KHMM | **Horse Mountain** | 81.60 | 50 | P | | P | | 07 37 48.8 | +2.0 | |
| KHMM | | | | IAmb | | IAmb | | 07 37 49.9 | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| B06A | **Marblemount** | 81.64 | 42 | P | | P | | 07 37 47.4 | +0.7 | |
| B06A | | | | IAmb | | IAmb | | 07 37 48.5 | | |
| | comp=Z,38nm,1.2s | | | | | | | | | |
| KMRM | **Mail Ridge** | 81.75 | 51 | P | | P | | 07 37 49.5 | +2.0 | |
| KMRM | | | | IAmb | | IAmb | | 07 37 50.7 | | |
| | comp=Z,29nm,1.3s | | | | | | | | | |
| HUMO | **Hull Mountain** | 81.83 | 48 | P | | P | | 07 37 49.3 | +1.5 | |
| HUMO | | | | IAmb | | IAmb | | 07 37 50.7 | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| KCPM | **Cahto Peak** | 81.95 | 51 | P | | P | | 07 37 50.8 | +2.2 | |
| KCPM | | | | IAmb | | IAmb | | 07 37 51.5 | | |
| | comp=Z,32nm,0.9s | | | | | | | | | |
| H04A | **Detroit Lake** | 81.95 | 46 | P | | P | | 07 37 49.6 | +1.1 | |
| I04A | **Tendick Farm,** | 81.98 | 47 | P | | P | | 07 37 49.7 | +1.1 | |
| | baz=282,SNR=8.2 | | | | | | | | | |
| M02C | **Callahan** | 82.15 | 49 | P | | P | | 07 37 50.6 | +1.0 | |
| M02C | | | | IAmb | | IAmb | | 07 37 52.5 | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| M02C | **Callahan** | 82.15 | 49 | P | | P | | 07 37 51.5 | +1.9 | |
| | baz=282,SNR=10 | | | | | | | | | |
| YKA | **Yellowknife Ar** | 82.17 | 27 | P | | P | | 07 37 48.5 | -0.6 | |
| | comp=Z,7.5nm,0.7s,baz=286,slow=5.1,SNR=154 | | | | | | | | | |
| YKA | **Yellowknife Ar** | 82.17 | 27 | P | | P | | 07 37 48.8 | -0.3 | |
| YBH | **Yreka Blue Hor** | 82.19 | 49 | P | | P | | 07 37 51.3 | +1.5 | |
| | comp=Z,18nm,0.7s,baz=315,slow=2.5,SNR=78 | | | | | | | | | |
| YBH | | | | LR | | LR | | 08 13 45.2 | | |
| | comp=Z,28nm,18.1s,baz=296,slow=35 | | | | | | | | | |
| YBH | **Yreka Blue Hor** | 82.19 | 49 | P | | P | | 07 37 51.3 | +1.5 | |
| | comp=Z,22nm,0.8s | | | | | | | | | |
| HOOD | **Mount Hood Mea** | 82.19 | 45 | P | | P | | 07 37 50.9 | +1.1 | |
| HOOD | | | | IAmb | | IAmb | | 07 37 52.1 | | |
| | comp=Z,45nm,1.2s | | | | | | | | | |
| F05D | **White Salmon** | 82.21 | 45 | P | | P | | 07 37 50.9 | +1.2 | |
| F05D | | | | IAmb | | IAmb | | 07 37 52.1 | | |
| | comp=Z,24nm,1.2s | | | | | | | | | |
| F05D | **White Salmon** | 82.21 | 45 | P | | P | | 07 37 51.0 | +1.3 | |
| | baz=282 | | | | | | | | | |
| J04D | **Umpqua Nationa** | 82.31 | 47 | P | | P | | 07 37 51.7 | +1.1 | |
| J04D | **Umpqua Nationa** | 82.31 | 47 | P | | P | | 07 37 52.2 | +1.7 | |
| | baz=282,SNR=5.6 | | | | | | | | | |
| N02D | **Trinity Center** | 82.35 | 50 | P | | P | | 07 37 52.3 | +1.7 | |
| N02D | | | | IAmb | | IAmb | | 07 37 53.0 | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| N02D | **Trinity Center** | 82.35 | 50 | P | | P | | 07 37 52.5 | +1.8 | |
| | baz=282,SNR=11 | | | | | | | | | |
| L04D | **Klamath Falls** | 82.38 | 48 | P | | P | | 07 37 52.1 | +1.2 | |
| L04D | **Klamath Falls** | 82.38 | 48 | P | | P | | 07 37 52.3 | +1.4 | |
| | baz=282,SNR=13 | | | | | | | | | |
| G05D | **Wamic, OR** | 82.44 | 45 | P | | P | | 07 37 52.1 | +1.1 | |
| | baz=282 | | | | | | | | | |
| LTY | **Liberty** | 82.44 | 43 | P | | P | | 07 37 51.8 | +0.8 | |
| LTY | | | | IAmb | | IAmb | | 07 37 52.8 | | |
| | comp=Z,25nm,1.1s | | | | | | | | | |
| WDC | **Whiskeytown Da** | 82.55 | 50 | P | | P | | 07 37 52.8 | +1.2 | |
| WDC | | | | IAmb | | IAmb | | 07 37 54.2 | | |
| | comp=Z,26nm,1.4s | | | | | | | | | |
| I05D | **Terrebonne, OR** | 82.62 | 46 | P | | P | | 07 37 53.1 | +1.1 | |
| | baz=282,SNR=6.0 | | | | | | | | | |
| K04D | **Chiloquin, OR** | 82.69 | 48 | P | | P | | 07 37 53.9 | +1.4 | |
| | baz=282,SNR=18 | | | | | | | | | |
| GDXM | **Geysers** | 82.73 | 52 | P | | P | | 07 37 53.8 | +1.1 | |
| GDXM | | | | IAmb | | IAmb | | 07 37 55.8 | | |
| | comp=Z,22nm,1.3s | | | | | | | | | |
| M04C | **Macdoel** | 82.81 | 49 | P | | P | | 07 37 54.6 | +1.5 | |
| M04C | **Macdoel** | 82.81 | 49 | P | | P | | 07 37 54.6 | +1.5 | |
| | baz=282,SNR=25 | | | | | | | | | |
| J05D | **Fort Rock, OR** | 82.92 | 47 | P | | P | | 07 37 55.3 | +1.6 | |
| | baz=283,SNR=20 | | | | | | | | | |
| PINE | **Pine Mountain** | 83.02 | 47 | P | | P | | 07 37 56.0 | +1.8 | |
| B08A | **Colville Reser** | 83.08 | 42 | P | | P | | 07 37 55.0 | +0.7 | |
| E07A | **Sunnyside** | 83.15 | 44 | P | | P | | 07 37 55.9 | +1.3 | |
| E07A | | | | IAmb | | IAmb | | 07 37 56.8 | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| F07A | **Phinny Hill Vi** | 83.25 | 44 | P | | P | | 07 37 56.3 | +1.2 | |
| F07A | | | | IAmb | | IAmb | | 07 37 57.3 | | |
| | comp=Z,23nm,1.1s | | | | | | | | | |
| K05A | **Summer Lake** | 83.29 | 48 | P | | P | | 07 37 56.9 | +1.3 | |
| HAWA | **Hanford** | 83.40 | 44 | P | | P | | 07 37 57.0 | +1.2 | |
| HAWA | | | | IAmb | | IAmb | | 07 37 58.0 | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| ORV | **Oroville** | 83.55 | 51 | P | | P | | 07 37 57.7 | +0.9 | |
| ORV | | | | IAmb | | IAmb | | 07 37 58.8 | | |
| | comp=Z,24nm,1.2s | | | | | | | | | |
| D08A | **Wollman Farm,** | 83.65 | 43 | P | | P | | 07 37 58.3 | +1.2 | |
| D08A | | | | IAmb | | IAmb | | 07 37 59.1 | | |
| | comp=Z,26nm,1.1s | | | | | | | | | |
| E08A | **Dider Farm, El** | 83.70 | 44 | P | | P | | 07 37 58.8 | +1.5 | |
| E08A | | | | IAmb | | IAmb | | 07 37 59.4 | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| C09A | **Chrisman Ranch** | 83.90 | 42 | P | | P | | 07 37 59.0 | +0.6 | |
| MOD | **Modoc Plateau** | 83.90 | 48 | P | | P | | 07 37 59.9 | +1.2 | |
| MOD | | | | IAmb | | IAmb | | 07 38 00.9 | | |
| | comp=Z,31nm,1.1s | | | | | | | | | |
| RES | **Resolute Bay** | 83.92 | 13 | P | | P | | 07 37 57.5 | -0.4 | |
| | comp=Z,4.5nm,0.6s,baz=343,slow=5.2,SNR=21 | | | | | | | | | |
| RES | **Resolute Bay** | 83.92 | 13 | P | | P | | 07 37 58.1 | +0.2 | |
| I07A | **Izee** | 83.96 | 46 | P | | P | | 07 38 00.1 | +1.1 | |
| G08A | **Pilot Rock** | 84.05 | 45 | P | | P | | 07 38 00.2 | +0.9 | |
| E09A | **Wood Farm, Sta** | 84.30 | 44 | P | | P | | 07 38 01.6 | +1.2 | |
| E09A | | | | IAmb | | IAmb | | 07 38 02.5 | | |
| | comp=Z,19nm,0.7s | | | | | | | | | |
| NEW | **Newport** | 84.53 | 42 | P | | P | | 07 38 02.4 | +0.7 | |
| | comp=Z,20nm,0.6s,baz=286,slow=4.2,SNR=75 | | | | | | | | | |
| NEW | **Newport** | 84.53 | 42 | P | | P | | 07 38 02.8 | +1.1 | |
| NEW | | | | IAmb | | IAmb | | 07 38 03.3 | | |
| | comp=Z,22nm,0.8s | | | | | | | | | |
| NEW | **Newport** | 84.53 | 42 | P | | P | | 07 38 02.5 | +0.9 | |
| | baz=285,SNR=32 | | | | | | | | | |
| RUBR | **Rubicon Trail** | 84.68 | 51 | P | | P | | 07 38 03.7 | +0.9 | |
| RUBR | | | | IAmb | | IAmb | | 07 38 05.3 | | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| MPK | **Martis Peak** | 84.72 | 51 | P | | P | | 07 38 04.4 | +1.3 | |
| EMB | **Emerald Bay** | 84.74 | 51 | P | | P | | 07 38 04.5 | +1.4 | |
| CMB | **Columbia Colle** | 84.75 | 52 | P | | P | | 07 38 04.0 | +1.1 | |
| CMB | | | | IAmb | | IAmb | | 07 38 05.2 | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| J08A | **Circle Bar Ran** | 84.86 | 47 | P | | P | | 07 38 04.6 

PASC Pasadena Art C 87.44 56 P P 07 38 17.5 +1.3
PASC IAmb IAmb 07 38 18.3
comp=Z,9.3nm,0.9s
MPMC Manual Prospec 87.49 54 P P 07 38 18.0 +1.3
baz=286,SNR=22
LRMC Laurel Mtn Rad 87.49 54 P P 07 38 18.1 +1.5
baz=286,SNR=5.5
HLID Hailey 87.65 46 P P 07 38 18.8 +1.5
HLID Hailey 87.65 46 P P 07 38 18.5 +1.2
baz=287,SNR=50
FURC Furnace Creek, 87.87 53 P P 07 38 19.8 +1.7
baz=286,SNR=18
ELK Elko 87.89 49 P P 07 38 19.6 +1.1
comp=Z,35nm,0.7s,baz=295,slow=4.6,SNR=148
ELK LR LR 08 09 16.6
comp=Z,42nm,21.9s,baz=287,slow=30
ELK Elko 87.89 49 P P 07 38 20.0 +1.5
QSM Queen of Sheba 88.00 54 P P 07 38 20.2 +1.3
QSM IAmb IAmb 07 38 21.2
comp=Z,17nm,1.0s
GWY Greenwater Val 88.09 53 P P 07 38 20.8 +1.3
GWY IAmb IAmb 07 38 21.7
comp=Z,22nm,1.1s
BCYI Bear Canyon 88.12 45 P P 07 38 20.7 +1.2
ELS Elsinore Mount 88.19 56 P P 07 38 21.2 +1.3
ELS IAmb IAmb 07 38 22.0
comp=Z,16nm,1.4s
TPNV Topopah Spring 88.21 52 P P 07 38 21.4 +1.4
TPNV IAmb IAmb 07 38 22.4
comp=Z,12nm,0.9s
TPNV Topopah Spring 88.21 52 P P 07 38 21.4 +1.4
baz=286,SNR=20
GSC Goldstone, Bar 88.23 54 P P 07 38 21.3 +1.2
GSC IAmb IAmb 07 38 22.5
comp=Z,22nm,1.1s
GSC Goldstone, Bar 88.23 54 P P 07 38 21.6 +1.5
baz=286,SNR=18
LRM Limekiln Ridge 88.29 43 P P 07 38 21.4 +1.0
R11A Troy Canyon, C 88.32 51 P P 07 38 21.7 +1.1
R11A IAmb IAmb 07 38 23.0
comp=Z,15nm,1.0s
R11A Troy Canyon, C 88.32 51 P P 07 38 21.8 +1.3
baz=287,SNR=21
MCMT McKenzie Canyo 88.34 44 P P 07 38 21.5 +0.9
DLMT Dillon 88.34 44 P P 07 38 21.3 +0.9
DLMT IAmb IAmb 07 38 22.2
comp=Z,22nm,1.4s
MURC Murrieta 88.39 56 P P 07 38 21.6 +0.8
baz=286
S11A Rachel 88.39 52 P P 07 38 22.3 +1.4
109C Camp Elliot, M 88.65 57 P P 07 38 23.1 +1.2
109C IAmb IAmb 07 38 24.2
comp=Z,15nm,0.8s
109C Camp Elliot, M 88.65 57 P P 07 38 23.1 +1.2
baz=286
HEC Hector,Ludlow 88.73 55 P P 07 38 23.9 +1.5
baz=286,SNR=5.9
OBN Obninsk 88.88 327 *e*P P 07 38 22.1 -0.4
OBN *e**PP **sP** 07 38 51.8 -1.2
OBN *e* 07 41 57.0
OBN pmax pmax
comp=Z,4.0nm,0.5s
TUQ Turquoise Moun 88.89 54 P P 07 38 24.8 +1.6
baz=287
BOZ Bozeman (W) 88.91 43 P P 07 38 24.1 +1.0
BOZ Bozeman (W) 88.91 43 P P 07 38 23.8 +0.7
baz=289,SNR=8.5
PFO Pinyon Flats O 88.97 56 P P 07 38 24.4 +0.7
PFO IAmb IAmb 07 38 25.9
comp=Z,23nm,1.4s
PFO Pinyon Flats O 88.97 56 P P 07 38 24.9 +1.3
baz=286,SNR=7.9
TPFO Pinon Flats 88.98 56 P P 07 38 24.9 +1.2
baz=286,SNR=6.2
PRN Pahroc Range 88.99 52 P P 07 38 25.1 +1.4
PRN IAmb IAmb 07 38 26.4
comp=Z,17nm,1.0s
BAR Barrett 89.06 57 P P 07 38 25.2 +1.2
BAR IAmb IAmb 07 38 26.0
comp=Z,11nm,0.9s
SPR3 Spring Creek 3 89.07 50 P P 07 38 25.6 +1.4
KIV Kislovodsk 89.16 315 *e*P P 07 38 24.7 +0.5
KIV pmax pmax
comp=Z,9.0nm,1.0s
SHPR Sheep Range 89.17 53 P P 07 38 26.2 +1.7
SHPR IAmb IAmb 07 38 27.3
comp=Z,18nm,0.9s
MONP2 Monument Peak 89.20 56 P P 07 38 26.4 +1.5
baz=286,SNR=7.2
BELC Belle Mtn. Jos 89.23 55 P P 07 38 26.2 +1.3
baz=286,SNR=6.8
GMRC Granite Mounta 89.28 54 P P 07 38 26.4 +1.4
baz=287,SNR=16
QLMT Earthquake Lak 89.30 44 P P 07 38 26.5 +1.5
HVU Hansel Valley 89.35 47 P P 07 38 26.5 +1.2
IKP In-Ko-Pah, Jac 89.52 57 P P 07 38 27.6 +1.4
baz=286
YMR Madison River 89.66 44 P P 07 38 28.5 +1.7
YUH Yuha Desert 89.67 56 P P 07 38 27.6 +0.9
YUH IAmb IAmb 07 38 29.0
comp=Z,11nm,0.9s
SWSC Sam W. Stewart 89.69 56 P P 07 38 28.0 +1.1
baz=287
YHH Holmes Hill 89.70 44 P P 07 38 28.1 +1.1
YHH IAmb IAmb 07 38 29.8
comp=Z,18nm,1.3s
BC3 Big Chuckawall 89.77 55 P P 07 38 28.9 +1.5
baz=287,SNR=6.4
DUG Dugway, Tooele 89.82 49 P P 07 38 28.4 +0.9
DUG Dugway, Tooele 89.82 49 P P 07 38 28.8 +1.3
baz=288,SNR=28
YNR Norris Junctio 89.84 44 P P 07 38 29.4 +1.8
IRM Iron Mountain 89.86 55 P P 07 38 29.1 +1.4
baz=287,SNR=15
ECR Eagle Creek 89.92 46 P P 07 38 29.3 +1.3
H17A Grant Village 90.02 44 P P 07 38 30.6 +2.1
H17A IAmb IAmb 07 38 32.4
comp=Z,17nm,0.9s
H17A Grant Village 90.02 44 P P 07 38 31.5 +3.0
baz=290,SNR=12
FLWY Flagg Ranch 90.04 44 P P 07 38 30.1 +1.6
TPAW Teton Pass 90.06 45 P P 07 38 29.6 +0.8
TPAW IAmb IAmb 07 38 29.6
comp=Z,8.0nm,0.6s
LKWY Lake 90.08 44 P P 07 38 30.6 +1.8
MOOW Moose Ponds 90.12 45 P P 07 38 29.7 +0.7
MOOW IAmb IAmb 07 38 31.1
comp=Z,10.0nm,0.9s
REDW Red Top Meadow 90.18 45 P P 07 38 30.1 +0.9
AHID Auburn Hatcher 90.20 46 P P 07 38 30.1 +0.8
SNOW Snow King Moun 90.21 45 P P 07 38 30.2 +0.8
CCUT Cedar City 90.23 51 P P 07 38 30.9 +1.3
CCUT IAmb IAmb 07 38 31.8
comp=Z,8.2nm,0.9s
LOHW Long Hollow 90.26 45 P P 07 38 30.3 +0.8
CTU Camp Tracy 90.43 48 P P 07 38 31.1 +0.8
CTU IAmb IAmb 07 38 32.2
comp=Z,14nm,0.9s
SZCU Shurtz Canyon 90.43 51 P P 07 38 31.6 +1.1
SZCU IAmb IAmb 07 38 32.9
comp=Z,9.9nm,1.0s
NLU North Lily Min 90.43 49 P P 07 38 31.1 +0.7
NLU IAmb IAmb 07 38 32.5
comp=Z,13nm,0.9s
BLYC Blythe 90.48 55 P P 07 38 31.6 +1.1
LCMT Little Creek M 90.49 52 P P 07 38 31.6 +0.9
LCMT IAmb IAmb 07 38 33.3
comp=Z,12nm,1.0s
W13A Hualapai Mount 90.58 54 P P 07 38 32.4 +1.2
W13A IAmb IAmb 07 38 33.8
comp=Z,14nm,0.9s
PDMCI Parker Dam,Lak 90.62 54 P P 07 38 32.9 +1.8
baz=288,SNR=14
RLMT Red Lodge 90.64 43 P P 07 38 32.8 +1.4
RLMT IAmb IAmb 07 38 35.0
comp=Z,7.2nm,0.8s
RLMT Red Lodge 90.64 43 P P 07 38 32.7 +1.4
baz=291,SNR=7.9
JLU Jordanelle 90.67 48 P P 07 38 32.1 +0.5
KNB Kanab 90.81 52 P P 07 38 33.5 +1.3
MSU Marysvale 90.82 50 P P 07 38 33.5 +1.2
FINES FINESS Array B 90.85 335 P P 07 38 29.8 -1.8
comp=Z,1.9nm,0.4s,baz=56,slow=4.5,SNR=24
MTPU Mount Pierson 90.96 50 P P 07 38 34.9 +1.7
BW06 Boulder Array 91.27 45 P P 07 38 34.1 -0.2
BW06 Boulder Array 91.27 45 P P 07 38 34.6 +0.3
baz=291,SNR=7.3
PD31 Pinedale Array 91.27 45 P P 07 38 34.2 -0.1
PDAR Pinedale Array 91.27 45 P P 07 38 34.5 +0.2
comp=Z,3.4nm,0.6s,baz=241,slow=2.7,SNR=44
PDAR LR LR 08 14 23.8
comp=Z,38nm,19.0s,baz=32,slow=32
PDAR Pinedale Array 91.27 45 P P 07 38 34.4 0.0
TMUT Trail Mountain 91.28 49 P P 07 38 35.2 +0.7
TMUT IAmb IAmb 07 38 36.5
comp=Z,7.2nm,0.9s
113A Mohawk Valley, 91.38 56 P P 07 38 35.6 +0.9
113A IAmb IAmb 07 38 36.5
comp=Z,9.4nm,0.9s
U15A North Rim 91.40 52 P P 07 38 36.1 +1.0
Q16A Castle Valley 91.43 49 P P 07 38 35.7 +0.6
Q16A IAmb IAmb 07 38 37.0
comp=Z,9.7nm,0.9s
P17A Butcher Ranch, 91.56 49 P P 07 38 36.4 +0.8
P17A IAmb IAmb 07 38 37.6
comp=Z,9.7nm,1.0s
Y14A Wickenburg 91.62 55 P P 07 38 37.1 +1.2
SRU San Rafael Swe 91.84 49 P P 07 38 37.3 +0.3
P18A Preston Nutter 91.87 48 P P 07 38 37.8 +0.6
P18A IAmb IAmb 07 38 39.0
comp=Z,7.1nm,0.8s
LAO LASA Array 92.03 41 P P 07 38 38.1 +0.6
RDMU Red Mountain 92.03 47 P P 07 38 38.1 +0.3
214A Organ Pipe Nat 92.40 56 P P 07 38 40.8 +1.4
214A Organ Pipe Nat 92.40 56 P P 07 38 41.3 +1.8
baz=288
WUAZ Wupatki 92.40 53 P P 07 38 40.5 +1.0
WUAZ Wupatki 92.40 53 P P 07 38 41.4 +1.8
baz=289,SNR=23
X16A Lo Mia Camp, P 92.70 54 P P 07 38 42.1 +1.1
O20A White River Ci 93.13 47 P P 07 38 43.2 +0.3
O20A White River Ci 93.13 47 P P 07 38 43.4 +0.5
baz=291,SNR=7.0
PV23 Carpenter Ridg 93.18 49 P P 07 38 43.7 +0.5
PV11 David Mesa, Pa 93.33 49 P P 07 38 44.6 +0.7
K22A Casper 93.39 45 P P 07 38 44.7 +0.7
K22A Casper 93.39 45 P P 07 38 44.8 +0.8
baz=293
PV15 Paradox Valley 93.61 49 P P 07 38 45.8 +0.6
PV15 IAmb IAmb 07 38 46.7
comp=Z,7.3nm,0.9s
X18A Snowflake 93.83 53 P P 07 38 47.3 +1.1
X18A IAmb IAmb 07 38 48.2
comp=Z,6.3nm,1.0s
TUC Tucson 93.91 55 P P 07 38 47.1 +0.6
TUC IAmb IAmb 07 38 49.4
comp=Z,9.2nm,1.2s
TUC Tucson 93.91 55 P P 07 38 48.1 +1.6
baz=289
MVCO Mesa Verde 94.00 50 P P 07 38 47.4 +0.3
MVCO IAmb IAmb 07 38 49.0
comp=Z,4.0nm,0.8s
MVCO Mesa Verde 94.00 50 P P 07 38 47.8 +0.8
baz=291
N23A Red Feather La 94.47 46 P P 07 38 49.9 +0.8
N23A Red Feather La 94.47 46 P P 07 38 50.3 +1.2
baz=293
RSSD Black Hills 94.47 43 P P 07 38 48.7 -0.4
RSSD IAmb IAmb 07 38 49.9
comp=Z,7.3nm,0.7s
RSSD Black Hills 94.47 43 P P 07 38 49.1 0.0
baz=294
PHWY Pilot Hill 94.65 46 P P 07 38 50.5 +0.5
S22A 4UR Ranch, Cre 95.04 49 P P 07 38 52.2 +0.4
S22A IAmb IAmb 07 38 53.8
comp=Z,7.1nm,1.1s
S22A 4UR Ranch, Cre 95.04 49 P P 07 38 52.8 +0.9
baz=292
SDCO Great Sand Dun 96.01 49 P P 07 38 57.0 +0.7
SDCO Great Sand Dun 96.01 49 P P 07 38 56.8 +0.5
baz=293
ANMO Albuquerque 96.36 52 *i*P P 07 38 58.2 +0.4
ANMO Albuquerque 96.36 52 P P 07 38 58.6 +0.8
ANMO Albuquerque 96.36 52 P P 07 38 59.0 +1.2
baz=292
NOA NORSAR Array B 96.69 339 P P 07 38 56.6 -1.9
comp=Z,1.3nm,0.8s,baz=50,slow=4.8,SNR=2.9
NOA LR LR 08 24 05.4
comp=Z,37nm,21.0s,baz=55,slow=36
T25A Trinidad 97.05 49 P P 07 39 02.0 +1.1
baz=294
FRB Frobisher Bay 98.10 14 LR LR 08 30 45.6
comp=Z,71nm,18.0s,baz=172,slow=40
SFJD Kangerlussuaq 98.25 6 LR LR 08 29 28.3
comp=Z,38nm,18.0s,baz=192,slow=39
MNTX Cornudas Mount 98.42 54 P P 07 39 07.3 +0.4
MNTX IAmb IAmb 07 39 09.6
comp=Z,3.6nm,0.9s
MNTX Cornudas Mount 98.42 54 Pdiff Pdif 07 39 08.4 +1.4
baz=292
MLR Muntele Rosu 99.33 322 LR LR 08 24 54.2
comp=Z,46nm,21.9s,baz=55,slow=36
TXAR Lajitas Array 100.69 56 P Pdif 07 39 17.6 +0.4
comp=Z,0.2nm,0.6s,baz=243,slow=4.0,SNR=6.6
SYO Syowa Base 108.73 201 *i*Pdiff Pdif 07 39 53.6 +1.8
SNAA Sanae 119.41 191 P PKPdf 07 44 16.4 -0.5
VNA2 Neumayer--Watz 120.84 190 P PKPdf 07 44 19.4 -0.2
baz=36,slow=1.1
VNA3 Neumayer Olymp 120.94 189 P PKPdf 07 44 20.2 +0.4
BOSA Boshof 122.88 245 PKP PKPdf 07 44 24.6 -0.3
comp=Z,3.4nm,0.9s,baz=128,slow=4.1,SNR=4.0
ZARC Zaragoza, Cauc 134.71 64 PKPdf PKPdf 07 44 47.4 -0.3
TORD Torodi Ar. Bea 134.91 305 PKP PKPdf 07 44 47.7 -0.3
comp=Z,0.5nm,0.4s,baz=26,slow=1.8,SNR=6.2
TORD SKPbc SKPbc 07 48 07.8 -3.5
comp=Z,1.2nm,0.8s,baz=29,slow=2.2,SNR=5.8
SDV Santo Domingo 137.63 59 PKPdf PKPdf 07 44 51.3 -2.0
LC01 Cunco 139.01 134 PKPdf PKPdf 07 44 55.6 +0.7
PLCA Paso Flores 139.04 137 PKP PKPdf 07 44 56.0 +1.0
comp=Z,2.8nm,0.7s,baz=199,slow=7.9,SNR=6.1
PLCA Paso Flores 139.04 137 PKPdf PKPdf 07 44 55.8 +0.8
LCO Las Campanas 143.55 120 PKPdf PKPbc 07 45 03.0 +1.7
DBIC Dimbokro 143.90 303 PKP PKPab 07 45 01.4 -0.2
comp=Z,7.3nm,0.5s,baz=84,slow=2.2,SNR=12
TBTG Tabatinga, AM 143.90 78 PKPdf PKPab 07 45 02.0 +0.4
KIC Kosan Boka 143.98 302 *e*PKIKP PKPab 07 45 01.3 -0.6
comp=Z,11nm,0.6s
TIC Toumodi 144.04 303 *e*PKIKP **PKPab** 07 45 01.4 -0.8
LIC Lamto 144.29 303 *e*PKIKP **PKPab** 07 45 01.1 -2.0
comp=Z,59nm,0.7s
GO03 Copiap 144.33 118 PKPdf PKPab 07 45 04.0 +1.0
ZON Zonda 144.40 125 PKPdf PKPab 07 45 04.2 +1.1
PB06 IPOC Station P 145.89 110 PKPdf 07 45 07.6 -0.1
PB11 IPOC Station P 146.13 104 PKPdf PKPdf 07 45 09.1 +0.9
PB01 IPOC Station P 146.17 107 PKPdf 07 45 08.7 +0.5
MNMC Minye Minye 146.22 103 PKPdf 07 45 07.7 -0.9
GO01 Chusmiza 146.57 104 PKPbc 07 45 11.2 +0.3
PB08 IPOC Station P 146.57 105 PKPdf 07 45 10.8 +1.6
LPAZ La Paz 147.68 98 PKPbc PKPbc 07 45 15.4 +1.1
comp=Z,10.0nm,0.8s,baz=282,slow=3.1,SNR=22
LPAZ La Paz 147.68 98 PKPdf 07 45 13.4 +1.9
LPAZ PKPab PKPbc 07 45 15.7 +1.4
CPUP Villa Florida 155.58 123 PKP PKPdf 07 45 22.7 +0.4
comp=Z,1.2nm,0.8s,baz=44,slow=17,SNR=2.1
BDFB Brasilia 167.03 98 PKP PKPdf 07 45 35.1 +0.3
comp=Z,3.3nm,1.0s,baz=206,slow=0.7,SNR=5.0

*IDC* ***07*** *07:34:22.7±2.3,59.75N×153.14W,h99km±56km,mb3.5/5, mb1 3.5/6,mb1mx3.0/48,mbtmp3.8/6,Error ellipse: s-maj=81.0km s-min=19.8km az=106.0*

*NEIC* ***07*** *07:34:23.6±1.1,59.76N±0.03×153.16W±0.07, h110km±4km,Error ellipse: s-maj=5.3km s-min=4.7km az=127.0*

*AEIC* ***07*** *07:34:24±1.2,59.76N±0.03×153.13W±0.07,h104km±4km, ML3.3,ML3.5/88(NEIC),Error ellipse: s-maj=5.0km s-min=4.6km az=128.0*

**ISC 07 07:34:23.6±0.8,59.77N±0.03×153.10W±0.04, h112km±5km,n210,σ0s69/227,mb3.8/5,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| OPT | Oil Point | 0.13 | 210 | | Pn | 07 34 38.8 | -0.3 |
| OPT | Oil Point | 0.13 | 210 | P | Pn | 07 34 38.8 | -0.3 |
| | baz=23 | | | | | | |
| ILSW | Iliamna Southw | 0.22 | 354 | | Pn | 07 34 38.9 | -0.6 |
| ILSW | | | | | Sn | 07 34 50.1 | -1.3 |
| ILIM | Iliamna | 0.32 | 13 | | Pn | 07 34 39.6 | -0.1 |
| O20K | Slope Mountain | 0.40 | 37 | | Pn | 07 34 40.0 | -0.1 |
| O20K | | | | | Sn | 07 34 52.3 | -0.3 |
| O20K | Slope Mountain | 0.40 | 37 | P | Pn | 07 34 40.0 | -0.1 |
| | baz=219 | | | | | | |
| O20K | | | | S | Sn | 07 34 52.3 | -0.3 |
| | baz=219 | | | | | | |
| AU22 | Augustine Moun | 0.42 | 198 | | Pn | 07 34 40.0 | -0.1 |
| AU22 | | | | | Sn | 07 34 52.0 | -0.5 |
| AUL | Augustine Lava | 0.42 | 204 | | Pn | 07 34 40.0 | -0.1 |
| AUL | | | | | Sn | 07 34 52.2 | -0.4 |
| AGU | Augustine-Summ | 0.44 | 203 | | Pn | 07 34 40.3 | -0.1 |
| AUQ | Augustine Qik' | 0.44 | 201 | | Pn | 07 34 40.2 | -0.2 |
| RED | Redoubt Volcan | 0.68 | 14 | | Pn | 07 34 41.7 | -0.3 |
| RED | | | | | Sn | 07 34 55.1 | -0.8 |
| RSO | Redoubt South | 0.72 | 14 | | Pn | 07 34 42.4 | -0.1 |
| HOM | Homer | 0.75 | 98 | | Pn | 07 34 42.6 | +0.1 |
| HOM | | | | | Sn | 07 34 57.1 | +0.4 |
| HOM | | | | IAML | | 07 34 58.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| HOM | | | | IAML | | 07 34 58.3 | |
| | comp=N,1μm,0.5s | | | | | | |
| HOM | Homer | 0.75 | 98 | P | Pn | 07 34 42.6 | +0.1 |
| | baz=278 | | | | | | |
| HOM | | | | S | Sn | 07 34 57.3 | +0.6 |
| | baz=278 | | | | | | |
| O19K | Port Alsworth | 0.75 | 306 | | Pn | 07 34 42.1 | -0.4 |
| O19K | | | | | Sn | 07 34 55.8 | -0.9 |
| O19K | | | | IAML | | 07 34 56.8 | |
| | comp=N,2μm,0.4s | | | | | | |
| O19K | | | | IAML | | 07 34 57.8 | |
| | comp=E,1μm,0.5s | | | | | | |
| O19K | Port Alsworth | 0.75 | 306 | P | Pn | 07 34 42.1 | -0.4 |
| | baz=126 | | | | | | |
| O19K | | | | S | Sn | 07 34 55.9 | -0.9 |
| | baz=126 | | | | | | |
| REF | Redoubt East F | 0.75 | 15 | | Pn | 07 34 42.8 | +0.1 |
| REF | | | | | Sn | 07 34 56.6 | -0.6 |
| NCT | North Crescent | 0.80 | 6 | | Pn | 07 34 43.0 | -0.1 |
| DFR | Drift River | 0.85 | 14 | | Pn | 07 34 43.5 | -0.1 |
| DFR | | | | | Sn | 07 34 58.3 | -0.4 |
| RDT | Redoubt | 0.88 | 23 | | Pn | 07 34 43.7 | -0.1 |
| Q19K | Cape Douglas, | 0.89 | 199 | | Pn | 07 34 43.4 | -0.4 |
| Q19K | | | | | Sn | 07 34 58.0 | -1.1 |
| Q19K | | | | IAML | | 07 35 03.4 | |
| | comp=N,786nm,0.8s | | | | | | |
| Q19K | Cape Douglas, | 0.89 | 199 | P | Pn | 07 34 43.6 | -0.3 |
| | baz=17 | | | | | | |
| Q19K | | | | S | Sn | 07 34 58.4 | -0.7 |
| | baz=17 | | | | | | |
| CNPM | China Poot | 0.98 | 103 | | Pn | 07 34 44.5 | -0.2 |
| CNPM | | | | IAML | | 07 35 01.0 | |
| | comp=N,702nm,0.5s | | | | | | |
| BRLK | Bradley Lake | 1.12 | 89 | | Pn | 07 34 45.8 | -0.4 |
| BRLK | | | | IAML | | 07 35 03.8 | |
| | comp=N,790nm,0.2s | | | | | | |
| BRLK | | | | IAML | | 07 35 04.0 | |
| | comp=E,646nm,0.3s | | | | | | |
| P18K | Big Mountain, | 1.15 | 252 | | Pn | 07 34 45.7 | -0.7 |
| P18K | | | | | Sn | 07 35 02.1 | -1.7 |
| P18K | Big Mountain, | 1.15 | 252 | P | Pn | 07 34 45.8 | -0.7 |
| | baz=70 | | | | | | |
| P18K | | | | S | Sn | 07 35 02.4 | -1.4 |
| | baz=70 | | | | | | |
| BRSE | Bradley Lake S | 1.20 | 90 | | Pn | 07 34 46.5 | -0.4 |
| BRSE | Bradley Lake S | 1.20 | 90 | P | Pn | 07 34 46.5 | -0.4 |
| | baz=272 | | | | | | |
| N19K | Bonanza Creek | 1.26 | 327 | | Pn | 07 34 47.6 | -0.1 |
| N19K | Bonanza Creek | 1.26 | 327 | P | Pn | 07 34 47.6 | -0.1 |
| | baz=147 | | | | | | |
| CAPN | Captain Cook N | 1.40 | 43 | P | Pn | 07 34 51.0 | +1.8 |
| | baz=225 | | | | | | |
| SPU | Mount Spurr | 1.51 | 20 | | Pn | 07 34 50.8 | +0.1 |
| SPCN | Chakachatna No | 1.53 | 17 | | Pn | 07 34 51.2 | +0.4 |
| SPBG | Spurr Blockage | 1.54 | 13 | | Pn | 07 34 51.5 | +0.5 |
| SPNN | North Nagishla | 1.62 | 7 | | Pn | 07 34 52.4 | +0.3 |
| SPCG | Spurr Capps Gl | 1.62 | 19 | | Pn | 07 34 52.3 | +0.3 |
| SLKM | Skilak Lake | 1.62 | 61 | | Pn | 07 34 52.4 | +0.4 |
| KCG | Knife Ck. Glac | 1.79 | 216 | | Pn | 07 34 54.0 | -0.1 |
| SVW2 | Sparrevohn | 1.82 | 318 | | Pn | 07 34 54.0 | -0.3 |
| O22K | Cooper Landing | 1.84 | 66 | | Pn | 07 34 54.8 | +0.2 |
| O22K | | | | IAML | | 07 35 32.0 | |
| | comp=E,836nm,0.8s | | | | | | |
| O22K | Cooper Landing | 1.84 | 66 | P | Pn | 07 34 54.7 | +0.2 |
| | baz=248 | | | | | | |
| STLK | Strandline Lak | 1.85 | 19 | | Pn | 07 34 55.4 | +0.6 |
| SEW | Seward | 1.87 | 78 | | Pn | 07 34 54.6 | -0.2 |
| SEW | Seward | 1.87 | 78 | P | Pn | 07 34 54.7 | -0.2 |
| | baz=261 | | | | | | |
| KELA | Mount Kelaz | 1.90 | 227 | | Pn | 07 34 55.4 | -0.1 |
| ANCK | Angle Creek | 2.00 | 219 | | Pn | 07 34 56.9 | +0.2 |
| KDAK | Kodiak Island | 2.01 | 172 | P | Pn | 07 34 55.7 | -0.9 |
| | comp=E,37nm,0.3s,baz=34,slow=8.6,SNR=187 | | | | | | |
| KDAK | | | | | Sn | 07 35 20.2 | -1.7 |
| | comp=E,34nm,0.3s,baz=143,slow=22,SNR=29 | | | | | | |
| KDAK | Kodiak Island | 2.01 | 172 | IAML | | 07 35 22.8 | |
| | comp=E,239nm,0.3s | | | | | | |
| KDAK | | | | IAML | | 07 35 28.9 | |
| | comp=E,226nm,0.6s | | | | | | |
| CAHL | Cahill | 2.06 | 215 | | Pn | 07 34 57.8 | +0.3 |
| RC01 | Rabbit Creek A | 2.13 | 50 | | Pn | 07 34 58.5 | +0.3 |
| RC01 | | | | IAML | | 07 35 25.2 | |
| | comp=E,657nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 07 35 25.5 | |
| | comp=N,542nm,0.3s | | | | | | |
| RC01 | Rabbit Creek A | 2.13 | 50 | P | Pn | 07 34 58.5 | +0.3 |
| | baz=233 | | | | | | |
| M22K | Willow | 2.47 | 35 | | Pn | 07 35 03.3 | +0.7 |
| M22K | Willow | 2.47 | 35 | P | Pn | 07 35 03.3 | +0.7 |
| | baz=218 | | | | | | |
| OHAK | Old Harbor | 2.55 | 182 | | Pn | 07 35 02.3 | -1.4 |
| OHAK | Old Harbor | 2.55 | 182 | P | Pn | 07 35 02.3 | -1.4 |
| | baz=1.7 | | | | | | |
| L19K | White Mountain | 2.57 | 341 | | Pn | 07 35 03.9 | 0.0 |
| L19K | White Mountain | 2.57 | 341 | P | Pn | 07 35 03.9 | 0.0 |
| | baz=160 | | | | | | |
| PWL | Port Wells | 2.61 | 63 | | Pn | 07 35 03.9 | -0.6 |
| PMR | Palmer | 2.68 | 45 | | Pn | 07 35 04.6 | -0.6 |
| PMR | Palmer | 2.68 | 45 | P | Pn | 07 35 04.6 | -0.6 |
| | baz=229 | | | | | | |
| PLK1 | Peulik 1 | 2.69 | 224 | | Pn | 07 35 06.0 | +0.5 |
| L20K | Farewell, AK | 2.75 | 352 | | Pn | 07 35 06.7 | +0.4 |
| L20K | Farewell, AK | 2.75 | 352 | P | Pn | 07 35 06.7 | +0.4 |
| | baz=172 | | | | | | |
| KNK | Knik Glacier | 2.82 | 52 | | Pn | 07 35 06.8 | -0.5 |
| KNK | Knik Glacier | 2.82 | 52 | P | Pn | 07 35 06.7 | -0.5 |
| | baz=236 | | | | | | |
| GHO | Glory Hole Cre | 2.87 | 44 | | Pn | 07 35 07.5 | -0.5 |
| GHO | | | | IAML | | 07 35 41.5 | |
| | comp=E,204nm,0.3s | | | | | | |
| GHO | | | | IAML | | 07 35 42.8 | |
| | comp=N,212nm,0.3s | | | | | | |
| CUT | Chulitna | 2.98 | 26 | | Pn | 07 35 10.2 | +0.9 |
| CUT | | | | IAML | | 07 35 46.0 | |
| | comp=E,146nm,0.4s | | | | | | |
| CUT | | | | IAML | | 07 35 51.5 | |
| | comp=N,159nm,0.5s | | | | | | |
| CUT | Chulitna | 2.98 | 26 | P | Pn | 07 35 10.0 | +0.7 |
| | baz=209 | | | | | | |
| SML | Sawmill | 3.11 | 47 | | Pn | 07 35 10.4 | -0.6 |
| SML | | | | IAML | | 07 35 48.4 | |
| | comp=N,118nm,0.4s | | | | | | |
| SML | | | | IAML | | 07 35 54.7 | |
| | comp=E,128nm,0.7s | | | | | | |
| SML | Sawmill | 3.11 | 47 | P | Pn | 07 35 10.4 | -0.6 |
| | baz=231 | | | | | | |
| PPLA | Purkeypile | 3.17 | 8 | | Pn | 07 35 13.0 | +1.1 |
| PPLA | Purkeypile | 3.17 | 8 | P | Pn | 07 35 13.1 | +1.2 |
| | baz=189 | | | | | | |
| GLI | Glacier Island | 3.19 | 67 | | Pn | 07 35 11.2 | -0.9 |
| GLI | | | | IAML | | 07 35 47.5 | |
| | comp=E,230nm,0.8s | | | | | | |
| GLI | | | | IAML | | 07 35 47.8 | |
| | comp=N,242nm,0.5s | | | | | | |
| GLI | Glacier Island | 3.19 | 67 | P | Pn | 07 35 11.8 | -0.3 |
| | baz=252 | | | | | | |
| FID | Port Fidalgo | 3.44 | 70 | | Pn | 07 35 13.8 | -1.7 |
| Q23K | Middleton Isla | 3.45 | 93 | | Pn | 07 35 15.2 | -0.2 |
| Q23K | Middleton Isla | 3.45 | 93 | P | Pn | 07 35 15.1 | -0.4 |
| | baz=278 | | | | | | |
| TT01 | Tatalina | 3.45 | 337 | | Pn | 07 35 15.3 | -0.2 |
| MID | Middleton Isla | 3.45 | 93 | | Pn | 07 35 15.4 | -0.1 |
| TTA | Tatalina | 3.47 | 337 | | Pn | 07 35 15.5 | -0.3 |
| TTA | Tatalina | 3.47 | 337 | P | Pn | 07 35 15.5 | -0.3 |
| | baz=155 | | | | | | |
| JPK | Jack Peak | 3.48 | 65 | | Pn | 07 35 16.3 | +0.4 |
| SCM | Sheep Creek Mo | 3.51 | 51 | | Pn | 07 35 16.0 | -0.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SCM | | | | IAML | | 07 35 58.7 | |
| | comp=E,150nm,0.5s | | | | | | |
| SCM | | | | IAML | | 07 36 00.9 | |
| | comp=N,112nm,0.6s | | | | | | |
| **K20K** | **Telida** | **3.63** | **353** | | **Pn** | **07 35 18.3** | **+0.3** |
| **K20K** | **Telida** baz=173 | **3.63** | **353** | P | **Pn** | **07 35 18.3** | **+0.3** |
| **CAST** | **Castle Rocks** | **3.70** | **7** | | **Pn** | **07 35 19.3** | **+0.5** |
| **CAST** | **Castle Rocks** baz=188 | **3.70** | **7** | P | **Pn** | **07 35 19.3** | **+0.5** |
| **EYAK** | **Cordova Ski Ar** | **3.76** | **75** | | **Pn** | **07 35 18.6** | **-1.0** |
| **EYAK** | **Cordova Ski Ar** baz=261 | **3.76** | **75** | P | **Pn** | **07 35 18.8** | **-0.8** |
| **DIV** | **Divide** | **3.88** | **66** | | **Pn** | **07 35 21.0** | **-0.3** |
| **TRF** | **Thorofare Moun** | **3.93** | **19** | | **Pn** | **07 35 22.5** | **+0.4** |
| TRF | | | | IAML | | 07 36 10.0 | |
| | comp=N,36nm,0.5s | | | | | | |
| TRF | | | | IAML | | 07 36 49.2 | |
| | comp=E,30nm,2.8s | | | | | | |
| **TRF** | **Thorofare Moun** baz=201 | **3.93** | **19** | P | **Pn** | **07 35 22.5** | **+0.4** |
| **KLU** | **Klutina** | **3.94** | **61** | | **Pn** | **07 35 21.5** | **-0.6** |
| KLU | | | | IAML | | 07 36 09.6 | |
| | comp=E,142nm,0.4s | | | | | | |
| **KLU** | **Klutina** baz=247 | **3.94** | **61** | P | **Pn** | **07 35 21.5** | **-0.6** |
| **KTH** | **Kantishna Hill** | **3.94** | **14** | | **Pn** | **07 35 22.1** | **-0.1** |
| **M24K** | **Tolsona, Glenn** | **4.11** | **52** | | **Pn** | **07 35 24.5** | **0.0** |
| M24K | | | | IAML | | 07 36 23.0 | |
| | comp=N,95nm,0.7s | | | | | | |
| M24K | | | | IAML | | 07 36 29.8 | |
| | comp=E,96nm,1.4s | | | | | | |
| **M24K** | **Tolsona, Glenn** baz=238 | **4.11** | **52** | P | **Pn** | **07 35 24.6** | **+0.2** |
| **CHUM** | **Lake Minchumin** | **4.15** | **5** | | **Pn** | **07 35 25.3** | **+0.5** |
| **CHUM** | **Lake Minchumin** baz=186 | **4.15** | **5** | P | **Pn** | **07 35 25.3** | **+0.5** |
| **RND** | **Reindeer** | **4.18** | **27** | | **Pn** | **07 35 25.5** | **+0.2** |
| **GOAT** | **Goat Mountain** | **4.26** | **75** | | **Pn** | **07 35 25.9** | **-0.6** |
| **BMRM** | **Bremner River** | **4.39** | **70** | | **Pn** | **07 35 27.4** | **-0.7** |
| BMRM | | | | IAML | | 07 36 17.2 | |
| | comp=E,62nm,0.4s | | | | | | |
| BMRM | | | | IAML | | 07 36 37.5 | |
| | comp=N,72nm,2.6s | | | | | | |
| **BMRM** | **Bremner River** baz=258 | **4.39** | **70** | P | **Pn** | **07 35 28.1** | **0.0** |
| **MCK** | **McKinley** | **4.45** | **25** | | **Pn** | **07 35 29.3** | **+0.5** |
| MCK | | | | IAML | | 07 37 59.1 | |
| | comp=N,20nm,4.0s | | | | | | |
| **MCK** | **McKinley** baz=208 | **4.45** | **25** | P | **Pn** | **07 35 29.3** | **+0.5** |
| **J20K** | **Nowinta River** | **4.45** | **354** | | **Pn** | **07 35 29.4** | **+0.5** |
| **J20K** | **Nowinta River** baz=173 | **4.45** | **354** | P | **Pn** | **07 35 29.2** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **4.46** | **12** | | **Pn** | **07 35 28.6** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** baz=194 | **4.46** | **12** | P | **Pn** | **07 35 28.5** | **-0.5** |
| **HMT** | **Hamilton** | **4.47** | **79** | Pn | **Pn** | **07 35 29.6** | **+0.4** |
| **N25K** | **Chitina, Valde** | **4.57** | **63** | | **Pn** | **07 35 30.9** | **+0.3** |
| N25K | | | | IAML | | 07 36 22.7 | |
| | comp=E,88nm,0.6s | | | | | | |
| N25K | | | | IAML | | 07 36 24.8 | |
| | comp=N,57nm,0.5s | | | | | | |
| **N25K** | **Chitina, Valde** baz=250 | **4.57** | **63** | P | **Pn** | **07 35 30.9** | **+0.3** |
| **HARP** | **HAARP** | **4.67** | **52** | | **Pn** | **07 35 32.1** | **+0.2** |
| **HARP** | **HAARP** baz=239 | **4.67** | **52** | P | **Pn** | **07 35 32.1** | **+0.2** |
| **SUCK** | **Suckling Hills** | **4.70** | **82** | Pn | **Pn** | **07 35 32.7** | **+0.4** |
| **BWN** | **Browne** | **4.74** | **20** | | **Pn** | **07 35 33.5** | **+0.6** |
| BWN | | | | IAML | | 07 36 37.8 | |
| | comp=N,43nm,2.8s | | | | | | |
| BWN | | | | IAML | | 07 37 19.7 | |
| | comp=E,38nm,2.9s | | | | | | |
| **BERG** | **Berg Lake** | **4.75** | **78** | Pn | **Pn** | **07 35 32.8** | **-0.2** |
| **GLB** | **Gilahina Butte** | **4.88** | **66** | | **Pn** | **07 35 34.8** | **+0.1** |
| GLB | | | | IAML | | 07 36 30.4 | |
| | comp=E,50nm,0.8s | | | | | | |
| GLB | | | | IAML | | 07 36 30.4 | |
| | comp=N,63nm,0.8s | | | | | | |
| **PAX** | **Paxson** | **4.88** | **46** | | **Pn** | **07 35 34.6** | **-0.1** |
| **PAX** | **Paxson** baz=232 | **4.88** | **46** | P | **Pn** | **07 35 34.6** | **-0.1** |
| **GRIN** | **Grindle Hills** | **4.94** | **80** | | **Pn** | **07 35 35.7** | **+0.3** |
| **KHIT** | **Khitrov Hills** | **4.98** | **78** | | **Pn** | **07 35 35.9** | **-0.2** |
| **VRDI** | **Verde Repeater** | **4.99** | **69** | | **Pn** | **07 35 36.6** | **+0.3** |
| VRDI | | | | IAML | | 07 36 23.4 | |
| | comp=E,28nm,3.4s | | | | | | |
| VRDI | | | | IAML | | 07 36 33.2 | |
| | comp=N,40nm,0.5s | | | | | | |
| **PS10** | **TAPS Pump St10** | **5.07** | **41** | | **Pn** | **07 35 38.0** | **+0.7** |
| **SNH** | **Sunshine Point** | **5.17** | **81** | Pn | **Pn** | **07 35 39.1** | **+0.5** |
| **WAX** | **Waxell Ridge** | **5.17** | **78** | | **Pn** | **07 35 38.6** | **-0.1** |
| **NEA2** | **Nenana** | **5.20** | **20** | | **Pn** | **07 35 38.6** | **-0.4** |
| NEA2 | | | | IAML | | 07 36 52.1 | |
| | comp=N,13nm,3.7s | | | | | | |
| NEA2 | | | | IAML | | 07 38 07.1 | |
| | comp=E,13nm,4.3s | | | | | | |
| **NEA2** | **Nenana** baz=203 | **5.20** | **20** | P | **Pn** | **07 35 38.6** | **-0.4** |
| **WRH** | **Wood River Hil** | **5.27** | **24** | | **Pn** | **07 35 39.6** | **-0.4** |
| WRH | | | | IAML | | 07 37 04.2 | |
| | comp=E,20nm,4.8s | | | | | | |
| WRH | | | | IAML | | 07 38 03.8 | |
| | comp=N,19nm,4.9s | | | | | | |
| **GCSA** | **Galena City Sc** | **5.30** | **342** | | **Pn** | **07 35 40.2** | **0.0** |
| **GCSA** | **Galena City Sc** baz=159 | **5.30** | **342** | P | **Pn** | **07 35 40.3** | **0.0** |
| **MLY** | **Manley** | **5.40** | **11** | | **Pn** | **07 35 41.5** | **-0.2** |
| **MLY** | **Manley** baz=193 | **5.40** | **11** | P | **Pn** | **07 35 41.7** | **0.0** |
| **ISLE** | **Juniper Island** | **5.44** | **76** | | **Pn** | **07 35 42.5** | **+0.2** |
| **I21K** | **Tanana** | **5.46** | **5** | | **Pn** | **07 35 42.5** | **+0.1** |
| **I21K** | **Tanana** baz=186 | **5.46** | **5** | P | **Pn** | **07 35 42.6** | **+0.1** |
| **KIAG** | **Kiagna River** | **5.46** | **73** | | **Pn** | **07 35 43.0** | **+0.4** |
| **HDA** | **Harding Lake** | **5.48** | **29** | | **Pn** | **07 35 42.5** | **-0.3** |
| **HDA** | **Harding Lake** baz=215 | **5.48** | **29** | P | **Pn** | **07 35 42.5** | **-0.3** |
| **BALM** | **Baldy** | **5.48** | **72** | | **Pn** | **07 35 43.5** | **+0.6** |
| **CCB** | **Clear Creek Bu** | **5.49** | **25** | | **Pn** | **07 35 42.4** | **-0.5** |
| **BAGL** | **Bagley Icefiel** | **5.55** | **78** | | **Pn** | **07 35 44.6** | **+0.9** |
| **M26K** | **Nabesna, AK** | **5.57** | **57** | | **Pn** | **07 35 45.0** | **+1.0** |
| **RIDG** | **Independent Ri** | **5.59** | **41** | | **Pn** | **07 35 44.5** | **+0.2** |
| **RIDG** | **Independent Ri** baz=228 | **5.59** | **41** | P | **Pn** | **07 35 44.5** | **+0.2** |
| **MESA** | **MESA** | **5.62** | **81** | | **Pn** | **07 35 45.3** | **+0.5** |
| **MESA** | **MESA** baz=271 | **5.62** | **81** | P | **Pn** | **07 35 45.4** | **+0.5** |
| **PS08** | **TAPS Pump Stn8** | **5.62** | **29** | | **Pn** | **07 35 44.2** | **-0.4** |
| **I23K** | **Minto, Yukon-K** | **5.67** | **16** | | **Pn** | **07 35 45.3** | **-0.1** |
| **I23K** | **Minto, Yukon-K** baz=200 | **5.67** | **16** | P | **Pn** | **07 35 45.2** | **-0.1** |
| **TCOL** | **CIGO, UAF Yank** | **5.68** | **23** | | **Pn** | **07 35 45.3** | **-0.1** |
| **TCOL** | **CIGO, UAF Yank** baz=208 | **5.68** | **23** | P | **Pn** | **07 35 45.3** | **-0.1** |
| **COLA** | **College** | **5.68** | **23** | | **Pn** | **07 35 45.4** | **0.0** |
| **MDM** | **Murphy Dome** | **5.68** | **21** | | **Pn** | **07 35 45.2** | **-0.3** |
| **L26K** | **Log Cabin Wild** | **5.71** | **51** | | **Pn** | **07 35 45.8** | **-0.1** |
| **L26K** | **Log Cabin Wild** baz=240 | **5.71** | **51** | P | **Pn** | **07 35 45.9** | **-0.1** |
| **YAH** | **Yahtse** | **5.72** | **79** | | **Pn** | **07 35 47.0** | **+0.7** |
| **DOT** | **Dot Lake** | **5.80** | **44** | | **Pn** | **07 35 47.2** | **+0.1** |
| **IL31** | | **5.80** | **27** | | **Pn** | **07 35 46.6** | **-0.4** |
| **ILAR** | **Eielson Array** comp=N,3.8nm,0.3s,baz=213,slow=13,SNR=142 | **5.80** | **27** | P | **Pn** | **07 35 46.4** | **-0.7** |
| ILAR | | | | S | **Sn** | **07 36 46.7** | **-5.5** |
| | comp=N,1.0nm,0.3s,baz=217,slow=27,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **5.80** | **27** | | **Pn** | **07 35 46.5** | **-0.5** |
| **BARN** | **Barnard Glacie** | **5.82** | **72** | | **Pn** | **07 35 48.5** | **+1.0** |
| **H21K** | **Melozitna Rive** | **5.92** | **1** | | **Pn** | **07 35 48.9** | **+0.3** |
| **POKR** | **Poker Plat Res** | **5.98** | **24** | | **Pn** | **07 35 49.4** | **0.0** |
| **POKR** | **Poker Plat Res** baz=209 | **5.98** | **24** | P | **Pn** | **07 35 49.5** | **0.0** |
| **TABL** | **Table Mountain** | **6.02** | **78** | | **Pn** | **07 35 50.8** | **+0.6** |
| **SCRK** | **Sand Creek** | **6.03** | **42** | | **Pn** | **07 35 49.6** | **-0.7** |
| **SCRK** | **Sand Creek** baz=230 | **6.03** | **42** | P | **Pn** | **07 35 49.5** | **-0.9** |
| **M27K** | **Edge Creek, AK** | **6.04** | **60** | Pn | **Pn** | **07 35 51.6** | **+1.2** |
| **J25K** | **Salcha River,** | **6.06** | **33** | | **Pn** | **07 35 50.3** | **-0.4** |
| **J25K** | **Salcha River,** baz=220 | **6.06** | **33** | P | **Pn** | **07 35 50.2** | **-0.4** |
| **IM03** | | **6.25** | **358** | | **Pn** | **07 35 53.5** | **+0.4** |
| **IMAR** | **Indian Mountai** | **6.25** | **358** | Pn | **Pn** | **07 35 53.5** | **+0.4** |
| **PS06** | **TAPS Pump Stn6** | **6.30** | **13** | | **Pn** | **07 35 54.1** | **+0.3** |
| **YUK2** | **White River** | **6.34** | **66** | | **Pn** | **07 35 54.8** | **+0.4** |
| **L27K** | **Beaver Creek,** | **6.34** | **54** | Pn | **Pn** | **07 35 54.9** | **+0.5** |
| **BC03** | | **6.36** | **54** | | **Pn** | **07 35 54.8** | **+0.2** |
| **BCAR** | **Beaver Creek A** | **6.36** | **54** | Pn | **Pn** | **07 35 55.2** | **+0.5** |
| **PCA** | **Pinnacle** | **6.47** | **82** | | **Pn** | **07 35 56.8** | **+0.6** |
| **PINM** | **Pinnacle** baz=273 | **6.47** | **82** | P | **Pn** | **07 35 56.6** | **+0.4** |
| **J26L** | **Joseph Creek** | **6.52** | **39** | Pn | **Pn** | **07 35 56.7** | **-0.2** |
| **J26L** | **Joseph Creek** baz=228 | **6.52** | **39** | P | **Pn** | **07 35 56.8** | **0.0** |
| **H24K** | **Noodor Dome** | **6.54** | **19** | | **Pn** | **07 35 57.0** | **-0.2** |
| **H24K** | **Noodor Dome** baz=204 | **6.54** | **19** | P | **Pn** | **07 35 57.1** | **-0.1** |
| **PRP** | **Porcupine Dome** | **6.74** | **28** | | **Pn** | **07 35 59.8** | **-0.1** |
| **PRP** | **Porcupine Dome** baz=215 | **6.74** | **28** | P | **Pn** | **07 36 00.1** | **+0.2** |
| **BCPM** | **Bancas Point** | **6.79** | **83** | | **Pn** | **07 36 01.5** | **+1.1** |
| **PNL** | **Peninsula** | **6.93** | **85** | | **Pn** | **07 36 02.5** | **0.0** |
| **YUK4** | **Talbot Arm** baz=263 | **7.30** | **71** | P | **Pn** | **07 36 08.9** | **+1.3** |
| **FALS** | **False Pass** | **7.44** | **233** | Pn | **Pn** | **07 36 09.4** | **+0.1** |
| **YUK7** | **Dusty Glacier** | **7.51** | **78** | | **Pn** | **07 36 10.4** | **0.0** |
| **COLD** | **Coldfoot** | **7.60** | **9** | | **Pn** | **07 36 11.7** | **+0.3** |
| **COLD** | **Coldfoot** baz=191 | **7.60** | **9** | P | **Pn** | **07 36 11.6** | **+0.2** |
| **ISLZ** | **Isanotski Laza** | **7.65** | **233** | | **Pn** | **07 36 12.4** | **+0.1** |
| **FYU** | **Fort Yukon** | **7.69** | **24** | | **Pn** | **07 36 12.1** | **-0.5** |
| **DAWY** | **Dawson** | **7.77** | **50** | | **Pn** | **07 36 13.9** | **+0.2** |
| **DAWY** | **Dawson** baz=243 | **7.77** | **50** | P | **Pn** | **07 36 13.0** | **-0.7** |
| **HYT** | **Haines Junctio** | **7.82** | **75** | | **Pn** | **07 36 15.6** | **+1.0** |
| **HYT** | **Haines Junctio** baz=269 | **7.82** | **75** | P | **Pn** | **07 36 14.7** | **+0.1** |
| **BM03** | **Burnt Mountain** | **8.55** | **23** | | **Pn** | **07 36 23.3** | **-1.1** |
| **BMAR** | **Burnt Mountain** | **8.57** | **23** | Pn | **Pn** | **07 36 23.2** | **-1.3** |
| **N31M** | **Braeburn, Yuko** | **8.69** | **71** | Pn | **Pn** | **07 36 26.9** | **+0.8** |
| **WHY** | **Whitehorse** | **9.11** | **77** | | **Pn** | **07 36 32.2** | **+0.2** |
| **JIS** | **Juneau Island** | **9.76** | **91** | Pn | **Pn** | **07 36 42.4** | **+1.7** |
| **P33M** | **Teslin, Yukon** | **10.17** | **79** | Pn | **Pn** | **07 36 47.4** | **+1.1** |
| **PETK** | **Petropavlovsk-** comp=N,3.1nm,1.1s,baz=72,slow=11,SNR=5.4 | **27.44** | **278** | P | **P** | **07 39 57.8** | **-0.8** |
| **KSRS** | **Korea Array** comp=N,0.8nm,0.4s,baz=39,slow=7.0,SNR=5.4 | **53.18** | **283** | P | **P** | **07 43 31.0** | **+1.2** |
| **SONM** | **Songino Array** comp=N,0.8nm,0.7s,baz=33,slow=5.7,SNR=5.0 | **54.89** | **306** | P | **P** | **07 43 43.2** | **+1.0** |
| **ZALV** | **Zalesovo Beam** comp=N,0.8nm,0.4s,baz=35,slow=6.3,SNR=4.9 | **57.53** | **324** | P | **P** | **07 44 00.8** | **+0.1** |
| **MKAR** | **Makanchi Array** comp=N,0.1nm,0.5s,baz=46,slow=7.8,SNR=1.9 | **64.58** | **321** | P | **P** | **07 44 48.2** | **-0.3** |

*IDC **07** 07:41:51.1±1.1,6.89N×126.24E,h0km,mb3.5/6, mb1 3.7/6,mb1mx3.5/37,mbtmp3.4/6,Error ellipse: s-maj=25.7km s-min=9.8km az=22.0*
*MAN **07** 07:41:55.6,6.81N×125.86E,h20km,mb4.6,ML3.5,MS3.3*
**ISC 07 07:41:56.3±0.9,6.78N±0.05×125.86E±0.05,h35km,n15, σ0.97/18,mb3.2/5,4C-3D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **0.41** | **316** | Pg | **Pn** | **07 42 04.4** | **-1.3** |
| | 690nm,0.3s,baz=214,slow=1.7,SNR=44 | | | | | | |
| DAV | | | | Lg | Lg | 07 42 14.0 | |
| | 559nm,0.3s,baz=302,slow=22,SNR=7.8 | | | | | | |
| DAV | | | | LR | LR | 07 42 21.2 | |
| | comp=Z,241nm,21.4s,baz=221,slow=44 | | | | | | |
| **MATI** | **Mati** | **0.42** | **67** | *i*eP | **Pn** | **07 42 04.7** | **-1.3** |
| **DDMP** | **Don Marcelino,** | **0.69** | **193** | *i*P | **Pn** | **07 42 10.2** | **+0.6** |
| **KCP** | **Kidapawan** | **0.80** | **287** | *i*P | **Pn** | **07 42 10.0** | **-1.2** |
| KCP | | | | *i* S | **Sn** | **07 42 21.8** | **-0.2** |
| **GSPH** | **General Santos** | **1.14** | **233** | eP | **Pn** | **07 42 15.8** | **-0.1** |
| **BUKP** | **Musuan** | **1.35** | **324** | *i*eP | **Pn** | **07 42 18.8** | **0.0** |
| BUKP | | | | eS | **Sn** | **07 42 36.6** | **+1.0** |
| **BIPH** | **Bislig** | **1.48** | **19** | *i*eP | **Pn** | **07 42 22.2** | **+1.6** |
| BIPH | | | | eS | **Sn** | **07 42 38.8** | **+0.1** |
| **CTBH** | **Cotabato--PC H** | **1.67** | **285** | *i*P | **Pn** | **07 42 23.9** | **+0.8** |
| CTBH | | | | *i* S | **Sn** | **07 42 44.9** | **+1.6** |
| **GLSP** | **General Luna,** | **3.00** | **5** | *i*eP | **Pn** | **07 42 42.4** | **+0.9** |
| **FITZ** | **Fitzroy Crossi** 0.5nm,0.7s,baz=216,slow=20,SNR=1.3 | **24.72** | **181** | P | **P** | **07 47 14.5** | **0.0** |
| **WRA** | **Warramunga Arr** 0.2nm,0.7s,baz=347,slow=9.3,SNR=1.8 | **27.83** | **163** | P | **P** | **07 47 42.7** | **+0.1** |
| **ASAR** | **Alice Springs** 0.2nm,0.6s,baz=344,slow=6.8,SNR=7.6 | **31.26** | **166** | P | **P** | **07 48 13.3** | **+0.3** |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=127,slow=8.4,SNR=2.4 | **54.58** | **324** | P | **P** | **07 51 20.4** | **-0.9** |
| **ILAR** | **Eielson Array** 0.5nm,1.0s,baz=247,slow=4.8,SNR=4.4 | **82.74** | **26** | P | **P** | **07 54 16.1** | **-0.3** |
| **YKA** | **Yellowknife Ar** 0.3nm,0.9s,baz=293,slow=3.8,SNR=3.8 | **97.09** | **24** | P | Pdif | 07 55 24.4 | -0.4 |

**IDC 07 07:55:32.9±14.0,55.36S×28.17W,h0km,mb3.7/1, mb1 3.7/1,mb1mx3.5/16,mbtmp3.7/1,Error ellipse: s-maj=847.2km s-min=77.2km az=144.0,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** 0.4nm,0.6s,baz=202,slow=7.3,SNR=3.7 | **72.73** | **31** | P | P | 08 07 02.7 | 0.0 |
| **YKA** | **Yellowknife Ar** 0.2nm,0.9s,baz=120,slow=2.3,SNR=1.8 | **135.29** | **319** | PKP | PKPdf | 08 14 52.7 | -0.2 |
| **ILAR** | **Eielson Array** 0.3nm,0.7s,baz=130,slow=1.4,SNR=6.5 | **149.24** | **313** | PKPbc | PKPbc | 08 15 21.3 | -0.6 |

*ISK **07** 08:03:41.8,40.58N×36.05E,h15km,ML2.3/6*
*DDA **07** 08:03:42.2±0.0,40.55N×36.00E,h7km,2km,ML2.5*
**ISC 07 08:03:42.1±0.9,40.56N±0.02×36.03E±0.02,h14km±8km, n20,σ0.57/37,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AMSY** | **Amasya-Merkez** | **0.16** | **297** | P | **Pg** | **08 03 46.0** | **-0.1** |
| AMSY | | | | S | **Sg** | **08 03 48.8** | **-0.1** |
| AMSY | | | | *i* AML | AML | 08 03 49.0 | |
| | comp=E,2μm,0.8s | | | | | | |
| AMSY | | | | *i* AML | AML | 08 03 50.0 | |
| | comp=N,2μm,0.7s | | | | | | |
| **KIZO** | **Buyukkizoglu-L** | **0.34** | **348** | Pg | **Pg** | **08 03 49.2** | **0.0** |
| KIZO | | | | SG | **Sg** | **08 03 54.4** | **+0.4** |
| **YARM** | **Yarimca-Ladik(** | **0.39** | **337** | PG | **Pg** | **08 03 50.1** | **+0.1** |
| YARM | | | | SG | **Sb** | **08 03 56.1** | **-0.8** |
| **TOKA** | **Tokat** | **0.42** | **125** | P | **Pb** | **08 03 51.0** | **-0.5** |
| TOKA | | | | S | **Sb** | **08 03 57.1** | **-0.6** |
| **TOKT** | **Tokat** | **0.47** | **121** | PG | **Pg** | **08 03 51.4** | **0.0** |
| TOKT | | | | SG | **Sb** | **08 03 58.0** | **-0.7** |
| **KVT** | **Kavak** | **0.52** | **2** | PG | **Pg** | **08 03 52.5** | **+0.1** |
| KVT | | | | SG | **Sg** | **08 03 59.7** | **+0.4** |
| **HAVZ** | **Havza** | **0.56** | **335** | P | **Pg** | **08 03 53.5** | **+0.3** |
| HAVZ | | | | S | **Sg** | **08 04 01.0** | **+0.4** |
| HAVZ | | | | *i* AML | AML | 08 04 02.0 | |
| | comp=N,371nm,0.3s | | | | | | |
| HAVZ | | | | *i* AML | AML | 08 04 02.0 | |
| | comp=E,234nm,0.3s | | | | | | |
| **ERBA** | **Erbaa** | **0.57** | **78** | P | **Pg** | **08 03 52.7** | **-0.6** |
| ERBA | | | | S | **Sg** | **08 04 00.4** | **-0.4** |
| **CKRK** | **Yozgat, Cekere** | **0.63** | **220** | P | **Pg** | **08 03 54.1** | **-0.5** |
| CKRK | | | | S | **Sb** | **08 04 03.9** | **0.0** |
| **COAL** | **Corum-Alaca** | **0.85** | **249** | P | **Pg** | **08 03 57.5** | **-1.1** |
| COAL | | | | S | **Sg** | **08 04 10.2** | **+0.1** |
| **HACI** | **Hacifakili, Ak** | **0.89** | **195** | P | **Pg** | **08 03 59.3** | **-0.1** |
| HACI | | | | S | **Sb** | **08 04 11.5** | **+0.2** |
| **SVSK** | **Karacayir** | **0.98** | **131** | PG | **Pg** | **08 04 00.8** | **-0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.01** | **99** | PG | **Pg** | **08 04 01.2** | **-0.4** |
| **SCER** | **sogukcermik** | **1.10** | **129** | P | **Pn** | **08 04 03.4** | **+0.1** |
| SCER | | | | S | **Sb** | **08 04 17.8** | **+0.5** |
| **CORM** | **Corum** | **1.13** | **251** | PN | **Pn** | **08 04 03.9** | **+0.1** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.16** | **172** | P | **Pn** | **08 04 04.5** | **+0.4** |
| CUSAR | | | | S | **Sg** | **08 04 19.6** | **+0.1** |
| **SIRC** | **Yozgat** | **1.40** | **209** | P | **Pb** | **08 04 08.0** | **-0.1** |
| SIRC | | | | S | **Sg** | **08 04 27.1** | **-0.1** |
| **CUAYA** | **Sivas-Altinyay** | **1.41** | **157** | P | **Pg** | **08 04 09.4** | **+0.2** |
| CUAYA | | | | S | **Sg** | **08 04 29.7** | **+2.1** |
| CUAYA | | | | *i* AML | AML | 08 04 31.0 | |
| | comp=E,65nm,0.6s | | | | | | |
| **CDAG** | **Cicekdag** | **1.58** | **234** | P | **Pb** | **08 04 11.7** | **+0.5** |
| CDAG | | | | S | **Sg** | **08 04 32.2** | **-0.8** |
| **DELI** | **KIRIKKALE** | **1.71** | **251** | P | **Pb** | **08 04 13.2** | **-0.2** |
| DELI | | | | S | **Sb** | **08 04 35.3** | **+0.5** |

**IDC 07 08:30:01.7±1.4,53.26N×158.61E,h169km±10km,mb2.7/2, mb1 2.8/2,mb1mx2.6/30,mbtmp3.2/2,Error ellipse: s-maj=49.5km s-min=33.0km az=174.0,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** 8.9nm,0.3s,baz=72,slow=9.2,SNR=320 | **0.57** | **255** | P | Pn | 08 30 25.9 | +0.3 |
| PETK | | | | S | Sn | 08 30 45.0 | +1.1 |
| | 1.6nm,0.3s,baz=49,slow=16,SNR=6.7 | | | | | | |
| **YKA** | **Yellowknife Ar** 0.1nm,0.4s,baz=300,slow=7.3,SNR=2.4 | **43.65** | **42** | P | P | 08 37 48.8 | 0.0 |
| **MKAR** | **Makanchi Array** 0.4nm,0.5s,baz=48,slow=7.4,SNR=6.4 | **47.28** | **295** | P | P | 08 38 17.6 | -0.1 |

**IDC 07 08:58:37.8±6.6,11.07S×127.64E,h0km,mb3.6/1, mb1 3.3/4,mb1mx3.0/30,mbtmp3.1/4,ML2.9/3,Error ellipse: s-maj=78.7km s-min=51.4km az=148.0,Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** 0.1nm,0.3s,baz=4.1,slow=14,SNR=1.5 | **7.25** | **195** | Pn | Pn | 09 00 23.0 | -2.1 |
| FITZ | | | | Sn | Sn | 09 01 50.0 | +1.8 |
| | 0.2nm,0.3s,baz=292,slow=15,SNR=8.7 | | | | | | |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=323,slow=13,SNR=7.2 | **10.93** | **145** | Pn | Pn | 09 01 14.9 | -0.7 |
| WRA | | | | Sn | Sn | 09 03 21.8 | +3.1 |
| | 0.0nm,0.3s,baz=326,slow=20,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=321,slow=10,SNR=5.6 | **13.88** | **155** | Pn | Pn | 09 01 54.3 | -1.7 |
| ASAR | | | | Sn | Sn | 09 04 39.0 | +8.1 |
| | 0.1nm,0.3s,baz=316,slow=20,SNR=4.3 | | | | | | |
| **STKA** | **Stephens Creek** 1.3nm,0.8s,baz=343,slow=11,SNR=2.9 | **24.39** | **150** | P | P | 09 03 59.3 | +1.4 |

*TUL **07** 09:02:23.8±1.2,36.288N±0.010×97.52W±0.01,h7km±6km, ML2.5,mb_Lg3.1/4(NEIC),Error ellipse: s-maj=1.6km s-min=1.4km az=112.0*
**NEIC 07 09:02:23.8±1.0,36.29N±0.01×97.52W±0.01,h5km±2km, Error ellipse: s-maj=3.0km s-min=2.0km az=258.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CROK** | **Carrier** | **0.43** | **300** | Pg | Pg | 09 02 32.4 | +0.2 |
| CROK | | | | Sg | Sg | 09 02 37.6 | -0.2 |
| **OK029** | **Liberty Lake** | **0.49** | **174** | Pg | Pg | 09 02 33.4 | +0.1 |
| OK029 | | | | Sg | Sg | 09 02 40.2 | +0.5 |
| **OK033** | **Mehan** | **0.53** | **117** | Pg | Pg | 09 02 33.5 | -0.4 |
| OK033 | | | | Sg | Sg | 09 02 41.0 | +0.2 |
| **BLOK** | **Blackwell** | **0.53** | **27** | | Pg | 09 02 34.2 | +0.2 |
| BLOK | | | | Sg | Sg | 09 02 41.3 | +0.3 |
| **GC02** | **Grant County #** | **0.63** | **334** | Pg | Pg | 09 02 36.0 | +0.1 |
| GC02 | | | | Sg | Sg | 09 02 43.6 | -0.4 |
| **BCOK** | **Bluff Creek, N** | **0.63** | **186** | Pg | Pg | 09 02 36.1 | +0.2 |
| BCOK | | | | Sg | Sg | 09 02 43.9 | -0.2 |
| **OK031** | **S. Brethren Rd** | **0.65** | **121** | | Pg | 09 02 35.9 | -0.3 |
| OK031 | | | | Sg | Sg | 09 02 44.3 | -0.3 |
| **QUOK** | **Quay** | **0.67** | **100** | Pg | Pg | 09 02 36.2 | -0.5 |
| QUOK | | | | Sg | Sg | 09 02 44.5 | -0.8 |
| **OK030** | **Cody Creek RV** | **0.70** | **121** | Pg | Pg | 09 02 37.2 | 0.0 |
| OK030 | | | | Sg | Sg | 09 02 45.9 | -0.3 |
| **OK034** | **N. Norfolk Rd.** | **0.71** | **113** | | Pg | 09 02 37.4 | 0.0 |
| OK034 | | | | Sg | Sg | 09 02 46.0 | -0.7 |
| **OK025** | **Westminster Rd** | **0.72** | **168** | | Pg | 09 02 37.9 | +0.2 |
| OK025 | | | | Sg | Sg | 09 02 47.3 | +0.4 |
| **KAN13** | **South Haven SW** | **0.73** | **3** | | Pg | 09 02 37.4 | -0.3 |
| KAN13 | | | | Sg | Sg | 09 02 47.1 | 0.0 |
| **KAN14** | **Manchester OK** | **0.76** | **332** | Pg | Pg | 09 02 38.2 | -0.2 |
| KAN14 | | | | Sg | Sg | 09 02 47.8 | -0.4 |
| **OK032** | **Salt Plains WL** | **0.76** | **313** | | Pg | 09 02 38.2 | -0.1 |
| OK032 | | | | Sg | Sg | 09 02 47.6 | -0.6 |
| **KAN17** | **Caldwell West** | **0.78** | **346** | Pg | Pg | 09 02 38.4 | -0.4 |
| KAN17 | | | | Sg | Sg | 09 02 48.2 | -0.7 |
| **KAN05** | **Bluff City Nor** | **0.87** | **341** | Pg | Pb | 09 02 41.1 | -0.3 |
| KAN05 | | | | Sg | Sg | 09 02 51.4 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.87** | **176** | | Pg | 09 02 40.0 | -0.5 |
| OKCFA | | | | Sg | Sg | 09 02 51.5 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.88** | **176** | Pg | Pg | 09 02 40.6 | -0.1 |
| OKCSW | | | | Sg | Sg | 09 02 51.9 | -0.2 |
| **KAN01** | **Argonia South** | **0.89** | **348** | Pg | Pg | 09 02 40.6 | -0.2 |
| KAN01 | | | | Sg | Sg | 09 02 51.1 | -1.2 |
| **KAN06** | **Argonia West S** | **1.00** | **344** | Pg | Pg | 09 02 42.7 | -0.2 |
| KAN06 | | | | Sg | Sg | 09 02 55.4 | -0.5 |
| **KAN08** | **Anthony NE Sta** | **1.00** | **339** | Pg | Pg | 09 02 42.2 | -0.8 |
| KAN08 | | | | Sg | Sg | 09 02 55.3 | -0.8 |
| KAN08 | | | | IAmb_Lg | | 09 02 56.5 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.03** | **52** | | Pg | 09 02 43.0 | -0.5 |
| T35A | | | | Sg | Sg | 09 02 56.5 | -0.3 |
| **FNO** | **Franklin** | **1.03** | **174** | Pg | Pg | 09 02 43.3 | -0.3 |
| FNO | | | | Sg | Sg | 09 02 56.0 | -0.9 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SALU | | | | | *i* S | | **Sg** | 09 12 44.9 | +0.2 |
| **PAJU** | **Pajala** | **0.94** | **97** | | P | | **Pb** | 09 12 35.5 | +0.4 |
| PAJU | | | | | S | | **Sb** | 09 12 48.9 | +0.9 |
| **PAJU** | **Pajala** | **0.94** | **97** | | *e*P | | **Pb** | 09 12 35.5 | +0.4 |
| PAJU | | | | | *e*S | | **Sb** | 09 12 48.5 | +0.5 |
| **HARU** | **Harads** | **1.00** | **175** | | P | | **Pb** | 09 12 36.3 | +0.2 |
| **HARU** | **Harads** | **1.00** | **175** | | *e*P | | **Pb** | 09 12 36.3 | +0.2 |
| **LANU** | **Lannavaara** | **1.02** | **27** | | P | | **Pb** | 09 12 36.0 | -0.4 |
| **LANU** | **Lannavaara** | **1.02** | **27** | | *e*P | | **Pb** | 09 12 36.1 | -0.3 |
| **KOVU** | **Salmi** | **1.09** | **349** | | P | | **Pg** | 09 12 36.8 | -0.1 |
| **KOVU** | **Salmi** | **1.09** | **349** | | *e*P | | **Pg** | 09 12 36.8 | -0.1 |
| **KLF** | **Kolari** | **1.26** | **85** | | *e*P | | **Pn** | 09 12 41.2 | +0.5 |
| KLF | | | | | *e*S | | **Sb** | 09 12 57.8 | +0.6 |
| **KALU** | **Kalix** | **1.67** | **140** | | *e*P | | **Pg** | 09 12 48.4 | +0.4 |
| KALU | | | | | *e*S | | **Sg** | 09 13 11.2 | +1.7 |
| **HEF** | **Hetta** | **1.68** | **40** | | Pn | | **Pb** | 09 12 47.6 | 0.0 |
| HEF | | | | | Sn | | **Sg** | 09 13 09.6 | -0.2 |
| **HEF** | **Hetta** | **1.68** | **40** | | *e*P | | **Pb** | 09 12 47.7 | 0.0 |
| HEF | | | | | *e*S | | **Sg** | 09 13 09.8 | +0.1 |
| **HEF** | **Hetta** | **1.68** | **40** | | *e*P | | **Pb** | 09 12 47.6 | 0.0 |
| HEF | | | | | *e*S | | **Sg** | 09 13 09.5 | -0.2 |
| HEF | | | | | MSG | | | 09 13 13.4 | |
| | comp=Z,31nm,0.2s | | | | | | | | |
| **SJUU** | **Sjulsmark** | **1.69** | **168** | | P | | **Pg** | 09 12 48.6 | +0.3 |
| **SJUU** | **Sjulsmark** | **1.69** | **168** | | *e*P | | **Pg** | 09 12 48.6 | +0.3 |
| **TOF** | **Tornio** | **1.79** | **125** | | *e*P | | **Pg** | 09 12 50.8 | +0.6 |
| TOF | | | | | *e*S | | **Sg** | 09 13 14.6 | +1.2 |
| TOF | | | | | MSG | | | 09 13 17.2 | |
| | comp=Z,28nm,0.1s | | | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.86** | **1** | | Pn | | **Pb** | 09 12 50.9 | +0.1 |
| KIF | | | | | Sn | | **Sg** | 09 13 16.0 | +0.5 |
| **KIF** | **Kilpisjarvi** | **1.86** | **1** | | *e*P | | **Pb** | 09 12 50.8 | +0.1 |
| KIF | | | | | *e*S | | **Sg** | 09 13 16.0 | +0.5 |
| **KIF** | **Kilpisjarvi** | **1.86** | **1** | | *e*P | | **Pb** | 09 12 50.8 | +0.1 |
| KIF | | | | | *e*S | | **Sb** | 09 13 14.6 | +0.2 |
| **KTK1** | **Kautokeino** | **2.09** | **26** | | Pn | | **Pb** | 09 12 54.7 | +0.1 |
| KTK1 | | | | | Sn | | **Sb** | 09 13 21.0 | 0.0 |
| **KTK1** | **Kautokeino** | **2.09** | **26** | | *e*P | | **Pb** | 09 12 54.6 | 0.0 |
| KTK1 | | | | | *e*S | | **Sb** | 09 13 20.8 | -0.2 |
| KTK1 | | | | | IAML | | | 09 13 24.0 | |
| | comp=Z,86nm,0.3s | | | | | | | | |
| **FAUS** | **Fauske** | **2.13** | **279** | | *e*P | | **Pb** | 09 12 54.6 | -0.7 |
| FAUS | | | | | *e*S | | **Sn** | 09 13 20.4 | +0.6 |
| FAUS | | | | | IAML | | | 09 13 24.8 | |
| | comp=Z,88nm,0.3s | | | | | | | | |
| **RNF** | **Rovaniemi** | **2.15** | **102** | | *e*PB | | **Pb** | 09 12 56.2 | +0.5 |
| **STEI** | **Steigen** | **2.25** | **293** | | *e*P | | **Pn** | 09 12 55.5 | +1.2 |
| STEI | | | | | IAML | | | 09 13 33.2 | |
| | comp=Z,34nm,0.5s | | | | | | | | |
| **STEI** | **Steigen** | **2.25** | **293** | | *e*P | | **Pn** | 09 12 55.3 | +1.0 |
| STEI | | | | | *e*SG | | **Sb** | 09 13 26.5 | +0.8 |
| **SGF** | **Sodankyl** | **2.26** | **80** | | *e*P | | **Pb** | 09 12 56.8 | -0.8 |
| SGF | | | | | *e*SG | | **Sg** | 09 13 29.3 | +0.8 |
| SGF | | | | | MSG | | | 09 13 29.8 | |
| | comp=Z,24nm,0.2s | | | | | | | | |
| **JETT** | **Jettan, Norway** | **2.41** | **357** | | Pn | | **Pb** | 09 12 59.7 | -0.5 |
| JETT | | | | | Sn | | **Sb** | 09 13 29.4 | -1.1 |
| **TRO** | **Tromso** | **2.58** | **346** | | *e*PB | | **Pb** | 09 13 02.7 | -0.2 |
| TRO | | | | | *e*SG | | **Sb** | 09 13 36.1 | +1.1 |
| **ARA0** | **ARCESS Array S** | **2.97** | **34** | | Pn | | **Pn** | 09 13 05.9 | +1.6 |
| | baz=210,slow=16 | | | | | | | | |
| ARA0 | | | | | Sn | | **Sn** | 09 13 42.5 | +2.0 |
| | baz=214,slow=28 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.97** | **34** | | Pn | | **Pn** | 09 13 05.9 | +1.6 |
| | baz=210,slow=16 | | | | | | | | |
| ARA0 | | | | | Sn | | **Sn** | 09 13 42.5 | +2.0 |
| | baz=214,slow=28 | | | | | | | | |
| ARA0 | | | | | IAML | | | 09 13 53.4 | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.97** | **34** | | Pn | | **Pn** | 09 13 05.9 | +1.6 |
| | baz=215,slow=13,SNR=3.6 | | | | | | | | |
| ARCES | | | | | Sn | | **Sn** | 09 13 43.2 | +2.6 |
| | baz=213,slow=26,SNR=11 | | | | | | | | |
| ARCES | | | | | Lg | | Lg | 09 13 50.5 | |
| | baz=211,slow=28,SNR=5.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.97** | **34** | | P | | **Pn** | 09 13 05.9 | +1.6 |
| ARCES | | | | | S | | **Sn** | 09 13 43.5 | +2.9 |
| **KONS** | **Konsvik** | **3.09** | **261** | | *e*P | | **Pn** | 09 13 07.4 | +1.6 |
| KONS | | | | | IAML | | | 09 13 55.5 | |
| | comp=Z,26nm,0.4s | | | | | | | | |
| **KEV** | **Kevo** | **3.49** | **39** | | *e*P | | **Pn** | 09 13 12.6 | +1.3 |
| **HAMF** | **Hammerfest** | **3.66** | **16** | | *e*P | | **Pn** | 09 13 16.0 | +2.3 |
| HAMF | | | | | *e*S | | **Sn** | 09 13 57.6 | +0.2 |
| HAMF | | | | | IAML | | | 09 14 16.1 | |
| | comp=Z,16nm,0.3s | | | | | | | | |
| **APA0** | **Apatity Array** | **4.75** | **79** | | Pn | | **Pn** | 09 13 30.0 | +1.3 |
| | baz=272,slow=12 | | | | | | | | |
| APA0 | | | | | Sn | | **Sn** | 09 14 24.0 | -0.4 |
| | baz=268,slow=28 | | | | | | | | |
| APA0 | | | | | Lg | | Lg | 09 14 42.6 | |
| | baz=266,slow=37 | | | | | | | | |
| **APA0** | **Apatity Array** | **4.75** | **79** | | Pn | | **Pn** | 09 13 30.0 | +1.3 |
| | baz=272,slow=12 | | | | | | | | |
| APA0 | | | | | Sn | | **Sn** | 09 14 24.0 | -0.4 |
| | baz=268,slow=28 | | | | | | | | |
| **APA0** | **Apatity Array** | **4.75** | **79** | | P | | **Pn** | 09 13 30.1 | +1.3 |
| APA0 | | | | | S | | **Sn** | 09 14 24.6 | +0.2 |
| **PRVG** | **Vayda Guba** | **4.95** | **53** | | P | | **Pn** | 09 13 32.9 | +1.5 |
| PRVG | | | | | S | | **Sn** | 09 14 27.8 | -1.5 |
| **TERR** | **Teriberka** | **5.73** | **62** | | P | | **Pn** | 09 13 42.5 | +0.3 |
| TERR | | | | | S | | **Sn** | 09 14 48.5 | 0.0 |
| **FIA0** | **FINESS Array S** | **6.18** | **156** | | Pn | | **Pn** | 09 13 51.0 | +2.7 |
| | baz=344,slow=14 | | | | | | | | |
| FIA0 | | | | | Sn | | **Sn** | 09 15 00.9 | +1.2 |
| | baz=347,slow=28 | | | | | | | | |
| FIA0 | | | | | Lg | | Lg | 09 15 31.0 | |
| | baz=345,slow=37 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **6.18** | **156** | | Pn | | **Pn** | 09 13 51.0 | +2.7 |
| | baz=344,slow=14 | | | | | | | | |
| FIA0 | | | | | Sn | | **Sn** | 09 15 00.9 | +1.2 |
| | baz=347,slow=28 | | | | | | | | |
| **FINES** | **FINESS Array B** | **6.18** | **156** | | Pn | | **Pn** | 09 13 51.0 | +2.7 |
| | comp=Z,0.7nm,0.3s,baz=346,slow=13,SNR=31 | | | | | | | | |
| FINES | | | | | Pg | | **Pb** | 09 14 00.8 | -3.6 |
| | comp=Z,0.4nm,0.3s,baz=346,slow=13,SNR=9.9 | | | | | | | | |
| FINES | | | | | Sn | | **Sn** | 09 15 00.1 | +0.4 |
| | comp=Z,0.8nm,0.3s,baz=346,slow=22,SNR=8.3 | | | | | | | | |
| FINES | | | | | Lg | | Lg | 09 15 31.0 | |
| | comp=Z,2.1nm,0.3s,baz=343,slow=28,SNR=9.3 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **219** | | Pn | | **Pn** | 09 14 06.6 | +1.3 |
| | baz=29,slow=14 | | | | | | | | |
| NB2 | | | | | Sn | | **Sn** | 09 15 26.6 | -3.4 |
| | baz=30,slow=28 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **219** | | Pn | | **Pn** | 09 14 06.6 | +1.3 |
| | baz=29,slow=14 | | | | | | | | |
| NB2 | | | | | Sn | | **Sn** | 09 15 26.6 | -3.4 |
| | baz=30,slow=28 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **7.41** | **219** | | Pn | | **Pn** | 09 14 05.8 | +0.5 |
| | comp=Z,0.0nm,0.3s,baz=25,slow=11,SNR=4.7 | | | | | | | | |
| NOA | | | | | Sn | | **Sn** | 09 15 27.7 | -2.3 |
| | comp=Z,0.0nm,0.3s,baz=42,slow=24,SNR=4.6 | | | | | | | | |
| NOA | | | | | Lg | | Lg | 09 16 06.0 | |
| | comp=Z,0.1nm,0.3s,baz=90,slow=15,SNR=4.0 | | | | | | | | |
| **NRA0** | **NORESS Array S** | **7.60** | **216** | | Pn | | **Pn** | 09 14 09.2 | +1.4 |
| | baz=23,slow=14 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | 09 15 31.1 | -3.5 |
| | baz=35,slow=22 | | | | | | | | |
| **NRA0** | **NORESS Array S** | **7.60** | **216** | | Pn | | **Pn** | 09 14 09.2 | +1.4 |
| | baz=23,slow=14 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | 09 15 31.1 | -3.5 |
| | baz=35,slow=22 | | | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | | Pn | | **Pn** | 09 14 09.4 | +0.1 |
| | comp=Z,0.2nm,0.3s,baz=28,slow=13,SNR=11 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | 09 15 33.7 | -3.5 |
| | comp=Z,0.5nm,0.3s,baz=19,slow=15,SNR=7.2 | | | | | | | | |
| HFS | | | | | Lg | | Lg | 09 16 16.4 | |
| | comp=Z,0.6nm,0.3s,baz=35,slow=28,SNR=2.1 | | | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | | Pn | | **Pn** | 09 14 09.9 | +0.7 |
| | baz=22,slow=14 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | 09 15 32.9 | -4.3 |
| | baz=29,slow=28 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | 09 15 37.9 | +0.7 |
| | baz=32,slow=28 | | | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | | Pn | | **Pn** | 09 14 09.9 | +0.7 |
| | baz=22,slow=14 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | 09 15 32.9 | -4.3 |
| | baz=29,slow=28 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **11.15** | **355** | | Pn | | **Pn** | 09 14 55.6 | -0.7 |
| | baz=161,slow=27,SNR=6.2 | | | | | | | | |
| **OBN** | **Obninsk** | **14.23** | **140** | | Pn | | **Pn** | 09 15 35.0 | -3.4 |
| | comp=Z,3.2nm,0.3s,baz=124,slow=23,SNR=5.8 | | | | | | | | |

*JMA **07** 09:14:49.7±0.1,24.4°N×122.4°E,h59$^{km}_{\pm}$2$^{km}$,M2.4*

*TAP **07** 09:14:49.8,24.46°N×122.42°E,h48$^{km}$,ML2.9,B*

**ISC 07 09:14:50.0±1.2,24°45N±0.03×122°43E±0.02,h53$^{km}_{\pm}$9$^{km}$, n74,s0857/144,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.47** | **90** | P | **Pn** | **09 15 01.4** | **+0.3** |
| JYNG | | | | S | **Sn** | **09 15 09.5** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.53** | **89** | P | **Pn** | **09 15 02.0** | **+0.2** |
| YOJ | | | | S | **Sn** | **09 15 10.5** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.53** | **89** | P | **Pn** | **09 15 01.8** | **0.0** |
| | baz=88 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **09 15 10.7** | **+0.4** |
| | baz=88 | | | | | | |
| **TWC** | **Suao** | **0.55** | **287** | *e*P | **Pn** | **09 15 01.9** | **-0.2** |
| | baz=286 | | | | | | |
| TWC | | | | *e*S | **Sn** | **09 15 10.3** | **-0.4** |
| | baz=286 | | | | | | |
| **ENA** | **Nanau** | **0.63** | **268** | P | **Pn** | **09 15 02.8** | **-0.2** |
| | baz=266 | | | | | | |
| ENA | | | | *e*S | **Sn** | **09 15 12.9** | **+0.5** |
| | baz=266 | | | | | | |
| **NDS** | **Dongshan** | **0.67** | **286** | P | **Pn** | **09 15 03.6** | **0.0** |
| | baz=285 | | | | | | |
| NDS | | | | *e*S | **Sn** | **09 15 12.9** | **-0.5** |
| | baz=285 | | | | | | |
| **NTC** | **Toucheng** | **0.68** | **306** | *e*P | **Pn** | **09 15 03.1** | **-0.5** |
| | baz=306 | | | | | | |
| NTC | | | | *e*S | **Sn** | **09 15 13.2** | **-0.3** |
| | baz=306 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.68** | **324** | *e*P | **Pn** | **09 15 03.3** | **-0.4** |
| | baz=324 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **09 15 13.2** | **-0.4** |
| | baz=324 | | | | | | |
| **ILA** | **Ilan** | **0.69** | **297** | *e*P | **Pn** | **09 15 03.0** | **-0.8** |
| | baz=296 | | | | | | |
| ILA | | | | *e*S | **Sn** | **09 15 14.4** | **+0.6** |
| | baz=296 | | | | | | |
| **TWE** | **Neicheng** | **0.74** | **291** | *e*P | **Pn** | **09 15 04.5** | **0.0** |
| | baz=291 | | | | | | |
| TWE | | | | *e*S | **Sn** | **09 15 15.3** | **+0.4** |
| | baz=291 | | | | | | |
| **TIPB** | **Shuangxi** | **0.75** | **313** | P | **Pn** | **09 15 04.5** | **-0.1** |
| | baz=313 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **09 15 15.2** | **-0.1** |
| | baz=313 | | | | | | |
| **ETL** | **Fush Village** | **0.79** | **248** | *e*P | **Pn** | **09 15 05.1** | **0.0** |
| | baz=247 | | | | | | |
| ETL | | | | *e*S | **Sn** | **09 15 16.5** | **+0.3** |
| | baz=247 | | | | | | |
| **ENTT** | **Nioudou** | **0.81** | **284** | *e*P | **Pn** | **09 15 06.1** | **+0.8** |
| | baz=283 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **09 15 17.3** | **+0.8** |
| | baz=283 | | | | | | |
| **NACB** | **Ninganchiao** | **0.81** | **250** | P | **Pn** | **09 15 05.2** | **-0.2** |
| | baz=249 | | | | | | |
| NACB | | | | *e*S | **Sn** | **09 15 16.5** | **0.0** |
| | baz=249 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.81** | **322** | *e*P | **Pn** | **09 15 05.0** | **-0.5** |
| | baz=321 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **09 15 16.4** | **-0.4** |
| | baz=321 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.82** | **292** | P | **Pn** | **09 15 06.0** | **+0.4** |
| | baz=291 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **09 15 17.1** | **+0.2** |
| | baz=291 | | | | | | |
| **LATG** | **Datong** | **0.83** | **276** | P | **Pn** | **09 15 06.3** | **+0.6** |
| | baz=275 | | | | | | |
| LATG | | | | *e*S | **Sn** | **09 15 17.5** | **+0.4** |
| | baz=275 | | | | | | |
| **TWD** | **Chiawan** | **0.85** | **244** | *e*P | **Pn** | **09 15 05.4** | **-0.4** |
| | baz=243 | | | | | | |
| TWD | | | | *e*S | **Sn** | **09 15 17.1** | **-0.2** |
| | baz=243 | | | | | | |
| **NDT** | **Datong Townshi** | **0.85** | **280** | P | **Pn** | **09 15 06.6** | **+0.8** |
| | baz=279 | | | | | | |
| NDT | | | | *e*S | **Sn** | **09 15 18.7** | **+1.3** |
| | baz=279 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.85** | **316** | P | **Pn** | **09 15 06.0** | **+0.1** |
| | baz=316 | | | | | | |
| NWF | | | | *e*S | **Sn** | **09 15 17.5** | **-0.1** |
| | baz=316 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.90** | **254** | *e*P | **Pn** | **09 15 06.5** | **-0.1** |
| | baz=253 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **09 15 18.3** | **-0.4** |
| | baz=253 | | | | | | |
| **NWLT** | **Wulai** | **0.90** | **291** | P | **Pn** | **09 15 07.1** | **+0.5** |
| | baz=290 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **09 15 19.0** | **+0.2** |
| | baz=290 | | | | | | |
| **NNSB** | **Datong** | **0.95** | **269** | P | **Pn** | **09 15 07.5** | **+0.1** |
| | baz=268 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **09 15 20.5** | **+0.4** |
| | baz=268 | | | | | | |
| **NNS** | **Nan Shan** | **0.96** | **269** | P | **Pn** | **09 15 07.6** | **+0.1** |
| | baz=268 | | | | | | |
| NNS | | | | *e*S | **Sn** | **09 15 20.6** | **+0.3** |
| | baz=268 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.97** | **302** | P | **Pn** | **09 15 07.3** | **0.0** |
| | baz=301 | | | | | | |
| NHDH | | | | *e*S | **Sn** | **09 15 20.5** | **+0.3** |
| | baz=301 | | | | | | |
| **YHNB** | **Yeheng** | **0.98** | **283** | P | **Pn** | **09 15 08.5** | **+0.8** |
| | baz=282 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **09 15 21.5** | **+0.8** |
| | baz=282 | | | | | | |
| **YM01** | **YM01** | **1.04** | **312** | *e*P | **Pn** | **09 15 08.5** | **+0.1** |
| | baz=311 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **09 15 21.9** | **-0.1** |
| | baz=311 | | | | | | |
| **FUSS** | **Fushou** | **1.10** | **260** | *e*P | **Pn** | **09 15 09.2** | **-0.2** |
| | baz=258 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **09 15 23.0** | **-0.7** |
| | baz=258 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.11** | **254** | *e*P | **Pn** | **09 15 09.3** | **-0.4** |
| | baz=253 | | | | | | |
| WHF | | | | *e*S | **Sn** | **09 15 23.4** | **-0.7** |
| | baz=253 | | | | | | |
| **ESL** | **Shilin** | **1.11** | **235** | *e*P | **Pn** | **09 15 08.7** | **-0.6** |
| | baz=234 | | | | | | |
| ESL | | | | *e*S | **Sn** | **09 15 22.8** | **-0.8** |
| | baz=234 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.12** | **305** | P | **Pn** | **09 15 09.7** | **+0.2** |
| | baz=305 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **09 15 24.4** | **+0.5** |
| | baz=305 | | | | | | |
| **NTST** | **Danshui** | **1.14** | **309** | *e*P | **Pn** | **09 15 09.3** | **-0.4** |
| | baz=308 | | | | | | |
| NTST | | | | *e*S | **Sn** | **09 15 24.3** | **0.0** |
| | baz=308 | | | | | | |
| **TDCB** | **Techi** | **1.18** | **261** | *e*P | **Pn** | **09 15 11.1** | **+0.7** |
| | baz=259 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **09 15 25.1** | **-0.3** |
| | baz=259 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.19** | **95** | P | **Pn** | **09 15 10.4** | **0.0** |
| IRIF | | | | S | **Sn** | **09 15 25.2** | **-0.4** |
| **NFF** | **Wufeng Townshi** | **1.21** | **279** | *e*P | **Pn** | **09 15 11.2** | **+0.5** |
| | baz=278 | | | | | | |
| NFF | | | | *e*S | **Sn** | **09 15 27.0** | **+0.9** |
| | baz=278 | | | | | | |
| **CHGB** | **Renai** | **1.21** | **251** | *e*P | **Pn** | **09 15 10.8** | **-0.1** |
| | baz=250 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **09 15 25.5** | **-0.8** |
| | baz=250 | | | | | | |
| **NCU** | **National Centr** | **1.24** | **295** | *e*P | **Pn** | **09 15 11.3** | **+0.2** |
| | baz=294 | | | | | | |
| NCU | | | | *e*S | **Sn** | **09 15 27.3** | **+0.5** |
| | baz=294 | | | | | | |
| **NCUH** | **Zhongli** | **1.24** | **295** | *e*P | **Pn** | **09 15 10.7** | **-0.4** |
| | baz=294 | | | | | | |
| NCUH | | | | *e*S | **Sn** | **09 15 27.2** | **+0.4** |
| | baz=294 | | | | | | |
| **WUSB** | **Renai** | **1.28** | **249** | *e*P | **Pn** | **09 15 11.9** | **+0.2** |
| | baz=248 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **09 15 27.2** | **-0.8** |
| | baz=248 | | | | | | |
| **LIOB** | **Emei** | **1.30** | **279** | P | **Pn** | **09 15 12.6** | **+0.7** |
| | baz=278 | | | | | | |
| LIOB | | | | *e*S | **Sn** | **09 15 28.4** | **+0.1** |
| | baz=278 | | | | | | |
| **HGSD** | **Ruisui** | **1.33** | **224** | *e*P | **Pn** | **09 15 12.0** | **-0.2** |
| | baz=223 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **09 15 28.1** | **-0.7** |
| | baz=223 | | | | | | |
| **SBCB** | **Hsinchu** | **1.36** | **285** | *e*P | **Pn** | **09 15 13.1** | **+0.4** |
| | baz=284 | | | | | | |
| SBCB | | | | *e*S | **Sn** | **09 15 30.1** | **+0.5** |
| | baz=284 | | | | | | |
| **WHP** | **Taichung City** | **1.36** | **263** | P | **Pn** | **09 15 13.9** | **+1.1** |
| | baz=262 | | | | | | |
| WHP | | | | *e*S | **Sn** | **09 15 30.6** | **+0.7** |
| | baz=262 | | | | | | |
| **VWDT** | **VWDT** | **1.37** | **240** | *e*P | **Pn** | **09 15 12.5** | **-0.3** |
| | baz=238 | | | | | | |
| VWDT | | | | *e*S | **Sn** | **09 15 29.8** | **0.0** |
| | baz=238 | | | | | | |
| **EHY** | **Hungye** | **1.38** | **227** | *e*P | **Pn** | **09 15 12.4** | **-0.6** |
| | baz=226 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.44** | **254** | *e*P | **Pn** | **09 15 14.3** | **+0.5** |
| | baz=253 | | | | | | |
| WCS | | | | *e*S | **Sn** | **09 15 32.8** | **+1.2** |
| | baz=253 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.46** | **98** | P | **Pn** | **09 15 14.6** | **+0.6** |
| JKRS | | | | S | **Sn** | **09 15 32.6** | **+0.6** |
| **YULB** | **Yu-li** | **1.48** | **225** | *e*P | **Pn** | **09 15 13.8** | **-0.6** |
| | baz=224 | | | | | | |
| YULB | | | | *e*S | **Sn** | **09 15 31.5** | **-1.1** |
| | baz=224 | | | | | | |
| **NMLH** | **Miaoli** | **1.50** | **274** | *e*P | **Pn** | **09 15 15.2** | **+0.7** |
| | baz=273 | | | | | | |
| NMLH | | | | *e*S | **Sn** | **09 15 34.1** | **+1.2** |
| | baz=273 | | | | | | |
| **EYUL** | **Yuli** | **1.50** | **223** | *e*P | **Pn** | **09 15 14.2** | **-0.3** |
| | baz=222 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **09 15 32.2** | **-0.8** |
| | baz=222 | | | | | | |
| **SSLB** | **Suanglung** | **1.50** | **244** | *e*P | **Pn** | **09 15 15.1** | **+0.4** |
| | baz=243 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **09 15 32.6** | **-0.5** |
| | baz=243 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.51** | **248** | *e*P | **Pn** | **09 15 15.4** | **+0.6** |
| | baz=247 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **09 15 34.9** | **+1.5** |
| | baz=247 | | | | | | |
| **TWQ1** | **Liyutan** | **1.51** | **266** | *e*P | **Pn** | **09 15 16.0** | **+1.2** |
| | baz=265 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **09 15 33.0** | **-0.5** |
| | baz=265 | | | | | | |
| **TYC** | **Yuchr** | **1.54** | **249** | *e*P | **Pn** | **09 15 15.4** | **+0.3** |
| | baz=248 | | | | | | |
| TYC | | | | *e*S | **Sn** | **09 15 34.6** | **+0.7** |
| | baz=248 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.56** | **93** | P | **Pn** | **09 15 15.3** | **-0.2** |
| JIJ | | | | S | **Sn** | **09 15 33.9** | **-0.7** |
| **FULB** | **Fuli** | **1.62** | **220** | *e*P | **Pn** | **09 15 15.9** | **-0.4** |
| | baz=219 | | | | | | |
| FULB | | | | *e*S | **Sn** | **09 15 35.4** | **-0.7** |
| | baz=219 | | | | | | |
| **WJS** | **Zhushan** | **1.68** | **248** | *e*P | **Pn** | **09 15 17.3** | **+0.3** |
| | baz=247 | | | | | | |
| WJS | | | | *e*S | **Sn** | **09 15 38.0** | **+0.7** |
| | baz=247 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.72** | **85** | P | **Pn** | **09 15 17.6** | **0.0** |
| JISG | | | | S | **Sn** | **09 15 37.9** | **-0.5** |
| **ELDTW** | **Lidau** | **1.80** | **226** | *e*P | **Pn** | **09 15 18.9** | **0.0** |
| | baz=225 | | | | | | |
| **CHN5** | **Tsauling** | **1.81** | **242** | *e*P | **Pn** | **09 15 19.2** | **+0.3** |
| | baz=241 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **09 15 40.2** | **-0.6** |
| | baz=241 | | | | | | |
| **WDLH** | **Douliu** | **1.89** | **247** | *e*P | **Pn** | **09 15 20.0** | **+0.2** |
| | baz=245 | | | | | | |
| WDLH | | | | *e*S | **Sn** | **09 15 42.5** | **0.0** |
| | baz=245 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.95** | **254** | *e*P | **Pn** | **09 15 20.4** | **-0.3** |
| | baz=253 | | | | | | |
| WRL | | | | *e*S | **Sn** | **09 15 44.8** | **+0.7** |
| | baz=253 | | | | | | |
| **STYH** | **Taoyuan** | **1.98** | **230** | *e*P | **Pn** | **09 15 21.9** | **+0.7** |
| | baz=229 | | | | | | |
| STYH | | | | *e*S | **Sn** | **09 15 45.0** | **+0.2** |
| | baz=229 | | | | | | |
| **CHN4** | **Tsaushan** | **2.01** | **237** | *e*P | **Pn** | **09 15 22.0** | **+0.5** |
| | baz=236 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **09 15 46.3** | **+0.8** |
| | baz=236 | | | | | | |
| **TPUB** | **Ta-pu** | **2.01** | **236** | *e*P | **Pn** | **09 15 21.0** | **-0.5** |
| | baz=234 | | | | | | |
| TPUB | | | | *e*S | **Sn** | **09 15 46.1** | **+0.6** |
| | baz=234 | | | | | | |
| **WTP** | **Ta-pu** | **2.05** | **235** | *e*P | **Pn** | **09 15 23.0** | **+0.8** |
| | baz=233 | | | | | | |
| WTP | | | | *e*S | **Sn** | **09 15 45.6** | **-1.0** |
| | baz=233 | | | | | | |
| **JTJ** | **Tarama** | **2.08** | **84** | P | **Pn** | **09 15 23.1** | **+0.6** |
| JTJ | | | | S | **Sn** | **09 15 47.7** | **+0.5** |
| **CHN1** | **Nanshi** | **2.15** | **234** | *e*P | **Pn** | **09 15 23.9** | **+0.4** |
| | baz=233 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **09 15 49.9** | **+0.9** |
| | baz=233 | | | | | | |
| **SLGT** | **Liugui** | **2.19** | **229** | *e*P | **Pn** | **09 15 24.7** | **+0.7** |
| | baz=228 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.46** | **222** | *e*P | **Pn** | **09 15 27.5** | **-0.3** |
| | baz=221 | | | | | | |
| MASBT | | | | *e*S | **Sn** | **09 15 56.6** | **-0.1** |
| | baz=221 | | | | | | |
| **MATB** | **Ma-tsu** | **2.81** | **307** | *e*P | **Pn** | **09 15 32.3** | **-0.2** |
| | baz=306 | | | | | | |
| MATB | | | | *e*S | **Sn** | **09 16 03.8** | **-1.4** |
| | baz=306 | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.06** | **282** | *e*P | **Pn** | **09 15 35.8** | **-0.2** |
| | baz=280 | | | | | | |
| **XPSS** | **Dashiqiu** | **3.19** | **321** | *e*P | **Pn** | **09 15 37.3** | **-0.4** |
| | baz=320 | | | | | | |
| XPSS | | | | *e*S | **Sn** | **09 16 14.5** | **0.0** |
| | baz=320 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.19** | **311** | *e*P | **Pn** | **09 15 37.4** | **-0.3** |
| | baz=310 | | | | | | |
| LYJJ | | | | *e*S | **Sn** | **09 16 13.0** | **-1.5** |
| | baz=310 | | | | | | |

*TUL **07** 09:19:54.7±1.0,36.80N±0.01×98.28W±0.02,h4$^{km}_{\pm}$7$^{km}$, ML2.5,mb_Lg2.2/8(NEIC),Error ellipse: s-maj=2.3km s-min=1.7km az=116.0*

**NEIC 07 09:19:55.0±1.1,36.78N±0.01×98.29W±0.01,h5$^{km}_{\pm}$6$^{km}$, Error ellipse: s-maj=2.3km s-min=1.0km az=146.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK032** | **Salt Plains WL** | **0.06** | **71** | | Pg | 09 19 56.5 | 0.0 |
| OK032 | | | | Sg | Sg | 09 19 58.0 | +0.4 |
| **KAN14** | **Manchester OK** | **0.31** | **56** | Pg | Pg | 09 20 01.1 | +0.1 |
| KAN14 | | | | Sg | Sg | 09 20 05.4 | +0.3 |
| **GC02** | **Grant County #** | **0.35** | **78** | Pg | Pg | 09 20 01.7 | 0.0 |
| GC02 | | | | Sg | Sg | 09 20 06.7 | +0.4 |
| **OK035** | **E0210 Rd and N** | **0.35** | **258** | Pg | Pg | 09 20 02.0 | +0.3 |
| OK035 | | | | Sg | Sg | 09 20 05.8 | -0.5 |
| **CROK** | **Carrier** | **0.37** | **139** | Pg | Pg | 09 20 02.2 | +0.1 |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OK034 | **N. Norfolk Rd.** | **1.48** | **121** | Pn | Pn | 09 20 22.2 | -0.1 |
| OKCFA | **Oklahoma City** | **1.52** | **153** | Pn | Pn | 09 20 23.0 | +0.1 |
| OKCSW | **OKLAHOMA CITY** | **1.54** | **153** | Pn | Pn | 09 20 23.2 | +0.1 |
| R32A | **Long Quarter,** | **1.67** | **348** | | Pb | 09 20 25.7 | -0.5 |
| R32A | | | | IAmb_Lg | | 09 20 46.2 | |
| | comp=Z,15nm,1.3s | | | | | | |
| FNO | **Franklin** | **1.68** | **155** | Pn | Pn | 09 20 25.4 | +0.4 |
| W35A | **Tecumseh** | **1.99** | **144** | | Pn | 09 20 30.2 | +0.9 |
| WMOK | **Wichita Mounta** | **2.08** | **191** | | Pn | 09 20 31.6 | +1.0 |
| TUL1 | **Leonard** | **2.19** | **113** | | Pb | 09 20 33.8 | -1.3 |
| X34A | **Smith Ranch, M** | **2.21** | **170** | | Pn | 09 20 33.5 | +1.2 |
| CBKS | **Cedar Bluff** | **2.33** | **331** | | Pn | 09 20 34.1 | +0.1 |
| CBKS | | | | IAmb_Lg | | 09 21 07.7 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| KSU1 | **Kansas State U** | **2.67** | **29** | | Pn | 09 20 39.5 | +0.9 |
| LOOK | **Love County** | **2.93** | **162** | Pn | Pn | 09 20 42.3 | +0.2 |
| U38A | **Gravette** | **3.16** | **95** | Pn | Pn | 09 20 46.1 | +0.8 |
| X37A | **Clayton** | **3.23** | **132** | | Pn | 09 20 46.2 | -0.1 |
| AMTX | **Amarillo** | **3.35** | **237** | | Pn | 09 20 49.6 | +1.6 |
| HHAR | **Hobbs** | **3.54** | **97** | | Pn | 09 20 50.7 | +0.2 |
| S39A | **Bolivar** | **4.06** | **76** | | Pn | 09 20 57.3 | -0.5 |
| U40A | **Yellville** | **4.39** | **94** | Pn | Pn | 09 21 02.7 | +0.4 |
| MIAR | **Mount Ida** | **4.44** | **119** | | Pn | 09 21 02.1 | -0.8 |
| N35A | **Tabor** | **4.56** | **26** | | Pn | 09 21 06.2 | +1.6 |
| BGNE | **Belgrade** | **4.62** | **1** | Pn | Pn | 09 21 04.6 | -0.8 |
| P38A | **Dawn** | **4.70** | **51** | | Pn | 09 21 05.5 | -1.0 |
| WHTX | **Lake Whitney,** | **4.83** | **172** | Pn | Pn | 09 21 08.3 | 0.0 |
| MGMO | **Mountain Grove** | **4.83** | **184** | Pn | Pn | 09 21 08.5 | +0.1 |
| T25A | **Trinidad** | **4.92** | **276** | Pn | Pn | 09 21 09.2 | -0.6 |
| X40A | **Basin Creek Fa** | **5.00** | **116** | Pn | Pn | 09 21 10.0 | -0.6 |
| R40A | **Maddies Statio** | **5.01** | **71** | Pn | Pn | 09 21 09.7 | -1.1 |
| FCAR | **Ozark Folk Cen** | **5.05** | **98** | Pn | Pn | 09 21 10.5 | -0.9 |
| WHAR | **Wooly Hollow** | **5.08** | **105** | Pn | Pn | 09 21 11.6 | -0.2 |
| W41B | **Gary Mavity, V** | **5.15** | **106** | Pn | Pn | 09 21 12.1 | -0.6 |
| P40A | **Paris** | **5.63** | **59** | Pn | Pn | 09 21 21.1 | +1.8 |
| CCM | **Cathedral Cave** | **5.75** | **75** | IAmb_Lg | | 09 22 57.8 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| T42A | **Van Buren** | **5.77** | **85** | Pn | Pn | 09 21 20.3 | -0.9 |
| LCAR | **Lake Charles** | **5.79** | **95** | Pn | Pn | 09 21 21.5 | 0.0 |
| Q24A | **Divide** | **5.85** | **294** | Pn | Pn | 09 21 23.6 | +1.0 |
| FVM | **French Village** | **6.37** | **77** | Pn | Pn | 09 21 29.6 | +0.1 |
| ECSD | **EROS Data Cent** | **7.06** | **10** | Pn | Pn | 09 21 39.6 | +0.7 |

*NEIC* ***07*** *09:35:29.7±0.9, 1°.26S±0°.08×127°.69E±0°.09, h41km±9km, mb4.3/6, Error ellipse: s-maj=13.9km s-min=11.1km az=52.0*

*IDC* ***07*** *09:35:31.1±1.8, 1°.49S×127°.63E, h70km±19km, mb3.6/4, mb1 3.7/8, mb1mx3.5/32, mbtmp3.9/8, MS3.0/2, Ms1 3.0/2, ms1mx2.3/69, Error ellipse: s-maj=14.6km s-min=12.9km az=58.0*

**ISC 07 09:35:29.9±0.7, 1°.39S±0°.07×127°.60E±0°.07, h50km, n24, σ1°28/26, mb4.3/7, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | **Ternate** | **2.16** | **354** | Pn | **Pn** | **09 36 02.0** | **-1.3** |
| SIJI | **Sorong** | **3.70** | **82** | P | **Pn** | **09 36 24.8** | **+0.3** |
| | 6.9nm,0.3s,baz=225,slow=14,SNR=6.8 | | | | | | |
| SIJI | | | | S | **Sn** | **09 37 08.8** | **+1.9** |
| | baz=108,slow=19,SNR=1.2 | | | | | | |
| FAKI | **Fak Fak** | **4.88** | **108** | | **Pn** | **09 36 39.9** | **-1.0** |
| TOLI2 | **Tolitoli** | **7.26** | **290** | Pn | **Pn** | **09 37 13.3** | **-0.1** |
| KAPI | **Kappang** | **8.63** | **245** | P | **Pn** | **09 37 33.1** | **+0.9** |
| | 1.5nm,0.3s,baz=134,slow=6.0,SNR=5.1 | | | | | | |
| KAPI | | | | S | **Sn** | **09 39 08.3** | **+0.2** |
| | 1.5nm,0.3s,baz=191,slow=16,SNR=2.5 | | | | | | |
| KAPI | **Kappang** | **8.63** | **245** | | **Pn** | **09 37 33.7** | **+1.5** |
| DAV | **Davao City (W)** | **8.64** | **347** | LR | LR | 09 41 34.7 | |
| | comp=Z,44nm,21.1s,baz=186,slow=42 | | | | | | |
| FITZ | **Fitzroy Crossi** | **16.72** | **187** | P | **Pn** | **09 39 20.7** | **0.0** |
| | 0.1nm,0.3s,baz=34,slow=3.6,SNR=1.9 | | | | | | |
| WRA | **Warramunga Arr** | **19.58** | **161** | P | **P** | **09 39 52.8** | **-1.2** |
| | 0.5nm,0.3s,baz=348,slow=12,SNR=21 | | | | | | |
| WRA | | | | S | **S** | **09 43 29.5** | **-3.0** |
| | 0.1nm,0.3s,baz=298,slow=34,SNR=1.6 | | | | | | |
| AS31 | **Alice Springs** | **22.97** | **165** | P | **P** | **09 40 28.1** | **-2.3** |
| ASAR | **Alice Springs** | **22.97** | **165** | P | **P** | **09 40 29.4** | **-0.9** |
| | 1.2nm,0.5s,baz=345,slow=12,SNR=22 | | | | | | |
| ASAR | | | | S | **S** | **09 44 38.7** | **+1.6** |
| | 0.7nm,0.9s,baz=347,slow=22,SNR=6.4 | | | | | | |
| ASAR | **Alice Springs** | **22.97** | **165** | P | **P** | **09 40 28.7** | **-1.7** |
| CTA | **Charters Tower** | **26.04** | **137** | LR | LR | 09 53 39.2 | |
| | comp=Z,60nm,19.1s,baz=254,slow=42 | | | | | | |
| SONM | **Songino Array** | **52.40** | **342** | P | **P** | **09 44 37.3** | **0.0** |
| | 0.8nm,0.7s,baz=150,slow=7.9,SNR=5.7 | | | | | | |
| SONM | **Songino Array** | **52.40** | **342** | P | **P** | **09 44 36.9** | **-0.4** |
| SONM | | | | IAmb | IAmb | 09 44 39.6 | |
| | comp=Z,1.8nm,1.3s | | | | | | |
| MK31 | **Makanchi Array** | **62.25** | **326** | P | **P** | **09 45 46.8** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 09 45 47.6 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| MKAR | **Makanchi Array** | **62.25** | **326** | P | **P** | **09 45 46.8** | **+0.1** |
| | comp=Z,3.0nm,0.7s,baz=118,slow=7.9,SNR=32 | | | | | | |
| MKAR | **Makanchi Array** | **62.25** | **326** | P | **P** | **09 45 46.5** | **-0.2** |
| MAKZ | **Makanchi** | **62.44** | **326** | P | **P** | **09 45 48.1** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 09 45 48.6 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **65.53** | **334** | P | **P** | **09 46 06.6** | **-1.3** |
| | comp=Z,6.0nm,0.4s,baz=129,slow=5.0,SNR=4.6 | | | | | | |
| ZALV | **Zalesovo Beam** | **65.53** | **334** | P | **P** | **09 46 08.0** | **0.0** |
| KURK | **Kurchatov** | **66.51** | **328** | P | **P** | **09 46 13.9** | **-0.5** |
| KURK | | | | IAmb | IAmb | 09 46 15.0 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| QSPA | **South Pole Qui** | **88.55** | **180** | P | **P** | **09 48 19.0** | **+1.9** |
| BMAR | **Burnt Mountain** | **90.43** | **23** | P | **P** | **09 48 25.6** | **-0.2** |

*JMA* ***07*** *09:56:43.4±0.5, 31°.36N×138°.69E, h424km, M3.2*

*IDC* ***07*** *09:56:56.9±2.0, 32°.16N×138°.34E, h336km±22km, mb2.8/7, mb1 2.9/10, mb1mx2.6/41, mbtmp3.5/10, Error ellipse: s-maj=51.4km s-min=16.1km az=70.0*

**ISC 07 09:56:57.4±1.1, 32°.3N±0°.1×138°.5E±0°.1, h350km, n22, σ1°41/25, mb2.9/7, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TTO1 | **TONANKAI O.B.S** | **1.93** | **312** | P | **Pn** | **09 57 47.2** | **-0.6** |
| JIE | **Ise** | **2.54** | **324** | P | **Pn** | **09 57 52.5** | **-0.2** |
| JKN2 | **Miekihoku** | **2.66** | **316** | P | **Pn** | **09 57 52.8** | **-0.9** |
| JTNC | **Tanabenakahech** | **2.84** | **302** | P | **Pn** | **09 57 53.6** | **-1.8** |
| JOD2 | **Odawara 2** | **2.95** | **9** | P | **Pn** | **09 57 57.1** | **+0.8** |
| JAO | **Obara** | **3.10** | **341** | P | **Pn** | **09 57 58.2** | **+0.6** |
| JHU | **Hanno** | **3.56** | **10** | P | **Pn** | **09 58 02.0** | **+0.1** |
| JHU | | | | *e*S | **S** | **09 58 52.4** | **-1.5** |
| JRY | **Ryogami san** | **3.68** | **5** | P | **Pn** | **09 58 04.1** | **+1.0** |
| JYT | **Yasato** | **4.12** | **19** | P | **Pn** | **09 58 07.1** | **-0.4** |
| JYT | | | | S | **S** | **09 59 00.1** | **-4.0** |
| JAG | **Ashikaga** | **4.15** | **11** | P | **Pn** | **09 58 07.3** | **-0.5** |
| JAG | | | | S | **S** | **09 59 02.1** | **-2.6** |
| MJAR | **Matsushiro Arr** | **4.20** | **357** | P | **Pn** | **09 58 08.5** | **+0.1** |
| | 0.4nm,0.3s,baz=96,slow=2.5,SNR=20 | | | | | | |
| MAT | **Matsushiro** | **4.20** | **357** | P | **Pn** | **09 58 09.4** | **+1.0** |
| MAT | | | | *e*S | S | 09 59 17.6 | +12 |
| JHO | **Hitachi** | **4.58** | **21** | P | **Pn** | **09 58 11.9** | **-0.5** |
| KSRS | **Korea Array** | **10.08** | **303** | P | **P** | **09 59 16.2** | **-1.4** |
| | 0.1nm,0.3s,baz=118,slow=13,SNR=4.1 | | | | | | |
| USRK | **Ussuriysk Ar.** | **12.89** | **339** | P | **Pn** | **09 59 50.7** | **+1.2** |
| | baz=151,slow=12,SNR=3.4 | | | | | | |
| SONM | **Songino Array** | **28.78** | **312** | P | **P** | **10 02 25.1** | **+0.9** |
| | 0.3nm,0.7s,baz=97,slow=6.7,SNR=1.9 | | | | | | |
| ZALV | **Zalesovo Beam** | **43.47** | **316** | P | **P** | **10 04 27.5** | **+0.5** |
| | 0.6nm,0.4s,baz=94,slow=7.4,SNR=4.3 | | | | | | |
| MKAR | **Makanchi Array** | **44.75** | **306** | P | **P** | **10 04 37.4** | **+0.1** |
| | 0.3nm,0.3s,baz=89,slow=10,SNR=8.8 | | | | | | |
| WRA | **Warramunga Arr** | **52.14** | **185** | P | **P** | **10 05 31.8** | **-1.4** |
| | 0.1nm,0.3s,baz=358,slow=7.8,SNR=6.8 | | | | | | |
| ASAR | **Alice Springs** | **55.87** | **185** | P | **P** | **10 06 00.1** | **+0.2** |
| | 0.2nm,0.5s,baz=17,slow=14,SNR=4.6 | | | | | | |
| FINES | **FINESS Array B** | **71.84** | **332** | P | **P** | **10 07 44.2** | **+1.7** |
| | 1.5nm,0.9s,baz=204,slow=1.9,SNR=5.6 | | | | | | |
| AKASG | **Malin Array Be** | **76.52** | **322** | P | **P** | **10 08 10.5** | **+1.0** |
| | 0.4nm,0.5s,baz=50,slow=4.6,SNR=2.3 | | | | | | |

**IDC 07 10:04:47.7±16.0, 18°.95S×177°.89W, h591km±44km, mb2.9/4, mb1 3.0/5, mb1mx2.4/42, mbtmp3.8/5, Error ellipse: s-maj=309.4km s-min=116.3km az=75.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | **4.04** | **287** | P | P | 10 06 12.8 | -0.1 |
| | 1.4nm,0.3s,baz=106,slow=15,SNR=14 | | | | | | |
| CTA | **Charters Tower** | **33.78** | **262** | P | P | 10 10 42.5 | +0.4 |
| | 1.3nm,0.3s,baz=92,slow=8.6,SNR=7.5 | | | | | | |
| STKA | **Stephens Creek** | **38.58** | **242** | P | P | 10 11 21.1 | -0.3 |
| | 0.7nm,0.4s,baz=135,slow=8.6,SNR=1.7 | | | | | | |
| WRA | **Warramunga Arr** | **44.94** | **260** | P | P | 10 12 11.1 | -0.4 |
| | 0.3nm,0.3s,baz=97,slow=7.6,SNR=15 | | | | | | |
| ASAR | **Alice Springs** | **44.99** | **255** | P | P | 10 12 11.8 | -0.1 |
| | 1.2nm,0.8s,baz=86,slow=8.1,SNR=18 | | | | | | |

*CNRM* ***07*** *10:10:25.4, 35°.50N×3°.61W, h18km, ml3.0*

*SFS* ***07*** *10:10:25.0, 35°.50N×3°.60W, ML2.7, ALBORAN SUR*

*IGIL* ***07*** *10:10:26.5, 35°.52N×3°.65W, h0km, ML2.1*

*INMG* ***07*** *10:10:26.1±1.4, 35°.43N×3°.64W, h13km±8km, ML2.2, Error ellipse: s-maj=4.8km s-min=4.0km az=135.0*

**ISC 07 10:10:23.7±1.3, 35°.50N±0°.03×3°.64W±0°.03, h7km±12km, n30, σ1°77/51, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | **Palemas** | **0.37** | **221** | P | **Pb** | **10 10 33.1** | **+0.5** |
| PALE | | | | S | **Sb** | **10 10 40.1** | **+1.5** |
| GOG | **Mont Gurugu** | **0.59** | **117** | P | **Pb** | **10 10 36.3** | **-0.1** |
| GOG | | | | S | **Sg** | **10 10 43.6** | **+0.7** |
| CHAS | **Isla Isabel II** | **1.04** | **107** | P | **Pg** | **10 10 43.0** | **-0.6** |
| CHAS | | | | S | **Sg** | **10 10 55.6** | **-1.5** |
| TAF | **Taforalt** | **1.21** | **124** | P | **Pg** | **10 10 46.5** | **-0.5** |
| TAF | | | | S | **Sn** | **10 11 04.0** | **+0.2** |
| EMAL | **Malaga-Limoner** | **1.42** | **333** | P | **Pn** | **10 10 50.1** | **+0.3** |
| EMAL | | | | S | **Sb** | **10 11 06.6** | **-2.1** |
| CHEFC | **Chefchaouen** | **1.44** | **255** | P | **Pg** | **10 10 52.0** | **+0.7** |
| CHEFC | | | | S | **Sb** | **10 11 08.1** | **-1.4** |
| CEU | **Ceuta** | **1.47** | **286** | P | **Pn** | **10 10 49.1** | **-1.4** |
| CEU | | | | S | **Sn** | **10 11 05.0** | **-4.9** |
| IFR | **Ifrane** | **2.32** | **212** | P | **Pb** | **10 11 06.2** | **+0.2** |
| IFR | | | | S | **Sn** | **10 11 28.4** | **-2.9** |
| MD31 | **MD31** | **2.78** | **200** | P | **Pn** | **10 11 11.0** | **+2.3** |
| MD31 | | | | S | **Sn** | **10 11 43.9** | **+1.4** |
| MDT | **Midelt** | **2.79** | **197** | P | **Pb** | **10 11 12.4** | **-1.5** |
| MDT | | | | S | **Sb** | **10 11 46.9** | **-1.5** |
| ZHG | **ZHG** | **3.21** | **231** | P | **Pn** | **10 11 15.7** | **+1.0** |
| ZHG | | | | S | **Sn** | **10 11 54.7** | **+1.6** |
| PVAQ | **Vaqueiros** | **3.80** | **301** | *e*Pn | **Pn** | **10 11 24.0** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **10 12 06.5** | **-1.0** |
| PVAQ | | | | A | A | 10 12 12.9 | |
| | 2.9nm,0.2s | | | | | | |
| PVAQ | **Vaqueiros** | **3.80** | **301** | P | **Pn** | **10 11 24.4** | **+1.8** |
| PVAQ | | | | S | **Sn** | **10 12 05.8** | **-1.7** |
| PCVE | **Castro Verde** | **4.13** | **302** | *e*Pn | **Pn** | **10 11 29.2** | **+2.0** |
| PCVE | | | | *e*Sn | **Sn** | **10 12 15.3** | **-0.5** |
| PCVE | | | | A | A | 10 12 21.9 | |
| | 3.9nm,0.7s | | | | | | |
| MESJ | **Messejana** | **4.36** | **304** | *e*P | **Pn** | **10 11 31.7** | **+1.3** |
| MESJ | | | | *e*S | **Sn** | **10 12 19.6** | **-1.8** |
| MESJ | | | | IAML | | 10 12 23.3 | |
| | comp=N,3.8nm,0.2s | | | | | | |
| MESJ | **Messejana** | **4.36** | **304** | *e*Pn | **Pn** | **10 11 31.8** | **+1.5** |
| MESJ | | | | *e*Sn | **Sn** | **10 12 21.0** | **-0.4** |
| MESJ | | | | A | A | 10 12 25.4 | |
| | comp=N,3.7nm,1.1s | | | | | | |
| MORF | **Marmelete** | **4.43** | **296** | *e*Sn | **Sn** | **10 12 23.0** | **-0.1** |
| MORF | | | | A | A | 10 12 24.9 | |
| | comp=N,2.9nm,0.5s | | | | | | |
| PFVI | **Vila Bisbo** | **4.50** | **293** | *e*Sn | **Sn** | **10 12 23.5** | **-1.2** |
| PTEO | **Sao Teotonio** | **4.58** | **298** | *e*Sn | **Sn** | **10 12 26.8** | **+0.1** |
| PESTR | **Estremoz** | **4.61** | **318** | *e*Pn | **Pn** | **10 11 36.0** | **+2.2** |
| PESTR | | | | *e*Sn | **Sn** | **10 12 27.5** | **-0.1** |
| PESTR | | | | A | A | 10 12 35.1 | |
| | comp=N,2.7nm,0.9s | | | | | | |
| PESTR | **Estremoz** | **4.61** | **318** | P | **Pn** | **10 11 35.8** | **+2.0** |
| PESTR | | | | S | **Sn** | **10 12 30.3** | **+2.7** |
| EVO | **Evora** | **4.63** | **312** | *e*Pn | **Pn** | **10 11 35.7** | **+1.7** |
| EVO | | | | *e*Sn | **Sn** | **10 12 27.0** | **-1.0** |
| EVO | | | | A | A | 10 12 30.6 | |
| | comp=N,3.1nm,0.7s | | | | | | |
| PNCL | **Nicolau / Gran** | **4.71** | **305** | *e*Pn | **Pn** | **10 11 36.4** | **+1.2** |
| PNCL | | | | *e*Sn | **Sn** | **10 12 29.1** | **-0.9** |
| PNCL | | | | A | A | 10 12 34.0 | |
| | comp=N,3.0nm,0.5s | | | | | | |
| PMRV | **Marv??o** | **4.93** | **324** | *e*Pn | **Pn** | **10 11 39.7** | **+1.5** |
| PMRV | | | | *e*Sn | **Sn** | **10 12 34.9** | **-0.6** |
| PMRV | | | | A | A | 10 12 40.9 | |
| | comp=N,2.0nm,0.6s | | | | | | |
| PMTG | **Montargil** | **5.11** | **316** | *e*Pn | **Pn** | **10 11 42.6** | **+2.0** |
| PCBR | **Castelo Branco** | **5.30** | **326** | *e*Pn | **Pn** | **10 11 45.3** | **+2.1** |
| PSBE | **So Bento** | **5.73** | **316** | *e*Pn | **Pn** | **10 11 51.7** | **+2.5** |
| MVO | **Moncorvo** | **6.25** | **336** | *e*Pn | **Pn** | **10 11 59.4** | **+3.0** |
| PVRL | **Vila Real** | **6.60** | **332** | *e*Pn | **Pn** | **10 12 03.1** | **+2.0** |
| PBRG | **Braganca** | **6.75** | **340** | *e*Pn | **Pn** | **10 12 06.4** | **+3.2** |

*IDC* ***07*** *10:12:51.0±1.3, 14°.20N×92°.63W, h0km, mb3.9/8, mb1 4.2/11, mb1mx3.8/42, mbtmp3.9/11, ML3.5/3, MS3.5/5, Ms1 3.5/5, ms1mx3.0/67, Error ellipse: s-maj=32.3km s-min=19.1km az=32.0*

*MEX* ***07*** *10:12:56.3±1.0, 14°.08N×92°.71W, h18km±65km, MD4.1*

*NEIC* ***07*** *10:12:58.3±2.2, 14°.07N±0°.09×92°.2W±0°.1, h60km±6km, mb4.3/18, Error ellipse: s-maj=15.9km s-min=11.1km az=60.0*

**ISC 07 10:12:55.8±1.4, 14°.15N±0°.06×92°.48W±0°.07, h34km±4km, n60, σ1°24/68, mb4.2/12, MS3.6/4, 1D, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| THIG | | **0.78** | **16** | *e*P | **Pb** | **10 13 11.1** | **+0.1** |
| THIG | | | | *i* S | **Sb** | **10 13 21.7** | **+0.3** |
| RTAL | **Retalhuleu** | **0.85** | **64** | Pn | **Pn** | **10 13 11.7** | **+0.3** |
| PATR | **El Naranjo** | **0.99** | **14** | *e*P | **Pn** | **10 13 13.6** | **+0.1** |
| PATR | | | | *e*S | **Sb** | **10 13 27.4** | **-0.1** |
| CHUJ | **Union Juarez** | **1.00** | **21** | *e*P | **Pb** | **10 13 14.2** | **-0.7** |
| CHUJ | | | | *e*S | **Sb** | **10 13 29.2** | **+1.2** |
| PAVE | **Pavencul** | **1.08** | **16** | *e*P | **Pb** | **10 13 15.1** | **-1.1** |
| PAVE | | | | *e*S | **Sb** | **10 13 29.6** | **-0.4** |
| HUEH | **Huehuetenango** | **1.50** | **39** | Pn | **Pb** | **10 13 23.2** | **0.0** |
| PCIG | | **1.70** | **335** | *e*P | **Pn** | **10 13 21.9** | **-1.1** |
| PCIG | | | | *e*S | **Sn** | **10 13 41.5** | **-2.1** |
| APG | **El Apazote** | **2.13** | **66** | Pn | **Pn** | **10 13 30.2** | **+1.1** |
| | 13nm,0.3s,baz=265,slow=8.8,SNR=67 | | | | | | |
| APG | | | | Sn | **Sb** | **10 13 60.0** | **-0.1** |
| | 24nm,0.3s,baz=44,slow=4.3,SNR=6.1 | | | | | | |
| APG | | | | Lg | Lg | 10 14 06.0 | |
| | 18nm,0.3s,baz=74,slow=19,SNR=6.7 | | | | | | |
| APG | | | | LR | LR | 10 14 31.2 | |
| | comp=Z,322nm,18.1s,baz=94,slow=45 | | | | | | |
| CCIG | **Comitan** | **2.14** | **9** | Pn | **Pb** | **10 13 33.9** | **-0.3** |
| CCIG | **Comitan** | **2.14** | **9** | *e*P | **Pb** | **10 13 32.7** | **-1.4** |
| CCIG | | | | *e*S | **Sn** | **10 13 55.6** | **+0.8** |
| TGIG | | **2.68** | **347** | *e*P | **Pn** | **10 13 36.8** | **+0.2** |
| TGIG | | | | *i* S | **Sn** | **10 14 07.4** | **+0.6** |
| ESQI | **Esquipulas** | **3.07** | **82** | Pn | **Pn** | **10 13 41.3** | **-0.7** |
| UXUV | **UXUV** | **3.53** | **333** | *e*P | **Pn** | **10 13 47.6** | **-0.6** |
| UXUV | | | | *e*S | **Sn** | **10 14 31.7** | **+2.8** |
| CMIG | **Matias Romero** | **3.73** | **322** | Pn | **Pn** | **10 13 48.7** | **-2.2** |
| | 2.0nm,0.3s,baz=147,slow=10,SNR=17 | | | | | | |
| CMIG | | | | Sn | **Sn** | **10 14 33.5** | **-0.1** |
| | 5.2nm,0.3s,baz=93,slow=12,SNR=5.0 | | | | | | |
| CMIG | | | | Lg | Lg | 10 14 49.8 | |
| | 11nm,0.3s,baz=81,slow=14,SNR=5.5 | | | | | | |
| CMIG | **Matias Romero** | **3.73** | **322** | *e*P | **Pn** | **10 13 49.7** | **-1.3** |
| PETF | **Flores** | **3.73** | **42** | Pn | **Pn** | **10 13 53.6** | **+2.7** |
| TGUH | **Tegucigalpa,Un** | **5.05** | **90** | Pn | **Pn** | **10 14 08.1** | **+1.3** |
| BOAB | **BOACO BROADBAN** | **6.85** | **104** | Pn | **Pn** | **10 14 30.7** | **-3.1** |
| HZTE | **Horizontes, Gu** | **7.54** | **116** | Pn | **Pn** | **10 14 41.5** | **-2.0** |
| ORTG | **Ortega, Santa** | **7.83** | **118** | Pn | **Pn** | **10 14 47.3** | **-0.1** |
| CAO2 | **Cobano, Puntar** | **8.47** | **121** | Pn | **Pn** | **10 14 54.7** | **-1.4** |
| RIMA | **Rio Macho** | **9.49** | **116** | Pn | **Pn** | **10 15 10.2** | **-0.2** |
| SRBA | **San Rafael, Bu** | **10.18** | **118** | Pn | **Pn** | **10 15 18.9** | **-0.8** |
| RIOS | **Rincon, Osa** | **10.32** | **121** | Pn | **Pn** | **10 15 21.8** | **+0.2** |
| TXAR | **Lajitas Array** | **18.31** | **327** | P | **P** | **10 17 05.9** | **-1.3** |
| | 0.1nm,0.3s,baz=149,slow=13,SNR=10 | | | | | | |
| TXAR | **Lajitas Array** | **18.31** | **327** | P | **Pn** | **10 17 08.7** | **+1.4** |
| TX31 | **Lajitas Ar. Si** | **18.32** | **327** | P | **Pn** | **10 17 10.2** | **+2.9** |
| TX31 | | | | IAmb | IAmb | 10 17 20.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| TX32 | **Lajitas Array** | **18.32** | **327** | P | **Pn** | **10 17 09.6** | **+2.2** |
| LRAL | **Lakeview Retre** | **19.45** | **14** | P | **P** | **10 17 19.1** | **-0.4** |
| LRAL | | | | IAmb | IAmb | 10 17 41.5 | |
| | comp=Z,19nm,1.5s | | | | | | |
| MIAR | **Mount Ida** | **20.33** | **357** | P | **P** | **10 17 29.1** | **+0.1** |
| MIAR | | | | IAmb | IAmb | 10 17 43.5 | |
| | comp=Z,17nm,1.2s | | | | | | |
| MNTX | **Cornudas Mount** | **21.09** | **328** | P | **P** | **10 17 38.3** | **+0.9** |
| W35A | **Tecumseh** | **21.28** | **350** | | **P** | **10 17 39.4** | **0.0** |
| SWET | **Sewanee** | **21.79** | **15** | P | **P** | **10 17 43.9** | **-0.9** |
| TKL | **Tuckaleechee C** | **22.80** | **19** | P | **P** | **10 17 54.7** | **-0.9** |
| | comp=Z,4.3nm,1.1s,baz=206,slow=18,SNR=1.5 | | | | | | |
| TKL | | | | LR | LR | 10 26 47.7 | |
| | comp=Z,119nm,20.9s,baz=167,slow=37 | | | | | | |
| TKL | **Tuckaleechee C** | **22.80** | **19** | P | **P** | **10 17 55.2** | **-0.4** |
| TKL | | | | IAmb | IAmb | 10 18 16.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| ANMO | **Albuquerque** | **24.24** | **331** | P | **P** | **10 18 09.2** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=146,slow=13,SNR=2.9 | | | | | | |
| ANMO | **Albuquerque** | **24.24** | **331** | P | **P** | **10 18 11.3** | **+1.5** |
| KSCT | **Kent School, K** | **32.04** | **27** | P | **P** | **10 19 18.1** | **-1.1** |
| KSCT | | | | IAmb | IAmb | 10 19 43.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| PDAR | **Pinedale Array** | **32.09** | **336** | P | **P** | **10 19 19.3** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=120,slow=8.8,SNR=4.8 | | | | | | |
| PDAR | **Pinedale Array** | **32.09** | **336** | P | **P** | **10 19 19.9** | **0.0** |
| SADO | **Sadowa** | **32.56** | **18** | LR | LR | 10 34 19.0 | |
| | comp=Z,166nm,18.4s,baz=144,slow=40 | | | | | | |
| REDW | **Red Top Meadow** | **33.11** | **335** | P | **P** | **10 19 29.8** | **+0.9** |
| NVAR | **Mina Array Bea** | **33.26** | **321** | P | **P** | **10 19 30.1** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=132,slow=9.1,SNR=13 | | | | | | |
| NVAR | **Mina Array Bea** | **33.26** | **321** | P | **P** | **10 19 31.9** | **+1.7** |
| NCB | **Newcomb** | **33.57** | **24** | P | **P** | **10 19 31.0** | **-1.6** |
| MCMT | **McKenzie Canyo** | **35.13** | **335** | P | **P** | **10 19 47.9** | **+1.5** |
| PLID | **Pearl Lake** | **36.72** | **332** | P | **P** | **10 20 00.1** | **+0.1** |
| PLID | | | | IAmb | IAmb | 10 20 10.6 | |
| | comp=Z,3.6nm,1.3s | | | | | | |
| F10A | **Beach Ranch, E** | **37.95** | **332** | P | **P** | **10 20 10.3** | **+0.1** |
| F10A | | | | IAmb | IAmb | 10 20 18.4 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| NEW | **Newport** | **39.65** | **334** | LR | LR | 10 39 31.7 | |
| | comp=Z,55nm,21.0s,baz=59,slow=40 | | | | | | |
| EDM | **Edmonton** | **42.34** | **341** | P | **P** | **10 20 47.0** | **+0.6** |
| EDM | | | | IAmb | IAmb | 10 20 48.2 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| SCHQ | **Schefferville** | **45.24** | **21** | LR | LR | 10 41 54.1 | |
| | comp=Z,115nm,18.4s,baz=102,slow=38 | | | | | | |
| YKA | **Yellowknife Ar** | **50.77** | **347** | P | **P** | **10 21 52.3** | **0.0** |
| | comp=Z,5.5nm,0.7s,baz=150,slow=7.3,SNR=97 | | | | | | |
| YKA | | | | PcP | **PcP** | **10 23 07.4** | **-1.5** |
| | comp=Z,0.4nm,0.7s,baz=150,slow=3.7,SNR=5.2 | | | | | | |
| YKA | **Yellowknife Ar** | **50.77** | **347** | P | **P** | **10 21 51.9** | **-0.4** |
| DLBC | **Dease Lake** | **52.33** | **336** | P | **P** | **10 22 05.8** | **+1.7** |
| CPUP | **Villa Florida** | **52.80** | **140** | P | **P** | **10 22 10.1** | **+2.1** |
| | comp=Z,1.6nm,0.7s,baz=348,slow=2.9,SNR=3.6 | | | | | | |
| INK | **Inuvik** | **60.16** | **344** | P | **P** | **10 22 59.4** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=112,slow=6.5,SNR=9.3 | | | | | | |
| INK | **Inuvik** | **60.16** | **344** | P | **P** | **10 23 00.0** | **+0.3** |
| INK | | | | IAmb | IAmb | 10 23 00.1 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| ILAR | **Eielson Array** | **62.52** | **337** | P | **P** | **10 23 15.0** | **-0.8** |
| | comp=Z,1.7nm,0.9s,baz=122,slow=4.2,SNR=10 | | | | | | |
| BMAR | **Burnt Mountain** | **62.99** | **340** | P | **P** | **10 23 19.2** | **+0.3** |
| CMAR | **Chiang Mai Arr** | **145.69** | **341** | PKPbc | **PKPdf** | **10 32 30.9** | **-0.8** |
| | comp=Z,2.5nm,0.7s,baz=331,slow=3.0,SNR=11 | | | | | | |

*IDC* ***07*** *10:20:13.1±0.7, 53°.75N×158°.34E, h156km±19km, mb3.0/6, mb1 3.3/6, mb1mx3.0/50, mbtmp3.4/6, Error ellipse: s-maj=61.2km s-min=21.8km az=176.0*

**ISC 07 10:20:13.1±0.9, 53°.9N±0°.2×158°.3E±0°.2, h150km, n7, σ0°28/8, mb3.1/6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PETK | **Petropavlovsk-** | **0.88** | **205** | P | **Pn** | **10 20 36.8** | **-0.2** |
| | 20nm,0.3s,baz=65,slow=9.7,SNR=358 | | | | | | |
| PETK | | | | S | **Sn** | **10 20 55.4** | **+0.4** |
| | 0.6nm,0.3s,baz=142,slow=9.9,

**JNU Nakatsue 8.04 251** Pn **Pn** **10 28 52.2 +1.5**
**ASAJ Asahikawa 8.32 13** P **Pn** **10 28 55.8 +1.3**
2.2nm,0.3s,baz=246,slow=10.0,SNR=16
ASAJ S **Sn** **10 30 26.6 -0.3**
0.4nm,0.3s,baz=180,slow=20,SNR=1.4
ASAJ LR LR 10 32 10.4
comp=Z,161nm,20.3s,baz=16,slow=40
**JKA Kamikawa-asahi 8.32 13** Pn **Pn** **10 28 55.8 +1.4**
**NMR Nemuro--Hokkai 8.56 29** *eP* **Pn** **10 28 55.9 -1.9**
NMR *eS* **Sn** **10 30 25.9 -7.0**
**GLVR Golovnino 8.79 27** *eP* **Pn** **10 29 03.6 +2.6**
GLVR *eS* **Sn** **10 30 36.6 -2.0**
**RUSJ Misakicho 9.02 25** *eP* **Pn** **10 29 05.3 +1.3**
RUSJ *eS* **Sn** **10 30 41.2 -2.8**
**JCJ Chichijima 9.11 167** Pn **Pn** **10 29 03.0 -2.5**
**YUK Yuzh-Kuril'sk 9.18 28** P **Pn** **10 29 06.3 +0.1**
YUK *eS* **Sn** **10 30 42.9 -5.1**
YUK pmax pmax
comp=Z,101nm,0.5s
YUK pmax pmax
comp=N,74nm,0.3s
YUK pmax pmax
comp=E,56nm,0.3s
**SHO Shikotan 9.43 32** *eP* **Pn** **10 29 09.3 -0.4**
SHO pmax pmax
comp=Z,27nm,0.7s
SHO pmax pmax
comp=N,26nm,0.3s
SHO pmax pmax
comp=E,15nm,0.3s
**KSRS Korea Array 9.77 282** P **Pn** **10 29 14.8 +0.5**
comp=E,0.7nm,0.3s,baz=92,slow=14,SNR=19
KSRS LR LR 10 32 54.0
comp=E,353nm,19.7s,baz=100,slow=37
**KSAR Wonju Array Be 9.80 282** Pn **Pn** **10 29 18.1 +3.3**
**KS19 Wonju Array Si 9.81 282** Pn **Pn** **10 29 18.5 +3.5**
**USA0B Ussuriysk Arra 10.18 326** Pn Pn 10 29 25.1 +5.1
**USRK Ussuriysk Ar. 10.18 326** P **Pn** **10 29 22.1 +2.1**
baz=136,slow=12,SNR=40
USRK LR LR 10 33 10.4
comp=E,126nm,18.6s,baz=156,slow=37
**USRK Ussuriysk Ar. 10.18 326** Pn Pn 10 29 25.1 +5.1
**KUR Kuril'sk 10.97 31** *eP* Pn 10 29 38.2 +7.5
KUR *eS* **Sn** **10 31 29.0 -2.8**
KUR smax smax
comp=E,75nm,0.8s
KUR smax smax
comp=N,48nm,0.7s
**YSS Yuzh-Sakhalins 11.10 10**⇓ *eP* **Pn** **10 29 32.6 0.0**
YSS *eS* **Sn** **10 31 35.5 +0.3**
YSS pmax pmax
comp=Z,20nm,0.7s
YSS MLR MLR
comp=Z,600nm,18.0s
YSS MLR MLR
comp=N,300nm,12.0s
YSS MLR MLR
comp=E,200nm,13.0s
**MDJ Mudanjiang 11.65 320** P **Pn** **10 29 44.7 +4.6**
MDJ pmax pmax
comp=E,29nm,1.3s
MDJ pmax pmax
comp=E,420nm,6.1s
**MDJ Mudanjiang 11.65 320** Pn **Pn** **10 29 43.4 +3.3**
**BNX BinXian 13.55 319** ⇓P **Pn** **10 30 07.3 +1.3**
BNX pmax pmax
comp=E,32nm,1.1s
BNX pmax pmax
comp=E,370nm,4.9s
**CN2 Changchun 13.56 309** *eP* **P** **10 30 10.9 -2.8**
CN2 pmax pmax
comp=E,10.0nm,1.0s
**SNY Shenyang 14.00 299** ⇑P **Pn** **10 30 13.8 +1.8**
SNY pmax pmax
comp=E,7.0nm,1.2s
**KLR Kul'dur 14.49 338** P **Pn** **10 30 19.8 +1.2**
comp=E,0.5nm,0.3s,baz=138,slow=14,SNR=9.3
KLR LR LR 10 35 54.3
comp=E,149nm,18.0s,baz=143,slow=37
**KLR Kul'dur 14.49 338**⇑ *eP* **Pn** **10 30 20.1 +1.5**
KLR pmax pmax
comp=Z,14nm,1.1s
**TYV Tymovskoe 14.95 7** *eP* **P** **10 30 29.9 +0.8**
TYV pmax pmax
comp=Z,19nm,1.0s
TYV pmax pmax
comp=Z,200nm,5.1s
**NJ2 Nanjing 17.93 263** *eP* **P** **10 31 02.7 +0.4**
NJ2 pmax pmax
comp=Z,5.0nm,0.6s
**TIA Tai'an 18.45 277** ⇓P **P** **10 31 07.0 -0.9**
TIA pmax pmax
comp=Z,5.0nm,0.7s
**SKR Severo-Kuril's 18.71 33**⇓ *eP* **Pn** **10 31 12.1 +0.7**
**BJI Beijing 19.14 289** P **Pn** **10 31 16.6 -0.2**
BJI pmax pmax
comp=Z,5.0nm,0.5s
**BJT Baijiatuan 19.15 289** P **P** **10 31 16.0 +0.4**
**ZEA Zeya 19.80 337** *eP* **P** **10 31 19.8 -2.8**
ZEA pmax pmax
comp=E,10.0nm,0.3s
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=Z,20nm,0.5s
**HNS HongShan 20.28 281** ⇑P **P** **10 31 25.0 -2.9**
HNS pmax pmax
comp=Z,13nm,0.9s
**PEA0B Petropavlovsk- 21.14 31** P **P** **10 31 38.0 +1.0**
PEA0B IAmb IAmb 10 31 44.2
comp=Z,49nm,1.3s
**PETK Petropavlovsk- 21.14 31** P **P** **10 31 37.1 +0.1**
comp=Z,3.8nm,0.8s,baz=90,slow=30,SNR=7.4
PETK LR LR 10 39 44.5
comp=Z,69nm,19.4s,baz=233,slow=36
**PET Petropavlovsk 21.48 32** *eP* **P** **10 31 40.6 0.0**
PET *eS* **S** **10 35 30.8 -5.0**
PET pmax pmax
comp=Z,18nm,1.3s
PET MLR MLR
comp=Z,100nm,20.0s
**WHN Wuhan 22.07 263** P **P** **10 31 53.2 +6.0**
**LYN LuoYang 22.47 274** *eP* **P** **10 31 49.7 -1.7**
**HHC Hu-ho-hao-te 22.71 291** *eP* **P** **10 31 53.2 -0.9**
HHC pmax pmax
comp=Z,5.0nm,0.7s
HHC pmax pmax
comp=Z,220nm,6.2s
**GUMO Guam 22.79 168** P **P** **10 31 54.7 -0.2**
**MA2 Magadan 24.58 13***c iP* **P** **10 32 11.4 -0.1**
MA2 pmax pmax
comp=Z,26nm,1.3s
**MA2 Magadan 24.58 13** P **P** **10 32 11.8 +0.3**
MA2 IAmb IAmb 10 32 14.0
comp=Z,15nm,0.8s
**ENH Enshi 26.09 266** P **P** **10 32 23.7 -1.8**
ENH IAmb IAmb 10 32 24.9
comp=Z,15nm,0.6s
**YAK Yakutsk 26.81 349** P **P** **10 32 30.6 -1.0**
comp=Z,5.0nm,0.4s,baz=327,slow=2.7,SNR=7.0
YAK LR LR 10 42 55.8
comp=Z,97nm,20.4s,baz=101,slow=36
**YAK Yakutsk 26.81 349** *eP* **P** **10 32 30.6 -1.0**
YAK *e**PP **sP** **10 32 47.6 -3.1**
YAK *e* 10 33 12.9
YAK *e* 10 35 52.8
YAK *eS* **S** **10 37 01.2 -2.7**
YAK *eSS* **SnSn** **10 38 11.2 -0.8**
YAK *e* 10 43 18.6
YAK pmax pmax
comp=Z,20nm,0.9s
YAK pmax pmax
comp=N,9.0nm,1.1s
YAK pmax pmax
comp=E,3.0nm,1.3s
YAK pmax pmax
comp=Z,87nm,2.7s
YAK pmax pmax
comp=N,28nm,2.2s
YAK pmax pmax
comp=E,50nm,2.9s
YAK smax smax
comp=N,97nm,3.8s
YAK smax smax
comp=E,110nm,3.8s

**YAK Yakutsk 26.81 349** P **P** **10 32 30.9 -0.7**
YAK IAmb IAmb 10 32 32.9
comp=Z,20nm,0.8s
**ULN Ulaanbaatar 26.97 306**⇓ *eP* **P** **10 32 34.3 +0.8**
ULN pmax pmax
comp=Z,8.0nm,1.3s
**ULN Ulaanbaatar 26.97 306** P **P** **10 32 33.8 +0.3**
**SONM Songino Array 27.40 306** P **P** **10 32 36.8 -0.5**
comp=Z,2.3nm,0.6s,baz=105,slow=8.4,SNR=20
SONM PcP **PcP** **10 35 55.5 +0.5**
comp=Z,0.5nm,0.5s,baz=130,slow=1.7,SNR=2.9
SONM LR LR 10 43 50.9
comp=Z,112nm,19.3s,baz=117,slow=37
**SONM Songino Array 27.40 306** P **P** **10 32 38.0 +0.7**
**BOD Bodaibo 27.77 330** *eP* **P** **10 32 39.9 -0.4**
BOD pmax pmax
comp=Z,10.0nm,1.1s
**SEY Seymchan 28.00 12** P **P** **10 32 43.0 +0.7**
comp=Z,3.2nm,0.8s,baz=214,slow=6.4,SNR=14
**LZH Lanzhou 29.09 281** *eP* **P** **10 32 56.9 +4.4**
LZH pP pP 10 33 10.7 +5.1
LZH sP sP 10 33 14.9 +3.2
LZH pmax pmax
comp=Z,19nm,1.3s
LZH LR LR
comp=Z,320nm,15.2s
LZH LR LR
comp=Z,250nm,15.7s
LZH LR LR
comp=Z,450nm,18.4s
**GYA Guiyang 29.91 261**⇑ *iP* **P** **10 32 58.4 -1.3**
GYA sP sP 10 33 19.6 +0.7
GYA pmax pmax
comp=Z,9.0nm,0.9s
**ZAK Zakamensk 29.99 310** *eP* **P** **10 32 58.3 -2.0**
ZAK pmax pmax
comp=Z,3.0nm,1.1s
**DAV Davao City (W) 31.70 208** LR LR 10 45 58.9
comp=Z,79nm,20.4s,baz=4.5,slow=36
**GTA Gaotai 31.75 288** *eP* **P** **10 33 14.9 -1.0**
GTA pP pP 10 33 28.3 -0.8
GTA sP sP 10 33 33.3 -1.9
GTA pmax pmax
comp=Z,3.0nm,0.9s
**KMI Kunming 33.66 262**⇑ P **P** **10 33 30.9 -1.9**
KMI pmax pmax
comp=Z,7.0nm,1.2s
**PZH PanZhiHua 33.84 265**⇓ P **P** **10 33 32.8 -1.5**
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,130nm,6.1s
**BILL Bilibino 35.31 17** *eP* **P** **10 33 47.0 +0.6**
BILL *e* 10 35 04.7
BILL *e* 10 36 14.7
BILL pmax pmax
comp=Z,8.0nm,2.5s
**TIXI Tiksi 36.15 354** LR LR 10 49 42.2
comp=Z,56nm,18.1s,baz=185,slow=38
**TIXI Tiksi 36.15 354**⇓ *iP* **P** **10 33 53.3 -0.1**
TIXI pmax pmax
comp=Z,13nm,1.7s
**TIXI Tiksi 36.15 354** P **P** **10 33 53.5 +0.1**
TIXI IAmb IAmb 10 33 53.8
comp=Z,4.5nm,0.7s
**GOMU GeErMu 36.22 284** P **P** **10 33 54.0 -1.0**
GOMU pP pP 10 34 10.3 +2.0
GOMU sP sP 10 34 18.0 +3.7
GOMU PcP **PcP** **10 36 19.7 +0.3**
GOMU pmax pmax
comp=Z,4.0nm,0.6s
GOMU pmax pmax
comp=Z,200nm,6.6s
**JAY Jayapura 38.36 179** LR LR 10 47 05.3
comp=Z,67nm,21.6s,baz=28,slow=32
**FAKI Fak Fak 39.42 192** P **P** **10 34 21.7 +0.1**
**DGZ Jazzator, Alta 40.04 307***d iP* **P** **10 34 27.6 +0.9**
DGZ pmax pmax
comp=Z,24nm,0.6s
**CMAR Chiang Mai Arr 40.11 255** P **P** **10 34 26.4 -1.1**
comp=Z,0.7nm,0.4s,baz=54,slow=9.1,SNR=1.9
CMAR LR LR 10 54 06.0
comp=Z,28nm,18.0s,baz=55,slow=41
**WMQ Urumqi 40.26 298** *eP* **P** **10 34 30.6 +2.1**
WMQ pP pP 10 34 43.0 +1.1
WMQ pmax pmax
comp=Z,9.0nm,1.1s
WMQ pmax pmax
comp=Z,310nm,4.3s
**ZAA0 Zalesovo Array 41.73 313** P **P** **10 34 40.1 -0.3**
**ZALV Zalesovo Beam 41.73 313** P **P** **10 34 39.8 -0.6**
comp=Z,27nm,0.7s,baz=91,slow=6.5,SNR=105
ZALV PcP **PcP** **10 36 35.5 -0.4**
comp=Z,3.8nm,0.6s,baz=113,slow=3.4,SNR=6.7
ZALV LR LR 10 51 08.4
comp=Z,44nm,19.1s,baz=50,slow=35
**ZALV Zalesovo Beam 41.73 313** P **P** **10 34 39.6 -0.8**
**SHL Shillong 42.23 270** P **P** **10 34 43.6 -1.4**
SHL IAmb IAmb 10 34 44.0
comp=Z,6.8nm,0.8s
**TNA Tin City 42.29 29** P **P** **10 34 46.3 +1.6**
**MK31 Makanchi Array 43.66 303***d iP* **P** **10 34 56.0 -0.2**
**MK31 Makanchi Array 43.66 303** P **P** **10 34 55.9 -0.2**
**MKAR Makanchi Array 43.66 303** P **P** **10 34 55.9 -0.3**
comp=Z,4.9nm,0.6s,baz=86,slow=9.1,SNR=68
MKAR PcP **PcP** **10 36 42.4 -0.2**
comp=Z,1.0nm,0.7s,baz=58,slow=5.4,SNR=3.0
MKAR LR LR 10 54 02.7
comp=Z,74nm,18.6s,baz=60,slow=37
**NRIK Noril'sk 43.69 336** P **P** **10 34 55.7 -0.3**
comp=Z,5.9nm,0.7s,baz=105,slow=9.7,SNR=8.5
**NRIK Noril'sk 43.69 336** P **P** **10 34 56.0 -0.1**
NRIK IAmb IAmb 10 34 57.2
comp=Z,15nm,1.3s
**MAKZ Makanchi 43.88 303** P **P** **10 34 57.3 -0.6**
**MAKZ Makanchi 43.88 303** P **P** **10 34 57.1 -0.8**
MAKZ IAmb IAmb 10 34 58.5
comp=Z,11nm,1.1s
**TAPN Taplejung 44.85 274** *eP* **P** **10 35 05.7 -0.5**
comp=Z,8.8nm,0.4s
**ODAN Odare 45.31 274** *eP* **P** **10 35 09.2 -0.6**
**KURK Kurchatov 45.63 309** P **P** **10 35 11.8 +0.1**
**KURK Kurchatov 45.63 309** P **P** **10 35 11.3 -0.4**
**KURBB Kurchatov Arra 45.70 309** P **P** **10 35 11.8 -0.5**
comp=Z,20nm,0.5s,baz=84,slow=7.8,SNR=288
KURBB LR LR 10 54 50.8
comp=Z,41nm,20.9s,baz=36,slow=37
**PMG Port Moresby 45.71 170** LR LR 10 53 01.8
comp=Z,35nm,20.3s,baz=354,slow=34
**RAMN Ramite 45.91 274** *eP* **P** **10 35 13.8 -0.8**
comp=Z,29nm,0.5s
**JIRN Jiri 45.95 275** *eP* **P** **10 35 14.9 -0.1**
comp=Z,34nm,0.7s
**GUN Gumba 46.09 276** *eP* **P** **10 35 15.9 -0.2**
comp=Z,12nm,0.5s
**PKI Pulchoki 46.61 276** *eP* **P** **10 35 19.3 -0.9**
comp=Z,8.7nm,0.6s
**PKIN Phulchoki 46.62 276** *eP* **P** **10 35 19.4 -0.8**
comp=Z,15nm,0.6s
**KKN Kakani 46.62 276** *eP* **P** **10 35 19.6 -0.5**
comp=Z,25nm,0.8s
**DMN Daman 46.84 276** *eP* **P** **10 35 21.4 -0.5**
**GKN Gorkha 47.05 277** *eP* **P** **10 35 23.0 -0.4**
comp=Z,102nm,0.9s
**ARXS Arharly 47.20 300** *eP* **P** **10 35 24.1 -0.2**
**DANN Dangsing 47.62 277** *eP* **P** **10 35 28.0 0.0**
comp=Z,136nm,0.8s
**TARG Taragay, Kyrgy 47.80 297** P **P** **10 35 29.5 +0.2**
**K20K Telida 47.81 34** P **P** **10 35 31.4 +2.8**
K20K IAmb IAmb 10 35 36.1
comp=Z,5.8nm,0.7s
**KOLN Koldanda 47.99 277** *eP* **P** **10 35 30.5 -0.2**
comp=Z,71nm,1.2s
**MDOK Medeo 47.99 299** P **P** **10 35 30.4 -0.1**
**PYUN Piuthan 48.34 278** *eP* **P** **10 35 33.3 -0.1**
comp=Z,154nm,1.0s
**BATI Baumata 48.50 202** LR LR 10 57 43.1
comp=Z,49nm,18.1s,baz=352,slow=38
**KDAK Kodiak Island 48.62 41** P **P** **10 35 35.7 +0.8**
comp=Z,9.5nm,0.6s,baz=305,slow=2.4,SNR=8.5
**CAST Castle Rocks 48.70 34** P **P** **10 35 37.7 +2.2**
CAST IAmb IAmb 10 35 43.0
comp=Z,3.8nm,0.6s
**ULHL Ulahol 48.79 298** P **P** **10 35 36.9 +0.1**
SNR=5.8
**HNR Honiara 48.99 153** LR LR 10 57 53.8
comp=Z,24nm,19.1s,baz=356,slow=38
**TKM2 Tokmak 2 49.08 299** P **P** **10 35 39.6 +0.7**
SNR=21
**TKM2 Tokmak 2 49.08 299** *i* P **P** **10 35 38.9 0.0**
TKM2 pmax pmax
comp=Z,12nm,0.6s
**MLY Manley 49.31 32** P **P** **10 35 42.7 +2.5**
MLY IAmb IAmb 10 35 43.0
comp=Z,4.5nm,0.8s
**BRZS Berezniki 49.51 308** *i* P **P** **10 35 41.2 -0.6**
**KBK Karagaybulak 49.61 299** P **P** **10 35 43.5 +0.5**
SNR=21
**SGDS Sogindy 49.63 300** *i* P **P** **10 35 42.9 0.0**
**BTLS Baital 49.64 302** *i* P **P** **10 35 42.6 -0.3**
**CHMS Chumysh 49.66 299** P **P** **10 35 43.2 +0.1**
SNR=6.1
**KSH Kashi 49.75 294** P **P** **10 35 47.4 +3.4**
KSH PP **PP** **10 37 42.6 +3.9**
KSH pmax pmax
comp=Z,10.0nm,0.8s
**USP Ospenovka 49.77 299** P **P** **10 35 43.9 -0.1**
SNR=14
**AAK Ala-Archa 49.94 299** P **P** **10 35 45.5 +0.1**
comp=Z,9.7nm,0.8s,baz=117,slow=5.1,SNR=34
AAK LR LR 10 56 22.0
comp=Z,86nm,19.1s,baz=74,slow=35
**AAK Ala-Archa 49.94 299** P **P** **10 35 45.5 +0.1**
SNR=12
**AAK Ala-Archa 49.94 299** P **P** **10 35 45.5 +0.1**
**NEA2 Nenana 50.02 32** P **P** **10 35 47.0 +1.4**
NEA2 IAmb IAmb 10 35 48.5
comp=Z,7.4nm,1.0s
**UCH Uchtor 50.03 298** P **P** **10 35 46.9 +0.4**
SNR=13
**OTUK Ortayu 50.07 306** P **P** **10 35 45.7 -0.4**
**MDM Murphy Dome 50.38 32** P **P** **10 35 50.3 +2.1**
MDM IAmb IAmb 10 35 51.2
comp=Z,9.0nm,0.8s
**BVAR Borovoye Array 50.38 313** P **P** **10 35 48.1 -0.3**
comp=Z,4.3nm,0.7s,baz=70,slow=14,SNR=21
**BRVK Borovoye 50.44 313**⇓ *iP* **P** **10 35 49.0 +0.2**
BRVK pmax pmax
comp=Z,8.0nm,1.0s
**BRVK Borovoye 50.44 313** P **P** **10 35 48.6 -0.2**
BRVK IAmb IAmb 10 35 53.8
comp=Z,7.7nm,1.0s
**EKS2 Erkin-Say 50.44 299** P **P** **10 35 49.1 0.0**
SNR=7.8
**COLA College 50.54 32**⇑ *eP* **P** **10 35 51.1 +1.7**
COLA pmax pmax
comp=Z,6.0nm,0.8s
**AML Almayashu 50.65 298** P **P** **10 35 51.9 +0.8**
SNR=66
**IL31 50.96 32** P **P** **10 35 53.9 +1.3**
IL31 IAmb IAmb 10 35 57.4
comp=Z,5.9nm,0.8s
**ILAR Eielson Array 50.96 32** P **P** **10 35 53.1 +0.5**
comp=Z,3.6nm,0.7s,baz=271,slow=5.9,SNR=39
ILAR pP **pP** **10 36 05.7 -0.8**
comp=Z,2.9nm,0.7s,baz=267,slow=5.6,SNR=6.7
ILAR LR LR 11 00 02.6
comp=Z,33nm,18.1s,baz=50,slow=39
**ILAR Eielson Array 50.96 32** P **P** **10 35 53.8 +1.2**
**PRP Porcupine Dome 51.49 31** P **P** **10 35 58.6 +1.9**
PRP IAmb IAmb 10 36 11.2
comp=Z,6.7nm,1.1s
**KLSI 52.25 227** P **P** **10 35 59.7 -3.1**
comp=Z,8.0nm,1.1s
**SCRK Sand Creek 52.28 33** P **P** **10 36 04.5 +2.0**
SCRK IAmb IAmb 10 36 11.5
comp=Z,6.8nm,1.0s
**DOT Dot Lake 52.28 33** P **P** **10 36 03.0 +0.5**
DOT IAmb IAmb 10 36 08.6
comp=Z,5.3nm,0.7s
**LEM Lembang 52.35 222** P **P** **10 36 02.8 -0.9**
comp=Z,32nm,0.6s,baz=345,slow=22,SNR=4.2
**MDSI Maura Dua 52.41 227** P **P** **10 36 02.6 -1.4**
comp=Z,9.0nm,0.9s
**KKAR Karatay Array 52.62 300** P **P** **10 36 04.7 -0.6**
**L26K Log Cabin Wild 52.67 34** P **P** **10 36 07.5 +2.1**
L26K IAmb IAmb 10 36 08.6
comp=Z,7.1nm,1.0s
**IUG Iuzhnay 53.24 299** *eP* **P** **10 36 10.5 +0.5**
**L27K Beaver Creek, 53.35 34** P **P** **10 36 12.5 +2.0**
L27K IAmb IAmb 10 36 19.0
comp=Z,4.8nm,0.8s
**BCAR Beaver Creek A 53.37 34** P **P** **10 36 13.2 +2.6**
**EGAK Eagle 53.40 32** P **P** **10 36 11.9 +1.2**
EGAK IAmb IAmb 10 36 12.3
comp=Z,4.5nm,1.1s
**NIL Nilore 53.82 288** P **P** **10 36 14.5 +0.2**
**GAR Garm 54.07 296** P **P** **10 36 15.6 -0.6**
**I29M Ogilvie Camp, 54.50 31** P **P** **10 36 21.0 +2.2**
I29M IAmb IAmb 10 36 21.4
comp=Z,9.9nm,1.1s
**EPYK Eagle Plains 54.97 29** P **P** **10 36 23.8 +1.6**
**CHGR Chuyangaron 55.04 296** P **P** **10 36 22.7 -0.5**
**SVE Sverdlovsk 55.12 319** *eP* **P** **10 36 24.0 +0.7**
SVE pmax pmax
comp=Z,11nm,0.9s
**INK Inuvik 55.80 27** P **P** **10 36 28.8 +0.8**
comp=Z,2.1nm,0.5s,baz=289,slow=6.9,SNR=20
INK pP **pP** **10 36 42.0 0.0**
comp=Z,4.0nm,0.6s,baz=296,slow=8.4,SNR=7.9
INK LR LR 11 01 36.7
comp=Z,38nm,19.3s,baz=126,slow=37
**INK Inuvik 55.80 27** P **P** **10 36 29.4 +1.5**
INK IAmb IAmb 10 36 49.2
comp=Z,10nm,1.1s
**WRAB Tennant Creek 55.92 186***ce* P **P** **10 36 29.8 +0.4**
WRAB pmax pmax
comp=Z,9.0nm,1.1s
**WB2 Warramunga Arr 55.93 186** P **P** **10 36 29.3 -0.2**
**WR0 Warramunga Arr 55.93 186** P **P** **10 36 29.1 -0.4**
**WRA Warramunga Arr 55.93 186** P **P** **10 36 28.9 -0.5**
comp=Z,4.3nm,0.6s,baz=360,slow=7.7,SNR=41
WRA pP **pP** **10 36 41.6 -1.8**
comp=Z,3.8nm,0.4s,baz=1.0,slow=7.7,SNR=9.8
WRA LR LR 10 59 57.5
comp=Z,43nm,19.3s,baz=18,slow=35
**WRA Warramunga Arr 55.93 186** P **P** **10 36 29.4 -0.1**
**CTA Charters Tower 56.14 173** LR LR 11 00 09.5
comp=Z,39nm,20.3s,baz=54,slow=36
**ARU Arti 56.33 319** P **P** **10 36 31.4 -0.6**
comp=Z,4.7nm,0.5s,baz=72,slow=4.2,SNR=26
**ARU Arti 56.33 319***d iP* **P** **10 36 31.7 -0.3**
ARU *PP **pP** **10 36 48.4 +2.4**
ARU 10 37 24.9
ARU 10 38 36.5
ARU S **S** **10 44 20.3 +1.9**
ARU SS **SS** **10 48 10.9 +5.7**
ARU pmax pmax
comp=Z,14nm,0.7s
**ARU Arti 56.33 319** P **P** **10 36 31.6 -0.4**
**KBL Kabul 56.68 291** P **P** **10 36 34.1 -1.0**
**A36M Sachs Harbour 57.61 22** P **P** **10 36 42.9 +2.1**
**AB31 Akbulak array 57.69 310** P **P** **10 36 41.0 -0.7**
**ABKAR Akbulak array 57.69 310** P **P** **10 36 41.0 -0.7**
**ABKAR Akbulak array 57.69 310** P **P** **10 36 41.6 -0.1**
ABKAR IAmb IAmb 10 36 43.5
comp=Z,6.6nm,0.6s
**AKTO Aktyubinsk 58.47 312** P **P** **10 36 46.7 -0.5**
comp=Z,7.5nm,0.8s,baz=80,slow=11,SNR=19
AKTO LR LR 11 00 30.0
comp=Z,43nm,20.1s,baz=322,slow=34
**C36M Paulatuk 58.82 24** P **P** **10 36 50.2 +0.9**
C36M IAmb IAmb 10 36 51.5
comp=Z,5.8nm,0.7s
**AS31 Alice Springs 59.66 186** P **P** **10 36 55.6 0.0**
AS31 IAmb IAmb 10 37 09.7
comp=Z,2.1nm,0.5s
**ASAR Alice Springs 59.66 186** P **P** **10 36 55.5 -0.1**
comp=Z,1.7nm,0.5s,baz=14,slow=6.8,SNR=33
ASAR pP **pP** **10 37 08.7 -1.0**
comp=Z,1.9nm,0.6s,baz=19,slow=13,SNR=8.8
**ASAR Alice Springs 59.66 186** P **P** **10 36 55.0 -0.6**
**MBWA Marble Bar 60.02 202** P **P** **10 36 58.0 -0.1**
**KIRV Kirov 60.34 323** P **P** **10 36 59.8 0.0**
comp=Z,24nm,0.6s,baz=154,slow=1.5,SNR=11
KIRV LR LR 11 03 36.6
comp=Z,54nm,19.9s,baz=43,slow=36
**PSA00 Pilbara Seismi 60.38 202** P **P** **10 37 00.2 -0.4**
PSA00 IAmb IAmb 10 37 00.8
comp=Z,8.6nm,1.4s
**PALK Pallekele 61.01 257** P **P** **10 37 04.5 -0.7**

comp=Z,7.8nm,0.7s,baz=142,slow=7.4,SNR=6.3
PALK LR LR 11 05 26.8
comp=Z,38nm,18.0s,baz=179,slow=38
**NOR Nord 61.97 356** *e*P **P 10 37 10.8 +0.1**
NOR IAmb IAmb 10 37 14.3
comp=Z,6.4nm,1.2s
**DZM Mont Dzumac 62.99 152** LR LR 11 05 23.4
comp=Z,66nm,19.3s,baz=20,slow=37
**GEYT Alibeck 63.29 299** P **P 10 37 20.1 -0.1**
comp=Z,3.3nm,0.6s,baz=107,slow=1.5,SNR=4.8
GEYT LR LR 11 06 47.4
comp=Z,56nm,18.4s,baz=316,slow=38
**GEYT Alibeck 63.29 299** P **P 10 37 20.7 +0.6**
GEYT IAmb IAmb 10 37 21.2
comp=Z,5.6nm,0.9s
**BELG Belogornoye 63.73 317** *ce*P **P 10 37 22.3 -0.4**
BELG pmax pmax
comp=Z,6.0nm,0.8s
**RES Resolute Bay 63.85 14** P **P 10 37 23.4 +0.3**
RES IAmb IAmb 10 37 25.6
comp=Z,5.6nm,0.9s
**KLMR Klimovskoe 63.97 328** *e*P **P 10 37 22.2 -2.0**
KLMR AMP 10 37 24.6
comp=Z,15nm,0.7s
**ARCES ARCESS Array B 64.51 339** P **P 10 37 27.6 0.0**
comp=Z,2.4nm,0.7s,baz=39,slow=7.8,SNR=12
**ARCES ARCESS Array B 64.51 339** P **P 10 37 28.3 +0.7**
**YKA Yellowknife Ar 65.25 30** P **P 10 37 33.0 +0.5**
comp=Z,3.0nm,0.8s,baz=301,slow=6.6,SNR=48
YKA pP **pP 10 37 46.1 -0.7**
comp=Z,1.5nm,0.7s,baz=303,slow=6.4,SNR=8.6
**YKA Yellowknife Ar 65.25 30** P **P 10 37 33.3 +0.8**
**NEEM North Greenlan 66.58 3** *e*P **P 10 37 42.2 +1.0**
**DAG Danmarks Havn 66.66 355** *e*P **P 10 37 41.4 +0.1**
**AFI Afiamalu 67.42 128** P **P 10 37 47.5 +0.5**
comp=Z,10nm,0.3s,baz=310,slow=13,SNR=4.8
AFI LR LR 11 07 22.0
comp=Z,33nm,18.8s,baz=328,slow=36
**VRH Novokhopyorsk 67.53 318** *e*P **P 10 37 45.2 -2.0**
VRH pmax pmax
comp=Z,20nm,0.6s
**STKA Stephens Creek 67.58 178** P **P 10 37 47.7 +0.1**
comp=Z,3.3nm,0.8s,baz=327,slow=8.6,SNR=6.4
**STKA Stephens Creek 67.58 178** P **P 10 37 48.1 +0.5**
**OBN Obninsk 68.19 323** *e*P **P 10 37 51.0 -0.3**
OBN *e* 10 38 20.6
OBN *e* 10 40 27.2
OBN *e*PPP PPP 10 42 01.0
OBN pmax pmax
comp=Z,10.0nm,0.8s
**LPSR Galich'ya Gora 68.31 320** *e*P **P 10 37 51.4 -0.7**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**VORR Voronezh 68.65 319** *e*P **P 10 37 54.5 +0.3**
VORR pmax pmax
comp=Z,30nm,0.4s
**VSR Storozhevoye 68.91 319** *e*P **P 10 37 55.1 -0.8**
VSR pmax pmax
comp=Z,10.0nm,0.8s
**FINES FINESS Array B 69.14 332** P **P 10 37 56.7 -0.5**
comp=Z,7.4nm,0.8s,baz=62,slow=6.1,SNR=16
FINES LR LR 11 14 12.6
comp=Z,70nm,18.5s,baz=48,slow=41
**FINES FINESS Array B 69.14 332** *i* P **P 10 37 57.0 -0.2**
FINES pmax pmax
comp=Z,7.0nm,0.8s
**FINES FINESS Array B 69.14 332** P **P 10 37 56.9 -0.2**
**KBZ Khabaz 70.66 310** P **P 10 38 06.6 -0.2**
comp=Z,6.0nm,0.9s,baz=15,slow=4.3,SNR=7.4
KBZ LR LR 11 11 31.8
comp=Z,52nm,18.4s,baz=21,slow=38
**KBZ Khabaz 70.66 310**↓ *i* P **P 10 38 07.2 +0.5**
KBZ pmax pmax
comp=Z,7.0nm,0.9s
**KIV Kislovodsk 70.67 311** *e*P **P 10 38 07.5 +0.5**
KIV pmax pmax
comp=Z,18nm,1.1s
**KIV Kislovodsk 70.67 311** P **P 10 38 07.5 +0.5**
**VSU Vasula 70.71 329**↓ *e*P **P 10 38 06.8 0.0**
**NEY Neytrino 71.02 310**↓ *e*P **P 10 38 10.9 +1.7**
NEY pmax pmax
comp=Z,6.0nm,1.4s
**C09A Chrisman Ranch 71.26 44** P **P 10 38 12.3 +1.8**
**GNI Garni 71.36 306** LR LR 11 12 08.9
comp=Z,58nm,18.8s,baz=38,slow=38
**SUMG Summit 71.67 359** *i* P **P 10 38 13.0 +0.1**
**SUMG Summit 71.67 359** P **P 10 38 14.5 +1.6**
**M04C Macdoel 72.40 51** P **P 10 38 18.9 +1.4**
M04C IAmb IAmb 10 38 38.9
comp=Z,10nm,1.1s
**MNK Minsk 72.66 326** *i* P **P 10 38 16.2 -2.4**
MNK *i* *PP **pP 10 38 32.7 -0.4**
MNK *i* 10 40 56.8
MNK *i* PPP PPP 10 42 41.9
MNK *i* S **S 10 47 37.2 -2.4**
MNK *i* *SS **sS 10 48 06.3 +2.2**
MNK *i* SS **SS 10 52 19.9 +1.2**
MNK *i* SSS SSS 10 55 37.3
MNK pmax pmax
comp=E,4.0nm,0.8s
MNK pmax pmax
comp=Z,15nm,0.7s
MNK pmax pmax
comp=N,13nm,0.9s
MNK MLR MLR
comp=Z,189nm,12.0s
MNK MLR MLR
comp=E,27nm,12.0s
MNK MLR MLR
comp=N,209nm,21.0s
**MNK Minsk 72.66 326** *i* P **P 10 38 16.2 -2.3**
comp=E,4.0nm,0.8s
MNK *i* P **P 10 38 16.2 -2.3**
comp=N,13nm,0.9s
MNK *i* P **P 10 38 16.2 -2.3**
comp=Z,15nm,0.7s,baz=52
MNK *i* pP **pP 10 38 32.7 -0.3**
MNK *i* PP **PP 10 40 56.8 -3.3**
MNK *i* PPP PPP 10 42 41.9
MNK *i* S **S 10 47 37.2 -2.4**
MNK *i* sS **sS 10 48 06.3 +2.3**
MNK *i* SS **SS 10 52 19.9 +1.2**
MNK *i* SSS SSS 10 55 37.4
MNK *i* LQ LQ 11 05 36.9
MNK *i* LR LR 11 10 55.1
MNK *i* LRM MLR 11 13 34.2
comp=Z,189nm,12.2s
MNK *i* LRM MLR 11 13 36.7
comp=E,27nm,11.5s
MNK *i* LRM MLR 11 13 42.5
comp=N,209nm,21.1s
**NACGM Naroch 72.91 326** *i* P **P 10 38 20.0 -0.1**
**BMO Blue Mountains 73.46 46** P **P 10 38 25.2 +1.5**
**ORV Oroville 73.83 53** P **P 10 38 26.6 +0.8**
**WVOR Wild Horse Val 74.03 49** P **P 10 38 28.0 +1.0**
**AKASG Malin Array Be 74.36 322** P **P 10 38 27.8 -0.8**
comp=N,4.0nm,0.6s,baz=48,slow=6.4,SNR=29
AKASG LR LR 11 16 55.1
comp=N,73nm,18.3s,baz=26,slow=40
**AKBB Malin Array Si 74.36 322** P **P 10 38 28.8 +0.2**
AKBB IAmb IAmb 10 38 29.0
comp=Z,6.4nm,0.8s
**NC405 NORSAR Array S 74.43 337** P **P 10 38 28.4 -0.5**
**HFS Hagfors 74.51 335** LR LR 11 12 19.9
comp=Z,86nm,18.7s,baz=20,slow=37
**NC204 NORSAR Array S 74.61 337** P **P 10 38 30.4 +0.4**
**NB2 NORSAR Subarra 74.65 337** P **P 10 38 29.3 -0.9**
comp=Z,1.6nm,0.5s,baz=42,slow=5.9
**NOA NORSAR Array B 74.65 337** P **P 10 38 29.6 -0.7**
comp=Z,3.7nm,0.8s,baz=40,slow=5.7,SNR=9.9
NOA pP **PcP 10 38 43.3 -1.0**
comp=Z,2.2nm,0.8s,baz=40,slow=5.8,SNR=3.5
NOA LR LR 11 14 37.9
comp=Z,40nm,18.9s,baz=40,slow=38
**PAHR Pah Rah Range 75.10 52** P **P 10 38 33.9 +0.5**
PAHR IAmb IAmb 10 38 36.7
comp=Z,10nm,1.4s
**FFC Flin Flon 75.17 32** P **P 10 38 34.5 +1.3**
FFC IAmb IAmb 10 38 35.2
comp=Z,6.8nm,0.9s
**ICESG Greenland Ices 75.18 360** *e*P **P 10 38 34.8 +1.2**
**CMB Columbia Colle 75.40 54** P **P 10 38 36.1 +1.2**
**YERR Yerington 75.60 52** P **P 10 38 37.1 +0.8**
YERR IAmb IAmb 10 38 39.2
comp=Z,4.8nm,0.8s

**LRM Limekiln Ridge 75.67 43** P **P 10 38 38.7 +2.0**
**DLMT Dillon 75.87 44** P **P 10 38 40.0 +2.3**
DLMT IAmb IAmb 10 38 40.4
comp=Z,8.5nm,1.1s
**RYN Ryan 76.27 52** P **P 10 38 41.8 +1.8**
**BOZ Bozeman (W) 76.27 43** P **P 10 38 41.1 +1.2**
**KVN Kaiserville 76.29 52** P **P 10 38 42.1 +1.9**
KVN IAmb IAmb 10 38 43.3
comp=Z,5.0nm,0.9s
**NVAR Mina Array Bea 76.52 52** P **P 10 38 43.0 +1.4**
comp=Z,2.9nm,0.8s,baz=282,slow=5.9,SNR=23
NVAR pP **pP 10 38 57.5 +1.4**
comp=Z,2.8nm,0.9s,baz=278,slow=6.4,SNR=7.2
**NVAR Mina Array Bea 76.52 52** P **P 10 38 42.1 +0.6**
**NV11 Mina Array Sit 76.61 52** P **P 10 38 43.6 +1.6**
NV11 IAmb IAmb 10 38 45.4
comp=Z,7.3nm,1.5s
**SFJD Kangerlussuaq 76.97 4** LR LR 11 16 15.0
comp=Z,69nm,18.5s,baz=170,slow=38
**ELK Elko 77.08 49** P **P 10 38 47.1 +2.4**
**TPH Tonopah 77.42 52** P **P 10 38 48.7 +2.0**
**BEL Belsk 77.63 326** *e*P **P 10 38 48.2 +0.9**
**DY2G Dye2 77.70 3** *e*P **P 10 38 48.0 +0.3**
**R11A Troy Canyon, C 78.30 51** P **P 10 38 53.6 +2.1**
**BUR08 Bucovina Ar. S 78.35 321** P **P 10 38 52.0 +0.5**
BUR08 IAmb IAmb 10 38 57.1
comp=Z,6.2nm,1.2s
**BURAR Bucovina Array 78.36 321** P **P 10 38 51.9 +0.3**
**BRTR Keskin Array B 78.63 311** P **P 10 38 53.0 -0.3**
comp=Z,1.7nm,0.8s,baz=136,slow=4.1,SNR=6.1
**BRTR Keskin Array B 78.63 311** *i* P **P 10 38 53.5 +0.3**
BRTR pmax pmax
comp=Z,2.0nm,0.8s
**BRTR Keskin Array B 78.63 311** P **P 10 38 53.4 +0.2**
**TPNV Topopah Spring 78.71 53** P **P 10 38 55.1 +1.4**
**DUG Dugway, Tooele 78.89 48** P **P 10 38 57.0 +2.4**
**GWY Greenwater Val 78.89 53** P **P 10 38 55.7 +0.9**
GWY IAmb IAmb 10 38 57.9
comp=Z,5.9nm,1.2s
**QSM Queen of Sheba 78.89 54** P **P 10 38 55.8 +1.3**
QSM IAmb IAmb 10 38 58.5
comp=Z,9.9nm,1.3s
**PD31 Pinedale Array 79.19 45** P **P 10 38 57.2 +0.8**
**PDAR Pinedale Array 79.19 45** P **P 10 38 57.0 +0.7**
comp=Z,1.1nm,0.6s,baz=255,slow=2.4,SNR=13
**PDAR Pinedale Array 79.19 45** P **P 10 38 58.1 +1.7**
**OJC Ojcow 79.21 326** *e*P **P 10 38 56.0 0.0**
**JLU Jordanelle 79.45 47** P **P 10 38 59.7 +1.8**
**NIE Niedzica 79.53 325** *e*P **P 10 38 59.7 +1.8**
**RAYN Ar Rayn 79.94 292** P **P 10 38 59.8 -0.7**
RAYN IAmb IAmb 10 39 01.2
comp=Z,5.4nm,0.8s
**KSP Ksiaz 80.32 328** *e*P **P 10 39 02.3 +0.3**
**RAR Rarotonga 80.54 125** LR LR 11 08 04.4
comp=Z,51nm,20.7s,baz=264,slow=31
**PFO Pinyon Flats O 80.56 55** P **P 10 39 04.4 +0.6**
PFO IAmb IAmb 10 39 06.5
comp=Z,4.7nm,0.9s
**LCMT Little Creek M 80.58 51** P **P 10 39 04.7 +0.8**
**RDMU Red Mountain 80.58 46** P **P 10 39 05.2 +1.2**
RDMU IAmb IAmb 10 39 07.8
comp=Z,15nm,1.3s
**PMD Palm Desert 80.60 55** P **P 10 39 05.4 +1.6**
PMD IAmb IAmb 10 39 06.2
comp=Z,4.7nm,0.9s
**VRAC Vranov 81.31 326** LR LR 11 16 22.3
comp=Z,61nm,18.4s,baz=336,slow=36
**CLL Collm 81.37 330** *i* P **P 10 39 07.5 -0.1**
comp=Z,6.0nm,0.8s
CLL *ep*P **pP 10 39 21.0 -1.3**
**URZ Urewera 81.53 151** LR LR 11 18 03.1
comp=Z,30nm,18.0s,baz=1.0,slow=38
**U15A North Rim 81.54 51** P **P 10 39 10.6 +1.4**
U15A IAmb IAmb 10 39 12.3
comp=Z,4.6nm,0.8s
**MMAI Mount Meron Ar 81.58 305** LR LR 11 19 19.4
comp=Z,44nm,20.2s,baz=216,slow=39
**PRU Pruhonice 81.71 328** *e*P **P 10 39 09.7 +0.3**
**PRU Pruhonice 81.71 328** *e*P **P 10 39 09.7 +0.3**
**Y14A Wickenburg 82.64 53** P **P 10 39 16.2 +1.5**
Y14A IAmb IAmb 10 39 17.3
comp=Z,3.5nm,0.8s
**CONA Conrad Observa 82.65 326** *i* P **P 10 39 15.0 +0.5**
comp=Z,1.2nm,0.6s
**CKRC Cesky Krumlov 82.69 327** *e*P **P 10 39 14.8 +0.2**
**WUAZ Wupatki 82.69 51** P **P 10 39 16.2 +1.2**
WUAZ IAmb IAmb 10 39 18.1
comp=Z,5.3nm,0.9s
**KHC Kasperske Hory 82.77 328**↓ *e*P **P 10 39 15.2 +0.2**
KHC pmax pmax
comp=Z,38nm,2.9s
**KHC Kasperske Hory 82.77 328** *e*P **P 10 39 14.8 -0.2**
**GERES GERESS Array B 82.93 328** P **P 10 39 15.3 -0.7**
comp=Z,1.2nm,0.6s,baz=2.9,slow=8.0,SNR=7.7
**GERES GERESS Array B 82.93 328** P **P 10 39 14.2 -1.7**
**X16A Lo Mia Camp, P 83.34 52** P **P 10 39 18.9 +0.4**
X16A IAmb IAmb 10 39 22.2
comp=Z,4.8nm,0.9s
**SOKA Soboth 83.96 325** *e*P **P 10 39 21.9 +0.7**
comp=Z,4.0nm,0.7s
**S22A 4UR Ranch, Cre 84.04 47** P **P 10 39 23.5 +1.4**
S22A IAmb IAmb 10 39 25.8
comp=Z,5.2nm,1.1s
**X18A Snowflake 84.22 51** P **P 10 39 23.7 +0.7**
**KBA Koelnbreinsper 84.42 327** *e*P **P 10 39 24.1 +0.3**
comp=Z,1.9nm,0.6s
**MYKA Terra Mystica 84.63 326** *e*P **P 10 39 24.2 -0.4**
comp=Z,1.1nm,0.4s
**TUC Tucson 85.11 53** P **P 10 39 28.0 +0.7**
TUC IAmb IAmb 10 39 29.5
comp=Z,3.5nm,0.9s
**PPT Papeete 85.25 116** LR LR 11 07 51.8
comp=Z,45nm,21.5s,baz=347,slow=29
**SQTA Sankt Quirin 85.25 328** *e*P **P 10 39 28.5 +0.7**
comp=Z,1.0nm,0.4s
**ANMO Albuquerque 86.12 49**↓ *e*P **P 10 39 34.2 +1.7**
ANMO pmax pmax
comp=Z,13nm,2.5s
**ANMO Albuquerque 86.12 49** P **P 10 39 32.1 -0.4**
**SCHQ Schefferville 86.61 15** P **P 10 39 34.0 -0.2**
comp=Z,4.8nm,0.8s,baz=349,slow=6.0,SNR=7.6
**TXAR Lajitas Array 91.65 52** P **P 10 39 59.8 +1.1**
comp=Z,1.4nm,0.6s,baz=289,slow=2.6,SNR=25
TXAR pP **pP 10 40 13.0 -0.5**
comp=Z,0.6nm,0.7s,baz=307,slow=2.9,SNR=4.4
**TXAR Lajitas Array 91.65 52** P **P 10 39 58.9 +0.3**
**LPAZ La Paz 148.21 59** PKPbc **PKPbc 10 46 37.6 -0.4**
comp=Z,2.6nm,0.6s,baz=266,slow=1.1,SNR=7.4
**LPAZ La Paz 148.21 59** **PKPdf 10 46 33.3 -1.5**
LPAZ PKPbc **PKiKP 10 46 39.1 -0.7**

*ISK **07** 10:36:27.1,34˚.85N×33˚.95E,h30km, ML2.7/10*
*NIC **07** 10:36:28.1±0.0,35˚.01N×33˚.88E,h46km±1km, MI2.2/4*
*DDA **07** 10:36:28.2±0.0,35˚.12N×34˚.19E,h22km±3km, ML2.5*
**ISC 07 10:36:29.1**±1.3**,34˚92N**±0˚.04×**33˚91E**±0˚.04**,h40**km±8km**,**
**n28,σ0s89/46,2C-1D,Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PARAL** | **Paralimni** | **0.13** | **56** | P | **Pn** | **10 36 35.9** | **-0.1** |
| PARAL | | | | S | **Sn** | **10 36 41.4** | **+0.7** |
| PARAL | | | | AMI | | 10 36 44.1 | |
| | 0.6nm,0.4s | | | | | | |
| PARAL | | | | AMI | | 10 36 44.1 | |
| | 0.6nm,0.4s | | | | | | |
| PARAL | | | | AMI | | 10 36 45.6 | |
| | 0.7nm,0.4s | | | | | | |
| PARAL | | | | AMI | | 10 36 45.6 | |
| | 0.7nm,0.4s | | | | | | |
| **MVOU** | **Mavrovouni** | **0.25** | **293**↑ | *e*P | **Pn** | **10 36 36.3** | **-0.5** |
| MVOU | | | | AMI | | 10 36 42.4 | |
| | 1.1nm,0.2s | | | | | | |
| MVOU | | | | AMI | | 10 36 42.4 | |
| | 1.1nm,0.2s | | | | | | |
| MVOU | | | | S | **Sn** | **10 36 42.5** | **+0.3** |
| MVOU | | | | AMI | | 10 36 42.7 | |
| | 1.8nm,0.2s | | | | | | |
| MVOU | | | | AMI | | 10 36 42.7 | |
| | 1.8nm,0.2s | | | | | | |
| **LFK** | **Lefkose** | **0.47** | **319** | PG | **Pn** | **10 36 39.2** | **-0.3** |
| **ATHAL** | **Athalassa** | **0.47** | **298** | P | **Pn** | **10 36 37.9** | **-1.6** |
| **CSS** | **Mathiatis** | **0.48** | **275** | P | **Pn** | **10 36 38.6** | **-0.9** |
| CSS | | | | S | **Sn** | **10 36 46.4** | **-0.5** |
| **ASGA** | **Asgata** | **0.56** | **256**↑ | *e*P | **Pn** | **10 36 40.0** | **-0.6** |
| ASGA | | | | S | **Sn** | **10 36 49.6** | **+0.8** |
| ASGA | | | | AMI | | 10 36 50.1 | |
| | 0.4nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 10 36 50.1 | |
| | 0.4nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 10 36 50.2 | |
| | 0.4nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 10 36 50.2 | |
| | 0.4nm,0.3s | | | | | | |
| **EREN** | **Erenkoy** | **0.65** | **19** | PG | **Pn** | **10 36 41.3** | **-0.5** |
| EREN | | | | SG | **Sn** | **10 36 51.7** | **+0.8** |
| **LEF** | **Lefka** | **0.86** | **284** | PG | **Pn** | **10 36 44.6** | **-0.1** |
| LEF | | | | SG | **Sn** | **10 36 57.4** | **+1.3** |
| **SZAC** | **Souni** | **0.86** | **259**↓ *e*P | | **Pn** | **10 36 44.2** | **-0.5** |
| SZAC | | | | S | **Sn** | **10 36 56.6** | **+0.4** |
| **ALFC** | **Alefka** | **1.10** | **283** | P | **Pn** | **10 36 47.5** | **-0.5** |
| ALFC | | | | S | **Sn** | **10 37 01.0** | **-1.0** |
| ALFC | | | | AMI | | 10 37 01.8 | |
| | 0.3nm,0.5s | | | | | | |
| ALFC | | | | AMI | | 10 37 01.8 | |
| | 0.3nm,0.5s | | | | | | |
| ALFC | | | | AMI | | 10 37 02.2 | |
| | 0.3nm,0.6s | | | | | | |
| ALFC | | | | AMI | | 10 37 02.2 | |
| | 0.3nm,0.6s | | | | | | |
| **AKKU** | **Akkuyu-Mersin** | **1.27** | **347** | PN | **Pn** | **10 36 50.6** | **+0.3** |
| AKKU | | | | SN | **Sn** | **10 37 07.3** | **+1.1** |
| **GULN** | **MERSIN_Gulnar** | **1.29** | **347** | P | **Pn** | **10 36 50.4** | **-0.2** |
| GULN | | | | S | **Sn** | **10 37 06.8** | **0.0** |
| **AKMS** | **Akamas** | **1.30** | **275** | P | **Pn** | **10 36 50.5** | **-0.2** |
| **TEKE** | **Tekeli-Mersin** | **1.38** | **332** | PN | **Pn** | **10 36 51.6** | **-0.3** |
| **BERE** | **Bereket-Mersin** | **1.53** | **339** | PN | **Pn** | **10 36 54.1** | **+0.1** |
| **KEBE** | **Keben-Mersin** | **1.53** | **354** | PN | **Pn** | **10 36 54.3** | **+0.3** |
| **TEVE** | **Tevekalti-Mers** | **1.56** | **346** | PN | **Pn** | **10 36 54.7** | **+0.3** |
| **KIZM** | **Mersin** | **1.57** | **7** | PN | **Pn** | **10 36 54.5** | **+0.1** |
| **KIZK** | **Mersin** | **1.57** | **7** | P | **Pn** | **10 36 54.8** | **+0.3** |
| KIZK | | | | S | **Sn** | **10 37 13.2** | **-0.3** |
| KIZK | | | | *i* AML | AML | 10 37 45.0 | |
| | comp=Z,72nm,1.2s | | | | | | |
| **GAZI** | **Gazipasa** | **1.84** | **316** | PN | **Pn** | **10 36 58.4** | **+0.1** |
| **GAZI** | **Gazipasa** | **1.84** | **316** | P | **Pn** | **10 36 58.2** | **-0.1** |
| GAZI | | | | S | **Sn** | **10 37 17.8** | **-2.6** |
| GAZI | | | | *i* AML | AML | 10 37 46.0 | |
| | comp=N,48nm,1.6s | | | | | | |
| GAZI | | | | *i* AML | AML | 10 38 07.0 | |
| | comp=Z,41nm,2.6s | | | | | | |
| **MERS** | **Mersin** | **2.01** | **14** | PN | **Pn** | **10 37 00.6** | **+0.1** |
| MERS | | | | SN | **Sn** | **10 37 25.1** | **+0.7** |
| **YAYL** | **Yayladag** | **2.11** | **58** | PN | **Pn** | **10 37 01.5** | **-0.5** |
| YAYL | | | | SN | **Sn** | **10 37 26.5** | **-0.6** |
| **YAYL** | **Yayladag** | **2.11** | **58** | P | **Pn** | **10 37 01.5** | **-0.5** |
| YAYL | | | | S | **Sn** | **10 37 24.4** | **-2.7** |
| YAYL | | | | *i* AML | AML | 10 38 04.0 | |
| | comp=E,67nm,1.9s | | | | | | |
| **OSC2** | **CSNet OBS 4** | **2.29** | **217** | P | **Pn** | **10 37 04.7** | **+0.3** |
| OSC2 | | | | S | **Sn** | **10 37 32.8** | **+1.5** |
| **HDMB** | **Hadim** | **2.34** | **331** | PN | **Pn** | **10 37 05.5** | **+0.2** |
| **KKBE** | **Karaman, Kazim** | **2.42** | **341** | P | **Pn** | **10 37 07.3** | **+1.0** |
| KKBE | | | | S | **Sn** | **10 37 34.7** | **-0.1** |
| KKBE | | | | *i* AML | AML | 10 38 24.0 | |
| | comp=Z,24nm,2.6s | | | | | | |
| **KERG** | **Konya-Eregli** | **2.50** | **4** | P | **Pn** | **10 37 08.7** | **+1.4** |
| KERG | | | | S | **Sn** | **10 37 37.3** | **+0.7** |

*TUL **07** 10:39:31.9±1.3,35˚.97N×0˚.01×96˚.91W×0˚.01,h5km±4km,*
*ML2.6,mb_Lg2.1/5(NEIC),Error ellipse: s-maj=1.6km*
*s-min=1.2km az=196.0*
**NEIC 07 10:39:32.1**±1.0**,35˚98N**±0˚.01×**96˚91W**±0˚.01**,h9**km±3km**,**
**Error ellipse: s-maj=1.8km s-min=1.4km az=65.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK031** | **S. Brethren Rd** | **0.07** | **113** | Pg | Pg | 10 39 33.7 | -0.5 |
| OK031 | | | | Sg | Sg | 10 39 34.9 | -0.7 |
| **OK033** | **Mehan** | **0.07** | **343** | Pg | Pg | 10 39 33.8 | -0.4 |
| OK033 | | | | Sg | Sg | 10 39 35.3 | -0.3 |
| **OK030** | **Cody Creek RV** | **0.12** | **115** | Pg | Pg | 10 39 34.8 | -0.1 |
| OK030 | | | | Sg | Sg | 10 39 36.6 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.17** | **79** | Pg | Pg | 10 39 35.6 | 0.0 |
| OK034 | | | | Sg | Sg | 10 39 38.1 | +0.1 |
| **QUOK** | **Quay** | **0.26** | **41** | Pg | Pg | 10 39 37.4 | +0.1 |
| QUOK | | | | Sg | Sg | 10 39 41.0 | +0.3 |
| **OK029** | **Liberty Lake** | **0.47** | **248** | Pg | Pg | 10 39 41.3 | 0.0 |
| OK029 | | | | Sg | Sg | 10 39 47.7 | +0.1 |
| **OK025** | **Westminster Rd** | **0.53** | **221** | Pg | Pg | 10 39 42.2 | -0.1 |
| OK025 | | | | Sg | Sg | 10 39 49.5 | +0.3 |
| **BCOK** | **Bluff Creek, N** | **0.65** | **241** | Pg | Pg | 10 39 44.4 | -0.3 |
| BCOK | | | | Sg | Sg | 10 39 53.4 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.71** | **218** | Pg | Pg | 10 39 45.1 | -0.7 |
| OKCFA | | | | Sg | Sg | 10 39 55.1 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **0.71** | **217** | Pg | Pg | 10 39 45.8 | -0.1 |
| OKCSW | | | | Sg | Sg | 10 39 55.6 | +0.4 |
| **BLOK** | **Blackwell** | **0.82** | **343** | Pg | Pg | 10 39 47.3 | -0.4 |
| BLOK | | | | Sg | Sg | 10 39 58.4 | -0.1 |
| **FNO** | **Franklin** | **0.82** | **209** | Pg | Pg | 10 39 47.8 | -0.1 |
| FNO | | | | Sg | Sg | 10 39 56.8 | -1.8 |
| FNO | | | | IAmb_Lg | | 10 39 59.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **W35A** | **Tecumseh** | **0.82** | **178** | Pg | Pg | 10 39 47.6 | -0.4 |
| W35A | | | | Sg | Sg | 10 39 57.9 | -0.8 |
| W35A | | | | IAmb_Lg | | 10 39 58.2 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **TUL1** | **Leonard** | **0.91** | **94** | Pg | Pg | 10 39 48.9 | -0.7 |
| TUL1 | | | | Sg | Sg | 10 40 01.8 | +0.2 |
| **T35A** | **Sooner Cattle** | **0.99** | **19** | | Pg | 10 39 50.9 | -0.3 |
| T35A | | | | Sg | Sg | 10 40 03.0 | -0.4 |
| **CROK** | **Carrier** | **1.01** | **302** | | Pg | 10 39 51.0 | -0.6 |
| CROK | | | | Sg | Sg | 10 40 04.9 | +0.2 |
| **KAN13** | **South Haven SW** | **1.13** | **336** | Pg | Pg | 10 39 53.6 | -0.2 |
| KAN13 | | | | Sg | Sg | 10 40 08.0 | -0.4 |
| **GC02** | **Grant County #** | **1.16** | **319** | Pg | Pb | 10 39 53.8 | -0.5 |
| GC02 | | | | Sg | Sg | 10 40 09.4 | 0.0 |
| **KAN17** | **Caldwell West** | **1.27** | **327** | Pg | Pb | 10 39 56.2 | 0.0 |
| KAN17 | | | | Sg | Sb | 10 40 12.4 | -0.2 |
| **KAN14** | **Manchester OK** | **1.29** | **319** | Pn | Pn | 10 39 56.0 | -0.4 |
| **OK032** | **Salt Plains WL** | **1.33** | **309** | | Pn | 10 39 56.6 | -0.4 |
| **KAN01** | **Argonia South** | **1.36** | **330** | Pn | Pn | 10 39 57.4 | +0.1 |
| **KAN05** | **Bluff City Nor** | **1.37** | **326** | Pn | Pn | 10 39 57.3 | -0.1 |
| **KAN06** | **Argonia West S** | **1.48** | **329** | Pn | Pb | 10 39 59.9 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **1.51** | **326** | Pn | Pn | 10 39 59.7 | +0.3 |
| **KAN16** | **Harper SW Stat** | **1.55** | **324** | Pn | Pn | 10 39 59.6 | -0.4 |
| **X34A** | **Smith Ranch, M** | **1.57** | **209** | Pn | Pn | 10 40 00.5 | +0.4 |
| **OK035** | **E0210 Rd and N** | **1.62** | **297** | | Pn | 10 40 00.8 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.74** | **284** | | Pn | 10 40 03.2 | +0.7 |
| **X37A** | **Clayton** | **1.87** | **137** | | Pn | 10 40 05.4 | +1.0 |
| X37A | | | | IAmb_Lg | | 10 40 32.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.96** | **232** | | Pn | 10 40 06.5 | +0.8 |
| **LOOK** | **Love County** | **1.99** | **186** | Pn | Pb | 10 40 07.8 | -0.7 |
| **U38A** | **Gravette** | **2.10** | **77** | Pn | Pn | 10 40 08.6 | +1.2 |
| **HHAR** | **Hobbs** | **2.43** | **82** | Pn | Pn | 10 40 13.7 | +1.7 |
| **MIAR** | **Mount Ida** | **3.08** | **117** | Pn | Pn | 10 40 22.4 | +1.5 |
| **KSU1** | **Kansas State U** | **3.13** | **4** | | Pn | 10 40 22.1 | +0.5 |
| **U40A** | **Yellville** | **3.31** | **82** | Pn | Pn | 10 40 24.1 | 0.0 |
| **S39A** | **Bolivar** | **3.35** | **58** | Pn | Pn | 10 40 25.8 | +1.1 |
| **CBKS** | **Cedar Bluff** | **3.62** | **322** | | Pn | 10 40 28.6 | +0.3 |
| **X40A** | **Basin Creek Fa** | **3.66** | **113** | | Pn | 10 40 28.4 | -0.5 |
| **WHAR** | **Wooly Hollow** | **3.83** | **99** | | Pn | 10 40 31.6 | +0.4 |
| **W41B** | **Gary Mavity, V** | **3.89** | **101** | | Pn | 10 40 32.7 | +0.6 |
| **FCAR** | **Ozark Folk Cen** | **3.89** | **90** | | Pn | 10 40 33.1 | +1.1 |
| **MGMO** | **Mountain Grove** | **3.92** | **71** | | Pn | 10 40 34.0 | +1.5 |
| **AMTX** | **Amarillo** | **4.04** | **256** | Pn | Pn | 10 40 36.4 | +2.1 |
| **R40A** | **Maddies Statio** | **4.37** | **57** | Pn | Pn | 10 40 38.3 | -0.4 |
| **P38A** | **Dawn** | **4.52** | **35** | | Pn | 10 40 41.2 | +0.5 |
| **LCAR** | **Lake Charles** | **4.67** | **87** | Pn | Pn | 10 40 42.1 | -0.6 |
| **T42A** | **Van Buren** | **4.80** | **76** | Pn | Pn | 10 40 45.8 | +1.1 |
| **PBMO** | **Poplar Bluff** | **5.29** | **79** | Pn | Pn | 10 40 50.9 | -0.4 |
| **FVM** | **French Village** | **5.57** | **67** | Pn | Pn | 10 40 54.5 | -0.7 |

*IDC **07** 10:41:01.6±1.1,8˚.79N×122˚.64E,h0km,mb3.5/4,*
*mb1 3.7/4,mb1mx3.4/43,mbtmp3.5/4,MS3.0/2,Ms1 3.0/2,*
*ms1mx2.5/48,Error ellipse: s-maj=153.3km s-min=21.1km*
*az=67.0*
*MAN **07** 10:41:04.9,8˚.97N×122˚.77E,h23km,mb4.5,ML3.3,MS3.1*
**ISC 07 10:41:02.6**±1.3**,8˚96N**±0˚.03×**122˚84E**±0˚.05**,h9**km±9km**,**
**n18,σ1s03/26,mb3.5/4,5C-7D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNPH** | **Sibulan** | **0.54** | **46** | *iP* | **Pn** | **10 41 16.8** | **+0.2** |
| SNPH | | | | *i* S | **Sn** | **10 41 24.6** | **-1.2** |
| **DCPH** | **Dipolog City** | **0.63** | **127** | *eP* | **Pb** | **10 41 15.8** | **0.0** |
| DCPH | | | | *i* S | **Sb** | **10 41 24.1** | **-0.5** |
| **CNOP** | **Candoni, Negro** | **0.88** | **347** | *eP* | **Pn** | **10 41 21.3** | **+0.1** |
| **PAGZ** | **Pagadian** | **1.23** | **154** | *eP* | **Pg** | **10 41 26.1** | **-0.2** |
| PAGZ | | | | *eS* | **Sg** | **10 41 42.4** | **+0.2** |
| **TBP** | **Tagbilaran** | **1.24** | **54** | *eP* | **Pg** | **10 41 27.3** | **+0.9** |
| TBP | | | | *i* S | **Sg** | **10 41 43.8** | **+1.3** |
| **LLP** | **Lapu-Lapu** | **1.74** | **39** | *eP* | **Pb** | **10 41 34.9** | **+0.2** |
| LLP | | | | *eS* | **Sg** | **10 41 57.1** | **-1.5** |
| **JAP** | **San Jose, Anti** | **1.98** | **334** | *eP* | **Pg** | **10 41 39.7** | **-1.0** |
| **CTBH** | **Cotabato--PC H** | **2.22** | **141** | *iP* | **Pb** | **10 41 41.7** | **-1.2** |
| CTBH | | | | *i* S | **Sb** | **10 42 09.6** | **-0.9** |
| **MSLP** | **Maasin** | **2.30** | **60** | *eP* | **Pb** | **10 41 43.7** | **-0.6** |
| MSLP | | | | *i* S | **Sn** | **10 42 08.1** | **-1.1** |
| **BUKP** | **Musuan** | **2.44** | **116** | *eP* | **Pg** | **10 41 49.9** | **+0.4** |
| **RCP** | **Roxas** | **2.58** | **358** | *eP* | **Pb** | **10 41 47.7** | **-1.4** |
| RCP | | | | *eS* | **Sb** | **10 42 20.9** | **-0.1** |
| **CUYO** | **Cuyo Island** | **2.60** | **316** | *eP* | **Pn** | **10 41 46.6** | **+1.8** |
| **PSI** | **Prapat** | **24.56** | **257** | LR | LR | 10 59 19.6 | |
| | comp=Z,75nm,18.4s,baz=18,slow=45 | | | | | | |
| **KSRS** | **Korea Array** | **28.73** | **8** | LR | LR | 10 59 37.0 | |
| | comp=Z,14nm,18.7s,baz=185,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.87** | **159** | P | **P** | **10 47 19.4** | **-0.2** |
| | 0.3nm,0.5s,baz=335,slow=10,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **34.19** | **162** | P | **P** | **10 47 48.8** | **+0.2** |
| | 0.5nm,0.6s,baz=342,slow=6.8,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 50 24.1** | **-1.6** |
| | 0.2nm,0.5s,baz=337,slow=2.8,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **41.17** | **343** | P | **P** | **10 48 48.6** | **+1.0** |
| | 0.7nm,0.8s,baz=161,slow=8.7,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.08** | **325** | P | **P** | **10 50 07.2** | **+1.7** |
| | 0.4nm,0.7s,baz=129,slow=8.7,SNR=5.0 | | | | | | |
| MKAR | | | | PcP | **PcP** | **10 51 20.8** | **-0.5** |
| | 0.2nm,0.6s,baz=127,slow=3.9,SNR=2.1 | | | | | | |

*IDC **07** 10:57:58.2±5.1, 47.67N×151.85E, h64km±53km, mb3.3/6, mb1 3.6/7, mb1mx3.2/56, mbtmp3.6/7, ML2.0/1, Error ellipse: s-maj=155.2km s-min=20.8km az=124.0*

**ISC 07 10:57:57.0±1.9, 47.5N±0.4×152.1E±0.7, h50km, n13, σ0.95/7, mb3.6/6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.66** | **30** | P | **Pn** | **10 59 32.9** | **+0.7** |
| | 0.1nm,0.3s,baz=186,slow=13,SNR=2.2 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.18** | **151** | T | T | 11 35 42.7 | |
| | baz=341,slow=76 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.19** | **152** | T | T | 11 35 35.1 | |
| | baz=341,slow=76 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.19** | **151** | T | T | 11 35 35.0 | |
| | baz=341,slow=76 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.26** | **153** | T | T | 11 37 00.4 | |
| | baz=342,slow=76 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.27** | **153** | T | T | 11 37 01.1 | |
| | baz=342,slow=76 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.28** | **153** | T | T | 11 37 01.0 | |
| | baz=342,slow=76 | | | | | | |
| **ILAR** | **Eielson Array** | **36.40** | **39** | P | **P** | **11 04 55.1** | **-1.0** |
| | 0.5nm,1.0s,baz=246,slow=7.2,SNR=4.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.73** | **37** | P | **P** | **11 06 50.9** | **-0.4** |
| | 0.4nm,0.5s,baz=299,slow=6.9,SNR=6.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.68** | **62** | P | **P** | **11 08 16.8** | **+0.2** |
| | 0.3nm,0.6s,baz=306,slow=7.7,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **69.00** | **198** | P | **P** | **11 08 56.2** | **-0.8** |
| | 0.4nm,0.8s,baz=10,slow=6.6,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **72.70** | **197** | P | **P** | **11 09 20.6** | **+1.1** |
| | 0.5nm,0.5s,baz=9.9,slow=5.4,SNR=17 | | | | | | |
| **TXAR** | **Lajitas Array** | **77.70** | **60** | P | **P** | **11 09 48.8** | **+0.2** |
| | 0.5nm,0.5s,baz=300,slow=5.2,SNR=12 | | | | | | |

**TRN 07 11:25:52.2, 19.81N×62.85W, h3km, MD4.1, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMRT** | **St. Maarten** | **1.77** | **187** | *eP* | Pg | 11 26 25.7 | -0.3 |
| SMRT | | | | *eS* | Sg | 11 26 50.4 | +1.5 |
| **ANWB** | **Willy Bob** | **2.36** | **154** | *eP* | Pb | 11 26 33.9 | -1.5 |
| ANWB | | | | *eS* | Sb | 11 27 04.5 | -0.3 |
| **SKI** | **Saint Kitts** | **2.47** | **177** | *eP* | Pn | 11 26 36.5 | -0.7 |
| SKI | | | | *eS* | Sb | 11 27 08.3 | +0.3 |
| **ANBD** | **Bethesda, Anti** | **2.94** | **159** | *eP* | Pn | 11 26 41.8 | +2.0 |
| ANBD | | | | *eS* | Sb | 11 27 19.0 | -2.5 |
| **CBE** | **Ff, Capester** | **3.91** | **162** | *eP* | Pn | 11 26 56.3 | +3.2 |
| **CBE** | **Ff, Capester** | **3.91** | **162** | *eS* | Sn | 11 27 42.9 | +3.3 |
| **TBG** | **Guadaloupe-3** | **4.10** | **164** | *eP* | Pn | 11 26 58.9 | +3.0 |
| **TBG** | **Guadaloupe-3** | **4.10** | **164** | *eS* | Sn | 11 27 47.2 | +2.8 |
| **TDBA** | **Terre de Bas,** | **4.11** | **163** | *eP* | Pn | 11 26 59.2 | +3.3 |
| **TDBA** | **Terre de Bas,** | **4.11** | **163** | *eS* | Sn | 11 27 47.7 | +3.2 |
| **MAGL** | **Barre de l'ile** | **4.12** | **158** | *eP* | Pn | 11 26 59.1 | +3.0 |
| **MAGL** | **Barre de l'ile** | **4.12** | **158** | *eS* | Sn | 11 27 48.4 | +3.5 |
| **DSLB** | **Salisbury** | **4.56** | **162** | *eP* | Pn | 11 27 05.6 | +3.5 |
| **BIM** | **Bigot** | **5.53** | **162** | *eP* | Pn | 11 27 18.9 | +3.4 |
| **MPOM** | **Morne Pois Mar** | **5.67** | **160** | *eP* | Pn | 11 27 19.7 | +2.4 |

*ISK **07** 11:29:54.8, 38.60N×25.65E, h7km, ML2.6/11*
*DDA **07** 11:29:58.6±0.0, 38.66N×26.02E, h7km±2km, ML2.5*
*ATH **07** 11:29:58.7, 38.69N×26.03E, h16km±8km, ML2.7/4, Error ellipse: s-maj=8.5km s-min=1.1km az=244.0*
*THE **07** 11:29:59.0, 38.67N×25.92E, h12km±1km, ML2.5/6, Error ellipse: s-maj=2.2km s-min=0.9km az=83.0*

**ISC 07 11:29:58.6±1.0, 38.68N±0.02×25.99E±0.03, h15km±8km, n37, σ0.73/64, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOS** | **Chios island** | **0.29** | **170** | P | **Pg** | **11 30 05.1** | **+0.3** |
| CHOS | | | | S | **Sb** | **11 30 09.7** | **-0.6** |
| | 3µm,0.4s | | | | | | |
| **CHOS** | **Chios island** | **0.29** | **170** | P | **Pb** | **11 30 05.2** | **-0.4** |
| CHOS | | | | S | **Sb** | **11 30 09.6** | **-0.6** |
| CHOS | | | | AML | AML | 11 30 09.7 | |
| | comp=N,5047µm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 11 30 09.9 | |
| | comp=E,7370µm,0.2s | | | | | | |
| **PSRA** | **Psara** | **0.36** | **248** | P | **Pb** | **11 30 07.0** | **+0.4** |
| PSRA | | | | S | **Sb** | **11 30 12.5** | **+0.3** |
| PSRA | | | | AML | AML | 11 30 12.7 | |
| | comp=N,7572µm,0.3s | | | | | | |
| PSRA | | | | AML | AML | 11 30 13.1 | |
| | comp=E,7081µm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.55** | **349** | P | **Pg** | **11 30 09.3** | **-0.1** |
| SIGR | | | | S | **Sg** | **11 30 16.7** | **+0.1** |
| | comp=E,542nm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.55** | **349** | P | **Pg** | **11 30 09.3** | **-0.1** |
| SIGR | | | | S | **Sg** | **11 30 16.6** | **0.0** |
| SIGR | | | | AML | AML | 11 30 17.3 | |
| | comp=N,603µm,0.2s | | | | | | |
| SIGR | | | | AML | AML | 11 30 20.8 | |
| | comp=E,1160µm,0.4s | | | | | | |
| **URLA** | **Izmir** | **0.57** | **123** | PG | **Pb** | **11 30 10.1** | **-0.2** |
| URLA | | | | SG | **Sn** | **11 30 21.7** | **+0.3** |
| **URLA** | **Izmir** | **0.57** | **123** | P | **Pg** | **11 30 09.8** | **+0.1** |
| URLA | | | | S | **Sg** | **11 30 17.2** | **-0.2** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.59** | **137** | P | **Pb** | **11 30 10.3** | **-0.3** |
| ZEYE | | | | S | **Sg** | **11 30 17.9** | **-0.2** |
| ZEYE | | | | *i* AML | AML | 11 30 22.0 | |
| | comp=E,322nm,0.5s | | | | | | |
| ZEYE | | | | *i* AML | AML | 11 30 22.0 | |
| | comp=E,412nm,0.4s | | | | | | |
| **PRK** | **Paraskevi** | **0.61** | **21** | P | **Pb** | **11 30 11.2** | **+0.2** |
| PRK | | | | S | **Sn** | **11 30 21.5** | **-0.8** |
| | comp=E,430nm,0.4s | | | | | | |
| **PRK** | **Paraskevi** | **0.61** | **21** | P | **Pg** | **11 30 10.6** | **+0.1** |
| PRK | | | | AML | AML | 11 30 23.4 | |
| | comp=N,716µm,0.4s | | | | | | |
| PRK | | | | AML | AML | 11 30 25.4 | |
| | comp=E,1002µm,0.4s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.79** | **8** | PG | **Pg** | **11 30 13.2** | **-0.7** |
| GPNR | | | | SG | **Sn** | **11 30 26.7** | **0.0** |
| **DKL** | **Dikili** | **0.82** | **61** | PN | **Pn** | **11 30 15.9** | **+0.3** |
| **KOCA** | **Canakkale, Ayv** | **0.83** | **8** | P | **Pg** | **11 30 14.4** | **-0.4** |
| KOCA | | | | S | **Sb** | **11 30 27.3** | **+1.4** |
| KOCA | | | | *i* AML | AML | 11 30 30.0 | |
| | comp=E,152nm,0.5s | | | | | | |
| KOCA | | | | *i* AML | AML | 11 30 31.0 | |
| | comp=E,174nm,0.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AYVA** | **Ayvalik** | **0.83** | **41** | P | **Pg** | **11 30 14.6** | **-0.2** |
| AYVA | | | | S | **Sb** | **11 30 26.4** | **+0.5** |
| **ZEDA** | **zmir-Bergama** | **0.90** | **71** | P | **Pn** | **11 30 16.6** | **-0.1** |
| ZEDA | | | | S | **Sb** | **11 30 28.0** | **+0.4** |
| **BOZC** | **Bozcaada** | **1.17** | **2** | PN | **Pb** | **11 30 19.8** | **-0.6** |
| BOZC | | | | SN | **Sn** | **11 30 37.9** | **+1.8** |
| **BOZC** | **Bozcaada** | **1.17** | **2** | P | **Pb** | **11 30 19.8** | **-0.6** |
| BOZC | | | | S | **Sb** | **11 30 34.4** | **-1.0** |
| **SMG** | **Samos** | **1.17** | **145** | P | **Pg** | **11 30 21.0** | **-0.2** |
| SMG | | | | S | **Sn** | **11 30 36.8** | **+0.6** |
| | comp=E,418nm,0.5s | | | | | | |
| **SMG** | **Samos** | **1.17** | **145** | P | **Pb** | **11 30 20.2** | **-0.4** |
| SMG | | | | S | **Sn** | **11 30 37.1** | **+0.8** |
| **EZN** | **Ezine** | **1.18** | **13** | P | **Pn** | **11 30 19.7** | **-0.8** |
| EZN | | | | S | **Sn** | **11 30 37.5** | **+1.2** |
| | comp=E,145nm,0.4s | | | | | | |
| **EZN** | **Ezine** | **1.18** | **13** | PN | **Pn** | **11 30 20.4** | **-0.1** |
| EZN | | | | SN | **Sn** | **11 30 39.1** | **+2.8** |
| **BUHA** | **Balikesir, Bur** | **1.18** | **45** | P | **Pg** | **11 30 22.1** | **+0.8** |
| BUHA | | | | S | **Sb** | **11 30 35.5** | **-0.3** |
| **LIA** | **Limnos Island** | **1.37** | **333** | P | **Pn** | **11 30 22.9** | **-0.3** |
| LIA | | | | S | **Sn** | **11 30 40.1** | **-1.0** |
| | comp=E,110nm,0.6s | | | | | | |
| **ECEA** | **Canakkale, Ece** | **1.38** | **6** | P | **Pn** | **11 30 23.7** | **+0.5** |
| ECEA | | | | S | **Sn** | **11 30 41.0** | **-0.2** |
| ECEA | | | | *i* AML | AML | 11 30 46.0 | |
| | comp=E,80nm,0.5s | | | | | | |
| ECEA | | | | *i* AML | AML | 11 30 51.0 | |
| | comp=E,117nm,0.6s | | | | | | |
| **KARY** | **Karystos** | **1.38** | **243** | P | **Pn** | **11 30 22.8** | **-0.5** |
| **GCAM** | **G?zelcami?** | **1.38** | **134** | PN | **Pn** | **11 30 23.2** | **-0.1** |
| GCAM | | | | SN | **Sg** | **11 30 44.4** | **+1.3** |
| **GCAM** | **G?zelcami?** | **1.38** | **134** | P | **Pg** | **11 30 25.2** | **+0.1** |
| GCAM | | | | S | **Sn** | **11 30 41.4** | **+0.1** |
| GCAM | | | | *i* AML | AML | 11 30 45.0 | |
| | comp=E,169nm,1.4s | | | | | | |
| GCAM | | | | *i* AML | AML | 11 30 45.0 | |
| | comp=E,84nm,0.9s | | | | | | |
| **AKHS** | **Akhisar** | **1.44** | **81** | P | **Pg** | **11 30 25.6** | **-0.7** |
| **KYMI** | **Kymi, Euboea I** | **1.48** | **269** | P | **Pn** | **11 30 24.6** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.52** | **357** | PN | **Pn** | **11 30 24.3** | **-0.9** |
| GADA | | | | SN | **Sb** | **11 30 45.8** | **+0.4** |
| **STEP** | **BALIKESIR_Sava** | **1.52** | **62** | P | **Pg** | **11 30 27.1** | **-0.6** |
| STEP | | | | S | **Sg** | **11 30 47.8** | **+0.3** |
| **BALY** | **Balya** | **1.65** | **49** | P | **Pg** | **11 30 29.5** | **-0.8** |
| BALY | | | | S | **Sn** | **11 30 48.1** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.76** | **12** | PN | **Pn** | **11 30 28.7** | **+0.1** |
| **BODT** | **Bodrum** | **1.92** | **147** | PN | **Pn** | **11 30 30.3** | **-0.5** |
| **MLSB** | **Milas** | **1.97** | **134** | PN | **Pn** | **11 30 32.1** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **1.99** | **30** | PN | **Pn** | **11 30 32.8** | **+1.1** |
| **KULA** | **Kula-Manisa** | **2.10** | **94** | PN | **Pb** | **11 30 35.2** | **-1.2** |

**IDC 07 11:32:10.1±1.9, 3.07S×127.34E, h0km, mb3.2/2, mb1 3.6/4, mb1mx3.2/37, mbtmp3.4/4, ML3.5/2, Error ellipse: s-maj=108.1km s-min=25.8km az=69.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **15.03** | **186** | Pn | Pn | 11 35 46.0 | +2.1 |
| | 0.1nm,0.3s,baz=352,slow=7.1,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.11** | **158** | P | P | 11 36 24.9 | +1.2 |
| | 0.3nm,0.3s,baz=336,slow=12,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **21.44** | **163** | P | P | 11 36 59.2 | -0.8 |
| | 0.4nm,0.5s,baz=346,slow=11,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.51** | **327** | P | P | 11 42 41.9 | -0.4 |
| | 0.1nm,0.3s,baz=122,slow=8.6,SNR=5.0 | | | | | | |

*JMA **07** 11:47:28.5±0.1, 30.93N×131.65E, h46km±2km, M2.8*
*IDC **07** 11:47:30.9±0.8, 30.96N×131.41E, h48km±12km, mb3.1/3, mb1 3.3/5, mb1mx3.0/44, mbtmp3.4/5, ML2.8/2, Error ellipse: s-maj=29.0km s-min=8.6km az=90.0*

**ISC 07 11:47:28.8±1.2, 30.95N±0.04×131.59E±0.08, h32km, n16, σ0.98/21, mb3.5/3, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTN** | **Tanegashima 3** | **0.60** | **241** | P | **Pn** | **11 47 41.5** | **+0.4** |
| JTN | | | | *e*S | **Sn** | **11 47 51.6** | **+1.9** |
| **JTSR** | **Tashiro 2** | **0.61** | **291** | P | **Pn** | **11 47 41.4** | **+0.1** |
| JTSR | | | | S | **Sn** | **11 47 51.6** | **+1.5** |
| **JNAR** | **Kushima--Naru** | **0.64** | **335** | P | **Pn** | **11 47 41.9** | **+0.2** |
| JNAR | | | | *e*S | **Sn** | **11 47 51.8** | **+1.1** |
| **JNKG** | **Nichinankitago** | **0.74** | **346** | P | **Pb** | **11 47 43.3** | **+0.1** |
| **JMTN** | **Minamitane** | **0.80** | **227** | P | **Pb** | **11 47 44.1** | **-0.3** |
| **JTZ** | **Takazaki** | **1.04** | **336** | P | **Pb** | **11 47 47.6** | **-0.8** |
| **JSU** | **Suzuyama** | **1.12** | **300** | P | **Pb** | **11 47 49.0** | **-0.6** |
| **JYAK** | **Yakushimahirau** | **1.17** | **233** | P | **Pb** | **11 47 49.3** | **-1.1** |
| **JKC** | **Kuchinoerabu** | **1.29** | **248** | P | **Pb** | **11 47 51.2** | **-1.3** |
| JKC | | | | *e*S | **Sb** | **11 48 08.0** | **-0.1** |
| **JTSN** | **Tsuno** | **1.30** | **357** | P | **Pn** | **11 47 50.7** | **0.0** |
| **JZO** | **Okuchi** | **1.46** | **325** | P | **Pb** | **11 47 53.7** | **-1.7** |
| **JNU** | **Nakatsue** | **2.25** | **345** | P | **Pn** | **11 48 05.0** | **+1.1** |
| | 1.3nm,0.3s,baz=203,slow=7.7,SNR=21 | | | | | | |
| JNU | | | | S | **Sn** | **11 48 31.2** | **+0.6** |
| | 4.3nm,0.3s,baz=33,slow=6.4,SNR=6.7 | | | | | | |
| **JOW** | **Kunigami** | **5.02** | **216** | P | **Pn** | **11 48 42.5** | **+0.5** |
| | 3.1nm,0.3s,baz=169,slow=7.7,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.82** | **307** | P | **P** | **11 55 06.8** | **-0.5** |
| | 0.3nm,0.8s,baz=105,slow=9.4,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.66** | **177** | P | **P** | **11 56 24.5** | **-0.7** |
| | 0.5nm,0.8s,baz=354,slow=7.9,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **54.35** | **177** | P | **P** | **11 56 52.9** | **+0.4** |
| | 0.3nm,0.7s,baz=12,slow=12,SNR=8.9 | | | | | | |

**WEL 07 12:00:14.1±0.9, 32.3S±19.3×18.0E±3.8, h373km±28km, M4.1/11, mB4.5/4, ML4.4/15, MLv4.2/11, Mw(mB)3.6/4, Error ellipse: s-maj=0.1km s-min=0.0km az=114.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **5.28** | **191** | P | Pn | 12 01 37.3 | -0.3 |
| MXZ | | | | S | S | 12 02 45.6 | +0.1 |
| **WMGZ** | **Waiomatatini S** | **5.51** | **190** | P | Pn | 12 01 40.3 | +0.1 |
| WMGZ | | | | S | S | 12 02 50.7 | +0.5 |
| **HAZ** | **Te Kaha** | **5.57** | **195** | P | Pn | 12 01 40.5 | -0.2 |
| HAZ | | | | S | S | 12 02 51.7 | +0.5 |
| **PKGZ** | **Pakihiroa** | **5.64** | **192** | P | Pn | 12 01 42.6 | +1.0 |
| **PUZ** | **Puketiti** | **5.79** | **191** | P | Pn | 12 01 41.4 | -1.8 |
| PUZ | | | | S | S | 12 02 56.0 | +0.2 |
| **RUGZ** | **Raukumara Rang** | **5.79** | **195** | P | Pn | 12 01 42.6 | -0.8 |
| RUGZ | | | | S | S | 12 02 55.2 | -0.9 |
| **TWGZ** | **Tauwhareparae** | **5.93** | **193** | P | Pn | 12 01 46.4 | +1.7 |
| TWGZ | | | | S | S | 12 03 01.4 | +2.7 |
| **MWZ** | **Matawai** | **6.18** | **195** | P | Pn | 12 01 46.4 | -1.2 |
| MWZ | | | | S | S | 12 03 04.0 | +0.2 |
| **URZ** | **Urewera** | **6.21** | **198** | P | Pn | 12 01 47.9 | 0.0 |
| URZ | | | | S | S | 12 03 04.6 | +0.3 |
| **TKGZ** | **Te Karaka** | **6.21** | **193** | P | Pn | 12 01 48.3 | +0.3 |
| TKGZ | | | | S | S | 12 03 04.5 | +0.1 |
| **RAGZ** | **Rawiri** | **6.36** | **196** | P | Pn | 12 01 50.8 | +1.1 |
| RAGZ | | | | S | S | 12 03 08.7 | +1.1 |
| **RIGZ** | **Rimuhau** | **6.49** | **193** | P | Pn | 12 01 51.2 | +0.1 |
| RIGZ | | | | S | S | 12 03 09.4 | -0.8 |
| **MUGZ** | **Murupara** | **6.51** | **200** | P | Pn | 12 01 51.7 | +0.3 |
| **SNGZ** | **Shannon Statio** | **6.65** | **196** | P | Pn | 12 01 53.2 | +0.3 |
| SNGZ | | | | S | S | 12 03 14.1 | +0.6 |
| **NMHZ** | **Naumai** | **7.08** | **198** | P | P | 12 01 58.7 | -0.2 |
| NMHZ | | | | S | S | 12 03 22.9 | +0.4 |
| **ARHZ** | **Aropaoanui** | **7.19** | **196** | P | Pn | 12 01 59.1 | +0.1 |
| ARHZ | | | | S | S | 12 03 25.3 | +0.6 |
| **BKZ** | **Black Stump Fm** | **7.23** | **200** | P | Pn | 12 01 59.3 | -0.3 |
| BKZ | | | | S | S | 12 03 27.1 | +1.4 |
| **MCHZ** | **McNeill Hill** | **7.43** | **198** | P | Pn | 12 02 02.3 | +0.4 |
| MCHZ | | | | S | S | 12 03 29.3 | -0.6 |
| **BHHZ** | **Black Hill Sta** | **7.65** | **201** | P | Pn | 12 02 03.9 | -0.6 |
| **KRHZ** | **Kereru** | **7.71** | **199** | P | Pn | 12 02 04.4 | -0.7 |
| **KAHZ** | **Kahuranaki** | **7.72** | **196** | P | Pn | 12 02 05.2 | -0.1 |

**WEL 07 12:01:32.9±0.5, 44.5S±4.3×167.9E±., h7km±8km, M3.6/8, ML3.9/8, MLv3.6/8, Error ellipse: s-maj=0.0km s-min=0.0km az=149.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCZ** | **Jackson Bay** | **0.43** | **290** | P | Pb | 12 01 42.3 | -0.6 |
| JCZ | | | | S | Sg | 12 01 48.1 | +1.2 |
| **LBZ** | **Lake Benmore** | **0.62** | **106** | P | Pb | 12 01 45.5 | -0.6 |
| **WKZ** | **Wanaka** | **0.65** | **201** | P | Pg | 12 01 45.8 | +0.4 |
| **FOZ** | **Fox Glacier** | **0.77** | **26** | P | Pg | 12 01 46.9 | -0.7 |
| **EAZ** | **Earnscleugh** | **1.01** | **182** | P | Pg | 12 01 52.3 | 0.0 |
| EAZ | | | | S | Sg | 12 02 05.7 | +0.3 |
| **MSZ** | **Milford Sound** | **1.11** | **246** | P | Pb | 12 01 54.4 | -0.1 |
| MSZ | | | | S | Sg | 12 02 08.9 | +0.2 |
| **GCSZ** | **Gaunt Creek Bo** | **1.15** | **38** | P | Pg | 12 01 53.5 | -1.4 |
| **TMZ** | **Timaru** | **1.20** | **98** | P | Pn | 12 01 56.2 | +0.1 |
| **ODZ** | **Otahua Downs** | **1.24** | **132** | P | Pb | 12 01 56.3 | -0.3 |
| ODZ | | | | S | Sg | 12 02 11.7 | -0.9 |
| **RPZ** | **Rata Peaks** | **1.33** | **68** | P | Pn | 12 01 57.9 | 0.0 |
| **ARCZ** | **Arundel** | **1.35** | **79** | P | Pb | 12 01 58.5 | +0.1 |
| **MLZ** | **Mavora Lakes** | **1.44** | **217** | P | Pb | 12 02 00.1 | 0.0 |
| **WVZ** | **Waitaha Valley** | **1.53** | **42** | P | Pn | 12 02 00.4 | -0.2 |
| WVZ | | | | S | Sn | 12 02 19.6 | -1.1 |
| **TUZ** | **Tuapeka** | **1.74** | **174** | P | Pn | 12 02 03.7 | +0.1 |
| TUZ | | | | S | Sn | 12 02 25.3 | -0.8 |
| **MHCZ** | **Mount Hutt** | **1.75** | **68** | P | Pn | 12 02 04.1 | +0.4 |
| **WACZ** | **Wakanui South** | **1.82** | **82** | P | Pn | 12 02 05.1 | +0.5 |
| **HHSZ** | **Highcliff Hill** | **1.88** | **152** | P | Pb | 12 02 06.7 | -0.9 |
| **WHZ** | **Wether Hill Ro** | **1.94** | **210** | P | Pn | 12 02 06.8 | +0.5 |
| **DCZ** | **Deep Cove** | **2.00** | **231** | P | Pb | 12 02 08.7 | -0.8 |
| **RACZ** | **Rakaia** | **2.07** | **77** | P | Pb | 12 02 10.9 | 0.0 |
| **INZ** | **Inchbonnie** | **2.14** | **46** | P | Pn | 12 02 09.4 | +0.4 |
| **OXZ** | **Oxford** | **2.14** | **66** | P | Pn | 12 02 08.9 | -0.2 |
| **SYZ** | **Scrubby Hill** | **2.32** | **184** | P | Pn | 12 02 11.3 | -0.2 |
| **MQZ** | **McQueen's Vall** | **2.44** | **79** | P | Pn | 12 02 13.2 | +0.1 |
| **LTZ** | **Lake Taylor** | **2.57** | **57** | P | Pn | 12 02 15.2 | +0.3 |
| **AKCZ** | **Akaroa Harbour** | **2.59** | **83** | P | Pn | 12 02 15.3 | 0.0 |
| **AMCZ** | **Amberley** | **2.61** | **68** | P | Pn | 12 02 15.9 | +0.4 |
| **PYZ** | **Puysegur Point** | **2.71** | **223** | P | Pn | 12 02 18.6 | +1.7 |
| **OKCZ** | **Okains Bay** | **2.73** | **81** | P | Pn | 12 02 17.5 | +0.4 |
| **APZ** | **The Paps** | **2.78** | **200** | P | Pn | 12 02 17.5 | -0.4 |
| **GVZ** | **Greta Valley S** | **2.96** | **66** | P | Pn | 12 02 20.6 | +0.3 |
| **DSZ** | **Denniston Nort** | **3.06** | **37** | P | Pn | 12 02 21.5 | -0.3 |
| **KHZ** | **Kahutara** | **3.55** | **61** | P | Pn | 12 02 29.5 | +1.1 |
| **THZ** | **Tophouse** | **3.58** | **48** | P | Pn | 12 02 29.1 | +0.1 |
| **MRNZ** | **Matariki Terra** | **3.77** | **43** | P | Pn | 12 02 32.0 | +0.4 |
| **QRZ** | **Quartz Range** | **4.13** | **36** | P | Pn | 12 02 36.4 | 0.0 |
| **TKNZ** | **Takaka Hill** | **4.15** | **41** | P | Pn | 12 02 37.2 | +0.5 |
| **NNZ** | **Nelson** | **4.22** | **46** | P | Pn | 12 02 39.9 | +2.2 |
| **TUWZ** | **Tuamarina** | **4.38** | **52** | P | Pn | 12 02 44.4 | +4.6 |
| **DUWZ** | **D'Urville Isla** | **4.81** | **46** | P | Pn | 12 02 48.0 | +2.3 |
| **NBEZ** | **Newall Road No** | **5.99** | **36** | P | Pn | 12 03 03.0 | +1.0 |
| **KHEZ** | **Kahui Hut** | **6.03** | **37** | P | Pn | 12 03 03.6 | +1.0 |
| **PREZ** | **Palmer Road** | **6.06** | **38** | P | Pn | 12 03 04.3 | +1.4 |
| **NEZ** | **North Egmont** | **6.09** | **37** | P | Pn | 12 03 04.7 | +1.3 |
| **PKE** | **Pukeiti** | **6.11** | **36** | P | Pn | 12 03 05.2 | +1.6 |
| **VRZ** | **Vera Road** | **6.51** | **40** | P | Pn | 12 03 10.4 | +1.4 |

*SOME **07** 12:06:25.4, 42.13N×81.33E, h15km*
*NNC **07** 12:06:27.3±1.6, 42.22N×81.27E, h0km, mb3.6, mpv3.4, Error ellipse: s-maj=11.0km s-min=8.5km az=148.0*

**ISC 07 12:06:25.0±2.3, 42.34N±0.08×81.66E±0.06, h2km±16km, n48, σ1.953/70, 3C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **1.47** | **319** | *eP* | **Pg** | **12 06 53.8** | **+0.7** |
| | 18nm,0.1s | | | | | | |
| KTMS | | | | *eS* | **Sg** | **12 07 14.3** | **+2.1** |
| | 20nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.47** | **319** | P | **Pg** | **12 06 53.8** | **+0.7** |
| | 18nm,0.1s | | | | | | |
| KTMS | | | | S | **Sg** | **12 07 14.3** | **+2.1** |
| | 20nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.11** | **293** | *eP* | **Pn** | **12 07 02.8** | **+1.3** |
| | 13nm,0.4s | | | | | | |
| UZB | | | | *eS* | **Sb** | **12 07 29.8** | **-0.9** |
| | 36nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **2.11** | **293** | Pg | **Pn** | **12 07 02.8** | **+1.3** |
| | 13nm,0.4s | | | | | | |
| UZB | | | | Lg | Lg | 12 07 29.8 | |
| | 36nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **2.42** | **326** | *eP* | **Pg** | **12 07 10.8** | **-0.5** |
| | 10nm,0.3s | | | | | | |
| DJR | | | | *eS* | **Sg** | **12 07 44.2** | **+1.6** |
| | 16nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **2.42** | **326** | Pg | **Pg** | **12 07 10.8** | **-0.5** |
| | 10nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 12 07 44.2 | |
| | 16nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.46** | **298** | *eP* | **Pb** | **12 07 09.2** | **-0.9** |
| | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TDK | | | | *e*S | **Sg** | **12 08 16.1** | **-3.2** |
| | 22nm,0.3s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.56** | **320** | Pg | **Pb** | **12 07 26.7** | **-2.0** |
| | 26nm,0.3s | | | | | | | |
| TDK | | | | Lg | Lg | 12 08 11.4 | | |
| | 22nm,0.4s | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.79** | **282** | *e*P | **Pb** | **12 07 31.3** | **-1.4** |
| | 3.1nm,0.3s | | | | | | | |
| IZV | | | | *e*S | **Sb** | **12 08 18.4** | **-0.7** |
| | 17nm,0.5s | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.79** | **282** | Pg | **Pb** | **12 07 31.3** | **-1.4** |
| | 3.1nm,0.3s | | | | | | | |
| IZV | | | | Lg | Lg | 12 08 18.4 | | |
| | 17nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **3.90** | **292** | *e*P | **Pb** | **12 07 32.5** | **-2.1** |
| | 2.2nm,0.3s | | | | | | | |
| KTBS | | | | *e*S | **Sb** | **12 08 21.2** | **-1.1** |
| | 15nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **3.90** | **292** | Pg | **Pb** | **12 07 32.5** | **-2.1** |
| | 2.2nm,0.3s | | | | | | | |
| KTBS | | | | Lg | Lg | 12 08 21.2 | | |
| | 15nm,0.4s | | | | | | | |
| **MTBS** | **Maitube** | **3.94** | **283** | *e*P | **Pb** | **12 07 32.9** | **-2.3** |
| | 2.0nm,0.3s | | | | | | | |
| MTBS | | | | *e*S | **Sb** | **12 08 21.3** | **-1.9** |
| | 12nm,0.4s | | | | | | | |
| **MTBS** | **Maitube** | **3.94** | **283** | Pg | **Pb** | **12 07 32.9** | **-2.3** |
| | 2.0nm,0.3s | | | | | | | |
| MTBS | | | | Lg | Lg | 12 08 21.3 | | |
| | 12nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | **4.20** | **294** | *e*P | **Pb** | **12 07 39.2** | **-0.4** |
| | 2.5nm,0.4s | | | | | | | |
| KUU | | | | *e*S | **Sb** | **12 08 32.1** | **+1.4** |
| | 5.7nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **4.20** | **294** | Pg | **Pb** | **12 07 39.2** | **-0.4** |
| | 2.5nm,0.4s | | | | | | | |
| KUU | | | | Lg | Lg | 12 08 32.1 | | |
| | 5.7nm,0.5s | | | | | | | |
| **KST** | **Kastek** | **4.26** | **281** | *e*P | **Pb** | **12 07 40.0** | **-0.8** |
| | 3.1nm,0.4s | | | | | | | |
| KST | | | | *e*S | **Sb** | **12 08 33.3** | **+0.7** |
| | 6.6nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **4.26** | **281** | Pg | **Pb** | **12 07 40.0** | **-0.8** |
| | 3.1nm,0.4s | | | | | | | |
| KST | | | | Lg | Lg | 12 08 33.3 | | |
| | 6.6nm,0.4s | | | | | | | |
| **DGS** | **Degeres** | **4.43** | **284** | *e*P | **Pb** | **12 07 43.0** | **-0.6** |
| | 2.5nm,0.3s | | | | | | | |
| DGS | | | | *e*S | **Sb** | **12 08 38.5** | **+1.0** |
| | 6.9nm,0.6s | | | | | | | |
| **DGS** | **Degeres** | **4.43** | **284** | Pg | **Pb** | **12 07 43.0** | **-0.6** |
| | 2.5nm,0.3s | | | | | | | |
| DGS | | | | Lg | Lg | 12 08 38.5 | | |
| | 6.9nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.48** | **6** | ⇓Pn | **Pb** | **12 07 39.8** | **-4.6** |
| | 0.1nm,0.2s,baz=190,slow=14,SNR=25 | | | | | | | |
| MK31 | | | | ⇓Sn | **Sb** | **12 08 37.9** | **-0.9** |
| | 1.6nm,0.5s,baz=188,slow=25,SNR=5.7 | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.51** | **279** | ⇑Pg | **Pg** | **12 07 49.7** | **-1.8** |
| | 1.6nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 12 08 41.6 | | |
| | 3.8nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **4.59** | **289** | *e*P | **Pb** | **12 07 46.0** | **-0.4** |
| | 1.8nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | **Sb** | **12 08 43.6** | **+1.4** |
| | 3.7nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **4.59** | **289** | Pg | **Pb** | **12 07 46.0** | **-0.4** |
| | 1.8nm,0.5s | | | | | | | |
| KRBS | | | | Lg | Lg | 12 08 43.6 | | |
| | 3.7nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **5.31** | **276** | Pg | **Pb** | **12 08 01.1** | **+2.4** |
| | 0.6nm,0.5s | | | | | | | |
| AAK | | | | Lg | Lg | 12 09 08.8 | | |
| | 2.4nm,0.6s | | | | | | | |
| **ZSN** | **Zaisan** | **5.59** | **23** | *e*P | **Pg** | **12 08 12.5** | **+0.3** |
| | 2.9nm,0.5s | | | | | | | |
| ZSN | | | | *e*S | **Sg** | **12 09 29.0** | **+4.4** |
| | 3.8nm,0.7s | | | | | | | |
| **KK07** | **Karatay Array** | **8.25** | **279** | Lg | Lg | 12 10 39.9 | | |
| | baz=238,slow=26 | | | | | | | |
| **OTUK** | **Ortayu** | **8.83** | **315** | ⇑Lg | Lg | 12 11 03.5 | | |
| | 0.7nm,0.6s | | | | | | | |

*TUL **07** 12:20:34.4±1.1,36˚.13N±0˚.01×97˚.27W±0˚.02,h5km±7km, ML2.6,mb_Lg2.6/28(NEIC),Error ellipse: s-maj=1.9km s-min=1.6km az=62.0*

**NEIC 07 12:20:34.6±0.9,36˚.142N±0˚.005×97˚.27W±0˚.01,h3km±7km, Error ellipse: s-maj=1.7km s-min=0.5km az=66.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.29** | **110** | Pg | Pg | 12 20 40.3 | +0.1 |
| OK033 | | | | Sg | Sg | 12 20 44.6 | +0.6 |
| **OK029** | **Liberty Lake** | **0.38** | **203** | Pg | Pg | 12 20 41.5 | -0.3 |
| OK029 | | | | Sg | Sg | 12 20 46.6 | -0.1 |
| **OK031** | **S. Brethren Rd** | **0.40** | **118** | Pg | Pg | 12 20 42.4 | +0.1 |
| OK031 | | | | Sg | Sg | 12 20 47.7 | +0.2 |
| **OK030** | **Cody Creek RV** | **0.45** | **118** | Pg | Pg | 12 20 43.4 | +0.1 |
| OK030 | | | | Sg | Sg | 12 20 49.1 | 0.0 |
| **QUOK** | **Quay** | **0.46** | **86** | Pg | Pg | 12 20 43.6 | +0.2 |
| QUOK | | | | Sg | Sg | 12 20 49.9 | +0.5 |
| **OK034** | **N. Norfolk Rd.** | **0.47** | **106** | Pg | Pg | 12 20 43.7 | 0.0 |
| OK034 | | | | Sg | Sg | 12 20 50.1 | +0.3 |
| **BCOK** | **Bluff Creek, N** | **0.56** | **209** | Pg | Pg | 12 20 44.9 | -0.4 |
| BCOK | | | | Sg | Sg | 12 20 52.4 | -0.1 |
| **OK025** | **Westminster Rd** | **0.56** | **185** | Pg | Pg | 12 20 45.1 | -0.3 |
| OK025 | | | | Sg | Sg | 12 20 53.3 | +0.7 |
| **BLOK** | **Blackwell** | **0.62** | **4** | Pg | Pg | 12 20 46.6 | +0.1 |
| BLOK | | | | | Sg | 12 20 54.8 | +0.2 |
| **CROK** | **Carrier** | **0.68** | **302** | Pg | Pg | 12 20 47.6 | -0.1 |
| CROK | | | | Sg | Sg | 12 20 56.8 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.74** | **191** | | Pg | 12 20 48.3 | -0.5 |
| OKCFA | | | | Sg | Sg | 12 20 58.7 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.75** | **190** | Pg | Pg | 12 20 48.2 | -0.8 |
| OKCSW | | | | Sg | Sg | 12 20 58.4 | -0.2 |
| **GC02** | **Grant County #** | **0.85** | **326** | Pg | Pg | 12 20 51.0 | +0.1 |
| GC02 | | | | Sg | Sg | 12 21 02.1 | +0.1 |
| **KAN13** | **South Haven SW** | **0.89** | **349** | | Pb | 12 20 52.3 | -0.4 |
| KAN13 | | | | Sg | Sg | 12 21 03.0 | -0.1 |
| KAN13 | | | | lAmb_Lg | | 12 21 03.7 | |
| | comp=Z,53nm,0.9s | | | | | | |
| **FNO** | **Franklin** | **0.89** | **187** | | Pg | 12 20 50.8 | -0.8 |
| FNO | | | | Sg | Sg | 12 21 02.8 | -0.4 |
| **KAN17** | **Caldwell West** | **0.98** | **336** | Pg | Pg | 12 20 53.4 | -0.1 |
| KAN17 | | | | Sg | Sg | 12 21 06.4 | +0.1 |
| **KAN14** | **Manchester OK** | **0.98** | **326** | | Pg | 12 20 53.1 | -0.4 |
| KAN14 | | | | Sg | Sg | 12 21 06.0 | -0.3 |
| **T35A** | **Sooner Cattle** | **0.99** | **38** | | Pg | 12 20 53.4 | -0.2 |
| T35A | | | | Sg | Sg | 12 21 05.4 | -1.0 |
| **OK032** | **Salt Plains WL** | **1.00** | **311** | | Pg | 12 20 53.6 | -0.3 |
| **W35A** | **Tecumseh** | **1.04** | **162** | Pg | Pg | 12 20 53.5 | -1.0 |
| W35A | | | | Sg | Sg | 12 21 07.2 | -0.8 |
| **KAN05** | **Bluff City Nor** | **1.08** | **334** | | Pg | 12 20 55.4 | +0.1 |
| KAN05 | | | | Sg | Sg | 12 21 09.1 | -0.2 |
| **KAN01** | **Argonia South** | **1.08** | **339** | | Pg | 12 20 55.3 | -0.1 |
| KAN01 | | | | Sg | Sg | 12 21 08.9 | -0.5 |
| **KAN10** | **Anthony SW Sta** | **1.18** | **326** | | Pg | 12 20 57.2 | -0.1 |
| KAN10 | | | | Sg | Sg | 12 21 12.1 | -0.5 |
| **KAN06** | **Argonia West S** | **1.20** | **337** | | Pg | 12 20 57.4 | -0.3 |
| KAN06 | | | | Sg | Sg | 12 21 12.7 | -0.5 |
| **KAN08** | **Anthony NE Sta** | **1.22** | **333** | | Pg | 12 20 57.3 | -0.7 |
| KAN08 | | | | Sg | Sg | 12 21 13.2 | -0.6 |
| **TUL1** | **Leonard** | **1.22** | **100** | | Pg | 12 20 56.8 | -1.3 |
| TUL1 | | | | Sg | Sg | 12 21 13.6 | -0.4 |
| **KAN16** | **Harper SW Stat** | **1.25** | **330** | | Pg | 12 20 57.7 | -1.0 |
| KAN16 | | | | Sg | Sg | 12 21 15.0 | 0.0 |
| **OK035** | **E0210 Rd and N** | **1.29** | **296** | Pn | Pg | 12 20 59.1 | -0.2 |
| **KAN12** | **Harper NE Stat** | **1.29** | **333** | Pn | Pn | 12 20 59.7 | +0.1 |
| **U32A** | **Winter Ranch,** | **1.42** | **280** | | Pn | 12 21 00.2 | -1.2 |
| **X34A** | **Smith Ranch, M** | **1.60** | **197** | Pn | Pn | 12 21 04.0 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.86** | **222** | | Pn | 12 21 07.4 | -0.1 |
| WMOK | | | | lAmb_Lg | | 12 21 36.8 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **LOOK** | **Love County** | **2.15** | **178** | | Pn | 12 21 11.6 | +0.2 |
| LOOK | | | | lAmb_Lg | | 12 21 45.5 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **2.19** | **134** | Pn | Pn | 12 21 12.2 | +0.2 |
| **U38A** | **Gravette** | **2.35** | **82** | | Pn | 12 21 14.7 | +0.5 |
| **R32A** | **Long Quarter,** | **2.55** | **334** | | Pn | 12 21 17.0 | 0.0 |
| R32A | | | | lAmb_Lg | | 12 21 59.9 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **2.70** | **86** | | Pn | 12 21 18.6 | -0.4 |
| **W39A** | **Magazine** | **2.99** | **107** | | Pn | 12 21 22.6 | -0.4 |
| **KSU1** | **Kansas State U** | **3.00** | **10** | Pn | Pn | 12 21 23.6 | +0.5 |
| KSU1 | | | | lAmb_Lg | | 12 22 15.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.31** | **324** | Pn | Pn | 12 21 28.0 | +0.6 |
| CBKS | | | | lAmb_Lg | | 12 22 24.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.42** | **117** | | Pn | 12 21 29.2 | +0.4 |
| MIAR | | | | lAmb_Lg | | 12 22 28.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.44** | **146** | | Pn | 12 21 28.6 | -0.4 |
| Z38A | | | | lAmb_Lg | | 12 22 30.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.52** | **63** | Pn | Pn | 12 21 31.1 | +0.8 |
| **U40A** | **Yellville** | **3.58** | **85** | | Pn | 12 21 30.9 | -0.2 |
| **AMTX** | **Amarillo** | **3.81** | **252** | Pn | Pn | 12 21 33.2 | -1.1 |
| AMTX | | | | lAmb_Lg | | 12 22 43.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.99** | **113** | | Pn | 12 21 36.8 | +0.2 |
| X40A | | | | lAmb_Lg | | 12 22 46.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.14** | **100** | | Pn | 12 21 39.0 | +0.2 |
| **MGMO** | **Mountain Grove** | **4.15** | **74** | Pn | Pn | 12 21 38.8 | -0.1 |
| **FCAR** | **Ozark Folk Cen** | **4.18** | **92** | Pn | Pn | 12 21 39.1 | -0.2 |
| **W41B** | **Gary Mavity, V** | **4.21** | **102** | Pn | Pn | 12 21 39.6 | 0.0 |
| **WLAR** | **White Oak Lake** | **4.21** | **124** | | Pn | 12 21 38.7 | -0.9 |
| **R40A** | **Maddies Statio** | **4.53** | **60** | Pn | Pn | 12 21 43.5 | -0.7 |
| R40A | | | | lAmb_Lg | | 12 23 09.0 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.57** | **39** | Pn | Pn | 12 21 44.2 | -0.4 |
| **Z41A** | **Richland Creek** | **4.67** | **127** | Pn | Pn | 12 21 46.9 | +0.8 |
| **N35A** | **Tabor** | **4.88** | **15** | Pn | Pn | 12 21 49.0 | +0.1 |
| **LCAR** | **Lake Charles** | **4.96** | **89** | Pn | Pn | 12 21 50.2 | +0.3 |
| LCAR | | | | lAmb_Lg | | 12 23 14.1 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **MSTX** | **Muleshoe** | **5.00** | **246** | Pn | Pn | 12 21 52.2 | +1.4 |
| **T42A** | **Van Buren** | **5.05** | **78** | Pn | Pn | 12 21 51.4 | +0.1 |
| **CCM** | **Cathedral Cave** | **5.18** | **67** | Pn | Pn | 12 21 52.4 | -0.7 |
| **P40A** | **Paris** | **5.34** | **49** | Pn | Pn | 12 21 55.7 | +0.4 |
| **FVM** | **French Village** | **5.78** | **69** | Pn | Pn | 12 21 59.6 | -1.6 |
| **T25A** | **Trinidad** | **5.83** | **282** | Pn | Pn | 12 22 01.7 | -0.4 |
| T25A | | | | lAmb_Lg | | 12 23 42.0 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **201** | Pn | Pn | 12 22 05.1 | +0.3 |
| **S44A** | **Carbondale** | **6.61** | **74** | Pn | Pn | 12 22 13.0 | +0.3 |
| **SDCO** | **Great Sand Dun** | **6.78** | **286** | Pn | Pn | 12 22 15.4 | +0.1 |
| **Q24A** | **Divide** | **6.86** | **297** | Pn | Pn | 12 22 16.6 | +0.1 |
| **ECSD** | **EROS Data Cent** | **7.60** | **4** | Pn | Pn | 12 22 25.1 | -1.2 |
| **146A** | **Union** | **7.64** | **115** | lAmb_Lg | | 12 24 30.7 | |
| | comp=Z,9.0nm,1.1s | | | | | | |

*SGS **07** 12:35:44.9,30˚.34N×35˚.05E,h13km,Ml3.7*
*HLW **07** 12:35:46.7,30˚.16N×35˚.44E,h28km±16km,Md3.3*
*GII **07** 12:35:49.8±0.3,30˚.04N×35˚.13E,h17km,MD3.9/3, Mm3.2/8*
*JSO **07** 12:35:50.4±0.0,30˚N±4˚×3˚5E±˚,h15km±5km,Mjma3.9/10, ML4.3/8,MLv4.1/11,Ms3.7/3*

**ISC 07 12:35:50.0±0.9,30˚.02N±0˚.02×35˚.11E±0˚.04,h23km±6km, n50,σ0°67/63,Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HRFI** | **Mount Harif** | **0.06** | **283** | Pg | **Pb** | **12 35 53.8** | **-0.3** |
| HRFI | | | | Sg | **Sb** | **12 35 56.8** | **-0.1** |
| **MBRI** | **Mt Berech** | **0.28** | **217** | P | **Pb** | **12 35 56.7** | **+0.1** |
| **MBRI** | **Mt Berech** | **0.28** | **217** | Pg | **Pb** | **12 35 56.8** | **+0.1** |
| MBRI | | | | Sg | **Sb** | **12 36 01.8** | **+0.6** |
| **PRNI** | **Paran** | **0.34** | **345** | P | **Pb** | **12 35 57.3** | **-0.2** |
| **PRNI** | **Paran** | **0.34** | **345** | Pg | **Pb** | **12 35 57.0** | **-0.5** |
| PRNI | | | | Sg | **Sb** | **12 36 02.6** | **0.0** |
| **KRMI** | **Paran Flat** | **0.35** | **286** | Pg | **Pb** | **12 35 57.5** | **-0.1** |
| KRMI | | | | Sg | **Sb** | **12 36 02.8** | **+0.1** |
| **EIL** | **Elat** | **0.38** | **201** | P | **Pb** | **12 35 58.1** | **+0.1** |
| **EIL** | **Elat** | **0.38** | **201** | Pg | **Pb** | **12 35 58.1** | **+0.1** |
| EIL | | | | Sg | **Sb** | **12 36 04.2** | **+0.7** |
| **ZFRI** | **Zfri** | **0.53** | **6** | P | **Pb** | **12 36 00.1** | **-0.6** |
| **ZFRI** | **Zfri** | **0.53** | **6** | Pg | **Pb** | **12 36 00.2** | **-0.5** |
| ZFRI | | | | Sg | **Sb** | **12 36 07.7** | **-0.3** |
| **HSNJ** | **Maan** | **0.55** | **65** | P | **Pb** | **12 36 01.2** | **+0.1** |
| **RMNI** | **Mount Ramon** | **0.65** | **332** | Pg | **Pb** | **12 36 02.3** | **-0.4** |
| **DRHJ** | **Al-Direh** | **0.67** | **191** | P | **Pb** | **12 36 03.2** | **+0.2** |
| **HQLS** | | **0.72** | **183** | P | **Pb** | **12 36 03.6** | **-0.3** |
| **JMOS** | **Jabal al Moall** | **0.85** | **180** | P | **Pb** | **12 36 05.6** | **-0.4** |
| **HBST** | **Basata** | **0.87** | **202** | P | **Pb** | **12 36 06.1** | **-0.2** |
| | baz=214 | | | | | | |
| **HAQS** | **Haql** | **0.98** | **190** | P | **Pb** | **12 36 07.2** | **-1.1** |
| **NUB** | **Nuweibaa** | **1.07** | **202** | P | **Pn** | **12 36 09.1** | **-0.5** |
| | baz=211 | | | | | | |
| NUB | | | | S | **Sn** | **12 36 25.6** | **+1.9** |
| | baz=211 | | | | | | |
| **KZIT** | **Kziot** | **1.07** | **325** | Pg | **Pn** | **12 36 09.3** | **-0.3** |
| KZIT | | | | Sg | **Sb** | **12 36 23.7** | **+0.2** |
| **MDBI** | **Mazsada** | **1.30** | **9** | Pg | **Pn** | **12 36 11.4** | **-1.4** |
| MDBI | | | | Sg | **Sn** | **12 36 29.0** | **-0.4** |
| **JLOS** | | **1.32** | **165** | P | **Pn** | **12 36 12.3** | **-0.9** |
| **GHAJ** | **Ghor Haditha** | **1.34** | **17** | Sn | **Sn** | **12 36 30.1** | **-0.2** |
| **YTIR** | **Yattir** | **1.34** | **0** | P | **Pn** | **12 36 13.6** | **+0.3** |
| **YTIR** | **Yattir** | **1.34** | **0** | Pn | **Pn** | **12 36 12.6** | **-0.7** |
| YTIR | | | | Sn | **Sn** | **12 36 30.6** | **+0.1** |
| **HDHB** | **Dhahab** | **1.36** | **198** | P | **Pn** | **12 36 12.3** | **-1.3** |
| | baz=207 | | | | | | |
| **SWQJ** | **Swaqa** | **1.47** | **34** | P | **Pb** | **12 36 17.8** | **+1.2** |
| **TAYS** | **Tayyib Ism** | **1.48** | **188** | P | **Pn** | **12 36 14.1** | **-1.1** |
| **AMAZ** | **Amatzia** | **1.52** | **354** | Pn | **Pn** | **12 36 15.2** | **-0.5** |
| AMAZ | | | | Sn | **Sn** | **12 36 34.8** | **0.0** |
| **DSI** | **Dead Sea** | **1.56** | **9** | P | **Pn** | **12 36 15.9** | **-0.4** |
| **DSI** | **Dead Sea** | **1.56** | **9** | Pn | **Pn** | **12 36 15.6** | **-0.7** |
| DSI | | | | Sn | **Sn** | **12 36 36.5** | **+0.6** |
| **BDAS** | **Al Bad`** | **1.59** | **180** | P | **Pn** | **12 36 15.5** | **-1.2** |
| **BDAS** | **Al Bad`** | **1.59** | **180** | S | **Sb** | **12 36 38.6** | **+0.4** |
| **WALJ** | **Wala** | **1.65** | **21** | P | **Pn** | **12 36 17.1** | **-0.4** |
| **HKAT** | **Jabal Katrina** | **1.78** | **213** | P | **Pn** | **12 36 19.2** | **-0.3** |
| | baz=218 | | | | | | |
| **AYUS** | **`Aynunah** | **1.83** | **176** | P | **Pn** | **12 36 18.9** | **-1.1** |
| **AYUS** | **`Aynunah** | **1.83** | **176** | S | **Sb** | **12 36 45.7** | **+0.5** |
| **KRABS** | **KRABS** | **1.92** | **176** | P | **Pn** | **12 36 20.0** | **-1.2** |
| **UJAP** | **Al Uja** | **1.95** | **9** | Pn | **Pn** | **12 36 21.4** | **-0.2** |
| UJAP | | | | Sn | **Sn** | **12 36 45.4** | **+0.1** |
| **SUZ** | **Suez** | **1.98** | **265** | P | **Pn** | **12 36 22.1** | **0.0** |
| | baz=263 | | | | | | |
| **TR2** | **Tor 2** | **2.03** | **217** | P | **Pn** | **12 36 22.4** | **-0.5** |
| | baz=221 | | | | | | |
| **ZNM** | **Zenema** | **2.05** | **252** | P | **Pn** | **12 36 23.2** | **+0.2** |
| | baz=252 | | | | | | |
| **HRDS** | **Abu Rudays** | **2.05** | **231** | P | **Pn** | **12 36 23.8** | **+0.7** |
| | baz=233 | | | | | | |
| **HMDT** | **Nahal Hemdat** | **2.25** | **9** | P | **Pn** | **12 36 26.1** | **+0.3** |
| **HMDT** | **Nahal Hemdat** | **2.25** | **9** | Pn | **Pn** | **12 36 25.5** | **-0.3** |
| **QRNJ** | **Al-Qirein** | **2.34** | **10** | P | **Pn** | **12 36 26.7** | **-0.3** |
| **OFRI** | **`Ofer** | **2.59** | **358** | Pn | **Pn** | **12 36 30.4** | **-0.2** |
| **ASF** | **Jabal al Asfar** | **2.64** | **35** | P | **Pn** | **12 36 33.0** | **+1.8** |
| **GRB** | **Gharib** | **2.68** | **230** | P | **Pn** | **12 36 31.2** | **-0.6** |
| | baz=232 | | | | | | |
| **KOT** | **Kottamia** | **2.85** | **269** | P | **Pn** | **12 36 33.6** | **-0.4** |
| | baz=267 | | | | | | |
| **MMA2** | **Mount Meron ar** | **2.99** | **5** | Pn | **Pn** | **12 36 36.3** | **+0.2** |

**TAP 07 12:36:19.8,23˚.06N×120˚.56E,h7km,ML1.1,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGST** | **Jiashian** | **0.03** | **49** | *i* P | Pg | 12 36 21.3 | +0.1 |
| | baz=59 | | | | | | |
| SGST | | | | S | Sg | 12 36 23.2 | +1.0 |
| | baz=59 | | | | | | |
| **SLGT** | **Liugui** | **0.11** | **130** | P | Pg | 12 36 23.4 | +1.2 |
| | baz=130 | | | | | | |
| SLGT | | | | S | Sg | 12 36 26.6 | +2.8 |
| | baz=130 | | | | | | |
| **CHN1** | **Nanshi** | **0.13** | **347** | *i* P | Pg | 12 36 23.6 | +1.0 |
| | baz=350 | | | | | | |
| CHN1 | | | | S | Sg | 12 36 26.2 | +1.8 |
| | baz=350 | | | | | | |
| **SNST** | **Tainan City** | **0.17** | **340** | P | Pg | 12 36 24.4 | +1.2 |
| | baz=342 | | | | | | |
| SNST | | | | S | Sg | 12 36 27.8 | +2.2 |
| | baz=342 | | | | | | |
| **WTP** | **Ta-pu** | **0.19** | **16** | *i* P | Pg | 12 36 24.8 | +1.1 |
| | baz=19 | | | | | | |
| WTP | | | | S | Sg | 12 36 28.9 | +2.5 |
| | baz=19 | | | | | | |
| **SHHT** | **Tainan City** | **0.20** | **258** | S | Sg | 12 36 30.5 | +4.0 |
| | baz=258 | | | | | | |
| **TWK** | **Hsinying** | **0.21** | **342** | P | Pg | 12 36 25.4 | +1.2 |
| | baz=348 | | | | | | |
| TWK | | | | S | Sg | 12 36 29.4 | +2.4 |
| | baz=348 | | | | | | |
| **STYH** | **Taoyuan** | **0.23** | **62** | *i* P | Pg | 12 36 25.8 | +1.4 |
| | baz=56 | | | | | | |
| STYH | | | | S | Sg | 12 36 29.7 | +2.3 |
| | baz=56 | | | | | | |
| **TPUB** | **Ta-pu** | **0.25** | **16** | *i* P | Pg | 12 36 26.0 | +1.3 |
| | baz=21 | | | | | | |
| TPUB | | | | *i* S | Sg | 12 36 30.4 | +2.4 |
| | baz=21 | | | | | | |
| **TSMG** | **Majia** | **0.36** | **167** | *e*P | Pb | 12 36 28.8 | +0.3 |
| | baz=155 | | | | | | |
| TSMG | | | | *e*S | Sb | 12 36 34.0 | -0.5 |
| | baz=155 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.45** | **171** | *e*P | Pb | 12 36 30.0 | -0.1 |
| | baz=160 | | | | | | |

**TAP 07 12:36:25.9,22˚.92N×120˚.44E,h20km±1km,ML1.2,C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWM1** | **Shoushan** | **0.10** | **191** | *e*S | Sb | 12 36 32.7 | +0.1 |
| | baz=196 | | | | | | |
| **TWM1** | **Shoushan** | **0.10** | **191** | *e*P | Pb | 12 36 30.0 | +0.1 |
| | baz=190 | | | | | | |
| TWM1 | | | | *e*S | Sb | 12 36 32.8 | +0.1 |
| | baz=190 | | | | | | |
| **SHHT** | **Tainan City** | **0.13** | **318** | *i* P | Pb | 12 36 31.4 | +0.9 |
| | baz=311 | | | | | | |
| SHHT | | | | S | Sb | 12 36 35.8 | +2.1 |
| | baz=311 | | | | | | |
| **SLGT** | **Liugui** | **0.20** | **69** | *e*S | Sb | 12 36 36.7 | +1.8 |
| | baz=66 | | | | | | |
| **SGST** | **Jiashian** | **0.20** | **39** | *e*P | Pb | 12 36 32.2 | +0.9 |
| | baz=44 | | | | | | |
| SGST | | | | *e*S | Sb | 12 36 36.8 | +1.9 |
| | baz=44 | | | | | | |
| **CHN1** | **Nanshi** | **0.27** | **16** | *i* P | Pb | 12 36 33.3 | +1.0 |
| | baz=16 | | | | | | |
| CHN1 | | | | *i* S | Sb | 12 36 38.5 | +1.9 |
| | baz=16 | | | | | | |
| **SNST** | **Tainan City** | **0.30** | **9** | *e*P | Pn | 12 36 35.9 | +0.7 |
| | baz=9.0 | | | | | | |
| SNST | | | | S | Sn | 12 36 39.6 | -1.5 |
| | baz=9.0 | | | | | | |
| **TWK** | **Hsinying** | **0.35** | **7** | S | Sn | 12 36 41.1 | -1.2 |
| | baz=9.0 | | | | | | |
| **WTP** | **Ta-pu** | **0.36** | **26** | P | Pn | 12 36 34.9 | -1.2 |
| | baz=27 | | | | | | |
| WTP | | | | S | Sn | 12 36 41.3 | -1.3 |
| | baz=27 | | | | | | |
| **TPUB** | **Ta-pu** | **0.41** | **24** | *e*S | Sn | 12 36 42.4 | -1.5 |
| | baz=24 | | | | | | |

*NEIC **07** 12:46:00.8±2.4,41˚.67N±0˚.03×82˚.82W±0˚.02,h6km±5km, Error ellipse: s-maj=4.2km s-min=2.5km az=164.0*
*OTT **07** 12:46:00.4±0.3,41˚.56N×82˚.77W,h5km,MN2.6/5, Western Lake Erie. 60km south from Leamington, On Eastern Background Seismic Zone.*
*OGSO **07** 12:46:00±3.1,41˚.65N±0˚.03×82˚.90W±0˚.03,h5km±4km, ML2.5,ML2.4/40(NEIC),ML2.6(OTT),Error ellipse: s-maj=0.0km s-min=0.0km az=91.0*

**ISC 07 12:45:58.2±1.2,41˚.66N±0˚.03×82˚.81W±0˚.03,h17km±13km, n30,σ1°06/37,1D,Ohio**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLIO** | **Pelee Island,** | **0.16** | **58** | Pg | **Pb** | **12 46 04.1** | **+1.3** |
| PLIO | | | | Sg | **Sb** | **12 46 07.1** | **+1.3** |
| **PLIO** | **Pelee Island,** | **0.16** | **58** | ⇓PG | **Pb** | **12 46 04.1** | **+1.3** |
| PLIO | | | | SG | **Sb** | **12 46 07.1** | **+1.3** |
| PLIO | | | | Trac | | 12 46 07.8 | |
| | comp=Z,43nm,0.0s | | | | | | |
| **M50A** | **Fremont** | **0.31** | **214** | Pg | **Pn** | **12 46 08.4** | **+0.4** |
| **N51A** | **Ashland** | **0.81** | **156** | Pg | **Pn** | **12 46 14.9** | **0.0** |
| **AAM** | **Ann Arbor** | **0.90** | **316** | Pg | **Pb** | **12 46 15.5** | **+0.2** |
| AAM | | | | IAML | | 12 46 27.8 | |
| | 89nm,0.2s | | | | | | |
| AAM | | | | IAML | | 12 46 29.1 | |
| | 104nm,0.2s | | | | | | |
| **M52A** | **Chesterland** | **1.10** | **96** | Pg | **Pg** | **12 46 20.7** | **+1.2** |
| M52A | | | | IAML | | 12 46 36.9 | |
| | comp=E,49nm,0.1s | | | | | | |
| **L48A** | **N Adams** | **1.24** | **284** | Pn | **Pg** | **12 46 24.2** | **+1.9** |
| **N49A** | **Columbus Grove** | **1.27** | **235** | Pn | **Pn** | **12 46 21.5** | **+0.3** |
| **ACSO** | **Alum Creek Sta** | **1.44** | **185** | Pn | **Pb** | **12 46 25.0** | **+0.5** |
| ACSO | | | | IAML | | 12 46 44.5 | |
| | comp=E,82nm,0.2s | | | | | | |
| **M53A** | **WI Miller and** | **1.62** | **97** | Pn | **Pg** | **12 46 28.9** | **-0.5** |
| M53A | | | | IAML | | 12 46 54.6 | |
| | comp=N,38nm,0.5s | | | | | | |
| M53A | | | | IAML | | 12 46 56.3 | |
| | comp=E,37nm,0.5s | | | | | | |
| **O52A** | **Adamsville** | **1.71** | **154** | Pn | **Pg** | **12 46 30.4** | **-0.8** |
| O52A | | | | IAML | | 12 47 20.1 | |
| | comp=N,40nm,4.3s | | | | | | |
| **N53A** | **Lisbon** | **1.72** | **119** | Pn | **Pg** | **12 46 31.4** | **+0.1** |
| N53A | | | | IAML | | 12 47 16.0 | |
| | comp=N,25nm,4.3s | | | | | | |
| N53A | | | | IAML | | 12 47 21.1 | |
| | comp=E,31nm,5.0s | | | | | | |
| **O53A** | **New Philadelph** | **1.86** | **139** | Pn | **Pg** | **12 46 32.8** | **-1.2** |
| O53A | | | | IAML | | 12 47 05.2 | |
| | comp=E,28nm,4.3s | | | | | | |
| O53A | | | | IAML | | 12 47 13.1 | |
| | comp=N,35nm,4.0s | | | | | | |
| **O49A** | **Covington** | **1.87** | **219** | Pn | **Pg** | **12 46 34.0** | **-0.2** |
| O49A | | | | IAML | | 12 46 56.2 | |
| | comp=N,27nm,4.5s | | | | | | |
| O49A | | | | IAML | | 12 47 02.2 | |
| | comp=

| | | | | | |
|---|---|---|---|---|---|
| BMRO | | | Trac | | 12 47 37.8 |
| | comp=N,17nm,0.5s | | | | |
| BMRO | | | LG | Lg | 12 47 40.9 |

*EAF **07** 12:55:33.3±2.0,26°.15S×29°.48E, h30km±19km, MD3.7*
**BUL 07 12:55:33.3±1.2, 26°.16S×29°.45E, h29km±12km, MD3.9, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.46** | **94** | *eP* | Pn | 12 56 10.6 | -0.9 |
| CNG | | | | *eS* | Sn | 12 56 39.8 | -1.0 |
| **CNG** | **Changalane** | **2.46** | **94** | *eP* | Pn | 12 56 10.6 | -0.9 |
| CNG | | | | *eS* | Sn | 12 56 39.8 | -1.0 |
| **MOPA** | **Mopani** | **3.17** | **34** | *eP* | Pn | 12 56 19.7 | -1.6 |
| MOPA | | | | *eS* | Sn | 12 56 53.6 | -4.7 |
| **MOPA** | **Mopani** | **3.17** | **34** | *eP* | Pn | 12 56 19.7 | -1.6 |
| MOPA | | | | *eS* | Sn | 12 56 53.6 | -4.7 |
| **LBTB** | **Lobatse** | **3.66** | **287** | *eP* | Pn | 12 56 27.9 | -0.2 |
| LBTB | | | | *eS* | Sn | 12 57 07.9 | -2.5 |
| **LBTB** | **Lobatse** | **3.66** | **287** | *eP* | Pn | 12 56 27.9 | -0.2 |
| LBTB | | | | *eS* | Sn | 12 57 07.9 | -2.5 |
| **MSNA** | **Messina** | **3.83** | **8** | *eP* | Pn | 12 56 30.9 | +0.4 |
| MSNA | | | | *eS* | Sn | 12 57 11.5 | -3.2 |
| **MSNA** | **Messina** | **3.83** | **8** | *eP* | Pn | 12 56 30.9 | +0.4 |
| MSNA | | | | *eS* | Sn | 12 57 11.5 | -3.2 |
| **BOSA** | **Boshof** | **4.46** | **236** | *eP* | Pn | 12 56 38.0 | -1.0 |
| BOSA | | | | *eS* | Sn | 12 57 27.3 | -2.8 |
| **BOSA** | **Boshof** | **4.46** | **236** | *eP* | Pn | 12 56 38.0 | -1.0 |
| BOSA | | | | *eS* | Sn | 12 57 27.3 | -2.8 |
| **MATP** | **Matopo** | **5.78** | **351** | *eP* | Pn | 12 56 57.5 | +0.2 |
| MATP | | | | *eS* | Sn | 12 57 57.4 | -5.2 |
| **MATP** | **Matopo** | **5.78** | **351** | *eP* | Pn | 12 56 57.5 | +0.2 |
| MATP | | | | *eS* | Sn | 12 57 57.4 | -5.2 |
| **BLWY** | **Bulawayo** | **6.04** | **352** | *eP* | Pn | 12 57 00.9 | 0.0 |
| BLWY | | | | *eS* | Sn | 12 58 03.1 | -6.2 |
| **BLWY** | **Bulawayo** | **6.04** | **352** | *eP* | Pn | 12 57 00.9 | 0.0 |
| BLWY | | | | *eS* | Sn | 12 58 03.1 | -6.2 |

**IDC 07 13:14:33.7±2.1, 5°.29S×127°.14E, h0km, mb3.3/1, mb1 3.3/3, mb1mx3.1/47, mbtmp3.1/3, ML3.1/2, MS3.0/1, Ms1 3.0/1, ms1mx2.3/27, Error ellipse: s-maj=193.4km s-min=30.1km az=65.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **16.17** | **155** | Pn | P | 13 18 24.4 | -1.4 |
| | 0.1nm,0.3s,baz=334,slow=11,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.40** | **161** | P | P | 13 19 00.8 | -0.8 |
| | 0.1nm,0.3s,baz=343,slow=12,SNR=6.4 | | | | | | |
| **ASAJ** | **Asahikawa** | **51.11** | **14** | LR | LR | 13 46 22.4 | |
| | comp=Z,16nm,19.3s,baz=69,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.25** | **328** | P | P | 13 25 17.3 | 0.0 |
| | 0.1nm,0.4s,baz=114,slow=8.5,SNR=5.2 | | | | | | |

**IDC 07 13:28:15.9±2.2, 2°.15N×126°.24E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.3/29, mbtmp3.3/3, MS2.1/1, Ms1 2.1/1, ms1mx1.9/32, Error ellipse: s-maj=195.5km s-min=25.4km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.85** | **121** | LR | LR | 13 31 40.9 | |
| | comp=Z,18nm,21.3s,baz=142,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.35** | **160** | P | P | 13 33 25.8 | -0.4 |
| | 0.6nm,0.3s,baz=339,slow=11,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **26.72** | **164** | P | P | 13 33 57.6 | +0.3 |
| | 0.1nm,0.3s,baz=345,slow=8.0,SNR=8.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.58** | **326** | P | P | 13 38 14.5 | -0.1 |
| | 0.1nm,0.5s,baz=114,slow=6.7,SNR=5.5 | | | | | | |

*BGR **07** 14:04:24.8±0.0, 18°.43S×173°.83W, h33km*
*IDC **07** 14:05:30.9±1.5, 18°.13S×178°.24W, h616km±17km, mb3.3/17, mb1 3.5/19, mb1mx3.3/37, mbtmp4.2/19, Error ellipse: s-maj=19.9km s-min=14.0km az=147.0*
*NEIC **07** 14:05:30.4±1.3, 18°.15±0°.1×178°.1W±0°.1, h620km±7km, mb4.3/90, Error ellipse: s-maj=18.4km s-min=16.6km az=132.0*
*NOU **07** 14:05:33.3, 18°.31S×178°.49W, h608km, mb4.2/39, Fiji Islands Region*
**ISC 07 14:05:29.7±0.5, 18°.00S±0°.09×178°.24W±0°.08, h600km±11, n227, σ1§09/226, mb4.3/60, 12C-4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LKBA** | **Tubou, Lakemba** | **0.60** | **247** | P | P | 14 06 44.0 | +3.8 |
| **TAVE** | **Taveuni** | **2.05** | **309** | P | P | 14 06 48.3 | +4.1 |
| **DGTI** | **Dogotuki** | **2.57** | **311** | P | P | 14 06 50.6 | +3.4 |
| **MSVF** | **Nonsavu** | **3.55** | **274** | P | P | 14 06 55.5 | +3.3 |
| | 3.8nm,0.3s,baz=136,slow=3.2,SNR=60 | | | | | | |
| **MSVF** | **Nonsavu** | **3.55** | **274** | P | P | 14 06 56.0 | +3.7 |
| **MSVF** | **Nonsavu** | **3.55** | **274** | P | P | 14 06 56.4 | +4.2 |
| **AFI** | **Afiamalu** | **7.42** | **58** | P | P | 14 07 25.3 | +1.6 |
| **NIUE** | **Niue** | **7.96** | **99** | P | P | 14 07 35.3 | +6.7 |
| **FUNA** | **Funafuti** | **9.74** | **345** | P | P | 14 07 52.3 | +6.3 |
| **RTV** | **Rentapao** | **12.70** | **269** | P | P | 14 08 17.3 | +1.8 |
| **DVP** | **Devils Point** | **12.93** | **269** | P | P | 14 08 19.9 | +2.1 |
| **MARNC** | **Mare, Loyalty** | **13.39** | **253** | P | P | 14 08 21.5 | -0.9 |
| **MARNC** | **Mare, Loyalty** | **13.39** | **253** | P | P | 14 08 22.3 | -0.1 |
| **LIFNC** | **LIFOU** | **13.98** | **256** | P | P | 14 08 27.3 | -1.1 |
| **LIFNC** | **LIFOU** | **13.98** | **256** | P | P | 14 08 27.9 | -0.5 |
| **SANVU** | **Saraoutou** | **14.18** | **278** | P | P | 14 08 29.4 | -1.0 |
| **PINNC** | **Pines Island,** | **14.19** | **249** | P | P | 14 08 28.6 | -1.8 |
| **YATNC** | **Mamie plateau,** | **14.55** | **251** | P | P | 14 08 33.7 | -0.1 |
| **OUENC** | **Ouen Island, N** | **14.68** | **250** | P | P | 14 08 34.3 | -0.6 |
| **OUENC** | **Ouen Island, N** | **14.68** | **250** | P | P | 14 08 35.4 | +0.5 |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | P | 14 08 37.8 | +0.3 |
| | 0.9nm,0.3s,baz=141,slow=19,SNR=10 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | P | 14 08 36.9 | -0.7 |
| DZM | | | | IAmb | IAmb | 14 08 56.2 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | P | 14 08 38.5 | +0.9 |
| **ONTNC** | **Ouen Toro** | **15.00** | **251** | P | P | 14 08 38.7 | +0.8 |
| ONTNC | | | | IAmb | IAmb | 14 08 40.4 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.70** | **258** | P | P | 14 08 52.9 | -0.6 |
| **OUZ** | **Omahuta** | **18.63** | **201** | P | P | 14 09 10.8 | 0.0 |
| **URZ** | **Urewera** | **20.59** | **190** | P | P | 14 09 27.1 | -1.5 |
| | comp=Z,3.8nm,0.6s,baz=190,slow=1.4,SNR=6.3 | | | | | | |
| **URZ** | **Urewera** | **20.59** | **190** | P | P | 14 09 27.0 | -1.5 |
| **URZ** | **Urewera** | **20.59** | **190** | P | P | 14 09 27.7 | -0.9 |
| | comp=Z,70nm,2.2s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.59** | **191** | P | P | 14 09 35.0 | -2.6 |
| BKZ | | | | IAmb | IAmb | 14 09 42.3 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.59** | **191** | P | P | 14 09 36.3 | -1.2 |
| **SNZO** | **South Karori** | **24.01** | **193** | P | P | 14 09 57.9 | -1.0 |
| **BHW** | **Baring Head** | **24.07** | **193** | P | P | 14 09 58.3 | -1.2 |
| **QRZ** | **Quartz Range** | **24.10** | **197** | P | P | 14 10 00.4 | +0.7 |
| **QRZ** | **Quartz Range** | **24.10** | **197** | P | P | 14 10 00.7 | +0.9 |
| **PLWZ** | **Palliser** | **24.15** | **192** | P | P | 14 09 58.9 | -1.3 |
| **NNZ** | **Nelson** | **24.24** | **196** | P | P | 14 09 59.7 | -1.2 |
| NNZ | | | | IAmb | IAmb | 14 10 18.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **TUWZ** | **Tuamarina** | **24.30** | **194** | P | P | 14 10 00.0 | -1.5 |
| **THZ** | **Tophouse** | **24.87** | **196** | P | P | 14 10 05.5 | -1.1 |
| THZ | | | | IAmb | IAmb | 14 10 33.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **KHZ** | **Kahutara** | **25.33** | **194** | P | P | 14 10 09.7 | -0.8 |
| **LTZ** | **Lake Taylor** | **25.99** | **196** | P | P | 14 10 14.9 | -1.5 |
| **RPZ** | **Rata Peaks** | **27.19** | **197** | P | P | 14 10 26.6 | -0.3 |
| **LBZ** | **Lake Benmore** | **28.05** | **198** | P | P | 14 10 32.5 | -1.9 |
| LBZ | | | | IAmb | IAmb | 14 10 37.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **ODZ** | **Otahua Downs** | **28.53** | **197** | P | P | 14 10 37.8 | -0.7 |
| **WHZ** | **Wether Hill Ro** | **30.09** | **199** | P | P | 14 10 51.8 | -0.2 |
| WHZ | | | | IAmb | IAmb | 14 11 04.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **CNB** | **Canberra Magne** | **33.50** | **233** | P | P | 14 11 22.7 | +1.6 |
| | baz=34,SNR=28 | | | | | | |
| **CNB** | **Canberra Magne** | **33.50** | **233** | P | P | 14 11 22.6 | +1.4 |
| **CTA** | **Charters Tower** | **33.59** | **261** | P | P | 14 11 22.2 | +0.2 |
| | comp=Z,1.5nm,0.6s,baz=105,slow=11,SNR=1.9 | | | | | | |
| **CTAO** | **Charters Tower** | **33.59** | **261** | P | P | 14 11 22.4 | +0.3 |
| CTAO | | | | IAmb | IAmb | 14 11 27.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **33.78** | **233** | P | P | 14 11 23.2 | -0.2 |
| CAN | | | | IAmb | IAmb | 14 11 50.8 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **33.78** | **233** | P | P | 14 11 24.7 | +1.3 |
| **CMSA** | **Cobar Meteorol** | **35.25** | **241** | P | P | 14 11 36.7 | +1.1 |
| | baz=35,SNR=9.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.25** | **241** | P | P | 14 11 36.6 | +1.0 |
| **INKA** | **Innaminka** | **38.87** | **248** | P | P | 14 12 06.8 | +1.6 |
| **MCQ** | **Macquarie Isla** | **40.43** | **200** | P | P | 14 12 18.1 | +0.9 |
| | comp=Z,100nm,2.1s | | | | | | |
| **LCRK** | **Leigh Creek** | **41.37** | **244** | P | P | 14 12 26.1 | +1.1 |
| **JAY** | **Jayapura** | **43.09** | **286** | P | P | 14 12 39.7 | +0.9 |
| | comp=Z,7.7nm,0.5s,baz=151,slow=5.5,SNR=6.3 | | | | | | |
| **OOD** | **Oodnadatta** | **43.34** | **248** | P | P | 14 12 41.9 | +1.5 |
| **BBOO** | **Buckleboo** | **43.51** | **241** | P | P | 14 12 42.4 | +0.7 |
| **WR0** | **Warramunga Arr** | **44.59** | **260** | P | P | 14 12 49.9 | -0.3 |
| **WB0** | **Warramunga Arr** | **44.74** | **260** | P | P | 14 12 50.8 | -0.6 |
| **WB2** | **Warramunga Arr** | **44.77** | **260** | P | P | 14 12 51.1 | -0.5 |
| **WRAB** | **Tennant Creek** | **44.77** | **260** | P | P | 14 12 51.0 | -0.6 |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | P | 14 12 51.2 | -0.5 |
| | comp=Z,1.5nm,0.5s,baz=92,slow=7.3,SNR=56 | | | | | | |
| WRA | | | | PcP | PcP | 14 14 20.4 | -0.1 |
| | comp=Z,0.5nm,0.3s,baz=90,slow=3.8,SNR=9.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | P | 14 12 50.8 | -0.9 |
| **MULG** | **Mulgathing** | **44.92** | **245** | P | P | 14 12 53.0 | +0.4 |
| **AS31** | **Alice Springs** | **44.92** | **254** | P | P | 14 12 52.6 | -0.2 |
| **ASAR** | **Alice Springs** | **44.93** | **254** | P | P | 14 12 53.0 | +0.2 |
| | comp=Z,4.4nm,0.6s,baz=88,slow=8.4,SNR=140 | | | | | | |
| ASAR | | | | PcP | PcP | 14 14 20.7 | -0.3 |
| | comp=Z,1.7nm,0.5s,baz=104,slow=3.8,SNR=17 | | | | | | |
| ASAR | | | | S | S | 14 18 45.5 | -3.0 |
| | comp=Z,1.4nm,0.9s,baz=87,slow=15,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **44.93** | **254** | P | P | 14 12 52.1 | -0.6 |
| **KDU** | **Kakadu** | **47.72** | **269** | P | P | 14 13 13.9 | +0.1 |
| | baz=48,SNR=7.7 | | | | | | |
| **KDU** | **Kakadu** | **47.72** | **269** | P | P | 14 13 14.0 | +0.1 |
| **MTN** | **Manton Dam** | **48.96** | **268** | P | P | 14 13 22.8 | -0.3 |
| | baz=49,SNR=4.6 | | | | | | |
| **MTN** | **Manton Dam** | **48.96** | **268** | P | P | 14 13 22.9 | -0.2 |
| **DRS** | **Darwin Rock St** | **49.27** | **269** | P | P | 14 13 25.1 | -0.2 |
| **WRKA** | **Warakurna** | **49.97** | **252** | P | P | 14 13 30.5 | +0.1 |
| | baz=50,SNR=12 | | | | | | |
| **WRKA** | **Warakurna** | **49.97** | **252** | P | P | 14 13 30.6 | +0.1 |
| **KNRA** | **Kununurra** | **50.64** | **264** | P | P | 14 13 35.1 | -0.2 |
| | baz=51,SNR=7.4 | | | | | | |
| **KNRA** | **Kununurra** | **50.64** | **264** | P | P | 14 13 35.2 | -0.2 |
| **FAKI** | **Fak Fak** | **50.76** | **281** | P | P | 14 13 36.3 | +0.1 |
| FAKI | | | | IAmb | IAmb | 14 13 53.1 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **SIJI** | **Sorong** | **52.42** | **283** | P | P | 14 13 48.6 | +0.5 |
| | comp=Z,12nm,0.4s,baz=154,slow=22,SNR=6.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.18** | **261** | P | P | 14 13 52.9 | -0.6 |
| | comp=Z,1.6nm,0.6s,baz=55,slow=8.6,SNR=8.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.18** | **261** | P | P | 14 13 53.7 | +0.3 |
| | baz=53,SNR=5.3 | | | | | | |
| **SOEI** | **Soe** | **56.24** | **270** | P | P | 14 14 14.4 | -0.6 |
| SOEI | | | | IAmb | IAmb | 14 14 20.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.05** | **255** | P | P | 14 14 26.6 | -0.4 |
| **MBWA** | **Marble Bar** | **58.21** | **256** | P | P | 14 14 27.5 | -0.6 |
| **TOLI2** | **Tolitoli** | **62.89** | **281** | P | P | 14 14 59.2 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **66.20** | **269** | P | P | 14 15 18.2 | -1.6 |
| JAGI | | | | IAmb | IAmb | 14 15 18.9 | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **JMM** | **Marumori** | **67.61** | **326** | P | P | 14 15 27.6 | -0.2 |
| **MJAR** | **Matsushiro Arr** | **68.08** | **323** | P | P | 14 15 30.6 | -0.1 |
| | comp=Z,3.3nm,0.6s,baz=163,slow=5.5,SNR=10 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.08** | **323** | P | P | 14 15 30.2 | -0.5 |
| **MAJO** | **Matsushiro** | **68.08** | **323** | P | P | 14 15 30.7 | -0.1 |
| MAJO | | | | IAmb | IAmb | 14 15 31.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.08** | **323** | P | P | 14 15 30.8 | -0.1 |
| MJB9 | | | | IAmb | IAmb | 14 15 31.5 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **JWT** | **Wachi** | **68.86** | **321** | P | P | 14 15 35.2 | -0.2 |
| **UGM** | **Wanagama** | **69.81** | **268** | P | P | 14 15 41.3 | -0.4 |
| **JHS** | **Saijyo** | **70.07** | **319** | P | P | 14 15 43.4 | +0.7 |
| **JNU** | **Nakatsue** | **70.32** | **316** | P | P | 14 15 44.4 | +0.1 |
| JNU | | | | IAmb | IAmb | 14 15 59.5 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **TWG** | **Pinlang** | **71.86** | **302** | P | P | 14 15 52.2 | -1.2 |
| **YULB** | **Yu-li** | **71.95** | **303** | P | P | 14 15 52.9 | -1.1 |
| YULB | | | | IAmb | IAmb | 14 16 04.5 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | P | 14 15 54.6 | +0.6 |
| **SSLB** | **Suanglung** | **72.42** | **303** | P | P | 14 15 55.2 | -1.5 |
| SSLB | | | | IAmb | IAmb | 14 16 08.7 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **72.45** | **302** | P | P | 14 15 55.2 | -1.6 |
| **KSM** | **Kuching** | **72.86** | **277** | P | P | 14 15 59.7 | +0.3 |
| **PEA0B** | **Petropavlovsk-** | **73.81** | **345** | P | P | 14 16 04.3 | +0.5 |
| **PETK** | **Petropavlovsk-** | **73.81** | **345** | P | P | 14 16 03.9 | 0.0 |
| | comp=Z,2.7nm,0.7s,baz=118,slow=6.8,SNR=12 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.81** | **345** | P | P | 14 16 03.6 | -0.3 |
| **KSRS** | **Korea Array** | **74.88** | **318** | P | P | 14 16 11.2 | +0.9 |
| | comp=Z,0.6nm,0.6s,baz=120,slow=5.7,SNR=4.3 | | | | | | |
| **HKPS** | **Hong Kong Po S** | **77.30** | **299** | P | P | 14 16 23.8 | -0.1 |
| **YBH** | **Yreka Blue Hor** | **78.49** | **39** | P | P | 14 16 31.6 | +1.6 |
| **NVAR** | **Mina Array Bea** | **79.37** | **44** | P | P | 14 16 35.5 | +0.6 |
| | comp=Z,0.4nm,0.7s,baz=231,slow=8.9,SNR=4.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.37** | **44** | P | P | 14 16 33.8 | -1.1 |
| **MOD** | **Modoc Plateau** | **80.05** | **40** | P | P | 14 16 38.7 | +0.5 |
| **G03D** | **McMinnville, O** | **80.28** | **36** | P | P | 14 16 40.0 | +0.9 |
| **O19K** | **Port Alsworth** | **80.30** | **12** | P | P | 14 16 38.7 | -0.1 |
| O19K | | | | IAmb | IAmb | 14 16 43.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **ILSW** | **Iliamna Southw** | **80.34** | **12** | P | P | 14 16 38.9 | -0.4 |
| **H04A** | **Detroit Lake** | **80.56** | **37** | P | P | 14 16 40.9 | +0.2 |
| H04A | | | | IAmb | IAmb | 14 17 04.0 | |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **BRLK** | **Bradley Lake** | **80.62** | **14** | P | P | 14 16 40.0 | -0.6 |
| **WVOR** | **Wild Horse Val** | **81.37** | **40** | P | P | 14 16 45.8 | +0.8 |
| **GAMB** | **Gambell** | **81.67** | **3** | P | P | 14 16 46.2 | +0.5 |
| GAMB | | | | IAmb | IAmb | 14 16 59.6 | |
| | comp=Z,8.5nm,1.5s | | | | | | |
| **I07A** | **Izee** | **81.77** | **38** | P | P | 14 16 48.2 | +1.2 |
| **L19K** | **White Mountain** | **82.03** | **11** | P | P | 14 16 48.2 | +0.4 |
| **PWL** | **Port Wells** | **82.18** | **14** | P | P | 14 16 47.8 | -0.7 |
| **GLI** | **Glacier Island** | **82.50** | **15** | P | P | 14 16 49.6 | -0.5 |
| **IPM** | **Ipoh** | **82.60** | **277** | P | P | 14 16 50.9 | -0.8 |
| **KNK** | **Knik Glacier** | **82.64** | **14** | P | P | 14 16 50.4 | -0.5 |
| **PMR** | **Palmer** | **82.65** | **14** | P | P | 14 16 50.4 | -0.4 |
| **GHO** | **Glory Hole Cre** | **82.86** | **14** | P | P | 14 16 51.4 | -0.5 |
| GHO | | | | IAmb | IAmb | 14 17 10.4 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **CUT** | **Chulitna** | **83.13** | **13** | P | P | 14 16 52.7 | -0.5 |
| **PPLA** | **Purkeypile** | **83.19** | **12** | P | P | 14 16 52.8 | -0.9 |
| PPLA | | | | IAmb | IAmb | 14 17 01.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BMRM** | **Bremner River** | **83.20** | **16** | P | P | 14 16 53.2 | -0.4 |
| BMRM | | | | IAmb | IAmb | 14 16 56.2 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **K20K** | **Telida** | **83.26** | **11** | P | P | 14 16 53.9 | 0.0 |
| K20K | | | | IAmb | IAmb | 14 16 54.3 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.27** | **14** | P | P | 14 16 53.6 | -0.5 |
| **CAST** | **Castle Rocks** | **83.68** | **12** | P | P | 14 16 54.5 | -1.5 |
| CAST | | | | IAmb | IAmb | 14 16 55.3 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **TABL** | **Table Mountain** | **83.70** | **18** | P | P | 14 16 55.9 | -0.5 |
| **VRDI** | **Verde Repeater** | **83.72** | **16** | P | P | 14 16 55.1 | -1.3 |
| VRDI | | | | IAmb | IAmb | 14 17 15.3 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.74** | **15** | P | P | 14 16 56.3 | -0.1 |
| N25K | | | | IAmb | IAmb | 14 17 13.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.81** | **16** | P | P | 14 16 56.4 | -0.3 |
| GLB | | | | IAmb | IAmb | 14 16 56.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **J20K** | **Nowinta River** | **84.00** | **10** | P | P | 14 16 57.4 | -0.1 |
| J20K | | | | IAmb | IAmb | 14 17 06.4 | |
| | comp=Z,5.4nm,1.4s | | | | | | |
| **KTH** | **Kantishna Hill** | **84.03** | **12** | P | P | 14 16 56.5 | -1.3 |
| KTH | | | | IAmb | IAmb | 14 16 58.8 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **TRF** | **Thorofare Moun** | **84.06** | **12** | P | P | 14 16 57.2 | -0.9 |
| TRF | | | | IAmb | IAmb | 14 16 59.1 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **BARN** | **Barnard Glacie** | **84.06** | **17** | P | P | 14 16 58.6 | +0.4 |
| BARN | | | | IAmb | IAmb | 14 17 01.9 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **84.32** | **13** | P | P | 14 16 58.8 | -0.4 |
| RND | | | | IAmb | IAmb | 14 16 59.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **MCK** | **McKinley** | **84.59** | **13** | P | P | 14 16 59.6 | -0.8 |
| MCK | | | | IAmb | IAmb | 14 17 06.0 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.08** | **16** | P | P | 14 17 03.3 | +0.3 |
| M27K | | | | IAmb | IAmb | 14 17 08.0 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **I21K** | **Tanana** | **85.30** | **11** | P | P | 14 17 03.2 | -0.6 |
| **NEA2** | **Nenana** | **85.33** | **12** | P | P | 14 17 03.4 | -0.5 |
| NEA2 | | | | IAmb | IAmb | 14 17 04.7 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **MLY** | **Manley** | **85.40** | **11** | P | P | 14 17 03.2 | -1.1 |
| **WRH** | **Wood River Hil** | **85.42** | **13** | P | P | 14 17 03.4 | -0.9 |
| **H21K** | **Melozitna Rive** | **85.60** | **10** | P | P | 14 17 04.5 | -0.7 |
| H21K | | | | IAmb | IAmb | 14 17 19.8 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **85.61** | **13** | P | P | 14 17 04.8 | -0.5 |
| HDA | | | | IAmb | IAmb | 14 17 06.2 | |
| | comp=Z,3.2nm,0.4s | | | | | | |
| **DOT** | **Dot Lake** | **85.61** | **15** | P | P | 14 17 05.0 | -0.4 |
| **CCB** | **Clear Creek Bu** | **85.63** | **13** | P | P | 14 17 04.3 | -1.1 |
| CCB | | | | IAmb | IAmb | 14 17 05.5 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **BCAR** | **Beaver Creek A** | **85.69** | **16** | P | P | 14 17 05.1 | -0.6 |
| **IMAR** | **Indian Mountai** | **85.74** | **10** | P | P | 14 17 05.6 | -0.2 |
| **MDM** | **Murphy Dome** | **85.82** | **12** | P | P | 14 17 05.1 | -1.2 |
| MDM | | | | IAmb | IAmb | 14 17 28.4 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | P | 14 17 09.3 | +1.7 |
| | comp=Z,0.9nm,0.8s,baz=222,slow=5.7,SNR=10 | | | | | | |
| **IL31** | | **85.94** | **13** | P | P | 14 17 05.7 | -1.0 |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | P | 14 17 06.2 | -0.7 |
| | comp=Z,1.0nm,0.4s,baz=220,slow=4.8,SNR=22 | | | | | | |
| **J25K** | **Salcha River,** | **86.13** | **14** | P | P | 14 17 07.7 | -0.1 |
| J25K | | | | IAmb | IAmb | 14 17 36.1 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **J26L** | **Joseph Creek** | **86.45** | **14** | P | P | 14 17 09.3 | -0.1 |
| J26L | | | | IAmb | IAmb | 14 17 10.4 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **86.87** | **13** | P | P | 14 17 10.4 | -0.9 |
| **DAWY** | **Dawson** | **87.13** | **16** | P | P | 14 17 12.6 | +0.1 |
| DAWY | | | | IAmb | IAmb | 14 17 37.3 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **BW06** | **Boulder Array** | **87.30** | **43** | P | P | 14 17 14.3 | +0.2 |
| BW06 | | | | IAmb | IAmb | 14 17 24.0 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.30** | **43** | P | P | 14 17 14.7 | +0.6 |
| | comp=Z,0.6nm,0.6s,baz=212,slow=4.2,SNR=7.1 | | | | | | |
| **COLD** | **Coldfoot** | **87.47** | **11** | P | P | 14 17 13.5 | -0.5 |
| COLD | | | | IAmb | IAmb | 14 17 39.4 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **FYU** | **Fort Yukon** | **87.84** | **13** | P | P | 14 17 14.9 | -0.8 |
| FYU | | | | IAmb | IAmb | 14 17 34.7 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.71** | **12** | P | P | 14 17 20.1 | +0.3 |
| **CMAR** | **Chiang Mai Arr** | **89.07** | **290** | P | P | 14 17 23.0 | +0.5 |
| | comp=Z,1.2nm,0.8s,baz=119,slow=2.7,SNR=7.0 | | | | | | |
| **SONM** | **Songino Array** | **93.72** | **319** | P | P | 14 17 43.7 | +0.2 |
| | comp=Z,0.2nm,0.6s,baz=101,slow=4.6,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.34** | **25** | P | P | 14 17 45.5 | -0.2 |
| | comp=Z,0.2nm,0.5s,baz=239,slow=4.4,SNR=8.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.34** | **25** | P | P | 14 17 44.5 | -1.2 |
| **MKAR** | **Makanchi Array** | **109.31** | **314** | PKiKP | **PKiKP** | 14 22 51.4 | -1.2 |
| | comp=Z,0.4nm,0.5s,baz=187,slow=0.8,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **109.31** | **314** | | **PKiKP** | 14 22 51.0 | -1.6 |
| **KURK** | **Kurchatov** | **112.00** | **318** | | **PKiKP** | 14 22 56.3 | -1.2 |
| **KURBB** | **Kurchatov Arra** | **112.06** | **318** | PKiKP | **PKiKP** | 14 22 56.3 | -1.3 |
| | comp=Z,0.2nm,0.2s,baz=86,slow=1.8,SNR=5.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.02** | **321** | PKP | **PKPdf** | 14 23 06.3 | -0.9 |
| | comp=Z,0.9nm,0.5s,baz=132,slow=6.4,SNR=9.2 | | | | | | |
| **ARU** | **Arti** | **123.02** | **326** | PKP | **PKPdf** | 14 23 17.1 | -1.4 |
| | comp=Z,0.8nm,0.6s,baz=182,slow=5.5,SNR=3.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.43** | **350** | PKP | **PKPdf** | 14 23 23.5 | -1.2 |
| | comp=Z,2.1nm,0.8s,baz=48,slow=1.7,SNR=8.1 | | | | | | |
| **FINES** | **FINESS Array B** | **133.32** | **344** | PKP | **PKPdf** | 14 23 36.4 | -1.6 |
| | comp=Z,1.8nm,0.9s,baz=108,slow=4.2,SNR=4.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.72** | **332** | PKP | **PKPdf** | 14 23 52.5 | +0.6 |
| | comp=Z,0.3nm,0.3s,baz=35,slow=2.9,SNR=4.4 | | | | | | |
| **SORM** | **Soroca** | **142.95** | **330** | ⇑P | **PKPdf** | 14 23 53.5 | -2.4 |
| **BSEG** | **Bad Segeberg** | **143.53** | **351** | *e*PKPbc | **PKPdf** | 14 23 

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **2.25** | **209** | Pn | **Pn** | **14 17 38.3** | **+0.2** |
| **CHGR** | **Chuyangaron** | **2.33** | **336** | Pn | **Pn** | **14 17 39.1** | **+0.4** |
| **GAR** | **Garm** | **2.47** | **359** | Pn | **Pn** | **14 17 40.9** | **+0.6** |
| **CEP** | **Cherat** | **2.98** | **154** | P | **Pn** | **14 17 46.7** | **+0.4** |
| CEP | | | | S | **S** | **14 18 24.0** | **-0.6** |
| **CHCP** | **Chirah Chowk** | **3.73** | **139** | P | **Pn** | **14 17 55.7** | **+0.6** |
| **NIL** | **Nilore** | **3.73** | **140** | Pn | **Pn** | **14 17 55.7** | **+0.6** |
| **THW** | **Thamme Wali** | **3.90** | **162** | P | **Pn** | **14 17 57.2** | **0.0** |
| **TAS** | **Tashkent** | **4.86** | **351** | Pn | **Pn** | **14 18 10.3** | **+1.2** |
| **KSH** | **Kashi** | **5.35** | **54** | P | **Pn** | **14 18 11.3** | **-4.1** |
| KSH | | | | S | S | 14 19 07.4 | -10 |
| KSH | comp=N,54nm,0.6s | | | smax | smax | | |
| KSH | comp=E,32nm,0.5s | | | smax | smax | | |
| **AML** | **Almayashu** SNR=73 | **6.17** | **24** | P | **Pn** | **14 18 26.6** | **+0.4** |
| **UCH** | **Uchtor** SNR=16 | **6.54** | **28** | P | **Pn** | **14 18 31.5** | **+0.5** |
| **KKAR** | **Karatay Array** | **6.57** | **1** | | **Pn** | **14 18 31.1** | **+0.1** |
| **KK08** | **Karatay Array** 0.3nm,0.2s | **6.57** | **1** | ⇑P | **Pn** | **14 18 32.2** | **+1.1** |
| KK08 | 4.2nm,0.5s | | | ⇑S | S | 14 19 35.4 | -11 |
| **EKS2** | **Erkin-Say** SNR=5.8 | **6.67** | **22** | P | **Pn** | **14 18 33.4** | **+0.9** |
| **AAK** | **Ala-Archa** 1.4nm,0.3s,baz=197,slow=8.4,SNR=22 | **6.89** | **26** | P | **Pn** | **14 18 36.0** | **+0.7** |
| AAK | 0.7nm,0.3s,baz=5.3,slow=20,SNR=5.1 | | | S | **S** | **14 19 51.5** | **-2.2** |
| **AAK** | **Ala-Archa** SNR=7.0 | **6.89** | **26** | P | **Pn** | **14 18 36.1** | **+0.7** |
| **AAK** | **Ala-Archa** 1.0nm,0.2s | **6.89** | **26** | ⇑P | **Pn** | **14 18 35.8** | **+0.6** |
| AAK | 9.5nm,0.7s | | | S | **S** | **14 19 51.5** | **-2.2** |
| **AAK** | **Ala-Archa** | **6.89** | **26** | Pn | **Pn** | **14 18 35.7** | **+0.4** |
| **TKM2** | **Tokmak 2** SNR=12 | **7.55** | **31** | P | **Pn** | **14 18 44.8** | **+0.8** |
| **TKM2** | **Tokmak 2** 5.4nm,0.5s | **7.55** | **31** | ⇑P | **Pn** | **14 18 44.3** | **+0.3** |
| TKM2 | 2.7nm,0.8s | | | ⇓S | **S** | **14 20 06.7** | **-2.8** |
| **GEYT** | **Alibeck** | **9.86** | **282** | Pn | **Pn** | **14 19 13.2** | **-0.6** |
| **MAKZ** | **Makanchi** | **13.44** | **37** | Pn | **Pn** | **14 19 58.9** | **-0.2** |
| **MK31** | **Makanchi Array** | **13.58** | **37** | Pn | **Pn** | **14 20 01.6** | **+0.8** |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=217,slow=13,SNR=11 | **13.58** | **37** | P | **Pn** | **14 20 02.0** | **+1.1** |
| **MKAR** | **Makanchi Array** | **13.58** | **37** | Pn | **Pn** | **14 20 00.8** | **0.0** |
| **PYUN** | **Piuthan** 6.4nm,0.3s | **13.59** | **125** | *eP* | **Pn** | **14 20 00.6** | **-0.7** |
| **DANN** | **Dangsing** 8.3nm,0.3s | **13.94** | **122** | *eP* | **Pn** | **14 20 05.9** | **+0.1** |
| **KOLN** | **Koldanda** 4.9nm,0.3s | **14.21** | **124** | *eP* | **Pn** | **14 20 08.0** | **-1.0** |
| **GKN** | **Gorkha** 8.8nm,0.3s | **14.76** | **121** | *eP* | **Pn** | **14 20 16.2** | **+0.4** |
| **AB31** | **Akbulak array** 0.4nm,0.3s,baz=148,slow=12,SNR=45 | **14.81** | **332** | P | **Pn** | **14 20 16.0** | **+0.1** |
| **ABKAR** | **Akbulak array** | **14.81** | **332** | | **Pn** | **14 20 16.1** | **+0.2** |
| **WMQ** | **Urumqi** | **15.11** | **56** | *eP* | **P** | **14 20 21.1** | **+0.9** |
| **KKN** | **Kakani** 7.8nm,0.4s | **15.34** | **120** | *eP* | **Pn** | **14 20 22.9** | **+0.1** |
| **PKIN** | **Phulchoki** 15nm,0.5s | **15.55** | **121** | *eP* | **Pn** | **14 20 25.6** | **+0.1** |
| **PKI** | **Pulchoki** 15nm,0.5s | **15.57** | **121** | *eP* | **P** | **14 20 25.0** | **-0.7** |
| **GUN** | **Gumba** 10nm,0.5s | **15.69** | **119** | *eP* | **P** | **14 20 27.1** | **+0.1** |
| **JIRN** | **Jiri** 23nm,0.4s | **16.06** | **119** | *eP* | **Pn** | **14 20 31.4** | **-0.2** |
| **AKTO** | **Aktyubinsk** 0.3nm,0.3s,baz=148,slow=13,SNR=8.9 | **16.50** | **331** | P | **Pn** | **14 20 38.1** | **+1.8** |
| **AKTO** | **Aktyubinsk** 2.2nm,0.6s | **16.50** | **331** | ⇑P | **Pn** | **14 20 37.1** | **+0.8** |
| **RAMN** | **Ramite** 19nm,0.4s | **16.78** | **120** | *eP* | **P** | **14 20 38.6** | **-0.3** |
| **TAPN** | **Taplejung** 3.0nm,0.3s | **17.32** | **117** | *eP* | **P** | **14 20 45.5** | **+0.6** |
| **ODAN** | **Odare** 7.9nm,0.5s | **17.39** | **119** | *eP* | **P** | **14 20 45.0** | **-0.6** |
| **ZALV** | **Zalesovo Beam** 0.7nm,0.4s,baz=217,slow=11,SNR=4.9 | **20.11** | **25** | P | **P** | **14 21 14.8** | **+0.4** |
| **PZH** | **PanZhiHua** | **28.46** | **102** | P | **P** | **14 22 35.8** | **+3.2** |
| PZH | comp=Z,10.0nm,1.0s | | | pmax | pmax | | |
| PZH | comp=Z,120nm,6.3s | | | pmax | pmax | | |
| **HHC** | **Hu-ho-hao-te** | **32.24** | **70** | *eP* | **P** | **14 23 07.0** | **+1.3** |
| **OJC** | **Ojcow** | **38.47** | **307** | P | **P** | **14 23 58.8** | **+0.4** |
| OJC | comp=Z,12nm,1.2s | | | IAmb | IAmb | 14 24 00.3 | |
| **NJ2** | **Nanjing** | **39.99** | **82** | *eP* | **P** | **14 24 11.2** | **0.0** |
| NJ2 | comp=Z,5.0nm,0.5s | | | pmax | pmax | | |
| **NAO01** | **NORSAR Array S** | **44.18** | **323** | P | **P** | **14 24 43.3** | **-1.4** |
| NAO01 | comp=Z,56nm,1.4s | | | IAmb | IAmb | 14 24 59.8 | |
| **KS19** | **Wonju Array Si** | **45.31** | **71** | P | **P** | **14 24 54.2** | **+0.3** |
| KS19 | comp=Z,18nm,1.5s | | | IAmb | IAmb | 14 25 16.1 | |
| **GSTR** | **Great Sitkin T** | **74.48** | **36** | P | **P** | **14 28 13.0** | **+0.8** |
| **WRA** | **Warramunga Arr** comp=Z,0.2nm,0.5s,baz=323,slow=4.8,SNR=1.9 | **82.45** | **121** | P | **P** | **14 28 54.8** | **-1.3** |
| **ASAR** | **Alice Springs** comp=Z,0.3nm,0.9s,baz=321,slow=5.2,SNR=5.1 | **84.70** | **124** | P | **P** | **14 29 06.0** | **-1.6** |

*IDC **07** 14:23:39.7±0.2,21°.37S×68°.08W,h112km±4km, mb3.3/3, mb1 3.4/5,mb1mx3.2/35,mbtmp3.7/5, Error ellipse: s-maj=11.3km s-min=2.4km az=131.0*

**ISC 07 14:23:38.8±0.9, 21°.34S±0°.09×68°.1W±0°.2, h100km, n7, σ1s56/8, mb3.4/3, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** 53nm,0.3s,baz=41,slow=12,SNR=47 | **1.49** | **212** | P | **Pn** | **14 24 06.1** | **+0.8** |
| LVC | 20nm,0.3s,baz=107,slow=23,SNR=23 | | | S | **Sn** | **14 24 26.6** | **+1.3** |
| **LPAZ** | **La Paz** 0.6nm,0.3s,baz=183,slow=6.1,SNR=6.8 | **5.03** | **359** | P | **Pn** | **14 24 54.1** | **+1.7** |
| **SIV** | **San Ignacio** 1.9nm,0.3s,baz=243,slow=12,SNR=51 | **8.50** | **52** | P | **Pn** | **14 25 40.4** | **+1.3** |
| **QSPA** | **South Pole Qui** 1.3nm,1.1s,baz=316,slow=2.0,SNR=6.6 | **68.85** | **180** | P | **P** | **14 34 32.1** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** 0.3nm,0.5s,baz=257,slow=4.2,SNR=4.2 | **76.56** | **70** | P | **P** | **14 35 18.3** | **-0.4** |
| **YKA** | **Yellowknife Ar** 0.1nm,0.4s,baz=131,slow=4.9,SNR=1.8 | **91.30** | **340** | P | **P** | **14 36 30.3** | **-2.3** |
| **MKAR** | **Makanchi Array** 0.4nm,0.6s,baz=321,slow=3.0,SNR=2.8 | **145.04** | **36** | PKPbc | **PKPbc** | **14 43 04.2** | **+0.2** |

**GUC 07 14:24:07.2±0.8, 21°.25S×69°.03W, h106km±5km, ML3.4, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.48** | **295** | *eP* | Pn | 14 24 24.2 | +0.6 |
| PB01 | | | | *i* S | Sn | 14 24 35.0 | -0.9 |
| **PB09** | **IPOC Station P** | **0.58** | **200** | *eP* | Pn | 14 24 24.5 | 0.0 |
| PB09 | | | | *eS* | Sn | 14 24 37.3 | -0.1 |
| PB09 | comp=E,1μm,0.4s | | | IAML | | 14 24 40.0 | |
| **PB02** | **IPOC Station P** | **0.81** | **265** | *eP* | Pn | 14 24 25.4 | -0.9 |
| PB02 | | | | *i* S | Sn | 14 24 39.9 | -0.8 |
| PB02 | comp=N,3μm,0.3s | | | IAML | | 14 24 41.0 | |
| **PB07** | **IPOC Station P** | **0.93** | **239** | *eP* | Pn | 14 24 27.3 | -0.3 |
| PB07 | | | | *eS* | Sn | 14 24 42.3 | -0.6 |
| PB07 | comp=E,927nm,0.3s | | | IAML | | 14 24 48.5 | |
| **PB03** | **IPOC Station P** | **1.04** | **220** | *eP* | Pn | 14 24 28.2 | -0.5 |
| PB03 | | | | *eS* | Sn | 14 24 44.6 | -0.3 |
| PB03 | comp=E,1μm,0.2s | | | IAML | | 14 24 47.4 | |
| **PB08** | **IPOC Station P** | **1.11** | **354** | *eP* | Pn | 14 24 29.3 | -0.4 |
| PB08 | | | | *i* S | Sn | 14 24 47.2 | +0.6 |
| PB08 | comp=N,589nm,0.1s | | | IAML | | 14 24 49.6 | |
| **PATCX** | **Punta Patache** | **1.14** | **292** | *eP* | Pn | 14 24 28.6 | -1.0 |
| PATCX | | | | *eS* | Sn | 14 24 45.8 | -0.8 |
| PATCX | comp=E,2μm,0.2s | | | IAML | | 14 24 49.0 | |
| **TA01** | **Diego Aracena** | **1.28** | **302** | *eP* | Pn | 14 24 29.8 | -1.4 |
| TA01 | | | | *eS* | Sn | 14 24 48.6 | -0.6 |
| TA01 | comp=N,838nm,0.1s | | | IAML | | 14 24 53.9 | |
| **LVC** | **Limon Verde** | **1.36** | **175** | *eP* | Pn | 14 24 32.2 | -0.3 |
| LVC | | | | *eS* | Sn | 14 24 52.4 | +0.9 |
| **PB16** | **IPOC Station P** comp=E,102nm,0.6s | **2.94** | **351** | IAML | | 14 25 39.7 | |

*IDC **07** 14:29:52.8±1.4, 15°.64N×147°.26E, h0km, mb3.7/8, mb1 3.8/9,mb1mx3.6/60,mbtmp3.7/9,ML3.6/1,MS2.6/1, Ms1 2.6/1,ms1mx2.2/80, Error ellipse: s-maj=40.9km s-min=22.4km az=97.0*

**ISC 07 14:29:57.8±1.3, 15°.6N±0°.2×147°.2E±0°.2, h33km, n12, σ0s50/10, mb3.9/8, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **3.00** | **228** | Pn | **Pn** | **14 30 42.4** | **-0.6** |
| GUMO | 7.0nm,0.3s,baz=165,slow=21,SNR=1.5 | | | Sn | **Sn** | **14 31 17.9** | **+0.1** |
| GUMO | 21nm,0.3s,baz=148,slow=22,SNR=10 | | | LR | LR | 14 32 03.0 | |
| **H11S3** | **WAKE ISLAND Hy** baz=264,slow=78,SNR=6.0 | **18.88** | **78** | T | T | 14 53 27.4 | |
| **H11S1** | **WAKE ISLAND Hy** baz=264,slow=78,SNR=3.6 | **18.89** | **78** | T | T | 14 53 31.3 | |
| **H11S2** | **WAKE ISLAND Hy** baz=264,slow=78,SNR=4.2 | **18.90** | **78** | T | T | 14 53 33.1 | |
| **WRA** | **Warramunga Arr** 0.8nm,1.0s,baz=23,slow=8.5,SNR=3.2 | **37.51** | **200** | P | **P** | **14 37 09.5** | **+0.7** |
| **ASAR** | **Alice Springs** 0.1nm,0.5s,baz=17,slow=5.6,SNR=1.6 | **41.13** | **199** | P | **P** | **14 37 39.1** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** 1.1nm,0.7s,baz=80,slow=6.2,SNR=5.4 | **46.10** | **281** | P | **P** | **14 38 19.3** | **+0.1** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.4s,baz=108,slow=9.3,SNR=3.0 | **61.32** | **323** | P | **P** | **14 40 09.8** | **-0.3** |
| **MKAR** | **Makanchi Array** 0.8nm,0.6s,baz=90,slow=8.2,SNR=22 | **61.62** | **315** | P | **P** | **14 40 13.1** | **+0.7** |
| **KURBB** | **Kurchatov Arra** 4.3nm,1.0s,baz=98,slow=6.6,SNR=27 | **64.56** | **319** | P | **P** | **14 40 32.0** | **+0.4** |
| **BVAR** | **Borovoye Array** 0.6nm,0.6s,baz=64,slow=8.4,SNR=3.5 | **69.75** | **321** | P | **P** | **14 41 04.6** | **0.0** |
| **YKA** | **Yellowknife Ar** 0.5nm,0.8s,baz=286,slow=5.0,SNR=4.6 | **80.05** | **28** | P | **P** | **14 42 03.5** | **-0.4** |

*IDC **07** 14:34:08.8±1.3, 33°.84N×25°.12E, h0km, mb3.7/6, mb1 3.6/9,mb1mx3.3/58,mbtmp3.5/9,ML3.5/3, Error ellipse: s-maj=26.5km s-min=23.3km az=119.0*

**ISC 07 14:34:12.0±1.1, 33°.8N±0°.1×25°.1E±0°.1, h20km, n10, σ0s59/11, mb3.5/6, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDI** | **Anoyia** 4.7nm,0.3s,baz=158,slow=22,SNR=11 | **1.45** | **354** | Pn | **Pn** | **14 34 37.6** | **+0.4** |
| IDI | 6.3nm,0.3s,baz=345,slow=12,SNR=5.9 | | | Sn | **Sn** | **14 34 56.2** | **+0.5** |
| **BRTR** | **Keskin Array B** 0.1nm,0.3s,baz=224,slow=12,SNR=1.9 | **9.03** | **47** | Pn | **Pn** | **14 36 22.1** | **+0.7** |
| **AKASG** | **Malin Array Be** 0.5nm,0.3s,baz=203,slow=10,SNR=8.1 | **17.12** | **9** | P | **Pn** | **14 38 09.5** | **-0.5** |
| **GERES** | **GERESS Array B** 0.1nm,0.3s,baz=139,slow=12,SNR=5.3 | **17.22** | **334** | P | **Pn** | **14 38 11.5** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** 0.4nm,0.6s,baz=39,slow=9.8,SNR=2.4 | **29.61** | **232** | P | **P** | **14 40 16.5** | **+0.5** |
| **KURBB** | **Kurchatov Arra** 0.5nm,0.5s,baz=275,slow=8.7,SNR=5.8 | **42.01** | **50** | P | **P** | **14 42 01.1** | **-0.6** |
| **MKAR** | **Makanchi Array** 0.6nm,0.5s,baz=269,slow=7.4,SNR=14 | **44.56** | **55** | P | **P** | **14 42 22.8** | **+0.3** |
| **ZALV** | **Zalesovo Beam** 2.2nm,0.4s,baz=266,slow=8.4,SNR=11 | **45.97** | **45** | P | **P** | **14 42 32.8** | **-0.7** |
| **SONM** | **Songino Array** 0.2nm,0.6s,baz=309,slow=9.1,SNR=1.8 | **60.38** | **50** | P | **P** | **14 44 19.8** | **0.0** |
| **YKA** | **Yellowknife Ar** 0.3nm,0.6s,baz=31,slow=5.2,SNR=6.8 | **78.68** | **342** | P | **P** | **14 46 11.6** | **-0.7** |

*KRNET **07** 14:49:28.9±0.1, 41°.75N×77°.37E, h17km, mb3.5*
*NNC **07** 14:49:29.7±1.8, 41°.79N×77°.45E, h0km, mb3.3, mpv3.1, Error ellipse: s-maj=13.0km s-min=8.8km az=136.0*
*SOME **07** 14:49:29.1, 41°.78N×77°.33E, h10km*

**ISC 07 14:49:27.7±1.3, 41°.71N±0°.04×77°.34E±0°.02, h2km±11km, n61, σ1s06/108, 30C-10D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** baz=94 | **0.35** | **86** | ⇑*iP* | **Pg** | **14 49 35.4** | **+0.9** |
| TARG | baz=94 | | | ⇑*iS* | **Sg** | **14 49 39.7** | **+0.7** |
| **KDJ** | **Kajisay** baz=41 | **0.44** | **344** | ⇑*iP* | **Pg** | **14 49 36.7** | **+0.5** |
| KDJ | baz=41 | | | ⇑*iS* | **Sg** | **14 49 42.2** | **+0.3** |
| **ULHL** | **Ulahol** baz=1.0 | **0.98** | **304** | ⇑*iP* | **Pb** | **14 49 47.3** | **-0.3** |
| ULHL | baz=1.0 | | | ⇑*iS* | **Sg** | **14 50 00.4** | **+1.2** |
| **ANVS** | **Anan'yevo** baz=12 | **1.10** | **13** | ⇑*iP* | **Pb** | **14 49 48.6** | **-1.0** |
| ANVS | baz=12 | | | ⇑*iS* | **Sg** | **14 50 03.0** | **-0.2** |
| **PRZ** | **Przheval'sk** baz=45 | **1.11** | **45** | ⇑*iP* | **Pb** | **14 49 48.8** | **-0.9** |
| PRZ | baz=45 | | | ⇑*iS* | **Sg** | **14 50 03.3** | **0.0** |
| **BOOM** | **Boomskoye usch** baz=5.0 | **1.30** | **307** | ⇑*iP* | **Pb** | **14 49 52.9** | **-0.1** |
| BOOM | baz=5.0 | | | ⇑*iS* | **Sn** | **14 50 10.0** | **-1.2** |
| **TNSS** | **Tian-Shan** 30nm,0.1s | **1.36** | **348** | *eP* | **Pb** | **14 49 53.9** | **-0.3** |
| TNSS | 26nm,0.2s | | | *eS* | **Sg** | **14 50 11.1** | **-0.4** |
| **TNSS** | **Tian-Shan** baz=46 | **1.36** | **348** | *eP* | **Pb** | **14 49 53.9** | **-0.3** |
| TNSS | baz=46 | | | *eS* | **Sg** | **14 50 11.1** | **-0.4** |
| **MDOK** | **Medeo** 55nm,0.2s | **1.47** | **352** | *eP* | **Pb** | **14 49 55.8** | **-0.1** |
| MDOK | 24nm,0.4s | | | *eS* | **Sg** | **14 50 14.1** | **-0.8** |
| **MDOK** | **Medeo** 32nm,0.5s | **1.47** | **352** | ⇑P | **Pb** | **14 49 55.3** | **-0.6** |
| MDOK | 25nm,0.7s | | | ⇑S | **Sg** | **14 50 14.8** | **-0.2** |
| **MDOK** | **Medeo** baz=51 | **1.47** | **352** | *eP* | **Pb** | **14 49 55.8** | **-0.1** |
| MDOK | baz=51 | | | *eS* | **Sg** | **14 50 14.2** | **-0.8** |
| **KNDC** | **Almaty** 50nm,0.3s | **1.54** | **350** | ⇑P | **Pg** | **14 49 57.0** | **-0.2** |
| KNDC | 49nm,0.3s | | | ⇑S | **Sg** | **14 50 17.7** | **+0.7** |
| **KOTS** | **Kotyrbulak** 99nm,0.2s | **1.54** | **354** | *eP* | **Pg** | **14 49 57.0** | **-0.1** |
| KOTS | 65nm,0.2s | | | *eS* | **Sg** | **14 50 16.6** | **-0.5** |
| **KOTS** | **Kotyrbulak** baz=53 | **1.54** | **354** | *eP* | **Pg** | **14 49 57.0** | **-0.1** |
| KOTS | baz=53 | | | *eS* | **Sg** | **14 50 16.6** | **-0.5** |
| **SATY** | **Saty** 11nm,0.2s | **1.56** | **30** | *eP* | **Pb** | **14 49 57.0** | **-0.5** |
| SATY | 132nm,0.1s | | | *eS* | **Sg** | **14 50 16.9** | **-1.1** |
| **SATY** | **Saty** baz=30 | **1.56** | **30** | *eP* | **Pb** | **14 49 57.0** | **-0.5** |
| SATY | baz=30 | | | *eS* | **Sg** | **14 50 16.9** | **-1.1** |
| **MTBS** | **Maitube** 37nm,0.2s | **1.57** | **335** | *eP* | **Pb** | **14 49 57.5** | **-0.1** |
| MTBS | 63nm,0.2s | | | *eS* | **Sg** | **14 50 17.7** | **-0.6** |
| **MTBS** | **Maitube** baz=34 | **1.57** | **335** | *eP* | **Pb** | **14 49 57.5** | **-0.1** |
| MTBS | baz=34 | | | *eS* | **Sg** | **14 50 17.7** | **-0.6** |
| **ZHN** | **Zhinishke** 17nm,0.2s | **1.67** | **29** | *eP* | **Pb** | **14 49 58.8** | **-0.5** |
| ZHN | 82nm,0.2s | | | *eS* | **Sb** | **14 50 19.7** | **-1.1** |
| **ZHN** | **Zhinishke** baz=29 | **1.67** | **29** | *eP* | **Pb** | **14 49 58.8** | **-0.5** |
| ZHN | baz=29 | | | *eS* | **Sb** | **14 50 19.7** | **-1.1** |
| **KST** | **Kastek** 30nm,0.2s | **1.68** | **323** | *eP* | **Pb** | **14 49 59.8** | **+0.3** |
| KST | 39nm,0.6s | | | *eS* | **Sg** | **14 50 21.5** | **-0.2** |
| **KST** | **Kastek** baz=22 | **1.68** | **323** | *eP* | **Pb** | **14 49 59.8** | **+0.3** |
| KST | baz=22 | | | *eS* | **Sg** | **14 50 21.5** | **-0.2** |
| **TKM2** | **Tokmak 2** SNR=18 | **1.77** | **314** | P | **Pb** | **14 50 01.7** | **+0.7** |
| **TKM2** | **Tokmak 2** 4.1nm,0.2s | **1.77** | **314** | ⇑Pn | **Pb** | **14 50 01.5** | **+0.4** |
| TKM2 | 34nm,0.3s | | | ⇑Sn | **Sg** | **14 50 25.0** | **+0.3** |
| **TKM2** | **Tokmak 2** baz=12 | **1.77** | **314** | ⇓*iP* | **Pb** | **14 50 01.0** | **-0.1** |
| TKM2 | baz=12 | | | ⇓*iS* | **Sg** | **14 50 24.2** | **-0.5** |
| **KURS** | **Kuram** 11nm,0.3s | **1.88** | **19** | *eP* | **Pb** | **14 50 02.6** | **-0.3** |
| KURS | 11nm,0.4s | | | *eS* | **Sb** | **14 50 26.2** | **-0.7** |
| **KURS** | **Kuram** baz=19 | **1.88** | **19** | *eP* | **Pb** | **14 50 02.6** | **-0.3** |
| KURS | baz=19 | | | *eS* | **Sb** | **14 50 26.2** | **-0.7** |
| **UZB** | **Uzynbulak** 20nm,0.2s | **1.90** | **40** | *eP* | **Pb** | **14 50 02.7** | **-0.5** |
| UZB | 38nm,0.3s | | | *eS* | **Sb** | **14 50 26.9** | **-0.6** |
| **UZB** | **Uzynbulak** baz=41 | **1.90** | **40** | *eP* | **Pb** | **14 50 02.7** | **-0.5** |
| UZB | baz=41 | | | *eS* | **Sb** | **14 50 26.9** | **-0.6** |
| **DGS** | **Degeres** 7.0nm,0.2s | **1.92** | **323** | *eP* | **Pb** | **14 50 04.1** | **+0.5** |
| DGS | 60nm,0.2s | | | *eS* | **Sg** | **14 50 29.5** | **0.0** |
| **KBK** | **Karagaybulak** SNR=14 | **2.02** | **299** | P | **Pb** | **14 50 06.2** | **+1.1** |
| **KBK** | **Karagaybulak** baz=97 | **2.02** | **299** | ⇑*iP* | **Pb** | **14 50 04.7** | **-0.5** |
| KBK | baz=97 | | | ⇑*iS* | **Sb** | **14 50 30.9** | **+0.1** |
| **KPKS** | **Kokpek** 41nm,0.1s | **2.02** | **29** | *eP* | **Pb** | **14 50 05.1** | **-0.1** |
| KPKS | 160nm,0.3s | | | *eS* | **Sg** | **14 50 30.5** | **-2.1** |
| **KPKS** | **Kokpek** baz=29 | **2.02** | **29** | *eP* | **Pb** | **14 50 05.1** | **-0.1** |
| KPKS | baz=29 | | | *eS* | **Sg** | **14 50 30.5** | **-2.1** |
| **KTBS** | **Karatobe** 21nm,0.2s | **2.06** | **347** | *eP* | **Pb** | **14 50 06.2** | **+0.3** |
| KTBS | 102nm,0.2s | | | *eS* | **Sg** | **14 50 32.8** | **-1.1** |
| **UCH** | **Uchtor** SNR=15 | **2.17** | **285** | P | **Pg** | **14 50 09.7** | **+0.4** |
| **UCH** | **Uchtor** baz=83 | **2.17** | **285** | ⇑*iP* | **Pb** | **14 50 07.2** | **-0.8** |
| UCH | baz=83 | | | ⇑*iS* | **Sb** | **14 50 35.1** | **-0.5** |
| **ARLS** | **Aral** baz=74 | **2.26** | **275** | ⇑*iP* | **Pb** | **14 50 08.3** | **-1.1** |
| ARLS | baz=74 | | | ⇑*iS* | **Sb** | **14 50 37.3** | **-0.6** |
| **KUU** | **Kurty** 24nm,0.2s | **2.31** | **342** | *eP* | **Pb** | **14 50 10.3** | **+0.2** |
| KUU | 31nm,0.6s | | | *eS* | **Sb** | **14 50 39.5** | **+0.5** |
| **AAK** | **Ala-Archa** SNR=17 | **2.31** | **295** | P | **Pg** | **14 50 12.2** | **+0.2** |
| **AAK** | **Ala-Archa** 6.8nm,0.5s | **2.31** | **295** | ⇓Pn | **Pb** | **14 50 11.0** | **+0.8** |
| AAK | 29nm,0.6s | | | ⇓Sn | **Sg** | **14 50 42.0** | **+0.1** |
| **AAK** | **Ala-Archa** baz=93 | **2.31** | **295** | ⇑*iP* | **Pb** | **14 50 08.7** | **-1.5** |
| AAK | baz=93 | | | ⇑*iS* | **Sb** | **14 50 38.0** | **-1.3** |
| **CHMS** | **Chumysh** SNR=9.5 | **2.31** | **305** | P | **Pb** | **14 50 11.1** | **+0.9** |
| **CHMS** | **Chumysh** baz=4.0 | **2.31** | **305** | ⇓*iP* | **Pb** | **14 50 08.5** | **-1.7** |
| CHMS | baz=4.0 | | | ⇓*iS* | **Sb** | **14 50 38.0** | **-1.2** |
| **KRBS** | **Karabastau** 16nm,0.2s | **2.34** | **329** | *eP* | **Pb** | **14 50 11.3** | **+0.7** |
| KRBS | 49nm,0.4s | | | *eS* | **Sg** | **14 50 41.2** | **-1.6** |
| **ARXS** | **Arharly** 10.0nm,0.3s | **2.53** | **8** | *eP* | **Pb** | **14 50 13.7** | **-0.2** |
| ARXS | 43nm,0.2s | | | *eS* | **Sg** | **14 50 46.1** | **-2.9** |
| **BLB** | **Baldybastay** 34nm,0.1s | **2.53** | **19** | *eP* | **Pb** | **14 50 13.6** | **-0.3** |
| BLB | 136nm,0.2s | | | *eS* | **Sb** | **14 50 45.7** | **+0.1** |
| **USP** | **Ospenovka** SNR=11 | **2.62** | **308** | P | **Pb** | **14 50 16.5** | **+1.2** |
| **SGDS** | **Sogindy** 9.9nm,0.2s | **2.66** | **312** | *eP* | **Pb** | **14 50 16.9** | **+0.8** |
| SGDS | 48nm,0.3s | | | *eS* | **Sg** | **14 50 51.0** | **-2.0** |
| **AML** | **Almayashu** SNR=14 | **2.75** | **280** | P | **Pg** | **14 50 21.1** | **+0.7** |
| **EKS2** | **Erkin-Say** SNR=18 | **2.81** | **291** | P | **Pg** | **14 50 21.6** | **-0.1** |
| **EKS2** | **Erkin-Say** baz=90 | **2.81** | **291** | ⇓*eP* | **Pn** | **14 50 15.8** | **+1.9** |
| EKS2 | baz=90 | | | ⇓*iS* | **Sb** | **14 50 50.1** | **-3.6** |
| **DJR** | **Jarkent** 2.9nm,0.2s | **3.18** | **34** | *eP* | **Pb** | **14 50 24.8** | **-0.2** |
| DJR | 23nm,0.3s | | | *eS* | **Sb** | **14 51 04.6** | **+0.4** |
| **MRKS** | **Merke** 2.8nm,0.2s | **3.23** | **290** | *eP* | **Pg** | **14 50 29.3** | **-0.2** |
| MRKS | 24nm,0.3s | | | *eS* | **Sg** | **14 51 12.5** | **+1.1** |
| **TDK** | **Taldyqorghan** 15nm,0.3s | **3.38** | **13** | *eP* | **Pb** | **14 50 29.0** | **+0.6** |
| TDK | 67nm,0.5s | | | *eS* | **Sb** | **14 51 11.7** | **+1.7** |
| **KAPS** | **Kapalarasan** 5.1nm,0.3s | **3.87** | **22** | *eP* | **Pb** | **14 50 37.5** | **+0.8** |
| KAPS | 15nm,0.5s | | | *eS* | **Sb** | **14 51 26.0** | **+2.1** |
| **BTLS** | **Baital** 2.4nm,0.4s | **4.11** | **325** | *eP* | **Pb** | **14 50 42.5** | **+1.8** |
| BTLS | 6.2nm,0.3s | | | *eS* | **Sb** | **14 51 34.1** | **+3.3** |
| **KK08** | **Karatay Array** 0.6nm,0.5s | **5.26** | **288** | ⇑Pg | **Pg** | **14 51 05.2** | **-3.4** |
| KK08 | 1.9nm,0.5s | | | ⇓Lg | Lg | 14 52 15.1 | |
| **MK31** | **Makanchi Array** 0.2nm,0.5s,baz=210,slow=14,SNR=4.4 | **6.20** | **33** | ⇑Pn | **Pn** | **14 51 01.6** | **+1.3** |
| MK31 | 0.2nm,0.3s,baz=211,slow=14,SNR=4.4 | | | ⇑Pg | Pb | 14 51 20.9 | +4.5 |
| MK31 | 0.4nm,0.4s,baz=218,slow=22,SNR=4.4 | | | Lg | Lg | 14 52 39.1 | |
| **KURBB** | **Kurchatov Arra** 3.4nm,1.1s | **8.96** | **5** | ⇓Lg | Lg | 14 54 12.9 | |
| **KURK** | **Kurchatov** 2.1nm,0.9s | **9.05** | **5** | ⇑Lg | Lg | 14 54 13.4 | |

*IDC **07** 14:57:53.6±1.1, 36°.63N×11°.14W, h0km, mb3.6/7, mb1 3.9/9,mb1mx3.5/47,mbtmp3.7/9,ML4.1/2, Error ellipse: s-maj=26.4km s-min=24.3km az=58.0*
*NEIC **07** 14:57:55.3±1.5, 36°.62N±0°.09×11°.1W±0°.1, h15km±4km, mb4.7/5, Error ellipse: s-maj=15.2km s-min=13.4km az=71.0*
*CNRM **07** 14:57:57.3, 36°.56N×10°.82W, h6km, ml3.8*
*LDG **07** 14:57:59.1±0.2, 36°.78N×11°.01W, h10km, Ml3.7/15, Error ellipse: s-maj=3.0km s-min=2.2km az=51.0*
*INMG **07** 14:58:00.0±1.7, 36°.71N×11°.08W, h31km, ML3.6, Error ellipse: s-maj=4.6km s-min=3.0km az=75.0*
*IGIL **07** 14:58:00.6, 36°.66N×11°.00W, h31km, ML3.6*

**ISC 07 14:57:59.8±1.6, 36°.75N±0°.05×11°.04W±0°.08, h42km±16km,**

**n119,σ1ᵍ82/108, mb3.5/9, 3C-7D, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **1.82** | **77** | *i*Pn | **Pn** | **14 58 27.6** | **-1.0** |
| PFVI | | | | *e*Sn | **Sn** | **14 58 48.5** | **-1.9** |
| PFVI | | | | A | A | 14 58 49.8 | |
| | 201nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.82** | **77** | | Pn | 14 58 27.3 | -1.2 |
| **PFVI** | **Vila Bisbo** | **1.82** | **77** | P | **Pn** | **14 58 27.5** | **-1.1** |
| **PFVI** | **Vila Bisbo** | **1.82** | **77** | P | **Pn** | **14 58 27.5** | **-1.1** |
| PFVI | | | | S | **Sn** | **14 58 48.1** | **-2.2** |
| **MORF** | **Marmelete** | **1.99** | **73** | *e*P | **Pn** | **14 58 30.2** | **-0.8** |
| MORF | | | | *e*S | **Sn** | **14 58 51.7** | **-3.1** |
| MORF | | | | IAML | | 14 58 54.9 | |
| | comp=N,366nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **1.99** | **73** | *i*Pn | **Pn** | **14 58 30.3** | **-0.8** |
| MORF | | | | *e*Sn | **Sn** | **14 58 53.6** | **-1.2** |
| MORF | | | | A | A | 14 59 02.8 | |
| | comp=N,227nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.02** | **66** | *e*Pn | **Pn** | **14 58 30.7** | **-0.6** |
| PTEO | | | | *e*Sn | **Sn** | **14 58 53.9** | **-1.4** |
| PTEO | | | | A | A | 14 59 09.2 | |
| | comp=N,236nm,0.5s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.42** | **55** | *e*Pn | **Pn** | **14 58 36.4** | **-0.4** |
| PNCL | | | | *e*Sn | **Sn** | **14 59 03.8** | **-1.4** |
| PNCL | | | | A | A | 14 59 07.5 | |
| | comp=N,141nm,0.5s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **2.47** | **36** | *e*Pn | **Pn** | **14 58 37.1** | **-0.4** |
| PMST | | | | *e*Sn | **Sn** | **14 59 05.4** | **-1.1** |
| PMST | | | | A | A | 14 59 08.7 | |
| | comp=N,235nm,0.2s | | | | | | |
| **LIS** | **Lisbon** | **2.47** | **37** | *e*P | **Pn** | **14 58 37.3** | **-0.2** |
| LIS | | | | *e*S | **Sn** | **14 59 04.5** | **-2.0** |
| LIS | | | | IAML | | 14 59 09.1 | |
| | comp=N,565nm,0.4s | | | | | | |
| **LIS** | **Lisbon** | **2.47** | **37** | *e*Pn | **Pn** | **14 58 37.3** | **-0.2** |
| LIS | | | | *e*Sn | **Sn** | **14 59 05.6** | **-0.9** |
| LIS | | | | A | A | 14 59 10.2 | |
| | comp=N,274nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **2.50** | **63** | *e*P | **Pn** | **14 58 37.3** | **-0.6** |
| MESJ | | | | *e*S | **Sn** | **14 59 04.1** | **-3.1** |
| MESJ | | | | IAML | | 14 59 14.3 | |
| | comp=N,136nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.50** | **63** | *e*Pn | **Pn** | **14 58 37.3** | **-0.6** |
| MESJ | | | | *e*Sn | **Sn** | **14 59 05.7** | **-1.5** |
| MESJ | | | | A | A | 14 59 13.0 | |
| | comp=N,109nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.54** | **78** | *e*Pn | **Pn** | **14 58 37.8** | **-0.7** |
| PBDV | | | | *e*Sn | **Sn** | **14 59 06.2** | **-2.0** |
| PBDV | | | | A | A | 14 59 17.0 | |
| | comp=N,85nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **2.56** | **69** | *e*Pn | **Pn** | **14 58 38.2** | **-0.5** |
| PCVE | | | | *e*Sn | **Sn** | **14 59 06.9** | **-1.7** |
| PCVE | | | | A | A | 14 59 18.6 | |
| | comp=N,86nm,0.4s | | | | | | |
| **PMAFR** | **Mafra** | **2.60** | **32** | *i*Pn | **Pn** | **14 58 38.9** | **-0.5** |
| PMAFR | | | | *e*Sn | **Sn** | **14 59 08.3** | **-1.5** |
| PMAFR | | | | A | A | 14 59 09.8 | |
| | comp=N,938nm,0.2s | | | | | | |
| **PACT** | **Alcochete** | **2.67** | **40** | *e*Pn | **Pn** | **14 58 40.0** | **-0.2** |
| PACT | | | | *e*Sn | **Sn** | **14 59 10.3** | **-1.0** |
| PACT | | | | A | A | 14 59 15.8 | |
| | comp=N,231nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.74** | **75** | *e*Pn | **Pn** | **14 58 40.7** | **-0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **14 59 10.6** | **-2.5** |
| PVAQ | | | | A | A | 14 59 22.3 | |
| | comp=N,95nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.74** | **75** | | Pn | **14 58 40.4** | **-0.8** |
| **PVAQ** | **Vaqueiros** | **2.74** | **75** | P | **Pn** | **14 58 40.3** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **2.74** | **75** | P | **Pn** | **14 58 40.5** | **-0.8** |
| PVAQ | | | | S | **Sn** | **14 59 10.1** | **-3.0** |
| **PBEJ** | **Beja** | **2.83** | **62** | *e*Pn | **Pn** | **14 58 41.8** | **-0.7** |
| PBEJ | | | | *e*Sn | **Sn** | **14 59 12.9** | **-2.5** |
| PBEJ | | | | A | A | 14 59 14.4 | |
| | comp=N,62nm,0.2s | | | | | | |
| **EVO** | **Evora** | **2.99** | **53** | P | **Pn** | **14 58 44.1** | **-0.6** |
| **EVO** | **Evora** | **2.99** | **53** | S | **Sn** | **14 59 16.8** | **-2.5** |
| **EVO** | **Evora** | **2.99** | **53** | *e*Pn | **Pn** | **14 58 44.1** | **-0.6** |
| EVO | | | | *e*Sn | **Sn** | **14 59 17.3** | **-2.0** |
| EVO | | | | A | A | 14 59 19.1 | |
| | comp=N,152nm,0.1s | | | | | | |
| **PMTG** | **Montargil** | **3.21** | **43** | *e*Pn | **Pn** | **14 58 46.9** | **-0.8** |
| PMTG | | | | *e*Sn | **Sn** | **14 59 22.7** | **-2.1** |
| PMTG | | | | A | A | 14 59 23.8 | |
| | comp=N,81nm,0.2s | | | | | | |
| **PSBE** | **So Bento** | **3.28** | **32** | *e*Pn | **Pn** | **14 58 48.3** | **-0.4** |
| PSBE | | | | *e*Sn | **Sn** | **14 59 24.5** | **-2.0** |
| PSBE | | | | A | A | 14 59 28.9 | |
| | comp=N,101nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **3.46** | **51** | *e*Pn | **Pn** | **14 58 50.5** | **-0.6** |
| PESTR | | | | *e*Sn | **Sn** | **14 59 28.5** | **-2.3** |
| PESTR | | | | A | A | 14 59 32.6 | |
| | comp=N,59nm,0.2s | | | | | | |
| **PESTR** | **Estremoz** | **3.46** | **51** | Pn | **Pn** | **14 58 50.4** | **-0.7** |
| **PESTR** | **Estremoz** | **3.46** | **51** | P | **Pn** | **14 58 50.6** | **-0.6** |
| **PESTR** | **Estremoz** | **3.46** | **51** | P | **Pn** | **14 58 50.6** | **-0.6** |
| **ARNO** | **Arenosillo** | **3.47** | **83** | S | **Sn** | **14 59 28.0** | **-3.1** |
| **PBAR** | **Barrancos** | **3.49** | **65** | *e*Pn | **Pn** | **14 58 51.2** | **-0.3** |
| PBAR | | | | *e*Sn | **Sn** | **14 59 29.2** | **-2.4** |
| PBAR | | | | A | A | 14 59 31.4 | |
| | comp=N,48nm,0.6s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.85** | **30** | *e*Pn | **Pn** | **14 58 56.0** | **-0.6** |
| PCAS | | | | *e*Sn | **Sn** | **14 59 38.0** | **-2.6** |
| PCAS | | | | A | A | 14 59 42.9 | |
| | comp=N,58nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **3.93** | **46** | *i*Pn | **Pn** | **14 58 56.7** | **-0.9** |
| PMRV | | | | *e*Sn | **Sn** | **14 59 39.1** | **-3.4** |
| PMRV | | | | A | A | 14 59 41.1 | |
| | comp=N,125nm,0.6s | | | | | | |
| **COI** | **Coimbra** | **4.02** | **30** | *e*Pn | **Pn** | **14 58 58.5** | **-0.3** |
| COI | | | | *e*Sn | **Sn** | **14 59 42.6** | **-2.1** |
| COI | | | | A | A | 14 59 46.5 | |
| | comp=N,125nm,0.3s | | | | | | |
| **COI** | **Coimbra** | **4.02** | **30** | Pn | Pn | 14 58 57.8 | -1.1 |
| **PCBR** | **Castelo Branco** | **4.17** | **41** | *e*Pn | **Pn** | **14 59 00.2** | **-0.7** |
| PCBR | | | | *e*Sn | **Sn** | **14 59 45.7** | **-2.6** |
| PCBR | | | | A | A | 14 59 47.1 | |
| | comp=N,58nm,0.3s | | | | | | |
| **AVE** | **Averroes** | **4.55** | **138** | P | Pn | 14 59 03.9 | -2.3 |
| **AVE** | **Averroes** | **4.55** | **138** | S | Sn | 14 59 50.2 | -7.6 |
| **AVE** | **Averroes** | **4.55** | **138** | P | Pn | 14 59 03.6 | -2.6 |
| **AVE** | **Averroes** | **4.55** | **138** | P | Pn | 14 59 03.9 | -2.3 |
| **MTE** | **Manteigas** | **4.56** | **36** | *e*Pn | **Pn** | **14 59 05.6** | **-0.7** |
| MTE | | | | *e*Sn | **Sn** | **14 59 55.1** | **-2.9** |
| MTE | | | | A | A | 14 59 58.8 | |
| | comp=N,49nm,0.6s | | | | | | |
| **MTE** | **Manteigas** | **4.56** | **36** | P | Pn | 14 59 05.1 | -1.2 |
| **CEU** | **Ceuta** | **4.66** | **99** | P | **Pn** | **14 59 06.9** | **-0.7** |
| **CEU** | **Ceuta** | **4.66** | **99** | S | **Sn** | **14 59 56.6** | **-3.7** |
| **PVIS** | **Viseu** | **4.66** | **31** | *e*Pn | **Pn** | **14 59 06.9** | **-0.8** |
| PVIS | | | | *e*Sn | **Sn** | **14 59 57.3** | **-3.2** |
| PVIS | | | | A | A | 14 59 58.7 | |
| | comp=N,37nm,0.2s | | | | | | |
| **PTO** | **Porto** | **4.78** | **23** | *e*Pn | **Pn** | **14 59 08.5** | **-0.7** |
| PTO | | | | *e*Sn | **Sn** | **15 00 00.2** | **-3.1** |
| **ZHG** | **ZHG** | **4.89** | **131** | P | Pn | 14 59 08.0 | -2.9 |
| **ZHG** | **ZHG** | **4.89** | **131** | P | Pn | 14 59 07.6 | -3.2 |
| **CHEFC** | **Chefchaouen** | **4.91** | **108** | P | **Pn** | **14 59 10.1** | **-1.0** |
| **SRHM** | **Skhour des Reh** | **5.00** | **148** | P | Pn | 14 59 09.2 | -3.1 |
| **PVRL** | **Vila Real** | **5.21** | **29** | *e*Pn | **Pn** | **14 59 14.3** | **-0.9** |
| PVRL | | | | *e*Sn | **Sn** | **15 00 09.8** | **-4.2** |
| PVRL | | | | A | A | 15 00 13.3 | |
| | comp=N,78nm,0.1s | | | | | | |
| **EAH** | **EAH** | **5.23** | **166** | P | Pn | **14 59 13.0** | **-2.5** |
| **EAH** | **EAH** | **5.23** | **166** | P | Pn | 14 59 11.2 | -4.2 |
| **POLO** | **Lamas de Olo** | **5.26** | **28** | *e*Pn | **Pn** | **14 59 15.3** | **-0.7** |
| POLO | | | | *e*Sn | **Sn** | **15 00 11.5** | **-3.9** |
| POLO | | | | A | A | 15 00 14.6 | |
| | comp=N,24nm,0.4s | | | | | | |
| **EMAL** | **Malaga-Limoner** | **5.31** | **88** | P | Pn | 14 59 18.9 | +2.4 |
| **EMAL** | **Malaga-Limoner** | **5.31** | **88** | S | Sn | 15 00 11.0 | -5.4 |
| **MVO** | **Moncorvo** | **5.40** | **34** | *e*Pn | Pn | 14 59 16.8 | -1.1 |
| MVO | | | | *e*Sn | **Sn** | **15 00 14.5** | **-4.3** |
| MVO | | | | A | A | 15 00 17.8 | |
| | comp=N,86nm,0.5s | | | | | | |
| **PCAB** | **Cabril** | **5.48** | **24** | *e*Pn | **Pn** | **14 59 17.9** | **-1.0** |
| PCAB | | | | *e*Sn | **Sn** | **15 00 16.6** | **-4.0** |
| PCAB | | | | A | A | 15 00 32.7 | |
| | comp=N,38nm,0.3s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.63** | **22** | *e*Pn | **Pn** | **14 59 20.4** | **-0.7** |
| PGAV | | | | *e*Sn | **Sn** | **15 00 20.5** | **-4.0** |
| PGAV | | | | A | A | 15 00 23.4 | |
| | comp=N,32nm,0.2s | | | | | | |
| **PMPST** | **Porto Santo, M** | **5.68** | **231** | *e*Pn | Pn | 14 59 18.0 | -3.7 |
| PMPST | | | | *e*Sn | Sn | 15 00 14.6 | -11 |
| PMPST | | | | A | A | 15 00 18.5 | |
| | comp=N,98nm,0.3s | | | | | | |
| **PMPS** | **Porto Santo** | **5.70** | **231** | *e*Pn | Pn | 14 59 18.4 | -3.5 |
| PMPS | | | | *e*Sn | Sn | 15 00 16.2 | -10 |
| PMPS | | | | A | A | 15 00 23.7 | |
| | comp=N,43nm,0.3s | | | | | | |
| **IFR** | **Ifrane** | **5.82** | **122** | P | Pn | 14 59 20.4 | -3.4 |
| **IFR** | **Ifrane** | **5.82** | **122** | S | Sn | 15 00 19.4 | -10 |
| **LCRM** | **LCR** | **5.91** | **119** | P | Pn | 14 59 22.0 | -3.0 |
| **LCRM** | **LCR** | **5.91** | **119** | P | Pn | 14 59 21.6 | -3.4 |
| **PAB** | **San Pablo** | **5.97** | **60** | Pn | Pn | 14 59 24.5 | -1.1 |
| **PAB** | **San Pablo** | **5.97** | **60** | P | **Pn** | **14 59 25.3** | **-0.3** |
| **PBRG** | **Braganca** | **6.05** | **32** | *e*Pn | Pn | 14 59 25.3 | -1.4 |
| PBRG | | | | *e*Sn | Sn | 15 00 30.1 | -4.6 |
| PBRG | | | | A | A | 15 00 33.2 | |
| | comp=N,38nm,0.2s | | | | | | |
| **OUK** | **Oukaimeden** | **6.13** | **154** | P | Pn | 14 59 25.0 | -3.1 |
| **OUK** | **Oukaimeden** | **6.13** | **154** | P | Pn | 14 59 25.1 | -3.0 |
| **PMAR** | **Madeira** | **6.28** | **232** | *e*Pn | Pn | 14 59 26.3 | -3.8 |
| PMAR | | | | *e*Sn | Sn | 15 00 29.5 | -11 |
| PMAR | | | | A | A | 15 00 38.4 | |
| | comp=N,75nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **6.29** | **60** | Pn | Pn | 14 59 28.5 | -1.6 |
| | comp=N,1.4nm,0.3s,baz=249,slow=13,SNR=21 | | | | | | |
| ESDC | | | | Sn | **Sn** | **15 00 36.6** | **-4.1** |
| | comp=N,5.3nm,0.3s,baz=245,slow=23,SNR=23 | | | | | | |
| **ESBB** | **Sonseca Array** | **6.29** | **60** | Pn | **Pn** | **14 59 29.2** | **-0.9** |
| **FUL** | **Funchal** | **6.32** | **231** | *e*Sn | Sn | 15 00 30.7 | -11 |
| FUL | | | | A | A | 15 00 36.6 | |
| | comp=N,69nm,0.2s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **6.40** | **234** | *e*Pn | **Pn** | **14 59 30.2** | **-1.5** |
| PMOZ | | | | *e*Sn | Sn | 15 00 33.5 | -10 |
| PMOZ | | | | A | A | 15 00 46.1 | |
| | comp=N,77nm,0.5s | | | | | | |
| **MD31** | **MD31** | **6.46** | **125** | P | Pn | 14 59 28.9 | -3.6 |
| **MDT** | **Midelt** | **6.59** | **125** | Pn | Pn | 14 59 30.7 | -3.6 |
| | comp=N,5.8nm,0.3s,baz=234,slow=1.8,SNR=79 | | | | | | |
| MDT | | | | Sn | Sn | 15 00 40.0 | -8.1 |
| | comp=N,22nm,0.3s,baz=231,slow=22,SNR=32 | | | | | | |
| **MDT** | **Midelt** | **6.59** | **125** | P | Pn | 14 59 31.0 | -3.2 |
| **MDT** | **Midelt** | **6.59** | **125** | P | Pn | 14 59 31.1 | -3.2 |
| **OUZM** | **OUZ** | **6.83** | **147** | P | Pn | 14 59 35.0 | -2.6 |
| **OUZM** | **OUZ** | **6.83** | **147** | P | Pn | 14 59 34.4 | -3.2 |
| **UCM** | **Universidad Co** | **7.07** | **57** | P | **Pn** | **14 59 40.4** | **-0.3** |
| **UCM** | **Universidad Co** | **7.07** | **57** | S | Sn | 15 00 54.8 | -5.0 |
| **GOLM** | **Goulmima** | **7.12** | **133** | P | **Pn** | **14 59 40.0** | **-1.6** |
| **GOLM** | **Goulmima** | **7.12** | **133** | P | **Pn** | **14 59 39.5** | **-2.1** |
| **TZRR** | **Tazzarine** | **7.49** | **141** | P | Pn | 14 59 44.0 | -2.7 |
| **TZRR** | **Tazzarine** | **7.49** | **141** | P | Pn | 14 59 43.5 | -3.2 |
| **ZGR** | **Zagora** | **8.02** | **144** | P | Pn | 14 59 50.4 | -3.4 |
| **ZGR** | **Zagora** | **8.02** | **144** | P | Pn | 14 59 50.3 | -3.5 |
| ZGR | | | | S | **Sn** | **15 01 24.1** | **+0.8** |
| **SJPF** | **Ste Jean** | **9.86** | **47** | *e*Pn | **Pn** | **15 00 17.9** | **-1.0** |
| SJPF | | | | *e*Sn | Sn | 15 02 01.6 | -6.5 |
| | comp=N,9.9nm,0.4s | | | | | | |
| **ETSF** | **Etsaut** | **10.13** | **49** | *e*Pn | Pn | 15 00 21.4 | -1.3 |
| ETSF | | | | *e*Sn | Sn | 15 02 08.1 | -6.9 |
| | comp=N,3.0nm,0.3s | | | | | | |
| **EPF** | **Esparros** | **10.76** | **51** | *e*Pn | **Pn** | **15 00 30.2** | **-1.0** |
| EPF | | | | *e*Sn | Sn | 15 02 23.6 | -6.7 |
| | comp=N,6.2nm,0.4s | | | | | | |
| **LFF** | **La Frestale** | **12.09** | **44** | *e*Pn | Pn | 15 00 47.9 | -1.5 |
| LFF | | | | *e*Sn | Sn | 15 02 54.9 | -8.0 |
| | comp=N,0.8nm,0.2s | | | | | | |
| **QUIF** | **Quistinic** | **12.58** | **25** | *e*Pn | Pn | 15 00 54.6 | -1.4 |
| QUIF | | | | *e*Sn | Sn | 15 03 06.5 | -8.1 |
| | comp=N,4.2nm,0.4s | | | | | | |
| **RJF** | **Les Rejaudoux** | **12.75** | **44** | *e*Pn | Pn | 15 00 56.2 | -2.2 |
| RJF | | | | *e*Sn | Sn | 15 03 10.6 | -8.4 |
| | comp=N,1.8nm,0.2s | | | | | | |
| **MFF** | **Saint Martin d** | **12.76** | **36** | *e*Pn | Pn | 15 00 57.3 | -1.3 |
| MFF | | | | *e*Sn | Sn | 15 03 11.0 | -8.2 |
| | comp=N,0.4nm,0.2s | | | | | | |
| **CAF** | **Calviac** | **12.84** | **46** | *e*Pn | Pn | 15 00 58.1 | -1.6 |
| CAF | | | | *e*Sn | Sn | 15 03 12.9 | -8.3 |
| | comp=N,1.9nm,0.3s | | | | | | |
| **ROSF** | **Rostrenen** | **12.91** | **24** | *e*Pn | Pn | 15 00 59.0 | -1.5 |
| ROSF | | | | *e*Sn | Sn | 15 03 14.7 | -8.0 |
| | comp=N,1.4nm,0.3s | | | | | | |
| **SGMF** | **Saint Gilles** | **13.08** | **26** | *e*Pn | Pn | 15 01 01.6 | -1.3 |
| **GRR** | **Gorron** | **13.82** | **30** | *e*Pn | **Pn** | **15 01 12.2** | **-0.8** |
| GRR | | | | *e*Sn | Sn | 15 03 36.5 | -8.5 |
| | comp=N,0.4nm,0.2s | | | | | | |
| **BGF** | **Bois d'Agland** | **14.26** | **42** | *e*P | **P** | **15 01 22.7** | **-2.6** |
| BGF | | | | *e*Sn | Sn | 15 03 46.7 | -8.9 |
| | comp=N,16nm,0.5s | | | | | | |
| **LDF** | **La Druitiere** | **14.29** | **31** | *e*Pn | **Pn** | **15 01 18.3** | **-1.0** |
| LDF | | | | *e*Sn | Sn | 15 03 47.4 | -8.9 |
| | comp=N,0.3nm,0.2s | | | | | | |
| **AVF** | **Avril sur Loir** | **14.67** | **42** | *e*Pn | Pn | 15 01 23.1 | -1.4 |
| AVF | | | | *e*Sn | Sn | 15 03 56.6 | -9.1 |
| | comp=N,0.8nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **14.92** | **42** | *e*Pn | Pn | 15 01 26.1 | -1.7 |
| SSF | | | | *e*Sn | Sn | 15 04 02.6 | -9.2 |
| | comp=N,0.3nm,0.2s | | | | | | |
| **GERES** | **GERESS Array B** | **21.70** | **48** | P | **P** | **15 02 49.1** | **+1.9** |
| | comp=N,0.9nm,0.8s,baz=254,slow=8.2,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **26.13** | **151** | P | **P** | **15 03 29.3** | **-0.7** |
| | comp=N,0.5nm,0.5s,baz=326,slow=10,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **33.88** | **31** | P | **P** | **15 04 38.6** | **+0.4** |
| | comp=N,1.9nm,0.9s,baz=251,slow=9.3,SNR=3.7 | | | | | | |
| **FIA1** | **FINESS Array S** | **33.88** | **31** | P | **P** | **15 04 38.1** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **38.31** | **20** | P | **P** | **15 05 17.0** | **+1.0** |
| | comp=N,3.5nm,0.9s,baz=230,slow=9.2,SNR=8.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.31** | **20** | P | **P** | **15 05 16.8** | **+0.8** |
| ARCES | | | | IAmb | IAmb | 15 05 24.5 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.37** | **48** | P | **P** | **15 08 44.9** | **+0.6** |
| | comp=Z,0.1nm,0.6s,baz=312,slow=6.7,SNR=1.4 | | | | | | |
| **DAWY** | **Dawson** | **71.58** | **339** | P | **P** | **15 09 15.8** | **-0.5** |
| DAWY | | | | IAmb | IAmb | 15 09 27.2 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **71.61** | **310** | P | **P** | **15 09 15.7** | **-1.4** |
| | comp=Z,0.3nm,0.5s,baz=68,slow=8.2,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.03** | **295** | P | **P** | **15 09 38.6** | **+1.3** |
| | comp=Z,0.2nm,0.5s,baz=78,slow=4.7,SNR=1.8 | | | | | | |
| **PB06** | **IPOC Station P** | **80.88** | **233** | P | **P** | **15 10 08.0** | **-1.8** |
| PB06 | | | | IAmb | IAmb | 15 10 16.1 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **145.47** | **71** | PKPbc | **PKPdf** | **15 17 33.4** | **-0.3** |
| | comp=Z,7nm,0.7s,baz=317,slow=2.9,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **147.21** | **76** | PKPbc | **PKPbc** | **15 17 38.8** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=304,slow=3.8,SNR=7.4 | | | | | | |

*IDC **07** 15:09:41.1±1.1, 52.°34N×169.°48W, h0km, mb3.9/15, mb1 4.1/17, mb1mx3.7/57, mbtmp3.9/17, ML3.4/2, MS2.9/2, Ms1 2.9/2, ms1mx2.5/100, Error ellipse: s-maj=30.4km s-min=16.2km az=173.0*

*AEIC **07** 15:09:44±2.3, 52.°15N±0.°09×169.°4W±0.°1, h24km±7km, Error ellipse: s-maj=14.3km s-min=8.0km az=154.0*

*NEIC **07** 15:09:47.9±1.8, 52.°4N±0.°1×169.°5W±0.°1, h42km±12km, mb3.9/14, ML3.5(AEIC), Error ellipse: s-maj=18.7km s-min=8.3km az=150.0*

**ISC 07 15:09:46.6±0.7, 52.°26N±0.°10×169.°39W±0.°06, h40km, n70, σ0ᵍ87/62, mb3.8/16, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLCO** | **Concord Point,** | **0.56** | **339** | | **Pn** | **15 09 58.1** | **-0.1** |
| **CLES** | **Cleveland East** | **0.64** | **332** | | **Pn** | **15 09 59.2** | **0.0** |
| **NIKH** | **Nikolski High** | **0.78** | **25** | | **Pn** | **15 10 00.6** | **-0.6** |
| **OKSP** | **Okmok Steeple** | **1.20** | **34** | | **Pn** | **15 10 06.6** | **-0.4** |
| **OKFG** | **Magazine Ridge** | **1.46** | **37** | | **Pn** | **15 10 10.6** | **+0.1** |
| **MREP** | **Makushin Rep't** | **2.23** | **45** | | **Pn** | **15 10 21.5** | **+0.4** |
| **MSW** | **Makushin Switc** | **2.29** | **43** | | **Pn** | **15 10 22.4** | **+0.6** |
| **UNV** | **Unalaska Valle** | **2.36** | **47** | | **Pn** | **15 10 23.4** | **+0.7** |
| **MTBL** | **Makushin Table** | **2.37** | **43** | | **Pn** | **15 10 23.9** | **+0.9** |
| **AKGG** | **Akutan Green G** | **2.82** | **45** | | **Pn** | **15 10 30.5** | **+1.4** |
| **KOFP** | **Korovin Flat P** | **2.89** | **272** | | **Pn** | **15 10 30.0** | **-0.1** |
| **ATKA** | **Atka Island** | **2.95** | **271** | | **Pn** | **15 10 30.8** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **4.11** | **270** | Pn | **Pn** | **15 10 47.4** | **+0.6** |
| **SSLN** | **Shishaldin Nor** | **4.11** | **49** | | **Pn** | **15 10 48.0** | **+1.2** |
| **GSTD** | **Great Sitkin T** | **4.16** | **270** | | **Pn** | **15 10 47.9** | **+0.3** |
| **ISLZ** | **Isanotski Laza** | **4.20** | **52** | | **Pn** | **15 10 48.3** | **+0.2** |
| **KIWB** | **Kanaga Island** | **4.80** | **268** | Pn | **Pn** | **15 10 56.8** | **+0.5** |
| **KIMD** | **Kanaga Island** | **4.87** | **267** | | **Pn** | **15 10 57.8** | **+0.6** |
| **SPIA** | **Saint Paul Isl** | **4.95** | **355** | | **Pn** | **15 11 00.7** | **+2.4** |
| **TASE** | **Tanaga Southea** | **5.35** | **269** | | **Pn** | **15 11 05.1** | **+1.1** |
| **SHEM** | **Shemya Is, Ala** | **10.08** | **279** | LR | LR | 15 15 46.9 | |
| | comp=Z,57nm,20.0s,baz=112,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.11** | **54** | Pn | **Pn** | **15 12 21.2** | **-1.5** |
| | 0.3nm,0.3s,baz=184,slow=9.5,SNR=2.4 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.11** | **54** | Pn | **Pn** | **15 12 23.4** | **+0.8** |
| **L19K** | **White Mountain** | **12.65** | **33** | Pn | **Pn** | **15 12 44.0** | **+0.2** |
| **BRLK** | **Bradley Lake** | **12.76** | **47** | Pn | **Pn** | **15 12 46.2** | **+1.0** |
| **SEW** | **Seward** | **13.56** | **47** | Pn | **Pn** | **15 12 55.5** | **-0.6** |
| **RC01** | **Rabbit Creek A** | **13.91** | **43** | Pn | **Pn** | **15 13 00.8** | **0.0** |
| **PWL** | **Port Wells** | **14.39** | **45** | Pn | **Pn** | **15 13 06.1** | **-1.3** |
| **CAST** | **Castle Rocks** | **14.43** | **32** | P | **P** | **15 13 14.8** | **+0.8** |
| **KTH** | **Kantishna Hill** | **14.90** | **33** | P | **P** | **15 13 19.4** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **15.25** | **32** | Pn | **Pn** | **15 13 19.1** | **+0.3** |
| BPAW | | | | IAmb | IAmb | 15 13 24.1 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **15.28** | **43** | Pn | **Pn** | **15 13 17.6** | **-1.7** |
| **DIV** | **Divide** | **15.64** | **46** | P | **P** | **15 13 26.7** | **-0.8** |
| DIV | | | | IAmb | IAmb | 15 13 34.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **KLU** | **Klutina** | **15.72** | **45** | Pn | **Pn** | **15 13 23.1** | **-1.9** |
| KLU | | | | IAmb | IAmb | 15 13 32.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **MLY** | **Manley** | **15.97** | **30** | P | **P** | **15 13 31.9** | **+0.7** |
| **GLB** | **Gilahina Butte** | **16.63** | **46** | Pn | **Pn** | **15 13 36.1** | **-0.4** |
| GLB | | | | IAmb | IAmb | 15 13 52.0 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| **VRDI** | **Verde Repeater** | **16.71** | **47** | Pn | **Pn** | **15 13 37.1** | **-0.6** |
| VRDI | | | | IAmb | IAmb | 15 14 05.5 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **17.05** | **34** | P | **Pn** | **15 13 40.0** | **-1.6** |
| | comp=Z,0.0nm,0.3s,baz=223,slow=11,SNR=4.6 | | | | | | |
| **J25K** | **Salcha River,** | **17.49** | **36** | Pn | **Pn** | **15 13 46.5** | **-0.7** |
| **J26L** | **Joseph Creek** | **18.09** | **37** | | **Pn** | **15 13 53.9** | **-0.8** |
| **PET** | **Petropavlovsk** | **19.33** | **285** | P | **P** | **15 14 08.5** | **+0.4** |
| PET | | | | IAmb | IAmb | 15 14 21.8 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **HYT** | **Haines Junctio** | **19.38** | **51** | Pn | **Pn** | **15 14 11.3** | **+1.1** |
| **BMAR** | **Burnt Mountain** | **19.43** | **29** | P | **P** | **15 14 09.6** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **19.88** | **286** | P | **P** | **15 14 14.2** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **19.88** | **286** | P | **P** | **15 14 13.7** | **-0.5** |
| | comp=Z,1.6nm,0.3s,baz=90,slow=12,SNR=62 | | | | | | |
| **SEY** | **Seymchan** | **22.73** | **313** | P | **P** | **15 14 44.1** | **-0.6** |
| | comp=Z,1.6nm,0.8s,baz=101,slow=9.8,SNR=6.2 | | | | | | |
| **INK** | **Inuvik** | **23.44** | **33** | P | **P** | **15 14 50.3** | **-1.6** |
| | comp=Z,1.2nm,0.5s,baz=253,slow=5.8,SNR=8.2 | | | | | | |
| **INK** | **Inuvik** | **23.44** | **33** | P | **P** | **15 14 50.4** | **-1.4** |
| INK | | | | IAmb | IAmb | 15 15 18.3 | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **C36M** | **Paulatuk** | **27.02** | **34** | P | **P** | **15 15 24.1** | **-0.3** |
| C36M | | | | IAmb | IAmb | 15 15 50.4 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.32** | **49** | P | **P** | **15 15 55.1** | **+1.2** |
| | comp=Z,0.6nm,0.6s,baz=272,slow=7.9,SNR=15 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.32** | **49** | P | **P** | **15 15 53.2** | **-0.6** |
| **KLR** | **Kul'dur** | **36.48** | **289** | LR | LR | 15 32 02.0 | |
| | comp=Z,18nm,19.0s,baz=58,slow=37 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.36** | **219** | T | T | 15 56 39.6 | |
| | baz=24,slow=75,SNR=4.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.37** | **219** | T | T | 15 56 42.5 | |
| | baz=24,slow=75,SNR=4.6 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.38** | **219** | T | T | 15 56 39.8 | |
| | baz=24,slow=75,SNR=4.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.55** | **218** | T | T | 15 58 14.6 | |
| | baz=26,slow=74,SNR=29 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.56** | **218** | T | T | 15 58 15.7 | |
| | baz=26,slow=74,SNR=26 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.56** | **218** | T | T | 15 58 08.2 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Q19K** | **Cape Douglas,** | **1.40** | **302** | | | **Pn** | **15 27 28.4** | **+0.2** |
| Q19K | | | | | | **Sn** | **15 27 45.9** | **0.0** |
| **Q19K** | **Cape Douglas,** | **1.40** | **302** | | IAML | | 15 27 51.9 | |
| | comp=E,814nm,0.7s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.40** | **302** | P | | **Pn** | **15 27 28.4** | **+0.2** |
| | baz=120 | | | | | | | |
| Q19K | | | | S | | **Sn** | **15 27 45.9** | **0.0** |
| | baz=120 | | | | | | | |
| **OHAK** | **Old Harbor** | **1.42** | **227** | | | **Pn** | **15 27 29.1** | **+0.7** |
| **OHAK** | **Old Harbor** | **1.42** | **227** | P | | **Pn** | **15 27 29.1** | **+0.7** |
| | baz=45 | | | | | | | |
| **HOM** | **Homer** | **1.47** | **354** | | | **Pn** | **15 27 29.4** | **+0.3** |
| HOM | | | | | | **Sn** | **15 27 48.3** | **+0.9** |
| **HOM** | **Homer** | **1.47** | **354** | | IAML | | 15 27 53.2 | |
| | comp=E,784nm,1.0s | | | | | | | |
| **HOM** | **Homer** | **1.47** | **354** | P | | **Pn** | **15 27 29.4** | **+0.3** |
| | baz=174 | | | | | | | |
| HOM | | | | S | | **Sn** | **15 27 48.3** | **+0.9** |
| | baz=174 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.58** | **11** | | | **Pn** | **15 27 30.5** | **0.0** |
| **BRSE** | **Bradley Lake S** | **1.58** | **11** | P | | **Pn** | **15 27 30.5** | **0.0** |
| | baz=192 | | | | | | | |
| **BRLK** | **Bradley Lake** | **1.59** | **9** | | | **Pn** | **15 27 30.5** | **-0.2** |
| **OPT** | **Oil Point** | **1.75** | **327** | | | **Pn** | **15 27 33.1** | **+0.3** |
| **OPT** | **Oil Point** | **1.75** | **327** | P | | **Pn** | **15 27 33.1** | **+0.3** |
| | baz=145 | | | | | | | |
| **O20K** | **Slope Mountain** | **2.00** | **342** | | | **Pn** | **15 27 36.7** | **+0.5** |
| O20K | | | | | | **Sn** | **15 28 00.9** | **+0.7** |
| **O20K** | **Slope Mountain** | **2.00** | **342** | P | | **Pn** | **15 27 36.7** | **+0.5** |
| | baz=160 | | | | | | | |
| O20K | | | | S | | **Sn** | **15 28 00.9** | **+0.7** |
| | baz=160 | | | | | | | |
| **ILSW** | **Iliamna Southw** | **2.01** | **334** | | | **Pn** | **15 27 36.8** | **+0.3** |
| **CAHL** | **Cahill** | **2.10** | **268** | | | **Pn** | **15 27 38.4** | **+0.8** |
| **SEW** | **Seward** | **2.15** | **26** | | | **Pn** | **15 27 38.0** | **-0.2** |
| **SEW** | **Seward** | **2.15** | **26** | P | | **Pn** | **15 27 38.0** | **-0.2** |
| | baz=208 | | | | | | | |
| **SII** | **Sitkinak Islan** | **2.24** | **224** | Pn | | **Pn** | **15 27 39.1** | **-0.4** |
| SII | | | | IAML | | | 15 28 35.8 | |
| | comp=E,241nm,2.6s | | | | | | | |
| **KELA** | **Mount Kelaz** | **2.32** | **278** | | | **Pn** | **15 27 41.0** | **+0.3** |
| **P18K** | **Big Mountain,** | **2.34** | **302** | | | **Pn** | **15 27 40.9** | **0.0** |
| **P18K** | **Big Mountain,** | **2.34** | **302** | P | | **Pn** | **15 27 40.9** | **0.0** |
| | baz=118 | | | | | | | |
| **RED** | **Redoubt Volcan** | **2.34** | **343** | | | **Pn** | **15 27 40.8** | **-0.1** |
| **RSO** | **Redoubt South** | **2.38** | **343** | | | **Pn** | **15 27 41.0** | **-0.5** |
| **SLKM** | **Skilak Lake** | **2.39** | **14** | | | **Pn** | **15 27 41.5** | **0.0** |
| **O22K** | **Cooper Landing** | **2.44** | **19** | | | **Pn** | **15 27 41.9** | **-0.2** |
| O22K | | | | | IAML | | 15 28 54.2 | |
| | comp=N,739nm,0.3s | | | | | | | |
| **O22K** | **Cooper Landing** | **2.44** | **19** | P | | **Pn** | **15 27 42.1** | **+0.1** |
| | baz=201 | | | | | | | |
| **RDT** | **Redoubt** | **2.44** | **348** | | | **Pn** | **15 27 42.3** | **+0.1** |
| **DFR** | **Drift River** | **2.50** | **345** | | | **Sn** | **15 28 11.9** | **-0.4** |
| **DFR** | **Drift River** | **2.50** | **345** | | | **Pn** | **15 27 42.8** | **-0.2** |
| **NCT** | **North Crescent** | **2.50** | **342** | | | **Pn** | **15 27 43.1** | **0.0** |
| **O19K** | **Port Alsworth** | **2.52** | **324** | | | **Pn** | **15 27 43.0** | **-0.1** |
| O19K | | | | | IAML | | 15 28 21.7 | |
| | comp=N,282nm,0.5s | | | | | | | |
| O19K | | | | | IAML | | 15 28 33.7 | |
| | comp=E,510nm,0.5s | | | | | | | |
| **O19K** | **Port Alsworth** | **2.52** | **324** | P | | **Pn** | **15 27 43.1** | **-0.1** |
| | baz=141 | | | | | | | |
| **CAPN** | **Captain Cook N** | **2.58** | **2** | | | **Pn** | **15 27 44.9** | **+0.9** |
| **CAPN** | **Captain Cook N** | **2.58** | **2** | | IAML | | 15 29 23.6 | |
| | comp=N,572nm,1.2s | | | | | | | |
| **CAPN** | **Captain Cook N** | **2.58** | **2** | P | | **Pn** | **15 27 44.9** | **+0.9** |
| | baz=182 | | | | | | | |
| **PLK1** | **Peulik 1** | **2.82** | **264** | | | **Pn** | **15 27 47.7** | **+0.4** |
| **MID** | **Middleton Isla** | **2.89** | **63** | | | **Pn** | **15 27 48.9** | **+0.7** |
| **SPU** | **Mount Spurr** | **3.01** | **354** | | | **Pn** | **15 27 50.0** | **0.0** |
| **RC01** | **Rabbit Creek A** | **3.02** | **15** | | | **Pn** | **15 27 50.1** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **3.02** | **15** | P | | **Pn** | **15 27 50.1** | **+0.2** |
| | baz=196 | | | | | | | |
| **CKN** | **Chakachatna No** | **3.06** | **353** | | | **Pn** | **15 27 50.8** | **+0.1** |
| **N19K** | **Bonanza Creek** | **3.07** | **330** | | | **Pn** | **15 27 50.9** | **+0.1** |
| **N19K** | **Bonanza Creek** | **3.07** | **330** | P | | **Pn** | **15 27 50.9** | **+0.1** |
| | baz=147 | | | | | | | |
| **PWL** | **Port Wells** | **3.08** | **29** | | | **Pn** | **15 27 51.2** | **+0.3** |
| **SPBG** | **Spurr Blockage** | **3.11** | **351** | | | **Pn** | **15 27 51.1** | **-0.3** |
| SPBG | | | | | | **Sn** | **15 28 27.8** | **+0.3** |
| **SPCG** | **Spurr Capps Gl** | **3.12** | **354** | | | **Pn** | **15 27 50.7** | **-0.8** |
| **STLK** | **Strandline Lak** | **3.32** | **356** | | | **Pn** | **15 27 54.8** | **+0.6** |
| **GLI** | **Glacier Island** | **3.46** | **37** | | | **Pn** | **15 27 56.0** | **0.0** |
| **GLI** | **Glacier Island** | **3.46** | **37** | P | | **Pn** | **15 27 56.0** | **0.0** |
| | baz=221 | | | | | | | |
| **KNK** | **Knik Glacier** | **3.54** | **23** | | | **Pn** | **15 27 57.1** | **-0.1** |
| **KNK** | **Knik Glacier** | **3.54** | **23** | P | | **Pn** | **15 27 57.1** | **-0.1** |
| | baz=206 | | | | | | | |
| **FID** | **Port Fidalgo** | **3.57** | **42** | | | **Pn** | **15 27 57.2** | **-0.4** |
| **PMR** | **Palmer** | **3.59** | **17** | | | **Pn** | **15 27 57.5** | **-0.2** |
| **PMR** | **Palmer** | **3.59** | **17** | P | | **Pn** | **15 27 57.5** | **-0.2** |
| | baz=199 | | | | | | | |
| **SVW2** | **Sparrevohn** | **3.61** | **325** | | | **Pn** | **15 27 58.1** | **0.0** |
| **M22K** | **Willow** | **3.62** | **9** | | | **Pn** | **15 27 58.3** | **+0.1** |
| **M22K** | **Willow** | **3.62** | **9** | P | | **Pn** | **15 27 58.3** | **+0.1** |
| | baz=190 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **48** | | | **Pn** | **15 28 00.1** | **+0.6** |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **48** | P | | **Pn** | **15 28 00.1** | **+0.6** |
| | baz=233 | | | | | | | |
| **JPK** | **Jack Peak** | **3.75** | **38** | | | **Pn** | **15 28 00.4** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **3.79** | **18** | | | **Pn** | **15 28 00.8** | **+0.2** |
| **SKT** | **Skwentna** | **3.79** | **359** | | | **Pn** | **15 28 01.0** | **+0.3** |
| **SKT** | **Skwentna** | **3.79** | **359** | P | | **Pn** | **15 28 01.0** | **+0.3** |
| | baz=176 | | | | | | | |
| **SML** | **Sawmill** | **3.93** | **22** | | | **Pn** | **15 28 02.7** | **+0.3** |
| **SML** | **Sawmill** | **3.93** | **22** | P | | **Pn** | **15 28 02.7** | **+0.3** |
| | baz=204 | | | | | | | |
| **DIV** | **Divide** | **4.08** | **42** | | | **Pn** | **15 28 05.2** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **4.17** | **27** | | | **Pn** | **15 28 06.4** | **+0.6** |
| **HMT** | **Hamilton** | **4.23** | **57** | Pn | | **Pn** | **15 28 06.2** | **-0.3** |
| HMT | | | | IAML | | | 15 29 60.0 | |
| | comp=E,121nm,2.3s | | | | | | | |
| HMT | | | | IAML | | | 15 30 11.5 | |
| | comp=N,125nm,3.1s | | | | | | | |
| **KLU** | **Klutina** | **4.29** | **37** | | | **Pn** | **15 28 08.1** | **+0.6** |
| **KLU** | **Klutina** | **4.29** | **37** | P | | **Pn** | **15 28 08.1** | **+0.6** |
| | baz=222 | | | | | | | |
| **L19K** | **White Mountain** | **4.36** | **338** | | | **Pn** | **15 28 08.7** | **+0.4** |
| **L19K** | **White Mountain** | **4.36** | **338** | P | | **Pn** | **15 28 08.7** | **+0.4** |
| | baz=155 | | | | | | | |
| **BMRM** | **Bremner River** | **4.42** | **48** | | | **Pn** | **15 28 09.7** | **+0.5** |
| **BMRM** | **Bremner River** | **4.42** | **48** | P | | **Pn** | **15 28 09.6** | **+0.5** |
| | baz=234 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.70** | **31** | | | **Pn** | **15 28 14.2** | **+1.1** |
| **M24K** | **Tolsona, Glenn** | **4.70** | **31** | P | | **Pn** | **15 28 14.1** | **+1.1** |
| | baz=216 | | | | | | | |
| **PPLA** | **Purkeypile** | **4.73** | **355** | Pn | | **Pn** | **15 28 13.8** | **+0.2** |
| **SNH** | **Sunshine Point** | **4.81** | **62** | Pn | | **Pn** | **15 28 14.7** | **+0.1** |
| SNH | | | | IAML | | | 15 29 50.2 | |
| | comp=E,108nm,3.7s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.82** | **42** | | | **Pn** | **15 28 15.3** | **+0.6** |
| **N25K** | **Chitina, Valde** | **4.82** | **42** | P | | **Pn** | **15 28 15.3** | **+0.6** |
| | baz=228 | | | | | | | |
| **WAX** | **Waxell Ridge** | **4.91** | **59** | Pn | | **Pn** | **15 28 16.9** | **+1.0** |
| WAX | | | | IAML | | | 15 29 56.3 | |
| | comp=N,104nm,4.1s | | | | | | | |
| WAX | | | | IAML | | | 15 30 15.1 | |
| | comp=E,82nm,4.2s | | | | | | | |
| **GLB** | **Gilahina Butte** | **5.01** | **46** | | | **Pn** | **15 28 17.8** | **+0.6** |
| **GLB** | **Gilahina Butte** | **5.01** | **46** | IAML | | | 15 29 50.5 | |
| | comp=N,28nm,0.7s | | | | | | | |
| **VRDI** | **Verde Repeater** | **5.03** | **49** | Pn | | **Pn** | **15 28 17.9** | **+0.3** |
| VRDI | | | | IAML | | | 15 29 15.3 | |
| | comp=E,25nm,4.0s | | | | | | | |
| VRDI | | | | IAML | | | 15 31 03.9 | |
| | comp=N,30nm,4.3s | | | | | | | |
| **ISLE** | **Juniper Island** | **5.20** | **59** | Pn | | **Pn** | **15 28 19.9** | **-0.1** |
| ISLE | | | | IAML | | | 15 29 22.1 | |
| | comp=E,41nm,3.8s | | | | | | | |
| **HARP** | **HAARP** | **5.22** | **34** | | | **Pn** | **15 28 20.8** | **+0.7** |
| **HARP** | **HAARP** | **5.22** | **34** | P | | **Pn** | **15 28 20.8** | **+0.7** |
| | baz=219 | | | | | | | |
| **MESA** | **MESA** | **5.23** | **64** | Pn | | **Pn** | **15 28 19.5** | **-0.9** |
| **CAST** | **Castle Rocks** | **5.25** | **356** | Pn | | **Pn** | **15 28 19.6** | **-0.9** |
| CAST | | | | IAML | | | 15 29 42.9 | |
| | comp=E,21nm,3.9s | | | | | | | |
| **TT01** | **Tatalina** | **5.25** | **336** | | | **Pn** | **15 28 20.3** | **-0.2** |
| **TRF** | **Thorofare Moun** | **5.30** | **5** | Pn | | **Pn** | **15 28 21.1** | **-0.1** |
| TRF | | | | IAML | | | 15 29 29.4 | |
| | comp=E,30nm,0.7s | | | | | | | |
| **KIAG** | **Kiagna River** | **5.33** | **55** | | | **Pn** | **15 28 21.7** | **0.0** |
| **K20K** | **Telida** | **5.34** | **347** | | | **Pn** | **15 28 21.5** | **-0.2** |
| **K20K** | **Telida** | **5.34** | **347** | IAML | | | 15 30 04.1 | |
| | comp=E,22nm,4.4s | | | | | | | |
| **K20K** | **Telida** | **5.34** | **347** | P | | **Pn** | **15 28 21.5** | **-0.2** |
| | baz=164 | | | | | | | |
| **RND** | **Reindeer** | **5.37** | **12** | | | **Pn** | **15 28 22.2** | **+0.1** |
| RND | | | | IAML | | | 15 29 30.6 | |
| | comp=E,26nm,0.7s | | | | | | | |
| RND | | | | IAML | | | 15 31 03.3 | |
| | comp=N,30nm,4.3s | | | | | | | |
| **KTH** | **Kantishna Hill** | **5.38** | **2** | | | **Pn** | **15 28 22.4** | **+0.2** |
| KTH | | | | IAML | | | 15 29 33.2 | |
| | comp=E,30nm,0.6s | | | | | | | |
| KTH | | | | IAML | | | 15 29 37.8 | |
| | comp=N,34nm,0.7s | | | | | | | |
| **BALM** | **Baldy** | **5.39** | **54** | | | **Pn** | **15 28 23.2** | **+0.7** |
| **MCK** | **McKinley** | **5.68** | **11** | | | **Pn** | **15 28 26.8** | **+0.5** |
| **MCK** | **McKinley** | **5.68** | **11** | P | | **Pn** | **15 28 26.8** | **+0.5** |
| | baz=193 | | | | | | | |
| **BARN** | **Barnard Glacie** | **5.70** | **56** | Pn | | **Pn** | **15 28 26.5** | **-0.2** |
| **M26K** | **Nabesna, AK** | **5.92** | **41** | IAML | | | 15 29 41.3 | |
| | comp=E,20nm,4.8s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **5.92** | **2** | | | **Pn** | **15 28 29.5** | **-0.2** |
| **BPAW** | **Bear Paw Mtn.** | **5.92** | **2** | P | | **Pn** | **15 28 29.5** | **-0.2** |
| | baz=182 | | | | | | | |
| **BCPM** | **Bancas Point** | **6.30** | **69** | Pn | | **Pn** | **15 28 34.5** | **-0.3** |
| **WRH** | **Wood River Hil** | **6.49** | **13** | | | **Pn** | **15 28 37.4** | **+0.1** |
| **HDA** | **Harding Lake** | **6.58** | **17** | Pn | | **Pn** | **15 28 38.3** | **-0.4** |
| **HDA** | **Harding Lake** | **6.58** | **17** | P | | **Pn** | **15 28 38.3** | **-0.4** |
| | baz=201 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **6.69** | **13** | | | **Pn** | **15 28 40.0** | **-0.2** |
| **L27K** | **Beaver Creek,** | **6.76** | **40** | IAML | | | 15 29 56.4 | |
| | comp=E,14nm,3.9s | | | | | | | |
| **SCRK** | **Sand Creek** | **6.81** | **29** | Pn | | **Pn** | **15 28 41.5** | **-0.4** |
| **MLY** | **Manley** | **6.86** | **2** | | | **Pn** | **15 28 42.4** | **-0.1** |
| **MLY** | **Manley** | **6.86** | **2** | P | | **Pn** | **15 28 42.4** | **-0.1** |
| | baz=183 | | | | | | | |
| **IL31** | | **6.93** | **16** | | | **Pn** | **15 28 42.7** | **-0.7** |
| **MDM** | **Murphy Dome** | **6.95** | **11** | | | **Pn** | **15 28 43.0** | **-0.6** |
| **I23K** | **Minto, Yukon-K** | **7.04** | **7** | | | **Pn** | **15 28 45.2** | **+0.3** |
| **I23K** | **Minto, Yukon-K** | **7.04** | **7** | P | | **Pn** | **15 28 45.2** | **+0.3** |
| | baz=189 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **7.04** | **7** | IAML | | | 15 30 03.2 | |
| | comp=E,14nm,4.6s | | | | | | | |
| **J25K** | **Salcha River,** | **7.05** | **22** | | | **Pn** | **15 28 45.1** | **0.0** |
| **J25K** | **Salcha River,** | **7.05** | **22** | P | | **Pn** | **15 28 45.1** | **0.0** |
| | baz=207 | | | | | | | |
| **J26L** | **Joseph Creek** | **7.35** | **27** | | | **Pn** | **15 28 48.6** | **-0.5** |
| **J26L** | **Joseph Creek** | **7.35** | **27** | P | | **Pn** | **15 28 48.6** | **-0.5** |
| | baz=214 | | | | | | | |
| **H21K** | **Melozitna Rive** | **7.52** | **355** | Pn | | **Pn** | **15 28 50.6** | **-0.8** |
| **PRP** | **Porcupine Dome** | **7.84** | **18** | | | **Pn** | **15 28 55.5** | **-0.5** |
| **PRP** | **Porcupine Dome** | **7.84** | **18** | P | | **Pn** | **15 28 55.5** | **-0.5** |
| | baz=203 | | | | | | | |
| **IM03** | | **7.89** | **353** | | | **Pn** | **15 28 55.7** | **-0.8** |
| **WHY** | **Whitehorse** | **8.75** | **67** | Pn | | **Pn** | **15 29 06.9** | **-1.5** |
| **UNV** | **Unalaska Valle** | **9.53** | **249** | Pn | | **Pn** | **15 29 19.1** | **+0.2** |

*NEIC* ***07*** *15:28:26.8±1.6, 61°.31N±0°.02×149°.48W±0°.05, h34km±9km, Error ellipse: s-maj=3.4km s-min=3.0km az=123.0*

**AEIC 07 15:28:27**±1.5, **61°.29N**±0°.02×**149°.46W**±0°.04, **h25**km±7km, **ML2.5, ML2.8**/110(NEIC), **Error ellipse: s-maj=3.3km s-min=2.2km az=152.0, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RC01** | **Rabbit Creek A** | **0.24** | **214** | | **Pb** | 15 28 33.4 | +0.2 |
| RC01 | | | | | Sb | 15 28 39.0 | +1.7 |
| **PMR** | **Palmer** | **0.34** | **27** | | **Pb** | 15 28 34.1 | -0.5 |
| PMR | | | | | Sb | 15 28 40.5 | +0.6 |
| **PMR** | **Palmer** | **0.34** | **27** | IAML | | 15 28 40.9 | |
| | comp=E,2μm,0.5s | | | | | | |
| **FIS** | **Fire Island** | **0.39** | **249** | | **Pb** | 15 28 35.9 | +0.5 |
| **FIS** | **Fire Island** | **0.39** | **249** | IAML | | 15 28 45.2 | |
| | comp=N,660nm,0.2s | | | | | | |
| **KNK** | **Knik Glacier** | **0.50** | **75** | | **Pb** | 15 28 36.3 | -0.9 |
| KNK | | | | | Sb | 15 28 44.2 | 0.0 |
| **KNK** | **Knik Glacier** | **0.50** | **75** | IAML | | 15 28 45.2 | |
| | comp=N,674nm,0.3s | | | | | | |
| KNK | | | | IAML | | 15 28 46.1 | |
| | comp=E,555nm,0.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **0.55** | **28** | | **Pb** | 15 28 37.0 | -1.2 |
| **GHO** | **Glory Hole Cre** | **0.55** | **28** | IAML | | 15 28 46.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| GHO | | | | IAML | | 15 28 46.7 | |
| | comp=N,703nm,0.3s | | | | | | |
| **M22K** | **Willow** | **0.56** | **326** | | **Pb** | 15 28 36.6 | -1.6 |
| M22K | | | | | Sb | 15 28 45.1 | -0.8 |
| **M22K** | **Willow** | **0.56** | **326** | IAML | | 15 28 45.6 | |
| | comp=E,1μm,0.3s | | | | | | |
| M22K | | | | IAML | | 15 28 45.6 | |
| | comp=N,1μm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **0.70** | **128** | | **Pb** | 15 28 39.1 | -1.4 |
| **PWL** | **Port Wells** | **0.70** | **128** | IAML | | 15 28 49.5 | |
| | comp=N,459nm,0.5s | | | | | | |
| PWL | | | | IAML | | 15 28 49.7 | |
| | comp=E,543nm,0.5s | | | | | | |
| **SML** | **Sawmill** | **0.75** | **46** | | **Pb** | 15 28 39.8 | -1.7 |
| SML | | | | | Sb | 15 28 50.6 | -0.8 |
| **SML** | **Sawmill** | **0.75** | **46** | IAML | | 15 28 51.6 | |
| | comp=N,304nm,0.7s | | | | | | |
| **O22K** | **Cooper Landing** | **0.82** | **189** | | **Pb** | 15 28 40.9 | -1.7 |
| O22K | | | | | Sb | 15 28 52.9 | -0.3 |
| **O22K** | **Cooper Landing** | **0.82** | **189** | IAML | | 15 28 55.0 | |
| | comp=E,509nm,0.4s | | | | | | |
| **SLKM** | **Skilak Lake** | **0.87** | **206** | | **Pb** | 15 28 41.8 | -1.6 |
| **CAPN** | **Captain Cook N** | **0.97** | **238** | | **Pn** | 15 28 44.4 | -0.7 |
| **SCM** | **Sheep Creek Mo** | **1.16** | **61** | | **Pn** | 15 28 45.9 | -1.8 |
| **SCM** | **Sheep Creek Mo** | **1.16** | **61** | IAML | | 15 29 03.8 | |
| | comp=N,218nm,0.6s | | | | | | |
| SCM | | | | IAML | | 15 29 03.8 | |
| | comp=E,225nm,0.3s | | | | | | |
| **STLK** | **Strandline Lak** | **1.16** | **282** | | **Pn** | 15 28 46.2 | -1.5 |
| **CUT** | **Chulitna** | **1.18** | **341** | | **Pn** | 15 28 46.2 | -1.7 |
| **CUT** | **Chulitna** | **1.18** | **341** | IAML | | 15 29 04.7 | |
| | comp=N,246nm,0.4s | | | | | | |
| **SEW** | **Seward** | **1.19** | **180** | | **Pn** | 15 28 46.5 | -1.5 |
| **GLI** | **Glacier Island** | **1.22** | **109** | | **Pn** | 15 28 46.5 | -2.0 |
| GLI | | | | | Sn | 15 29 03.4 | -0.7 |
| **GLI** | **Glacier Island** | **1.22** | **109** | IAML | | 15 29 04.1 | |
| | comp=N,266nm,0.3s | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.24** | **271** | | **Pn** | 15 28 47.0 | -1.8 |
| **SPU** | **Mount Spurr** | **1.26** | **266** | Pn | **Pn** | 15 28 47.0 | -2.0 |
| **SPCN** | **Chakachatna No** | **1.32** | **268** | | **Pn** | 15 28 48.3 | -1.5 |
| **JPK** | **Jack Peak** | **1.41** | **98** | | **Pn** | 15 28 49.6 | -1.4 |
| **VMT** | **TAPS Tl Valdez** | **1.51** | **96** | | **Pn** | 15 28 51.0 | -1.5 |
| **FID** | **Port Fidalgo** | **1.55** | **109** | | **Pn** | 15 28 50.7 | -2.3 |
| **FID** | **Port Fidalgo** | **1.55** | **109** | IAML | | 15 29 13.8 | |
| | comp=N,106nm,0.3s | | | | | | |
| FID | | | | IAML | | 15 29 14.2 | |
| | comp=E,126nm,0.3s | | | | | | |
| **SPNN** | **North Nagishla** | **1.56** | **274** | | **Pn** | 15 28 52.4 | -0.9 |
| **RDT** | **Redoubt** | **1.61** | **245** | | **Pn** | 15 28 52.4 | -1.4 |
| **BRSE** | **Bradley Lake S** | **1.68** | **203** | | **Pn** | 15 28 53.4 | -1.3 |
| **BRLK** | **Bradley Lake** | **1.68** | **205** | | **Pn** | 15 28 53.4 | -1.4 |
| **KLU** | **Klutina** | **1.71** | **82** | | **Pn** | 15 28 54.0 | -1.3 |
| **KLU** | **Klutina** | **1.71** | **82** | IAML | | 15 29 17.8 | |
| | comp=E,98nm,0.2s | | | | | | |
| **DFR** | **Drift River** | **1.72** | **247** | | **Pn** | 15 28 54.1 | -1.4 |
| **M24K** | **Tolsona, Glenn** | **1.77** | **61** | | **Pn** | 15 28 55.8 | -0.3 |
| **M24K** | **Tolsona, Glenn** | **1.77** | **61** | IAML | | 15 29 20.7 | |
| | comp=N,278nm,0.4s | | | | | | |
| M24K | | | | IAML | | 15 29 21.3 | |
| | comp=E,299nm,0.6s | | | | | | |
| **DIV** | **Divide** | **1.79** | **93** | | **Pn** | 15 28 54.9 | -1.5 |
| **RSO** | **Redoubt South** | **1.81** | **244** | Pn | **Pn** | 15 28 55.6 | -1.2 |
| **RED** | **Redoubt Volcan** | **1.84** | **243** | | **Pn** | 15 28 55.7 | -1.3 |
| **EYAK** | **Cordova Ski Ar** | **1.96** | **111** | | **Pn** | 15 28 57.8 | -0.8 |
| **HOM** | **Homer** | **1.96** | **214** | Pn | **Pn** | 15 28 57.0 | -1.6 |
| **O20K** | **Slope Mountain** | **1.97** | **234** | | **Pn** | 15 28 57.8 | -1.1 |
| **CNPM** | **China Poot** | **1.98** | **207** | | **Pn** | 15 28 57.9 | -1.0 |
| **CNPM** | **China Poot** | **1.98** | **207** | IAML | | 15 29 35.0 | |
| | comp=E,75nm,2.1s | | | | | | |
| CNPM | | | | IAML | | 15 30 09.2 | |
| | comp=N,68nm,4.4s | | | | | | |
| **PS11** | **TAPS Pump St11** | **2.06** | **66** | | **Pn** | 15 28 59.9 | -0.1 |
| **PPLA** | **Purkeypile** | **2.06** | **323** | | **Pn** | 15 28 59.0 | -1.1 |
| **PS12** | **TAPS Pump St12** | **2.09** | **83** | | **Pn** | 15 28 59.4 | -1.0 |
| **RND** | **Reindeer** | **2.15** | **7** | | **Pn** | 15 29 00.7 | -0.5 |
| **TRF** | **Thorofare Moun** | **2.20** | **350** | | **Pn** | 15 29 00.8 | -1.4 |
| **TRF** | **Thorofare Moun** | **2.20** | **350** | IAML | | 15 29 32.5 | |
| | comp=N,49nm,0.4s | | | | | | |
| **ILSW** | **Iliamna Southw** | **2.24** | **236** | | **Pn** | 15 29 01.4 | -1.2 |
| **ILSW** | **Iliamna Southw** | **2.24** | **236** | IAML | | 15 29 41.8 | |
| | comp=N,42nm,3.4s | | | | | | |
| **HARP** | **HAARP** | **2.33** | **59** | | **Pn** | 15 29 03.6 | 0.0 |
| **N25K** | **Chitina, Valde** | **2.36** | **80** | | **Pn** | 15 29 03.6 | -0.5 |
| **N25K** | **Chitina, Valde** | **2.36** | **80** | IAML | | 15 29 38.0 | |
| | comp=N,51nm,0.5s | | | | | | |
| N25K | | | | IAML | | 15 29 38.6 | |
| | comp=E,31nm,0.5s | | | | | | |
| **KTH** | **Kantishna Hill** | **2.37** | **344** | | **Pn** | 15 29 03.1 | -1.2 |
| **BMRM** | **Bremner River** | **2.38** | **96** | | **Pn** | 15 29 03.7 | -0.7 |
| BMRM | | | | IAML | | 15 29 40.8 | |
| | comp=N,57nm,0.7s | | | | | | |
| BMRM | | | | IAML | | 15 29 41.8 | |
| | comp=E,42nm,0.8s | | | | | | |
| **L20K** | **Farewell, AK** | **2.41** | **302** | | **Pn** | 15 29 03.5 | -1.3 |
| **CAST** | **Castle Rocks** | **2.46** | **331** | | **Pn** | 15 29 04.4 | -1.1 |
| **MCK** | **McKinley** | **2.47** | **5** | Pn | **Pn** | 15 29 05.3 | -0.2 |
| MCK | | | | IAML | | 15 29 47.5 | |
| | comp=E,33nm,4.8s | | | | | | |
| **N19K** | **Bonanza Creek** | **2.49** | **261** | Pn | **Pn** | 15 29 05.1 | -0.9 |
| **PAX** | **Paxson** | **2.52** | **46** | | **Pn** | 15 29 05.8 | -0.6 |
| **O19K** | **Port Alsworth** | **2.63** | **247** | | **Pn** | 15 29 07.4 | -0.4 |
| **O19K** | **Port Alsworth** | **2.63** | **247** | IAML | | 15 29 38.7 | |
| | comp=E,51nm,0.5s | | | | | | |
| **L19K** | **White Mountain** | **2.72** | **292** | Pn | **Pn** | 15 29 07.5 | -1.5 |
| L19K | | | | IAML | | 15 29 41.1 | |
| | comp=E,32nm,4.4s | | | | | | |
| **HMT** | **Hamilton** | **2.72** | **108** | Pn | **Pn** | 15 29 08.5 | -0.6 |
| **GLB** | **Gilahina Butte** | **2.73** | **84** | | **Pn** | 15 29 08.5 | -0.7 |
| **GLB** | **Gilahina Butte** | **2.73** | **84** | IAML | | 15 29 55.7 | |
| | comp=E,21nm,1.7s | | | | | | |
| **VRDI** | **Verde Repeater** | **2.90** | **89** | | **Pn** | 15 29 10.9 | -0.8 |
| **VRDI** | **Verde Repeater** | **2.90** | **89** | IAML | | 15 30 39.9 | |
| | comp=E,21nm,4.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **2.91** | **347** | | **Pn** | 15 29 10.5 | -1.2 |
| **CHUM** | **Lake Minchumin** | **2.92** | **334** | | **Pn** | 15 29 10.8 | -1.0 |
| **K20K** | **Telida** | **2.99** | **316** | | **Pn** | 15 29 11.5 | -1.3 |
| **K20K** | **Telida** | **2.99** | **316** | IAML | | 15 30 34.7 | |
| | comp=N,14nm,4.1s | | | | | | |
| **WRH** | **Wood River Hil** | **3.26** | **11** | Pn | **Pn** | 15 29 16.2 | -0.2 |
| **RIDG** | **Independent Ri** | **3.26** | **39** | | **Pn** | 15 29 15.9 | -0.6 |
| RIDG | | | | IAML | | 15 30 01.2 | |
| | comp=N,23nm,1.1s | | | | | | |
| **M26K** | **Nabesna, AK** | **3.26** | **67** | Pn | **Pn** | 15 29 15.8 | -0.8 |
| **HDA** | **Harding Lake** | **3.34** | **19** | Pn | **Pn** | 15 29 17.3 | -0.2 |
| HDA | | | | IAML | | 15 30 02.3 | |
| | comp=E,21nm,2.2s | | | | | | |
| HDA | | | | IAML | | 15 31 10.9 | |
| | comp=N,21nm,4.7s | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.36** | **56** | | **Pn** | 15 29 17.6 | -0.2 |
| **L26K** | **Log Cabin Wild** | **3.36** | **56** | IAML | | 15 30 19.5 | |
| | comp=E,19nm,0.4s | | | | | | |
| L26K | | | | IAML | | 15 30 39.8 | |
| | comp=N,21nm,4.2s | | | | | | |
| **P18K** | **Big Mountain,** | **3.44** | **239** | Pn | **Pn** | 15 29 17.7 | -1.2 |
| P18K | | | | IAML | | 15 30 25.1 | |
| | comp=E,31nm,3.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **3.46** | **12** | Pn | **Pn** | 15 29 18.4 | -0.7 |
| **ISLE** | **Juniper Island** | **3.54** | **98** | Pn | **Pn** | 15 29 18.9 | -1.6 |
| **J20K** | **Nowinta River** | **3.61** | **325** | | **Pn** | 15 29 19.6 | -1.7 |
| J20K | | | | IAML | | 15 30 08.0 | |
| | comp=E,16nm,4.8s | | | | | | |
| J20K | | | | IAML | | 15 30 15.8 | |
| | comp=N,18nm,4.8s | | | | | | |
| **COLA** | **College** | **3.67** | **11** | Pn | **Pn** | 15 29 22.5 | +0.4 |
| **IL31** | | **3.69** | **17** | Pn | **Pn** | 15 29 22.7 | +0.4 |
| **SCRK** | **Sand Creek** | **3.70** | **41** | Pn | **Pn** | 15 29 22.8 | +0.2 |
| SCRK | | | | IAML | | 15 30 20.1 | |
| | comp=N,13nm,0.9s | | | | | | |
| SCRK | | | | IAML | | 15 30 41.3 | |
| | comp=E,18nm,4.9s | | | | | | |
| **MDM** | **Murphy Dome** | **3.73** | **8** | Pn | **Pn** | 15 29 22.5 | -0.4 |
| MDM | | | | IAML | | 15 30 20.6 | |
| | comp=E,12nm,3.8s | | | | | | |
| MDM | | | | IAML | | 15 30 43.5 | |
| | comp=N,12nm,3.9s | | | | | | |
| **BARN** | **Barnard Glacie** | **3.79** | **90** | Pn | **Pn** | 15 29 22.9 | -1.0 |
| BARN | | | | IAML | | 15 30 20.1 | |
| | comp=N,20nm,3.2s | | | | | | |
| **MLY** | **Manley** | **3.80** | **352** | Pn | **Pn** | 15 29 22.4 | -1.5 |
| MLY | | | | IAML | | 15 30 18.8 | |
| | comp=N,12nm,4.6s | | | | | | |
| MLY | | | | IAML | | 15 30 20.8 | |
| | comp=E,13nm,4.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **3.88** | **1** | Pn | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ETLH | | | *eS* | | Sn | 15 29 48.0 | -0.1 |
| | baz=234 | | | | | | |
| **NNSB** | **Datong** | **0.69 262** | *eS* | | Sn | 15 29 49.2 | +0.7 |
| | baz=254 | | | | | | |
| **NNS** | **Nan Shan** | **0.69 263** | *eS* | | Sn | 15 29 49.3 | +0.6 |
| | baz=255 | | | | | | |
| **YHNB** | **Yeheng** | **0.70 282** | P | | Pn | 15 29 38.8 | +0.6 |
| | baz=282 | | | | | | |
| YHNB | | | S | | Sn | 15 29 49.6 | +0.8 |
| | baz=282 | | | | | | |
| **NSK** | **Sanguang** | **0.72 282** | P | | Pn | 15 29 39.0 | +0.6 |
| | baz=282 | | | | | | |
| NSK | | | *eS* | | Sn | 15 29 49.8 | +0.7 |
| | baz=282 | | | | | | |
| **FUSS** | **Fushou** | **0.85 251** | *eS* | | Sn | 15 29 52.5 | +0.2 |
| | baz=245 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.93 277** | *eP* | | Pn | 15 29 41.8 | +0.8 |
| | baz=286 | | | | | | |
| NFF | | | *eS* | | Sn | 15 29 54.6 | +0.9 |
| | baz=286 | | | | | | |
| **CHGB** | **Renai** | **0.98 242** | *eP* | | Pn | 15 29 42.5 | +0.7 |
| | baz=234 | | | | | | |
| CHGB | | | *eS* | | Sn | 15 29 56.0 | +0.8 |
| | baz=234 | | | | | | |
| **LIOB** | **Emei** | **1.02 277** | *eP* | | Pn | 15 29 43.0 | +0.9 |
| | baz=288 | | | | | | |
| LIOB | | | *eS* | | Sn | 15 29 57.1 | +1.4 |
| | baz=288 | | | | | | |
| **WUSB** | **Renai** | **1.06 240** | *eP* | | Pn | 15 29 43.3 | +0.5 |
| | baz=233 | | | | | | |
| WUSB | | | *eS* | | Sn | 15 29 57.5 | +0.6 |
| | baz=233 | | | | | | |
| **WHP** | **Taichung City** | **1.10 257** | *eS* | | Sn | 15 29 59.3 | +1.4 |
| | baz=254 | | | | | | |
| **HGSD** | **Ruisui** | **1.21 212** | *eP* | | Pn | 15 29 44.5 | -0.1 |
| | baz=224 | | | | | | |
| HGSD | | | *eS* | | Sn | 15 30 01.7 | +1.5 |
| | baz=224 | | | | | | |
| **SSLB** | **Suanglung** | **1.30 236** | *eS* | | Sn | 15 30 03.7 | +1.4 |
| | baz=231 | | | | | | |
| **YULB** | **Yu-li** | **1.36 214** | *eP* | | Pn | 15 29 46.1 | -0.5 |
| | baz=223 | | | | | | |
| YULB | | | *eS* | | Sn | 15 30 01.9 | -1.9 |
| | baz=223 | | | | | | |
| **FULB** | **Fuli** | **1.52 210** | *eP* | | Pn | 15 29 49.7 | +0.9 |
| | baz=220 | | | | | | |
| FULB | | | *eS* | | Sn | 15 30 07.1 | -0.6 |
| | baz=220 | | | | | | |

**JMA 07 15:29:40.9±0.2, 25°.16N×124°.00E, h117km, M1.9, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JISG** | **Ishigakijimahi** | **0.64** | **154** | S | Sn | 15 30 13.8 | +0.4 |
| **JIJ** | **Ishigaki jima** | **0.80** | **171** | P | Pn | 15 30 00.3 | -0.5 |
| JIJ | | | | S | Sn | 15 30 15.6 | -0.2 |
| **JTJ** | **Tarama** | **0.82** | **129** | P | Pn | 15 30 01.2 | +0.2 |
| JTJ | | | | S | Sn | 15 30 16.4 | +0.3 |
| **IRIF** | **Iriomote-Funau** | **0.86** | **197** | P | Pn | 15 30 01.6 | +0.3 |
| IRIF | | | | S | Sn | 15 30 17.8 | +1.1 |
| **JKRS** | **Kuro-shima** | **0.92** | **179** | P | Pn | 15 30 02.1 | +0.2 |
| JKRS | | | | S | Sn | 15 30 18.4 | +0.7 |
| **HATJ** | **Hateruma jima** | **1.11** | **189** | S | Sn | 15 30 22.0 | +0.8 |
| **JIRB** | **Irabujima** | **1.11** | **107** | P | Pn | 15 30 03.9 | +0.1 |
| JIRB | | | | S | Sn | 15 30 21.3 | +0.1 |
| **JMJ2** | **Miyako jima3** | **1.27** | **109** | P | Pn | 15 30 06.3 | +0.8 |
| JMJ2 | | | | S | Sn | 15 30 25.2 | +1.0 |

*IDC **07** 15:34:33.4±0.8, 30°.64N×132°.72E, h0km, mb3.7/8, mb1 3.9/11, mb1mx3.7/37, mbtmp3.7/11, ML3.4/3, MS2.7/4, Ms1 2.8/4, ms1mx2.5/92, Error ellipse: s-maj=27.7km s-min=16.1km az=85.0*

*JMA **07** 15:34:35.6±0.1, 30°.56N×132°.81E, h68km, M3.5*

**ISC 07 15:34:37.7±0.8, 30°.63N±0°.05×132°.85E±0°.06, h35km, n29, σ1.195/39, mb3.7/8, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTN** | **Tanegashima 3** | **1.61** | **271** | P | **Pn** | **15 35 01.8** | **-1.9** |
| JTN | | | | *eS* | **Sn** | **15 35 21.3** | **-2.0** |
| **JNAR** | **Kushima--Naru** | **1.62** | **304** | P | **Pn** | **15 35 02.9** | **-0.9** |
| JNAR | | | | S | **Sn** | **15 35 23.2** | **-0.2** |
| **JNKG** | **Nichinankitago** | **1.63** | **309** | P | **Pn** | **15 35 03.1** | **-0.8** |
| JNKG | | | | *eS* | **Sn** | **15 35 22.9** | **-0.7** |
| **JMTN** | **Minamitane** | **1.70** | **263** | P | **Pn** | **15 35 03.2** | **-1.7** |
| JMTN | | | | S | **Sn** | **15 35 23.8** | **-1.6** |
| **JTSR** | **Tashiro 2** | **1.74** | **288** | P | **Pn** | **15 35 04.0** | **-1.5** |
| JTSR | | | | S | **Sn** | **15 35 26.0** | **-0.5** |
| **JTZ** | **Takazaki** | **1.97** | **310** | P | **Pn** | **15 35 07.6** | **-1.0** |
| JTZ | | | | *eS* | **Sn** | **15 35 30.8** | **-1.2** |
| **JTO** | **Tosashimizu** | **2.22** | **359** | P | **Pn** | **15 35 10.5** | **-1.5** |
| JTO | | | | S | **Sn** | **15 35 34.1** | **-4.1** |
| **JNN** | **Nakanoshima** | **2.69** | **254** | P | **Pn** | **15 35 16.9** | **-1.7** |
| JNN | | | | *eS* | **Sn** | **15 35 47.8** | **-2.2** |
| **JSJ** | **Shimokoshiki** | **2.88** | **292** | P | **Pn** | **15 35 19.4** | **-1.7** |
| JSJ | | | | S | **Sn** | **15 35 52.7** | **-1.9** |
| **JNA** | **Nagahama** | **2.93** | **354** | P | **Pn** | **15 35 21.2** | **-0.6** |
| JNA | | | | S | **Sn** | **15 35 52.5** | **-3.3** |
| **JNU** | **Nakatsue** | **3.00** | **326** | Pn | **Pn** | **15 35 22.9** | **+0.2** |
| | 6.1nm,0.3s,baz=192,slow=5.1,SNR=92 | | | | | | |
| JNU | | | | Sn | **Sn** | **15 35 56.9** | **-0.6** |
| | 15nm,0.3s,baz=287,slow=16,SNR=8.5 | | | | | | |
| **JMN** | **Monobe** | **3.21** | **16** | P | **Pn** | **15 35 25.2** | **-0.4** |
| **JAI** | **Aioi** | **3.43** | **23** | S | **Sn** | **15 36 03.5** | **-4.6** |
| **JAMN** | **Amaminishikomi** | **3.99** | **234** | P | **Pn** | **15 35 36.0** | **-0.4** |
| JAMN | | | | S | **Sn** | **15 36 20.3** | **-1.7** |
| **JHS** | **Saijyo** | **4.36** | **3** | P | **Pn** | **15 35 41.4** | **-0.1** |
| JHS | | | | S | **Sn** | **15 36 27.1** | **-3.9** |
| **JOW** | **Kunigami** | **5.52** | **228** | Pn | **Pn** | **15 35 56.0** | **-1.4** |
| | 11nm,0.3s,baz=143,slow=27,SNR=14 | | | | | | |
| JOW | | | | Sn | **Sn** | **15 36 54.9** | **-4.8** |
| | 3.0nm,0.3s,baz=133,slow=19,SNR=2.1 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.39** | **65** | LR | LR | 15 38 15.4 | |
| | comp=Z,94nm,20.9s,baz=227,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.39** | **36** | Pn | **Pn** | **15 36 24.3** | **+1.2** |
| | 0.1nm,0.3s,baz=210,slow=13,SNR=8.4 | | | | | | |
| MJAR | | | | LR | LR | 15 39 07.2 | |
| | comp=Z,43nm,20.4s,baz=182,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **7.94** | **330** | Sn | **Sn** | **15 37 59.5** | **+0.4** |
| | 0.2nm,0.3s,baz=146,slow=23,SNR=4.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **15.51** | **27** | LR | LR | 15 43 59.4 | |
| | comp=Z,58nm,19.0s,baz=41,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **33.01** | **256** | LR | LR | 15 53 58.5 | |
| | comp=Z,8.8nm,20.4s,baz=185,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.88** | **307** | P | **P** | **15 42 25.0** | **+0.5** |
| | 0.2nm,0.5s,baz=97,slow=6.7,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.30** | **178** | P | **P** | **15 43 31.5** | **+0.5** |
| | 0.3nm,0.6s,baz=353,slow=8.6,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **54.00** | **179** | P | P | 15 44 00.1 | +1.7 |
| | 0.5nm,0.6s,baz=11,slow=12,SNR=16 | | | | | | |
| **ILAR** | **Eielson Array** | **58.63** | **30** | P | **P** | **15 44 32.2** | **+1.2** |
| | 0.3nm,0.7s,baz=300,slow=5.9,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **62.72** | **172** | P | **P** | **15 44 59.9** | **+0.8** |
| | 2.4nm,0.9s,baz=307,slow=5.4,SNR=3.9 | | | | | | |
| **FINES** | **FINESS Array B** | **71.03** | **331** | P | **P** | **15 45 51.5** | **-0.2** |
| | 0.9nm,0.7s,baz=72,slow=8.2,SNR=7.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.81** | **27** | P | **P** | **15 46 04.0** | **+1.7** |
| | 0.7nm,0.9s,baz=298,slow=5.5,SNR=8.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.80** | **320** | P | **P** | **15 46 14.9** | **+0.7** |
| | 0.9nm,0.6s,baz=57,slow=5.7,SNR=5.8 | | | | | | |

*IDC **07** 16:03:34.2±1.1, 37°.10N×140°.70E, h0km, mb3.5/6, mb1 3.8/9, mb1mx3.5/51, mbtmp3.6/9, ML3.3/3, MS2.5/2, Ms1 2.5/2, ms1mx2.2/76, Error ellipse: s-maj=24.6km s-min=19.7km az=133.0*

*NIED **07** 16:03:35.7, 37°.09N×140°.73E, h10km, MW3.4, Moment Tensor Solution. s3 Moment tensor: Scale 1014Nm; Mrr-1.46; Mθθ 0.21; Mφφ 1.26; Mrθ 0.37; Mθφ -0.58; Mφr 0.30; Fault plane solution: Mo 1.56000×10^14 NP1: φs172.00000°, δ50.00000°, λ-68.00000°. NP2: φs320.00000°, δ45.00000°, λ-114.00000°.*

*JMA **07** 16:03:35.7, 37°.09N×140°.73E, h10km±1km, M3.8 Broadband fault plane solution: P waves. NP1: φs170.00000°, δ41.00000°, λ-80.00000°. NP2: φs337.00000°, δ49.00000°, λ-99.00000°. Principal axes: T Plg4.0000°, Azm73.0000°; N Plg7.0000°, Azm343.0000°; P Plg82.0000°, Azm194.0000°;*

*JMA Felt III J1.*

**ISC 07 16:03:35.5±0.8, 37°.09N±0°.03×140°.75E±0°.04, h10km±5km, n26, σ0.64/30, mb3.3/6, 8C-1D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONAJ** | **Iwakimizuishiy** | **0.04** | **67** | ⇓P | **Pg** | **16 03 37.7** | **+0.3** |
| ONAJ | | | | S | **Sg** | **16 03 39.0** | **+0.2** |
| **JFFD** | **Fukushimafurud** | **0.15** | **272** | ⇑P | **Pg** | **16 03 38.8** | **0.0** |
| JFFD | | | | S | **Sg** | **16 03 40.9** | **-0.3** |
| **JFK** | **Kawauchi** | **0.30** | **19** | ⇑P | **Pg** | **16 03 41.7** | **+0.2** |
| JFK | | | | S | **Sg** | **16 03 45.8** | **+0.3** |
| **JHO** | **Hitachi** | **0.49** | **197** | ⇑P | **Pg** | **16 03 45.1** | **0.0** |
| JHO | | | | S | **Sg** | **16 03 52.0** | **+0.4** |
| **JFT** | **Otama** | **0.54** | **323** | ⇑P | **Pg** | **16 03 46.2** | **+0.1** |
| JFT | | | | S | **Sg** | **16 03 53.5** | **+0.3** |
| **JSB** | **Shiboa** | **0.68** | **260** | ⇑P | **Pg** | **16 03 49.1** | **+0.6** |
| JSB | | | | S | **Sg** | **16 03 58.3** | **+0.9** |
| **JMM** | **Marumori** | **0.78** | **2** | ⇑P | **Pg** | **16 03 50.2** | **-0.3** |
| JMM | | | | S | **Sg** | **16 04 00.6** | **-0.1** |
| **JFY** | **Yanaizu** | **0.89** | **291** | ⇑P | **Pg** | **16 03 52.5** | **-0.2** |
| JFY | | | | S | **Sg** | **16 04 03.8** | **-0.6** |
| **JYT** | **Yasato** | **0.97** | **208** | ⇑P | **Pb** | **16 03 53.3** | **-1.0** |
| JYT | | | | S | **Sg** | **16 04 06.0** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **2.11** | **256** | Pn | **Pn** | **16 04 11.6** | **+0.7** |
| | 5.3nm,0.3s,baz=359,slow=7.4,SNR=116 | | | | | | |
| MJAR | | | | Sn | **Sn** | **16 04 38.2** | **+1.0** |
| | 9.4nm,0.3s,baz=359,slow=9.8,SNR=5.9 | | | | | | |
| MJAR | | | | LR | LR | 16 05 05.3 | |
| | comp=Z,65nm,18.2s,baz=10.0,slow=44 | | | | | | |
| **MAT** | **Matsushiro** | **2.11** | **256** | P | **Pn** | **16 04 12.0** | **+1.1** |
| MAT | | | | S | **Sb** | **16 04 39.9** | **-0.3** |
| **JHJ** | **Hachijo jima 2** | **4.04** | **192** | Pn | **Pn** | **16 04 38.1** | **+0.8** |
| | 3.7nm,0.3s,baz=94,slow=23,SNR=1.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.16** | **11** | Pn | **Pn** | **16 05 20.6** | **+0.2** |
| | 0.7nm,0.3s,baz=221,slow=14,SNR=11 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.91** | **31** | LR | LR | 16 16 40.9 | |
| | comp=Z,23nm,18.2s,baz=69,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **27.32** | **304** | P | **P** | **16 09 19.9** | **-0.6** |
| | 0.4nm,0.7s,baz=107,slow=8.8,SNR=3.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.63** | **120** | T | T | 16 39 19.3 | |
| | baz=313,slow=75,SNR=35 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.64** | **120** | T | T | 16 39 16.5 | |
| | baz=313,slow=75,SNR=56 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.65** | **120** | T | T | 16 39 20.7 | |
| | baz=313,slow=75,SNR=42 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.33** | **122** | T | T | 16 40 19.3 | |
| | baz=314,slow=75,SNR=43 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.34** | **122** | T | T | 16 40 18.0 | |
| | baz=314,slow=75,SNR=21 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.35** | **122** | T | T | 16 40 21.9 | |
| | baz=314,slow=75,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.49** | **312** | P | **P** | **16 11 21.7** | **-0.8** |
| | 0.3nm,0.4s,baz=91,slow=5.8,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.64** | **302** | P | **P** | **16 11 39.5** | **-0.7** |
| | 0.3nm,0.6s,baz=85,slow=11,SNR=5.5 | | | | | | |
| **ILAR** | **Eielson Array** | **49.73** | **32** | P | **P** | **16 12 27.9** | **+0.2** |
| | 0.2nm,0.6s,baz=268,slow=6.0,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.04** | **187** | P | **P** | **16 13 21.1** | **-0.6** |
| | 1.1nm,0.5s,baz=7.4,slow=7.7,SNR=6.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.38** | **53** | P | **P** | **16 15 21.0** | **+1.3** |
| | 0.3nm,0.6s,baz=295,slow=4.4,SNR=3.8 | | | | | | |

*TUL **07** 16:10:00.7±0.9, 35°.98N±0°.02×97°.18W±0°.04, h8km±7km, ML3.6, mb_Lg3.2/81(NEIC), Error ellipse: s-maj=4.6km s-min=2.3km az=59.0*

*NEIC **07** 16:10:00.7±0.8, 35°.99N±0°.02×97°.19W±0°.05, h8km±7km, Error ellipse: s-maj=6.5km s-min=1.1km az=71.0*

**ISC 07 16:10:00.6±1.0, 35°.99N±0°.02×97°.18W±0°.02, h12km±10km, n86, σ0.56/66, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.21** | **74** | | **Pg** | **16 10 05.3** | **+0.2** |
| OK033 | | | | Sg | **Sg** | **16 10 08.1** | **-0.1** |
| **OK031** | **S. Brethren Rd** | **0.28** | **97** | | **Pg** | **16 10 06.6** | **+0.2** |
| **OK029** | **Liberty Lake** | **0.29** | **229** | | **Pg** | **16 10 06.5** | **0.0** |
| **OK030** | **Cody Creek RV** | **0.33** | **100** | | **Pg** | **16 10 07.4** | **+0.1** |
| OK030 | | | | Sg | **Sg** | **16 10 11.2** | **-0.6** |
| **OK034** | **N. Norfolk Rd.** | **0.38** | **86** | | **Pg** | **16 10 08.5** | **+0.3** |
| **OK025** | **Westminster Rd** | **0.42** | **197** | | **Pg** | **16 10 09.0** | **0.0** |
| **QUOK** | **Quay** | **0.43** | **64** | Pg | **Pg** | **16 10 09.3** | **+0.2** |
| **OK009** | **Oakdale Elemen** | **0.45** | **206** | | **Pg** | **16 10 09.3** | **-0.2** |
| **BCOK** | **Bluff Creek, N** | **0.48** | **227** | | **Pg** | **16 10 09.8** | **-0.2** |
| BCOK | | | | Sg | **Sg** | **16 10 16.1** | **-0.2** |
| **OKCFA** | **Oklahoma City** | **0.61** | **201** | | **Pg** | **16 10 12.2** | **-0.2** |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **200** | | **Pg** | **16 10 12.2** | **-0.4** |
| OKCSW | | | | Sg | **Sg** | **16 10 20.2** | **-0.5** |
| **FNO** | **Franklin** | **0.75** | **194** | | **Pg** | **16 10 14.7** | **-0.4** |
| FNO | | | | Sg | **Sg** | **16 10 24.2** | **-0.7** |
| **BLOK** | **Blackwell** | **0.77** | **358** | | **Pg** | **16 10 15.6** | **0.0** |
| **CROK** | **Carrier** | **0.83** | **309** | | **Pg** | **16 10 16.8** | **0.0** |
| **W35A** | **Tecumseh** | **0.87** | **163** | | **Pg** | **16 10 16.4** | **-1.0** |
| **GC02** | **Grant County #** | **1.02** | **328** | | **Pg** | **16 10 20.0** | **-0.3** |
| **KAN13** | **South Haven SW** | **1.05** | **347** | | **Pg** | **16 10 20.6** | **-0.2** |
| **T35A** | **Sooner Cattle** | **1.07** | **30** | | **Pg** | **16 10 20.8** | **-0.6** |
| **TUL1** | **Leonard** | **1.13** | **93** | Pg | **Pg** | **16 10 21.3** | **-1.1** |
| **KAN14** | **Manchester OK** | **1.15** | **327** | Pg | **Pg** | **16 10 22.4** | **-0.4** |
| **KAN17** | **Caldwell West** | **1.16** | **336** | Pg | **Pg** | **16 10 22.5** | **-0.3** |
| **OK032** | **Salt Plains WL** | **1.16** | **315** | Pg | **Pg** | **16 10 22.3** | **-0.7** |
| **KAN05** | **Bluff City Nor** | **1.25** | **334** | | **Pn** | **16 10 24.0** | **0.0** |
| **KAN01** | **Argonia South** | **1.25** | **339** | | **Pn** | **16 10 24.1** | **+0.1** |
| **KAN10** | **Anthony SW Sta** | **1.35** | **327** | | **Pn** | **16 10 25.7** | **+0.4** |
| **KAN06** | **Argonia West S** | **1.37** | **337** | | **Pn** | **16 10 25.9** | **+0.3** |
| **KAN08** | **Anthony NE Sta** | **1.39** | **333** | | **Pn** | **16 10 26.2** | **+0.3** |
| **KAN16** | **Harper SW Stat** | **1.43** | **330** | | **Pn** | **16 10 26.9** | **+0.5** |
| **OK035** | **E0210 Rd and N** | **1.43** | **301** | | **Pn** | **16 10 26.9** | **+0.6** |
| **KAN12** | **Harper NE Stat** | **1.46** | **334** | | **Pn** | **16 10 27.4** | **+0.5** |
| **X34A** | **Smith Ranch, M** | **1.48** | **201** | | **Pn** | **16 10 28.3** | **+0.7** |
| **U32A** | **Winter Ranch,** | **1.52** | **285** | | **Pn** | **16 10 28.3** | **+0.6** |
| **WMOK** | **Wichita Mounta** | **1.80** | **227** | | **Pn** | **16 10 32.5** | **+0.9** |
| **LOOK** | **Love County** | **1.99** | **180** | | **Pn** | **16 10 35.1** | **+1.0** |
| LOOK | | | | lAmb_Lg | | 16 11 08.8 | |
| | comp=Z,107nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.04** | **133** | | **Pn** | **16 10 35.3** | **+0.6** |
| **U38A** | **Gravette** | **2.31** | **78** | | **Pn** | **16 10 39.0** | **+0.5** |
| U38A | | | | lAmb_Lg | | 16 11 14.9 | |
| | comp=Z,74nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **2.64** | **83** | | **Pn** | **16 10 43.5** | **+0.4** |
| **Z35A** | **Perchaven, San** | **2.65** | **181** | Pn | **Pn** | **16 10 43.6** | **+0.4** |
| Z35A | | | | lAmb_Lg | | 16 11 27.7 | |
| | comp=Z,66nm,1.0s | | | | | | |
| **R32A** | **Long Quarter,** | **2.72** | **334** | Pn | **Pn** | **16 10 44.7** | **+0.5** |
| **W39A** | **Magazine** | **2.88** | **105** | Pn | **Pn** | **16 10 46.1** | **-0.2** |
| W39A | | | | lAmb_Lg | | 16 11 37.7 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.14** | **8** | | **Pn** | **16 10 49.6** | **-0.4** |
| **Z38A** | **Mt. Pleasant** | **3.27** | **146** | Pn | **Pn** | **16 10 51.6** | **-0.1** |
| **MIAR** | **Mount Ida** | **3.28** | **115** | | **Pn** | **16 10 51.8** | **-0.1** |
| MIAR | | | | lAmb_Lg | | 16 11 52.0 | |
| | comp=Z,55nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.48** | **325** | Pn | **Pn** | **16 10 55.0** | **+0.4** |
| **U40A** | **Yellville** | **3.52** | **83** | Pn | **Pn** | **16 10 55.6** | **+0.4** |
| U40A | | | | lAmb_Lg | | 16 12 01.0 | |
| | comp=Z,63nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.53** | **60** | Pn | **Pn** | **16 10 55.8** | **+0.4** |
| **AMTX** | **Amarillo** | **3.83** | **255** | Pn | **Pn** | **16 10 59.9** | **+0.3** |
| AMTX | | | | lAmb_Lg | | 16 12 02.0 | |
| | comp=Z,66nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.86** | **112** | Pn | **Pn** | **16 11 00.6** | **+0.7** |
| X40A | | | | lAmb_Lg | | 16 12 04.9 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.92** | **212** | Pn | **Pn** | **16 11 01.7** | **+1.0** |
| **WHTX** | **Lake Whitney,** | **3.99** | **183** | Pn | **Pn** | **16 11 02.4** | **+0.8** |
| **WHAR** | **Wooly Hollow** | **4.05** | **98** | Pn | **Pn** | **16 11 03.2** | **+0.8** |
| **WLAR** | **White Oak Lake** | **4.06** | **123** | Pn | **Pn** | **16 11 03.4** | **+0.9** |
| **W41B** | **Gary Mavity, V** | **4.10** | **100** | | **Pn** | **16 11 03.9** | **+0.7** |
| W41B | | | | lAmb_Lg | | 16 12 15.0 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **90** | Pn | **Pn** | **16 11 04.0** | **+0.8** |
| FCAR | | | | lAmb_Lg | | 16 12 11.8 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.12** | **72** | Pn | **Pn** | **16 11 04.6** | **+1.1** |
| MGMO | | | | lAmb_Lg | | 16 12 17.0 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **4.14** | **164** | Pn | **Pn** | **16 11 04.0** | **+0.3** |
| 237A | | | | lAmb_Lg | | 16 12 20.8 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.55** | **58** | | **Pn** | **16 11 09.9** | **+0.6** |
| R40A | | | | lAmb_Lg | | 16 12 22.4 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **4.64** | **37** | Pn | **Pn** | **16 11 11.7** | **+1.1** |
| P38A | | | | lAmb_Lg | | 16 12 30.2 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **NATX** | **Nacogdoches** | **4.71** | **153** | lAmb_Lg | | 16 12 42.9 | |
| | comp=Z,49nm,1.1s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.75** | **358** | lAmb_Lg | | 16 12 34.7 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **LCAR** | **Lake Charles** | **4.89** | **87** | Pn | **Pn** | **16 11 13.9** | **0.0** |
| **CCAR** | **Cane Creek** | **4.90** | **113** | lAmb_Lg | | 16 12 46.2 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **T42A** | **Van Buren** | **5.02** | **76** | lAmb_Lg | | 16 12 45.2 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.18** | **65** | Pn | **Pn** | **16 11 18.9** | **+0.9** |
| CCM | | | | lAmb_Lg | | 16 12 43.3 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **5.20** | **184** | lAmb_Lg | | 16 12 52.2 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.28** | **307** | lAmb_Lg | | 16 12 56.2 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.39** | **47** | lAmb_Lg | | 16 12 56.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.71** | **32** | lAmb_Lg | | 16 13 03.2 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **FVM** | **French Village** | **5.77** | **68** | lAmb_Lg | | 16 13 04.0 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.91** | **203** | lAmb_Lg | | 16 13 19.6 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.93** | **283** | Pn | **Pn** | **16 11 29.0** | **+0.5** |
| T25A | | | | lAmb_Lg | | 16 13 13.0 | |
| | comp=Z,53nm,1.0s | | | | | | |
| **SLM** | **Saint Louis** | **6.14** | **62** | lAmb_Lg | | 16 13 13.0 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.24** | **324** | lAmb_Lg | | 16 13 27.0 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **6.67** | **26** | lAmb_Lg | | 16 13 35.0 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **N41A** | **Harden Midland** | **6.85** | **45** | lAmb_Lg | | 16 13 35.8 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **K38A** | **Parkersburg** | **7.48** | **26** | lAmb_Lg | | 16 14 10.6 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **L40A** | **Anamosa** | **7.64** | **36** | lAmb_Lg | | 16 13 59.5 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **7.67** | **302** | lAmb_Lg | | 16 14 09.3 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **HDIL** | **Hopedale** | **7.70** | **51** | lAmb_Lg | | 16 14 10.0 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **833A** | **Chaparral WMA,** | **7.87** | **194** | lAmb_Lg | | 16 14 19.9 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.38** | **42** | lAmb_Lg | | 16 14 31.2 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.44** | **308** | lAmb_Lg | | 16 14 38.9 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.53** | **19** | lAmb_Lg | | 16 14 42.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.75** | **36** | lAmb_Lg | | 16 14 54.7 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **K22A** | **Casper** | **9.83** | **315** | lAmb_Lg | | 16 15 29.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.87** | **4** | lAmb_Lg | | 16 15 19.0 | |
| | comp=Z,15nm,0.9s | | | | | | |

*TUL **07** 16:26:28.2±1.3, 35°.97N±0°.02×97°.19W±0°.02, h8km±6km, ML2.5, mb_Lg1.9/4(NEIC), Error ellipse: s-maj=2.3km s-min=1.7km az=147.0*

**NEIC 07 16:26:28.1±0.6, 35°.99N±0°.02×97°.21W±0°.02, h6km±7km, Error ellipse: s-maj=2.4km s-min=1.8km az=158.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK033** | **Mehan** | **0.23** | **76** | Pg | Pg | 16 26 32.9 | +0.3 |
| **OK029** | **Liberty Lake** | **0.28** | **226** | Pg | Pg | 16 26 33.8 | +0.2 |
| **OK031** | **S. Brethren Rd** | **0.30** | **97** | Pg | Pg | 16 26 34.1 | +0.1 |
| **OK030** | **Cody Creek RV** | **0.35** | **100** | Pg | Pg | 16 26 35.0 | +0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.40** | **87** | Pg | Pg | 16 26 36.0 | +0.1 |
| **OK025** | **Westminster Rd** | **0.42** | **195** | Pg | Pg | 16 26 36.3 | 0.0 |
| **QUOK** | **Quay** | **0.44** | **66** | Pg | Pg | 16 26 36.9 | +0.2 |
| **BCOK** | **Bluff Creek, N** | **0.47** | **224** | Pg | Pg | 16 26 37.2 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.61** | **199** | Pg | Pg | 16 26 39.6 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.61** | **198** | Pg | Pg | 16 26 39.9 | 0.0 |
| **FNO** | **Franklin** | **0.75** | **192** | Pg | Pg | 16 26 42.2 | -0.4 |
| **BLOK** | **Blackwell** | **0.77** | **360** | Pg | Pg | 16 26 42.2 | -0.7 |
| **CROK** | **Carrier** | **0.81** | **309** | Pg | Pg | 16 26 43.8 | +0.1 |
| **W35A** | **Tecumseh** | **0.88** | **162** | Pg | Pg | 16 26 43.9 | -1.1 |
| **GC02** | **Grant County #** | **1.01** | **329** | Pg | Pg | 16 26 47.5 | 0.0 |
| **KAN13** | **South Haven SW** | **1.04** | **348** | Pg | Pg | 16 26 47.8 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.08** | **31** | Pg | Pg | 16 26 48.4 | -0.4 |
| **KAN14** | **Manchester OK** | **1.14** | **328** | Pg |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BRCR** | **Berchikul'** | **3.63** | **293** | Pn | Pb | 17 07 51.6 | -2.8 |
| BRCR | | | | Pg | Pg | 17 08 00.3 | +1.0 |
| BRCR | | | | Sg | Sg | 17 08 47.4 | +1.3 |
| **TASR** | **Tashtagol** | **4.09** | **250** | Pg | Pg | 17 08 08.4 | +0.4 |
| TASR | | | | Sg | Sg | 17 09 03.9 | +3.0 |
| **KNGR** | **Kungurtug, Tuv** | **4.26** | **150** | Pg | Pg | 17 08 15.4 | +4.1 |
| KNGR | | | | Sg | Sg | 17 09 08.1 | +1.7 |
| **POMOR** | **Pomortsevo, Ku** | **4.49** | **274** | Sg | Sg | 17 09 19.3 | +5.5 |
| **BJR1** | **Bachatsky 1, K** | **4.78** | **272** | Sg | Sg | 17 09 28.0 | +4.8 |
| **ELT** | **Eltsovka** | **4.84** | **260** | Pg | Pg | 17 08 23.2 | +0.8 |
| ELT | | | | Sg | Sg | 17 09 26.7 | +1.6 |
| **ARTR** | **Artybash** | **4.89** | **241** | Pg | Pg | 17 08 21.6 | -1.7 |
| ARTR | | | | Sg | Sg | 17 09 28.9 | +2.3 |
| **MOY** | **Mondy** | **4.90** | **120** | Pg | Pg | 17 08 21.6 | -2.0 |
| MOY | | | | Sg | Sg | 17 09 27.6 | +0.6 |
| **SALR** | **Pechorkino, Sa** | **4.97** | **274** | Sg | Sg | 17 09 31.3 | +2.2 |
| **ULGR** | **Ulagan, Altay** | **5.33** | **228** | Pg | Pg | 17 08 34.4 | +2.7 |
| ULGR | | | | Sg | Sg | 17 09 45.0 | +4.3 |
| **CUR** | **Chagan-Uzun** | **5.56** | **223** | Pg | Pg | 17 08 38.2 | +1.9 |
| CUR | | | | Sg | Sg | 17 09 51.1 | +2.8 |
| **AKAR** | **Aktash** | **5.70** | **228** | Pg | Pg | 17 08 39.5 | +0.6 |
| AKAR | | | | Sg | Sg | 17 09 54.5 | +1.9 |
| **CHBI** | **Chibit, Altay** | **5.75** | **228** | Pg | Pg | 17 08 40.5 | +0.6 |
| CHBI | | | | Sg | Sg | 17 09 57.7 | +3.3 |
| **DGZ** | **Jazzator, Alta** | **6.25** | **225** | Pg | Pg | 17 08 48.7 | -0.6 |
| DGZ | | | | Sg | Sg | 17 10 12.7 | +2.5 |
| **ZAK** | **Zakamensk** | **6.83** | **122** | Sg | Sg | 17 10 28.5 | -0.4 |
| **TRG** | **Tyrgan** | **7.41** | **97** | Sg | Sg | 17 10 40.6 | -6.9 |

*SIGU **07** 17:06:52.9,48°.58N×27°.31E, h4km*
*MCSM **07** 17:06:53.4±0.4,49°.N±3°×2°.7E±°, h3km±3km, ML2.9/4*
**ISC 07 17:06:53.3**±0.9,**48°.57N**±0°.03×**27°.34E**±0°.02,**h5**km±7km,
**n49,**σ1°**42/78,35C-15D,Ukraine-Moldova-Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NDNU** | **Novodnistrovsk** | **0.03** | **30** | ⇑*i*Pg | **Pg** | **17 06 54.6** | **+0.3** |
| NDNU | | | | m | | 17 06 54.9 | |
| NDNU | | | | ⇓*i*Sg | **Sg** | **17 06 55.0** | **-0.1** |
| **KMPD** | **K-Podol'skiy** | **0.58** | **270** | ⇑*i*Pg | **Pg** | **17 07 04.7** | **+0.2** |
| KMPD | | | | *e*Sg | **Sg** | **17 07 12.4** | **+0.3** |
| **KMPD** | **K-Podol'skiy** | **0.58** | **270** | Pg | **Pg** | **17 07 04.0** | **-0.5** |
| **SORM** | **Soroca** | **0.80** | **122** | ⇑P | **Pg** | **17 07 08.7** | **+0.1** |
| SORM | | | | ⇑S | **Sg** | **17 07 19.1** | **+0.1** |
| **SORM** | **Soroca** | **0.80** | **122** | *e*Pg | **Pg** | **17 07 08.7** | **+0.1** |
| SORM | | | | Sg | **Sg** | **17 07 19.1** | **+0.1** |
| **SORM** | **Soroca** | **0.80** | **122** | Pg | **Pg** | **17 07 08.3** | **-0.3** |
| **HORU** | **Horodok** | **0.89** | **317** | *e*Pg | **Pg** | **17 07 09.7** | **-0.6** |
| HORU | | | | Pm | | 17 07 09.8 | |
| HORU | | | | *e*Sg | **Sb** | **17 07 22.7** | **-0.6** |
| HORU | | | | Sm | | 17 07 23.2 | |
| **CHRU** | **Chernivtsi** | **0.98** | **255** | *e*Pg | **Pb** | **17 07 12.8** | **0.0** |
| CHRU | | | | m | | 17 07 24.8 | |
| **IAS** | **Iasi** | **1.38** | **174** | ⇑P | **Pg** | **17 07 21.2** | **+1.5** |
| **KSV** | **Kosov** | **1.54** | **261** | *e*Pn | **Pb** | **17 07 22.1** | **-0.1** |
| KSV | | | | Pm | | 17 07 22.7 | |
| KSV | | | | *e*Sn | **Sg** | **17 07 43.8** | **+1.2** |
| KSV | | | | Sm | | 17 07 44.5 | |
| KSV | | | | m | | 17 07 48.3 | |
| **GIRR** | **Girov** | **1.71** | **200** | ⇑P | **Pg** | **17 07 26.1** | **+0.1** |
| **BURAR** | **Bucovina Array** | **1.71** | **237** | ⇓P | **Pg** | **17 07 26.1** | **0.0** |
| **STNU** | **Starunia** | **1.89** | **275** | *e*Pn | **Pb** | **17 07 28.0** | **-0.2** |
| STNU | | | | *e*Sn | **Sg** | **17 07 53.4** | **-0.5** |
| **MILM** | **Milestii Mici** | **1.92** | **148** | ⇑P | **Pb** | **17 07 29.0** | **+0.2** |
| MILM | | | | ⇓S | **Sg** | **17 07 54.4** | **-0.6** |
| **MILM** | **Milestii Mici** | **1.92** | **148** | *e*Pn | **Pb** | **17 07 29.0** | **+0.2** |
| MILM | | | | *e*Sn | **Sg** | **17 07 54.5** | **-0.6** |
| **VASR** | **Vaslui** | **1.95** | **171** | ⇑P | **Pg** | **17 07 30.3** | **-0.3** |
| VASR | | | | ⇓S | **Sg** | **17 07 56.5** | **+0.6** |
| **NSLU** | **Nyzhne Selyshc** | **1.96** | **260** | *e*Pn | Pg | 17 07 40.7 | +10 |
| NSLU | | | | *e*Sn | Sg | 17 08 15.3 | +19 |
| **TESR** | **Tescani** | **2.11** | **193** | ⇑P | **Pg** | **17 07 33.2** | **-0.5** |
| TESR | | | | ⇑S | **Sg** | **17 08 00.9** | **0.0** |
| **LEOM** | **Leova** | **2.18** | **163** | ⇑P | **Pb** | **17 07 32.5** | **-0.7** |
| LEOM | | | | ⇑S | **Sg** | **17 08 02.7** | **-0.6** |
| **LEOM** | **Leova** | **2.18** | **163** | *e*Pn | **Pb** | **17 07 32.5** | **-0.7** |
| LEOM | | | | *e*Sn | **Sg** | **17 08 02.7** | **-0.6** |
| **RAKU** | **Rahkiv** | **2.19** | **257** | *e*Pn | **Pb** | **17 07 33.6** | **+0.3** |
| RAKU | | | | Pm | | 17 07 33.7 | |
| RAKU | | | | *e*Sn | **Sg** | **17 08 02.9** | **-0.6** |
| RAKU | | | | Sm | | 17 08 05.2 | |
| RAKU | | | | m | | 17 08 05.3 | |
| **JOSR** | **Joseni** | **2.23** | **214** | ⇓P | **Pg** | **17 07 35.2** | **-0.8** |
| JOSR | | | | ⇑S | **Sg** | **17 08 05.8** | **+0.9** |
| **BIR** | **Birlad** | **2.31** | **175** | ⇑P | **Pb** | **17 07 34.9** | **-0.5** |
| BIR | | | | ⇑S | **Sg** | **17 08 07.6** | **+0.2** |
| **MORS** | **Morshin** | **2.35** | **285** | *e*Pn | **Pb** | **17 07 35.8** | **-0.2** |
| MORS | | | | *e*Sn | **Sg** | **17 08 07.1** | **-1.5** |
| **AKBB** | **Malin Array Si** | **2.46** | **29** | Pn | **Pn** | **17 07 34.7** | **+0.6** |
| **ARCR** | **ARCALIA** | **2.50** | **235** | ⇑P | **Pb** | **17 07 37.9** | **-0.7** |
| ARCR | | | | ⇓S | **Sg** | **17 08 12.7** | **-0.8** |
| **GHRR** | | **2.51** | **179** | ⇓P | **Pb** | **17 07 38.1** | **-0.7** |
| GHRR | | | | ⇑S | **Sb** | **17 08 10.7** | **+0.8** |
| **LVV** | **L'vov** | **2.51** | **301** | *e*Sn | **Sb** | **17 08 10.4** | **+0.5** |
| **MEZ** | **Mezhgor'ye** | **2.54** | **270** | *e*Pn | **Pb** | **17 07 39.0** | **-0.4** |
| MEZ | | | | Pm | | 17 07 41.1 | |
| MEZ | | | | *e*Sn | **Sg** | **17 08 13.4** | **-1.5** |
| MEZ | | | | Sm | | 17 08 19.0 | |
| **PURM** | **Purcari** | **2.66** | **139** | ⇑P | **Pn** | **17 07 38.2** | **+1.4** |
| PURM | | | | ⇓S | **Sb** | **17 08 12.3** | **-2.1** |
| **OZUR** | | **2.69** | **204** | ⇓S | **Sg** | **17 08 17.6** | **-2.0** |
| **SHIU** | **Shidnytsya** | **2.71** | **286** | *e*Sn | **Sg** | **17 08 18.1** | **-2.1** |
| **BMR** | **Baia Mare** | **2.73** | **252** | ⇓P | **Pb** | **17 07 41.6** | **-0.9** |
| **VRI** | **Vrincioaia** | **2.73** | **189** | ⇑P | **Pb** | **17 07 41.7** | **-0.9** |
| VRI | | | | ⇓S | **Sb** | **17 08 18.3** | **+1.9** |
| **PLOR** | **Plostina** | **2.76** | **190** | ⇓P | **Pb** | **17 07 42.0** | **-1.0** |
| PLOR | | | | ⇑S | **Sb** | **17 08 18.5** | **+1.3** |
| **VLDR** | **Vladesti** | **2.77** | **169** | ⇑P | **Pb** | **17 07 41.4** | **-1.8** |
| VLDR | | | | ⇓S | **Sb** | **17 08 18.0** | **+0.5** |
| **ODBI** | **Odobesti** | **2.81** | **184** | ⇑S | **Sb** | **17 08 19.5** | **+0.8** |
| **BRIU** | **Brid** | **2.88** | **267** | *e*Pn | **Pb** | **17 07 44.9** | **-0.3** |
| **CJR** | **Cluj-Napoca** | **3.14** | **235** | ⇑P | **Pb** | **17 07 47.3** | **-2.3** |
| CJR | | | | ⇑S | **Sb** | **17 08 28.0** | **-0.1** |
| **STZU** | **Stuzhytsa** | **3.15** | **280** | *e*Pn | **Pb** | **17 07 49.6** | **-0.2** |
| **MLR** | **Muntele Rosu** | **3.22** | **198** | ⇑P | **Pb** | **17 07 48.6** | **-2.4** |
| MLR | | | | ⇑S | **Sb** | **17 08 30.3** | **-0.3** |
| **HOLU** | **Holmets** | **3.29** | **271** | *e*Pn | **Pb** | **17 07 51.3** | **-0.9** |
| **CFR** | **Carcaliu** | **3.43** | **171** | ⇑P | **Pn** | **17 07 49.5** | **+2.1** |
| CFR | | | | ⇑S | **Sb** | **17 08 34.3** | **-2.2** |
| **VOIR** | | **3.50** | **207** | ⇑P | **Pb** | **17 07 52.3** | **-3.5** |
| **TLCR** | | **3.53** | **163** | ⇑P | **Pn** | **17 07 51.4** | **+2.6** |
| TLCR | | | | ⇑S | **Sb** | **17 08 35.8** | **-3.4** |
| **DRGR** | | **3.60** | **242** | ⇑P | **Pn** | **17 07 53.2** | **+3.4** |
| DRGR | | | | ⇓S | **Sb** | **17 08 39.0** | **-2.4** |
| **ARR** | **Arges** | **3.70** | **211** | ⇑P | **Pn** | **17 07 54.3** | **+3.1** |
| ARR | | | | ⇑S | **Sb** | **17 08 42.0** | **-2.2** |
| **TPGR** | **Topolog** | **3.78** | **168** | ⇓S | **Sb** | **17 08 42.8** | **-3.9** |
| **TIRR** | **Tirgusor** | **4.17** | **169** | ⇑P | **Pn** | **17 07 59.8** | **+2.2** |

*IDC **07** 17:27:53.2±0.6,26°.22N×125°.81E, h0km, mb3.5/4, mb1 3.6/4, mb1mx3.4/40, mbtmp3.5/4, Error ellipse: s-maj=26.2km s-min=13.3km az=61.0*
*JMA **07** 17:27:54.1±0.3,26°.07N×125°.40E, h6km±4km, M3.3*
**ISC 07 17:27:54.0**±1.9,**26°.03N**±0°.07×**125°.53E**±0°.07,**h5**km±12km,
**n15,**σ0°**76/25,mb3.3/4,Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKM** | **Ikemajima** | **1.13** | **193** | P | **Pg** | **17 28 15.8** | **+0.1** |
| JIKM | | | | S | **Sg** | **17 28 30.6** | **+0.3** |
| **JKE** | **Kume jima 2** | **1.17** | **75** | P | **Pn** | **17 28 17.5** | **+0.6** |
| JKE | | | | *e*S | **Sn** | **17 28 34.5** | **+1.3** |
| **JIRB** | **Irabujima** | **1.24** | **195** | P | **Pn** | **17 28 17.4** | **-0.5** |
| JIRB | | | | S | **Sg** | **17 28 34.4** | **+0.6** |
| **JOGS** | **Gusukube** | **1.27** | **185** | P | **Pn** | **17 28 18.3** | **0.0** |
| JOGS | | | | S | **Sg** | **17 28 35.3** | **+0.5** |
| **JMJ2** | **Miyako jima3** | **1.29** | **188** | P | **Pn** | **17 28 18.7** | **0.0** |
| JMJ2 | | | | S | **Sb** | **17 28 35.8** | **+0.1** |
| **JTJ** | **Tarama** | **1.57** | **209** | P | **Pn** | **17 28 22.3** | **-0.2** |
| JTJ | | | | *e*S | **Sn** | **17 28 42.1** | **-1.1** |
| **JISG** | **Ishigakijimahi** | **1.81** | **218** | P | **Pn** | **17 28 26.0** | **+0.2** |
| JISG | | | | *e*S | **Sn** | **17 28 49.4** | **+0.3** |
| **JJT3** | **Tamagusuku3** | **2.03** | **86** | P | **Pg** | **17 28 32.2** | **-0.7** |
| JJT3 | | | | *e*S | **Sg** | **17 28 58.5** | **-0.7** |
| **JIJ** | **Ishigaki jima** | **2.08** | **218** | P | **Pn** | **17 28 29.5** | **0.0** |
| JIJ | | | | *e*S | **Sn** | **17 28 54.3** | **-1.5** |
| **JKRS** | **Kuro-shima** | **2.25** | **218** | P | **Pn** | **17 28 32.0** | **+0.1** |
| JKRS | | | | S | **Sn** | **17 28 59.6** | **-0.5** |
| **IRIF** | **Iriomote-Funau** | **2.35** | **224** | P | **Pn** | **17 28 34.0** | **+0.8** |
| **MKAR** | **Makanchi Array** | **39.88** | **313** | P | **P** | **17 35 28.9** | **+0.3** |
| | 0.4nm,0.6s,baz=100,slow=11,SNR=8.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.96** | **324** | P | **P** | **17 35 38.0** | **+0.5** |
| | 0.8nm,0.7s,baz=128,slow=9.3,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **50.06** | **170** | P | **P** | **17 36 51.0** | **+1.1** |
| | 0.2nm,0.5s,baz=352,slow=7.3,SNR=5.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.72** | **24** | P | **P** | **17 40 01.1** | **-1.4** |
| | 0.3nm,0.7s,baz=307,slow=4.8,SNR=6.7 | | | | | | |

*TUL **07** 17:44:17.8±1.1,36°.89N±0°.01×97°.67W±0°.02,h3km±7km, ML2.5,mb_Lg2.3/5(NEIC),Error ellipse: s-maj=2.7km s-min=1.6km az=70.0*
**NEIC 07 17:44:17.9**±0.6,**36°.89N**±0°.01×**97°.66W**±0°.02,**h7**km±4km,
**Error ellipse: s-maj=3.1km s-min=1.4km az=65.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GC02** | **Grant County #** | **0.17** | **257** | Pg | Pg | 17 44 21.2 | -0.2 |
| GC02 | | | | Sg | Sg | 17 44 23.7 | +0.1 |
| **KAN17** | **Caldwell West** | **0.18** | **331** | Pg | Pg | 17 44 21.7 | +0.1 |
| **KAN13** | **South Haven SW** | **0.19** | **49** | Pg | Pg | 17 44 22.2 | +0.4 |
| **KAN01** | **Argonia South** | **0.28** | **343** | Pg | Pg | 17 44 23.4 | 0.0 |
| **KAN05** | **Bluff City Nor** | **0.28** | **322** | Pg | Pg | 17 44 23.4 | 0.0 |
| KAN05 | | | | Sg | Sg | 17 44 27.3 | +0.2 |
| **BLOK** | **Blackwell** | **0.38** | **110** | Pg | Pg | 17 44 25.7 | +0.4 |
| **KAN06** | **Argonia West S** | **0.39** | **336** | | Pg | 17 44 25.7 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **0.42** | **323** | Pg | Pg | 17 44 25.7 | -0.4 |
| **KAN10** | **Anthony SW Sta** | **0.42** | **304** | Pg | Pg | 17 44 26.1 | 0.0 |
| **OK032** | **Salt Plains WL** | **0.45** | **259** | Pg | Pg | 17 44 26.6 | -0.1 |
| **CROK** | **Carrier** | **0.47** | **214** | Pg | Pg | 17 44 27.1 | +0.1 |
| **KAN16** | **Harper SW Stat** | **0.47** | **316** | Pg | Pg | 17 44 26.9 | -0.2 |
| **KAN12** | **Harper NE Stat** | **0.49** | **326** | Pg | Pg | 17 44 27.4 | 0.0 |
| **OK035** | **E0210 Rd and N** | **0.86** | **258** | Pg | Pg | 17 44 34.3 | -0.3 |
| **T35A** | **Sooner Cattle** | **0.92** | **88** | | Pg | 17 44 35.5 | -0.1 |
| **OK033** | **Mehan** | **1.02** | **145** | Pg | Pg | 17 44 37.5 | -0.1 |
| **QUOK** | **Quay** | **1.05** | **133** | | Pg | 17 44 37.9 | -0.2 |
| **OK029** | **Liberty Lake** | **1.10** | **171** | Pg | Pg | 17 44 38.8 | -0.3 |
| **OK031** | **S. Brethren Rd** | **1.14** | **145** | | Pg | 17 44 39.6 | -0.3 |
| **OK034** | **N. Norfolk Rd.** | **1.16** | **139** | | Pg | 17 44 39.8 | -0.4 |
| **OK030** | **Cody Creek RV** | **1.19** | **143** | | Pg | 17 44 40.4 | -0.4 |
| **U32A** | **Winter Ranch,** | **1.20** | **245** | Pg | Pg | 17 44 40.0 | -0.8 |
| **BCOK** | **Bluff Creek, N** | **1.23** | **178** | | Pb | 17 44 41.3 | -0.2 |
| **OK025** | **Westminster Rd** | **1.33** | **169** | | Pn | 17 44 42.9 | -0.1 |
| **OKCFA** | **Oklahoma City** | **1.48** | **173** | Pn | Pn | 17 44 45.1 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **173** | Pn | Pn | 17 44 44.7 | -0.5 |
| **FNO** | **Franklin** | **1.64** | **173** | Pn | Pn | 17 44 46.9 | -0.3 |
| **R32A** | **Long Quarter,** | **1.74** | **332** | Pn | Pn | 17 44 49.1 | +0.4 |
| **TUL1** | **Leonard** | **1.79** | **122** | | Pn | 17 44 49.5 | +0.2 |
| **W35A** | **Tecumseh** | **1.84** | **160** | | Pn | 17 44 50.4 | +0.3 |
| **U38A** | **Gravette** | **2.67** | **99** | IAmb_Lg | | 17 45 46.9 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **LOOK** | **Love County** | **2.92** | **172** | Pn | Pn | 17 45 04.2 | -0.6 |
| **HHAR** | **Hobbs** | **3.05** | **100** | IAmb_Lg | | 17 45 52.6 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **3.56** | **117** | IAmb_Lg | | 17 46 12.6 | |
| | comp=Z,15nm,1.1s | | | | | | |

**IDC 07 17:49:16.1**±9.0,**4°.48S×153°.66E, h108**km±63km,**mb3.4/3, mb1 3.6/4,mb1mx3.2/36,mbtmp3.9/4,Error ellipse: s-maj=79.6km s-min=56.5km az=109.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **8.10** | **232** | P | Pn | 17 51 11.3 | +0.3 |
| | 5.2nm,0.3s,baz=57,slow=3.0,SNR=25 | | | | | | |
| PMG | | | | S | Sn | 17 52 41.3 | +0.4 |
| | 1.7nm,0.3s,baz=133,slow=18,SNR=9.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.30** | **229** | P | P | 17 54 23.9 | +0.2 |
| | 1.4nm,0.5s,baz=54,slow=9.9,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **26.96** | **223** | P | P | 17 54 47.8 | -0.1 |
| | 0.9nm,1.1s,baz=56,slow=9.0,SNR=10.0 | | | | | | |
| **STKA** | **Stephens Creek** | **29.51** | **201** | P | P | 17 55 10.2 | -0.1 |
| | 0.9nm,0.6s,baz=35,slow=16,SNR=3.0 | | | | | | |
| **H03N3** | **Juan Fernandez** | **117.63** | **131** | T | T | 20 16 46.4 | |
| | baz=242,slow=74,SNR=6.0 | | | | | | |
| **H03N2** | **Juan Fernandez** | **117.63** | **131** | T | T | 20 16 43.9 | |
| | baz=242,slow=74,SNR=4.8 | | | | | | |
| **H03N1** | **Juan Fernandez** | **117.65** | **131** | T | T | 20 16 44.0 | |
| | baz=242,slow=74,SNR=6.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.02** | **289** | PKPbc | PKPbc | 18 08 57.3 | -0.3 |
| | 0.4nm,0.7s,baz=71,slow=2.3,SNR=2.6 | | | | | | |

*IDC **07** 17:53:36.1±1.1,14°.74N×144°.31E, h0km, mb3.6/7, mb1 3.8/7,mb1mx3.6/35,mbtmp3.6/7,MS3.0/2,Ms1 3.1/2, ms1mx2.5/56,Error ellipse: s-maj=45.7km s-min=16.4km az=75.0*
**ISC 07 17:53:39.9**±0.9,**14°.7N**±0°.1×**144°.4E**±0°.3,**h27**km,**n10,**
σ0°**99/9,mb3.6/7,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.20** | **156** | Pn | **Pn** | **17 54 00.3** | **-0.6** |
| | 168nm,0.3s,baz=285,slow=2.1,SNR=81 | | | | | | |
| GUMO | | | | Sn | **Sn** | **17 54 15.8** | **-0.5** |
| | 134nm,0.3s,baz=80,slow=21,SNR=7.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.45** | **347** | P | **P** | **17 58 37.2** | **+0.4** |
| | 2.6nm,1.0s,baz=165,slow=9.6,SNR=2.7 | | | | | | |
| **HNR** | **Honiara** | **28.51** | **146** | LR | LR | 18 11 56.4 | |
| | comp=Z,37nm,18.1s,baz=320,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.80** | **196** | P | **P** | **18 00 38.2** | **+1.1** |
| | 1.1nm,0.8s,baz=16,slow=9.7,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **39.47** | **195** | P | **P** | **18 01 09.1** | **+0.9** |
| | 0.3nm,0.7s,baz=21,slow=11,SNR=6.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.61** | **281** | LR | LR | 18 19 04.0 | |
| | comp=Z,12nm,20.5s,baz=200,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **45.56** | **325** | P | **P** | **18 01 57.1** | **-0.5** |
| | 0.7nm,0.8s,baz=133,slow=11,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.36** | **316** | P | **P** | **18 03 46.0** | **-0.6** |
| | 0.9nm,0.8s,baz=98,slow=8.9,SNR=7.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.45** | **324** | P | **P** | **18 03 45.8** | **-1.2** |
| | 0.4nm,0.6s,baz=101,slow=7.5,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.11** | **27** | P | **P** | **18 05 58.8** | **+1.0** |
| | 0.2nm,0.7s,baz=288,slow=4.5,SNR=2.1 | | | | | | |

**TAP 07 18:05:21.1,23°.04N×120°.47E,h5km,ML1.0,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHN3** | **Shinhua** | **0.11** | **291** | *e*S | Sg | 18 05 27.5 | +2.6 |
| | baz=291 | | | | | | |
| **SGST** | **Jiashian** | **0.11** | **66** | *i* P | Pg | 18 05 24.6 | +1.2 |
| | baz=69 | | | | | | |
| SGST | | | | *i* S | Sg | 18 05 26.5 | +1.5 |
| | baz=69 | | | | | | |
| **SHHT** | **Tainan City** | **0.12** | **262** | *e*S | Sg | 18 05 28.0 | +2.9 |
| | baz=262 | | | | | | |
| **SCST** | **Cishan** | **0.15** | **173** | *e*S | Sg | 18 05 30.1 | +3.9 |
| | baz=172 | | | | | | |
| **CHN1** | **Nanshi** | **0.15** | **19** | *i* P | Pg | 18 05 24.9 | +0.7 |
| | baz=20 | | | | | | |
| CHN1 | | | | S | Sg | 18 05 28.7 | +2.4 |
| | baz=20 | | | | | | |
| **SLGT** | **Liugui** | **0.17** | **105** | *e*P | Pg | 18 05 26.6 | +2.2 |
| | baz=106 | | | | | | |
| **SNST** | **Tainan City** | **0.18** | **7** | *e*S | Sg | 18 05 30.4 | +3.2 |
| | baz=8.0 | | | | | | |
| **SSHA** | **Shanhua** | **0.20** | **300** | *e*S | Sg | 18 05 30.5 | +2.9 |
| | baz=300 | | | | | | |
| **TWK** | **Hsinying** | **0.23** | **3** | *e*P | Pg | 18 05 27.8 | +2.1 |
| | baz=8.0 | | | | | | |
| TWK | | | | *e*S | Sg | 18 05 32.0 | +3.4 |
| | baz=8.0 | | | | | | |
| **WTP** | **Ta-pu** | **0.24** | **32** | *e*P | Pg | 18 05 27.8 | +1.9 |
| | baz=35 | | | | | | |
| WTP | | | | S | Sg | 18 05 32.2 | +3.0 |
| | baz=35 | | | | | | |
| **TPUB** | **Ta-pu** | **0.30** | **29** | *e*P | Pb | 18 05 28.8 | -0.2 |
| | baz=30 | | | | | | |
| TPUB | | | | *e*S | Sb | 18 05 33.8 | -0.4 |
| | baz=30 | | | | | | |
| **WSF** | **Szhu** | **0.64** | **339** | *e*S | Sn | 18 05 46.1 | -1.2 |
| | baz=341 | | | | | | |

**TAP 07 18:05:30.0,23°.14N×120°.89E,h8km,ML0.7,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.11** | **286** | *e*S | Sg | 18 05 35.1 | +0.9 |
| | baz=65 | | | | | | |
| **STYH** | **Taoyuan** | **0.11** | **286** | *e*P | Pg | 18 05 33.2 | +0.7 |
| | baz=291 | | | | | | |
| STYH | | | | *e*S | Sg | 18 05 35.3 | +1.1 |
| | baz=291 | | | | | | |
| **ELDTW** | **Lidau** | **0.13** | **68** | *e*P | Pg | 18 05 33.6 | +0.8 |
| | baz=74 | | | | | | |
| **ELDTW** | **Lidau** | **0.13** | **68** | P | Pg | 18 05 33.7 | +0.8 |
| | baz=70 | | | | | | |
| ELDTW | | | | *e*S | Sg | 18 05 36.4 | +1.5 |
| | baz=70 | | | | | | |
| **WTP** | **Ta-pu** | **0.27** | **293** | *e*P | Pg | 18 05 36.2 | +0.8 |
| | baz=292 | | | | | | |
| WTP | | | | *e*S | Sb | 18 05 40.8 | -1.2 |
| | baz=292 | | | | | | |
| **SGST** | **Jiashian** | **0.29** | **258** | *e*S | Sb | 18 05 41.3 | -1.0 |
| | baz=257 | | | | | | |
| **CHN1** | **Nanshi** | **0.33** | **278** | *e*P | Pb | 18 05 37.7 | -0.5 |
| | baz=277 | | | | | | |
| CHN1 | | | | S | Sb | 18 05 43.1 | -0.6 |
| | baz=277 | | | | | | |
| **SNST** | **Tainan City** | **0.37** | **282** | *e*S | Sb | 18 05 44.3 | -0.3 |
| | baz=282 | | | | | | |

*TEH **07** 18:15:56.6,27°.04N×54°.06E,h9km,ML3.4*
*OMAN **07** 18:16:09.5±0.5,26°.76N×54°.72E,h31km±23km,mb4.4/1, ml2.8/10,Error ellipse: s-maj=11.0km s-min=3.4km az=314.0*
**ISC 07 18:15:56.4**±0.9,**27°.01N**±0°.04×**54°.09E**±0°.04,**h10**km,**n44,**
σ2°**37/51,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAR1** | **LAR** | **0.71** | **21** | *e*Pg | **Pg** | **18 16 10.0** | **-0.1** |
| LAR1 | | | | *e*Sg | **Sb** | **18 16 20.4** | **-0.3** |
| LAR1 | | | | *e* | | 18 16 26.3 | |
| | comp=Z,38μm,0.3s | | | | | | |
| **LMD1** | **Lamerd** | **0.89** | **292** | *e*Pg | **Pg** | **18 16 12.9** | **-0.7** |
| LMD1 | | | | *e* | | 18 16 29.2 | |
| | comp=Z,16μm,0.3s | | | | | | |
| **JHRM** | **Jahrom** | **1.56** | **343** | *e*Pg | **Pg** | **18 16 25.6** | **-0.8** |
| JHRM | | | | *e* | | 18 16 50.4 | |
| | comp=Z,8μm,0.6s | | | | | | |
| **GHIR** | **Ghir-Karzin** | **1.61** | **323** | *e*Pn | **Pb** | **18 16 25.5** | **-0.8** |
| **QIR1** | **Qir** | **1.74** | **328** | *e*Pn | **Pg** | **18 16 28.5** | **-1.2** |
| QIR1 | | | | *e* | | 18 16 31.3 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **GENO** | **Geno** | **1.89** | **78** | *e*Pn | **Pb** | **18 16 31.4** | **+0.3** |
| **SHME** | **Shamm** | **2.07** | **117** | *e*Pn | **Pn** | **18 16 31.9** | **+0.8** |
| **SHME** | **Shamm** | **2.07** | **117** | P | **Pb** | **18 16 33.7** | **-0.3** |
| SHME | | | | S | **Sn** | **18 16 52.3** | **-4.6** |
| **BANOM** | **Banah** | **2.25** | **118** | *e*Pn | **Pb** | **18 16 36.5** | **-0.6** |
| **BANOM** | **Banah** | **2.25** | **118** | P | **Pb** | **18 16 36.6** | **-0.6** |
| | SNR=11 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.46** | **145** | *e*Pn | **Pb** | **18 16 40.3** | **-0.3** |
| **MASF** | **Masafi** | **2.47** | **131** | P | **Pb** | **18 16 39.8** | **-1.1** |
| MASF | | | | S | **Sn** | **18 17 03.2** | **-3.8** |
| **MSFE** | **Esma-Masafi** | **2.48** | **131** | *e*Pn | **Pb** | **18 16 40.6** | **-0.4** |
| **ASUD** | **Al Ashush, Dub** | **2.62** | **155** | *e*Pn | **Pb** | **18 16 43.6** | **+0.2** |
| **ASUD** | **Al Ashush, Dub** | **2.62** | **155** | P | **Pb** | **18 16 43.6** | **+0.2** |
| | SNR=14 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.62** | **149** | *e*Pn | **Pb** | **18 16 42.8** | **-0.7** |
| **FAQ** | **Al Faqa, Dubai** | **2.62** | **149** | P | **Pb** | **18 16 42.7** | **-0.7** |
| **UOSS** | **Minazif** | **2.80** | **137** | *e*Pn | **Pn** | **18 16 44.7** | **+3.5** |
| **UOSS** | **Minazif** | **2.80** | **137** | P | **Pb** | **18 16 45.0** | **-1.5** |
| **HATD** | **Hatta, Dubai** | **2.84** | **139** | *e*Pn | **Pn** | **18 16 45.2** | **+3.4** |
| **HATD** | **Hatta, Dubai** | **2.84** | **139** | P | **Pn** | **18 16 45.2** | **+3.4** |
| **ASHO** | **Ashiyiah** | **2.91** | **142** | *e*Pn | **Pb** | **18 16 47.0** | **-1.4** |
| **ASHO** | **Ashiyiah** | **2.91** | **142** | P | **Pb** | **18 16 47.0** | **-1.4** |
| | SNR=6.9 | | | | | | |
| ASHO | | | | S | **Sn** | **18 17 17.0** | **-0.9** |
| **AHBU** | **AHRAM** | **3.09** | **307** | *e*Pn | **Pn** | **18 16 45.5** | **+0.3** |
| **ALNE** | **Al Ain** | **3.30** | **153** | *e*Pn | **Pn** | **18 16 52.3** | **+4.2** |
| **KHNJ** | **Kahnooj** | **3.34** | **73** | *e*Pn | **Pn** | **18 16 50.8** | **+2.1** |
| **KRBR** | **Kerman** | **3.78** | **38** | *e*Pn

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| URZ | Urewera | 18.07 | 192 | P | | P | 18 26 25.9 | -1.1 | |
| | 0.8nm,0.3s,baz=267,slow=2.9,SNR=5.7 | | | | | | | | |
| QRZ | Quartz Range | 21.65 | 199 | P | | P | 18 26 58.6 | -0.8 | |
| QRZ | | | | IAmb | | IAmb | 18 27 12.8 | | |
| | comp=Z,9.7nm,1.0s | | | | | | | | |
| THZ | Tophouse | 22.40 | 197 | P | | P | 18 27 05.5 | -0.7 | |
| THZ | | | | IAmb | | IAmb | 18 27 24.4 | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| WHZ | Wether Hill Ro | 27.66 | 201 | P | | P | 18 27 52.7 | +0.2 | |
| WHZ | | | | IAmb | | IAmb | 18 27 53.8 | | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| CTA | Charters Tower | 33.16 | 264 | P | | P | 18 28 40.8 | +0.6 | |
| | comp=Z,8.2nm,0.7s,baz=85,slow=11,SNR=12 | | | | | | | | |
| CTAO | Charters Tower | 33.16 | 264 | P | | P | 18 28 40.1 | -0.1 | |
| CTAO | | | | IAmb | | IAmb | 18 28 41.7 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| PMG | Port Moresby | 35.03 | 283 | P | | P | 18 28 56.5 | +0.5 | |
| | comp=Z,11nm,0.8s,baz=78,slow=5.1,SNR=6.7 | | | | | | | | |
| PMG | Port Moresby | 35.03 | 283 | P | | P | 18 28 54.4 | -1.6 | |
| PMG | | | | IAmb | | IAmb | 18 28 57.0 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| STKA | Stephens Creek | 37.47 | 244 | P | | P | 18 29 16.0 | +0.2 | |
| | comp=Z,1.8nm,0.7s,baz=64,slow=9.2,SNR=3.6 | | | | | | | | |
| STKA | Stephens Creek | 37.47 | 244 | P | | P | 18 29 14.6 | -1.3 | |
| JAY | Jayapura | 43.75 | 289 | P | | P | 18 30 06.3 | +0.3 | |
| | comp=Z,9.0nm,0.5s,baz=127,slow=5.6,SNR=13 | | | | | | | | |
| WR0 | Warramunga Arr | 44.08 | 262 | P | | P | 18 30 08.0 | -0.5 | |
| AS31 | Alice Springs | 44.18 | 257 | P | | P | 18 30 09.4 | +0.1 | |
| AS31 | | | | PcP | | PcP | 18 31 42.5 | +0.3 | |
| ASAR | Alice Springs | 44.18 | 257 | P | | P | 18 30 09.5 | +0.1 | |
| | comp=Z,13nm,0.7s,baz=98,slow=7.7,SNR=204 | | | | | | | | |
| ASAR | | | | PcP | | PcP | 18 31 42.2 | +0.1 | |
| | comp=Z,2.4nm,0.5s,baz=101,slow=4.1,SNR=13 | | | | | | | | |
| ASAR | | | | S | | S | 18 36 02.5 | -0.5 | |
| | comp=Z,1.0nm,0.9s,baz=94,slow=15,SNR=7.1 | | | | | | | | |
| WB0 | Warramunga Arr | 44.24 | 262 | P | | P | 18 30 09.6 | -0.3 | |
| WB0 | | | | IAmb | | IAmb | 18 30 10.2 | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| WB2 | Warramunga Arr | 44.25 | 262 | P | | P | 18 30 09.6 | -0.3 | |
| WB2 | | | | IAmb | | IAmb | 18 30 10.4 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| WRA | Warramunga Arr | 44.27 | 262 | P | | P | 18 30 09.6 | -0.5 | |
| | comp=Z,5.6nm,0.7s,baz=96,slow=7.4,SNR=74 | | | | | | | | |
| WRA | Warramunga Arr | 44.27 | 262 | P | | P | 18 30 08.8 | -1.2 | |
| FITZ | Fitzroy Crossi | 52.69 | 263 | P | | P | 18 31 12.8 | +0.3 | |
| | comp=Z,3.3nm,0.8s,baz=88,slow=5.3,SNR=22 | | | | | | | | |
| SIJI | Sorong | 52.93 | 285 | P | | P | 18 31 14.6 | +0.2 | |
| | comp=Z,40nm,0.8s,baz=90,slow=6.1,SNR=9.7 | | | | | | | | |
| SOEI | Soe | 56.17 | 272 | P | | P | 18 31 38.3 | +1.1 | |
| BATI | Baumata | 56.60 | 271 | P | | P | 18 31 41.0 | +0.9 | |
| | comp=Z,17nm,0.8s,baz=206,slow=6.2,SNR=6.5 | | | | | | | | |
| PSA00 | Pilbara Seismi | 57.33 | 257 | P | | P | 18 31 44.2 | -0.7 | |
| PSA00 | | | | IAmb | | IAmb | 18 31 45.6 | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| MBWA | Marble Bar | 57.52 | 257 | P | | P | 18 31 45.2 | -1.0 | |
| QSPA | South Pole Qui | 69.51 | 180 | P | | P | 18 33 03.0 | +0.9 | |
| | comp=Z,4.0nm,0.7s,baz=55,slow=0.8,SNR=17 | | | | | | | | |
| QSPA | South Pole Qui | 69.51 | 180 | P | | P | 18 33 02.8 | +0.7 | |
| MJAR | Matsushiro Arr | 70.06 | 324 | P | | P | 18 33 05.5 | -0.2 | |
| | comp=Z,2.2nm,0.8s,baz=166,slow=7.8,SNR=5.6 | | | | | | | | |
| MAT | Matsushiro | 70.06 | 324 | P | | P | 18 33 05.4 | -0.3 | |
| PETK | Petropavlovsk- | 76.24 | 345 | P | | P | 18 33 40.6 | 0.0 | |
| | comp=Z,6.1nm,0.7s,baz=125,slow=7.8,SNR=14 | | | | | | | | |
| PETK | Petropavlovsk- | 76.24 | 345 | P | | P | 18 33 40.2 | -0.4 | |
| USRK | Ussuriysk Ar. | 78.83 | 326 | P | | P | 18 33 55.8 | +1.0 | |
| | comp=Z,2.4nm,0.7s,baz=134,slow=5.5,SNR=4.1 | | | | | | | | |
| KMRM | Mail Ridge | 79.01 | 40 | P | | P | 18 33 56.7 | +0.7 | |
| WDC | Whiskeytown Da | 79.93 | 40 | P | | P | 18 33 59.5 | -1.2 | |
| M02C | Callahan | 80.25 | 39 | P | | P | 18 34 03.9 | +1.4 | |
| M02C | | | | IAmb | | IAmb | 18 34 04.9 | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| YBH | Yreka Blue Hor | 80.54 | 39 | P | | P | 18 34 05.1 | +1.1 | |
| YBH | | | | IAmb | | IAmb | 18 34 06.2 | | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| PNTR | Pine Nut | 80.85 | 42 | P | | P | 18 34 07.0 | +1.2 | |
| PNTR | | | | IAmb | | IAmb | 18 34 07.7 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| YERR | Yerington | 81.01 | 43 | P | | P | 18 34 07.0 | +0.3 | |
| L04D | Klamath Falls | 81.08 | 39 | P | | P | 18 34 06.4 | -0.5 | |
| L04D | | | | IAmb | | IAmb | 18 34 08.6 | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| NVAR | Mina Array Bea | 81.29 | 44 | P | | P | 18 34 08.8 | +0.7 | |
| | comp=Z,3.1nm,0.8s,baz=223,slow=9.3,SNR=26 | | | | | | | | |
| PAHR | Pah Rah Range | 81.34 | 42 | P | | P | 18 34 07.2 | -1.1 | |
| NV11 | Mina Array Sit | 81.39 | 44 | P | | P | 18 34 07.8 | -0.7 | |
| KVN | Kaiserville | 81.78 | 43 | P | | P | 18 34 11.1 | +0.6 | |
| J04D | Umpqua Nationa | 81.82 | 38 | P | | P | 18 34 10.9 | +0.2 | |
| K05A | Summer Lake | 82.22 | 39 | P | | P | 18 34 13.9 | +1.2 | |
| K05A | | | | IAmb | | IAmb | 18 34 14.7 | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| O19K | Port Alsworth | 82.81 | 12 | P | | P | 18 34 14.8 | -0.2 | |
| PINE | Pine Mountain | 82.83 | 38 | P | | P | 18 34 16.9 | +1.1 | |
| PINE | | | | IAmb | | IAmb | 18 34 18.0 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| ILSW | Iliamna Southw | 82.85 | 12 | P | | P | 18 34 14.6 | -0.8 | |
| I07A | Izee | 83.84 | 38 | P | | P | 18 34 21.6 | +1.0 | |
| I07A | | | | IAmb | | IAmb | 18 34 22.6 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| GAMB | Gambell | 84.22 | 3 | P | | P | 18 34 21.3 | -0.5 | |
| GAMB | | | | IAmb | | IAmb | 18 34 23.3 | | |
| | comp=Z,8.6nm,0.9s | | | | | | | | |
| U15A | North Rim | 84.25 | 48 | P | | P | 18 34 24.1 | +1.1 | |
| U15A | | | | IAmb | | IAmb | 18 34 25.0 | | |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| G08A | Pilot Rock | 84.86 | 38 | P | | P | 18 34 26.1 | +0.4 | |
| BMO | Blue Mountains | 85.57 | 39 | P | | P | 18 34 28.5 | -0.6 | |
| SCM | Sheep Creek Mo | 85.77 | 14 | P | | P | 18 34 29.1 | -0.4 | |
| CAST | Castle Rocks | 86.20 | 12 | P | | P | 18 34 29.6 | -2.0 | |
| CAST | | | | IAmb | | IAmb | 18 34 30.9 | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| F10A | Beach Ranch, E | 86.25 | 38 | P | | P | 18 34 32.2 | -0.1 | |
| F10A | | | | IAmb | | IAmb | 18 34 33.4 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| PLID | Pearl Lake | 86.47 | 39 | P | | P | 18 34 33.7 | +0.2 | |
| PLID | | | | IAmb | | IAmb | 18 34 34.2 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| B08A | Colville Reser | 86.47 | 35 | P | | P | 18 34 32.9 | -0.3 | |
| B08A | | | | IAmb | | IAmb | 18 34 33.7 | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| J20K | Nowinta River | 86.53 | 10 | P | | P | 18 34 32.7 | -0.3 | |
| TRF | Thorofare Moun | 86.57 | 12 | P | | P | 18 34 32.5 | -1.0 | |
| RND | Reindeer | 86.83 | 13 | P | | P | 18 34 34.0 | -0.6 | |
| TXAR | Lajitas Array | 87.36 | 57 | P | | P | 18 34 39.2 | +1.3 | |
| | comp=Z,2.3nm,0.9s,baz=215,slow=6.6,SNR=18 | | | | | | | | |
| I21K | Tanana | 87.83 | 11 | P | | P | 18 34 38.4 | -0.7 | |
| MLY | Manley | 87.92 | 11 | P | | P | 18 34 38.5 | -1.1 | |
| MLY | | | | IAmb | | IAmb | 18 34 39.2 | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| WRH | Wood River Hil | 87.93 | 13 | P | | P | 18 34 39.0 | -0.5 | |
| HDA | Harding Lake | 88.11 | 13 | P | | P | 18 34 39.8 | -0.6 | |
| H21K | Melozitna Rive | 88.12 | 10 | P | | P | 18 34 40.3 | -0.2 | |
| H21K | | | | IAmb | | IAmb | 18 34 41.2 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | | |
| CCB | Clear Creek Bu | 88.14 | 13 | P | | P | 18 34 39.6 | -0.9 | |
| IMAR | Indian Mountai | 88.27 | 10 | P | | P | 18 34 40.9 | -0.3 | |
| MDM | Murphy Dome | 88.33 | 12 | P | | P | 18 34 40.3 | -1.2 | |
| IL31 | | 88.44 | 13 | P | | P | 18 34 41.2 | -0.7 | |
| IL31 | | | | IAmb | | IAmb | 18 34 41.9 | | |
| | comp=Z,7.3nm,1.1s | | | | | | | | |
| ILAR | Eielson Array | 88.44 | 13 | P | | P | 18 34 41.0 | -0.9 | |
| | comp=Z,5.8nm,0.9s,baz=221,slow=5.8,SNR=38 | | | | | | | | |
| J25K | Salcha River, | 88.63 | 14 | P | | P | 18 34 42.3 | -0.6 | |
| J25K | | | | IAmb | | IAmb | 18 34 43.5 | | |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| J26L | Joseph Creek | 88.94 | 14 | P | | P | 18 34 44.7 | +0.2 | |
| HHC | Hu-ho-hac-te | 89.16 | 314 | eP | | P | 18 34 47.3 | +1.3 | |
| PD31 | Pinedale Array | 89.23 | 43 | P | | P | 18 34 46.4 | -0.1 | |
| PD31 | | | | IAmb | | IAmb | 18 34 47.4 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| PDAR | Pinedale Array | 89.23 | 43 | P | | P | 18 34 46.7 | +0.2 | |
| | comp=Z,2.6nm,0.6s,baz=211,slow=3.5,SNR=28 | | | | | | | | |
| PRP | Porcupine Dome | 89.38 | 13 | P | | P | 18 34 45.2 | -1.3 | |
| PRP | | | | IAmb | | IAmb | 18 34 48.0 | | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| CMAR | Chiang Mai Arr | 89.82 | 290 | P | | P | 18 34 51.0 | +1.5 | |
| | comp=Z,2.1nm,0.9s,baz=128,slow=2.9,SNR=9.6 | | | | | | | | |
| COLD | Coldfoot | 89.99 | 11 | P | | P | 18 34 48.8 | -0.4 | |
| COLD | | | | IAmb | | IAmb | 18 34 50.4 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | | |
| PZH | PanZhiHua | 90.44 | 298 | P | | P | 18 34 53.2 | +0.9 | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,140nm,6.1s | | | | | | | | |
| YKA | Yellowknife Ar | 96.70 | 25 | P | | P | 18 35 19.3 | -0.5 | |
| | comp=Z,0.2nm,0.7s,baz=246,slow=4.6,SNR=6.4 | | | | | | | | |
| ZALV | Zalesovo Beam | 110.33 | 321 | PKiKP | | PKiKP | 18 40 16.9 | -1.3 | |
| | comp=Z,1.1nm,0.6s,baz=197,slow=1.8,SNR=7.9 | | | | | | | | |
| MKAR | Makanchi Array | 111.00 | 313 | PKiKP | | PKiKP | 18 40 18.6 | -1.0 | |
| | comp=Z,0.8nm,0.6s,baz=156,slow=0.7,SNR=16 | | | | | | | | |
| ARCES | ARCESS Array B | 128.92 | 349 | PKP | | PKPdf | 18 40 52.5 | -0.8 | |
| | comp=Z,1.5nm,0.5s,baz=36,slow=1.0,SNR=12 | | | | | | | | |
| ARCES | ARCESS Array B | 128.92 | 349 | | | PKPdf | 18 40 53.6 | +0.2 | |
| FINES | FINESS Array B | 135.73 | 343 | PKhKP | | PKPpre | 18 40 55.0 | | |
| | comp=Z,2.8nm,0.9s,baz=193,slow=7.8,SNR=5.3 | | | | | | | | |
| FINES | | | | PKP | | PKPdf | 18 41 05.0 | -1.3 | |
| | comp=Z,2.6nm,0.8s,baz=45,slow=3.0,SNR=6.7 | | | | | | | | |
| FINES | | | | SKPbc | | SKPbc | 18 43 48.2 | +1.8 | |
| | comp=Z,6.3nm,1.1s,baz=350,slow=2.1,SNR=3.4 | | | | | | | | |
| NB2 | NORSAR Subarra | 139.00 | 353 | PKP | | PKPpre | 18 41 03.3 | | |
| | comp=Z,3.0nm,1.0s,baz=16,slow=3.2 | | | | | | | | |
| NOA | NORSAR Array B | 139.00 | 353 | PKhKP | | PKPpre | 18 41 04.7 | | |
| | comp=Z,1.2nm,0.6s,baz=16,slow=5.0,SNR=6.2 | | | | | | | | |
| AKASG | Malin Array Be | 142.90 | 331 | PKhKP | | PKPpre | 18 41 16.3 | | |
| | comp=Z,9.7nm,0.5s,baz=42,slow=4.4,SNR=108 | | | | | | | | |
| LODK | Lodwar | 143.02 | 247 | PKPdf | | PKPbc | 18 41 20.0 | +0.8 | |
| SORM | Soroca | 145.08 | 328 | ⇓P | | PKPdf | 18 41 23.7 | +0.2 | |
| PURM | Purcari | 145.34 | 325 | ⇑P | | PKPbc | 18 41 25.5 | +0.3 | |
| BEL | Belsk | 145.39 | 339 | *e*PKPbc | | PKPab | 18 41 25.9 | -0.5 | |
| MILM | Milestii Mici | 145.66 | 326 | ⇓P | | PKPbc | 18 41 25.8 | -0.3 | |
| BSEG | Bad Segeberg | 146.02 | 351 | *e*PKPbc | | PKPbc | 18 41 27.1 | +0.3 | |
| | baz=17,slow=2.6 | | | | | | | | |
| BR131 | Keskin Array S | 146.63 | 312 | | | PKPbc | 18 41 29.2 | -0.1 | |
| BRTR | Keskin Array B | 146.63 | 312 | PKPbc | | PKPbc | 18 41 28.9 | -0.4 | |
| | comp=Z,14.5nm,0.6s,baz=138,slow=4.0,SNR=27 | | | | | | | | |
| BRTR | Keskin Array B | 146.63 | 312 | | | PKPbc | 18 41 29.1 | -0.1 | |
| VLDR | Vladesti | 146.74 | 325 | ⇑P | | PKPbc | 18 41 29.7 | +0.6 | |
| TLCR | | 146.76 | 324 | ⇑P | | PKPbc | 18 41 29.0 | -0.2 | |
| RUE | Ruedersdorf | 146.77 | 346 | *e*PKPbc | | PKPbc | 18 41 29.1 | +0.1 | |
| | baz=17,slow=2.6 | | | | | | | | |
| BUR08 | Bucovina Ar. S | 146.94 | 330 | | | PKPbc | 18 41 30.4 | +0.6 | |
| BUR01 | Bucovina Ar. S | 146.95 | 330 | ⇑P | | PKiKP | 18 41 31.4 | -0.2 | |
| BURAR | Bucovina Array | 146.95 | 330 | ⇑P | | PKiKP | 18 41 31.1 | -0.6 | |
| BURAR | Bucovina Array | 146.95 | 330 | | | PKPbc | 18 41 30.3 | +0.5 | |
| TESR | Tescani | 147.03 | 328 | ⇑P | | PKPbc | 18 41 29.7 | -0.2 | |
| OJC | Ojcow | 147.09 | 338 | *e*PKPbc | | PKPbc | 18 41 30.0 | 0.0 | |
| CFR | Carcaliu | 147.14 | 324 | ⇓P | | PKPbc | 18 41 30.7 | +0.6 | |
| TPGR | Topolog | 147.19 | 324 | ⇑P | | PKPbc | 18 41 30.7 | +0.3 | |
| FLTG | Fleringen | 147.42 | 349 | *e*PKPbc | | PKPbc | 18 41 30.6 | -0.1 | |
| | baz=17,slow=2.6 | | | | | | | | |
| VRI | Vrincioaia | 147.43 | 327 | ⇓P | | PKPdf | 18 41 24.1 | -3.5 | |
| VRI | | | | ⇑P | | PKPbc | 18 41 31.1 | +0.1 | |
| NRDL | Niedersach Rie | 147.45 | 350 | *e*PKPbc | | PKPbc | 18 41 30.7 | 0.0 | |
| | baz=17,slow=2.6 | | | | | | | | |
| PLOR | Plostina | 147.48 | 327 | ⇑P | | PKPbc | 18 41 31.1 | -0.1 | |
| HARR | Harsova | 147.56 | 324 | ⇑P | | PKPbc | 18 41 31.4 | +0.1 | |
| CRVS | Cervenica-Dubn | 147.57 | 335 | *e*PKP | | PKPbc | 18 41 31.6 | +0.3 | |
| CRVS | | | | *e* | | | 18 41 35.9 | | |
| NIE | Niedzica | 147.59 | 337 | *e*PKPbc | | PKPdf | 18 41 29.0 | +1.2 | |
| KSP | Ksiaz | 147.65 | 343 | *e*PKPbc | | PKPbc | 18 41 32.0 | +0.6 | |
| BMR | Baia Mare | 147.68 | 332 | ⇑P | | PKPbc | 18 41 31.8 | +0.2 | |
| COVR | Voineasa-Covas | 147.72 | 327 | ⇑P | | PKPbc | 18 41 31.1 | -0.7 | |
| MANR | Mangalia | 147.73 | 322 | ⇑P | | PKiKP | 18 41 32.5 | -0.7 | |
| ARCR | ARCALIA | 147.74 | 330 | ⇓P | | PKPab | 18 41 36.7 | +0.7 | |
| TRPA | Tarpa | 147.74 | 333 | ⇓P | | PKPbc | 18 41 31.8 | +0.1 | |
| OZUR | | 147.75 | 328 | ⇑P | | PKPdf | 18 41 29.0 | +0.8 | |
| OSTC | Ostas | 147.93 | 342 | ⇑*e*PKP | | PKPbc | 18 41 32.5 | +0.4 | |
| CHVC | Chvalec | 147.94 | 343 | ⇑*e*PKP | | PKPbc | 18 41 32.5 | +0.3 | |
| NEHR | Nehoiu | 147.95 | 326 | ⇑P | | PKPbc | 18 41 32.5 | +0.1 | |
| UPC | Upice | 148.03 | 343 | ⇑*e*PKP | | PKPbc | 18 41 32.7 | +0.3 | |
| UPC | | | | *e*PKPAB | | PKPab | 18 41 37.7 | +0.6 | |
| CLZ | Clausthal | 148.04 | 350 | *e*PKPbc | | PKPbc | 18 41 32.7 | +0.3 | |
| | baz=17,slow=2.6 | | | | | | | | |
| CLL | Collm | 148.04 | 346 | *e*PKPdf | | PKPdf | 18 41 29.0 | +0.6 | |
| CLL | | | | ⇓*i*PKPbc | | PKPbc | 18 41 32.4 | +0.1 | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| CLL | | | | ⇑*i*PKPab | | PKPab | 18 41 36.9 | -0.2 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| CLL | | | | *ex* | | x | 18 44 04.0 | | |
| DOPR | Dopca | 148.04 | 328 | ⇓P | | PKiKP | 18 41 33.2 | -0.7 | |
| KALB | Balgarevo | 148.08 | 322 | ⇓P | | PKPbc | 18 41 33.2 | +0.5 | |
| MLR | Muntele Rosu | 148.09 | 327 | ⇑P | | PKiKP | 18 41 33.9 | -0.2 | |
| LANS | Liptovska Anna | 148.11 | 338 | *e*PKP | | PKiKP | 18 41 33.9 | 0.0 | |
| LANS | | | | *e* | | | 18 41 38.8 | | |
| KRLC | Kraliky | 148.19 | 341 | ⇑*e*PKP | | PKPbc | 18 41 33.0 | +0.2 | |
| MORC | Moravsky Berou | 148.22 | 340 | ⇑P | | PKPab | 18 41 38.8 | +0.8 | |
| BRG | Berggiesshubel | 148.23 | 345 | *i* PKP | | PKPbc | 18 41 33.0 | +0.3 | |
| BRG | | | | Amp | | | 18 41 34.0 | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| BRG | | | | *i* x | | x | 18 41 37.9 | | |
| BRG | | | | Amp | | | 18 41 38.6 | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| BRG | Berggiesshubel | 148.23 | 345 | *e*PKPbc | | PKPbc | 18 41 33.1 | +0.3 | |
| | baz=17,slow=2.6 | | | | | | | | |
| BRG | | | | *e*PKPab | | PKPab | 18 41 37.9 | 0.0 | |
| | baz=18,slow=4.3 | | | | | | | | |
| FBE | Freiberg | 148.32 | 346 | *e*PKPbc | | PKiKP | 18 41 33.6 | -0.6 | |
| | baz=17,slow=2.6 | | | | | | | | |
| FBE | | | | *e*PKPab | | PKPab | 18 41 38.4 | +0.1 | |
| | baz=18,slow=4.3 | | | | | | | | |
| SECR | | 148.34 | 326 | ⇓P | | PKPbc | 18 41 33.6 | +0.2 | |
| CJR | Cluj-Napoca | 148.36 | 331 | ⇑P | | PKPbc | 18 41 33.9 | +0.5 | |
| NEUB | Neuenburg | 148.39 | 348 | *e*PKPab | | PKPab | 18 41 38.4 | -0.1 | |
| | baz=18,slow=4.3 | | | | | | | | |
| PVCC | Panska Ves | 148.40 | 344 | ⇑*e*PKP | | PKPbc | 18 41 33.4 | +0.1 | |
| PVCC | | | | *e*PKPAB | | PKPab | 18 41 38.8 | +0.2 | |
| VOIR | | 148.58 | 328 | ⇓P | | PKiKP | 18 41 35.0 | -0.1 | |
| DRGR | | 148.70 | 332 | ⇓P | | PKPbc | 18 41 33.6 | -0.7 | |
| ARR | Arges | 148.84 | 328 | ⇑P | | PKiKP | 18 41 35.7 | +0.1 | |
| VYHS | Vyhne | 148.89 | 338 | *e*PKP | | PKPbc | 18 41 34.9 | +0.3 | |
| VYHS | | | | *e* | | | 18 41 40.8 | | |
| PRU | Pruhonice | 148.90 | 344 | ⇑*e*PKP | | PKPbc | 18 41 33.9 | -0.6 | |
| PRU | | | | *e*PKPAB | | PKPab | 18 41 40.0 | -0.7 | |
| MOX | Moxa | 148.96 | 348 | *e*PKPbc | | PKPbc | 18 41 34.6 | 0.0 | |
| | baz=17,slow=2.6 | | | | | | | | |
| KOLL | Kolacno | 148.97 | 338 | *e*PKP | | PKiKP | 18 41 35.2 | -0.5 | |
| PSZ | Piszkesteto | 148.98 | 336 | ⇓P | | PKiKP | 18 41 35.7 | -0.1 | |
| PLN | Plauen | 149.00 | 347 | *e*PKPbc | | PKPbc | 18 41 34.9 | +0.2 | |
| | baz=17,slow=2.6 | | | | | | | | |
| TANN | Tannenbergstha | 149.00 | 347 | *e*PKPbc | | PKPbc | 18 41 35.0 | +0.2 | |
| | baz=17,slow=2.6 | | | | | | | | |
| TANN | | | | *e*PKPab | | PKPab | 18 41 41.0 | -0.2 | |
| | baz=18,slow=4.3 | | | | | | | | |
| WERD | Werda | 149.00 | 347 | *e*PKPbc | | PKPbc | 18 41 35.1 | +0.3 | |
| | baz=17,slow=2.6 | | | | | | | | |
| GUNZ | Gunzen | 149.08 | 347 | *e*PKPbc | | PKPbc | 18 41 35.4 | +0.4 | |
| | baz=17,slow=2.6 | | | | | | | | |
| GUNZ | | | | *e*PKPab | | PKPab | 18 41 41.6 | +0.1 | |
| | baz=18,slow=4.3 | | | | | | | | |
| WERN | Wernitzgruen | 149.14 | 347 | *e*PKPab | | PKPab | 18 41 42.0 | +0.3 | |
| | baz=18,slow=4.3 | | | | | | | | |
| NKC | Novy Kostel | 149.17 | 346 | ⇑*e*PKP | | PKPbc | 18 41 34.9 | -0.3 | |
| NKC | | | | *e*PKPAB | | PKPab | 18 41 41.6 | -0.3 | |
| HUMR | Humele | 149.25 | 326 | ⇓P | | PKPbc | 18 41 35.0 | -0.6 | |
| PBCC | Pribram | 149.32 | 344 | ⇑*e*PKP | | PKPbc | 18 41 35.3 | -0.2 | |
| PBCC | | | | *e*PKPAB | | PKPab | 18 41 42.5 | 0.0 | |
| COPA | Copaceanca | 149.40 | 326 | ⇑P | | PKPbc | 18 41 35.0 | -0.9 | |
| MODS | Modra-Piesok | 149.53 | 339 | *e*PKP | | PKiKP | 18 41 38.9 | +2.0 | |
| MEM | Membach | 149.81 | 354 | *d*PKP | | PKPbc | 18 41 36.5 | -0.2 | |
| BTNL | Ternell | 149.82 | 354 | *d*PKPdf | | PKPdf | 18 41 31.7 | +0.4 | |
| BTNL | | | | *d*PKP | | PKPbc | 18 41 36.5 | -0.2 | |
| BSTI | Sart Tilman | 149.88 | 355 | *d*PKP | | PKPbc | 18 41 37.0 | +0.2 | |
| KHC | Kasperske Hory | 149.93 | 344 | *e*PKPDF | | PKPdf | 18 41 32.0 | +0.5 | |
| KHC | | | | ⇑*e*PKP | | PKPbc | 18 41 37.1 | 0.0 | |
| KHC | | | | *e*PKPAB | | PKPab | 18 41 45.5 | +0.4 | |
| CKRC | Cesky Krumlov | 150.03 | 343 | ⇑*e*PKP | | PKPbc | 18 41 37.1 | -0.2 | |
| CKRC | | | | *e*PKPAB | | PKPab | 18 41 45.5 | 0.0 | |
| SRE | Strehaia | 150.05 | 328 | ⇑P | | PKiKP | 18 41 38.1 | +0.1 | |
| BZS | Buzias | 150.09 | 331 | ⇓P | | PKPbc | 18 41 37.4 | -0.1 | |
| WET | Wettzell | 150.09 | 345 | *e*PKPab | | PKPab | 18 41 45.9 | +0.1 | |
| | baz=18,slow=4.3 | | | | | | | | |
| GEC2 | GERESS Array S | 150.16 | 344 | *e*PKPbc | | PKPbc | 18 41 37.7 | 0.0 | |
| | baz=17,slow=2.6 | | | | | | | | |
| GERES | GERESS Array B | 150.16 | 344 | PKPbc | | PKPbc | 18 41 37.5 | -0.1 | |
| | comp=Z,4.1nm,0.7s,baz=32,slow=2.4,SNR=27 | | | | | | | | |
| GERES | | | | PKPab | | PKPab | 18 41 46.2 | +0.1 | |
| | comp=Z,1.2nm,0.6s,baz=28,slow=6.0,SNR=5.6 | | | | | | | | |
| BMRD | Maredsous | 150.22 | 356 | *d*PKP | | PKPbc | 18 41 37.7 | +0.1 | |
| HERR | Herculane | 150.28 | 329 | ⇓P | | PKPbc | 18 41 37.8 | -0.2 | |
| CONA | Conrad Observa | 150.38 | 340 | *i* P | | PKPbc | 18 41 38.2 | 0.0 | |
| | comp=Z,4.8nm,0.6s | | | | | | | | |
| BANR | Banloc | 150.49 | 331 | ⇑P | | PKiKP | 18 41 38.8 | 0.0 | |
| WLF | Walferdange | 150.74 | 354 | *d*PKP | | PKPbc | 18 41 38.7 | -0.2 | |
| MORH | Mrgy, Hungar | 150.87 | 335 | ⇑P | | PKPbc | 18 41 39.2 | -0.1 | |
| MOA | Molln | 150.92 | 342 | *i* P | | PKPbc | 18 41 38.9 | -0.5 | |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| FRGS | Fruska Gora | 151.24 | 333 | ⇓P | | PKPbc | 18 41 38.8 | -1.4 | |
| RJOB | Jochberg | 151.42 | 344 | *e*PKPab | | PKPab | 18 41 51.6 | +0.2 | |
| | baz=18,slow=4.3 | | | | | | | | |
| VTS | Vitosha | 151.49 | 325 | ⇑P | | PKPbc | 18 41 40.9 | -0.1 | |
| KBA | Koelnbreinsper | 151.88 | 343 | *i* P | | PKPbc | 18 41 40.4 | -1.4 | |
| | comp=Z,3.1nm,0.5s | | | | | | | | |
| OBKA | Obir | 152.05 | 341 | *e*P | | PKPbc | 18 41 40.9 | -1.2 | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| WTTA | Wattenberg | 152.15 | 345 | *i* P | | PKPbc | 18 41 41.8 | -0.6 | |
| | comp=Z,2.4nm,0.5s | | | | | | | | |
| MOTA | Moosalm | 152.19 | 346 | *e*P | | PKPbc | 18 41 42.2 | -0.2 | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| MYKA | Terra Mystica | 152.21 | 342 | *i* P | | PKPbc | 18 41 41.5 | -0.9 | |
| | comp=Z,5.4nm,0.7s | | | | | | | | |
| SQTA | Sankt Quirin | 152.29 | 346 | *e*P | | PKPbc | 18 41 42.1 | -0.5 | |
| | comp=Z,4.2nm,0.7s | | | | | | | | |
| ABTA | Abfaltersbach | 152.41 | 344 | *e*P | | PKPbc | 18 41 41.7 | -1.1 | |
| | comp=Z,4.6nm,0.5s | | | | | | | | |
| FETA | Feichten | 152.58 | 346 | *i* P | | PKPbc | 18 41 42.9 | -0.4 | |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| ESDC | Sonseca Array | 160.35 | 13 | PKPab | | PKPab | 18 42 29.9 | -0.2 | |
| | comp=Z,2.1nm,1.0s,baz=301,slow=2.2,SNR=6.0 | | | | | | | | |

**IDC 07 18:29:02.1±8.4, 18°87S×176°61W, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.4/33, mbtmp3.3/3, Error ellipse: s-maj=379.3km s-min=23.8km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| WRA | Warramunga Arr | 46.14 | 260 | P | | P | 18 37 28.2 | -0.5 |
| | 0.4nm,1.0s,baz=99,slow=6.4,SNR=1.9 | | | | | | | |
| ASAR | Alice Springs | 46.18 | 255 | P | | P | 18 37 29.1 | 0.0 |
| | 0.1nm,0.4s,baz=90,slow=7.7,SNR=5.3 | | | | | | | |
| ILAR | Eielson Array | 86.45 | 12 | P | | P | 18 41 46.1 | 0.0 |
| | 0.2nm,0.5s,baz=212,slow=6.2,SNR=4.1 | | | | | | | |

*IDC 07 18:31:07.5±2.2, 1°.68N×126°.83E, h0km, mb3.1/3, mb1 3.4/4, mb1mx3.2/30, mbtmp3.2/4, ML3.2/1, Error ellipse: s-maj=123.0km s-min=27.4km az=69.0*
*DJA 07 18:31:18.6±0.6, 2°.N±4°×12°.7E±°, h113km±7km, M3.4/7, MLv3.4/7*

**ISC 07 18:31:19.0±1.3, 1°.74N±0°.09×127°.2E±0°.1, h100km, n11, σ2§11/10, mb3.0/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TNTI | Ternate | 0.98 | 169 | P | | Pn | 18 31 41.5 | +2.3 |
| TNTI | Ternate | 0.98 | 169 | IAmb | | IAmb | 18 31 45.0 | |
| | comp=Z,35nm,1.1s | | | | | | | |
| TNTI | Ternate | 0.98 | 169 | P | | Pn | 18 31 41.5 | +2.3 |
| LBMI | Labuha | 2.38 | 172 | P | | Pn | 18 31 57.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| URZ | | | | S | | **S** | **19 05 43.1** | **+0.3** |
| | 0.5nm,0.3s,baz=125,slow=18,SNR=8.0 | | | | | | | |
| **QRZ** | **Quartz Range** | **18.99** | **199** | P | | **P** | **19 03 37.8** | **+2.0** |
| **THZ** | **Tophouse** | **19.75** | **197** | P | | **P** | **19 03 43.1** | **+0.2** |
| THZ | | | | IAmb | | IAmb | 19 03 46.6 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **KHZ** | **Kahutara** | **20.20** | **195** | P | | **P** | **19 03 47.1** | **+0.2** |
| KHZ | | | | IAmb | | IAmb | 19 03 50.6 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **LTZ** | **Lake Taylor** | **20.87** | **197** | P | | **P** | **19 03 53.3** | **+0.4** |
| **OXZ** | **Oxford** | **21.44** | **197** | P | | **P** | **19 03 59.4** | **+1.4** |
| **WHZ** | **Wether Hill Ro** | **24.99** | **201** | P | | **P** | **19 04 29.2** | **-0.6** |
| WHZ | | | | IAmb | | IAmb | 19 04 32.8 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **29.93** | **239** | P | | **P** | **19 05 15.1** | **+1.8** |
| CAN | | | | IAmb | | IAmb | 19 05 15.8 | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **CTAO** | **Charters Tower** | **31.87** | **269** | P | | **P** | **19 05 30.8** | **+0.8** |
| CTAO | | | | IAmb | | IAmb | 19 05 31.5 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **PMG** | **Port Moresby** | **34.58** | **288** | P | | **P** | **19 05 52.5** | **-0.4** |
| **STKA** | **Stephens Creek** | **35.42** | **247** | P | | **P** | **19 06 00.8** | **+1.0** |
| | comp=Z,1.7nm,0.6s,baz=127,slow=3.3,SNR=6.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.42** | **247** | P | | **P** | **19 05 59.1** | **-0.7** |
| **AS31** | **Alice Springs** | **42.57** | **260** | P | | **P** | **19 06 56.9** | **-0.9** |
| **ASAR** | **Alice Springs** | **42.57** | **260** | P | | **P** | **19 06 58.5** | **+0.7** |
| | comp=Z,2.0nm,0.8s,baz=102,slow=7.2,SNR=26 | | | | | | | |
| ASAR | | | | S | | **S** | **19 12 40.7** | **-1.7** |
| | comp=Z,0.5nm,0.8s,baz=98,slow=15,SNR=4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.57** | **260** | P | | **P** | **19 06 57.4** | **-0.4** |
| **WR0** | **Warramunga Arr** | **42.67** | **265** | P | | **P** | **19 06 57.6** | **-1.0** |
| **WB0** | **Warramunga Arr** | **42.85** | **265** | P | | **P** | **19 06 59.9** | **0.0** |
| WB0 | | | | IAmb | | IAmb | 19 07 00.7 | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **42.85** | **265** | P | | **P** | **19 07 00.0** | **+0.1** |
| WB2 | | | | IAmb | | IAmb | 19 07 00.7 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.86** | **265** | P | | **P** | **19 07 00.1** | **0.0** |
| | comp=Z,3.0nm,0.7s,baz=96,slow=8.5,SNR=33 | | | | | | | |
| WRA | | | | S | | **S** | **19 12 43.5** | **-3.1** |
| | comp=Z,0.5nm,0.6s,baz=99,slow=13,SNR=4.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.86** | **265** | P | | **P** | **19 06 59.0** | **-1.1** |
| **SOEI** | **Soe** | **55.16** | **274** | P | | **P** | **19 08 31.5** | **+0.2** |
| SOEI | | | | IAmb | | IAmb | 19 08 34.0 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **71.37** | **325** | P | | **P** | **19 10 14.0** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=165,slow=6.0,SNR=5.9 | | | | | | | |
| **TPUB** | **Ta-pu** | **74.12** | **304** | P | | **P** | **19 10 29.1** | **-1.8** |
| TPUB | | | | IAmb | | IAmb | 19 10 31.0 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.31** | **346** | P | | **P** | **19 10 53.4** | **+0.2** |
| | comp=Z,1.4nm,0.7s,baz=117,slow=8.6,SNR=5.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.83** | **44** | P | | **P** | **19 11 22.6** | **+0.2** |
| | comp=Z,1.1nm,1.0s,baz=224,slow=8.0,SNR=5.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.58** | **290** | P | | **P** | **19 11 51.7** | **+1.9** |
| | comp=Z,1.1nm,0.6s,baz=116,slow=3.0,SNR=7.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.62** | **58** | P | | **P** | **19 11 49.7** | **-0.2** |
| | comp=Z,0.8nm,0.8s,baz=212,slow=4.4,SNR=6.1 | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.77** | **44** | P | | **P** | **19 11 59.0** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=242,slow=3.2,SNR=3.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.41** | **328** | PKP | | PKPbc | 19 18 23.0 | -0.9 |
| | comp=Z,0.6nm,0.4s,baz=43,slow=4.4,SNR=13 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.33** | **308** | PKPbc | | **PKPbc** | **19 18 31.4** | **-1.4** |
| | comp=Z,0.6nm,0.6s,baz=156,slow=6.4,SNR=3.7 | | | | | | | |
| **CLL** | **Collm** | **150.09** | **344** | *e*PKPbc | | **PKPbc** | **19 18 39.0** | **0.0** |

*SSNC **07** 19:04:13.0±1.5, 19°.73N×76°.01W, h8km±11km, MD3.0, ML2.9, MW3.1*
*JSN **07** 19:04:14.2±0.9, 17°.19N×75°.32W, h29km±999km, MD3.4*
**ISC 07 19:04:10.7±1.0, 19°.70N±0°.06×76°.05W±0°.04, h10km, n9, σ0°.77/12, Cuba region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RCC** | **Rio Carpintero** | **0.45** | **48** | | *e*P | | **Pg** | **19 04 19.9** | **+0.5** |
| RCC | | | | | *e*S | | **Sg** | **19 04 25.1** | **-0.2** |
| RCC | | | | | IAML | | | 19 04 27.4 | |
| | comp=E,488nm,0.3s | | | | | | | | |
| RCC | | | | | IAML | | | 19 04 29.4 | |
| | comp=N,371nm,0.2s | | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **0.91** | **75** | | *e*P | | **Pg** | **19 04 28.7** | **+0.4** |
| **LMGC** | **Las Mercedes** | **0.97** | **292** | | *e*P | | **Pg** | **19 04 29.3** | **-0.1** |
| LMGC | | | | | *e*S | | **Sg** | **19 04 41.9** | **-0.1** |
| LMGC | | | | | IAML | | | 19 04 44.7 | |
| | comp=N,479nm,0.1s | | | | | | | | |
| LMGC | | | | | IAML | | | 19 04 46.2 | |
| | comp=E,320nm,0.1s | | | | | | | | |
| **HLGC** | **Holguin** | **1.19** | **360** | | *e*P | | **Pb** | **19 04 33.6** | **+0.3** |
| HLGC | | | | | IAML | | | 19 04 52.2 | |
| | comp=E,301nm,0.6s | | | | | | | | |
| HLGC | | | | | IAML | | | 19 04 55.7 | |
| | comp=N,245nm,0.5s | | | | | | | | |
| **MOAC** | **Moa** | **1.40** | **47** | | *e*P | | **Pn** | **19 04 35.7** | **-0.6** |
| MOAC | | | | | IAML | | | 19 04 58.0 | |
| | comp=N,165nm,0.3s | | | | | | | | |
| MOAC | | | | | IAML | | | 19 05 00.2 | |
| | comp=E,151nm,0.4s | | | | | | | | |
| **GWJ** | **Greenwich** | **1.74** | **202** | | *i* P | | **Pn** | **19 04 39.5** | **-1.6** |
| **STH** | **Stony Hill** | **1.77** | **204** | | *i* P | | **Pn** | **19 04 41.3** | **-0.1** |
| **MASC** | **Masc** | **1.78** | **74** | | *e*P | | **Pn** | **19 04 41.0** | **-0.5** |
| MASC | | | | | IAML | | | 19 05 11.3 | |
| | comp=N,64nm,0.3s | | | | | | | | |
| MASC | | | | | IAML | | | 19 05 12.9 | |
| | comp=E,79nm,0.4s | | | | | | | | |
| **MCJ** | **Malvern** | **2.35** | **222** | | *i* P | | **Pn** | **19 04 50.7** | **+1.3** |
| MCJ | | | | | *i* S | | **Sn** | **19 05 18.2** | **-0.2** |

*IDC **07** 19:12:55.0±0.7, 16°.72S×176°.27E, h0km, mb4.1/11, mb1 4.3/12, mb1mx4.1/26, mbtmp4.0/12, ML3.3/1, MS4.2/34, Ms1 4.2/34, ms1mx4.0/61, Error ellipse: s-maj=25.6km s-min=16.8km az=173.0*
*GCMT **07** 19:13:01.0±0.2, 16°.47S±0°.01×176°.21E±0°.01, h17km±1km, MW4.9/107, Moment Tensor Solution. s24,c26; s107,c145; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr1.01±.13; Mθθ-1.16±.11; Mϕϕ0.14±.08; Mrθ1.22±.30; Mθϕ2.85±.08; Mrϕ0.25±.23; Best double couple: M₀3.24900×10¹⁶ NP1:ϕs351.00000°, δ63.00000°, λ167.00000°. NP2:ϕs87.00000°, δ78.00000°, λ28.00000°. Principal axes: T 2.9230, Plg28.0000°, Azm312.0000°; N 0.6460, Plg60.0000°, Azm109.0000°; P -3.5750, Plg10.0000°, Azm217.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*
**ISC 07 19:12:56.7±0.6, 16°.8S±0°.1×176°.33E±0°.08, h10km, n55, σ1969/27, mb4.0/14, MS4.2/31, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.91** | **121** | | Pn | | **Pn** | **19 13 28.9** | **-0.5** |
| | 17nm,0.3s,baz=283,slow=16,SNR=103 | | | | | | | | |
| MSVF | | | | | Sn | | **Sb** | **19 13 55.0** | **-0.6** |
| | 59nm,0.3s,baz=319,slow=23,SNR=14 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **10.71** | **239** | | *e*P | | **Pn** | **19 15 30.6** | **+0.2** |
| | 73nm,1.4s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **10.71** | **239** | | Pn | | **Pn** | **19 15 31.3** | **+1.0** |
| | 0.2nm,0.3s,baz=68,slow=18,SNR=6.7 | | | | | | | | |
| DZM | | | | | LR | | LR | 19 19 04.6 | |
| | comp=Z,2μm,20.2s,baz=63,slow=35 | | | | | | | | |
| **AFI** | **Afiamalu** | **11.82** | **78** | | LR | | LR | 19 19 23.2 | |
| | comp=Z,984nm,20.5s,baz=253,slow=33 | | | | | | | | |
| **HNR** | **Honiara** | **17.53** | **293** | | LR | | LR | 19 22 57.3 | |
| | comp=Z,537nm,18.7s,baz=130,slow=34 | | | | | | | | |
| **URZ** | **Urewera** | **21.43** | **178** | | LR | | LR | 19 24 35.6 | |
| | comp=Z,445nm,19.0s,baz=5.5,slow=33 | | | | | | | | |
| **RAR** | **Rarotonga** | **23.02** | **105** | | LR | | LR | 19 25 16.5 | |
| | comp=Z,191nm,21.3s,baz=288,slow=32 | | | | | | | | |
| **CTA** | **Charters Tower** | **28.70** | **259** | | LR | | LR | 19 28 20.0 | |
| | comp=Z,247nm,18.8s,baz=82,slow=32 | | | | | | | | |
| **PMG** | **Port Moresby** | **29.31** | **281** | | P | | **P** | **19 19 00.1** | **+0.5** |
| | 7.3nm,0.8s,baz=32,slow=6.0,SNR=4.3 | | | | | | | | |
| PMG | | | | | LR | | LR | 19 29 45.3 | |
| | comp=Z,235nm,19.3s,baz=25,slow=34 | | | | | | | | |
| **PPT** | **Papeete** | **32.56** | **97** | | LR | | LR | 19 31 04.8 | |
| | comp=Z,70nm,18.4s,baz=248,slow=33 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.87** | **239** | | P | | **P** | **19 19 49.3** | **+1.0** |
| | 8.2nm,0.9s,baz=69,slow=7.4,SNR=9.9 | | | | | | | | |
| STKA | | | | | LR | | LR | 19 32 40.6 | |
| | comp=Z,503nm,20.4s,baz=55,slow=34 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.41** | **345** | | T | | T | 19 59 44.8 | |
| | baz=165,slow=76,SNR=12 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.41** | **345** | | T | | T | 19 59 39.4 | |
| | baz=165,slow=76,SNR=28 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.43** | **345** | | T | | T | 19 59 37.7 | |
| | baz=165,slow=76,SNR=5.6 | | | | | | | | |
| **JAY** | **Jayapura** | **37.76** | **288** | | LR | | LR | 19 35 40.1 | |
| | comp=Z,214nm,18.8s,baz=48,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.91** | **259** | | P | | **P** | **19 20 29.1** | **-2.1** |
| | 3.1nm,0.9s,baz=91,slow=8.6,SNR=15 | | | | | | | | |
| WRA | | | | | LR | | LR | 19 35 20.8 | |
| | comp=Z,142nm,21.9s,baz=84,slow=34 | | | | | | | | |
| **ASAR** | **Alice Springs** | **40.28** | **253** | | P | | **P** | **19 20 32.8** | **-1.6** |
| | 5.3nm,0.8s,baz=80,slow=9.1,SNR=42 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **19 22 38.0** | **-0.2** |
| | 0.5nm,0.8s,baz=88,slow=4.2,SNR=2.0 | | | | | | | | |
| ASAR | | | | | LR | | LR | 19 35 44.4 | |
| | comp=Z,166nm,22.0s,baz=94,slow=34 | | | | | | | | |
| **GUMO** | **Guam** | **43.30** | **312** | | LR | | LR | 19 37 36.5 | |
| | comp=Z,75nm,21.3s,baz=113,slow=34 | | | | | | | | |
| **SIJI** | **Sorong** | **47.08** | **285** | | LR | | LR | 19 39 57.3 | |
| | comp=Z,148nm,20.0s,baz=141,slow=34 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.25** | **261** | | LR | | LR | 19 40 26.8 | |
| | comp=Z,113nm,20.7s,baz=90,slow=34 | | | | | | | | |
| **VNDA** | **Vanda** | **61.21** | **184** | | LR | | LR | 19 44 59.6 | |
| | comp=Z,157nm,21.8s,baz=22,slow=31 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.08** | **326** | | P | | **P** | **19 23 29.7** | **-1.3** |
| | 4.6nm,1.2s,baz=164,slow=6.8,SNR=4.3 | | | | | | | | |
| **MAT** | **Matsushiro** | **64.08** | **326** | | P | | **P** | **19 23 29.0** | **-2.0** |
| **SHEM** | **Shemya Is, Ala** | **69.23** | **359** | | LR | | LR | 19 47 41.7 | |
| | comp=Z,140nm,20.0s,baz=129,slow=30 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.42** | **348** | | LR | | LR | 19 50 15.0 | |
| | comp=Z,48nm,21.3s,baz=153,slow=31 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **73.28** | **180** | | LR | | LR | 19 53 23.4 | |
| | comp=Z,60nm,18.1s,baz=38,slow=33 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.61** | **16** | | LR | | LR | 19 52 18.5 | |
| | comp=Z,283nm,19.7s,baz=218,slow=30 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.91** | **42** | | LR | | LR | 19 52 22.6 | |
| | comp=Z,127nm,20.6s,baz=242,slow=29 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **81.27** | **51** | | LR | | LR | 19 53 02.5 | |
| | comp=Z,190nm,20.7s,baz=254,slow=30 | | | | | | | | |
| **XAN** | **Xi'an** | **81.61** | **309** | | P | | P | 19 25 21.8 | +6.6 |
| XAN | | | | | pP | | PcP | 19 25 24.9 | +3.8 |
| XAN | | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.17** | **46** | | P | | **P** | **19 25 19.4** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=203,slow=3.9,SNR=2.7 | | | | | | | | |
| NVAR | | | | | LR | | LR | 19 53 52.6 | |
| | comp=Z,365nm,21.7s,baz=248,slow=30 | | | | | | | | |
| **LPIG** | **La Paz** | **82.29** | **62** | | LR | | LR | 19 54 29.5 | |
| | comp=Z,172nm,18.3s,baz=226,slow=30 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.77** | **291** | | P | | **P** | **19 25 25.8** | **-0.9** |
| | comp=Z,0.4nm,0.9s,baz=137,slow=3.2,SNR=1.7 | | | | | | | | |
| **BBB** | **Bella Bella** | **83.82** | **31** | | LR | | LR | 19 55 06.2 | |
| | comp=Z,260nm,19.5s,baz=238,slow=30 | | | | | | | | |
| **ELK** | **Elko** | **85.34** | **45** | | LR | | LR | 19 56 59.3 | |
| | comp=Z,283nm,19.9s,baz=214,slow=31 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.99** | **15** | | P | | **P** | **19 25 36.4** | **-0.5** |
| | comp=Z,0.9nm,0.8s,baz=213,slow=7.2,SNR=6.3 | | | | | | | | |
| ILAR | | | | | LR | | LR | 19 56 05.1 | |
| | comp=Z,240nm,20.8s,baz=229,slow=30 | | | | | | | | |
| **LZH** | **Lanzhou** | **86.24** | **309** | | *e*P | | P | 19 25 43.1 | +4.1 |
| LZH | | | | | pP | | pwP | 19 25 48.2 | +3.7 |
| LZH | | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **DLBC** | **Dease Lake** | **86.85** | **25** | | LR | | LR | 19 59 39.6 | |
| | comp=Z,129nm,18.6s,baz=261,slow=32 | | | | | | | | |
| **NEW** | **Newport** | **87.62** | **38** | | LR | | LR | 19 59 07.2 | |
| | comp=Z,167nm,18.6s,baz=229,slow=32 | | | | | | | | |
| **ANMO** | **Albuquerque** | **89.39** | **53** | | LR | | LR | 20 03 00.7 | |
| | comp=Z,139nm,18.7s,baz=256,slow=34 | | | | | | | | |
| **SONM** | **Songino Array** | **89.44** | **321** | | P | | **P** | **19 25 53.1** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=88,slow=4.8,SNR=3.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.69** | **59** | | P | | **P** | **19 25 56.5** | **+1.0** |
| | comp=Z,0.6nm,1.0s,baz=212,slow=3.2,SNR=3.0 | | | | | | | | |
| TXAR | | | | | LR | | LR | 19 58 37.4 | |
| | comp=Z,245nm,19.2s,baz=248,slow=31 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **90.05** | **45** | | LR | | LR | 19 58 42.9 | |
| | comp=Z,117nm,20.1s,baz=252,slow=30 | | | | | | | | |
| **GTA** | **Gaotai** | **90.47** | **311** | | *e*P | | **P** | **19 26 00.8** | **+1.8** |
| GTA | | | | | pP | | pwP | 19 26 06.2 | +1.7 |
| GTA | | | | | sP | | sP | 19 26 09.0 | +6.5 |
| GTA | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,1.3s | | | | | | | | |
| **INK** | **Inuvik** | **92.17** | **17** | | LR | | LR | 20 00 58.8 | |
| | comp=Z,119nm,19.2s,baz=204,slow=31 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.45** | **26** | | P | | **P** | **19 26 20.9** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=245,slow=4.7,SNR=5.7 | | | | | | | | |
| YKA | | | | | LR | | LR | 20 03 31.5 | |
| | comp=Z,726nm,21.0s,baz=296,slow=32 | | | | | | | | |
| **GERES** | **GERESS Array B** | **145.00** | **340** | | PKP | | **PKiKP** | **19 32 34.9** | **-3.3** |
| | comp=Z,0.6nm,0.7s,baz=36,slow=5.1,SNR=2.8 | | | | | | | | |
| **CONA** | **Conrad Observa** | **145.02** | **337** | | *e*P | | **PKiKP** | **19 32 39.9** | **+1.6** |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **MOA** | **Molln** | **145.67** | **338** | | *e*P | | **PKiKP** | **19 32 40.3** | **+0.8** |
| | comp=Z,16nm,2.0s | | | | | | | | |
| **RETA** | **Reutte** | **147.13** | **342** | | *e*P | | **PKiKP** | **19 32 45.7** | **+3.1** |
| | comp=Z,11nm,1.6s | | | | | | | | |
| **MOTA** | **Moosalm** | **147.15** | **341** | | *e*P | | **PKiKP** | **19 32 45.2** | **+2.4** |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **147.22** | **339** | | *e*P | | **PKiKP** | **19 32 45.1** | **+2.2** |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.23** | **341** | | *e*P | | **PKiKP** | **19 32 44.5** | **+1.6** |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **FETA** | **Feichten** | **147.55** | **342** | | *e*P | | **PKiKP** | **19 32 46.6** | **+2.9** |
| | comp=Z,7.9nm,1.2s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **173.69** | **236** | | PKP | | **PKPdf** | **19 33 07.3** | **-0.1** |
| | comp=Z,0.2nm,0.5s,baz=151,slow=3.3,SNR=1.4 | | | | | | | | |

*PRE **07** 19:15:45.2±1.0, 27°.00S×26°.72E, h2km, ML2.3*
*EAF **07** 19:15:50.1±0.9, 27°.07S×26°.82E, h10km, MD3.7*
**ISC 07 19:15:45.6±1.3, 27°.00S±0°.03×26°.73E±0°.03, h4km±10km, n21, σ1996/40, 2D, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PRYS** | **Parys** | **0.56** | **82** | | *e*P | | **Pb** | **19 15 57.2** | **-0.9** |
| PRYS | | | | | *e*S | | **Sg** | **19 16 04.7** | **+0.9** |
| PRYS | | | | | IAML | | | 19 16 11.9 | |
| | comp=Z,79nm,0.7s | | | | | | | | |
| **KSR** | **Koster** | **1.16** | **7** | | *e*P | | **Pb** | **19 16 07.9** | **-0.3** |
| KSR | | | | | *e*S | | **Sb** | **19 16 23.4** | **-0.2** |
| KSR | | | | | IAML | | | 19 16 28.4 | |
| | comp=Z,409nm,0.7s | | | | | | | | |
| **SWZ** | **Schweizer** | **1.26** | **262** | | *e*P | | **Pb** | **19 16 09.6** | **-0.4** |
| SWZ | | | | | *e*S | | **Sb** | **19 16 26.2** | **-0.4** |
| SWZ | | | | | IAML | | | 19 16 33.0 | |
| | comp=Z,166nm,0.3s | | | | | | | | |
| **HRAO** | **HartRAO** | **1.40** | **38** | | *e*P | | **Pb** | **19 16 12.3** | **0.0** |
| HRAO | | | | | *e*S | | **Sn** | **19 16 31.3** | **+0.3** |
| HRAO | | | | | IAML | | | 19 16 34.6 | |
| | comp=Z,69nm,0.3s | | | | | | | | |
| **SLR** | **Silverton** | **1.88** | **48** | | *e*P | | **Pn** | **19 16 18.9** | **+0.4** |
| SLR | | | | | *e*S | | **Sn** | **19 16 43.5** | **+0.6** |
| SLR | | | | | IAML | | | 19 16 48.1 | |
| | comp=Z,88nm,0.4s | | | | | | | | |
| **BOSA** | **Boshof** | **2.07** | **219** | | *i* P | | **Pg** | **19 16 25.4** | **+0.1** |
| BOSA | | | | | *e*S | | **Sb** | **19 16 49.7** | **-0.3** |
| **BOSA** | **Boshof** | **2.07** | **219** | | *i* P | | **Pg** | **19 16 25.4** | **+0.1** |
| BOSA | | | | | *e*S | | **Sb** | **19 16 49.7** | **-0.3** |
| **LBTB** | **Lobatse** | **2.23** | **332** | | *i* P | | **Pg** | **19 16 27.6** | **-0.7** |
| LBTB | | | | | *i* S | | **Sg** | **19 16 55.5** | **-1.6** |
| **LBTB** | **Lobatse** | **2.23** | **332** | | *i* P | | **Pg** | **19 16 27.6** | **-0.7** |
| LBTB | | | | | *i* S | | **Sg** | **19 16 55.5** | **-1.6** |
| **POGA** | **Pongola** | **4.44** | **96** | | *e*P | | **Pn** | **19 16 54.3** | **+0.5** |
| POGA | | | | | *e*S | | **Sn** | **19 17 44.8** | **-1.2** |
| POGA | | | | | IAML | | | 19 17 48.9 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **CNG** | **Changalane** | **4.93** | **83** | | *e*P | | **Pn** | **19 17 02.5** | **+2.1** |
| CNG | | | | | *e*S | | **Sn** | **19 17 55.4** | **-2.6** |
| **CNG** | **Changalane** | **4.93** | **83** | | *e*P | | **Pn** | **19 17 02.5** | **+2.1** |
| CNG | | | | | *e*S | | **Sn** | **19 17 55.4** | **-2.6** |
| **UPI** | **Upington** | **5.04** | **253** | | *e*P | | **Pn** | **19 17 03.0** | **+0.9** |
| UPI | | | | | *e*S | | **Sn** | **19 17 59.1** | **-1.8** |
| UPI | | | | | IAML | | | 19 18 03.9 | |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| **MOPA** | **Mopani** | **5.46** | **52** | | *e*P | | **Pn** | **19 17 10.3** | **+2.5** |
| MOPA | | | | | *e*S | | **Sn** | **19 18 09.7** | **-1.5** |
| **MOPA** | **Mopani** | **5.46** | **52** | | *e*P | | **Pn** | **19 17 10.3** | **+2.5** |
| MOPA | | | | | *e*S | | **Sn** | **19 18 09.7** | **-1.5** |
| **MSNA** | **Messina** | **5.52** | **34** | | *e*S | | **Sn** | **19 18 11.5** | **-1.0** |
| **MSNA** | **Messina** | **5.52** | **34** | | *e*S | | **Sn** | **19 18 11.5** | **-1.0** |
| **MATP** | **Matopo** | **6.74** | **14** | | *e*P | | **Pn** | **19 17 30.1** | **+4.6** |
| MATP | | | | | *e*S | | **Sn** | **19 18 41.0** | **-1.9** |
| **MATP** | **Matopo** | **6.74** | **14** | | *e*P | | **Pn** | **19 17 30.1** | **+4.6** |
| MATP | | | | | *e*S | | **Sn** | **19 18 41.0** | **-1.9** |
| **BLWY** | **Bulawayo** | **7.04** | **15** | | *e*P | | **Pn** | **19 17 33.2** | **+3.6** |
| BLWY | | | | | ⇓*e*S | | **Sn** | **19 18 48.5** | **-1.8** |
| **BLWY** | **Bulawayo** | **7.04** | **15** | | *e*P | | **Pn** | **19 17 33.2** | **+3.6** |
| BLWY | | | | | ⇓*e*S | | **Sn** | **19 18 48.5** | **-1.8** |

*IDC **07** 19:35:04.6±0.8, 16°.55S×176°.33E, h0km, mb4.3/12, mb1 4.4/14, mb1mx4.2/41, mbtmp4.2/14, ML5.2/1, MS4.1/43, Ms1 4.1/43, ms1mx4.0/62, Error ellipse: s-maj=22.9km s-min=17.1km az=157.0*
*GCMT **07** 19:35:07.9±0.2, 16°.54S±0°.02×176°.36E±0°.01, h16km±1km, MW4.9/98, Moment Tensor Solution. s23,c30; s98,c137; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr0.59±.09; Mθθ0.00±.07; Mrθ-0.00±.23; Mθϕ2.76±.08; Mϕϕ-0.67±.25; Best double couple: M₀2.86600×10¹⁶ NP1:ϕs267.00000°, δ75.00000°, λ5.00000°. NP2: ϕs176.00000°, δ85.00000°, λ165.00000°. Principal axes: T 2.6070, Plg14.0000°, Azm131.0000°; N 0.5170, Plg74.0000°, Azm338.0000°; P -3.1250, Plg7.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **07** 19:35:10.9±2.2, 16°.8S±0°.2×176°.5E±0°.1, h57km±14km, mb4.5/9 Error ellipse: s-maj=30.5km s-min=12.7km az=202.0*
**ISC 07 19:35:09.9±0.5, 16°.78S±0°.09×176°.38E±0°.07, h35km, n76, σ1876/41, mb4.4/18, MS4.1/39, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.86** | **121** | | Pn | | **Pn** | **19 35 38.7** | **-0.7** |
| | 41nm,0.3s,baz=321,slow=23,SNR=269 | | | | | | | | |
| MSVF | | | | | Sn | | **Sn** | **19 36 03.7** | **+2.0** |
| | 133nm,0.3s,baz=4.2,slow=23,SNR=21 | | | | | | | | |
| **MSVF** | **Nonsavu** | **1.86** | **121** | | Pn | | **Pn** | **19 35 38.6** | **-0.8** |
| **SANVU** | **Saraoutou** | **8.91** | **277** | | Pn | | **Pn** | **19 37 18.8** | **+2.5** |
| **PINNC** | **Pines Island,** | **10.21** | **234** | | Pn | | **Pn** | **19 37 33.9** | **-0.2** |
| **OUENC** | **Ouen Island, N** | **10.59** | **237** | | Pn | | **Pn** | **19 37 41.0** | **+1.7** |
| **DZM** | **Mont Dzumac** | **10.74** | **239** | | *e*P | | Pn | 19 37 48.9 | +7.5 |
| | 42nm,1.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **10.74** | **239** | | Pn | | **Pn** | **19 37 41.8** | **+0.3** |
| | 0.2nm,0.3s,baz=249,slow=16,SNR=2.3 | | | | | | | | |
| DZM | | | | | LR | | LR | 19 41 15.0 | |
| | comp=Z,2μm,20.0s,baz=62,slow=34 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **10.74** | **239** | | Pn | | **Pn** | **19 37 42.0** | **+0.5** |
| **AFI** | **Afiamalu** | **11.78** | **78** | | LR | | LR | 19 41 32.0 | |
| | comp=Z,986nm,20.0s,baz=254,slow=33 | | | | | | | | |
| **RAO** | **Raoul Island** | **13.47** | **158** | | LR | | LR | 19 41 47.5 | |
| | comp=Z,320nm,19.6s,baz=152,slow=29 | | | | | | | | |
| **HNR** | **Honiara** | **17.58** | **293** | | LR | | LR | 19 45 07.8 | |
| | comp=Z,664nm,18.4s,baz=132,slow=35 | | | | | | | | |
| **URZ** | **Urewera** | **21.41** | **178** | | P | | **P** | **19 39 58.0** | **+3.3** |
| | 22nm,1.0s,baz=60,slow=7.0,SNR=6.0 | | | | | | | | |
| URZ | | | | | LR | | LR | 19 46 45.8 | |
| | comp=Z,355nm,19.1s,baz=0.0,slow=32 | | | | | | | | |
| **RAR** | **Rarotonga** | **22.97** | **105** | | LR | | LR | 19 47 35.8 | |
| | comp=Z,176nm,20.6s,baz=282,slow=33 | | | | | | | | |
| **CTA** | **Charters Tower** | **28.74** | **259** | | LR | | LR | 19 50 21.3 | |
| | comp=Z,250nm,21.3s,baz=80,slow=32 | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.33** | **192** | | P | | **P** | **19 41 08.5** | **-0.9** |
| **PMG** | **Port Moresby** | **29.36** | **281** | | P | | **P** | **19 41 08.2** | **-1.6** |
| | 6.8nm,0.9s,baz=286,slow=21,SNR=2.5 | | | | | | | | |
| PMG | | | | | LR | | LR | 19 52 04.6 | |
| | comp=Z,431nm,18.3s,baz=31,slow=35 | | | | | | | | |
| **PPT** | **Papeete** | **32.52** | **96** | | LR | | LR | 19 53 22.2 | |
| | comp=Z,122nm,18.2s,baz=22,slow=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.90** | **238** | | P | | **P** | **19 41 58.6** | **+0.4** |
| | 10nm,1.0s,baz=49,slow=9.1,SNR=12 | | | | | | | | |
| STKA | | | | | LR | | LR | 19 54 51.2 | |
| | comp=Z,518nm,20.4s,baz=48,slow=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.90** | **238** | | P | | **P** | **19 41 59.5** | **+1.2** |
| STKA | | | | | IAmb | | IAmb | 19 42 07.3 | |
| | comp=Z,5.4nm,1.1s | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.44** | **345** | | T | | T | 20 21 40.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANMO** | **Albuquerque** | **89.36** | **53** | LR | LR | 20 25 27.7 | | |
| | comp=Z,122nm,18.3s,baz=252,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **89.49** | **321** | P | **P** | **19 48 04.2** | **+0.7** | |
| | comp=Z,1.1nm,1.1s,baz=120,slow=5.7,SNR=4.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.66** | **59** | P | **P** | **19 48 05.5** | **+0.8** | |
| | comp=Z,0.5nm,0.8s,baz=224,slow=3.5,SNR=4.9 | | | | | | | |
| TXAR | | | | LR | LR | 20 20 27.2 | | |
| | comp=Z,235nm,19.6s,baz=254,slow=30 | | | | | | | |
| **PDAR** | **Pinedale Array** | **90.03** | **45** | LR | LR | 20 20 52.1 | | |
| | comp=Z,107nm,19.4s,baz=264,slow=31 | | | | | | | |
| **GTA** | **Gaotai** | **90.51** | **311** | *e*P | **P** | **19 48 10.9** | **+2.3** | |
| GTA | | | | pP | pwP | 19 48 20.8 | -1.2 | |
| GTA | | | | sP | sP | 19 48 26.7 | +4.1 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **INK** | **Inuvik** | **92.17** | **17** | LR | LR | 20 21 39.9 | | |
| | comp=Z,100nm,21.8s,baz=214,slow=30 | | | | | | | |
| **CMIG** | **Matias Romero** | **93.65** | **73** | LR | LR | 20 21 39.0 | | |
| | comp=Z,158nm,20.2s,baz=226,slow=30 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.44** | **26** | P | **P** | **19 48 30.1** | **-0.4** | |
| | comp=Z,0.4nm,0.7s,baz=249,slow=4.2,SNR=5.3 | | | | | | | |
| YKA | | | | LR | LR | 20 31 48.3 | | |
| | comp=Z,98nm,18.3s,baz=302,slow=36 | | | | | | | |
| **GERES** | **GERESS Array B** | **145.04** | **340** | PKP | PKPbc | 19 54 42.5 | -0.6 | |
| | comp=Z,1.4nm,0.9s,baz=22,slow=4.3,SNR=5.9 | | | | | | | |
| **CONA** | **Conrad Observa** | **145.06** | **337** | *e*P | **PKPdf** | **19 54 44.7** | **+0.9** | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **MOA** | **Molln** | **145.70** | **338** | *e*P | **PKiKP** | **19 54 46.6** | **-2.3** | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **WTTA** | **Wattenberg** | **147.09** | **341** | *e*P | **PKiKP** | **19 54 54.8** | **+2.8** | |
| | comp=Z,9.4nm,1.1s | | | | | | | |
| **RETA** | **Reutte** | **147.16** | **342** | *e*P | **PKiKP** | **19 54 56.3** | **+4.4** | |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| **MOTA** | **Moosalm** | **147.18** | **341** | *e*P | **PKiKP** | **19 54 56.0** | **+3.9** | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **147.26** | **339** | *e*P | **PKPab** | **19 54 50.0** | **-1.6** | |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.26** | **341** | *e*P | **PKPab** | **19 54 50.8** | **-0.8** | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| **FETA** | **Feichten** | **147.59** | **342** | *e*P | **PKiKP** | **19 54 52.7** | **-0.2** | |
| | comp=Z,4.9nm,1.2s | | | | | | | |

*IDC **07** 20:05:11.5±0.6,22°.95S×69°.37E,h0km,mb4.1/22, mb1 4.2/22,mb1mx4.0/50,mbtmp4.1/22,MS4.1/40, Ms1 4.1/40,ms1mx3.9/77,Error ellipse: s-maj=19.0km s-min=15.7km az=176.0*

*NEIC **07** 20:05:13.7±1.8,22°.9S±0°.1×69°.3E±0°.1,h10km±1km, mb4.5/23,Error ellipse: s-maj=24.1km s-min=16.8km az=174.0*

*GCMT **07** 20:05:16.7±0.3,22°.77S±0°.02×69°.20E±0°.01,h19km±1km, MW5.0/92,Moment Tensor Solution. s29,c34; s92,c126; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.52±.16; $M_{\theta\theta}$-2.89±.12; $M_{\phi\phi}$3.41±.14; $M_{r\theta}$0.23±.26; $M_{\theta\phi}$1.33±.11; $M_{\phi r}$0.46±.24; Best double couple: $M_o$3.45100×$10^{16}$ NP1:$\phi_s$326.00000°,δ83.00000°,λ177.00000°. NP2: $\phi_s$57.00000°,δ87.00000°,λ7.00000°. Principal axes: T 3.7360, Plg7.0000°, Azm282.0000°; N -0.5700, Plg83.0000°, Azm77.0000°; P -3.1660, Plg3.0000°, Azm191.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 07 20:05:13.2±0.6,23°.1S±0°.1×69°.25E±0°.08,h10km,n107, σ1°45/65,mb4.4/38,MS4.1/43,5C-6D,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RER** | **Riviere de l'E** | **12.66** | **276** | Pn | **Pn** | **20 08 11.6** | **-1.9** |
| **H08S1** | **Diego Garcia H** | **15.63** | **12** | T | T | 20 24 33.7 | |
| | baz=192,slow=76,SNR=1002 | | | | | | |
| **H08S2** | **Diego Garcia H** | **15.64** | **12** | T | T | 20 24 30.3 | |
| | baz=192,slow=76,SNR=947 | | | | | | |
| **H08S3** | **Diego Garcia H** | **15.65** | **12** | T | T | 20 24 40.5 | |
| | baz=192,slow=76,SNR=2145 | | | | | | |
| **VOI** | **Vohitsoka** | **20.78** | **269** | P | **P** | **20 09 55.3** | **+0.5** |
| VOI | | | | IAmb | IAmb | 20 09 58.9 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **ABPO** | **Ambohimpanom** | **20.94** | **277** | P | **P** | **20 09 57.8** | **+1.2** |
| ABPO | | | | IAmb | IAmb | 20 09 58.3 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **OPO** | **Ambohidratompo** | **21.09** | **278** | P | **P** | **20 09 59.7** | **+1.5** |
| | comp=Z,14nm,1.0s,baz=98,slow=14,SNR=6.7 | | | | | | |
| **PALK** | **Pallekele** | **32.16** | **22** | LR | LR | 20 21 31.2 | |
| | comp=Z,322nm,20.3s,baz=304,slow=31 | | | | | | |
| **KIBK** | **Kibwezi** | **36.59** | **300** | P | **P** | **20 12 19.7** | **-0.1** |
| KIBK | | | | IAmb | IAmb | 20 12 21.2 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **MATP** | **Matopo** | **37.86** | **266** | LR | LR | 20 25 13.8 | |
| | comp=Z,169nm,22.0s,baz=106,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **37.95** | **301** | P | **P** | **20 12 31.9** | **+0.3** |
| | comp=Z,2.2nm,1.0s,baz=104,slow=4.8,SNR=4.6 | | | | | | |
| KMBO | | | | LR | LR | 20 24 47.6 | |
| | comp=Z,193nm,21.0s,baz=100,slow=31 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **37.95** | **301** | P | **P** | **20 12 30.6** | **-0.9** |
| KMBO | | | | IAmb | IAmb | 20 12 35.9 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **LSZ** | **Lusaka** | **39.45** | **274** | LR | LR | 20 27 04.1 | |
| | comp=Z,294nm,19.4s,baz=120,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **39.79** | **258** | P | **P** | **20 12 47.6** | **+0.8** |
| | comp=Z,3.6nm,0.7s,baz=106,slow=10.0,SNR=5.6 | | | | | | |
| LBTB | | | | LR | LR | 20 26 24.1 | |
| | comp=Z,259nm,18.4s,baz=102,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **39.79** | **258** | P | **P** | **20 12 47.0** | **+0.2** |
| LBTB | | | | IAmb | IAmb | 20 13 04.0 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **39.82** | **253** | P | **P** | **20 12 47.2** | **+0.2** |
| | comp=Z,4.9nm,0.7s,baz=81,slow=8.7,SNR=9.7 | | | | | | |
| BOSA | | | | LR | LR | 20 25 56.8 | |
| | comp=Z,403nm,19.4s,baz=100,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **39.82** | **253** | P | **P** | **20 12 45.9** | **-1.1** |
| BOSA | | | | IAmb | IAmb | 20 12 55.4 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| **LEM** | **Lembang** | **40.26** | **72** | LR | LR | 20 25 37.5 | |
| | comp=Z,102nm,20.6s,baz=196,slow=31 | | | | | | |
| **LODK** | **Lodwar** | **42.26** | **304** | P | **P** | **20 13 07.3** | **+0.1** |
| **MBAR** | **Mbarara** | **43.55** | **295** | LR | LR | 20 28 13.1 | |
| | comp=Z,176nm,21.8s,baz=104,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **43.57** | **247** | LR | LR | 20 27 39.6 | |
| | comp=Z,175nm,21.3s,baz=106,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **43.57** | **247** | P | **P** | **20 13 18.2** | **+0.4** |
| **MAW** | **Mawson** | **44.73** | **183** | LR | LR | 20 27 27.5 | |
| | comp=Z,153nm,20.6s,baz=46,slow=30 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **46.64** | **98** | P | **P** | **20 13 40.9** | **-1.3** |
| PSA00 | | | | IAmb | IAmb | 20 13 44.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **WSAR** | **Wadi Sarin** | **47.16** | **347** | LR | LR | 20 29 45.7 | |
| | comp=Z,122nm,18.6s,baz=175,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **48.15** | **264** | LR | LR | 20 31 43.0 | |
| | comp=Z,380nm,20.0s,baz=128,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **50.44** | **38** | P | **P** | **20 14 08.6** | **-2.7** |
| | comp=Z,1.6nm,0.9s,baz=231,slow=6.3,SNR=8.3 | | | | | | |
| CMAR | | | | LR | LR | 20 33 52.2 | |
| | comp=Z,66nm,18.0s,baz=205,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **50.44** | **38** | P | **P** | **20 14 10.9** | **-0.4** |
| **RAYN** | **Ar Rayn** | **51.74** | **332** | P | **P** | **20 14 20.5** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **52.76** | **96** | LR | LR | 20 32 54.5 | |
| | comp=Z,83nm,21.2s,baz=286,slow=32 | | | | | | |
| **SHL** | **Shillong** | **53.08** | **26** | P | **P** | **20 14 29.9** | **-1.2** |
| **BATI** | **Baumata** | **53.40** | **86** | LR | LR | 20 32 59.3 | |
| | comp=Z,149nm,21.7s,baz=252,slow=31 | | | | | | |
| **NIL** | **Nilore** | **56.52** | **4** | P | **P** | **20 14 52.8** | **-3.0** |
| NIL | | | | IAmb | IAmb | 20 15 05.2 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **PZH** | **PanZhiHua** | **58.45** | **34** | P | **P** | **20 15 10.9** | **+1.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,6.3s | | | | | | |
| **ASAR** | **Alice Springs** | **58.87** | **105** | P | **P** | **20 15 11.8** | **-0.9** |
| | comp=Z,1.1nm,0.7s,baz=260,slow=6.4,SNR=15 | | | | | | |
| ASAR | | | | LR | LR | 20 37 20.2 | |
| | comp=Z,441nm,20.3s,baz=276,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **58.87** | **105** | P | **P** | **20 15 12.7** | **0.0** |
| **AS31** | **Alice Springs** | **58.87** | **105** | P | **P** | **20 15 09.7** | **-3.0** |
| **WRA** | **Warramunga Arr** | **60.20** | **100** | P | **P** | **20 15 21.1** | **-0.8** |
| | comp=Z,2.9nm,0.8s,baz=258,slow=6.5,SNR=28 | | | | | | |
| WRA | | | | LR | LR | 20 39 54.8 | |
| | comp=Z,254nm,18.5s,baz=254,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.20** | **100** | P | **P** | **20 15 21.6** | **-0.2** |
| **WB0** | **Warramunga Arr** | **60.29** | **100** | P | **P** | **20 15 21.8** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 20 15 43.5 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **60.37** | **101** | P | **P** | **20 15 22.9** | **-0.2** |
| **GYA** | **Guiyang** | **61.10** | **38** | ⇑P | **P** | **20 15 30.5** | **+2.6** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **GEYT** | **Alibeck** | **61.56** | **350** | LR | LR | 20 38 08.7 | |
| | comp=Z,110nm,21.5s,baz=158,slow=32 | | | | | | |
| **EIL** | **Elat** | **61.94** | **326** | LR | LR | 20 39 55.7 | |
| | comp=Z,88nm,18.7s,baz=128,slow=34 | | | | | | |
| **KSH** | **Kashi** | **62.56** | **6** | P | **P** | **20 15 33.7** | **-3.8** |
| KSH | | | | pP | pP | 20 15 37.0 | -2.7 |
| KSH | | | | sP | sP | 20 15 40.8 | +0.2 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **62.67** | **200** | LR | LR | 20 41 08.7 | |
| | comp=Z,69nm,18.6s,baz=62,slow=34 | | | | | | |
| **GOMU** | **GeErMu** | **63.70** | **23** | P | **P** | **20 15 46.5** | **+1.1** |
| GOMU | | | | sP | pwP | 20 15 51.3 | -0.3 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,340nm,5.6s | | | | | | |
| **STKA** | **Stephens Creek** | **63.75** | **115** | LR | LR | 20 39 53.0 | |
| | comp=Z,277nm,20.6s,baz=212,slow=33 | | | | | | |
| **SIJI** | **Sorong** | **64.02** | **79** | LR | LR | 20 38 47.9 | |
| | comp=Z,64nm,20.6s,baz=253,slow=32 | | | | | | |
| **AAK** | **Ala-Archa** | **65.54** | **4** | LR | LR | 20 42 11.5 | |
| | comp=Z,140nm,21.0s,baz=194,slow=34 | | | | | | |
| **ENH** | **Enshi** | **65.61** | **38** | P | **P** | **20 15 57.6** | **0.0** |
| **KKAR** | **Karatay Array** | **65.84** | **1** | P | **P** | **20 15 58.2** | **-0.5** |
| **GNI** | **Garni** | **66.91** | **340** | LR | LR | 20 42 30.7 | |
| | comp=Z,100nm,21.5s,baz=112,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **67.06** | **180** | P | **P** | **20 16 07.8** | **+1.2** |
| | comp=Z,4.1nm,0.9s,baz=269,slow=3.8,SNR=6.8 | | | | | | |
| QSPA | | | | LR | LR | 20 43 04.8 | |
| | comp=Z,84nm,18.3s,baz=288,slow=34 | | | | | | |
| **LZH** | **Lanzhou** | **67.31** | **30** | *e*P | **P** | **20 16 10.1** | **+1.6** |
| LZH | | | | pP | sP | 20 16 13.0 | +1.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,180nm,14.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,190nm,13.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,190nm,14.9s | | | | | | |
| **XAN** | **Xi'an** | **68.18** | **35** | P | **P** | **20 16 15.0** | **+1.1** |
| XAN | | | | pP | pwP | 20 16 22.6 | +2.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **68.22** | **166** | LR | LR | 20 41 13.2 | |
| | comp=Z,115nm,18.9s,baz=278,slow=32 | | | | | | |
| **GTA** | **Gaotai** | **68.40** | **25** | *e*P | **P** | **20 16 16.5** | **+1.3** |
| GTA | | | | pP | pwP | 20 16 26.4 | +4.9 |
| GTA | | | | sP | sP | 20 16 30.1 | +12 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,130nm,5.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,120nm,14.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,200nm,13.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,210nm,14.9s | | | | | | |
| **WMQ** | **Urumqi** | **68.67** | **14** | *e*P | **P** | **20 16 18.3** | **+1.5** |
| WMQ | | | | pP | pwP | 20 16 22.8 | -0.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,250nm,5.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,290nm,29.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,370nm,29.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,140nm,17.7s | | | | | | |
| **MK31** | **Makanchi Array** | **70.52** | **9** | P | **P** | **20 16 25.5** | **-2.6** |
| MK31 | | | | IAmb | IAmb | 20 16 28.8 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **70.52** | **9** | P | **P** | **20 16 25.6** | **-2.5** |
| | comp=Z,2.3nm,0.9s,baz=197,slow=5.5,SNR=15 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.52** | **9** | P | **P** | **20 16 26.2** | **-1.9** |
| **KBZ** | **Khabaz** | **70.73** | **340** | LR | LR | 20 46 35.6 | |
| | comp=Z,96nm,19.5s,baz=185,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **70.75** | **332** | P | **P** | **20 16 29.7** | **-0.1** |
| | comp=Z,2.7nm,0.9s,baz=142,slow=6.3,SNR=5.9 | | | | | | |
| BRTR | | | | LR | LR | 20 46 33.5 | |
| | comp=Z,70nm,18.3s,baz=196,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **70.75** | **332** | P | **P** | **20 16 29.6** | **-0.3** |
| **CTA** | **Charters Tower** | **70.87** | **104** | LR | LR | 20 44 00.1 | |
| | comp=Z,291nm,21.5s,baz=258,slow=33 | | | | | | |
| **ABKAR** | **Akbulak array** | **72.46** | **354** | P | **P** | **20 16 39.2** | **-0.4** |
| **ABKAR** | **Akbulak array** | **72.46** | **354** | P | **P** | **20 16 38.6** | **-1.1** |
| **NJ2** | **Nanjing** | **72.47** | **43** | *e*P | **P** | **20 16 40.9** | **+0.8** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **73.80** | **36** | ⇓P | **P** | **20 16 49.2** | **+1.3** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.81** | **6** | P | **P** | **20 16 48.1** | **+0.5** |
| | comp=Z,2.1nm,0.9s,baz=202,slow=6.4,SNR=8.6 | | | | | | |
| KURBB | | | | LR | LR | 20 45 54.9 | |
| | comp=Z,112nm,20.5s,baz=135,slow=33 | | | | | | |
| **AKTO** | **Aktyubinsk** | **73.84** | **353** | P | **P** | **20 16 48.3** | **+0.5** |
| | comp=Z,3.1nm,1.0s,baz=215,slow=3.2,SNR=4.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **74.75** | **32** | *e*P | **P** | **20 16 53.8** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **75.25** | **291** | P | **P** | **20 16 56.0** | **-0.8** |
| | comp=Z,0.7nm,0.6s,baz=91,slow=6.6,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.25** | **291** | P | **P** | **20 16 57.1** | **+0.3** |
| **BVAR** | **Borovoye Array** | **75.77** | **1** | P | **P** | **20 16 58.6** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=109,slow=8.0,SNR=6.4 | | | | | | |
| **BELG** | **Belogornoye** | **77.47** | **347** | P | **P** | **20 17 08.6** | **+0.1** |
| | comp=Z,7.0nm,0.9s,baz=192,slow=6.4,SNR=4.9 | | | | | | |
| BELG | | | | LR | LR | 20 50 14.1 | |
| | comp=Z,61nm,19.9s,baz=8.9,slow=35 | | | | | | |
| **CFR** | **Carcaliu** | **77.56** | **332** | ⇓P | P | 20 17 15.2 | +6.0 |
| **ZALV** | **Zalesovo Beam** | **77.86** | **9** | P | **P** | **20 17 09.5** | **-1.1** |
| | comp=Z,1.9nm,0.7s,baz=220,slow=3.9,SNR=9.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **77.86** | **9** | P | **P** | **20 17 09.7** | **-0.9** |
| **SONM** | **Songino Array** | **78.06** | **25** | P | **P** | **20 17 11.5** | **-0.6** |
| | comp=Z,2.3nm,0.9s,baz=211,slow=5.2,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **78.06** | **25** | P | **P** | **20 17 12.0** | **-0.2** |
| SONM | | | | IAmb | IAmb | 20 17 14.8 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **DBIC** | **Dimbokro** | **78.14** | **283** | LR | LR | 20 49 26.3 | |
| | comp=Z,315nm,20.7s,baz=101,slow=34 | | | | | | |
| **ULN** | **Ulaanbaatar** | **78.34** | **25** | P | **P** | **20 17 13.3** | **-0.4** |
| ULN | | | | IAmb | IAmb | 20 17 21.8 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **VRI** | **Vrincioaia** | **78.71** | **331** | ⇓P | P | 20 17 21.6 | +5.9 |
| **PLOR** | **Plostina** | **78.73** | **331** | ⇓P | P | 20 17 21.3 | +5.5 |
| **MLR** | **Muntele Rosu** | **78.78** | **331** | ⇓P | P | 20 17 22.1 | +5.9 |
| **MLR** | **Muntele Rosu** | **78.78** | **331** | P | **P** | **20 17 17.3** | **+1.2** |
| | comp=Z,4.4nm,1.0s,baz=246,slow=7.3,SNR=3.3 | | | | | | |
| **COVR** | **Voineasa-Covas** | **78.93** | **331** | ⇑P | P | 20 17 22.2 | +5.3 |
| **VOIR** | | **79.14** | **330** | ⇑P | P | 20 17 23.1 | +5.0 |
| **ARR** | **Arges** | **79.28** | **330** | ⇑P | P | 20 17 24.5 | +5.6 |
| **DOPR** | **Dopca** | **79.39** | **331** | ⇓P | P | 20 17 24.6 | +5.2 |
| **ARU** | **Arti** | **79.69** | **354** | P | **P** | **20 17 21.1** | **+0.4** |
| | comp=Z,0.2nm,0.2s,baz=264,slow=9.2,SNR=1.5 | | | | | | |
| **SORM** | **Soroca** | **79.79** | **334** | ⇑P | P | 20 17 27.2 | +5.8 |
| **KEST** | **Kesra** | **81.41** | **315** | LR | LR | 20 52 31.3 | |
| | comp=Z,103nm,19.3s,baz=331,slow=35 | | | | | | |
| **AKASG** | **Malin Array Be** | **81.49** | **336** | P | **P** | **20 17 29.4** | **-1.1** |
| | comp=Z,1.2nm,0.7s,baz=143,slow=4.5,SNR=10 | | | | | | |
| **KSRS** | **Korea Array** | **81.65** | **43** | P | **P** | **20 17 32.0** | **+0.4** |
| | comp=Z,0.7nm,0.7s,baz=224,slow=4.0,SNR=2.8 | | | | | | |
| **VRAC** | **Vranov** | **85.92** | **329** | LR | LR | 20 57 46.7 | |
| | comp=Z,48nm,18.9s,baz=62,slow=37 | | | | | | |
| **HNR** | **Honiara** | **87.00** | **99** | LR | LR | 20 54 04.6 | |
| | comp=Z,64nm,20.1s,baz=258,slow=34 | | | | | | |
| **KLMR** | **Klimovskoe** | **87.02** | **346** | *e*P | **P** | **20 18 03.0** | **+4.6** |
| KLMR | | | | AMP | | 20 18 06.0 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **GERES** | **GERESS Array B** | **87.03** | **327** | P | **P** | **20 17 56.9** | **-1.9** |
| | comp=Z,0.2nm,0.3s,baz=158,slow=6.3,SNR=2.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **87.79** | **113** | LR | LR | 20 53 47.9 | |
| | comp=Z,219nm,20.4s,baz=280,slow=33 | | | | | | |
| **MDT** | **Midelt** | **89.68** | **306** | LR | LR | 20 58 18.6 | |
| | comp=Z,174nm,19.4s,baz=138,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **92.43** | **312** | LR | LR | 21 01 05.3 | |
| | comp=Z,93nm,18.0s,baz=96,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **97.50** | **346** | LR | LR | 21 01 06.5 | |
| | comp=Z,78nm,21.4s,baz=120,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **99.50** | **114** | LR | LR | 21 01 28.6 | |
| | comp=Z,155nm,19.1s,baz=230,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **140.50** | **3** | PKP | **PKPdf** | **20 24 40.7** | **-1.5** |
| | comp=Z,0.4nm,0.9s,baz=342,slow=4.1,SNR=4.2 | | | | | | |

*PGC **07** 20:36:14.2±0.0,50°.19N×114°.83W,h0km,ML3.2/7,101km northeast of Cranbrook, Bc Alberta, Canada Mining explosion.*

*ANF **07** 20:36:14.7±3.6,50°.09N×114°.86W,h0km,ML3.6/6,Error ellipse: s-maj=38.1km s-min=18.8km az=4.0*

**ISC 07 20:36:13.1±0.8,50°.17N±0°.02×114°.93W±0°.03,h0km,n28, σ1°56/49,Alberta**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRDA** | **Priddis** | **0.80** | **30** | P | **Pg** | **20 36 37.7** | **-0.8** |
| PRDA | | | | S | **Sg** | **20 36 37.3** | **-1.6** |
| **WALA** | **Waterton Lakes** | **1.29** | **149** | P | **Pg** | **20 36 37.5** | **-0.3** |
| WALA | | | | Sg | **Sn** | **20 36 57.6** | **+1.0** |
| **SLEB** | **Sale Mountain** | **2.27** | **297** | Pn | **Pn** | **20 36 53.2** | **+1.1** |
| SLEB | | | | Sg | **Sg** | **20 37 25.5** | **-0.5** |
| **MKRVA** | **Milk River, Al** | **2.29** | **116** | Pn | **Pn** | **20 36 51.9** | **-0.2** |
| MKRVA | | | | Sg | **Sn** | **20 37 22.1** | **+1.0** |
| **BSMT** | **Bassoo Peak** | **2.33** | **178** | Pn | **Pn** | **20 36 53.1** | **+0.4** |
| BSMT | | | | Sg | **Sb** | **20 37 25.2** | **-0.1** |
| **YBMT** | **Yellow Bay** | **2.39** | **165** | Pn | **Pn** | **20 36 53.4** | **-0.2** |
| **NEW** | **Newport** | **2.39** | **218** | P | **Pn** | **20 36 54.6** | **+1.1** |
| | baz=37 | | | | | | |
| NEW | | | | S | **Sb** | **20 37 25.3** | **-1.8** |
| | baz=37 | | | | | | |
| **JTMT** | **Jette** | **2.46** | **170** | Pn | **Pn** | **20 36 54.7** | **+0.1** |
| **LGPLA** | **Lodgepole** | **2.96** | **355** | Pn | **Pn** | **20 37 01.5** | **+0.2** |
| LGPLA | | | | Sn | **Sn** | **20 37 37.5** | **0.0** |
| **MNB** | **Mounoet Dainar** | **2.98** | **314** | Pn | **Pn** | **20 37 03.2** | **+1.4** |
| MNB | | | | Sg | **Sg** | **20 37 47.9** | **-0.7** |
| **PNT** | **Penticton** | **3.16** | **256** | Pn | **Pn** | **20 37 04.3** | **+0.3** |
| PNT | | | | Sn | **Sn** | **20 37 41.5** | **-1.0** |
| **EDM** | **Edmonton** | **3.21** | **17** | Pn | **Pn** | **20 37 03.3** | **-1.4** |
| EDM | | | | Sg | **Sb** | **20 37 52.5** | **+2.0** |
| **BLBC** | **Blue River** | **3.30** | **306** | Pn | **Pn** | **20 37 07.7** | **+1.4** |
| **OVMT** | **Ovando** | **3.36** | **157** | Pn | **Pn** | **20 37 07.8** | **+0.8** |
| OVMT | | | | Sg | **Sb** | **20 37 57.2** | **+2.1** |
| **B08A** | **Colville Reser** | **3.41** | **240** | Pn | **Pn** | **20 37 07.4** | **-0.1** |
| B08A | | | | Sn | **Sn** | **20 37 47.7** | **-0.9** |
| **MSO** | **Missoula** | **3.41** | **169** | P | **Pn** | **20 37 07.5** | **-0.1** |
| | baz=350 | | | | | | |
| MSO | | | | S | **Sn** | **20 37 49.8** | **+1.0** |
| | baz=350 | | | | | | |
| **EGMT** | **Eagleton** | **4.02** | **120** | P | **Pn** | **20 37 16.5** | **+0.5** |
| | baz=305 | | | | | | |
| EGMT | | | | S | **Sn** | **20 38 04.3** | **+0.6** |
| | baz=305 | | | | | | |
| **BRLDA** | **Berland Lookou** | **4.21** | **340** | Pn | **Pn** | **20 37 19.4** | **+0.8** |
| BRLDA | | | | Sn | **Sn** | **20 38 07.9** | **-0.6** |
| BRLDA | | | | Sg | **Sg** | **20 38 25.8** | **-2.5** |
| **C06D** | **Leavenworth** | **4.53** | **242** | P | **Pn** | **20 37 25.1** | **+2.2** |
| | baz=58 | | | | | | |
| C06D | | | | S | **Sn** | **20 38 17.9** | **+1.7** |
| | baz=58 | | | | | | |
| **LTY** | **Liberty** | **4.79** | **235** | Sn | **Sn** | **20 38 21.8** | **-1.0** |
| LTY | | | | Sg | **Sg** | **20 38 45.8** | **-1.1** |
| **A05A** | **Maple Falls** | **4.80** | **259** | Sg | **Sg** | **20 38 46.3** | **-1.0** |
| **SWHSA** | **Sweathouse Loo** | **4.86** | **347** | Pn | **Pn** | **20 37 27.6** | **+0.1** |
| SWHSA | | | | Sn | **Sn** | **20 38 21.4** | **-3.2** |
| SWHSA | | | | Sg | **Sb** | **20 38 42.7** | **+4.5** |
| **CMW** | **Cultus Mountai** | **5.02** | **252** | Sg | **Sg** | **20 38 52.4** | **-1.9** |
| **HNBB** | **Haney** | **5.04** | **263** | Sg | **Sg** | **20 38 51.2** | **-3.7** |
| **B05A** | **Bryant** | **5.07** | **251** | P | **Pn** | **20 37 32.7** | **+2.4** |
| | baz=65 | | | | | | |
| **BOZ** | **Bozeman (W)** | **5.09** | **153** | P | **Pn** | **20 37 31.2** | **+0.5** |
| | baz=336 | | | | | | |
| BOZ | | | | S | **Sn** | **20 38 31.0** | **+0.8** |
| | baz=336 | | | | | | |
| **D03D** | **Eldon** | **6.00** | **247** | P | **Pn** | **20 37 45.2** | **+2.2** |
| | baz=61 | | | | | | |
| **E04D** | **Cinebar** | **6.25** | **238** | P | **Pn** | **20 37 48.3** | **+1.9** |
| | baz=52 | | | | | | |

*IDC **07** 20:43:04.3±1.1,8°.42N×71°.38W,h0km,mb3.6/3,mb1 3.8/4, mb1mx3.5/30,mbtmp3.6/4,ML2.3/1,Error ellipse: s-maj=36.4km s-min=10.4km az=151.0*

*FUNV **07** 20:43:07.3,8°.54N×71°.47W,h5km,MW3.9*

**ISC 07 20:43:06.2±1.2,8°.63N±0°.02×71°.36W±0°.02,h6km±9km,n55, σ1°58/98,mb3.8/3,1C,Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.60** | **124** | ⇑*i*P | **Pg** | **20 43 17.5** | **-0.4** |
| SOCV | | | | *e*S | **Sg** | **20 43 24.6** | **-1.1** |
| **SDV** | **Santo Domingo** | **0.77** | **70** | Pg | **Pg** | **20 43 21.7** | **+0.7** |
| | 19nm,0.3s,baz=243,slow=15,SNR=61 | | | | | | |
| SDV | | | | Lg | Lg | 20 43 33.3 | |
| | 73nm,0.3s,baz=284,slow=15,SNR=15 | | | | | | |
| **SDV** | **Santo Domingo** | **0.77** | **70** | *e*P | **Pb** | **20 43 22.2** | **+0.2** |
| SDV | | | | *e*S | **Sb**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,28nm,0.5s | | | | | | | | |
| **NORC** | **Norcasia** | **4.62** | **229** | *eP* | | **Pn** | | **20 44 17.3** | **+0.6** |
| NORC | | | | *eS* | | **Sn** | | **20 45 11.2** | **+0.5** |
| **ROSC** | **El Rosal** | **4.77** | **218** | Pn | | **Pn** | | **20 44 17.7** | **-1.3** |
| | comp=Z,3.3nm,0.3s,baz=80,slow=18,SNR=9.4 | | | | | | | | |
| **HELC** | **Santa Helena** | **4.79** | **240** | *eP* | | **Pn** | | **20 44 20.4** | **+1.2** |
| HELC | | | | *eS* | | **Sn** | | **20 45 16.8** | **+1.5** |
| **PAYV** | **Puerto Ayacuch** | **4.86** | **131** | *eP* | | **Pn** | | **20 44 19.2** | **-0.7** |
| PAYV | | | | *eS* | | **Sn** | | **20 45 13.0** | **-3.6** |
| **CACV** | **CAICARA DEL OR** | **4.89** | **102** | *eP* | | Pb | | 20 44 28.0 | -4.3 |
| CACV | | | | *eS* | | **Sb** | | **20 45 28.1** | **-3.3** |
| **MERV** | **Las Mercedes** | **5.04** | **83** | *eP* | | **Pn** | | **20 44 23.6** | **+1.2** |
| MERV | | | | *eS* | | **Sn** | | **20 45 19.9** | **-1.1** |
| **VILC** | **Villavicencio,** | **5.05** | **207** | *eP* | | **Pn** | | **20 44 22.9** | **+0.3** |
| VILC | | | | *eS* | | **Sn** | | **20 45 23.0** | **+1.7** |
| **DBBC** | **Dabeiba** | **5.06** | **252** | *eP* | | **Pn** | | **20 44 26.0** | **+3.2** |
| DBBC | | | | *eS* | | **Sb** | | **20 45 40.0** | **+3.5** |
| **GUY2C** | **Guyana, Caldas** | **5.22** | **230** | *eP* | | **Pn** | | **20 44 27.7** | **+2.5** |
| GUY2C | | | | *eS* | | **Sn** | | **20 45 27.4** | **+1.4** |
| **BIRV** | **Birongo** | **5.35** | **69** | *eP* | | **Pn** | | **20 44 27.8** | **+1.2** |
| BIRV | | | | *eS* | | **Sn** | | **20 45 27.9** | **-0.7** |
| **CBOC** | **Ciudad Bolivar** | **5.37** | **240** | *eP* | | **Pn** | | **20 44 30.1** | **+3.0** |
| CBOC | | | | *eS* | | **Sn** | | **20 45 30.9** | **+1.7** |
| CBOC | | | | *i* | | | | 20 46 00.6 | |
| | comp=Z,10nm,0.5s | | | | | | | | |
| **ANIL** | **Santa Ana** | **5.74** | **225** | *eP* | | **Pn** | | **20 44 35.6** | **+3.3** |
| ANIL | | | | *eS* | | **Sn** | | **20 45 38.8** | **+0.1** |
| ANIL | | | | *i* | | | | 20 45 45.3 | |
| | comp=Z,35nm,0.3s | | | | | | | | |
| **PRAC** | **Prado** | **6.01** | **216** | *eP* | | **Pn** | | **20 44 36.6** | **+0.9** |
| PRAC | | | | *eS* | | **Sn** | | **20 45 44.0** | **-0.9** |
| **ORTC** | **Ortega, Tolima** | **6.07** | **220** | *eP* | | **Pn** | | **20 44 36.6** | **+0.1** |
| ORTC | | | | *eS* | | **Sn** | | **20 45 44.0** | **-2.4** |
| **PDAR** | **Pinedale Array** | **47.70** | **322** | P | | **P** | | **20 51 44.9** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=116,slow=10,SNR=3.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.20** | **339** | P | | **P** | | **20 53 28.2** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=127,slow=7.0,SNR=5.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.67** | **79** | P | | **P** | | **20 54 28.1** | **-1.4** |
| | comp=Z,0.7nm,0.8s,baz=281,slow=4.9,SNR=4.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **151.57** | **235** | PKPbc | | **PKPbc** | | **21 03 00.8** | **-1.5** |
| | comp=Z,0.7nm,0.7s,baz=107,slow=2.6,SNR=7.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **152.72** | **243** | PKPbc | | **PKPbc** | | **21 03 03.6** | **-1.3** |
| | comp=Z,0.7nm,0.6s,baz=102,slow=3.1,SNR=10 | | | | | | | | |

*IDC **07** 20:45:34.7±0.6,24˚.29N×123˚.28E,h0km,mb4.2/18, mb1 4.4/22,mb1mx4.2/42,mbtmp4.2/22,ML3.2/4,MS3.8/40, Ms1 3.8/40,ms1mx3.6/91,Error ellipse: s-maj=18.7km s-min=14.1km az=74.0*

*BJI **07** 20:45:38.6±0.0,24˚.23N×123˚.48E,h36km,mb4.0/41, mB4.6/30,ML3.9/8,Ms4.0/23,Ms7 3.7/23*

*NEIC **07** 20:45:40.8±1.6,24˚.30N±0˚.08×123˚.48E±0˚.07,h45km±7km, mb4.4/18,Error ellipse: s-maj=11.0km s-min=9.8km az=176.0*

*NIED **07** 20:45:41.4,24˚.30N×123˚.44E,h45km,MW4.6,Moment Tensor Solution. s3 Moment tensor: Scale 10^15^Nm; Mrr7.71; Mθθ-9.11; Mφφ 1.40; Mrθ0.88; Mθφ0.50; Mrφ0.20; Fault plane solution: M0 8.47000×10^15^ NP1:φs91.00000°, δ48.00000°,λ87.00000°. NP2:φs275.00000°,δ42.00000°, λ93.00000°.*

*JMA **07** 20:45:41.4±0.1,24˚.30N×123˚.44E,h45km±1km,M4.6*

*JMA Felt II J1.*

**ISC 07 20:45:41.1**±0.7,**24˚.27N**±0˚.05×**123˚.44E**±0˚.03,**h46**km±6km, **n155**,σ1§**18**/139,**mb4.5**/41,**MS3.8**/39,**8C-11D, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.27** | **75** | P | | **Pn** | **20** | **45 49.5** | **-0.1** |
| IRIF | | | | S | | **Sn** | **20** | **45 55.7** | **+0.1** |
| **HATJ** | **Hateruma jima** | **0.39** | **122** | P | | **Pn** | **20** | **45 51.1** | **+0.2** |
| HATJ | | | | S | | **Sn** | **20** | **45 58.1** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.44** | **296** | P | | **Pn** | **20** | **45 51.4** | **0.0** |
| YOJ | | | | S | | **Sn** | **20** | **45 58.3** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.44** | **296** | | | **Pn** | **20** | **45 51.3** | **-0.2** |
| **JYNG** | **Yonagunijimaku** | **0.49** | **292** | P | | **Pn** | **20** | **45 51.9** | **-0.1** |
| JYNG | | | | S | | **Sn** | **20** | **45 59.3** | **-0.5** |
| **JKRS** | **Kuro-shima** | **0.52** | **93** | P | | **Pn** | **20** | **45 52.7** | **+0.3** |
| JKRS | | | | S | | **Sn** | **20** | **46 00.4** | **0.0** |
| **JIJ** | **Ishigaki jima** | **0.65** | **81** | P | | **Pn** | **20** | **45 54.0** | **0.0** |
| JIJ | | | | S | | **Sn** | **20** | **46 02.6** | **-0.7** |
| **JISG** | **Ishigakijimahi** | **0.85** | **68** | P | | **Pn** | **20** | **45 56.9** | **+0.1** |
| JISG | | | | S | | **Sn** | **20** | **46 08.5** | **+0.3** |
| **JTJ** | **Tarama** | **1.21** | **72** | P | | **Pn** | **20** | **46 02.1** | **+0.5** |
| JTJ | | | | S | | **Sn** | **20** | **46 17.3** | **+0.5** |
| **NACB** | **Ninganchiao** | **1.69** | **267** | | | **Pn** | **20** | **46 08.2** | **0.0** |
| **TATO** | **Taipei** | **1.91** | **292** | | | **Pn** | **20** | **46 11.7** | **+0.5** |
| **YHNB** | **Yeheng** | **1.93** | **282** | | | **Pn** | **20** | **46 12.3** | **+0.8** |
| **YULB** | **Yu-li** | **2.15** | **247** | | | **Pn** | **20** | **46 14.1** | **-0.5** |
| **SSLB** | **Suanglung** | **2.33** | **259** | | | **Pn** | **20** | **46 17.0** | **+0.1** |
| **TWG** | **Pinlang** | **2.61** | **237** | | | **Pn** | **20** | **46 20.0** | **-0.8** |
| **TPUB** | **Ta-pu** | **2.75** | **250** | | | **Pn** | **20** | **46 24.4** | **+1.7** |
| **QZH** | **Quanzhou** | **4.47** | **280** | P | | **Pn** | **20** | **46 46.4** | **+0.1** |
| QZH | | | | S | | **Sn** | **20** | **47 34.4** | **-2.6** |
| QZH | | | | smax | smax | | | | |
| | comp=N,73nm,1.2s | | | | | | | | |
| QZH | | | | smax | smax | | | | |
| | comp=E,49nm,0.9s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=N,1μm,13.4s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=E,570nm,17.1s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,490nm,15.9s | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.61** | **273** | | | **Pn** | **20** | **46 48.0** | **-0.3** |
| **JOW** | **Kunigami** | **5.06** | **59** | Pn | | **Pn** | **20** | **46 54.4** | **0.0** |
| | 3.6nm,0.3s,baz=329,slow=25,SNR=1.9 | | | | | | | | |
| **JOW** | **Kunigami** | **5.06** | **59** | | | **Pn** | **20** | **46 53.2** | **-1.2** |
| **NJ2** | **Nanjing** | **8.75** | **333** | *eP* | | **Pn** | **20** | **47 45.8** | **+0.8** |
| NJ2 | | | | S | | **Sn** | **20** | **49 21.7** | **-0.6** |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| NJ2 | | | | smax | smax | | | | |
| | comp=N,27nm,0.9s | | | | | | | | |
| NJ2 | | | | smax | smax | | | | |
| | comp=E,31nm,1.7s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=N,690nm,13.7s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=E,390nm,11.1s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=Z,580nm,12.6s | | | | | | | | |
| **WHN** | **Wuhan** | **10.21** | **310** | ⇑P | | **Pn** | **20** | **48 05.8** | **+0.7** |
| WHN | | | | S | | **Sn** | **20** | **50 05.1** | **+6.9** |
| WHN | | | | LR | LR | | | | |
| | comp=N,2μm,18.5s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=E,770nm,12.5s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,900nm,11.5s | | | | | | | | |
| **JNU** | **Nakatsue** | **10.97** | **35** | Pn | | **Pn** | **20** | **48 15.3** | **-0.2** |
| | 0.2nm,0.3s,baz=208,slow=11,SNR=2.4 | | | | | | | | |
| **JNU** | **Nakatsue** | **10.97** | **35** | Pn | | **Pn** | **20** | **48 14.3** | **-1.2** |
| **KSRS** | **Korea Array** | **13.69** | **15** | Pn | | **Pn** | **20** | **48 51.6** | **-1.0** |
| | 0.1nm,0.3s,baz=193,slow=12,SNR=2.8 | | | | | | | | |
| KSRS | | | | LR | LR | | 20 | 54 53.3 | |
| | comp=Z,274nm,18.4s,baz=200,slow=41 | | | | | | | | |
| **ENH** | **Enshi** | **13.77** | **299** | Pn | | **Pn** | **20** | **48 50.7** | **-3.1** |
| **LYN** | **LuoYang** | **14.01** | **320** | ⇓*i*P | | **P** | **20** | **49 06.3** | **+2.6** |
| LYN | | | | S | | **S** | **20** | **51 50.0** | **-0.5** |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=N,390nm,17.2s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,360nm,18.6s | | | | | | | | |
| **GYA** | **Guiyang** | **15.32** | **282** | ⇑*i*P | | **P** | **20** | **49 21.1** | **+2.6** |
| GYA | | | | pP | pP | | 20 | 49 24.7 | -4.5 |
| GYA | | | | pmax | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,170nm,22.0s | | | | | | | | |
| **XAN** | **Xi'an** | **15.98** | **311** | P | | **P** | **20** | **49 25.6** | **0.0** |
| XAN | | | | pP | pP | | 20 | 49 36.5 | +0.2 |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **16.82** | **55** | LR | | LR | 20 | 55 46.1 | |
| | comp=Z,89nm,19.7s,baz=278,slow=36 | | | | | | | | |
| **BJT** | **Baijiatuau** | **16.86** | **340** | | | **Pn** | **20** | **49 31.2** | **-2.6** |
| BJT | | | | IAmb | | IAmb | 20 | 49 41.7 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **BJI** | **Beijing** | **16.88** | **340** | P | | **P** | **20** | **49 38.2** | **+2.7** |
| BJI | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **DAV** | **Davao City (W)** | **17.22** | **173** | LR | | LR | 20 | 56 48.7 | |
| | comp=Z,176nm,18.9s,baz=338,slow=39 | | | | | | | | |
| **MAT** | **Matsushiro** | **17.63** | **43** | P | | **Pn** | **20** | **49 42.1** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **17.63** | **43** | P | | **Pn** | **20** | **49 42.9** | **-0.6** |
| | comp=Z,0.0nm,0.3s,baz=230,slow=9.2,SNR=5.6 | | | | | | | | |
| **KMI** | **Kunming** | **18.83** | **277** | ⇓P | | **Pn** | | | |
| KMI | | | | pmax | pmax | | **20** | **50 00.8** | **+2.5** |
| | comp=Z,6.0nm,1.4s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,190nm,16.6s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,280nm,16.0s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,280nm,18.5s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.30** | **332** | *eP* | | **P** | **20** | **50 02.9** | **+0.6** |
| HHC | | | | sP | sP | | 20 | 50 18.7 | +0.1 |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,230nm,4.6s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,250nm,11.4s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,180nm,10.5s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,410nm,10.8s | | | | | | | | |
| **CN2** | **Changchun** | **19.56** | **4** | *eP* | | **Pn** | **20** | **50 07.3** | **+0.8** |
| **PZH** | **PanZhiHua** | **19.73** | **281** | P | | **Pn** | **20** | **50 09.1** | **+0.2** |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,190nm,6.3s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.49** | **345** | *eP* | | Pn | 20 | 50 19.6 | +1.8 |
| XLT | | | | pP | pP | | 20 | 50 28.9 | +3.1 |
| XLT | | | | sP | sP | | 20 | 50 35.5 | +4.0 |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,250nm,4.7s | | | | | | | | |
| **LZH** | **Lanzhou** | **20.59** | **309** | *eP* | | **P** | **20** | **50 17.4** | **+0.9** |
| LZH | | | | pP | pP | | 20 | 50 26.7 | -0.6 |
| LZH | | | | sP | sP | | 20 | 50 30.6 | -2.4 |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,100nm,5.4s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,340nm,13.6s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,320nm,11.9s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,480nm,13.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.08** | **17** | LR | | LR | 20 | 58 25.8 | |
| | comp=Z,184nm,19.7s,baz=192,slow=36 | | | | | | | | |
| **BNX** | **BinXian** | **21.66** | **8** | ⇓P | | **P** | **20** | **50 26.6** | **-1.0** |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,280nm,4.2s | | | | | | | | |
| **GUMO** | **Guam** | **22.85** | **114** | LR | | LR | 20 | 58 44.4 | |
| | comp=Z,81nm,19.9s,baz=356,slow=34 | | | | | | | | |
| **TOLI2** | **Tolitoli** | **23.16** | **187** | P | | **P** | **20** | **50 41.8** | **-1.9** |
| TOLI2 | | | | IAmb | IAmb | | 20 | 51 01.0 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.52** | **261** | P | | **P** | **20** | **50 45.6** | **-1.6** |
| | comp=Z,1.1nm,0.8s,baz=61,slow=8.3,SNR=5.9 | | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **20** | **54 32.9** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=38,slow=1.6,SNR=4.1 | | | | | | | | |
| CMAR | | | | LR | LR | | 21 | 00 14.6 | |
| | comp=Z,100nm,21.2s,baz=70,slow=38 | | | | | | | | |
| **GTA** | **Gaotai** | **25.02** | **313** | *eP* | | **P** | **20** | **51 00.4** | **-0.5** |
| GTA | | | | pP | pP | | 20 | 51 11.3 | -1.5 |
| GTA | | | | sP | sP | | 20 | 51 15.3 | -3.0 |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,40nm,5.8s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,230nm,16.0s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,160nm,17.8s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,200nm,17.1s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **25.25** | **34** | LR | | LR | 21 | 00 48.6 | |
| | comp=Z,112nm,20.0s,baz=236,slow=36 | | | | | | | | |
| **KLR** | **Kul'dur** | **25.76** | **13** | P | | **P** | **20** | **51 08.2** | **+0.9** |
| | comp=Z,2.2nm,0.9s,baz=210,slow=9.0,SNR=6.6 | | | | | | | | |
| KLR | | | | PcP | | **PcP** | **20** | **54 37.5** | **+1.3** |
| | comp=Z,1.1nm,0.8s,baz=334,slow=4.5,SNR=4.3 | | | | | | | | |
| KLR | | | | LR | | LR | 21 | 01 41.2 | |
| | comp=Z,215nm,19.1s,baz=197,slow=38 | | | | | | | | |
| **SIJI** | **Sorong** | **26.11** | **162** | LR | | LR | 20 | 59 26.1 | |
| | comp=Z,78nm,20.7s,baz=44,slow=32 | | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **26.40** | **200** | P | | **P** | **20** | **51 14.8** | **+1.4** |
| | comp=Z,1μmcomp=Z,8.6nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **27.14** | **334** | P | | **P** | **20** | **51 19.0** | **-1.0** |
| | comp=Z,3.5nm,0.9s,baz=154,slow=11,SNR=26 | | | | | | | | |
| SONM | | | | LR | | LR | 21 | 03 15.5 | |
| | comp=Z,235nm,20.6s,baz=170,slow=39 | | | | | | | | |
| **SONM** | **Songino Array** | **27.14** | **334** | P | | **P** | **20** | **51 19.2** | **-0.8** |
| **KAPI** | **Kappang** | **29.32** | **188** | LR | | LR | 21 | 04 30.5 | |
| | comp=Z,93nm,19.4s,baz=15,slow=39 | | | | | | | | |
| **JAY** | **Jayapura** | **31.47** | **145** | LR | | LR | 21 | 01 56.5 | |
| | comp=Z,156nm,21.4s,baz=14,slow=31 | | | | | | | | |
| **PSI** | **Prapat** | **31.87** | **232** | LR | | LR | 21 | 04 05.0 | |
| | comp=Z,114nm,18.1s,baz=54,slow=35 | | | | | | | | |
| **TAPN** | **Taplejung** | **32.25** | **283** | *eP* | | **P** | **20** | **52 07.0** | **+1.3** |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **ODAN** | **Odare** | **32.56** | **282** | *eP* | | **P** | **20** | **52 09.4** | **+1.0** |
| | comp=Z,37nm,1.1s | | | | | | | | |
| **MMRI** | **Maumere** | **32.72** | **182** | P | | **P** | **20** | **52 10.7** | **+1.2** |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **MNSI** | **Mandailing Nat** | **32.84** | **228** | P | | **P** | **20** | **52 10.8** | **+0.2** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **PPI** | **Padang Panjang** | **33.22** | **226** | P | | **P** | **20** | **52 15.5** | **+1.6** |
| | comp=Z,502nmcomp=Z,5.9nm,0.5s | | | | | | | | |
| **RAMN** | **Ramite** | **33.26** | **283** | *eP* | | **P** | **20** | **52 15.8** | **+1.3** |
| | comp=Z,6.9nm,0.5s | | | | | | | | |
| **JIRN** | **Jiri** | **33.58** | **284** | *eP* | | **P** | **20** | **52 18.3** | **+0.9** |
| **GUN** | **Gumba** | **33.85** | **284** | *eP* | | **P** | **20** | **52 20.5** | **+0.8** |
| **PKI** | **Pulchoki** | **34.28** | **284** | *eP* | | **P** | **20** | **52 23.8** | **+0.4** |
| **PKIN** | **Phulchoki** | **34.29** | **284** | *eP* | | **P** | **20** | **52 23.7** | **+0.2** |
| **KKN** | **Kakani** | **34.38** | **284** | *eP* | | **P** | **20** | **52 24.7** | **+0.5** |
| | comp=Z,27nm,1.0s | | | | | | | | |
| **DMN** | **Daman** | **34.55** | **284** | *eP* | | **P** | **20** | **52 26.2** | **+0.5** |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **GKN** | **Gorkha** | **34.94** | **285** | *eP* | | **P** | **20** | **52 29.3** | **+0.3** |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **WMQ** | **Urumqi** | **35.10** | **313** | *eP* | | **P** | **20** | **52 30.8** | **+0.8** |
| **DANN** | **Dangsing** | **35.70** | **285** | *eP* | | **P** | **20** | **52 36.4** | **+0.8** |
| | comp=Z,37nm,1.1s | | | | | | | | |
| **KOLN** | **Koldanda** | **35.87** | **284** | *eP* | | **P** | **20** | **52 38.3** | **+1.3** |
| **PYUN** | **Piuthan** | **36.39** | **285** | *eP* | | **P** | **20** | **52 42.3** | **+0.9** |
| | comp=Z,38nm,1.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **37.99** | **5** | LR | | LR | 21 | 08 17.5 | |
| | comp=Z,82nm,20.6s,baz=258,slow=36 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **38.66** | **33** | LR | | LR | 21 | 10 47.2 | |
| | comp=Z,60nm,18.1s,baz=251,slow=39 | | | | | | | | |
| **MK31** | **Makanchi Array** | **39.73** | **315** | P | | **P** | **20** | **53 08.1** | **-1.1** |
| **MKAR** | **Makanchi Array** | **39.73** | **315** | P | | **P** | **20** | **53 08.1** | **-1.0** |
| | comp=Z,2.3nm,0.7s,baz=101,slow=8.7,SNR=40 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **20** | **55 14.0** | **-0.9** |
| | comp=Z,0.8nm,0.6s,baz=97,slow=3.9,SNR=3.9 | | | | | | | | |
| MKAR | | | | LR | LR | | 21 | 11 01.4 | |
| | comp=Z,96nm,18.7s,baz=68,slow=39 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.73** | **315** | P | | **P** | **20** | **53 08.4** | **-0.7** |
| **MAKZ** | **Makanchi** | **39.93** | **315** | P | | **P** | **20** | **53 10.4** | **-0.4** |
| MAKZ | | | | IAmb | IAmb | | 20 | 53 12.0 | |
| | comp=Z,4.3nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **40.70** | **143** | LR | | LR | 21 | 09 44.0 | |
| | comp=Z,61nm,20.7s,baz=287,slow=36 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.31** | **326** | P | | **P** | **20** | **53 20.0** | **-2.0** |
| ZAA0 | | | | IAmb | IAmb | | 20 | 53 21.9 | |
| | comp=Z,5.3nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.31** | **326** | P | | **P** | **20** | **53 20.5** | **-1.5** |
| | comp=Z,4.2nm,0.6s,baz=116,slow=8.6,SNR=22 | | | | | | | | |
| ZALV | | | | LR | LR | | 21 | 11 47.0 | |
| | comp=Z,185nm,18.1s,baz=92,slow=38 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.31** | **326** | P | | **P** | **20** | **53 20.4** | **-1.7** |
| **KSH** | **Kashi** | **42.59** | **303** | P | | **P** | **20** | **53 34.5** | **+1.7** |
| **KURK** | **Kurchatov** | **43.36** | **319** | P | | **P** | **20** | **53 37.5** | **-1.3** |
| KURK | | | | IAmb | IAmb | | 20 | 53 39.0 | |
| | comp=Z,7.8nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **44.10** | **307** | LR | | LR | 21 | 15 28.6 | |
| | comp=Z,78nm,18.4s,baz=99,slow=41 | | | | | | | | |
| **PALK** | **Pallekele** | **44.24** | **255** | LR | | LR | 21 | 12 02.6 | |
| | comp=Z,59nm,21.7s,baz=162,slow=36 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.05** | **165** | P | | **P** | **20** | **53 52.8** | **+0.3** |
| WB0 | | | | IAmb | IAmb | | 20 | 53 54.7 | |
| | comp=Z,9.7nm,1.1s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.20** | **165** | P | | **P** | **20** | **53 52.0** | **-1.7** |
| **WRA** | **Warramunga Arr** | **45.21** | **165** | P | | **P** | **20** | **53 54.0** | **+0.3** |
| | comp=Z,7.0nm,0.9s,baz=349,slow=8.4,SNR=29 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.21** | **165** | P | | **P** | **20** | **53 52.7** | **-1.1** |
| **WB2** | **Warramunga Arr** | **45.21** | **165** | P | | **P** | **20** | **53 53.0** | **-0.9** |
| **WR0** | **Warramunga Arr** | **45.27** | **165** | P | | **P** | **20** | **53 54.1** | **-0.2** |
| WR0 | | | | IAmb | IAmb | | 20 | 53 55.5 | |
| | comp=Z,8.7nm,0.9s | | | | | | | | |
| **GAR** | **Garm** | **46.93** | **301** | P | | **P** | **20** | **54 07.0** | **-0.4** |
| **TIXI** | **Tiksi** | **47.51** | **2** | LR | | LR | 21 | 16 39.5 | |
| | comp=Z,151nm,18.3s,baz=181,slow=39 | | | | | | | | |
| **TIXI** | **Tiksi** | **47.51** | **2** | P | | **P** | **20** | **54 09.2** | **-2.0** |
| TIXI | | | | IAmb | IAmb | | 20 | 54 13.6 | |
| | comp=Z,4.1nm,1.2s | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.72** | **167** | P | | **P** | **20** | **54 22.2** | **+1.1** |
| | comp=Z,1.9nm,0.6s,baz=350,slow=6.8,SNR=28 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.72** | **167** | P | | **P** | **20** | **54 20.6** | **-0.6** |
| **HNR** | **Honiara** | **48.91** | **129** | LR | | LR | 21 | 14 00.8 | |
| | comp=Z,46nm,19.6s,baz=294,slow=35 | | | | | | | | |
| **BRVK** | **Borovoye** | **48.99** | **320** | P | | **P** | **20** | **54 22.6** | **-0.4** |
| **NRIK** | **Noril'sk** | **49.87** | **344** | LR | | LR | 21 | 17 53.8 | |
| | comp=Z,165nm,19.1s,baz=112,slow=39 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.86** | **314** | P | | **P** | **20** | **55 06.6** | **-0.1** |
| ABKAR | | | | IAmb | IAmb | | 20 | 55 08.0 | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.86** | **314** | P | | **P** | **20** | **55 06.7** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **56.16** | **316** | LR | | LR | 21 | 20 08.0 | |
| | comp=Z,76nm,18.3s,baz=107,slow=37 | | | | | | | | |
| **ARU** | **Arti** | **56.29** | **323** | LR | | LR | 21 | 22 17.4 | |
| | comp=Z,67nm,19.2s,baz=54,slow=39 | | | | | | | | |
| **ARU** | **Arti** | **56.29** | **323** | P | | **P** | **20** | **55 15.4** | **-1.4** |
| ARU | | | | IAmb | IAmb | | 20 | 55 16.8 | |
| | comp=Z,4.9nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.46** | **162** | P | | **P** | **20** | **55 32.3** | **-0.1** |
| | comp=Z,9.3nm,1.2s,baz=346,slow=6.8,SNR=6.5 | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.46** | **162** | P | | **P** | **20** | **55 32.0** | **-0.4** |
| **KIRV** | **Kirov** | **61.34** | **325** | LR | | LR | 21 | 24 48.5 | |
| | comp=Z,219nm,19.8s,baz=85,slow=38 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **62.20** | **134** | LR | | LR | 21 | 18 41.2 | |
| | comp=Z,80nm,20.7s,baz=278,slow=32 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **66.19** | **328** | *eP* | | **P** | **20** | **56 21.7** | **-2.1** |
| KLMR | | | | AMP | | | 20 | 56 24.0 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **GNI** | **Garni** | **66.45** | **305** | LR | | LR | 21 | 29 18.4 | |
| | comp=Z,50nm,18.7s,baz=347,slow=40 | | | | | | | | |
| **KBZ** | **Khabaz** | **67.03** | **309** | P | | **P** | **20** | **56 28.8** | **-0.6** |
| | comp=Z,3.9nm,0.9s,baz=142,slow=6.5,SNR=5.8 | | | | | | | | |
| **ILAR** | **Eielson Array** | **68.19** | **27** | P | | **P** | **20** | **56 36.5** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=272,slow=6.0,SNR=6.9 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **69.84** | **348** | LR | | LR | 21 | 31 03.9 | |
| | comp=Z,89nm,20.0s,baz=235,slow=39 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **70.23** | **338** | P | | **P** | **20** | **56 48.0** | **-0.9** |
| | comp=Z,4.0nm,1.0s,baz=81,slow=7.7,SNR=5.5 | | | | | | | | |
| ARCES | | | | LR | | LR | 21 | 31 24.7 | |
| | comp=Z,56nm,18.1s,baz=84,slow=39 | | | | | | | | |
| **FINES** | **FINESS Array B** | **72.41** | **330** | P | | **P** | **20** | **57 02.2** | **0.0** |
| | comp=Z,0.7nm,0.3s,baz=57,slow=5.6,SNR=16 | | | | | | | | |
| FINES | | | | LR | | LR | 21 | 31 37.6 | |
| | comp=Z,164nm,21.2s,baz=52,slow=38 | | | | | | | | |
| **IDID** | **Didziasalis** | **74.07** | **324** | *eP* | | **P** | **20** | **57 12.6** | **+0.4** |
| **AKASG** | **Malin Array Be** | **74.17** | **319** | P | | **P** | **20** | **57 12.2** | **-0.6** |
| | comp=Z,0.8nm,0.3s,baz=59,slow=6.1,SNR=11 | | | | | | | | |
| AKASG | | | | LR | | LR | 21 | 32 06.4 | |
| | comp=Z,79nm,20.1s,baz=132,slow=38 | | | | | | | | |
| **IIGN** | **Ignalina** | **74.34** | **324** | *eP* | | **P** | **20** | **57 13.2** | **-0.5** |
| **BRTR** | **Keskin Array B** | **74.78** | **307** | P | | **P** | **20** | **57 17.1** | **+0.4** |
| | comp=Z,5.4nm,1.0s,baz=108,slow=4.5,SNR=17 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.78** | **307** | P | | **P** | **20** | **57 16.8** | **+0.1** |
| **PABE** | **Paberze** | **75.48** | **325** | *eP* | | **P** | **20** | **57 20.6** | **+0.4** |
| **SORM** | **Soroca** | **75.57** | **316** | ⇓P | | **P** | **20** | **57 20.3** | **-0.7** |
| **SUW** | **Suwalki** | **76.47** | **323**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CVALL** | **Valledupar, Ce** | **2.67** | **316** | *eP* | | **Pn** | **20 53 44.8** | **-1.6** |
| CVALL | | | | *eS* | | **Sn** | **20 54 20.1** | **+0.6** |
| **BARC** | **Barichara** | **2.67** | **222** | *eP* | | **Pb** | **20 53 51.5** | **+0.4** |
| BARC | | | | *eS* | | **Sn** | **20 54 22.4** | **+2.5** |
| **SMLC** | **San Martn de** | **2.68** | **275** | *eP* | | **Pn** | **20 53 46.9** | **+0.3** |
| SMLC | | | | *eS* | | **Sn** | **20 54 21.5** | **+1.8** |
| **CRJC** | **Cerrejon, Guaj** | **2.84** | **328** | *eP* | | **Pn** | **20 53 49.8** | **+0.9** |
| CRJC | | | | *eS* | | **Sn** | **20 54 25.4** | **+1.5** |
| **ARGC** | **Ariguani, Magd** | **3.11** | **294** | *eP* | | **Pn** | **20 53 53.5** | **+1.0** |
| ARGC | | | | *eS* | | **Sn** | **20 54 30.7** | **+0.3** |
| **MAPV** | **Macapo** | **3.13** | **66** | *eP* | | **Pn** | **20 53 55.9** | **+3.1** |
| MAPV | | | | *eS* | | **Sn** | **20 54 33.3** | **+2.5** |
| **URIC** | **Uribia, Colomb** | **3.16** | **349** | *eP* | | **Pg** | **20 54 03.9** | **+1.1** |
| URIC | | | | *eS* | | **Sn** | **20 54 30.7** | **-0.8** |
| **RUSC** | **La Rusia** | **3.17** | **213** | *eP* | | **Pn** | **20 53 55.9** | **+2.1** |
| RUSC | | | | *eS* | | **Sn** | **20 54 33.9** | **+1.4** |
| **BAUV** | **El Baul** | **3.31** | **84** | *eP* | | **Pn** | **20 53 57.5** | **+2.3** |
| BAUV | | | | *eS* | | **Sn** | **20 54 36.8** | **+1.6** |
| **JACV** | **Jacura** | **3.53** | **45** | *eP* | | **Pn** | **20 54 01.2** | **+2.9** |
| **ZARC** | **Zaragoza, Cauc** | **3.62** | **253** | *eP* | | **Pn** | **20 54 00.3** | **+0.7** |
| ZARC | | | | *eS* | | **Sn** | **20 54 41.6** | **-1.5** |
| **PTBC** | **PUERTO BERRIO,** | **3.67** | **237** | *eP* | | **Pn** | **20 54 00.2** | **-0.1** |
| PTBC | | | | *eS* | | **Sb** | **20 54 52.8** | **-0.4** |
| **SMRC** | **Santa Marta, M** | **3.81** | **313** | *eP* | | **Pn** | **20 54 02.4** | **+0.3** |
| SMRC | | | | *eS* | | **Sn** | **20 54 45.0** | **-2.5** |
| **SPBC** | **San Pablo de B** | **3.96** | **223** | *eP* | | **Pn** | **20 54 05.9** | **+1.6** |
| SPBC | | | | *eS* | | **Sn** | **20 54 52.3** | **+0.8** |
| **BENV** | **Beln** | **3.96** | **70** | *eP* | | **Pn** | **20 54 06.8** | **+2.5** |
| BENV | | | | *eS* | | **Sn** | **20 54 52.9** | **+1.3** |
| **SJCC** | **San Jacinto, C** | **3.98** | **289** | *eP* | | **Pn** | **20 54 06.5** | **+2.0** |
| SJCC | | | | *eS* | | **Sn** | **20 54 54.7** | **+2.7** |
| **UREC** | **San Jos de Ur** | **4.21** | **259** | *eP* | | **Pn** | **20 54 06.4** | **-1.2** |
| UREC | | | | *eS* | | **Sn** | **20 54 59.0** | **+1.6** |
| **PTGC** | **Puerto Gaitan,** | **4.42** | **190** | *eP* | | **Pg** | **20 54 30.7** | **+3.7** |
| PTGC | | | | *eS* | | **Sb** | **20 55 20.3** | **+5.6** |
| **CHIC** | **Chingaza** | **4.58** | **211** | *eP* | | **Pn** | **20 54 14.3** | **+1.3** |
| CHIC | | | | *eS* | | **Sn** | **20 55 06.2** | **-0.9** |
| **NORC** | **Norcasia** | **4.59** | **229** | *eP* | | **Pn** | **20 54 14.4** | **+1.5** |
| NORC | | | | *eS* | | **Sn** | **20 55 10.4** | **+3.4** |
| **ROSC** | **El Rosal** | **4.74** | **218** | Pn | | **Pn** | **20 54 15.1** | **-0.1** |
| | 5.8nm,0.3s,baz=107,slow=13,SNR=15 | | | | | | | |
| ROSC | | | | Sn | | **Sn** | **20 55 11.1** | **0.0** |
| | 5.2nm,0.3s,baz=3.9,slow=22,SNR=3.7 | | | | | | | |
| **ROSC** | **El Rosal** | **4.74** | **218** | *eP* | | **Pn** | **20 54 18.3** | **+3.1** |
| ROSC | | | | *eS* | | **Sn** | **20 55 16.3** | **+5.3** |
| **HELC** | **Santa Helena** | **4.76** | **240** | *eP* | | **Pn** | **20 54 17.4** | **+1.4** |
| HELC | | | | *eS* | | **Sb** | **20 55 26.8** | **+1.9** |
| **PAYV** | **Puerto Ayacuch** | **4.84** | **130** | *eP* | | **Pn** | **20 54 17.1** | **+0.8** |
| PAYV | | | | *eS* | | **Sn** | **20 55 10.9** | **-2.2** |
| **CACV** | **CAICARA DEL OR** | **4.89** | **102** | *eP* | | **Pb** | **20 54 25.9** | **-2.8** |
| CACV | | | | *eS* | | **Sb** | **20 55 25.6** | **-2.4** |
| **VILC** | **Villavicencio,** | **5.01** | **208** | *eP* | | **Pn** | **20 54 19.8** | **+1.0** |
| VILC | | | | *eS* | | **Sn** | **20 55 18.9** | **+1.5** |
| **DBBC** | **Dabeiba** | **5.04** | **252** | *eP* | | **Pn** | **20 54 23.0** | **+3.8** |
| DBBC | | | | *eS* | | **Sg** | **20 55 40.1** | **-4.3** |
| **MERV** | **Las Mercedes** | **5.05** | **82** | *eP* | | **Pn** | **20 54 21.7** | **+2.4** |
| MERV | | | | *eS* | | **Sn** | **20 55 18.2** | **-0.1** |
| **GUY2C** | **Guyana, Caldas** | **5.19** | **230** | *eP* | | **Pn** | **20 54 24.4** | **+3.0** |
| GUY2C | | | | *eS* | | **Sn** | **20 55 24.4** | **+2.1** |
| **CBOC** | **Ciudad Bolivar** | **5.34** | **240** | *eP* | | **Pn** | **20 54 26.8** | **+3.4** |
| CBOC | | | | *eS* | | **Sn** | **20 55 30.7** | **+5.0** |
| **BIRV** | **Birongo** | **5.37** | **69** | *eP* | | **Pn** | **20 54 25.7** | **+2.1** |
| BIRV | | | | *eS* | | **Sn** | **20 55 24.8** | **-1.3** |
| **ANIL** | **Santa Ana** | **5.71** | **225** | *eP* | | **Pn** | **20 54 29.7** | **+1.2** |
| ANIL | | | | *eS* | | **Sn** | **20 55 35.8** | **+0.9** |
| **PRAC** | **Prado** | **5.97** | **216** | *eP* | | **Pn** | **20 54 33.4** | **+1.6** |
| PRAC | | | | *eS* | | **Sn** | **20 55 41.4** | **+0.4** |
| **ORTC** | **Ortega, Tolima** | **6.04** | **220** | *eP* | | **Pn** | **20 54 35.6** | **+2.9** |
| ORTC | | | | *eS* | | **Sn** | **20 55 43.5** | **+0.9** |
| **PLMC** | **San Jos del P** | **6.10** | **233** | *eP* | | **Pn** | **20 54 36.6** | **+2.9** |
| PLMC | | | | *eS* | | **Sn** | **20 55 47.2** | **+3.0** |
| **GUVC** | **San Jose del G** | **6.13** | **192** | *eP* | | **Pn** | **20 54 34.3** | **+0.2** |
| GUVC | | | | *eS* | | **Sn** | **20 55 43.7** | **-1.1** |
| **YOTC** | **Yotoco, Valle** | **6.74** | **228** | *eP* | | **Pn** | **20 54 44.1** | **+1.6** |
| YOTC | | | | *eS* | | **Sn** | **20 56 02.2** | **+2.2** |
| **MACC** | **Macarena, Meta** | **6.86** | **201** | *eP* | | **Pn** | **20 54 43.2** | **-0.8** |
| MACC | | | | *eS* | | **Sn** | **20 55 58.7** | **-4.1** |
| **GARC** | **Garzon, Huila** | **7.57** | **213** | *eP* | | **Pn** | **20 54 52.8** | **-1.2** |
| GARC | | | | *eS* | | **Sn** | **20 56 17.7** | **-3.0** |
| **ATAH** | **Atahualpa** | **17.11** | **204** | LR | | LR | 21 03 56.9 | |
| | comp=Z,82nm,21.2s,baz=46,slow=38 | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.66** | **309** | P | | **P** | **21 00 09.9** | **-1.0** |
| | 0.2nm,0.5s,baz=135,slow=12,SNR=2.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **47.72** | **322** | P | | **P** | **21 01 41.0** | **-0.1** |
| | 0.5nm,0.5s,baz=128,slow=9.9,SNR=7.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.53** | **313** | P | | **P** | **21 02 09.7** | **-0.4** |
| | 0.2nm,0.6s,baz=97,slow=7.4,SNR=2.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.23** | **339** | P | | **P** | **21 03 25.0** | **-0.4** |
| | 0.6nm,0.8s,baz=128,slow=7.1,SNR=7.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.69** | **79** | P | | **P** | **21 04 25.2** | **-1.3** |
| | 0.6nm,0.7s,baz=282,slow=4.0,SNR=5.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **151.54** | **235** | PKPbc | | **PKPbc** | **21 12 57.9** | **-1.3** |
| | 0.8nm,0.7s,baz=116,slow=2.9,SNR=10 | | | | | | | |
| **WRA** | **Warramunga Arr** | **152.69** | **243** | PKPbc | | **PKPbc** | **21 13 00.6** | **-1.3** |
| | 0.7nm,0.5s,baz=102,slow=3.3,SNR=17 | | | | | | | |

*NNC* ***07*** *20:58:03.9±3.1, 42.°97N×78.°65E, h0km, mpv2.8, Error ellipse: s-maj=29.0km s-min=11.2km az=174.0*

**SOME 07 20:58:00.9, 42.°82N×78.°57E, h0km, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SATY** | **Saty** | **0.27** | **334** | *eP* | Pg | 20 58 06.5 | +0.4 |
| | 1.1nm,0.1s | | | | | | |
| SATY | | | | *eS* | Sg | 20 58 10.4 | +0.9 |
| | 12nm,0.1s | | | | | | |
| **SATY** | **Saty** | **0.27** | **334** | P | Pg | 20 58 06.5 | +0.4 |
| | 1.1nm,0.1s | | | | | | |
| SATY | | | | S | Sg | 20 58 10.4 | +0.9 |
| | 12nm,0.1s | | | | | | |
| **ZHN** | **Zhinishke** | **0.36** | **345** | *eP* | Pg | 20 58 08.4 | +0.5 |
| | 1.6nm,0.1s | | | | | | |
| ZHN | | | | *eS* | Sg | 20 58 13.8 | +1.2 |
| | 3.2nm,0.1s | | | | | | |
| **ZHN** | **Zhinishke** | **0.36** | **345** | P | Pg | 20 58 08.4 | +0.5 |
| ZHN | | | | S | Sg | 20 58 13.8 | +1.2 |
| **UZB** | **Uzynbulak** | **0.47** | **45** | *eP* | Pg | 20 58 09.9 | 0.0 |
| | 1.7nm,0.1s | | | | | | |
| UZB | | | | *eS* | Sg | 20 58 16.5 | +0.5 |
| | 2.2nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **0.47** | **45** | P | Pg | 20 58 09.0 | -0.9 |
| | 1.6nm,0.0s | | | | | | |
| UZB | | | | S | Sg | 20 58 15.8 | -0.2 |
| | 2.2nm,0.1s | | | | | | |

**SOME 07 20:58:14.5, 42.°90N×76.°08E, h15km, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KST** | **Kastek** | **0.17** | **328** | *eP* | Pg | 20 58 18.7 | -0.2 |
| | 12nm,0.1s | | | | | | |
| KST | | | | *eS* | Sg | 20 58 21.8 | +0.1 |
| | 99nm,0.1s | | | | | | |
| **MTBS** | **Maitube** | **0.34** | **48** | *eP* | Pg | 20 58 21.7 | +0.1 |
| | 4.7nm,0.1s | | | | | | |
| MTBS | | | | *eS* | Sg | 20 58 26.9 | +0.4 |
| | 37nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.41** | **326** | *eP* | Pg | 20 58 22.5 | -0.3 |
| | 6.7nm,0.1s | | | | | | |
| DGS | | | | *eS* | Sg | 20 58 28.3 | -0.2 |
| | 17nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **0.65** | **78** | *eP* | Pg | 20 58 27.0 | -0.3 |
| | 2.2nm,0.1s | | | | | | |
| TNSS | | | | *eS* | Sg | 20 58 36.2 | +0.2 |
| | 2.1nm,0.1s | | | | | | |
| **TNSS** | **Tian-Shan** | **0.65** | **78** | P | Pg | 20 58 27.0 | -0.3 |
| | 2.2nm,0.1s | | | | | | |
| **MDOK** | **Medeo** | **0.76** | **69** | *eP* | Pg | 20 58 28.9 | -0.3 |
| | 2.5nm,0.1s | | | | | | |
| MDOK | | | | *eS* | Sg | 20 58 39.2 | -0.1 |
| | 3.4nm,0.1s | | | | | | |
| **MDOK** | **Medeo** | **0.76** | **69** | Pg | Pg | 20 58 28.9 | -0.3 |
| | 2.5nm,0.1s | | | | | | |
| MDOK | | | | Lg | Lg | 20 58 39.2 | |
| | 3.4nm,0.1s | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.82** | **66** | *eP* | Pg | 20 58 30.4 | -0.1 |
| | 1.8nm,0.1s | | | | | | |
| KOTS | | | | *eS* | Sb | 20 58 41.9 | +0.3 |
| | 3.4nm,0.1s | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.82** | **66** | P | Pg | 20 58 30.4 | -0.1 |
| | 1.8nm,0.1s | | | | | | |
| KOTS | | | | S | Sb | 20 58 41.9 | +0.3 |
| | 3.4nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **0.85** | **340** | *eP* | Pb | 20 58 30.2 | -0.8 |
| | 2.7nm,0.1s | | | | | | |
| KRBS | | | | *eS* | Sg | 20 58 41.4 | -0.9 |
| | 3.2nm,0.1s | | | | | | |
| **KTBS** | **Karatobe** | **0.92** | **28** | *eP* | Pb | 20 58 31.6 | -0.6 |
| | 0.6nm,0.1s | | | | | | |
| KTBS | | | | *eS* | Sb | 20 58 44.2 | -0.1 |
| | 11nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **1.01** | **11** | *eP* | Pb | 20 58 33.0 | -0.7 |
| | 0.6nm,0.1s | | | | | | |
| KUU | | | | *eS* | Sb | 20 58 46.5 | -0.3 |
| | 5.2nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **1.82** | **43** | *eP* | Pb | 20 58 47.4 | -0.2 |
| | 1.0nm,0.1s | | | | | | |
| ARXS | | | | *eS* | Sb | 20 59 11.6 | +1.3 |
| | 4.0nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **2.11** | **55** | *eP* | Pb | 20 58 52.9 | +0.3 |
| | 1.3nm,0.1s | | | | | | |
| BLB | | | | *eS* | Sb | 20 59 19.8 | +1.1 |
| | 3.1nm,0.3s | | | | | | |

*KRSC* ***07*** *20:58:58.6±1.6, 49.°09N×156.°66E, h40km±22km, ML4.2*
*MOS* ***07*** *20:59:00.7±0.9, 49.°36N×155.°46E, h108km, mb4.3/5, Error ellipse: s-maj=15.0km s-min=4.4km az=76.0*
*IDC* ***07*** *20:59:02.4±4.1, 49.°39N×155.°37E, h104km±32km, mb3.3/9, mb1 3.5/12, mb1mx3.3/66, mbtmp3.7/12, MS3.1/1, Ms1 3.1/1, ms1mx2.3/41, Error ellipse: s-maj=43.7km s-min=16.2km az=168.0*

**ISC 07 20:59:00.9±0.9, 49.°2N±0.°1×155.°61E±0.°09, h100km, n77, σ1s45/83, mb3.8/14, 2C-7D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.50** | **12** | *e*PN | **Pn** | **20 59 25.6** | **-1.4** |
| SKR | | | | *eS* | **Sn** | **20 59 44.6** | **-2.2** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,609nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,763nm,0.3s | | | | | | |
| **SKR** | **Severo-Kuril's** | **1.50** | **12** | *eP* | **Pn** | **20 59 26.0** | **-1.0** |
| SKR | | | | *eS* | **Sn** | **20 59 45.4** | **-1.4** |
| **PAU** | **Pauzhetka** | **2.37** | **18** | PN | **Pn** | **20 59 37.7** | **-0.5** |
| PAU | | | | S | **Sn** | **21 00 06.2** | **-0.7** |
| **PAU** | **Pauzhetka** | **2.37** | **18** | *eP* | **Pn** | **20 59 37.7** | **-0.5** |
| PAU | | | | *eS* | **Sn** | **21 00 06.2** | **-0.7** |
| **KDTR** | **Khodutka, Kamc** | **3.03** | **30** | PN | **Pn** | **20 59 45.8** | **-1.1** |
| KDTR | | | | S | **Sn** | **21 00 20.0** | **-2.4** |
| **KDTR** | **Khodutka, Kamc** | **3.03** | **30** | *eP* | **Pn** | **20 59 45.8** | **-1.1** |
| KDTR | | | | *eS* | **Sn** | **21 00 20.0** | **-2.4** |
| **MTVR** | **Mutnovka** | **3.65** | **26** | PN | **Pn** | **20 59 55.1** | **-0.2** |
| MTVR | | | | S | **Sn** | **21 00 36.9** | **-0.6** |
| **MTVR** | **Mutnovka** | **3.65** | **26** | *eP* | **Pn** | **20 59 55.1** | **-0.2** |
| MTVR | | | | *eS* | **Sn** | **21 00 36.9** | **-0.6** |
| **GRL** | **Gorelyy** | **3.68** | **24** | PN | **Pn** | **20 59 56.1** | **+0.4** |
| **GRL** | **Gorelyy** | **3.68** | **24** | *eP* | **Pn** | **20 59 56.1** | **+0.4** |
| **RUS** | **Russkaya** | **3.70** | **29** | PN | **Pn** | **20 59 54.7** | **-1.2** |
| RUS | | | | S | **Sn** | **21 00 35.4** | **-3.1** |
| **RUS** | **Russkaya** | **3.70** | **29** | *eP* | **Pn** | **20 59 54.7** | **-1.2** |
| RUS | | | | *eS* | **Sn** | **21 00 35.4** | **-3.1** |
| **APC** | **Apacha** | **3.83** | **14** | PN | **Pn** | **20 59 59.4** | **+1.7** |
| **APC** | **Apacha** | **3.83** | **14** | *eP* | **Pn** | **20 59 59.4** | **+1.7** |
| **KRMR** | **Karymshinskiy** | **3.94** | **23** | PN | **Pn** | **20 59 59.6** | **+0.4** |
| **KRMR** | **Karymshinskiy** | **3.94** | **23** | *eP* | **Pn** | **20 59 59.6** | **+0.4** |
| **PEA0B** | **Petropavlovsk-** | **4.11** | **18** | *d iP* | **Pn** | **21 00 02.3** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **4.11** | **18** | P | **Pn** | **21 00 01.6** | **+0.2** |
| | comp=E,14nm,0.3s,baz=185,slow=14,SNR=239 | | | | | | |
| **PET** | **Petropavlovsk** | **4.26** | **26** | *e*PN | **Pn** | **21 00 02.7** | **-0.7** |
| PET | | | | *eS* | **Sn** | **21 00 52.8** | **+0.8** |
| PET | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,43nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,44nm,0.5s | | | | | | |
| **PET** | **Petropavlovsk** | **4.26** | **26** | *eP* | **Pn** | **21 00 03.3** | **-0.1** |
| **DALK** | **Dalny** | **4.29** | **26** | PN | **Pn** | **21 00 03.5** | **-0.4** |
| **DALK** | **Dalny** | **4.29** | **26** | *eP* | **Pn** | **21 00 03.5** | **-0.4** |
| **UGLR** | **Uglovaya** | **4.47** | **26** | PN | **Pn** | **21 00 06.9** | **+0.5** |
| **UGLR** | **Uglovaya** | **4.47** | **26** | *eP* | **Pn** | **21 00 06.9** | **+0.5** |
| **KOK** | **Koryaka** | **4.49** | **24** | PN | **Pn** | **21 00 07.8** | **+1.1** |
| **KOK** | **Koryaka** | **4.49** | **24** | *eP* | **Pn** | **21 00 07.8** | **+1.1** |
| **AVH** | **Avacha** | **4.50** | **25** | PN | **Pn** | **21 00 07.7** | **+1.0** |
| **AVH** | **Avacha** | **4.50** | **25** | *eP* | **Pn** | **21 00 07.7** | **+1.0** |
| **SMAR** | **Somma** | **4.51** | **25** | PN | **Pn** | **21 00 07.5** | **+0.4** |
| **SMAR** | **Somma** | **4.51** | **25** | *eP* | **Pn** | **21 00 07.5** | **+0.4** |
| **KRER** | **Koryakskii** | **4.54** | **25** | PN | **Pn** | **21 00 08.2** | **+0.8** |
| **KRER** | **Koryakskii** | **4.54** | **25** | *eP* | **Pn** | **21 00 08.2** | **+0.8** |
| **SDLR** | **Sedlovina** | **4.55** | **26** | PN | **Pn** | **21 00 07.3** | **-0.2** |
| **SDLR** | **Sedlovina** | **4.55** | **26** | *eP* | **Pn** | **21 00 07.3** | **-0.2** |
| **GNL** | **Ganaly** | **4.71** | **17** | PN | **Pn** | **21 00 10.8** | **+1.2** |
| **GNL** | **Ganaly** | **4.71** | **17** | *eP* | **Pn** | **21 00 10.8** | **+1.2** |
| **SPN** | **Mys Shipunski** | **4.77** | **34** | PN | **Pn** | **21 00 09.6** | **-0.7** |
| **SPN** | **Mys Shipunski** | **4.77** | **34** | *eP* | **Pn** | **21 00 09.6** | **-0.7** |
| **MKZ** | **Mys Kozlova** | **6.54** | **33** | PN | **Pn** | **21 00 32.6** | **-1.8** |
| **MKZ** | **Mys Kozlova** | **6.54** | **33** | *eP* | **Pn** | **21 00 32.6** | **-1.8** |
| **TUMR** | **Tumrok** | **6.67** | **23** | PN | **Pn** | **21 00 37.4** | **+1.1** |
| **TUMR** | **Tumrok** | **6.67** | **23** | *eP* | **Pn** | **21 00 37.4** | **+1.1** |
| **KMNR** | **Kamenistaya** | **7.12** | **22** | PN | **Pn** | **21 00 43.5** | **+1.1** |
| **KMNR** | **Kamenistaya** | **7.12** | **22** | *eP* | **Pn** | **21 00 43.5** | **+1.1** |
| **SHO** | **Shikotan** | **8.08** | **232** | PN | **Pn** | **21 01 10.8** | **+15** |
| **KBTR** | **Krutoberegovo** | **8.25** | **29** | PN | **Pn** | **21 00 57.9** | **+0.4** |
| **KBTR** | **Krutoberegovo** | **8.25** | **29** | *eP* | **Pn** | **21 00 57.9** | **+0.4** |
| **MA2** | **Magadan** | **10.75** | **347** | *eP* | **Pn** | **21 01 31.5** | **0.0** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,17nm,2.4s | | | | | | |
| **SEY** | **Seymchan** | **13.86** | **354** | *eP* | **Pn** | **21 02 09.8** | **-2.8** |
| **KLR** | **Kul'dur** | **15.58** | **279** | P | **Pn** | **21 02 34.3** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=80,slow=6.5,SNR=7.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.93** | **232** | LR | LR | 21 10 57.6 | |
| | comp=Z,54nm,18.3s,baz=200,slow=40 | | | | | | |
| **ZEA** | **Zeya** | **18.17** | **295** | *eP* | **P** | **21 03 01.5** | **-3.8** |
| **YAK** | **Yakutsk** | **19.29** | **321** | P | **P** | **21 03 16.7** | **-0.7** |
| | comp=Z,0.0nm,0.3s,baz=141,slow=1.8,SNR=8.4 | | | | | | |
| **YAK** | **Yakutsk** | **19.29** | **321** | *d iP* | **P** | **21 03 16.5** | **-0.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **BILL** | **Bilibino** | **19.61** | **12** | *eP* | **P** | **21 03 21.5** | **+0.6** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,98nm,12.0s | | | | | | |
| **KSRS** | **Korea Array** | **23.18** | **250** | P | **P** | **21 03 59.4** | **+0.7** |
| | comp=Z,0.8nm,0.9s,baz=51,slow=11,SNR=4.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.80** | **159** | T | T | 21 38 00.0 | |
| | baz=168,slow=74,SNR=8.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.80** | **159** | T | T | 21 37 59.9 | |
| | baz=345,slow=74,SNR=5.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.92** | **160** | T | T | 21 38 48.8 | |
| | baz=346,slow=76,SNR=55 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.93** | **160** | T | T | 21 39 13.3 | |
| | baz=346,slow=76,SNR=40 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.94** | **160** | T | T | 21 39 05.3 | |
| | baz=346,slow=76,SNR=52 | | | | | | |
| **ILAR** | **Eielson Array** | **33.57** | **41** | P | **P** | **21 05 31.4** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=275,slow=10,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.56** | **304** | P | **P** | **21 06 44.9** | **-1.5** |
| | comp=Z,0.8nm,0.4s,baz=76,slow=7.6,SNR=4.7 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **42.90** | **298** | *eP* | **P** | **21 06 49.1** | **-0.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **47.03** | **262** | P | **P** | **21 07 19.7** | **-2.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.1s | | | | | | |
| **MK31** | **Makanchi Array** | **47.32** | **296** | *eP* | **P** | **21 07 23.2** | **-1.0** |
| **MKAR** | **Makanchi Array** | **47.32** | **296** | P | **P** | **21 07 23.2** | **-1.0** |
| | comp=Z,2.0nm,0.7s,baz=61,slow=8.0,SNR=27 | | | | | | |
| **KURK** | **Kurchatov** | **47.41** | **303** | *iP* | **P** | **21 07 23.8** | **-1.0** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.94** | **39** | P | **P** | **21 07 29.1** | **+0.4** |
| | comp=Z,0.5nm,0.9s,baz=300,slow=7.4,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.94** | **39** | *eP* | **P** | **21 07 30.8** | **+2.1** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **50.63** | **309** | *eP* | **P** | **21 07 48.2** | **-1.1** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.5s | | | | | | |
| **ARU** | **Arti** | **54.33** | **317** | *d iP* | **P** | **21 08 15.1** | **-1.4** |
| ARU | | | | S | **S** | **21 15 49.1** | **+2.7** |
| ARU | | | | SS | **SKiKP** | **21 19 21.0** | **+4.9** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **59.83** | **65** | P | **P** | **21 08 57.4** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=284,slow=7.3,SNR=2.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **61.95** | **56** | P | **P** | **21 09 11.9** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=191,slow=0.8,SNR=5.6 | | | | | | |
| **GERES** | **GERESS Array B** | **76.94** | **335** | P | **P** | **21 10 42.5** | **+0.4** |
| | comp=Z,0.2nm,0.4s,baz=356,slow=6.4,SNR=2.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.71** | **318** | P | **P** | **21 10 46.9** | **+0.2** |
| | comp=Z,1.1nm,0.9s,baz=62,slow=3.4,SNR=4.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.71** | **318** | *eP* | **P** | **21 10 49.0** | **+2.4** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |

*IDC* ***07*** *21:21:16.0±4.9, 9.°86S×121.°95E, h92km±52km, mb3.2/3, mb1 3.2/6, mb1mx2.9/30, mbtmp3.4/6, ML3.5/3, Error ellipse: s-maj=79.8km s-min=31.6km az=77.0*
*DJA* ***07*** *21:21:17.6±0.8, 9.°5S±3.°×12.°2E±.°, h20km±6km, M3.6/8, MLv3.6/8*

**ISC 07 21:21:15.8±0.8, 9.°54S±0.°06×122.°38E±0.°06, h100km, n14, σ3s64/20, mb3.5/3, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **0.91** | **351** | P | **Pn** | **21 21 33.1** | **-2.3** |
| MMRI | | | | S | **Sn** | **21 21 44.5** | **-5.5** |
| **BATI** | **Baumata** | **1.43** | **118** | P | **Pn** | **21 21 44.7** | **+3.5** |
| | 20nm,0.3s,baz=288,slow=6.4,SNR=31 | | | | | | |
| BATI | | | | S | **Sn** | **21 22 04.8** | **+4.3** |
| | 25nm,0.3s,baz=30,slow=16,SNR=4.7 | | | | | | |
| **BATI** | **Baumata** | **1.43** | **118** | P | **Pn** | **21 21 44.7** | **+3.5** |
| **SOEI** | **Soe** | **1.87** | **97** | P | **Pn** | **21 21 51.3** | **+4.4** |
| **BASI** | **Baing, Sumba** | **1.90** | **249** | P | **Pn** | **21 21 47.6** | **+0.5** |
| BASI | | | | S | **Sn** | **21 22 10.8** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **2.95** | **268** | P | **Pn** | **21 22 01.3** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **3.86** | **331** | P | **Pn** | **21 22 13.4** | **+0.2** |
| **BKSI** | **Bulukumba** | **4.75** | **332** | P | **Pn** | **21 22 25.5** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **9.07** | **160** | P | **Pn** | **21 23 22.7** | **-1.3** |
| | 0.3nm,0.3s,baz=342,slow=6.6,SNR=9.8 | | | | | | |
| FITZ | | | | S | **Sn** | **21 24 58.8** | **-5.6** |
| | 0.4nm,0.3s,baz=298,slow=11,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.50** | **133** | P | **Pn** | **21 24 49.0** | **-0.1** |
| | 0.2nm,0.3s,baz=300,slow=13,SNR=5.4 | | | | | | |
| WRA | | | | S | **Sn** | **21 27 33.0** | **-7.5** |
| | 0.2nm,0.3s,baz=308,slow=23,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **17.85** | **143** | P | **P** | **21 25 18.5** | **+1.3** |
| | 0.2nm,0.3s,baz=326,slow=13,SNR=12 | | | | | | |
| ASAR | | | | S | **Sn** | **21 28 31.9** | **-5.1** |
| | 0.1nm,0.3s,baz=317,slow=22,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **58.86** | **347** | P | **P** | **21 31 06.6** | **+2.4** |
| | 0.2nm,0.6s,baz=169,slow=8.7,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.50** | **331** | P | **P** | **21 31 56.5** | **+1.6** |
| | 0.5nm,0.7s,baz=135,slow=7.3,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.77** | **338** | P | **P** | **21 32 22.5** | **+1.3** |
| | 0.4nm,0.5s,baz=147,slow=7.5,SNR=2.6 | | | | | | |

*FUNV* ***07*** *21:38:52.2, 8.°58N×71.°51W, h5km, MW3.6*

**ISC 07 21:38:51.0±1.3, 8.°62N±0.°02×71.°36W±0.°02, h7km±11km, n28, σ1s73/55, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.60** | **124** | *eP* | **Pg** | **21 39 02.4** | **-0.2** |
| SOCV | | | | *eS* | **Sg** | **21 39 10.3** | **-0.1** |
| **SDV** | **Santo Domingo** | **0.77** | **70** | *eP* | **Pb** | **21 39 06.9** | **+0.2** |
| SDV | | | | *eS* | **Sn** | **21 39 18.1** | **-2.2** |
| **CAPV** | **Capacho** | **1.21** | **232** | *eP* | **Pn** | **21 39 12.

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **5.97** | **343** | ⇓*i*P | **Pg** | **22 33 43.8** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **22.07** | **184** | P | **P** | **22 36 44.7** | **-0.5** |
| | 0.7nm,0.5s,baz=0.0,slow=8.1,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.83** | **164** | P | **P** | **22 37 12.3** | **-0.3** |
| | 0.6nm,0.6s,baz=343,slow=10,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **28.29** | **167** | P | **P** | **22 37 42.9** | **-1.0** |
| | 0.1nm,0.3s,baz=340,slow=8.4,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **38.23** | **160** | P | **P** | **22 39 11.2** | **+0.9** |
| | 1.1nm,0.7s,baz=343,slow=11,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **47.18** | **341** | P | **P** | **22 40 22.5** | **-0.4** |
| | 0.2nm,0.6s,baz=161,slow=5.9,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.62** | **325** | P | **P** | **22 41 41.4** | **+1.2** |
| | 0.5nm,0.5s,baz=117,slow=8.0,SNR=14 | | | | | | |

*IDC **07** 22:45:26.6±3.3, 38.°10N×69.°95E, h0km, mb1 3.3/3, mb1mx3.1/38, mbtmp3.3/3, ML2.9/3, Error ellipse: s-maj=59.3km s-min=31.1km az=145.0*
*NNC **07** 22:45:28.1±5.1, 36.°74N×70.°68E, h117km±138km, mb2.8, mpv3.4, Error ellipse: s-maj=42.8km s-min=39.6km az=161.0*

**ISC 07 22:45:25.9±2.9, 36.°6N±0.°2×70.°7E±0.°2, h150km, n7, σ1s74/9, 2C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK08** | **Karatay Array** | **6.48** | **359** | ⇑P | **Pn** | **22 46 59.7** | **+0.8** |
| | 0.6nm,0.3s | | | | | | |
| KK08 | | | | ⇓S | **Sn** | **22 48 11.3** | **-0.5** |
| | 1.1nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **6.69** | **25** | ⇓P | **Pn** | **22 47 03.0** | **+1.2** |
| | 2.4nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **22 48 15.9** | **-1.1** |
| | 0.7nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.34** | **29** | ⇑P | **Pn** | **22 47 10.7** | **+0.1** |
| | 1.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **22 48 33.9** | **+1.3** |
| | 1.5nm,0.7s | | | | | | |
| **GEYT** | **Alibeck** | **10.11** | **281** | Pn | Pn | 22 47 42.6 | -4.8 |
| | 0.3nm,0.3s,baz=85,slow=23,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.34** | **37** | Pn | **Pn** | **22 48 26.5** | **-2.8** |
| | 0.0nm,0.3s,baz=224,slow=12,SNR=1.8 | | | | | | |
| **AB31** | **Akbulak array** | **14.86** | **332** | P | **P** | **22 48 50.7** | **+0.4** |
| | 0.2nm,0.3s,baz=156,slow=13,SNR=9.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.91** | **25** | P | **P** | **22 49 47.8** | **+2.2** |
| | 0.3nm,0.3s,baz=217,slow=12,SNR=8.9 | | | | | | |

**IDC 07 22:53:21.6±2.2, 35.°12N×64.°14E, h0km, mb3.4/2, mb1 3.4/4, mb1mx3.1/48, mbtmp3.3/4, ML3.0/2, Error ellipse: s-maj=45.9km s-min=25.0km az=22.0, Northwestern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GEYT** | **Alibeck** | **5.60** | **302** | Pn | Pn | 22 54 46.0 | -0.2 |
| | 0.9nm,0.3s,baz=114,slow=14,SNR=9.8 | | | | | | |
| GEYT | | | | Sn | Sn | 22 55 46.8 | -4.5 |
| | 1.1nm,0.3s,baz=146,slow=14,SNR=1.2 | | | | | | |
| GEYT | | | | Lg | Lg | 22 56 19.5 | |
| | 1.3nm,0.3s,baz=48,slow=48,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **17.95** | **44** | P | Pn | 22 57 32.5 | -0.1 |
| | 0.0nm,0.3s,baz=236,slow=11,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **23.75** | **31** | P | P | 22 58 36.0 | +0.6 |
| | 0.5nm,0.6s,baz=233,slow=11,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **88.20** | **121** | P | P | 23 06 14.5 | -0.4 |
| | 0.2nm,0.4s,baz=319,slow=4.1,SNR=1.7 | | | | | | |

*IDC **07** 23:02:52.3±1.4, 10.°82N×127.°02E, h0km, mb3.8/7, mb1 4.0/8, mb1mx3.4/48, mbtmp3.9/8, ML4.8/1, MS3.3/7, Ms1 3.3/7, ms1mx2.9/80, Error ellipse: s-maj=60.5km s-min=19.3km az=66.0*
*NEIC **07** 23:02:55.3±0.9, 10.°58N±0.°07×127.°2E±0.°1, h35km±2km, mb4.6/16, Error ellipse: s-maj=23.4km s-min=10.1km az=107.0*
*MAN **07** 23:02:57.7, 9.°84N×125.°29E, h20km, mb4.6, ML3.5, MS3.4*

**ISC 07 23:02:55.5±0.7, 10.°66N±0.°06×127.°1E±0.°1, h35km, n31, σ1s80/28, mb4.2/13, MS3.1/5, 1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLSP** | **General Luna,** | **1.31** | **228** | ⇓*i*P | **Pn** | **23 03 14.9** | **-2.4** |
| **BIPH** | **Bislig** | **2.58** | **197** | ⇑*i*P | **Pn** | **23 03 34.7** | **0.0** |
| BIPH | | | | *i* S | **Sn** | **23 04 00.2** | **-4.6** |
| **DAV** | **Davao City (W)** | **3.88** | **203** | Pn | **Pn** | **23 03 54.9** | **+2.2** |
| | 57nm,0.3s,baz=257,slow=15,SNR=1.9 | | | | | | |
| DAV | | | | Sn | **Sn** | **23 04 40.1** | **+3.0** |
| | 10.0nm,0.3s,baz=248,slow=22,SNR=7.8 | | | | | | |
| DAV | | | | LR | LR | 23 05 18.0 | |
| | comp=Z,950nm,21.6s,baz=336,slow=36 | | | | | | |
| **DAV** | **Davao City (W)** | **3.88** | **203** | | **Pn** | **23 03 52.2** | **-0.5** |
| **TNTI** | **Ternate** | **9.83** | **179** | Pn | **Pn** | **23 05 11.4** | **-2.9** |
| **KAPI** | **Kappang** | **17.22** | **206** | LR | LR | 23 13 48.1 | |
| | comp=Z,67nm,19.6s,baz=50,slow=38 | | | | | | |
| **MMRI** | **Maumere** | **19.78** | **194** | P | **P** | **23 07 22.3** | **-0.5** |
| MMRI | | | | IAmb | IAmb | 23 07 30.9 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **24.74** | **251** | P | **P** | **23 08 13.0** | **-0.9** |
| MYKOM | | | | IAmb | IAmb | 23 08 27.9 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **MAJO** | **Matsushiro** | **27.65** | **19** | P | **P** | **23 08 39.2** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **27.65** | **19** | LR | LR | 23 20 32.3 | |
| | comp=Z,34nm,18.3s,baz=203,slow=38 | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **27.65** | **19** | P | **P** | **23 08 38.8** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **28.33** | **289** | P | **P** | **23 08 46.7** | **+0.4** |
| | comp=Z,0.4nm,0.2s,baz=113,slow=11,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 23 19 45.6 | |
| | comp=Z,87nm,18.2s,baz=130,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.23** | **167** | P | P | 23 09 16.8 | +5.0 |
| | comp=Z,0.6nm,0.9s,baz=346,slow=8.8,SNR=3.1 | | | | | | |
| WRA | | | | LR | LR | 23 26 36.3 | |
| | comp=Z,24nm,18.1s,baz=120,slow=45 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **33.68** | **6** | P | **P** | **23 09 33.2** | **+0.1** |
| USA0B | | | | IAmb | IAmb | 23 09 37.0 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.68** | **6** | P | **P** | **23 09 32.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **34.76** | **169** | P | **P** | **23 09 45.0** | **+2.3** |
| | comp=Z,0.4nm,0.6s,baz=348,slow=7.6,SNR=3.0 | | | | | | |
| **HNR** | **Honiara** | **38.27** | **120** | LR | LR | 23 26 48.0 | |
| | comp=Z,28nm,18.3s,baz=334,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **44.51** | **162** | P | **P** | **23 11 06.8** | **+3.1** |
| | comp=Z,1.3nm,0.7s,baz=342,slow=9.6,SNR=2.1 | | | | | | |
| **ONTNC** | **Ouen Toro** | **50.60** | **131** | P | **P** | **23 11 49.3** | **-1.9** |
| **MKAR** | **Makanchi Array** | **52.23** | **322** | P | **P** | **23 12 04.3** | **+1.1** |
| | comp=Z,0.6nm,0.8s,baz=127,slow=7.8,SNR=5.6 | | | | | | |
| **NIL** | **Nilore** | **54.21** | **304** | P | **P** | **23 12 16.1** | **-1.8** |
| NIL | | | | IAmb | IAmb | 23 12 17.2 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **56.23** | **325** | P | **P** | **23 12 32.3** | **+0.2** |
| KURK | | | | IAmb | IAmb | 23 12 52.7 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.23** | **325** | P | **P** | **23 12 33.7** | **+1.5** |
| | comp=Z,0.6nm,0.2s,baz=121,slow=6.8,SNR=4.5 | | | | | | |
| **GAR** | **Garm** | **57.69** | **310** | P | **P** | **23 12 42.2** | **-0.7** |
| **KBL** | **Kabul** | **57.81** | **304** | P | **P** | **23 12 43.7** | **-0.2** |
| KBL | | | | IAmb | IAmb | 23 12 48.1 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **CHGR** | **Chuyangaron** | **58.50** | **309** | P | **P** | **23 12 47.2** | **-1.3** |
| CHGR | | | | IAmb | IAmb | 23 12 53.0 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| **KKAR** | **Karatay Array** | **58.58** | **314** | P | **P** | **23 12 48.7** | **-0.2** |
| **AFI** | **Afiamalu** | **65.33** | **111** | LR | LR | 23 39 55.6 | |
| | comp=Z,34nm,18.4s,baz=46,slow=34 | | | | | | |
| **LVZ** | **Lovozero** | **81.14** | **338** | P | **P** | **23 15 06.8** | **-0.2** |
| **AKASG** | **Malin Array Be** | **86.79** | **321** | P | **P** | **23 15 36.4** | **+0.1** |
| | comp=Z,2.7nm,1.0s,baz=60,slow=4.9,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **86.79** | **321** | P | **P** | **23 15 35.9** | **-0.3** |

*IDC **07** 23:20:58.2±1.6, 9.°77S×124.°09E, h0km, mb3.3/2, mb1 3.3/4, mb1mx3.2/25, mbtmp3.2/4, ML3.1/2, MS3.6/1, Ms1 3.6/1, ms1mx2.4/27, Error ellipse: s-maj=118.1km s-min=26.4km az=63.0*
*DJA **07** 23:21:03.9±0.5, 10.°3S±4.°×12.°4E±.°, h10km, M3.4/7, mb3.8/1, MLv3.2/7*

**ISC 07 23:21:02.8±0.9, 10.°33S±0.°09×123.°72E±0.°08, h35km, n10, σ2s40/10, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.14** | **334** | P | **Pn** | **23 21 06.8** | **-2.4** |
| BATI | | | | S | **Sn** | **23 21 10.8** | **-2.7** |
| **SOEI** | **Soe** | **0.78** | **43** | P | **Pn** | **23 21 20.0** | **+2.5** |
| **MMRI** | **Maumere** | **2.23** | **319** | P | **Pn** | **23 21 40.0** | **+2.6** |
| **BASI** | **Baing, Sumba** | **3.10** | **272** | P | **Pn** | **23 21 51.5** | **+2.3** |
| **FITZ** | **Fitzroy Crossi** | **7.94** | **167** | Pn | Pn | 23 23 01.3 | +5.5 |
| | baz=345,slow=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.00** | **134** | Pn | **Pn** | **23 24 20.3** | **+1.4** |
| | 0.1nm,0.3s,baz=315,slow=12,SNR=1.3 | | | | | | |
| WRA | | | | Sn | **Sn** | **23 26 51.0** | **-2.1** |
| | 0.1nm,0.3s,baz=310,slow=26,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **16.44** | **145** | Pn | **P** | **23 24 54.0** | **+0.7** |
| | 0.1nm,0.3s,baz=322,slow=12,SNR=2.1 | | | | | | |
| **PALK** | **Pallekele** | **46.27** | **290** | LR | LR | 23 49 24.4 | |
| | comp=Z,76nm,21.8s,baz=149,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.83** | **331** | P | **P** | **23 31 56.7** | **-0.7** |
| | 0.2nm,0.7s,baz=126,slow=7.3,SNR=1.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.28** | **332** | P | **P** | **23 32 23.3** | **-1.3** |
| | 0.2nm,0.6s,baz=151,slow=5.9,SNR=1.9 | | | | | | |

*IDC **07** 23:30:53.5±0.5, 26.°06N×99.°64E, h0km, mb4.1/28, mb1 4.2/29, mb1mx4.1/48, mbtmp4.1/29, ML4.7/1, MS3.7/41, Ms1 3.7/41, ms1mx3.6/94, Error ellipse: s-maj=16.8km s-min=11.2km az=65.0*
*MOS **07** 23:30:53.4±1.1, 26.°00N×99.°56E, h10km, mb4.6/24, Error ellipse: s-maj=12.4km s-min=6.1km az=111.5*
*BJI **07** 23:30:54.7±0.0, 26.°05N×99.°66E, h10km, mb4.3/43, mB4.9/25, ML4.3/14, Ms4.6/55, Ms7 4.1/44*

**ISC 07 23:30:55.2±0.4, 26.°06N±0.°04×99.°67E±0.°03, h10km, n172, σ2s08/167, mb4.4/60, MS3.8/47, 28C-19D, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **1.92** | **76** | ⇑Pg | **Pb** | **23 31 30.3** | **-0.1** |
| PZH | | | | Sg | **Sb** | **23 31 54.8** | **+0.4** |
| PZH | | | | smax | smax | | |
| | comp=N,5μm,0.7s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,5μm,0.7s | | | | | | |
| **KMI** | **Kunming** | **2.93** | **108** | ⇑Pn | **Pb** | **23 31 44.8** | **-2.9** |
| KMI | | | | Pg | **Pg** | **23 31 50.4** | **-1.0** |
| KMI | | | | Sn | **Sb** | **23 32 22.4** | **-1.2** |
| KMI | | | | Sg | **Sg** | **23 32 30.5** | **+1.2** |
| KMI | | | | smax | smax | | |
| | comp=N,1μm,1.3s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,1μm,1.1s | | | | | | |
| **CD2** | **Chengdu** | **6.03** | **36** | Pn | **Pn** | **23 32 27.0** | **+2.4** |
| CD2 | | | | Sg | **Sg** | **23 34 05.1** | **-3.8** |
| CD2 | | | | smax | smax | | |
| | comp=E,640nm,1.7s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=E,7μm,9.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,980nm,3.7s | | | | | | |
| **GYA** | **Guiyang** | **6.30** | **85** | ⇑Pn | **Pn** | **23 32 31.7** | **+3.4** |
| GYA | | | | Sn | **Sn** | **23 33 44.3** | **+3.9** |
| GYA | | | | Sg | **Sg** | **23 34 22.0** | **+4.6** |
| GYA | | | | smax | smax | | |
| | comp=N,110nm,2.0s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,110nm,1.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=N,3μm,5.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,1μm,4.3s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,890nm,4.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **7.59** | **185** | Pn | **Pn** | **23 32 47.6** | **+1.6** |
| | 3.1nm,0.3s,baz=1.4,slow=12,SNR=54 | | | | | | |
| CMAR | | | | Pg | Pg | 23 33 15.1 | -5.6 |
| | 6.8nm,0.3s,baz=356,slow=18,SNR=37 | | | | | | |
| CMAR | | | | Lg | Lg | 23 34 55.5 | |
| | 3.5nm,0.3s,baz=3.1,slow=18,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **7.59** | **185** | *i* P | **Pn** | **23 32 48.0** | **+2.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | |
| **LSA** | **Lhasa** | **8.36** | **298** | P | **Pn** | **23 32 57.0** | **0.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,52nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **8.36** | **298** | P | **Pn** | **23 32 57.3** | **+0.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,52nm,0.9s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,1μm,12.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,590nm,13.5s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,1μm,15.7s | | | | | | |
| **LZH** | **Lanzhou** | **10.62** | **19** | *e*P | **Pn** | **23 33 31.6** | **+4.0** |
| LZH | | | | pP | | 23 33 38.0 | |
| LZH | | | | sP | | 23 33 41.5 | |
| LZH | | | | *e*S | **Sn** | **23 35 27.4** | **+0.7** |
| LZH | | | | SS | **SnSn** | **23 35 41.8** | **+2.9** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,72nm,4.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,8.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,7.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,10.5s | | | | | | |
| **TAPN** | **Taplejung** | **10.77** | **280** | *e*P | **Pn** | **23 33 27.9** | **-1.9** |
| | comp=Z,124nm,0.6s | | | | | | |
| **GOMU** | **GeErMu** | **10.93** | **339** | P | **Pn** | **23 33 30.3** | **-1.8** |
| GOMU | | | | S | **Sn** | **23 35 32.8** | **-1.8** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,140nm,5.8s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,2μm,10.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,4μm,12.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,940nm,9.0s | | | | | | |
| **ODAN** | **Odare** | **11.03** | **277** | *e*P | **Pn** | **23 33 31.5** | **-1.8** |
| | comp=Z,155nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **11.29** | **43** | P | **Pn** | **23 33 36.7** | **0.0** |
| XAN | | | | LR | LR | | |
| | comp=Z,4μm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,3μm,14.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,780nm,9.1s | | | | | | |
| **QIZ** | **Qiongzhong** | **11.71** | **125** | P | **Pn** | **23 33 40.9** | **-1.6** |
| QIZ | | | | S | **Sn** | **23 35 49.2** | **-4.2** |
| QIZ | | | | LR | LR | | |
| | comp=Z,2μm,12.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,15.5s | | | | | | |
| **RAMN** | **Ramite** | **11.74** | **277** | *e*P | **Pn** | **23 33 41.4** | **-1.6** |
| | comp=Z,161nm,0.6s | | | | | | |
| **CNSH** | **ChangSha** | **12.01** | **77** | ⇑P | Pn | 23 33 40.8 | -5.6 |
| CNSH | | | | S | **Sn** | **23 35 52.7** | **-7.8** |
| CNSH | | | | smax | smax | | |
| | comp=N,100nm,0.8s | | | | | | |
| CNSH | | | | smax | smax | | |
| | comp=E,96nm,0.8s | | | | | | |
| **JIRN** | **Jiri** | **12.14** | **281** | *e*P | **Pn** | **23 33 46.2** | **-2.4** |
| | comp=E,153nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **12.43** | **282** | *e*P | **Pn** | **23 33 50.1** | **-2.5** |
| | comp=E,69nm,0.5s | | | | | | |
| **GZH** | **Guangzhou** | **12.79** | **100** | P | **Pn** | **23 33 59.6** | **+2.4** |
| **PKI** | **Pulchoki** | **12.82** | **280** | *e*P | **Pn** | **23 33 55.1** | **-2.9** |
| | comp=E,49nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **12.84** | **280** | *e*P | **Pn** | **23 33 55.0** | **-3.1** |
| | comp=E,49nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **12.95** | **281** | *e*P | **Pn** | **23 33 56.9** | **-2.7** |
| | comp=E,124nm,0.7s | | | | | | |
| **DMN** | **Daman** | **13.09** | **280** | *e*P | **Pn** | **23 33 58.4** | **-3.2** |
| | comp=E,85nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **13.32** | **0** | *e*P | Pn | 23 34 11.6 | +7.1 |
| GTA | | | | pP | P | 23 34 16.2 | +1.9 |
| GTA | | | | sP | | 23 34 19.5 | |
| GTA | | | | pmax | pmax | | |
| | comp=E,140nm,4.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,470nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,1μm,14.9s | | | | | | |
| **GKN** | **Gorkha** | **13.54** | **282** | *e*P | **Pn** | **23 34 03.9** | **-3.6** |
| | comp=E,57nm,0.6s | | | | | | |
| **WHN** | **Wuhan** | **13.69** | **68** | ⇓P | **Pn** | **23 34 08.7** | **-0.7** |
| WHN | | | | sP | **P** | **23 34 14.7** | **-3.5** |
| WHN | | | | S | **Sn** | **23 36 39.7** | **-1.8** |
| WHN | | | | pmax | pmax | | |
| | comp=E,30nm,0.5s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,4μm,11.3s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,2μm,13.5s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,2μm,11.8s | | | | | | |
| **LYN** | **LuoYang** | **13.92** | **49** | ⇓*i*P | **Pn** | **23 34 11.9** | **-0.7** |
| LYN | | | | S | **Sn** | **23 36 46.6** | **-0.6** |
| LYN | | | | SS | **S** | **23 37 07.9** | **-1.3** |
| LYN | | | | LR | LR | | |
| | comp=E,2μm,14.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,2μm,12.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,820nm,8.8s | | | | | | |
| **DANN** | **Dangsing** | **14.34** | **283** | *e*P | Pn | 23 34 13.7 | -4.9 |
| | comp=E,22nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **14.44** | **280** | *e*P | **Pn** | **23 34 15.5** | **-4.4** |
| | comp=E,64nm,0.9s | | | | | | |
| **PYUN** | **Piuthan** | **14.99** | **282** | *e*P | Pn | 23 34 21.8 | -5.7 |
| | comp=E,56nm,0.6s | | | | | | |
| **TIY** | **Taiyuan** | **15.88** | **40** | *e*P | **P** | **23 34 45.6** | **+3.0** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=N,570nm,7.1s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=E,770nm,7.2s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,790nm,10.3s | | | | | | |
| **BTO** | **Baotou** | **16.88** | **28** | *e*P | Pn | 23 34 40.5 | -11 |
| BTO | | | | S | Sn | 23 37 42.7 | -17 |
| BTO | | | | LR | LR | | |
| | comp=N,2μm,11.0s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,3μm,11.1s | | | | | | |
| **HNS** | **HongShan** | **17.05** | **45** | ⇑P | **P** | **23 34 56.4** | **+0.9** |
| HNS | | | | S | **Sn** | **23 37 57.1** | **-6.3** |
| HNS | | | | pmax | pmax | | |
| | comp=E,5.0nm,1.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,1μm,17.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,2μm,16.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,610nm,12.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **17.76** | **31** | *e*P | **P** | **23 35 06.3** | **+2.8** |
| HHC | | | | pmax | pmax | | |
| | comp=E,13nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=E,290nm,5.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,710nm,8.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,490nm,9.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,570nm,12.0s | | | | | | |
| **NJ2** | **Nanjing** | **17.80** | **66** | *e*P | **P** | **23 35 06.3** | **+2.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,3μm,13.3s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,940nm,12.8s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,1μm,12.3s | | | | | | |
| **TIA** | **Tai'an** | **18.03** | **52** | ⇑P | **P** | **23 35 06.8** | **+0.5** |
| TIA | | | | S | **Sn** | **23 38 25.6** | **-1.4** |
| TIA | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.7s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=E,54nm,4.1s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,540nm,9.3s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,260nm,10.3s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,690nm,13.5s | | | | | | |
| **BJI** | **Beijing** | **19.60** | **41** | P | **Pn** | **23 35 28.4** | **+3.5** |
| BJI | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **20.22** | **334** | *e*P | **P** | **23 35 30.8** | **+0.4** |
| WMQ | | | | pP | sP | 23 35 34.8 | -1.0 |
| WMQ | | | | sP | pP | 23 35 36.3 | +2.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=E,12nm,0.9s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=E,300nm,3.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,870nm,15.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,960nm,15.5s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **20.87** | **188** | P | Pn | 23 35 52.0 | +12 |
| **XLT** | **XiLinHaoTe** | **22.24** | **33** | *e*P | **P** | **23 35 55.6** | **+3.4** |
| XLT | | | | pP | sP | 23 35 59.3 | +1.9 |
| XLT | | | | sP | pP | 23 36 02.2 | +6.4 |
| XLT | | | | S | **S** | **23 39 48.8** | **-8.2** |
| XLT | | | | pmax | pmax | | |
| | comp=E,20nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=E,190nm,5.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,580nm,9.9s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,730nm,9.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,750nm,9.6s | | | | | | |
| **SONM** | **Songino Array** | **22.38** | **12** | P | **P** | **23 35 53.6** | **-0.1** |
| | comp=E,0.5nm,0.4s,baz=197,slow=10,SNR=15 | | | | | | |
| SONM | | | | LR | LR | 23 45 42.5 | |
| | comp=E,462nm,21.9s,baz=204,slow=40 | | | | | | |
| **TSI** | **Tuntungan** | **22.45** | **183** | P | **P** | **23 35 56.0** | **+1.5** |
| | comp=E,176nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **22.53** | **13** | ⇓*e*P | **P** | **23 35 57.6** | **+2.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **PSI** | **Prapat** | **23.13** | **182** | P | **P** | **23 36 03.0** | **+1.2** |
| | comp=Z,11nm,0.7s,baz=352,slow=9.8,SNR=8.2 | | | | | | |
| PSI | | | | LR | LR | 23 45 21.2 | |
| | comp=Z,156nm,19.2s,baz=336,slow=37 | | | | | | |
| **KSH** | **Kashi** | **23.93** | **310** | P | **P** | **23 36 10.9** | **+1.3** |
| KSH | | | | pP | sP | 23 36 16.4 | +1.2 |
| KSH | | | | sP | pP | 23 36 17.9 | +4.4 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,510nm,14.4s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,450nm,15.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,430nm,13.1s | | | | | | |
| **SBSI** | **Sibolga** | **24.38** | **182** | P | **P** | **23 36 15.8** | **+2.1** |
| | comp=Z,20nm,0.7s | | | | | | |
| **ZAK** | **Zakamensk** | **24.45** | **6** | *e*P | **P** | **23 36 14.7** | **+0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **GSI** | **Gunungsitoli** | **24.69** | **185** | P | **P** | **23 36 17.2** | **+0.6** |
| | comp=Z,36nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **24.87** | **331** | *c i*P | **P** | **23 36 18.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **24.87** | **331** | P | **P** | **23 36 18.2** | **+0.2** |
| | comp=Z,7.5nm,0.8s,baz=142,slow=10.0,SNR=91 | | | | | | |
| MKAR | | | | LR | LR | 23 46 54.0 | |
| | comp=Z,109nm,19.6s,baz=151,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.87** | **331** | *i* P | **P** | **23 36 18.3** | **+0.3** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **25.44** | **341** | ⇓*i*P | **P** | **23 36 24.2** | **+0.9** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | |
| **BKNI** | **Bangkinang** | **25.61** | **177** | P | **P** | **23 36 26.0** | **+1.1** |
| | comp=Z,43nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **26.14** | **316** | P | **P** | **23 36 31.1** | **+1.3** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **26.42** | **315** | P | **P** | **23 36 33.1** | **+0.9** |
| | comp=Z,5.3nm,0.6s,baz=130,slow=6.7,SNR=32 | | | | | | |
| AAK | | | | LR | LR | 23 47 35.8 | |
| | comp=Z,175nm,19.1s,baz=98,slow=38 | | | | | | |
| **AAK** | **

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **26.42** | **315** | *ce* | P | | **P** | **23 36 33.5** | **+1.3** |
| AAK | | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.7s | | | | | | | | | |
| **KSRS** | **Korea Array** | **26.48** | **58** | | P | | **P** | **23 36 32.9** | **+0.3** |
| | comp=Z,1.3nm,0.7s,baz=248,slow=9.9,SNR=4.9 | | | | | | | | | |
| **AML** | **Almayashu** | **26.68** | **313** | | P | | **P** | **23 36 36.0** | **+1.1** |
| | SNR=16 | | | | | | | | | |
| **USP** | **Ospenovka** | **26.74** | **316** | | P | | **P** | **23 36 35.9** | **+0.8** |
| | SNR=11 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **26.89** | **315** | | P | | **P** | **23 36 38.0** | **+1.5** |
| | SNR=9.1 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.40** | **332** | | P | | **P** | **23 36 58.6** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=134,slow=10.0,SNR=12 | | | | | | | | | |
| KURBB | | | | | PcP | | **PcP** | **23 40 04.0** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=136,slow=0.8,SNR=4.2 | | | | | | | | | |
| **KURK** | **Kurchatov** | **29.43** | **332** | | P | | **P** | **23 36 58.6** | **-0.3** |
| KURK | | | | | | | | 23 40 04.0 | | |
| **ZALV** | **Zalesovo Beam** | **29.96** | **342** | | P | | **P** | **23 37 03.4** | **-0.2** |
| | comp=Z,1.8nm,0.5s,baz=160,slow=8.9,SNR=12 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.96** | **342** | *i* | P | | **P** | **23 37 06.6** | **+3.0** |
| ZALV | | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.76** | **47** | | P | | **P** | **23 37 19.3** | **-0.3** |
| | comp=Z,2.2nm,0.7s,baz=257,slow=16,SNR=4.3 | | | | | | | | | |
| **KLR** | **Kul'dur** | **33.95** | **39** | | P | | **P** | **23 37 38.8** | **+0.2** |
| | comp=Z,1.0nm,0.7s,baz=271,slow=18,SNR=2.3 | | | | | | | | | |
| **KLR** | **Kul'dur** | **33.95** | **39** | ⇓ *e* | P | | **P** | **23 37 39.8** | **+1.2** |
| KLR | | | | | pmax | | pmax | | | |
| | comp=Z,12nm,3.2s | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.35** | **63** | | LR | | LR | 23 52 32.8 | | |
| | comp=Z,121nm,18.4s,baz=261,slow=38 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **34.70** | **329** | | P | | **P** | **23 37 44.8** | **-0.3** |
| | comp=Z,1.0nm,0.6s,baz=97,slow=16,SNR=14 | | | | | | | | | |
| **BRVK** | **Borovoye** | **34.77** | **329** | *ce* | P | | **P** | **23 37 45.9** | **+0.2** |
| BRVK | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.7s | | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **35.43** | **69** | | LR | | LR | 23 51 55.1 | | |
| | comp=Z,111nm,21.4s,baz=271,slow=36 | | | | | | | | | |
| **KAPI** | **Kappang** | **36.52** | **145** | | LR | | LR | 23 53 55.4 | | |
| | comp=Z,53nm,20.5s,baz=334,slow=38 | | | | | | | | | |
| **GEYT** | **Alibeck** | **36.89** | **299** | | P | | **P** | **23 38 03.9** | **-0.3** |
| | comp=Z,4.1nm,0.8s,baz=88,slow=13,SNR=6.7 | | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **37.30** | **275** | | LR | | LR | 23 54 54.2 | | |
| | comp=Z,54nm,18.9s,baz=152,slow=39 | | | | | | | | | |
| **ASAJ** | **Asahikawa** | **38.98** | **51** | | LR | | LR | 23 56 08.5 | | |
| | comp=Z,54nm,18.7s,baz=248,slow=39 | | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **40.03** | **319** | | P | | **P** | **23 38 30.3** | **0.0** |
| | comp=Z,2.8nm,0.6s,baz=98,slow=5.2,SNR=6.3 | | | | | | | | | |
| AKTO | | | | | LR | | LR | 23 56 53.0 | | |
| | comp=Z,219nm,18.9s,baz=115,slow=39 | | | | | | | | | |
| **YAK** | **Yakutsk** | **41.20** | **21** | | LR | | LR | 23 57 40.5 | | |
| | comp=Z,184nm,18.1s,baz=272,slow=39 | | | | | | | | | |
| **SVE** | **Sverdlovsk** | **41.49** | **328** | *e* | P | | **P** | **23 38 43.0** | **+0.7** |
| SVE | | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | | | |
| **ARU** | **Arti** | **42.29** | **327** | | P | | **P** | **23 38 48.7** | **-0.1** |
| | comp=Z,1.4nm,0.5s,baz=9.8,slow=1.7,SNR=8.7 | | | | | | | | | |
| ARU | | | | | LR | | LR | 23 58 45.9 | | |
| | comp=Z,73nm,18.5s,baz=111,slow=40 | | | | | | | | | |
| **ARU** | **Arti** | **42.29** | **327** | *c* | *i* P | | **P** | **23 38 48.9** | **+0.1** |
| ARU | | | | | S | | **S** | **23 45 11.9** | **+2.6** |
| ARU | | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| **NRIK** | **Noril'sk** | **43.90** | **354** | | P | | **P** | **23 39 01.4** | **-0.3** |
| | comp=Z,1.4nm,0.4s,baz=130,slow=8.1,SNR=5.8 | | | | | | | | | |
| **NRIK** | **Noril'sk** | **43.90** | **354** | ⇑ *e* | P | | **P** | **23 39 02.9** | **+1.3** |
| NRIK | | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.8s | | | | | | | | | |
| **GUMO** | **Guam** | **44.09** | **97** | | LR | | LR | 23 56 52.0 | | |
| | comp=Z,46nm,21.4s,baz=130,slow=35 | | | | | | | | | |
| **BELG** | **Belogornoye** | **46.82** | **319** | | LR | | LR | 00 01 29.0 | | |
| | comp=Z,102nm,20.2s,baz=136,slow=39 | | | | | | | | | |
| **BELG** | **Belogornoye** | **46.82** | **319** | ⇓ *i* | P | | **P** | **23 39 24.3** | **-0.7** |
| BELG | | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | | |
| **GNI** | **Garni** | **47.41** | **302** | | LR | | LR | 00 03 34.4 | | |
| | comp=Z,78nm,19.4s,baz=80,slow=41 | | | | | | | | | |
| **KIRV** | **Kirov** | **47.67** | **327** | | LR | | LR | 00 01 41.0 | | |
| | comp=Z,118nm,19.6s,baz=110,slow=39 | | | | | | | | | |
| **KIRV** | **Kirov** | **47.67** | **327** | ⇓ *e* | P | | **P** | **23 39 31.8** | **+0.3** |
| **NCK** | **Nalchik** | **48.32** | **306** | ⇑ *e* | P | | **P** | **23 39 36.8** | **-0.1** |
| NCK | | | | | pmax | | pmax | | | |
| | comp=Z,29nm,2.2s | | | | | | | | | |
| **MA2** | **Magadan** | **48.43** | **32** | ⇑ *e* | P | | **P** | **23 39 39.4** | **+1.9** |
| MA2 | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | | |
| **TIXI** | **Tiksi** | **48.47** | **12** | | P | | **P** | **23 39 37.6** | **+0.1** |
| | comp=Z,2.9nm,0.5s,baz=91,slow=24,SNR=9.3 | | | | | | | | | |
| TIXI | | | | | LR | | LR | 00 01 23.5 | | |
| | comp=Z,116nm,19.8s,baz=184,slow=38 | | | | | | | | | |
| **TIXI** | **Tiksi** | **48.47** | **12** | ⇓ *e* | P | | **P** | **23 39 39.7** | **+2.2** |
| TIXI | | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.9s | | | | | | | | | |
| **JAY** | **Jayapura** | **48.79** | **119** | | LR | | LR | 23 59 54.2 | | |
| | comp=Z,67nm,21.4s,baz=356,slow=36 | | | | | | | | | |
| **KBZ** | **Khabaz** | **48.83** | **306** | | LR | | LR | 00 03 20.7 | | |
| | comp=Z,134nm,18.3s,baz=86,slow=40 | | | | | | | | | |
| **NEY** | **Neytrino** | **48.95** | **306** | ⇑ *e* | P | | **P** | **23 39 42.0** | **+0.1** |
| NEY | | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.9s | | | | | | | | | |
| **KIV** | **Kislovodsk** | **48.99** | **307** | *e* | P | | **P** | **23 39 40.5** | **-1.7** |
| KIV | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | | |
| KIV | | | | | MLR | | MLR | | | |
| | comp=Z,92nm,17.0s | | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.63** | **147** | | LR | | LR | 00 03 14.8 | | |
| | comp=Z,45nm,18.3s,baz=315,slow=38 | | | | | | | | | |
| **VORR** | **Voronezh** | **51.83** | **316** | *e* | P | | **P** | **23 40 01.2** | **-2.1** |
| VORR | | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.4s | | | | | | | | | |
| **KLMR** | **Klimovskoe** | **53.12** | **328** | *e* | P | | **P** | **23 40 11.1** | **-1.7** |
| KLMR | | | | | AMP | | | 23 40 24.5 | | |
| | comp=Z,27nm,1.5s | | | | | | | | | |
| **OBN** | **Obninsk** | **53.74** | **321** | *e* | P | | **P** | **23 40 17.2** | **-0.2** |
| OBN | | | | *e* | | | | 23 41 22.1 | | |
| OBN | | | | *e* | | | | 23 42 18.1 | | |
| OBN | | | | *e* | PPP | | PPP | 23 43 24.5 | | |
| OBN | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **55.59** | **293** | | LR | | LR | 00 08 39.0 | | |
| | comp=Z,42nm,18.6s,baz=228,slow=41 | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **55.95** | **302** | | P | | **P** | **23 40 34.0** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=125,slow=11,SNR=4.5 | | | | | | | | | |
| BRTR | | | | | LR | | LR | 00 09 49.9 | | |
| | comp=Z,79nm,19.7s,baz=121,slow=42 | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **55.95** | **302** | | P | | **P** | **23 40 34.0** | **+0.1** |
| **WRAB** | **Tennant Creek** | **56.78** | **140** | ⇑ *i* | P | | **P** | **23 40 40.2** | **+0.4** |
| WRAB | | | | | pmax | | pmax | | | |
| | comp=Z,14nm,2.1s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.78** | **140** | | P | | **P** | **23 40 39.9** | **+0.1** |
| | comp=Z,3.6nm,0.7s,baz=329,slow=7.6,SNR=24 | | | | | | | | | |
| WRA | | | | | LR | | LR | 00 09 12.4 | | |
| | comp=Z,74nm,18.2s,baz=73,slow=40 | | | | | | | | | |
| **BILL** | **Bilibino** | **57.38** | **24** | *de* | P | | **P** | **23 40 45.3** | **+1.9** |
| BILL | | | | *e* | | | | 23 42 53.5 | | |
| BILL | | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.7s | | | | | | | | | |
| BILL | | | | | MLR | | MLR | | | |
| | comp=Z,102nm,14.0s | | | | | | | | | |
| **PMG** | **Port Moresby** | **58.08** | **121** | | LR | | LR | 00 07 32.8 | | |
| | comp=Z,41nm,19.2s,baz=287,slow=38 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **58.09** | **315** | | P | | **P** | **23 40 47.5** | **-1.2** |
| | comp=Z,2.1nm,0.5s,baz=74,slow=7.0,SNR=16 | | | | | | | | | |
| AKASG | | | | | LR | | LR | 00 11 06.7 | | |
| | comp=Z,102nm,18.6s,baz=357,slow=42 | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **58.09** | **315** | ⇑ *e* | P | | **P** | **23 40 47.2** | **-1.4** |
| AKBB | | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.7s | | | | | | | | | |
| **MNK** | **Minsk** | **58.74** | **320** | *i* | P | | **P** | **23 40 50.4** | **-2.8** |
| MNK | | | | *i* | | | | 23 43 03.2 | | |
| MNK | | | | *i* | PPP | | PPP | 23 44 21.8 | | |
| MNK | | | | *i* | S | | **S** | **23 48 55.6** | **-2.4** |
| MNK | | | | *i* | SS | | **SS** | **23 52 48.7** | **-2.0** |
| MNK | | | | | pmax | | pmax | | | |
| | comp=N,15nm,1.0s | | | | | | | | | |
| MNK | | | | | pmax | | pmax | | | |
| | comp=E,1.0nm,0.7s | | | | | | | | | |
| MNK | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| MNK | | | | | MLR | | MLR | | | |
| | comp=Z,253nm,15.3s | | | | | | | | | |
| MNK | | | | *i* | LRM | | MLR | 00 10 19.1 | | |
| | comp=E,40nm,10.9s | | | | | | | | | |
| MNK | | | | *i* | LRM | | MLR | 00 10 22.3 | | |
| | comp=N,168nm,9.9s | | | | | | | | | |
| **SORM** | **Soroca** | **58.84** | **312** | ⇑ | P | | **P** | **23 40 52.8** | **-1.1** |
| **SORM** | **Soroca** | **58.84** | **312** | ⇑ | P | | **P** | **23 40 52.8** | **-1.1** |
| **NACGM** | **Naroch** | **59.37** | **320** | *i* | P | | **P** | **23 41 01.2** | **+3.7** |
| **ASAR** | **Alice Springs** | **59.51** | **143** | | P | | **P** | **23 40 59.0** | **+0.2** |
| | comp=N,1.4nm,1.0s,baz=325,slow=6.5,SNR=11 | | | | | | | | | |
| ASAR | | | | | LR | | LR | 00 09 24.7 | | |
| | comp=N,68nm,19.6s,baz=348,slow=39 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **59.65** | **328** | | P | | **P** | **23 40 57.9** | **-1.4** |
| | comp=N,2.7nm,0.8s,baz=92,slow=5.9,SNR=7.1 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **59.65** | **328** | *i* | P | | **P** | **23 41 01.5** | **+2.2** |
| FINES | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | | |
| **TESR** | **Tescani** | **60.17** | **310** | ⇓ | P | | **P** | **23 41 02.5** | **-0.7** |
| **VRI** | **Vrincioaia** | **60.20** | **310** | ⇓ | P | | **P** | **23 41 03.8** | **+0.4** |
| **VRI** | **Vrincioaia** | **60.20** | **310** | ⇓ | P | | **P** | **23 41 03.8** | **+0.4** |
| **PLOR** | **Plostina** | **60.26** | **310** | ⇑ | P | | **P** | **23 41 04.7** | **+0.9** |
| **PLOR** | **Plostina** | **60.26** | **310** | ⇑ | P | | **P** | **23 41 04.7** | **+0.9** |
| **ARCES** | **ARCESS Array B** | **60.31** | **337** | | LR | | LR | 00 09 28.0 | | |
| | comp=Z,106nm,21.3s,baz=78,slow=38 | | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **60.42** | **42** | | LR | | LR | 00 08 16.3 | | |
| | comp=Z,46nm,18.7s,baz=344,slow=37 | | | | | | | | | |
| **NEHR** | **Nehoiu** | **60.56** | **309** | ⇑ | P | | **P** | **23 41 06.2** | **+0.3** |
| **MLR** | **Muntele Rosu** | **60.80** | **309** | ⇑ | P | | **P** | **23 41 08.3** | **+0.6** |
| **MLR** | **Muntele Rosu** | **60.80** | **309** | | LR | | LR | 00 11 06.4 | | |
| | comp=Z,87nm,18.8s,baz=52,slow=40 | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **60.80** | **309** | ⇑ | P | | **P** | **23 41 08.3** | **+0.6** |
| **BURAR** | **Bucovina Array** | **61.00** | **312** | ⇑ | P | | **P** | **23 41 09.0** | **0.0** |
| **BURAR** | **Bucovina Array** | **61.00** | **312** | ⇑ | P | | **P** | **23 41 09.0** | **0.0** |
| **VOIR** | | **61.43** | **309** | ⇓ | P | | **P** | **23 41 11.7** | **-0.2** |
| **VOIR** | | **61.43** | **309** | ⇓ | P | | **P** | **23 41 11.7** | **-0.2** |
| **ARCR** | **ARCALIA** | **61.65** | **311** | ⇑ | P | | **P** | **23 41 15.9** | **+2.6** |
| **ARR** | **Arges** | **61.73** | **309** | ⇑ | P | | **P** | **23 41 13.3** | **-0.6** |
| **DRGR** | | **62.81** | **311** | ⇓ | P | | **P** | **23 41 21.2** | **0.0** |
| **DRGR** | | **62.81** | **311** | ⇓ | P | | **P** | **23 41 21.2** | **0.0** |
| **VTS** | **Vitosha** | **63.22** | **307** | ⇓ | P | | **P** | **23 41 24.0** | **-0.1** |
| **VTS** | **Vitosha** | **63.22** | **307** | ⇓ | P | | **P** | **23 41 24.0** | **-0.1** |
| **CRVS** | **Cervenica-Dubn** | **63.28** | **314** | *e* | P | | **P** | **23 41 28.0** | **+3.8** |
| **HERR** | **Herculane** | **63.36** | **309** | ⇓ | P | | **P** | **23 41 24.3** | **-0.4** |
| **IDI** | **Anoyia** | **63.61** | **298** | | LR | | LR | 00 11 45.7 | | |
| | comp=Z,37nm,19.8s,baz=90,slow=39 | | | | | | | | | |
| **MDVR** | **Moldovita** | **63.87** | **309** | ⇑ | P | | **P** | **23 41 25.4** | **-2.8** |
| **CTA** | **Charters Tower** | **64.41** | **131** | | LR | | LR | 00 10 41.8 | | |
| | comp=Z,45nm,20.7s,baz=268,slow=37 | | | | | | | | | |
| **VRAC** | **Vranov** | **66.34** | **315** | | LR | | LR | 00 15 08.3 | | |
| | comp=Z,101nm,18.2s,baz=78,slow=40 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **66.83** | **328** | | P | | **P** | **23 41 45.9** | **-1.1** |
| | comp=Z,3.2nm,0.9s,baz=78,slow=6.5 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.83** | **328** | | P | | **P** | **23 41 45.5** | **-1.5** |
| | comp=Z,1.5nm,0.8s,baz=78,slow=6.4,SNR=4.4 | | | | | | | | | |
| NOA | | | | | LR | | LR | 00 13 35.0 | | |
| | comp=Z,75nm,20.0s,baz=65,slow=38 | | | | | | | | | |
| **CONA** | **Conrad Observa** | **67.13** | **313** | *i* | P | | **P** | **23 41 52.2** | **+2.9** |
| | comp=Z,1.5nm,0.7s | | | | | | | | | |
| **ARSA** | **Arzberg** | **67.52** | **313** | *e* | P | | **P** | **23 41 53.6** | **+1.9** |
| | comp=Z,2.8nm,0.9s | | | | | | | | | |
| **MOA** | **Molln** | **68.19** | **314** | *e* | P | | **P** | **23 41 58.5** | **+2.6** |
| | comp=Z,2.1nm,0.7s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **68.30** | **315** | | P | | **P** | **23 41 55.1** | **-1.5** |
| | comp=Z,1.1nm,0.7s,baz=72,slow=5.8,SNR=7.3 | | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **69.00** | **313** | *e* | P | | **P** | **23 42 01.9** | **+0.7** |
| | comp=Z,1.2nm,0.5s | | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **69.64** | **313** | *e* | P | | **P** | **23 42 07.1** | **+2.1** |
| | comp=Z,1.3nm,0.5s | | | | | | | | | |
| **WTTA** | **Wattenberg** | **70.07** | **314** | *e* | P | | **P** | **23 42 11.1** | **+3.4** |
| | comp=Z,2.9nm,0.7s | | | | | | | | | |
| **WATA** | **Walderalm** | **70.08** | **314** | *e* | P | | **P** | **23 42 10.8** | **+3.0** |
| | comp=Z,0.9nm,0.4s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **70.14** | **143** | | P | | **P** | **23 42 07.8** | **-0.2** |
| | comp=Z,2.0nm,0.7s,baz=326,slow=7.3,SNR=3.7 | | | | | | | | | |
| STKA | | | | | LR | | LR | 00 14 19.5 | | |
| | comp=Z,28nm,21.1s,baz=234,slow=37 | | | | | | | | | |
| **RETA** | **Reutte** | **70.57** | **314** | *e* | P | | **P** | **23 42 12.2** | **+1.5** |
| | comp=Z,0.6nm,0.4s | | | | | | | | | |
| **FETA** | **Feichten** | **70.73** | **314** | *e* | P | | **P** | **23 42 13.0** | **+1.2** |
| | comp=Z,2.1nm,0.6s | | | | | | | | | |
| **MBAR** | **Mbarara** | **71.41** | **260** | | LR | | LR | 00 13 54.6 | | |
| | comp=Z,52nm,18.1s,baz=280,slow=36 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **76.04** | **24** | | P | | **P** | **23 42 42.6** | **+0.1** |
| | comp=Z,1.2nm,0.9s,baz=260,slow=5.1,SNR=7.5 | | | | | | | | | |
| **INK** | **Inuvik** | **78.16** | **18** | | P | | **P** | **23 42 53.7** | **-0.6** |
| | comp=Z,3.6nm,0.9s,baz=324,slow=6.7,SNR=8.9 | | | | | | | | | |
| INK | | | | | LR | | LR | 00 21 15.9 | | |
| | comp=Z,67nm,19.5s,baz=5.5,slow=39 | | | | | | | | | |
| **LSZ** | **Lusaka** | **80.71** | **248** | | LR | | LR | 00 18 59.6 | | |
| | comp=Z,26nm,18.6s,baz=42,slow=36 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **83.44** | **311** | | P | | **P** | **23 43 22.9** | **-0.4** |
| | comp=Z,0.8nm,1.0s,baz=36,slow=3.9,SNR=2.4 | | | | | | | | | |
| **DLBC** | **Dease Lake** | **86.25** | **24** | | LR | | LR | 00 23 46.9 | | |
| | comp=Z,139nm,19.2s,baz=260,slow=37 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.61** | **15** | | P | | **P** | **23 43 42.5** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=331,slow=4.1,SNR=5.2 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.61** | **15** | *i* | P | | **P** | **23 43 46.0** | **+2.6** |
| YKA | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| **LBTB** | **Lobatse** | **87.69** | **241** | | LR | | LR | 00 23 29.6 | | |
| | comp=Z,31nm,18.2s,baz=66,slow=36 | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **91.31** | **285** | | P | | **P** | **23 44 01.0** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=67,slow=4.4,SNR=1.8 | | | | | | | | | |
| **TSUM** | **Tsumeb** | **91.47** | **249** | | LR | | LR | 00 26 25.6 | | |
| | comp=Z,59nm,18.3s,baz=146,slow=36 | | | | | | | | | |
| **SUR** | **Sutherland** | **94.92** | **236** | | LR | | LR | 00 22 41.1 | | |
| | comp=Z,72nm,20.5s,baz=21,slow=33 | | | | | | | | | |
| **BDFB** | **Brasilia** | **148.15** | **283** | | PKPbc | | **PKPbc** | **23 50 41.9** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=175,slow=11,SNR=3.9 | | | | | | | | | |
| **ROSC** | **El Rosal** | **148.74** | **348** | | PKPbc | | **PKPbc** | **23 50 43.7** | **-0.5** |
| | comp=Z,18nm,0.7s,baz=54,slow=6.2,SNR=9.9 | | | | | | | | | |

*IDC **07** 23:39:09.0±0.8,26.°07N×99.°73E, h0km, mb3.8/13, mb1 3.9/14, mb1mx3.6/55, mbtmp3.8/14, ML4.2/1, MS3.0/1, Ms1 3.2/1, ms1mx2.6/91, Error ellipse: s-maj=27.6km s-min=13.9km az=69.0*

*BJI **07** 23:39:10.3±0.0,26.°07N×99.°61E, h10km, mb4.0/21, mB4.8/8, ML3.9/13, Ms4.1/22, Ms7 3.6/15*

*NEIC **07** 23:39:12.3±1.7,26.°18N±0.°09×99.°57E±0.°09, h10km±1km, mb4.3/18, Error ellipse: s-maj=15.7km s-min=13.8km az=159.0*

**ISC 07 23:39:10.5±0.4,26.°03N±0.°05×99.°62E±0.°03, h10km, n73, σ1s94/80, mb4.1/23, 4C, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **1.96** | **76** | ⇑ Pg | | **Pn** | **23 39 44.8** | **+0.8** |
| PZH | | | | Sg | | **Sb** | **23 40 10.5** | **-0.6** |
| PZH | | | | smax | | smax | | |
| | comp=N,980nm,1.0s | | | | | | | |
| PZH | | | | smax | | smax | | |
| | comp=E,1μm,0.9s | | | | | | | |
| **KMI** | **Kunming** | **2.96** | **107** | ⇑ Pn | | **Pn** | **23 39 58.6** | **+0.8** |
| KMI | | | | Pg | | **Pb** | **23 40 05.3** | **+1.8** |
| KMI | | | | Sg | | **Sg** | **23 40 44.0** | **-1.7** |
| KMI | | | | smax | | smax | | |
| | comp=N,680nm,1.6s | | | | | | | |
| KMI | | | | smax | | smax | | |
| | comp=E,460nm,1.5s | | | | | | | |
| **LKP** | **Lekhapani** | **3.62** | **292** | IAmb | | IAmb | 23 39 48.4 | |
| | comp=Z,129nm,0.3s | | | | | | | |
| LKP | | | | *e*S | | **Sb** | **23 40 59.0** | **+0.5** |
| LKP | | | | IAML | | | 23 41 15.8 | |
| | comp=E,210nm,0.8s | | | | | | | |
| **MOKO** | **MOKOCHONG** | **4.59** | **275** | *e*P | | **Pn** | **23 40 24.1** | **+3.9** |
| MOKO | | | | IAmb | | IAmb | 23 40 28.9 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **KOHI** | **KOHIMA** | **4.97** | **268** | IAmb | | IAmb | 23 40 49.9 | |
| | comp=Z,54nm,0.8s | | | | | | | |
| KOHI | | | | *e*S | | **Sg** | **23 41 52.4** | **+2.1** |
| KOHI | | | | IAML | | | 23 42 03.7 | |
| | comp=N,25nm,0.9s | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **IMP** | **Imphal** | **5.26** | **258** | *e* | P | | **Pb** | **23 40 42.2** | **-0.5** |
| IMP | | | | | IAmb | | IAmb | 23 40 44.4 | | |
| | comp=Z,16nm,0.6s | | | | | | | | | |
| **CD2** | **Chengdu** | **6.07** | **36** | | Pn | | **Pn** | **23 40 41.1** | **+0.6** |
| CD2 | | | | | Sg | | **Sg** | **23 42 23.7** | **-1.9** |
| CD2 | | | | | smax | | smax | | | |
| | comp=Z,100nm,1.7s | | | | | | | | | |
| CD2 | | | | | LR | | LR | | | |
| | comp=Z,240nm,10.4s | | | | | | | | | |
| CD2 | | | | | LR | | LR | | | |
| | comp=Z,2μm,9.5s | | | | | | | | | |
| CD2 | | | | | LR | | LR | | | |
| | comp=Z,620nm,10.2s | | | | | | | | | |
| **GYA** | **Guiyang** | **6.34** | **85** | ⇑ Pn | | Pn | | 23 40 49.0 | +4.8 | |
| GYA | | | | | Sg | | **Sg** | **23 42 37.0** | **+2.8** | |
| GYA | | | | | smax | | smax | | | |
| | comp=Z,26nm,1.4s | | | | | | | | | |
| GYA | | | | | smax | | smax | | | |
| | comp=Z,28nm,1.8s | | | | | | | | | |
| GYA | | | | | LR | | LR | | | |
| | comp=Z,410nm,7.8s | | | | | | | | | |
| GYA | | | | | LR | | LR | | | |
| | comp=Z,400nm,8.0s | | | | | | | | | |
| GYA | | | | | LR | | LR | | | |
| | comp=Z,280nm,9.2s | | | | | | | | | |
| **SHL** | **Shillong** | **6.99** | **268** | | Pn | | **Pn** | **23 40 53.3** | **+0.1** | |
| **CHTO** | **Chiang Mai** | **7.21** | **185** | | Pn | | **Pn** | **23 40 58.7** | **+2.6** | |
| **CM31** | **Chiang Mai Arr** | **7.56** | **185** | | Pg | | **Pg** | **23 41 35.0** | **-0.4** | |
| **CMAR** | **Chiang Mai Arr** | **7.56** | **185** | | Pn | | **Pn** | **23 41 01.4** | **+0.4** | |
| | comp=Z,0.9nm,0.3s,baz=359,slow=13,SNR=2.8 | | | | | | | | | |
| CMAR | | | | | Pg | | Pb | 23 41 28.9 | +7.1 | |
| | comp=Z,2.0nm,0.3s,baz=355,slow=17,SNR=14 | | | | | | | | | |
| CMAR | | | | | Lg | | Lg | 23 43 11.5 | | |
| | comp=Z,4.5nm,0.3s,baz=3.9,slow=29,SNR=12 | | | | | | | | | |
| CMAR | | | | | LR | | LR | 23 44 21.4 | | |
| | comp=Z,115nm,19.4s,baz=305,slow=41 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **7.56** | **185** | | | | **Pn** | **23 41 03.5** | **+2.5** | |
| **LSA** | **Lhasa** | **8.34** | **298** | | P | | **Pn** | **23 41 15.6** | **+3.7** | |
| LSA | | | | | LR | | LR | | | |
| | comp=Z,750nm,14.2s | | | | | | | | | |
| LSA | | | | | LR | | LR | | | |
| | comp=Z,410nm,8.5s | | | | | | | | | |
| **ENH** | **Enshi** | **9.68** | **62** | | | | **Pn** | **23 41 30.0** | **+0.1** | |
| **GTK** | **Tadong** | **9.94** | **280** | *e* | P | | **Pn** | **23 41 29.0** | **-4.6** | |
| GTK | | | | | IAmb | | IAmb | 23 41 37.6 | | |
| | comp=Z,5.7nm,0.6s | | | | | | | | | |
| GTK | | | | *e* | S | | **Sn** | **23 43 22.3** | **-3.0** | |
| GTK | | | | | IAML | | | 23 43 23.9 | | |
| | comp=N,160nm,0.1s | | | | | | | | | |
| GTK | | | | | IAML | | | 23 43 24.0 | | |
| | comp=E,161nm,0.2s | | | | | | | | | |
| **LZH** | **Lanzhou** | **10.66** | **19** | *e* | P | | **Pn** | **23 41 46.3** | **+2.9** | |
| LZH | | | | | pP | | | 23 41 48.5 | | |
| LZH | | | | | sP | | | 23 41 51.1 | | |
| LZH | | | | | pmax | | pmax | | | |
| | comp=E,17nm,1.2s | | | | | | | | | |
| LZH | | | | | pmax | | pmax | | | |
| | comp=E,65nm,4.5s | | | | | | | | | |
| LZH | | | | | LR | | LR | | | |
| | comp=E,530nm,13.0s | | | | | | | | | |
| LZH | | | | | LR | | LR | | | |
| | comp=E,900nm,13.0s | | | | | | | | | |
| LZH | | | | | LR | | LR | | | |
| | comp=E,410nm,14.6s | | | | | | | | | |
| **TAPN** | **Taplejung** | **10.73** | **280** | *e* | P | | **Pn** | **23 41 43.7** | **-0.9** | |
| | comp=E,20nm,0.6s | | | | | | | | | |
| **GOMU** | **GeErMu** | **10.94** | **339** | | P | | **Pn** | **23 41 46.0** | **-1.5** | |
| GOMU | | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,1.1s | | | | | | | | | |
| GOMU | | | | | LR | | LR | | | |
| | comp=E,370nm,10.5s | | | | | | | | | |
| GOMU | | | | | LR | | LR | | | |
| | comp=E,410nm,10.4s | | | | | | | | | |
| GOMU | | | | | LR | | LR | | | |
| | comp=E,250nm,7.4s | | | | | | | | | |
| **ODAN** | **Odare** | **10.99** | **277** | *e* | P | | **Pn** | **23 41 46.9** | **-1.2** | |
| **XAN** | **Xi'an** | **11.34** | **43** | | P | | **Pn** | **23 41 53.2** | **+0.5** | |
| XAN | | | | | LR | | LR | | | |
| | comp=E,790nm,11.9s | | | | | | | | | |
| XAN | | | | | LR | | LR | | | |
| | comp=E,500nm,14.3s | | | | | | | | | |
| XAN | | | | | LR | | LR | | | |
| | comp=E,480nm,14.9s | | | | | | | | | |
| **RAMN** | **Ramite** | **11.70** | **277** | *e* | P | | **Pn** | **23 41 56.4** | **-1.4** | |
| | comp=E,15nm,0.5s | | | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.74** | **124** | | P | | **Pn** | **23 41 53.7** | **-4.4** | |
| QIZ | | | | | S | | **Sn** | **23 44 11.3** | **+2.0** | |
| QIZ | | | | | LR | | LR | | | |
| | comp=N,610nm,15.1s | | | | | | | | | |
| QIZ | | | | | LR | | LR | | | |
| | comp=E,340nm,17.2s | | | | | | | | | |
| **JIRN** | **Jiri** | **12.10** | **281** | *e* | P | | **Pn** | **23 42 02.1** | **-1.3** | |
| | comp=E,9.6nm,0.4s | | | | | | | | | |
| **GUN** | **Gumba** | **12.40** | **282** | *e* | P | | **Pn** | **23 42 06.1** | **-1.4** | |
| | comp=E,11nm,0.5s | | | | | | | | | |
| **PKI** | **Pulchoki** | **12.79** | **280** | *e* | P | | **Pn** | **23 42 10.9** | **-1.8** | |
| | com

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **29.98** | **342** | P | | **P** | | **23 45 19.2** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **29.98** | **342** | P | | **P** | | **23 45 18.0** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=160,slow=9.0,SNR=5.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.98** | **342** | P | | **P** | | **23 45 19.1** | **+0.2** |
| **MDJ** | **Mudanjiang** | **30.44** | **45** | P | | **P** | | **23 45 25.6** | **+2.4** |
| MDJ | | | | IAmb | | IAmb | | 23 45 34.6 | |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **34.70** | **329** | P | | **P** | | **23 46 01.1** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=148,slow=8.6,SNR=14 | | | | | | | | |
| **BRVK** | **Borovoye** | **34.77** | **329** | P | | **P** | | **23 46 01.8** | **+0.8** |
| **ABKAR** | **Akbulak array** | **38.42** | **318** | P | | **P** | | **23 46 33.9** | **+1.7** |
| **AKTO** | **Aktyubinsk** | **40.02** | **319** | P | | **P** | | **23 46 45.8** | **+0.2** |
| | comp=Z,1.7nm,0.8s,baz=143,slow=10,SNR=2.5 | | | | | | | | |
| **ARU** | **Arti** | **42.28** | **327** | P | | **P** | | **23 47 04.2** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=111,slow=8.6,SNR=4.2 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **56.68** | **140** | P | | **P** | | **23 48 55.9** | **+1.5** |
| WB0 | | | | IAmb | | IAmb | | 23 48 58.8 | |
| | comp=Z,3.5nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.79** | **140** | P | | **P** | | **23 48 54.3** | **-0.8** |
| | comp=Z,1.2nm,0.6s,baz=329,slow=7.7,SNR=11 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **56.80** | **140** | P | | **P** | | **23 48 57.1** | **+1.9** |
| WB2 | | | | IAmb | | IAmb | | 23 48 59.3 | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **CSS** | **Mathiatis** | **56.90** | **296** | P | | **P** | | **23 48 56.1** | **+0.2** |
| **BILL** | **Bilibino** | **57.41** | **24** | P | | **P** | | **23 49 00.2** | **+1.2** |
| BILL | | | | IAmb | | IAmb | | 23 49 02.2 | |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **58.07** | **315** | P | | **P** | | **23 49 04.4** | **+0.6** |
| | comp=Z,1.7nm,0.5s,baz=78,slow=6.3,SNR=6.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **59.51** | **143** | P | | **P** | | **23 49 14.4** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=326,slow=6.6,SNR=4.7 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **60.78** | **309** | P | | **P** | | **23 49 23.8** | **+0.9** |
| MLR | | | | IAmb | | IAmb | | 23 49 27.3 | |
| | comp=Z,3.7nm,1.0s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **60.98** | **312** | | | **P** | | **23 49 25.5** | **+1.3** |
| **GERES** | **GERESS Array B** | **68.28** | **315** | P | | **P** | | **23 50 12.8** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=69,slow=5.4,SNR=2.6 | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **75.44** | **21** | P | | **P** | | **23 50 55.9** | **+1.5** |
| **MDM** | **Murphy Dome** | **75.49** | **24** | P | | **P** | | **23 50 55.9** | **+1.2** |
| MDM | | | | IAmb | | IAmb | | 23 51 05.9 | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.64** | **15** | P | | **P** | | **23 51 58.5** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=326,slow=4.7,SNR=2.8 | | | | | | | | |

*IDC **07** 23:41:47.3±1.3, 35°.21N×64°.29E, h0[km], mb3.4/8, mb1 3.6/13, mb1mx3.3/51, mbtmp3.5/13, ML3.5/4, MS3.7/1, Ms1 3.7/1, ms1mx2.5/55, Error ellipse: s-maj=27.7km s-min=18.2km az=158.0*

*NNC **07** 23:41:50.7±6.9, 35°.70N×64°.20E, h0[km], mb4.0, mpv3.7, Error ellipse: s-maj=78.9km s-min=21.1km az=170.0*

**ISC 07 23:41:49.0±1.0, 35°.4N±0°.1×64°.28E±0°.07, h10[km], n20, σ1§97/24, mb3.4/8, 6C-2D, Northwestern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GEYT** | **Alibeck** | **5.56** | **299** | Pn | | **Pn** | **23 43 10.8** | **-1.0** |
| | 1.5nm,0.3s,baz=114,slow=13,SNR=25 | | | | | | | |
| GEYT | | | | Sn | | **Sn** | **23 44 14.8** | **-1.0** |
| | 2.5nm,0.3s,baz=126,slow=27,SNR=1.7 | | | | | | | |
| GEYT | | | | Lg | | Lg | 23 44 42.8 | |
| | 1.7nm,0.3s,baz=119,slow=41,SNR=2.0 | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **5.56** | **299** | ⇓P | | **Pn** | **23 43 10.4** | **-1.4** |
| GYA0B | | | | ⇑S | | **Sn** | **23 44 17.0** | **+1.2** |
| **KK08** | **Karatay Array** | **9.07** | **30** | ⇑P | | **Pn** | **23 44 01.3** | **+1.3** |
| | 1.2nm,0.3s,baz=223,slow=15 | | | | | | | |
| KK08 | | | | ⇑S | | **Sn** | **23 45 38.5** | **-3.7** |
| | 1.2nm,0.5s,baz=214,slow=31 | | | | | | | |
| **KSH** | **Kashi** | **10.16** | **63** | P | | **Pn** | **23 44 11.7** | **-3.3** |
| KSH | | | | pP | | | 23 44 15.9 | |
| KSH | | | | sP | | | 23 44 18.3 | |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **10.74** | **45** | Pn | | **Pn** | **23 44 23.5** | **+0.6** |
| | comp=Z,0.7nm,0.3s,baz=205,slow=6.3,SNR=16 | | | | | | | |
| AAK | | | | Sn | | **Sn** | **23 46 23.2** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=267,slow=7.4,SNR=1.4 | | | | | | | |
| **AAK** | **Ala-Archa** | **10.74** | **45** | ⇑P | | **Pn** | **23 44 23.6** | **+0.7** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| AAK | | | | ⇑S | | **Sn** | **23 46 27.6** | **+4.4** |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **AB31** | **Akbulak array** | **14.21** | **348** | ⇓P | | **Pn** | **23 45 06.6** | **-3.6** |
| | comp=Z,1.1nm,0.7s,baz=158,slow=13,SNR=7.2 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.70** | **345** | Pn | | **Pn** | **23 45 29.2** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=171,slow=10,SNR=4.7 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.70** | **345** | ⇑P | | **Pn** | **23 45 28.4** | **-1.7** |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **17.67** | **44** | P | | **P** | **23 45 55.8** | **-0.2** |
| | baz=247,slow=12,SNR=1.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **18.39** | **30** | P | | **P** | **23 46 04.9** | **+1.0** |
| | comp=Z,0.0nm,0.3s,baz=224,slow=10,SNR=2.2 | | | | | | | |
| **ARU** | **Arti** | **21.39** | **351** | P | | **P** | **23 46 38.4** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=203,slow=7.7,SNR=1.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **23.46** | **31** | P | | **P** | **23 46 58.9** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=238,slow=8.3,SNR=3.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **24.61** | **289** | P | | **P** | **23 47 09.9** | **+0.3** |
| | comp=Z,0.4nm,0.7s,baz=82,slow=10,SNR=1.9 | | | | | | | |
| **SONM** | **Songino Array** | **33.44** | **55** | P | | **P** | **23 48 28.6** | **+0.6** |
| | comp=Z,0.2nm,0.7s,baz=72,slow=4.7,SNR=1.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.20** | **340** | P | | **P** | **23 49 25.7** | **+0.6** |
| | comp=Z,4.2nm,1.1s,baz=137,slow=8.0,SNR=2.1 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **44.25** | **221** | LR | | LR | 00 08 44.8 | |
| | comp=Z,86nm,18.3s,baz=90,slow=37 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.21** | **265** | P | | **P** | **23 51 58.5** | **+0.9** |
| | comp=Z,0.3nm,0.8s,baz=51,slow=6.6,SNR=1.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.44** | **359** | P | | **P** | **23 54 13.2** | **+2.1** |
| | comp=Z,0.2nm,0.7s,baz=352,slow=5.5,SNR=4.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **88.25** | **121** | P | | **P** | **23 54 39.5** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=308,slow=5.8,SNR=6.1 | | | | | | | |

*IDC **07** 23:50:19.3±1.7, 35°.34N×26°.41E, h0[km], mb3.3/3, mb1 3.2/6, mb1mx3.1/44, mbtmp3.2/6, ML2.9/3, Error ellipse: s-maj=39.1km s-min=25.5km az=153.0*

*ISK **07** 23:50:22.9, 35°.51N×26°.62E, h3[km], ML3.2/16*

*ATH **07** 23:50:23.2, 35°.54N×26°.61E, h23[km±1[km]], ML3.2/5, Error ellipse: s-maj=1.9km s-min=1.0km az=225.0*

*NIC **07** 23:50:23.8±0.0, 35°.36N×26°.74E, h11[km±4[km]], Ml4.0/3*

*THE **07** 23:50:24.0, 35°.49N×26°.60E, h4[km±1[km]], ML3.1/8, Error ellipse: s-maj=2.1km s-min=0.5km az=164.0*

*DDA **07** 23:50:24.0±0.0, 35°.39N×26°.51E, h23[km±71[km]], ML2.9*

*GII **07** 23:50:30.4±0.0, 34°.74N×26°.83E, h10[km], Mm3.4/1*

**ISC 07 23:50:24.6±1.0, 35°.38N±0°.03×26°.59E±0°.03, h33[km±8[km]], n106, σ1§51/147, mb3.2/3, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **0.41** | **229** | P | | **Pb** | **23 50 33.6** | **-0.2** |
| ZKR | | | | S | | **Sn** | **23 50 41.5** | **+0.8** |
| | 3µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.41** | **229** | P | | **Pn** | **23 50 33.7** | **-0.5** |
| ZKR | | | | S | | **Sn** | **23 50 41.6** | **+0.8** |
| ZKR | | | | AML | | AML | 23 50 41.8 | |
| | comp=E,8212µm,0.3s | | | | | | | |
| ZKR | | | | AML | | AML | 23 50 42.0 | |
| | comp=N,2408µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.41** | **229** | PG | | **Pn** | **23 50 33.8** | **-0.5** |
| ZKR | | | | SG | | **Sn** | **23 50 41.7** | **+1.0** |
| **ZKR** | **Zakros** | **0.41** | **229** | P | | **Pb** | **23 50 33.4** | **-0.5** |
| ZKR | | | | AMI | | | 23 50 40.6 | |
| | comp=N,2.3nm,0.5s | | | | | | | |
| ZKR | | | | AMI | | | 23 50 40.6 | |
| | comp=N,7.4nm,0.3s | | | | | | | |
| ZKR | | | | AMI | | | 23 50 40.6 | |
| | comp=N,2.3nm,0.5s | | | | | | | |
| ZKR | | | | AMI | | | 23 50 40.6 | |
| | comp=N,7.4nm,0.3s | | | | | | | |
| ZKR | | | | S | | **Sn** | **23 50 41.4** | **+0.7** |
| **STIA** | **Sitia Lasithi** | **0.45** | **246** | P | | **Pb** | **23 50 33.7** | **-0.7** |
| STIA | | | | S | | **Sn** | **23 50 41.9** | **+0.2** |
| **FRMA** | **Ierapetra Chan** | **0.79** | **243** | P | | **Pn** | **23 50 38.7** | **-0.8** |
| FRMA | | | | S | | **Sb** | **23 50 49.9** | **-0.6** |
| **NPS** | **Neapolis** | **0.81** | **262** | P | | **Pb** | **23 50 40.4** | **+0.1** |
| NPS | | | | S | | **Sn** | **23 50 51.7** | **+1.0** |
| | comp=N,3µm,0.3s | | | | | | | |
| **NPS** | **Neapolis** | **0.81** | **262** | P | | **Pb** | **23 50 40.4** | **+0.1** |
| NPS | | | | S | | **Sn** | **23 50 51.9** | **+1.2** |
| NPS | | | | AML | | AML | 23 50 55.4 | |
| | comp=N,5618µm,0.3s | | | | | | | |
| NPS | | | | AML | | AML | 23 50 55.6 | |
| | comp=E,5895µm,0.3s | | | | | | | |
| **HRKL** | **Herakleio** | **1.22** | **267** | P | | **Pb** | **23 50 46.8** | **-0.4** |
| HRKL | | | | S | | **Sb** | **23 51 04.3** | **+1.7** |
| | comp=E,1µm,0.6s | | | | | | | |
| **HRKL** | **Herakleio** | **1.22** | **267** | PN | | **Pb** | **23 50 47.6** | **+0.4** |
| HRKL | | | | SN | | **Sb** | **23 51 05.8** | **+3.2** |
| **IACM** | **Heraklion** | **1.25** | **267** | P | | **Pb** | **23 50 47.9** | **+0.3** |
| **KSTL** | **Kastelli Herak** | **1.25** | **267** | P | | **Pn** | **23 50 44.5** | **-1.3** |
| **SANT** | **Santorini** | **1.35** | **317** | P | | **Pn** | **23 50 47.2** | **-0.1** |
| SANT | | | | S | | **Sb** | **23 51 04.1** | **-2.2** |
| **SANT** | **Santorini** | **1.35** | **317** | P | | **Pn** | **23 50 46.9** | **-0.4** |
| **THR8** | **Santorini-Mono** | **1.36** | **319** | P | | **Pn** | **23 50 47.2** | **-0.2** |
| **THR8** | **Santorini-Mono** | **1.36** | **319** | P | | **Pn** | **23 50 47.4** | **0.0** |
| **THR6** | **Thira Island,** | **1.37** | **315** | P | | **Pn** | **23 50 47.2** | **-0.3** |
| **THR6** | **Thira Island,** | **1.37** | **315** | P | | **Pn** | **23 50 47.2** | **-0.3** |
| **IDI** | **Anoyia** | **1.40** | **267** | P | | **Pb** | **23 50 49.2** | **-1.0** |
| IDI | | | | S | | **Sb** | **23 51 08.3** | **+0.6** |
| | comp=E,665nm,0.3s | | | | | | | |
| **IDI** | **Anoyia** | **1.40** | **267** | P | | **Pb** | **23 50 49.2** | **-1.0** |
| IDI | | | | S | | **Sb** | **23 51 08.8** | **+1.2** |
| IDI | | | | AML | | AML | 23 51 11.2 | |
| | comp=N,1612µm,0.4s | | | | | | | |
| IDI | | | | AML | | AML | 23 51 11.4 | |
| | comp=E,1036µm,0.3s | | | | | | | |
| **THR9** | **Santorini-Faro** | **1.40** | **314** | P | | **Pn** | **23 50 47.9** | **0.0** |
| **THR9** | **Santorini-Faro** | **1.40** | **314** | P | | **Pn** | **23 50 47.9** | **0.0** |
| **KOSK** | **Kos Island** | **1.40** | **13** | P | | **Pn** | **23 50 46.9** | **-1.0** |
| **KOSK** | **Kos Island** | **1.40** | **13** | PN | | **Pn** | **23 50 47.9** | **0.0** |
| **SFIR** | **Foira Santorin** | **1.40** | **318** | P | | **Pn** | **23 50 48.1** | **+0.1** |
| **SNT5** | **Nea Kammeni, S** | **1.41** | **317** | P | | **Pn** | **23 50 48.0** | **0.0** |
| **THR3** | **Thira Island,** | **1.41** | **317** | P | | **Pn** | **23 50 48.0** | **0.0** |
| **THR3** | **Thira Island,** | **1.41** | **317** | P | | **Pn** | **23 50 48.0** | **0.0** |
| **THT2** | **Imerovigli** | **1.42** | **318** | P | | **Pn** | **23 50 48.1** | **0.0** |
| THT2 | | | | S | | **Sb** | **23 51 07.0** | **-1.2** |
| | comp=E,425nm,0.5s | | | | | | | |
| **THT2** | **Imerovigli** | **1.42** | **318** | P | | **Pn** | **23 50 48.2** | **0.0** |
| THT2 | | | | S | | **Sb** | **23 51 06.9** | **-1.4** |
| **THR2** | **Thira island,** | **1.42** | **319** | P | | **Pn** | **23 50 47.9** | **-0.2** |
| **THR2** | **Thira island,** | **1.42** | **319** | P | | **Pn** | **23 50 47.1** | **-1.0** |
| **THR5** | **Thira Island,** | **1.45** | **316** | P | | **Pn** | **23 50 48.4** | **-0.1** |
| **THR5** | **Thira Island,** | **1.45** | **316** | P | | **Pn** | **23 50 48.0** | **-0.5** |
| **ARG** | **Arkhangelos** | **1.50** | **56** | P | | **Pn** | **23 50 50.1** | **+0.9** |
| ARG | | | | S | | **Sn** | **23 51 08.6** | **+0.9** |
| | comp=E,448nm,0.4s | | | | | | | |
| **ARG** | **Arkhangelos** | **1.50** | **56** | P | | **Pn** | **23 50 50.2** | **+0.9** |
| ARG | | | | S | | **Sn** | **23 51 08.2** | **+0.5** |
| ARG | | | | AML | | AML | 23 51 12.4 | |
| | comp=E,1049µm,0.5s | | | | | | | |
| ARG | | | | AML | | AML | 23 51 12.8 | |
| | comp=N,732µm,0.3s | | | | | | | |
| **ARG** | **Arkhangelos** | **1.50** | **56** | PN | | **Pn** | **23 50 50.1** | **+0.9** |
| ARG | | | | SN | | **Sb** | **23 51 10.3** | **-0.2** |
| **ARG** | **Arkhangelos** | **1.50** | **56** | P | | **Pn** | **23 50 49.6** | **+0.3** |
| ARG | | | | S | | **Sn** | **23 51 08.8** | **+1.1** |
| **SIVA** | **Sivas** | **1.50** | **257** | P | | **Pb** | **23 50 52.8** | **+0.8** |
| **TMBK** | **Timbaki Herakl** | **1.53** | **259** | P | | **Pb** | **23 50 52.5** | **+0.2** |
| TMBK | | | | S | | **Sb** | **23 51 14.8** | **+3.5** |
| | comp=N,392nm,0.5s | | | | | | | |
| **BODT** | **Bodrum** | **1.77** | **19** | P | | **Pn** | **23 50 52.0** | **-1.1** |
| **BODT** | **Bodrum** | **1.77** | **19** | PN | | **Pn** | **23 50 54.2** | **+1.1** |
| **BODT** | **Bodrum** | **1.77** | **19** | P | | **Pb** | **23 50 56.6** | **0.0** |
| BODT | | | | S | | **Sb** | **23 51 17.4** | **-1.0** |
| **MRSB** | **Marmaris-Mugla** | **1.86** | **44** | PN | | **Pn** | **23 50 55.5** | **+1.2** |
| **MRSB** | **Marmaris-Mugla** | **1.86** | **44** | P | | **Pn** | **23 50 55.5** | **+1.2** |
| **TURN** | **Turunc** | **1.93** | **43** | PN | | **Pn** | **23 50 55.9** | **+0.8** |
| **TURN** | **Turunc** | **1.93** | **43** | P | | **Pn** | **23 50 55.7** | **+0.6** |
| TURN | | | | S | | **Sn** | **23 51 18.9** | **+0.7** |
| **VAM** | **Vamos** | **1.96** | **271** | P | | **Pb** | **23 50 57.0** | **-2.6** |
| **VAM** | **Vamos** | **1.96** | **271** | P | | **Pb** | **23 50 57.2** | **-2.4** |
| VAM | | | | AML | | AML | 23 51 29.4 | |
| | comp=N,1006µm,0.5s | | | | | | | |
| VAM | | | | AML | | AML | 23 51 31.3 | |
| | comp=E,620µm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **2.12** | **256** | P | | **Pb** | **23 51 04.1** | **+1.6** |
| **GVD** | **Gavdhos** | **2.12** | **256** | P | | **Pb** | **23 51 00.4** | **-2.1** |
| **GVD** | **Gavdhos** | **2.12** | **256** | PN | | **Pb** | **23 51 01.6** | **-0.9** |
| **IMMV** | **Iera Moni Meta** | **2.13** | **273** | P | | **Pn** | **23 50 58.8** | **+0.8** |
| **IMMV** | **Iera Moni Meta** | **2.13** | **273** | P | | **Pn** | **23 50 59.0** | **+1.0** |
| IMMV | | | | S | | **Sb** | **23 51 27.3** | **-1.4** |
| **IMMV** | **Iera Moni Meta** | **2.13** | **273** | PN | | **Pb** | **23 51 01.1** | **-1.6** |
| **MLSB** | **Milas** | **2.13** | **26** | PN | | **Pn** | **23 50 58.9** | **+0.9** |
| **MLSB** | **Milas** | **2.13** | **26** | P | | **Pb** | **23 51 04.0** | **+1.3** |
| **DALY** | **Dalyan (Mula)** | **2.20** | **49** | PN | | **Pn** | **23 51 00.4** | **+1.5** |
| **YER** | **Yerkesik** | **2.22** | **38** | P | | **Pn** | **23 50 59.4** | **+0.2** |
| YER | | | | S | | **Sn** | **23 51 25.6** | **+0.1** |
| **YER** | **Yerkesik** | **2.22** | **38** | PN | | **Pn** | **23 51 00.4** | **+1.2** |
| **YER** | **Yerkesik** | **2.22** | **38** | P | | **Pn** | **23 50 59.2** | **0.0** |
| YER | | | | S | | **Sn** | **23 51 22.9** | **-2.7** |
| **SMG** | **Samos** | **2.33** | **5** | P | | **Pn** | **23 50 59.4** | **-1.3** |
| **MULA** | **Mugla, Merkez-** | **2.33** | **36** | P | | **Pn** | **23 51 04.6** | **-1.5** |
| **FETY** | **Fethiye** | **2.38** | **58** | PN | | **Pn** | **23 51 02.9** | **+1.6** |
| **KNDR** | **Palaiochora Ch** | **2.38** | **267** | P | | **Pn** | **23 51 05.3** | **-1.5** |
| **KNDR** | **Palaiochora Ch** | **2.38** | **267** | PN | | **Pb** | **23 51 05.6** | **-1.2** |
| **KSL** | **Kastellorizon** | **2.55** | **72** | P | | **Pn** | **23 51 05.9** | **+2.2** |
| KSL | | | | S | | **Sn** | **23 51 35.3** | **+1.7** |
| **KSL** | **Kastellorizon** | **2.55** | **72** | P | | **Pn** | **23 51 03.6** | **-0.1** |
| KSL | | | | S | | **Sn** | **23 51 34.4** | **+0.8** |
| **AKAS** | **Kas** | **2.59** | **70** | PN | | **Pn** | **23 51 06.4** | **+2.0** |
| **AKAS** | **Kas** | **2.59** | **70** | P | | **Pn** | **23 51 05.5** | **+1.1** |
| AKAS | | | | *i* AML | | AML | 23 51 33.0 | |
| | comp=E,66nm,1.1s | | | | | | | |
| AKAS | | | | S | | **Sn** | **23 51 34.0** | **-0.8** |
| **TAVA** | **DENIZLI_Tavas** | **2.80** | **41** | P | | **Pn** | **23 51 08.5** | **+1.3** |
| TAVA | | | | S | | **Sn** | **23 51 42.6** | **+2.8** |
| **CAEL** | **Denizli, Camel** | **2.81** | **51** | P | | **Pn** | **23 51 14.3** | **+0.1** |
| **KTHA** | **Kythira Island** | **3.00** | **288** | P | | **Pn** | **23 51 11.3** | **+1.4** |
| **ELL** | **Elmali** | **3.01** | **62** | PN | | **Pn** | **23 51 12.7** | **+2.5** |
| **ELL** | **Elmali** | **3.01** | **62** | P | | **Pn** | **23 51 12.6** | **+2.5** |
| **GOLH** | **Golhisar** | **3.03** | **51** | P | | **Pn** | **23 51 11.5** | **+1.1** |
| GOLH | | | | S | | **Sn** | **23 51 48.2** | **+2.6** |
| GOLH | | | | *i* AML | | AML | 23 52 01.0 | |
| | comp=E,39nm,0.5s | | | | | | | |
| GOLH | | | | *i* AML | | AML | 23 52 07.0 | |
| | comp=E,32nm,1.0s | | | | | | | |
| **KTHR** | **Kythira** | **3.04** | **288** | P | | **Pn** | **23 51 12.0** | **+1.5** |
| KTHR | | | | S | | **Sn** | **23 51 47.2** | **+1.3** |
| | comp=E,60nm,0.4s | | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **3.19** | **72** | P | | **Pn** | **23 51 14.8** | **+2.4** |
| **VLI** | **Veliai** | **3.25** | **295** | P | | **Pn** | **23 51 14.0** | **+0.7** |
| VLI | | | | S | | **Sn** | **23 51 51.5** | **+0.6** |
| **VLI** | **Veliai** | **3.25** | **295** | P | | **Pn** | **23 51 14.1** | **+0.8** |
| **KORT** | **Korkueli** | **3.44** | **61** | P | | **Pn** | **23 51 16.4** | **+0.4** |
| **BUCA** | **Burdur, Bucak-** | **3.74** | **58** | P | | **Pn** | **23 51 23.0** | **+2.8** |
| **KLV** | **Kalavryta, Ach** | **4.45** | **308** | P | | **Pn** | **23 51 32.1** | **+2.2** |
| **AKMS** | **Akamas** | **4.72** | **93** | P | | **Pn** | **23 51 33.3** | **-0.2** |
| AKMS | | | | S | | **Sn** | **23 52 28.5** | **+1.4** |
| AKMS | | | | AMI | | | 23 52 28.9 | |
| | comp=E,0.4nm,0.8s | | | | | | | |
| AKMS | | | | AMI | | | 23 52 28.9 | |
| | comp=E,0.4nm,0.8s | | | | | | | |
| AKMS | | | | AMI | | | 23 52 33.4 | |
| | comp=E,0.4nm,1.1s | | | | | | | |
| AKMS | | | | AMI | | | 23 52 33.4 | |
| | comp=E,0.4nm,1.1s | | | | | | | |
| **ALFC** | **Alefka** | **4.92** | **91** | P | | **Pn** | **23 51 36.3** | **0.0** |
| ALFC | | | | AMI | | | 23 52 34.8 | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| ALFC | | | | AMI | | | 23 52 35.5 | |
| | comp=E,0.3nm,0.9s | | | | | | | |
| **NATA** | **Nata** | **4.94** | **95** | P | | **Pn** | **23 51 37.3** | **+0.7** |
| **SZAC** | **Soumi** | **5.20** | **95** | P | | **Pn** | **23 51 40.6** | **+0.5** |
| **ASGA** | **Asgata** | **5.49** | **94** | P | | **Pn** | **23 51 44.4** | **+0.3** |
| **MVOU** | **Mavrovouni** | **5.78** | **92** | P | | **Pn** | **23 51 48.9** | **+0.8** |
| **BRTR** | **Keskin Array B** | **7.08** | **50** | Pn | | **Pn** | **23 52 08.7** | **+2.7** |
| | comp=E,0.1nm,0.3s,baz=221,slow=15,SNR=2.5 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **7.67** | **105** | Pn | | **Pn** | **23 52 13.7** | **-0.5** |
| | comp=E,0.7nm,0.3s,baz=295,slow=11,SNR=7.7 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **23 53 43.0** | **+3.1** |
| | comp=E,1.6nm,0.3s,baz=316,slow=28,SNR=5.6 | | | | | | | |
| **NATI** | **Neve Ativ** | **7.85** | **103** | Pn | | **Pn** | **23 52 20.7** | **+4.1** |
| **MMLI** | **Mount Malkishu** | **7.90** | **109** | Pn | | **Pn** | **23 52 20.9** | **+3.6** |
| MMLI | | | | Sn | | **Sn** | **23 53 46.5** | **+0.6** |
| **KZIT** | **Kziot** | **7.92** | **122** | Pn | | **Pn** | **23 52 18.7** | **+1.2** |
| KZIT | | | | Sn | | **Sn** | **23 53 43.3** | **-2.7** |
| **HMDT** | **Nahal Hemdat** | **8.06** | **110** | Pn | | **Pn** | **23 52 22.3** | **+2.9** |
| **YTIR** | **Yattir** | **8.18** | **117** | Pn | | **Pn** | **23 52 23.8** | **+2.7** |
| YTIR | | | | Sn | | **Sn** | **23 53 51.4** | **-1.0** |
| **GHAJ** | **Ghor Haditha** | **8.54** | **116** | Pn | | **Pn** | **23 52 28.8** | **+2.9** |
| **KRMI** | **Paran Flat** | **8.63** | **125** | Pn | | **Pn** | **23 52 28.5** | **+1.3** |
| KRMI | | | | Sn | | **Sn** | **23 54 00.6** | **-2.8** |
| **ZFRI** | **Zfri** | **8.67** | **121** | Pn | | **Pn** | **23 52 29.0** | **+1.2** |
| **PRNI** | **Paran** | **8.67** | **123** | Pn | | **Pn** | **23 52 29.3** | **+1.5** |
| PRNI | | | | Sn | | **Sn** | **23 54 02.1** | **-2.4** |
| **HRFI** | **Mount Harif** | **8.89** | **124** | Pn | | **Pn** | **23 52 32.4** | **+1.6** |
| HRFI | | | | Sn | | **Sn** | **23 54 07.2** | **-2.6** |
| **EIL** | **Elat** | **9.07** | **127** | Pn | | **Pn** | **23 52 33.9** | **+0.6** |
| | comp=E,0.2nm,0.3s,baz=225,slow=2.9,SNR=1.6 | | | | | | | |
| EIL | | | | Sn | | **Sn** | **23 54 09.6** | **-4.5** |
| | comp=E,0.2nm,0.3s,baz=350,slow=24,SNR=1.7 | | | | | | | |
| **EIL** | **Elat** | **9.07** | **127** | Pn | | **Pn** | **23 52 34.9** | **+1.7** |
| **TORD** | **Torodi Ar. Bea** | **31.54** | **232** | P | | **P** | **23 56 41.9** | **-2.0** |
| | comp=E,0.4nm,0.8s,baz=45,slow=9.2,SNR=2.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.07** | **51** | P | | **P** | **23 57 56.6** | **-0.1** |
| | comp=E,0.3nm,0.6s,baz=276,slow=9.1,SNR=2.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.67** | **57** | P | | **P** | **23 58 19.3** | **+1.1** |
| | comp=E,0.2nm,0.5s,baz=268,slow=8.9,SNR=3.3 | | | | | | | |

*IDC **07** 23:57:07.2±6.5, 52°.64N×169°.68W, h0[km], mb3.2/4, mb1 3.7/5, mb1mx3.4/45, mbtmp3.4/5, ML3.5/1, Error ellipse: s-maj=115.0km s-min=56.9km az=88.0*

*AEIC **07** 23:57:09.1±1.3, 52°.23N±0°.09×170°.36W±0°.09, h34[km±7[km]], ML3.4/30, Error ellipse: s-maj=15.3km s-min=3.4km az=151.0*

*NEIC **07** 23:57:10.6±1.6, 52°.27N±0°.07×170°.36W±0°.06, h40[km±14[km]], Error ellipse: s-maj=10.1km s-min=5.4km az=169.0*

**ISC 07 23:57:10.1±1.6, 52°.3N±0°.2×170°.36W±0°.07, h48[km±16[km]], n46, σ1§22/45, mb3.2/4, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CLES** | **Cleveland East** | **0.63** | **26** | | | **Pn** | **23 57 22.1** | **-0.7** |
| **CLES** | **Cleveland East** | **0.63** | **26** | | | **Sn** | **23 57 31.4** | **-0.7** |
| **CLCO** | **Concord Point,** | **0.66** | **36** | | | **Pn** | **23 57 22.3** | **-0.8** |
| CLCO | | | | | | **Sn** | **23 57 32.6** | **+1.0** |
| **NIKH** | **Nikolski High** | **1.16** | **51** | | | **Pn** | **23 57 28.9** | **-1.0** |
| NIKH | | | | | | **Sn** | **23 57 43.8** | **-0.8** |
| **OKSP** | **Okmok Steeple** | **1.60** | **51** | | | **Pn** | **23 57 36.0** | **0.0** |
| **OKCE** | **Okmok Cone E** | **1.77** | **48** | | | **Pn** | **23 57 39.0** | **+0.7** |
| **OKNC** | **Okmok New Cone** | **1.81** | **48** | | | **Pn** | **23 57 39.7** | **+0.9** |
| **OKFG** | **Magazine Ridge** | **1.88** | **51** | | | **Pn** | **23 57 40.1** | **+0.4** |
| OKFG | | | | | | **Sn** | **23 58 03.1** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **2.30** | **272** | | | **Pn** | **23 57 45.9** | **+0.4** |
| **ATKA** | **Atka Island** | **2.36** | **270** | | | **Pn** | **23 57 45.8** | **-0.4** |
| ATKA | | | | | | **Sn** | **23 58 13.7** | **-0.3** |
| **MAPS** | **Pakushin South** | **2.58** | **52** | | | **Pn** | **23 57 49.6** | **+0.2** |
| MAPS | | | | | | **Sn** | **23 58 20.6** | **+1.2** |
| **MSW** | **Makushin Switc** | **2.72** | **51** | | | **Pn** | **23 57 51.7** | **+0.5** |
| **MTBL** | **Makushin Table** | **2.80** | **51** | | | **Pn** | **23 57 52.6** | **+0.2** |
| **UNV** | **Unalaska Valle** | **2.82** | **54** | | | **Pn** | **23 57 52.8** | **+0.3** |
| **UNV** | **Unalaska Valle** | **2.82** | **54** | | | **Sn** | **23 58 27.4** | **+2.2** |
| **AKMO** | **Akutan Morgan** | **3.20** | **53** | | | **Pn** | **23 57 58.9** | **+1.1** |
| **ZRO** | **Akutan Zero** | **3.21** | **53** | | | **Pn** | **23 57 59.4** | **+1.4** |
| **AHB** | **Akutan Harbor** | **3.31** | **54** | | | **Pn** | **23 58 00.2** | **+1.0** |
| **AKUT** | **Akutan** | **3.34** | **54**

*s-min=10.5km az=140.0*

**ISC 08 00:19:31.5**±0.4,**19°49S**±0'07×**173°07W**±0'06,**h26**km, **n203,** σ2**814**/154, **mb4.8**/40, **MS4.5**/51, **19C-8D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **5.69** | **13** | P | Pn | 00 20 49.4 | -5.1 |
| | 12nm,0.3s,baz=292,slow=2.6,SNR=11 | | | | | | |
| AFI | | | | S | Sn | 00 21 44.5 | -14 |
| | 12nm,0.3s,baz=357,slow=20,SNR=2.6 | | | | | | |
| **AFI** | **Afiamalu** | **5.69** | **13** | Pn | **Pn** | **00 20 52.2** | **-2.2** |
| **MSVF** | **Nonsavu** | **8.60** | **280** | P | **Pn** | **00 21 38.1** | **+3.7** |
| | 0.8nm,0.3s,baz=120,slow=11,SNR=47 | | | | | | |
| MSVF | | | | LR | LR | 00 24 24.1 | |
| | comp=Z,3μm,21.4s,baz=100,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **8.60** | **280** | Pn | **Pn** | **00 21 37.9** | **+3.4** |
| **RAR** | **Rarotonga** | **12.59** | **100** | P | **Pn** | **00 22 26.0** | **-3.1** |
| | 9.1nm,0.3s,baz=247,slow=7.9,SNR=16 | | | | | | |
| **RAR** | **Rarotonga** | **12.59** | **100** | Pn | **Pn** | **00 22 24.8** | **-4.3** |
| **MARNC** | **Mare, Loyalty** | **17.82** | **260** | Pn | **Pn** | **00 23 35.5** | **-2.2** |
| **PINNC** | **Pines Island,** | **18.45** | **257** | P | **Pn** | **00 23 45.7** | **+0.2** |
| PINNC | | | | IAmb | IAmb | 00 23 47.9 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **LIFNC** | **LIFOU** | **18.53** | **263** | P | **P** | **00 23 45.9** | **-0.3** |
| LIFNC | | | | IAmb | IAmb | 00 24 04.3 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **OUENC** | **Ouen Island, N** | **18.98** | **258** | P | **P** | **00 23 51.1** | **0.0** |
| **SANVU** | **Saraoutou** | **19.24** | **279** | P | **P** | **00 23 54.0** | **+0.1** |
| SANVU | | | | IAmb | IAmb | 00 23 56.9 | |
| | comp=Z,57nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.32** | **259** | *e*P | **Pn** | **00 23 56.4** | **+0.2** |
| | comp=Z,134nm,1.1s | | | | | | |
| DZM | | | | *e*LR | LR | 00 28 31.5 | |
| | comp=Z,1μm,21.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.32** | **259** | P | **P** | **00 23 54.6** | **-0.4** |
| | comp=Z,0.8nm,0.3s,baz=82,slow=16,SNR=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.32** | **259** | P | **P** | **00 23 55.2** | **+0.2** |
| DZM | | | | IAmb | IAmb | 00 23 57.6 | |
| | comp=Z,53nm,0.9s | | | | | | |
| **ONTNC** | **Ouen Toro** | **19.33** | **258** | P | **Pn** | **00 23 55.6** | **-0.5** |
| ONTNC | | | | IAmb | IAmb | 00 24 09.6 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **HAZ** | **Te Kaha** | **19.87** | **202** | P | **Pn** | **00 24 06.2** | **+3.8** |
| **MWZ** | **Matawai** | **20.48** | **202** | P | Pn | 00 24 14.3 | +4.6 |
| **URZ** | **Urewera** | **20.56** | **202** | P | Pn | 00 24 10.3 | -0.2 |
| | comp=Z,5.4nm,0.3s,baz=91,slow=0.9,SNR=8.2 | | | | | | |
| URZ | | | | S | **S** | **00 27 52.3** | **-4.6** |
| | comp=Z,3.4nm,0.2s,baz=45,slow=17,SNR=6.8 | | | | | | |
| **URZ** | **Urewera** | **20.56** | **202** | P | Pn | 00 24 12.4 | +1.9 |
| **URZ** | **Urewera** | **20.56** | **202** | P | **P** | **00 24 09.0** | **+0.8** |
| **RAGZ** | **Rawiri** | **20.66** | **202** | P | Pn | 00 24 13.5 | +1.7 |
| **TOZ** | **Tahuroa Road** | **20.73** | **206** | P | Pn | 00 24 15.7 | +3.3 |
| **RTZ** | **Ruatahuna** | **20.92** | **202** | P | Pn | 00 24 16.5 | +1.7 |
| **MTHZ** | **Maungataniwha** | **21.18** | **202** | P | **P** | **00 24 20.4** | **+5.4** |
| **HIZ** | **Hauiti** | **21.66** | **206** | P | **P** | **00 24 25.3** | **+5.2** |
| **TMVZ** | **Te Maari** | **21.83** | **204** | P | **P** | **00 24 26.0** | **+4.0** |
| **ETVZ** | **East Tongariro** | **21.85** | **204** | P | **P** | **00 24 25.6** | **+3.3** |
| **OTVZ** | **Oturere** | **21.89** | **204** | P | **P** | **00 24 25.4** | **+2.6** |
| **SNVZ** | **South Ngauruho** | **21.92** | **204** | P | **P** | **00 24 27.1** | **+4.0** |
| **PAE** | **Paea** | **22.34** | **89** | *e*T | T | 00 47 11.6 | |
| | comp=Z,2.8nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **22.36** | **89** | *e*LQ | LQ | 00 28 44.9 | |
| | comp=Z,1μm,26.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 29 26.4 | |
| | comp=Z,2μm,28.5s | | | | | | |
| **PPT** | **Papeete** | **22.36** | **89** | LR | LR | 00 31 37.2 | |
| | comp=Z,1μm,18.4s,baz=210,slow=32 | | | | | | |
| **LTZ** | **Lake Taylor** | **26.31** | **205** | P | **P** | **00 25 07.1** | **+1.9** |
| LTZ | | | | IAmb | IAmb | 00 25 20.5 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **OXZ** | **Oxford** | **26.86** | **205** | P | **P** | **00 25 11.8** | **+1.7** |
| **MQZ** | **McQueen's Vall** | **26.95** | **203** | P | **P** | **00 25 11.6** | **+0.8** |
| MQZ | | | | IAmb | IAmb | 00 25 12.3 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.58** | **205** | P | **P** | **00 25 18.2** | **+1.7** |
| RPZ | | | | IAmb | IAmb | 00 25 30.1 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **HNR** | **Honiara** | **27.93** | **287** | LR | LR | 00 36 37.6 | |
| | comp=Z,330nm,18.8s,baz=118,slow=37 | | | | | | |
| **FOZ** | **Fox Glacier** | **27.95** | **207** | P | **P** | **00 25 21.8** | **+2.0** |
| **TAOE** | **Nuku Hiva Isla** | **33.56** | **76** | *e*LR | LR | 00 34 47.0 | |
| | comp=Z,556nm,20.8s | | | | | | |
| **CAN** | **Canberra** | **36.93** | **237** | P | **P** | **00 26 38.1** | **-0.4** |
| CAN | | | | IAmb | IAmb | 00 26 39.7 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **38.21** | **262** | P | **P** | **00 26 47.6** | **-1.8** |
| | comp=Z,24nm,0.8s,baz=91,slow=10.0,SNR=24 | | | | | | |
| **CTAO** | **Charters Tower** | **38.21** | **262** | P | **P** | **00 26 48.6** | **-0.8** |
| **PMG** | **Port Moresby** | **39.70** | **279** | P | **P** | **00 27 00.5** | **-1.5** |
| | comp=Z,6.3nm,0.2s,baz=54,slow=6.0,SNR=5.3 | | | | | | |
| PMG | | | | LR | LR | 00 42 37.7 | |
| | comp=Z,761nm,18.1s,baz=104,slow=35 | | | | | | |
| **PMG** | **Port Moresby** | **39.70** | **279** | P | **P** | **00 27 01.0** | **-1.0** |
| PMG | | | | IAmb | IAmb | 00 27 13.9 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **HLP** | **Hilina Pali** | **42.30** | **25** | P | **P** | **00 27 22.8** | **-0.5** |
| **STKA** | **Stephens Creek** | **42.39** | **244** | P | **P** | **00 27 23.1** | **-0.9** |
| | comp=Z,2.5nm,0.7s,baz=87,slow=9.7,SNR=6.5 | | | | | | |
| STKA | | | | LR | LR | 00 43 38.2 | |
| | comp=Z,700nm,19.1s,baz=57,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **42.39** | **244** | P | **P** | **00 27 22.6** | **-1.4** |
| **JAY** | **Jayapura** | **48.20** | **285** | P | **P** | **00 28 09.9** | **-0.4** |
| | comp=Z,6.7nm,0.5s,baz=91,slow=9.6,SNR=3.5 | | | | | | |
| **AS31** | **Alice Springs** | **49.26** | **255** | IAmb | IAmb | 00 28 18.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **49.26** | **255** | P | **P** | **00 28 16.3** | **-2.0** |
| | comp=Z,28nm,0.9s,baz=86,slow=8.5,SNR=188 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 29 40.2** | **-0.9** |
| | comp=Z,4.5nm,0.6s,baz=90,slow=6.9,SNR=5.5 | | | | | | |
| ASAR | | | | S | **S** | **00 35 17.9** | **-5.3** |
| | comp=Z,0.1nm,0.4s,baz=92,slow=17,SNR=1.7 | | | | | | |
| ASAR | | | | LR | LR | 00 49 14.1 | |
| | comp=Z,452nm,19.8s,baz=100,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **49.26** | **255** | P | **P** | **00 28 16.9** | **-1.4** |
| **WB0** | **Warramunga Arr** | **49.31** | **260** | IAmb | IAmb | 00 28 21.7 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **49.32** | **260** | P | **P** | **00 28 17.2** | **-1.7** |
| WB2 | | | | IAmb | IAmb | 00 28 21.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **49.33** | **260** | P | **P** | **00 28 18.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **49.33** | **260** | P | **P** | **00 28 16.1** | **-2.8** |
| | comp=Z,4.5nm,0.6s,baz=97,slow=7.4,SNR=39 | | | | | | |
| WRA | | | | S | **S** | **00 35 16.8** | **-7.4** |
| | comp=Z,0.2nm,0.4s,baz=146,slow=9.3,SNR=2.8 | | | | | | |
| WRA | | | | LR | LR | 00 49 31.5 | |
| | comp=Z,552nm,19.4s,baz=88,slow=37 | | | | | | |
| **GUMO** | **Guam** | **52.87** | **305** | LR | LR | 00 50 11.9 | |
| | comp=Z,95nm,19.6s,baz=122,slow=35 | | | | | | |
| **SIJI** | **Sorong** | **57.51** | **282** | LR | LR | 00 54 28.4 | |
| | comp=Z,166nm,18.9s,baz=156,slow=36 | | | | | | |
| **SWI** | **Sorong** | **57.52** | **282** | P | **P** | **00 29 19.8** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **57.76** | **260** | LR | LR | 00 54 02.3 | |
| | comp=Z,296nm,18.5s,baz=100,slow=36 | | | | | | |
| **RPN** | **Rapa Nui** | **58.50** | **110** | LR | LR | 00 49 07.1 | |
| | comp=Z,540nm,18.1s,baz=273,slow=30 | | | | | | |
| **VNDA** | **Vanda** | **59.36** | **186** | LR | LR | 00 50 23.1 | |
| | comp=Z,166nm,20.6s,baz=354,slow=31 | | | | | | |
| **SOEI** | **Soe** | **61.12** | **269** | P | **P** | **00 29 45.0** | **+0.8** |
| | comp=Z,62nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **61.12** | **269** | P | **P** | **00 29 43.7** | **-0.5** |
| **BATI** | **Baumata** | **61.56** | **269** | LR | LR | 00 57 14.1 | |
| | comp=Z,239nm,19.4s,baz=142,slow=37 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **62.41** | **255** | P | **P** | **00 29 52.1** | **-0.6** |
| **MBWA** | **Marble Bar** | **62.59** | **256** | P | **P** | **00 29 52.9** | **-1.0** |
| **KAPI** | **Kappang** | **66.84** | **273** | LR | LR | 00 59 50.6 | |
| | comp=Z,57nm,18.4s,baz=156,slow=36 | | | | | | |
| **TOLI2** | **Tolitoli** | **67.97** | **279** | P | **P** | **00 30 27.9** | **-0.9** |
| TOLI2 | | | | IAmb | IAmb | 00 30 32.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **69.02** | **319** | LR | LR | 01 02 09.3 | |
| | comp=Z,65nm,18.1s,baz=238,slow=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **70.58** | **180** | P | **P** | **00 30 44.2** | **0.0** |
| | comp=Z,4.3nm,1.1s,baz=276,slow=19,SNR=3.2 | | | | | | |
| QSPA | | | | LR | LR | 00 58 03.7 | |
| | comp=Z,164nm,19.9s,baz=54,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **70.58** | **180** | IAmb | IAmb | 00 31 02.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.26** | **321** | P | **P** | **00 30 54.4** | **-0.3** |
| | comp=Z,9.2nm,1.0s,baz=162,slow=5.7,SNR=8.8 | | | | | | |
| MJAR | | | | LR | LR | 00 58 32.4 | |
| | comp=Z,192nm,21.0s,baz=121,slow=32 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.26** | **321** | P | **P** | **00 30 56.0** | **+1.3** |
| **MAT** | **Matsushiro** | **72.27** | **321** | P | **P** | **00 30 55.4** | **+0.7** |
| MAT | | | | eS | **S** | **00 40 13.0** | **-3.2** |
| **SHEM** | **Shemya Is, Ala** | **72.78** | **352** | LR | LR | 00 57 40.8 | |
| | comp=Z,340nm,21.2s,baz=144,slow=31 | | | | | | |
| **LPIG** | **La Paz** | **74.94** | **57** | LR | LR | 00 57 10.3 | |
| | comp=Z,480nm,19.5s,baz=216,slow=30 | | | | | | |
| **ASAJ** | **Asahikawa** | **75.17** | **329** | LR | LR | 00 59 52.8 | |
| | comp=Z,251nm,20.3s,baz=148,slow=32 | | | | | | |
| **PFO** | **Pinyon Flats O** | **75.49** | **46** | LR | LR | 00 57 37.9 | |
| | comp=Z,223nm,19.6s,baz=246,slow=30 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.60** | **342** | LR | LR | 00 59 49.4 | |
| | comp=Z,50nm,19.9s,baz=170,slow=32 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **76.67** | **36** | LR | LR | 00 58 51.4 | |
| | comp=Z,313nm,18.9s,baz=246,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.17** | **41** | P | **P** | **00 31 25.9** | **+2.6** |
| | comp=Z,1.9nm,0.8s,baz=228,slow=9.7,SNR=13 | | | | | | |
| NVAR | | | | LR | LR | 01 00 50.8 | |
| | comp=Z,341nm,18.0s,baz=206,slow=32 | | | | | | |
| **NV11** | **Mina Array Sit** | **77.26** | **41** | | sP | 00 31 35.2 | +3.6 |
| **LEM** | **Lembang** | **77.70** | **267** | LR | LR | 01 06 23.4 | |
| | comp=Z,192nm,19.3s,baz=142,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.85** | **11** | LR | LR | 01 00 39.6 | |
| | comp=Z,299nm,18.6s,baz=219,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **79.29** | **316** | P | **P** | **00 31 34.0** | **-0.9** |
| | comp=Z,2.8nm,1.0s,baz=130,slow=6.5,SNR=7.6 | | | | | | |
| KSRS | | | | LR | LR | 01 02 10.3 | |
| | comp=Z,105nm,20.6s,baz=110,slow=32 | | | | | | |
| **KSAR** | **Wonju Array Be** | **79.31** | **316** | P | **P** | **00 31 37.0** | **+2.1** |
| **PMSA** | **Palmer Station** | **80.33** | **156** | LR | LR | 01 00 04.0 | |
| | comp=Z,228nm,18.9s,baz=276,slow=30 | | | | | | |
| **ELK** | **Elko** | **80.45** | **41** | LR | LR | 01 03 39.7 | |
| | comp=Z,361nm,18.2s,baz=238,slow=33 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **80.83** | **323** | LR | LR | 01 03 05.5 | |
| | comp=Z,389nm,20.4s,baz=128,slow=32 | | | | | | |
| **USHA** | **Ushuaia** | **82.38** | **146** | LR | LR | 01 05 12.2 | |
| | comp=Z,152nm,18.4s,baz=236,slow=33 | | | | | | |
| **MNTX** | **Cornudas Mount** | **82.42** | **53** | | pP | 00 31 56.5 | -1.0 |
| **PLID** | **Pearl Lake** | **82.58** | **37** | P | **P** | **00 31 51.7** | **-0.8** |
| **TX32** | **Lajitas Array** | **82.64** | **56** | | pP | 00 31 58.3 | -0.6 |
| **TXAR** | **Lajitas Array** | **82.64** | **56** | P | **P** | **00 31 54.6** | **+1.6** |
| | comp=Z,2.1nm,1.1s,baz=218,slow=7.9,SNR=11 | | | | | | |
| TXAR | | | | LR | LR | 01 02 60.0 | |
| | comp=Z,227nm,18.2s,baz=251,slow=31 | | | | | | |
| **NJ2** | **Nanjing** | **82.88** | **307** | *e*P | **P** | **00 31 56.0** | **+2.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **ANMO** | **Albuquerque** | **83.20** | **49** | LR | LR | 01 02 13.6 | |
| | comp=Z,172nm,18.5s,baz=265,slow=31 | | | | | | |
| **NEW** | **Newport** | **83.90** | **34** | LR | LR | 01 04 56.8 | |
| | comp=Z,700nm,18.2s,baz=234,slow=32 | | | | | | |
| **KLR** | **Kul'dur** | **84.11** | **327** | LR | LR | 01 05 00.2 | |
| | comp=Z,154nm,19.6s,baz=137,slow=32 | | | | | | |
| **BNX** | **BinXian** | **84.36** | **323** | ⇓P | **P** | **00 32 02.9** | **+1.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,290nm,5.6s | | | | | | |
| **CN2** | **Changchun** | **84.41** | **320** | *e*P | **P** | **00 32 04.9** | **+3.3** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **RND** | **Reindeer** | **84.78** | **11** | P | **P** | **00 32 03.2** | **+0.1** |
| RND | | | | IAmb | IAmb | 00 32 15.9 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **CMIG** | **Matias Romero** | **84.96** | **70** | LR | LR | 01 01 56.3 | |
| | comp=Z,276nm,20.0s,baz=229,slow=30 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.10** | **41** | P | **P** | **00 32 06.0** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=212,slow=4.7,SNR=3.8 | | | | | | |
| PDAR | | | | LR | LR | 01 06 21.0 | |
| | comp=Z,204nm,18.1s,baz=294,slow=33 | | | | | | |
| **MSTX** | **Muleshoe** | **85.42** | **52** | | pP | 00 32 11.7 | -1.2 |
| **WRH** | **Wood River Hil** | **85.89** | **11** | P | **P** | **00 32 09.1** | **+0.5** |
| **HDA** | **Harding Lake** | **86.04** | **11** | P | **P** | **00 32 08.8** | **-0.5** |
| HDA | | | | IAmb | IAmb | 00 32 26.1 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.10** | **11** | P | **P** | **00 32 09.7** | **+0.1** |
| CCB | | | | IAmb | IAmb | 00 32 22.9 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **86.31** | **10** | IAmb | IAmb | 00 32 30.8 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **86.32** | **10** | P | **P** | **00 32 11.4** | **+0.6** |
| **IL31** | | **86.38** | **11** | P | **P** | **00 32 11.1** | **+0.2** |
| **ILAR** | **Eielson Array** | **86.38** | **11** | P | **P** | **00 32 11.4** | **+0.5** |
| | comp=Z,1.2nm,0.7s,baz=228,slow=5.9,SNR=18 | | | | | | |
| ILAR | | | | LR | LR | 01 05 21.3 | |
| | comp=Z,193nm,19.4s,baz=182,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **86.38** | **11** | P | **P** | **00 32 11.3** | **+0.3** |
| **PLCA** | **Paso Flores** | **86.55** | **132** | P | **P** | **00 32 14.9** | **+2.2** |
| | comp=Z,4.3nm,1.0s,baz=234,slow=6.2,SNR=5.1 | | | | | | |
| PLCA | | | | LR | LR | 01 06 38.1 | |
| | comp=Z,206nm,18.0s,baz=227,slow=32 | | | | | | |
| **PLCA** | **Paso Flores** | **86.55** | **132** | | pP | 00 32 18.2 | -0.1 |
| **APG** | **El Apazote** | **88.17** | **73** | LR | LR | 01 03 25.4 | |
| | comp=Z,216nm,19.8s,baz=85,slow=30 | | | | | | |
| **HNS** | **HongShan** | **88.35** | **311** | ⇑P | **P** | **00 32 23.5** | **+2.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **BJI** | **Beijing** | **88.50** | **314** | P | **P** | **00 32 24.2** | **+2.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.8s | | | | | | |
| **LYN** | **LuoYang** | **88.78** | **307** | ⇓P | **P** | **00 32 26.1** | **+2.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,130nm,9.0s | | | | | | |
| **TIY** | **Taiyuan** | **90.11** | **310** | *e*P | **P** | **00 32 33.3** | **+3.8** |
| **XLT** | **XiLinHaoTe** | **90.31** | **317** | *e*P | **P** | **00 32 32.3** | **+2.0** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,330nm,5.2s | | | | | | |
| **JTS** | **Las Juntas de** | **91.63** | **80** | LR | LR | 01 04 25.4 | |
| | comp=Z,358nm,21.9s,baz=134,slow=29 | | | | | | |
| **NNA** | **Nana** | **91.82** | **102** | LR | LR | 01 04 59.1 | |
| | comp=Z,162nm,19.7s,baz=264,slow=30 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **92.02** | **313** | *e*P | **P** | **00 32 41.2** | **+2.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,260nm,6.2s | | | | | | |
| **ATAH** | **Atahualpa** | **92.03** | **98** | LR | LR | 01 06 12.0 | |
| | comp=Z,347nm,18.1s,baz=263,slow=30 | | | | | | |
| **INK** | **Inuvik** | **92.14** | **14** | LR | LR | 01 12 41.3 | |
| | comp=Z,175nm,18.1s,baz=190,slow=34 | | | | | | |
| **YAK** | **Yakutsk** | **92.97** | **337** | LR | LR | 01 11 15.8 | |
| | comp=Z,81nm,19.9s,baz=103,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.71** | **23** | P | **P** | **00 32 47.1** | **+1.7** |
| | comp=Z,0.3nm,0.8s,baz=235,slow=4.4,SNR=5.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.18** | **288** | P | **P** | **00 32 48.8** | **+0.1** |
| | comp=Z,2.2nm,0.8s,baz=118,slow=2.8,SNR=8.2 | | | | | | |
| CMAR | | | | LR | LR | 01 12 25.6 | |
| | comp=Z,64nm,20.8s,baz=130,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.18** | **288** | P | **P** | **00 32 51.4** | **+2.7** |
| **PZH** | **PanZhiHua** | **94.37** | **296** | P | **P** | **00 32 51.6** | **+2.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,5.6s | | | | | | |
| **LVC** | **Limon Verde** | **94.96** | **116** | LR | LR | 01 07 01.7 | |
| | comp=Z,170nm,19.4s,baz=234,slow=30 | | | | | | |
| **LZH** | **Lanzhou** | **95.88** | **306** | *e*P | **P** | **00 32 59.4** | **+3.1** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.5s | | | | | | |
| **ULM** | **Lac du Bonnet** | **96.90** | **39** | LR | LR | 01 12 16.6 | |
| | comp=Z,352nm,18.0s,baz=264,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **98.08** | **318** | P | **P** | **00 33 04.8** | **-1.1** |
| | comp=Z,0.7nm,1.1s,baz=122,slow=3.5,SNR=3.5 | | | | | | |
| SONM | | | | LR | LR | 01 13 25.1 | |
| | comp=Z,86nm,19.9s,baz=106,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **98.08** | **318** | IAmb | IAmb | 00 33 07.2 | |
| | comp=Z,1.3nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **98.11** | **110** | LR | LR | 01 10 23.8 | |
| | comp=Z,208nm,18.5s,baz=250,slow=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **116.44** | **318** | PKP | **PKPdf** | **00 38 12.5** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=64,slow=2.2,SNR=1.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **121.26** | **321** | PKP | **PKPdf** | **00 38 21.8** | **-0.2** |
| | comp=Z,1.0nm,0.5s,baz=134,slow=8.5,SNR=1.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.68** | **352** | PKP | **PKPdf** | **00 38 34.2** | **-1.5** |
| | comp=Z,2.5nm,0.8s,baz=47,slow=5.3,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **135.98** | **347** | PKhKP | PKPpre | 00 38 45.1 | |
| | comp=Z,6.6nm,1.0s,baz=183,slow=30,SNR=2.1 | | | | | | |
| **NACGM** | **Naroch** | **141.56** | **342** | *i* PKP | **PKPdf** | **00 38 56.0** | **-4.1** |
| **KMBO** | **Kilima Mbogo** | **143.87** | **239** | PKP | PKPbc | 00 39 04.2 | +0.6 |
| | comp=Z,0.5nm,0.5s,baz=58,slow=3.5,SNR=2.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.20** | **336** | PKP | PKPbc | 00 39 03.3 | +0.2 |
| | comp=Z,0.3nm,0.4s,baz=38,slow=3.9,SNR=9.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.20** | **336** | PKPdf | **PKPdf** | **00 39 05.5** | **+0.6** |
| **BSEG** | **Bad Segeberg** | **145.52** | **356** | *e*PKPbc | **PKiKP** | **00 39 09.6** | **-1.5** |
| | baz=355,slow=2.6 | | | | | | |
| **SORM** | **Soroca** | **146.57** | **334** | ⇑P | **PKPab** | **00 39 12.2** | **+0.6** |
| **FLTG** | **Flechtingen** | **147.05** | **355** | *e*PKPbc | **PKiKP** | **00 39 14.1** | **-0.2** |
| | baz=355,slow=2.6 | | | | | | |
| **PURM** | **Purcari** | **147.11** | **330** | ⇓P | **PKiKP** | **00 39 14.2** | **-0.4** |
| **MILM** | **Milestii Mici** | **147.31** | **332** | ⇓P | PKiKP | 00 39 24.2 | +9.2 |
| **CLZ** | **Clausthal** | **147.60** | **356** | *e*PKPbc | **PKPab** | **00 39 16.2** | **+0.6** |
| | baz=355,slow=2.6 | | | | | | |
| **CLL** | **Collm** | **147.89** | **353** | *e*PKPbc | **PKiKP** | **00 39 16.0** | **-0.1** |
| CLL | | | | *ep*PKPdf | **sPKPbc** | **00 39 21.0** | **-0.8** |
| CLL | | | | *ep*PKiKP | **sPKPab** | **00 39 26.0** | **+1.8** |
| | comp=Z,46nm,1.7s | | | | | | |
| **CLL** | **Collm** | **147.89** | **353** | *e*PKPbc | **PKPab** | **00 39 16.7** | **0.0** |
| | baz=355,slow=2.6 | | | | | | |
| **LODK** | **Lodwar** | **147.97** | **244** | PKPab | **PKPab** | **00 39 17.9** | **+0.4** |
| **CHVC** | **Chvalec** | **148.13** | **349** | ⇑*e*PKP | **PKPab** | **00 39 19.9** | **+2.2** |
| **OSTC** | **Ostas** | **148.14** | **349** | ⇑*e*PKP | **PKPab** | **00 39 20.0** | **+2.3** |
| **BRG** | **Berggiesshubel** | **148.19** | **352** | *e*P | **PKPab** | **00 39 19.4** | **+1.5** |
| BRG | | | | Amp | | 00 39 20.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| BRG | | | | *ex* | x | 00 39 28.3 | |
| BRG | | | | Amp | | 00 39 35.8 | |
| | comp=Z,45nm,1.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **148.19** | **352** | *e*PKPbc | **PKPab** | **00 39 19.5** | **+1.5** |
| | baz=355,slow=2.6 | | | | | | |
| **BURAR** | **Bucovina Array** | **148.24** | **336** | ⇑P | **PKPab** | **00 39 20.7** | **+2.3** |
| **GAZ** | **Gaziantep** | **148.24** | **310** | | **PKiKP** | **00 39 16.8** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **148.31** | **349** | ⇑*e*PKP | **PKPab** | **00 39 18.2** | **-0.3** |
| **CRVS** | **Cervenica-Dubn** | **148.41** | **342** | *e*PKP | **PKPab** | **00 39 20.7** | **+1.8** |
| **KRLC** | **Kraliky** | **148.49** | **348** | ⇑*e*PKP | **PKiKP** | **00 39 18.2** | **+0.8** |
| **GHRR** | | **148.59** | **332** | ⇑P | PKPab | 00 39 34.8 | +15 |
| **TLCR** | | **148.60** | **330** | ⇑P | **PKPab** | **00 39 21.3** | **+1.6** |
| **MORC** | **Moravsky Berou** | **148.61** | **347** | *e*PKP | **PKiKP** | **00 39 18.0** | **+0.3** |
| **LANS** | **Liptovska Anna** | **148.74** | **344** | *e*PKP | **PKPab** | **00 39 21.5** | **+1.3** |
| **TRPA** | **Tarpa** | **148.75** | **340** | ⇑P | **PKPab** | **00 39 19.1** | **-1.1** |
| **PRU** | **Pruhonice** | **148.97** | **350** | ⇑*e*PKP | **PKPab** | **00 39 19.8** | **-1.3** |
| **VRI** | **Vrincioaia** | **149.03** | **333** | ⇓P | **PKPab** | **00 39 22.5** | **+1.0** |
| **VRAC** | **Vranov** | **149.25** | **348** | *e*PKP | **PKPab** | **00 39 20.2** | **+1.2** |
| **TIRR** | **Tirgusor** | **149.33** | **329** | ⇑P | **PKPab** | **00 39 25.2** | **+2.5** |
| **BRTR** | **Keskin Array B** | **149.44** | **317** | PKPbc | **PKPbc** | **00 39 18.8** | **+0.1** |
| | comp=Z,3.3nm,0.8s,baz=71,slow=0.5,SNR=16 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.44** | **317** | | **PKiKP** | **00 39 20.2** | **+0.4** |
| **JAVC** | **Velka Javorina** | **149.45** | **346** | *e*PKP | **PKiKP** | **00 39 20.8** | **+1.3** |
| **DOPR** | **Dopca** | **149.52** | **334** | ⇑P | **PKPab** | **00 39 21.8** | **-1.7** |
| **KRUC** | **Moravsky** | **149.53** | **348** | *e*PKP | **PKiKP** | **00 39 20.7** | **+1.2** |
| **MLR** | **Muntele Rosu** | **149.67** | **333** | ⇓P | **PKiKP** | **00 39 21.1** | **+1.0** |
| **MLR** | **Muntele Rosu** | **149.67** | **333** | | **PKiKP** | **00 39 21.2** | **+1.0** |
| **GRF** | **Grafenberg Arr** | **149.67** | **354** | *e*PKPbc | **PKiKP** | **00 39 21.6** | **+1.8** |
| | baz=355,slow=2.6 | | | | | | |
| **SMOL** | **Smolenice** | **149.83** | **346** | *e*PKP | **PKPab** | **00 39 24.8** | **+0.2** |
| **DRGR** | | **149.85** | **338** | ⇑P | **PKiKP** | **00 39 21.9** | **+1.5** |
| **ANTO** | **Ankara** | **149.89** | **318** | PKPab | **PKiKP** | **00 39 22.9** | **+2.2** |
| **KHC** | **Kasperske Hory** | **149.95** | **351** | ⇑*e*PKP | **PKiKP** | **00 39 22.1** | **+1.6** |
| **KHC** | **Kasperske Hory** | **149.95** | **351** | | **PKiKP** | **00 39 22.2** | **+1.7** |
| **MODS** | **Modra-Piesok** | **149.99** | **346** | *e*PKP | **PKPab** | **00 39 25.2** | **-0.1** |
| **WET** | **Wettzell** | **150.03** | **352** | *e*PKPbc | **PKiKP** | **00 39 22.0** | **+1.4** |
| | baz=355,slow=2.6 | | | | | | |
| **VOIR** | | **150.09** | **334** | 

TKM2 ⇓S Sn 00 36 16.5 -5.3
44nm,0.9s
**SGDS Sogindy 7.67 25** *eP* **Pn 00 34 55.4 -1.6**
baz=24
SGDS *eS* **Sn 00 36 20.2 -3.5**
baz=24
**KDJ Kajisay 7.74 42 Pn 00 34 57.5 -0.4**
**TARG Taragay, Kyrgy 7.82 46 Pn 00 34 58.0 -1.2**
**TNSS Tian-Shan 8.28 36** *eP* **Pn 00 35 04.5 -0.7**
baz=36
**MDOK Medeo 8.42 36** *eP* **Pn 00 35 06.1 -0.7**
baz=36
MDOK *eS* **Sn 00 36 38.7 -2.8**
baz=36
**MDOK Medeo 8.42 36** ⇑P **Pn 00 35 06.5 -0.3**
14nm,0.6s
**PRZ Przheval'sk 8.64 44 Pn 00 35 09.5 -0.2**
**BTLS Baital 8.96 17** *eP* **Pn 00 35 12.8 -0.9**
baz=17
**SATY Saty 9.03 41** *eP* **Pn 00 35 13.3 -1.4**
baz=41
**ZHN Zhinishke 9.12 41** *eP* **Pn 00 35 14.3 -1.6**
baz=41
**UZB Uzynbulak 9.43 43** *eP* **Pn 00 35 18.0 -1.8**
baz=43
**KPKS Kokpek 9.46 40** *eP* **Pn 00 35 18.8 -1.4**
baz=40
KPKS *eS* **Sn 00 37 02.9 -3.2**
baz=40
**NDI New Delhi 9.78 141** *eP* **Pn 00 35 22.1 -2.3**
NDI ⇑*eS* Sn 00 37 00.5 -13
**GEYT Alibeck 9.79 282** P **Pn 00 35 23.8 -0.7**
0.3nm,0.3s,baz=95,slow=16,SNR=5.9
GEYT S **Sn 00 37 10.8 -3.1**
1.5nm,0.3s,baz=24,slow=26,SNR=5.4
**KUDL Kundal 9.88 146** *eP* **Pn 00 35 22.6 -3.1**
KUDL *eS* Sn 00 37 00.7 -15
**SONA Sohna 10.07 143** *eS* Sn 00 37 08.5 -12
**TDK Taldyqorghan 10.46 34** *eP* **Pn 00 35 31.9 -1.2**
baz=33
**AJM Ajmer 10.70 158**⇑*eP* **Pn 00 35 34.5 -1.8**
**OTUK Ortayu 11.80 7** ⇓P **Pn 00 35 48.9 -1.3**
7.4nm,0.7s
**JHNI Jhansi 13.11 145** *eP* **Pn 00 36 07.0 +0.1**
JHNI *eS* S 00 38 18.1 -15
**MAKZ Makanchi 13.47 37** ⇑P **Pn 00 36 09.6 -1.6**
24nm,0.7s
**MAKZ Makanchi 13.47 37** Pn **Pn 00 36 10.6 -0.7**
**BRZS Berezniki 13.55 7** *eP* **Pn 00 36 11.8 -0.3**
baz=6.1
**MK31 Makanchi Array 13.61 37** ⇑P **Pn 00 36 12.7 -0.3**
16nm,0.7s,baz=216,slow=12,SNR=92
**MK31 Makanchi Array 13.61 37** Pn **Pn 00 36 12.9 -0.1**
**MKAR Makanchi Array 13.61 37** P **Pn 00 36 12.6 -0.4**
1.1nm,0.3s,baz=215,slow=10,SNR=46
**MKAR Makanchi Array 13.61 37** Pn **Pn 00 36 12.5 -0.5**
**DANN Dangsing 14.01 122** *eP* **Pn 00 36 16.0 -2.3**
37nm,0.3s
**BHPL Bhopal 14.62 153** *eP* **P 00 36 27.3 +0.5**
BHPL IAmb IAmb 00 36 28.5
comp=Z,33nm,0.6s
BHPL *eS* S 00 38 57.7 -11
**AB31 Akbulak array 14.77 333** P **Pn 00 36 27.0 -0.2**
comp=Z,1.8nm,0.3s,baz=148,slow=12,SNR=188
AB31 S **S 00 39 05.4 -5.8**
comp=Z,2.1nm,0.6s,baz=152,slow=24,SNR=4.9
**ABKAR Akbulak array 14.77 333 Pn 00 36 25.7 -1.5**
**ABKAR Akbulak array 14.77 333 Pn 00 36 26.4 -0.8**
**GKN Gorkha 14.82 121** *eP* **Pn 00 36 26.8 -1.4**
comp=Z,54nm,0.3s
**WMQ Urumqi 15.16 56** *eP* **P 00 36 33.8 +1.2**
**KURBB Kurchatov Arra 15.29 20** P **Pn 00 36 32.0 -1.4**
comp=Z,0.3nm,0.3s,baz=208,slow=10,SNR=15
**KURBB Kurchatov Arra 15.29 20** ⇓P **Pn 00 36 31.4 -2.1**
comp=Z,5.8nm,0.7s
**ZSN Zaisan 15.36 40** *eP* **Pn 00 36 34.2 -0.2**
baz=40
**DMN Daman 15.39 121** *eP* **Pn 00 36 33.7 -1.6**
comp=Z,32nm,0.4s
**KURK Kurchatov 15.39 20** ⇑P **Pn 00 36 32.4 -2.3**
comp=Z,8.1nm,1.1s
**KURK Kurchatov 15.39 20** P **Pn 00 36 33.9 -0.8**
KURK IAmb IAmb 00 36 37.6
comp=Z,5.6nm,0.9s
**KKN Kakani 15.40 120** *eP* **Pn 00 36 33.9 -1.4**
comp=Z,54nm,0.5s
**PKIN Phulchoki 15.62 121** *eP* **P 00 36 36.2 -1.8**
comp=Z,32nm,0.3s
**PKI Pulchoki 15.63 121** *eP* **P 00 36 36.4 -1.8**
comp=Z,67nm,0.5s
**GUN Gumba 15.75 119** *eP* **P 00 36 38.4 -1.1**
comp=Z,38nm,0.4s
**AKTO Aktyubinsk 16.46 331** P **Pn 00 36 48.0 +0.4**
comp=Z,1.8nm,0.3s,baz=149,slow=11,SNR=53
AKTO S **S 00 39 45.2 -3.5**
comp=Z,0.2nm,0.3s,baz=121,slow=23,SNR=2.4
**AKTO Aktyubinsk 16.46 331** ⇑P **Pn 00 36 48.0 +0.4**
comp=Z,15nm,0.7s
AKTO ⇑S **S 00 39 47.2 -1.5**
comp=Z,4.2nm,0.7s
**BVAR Borovoye Array 16.49 0** P **Pn 00 36 48.2 +0.3**
comp=Z,2.0nm,0.3s,baz=117,slow=8.5,SNR=19
BVAR S **S 00 39 48.7 -0.5**
comp=Z,0.3nm,0.3s,baz=159,slow=25,SNR=2.6
**BRVK Borovoye 16.52 0** ⇑P **Pn 00 36 48.1 -0.2**
comp=Z,9.7nm,0.9s
**BRVK Borovoye 16.52 0** P **P 00 36 47.3 -0.1**
BRVK IAmb IAmb 00 36 51.1
comp=Z,8.5nm,0.8s
**WSAR Wadi Sarin 16.64 220** P **P 00 36 49.7 +0.8**
comp=Z,0.3nm,0.3s,baz=11,slow=1.9,SNR=5.0
**TAPN Taplejung 17.39 117** *eP* **P 00 36 58.4 +0.9**
comp=Z,21nm,0.4s
**ODAN Odare 17.45 119** *eP* **P 00 36 58.3 +0.2**
comp=Z,44nm,0.7s
**SRSP Sriramsagar 18.93 156** *eP* **P 00 37 14.1 +0.2**
**KLRI Killari 19.23 161** *eP* **P 00 37 17.6 +0.5**
**RPR Rampur 19.32 153** *eP* **P 00 37 18.9 +0.8**
**ZAA0 Zalesovo Array 20.13 26** ⇑P **P 00 37 26.8 +0.3**
comp=Z,1.1nm,0.5s
**ZAA0 Zalesovo Array 20.13 26** P **P 00 36 27.9 +0.5**
ZAA0 IAmb IAmb 00 37 27.9
comp=Z,11nm,0.9s
**ZALV Zalesovo Beam 20.13 26** P **P 00 37 27.1 +0.6**
comp=Z,10nm,0.3s,baz=213,slow=10,SNR=99
**ZALV Zalesovo Beam 20.13 26** P **P 00 37 26.9 +0.4**
**HYBB Hyderabad (bro 20.41 157** *eP* **P 00 37 32.3 +2.5**
**CUPL Choutuppal 20.64 156** *eP* **P 00 37 34.2 +1.9**
**ARU Arti 21.41 342** P **P 00 37 41.1 +1.1**
comp=Z,3.8nm,0.6s,baz=153,slow=5.8,SNR=21
**ARU Arti 21.41 342** P **P 00 37 41.0 +1.1**
ARU IAmb IAmb 00 37 43.6
comp=Z,10nm,0.7s
**SHL Shillong 21.46 115** P **P 00 37 40.2 -0.8**
SHL IAmb IAmb 00 37 42.9
comp=Z,19nm,1.2s
**NJS Nagarjunasagar 21.46 156** *eP* **P 00 37 41.3 +0.4**
**PVM Polavaram 21.68 149** *eP* **P 00 37 44.0 +0.9**
**MYLAV Mylavaram 21.75 152** *eP* **P 00 37 44.0 +0.3**
**SRLM Srisailam 21.75 157** *eP* **P 00 37 43.9 +0.1**
**RCLA Racherla 22.38 158** *eP* **P 00 37 50.1 +0.3**
**URV Uravakonda 22.39 162** *eP* **P 00 37 50.2 +0.3**
**BELG Belogornoye 22.50 322** P **P 00 37 52.0 +1.6**
comp=Z,13nm,0.7s,baz=158,slow=18,SNR=5.3
**GTA Gaotai 23.42 74** *eP* **P 00 38 01.9 +2.7**
GTA pmax pmax
comp=Z,2.0nm,0.5s
GTA pmax pmax
comp=Z,170nm,5.1s
GTA LR LR
comp=Z,120nm,13.8s
GTA LR LR
comp=Z,75nm,14.5s
GTA LR LR
comp=Z,95nm,14.2s
**SKHT Srikalahasti 24.23 157** *eP* **P 00 38 07.0 +0.5**
**KIRV Kirov 25.95 335** P **P 00 38 23.4 +1.8**
comp=Z,4.9nm,0.4s,baz=129,slow=2.7,SNR=4.2
**LZH Lanzhou 26.99 81** *eP* **P 00 38 35.1 +3.7**
LZH sP PP 00 39 33.0 -3.4
LZH pmax pmax
comp=Z,13nm,1.3s
**PZH PanZhiHua 28.52 102** P **P 00 38 46.1 +1.0**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,130nm,5.1s
**SONM Songino Array 28.80 56** P **P 00 38 47.2 -0.2**
comp=Z,0.3nm,0.5s,baz=268,slow=8.7,SNR=5.1
**HHC Hu-ho-hao-te 32.30 70** *eP* **P 00 39 21.8 +3.6**
HHC pmax pmax
comp=Z,3.0nm,1.0s
HHC pmax pmax
comp=Z,190nm,5.1s
**AKASG Malin Array Be 32.46 309** P **P 00 39 21.0 +1.8**
comp=Z,0.2nm,0.4s,baz=47,slow=3.8,SNR=4.1
**MNK Minsk 34.06 315** *i* P **P 00 39 34.9 +1.9**
comp=E,3.0nm,1.1s
MNK *i* P **P 00 39 34.9 +1.9**
comp=N,9.0nm,0.7s
MNK *i* P **P 00 39 34.9 +1.9**
comp=Z,10.0nm,0.9s,baz=104
MNK *i* pP **pP 00 40 14.4 0.0**
MNK *i* PP **PP 00 40 56.0 +1.7**
MNK *i* S **S 00 44 46.9 +3.5**
MNK *i* sS **sS 00 45 57.8 -0.1**
MNK *i* SS **SnSn 00 47 19.8 +2.9**
MNK *i* LRM MLR 00 54 50.6
comp=E,48nm,18.1s
MNK *i* LRM MLR 00 54 56.4
comp=Z,73nm,14.5s
MNK *i* LRM MLR 00 55 04.8
comp=N,436nm,22.4s
**NRIK Noril'sk 34.20 11** P **P 00 39 34.6 +0.6**
comp=N,3.8nm,0.6s,baz=196,slow=7.3,SNR=9.3
**NRIK Noril'sk 34.20 11** P **P 00 39 34.9 +0.9**
NRIK IAmb IAmb 00 39 36.8
comp=Z,6.8nm,1.0s
**FIA1 FINESS Array S 37.12 326** P **P 00 40 00.3 +1.3**
FIA1 IAmb IAmb 00 40 17.3
comp=Z,11nm,1.1s
**FINES FINESS Array B 37.12 326** P **P 00 40 00.6 +1.6**
comp=Z,2.7nm,0.7s,baz=117,slow=8.9,SNR=11
**LVZ Lovozero 37.21 339** P **P 00 40 00.3 +0.6**
**NJ2 Nanjing 40.05 82** *eP* **P 00 40 24.3 +0.6**
NJ2 pmax pmax
comp=Z,5.0nm,0.6s
**KEV Kevo 40.55 338** P **P 00 40 28.0 +0.7**
**ARCES ARCESS Array B 40.89 338** P **P 00 40 31.7 +1.6**
comp=Z,1.8nm,0.4s,baz=112,slow=7.3,SNR=20
**ARCES ARCESS Array B 40.89 338** P **P 00 40 31.5 +1.5**
**NC303 NORSAR Array S 43.94 323** P **P 00 40 55.3 +0.6**
NC303 IAmb IAmb 00 41 04.2
comp=Z,5.8nm,0.9s
**NB2 NORSAR Subarra 44.00 323** P **P 00 40 56.7 +1.5**
comp=Z,0.6nm,0.5s,baz=97,slow=7.9
**NOA NORSAR Array B 44.00 323** P **P 00 40 56.0 +0.8**
comp=Z,0.8nm,0.5s,baz=104,slow=7.3,SNR=3.5
**NBO00 NORSAR Array S 44.21 323** P **P 00 40 56.8 -0.1**
**NC204 NORSAR Array S 44.24 323** P **P 00 40 57.3 +0.1**
**KMBO Kilima Mbogo 48.42 227** P **P 00 41 29.4 -1.1**
comp=Z,1.1nm,0.6s,baz=42,slow=9.3,SNR=2.5
**PETK Petropavlovsk- 60.35 44** P **P 00 42 57.0 +1.4**
comp=Z,1.6nm,0.8s,baz=283,slow=8.7,SNR=1.4
**LSZ Lusaka 65.06 226** P **P 00 43 27.0 -0.2**
comp=Z,1.0nm,0.7s,baz=269,slow=23,SNR=2.2
**TORD Torodi Ar. Bea 65.13 268** P **P 00 43 27.4 -0.3**
comp=Z,0.4nm,0.5s,baz=45,slow=6.0,SNR=9.1
**TORD Torodi Ar. Bea 65.13 268** IAmb IAmb 00 43 28.4
comp=Z,0.6nm,0.8s
**INK Inuvik 73.96 9** P **P 00 44 22.3 +1.5**
comp=Z,0.4nm,0.4s,baz=298,slow=3.3,SNR=4.5
**ILAR Eielson Array 74.90 16** P **P 00 44 27.4 +1.0**
comp=Z,0.1nm,0.4s,baz=298,slow=4.0,SNR=1.8
**YKA Yellowknife Ar 81.23 2** P **P 00 45 01.9 +0.8**
comp=Z,0.2nm,0.4s,baz=352,slow=5.4,SNR=8.4
**WRA Warramunga Arr 82.51 121** P **P 00 45 06.7 -1.7**
comp=Z,0.8nm,0.7s,baz=322,slow=4.6,SNR=6.9
**ASAR Alice Springs 84.76 124** P **P 00 45 18.1 -1.8**
comp=Z,0.7nm,0.6s,baz=307,slow=5.1,SNR=10

*TAP **08** 00:36:28.8,23.92N×122.62E,h30km±1km,ML2.6,D*
*JMA **08** 00:36:29.5±0.1,23.99N×122.53E,h23km±3km,M2.2*
**ISC 08 00:36:28.7**±1.2,**23.89N**±0.04×**122.57E**±0.02,**h24**km±14km,
**n56,σ0°73/107,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.66** | **31** | P | | **Pb** | **00 36 41.1** | **-0.5** |
| JYNG | | | | *eS* | | **Sb** | **00 36 49.3** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **0.70** | **35** | P | | **Pb** | **00 36 41.9** | **-0.4** |
| YOJ | | | | *eS* | | **Sb** | **00 36 50.5** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **0.70** | **35** | *i* P | | **Pb** | **00 36 41.8** | **-0.4** |
| | baz=39 | | | | | | | |
| YOJ | | | | S | | **Sb** | **00 36 51.0** | **-0.6** |
| | baz=39 | | | | | | | |
| **TWD** | **Chiawan** | **0.91** | **282** | *i* P | | **Pn** | **00 36 46.1** | **+0.1** |
| | baz=280 | | | | | | | |
| TWD | | | | S | | **Sb** | **00 36 57.9** | **+0.3** |
| | baz=280 | | | | | | | |
| **EWUT** | **Wuta** | **0.91** | **308** | P | | **Pn** | **00 36 45.5** | **-0.5** |
| | baz=305 | | | | | | | |
| EWUT | | | | S | | **Sn** | **00 36 58.6** | **+0.3** |
| | baz=305 | | | | | | | |
| **ENA** | **Nanau** | **0.93** | **306** | *i* P | | **Pb** | **00 36 46.2** | **0.0** |
| | baz=302 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.94** | **288** | *eP* | | **Pn** | **00 36 46.3** | **0.0** |
| | baz=273 | | | | | | | |
| NACB | | | | *eS* | | **Sb** | **00 36 57.9** | **-0.4** |
| | baz=273 | | | | | | | |
| **ETM** | **Tongmen** | **0.99** | **275** | *i* P | | **Pn** | **00 36 47.2** | **+0.2** |
| | baz=273 | | | | | | | |
| ETM | | | | S | | **Sn** | **00 37 00.7** | **+0.4** |
| | baz=273 | | | | | | | |
| **ESL** | **Shilin** | **1.04** | **266** | *i* P | | **Pn** | **00 36 47.1** | **-0.7** |
| | baz=265 | | | | | | | |
| ESL | | | | S | | **Sn** | **00 37 02.0** | **+0.3** |
| | baz=265 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.04** | **288** | P | | **Pn** | **00 36 47.7** | **-0.2** |
| | baz=274 | | | | | | | |
| ETLH | | | | *eS* | | **Sn** | **00 37 01.3** | **-0.5** |
| | baz=274 | | | | | | | |
| **NDS** | **Dongshan** | **1.08** | **314** | P | | **Pb** | **00 36 48.5** | **-0.2** |
| | baz=311 | | | | | | | |
| NDS | | | | *i* S | | **Sb** | **00 37 03.4** | **+1.0** |
| | baz=311 | | | | | | | |
| **HGSD** | **Ruisui** | **1.12** | **250** | P | | **Pn** | **00 36 48.3** | **-0.6** |
| | baz=249 | | | | | | | |
| HGSD | | | | *eS* | | **Sn** | **00 37 02.7** | **-0.8** |
| | baz=249 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.14** | **81** | *eS* | | **Sb** | **00 37 05.8** | **+1.6** |
| **IRIF** | **Iriomote-Funau** | **1.15** | **67** | P | | **Pb** | **00 36 50.2** | **+0.3** |
| IRIF | | | | *eS* | | **Sb** | **00 37 04.4** | **-0.1** |
| **LATG** | **Datong** | **1.15** | **304** | P | | **Pb** | **00 36 49.7** | **-0.3** |
| | baz=302 | | | | | | | |
| LATG | | | | *eS* | | **Sb** | **00 37 04.7** | **+0.1** |
| | baz=302 | | | | | | | |
| **TWE** | **Neicheng** | **1.17** | **315** | *i* P | | **Pb** | **00 36 50.0** | **-0.3** |
| | baz=313 | | | | | | | |
| TWE | | | | *i* S | | **Sb** | **00 37 06.2** | **+1.2** |
| | baz=313 | | | | | | | |
| **ECBN** | **Changbin** | **1.17** | **241** | P | | **Pn** | **00 36 49.2** | **-0.4** |
| | baz=228 | | | | | | | |
| ECBN | | | | S | | **Sn** | **00 37 04.2** | **-0.5** |
| | baz=228 | | | | | | | |
| **NTC** | **Toucheng** | **1.18** | **325** | P | | **Pb** | **00 36 50.6** | **+0.2** |
| | baz=322 | | | | | | | |
| NTC | | | | S | | **Sb** | **00 37 06.7** | **+1.4** |
| | baz=322 | | | | | | | |
| **ENTT** | **Nioudou** | **1.19** | **310** | *i* P | | **Pb** | **00 36 50.4** | **-0.2** |
| | baz=293 | | | | | | | |
| ENTT | | | | *i* S | | **Sb** | **00 37 06.5** | **+1.0** |
| | baz=293 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.20** | **307** | *i* P | | **Pb** | **00 36 50.8** | **0.0** |
| | baz=292 | | | | | | | |
| NDT | | | | S | | **Sb** | **00 37 07.2** | **+1.2** |
| | baz=292 | | | | | | | |
| **EHY** | **Hungye** | **1.20** | **252** | *i* P | | **Pn** | **00 36 50.0** | **-0.1** |
| | baz=251 | | | | | | | |
| EHY | | | | S | | **Sn** | **00 37 05.6** | **0.0** |
| | baz=251 | | | | | | | |
| **NNSB** | **Datong** | **1.21** | **297** | *i* P | | **Pn** | **00 36 50.6** | **+0.3** |
| | baz=283 | | | | | | | |
| NNSB | | | | *i* S | | **Sb** | **00 37 06.2** | **-0.1** |
| | baz=283 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.22** | **282** | *i* P | | **Pn** | **00 36 50.4** | **-0.2** |
| | baz=281 | | | | | | | |
| WHF | | | | *eS* | | **Sn** | **00 37 06.7** | **0.0** |
| | baz=281 | | | | | | | |
| **NNS** | **Nan Shan** | **1.23** | **297** | *i* P | | **Pn** | **00 36 50.8** | **+0.3** |
| | baz=283 | | | | | | | |
| NNS | | | | *i* S | | **Sb** | **00 37 06.7** | **0.0** |
| | baz=283 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.24** | **335** | P | | **Pb** | **00 36 50.6** | **-0.9** |
| | baz=347 | | | | | | | |
| TWB1 | | | | *eS* | | **Sb** | **00 37 07.9** | **+0.9** |
| | baz=347 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.25** | **314** | P | | **Pb** | **00 36 51.5** | **-0.2** |
| | baz=299 | | | | | | | |
| FUSB | | | | S | | **Sb** | **00 37 08.4** | **+1.0** |
| | baz=299 | | | | | | | |
| **EYUL** | **Yuli** | **1.27** | **245** | *eP* | | **Pn** | **00 36 50.9** | **0.0** |
| | baz=244 | | | | | | | |
| EYUL | | | | S | | **Sn** | **00 37 07.4** | **+0.3** |
| | baz=244 | | | | | | | |
| **YULB** | **Yu-li** | **1.27** | **247** | P | | **Pn** | **00 36 51.1** | **+0.2** |
| | baz=247 | | | | | | | |
| YULB | | | | S | | **Sn** | **00 37 07.4** | **+0.3** |
| | baz=247 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.28** | **328** | *eP* | | **Pb** | **00 36 52.6** | **+0.5** |
| | baz=326 | | | | | | | |
| TIPB | | | | *i* S | | **Sb** | **00 37 08.5** | **+0.4** |
| | baz=326 | | | | | | | |
| **TWF1** | **Yuli** | **1.28** | **246** | *i* P | | **Pn** | **00 36 51.5** | **+0.4** |
| | baz=245 | | | | | | | |
| TWF1 | | | | S | | **Sn** | **00 37 07.9** | **+0.4** |
| | baz=245 | | | | | | | |
| **CHGB** | **Renai** | **1.29** | **278** | P | | **Pn** | **00 36 51.4** | **0.0** |
| | baz=266 | | | | | | | |
| CHGB | | | | S | | **Sn** | **00 37 08.2** | **+0.2** |
| | baz=266 | | | | | | | |
| **VWDT** | **VWDT** | **1.31** | **265** | P | | **Pn** | **00 36 51.8** | **+0.2** |
| | baz=263 | | | | | | | |
| VWDT | | | | *eS* | | **Sn** | **00 37 08.7** | **+0.3** |
| | baz=263 | | | | | | | |
| **NWLT** | **Wulai** | **1.32** | **313** | P | | **Pb** | **00 36 52.5** | **-0.3** |
| | baz=297 | | | | | | | |
| NWLT | | | | *i* S | | **Sb** | **00 37 10.3** | **+1.0** |
| | baz=297 | | | | | | | |
| **WUSB** | **Renai** | **1.33** | **275** | P | | **Pn** | **00 36 52.2** | **+0.3** |
| | baz=273 | | | | | | | |
| WUSB | | | | S | | **Sn** | **00 37 09.2** | **+0.2** |
| | baz=273 | | | | | | | |
| **YHNB** | **Yeheng** | **1.34** | **306** | *eP* | | **Pb** | **00 36 52.7** | **-0.5** |
| | baz=303 | | | | | | | |
| YHNB | | | | S | | **Sb** | **00 37 09.8** | **-0.2** |
| | baz=303 | | | | | | | |
| **CHKT** | **Chengkung** | **1.35** | **235** | P | | **Pn** | **00 36 52.4** | **+0.3** |
| | baz=224 | | | | | | | |
| CHKT | | | | *eS* | | **Sn** | **00 37 08.0** | **-1.3** |
| | baz=224 | | | | | | | |
| **FULB** | **Fuli** | **1.36** | **240** | *i* P | | **Pn** | **00 36 51.7** | **-0.5** |
| | baz=229 | | | | | | | |
| FULB | | | | S | | **Sn** | **00 37 08.6** | **-0.8** |
| | baz=229 | | | | | | | |
| **NSK** | **Sanguang** | **1.36** | **306** | *i* P | | **Pb** | **00 36 52.8** | **-0.7** |
| | baz=291 | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.36** | **332** | P | | **Pb** | **00 36 52.5** | **-1.0** |
| | baz=343 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.36** | **75** | P | | **Pb** | **00 36 54.3** | **+0.8** |
| JKRS | | | | S | | **Sb** | **00 37 11.9** | **+1.4** |
| **NWF** | **Wu-fen Shan** | **1.38** | **329** | *i* P | | **Pb** | **00 36 53.0** | **-1.0** |
| | baz=327 | | | | | | | |
| NWF | | | | *eS* | | **Sb** | **00 37 11.5** | **+0.3** |
| | baz=327 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.38** | **329** | P | | **Pb** | **00 36 52.8** | **-1.1** |
| | baz=327 | | | | | | | |
| WFSB | | | | *eS* | | **Sb** | **00 37 11.8** | **+0.7** |
| | baz=327 | | | | | | | |
| **TATO** | **Taipei** | **1.47** | **318** | *eP* | | **Pb** | **00 36 55.4** | **+0.1** |
| | baz=333 | | | | | | | |
| TATO | | | | *eS* | | **Sb** | **00 37 14.5** | **+0.9** |
| | baz=333 | | | | | | | |
| **ECS** | **Chishang** | **1.47** | **238** | *eP* | | **Pn** | **00 36 54.5** | **+0.9** |
| | baz=227 | | | | | | | |
| ECS | | | | *eS* | | **Sn** | **00 37 13.1** | **+1.0** |
| | baz=227 | | | | | | | |
| **EDH** | **Donghe** | **1.48** | **232** | *eP* | | **Pn** | **00 36 52.5** | **-1.2** |
| | baz=223 | | | | | | | |
| EDH | | | | *eS* | | **Sn** | **00 37 11.1** | **-1.2** |
| | baz=223 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.51** | **71** | P | | **Pb** | **00 36 55.7** | **-0.4** |
| JIJ | | | | S | | **Sb** | **00 37 15.0** | **+0.1** |
| **NFF** | **Wufeng Townshi** | **1.52** | **300** | P | | **Pb** | **00 36 55.8** | **-0.5** |
| | baz=298 | | | | | | | |
| NFF | | | | S | | **Sb** | **00 37 15.4** | **+0.2** |
| | baz=298 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.53** | **255** | P | | **Pn** | **00 36 55.5** | **+0.4** |
| | baz=254 | | | | | | | |
| YUS | | | | S | | **Sn** | **00 37 14.3** | **-0.1** |
| | baz=254 | | | | | | | |
| **LDUT** | **Ludao** | **1.57** | **220** | *eP* | | **Pn** | **00 36 54.1** | **-1.0** |
| | baz=220 | | | | | | | |
| LDUT | | | | *eS* | | **Sn** | **00 37 13.5** | **-1.3** |
| | baz=220 | | | | | | | |
| **LONT** | **Longtian** | **1.64** | **234** | P | | **Pn** | **00 36 56.5** | **+0.4** |
| | baz=225 | | | | | | | |
| LONT | | | | S | | **Sn** | **00 37 16.3** | **-0.1** |
| | baz=225 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.71** | **286** | P | | **Pb** | **00 36 58.8** | **-0.6** |
| | baz=284 | | | | | | | |
| TWQ1 | | | | S | | **Sb** | **00 37 20.9** | **+0.5** |
| | baz=284 | | | | | | | |
| **TWGBT** | **Beinan** | **1.73** | **232** | *eP* | | **Pn** | **00 36 58.6** | **+1.3** |
| | baz=222 | | | | | | | |
| TWGBT | | | | S | | **Sn** | **00 37 18.3** | **-0.4** |
| | baz=222 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.74** | **66** | P | | **Pn** | **00 36 58.3** | **+1.0** |
| JISG | | | | *eS* | | **Sn** | **00 37 19.4** | **+0.7** |
| **CHN5** | **Tsauling** | **1.76** | **261** | *eP* | | **Pb** | **00 37 01.1** | **+0.8** |
| | baz=260 | | | | | | | |
| CHN5 | | | | *eS* | | **Sb** | **00 37 22.9** | **+0.9** |
| | baz=260 | | | | | | | |
| **STYH** | **Taoyuan** | **1.79** | **247** | *eP* | | **Pn** | **00 36 57.0** | **-1.1** |
| | baz=238 | | | | | | | |
| STYH | | | | *eS* | | **Sn** | **00 37 17.9** | **-2.3** |
| | baz=238 | | | | | | | |
| **JMJ** | **Miyako jima 2** | **2.65** | **69** | *eS* | | **Sn** | **00 37 39.7** | **-1.6** |
| | baz=70 | | | | | | | |

*IDC **08** 00:48:18.8±1.1,55.91S×27.67W,h0km,mb4.1/3,*
*mb1 4.1/4,mb1mx3.8/23,mbtmp4.0/4,ML3.4/1,Error*
*ellipse: s-maj=68.8km s-min=25.0km az=93.0*
*NEIC **08** 00:48:32.2±1.6,56.3S±0.1×27.3W±0.2,h96km±10km,*
*mb4.5/10,Error ellipse: s-maj=23.8km s-min=8.6km*
*az=214.0*
**ISC 08 00:48:32.1**±0.8,**56.2S**±0.1×**27.2W**±0.1,**h100**km,**n22,**
**σ0°99/21,mb4.2/5,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.65** | **286** | Pn | | **Pn** | **00 49 53.3** | **-0.2** |
| **ESPZ** | **Base Esperanza** | **16.54** | **232** | | | **P** | **00 52 19.3** | **+0.8** |
| ESPZ | | | | IAmb | | IAmb | 00 52 29.1 | |
| | comp=Z,69nm,1.1s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **16.69** | **158** | P | | **P** | **00 52 19.7** | **-0.4** |
| **VNA3** | **Neumayer Olymp** | **16.89** | **160** | P | | **P** | **00 52 23.2** | **+0.8** |
| **VNA2** | **Neumayer--Watz** | **17.09** | **158** | P | | **P** | **00 52 24.9** | **+0.4** |
| | baz=322,slow=13 | | | | | | | |
| **SNAA** | **Sanae** | **18.64** | **156** | P | | **P** | **00 52 40.9** | **-0.8** |
| **SNAA** | **Sanae** | **18.64** | **156** | P | | **P** | **00 52 40.5** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=302,slow=15,SNR=6.1 | | | | | | | |
| **SNAA** | **Sanae** | **18.64** | **156** | IAmb | | IAmb | 00 52 45.9 | |
| | comp=Z,2.7nm,1.0s | | | | | | | |
| **BELA** | **Belgrano 2** | **21.97** | **184** | P | | **P** | **00 53 15.9** | **-1.4** |
| BELA | | | | IAmb | | IAmb | 00 53 18.2 | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **LL01** | **San Ignacio de** | **31.94** | **276** | P | | **P** | **00 54 47.3** | **-0.7** |
| **QSPA** | **South Pole Qui** | **34.09** | **180** | P | | **P** | **00 55 06.8** | **+0.1** |
| | comp=Z,3.5nm,0.6s,baz=193,slow=4.7,SNR=14 | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.09** | **180** | P | | **P** | **00 55 06.7** | **-0.1** |
| QSPA | | | | IAmb | | IAmb | 00 55 09.3 | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| **VA03** | **San Esteban** | **37.90** | **290** | P | | **P** | **00 55 38.9** | **-0.6** |
| **PB06** | **IPOC Station P** | **45.60** | **299** | P | | **P** | **00 56 43.4** | **+1.1** |
| **VNDA** | **Vanda** | **46.47** | **183** | P | | **P** | **00 56 49.7** | **+1.5** |
| | comp=Z,2.8nm,0.8s,baz=190,slow=6.2,SNR=5.2 | | | | | | | |
| **VNDA** | **Vanda** | **46.47** | **183** | P | | **P** | **00 56 49.5** | **+1.3** |
| VNDA | | | | IAmb | | IAmb | 00 56 51.4 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.15** | **29** | P | | **P** | **00 59 51.6** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=198,slow=7.2,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.15** | **29** | P | | **P** | **00 59 52.6** | **+1.0** |
| **BIRV** | **Birongo** | **73.89** | **320** | P | | **P** | **00 59 56.5** | **+0.5** |
| BIRV | | | | IAmb | | IAmb | 01 00 03.3 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **136.25** | **318** | PKP | | **PKPdf** | **01 07 40.4** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=124,slow=2.4,SNR=6.3 | | | | | | | |

**ILAR Eielson Array 150.19 312** PKPbc **PKPbc 01 08 07.6 -2.1**
comp=Z,0.6nm,0.7s,baz=103,slow=1.9,SNR=6.3
**SONM Songino Array 150.73 87** PKPbc **PKPbc 01 08 11.1 -0.7**
comp=Z,0.6nm,0.7s,baz=219,slow=4.2,SNR=5.5

*INMG **08** 00:52:13.3±1.4,35°.49N×3°.84W, h0km, ML2.0, Error ellipse: s-maj=4.3km s-min=3.2km az=166.0*
*CNRM **08** 00:52:13.2, 35°.57N×3°.81W, h10km, ml2.6*
*SFS **08** 00:52:15.0, 35°.48N×3°.48W, ML2.2, ALBORAN SUR*
**ISC 08 00:52:13.4**±1.3**, 35°.56N**±0°.03×**3°.77W**±0°.04**, h19**km±3km**, n21, σ2°13/40, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PALE** | **Palemas** | **0.37** | **203** | P | | **Pg** | **00 52 20.1** | **-1.0** |
| PALE | | | | S | | **Sg** | **00 52 25.1** | **-1.4** |
| **AKLM** | **AKL** | **1.05** | **184** | P | | **Pb** | **00 52 30.0** | **-2.9** |
| AKLM | | | | S | | **Sb** | **00 52 46.1** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.15** | **108** | P | | **Pg** | **00 52 35.9** | **+0.2** |
| CHAS | | | | S | | **Sb** | **00 52 47.5** | **-1.7** |
| **SMIR** | **Smir Dam** | **1.32** | **276** | P | | **Pn** | **00 52 35.7** | **-1.0** |
| SMIR | | | | S | | **Sb** | **00 52 54.5** | **+0.4** |
| **CEU** | **Ceuta** | **1.35** | **285** | P | | **Pn** | **00 52 35.4** | **-1.8** |
| **CEU** | **Ceuta** | **1.35** | **285** | P | | **Pn** | **00 52 36.9** | **-0.2** |
| CEU | | | | S | | **Sn** | **00 52 46.7** | **-7.9** |
| CEU | | | | S | | **Sb** | **00 52 53.0** | **-1.9** |
| **CHEFC** | **Chefchaouen** | **1.36** | **251** | P | | **Pb** | **00 52 38.5** | **+0.2** |
| CHEFC | | | | S | | **Sg** | **00 53 00.0** | **+2.5** |
| **SICH** | **Sidi Chahed** | **1.93** | **222** | P | | **Pb** | **00 52 46.7** | **-1.2** |
| SICH | | | | S | | **Sb** | **00 53 12.9** | **+1.3** |
| **LCRM** | **LCR** | **2.07** | **206** | P | | **Pb** | **00 52 50.1** | **-0.3** |
| LCRM | | | | S | | **Sg** | **00 53 18.3** | **-1.9** |
| **IFR** | **Ifrane** | **2.32** | **209** | P | | **Pb** | **00 52 55.4** | **+0.6** |
| IFR | | | | S | | **Sn** | **00 53 17.6** | **-1.3** |
| **MD31** | **MD31** | **2.81** | **197** | P | | **Pn** | **00 52 58.5** | **+1.2** |
| MD31 | | | | S | | **Sn** | **00 53 31.3** | **+0.7** |
| **MDT** | **Midelt** | **2.82** | **195** | P | | **Pn** | **00 52 58.8** | **+1.3** |
| MDT | | | | S | | **Sn** | **00 53 33.9** | **+2.9** |
| **ZHG** | **ZHG** | **3.17** | **229** | P | | **Pn** | **00 53 05.1** | **+2.8** |
| ZHG | | | | S | | **Sn** | **00 53 43.0** | **+3.4** |
| **PVAQ** | **Vaqueiros** | **3.68** | **301** | *e*Pn | | **Pn** | **00 53 10.4** | **+1.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **00 53 52.1** | **+0.1** |
| PVAQ | | | | A | | A | 00 53 57.6 | |
| | 3.6nm,0.7s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.68** | **301** | P | | **Pn** | **00 53 10.3** | **+1.2** |
| PVAQ | | | | S | | **Sn** | **00 53 52.2** | **+0.1** |
| **PBDV** | **Barranco-do-Ve** | **3.76** | **298** | *e*Pn | | **Pn** | **00 53 11.1** | **+0.8** |
| PBDV | | | | *e*Sn | | **Sn** | **00 53 55.0** | **+1.0** |
| **MESJ** | **Messejana** | **4.24** | **304** | *e*Pn | | **Pn** | **00 53 18.2** | **+1.3** |
| MESJ | | | | *e*Sn | | **Sn** | **00 54 06.8** | **+0.9** |
| **PESTR** | **Estremoz** | **4.50** | **318** | P | | **Pn** | **00 53 21.8** | **+1.3** |
| **EVO** | **Evora** | **4.51** | **312** | *e*Pn | | **Pn** | **00 53 23.0** | **+2.4** |
| EVO | | | | *e*Sn | | **Sn** | **00 54 13.5** | **+0.9** |
| EVO | | | | A | | A | 00 54 18.5 | |
| | 2.5nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.59** | **305** | *e*Pn | | **Pn** | **00 53 23.5** | **+1.8** |
| PNCL | | | | *e*Sn | | **Sn** | **00 54 14.6** | **+0.1** |
| **PMRV** | **Marv??o** | **4.82** | **324** | *e*Pn | | **Pn** | **00 53 28.8** | **+3.9** |

*IDC **08** 01:02:05.5±0.6,20°.67S×68°.69W, h104km±6km, mb3.3/9, mb1 3.5/11, mb1mx3.5/30, mbtmp3.7/11, MS3.3/2, Ms1 3.3/2, ms1mx2.8/21, Error ellipse: s-maj=18.2km s-min=7.9km az=101.0*
*SJA **08** 01:02:05.2±0.7,20°.69S×68°.98W, h104km±4km, ML4.4, MW4.0*
*NEIC **08** 01:02:05.8±0.9,20°.70S±0°.02×68°.92W±0°.07, h99km±5km, mb3.9/6, ML4.2(GUC), Error ellipse: s-maj=9.1km s-min=2.2km az=96.0*
*GUC **08** 01:02:06.7±0.6,20°.71S×68°.92W, h96km±3km, ML4.2*
**ISC 08 01:02:04.9**±0.5**, 20°.67S**±0°.03×**68°.89W**±0°.05**, h97**km±5km**, n94, σ1°60/126, mb3.9/10, 5C-6D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PB08** | **IPOC Station P** | **0.58** | **335** | ⇓*i* P | | **Pn** | **01 02 23.1** | **+1.6** |
| PB08 | | | | *e*S | | **Sn** | **01 02 35.8** | **+1.9** |
| **PB08** | **IPOC Station P** | **0.58** | **335** | | | **Pn** | **01 02 22.8** | **+1.3** |
| PB08 | | | | S | | **Sn** | **01 02 35.7** | **+1.9** |
| **PB08** | **IPOC Station P** | **0.58** | **335** | *e*P | | **Pn** | **01 02 23.0** | **+1.6** |
| PB08 | | | | *e*S | | **Sn** | **01 02 36.4** | **+2.6** |
| **PB01** | **IPOC Station P** | **0.67** | **236** | ⇓*i* P | | **Pn** | **01 02 22.6** | **+0.8** |
| PB01 | | | | *e*S | | **Sn** | **01 02 35.3** | **+0.8** |
| PB01 | | | | IAML | | | 01 02 36.5 | |
| | comp=N,15μm,0.3s | | | | | | | |
| **PB01** | **IPOC Station P** | **0.67** | **236** | | | **Pn** | **01 02 22.6** | **+0.8** |
| PB01 | | | | S | | **Sn** | **01 02 33.7** | **-0.9** |
| **PB01** | **IPOC Station P** | **0.67** | **236** | *e*P | | **Pn** | **01 02 19.0** | **-2.8** |
| PB01 | | | | *e*P | | **Pn** | **01 02 22.7** | **+0.8** |
| PB01 | | | | *e*S | | **Sn** | **01 02 35.8** | **+1.2** |
| PB01 | | | | IAML | | | 01 02 36.2 | |
| | comp=Z,8μm,0.2s | | | | | | | |
| **HMBC** | **Humberstone** | **1.01** | **293** | ⇓*i* P | | **Pn** | **01 02 26.1** | **+0.7** |
| HMBC | | | | *e*S | | **Sn** | **01 02 41.5** | **+0.7** |
| HMBC | | | | IAML | | | 01 02 44.6 | |
| | comp=E,7μm,0.8s | | | | | | | |
| **GO01** | **Chusmiza** | **1.04** | **344** | ⇓*i* P | | **Pn** | **01 02 27.6** | **+1.5** |
| GO01 | | | | *e*S | | **Sn** | **01 02 44.3** | **+2.4** |
| GO01 | | | | IAML | | | 01 02 46.3 | |
| | comp=N,12μm,0.1s | | | | | | | |
| **GO01** | **Chusmiza** | **1.04** | **344** | | | **Pn** | **01 02 27.5** | **+1.5** |
| GO01 | | | | S | | **Sn** | **01 02 43.2** | **+1.3** |
| **PB02** | **IPOC Station P** | **1.14** | **235** | ⇑*i* P | | **Pn** | **01 02 27.4** | **+0.7** |
| PB02 | | | | *e*S | | **Sn** | **01 02 43.9** | **+0.7** |
| **PB02** | **IPOC Station P** | **1.14** | **235** | | | **Pn** | **01 02 27.4** | **+0.7** |
| PB02 | | | | S | | **Sn** | **01 02 43.8** | **+0.6** |
| **PB02** | **IPOC Station P** | **1.14** | **235** | *e*P | | **Pn** | **01 02 27.5** | **+0.7** |
| PB02 | | | | *e*S | | **Sn** | **01 02 44.6** | **+1.3** |
| PB02 | | | | IAML | | | 01 02 44.8 | |
| | comp=Z,8μm,0.4s | | | | | | | |
| **PB11** | **IPOC Station P** | **1.16** | **322** | ⇓*i* P | | **Pn** | **01 02 28.1** | **+1.0** |
| PB11 | | | | *e*S | | **Sn** | **01 02 45.0** | **+1.2** |
| PB11 | | | | IAML | | | 01 02 49.1 | |
| | comp=E,4μm,0.1s | | | | | | | |
| **PB11** | **IPOC Station P** | **1.16** | **322** | | | **Pn** | **01 02 28.1** | **+1.0** |
| PB11 | | | | Sn | | **Sn** | **01 02 44.9** | **+1.2** |
| **PB11** | **IPOC Station P** | **1.16** | **322** | *e*P | | **Pn** | **01 02 28.2** | **+1.2** |
| PB11 | | | | *e*S | | **Sn** | **01 02 45.4** | **+1.7** |
| **PB09** | **IPOC Station P** | **1.17** | **196** | ⇓*i* P | | **Pn** | **01 02 28.4** | **+1.2** |
| PB09 | | | | *e*S | | **Sn** | **01 02 45.1** | **+1.2** |
| PB09 | | | | IAML | | | 01 02 49.0 | |
| | comp=N,4μm,0.5s | | | | | | | |
| **PB09** | **IPOC Station P** | **1.17** | **196** | | | **Pn** | **01 02 28.4** | **+1.2** |
| PB09 | | | | Sn | | **Sn** | **01 02 44.7** | **+0.8** |
| **PB09** | **IPOC Station P** | **1.17** | **196** | *e*P | | **Pn** | **01 02 28.3** | **+1.2** |
| PB09 | | | | *e*S | | **Sn** | **01 02 46.0** | **+2.1** |
| PB09 | | | | IAML | | | 01 02 48.2 | |
| | comp=Z,5μm,0.5s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.19** | **263** | ⇑*i* P | | **Pn** | **01 02 27.9** | **+0.6** |
| PATCX | | | | *e*S | | **Sn** | **01 02 44.7** | **+0.5** |
| PATCX | | | | IAML | | | 01 02 47.0 | |
| | comp=E,5μm,0.4s | | | | | | | |
| PATCX | | | | IAML | | | 01 02 51.5 | |
| | comp=E,5μm,0.4s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.19** | **263** | | | **Pn** | **01 02 27.8** | **+0.5** |
| PATCX | | | | Sn | | **Sn** | **01 02 44.7** | **+0.5** |
| **TA01** | **Diego Aracena** | **1.21** | **275** | ⇑*i* P | | **Pn** | **01 02 28.1** | **+0.7** |
| TA01 | | | | *e*S | | **Sn** | **01 02 45.1** | **+0.5** |
| **TA01** | **Diego Aracena** | **1.21** | **275** | | | **Pn** | **01 02 28.1** | **+0.7** |
| TA01 | | | | Sn | | **Sn** | **01 02 45.2** | **+0.7** |
| **TA02** | **Huaiquique** | **1.23** | **289** | *e*P | | **Pn** | **01 02 28.5** | **+0.8** |
| TA02 | | | | *e*S | | **Sn** | **01 02 45.3** | **+0.4** |
| **TA02** | **Huaiquique** | **1.23** | **289** | | | **Pn** | **01 02 28.4** | **+0.8** |
| **PB07** | **IPOC Station P** | **1.40** | **221** | ⇑*i* P | | **Pn** | **01 02 30.6** | **+0.7** |
| PB07 | | | | *e*S | | **Sn** | **01 02 48.9** | **0.0** |
| **PB07** | **IPOC Station P** | **1.40** | **221** | Pn | | **Pn** | **01 02 30.3** | **+0.3** |
| **PB07** | **IPOC Station P** | **1.40** | **221** | *e*P | | **Pn** | **01 02 30.6** | **+0.7** |
| PB07 | | | | *e*S | | **Sn** | **01 02 49.9** | **+1.0** |
| PB07 | | | | IAML | | | 01 02 50.8 | |
| | comp=Z,6μm,0.4s | | | | | | | |
| **PB03** | **IPOC Station P** | **1.59** | **210** | ⇑*i* P | | **Pn** | **01 02 32.9** | **+0.7** |
| PB03 | | | | *e*S | | **Sn** | **01 02 52.8** | **-0.2** |
| PB03 | | | | IAML | | | 01 02 56.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **PB03** | **IPOC Station P** | **1.59** | **210** | | | **Pn** | **01 02 33.0** | **+0.7** |
| **PB03** | **IPOC Station P** | **1.59** | **210** | *e*P | | **Pn** | **01 02 33.2** | **+1.0** |
| PB03 | | | | *e*S | | **Sn** | **01 02 54.3** | **+1.4** |
| PB03 | | | | IAML | | | 01 02 59.8 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **MNMC** | **Minye Minye** | **1.67** | **337** | *i* P | | **Pn** | **01 02 35.1** | **+1.7** |
| MNMC | | | | *e*S | | **Sn** | **01 02 57.6** | **+2.6** |
| MNMC | | | | IAML | | | 01 03 02.8 | |
| | comp=N,3μm,0.3s | | | | | | | |
| **MNMC** | **Minye Minye** | **1.67** | **337** | Pn | | **Pn** | **01 02 35.5** | **+2.1** |
| **MNMCX** | **Minye Minye** | **1.67** | **337** | *e*P | | **Pn** | **01 02 35.3** | **+1.9** |
| MNMCX | | | | *e*S | | **Sn** | **01 02 56.9** | **+1.9** |
| MNMCX | | | | IAML | | | 01 03 03.2 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **1.93** | **180** | P | | **Pn** | **01 02 38.6** | **+1.8** |
| | comp=Z,28nm,0.3s,baz=10,slow=9.6,SNR=133 | | | | | | | |
| LVC | | | | S | | **Sn** | **01 03 02.7** | **+1.7** |
| | comp=Z,123nm,0.3s,baz=350,slow=15,SNR=47 | | | | | | | |
| **LVC** | **Limon Verde** | **1.93** | **180** | *e*P | | **Pn** | **01 02 38.5** | **+1.8** |
| LVC | | | | *e*S | | **Sn** | **01 03 03.0** | **+1.9** |
| **LVC** | **Limon Verde** | **1.93** | **180** | Pn | | **Pn** | **01 02 38.9** | **+2.1** |
| **LVC** | **Limon Verde** | **1.93** | **180** | *e*P | | **Pn** | **01 02 38.7** | **+1.9** |
| LVC | | | | *e*S | | **Sn** | **01 03 05.2** | **+4.2** |
| **PB04** | **IPOC Station P** | **2.02** | **215** | *e*P | | **Pn** | **01 02 38.7** | **+0.9** |
| PB04 | | | | IAML | | | 01 03 13.6 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.02** | **215** | Pn | | **Pn** | **01 02 38.4** | **+0.5** |
| **PB04** | **IPOC Station P** | **2.02** | **215** | *e*P | | **Pn** | **01 02 38.8** | **+0.9** |
| PB04 | | | | *e*S | | **Sn** | **01 03 04.8** | **+1.8** |
| PB04 | | | | IAML | | | 01 03 18.2 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.12** | **197** | *e*P | | **Pn** | **01 02 40.1** | **+1.0** |
| PB06 | | | | *e*S | | **Sn** | **01 03 04.1** | **-1.1** |
| PB06 | | | | IAML | | | 01 03 12.9 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.12** | **197** | Pn | | **Pn** | **01 02 40.6** | **+1.5** |
| **PB06** | **IPOC Station P** | **2.12** | **197** | *e*P | | **Pn** | **01 02 40.3** | **+1.2** |
| PB06 | | | | *e*S | | **Sn** | **01 03 08.0** | **+2.8** |
| PB06 | | | | IAML | | | 01 03 12.4 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **PB16** | **IPOC Station P** | **2.40** | **346** | *e*P | | **Pn** | **01 02 45.6** | **+2.6** |
| **PB16** | **IPOC Station P** | **2.40** | **346** | Pn | | **Pn** | **01 02 45.0** | **+1.9** |
| **PB16** | **IPOC Station P** | **2.40** | **346** | *e*P | | **Pn** | **01 02 45.7** | **+2.6** |
| PB16 | | | | *e*S | | **Sn** | **01 03 19.0** | **+6.7** |
| **PB12** | **IPOC Station P** | **2.45** | **326** | *e*P | | **Pn** | **01 02 43.9** | **+0.4** |
| PB12 | | | | IAML | | | 01 03 24.4 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **PB12** | **IPOC Station P** | **2.45** | **326** | Pn | | **Pn** | **01 02 44.1** | **+0.7** |
| **PB12** | **IPOC Station P** | **2.45** | **326** | *e*P | | **Pn** | **01 02 44.1** | **+0.7** |
| PB12 | | | | *e*S | | **Sn** | **01 03 15.8** | **+2.8** |
| **PB15** | **IPOC Station P** | **2.58** | **192** | *e*P | | **Pn** | **01 02 46.6** | **+1.5** |
| **PB15** | **IPOC Station P** | **2.58** | **192** | Pn | | **Pn** | **01 02 47.3** | **+2.1** |
| **PB15** | **IPOC Station P** | **2.58** | **192** | *e*P | | **Pn** | **01 02 46.9** | **+1.7** |
| PB15 | | | | *e*S | | **Sn** | **01 03 16.5** | **+0.4** |
| PB15 | | | | IAML | | | 01 03 26.9 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **AP01** | **Chacalluta** | **2.67** | **329** | IAML | | | 01 03 30.6 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **AP01** | **Chacalluta** | **2.67** | **329** | Pn | | **Pn** | **01 02 48.8** | **+2.7** |
| **PB10** | **IPOC Station P** | **3.22** | **208** | *e*P | | **Pn** | **01 02 54.2** | **+0.7** |
| **PB10** | **IPOC Station P** | **3.22** | **208** | Pn | | **Pn** | **01 02 54.6** | **+1.1** |
| **PB10** | **IPOC Station P** | **3.22** | **208** | *e*P | | **Pn** | **01 02 54.3** | **+0.8** |
| PB10 | | | | *e*S | | Sn | 01 03 43.0 | +12 |
| **PB14** | **IPOC Station P** | **4.17** | **199** | *e*P | | **Pn** | **01 03 07.2** | **+0.6** |
| PB14 | | | | *e*S | | Sn | 01 04 05.0 | +10 |
| PB14 | | | | IAML | | | 01 04 08.1 | |
| | comp=Z,235nm,0.5s | | | | | | | |
| **LPAZ** | **La Paz** | **4.42** | **10** | P | | **Pn** | **01 03 11.1** | **+0.7** |
| | comp=Z,1.9nm,0.3s,baz=214,slow=7.8,SNR=17 | | | | | | | |
| LPAZ | | | | S | | Sn | 01 03 51.4 | -10 |
| | comp=Z,0.4nm,0.3s,baz=173,slow=23,SNR=1.2 | | | | | | | |
| **LPAZ** | **La Paz** | **4.42** | **10** | Pn | | **Pn** | **01 03 11.4** | **+1.1** |
| **AC02** | **Maricunga** | **6.14** | **182** | Pn | | **Pn** | **01 03 33.8** | **+0.3** |
| **SIV** | **San Ignacio** | **8.77** | **59** | P | | **Pn** | **01 04 06.2** | **-2.6** |
| | comp=Z,2.2nm,0.3s,baz=250,slow=9.6,SNR=31 | | | | | | | |
| SIV | | | | S | | **Sn** | **01 05 40.2** | **-5.8** |
| | comp=Z,0.2nm,0.3s,baz=303,slow=22,SNR=1.3 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.63** | **62** | | | **Pn** | **01 04 32.9** | **-1.3** |
| **ETMB** | **Extrema** | **11.10** | **14** | Pn | | **Pn** | **01 04 40.3** | **-0.3** |
| **VILB** | **Vilhena** | **11.32** | **49** | Pn | | **Pn** | **01 04 43.2** | **-0.4** |
| **CPUP** | **Villa Florida** | **12.01** | **120** | LR | | LR | 01 10 47.1 | |
| | comp=Z,107nm,18.3s,baz=246,slow=44 | | | | | | | |
| **BO01** | **Tunca** | **13.80** | **188** | Pn | | **Pn** | **01 05 17.1** | **+0.7** |
| **H03N1** | **Juan Fernandez** | **15.52** | **213** | T | | T | 01 21 16.2 | |
| | baz=34,slow=72,SNR=6.2 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.53** | **213** | T | | T | 01 21 10.0 | |
| | baz=34,slow=72,SNR=5.5 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.54** | **213** | T | | T | 01 21 07.9 | |
| | baz=34,slow=72,SNR=6.4 | | | | | | | |
| **PLCA** | **Paso Flores** | **20.05** | **184** | P | | **P** | **01 06 29.1** | **-1.2** |
| | comp=Z,1.3nm,0.8s,baz=34,slow=17,SNR=2.7 | | | | | | | |
| **PLCA** | **Paso Flores** | **20.05** | **184** | P | | **P** | **01 06 31.0** | **+0.7** |
| **BDFB** | **Brasilia** | **20.45** | **79** | P | | **P** | **01 06 33.9** | **-1.1** |
| | comp=Z,6.0nm,0.3s,baz=198,slow=9.6,SNR=1.5 | | | | | | | |
| **PTGA** | **Pitinga** | **21.66** | **25** | P | | **P** | **01 06 47.1** | **-0.5** |
| | comp=Z,0.8nm,0.3s,baz=336,slow=23,SNR=1.5 | | | | | | | |
| PTGA | | | | LR | | LR | 01 16 60.0 | |
| | comp=Z,113nm,21.9s,baz=256,slow=42 | | | | | | | |
| **BOAV** | **Boa Vista** | **24.35** | **21** | P | | **P** | **01 07 13.8** | **0.0** |
| BOAV | | | | IAmb | | IAmb | 01 07 16.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **28.60** | **348** | P | | **P** | **01 07 50.8** | **-1.3** |
| ZARC | | | | IAmb | | IAmb | 01 07 52.2 | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **MIAR** | **Mount Ida** | **59.72** | **336** | P | | **P** | **01 11 59.9** | **+0.5** |
| **TXAR** | **Lajitas Array** | **59.96** | **325** | P | | **P** | **01 12 01.0** | **-0.3** |
| | comp=Z,0.2nm,0.7s,baz=177,slow=6.3,SNR=2.3 | | | | | | | |
| **S39A** | **Bolivar** | **62.44** | **338** | P | | **P** | **01 12 17.6** | **-0.2** |
| **SNAA** | **Sanae** | **63.05** | **161** | P | | **P** | **01 12 22.6** | **+1.1** |
| SNAA | | | | IAmb | | IAmb | 01 12 47.5 | |
| | comp=Z,1.9nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **68.49** | **74** | P | | **P** | **01 12 55.1** | **-2.0** |
| | comp=Z,2.4nm,0.9s,baz=190,slow=5.1,SNR=2.2 | | | | | | | |
| **PDAR** | **Pinedale Array** | **73.41** | **330** | P | | **P** | **01 13 26.8** | **+0.2** |
| | comp=Z,0.1nm,0.5s,baz=116,slow=8.1,SNR=1.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.86** | **322** | P | | **P** | **01 13 35.8** | **+0.6** |
| | comp=Z,0.3nm,0.7s,baz=100,slow=9.3,SNR=2.9 | | | | | | | |
| NVAR | | | | pP | | **pP** | **01 14 01.2** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=167,slow=6.4,SNR=2.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.06** | **71** | P | | **P** | **01 13 47.2** | **-0.7** |
| | comp=Z,1.8nm,0.7s,baz=259,slow=5.3,SNR=13 | | | | | | | |
| TORD | | | | pP | | **pP** | **01 14 14.6** | **+0.3** |
| | comp=Z,1.1nm,0.7s,baz=259,slow=5.2,SNR=4.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.42** | **341** | P | | **P** | **01 14 55.5** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=132,slow=4.5,SNR=22 | | | | | | | |
| YKA | | | | pP | | **pP** | **01 15 22.8** | **+0.8** |
| | comp=Z,0.5nm,0.6s,baz=132,slow=4.6,SNR=6.5 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **27.79** | **278** | T | | T | 03 40 57.2 | |
| | baz=101,slow=74,SNR=18 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **27.79** | **278** | T | | T | 03 40 58.7 | |
| | baz=101,slow=74,SNR=21 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **27.80** | **278** | T | | T | 03 40 59.0 | |
| | baz=101,slow=74,SNR=18 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **27.84** | **279** | T | | T | 03 41 01.5 | |
| | baz=102,slow=74,SNR=8.9 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **27.86** | **279** | T | | T | 03 41 05.1 | |
| | baz=102,slow=74,SNR=4.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **27.86** | **279** | T | | T | 03 41 03.1 | |
| | baz=102,slow=74,SNR=3.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.67** | **211** | PKP | | **PKPdf** | **01 21 11.2** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=150,slow=1.6,SNR=4.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **140.64** | **33** | PKP | | **PKPdf** | **01 21 21.0** | **-1.9** |
| | comp=Z,0.5nm,0.8s,baz=231,slow=5.9,SNR=1.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.96** | **35** | PKP | | **PKPdf** | **01 21 30.8** | **+0.1** |
| | comp=Z,2.2nm,0.8s,baz=310,slow=3.9,SNR=6.0 | | | | | | | |

*ECX **08** 01:03:22.7±0.5,32°.40N×115°.24W, h12km±1km, MD2.5, ML2.7*
*MEX **08** 01:03:22.7±0.4,32°.56N×115°.10W, h2km±3km, MD3.6*
**ISC 08 01:03:23.5**±0.8**, 32°.39N**±0°.05×**115°.27W**±0°.03**, h16**km±5km**, n19, σ0°62/32, 5C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.05** | **316** | ⇑*e* P | | **Pg** | **01 03 26.5** | **+0.1** |
| CPBX | | | | *e*S | | **Sg** | **01 03 28.8** | **+0.5** |
| CPBX | | | | IAML | | | 01 03 31.1 | |
| | comp=E,8μm,0.2s | | | | | | | |
| CPBX | | | | ⇑*e* | | | 01 03 31.1 | |
| CPBX | | | | ⇑*e* | | | 01 03 31.1 | |
| CPBX | | | | IAML | | | 01 03 31.1 | |
| | comp=N,7μm,0.2s | | | | | | | |
| **MBIG** | **Mexicali** | **0.06** | **69** | *i* P | | **Pg** | **01 03 26.0** | **-0.5** |
| MBIG | | | | *e*P | | **Pg** | **01 03 26.2** | **-0.3** |
| MBIG | | | | *i* S | | **Sg** | **01 03 28.5** | **+0.1** |
| MBIG | | | | *e*S | | **Sg** | **01 03 28.7** | **+0.3** |
| **MBIG** | **Mexicali** | **0.06** | **69** | ⇓*i* P | | **Pg** | **01 03 26.0** | **-0.5** |
| MBIG | | | | *e*S | | **Sg** | **01 03 28.5** | **+0.1** |
| **CTLX** | **Tlaxcala, TLX** | **0.13** | **49** | ⇓*i* P | | **Pg** | **01 03 27.6** | **+0.3** |
| CTLX | | | | *e*S | | **Sg** | **01 03 31.2** | **+1.5** |
| **GUVIX** | **Guadalupe Vict** | **0.18** | **117** | ⇑*i* P | | **Pb** | **01 03 28.4** | **-0.1** |
| GUVIX | | | | *e*S | | **Sb** | **01 03 31.8** | **0.0** |
| GUVIX | | | | ⇑*e* | | | 01 03 33.1 | |
| GUVIX | | | | IAML | | | 01 03 33.1 | |
| | comp=E,2μm,0.1s | | | | | | | |
| **PESCX** | **Ej. Pescaderos** | **0.26** | **79** | *e*P | | **Pb** | **01 03 29.2** | **-0.6** |
| **RITX** | **Riito Sonora** | **0.34** | **130** | *e* | | **Sb** | **01 03 38.1** | **+1.8** |
| RITX | | | | IAML | | | 01 03 38.1 | |
| | comp=N,999nm,0.2s | | | | | | | |
| **EMSC** | **East Mesa** | **0.42** | **34** | *e*P | | **Pb** | **01 03 32.5** | **-0.1** |
| **SGL** | **Mount Signal** | **0.47** | **304** | *i* P | | **Pb** | **01 03 33.5** | **+0.1** |
| **COA** | **Coachella** | **0.49** | **14** | ⇑*i* P | | **Pb** | **01 03 33.9** | **+0.1** |
| **YUH2** | **Yuha Desert** | **0.61** | **295** | *e*P | | **Pb** | **01 03 35.9** | **+0.1** |
| YUH2 | | | | *e*S | | **Sb** | **01 03 44.2** | **-0.1** |
| **YMD** | **Yuma Desert** | **0.63** | **74** | *e*P | | **Pb** | **01 03 35.7** | **-0.5** |
| **IKP** | **In-Ko-Pah, Jac** | **0.76** | **291** | *e*P | | **Pg** | **01 03 38.7** | **+0.4** |
| **CRR** | **Carrizo Plain** | **0.78** | **310** | ⇓*i* P | | **Pb** | **01 03 38.5** | **-0.2** |
| **CBX** | **Cerro Bola** | **1.19** | **267** | *i* P | | **Pn** | **01 03 43.8** | **-1.8** |
| CBX | | | | *i* S | | **Sg** | **01 04 02.1** | **+0.3** |
| **CBX** | **Cerro Bola** | **1.19** | **267** | *e*P | | **Pg** | **01 03 46.4** | **0.0** |
| CBX | | | | *e*S | | **Sb** | **01 04 01.2** | **+0.3** |
| **TJIG** | **Tijuana** | **1.19** | **273** | *e*P | | **Pn** | **01 03 45.3** | **-0.2** |
| TJIG | | | | *e*S | | **Sn** | **01 04 01.8** | **+0.3** |
| **BAR** | **Barrett** | **1.22** | **284** | *e*P | | **Pg** | **01 03 47.2** | **+0.1** |
| BAR | | | | *e*S | | **Sg** | **01 04 03.2** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **1.35** | **187** | *e*P | | **Pn** | **01 03 47.8** | **-0.2** |
| SPIG | | | | *e*S | | **Sg** | **01 04 07.5** | **+0.4** |

*IDC **08** 01:06:39.9±1.8,20°.40S×177°.97W, h526km±19km, mb3.5/19, mb1 3.7/22, mb1mx3.5/36, mbtmp4.3/22, Error ellipse: s-maj=18.4km s-min=14.3km az=136.0*
*NEIC **08** 01:06:41.7±1.3,20°.30S±0°.10×178°.1W±0°.2, h535km±6km, mb4.1/30, Error ellipse: s-maj=22.3km s-min=14.0km az=86.0*
**ISC 08 01:06:41.1**±0.5**, 20°.35S**±0°.09×**178°.0W**±0°.1**, h534**km**, n100, σ0°83/104, mb4.0/33, 15C-10D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.53** | **304** | P | | **P** | **01 08 06.4** | **+0.2** |
| | 8.9nm,0.3s,baz=139,slow=9.5,SNR=78 | | | | | | | |
| **MSVF** | **Nonsavu** | **4.53** | **304** | P | | **P** | **01 08 07.0** | **+0.8** |
| **DZM** | **Mont Dzumac** | **14.58** | **260** | P | | **P** | **01 09 47.1** | **+0.5** |
| | 0.2nm,0.3s,baz=114,slow=20,SNR=3.2 | | | | | | | |
| **OUZ** | **Omahuta** | **16.55** | **205** | P | | **P** | **01 10 07.6** | **+1.4** |
| **URZ** | **Urewera** | **18.34** | **192** | P | | **P** | **01 10 19.8** | **-2.8** |
| | 1.4nm,0.3s,baz=8.3,slow=4.5,SNR=9.0 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.34** | **193** | P | | **P** | **01 10 31.3** | **-0.6** |
| BKZ | | | | IAmb | | IAmb | 01 10 50.3 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **QRZ** | **Quartz Range** | **21.94** | **199** | P | | **P** | **01 10 54.6** | **-0.7** |
| **WHZ** | **Wether Hill Ro** | **27.97** | **201** | P | | **P** | **01 11 49.1** | **+0.6** |
| WHZ | | | | IAmb | | IAmb | 01 11 55.8 | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| **CTA** | **Charters Tower** | **33.48** | **264** | P | | **P** | **01 12 36.0** | **-0.3** |
| | comp=Z,6.0nm,0.7s,baz=67,slow=11,SNR=3.6 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.48** | **264** | P | | **P** | **01 12 36.3** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 01 12 37.0 | |
| | comp=Z,9.3nm,1.0s | | | | | | | |
| **JAY** | **Jayapura** | **43.97** | **288** | P |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.2nm,0.7s,baz=318,slow=4.6,SNR=2.3 | | | | | | | |
| **BVAR** | **Borovoye Array** | **118.94** | **320** | PKP | | **PKPdf** | **01 24 28.2** | **-0.6** |
| | comp=Z,1.4nm,0.4s,baz=61,slow=12,SNR=1.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.76** | **350** | PKP | | **PKPdf** | **01 24 46.6** | **-0.5** |
| | comp=Z,2.8nm,0.9s,baz=32,slow=4.7,SNR=3.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.76** | **350** | | | **PKPdf** | **01 24 47.2** | **+0.1** |
| **AKASG** | **Malin Array Be** | **142.87** | **331** | PKhKP | | PKPpre | 01 25 10.0 | |
| | comp=Z,5.4nm,0.6s,baz=43,slow=4.4,SNR=26 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.87** | **331** | | | PKPpre | 01 25 08.8 | |
| **SORM** | **Soroca** | **145.06** | **329** | ⇓P | | **PKPdf** | **01 25 17.7** | **+0.2** |
| **PURM** | **Purcari** | **145.34** | **325** | ⇑P | | **PKPdf** | **01 25 18.7** | **+0.6** |
| **BRTR** | **Keskin Array B** | **146.71** | **312** | PKPbc | | **PKPbc** | **01 25 23.1** | **-0.4** |
| | comp=Z,1.8nm,0.8s,baz=118,slow=4.5,SNR=9.6 | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **146.90** | **331** | PKPdf | | **PKPdf** | **01 25 20.4** | **-0.4** |
| BUR08 | | | | PKPbc | | **PKPbc** | **01 25 24.4** | **+0.6** |
| **BURAR** | **Bucovina Array** | **146.91** | **331** | ⇓P | | **PKiKP** | **01 25 25.1** | **-0.6** |
| **GHRR** | | **146.94** | **327** | ⇑P | | **PKPbc** | **01 25 23.8** | **+0.1** |
| **TPGR** | **Topolog** | **147.19** | **324** | ⇓P | | **PKPbc** | **01 25 24.6** | **+0.2** |
| **ODBI** | **Odobesti** | **147.32** | **327** | ⇑P | | **PKPab** | **01 25 29.9** | **+1.5** |
| **PLOR** | **Plostina** | **147.47** | **327** | ⇑P | | **PKPab** | **01 25 28.3** | **-0.8** |
| **EFOR** | **EFORIE** | **147.56** | **323** | ⇓P | | **PKPbc** | **01 25 26.0** | **+0.7** |
| **TRPA** | **Tarpa** | **147.69** | **334** | ⇓P | | **PKPbc** | **01 25 25.6** | **0.0** |
| **ARCR** | **ARCALIA** | **147.70** | **331** | ⇓P | | **PKPbc** | **01 25 31.0** | **+1.1** |
| **MMAI** | **Mount Meron Ar** | **147.71** | **300** | PKPbc | | **PKPbc** | **01 25 26.8** | **+0.5** |
| | comp=Z,3.1nm,0.6s,baz=86,slow=5.9,SNR=11 | | | | | | | |
| **OZUR** | | **147.74** | **328** | ⇓P | | **PKPbc** | **01 25 24.4** | **-1.4** |
| **OSTC** | **Ostas** | **147.81** | **343** | ⇑*e*PKP | | **PKiKP** | **01 25 26.8** | **-0.5** |
| **CLL** | **Collm** | **147.91** | **347** | *i* PKPbc | | **PKPbc** | **01 25 26.1** | **+0.1** |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| CLL | | | | *e*PKPab | | **PKPab** | **01 25 30.0** | **-0.5** |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **SHAB** | **Shabla** | **147.91** | **322** | ⇑P | | **PKPab** | **01 25 32.4** | **+1.6** |
| **DOPR** | **Dopca** | **148.02** | **328** | ⇑P | | **PKPbc** | **01 25 26.7** | **+0.1** |
| **MLR** | **Muntele Rosu** | **148.08** | **327** | ⇑P | | **PKPbc** | **01 25 26.7** | **-0.2** |
| **KRLC** | **Kraliky** | **148.09** | **342** | *e*PKP | | **PKPbc** | **01 25 27.1** | **+0.5** |
| **DRGR** | | **148.66** | **332** | ⇓P | | **PKPbc** | **01 25 27.6** | **-0.5** |
| **PRU** | **Pruhonice** | **148.78** | **344** | ⇑*e*PKP | | **PKPbc** | **01 25 27.9** | **-0.3** |
| PRU | | | | *e*PKPAB | | **PKPab** | **01 25 34.6** | **+0.5** |
| **ARR** | **Arges** | **148.82** | **328** | ⇑P | | **PKiKP** | **01 25 29.7** | **+0.1** |
| **VRAC** | **Vranov** | **148.82** | **341** | ⇓P | | **PKPab** | **01 25 35.5** | **+1.1** |
| **NKC** | **Novy Kostel** | **149.04** | **347** | ⇑*e*PKP | | **PKiKP** | **01 25 31.9** | **+2.1** |
| **KHC** | **Kasperske Hory** | **149.81** | **345** | ⇑*e*PKP | | **PKPbc** | **01 25 31.1** | **+0.3** |
| KHC | | | | *e*PKPAB | | **PKPab** | **01 25 38.7** | **+0.2** |
| **CKRC** | **Cesky Krumlov** | **149.91** | **344** | ⇑*e*PKP | | **PKPbc** | **01 25 31.4** | **+0.4** |
| **GERES** | **GERESS Array B** | **150.04** | **344** | PKPbc | | **PKPbc** | **01 25 30.7** | **-0.8** |
| | comp=Z,1.6nm,0.8s,baz=42,slow=2.2,SNR=7.0 | | | | | | | |
| **BZS** | **Buzias** | **150.05** | **332** | ⇓P | | **PKPbc** | **01 25 30.5** | **-0.9** |
| **CONA** | **Conrad Observa** | **150.28** | **341** | *e*P | | **PKPbc** | **01 25 32.2** | **+0.1** |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **150.81** | **343** | *i* P | | **PKPbc** | **01 25 32.5** | **-0.6** |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **VTS** | **Vitosha** | **151.48** | **326** | ⇑P | | **PKPbc** | **01 25 34.7** | **-0.3** |
| **KBA** | **Koelnbreinsper** | **151.77** | **343** | *i* P | | **PKPbc** | **01 25 35.0** | **-0.5** |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **OBKA** | **Obir** | **151.94** | **341** | *e*P | | **PKiKP** | **01 25 36.9** | **+0.9** |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.02** | **346** | *e*P | | **PKPbc** | **01 25 35.7** | **-0.4** |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **152.16** | **346** | *e*P | | **PKPbc** | **01 25 36.0** | **-0.3** |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **152.29** | **344** | *i* P | | **PKPbc** | **01 25 35.7** | **-0.9** |
| | comp=Z,2.2nm,0.5s | | | | | | | |

**IDC 08 01:11:16.6±1.3, 29°23S×178°95W, h0km, mb3.8/3, mb1 4.0/4, mb1mx3.5/31, mbtmp3.8/4, ML3.5/1, Error ellipse: s-maj=34.6km s-min=15.7km az=176.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **0.90** | **92** | Pn | Pn | 01 11 37.3 | +0.8 |
| | 155nm,0.3s,baz=270,slow=20,SNR=5.1 | | | | | | |
| RAO | | | | Sn | Sn | 01 11 49.7 | -0.6 |
| | 260nm,0.3s,baz=270,slow=20,SNR=7.4 | | | | | | |
| **URZ** | **Urewera** | **9.58** | **199** | Pn | Pn | 01 13 35.4 | -0.4 |
| | 0.4nm,0.3s,baz=307,slow=5.1,SNR=1.4 | | | | | | |
| URZ | | | | Sn | Sn | 01 15 23.2 | -1.0 |
| | 1.0nm,0.3s,baz=314,slow=18,SNR=9.9 | | | | | | |
| **STKA** | **Stephens Creek** | **33.95** | **255** | P | P | 01 18 03.1 | +1.3 |
| | 0.9nm,0.4s,baz=90,slow=9.1,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **42.36** | **266** | P | P | 01 19 12.7 | -0.1 |
| | 0.6nm,0.5s,baz=98,slow=8.0,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.24** | **271** | P | P | 01 19 18.9 | -1.1 |
| | 0.7nm,0.4s,baz=109,slow=7.7,SNR=6.5 | | | | | | |

*IDC **08** 01:15:16.7±0.8, 35°72N×71°00E, h0km, mb4.0/20, mb1 4.1/25, mb1mx4.0/54, mbtmp4.0/25, ML3.6/4, MS3.4/1, Ms1 3.4/1, ms1mx2.5/90, Error ellipse: s-maj=18.5km s-min=14.5km az=12.0*

*BJI **08** 01:15:33.3±0.0, 36°32N×71°21E, h102km, mb4.2/16, mB4.8/9*

*NEIC **08** 01:15:35.3±2.4, 36°39N±0°02×71°08E±0°07, h125km±6km, mb4.1/14, Error ellipse: s-maj=8.1km s-min=2.0km az=72.0*

*MOS **08** 01:15:35.6±1.2, 36°68N×71°21E, h113km, mb4.2/9, Error ellipse: s-maj=10.6km s-min=4.7km az=80.4*

*NNC **08** 01:15:37.3±3.6, 36°72N×70°83E, h144km±40km, mb3.8, mpv4.6, Error ellipse: s-maj=33.2km s-min=17.7km az=164.0*

**ISC 08 01:15:33.4±0.5, 36°39N±0°04×71°18E±0°04, h111km±5km, h111km:pP-P,n190,σ2°60/223, mb4.0/29, 21C-16D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.54** | **224** | Pn | **Pn** | **01 16 15.3** | **+1.7** |
| KBL | | | | Sn | **Sn** | **01 16 45.1** | **+0.7** |
| **CEP** | **Cherat** | **2.63** | **167** | P | **Pn** | **01 16 17.3** | **+2.6** |
| CEP | | | | S | **Sn** | **01 16 48.0** | **+1.7** |
| **GAR** | **Garm** | **2.70** | **345** | Pn | **Pn** | **01 16 17.8** | **+2.3** |
| GAR | | | | Sn | **Sn** | **01 16 49.7** | **+1.8** |
| **CHGR** | **Chuyangaron** | **2.78** | **325** | Pn | **Pn** | **01 16 18.1** | **+1.6** |
| CHGR | | | | Sn | **Sn** | **01 16 49.5** | **-0.3** |
| **CHCP** | **Chirah Chowk** | **3.21** | **147** | P | **Pn** | **01 16 25.3** | **+3.0** |
| **NIL** | **Nilore** | **3.22** | **148** | Pn | **Pn** | **01 16 25.0** | **+2.7** |
| NIL | | | | Sn | **Sn** | **01 17 03.7** | **+3.7** |
| **THW** | **Thamme Wali** | **3.62** | **173** | P | **Pn** | **01 16 29.7** | **+2.1** |
| **SARP** | **Sargodha** | **4.62** | **164** | P | **Pn** | **01 16 42.1** | **+1.0** |
| **JMU** | **Jammu** | **4.78** | **139** | *e*P | **Pn** | **01 16 44.6** | **+1.5** |
| JMU | | | | *e*S | **Sn** | **01 17 36.3** | **-1.2** |
| **KSH** | **Kashi** | **4.91** | **49** | P | **Pn** | **01 16 43.4** | **-1.6** |
| KSH | | | | S | **Sn** | **01 17 34.4** | **-6.3** |
| KSH | | | | smax | smax | | |
| | comp=N,1μm,0.7s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,770nm,1.1s | | | | | | |
| **TAS** | **Tashkent** | **5.14** | **344** | Pn | **Pn** | **01 16 49.8** | **+1.7** |
| **THN** | **Thein Dam** | **5.44** | **135** | *e*P | **Pn** | **01 16 53.4** | **+1.3** |
| THN | | | | *e*S | **Sn** | **01 17 52.5** | **-1.0** |
| **IUG** | **Iuzhnay** | **5.82** | **352** | *e*PN | **Pn** | **01 16 56.9** | **-0.4** |
| IUG | | | | *e* | | 01 18 00.2 | |
| **IUG** | **Iuzhnay** | **5.82** | **352** | *e*Pn | **Pn** | **01 16 56.9** | **-0.4** |
| | baz=351 | | | | | | |
| IUG | | | | *e*Sn | **Sn** | **01 18 00.2** | **-2.6** |
| | baz=351 | | | | | | |
| **AML** | **Almayashu** | **6.06** | **18** | P | **Pn** | **01 17 02.7** | **+2.0** |
| | SNR=262 | | | | | | |
| **UCH** | **Uchtor** | **6.38** | **23** | P | **Pn** | **01 17 07.2** | **+2.0** |
| | SNR=92 | | | | | | |
| **DZA** | **Taraz** | **6.50** | **1** | *e*PN | **Pn** | **01 17 06.2** | **-0.2** |
| **DZA** | **Taraz** | **6.50** | **1** | *e*P | **Pn** | **01 17 06.3** | **-0.2** |
| | baz=0.7 | | | | | | |
| DZA | | | | *e*S | **Sn** | **01 18 16.3** | **-2.8** |
| | baz=0.7 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.58** | **17** | P | **Pn** | **01 17 09.5** | **+1.9** |
| | SNR=42 | | | | | | |
| **BHK** | **Bhakra** | **6.60** | **137** | *e*P | **Pn** | **01 17 09.7** | **+1.9** |
| **BRLS** | **Borolday** | **6.71** | **352** | *e*PN | **Pn** | **01 17 06.5** | **-2.8** |
| BRLS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **6.71** | **352** | *e*P | **Pn** | **01 17 06.5** | **-2.8** |
| | comp=Z,5.3nm,0.6s,baz=349 | | | | | | |
| **KK02** | **Karatay Array** | **6.73** | **356** | ⇑P | **Pn** | **01 17 10.9** | **+1.4** |
| | comp=Z,41nm,0.3s,baz=176,slow=13 | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **01 18 23.3** | **-1.3** |
| | comp=Z,63nm,0.6s,baz=184,slow=26 | | | | | | |
| **KKAR** | **Karatay Array** | **6.73** | **356** | Pn | **Pn** | **01 17 10.9** | **+1.4** |
| **AAK** | **Ala-Archa** | **6.74** | **21** | Pn | **Pn** | **01 17 11.8** | **+1.9** |
| | comp=Z,24nm,0.3s,baz=189,slow=8.2,SNR=312 | | | | | | |
| AAK | | | | Sn | **Sn** | **01 18 23.5** | **-1.8** |
| | comp=Z,2.0nm,0.3s,baz=221,slow=15,SNR=3.6 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **6.74** | **21** | P | **Pn** | **01 17 12.1** | **+2.2** |
| | SNR=106 | | | | | | |
| **AAK** | **Ala-Archa** | **6.74** | **21** | PN | **Pn** | **01 17 12.2** | **+2.3** |
| AAK | | | | S | **Sn** | **01 18 24.4** | **-0.9** |
| **AAK** | **Ala-Archa** | **6.74** | **21** | ⇑P | **Pn** | **01 17 12.2** | **+2.3** |
| | comp=Z,28nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 18 24.4** | **-0.9** |
| | comp=Z,149nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **6.90** | **24** | P | **Pn** | **01 17 14.9** | **+2.8** |
| | SNR=18 | | | | | | |
| **FRU1** | **Bishkek** | **6.94** | **21** | Pn | **Pn** | **01 17 15.7** | **+3.2** |
| **ULHL** | **Ulahol** | **7.04** | **32** | P | **Pn** | **01 17 15.8** | **+1.9** |
| | SNR=31 | | | | | | |
| **CHMS** | **Chumysh** | **7.15** | **22** | P | **Pn** | **01 17 17.3** | **+2.0** |
| | SNR=17 | | | | | | |
| **USP** | **Ospenovka** | **7.33** | **19** | P | **Pn** | **01 17 19.9** | **+2.2** |
| | SNR=39 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **26** | P | **Pn** | **01 17 20.5** | **+2.2** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **26** | *i* PN | **Pn** | **01 17 19.9** | **+1.7** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **26** | ⇑P | **Pn** | **01 17 19.9** | **+1.7** |
| | comp=Z,19nm,0.7s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **01 18 38.6** | **-1.7** |
| | comp=Z,31nm,0.8s | | | | | | |
| **KDJ** | **Kajisay** | **7.38** | **37** | Pn | **Pn** | **01 17 20.6** | **+2.1** |
| **TARG** | **Taragay, Kyrgy** | **7.41** | **42** | Pn | **Pn** | **01 17 20.8** | **+1.7** |
| **SGDS** | **Sogindy** | **7.53** | **20** | *e*P | **Pn** | **01 17 20.2** | **-0.3** |
| | comp=Z,2.7nm,0.6s,baz=20 | | | | | | |
| SGDS | | | | *e*S | **Sn** | **01 18 41.5** | **-2.8** |
| | baz=20 | | | | | | |
| **HRA** | **Herat** | **7.57** | **257** | Pn | **Pn** | **01 17 21.5** | **+0.3** |
| **MDOK** | **Medeo** | **8.13** | **32** | PN | **Pn** | **01 17 30.1** | **+1.4** |
| **MDOK** | **Medeo** | **8.13** | **32** | *e*P | **Pn** | **01 17 28.9** | **+0.2** |
| | baz=33 | | | | | | |
| **MDOK** | **Medeo** | **8.13** | **32** | ⇑P | **Pn** | **01 17 30.1** | **+1.4** |
| | comp=Z,13nm,0.9s | | | | | | |
| **PRZ** | **Przheval'sk** | **8.26** | **40** | Pn | **Pn** | **01 17 33.2** | **+2.8** |
| **DDI** | **Dehra Dun** | **8.34** | **135** | *e*S | **Sn** | **01 19 00.6** | **-3.5** |
| DDI | | | | IAML | | 01 19 04.9 | |
| | comp=E,529nm,0.4s | | | | | | |
| DDI | | | | IAML | | 01 19 05.4 | |
| | comp=N,547nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **8.47** | **26** | *e*PN | **Pn** | **01 17 32.9** | **-0.2** |
| **KUU** | **Kurty** | **8.47** | **26** | *e*P | **Pn** | **01 17 33.0** | **-0.2** |
| | baz=27 | | | | | | |
| **SATY** | **Saty** | **8.68** | **38** | *e*PN | **Pn** | **01 17 36.0** | **0.0** |
| SATY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **SATY** | **Saty** | **8.68** | **38** | *e*P | **Pn** | **01 17 36.0** | **0.0** |
| | comp=Z,4.4nm,1.1s,baz=39 | | | | | | |
| **ZHN** | **Zhinishke** | **8.77** | **37** | *e*PN | **Pn** | **01 17 37.3** | **0.0** |
| **ZHN** | **Zhinishke** | **8.77** | **37** | *e*P | **Pn** | **01 17 37.4** | **0.0** |
| | baz=38 | | | | | | |
| **BTLS** | **Baital** | **8.91** | **13** | *e*PN | **Pn** | **01 17 38.9** | **-0.2** |
| **BTLS** | **Baital** | **8.91** | **13** | *e*P | **Pn** | **01 17 38.9** | **-0.2** |
| | baz=14 | | | | | | |
| **UZB** | **Uzynbulak** | **9.05** | **39** | *e*PN | **Pn** | **01 17 41.4** | **+0.3** |
| UZB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **9.05** | **39** | *e*P | **Pn** | **01 17 41.4** | **+0.3** |
| | comp=Z,4.0nm,0.6s,baz=40 | | | | | | |
| **KPKS** | **Kokpek** | **9.12** | **37** | *e*PN | **Pn** | **01 17 42.1** | **+0.2** |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **KPKS** | **Kokpek** | **9.12** | **37** | *e*P | **Pn** | **01 17 42.2** | **+0.2** |
| | comp=Z,9.1nm,0.8s,baz=38 | | | | | | |
| **NDI** | **New Delhi** | **9.21** | **145** | *e*P | **Pn** | **01 17 43.0** | **-0.3** |
| NDI | | | | *e*P | **Pn** | **01 17 43.1** | **-0.2** |
| NDI | | | | *e*S | Sn | 01 19 17.0 | -8.2 |
| NDI | | | | *e*S | **Sn** | **01 19 19.3** | **-5.9** |
| **AYAN** | **Aya Nagar** | **9.34** | **146** | *e*P | **Pn** | **01 17 45.2** | **+0.2** |
| AYAN | | | | *e*S | **Sn** | **01 19 24.7** | **-3.6** |
| **KUDL** | **Kundal** | **9.37** | **150** | *e*P | **Pn** | **01 17 43.9** | **-1.4** |
| KUDL | | | | *e*S | **Sn** | **01 19 22.2** | **-6.6** |
| **SONA** | **Sohna** | **9.52** | **147** | *e*P | **Pn** | **01 17 48.3** | **+0.9** |
| SONA | | | | *e*S | **Sn** | **01 19 25.7** | **-7.0** |
| **PTH** | **Pithoragarh** | **10.20** | **129** | *e*P | **Pn** | **01 17 55.5** | **-1.2** |
| PTH | | | | *e*S | Sn | 01 19 40.3 | -9.0 |
| **TDK** | **Taldyqorghan** | **10.20** | **30** | *e*P | **Pn** | **01 17 56.7** | **+0.2** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **TDK** | **Taldyqorghan** | **10.20** | **30** | *e*P | **Pn** | **01 17 56.7** | **+0.2** |
| | comp=Z,5.0nm,0.7s,baz=31 | | | | | | |
| **AJM** | **Ajmer** | **10.31** | **162** | *e*P | **Pn** | **01 17 58.1** | **-0.1** |
| AJM | | | | *e*S | Sn | 01 19 40.0 | -12 |
| **GEYT** | **Alibeck** | **10.54** | **282** | Pn | **Pn** | **01 17 59.2** | **-2.1** |
| | comp=Z,7.2nm,0.3s,baz=144,slow=5.5,SNR=51 | | | | | | |
| GEYT | | | | Sn | **Sn** | **01 19 51.9** | **-5.5** |
| | comp=Z,3.4nm,0.3s,baz=111,slow=21,SNR=4.5 | | | | | | |
| **GEYT** | **Alibeck** | **10.54** | **282** | Pn | **Pn** | **01 17 59.4** | **-1.9** |
| **GYA0B** | **ALIBECK ARRAY** | **10.54** | **282** | ⇑P | **Pn** | **01 17 59.7** | **-1.6** |
| GYA0B | | | | ⇓S | **Sn** | **01 19 52.2** | **-5.2** |
| **GYA0B** | **ALIBECK ARRAY** | **10.54** | **282** | Pn | **Pn** | **01 17 59.1** | **-2.2** |
| **OTUK** | **Ortayu** | **11.88** | **4** | ⇓P | **Pn** | **01 18 17.2** | **-1.8** |
| | comp=Z,15nm,1.2s | | | | | | |
| **JHNI** | **Jhansi** | **12.58** | **148** | *e*P | **Pn** | **01 18 26.9** | **-1.5** |
| JHNI | | | | *e*S | Sn | 01 20 34.5 | -12 |
| **PYUN** | **Piuthan** | **12.96** | **126** | *e*P | **Pn** | **01 18 31.1** | **-2.4** |
| | comp=Z,35nm,0.3s | | | | | | |
| PYUN | | | | *e*S | Sn | 01 20 46.1 | -10 |
| **MAKZ** | **Makanchi** | **13.16** | **34** | P | **Pn** | **01 18 35.1** | **-0.8** |
| **MAKZ** | **Makanchi** | **13.16** | **34** | ⇑P | **Pn** | **01 18 35.1** | **-0.8** |
| | comp=Z,15nm,1.4s | | | | | | |
| **MAKZ** | **Makanchi** | **13.16** | **34** | Pn | **Pn** | **01 18 35.4** | **-0.5** |
| **MK31** | **Makanchi Array** | **13.29** | **35** | ⇑*e*P | **Pn** | **01 18 37.2** | **-0.4** |
| **MK31** | **Makanchi Array** | **13.29** | **35** | ⇑P | **Pn** | **01 18 36.8** | **-0.8** |
| | comp=Z,1.4nm,0.4s,baz=220,slow=11,SNR=118 | | | | | | |
| **MK31** | **Makanchi Array** | **13.29** | **35** | Pn | **Pn** | **01 18 37.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **13.29** | **35** | Pn | **Pn** | **01 18 35.6** | **-2.0** |
| | comp=Z,0.2nm,0.3s,baz=222,slow=14,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.29** | **35** | Pn | **Pn** | **01 18 36.7** | **-0.9** |
| **DANN** | **Dangsing** | **13.30** | **123** | *e*P | **Pn** | **01 18 36.0** | **-2.1** |
| | comp=Z,43nm,0.3s | | | | | | |
| DANN | | | | *e*S | Sn | 01 20 53.9 | -11 |
| **KOLN** | **Koldanda** | **13.58** | **126** | *e*P | **Pn** | **01 18 39.2** | **-2.4** |
| | comp=Z,20nm,0.3s | | | | | | |
| KOLN | | | | *e*S | Sn | 01 21 01.0 | -10 |
| **BRZS** | **Berezniki** | **13.63** | **4** | *e*P | **Pn** | **01 18 41.6** | **-0.3** |
| BRZS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BRZS** | **Berezniki** | **13.63** | **4** | *e*P | **Pn** | **01 18 41.6** | **-0.3** |
| | comp=Z,2.9nm,0.8s,baz=4.1 | | | | | | |
| **GKN** | **Gorkha** | **14.12** | **123** | *e*P | **Pn** | **01 18 46.2** | **-2.3** |
| | comp=Z,88nm,0.4s | | | | | | |
| GKN | | | | *e*S | Sn | 01 21 13.0 | -11 |
| **BHPL** | **Bhopal** | **14.17** | **156** | *e*P | **Pn** | **01 18 46.2** | **-2.9** |
| BHPL | | | | IAmb | IAmb | 01 18 55.4 | |
| | comp=Z,14nm,0.6s | | | | | | |
| BHPL | | | | *e*S | Sn | 01 21 12.1 | -13 |
| **ALBI** | **Allahabad** | **14.31** | **138** | *e*S | Sn | 01 21 15.9 | -13 |
| **WMQ** | **Urumqi** | **14.64** | **54** | *e*P | **P** | **01 18 57.9** | **-0.3** |
| **DMN** | **Daman** | **14.69** | **123** | *e*P | **Pn** | **01 18 54.4** | **-1.5** |
| | comp=Z,34nm,0.3s | | | | | | |
| DMN | | | | *e*S | Sn | 01 21 27.8 | -10 |
| **KKN** | **Kakani** | **14.69** | **122** | *e*P | **Pn** | **01 18 53.5** | **-2.4** |
| | comp=Z,50nm,0.6s | | | | | | |
| KKN | | | | *e*S | Sn | 01 21 27.6 | -11 |
| **PKIN** | **Phulchoki** | **14.91** | **122** | *e*P | **Pn** | **01 18 56.7** | **-2.0** |
| | comp=Z,58nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.92** | **122** | *e*P | **Pn** | **01 18 57.0** | **-1.9** |
| | comp=Z,30nm,0.4s | | | | | | |
| PKI | | | | *e*S | Sn | 01 21 32.3 | -12 |
| **GUN** | **Gumba** | **15.03** | **120** | *e*P | **Pn** | **01 18 57.9** | **-2.4** |
| | comp=Z,40nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.18** | **18** | Pn | **Pn** | **01 18 59.3** | **-2.4** |
| | comp=Z,0.1nm,0.3s,baz=208,slow=11,SNR=9.5 | | | | | | |
| KURBB | | | | LR | LR | 01 25 46.2 | |
| | comp=Z,136nm,20.2s,baz=64,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.18** | **18** | ⇓P | **Pn** | **01 18 59.5** | **-2.1** |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **JBP** | **Jabalpur** | **15.22** | **148** | ⇓*e*S | Sn | 01 21 37.6 | -13 |
| **AB31** | **Akbulak array** | **15.25** | **331** | P | **Pn** | **01 19 02.7** | **+0.1** |
| AB31 | | | | S | **Sn** | **01 21 41.4** | **-10** |
| **AB31** | **Akbulak array** | **15.25** | **331** | ⇑P | **Pn** | **01 19 01.7** | **-0.9** |
| | comp=Z,5.0nm,0.3s,baz=140,slow=15,SNR=379 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **01 21 41.7** | **-9.4** |
| | comp=Z,12nm,0.5s,baz=169,slow=12,SNR=4.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **15.25** | **331** | | **Pn** | **01 19 02.0** | **-0.5** |
| **KURK** | **Kurchatov** | **15.29** | **18** | ⇓*e*P | **Pn** | **01 19 02.0** | **-1.0** |
| **KURK** | **Kurchatov** | **15.29** | **18** | ⇓P | **Pn** | **01 19 01.0** | **-2.0** |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **15.29** | **18** | Pn | **Pn** | **01 19 00.8** | **-2.2** |
| KURK | | | | IAmb | IAmb | 01 19 09.2 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,7.0nm,0.9s | | | | | | |
| **JIRN** | **Jiri** | **15.40** | **120** | *e*P | **Pn** | **01 19 02.8** | **-2.2** |
| | comp=Z,75nm,0.4s | | | | | | |
| JIRN | | | | *e*S | Sn | 01 21 44.6 | -11 |
| **RAMN** | **Ramite** | **16.13** | **121** | *e*P | **Pn** | **01 19 12.2** | **-1.7** |
| | comp=Z,20nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.64** | **358** | P | **Pn** | **01 19 19.3** | **-0.5** |
| | comp=Z,1.5nm,0.3s,baz=131,slow=10,SNR=18 | | | | | | |
| **TAPN** | **Taplejung** | **16.66** | **118** | *e*P | **Pn** | **01 19 19.8** | **-0.7** |
| | comp=Z,44nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **16.68** | **358** | ⇑*e*P | **P** | **01 19 22.2** | **+1.5** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.6s | | | | | | |
| **BRVK** | **Borovoye** | **16.68** | **358** | ⇑P | **P** | **01 19 21.4** | **+0.8** |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **16.68** | **358** | | **Pn** | **01 19 19.9** | **-0.3** |
| BRVK | | | | IAmb | IAmb | 01 19 23.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **16.73** | **120** | *e*P | **Pn** | **01 19 20.2** | **-1.1** |
| | comp=Z,35nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.95** | **330** | P | **Pn** | **01 19 21.3** | **-2.2** |
| | comp=Z,0.1nm,0.3s,baz=140,slow=4.1,SNR=7.0 | | | | | | |
| AKTO | | | | S | **Sn** | **01 22 22.1** | **-10** |
| | comp=Z,0.6nm,0.3s,baz=196,slow=19,SNR=4.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.95** | **330** | ⇓P | **Pn** | **01 19 23.1** | **-0.5** |
| | comp=Z,28nm,0.8s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **01 22 22.9** | **-9.1** |
| | comp=Z,27nm,0.8s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **17.78** | **37** | ⇓*i* P | **Pn** | **01 19 34.0** | **+0.2** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,15nm,1.5s | | | | | | |
| **LSA** | **Lhasa** | **18.00** | **106** | P | **Pn** | **01 19 38.1** | **+1.2** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **SRSP** | **Sriramsagar** | **18.50** | **158** | *e*P | **Pn** | **01 19 43.1** | **+0.7** |
| **KLRI** | **Killari** | **18.86** | **164** | *e*P | **Pn** | **01 19 47.2** | **+0.4** |
| **GOMU** | **GeErMu** | **19.04** | **84** | P | **Pn** | **01 19 50.9** | **+1.8** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.95** | **24** | ⇓P | **P** | **01 19 56.4** | **-0.1** |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.95** | **24** | P | **P** | **01 19 57.6** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **19.95** | **24** | P | **P** | **01 19 56.7** | **+0.2** |
| | comp=Z,5.9nm,0.3s,baz=213,slow=10.0,SNR=43 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.95** | **24** | *i* P | **P** | **01 19 57.7** | **+1.2** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.95** | **24** | P | **P** | **01 19 57.6** | **+1.2** |
| **HYBB** | **Hyderabad (bro** | **19.99** | **159** | *e*P | **P** | **01 19 57.6** | **+0.5** |
| **CUPL** | **Choutuppal** | **20.22** | **158** | *e*P | **P** | **01 20 00.7** | **+1.1** |
| **GROC** | **Groznyy** | **20.61** | **297** | *e*P | Pn | 01 20 05.5 | -1.5 |
| GROC | | | | *e*S | **S** | **01 23 50.7** | **+2.8** |
| GROC | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| **GNI** | **Garni** | **21.07** | **288** | P | **P** | **01 20 04.3** | **-4.5** |
| | comp=Z,29nm,1.3s,baz=186,slow=17,SNR=3.1 | | | | | | |
| GNI | | | | S | **S** | **01 23 52.3** | **-4.8** |
| | comp=Z,43nm,1.3s,baz=145,slow=20,SNR=2.5 | | | | | | |
| **CHLP** | **

comp=N,379nm,19.5s
**MLR Muntele Rosu 34.96 299** ⇑P P 01 22 21.8 +7.0
**BURAR Bucovina Array 35.47 303** ⇑P **P 01 22 21.8 +2.8**
**BURAR Bucovina Array 35.47 303** P **P 01 22 21.2 +2.1**
**BUR08 Bucovina Ar. S 35.48 303** P **P 01 22 19.8 +0.6**
**ARR Arges 35.89 299** ⇓P P 01 22 27.6 +4.9
**FIA1 FINESS Array S 37.66 326** P **P 01 22 38.0 +0.7**
**FINES FINESS Array B 37.66 326** P **P 01 22 36.8 -0.5**
comp=N,1.1nm,0.4s,baz=123,slow=9.3,SNR=16
**FINES FINESS Array B 37.66 326** *i* P **P 01 22 39.0 +1.7**
FINES pmax pmax
comp=Z,1.0nm,0.4s
**FINES FINESS Array B 37.66 326** P **P 01 22 38.5 +1.2**
**ARCES ARCESS Array B 41.30 338** P **P 01 23 08.3 +0.9**
comp=Z,1.3nm,0.5s,baz=121,slow=8.9,SNR=12
**ARCES ARCESS Array B 41.30 338** P **P 01 23 09.3 +1.9**
**NB2 NORSAR Subarra 44.56 323** P **P 01 23 34.9 +1.1**
comp=Z,0.6nm,0.5s,baz=98,slow=7.9
**NOA NORSAR Array B 44.56 323** P **P 01 23 33.8 0.0**
comp=Z,1.4nm,0.7s,baz=97,slow=7.7,SNR=5.5
**KSRS Korea Array 44.77 71** P **P 01 23 33.1 -2.7**
comp=Z,0.6nm,0.8s,baz=310,slow=6.9,SNR=1.8
**KLR Kul'dur 45.09 54**⇓ *e*P **P 01 23 40.7 +2.5**
KLR pmax pmax
comp=Z,9.0nm,2.3s
**SPITS Spitsbergen Ar 47.63 347** P **P 01 23 58.4 +0.7**
comp=Z,17nm,1.1s,baz=121,slow=14,SNR=2.1
**SEY Seymchan 54.43 34**⇓ *e*P **P 01 24 49.4 +0.8**
**BILL Bilibino 58.64 26** ⇑P P 01 25 28.6 +10
**TORD Torodi Ar. Bea 65.86 269** P **P 01 26 04.3 -3.1**
comp=Z,0.5nm,0.4s,baz=47,slow=6.1,SNR=15
**TORD Torodi Ar. Bea 65.86 269** P **P 01 26 06.8 -0.6**
TORD IAmb IAmb 01 26 12.9
comp=Z,1.5nm,0.8s
**TOLK Toolik Lake Re 70.99 15** P **P 01 26 40.0 +1.5**
TOLK IAmb IAmb 01 26 44.4
comp=Z,3.1nm,1.1s
**INK Inuvik 73.99 9** P **P 01 26 57.9 +1.7**
comp=Z,1.4nm,0.9s,baz=7.3,slow=1.7,SNR=5.0
**ILAR Eielson Array 74.84 16** P **P 01 27 00.2 -1.0**
comp=Z,0.2nm,0.5s,baz=320,slow=34,SNR=4.9
**YKA Yellowknife Ar 81.35 3** P **P 01 27 37.7 +0.5**
comp=Z,1.1nm,0.8s,baz=346,slow=5.2,SNR=14
**YKA Yellowknife Ar 81.35 3** *i* P **P 01 27 40.7 +3.6**
YKA pmax pmax
comp=Z,1.0nm,0.8s
**YKA Yellowknife Ar 81.35 3** P **P 01 27 38.8 +1.7**
**WRA Warramunga Arr 81.81 122** P **P 01 27 37.0 -3.2**
comp=Z,0.3nm,0.6s,baz=326,slow=4.9,SNR=2.9
**WRA Warramunga Arr 81.81 122** *i* P P 01 27 45.2 +5.0
**WB2 Warramunga Ar 81.81 122** P **P 01 27 40.0 -0.2**
**ASAR Alice Springs 84.07 125** P **P 01 27 47.8 -4.0**
comp=Z,0.4nm,0.7s,baz=314,slow=5.0,SNR=1.6

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*TUL **08** 01:39:45.3±0.9, 36.70N±0.01×98.27W±0.02, h5km±5km, ML2.7, mb_Lg2.3/10(NEIC), Error ellipse: s-maj=2.6km s-min=1.5km az=130.0*

**NEIC 08 01:39:45.5±0.5, 36.70N±0.02×98.28W±0.01, h9km±6km, Error ellipse: s-maj=3.0km s-min=1.2km az=197.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK032** | **Salt Plains WL** | **0.12** | **26** | Pg | Pg | 01 39 48.2 | -0.1 |
| OK032 | | | | | Sg | 01 39 50.3 | +0.1 |
| **CROK** | **Carrier** | **0.30** | **129** | Pg | Pg | 01 39 51.4 | -0.2 |
| CROK | | | | Sg | Sg | 01 39 55.5 | -0.1 |
| **OK035** | **E0210 Rd and N** | **0.35** | **272** | Pg | Pg | 01 39 52.5 | +0.1 |
| OK035 | | | | Sg | Sg | 01 39 58.0 | +1.0 |
| **KAN14** | **Manchester OK** | **0.36** | **44** | Pg | Pg | 01 39 52.6 | 0.0 |
| KAN14 | | | | Sg | Sg | 01 39 57.8 | +0.4 |
| **GC02** | **Grant County #** | **0.37** | **65** | Pg | Pg | 01 39 52.7 | -0.1 |
| GC02 | | | | | Sg | 01 39 58.1 | +0.5 |
| **KAN10** | **Anthony SW Sta** | **0.45** | **19** | Pg | Pg | 01 39 54.2 | -0.1 |
| **KAN17** | **Caldwell West** | **0.54** | **50** | Pg | Pg | 01 39 55.6 | -0.3 |
| KAN17 | | | | Sg | Sg | 01 40 03.0 | +0.1 |
| **KAN16** | **Harper SW Stat** | **0.55** | **18** | Pg | Pg | 01 39 56.2 | -0.1 |
| **KAN08** | **Anthony NE Sta** | **0.58** | **25** | Pg | Pg | 01 39 56.8 | 0.0 |
| KAN08 | | | | Sg | Sg | 01 40 04.6 | +0.1 |
| **KAN01** | **Argonia South** | **0.61** | **42** | Pg | Pg | 01 39 57.3 | -0.2 |
| **KAN12** | **Harper NE Stat** | **0.64** | **20** | Pg | Pg | 01 39 57.8 | -0.1 |
| **KAN06** | **Argonia West S** | **0.64** | **31** | Pg | Pg | 01 39 57.8 | -0.1 |
| **U32A** | **Winter Ranch,** | **0.67** | **242** | Pg | Pg | 01 39 58.3 | -0.1 |
| **KAN13** | **South Haven SW** | **0.71** | **63** | Pg | Pg | 01 39 58.9 | -0.3 |
| **BLOK** | **Blackwell** | **0.85** | **85** | Pg | Pg | 01 40 01.1 | -0.9 |
| **OK029** | **Liberty Lake** | **1.12** | **143** | | Pg | 01 40 06.2 | -0.8 |
| **BCOK** | **Bluff Creek, N** | **1.17** | **152** | | Pb | 01 40 07.0 | -1.0 |
| BCOK | | | | IAmb_Lg | | 01 40 22.7 | |
| comp=Z,12nm,1.1s | | | | | | | |
| **OK025** | **Westminster Rd** | **1.35** | **145** | | Pn | 01 40 10.2 | -0.4 |
| **QUOK** | **Quay** | **1.37** | **112** | Pn | Pn | 01 40 10.6 | -0.2 |
| **OK031** | **S. Brethren Rd** | **1.38** | **122** | Pn | Pn | 01 40 10.7 | -0.2 |
| OK031 | | | | IAmb_Lg | | 01 40 30.8 | |
| comp=Z,6.7nm,0.8s | | | | | | | |
| **OK030** | **Cody Creek RV** | **1.43** | **122** | | Pn | 01 40 11.6 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.43** | **81** | | Pn | 01 40 11.8 | +0.1 |
| **OK034** | **N. Norfolk Rd.** | **1.44** | **118** | Pn | Pn | 01 40 11.7 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.44** | **152** | IAmb_Lg | | 01 40 30.1 | |
| comp=Z,28nm,1.3s | | | | | | | |
| **FNO** | **Franklin** | **1.60** | **153** | Pn | Pn | 01 40 13.7 | -0.3 |
| **WMOK** | **Wichita Mounta** | **2.00** | **192** | Pn | Pn | 01 40 19.9 | +0.4 |
| **CBKS** | **Cedar Bluff** | **2.41** | **332** | Pn | Pn | 01 40 25.1 | -0.1 |
| CBKS | | | | IAmb_Lg | | 01 41 05.8 | |
| comp=Z,19nm,1.0s | | | | | | | |
| **U38A** | **Gravette** | **3.14** | **94** | Pn | Pn | 01 40 35.6 | +0.4 |
| **X37A** | **Clayton** | **3.16** | **131** | Pn | Pn | 01 40 35.7 | +0.2 |
| **HHAR** | **Hobbs** | **3.52** | **95** | Pn | Pn | 01 40 40.2 | -0.2 |
| HHAR | | | | IAmb_Lg | | 01 41 44.5 | |
| comp=Z,10nm,0.7s | | | | | | | |
| **W39A** | **Magazine** | **3.94** | **111** | Pn | Pn | 01 40 47.2 | +1.0 |
| **S39A** | **Bolivar** | **4.08** | **74** | Pn | Pn | 01 40 48.3 | +0.3 |
| **U40A** | **Yellville** | **4.38** | **93** | Pn | Pn | 01 40 52.3 | +0.1 |
| **WHTX** | **Lake Whitney,** | **4.74** | **172** | Pn | Pn | 01 40 57.3 | +0.1 |
| **X40A** | **Basin Creek Fa** | **4.95** | **115** | Pn | Pn | 01 41 01.0 | +0.9 |
| **R40A** | **Maddies Statio** | **5.03** | **70** | Pn | Pn | 01 41 01.0 | -0.2 |
| R40A | | | | IAmb_Lg | | 01 42 28.9 | |
| comp=Z,7.6nm,0.8s | | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.12** | **105** | Pn | Pn | 01 41 01.9 | -0.5 |

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*IDC **08** 01:39:55.7±1.1, 5.81N×127.03E, h0km, mb3.7/7, mb1 3.8/7, mb1mx3.6/39, mbtmp3.7/7, Error ellipse: s-maj=54.0km s-min=21.3km az=78.0*
*MAN **08** 01:40:32.5, 6.31N×125.34E, h60km, mb4.2, ML3.0, MS2.7*

**ISC 08 01:40:07.3±1.0, 5.7N±0.1×127.3E±0.1, h100km, n9, σ1°53/10, mb3.4/7, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSPH** | **General Santos** | **2.34** | **281** | *e*P | **Pn** | **01 40 43.5** | **-0.9** |
| **KCP** | **Kidapawan** | **2.54** | **302**⇑ | *e*P | **Pn** | **01 40 48.7** | **+1.7** |
| KCP | | | | *i* S | **Sn** | **01 41 18.9** | **+1.4** |
| **FITZ** | **Fitzroy Crossi** | **23.66** | **184** | P | **P** | **01 45 10.5** | **+0.7** |
| 1.2nm,0.9s,baz=353,slow=8.1,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.38** | **165** | P | **P** | **01 45 35.9** | **+1.4** |
| 0.2nm,0.6s,baz=344,slow=10,SNR=5.0 | | | | | | | |
| **SONM** | **Songino Array** | **45.66** | **340** | P | **P** | **01 48 16.4** | **-1.6** |
| 0.6nm,0.9s,baz=131,slow=7.9,SNR=2.7 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **53.46** | **22** | P | **P** | **01 49 18.4** | **+1.4** |
| 1.5nm,0.7s,baz=196,slow=2.6,SNR=1.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.30** | **324** | P | **P** | **01 49 36.8** | **-0.9** |
| 1.8nm,0.5s,baz=117,slow=7.6,SNR=49 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.13** | **332** | P | **P** | **01 49 55.6** | **-1.7** |
| 0.4nm,0.3s,baz=119,slow=6.0,SNR=4.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.15** | **26** | P | **P** | **01 52 21.7** | **-0.2** |
| 0.4nm,0.9s,baz=243,slow=8.0,SNR=2.5 | | | | | | | |

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*TUL **08** 01:42:31.7±0.5, 36.316N±0.007×98.15W±0.02, h7km±3km, ML2.6, mb_Lg2.2/4(NEIC), Error ellipse: s-maj=2.1km s-min=0.8km az=70.0*

**NEIC 08 01:42:32.2±0.5, 36.312N±0.006×98.16W±0.02, h7km±3km, Error ellipse: s-maj=2.0km s-min=0.7km az=69.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CROK** | **Carrier** | **0.24** | **37** | | Pg | 01 42 36.8 | -0.3 |
| CROK | | | | Sg | Sg | 01 42 40.3 | 0.0 |
| **OK032** | **Salt Plains WL** | **0.49** | **356** | Pg | Pg | 01 42 41.4 | -0.4 |
| OK032 | | | | Sg | Sg | 01 42 48.4 | +0.2 |
| **GC02** | **Grant County #** | **0.59** | **24** | | Pg | 01 42 43.0 | -0.6 |
| GC02 | | | | | Sg | 01 42 51.0 | -0.3 |
| **OK035** | **E0210 Rd and N** | **0.59** | **312** | Pg | Pg | 01 42 43.1 | -0.5 |
| **KAN14** | **Manchester OK** | **0.66** | **14** | Pg | Pg | 01 42 44.2 | -0.9 |
| KAN14 | | | | Sg | Sg | 01 42 53.4 | -0.3 |
| **U32A** | **Winter Ranch,** | **0.68** | **276** | | Pg | 01 42 44.9 | -0.5 |
| U32A | | | | Sg | Sg | 01 42 54.1 | 0.0 |
| **OK029** | **Liberty Lake** | **0.77** | **132** | Pg | Pg | 01 42 46.1 | -1.0 |
| OK029 | | | | Sg | Sg | 01 42 56.5 | -0.6 |
| **BCOK** | **Bluff Creek, N** | **0.79** | **145** | Pg | Pg | 01 42 46.5 | -1.0 |
| BCOK | | | | Sg | Sg | 01 42 57.4 | -0.4 |
| **KAN17** | **Caldwell West** | **0.80** | **24** | Pg | Pg | 01 42 46.6 | -1.0 |
| KAN17 | | | | Sg | Sg | 01 42 57.4 | -0.6 |
| **KAN10** | **Anthony SW Sta** | **0.81** | **4** | Pg | Pg | 01 42 47.1 | -0.8 |
| **BLOK** | **Blackwell** | **0.89** | **59** | Pg | Pg | 01 42 47.9 | -1.3 |
| **KAN13** | **South Haven SW** | **0.89** | **38** | Pg | Pg | 01 42 48.3 | -1.1 |
| **KAN01** | **Argonia South** | **0.90** | **21** | Pg | Pg | 01 42 48.7 | -0.8 |
| KAN01 | | | | IAmb_Lg | | 01 43 00.4 | |
| comp=Z,26nm,0.7s | | | | | | | |
| **KAN16** | **Harper SW Stat** | **0.92** | **5** | Pg | Pg | 01 42 49.0 | -0.8 |
| **KAN06** | **Argonia West S** | **0.97** | **15** | Pg | Pg | 01 42 49.7 | -1.1 |
| **OK025** | **Westminster Rd** | **0.99** | **137** | Pg | Pg | 01 42 50.3 | -1.0 |
| **OKCFA** | **Oklahoma City** | **1.07** | **147** | Pg | Pg | 01 42 51.4 | -1.3 |
| **OK031** | **S. Brethren Rd** | **1.13** | **108** | Pg | Pg | 01 42 52.7 | -1.3 |
| **OK030** | **Cody Creek RV** | **1.18** | **109** | | Pg | 01 42 53.4 | -1.5 |
| **QUOK** | **Quay** | **1.19** | **96** | | Pg | 01 42 53.6 | -1.4 |
| **OK034** | **N. Norfolk Rd.** | **1.21** | **104** | | Pg | 01 42 53.9 | -1.6 |
| **FNO** | **Franklin** | **1.22** | **149** | Pg | Pg | 01 42 53.8 | -1.9 |
| **T35A** | **Sooner Cattle** | **1.46** | **65** | | Pn | 01 42 58.7 | -0.4 |
| **W35A** | **Tecumseh** | **1.56** | **137** | | Pn | 01 42 59.5 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.65** | **198** | Pn | Pn | 01 43 01.0 | -0.7 |
| WMOK | | | | IAmb_Lg | | 01 43 23.6 | |
| comp=Z,14nm,0.9s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.73** | **171** | Pn | Pn | 01 43 03.2 | +0.4 |
| **TUL1** | **Leonard** | **1.96** | **101** | Pn | Pn | 01 43 05.6 | -0.3 |
| **X37A** | **Clayton** | **2.85** | **126** | Pn | Pn | 01 43 18.3 | +0.1 |
| **MIAR** | **Mount Ida** | **4.14** | **114** | Pn | Pn | 01 43 36.5 | +0.6 |

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*IDC **08** 01:42:48.8±1.8, 61.47N×146.17W, h22km±13km, mb3.4/7, mb1 3.7/12, mb1mx3.5/45, mbtmp3.5/12, ML3.3/5, MS3.4/2, Ms1 3.4/2, ms1mx2.7/50, Error ellipse: s-maj=12.9km s-min=11.1km az=105.0*
*ANF **08** 01:42:49.9±0.2, 61.56N×146.40W, h28km±1km, ML4.2/62, Error ellipse: s-maj=1.6km s-min=1.4km az=19.0*
*NEIC **08** 01:42:50.1±1.3, 61.56N±0.02×146.37W±0.04, h31km, Error ellipse: s-maj=2.9km s-min=2.8km az=153.0*
*AEIC **08** 01:42:50±1.3, 61.56N±0.02×146.37W±0.03, h27km±5km, ML3.8, mb3.8/4(NEIC), ML4.0/168(NEIC), Mwr3.8/68(NEIC), Error ellipse: s-maj=2.9km s-min=1.5km az=151.0*
*NEIC **08** 01:42:50, 61.55N×146.40W, h37km, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=3.60; $M_{\theta\theta}$=1.58; $M_{\phi\phi}$=5.18; $M_{r\theta}$=3.15; $M_{\theta\phi}$=3.52; $M_{\phi r}$=0.03; Fault plane solution: $M_0$=6.59000×$10^{14}$ NP1:$\phi_s$=236.60000°, $\delta$=64.10000°, $\lambda$=-43.04000°. NP2:$\phi_s$=348.79000°, $\delta$=52.12000°, $\lambda$=-146.40000°. Principal axes: T 6.8323, Plg7.0000°, Azm295.0000°; N -0.5086, Plg41.0000°, Azm32.0000°; P -6.3237, Plg48.0000°, Azm197.0000°;*

**ISC 08 01:42:50.0±0.8, 61.55N±0.02×146.36W±0.02, h33km±4km, n244, σ0.91/278, mb3.4/7, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLU** | **Klutina** | **0.22** | **105** | | **Pb** | **01 42 56.9** | **+0.1** |
| KLU | | | | Sg | **Sb** | **01 43 02.0** | **+0.6** |
| **KLU** | **Klutina** | **0.22** | **105** | P | **Pb** | **01 42 57.0** | **+0.1** |
| baz=287,SNR=1000 | | | | | | | |
| KLU | | | | S | **Sb** | **01 43 02.1** | **+0.6** |
| baz=287 | | | | | | | |
| **VMT** | **TAPS Tl Valdez** | **0.47** | **180** | | **Pb** | **01 42 59.4** | **-0.6** |
| VMT | | | | | **Sb** | **01 43 06.5** | **-0.4** |
| **DIV** | **Divide** | **0.51** | **146** | | **Pb** | **01 42 59.9** | **-0.8** |
| DIV | | | | Sg | **Sb** | **01 43 07.6** | **-0.5** |
| **JPK** | **Jack Peak** | **0.51** | **193** | | **Pb** | **01 43 00.1** | **-0.6** |
| **SCM** | **Sheep Creek Mo** | **0.54** | **302** | | **Pb** | **01 43 00.4** | **-0.8** |
| SCM | | | | Sg | **Sb** | **01 43 08.4** | **-0.6** |
| **SCM** | **Sheep Creek Mo** | **0.54** | **302** | P | **Pb** | **01 43 00.4** | **-0.8** |
| baz=121,SNR=1000 | | | | | | | |
| SCM | | | | S | **Sb** | **01 43 08.4** | **-0.6** |
| baz=121 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **0.57** | **9** | | **Pb** | **01 43 00.8** | **-0.8** |
| M24K | | | | Sg | **Sn** | **01 43 10.0** | **0.0** |
| M24K | | | | IAML | | 01 43 10.5 | |
| comp=E,8μm,0.6s | | | | | | | |
| M24K | | | | IAML | | 01 43 10.6 | |
| comp=N,9μm,1.0s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **0.57** | **9** | P | **Pb** | **01 43 01.1** | **-0.6** |
| baz=189,SNR=621 | | | | | | | |
| M24K | | | | S | **Sb** | **01 43 09.7** | **+0.1** |
| baz=189 | | | | | | | |
| **PS12** | **TAPS Pump St12** | **0.59** | **97** | | **Pb** | **01 43 01.0** | **-1.0** |
| PS12 | | | | | **Sb** | **01 43 09.4** | **-0.8** |
| **PS11** | **TAPS Pump St11** | **0.68** | **38** | | **Pb** | **01 43 02.8** | **-0.6** |
| **GLI** | **Glacier Island** | **0.76** | **208** | | **Pb** | **01 43 03.9** | **-0.9** |
| GLI | | | | | **Sb** | **01 43 14.9** | **0.0** |
| GLI | | | | IAML | | 01 43 17.9 | |
| comp=E,5μm,0.5s | | | | | | | |
| **GLI** | **Glacier Island** | **0.76** | **208** | P | **Pb** | **01 43 03.9** | **-0.9** |
| baz=27,SNR=56 | | | | | | | |
| GLI | | | | S | **Sb** | **01 43 15.1** | **+0.2** |
| baz=27 | | | | | | | |
| **FID** | **Port Fidalgo** | **0.80** | **184** | Pn | **Pb** | **01 43 05.2** | **-0.3** |
| FID | | | | Sn | **Sn** | **01 43 17.4** | **+1.7** |
| **N25K** | **Chitina, Valde** | **0.85** | **85** | | **Pn** | **01 43 04.6** | **-1.0** |
| N25K | | | | Sn | **Sb** | **01 43 15.9** | **-1.4** |
| **N25K** | **Chitina, Valde** | **0.85** | **85** | P | **Pn** | **01 43 04.7** | **-1.0** |
| baz=267,SNR=221 | | | | | | | |
| N25K | | | | S | **Sb** | **01 43 15.9** | **-1.4** |
| baz=267 | | | | | | | |
| **SML** | **Sawmill** | **0.97** | **286** | Pn | **Pn** | **01 43 06.2** | **-1.1** |
| SML | | | | Sn | **Sn** | **01 43 19.4** | **-0.7** |
| SML | | | | IAML | | 01 43 22.8 | |
| comp=E,4μm,0.5s | | | | | | | |
| SML | | | | IAML | | 01 43 25.1 | |
| comp=N,3μm,0.6s | | | | | | | |
| **SML** | **Sawmill** | **0.97** | **286** | P | **Pn** | **01 43 06.4** | **-0.9** |
| baz=104,SNR=277 | | | | | | | |
| SML | | | | S | **Sn** | **01 43 19.0** | **-1.1** |
| baz=104 | | | | | | | |
| **KNK** | **Knik Glacier** | **1.01** | **263** | Pn | **Pn** | **01 43 07.8** | **-0.1** |
| KNK | | | | Sn | **Sn** | **01 43 21.0** | **0.0** |
| **KNK** | **Knik Glacier** | **1.01** | **263** | P | **Pn** | **01 43 07.8** | **-0.1** |
| baz=81,SNR=685 | | | | | | | |
| KNK | | | | S | **Sn** | **01 43 21.3** | **+0.2** |
| baz=81 | | | | | | | |
| **HARP** | **HAARP** | **1.02** | **33** | | **Pn** | **01 43 07.7** | **-0.4** |
| HARP | | | | | **Sb** | **01 43 22.0** | **-0.3** |
| **HARP** | **HAARP** | **1.02** | **33** | P | **Pn** | **01 43 07.7** | **-0.4** |
| baz=214,SNR=236 | | | | | | | |
| HARP | | | | S | **Sb** | **01 43 22.1** | **-0.3** |
| baz=214 | | | | | | | |
| **BMRM** | **Bremner River** | **1.03** | **124** | Pn | **Pn** | **01 43 07.3** | **-0.8** |
| BMRM | | | | Sn | **Sb** | **01 43 22.4** | **-0.1** |
| BMRM | | | | IAML | | 01 43 25.5 | |
| comp=E,3μm,0.6s | | | | | | | |
| BMRM | | | | IAML | | 01 43 27.1 | |
| comp=N,3μm,0.4s | | | | | | | |
| **BMRM** | **Bremner River** | **1.03** | **124** | P | **Pn** | **01 43 07.3** | **-0.8** |
| baz=306,SNR=294 | | | | | | | |
| BMRM | | | | S | **Sb** | **01 43 22.6** | **+0.1** |
| baz=306 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **1.05** | **163** | | **Pn** | **01 43 08.6** | **+0.3** |
| **EYAK** | **Cordova Ski Ar** | **1.05** | **163** | P | **Pn** | **01 43 08.5** | **+0.2** |
| baz=344,SNR=84 | | | | | | | |
| EYAK | | | | S | **Sb** | **01 43 23.6** | **+0.7** |
| baz=344 | | | | | | | |
| **PWL** | **Port Wells** | **1.18** | **235** | | **Pn** | **01 43 10.5** | **+0.3** |
| PWL | | | | Sn | **Sn** | **01 43 26.1** | **+1.1** |
| PWL | | | | IAML | | 01 43 27.8 | |
| comp=E,6μm,0.4s | | | | | | | |
| **PWL** | **Port Wells** | **1.18** | **235** | P | **Pn** | **01 43 10.4** | **+0.3** |
| baz=53,SNR=64 | | | | | | | |
| PWL | | | | S | **Sn** | **01 43 25.9** | **+0.8** |
| baz=53 | | | | | | | |
| **GLB** | **Gilahina Butte** | **1.23** | **94** | | **Pn** | **01 43 10.4** | **-0.5** |
| GLB | | | | | **Sn** | **01 43 26.9** | **+0.5** |
| GLB | | | | IAML | | 01 43 30.7 | |
| comp=E,3μm,0.6s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.24** | **281** | | **Pn** | **01 43 09.6** | **-1.5** |
| GHO | | | | Sn | **Sn** | **01 43 27.3** | **+0.6** |
| **GOAT** | **Goat Mountain** | **1.26** | **140** | | **Pn** | **01 43 11.9** | **+0.6** |
| **PMR** | **Palmer** | **1.32** | **273** | | **Pn** | **01 43 12.0** | **-0.1** |
| PMR | | | | | Sn | **01 43 29.1** | **+0.5** |
| PMR | | | | IAML | | 01 43 31.8 | |
| comp=E,4μm,0.5s | | | | | | | |
| **PMR** | **Palmer** | **1.32** | **273** | P | **Pn** | **01 43 12.3** | **+0.2** |
| baz=90,SNR=406 | | | | | | | |
| PMR | | | | S | **Sn** | **01 43 29.6** | **+1.0** |
| baz=90 | | | | | | | |
| **RAGM** | **Ragged Mountai** | **1.43** | **144** | Pn | **Pn** | **01 43 14.7** | **+1.1** |
| **VRDI** | **Verde Repeater** | **1.44** | **102** | Pn | **Pn** | **01 43 13.6** | **-0.3** |
| VRDI | | | | IAML | | 01 43 35.6 | |
| comp=N,2μm,0.9s | | | | | | | |
| VRDI | | | | IAML | | 01 43 36.4 | |
| comp=E,2μm,0.6s | | | | | | | |
| **PAX** | **Paxson** | **1.49** | **16** | Pn | **Pn** | **01 43 13.8** | **-0.7** |
| **PAX** | **Paxson** | **1.49** | **16** | P | **Pn** | **01 43 14.0** | **-0.4** |
| baz=197,SNR=113 | | | | | | | |
| PAX | | | | S | **Sn** | **01 43 32.3** | **-0.5** |
| baz=197 | | | | | | | |
| **HMT** | **Hamilton** | **1.59** | **139** | | **Pn** | **01 43 16.7** | **+0.9** |
| **RC01** | **Rabbit Creek A** | **1.69** | **256** | Pn | **Pn** | **01 43 18.1** | **+1.0** |
| **RC01** | **Rabbit Creek A** | **1.69** | **256** | P | **Pn** | **01 43 17.9** | **+0.8** |
| baz=72,SNR=227 | | | | | | | |
| **BERG** | **Berg Lake** | **1.74** | **131** | | **Pn** | **01 43 19.1** | **+1.3** |
| **NICHA** | **Nichawak Mount** | **1.76** | **137** | | **Pn** | **01 43 18.8** | **+0.6** |
| **M22K** | **Willow** | **1.81** | **278** | | **Pn** | **01 43 19.4** | **+0.7** |
| **M22K** | **Willow** | **1.81** | **278** | P | **Pn** | **01 43 19.4** | **+0.7** |
| baz=95,SNR=152 | | | | | | | |
| **M26K** | **Nabesna, AK** | **1.81** | **60** | | **Pn** | **01 43 19.4** | **+0.6** |
| M26K | | | | IAML | | 01 43 44.4 | |
| comp=N,2μm,0.6s | | | | | | | |
| M26K | | | | IAML | | 01 43 44.8 | |
| comp=E,1μm,0.6s | | | | | | | |
| **M26K** | **Nabesna, AK** | **1.81** | **60** | P | **Pn** | **01 43 19.5** | **+0.7** |
| baz=243 | | | | | | | |
| M26K | | | | S | **Sb** | **01 43 43.3** | **-1.3** |
| baz=243 | | | | | | | |
| **MENT** | **Mentasta** | **1.86** | **40** | | **Pn** | **01 43 19.8** | **+0.2** |
| MENT | | | | IAML | | 01 43 55.7 | |
| comp=E,1μm,0.8s | | | | | | | |
| MENT | | | | IAML | | 01 43 57.3 | |
| comp=N,983nm,0.8s | | | | | | | |
| **KHIT** | **Khitrov Hills** | **1.88** | **125** | | **Pn** | **01 43 20.2** | **+0.4** |
| **KAIM** | **Kayak Island** | **1.89** | **149** | Pn | **Pn** | **01 43 20.1** | **+0.3** |
| **KAIM** | **Kayak Island** | **1.89** | **149** | P | **Pn** | **01 43 20.5** | **+0.6** |
| baz=330 | | | | | | | |
| **PS10** | **TAPS Pump St10** | **1.90** | **8** | | **Pn** | **01 43 21.1** | **+1.1** |
| **GRIN** | **Grindle Hills** | **1.96** | **129** | | **Pn** | **01 43 21.6** | **+0.7** |
| **O22K** | **Cooper Landing** | **1.96** | **238** | Pn | **Pn** | **01 43 21.1** | **+0.3** |
| **BALM** | **Baldy** | **2.01** | **103** | | **Pn** | **01 43 21.9** | **+0.3** |
| **CUT** | **Chulitna** | **2.03** | **297** | Pn | **Pn** | **01 43 22.7** | **+0.8** |
| **CUT** | **Chulitna** | **2.03** | **297** | P | **Pn** | **01 43 23.0** | **+1.2** |
| baz=113,SNR=471 | | | | | | | |
| **WAX** | **Waxell Ridge** | **2.04** | **121** | Pn | **Pn** | **01 43 22.3** | **+0.3** |
| WAX | | | | IAML | | 01 43 53.9 | |
| comp=E,2μm,0.4s | | | | | | | |
| **KIAG** | **Kiagna River** | **2.04** | **106** | | **Pn** | **01 43 22.2** | **+0.2** |
| **L26K** | **Log Cabin Wild** | **2.04** | **42** | Pn | **Pn** | **01 43 22.7** | **+0.6** |
| **L26K** | **Log Cabin Wild** | **2.04** | **42** | P | **Pn** | **01 43 22.8** | **+0.8** |
| baz=225,SNR=61 | | | | | | | |
| **BGLC** | **Bering Glacier** | **2.08** | **132** | P | **Pn** | **01 43 25.1** | **-1.9** |
| baz=315 | | | | | | | |
| **SEW** | **Seward** | **2.10** | **228** | Pn | **Pn** | **01 43 23.9** | **+1.2** |
| **SEW** | **Seward** | **2.10** | **228** | P | **Pn** | **01 43 23.4** | **+0.7** |
| baz=45,SNR=14 | | | | | | | |
| **Q23K** | **Middleton Isla** | **2.13** | **180** | Pn | **Pn** | **01 43 23.9** | **+0.8** |
| Q23K | | | | IAML | | 01 43 59.8 | |
| comp=E,1μm,0.7s | | | | | | | |
| Q23K | | | | IAML | | 01 44 00.1 | |
| comp=N,1μm,0.7s | | | | | | | |
| **Q23K** | **Middleton Isla** | **2.13** | **180** | P | **Pn** | **01 43 24.0** | **+0.8** |
| baz=360 | | | | | | | |
| **MID** | **Middleton Isla** | **2.13** | **180** | Pn | **Pn** | **01 43 23.7** | **+0.5** |
| MID | | | | IAML | | 01 43 59.8 | |
| comp=E,2μm,0.6s | | | | | | | |
| MID | | | | IAML | | 01 44 08.1 | |
| comp=N,854nm,0.5s | | | | | | | |
| **SLKM** | **Skilak Lake** | **2.15** | **243** | | **Pn** | **01 43 24.2** | **+0.7** |
| **ISLE** | **Juniper Island** | **2.17** | **114** | Pn | **Pn** | **01 43 24.1** | **+0.2** |
| ISLE | | | | IAML | | 01 44 01.9 | |
| comp=E,1μm,0.6s | | | | | | | |
| ISLE | | | | IAML | | 01 44 06.0 | |
| comp=N,1μm,0.8s | | | | | | | |
| **RND** | **Reindeer** | **2.19** | **329** | Pn | **Pn** | **01 43 24.5** | **+0.4** |
| RND | | | | IAML | | 01 43 56.7 | |
| comp=E,836nm,0.8s | | | | | | | |
| RND | | | | IAML | | 01 44 01.2 | |
| comp=N,643nm,0.9s | | | | | | | |
| **SNH** | **Sunshine Point** | **2.21** | **127** | Pn | **Pn** | **01 43 26.0** | **+1.8** |
| SNH | | | | IAML | | 01 43 58.1 | |
| comp=E,1μm,0.4s | | | | | | | |
| SNH | | | | IAML | | 01 44 07.4 | |
| comp=N,781nm,0.8s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **2.27** | **67** | Pn | **Pn** | **01 43 25.8** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **2.27** | **67** | P | **Pn** | **01 43 26.6** | **+1.4** |
| baz=251 | | | | | | | |
| **RIDG** | **Independent Ri** | **2.31** | **17** | | **Pn** | **01 43 27.0** | **+1.4** |
| RIDG | | | | IAML | | 01 44 08.2 | |
| comp=E,722nm,0.7s | | | | | | | |
| **RIDG** | **Independent Ri** | **2.31** | **17** | P | **Pn** | **01 43 27.1** | **+1.4** |
| baz=198,SNR=54 | | | | | | | |
| **BARN** | **Barnard Glacie** | **2.32** | **100** | Pn | **Pn** | **01 43 26.7** | **+0.7** |
| BARN | | | | IAML | | 01 44 02.0 | |
| comp=N,669nm,0.8s | | | | | | | |
| BARN | | | | IAML | | 01 44 03.1 | |
| comp=E,733nm,1.1s | | | | | | | |
| **BAGL** | **Bagley Icefiel** | **2.34** | **115** | | **Pn** | **01 43 26.5** | **+0.5** |
| **DOT** | **Dot Lake** | **2.36** | **26** | Pn | **Pn** | **01 43 27.6** | **+1.2** |
| **CAPN** | **Captain Cook N** | **2.45** | **253** | Pn | **Pn** | **01 43 28.1** | **+0.5** |
| **MCK** | **McKin

| | | | | | | |
|---|---|---|---|---|---|---|
| **HDA** | **Harding Lake** | **2.88** | **355** | | **Pn** | **01 43 33.6 +0.1** |
| HDA | | | | IAML | | 01 44 14.2 |
| | comp=N,588nm,0.5s | | | | | |
| HDA | | | | IAML | | 01 44 20.4 |
| | comp=E,684nm,1.0s | | | | | |
| **HDA** | **Harding Lake** baz=174 | **2.88** | **355** | P | **Pn** | **01 43 33.9 +0.4** |
| **SPBG** | **Spurr Blockage** | **2.90** | **267** | | **Pn** | **01 43 34.4 +0.5** |
| **KTH** | **Kantishna Hill** | **2.92** | **316** | Pn | **Pn** | **01 43 34.6 +0.6** |
| KTH | | | | IAML | | 01 44 18.9 |
| | comp=N,512nm,0.8s | | | | | |
| KTH | | | | IAML | | 01 44 21.0 |
| | comp=E,602nm,0.8s | | | | | |
| **BWN** | **Browne** | **2.99** | **333** | Pn | **Pn** | **01 43 35.1 +0.1** |
| **PS08** | **TAPS Pump Stn8** | **3.01** | **356** | | **Pn** | **01 43 35.3 +0.1** |
| **WRH** | **Wood River Hil** | **3.04** | **346** | | **Pn** | **01 43 35.8 +0.2** |
| WRH | | | | IAML | | 01 44 16.2 |
| | comp=E,304nm,1.0s | | | | | |
| **PPLA** | **Purkeypile** | **3.04** | **299** | Pn | **Pn** | **01 43 36.5 +0.6** |
| **PPLA** | **Purkeypile** baz=114,SNR=47 | **3.04** | **299** | P | **Pn** | **01 43 36.6 +0.6** |
| **SPNN** | **North Nagishla** | **3.05** | **269** | | **Pn** | **01 43 36.6 +0.7** |
| **RDT** | **Redoubt** | **3.10** | **254** | | **Pn** | **01 43 36.5 0.0** |
| **J25K** | **Salcha River,** | **3.11** | **8** | Pn | **Pn** | **01 43 36.9 +0.2** |
| **J25K** | **Salcha River,** baz=189,SNR=12 | **3.11** | **8** | P | **Pn** | **01 43 37.0 +0.3** |
| **CNPM** | **China Poot** | **3.15** | **232** | | **Pn** | **01 43 38.0 +0.7** |
| CNPM | | | | IAML | | 01 44 29.2 |
| | comp=N,637nm,0.6s | | | | | |
| CNPM | | | | IAML | | 01 44 30.3 |
| | comp=E,543nm,0.7s | | | | | |
| **CCB** | **Clear Creek Bu** | **3.18** | **349** | Pn | **Pn** | **01 43 37.2 -0.4** |
| CCB | | | | IAML | | 01 44 19.4 |
| | comp=E,370nm,0.9s | | | | | |
| **HOM** | **Homer** | **3.22** | **236** | Pn | **Pn** | **01 43 38.9 +0.8** |
| **HOM** | **Homer** baz=52 | **3.22** | **236** | P | **Pn** | **01 43 38.7 +0.5** |
| **J26L** | **Joseph Creek** | **3.23** | **22** | | **Pn** | **01 43 38.8 +0.4** |
| **J26L** | **Joseph Creek** baz=205 | **3.23** | **22** | P | **Pn** | **01 43 39.1 +0.8** |
| **IL31** | | **3.24** | **356** | | **Pn** | **01 43 38.1 -0.3** |
| **ILAR** | **Eielson Array** | **3.24** | **356** | Pn | **Pn** | **01 43 37.9 -0.6** |
| | comp=E,7.9nm,0.3s,baz=180,slow=13,SNR=187 | | | | | |
| ILAR | | | | Pg | **Pb** | **01 43 47.5 +0.8** |
| | comp=E,14nm,0.3s,baz=180,slow=13,SNR=32 | | | | | |
| **ILAR** | **Eielson Array** | **3.24** | **356** | | **Pn** | **01 43 38.4 -0.1** |
| **CAST** | **Castle Rocks** | **3.25** | **308** | | **Pn** | **01 43 38.7 +0.1** |
| CAST | | | | IAML | | 01 44 24.8 |
| | comp=E,348nm,0.7s | | | | | |
| CAST | | | | IAML | | 01 44 39.0 |
| | comp=N,261nm,0.7s | | | | | |
| **CAST** | **Castle Rocks** baz=123,SNR=114 | **3.25** | **308** | P | **Pn** | **01 43 38.7 +0.1** |
| **NEA2** | **Nenana** | **3.29** | **339** | | **Pn** | **01 43 39.1 0.0** |
| NEA2 | | | | IAML | | 01 44 33.0 |
| | comp=E,267nm,0.8s | | | | | |
| **NEA2** | **Nenana** baz=157,SNR=44 | **3.29** | **339** | P | **Pn** | **01 43 38.6 -0.5** |
| **RSO** | **Redoubt South** | **3.30** | **253** | Pn | **Pn** | **01 43 40.4 +0.9** |
| **BPAW** | **Bear Paw Mtn.** | **3.32** | **322** | | **Pn** | **01 43 39.9 +0.3** |
| BPAW | | | | IAML | | 01 44 35.7 |
| | comp=N,241nm,0.7s | | | | | |
| **BPAW** | **Bear Paw Mtn.** baz=138,SNR=52 | **3.32** | **322** | P | **Pn** | **01 43 39.6 0.0** |
| **PCA** | **Pinnacle** | **3.33** | **113** | Pn | **Pn** | **01 43 40.3 +0.6** |
| **RDWB** | **Redoubt West** | **3.33** | **254** | | **Pn** | **01 43 40.0 +0.3** |
| **PINM** | **Pinnacle** baz=299 | **3.33** | **113** | P | **Pn** | **01 43 39.7 -0.1** |
| **O20K** | **Slope Mountain** | **3.40** | **247** | | **Pn** | **01 43 41.2 +0.4** |
| **O20K** | **Slope Mountain** baz=62 | **3.40** | **247** | P | **Pn** | **01 43 41.1 +0.4** |
| **COLA** | **College** | **3.41** | **349** | Pn | **Pn** | **01 43 41.4 +0.8** |
| **COLA** | **College** baz=168 | **3.41** | **349** | P | **Pn** | **01 43 40.6 0.0** |
| **TCOL** | **CIGO, UAF Yank** | **3.41** | **349** | Pn | **Pn** | **01 43 41.4 +0.7** |
| **TCOL** | **CIGO, UAF Yank** baz=168,SNR=48 | **3.41** | **349** | P | **Pn** | **01 43 40.4 -0.3** |
| **MDM** | **Murphy Dome** | **3.52** | **347** | | **Pn** | **01 43 42.3 -0.1** |
| MDM | | | | IAML | | 01 44 40.8 |
| | comp=E,220nm,1.1s | | | | | |
| **CHUM** | **Lake Minchumin** | **3.60** | **313** | | **Pn** | **01 43 43.6 +0.2** |
| **CHUM** | **Lake Minchumin** baz=128,SNR=80 | **3.60** | **313** | P | **Pn** | **01 43 43.5 +0.2** |
| **POKR** | **Poker Plat Res** | **3.61** | **353** | Pn | **Pn** | **01 43 43.4 -0.2** |
| **POKR** | **Poker Plat Res** baz=172,SNR=24 | **3.61** | **353** | P | **Pn** | **01 43 43.4 -0.2** |
| **L20K** | **Farewell, AK** | **3.66** | **288** | | **Pn** | **01 43 44.0 -0.3** |
| **L20K** | **Farewell, AK** baz=101 | **3.66** | **288** | P | **Pn** | **01 43 44.0 -0.3** |
| **BCPM** | **Bancas Point** | **3.67** | **113** | Pn | **Pn** | **01 43 44.5 +0.1** |
| BCPM | | | | IAML | | 01 44 43.3 |
| | comp=E,354nm,0.8s | | | | | |
| BCPM | | | | IAML | | 01 44 45.6 |
| | comp=N,312nm,0.9s | | | | | |
| **ILSW** | **Iliamna Southw** | **3.68** | **248** | Pn | **Pn** | **01 43 44.5 -0.1** |
| ILSW | | | | IAML | | 01 44 44.3 |
| | comp=N,235nm,0.7s | | | | | |
| ILSW | | | | IAML | | 01 44 49.5 |
| | comp=E,184nm,0.9s | | | | | |
| **M19K** | **Big River Lodg** | **3.84** | **279** | Pn | **Pn** | **01 43 46.5 -0.2** |
| M19K | | | | IAML | | 01 44 48.2 |
| | comp=E,289nm,0.5s | | | | | |
| M19K | | | | IAML | | 01 44 49.7 |
| | comp=N,338nm,0.7s | | | | | |
| **M19K** | **Big River Lodg** baz=92,SNR=28 | **3.84** | **279** | P | **Pn** | **01 43 46.1 -0.5** |
| **I23K** | **Minto, Yukon-K** | **3.86** | **341** | | **Pn** | **01 43 47.2 +0.4** |
| I23K | | | | IAML | | 01 44 49.6 |
| | comp=E,278nm,0.8s | | | | | |
| I23K | | | | IAML | | 01 44 52.0 |
| | comp=N,253nm,0.8s | | | | | |
| **I23K** | **Minto, Yukon-K** baz=158,SNR=90 | **3.86** | **341** | P | **Pn** | **01 43 46.8 -0.1** |
| **YUK6** | **Outpost Mounta** | **3.91** | **95** | | **Pn** | **01 43 48.6 +0.7** |
| **YUK6** | **Outpost Mounta** baz=282 | **3.91** | **95** | P | **Pn** | **01 43 48.0 +0.1** |
| **PNL** | **Peninsula** | **3.92** | **116** | | **Pn** | **01 43 49.2 +1.5** |
| **N19K** | **Bonanza Creek** baz=76 | **4.00** | **263** | P | **Pn** | **01 43 48.8 -0.2** |
| **PRP** | **Porcupine Dome** | **4.00** | **5** | Pn | **Pn** | **01 43 49.7 +0.7** |
| PRP | | | | IAML | | 01 44 57.3 |
| | comp=N,141nm,0.5s | | | | | |
| **PRP** | **Porcupine Dome** baz=186,SNR=24 | **4.00** | **5** | P | **Pn** | **01 43 49.0 0.0** |
| **EGAK** | **Eagle** | **4.01** | **34** | | **Pn** | **01 43 50.3 +1.4** |
| EGAK | | | | IAML | | 01 45 06.4 |
| | comp=N,144nm,0.7s | | | | | |
| EGAK | | | | IAML | | 01 45 06.5 |
| | comp=N,147nm,0.7s | | | | | |
| **EGAK** | **Eagle** baz=218,SNR=9.6 | **4.01** | **34** | P | **Pn** | **01 43 50.3 +1.4** |
| **K20K** | **Telida** | **4.01** | **300** | | **Pn** | **01 43 48.3 -0.8** |
| K20K | | | | IAML | | 01 44 56.2 |
| | comp=E,272nm,0.8s | | | | | |
| K20K | | | | IAML | | 01 44 56.4 |
| | comp=N,158nm,0.9s | | | | | |
| **K20K** | **Telida** baz=113 | **4.01** | **300** | P | **Pn** | **01 43 49.0 -0.1** |
| **MLY** | **Manley** | **4.01** | **332** | | **Pn** | **01 43 49.0 -0.1** |
| MLY | | | | IAML | | 01 44 40.7 |
| | comp=N,156nm,0.4s | | | | | |
| **MLY** | **Manley** baz=148,SNR=78 | **4.01** | **332** | P | **Pn** | **01 43 49.0 -0.1** |
| **L19K** | **White Mountain** | **4.07** | **283** | | **Pn** | **01 43 49.8 -0.1** |
| L19K | | | | IAML | | 01 44 55.8 |
| | comp=E,204nm,0.6s | | | | | |
| L19K | | | | IAML | | 01 45 03.7 |
| | comp=N,141nm,0.7s | | | | | |
| **L19K** | **White Mountain** baz=95,SNR=29 | **4.07** | **283** | P | **Pn** | **01 43 49.8 -0.1** |
| **DAWY** | **Dawson** | **4.08** | **49** | Pn | **Pn** | **01 43 51.1 +1.2** |
| **DAWY** | **Dawson** baz=235,SNR=6.6 | **4.08** | **49** | P | **Pn** | **01 43 50.4 +0.5** |
| **O19K** | **Port Alsworth** | **4.12** | **254** | Pn | **Pn** | **01 43 51.4 +0.9** |
| **O19K** | **Port Alsworth** baz=67,SNR=6.1 | **4.12** | **254** | P | **Pn** | **01 43 51.0 +0.5** |
| **YUK7** | **Dusty Glacier** | **4.13** | **101** | | **Pn** | **01 43 51.5 +0.7** |
| **HYT** | **Haines Junctio** | **4.35** | **96** | Pn | **Pn** | **01 43 53.2 -0.6** |
| **HYT** | **Haines Junctio** baz=284 | **4.35** | **96** | P | **Pn** | **01 43 54.0 +0.2** |
| **H24K** | **Noodor Dome** | **4.36** | **352** | | **Pn** | **01 43 53.3 -0.5** |
| H24K | | | | IAML | | 01 45 12.3 |
| | comp=E,153nm,1.1s | | | | | |
| **H24K** | **Noodor Dome** baz=170 | **4.36** | **352** | P | **Pn** | **01 43 53.7 -0.1** |
| **J20K** | **Nowinta River** | **4.43** | **310** | | **Pn** | **01 43 54.4 -0.4** |
| J20K | | | | IAML | | 01 45 07.5 |
| | comp=N,184nm,0.9s | | | | | |
| J20K | | | | IAML | | 01 45 15.8 |
| | comp=E,162nm,1.0s | | | | | |
| **J20K** | **Nowinta River** baz=123 | **4.43** | **310** | P | **Pn** | **01 43 54.7 -0.1** |
| **I21K** | **Tanana** | **4.43** | **328** | Pn | **Pn** | **01 43 54.0 -0.8** |
| I21K | | | | IAML | | 01 45 04.4 |
| | comp=N,108nm,1.0s | | | | | |
| **I21K** | **Tanana** baz=143 | **4.43** | **328** | P | **Pn** | **01 43 54.9 +0.1** |
| **SVW2** | **Sparrevohn** | **4.47** | **268** | Pn | **Pn** | **01 43 53.5 -1.8** |
| SVW2 | | | | IAML | | 01 45 19.5 |
| | comp=N,110nm,1.4s | | | | | |
| **Q19K** | **Cape Douglas,** | **4.48** | **237** | Pn | **Pn** | **01 43 56.0 +0.5** |
| **Q19K** | **Cape Douglas,** baz=51 | **4.48** | **237** | P | **Pn** | **01 43 56.3 +0.8** |
| **J29M** | **Klondike Camp** | **4.72** | **48** | Pn | **Pn** | **01 43 57.4 -1.4** |
| **TT01** | **Tatalina** | **4.72** | **291** | | **Pn** | **01 43 58.0 -0.7** |
| **TTA** | **Tatalina** | **4.72** | **291** | Pn | **Pn** | **01 43 57.7 -1.1** |
| TTA | | | | IAML | | 01 45 24.9 |
| | comp=E,151nm,1.3s | | | | | |
| TTA | | | | IAML | | 01 45 26.8 |
| | comp=N,84nm,0.9s | | | | | |
| **TTA** | **Tatalina** baz=103,SNR=28 | **4.72** | **291** | P | **Pn** | **01 43 57.9 -0.9** |
| **P18K** | **Big Mountain,** | **4.89** | **248** | Pn | **Pn** | **01 44 00.4 -0.7** |
| **P18K** | **Big Mountain,** baz=60 | **4.89** | **248** | P | **Pn** | **01 44 00.4 -0.7** |
| **KDAK** | **Kodiak Island** | **4.92** | **223** | Pn | **Pn** | **01 43 59.3 -2.2** |
| | comp=N,5.2nm,0.3s,baz=70,slow=7.1,SNR=104 | | | | | |
| KDAK | | | | Sn | **Sn** | **01 44 52.4 -4.8** |
| | comp=N,8.0nm,0.3s,baz=330,slow=20,SNR=9.0 | | | | | |
| KDAK | | | | Lg | Lg | 01 45 21.3 |
| | comp=N,4.5nm,0.3s,baz=18,slow=20,SNR=2.0 | | | | | |
| **KDAK** | **Kodiak Island** | **4.92** | **223** | Pn | **Pn** | **01 44 01.4 -0.1** |
| KDAK | | | | IAML | | 01 45 36.0 |
| | comp=N,116nm,3.5s | | | | | |
| **KDAK** | **Kodiak Island** baz=37 | **4.92** | **223** | P | **Pn** | **01 44 01.3 -0.2** |
| **H21K** | **Melozitna Rive** | **5.03** | **328** | | **Pn** | **01 44 02.8 -0.1** |
| **H21K** | **Melozitna Rive** baz=142 | **5.03** | **328** | P | **Pn** | **01 44 02.5 -0.4** |
| **FYU** | **Fort Yukon** | **5.06** | **5** | Pn | **Pn** | **01 44 03.6 +0.2** |
| FYU | | | | IAML | | 01 45 30.5 |
| | comp=N,145nm,3.5s | | | | | |
| FYU | | | | IAML | | 01 45 50.1 |
| | comp=E,132nm,2.7s | | | | | |
| **N31M** | **Braeburn, Yuko** | **5.07** | **86** | Pn | **Pn** | **01 44 04.8 +1.2** |
| N31M | | | | IAML | | 01 45 39.1 |
| | comp=N,83nm,1.2s | | | | | |
| N31M | | | | IAML | | 01 45 45.3 |
| | comp=E,77nm,0.9s | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.26** | **40** | Pn | **Pn** | **01 44 08.1 +2.0** |
| **IM03** | | **5.52** | **327** | | **Pn** | **01 44 09.4 -0.3** |
| **IMAR** | **Indian Mountai** | **5.52** | **327** | Pn | **Pn** | **01 44 09.1 -0.7** |
| **IM01** | **Indian Mountai** | **5.53** | **327** | | **Pn** | **01 44 09.5 -0.3** |
| **OHAK** | **Old Harbor** | **5.60** | **222** | Pn | **Pn** | **01 44 09.9 -0.8** |
| **OHAK** | **Old Harbor** baz=36 | **5.60** | **222** | P | **Pn** | **01 44 10.2 -0.6** |
| **WHY** | **Whitehorse** | **5.64** | **94** | Pn | **Pn** | **01 44 13.0 +1.5** |
| **M31M** | **Drury Creek, Y** | **5.70** | **78** | Pn | **Pn** | **01 44 13.2 +0.9** |
| **GCSA** | **Galena City Sc** | **5.74** | **309** | | **Pn** | **01 44 12.8 0.0** |
| **GCSA** | **Galena City Sc** baz=119,SNR=22 | **5.74** | **309** | P | **Pn** | **01 44 12.6 -0.1** |
| **COLD** | **Coldfoot** | **5.94** | **345** | Pn | **Pn** | **01 44 16.4 +1.0** |
| **COLD** | **Coldfoot** baz=162,SNR=25 | **5.94** | **345** | P | **Pn** | **01 44 16.3 +0.8** |
| **BM03** | **Burnt Mountain** | **5.94** | **7** | | **Pn** | **01 44 15.7 +0.1** |
| **BMAR** | **Burnt Mountain** | **5.95** | **7** | Pn | **Pn** | **01 44 16.6 +0.9** |
| **EPYK** | **Eagle Plains** | **6.43** | **37** | Pn | **Pn** | **01 44 22.0 -0.2** |
| **BESE** | **Bessie Mountai** | **6.48** | **112** | Pn | **Pn** | **01 44 23.2 +0.2** |
| **P33M** | **Teslin, Yukon** | **6.75** | **95** | Pn | **Pn** | **01 44 28.1 +1.5** |
| **JIS** | **Juneau Island** | **6.86** | **113** | Pn | **Pn** | **01 44 27.7 -0.3** |
| **MMPY** | **Sheldon Lake,** baz=268 | **7.17** | **75** | P | **Pn** | **01 44 32.8 +0.4** |
| **SIT** | **Sitka** baz=313 | **7.22** | **124** | P | **Pn** | **01 44 32.8 -0.2** |
| **TOLK** | **Toolik Lake Re** | **7.25** | **351** | Pn | **Pn** | **01 44 35.6 +2.2** |
| **TOLK** | **Toolik Lake Re** baz=168,SNR=34 | **7.25** | **351** | P | **Pn** | **01 44 35.2 +1.7** |
| **INK** | **Inuvik** | **8.68** | **33** | Pn | **Pn** | **01 44 52.7 -0.3** |
| | comp=E,0.2nm,0.3s,baz=234,slow=20,SNR=7.1 | | | | | |
| INK | | | | Sn | **Sn** | **01 46 29.6 +0.1** |
| | comp=E,0.0nm,0.3s,baz=186,slow=19,SNR=3.1 | | | | | |
| INK | | | | Lg | Lg | 01 47 22.6 |
| | comp=E,0.1nm,0.3s,baz=124,slow=30,SNR=2.5 | | | | | |
| **INK** | **Inuvik** | **8.68** | **33** | Pn | **Pn** | **01 44 53.1 +0.2** |
| **DLBC** | **Dease Lake** | **8.76** | **104** | Pn | **Pn** | **01 44 52.4 -1.7** |
| | comp=E,0.1nm,0.3s,baz=292,slow=16,SNR=1.2 | | | | | |
| DLBC | | | | Lg | Lg | 01 47 18.2 |
| | comp=E,0.3nm,0.3s,baz=208,slow=22,SNR=2.4 | | | | | |
| **DLBC** | **Dease Lake** | **8.76** | **104** | Pn | **Pn** | **01 44 56.8 +2.6** |
| **ANM** | **Nome** baz=101 | **9.13** | **298** | P | **Pn** | **01 44 59.2 0.0** |
| **RDOG** | **Red Dog Mine** | **9.58** | **320** | Pn | **Pn** | **01 45 07.9 +2.6** |
| **TNA** | **Tin City** | **10.39** | **302** | Pn | **Pn** | **01 45 16.3 -0.1** |
| **TNA** | **Tin City** baz=103,SNR=7.5 | **10.39** | **302** | P | **Pn** | **01 45 16.4 0.0** |
| **GAMB** | **Gambell** | **11.83** | **292** | Pn | **Pn** | **01 45 39.1 +3.1** |
| **YKA** | **Yellowknife Ar** | **14.86** | **72** | Pn | **Pn** | **01 46 16.5 -0.8** |
| | comp=E,0.0nm,0.3s,baz=283,slow=13,SNR=6.2 | | | | | |
| **YKA** | **Yellowknife Ar** | **14.86** | **72** | Pn | **Pn** | **01 46 15.4 -1.8** |
| **EDM** | **Edmonton** | **19.45** | **100** | P | **P** | **01 47 13.4 -0.2** |
| EDM | | | | IAmb | IAmb | 01 47 35.0 |
| | comp=Z,6.0nm,1.1s | | | | | |
| **NEW** | **Newport** | **21.20** | **115** | P | **P** | **01 47 32.1 -0.3** |
| | comp=Z,1.1nm,0.8s,baz=324,slow=14,SNR=1.2 | | | | | |
| **I07A** | **Izee** | **23.58** | **126** | P | **P** | **01 48 00.2 +2.7** |
| **K05A** | **Summer Lake** | **24.21** | **129** | P | **P** | **01 48 04.4 +0.9** |
| **PD31** | **Pinedale Array** | **28.80** | **114** | P | **P** | **01 48 42.9 -2.0** |
| PD31 | | | | IAmb | IAmb | 01 48 45.7 |
| | comp=Z,2.3nm,1.3s | | | | | |
| **PDAR** | **Pinedale Array** | **28.80** | **114** | P | **P** | **01 48 42.2 -2.7** |
| | comp=Z,0.2nm,0.4s,baz=326,slow=9.0,SNR=2.0 | | | | | |
| **NVAR** | **Mina Array Bea** | **28.92** | **130** | P | **P** | **01 48 44.7 -1.3** |
| | comp=Z,0.5nm,0.7s,baz=317,slow=10,SNR=3.0 | | | | | |
| **MSU** | **Marysvale** | **31.22** | **122** | P | **P** | **01 49 09.1 +2.8** |
| **CCUT** | **Cedar City** | **31.57** | **124** | P | **P** | **01 49 11.2 +1.8** |
| **TXAR** | **Lajitas Array** | **42.68** | **119** | P | **P** | **01 50 43.7 +0.3** |
| | comp=Z,0.1nm,0.5s,baz=331,slow=6.6,SNR=5.8 | | | | | |
| TXAR | | | | LR | LR | 02 09 42.6 |
| | comp=Z,40nm,21.4s,baz=20,slow=38 | | | | | |
| **TXAR** | **Lajitas Array** | **42.68** | **119** | P | **P** | **01 50 45.2 +1.8** |
| **NRIK** | **Noril'sk** | **43.89** | **336** | LR | LR | 02 10 59.7 |
| | comp=Z,59nm,18.1s,baz=266,slow=38 | | | | | |
| **SONM** | **Songino Array** | **56.42** | **309** | P | **P** | **01 52 28.6 +0.7** |
| | comp=Z,0.3nm,0.3s,baz=58,slow=5.8,SNR=3.2 | | | | | |
| **FINES** | **FINESS Array B** | **57.19** | **4** | P | **P** | **01 52 32.1 -0.9** |
| | comp=Z,1.7nm,0.8s,baz=336,slow=2.3,SNR=3.4 | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.95** | **327** | P | **P** | **01 52 39.2 +0.8** |
| | comp=Z,0.3nm,0.4s,baz=40,slow=11,SNR=2.1 | | | | | |

*DDA **08** 01:51:56.1±0.0,36.01N×26.99E,h14±2km, ML2.9*
*ISK **08** 01:51:57.1,36.02N×26.97E,h12km, ML2.9/10*
*ATH **08** 01:51:57.0,36.01N×27.01E,h42km±5km, ML3.2/3, Error ellipse: s-maj=6.0km s-min=1.4km az=341.0*
*NIC **08** 01:51:58.5±0.0,35.73N×27.17E,h5km±2km, Ml2.8/3*
*THE **08** 01:51:58.3,36.02N×26.94E,h9km±1km, ML3.0/5, Error ellipse: s-maj=1.5km s-min=0.4km az=87.0*

**ISC 08 01:51:57.2**±1.1,**36.01N**±0.02×**26.96E**±0.02,**h14**km±9km, **n93**,σ0**89**/124,**Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NISR** | **Nisiros** | **0.62** | **12** | P | P | **Pb** | **01 52 10.0** | **+0.3** |
| NISR | | | | S | S | **Sn** | **01 52 20.1** | **-1.1** |
| **NISR** | **Nisiros** | **0.62** | **12** | P | P | **Pb** | **01 52 09.6** | **-0.2** |
| NISR | | | | S | S | **Sb** | **01 52 19.6** | **+1.4** |
| NISR | | | | AML | AML | | 01 52 20.9 | |
| | comp=N,4768µm,0.4s | | | | | | | |
| NISR | | | | AML | AML | | 01 52 21.0 | |
| | comp=E,10392µm,0.4s | | | | | | | |
| **KOSK** | **Kos Island** | **0.74** | **1** | P | P | **Pb** | **01 52 12.6** | **+0.7** |
| KOSK | | | | S | S | **Sb** | **01 52 23.1** | **+1.2** |
| | comp=E,930nm,0.5s | | | | | | | |
| **KOSK** | **Kos Island** | **0.74** | **1** | PG | P | **Pb** | **01 52 11.9** | **0.0** |
| KOSK | | | | SG | S | **Sb** | **01 52 22.5** | **+0.6** |
| **ARG** | **Arkhangelos** | **0.96** | **77** | P | P | **Pn** | **01 52 16.1** | **-0.2** |
| ARG | | | | S | S | **Sn** | **01 52 29.9** | **+0.1** |
| | comp=E,1µm,0.4s | | | | | | | |
| **ARG** | **Arkhangelos** | **0.96** | **77** | P | P | **Pn** | **01 52 15.8** | **-0.4** |
| ARG | | | | S | S | **Sg** | **01 52 27.2** | **-1.2** |
| ARG | | | | AML | AML | | 01 52 30.1 | |
| | comp=N,1719µm,0.5s | | | | | | | |
| ARG | | | | AML | AML | | 01 52 32.6 | |
| | comp=E,3646µm,0.3s | | | | | | | |
| **ARG** | **Arkhangelos** | **0.96** | **77** | PG | P | **Pn** | **01 52 16.2** | **-0.1** |
| ARG | | | | SG | S | **Sn** | **01 52 29.3** | **-0.5** |
| **ARG** | **Arkhangelos** | **0.96** | **77** | P | P | **Pn** | **01 52 15.9** | **-0.4** |
| ARG | | | | S | S | **Sn** | **01 52 29.1** | **-0.7** |
| **STIA** | **Sitia Lasithi** | **1.07** | **222** | P | P | **Pb** | **01 52 17.7** | **+0.2** |
| STIA | | | | S | S | **Sn** | **01 52 33.5** | **+1.0** |
| **ZKR** | **Zakros** | **1.08** | **215** | P | P | **Pg** | **01 52 18.1** | **+0.1** |
| **ZKR** | **Zakros** | **1.08** | **215** | P | P | **Pb** | **01 52 17.6** | **0.0** |
| ZKR | | | | S | S | **Sb** | **01 52 31.6** | **0.0** |
| ZKR | | | | AML | AML | | 01 52 37.1 | |
| | comp=E,1459µm,0.3s | | | | | | | |
| ZKR | | | | AML | AML | | 01 52 37.3 | |
| | comp=N,809µm,0.3s | | | | | | | |
| **ZKR** | **Zakros** | **1.08** | **215** | PN | P | **Pn** | **01 52 18.6** | **+0.7** |
| ZKR | | | | SN | S | **Sn** | **01 52 34.2** | **+1.5** |
| **ZKR** | **Zakros** | **1.08** | **215** | P | P | **Pb** | **01 52 17.6** | **0.0** |
| ZKR | | | | S | S | **Sg** | **01 52 32.3** | **+0.2** |
| ZKR | | | | AMI | | | 01 52 34.5 | |
| | comp=N,1.2nm,0.5s | | | | | | | |
| ZKR | | | | AMI | | | 01 52 34.5 | |
| | comp=N,1.2nm,0.5s | | | | | | | |
| ZKR | | | | AMI | | | 01 52 35.4 | |
| | comp=N,0.9nm,0.6s | | | | | | | |
| ZKR | | | | AMI | | | 01 52 35.4 | |
| | comp=N,0.9nm,0.6s | | | | | | | |
| **BODT** | **Bodrum** | **1.09** | **15** | P | P | **Pb** | **01 52 17.6** | **-0.2** |
| BODT | | | | S | S | **Sn** | **01 52 33.9** | **+1.0** |
| **BODT** | **Bodrum** | **1.09** | **15** | PG | P | **Pn** | **01 52 18.2** | **+0.2** |
| BODT | | | | SG | S | **Sn** | **01 52 33.4** | **+0.5** |
| **BODT** | **Bodrum** | **1.09** | **15** | P | P | **Pb** | **01 52 16.2** | **-1.6** |
| BODT | | | | S | S | **Sb** | **01 52 31.1** | **-0.8** |
| **YKAV** | **Yalikavak-Bodr** | **1.14** | **13** | PN | P | **Pg** | **01 52 19.1** | **-0.1** |
| **MRSB** | **Marmaris-Mugla** | **1.22** | **54** | PN | P | **Pb** | **01 52 19.9** | **-0.1** |
| **MRSB** | **Marmaris-Mugla** | **1.22** | **54** | P | P | **Pn** | **01 52 19.1** | **-0.7** |
| MRSB | | | | S | S | **Sb** | **01 52 34.6** | **-1.1** |
| MRSB | | | | *i* AML | AML | | 01 52 48.0 | |
| | comp=N,830nm,0.3s | | | | | | | |
| **THR8** | **Santorini-Mono** | **1.27** | **289** | P | P | **Pn** | **01 52 20.0** | **-0.4** |
| **SANT** | **Santorini** | **1.27** | **287** | P | P | **Pn** | **01 52 20.2** | **-0.3** |
| **SANT** | **Santorini** | **1.27** | **287** | P | P | **Pn** | **01 52 20.2** | **-0.3** |
| **SANT** | **Santorini** | **1.27** | **287** | PN | P | **Pn** | **01 52 20.5** | **-0.1** |
| **SANT** | **Santorini** | **1.27** | **287** | P | P | **Pn** | **01 52 20.1** | **-0.5** |
| SANT | | | | S | S | **Sb** | **01 52 35.0** | **-2.2** |
| **TURN** | **Turunc** | **1.28** | **53** | PN | P | **Pn** | **01 52 20.5** | **-0.2** |
| **TURN** | **Turunc** | **1.28** | **53** | P | P | **Pn** | **01 52 20.4** | **-0.3** |
| TURN | | | | S | S | **Sb** | **01 52 35.2** | **-2.3** |
| **SFIR** | **Foira Santorin** | **1.31** | **289** | P | P | **Pn** | **01 52 20.8** | **-0.3** |
| SFIR | | | | S | S | **Sb** | **01 52 37.9** | **-0.3** |
| | comp=N,1µm,0.4s | | | | | | | |
| **THR2** | **Thira island,** | **1.31** | **290** | P | P | **Pn** | **01 52 20.9** | **-0.2** |
| **THR6** | **Thira Island,** | **1.31** | **286** | P | P | **Pn** | **01 52 21.1** | **0.0** |
| **THT2** | **Imerovigli** | **1.32** | **289** | P | P | **Pn** | **01 52 21.1** | **-0.1** |
| THT2 | | | | S | S | **Sb** | **01 52 38.5** | **0.0** |
| **THT2** | **Imerovigli** | **1.32** | **289** | P | P | **Pn** | **01 52 20.7** | **-0.5** |
| **THR3** | **Thira Island,** | **1.33** | **288** | P | P | **Pn** | **01 52 21.1** | **-0.2** |
| **NPS** | **Neapolis** | **1.33** | **236** | P | P | **Pn** | **01 52 21.2** | **-0.1** |
| NPS | | | | S | S | **Sg** | **01 52 40.3** | **+0.2** |
| | comp=N,805nm,0.2s | | | | | | | |
| **NPS** | **Neapolis** | **1.33** | **236** | P | P | **Pn** | **01 52 20.9** | **-0.4** |
| **SNT5** | **Nea Kammeni, S** | **1.33** | **288** | P | P | **Pn** | **01 52 21.1** | **-0.2** |
| **CMBO** | **Columbo, Santo** | **1.34** | **291** | P | P | **Pn** | **01 52 21.1** | **-0.4** |
| **THR9** | **Santorini-Faro** | **1.35** | **285** | P | P | **Pn** | **01 52 21.0** | **-0.5** |
| **THR5** | **Thira Island,** | **1.37** | **288** | P | P | **Pn** | **01 52 22.2** | **+0.3** |
| **FRMA** | **Ierapetra Chan** | **1.41** | **226** | P | P | **Pn** | **01 52 21.7** | **-0.7** |
| **MLSB** | **Milas** | **1.44** | **27** | PN | P | **Pb** | **01 52 23.8** | **0.0** |
| **MLSB** | **Milas** | **1.44** | **27** | P | P | **Pg** | **01 52 24.9** | **0.0** |
| MLSB | | | | S | S | **Sg** | **01 52 43.8** | **+0.1** |
| **DDIM** | **Aydin, Didim** | **1.46** | **9** | P | P | **Pg** | **01 52 26.4** | **+1.0** |
| **YER** | **Yerkesik** | **1.54** | **43** | P | P | **Pn** | **01 52 24.9** | **+0.5** |
| **YER** | **Yerkesik** | **1.54** | **43** | PN | P | **Pb** | **01 52 25.2** | **-0.4** |
| **YER** | **Yerkesik** | **1.54** | **43** | P | P | **Pn** | **01 52 24.8** | **+0.5** |
| YER | | | | S | S | **Sn** | **01 52 41.7** | **-2.5** |
| **DALY** | **Dalyan (Mula)** | **1.58** | **59** | PN | P | **Pb** | **01 52 25.8** | **-0.4** |
| **MULA** | **Mugla, Merkez-** | **1.66** | **41** | P | P | **Pb** | **01 52 27.1** | **-0.5** |
| **HRKL** | **Herakleio** | **1.67** | **246** | P | P | **Pn** | **01 52 26.2** | **+0.2** |
| HRKL | | | | S | S | **Sn** | **01 52 47.1** | **-0.1** |
| **KSTL** | **Kastelli Herak** | **1.69** | **246** | P | P | **Pn** | **01 52 24.4** | **-1.9** |
| KSTL | | | | S | S | **Sn** | **01 52 44.5** | **-3.3** |
| **SMG** | **Samos** | **1.70** | **357** | P | P | **Pn** | **01 52 25.8** | **-0.6** |
| SMG | | | | S | S | **Sb** | **01 52 49.6** | **+0.1** |
| | comp=N,180nm,0.4s | | | | | | | |
| **GCAM** | **G?zelcaml?** | **1.70** | **7** | PN | P | **Pb** | **01 52 27.8** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **1.70** | **7** | P | P | **Pg** | **01 52 29.1** | **-0.8** |
| **FETY** | **Fethiye** | **1.82** | **69** | PN | P | **Pb** | **01 52 29.2** | **-1.1** |
| **IDI** | **Anoyia** | **1.84** | **248** | P | P | **Pn** | **01 52 28.3** | **-0.1** |
| **IDI** | **Anoyia** | **1.84** | **248** | P | P | **Pn** | **01 52 27.8** | **-0.5** |
| **TMBK** | **Timbaki Herakl** | **2.02** | **243** | P | P | **Pn** | **01 52 31.8** | **+1.0** |
| **KSL** | **Kastellorizon** | **2.13** | **85** | P | P | **Pn** | **01 52 33.4** | **+1.1** |
| KSL | | | | S | S | **Sn** | **01 52 59.7** | **+1.2** |
| KSL | | | | AMI | | | 01 53 05.2 | |
| | comp=N,0.2nm,1.1s | | | | | | | |
| KSL | | | | AMI | | | 01 53

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **0.62** | **184** | ⇑P | **Pn** | **01 53 58.1** | **-0.3** |
| | 4.2nm,0.2s | | | | | | |
| MAKZ | | | | ⇑S | **Sb** | **01 54 06.9** | **+1.7** |
| | 28nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **0.62** | **184** | Pg | **Pn** | **01 53 58.1** | **-0.3** |
| MAKZ | | | | Sg | **Sn** | **01 54 07.3** | **-0.9** |
| **MK31** | **Makanchi Array** | **0.66** | **165** | ⇓P | **Pg** | **01 53 57.2** | **+0.3** |
| | 2.5nm,0.2s,baz=11,slow=16,SNR=14 | | | | | | |
| MK31 | | | | ⇓S | **Sg** | **01 54 06.0** | **+0.5** |
| | 20nm,0.3s,baz=19,slow=22,SNR=55 | | | | | | |
| **MKAR** | **Makanchi Array** | **0.66** | **165** | Pg | **Pg** | **01 53 57.1** | **+0.3** |
| MKAR | | | | Sg | **Sg** | **01 54 05.9** | **+0.4** |
| **ZSN** | **Zaisan** | **1.92** | **88** | *e*P | **Pn** | **01 54 15.7** | **-0.7** |
| | 10nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sn** | **01 54 38.1** | **-2.1** |
| | 38nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.83** | **222** | *e*P | **Pg** | **01 54 38.1** | **-0.2** |
| | 1.1nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **01 55 17.0** | **+1.9** |
| | 4.3nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **3.94** | **325** | ⇓Pg | **Pg** | **01 54 59.2** | **-0.3** |
| | 1.4nm,0.5s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 01 55 54.6 | |
| | 21nm,0.7s | | | | | | |
| **UKR** | **Ust'-Kan** | **3.94** | **26** | Pg | **Pb** | **01 54 52.5** | **-0.9** |
| UKR | | | | Sg | **Sb** | **01 55 41.8** | **+0.9** |
| **KURK** | **Kurchatov** | **3.98** | **327** | ⇓Pg | **Pg** | **01 55 00.3** | **0.0** |
| | 0.6nm,0.3s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 01 55 55.7 | |
| | 6.1nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **3.98** | **327** | Pg | **Pg** | **01 55 00.4** | **+0.1** |
| KURK | | | | Sg | **Sg** | **01 55 52.9** | **+1.0** |
| **BLB** | **Baldybastay** | **4.16** | **218** | *e*P | **Pg** | **01 55 04.1** | **+0.4** |
| | 0.9nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sg** | **01 56 00.9** | **+3.4** |
| | 5.6nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **4.24** | **56** | Pg | **Pb** | **01 54 58.9** | **+0.5** |
| DGZ | | | | Sg | **Sb** | **01 55 48.7** | **-0.9** |
| **ARXS** | **Arharly** | **4.36** | **224** | *e*P | **Pg** | **01 55 06.9** | **-0.6** |
| | 1.0nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **01 56 05.9** | **+2.0** |
| | 10nm,0.8s | | | | | | |
| **KPKS** | **Kokpek** | **4.61** | **212** | *e*P | **Pg** | **01 55 11.3** | **-1.0** |
| | 1.4nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **01 56 13.3** | **+1.3** |
| | 8.7nm,0.5s | | | | | | |
| **CHBI** | **Chibit, Altay** | **4.62** | **49** | Pn | **Pn** | **01 54 56.1** | **+2.6** |
| CHBI | | | | Pg | **Pb** | **01 55 04.6** | **-0.2** |
| CHBI | | | | Sg | **Sb** | **01 56 04.1** | **+3.7** |
| **AKAR** | **Aktash** | **4.69** | **50** | Sg | **Sb** | **01 56 04.6** | **+2.3** |
| **CUR** | **Chagan-Uzun** | **4.96** | **55** | Pg | **Pb** | **01 55 08.2** | **-2.4** |
| CUR | | | | Sg | **Sb** | **01 56 11.8** | **+1.7** |
| **ULGR** | **Ulagan, Altay** | **5.04** | **48** | Pg | **Pb** | **01 55 10.0** | **-2.1** |
| ULGR | | | | Sg | **Sb** | **01 56 16.1** | **+3.6** |
| **KTBS** | **Karatobe** | **5.29** | **227** | *e*P | **Pg** | **01 55 23.9** | **-1.3** |
| | 0.6nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **01 56 34.7** | **+1.1** |
| | 6.7nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **5.33** | **231** | *e*P | **Pg** | **01 55 24.4** | **-1.7** |
| | 0.9nm,0.6s | | | | | | |
| KUU | | | | *e*S | **Sg** | **01 56 35.8** | **+0.6** |
| | 2.8nm,0.5s | | | | | | |
| **ARTR** | **Artybash** | **5.54** | **36** | Sg | **Sb** | **01 56 31.7** | **+4.8** |
| **ELT** | **Eltsovka** | **6.43** | **23** | Sg | **Sg** | **01 57 04.9** | **-5.3** |

*NEIC **08** 02:02:25.7±1.3,19.°18N±0.°09×145.°57E±0.°07,h94km±7km, mb4.4/55, Error ellipse: s-maj=13.9km s-min=8.9km az=152.0*

*IDC **08** 02:02:30.9±2.4,19.°15N×145.°53E,h153km±24km, mb3.8/18,mb1 3.9/20,mb1mx3.7/55,mbtmp4.2/20,Error ellipse: s-maj=17.6km s-min=12.1km az=83.0*

**ISC 08 02:02:30.8±0.5,19.°14N±0.°06×145.°5E±0.°1,h150km,n97, σ0§89/89,mb4.2/46,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.55** | **186** | P | **Pn** | **02 03 51.8** | **+0.3** |
| | 9.0nm,0.3s,baz=342,slow=19,SNR=1.9 | | | | | | |
| GUMO | | | | S | **Sn** | **02 04 55.7** | **+1.1** |
| | 4.0nm,0.3s,baz=43,slow=18,SNR=1.2 | | | | | | |
| **GUMO** | **Guam** | **5.55** | **186** | Pn | **Pn** | **02 03 47.7** | **-3.8** |
| **PATS** | **Pohnpei** | **17.46** | **133** | P | **P** | **02 06 23.2** | **-1.1** |
| **JOW** | **Kunigami** | **17.60** | **299** | P | **P** | **02 06 24.1** | **-1.6** |
| **MJAR** | **Matsushiro Arr** | **18.49** | **341** | P | **P** | **02 06 33.7** | **-1.7** |
| | 0.2nm,0.3s,baz=184,slow=14,SNR=4.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **20.07** | **88** | T | T | 02 27 38.2 | |
| | baz=275,slow=74,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.08** | **88** | T | T | 02 27 39.2 | |
| | baz=275,slow=74,SNR=5.4 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.09** | **88** | T | T | 02 27 40.3 | |
| | baz=275,slow=74,SNR=6.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.19** | **85** | T | T | 02 28 05.2 | |
| | baz=271 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.19** | **85** | T | T | 02 27 53.4 | |
| | baz=271 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.20** | **85** | T | T | 02 28 04.0 | |
| | baz=271 | | | | | | |
| **TJN** | **Taejon** | **23.44** | **321** | P | **P** | **02 07 25.4** | **-1.1** |
| **KSRS** | **Korea Array** | **23.86** | **324** | P | **P** | **02 07 30.7** | **+0.4** |
| | 1.5nm,0.6s,baz=143,slow=8.8,SNR=9.2 | | | | | | |
| **KS19** | **Wonju Array Si** | **23.92** | **324** | P | **P** | **02 07 31.2** | **+0.3** |
| KS19 | | | | IAmb | IAmb | 02 07 48.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **KLR** | **Kul'dur** | **32.00** | **343** | P | **P** | **02 08 42.5** | **-0.2** |
| | comp=Z,12nm,0.6s,baz=154,slow=7.7,SNR=55 | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.21** | **13** | P | **P** | **02 09 10.8** | **+0.4** |
| | comp=Z,3.0nm,0.9s,baz=181,slow=13,SNR=2.2 | | | | | | |
| **SOEI** | **Soe** | **35.53** | **218** | P | **P** | **02 09 14.5** | **+0.8** |
| **WB0** | **Warramunga Arr** | **40.16** | **196** | P | **P** | **02 09 52.6** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 02 09 53.9 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **40.34** | **196** | P | **P** | **02 09 54.1** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 02 09 55.5 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.35** | **196** | P | **P** | **02 09 53.8** | **-0.2** |
| | comp=Z,2.9nm,0.5s,baz=21,slow=9.1,SNR=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.35** | **196** | P | **P** | **02 09 53.6** | **-0.3** |
| **SONM** | **Songino Array** | **42.69** | **321** | P | **P** | **02 10 13.3** | **+0.4** |
| | comp=Z,0.9nm,0.3s,baz=128,slow=6.7,SNR=20 | | | | | | |
| **SONM** | **Songino Array** | **42.69** | **321** | P | **P** | **02 10 13.8** | **+0.9** |
| **AS31** | **Alice Springs** | **44.02** | **195** | P | **P** | **02 10 24.2** | **+0.6** |
| **ASAR** | **Alice Springs** | **44.02** | **195** | P | **P** | **02 10 23.4** | **-0.3** |
| | comp=Z,0.9nm,0.5s,baz=18,slow=12,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **44.02** | **195** | P | **P** | **02 10 24.1** | **+0.5** |
| **MBWA** | **Marble Bar** | **47.33** | **213** | P | **P** | **02 10 51.1** | **+1.5** |
| MBWA | | | | IAmb | IAmb | 02 10 55.8 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **UNV** | **Unalaska Valle** | **50.41** | **35** | P | **P** | **02 11 11.9** | **-0.7** |
| **BILL** | **Bilibino** | **50.62** | **10** | P | **P** | **02 11 15.2** | **+1.1** |
| BILL | | | | IAmb | IAmb | 02 11 15.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **50.86** | **184** | P | **P** | **02 11 16.5** | **+0.2** |
| **AKUT** | **Akutan** | **50.92** | **35** | P | **P** | **02 11 15.7** | **-0.9** |
| **ANM** | **Nome** | **55.87** | **23** | P | **P** | **02 11 53.1** | **+0.6** |
| ANM | | | | IAmb | IAmb | 02 11 60.0 | |
| | comp=Z,4.8nm,1.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.55** | **322** | P | **P** | **02 12 04.7** | **+0.1** |
| ZAA0 | | | | IAmb | IAmb | 02 12 32.4 | |
| | comp=Z,5.2nm,1.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.55** | **322** | P | **P** | **02 12 03.6** | **-1.0** |
| | comp=Z,1.2nm,0.5s,baz=106,slow=8.4,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.55** | **322** | P | **P** | **02 12 04.5** | **-0.1** |
| **MK31** | **Makanchi Array** | **58.02** | **314** | P | **P** | **02 12 08.5** | **+0.5** |
| **MKAR** | **Makanchi Array** | **58.02** | **314** | P | **P** | **02 12 07.8** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=89,slow=9.8,SNR=7.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.02** | **314** | P | **P** | **02 12 09.0** | **+1.0** |
| **MAKZ** | **Makanchi** | **58.24** | **314** | P | **P** | **02 12 10.2** | **+0.7** |
| **KDAK** | **Kodiak Island** | **59.10** | **33** | P | **P** | **02 12 14.8** | **-0.4** |
| | comp=Z,20nm,1.1s,baz=272,slow=14,SNR=1.7 | | | | | | |
| **J20K** | **Nowinta River** | **60.15** | **26** | P | **P** | **02 12 23.2** | **+1.0** |
| J20K | | | | IAmb | IAmb | 02 12 24.2 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **BRLK** | **Bradley Lake** | **60.42** | **31** | P | **P** | **02 12 23.5** | **-0.7** |
| **PPLA** | **Purkeypile** | **60.60** | **28** | P | **P** | **02 12 26.0** | **+0.4** |
| **CAST** | **Castle Rocks** | **60.80** | **27** | P | **P** | **02 12 26.2** | **-0.5** |
| CAST | | | | IAmb | IAmb | 02 12 27.9 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **60.82** | **318** | P | **P** | **02 12 25.8** | **-1.2** |
| **KURBB** | **Kurchatov Arra** | **60.87** | **318** | P | **P** | **02 12 27.0** | **-0.4** |
| | comp=Z,1.0nm,0.3s,baz=91,slow=7.5,SNR=22 | | | | | | |
| **IMAR** | **Indian Mountai** | **60.90** | **24** | P | **P** | **02 12 27.9** | **+0.6** |
| **H21K** | **Melozitna Rive** | **61.16** | **25** | P | **P** | **02 12 29.0** | **-0.2** |
| H21K | | | | IAmb | IAmb | 02 12 33.4 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| **KTH** | **Kantishna Hill** | **61.34** | **27** | P | **P** | **02 12 30.3** | **-0.1** |
| **PWL** | **Port Wells** | **61.89** | **31** | P | **P** | **02 12 34.0** | **-0.1** |
| **SML** | **Sawmill** | **62.09** | **29** | P | **P** | **02 12 35.1** | **-0.3** |
| **I23K** | **Minto, Yukon-K** | **62.40** | **26** | P | **P** | **02 12 37.3** | **-0.1** |
| I23K | | | | IAmb | IAmb | 02 12 39.0 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **62.56** | **30** | P | **P** | **02 12 38.6** | **0.0** |
| **WRH** | **Wood River Hil** | **62.77** | **27** | P | **P** | **02 12 39.5** | **-0.3** |
| **MDM** | **Murphy Dome** | **62.82** | **26** | P | **P** | **02 12 41.1** | **+0.9** |
| MDM | | | | IAmb | IAmb | 02 12 41.5 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **63.17** | **25** | P | **P** | **02 12 43.1** | **+0.5** |
| H24K | | | | IAmb | IAmb | 02 12 51.9 | |
| | comp=Z,6.5nm,1.5s | | | | | | |
| **HDA** | **Harding Lake** | **63.24** | **27** | P | **P** | **02 12 41.9** | **-1.0** |
| HDA | | | | IAmb | IAmb | 02 12 45.6 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **63.26** | **22** | P | **P** | **02 12 43.3** | **+0.2** |
| TOLK | | | | IAmb | IAmb | 02 12 44.8 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **IL31** | | **63.34** | **26** | P | **P** | **02 12 42.4** | **-1.2** |
| **ILAR** | **Eielson Array** | **63.34** | **26** | P | **P** | **02 12 42.0** | **-1.6** |
| | comp=Z,1.2nm,0.6s,baz=257,slow=5.7,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **63.34** | **26** | P | **P** | **02 12 42.3** | **-1.3** |
| **PAX** | **Paxson** | **63.62** | **28** | P | **P** | **02 12 46.1** | **+0.5** |
| PAX | | | | IAmb | IAmb | 02 12 46.2 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **63.95** | **27** | P | **P** | **02 12 45.9** | **-1.8** |
| J25K | | | | IAmb | IAmb | 02 12 48.8 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **DOT** | **Dot Lake** | **64.35** | **28** | P | **P** | **02 12 50.4** | **0.0** |
| DOT | | | | IAmb | IAmb | 02 12 51.1 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **64.80** | **24** | P | **P** | **02 12 54.1** | **+1.0** |
| **BCAR** | **Beaver Creek A** | **65.29** | **29** | P | **P** | **02 12 56.8** | **+0.3** |
| **EGAK** | **Eagle** | **65.76** | **27** | P | **P** | **02 13 00.2** | **+0.9** |
| EGAK | | | | IAmb | IAmb | 02 13 21.5 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **66.02** | **320** | P | **P** | **02 13 01.2** | **0.0** |
| | comp=Z,1.3nm,0.4s,baz=75,slow=14,SNR=14 | | | | | | |
| **DAWY** | **Dawson** | **66.46** | **28** | P | **P** | **02 13 04.2** | **+0.4** |
| DAWY | | | | IAmb | IAmb | 02 13 08.5 | |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **EPYK** | **Eagle Plains** | **67.74** | **25** | P | **P** | **02 13 12.5** | **+0.6** |
| EPYK | | | | IAmb | IAmb | 02 13 13.1 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **M31M** | **Drury Creek, Y** | **68.66** | **30** | P | **P** | **02 13 18.3** | **+0.6** |
| M31M | | | | IAmb | IAmb | 02 13 27.6 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **INK** | **Inuvik** | **69.05** | **23** | P | **P** | **02 13 19.6** | **-0.3** |
| | comp=Z,3.2nm,0.7s,baz=299,slow=6.3,SNR=11 | | | | | | |
| **INK** | **Inuvik** | **69.05** | **23** | P | **P** | **02 13 19.8** | **-0.1** |
| INK | | | | IAmb | IAmb | 02 13 21.1 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **P33M** | **Teslin, Yukon** | **69.48** | **32** | P | **P** | **02 13 23.9** | **+1.0** |
| P33M | | | | IAmb | IAmb | 02 13 35.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **DLBC** | **Dease Lake** | **71.04** | **34** | P | **P** | **02 13 33.1** | **+0.8** |
| DLBC | | | | IAmb | IAmb | 02 13 34.2 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.89** | **317** | P | **P** | **02 13 42.8** | **-0.7** |
| **NLWA** | **Neilton Lookou** | **76.59** | **44** | P | **P** | **02 14 06.3** | **+1.4** |
| **YKA** | **Yellowknife Ar** | **77.69** | **28** | P | **P** | **02 14 10.6** | **-0.1** |
| | comp=Z,4.2nm,0.7s,baz=288,slow=5.6,SNR=51 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.69** | **28** | P | **P** | **02 14 10.1** | **-0.5** |
| **LTY** | **Liberty** | **78.73** | **44** | P | **P** | **02 14 16.7** | **0.0** |
| LTY | | | | IAmb | IAmb | 02 14 17.4 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **RES** | **Resolute Bay** | **79.05** | **14** | P | **P** | **02 14 18.6** | **+0.8** |
| **B08A** | **Colville Reser** | **79.28** | **43** | P | **P** | **02 14 20.2** | **+0.6** |
| B08A | | | | IAmb | IAmb | 02 14 20.5 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **D08A** | **Wollman Farm,** | **79.93** | **44** | P | **P** | **02 14 23.6** | **+0.5** |
| D08A | | | | IAmb | IAmb | 02 14 24.6 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **NEW** | **Newport** | **80.72** | **42** | P | **P** | **02 14 27.9** | **+0.5** |
| **BMO** | **Blue Mountains** | **81.68** | **45** | P | **P** | **02 14 32.9** | **+0.2** |
| BMO | | | | IAmb | IAmb | 02 14 33.9 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.02** | **342** | P | **P** | **02 14 34.3** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=78,slow=5.6,SNR=6.0 | | | | | | |
| **PLID** | **Pearl Lake** | **82.48** | **45** | P | **P** | **02 14 36.8** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **83.02** | **52** | P | **P** | **02 14 40.3** | **+0.5** |
| | comp=Z,3.8nm,0.7s,baz=262,slow=5.6,SNR=12 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.02** | **52** | P | **P** | **02 14 38.0** | **-1.9** |
| **BCYI** | **Bear Canyon** | **84.48** | **45** | P | **P** | **02 14 47.4** | **+0.2** |
| **HRY** | **Holter Researc** | **84.62** | **42** | P | **P** | **02 14 48.3** | **+0.6** |
| **TPNV** | **Topopah Spring** | **85.05** | **53** | P | **P** | **02 14 50.6** | **+0.5** |
| **FINES** | **FINESS Array B** | **86.41** | **335** | P | **P** | **02 14 54.4** | **-1.7** |
| | comp=Z,1.2nm,0.4s,baz=68,slow=4.6,SNR=29 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.66** | **45** | P | **P** | **02 15 01.6** | **-1.2** |
| | comp=Z,0.8nm,0.9s,baz=217,slow=0.8,SNR=6.2 | | | | | | |
| **H03N2** | **Juan Fernandez** | **138.01** | **119** | T | T | 04 57 07.2 | |
| | baz=252,slow=73,SNR=6.7 | | | | | | |
| **H03N3** | **Juan Fernandez** | **138.01** | **119** | T | T | 04 57 08.1 | |
| | baz=252,slow=73,SNR=7.2 | | | | | | |
| **H03N1** | **Juan Fernandez** | **138.03** | **119** | T | T | 04 57 07.2 | |
| | baz=252,slow=73,SNR=10 | | | | | | |

*IDC **08** 02:03:40.9±1.1,14.°85N×119.°19E,h0km,mb3.8/4, mb1 4.0/5,mb1mx3.3/52,mbtmp3.8/5,ML4.4/1,Error ellipse: s-maj=40.6km s-min=17.6km az=47.0*

*MAN **08** 02:03:45.7,14.°91N×119.°16E,h21km,mb4.4,ML3.2, MS3.0*

**ISC 08 02:03:42.2±3.2,14.°86N±0.°05×119.°17E±0.°08,h7km±21km, n13,σ1§37/19,mb3.8/4,3C-4D,Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCZP** | **Santa Cruz** | **1.16** | **38** | ⇓*i*P | **Pb** | **02 04 04.8** | **+0.2** |
| SCZP | | | | *e*S | **Sb** | **02 04 16.7** | **-3.2** |
| **LUBP** | **Lubang** | **1.53** | **137** | ⇓*i*P | **Pn** | **02 04 10.5** | **+0.6** |
| LUBP | | | | *e*S | **Sn** | **02 04 29.1** | **-1.0** |
| **MACP** | **Maragondon, Ca** | **1.61** | **111** | ⇑*e*P | **Pb** | **02 04 13.4** | **+1.0** |
| MACP | | | | *e*S | **Sb** | **02 04 34.5** | **+1.5** |
| **TGY** | **Tagaytay City** | **1.87** | **113** | Pn | **Pn** | **02 04 13.9** | **-0.8** |
| | 93nm,0.3s,baz=164,slow=12,SNR=2.5 | | | | | | |
| TGY | | | | Sn | **Sb** | **02 04 40.7** | **+0.3** |
| | 154nm,0.3s,baz=84,slow=20,SNR=3.2 | | | | | | |
| **SMPP** | **San Manuel, Pa** | **1.94** | **48** | ⇑*e*P | **Pb** | **02 04 17.7** | **-0.3** |
| SMPP | | | | *e*S | **Sg** | **02 04 44.5** | **-0.3** |
| **PGP** | **Puerto Galera** | **2.19** | **128** | ⇓*e*P | **Pb** | **02 04 21.6** | **-0.7** |
| PGP | | | | *i* S | **Sn** | **02 04 48.2** | **+1.6** |
| **LQP** | **Lukban** | **2.41** | **108** | ⇓*e*P | **Pb** | **02 04 25.5** | **-0.6** |
| **SAMP** | **Sagada Mountai** | **2.77** | **37** | ⇑*e*P | **Pn** | **02 04 29.7** | **+2.7** |
| **CMAR** | **Chiang Mai Arr** | **19.70** | **283** | P | **P** | **02 08 13.1** | **+0.8** |
| | 0.4nm,0.3s,baz=89,slow=9.1,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **34.55** | **345** | P | **P** | **02 10 31.6** | **+0.1** |
| | 0.4nm,0.6s,baz=164,slow=9.7,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.66** | **156** | P | **P** | **02 10 57.5** | **-0.8** |
| | 1.5nm,0.5s,baz=337,slow=9.4,SNR=9.6 | | | | | | |
| **ASAR** | **Alice Springs** | **40.91** | **159** | P | **P** | **02 11 25.0** | **-0.4** |
| | 3.3nm,0.6s,baz=337,slow=6.7,SNR=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.23** | **324** | P | **P** | **02 11 51.6** | **-0.6** |
| | 0.3nm,0.6s,baz=128,slow=9.1,SNR=5.2 | | | | | | |

*NIED **08** 02:10:05.7,44.°87N×149.°58E,h30km,MW3.5,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr0.12; Mθθ0.58; Mφφ-0.70; Mrθ-0.48; Mrφ-0.86; Mθφ1.73; Fault plane solution: M₀2.09000×10¹⁴ NP1: φs344.00000°,δ88.00000°,λ59.00000°. NP2: φs251.00000°,δ31.00000°,λ176.00000°.*

**SKHL 08 02:10:08.2±0.8,44.°70N×149.°40E,h33km±5km,mb4.5/6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.21** | **297** | *i* P | Pn | 02 10 28.4 | -0.4 |
| KUR | | | | AMB | AMB | 02 10 30.6 | |
| | 160nm,0.3s | | | | | | |
| KUR | | | | *e*S | Sn | 02 10 42.9 | -1.2 |
| KUR | | | | A | A | 02 10 48.0 | |
| | 520nm,0.3s | | | | | | |
| KUR | | | | A | A | 02 10 48.0 | |
| | 280nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **247** | *e*P | Pn | 02 10 39.5 | -0.5 |
| SHO | | | | AMB | AMB | 02 10 42.1 | |
| | 10.0nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 02 10 42.1 | |
| | 20nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 02 10 42.1 | |
| | 40nm,0.3s | | | | | | |
| SHO | | | | *e*S | Sn | 02 11 03.2 | -0.9 |
| SHO | | | | A | A | 02 11 10.3 | |
| | 150nm,0.3s | | | | | | |
| SHO | | | | A | A | 02 11 10.3 | |
| | 180nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.62** | **257** | *e*P | Pn | 02 10 48.6 | +0.4 |
| YUK | | | | AMB | AMB | 02 10 49.5 | |
| | 110nm,0.4s | | | | | | |
| YUK | | | | *e*S | Sn | 02 11 19.4 | +0.5 |
| YUK | | | | A | A | 02 11 28.5 | |
| | 220nm,0.4s | | | | | | |
| YUK | | | | A | A | 02 11 28.5 | |
| | 120nm,0.4s | | | | | | |
| **GLVR** | **Golovnino** | **2.95** | **252** | *e*P | Pn | 02 10 53.5 | +0.8 |
| GLVR | | | | AMB | AMB | 02 10 59.8 | |
| | 40nm,0.2s | | | | | | |
| GLVR | | | | *e*S | Sn | 02 11 28.3 | +1.4 |
| GLVR | | | | A | A | 02 11 35.1 | |
| | 210nm,0.4s | | | | | | |
| GLVR | | | | A | A | 02 11 35.1 | |
| | 120nm,0.4s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.96** | **245** | *i* P | Pn | 02 10 52.7 | -0.2 |
| NMR | | | | AMB | AMB | 02 10 53.2 | |
| | 30nm,0.5s | | | | | | |
| NMR | | | | *i* S | Sn | 02 11 27.7 | +0.4 |
| NMR | | | | A | A | 02 11 42.1 | |
| | 110nm,0.3s | | | | | | |
| NMR | | | | A | A | 02 11 42.1 | |
| | 90nm,0.3s | | | | | | |
| **AKK** | **Akkeshi** | **3.70** | **245** | *e*P | Pn | 02 11 04.5 | +1.5 |
| AKK | | | | AMB | AMB | 02 11 05.5 | |
| | 20nm,0.3s | | | | | | |
| AKK | | | | *e*S | Sn | 02 11 46.3 | +0.8 |
| AKK | | | | A | A | 02 12 03.3 | |
| | 100nm,0.5s | | | | | | |
| AKK | | | | A | A | 02 12 03.3 | |
| | 90nm,0.5s | | | | | | |

*IDC **08** 02:12:11.0±1.1,33.°63N×71.°36E,h0km,mb3.6/9, mb1 3.8/14,mb1mx3.6/49,mbtmp3.6/14,ML3.6/5,Error ellipse: s-maj=26.5km s-min=20.8km az=64.0*

*NNC **08** 02:12:14.3±8.7,33.°78N×70.°85E,h0km,mb3.9,Error ellipse: s-maj=90.1km s-min=67.7km az=110.0*

**ISC 08 02:12:15.3±0.8,33.°50N±0.°08×71.°32E±0.°10,h35km,n31, σ1§82/35,mb3.6/9,3C-1D,Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **9.46** | **14** | Pn | **Pn** | **02 14 29.3** | **+0.1** |
| | 0.7nm,0.3s,baz=193,slow=6.9,SNR=7.8 | | | | | | |
| AAK | | | | Sn | **Sn** | **02 16 11.8** | **-2.5** |
| | 0.7nm,0.3s,baz=252,slow=3.2,SNR=1.5 | | | | | | |
| **AAK** | **Ala-Archa** | **9.46** | **14** | P | **Pn** | **02 14 29.5** | **+0.3** |
| | 1.3nm,0.7s | | | | | | |
| AAK | | | | S | **Sn** | **02 16 19.0** | **+4.7** |
| | 1.2nm,0.3s | | | | | | |
| **KK02** | **Karatay Array** | **9.61** | **356** | ⇓P | **Pn** | **02 14 29.2** | **-1.9** |
| | 1.8nm,0.4s,baz=175,slow=12 | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **02 16 14.1** | **-3.7** |
| | 1.3nm,0.5s,baz=174,slow=21 | | | | | | |
| **TKM2** | **Tokmak 2** | **9.99** | **18** | ⇑P | **Pn** | **02 14 38.1** | **+1.7** |
| | 1.0nm,0.6s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **02 16 30.7** | **+3.4** |
| | 0.8nm,0.6s | | | | | | |
| **PYUN** | **Piuthan** | **11.38** | **115** | *e*P | **Pn** | **02 14 55.3** | **-0.3** |
| | 19nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **11.85** | **112** | *e*P | **Pn** | **02 15 01.6** | **-0.4** |
| | 15nm,0.2s | | | | | | |
| **KOLN** | **Koldanda** | **12.01** | **115** | *e*P | **Pn** | **02 15 04.7** | **+0.5** |
| | 14nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **12.69** | **112** | *e*P | **Pn** | **02 15 12.8** | **-0.6** |
| | 19nm,0.4s | | | | | | |
| **DMN** | **Daman** | **13.25** | **113** | *e*P | **Pn** | **02 15 20.5** | **-0.6** |
| | 17nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **13.29** | **112** | *e*P | **Pn** | **02 15 20.0** | **-1.7** |
| | 23nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **13.49** | **112** | *e*P | **Pn** | **02 15 22.4** | **-2.0** |
| | 15nm,0.2s | | | | | | |
| **PKI** | **Phulchoki** | **13.50** | **112** | *e*P | **Pn** | **02 15 22.8** | **-1.8** |
| | 13nm,0.2s | | | | | | |
| **GUN** | **Gumba** | **13.71** | **110** | *e*P | **Pn** | **02 15 25.3** | **-2.1** |
| | 19nm,0.6s | | | | | | |
| **JIRN** | **Jiri** | **14.06** | **110** | *e*P | **Pn** | **02 15 29.9** | **-2.5** |
| | 40nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **14.73** | **112** | *e*P | **Pn** | **02 15 39.0** | **-2.2** |
| | 30nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **15.38** | **111** | *e*P | **Pn** | **02 15 48.5** | **-1.5** |
| | 8.1nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **15.40** | **109** | *e*P | **Pn** | **02 15 48.0** | **-2.3** |
| | 7.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **15.69** | **29** | Pn | **Pn** | **02 15 52.2** | **-1.3** |
| | 0.1nm,0.3s,baz=209,slow=12,SNR=8.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.91** | **15** | P | **Pn** | **02 16 19.9** | **-1.6** |
| | 0.1nm,0.3s,baz=205,slow=11,SNR=20 | | | | | | |
| **BVAR** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AAK | | | | ⇑S | | Sn | 02 21 01.1 | +1.4 |
| | comp=E,16nm,0.8s | | | | | | | |
| **KBK** | **Karagaybulak** | **9.32** | **35** | P | Pn | **P** | 02 19 24.0 | +2.4 |
| | SNR=14 | | | | | | | |
| **CHMS** | **Chumysh** | **9.50** | **33** | P | Pn | **P** | 02 19 27.4 | +3.5 |
| | SNR=9.0 | | | | | | | |
| **USP** | **Ospenovka** | **9.60** | **31** | P | Pn | **P** | 02 19 25.7 | +0.3 |
| | SNR=6.5 | | | | | | | |
| **SGDS** | **Sogindy** | **9.81** | **31** | *e*P | Pn | **P** | 02 19 28.3 | +0.1 |
| | baz=31 | | | | | | | |
| **TKM2** | **Tokmak 2** | **9.83** | **36** | P | Pn | **P** | 02 19 29.3 | +0.6 |
| | SNR=11 | | | | | | | |
| **TKM2** | **Tokmak 2** | **9.83** | **36** | ⇑P | Pn | **P** | 02 19 28.4 | -0.2 |
| | comp=E,9.0nm,0.6s | | | | | | | |
| TKM2 | | | | ⇓S | Sn | **P** | 02 21 21.2 | +3.4 |
| | comp=E,6.2nm,0.9s | | | | | | | |
| **TNSS** | **Tian-Shan** | **10.60** | **40** | *e*P | Pn | **P** | 02 19 39.8 | +0.5 |
| | baz=40 | | | | | | | |
| **AAA** | **Alma-Ata** | **10.70** | **39** | *e*P | Pn | **P** | 02 19 40.1 | -0.3 |
| | baz=39 | | | | | | | |
| **MDOK** | **Medeo** | **10.74** | **40** | *e*P | Pn | **P** | 02 19 41.7 | +0.7 |
| | baz=40 | | | | | | | |
| **KUU** | **Kurty** | **10.92** | **35** | *e*P | Pn | **P** | 02 19 44.1 | +0.7 |
| | baz=35 | | | | | | | |
| **ZHN** | **Zhinishke** | **11.49** | **43** | *e*P | Pn | **P** | 02 19 52.2 | +0.9 |
| | baz=43 | | | | | | | |
| **KPKS** | **Kokpek** | **11.82** | **43** | *e*P | Pn | **P** | 02 19 56.1 | +0.4 |
| | baz=42 | | | | | | | |
| **BRZS** | **Berezniki** | **15.19** | **12** | *e*P | Pn | **P** | 02 20 41.7 | +0.2 |
| | baz=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **15.93** | **39** | Pn | Pn | **P** | 02 20 50.3 | -0.8 |
| | comp=E,0.1nm,0.3s,baz=231,slow=12,SNR=16 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.76** | **338** | Pn | Pn | **P** | 02 20 58.0 | -3.5 |
| | comp=E,0.1nm,0.3s,baz=129,slow=13,SNR=2.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.28** | **24** | P | Pn | **P** | 02 21 06.2 | -1.8 |
| | comp=E,0.1nm,0.3s,baz=214,slow=10,SNR=6.0 | | | | | | | |
| **SEM** | **Semipalatinsk** | **17.71** | **27** | *e*P | **P** | **P** | 02 21 14.1 | -0.1 |
| | baz=27 | | | | | | | |
| **BVAR** | **Borovoye Array** | **17.90** | **5** | P | Pn | **P** | 02 21 13.6 | -2.1 |
| | comp=E,0.5nm,0.3s,baz=132,slow=8.8,SNR=9.1 | | | | | | | |
| **GOMU** | **GeErMu** | **22.01** | **80** | P | **P** | **P** | 02 22 02.1 | +0.8 |
| GOMU | | | | pP | sP | | 02 22 25.7 | +10 |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **22.11** | **346** | P | **P** | **P** | 02 22 02.2 | +0.5 |
| | comp=Z,0.5nm,0.5s,baz=107,slow=22,SNR=2.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.23** | **27** | P | **P** | **P** | 02 22 02.9 | -0.2 |
| | comp=Z,3.5nm,0.6s,baz=224,slow=10,SNR=15 | | | | | | | |
| **GTA** | **Gaotai** | **25.80** | **71** | *e*P | **P** | **P** | 02 22 38.9 | +1.4 |
| GTA | | | | pP | pP | | 02 22 45.1 | -3.0 |
| GTA | | | | sP | sP | | 02 22 47.9 | -4.7 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **27.31** | **290** | P | **P** | **P** | 02 22 53.3 | +2.1 |
| | comp=Z,1.0nm,0.9s,baz=83,slow=10,SNR=4.4 | | | | | | | |
| **OBN** | **Obninsk** | **29.25** | **323** | LR | LR | | 02 38 10.0 | |
| | comp=Z,19nm,18.9s,baz=332,slow=43 | | | | | | | |
| **SONM** | **Songino Array** | **31.25** | **54** | P | **P** | **P** | 02 23 26.5 | +0.4 |
| | comp=Z,0.9nm,0.8s,baz=257,slow=8.5,SNR=7.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **31.72** | **311** | P | **P** | **P** | 02 23 30.3 | +0.4 |
| | comp=Z,0.1nm,0.3s,baz=116,slow=8.4,SNR=2.0 | | | | | | | |
| **MNK** | **Minsk** | **33.58** | **318** | *i* P | **P** | **P** | 02 23 45.0 | -1.2 |
| | comp=E,4.0nm,0.9s | | | | | | | |
| MNK | | | | *i* P | **P** | **P** | 02 23 45.0 | -1.2 |
| | comp=N,8.0nm,0.8s | | | | | | | |
| MNK | | | | *i* P | **P** | **P** | 02 23 45.0 | -1.2 |
| | comp=Z,6.0nm,1.0s,baz=108 | | | | | | | |
| MNK | | | | *i* PP | **PnPn** | **P** | 02 24 57.1 | -1.1 |
| MNK | | | | *i* PPP | PPP | | 02 25 08.8 | |
| MNK | | | | *i* S | **S** | **P** | 02 29 05.5 | -0.5 |
| MNK | | | | *i* SS | **SnSn** | **P** | 02 31 11.7 | +1.2 |
| MNK | | | | *i* SSS | SSS | | 02 31 28.2 | |
| MNK | | | | *i* LR | LR | | 02 37 28.4 | |
| MNK | | | | *i* LRM | MLR | | 02 38 37.1 | |
| | comp=E,23nm,13.4s | | | | | | | |
| MNK | | | | *i* LRM | MLR | | 02 38 46.1 | |
| | comp=N,143nm,13.4s | | | | | | | |
| MNK | | | | *i* LRM | MLR | | 02 38 49.4 | |
| | comp=Z,24nm,8.0s | | | | | | | |
| **WHN** | **Wuhan** | **39.17** | **83** | ⇑P | **P** | **P** | 02 24 34.7 | +0.6 |
| **TORD** | **Torodi Ar. Bea** | **63.00** | **267** | P | **P** | **P** | 02 27 32.5 | -0.8 |
| | comp=Z,1.1nm,0.8s,baz=28,slow=5.7,SNR=6.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.61** | **1** | P | **P** | **P** | 02 29 28.9 | +0.1 |
| | comp=Z,0.3nm,0.7s,baz=348,slow=4.8,SNR=4.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.63** | **120** | P | **P** | **P** | 02 29 35.7 | +0.9 |
| | comp=Z,0.8nm,0.9s,baz=326,slow=4.7,SNR=4.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **85.76** | **123** | P | **P** | **P** | 02 29 46.4 | +1.0 |
| | comp=Z,1.4nm,0.7s,baz=317,slow=5.5,SNR=16 | | | | | | | |

**IDC 08 02:52:58.2±3.6, 4°08S×137°99E, h0km, mb3.4/1, mb1 3.5/4, mb1mx3.4/33, mbtmp3.4/4, ML3.3/3, Error ellipse: s-maj=117.5km s-min=32.4km az=89.0, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **16.16** | **192** | Pn | P | 02 56 48.8 | -1.5 |
| | 0.2nm,0.3s,baz=15,slow=12,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.45** | **220** | P | Pn | 02 57 14.6 | -0.9 |
| | 0.0nm,0.3s,baz=27,slow=9.0,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.87** | **191** | P | P | 02 57 30.8 | -0.4 |
| | 0.2nm,0.3s,baz=20,slow=11,SNR=9.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.43** | **323** | P | P | 03 04 14.6 | +0.1 |
| | 0.3nm,0.7s,baz=110,slow=4.5,SNR=2.7 | | | | | | |

**IDC 08 02:54:05.2±11.0, 20°57S×179°27W, h502km±62km, mb2.9/4, mb1 3.1/5, mb1mx2.8/33, mbtmp3.7/5, Error ellipse: s-maj=263.9km s-min=33.1km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.79** | **318** | P | P | 02 55 22.2 | -0.1 |
| | 1.5nm,0.3s,baz=129,slow=6.4,SNR=8.0 | | | | | | |
| **CTA** | **Charters Tower** | **32.30** | **265** | P | P | 02 59 52.6 | +0.3 |
| | 1.1nm,0.4s,baz=130,slow=7.9,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **43.34** | **257** | P | P | 03 01 22.6 | 0.0 |
| | 0.5nm,0.5s,baz=100,slow=7.5,SNR=8.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.41** | **262** | P | P | 03 01 22.6 | -0.6 |
| | 0.3nm,0.4s,baz=97,slow=7.3,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **88.65** | **13** | P | P | 03 06 03.8 | 0.0 |
| | 0.8nm,1.1s,baz=206,slow=5.9,SNR=3.0 | | | | | | |

*IDC **08** 02:54:22.0±0.9, 14°.92N×120°.49E, h0km, mb3.6/7, mb1 3.8/7, mb1mx3.6/39, mbtmp3.6/7, Error ellipse: s-maj=36.6km s-min=9.2km az=62.0*
*MAN **08** 02:54:23.2, 13°.95N×120°.12E, h52km, mb4.6, ML3.5, MS3.4*
**ISC 08 02:54:23.6±0.8, 13°93N±0°.04×120°19E±0°.06, h71km±7km, n22, σ1°11/28, mb3.6/8, 6C-5D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.20** | **163⇑** | *e*P | **Pn** | **02 54 34.6** | **+0.2** |
| LUBP | | | | *e*S | **Sn** | **02 54 41.4** | **-0.7** |
| **MACP** | **Maragondon, Ca** | **0.61** | **57⇓** | *i*P | **Pn** | **02 54 37.4** | **-0.2** |
| MACP | | | | *e*S | **Sn** | **02 54 47.2** | **-0.8** |
| **TGY** | **Tagaytay City** | **0.75** | **77** | Pg | **Pn** | **02 54 40.1** | **+0.9** |
| | 662nm,0.3s,baz=257,slow=2.9,SNR=28 | | | | | | |
| TGY | | | | Lg | Lg | 02 54 52.1 | |
| | 3µm,0.3s,baz=348,slow=22,SNR=16 | | | | | | |
| **TGY** | **Tagaytay City** | **0.75** | **77⇑** | *e*P | **Pn** | **02 54 40.2** | **+1.0** |
| TGY | | | | *i* S | **Sn** | **02 54 52.5** | **+1.8** |
| **PGP** | **Puerto Galera** | **0.86** | **120⇑** | *e*P | **Pn** | **02 54 40.4** | **-0.1** |
| PGP | | | | *i* S | **Sn** | **02 54 52.6** | **-0.4** |
| **LQP** | **Lukban** | **1.33** | **82⇑** | *e*P | **Pn** | **02 54 46.7** | **+0.2** |
| LQP | | | | *i* S | **Sn** | **02 55 04.5** | **+0.8** |
| **SJMP** | **San Jose** | **1.72** | **148⇓** | *i*P | **Pn** | **02 54 52.3** | **+0.8** |
| SJMP | | | | *e*S | **Sn** | **02 55 12.1** | **-0.5** |
| **PCPH** | **Palayan** | **1.85** | **28⇑** | *e*P | **Pn** | **02 54 53.0** | **-0.3** |
| PCPH | | | | *e*S | **Sn** | **02 55 15.5** | **-0.2** |
| **SCZP** | **Santa Cruz** | **1.85** | **352⇑** | *e*P | **Pn** | **02 54 53.9** | **+0.6** |
| SCZP | | | | *e*S | **Sn** | **02 55 15.9** | **0.0** |
| **SMPP** | **San Manuel, Pa** | **2.26** | **12⇓** | *i*P | **Pn** | **02 54 59.1** | **+0.3** |
| SMPP | | | | *e*S | **Sn** | **02 55 25.8** | **+0.1** |
| **ENPP** | **El Nido** | **2.81** | **195⇓** | *i*P | **Pn** | **02 55 06.9** | **+0.6** |
| ENPP | | | | *e*S | **Sn** | **02 55 38.0** | **-1.0** |
| **PPR** | **Puerto Princes** | **4.37** | **199⇓** | *i*P | **Pn** | **02 55 28.2** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **20.89** | **285** | P | Pn | 02 59 04.7 | +1.3 |
| | 2.1nm,0.4s,baz=98,slow=8.9,SNR=9.9 | | | | | | |
| **KSRS** | **Korea Array** | **24.42** | **15** | P | **P** | **02 59 32.5** | **-3.0** |
| | 0.5nm,0.6s,baz=145,slow=23,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **35.70** | **344** | P | **P** | **03 01 15.5** | **+0.2** |
| | 1.3nm,0.6s,baz=161,slow=10.0,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.43** | **157** | P | P | 03 01 36.6 | +15 |
| | 0.9nm,0.6s,baz=338,slow=9.6,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **39.70** | **160** | P | P | 03 02 04.2 | +15 |
| | 0.5nm,0.8s,baz=335,slow=6.7,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.55** | **324** | P | **P** | **03 02 38.6** | **+2.2** |
| | 0.1nm,0.3s,baz=120,slow=7.2,SNR=2.7 | | | | | | |
| **HNR** | **Honiara** | **45.77** | **118** | P | P | 03 02 45.3 | +6.8 |
| | 133nm,0.4s,baz=326,slow=7.3,SNR=6.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.63** | **333** | P | **P** | **03 03 01.2** | **+1.1** |
| | 0.2nm,0.3s,baz=155,slow=7.9,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.69** | **339** | P | **P** | **03 06 18.6** | **+0.8** |
| | 1.2nm,0.8s,baz=61,slow=6.1,SNR=0.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.75** | **22** | P | **P** | **03 07 26.1** | **-1.7** |
| | 0.1nm,0.3s,baz=307,slow=4.0,SNR=2.2 | | | | | | |

*TUL **08** 03:53:40.2±0.4, 36°.12N±0°.01×97°.58W±0°.02, h4km±4km, ML2.8, mb_Lg2.2/16(NEIC), Error ellipse: s-maj=2.0km s-min=1.4km az=52.0*
**NEIC 08 03:53:40.8±0.4, 36°119N±0°007×97°59W±0°02, h4km±3km, Error ellipse: s-maj=1.9km s-min=0.7km az=68.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK029** | **Liberty Lake** | **0.34** | **162** | | Pg | 03 53 47.1 | -0.3 |
| OK029 | | | | Sg | Sg | 03 53 51.9 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **0.46** | **182** | | Pg | 03 53 49.4 | -0.4 |
| BCOK | | | | Sg | Sg | 03 53 55.9 | +0.1 |
| **CROK** | **Carrier** | **0.50** | **320** | Pg | Pg | 03 53 50.2 | -0.3 |
| CROK | | | | Sg | Sg | 03 53 57.1 | +0.1 |
| **OK033** | **Mehan** | **0.53** | **98** | | Pg | 03 53 50.5 | -0.5 |
| **OK025** | **Westminster Rd** | **0.57** | **159** | | Pg | 03 53 51.4 | -0.4 |
| **OK031** | **S. Brethren Rd** | **0.63** | **105** | Pg | Pg | 03 53 52.4 | -0.5 |
| **OK030** | **Cody Creek RV** | **0.68** | **106** | Pg | Pg | 03 53 53.1 | -0.7 |
| OK030 | | | | lAmb_Lg | | 03 54 02.1 | |
| | comp=Z,26nm,0.8s | | | | | | |
| OK030 | | | | Sg | Sg | 03 54 02.2 | -0.4 |
| **BLOK** | **Blackwell** | **0.71** | **25** | | Pg | 03 53 53.8 | -0.6 |
| BLOK | | | | lAmb_Lg | | 03 54 03.5 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **OKCFA** | **Oklahoma City** | **0.71** | **171** | Pg | Pg | 03 53 53.8 | -0.7 |
| OKCFA | | | | Sg | Sg | 03 54 03.7 | 0.0 |
| **QUOK** | **Quay** | **0.71** | **86** | Pg | Pg | 03 53 53.9 | -0.6 |
| QUOK | | | | Sg | Sg | 03 54 03.6 | -0.2 |
| **OK034** | **N. Norfolk Rd.** | **0.72** | **98** | Pg | Pg | 03 53 53.8 | -0.8 |
| OK034 | | | | Sg | Sg | 03 54 03.8 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.72** | **170** | Pg | Pg | 03 53 54.0 | -0.7 |
| OKCSW | | | | Sg | Sg | 03 54 04.2 | +0.2 |
| **GC02** | **Grant County #** | **0.76** | **343** | | Pg | 03 53 54.6 | -0.9 |
| **OK032** | **Salt Plains WL** | **0.85** | **324** | Pg | Pg | 03 53 56.2 | -0.9 |
| **FNO** | **Franklin** | **0.87** | **170** | | Pg | 03 53 56.6 | -1.0 |
| FNO | | | | Sg | Sg | 03 54 08.6 | -0.3 |
| **KAN14** | **Manchester OK** | **0.89** | **340** | | Pg | 03 53 57.0 | -0.9 |
| KAN14 | | | | Sg | Sg | 03 54 09.1 | -0.3 |
| **KAN13** | **South Haven SW** | **0.90** | **6** | Pg | Pg | 03 53 57.2 | -0.9 |
| **KAN17** | **Caldwell West** | **0.93** | **351** | Pg | Pg | 03 53 57.9 | -0.9 |
| **KAN05** | **Bluff City Nor** | **1.01** | **347** | Pg | Pg | 03 53 59.2 | -1.1 |
| **KAN01** | **Argonia South** | **1.04** | **352** | Pg | Pg | 03 53 59.8 | -1.1 |
| **OK035** | **E0210 Rd and N** | **1.08** | **303** | Pg | Pg | 03 54 00.5 | -1.1 |
| **W35A** | **Tecumseh** | **1.12** | **149** | Pg | Pg | 03 54 00.9 | -1.5 |
| W35A | | | | lAmb_Lg | | 03 54 16.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **KAN06** | **Argonia West S** | **1.15** | **349** | Pg | Pg | 03 54 01.6 | -1.3 |
| **KAN08** | **Anthony NE Sta** | **1.15** | **344** | Pg | Pg | 03 54 01.7 | -1.2 |
| **KAN16** | **Harper SW Stat** | **1.17** | **341** | Pg | Pg | 03 54 01.9 | -1.3 |
| **U32A** | **Winter Ranch,** | **1.17** | **283** | Pg | Pg | 03 54 02.1 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.18** | **47** | Pg | Pg | 03 54 02.3 | -1.1 |
| **KAN12** | **Harper NE Stat** | **1.22** | **344** | Pg | Pg | 03 54 02.6 | -1.7 |
| **TUL1** | **Leonard** | **1.47** | **98** | | Pn | 03 54 06.8 | -1.3 |
| **X34A** | **Smith Ranch, M** | **1.53** | **188** | | Pn | 03 54 08.6 | -0.3 |
| X34A | | | | lAmb_Lg | | 03 54 28.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.69** | **216** | Pn | Pn | 03 54 10.5 | -0.6 |
| **LOOK** | **Love County** | **2.15** | **171** | Pn | Pn | 03 54 17.3 | -0.2 |
| **X37A** | **Clayton** | **2.37** | **129** | Pn | Pn | 03 54 20.4 | 0.0 |
| X37A | | | | lAmb_Lg | | 03 54 54.7 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.61** | **82** | Pn | Pn | 03 54 23.2 | -0.5 |
| **Z35A** | **Perchaven, San** | **2.79** | **174** | Pn | Pn | 03 54 26.8 | +0.5 |
| **HHAR** | **Hobbs** | **2.95** | **86** | Pn | Pn | 03 54 27.9 | -0.6 |
| **MIAR** | **Mount Ida** | **3.63** | **114** | Pn | Pn | 03 54 38.0 | +0.1 |
| MIAR | | | | lAmb_Lg | | 03 55 38.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.39** | **99** | Pn | Pn | 03 54 47.7 | -0.6 |
| **MGMO** | **Mountain Grove** | **4.40** | **75** | Pn | Pn | 03 54 47.2 | -1.2 |
| **WLAR** | **White Oak Lake** | **4.41** | **122** | Pn | Pn | 03 54 48.7 | +0.3 |
| **R40A** | **Maddies Statio** | **4.77** | **61** | Pn | Pn | 03 54 52.8 | -0.6 |

*SFS **08** 04:10:30.0, 35°.59N×3°.62W, ML2.2, ALBORAN SUR*
*CNRM **08** 04:10:31.3, 35°.71N×3°.61W, h19km, ml2.6*
*INMG **08** 04:10:31.5±1.1, 35°.60N×3°.61W, h5km, ML2.0, Error ellipse: s-maj=3.7km s-min=2.8km az=160.0*
**ISC 08 04:10:29.1±2.1, 35°68N±0°.04×3°53W±0°.05, h6km±16km, n21, σ1°25/34, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.56** | **216** | P | **Pb** | **04 10 41.9** | **+0.4** |
| PALE | | | | S | **Sb** | **04 10 50.8** | **+1.0** |
| **CHAS** | **Isla Isabel II** | **1.02** | **118** | P | **Pb** | **04 10 49.2** | **0.0** |
| CHAS | | | | S | **Sb** | **04 11 00.8** | **-2.1** |
| **AKLM** | **AKL** | **1.19** | **193** | P | **Pb** | **04 10 52.4** | **+0.2** |
| AKLM | | | | S | **Sg** | **04 11 07.3** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.31** | **326** | P | **Pn** | **04 10 54.3** | **+0.4** |
| EMAL | | | | S | **Sb** | **04 11 09.8** | **-1.3** |
| **CHEFC** | **Chefchaouen** | **1.58** | **250** | P | **Pn** | **04 10 57.8** | **0.0** |
| **LCRM** | **LCR** | **2.27** | **209** | P | **Pb** | **04 11 10.0** | **-0.5** |
| LCRM | | | | S | **Sg** | **04 11 40.8** | **-1.0** |
| **IFR** | **Ifrane** | **2.52** | **212** | P | **Pn** | **04 11 10.7** | **-0.1** |
| IFR | | | | S | **Sn** | **04 11 40.3** | **-1.8** |
| **TDRA** | **Tendrara** | **2.91** | **154** | P | **Pn** | **04 11 17.7** | **+1.5** |
| **MD31** | **MD31** | **2.98** | **200** | P | **Pn** | **04 11 17.9** | **+0.8** |
| MD31 | | | | S | **Sn** | **04 11 52.9** | **-0.2** |
| **MDT** | **Midelt** | **2.99** | **198** | P | **Pn** | **04 11 18.4** | **+1.2** |
| MDT | | | | S | **Sn** | **04 11 54.9** | **+1.5** |
| **PVAQ** | **Vaqueiros** | **3.79** | **298** | *e*Pn | **Pn** | **04 11 28.9** | **+0.9** |
| PVAQ | | | | *e*Sn | **Sn** | **04 12 12.5** | **-0.4** |
| PVAQ | | | | A | A | 04 12 18.3 | |
| | 1.2nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.79** | **298** | P | **Pn** | **04 11 28.2** | **+0.1** |
| PVAQ | | | | S | **Sn** | **04 12 11.2** | **-1.8** |
| **PBDV** | **Barranco-do-Ve** | **3.88** | **295** | *e*Pn | **Pn** | **04 11 29.9** | **+0.6** |
| PBDV | | | | *e*Sn | **Sn** | **04 12 14.7** | **-0.5** |
| **PCVE** | **Castro Verde** | **4.12** | **300** | *e*Pn | **Pn** | **04 11 34.6** | **+2.0** |
| **MESJ** | **Messejana** | **4.34** | **301** | *e*Pn | **Pn** | **04 11 37.3** | **+1.6** |
| **PESTR** | **Estremoz** | **4.54** | **316** | *e*Pn | **Pn** | **04 11 40.0** | **+1.6** |
| PESTR | | | | *e*Sn | **Sn** | **04 12 31.1** | **-0.5** |
| **EVO** | **Evora** | **4.58** | **310** | *e*Pn | **Pn** | **04 11 40.4** | **+1.5** |
| EVO | | | | *e*Sn | **Sn** | **04 12 31.8** | **-0.7** |
| EVO | | | | A | A | 04 12 33.7 | |
| | 2.0nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.69** | **303** | *e*Pn | **Pn** | **04 11 41.2** | **+0.8** |
| **PMRV** | **Marv??o** | **4.84** | **322** | *e*Pn | **Pn** | **04 11 44.5** | **+1.9** |
| **PMTG** | **Montargil** | **5.04** | **314** | *e*Pn | **Pn** | **04 11 47.4** | **+2.1** |
| **PSBE** | **So Bento** | **5.67** | **314** | *e*Pn | **Pn** | **04 11 55.7** | **+1.7** |

*IDC **08** 04:11:48.0±2.4, 2°.00N×127°.05E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.2/38, mbtmp3.3/3, Error ellipse: s-maj=185.0km s-min=28.5km az=66.0*
*DJA **08** 04:12:06.3±0.5, 0°S±5°×12°3E±°, h99km±11km, M4.0/8, MLv4.0/8*
**ISC 08 04:12:05.9±1.2, 0°18S±0°09×123°46E±0°05, h100km, n9, σ1°26/12, mb3.2/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.91** | **35** | P | **Pn** | **04 12 27.0** | **+1.6** |
| **MRSI** | **Marisa** | **1.66** | **293** | P | **Pn** | **04 12 33.3** | **-0.8** |
| MRSI | | | | S | **Sn** | **04 12 53.6** | **-2.0** |
| **APSI** | **Ampana** | **1.95** | **248** | P | **Pn** | **04 12 39.8** | **+1.9** |
| APSI | | | | S | **Sn** | **04 13 02.3** | **0.0** |
| **SANI** | **Sanana** | **3.13** | **126** | P | **Pn** | **04 12 53.1** | **-0.4** |
| SANI | | | | S | **Sn** | **04 13 29.0** | **-1.2** |
| **MPSI** | **Mapaga** | **3.60** | **278** | P | **Pn** | **04 13 00.6** | **+0.9** |
| **LBMI** | **Labuha** | **4.07** | **96** | P | **Pn** | **04 13 06.6** | **+0.6** |
| LBMI | | | | S | **Sn** | **04 13 52.7** | **+0.1** |
| **WRA** | **Warramunga Arr** | **22.34** | **152** | P | **P** | **04 16 54.8** | **-0.9** |
| | 1.1nm,0.8s,baz=341,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **25.45** | **157** | P | **P** | **04 17 25.2** | **+0.5** |
| | 0.3nm,0.6s,baz=341,slow=11,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.01** | **328** | P | P | 04 21 50.6 | -4.6 |
| | 0.1nm,0.5s,baz=128,slow=9.3,SNR=2.8 | | | | | | |

*IDC **08** 04:16:33.0±2.1, 17°.33S×179°.00W, h578km±18km, mb3.0/6, mb1 3.2/7, mb1mx2.7/44, mbtmp3.9/7, Error ellipse: s-maj=118.0km s-min=21.6km az=155.0*
**ISC 08 04:16:34.5±1.6, 17°2S±0°9×179°1W±0°5, h600km, n7, σ1°59/7, mb3.3/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.73** | **259** | P | **P** | **04 17 49.7** | **-2.6** |
| | 3.8nm,0.3s,baz=125,slow=5.5,SNR=46 | | | | | | |
| **STKA** | **Stephens Creek** | **38.35** | **240** | P | **P** | **04 23 05.8** | **0.0** |
| | 1.0nm,0.4s,baz=96,slow=10,SNR=2.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.07** | **259** | P | **P** | **04 23 51.3** | **+0.2** |
| | 0.6nm,0.5s,baz=92,slow=7.0,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **44.31** | **254** | P | **P** | **04 23 53.4** | **+0.6** |
| | 7.3nm,0.5s,baz=88,slow=8.2,SNR=109 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.45** | **260** | P | **P** | **04 24 54.8** | **+1.7** |
| | 0.3nm,0.3s,baz=127,slow=5.1,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.22** | **58** | P | **P** | **04 28 14.4** | **+0.5** |
| | 0.3nm,0.7s,baz=222,slow=6.7,SNR=3.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.34** | **44** | P | **P** | **04 28 19.0** | **-0.1** |
| | 0.2nm,0.5s,baz=212,slow=3.2,SNR=3.5 | | | | | | |

*KRSC **08** 04:25:03.6±0.8, 55°.28N×160°.62E, h180km±8km, ML4.2*
*IDC **08** 04:25:05.3±1.3, 55°.46N×160°.07E, h175km±14km, mb3.3/13, mb1 3.5/15, mb1mx3.2/54, mbtmp3.7/15, Error ellipse: s-maj=17.5km s-min=12.9km az=144.0*
**ISC 08 04:25:04.9±0.7, 55°30N±0°04×160°48E±0°06, h178km±5km, n55, σ1°06/71, mb3.6/13, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TUMD** | **Tumrok D** | **0.11** | **203** | *e*P | **Pn** | **04 25 28.4** | **0.0** |
| TUMD | | | | *e*S | **Sn** | **04 25 46.7** | **+0.3** |
| **TUMR** | **Tumrok** | **0.19** | **264** | *e*P | **Pn** | **04 25 29.0** | **+0.4** |
| TUMR | | | | *e*S | **Sn** | **04 25 47.5** | **+0.7** |
| **KMNR** | **Kamenistaya** | **0.47** | **343** | *e*P | **Pn** | **04 25 29.4** | **0.0** |
| KMNR | | | | *e*S | **Sn** | **04 25 48.8** | **+0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **0.65** | **11** | *e*P | **Pn** | **04 25 31.1** | **+0.9** |
| **KIRR** | **Kirishev** | **0.66** | **353** | *e*P | **Pn** | **04 25 29.8** | **-0.5** |
| **ZLN** | **Zelenaya** | **0.74** | **14** | *e*P | **Pn** | **04 25 31.1** | **+0.4** |
| **LGNR** | **Loginova** | **0.79** | **9** | *i* P | **Pn** | **04 25 31.6** | **+0.4** |
| **CIRR** | **Tsirk** | **0.83** | **11** | *e*P | **Pn** | **04 25 31.4** | **+0.1** |
| **KLY** | **Klyuchi** | **1.02** | **6** | *e*P | **Pn** | **04 25 32.4** | **0.0** |
| KLY | | | | *e*S | **Sn** | **04 25 53.8** | **+0.1** |
| **MKZ** | **Mys Kozlova** | **1.04** | **135** | *e*P | **Pn** | **04 25 32.2** | **-0.4** |
| MKZ | | | | *e*S | **Sn** | **04 25 53.2** | **-0.8** |
| **BDR** | **Baidarnaya** | **1.33** | **18** | *e*P | **Pn** | **04 25 35.6** | **+0.5** |
| **SMKR** | **Semkarok** | **1.40** | **23** | *e*P | **Pn** | **04 25 36.0** | **+0.3** |
| SMKR | | | | *e*S | **Sn** | **04 25 59.3** | **-0.3** |
| **SRKR** | **Sorokina** | **1.41** | **16** | *e*P | **Pn** | **04 25 35.8** | **0.0** |
| **KBG** | **Krutoberegovo** | **1.58** | **52** | *e*P | **Pn** | **04 25 37.1** | **-0.2** |
| KBG | | | | *e*S | **Sn** | **04 26 01.0** | **-1.5** |
| **KBTR** | **Krutoberegovo** | **1.60** | **55** | *e*P | **Pn** | **04 25 36.9** | **-0.7** |
| KBTR | | | | *e*S | **Sn** | **04 26 01.3** | **-1.7** |
| **GNL** | **Ganaly** | **2.19** | **224** | *e*P | **Pn** | **04 25 44.5** | **+0.5** |
| **SPN** | **Mys Shipunski** | **2.23** | **187** | *e*P | **Pn** | **04 25 43.3** | **-1.0** |
| SPN | | | | *e*S | **Sn** | **04 26 12.3** | **-2.5** |
| **SDLR** | **Sedlovina** | **2.23** | **205** | *i* P | **Pn** | **04 25 45.2** | **+0.7** |
| **NLC** | **Nalytchevo** | **2.24** | **198** | *e*P | **Pn** | **04 25 44.4** | **0.0** |
| NLC | | | | *e*S | **Sn** | **04 26 14.2** | **-0.8** |
| **KRER** | **Koryakskii** | **2.25** | **207** | *i* P | **Pn** | **04 25 45.8** | **+1.1** |
| **SMAR** | **Somma** | **2.27** | **206** | *i* P | **Pn** | **04 25 45.7** | **+0.7** |
| SMAR | | | | *e*S | **Sn** | **04 26 17.5** | **+1.5** |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KZLR | | | | Sg | Sg | 05 14 47.8 | +5.1 | |
| **ZAK** | **Zakamensk** | **3.56** | **99** | Pg | Pg | 05 14 39.5 | -1.4 | |
| ZAK | | | | Sg | Sg | 05 15 26.2 | -0.8 | |
| **IRK** | **Irkutsk** | **4.21** | **71** | Sg | Sg | 05 15 48.8 | +1.1 | |
| **DJOS** | **Djoyskaya Sosn** | **4.31** | **296** | Pg | Pg | 05 14 58.6 | +3.3 | |
| DJOS | | | | Sg | Sg | 05 15 53.6 | +2.5 | |
| **CERR** | **Cheremushki** | **4.33** | **297** | Sg | Sg | 05 15 53.2 | +1.7 | |
| **MINR** | **Mina** | **4.40** | **332** | Pg | Pg | 05 15 01.7 | +4.6 | |
| MINR | | | | Sg | Sg | 05 16 02.1 | +8.0 | |
| **DJO** | **Djoy, Khakassi** | **4.41** | **295** | Pg | Pg | 05 14 59.4 | +2.3 | |
| DJO | | | | Sg | Sg | 05 15 55.2 | +0.9 | |
| **ABNR** | **Abakan** | **4.71** | **307** | Sg | Sg | 05 16 01.3 | -2.6 | |
| **TRG** | **Tyrgan** | **5.56** | **69** | Pg | Pg | 05 15 18.4 | -0.9 | |
| TRG | | | | Sg | Sg | 05 16 29.9 | -1.4 | |
| **SHRR** | **Shira** | **5.75** | **309** | Pg | Pg | 05 15 23.4 | +0.5 | |
| **SHRR** | **Shira** | **5.75** | **309** | Sg | Sg | 05 16 39.1 | +1.7 | |
| **LUZB** | **Luzhba, Kemero** | **6.03** | **299** | Sg | Sg | 05 16 45.0 | -1.2 | |
| **CUR** | **Chagan-Uzun** | **6.09** | **264** | Pg | Pg | 05 15 28.2 | -1.1 | |
| CUR | | | | Sg | Sg | 05 16 49.8 | +1.6 | |
| **ULGR** | **Ulagan, Altay** | **6.24** | **270** | Pg | Pg | 05 15 34.2 | +2.0 | |
| ULGR | | | | Sg | Sg | 05 16 57.0 | +4.0 | |
| **TASR** | **Tashtagol** | **6.36** | **289** | Sg | Sg | 05 16 57.4 | +0.7 | |
| **ARTR** | **Artybash** | **6.61** | **280** | Sg | Sg | 05 17 03.2 | -1.7 | |
| **DGZ** | **Jazzator, Alta** | **6.76** | **262** | Sg | Sg | 05 17 09.2 | -0.6 | |
| **ULN** | **Ulaanbaatar** | **6.84** | **114** | Sg | Sg | 05 17 07.0 | -5.2 | |
| **BRCR** | **Berchikul'** | **7.28** | **313** | Sg | Sg | 05 17 27.1 | +0.9 | |

**IDC 08 05:19:21.8±2.1, 1°.85N×126°.28E, h0km, mb3.1/3, mb1 3.3/3, mb1mx3.2/23, mbtmp3.2/3, MS3.4/1, Ms1 3.4/1, ms1mx2.3/23, Error ellipse: s-maj=184.0km s-min=26.4km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.05** | **160** | P | P | 05 24 28.9 | -0.1 |
| | 0.2nm,0.3s,baz=339,slow=11,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **26.43** | **164** | P | P | 05 25 00.7 | +0.3 |
| | 0.3nm,0.8s,baz=341,slow=7.8,SNR=2.2 | | | | | | |
| **HNR** | **Honiara** | **35.36** | **109** | LR | LR | 05 40 24.2 | |
| | comp=Z,52nm,18.7s,baz=86,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.84** | **326** | P | P | 05 29 22.2 | -0.1 |
| | 0.1nm,0.4s,baz=123,slow=7.1,SNR=5.9 | | | | | | |

*NNC **08** 05:37:00.1±2.5, 54°.33N×87°.47E, h0km, mb3.1, mpv2.9, Error ellipse: s-maj=21.3km s-min=12.4km az=15.0, Suspected Mining explosion.*
*IDC **08** 05:37:02.6±2.8, 54°.26N×87°.27E, h0km, mb1 3.1/2, mb1mx2.5/44, mbtmp3.1/2, ML2.9/2, Error ellipse: s-maj=24.6km s-min=16.6km az=57.0*
**ISC 08 05:37:00.5±3.5, 54°.3N±0°.2×87°.4E±0°.1, h0km, n9, σ2≥13/14, 10C-4D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.56** | **257** | *i* | | 05 46 31.4 | |
| | baz=72,slow=299,SNR=1.1 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.56** | **257** | ⇑P | **Pb** | **05 37 28.3** | **-1.9** |
| | 0.5nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑S | **Sg** | **05 37 51.1** | **+0.6** |
| | 1.1nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.56** | **257** | Pg | **Pg** | **05 37 28.8** | **-1.5** |
| | 1.7nm,0.3s,baz=78,slow=15,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 05 37 49.6 | |
| | 2.1nm,0.3s,baz=75,slow=29,SNR=7.8 | | | | | | |
| ZALV | | | | *i* | | 05 46 34.0 | |
| | 2.4nm,0.3s,baz=91,slow=7.2,SNR=20 | | | | | | |
| **KURK** | **Kurchatov** | **6.46** | **239** | ⇑Pn | **Pn** | **05 38 38.0** | **+1.3** |
| | 1.5nm,0.9s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **05 39 54.0** | **+2.9** |
| | 1.1nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 40 25.9 | |
| | 1.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.56** | **239** | Pn | **Pn** | **05 38 39.9** | **+1.7** |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=9.1 | | | | | | |
| KURBB | | | | Lg | Lg | 05 40 27.5 | |
| | 0.0nm,0.3s,baz=52,slow=32,SNR=2.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.56** | **239** | ⇑Pn | **Pn** | **05 38 39.5** | **+1.4** |
| | 0.9nm,0.4s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **05 39 55.0** | **+1.4** |
| | 2.1nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 05 40 30.7 | |
| | 6.2nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **8.22** | **205** | ⇑Pn | **Pn** | **05 39 03.2** | **+2.3** |
| | 0.3nm,0.5s,baz=29,slow=14,SNR=22 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **05 40 31.6** | **-2.7** |
| | 1.0nm,0.8s,baz=27,slow=27,SNR=3.2 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 05 41 21.0 | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.22** | **205** | Pn | **Pn** | **05 39 03.2** | **+2.3** |
| | 0.3nm,0.3s,baz=25,slow=13,SNR=22 | | | | | | |
| MKAR | | | | Sn | **Sn** | **05 40 32.2** | **-2.2** |
| | 0.1nm,0.3s,baz=28,slow=28,SNR=6.9 | | | | | | |
| MKAR | | | | Lg | Lg | 05 41 20.2 | |
| | baz=28,slow=31,SNR=2.4 | | | | | | |
| **MAKZ** | **Makanchi** | **8.28** | **207** | ⇓Pn | **Pn** | **05 39 03.6** | **+1.8** |
| | 0.3nm,0.4s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **05 40 36.8** | **+0.7** |
| | 1.5nm,1.0s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 05 41 23.8 | |
| | 0.9nm,0.8s | | | | | | |

**KRSC 08 05:45:34.5±1.3, 55°.08N×164°.79E, h48km±25km, ML3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **0.69** | **79** | *eP* | Pn | 05 45 48.6 | +0.6 |
| BKI | | | | *eS* | Sn | 05 45 58.5 | +0.7 |
| **KBTR** | **Krutoberegovo** | **1.59** | **316** | *eP* | Pn | 05 46 00.4 | +0.3 |
| KBTR | | | | *eS* | Sn | 05 46 19.2 | -0.3 |
| **KBG** | **Krutoberegovo** | **1.67** | **316** | *eP* | Pn | 05 46 01.5 | +0.3 |
| KBG | | | | *eS* | Sn | 05 46 21.6 | +0.2 |
| **MKZ** | **Mys Kozlova** | **1.84** | **255** | *eP* | Pn | 05 46 05.9 | +2.3 |
| MKZ | | | | *eS* | Sn | 05 46 28.0 | +2.3 |
| **SMKR** | **Semkarok** | **2.41** | **310** | *eP* | Pn | 05 46 13.7 | +2.3 |
| **ZLN** | **Zelenaya** | **2.45** | **294** | *eP* | Pn | 05 46 14.3 | +2.3 |
| **BZGR** | **Bezymyannyi-Gr** | **2.48** | **292** | *eP* | Pn | 05 46 17.5 | +5.0 |
| **BDR** | **Baidarnaya** | **2.51** | **308** | *eP* | Pn | 05 46 15.9 | +3.1 |
| **TUMD** | **Tumrok D** | **2.52** | **275** | *eP* | Pn | 05 46 16.4 | +3.5 |
| TUMD | | | | *eS* | Sn | 05 46 46.5 | +4.1 |
| **BZWR** | **Bezymyannyi-We** | **2.60** | **292** | *eP* | Pn | 05 46 18.0 | +3.9 |
| **KLY** | **Klyuchi** | **2.65** | **300** | *eP* | Pn | 05 46 16.9 | +2.3 |
| KLY | | | | *eS* | Sn | 05 46 48.0 | +2.5 |
| **TUMR** | **Tumrok** | **2.67** | **276** | *eP* | Pn | 05 46 18.6 | +3.6 |
| TUMR | | | | *eS* | Sn | 05 46 50.3 | +4.1 |
| **KIRR** | **Kirishev** | **2.68** | **291** | *eP* | Pn | 05 46 19.2 | +4.0 |
| **KMNR** | **Kamenistaya** | **2.68** | **287** | *eP* | Pn | 05 46 19.3 | +4.1 |
| KMNR | | | | *eS* | Sn | 05 46 52.9 | +6.4 |
| **KPT** | **Kopyto** | **2.75** | **291** | *eP* | Pn | 05 46 20.2 | +4.2 |
| **SPN** | **Mys Shipunski** | **3.44** | **237** | *eP* | Pn | 05 46 28.4 | +3.0 |
| SPN | | | | *eS* | Sn | 05 47 07.0 | +2.2 |
| **ESO** | **Esso** | **3.57** | **286** | *eP* | Pn | 05 46 30.1 | +2.9 |
| **NLC** | **Nalytchevo** | **3.73** | **241** | *eS* | Sn | 05 47 15.2 | +3.2 |
| **SDLR** | **Sedlovina** | **3.91** | **245** | *eP* | Pn | 05 46 36.1 | +4.1 |
| SDLR | | | | *eS* | Sn | 05 47 20.9 | +4.2 |
| **SMAR** | **Somma** | **3.96** | **245** | *eP* | Pn | 05 46 37.1 | +4.3 |
| **KRER** | **Koryakskii** | **3.97** | **246** | *eP* | Pn | 05 46 37.7 | +4.8 |
| **UGLR** | **Uglovaya** | **3.98** | **244** | *eP* | Pn | 05 46 37.4 | +4.5 |
| **AVH** | **Avacha** | **3.99** | **245** | *eP* | Pn | 05 46 37.9 | +4.8 |
| **KOK** | **Koryaka** | **4.03** | **246** | *eP* | Pn | 05 46 38.2 | +4.5 |
| **DALK** | **Dalny** | **4.10** | **243** | *eP* | Pn | 05 46 38.4 | +3.8 |
| **GNL** | **Ganaly** | **4.24** | **254** | *eP* | Pn | 05 46 41.6 | +5.1 |
| **KRMR** | **Karymshinskiy** | **4.53** | **243** | *eP* | Pn | 05 46 44.6 | +4.2 |
| KRMR | | | | *eS* | Sn | 05 47 35.7 | +3.9 |
| **RUS** | **Russkaya** | **4.57** | **237** | *eP* | Pn | 05 46 44.0 | +3.1 |
| **MTVR** | **Mutnovka** | **4.70** | **239** | *eP* | Pn | 05 46 46.8 | +3.9 |
| MTVR | | | | *eS* | Sn | 05 47 38.2 | +2.0 |
| **GRL** | **Gorelyy** | **4.71** | **240** | *eP* | Pn | 05 46 47.4 | +4.3 |
| **KDTR** | **Khodutka, Kamc** | **5.18** | **234** | *eP* | Pn | 05 46 52.4 | +3.1 |

**WEL 08 06:12:50.0±1.3, 35°.5S±9°.9×17°.9E±1°.8, h33km, M3.6/19, mB4.6/1, ML3.9/23, MLv3.6/19, Mw(mB)3.8/1, Error ellipse: s-maj=0.0km s-min=0.0km az=101.8, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **2.51** | **193** | P | Pn | 06 13 28.6 | +0.1 |
| **HAZ** | **Te Kaha** | **2.62** | **204** | P | Pn | 06 13 29.2 | -0.8 |
| **PKGZ** | **Pakihiroa** | **2.65** | **198** | P | Pn | 06 13 29.1 | -1.4 |
| **PUZ** | **Puketiti** | **2.79** | **194** | P | Pn | 06 13 33.2 | +0.9 |
| PUZ | | | | S | Sn | 06 14 08.3 | +3.5 |
| **RUGZ** | **Raukumara Rang** | **2.84** | **204** | P | Pn | 06 13 31.7 | -1.4 |
| **TWGZ** | **Tauwhareparae** | **2.95** | **198** | P | Pn | 06 13 36.3 | +1.7 |
| TWGZ | | | | S | Sb | 06 14 14.1 | -3.5 |
| **MWZ** | **Matawai** | **3.23** | **203** | P | Pn | 06 13 37.0 | -1.3 |
| **TKGZ** | **Te Karaka** | **3.23** | **198** | P | Pn | 06 13 39.6 | +1.2 |
| **URZ** | **Urewera** | **3.31** | **209** | P | Pn | 06 13 37.5 | -2.0 |
| URZ | | | | S | Sn | 06 14 14.1 | -3.5 |
| **RAGZ** | **Rawiri** | **3.41** | **203** | P | Pn | 06 13 40.0 | -0.9 |
| **RIGZ** | **Rimuhau** | **3.51** | **198** | P | Pn | 06 13 42.3 | +0.2 |
| RIGZ | | | | S | Sn | 06 14 27.4 | +4.9 |
| **PRGZ** | **Paritu Road** | **3.69** | **195** | P | Pn | 06 13 45.2 | +0.5 |
| **SNGZ** | **Shannon Statio** | **3.69** | **202** | P | Pn | 06 13 45.4 | +0.6 |
| SNGZ | | | | S | Sn | 06 14 29.2 | +2.0 |
| **MTHZ** | **Maungataniwha** | **3.93** | **207** | P | Pn | 06 13 48.2 | +0.2 |
| **TLZ** | **Tolley Road** | **4.13** | **223** | P | Pn | 06 13 55.0 | +4.3 |
| **BKZ** | **Black Stump Fm** | **4.33** | **208** | P | Pn | 06 13 53.4 | -0.1 |
| **MCHZ** | **McNeill Hill** | **4.51** | **205** | P | Pn | 06 13 55.5 | -0.3 |
| **KWHZ** | **Kaweka Forest** | **4.59** | **207** | P | Pn | 06 13 56.4 | -0.6 |
| **NTVZ** | **North Tongarir** | **4.63** | **215** | P | Pn | 06 13 58.7 | +1.0 |
| **TMVZ** | **Te Maari** | **4.63** | **215** | P | Pn | 06 13 58.4 | +0.6 |
| **ETVZ** | **East Tongariro** | **4.64** | **215** | P | Pn | 06 13 58.3 | +0.4 |
| **NNVZ** | **North Ngauruho** | **4.69** | **216** | P | Pn | 06 13 59.8 | +1.3 |
| **OTVZ** | **Oturere** | **4.69** | **215** | P | Pn | 06 13 58.2 | -0.4 |
| **SNVZ** | **South Ngauruho** | **4.72** | **215** | P | Pn | 06 13 58.5 | -0.5 |
| **NGZ** | **Ngauruhoe** | **4.73** | **215** | P | Pn | 06 13 59.9 | +0.8 |
| **KAHZ** | **Kahuranaki** | **4.77** | **201** | P | Pn | 06 13 58.4 | -1.1 |
| KAHZ | | | | S | Sn | 06 14 54.9 | +1.3 |
| **BHHZ** | **Black Hill Sta** | **4.78** | **210** | P | Pn | 06 13 59.3 | -0.5 |
| **KRERU** | **Kereru** | **4.80** | **206** | P | Pn | 06 13 58.6 | -1.3 |
| **WNVZ** | **Wahianoa** | **4.85** | **214** | P | Pn | 06 14 00.8 | 0.0 |
| **ANWZ** | **Angora Road** | **5.50** | **202** | P | Pn | 06 14 07.2 | -2.3 |

*WEL **08** 06:17:39.7±1.9, 35°.5S×22°.18°.0E±2°.4, h103km±93km, M4.3/12, ML4.5/12, MLv4.3/12, Error ellipse: s-maj=0.0km s-min=0.0km az=122.7*
*IDC **08** 06:17:41.3±1.0, 35°.43S×178°.72E, h0km, mb4.4/8, mb1 4.6/9, mb1mx4.2/31, mbtmp4.4/9, ML4.0/1, MS3.7/22, Ms1 3.7/22, ms1mx3.5/55, Error ellipse: s-maj=26.9km s-min=20.8km az=47.0*
*NEIC **08** 06:17:45.8±1.2, 35°.53S±0°.05×178°.6E±0°.2, h25km±7km, mb4.5/12, Error ellipse: s-maj=19.1km s-min=5.2km az=72.0*
*NOU **08** 06:17:45.6, 35°.60S×179°.17E, h103km, MLv4.6/6, Off E. Coast of N. Island, N.Z.*
**ISC 08 06:17:40.9±2.8, 35°.52S±0°.05×179°.00E±0°.08, h2km±17km, n135, σ2≥30/110, mb4.5/12, MS3.7/20, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.12** | **195** | P | **Pn** | **06 18 18.0** | **+0.7** |
| **MXZ** | **Matakaoa Point** | **2.12** | **195** | Pn | **Pn** | **06 18 17.9** | **+0.5** |
| **WMGZ** | **Waiomatatini S** | **2.35** | **191** | P | **Pb** | **06 18 23.9** | **-0.1** |
| WMGZ | | | | S | **Sg** | **06 18 56.8** | **+0.5** |
| **HAZ** | **Te Kaha** | **2.44** | **203** | P | **Pn** | **06 18 23.7** | **+1.9** |
| **PKGZ** | **Pakihiroa** | **2.48** | **197** | P | **Pn** | **06 18 23.9** | **+1.5** |
| **PUZ** | **Puketiti** | **2.62** | **193** | P | **Pb** | **06 18 27.9** | **-0.7** |
| PUZ | | | | S | **Sb** | **06 19 01.8** | **+0.5** |
| **RUGZ** | **Raukumara Rang** | **2.67** | **203** | P | **Pn** | **06 18 26.4** | **+1.4** |
| **TWGZ** | **Tauwhareparae** | **2.78** | **197** | P | **Pb** | **06 18 30.8** | **-0.6** |
| **MYRZ** | **Mayor Island** | **2.84** | **231** | P | **Pb** | **06 18 34.3** | **+2.0** |
| **OPRZ** | **Ohinepanea** | **3.04** | **219** | P | **Pn** | **06 18 33.7** | **+3.6** |
| **MWZ** | **Matawai** | **3.05** | **202** | P | **Pn** | **06 18 31.2** | **+0.9** |
| **TKGZ** | **Te Karaka** | **3.06** | **197** | P | **Pb** | **06 18 34.4** | **-1.7** |
| TKGZ | | | | S | **Sb** | **06 19 14.0** | **+0.1** |
| **MARZ** | **Manawahe** | **3.09** | **216** | P | **Pb** | **06 18 35.9** | **-0.7** |
| **TGRZ** | **Tauranga** | **3.12** | **224** | P | **Pn** | **06 18 35.0** | **+3.9** |
| **URZ** | **Urewera** | **3.13** | **208** | Pn | **Pn** | **06 18 32.1** | **+0.9** |
| | 18nm,0.3s,baz=288,slow=2.8,SNR=73 | | | | | | |
| URZ | | | | Sn | **Sn** | **06 19 08.8** | **-0.4** |
| | 12nm,0.3s,baz=260,slow=23,SNR=9.3 | | | | | | |
| **URZ** | **Urewera** | **3.13** | **208** | P | **Pn** | **06 18 32.2** | **+0.9** |
| URZ | | | | S | **Sn** | **06 19 08.4** | **-0.8** |
| **URZ** | **Urewera** | **3.13** | **208** | P | **Pb** | **06 18 32.4** | **+1.1** |
| **EDRZ** | **Edgecumbe** | **3.16** | **214** | P | **Pb** | **06 18 37.1** | **-0.7** |
| **RAGZ** | **Rawiri** | **3.23** | **203** | P | **Pn** | **06 18 34.7** | **+1.9** |
| **MKRZ** | **Makatiti** | **3.31** | **217** | P | **Pb** | **06 18 40.1** | **-0.4** |
| **RIGZ** | **Rimuhau** | **3.33** | **197** | P | **Pn** | **06 18 37.2** | **+3.1** |
| **OMRZ** | **Omania** | **3.33** | **218** | P | **Pb** | **06 18 40.0** | **-0.8** |
| **KARZ** | **Kaharoa** | **3.34** | **221** | P | **Pb** | **06 18 39.1** | **-1.8** |
| **TARZ** | **Mount Tarawera** | **3.37** | **216** | P | **Pb** | **06 18 40.7** | **-0.7** |
| **KMRZ** | **Kaimai** | **3.38** | **226** | P | **Pb** | **06 18 41.3** | **-0.3** |
| **MUGZ** | **Murupara** | **3.45** | **210** | P | **Pn** | **06 18 37.8** | **+2.1** |
| **RTZ** | **Ruatahuna** | **3.49** | **207** | P | **Pn** | **06 18 37.4** | **+1.1** |
| **PRGZ** | **Paritu Road** | **3.52** | **194** | P | **Pn** | **06 18 39.7** | **+3.1** |
| **SNGZ** | **Shannon Statio** | **3.52** | **202** | P | **Pn** | **06 18 40.1** | **+3.4** |
| **PRRZ** | **Plateau Road** | **3.63** | **214** | P | **Pn** | **06 18 42.7** | **+4.5** |
| **KNZ** | **Kokohu** | **3.66** | **196** | P | **Pn** | **06 18 40.7** | **+2.2** |
| **ALRZ** | **Allen Road** | **3.71** | **214** | P | **Pn** | **06 18 41.9** | **+2.7** |
| **MHGZ** | **Mahia Peninsul** | **3.73** | **193** | P | **Pn** | **06 18 42.2** | **+2.6** |
| **WPRZ** | **Whakapapatarin** | **3.76** | **216** | P | **Pb** | **06 18 45.3** | **-2.7** |
| **KUTZ** | **Kaahu Road** | **3.91** | **220** | P | **Pb** | **06 18 47.7** | **-2.9** |
| **NMHZ** | **Naumai** | **3.98** | **205** | P | **Pn** | **06 18 47.4** | **+4.3** |
| **ARHZ** | **Aropaoanui** | **4.07** | **202** | P | **Pn** | **06 18 47.3** | **+3.1** |
| **WATZ** | **Wairara** | **4.12** | **218** | P | Pn | 06 18 50.0 | ±5.0 |
| **BKZ** | **Black Stump Fm** | **4.15** | **208** | P | **Pn** | **06 18 47.7** | **+2.3** |
| **BKZ** | **Black Stump Fm** | **4.15** | **208** | Pn | **Pn** | **06 18 45.4** | **0.0** |
| **BKZ** | **Black Stump Fm** | **4.15** | **208** | P | **Pn** | **06 18 47.8** | **+2.3** |
| **RATZ** | **Rangitukua** | **4.22** | **217** | P | Pn | 06 18 51.3 | +4.9 |
| **RITZ** | **Rihia Road** | **4.27** | **215** | P | **Pn** | **06 18 51.1** | **+4.2** |
| **MCHZ** | **McNeill Hill** | **4.33** | **204** | P | **Pn** | **06 18 50.1** | **+2.4** |
| **KATZ** | **Kakaramea** | **4.34** | **216** | P | Pn | 06 18 53.5 | +5.4 |
| **KWHZ** | **Kaweka Forest** | **4.41** | **207** | P | **Pn** | **06 18 51.0** | **+2.1** |
| **CKHZ** | **Cape Kidnapper** | **4.41** | **200** | P | **Pn** | **06 18 50.4** | **+1.6** |
| **OUZ** | **Omahuta** | **4.42** | **272** | Pn | **Pn** | **06 18 48.0** | **-1.0** |
| **OUZ** | **Omahuta** | **4.42** | **272** | P | **Pn** | **06 18 52.4** | **+3.3** |
| **NTVZ** | **North Tongarir** | **4.45** | **216** | P | **Pn** | **06 18 53.3** | **+3.7** |
| **TMVZ** | **Te Maari** | **4.45** | **215** | P | **Pn** | **06 18 52.7** | **+3.1** |
| **ETVZ** | **East Tongariro** | **4.46** | **215** | P | **Pn** | **06 18 52.6** | **+2.9** |
| **KRVZ** | **Karewarewa** | **4.46** | **216** | P | **Pn** | **06 18 54.2** | **+4.4** |
| **HIZ** | **Hauiti** | **4.46** | **227** | | **Pn** | **06 18 50.7** | **+1.0** |
| **HIZ** | **Hauiti** | **4.46** | **227** | P | **Pn** | **06 18 51.8** | **+2.2** |
| **WTVZ** | **West Tongariro** | **4.50** | **216** | P | **Pn** | **06 18 54.2** | **+3.9** |
| **NNVZ** | **North Ngauruho** | **4.50** | **216** | P | **Pn** | **06 18 53.8** | **+3.5** |
| **OTVZ** | **Oturere** | **4.51** | **215** | P | **Pn** | **06 18 52.8** | **+2.4** |
| **SNVZ** | **South Ngauruho** | **4.54** | **215** | P | **Pn** | **06 18 53.7** | **+2.9** |
| **TWVZ** | **Taurewa** | **4.54** | **218** | P | **Pn** | **06 18 55.5** | **+4.6** |
| **NGZ** | **Ngauruhoe** | **4.55** | **216** | P | **Pn** | **06 18 54.1** | **+3.2** |
| **KAHZ** | **Kahuranaki** | **4.59** | **201** | P | **Pn** | **06 18 53.0** | **+1.6** |
| **TUVZ** | **Tukino** | **4.59** | **214** | P | **Pn** | **06 18 55.2** | **+3.6** |
| **BHHZ** | **Black Hill Sta** | **4.60** | **210** | P | **Pn** | **06 18 54.0** | **+2.4** |
| **KRHZ** | **Kereru** | **4.62** | **206** | P | **Pn** | **06 18 53.2** | **+1.5** |
| **FWVZ** | **Far West T-bar** | **4.63** | **215** | P | **Pn** | **06 18 55.7** | **+3.5** |
| **MOVZ** | **Moawhango** | **4.66** | **213** | P | **Pn** | **06 18 54.6** | **+2.2** |
| **WNVZ** | **Wahianoa** | **4.67** | **214** | P | **Pn** | **06 18 56.1** | **+3.5** |
| **TRVZ** | **Turoa** | **4.67** | **215** | P | **Pn** | **06 18 56.2** | **+3.5** |
| **PKVZ** | **Pokaka** | **4.76** | **217** | P | **Pn** | **06 18 57.2** | **+3.5** |
| **PXZ** | **Pawanui** | **4.81** | **200** | P | **Pn** | **06 18 55.5** | **+1.0** |
| **PNHZ** | **Pukenui** | **4.92** | **206** | P | **Pn** | **06 18 56.7** | **+0.8** |
| **WPHZ** | **Waipukurau** | **4.97** | **203** | P | **Pn** | **06 18 58.1** | **+1.5** |
| **WAZ** | **Wanganui** | **5.29** | **216** | P | Pn | 06 19 06.9 | ±5.9 |
| **NEZ** | **North Egmont** | **5.41** | **225** | P | **Pn** | **06 19 06.9** | **+4.2** |
| **PKE** | **Pukeiti** | **5.42** | **226** | P | **Pn** | **06 19 06.8** | **+4.0** |
| **KHEZ** | **Kahui Hut** | **5.47** | **225** | P | Pn | 06 19 10.1 | +6.5 |
| **BFZ** | **Birch Farm** | **5.59** | **202** | Pn | **Pn** | **06 19 05.7** | **+0.5** |
| **BFZ** | **Birch Farm** | **5.59** | **202** | P | **Pn** | **06 19 05.7** | **+0.5** |
| **OGWZ** | **Otaki Gorge** | **6.09** | **209** | P | **Pn** | **06 19 14.8** | **+2.8** |
| **MSWZ** | **Moikau Station** | **6.58** | **205** | Pn | **Pn** | **06 19 19.1** | **+0.3** |
| **SNZO** | **South Karori** | **6.69** | **209** | Pn | **Pn** | **06 19 19.9** | **-0.4** |
| **PLWZ** | **Palliser** | **6.72** | **205** | Pn | **Pn** | **06 19 19.6** | **-1.0** |
| **RAO** | **Raoul Island** | **6.77** | **24** | LR | LR | 06 21 39.4 | |
| | comp=Z,432nm,18.7s,baz=192,slow=35 | | | | | | |
| **TUWZ** | **Tuamarina** | **7.11** | **212** | Pn | **Pn** | **06 19 24.6** | **-1.4** |
| **QRZ** | **Quartz Range** | **7.35** | **222** | P | **Pn** | **06 19 30.3** | **+1.0** |
| **THZ** | **Tophouse** | **7.85** | **216** | | **Pn** | **06 19 34.8** | **-1.4** |
| **OXZ** | **Oxford** | **9.47** | **212** | Pn | **Pn** | **06 19 58.3** | **-0.1** |
| **ODZ** | **Otahua Downs** | **11.45** | **211** | Pn | **Pn** | **06 20 23.1** | **-2.3** |
| **PINNC** | **Pines Island,** | **16.33** | **319** | Pn | **Pn** | **06 21 31.1** | **-0.3** |
| **DZM** | **Mont Dzumac** | **17.31** | **317** | LR | LR | 06 27 20.5 | |
| | comp=Z,469nm,18.1s,baz=201,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **17.73** | **357** | | **P** | **06 21 51.2** | **+1.2** |
| **LIFNC** | **LIFOU** | **17.95** | **322** | Pn | **Pn** | **06 21 49.2** | **-2.5** |
| LIFNC | | | | IAmb | IAmb | 06 21 51.3 | |
| | comp=Z,48nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **31.21** | **266** | LR | LR | 06 35 39.4 | |
| | comp=Z,73nm,18.1s,baz=46,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **32.60** | **289** | P | **P** | **06 24 13.7** | **-0.4** |
| | comp=Z,5.9nm,0.9s,baz=140,slow=7.9,SNR=3.3 | | | | | | |
| **PPT** | **Papeete** | **33.12** | **66** | LR | LR | 06 34 30.9 | |
| | comp=Z,56nm,20.1s,baz=14,slow=30 | | | | | | |
| **PMG** | **Port Moresby** | **38.94** | **304** | LR | LR | 06 39 16.7 | |
| | comp=Z,111nm,18.3s,baz=186,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **40.63** | **274** | P | **P** | **06 25 21.0** | **-1.6** |
| **ASAR** | **Alice Springs** | **40.63** | **274** | P | **P** | **06 25 21.0** | **-1.6** |
| | comp=Z,8.9nm,0.8s,baz=114,slow=7.5,SNR=63 | | | | | | |
| ASAR | | | | LR | LR | 06 41 21.7 | |
| | comp=Z,142nm,18.4s,baz=109,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **40.63** | **274** | P | **P** | **06 25 20.4** | **-2.2** |
| **WR0** | **Warramunga Arr** | **41.93** | **280** | P | **P** | **06 25 31.1** | **-2.1** |
| WR0 | | | | IAmb | IAmb | 06 25 40.5 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.09** | **279** | P | **P** | **06 25 32.3** | **-2.2** |
| WB2 | | | | IAmb | IAmb | 06 25 34.2 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.10** | **279** | P | **P** | **06 25 32.8** | **-1.8** |
| | comp=Z,5.4nm,0.8s,baz=122,slow=7.5,SNR=40 | | | | | | |
| WRA | | | | LR | LR | 06 42 45.1 | |
| | comp=Z,123nm,18.7s,baz=125,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.10** | **279** | IAmb | IAmb | 06 25 34.3 | |
| | comp=Z,0.3nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.14** | **280** | P | **P** | **06 25 33.3** | **-1.7** |
| WB0 | | | | IAmb | IAmb | 06 25 42.2 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **JAY** | **Jayapura** | **48.33** | **304** | LR | LR | 06 45 20.6 | |
| | comp=Z,85nm,21.1s,baz=329,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.08** | **276** | P | **P** | **06 26 36.0** | **-1.6** |
| | comp=Z,6.1nm,0.8s,baz=140,slow=8.3,SNR=15 | | | | | | |
| FITZ | | | | LR | LR | 06 46 57.7 | |
| | comp=Z,110nm,19.6s,baz=120,slow=35 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **53.07** | **268** | P | **P** | **06 26 57.9** | **-2.1** |
| **MBWA** | **Marble Bar** | **53.37** | **269** | P | **P** | **06 27 00.4** | **-1.7** |
| MBWA | | | | IAmb | IAmb | 06 27 07.6 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **54.61** | **180** | P | **P** | **06 27 12.9** | **+2.2** |
| | comp=Z,1nm,1.0s,baz=33,slow=2.7,SNR=19 | | | | | | |
| **QSPA** | **South Pole Qui** | **54.61** | **180** | P | **P** | **06 27 13.3** | **+2.6** |
| **BATI** | **Baumata** | **56.04** | **283** | LR | LR | 06 50 47.7 | |
| | comp=Z,62nm,18.3s,baz=126,slow=36 | | | | | | |
| **GUMO** | **Guam** | **58.56** | **320** | LR | LR | 06 52 08.0 | |
| | comp=Z,27nm,18.3s,baz=106,slow=35 | | | | | | |
| **RPN** | **Rapa Nui** | **60.60** | **104** | LR | LR | 06 47 38.0 | |
| | comp=Z,48nm,21.8s,baz=200,slow=30 | | | | | | |
| **KAPI** | **Kappang** | **62.24** | **285** | LR | LR | 06 55 41.5 | |
| | comp=Z,32nm,18.3s,baz=148,slow=37 | | | | | | |
| **MAW** | **Mawson** | **66.64** | **202** | LR | LR | 06 57 13.1 | |
| | comp=Z,139nm,18.9s,baz=238,slow=36 | | | | | | |
| **LEM** | **Lembang** | **70.92** | **275** | LR | LR | 07 00 36.5 | |
| | comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IDE** | **Isla Desecheo** | **1.55** | **227** | *eS* | | **Sb** | **06 20 50.0** | **+0.9** |
| **CRPR** | **Cabo Rojo, PR** | **1.64** | **209** | ⇓*eP* | | **Pn** | **06 20 30.2** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **1.64** | **209** | *eS* | | **Sn** | **06 20 50.1** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.64** | **209** | | | **Pn** | **06 20 30.2** | **+0.7** |
| CRPR | | | | | | **Sn** | **06 20 50.1** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.64** | **209** | IAML | | | 06 21 02.0 | |
| | comp=N,96nm,1.0s | | | | | | | |
| CRPR | | | | IAML | | | 06 21 06.3 | |
| | comp=E,68nm,1.1s | | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.64** | **207** | ⇓*eP* | | **Pn** | **06 20 29.6** | **+0.1** |
| **MLPR** | **Magueyes Islan** | **1.64** | **207** | *eS* | | **Sn** | **06 20 49.0** | **-1.1** |
| **MLPR** | **Magueyes Islan** | **1.64** | **207** | | | **Pn** | **06 20 29.6** | **+0.1** |
| MLPR | | | | | | **Sn** | **06 20 49.0** | **-1.1** |
| **MLPR** | **Magueyes Islan** | **1.64** | **207** | IAML | | | 06 21 01.7 | |
| | comp=N,57nm,1.1s | | | | | | | |
| **STVI** | **Saint Thomas** | **1.66** | **131** | ⇑*eP* | | **Pb** | **06 20 31.7** | **+0.1** |
| **STVI** | **Saint Thomas** | **1.66** | **131** | *eS* | | **Sb** | **06 20 52.4** | **+0.4** |
| **STVI** | **Saint Thomas** | **1.66** | **131** | | | **Pb** | **06 20 31.7** | **+0.1** |
| STVI | | | | | | **Sb** | **06 20 52.4** | **+0.4** |
| **STVI** | **Saint Thomas** | **1.66** | **131** | IAML | | | 06 20 56.7 | |
| | comp=N,76nm,0.6s | | | | | | | |
| **TBVI** | **Tortola** | **1.87** | **123** | ⇓*eP* | | **Pb** | **06 20 35.2** | **0.0** |
| **TBVI** | **Tortola** | **1.87** | **123** | *eS* | | **Sb** | **06 20 58.2** | **-0.1** |
| **DR12** | **Loma Pena Alta** | **3.01** | **258** | Pn | | **Pn** | **06 20 50.1** | **+1.6** |
| **BANI** | **BANI** | **4.01** | **256** | Pn | | **Pn** | **06 21 00.7** | **-1.5** |
| **SDDR** | **Presa de Saban** | **4.76** | **265** | Pn | | **Pn** | **06 21 12.6** | **0.0** |

*ANF **08** 06:20:41.8±0.2, 35°.45N×119°.94W, h15km±1km, ML3.8/35, ML3.8/35, Error ellipse: s-maj=3.1km s-min=1.6km az=104.0*

*NEIC **08** 06:20:42.4±2.2, 35°.32N±0°.04×120°.10W±0°.06, h23km±7km, Error ellipse: s-maj=9.6km s-min=0.7km az=48.0*

*PAS **08** 06:20:42.4±2.6, 35°.46N±0°.05×119°.97W±0°.04, h8km±7km, Mwr3.5/5, ML3.5/92(NEIC), Error ellipse: s-maj=8.2km s-min=3.7km az=208.0*

*NEIC **08** 06:20:42.4, 35°.46N×119°.97W, h11km, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=1.27; $M_{\theta\theta}$=1.62; $M_{\phi\phi}$2.90; $M_{r\theta}$=0.45; $M_{\theta\phi}$-0.88; $M_{\phi r}$0.10; Fault plane solution: $M_0$2.56000×$10^{14}$ NP1:ϕs308.00000°, δ69.00000°, λ-158.00000°. NP2:ϕs210.00000°, δ69.00000°, λ-22.00000°. Principal axes: T 3.0637, Plg0.0000°, Azm259.0000°; N -1.0072, Plg60.0000°, Azm350.0000°; P -2.0565, Plg30.0000°, Azm169.0000°;*

*IDC **08** 06:20:43.9±1.6, 35°.47N×119°.49W, h0km, mb3.1/1, mb1 3.3/6, mb1mx3.2/56, mbtmp3.0/6, ML3.3/5 Error ellipse: s-maj=23.3km s-min=8.7km az=71.0*

**ISC 08 06:20:42.1**±0.8, **35°.41N**±0°.02×**120°.00W**±0°.03, **h17**km±5km, **n110**, σ**1s18**/133, **Central California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMMC** | **Simmler** | **0.09** | **181** | P | **Pg** | **06 20 45.4** | **-0.2** |
| | baz=7.0,SNR=1000 | | | | | | |
| SMMC | | | | S | **Sg** | **06 20 48.7** | **+0.8** |
| | baz=7.0 | | | | | | |
| **TSCN** | **Private Proper** | **0.32** | **296** | | **Pg** | **06 20 48.9** | **0.0** |
| TSCN | | | | | **Sg** | **06 20 53.4** | **-0.1** |
| **TRAM** | **Private Proper** | **0.35** | **320** | | **Pn** | **06 20 54.1** | **+1.5** |
| **THIS** | **South End of C** | **0.37** | **329** | | **Pg** | **06 20 49.4** | **-0.5** |
| THIS | | | | | **Sg** | **06 20 55.0** | **0.0** |
| **PAGB** | **Antelope Grade** | **0.38** | **327** | | **Pg** | **06 20 49.4** | **-0.6** |
| **PKM** | **Mcpherson Peak** | **0.54** | **164** | P | **Pb** | **06 20 53.4** | **+0.1** |
| | baz=347,SNR=408 | | | | | | |
| PKM | | | | S | **Sb** | **06 21 00.9** | **+0.2** |
| | baz=347 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **0.67** | **134** | | **Pb** | **06 20 55.4** | **0.0** |
| **PKD** | **Bear Valley Ra** | **0.70** | **321** | | **Pg** | **06 20 54.6** | **-1.2** |
| PKD | | | | | **Sb** | **06 21 05.2** | **-0.1** |
| **PMLM** | **Mount Lospe** | **0.72** | **225** | | **Pn** | **06 20 57.1** | **-0.4** |
| **RAMR** | **Ramage Ranch** | **0.75** | **288** | | **Pg** | **06 20 56.2** | **-0.5** |
| RAMR | | | | | **Sg** | **06 21 07.3** | **+0.6** |
| **VES** | **Vestal, Richgr** | **0.86** | **59** | P | **Pb** | **06 20 57.3** | **-1.3** |
| | baz=243,SNR=383 | | | | | | |
| VES | | | | S | **Sb** | **06 21 08.6** | **-1.2** |
| | baz=243 | | | | | | |
| **SBC** | **Santa Barbara** | **0.99** | **166** | P | **Pn** | **06 21 02.2** | **+0.9** |
| | baz=348,SNR=106 | | | | | | |
| **ARVC** | **Arvin** | **0.99** | **106** | P | **Pb** | **06 20 59.9** | **-1.0** |
| | baz=290,SNR=181 | | | | | | |
| ARVC | | | | S | **Sb** | **06 21 13.9** | **+0.2** |
| | baz=290 | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.04** | **28** | P | **Pb** | **06 21 00.0** | **-1.6** |
| | baz=209,SNR=105 | | | | | | |
| VOG | | | | S | **Sb** | **06 21 13.9** | **-1.1** |
| | baz=209 | | | | | | |
| **PMPB** | **Monarch Peak** | **1.04** | **321** | | **Pb** | **06 21 00.9** | **-0.8** |
| PMPB | | | | IAML | | 06 21 31.4 | |
| | comp=N,2μm,1.0s | | | | | | |
| PMPB | | | | IAML | | 06 21 31.5 | |
| | comp=E,2μm,0.7s | | | | | | |
| **ISA** | **Isabella, Lake** | **1.27** | **78** | | **Pn** | **06 21 03.9** | **-1.2** |
| ISA | | | | IAML | | 06 21 23.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| ISA | | | | IAML | | 06 21 23.4 | |
| | comp=E,1μm,0.2s | | | | | | |
| **ISA** | **Isabella, Lake** | **1.27** | **78** | P | **Pn** | **06 21 04.0** | **-1.2** |
| | baz=261,SNR=560 | | | | | | |
| ISA | | | | S | **Sb** | **06 21 20.4** | **-1.3** |
| | baz=261 | | | | | | |
| **OSI** | **Osito Audit: C** | **1.31** | **127** | P | **Pn** | **06 21 05.6** | **-0.1** |
| | baz=310,SNR=12 | | | | | | |
| OSI | | | | S | **Sb** | **06 21 22.5** | **-0.3** |
| | baz=310 | | | | | | |
| **BBGB** | **Big Mountain B** | **1.44** | **324** | | **Pn** | **06 21 07.8** | **+0.2** |
| **HELL** | **Mitchell Peak,** | **1.50** | **32** | | **Pn** | **06 21 06.8** | **-1.5** |
| **HAST** | **Hastings Reser** | **1.60** | **308** | | **Pn** | **06 21 08.4** | **-1.3** |
| **CCAC** | **Calif City Air** | **1.64** | **98** | | **Pn** | **06 21 10.4** | **+0.2** |
| **EDW2** | **Edwards Air Fo** | **1.72** | **107** | P | **Pn** | **06 21 11.1** | **-0.3** |
| | baz=290,SNR=176 | | | | | | |
| **DECC** | **Green Verdugo** | **1.79** | **130** | P | **Pn** | **06 21 11.8** | **-0.5** |
| | baz=312 | | | | | | |
| **SAO** | **San Andreas Ge** | **1.79** | **319** | | **Pn** | **06 21 11.2** | **-1.2** |
| **CWC** | **Cottonwood Cre** | **1.86** | **56** | Pb | **Pn** | **06 21 13.9** | **+0.5** |
| | baz=238 | | | | | | |
| CWC | | | | Sb | **Sn** | **06 21 38.1** | **+1.3** |
| | baz=238 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.89** | **87** | Pb | **Pb** | **06 21 15.2** | **-1.0** |
| | baz=270,SNR=40 | | | | | | |
| LRMC | | | | Sb | **Sb** | **06 21 39.6** | **-0.1** |
| | baz=270 | | | | | | |
| **PASC** | **Pasadena Art C** | **1.93** | **129** | | **Pn** | **06 21 14.7** | **+0.4** |
| PASC | | | | IAML | | 06 21 55.7 | |
| | comp=E,349nm,0.5s | | | | | | |
| PASC | | | | IAML | | 06 21 58.0 | |
| | comp=N,220nm,0.8s | | | | | | |
| **MPMC** | **Manual Prospec** | **2.14** | **72** | P | **Pn** | **06 21 17.0** | **-0.3** |
| | baz=254,SNR=420 | | | | | | |
| MPMC | | | | Sb | **Sb** | **06 21 46.9** | **0.0** |
| | baz=254 | | | | | | |
| **TIN** | **Tinemaha, Big** | **2.18** | **40** | Pb | **Pn** | **06 21 18.8** | **+1.1** |
| | baz=222,SNR=48 | | | | | | |
| TIN | | | | Sb | **Sb** | **06 21 47.2** | **-0.7** |
| | baz=222 | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.19** | **170** | | **Pn** | **06 21 18.4** | **+0.7** |
| SNCC | | | | IAML | | 06 21 54.7 | |
| | comp=N,146nm,0.7s | | | | | | |
| SNCC | | | | IAML | | 06 22 03.0 | |
| | comp=E,208nm,0.9s | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.19** | **170** | P | **Pn** | **06 21 17.7** | **0.0** |
| | baz=351 | | | | | | |
| SNCC | | | | S | **Sn** | **06 21 45.5** | **+1.0** |
| | baz=351 | | | | | | |
| **FMP** | **Fort Macarthur** | **2.20** | **140** | P | **Pn** | **06 21 18.1** | **+0.3** |
| | baz=322 | | | | | | |
| FMP | | | | S | **Sn** | **06 21 45.2** | **+0.6** |
| | baz=322 | | | | | | |
| **MTUM** | **Tungsten Hills** | **2.26** | **30** | | **Pn** | **06 21 20.2** | **+1.3** |
| **CIS** | **Catalina Islan** | **2.39** | **146** | P | **Pn** | **06 21 20.4** | **-0.1** |
| | baz=328,SNR=16 | | | | | | |
| CIS | | | | S | **Sn** | **06 21 49.3** | **-0.1** |
| | baz=328 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **2.41** | **22** | P | **Pn** | **06 21 21.7** | **+0.7** |
| | baz=203,SNR=202 | | | | | | |
| **RRX** | **Edison Barstow** | **2.51** | **101** | Pb | **Pb** | **06 21 26.9** | **+0.1** |
| | baz=284 | | | | | | |
| RRX | | | | S | **Sn** | **06 21 52.4** | **-0.1** |
| | baz=284 | | | | | | |
| **QSM** | **Queen of Sheba** | **2.60** | **77** | | **Pn** | **06 21 24.6** | **+1.1** |
| QSM | | | | IAML | | 06 22 08.8 | |
| | comp=E,264nm,1.0s | | | | | | |
| QSM | | | | IAML | | 06 22 10.9 | |
| | comp=N,250nm,0.6s | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.61** | **91** | | **Pn** | **06 21 23.0** | **-0.6** |
| GSC | | | | IAML | | 06 22 08.1 | |
| | comp=N,216nm,0.8s | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.61** | **91** | P | **Pn** | **06 21 23.0** | **-0.6** |
| | baz=274,SNR=43 | | | | | | |
| **LCH** | **Last Change Ra** | **2.63** | **45** | | **Pn** | **06 21 24.6** | **+0.6** |
| LCH | | | | IAML | | 06 22 07.6 | |
| | comp=E,251nm,0.8s | | | | | | |
| LCH | | | | IAML | | 06 22 09.9 | |
| | comp=N,194nm,0.5s | | | | | | |
| **CMB** | **Columbia Colle** | **2.64** | **353** | | **Pn** | **06 21 24.0** | **0.0** |
| **GRAC** | **Grapevine Rang** | **2.65** | **53** | | **Pn** | **06 21 25.2** | **+1.0** |
| **SCI2** | **San Clemente I** | **2.70** | **153** | P | **Pn** | **06 21 24.4** | **-0.4** |
| | baz=335,SNR=20 | | | | | | |
| SCI2 | | | | S | **Sn** | **06 21 58.4** | **+1.3** |
| | baz=335 | | | | | | |
| **ELS** | **Elsinore Mount** | **2.75** | **129** | | **Pn** | **06 21 26.7** | **+1.1** |
| **FURC** | **Furnace Creek,** | **2.75** | **66** | Pb | **Pb** | **06 21 30.7** | **-0.2** |
| | baz=249 | | | | | | |
| FURC | | | | Sb | **Sb** | **06 22 06.4** | **+2.1** |
| | baz=249 | | | | | | |
| **BBRC** | **Big Bear Solar** | **2.77** | **113** | P | **Pn** | **06 21 25.4** | **-0.6** |
| | baz=296,SNR=12 | | | | | | |
| BBRC | | | | S | **Sn** | **06 21 59.7** | **+0.5** |
| | baz=296 | | | | | | |
| **GWY** | **Greenwater Val** | **2.81** | **73** | | **Pn** | **06 21 27.4** | **+0.9** |
| GWY | | | | IAML | | 06 22 13.5 | |
| | comp=N,196nm,0.8s | | | | | | |
| GWY | | | | IAML | | 06 22 23.6 | |
| | comp=E,247nm,0.7s | | | | | | |
| **MURC** | **Murrieta** | **2.93** | **127** | P | **Pn** | **06 21 28.0** | **0.0** |
| | baz=310,SNR=12 | | | | | | |
| **HEC** | **Hector,Ludlow** | **3.06** | **100** | P | **Pn** | **06 21 28.9** | **-0.8** |
| | baz=283,SNR=7.6 | | | | | | |
| **LHV** | **Little Huntoon** | **3.08** | **22** | | **Pn** | **06 21 31.3** | **+1.3** |
| **NVAR** | **Mina Array Bea** | **3.31** | **24** | Pn | **Pn** | **06 21 34.2** | **+0.8** |
| | comp=E,3.0nm,0.3s,baz=208,slow=15,SNR=44 | | | | | | |
| NVAR | | | | Pg | **Pb** | **06 21 41.1** | **+0.7** |
| | comp=E,13nm,0.3s,baz=203,slow=18,SNR=34 | | | | | | |
| NVAR | | | | Lg | Lg | 06 22 21.8 | |
| | comp=E,8.1nm,0.3s,baz=211,slow=24,SNR=4.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **3.31** | **24** | Pn | **Pn** | **06 21 33.4** | **+0.1** |
| **TUQ** | **Turquoise Moun** | **3.33** | **88** | S | **Sn** | **06 22 12.6** | **-0.1** |
| | baz=272 | | | | | | |
| **NV11** | **Mina Array Sit** | **3.36** | **25** | Pn | **Pn** | **06 21 34.9** | **+0.9** |
| NV11 | | | | IAML | | 06 22 29.1 | |
| | comp=E,62nm,0.8s | | | | | | |
| NV11 | | | | IAML | | 06 22 34.3 | |
| | comp=N,68nm,1.0s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.40** | **62** | | **Pn** | **06 21 35.4** | **+0.9** |
| TPNV | | | | IAML | | 06 22 31.5 | |
| | comp=N,57nm,0.7s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.40** | **62** | P | **Pn** | **06 21 35.0** | **+0.4** |
| | baz=245,SNR=22 | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.42** | **121** | Pn | **Pn** | **06 21 35.1** | **+0.3** |
| | comp=N,2.7nm,0.3s,baz=310,slow=14,SNR=28 | | | | | | |
| PFO | | | | Sn | **Sn** | **06 22 13.2** | **-1.9** |
| | comp=N,3.6nm,0.3s,baz=311,slow=13,SNR=6.5 | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.42** | **121** | Pn | **Pn** | **06 21 35.2** | **+0.3** |
| **PFO** | **Pinyon Flats O** | **3.42** | **121** | P | **Pn** | **06 21 34.7** | **-0.2** |
| | baz=304,SNR=13 | | | | | | |
| **RYN** | **Ryan** | **3.42** | **20** | | **Pn** | **06 21 35.5** | **+0.7** |
| RYN | | | | IAML | | 06 22 42.9 | |
| | comp=E,67nm,0.6s | | | | | | |
| **TPFO** | **Pinon Flats** | **3.43** | **121** | P | **Pn** | **06 21 34.4** | **-0.6** |
| | baz=304,SNR=12 | | | | | | |
| **PMD** | **Palm Desert** | **3.46** | **119** | | **Pn** | **06 21 35.9** | **+0.6** |
| PMD | | | | IAML | | 06 22 29.7 | |
| | comp=E,49nm,1.1s | | | | | | |
| PMD | | | | IAML | | 06 22 38.9 | |
| | comp=N,64nm,0.8s | | | | | | |
| **109C** | **Camp Elliot, M** | **3.47** | **136** | Pn | **Pn** | **06 21 35.4** | **-0.1** |
| **109C** | **Camp Elliot, M** | **3.47** | **136** | P | **Pn** | **06 21 35.3** | **-0.1** |
| | baz=318 | | | | | | |
| **TPH** | **Tonopah** | **3.47** | **39** | | **Pn** | **06 21 36.1** | **+0.5** |
| **EMB** | **Emerald Bay** | **3.56** | **359** | Pn | **Pn** | **06 21 37.3** | **+0.5** |
| EMB | | | | IAML | | 06 22 41.2 | |
| | comp=E,126nm,0.6s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **3.58** | **112** | P | **Pn** | **06 21 36.9** | **-0.1** |
| | baz=295 | | | | | | |
| **MCCM** | **Marconi Confer** | **3.58** | **321** | Pn | **Pn** | **06 21 38.4** | **+1.5** |
| MCCM | | | | IAML | | 06 22 44.6 | |
| | comp=N,62nm,2.4s | | | | | | |
| MCCM | | | | IAML | | 06 22 59.5 | |
| | comp=E,52nm,3.1s | | | | | | |
| **GMRC** | **Granite Mounta** | **3.61** | **99** | P | **Pn** | **06 21 36.1** | **-1.3** |
| | baz=282 | | | | | | |
| **YERR** | **Yerington** | **3.62** | **9** | | **Pn** | **06 21 40.5** | **+2.9** |
| YERR | | | | IAML | | 06 22 42.9 | |
| | comp=N,95nm,0.8s | | | | | | |
| **PNTR** | **Pine Nut** | **3.69** | **5** | | **Pn** | **06 21 42.5** | **+3.9** |
| **TJX** | **Tijuana** | **3.78** | **139** | Pn | **Pn** | **06 21 39.2** | **-0.5** |
| TJX | | | | IAML | | 06 22 35.6 | |
| | comp=N,112nm,0.9s | | | | | | |
| TJX | | | | IAML | | 06 23 27.4 | |
| | comp=E,107nm,1.2s | | | | | | |
| **BAR** | **Barrett** | **3.87** | **134** | | **Pn** | **06 21 41.0** | **+0.1** |
| **MONP2** | **Monument Peak** | **3.88** | **129** | P | **Pn** | **06 21 41.7** | **+0.5** |
| | baz=312,SNR=11 | | | | | | |
| **VCNR** | **Virginia City** | **3.89** | **4** | | **Pn** | **06 21 42.4** | **+1.0** |
| VCNR | | | | IAML | | 06 22 49.5 | |
| | comp=E,124nm,1.1s | | | | | | |
| VCNR | | | | IAML | | 06 22 51.7 | |
| | comp=N,97nm,0.9s | | | | | | |
| **KVN** | **Kaiserville** | **3.94** | **22** | Pn | **Pn** | **06 21 42.3** | **+0.3** |
| KVN | | | | IAML | | 06 22 53.8 | |
| | comp=E,39nm,0.9s | | | | | | |
| **GDXM** | **Geysers** | **4.07** | **327** | | **Pn** | **06 21 42.5** | **-1.2** |
| **SHPR** | **Sheep Range** | **4.07** | **73** | Pn | **Pn** | **06 21 44.6** | **+0.8** |
| SHPR | | | | IAML | | 06 22 59.8 | |
| | comp=E,37nm,1.0s | | | | | | |
| **S11A** | **Rachel** | **4.08** | **56** | Pn | **Pn** | **06 21 46.6** | **+2.6** |
| **CBX** | **Cerro Bola** | **4.15** | **137** | | **Pn** | **06 21 45.6** | **+0.8** |
| CBX | | | | IAML | | 06 22 58.2 | |
| | comp=N,28nm,0.7s | | | | | | |
| CBX | | | | IAML | | 06 23 20.4 | |
| | comp=E,29nm,0.8s | | | | | | |
| **IRM** | **Iron Mountain** | **4.18** | **106** | P | **Pn** | **06 21 45.0** | **-0.2** |
| | baz=290 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **4.24** | **129** | P | **Pn** | **06 21 46.7** | **+0.6** |
| | baz=312 | | | | | | |
| **ORV** | **Oroville** | **4.31** | **344** | | **Pn** | **06 21 46.4** | **-0.6** |
| **YUH** | **Yuha Desert** | **4.36** | **128** | Pn | **Pn** | **06 21 46.9** | **-0.7** |
| **PRN** | **Pahroc Range** | **4.46** | **62** | | **Pn** | **06 21 49.9** | **+0.8** |
| PRN | | | | IAML | | 06 23 08.3 | |
| | comp=E,65nm,1.0s | | | | | | |
| **R11A** | **Troy Canyon, C** | **4.59** | **49** | Pn | **Pn** | **06 21 53.6** | **+2.5** |
| **BLYC** | **Blythe** | **4.81** | **109** | Pn | **Pn** | **06 21 54.1** | **+0.4** |
| BLYC | | | | IAML | | 06 23 21.8 | |
| | comp=N,32nm,0.6s | | | | | | |
| BLYC | | | | IAML | | 06 23 33.3 | |
| | comp=E,30nm,0.8s | | | | | | |
| **W13A** | **Hualapai Mount** | **5.01** | **92** | Pn | **Pn** | **06 21 57.3** | **+0.6** |
| W13A | | | | IAML | | 06 22 55.8 | |
| | comp=E,23nm,0.3s | | | | | | |
| W13A | | | | IAML | | 06 23 28.4 | |
| | comp=N,26nm,2.0s | | | | | | |
| **BMN** | **Battle Mountai** | **5.47** | **23** | Pn | **Pn** | **06 22 04.8** | **+1.8** |
| **LCMT** | **Little Creek M** | **5.69** | **72** | | **Pn** | **06 22 08.1** | **+2.1** |
| **CCUT** | **Cedar City** | **5.76** | **66** | Pn | **Pn** | **06 22 06.5** | **-0.5** |
| **SPR3** | **Spring Creek 3** | **5.77** | **50** | Pn | **Pn** | **06 22 08.7** | **+1.5** |
| **113A** | **Mohawk Valley,** | **5.80** | **115** | Pn | **Pn** | **06 22 09.5** | **+2.2** |
| **Y14A** | **Wickenburg** | **5.94** | **102** | | **Pn** | **06 22 09.0** | **-0.4** |
| **SZCU** | **Shurtz Canyon** | **5.98** | **67** | Pn | **Pn** | **06 22 10.5** | **+0.5** |
| **KNB** | **Kanab** | **6.02** | **72** | | **Pn** | **06 22 13.3** | **+2.8** |
| **U15A** | **North Rim** | **6.33** | **79** | Pn | **Pn** | **06 22 17.9** | **+2.9** |
| **ELK** | **Elko** | **6.52** | **34** | Pn | **Pn** | **06 22 18.7** | **+1.2** |
| | comp=N,0.8nm,0.3s,baz=193,slow=14,SNR=12 | | | | | | |
| ELK | | | | Lg | Lg | 06 24 00.3 | |
| | comp=N,0.4nm,0.3s,baz=270,slow=20,SNR=1.9 | | | | | | |
| **ELK** | **Elko** | **6.52** | **34** | Pn | **Pn** | **06 22 18.9** | **+1.4** |
| **PKCU** | **Pink Cliffs** | **6.52** | **70** | Pn | **Pn** | **06 22 20.1** | **+2.5** |
| **YBH** | **Yreka Blue Hor** | **6.66** | **342** | Pn | Pn | 06 22 27.4 | +8.0 |
| | comp=N,0.1nm,0.3s,baz=180,slow=6.1,SNR=3.0 | | | | | | |
| **MTPU** | **Mount Pierson** | **6.80** | **65** | Pn | **Pn** | **06 22 24.8** | **+3.3** |
| **TCRU** | **Three Creeks R** | **6.83** | **60** | Pn | **Pn** | **06 22 21.1** | **-0.7** |
| **MSU** | **Marysvale** | **6.98** | **61** | Pn | **Pn** | **06 22 26.9** | **+3.0** |
| **WUAZ** | **Wupatki** | **7.04** | **87** | Pn | **Pn** | **06 22 26.1** | **+1.6** |
| **DUG** | **Dugway, Tooele** | **7.43** | **48** | Pn | **Pn** | **06 22 31.0** | **+1.2** |
| **G08A** | **Pilot Rock** | **9.90** | **4** | | **Pn** | **06 23 03.4** | **-0.4** |
| **TXAR** | **Lajitas Array** | **15.06** | **109** | Pn | **P** | **06 24 17.2** | **-2.3** |
| | comp=N,0.0nm,0.3s,baz=290,slow=12,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.32** | **5** | P | **P** | **06 26 27.9** | **+2.1** |
| | comp=N,0.2nm,0.6s,baz=186,slow=9.6,SNR=2.1 | | | | | | |

*IDC **08** 06:22:33.9±3.2, 54°.32N×87°.55E, h0km, mb1 2.9/2, mb1mx2.8/45, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=26.0km s-min=17.8km az=50.0*

*NNC **08** 06:22:34.9±2.9, 54°.16N×87.41E, h0km, mb3.0, mpv2.7, Error ellipse: s-maj=23.2km s-min=12.7km az=25.0, Suspected Mining explosion.*

**ISC 08 06:22:37.2**±4.3, **54°.3N**±0°.2×**87°.1E**±0°.2, **h0**km, **n9**, σ**1s12**/14, **11C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.35** | **258** | *i* | | 06 32 20.3 | |
| | baz=77,slow=329,SNR=1.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.35** | **258** | ⇑P | **Pg** | **06 23 02.7** | **-0.4** |
| | 0.4nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **06 23 24.3** | **+2.4** |
| | 3.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.35** | **258** | Pg | **Pn** | **06 23 03.0** | **-0.3** |
| | 3.4nm,0.3s,baz=76,slow=15,SNR=41 | | | | | | |
| ZALV | | | | Lg | Lg | 06 23 26.9 | |
| | 1.7nm,0.3s,baz=79,slow=24,SNR=5.5 | | | | | | |
| **KURK** | **Kurchatov** | **6.25** | **239** | ⇑Pn | **Pn** | **06 24 10.7** | **+0.1** |
| | 0.3nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **06 25 23.4** | **+0.7** |
| | 1.0nm,0.9s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 06 25 57.7 | |
| | 4.5nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.35** | **239** | Pn | **Pn** | **06 24 12.5** | **+0.5** |
| | 0.1nm,0.3s,baz=57,slow=14,SNR=4.8 | | | | | | |
| KURBB | | | | Lg | Lg | 06 26 05.7 | |
| | 0.0nm,0.3s,baz=48,slow=35,SNR=6.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.35** | **239** | ⇑Pn | **Pn** | **06 24 10.6** | **-1.4** |
| | 0.7nm,0.4s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **06 25 23.6** | **-1.6** |
| | 2.4nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 25 59.9 | |
| | 4.6nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.05** | **204** | ⇑Pn | **Pn** | **06 24 35.0** | **-0.4** |
| | 0.1nm,0.3s,baz=29,slow=14,SNR=5.2 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **06 26 06.5** | **-0.6** |
| | 0.2nm,0.6s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 26 54.1 | |
| | 1.7nm,0.9s,baz=24,slow=28 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.05** | **204** | Pn | **Pn** | **06 24 36.4** | **+1.0** |
| | 0.1nm,0.3s,baz=28,slow=14,SNR=6.1 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 26 08.0** | **+0.8** |
| | 0.1nm,0.3s,baz=26,slow=27,SNR=3.2 | | | | | | |
| MKAR | | | | Lg | Lg | 06 26 55.7 | |
| | 0.0nm,0.3s,baz=21,slow=29,SNR=2.4 | | | | | | |
| **MAKZ** | **Makanchi** | **8.12** | **206** | ⇑Pn | **Pn** | **06 24 36.4** | **+0.2** |
| | 0.7nm,0.6s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | **06 26 09.1** | **+0.4** |
| | 0.6nm,0.8s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 06 26 55.7 | |
| | 0.9nm,0.9s | | | | | | |

**IDC 08 06:28:44.6**±2.6, **54°.18N**×**86°.48E**, **h0**km, **mb1 2.6**/2, **mb1mx2.6**/40, **mbtmp2.6**/2, **ML2.3**/2, **Error ellipse: s-maj=20.9km s-min=12.6km az=60.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.01** | **257** | *i* | | 06 36 18.4 | |
| | baz=75,slow=341,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.01** | **257** | Pg | Pg | 06 29 02.8 | -1.1 |
| | 1.5nm,0.3s,baz=74,slow=16,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 06 29 18.6 | |
| | 2.7nm,0.3s,baz=80,slow=30,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.03** | **237** | Pn | Pn | 06 30 15.0 | +0.1 |
| | 0.0nm,0.3s,baz=54,slow=14,SNR=7.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 31 55.4 | |
| | 0.0nm,0.3s,baz=60,slow=33,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.86** | **202** | Pn | Pn | 06 30 41.8 | +1.7 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=6.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 32 55.7 | |
| | 0.0nm,0.3s,baz=29,slow=31,SNR=4.5 | | | | | | |

*IDC **08** 06:29:33.8±3.2, 10°.80S×162°.11E, h54km±27km, mb3.3/6, mb1 3.6/8, mb1mx3.4/32, mbtmp3.7/8, ML3.6/2, Error ellipse: s-maj=31.5km s-min=19.8km az=55.0*

**ISC 08 06:29:33.4**±0.9, **10°.8S**±0°.1×**162°.1E**±0°.1, **h50**km, **n14**, σ**0s43**/9, **mb3.4**/6, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **2.54** | **302** | P | **Pn** | **06 30 12.1** | **-0.1** |
| | 24nm,0.3s,baz=58,slow=12,SNR=2.0 | | | | | | |
| HNR | | | | S | **Sn** | **06 30 42.7** | **+0.7** |
| | 162nm,0.3s,baz=196,slow=15,SNR=7.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.96** | **160** | P | **Pn** | **06 32 21.8** | **+0.4** |
| | 0.2nm,0.3s,baz=90,slow=7.9,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.28** | **248** | P | **P** | **06 35 21.7** | **-0.7** |
| | 0.4nm,0.7s,baz=78,slow=8.7,SNR=3.4 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.43** | **9** | T | T | 07 06 19.5 | |
| | baz=188,slow=76,SNR=55 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.43** | **9** | T | T | 07 06 16.3 | |
| | baz=188,slow=76,SNR=36 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.44** | **9** | T | T | 07 06 17.5 | |
| | baz=188,slow=76,SNR=30 | | | | | | |
| **ASAR** | **Alice Springs** | **29.79** | **241** | P | **P** | **06 35 35.6** | **-0.2** |
| | 0.5nm,0.9s,baz=66,slow=9.9,SNR=3.4 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.66** | **9** | T | T | 07 07 48.9 | |
| | baz=188,slow=76,SNR=28 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.66** | **9** | T | T | 07 07 54.2 | |
| | baz=188,slow=76,SNR=22 | | | | | | |
| **H11N2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| X34A | | | | IAmb_Lg | | 06 34 42.5 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **W35A** | **Tecumseh** | **2.21** | **127** | Pn | Pn | 06 34 12.1 | +0.2 | |
| **CBKS** | **Cedar Bluff** | **2.36** | **346** | Pn | Pn | 06 34 15.3 | +1.2 | |
| CBKS | | | | IAmb_Lg | | 06 34 53.6 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **TUL1** | **Leonard** | **2.68** | **102** | Pn | Pn | 06 34 18.3 | -0.1 | |
| **AMTX** | **Amarillo** | **2.71** | **234** | Pn | Pn | 06 34 18.9 | 0.0 | |
| AMTX | | | | IAmb_Lg | | 06 34 58.8 | | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **LOOK** | **Love County** | **2.93** | **149** | Pn | Pn | 06 34 22.3 | +0.4 | |
| **Z35A** | **Perchaven, San** | **3.49** | **155** | Pn | Pn | 06 34 30.3 | +0.7 | |
| **X37A** | **Clayton** | **3.54** | **122** | Pn | Pn | 06 34 30.4 | +0.1 | |
| **U38A** | **Gravette** | **3.73** | **90** | Pn | Pn | 06 34 34.5 | +1.5 | |
| **KSCO** | **Kaye Shedlock'** | **3.79** | **312** | IAmb_Lg | | 06 35 39.8 | | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **HHAR** | **Hobbs** | **4.11** | **92** | IAmb_Lg | | 06 35 50.3 | | |
| | comp=Z,22nm,1.2s | | | | | | | |

**IDC 08 06:39:17.2±3.1, 54°27N×87°42E, h0km, mb1 2.9/2, mb1mx2.7/56, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=25.5km s-min=17.1km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.56** | **259** | *i* | | 06 48 49.3 | |
| | baz=74,slow=314,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.56** | **259** | Pg | Pn | 06 39 44.7 | -1.6 |
| | 0.9nm,0.3s,baz=81,slow=18,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 06 40 07.8 | |
| | 1.5nm,0.3s,baz=77,slow=27,SNR=7.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.55** | **240** | Pn | Pn | 06 40 55.3 | +0.7 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=5.2 | | | | | | |
| KURBB | | | | Lg | Lg | 06 42 42.4 | |
| | 0.0nm,0.3s,baz=64,slow=31,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.17** | **206** | Pn | Pn | 06 41 18.4 | +1.4 |
| | 0.2nm,0.3s,baz=22,slow=12,SNR=7.0 | | | | | | |
| MKAR | | | | Sn | Sn | 06 42 48.7 | -1.2 |
| | baz=25,slow=27,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 06 43 37.3 | |
| | 0.1nm,0.3s,baz=26,slow=30,SNR=3.8 | | | | | | |

*NEIC **08** 06:46:59.1±1.2, 13°.86N±0°.09×121°.1E±0°.2, h21km±7km, mb4.2/7, Error ellipse: s-maj=25.9km s-min=12.0km az=97.0*

*MAN **08** 06:47:11.9, 13°.71N×120°.61E, h119km, mb4.4, ML3.3, MS3.1*

*IDC **08** 06:47:12.0±0.6, 13°.78N×120°.88E, h138km±5km, mb3.4/9, mb1 3.6/9, mb1mx3.2/56, mbtmp3.8/9, Error ellipse: s-maj=36.1km s-min=13.5km az=64.0*

**ISC 08 06:47:11.5±0.7, 13°.69N±0°.05×120°.65E±0°.09, h136km±5km, n32, σ0s95/37, mb3.7/12, 5C-4D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.35** | **122** | ⇑*eP* | **Pn** | **06 47 29.8** | **-0.9** |
| **LUBP** | **Lubang** | **0.39** | **277** | ⇓*iP* | **Pn** | **06 47 30.9** | **+0.2** |
| LUBP | | | | *eS* | **Sn** | **06 47 44.3** | **-1.0** |
| **TGY** | **Tagaytay City** | **0.50** | **34** | P | **Pn** | **06 47 31.9** | **+0.5** |
| | 742nm,0.3s,baz=251,slow=2.1,SNR=20 | | | | | | |
| TGY | | | | S | **Sn** | **06 47 47.5** | **+1.1** |
| | 313nm,0.3s,baz=342,slow=21,SNR=11 | | | | | | |
| **TGY** | **Tagaytay City** | **0.50** | **34** | ⇓*eP* | **Pn** | **06 47 32.0** | **+0.6** |
| TGY | | | | *eS* | **Sn** | **06 47 46.1** | **-0.3** |
| **MACP** | **Maragondon, Ca** | **0.58** | **7** | ⇑*eP* | **Pn** | **06 47 31.5** | **-0.2** |
| MACP | | | | *eS* | **Sn** | **06 47 46.4** | **-0.7** |
| **LQP** | **Lukban** | **0.96** | **64** | ⇑*iP* | **Pn** | **06 47 35.7** | **+0.8** |
| LQP | | | | *i* S | **Sn** | **06 47 53.3** | **+0.6** |
| **SJMP** | **San Jose** | **1.30** | **159** | ⇑*eP* | **Pn** | **06 47 38.4** | **+0.4** |
| SJMP | | | | *eS* | **Sn** | **06 47 57.7** | **-0.4** |
| **PCPH** | **Palayan** | **1.91** | **13** | ⇓*eP* | **Pn** | **06 47 44.5** | **-0.4** |
| **SCZP** | **Santa Cruz** | **2.19** | **341** | ⇓*iP* | **Pn** | **06 47 48.7** | **+0.5** |
| SCZP | | | | *eS* | **Sn** | **06 48 14.6** | **-1.8** |
| **SMPP** | **San Manuel, Pa** | **2.45** | **1** | ⇑*eP* | **Pn** | **06 47 51.2** | **-0.2** |
| SMPP | | | | *eS* | **Sn** | **06 48 21.7** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **8.76** | **210** | Pn | Pn | 06 49 08.9 | -6.5 |
| **TWG** | **Pinlang** | **9.09** | **2** | Pn | Pn | 06 49 05.8 | -14 |
| **CMAR** | **Chiang Mai Arr** | **21.38** | **286** | P | **P** | **06 51 50.9** | **+2.5** |
| | 1.6nm,0.4s,baz=98,slow=8.5,SNR=8.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **35.89** | **158** | P | **P** | **06 53 56.8** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 06 54 22.8 | |
| | comp=Z,5.7nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.03** | **158** | P | **P** | **06 54 00.5** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=332,slow=9.8,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.03** | **158** | P | **P** | **06 53 59.0** | **-0.9** |
| **WB2** | **Warramunga Arr** | **36.04** | **158** | P | **P** | **06 53 58.3** | **-1.7** |
| WB2 | | | | IAmb | IAmb | 06 54 16.4 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **36.05** | **344** | P | **P** | **06 54 00.2** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=164,slow=9.7,SNR=7.2 | | | | | | |
| **SONM** | **Songino Array** | **36.05** | **344** | P | **P** | **06 53 58.7** | **-1.2** |
| SONM | | | | IAmb | IAmb | 06 54 27.8 | |
| | comp=Z,2.7nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **39.32** | **161** | P | **P** | **06 54 27.8** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=336,slow=7.7,SNR=9.6 | | | | | | |
| **ASAR** | **Alice Springs** | **39.32** | **161** | P | **P** | **06 54 26.1** | **-1.5** |
| **MK31** | **Makanchi Array** | **46.01** | **324** | P | **P** | **06 55 22.0** | **+0.7** |
| MK31 | | | | IAmb | IAmb | 06 55 23.0 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.01** | **324** | P | **P** | **06 55 22.3** | **+1.0** |
| | comp=Z,0.6nm,0.3s,baz=121,slow=8.2,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.01** | **324** | P | **P** | **06 55 22.0** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **49.05** | **333** | P | **P** | **06 55 44.5** | **-0.1** |
| | comp=Z,1.5nm,0.4s,baz=122,slow=6.1,SNR=6.7 | | | | | | |
| **STKA** | **Stephens Creek** | **49.56** | **156** | P | **P** | **06 55 48.5** | **-0.2** |
| | comp=Z,0.9nm,0.5s,baz=310,slow=4.1,SNR=3.1 | | | | | | |
| **KURK** | **Kurchatov** | **50.17** | **326** | P | **P** | **06 55 54.0** | **+0.9** |
| **KKAR** | **Karatay Array** | **51.95** | **314** | P | **P** | **06 56 06.9** | **+0.3** |
| **ABKAR** | **Akbulak array** | **60.71** | **319** | P | **P** | **06 57 08.8** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **79.08** | **339** | P | **P** | **06 59 00.1** | **-0.4** |
| | comp=Z,2.4nm,0.8s,baz=75,slow=5.3,SNR=5.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.08** | **339** | IAmb | IAmb | 06 59 18.2 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.81** | **22** | P | **P** | **07 00 08.1** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=305,slow=4.7,SNR=7.6 | | | | | | |

**WEL 08 06:49:02.3±0.9, 32°S±6°×177°E±1°2, h0km, M3.9/8, mB4.4/5, ML4.4/13, MLv4.1/8, Mw(mB)3.6/5, Error ellipse: s-maj=0.0km s-min=0.0km az=111.6, North of New Zealand**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **4.80** | **54** | S | Sn | 06 51 13.0 | +0.8 |
| **WMGZ** | **Waiomatatini S** | **5.64** | **174** | P | Pn | 06 50 26.9 | -0.5 |
| WMGZ | | | | S | Sn | 06 51 34.7 | +2.0 |
| **PKGZ** | **Pakihiroa** | **5.68** | **177** | P | Pn | 06 50 28.8 | +0.8 |
| PKGZ | | | | S | Sn | 06 51 33.8 | -0.2 |
| **RUGZ** | **Raukumara Rang** | **5.75** | **180** | P | Pn | 06 50 29.4 | +0.5 |
| RUGZ | | | | S | Sn | 06 51 34.7 | -1.0 |
| **URZ** | **Urewera** | **6.06** | **184** | P | Pn | 06 50 34.2 | +1.1 |
| URZ | | | | S | Sn | 06 51 47.2 | +4.0 |
| **MWZ** | **Matawai** | **6.12** | **181** | P | Pn | 06 50 34.5 | +0.5 |
| MWZ | | | | S | Sn | 06 51 44.8 | +0.1 |
| **RAGZ** | **Rawiri** | **6.28** | **182** | P | Pn | 06 50 35.7 | -0.6 |
| RAGZ | | | | S | Sn | 06 51 49.6 | +0.9 |
| **RIGZ** | **Rimuhau** | **6.49** | **179** | P | Pn | 06 50 37.3 | -1.8 |
| RIGZ | | | | S | Sn | 06 51 52.6 | -1.2 |
| **SNGZ** | **Shannon Statio** | **6.57** | **182** | P | Pn | 06 50 39.8 | -0.4 |
| SNGZ | | | | S | Sn | 06 51 57.2 | +1.4 |
| **NMHZ** | **Naumai** | **6.91** | **186** | P | Pn | 06 50 44.0 | -1.0 |
| NMHZ | | | | S | Sn | 06 52 04.6 | +0.2 |
| **BKZ** | **Black Stump Fm** | **7.01** | **187** | P | Pn | 06 50 45.0 | -1.3 |
| BKZ | | | | S | Sn | 06 52 09.1 | +2.3 |
| **ARHZ** | **Aropaoanui** | **7.07** | **184** | P | Pn | 06 50 45.1 | -1.8 |
| ARHZ | | | | S | Sn | 06 52 06.0 | -1.9 |
| **ETVZ** | **East Tongariro** | **7.10** | **192** | P | Pn | 06 50 48.3 | +0.8 |
| **OTVZ** | **Oturere** | **7.13** | **193** | P | Pn | 06 50 48.7 | +0.7 |
| **SNVZ** | **South Ngauruho** | **7.16** | **193** | P | Pn | 06 50 49.1 | +0.7 |
| **KWHZ** | **Kaweka Forest** | **7.28** | **188** | P | Pn | 06 50 47.9 | -2.0 |
| KWHZ | | | | S | Sn | 06 52 13.3 | +0.1 |

*IDC **08** 07:04:01.8±0.7, 6°.77N×73°.00W, h154km±10km, mb3.2/4, mb1 3.6/7, mb1mx3.3/29, mbtmp3.8/7, Error ellipse: s-maj=31.6km s-min=7.3km az=132.0*

*RSNC **08** 07:04:02.2±1.2, 6°.82N×73°.14W, h145km±5km, ML3.5, Mw3.8*

**ISC 08 07:04:01.3±0.8, 6°.81N±0°.03×73°.09W±0°.03, h153km±5km, n45, σ2s21/84, mb3.4/4, 7C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **203** | ⇓*iP* | **Pn** | **07 04 22.5** | **+0.1** |
| BARC | | | | *eS* | **Sn** | **07 04 36.4** | **-2.0** |
| BARC | | | | *i* | | 07 04 38.3 | |
| | comp=Z,791nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.65** | **36** | ⇑*iP* | **Pn** | **07 04 25.3** | **+0.8** |
| PAMC | | | | *eS* | **Sn** | **07 04 41.8** | **-0.3** |
| PAMC | | | | *i* | | 07 04 44.3 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **0.91** | **180** | *eP* | **Pn** | **07 04 26.6** | **+0.3** |
| RUSC | | | | *eS* | **Sn** | **07 04 44.6** | **-0.8** |
| RUSC | | | | *i* | | 07 04 46.8 | |
| | comp=Z,730nm,0.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.38** | **259** | ⇑*iP* | **Pn** | **07 04 29.0** | **-1.0** |
| PTBC | | | | *eS* | **Sn** | **07 04 49.8** | **-2.1** |
| PTBC | | | | *i* | | 07 04 53.3 | |
| | comp=Z,491nm,0.3s | | | | | | |
| **OCAC** | **Ocana** | **1.44** | **351** | ⇑*iP* | **Pn** | **07 04 30.7** | **0.0** |
| OCAC | | | | *eS* | **Sn** | **07 04 51.2** | **-2.0** |
| OCAC | | | | *i* | | 07 04 55.8 | |
| | comp=Z,801nm,0.4s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.51** | **220** | ⇑*iP* | **Pn** | **07 04 31.5** | **+0.1** |
| SPBC | | | | *eS* | **Sn** | **07 04 52.9** | **-1.5** |
| SPBC | | | | *i* | | 07 05 00.5 | |
| | comp=Z,547nm,0.2s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.88** | **291** | *eP* | **Pn** | **07 04 35.3** | **0.0** |
| ZARC | | | | *eS* | **Sn** | **07 05 00.8** | **-0.6** |
| ZARC | | | | *i* | | 07 05 07.2 | |
| | comp=Z,414nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.16** | **235** | *eP* | **Pn** | **07 04 38.6** | **0.0** |
| NORC | | | | *eS* | **Sn** | **07 05 06.0** | **-1.3** |
| NORC | | | | *i* | | 07 05 09.0 | |
| | comp=Z,204nm,0.2s | | | | | | |
| **SMLC** | **San Martn de** | **2.20** | **334** | ⇑*eP* | **Pn** | **07 04 38.6** | **-0.4** |
| SMLC | | | | *eS* | **Sn** | **07 05 06.0** | **-2.1** |
| SMLC | | | | *i* | | 07 05 10.3 | |
| | comp=Z,238nm,0.2s | | | | | | |
| **CHIC** | **Chingaza** | **2.26** | **196** | *eP* | **Pn** | **07 04 40.8** | **+0.6** |
| CHIC | | | | *eS* | **Sn** | **07 05 08.8** | **-1.2** |
| CHIC | | | | *i* | | 07 05 13.6 | |
| | comp=Z,152nm,0.5s | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **212** | P | **Pn** | **07 04 42.5** | **+1.7** |
| | comp=Z,93nm,0.3s,baz=235,slow=2.3,SNR=182 | | | | | | |
| ROSC | | | | S | **Sn** | **07 05 12.1** | **+1.0** |
| | comp=Z,129nm,0.3s,baz=54,slow=22,SNR=14 | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **212** | ⇑*iP* | **Pn** | **07 04 42.5** | **+1.7** |
| ROSC | | | | *eS* | **Sn** | **07 05 10.2** | **-0.8** |
| ROSC | | | | *i* | | 07 05 17.1 | |
| | comp=Z,312nm,0.4s | | | | | | |
| **HELC** | **Santa Helena** | **2.50** | **256** | *eP* | **Pn** | **07 04 43.5** | **+0.5** |
| HELC | | | | *eS* | **Sn** | **07 05 13.5** | **-1.5** |
| HELC | | | | *i* | | 07 05 21.8 | |
| | comp=Z,235nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.60** | **291** | *eP* | **Pn** | **07 04 42.8** | **-1.0** |
| UREC | | | | *eS* | **Sn** | **07 05 13.5** | **-3.1** |
| UREC | | | | *i* | | 07 05 16.5 | |
| | comp=Z,206nm,0.1s | | | | | | |
| **SOCV** | **Socops** | **2.66** | **56** | *eP* | **Pn** | **07 04 44.5** | **-0.1** |
| SOCV | | | | *eS* | **Sn** | **07 05 14.9** | **-3.0** |
| **VILC** | **Villavicencio,** | **2.75** | **193** | *eP* | **Pn** | **07 04 45.9** | **+0.1** |
| VILC | | | | *eS* | **Sn** | **07 05 17.5** | **-2.8** |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **235** | *eP* | **Pn** | **07 04 47.2** | **+1.0** |
| GUY2C | | | | *eS* | **Sn** | **07 05 20.7** | **-0.2** |
| GUY2C | | | | *i* | | 07 05 32.1 | |
| | comp=Z,146nm,0.6s | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **160** | ⇓*eP* | **Pn** | **07 04 45.8** | **-0.1** |
| PTGC | | | | *eS* | **Sn** | **07 05 18.7** | **-1.8** |
| PTGC | | | | *e* | | 07 05 18.7 | |
| PTGC | | | | *i* | | 07 05 21.8 | |
| | comp=Z,273nm,0.5s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.91** | **357** | *eP* | **Pn** | **07 04 47.2** | **-0.5** |
| LL6C | | | | *eS* | **Sn** | **07 05 20.9** | **-2.8** |
| LL6C | | | | *i* | | 07 05 35.9 | |
| | comp=Z,47nm,0.4s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **252** | *eP* | **Pn** | **07 04 50.4** | **+0.7** |
| CBOC | | | | *eS* | **Sn** | **07 05 25.1** | **-2.0** |
| CBOC | | | | *i* | | 07 05 38.9 | |
| | comp=Z,77nm,0.4s | | | | | | |
| **DBBC** | **Dabeiba** | **3.10** | **274** | ⇓*eP* | **Pn** | **07 04 50.5** | **+0.3** |
| DBBC | | | | *eS* | **Sn** | **07 05 24.1** | **-3.9** |
| **SDV** | **Santo Domingo** | **3.19** | **50** | P | **Pn** | **07 04 52.3** | **+0.8** |
| | comp=Z,26nm,0.3s,baz=149,slow=1.1,SNR=71 | | | | | | |
| SDV | | | | S | **Sn** | **07 05 29.6** | **-0.6** |
| | comp=Z,44nm,0.3s,baz=250,slow=22,SNR=45 | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.21** | **308** | *eP* | **Pn** | **07 04 50.2** | **-1.4** |
| MOTC | | | | *eS* | **Sn** | **07 05 27.2** | **-3.2** |
| MOTC | | | | *i* | | 07 05 29.5 | |
| | comp=Z,86nm,0.2s | | | | | | |
| **ARGC** | **Ariguani, Magd** | **3.23** | **339** | *eP* | **Pn** | **07 04 53.0** | **+1.2** |
| ARGC | | | | *eS* | **Sn** | **07 05 29.7** | **-1.3** |
| ARGC | | | | *i* | | 07 05 39.0 | |
| | comp=Z,51nm,0.3s | | | | | | |
| **ANIL** | **Santa Ana** | **3.26** | **225** | *eP* | **Pn** | **07 04 53.5** | **+1.1** |
| ANIL | | | | *eS* | **Sn** | **07 05 30.9** | **-1.0** |
| **ELOV** | **Elorza** | **3.59** | **87** | *eP* | **Pn** | **07 04 57.0** | **+0.6** |
| ELOV | | | | *eS* | **Sn** | **07 05 33.5** | **-5.5** |
| **ORTC** | **Ortega, Tolima** | **3.59** | **217** | *eP* | **Pn** | **07 04 56.8** | **+0.2** |
| ORTC | | | | *eS* | **Sn** | **07 05 38.7** | **-0.6** |
| ORTC | | | | *i* | | 07 05 47.3 | |
| | comp=Z,121nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.70** | **239** | *eP* | **Pn** | **07 04 58.4** | **+0.6** |
| PLMC | | | | *eS* | **Sn** | **07 05 39.7** | **-2.0** |
| PLMC | | | | *i* | | 07 05 47.5 | |
| | comp=Z,110nm,0.3s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.70** | **326** | *eP* | **Pn** | **07 04 56.9** | **-0.9** |
| SJCC | | | | *eS* | **Sn** | **07 05 38.3** | **-3.4** |
| SJCC | | | | *i* | | 07 05 42.1 | |
| | comp=Z,137nm,0.5s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.19** | **3** | ⇑*eP* | **Pn** | **07 05 03.0** | **-1.3** |
| CRJC | | | | *eS* | **Sn** | **07 05 48.8** | **-4.4** |
| CRJC | | | | *i* | | 07 05 55.1 | |
| | comp=Z,59nm,0.3s | | | | | | |
| **GUVC** | **San Jose del G** | **4.26** | **174** | *eP* | **Pn** | **07 05 04.5** | **-0.7** |
| GUVC | | | | *eS* | **Sn** | **07 05 52.3** | **-2.7** |
| GUVC | | | | *i* | | 07 05 58.6 | |
| | comp=Z,149nm,0.2s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.29** | **229** | *eP* | **Pn** | **07 05 05.4** | **-0.2** |
| YOTC | | | | *eS* | **Sn** | **07 05 48.8** | **-6.8** |
| **MACC** | **Macarena, Meta** | **4.70** | **189** | *eP* | **Pn** | **07 05 10.0** | **-0.9** |
| MACC | | | | *eS* | **Sn** | **07 05 59.5** | **-5.6** |
| MACC | | | | *i* | | 07 06 08.5 | |
| | comp=Z,44nm,0.4s | | | | | | |
| **MARP** | **Paez Belalcaza** | **4.87** | **216** | *eP* | **Pn** | **07 05 13.9** | **+0.5** |
| MARP | | | | *eS* | **Sn** | **07 06 04.1** | **-5.4** |
| **GARC** | **Garzon, Huila** | **5.18** | **208** | *eP* | **Pn** | **07 05 17.1** | **-0.4** |
| GARC | | | | *eS* | **Sn** | **07 06 13.8** | **-3.2** |
| GARC | | | | *i* | | 07 06 19.0 | |
| | comp=Z,36nm,0.2s | | | | | | |
| **PCON** | **Cinco Dias** | **5.54** | **217** | *eP* | **Pn** | **07 05 24.4** | **+1.9** |
| PCON | | | | *eS* | **Sn** | **07 06 24.4** | **-1.5** |
| PCON | | | | *i* | | 07 06 47.2 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **POPC** | **Popayan, Colom** | **5.55** | **220** | *eP* | **Pn** | **07 05 22.8** | **+0.4** |
| POPC | | | | *eS* | **Sn** | **07 06 24.0** | **-1.6** |
| **FLOC** | **Florencia** | **5.79** | **206** | *eP* | **Pn** | **07 05 25.7** | **+0.4** |
| FLOC | | | | *eS* | **Sn** | **07 06 23.1** | **-8.0** |
| FLOC | | | | *i* | | 07 06 36.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **9.01** | **68** | P | **Pn** | **07 06 09.2** | **+1.0** |
| | comp=Z,0.7nm,0.3s,baz=272,slow=4.0,SNR=1.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **36.49** | **312** | P | **P** | **07 10 53.0** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=132,slow=8.8,SNR=4.4 | | | | | | |
| TXAR | | | | PcP | **PcP** | **07 13 14.6** | **+1.9** |
| | comp=Z,0.2nm,0.7s,baz=132,slow=7.4,SNR=3.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **48.10** | **324** | P | **P** | **07 12 27.1** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=132,slow=8.8,SNR=2.4 | | | | | | |
| **SCHQ** | **Schefferville** | **48.15** | **5** | P | **P** | **07 12 26.6** | **+0.8** |
| | comp=Z,2.8nm,0.8s,baz=201,slow=7.4,SNR=5.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.28** | **340** | P | **P** | **07 14 14.1** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=132,slow=6.5,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **149.13** | **234** | PKPbc | **PKPbc** | **07 23 32.0** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=114,slow=3.9,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.36** | **241** | PKPbc | **PKPbc** | **07 23 35.2** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=106,slow=2.9,SNR=10 | | | | | | |

*SOME **08** 07:21:10.5, 39°.15N×73°.13E, h0km*

*NNC **08** 07:21:18.7±3.7, 39°.31N×73°.61E, h0km, mb3.7, mpv3.3, Error ellipse: s-maj=27.6km s-min=17.5km az=166.0*

**ISC 08 07:21:07.2±2.9, 39°.0N±0°.1×73°.08E±0°.04, h10km, n31, σ1s58/46, 4C-3D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **3.73** | **2** | *eP* | **Pg** | **07 22 18.4** | **-0.3** |
| | 6.0nm,0.6s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **07 23 08.0** | **+1.0** |
| | 8.4nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.73** | **2** | Pg | **Pg** | **07 22 18.4** | **-0.3** |
| | 6.0nm,0.6s | | | | | | |
| MRKS | | | | Lg | Lg | 07 23 08.0 | |
| | 8.4nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.78** | **16** | ⇓Pn | **Pb** | **07 22 13.8** | **-0.3** |
| | 7.5nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 07 23 03.3 | |
| | 11nm,0.7s | | | | | | |
| **IUG** | **Iuzhnay** | **3.90** | **324** | *eP* | **Pg** | **07 22 21.9** | **0.0** |
| | 149nm,0.3s | | | | | | |
| IUG | | | | *eS* | **Sg** | **07 23 13.8** | **+1.5** |
| | 41nm,0.9s | | | | | | |
| **IUG** | **Iuzhnay** | **3.90** | **324** | Pg | **Pg** | **07 22 21.8** | **0.0** |
| | 149nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 07 23 13.8 | |
| | 41nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.35** | **25** | ⇑Pg | **Pb** | **07 22 27.1** | **+3.3** |
| | 2.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 07 23 19.1 | |
| | 5.1nm,0.6s | | | | | | |
| **KK02** | **Karatay Array** | **4.52** | **335** | ⇑Pn | **Pb** | **07 22 28.2** | **+1.6** |
| | 3.0nm,0.5s,baz=148,slow=15 | | | | | | |
| KK02 | | | | ⇑Sn | **Sb** | **07 23 20.9** | **-0.4** |
| | 6.4nm,0.7s | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 07 23 40.2 | |
| | 3.4nm,0.5s,baz=138,slow=28 | | | | | | |
| **KST** | **Kastek** | **4.58** | **28** | *eP* | **Pg** | **07 22 34.1** | **-0.8** |
| | 2.4nm,0.5s | | | | | | |
| KST | | | | *eS* | **Sg** | **07 23 35.2** | **+1.0** |
| | 12nm,0.9s | | | | | | |
| **KST** | **Kastek** | **4.58** | **28** | Pg | **Pg** | **07 22 34.1** | **-0.8** |
| | 2.4nm,0.5s | | | | | | |
| KST | | | | Lg | Lg | 07 23 35.2 | |
| | 12nm,0.9s | | | | | | |
| **SGDS** | **Sogindy** | **4.59** | **14** | *eP* | **Pg** | **07 22 34.5** | **-0.5** |
| | 1.9nm,0.5s | | | | | | |
| SGDS | | | | *eS* | **Sg** | **07 23 35.6** | **+1.2** |
| | 3.4nm,0.5s | | | | | | |
| **SGDS** | **Sogindy** | **4.59** | **14** | Pg | **Pg** | **07 22 34.5** | **-0.5** |
| | 1.9nm,0.5s | | | | | | |
| SGDS | | | | Lg | Lg | 07 23 35.6 | |
| | 3.4nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.69** | **25** | *eP* | **Pg** | **07 22 35.8** | **-1.2** |
| | 2.7nm,0.6s | | | | | | |
| DGS | | | | *eS* | **Sg** | **07 23 38.3** | **+0.5** |
| | 5.9nm,1.0s | | | | | | |
| **DGS** | **Degeres** | **4.69** | **25** | Pg | **Pg** | **07 22 35.8** | **-1.2** |
| | 2.7nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 07 23 38.3 | |
| | 5.9nm,1.0s | | | | | | |
| **BRLS** | **Boroldav** | **4.70** | **330** | *eP* | **Pg** | **07 22 34.7** | **-2.5** |
| | 3.0nm,0.6s | | | | | | |
| BRLS | | | | *eS* | **Sg** | **07 23 35.6** | **-2.5** |
| | 1.6nm,0.5s | | | | | | |
| **BRLS** | **Boroldav** | **4.70** | **330** | Pg | **Pg** | **07 22 34.7** | **-2.5** |
| | 3.0nm,0.6s | | | | | | |
| BRLS | | | | Lg | Lg | 07 23 35.6 | |
| | 1.6nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **4.83** | **31** | *eP* | **Pg** | **07 22 39.2** | **-0.5** |
| | 2.9nm,0.4s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **07 23 43.4** | **+1.2** |
| | 3.8nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **4.83** | **31** | Pg | **Pg** | **07 22 39.2** | **-0.5** |
| | 2.9nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 07 23 43.4 | |
| | 3.8nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.97** | **35** | *eP* | **Pg** | **07 22 40.9** | **-1.6** |
| | 3.0nm,0.6s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **07 23 46.3** | **-0.6** |
| | 2.6nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.97** | **35** | Pg | **Pg** | **07 22 40.8** | **-1.6** |
| | 3.0nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 07 23 46.3 | |
| | 2.6nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **5.07** | **22** | *eP* | **Pg** | **07 22 42.7** | **-1.6** |
| | 1.7nm,0.7s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **07 23 49.9** | **0.0** |
| | 6.1nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **5.07** | **22** | Pg | **Pg** | **07 22 42.7** | **-1.6** |
| | 1.7nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 07 23 49.9 | |
| | 6.1nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **5.12** | **35** | *eP* | **Pg** | **07 22 43.8** | **-1.4** |
| | 2.4nm,0.7s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **07 23 51.9** | **+0.5** |
| | 5.8nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **5.12** | **35** | Pg | **Pg** | **07 22 43.8** | **-1.4** |
| | 2.4nm,0.7s | | | | | | |
| MDOK | | | | Lg | Lg | 07 23 51.9 | |
| | 5.8nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **5.42** | **29** | *eP* | **Pg** | **07 22 49.1** | **-1.9** |
| | 1.2nm,0.8s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **07 24 01.3** | **+0.1** |
| | 11nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **5.42** | **29** | Pg | **Pg** | **07 22 49.1** | **-1.9** |
| | 1.2nm,0.8s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZALV | | | | Lg | Lg | 07 36 04.8 | | |
| | 1.0nm,0.3s,baz=76,slow=29,SNR=5.2 | | | | | | | |
| **KURK** | **Kurchatov** | **6.17 239** | ⇓Pn | **Pn** | **07 36 50.0** | **-0.9** | | |
| | 0.4nm,0.6s | | | | | | | |
| KURK | | | ⇑Lg | Lg | 07 38 40.8 | | | |
| | 1.9nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.27 239** | Pn | **Pn** | **07 36 54.0** | **+1.6** | | |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=5.7 | | | | | | | |
| KURBB | | | Lg | Lg | 07 38 44.4 | | | |
| | 0.0nm,0.3s,baz=59,slow=36,SNR=3.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.27 239** | ⇓Pn | **Pn** | **07 36 53.1** | **+0.8** | | |
| | 1.0nm,0.5s | | | | | | | |
| KURBB | | | ⇓Lg | Lg | 07 38 43.4 | | | |
| | 4.6nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **7.97 204** | ⇑Pn | **Pn** | **07 37 16.1** | **+0.4** | | |
| | 0.5nm,0.7s,baz=14,slow=12,SNR=6.6 | | | | | | | |
| MK31 | | | ⇓Sn | **Sn** | **07 38 47.3** | **+0.7** | | |
| | 0.3nm,0.5s | | | | | | | |
| MK31 | | | ⇓Lg | Lg | 07 39 34.9 | | | |
| | 1.2nm,0.8s,baz=11,slow=29 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.97 204** | Pn | **Pn** | **07 37 17.4** | **+1.7** | | |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=6.7 | | | | | | | |
| MKAR | | | Sn | **Sn** | **07 38 46.2** | **-0.4** | | |
| | 0.1nm,0.3s,baz=24,slow=26,SNR=5.0 | | | | | | | |
| MKAR | | | Lg | Lg | 07 39 35.3 | | | |
| | 0.1nm,0.3s,baz=26,slow=33,SNR=6.0 | | | | | | | |
| **MAKZ** | **Makanchi** | **8.04 205** | ⇓Pn | **Pn** | **07 37 15.6** | **-1.0** | | |
| | 0.4nm,0.5s | | | | | | | |
| MAKZ | | | ⇓Sn | **Sn** | **07 38 48.0** | **-0.1** | | |
| | 0.7nm,0.8s | | | | | | | |
| MAKZ | | | ⇑Lg | Lg | 07 39 35.2 | | | |
| | 1.9nm,1.1s | | | | | | | |

**WEL 08 07:38:16.2±1.1,35°S±10″×17°9E±1′8,h33km,M3.6/15, mB5.0/2,ML3.9/22,MLv3.6/15,Mw(mB)4.3/2,Error ellipse: s-maj=0.0km s-min=0.0km az=110.7,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.39** | **200** | P | Pn | 07 38 50.6 | -2.4 |
| **WMGZ** | **Waiomatatini S** | **2.61** | **196** | P | Pn | 07 38 56.3 | +0.2 |
| **HAZ** | **Te Kaha** | **2.74** | **206** | P | Pn | 07 38 55.7 | -2.1 |
| **PUZ** | **Puketiti** | **2.88** | **197** | P | Pn | 07 39 00.7 | +0.8 |
| **RUGZ** | **Raukumara Rang** | **2.96** | **206** | P | Pn | 07 38 59.2 | -1.8 |
| **TWGZ** | **Tauwhareparae** | **3.06** | **200** | P | Pn | 07 39 04.8 | +2.5 |
| TWGZ | | | | S | Sn | 07 39 41.7 | +4.0 |
| **TKGZ** | **Te Karaka** | **3.34** | **200** | P | Pn | 07 39 07.4 | +1.3 |
| **MWZ** | **Matawai** | **3.34** | **205** | P | Pn | 07 39 04.5 | -1.7 |
| **URZ** | **Urewera** | **3.44** | **210** | P | Pn | 07 39 05.0 | -2.5 |
| URZ | | | | S | Sn | 07 39 46.7 | -0.3 |
| **RAGZ** | **Rawiri** | **3.53** | **205** | P | Pn | 07 39 07.6 | -1.2 |
| **RIGZ** | **Rimuhau** | **3.61** | **200** | P | Pn | 07 39 10.0 | +0.1 |
| RIGZ | | | | S | Sn | 07 39 52.8 | +1.4 |
| **SNGZ** | **Shannon Statio** | **3.81** | **204** | P | Pn | 07 39 12.9 | +0.3 |
| SNGZ | | | | S | Sn | 07 39 57.3 | +1.1 |
| **MTHZ** | **Maungataniwha** | **4.05** | **208** | P | Pn | 07 39 15.5 | -0.4 |
| **NMHZ** | **Naumai** | **4.28** | **207** | P | Pn | 07 39 19.3 | +0.2 |
| **BKZ** | **Black Stump Fm** | **4.46** | **209** | P | Pn | 07 39 20.7 | -0.8 |
| BKZ | | | | S | Sn | 07 40 11.5 | -0.8 |
| **TMVZ** | **Te Maari** | **4.77** | **216** | P | Pn | 07 39 26.6 | +0.7 |
| **NTVZ** | **North Tongariro** | **4.77** | **216** | P | Pn | 07 39 26.1 | +0.2 |
| **ETVZ** | **East Tongariro** | **4.78** | **216** | P | Pn | 07 39 25.9 | -0.1 |
| **NNVZ** | **North Ngauruho** | **4.82** | **217** | P | Pn | 07 39 27.7 | +1.0 |
| **OTVZ** | **Oturere** | **4.82** | **216** | P | Pn | 07 39 25.6 | -1.1 |
| **WTVZ** | **West Tongariro** | **4.82** | **217** | P | Pn | 07 39 28.8 | +2.2 |
| **SNVZ** | **South Ngauruho** | **4.85** | **216** | P | Pn | 07 39 27.8 | +0.7 |
| **KAHZ** | **Kahuranaki** | **4.88** | **203** | P | Pn | 07 39 24.0 | -3.3 |
| **BHHZ** | **Black Hill Sta** | **4.91** | **211** | P | Pn | 07 39 26.8 | -0.9 |
| **KRHZ** | **Kereru** | **4.92** | **208** | P | Pn | 07 39 25.8 | -2.0 |
| KRHZ | | | | S | Sn | 07 40 22.7 | -0.9 |
| **MOVZ** | **Moawhango** | **4.98** | **214** | P | Pn | 07 39 28.1 | -0.6 |
| **MTVZ** | **Mangateitei** | **5.09** | **216** | P | Pn | 07 39 35.7 | +5.4 |
| **PRWZ** | **Pori Road** | **5.87** | **206** | P | Pn | 07 39 45.7 | +4.9 |

*IDC **08** 07:38:44.8±1.1,5°.66N×126°.95E,h0km,mb3.8/6, mb1 4.0/6,mb1mx3.5/52,mbtmp3.8/6,MS3.1/1,Ms1 3.1/1, ms1mx2.3/77,Error ellipse: s-maj=112.0km s-min=18.5km az=70.0*

*MAN **08** 07:38:48.9,5°.48N×126°.32E,h104km,mb4.7,ML3.6, MS3.5*

**ISC 08 07:38:56.5±1.5,5°.4N±0°.1×126°.5E±0°.1,h90km±15km,n14, σ1s39/22,mb3.8/6,4C-2D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **1.52** | **351** | ⇑*e*P | **Pn** | **07 39 20.9** | **-1.6** |
| MATI | | | | *e*S | **Sn** | **07 39 45.9** | **+3.7** |
| **KCP** | **Kidapawan** | **2.10** | **318** | ⇑*e*P | **Pn** | **07 39 29.9** | **-0.1** |
| KCP | | | | *e*S | **Sn** | **07 39 54.5** | **-1.3** |
| **BIPH** | **Bislig** | **2.74** | **357** | ⇑*i*P | **Pn** | **07 39 38.7** | **+0.1** |
| BIPH | | | | *i* S | **Sn** | **07 40 10.1** | **-0.7** |
| **BUKP** | **Musuan** | **2.82** | **330** | ⇑*e*P | **Pn** | **07 39 37.1** | **-2.6** |
| BUKP | | | | *e*S | **Sn** | **07 40 13.9** | **+1.1** |
| **BUKP** | **Musuan** | **2.82** | **330** | ⇓*i*P | **Pn** | **07 39 41.0** | **+1.3** |
| BUKP | | | | *i* S | **Sn** | **07 40 13.7** | **+0.9** |
| **GLSP** | **General Luna,** | **4.34** | **355** | ⇓*i*P | **Pn** | **07 39 59.6** | **-0.6** |
| GLSP | | | | *e*S | **Sn** | **07 40 48.8** | **-0.7** |
| **JOW** | **Kunigami** | **21.35** | **4** | LR | LR | 07 52 48.0 | |
| | comp=Z,49nm,20.2s,baz=46,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.40** | **182** | P | **P** | **07 43 58.5** | **+0.9** |
| | 1.3nm,0.9s,baz=6.3,slow=9.2,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.37** | **163** | P | **P** | **07 44 23.8** | **-0.6** |
| | 1.6nm,0.7s,baz=344,slow=10,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 47 48.5** | **+0.2** |
| | 0.4nm,0.6s,baz=331,slow=2.5,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **29.81** | **166** | P | **P** | **07 44 54.9** | **-0.3** |
| | 1.3nm,0.4s,baz=343,slow=6.8,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 47 57.0** | **+0.3** |
| | 0.8nm,0.4s,baz=348,slow=2.4,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **39.80** | **160** | P | **P** | **07 46 20.3** | **-0.6** |
| | 1.6nm,0.6s,baz=320,slow=9.5,SNR=4.2 | | | | | | |
| STKA | | | | PcP | **PcP** | **07 48 25.6** | **+0.1** |
| | 0.4nm,0.4s,baz=36,slow=3.1,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **45.62** | **341** | P | **P** | **07 47 07.8** | **-0.1** |
| | 0.1nm,0.3s,baz=152,slow=9.6,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.04** | **325** | P | **P** | **07 48 25.3** | **-0.7** |
| | 0.7nm,0.5s,baz=118,slow=7.3,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.16** | **289** | PKP | **PKiKP** | **07 57 43.8** | **+1.8** |
| | 0.2nm,0.4s,baz=65,slow=2.6,SNR=2.0 | | | | | | |

**WEL 08 07:42:42.5±1.8,36°S±27″×17°9E±2′0,h152km±47km, M3.5/9,ML3.8/12,MLv3.5/9,Error ellipse: s-maj=0.0km s-min=0.0km az=179.7,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **2.17** | **189** | P | Pn | 07 43 18.1 | -1.7 |
| **HAZ** | **Te Kaha** | **2.25** | **202** | P | Pn | 07 43 17.5 | -3.2 |
| **PKGZ** | **Pakihiroa** | **2.30** | **195** | P | Pn | 07 43 12.7 | -8.6 |
| **PUZ** | **Puketiti** | **2.44** | **191** | P | Pn | 07 43 22.8 | -0.3 |
| PUZ | | | | S | Sn | 07 43 58.6 | +4.2 |
| **RUGZ** | **Raukumara Rang** | **2.48** | **202** | P | Pn | 07 43 21.7 | -1.8 |
| **TWGZ** | **Tauwhareparae** | **2.60** | **195** | P | Pn | 07 43 27.0 | +2.0 |
| **OPRZ** | **Ohinepanea** | **2.85** | **220** | P | Pn | 07 43 30.6 | +2.6 |
| **MWZ** | **Matawai** | **2.86** | **201** | P | Pn | 07 43 27.2 | -1.1 |
| **TGRZ** | **Tauranga** | **2.92** | **225** | P | Pn | 07 43 32.5 | +3.6 |
| **URZ** | **Urewera** | **2.94** | **208** | P | Pn | 07 43 27.4 | -1.7 |
| URZ | | | | S | Sn | 07 44 02.3 | -2.9 |
| **RAGZ** | **Rawiri** | **3.04** | **202** | P | Pn | 07 43 30.2 | -0.4 |
| **RIGZ** | **Rimuhau** | **3.15** | **196** | P | Pn | 07 43 32.5 | +0.6 |
| **KMRZ** | **Kaimai** | **3.19** | **226** | P | Pn | 07 43 36.1 | +3.8 |
| **RTZ** | **Ruatahuna** | **3.30** | **206** | P | Pn | 07 43 32.7 | -1.1 |
| **SNGZ** | **Shannon Statio** | **3.33** | **201** | P | Pn | 07 43 35.2 | +1.0 |
| **PRGZ** | **Paritu Road** | **3.34** | **193** | P | Pn | 07 43 35.0 | +0.8 |
| **KNZ** | **Kokohu** | **3.48** | **195** | P | Pn | 07 43 35.9 | -0.1 |
| **ALRZ** | **Allen Road** | **3.51** | **214** | P | Pn | 07 43 38.4 | +1.9 |
| **MHGZ** | **Mahia Peninsul** | **3.56** | **192** | P | Pn | 07 43 37.9 | +0.8 |
| **MTHZ** | **Maungataniwha** | **3.56** | **206** | P | Pn | 07 43 37.2 | +0.1 |
| **NMHZ** | **Naumai** | **3.79** | **205** | P | Pn | 07 43 42.1 | +2.0 |
| **ARHZ** | **Aropaoanui** | **3.88** | **202** | P | Pn | 07 43 42.0 | +0.8 |
| **BKZ** | **Black Stump Fm** | **3.96** | **208** | P | Pn | 07 43 43.4 | +1.1 |
| **MCHZ** | **McNeill Hill** | **4.14** | **204** | P | Pn | 07 43 45.6 | +1.0 |
| **NTVZ** | **North Tongariro** | **4.25** | **215** | P | Pn | 07 43 48.7 | +2.5 |
| **TMVZ** | **Te Maari** | **4.25** | **215** | P | Pn | 07 43 48.7 | +2.4 |
| **ETVZ** | **East Tongariro** | **4.27** | **215** | P | Pn | 07 43 48.4 | +2.0 |
| **WTVZ** | **West Tongariro** | **4.31** | **216** | P | Pn | 07 43 49.2 | +2.3 |
| **NNVZ** | **North Ngauruho** | **4.31** | **216** | P | Pn | 07 43 50.0 | +3.0 |
| **OTVZ** | **Oturere** | **4.31** | **215** | P | Pn | 07 43 48.4 | +1.4 |
| **SNVZ** | **South Ngauruho** | **4.34** | **215** | P | Pn | 07 43 48.9 | +1.5 |
| **NGZ** | **Ngauruhoe** | **4.35** | **215** | P | Pn | 07 43 50.0 | +2.5 |
| **TUVZ** | **Tukino** | **4.40** | **214** | P | Pn | 07 43 52.4 | +4.2 |
| **KAHZ** | **Kahuranaki** | **4.41** | **200** | P | Pn | 07 43 48.4 | +0.3 |
| **BHHZ** | **Black Hill Sta** | **4.41** | **209** | P | Pn | 07 43 49.4 | +1.2 |
| **KRHZ** | **Kereru** | **4.43** | **206** | P | Pn | 07 43 48.5 | +0.1 |
| **FWVZ** | **Far West T-bar** | **4.44** | **215** | P | Pn | 07 43 51.0 | +2.3 |
| **MOVZ** | **Moawhango** | **4.47** | **212** | P | Pn | 07 43 50.3 | +1.3 |
| **TRVZ** | **Turoa** | **4.47** | **215** | P | Pn | 07 43 53.0 | +3.8 |
| **WNVZ** | **Wahianoa** | **4.47** | **214** | P | Pn | 07 43 51.1 | +1.9 |
| **PKVZ** | **Pokaka** | **4.56** | **217** | P | Pn | 07 43 53.7 | +3.5 |
| **MTVZ** | **Mangateitei** | **4.58** | **215** | P | Pn | 07 43 53.4 | +2.9 |
| **PNHZ** | **Pukenui** | **4.73** | **206** | P | Pn | 07 43 52.2 | -0.1 |
| **BFZ** | **Birch Farm** | **5.41** | **201** | P | Pn | 07 44 00.3 | -1.0 |

*DDA **08** 07:47:15.7±0.0,41°.15N×43°.81E,h7km±3km,ML2.5*
*ISK **08** 07:47:15.8,41°.18N×43°.68E,h17km,ML3.1/7*
*TIF **08** 07:47:16.7,41°.08N×43°.73E,h16km*
*NORS **08** 07:47:18.0±0.0,41°.27N×43°.82E,h2km,MPVA3.3*

**ISC 08 07:47:17.7±0.9,41°.09N±0°.02×43°.73E±0°.02,h15km±9km, n38,σ1s67/69,Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BGD** | **Bogdanovka** | **0.20** | **331** | P | **Pb** | **07 47 22.1** | **-1.1** |
| BGD | | | | S | **Sb** | **07 47 25.9** | **-1.1** |
| **EAK** | **Akyaka** | **0.41** | **193** | P | **Pg** | **07 47 25.2** | **-0.8** |
| EAK | | | | *i* AML | AML | 07 47 31.0 | |
| | comp=N,878nm,0.3s | | | | | | |
| EAK | | | | *i* AML | AML | 07 47 31.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| EAK | | | | S | **Sg** | **07 47 31.2** | **-0.5** |
| **DMNI** | **Dmanisi** | **0.42** | **55** | P | **Pg** | **07 47 25.8** | **-0.5** |
| DMNI | | | | S | **Sg** | **07 47 31.9** | **-0.1** |
| **TRLG** | **Trialeti** | **0.53** | **32** | P | **Pg** | **07 47 27.6** | **-0.7** |
| TRLG | | | | S | **Sg** | **07 47 35.0** | **-0.3** |
| **BRNG** | **Burnasheti** | **0.54** | **8** | P | **Pg** | **07 47 28.2** | **-0.2** |
| BRNG | | | | S | **Sg** | **07 47 36.3** | **+0.7** |
| **KARS** | **Kars** | **0.68** | **227** | PG | **Pb** | **07 47 30.4** | **-0.9** |
| KARS | | | | SG | **Sg** | **07 47 40.6** | **+0.7** |
| **DIGO** | **Kars** | **0.73** | **202** | P | **Pb** | **07 47 31.1** | **-1.1** |
| DIGO | | | | S | **Sb** | **07 47 41.0** | **-1.1** |
| DIGO | | | | *i* AML | AML | 07 47 42.0 | |
| | comp=N,823nm,0.5s | | | | | | |
| DIGO | | | | *i* AML | AML | 07 47 43.0 | |
| | comp=E,931nm,0.4s | | | | | | |
| **EPOS** | **Posof** | **0.86** | **299** | P | **Pb** | **07 47 33.7** | **-0.8** |
| EPOS | | | | S | **Sb** | **07 47 45.5** | **-0.4** |
| EPOS | | | | *i* AML | AML | 07 47 46.0 | |
| | comp=N,254nm,0.4s | | | | | | |
| EPOS | | | | *i* AML | AML | 07 47 47.0 | |
| | comp=E,113nm,0.3s | | | | | | |
| **ABS** | **Abastumani** | **0.96** | **314** | P | **Pb** | **07 47 35.5** | **-0.6** |
| ABS | | | | S | **Sb** | **07 47 48.7** | **0.0** |
| **BTNK** | **Botanikuri** | **1.00** | **53** | P | **Pb** | **07 47 32.7** | **-4.1** |
| BTNK | | | | S | **Sb** | **07 47 46.5** | **-3.3** |
| **BTNK** | **Botanikuri** | **1.00** | **53** | P | **Pb** | **07 47 32.7** | **-4.1** |
| BTNK | | | | S | **Sb** | **07 47 46.0** | **-3.8** |
| BTNK | | | | *i* AML | AML | 07 47 46.0 | |
| | comp=E,927nm,0.3s | | | | | | |
| **TASB** | **TASBURUN-IGDIR** | **1.17** | **160** | PN | **Pn** | **07 47 39.2** | **-0.4** |
| TASB | | | | SN | **Sg** | **07 47 56.7** | **+1.2** |
| **GNI** | **Garni** | **1.21** | **140** | PN | **Pn** | **07 47 40.2** | **-0.1** |
| GNI | | | | SN | **Sg** | **07 47 57.4** | **+0.5** |
| **IGDI** | **IGDIR** | **1.25** | **168** | P | **Pb** | **07 47 39.7** | **-1.0** |
| IGDI | | | | S | **Sb** | **07 47 56.6** | **-0.3** |
| IGDI | | | | *i* AML | AML | 07 47 57.0 | |
| | comp=E,62nm,0.3s | | | | | | |
| IGDI | | | | *i* AML | AML | 07 47 58.0 | |
| | comp=N,72nm,0.3s | | | | | | |
| **DGRG** | **David-gareji** | **1.29** | **73** | P | **Pn** | **07 47 41.7** | **+0.4** |
| **KOTA** | **Agri, Merkez-K** | **1.35** | **197** | P | **Pb** | **07 47 43.2** | **+0.5** |
| KOTA | | | | S | **Sg** | **07 48 05.9** | **+4.7** |
| **DAGI** | **Agillar** | **1.37** | **270** | P | **Pn** | **07 47 43.0** | **+0.5** |
| DAGI | | | | S | **Sn** | **07 48 01.0** | **+0.6** |
| DAGI | | | | *i* AML | AML | 07 48 04.0 | |
| | comp=N,41nm,0.8s | | | | | | |
| DAGI | | | | *i* AML | AML | 07 48 04.0 | |
| | comp=E,47nm,0.4s | | | | | | |
| **TKB** | **Tkibuli** | **1.38** | **337** | P | **Pn** | **07 47 43.2** | **+0.8** |
| TKB | | | | S | **Sb** | **07 48 01.5** | **+0.9** |
| **DDEM** | **Demirkent** | **1.51** | **263** | P | **Pn** | **07 47 44.9** | **+0.6** |
| DDEM | | | | S | **Sb** | **07 48 06.0** | **+1.5** |
| DDEM | | | | *i* AML | AML | 07 48 09.0 | |
| | comp=N,90nm,0.3s | | | | | | |
| DDEM | | | | *i* AML | AML | 07 48 10.0 | |
| | comp=E,75nm,0.4s | | | | | | |
| **ONI** | **Oni** | **1.52** | **352** | P | **Pb** | **07 47 46.2** | **+0.7** |
| ONI | | | | S | **Sg** | **07 48 07.1** | **+0.6** |
| **ONI** | **Oni** | **1.52** | **352** | *i* Pg | **Pb** | **07 47 46.2** | **+0.7** |
| ONI | | | | *e*Sg | **Sg** | **07 48 07.1** | **+0.6** |
| **EATA** | **Eleskirt** | **1.55** | **218** | P | **Pn** | **07 47 46.2** | **+1.2** |
| EATA | | | | S | **Sb** | **07 48 06.6** | **+0.8** |
| EATA | | | | *i* AML | AML | 07 48 13.0 | |
| | comp=E,37nm,0.7s | | | | | | |
| **BATM** | **Batumi** | **1.62** | **289** | P | **Pn** | **07 47 42.7** | **-3.0** |
| BATM | | | | S | **Sn** | **07 48 04.6** | **-1.7** |
| **BATM** | **Batumi** | **1.62** | **289** | PN | **Pn** | **07 47 42.7** | **-3.0** |
| **PNSH** | **Pansheti** | **1.68** | **23** | P | **Pn** | **07 47 48.3** | **+1.5** |
| PNSH | | | | S | **Sb** | **07 48 11.1** | **+1.5** |
| **ZEI** | **Tsey** | **1.70** | **4** | *e*Pg | **Pb** | **07 47 49.5** | **+0.6** |
| ZEI | | | | *e*Sg | **Sg** | **07 48 12.8** | **+0.3** |
| **HOPA** | **Hopa-Artvin** | **1.75** | **281** | PN | **Pn** | **07 47 45.7** | **-1.8** |
| **LACR** | **Lac** | **1.79** | **13** | *e*Pg | **Pb** | **07 47 50.4** | **+0.1** |
| LACR | | | | *e*Sg | **Sb** | **07 48 14.9** | **+2.4** |
| **KOPR** | **Koprukoy-ERZUR** | **1.80** | **233** | PN | **Pn** | **07 47 47.6** | **-0.8** |
| **DIGR** | **Digorskoe uzhe** | **1.81** | **357** | *e*Pg | **Pb** | **07 47 51.1** | **+0.4** |
| DIGR | | | | *e*Sg | **Sg** | **07 48 16.1** | **0.0** |
| **DDFL** | **Dedoflistskaro** | **1.83** | **78** | P | **Pb** | **07 47 52.4** | **+1.3** |
| DDFL | | | | S | **Sg** | **07 48 21.1** | **+4.3** |
| **DDFL** | **Dedoflistskaro** | **1.83** | **78** | P | **Pb** | **07 47 51.9** | **+0.9** |
| DDFL | | | | *i* AML | AML | 07 48 23.0 | |
| | comp=N,123nm,0.7s | | | | | | |
| DDFL | | | | *i* AML | AML | 07 48 24.0 | |
| | comp=E,91nm,0.7s | | | | | | |
| **LGD** | **Lagodekhi** | **2.03** | **68** | P | **Pb** | **07 47 54.3** | **0.0** |
| LGD | | | | S | **Sb** | **07 48 21.5** | **+2.1** |
| **ERZM** | **Erzurum** | **2.16** | **238** | PN | **Pn** | **07 47 52.6** | **-0.8** |
| **LSNR** | **Lesken** | **2.19** | **2** | *e*Pg | **Pb** | **07 48 56.8** | **+1.6** |
| LSNR | | | | *e*Sg | **Sg** | **07 48 29.3** | **+1.2** |
| **CHOM** | **Cayeli-Rize** | **2.24** | **271** | PN | **Pn** | **07 47 53.3** | **-1.0** |
| **NEY** | **Neytrino** | **2.29** | **341** | *e*Pg | **Pb** | **07 47 59.7** | **+0.9** |
| NEY | | | | *e*Sg | **Sb** | **07 48 29.4** | **+2.5** |
| **SHA1** | **Shidzhatmaz** | **2.76** | **344** | *e*Pn | **Pb** | **07 48 09.0** | **+2.1** |
| SHA1 | | | | *e*Sn | **Sg** | **07 48 45.3** | **-1.3** |

*TUL **08** 08:02:12.5±1.5,35°.54N±0°.01×97°.31W±0°.02,h6km±3km, ML3.5,mb_Lg3.2/47(NEIC),Error ellipse: s-maj=2.2km s-min=1.6km az=92.0*

**NEIC 08 08:02:13.1±1.4,35°.56N±0°.01×97°.33W±0°.02,h9km±3km, Error ellipse: s-maj=2.5km s-min=2.1km az=114.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK025** | **Westminster Rd** | **0.03** | **336** | Pg | Pg | 08 02 14.2 | -0.6 |
| OK025 | | | | Sg | Sg | 08 02 15.4 | -0.6 |
| **OK001** | **Jones High Sch** | **0.03** | **81** | Pg | Pg | 08 02 14.0 | -0.8 |
| OK001 | | | | Sg | Sg | 08 02 15.1 | -1.0 |
| **OK009** | **Oakdale Elemen** | **0.08** | **287** | Pg | Pg | 08 02 15.1 | -0.3 |
| OK009 | | | | Sg | Sg | 08 02 17.0 | 0.0 |
| **OK005** | **Luther M Schoo** | **0.15** | **48** | Pg | Pg | 08 02 16.2 | -0.1 |
| OK005 | | | | Sg | Sg | 08 02 18.8 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.17** | **216** | Pg | Pg | 08 02 16.3 | -0.4 |
| OKCFA | | | | Sg | Sg | 08 02 19.2 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.18** | **212** | Pg | Pg | 08 02 16.4 | -0.4 |
| OKCSW | | | | Sg | Sg | 08 02 19.2 | -0.2 |
| **BCOK** | **Bluff Creek, N** | **0.25** | **293** | Pg | Pg | 08 02 18.1 | -0.1 |
| BCOK | | | | Sg | Sg | 08 02 22.3 | +0.7 |
| **OK029** | **Liberty Lake** | **0.26** | **336** | Pg | Pg | 08 02 18.4 | 0.0 |
| OK029 | | | | Sg | Sg | 08 02 22.8 | +0.8 |
| **FNO** | **Franklin** | **0.30** | **192** | Pg | Pg | 08 02 18.6 | -0.6 |
| FNO | | | | Sg | Sg | 08 02 23.1 | -0.1 |
| **OK011** | **Prague** | **0.53** | **98** | Pg | Pg | 08 02 22.6 | -0.7 |
| OK011 | | | | Sg | Sg | 08 02 30.2 | 0.0 |
| **W35A** | **Tecumseh** | **0.55** | **137** | Pg | Pg | 08 02 22.9 | -0.8 |
| W35A | | | | Sg | Sg | 08 02 30.4 | -0.4 |
| **OK031** | **S. Brethren Rd** | **0.56** | **45** | Pg | Pg | 08 02 23.4 | -0.6 |
| OK031 | | | | Sg | Sg | 08 02 31.6 | +0.3 |
| **OK030** | **Cody Creek RV** | **0.57** | **50** | Pg | Pg | 08 02 23.3 | -0.9 |
| OK030 | | | | Sg | Sg | 08 02 32.0 | +0.2 |
| **OK033** | **Mehan** | **0.58** | **33** | Pg | Pg | 08 02 23.9 | -0.4 |
| OK033 | | | | Sg | Sg | 08 02 32.4 | +0.4 |
| **OK034** | **N. Norfolk Rd.** | **0.67** | **47** | Pg | Pg | 08 02 25.3 | -0.8 |
| OK034 | | | | Sg | Sg | 08 02 34.8 | -0.1 |
| **QUOK** | **Quay** | **0.79** | **39** | Pg | Pg | 08 02 27.6 | -0.8 |
| QUOK | | | | Sg | Sg | 08 02 38.7 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.04** | **204** | Pg | Pg | 08 02 32.4 | -0.6 |
| X34A | | | | Sg | Sb | 08 02 47.3 | +0.3 |
| **CROK** | **Carrier** | **1.09** | **331** | Pg | Pg | 08 02 33.3 | -0.7 |
| CROK | | | | Sg | Sb | 08 02 48.3 | 0.0 |
| **BLOK** | **Blackwell** | **1.21** | **4** | Pn | Pb | 08 02 35.3 | -0.8 |
| BLOK | | | | Sg | Sb | 08 02 51.8 | 0.0 |
| **TUL1** | **Leonard** | **1.30** | **74** | Pn | Pn | 08 02 35.9 | -1.5 |
| **GC02** | **Grant County #** | **1.36** | **342** | | Pn | 08 02 38.0 | -0.3 |
| **OK032** | **Salt Plains WL** | **1.44** | **330** | | Pn | 08 02 39.2 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.45** | **236** | Pn | Pn | 08 02 38.8 | -0.7 |
| **KAN13** | **South Haven SW** | **1.46** | **355** | | Pn | 08 02 39.5 | -0.1 |
| **KAN14** | **Manchester OK** | **1.49** | **340** | | Pn | 08 02 40.1 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.51** | **26** | | Pn | 08 02 39.9 | -0.4 |
| **KAN17** | **Caldwell West** | **1.53** | **347** | | Pn | 08 02 40.7 | +0.2 |
| **LOOK** | **Love County** | **1.56** | **176** | | Pn | 08 02 41.0 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.59** | **302** | | Pn | 08 02 41.8 | +0.4 |
| **OK035** | **E0210 Rd and N** | **1.61** | **316** | Pn | Pn | 08 02 41.5 | -0.2 |
| **KAN05** | **Bluff City Nor** | **1.61** | **344** | Pn | Pn | 08 02 41.3 | -0.4 |
| KAN05 | | | | IAmb_Lg | | 08 03 04.5 | |
| | comp=Z,94nm,0.8s | | | | | | |
| **KAN01** | **Argonia South** | **1.63** | **348** | | Pn | 08 02 42.1 | +0.1 |
| **KAN10** | **Anthony SW Sta** | **1.68** | **339** | | Pn | 08 02 42.7 | 0.0 |
| **KAN06** | **Argonia West S** | **1.74** | **346** | | Pn | 08 02 43.6 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **1.75** | **343** | | Pn | 08 02 44.4 | +0.8 |
| KAN08 | | | | IAmb_Lg | | 08 03 09.3 | |
| | comp=Z,85nm,0.8s | | | | | | |
| **KAN16** | **Harper SW Stat** | **1.77** | **340** | Pn | Pn | 08 02 44.7 | +0.8 |
| **KAN12** | **Harper NE Stat** | **1.82** | **343** | | Pn | 08 02 45.1 | +0.6 |
| **X37A** | **Clayton** | **1.87** | **121** | | Pn | 08 02 45.7 | +0.4 |
| **Z35A** | **Perchaven, San** | **2.22** | **178** | Pn | Pn | 08 02 49.1 | -0.9 |
| **U38A** | **Gravette** | **2.54** | **69** | | Pn | 08 02 56.0 | +1.5 |
| **HHAR** | **Hobbs** | **2.84** | **74** | | Pn | 08 02 58.5 | -0.2 |
| **W39A** | **Magazine** | **2.92** | **96** | | Pn | 08 02 58.9 | -0.8 |
| **Z38A** | **Mt. Pleasant** | **3.00** | **139** | Pn | Pn | 08 03 01.2 | +0.5 |
| Z38A | | | | IAmb_Lg | | 08 03 52.1 | |
| | comp=Z,68nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.24** | **107** | Pn | Pn | 08 03 04.6 | +0.6 |
| **WHTX** | **Lake Whitney,** | **3.56** | **182** | Pn | Pn | 08 03 08.8 | +0.4 |
| **KSU1** | **Kansas State U** | **3.58** | **9** | IAmb_Lg | | 08 04 13.6 | |
| | comp=Z,63nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **3.63** | **261** | Pn | Pn | 08 03 10.3 | +0.8 |
| **U40A** | **Yellville** | **3.71** | **76** | Pn | Pn | 08 03 10.0 | -0.6 |
| **237A** | **Washetta, Mont** | **3.76** | **160** | Pn | Pn | 08 03 10.7 | -0.6 |
| **CBKS** | **Cedar Bluff** | **3.78** | **330** | Pn | Pn | 08 03 12.1 | +0.6 |
| **X40A** | **Basin Creek Fa** | **3.84** | **105** | Pn | Pn | 08 03 12.3 | +0.1 |
| X40A | | | | IAmb_Lg | | 08 04 21.4 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.86** | **55** | Pn | Pn | 08 03 12.7 | +0.1 |
| S39A | | | | IAmb_Lg | | 08 04 16.6 | |
| | comp=Z,85nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **3.94** | **117** | Pn | Pn | 08 03 14.1 | +0.4 |
| WLAR | | | | IAmb_Lg | | 08 04 26.6 | |
| | comp=Z,55nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.12** | **92** | Pn | Pn | 08 03 16.2 | 0.0 |
| WHAR | | | | IAmb_Lg | | 08 04 24.8 | |
| | comp=Z,55nm,1.2s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.17** | **94** | Pn | Pn | 08 03 17.0 | +0.2 |
| **FCAR** | **Ozark Folk Cen** | **4.24** | **84** | Pn | Pn | 08 03 17.7 | -0.2 |
| **MGMO** | **Mountain Grove** | **4.38** | **67** | Pn | Pn | 08 03 17.7 | -2.1 |
| MGMO | | | | IAmb_Lg | | 08 04 33.6 | |
| | comp=Z,71nm,0.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CSP1** | **Cessapalombo** | **0.52** | **5** | P | Pg | 08 10 51.2 | +0.1 | |
| CSP1 | | | | S | Sb | 08 10 59.4 | -0.3 | |
| **CSP1** | **Cessapalombo** | **0.52** | **5** | P | Pg | 08 10 51.4 | +0.3 | |
| **CRMI** | **Carmignano** | **2.00** | **308** | P | Pb | 08 11 17.1 | -0.2 | |
| CRMI | | | | AML | AML | | | |
| | comp=E,238μm,0.8s | | | | | | | |
| CRMI | | | | AML | AML | | | |
| | comp=N,154μm,0.5s | | | | | | | |
| **CRMI** | **Carmignano** | **2.00** | **308** | P | Pb | 08 11 17.1 | -0.3 | |
| CRMI | | | | S | Sn | 08 11 20.1 | -20 | |
| CRMI | | | | AML | AML | | | |
| | comp=E,238μm,0.8s | | | | | | | |
| CRMI | | | | AML | AML | | | |
| | comp=N,154μm,0.5s | | | | | | | |
| CRMI | | | | AML | AML | | | |
| | comp=E,238μm,0.8s | | | | | | | |
| CRMI | | | | AML | AML | | | |
| | comp=N,154μm,0.5s | | | | | | | |
| **PII** | **Pisa** | **2.23** | **302** | ⇓P | Pb | 08 11 20.4 | -0.9 | |
| PII | | | | AML | AML | | | |
| | comp=N,164μm,0.9s | | | | | | | |
| PII | | | | AML | AML | | | |
| | comp=E,166μm,1.3s | | | | | | | |
| **PII** | **Pisa** | **2.23** | **302** | S | Pg | 08 11 25.2 | +1.5 | |
| PII | | | | AML | AML | | | |
| | comp=E,166μm,1.3s | | | | | | | |
| PII | | | | AML | AML | | | |
| | comp=N,164μm,0.9s | | | | | | | |
| PII | | | | AML | AML | | | |
| | comp=N,164μm,0.9s | | | | | | | |
| PII | | | | AML | AML | | | |
| | comp=E,166μm,1.3s | | | | | | | |
| **MAIM** | **Mastiano** | **2.35** | **305** | ⇓P | Pb | 08 11 22.4 | -0.9 | |
| **MAIM** | **Mastiano** | **2.35** | **305** | P | Pb | 08 11 22.4 | -1.0 | |
| MAIM | | | | S | Pg | 08 11 28.6 | +2.6 | |
| **MRLC** | **Muro Lucano** | **2.53** | **135** | S | Pb | 08 11 25.0 | -1.5 | |
| **PLMA** | **Palmaria, Port** | **2.81** | **303** | P | Pn | 08 11 24.5 | -1.4 | |
| PLMA | | | | AML | AML | | | |
| | comp=E,134μm,1.6s | | | | | | | |
| PLMA | | | | AML | AML | | | |
| | comp=N,140μm,1.6s | | | | | | | |
| **PLMA** | **Palmaria, Port** | **2.81** | **303** | AML | AML | | | |
| | comp=N,140μm,1.6s | | | | | | | |
| PLMA | | | | AML | AML | | | |
| | comp=E,134μm,1.6s | | | | | | | |
| PLMA | | | | AML | AML | | | |
| | comp=N,140μm,1.6s | | | | | | | |
| PLMA | | | | AML | AML | | | |
| | comp=E,134μm,1.6s | | | | | | | |
| **CRND** | **Cornuda** | **3.34** | **347** | P | Pb | 08 11 38.9 | -1.4 | |
| **GALF** | **Gagliano Caste** | **4.98** | **167** | S | Pg | 08 12 14.0 | -2.5 | |

**ROM 08 08:11:12.9**±0.1,**43°.627N**±0°.007×**10°.943E**±0°.010,**h8**km, **ML1.5**/2,**Error ellipse: s-maj=0.8km s-min=0.7km az=299.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARCI** | **Arcidosso** | **0.87** | **153** | P | Pg | 08 11 29.4 | -0.2 |
| **LNSS** | **Leonessa** | **1.84** | **123** | AML | AML | | |
| | comp=N,1049μm,0.1s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,652μm,0.3s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=N,1054μm,0.1s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,651μm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **2.00** | **123** | AML | AML | | |
| | comp=N,348μm,0.4s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,325μm,1.3s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,388μm,0.3s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,189μm,0.4s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,347μm,0.4s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,326μm,1.3s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,326μm,1.3s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,388μm,0.3s | | | | | | |
| **SMA1** | **SAN MARTINO** | **2.02** | **119** | AML | AML | | |
| | comp=E,150μm,1.4s | | | | | | |
| SMA1 | | | | AML | AML | | |
| | comp=N,150μm,0.3s | | | | | | |
| **LPEL** | **Lama del Pelig** | **2.86** | **122** | AML | AML | | |
| | comp=E,193μm,0.2s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,96μm,1.2s | | | | | | |
| **PTRJ** | **Pietraroja** | **3.48** | **129** | AML | AML | | |
| | comp=E,281μm,1.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,296μm,0.4s | | | | | | |

*UCR **08** 08:20:34.9±1.4, 10°.04N×84°.65W, h53km±4km, MW3.6*
*INET **08** 08:20:35.6±1.2, 10°.05N×84°.63W, h44km±8km, MD2.6, ML3.4*

**ISC 08 08:20:35.6**±1.4,**10°.05N**±0°.04×**84°.65W**±0°.04,**h46**km±11km, **n39**,σ0**s71**/47,**9C-2D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAFE** | **Finca La Fe, P** | **0.35** | **228** | ⇓*e*P | **Pn** | **08 20 44.7** | **-0.3** |
| **LAFE** | **Finca La Fe, P** | **0.35** | **228** | *e*P | **Pn** | **08 20 44.7** | **-0.3** |
| LAFE | | | | IAML | | 08 20 54.6 | |
| | comp=E,3μm,0.2s | | | | | | |
| **JACO** | **JACO, Garabito** | **0.38** | **182** | *e*P | **Pn** | **08 20 44.5** | **-0.8** |
| JACO | | | | *e*S | **Sn** | **08 20 52.6** | **+0.5** |
| **JTS** | **Las Juntas de** | **0.39** | **309** | *e*P | **Pn** | **08 20 44.8** | **-0.6** |
| **JTS** | **Las Juntas de** | **0.39** | **309** | *e*P | **Pn** | **08 20 44.8** | **-0.6** |
| JTS | | | | *e*S | **Sn** | **08 20 52.9** | **+0.5** |
| **CEDE** | **Laguna Cedeo** | **0.44** | **353** | ⇑*i*P | **Pn** | **08 20 46.2** | **+0.1** |
| **HDC** | **Heredia** | **0.53** | **95** | *e*P | **Pn** | **08 20 46.6** | **-0.6** |
| HDC | | | | *e*S | **Sn** | **08 20 55.7** | **+0.4** |
| **HDC3** | **Heredia 3** | **0.53** | **95** | *e*P | **Pn** | **08 20 46.7** | **-0.5** |
| HDC3 | | | | *e*S | **Sn** | **08 20 56.0** | **+0.7** |
| **CAO2** | **Cobano, Puntar** | **0.58** | **232** | *e*P | **Pn** | **08 20 46.4** | **-1.3** |
| **ACAL** | **Aguas Claras** | **0.70** | **327** | ⇑*i*P | **Pn** | **08 20 48.9** | **-0.4** |
| **LCR2** | **La Lucha 2** | **0.70** | **116** | ⇑*e*P | **Pn** | **08 20 48.5** | **-0.9** |
| LCR2 | | | | *e*S | **Sn** | **08 20 59.2** | **-0.2** |
| **COVE** | **Coope Vega, Sa** | **0.71** | **20** | ⇑*e*P | **Pn** | **08 20 48.6** | **-0.8** |
| **PTEN** | **Parque Tenorio** | **0.74** | **333** | *i*P | **Pn** | **08 20 49.8** | **-0.2** |
| **CUI** | **Cuipilapa** | **0.79** | **320** | ⇑*i*P | **Pn** | **08 20 50.1** | **-0.5** |
| **RIMA** | **Rio Macho** | **0.82** | **110** | ⇑*e*P | **Pn** | **08 20 50.3** | **-0.7** |
| **RIMA** | **Rio Macho** | **0.82** | **110** | *e*P | **Pn** | **08 20 50.3** | **-0.7** |
| **COLC** | **Colonia** | **0.82** | **318** | *i*P | **Pn** | **08 20 50.5** | **-0.5** |
| **DUNO** | **Dulce Nombre,** | **0.84** | **272** | *e*P | **Pn** | **08 20 50.8** | **-0.3** |
| **HORNC** | **Hornillas** | **0.84** | **322** | *i*P | **Pn** | **08 20 50.6** | **-0.7** |
| **ORTG** | **Ortega, Santa** | **0.86** | **292** | *e*P | **Pn** | **08 20 51.3** | **-0.2** |
| **INDI** | **Punta índio, G** | **0.86** | **258** | ⇓*e*P | **Pn** | **08 20 50.2** | **-1.2** |
| **GUAB** | **Guayabo de Bag** | **0.87** | **319** | *i*P | **Pn** | **08 20 51.1** | **-0.6** |
| **GUAI** | **GUAI** | **0.88** | **285** | *i*P | **Pn** | **08 20 51.4** | **-0.2** |
| **LIM1** | **Limonal** | **0.88** | **317** | *i*P | **Pn** | **08 20 51.2** | **-0.6** |
| **VMAR** | **Armenia, Volca** | **0.89** | **328** | ⇑*i*P | **Pn** | **08 20 51.5** | **-0.5** |
| VMAR | | | | *e*S | **Sn** | **08 21 04.8** | **+1.0** |
| **CDM** | **Cerro de Muert** | **1.00** | **119** | *e*P | **Pn** | **08 20 53.2** | **-0.5** |
| CDM | | | | IAML | | 08 21 08.3 | |
| | comp=N,682nm,0.3s | | | | | | |
| **LAPC** | **Finca la Perla** | **1.06** | **313** | *i*P | **Pn** | **08 20 53.2** | **-0.9** |
| **BUAI** | **Buenos Aires** | **1.07** | **321** | ⇑*i*P | **Pn** | **08 20 53.6** | **-0.6** |
| **EDDO** | **Dominical** | **1.10** | **136** | *e*P | **Pn** | **08 20 54.2** | **-0.4** |
| EDDO | | | | *e*S | **Sn** | **08 21 10.3** | **+1.6** |
| **HZTE** | **Horizontes, Gu** | **1.15** | **305** | *e*P | **Pn** | **08 20 54.9** | **-0.4** |
| **HZTE** | **Horizontes, Gu** | **1.15** | **305** | *e*P | **Pn** | **08 20 55.3** | **0.0** |
| HZTE | | | | IAML | | 08 21 14.5 | |
| | comp=E,892nm,0.6s | | | | | | |
| **PEZE** | **Perez Zeledon,** | **1.16** | **125** | *e*P | **Pn** | **08 20 54.4** | **-1.2** |
| **PEZE** | **Perez Zeledon,** | **1.16** | **125** | *e*P | **Pn** | **08 20 55.6** | **0.0** |
| **EDPN** | **Palmar Norte** | **1.59** | **132** | *e*P | **Pn** | **08 21 00.7** | **-0.7** |
| **EDBA** | **Buenos Aires** | **1.61** | **123** | *e*P | **Pn** | **08 21 00.7** | **-1.0** |
| EDBA | | | | *e*S | **Sn** | **08 21 21.3** | **0.0** |
| **ACON** | **Acoyapa** | **1.98** | **345** | *e*P | **Pn** | **08 21 06.0** | **-0.7** |
| **PIRO** | **Carate, Puerto** | **2.08** | **142** | *e*P | **Pn** | **08 21 08.5** | **+0.4** |
| **PIRO** | **Carate, Puerto** | **2.08** | **142** | *e*P | **Pn** | **08 21 09.3** | **+1.2** |
| **ESPN** | **Las Esperanzas** | **2.16** | **9** | *e*P | **Pn** | **08 21 08.7** | **-0.5** |

**IDC 08 08:43:14.3**±3.1,**53°.79N**×**88°.17E**,**h0**km,**mb1 3.3**/2, **mb1mx3.1**/35,**mbtmp3.3**/2,**ML2.9**/2,**Error ellipse: s-maj=26.6km s-min=16.4km az=58.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.99** | **276** | *i* | | 08 56 20.0 | |
| | baz=89,slow=339,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.99** | **276** | Pg | Pn | 08 43 49.8 | +0.6 |
| | 1.7nm,0.3s,baz=90,slow=13,SNR=20 | | | | | | |
| ZALV | | | | Lg | Lg | 08 44 17.5 | |
| | 4.7nm,0.3s,baz=93,slow=26,SNR=21 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.72** | **246** | Pn | Pn | 08 44 55.0 | +1.0 |
| | 0.3nm,0.3s,baz=62,slow=14,SNR=6.6 | | | | | | |
| KURBB | | | | Lg | Lg | 08 46 48.0 | |
| | baz=62,slow=34,SNR=0.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.95** | **211** | Pn | Pn | 08 45 12.3 | +1.3 |
| | 0.1nm,0.3s,baz=31,slow=14,SNR=9.4 | | | | | | |
| MKAR | | | | Sn | Sn | 08 46 39.9 | -1.6 |
| | 0.1nm,0.3s,baz=31,slow=28,SNR=1.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 47 24.1 | |
| | 0.0nm,0.3s,baz=23,slow=20,SNR=1.1 | | | | | | |

**IDC 08 08:49:13.6**±3.5,**54°.37N**×**87°.48E**,**h0**km,**mb1 2.7**/2, **mb1mx2.6**/37,**mbtmp2.7**/2,**ML2.4**/2,**Error ellipse: s-maj=31.4km s-min=20.4km az=37.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.62** | **256** | *i* | | 08 58 49.3 | |
| | baz=76,slow=338,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.62** | **256** | Pg | Pn | 08 49 42.5 | -0.9 |
| | 0.8nm,0.3s,baz=77,slow=17,SNR=10 | | | | | | |
| ZALV | | | | Lg | Lg | 08 50 06.4 | |
| | 1.3nm,0.3s,baz=81,slow=31,SNR=7.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.63** | **239** | Pn | Pn | 08 50 51.2 | -1.0 |
| | 0.0nm,0.3s,baz=57,slow=14,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.27** | **206** | Pn | Pn | 08 51 17.0 | +2.2 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=5.5 | | | | | | |
| MKAR | | | | Lg | Lg | 08 53 36.1 | |
| | 0.1nm,0.3s,baz=14,slow=30,SNR=3.1 | | | | | | |

**IDC 08 09:00:20.4**±3.2,**54°.48N**×**86°.87E**,**h0**km,**mb1 2.8**/2, **mb1mx2.7**/43,**mbtmp2.8**/2,**ML2.5**/2,**Error ellipse: s-maj=27.6km s-min=16.7km az=60.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.31** | **247** | *i* | | 09 09 30.0 | |
| | baz=64,slow=334,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.31** | **247** | Pg | Pn | 09 00 45.9 | 0.0 |
| | 0.5nm,0.3s,baz=62,slow=15,SNR=4.4 | | | | | | |
| ZALV | | | | Lg | Lg | 09 01 03.3 | |
| | 0.7nm,0.3s,baz=66,slow=27,SNR=6.5 | | | | | | |
| ZALV | | | | Rg | Rg | 09 01 09.7 | |
| | 6.0nm,0.8s,baz=61,slow=27,SNR=9.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.38** | **236** | Pn | Pn | 09 01 55.0 | -0.6 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.22** | **203** | Pn | Pn | 09 02 22.4 | +1.6 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=9.4 | | | | | | |
| MKAR | | | | Sn | Sn | 09 03 52.6 | -1.7 |
| | 0.0nm,0.3s,baz=31,slow=27,SNR=6.9 | | | | | | |
| MKAR | | | | Lg | Lg | 09 04 39.8 | |
| | 0.0nm,0.3s,baz=28,slow=36,SNR=2.3 | | | | | | |

**IDC 08 09:09:12.9**±2.4,**53°.64N**×**86°.94E**,**h0**km,**mb1 2.8**/2, **mb1mx2.8**/44,**mbtmp2.8**/2,**ML2.6**/2,**Error ellipse: s-maj=22.0km s-min=12.5km az=76.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.30** | **285** | *i* | | 09 18 11.2 | |
| | baz=100,slow=340,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.30** | **285** | Pg | Pg | 09 09 36.6 | -1.1 |
| | 1.2nm,0.3s,baz=100,slow=17,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 09 09 55.0 | |
| | 1.3nm,0.3s,baz=107,slow=30,SNR=11 | | | | | | |
| ZALV | | | | Rg | Rg | 09 10 02.9 | |
| | 3.6nm,0.5s,baz=95,slow=31,SNR=7.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.00** | **243** | Pn | Pn | 09 10 43.0 | +0.2 |
| | 0.1nm,0.3s,baz=59,slow=13,SNR=2.3 | | | | | | |
| KURBB | | | | Lg | Lg | 09 12 24.6 | |
| | 0.0nm,0.3s,baz=60,slow=32,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.47** | **205** | Pn | Pn | 09 11 05.0 | +1.9 |
| | 0.2nm,0.3s,baz=27,slow=13,SNR=15 | | | | | | |
| MKAR | | | | Sn | Sn | 09 12 27.4 | -1.1 |
| | 0.1nm,0.3s,baz=22,slow=31,SNR=6.4 | | | | | | |
| MKAR | | | | Lg | Lg | 09 13 09.7 | |
| | 0.1nm,0.3s,baz=30,slow=29,SNR=5.1 | | | | | | |

**IDC 08 09:18:25.9**±3.2,**54°.31N**×**86°.97E**,**h0**km,**mb1 2.8**/2, **mb1mx2.7**/40,**mbtmp2.8**/2,**ML2.3**/2,**Error ellipse: s-maj=28.2km s-min=17.3km az=61.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.32** | **255** | *i* | | 09 27 39.3 | |
| | baz=73,slow=338,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.32** | **255** | Pg | Pg | 09 18 50.0 | -1.2 |
| | 1.1nm,0.3s,baz=71,slow=16,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 09 19 08.2 | |
| | 1.2nm,0.3s,baz=81,slow=29,SNR=7.0 | | | | | | |
| ZALV | | | | Rg | Rg | 09 19 14.2 | |
| | 6.5nm,0.5s,baz=75,slow=26,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.34** | **238** | Pn | Pn | 09 20 01.9 | +1.3 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.09** | **203** | Pn | Pn | 09 20 25.8 | +1.2 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=5.4 | | | | | | |
| MKAR | | | | Sn | Sn | 09 21 55.9 | -0.8 |
| | 0.0nm,0.3s,baz=28,slow=28,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 22 41.0 | |
| | 0.0nm,0.3s,baz=20,slow=31,SNR=2.3 | | | | | | |

*NEIC **08** 09:32:11.1±1.9, 37°.84S±0°.08×179°.8E±0°.1, h10km±1km, mb4.7/13,Error ellipse: s-maj=14.4km s-min=14.1km az=56.0*
*WEL **08** 09:32:14.7±1.9, 38°.S±19°×18°.0E±1°.9, h27km±45km, M4.7/13, ML5.0/13, MLv4.7/13, Error ellipse: s-maj=0.0km s-min=0.0km az=44.6*
*IDC **08** 09:32:18.9±1.9, 37°.47S×179°.45E, h60km±15km, mb4.5/8, mb1 4.5/11, mb1mx4.2/24, mbtmp4.6/11, MS3.9/29, Ms1 3.9/29, ms1mx3.7/56, Error ellipse: s-maj=18.0km s-min=13.3km az=162.0*

**ISC 08 09:32:10.8**±1.6,**37°.72S**±0°.05×**179°.86E**±0°.06,**h10**km±8km, **n247**,σ1**s72**/230,**mb4.8**/15,**MS3.9**/29,**Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **1.15** | **264** | P | **Pn** | **09 32 34.1** | **+1.1** |
| **MXZ** | **Matakaoa Point** | **1.24** | **277** | P | **Pg** | **09 32 35.0** | **+0.3** |
| MXZ | | | | S | **Sn** | **09 32 50.4** | **-0.7** |
| **MXZ** | **Matakaoa Point** | **1.24** | **277** | Pn | **Pg** | **09 32 35.0** | **+0.3** |
| **PUZ** | **Puketiti** | **1.32** | **254** | P | **Pg** | **09 32 36.6** | **+0.5** |
| **PKGZ** | **Pakihiroa** | **1.42** | **263** | P | **Pb** | **09 32 37.7** | **+0.2** |
| **TWGZ** | **Tauwhareparae** | **1.56** | **252** | P | **Pb** | **09 32 40.1** | **+0.4** |
| TWGZ | | | | S | **Sn** | **09 32 59.7** | **+0.8** |
| **HAZ** | **Te Kaha** | **1.65** | **268** | P | **Pb** | **09 32 40.7** | **-0.5** |
| **TKGZ** | **Te Karaka** | **1.74** | **245** | P | **Pn** | **09 32 42.8** | **+1.7** |
| TKGZ | | | | S | **Sn** | **09 33 04.4** | **+0.9** |
| **RUGZ** | **Raukumara Rang** | **1.75** | **261** | P | **Pb** | **09 32 42.4** | **-0.6** |
| **RIGZ** | **Rimuhau** | **1.93** | **238** | P | **Pn** | **09 32 45.4** | **+1.7** |
| RIGZ | | | | S | **Sn** | **09 33 09.7** | **+1.7** |
| **MWZ** | **Matawai** | **1.94** | **251** | P | **Pn** | **09 32 45.0** | **+1.0** |
| MWZ | | | | S | **Sn** | **09 33 07.8** | **-0.7** |
| **PRGZ** | **Paritu Road** | **1.97** | **232** | P | **Pn** | **09 32 46.0** | **+1.7** |
| **RAGZ** | **Rawiri** | **2.08** | **247** | P | **Pn** | **09 32 47.1** | **+1.2** |
| **MHGZ** | **Mahia Peninsul** | **2.10** | **226** | P | **Pn** | **09 32 47.8** | **+1.8** |
| **KNZ** | **Kokohu** | **2.16** | **232** | P | **Pn** | **09 32 48.1** | **+1.3** |
| **URZ** | **Urewera** | **2.24** | **255** | P | **Pn** | **09 32 49.5** | **+1.6** |
| | 156nm,0.3s,baz=92,slow=1.7,SNR=1247 | | | | | | |
| URZ | | | | S | **Sn** | **09 33 15.2** | **-0.5** |
| | 465nm,0.3s,baz=357,slow=11,SNR=8.6 | | | | | | |
| URZ | | | | LR | LR | 09 33 35.8 | |
| | comp=Z,2μm,19.1s,baz=274,slow=38 | | | | | | |
| **URZ** | **Urewera** | **2.24** | **255** | P | **Pn** | **09 32 49.5** | **+1.6** |
| **SNGZ** | **Shannon Statio** | **2.25** | **241** | P | **Pn** | **09 32 49.6** | **+1.5** |
| **WHRZ** | **Whale Island** | **2.29** | **266** | P | **Pn** | **09 32 50.5** | **+1.8** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **RTZ** | **Ruatahuna** | **2.44** | **248** | P | **Pn** | **09 32 52.5** **+1.6** |
| **EDRZ** | **Edgecumbe** | **2.50** | **260** | P | **Pn** | **09 32 53.0** **+1.4** |
| **MARZ** | **Manawahe** | **2.54** | **263** | P | **Pn** | **09 32 53.4** **+1.3** |
| **MUGZ** | **Murupara** | **2.55** | **252** | P | **Pn** | **09 32 53.6** **+1.3** |
| **OPRZ** | **Ohinepanea** | **2.62** | **266** | P | **Pn** | **09 32 53.9** **+0.7** |
| **MTHZ** | **Maungataniwha** | **2.63** | **244** | P | **Pn** | **09 32 55.1** **+1.7** |
| **TARZ** | **Mount Tarawera** | **2.70** | **258** | P | **Pn** | **09 32 55.8** **+1.4** |
| **RRRZ** | **Republican Roa** | **2.71** | **256** | P | **Pn** | **09 32 55.8** **+1.3** |
| **MKRZ** | **Makatiti** | **2.72** | **260** | P | **Pn** | **09 32 56.7** **+2.1** |
| **ARHZ** | **Aropaoanui** | **2.73** | **235** | P | **Pn** | **09 32 56.6** **+1.9** |
| **NMHZ** | **Naumai** | **2.77** | **239** | P | **Pn** | **09 32 57.0** **+1.7** |
| **OMRZ** | **Omania** | **2.79** | **261** | P | **Pn** | **09 32 56.7** **+1.1** |
| **HLRZ** | **Highlands Stat** | **2.82** | **258** | P | **Pn** | **09 32 57.6** **+1.5** |
| **PRRZ** | **Plateau Road** | **2.84** | **253** | P | **Pn** | **09 32 57.6** **+1.3** |
| **TGRZ** | **Tauranga** | **2.85** | **269** | P | **Pn** | **09 32 57.3** **+0.8** |
| **KARZ** | **Kaharoa** | **2.88** | **263** | P | **Pn** | **09 32 57.8** **+1.0** |
| **ALRZ** | **Allen Road** | **2.90** | **252** | P | **Pn** | **09 32 58.3** **+1.3** |
| **HRRZ** | **Handcock Road** | **2.90** | **256** | P | **Pn** | **09 32 58.4** **+1.3** |
| **MYRZ** | **Mayor Island** | **2.91** | **278** | P | **Pn** | **09 32 57.9** **+0.7** |
| **CKHZ** | **Cape Kidnapper** | **2.92** | **227** | P | **Pn** | **09 32 58.4** **+1.1** |
| **HSRZ** | **Hossack Road** | **2.92** | **257** | P | **Pn** | **09 32 58.8** **+1.5** |
| **MRHZ** | **Matea Rd** | **2.93** | **247** | P | **Pn** | **09 32 58.9** **+1.4** |
| **NGRZ** | **Ngongotaha** | **2.93** | **261** | P | **Pn** | **09 32 59.1** **+1.5** |
| **UTU** | **Utuhina** | **2.94** | **260** | P | **Pn** | **09 32 59.4** **+1.9** |
| **BKZ** | **Black Stump Fm** | **3.02** | **240** | P | **Pn** | **09 32 59.9** **+1.3** |
| **BKZ** | **Black Stump Fm** | **3.02** | **240** | Pn | **Pn** | **09 32 60.0** **+1.3** |
| **MCHZ** | **McNeill Hill** | **3.02** | **234** | P | **Pn** | **09 33 00.1** **+1.3** |
| **WPRZ** | **Whakapapataran** | **3.02** | **253** | P | **Pn** | **09 33 00.5** **+1.7** |
| **GRRZ** | **Galatos Road** | **3.03** | **257** | P | **Pn** | **09 33 00.4** **+1.6** |
| **KMRZ** | **Kaimai** | **3.11** | **266** | P | **Pn** | **09 33 00.9** **+1.0** |
| **KAHZ** | **Kahuranaki** | **3.12** | **227** | P | **Pn** | **09 33 01.2** **+1.0** |
| **HATZ** | **Hinemaiaia** | **3.19** | **247** | P | **Pn** | **09 33 02.2** **+1.2** |
| **KWTZ** | **Kaweka Forest** | **3.19** | **237** | P | **Pn** | **09 33 02.3** **+1.2** |
| **WHTZ** | **Whakaora** | **3.22** | **252** | P | **Pn** | **09 33 03.1** **+1.6** |
| **KUTZ** | **Kaahu Road** | **3.28** | **255** | P | **Pn** | **09 33 03.4** **+1.2** |
| **PXZ** | **Pawanui** | **3.29** | **224** | P | **Pn** | **09 33 02.8** **+0.4** |
| **KRHZ** | **Kereru** | **3.34** | **234** | P | **Pn** | **09 33 03.9** **+0.7** |
| **RITZ** | **Rihia Road** | **3.39** | **247** | P | **Pn** | **09 33 05.2** **+1.4** |
| **RATZ** | **Rangitukua** | **3.42** | **249** | P | **Pn** | **09 33 06.4** **+2.2** |
| **KUZ** | **Kuaotunu** | **3.44** | **285** | P | **Pn** | **09 33 04.5** **0.0** |
| **TOZ** | **Tahuroa Road** | **3.46** | **268** | P | **Pn** | **09 33 05.3** **+0.6** |
| **BHHZ** | **Black Hill Sta** | **3.46** | **238** | P | **Pn** | **09 33 05.9** **+1.0** |
| **TLZ** | **Tolley Road** | **3.47** | **259** | P | **Pn** | **09 33 05.7** **+0.8** |
| **KATZ** | **Kakaramea** | **3.51** | **248** | P | **Pn** | **09 33 07.0** **+1.4** |
| **TMVZ** | **Te Maari** | **3.55** | **246** | P | **Pn** | **09 33 07.0** **+0.9** |
| **WPHZ** | **Waipukurau** | **3.55** | **228** | P | **Pn** | **09 33 06.4** **+0.4** |
| **ETVZ** | **East Tongariro** | **3.55** | **245** | P | **Pn** | **09 33 07.1** **+0.9** |
| **NTVZ** | **North Tongarir** | **3.56** | **246** | P | **Pn** | **09 33 07.2** **+0.9** |
| **PRHZ** | **Porangahau** | **3.58** | **224** | P | **Pn** | **09 33 06.4** **0.0** |
| **KRVZ** | **Karewarewa** | **3.59** | **246** | P | **Pn** | **09 33 07.8** **+1.1** |
| **OTVZ** | **Oturere** | **3.60** | **245** | P | **Pn** | **09 33 07.6** **+0.8** |
| **PNHZ** | **Pukenui** | **3.60** | **231** | P | **Pn** | **09 33 07.1** **+0.3** |
| **NNVZ** | **North Ngauruho** | **3.62** | **246** | P | **Pn** | **09 33 08.2** **+1.1** |
| **SNVZ** | **South Ngauruho** | **3.62** | **245** | P | **Pn** | **09 33 08.0** **+0.9** |
| **WTVZ** | **West Tongariro** | **3.63** | **246** | P | **Pn** | **09 33 08.4** **+1.1** |
| **MOVZ** | **Moawhango** | **3.63** | **241** | P | **Pn** | **09 33 08.0** **+0.7** |
| **TUVZ** | **Tukino** | **3.65** | **244** | P | **Pn** | **09 33 08.6** **+1.1** |
| **NGZ** | **Ngauruhoe** | **3.65** | **245** | P | **Pn** | **09 33 08.4** **+0.9** |
| **WHVZ** | **Whangaehu Hut** | **3.70** | **244** | P | **Pn** | **09 33 09.6** **+1.3** |
| **WNVZ** | **Wahianoa** | **3.71** | **243** | P | **Pn** | **09 33 09.2** **+0.8** |
| **DRZ** | **Dome Shelter** | **3.71** | **244** | P | **Pn** | **09 33 12.0** **+3.4** |
| **FWVZ** | **Far West T-bar** | **3.71** | **244** | P | **Pn** | **09 33 09.8** **+1.4** |
| **TRVZ** | **Turoa** | **3.73** | **244** | P | **Pn** | **09 33 09.8** **+1.1** |
| **ANWZ** | **Angora Road** | **3.80** | **223** | P | **Pn** | **09 33 09.3** **-0.1** |
| **GRZ** | **Great Barrier** | **3.82** | **291** | P | **Pn** | **09 33 10.2** **+0.5** |
| **TSZ** | **Takapari Road** | **3.84** | **231** | P | **Pn** | **09 33 10.1** **+0.1** |
| **DVZ** | **Dannevirke** | **3.86** | **227** | P | **Pn** | **09 33 10.0** **+0.1** |
| **PKVZ** | **Pokaka** | **3.87** | **245** | P | **Pn** | **09 33 11.6** **+1.1** |
| **WIAZ** | **Waiheke Island** | **3.88** | **282** | P | **Pn** | **09 33 11.4** **+0.9** |
| **ETAZ** | **East Tamaki Re** | **4.00** | **279** | P | **Pn** | **09 33 13.4** **+1.2** |
| **HIZ** | **Hauiti** | **4.03** | **257** | P | **Pn** | **09 33 14.1** **+1.5** |
| **HIZ** | **Hauiti** | **4.03** | **257** | Pn | **Pn** | **09 33 14.0** **+1.5** |
| **MBAZ** | **Motutapu North** | **4.07** | **282** | P | **Pn** | **09 33 14.4** **+1.3** |
| **BFZ** | **Birch Farm** | **4.08** | **222** | P | **Pn** | **09 33 12.5** **-0.8** |
| **BFZ** | **Birch Farm** | **4.08** | **222** | Pn | **Pn** | **09 33 12.5** **-0.8** |
| **PRWZ** | **Pori Road** | **4.14** | **226** | P | **Pn** | **09 33 14.3** **+0.2** |
| **POWZ** | **Post Office Ro** | **4.16** | **229** | P | **Pn** | **09 33 14.7** **+0.4** |
| **EPAZ** | **Eden Park BICE** | **4.17** | **280** | P | **Pn** | **09 33 16.2** **+1.7** |
| **ABAZ** | **Army Bay** | **4.17** | **284** | P | **Pn** | **09 33 15.9** **+1.4** |
| **HBAZ** | **Herne Bay Bore** | **4.18** | **280** | P | **Pn** | **09 33 16.4** **+1.7** |
| **AWAZ** | **Awhitu Peninsu** | **4.21** | **277** | P | **Pn** | **09 33 16.6** **+1.6** |
| **VRZ** | **Vera Road** | **4.25** | **249** | P | **Pn** | **09 33 17.3** **+1.8** |
| **CPWZ** | **Castlepoint** | **4.27** | **221** | P | **Pn** | **09 33 15.5** **-0.4** |
| **WTAZ** | **Waiatarua** | **4.29** | **279** | P | **Pn** | **09 33 17.6** **+1.5** |
| **RVAZ**

comp=Z,16nm,0.8s
**MSVF Nonsavu 19.97 355** P **Pn** 09 36 42.8 -2.3
comp=Z,0.9nm,0.3s,baz=239,slow=10.0,SNR=8.4
MSVF LR LR 09 42 59.5
comp=Z,338nm,20.2s,baz=183,slow=32
**MSVF Nonsavu 19.97 355** P **P** 09 36 41.7 -1.7
**RAR Rarotonga 24.10 53** LR LR 09 46 45.3
comp=Z,159nm,18.0s,baz=246,slow=36
**AFI Afiamalu 24.85 20** P **P** 09 37 35.4 +1.8
comp=Z,21nm,0.7s,baz=166,slow=21,SNR=5.0
AFI LR LR 09 47 24.0
comp=Z,57nm,21.0s,baz=214,slow=37
**SANVU Saraoutou 24.85 330** P **P** 09 37 32.5 -1.0
**STKA Stephens Creek 31.80 269** P **P** 09 38 35.7 +0.1
comp=Z,3.2nm,0.4s,baz=80,slow=9.4,SNR=8.3
STKA LR LR 09 51 15.8
comp=Z,230nm,18.1s,baz=60,slow=36
**HNR Honiara 33.40 322** LR LR 09 49 49.8
comp=Z,117nm,20.9s,baz=164,slow=32
**PAE Paea 33.41 62** *e*T T 10 13 08.4
comp=Z,3.6nm,0.3s
**PPT2 Papeete2 33.46 62** *e*LR LR 09 47 19.2
comp=Z,387nm,25.0s,baz=224
**PPT2 Papeete2 33.46 62** *e*T T 10 13 13.2
comp=Z,6.4nm,0.3s
**PPT Papeete 33.47 62** LR LR 09 48 34.9
comp=Z,223nm,21.5s,baz=234,slow=29
**CTA Charters Tower 34.03 292** LR LR 09 51 35.4
comp=Z,170nm,20.9s,baz=108,slow=34
**CTAO Charters Tower 34.03 292** P **P** 09 38 55.7 +0.5
**VAH Vaihoa 36.42 61** *e*T T 10 16 53.2
comp=Z,8.5nm,0.2s
**VNDA Vanda 40.65 186** LR LR 09 53 28.8
comp=Z,129nm,18.9s,baz=38,slow=31
**PMG Port Moresby 40.77 305** LR LR 09 55 25.7
comp=Z,173nm,18.9s,baz=176,slow=34
**AS31 Alice Springs 41.53 276** P **P** 09 39 57.7 -0.8
AS31 IAmb IAmb 09 39 58.7
comp=Z,5.0nm,0.7s
**ASAR Alice Springs 41.53 276** P **P** 09 39 57.5 -1.1
comp=Z,16nm,0.8s,baz=122,slow=8.3,SNR=183
ASAR PcP **PcP** 09 41 55.0 -1.0
comp=Z,2.5nm,0.8s,baz=122,slow=4.0,SNR=4.5
ASAR S **S** 09 46 07.5 -6.9
comp=Z,0.5nm,0.8s,baz=135,slow=12,SNR=5.3
ASAR LR LR 09 56 41.1
comp=Z,157nm,20.4s,baz=130,slow=36
**ASAR Alice Springs 41.53 276** P **P** 09 39 57.7 -0.8
**WB2 Warramunga Arr 43.17 281** P **P** 09 40 10.1 -1.8
WB2 IAmb IAmb 09 40 21.6
comp=Z,12nm,0.8s
**WRAB Tennant Creek 43.17 281** P **P** 09 40 10.4 -1.6
WRAB IAmb IAmb 09 40 21.6
comp=Z,12nm,0.8s
**WRA Warramunga Arr 43.17 281** P **P** 09 40 10.6 -1.4
comp=Z,11nm,0.8s,baz=122,slow=7.9,SNR=17
WRA PcP **PcP** 09 42 00.4 -1.1
comp=Z,3.5nm,0.8s,baz=122,slow=3.5,SNR=6.1
WRA LR LR 09 58 44.1
comp=Z,156nm,18.4s,baz=114,slow=37
**WRA Warramunga Arr 43.17 281** P **P** 09 40 09.8 -2.2
**WB0 Warramunga Arr 43.23 281** P **P** 09 40 11.1 -1.3
WB0 IAmb IAmb 09 40 12.1
comp=Z,11nm,0.6s
**TAOE Nuku Hiva Isla 46.09 62** *e*LR LR 09 53 09.5
comp=Z,310nm,26.1s
**JAY Jayapura 50.14 305** LR LR 10 01 19.6
comp=Z,70nm,20.0s,baz=38,slow=35
**FITZ Fitzroy Crossi 51.02 277** LR LR 10 03 55.2
comp=Z,131nm,18.2s,baz=114,slow=37
**QSPA South Pole Qui 52.41 180** P **P** 09 41 27.3 +4.1
comp=Z,9.2nm,0.9s,baz=55,slow=3.1,SNR=18
QSPA LR LR 10 01 25.3
comp=Z,128nm,18.0s,baz=56,slow=33
**QSPA South Pole Qui 52.41 180** P **P** 09 41 26.7 +3.6
QSPA IAmb IAmb 09 41 28.8
comp=Z,16nm,1.1s
**SIJI Sorong 57.75 298** LR LR 10 06 50.5
comp=Z,62nm,20.6s,baz=322,slow=36
**RPN Rapa Nui 59.42 102** LR LR 10 01 59.4
comp=Z,85nm,18.9s,baz=185,slow=30
**GUMO Guam 60.69 320** LR LR 10 04 23.4
comp=Z,31nm,21.6s,baz=110,slow=32
**KAPI Kappang 63.47 285** LR LR 10 11 20.9
comp=Z,66nm,19.8s,baz=162,slow=37
**PMSA Palmer Station 66.34 155** LR LR 10 06 15.1
comp=Z,272nm,18.5s,baz=224,slow=30
**H03S2 Juan Fernandez 77.92 123** T T 11 10 16.9
SNR=17
**H03S1 Juan Fernandez 77.93 123** T T 11 10 18.2
SNR=15
**H03S3 Juan Fernandez 77.94 123** T T 11 10 18.0
SNR=16
**H03N3 Juan Fernandez 78.15 123** T T 11 10 40.1
baz=234,slow=72,SNR=122
**H03N2 Juan Fernandez 78.16 123** T T 11 10 38.9
baz=234,slow=72,SNR=117
**H03N1 Juan Fernandez 78.17 123** T T 11 10 32.4
baz=234,slow=72,SNR=100
**PLCA Paso Flores 78.82 133** P **P** 09 44 17.9 +3.8
comp=Z,4.7nm,1.1s,baz=265,slow=1.9,SNR=5.3
PLCA LR LR 10 10 56.9
comp=Z,48nm,19.3s,baz=120,slow=29
**PLCA Paso Flores 78.82 133** IAmb IAmb 09 44 18.8
comp=Z,14nm,1.3s
**ASAJ Asahikawa 88.17 334** LR LR 10 17 00.4
comp=Z,39nm,19.9s,baz=152,slow=30
**KSRS Korea Array 88.84 321** P **P** 09 45 04.6 -0.3
comp=Z,3.8nm,0.8s,baz=148,slow=5.3,SNR=9.5
**NJ2 Nanjing 89.73 312** *e*P **P** 09 45 08.9 -0.3
NJ2 pmax pmax
comp=Z,7.0nm,0.6s
**LPIG La Paz 89.86 59** LR LR 10 17 35.1
comp=Z,56nm,18.4s,baz=10.0,slow=30
**LVC Limon Verde 91.86 120** LR LR 10 17 37.5
comp=Z,71nm,21.9s,baz=294,slow=30
**PFO Pinyon Flats O 92.42 48** LR LR 10 20 40.0
comp=Z,99nm,18.1s,baz=36,slow=31
**CMAR Chiang Mai Arr 94.18 290** P **P** 09 45 29.9 -0.3
comp=Z,1.5nm,0.3s,baz=145,slow=3.4,SNR=13
**ATAH Atahualpa 94.88 103** LR LR 10 18 28.5
comp=Z,100nm,20.8s,baz=333,slow=29
**CPUP Villa Florida 96.71 131** LR LR 10 23 42.1
comp=Z,103nm,18.1s,baz=14,slow=32
**PZH PanZhiHua 97.13 298** P **P** 09 45 43.5 -0.1
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,90nm,5.7s
**APG El Apazote 98.77 78** LR LR 10 20 25.9
comp=Z,70nm,20.9s,baz=77,slow=29
**XLT XiLinHaoTe 99.65 319** *e*P **Pdif** 09 45 53.9 -0.5
XLT pP pwP 09 45 58.8 -2.8
XLT pmax pmax
comp=Z,6.0nm,0.9s
XLT pmax pmax
comp=Z,280nm,6.3s
**HHC Hu-ho-hao-te 100.05 314** *e*P **Pdif** 09 45 55.5 -0.8
HHC pmax pmax
comp=Z,5.0nm,1.3s
HHC pmax pmax
comp=Z,200nm,5.2s
**LZH Lanzhou 101.66 307** *e*P **Pdif** 09 46 02.0 -1.7
LZH pP sPdif 09 46 05.7 -0.5
LZH sP pwP 09 46 07.8 -3.3
LZH pmax pmax
comp=Z,16nm,1.4s
**YKA Yellowknife Ar 112.77 27** PKiKP **PKiKP** 09 50 46.9 +0.2
comp=Z,0.5nm,1.0s,baz=221,slow=1.7,SNR=5.3
**MKAR Makanchi Array 120.96 307** PKP **PKPdf** 09 51 02.2 -0.9
comp=Z,2.0nm,1.0s,baz=100,slow=1.4,SNR=9.3
**KSH Kashi 122.23 297** PKP **PKiKP** 09 51 06.4 +0.3
**KURK Kurchatov 124.65 311** **PKPdf** 09 51 06.7 -3.3
**KURBB Kurchatov Arra 124.67 311** PKP **PKPdf** 09 51 09.3 -0.7
comp=Z,3.6nm,1.0s,baz=110,slow=2.1,SNR=15
**BVAR Borovoye Array 130.18 312** PKP **PKiKP** 09 51 21.0 -0.3
comp=Z,0.8nm,0.7s,baz=64,slow=13,SNR=5.5
**ARCES ARCESS Array B 145.25 345** PKP **PKPab** 09 51 47.4 -0.1
comp=Z,13nm,0.7s,baz=13,slow=3.1,SNR=29
**KLMR Klimovskoe 146.11 326** *e*PKPdf **PKPdf** 09 51 47.7 -1.6
KLMR AMP 09 51 51.1
comp=Z,98nm,1.3s
**KBZ Khabaz 147.12 294** PKPbc **PKPbc** 09 51 53.2 -0.5
comp=Z,7.5nm,0.9s,baz=159,slow=3.4,SNR=8.5
**LIC Lamto 148.34 171** *e*PKIKP **PKPbc** 09 51 58.5 +0.6
comp=Z,24nm,1.0s
**KIC Kosan Boka 148.51 171** *e*PKIKP **PKPbc** 09 51 58.5 +0.1
comp=Z,14nm,1.0s
**TIC Toumodi 148.75 171** *e*PKIKP **PKPbc** 09 51 59.3 +0.3
**DBIC Dimbokro 148.80 171** PKPbc **PKiKP** 09 52 00.5 0.0
comp=Z,5.1nm,0.9s,baz=165,slow=3.4,SNR=4.7
**OBN Obninsk 149.75 317** PKPbc **PKPbc** 09 52 00.1 -0.1
comp=Z,3.2nm,0.4s,baz=203,slow=22,SNR=3.4
**FINES FINESS Array B 151.18 334** PKPbc **PKPbc** 09 52 03.2 -0.2
comp=Z,17nm,0.9s,baz=94,slow=5.7,SNR=19
**BRTR Keskin Array B 153.66 285** PKPbc **PKPbc** 09 52 09.8 -0.2
comp=Z,3.1nm,1.0s,baz=147,slow=2.9,SNR=9.9
**MNK Minsk 154.57 320** *i* PKP **PKPdf** 09 52 02.6 -0.1
comp=E,2.0nm,0.7s
MNK *i* PKP **PKPdf** 09 52 02.6 -0.1
comp=N,38nm,0.7s
MNK *i* PKP **PKPdf** 09 52 02.6 -0.1
comp=Z,11nm,0.6s,baz=60
MNK *i* PP **PP** 09 56 02.3 +0.8
MNK *i* SKS **SKSdf** 09 59 09.5 +0.3
MNK *i* PPP PPP 09 59 31.9
MNK *i* SKKS **SKKSdf** 10 07 47.8 -0.8
MNK *i* SS **SS** 10 15 50.5 +8.1
MNK *i* SSS SSS 10 21 38.2
MNK *i* LR LR 10 58 57.6
MNK *i* LRM MLR 10 59 33.7
comp=E,87nm,19.3s
MNK *i* LRM MLR 10 59 39.5
comp=N,631nm,20.0s
MNK *i* LRM MLR 11 00 11.1
comp=Z,137nm,11.0s
**AKASG Malin Array Be 155.46 311** PKPbc **PKPdf** 09 52 11.5 +7.4
comp=Z,0.2nm,0.3s,baz=54,slow=2.8,SNR=4.3
**NB2 NORSAR Subarra155.59 347** PKP **PKPab** 09 52 26.2 -3.8
comp=Z,29nm,1.4s,baz=17,slow=2.6

*SFS **08** 09:35:00.0, 35°.45N×3°.87W, ML2.7, ALBORAN SUR*
*INMG **08** 09:35:01.6±1.3, 35°.49N×3°.80W, h7km±4km, ML2.5, Error ellipse: s-maj=3.4km s-min=2.6km az=27.0*
*IDC **08** 09:35:03.0±1.4, 35°.63N×4°.35W, h0km, mb3.3/2, mb1 3.4/4, mb1mx3.2/42, mbtmp3.1/4, ML3.0/2, Error ellipse: s-maj=64.5km s-min=12.4km az=91.0*
*CNRM **08** 09:35:02.6, 35°.17N×4°.05W, h18km, ml2.5*
**ISC 08 09:35:01.5±1.2, 35°.50N±0°.03×3°.78W±0°.03, h11km±9km, n36, σ1°.98/58, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.31** | **204** | P | | **Pg** | **Pg** | **09 35 08.6** | **+0.7** |
| PALE | | | | S | | **Sg** | **Sg** | **09 35 09.0** | **-3.2** |
| **CHAS** | **Isla Isabel II** | **1.15** | **106** | P | | **Pn** | **Pn** | **09 35 20.8** | **-2.6** |
| CHAS | | | | S | | **Sb** | **Sb** | **09 35 35.4** | **-2.8** |
| **TAF** | **Taforalt** | **1.31** | **121** | P | | **Pb** | **Pb** | **09 35 27.1** | **+0.8** |
| TAF | | | | S | | **Sn** | **Sn** | **09 35 41.8** | **-1.6** |
| **SMIR** | **Smir Dam** | **1.32** | **278** | P | | **Pn** | **Pn** | **09 35 25.0** | **-0.8** |
| **CHEFC** | **Chefchaouen** | **1.34** | **253** | P | | **Pn** | **Pn** | **09 35 25.5** | **-0.6** |
| CHEFC | | | | S | | **Sg** | **Sg** | **09 35 43.4** | **-1.1** |
| **CEU** | **Ceuta** | **1.35** | **287** | P | | **Pn** | **Pn** | **09 35 24.9** | **-1.4** |
| CEU | | | | S | | **Sb** | **Sb** | **09 35 40.6** | **-3.6** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **337** | P | | **Pn** | **Pn** | **09 35 24.5** | **-1.9** |
| EMAL | | | | S | | **Sn** | **Sn** | **09 35 40.9** | **-3.5** |
| **JBK** | **JBK** | **1.54** | **139** | P | | **Pn** | **Pn** | **09 35 27.4** | **-1.6** |
| JBK | | | | S | | **Sn** | **Sn** | **09 35 46.7** | **-2.3** |
| **IFR** | **Ifrane** | **2.27** | **210** | P | | **Pb** | **Pb** | **09 35 41.3** | **-1.4** |
| IFR | | | | S | | **Sn** | **Sn** | **09 36 07.1** | **-0.1** |
| **MD31** | **MD31** | **2.75** | **197** | P | | **Pn** | **Pn** | **09 35 46.7** | **+1.1** |
| **MDT** | **Midelt** | **2.77** | **195** | Pn | | **Pn** | **Pn** | **09 35 48.3** | **+2.4** |
| | 1.1nm,0.3s,baz=130,slow=2.3,SNR=5.7 | | | | | | | | |
| MDT | | | | Pg | | **Pg** | **Pg** | **09 35 56.3** | **+1.7** |
| | 2.9nm,0.3s,baz=307,slow=23,SNR=17 | | | | | | | | |
| MDT | | | | Sn | | **Sb** | **Sb** | **09 36 22.5** | **-2.5** |
| | 2.6nm,0.3s,baz=36,slow=22,SNR=5.8 | | | | | | | | |
| MDT | | | | Lg | | Lg | Lg | 09 36 32.1 | |
| | 2.6nm,0.3s,baz=353,slow=18,SNR=3.1 | | | | | | | | |
| **MDT** | **Midelt** | **2.77** | **195** | P | | **Pn** | **Pn** | **09 35 48.3** | **+2.4** |
| **TDRA** | **Tendrara** | **2.85** | **149** | P | | **Pn** | **Pn** | **09 35 47.6** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | *e*Pn | | **Pn** | **Pn** | **09 35 58.6** | **+0.1** |
| PVAQ | | | | *e*Sn | | **Sn** | **Sn** | **09 36 40.2** | **-1.8** |
| PVAQ | | | | A | | A | A | 09 36 47.0 | |
| | 8.1nm,0.6s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | P | | **Pn** | **Pn** | **09 35 59.1** | **+0.6** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **299** | *e*Pn | | **Pn** | **Pn** | **09 35 59.2** | **-0.4** |
| PBDV | | | | *e*Sn | | **Sn** | **Sn** | **09 36 41.7** | **-2.3** |
| PBDV | | | | A | | A | A | 09 36 54.4 | |
| | 5.8nm,0.8s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | | **Pn** | **Pn** | **09 36 03.7** | **+0.6** |
| PCVE | | | | *e*Sn | | **Sn** | **Sn** | **09 36 47.6** | **-2.7** |
| PCVE | | | | A | | A | A | 09 37 04.5 | |
| | 6.1nm,0.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.17** | **358** | Pn | | **Pn** | **Pn** | **09 36 06.3** | **+1.3** |
| | 0.8nm,0.3s,baz=183,slow=12,SNR=11 | | | | | | | | |
| ESDC | | | | Pg | | **Pb** | **Pb** | **09 36 18.4** | **+3.6** |
| | 0.4nm,0.3s,baz=187,slow=14,SNR=7.9 | | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **Sn** | **09 36 49.8** | **-3.9** |
| | 0.2nm,0.3s,baz=221,slow=41,SNR=1.4 | | | | | | | | |
| ESDC | | | | Lg | | Lg | Lg | 09 37 10.8 | |
| | 0.8nm,0.3s,baz=177,slow=28,SNR=6.6 | | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*Pn | | **Pn** | **Pn** | **09 36 06.3** | **0.0** |
| MESJ | | | | *e*Sn | | **Sn** | **Sn** | **09 36 53.7** | **-2.3** |
| MESJ | | | | A | | A | A | 09 36 57.7 | |
| | 5.5nm,0.4s | | | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **296** | *e*Pn | | **Pn** | **Pn** | **09 36 07.9** | **+0.8** |
| **PFVI** | **Vila Bisbo** | **4.39** | **293** | P | | **Pn** | **Pn** | **09 36 10.2** | **+2.2** |
| **PTEO** | **Sao Teotonio** | **4.47** | **299** | *e*Sn | | **Sn** | **Sn** | **09 37 00.7** | **-0.5** |
| **PESTR** | **Estremoz** | **4.53** | **319** | *e*Pn | | **Pn** | **Pn** | **09 36 11.4** | **+1.4** |
| PESTR | | | | *e*Sn | | **Sn** | **Sn** | **09 37 00.7** | **-1.9** |
| PESTR | | | | A | | A | A | 09 37 11.2 | |
| | 5.5nm,1.3s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.53** | **319** | P | | **Pn** | **Pn** | **09 36 08.5** | **-1.5** |
| **EVO** | **Evora** | **4.54** | **313** | *e*Pn | | **Pn** | **Pn** | **09 36 10.2** | **+0.1** |
| EVO | | | | A | | A | A | 09 36 52.5 | |
| | 6.3nm,0.1s | | | | | | | | |
| EVO | | | | *e*Sn | | **Sn** | **Sn** | **09 37 00.8** | **-2.0** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **306** | *e*Pn | | **Pn** | **Pn** | **09 36 11.1** | **0.0** |
| PNCL | | | | *e*Sn | | **Sn** | **Sn** | **09 37 02.8** | **-1.8** |
| PNCL | | | | A | | A | A | 09 37 08.7 | |
| | 3.6nm,0.3s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.86** | **325** | *e*Pn | | **Pn** | **Pn** | **09 36 14.7** | **+0.2** |
| PMRV | | | | *e*Sn | | **Sn** | **Sn** | **09 37 08.5** | **-2.2** |
| PMRV | | | | A | | A | A | 09 37 24.4 | |
| | 4.5nm,0.7s | | | | | | | | |
| **PMTG** | **Montargil** | **5.02** | **316** | *e*Pn | | **Pn** | **Pn** | **09 36 17.8** | **+1.1** |
| PMTG | | | | *e*Sn | | **Sn** | **Sn** | **09 37 12.8** | **-1.9** |
| PMTG | | | | A | | A | A | 09 37 19.0 | |
| | 4.9nm,0.5s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.23** | **327** | *e*Pn | | **Pn** | **Pn** | **09 36 19.9** | **+0.3** |
| PCBR | | | | *e*Sn | | **Sn** | **Sn** | **09 37 17.7** | **-2.1** |
| PCBR | | | | A | | A | A | 09 37 21.7 | |
| | 3.8nm,0.3s | | | | | | | | |
| **PSBE** | **So Bento** | **5.65** | **317** | *e*Pn | | **Pn** | **Pn** | **09 36 26.5** | **+1.1** |
| **PVIS** | **Viseu** | **6.13** | **329** | *e*Pn | | **Pn** | **Pn** | **09 36 33.3** | **+1.3** |
| **MVO** | **Moncorvo** | **6.20** | **337** | *e*Pn | | **Pn** | **Pn** | **09 36 34.2** | **+1.2** |
| **PVRL** | **Vila Real** | **6.54** | **333** | *e*Pn | | **Pn** | **Pn** | **09 36 37.4** | **-0.2** |
| **POLO** | **Lamas de Olo** | **6.65** | **333** | *e*Pn | | **Pn** | **Pn** | **09 36 40.0** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **22.80** | **166** | P | | **P** | **P** | **09 40 09.2** | **+4.9** |
| | 0.8nm,0.8s,baz=358,slow=13,SNR=3.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.83** | **332** | P | | **P** | **P** | **09 46 00.3** | **+1.2** |
| | 0.2nm,0.9s,baz=62,slow=6.3,SNR=4.2 | | | | | | | | |

*NEIC **08** 09:43:35.4±0.9, 45°.58N±0°.02×67°.32W±0°.02, h6km±6km, Error ellipse: s-maj=3.5km s-min=1.6km az=175.0*
*OTT **08** 09:43:36.6±0.1, 45°.61N×67°.34W, h1km, MN2.7/11*
*OTT 3km northwest from McAdam, Nb, Felt Northern Appalachians Seismic Zone. Felt at McAdam, Nb.*
**ISC 08 09:43:35.3±1.1, 45°.60N±0°.03×67°.34W±0°.02, h6km±9km, n41, σ0°.963/65, Maine**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **G65A** | **Princeton** | **0.43** | **202** | Pg | | **Pg** | **Pg** | **09 43 43.5** | **-0.1** |
| G65A | | | | Sg | | **Sg** | **Sg** | **09 43 48.7** | **-0.4** |
| G65A | | | | IAML | | | | 09 43 52.0 | |
| | comp=N,144nm,0.6s | | | | | | | | |
| G65A | | | | IAML | | | | 09 43 52.4 | |
| | comp=E,186nm,0.7s | | | | | | | | |
| **HANN** | **Hanwell** | **0.49** | **54** | Pg | | **Pg** | **Pg** | **09 43 44.9** | **+0.1** |
| HANN | | | | Sg | | **Sg** | **Sg** | **09 43 51.5** | **+0.3** |
| **HANN** | **Hanwell** | **0.49** | **54** | PG | | **Pg** | **Pg** | **09 43 44.9** | **+0.1** |
| HANN | | | | Trac | | | | 09 43 49.7 | |
| | comp=E,7.2nm,0.0s | | | | | | | | |
| HANN | | | | SG | | **Sg** | **Sg** | **09 43 51.5** | **+0.3** |
| **GGN** | **Saint George** | **0.59** | **144** | Pg | | **Pg** | **Pg** | **09 43 46.8** | **+0.1** |
| **GGN** | **Saint George** | **0.59** | **144** | PG | | **Pg** | **Pg** | **09 43 46.9** | **+0.1** |
| GGN | | | | SG | | **Sg** | **Sg** | **09 43 55.0** | **+0.6** |
| GGN | | | | Trac | | | | 09 44 00.1 | |
| | comp=E,22nm,0.1s | | | | | | | | |
| **F64A** | **Sherman** | **0.76** | **291** | Pg | | **Pg** | **Pg** | **09 43 50.3** | **+0.4** |
| F64A | | | | Sg | | **Sg** | **Sg** | **09 44 00.5** | **+0.8** |
| F64A | | | | IAML | | | | 09 44 05.1 | |
| | comp=N,73nm,0.3s | | | | | | | | |
| **PQI** | **Presque Isle** | **1.17** | **336** | Pg | | **Pg** | **Pg** | **09 43 57.7** | **-0.1** |
| PQI | | | | IAML | | | | 09 44 16.6 | |
| | comp=N,83nm,0.4s | | | | | | | | |
| **SRNB** | **Snider Mountai** | **1.22** | **78** | Pg | | **Pg** | **Pg** | **09 43 58.0** | **-0.7** |
| SRNB | | | | Sg | | **Sg** | **Sg** | **09 44 13.8** | **-0.6** |
| **SRNB** | **Snider Mountai** | **1.22** | **78** | PG | | **Pg** | **Pg** | **09 43 58.0** | **-0.7** |
| SRNB | | | | SG | | **Sg** | **Sg** | **09 44 13.8** | **-0.6** |
| SRNB | | | | Trac | | | | 09 44 16.7 | |
| | comp=N,35nm,0.1s | | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **1.24** | **275** | Pg | | **Pg** | **Pg** | **09 43 59.1** | **-0.1** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | Pg | | **Pg** | **Pg** | **09 43 59.3** | **-0.7** |
| WCNB | | | | Sg | | **Sg** | **Sg** | **09 44 16.2** | **-0.3** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | PG | | **Pg** | **Pg** | **09 43 59.3** | **-0.7** |
| WCNB | | | | SG | | **Sg** | **Sg** | **09 44 16.2** | **-0.3** |
| WCNB | | | | Trac | | | | 09 44 17.3 | |
| | comp=N,32nm,0.1s | | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **257** | Pn | | **Pn** | **Pn** | **09 44 01.6** | **-0.1** |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **257** | PG | | **Pn** | **Pn** | **09 44 01.7** | **+0.1** |
| PKME | | | | SG | | **Sb** | **Sb** | **09 44 20.2** | **-0.2** |
| PKME | | | | Trac | | | | 09 44 22.6 | |
| | comp=N,44nm,0.2s | | | | | | | | |
| **HKNB** | **Havelock Quarr** | **1.42** | **74** | | | | **Pn** | **09 44 01.7** | **0.0** |
| HKNB | | | | Sg | | **Sb** | **Sb** | **09 44 20.4** | **-0.2** |
| **HKNB** | **Havelock Quarr** | **1.42** | **74** | PG | | **Pn** | **Pn** | **09 44 01.7** | **0.0** |
| HKNB | | | | SG | | **Sb** | **Sb** | **09 44 20.4** | **-0.2** |
| HKNB | | | | SG | | **Sg** | **Sg** | **09 44 20.6** | **-0.4** |
| HKNB | | | | Trac | | | | 09 44 22.8 | |
| | comp=N,111nm,0.3s | | | | | | | | |
| **ELNB** | **Elgin, New Bru** | **1.55** | **80** | | | | **Pn** | **09 44 03.9** | **+0.3** |
| ELNB | | | | | | | **Sn** | **09 44 24.7** | **+0.7** |
| **ELNB** | **Elgin, New Bru** | **1.55** | **80** | PG | | **Pn** | **Pn** | **09 44 03.9** | **+0.3** |
| ELNB | | | | SG | | **Sn** | **Sn** | **09 44 24.7** | **+0.7** |
| ELNB | | | | Trac | | | | 09 44 28.9 | |
| | comp=N,8.3nm,0.2s | | | | | | | | |
| **LMN** | **Caledonia Moun** | **1.79** | **81** | Pn | | **Pn** | **Pn** | **09 44 06.5** | **-0.3** |
| **LMN** | **Caledonia Moun** | **1.79** | **81** | PN | | **Pn** | **Pn** | **09 44 06.8** | **0.0** |
| LMN | | | | SG | | **Sn** | **Sn** | **09 44 30.9** | **+1.0** |
| LMN | | | | Trac | | | | 09 44 33.1 | |
| | comp=N,8.8nm,0.1s | | | | | | | | |
| **SVNB** | **Stilesville Qu** | **1.81** | **71** | | | | **Pn** | **09 44 07.8** | **+0.8** |
| SVNB | | | | | | | **Sn** | **09 44 31.0** | **+0.7** |
| **SVNB** | **Stilesville Qu** | **1.81** | **71** | PN | | **Pn** | **Pn** | **09 44 07.8** | **+0.8** |
| SVNB | | | | SN | | **Sn** | **Sn** | **09 44 31.0** | **+0.7** |
| SVNB | | | | Trac | | | | 09 44 33.3 | |
| | comp=N,27nm,0.1s | | | | | | | | |
| **F62A** | **Pittston Farm,** | **1.86** | **280** | Pn | | **Pn** | **Pn** | **09 44 08.5** | **+0.7** |
| **BATG** | **Bathurst New B** | **1.90** | **27** | Pn | | **Pn** | **Pn** | **09 44 08.3** | **0.0** |
| **BATG** | **Bathurst New B** | **1.90** | **27** | PN | | **Pb** | **Pb** | **09 44 10.3** | **-0.1** |
| BATG | | | | SN | | **Sn** | **Sn** | **09 44 33.5** | **+1.0** |
| BATG | | | | Trac | | | | 09 44 36.4 | |
| | comp=N,36nm,0.1s | | | | | | | | |
| **D62A** | **Allapoint, All** | **1.90** | **322** | Pn | | **Pn** | **Pn** | **09 44 08.4** | **+0.1** |
| **G62A** | **West of Eustis** | **2.28** | **262** | Pn | | **Pn** | **Pn** | **09 44 13.8** | **+0.2** |
| **I63A** | **Otisfield** | **2.78** | **237** | Pn | | **Pn** | **Pn** | **09 44 20.4** | **+0.1** |
| **LMQ** | **La Malbaie** | **2.84** | **314** | Pn | | **Pn** | **Pn** | **09 44 21.3** | **0.0** |
| **LMQ** | **La Malbaie** | **2.84** | **314** | PN | | **Pn** | **Pn** | **09 44 21.6** | **+0.4** |
| LMQ | | | | SN | | **Sn** | **Sn** | **09 44 55.8** | **0.0** |
| LMQ | | | | Trac | | | | 09 45 09.4 | |
| | comp=N,14nm,0.2s | | | | | | | | |
| **H62A** | **Milan** | **2.89** | **251** | Pn | | **Pn** | **Pn** | **09 44 22.3** | **+0.3** |
| **I62A** | **Tamworth** | **3.33** | **240** | Pn | | **Pn** | **Pn** | **09 44 28.2** | **+0.3** |
| **MOQ** | **Mont Orford** | **3.47** | **267** | Pn | | **Pn** | **Pn** | **09 44 30.4** | **+0.4** |
| MOQ | | | | Sn | | **Sn** | **Sn** | **09 45 10.6** | **-0.9** |
| **MOQ** | **Mont Orford** | **3.47** | **267** | PN | | **Pn** | **Pn** | **09 44 30.4** | **+0.4** |
| MOQ | | | | SN | | **Sn** | **Sn** | **09 45 10.6** | **-0.9** |
| MOQ | | | | LG | | Lg | Lg | 09 45 24.0 | |
| MOQ | | | | Trac | | | | 09 45 24.9 | |
| | comp=N,3.6nm,0.2s | | | | | | | | |
| **LBNH** | **Lisbon** | **3.53** | **249** | Pn | | **Pn** | **Pn** | **09 44 31.9** | **+1.1** |
| **CNQ** | **Baie Comeau** | **3.74** | **353** | Pn | | **Pn** | **Pn** | **09 44 34.2** | **+0.6** |
| CNQ | | | | Sn | | **Sn** | **Sn** | **09 45 17.0** | **-1.0** |
| **CNQ** | **Baie Comeau** | **3.74** | **353** | PN | | **Pn** | **Pn** | **09 44 34.2** | **+0.6** |
| CNQ | | | | SN | | **Sn** | **Sn** | **09 45 17.0** | **-1.0** |
| CNQ | | | | Trac | | | | 09 45 36.6 | |
| | comp=N,2.2nm,0.2s | | | | | | | | |
| **HNH** | **Hanover** | **4.01** | **244** | Pn | | **Pn** | **Pn** | **09 44 39.5** | **+2.3** |
| **GBN** | **Guysborough** | **4.10** | **91** | Pn | | **Pn** | **Pn** | **09 44 39.4** | **+0.8** |
| **K62A** | **Royalston** | **4.58** | **232** | Pn | | **Pn** | **Pn** | **09 44 44.3** | **-0.9** |
| **NCB** | **Newcomb** | **5.17** | **254** | Pn | | **Pn** | **Pn** | **09 44 52.1** | **-1.1** |

*IDC **08** 09:50:10.7±1.5, 6°.78S×128°.91E, h0km, mb3.7/2, mb1 4.1/6, mb1mx3.6/50, mbtmp4.0/6, ML4.2/4, Error ellipse: s-maj=39.4km s-min=24.3km az=82.0*
**ISC 08 09:50:16.8±1.3, 7°.3S±0°.1×128°.6E±0°.1, h35km, n19, σ2s96/16, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DRS** | **Darwin Rock St** | **5.59** | **156** | P | | Pn | Pn | 09 51 45.8 | +8.3 |
| **BATI** | **Baumata** | **5.69** | **239** | Pn | | **Pn** | **Pn** | **09 51 43.6** | **+4.6** |
| | 18nm,0.3s,baz=138,slow=2.8,SNR=9.6 | | | | | | | | |
| BATI | | | | Sn | | **Sn** | **Sn** | **09 52 41.9** | **-1.3** |
| | 15nm,0.3s,baz=208,slow=23,SNR=7.1 | | | | | | | | |
| **MTN** | **Manton Dam** | **6.05** | **156** | P | | Pn | Pn | 09 51 52.1 | +8.2 |
| **KDU** | **Kakadu** | **6.58** | **145** | P | | Pn | Pn | 09 52 00.0 | +8.9 |
| **SIJI** | **Sorong** | **6.90** | **23** | Pn | | Pn | Pn | 09 51 47.3 | -8.3 |
| | 4.1nm,0.3s,baz=204,slow=22,SNR=7.0 | | | | | | | | |
| **KNRA** | **Kununurra** | **8.34** | **179** | P | | **Pn** | **Pn** | **09 52 19.4** | **+4.0** |
| **FITZ** | **Fitzroy Crossi** | **11.13** | **195** | Pn | | **Pn** | **Pn** | **09 52 54.0** | **+0.4** |
| | 1.0nm,0.3s,baz=15,slow=8.6,SNR=35 | | | | | | | | |
| FITZ | | | | Sn | | Sn | Sn | 09 54 46.6 | -10 |
| | 1.4nm,0.3s,baz=354,slow=11,SNR=6.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.75** | **157** | Pn | | **Pn** | **Pn** | **09 53 31.2** | **+1.8** |
| | 0.9nm,0.3s,baz=347,slow=13,SNR=31 | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KURBB | | | | Lg | Lg | 09 55 31.8 | | | |
| | 0.0nm,0.3s,baz=345,slow=26,SNR=1.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.99** | **241** | ⇑Pn | **Pn** | **09 53 52.4** | **+1.0** | | |
| | 0.9nm,0.5s | | | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **09 55 00.9** | **+0.3** | | |
| | 2.9nm,0.7s | | | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 55 33.4 | | | |
| | 2.5nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.59** | **204** | ⇓Pn | **Pn** | **09 54 14.0** | **+0.6** | | |
| | 0.4nm,0.5s,baz=24,slow=12,SNR=18 | | | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 55 40.2** | **+0.1** | | |
| | 0.2nm,0.6s,baz=30,slow=13,SNR=3.3 | | | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 56 20.3 | | | |
| | 0.1nm,0.5s,baz=32,slow=29 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.59** | **204** | Pn | **Pn** | **09 54 13.5** | **+0.1** | | |
| | 0.3nm,0.3s,baz=25,slow=13,SNR=22 | | | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 55 38.6** | **-1.4** | | |
| | 0.1nm,0.3s,baz=21,slow=30,SNR=2.5 | | | | | | | | |
| MKAR | | | | Lg | Lg | 09 56 20.7 | | | |
| | 0.1nm,0.3s,baz=30,slow=30,SNR=3.7 | | | | | | | | |
| **MAKZ** | **Makanchi** | **7.65** | **206** | ⇑Pn | **Pn** | **09 54 14.7** | **+0.4** | | |
| | 0.5nm,0.3s | | | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **09 55 42.2** | **+0.5** | | |
| | 0.3nm,0.3s | | | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 09 56 24.5 | | | |
| | 0.3nm,0.2s | | | | | | | | |

**IDC 08 09:54:42.2±2.0, 0.°50S×133.°11E, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.1/48, mbtmp3.8/4, ML3.4/1, MS3.5/3, Ms1 3.5/3, ms1mx2.8/68, Error ellipse: s-maj=46.5km s-min=25.8km az=57.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **1.88** | **259** | Pn | Pn | 09 55 15.4 | -0.2 |
| | 63nm,0.3s,baz=18,slow=20,SNR=78 | | | | | | |
| SIJI | | | | Sn | Sn | 09 55 37.9 | -2.3 |
| | 48nm,0.3s,baz=189,slow=18,SNR=18 | | | | | | |
| SIJI | | | | LR | LR | 09 55 42.1 | |
| | comp=Z,72nm,18.6s,baz=242,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.36** | **177** | P | Pn | 09 59 10.3 | -0.2 |
| | 0.1nm,0.3s,baz=354,slow=11,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **23.04** | **178** | P | P | 09 59 50.3 | +1.1 |
| | 2.0nm,0.3s,baz=5.1,slow=11,SNR=23 | | | | | | |
| **HNR** | **Honiara** | **28.14** | **109** | LR | LR | 10 13 01.9 | |
| | comp=Z,74nm,18.5s,baz=352,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **32.22** | **166** | P | P | 10 01 10.5 | -1.8 |
| | 0.8nm,0.4s,baz=338,slow=11,SNR=2.8 | | | | | | |
| **PALK** | **Pallekele** | **52.84** | **279** | LR | LR | 10 30 13.5 | |
| | comp=Z,87nm,18.0s,baz=170,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.68** | **324** | P | P | 10 05 22.2 | +0.1 |
| | 0.2nm,0.8s,baz=134,slow=7.0,SNR=1.7 | | | | | | |
| **WSAR** | **Wadi Sarin** | **75.96** | **294** | LR | LR | 10 41 33.4 | |
| | comp=Z,24nm,21.4s,baz=338,slow=37 | | | | | | |

*IASPEI **08** 09:54:51.9±0.8, 23.°01N±0.°01×120.°57E±0.°02, h16km±4km, Error ellipse: s-maj=2.4km s-min=1.8km az=83.1, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*TAP **08** 09:54:51.4, 23.°01N×120.°57E, h13km, ML3.8, B*

*JMA **08** 09:54:51.4±0.5, 22.°93N×120.°72E, h0km, M3.6*

**ISC 08 09:54:52.1±0.8, 23.°00N±0.°01×120.°59E±0.°02, h18km±2km, n117, σ1°18/191, 13C-18D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLGT** | **Liugui** | **0.05** | **95** | ⇓*i*P | **Pg** | **09 54 54.6** | **-0.8** |
| | baz=105 | | | | | | |
| SLGT | | | | S | **Sg** | **09 54 57.4** | **-0.4** |
| | baz=105 | | | | | | |
| **SGST** | **Jiashian** | **0.08** | **356** | ⇑*i*P | **Pg** | **09 54 54.3** | **-1.4** |
| | baz=17 | | | | | | |
| SGST | | | | *i* S | **Sg** | **09 54 57.2** | **-0.9** |
| | baz=17 | | | | | | |
| **SCST** | **Cishan** | **0.14** | **219** | ⇓*i*P | **Pg** | **09 54 56.0** | **-0.3** |
| | baz=209 | | | | | | |
| SCST | | | | S | **Sg** | **09 54 59.8** | **+0.7** |
| | baz=209 | | | | | | |
| **CHN1** | **Nanshi** | **0.20** | **343** | ⇑*i*P | **Pg** | **09 54 56.6** | **-0.5** |
| | baz=348 | | | | | | |
| CHN1 | | | | *i* S | **Sg** | **09 55 00.4** | **0.0** |
| | baz=348 | | | | | | |
| **CHN3** | **Shinhua** | **0.22** | **291** | P | **Pg** | **09 54 57.6** | **+0.2** |
| | baz=288 | | | | | | |
| CHN3 | | | | *e*S | **Sb** | **09 55 02.7** | **+1.8** |
| | baz=288 | | | | | | |
| **SHHT** | **Tainan City** | **0.22** | **276** | ⇓*i*P | **Pg** | **09 54 57.6** | **+0.2** |
| | baz=272 | | | | | | |
| SHHT | | | | S | **Sb** | **09 55 02.5** | **+1.6** |
| | baz=272 | | | | | | |
| **TWM1** | **Shoushan** | **0.23** | **222** | ⇓P | **Pb** | **09 54 58.0** | **+0.3** |
| | baz=214 | | | | | | |
| **SNST** | **Tainan City** | **0.24** | **339** | ⇑*i*P | **Pg** | **09 54 57.3** | **-0.4** |
| | baz=342 | | | | | | |
| SNST | | | | *i* S | **Sg** | **09 55 01.5** | **+0.1** |
| | baz=342 | | | | | | |
| **STYH** | **Taoyuan** | **0.24** | **45** | ⇓*i*P | **Pg** | **09 54 57.9** | **+0.2** |
| | baz=50 | | | | | | |
| STYH | | | | S | **Sg** | **09 55 02.6** | **+1.0** |
| | baz=50 | | | | | | |
| **WTP** | **Ta-pu** | **0.25** | **5** | ⇑*i*P | **Pg** | **09 54 57.7** | **-0.2** |
| | baz=12 | | | | | | |
| WTP | | | | S | **Sb** | **09 55 02.5** | **+0.5** |
| | baz=12 | | | | | | |
| **SSD** | **Sandimen** | **0.25** | **171** | ⇓*i*P | **Pg** | **09 54 57.9** | **0.0** |
| | baz=166 | | | | | | |
| SSD | | | | *i* S | **Sg** | **09 55 02.7** | **+0.8** |
| | baz=166 | | | | | | |
| **TWK** | **Hsinying** | **0.28** | **341** | ⇑*i*P | **Pg** | **09 54 58.0** | **-0.4** |
| | baz=346 | | | | | | |
| TWK | | | | S | **Sg** | **09 55 03.1** | **+0.4** |
| | baz=346 | | | | | | |
| **SGLT** | **Jiouru** | **0.29** | **199** | *i* P | **Pb** | **09 54 59.4** | **+0.7** |
| | baz=193 | | | | | | |
| SGLT | | | | *e*S | **Sb** | **09 55 06.2** | **+3.1** |
| | baz=193 | | | | | | |
| **TSMG** | **Majia** | **0.29** | **170** | ⇓*i*P | **Pb** | **09 54 58.5** | **-0.4** |
| | baz=167 | | | | | | |
| TSMG | | | | *i* S | **Sb** | **09 55 03.4** | **0.0** |
| | baz=167 | | | | | | |
| **TPUB** | **Ta-pu** | **0.30** | **7** | ⇓*i*P | **Pg** | **09 54 58.4** | **-0.4** |
| | baz=11 | | | | | | |
| TPUB | | | | S | **Sg** | **09 55 03.6** | **+0.3** |
| | baz=11 | | | | | | |
| **TPUB** | **Ta-pu** | **0.30** | **7** | P | **Pb** | **09 54 59.1** | **0.0** |
| **SSHA** | **Shanhua** | **0.31** | **296** | *i* P | **Pg** | **09 54 59.0** | **+0.2** |
| | baz=295 | | | | | | |
| **TSPT** | **Pingtung City** | **0.33** | **195** | *e*P | **Pb** | **09 55 00.3** | **+0.8** |
| | baz=193 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.34** | **277** | ⇓*i*P | **Pg** | **09 54 59.4** | **+0.1** |
| | baz=275 | | | | | | |
| TAI1 | | | | *e*S | **Sb** | **09 55 06.3** | **+1.7** |
| | baz=275 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.34** | **224** | *e*P | **Pb** | **09 55 00.1** | **+0.4** |
| | baz=220 | | | | | | |
| **CHN4** | **Tsaushan** | **0.35** | **0** | ⇓*e*P | **Pg** | **09 54 59.2** | **-0.4** |
| | baz=4.0 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **09 55 05.2** | **+0.5** |
| | baz=4.0 | | | | | | |
| **TAI** | **Tainan** | **0.36** | **270** | *e*P | **Pg** | **09 54 59.9** | **+0.1** |
| | baz=267 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.39** | **174** | ⇑*i*P | **Pb** | **09 55 00.1** | **-0.4** |
| | baz=172 | | | | | | |
| MASBT | | | | S | **Sb** | **09 55 06.1** | **0.0** |
| | baz=172 | | | | | | |
| **SCLT** | **Jiali** | **0.41** | **296** | P | **Pg** | **09 55 00.0** | **-0.5** |
| | baz=295 | | | | | | |
| SCLT | | | | *e*S | **Sg** | **09 55 07.3** | **+1.2** |
| | baz=295 | | | | | | |
| **ELDTW** | **Lidau** | **0.44** | **64** | *e*P | **Pb** | **09 55 01.4** | **0.0** |
| | baz=68 | | | | | | |
| ELDTW | | | | *e*S | **Sb** | **09 55 08.8** | **+1.1** |
| | baz=68 | | | | | | |
| **ICHU** | **Yijhu** | **0.46** | **322** | ⇓*i*P | **Pg** | **09 55 00.9** | **-0.6** |
| | baz=322 | | | | | | |
| ICHU | | | | *e*S | **Sg** | **09 55 08.0** | **+0.1** |
| | baz=322 | | | | | | |
| **WSSB** | **Gushan** | **0.47** | **221** | *e*P | **Pb** | **09 55 02.1** | **+0.3** |
| | baz=217 | | | | | | |
| **TWG** | **Pinlang** | **0.48** | **112** | *e*P | **Pb** | **09 55 02.6** | **+0.6** |
| | baz=112 | | | | | | |
| TWG | | | | *e*S | **Sb** | **09 55 10.7** | **+1.9** |
| | baz=112 | | | | | | |
| **TWGBT** | **Beinan** | **0.49** | **112** | P | **Pb** | **09 55 02.6** | **+0.4** |
| | baz=112 | | | | | | |
| TWGBT | | | | *e*S | **Sb** | **09 55 10.7** | **+1.7** |
| | baz=112 | | | | | | |
| **CHN8** | **Yiju** | **0.49** | **315** | P | **Pg** | **09 55 01.5** | **-0.6** |
| | baz=316 | | | | | | |
| CHN8 | | | | *e*S | **Sg** | **09 55 09.6** | **+0.9** |
| | baz=316 | | | | | | |
| **KAU** | **Kaohsiung** | **0.50** | **211** | *e*P | **Pb** | **09 55 03.2** | **+0.8** |
| | baz=208 | | | | | | |
| **LONT** | **Longtian** | **0.51** | **100** | *e*P | **Pb** | **09 55 02.8** | **+0.3** |
| | baz=102 | | | | | | |
| LONT | | | | *e*S | **Sb** | **09 55 11.2** | **+1.7** |
| | baz=102 | | | | | | |
| **SSPT** | **Xinbi** | **0.51** | **182** | ⇑*i*P | **Pb** | **09 55 02.7** | **+0.1** |
| | baz=180 | | | | | | |
| SSPT | | | | *e*S | **Sb** | **09 55 11.0** | **+1.3** |
| | baz=180 | | | | | | |
| **CHY** | **Chiayi** | **0.52** | **343** | ⇓*i*P | **Pg** | **09 55 02.2** | **-0.4** |
| | baz=345 | | | | | | |
| CHY | | | | *e*S | **Sg** | **09 55 10.2** | **+0.6** |
| | baz=345 | | | | | | |
| **ECL** | **Taimali** | **0.52** | **140** | ⇓*i*P | **Pb** | **09 55 02.9** | **+0.2** |
| | baz=139 | | | | | | |
| ECL | | | | *e*S | **Sb** | **09 55 11.1** | **+1.1** |
| | baz=139 | | | | | | |
| **CHN2** | **Minshiung** | **0.54** | **349** | ⇓P | **Pg** | **09 55 02.9** | **-0.1** |
| | baz=350 | | | | | | |
| CHN2 | | | | *e*S | **Sb** | **09 55 11.8** | **+1.3** |
| | baz=350 | | | | | | |
| **ALS** | **Alishan** | **0.55** | **21** | ⇓*i*P | **Pg** | **09 55 02.9** | **-0.3** |
| | baz=25 | | | | | | |
| ALS | | | | *e*S | **Sb** | **09 55 11.3** | **+0.3** |
| | baz=25 | | | | | | |
| **TTN** | **Taitung** | **0.57** | **115** | *e*P | **Pn** | **09 55 05.0** | **-0.3** |
| | baz=116 | | | | | | |
| TTN | | | | *e*S | **Sn** | **09 55 15.0** | **+0.8** |
| | baz=116 | | | | | | |
| **ECS** | **Chishang** | **0.59** | **80** | *e*P | **Pn** | **09 55 04.7** | **-0.9** |
| | baz=82 | | | | | | |
| **YUS** | **Yu-Shan** | **0.59** | **34** | P | **Pb** | **09 55 04.1** | **-0.1** |
| | baz=37 | | | | | | |
| YUS | | | | *e*S | **Sb** | **09 55 13.0** | **+0.6** |
| | baz=37 | | | | | | |
| **CHN5** | **Tsauling** | **0.60** | **8** | *i* P | **Pg** | **09 55 03.6** | **-0.6** |
| | baz=10.0 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **09 55 13.6** | **+1.2** |
| | baz=10.0 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.62** | **328** | ⇓*e*P | **Pg** | **09 55 03.7** | **-0.7** |
| | baz=328 | | | | | | |
| WSL | | | | *e*S | **Sg** | **09 55 12.7** | **-0.1** |
| | baz=328 | | | | | | |
| **SCZT** | **Fangliau** | **0.62** | **177** | P | **Pb** | **09 55 04.3** | **-0.2** |
| | baz=175 | | | | | | |
| SCZT | | | | *e*S | **Sn** | **09 55 15.5** | **0.0** |
| | baz=175 | | | | | | |
| **EAST** | **Anshuo** | **0.66** | **159** | *e*P | **Pb** | **09 55 05.2** | **+0.2** |
| | baz=157 | | | | | | |
| **EDH** | **Donghe** | **0.66** | **92** | *e*P | **Pn** | **09 55 05.8** | **-0.8** |
| | baz=93 | | | | | | |
| EDH | | | | *e*S | **Sn** | **09 55 16.0** | **-0.4** |
| | baz=93 | | | | | | |
| **WLCH** | **Liuqiu** | **0.67** | **197** | *e*P | **Pb** | **09 55 05.7** | **+0.4** |
| | baz=195 | | | | | | |
| **FULB** | **Fuli** | **0.68** | **73** | P | **Pn** | **09 55 06.3** | **-0.6** |
| | baz=75 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.68** | **198** | *e*P | **Pb** | **09 55 05.2** | **-0.2** |
| | baz=196 | | | | | | |
| **WGK** | **Gukeng** | **0.69** | **358** | *e*P | **Pg** | **09 55 05.4** | **-0.2** |
| WGK | | | | *e*S | **Sb** | **09 55 16.5** | **+1.8** |
| **WDLH** | **Douliu** | **0.69** | **356** | *e*P | **Pg** | **09 55 05.3** | **-0.5** |
| | baz=358 | | | | | | |
| WDLH | | | | *e*S | **Sb** | **09 55 15.8** | **+1.0** |
| | baz=358 | | | | | | |
| **TAWH** | **Dawu Township** | **0.71** | **157** | *e*P | **Pb** | **09 55 06.1** | **+0.1** |
| | baz=156 | | | | | | |
| **WTK** | **Tuku** | **0.71** | **345** | P | **Pg** | **09 55 05.3** | **-0.8** |
| | baz=346 | | | | | | |
| WTK | | | | *e*S | **Sg** | **09 55 15.8** | **+0.2** |
| | baz=346 | | | | | | |
| **CHKT** | **Chengkung** | **0.72** | **82** | *e*P | **Pn** | **09 55 07.2** | **-0.2** |
| | baz=83 | | | | | | |
| **WSF** | **Szhu** | **0.72** | **332** | *e*P | **Pg** | **09 55 05.4** | **-1.0** |
| | baz=333 | | | | | | |
| WSF | | | | *e*S | **Sg** | **09 55 16.4** | **+0.4** |
| | baz=333 | | | | | | |
| **TWF1** | **Yuli** | **0.74** | **61** | ⇑P | **Pb** | **09 55 06.7** | **+0.2** |
| | baz=64 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **09 55 16.9** | **+0.7** |
| | baz=64 | | | | | | |
| **EYUL** | **Yuli** | **0.76** | **62** | *e*P | **Pb** | **09 55 07.0** | **+0.2** |
| | baz=64 | | | | | | |
| EYUL | | | | *e*S | **Sb** | **09 55 17.7** | **+0.9** |
| | baz=64 | | | | | | |
| **YULB** | **Yu-li** | **0.76** | **59** | ⇑P | **Pb** | **09 55 06.9** | **0.0** |
| | baz=61 | | | | | | |
| YULB | | | | *e*S | **Sb** | **09 55 17.2** | **+0.3** |
| | baz=61 | | | | | | |
| **SLIU** | **Shizi** | **0.80** | **166** | P | **Pb** | **09 55 07.6** | **+0.1** |
| | baz=165 | | | | | | |
| SLIU | | | | *e*S | **Sb** | **09 55 18.8** | **+0.8** |
| | baz=165 | | | | | | |
| **WJS** | **Zhushan** | **0.83** | **9** | P | **Pg** | **09 55 07.6** | **-0.8** |
| | baz=10.0 | | | | | | |
| WJS | | | | *e*S | **Sb** | **09 55 20.3** | **+1.4** |
| | baz=10.0 | | | | | | |
| **EHY** | **Hungye** | **0.84** | **53** | *e*P | **Pb** | **09 55 08.4** | **+0.1** |
| | baz=55 | | | | | | |
| EHY | | | | *e*S | **Sb** | **09 55 19.8** | **+0.5** |
| | baz=55 | | | | | | |
| **SSLB** | **Suanglung** | **0.85** | **23** | P | **Pg** | **09 55 07.9** | **-0.9** |
| | baz=25 | | | | | | |
| SSLB | | | | *e*S | **Sb** | **09 55 20.0** | **+0.4** |
| | baz=25 | | | | | | |
| **SSLB** | **Suanglung** | **0.85** | **23** | P | **Pb** | **09 55 08.6** | **+0.1** |
| **WMLT** | **Mailiao** | **0.87** | **337** | *e*P | **Pg** | **09 55 07.7** | **-1.5** |
| | baz=338 | | | | | | |
| **LDUT** | **Ludao** | **0.87** | **112** | *e*P | **Pn** | **09 55 09.1** | **-0.4** |
| | baz=112 | | | | | | |
| **WNT** | **Mingjian** | **0.88** | **6** | *e*P | **Pg** | **09 55 08.7** | **-0.7** |
| | baz=8.0 | | | | | | |
| **WDGT** | **Dungji** | **0.90** | **287** | ⇓P | **Pg** | **09 55 07.5** | **-2.1** |
| | baz=286 | | | | | | |
| WDGT | | | | *e*S | **Sg** | **09 55 19.7** | **-1.7** |
| | baz=286 | | | | | | |
| **VWDT** | **VWDT** | **0.91** | **34** | *e*P | **Pb** | **09 55 09.3** | **-0.1** |
| | baz=36 | | | | | | |
| VWDT | | | | *e*S | **Sb** | **09 55 22.7** | **+1.6** |
| | baz=36 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.91** | **342** | *e*P | **Pg** | **09 55 08.2** | **-1.6** |
| | baz=343 | | | | | | |
| WTCT | | | | *e*S | **Sg** | **09 55 21.5** | **-0.3** |
| | baz=343 | | | | | | |
| **HGSD** | **Ruisui** | **0.91** | **57** | *e*P | **Pn** | **09 55 10.3** | **+0.2** |
| | baz=59 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **09 55 23.4** | **+0.7** |
| | baz=59 | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.92** | **348** | *e*P | **Pg** | **09 55 08.4** | **-1.6** |
| | baz=349 | | | | | | |
| WRL | | | | *e*S | **Sg** | **09 55 21.6** | **-0.7** |
| | baz=349 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.93** | **18** | *e*P | **Pg** | **09 55 09.4** | **-0.8** |
| | baz=20 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **09 55 23.6** | **+1.8** |
| | baz=20 | | | | | | |
| **TYC** | **Yuchr** | **0.94** | **15** | *e*P | **Pg** | **09 55 09.4** | **-1.0** |
| | baz=17 | | | | | | |
| TYC | | | | *e*S | **Sb** | **09 55 23.7** | **+1.8** |
| | baz=17 | | | | | | |
| **WWF** | **Wufeng** | **1.04** | **5** | *e*P | **Pg** | **09 55 11.0** | **-1.4** |
| | baz=7.0 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.07** | **299** | *e*P | **Pg** | **09 55 09.9** | **-3.0** |
| | baz=299 | | | | | | |
| PHUB | | | | *e*S | **Sg** | **09 55 23.8** | **-3.1** |
| | baz=299 | | | | | | |
| **TWK1** | **Hengchun** | **1.07** | **169** | *e*P | **Pn** | **09 55 12.2** | **0.0** |
| | baz=168 | | | | | | |
| **TWKBT** | **Hengchun** | **1.07** | **169** | ⇑*e*P | **Pn** | **09 55 12.1** | **-0.1** |
| | baz=168 | | | | | | |
| **DPDB** | **Guoxing** | **1.08** | **17** | *e*P | **Pg** | **09 55 12.3** | **-0.7** |
| | baz=18 | | | | | | |
| **WCHH** | **Zhanghua** | **1.08** | **358** | *e*P | **Pg** | **09 55 11.6** | **-1.4** |
| | baz=359 | | | | | | |
| WCHH | | | | *e*S | **Sg** | **09 55 27.2** | **0.0** |
| | baz=359 | | | | | | |
| **VCHM** | **Qimei** | **1.09** | **281** | ⇓*e*P | **Pg** | **09 55 10.2** | **-3.1** |
| | baz=281 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.09** | **16** | *e*P | **Pg** | **09 55 12.2** | **-1.2** |
| | baz=17 | | | | | | |
| WCS | | | | *e*S | **Sb** | **09 55 27.5** | **+1.0** |
| | baz=17 | | | | | | |
| **WUSB** | **Renai** | **1.10** | **26** | *e*P | **Pg** | **09 55 12.2** | **-1.3** |
| | baz=27 | | | | | | |
| WUSB | | | | *e*S | **Sb** | **09 55 27.9** | **+1.1** |
| | baz=27 | | | | | | |
| **PNG** | **Penghu** | **1.11** | **301** | *e*P | **Pg** | **09 55 10.4** | **-3.2** |
| | baz=301 | | | | | | |
| **CHGB** | **Renai** | **1.19** | **27** | ⇑*e*P | **Pg** | **09 55 14.2** | **-0.9** |
| | baz=28 | | | | | | |
| CHGB | | | | *e*S | **Sb** | **09 55 30.5** | **+1.2** |
| | baz=28 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.30** | **28** | *e*P | **Pg** | **09 55 16.3** | **-1.1** |
| | baz=30 | | | | | | |
| **LAY** | **Lan-yu** | **1.30** | **137** | *e*P | **Pg** | **09 55 15.5** | **-1.9** |
| | baz=137 | | | | | | |
| **WHP** | **Taichung City** | **1.31** | **14** | ⇑*e*P | **Pn** | **09 55 15.7** | **0.0** |
| | baz=15 | | | | | | |
| WHP | | | | *e*S | **Sb** | **09 55 33.4** | **+0.5** |
| | baz=15 | | | | | | |
| **WDJ** | **Dajia District** | **1.34** | **2** | *e*P | **Pn** | **09 55 16.0** | **0.0** |
| | baz=3.0 | | | | | | |
| WDJ | | | | *e*S | **Sb** | **09 55 34.5** | **+0.8** |
| | baz=3.0 | | | | | | |
| **LYUB** | **Lan-yu** | **1.35** | **137** | *e*P | **Pn** | **09 55 14.6** | **-1.5** |
| | baz=137 | | | | | | |
| **TDCB** | **Techi** | **1.35** | **23** | *e*P | **Pn** | **09 55 16.5** | **+0.2** |
| | baz=24 | | | | | | |
| TDCB | | | | *e*S | **Sb** | **09 55 33.9** | **-0.2** |
| | baz=24 | | | | | | |
| **TWQ1** | **Liyutan** | **1.35** | **7** | *e*P | **Pn** | **09 55 16.3** | **+0.2** |
| | baz=8.0 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **09 55 34.8** | **+0.8** |
| | baz=8.0 | | | | | | |
| **FUSS** | **Fushou** | **1.38** | **26** | *e*P | **Pn** | **09 55 17.0** | **+0.3** |
| | baz=27 | | | | | | |
| FUSS | | | | *e*S | **Sg** | **09 55 36.0** | **-0.9** |
| | baz=27 | | | | | | |
| **TWD** | **Chiawan** | **1.42** | **40** | *e*P | **Pn** | **09 55 17.2** | **+0.2** |
| | baz=42 | | | | | | |
| **NSY** | **Sanyi** | **1.42** | **6** | *e*P | **Pn** | **09 55 17.3** | **+0.2** |
| | baz=8.0 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.46** | **34** | *e*P | **Pn** | **09 55 18.4** | **+0.8** |
| | baz=35 | | | | | | |
| **NACB** | **Ninganchiao** | **1.49** | **38** | *e*P | **Pn** | **09 55 18.6** | **+0.6** |
| | baz=39 | | | | | | |
| **NMLH** | **Miaoli** | **1.54** | **7** | *e*P | **Pn** | **09 55 19.4** | **+0.7** |
| | baz=8.0 | | | | | | |
| **NNSB** | **Datong** | **1.60** | **27** | *e*P | **Pn** | **09 55 20.6** | **+1.0** |
| | baz=28 | | | | | | |
| **NNS** | **Nan Shan** | **1.60** | **26** | *e*P | **Pn** | **09 55 20.6** | **+0.8** |
| | baz=28 | | | | | | |
| **LIOB** | **Emei** | **1.69** | **13** | *e*P | **Pn** | **09 55 20.6** | **-0.2** |
| | baz=14 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.70** | **16** | *e*P | **Pn** | **09 55 21.0** | **+0.1** |
| | baz=17 | | | | | | |
| **LATG** | **Datong** | **1.75** | **29** | ⇑*e*P | **Pn** | **09 55 22.9** | **+1.2** |
| | baz=30 | | | | | | |
| LATG | | | | *e*S | **Sb** | **09 55 46.0** | **+0.4** |
| | baz=30 | | | | | | |
| **EWUT** | **Wuta** | **1.81** | **37** | *e*P | **Pb** | **09 55 24.3** | **-0.4** |
| | baz=38 | | | | | | |
| **NSK** | **Sanguang** | **1.81** | **23** | *e*P | **Pn** | **09 55 23.3** | **+0.7** |
| | baz=24 | | | | | | |
| **YHNB** | **Yeheng** | **1.81** | **23** | *e*P | **Pn** | **09 55 22.9** | **+0.4** |
| | baz=24 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **09 55 46.6** | **+1.5** |
| | baz=24 | | | | | | |
| **YHNB** | **Yeheng** | **1.81** | **23** | P | **Pn** | **09 55 23.4** | **+0.9** |
| **FUSB** | **Fushanzhiwuyua** | **1.98** | **27** | *e*P | **Pn** | **09 55 26.0** | **+1.3** |
| | baz=28 | | | | | | |
| **TWE** | **Neicheng** | **1.98** | **30** | *e*P | **Pb** | **09 55 26.8** | **-0.9** |
| | baz=31 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.60** | **56** | P | **Pn** | **09 55 35.6** | **+2.4** |
| JYNG | | | | *e*S | **Sb** | **09 56 08.1** | **-1.7** |
| **YOJ** | **Yonaguni jima** | **2.65** | **56** | P | **Pn** | **09 55 36.3** | **+2.3** |
| YOJ | | | | S | **Sb** | **09 56 09.1** | **-2.3** |
| **YOJ** | **Yonaguni jima** | **2.65** | **56** | P | **Pb** | **09 55 36.7** | **-2.4** |
| **HATJ** | **Hateruma jima** | **3.13** | **70** | P | **Pn** | **09 55 41.8** | **+1.2** |
| HATJ | | | | *e*S | **Sn** | **09 56 20.4** | **+2.8** |
| **IRIF** | **Iriomote-Funau** | **3.17** | **65** | P | **Pn** | **09 55 43.4** | **+2.3** |
| IRIF | | | | S | **Sb** | **09 56 22.6** | **-3.7** |
| **JKRS** | **Kuro-shima** | **3.37** | **68** | P | **Pn** | **09 55 46.1** | **+2.2** |
| JKRS | | | | *e*S | **Sn** | **09 56 26.0** | **+2.6** |
| **JIJ** | **Ishigaki jima** | **3.53** | **67** | P | **Pn** | **09 55 47.8** | **+1.7** |
| JIJ | | | | *e*S | **Sn** | **09 56 29.6** | **+2.3** |
| **JISG** | **Ishigakijimahi** | **3.76** | **64** | P | **Pn** | **09 55 50.6** | **+1.4** |
| JISG | | | | S | **Sn** | **09 56 34.2** | **+1.2** |
| **JTJ** | **Tarama** | **4.11** | **66** | P | **Pn** | **09 55 55.9** | **+1.9** |
| JTJ | | | | *e*S | **Sn** | **09 56 44.1** | **+2.5** |
| **JIRB** | **Irabujima** | **4.57** | **66** | P | **Pn** | **09 56 02.8** | **+2.4** |
| JIRB | | | | *e*S | **Sn** | **09 56 55.0** | **+1.9** |

**TEH 08 09:57:58.4, 31.°84N×56.°00E, h5km, ML3.9, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBAF** | **Bafgh** | **0.44** | **236** | *e*Sg | Sg | 09 58 13.6 | +0.8 |
| IBAF | | | | *e*Pg | Pg | 09 58 07.6 | +0.6 |
| IBAF | | | | *e* | | 09 58 14.1 | |
| | comp=Z,63μm,0.2s | | | | | | |
| **IMEH** | **Mehriz** | **1.26** | **249** | *e*Pg | Pn | 09 58 22.9 | 0.0 |
| IMEH | | | | *e* | | 09 58 44.8 | |
| | comp=Z,13μm,0.2s | | | | | | |
| **YZKH** | **Yazd** | **1.31** | **295** | *e*Pg | Pn | 09 58 23.5 | 0.0 |
| **TPRV** | **Parvadeh(Tabas** | **1.32** | **26** | *e*Pg | Pb | 09 58 24.8 | +1.1 |
| **ICHK** | **Chekchek** | **1.41** | **287** | *e*Pg | Pg | 09 58 25.7 | +0.3 |
| ICHK | | | | *e* | | 09 58 50.4 | |
| | comp=Z,16μm,0.2s | | | | | | |
| **KHGB** | **Koh Gabri** | **1.52** | **164** | *e*Pg | Pg | 09 58 28.0 | +0.5 |
| KHGB | | | | *e* | | 09 58 52.0 | |
| | comp=Z,11μm,0.6s | | | | | | |
| **TVBK** | **TV Kerman** | **1.96** | **160** | *e*Pn | Pg | 09 58 36.3 | +0.3 |
| **ISAD** | **Sadrabad** | **1.97** | **273** | *e*Pn | Pg | 09 58 35.6 | -0.5 |
| ISAD | | | | *e* | | 09 59 04.6 | |
| | comp=Z,15μm,0.4s | | | | | | |
| **TKDS** | **Koohdasht(Taba** | **2.01** | **28** | *e*Pn | Pb | 09 58 35.4 | -0.1 |
| TKDS | | | | *e* | | 09 59 20.6 | |
| | comp=Z,8μm,0.5s | | | | | | |
| **TABS** | **Tabas** | **2.04** | **27** | *e*Pn | Pb | 09 58 35.8 | -0.2 |
| **TNSJ** | **Nastanj** | **2.18** | **14** | *e*Pn | Pb | 09 58 37.4 | -1.0 |
| **NGRK** | **Negar Kerman** | **2.28** | **164** | *e*Pn | Pb | 09 58 39.9 | -0.4 |
| NGRK | | | | *e* | | 09 59 15.1 | |
| | comp=Z,12μm,0.4s | | | | | | |
| **ANAR** | **Anarak** | **2.34** | **306** | *e*Pn | Pb | 09 58 40.1 | -1.1 |
| **CHMN** | **Cheshme madani** | **2.38** | **146** | *e*Pn | Pb | 09 58 40.9 | -1.0 |
| CHMN | | | | *e* | | 09 59 19.2 | |
| | comp=Z,10μm,0.4s | | | | | | |
| **ITEG** | **Tejag** | **2.56** | **65** | *e*Pn | Pn | 09 58 42.7 | +2.0 |
| ITEG | | | | *e* | | 09 59 30.1 | |
| | comp=Z,6μm,0.4s | | | | | | |
| **IKOO** | **Kooshah** | **2.62** | **76** | *e*Pn | Pb | 09 58 43.8 | -2.2 |
| IKOO | | | | *e* | | 09 59 33.7 | |
| | comp=Z,6μm,0.4s | | | | | | |
| **BSRN** | **Basiran** | **2.67** | **87** | *e*Pn | Pn | 09 58 44.1 | +1.9 |
| **NASN** | **Na'in** | **2.86** | **290** | *e*Pn | Pn | 09 58 47.1 | +2.1 |
| **AFRZ** | **Afriz** | **3.00** | **57** | *e* | | 09 59 51.7 | |
| | comp=Z,2μm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **QAMS** | **Qamsar** | **4.31** | **297** | *e*Pn | Pn | 09 59 07.8 | +2.9 |
| **GHIR** | **Ghir-Karzin** | **4.40** | **217** | *e*Pn | Pn | 09 59 09.4 | +3.4 |
| **GENO** | **Geno** | **4.43** | **178** | *e*Pn | Pn | 09 59 09.5 | +3.1 |
| **BNDS** | **Bandar-Abbas** | **4.43** | **178** | *e*Pn | Pn | 09 59 09.8 | +3.4 |
| **ISHM** | **Shahmirzad** | **4.55** | **331** | *e*Pn | Pn | 09 59 10.8 | +2.6 |
| **ZHSF** | **Zahedan** | **4.68** | **117** | *e*Pn | Pn | 09 59 12.2 | +2.4 |
| **SBZV** | **Sabzevar** | **4.73** | **16** | *e*Pn | Pn | 09 59 13.3 | +2.7 |
| **GHVR** | **GHOM** | **4.74** | **305** | *e*Pn | Pn | 09 59 14.6 | +4.0 |
| **ZHDN** | **Zahedan** | **4.81** | **119** | *e*Pn | Pn | 09 59 14.1 | +2.4 |
| **TBJM** | **Torbat-e-JAM** | **4.98** | **45** | *e*Pn | Pn | 09 59 17.2 | +3.2 |
| **DAMV** | **Damavand** | **5.05** | **320** | *e*Pn | Pn | 09 59 17.7 | +2.6 |
| **IMOG** | **Moghan** | **5.08** | **32** | *e*Pn | Pn | 09 59 18.6 | +3.1 |
| **IQOM** | **Qom** | **5.09** | **307** | *e*Pn | Pn | 09 59 18.1 | +2.5 |
| **IAKL** | **Akhelmad** | **5.27** | **25** | *e*Pn | Pn | 09 59 21.4 | +3.3 |
| **KHMZ** | **Khomeyn** | **5.42** | **292** | *e*Pn | Pn | 09 59 22.3 | +2.2 |
| **ISFR** | **Sfrayin** | **5.46** | **17** | *e*Pn | Pn | 09 59 23.8 | +3.1 |
| **IMYA** | **Miami** | **5.63** | **36** | *e*Pn | Pn | 09 59 26.3 | +3.3 |
| **ASAO** | **Ashtian** | **5.69** | **300** | *e*Pn | Pn | 09 59 26.9 | +3.1 |
| **IKRD** | **Kardeh** | **5.72** | **30** | *e*Pn | Pn | 09 59 27.9 | +3.7 |
| **CHTH** | **Charan** | **5.73** | **316** | *e*Pn | Pn | 09 59 27.4 | +3.0 |
| **MRVT** | **Maraveh tapeh** | **5.80** | **1** | *e*Pn | Pn | 09 59 28.4 | +3.2 |
| **THKV** | **Tehran--Karaj** | **5.88** | **315** | *e*Pn | Pn | 09 59 28.2 | +1.8 |
| **BJRD** | **Bojnurd** | **5.96** | **11** | *e*Pn | Pn | 09 59 30.8 | +3.4 |
| **IRAZ** | **Razeghan** | **6.18** | **307** | *e*Pn | Pn | 09 59 33.5 | +2.9 |
| **QALM** | **Alamut, Qazvin** | **6.37** | **317** | *e*Pn | Pn | 09 59 36.9 | +3.7 |

**IDC 08 10:07:14.8±5.6, 30.61N×90.98E, h0km, mb3.4/2, mb1 3.6/3, mb1mx3.2/48, mbtmp3.4/3, ML2.7/1, Error ellipse: s-maj=443.2km s-min=39.4km az=62.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **17.50** | **340** | P | Pn | 10 11 20.3 | +0.1 |
| | 0.0nm,0.3s,baz=152,slow=13,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.30** | **135** | P | P | 10 17 59.2 | +0.4 |
| | 0.4nm,0.7s,baz=326,slow=6.8,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **67.88** | **138** | P | P | 10 18 15.0 | -0.3 |
| | 0.3nm,0.7s,baz=321,slow=6.7,SNR=5.2 | | | | | | |

**IDC 08 10:08:29.6±3.5, 2.50S×136.58E, h0km, mb2.9/2, mb1 3.2/3, mb1mx2.7/36, mbtmp3.1/3, ML3.0/1, MS2.8/1, Ms1 2.8/1, ms1mx2.4/15, Error ellipse: s-maj=140.0km s-min=32.6km az=81.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **14.53** | **311** | LR | LR | 10 17 40.5 | |
| | comp=Z,43nm,20.4s,baz=281,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.47** | **187** | P | Pn | 10 12 35.3 | +0.3 |
| | 0.1nm,0.3s,baz=8.5,slow=13,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **21.20** | **187** | P | P | 10 13 16.7 | -0.4 |
| | 0.2nm,0.8s,baz=13,slow=11,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.34** | **323** | P | P | 10 19 33.1 | +0.1 |
| | 0.3nm,0.8s,baz=120,slow=5.7,SNR=2.5 | | | | | | |

*ATH **08** 10:09:16.7, 37.37N×19.84E, h5km±4km, ML3.0/2, Error ellipse: s-maj=5.0km s-min=2.5km az=349.0*
*THE **08** 10:09:19.3, 37.44N×19.86E, h0km±2km, ML2.9/2, Error ellipse: s-maj=3.6km s-min=1.2km az=267.0*

**ISC 08 10:09:16.3±2.0, 37.38N±0.06×19.72E±0.06, h8km±11km, n38, σ1s72/53, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LTHK** | **Lithakia** | **0.95** | **70** | P | **Pg** | **10 09 33.0** | **-1.5** |
| **KEF3** | **Kipouria, Keph** | **0.96** | **31** | P | **Pg** | **10 09 34.8** | **+0.1** |
| KEF3 | | | | S | **Sg** | **10 09 47.2** | **0.0** |
| **KEF3** | **Kipouria, Keph** | **0.96** | **31** | P | **Pg** | **10 09 34.6** | **-0.1** |
| **DMLN** | **Damoulianata-K** | **1.00** | **31** | P | **Pg** | **10 09 35.3** | **-0.2** |
| DMLN | | | | S | **Sb** | **10 09 49.2** | **0.0** |
| **DMLN** | **Damoulianata-K** | **1.00** | **31** | P | **Pg** | **10 09 35.3** | **-0.2** |
| **PSDA** | **Pessada-Kefalo** | **1.00** | **43** | P | **Pg** | **10 09 35.0** | **-0.6** |
| PSDA | | | | S | **Sb** | **10 09 48.6** | **-0.6** |
| **PSDA** | **Pessada-Kefalo** | **1.00** | **43** | P | **Pg** | **10 09 34.2** | **-1.4** |
| PSDA | | | | S | **Sg** | **10 09 48.0** | **-0.6** |
| **KEF4** | **Livadi, Kephal** | **1.04** | **33** | P | **Pg** | **10 09 37.0** | **+0.8** |
| KEF4 | | | | S | **Sb** | **10 09 50.6** | **+0.4** |
| **KEF4** | **Livadi, Kephal** | **1.04** | **33** | P | **Pg** | **10 09 35.5** | **-0.8** |
| **VLS** | **Valsamata** | **1.05** | **41** | P | **Pg** | **10 09 36.1** | **-0.4** |
| **VLS** | **Valsamata** | **1.05** | **41** | P | **Pg** | **10 09 35.0** | **-1.5** |
| VLS | | | | S | **Sg** | **10 09 49.3** | **-0.9** |
| VLS | | | | AML | AML | 10 09 50.4 | |
| | comp=N,2492μm,0.8s | | | | | | |
| VLS | | | | AML | AML | 10 09 51.3 | |
| | comp=E,3257μm,0.4s | | | | | | |
| **FSK** | **Fiskardo** | **1.27** | **32** | P | **Pb** | **10 09 41.4** | **+1.0** |
| FSK | | | | S | **Sn** | **10 09 58.5** | **+1.1** |
| | comp=E,455nm,0.7s | | | | | | |
| **FSK** | **Fiskardo** | **1.27** | **32** | P | **Pg** | **10 09 39.4** | **-1.2** |
| FSK | | | | S | **Sb** | **10 09 57.0** | **+0.2** |
| FSK | | | | AML | AML | 10 09 58.4 | |
| | comp=E,1066μm,0.7s | | | | | | |
| FSK | | | | AML | AML | 10 10 00.7 | |
| | comp=N,587μm,0.5s | | | | | | |
| **VTN** | **Vitineika** | **1.28** | **65** | P | **Pg** | **10 09 39.8** | **-1.1** |
| **EVGI** | **Lefkada island** | **1.44** | **31** | P | **Pn** | **10 09 43.5** | **+0.8** |
| **EVGI** | **Lefkada island** | **1.44** | **31** | P | **Pn** | **10 09 43.1** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **1.54** | **30** | P | **Pn** | **10 09 45.6** | **+1.6** |
| NYDR | | | | S | **Sg** | **10 10 07.0** | **+1.2** |
| **NYDR** | **Nydri-Lefkada** | **1.54** | **30** | P | **Pn** | **10 09 45.4** | **+1.4** |
| **RLS** | **Riolos of Patr** | **1.54** | **64** | P | **Pn** | **10 09 44.9** | **+0.9** |
| **RLS** | **Riolos of Patr** | **1.54** | **64** | P | **Pn** | **10 09 44.3** | **+0.2** |
| **LKD2** | **Lefkada island** | **1.59** | **28** | P | **Pn** | **10 09 46.3** | **+1.6** |
| **TSLK** | **Tsoukalades, L** | **1.62** | **27** | P | **Pn** | **10 09 47.0** | **+1.9** |
| TSLK | | | | S | **Sg** | **10 10 07.9** | **-0.5** |
| **TSLK** | **Tsoukalades, L** | **1.62** | **27** | P | **Pn** | **10 09 46.9** | **+1.8** |
| **DRO** | **Drossia** | **1.68** | **70** | P | **Pb** | **10 09 47.9** | **+0.4** |
| DRO | | | | S | **Sg** | **10 10 09.0** | **-1.4** |
| | comp=N,340nm,0.7s | | | | | | |
| **PYL** | **PYLOS** | **1.69** | **106** | P | **Pg** | **10 09 48.4** | **-0.3** |
| **ITM** | **Ithomi** | **1.78** | **96** | P | **Pb** | **10 09 49.1** | **0.0** |
| **LAKA** | **Lakka** | **1.99** | **64** | P | **Pn** | **10 09 52.0** | **+1.8** |
| **LAKA** | **Lakka** | **1.99** | **64** | P | **Pn** | **10 09 51.9** | **+1.7** |
| **EFP** | **Efpalio** | **2.02** | **58** | P | **Pn** | **10 09 52.6** | **+2.0** |
| EFP | | | | S | **Sn** | **10 10 16.5** | **+0.4** |
| **EFP** | **Efpalio** | **2.02** | **58** | P | **Pn** | **10 09 52.7** | **+2.0** |
| **KLV** | **Kalavryta, Ach** | **2.04** | **70** | P | **Pn** | **10 09 52.4** | **+1.4** |
| **EVR** | **Evrytania** | **2.25** | **47** | P | **Pn** | **10 09 56.2** | **+2.3** |
| **KEK** | **Kerkira** | **2.33** | **2** | P | **Pn** | **10 09 57.5** | **+2.7** |
| **MAKR** | **Makrakomi, Fth** | **2.50** | **49** | P | **Pn** | **10 09 59.6** | **+2.3** |
| **THL** | **Klokotos Trika** | **2.83** | **39** | P | **Pn** | **10 10 04.1** | **+2.4** |
| **STON** | **Ston** | **5.70** | **345** | *e*Pn | **Pn** | **10 10 42.8** | **+1.7** |
| STON | | | | Sn | **Sn** | **10 11 40.6** | **-6.0** |
| **RICI** | **Ricice** | **6.42** | **343** | *e*Pn | **Pn** | **10 10 53.3** | **+2.3** |
| RICI | | | | Sn | **Sn** | **10 12 00.4** | **-3.9** |
| **MORI** | **Morici** | **7.16** | **336** | *e*Pn | **Pn** | **10 11 03.8** | **+2.7** |
| MORI | | | | Sn | **Sn** | **10 12 20.5** | **-2.1** |

*JMA **08** 10:22:01.9±0.1, 40.15N×142.45E, h34km±1km, M3.9*
*NIED **08** 10:22:01.9, 40.15N×142.45E, h34km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr1.21; Mθθ0.88; Mφφ-2.09; Mrθ0.70; Mrφ-0.85; Mθφ3.21; Fault plane solution: M0 3.73000×10^14 NP1: φs 12.00000°, δ 76.00000°, λ 87.00000°. NP2: φs 202.00000°, δ 14.00000°, λ 100.00000°.*
*IDC **08** 10:22:03.7±1.4, 40.73N×141.46E, h0km, mb3.6/6, mb1 3.7/8, mb1mx3.4/58, mbtmp3.6/8, ML3.1/2 Error ellipse: s-maj=35.3km s-min=18.1km az=108.0*

**ISC 08 10:21:59.6±1.7, 40.19N±0.04×142.51E±0.07, h18km±6km, n27, σ1s39/29, mb3.6/6, 8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTH** | **Tanohata** | **0.56** | **243** | ⇓P | **Pn** | **10 22 12.3** | **-0.3** |
| JTH | | | | S | **Sg** | **10 22 20.0** | **+1.8** |
| **JKEN** | **Kujiedanarisaw** | **0.61** | **272** | ⇓P | **Pn** | **10 22 13.1** | **-0.3** |
| JKEN | | | | S | **Sg** | **10 22 20.9** | **+1.0** |
| **JANG** | **Nango** | **0.78** | **284** | ⇓P | **Pn** | **10 22 15.8** | **+0.1** |
| JANG | | | | S | **Sg** | **10 22 25.4** | **+0.1** |
| **MIYJ** | **Miyakonagasawa** | **0.81** | **221** | ⇓P | **Pn** | **10 22 15.6** | **-0.5** |
| MIYJ | | | | S | **Sg** | **10 22 25.5** | **-0.7** |
| **JKZ** | **Kuzumaki** | **0.93** | **258** | ⇓P | **Pn** | **10 22 18.0** | **+0.2** |
| JKZ | | | | S | **Sb** | **10 22 29.4** | **+0.2** |
| **JOM** | **Ohasama** | **1.18** | **233** | ⇓P | **Pb** | **10 22 21.8** | **+0.4** |
| JOM | | | | *e*S | **Sb** | **10 22 36.1** | **-0.3** |
| **JARK** | **Aomorirokkasho** | **1.19** | **313** | ⇓P | **Pg** | **10 22 22.3** | **-0.3** |
| JARK | | | | *e*S | **Sb** | **10 22 37.8** | **+1.1** |
| **JTM** | **Tenmabayashi** | **1.25** | **299** | ⇓P | **Pg** | **10 22 23.3** | **-0.4** |
| JTM | | | | S | **Sn** | **10 22 39.2** | **+0.7** |
| **OFUJ** | **Ofunato** | **1.29** | **211** | P | **Pb** | **10 22 23.1** | **-0.1** |
| OFUJ | | | | S | **Sn** | **10 22 38.8** | **-0.6** |
| **JAH** | **Hinai** | **1.44** | **271** | *i* X | | 10 22 25.8 | |
| **JMK** | **Ichinoseki** | **1.59** | **219** | P | **Pb** | **10 22 27.5** | **-0.9** |
| JMK | | | | *e*S | **Sn** | **10 22 47.0** | **+0.1** |
| **ASAJ** | **Asahikawa** | **3.92** | **1** | Pn | **Pn** | **10 23 00.3** | **+1.4** |
| | 2.1nm,0.3s,baz=226,slow=12,SNR=16 | | | | | | |
| ASAJ | | | | Lg | Lg | 10 23 55.0 | |
| | 2.8nm,0.3s,baz=130,slow=33,SNR=4.4 | | | | | | |
| **MAT** | **Matsushiro** | **4.97** | **224** | P | **Pn** | **10 23 16.5** | **+3.2** |
| MAT | | | | *e*S | **Sn** | **10 24 12.0** | **+1.7** |
| **MJAR** | **Matsushiro Arr** | **4.97** | **224** | Pn | **Pn** | **10 23 16.7** | **+3.4** |
| | 0.3nm,0.3s,baz=32,slow=12,SNR=19 | | | | | | |
| MJAR | | | | Lg | Lg | 10 24 33.3 | |
| | 0.1nm,0.3s,baz=201,slow=22,SNR=1.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.78** | **301** | Pn | **Pn** | **10 24 02.3** | **-3.2** |
| | baz=107,slow=14,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **26.88** | **299** | P | **P** | **10 27 37.9** | **-1.5** |
| | 0.2nm,0.4s,baz=101,slow=8.6,SNR=5.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.20** | **127** | T | T | 10 58 41.8 | |
| | baz=319,slow=75,SNR=83 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.21** | **127** | T | T | 10 58 52.4 | |
| | baz=319,slow=75,SNR=62 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.21** | **127** | T | T | 10 58 53.1 | |
| | baz=319,slow=75,SNR=65 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.02** | **129** | T | T | 10 59 54.7 | |
| | baz=321,slow=76,SNR=24 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.02** | **129** | T | T | 10 59 52.8 | |
| | baz=321,slow=76,SNR=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.03** | **129** | T | T | 10 59 58.1 | |
| | baz=321,slow=76,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.49** | **310** | P | **P** | **10 29 36.2** | **-0.9** |
| | 0.8nm,0.4s,baz=106,slow=11,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.24** | **299** | P | **P** | **10 29 59.4** | **-0.3** |
| | 0.8nm,0.8s,baz=91,slow=12,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.30** | **189** | P | P | 10 32 18.1 | +11 |
| | 0.5nm,0.7s,baz=6.6,slow=6.8,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **60.66** | **31** | P | P | 10 32 15.3 | +6.2 |
| | 0.2nm,0.8s,baz=306,slow=7.2,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **66.43** | **332** | P | **P** | **10 32 47.5** | **+0.2** |
| | 2.7nm,1.0s,baz=336,slow=36,SNR=1.6 | | | | | | |

*IDC **08** 10:23:05.0±1.4, 10.20S×123.66E, h27km±1km, mb3.6/4, mb1 3.7/7, mb1mx3.4/46, mbtmp3.8/7, ML3.8/3, MS3.5/2, Ms1 3.5/2, ms1mx2.7/60, Error ellipse: s-maj=40.8km s-min=9.1km az=45.0*
*DJA **08** 10:23:06.7±0.7, 10°S±6'×12°4E±°, h12km±3km, M3.7/6, MLv3.7/6*
*NEIC **08** 10:23:07.7±1.2, 10°19S±0'10×123°8E±0'1, h43km±6km, mb3.8/2, Error ellipse: s-maj=17.0km s-min=11.0km az=51.0*

**ISC 08 10:23:05.3±0.6, 10.31S±0.05×123.70E±0.05, h10km, n33, σ2s33/35, mb4.0/4, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.11** | **343** | LR | LR | 10 23 08.5 | |
| | comp=Z,141nm,21.4s,baz=292,slow=469 | | | | | | |
| BATI | | | | Pn | **Pg** | **10 23 09.4** | **+1.3** |
| | 5μm,0.3s,baz=88,slow=1.5,SNR=1336 | | | | | | |
| BATI | | | | Lg | Lg | 10 23 13.0 | |
| | 7μm,0.3s,baz=2.8,slow=9.0,SNR=45 | | | | | | |
| **BATI** | **Baumata** | **0.11** | **343** | P | **Pg** | **10 23 09.4** | **+1.3** |
| BATI | | | | S | **Sg** | **10 23 13.1** | **+3.1** |
| **SOEI** | **Soe** | **0.79** | **45** | P | **Pg** | **10 23 21.7** | **+1.2** |
| SOEI | | | | S | **Sb** | **10 23 33.7** | **+1.7** |
| **SOEI** | **Soe** | **0.79** | **45** | P | **Pg** | **10 23 20.9** | **+0.4** |
| **SOEI** | **Soe** | **0.79** | **45** | P | **Pb** | **10 23 23.1** | **+1.9** |
| **MMRI** | **Maumere** | **2.20** | **319** | P | **Pn** | **10 23 41.6** | **-0.3** |
| MMRI | | | | S | **Sn** | **10 24 09.1** | **-0.1** |
| **MMRI** | **Maumere** | **2.20** | **319** | Pn | **Pn** | **10 23 40.7** | **-1.2** |
| **BASI** | **Baing, Sumba** | **3.07** | **271** | P | **Pn** | **10 23 54.5** | **+0.6** |
| **WBSI** | **Waikabubak, Su** | **4.29** | **279** | P | **Pn** | **10 24 11.6** | **+0.9** |
| **KNRA** | **Kununurra** | **7.27** | **138** | P | **Pn** | **10 24 54.4** | **+2.8** |
| **DRS** | **Darwin Rock St** | **7.37** | **107** | P | **Pn** | **10 24 55.2** | **+2.2** |
| **FITZ** | **Fitzroy Crossi** | **7.97** | **167** | Pn | **Pn** | **10 25 02.4** | **+1.2** |
| | 1.7nm,0.3s,baz=7.8,slow=10,SNR=44 | | | | | | |
| FITZ | | | | Sn | **Sn** | **10 26 32.4** | **+1.0** |
| | 3.0nm,0.3s,baz=96,slow=18,SNR=11 | | | | | | |
| **KDU** | **Kakadu** | **8.92** | **106** | P | **Pn** | **10 25 16.7** | **+2.4** |
| **MBWA** | **Marble Bar** | **11.44** | **199** | Pn | **Pn** | **10 25 49.9** | **+1.1** |
| **SIJI** | **Sorong** | **12.03** | **39** | LR | LR | 10 30 22.7 | |
| | comp=Z,103nm,21.7s,baz=27,slow=37 | | | | | | |
| **WB0** | **Warramunga Arr** | **13.96** | **134** | Pn | **Pn** | **10 26 21.8** | **-1.5** |
| **WRA** | **Warramunga Arr** | **14.04** | **134** | Pn | **Pn** | **10 26 22.9** | **-1.4** |
| | 0.4nm,0.3s,baz=297,slow=13,SNR=19 | | | | | | |
| WRA | | | | Sn | **Sn** | **10 28 55.0** | **-5.4** |
| | 0.8nm,0.3s,baz=264,slow=18,SNR=9.0 | | | | | | |
| **WB2** | **Warramunga Arr** | **14.04** | **134** | Pn | **Pn** | **10 26 23.7** | **-0.8** |
| **GIRL** | **Giralia** | **15.24** | **215** | P | **P** | **10 26 46.3** | **+0.6** |
| **AS31** | **Alice Springs** | **16.47** | **145** | Pn | **Pn** | **10 26 56.7** | **0.0** |
| AS31 | | | | IAmb | IAmb | 10 27 05.1 | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **16.47** | **145** | Pn | **Pn** | **10 26 56.8** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=322,slow=13,SNR=27 | | | | | | |
| ASAR | | | | Sn | **Sn** | **10 29 56.2** | **-3.3** |
| | comp=Z,0.4nm,0.3s,baz=314,slow=19,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **16.47** | **145** | Pn | **Pn** | **10 26 56.3** | **-0.3** |
| **MEEK** | **Meekatharra** | **16.93** | **196** | P | **P** | **10 27 07.3** | **+2.8** |
| **QIS** | **Mount Isa** | **18.39** | **126** | P | **Pn** | **10 27 24.2** | **+3.6** |
| **COEN** | **Coen** | **19.38** | **103** | P | **Pn** | **10 27 35.6** | **+3.0** |
| **MORW** | **Morawa** | **19.99** | **200** | P | Pn | 10 27 44.8 | +5.1 |
| **OOD** | **Oodnadatta** | **20.73** | **149** | P | **P** | **10 27 49.4** | **+3.3** |
| **USRK** | **Ussuriysk Ar.** | **54.77** | **7** | P | **P** | **10 32 32.4** | **-2.8** |
| | comp=Z,0.5nm,0.3s,baz=199,slow=7.6,SNR=8.8 | | | | | | |
| **SONM** | **Songino Array** | **59.90** | **347** | P | **P** | **10 33 08.0** | **-3.4** |
| | comp=Z,0.4nm,0.8s,baz=155,slow=8.8,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **59.90** | **347** | IAmb | IAmb | 10 33 11.6 | |
| | comp=Z,7.3nm,1.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.80** | **331** | P | **P** | **10 34 00.4** | **-3.0** |
| | comp=Z,0.7nm,0.6s,baz=134,slow=6.1,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.98** | **337** | P | **P** | **10 34 25.4** | **-3.5** |
| | comp=Z,0.5nm,0.4s,baz=130,slow=6.3,SNR=2.7 | | | | | | |
| **YAK** | **Yakutsk** | **72.27** | **3** | LR | LR | 11 08 29.0 | |
| | comp=Z,65nm,20.0s,baz=274,slow=38 | | | | | | |

*KNET **08** 10:24:11.4±0.4, 42.57N×75.13E, h14km±2km, ml3.2, Error ellipse: s-maj=3.1km s-min=2.1km az=135.0*
*NNC **08** 10:24:12.8±0.3, 42.65N×75.13E, h0km, mb4.2, mpv4.0, Error ellipse: s-maj=3.1km s-min=1.3km az=170.0*
*SOME **08** 10:24:12.6, 42.63N×75.13E, h10km*
*KRNET **08** 10:24:12.3±0.1, 42.59N×75.14E, h17km, mb3.7*
*MOS **08** 10:24:12.5±1.6, 42.65N×75.04E, h13km, mb3.4/1, Error ellipse: s-maj=7.0km s-min=5.6km az=140.7*
*MOS Felt (III-IV) at Arpa-Tektir; (III) at Karagay-Bulak, Issyk-Ata, Prigorodnoye, Kegeti; (II) at Bishkek.*

**ISC 08 10:24:11.6±1.1, 42.53N±0.02×75.16E±0.01, h2km±8km, n149, σ1s17/244, 40C-45D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **0.20** | **309** | ⇓P | **Pg** | **10 24 16.2** | **+0.6** |
| | 1μm,0.1s,SNR=4721 | | | | | | |
| KBK | | | | ⇓S | **Sg** | **10 24 18.9** | **+0.7** |
| | 10μm,0.3s | | | | | | |
| **KBK** | **Karagaybulak** | **0.20** | **309** | *i* PG | **Pg** | **10 24 16.1** | **+0.6** |
| **KBK** | **Karagaybulak** | **0.20** | **309** | *i* P | **Pg** | **10 24 16.1** | **+0.6** |
| | baz=96 | | | | | | |
| KBK | | | | *i* S | **Sg** | **10 24 18.8** | **+0.6** |
| | baz=96 | | | | | | |
| **FRU1** | **Bishkek** | **0.48** | **306** | ⇑*i* P | **Pg** | **10 24 21.4** | **+0.6** |
| | baz=3.0 | | | | | | |
| FRU1 | | | | ⇑*i* S | **Sg** | **10 24 27.9** | **+0.8** |
| | baz=3.0 | | | | | | |
| **AAK** | **Ala-Archa** | **0.50** | **283** | ⇑P | **Pg** | **10 24 21.8** | **+0.5** |
| | 100nm,0.2s,SNR=323 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **10 24 28.4** | **+0.7** |
| | 1μm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **0.50** | **283** | PG | **Pg** | **10 24 21.5** | **+0.2** |
| AAK | | | | S | **Sg** | **10 24 28.5** | **+0.7** |
| **AAK** | **Ala-Archa** | **0.50** | **283** | ⇑P | **Pg** | **10 24 21.5** | **+0.2** |
| | 14nm,0.2s | | | | | | |
| AAK | | | | ⇑S | **Sg** | **10 24 28.6** | **+0.8** |
| | 301nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **0.50** | **283** | *i* P | **Pg** | **10 24 21.8** | **+0.5** |
| | baz=76 | | | | | | |
| AAK | | | | *i* S | **Sg** | **10 24 28.4** | **+0.7** |
| | baz=76 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TKM2** | **Tokmak 2** | **0.51** | **39** | ⇓P | **Pg** | **10 24 21.3** | **0.0** |
| | 205nm,0.1s,SNR=265 | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **10 24 27.8** | **-0.1** |
| | 1μm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **39** | *i* PG | **Pg** | **10 24 21.3** | **0.0** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,69nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **39** | ⇓P | **Pg** | **10 24 21.3** | **0.0** |
| | comp=Z,69nm,0.2s | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **10 24 27.6** | **-0.3** |
| | comp=Z,437nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **39** | ⇑*i* P | **Pg** | **10 24 21.4** | **0.0** |
| | baz=45 | | | | | | |
| TKM2 | | | | ⇑*i* S | **Sg** | **10 24 27.9** | **-0.1** |
| | baz=45 | | | | | | |
| **CHMS** | **Chumysh** | **0.56** | **328** | ⇓P | **Pg** | **10 24 22.1** | **-0.3** |
| | comp=Z,686nm,0.2s,SNR=417 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **10 24 29.0** | **-0.5** |
| | comp=Z,1μm,0.1s | | | | | | |
| **CHMS** | **Chumysh** | **0.56** | **328** | *i* PG | **Pg** | **10 24 22.0** | **-0.3** |
| CHMS | | | | *i* S | **Sg** | **10 24 29.0** | **-0.5** |
| **CHMS** | **Chumysh** | **0.56** | **328** | ⇑*i* P | **Pg** | **10 24 22.0** | **-0.3** |
| | baz=25 | | | | | | |
| CHMS | | | | ⇑*i* S | **Sg** | **10 24 29.0** | **-0.5** |
| | baz=25 | | | | | | |
| **UCH** | **Uchtor** | **0.56** | **238** | ⇓P | **Pb** | **10 24 23.7** | **-0.8** |
| | comp=Z,142nm,0.3s,SNR=327 | | | | | | |
| UCH | | | | ⇓S | **Sb** | **10 24 31.3** | **-2.0** |
| | comp=Z,484nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **0.56** | **238** | *i* PG | **Pb** | **10 24 23.7** | **-0.8** |
| UCH | | | | *i* S | **Sb** | **10 24 32.0** | **-1.2** |
| **UCH** | **Uchtor** | **0.56** | **238** | *i* P | **Pb** | **10 24 23.7** | **-0.8** |
| | baz=33 | | | | | | |
| UCH | | | | *i* S | **Sb** | **10 24 32.0** | **-1.2** |
| | baz=33 | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.58** | **94** | *i* PG | **Pb** | **10 24 23.7** | **-0.9** |
| BOOM | | | | *i* S | **Sb** | **10 24 32.0** | **-1.4** |
| **BOOM** | **Boomskoye usch** | **0.58** | **94** | ⇓*i* P | **Pb** | **10 24 23.7** | **-0.9** |
| | baz=99 | | | | | | |
| BOOM | | | | ⇓*i* S | **Sb** | **10 24 32.0** | **-1.4** |
| | baz=99 | | | | | | |
| **KST** | **Kastek** | **0.78** | **49** | ⇓*e*P | **Pg** | **10 24 26.7** | **0.0** |
| | comp=Z,73nm,0.3s | | | | | | |
| KST | | | | *e*S | **Sg** | **10 24 36.9** | **+0.1** |
| | comp=Z,300nm,0.3s | | | | | | |
| **KST** | **Kastek** | **0.78** | **49** | P | **Pg** | **10 24 26.7** | **0.0** |
| | comp=Z,73nm,0.3s | | | | | | |
| KST | | | | S | **Sg** | **10 24 36.9** | **+0.1** |
| | comp=Z,300nm,0.3s | | | | | | |
| **KST** | **Kastek** | **0.78** | **49** | ⇓*e*P | **Pg** | **10 24 26.7** | **0.0** |
| | baz=53 | | | | | | |
| KST | | | | ⇓*e*S | **Sg** | **10 24 36.9** | **+0.1** |
| | baz=53 | | | | | | |
| **DGS** | **Degeres** | **0.84** | **32** | ⇓*e*P | **Pg** | **10 24 27.5** | **-0.3** |
| | comp=Z,88nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **10 24 38.4** | **-0.3** |
| | comp=Z,245nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **0.84** | **32** | P | **Pg** | **10 24 27.5** | **-0.3** |
| | comp=Z,88nm,0.3s | | | | | | |
| DGS | | | | S | **Sg** | **10 24 38.3** | **-0.3** |
| | comp=Z,245nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **0.84** | **32** | ⇓*e*P | **Pg** | **10 24 27.5** | **-0.3** |
| | baz=35 | | | | | | |
| DGS | | | | ⇓*e*S | **Sg** | **10 24 38.4** | **-0.3** |
| | baz=35 | | | | | | |
| **ULHL** | **Ulahol** | **0.85** | **109** | P | **Pb** | **10 24 28.8** | **-0.5** |
| | comp=Z,43nm,0.2s,SNR=146 | | | | | | |
| **ULHL** | **Ulahol** | **0.85** | **109** | *i* PG | **Pb** | **10 24 28.8** | **-0.5** |
| ULHL | | | | *i* S | **Sb** | **10 24 40.8** | **-0.4** |
| **ULHL** | **Ulahol** | **0.85** | **109** | *i* P | **Pb** | **10 24 28.8** | **-0.5** |
| | baz=12 | | | | | | |
| ULHL | | | | *i* S | **Sb** | **10 24 40.8** | **-0.4** |
| | baz=12 | | | | | | |
| **USP** | **Ospenovka** | **0.88** | **327** | P | **Pg** | **10 24 27.8** | **-0.7** |
| | comp=Z,372nm,0.2s,SNR=742 | | | | | | |
| USP | | | | ⇓S | **Sg** | **10 24 39.2** | **-0.7** |
| | comp=Z,310nm,0.2s | | | | | | |
| **USP** | **Ospenovka** | **0.88** | **327** | *i* PG | **Pg** | **10 24 27.8** | **-0.7** |
| USP | | | | *i* S | **Sg** | **10 24 39.3** | **-0.7** |
| **USP** | **Ospenovka** | **0.88** | **327** | ⇑*i* P | **Pg** | **10 24 27.8** | **-0.7** |
| | baz=25 | | | | | | |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AAA | | | | | *e*S | **Sg** | **10 24 59.3** | **+0.8** |
| | comp=Z,144nm,0.3s | | | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **62** | P | | **Pg** | **10 24 39.9** | **+0.3** |
| | comp=Z,138nm,0.3s | | | | | | | | |
| AAA | | | | | S | **Sg** | **10 24 59.3** | **+0.8** |
| | comp=Z,144nm,0.3s | | | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **62** | *e*P | | **Pg** | **10 24 39.9** | **+0.3** |
| | baz=64 | | | | | | | | |
| AAA | | | | | *e*S | **Sg** | **10 24 59.3** | **+0.8** |
| | baz=64 | | | | | | | | |
| **KNDC** | **Almaty** | **1.50** | **62** | PG | | **Pn** | **10 24 39.3** | **-0.3** |
| **KNDC** | **Almaty** | **1.50** | **62** | ⇓P | | **Pn** | **10 24 39.4** | **-0.3** |
| | comp=Z,24nm,0.4s | | | | | | | | |
| KNDC | | | | | ⇓S | **Sg** | **10 25 00.6** | **+0.9** |
| | comp=Z,284nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **65** | PN | | **Pn** | **10 24 39.3** | **-0.8** |
| **MDOK** | **Medeo** | **1.53** | **65** | *e*P | | **Pg** | **10 24 40.7** | **-0.2** |
| | comp=Z,66nm,0.5s | | | | | | | | |
| MDOK | | | | | *e*S | **Sg** | **10 25 00.9** | **+0.3** |
| | comp=Z,112nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **65** | ⇓P | | **Pn** | **10 24 39.4** | **-0.8** |
| | comp=Z,17nm,0.4s | | | | | | | | |
| MDOK | | | | | ⇑S | **Sg** | **10 25 01.2** | **+0.5** |
| | comp=Z,63nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **65** | Pg | | **Pg** | **10 24 40.7** | **-0.2** |
| | comp=Z,66nm,0.5s | | | | | | | | |
| MDOK | | | | | Lg | Lg | 10 25 00.9 | | |
| | comp=Z,112nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **65** | *e*P | | **Pg** | **10 24 40.7** | **-0.2** |
| | baz=67 | | | | | | | | |
| MDOK | | | | | *e*S | **Sg** | **10 25 01.0** | **+0.3** |
| | baz=67 | | | | | | | | |
| **KDJ** | **Kajisay** | **1.55** | **104** | *e*PN | | **Pg** | **10 24 41.4** | **+0.1** |
| KDJ | | | | *i* S | | **Sg** | **10 25 02.5** | **+1.1** |
| **KDJ** | **Kajisay** | **1.55** | **104** | ⇑*e*P | | **Pg** | **10 24 41.4** | **+0.1** |
| | baz=6.0 | | | | | | | | |
| KDJ | | | | | ⇑*i*S | **Sg** | **10 25 02.5** | **+1.1** |
| | baz=6.0 | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.60** | **63** | *e*P | | **Pg** | **10 24 42.0** | **-0.3** |
| | comp=Z,12nm,0.3s | | | | | | | | |
| KOTS | | | | | *e*S | **Sg** | **10 25 03.2** | **+0.2** |
| | comp=Z,214nm,0.4s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.60** | **63** | P | | **Pg** | **10 24 42.0** | **-0.3** |
| | comp=Z,42nm,0.3s | | | | | | | | |
| KOTS | | | | | S | **Sg** | **10 25 03.2** | **+0.2** |
| | comp=Z,214nm,0.4s | | | | | | | | |
| **KUU** | **Kurty** | **1.61** | **32** | ⇓*e*P | | **Pn** | **10 24 41.3** | **+0.1** |
| | comp=Z,117nm,0.3s | | | | | | | | |
| KUU | | | | | *e*S | **Sn** | **10 25 01.9** | **-0.7** |
| | comp=Z,296nm,0.3s | | | | | | | | |
| **KUU** | **Kurty** | **1.61** | **32** | P | | **Pn** | **10 24 41.3** | **+0.1** |
| | comp=Z,117nm,0.3s | | | | | | | | |
| KUU | | | | | S | **Sn** | **10 25 01.9** | **-0.7** |
| | comp=Z,296nm,0.3s | | | | | | | | |
| **KUU** | **Kurty** | **1.61** | **32** | ⇓*e*P | | **Pn** | **10 24 41.3** | **+0.1** |
| | baz=33 | | | | | | | | |
| KUU | | | | | ⇓*e*S | **Sn** | **10 25 01.9** | **-0.7** |
| | baz=33 | | | | | | | | |
| **KTBS** | **Karatobe** | **1.62** | **43** | ⇓*e*P | | **Pb** | **10 24 41.6** | **-0.8** |
| | comp=Z,110nm,0.3s | | | | | | | | |
| KTBS | | | | | *e*S | **Sn** | **10 25 02.8** | **-0.1** |
| | comp=Z,311nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.62** | **43** | P | | **Pb** | **10 24 41.6** | **-0.8** |
| | comp=Z,110nm,0.3s | | | | | | | | |
| KTBS | | | | | S | **Sn** | **10 25 02.8** | **-0.1** |
| | comp=Z,311nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.62** | **43** | ⇓*e*P | | **Pb** | **10 24 41.6** | **-0.8** |
| | baz=44 | | | | | | | | |
| KTBS | | | | | ⇓*e*S | **Sn** | **10 25 02.8** | **-0.1** |
| | baz=44 | | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.87** | **81** | *i* PN | | **Pb** | **10 24 46.1** | **-0.5** |
| ANVS | | | | *i* S | | **Sg** | **10 25 10.8** | **-0.8** |
| **ANVS** | **Anan'yevo** | **1.87** | **81** | ⇑*i*P | | **Pb** | **10 24 46.1** | **-0.5** |
| | baz=83 | | | | | | | | |
| ANVS | | | | | ⇑*i*S | **Sg** | **10 25 10.8** | **-0.8** |
| | baz=83 | | | | | | | | |
| **CHKK** | **Chushkaly** | **1.88** | **45** | *e*P | | **Pb** | **10 24 46.1** | **-0.6** |
| | comp=Z,61nm,0.3s | | | | | | | | |
| CHKK | | | | | *e*S | **Sb** | **10 25 09.9** | **-0.8** |
| | comp=Z,473nm,0.2s | | | | | | | | |
| **CHKK** | **Chushkaly** | **1.88** | **45** | *e*Pg | | **Pb** | **10 24 46.0** | **-0.8** |
| | baz=47 | | | | | | | | |
| **MNAS** | **Manas** | **1.96** | **270** | *i* PN | | **Pb** | **10 24 47.5** | **-0.7** |
| MNAS | | | | *i* S | | **Sb** | **10 25 13.0** | **-0.2** |
| **MNAS** | **Manas** | **1.96** | **270** | ⇓*i*P | | **Pb** | **10 24 47.5** | **-0.7** |
| | baz=68 | | | | | | | | |
| MNAS | | | | | ⇓*i*S | **Sb** | **10 25 13.0** | **-0.2** |
| | baz=68 | | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.40** | **90** | *e*PN | | **Pb** | **10 24 53.8** | **-1.8** |
| PRZ | | | | *i* S | | **Sb** | **10 25 24.1** | **-1.6** |
| **PRZ** | **Przheval'sk** | **2.40** | **90** | ⇑*e*P | | **Pb** | **10 24 53.8** | **-1.8** |
| | baz=91 | | | | | | | | |
| PRZ | | | | | ⇑*i*S | **Sb** | **10 25 24.1** | **-1.6** |
| | baz=91 | | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **66** | *e*P | | **Pg** | **10 24 56.5** | **-1.3** |
| | comp=Z,43nm,0.6s | | | | | | | | |
| KURS | | | | | *e*S | **Sg** | **10 25 27.9** | **-1.0** |
| | comp=Z,155nm,0.7s | | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **66** | Pg | | **Pg** | **10 24 56.5** | **-1.3** |
| | comp=Z,43nm,0.6s | | | | | | | | |
| KURS | | | | | Lg | Lg | 10 25 27.9 | | |
| | comp=Z,155nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **2.45** | **76** | *e*PN | | **Pb** | **10 24 56.7** | **+0.3** |
| **SATY** | **Saty** | **2.45** | **76** | *e*P | | **Pg** | **10 24 57.6** | **-0.9** |
| | comp=Z,66nm,0.2s | | | | | | | | |
| SATY | | | | | *e*S | **Sg** | **10 25 29.3** | **-1.0** |
| | comp=Z,280nm,0.6s | | | | | | | | |
| **SATY** | **Saty** | **2.45** | **76** | *e*Pg | | **Pb** | **10 24 56.8** | **+0.3** |
| | baz=78 | | | | | | | | |
| **SATY** | **Saty** | **2.45** | **76** | Pg | | **Pg** | **10 24 57.6** | **-0.9** |
| | comp=Z,66nm,0.2s | | | | | | | | |
| SATY | | | | | Lg | Lg | 10 25 30.3 | | |
| | comp=Z,280nm,0.6s | | | | | | | | |
| **ARK** | **Arkit** | **2.49** | **254** | *e*PN | | **Pb** | **10 24 54.9** | **-2.2** |
| **ARK** | **Arkit** | **2.49** | **254** | ⇑*e*P | | **Pb** | **10 24 54.9** | **-2.2** |
| | baz=53 | | | | | | | | |
| ARK | | | | | ⇑*i*S | **Sb** | **10 25 26.0** | **-2.2** |
| | baz=53 | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.49** | **74** | *e*PN | | **Pb** | **10 24 57.5** | **+0.3** |
| **ZHN** | **Zhinishke** | **2.49** | **74** | *e*P | | **Pg** | **10 24 59.0** | **-0.4** |
| | comp=Z,87nm,0.4s | | | | | | | | |
| ZHN | | | | | *e*S | **Sg** | **10 25 32.5** | **+0.8** |
| | comp=Z,220nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.49** | **74** | *e*Pg | | **Pb** | **10 24 57.6** | **+0.3** |
| | baz=76 | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.49** | **74** | Pg | | **Pg** | **10 24 59.0** | **-0.4** |
| | comp=Z,124nm,0.4s | | | | | | | | |
| ZHN | | | | | Lg | Lg | 10 25 32.5 | | |
| | comp=Z,220nm,0.3s | | | | | | | | |
| **ARXS** | **Arharly** | **2.57** | **48** | *e*PN | | **Pb** | **10 24 56.8** | **-1.7** |
| **ARXS** | **Arharly** | **2.57** | **48** | *e*P | | **Pb** | **10 24 57.6** | **-0.9** |
| | comp=Z,80nm,0.6s | | | | | | | | |
| ARXS | | | | | *e*S | **Sb** | **10 25 29.9** | **-0.8** |
| | comp=Z,209nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.57** | **48** | Pg | | **Pb** | **10 24 57.6** | **-0.9** |
| | comp=Z,80nm,0.6s | | | | | | | | |
| ARXS | | | | | Lg | Lg | 10 25 29.9 | | |
| | comp=Z,209nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **2.64** | **343** | *e*PN | | **Pb** | **10 24 58.6** | **-0.9** |
| **BTLS** | **Baital** | **2.64** | **343** | *e*P | | **Pb** | **10 24 58.8** | **-0.8** |
| | comp=Z,65nm,0.3s | | | | | | | | |
| BTLS | | | | | *e*S | **Sb** | **10 25 32.1** | **-0.3** |
| | comp=Z,200nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **2.64** | **343** | *e*Pg | | **Pb** | **10 24 58.7** | **-0.9** |
| | baz=342 | | | | | | | | |
| **BTLS** | **Baital** | **2.64** | **343** | Pg | | **Pb** | **10 24 58.8** | **-0.8** |
| | comp=Z,65nm,0.3s | | | | | | | | |
| BTLS | | | | | Lg | Lg | 10 25 32.1 | | |
| | comp=Z,200nm,0.6s | | | | | | | | |
| **OHH** | **Osh** | **2.68** | **222** | ⇑*i*P | | **Pb** | **10 24 57.9** | **-2.5** |
| | baz=21 | | | | | | | | |
| OHH | | | | | ⇑*i*S | **Sb** | **10 25 31.2** | **-2.6** |
| | baz=21 | | | | | | | | |
| **KPKS** | **Kokpek** | **2.75** | **69** | *e*PN | | **Pb** | **10 25 01.7** | **+0.1** |
| **KPKS** | **Kokpek** | **2.75** | **69** | *e*P | | **Pg** | **10 25 02.9** | **-1.5** |
| | comp=Z,42nm,0.4s | | | | | | | | |
| KPKS | | | | | *e*S | **Sg** | **10 25 39.0** | **-0.9** |
| | comp=Z,222nm,0.3s | | | | | | | | |
| **KPKS** | **Kokpek** | **2.75** | **69** | *e*Pg | | **Pb** | **10 25 01.8** | **+0.1** |
| | baz=71 | | | | | | | | |
| **DZA** | **Taraz** | **2.84** | **279** | *e*P | | **Pb** | **10 25 03.8** | **+0.7** |
| | comp=Z,155nm,0.1s | | | | | | | | |
| DZA | | | | | *e*S | **Sb** | **10 25 40.2** | **+1.8** |
| | comp=Z,876nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **56** | *e*P | | **Pb** | **10 25 03.9** | **0.0** |
| | comp=Z,92nm,0.5s | | | | | | | | |
| BLB | | | | | *e*S | **Sb** | **10 25 40.8** | **+1.1** |
| | comp=Z,272nm,0.5s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **56** | Pg | | **Pb** | **10 25 03.9** | **0.0** |
| | comp=Z,92nm,0.5s | | | | | | | | |
| BLB | | | | | Lg | Lg | 10 25 40.8 | | |
| | comp=Z,272nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.91** | **76** | *e*PN | | **Pb** | **10 25 04.9** | **+0.6** |
| **UZB** | **Uzynbulak** | **2.91** | **76** | *e*P | | **Pb** | **10 25 05.2** | **+0.9** |
| | comp=Z,29nm,0.4s | | | | | | | | |
| UZB | | | | | *e*S | **Sg** | **10 25 42.9** | **-2.1** |
| | comp=Z,215nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.91** | **76** | *e*Pg | | **Pb** | **10 25 05.0** | **+0.6** |
| | baz=78 | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.91** | **76** | Pg | | **Pb** | **10 25 05.2** | **+0.9** |
| | comp=Z,64nm,0.5s | | | | | | | | |
| UZB | | | | | Lg | Lg | 10 25 42.9 | | |
| | comp=Z,215nm,0.5s | | | | | | | | |
| **TRKS** | **Terek-Say** | **3.16** | **253** | ⇑*i*P | | **Pn** | **10 25 04.2** | **+1.7** |
| | baz=51 | | | | | | | | |
| TRKS | | | | | ⇑*i*S | **Sn** | **10 25 42.6** | **+1.8** |
| | baz=51 | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.28** | **74** | PN | | **Pg** | **10 25 12.4** | **-2.0** |
| PDGK | | | | | | | 10 25 53.2 | | |
| **PDGK** | **Podgornoye** | **3.28** | **74** | ⇑Pg | | **Pg** | **10 25 12.4** | **-2.0** |
| | comp=Z,23nm,0.6s | | | | | | | | |
| PDGK | | | | | ⇑Lg | Lg | 10 25 53.2 | | |
| | comp=Z,68nm,0.8s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.41** | **42** | *e*PN | | **Pn** | **10 25 03.7** | **-2.2** |
| **TDK** | **Taldyqorghan** | **3.41** | **42** | *e*P | | **Pb** | **10 25 13.4** | **+0.6** |
| | comp=Z,27nm,0.3s | | | | | | | | |
| TDK | | | | | *e*S | **Sb** | **10 25 57.0** | **+2.2** |
| | comp=Z,118nm,0.5s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.41** | **42** | *e*Pn | | **Pn** | **10 25 03.8** | **-2.2** |
| | baz=44 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.41** | **42** | Pg | | **Pb** | **10 25 13.4** | **+0.6** |
| | comp=Z,27nm,0.3s | | | | | | | | |
| TDK | | | | | Lg | Lg | 10 25 57.0 | | |
| | comp=Z,118nm,0.5s | | | | | | | | |
| **KNOS** | **Konyrlen** | **3.45** | **57** | *e*P | | **Pb** | **10 25 13.7** | **+0.1** |
| | comp=Z,2.9nm,0.4s | | | | | | | | |
| KNOS | | | | | *e*S | **Sb** | **10 25 57.1** | **+1.1** |
| | comp=Z,63nm,0.8s | | | | | | | | |
| **KK02** | **Karatay Array** | **3.47** | **281** | ⇓Pg | | **Pg** | **10 25 16.6** | **-1.4** |
| | comp=Z,25nm,0.8s,baz=95,slow=16 | | | | | | | | |
| KK02 | | | | | ⇑Lg | Lg | 10 25 57.9 | | |
| | comp=Z,70nm,0.5s,baz=95,slow=29 | | | | | | | | |
| **IUG** | **luzhnay** | **3.82** | **266** | *e*PN | | **Pg** | **10 25 22.3** | **-2.5** |
| **IUG** | **luzhnay** | **3.82** | **266** | *e*P | | **Pg** | **10 25 23.4** | **-1.4** |
| | comp=Z,228nm,0.3s | | | | | | | | |
| IUG | | | | | *e*S | **Sg** | **10 26 14.1** | **-0.3** |
| | comp=Z,149nm,0.8s | | | | | | | | |
| **IUG** | **luzhnay** | **3.82** | **266** | *e*Pg | | **Pg** | **10 25 22.3** | **-2.5** |
| | baz=265 | | | | | | | | |
| **IUG** | **luzhnay** | **3.82** | **266** | Pg | | **Pg** | **10 25 23.4** | **-1.4** |
| | comp=Z,283nm,0.4s | | | | | | | | |
| IUG | | | | | Lg | Lg | 10 26 14.1 | | |
| | comp=Z,149nm,0.8s | | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **60** | *e*P | | **Pg** | **10 25 22.2** | **-2.7** |
| | comp=Z,6.2nm,0.4s | | | | | | | | |
| DJR | | | | | *e*S | **Sg** | **10 26 11.7** | **-2.8** |
| | comp=Z,77nm,1.7s | | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **60** | Pg | | **Pg** | **10 25 22.2** | **-2.7** |
| | comp=Z,36nm,0.6s | | | | | | | | |
| DJR | | | | | Lg | Lg | 10 26 11.7 | | |
| | comp=Z,77nm,1.7s | | | | | | | | |
| **BRLS** | **Borolday** | **3.95** | **279** | *e*P | | **Pg** | **10 25 25.0** | **-2.3** |
| | comp=Z,3.8nm,0.2s | | | | | | | | |
| BRLS | | | | | *e*S | **Sg** | **10 26 16.6** | **-1.8** |
| | comp=Z,63nm,0.4s | | | | | | | | |
| **BRLS** | **Borolday** | **3.95** | **279** | Pg | | **Pg** | **10 25 25.0** | **-2.3** |
| | comp=Z,3.8nm,0.2s | | | | | | | | |
| BRLS | | | | | Lg | Lg | 10 26 16.7 | | |
| | comp=Z,63nm,0.4s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.10** | **46** | *e*P | | **Pb** | **10 25 25.0** | **+0.5** |
| | comp=Z,8.9nm,0.6s | | | | | | | | |
| KAPS | | | | | *e*S | **Sb** | **10 26 16.5** | **+2.0** |
| | comp=Z,32nm,0.6s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.10** | **46** | Pg | | **Pb** | **10 25 24.8** | **+0.3** |
| | comp=Z,8.9nm,0.6s | | | | | | | | |
| KAPS | | | | | Lg | Lg | 10 26 16.5 | | |
| | comp=Z,32nm,0.6s | | | | | | | | |
| **OTUK** | **Ortayu** | **6.05** | **342** | ⇓Pn | | **Pn** | **10 25 42.2** | **+0.1** |
| | comp=Z,3.6nm,0.5s | | | | | | | | |
| OTUK | | | | | ⇓Lg | Lg | 10 27 20.1 | | |
| | comp=Z,38nm,0.7s | | | | | | | | |
| **MAKZ** | **Makanchi** | **6.47** | **46** | ⇓Pn | | **Pn** | **10 25 49.8** | **+1.9** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| MAKZ | | | | | ⇑Sn | **Sn** | **10 27 03.1** | **+0.7** |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| MAKZ | | | | | ⇑Lg | Lg | 10 27 34.6 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **MK31** | **Makanchi Array** | **6.63** | **48** | *e*PN | | **Pn** | **10 25 51.9** | **+1.7** |
| MK31 | | | | *e* | | | 10 27 07.3 | | |
| **MK31** | **Makanchi Array** | **6.63** | **48** | ⇓Pn | | **Pn** | **10 25 52.1** | **+2.0** |
| | comp=Z,12nm,0.7s,baz=226,slow=14,SNR=139 | | | | | | | | |
| MK31 | | | | | ⇓Sn | **Sn** | **10 27 06.9** | **+0.5** |
| | comp=Z,2.2nm,0.4s,baz=226,slow=24,SNR=6.5 | | | | | | | | |
| MK31 | | | | | ⇑Lg | Lg | 10 27 38.2 | | |
| | comp=Z,6.2nm,0.6s,baz=263,slow=27,SNR=3.5 | | | | | | | | |
| **BRZS** | **Berezniki** | **7.65** | **348** | *e*P | | **Pn** | **10 26 01.8** | **-2.2** |
| **BRZS** | **Berezniki** | **7.65** | **348** | *e*Pn | | **Pn** | **10 26 01.9** | **-2.2** |
| | baz=348 | | | | | | | | |
| BRZS | | | | | *e*Pg | Pb | 10 26 30.5 | +5.5 | |
| | baz=348 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.42** | **15** | ⇓Pn | | **Pn** | **10 26 13.8** | **-0.8** |
| | comp=Z,1.8nm,0.3s | | | | | | | | |
| KURBB | | | | | ⇓Lg | Lg | 10 28 35.9 | | |
| | comp=Z,46nm,1.1s | | | | | | | | |
| **ZSN** | **Zaisan** | **8.46** | **51** | *e*Pg | | Pg | 10 26 46.2 | -7.3 | |
| | baz=52 | | | | | | | | |
| **KURK** | **Kurchatov** | **8.53** | **15** | *i* P | | **Pn** | **10 26 15.8** | **-0.2** |
| **KURK** | **Kurchatov** | **8.53** | **15** | ⇓Pn | | **Pn** | **10 26 16.1** | **0.0** |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| KURK | | | | | ⇓Lg | Lg | 10 28 38.2 | | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **8.63** | **22** | *e*Pg | | Pg | 10 26 48.5 | -8.3 | |
| | baz=22 | | | | | | | | |
| **BRVK** | **Borovoye** | **11.03** | **344** | *i* P | | **Pn** | **10 26 48.5** | **-1.8** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **11.13** | **46** | *i* P | | **Pn** | **10 26 54.9** | **+3.1** |
| DGZ | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **AB31** | **Akbulak array** | **12.54** | **308** | ⇑Pn | | **Pn** | **10 27 09.2** | **-1.8** |
| | comp=Z,0.4nm,0.4s,baz=114,slow=14,SNR=26 | | | | | | | | |
| AB31 | | | | | ⇓Sn | **Sn** | **10 29 33.1** | **+1.8** |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **13.10** | **26** | *i* P | | **Pn** | **10 27 19.0** | **+0.4** |
| ZALV | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.19** | **310** | ⇓Pn | | **Pn** | **10 27 34.5** | **+1.0** |
| | comp=Z,1.6nm,0.9s | | | | | | | | |
| AKTO | | | | | ⇓Sn | **Sn** | **10 30 04.7** | **-6.8** |
| | comp=Z,2.2nm,1.1s | | | | | | | | |
| **ARU** | **Arti** | **17.53** | **328** | *i* P | | **Pn** | **10 28 15.3** | **-1.7** |
| **ULN** | **Ulaanbaatar** | **23.00** | **66** | *i* P | | **P** | **10 29 20.1** | **+2.3** |
| ULN | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |

*ECX **08** 10:37:49.4±0.6,32.˚40N×115.˚22W,h11km±2km,MD2.6, ML2.9*
*MEX **08** 10:37:51.0±1.0,32.˚49N×115.˚11W,h5km,MD3.9*

**ISC 08 10:37:50.3**±0.8,**32.˚38N**±0.˚03×**115.˚26W**±0.˚03,**h13**km±5km, **n25**,σ**0.47**/40,**14C-5D**,**California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.05** | **317** | ⇑*e*P | | **Pg** | **10 37 52.8** | **0.0** |
| CPBX | | | | ⇓*e* | | | 10 37 55.6 | |
| CPBX | | | | IAML | | | 10 37 55.6 | |
| | comp=E,13μm,0.3s | | | | | | | |
| **MBIG** | **Mexicali** | **0.06** | **63** | *e*P | | **Pg** | **10 37 52.4** | **-0.5** |
| MBIG | | | | *e*P | | **Pg** | **10 37 52.4** | **-0.5** |
| MBIG | | | | *e*S | | **Sg** | **10 37 54.8** | **+0.1** |
| MBIG | | | | *i* S | | **Sg** | **10 37 54.9** | **+0.3** |
| **MBIG** | **Mexicali** | **0.06** | **63** | ⇓*e*P | | **Pg** | **10 37 52.4** | **-0.5** |
| MBIG | | | | *i* S | | **Sg** | **10 37 54.9** | **+0.3** |
| **CTLX** | **Tlaxcala, TLX** | **0.14** | **46** | ⇑*i*P | | **Pg** | **10 37 54.0** | **+0.2** |
| CTLX | | | | *e*S | | **Sb** | **10 37 57.5** | **-0.3** |
| **GUVIX** | **Guadalupe Vict** | **0.17** | **116** | ⇑*i*P | | **Pg** | **10 37 54.6** | **+0.3** |
| GUVIX | | | | *e*S | | **Sg** | **10 37 58.0** | **+0.9** |
| GUVIX | | | | IAML | | | 10 37 58.8 | |
| | comp=E,3μm,0.3s | | | | | | | |
| GUVIX | | | | *e* | | | 10 37 58.8 | |
| GUVIX | | | | ⇓*e* | | | 10 37 59.2 | |
| GUVIX | | | | IAML | | | 10 37 59.2 | |
| **ZC06** | **Zona comercial** | **0.25** | **333** | ⇓*i*P | | **Pb** | **10 37 56.2** | **-0.4** |
| **PESCX** | **Ej. Pescaderos** | **0.26** | **78** | *e*P | | **Pg** | **10 37 56.0** | **+0.3** |
| **YUCAX** | **Ej. Yucatįn** | **0.27** | **32** | ⇑*i*P | | **Pg** | **10 37 56.3** | **+0.4** |
| **POT2** | **Potabilizadora** | **0.27** | **337** | *e*P | | **Pb** | **10 37 56.7** | **-0.3** |
| POT2 | | | | ⇓*i*P | | **Pg** | **10 37 57.4** | **+1.4** |
| POT2 | | | | *e*S | | **Sb** | **10 38 01.5** | **0.0** |
| **UABX** | **UABC, Campus M** | **0.29** | **329** | ⇑*i*P | | **Pb** | **10 37 57.2** | **-0.3** |
| **ICBC** | **Inst. de Cultu** | **0.34** | **328** | ⇑*e*P | | **Pb** | **10 37 57.8** | **-0.3** |
| **EMSC** | **East Mesa** | **0.43** | **33** | ⇑*e*P | | **Pg** | **10 37 59.0** | **+0.1** |
| EMSC | | | | *e*S | | **Sb** | **10 38 05.7** | **-0.4** |
| **DREC** | **Desert Rsrch C** | **0.45** | **340** | ⇑*e*P | | **Pb** | **10 38 00.0** | **-0.2** |
| DREC | | | | *e*S | | **Sb** | **10 38 08.1** | **+1.2** |
| **SGL** | **Mount Signal** | **0.47** | **305** | ⇑*i*P | | **Pg** | **10 37 59.7** | **0.0** |
| **COA** | **Coachella** | **0.50** | **14** | ⇑*i*P | | **Pg** | **10 38 00.1** | **0.0** |
| **WESC** | **Westside Schoo** | **0.55** | **314** | ⇑*e*P | | **Pg** | **10 38 01.2** | **+0.1** |
| **YUH2** | **Yuha Desert** | **0.62** | **296** | ⇑*i*P | | **Pg** | **10 38 02.2** | **-0.2** |
| **YMD** | **Yuma Desert** | **0.63** | **74** | *e*P | | **Pg** | **10 38 02.0** | **-0.6** |
| **IKP** | **In-Ko-Pah, Jac** | **0.77** | **291** | ⇑*e*P | | **Pg** | **10 38 04.9** | **-0.3** |
| **CRR** | **Carrizo Plain** | **0.78** | **310** | ⇑*i*P | | **Pg** | **10 38 04.7** | **-0.8** |
| **CBX** | **Cerro Bola** | **1.19** | **267** | *i* P | | **Pn** | **10 38 12.5** | **-0.3** |
| CBX | | | | *i* S | | **Sg** | **10 38 28.9** | **+0.1** |
| **CBX** | **Cerro Bola** | **1.19** | **267** | *e*P | | **Pn** | **10 38 12.6** | **-0.3** |
| CBX | | | | *e*S | | **Sb** | **10 38 28.5** | **+0.3** |
| **TJIG** | **Tijuana** | **1.20** | **273** | *e*P | | **Pn** | **10 38 12.6** | **-0.2** |
| TJIG | | | | *e*S | | **Sb** | **10 38 28.4** | **+0.1** |
| **BAR** | **Barrett** | **1.23** | **284** | *e*P | | **Pn** | **10 38 13.3** | **0.0** |
| BAR | | | | *e*S | | **Sn** | **10 38 29.8** | **0.0** |
| **SPIG** | **San Pedro Mart** | **1.34** | **188** | *e*P | | **Pb** | **10 38 15.8** | **+0.3** |
| SPIG | | | | *i* S | | **Sg** | **10 38 33.9** | **+0.3** |

**IDC 08 10:52:49.3**±3.5,**54.˚20N**×**87.˚53E**,**h0**km,**mb1 2.6**/2, **mb1mx2.6**/37,**mbtmp2.6**/2,**ML2.5**/2,**Error ellipse: s-maj=30.6km s-min=19.1km az=47.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.62** | **262** | *i* | | | **11 02 20.0** | |
| | baz=78,slow=334,SNR=5.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.62** | **262** | Pg | | Pn | 10 53 17.2 | -1.8 |
| | 1.8nm,0.3s,baz=81,slow=15,SNR=20 | | | | | | | |
| ZALV | | | | Lg | | Lg | 10 53 41.8 | |
| | 0.8nm,0.3s,baz=84,slow=26,SNR=5.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.57** | **241** | Pn | | Pn | 10 54 27.7 | +0.7 |
| | 0.1nm,0.3s,baz=58,slow=14,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.13** | **206** | Pn | | Pn | 10 54 50.0 | +1.5 |
| | 0.1nm,0.3s,baz=31,slow=16,SNR=5.0 | | | | | | | |
| MKAR | | | | Lg | | Lg | 10 57 03.8 | |
| | 0.0nm,0.3s,baz=35,slow=18,SNR=1.5 | | | | | | | |

*NDI **08** 11:05:56.5±1.9,25.˚04N×94.˚86E,h95km±12km,ML4.0*
*IDC **08** 11:05:56.6±4.1,24.˚97N×94.˚67E,h84km±39km,mb3.1/5, mb1 3.3/6,mb1mx3.1/39,mbtmp3.4/6,Error ellipse: s-maj=68.5km s-min=17.4km az=65.0*

**ISC 08 11:05:58.4**±0.9,**25.˚13N**±0.˚06×**94.˚69E**±0.˚07,**h100**km,**n15**, σ**1**§**53**/22,**mb3.2/6**,**Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IMP** | **Imphal** | **0.74** | **247** | *e*P | | **Pn** | **11 06 15.5** | **-0.7** |
| IMP | | | | *e*S | | **Sn** | **11 06 28.6** | **-1.0** |
| **KOHI** | **KOHIMA** | **0.79** | **318** | *e*P | | **Pn** | **11 06 15.9** | **-0.9** |
| KOHI | | | | *e*S | | **Sn** | **11 06 31.5** | **+0.8** |
| KOHI | | | | IAML | | | 11 06 34.2 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **MOKO** | **MOKOCHONG** | **1.20** | **352** | *e*P | | **Pn** | **11 06 20.6** | **-0.6** |
| MOKO | | | | *e*S | | **Sn** | **11 06 37.6** | **-0.8** |
| MOKO | | | | IAML | | | 11 06 42.5 | |
| | comp=E,3μm,0.3s | | | | | | | |
| MOKO | | | | IAML | | | 11 06 42.7 | |
| | comp=N,4μm,0.3s | | | | | | | |
| **GUWA** | **GUWAHATI** | **2.91** | **292** | *e*P | | **Pn** | **11 06 42.8** | **-0.1** |
| GUWA | | | | *e*S | | **Sn** | **11 07 15.9** | **-1.3** |
| GUWA | | | | IAML | | | 11 07 17.4 | |
| | comp=E,520nm,0.2s | | | | | | | |
| **BRDH** | **Bariadhala** | **3.71** | **229** | S | | **Sn** | **11 07 36.3** | **-0.1** |
| | comp=E,0.4nm,0.3s,baz=180,slow=24,SNR=10 | | | | | | | |
| **TURI** | **Tura** | **3.97** | **277** | *e*P | | **Pn** | **11 06 59.1** | **+2.0** |
| TURI | | | | *e*S | | **Sn** | **11 07 44.0** | **+1.3** |
| TURI | | | | IAML | | | 11 07 47.0 | |
| | comp=E,835nm,0.3s | | | | | | | |
| TURI | | | | IAML | | | 11 07 47.4 | |
| | comp=N,934nm,0.2s | | | | | | | |
| **DHUB** | **DHUBRI** | **4.33** | **283** | *e*P | | **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ECEU** | **Ceuta** | **1.39** | **293** | Pn | **Pn** | **11 22 06.1** | **-2.8** |
| | 67nm,0.4s,SNR=29 | | | | | | | |
| ECEU | | | | Sn | **Sn** | **11 22 22.8** | **-4.5** |
| | 290nm,0.6s | | | | | | | |
| **EMIJ** | **Mijas** | **1.44** | **327** | Pn | **Pn** | **11 22 07.6** | **-1.9** |
| | 46nm,0.3s,SNR=26 | | | | | | | |
| EMIJ | | | | Lg | Lg | 11 22 28.7 | | |
| | 270nm,0.3s | | | | | | | |
| **JBK** | **JBK** | **1.44** | **135** | P | **Pn** | **11 22 09.1** | **-0.7** |
| JBK | | | | S | **Sn** | **11 22 27.5** | **-1.2** |
| **JBK** | **JBK** | **1.44** | **135** | P | **Pg** | **11 22 12.0** | **+0.8** |
| **EMAL** | **Malaga-Limoner** | **1.49** | **340** | P | **Pn** | **11 22 08.0** | **-2.1** |
| EMAL | | | | S | **Sn** | **11 22 25.4** | **-4.1** |
| **ELGU** | **Los Guajares,** | **1.51** | **5** | Pn | **Pn** | **11 22 08.2** | **-2.4** |
| | 38nm,0.2s,SNR=7.9 | | | | | | | |
| ELGU | | | | Sn | **Sn** | **11 22 29.0** | **-1.2** |
| | 4µm,0.8s,SNR=7.9 | | | | | | | |
| **EBER** | **Berja** | **1.70** | **25** | Pn | **Pn** | **11 22 11.2** | **-2.0** |
| | 170nm,0.4s,SNR=128 | | | | | | | |
| EBER | | | | Sn | **Sn** | **11 22 34.4** | **-0.7** |
| | 1µm,0.5s | | | | | | | |
| **EJIF** | **Jimena Fronter** | **1.74** | **309** | Pn | **Pn** | **11 22 11.2** | **-2.5** |
| | SNR=7.9 | | | | | | | |
| EJIF | | | | Lg | Lg | 11 22 38.9 | | |
| | SNR=7.9 | | | | | | | |
| **EGOR** | **Sierra Gorda,** | **1.76** | **352** | Pn | **Pn** | **11 22 13.8** | **-0.3** |
| | 9.1nm,0.2s,SNR=7.9 | | | | | | | |
| EGOR | | | | Sn | **Sn** | **11 22 36.6** | **0.0** |
| | 1µm,0.7s,SNR=7.9 | | | | | | | |
| **SICH** | **Sidi Chahed** | **1.77** | **225** | P | **Pb** | **11 22 15.7** | **-0.3** |
| SICH | | | | S | Sn | 11 22 25.0 | -12 |
| **SICH** | **Sidi Chahed** | **1.77** | **225** | P | **Pg** | **11 22 20.0** | **+2.4** |
| **EQUE** | **Quentar** | **1.86** | **9** | Pn | **Pn** | **11 22 14.5** | **-1.0** |
| | 58nm,0.3s,SNR=83 | | | | | | | |
| EQUE | | | | Sn | **Sn** | **11 22 38.2** | **-0.7** |
| | 661nm,2.1s,SNR=7.9 | | | | | | | |
| EQUE | | | | Lg | Lg | 11 22 42.0 | | |
| | 238nm,0.5s,SNR=8.9 | | | | | | | |
| **LCRM** | **LCR** | **1.89** | **208** | P | **Pb** | **11 22 18.0** | **-0.1** |
| LCRM | | | | S | **Sb** | **11 22 42.9** | **+1.1** |
| **LCRM** | **LCR** | **1.89** | **208** | P | **Pg** | **11 22 20.2** | **+0.5** |
| **OLHC** | **Oulhaca** | **1.95** | **93** | P | **Pn** | **11 22 14.0** | **-2.6** |
| **ENIJ** | **Nijar** | **2.06** | **38** | Pn | **Pn** | **11 22 15.9** | **-2.2** |
| | 26nm,0.3s,SNR=7.9 | | | | | | | |
| ENIJ | | | | Sn | **Sn** | **11 22 39.2** | **-4.5** |
| | 343nm,0.3s,SNR=7.9 | | | | | | | |
| **IFR** | **Ifrane** | **2.15** | **211** | P | **Pn** | **11 22 20.1** | **+0.7** |
| IFR | | | | S | **Sn** | **11 22 45.9** | **-0.2** |
| **SFS** | **San Fernando** | **2.24** | **300** | P | **Pg** | **11 22 29.8** | **+3.3** |
| SFS | | | | S | **Sg** | **11 22 54.2** | **-1.4** |
| **OTSS** | **Djebel Tessala** | **2.46** | **91** | P | **Pn** | **11 22 22.8** | **-0.8** |
| **EQES** | **Quesada** | **2.50** | **13** | Pn | **Pn** | **11 22 25.1** | **+0.9** |
| | 165nm,0.7s,SNR=80 | | | | | | | |
| EQES | | | | Sn | **Sn** | **11 22 54.5** | **-0.4** |
| | 228nm,0.4s,SNR=8.7 | | | | | | | |
| EQES | | | | Lg | Lg | 11 23 03.6 | | |
| | 285nm,0.8s,SNR=7.9 | | | | | | | |
| **MD31** | **MD31** | **2.62** | **198** | P | **Pn** | **11 22 27.2** | **+1.4** |
| **MDT** | **Midelt** | **2.63** | **195** | Pn | **Pn** | **11 22 27.6** | **+1.6** |
| | 4.4nm,0.3s,baz=195,slow=11,SNR=13 | | | | | | | |
| MDT | | | | Pg | **Pb** | **11 22 32.3** | **+1.6** |
| | 8.3nm,0.3s,baz=175,slow=7.9,SNR=14 | | | | | | | |
| MDT | | | | Sn | **Sn** | **11 22 59.0** | **+1.1** |
| | 14nm,0.3s,baz=302,slow=3.6,SNR=4.3 | | | | | | | |
| MDT | | | | Lg | Lg | 11 23 08.3 | | |
| | 20nm,0.3s,baz=292,slow=20,SNR=5.4 | | | | | | | |
| **MDT** | **Midelt** | **2.63** | **195** | P | **Pg** | **11 22 33.9** | **-0.1** |
| **MDT** | **Midelt** | **2.63** | **195** | P | **Pg** | **11 22 33.9** | **-0.1** |
| **TDRA** | **Tendrara** | **2.74** | **147** | P | **Pn** | **11 22 28.5** | **+0.9** |
| **TLOR** | **Lorca, Murcia** | **2.85** | **36** | Sn | **Sn** | **11 23 02.5** | **-0.7** |
| | 1µm,0.4s,SNR=7.9 | | | | | | | |
| **EADA** | **Adamuz** | **2.87** | **348** | Pn | **Pn** | **11 22 29.7** | **+0.5** |
| | 29nm,0.3s,SNR=26 | | | | | | | |
| EADA | | | | Pg | **Pb** | **11 22 35.3** | **+0.6** |
| | 80nm,0.7s,SNR=19 | | | | | | | |
| EADA | | | | Sn | **Sn** | **11 23 02.9** | **-0.8** |
| | 254nm,0.7s,SNR=8.7 | | | | | | | |
| EADA | | | | Lg | Lg | 11 23 13.4 | | |
| | 236nm,0.7s | | | | | | | |
| **ARNO** | **Arenosillo** | **2.94** | **307** | P | **Pn** | **11 22 31.8** | **+1.7** |
| ARNO | | | | S | **Sn** | **11 23 04.5** | **-0.9** |
| **ODJA** | **Bouhanifia** | **2.98** | **90** | P | **Pn** | **11 22 27.0** | **-3.8** |
| **ECAB** | **El Cabril** | **3.00** | **335** | Pn | **Pn** | **11 22 31.3** | **+0.3** |
| | 15nm,0.7s,SNR=22 | | | | | | | |
| ECAB | | | | Pg | **Pb** | **11 22 37.8** | **+0.7** |
| | 31nm,0.4s,SNR=19 | | | | | | | |
| ECAB | | | | Sn | **Sn** | **11 23 05.2** | **-1.8** |
| | 92nm,0.5s,SNR=7.6 | | | | | | | |
| ECAB | | | | Lg | Lg | 11 23 18.4 | | |
| | 152nm,0.8s | | | | | | | |
| **EZAR** | **Zarzadilla de** | **3.02** | **33** | Pn | **Pn** | **11 22 30.5** | **-1.0** |
| | 6.1nm,0.2s,SNR=7.9 | | | | | | | |
| EZAR | | | | Sn | **Sn** | **11 23 04.9** | **-2.8** |
| | 569nm,0.8s,SNR=7.9 | | | | | | | |
| **ZHG** | **ZHG** | **3.03** | **232** | P | Pg | 11 22 51.0 | +9.4 |
| **ZHG** | **ZHG** | **3.03** | **232** | P | Pg | 11 22 51.0 | +9.4 |
| **CART** | **Cartagena** | **3.16** | **45** | Pn | **Pn** | **11 22 31.5** | **-1.7** |
| **CART** | **Cartagena** | **3.16** | **45** | P | **Pn** | **11 22 30.3** | **-2.9** |
| CART | | | | S | **Sn** | **11 23 05.8** | **-5.2** |
| **EMUR** | **La Murta** | **3.22** | **39** | Pn | **Pn** | **11 22 34.4** | **+0.4** |
| | 15nm,0.4s,SNR=13 | | | | | | | |
| EMUR | | | | Sn | **Sn** | **11 23 07.8** | **-4.6** |
| | 184nm,0.4s,SNR=23 | | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.33** | **317** | Pn | **Pn** | **11 22 34.6** | **-1.0** |
| | 17nm,0.3s,SNR=16 | | | | | | | |
| EMIN | | | | Sn | **Sn** | **11 23 12.6** | **-2.6** |
| | 18nm,0.3s,SNR=5.1 | | | | | | | |
| **ETRV** | **Los Montesinos** | **3.60** | **42** | Sn | **Sn** | **11 23 20.1** | **-1.7** |
| | 89nm,0.5s,SNR=7.9 | | | | | | | |
| **AVE** | **Averroes** | **3.63** | **236** | P | **Pg** | **11 22 50.8** | **-2.3** |
| AVE | | | | S | **Sb** | **11 23 30.8** | **-1.1** |
| **AVE** | **Averroes** | **3.63** | **236** | P | **Pn** | **11 22 39.8** | **+0.1** |
| **EGRO** | **El Granado** | **3.68** | **307** | Pn | **Pn** | **11 22 39.9** | **-0.3** |
| | 40nm,0.3s,SNR=34 | | | | | | | |
| EGRO | | | | Sn | **Sn** | **11 23 21.7** | **-1.9** |
| | 70nm,0.5s,SNR=5.5 | | | | | | | |
| **OKGL** | **Djebel Kef Gue** | **3.68** | **78** | P | Pn | 11 22 21.0 | -19 |
| **OJGS** | **Djebel Guires** | **3.72** | **87** | P | Pn | 11 22 22.0 | -19 |
| **ETOB** | **Tobarra** | **3.74** | **28** | Pn | **Pn** | **11 22 41.4** | **+0.2** |
| | 19nm,0.2s,SNR=7.9 | | | | | | | |
| ETOB | | | | Sn | **Sn** | **11 23 23.2** | **-2.1** |
| | 97nm,0.7s,SNR=7.9 | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.76** | **304** | *e*Pn | **Pn** | **11 22 40.9** | **-0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **11 23 21.9** | **-3.8** |
| PVAQ | | | | A | A | 11 23 24.4 | |
| | 122nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.76** | **304** | Pn | **Pn** | **11 22 41.1** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.76** | **304** | P | **Pn** | **11 22 40.5** | **-0.9** |
| PVAQ | | | | S | **Sn** | **11 23 23.8** | **-1.9** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **301** | *e*Pn | **Pn** | **11 22 41.9** | **-0.5** |
| PBDV | | | | *e*Sn | **Sn** | **11 23 24.6** | **-2.8** |
| PBDV | | | | A | A | 11 23 30.2 | |
| | 53nm,0.5s | | | | | | | |
| **FIGM** | **Figuig** | **3.85** | **146** | P | Pg | 11 23 05.0 | +7.7 |
| **FIGM** | **Figuig** | **3.85** | **146** | P | Pg | 11 23 05.0 | +7.7 |
| **PCVE** | **Castro Verde** | **4.10** | **305** | *e*Pn | **Pn** | **11 22 45.6** | **-0.5** |
| PCVE | | | | *e*Sn | **Sn** | **11 23 31.4** | **-2.6** |
| PCVE | | | | A | A | 11 23 38.1 | |
| | 40nm,0.6s | | | | | | | |
| **PAB** | **San Pablo** | **4.20** | **354** | Pn | **Pn** | **11 22 48.5** | **+1.0** |
| **PAB** | **San Pablo** | **4.20** | **354** | Pn | **Pn** | **11 22 47.6** | **+0.1** |
| | 11nm,0.4s,SNR=7.9 | | | | | | | |
| PAB | | | | Sn | **Sn** | **11 23 34.4** | **-2.2** |
| | 12nm,0.4s,SNR=7.9 | | | | | | | |
| PAB | | | | Lg | Lg | 11 23 57.7 | | |
| | 66nm,0.6s,SNR=7.9 | | | | | | | |
| **PAB** | **San Pablo** | **4.20** | **354** | P | **Pn** | **11 22 47.9** | **+0.4** |
| **AFON** | **Font Roja** | **4.20** | **37** | Pn | **Pn** | **11 22 48.3** | **+0.7** |
| | 7.7nm,0.1s,SNR=7.9 | | | | | | | |
| AFON | | | | Sn | **Sn** | **11 23 34.2** | **-2.5** |
| | 68nm,0.6s,SNR=5.9 | | | | | | | |
| **PBEJ** | **Beja** | **4.21** | **310** | *e*Pn | **Pn** | **11 22 47.5** | **-0.2** |
| PBEJ | | | | *e*Sn | **Sn** | **11 23 34.6** | **-2.3** |
| PBEJ | | | | A | A | 11 23 38.8 | |
| | 29nm,0.4s | | | | | | | |
| **EBAD** | **Badajoz** | **4.25** | **324** | Pn | **Pn** | **11 22 47.6** | **-0.6** |
| | 8.9nm,0.3s,SNR=19 | | | | | | | |
| EBAD | | | | Sn | **Sn** | **11 23 34.2** | **-3.6** |
| | 23nm,0.4s,SNR=5.0 | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.30** | **358** | Pn | **Pn** | **11 22 48.5** | **-0.4** |
| | 2.7nm,0.3s,baz=180,slow=12,SNR=40 | | | | | | | |
| ESDC | | | | Sn | **Sn** | **11 23 36.3** | **-3.0** |
| | 1.8nm,0.3s,baz=180,slow=17,SNR=4.7 | | | | | | | |
| ESDC | | | | Lg | Lg | 11 23 54.2 | | |
| | 4.5nm,0.3s,baz=183,slow=28,SNR=6.9 | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.30** | **358** | Pn | **Pn** | **11 22 49.4** | **+0.4** |
| | 7.5nm,0.3s,baz=175,slow=12,SNR=34 | | | | | | | |
| ESDC | | | | Sn | **Sn** | **11 23 36.6** | **-2.7** |
| | 19nm,0.5s,baz=169,slow=28,SNR=208 | | | | | | | |
| ESDC | | | | Lg | Lg | 11 24 01.4 | | |
| | 72nm,0.8s,baz=175,slow=26,SNR=8.6 | | | | | | | |
| **ESBB** | **Sonseca Array** | **4.31** | **358** | Pn | **Pn** | **11 22 49.2** | **+0.2** |
| **MESJ** | **Messejana** | **4.33** | **306** | *e*P | **Pn** | **11 22 48.6** | **-0.7** |
| MESJ | | | | *e*S | **Sn** | **11 23 35.9** | **-3.8** |
| MESJ | | | | IAML | | 11 23 42.8 | |
| | comp=N,70nm,0.4s | | | | | | | |
| **MESJ** | **Messejana** | **4.33** | **306** | *e*Pn | **Pn** | **11 22 48.9** | **-0.4** |
| MESJ | | | | *e*Sn | **Sn** | **11 23 36.9** | **-2.9** |
| MESJ | | | | A | A | 11 23 39.4 | |
| | comp=N,46nm,0.3s | | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **298** | *e*P | **Pn** | **11 22 49.1** | **-0.7** |
| MORF | | | | *e*S | **Sn** | **11 23 37.2** | **-3.6** |
| MORF | | | | IAML | | 11 23 40.8 | |
| | comp=N,91nm,0.5s | | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **298** | *e*Pn | **Pn** | **11 22 49.4** | **-0.5** |
| MORF | | | | *e*Sn | **Sn** | **11 23 37.9** | **-2.9** |
| MORF | | | | A | A | 11 23 42.8 | |
| | comp=N,35nm,0.5s | | | | | | | |
| **EBEN2** | **Beniarda presa** | **4.39** | **40** | Pn | **Pn** | **11 22 49.8** | **-0.3** |
| | comp=N,2.7nm,0.1s,SNR=7.9 | | | | | | | |
| EBEN2 | | | | Sn | **Sn** | **11 23 39.2** | **-2.0** |
| | comp=N,33nm,0.5s,SNR=7.9 | | | | | | | |
| EBEN2 | | | | Lg | Lg | 11 24 05.0 | | |
| | comp=N,22nm,0.4s,SNR=7.9 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **295** | *e*Pn | **Pn** | **11 22 51.0** | **+0.3** |
| PFVI | | | | *e*Sn | **Sn** | **11 23 39.0** | **-3.2** |
| PFVI | | | | A | A | 11 23 46.7 | |
| | comp=N,46nm,0.7s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **295** | Pn | **Pn** | **11 22 49.8** | **-0.9** |
| **PFVI** | **Vila Bisbo** | **4.43** | **295** | Pn | **Pn** | **11 22 50.0** | **-0.6** |
| | comp=N,15nm,0.4s,SNR=9.5 | | | | | | | |
| PFVI | | | | Pg | **Pb** | **11 23 02.7** | **+1.4** |
| | comp=N,1.4nm,0.3s,SNR=7.9 | | | | | | | |
| PFVI | | | | Sn | **Sn** | **11 23 38.7** | **-3.5** |
| | comp=N,50nm,0.8s,SNR=6.6 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.43** | **295** | P | **Pn** | **11 22 51.0** | **+0.3** |
| **SRHM** | **Skhour des Reh** | **4.46** | **231** | P | **Pn** | **11 22 52.5** | **+1.3** |
| **PTEO** | **Sao Teotonio** | **4.53** | **300** | *e*Pn | **Pn** | **11 22 51.9** | **-0.1** |
| PTEO | | | | *e*Sn | **Sn** | **11 23 42.0** | **-2.6** |
| PTEO | | | | A | A | 11 23 49.8 | |
| | comp=N,33nm,0.4s | | | | | | | |
| **EVO** | **Evora** | **4.62** | **314** | P | **Pn** | **11 22 52.8** | **-0.5** |
| EVO | | | | S | **Sn** | **11 23 43.5** | **-3.6** |
| **EVO** | **Evora** | **4.62** | **314** | *e*Pn | **Pn** | **11 22 53.5** | **+0.2** |
| EVO | | | | *e*Sn | **Sn** | **11 23 44.4** | **-2.6** |
| EVO | | | | A | A | 11 23 48.3 | |
| | comp=N,32nm,0.3s | | | | | | | |
| **PESTR** | **Estremoz** | **4.63** | **320** | *e*Pn | **Pn** | **11 22 53.6** | **+0.2** |
| PESTR | | | | *e*Sn | **Sn** | **11 23 43.1** | **-4.0** |
| PESTR | | | | A | A | 11 23 58.6 | |
| | comp=N,31nm,0.6s | | | | | | | |
| **PESTR** | **Estremoz** | **4.63** | **320** | Pn | **Pn** | **11 22 54.3** | **+0.9** |
| **PESTR** | **Estremoz** | **4.63** | **320** | P | **Pn** | **11 22 52.2** | **-1.2** |
| **PNCL** | **Nicolau / Gran** | **4.69** | **307** | *e*Pn | **Pn** | **11 22 53.5** | **-0.6** |
| PNCL | | | | *e*Sn | **Sn** | **11 23 44.7** | **-3.8** |
| PNCL | | | | A | A | 11 23 58.9 | |
| | comp=N,31nm,0.5s | | | | | | | |
| **ECHE** | **Chera** | **4.78** | **27** | Pn | **Pn** | **11 22 54.9** | **-0.6** |
| | comp=N,5.3nm,0.2s,SNR=7.9 | | | | | | | |
| ECHE | | | | Pg | **Pb** | **11 23 10.4** | **+3.0** |
| | comp=N,0.5nm,0.4s,SNR=7.9 | | | | | | | |
| ECHE | | | | Sn | **Sn** | **11 23 48.1** | **-2.9** |
| | comp=N,24nm,0.6s,SNR=7.9 | | | | | | | |
| ECHE | | | | Lg | Lg | 11 24 14.5 | | |
| | comp=N,27nm,0.8s,SNR=7.9 | | | | | | | |
| **TZRR** | **Tazzarine** | **4.80** | **199** | P | **Pg** | **11 23 19.0** | **+3.5** |
| **UCM** | **Universidad Co** | **4.96** | **5** | P | **Pn** | **11 22 58.2** | **+0.3** |
| UCM | | | | S | **Sb** | **11 24 12.0** | **+2.1** |
| **PMRV** | **Marv??o** | **4.96** | **326** | *e*Pn | **Pn** | **11 22 57.5** | **-0.5** |
| PMRV | | | | *e*Sn | **Sn** | **11 23 52.9** | **-2.5** |
| PMRV | | | | A | A | 11 24 31.5 | |
| | comp=N,30nm,0.7s | | | | | | | |
| **EPLA** | **Plasencia** | **5.03** | **340** | Pn | **Pn** | **11 22 58.9** | **-0.1** |
| | comp=N,5.8nm,0.3s,SNR=13 | | | | | | | |
| EPLA | | | | Pg | **Pb** | **11 23 13.9** | **+2.3** |
| | comp=N,6.2nm,0.3s,SNR=6.8 | | | | | | | |
| EPLA | | | | Sn | **Sn** | **11 23 53.5** | **-3.6** |
| | comp=N,12nm,0.6s,SNR=5.0 | | | | | | | |
| EPLA | | | | Lg | Lg | 11 24 24.3 | | |
| | comp=N,102nm,0.6s | | | | | | | |
| **OUZM** | **OUZ** | **5.09** | **210** | P | **Pn** | **11 23 02.6** | **+2.7** |
| **OUZM** | **OUZ** | **5.09** | **210** | P | **Pn** | **11 23 04.0** | **+4.1** |
| **PMTG** | **Montargil** | **5.11** | **318** | *e*Pn | **Pn** | **11 22 59.8** | **-0.2** |
| PMTG | | | | *e*Sn | **Sn** | **11 23 55.3** | **-3.8** |
| PMTG | | | | A | A | 11 23 56.5 | |
| | comp=N,38nm,0.5s | | | | | | | |
| **PACT** | **Alcochete** | **5.27** | **312** | *e*Pn | **Pn** | **11 23 02.2** | **+0.1** |
| PACT | | | | *e*Sn | **Sn** | **11 24 00.3** | **-2.5** |
| PACT | | | | A | A | 11 24 09.0 | |
| | comp=N,38nm,0.6s | | | | | | | |
| **GUD** | **Guadarrama** | **5.28** | **357** | Pn | **Pn** | **11 23 01.8** | **-0.7** |
| | comp=N,7.3nm,0.3s,SNR=8.9 | | | | | | | |
| GUD | | | | Pg | **Pb** | **11 23 19.5** | **+3.7** |
| | comp=N,12nm,0.5s,SNR=5.6 | | | | | | | |
| GUD | | | | Sn | **Sn** | **11 23 59.0** | **-4.3** |
| | comp=N,39nm,0.8s,SNR=7.9 | | | | | | | |
| GUD | | | | Lg | Lg | 11 24 32.2 | | |
| | comp=N,36nm,0.6s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.34** | **328** | *e*Pn | **Pn** | **11 23 03.0** | **-0.1** |
| PCBR | | | | *e*Sn | **Sn** | **11 24 00.5** | **-4.1** |
| PCBR | | | | A | A | 11 24 17.1 | |
| | comp=N,23nm,0.5s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.37** | **221** | P | **Pn** | **11 23 01.8** | **-2.0** |
| **EIBI** | **Ibiza** | **5.50** | **47** | Pn | **Pn** | **11 23 03.9** | **-1.4** |
| | comp=N,5.2nm,0.1s,SNR=7.9 | | | | | | | |
| EIBI | | | | Sn | **Sn** | **11 24 04.9** | **-3.6** |
| | comp=N,31nm,0.3s,SNR=7.9 | | | | | | | |
| **ETOR** | **Torete** | **5.62** | **14** | Pn | **Pn** | **11 23 07.7** | **+0.6** |
| | comp=N,20nm,0.6s,SNR=5.9 | | | | | | | |
| ETOR | | | | Pg | **Pb** | **11 23 25.8** | **+4.2** |
| | comp=N,1.3nm,0.3s,SNR=7.9 | | | | | | | |
| ETOR | | | | Sn | **Sn** | **11 24 07.9** | **-3.8** |
| | comp=N,32nm,0.8s,SNR=7.9 | | | | | | | |
| ETOR | | | | Lg | Lg | 11 24 43.6 | | |
| | comp=N,60nm,0.6s,SNR=7.9 | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.64** | **27** | Pn | **Pn** | **11 23 08.7** | **+1.2** |
| | comp=N,4.7nm,0.4s,SNR=6.8 | | | | | | | |
| EMOS | | | | Pg | **Pb** | **11 23 26.4** | **+4.3** |
| | comp=N,0.4nm,0.5s,SNR=7.9 | | | | | | | |
| EMOS | | | | Sn | **Sn** | **11 24 08.7** | **-3.6** |
| | comp=N,73nm,1.1s,SNR=5.0 | | | | | | | |
| EMOS | | | | Lg | Lg | 11 24 43.9 | | |
| | comp=N,20nm,0.6s,SNR=7.9 | | | | | | | |
| **PMAFR** | **Mafra** | **5.66** | **311** | *e*Pn | **Pn** | **11 23 08.0** | **+0.4** |
| PMAFR | | | | *e*Sn | **Sn** | **11 24 09.5** | **-3.0** |
| PMAFR | | | | A | A | 11 24 24.1 | |
| | comp=N,37nm,0.4s | | | | | | | |
| **PMAFR** | **Mafra** | **5.66** | **311** | Pn | **Pn** | **11 23 08.0** | **+0.4** |
| | comp=N,42nm,0.5s,SNR=6.2 | | | | | | | |
| PMAFR | | | | Sn | **Sn** | **11 24 07.7** | **-4.9** |
| | comp=N,28nm,0.4s,SNR=7.9 | | | | | | | |
| **PSBE** | **So Bento** | **5.74** | **318** | *e*Pn | **Pn** | **11 23 09.0** | **+0.3** |
| PSBE | | | | *e*Sn | **Sn** | **11 24 10.8** | **-3.8** |
| PSBE | | | | A | A | 11 24 16.9 | |
| | comp=N,25nm,0.5s | | | | | | | |
| **MTE** | **Manteigas** | **5.83** | **331** | *e*Pn | **Pn** | **11 23 11.3** | **+1.3** |
| MTE | | | | *e*Sn | **Sn** | **11 24 13.6** | **-3.3** |
| **MTE** | **Manteigas** | **5.83** | **331** | Pn | **Pn** | **11 23 11.3** | **+1.3** |
| **PCAS** | **Casmilo, Conde** | **5.98** | **323** | *e*Pn | **Pn** | **11 23 12.6** | **+0.6** |
| PCAS | | | | *e*Sn | **Sn** | **11 24 15.9** | **-4.6** |
| PCAS | | | | A | A | 11 24 29.8 | |
| | comp=N,22nm,0.7s | | | | | | | |
| **EAH** | **EAH** | **6.09** | **234** | P | **Pn** | **11 23 11.9** | **-1.6** |
| **TTIG** | **Tnine Tigouga,** | **6.19** | **220** | P | **Pn** | **11 23 13.7** | **-1.2** |
| **PVIS** | **Viseu** | **6.24** | **330** | *e*Pn | **Pn** | **11 23 16.1** | **+0.5** |
| PVIS | | | | *e*Sn | **Sn** | **11 24 23.3** | **-3.7** |
| **MVO** | **Moncorvo** | **6.32** | **337** | *e*Pn | **Pn** | **11 23 17.1** | **+0.4** |
| MVO | | | | *e*Sn | **Sn** | **11 24 25.3** | **-3.7** |
| MVO | | | | A | A | 11 25 04.1 | |
| | comp=N,26nm,0.6s | | | | | | | |
| **MVO** | **Moncorvo** | **6.32** | **337** | Pn | **Pn** | **11 23 16.8** | **+0.1** |
| | comp=N,22nm,0.3s,SNR=12 | | | | | | | |
| MVO | | | | Sn | **Sn** | **11 24 24.3** | **-4.6** |
| | comp=N,4.6nm,0.9s,SNR=7.9 | | | | | | | |
| **ERTA** | **Horta de San J** | **6.46** | **29** | Pn | **Pn** | **11 23 19.8** | **+1.2** |
| | comp=N,11nm,0.4s,SNR=6.6 | | | | | | | |
| ERTA | | | | Sn | **Sn** | **11 24 28.5** | **-3.8** |
| | comp=N,22nm,0.7s,SNR=5.0 | | | | | | | |
| **PVRL** | **Vila Real** | **6.66** | **334** | *e*Pn | **Pn** | **11 23 21.0** | **-0.3** |
| PVRL | | | | *e*Sn | **Sn** | **11 24 32.8** | **-4.3** |
| PVRL | | | | A | A | 11 24 34.4 | |
| | comp=N,24nm,0.1s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.77** | **334** | *e*Pn | **Pn** | **11 23 23.5** | **+0.6** |
| POLO | | | | *e*Sn | **Sn** | **11 24 35.2** | **-4.8** |
| POLO | | | | A | A | 11 24 36.8 | |
| | comp=N,9.5nm,0.8s | | | | | | | |
| **PBRG** | **Braganca** | **6.83** | **341** | *e*Pn | **Pn** | **11 23 23.7** | **0.0** |
| PBRG | | | | *e*Sn | **Sn** | **11 24 38.7** | **-2.7** |
| PBRG | | | | A | A | 11 25 18.8 | |
| | comp=N,13nm,0.6s | | | | | | | |
| **ETOS** | **Mallorca** | **6.85** | **48** | Pn | **Pn** | **11 23 22.4** | **-1.5** |
| | comp=N,6.3nm,0.3s,SNR=11 | | | | | | | |
| ETOS | | | | Sn | **Sn** | **11 24 36.3** | **-5.5** |
| | comp=N,6.8nm,0.4s,SNR=5.5 | | | | | | | |
| **EPOB** | **Poblet** | **7.10** | **31** | Pn | **Pn** | **11 23 27.0** | **-0.4** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | |
| EPOB | | | | Sn | **Sn** | **11 24 42.6** | **-5.5** |
| | comp=N,4.5nm,0.5s,SNR=7.9 | | | | | | | |
| **ELOB** | **Lobios** | **7.30** | **334** | Pn | **Pn** | **11 23 31.0** | **+0.9** |
| | comp=N,10nm,0.6s,SNR=6.2 | | | | | | | |
| ELOB | | | | Sn | **Sn** | **11 24 47.3** | **-5.7** |
| | comp=N,10nm,0.4s,SNR=6.3 | | | | | | | |
| ELOB | | | | Lg | Lg | 11 25 36.5 | | |
| | comp=N,4.6nm,0.8s,SNR=7.9 | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.46** | **333** | *e*Sn | **Sn** | **11 24 51.4** | **-5.6** |
| PGAV | | | | A | A | 11 24 54.4 | |
| | comp=N,18nm,0.6s | | | | | | | |
| **EORO** | **Oroz-Betelu** | **7.76** | **14** | Pn | **Pn** | **11 23 38.1** | **+1.7** |
| | comp=N,8.9nm,0.4s,SNR=8.5 | | | | | | | |
| EORO | | | | Pg | Pb | 11 24 04.8 | +6.7 |
| | comp=N,0.9nm,0.8s,SNR=7.9 | | | | | | | |
| EORO | | | | Sn | **Sn** | **11 24 59.5** | **-4.9** |
| | comp=N,1.6nm,0.7s,SNR=5.0 | | | | | | | |
| **EZAM** | **Zamans** | **7.78** | **332** | Sn | **Sn** | **11 24 59.1** | **-5.6** |
| | comp=N,3.7nm,0.6s,SNR=7.9 | | | | | | | |
| **ETSF** | **Etsaut** | **7.93** | **18** | *e*Pn | **Pn** | **11 23 38.9** | **+0.1** |
| **ETSF** | **Etsaut** | **7.93** | **18** | *e*P | **Pn** | **11 23 43.4** | **+4.6** |
| ETSF | | | | *e*Sn | **Sn** | **11 25 05.1** | **-3.5** |
| | comp=N,1.3nm,0.3s | | | | | | | |
| **CSOR** | **Sort** | **7.99** | **27** | Pn | **Pn** | **11 23 40.4** | **+0.8** |
| | comp=N,10nm,0.4s,SNR=21 | | | | | | | |
| CSOR | | | | Sn | **Sn** | **11 25 04.6** | **-5.3** |
| | comp=N,13nm,0.6s,SNR=7.9 | | | | | | | |
| **SJPF** | **Ste Jean** | **7.99** | **14** | *e*Pn | **Pn** | **11 23 40.1** | **+0.5** |
| SJPF | | | | *e*Sn | **Sn** | **11 25 05.8** | **-4.1** |
| | comp=N,1.4nm,0.4s | | | | | | | |
| **EARI** | **Arriondas** | **8.00** | **353** | Pn | **Pn** | **11 23 43.1** | **+3.3** |
| | comp=N,11nm,0.6s,SNR=6.0 | | | | | | | |
| EARI | | | | Sn | **Sn** | **11 25 04.5** | **-5.7** |
| | comp=N,0.1nm,0.2s,SNR=7.9 | | | | | | | |
| **CFON** | **Fontmartina** | **8.04** | **36** | Pn | **Pn** | **11 23 41.2** | **+1.0** |
| | comp=N,0.7nm,0.3s,SNR=7.9 | | | | | | | |
| CFON | | | | Sn | **Sn** | **11 25 05.0** | **-6.2** |
| | comp=N,15nm,0.5s,SNR=7.9 | | | | | | | |
| **EALK** | **Alkurruntz** | **8.04** | **12** | Pn | **Pn** | **11 23 40.4** | **0.0** |
| | comp=N,67nm,0.5s,SNR=9.4 | | | | | | | |
| EALK | | | | Sn | **Sn** | **11 25 05.7** | **-5.6** |
| | comp=N,2.4nm,0.4s,SNR=7.9 | | | | | | | |
| **ATE** | **Arette** | **8.08** | **16** | Pn | **Pn** | **11 23 42.1** | **+1.3** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | |
| ATE | | | | Pg | Pg | 11 24 11.2 | -6.9 |
| | comp=N,0.1nm,0.4s,SNR=7.9 | | | | | | | |
| ATE | | | | Sn | **Sn** | **11 25 06.6** | **-5.4** |
| | comp=N,12nm,0.9s,SNR=7.9 | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **8.14** | **337** | Pn | **Pn** | **11 23 44.4** | **+2.8** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | |
| EAGO | | | | Sn | **Sn** | **11 25 07.6** | **-6.0** |
| | comp=N,16nm,0.9s,SNR=7.9 | | | | | | | |
| **EPF** | **Esparros** | **8.30** | **22** | *e*Pn | **Pn** | **11 23 44.7** | **+0.8** |
| EPF | | | | *e*Sn | **Sn** | **11 25 13.7** | **-3.9** |
| | comp=N,2.7nm,0.4s | | | | | | | |
| **EPON** | **Pontenova** | **8.36** | **343** | Pn | **Pn** | **11 23 47.8** | **+3.1** |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | |
| EPON | | | | Sn | **Sn** | **11 25 13.5** | **-5.6** |
| | comp=N,1.0nm,0.3s,SNR=7.9 | | | | | | | |
| **MTLF** | **Montolieu** | **9.23** | **28** | *e*Pn | **Pn** | **11 23 56.8** | **+0.3** |
| **MTLF** | **Montolieu** | **9.23** | **28** | *e*P | Pn | 11 24 01.6 | +5.1 |
| MTLF | | | | *e*Sn | **Sn** | **11 25 34.9** | **-5.4** |
| | comp=N,0.8nm,0.2s | | | | | | | |
| **LFF** | **La Frestale** | **10.17** | **19** | *e*P | Pn | 11 24 15.7 | +6.3 

DZM eSn Sn 12 07 25.7 -1.7
1µm,0.3s
DZM eLR LR 12 07 36.5
comp=Z,4µm,23.6s
**DZM Mont Dzumac 3.54 216** P Pn **12 06 46.1 -0.6**
98nm,0.3s,baz=71,slow=10,SNR=550
DZM S Sn 12 07 26.3 -1.1
324nm,0.3s,baz=182,slow=23,SNR=10
DZM LR LR 12 08 06.4
comp=Z,3µm,21.3s,baz=95,slow=37
**DZM Mont Dzumac 3.54 216** Pn Pn **12 06 45.8 -0.9**
**DZM Mont Dzumac 3.54 216** P Pn **12 06 47.3 +0.6**
**PINNC Pines Island, 3.58 199** Pn Pn **12 06 47.0 -0.2**
**PINNC Pines Island, 3.58 199** P Pn **12 06 48.3 +1.1**
**OUENC Ouen Island, N 3.63 208** Pn Pn **12 06 47.5 -0.4**
**OUENC Ouen Island, N 3.63 208** P Pn **12 06 48.4 +0.5**
**NOUC Port Laguerre 3.64 217** P Pn **12 06 48.4 +0.4**
**ONTNC Ouen Toro 3.73 214** Pn Pn **12 06 49.1 -0.1**
**ONTNC Ouen Toro 3.73 214** P Pn **12 06 49.9 +0.7**
**SANVU Saraoutou 3.99 339** P Pn **12 06 52.0 -0.9**
**KOUNC Koumac, New Ca 4.35 251** P Pn **12 06 57.1 -0.6**
**MSVF Nonsavu 9.01 82** P Pn 12 08 06.9 +5.1
1.7nm,0.3s,baz=258,slow=12,SNR=32
MSVF LR LR 12 11 00.4
comp=Z,2µm,19.1s,baz=255,slow=34
**MSVF Nonsavu 9.01 82** Pn Pn **12 08 04.7 +2.9**
**MSVF Nonsavu 9.01 82** P Pn **12 08 03.1 +1.3**
**NFK Norfolk Island 9.82 184** P Pn **12 08 15.1 +2.3**
baz=10,SNR=5.9
**NFK Norfolk Island 9.82 184** P Pn **12 08 14.3 +1.5**
**DGTI Dogotuki 10.92 76** P Pn **12 08 31.0 +3.1**
**HNR Honiara 12.88 318** P Pn **12 08 54.2 -0.5**
8.2nm,0.3s,baz=23,slow=17,SNR=1.5
HNR LR LR 12 13 00.4
comp=Z,364nm,20.7s,baz=168,slow=33
**RAO Raoul Island 15.78 132** LR LR 12 14 30.8
comp=Z,312nm,18.0s,baz=300,slow=33
**OUZ Omahuta 16.54 166** P P **12 09 44.9 0.0**
**OUZ Omahuta 16.54 166** P P **12 09 45.5 +0.6**
**EIDS Eidsvold 17.40 246** P P **12 09 58.7 +4.2**
baz=18,SNR=3.6
**ARMA Armidale 19.06 231** P Pn **12 10 15.8 +1.8**
baz=20,SNR=12
**ARMA Armidale 19.06 231** P Pn **12 10 14.5 +0.5**
**AFI Afiamalu 19.45 77** P Pn **12 10 19.2 +0.5**
0.6nm,0.3s,baz=282,slow=20,SNR=3.8
AFI LR LR 12 17 12.7
comp=Z,110nm,19.6s,baz=262,slow=35
**AFI Afiamalu 19.45 77** P Pn **12 10 19.0 +0.2**
**RMQ Roma 19.73 245** P Pn **12 10 24.0 +2.1**
baz=20,SNR=12
**HAZ Te Kaha 20.12 159** P P **12 10 24.0 -0.3**
**RUGZ Raukumara Rang 20.27 159** P Pn 12 10 29.5 +1.1
**URZ Urewera 20.36 161** P Pn 12 10 28.8 -0.3
14nm,0.6s,baz=325,slow=3.7,SNR=12
URZ LR LR 12 17 30.5
comp=Z,268nm,18.2s,baz=337,slow=34
**URZ Urewera 20.36 161** P Pn 12 10 28.9 -0.3
**URZ Urewera 20.36 161** P Pn 12 10 28.1 -1.0
URZ IAmb IAmb 12 10 41.6
comp=Z,86nm,1.3s
**URZ Urewera 20.36 161** P Pn 12 10 29.2 0.0
**MUGZ Murupara 20.45 162** P Pn 12 10 33.4 +3.0
**TWGZ Tauwhareparae 20.57 159** P P **12 10 30.3 +1.1**
**PUZ Puketiti 20.57 158** P Pn 12 10 33.9 +2.2
**RAGZ Rawiri 20.67 160** P Pn 12 10 33.2 +0.2
**TKGZ Te Karaka 20.76 159** P Pn 12 10 34.7 +0.8
**OTVZ Oturere 20.79 165** P Pn 12 10 34.7 +0.2
**SNGZ Shannon Statio 20.91 161** P Pn 12 10 36.0 +0.2
**RIGZ Rimuhau 20.97 160** P Pn 12 10 35.0 -1.5
**MGCD Mangrove Creek 21.01 225** P P **12 10 38.4 +4.5**
baz=22,SNR=4.5
**MGCD Mangrove Creek 21.01 225** P P **12 10 35.1 +1.2**
**BKZ Black Stump Fm 21.01 163** P P **12 10 35.3 +1.4**
**BKZ Black Stump Fm 21.01 163** P P **12 10 35.6 +1.6**
BKZ LR IAmb IAmb 12 10 51.6
comp=Z,43nm,1.1s
**BKZ Black Stump Fm 21.01 163** P P **12 10 36.5 +2.5**
**CTA Charters Tower 21.14 264** P P **12 10 36.7 +1.2**
comp=Z,15nm,0.8s,baz=93,slow=10,SNR=11
CTA LR LR 12 17 36.2
comp=Z,496nm,21.4s,baz=96,slow=33
**CTA Charters Tower 21.14 264** P P **12 10 38.0 +2.5**
**CTAO Charters Tower 21.14 264** P P **12 10 34.8 -0.7**
**CTAO Charters Tower 21.14 264** P P **12 10 38.0 +2.5**
**QRZ Quartz Range 21.80 172** P P **12 10 45.1 +2.8**
**NNZ Nelson 22.31 171** P P **12 10 48.7 +0.9**
NNZ IAmb IAmb 12 11 14.7
comp=Z,36nm,1.1s
**BFZ Birch Farm 22.37 165** P P **12 10 48.1 -0.4**
BFZ IAmb IAmb 12 11 01.7
comp=Z,51nm,1.1s
**BFZ Birch Farm 22.37 165** P P **12 10 50.9 +2.4**
**TUWZ Tuamarina 22.60 170** P P **12 10 51.5 +0.5**
**SNZO South Karori 22.63 168** P P **12 10 50.9 -0.3**
**SNZO South Karori 22.63 168** P P **12 10 52.6 +1.4**
**THZ Tophouse 22.77 172** P P **12 10 53.5 +0.6**
THZ IAmb IAmb 12 10 56.2
comp=Z,33nm,0.8s
**PMG Port Moresby 22.99 292** P P **12 10 54.4 -0.8**
comp=Z,17nm,0.8s,baz=88,slow=2.7,SNR=6.0
**PMG Port Moresby 22.99 292** P P **12 10 55.1 -0.2**
PMG IAmb IAmb 12 10 57.1
comp=Z,32nm,1.1s
**MTSU Mount Surprise 23.11 269** P P **12 10 57.6 +1.2**
baz=24,SNR=7.4
**CNB Canberra Magne 23.44 223** P P **12 11 01.5 +2.0**
baz=24,SNR=29
**CNB Canberra Magne 23.44 223** P P **12 11 01.5 +2.0**
**KHZ Kahutara 23.50 171** P P **12 10 59.1 -0.8**
KHZ IAmb IAmb 12 11 01.9
comp=Z,33nm,0.8s
**KHZ Kahutara 23.50 171** P P **12 11 00.1 +0.1**
**QLP Quilpie 23.66 247** P P **12 11 03.6 +2.0**
baz=24,SNR=7.1
**QLP Quilpie 23.66 247** P P **12 11 03.1 +1.4**
**CAN Canberra 23.67 223** P P **12 11 00.1 -1.7**
CAN IAmb IAmb 12 11 16.4
comp=Z,49nm,1.1s
**CAN Canberra 23.67 223** P P **12 11 03.4 +1.6**
**CMSA Cobar Meteorol 24.07 235** P P **12 11 06.6 +1.1**
baz=25,SNR=17
**CMSA Cobar Meteorol 24.07 235** P P **12 11 06.5 +1.1**
**RPZ Rata Peaks 24.52 176** P P **12 11 10.6 +1.3**
RPZ IAmb IAmb 12 11 18.4
comp=Z,21nm,0.8s
**RPZ Rata Peaks 24.52 176** P P **12 11 10.9 +1.5**
**COEN Coen 24.98 278** P P **12 11 14.9 +1.0**
**TOO Toolangi 27.28 223** P P **12 11 35.9 +1.4**
**QIS Mount Isa 27.36 262** P P **12 11 36.6 +1.2**
baz=28,SNR=4.8
**STKA Stephens Creek 27.42 237** P P **12 11 36.5 +0.8**
comp=Z,2.4nm,0.5s,baz=70,slow=10,SNR=8.9
STKA LR LR 12 21 46.0
comp=Z,300nm,21.9s,baz=77,slow=35
**STKA Stephens Creek 27.42 237** P P **12 11 37.0 +1.3**
baz=28,SNR=8.1
**STKA Stephens Creek 27.42 237** P P **12 11 35.6 -0.1**
**STKA Stephens Creek 27.42 237** P P **12 11 37.2 +1.5**
**RAR Rarotonga 29.65 99** LR LR 12 21 19.9
comp=Z,138nm,21.7s,baz=282,slow=31
**LCRK Leigh Creek 29.74 242** P P **12 11 58.2 +1.8**
**OOD Oodnadatta 31.37 248** P P **12 12 12.3 +1.5**
**JAY Jayapura 32.00 298** LR LR 12 24 46.3
comp=Z,148nm,21.6s,baz=151,slow=35
**WR0 Warramunga Arr 32.15 263** P P **12 12 17.3 -0.4**
**WB0 Warramunga Arr 32.30 263** P P **12 12 18.3 -0.8**
**WB2 Warramunga Arr 32.32 263** P P **12 12 18.0 -1.3**
**WRA Warramunga Arr 32.34 263** P P **12 12 18.2 -1.2**
comp=Z,1.1nm,0.5s,baz=85,slow=8.5,SNR=18
WRA LR LR 12 24 36.1
comp=Z,268nm,20.6s,baz=94,slow=35
**WRA Warramunga Arr 32.34 263** P P **12 12 17.3 -2.1**
**GENI Genyem 32.41 297** P P **12 12 19.4 -0.6**
**AS31 Alice Springs 32.62 256** P P **12 12 21.7 -0.3**
**ASAR Alice Springs 32.62 256** P P **12 12 21.5 -0.5**
comp=Z,6.5nm,0.7s,baz=83,slow=8.4,SNR=102
ASAR LR LR 12 25 15.8
comp=Z,475nm,20.2s,baz=102,slow=36
**ASAR Alice Springs 32.62 256** P P **12 12 21.7 -0.3**
**MULG Mulgathing 33.20 244** P P **12 12 27.5 +0.6**
**KDU Kakadu 35.36 275** P P **12 12 45.5 -0.2**
baz=36,SNR=3.8
**KDU Kakadu 35.36 275** P P **12 12 45.6 -0.1**

**DRS Darwin Rock St 36.91 275** P P **12 12 59.2 +0.2**
**WRKA Warakurna 37.76 254** P P **12 13 05.9 -0.2**
baz=38,SNR=5.0
**WRKA Warakurna 37.76 254** P P **12 13 06.4 +0.3**
**KNRA Kununurra 38.19 269** P P **12 13 09.2 -0.6**
baz=39,SNR=5.6
**KNRA Kununurra 38.19 269** P P **12 13 09.4 -0.4**
**FORT Forrest 38.39 244** P P **12 13 12.7 +1.4**
**FAKI Fak Fak 39.11 290** P P **12 13 16.4 -1.2**
FAKI IAmb IAmb 12 13 30.8
comp=Z,23nm,1.0s
**PPT2 Papeete2 39.58 95** eLR LR 12 24 10.3
comp=Z,375nm,27.2s
**PPT Papeete 39.58 95** LR LR 12 25 23.0
comp=Z,277nm,20.7s,baz=276,slow=30
**GUMO Guam 40.15 322** LR LR 12 27 38.2
comp=Z,129nm,21.9s,baz=107,slow=32
**FITZ Fitzroy Crossi 40.72 264** LR LR 12 29 45.1
comp=Z,276nm,20.2s,baz=96,slow=35
**FITZ Fitzroy Crossi 40.72 264** P P **12 13 31.0 +0.2**
baz=41,SNR=16
**SIJI Sorong 40.94 292** LR LR 12 30 42.6
comp=Z,203nm,20.3s,baz=128,slow=36
**SOEI Soe 43.91 276** P P **12 13 55.7 -1.3**
SOEI IAmb IAmb 12 14 20.0
comp=Z,36nm,1.1s
**BATI Baumata 44.34 275** LR LR 12 31 47.3
comp=Z,198nm,21.2s,baz=142,slow=35
**BATI Baumata 44.34 275** P P **12 14 01.5 +1.1**
comp=Z,17nm,0.8s
**PSA00 Pilbara Seismi 45.69 258** P **12 14 09.9 -1.1**
**MBWA Marble Bar 45.84 259** P P **12 14 11.9 -0.3**
MBWA IAmb IAmb 12 14 33.6
comp=Z,21nm,1.2s
**MEEK Meekatharra 46.47 251** P P **12 14 17.1 0.0**
baz=47,SNR=8.7
**NWAO Narrogin (SRO) 47.76 243** P P **12 14 27.1 0.0**
NWAO IAmb IAmb 12 14 46.7
comp=Z,19nm,1.0s
**KAPI Kappang 49.69 280** LR LR 12 35 59.0
comp=Z,34nm,21.2s,baz=108,slow=36
**JAGI Jajag, Banyuwa 53.82 274** P P 12 15 25.1 +12
**VNDA Vanda 58.45 182** P P **12 15 44.1 -0.9**
comp=Z,5.4nm,1.1s,baz=52,slow=6.8,SNR=3.3
VNDA LR LR 12 39 09.8
comp=Z,83nm,18.0s,baz=321,slow=34
**VNDA Vanda 58.45 182** P P **12 15 45.7 +0.7**
VNDA IAmb IAmb 12 15 56.3
comp=Z,22nm,1.4s
**JHJ Hachijo jima 2 58.90 332** LR LR 12 39 56.2
comp=Z,46nm,20.5s,baz=70,slow=35
**CASY Casey 59.95 203** P P **12 15 55.9 +0.4**
CASY IAmb IAmb 12 15 56.1
comp=Z,9.0nm,0.8s
**JSU Suzuyama 62.35 323** P P **12 16 11.9 -0.4**
**MJAR Matsushiro Arr 62.48 333** P P **12 16 12.3 -0.7**
comp=Z,3.2nm,0.5s,baz=173,slow=7.2,SNR=8.6
MJAR LR LR 12 43 00.9
comp=Z,30nm,20.1s,baz=320,slow=36
**MJAR Matsushiro Arr 62.48 333** P P **12 16 13.0 0.0**
MJAR IAmb IAmb 12 16 13.3
comp=Z,14nm,1.4s
**MJB9 Matsu-Tunnel 62.48 333** P P **12 16 12.4 -0.6**
MJB9 IAmb IAmb 12 16 13.4
comp=Z,7.8nm,0.7s
**NACB Ninganchiao 62.97 311** P P **12 16 16.0 -0.5**
**YHNB Yeheng 63.43 312** P P **12 16 20.3 +0.6**
**QZH Quanzhou 65.59 310** eP P **12 16 33.2 -0.4**
**ASAJ Asahikawa 67.39 340** LR LR 12 41 22.1
comp=Z,111nm,21.5s,baz=180,slow=32
**KSRS Korea Array 68.18 326** P P **12 16 49.8 -0.1**
comp=Z,1.8nm,0.9s,baz=242,slow=32,SNR=4.7
**NJ2 Nanjing 69.82 316** eP P **12 17 02.0 +1.8**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**YSS Yuzh-Sakhalins 69.88 341** P P **12 17 01.2 +1.0**
**IPM Ipoh 70.56 282** P P **12 17 04.3 -0.8**
**QSPA South Pole Qui 70.85 180** LR LR 12 45 03.8
comp=Z,87nm,19.4s,baz=22,slow=33
**QSPA South Pole Qui 70.85 180** P P **12 17 06.4 +0.2**
QSPA IAmb IAmb 12 17 22.0
comp=Z,27nm,1.2s
**USA0B Ussuriysk Arra 71.47 333** P P **12 17 10.2 +0.3**
USA0B IAmb IAmb 12 17 11.1
comp=Z,14nm,1.1s
**USRK Ussuriysk Ar. 71.47 333** P P **12 17 10.2 +0.3**
comp=Z,7.4nm,0.9s,baz=124,slow=7.2,SNR=6.0
**USRK Ussuriysk Ar. 71.47 333** P P **12 17 09.6 -0.3**
**SHEM Shemya Is, Ala 71.78 3** LR LR 12 41 31.8
comp=Z,90nm,21.9s,baz=64,slow=30
**PSI Prapat 71.90 280** LR LR 12 51 19.3
comp=Z,97nm,19.1s,baz=88,slow=38
**WHN Wuhan 71.94 313** ⇓P P **12 17 13.5 +0.4**
WHN pP pP **12 17 25.1 -0.6**
WHN pmax pmax
comp=Z,110nm,1.6s
**PEA0B Petropavlovsk- 72.64 353** P P **12 17 16.4 -0.4**
**PETK Petropavlovsk- 72.64 353** P P **12 17 16.6 -0.1**
comp=Z,5.7nm,0.9s,baz=160,slow=4.7,SNR=7.9
PETK LR LR 12 41 39.5
comp=Z,116nm,20.7s,baz=142,slow=30
**PETK Petropavlovsk- 72.64 353** P P **12 17 17.2 +0.5**
**CN2 Changchun 74.16 329** eP P **12 17 26.1 +0.2**
CN2 pmax pmax
comp=Z,20nm,1.2s
**BNX BinXian 74.69 331** ⇓P P **12 17 28.6 -0.4**
BNX pmax pmax
comp=Z,49nm,1.0s
BNX pmax pmax
comp=Z,490nm,7.2s
**ENH Enshi 75.25 310** P P **12 17 31.1 -1.5**
**GYA Guiyang 75.37 305** ⇑P P **12 17 32.3 -1.2**
GYA PcP pP **12 17 45.4 -0.8**
GYA pmax pmax
comp=Z,7.0nm,0.8s
**LYN LuoYang 75.57 315** ⇑/P P **12 17 34.8 +0.5**
LYN pP pP 12 17 46.7 -0.3
LYN pmax pmax
comp=Z,10.0nm,1.4s
**KLR Kul'dur 75.62 336** LR LR 12 46 33.4
comp=Z,91nm,21.8s,baz=324,slow=32
**HNS HongShan 75.82 318** ⇑P P **12 17 36.1 +0.4**
HNS pmax pmax
comp=Z,9.0nm,1.5s
**BJT Baijiatuau 76.57 321** P P **12 17 39.9 0.0**
BJT IAmb IAmb 12 17 43.7
comp=Z,7.2nm,0.6s
**BJI Beijing 76.58 321** P P **12 17 39.2 -0.7**
BJI pP PcP **12 17 51.9 +0.6**
BJI sP sP **12 17 58.8 +1.1**
BJI pmax pmax
comp=Z,10.0nm,1.0s
**XAN Xi'an 77.70 313** P P **12 17 46.7 +0.3**
XAN pP pP 12 17 58.7 -0.5
XAN pmax pmax
comp=Z,9.0nm,1.3s
**KMI Kunming 77.81 302** ⇑P P **12 17 48.7 +1.3**
KMI pP pP 12 18 00.3 +0.1
KMI pmax pmax
comp=Z,13nm,0.8s
**CMAR Chiang Mai Arr 78.01 294** P P **12 17 49.0 +0.6**
comp=Z,2.0nm,0.4s,baz=248,slow=20,SNR=5.8
**CMAR Chiang Mai Arr 78.01 294** P **12 17 48.6 +0.2**
**MAW Mawson 78.27 202** LR LR 12 49 08.8
comp=Z,149nm,19.4s,baz=108,slow=33
**XLT XiLinHaoTe 79.11 324** eP P **12 17 54.0 0.0**
XLT sP sP 12 18 11.3 -0.6
XLT pmax pmax
comp=Z,9.0nm,1.3s
XLT pmax pmax
comp=Z,420nm,6.4s
**PZH PanZhiHua 79.25 303** ⇑P P **12 17 55.1 -0.1**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,4.1s
**MA2 Magadan 79.85 351** P P **12 17 57.4 -0.1**
**HHC Hu-ho-hao-te 79.85 320** eP P **12 18 01.4 +3.2**
HHC pmax pmax
comp=Z,8.0nm,0.9s
HHC pmax pmax
comp=Z,250nm,6.5s
**BELA Belgrano 2 82.18 175** P P **12 18 08.8 -1.1**
**LZH Lanzhou 82.31 312** eP P **12 18 12.5 +1.0**
LZH pP pP 12 18 24.8 +0.5

LZH sP sP 12 18 32.8 +3.6
LZH pmax pmax
comp=Z,19nm,1.4s
LZH pmax pmax
comp=Z,110nm,8.6s
LZH LR LR
comp=Z,350nm,17.0s
LZH LR LR
comp=Z,350nm,16.8s
LZH LR LR
comp=Z,360nm,19.3s
**KDAK Kodiak Island 83.18 20** P P **12 18 16.3 +1.1**
**GAMB Gambell 84.11 9** P P **12 18 19.8 0.0**
**SVW2 Sparrevohn 85.02 17** P P **12 18 23.6 -0.8**
SVW2 IAmb IAmb 12 18 43.3
comp=Z,22nm,1.4s
**L19K White Mountain 86.11 16** P P **12 18 29.7 -0.2**
L19K IAmb IAmb 12 18 31.9
comp=Z,7.9nm,0.9s
**KMRM Mail Ridge 86.25 45** P P **12 18 32.2 +1.0**
**ULN Ulaanbaatar 86.52 324** P P **12 18 32.2 -0.3**
**YAK Yakutsk 86.68 343** LR LR 12 55 58.3
comp=Z,55nm,18.9s,baz=28,slow=35
**YAK Yakutsk 86.68 343** P P **12 18 32.2 -0.5**
**GTA Gaotai 86.72 314** eP P **12 18 34.1 +0.5**
GTA pP pP 12 18 45.8 -0.9
GTA sP sP 12 18 52.5 +0.9
GTA pmax pmax
comp=Z,5.0nm,1.1s
GTA pmax pmax
comp=Z,71nm,5.1s
GTA LR LR
comp=Z,190nm,16.4s
GTA LR LR
comp=Z,260nm,18.2s
GTA LR LR
comp=Z,280nm,17.8s
**SHL Shillong 86.87 298** P P **12 18 33.7 -1.0**
SHL IAmb IAmb 12 18 47.1
comp=Z,10nm,1.0s
**SONM Songino Array 86.88 323** P P **12 18 34.2 0.0**
comp=Z,5.6nm,0.9s,baz=140,slow=4.7,SNR=28
**SONM Songino Array 86.88 323** P P **12 18 34.1 -0.1**
**BILL Bilibino 87.01 359** P P **12 18 33.8 -0.4**
**N02D Trinity Center 87.28 45** P P **12 18 36.2 0.0**
N02D IAmb IAmb 12 18 39.4
comp=Z,5.6nm,0.8s
**ORV Oroville 87.44 47** P P **12 18 36.8 -0.1**
**CMB Columbia Colle 87.53 48** P P **12 18 36.9 -0.6**
CMB IAmb IAmb 12 18 40.1
comp=Z,6.8nm,0.9s
**YBH Yreka Blue Hor 87.64 44** P P **12 18 37.9 0.0**
comp=Z,3.3nm,0.8s,baz=92,slow=2.7,SNR=9.1
YBH LR LR 12 50 07.4
comp=Z,176nm,20.6s,baz=348,slow=30
**YBH Yreka Blue Hor 87.64 44** P P **12 18 38.1 +0.1**
YBH IAmb IAmb 12 18 41.8
comp=Z,5.9nm,1.1s
**L04D Klamath Falls 88.14 44** P P **12 18 40.4 0.0**
L04D IAmb IAmb 12 18 40.6
comp=Z,10nm,1.0s
**PFO Pinyon Flats O 88.52 54** P P **12 18 41.9 -0.5**
comp=Z,0.8nm,0.4s,baz=288,slow=6.0,SNR=5.1
PFO LR LR 12 49 58.7
comp=Z,86nm,20.9s,baz=49,slow=30
**GOMU GeErMu 88.85 309** P P **12 18 45.3 +1.1**
GOMU pP pP 12 18 56.3 -1.0
GOMU sP sP 12 19 06.8 +4.7
GOMU pmax pmax
comp=Z,3.0nm,1.0s
GOMU pmax pmax
comp=Z,230nm,7.2s
**LHV Little Huntoon 88.95 49** P P **12 18 44.5 +0.4**
LHV IAmb IAmb 12 18 46.6
comp=Z,6.3nm,1.1s
**SNAA Sanae 89.17 183** P P **12 18 43.4 -1.4**
**SNAA Sanae 89.17 183** LR LR 12 58 29.7
comp=Z,62nm,18.4s,baz=179,slow=35
**SNAA Sanae 89.17 183** P P **12 18 43.5 -1.3**
**NVAR Mina Array Bea 89.17 49** P P **12 18 45.2 -0.2**
comp=Z,1.8nm,0.8s,baz=229,slow=7.5,SNR=15
**NVAR Mina Array Bea 89.17 49** P P **12 18 45.6 +0.1**
**NV11 Mina Array Sit 89.28 49** P P **12 18 45.2 -0.7**
NV11 IAmb IAmb 12 18 48.3
comp=Z,5.0nm,1.1s
**MOD Modoc Plateau 89.31 45** P P **12 18 45.0 -1.0**
MOD IAmb IAmb 12 18 48.0
comp=Z,4.8nm,0.9s
**IMAR Indian Mountai 89.53 14** P P **12 18 45.4 -0.8**
**VNA3 Neumayer Olymp 89.78 181** P P **12 18 46.3 -1.2**
**LPIG La Paz 89.88 65** LR LR 12 50 38.9
comp=Z,120nm,18.8s,baz=3.0,slow=30
**BLYC Blythe 90.05 54** P P **12 18 49.6 +0.2**
BLYC IAmb IAmb 12 18 50.5
comp=Z,7.6nm,1.1s
**VNA2 Neumayer--Watz 90.07 181** P P **12 18 47.7 -1.1**
**IL31 90.36 17** P P **12 18 49.1 -0.8**
**ILAR Eielson Array 90.36 17** P P **12 18 47.6 -2.4**
comp=Z,1.8nm,0.7s,baz=238,slow=4.9,SNR=24
ILAR LR LR 12 54 55.8
comp=Z,119nm,19.5s,baz=150,slow=33
**ILAR Eielson Array 90.36 17** P P **12 18 49.9 -0.2**
**PALK Pallekele 90.46 277** LR LR 13 02 53.8
comp=Z,42nm,19.1s,baz=87,slow=38
**DLBC Dease Lake 92.25 27** P P **12 18 58.3 -0.8**
comp=Z,4.6nm,0.9s,baz=331,slow=5.7,SNR=5.3
DLBC LR LR 12 57 15.3
comp=Z,121nm,18.1s,baz=279,slow=33
**ELK Elko 92.28 48** P P **12 18 59.4 -0.5**
comp=Z,1.3nm,0.9s,baz=208,slow=16,SNR=5.3
**TUC Tucson 92.42 57** P P **12 18 59.4 -1.1**
TUC IAmb IAmb 12 19 01.7
comp=Z,5.3nm,1.1s
**INK Inuvik 96.68 18** P P **12 19 17.3 -1.7**
comp=Z,0.7nm,0.6s,baz=233,slow=18,SNR=2.5
**ANMO Albuquerque 96.71 55** P P **12 19 19.9 -0.4**
comp=Z,0.5nm,0.7s,baz=157,slow=7.4,SNR=2.1
**WMQ Urumqi 96.80 314** eP P **12 19 21.2 +0.9**
**PDAR Pinedale Array 96.98 47** P P **12 19 21.1 -0.3**
comp=Z,0.3nm,0.6s,baz=208,slow=4.9,SNR=3.7
**TXAR Lajitas Array 97.21 62** LR LR 12 56 17.2
comp=Z,81nm,18.3s,baz=14,slow=31
**PLCA Paso Flores 98.91 139** LR LR 13 00 56.0
comp=Z,41nm,18.2s,baz=97,slow=33
**YKA Yellowknife Ar 100.88 27** P **Pdif 12 19 37.0 -1.0**
comp=Z,0.9nm,0.6s,baz=256,slow=4.6,SNR=24
**MKAR Makanchi Array 101.34 316** P **Pdif 12 19 41.0 +0.5**
comp=Z,0.5nm,0.7s,baz=92,slow=6.4,SNR=7.1
**BOSA Boshof 120.76 218** PKP **PKPdf 12 24 41.7 -0.4**
comp=Z,2.6nm,0.6s,baz=202,slow=1.2,SNR=6.4
**BOSA Boshof 120.76 218 PKPdf 12 24 42.2 0.0**
**ARCES ARCESS Array B 124.90 345** PKP **PKPdf 12 24 47.1 -1.4**
comp=Z,4.1nm,0.7s,baz=51,slow=2.0,SNR=15
**KLMR Klimovskoe 125.26 332** ePKPdf **PKPdf 12 24 47.0 -2.5**
KLMR AMP 12 24 59.7
comp=Z,18nm,1.5s
**BDFB Brasilia 129.97 131** PKP **PKPdf 12 24 57.8 -2.2**
comp=Z,1.2nm,0.4s,baz=188,slow=20,SNR=1.9
**MNK Minsk 133.85 329** *i* PKP **PKPdf 12 25 06.2 +0.2**
comp=E,1.0nm,0.6s
MNK *i* PKP **PKPdf 12 25 06.2 +0.2**
comp=N,25nm,0.7s
MNK *i* PKP **PKPdf 12 25 06.2 +0.2**
comp=Z,18nm,0.8s,baz=56
MNK *i* pPKP **pPKPdf 12 25 21.4 +1.9**
MNK *i* PP **PP 12 27 36.8 +1.0**
MNK *i* PPP PPP 12 30 30.1
MNK *i* SKS **SKSdf 12 32 15.9 +2.4**
MNK *i* PS **PS 12 37 55.6 -0.3**
MNK *i* SS **SS 12 45 21.0 +1.5**
MNK *i* SSS SSS 12 50 25.0
MNK *i* LR LR 13 21 40.8
MNK *i* LRM MLR 13 23 53.6
comp=N,253nm,18.1s
MNK *i* LRM MLR 13 24 03.9
comp=E,46nm,14.8s
MNK *i* LRM MLR 13 24 20.7
comp=Z,243nm,13.5s
**VYHS Vyhne 141.97 327** ePKP **PKiKP 12 25 22.9 -1.2**
**MODS Modra-Piesok 142.84 328** ePKP **PKiKP 12 25 28.0 +2.1**
**GUNZ Gunzen 143.66 334** ePKPbc PKPbc 12 25 21.5 -0.1
baz=39,slow=3.2
**MOX Moxa 143.73 335** ePKPbc PKPbc 12 25 21.5 -0.3
baz=39,slow=3.2
**CONA Conrad Observa 143.84 329** eP PKPbc 12 25 23.1 +0.8
comp=Z,16nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CONA | | | | *i* P | | pPKPdf | 12 25 35.8 | -2.2 |
| | comp=Z,11nm,1.1s | | | | | | | |
| **MANZ** | **Manzenberg** | **144.04** | **334** | *e*PKPbc | | PKPbc | 12 25 22.7 | -0.1 |
| | baz=39,slow=3.2 | | | | | | | |
| **KHC** | **Kasperske Hory** | **144.06** | **332** | *e*P | | **PKPab** | **12 25 22.5** | **+0.1** |
| **ROTZ** | **Rotzenmuhle** | **144.17** | **334** | *e*PKPbc | | PKPbc | 12 25 23.3 | +0.1 |
| | baz=39,slow=3.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **144.21** | **331** | PKP | | **PKPab** | **12 25 23.2** | **+0.2** |
| | comp=Z,2.0nm,0.7s,baz=57,slow=4.9,SNR=8.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **144.21** | **331** | | | PKPbc | 12 25 23.5 | +0.1 |
| **KASTN** | **Kahler Asten** | **144.47** | **339** | *e*PKPbc | | **PKPab** | **12 25 23.9** | **+0.1** |
| | baz=39,slow=3.2 | | | | | | | |
| **ARSA** | **Arzberg** | **144.47** | **328** | *i* P | | PKPbc | 12 25 24.8 | +0.6 |
| | comp=Z,15nm,1.2s | | | | | | | |
| ARSA | | | | *i* P | | pPKPdf | 12 25 36.2 | -2.9 |
| | comp=Z,22nm,1.5s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **144.63** | **335** | *e*PKPbc | | PKPbc | 12 25 25.0 | +0.4 |
| | baz=39,slow=3.2 | | | | | | | |
| GRF | | | | *ep*PKPbc | | pPKPdf | 12 25 36.7 | -2.5 |
| **MOA** | **Molln** | **144.67** | **330** | *e*P | | PKPbc | 12 25 25.3 | +0.5 |
| | comp=Z,20nm,0.8s,SNR=8.9 | | | | | | | |
| MOA | | | | *i* P | | pPKPdf | 12 25 36.9 | -2.4 |
| | comp=Z,10nm,0.8s | | | | | | | |
| **SOKA** | **Soboth** | **145.10** | **328** | *i* P | | **PKPbc** | **12 25 25.6** | **-0.7** |
| | comp=Z,13nm,0.7s | | | | | | | |
| SOKA | | | | *e*P | | pPKPab | 12 25 37.9 | -1.6 |
| | comp=Z,27nm,1.2s | | | | | | | |
| **TNS** | **Taunus Mts** | **145.27** | **338** | *e*PKPbc | | **PKPdf** | **12 25 27.0** | **0.0** |
| | baz=39,slow=3.2 | | | | | | | |
| **RJOB** | **Jochberg** | **145.44** | **331** | *e*PKPbc | | **PKPdf** | **12 25 27.3** | **0.0** |
| | baz=39,slow=3.2 | | | | | | | |
| RJOB | | | | *ep*PKPbc | | **pPKPdf** | **12 25 39.2** | **-1.5** |
| **OBKA** | **Obir** | **145.46** | **328** | *i* P | | **PKPbc** | **12 25 27.5** | **0.0** |
| | comp=Z,20nm,1.4s | | | | | | | |
| OBKA | | | | *i* P | | **pPKPdf** | **12 25 38.8** | **-2.1** |
| | comp=Z,12nm,0.9s | | | | | | | |
| **AHRW** | **Bad Neuenahr-A** | **145.48** | **339** | *e*PKPbc | | **PKPab** | **12 25 27.4** | **-0.1** |
| | baz=39,slow=3.2 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **145.66** | **330** | *e*P | | **PKPdf** | **12 25 26.9** | **-1.0** |
| | comp=Z,19nm,1.3s | | | | | | | |
| KBA | | | | *i* P | | **pPKPdf** | **12 25 39.4** | **-1.9** |
| | comp=Z,27nm,1.2s | | | | | | | |
| **BTNL** | **Ternell** | **145.75** | **340** | *d*PKP | | **PKPdf** | **12 25 27.4** | **-0.4** |
| **MEM** | **Membach** | **145.77** | **340** | *d*PKPdf | | **PKPdf** | **12 25 27.4** | **-0.4** |
| **MYKA** | **Terra Mystica** | **145.83** | **329** | *i* P | | **PKPdf** | **12 25 26.7** | **-1.3** |
| | comp=Z,15nm,1.2s | | | | | | | |
| MYKA | | | | *i* P | | **pPKPdf** | **12 25 40.0** | **-1.4** |
| | comp=Z,21nm,1.2s | | | | | | | |
| **WATA** | **Walderalm** | **146.29** | **332** | *i* P | | **PKPbc** | **12 25 30.1** | **+0.1** |
| | comp=Z,15nm,1.2s | | | | | | | |
| WATA | | | | *i* P | | **pPKPdf** | **12 25 40.9** | **-1.4** |
| | comp=Z,22nm,1.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **146.29** | **330** | *i* P | | **PKPdf** | **12 25 29.2** | **+0.4** |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| ABTA | | | | *i* P | | **pPKPdf** | **12 25 41.0** | **-1.2** |
| | comp=Z,36nm,1.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **146.31** | **331** | *i* P | | **PKPbc** | **12 25 30.5** | **+0.2** |
| | comp=Z,19nm,1.2s | | | | | | | |
| WTTA | | | | *i* P | | **pPKPdf** | **12 25 41.5** | **-0.9** |
| | comp=Z,32nm,1.2s | | | | | | | |
| **RCHB** | **Rochefort** | **146.41** | **341** | *d*PKPdf | | **PKPdf** | **12 25 28.8** | **0.0** |
| **BMRD** | **Maredsous** | **146.43** | **341** | *d*PKP | | **PKPdf** | **12 25 27.8** | **-1.0** |
| **MOTA** | **Moosalm** | **146.49** | **332** | *i* P | | **PKPdf** | **12 25 29.5** | **+0.3** |
| | comp=Z,23nm,1.1s,SNR=7.9 | | | | | | | |
| MOTA | | | | *e*P | | **pPKPdf** | **12 25 42.2** | **-0.5** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **RETA** | **Reutte** | **146.53** | **332** | *e*P | | **PKPbc** | **12 25 30.9** | **+0.2** |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| RETA | | | | *i* P | | **pPKPdf** | **12 25 42.2** | **-0.4** |
| | comp=Z,11nm,1.2s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **146.54** | **332** | *i* P | | **PKPbc** | **12 25 30.3** | **-0.5** |
| | comp=Z,15nm,0.8s | | | | | | | |
| SQTA | | | | *i* P | | **pPKPdf** | **12 25 42.5** | **-0.2** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **WLF** | **Walferdange** | **146.54** | **339** | *e*PKPbc | | **PKPab** | **12 25 31.2** | **-0.3** |
| | baz=39,slow=3.2 | | | | | | | |
| **WLF** | **Walferdange** | **146.54** | **339** | *d*PKP | | **PKPbc** | **12 25 30.9** | **+0.3** |
| **DOU** | **Dourbes** | **146.66** | **341** | *d*PKP | | **PKPbc** | **12 25 30.5** | **-0.4** |
| **UBR** | **Ueberruh** | **146.67** | **333** | *e*PKPbc | | **PKPbc** | **12 25 30.9** | **-0.2** |
| | baz=39,slow=3.2 | | | | | | | |
| **BFO** | **Black Forest** | **146.87** | **336** | *e*PKPbc | | **PKPbc** | **12 25 31.4** | **-0.2** |
| | baz=39,slow=3.2 | | | | | | | |
| BFO | | | | *ep*PKPbc | | **pPKPdf** | **12 25 43.2** | **+0.1** |
| **FETA** | **Feichten** | **146.90** | **332** | *e*P | | **PKPbc** | **12 25 31.5** | **-0.4** |
| | comp=Z,22nm,1.2s,SNR=6.4 | | | | | | | |
| FETA | | | | *e*P | | **pPKPdf** | **12 25 43.7** | **+0.3** |
| | comp=Z,19nm,1.0s | | | | | | | |
| **DAVA** | **Damuels** | **147.07** | **333** | *i* P | | **PKPbc** | **12 25 32.6** | **+0.3** |
| | comp=Z,14nm,1.1s | | | | | | | |
| DAVA | | | | *i* P | | **pPKPbc** | **12 25 45.0** | **-0.7** |
| | comp=Z,20nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **158.63** | **344** | PKPab | | **PKPab** | **12 26 21.8** | **-0.6** |
| | comp=Z,0.7nm,0.8s,baz=23,slow=3.7,SNR=6.6 | | | | | | | |
| **KIC** | **Kosan Boka** | **165.72** | **207** | *e*PKP2 | | **PKPab** | **12 26 53.7** | **-0.3** |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| **LIC** | **Lamto** | **165.72** | **206** | *e*PKP2 | | **PKPab** | **12 26 53.7** | **-0.2** |
| | comp=Z,15nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | **166.05** | **208** | PKPab | | **PKPab** | **12 26 56.0** | **+0.7** |
| | comp=Z,4.2nm,0.9s,baz=185,slow=7.4,SNR=3.2 | | | | | | | |
| **TIC** | **Toumodi** | **166.09** | **207** | *e*PKP2 | | **PKPab** | **12 26 55.2** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **166.13** | **246** | PKPab | | **PKPab** | **12 26 55.7** | **-0.3** |
| | comp=Z,2.8nm,1.1s,baz=118,slow=3.4,SNR=5.3 | | | | | | | |

*VAO **08** 12:13:12.3±2.1, 32°.46S×72°.24W, h10km, mb4.6*
*IDC **08** 12:13:16.2±0.8, 32°.03S×71°.83W, h0km, mb4.4/7, mb1 4.4/12, mb1mx4.2/35, mbtmp4.3/12, ML4.1/5, MS3.7/10, Ms1 3.7/10, ms1mx3.5/52, Error ellipse: s-maj=26.9km s-min=19.3km az=101.0*
*NEIC **08** 12:13:19.4±1.9, 32°.08S±0°.04×72°.0W±0°.1, h22km±4km, mb4.7/14, Mwr4.3/49, ML4.3(GUC), Error ellipse: s-maj=13.0km s-min=5.8km az=93.0*
*GUC **08** 12:13:19.8±0.7, 32°.11S×71°.87W, h36km±4km, ML4.3*
*NEIC **08** 12:13:19.4, 32°.08S×71°.98W, h26km, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr=3.06; Mθθ=0.22; Mφφ=-3.28; Mrθ=0.74; Mrφ=-0.03; Mθφ=-0.51; Fault plane solution: Ms=3.30000×10^15^ NP1:φs=167.25000°, δ=51.06000°, λ=72.53000°. NP2:φs=13.85000°, δ=42.10000°, λ=110.38000°. Principal axes: T 3.2802, Plg=76.0000°, Azm=18.0000°; N 0.0390, Plg=14.0000°, Azm=178.0000°; P =-3.3192, Plg=5.0000°, Azm=270.0000°;*

**ISC 08 12:13:18.8±0.6, 32°.08S±0°.03×71°.92W±0°.05, h22km±4km, n120, σ1°=16/130, mb4.8/16, MS3.8/6, 10C-7D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **VA06** | **Catapilco** | **0.71** | **132** | ⇓*i*P | | **Pb** | **12 13 32.5** | **-0.1** |
| VA06 | | | | *i* S | | **Sb** | **12 13 41.5** | **-0.4** |
| VA06 | | | | IAML | | | 12 13 44.8 | |
| | comp=E,31µm,0.5s | | | | | | | |
| **VA01** | **Torpederas** | **0.96** | **166** | *e*P | | **Pb** | **12 13 36.9** | **0.0** |
| VA01 | | | | *i* S | | **Sb** | **12 13 49.4** | **+0.3** |
| **VA01** | **Torpederas** | **0.96** | **166** | Pn | | **Pb** | **12 13 36.8** | **0.0** |
| **ROCH** | **El Roble** | **1.17** | **139** | ⇓*i*P | | **Pb** | **12 13 40.0** | **-0.5** |
| ROCH | | | | ⇓*i*P | | **Pn** | **12 13 38.9** | **-1.2** |
| ROCH | | | | *i* S | | **Sb** | **12 13 54.2** | **-1.2** |
| ROCH | | | | *i* S | | **Sn** | **12 13 54.9** | **-0.6** |
| ROCH | | | | IAML | | | 12 13 58.1 | |
| | comp=N,10µm,0.5s | | | | | | | |
| ROCH | | | | IAML | | | 12 13 59.3 | |
| | comp=N,14µm,0.3s | | | | | | | |
| **ROC1** | **El Roble** | **1.17** | **139** | | | **Pn** | **12 13 38.9** | **-1.3** |
| **CO02** | **Combarbal** | **1.18** | **42** | ⇓*i*P | | **Pb** | **12 13 40.5** | **0.0** |
| CO02 | | | | *i* S | | **Sn** | **12 13 56.3** | **+0.8** |
| **CO02** | **Combarbal** | **1.18** | **42** | | | **Pn** | **12 13 40.5** | **0.0** |
| **VA03** | **San Esteban** | **1.34** | **121** | ⇓*i*P | | **Pn** | **12 13 42.5** | **+0.2** |
| VA03 | | | | *i* S | | **Sn** | **12 13 59.3** | **-0.3** |
| **MT02** | **Curacav** | **1.34** | **151** | ⇓*i*P | | **Pn** | **12 13 42.3** | **0.0** |
| MT02 | | | | *i* S | | **Sn** | **12 13 59.7** | **+0.3** |
| MT02 | | | | IAML | | | 12 14 01.7 | |
| | comp=N,5µm,0.5s | | | | | | | |
| **MT02** | **Curacav** | **1.34** | **151** | | | **Pn** | **12 13 42.6** | **+0.4** |
| **CO06** | **Fray Jorge** | **1.43** | **10** | ⇑*i*P | | **Pn** | **12 13 44.0** | **+0.6** |
| CO06 | | | | *i* S | | **Sb** | **12 14 03.5** | **+1.0** |
| CO06 | | | | IAML | | | 12 14 08.3 | |
| | comp=N,10µm,0.6s | | | | | | | |
| **PEL** | **Peldehue** | **1.48** | **136** | Pn | | **Pn** | **12 13 44.9** | **+0.7** |
| **VA05** | **Santo Domingo** | **1.59** | **171** | *e*P | | **Pn** | **12 13 45.9** | **+0.3** |
| VA05 | | | | IAML | | | 12 14 15.0 | |
| | comp=N,8µm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **1.63** | **41** | ⇓*i*P | | **Pb** | **12 13 47.7** | **-0.5** |
| CO03 | | | | *i* S | | **Sb** | **12 14 08.8** | **+0.5** |
| CO03 | | | | IAML | | | 12 14 14.1 | |
| | comp=N,8µm,0.5s | | | | | | | |
| **MT05** | **Renca** | **1.64** | **143** | ⇑*i*P | | **Pn** | **12 13 47.2** | **+0.8** |
| MT05 | | | | *i* S | | **Sb** | **12 14 08.2** | **-0.5** |
| MT05 | | | | IAML | | | 12 14 19.7 | |
| | comp=N,7µm,0.6s | | | | | | | |
| **MT05** | **Renca** | **1.64** | **143** | | | **Pn** | **12 13 47.3** | **+0.9** |
| **MT09** | **Talagante** | **1.86** | **155** | ⇑*i*P | | **Pn** | **12 13 50.6** | **+1.1** |
| MT09 | | | | IAML | | | 12 14 19.6 | |
| | comp=N,5µm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **1.86** | **163** | ⇑*i*P | | **Pn** | **12 13 50.0** | **+0.7** |
| MT01 | | | | IAML | | | 12 14 21.2 | |
| | comp=N,3µm,0.7s | | | | | | | |
| **GO04** | **Tololo Observa** | **2.13** | **27** | ⇑*i*P | | **Pn** | **12 13 54.5** | **+1.2** |
| GO04 | | | | *i* S | | **Sb** | **12 14 24.1** | **+1.0** |
| **GO04** | **Tololo Observa** | **2.13** | **27** | | | **Pn** | **12 13 54.8** | **+1.5** |
| **BO04** | **La Punta** | **2.20** | **150** | ⇑*i*P | | **Pn** | **12 13 55.5** | **+1.5** |
| BO04 | | | | IAML | | | 12 14 29.8 | |
| | comp=N,4µm,0.7s | | | | | | | |
| **CO05** | **La Serena** | **2.24** | **15** | *e*P | | **Pn** | **12 13 55.8** | **+1.3** |
| CO05 | | | | IAML | | | 12 14 35.5 | |
| | comp=E,5µm,0.4s | | | | | | | |
| **LMEL** | **Las Melosas** | **2.28** | **141** | ⇑*i*P | | **Pn** | **12 13 56.8** | **+1.6** |
| LMEL | | | | IAML | | | 12 14 35.5 | |
| | comp=N,3µm,0.7s | | | | | | | |
| **LMEL** | **Las Melosas** | **2.28** | **141** | | | **Pn** | **12 13 56.4** | **+1.2** |
| **BO01** | **Tunca** | **2.41** | **163** | *e*P | | **Pn** | **12 13 57.7** | **+0.8** |
| BO01 | | | | IAML | | | 12 14 35.9 | |
| | comp=E,3µm,0.9s | | | | | | | |
| **BO01** | **Tunca** | **2.41** | **163** | | | **Pn** | **12 13 57.6** | **+0.8** |
| **BO02** | **Sierra Bellavi** | **2.86** | **161** | ⇑*i*P | | **Pn** | **12 14 04.2** | **+1.0** |
| **GO05** | **Huala** | **2.92** | **180** | *e*P | | **Pn** | **12 14 05.0** | **+1.1** |
| **LCO** | **Las Campanas** | **3.24** | **19** | ⇑*i*P | | **Pn** | **12 14 09.5** | **+0.9** |
| **LCO** | **Las Campanas** | **3.24** | **19** | Pn | | **Pn** | **12 14 09.3** | **+0.7** |
| **ML02** | **Panimavida** | **3.69** | **174** | | | **Pn** | **12 14 14.7** | **+0.2** |
| **AC04** | **Llanos de Chal** | **3.94** | **11** | ⇑*i*P | | **Pn** | **12 14 17.9** | **+0.1** |
| **AC04** | **Llanos de Chal** | **3.94** | **11** | Pn | | **Pn** | **12 14 18.0** | **+0.1** |
| **GO03** | **Copiap** | **4.71** | **19** | *e*P | | **Pn** | **12 14 29.1** | **+0.5** |
| **H03N1** | **Juan Fernandez** | **6.04** | **255** | Pn | | **Pn** | **12 14 48.0** | **+1.5** |
| | baz=92,slow=15,SNR=11 | | | | | | | |
| H03N1 | | | | T | | T | 12 21 23.4 | |
| | baz=83,slow=72,SNR=1305 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.05** | **255** | Pn | | **Pn** | **12 14 48.3** | **+1.6** |
| | baz=92,slow=15,SNR=13 | | | | | | | |
| H03N3 | | | | T | | T | 12 21 20.2 | |
| | baz=83,slow=72,SNR=1115 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.06** | **255** | Pn | | **Pn** | **12 14 48.3** | **+1.6** |
| | baz=92,slow=15,SNR=13 | | | | | | | |
| H03N2 | | | | T | | T | 12 21 24.7 | |
| | baz=83,slow=72,SNR=796 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.12** | **252** | Pn | | **Pn** | **12 14 48.0** | **+0.3** |
| H03S3 | | | | T | | T | 12 21 33.1 | |
| | baz=80 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **6.12** | **251** | Pn | | **Pn** | **12 14 47.7** | **0.0** |
| H03S1 | | | | T | | T | 12 21 31.7 | |
| | baz=80 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **6.14** | **252** | Pn | | **Pn** | **12 14 47.9** | **0.0** |
| H03S2 | | | | T | | T | 12 21 30.5 | |
| | baz=80 | | | | | | | |
| **LC01** | **Cunco** | **6.80** | **180** | | | **Pn** | **12 14 57.5** | **+0.3** |
| **PB14** | **IPOC Station P** | **7.55** | **11** | | | **Pn** | **12 15 07.0** | **-0.9** |
| **PLCA** | **Paso Flores** | **8.70** | **173** | Pn | | **Pn** | **12 15 25.1** | **+1.7** |
| | comp=E,0.7nm,0.3s,baz=334,slow=12,SNR=29 | | | | | | | |
| PLCA | | | | Lg | | Lg | 12 17 47.2 | |
| | comp=E,0.2nm,0.3s,baz=279,slow=22,SNR=2.0 | | | | | | | |
| PLCA | | | | LR | | LR | 12 19 22.6 | |
| | comp=E,324nm,19.2s,baz=349,slow=42 | | | | | | | |
| **LVC** | **Limon Verde** | **9.81** | **17** | Pn | | **Pn** | **12 15 36.1** | **-2.8** |
| | comp=E,1.0nm,0.3s,baz=177,slow=7.7,SNR=7.5 | | | | | | | |
| LVC | | | | LR | | LR | 12 19 20.2 | |
| | comp=E,438nm,19.0s,baz=208,slow=37 | | | | | | | |
| **LVC** | **Limon Verde** | **9.81** | **17** | | | **Pn** | **12 15 35.2** | **-3.7** |
| **ITQB** | **Itaqui** | **13.36** | **84** | *e*P | | **Pn** | **12 16 26.4** | **-0.7** |
| **ITQB** | **Itaqui** | **13.36** | **84** | | | **Pn** | **12 16 27.8** | **+0.7** |
| **CPUP** | **Villa Florida** | **13.97** | **69** | Pn | | **Pn** | **12 16 35.2** | **-0.2** |
| | comp=E,0.3nm,0.3s,baz=250,slow=11,SNR=2.9 | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **12 19 11.6** | **+1.8** |
| | comp=E,0.2nm,0.3s,baz=178,slow=16,SNR=1.6 | | | | | | | |
| CPUP | | | | LR | | LR | 12 22 22.7 | |
| | comp=E,512nm,18.8s,baz=240,slow=39 | | | | | | | |
| **CPUP** | **Villa Florida** | **13.97** | **69** | | | **Pn** | **12 16 35.6** | **+0.2** |
| **LPAZ** | **La Paz** | **16.10** | **13** | Pn | | **Pn** | **12 17 05.8** | **+1.4** |
| | comp=E,0.2nm,0.3s,baz=176,slow=8.6,SNR=21 | | | | | | | |
| **LPAZ** | **La Paz** | **16.10** | **13** | *e*P | | **Pn** | **12 17 04.1** | **-0.3** |
| **LPAZ** | **La Paz** | **16.10** | **13** | | | **Pn** | **12 17 05.4** | **+1.0** |
| **AQDB** | **Aquidauana** | **18.55** | **55** | P | | **P** | **12 17 33.1** | **-1.0** |
| **SIV** | **San Ignacio** | **18.82** | **34** | P | | **Pn** | **12 17 37.4** | **-0.2** |
| | comp=E,0.5nm,0.3s,baz=214,slow=10.0,SNR=21 | | | | | | | |
| SIV | | | | LR | | LR | 12 26 10.1 | |
| | comp=E,184nm,19.5s,baz=185,slow=41 | | | | | | | |
| **PTGB** | **Pitanga** | **18.93** | **72** | *e*P | | **P** | **12 17 38.2** | **-0.2** |
| **PTLB** | **Pontes e Lacer** | **20.25** | **38** | *e*P | | **P** | **12 17 52.5** | **-0.1** |
| **PTLB** | **Pontes e Lacer** | **20.25** | **38** | P | | **P** | **12 17 52.8** | **+0.2** |
| **NNA** | **Nana** | **20.51** | **346** | LR | | LR | 12 24 40.4 | |
| | comp=E,90nm,18.3s,baz=164,slow=33 | | | | | | | |
| **PCMB** | **Pacaembu** | **21.15** | **66** | *e*P | | **P** | **12 18 01.3** | **-1.1** |
| **SALV** | **Santo Antonio** | **21.85** | **46** | *e*P | | **P** | **12 18 09.3** | **-0.7** |
| **VILB** | **Vilhena** | **21.87** | **32** | *e*P | | **P** | **12 18 10.1** | **-0.1** |
| **VILB** | **Vilhena** | **21.87** | **32** | P | | **P** | **12 18 09.7** | **-0.5** |
| VILB | | | | IAmb | | IAmb | 12 18 10.8 | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **EFI** | **East Falkland** | **22.06** | **157** | P | | **P** | **12 18 12.7** | **+0.8** |
| **ETMB** | **Extrema** | **22.78** | **15** | *e*P | | **P** | **12 18 19.2** | **-0.7** |
| **ETMB** | **Extrema** | **22.78** | **15** | P | | **P** | **12 18 21.9** | **+2.0** |
| ETMB | | | | IAmb | | IAmb | 12 18 23.2 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **USHA** | **Ushuaia** | **22.87** | **175** | P | | **P** | **12 18 23.0** | **+2.4** |
| | comp=Z,11nm,0.9s,baz=335,slow=5.2,SNR=3.8 | | | | | | | |
| USHA | | | | LR | | LR | 12 28 39.8 | |
| | comp=Z,316nm,18.8s,baz=11,slow=40 | | | | | | | |
| **VAO** | **Valinhos** | **23.86** | **74** | *e*P | | **P** | **12 18 27.8** | **-3.0** |
| **ARAG** | **Araguaiana, MT** | **24.50** | **53** | *e*P | | **P** | **12 18 36.4** | **-0.2** |
| **PDRB** | **Porto dos Gac** | **24.72** | **38** | *e*P | | **P** | **12 18 38.2** | **-0.4** |
| **ATAH** | **Atahualpa** | **25.55** | **345** | LR | | LR | 12 27 46.7 | |
| | comp=Z,95nm,18.8s,baz=353,slow=34 | | | | | | | |
| **IPMB** | **Ipameri, GO** | **25.59** | **62** | *e*P | | **P** | **12 18 45.4** | **-1.2** |
| **CLDB** | **Colider** | **25.83** | **39** | *e*P | | **P** | **12 18 49.3** | **+0.7** |
| **BDFB** | **Brasilia** | **27.22** | **59** | P | | **P** | **12 19 01.2** | **-0.1** |
| | comp=Z,16nm,0.9s,baz=233,slow=6.1,SNR=16 | | | | | | | |
| BDFB | | | | LR | | LR | 12 30 23.5 | |
| | comp=Z,263nm,22.0s,baz=196,slow=38 | | | | | | | |
| **BDFB** | **Brasilia** | **27.22** | **59** | P | | **P** | **12 19 01.1** | **-0.1** |
| BDFB | | | | IAmb | | IAmb | 12 19 02.3 | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **SNDB** | **Serra Nova Dou** | **27.58** | **48** | *e*P | | **P** | **12 19 04.0** | **-0.5** |
| **NPGB** | **Novo Progresso** | **29.31** | **35** | *e*P | | **P** | **12 19 18.7** | **-1.1** |
| **SMTB** | **Santa Maria do** | **32.30** | **50** | *e*P | | **P** | **12 19 45.9** | **-0.4** |
| **PRPB** | **Parauapebas** | **33.03** | **43** | *e*P | | **P** | **12 19 52.2** | **-0.4** |
| **PMSA** | **Palmer Station** | **33.08** | **174** | LR | | LR | 12 33 20.8 | |
| | comp=Z,195nm,20.8s,baz=322,slow=36 | | | | | | | |
| **BOAV** | **Boa Vista** | **35.96** | **20** | P | | **P** | **12 20 18.7** | **+0.8** |
| BOAV | | | | IAmb | | IAmb | 12 20 19.2 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **NBPN** | **Ponto Novo - B** | **36.09** | **61** | *e*P | | **P** | **12 20 17.9** | **-1.3** |
| **MCPB** | **Macapa, AP** | **36.71** | **35** | *e*P | | **P** | **12 20 22.9** | **-1.5** |
| **NBAN** | **Anadia - AL** | **39.80** | **64** | *e*P | | **P** | **12 20 48.8** | **-1.6** |
| **BAUV** | **El Baul** | **40.96** | **6** | P | | **P** | **12 21 00.8** | **+0.8** |
| BAUV | | | | IAmb | | IAmb | 12 21 01.2 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **MDP** | **Montagnes des** | **41.29** | **30** | LR | | LR | 12 40 09.9 | |
| | comp=Z,207nm,18.0s,baz=260,slow=39 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **51.09** | **158** | P | | **P** | **12 22 20.7** | **+1.4** |
| **VNA2** | **Neumayer--Watz** | **51.74** | **158** | P | | **P** | **12 22 25.4** | **+1.3** |
| | baz=280,slow=7.4 | | | | | | | |
| **SNAA** | **Sanae** | **53.32** | **158** | P | | **P** | **12 22 37.0** | **+1.2** |
| **SNAA** | **Sanae** | **53.32** | **158** | P | | **P** | **12 22 37.1** | **+1.3** |
| SNAA | | | | IAmb | | IAmb | 12 22 38.2 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.15** | **180** | P | | **P** | **12 23 12.2** | **+1.6** |
| QSPA | | | | IAmb | | IAmb | 12 23 13.2 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **68.12** | **330** | P | | **P** | **12 24 18.5** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=102,slow=3.8,SNR=2.6 | | | | | | | |
| **LIC** | **Lamto** | **74.08** | **72** | *e*P | | **P** | **12 24 53.2** | **-0.3** |
| | comp=Z,29nm,0.8s | | | | | | | |
| **TIC** | **Toumodi** | **74.33** | **72** | *e*P | | **P** | **12 24 54.7** | **-0.3** |
| **KIC** | **Kosan Boka** | **74.39** | **72** | *e*P | | **P** | **12 24 55.7** | **+0.4** |
| | comp=Z,20nm,0.7s | | | | | | | |
| **DBIC** | **Dimbokro** | **74.48** | **72** | P | | **P** | **12 24 56.4** | **+0.5** |
| | comp=Z,13nm,0.7s,baz=231,slow=5.4,SNR=22 | | | | | | | |
| **DBIC** | **Dimbokro** | **74.48** | **72** | P | | **P** | **12 24 56.5** | **+0.6** |
| **113A** | **Mohawk Valley,** | **75.64** | **325** | P | | **P** | **12 25 00.1** | **-1.9** |
| 113A | | | | IAmb | | IAmb | 12 25 00.8 | |
| | comp=Z,4.3nm,1.2s | | | | | | | |
| **BOSA** | **Boshof** | **80.88** | **118** | P | | **P** | **12 25 32.1** | **+0.5** |
| | comp=Z,4.5nm,0.9s,baz=225,slow=4.5,SNR=4.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.37** | **325** | P | | **P** | **12 25 41.2** | **+2.1** |
| | comp=Z,0.5nm,0.8s,baz=161,slow=6.1,SNR=4.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.37** | **325** | P | | **P** | **12 25 39.1** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **83.47** | **70** | P | | **P** | **12 25 45.9** | **+0.7** |
| | comp=Z,8.7nm,0.7s,baz=264,slow=4.7,SNR=53 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.47** | **70** | P | | **P** | **12 25 45.8** | **+0.7** |
| **ASAR** | **Alice Springs** | **119.31** | **207** | PKP | | **PKPdf** | **12 32 06.9** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=131,slow=2.6,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **119.31** | **207** | | | **PKPdf** | **12 32 06.3** | **-0.6** |
| **WRA** | **Warramunga Arr** | **122.47** | **210** | PKP | | **PKPdf** | **12 32 13.0** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=162,slow=1.7,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **122.47** | **210** | | | **PKPdf** | **12 32 12.3** | **-0.7** |
| **H11S2** | **WAKE ISLAND Hyd** | **125.88** | **270** | T | | T | 14 51 14.3 | |
| | baz=117,slow=74,SNR=81 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **125.89** | **270** | T | | T | 14 51 13.3 | |
| | baz=117,slow=74,SNR=62 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **125.89** | **270** | T | | T | 14 51 20.8 | |
| | baz=117,slow=74,SNR=70 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **126.24** | **272** | T | | T | 14 51 36.1 | |
| | baz=116,slow=76,SNR=18 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **126.25** | **272** | T | | T | 14 51 36.7 | |
| | baz=116,slow=76,SNR=6.4 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **126.26** | **272** | T | | T | 14 51 36.4 | |
| | baz=116,slow=76,SNR=46 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.54** | **30** | PKPbc | | **PKiKP** | **12 33 13.6** | **+0.5** |
| | comp=Z,2.8nm,0.5s,baz=291,slow=3.6,SNR=18 | | | | | | | |
| ZALV | | | | PKPab | | **sPKPbc** | **12 33 22.3** | **+0.1** |
| | comp=Z,7.5nm,0.6s,baz=308,slow=3.0,SNR=18 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.54** | **30** | PKPdf | | **PKPdf** | **12 33 02.5** | **-3.4** |
| ZALV | | | | | | **sPKPdf** | **12 33 14.3** | **-1.0** |
| ZALV | | | | PKPab | | **PKPab** | **12 33 23.5** | **+0.2** |
| **MKAR** | **Makanchi Array** | **155.40** | **46** | PKPbc | | **sPKPdf** | **12 33 20.0** | **+0.3** |
| | comp=Z,0.7nm,0.8s,baz=311,slow=2.8,SNR=5.2 | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | **12 33 36.6** | **+0.8** |
| | comp=Z,3.5nm,0.7s,baz=293,slow=4.0,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **155.40** | **46** | PKPdf | | **PKPdf** | **12 33 08.5** | **-1.8** |
| MKAR | | | | | | **sPKPdf** | **12 33 19.4** | **-0.3** |
| MKAR | | | | PKPab | | **PKPab** | **12 33 36.7** | **+1.0** |
| **SONM** | **Songino Array** | **164.22** | **4** | PKPab | | **PKPab** | **12 34 15.2** | **+1.2** |
| | comp=Z,0.7nm,0.9s,baz=324,slow=1.9,SNR=5.1 | | | | | | | |
| **SONM** | **Songino Array** | **164.22** | **4** | PKPdf | | **PKPdf** | **12 33 18.9** | **-1.4** |
| SONM | | | | | | **PKPab** | **12 34 10.1** | **-4.0** |
| **PZH** | **PanZhiHua** | **172.16** | **134** | PKP | | **PKPdf** | **12 33 26.4** | **+0.1** |
| **LZH** | **Lanzhou** | **174.68** | **40** | *e*PKP | | **PKPdf** | **12 33 24.4** | **-2.7** |
| LZH | | | | sPKP | | | 12 33 34.0 | |

**IDC 08 12:22:23.4±9.1, 20°.52S×176°.68W, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.7/30, mbtmp3.8/3, Error ellipse: s-maj=400.1km s-min=38.8km az=145.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **32.24** | **254** | P | | **P** | **12 43 59.0** | **+0.1** |
| | 0.4nm,0.5s,baz=78,slow=9.0,SNR=6.6 | | | | | | | |
| **SONM** | **Songino Array** | **85.14** | **324** | P | | **P** | **12 50 06.1** | **-0.2** |
| | 0.9nm,0.9s,baz=134,slow=4.2,SNR=6.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **99.66** | **316** | P | | **Pdif** | **12 51 12.2** | **-1.5** |
| | 0.3nm,1.0s,baz=91,slow=6.1,SNR=1.7 | | | | | | | |

*IDC **08** 12:39:56.6±1.4, 17°.43S×167°.87E, h0km, mb4.0/7, mb1 4.1/8, mb1mx3.9/27, mbtmp4.0/8, ML3.8/1, MS3.1/1, Ms1 3.1/1, ms1mx2.6/58, Error ellipse: s-maj=35.1km s-min=26.4km az=103.0*

*NEIC **08** 12:40:02.1±0.7, 17°.48S±0°.04×167°.7E±0°.2, h26km±9km, mb4.4/9, Error ellipse: s-maj=33.4km s-min=5.0km az=86.0*

**ISC 08 12:40:02.2±0.9, 17°.53S±0°.06×167°.7E±0°.2, h35km, n26, σ1s18/27, mb4.1/10, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **2.13** | **346** | Pn | | **Pn** | **12 40 35.1** | **-0.1** |
| **DZM** | **Mont Dzumac** | **4.68** | **195** | Pn | | **Pn** | **12 41 09.7** | **-0.9** |
| | 4.4nm,0.3s,baz=69,slow=17,SNR=4.2 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **12 42 02.0** | **-1.7** |
| | 12nm,0.3s,baz=127,slow=22,SNR=15 | | | | | | | |
| DZM | | | | LR | | LR | 12 42 44.2 | |
| | comp=Z,202nm,20.3s,baz=32,slow=35 | | | | | | | |
| **DZM** | **Mont Dzumac** | **4.68** | **195** | | | **Pn** | **12 41 11.3** | **+0.8** |
| **DZM** | **Mont Dzumac** | **4.68** | **195** | *e*Pn | | **Pn** | **12 41 10.8** | **+0.3** |
| | 29nm,0.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **4.68** | **195** | *e*Sn | | **Sn** | **12 41 59.8** | **-3.9** |
| | 63nm,0.2s | | | | | | | |
| **ONTNC** | **Ouen Toro** | **4.91** | **194** | Pn | | **Pn** | **12 41 15.1** | **+1.6** |
| **OUENC** | **Ouen Island, N** | **4.94** | **190** | Pn | | **Pn** | **12 41 15.0** | **+1.1** |
| **URZ** | **Urewera** | **22.23** | **160** | P | | **P** | **12 44 55.9** | **+0.1** |
| | 4.0nm,0.7s,baz=194,slow=4.2,SNR=1.5 | | | | | | | |
| **URZ** | **Urewera** | **22.23** | **160** | P | | **P** | **12 44 56.8** | **+1.1** |
| **TUWZ** | **Tuamarina** | **24.41** | **169** | P | | **P** | **12 45 18.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **27.63** | **234** | P | | **P** | **12 45 47.4** | **+0.8** |
| | 1.3nm,0.5s,baz=59,slow=12,SNR=5.9 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.63** | **234** | P | | **P** | **12 45 47.8** | **+1.3** |
| **WB0** | **Warramunga Arr** | **31.65** | **261** | P | | **P** | **12 46 22.4** | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 12 46 26.8 | |
| | comp=Z,7.4nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **31.69** | **260** | P | | **P** | **12 46 22.6** | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 12 46 42.6 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.70** | **260** | P | | **P** | **12 46 23.2** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=91,slow=9.6,SNR=5.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.70** | **260** | P | | **P** | **12 46 23.5** | **+0.7** |
| **AS31** | **Alice Springs** | **32.21** | **253** | P | | **P** | **12 46 27.4** | **+0.1** |
| AS31 | | | | IAmb | | IAmb | 12 46 29.0 | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **32.21** | **253** | P | | **P** | **12 46 27.8** | **+0.6** |
| | comp=Z,1.5nm,0.5s,baz=80,slow=8.7,SNR=21 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.21** | **253** | P | | **P** | **12 46 27.4** | **+0.1** |
| **QSPA** | **South Pole Qui** | **72.52** | **180** | P | | **P** | **12 51 25.5** | **+0.2** |
| QSPA | | | | IAmb | | IAmb | 12 51 40.2 | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **84.65** | **324** | P | | **P** | **12 52 32.6** | **+0.3** |
| **SONM** | **Songino Array** | **85.00** | **324** | P | | **P** | **12 52 34.3** | **+0.2** |
| | comp=Z,1.9nm,0.8s,baz=144,slow=6.2,SNR=18 | | | | | | | |
| **SONM** | **Songino Array** | **85.00** | **324** | P | | **P** | **12 52 35.0** | **+0.9** |
| SONM | | | | IAmb | | IAmb | 12 52 35.5 | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.03** | **18** | P | | **P** | **12 52 51.4** | **-1.7** |
| | comp=Z,0.2nm,0.8s,baz=265,slow=4.3,SNR=1.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **99.53** | **316** | P | | **Pdif** | **12 53 42.4** | **+0.7** |
| | comp=Z,0.2nm,0.6s,baz=92,slow=5.5,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **99.53** | **316** | P | | **Pdif** | **12 53 41.7** | **+0.1** |

*CNRM **08** 12:48:12.3, 35°.49N×3°.89W, h23km, ml2.5*

*INMG **08** 12:48:13.6±1.2, 35°.52N×3°.79W, h3km±3km, ML2.2, Error ellipse: s-maj=2.4km s-min=1.8km az=4.0*

*SFS **08** 12:48:13.0, 35°.51N×3°.78W, ML2.2, ALBORAN SUR*

**ISC 08 12:48:12.4±1.1, 35°.47N±0°.03×3°.81W±0°.03, h17km±8km, n26, σ1s83/49, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.27** | **203** | P | | **Pg** | **12 48 18.7** | **+0.2** |
| PALE | | | | S | | **Sg** | **12 48 22.0** | **-0.6** |
| **CHAS** | **Isla Isabel II** | **1.16** | **104** | P | | **Pb** | **12 48 33.9** | **-0.2** |
| CHAS | | | | S | | **Sb** | **12 48 47.1** | **-1.8** |
| **SMIR** | **Smir Dam** | **1.30** | **280** | P | | **Pn** | **12 48 36.1** | **+0.3** |
| SMIR | | | | S | | **Sb** | **12 48 51.2** | **-1.6** |
| **CHEFC** | **Chefchaouen** | **1.30** | **254** | P | | **Pn** | **12 48 34.5** | **-1.5** |
| CHEFC | | | | S | | **Sb** | **12 48 51.6** | **-1.4** |
| **TAF** | **Taforalt** | **1.32** | **119** | P | | **Pn** | **12 48 35.1** | **-1.0** |
| TAF | | | | S | | **Sb** | **12 48 52.6** | **-0.8** |
| **CEU** | **Ceuta** | **1.34** | **289** | P | | **Pn** | **12 48 35.3** | **-1.1** |
| CEU | | | | S | | **Sb** | **12 48 48.9** | **-5.2** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **339** | P | | **Pg** | **12 48 39.1** | **-0.1** |
| EMAL | | | | S | | **Sn** | **12 48 54.5** | **-0.5** |
| **JBK** | **JBK** | **1.52** | **138** | P | | **Pn** | **12 48 39.4** | **+0.3** |
| JBK | | | | S | | **Sn** | **12 48 57.5** | **-1.1** |
| **IFR** | **Ifrane** | **2.23** | **210** | P | | **Pb** | **12 48 53.9** | **+1.5** |
| IFR | | | | S | | **Sn** | **12 49 15.8** | **-0.3** |
| **MD31** | **MD31** | **2.71** | **197** | P | | **Pn** | **12 48 55.5** | **+0.2** |
| MD31 | | | | S | | **Sn** | **12 49 28.7** | **+0.9** |
| **MDT** | **Midelt** | **2.73** | **194** | P | | **Pn** | **12 48 57.4** | **+1.8** |
| MDT | | | | S | | **Sn** | **12 49 27.9** | **-0.3** |
| **TDRA** | **Tendrara** | **2.83** | **148** | P | | **Pn** | **12 48 57.2** | **0.0** |
| TDRA | | | | S | | **Sn** | **12 49 34.2** | **+3.2** |
| **ZHG** | **ZHG** | **3.09** | **230** | P | | **Pn** | **12 49 00.8** | **+0.2** |
| ZHG | | | | S | | **Sn** | **12 49 36.8** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.70** | **303** | *e*Pn | | **Pn** | **12 49 10.7** | **+1.9** |
| PVAQ | | | | *e*Sn | | **Sn** | **12 49 52.8** | **+0.8** |
| PVAQ | | | | A | | A | 12 49 53.4 | |
| | 4.2nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **303** | P | | **Pn** | **12 49 09.3** | **+0.6** |
| PVAQ | | | | S | | **Sn** | **12 49 48.2** | **-3.8** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **299** | *e*Pn | | **Pn** | **12 49 11.4** | **+1.6** |
| PBDV | | | | *e*Sn | | **Sn** | **12 49 55.0** | **+1.2** |
| PBDV | | | | A | | A | 12 49 57.1 | |
| | 10nm,0.7s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **304** | *e*Pn | | **Pn** | **12 49 16.8** | **+3.4** |
| PCVE | | | | *e*Sn | | **Sn** | **12 50 00.9** | **+0.6** |
| PCVE | | | | A | | A | 12 50 03.4 | |
| | 2.2nm,0.7s | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **305** | *e*Pn | | **Pn** | **12 49 19.5** | **+2.9** |
| MESJ | | | | *e*Sn | | **Sn** | **12 50 06.6** | **+0.7** |
| MESJ | | | | A | | A | 12 50 08.4 | |
| | 2.9nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **297** | *e*Pn | | **Pn** | **12 49 19.5** | **+2.1** |
| MORF | | | | *e*Sn | | **Sn** | **12 50 08.9** | **+1.6** |
| **PFVI** | **Vila Bisbo** | **4.38** | **294** | *e*Sn | | **Sn** | **12 50 09.0** | **+0.2** |
| **PESTR** | **Estremoz** | **4.54** | **319** | *e*Sn | | **Sn** | **12 50 13.6** | **+0.8** |
| PESTR | | | | A | | A | 12 50 21.7 | |
| | 1.8nm,0.5s | | | | | | | |
| **PESTR** | **Estremoz** | **4.54** | **319** | P | | **Pn** | **12 49 20.8** | **+0.4** |
| PESTR | | | | S | | **Sn** | **12 50 09.3** | **-3.5** |
| **EVO** | **Evora** | **4.55** | **314** | *e*Pn | | **Pn** | **12 49 22.5** | **+2.0** |
| EVO | | | | *e*Sn | | **Sn** | **12 50 13.0** | **+0.1** |
| EVO | | | | A | | A | 12 50 15.7 | |
| | 1.9nm,0.2s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.62** | **306** | *e*Pn | | **Pn** | **12 49 23.3** | **+1.9** |
| PNCL | | | | *e*Sn | | **Sn** | **12 50 15.1** | **+0.5** |
| PNCL | | | | A | | A | 12 50 18.3 | |
| | 2.5nm,0.3s | | | | | | | |
| **PMRV** | **Marv??o** | **4.87** | **325** | *e*Pn | | **Pn** | **12 49 28.0** | **+3.0** |
| **PMTG** | **Montargil** | **5.03** | **317** | *e*Pn | | **Pn** | **12 49 30.4** | **+3.3** |
| PMTG | | | | *e*Sn | | **Sn** | **12 50 24.9** | **0.0** |

*DJA **08** 13:17:13.0±0.5, 0°.S±4°×13°.3E±°, h65km±16km, M4.6/11, mb4.7/11, mB5.2/6, MLv4.5/11, Mw(mB)4.6/6*

*IDC **08** 13:17:14.8±0.9, 0°.37S×132°.51E, h0km, mb3.9/9, mb1 4.2/12, mb1mx3.9/38, mbtmp4.1/12, ML4.2/3, MS3.2/10, Ms1 3.2/10, ms1mx3.0/71, Error ellipse: s-maj=20.7km s-min=15.7km az=76.0*

*NEIC **08** 13:17:21.5±1.1, 0°.43S±0°.08×132°.38E±0°.09, h39km±8km, mb4.3/23, Error ellipse: s-maj=14.7km s-min=9.7km az=49.0*

**ISC 08 13:17:19.7±0.5, 0°.53S±0°.05×132°.49E±0°.06, h33km, n62, σ2s90/61, mb4.3/19, MS3.4/4, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **1.27** | **255** | Pn | | **Pn** | **13 17 40.1** | **-1.2** |
| | 100nm,0.3s,baz=160,slow=23,SNR=320 | | | | | | | |
| SIJI | | | | Sn | | **Sb** | **13 18 00.1** | **+0.8** |
| | 612nm,0.3s,baz=158,slow=19,SNR=30 | | | | | | | |
| **SWI** | **Sorong** | **1.28** | **255** | P | | **Pn** | **13 17 41.5** | **+0.2** |
| **FAKI** | **Fak Fak** | **2.39** | **186** | P | | **Pn** | **13 17 57.4** | **+0.8** |
| FAKI | | | | S | | **Sb** | **13 18 30.4** | **-0.8** |
| **FAKI** | **Fak Fak** | **2.39** | **186** | Pn | | **Pb** | **13 17 59.5** | **-2.6** |
| **MSAI** | **Masohi** | **4.53** | **232** | P | | **Pn** | **13 18 28.5** | **+2.4** |
| | 0.3nm755nm48nm,0.6s | | | | | | | |
| MSAI | | | | S | | **Sb** | **13 19 27.5** | **-5.3** |
| | 0.3nm755nm48nm,0.6s | | | | | | | |
| **LBMI** | **Labuha** | **4.99** | **269** | P | | **Pn** | **13 18 31.7** | **-0.7** |
| | 0.2nm59nm,0.8s | | | | | | | |
| **TNTI** | **Ternate** | **5.29** | **284** | Pn | | **Pn** | **13 18 35.9** | **-0.5** |
| **AAI** | **Ambon** | **5.32** | **234** | P | | **Pn** | **13 18 39.7** | **+2.8** |
| | 0.4nm3µm108nm,0.7s | | | | | | | |
| AAI | | | | S | | **Sn** | **13 19 44.8** | **+7.7** |
| | 0.4nm3µm108nm,0.7s | | | | | | | |
| **SANI** | **Sanana** | **6.68** | **257** | P | | **Pn** | **13 18 55.6** | **0.0** |
| | 0.1nm24nm,0.9s | | | | | | | |
| **SAUI** | **Saumlaki** | **7.50** | **189** | P | | **Pn** | **13 19 06.5** | **-0.4** |
| | 0.9nm5µm102nm,0.8s | | | | | | | |
| **SAUI** | **Saumlaki** | **7.50** | **189** | Pn | | **Pn** | **13 19 09.3** | **+2.4** |
| **APSI** | **Ampana** | **10.85** | **268** | P | | **Pn** | **13 19 52.5** | **-0.3** |
| | 36nm,1.5s | | | | | | | |
| **SOEI** | **Soe** | **12.29** | **222** | Pn | | **Pn** | **13 20 12.9** | **+0.2** |
| **BATI** | **Baumata** | **13.02** | **222** | Pn | | **Pn** | **13 20 25.0** | **+2.4** |
| | 2.9nm,0.3s,baz=222,slow=0.2,SNR=6.4 | | | | | | | |
| BATI | | | | LR | | LR | 13 26 25.9 | |
| | comp=Z,114nm,18.4s,baz=56,slow=42 | | | | | | | |
| **KAPI** | **Kappang** | **13.48** | **250** | Pn | | **Pn** | **13 20 32.0** | **+3.1** |
| | 0.4nm,0.3s,baz=137,slow=11,SNR=4.3 | | | | | | | |
| KAPI | | | | LR | | LR | 13 26 01.3 | |
| | comp=Z,51nm,19.3s,baz=102,slow=39 | | | | | | | |
| **PMG** | **Port Moresby** | **17.05** | **122** | LR | | LR | 13 28 42.8 | |
| | comp=Z,51nm,20.5s,baz=304,slow=40 | | | | | | | |
| **GUMO** | **Guam** | **18.63** | **41** | LR | | LR | 13 26 45.4 | |
| | comp=Z,86nm,20.0s,baz=186,slow=31 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.72** | **201** | P | | **P** | **13 21 35.1** | **-0.6** |
| | 0.4nm,0.3s,baz=21,slow=10.0,SNR=10 | | | | | | | |
| FITZ | | | | S | | **Sn** | **13 24 58.9** | **-5.8** |
| | 0.6nm,0.3s,baz=155,slow=7.9,SNR=5.2 | | | | | | | |
| FITZ | | | | LR | | LR | 13 31 06.1 | |
| | comp=Z,83nm,18.2s,baz=19,slow=44 | | | | | | | |
| **WB0** | **Warramunga Arr** | **19.21** | **175** | P | | **Pn** | **13 21 42.2** | **0.0** |
| WB0 | | | | IAmb | | IAmb | 13 21 44.1 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **19.37** | **175** | P | | **Pn** | **13 21 44.2** | **+0.1** |
| WRAB | | | | IAmb | | IAmb | 13 22 10.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.38** | **175** | P | | **Pn** | **13 21 44.9** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=354,slow=12,SNR=34 | | | | | | | |
| WRA | | | | S | | **S** | **13 25 14.9** | **-5.6** |
| | comp=Z,0.5nm,0.3s,baz=360,slow=23,SNR=7.4 | | | | | | | |
| WRA | | | | LR | | LR | 13 29 06.6 | |
| | comp=Z,59nm,20.8s,baz=330,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.38** | **175** | P | | **Pn** | **13 21 43.9** | **-0.4** |
| **WB2** | **Warramunga Arr** | **19.38** | **175** | P | | **Pn** | **13 21 44.1** | **-0.2** |
| WB2 | | | | IAmb | | IAmb | 13 22 01.3 | |
| | comp=Z,9.3nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **19.42** | **174** | | | **Pn** | **13 21 45.3** | **+0.7** |
| WR0 | | | | IAmb | | IAmb | 13 21 46.3 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **SBUM** | **Sibu** | **20.48** | **278** | Pn | | Pn | 13 21 56.4 | -0.9 |
| **AS31** | **Alice Springs** | **23.04** | **177** | P | | **P** | **13 22 23.8** | **+1.5** |
| **ASAR** | **Alice Springs** | **23.04** | **177** | P | | **P** | **13 22 24.1** | **+1.8** |
| | comp=Z,12nm,0.9s,baz=0.6,slow=8.1,SNR=77 | | | | | | | |
| ASAR | | | | S | | Sn | 13 26 41.4 | -7.4 |
| | comp=Z,3.2nm,0.8s,baz=358,slow=26,SNR=8.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.04** | **177** | P | | **P** | **13 22 24.0** | **+1.6** |
| **CTA** | **Charters Tower** | **23.65** | **146** | P | | **P** | **13 22 28.8** | **+0.4** |
| | comp=Z,9.7nm,1.1s,baz=7,slow=11,SNR=3.3 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **24.29** | **210** | P | | **P** | **13 22 35.3** | **+1.1** |
| PSA00 | | | | IAmb | | IAmb | 13 22 38.6 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **JOW** | **Kunigami** | **27.50** | **352** | P | | **P** | **13 23 03.0** | **-0.3** |
| **STKA** | **Stephens Creek** | **32.35** | **165** | P | | **P** | **13 23 47.7** | **+1.6** |
| | comp=Z,2.2nm,0.9s,baz=133,slow=14,SNR=2.8 | | | | | | | |
| STKA | | | | LR | | LR | 13 39 28.8 | |
| | comp=Z,93nm,19.6s,baz=19,slow=41 | | | | | | | |
| **STKA** | **Stephens Creek** | **32.35** | **165** | P | | **P** | **13 23 47.8** | **+1.7** |
| **PSI** | **Prapat** | **33.72** | **276** | P | | **P** | **13 23 57.9** | **-0.6** |
| | comp=Z,7.6nm,0.8s,baz=131,slow=5.4,SNR=5.1 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **34.16** | **11** | LR | | LR | 13 35 09.2 | |
| | comp=Z,69nm,21.2s,baz=46,slow=32 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.99** | **302** | P | | **P** | **13 24 35.1** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=119,slow=7.3,SNR=5.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.99** | **302** | P | | **P** | **13 24 34.2** | **-0.8** |
| **KSRS** | **Korea Array** | **38.03** | **354** | LR | | LR | 13 38 46.3 | |
| | comp=Z,22nm,21.8s,baz=345,slow=34 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **44.53** | **359** | P | | **P** | **13 25 27.8** | **-0.5** |
| USA0B | | | | IAmb | | IAmb | 13 25 53.1 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **ASAJ** | **Asahikawa** | **45.35** | **10** | LR | | LR | 13 41 13.2 | |
| | comp=Z,64nm,19.1s,baz=216,slow=32 | | | | | | | |
| **SONM** | **Songino Array** | **53.25** | **338** | P | | **P** | **13 26 34.8** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=137,slow=6.8,SNR=2.6 | | | | | | | |
| **SONM** | **Songino Array** | **53.25** | **338** | IAmb | | IAmb | 13 26 40.6 | |
| | comp=Z,1.5nm,1.3s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **55.60** | **139** | P | | **P** | **13 26 54.5** | **+2.1** |
| **MK31** | **Makanchi Array** | **64.33** | **324** | P | | **P** | **13 27 51.7** | **-0.5** |
| MK31 | | | | IAmb | | IAmb | 13 27 52.2 | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.33** | **324** | P | | **P** | **13 27 51.9** | **-0.3** |
| | comp=Z,0.6nm,0.6s,baz=116,slow=7.9,SNR=9.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.33** | **324** | P | | **P** | **13 27 51.3** | **-0.9** |
| **MAKZ** | **Makanchi** | **64.53** | **324** | P | | **P** | **13 27 53.1** | **-0.4** |
| MAKZ | | | | IAmb | | IAmb | 13 27 54.2 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **KSH** | **Kashi** | **65.11** | **315** | P | | **P** | **13 27 59.1** | **+1.5** |
| KSH | | | | pP | | pP | 13 28 04.2 | -3.7 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **KDJ** | **Kajisay** | **65.34** | **318** | P | | **P** | **13 27 59.3** | **+0.2** |
| KDJ | | | | IAmb | | IAmb | 13 28 00.6 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **66.33** | **318** | P | | **P** | **13 28 05.3** | **-0.2** |
| BOOM | | | | IAmb | | IAmb | 13 28 11.9 | |
| | comp=Z,4.1nm,1.2s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.01** | **332** | P | | **P** | **13 28 08.1** | **-1.2** |
| ZAA0 | | | | IAmb | | IAmb | 13 28 09.6 | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.01** | **332** | P | | **P** | **13 28 08.7** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=104,slow=4.7,SNR=4.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.01** | **332** | P | | **P** | **13 28 08.3** | **-1.0** |
| **KURK** | **Kurchatov** | **68.42** | **326** | P | | **P** | **13 28 18.2** | **0.0** |
| KURK | | | | IAmb | | IAmb | 13 28 18.9 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **GAR** | **Garm** | **69.03** | **312** | P | | **P** | **13 28 22.1** | **-0.4** |
| **KKAR** | **Karatay Array** | **70.26** | **317** | P | | **P** | **13 28 29.5** | **-0.3** |
| **CLES** | **Cleveland East** | **71.47** | **33** | P | | **P** | **13 28 37.3** | **+0.3** |
| **ABKAR** | **Akbulak array** | **79.07** | **320** | P | | **P** | **13 29 20.4** | **-0.3** |
| **ILAR** | **Eielson Array** | **86.47** | **25** | P | | **P** | **13 29 57.0** | **-1.8** |
| | comp=Z,0.5nm,1.0s,baz=247,slow=4.7,SNR=3.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.47** | **25** | P | | **P** | **13 29 57.9** | **-1.0** |
| **GNI** | **Garni** | **88.61** | **310** | P | | **P** | **13 30 10.0** | **0.0** |
| **QSPA** | **South Pole Qui** | **89.41** | **180** | P | | **P** | **13 30 14.0** | **+0.9** |
| QSPA | | | | IAmb | | IAmb | 13 30 23.5 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |

**WEL 08 13:18:31.2, 40°S±3°×17°6E±°, h34km±5km, M3.3/12, ML3.5/12, MLv3.3/12, Error ellipse: s-maj=0.0km s-min=0.0km az=5.3, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KRHZ** | **Kereru** | **0.07** | **95** | P | | Pb | 13 18 37.2 | +0.1 |
| KRHZ | | | | S | | Sb | 13 18 42.4 | +1.3 |
| **BHHZ** | **Black Hill Sta** | **0.22** | **312** | P | | Pb | 13 18 38.3 | 0.0 |
| BHHZ | | | | S | | Sb | 13 18 43.8 | +0.7 |
| **KWHZ** | **Kaweka Forest** | **0.24** | **28** | P | | Pb | 13 18 38.4 | -0.1 |
| KWHZ | | | | S | | Sb | 13 18 44.5 | +1.1 |
| **PNHZ** | **Pukenui** | **0.28** | **192** | P | | Pb | 13 18 38.9 | -0.1 |
| **MCHZ** | **McNeill Hill** | **0.38** | **59** | P | | Pn | 13 18 40.7 | +0.3 |
| **WPHZ** | **Waipukurau** | **0.44** | **164** | P | | Pn | 13 18 41.3 | 0.0 |
| WPHZ | | | | S | | Sn | 13 18 49.4 | +1.3 |
| **MOVZ** | **Moawhango** | **0.47** | **299** | P | | Pb | 13 18 41.5 | +0.1 |
| MOVZ | | | | S | | Sn | 13 18 49.2 | +0.6 |
| **TSZ** | **Takapari Road** | **0.49** | **210** | P | | Pb | 13 18 41.5 | -0.2 |
| **KAHZ** | **Kahuranaki** | **0.49** | **109** | P | | Pn | 13 18 41.9 | 0.0 |
| KAHZ | | | | S | | Sn | 13 18 51.5 | +2.3 |
| **BKZ** | **Black Stump Fm** | **0.50** | **20** | P | | Pb | 13 18 41.5 | -0.5 |
| BKZ | | | | S | | Sn | 13 18 49.9 | +0.4 |
| **PXZ** | **Pawanui** | **0.60** | **131** | P | | Pn | 13 18 43.0 | -0.2 |
| **TUVZ** | **Tukino** | **0.61** | **307** | P | | Pb | 13 18 44.1 | +0.3 |
| **WNVZ** | **Wahianoa** | **0.61** | **300** | P | | Pb | 13 18 44.0 | +0.2 |
| **CKHZ** | **Cape Kidnapper** | **0.62** | **92** | P | | Pn | 13 18 43.4 | -0.1 |
| **WHVZ** | **Whangaehu Hut** | **0.64** | **303** | P | | Pb | 13 18 44.5 | +0.1 |
| **TRVZ** | **Turoa** | **0.66** | **301** | P | | Pb | 13 18 44.7 | +0.1 |
| **DRZ** | **Dome Shelter** | **0.66** | **303** | P | | Pb | 13 18 44.9 | +0.2 |
| **DVHZ** | **Dannevirke** | **0.67** | **187** | P | | Pn | 13 18 44.0 | -0.3 |
| **ETVZ** | **East Tongariro** | **0.67** | **319** | P | | Pb | 13 18 44.6 | -0.1 |
| **SNVZ** | **South Ngauruho** | **0.67** | **312** | P | | Pb | 13 18 44.7 | -0.1 |
| **ARHZ** | **Aropaoanui** | **0.67** | **56** | P | | Pn | 13 18 44.3 | +0.1 |
| **OTVZ** | **Oturere** | **0.67** | **315** | P | | Pb | 13 18 44.7 | -0.1 |
| **MTVZ** | **Mangateitei** | **0.67** | **292** | P | | Pb | 13 18 44.8 | +0.1 |
| **NMHZ** | **Naumai** | **0.68** | **37** | P | | Pb | 13 18 44.9 | +0.1 |
| **FWVZ** | **Far West T-bar** | **0.68** | **304** | P | | Pb | 13 18 44.9 | -0.1 |
| **TMVZ** | **Te Maari** | **0.69** | **319** | P | | Pb | 13 18 44.8 | -0.1 |
| **PRHZ** | **Porangahau** | **0.69** | **156** | P | | Pn | 13 18 44.3 | -0.2 |
| **NGZ** | **Ngauruhoe** | **0.70** | **311** | P | | Pb | 13 18 45.0 | -0.2 |
| **NTVZ** | **North Tongarir** | **0.71** | **319** | P | | Pn | 13 18 45.1 | +0.1 |
| **NNVZ** | **North Ngauruho** | **0.72** | **314** | P | | Pn | 13 18 45.3 | +0.2 |
| **KRVZ** | **Karewarewa** | **0.73** | **318** | P | | Pn | 13 18 45.5 | +0.2 |
| **RITZ** | **Rihia Road** | **0.73** | **334** | P | | Pb | 13 18 45.5 | -0.2 |
| **WTVZ** | **West Tongariro** | **0.75** | **314** | P | | Pn | 13 18 45.6 | +0.1 |
| **HATZ** | **Hinemaiaia** | **0.76** | **349** | P | | Pn | 13 18 45.4 | -0.1 |
| **PKVZ** | **Pokaka** | **0.80** | **295** | P | | Pn | 13 18 46.4 | +0.2 |
| **KATZ** | **Kakaramea** | **0.80** | **325** | P | | Pn | 13 18 46.3 | +0.1 |
| **MRHZ** | **Matea Rd** | **0.81** | **8** | P | | Pn | 13 18 46.3 | 0.0 |
| **ANWZ** | **Angora Road** | **0.83** | **170** | P | | Pn | 13 18 46.3 | -0.2 |
| **POWZ** | **Post Office Ro** | **0.85** | **207** | P | | Pn | 13 18 46.8 | 0.0 |
| **TWVZ** | **Taurewa** | **0.86** | **311** | P | | Pn | 13 18 46.8 | -0.2 |
| **RATZ** | **Rangitukua** | **0.86** | **333** | P | | Pn | 13 18 46.9 | -0.1 |
| **MTHZ** | **Maungataniwha** | **0.90** | **29** | P | | Pn | 13 18 47.6 | +0.1 |
| **OHWZ** | **Ohakea** | **0.93** | **232** | P | | Pb | 13 18 49.1 | +0.1 |
| **PRWZ** | **Pori Road** | **0.95** | **194** | P | | Pn | 13 18 48.0 | -0.1 |
| **WHTZ** | **Whakaora** | **1.00** | **346** | P | | Pn | 13 18 49.0 | 0.0 |
| **WAZ** | **Wanganui** | **1.00** | **263** | P | | Pb | 13 18 50.2 | 0.0 |
| **WATZ** | **Wairara** | **1.02** | **335** | P | | Pn | 13 18 48.7 | -0.5 |
| **BFZ** | **Birch Farm** | **1.04** | **181** | P | | Pn | 13 18 48.7 | -0.7 |
| **ALRZ** | **Allen Road** | **1.07** | **3** | P | | Pn | 13 18 49.4 | -0.5 |
| **WPRZ** | **Whakapapatarin** | **1.12** | **355** | P | | Pn | 13 18 50.0 | -0.6 |
| **MRZ** | **Mangatainoka R** | **1.15** | **207** | P | | Pn | 13 18 50.4 | -0.6 |
| **RTZ** | **Ruatahuna** | **1.16** | **28** | P | | Pn | 13 18 50.9 | -0.1 |
| **TIWZ** | **Tintock** | **1.18** | **195** | P | | Pn | 13 18 50.7 | -0.6 |
| **SNGZ** | **Shannon Statio** | **1.19** | **44** | P | | Pn | 13 18 50.9 | -0.6 |
| **KUTZ** | **Kaahu Road** | **1.20** | **343** | P | | Pn | 13 18 51.1 | -0.5 |
| **MUGZ** | **Murupara** | **1.22** | **18** | P | | Pn | 13 18 51.4 | -0.5 |
| **HRRZ** | **Handcock Road** | **1.25** | **0** | P | | Pn | 13 18 52.1 | -0.2 |
| **KNZ** | **Kokohu** | **1.25** | **61** | P | | Pn | 13 18 51.0 | -1.1 |
| **CPWZ** | **Castlepoint** | **1.27** | **183** | P | | Pn | 13 18 52.2 | -0.4 |
| **VRZ** | **Vera Road** | **1.28** | **293** | P | | Pn | 13 18 52.7 | 0.0 |
| **GRRZ** | **Galatos Road** | **1.29** | **354** | P | | Pn | 13 18 52.7 | -0.2 |
| **RRRZ** | **Republican Roa** | **1.31** | **8** | P | | Pn | 13 18 52.6 | -0.5 |
| **HSRZ** | **Hossack Road** | **1.32** | **359** | P | | Pn | 13 18 53.0 | -0.3 |
| **MHGZ** | **Mahia Peninsul** | **1.35** | **70** | P | | Pn | 13 18 52.5 | -1.2 |
| **HLRZ** | **Highlands Stat** | **1.39** | **2** | P | | Pn | 13 18 54.7 | +0.6 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWE** | **Neicheng** | **1.09 281** | ⇑P | **Pn** | **13 19 39.0** | **-0.1** |
| | baz=272 | | | | | | |
| TWE | | | S | **Sn** | **13 19 53.2** | **-1.0** |
| | baz=272 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.10 104** | P | **Pn** | **13 19 39.4** | **+0.3** |
| JKRS | | | *e*S | **Sn** | **13 19 55.6** | **+1.2** |
| **NWF** | **Wu-fen Shan** | **1.11 300** | ⇑P | **Pn** | **13 19 39.5** | **+0.1** |
| | baz=288 | | | | | | |
| NWF | | | S | **Sn** | **13 19 54.4** | **-0.6** |
| | baz=288 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.11 300** | ⇑P | **Pn** | **13 19 39.5** | **+0.2** |
| | baz=289 | | | | | | |
| WFSB | | | S | **Sn** | **13 19 54.5** | **-0.3** |
| | baz=289 | | | | | | |
| **ETL** | **Fush Village** | **1.17 253** | ⇑P | **Pn** | **13 19 39.9** | **-0.1** |
| | baz=249 | | | | | | |
| ETL | | | S | **Sn** | **13 19 55.8** | **-0.2** |
| | baz=249 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.17 283** | ⇓P | **Pn** | **13 19 40.2** | **+0.1** |
| | baz=271 | | | | | | |
| FUSB | | | S | **Sn** | **13 19 56.1** | **0.0** |
| | baz=271 | | | | | | |
| **ENTT** | **Nioudou** | **1.17 277** | ⇑P | **Pn** | **13 19 40.6** | **+0.6** |
| | baz=272 | | | | | | |
| ENTT | | | S | **Sn** | **13 19 56.8** | **+0.8** |
| | baz=272 | | | | | | |
| **NACB** | **Ninganchiao** | **1.19 254** | ⇓P | **Pn** | **13 19 40.0** | **-0.3** |
| | baz=241 | | | | | | |
| NACB | | | S | **Sn** | **13 19 55.6** | **-0.8** |
| | baz=241 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.20 97** | P | **Pn** | **13 19 40.1** | **-0.2** |
| JIJ | | | S | **Sn** | **13 19 56.0** | **-0.5** |
| **LATG** | **Datong** | **1.20 271** | ⇓P | **Pn** | **13 19 40.8** | **+0.3** |
| | baz=272 | | | | | | |
| LATG | | | S | **Sn** | **13 19 57.0** | **+0.2** |
| | baz=272 | | | | | | |
| **NDT** | **Datong Townshi** | **1.21 275** | ⇓P | **Pn** | **13 19 41.2** | **+0.7** |
| | baz=270 | | | | | | |
| NDT | | | S | **Sn** | **13 19 57.9** | **+0.9** |
| | baz=270 | | | | | | |
| **TWD** | **Chiawan** | **1.22 250** | ⇓P | **Pn** | **13 19 40.3** | **-0.2** |
| | baz=246 | | | | | | |
| TWD | | | S | **Sn** | **13 19 56.3** | **-0.6** |
| | baz=246 | | | | | | |
| **TWA** | **Mucha** | **1.24 293** | S | **Sn** | **13 19 57.0** | **-0.5** |
| | baz=280 | | | | | | |
| **HWA** | **Hwalien** | **1.25 245** | ⇓P | **Pn** | **13 19 41.0** | **+0.1** |
| | baz=241 | | | | | | |
| HWA | | | S | **Sn** | **13 19 58.3** | **+0.6** |
| | baz=241 | | | | | | |
| **NWLT** | **Wulai** | **1.25 283** | ⇓P | **Pn** | **13 19 40.9** | **-0.1** |
| | baz=285 | | | | | | |
| NWLT | | | S | **Sn** | **13 19 57.3** | **-0.4** |
| | baz=285 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.28 257** | ⇓P | **Pn** | **13 19 41.2** | **-0.2** |
| | baz=245 | | | | | | |
| ETLH | | | S | **Sn** | **13 19 58.1** | **-0.4** |
| | baz=245 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.28 291** | P | **Pn** | **13 19 41.7** | **+0.3** |
| | baz=280 | | | | | | |
| NHDH | | | S | **Sn** | **13 19 57.9** | **-0.5** |
| | baz=280 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.30 241** | ⇓P | **Pn** | **13 19 41.6** | **-0.1** |
| | baz=232 | | | | | | |
| TEYL | | | S | **Sn** | **13 19 58.6** | **-0.4** |
| | baz=232 | | | | | | |
| **YM01** | **YM01** | **1.32 299** | ⇑P | **Pn** | **13 19 42.0** | **+0.1** |
| | baz=289 | | | | | | |
| YM01 | | | S | **Sn** | **13 19 59.2** | **-0.1** |
| | baz=289 | | | | | | |
| **NNSB** | **Datong** | **1.33 267** | ⇑P | **Pn** | **13 19 42.3** | **+0.2** |
| | baz=254 | | | | | | |
| NNSB | | | S | **Sn** | **13 19 59.2** | **-0.6** |
| | baz=254 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.34 86** | P | **Pn** | **13 19 41.8** | **-0.3** |
| JISG | | | S | **Sn** | **13 19 59.0** | **-0.7** |
| **NNS** | **Nan Shan** | **1.34 267** | ⇓P | **Pn** | **13 19 42.3** | **0.0** |
| | baz=254 | | | | | | |
| NNS | | | S | **Sn** | **13 19 59.9** | **-0.1** |
| | baz=254 | | | | | | |
| **YHNB** | **Yeheng** | **1.34 277** | ⇑P | **Pn** | **13 19 42.6** | **+0.4** |
| | baz=273 | | | | | | |
| YHNB | | | S | **Sn** | **13 20 00.1** | **+0.1** |
| | baz=273 | | | | | | |
| **NSK** | **Sanguang** | **1.36 277** | ⇓P | **Pn** | **13 19 42.8** | **+0.4** |
| | baz=273 | | | | | | |
| NSK | | | S | **Sn** | **13 20 00.3** | **-0.1** |
| | baz=273 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.42 295** | ⇓P | **Pn** | **13 19 43.5** | **+0.3** |
| | baz=285 | | | | | | |
| TWS1 | | | S | **Sn** | **13 20 02.0** | **+0.4** |
| | baz=285 | | | | | | |
| **TEGC** | **Jichi Village** | **1.43 236** | P | **Pn** | **13 19 43.3** | **0.0** |
| | baz=228 | | | | | | |
| TEGC | | | *e*S | **Sn** | **13 20 02.8** | **+1.0** |
| | baz=228 | | | | | | |
| **ESL** | **Shilin** | **1.46 242** | ⇓P | **Pn** | **13 19 43.3** | **-0.4** |
| | baz=239 | | | | | | |
| ESL | | | S | **Sn** | **13 20 02.1** | **-0.5** |
| | baz=239 | | | | | | |
| **FUSS** | **Fushou** | **1.48 260** | P | **Pn** | **13 19 44.2** | **0.0** |
| | baz=256 | | | | | | |
| FUSS | | | S | **Sn** | **13 20 03.0** | **-0.4** |
| | baz=256 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.48 256** | ⇓P | **Pn** | **13 19 44.3** | **-0.1** |
| | baz=252 | | | | | | |
| WHF | | | S | **Sn** | **13 20 03.2** | **-0.5** |
| | baz=252 | | | | | | |
| **EGFH** | **Guangfu** | **1.54 237** | *e*P | **Pn** | **13 19 44.8** | **+0.1** |
| | baz=229 | | | | | | |
| EGFH | | | *e*S | **Sn** | **13 20 04.2** | **-0.2** |
| | baz=229 | | | | | | |
| **TWT** | **Tachien** | **1.54 261** | *e*S | **Sn** | **13 20 05.1** | **+0.4** |
| | baz=257 | | | | | | |
| **TDCB** | **Techi** | **1.56 261** | ⇓P | **Pn** | **13 19 45.6** | **+0.5** |
| | baz=252 | | | | | | |
| TDCB | | | S | **Sn** | **13 20 05.0** | **+0.1** |
| | baz=252 | | | | | | |
| **NCUH** | **Zhongli** | **1.57 287** | *e*S | **Sn** | **13 20 05.8** | **+0.7** |
| | baz=273 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.57 275** | ⇓P | **Pn** | **13 19 45.6** | **+0.4** |
| | baz=271 | | | | | | |
| NFF | | | S | **Sn** | **13 20 05.1** | **-0.1** |
| | baz=271 | | | | | | |
| **CHGB** | **Renai** | **1.59 254** | ⇑P | **Pn** | **13 19 45.7** | **+0.2** |
| | baz=243 | | | | | | |
| CHGB | | | S | **Sn** | **13 20 05.4** | **-0.3** |
| | baz=243 | | | | | | |
| **HGSD** | **Ruisui** | **1.65 232** | ⇓P | **Pn** | **13 19 45.9** | **-0.2** |
| | baz=225 | | | | | | |
| HGSD | | | S | **Sn** | **13 20 06.2** | **-0.6** |
| | baz=225 | | | | | | |
| **WUSB** | **Renai** | **1.66 252** | ⇑P | **Pn** | **13 19 46.6** | **+0.3** |
| | baz=243 | | | | | | |
| WUSB | | | S | **Sn** | **13 20 06.7** | **-0.5** |
| | baz=243 | | | | | | |
| **LIOB** | **Emei** | **1.67 275** | P | **Pn** | **13 19 46.7** | **+0.3** |
| | baz=271 | | | | | | |
| LIOB | | | S | **Sn** | **13 20 08.2** | **+0.9** |
| | baz=271 | | | | | | |
| **JTJ** | **Tarama** | **1.70 85** | P | **Pn** | **13 19 47.0** | **+0.3** |
| JTJ | | | S | **Sn** | **13 20 08.0** | **0.0** |
| **NHW** | **Xinwu Township** | **1.71 287** | *e*S | **Sn** | **13 20 08.0** | **-0.2** |
| | baz=276 | | | | | | |
| **EHY** | **Hungye** | **1.71 235** | P | **Pn** | **13 19 46.7** | **-0.3** |
| | baz=232 | | | | | | |
| EHY | | | *e*S | **Sn** | **13 20 07.1** | **-1.3** |
| | baz=232 | | | | | | |
| **SBCB** | **Hsinchu** | **1.71 280** | *e*S | **Sn** | **13 20 08.7** | **+0.4** |
| | baz=276 | | | | | | |
| **VWDT** | **VWDT** | **1.73 244** | ⇑P | **Pn** | **13 19 47.5** | **+0.4** |
| | baz=241 | | | | | | |
| VWDT | | | S | **Sn** | **13 20 08.3** | **-0.4** |
| | baz=241 | | | | | | |
| **HSN** | **Hsinchu** | **1.73 280** | *e*S | **Sn** | **13 20 07.8** | **-0.8** |
| | baz=277 | | | | | | |
| **ECBN** | **Changbin** | **1.74 227** | ⇓P | **Pn** | **13 19 47.2** | **-0.1** |
| | baz=218 | | | | | | |
| ECBN | | | S | **Sn** | **13 20 08.1** | **-0.9** |
| | baz=218 | | | | | | |
| **WPL** | **Puli Township** | **1.79 254** | ⇓P | **Pn** | **13 19 48.6** | **+0.7** |
| | baz=246 | | | | | | |
| WPL | | | S | **Sn** | **13 20 10.5** | **+0.3** |
| | baz=246 | | | | | | |
| **YULB** | **Yu-li** | **1.80 232** | ⇓P | **Pn** | **13 19 47.8** | **-0.3** |
| | baz=239 | | | | | | |
| YULB | | | S | **Sn** | **13 20 09.2** | **-1.2** |
| | baz=239 | | | | | | |
| **DPDB** | **Guoxing** | **1.81 255** | *e*P | **Pn** | **13 19 49.1** | **+0.8** |
| | baz=247 | | | | | | |
| DPDB | | | *e*S | **Sn** | **13 20 11.6** | **+0.8** |
| | baz=247 | | | | | | |
| **EYUL** | **Yuli** | **1.81 231** | P | **Pn** | **13 19 48.4** | **+0.2** |
| | baz=223 | | | | | | |
| EYUL | | | S | **Sn** | **13 20 10.9** | **+0.2** |
| | baz=223 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.82 256** | ⇓P | **Pn** | **13 19 49.2** | **+0.9** |
| | baz=249 | | | | | | |
| WCS | | | *e*S | **Sn** | **13 20 11.3** | **+0.5** |
| | baz=249 | | | | | | |
| **TWF1** | **Yuli** | **1.82 231** | ⇑P | **Pn** | **13 19 48.2** | **-0.2** |
| | baz=238 | | | | | | |
| TWF1 | | | S | **Sn** | **13 20 10.0** | **-0.9** |
| | baz=238 | | | | | | |
| **NMLH** | **Miaoli** | **1.87 271** | P | **Pn** | **13 19 49.5** | **+0.6** |
| | baz=268 | | | | | | |
| NMLH | | | S | **Sn** | **13 20 12.1** | **0.0** |
| | baz=268 | | | | | | |
| **SSLB** | **Suanglung** | **1.87 248** | ⇑P | **Pn** | **13 19 49.2** | **+0.2** |
| | baz=245 | | | | | | |
| SSLB | | | S | **Sn** | **13 20 11.4** | **-0.7** |
| | baz=245 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.88 251** | ⇓P | **Pn** | **13 19 49.9** | **+0.6** |
| | baz=243 | | | | | | |
| SMLT | | | S | **Sn** | **13 20 12.7** | **+0.2** |
| | baz=243 | | | | | | |
| **TWQ1** | **Liyutan** | **1.89 266** | *e*P | **Pn** | **13 19 50.0** | **+0.7** |
| | baz=262 | | | | | | |
| TWQ1 | | | *e*S | **Sn** | **13 20 13.4** | **+0.8** |
| | baz=262 | | | | | | |
| **NSY** | **Sanyi** | **1.90 268** | P | **Pn** | **13 19 50.4** | **+1.0** |
| | baz=264 | | | | | | |
| NSY | | | S | **Sn** | **13 20 13.6** | **+0.9** |
| | baz=264 | | | | | | |
| **FULB** | **Fuli** | **1.93 228** | *e*P | **Pn** | **13 19 49.5** | **-0.3** |
| | baz=219 | | | | | | |
| FULB | | | *e*S | **Sn** | **13 20 12.6** | **-0.8** |
| | baz=219 | | | | | | |
| **CHKT** | **Chengkung** | **1.95 224** | *e*P | **Pn** | **13 19 49.3** | **-0.8** |
| | baz=218 | | | | | | |
| CHKT | | | *e*S | **Sn** | **13 20 11.9** | **-2.0** |
| | baz=218 | | | | | | |
| **YUS** | **Yu-Shan** | **2.00 240** | *e*P | **Pn** | **13 19 51.8** | **+0.6** |
| | baz=230 | | | | | | |
| YUS | | | *e*S | **Sn** | **13 20 15.2** | **-0.8** |
| | baz=230 | | | | | | |
| **TCU** | **Taichung** | **2.01 260** | *e*S | **Sn** | **13 20 16.8** | **+1.5** |
| | baz=267 | | | | | | |
| **WWF** | **Wufeng** | **2.01 257** | *e*P | **Pn** | **13 19 52.1** | **+1.2** |
| | baz=265 | | | | | | |
| WWF | | | *e*S | **Sn** | **13 20 17.1** | **+1.7** |
| | baz=265 | | | | | | |
| **WDJ** | **Dajia District** | **2.01 266** | *e*P | **Pn** | **13 19 51.7** | **+0.8** |
| | baz=262 | | | | | | |
| WDJ | | | *e*S | **Sn** | **13 20 15.5** | **0.0** |
| | baz=262 | | | | | | |
| **ECS** | **Chishang** | **2.05 227** | *e*P | **Pn** | **13 19 52.0** | **+0.6** |
| | baz=220 | | | | | | |
| ECS | | | *e*S | **Sn** | **13 20 17.2** | **+0.9** |
| | baz=220 | | | | | | |
| **WJS** | **Zhushan** | **2.05 251** | ⇓*e*P | **Pn** | **13 19 53.1** | **+1.7** |
| | baz=241 | | | | | | |
| WJS | | | *e*S | **Sn** | **13 20 18.3** | **+2.0** |
| | baz=241 | | | | | | |
| **WNT1** | **Nantou City** | **2.06 254** | *e*P | **Pn** | **13 19 52.7** | **+1.1** |
| | baz=261 | | | | | | |
| WNT1 | | | *e*S | **Sn** | **13 20 17.9** | **+1.3** |
| | baz=261 | | | | | | |
| **WNT** | **Mingjian** | **2.07 253** | *e*P | **Pn** | **13 19 53.4** | **+1.7** |
| | baz=249 | | | | | | |
| WNT | | | *e*S | **Sn** | **13 20 18.5** | **+1.8** |
| | baz=249 | | | | | | |
| **EDH** | **Donghe** | **2.08 223** | *e*P | **Pn** | **13 19 51.3** | **-0.5** |
| | baz=217 | | | | | | |
| EDH | | | *e*S | **Sn** | **13 20 15.0** | **-2.0** |
| | baz=217 | | | | | | |
| **ALS** | **Alishan** | **2.11 242** | *e*P | **Pn** | **13 19 53.4** | **+0.9** |
| | baz=233 | | | | | | |
| ALS | | | *e*S | **Sn** | **13 20 18.9** | **+0.7** |
| | baz=233 | | | | | | |
| **ELDTW** | **Lidau** | **2.13 232** | *e*P | **Pn** | **13 19 52.3** | **-0.2** |
| | baz=225 | | | | | | |
| ELDTW | | | *e*S | **Sn** | **13 20 17.3** | **-1.0** |
| | baz=225 | | | | | | |
| **JIRB** | **Irabujima** | **2.14 81** | P | **Pn** | **13 19 51.6** | **-1.0** |
| JIRB | | | *e*S | **Sn** | **13 20 17.7** | **-0.8** |
| **CHN5** | **Tsauling** | **2.18 246** | *e*P | **Pn** | **13 19 54.6** | **+1.4** |
| | baz=236 | | | | | | |
| CHN5 | | | *e*S | **Sn** | **13 20 20.9** | **+1.5** |
| | baz=236 | | | | | | |
| **LDUT** | **Ludao** | **2.22 215** | *e*P | **Pn** | **13 19 53.1** | **-0.6** |
| | baz=209 | | | | | | |
| LDUT | | | *e*S | **Sn** | **13 20 18.4** | **-1.9** |
| | baz=209 | | | | | | |
| **JIKM** | **Ikemajima** | **2.23 79** | P | **Pn** | **13 19 53.3** | **-0.4** |
| JIKM | | | *e*S | **Sn** | **13 20 20.4** | **-0.1** |
| **LONT** | **Longtian** | **2.24 225** | *e*P | **Pn** | **13 19 53.6** | **-0.3** |
| | baz=230 | | | | | | |
| LONT | | | *e*S | **Sn** | **13 20 20.5** | **-0.3** |
| | baz=230 | | | | | | |
| **JMJ** | **Miyako jima 2** | **2.25 82** | *e*P | **Pn** | **13 19 54.7** | **+0.6** |
| | baz=85 | | | | | | |
| JMJ | | | *e*S | **Sn** | **13 20 21.6** | **+0.5** |
| | baz=85 | | | | | | |
| **WDLH** | **Douliu** | **2.26 249** | *e*P | **Pn** | **13 19 55.7** | **+1.5** |
| | baz=258 | | | | | | |
| WDLH | | | *e*S | **Sn** | **13 20 23.1** | **+1.9** |
| | baz=258 | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.27 84** | P | **Pn** | **13 19 54.6** | **+0.3** |
| JMJ2 | | | *e*S | **Sn** | **13 20 22.3** | **+0.7** |
| **STYH** | **Taoyuan** | **2.31 235** | P | **Pn** | **13 19 56.1** | **+1.2** |
| | baz=229 | | | | | | |
| STYH | | | *e*S | **Sn** | **13 20 23.2** | **+0.6** |
| | baz=229 | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.33 255** | *e*P | **Pn** | **13 19 55.4** | **+0.3** |
| | baz=262 | | | | | | |
| WRL | | | *e*S | **Sn** | **13 20 22.9** | **-0.1** |
| | baz=262 | | | | | | |
| **TWGBT** | **Beinan** | **2.33 224** | *e*P | **Pn** | **13 19 54.7** | **-0.5** |
| | baz=229 | | | | | | |
| TWGBT | | | *e*S | **Sn** | **13 20 21.9** | **-1.2** |
| | baz=229 | | | | | | |
| **TWG** | **Pinlang** | **2.34 224** | *e*P | **Pn** | **13 19 54.8** | **-0.4** |
| | baz=229 | | | | | | |
| TWG | | | *e*S | **Sn** | **13 20 21.9** | **-1.2** |
| | baz=229 | | | | | | |
| **JOGS** | **Gusukube** | **2.35 83** | *e*S | **Sn** | **13 20 24.3** | **+0.9** |
| **TPUB** | **Ta-pu** | **2.36 240** | ⇓*e*P | **Pn** | **13 19 57.2** | **+1.7** |
| | baz=230 | | | | | | |
| TPUB | | | *e*S | **Sn** | **13 20 25.5** | **+1.9** |
| | baz=230 | | | | | | |
| **CHN4** | **Tsaushan** | **2.36 241** | ⇑P | **Pn** | **13 19 57.3** | **+1.8** |
| | baz=232 | | | | | | |
| CHN4 | | | *e*S | **Sn** | **13 20 25.9** | **+2.2** |
| | baz=232 | | | | | | |
| **WTK** | **Tuku** | **2.39 250** | *e*P | **Pn** | **13 19 56.7** | **+0.9** |
| | baz=258 | | | | | | |
| WTK | | | *e*S | **Sn** | **13 20 25.7** | **+1.4** |
| | baz=258 | | | | | | |
| **WTP** | **Ta-pu** | **2.40 239** | ⇑P | **Pn** | **13 19 57.5** | **+1.5** |
| | baz=236 | | | | | | |
| WTP | | | *e*S | **Sn** | **13 20 26.7** | **+2.1** |
| | baz=236 | | | | | | |
| **TWK** | **Hsinying** | **2.48 241** | ⇑*e*P | **Pn** | **13 19 58.8** | **+1.5** |
| | baz=237 | | | | | | |
| TWK | | | *e*S | **Sn** | **13 20 28.6** | **+1.8** |
| | baz=237 | | | | | | |
| **CHN1** | **Nanshi** | **2.50 239** | *e*P | **Pn** | **13 19 58.8** | **+1.4** |
| | baz=236 | | | | | | |
| CHN1 | | | *e*S | **Sn** | **13 20 28.3** | **+1.3** |
| | baz=236 | | | | | | |
| **SNST** | **Tainan City** | **2.50 240** | *e*P | **Pn** | **13 19 58.9** | **+1.4** |
| | baz=237 | | | | | | |
| SNST | | | *e*S | **Sn** | **13 20 29.8** | **+2.7** |
| | baz=237 | | | | | | |
| **SGST** | **Jiashian** | **2.51 236** | *e*P | **Pn** | **13 19 58.6** | **+1.0** |
| | baz=233 | | | | | | |
| SGST | | | *e*S | **Sn** | **13 20 28.8** | **+1.5** |
| | baz=233 | | | | | | |
| **SLGT** | **Liugui** | **2.52 234** | *e*P | **Pn** | **13 19 59.1** | **+1.5** |
| | baz=225 | | | | | | |
| SLGT | | | *e*S | **Sn** | **13 20 29.5** | **+2.0** |
| | baz=225 | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.58 248** | *e*P | **Pn** | **13 19 59.2** | **+0.7** |
| | baz=255 | | | | | | |
| WSL | | | *e*S | **Sn** | **13 20 30.0** | **+0.9** |
| | baz=255 | | | | | | |
| **ICHU** | **Yijhu** | **2.61 245** | *e*P | **Pn** | **13 19 60.0** | **+1.1** |
| | baz=241 | | | | | | |
| ICHU | | | *e*S | **Sn** | **13 20 31.6** | **+1.9** |
| | baz=241 | | | | | | |
| **SSD** | **Sandimen** | **2.68 230** | *e*P | **Pn** | **13 20 01.4** | **+1.5** |
| | baz=225 | | | | | | |
| SSD | | | *e*S | **Sn** | **13 20 32.2** | **+0.8** |
| | baz=225 | | | | | | |
| **TSMG** | **Majia** | **2.70 229** | *e*P | **Pn** | **13 20 01.9** | **+1.8** |
| | baz=225 | | | | | | |
| TSMG | | | *e*S | **Sn** | **13 20 32.7** | **+0.8** |
| | baz=225 | | | | | | |
| **SHHT** | **Tainan City** | **2.72 238** | *e*P | **Pn** | **13 20 02.4** | **+2.0** |
| | baz=245 | | | | | | |
| SHHT | | | *e*S | **Sn** | **13 20 35.7** | **+3.3** |
| | baz=245 | | | | | | |
| **LAY** | **Lan-yu** | **2.73 206** | *e*P | **Pn** | **13 19 59.2** | **-1.3** |
| | baz=199 | | | | | | |
| LAY | | | *e*S | **Sn** | **13 20 30.1** | **-2.6** |
| | baz=199 | | | | | | |
| **LYUB** | **Lan-yu** | **2.75 205** | *e*P | **Pn** | **13 19 59.4** | **-1.4** |
| | baz=210 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.77 227** | *e*P | **Pn** | **13 20 02.1** | **+1.0** |
| | baz=222 | | | | | | |
| MASBT | | | *e*S | **Sn** | **13 20 34.3** | **+0.7** |
| | baz=222 | | | | | | |
| **EAST** | **Anshuo** | **2.80 221** | *e*P | **Pn** | **13 20 01.4** | **-0.1** |
| | baz=224 | | | | | | |
| EAST | | | *e*S | **Sn** | **13 20 32.5** | **-1.9** |
| | baz=224 | | | | | | |
| **TAWH** | **Dawu Township** | **2.81 220** | *e*P | **Pn** | **13 20 01.8** | **+0.2** |
| | baz=223 | | | | | | |
| TAWH | | | *e*S | **Sn** | **13 20 33.0** | **-1.5** |
| | baz=223 | | | | | | |
| **SSPT** | **Xinbi** | **2.90 226** | *e*P | **Pn** | **13 20 04.8** | **+1.9** |
| | baz=235 | | | | | | |
| SSPT | | | *e*S | **Sn** | **13 20 39.3** | **+2.5** |
| | baz=235 | | | | | | |
| **SCZT** | **Fangliau** | **2.95 224** | *e*P | **Pn** | **13 20 05.0** | **+1.6** |
| | baz=217 | | | | | | |
| SCZT | | | *e*S | **Sn** | **13 20 38.0** | **+0.2** |
| | baz=217 | | | | | | |
| **SLIU** | **Shizi** | **2.96 220** | *e*P | **Pn** | **13 20 03.5** | **-0.1** |
| | baz=223 | | | | | | |
| **PHUB** | **P'eng-hu** | **3.15 252** | *e*P | **Pn** | **13 20 05.4** | **-0.7** |
| | baz=249 | | | | | | |
| PHUB | | | *e*S | **Sn** | **13 20 40.2** | **-2.5** |
| | baz=249 | | | | | | |
| **TWKBT** | **Hengchun** | **3.17 217** | *e*P | **Pn** | **13 20 07.0** | **+0.6** |
| | baz=215 | | | | | | |
| TWKBT | | | *e*S | **Sn** | **13 20 42.7** | **-0.4** |
| | baz=215 | | | | | | |
| **WDGT** | **Dungji** | **3.17 248** | *e*P | **Pn** | **13 20 06.5** | **+0.1** |
| | baz=244 | | | | | | |
| WDGT | | | *e*S | **Sn** | **13 20 42.0** | **-1.2** |
| | baz=244 | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.42 280** | *e*P | **Pn** | **13 20 09.5** | **-0.3** |
| | baz=276 | | | | | | |
| PTMZ | | | *e*S | **Sn** | **13 20 47.1** | **-2.2** |
| | baz=276 | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.06 270** | *e*P | **Pn** | **13 20 17.8** | **-0.7** |
| | baz=266 | | | | | | |
| KNMB | | | *e*S | **Sn** | **13 21 03.0** | **-1.8** |
| | baz=266 | | | | | | |
| **AXDP** | **Jialang** | **4.45 276** | *e*P | **Pn** | **13 20 23.6** | **-0.2** |
| | baz=263 | | | | | | |
| AXDP | | | *e*S | **Sn** | **13 21 13.5** | **-0.8** |
| | baz=263 | | | | | | |

*EAF **08** 13:28:50.0±2.5, 25°.93S×30°.01E, h10km, MD3.7*
**BUL 08 13:28:50.2±1.9, 25°.96S×29°.98E, h10km, MD3.8, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.02** | **100** | *e*P | | | Pn | 13 29 24.9 | +0.7 |
| CNG | | | | *e*S | | | Sn | 13 29 46.9 | -2.6 |
| **CNG** | **Changalane** | **2.02** | **100** | *e*P | | | Pn | 13 29 24.9 | +0.7 |
| CNG | | | | *e*S | | | Sn | 13 29 46.9 | -2.6 |
| **MOPA** | **Mopani** | **2.75** | **28** | *e*P | | | Pn | 13 29 32.7 | -1.7 |
| MOPA | | | | *e*S | | | Sn | 13 30 02.3 | -5.4 |
| **MOPA** | **Mopani** | **2.75** | **28** | *e*P | | | Pn | 13 29 32.7 | -1.7 |
| MOPA | | | | *e*S | | | Sn | 13 30 02.3 | -5.4 |
| **MSNA** | **Messina** | **3.59** | **1** | *e*P | | | Pn | 13 29 46.7 | +0.7 |
| MSNA | | | | *e*S | | | Sn | 13 30 24.9 | -3.7 |
| **MSNA** | **Messina** | **3.59** | **1** | *e*P | | | Pn | 13 29 46.7 | +0.7 |
| MSNA | | | | *e*S | | | Sn | 13 30 24.9 | -3.7 |
| **LBTB** | **Lobatse** | **4.07** | **282** | *e*P | | | Pn | 13 29 52.3 | -0.3 |
| LBTB | | | | *e*S | | | Sn | 13 30 36.5 | -3.9 |
| **LBTB** | **Lobatse** | **4.07** | **282** | *e*P | | | Pn | 13 29 52.3 | -0.3 |
| LBTB | | | | *e*S | | | Sn | 13 30 36.5 | -3.9 |
| **BOSA** | **Boshof** | **4.96** | **237** | *e*P | | | Pn | 13 30 05.2 | +0.2 |
| BOSA | | | | *e*S | | | Sn | 13 30 57.8 | -4.7 |
| **BOSA** | **Boshof** | **4.96** | **237** | *e*P | | | Pn | 13 30 05.2 | +0.2 |
| BOSA | | | | *e*S | | | Sn | 13 30 57.8 | -4.7 |
| **MATP** | **Matopo** | **5.67** | **346** | *e*P | | | Pn | 13 30 14.9 | +0.2 |
| MATP | | | | *e*S | | | Sn | 13 31 14.9 | -5.0 |
| **MATP** | **Matopo** | **5.67** | **346** | *e*P | | | Pn | 13 30 14.9 | +0.2 |
| MATP | | | | *e*S | | | Sn | 13 31 14.9 | -5.0 |
| **BLWY** | **Bulawayo** | **5.92** | **347** | *e*P | | | Pn | 13 30 18.3 | +0.1 |
| BLWY | | | | *e*S | | | Sn | 13 31 19.8 | -6.4 |
| **BLWY** | **Bulawayo** | **5.92** | **347** | *e*P | | | Pn | 13 30 18.3 | +0.1 |
| BLWY | | | | *e*S | | | Sn | 13 31 19.8 | -6.4 |

*IDC **08** 14:03:09.3±13.0, 14°.91S×165°.78E, h0km, mb3.7/3, mb1 3.9/4, mb1mx3.6/33, mbtmp3.7/4, ML3.5/1, MS3.0/1, Ms1 3.0/1, ms1mx2.5/59, Error ellipse: s-maj=236.0km s-min=37.2km az=56.0*
*NOU **08** 14:03:21.1, 15°.23S×167°.44E, h52km, mb3.2/10, Vanuatu Islands*
**ISC 08 14:03:07.4±1.8, 14°.8S±0°.1×166°.1E±0°.1, h10km, n11, σ3s 04/10, mb3.7/3, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **1.25** | **124** | P | | | **Pn** | **14 03 31.7** | **+0.7** |
| **DVP** | **Devils Point** | **3.56** | **147** | P | | | Pn | 14 03 59.5 | -3.3 |
| **KOUNC** | **Koumac, New Ca** | **6.03** | **197** | P | | | **Pb** | **14 04 48.5** | **-4.2** |
| **MARNC** | **Mare, Loyalty** | **6.94** | **165** | P | | | **Pn** | **14 04 51.2** | **+2.0** |
| **DZM** | **Mont Dzumac** | **7.29** | **178** | Pn | | | **Pn** | **14 04 55.8** | **+1.6** |
| | 0.9nm,0.3s,baz=54,slow=7.3,SNR=34 | | | | | | | | |
| DZM | | | | | Sn | | **Sn** | **14 06 17.2** | **+0.1** |
| | 0.4nm,0.3s,baz=339,slow=7.3,SNR=1.9 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **7.29** | **178** | P | | | **Pn** | **14 04 58.9** | **+4.7** |
| **OUENC** | **Ouen Island, N** | **7.66** | **175** | P | | | **Pn** | **14 05 03.3** | **+4.1** |
| **CTA** | **Charters Tower** | **19.69** | **252** | LR | | | LR | 14 13 48.8 | |
| | comp=Z,40nm,19.3s,baz=274,slow=33 | | | | | | | | |
| **STKA** | **Stephens Creek** | **28.15** | **228** | P | | | **P** | **14 09 00.3** | **+0.3** |
| | 1.1nm,0.5s,baz=61,slow=13,SNR=5.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **30.75** | **256** | P | | | **P** | **14 09 23.1** | **-0.1** |
| | 0.5nm,0.9s,baz=85,slow=8.4,SNR=0.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **31.64** | **249** | P | | | **P** | **14 09 31.2** | **+0.2** |
| | 0.7nm,0.8s,baz=80,slow=8.8,SNR=14 | | | | | | | | |

*BER **08** 14:13:06.2±0.5, 71°.11N×7°.49W, h0km±415km, ML2.9, Confirmed Earthquake*
**ISC 08 14:13:06.6±2.3, 71°.27N±0°.06×8°.0W±0°.2, h10km, n6, σ0s 95/12, 4D, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JNW** | **Jan Mayen West** | **0.28** | **212** | ⇓*i*P | | | **Pb** | **14 13 13.6** | **-0.1** |
| JNW | | | | *e*S | | | **Sb** | **14 13 19.3** | **+0.9** |
| JNW | | | | IAML | | | | 14 13 21.2 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **JNE** | **Jan Mayen East** | **0.30** | **201** | ⇓*i*P | | | **Pb** | **14 13 13.2** | **-0.8** |
| JNE | | | | *e*S | | | **Sb** | **14 13 18.8** | **-0.1** |
| JNE | | | | IAML | | | | 14 13 19.1 | |
| | comp=Z,2μm,0.2s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **0.33** | **212** | ⇓*i*P | | | **Pb** | **14 13 14.0** | **-0.6** |
| JMIC | | | | *e*S | | | **Sb** | **14 13 19.9** | **0.0** |
| JMIC | | | | IAML | | | | 14 13 21.2 | |
| | comp=Z,941nm,0.3s | | | | | | | | |
| **JMI** | **Jan Mayen** | **0.42** | **216** | ⇓*i*P | | | **Pb** | **14 13 15.6** | **-0.4** |
| JMI | | | | *e*S | | | **Sb** | **14 13 22.9** | **+0.4** |
| JMI | | | | IAML | | | | 14 13 23.1 | |
| | comp=Z,322nm,0.4s | | | | | | | | |
| **DBG** | **Daneborg** | **4.74** | **316** | *i* P | | | **Pn** | **14 14 18.9** | **+0.9** |
| DBG | | | | *i* S | | | **Sn** | **14 15 12.0** | **-0.9** |
| DBG | | | | IAML | | | | 14 15 15.8 | |
| | comp=Z,0.3nm,0.2s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DAG** | **Danmarks Havn** | **6.25** | **337** | *e* | Pn | 14 14 35.4 | -3.4 |
| | baz=20,slow=28 | | | | | | | |
| DAG | | | | *i* P | **Pn** | **14 14 40.0** | **+1.3** |
| DAG | | | | *e*S | **Sn** | **14 15 48.5** | **-1.6** |
| DAG | | | | IAML | | 14 15 54.4 | |
| | comp=Z,0.2nm,0.2s | | | | | | |

*DNK **08** 14:23:03.6±0.4,59˚.49N×11˚.72E, h0km,ML2.8(UPP), Explosion*
*UPP **08** 14:23:03.4±0.2,59˚.49N×11˚.73E, h0km,ML2.8, Explosion*
*BER **08** 14:23:05.1±1.3,59˚.55N×11˚.67E, h0km,ML1.4, Suspected explosion*

**ISC 08 14:23:02.1**±0.8,**59˚.51N**±0˚.03×**11˚.82E**±0˚.03,**h0**km,**n22,** σ0**s47/30,Southern Norway**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FINU** | **Finntorp** | **0.35** | **107** | P | **Pb** | **14 23 10.9** | **-0.3** |
| FINU | | | | S | **Sb** | **14 23 16.1** | **-1.3** |
| **FINU** | **Finntorp** | **0.35** | **107** | P | **Pb** | **14 23 10.9** | **-0.3** |
| FINU | | | | S | **Sb** | **14 23 16.1** | **-1.3** |
| **STRU** | **Stroemstad** | **0.58** | **215** | P | **Pg** | **14 23 13.5** | **+0.5** |
| STRU | | | | S | **Sg** | **14 23 20.4** | **-0.1** |
| **STRU** | **Stroemstad** | **0.58** | **215** | P | **Pg** | **14 23 13.5** | **+0.5** |
| STRU | | | | S | **Sg** | **14 23 20.4** | **-0.1** |
| **OSL** | **Oslo** | **0.70** | **308** | *e*S | **Sg** | **14 23 24.8** | **+0.2** |
| OSL | | | | IAML | | 14 23 30.3 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **NASU** | **Vaermlandsnaes** | **0.92** | **129** | P | **Pb** | **14 23 20.9** | **+0.1** |
| **NASU** | **Vaermlandsnaes** | **0.92** | **129** | P | **Pb** | **14 23 20.9** | **+0.1** |
| **VANU** | **Vaenersborg** | **1.03** | **172** | P | **Pg** | **14 23 22.2** | **+0.4** |
| **VANU** | **Vaenersborg** | **1.03** | **172** | P | **Pg** | **14 23 22.2** | **+0.4** |
| **UDD** | **Uddeholm** | **1.08** | **56** | P | **Pb** | **14 23 24.0** | **+0.5** |
| **KONO** | **Kongsberg** | **1.14** | **278** | *e*P | **Pg** | **14 23 23.4** | **-0.4** |
| KONO | | | | *e*S | **Sg** | **14 23 38.5** | **-0.1** |
| KONO | | | | IAML | | 14 23 41.4 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **NC602** | **NORSAR Array S** | **1.24** | **354** | *e*P | **Pg** | **14 23 25.8** | **0.0** |
| NC602 | | | | *e*S | **Sg** | **14 23 41.9** | **+0.1** |
| NC602 | | | | IAML | | 14 23 45.2 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **TJOU** | **Tjoern** | **1.48** | **184** | P | **Pn** | **14 23 30.2** | **+0.3** |
| **TJOU** | **Tjoern** | **1.48** | **184** | P | **Pn** | **14 23 30.2** | **+0.3** |
| **NB201** | **NORSAR Array S** | **1.57** | **351** | *e*P | **Pn** | **14 23 31.5** | **+0.4** |
| NB201 | | | | *e*S | **Sn** | **14 23 52.1** | **-0.1** |
| NB201 | | | | IAML | | 14 23 53.8 | |
| | comp=Z,8.7nm,0.3s | | | | | | |
| **NRAU** | **Nora** | **1.64** | **86** | P | **Pg** | **14 23 33.9** | **+0.4** |
| **NRAU** | **Nora** | **1.64** | **86** | P | **Pg** | **14 23 33.9** | **+0.4** |
| **ASKU** | **Askersund** | **1.67** | **110** | P | **Pg** | **14 23 34.4** | **+0.4** |
| **ASKU** | **Askersund** | **1.67** | **110** | P | **Pg** | **14 23 34.4** | **+0.4** |
| **FKPU** | **Falk** | **1.68** | **143** | P | **Pb** | **14 23 33.8** | **0.0** |
| **FKPU** | **Falk** | **1.68** | **143** | P | **Pb** | **14 23 33.8** | **0.0** |
| **SKAR** | **Skarslia** | **2.12** | **305** | *e*P | **Pn** | **14 23 39.1** | **+0.4** |
| SKAR | | | | *e*Sg | **Sb** | **14 24 07.6** | **-0.5** |
| SKAR | | | | IAML | | 14 24 11.7 | |
| | comp=Z,4.9nm,0.4s | | | | | | |

*TUL **08** 14:34:13.8±1.0,36˚.45N±0˚.02×98˚.69W±0˚.03, h7km±7km, ML2.9, mb_Lg2.7/19(NEIC), Error ellipse: s-maj=4.6km s-min=2.4km az=52.0*

**NEIC 08 14:34:13.9**±1.5,**36˚.42N**±0˚.03×**98˚.66W**±0˚.04,**h12**km±6km, **Error ellipse: s-maj=5.0km s-min=4.6km az=220.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.28** | **261** | Pg | Pg | 14 34 19.1 | -0.5 |
| U32A | | | | Sg | Sg | 14 34 23.1 | -0.4 |
| **OK035** | **E0210 Rd and N** | **0.29** | **352** | Pg | Pg | 14 34 19.3 | -0.5 |
| OK035 | | | | Sg | Sg | 14 34 23.4 | -0.4 |
| **OK032** | **Salt Plains WL** | **0.53** | **44** | Pg | Pg | 14 34 23.6 | -0.7 |
| **CROK** | **Carrier** | **0.55** | **81** | Pg | Pg | 14 34 24.6 | -0.2 |
| **GC02** | **Grant County #** | **0.77** | **56** | Pg | Pg | 14 34 28.5 | -0.5 |
| **KAN14** | **Manchester OK** | **0.77** | **46** | Pg | Pg | 14 34 28.4 | -0.5 |
| **KAN10** | **Anthony SW Sta** | **0.83** | **33** | Pg | Pg | 14 34 30.1 | 0.0 |
| KAN10 | | | | IAmb_Lg | | 14 34 40.2 | |
| | comp=Z,72nm,0.9s | | | | | | |
| **KAN16** | **Harper SW Stat** | **0.93** | **31** | Pg | Pg | 14 34 31.3 | -0.6 |
| **KAN17** | **Caldwell West** | **0.95** | **49** | Pg | Pg | 14 34 31.5 | -0.8 |
| **KAN12** | **Harper NE Stat** | **1.02** | **31** | Pg | Pb | 14 34 33.5 | -0.1 |
| **KAN01** | **Argonia South** | **1.03** | **45** | Pg | Pb | 14 34 33.2 | -0.5 |
| **KAN06** | **Argonia West S** | **1.05** | **38** | Pg | Pb | 14 34 33.4 | -0.6 |
| **KAN13** | **South Haven SW** | **1.12** | **58** | Pg | Pb | 14 34 34.5 | -0.7 |
| **BCOK** | **Bluff Creek, N** | **1.15** | **132** | Pg | Pb | 14 34 35.6 | -0.1 |
| **OK029** | **Liberty Lake** | **1.16** | **122** | | Pb | 14 34 35.7 | -0.2 |
| **BLOK** | **Blackwell** | **1.21** | **73** | | Pn | 14 34 36.3 | -0.4 |
| **OK025** | **Westminster Rd** | **1.36** | **128** | Pn | Pn | 14 34 39.1 | +0.2 |
| **OKCFA** | **Oklahoma City** | **1.41** | **135** | Pn | Pn | 14 34 38.7 | -0.7 |
| **OK033** | **Mehan** | **1.45** | **105** | Pn | Pb | 14 34 40.5 | -0.3 |
| **FNO** | **Franklin** | **1.55** | **138** | Pn | Pb | 14 34 42.2 | -0.4 |
| **QUOK** | **Quay** | **1.60** | **98** | Pn | Pb | 14 34 42.9 | -0.6 |
| **OK034** | **N. Norfolk Rd.** | **1.63** | **104** | Pn | Pn | 14 34 42.7 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.69** | **183** | Pn | Pn | 14 34 43.6 | +0.3 |
| **T35A** | **Sooner Cattle** | **1.80** | **74** | | Pn | 14 34 45.1 | +0.3 |
| T35A | | | | IAmb_Lg | | 14 35 13.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **W35A** | **Tecumseh** | **1.93** | **131** | Pn | Pn | 14 34 47.0 | +0.4 |
| **R32A** | **Long Quarter,** | **2.00** | **359** | | Pn | 14 34 48.4 | +0.8 |
| **TUL1** | **Leonard** | **2.38** | **102** | Pn | Pn | 14 34 53.5 | +0.7 |
| TUL1 | | | | IAmb_Lg | | 14 35 31.2 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.53** | **341** | Pn | Pn | 14 34 55.0 | 0.0 |
| **LOOK** | **Love County** | **2.71** | **153** | Pn | Pn | 14 34 57.4 | 0.0 |
| **AMTX** | **Amarillo** | **2.90** | **239** | | Pn | 14 34 59.2 | -0.8 |
| AMTX | | | | IAmb_Lg | | 14 35 49.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.13** | **31** | IAmb_Lg | | 14 35 55.3 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.25** | **123** | IAmb_Lg | | 14 36 06.2 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **3.45** | **88** | Pn | Pn | 14 35 07.8 | +0.3 |
| **KSCO** | **Kaye Shedlock'** | **4.07** | **311** | IAmb_Lg | | 14 36 28.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.46** | **72** | Pn | Pn | 14 35 21.4 | 0.0 |
| **T25A** | **Trinidad** | **4.67** | **280** | IAmb_Lg | | 14 36 45.9 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.69** | **89** | IAmb_Lg | | 14 36 43.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.18** | **80** | Pn | Pn | 14 35 31.8 | +0.5 |
| **OGNE** | **Ogallala** | **5.23** | **331** | Pn | Pn | 14 35 33.2 | +1.2 |
| **WHAR** | **Wooly Hollow** | **5.30** | **100** | Pn | Pn | 14 35 33.5 | +0.5 |
| **SDCO** | **Great Sand Dun** | **5.62** | **286** | Pn | Pn | 14 35 37.7 | 0.0 |
| **435B** | **Jarrell** | **5.70** | **171** | Pn | Pn | 14 35 37.4 | -1.0 |
| **N38A** | **Joes South For** | **6.09** | **43** | IAmb_Lg | | 14 37 43.9 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.14** | **72** | IAmb_Lg | | 14 37 33.4 | |
| | comp=Z,8.2nm,0.8s | | | | | | |

*IDC **08** 14:40:35.0±2.7,31˚.37S×178˚.16W, h0km, mb4.3/3, mb1 4.4/5, mb1mx3.9/36, mbtmp4.2/5, ML3.5/2, Error ellipse: s-maj=63.4km s-min=29.2km az=121.0*
*NEIC **08** 14:40:37.5±0.7,31˚.47S±0˚.08×177˚.9W±0˚.2, h24km±8km, mb4.2/8, Error ellipse: s-maj=24.7km s-min=7.2km az=111.0*

**ISC 08 14:40:38.3**±1.0,**31˚.46S**±0˚.08×**177˚.9W**±0˚.2,**h35**km,**n23,** σ0**s89/19,mb4.3/7,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.20** | **0** | Pn | **Pn** | **14 41 13.2** | **+0.9** |
| | 51nm,0.3s,baz=253,slow=20,SNR=2.5 | | | | | | |
| RAO | | | | Sn | **Sn** | **14 41 37.0** | **-1.2** |
| | 91nm,0.3s,baz=80,slow=22,SNR=3.2 | | | | | | |
| **URZ** | **Urewera** | **7.92** | **210** | Pn | **Pn** | **14 42 31.6** | **+0.9** |
| | 0.2nm,0.3s,baz=186,slow=19,SNR=1.1 | | | | | | |
| URZ | | | | Sn | **Sn** | **14 43 59.4** | **+0.3** |
| | 1.1nm,0.3s,baz=173,slow=17,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **7.92** | **210** | Pn | **Pn** | **14 42 30.6** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **8.94** | **209** | Pn | **Pn** | **14 42 44.6** | **-0.3** |
| **CMWZ** | **Cape Campbell** | **12.05** | **209** | Pn | **Pn** | **14 43 24.6** | **-2.8** |
| **RAR** | **Rarotonga** | **19.18** | **62** | P | **P** | **14 44 58.4** | **-0.6** |
| **CTA** | **Charters Tower** | **34.04** | **281** | P | **P** | **14 47 19.3** | **0.0** |
| | 4.0nm,0.8s,baz=115,slow=14,SNR=1.6 | | | | | | |
| **AS31** | **Alice Springs** | **43.12** | **268** | P | **P** | **14 48 35.8** | **+0.3** |
| **ASAR** | **Alice Springs** | **43.12** | **268** | P | **P** | **14 48 35.8** | **+0.3** |
| | 2.5nm,0.7s,baz=105,slow=7.7,SNR=45 | | | | | | |
| **WR0** | **Warramunga Arr** | **44.03** | **273** | P | **P** | **14 48 42.8** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 14 49 09.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.20** | **273** | P | **P** | **14 48 44.2** | **+0.1** |
| **WRAB** | **Tennant Creek** | **44.20** | **273** | P | **P** | **14 48 44.1** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 14 48 45.2 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.21** | **273** | P | **P** | **14 48 44.4** | **+0.2** |
| | comp=Z,3.3nm,0.5s,baz=112,slow=7.9,SNR=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.21** | **273** | P | **P** | **14 48 43.9** | **-0.3** |
| **WB0** | **Warramunga Arr** | **44.24** | **273** | P | **P** | **14 48 44.3** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 14 48 45.6 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.66** | **180** | P | **P** | **14 50 32.6** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 14 50 44.8 | |
| | comp=Z,1.1nm,1.1s | | | | | | |
| **H03S2** | **Juan Fernandez** | **79.83** | **123** | T | T | 16 21 51.3 | |
| | baz=241 | | | | | | |
| **H03S1** | **Juan Fernandez** | **79.84** | **123** | T | T | 16 21 54.0 | |
| | baz=241 | | | | | | |
| **H03S3** | **Juan Fernandez** | **79.85** | **123** | T | T | 16 21 48.9 | |
| | baz=241 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.03** | **123** | T | T | 16 21 50.8 | |
| | baz=241,slow=72,SNR=6.7 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.03** | **123** | T | T | 16 22 05.0 | |
| | baz=241,slow=72,SNR=5.8 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.05** | **123** | T | T | 16 21 48.6 | |
| | baz=241,slow=72,SNR=9.9 | | | | | | |
| **FINES** | **FINESS Array B** | **146.16** | **339** | PKPbc | **PKPbc** | **15 00 14.3** | **+0.3** |
| | comp=Z,3.3nm,0.9s,baz=34,slow=4.2,SNR=9.8 | | | | | | |

**IDC 08 14:43:54.7**±3.5,**7˚.11S×155˚.00E, h0km,mb3.5/3, mb1 3.8/3,mb1mx3.1/36,mbtmp3.5/3,Error ellipse: s-maj=87.5km s-min=49.2km az=108.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.75** | **235** | P | P | 14 49 09.6 | +0.6 |
| | 0.5nm,0.5s,baz=59,slow=9.8,SNR=5.0 | | | | | | |
| WRA | | | | PcP | PcP | 14 52 52.9 | -0.3 |
| | 0.1nm,0.5s,baz=60,slow=2.8,SNR=1.1 | | | | | | |
| **ASAR** | **Alice Springs** | **26.10** | **229** | P | P | 14 49 29.7 | -0.8 |
| | 0.3nm,0.7s,baz=61,slow=8.4,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.84** | **296** | P | P | 14 54 09.4 | 0.0 |
| | 0.5nm,0.6s,baz=116,slow=6.1,SNR=4.1 | | | | | | |

*IDC **08** 14:56:57.9±1.4,4˚.06S×139˚.10E, h98km±16km, mb3.6/9, mb1 3.8/14, mb1mx3.6/44, mbtmp4.1/14, Error ellipse: s-maj=19.9km s-min=12.6km az=112.0*
*NEIC **08** 14:56:58.7±1.0,4˚.06S±0˚.08×139˚.05E±0˚.09, h100km±8km, mb4.2/23, Error ellipse: s-maj=13.5km s-min=11.4km az=116.0*
*DJA **08** 14:56:59.1±0.3,4˚S±2˚×13˚9E±˚, h113km±4km, M4.4/6, mB5.2/1, mb4.3/6, MLv4.5/6, Mw(mB)4.5/1*

**ISC 08 14:56:57.9**±0.5,**4˚.11S**±0˚.04×**139˚.00E**±0˚.05,**h100**km,**n66,** σ1**s77/73,mb4.2/18,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.90** | **38** | P | **Pn** | **14 57 29.9** | **+0.7** |
| GENI | | | | S | **Sn** | **14 57 53.6** | **+0.5** |
| **GENI** | **Genyem** | **1.90** | **38** | P | **Pn** | **14 57 31.0** | **+1.8** |
| **JAY** | **Jayapura** | **2.32** | **47** | P | **Pn** | **14 57 34.6** | **-0.1** |
| | 9.9nm,0.3s,baz=210,slow=14,SNR=58 | | | | | | |
| JAY | | | | S | **Sn** | **14 58 00.8** | **-2.2** |
| | 23nm,0.3s,baz=139,slow=23,SNR=12 | | | | | | |
| **JAY** | **Jayapura** | **2.32** | **47** | P | **Pn** | **14 57 35.1** | **+0.4** |
| JAY | | | | S | **Sn** | **14 58 00.6** | **-2.3** |
| **SRPI** | **Serui, Papua** | **3.54** | **309** | S | **Sn** | **14 58 34.1** | **+2.2** |
| **BAKI** | **Biak** | **4.09** | **315** | P | **Pn** | **14 57 59.1** | **+0.8** |
| **MMPI** | **Merauke** | **4.54** | **162** | P | **Pn** | **14 58 08.3** | **+3.9** |
| MMPI | | | | S | **Sn** | **14 58 58.9** | **+2.7** |
| **FAKI** | **Fak Fak** | **6.84** | **280** | P | **Pn** | **14 58 37.0** | **+1.4** |
| | 0.2nm38nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **6.84** | **280** | Pn | **Pn** | **14 58 36.8** | **+1.2** |
| **FAKI** | **Fak Fak** | **6.84** | **280** | P | **Pn** | **14 58 37.4** | **+1.8** |
| **SIJI** | **Sorong** | **8.37** | **292** | P | **Pn** | **14 58 57.1** | **+0.7** |
| | 4.3nm,0.3s,baz=95,slow=8.1,SNR=15 | | | | | | |
| SIJI | | | | S | **Sn** | **15 00 26.9** | **-2.4** |
| | 0.4nm,0.3s,baz=40,slow=18,SNR=1.6 | | | | | | |
| **PMG** | **Port Moresby** | **9.66** | **123** | P | **Pn** | **14 59 15.0** | **+0.9** |
| | 1.9nm,0.3s,baz=304,slow=11,SNR=20 | | | | | | |
| PMG | | | | S | **Sn** | **15 00 58.5** | **-2.3** |
| | 0.5nm,0.3s,baz=353,slow=20,SNR=1.3 | | | | | | |
| **PMG** | **Port Moresby** | **9.66** | **123** | Pn | **Pn** | **14 59 16.5** | **+2.4** |
| **PMG** | **Port Moresby** | **9.66** | **123** | P | **Pn** | **14 59 16.7** | **+2.7** |
| **COEN** | **Coen** | **10.62** | **157** | P | **Pn** | **14 59 27.3** | **+0.2** |
| **KDU** | **Kakadu** | **10.69** | **217** | P | **Pn** | **14 59 28.2** | **+0.2** |
| **AAI** | **Ambon** | **10.79** | **272** | P | **Pn** | **14 59 32.3** | **+2.9** |
| | 1µm27nm,1.1s | | | | | | |
| **DRS** | **Darwin Rock St** | **11.51** | **224** | P | **Pn** | **14 59 39.5** | **+0.4** |
| **LBMI** | **Labuha** | **11.99** | **286** | P | **Pn** | **14 59 47.8** | **+2.3** |
| **TNTI** | **Ternate** | **12.59** | **292** | Pn | **Pn** | **14 59 53.0** | **-0.5** |
| **MTSU** | **Mount Surprise** | **14.88** | **160** | P | **P** | **15 00 26.2** | **-0.2** |
| **KNRA** | **Kununurra** | **15.28** | **220** | P | **Pn** | **15 00 29.5** | **+1.2** |
| **WB0** | **Warramunga Arr** | **16.20** | **196** | Pn | **Pn** | **15 00 38.8** | **-0.9** |
| **WR0** | **Warramunga Arr** | **16.35** | **195** | Pn | **Pn** | **15 00 40.7** | **-0.8** |
| **WRAB** | **Tennant Creek** | **16.37** | **196** | Pn | **Pn** | **15 00 41.8** | **0.0** |
| WRAB | | | | IAmb | IAmb | 15 01 06.5 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **BATI** | **Baumata** | **16.37** | **247** | S | **Sn** | **15 03 37.8** | **-5.8** |
| | comp=Z,0.8nm,0.3s,baz=285,slow=22,SNR=2.1 | | | | | | |
| **WB2** | **Warramunga Arr** | **16.38** | **196** | Pn | **Pn** | **15 00 41.5** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 15 01 06.7 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.38** | **196** | P | **Pn** | **15 00 41.2** | **-0.8** |
| | comp=Z,0.8nm,0.3s,baz=15,slow=12,SNR=21 | | | | | | |
| WRA | | | | S | Sn | 15 03 31.7 | -12 |
| | comp=Z,0.4nm,0.3s,baz=15,slow=23,SNR=3.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.09** | **222** | P | **P** | **15 01 13.6** | **+0.8** |
| | comp=Z,0.8nm,0.3s,baz=40,slow=11,SNR=26 | | | | | | |
| FITZ | | | | S | **S** | **15 04 36.3** | **-7.8** |
| | comp=Z,0.7nm,0.3s,baz=196,slow=22,SNR=6.5 | | | | | | |
| **AS31** | **Alice Springs** | **20.06** | **194** | P | **P** | **15 01 23.7** | **+0.4** |
| **ASAR** | **Alice Springs** | **20.06** | **194** | P | **P** | **15 01 25.0** | **+1.7** |
| | comp=Z,1.8nm,0.5s,baz=8,9,slow=10,SNR=53 | | | | | | |
| ASAR | | | | S | **S** | **15 04 60.0** | **-3.5** |
| | comp=Z,0.6nm,0.7s,baz=246,slow=35,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **20.06** | **194** | | **P** | **15 01 24.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **27.73** | **175** | P | **P** | **15 02 38.9** | **+1.9** |
| **UGM** | **Wanagama** | **28.56** | **261** | P | **P** | **15 02 45.2** | **+0.5** |
| **ENH** | **Enshi** | **44.33** | **322** | P | **P** | **15 04 58.6** | **+0.4** |
| ENH | | | | IAmb | IAmb | 15 05 13.5 | |
| | comp=Z,5.7nm,1.2s | | | | | | |
| **JTM** | **Tenmabayashi** | **44.72** | **2** | P | **P** | **15 05 01.4** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **45.39** | **301** | P | **P** | **15 05 07.3** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=113,slow=6.5,SNR=5.4 | | | | | | |
| **BJT** | **Baijiatuau** | **48.67** | **337** | P | **P** | **15 05 32.0** | **+0.1** |
| BJT | | | | IAmb | IAmb | 15 05 41.2 | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **58.85** | **335** | P | **P** | **15 06 46.1** | **-0.1** |
| ULN | | | | IAmb | IAmb | 15 06 47.6 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **59.10** | **335** | P | **P** | **15 06 48.8** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=158,slow=7.8,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **59.10** | **335** | P | **P** | **15 06 47.6** | **-0.2** |
| SONM | | | | IAmb | IAmb | 15 07 09.6 | |
| | comp=Z,1.8nm,1.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.15** | **13** | P | **P** | **15 06 48.0** | **0.0** |
| | comp=Z,3.5nm,0.9s,baz=240,slow=4.8,SNR=2.3 | | | | | | |
| **MK31** | **Makanchi Array** | **71.06** | **323** | P | **P** | **15 08 05.4** | **+0.2** |
| MK31 | | | | IAmb | IAmb | 15 08 06.7 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **71.06** | **323** | P | **P** | **15 08 05.9** | **+0.7** |
| | comp=Z,2.7nm,0.7s,baz=114,slow=8.0,SNR=30 | | | | | | |
| **MKAR** | **Makanchi Array** | **71.06** | **323** | P | **P** | **15 08 05.4** | **+0.1** |
| **MAKZ** | **Makanchi** | **71.26** | **323** | P | **P** | **15 08 06.7** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 15 08 07.5 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **73.28** | **330** | P | **P** | **15 08 17.4** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=161,slow=5.7,SNR=2.1 | | | | | | |
| **BOOM** | **Boomskoye usch** | **73.36** | **317** | P | **P** | **15 08 19.8** | **+0.6** |
| **KURK** | **Kurchatov** | **75.02** | **325** | P | **P** | **15 08 28.9** | **+0.5** |
| **KURK** | **Kurchatov** | **75.02** | **325** | IAmb | IAmb | 15 08 29.6 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **75.03** | **325** | P | **P** | **15 08 28.9** | **+0.5** |
| | comp=Z,1.4nm,0.8s,baz=114,slow=5.2,SNR=11 | | | | | | |
| **KKAR** | **Karatay Array** | **77.32** | **316** | P | **P** | **15 08 41.9** | **+0.2** |
| **BVAR** | **Borovoye Array** | **80.61** | **325** | P | **P** | **15 09 00.1** | **+0.6** |
| | comp=Z,3.2nm,0.7s,baz=90,slow=15,SNR=15 | | | | | | |
| **RND** | **Reindeer** | **85.75** | **25** | P | **P** | **15 09 25.2** | **-0.5** |
| **QSPA** | **South Pole Qui** | **85.85** | **180** | P | **P** | **15 09 25.7** | **-0.6** |
| **ABKAR** | **Akbulak array** | **85.97** | **320** | P | **P** | **15 09 26.0** | **-1.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **I23K** | **Minto, Yukon-K** | **86.08** | **24** | P | **P** | **15 09 28.1** | **+0.9** |
| I23K | | | | IAmb | IAmb | 15 09 56.5 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.56** | **24** | P | **P** | **15 09 28.4** | **-1.2** |
| CCB | | | | IAmb | IAmb | 15 09 40.7 | |
| | comp=Z,6.5nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **86.98** | **24** | P | **P** | **15 09 30.8** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=270,slow=3.9,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **86.98** | **24** | P | **P** | **15 09 30.4** | **-1.2** |
| **TOLK** | **Toolik Lake Re** | **87.12** | **20** | P | **P** | **15 09 32.9** | **+0.6** |
| TOLK | | | | IAmb | IAmb | 15 09 58.9 | |
| | comp=Z,6.1nm,1.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **87.16** | **28** | P | **P** | **15 09 33.0** | **+0.4** |
| **GLB** | **Gilahina Butte** | **87.48** | **28** | P | **P** | **15 09 34.3** | **+0.1** |
| **BMAR** | **Burnt Mountain** | **88.58** | **22** | P | **P** | **15 09 40.1** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **88.76** | **27** | P | **P** | **15 09 40.7** | **+0.6** |
| **DAWY** | **Dawson** | **89.99** | **26** | P | **P** | **15 09 46.5** | **+0.5** |
| DAWY | | | | IAmb | IAmb | 15 10 07.0 | |
| | comp=Z,0.9nm,0.8s | | | | | | |

*IDC **08** 15:11:26.3±1.8,59˚.90N×153˚.26W, h72km±29km, mb3.8/5, mb1 4.0/10, mb1mx3.5/49, mbtmp4.1/10, Error ellipse: s-maj=31.5km s-min=9.9km az=109.0*
*NEIC **08** 15:11:28.0±1.0,59˚.80N±0˚.03×153˚.07W±0˚.06, h105km±3km, Error ellipse: s-maj=4.9km s-min=4.5km az=135.0*
*ANF **08** 15:11:28.2±0.2,59˚.78N×153˚.02W, h98km±3km, ML4.1/39, Error ellipse: s-maj=2.4km s-min=1.8km az=132.0*
*AEIC **08** 15:11:29±1.3,59˚.78N±0˚.03×153˚.07W±0˚.06, h98km±3km, ML3.6, mb4.4/10(NEIC), ML3.9/112(NEIC), Error ellipse: s-maj=4.4km s-min=4.4km az=150.0*

**ISC 08 15:11:28.2**±0.6,**59˚.78N**±0˚.03×**153˚.01W**±0˚.03, **h106**km±5km,**n269,**σ0**s80/287,mb4.4/11,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.17** | **221** | | **Pn** | **15 11 42.9** | **-0.2** |
| **ILSW** | **Iliamna Southw** | **0.21** | **342** | | **Pn** | **15 11 42.6** | **-0.6** |
| ILSW | | | | | **Sn** | **15 11 53.1** | **-1.4** |
| **O20K** | **Slope Mountain** | **0.36** | **33** | | **Pn** | **15 11 43.6** | **-0.1** |
| O20K | | | | | **Sn** | **15 11 55.3** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.36** | **33** | P | **Pn** | **15 11 43.7** | **-0.1** |
| | baz=217,SNR=29 | | | | | | |
| O20K | | | | S | **Sn** | **15 11 54.9** | **-0.6** |
| | baz=217 | | | | | | |
| **AUL** | **Augustine Lava** | **0.46** | **209** | | **Pn** | **15 11 44.4** | **+0.1** |
| AUL | | | | | **Sn** | **15 11 56.0** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.48** | **206** | | **Pn** | **15 11 44.4** | **0.0** |
| AUQ | | | | | **Sn** | **15 11 56.3** | **-0.3** |
| **RED** | **Redoubt Volcan** | **0.65** | **10** | | **Pn** | **15 11 45.5** | **-0.3** |
| RED | | | | | **Sn** | **15 11 58.0** | **-1.0** |
| **RSO** | **Redoubt South** | **0.69** | **10** | | **Pn** | **15 11 45.9** | **-0.3** |
| **HOM** | **Homer** | **0.70** | **100** | | **Pn** | **15 11 46.6** | **+0.5** |
| HOM | | | | | **Sn** | **15 12 00.7** | **+1.1** |
| **HOM** | **Homer** | **0.70** | **100** | IAML | | 15 12 01.7 | |
| | comp=E,3µm,0.7s | | | | | | |
| **HOM** | **Homer** | **0.70** | **100** | P | **Pn** | **15 11 46.6** | **+0.5** |
| | baz=280,SNR=29 | | | | | | |
| HOM | | | | S | **Sn** | **15 12 00.6** | **+1.1** |
| | baz=280 | | | | | | |
| **RDWB** | **Redoubt West** | **0.71** | **7** | | **Pn** | **15 11 46.0** | **-0.3** |
| RDWB | | | | | **Sn** | **15 11 58.9** | **-1.2** |
| **O19K** | **Port Alsworth** | **0.78** | **303** | | **Pn** | **15 11 46.3** | **-0.4** |
| O19K | | | | | **Sn** | **15 11 59.7** | **-1.1** |
| **O19K** | **Port Alsworth** | **0.78** | **303** | IAML | | 15 12 01.7 | |
| | comp=E,8µm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.78** | **303** | P | **Pn** | **15 11 46.3** | **-0.4** |
| | baz=123,SNR=64 | | | | | | |
| O19K | | | | S | **Sn** | **15 11 59.6** | **-1.2** |
| | baz=123 | | | | | | |
| **NCT** | **North Crescent** | **0.78** | **3** | | **Pn** | **15 11 46.6** | **-0.4** |
| NCT | | | | | **Sn** | **15 11 59.9** | **-1.2** |
| **DFR** | **Drift River** | **0.83** | **11** | | **Pn** | **15 11 47.2** | **-0.2** |
| DFR | | | | | **Sn** | **15 12 00.8** | **-1.0** |
| **RDT** | **Redoubt** | **0.85** | **21** | | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PWL** | **Port Wells** | **2.56** | **63** | P | | **Pn** | **15 12 07.6** | **-0.6** |
| | baz=247,SNR=12 | | | | | | | |
| PWL | | | | S | | **Sn** | **15 12 36.9** | **-2.1** |
| | baz=247 | | | | | | | |
| **L19K** | **White Mountain** | **2.57** | **340** | | | **Pn** | **15 12 08.1** | **-0.2** |
| **L19K** | **White Mountain** | **2.57** | **340** | P | | **Pn** | **15 12 08.1** | **-0.2** |
| | baz=159,SNR=119 | | | | | | | |
| **OHAK** | **Old Harbor** | **2.57** | **183** | | | **Pn** | **15 12 07.5** | **-0.8** |
| **OHAK** | **Old Harbor** | **2.57** | **183** | IAML | | | 15 12 39.4 | |
| | comp=N,464nm,0.2s | | | | | | | |
| OHAK | | | | IAML | | | 15 12 39.7 | |
| | comp=E,278nm,0.2s | | | | | | | |
| **OHAK** | **Old Harbor** | **2.57** | **183** | P | | **Pn** | **15 12 07.6** | **-0.8** |
| | baz=2.4,SNR=10 | | | | | | | |
| OHAK | | | | S | | **Sn** | **15 12 37.3** | **-1.9** |
| | baz=2.4 | | | | | | | |
| **PMR** | **Palmer** | **2.63** | **45** | | | **Pn** | **15 12 08.6** | **-0.5** |
| **PMR** | **Palmer** | **2.63** | **45** | IAML | | | 15 12 40.4 | |
| | comp=E,600nm,0.3s | | | | | | | |
| PMR | | | | IAML | | | 15 12 41.2 | |
| | comp=N,488nm,0.3s | | | | | | | |
| **PMR** | **Palmer** | **2.63** | **45** | P | | **Pn** | **15 12 08.5** | **-0.5** |
| | baz=229,SNR=15 | | | | | | | |
| PMR | | | | S | | **Sn** | **15 12 38.8** | **-1.8** |
| | baz=229 | | | | | | | |
| **L20K** | **Farewell, AK** | **2.74** | **352** | | | **Pn** | **15 12 10.7** | **+0.2** |
| **KNK** | **Knik Glacier** | **2.78** | **52** | | | **Pn** | **15 12 10.3** | **-0.7** |
| **KNK** | **Knik Glacier** | **2.78** | **52** | P | | **Pn** | **15 12 10.6** | **-0.5** |
| | baz=236,SNR=20 | | | | | | | |
| KNK | | | | S | | **Sn** | **15 12 42.2** | **-1.8** |
| | baz=236 | | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.83** | **43** | | | **Pn** | **15 12 11.3** | **-0.4** |
| **GHO** | **Glory Hole Cre** | **2.83** | **43** | IAML | | | 15 12 46.4 | |
| | comp=N,710nm,0.3s | | | | | | | |
| **CUT** | **Chulitna** | **2.95** | **26** | | | **Pn** | **15 12 13.4** | **+0.2** |
| CUT | | | | IAML | | | 15 12 49.6 | |
| | comp=N,445nm,0.3s | | | | | | | |
| CUT | | | | IAML | | | 15 12 53.4 | |
| | comp=E,577nm,0.4s | | | | | | | |
| **CUT** | **Chulitna** | **2.95** | **26** | S | | **Sn** | **15 12 47.5** | **-0.5** |
| | baz=209 | | | | | | | |
| **SML** | **Sawmill** | **3.06** | **46** | | | **Pn** | **15 12 14.4** | **-0.5** |
| **SML** | **Sawmill** | **3.06** | **46** | IAML | | | 15 12 52.0 | |
| | comp=N,360nm,0.5s | | | | | | | |
| SML | | | | IAML | | | 15 13 00.9 | |
| | comp=E,410nm,1.1s | | | | | | | |
| **SML** | **Sawmill** | **3.06** | **46** | P | | **Pn** | **15 12 14.4** | **-0.5** |
| | baz=231 | | | | | | | |
| SML | | | | S | | **Sn** | **15 12 48.4** | **-2.4** |
| | baz=231 | | | | | | | |
| **GLI** | **Glacier Island** | **3.14** | **67** | | | **Pn** | **15 12 14.5** | **-1.3** |
| GLI | | | | IAML | | | 15 12 51.0 | |
| | comp=N,443nm,0.5s | | | | | | | |
| GLI | | | | IAML | | | 15 12 53.2 | |
| | comp=E,515nm,0.4s | | | | | | | |
| **GLI** | **Glacier Island** | **3.14** | **67** | S | | **Sn** | **15 12 49.6** | **-3.0** |
| | baz=252 | | | | | | | |
| **PPLA** | **Purkeypile** | **3.15** | **7** | | | **Pn** | **15 12 17.2** | **+1.2** |
| **PPLA** | **Purkeypile** | **3.15** | **7** | P | | **Pn** | **15 12 16.9** | **+0.8** |
| | baz=188 | | | | | | | |
| PPLA | | | | S | | **Sn** | **15 12 54.4** | **+1.3** |
| | baz=188 | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.29** | **191** | Pn | | **Pn** | **15 12 16.7** | **-1.2** |
| SII | | | | IAML | | | 15 12 58.1 | |
| | comp=E,354nm,1.2s | | | | | | | |
| SII | | | | IAML | | | 15 13 06.7 | |
| | comp=N,367nm,1.2s | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.29** | **191** | S | | **Sn** | **15 12 54.0** | **-2.3** |
| | baz=9.8 | | | | | | | |
| **FID** | **Port Fidalgo** | **3.40** | **71** | | | **Pn** | **15 12 17.6** | **-1.6** |
| **FID** | **Port Fidalgo** | **3.40** | **71** | IAML | | | 15 12 57.8 | |
| | comp=E,418nm,0.4s | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.40** | **93** | | | **Pn** | **15 12 19.4** | **+0.1** |
| **Q23K** | **Middleton Isla** | **3.40** | **93** | IAML | | | 15 13 24.1 | |
| | comp=N,331nm,2.5s | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.40** | **93** | P | | **Pn** | **15 12 19.3** | **+0.1** |
| | baz=279 | | | | | | | |
| Q23K | | | | S | | **Sn** | **15 12 58.6** | **-0.2** |
| | baz=279 | | | | | | | |
| **MID** | **Middleton Isla** | **3.41** | **93** | | | **Pn** | **15 12 19.4** | **0.0** |
| **MID** | **Middleton Isla** | **3.41** | **93** | IAML | | | 15 13 25.6 | |
| | comp=N,369nm,2.6s | | | | | | | |
| **JPK** | **Jack Peak** | **3.43** | **65** | | | **Pn** | **15 12 18.4** | **-1.3** |
| **TT01** | **Tatalina** | **3.45** | **336** | | | **Pn** | **15 12 19.6** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | | | **Pn** | **15 12 19.8** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | IAML | | | 15 13 02.1 | |
| | comp=E,316nm,0.6s | | | | | | | |
| SCM | | | | IAML | | | 15 13 16.1 | |
| | comp=N,262nm,0.9s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | P | | **Pn** | **15 12 19.9** | **-0.3** |
| | baz=236,SNR=5.8 | | | | | | | |
| SCM | | | | S | | **Sn** | **15 12 59.0** | **-1.4** |
| | baz=236 | | | | | | | |
| **TTA** | **Tatalina** | **3.47** | **337** | | | **Pn** | **15 12 19.8** | **-0.6** |
| **TTA** | **Tatalina** | **3.47** | **337** | P | | **Pn** | **15 12 19.8** | **-0.6** |
| | baz=155,SNR=41 | | | | | | | |
| **K20K** | **Telida** | **3.62** | **352** | | | **Pn** | **15 12 22.4** | **+0.1** |
| **CAST** | **Castle Rocks** | **3.68** | **7** | | | **Pn** | **15 12 23.5** | **+0.5** |
| **CAST** | **Castle Rocks** | **3.68** | **7** | P | | **Pn** | **15 12 23.4** | **+0.4** |
| | baz=188,SNR=86 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **75** | | | **Pn** | **15 12 22.4** | **-0.9** |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **75** | P | | **Pn** | **15 12 22.4** | **-0.9** |
| | baz=261 | | | | | | | |
| EYAK | | | | S | | **Sn** | **15 13 04.1** | **-2.0** |
| | baz=261 | | | | | | | |
| **DIV** | **Divide** | **3.83** | **66** | | | **Pn** | **15 12 24.2** | **-0.9** |
| **KLU** | **Klutina** | **3.89** | **61** | | | **Pn** | **15 12 25.2** | **-0.7** |
| **KLU** | **Klutina** | **3.89** | **61** | IAML | | | 15 13 12.0 | |
| | comp=E,276nm,0.4s | | | | | | | |
| **KLU** | **Klutina** | **3.89** | **61** | P | | **Pn** | **15 12 25.3** | **-0.7** |
| | baz=247,SNR=23 | | | | | | | |
| KLU | | | | S | | **Sn** | **15 13 08.1** | **-2.6** |
| | baz=247 | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.90** | **18** | | | **Pn** | **15 12 26.6** | **+0.4** |
| **TRF** | **Thorofare Moun** | **3.90** | **18** | IAML | | | 15 13 13.8 | |
| | comp=N,142nm,0.6s | | | | | | | |
| TRF | | | | IAML | | | 15 13 17.7 | |
| | comp=E,109nm,0.7s | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.90** | **18** | P | | **Pn** | **15 12 26.5** | **+0.3** |
| | baz=201,SNR=15 | | | | | | | |
| TRF | | | | S | | **Sn** | **15 13 09.7** | **-1.4** |
| | baz=201 | | | | | | | |
| **KTH** | **Kantishna Hill** | **3.91** | **14** | | | **Pn** | **15 12 26.3** | **+0.1** |
| **KTH** | **Kantishna Hill** | **3.91** | **14** | IAML | | | 15 13 19.9 | |
| | comp=E,70nm,0.9s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.07** | **52** | | | **Pn** | **15 12 28.4** | **+0.1** |
| **M24K** | **Tolsona, Glenn** | **4.07** | **52** | P | | **Pn** | **15 12 28.2** | **-0.1** |
| | baz=238,SNR=11 | | | | | | | |
| M24K | | | | S | | **Sn** | **15 13 14.3** | **-0.6** |
| | baz=238 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.13** | **4** | P | | **Pn** | **15 12 29.3** | **+0.3** |
| | baz=185,SNR=43 | | | | | | | |
| **RND** | **Reindeer** | **4.14** | **27** | | | **Pn** | **15 12 29.5** | **+0.2** |
| **RND** | **Reindeer** | **4.14** | **27** | IAML | | | 15 13 36.8 | |
| | comp=E,90nm,0.9s | | | | | | | |
| RND | | | | IAML | | | 15 13 37.9 | |
| | comp=N,61nm,0.7s | | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.21** | **201** | | | **Pn** | **15 12 29.1** | **-1.1** |
| **CHIR** | **Chirikof Islan** | **4.21** | **201** | P | | **Pn** | **15 12 29.1** | **-1.1** |
| | baz=18 | | | | | | | |
| **GOAT** | **Goat Mountain** | **4.21** | **75** | | | **Pn** | **15 12 29.3** | **-1.0** |
| **KAIM** | **Kayak Island** | **4.33** | **84** | Pn | | **Pn** | **15 12 32.2** | **+0.3** |
| **KAIM** | **Kayak Island** | **4.33** | **84** | P | | **Pn** | **15 12 31.7** | **-0.2** |
| | baz=272 | | | | | | | |
| **BMRM** | **Bremner River** | **4.34** | **70** | | | **Pn** | **15 12 32.1** | **+0.1** |
| BMRM | | | | IAML | | | 15 13 24.3 | |
| | comp=E,103nm,0.6s | | | | | | | |
| BMRM | | | | IAML | | | 15 13 39.8 | |
| | comp=N,100nm,0.9s | | | | | | | |
| **BMRM** | **Bremner River** | **4.34** | **70** | P | | **Pn** | **15 12 30.8** | **-1.1** |
| | baz=258,SNR=20 | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.34** | **55** | | | **Pn** | **15 12 31.6** | **-0.3** |
| **MCK** | **McKinley** | **4.41** | **24** | | | **Pn** | **15 12 33.3** | **+0.4** |
| MCK | | | | IAML | | | 15 13 25.9 | |
| | comp=N,74nm,0.8s | | | | | | | |
| MCK | | | | IAML | | | 15 13 32.2 | |
| | comp=E,51nm,0.4s | | | | | | | |
| **MCK** | **McKinley** | **4.41** | **24** | P | | **Pn** | **15 12 33.5** | **+0.6** |
| | baz=208,SNR=20 | | | | | | | |
| **HMT** | **Hamilton** | **4.42** | **79** | | | **Pn** | **15 12 33.3** | **+0.3** |
| HMT | | | | IAML | | | 15 13 26.3 | |
| | comp=N,154nm,0.5s | | | | | | | |
| HMT | | | | IAML | | | 15 13 30.6 | |
| | comp=E,218nm,0.7s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.44** | **12** | | | **Pn** | **15 12 33.5** | **+0.3** |
| **BPAW** | **Bear Paw Mtn.** | **4.44** | **12** | P | | **Pn** | **15 12 33.1** | **-0.1** |
| | baz=194,SNR=9.3 | | | | | | | |
| **J20K** | **Nowinta River** | **4.44** | **354** | | | **Pn** | **15 12 33.3** | **0.0** |
| **J20K** | **Nowinta River** | **4.44** | **354** | P | | **Pn** | **15 12 33.3** | **0.0** |
| | baz=173,SNR=63 | | | | | | | |
| **CHGN** | **Chignik** | **4.52** | **222** | P | | **Pn** | **15 12 34.4** | **+0.1** |
| | baz=37 | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | | | **Pn** | **15 12 33.8** | **-0.6** |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | IAML | | | 15 13 26.4 | |
| | comp=E,138nm,0.6s | | | | | | | |
| N25K | | | | IAML | | | 15 13 26.4 | |
| | comp=N,131nm,0.4s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | P | | **Pn** | **15 12 34.0** | **-0.4** |
| | baz=250,SNR=26 | | | | | | | |
| **HARP** | **HAARP** | **4.63** | **52** | | | **Pn** | **15 12 35.4** | **-0.3** |
| **HARP** | **HAARP** | **4.63** | **52** | P | | **Pn** | **15 12 35.5** | **-0.3** |
| | baz=239 | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.66** | **82** | Pn | | **Pn** | **15 12 36.5** | **+0.4** |
| **BERG** | **Berg Lake** | **4.70** | **79** | | | **Pn** | **15 12 36.9** | **+0.1** |
| **BERG** | **Berg Lake** | **4.70** | **79** | IAML | | | 15 13 32.0 | |
| | comp=E,163nm,0.4s | | | | | | | |
| BERG | | | | IAML | | | 15 13 37.5 | |
| | comp=N,151nm,1.0s | | | | | | | |
| **BWN** | **Browne** | **4.71** | **19** | | | **Pn** | **15 12 37.4** | **+0.5** |
| BWN | | | | IAML | | | 15 14 13.6 | |
| | comp=E,81nm,1.0s | | | | | | | |
| BWN | | | | IAML | | | 15 14 24.6 | |
| | comp=N,93nm,1.5s | | | | | | | |
| **GLB** | **Gilahina Butte** | **4.83** | **66** | | | **Pn** | **15 12 37.7** | **-0.9** |
| **GLB** | **Gilahina Butte** | **4.83** | **66** | IAML | | | 15 13 34.0 | |
| | comp=E,47nm,0.6s | | | | | | | |
| GLB | | | | IAML | | | 15 13 34.4 | |
| | comp=N,107nm,0.7s | | | | | | | |
| **PAX** | **Paxson** | **4.83** | **45** | | | **Pn** | **15 12 38.3** | **-0.3** |
| **PAX** | **Paxson** | **4.83** | **45** | P | | **Pn** | **15 12 38.5** | **-0.1** |
| | baz=232 | | | | | | | |
| **KHIT** | **Khitrov Hills** | **4.93** | **78** | | | **Pn** | **15 12 38.7** | **-1.3** |
| **VRDI** | **Verde Repeater** | **4.94** | **69** | | | **Pn** | **15 12 39.2** | **-1.0** |
| **VRDI** | **Verde Repeater** | **4.94** | **69** | IAML | | | 15 13 40.0 | |
| | comp=E,38nm,0.5s | | | | | | | |
| VRDI | | | | IAML | | | 15 13 44.3 | |
| | comp=N,47nm,1.0s | | | | | | | |
| **SNH** | **Sunshine Point** | **5.12** | **81** | Pn | | **Pn** | **15 12 43.2** | **+0.7** |
| **WAX** | **Waxell Ridge** | **5.12** | **78** | | | **Pn** | **15 12 42.6** | **0.0** |
| **NEA2** | **Nenana** | **5.17** | **19** | | | **Pn** | **15 12 42.6** | **-0.5** |
| **NEA2** | **Nenana** | **5.17** | **19** | P | | **Pn** | **15 12 42.8** | **-0.3** |
| | baz=203,SNR=32 | | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **24** | | | **Pn** | **15 12 43.8** | **-0.3** |
| **WRH** | **Wood River Hil** | **5.24** | **24** | IAML | | | 15 13 42.6 | |
| | comp=N,38nm,0.9s | | | | | | | |
| WRH | | | | IAML | | | 15 13 42.8 | |
| | comp=E,34nm,0.5s | | | | | | | |
| **GCSA** | **Galena City Sc** | **5.30** | **342** | | | **Pn** | **15 12 44.5** | **-0.3** |
| **GCSA** | **Galena City Sc** | **5.30** | **342** | P | | **Pn** | **15 12 44.4** | **-0.3** |
| | baz=159,SNR=6.6 | | | | | | | |
| **MLY** | **Manley** | **5.37** | **10** | | | **Pn** | **15 12 45.2** | **-0.7** |
| **ISLE** | **Juniper Island** | **5.39** | **77** | | | **Pn** | **15 12 45.7** | **-0.5** |
| **BALM** | **Baldy** | **5.43** | **72** | | | **Pn** | **15 12 46.0** | **-0.8** |
| **I21K** | **Tanana** | **5.44** | **5** | | | **Pn** | **15 12 46.6** | **-0.1** |
| **I21K** | **Tanana** | **5.44** | **5** | P | | **Pn** | **15 12 46.4** | **-0.3** |
| | baz=186 | | | | | | | |
| **HDA** | **Harding Lake** | **5.44** | **29** | | | **Pn** | **15 12 46.6** | **-0.2** |
| **HDA** | **Harding Lake** | **5.44** | **29** | P | | **Pn** | **15 12 46.6** | **-0.2** |
| | baz=214 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.45** | **24** | | | **Pn** | **15 12 46.1** | **-0.8** |
| **MENT** | **Mentasta** | **5.47** | **51** | Pn | | **Pn** | **15 12 47.2** | **0.0** |
| **BAGL** | **Bagley Icefiel** | **5.50** | **78** | | | **Pn** | **15 12 47.8** | **+0.2** |
| **M26K** | **Nabesna, AK** | **5.52** | **57** | | | **Pn** | **15 12 47.5** | **-0.4** |
| **M26K** | **Nabesna, AK** | **5.52** | **57** | P | | **Pn** | **15 12 47.8** | **-0.1** |
| | baz=246,SNR=37 | | | | | | | |
| **RIDG** | **Independent Ri** | **5.55** | **41** | | | **Pn** | **15 12 48.6** | **+0.3** |
| **RIDG** | **Independent Ri** | **5.55** | **41** | P | | **Pn** | **15 12 48.3** | **0.0** |
| | baz=228 | | | | | | | |
| **MESA** | **MESA** | **5.57** | **81** | | | **Pn** | **15 12 49.0** | **+0.3** |
| **MESA** | **MESA** | **5.57** | **81** | P | | **Pn** | **15 12 49.3** | **+0.6** |
| | baz=271 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.64** | **23** | | | **Pn** | **15 12 49.5** | **+0.1** |
| **TCOL** | **CIGO, UAF Yank** | **5.64** | **23** | P | | **Pn** | **15 12 49.4** | **-0.1** |
| | baz=208,SNR=20 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.64** | **16** | | | **Pn** | **15 12 49.4** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **5.64** | **16** | P | | **Pn** | **15 12 49.3** | **-0.1** |
| | baz=199,SNR=54 | | | | | | | |
| **COLA** | **College** | **5.64** | **23** | | | **Pn** | **15 12 49.4** | **-0.1** |
| **COLA** | **College** | **5.64** | **23** | P | | **Pn** | **15 12 49.4** | **-0.1** |
| | baz=208 | | | | | | | |
| **MDM** | **Murphy Dome** | **5.65** | **21** | | | **Pn** | **15 12 49.3** | **-0.3** |
| **L26K** | **Log Cabin Wild** | **5.67** | **51** | | | **Pn** | **15 12 49.8** | **0.0** |
| **L26K** | **Log Cabin Wild** | **5.67** | **51** | P | | **Pn** | **15 12 49.8** | **0.0** |
| | baz=240 | | | | | | | |
| **YAH** | **Yahtse** | **5.67** | **79** | | | **Pn** | **15 12 50.3** | **+0.2** |
| **DOT** | **Dot Lake** | **5.75** | **44** | | | **Pn** | **15 12 51.7** | **+0.7** |
| **IL31** | | **5.76** | **27** | | | **Pn** | **15 12 50.7** | **-0.4** |
| **ILAR** | **Eielson Array** | **5.76** | **27** | P | | **Pn** | **15 12 50.4** | **-0.7** |
| | comp=E,6.7nm,0.3s,baz=216,slow=14,SNR=136 | | | | | | | |
| ILAR | | | | S | | **Sn** | **15 13 51.1** | **-4.7** |
| | comp=E,5.6nm,0.3s,baz=200,slow=30,SNR=11 | | | | | | | |
| **BARN** | **Barnard Glacie** | **5.77** | **72** | | | **Pn** | **15 12 52.0** | **+0.6** |
| **H21K** | **Melozitna Rive** | **5.90** | **1** | | | **Pn** | **15 12 52.6** | **-0.3** |
| **POKR** | **Poker Flat Res** | **5.94** | **23** | | | **Pn** | **15 12 53.8** | **+0.2** |
| **POKR** | **Poker Flat Res** | **5.94** | **23** | P | | **Pn** | **15 12 53.8** | **+0.2** |
| | baz=209 | | | | | | | |
| **TABL** | **Table Mountain** | **5.97** | **79** | | | **Pn** | **15 12 53.8** | **-0.4** |
| **M27K** | **Edge Creek, AK** | **5.99** | **60** | | | **Pn** | **15 12 54.4** | **+0.1** |
| **SCRK** | **Sand Creek** | **5.99** | **42** | | | **Pn** | **15 12 53.8** | **-0.5** |
| **SCRK** | **Sand Creek** | **5.99** | **42** | P | | **Pn** | **15 12 54.0** | **-0.3** |
| | baz=230 | | | | | | | |
| **J25K** | **Salcha River,** | **6.02** | **33** | | | **Pn** | **15 12 54.3** | **-0.3** |
| **J25K** | **Salcha River,** | **6.02** | **33** | P | | **Pn** | **15 12 54.3** | **-0.3** |
| | baz=220,SNR=24 | | | | | | | |
| **CNBA** | **Chernabura Isl** | **6.12** | **218** | Pn | | **Pn** | **15 12 55.8** | **-0.2** |
| **SAMH** | **Samovar Hills** | **6.15** | **81** | | | **Pn** | **15 12 57.6** | **+1.1** |
| **IM03** | | **6.24** | **357** | | | **Pn** | **15 12 58.1** | **+0.7** |
| **IMAR** | **Indian Mountai** | **6.24** | **357** | Pn | | **Pn** | **15 12 57.8** | **+0.4** |
| **L27K** | **Beaver Creek,** | **6.29** | **54** | | | **Pn** | **15 12 57.8** | **-0.5** |
| **L27K** | **Beaver Creek,** | **6.29** | **54** | P | | **Pn** | **15 12 58.0** | **-0.4** |
| | baz=244 | | | | | | | |
| **BC03** | | **6.31** | **54** | | | **Pn** | **15 12 58.2** | **-0.3** |
| **BCAR** | **Beaver Creek A** | **6.31** | **54** | Pn | | **Pn** | **15 12 58.0** | **-0.6** |
| **PCA** | **Pinnacle** | **6.42** | **82** | | | **Pn** | **15 13 00.6** | **+0.5** |
| **PINM** | **Pinnacle** | **6.42** | **82** | P | | **Pn** | **15 13 00.8** | **+0.7** |
| | baz=273,SNR=7.0 | | | | | | | |
| **BVCY** | **Beaver Creek** | **6.45** | **61** | P | | **Pn** | **15 13 01.6** | **+1.1** |
| | baz=251 | | | | | | | |
| **YUK3** | **Moose Creek** | **6.46** | **67** | | | **Pn** | **15 13 00.9** | **+0.1** |
| **YUK3** | **Moose Creek** | **6.46** | **67** | P | | **Pn** | **15 13 01.6** | **+0.8** |
| | baz=258 | | | | | | | |
| **J26L** | **Joseph Creek** | **6.48** | **39** | | | **Pn** | **15 13 00.1** | **-0.8** |
| **H24K** | **Noodor Dome** | **6.51** | **19** | | | **Pn** | **15 13 00.6** | **-0.7** |
| **PRP** | **Porcupine Dome** | **6.71** | **28** | Pn | | **Pn** | **15 13 04.0** | **0.0** |
| **PRP** | **Porcupine Dome** | **6.71** | **28** | P | | **Pn** | **15 13 04.4** | **+0.4** |
| | baz=215,SNR=15 | | | | | | | |
| **BCPM** | **Bancas Point** | **6.74** | **83** | | | **Pn** | **15 13 04.5** | **+0.1** |
| **PNL** | **Peninsula** | **6.89** | **85** | | | **Pn** | **15 13 06.5** | **+0.1** |
| **PNL** | **Peninsula** | **6.89** | **85** | P | | **Pn** | **15 13 06.4** | **+0.1** |
| | baz=277,SNR=14 | | | | | | | |
| **YUK4** | **Talbot Arm** | **7.25** | **71** | P | | **Pn** | **15 13 12.6** | **+1.1** |
| | baz=263 | | | | | | | |
| **YUK6** | **Outpost Mounta** | **7.36** | **75** | | | **Pn** | **15 13 13.7** | **+0.8** |
| **YUK6** | **Outpost Mounta** | **7.36** | **75** | P | | **Pn** | **15 13 13.6** | **+0.6** |
| | baz=267 | | | | | | | |
| **EGAK** | **Eagle** | **7.45** | **43** | | | **Pn** | **15 13 13.7** | **-0.3** |
| **YUK7** | **Dusty Glacier** | **7.46** | **78** | | | **Pn** | **15 13 14.9** | **+0.6** |
| **ANM** | **Nome** | **7.51** | **315** | | | **Pn** | **15 13 15.2** | **+0.4** |
| **COLD** | **Coldfoot** | **7.58** | **8** | | | **Pn** | **15 13 15.7** | **0.0** |
| **COLD** | **Coldfoot** | **7.58** | **8** | P | | **Pn** | **15 13 15.6** | **0.0** |
| | baz=191,SNR=8.3 | | | | | | | |
| **FYU** | **Fort Yukon** | **7.66** | **24** | | | **Pn** | **15 13 15.8** | **-1.0** |
| **DAWY** | **Dawson** | **7.72** | **50** | Pn | | **Pn** | **15 13 17.5** | **-0.2** |
| **DAWY** | **Dawson** | **7.72** | **50** | P | | **Pn** | **15 13 17.7** | **0.0** |
| | baz=242 | | | | | | | |
| **HYT** | **Haines Junctio** | **7.77** | **76** | | | **Pn** | **15 13 19.3** | **+0.8** |
| **HYT** | **Haines Junctio** | **7.77** | **76** | P | | **Pn** | **15 13 19.1** | **+0.6** |
| | baz=269 | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **8.64** | **71** | | | **Pn** | **15 13 30.3** | **+0.2** |
| **N31M** | **Braeburn, Yuko** | **8.64** | **71** | P | | **Pn** | **15 13 30.3** | **+0.2** |
| | baz=266,SNR=9.7 | | | | | | | |
| **SKAG** | **Skagway** | **8.96** | **84** | | | **Pn** | **15 13 34.6** | **+0.1** |
| **SKAG** | **Skagway** | **8.96** | **84** | P | | **Pn** | **15 13 34.6** | **+0.1** |
| | baz=280,SNR=12 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **9.02** | **8** | | | **Pn** | **15 13 36.0** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **9.02** | **8** | P | | **Pn** | **15 13 35.7** | **+0.4** |
| | baz=191,SNR=7.0 | | | | | | | |
| **WHY** | **Whitehorse** | **9.06** | **77** | | | **Pn** | **15 13 36.1** | **+0.2** |
| **WHY** | **Whitehorse** | **9.06** | **77** | P | | **Pn** | **15 13 36.2** | **+0.2** |
| | baz=272,SNR=12 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **9.36** | **67** | | | **Pn** | **15 13 39.6** | **-0.3** |
| | baz=263 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **9.36** | **67** | P | | **Pn** | **15 13 40.0** | **+0.1** |
| **BESE** | **Bessie Mountai** | **9.39** | **89** | Pn | | **Pn** | **15 13 41.8** | **+1.3** |
| **UNV** | **Unalaska Valle** | **9.48** | **237** | Pn | | **Pn** | **15 13 41.2** | **-0.3** |
| **UNV** | **Unalaska Valle** | **9.48** | **237** | P | | **Pn** | **15 13 41.3** | **-0.3** |
| | baz=46 | | | | | | | |
| **SIT** | **Sitka** | **9.67** | **99** | Pn | | **Pn** | **15 13 42.6** | **-1.4** |
| **JIS** | **Juneau Island** | **9.72** | **91** | | | **Pn** | **15 13 45.3** | **+0.6** |
| **P33M** | **Teslin, Yukon** | **10.12** | **79** | Pn | | **Pn** | **15 13 50.6** | **+0.4** |
| **P33M** | **Teslin, Yukon** | **10.12** | **79** | P | | **Pn** | **15 13 50.6** | **+0.4** |
| | baz=276,SNR=8.6 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **10.85** | **66** | P | | **Pn** | **15 14 01.5** | **+1.3** |
| | baz=265,SNR=6.7 | | | | | | | |
| **WRAK** | **Wrangell Islan** | **11.42** | **98** | Pn | | **Pn** | **15 14 08.3** | **+0.5** |
| **CRAG** | **Craig** | **11.48** | **103** | Pn | | **Pn** | **15 14 09.4** | **+0.8** |
| **DLBC** | **Dease Lake** | **11.87** | **87** | P | | **Pn** | **15 14 15.2** | **+1.4** |
| | comp=E,6.2nm,0.3s,baz=335,slow=12,SNR=102 | | | | | | | |
| **DLBC** | **Dease Lake** | **11.87** | **87** | Pn | | **Pn** | **15 14 14.2** | **+0.4** |
| **INK** | **Inuvik** | **12.02** | **37** | P | | **Pn** | **15 14 15.5** | **-0.1** |
| | comp=E,0.2nm,0.3s,baz=265,slow=7.4,SNR=6.3 | | | | | | | |
| **MOBC** | **Moresby Island** | **13.36** | **111** | Pn | | **Pn** | **15 14 34.5** | **+1.2** |
| **C36M** | **Paulatuk** | **15.51** | **40** | Pn | | **Pn** | **15 14 58.5** | **-2.1** |
| **A36M** | **Sachs Harbour** | **16.45** | **31** | P | | **Pn** | **15 15 12.0** | **-0.1** |
| | baz=236 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.55** | **65** | P | | **P** | **15 15 37.7** | **+1.5** |
| | comp=E,0.2nm,0.3s,baz=276,slow=9.9,SNR=20 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.55** | **65** | P | | **P** | **15 15 36.1** | **-0.1** |
| **PEA0B** | **Petropavlovsk-** | **27.48** | **278** | P | | **P** | **15 17 04.3** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **27.48** | **278** | P | | **P** | **15 17 03.5** | **-0.6** |
| | comp=E,0.6nm,0.4s,baz=70,slow=12,SNR=11 | | | | | | | |
| **KSRS** | **Korea Array** | **53.22** | **283** | P | | **P** | **15 20 36.4** | **+1.1** |
| | comp=E,2.2nm,0.4s,baz=38,slow=7.1,SNR=22 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **53.25** | **283** | P | | **P** | **15 20 35.8** | **+0.3** |
| **ULN** | **Ulaanbaatar** | **54.62** | **306** | P | | **P** | **15 20 46.4** | **+0.8** |
| ULN | | | | IAmb | | IAmb | 15 22 39.3 | |
| | comp=Z,11nm,1.9s | | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **306** | P | | **P** | **15 20 48.8** | **+1.2** |
| | comp=Z,1.2nm,0.5s,baz=46,slow=5.7,SNR=18 | | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **306** | P | | **P** | **15 20 48.6** | **+1.0** |
| **BJT** | **Baijiatuan** | **56.84** | **293** | P | | **P** | **15 21 01.4** | **+0.1** |
| BJT | | | | IAmb | | IAmb | 15 21 19.2 | |
| | comp=Z,9.1nm,1.6s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.55** | **324** | P | | **P** | **15 21 06.6** | **+0.5** |
| ZAA0 | | | | IAmb | | IAmb | 15 21 07.0 | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.55** | **324** | P | | **P** | **15 21 06.3** | **+0.3** |
| | comp=Z,3.9nm,0.4s,baz=35,slow=7.0,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.55** | **324** | P | | **P** | **15 21 06.1** | **+0.1** |
| **KURK** | **Kurchatov** | **62.21** | **326** | P | | **P** | **15 21 37.9** | **0.0** |
| KURK | | | | IAmb | | IAmb | 15 23 21.8 | |
| | comp=Z,7.4nm,1.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **64.60** | **321** | P | | **P** | **15 21 53.4** | **-0.4** |
| MK31 | | | | IAmb | | IAmb | 15 22 43.9 | |
| | comp=Z,5.5nm,1.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.60** | **321** | P | | **P** | **15 21 53.5** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=42,slow=7.6,SNR=11 | | | | | | | |
| **MAKZ** | **Makanchi** | **64.69** | **322** | P | | **P** | **15 21 54.4** | **0.0** |
| MAKZ | | | | IAmb | | IAmb | 15 23 49.5 | |
| | comp=Z,6.3nm,1.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.06** | **337** | P | | **P** | **15 22 15.0** | **-0.8** |
| **PRVC** | **Isla de Provid** | **69.31** | **99** | P | | **P** | **15 22 23.7** | **-0.3** |

*IDC **08** 15:19:41.5±1.1,8˚.49S×115˚.47E,h0km,mb3.9/9, mb1 4.1/12,mb1mx3.8/52,mbtmp4.0/12,ML4.3/3,MS3.0/2, Ms1 3.0/2,ms1mx2.6/76,Error ellipse: s-maj=36.9km s-min=15.8km az=52.0*

*NEIC **08** 15:19:45.8±1.9,8˚.4S±0˚.1×115˚.62E±0˚.04,h18km±4km, mb4.1/13,Error ellipse: s-maj=15.6km s-min=5.4km az=178.0*

*DJA **08** 15:19:46.1±0.2,8˚.S±

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 23.14 | 133 | P | | P | 15 24 50.6 | -0.4 |
| QIS | Mount Isa | 26.10 | 120 | P | | P | 15 25 17.6 | -0.9 |
| OOD | Oodnadatta | 27.01 | 138 | P | | P | 15 25 27.1 | +0.5 |
| MULG | Mulgathing | 27.75 | 144 | P | | P | 15 25 33.0 | -0.2 |
| INKA | Innaminka | 30.52 | 132 | P | | P | 15 25 58.4 | +0.6 |
| BBOO | Buckleboo | 30.76 | 145 | P | | P | 15 25 59.9 | 0.0 |
| HTT | Hallett | 32.88 | 143 | P | | P | 15 26 18.9 | +0.3 |
| STKA | Stephens Creek | 33.56 | 138 | P | | P | 15 26 24.2 | -0.2 |
| | comp=Z,1.8nm,0.6s,baz=312,slow=8.1,SNR=8.5 | | | | | | | |
| STKA | Stephens Creek | 33.56 | 138 | P | | P | 15 26 25.1 | +0.6 |
| STKA | Stephens Creek | 33.56 | 138 | P | | P | 15 26 25.7 | +1.2 |
| ARPS | Mount Arapiles | 36.91 | 144 | P | | P | 15 26 54.7 | +1.4 |
| CAN | Canberra | 40.58 | 136 | P | | P | 15 27 25.2 | +1.1 |
| KSRS | Korea Array | 47.06 | 13 | P | | P | 15 28 15.6 | -0.4 |
| | comp=Z,1.4nm,0.9s,baz=199,slow=11,SNR=3.2 | | | | | | | |
| HHC | Hu-ho-hao-te | 49.17 | 356 | *e*P | | P | 15 28 35.9 | +3.4 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,270nm,7.1s | | | | | | | |
| MJAR | Matsushiro Arr | 49.49 | 24 | P | | P | 15 28 35.4 | +0.5 |
| | comp=Z,1.4nm,0.6s,baz=216,slow=6.0,SNR=3.2 | | | | | | | |
| SONM | Songino Array | 56.61 | 353 | P | | P | 15 29 27.1 | -0.2 |
| | comp=Z,0.9nm,0.7s,baz=165,slow=7.2,SNR=9.3 | | | | | | | |
| SONM | Songino Array | 56.61 | 353 | P | | P | 15 29 27.9 | +0.6 |
| SONM | | | | IAmb | | IAmb | 15 29 28.9 | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| WMQ | Urumqi | 57.85 | 336 | *e*P | | P | 15 29 37.8 | +1.8 |
| KSH | Kashi | 60.21 | 325 | P | | P | 15 29 52.0 | -0.6 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| NNZ | Nelson | 60.40 | 133 | P | | P | 15 29 53.7 | -0.1 |
| BKZ | Black Stump Fm | 62.21 | 130 | P | | P | 15 30 07.2 | +1.0 |
| MK31 | Makanchi Array | 62.48 | 335 | P | | P | 15 30 07.2 | -0.5 |
| MK31 | | | | IAmb | | IAmb | 15 30 14.3 | |
| | comp=Z,2.5nm,1.4s | | | | | | | |
| MKAR | Makanchi Array | 62.48 | 335 | P | | P | 15 30 06.6 | -1.1 |
| | comp=Z,0.5nm,0.5s,baz=148,slow=7.2,SNR=13 | | | | | | | |
| MKAR | Makanchi Array | 62.48 | 335 | P | | P | 15 30 07.1 | -0.6 |
| MAKZ | Makanchi | 62.62 | 335 | P | | P | 15 30 08.8 | +0.2 |
| KURBB | Kurchatov Arra | 67.02 | 335 | P | | P | 15 30 36.1 | -1.1 |
| | comp=Z,0.1nm,0.6s,baz=141,slow=4.7,SNR=2.2 | | | | | | | |
| BRTR | Keskin Array B | 89.23 | 310 | P | | P | 15 32 38.1 | -2.5 |
| | comp=Z,0.4nm,0.6s,baz=74,slow=4.5,SNR=3.8 | | | | | | | |

*MAN* ***08*** *15:25:10.7,5.74N×126.67E,h75km,mb5.5,ML4.4,MS4.7*
*IDC* ***08*** *15:25:14.7±1.0,5.96N×126.52E,h104km±7km,mb4.0/25, mb1 4.1/27,mb1mx3.9/57,mbtmp4.4/27,MS3.0/8, Ms1 3.1/8,ms1mx2.8/79,Error ellipse: s-maj=18.4km s-min=7.9km az=72.0*
*NEIC* ***08*** *15:25:14.7±1.7,5.96N±0.07×126.5E±0.1,h97km±6km, mb4.5/45,Error ellipse: s-maj=16.1km s-min=8.8km az=67.0*
*DJA* ***08*** *15:25:15.1±0.4,6.7N±3.3×12.7E±°,h93km±4km,M4.7/34, mB5.1/16,mb4.9/34,MLv5.1/11,Mw(mB)4.5/16*
**ISC 08 15:25:14.0±0.5,5.96N±0.03×126.53E±0.06,h93km±4km, n190,σ1°37/198,mb4.5/51,25C-13D,Fault plane solution: NP1:**ϕ±332.81171°,δ76.89043°,λ21.63680°. **NP2:**ϕ±237.67062°,δ68.95433°,λ165.93485°. **Principal axes:** T Plg24.4760°, Azm196.5767°; N Plg64.8656°, Azm2.5724°; P Plg5.3678°, Azm104.1252°; **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MATI | Mati | 1.01 | 344 | ⇓*i*P | Pn | 15 25 33.8 | -0.3 |
| MATI | | | | *e*S | Sn | 15 25 50.8 | +1.6 |
| DAV | Davao City (W) | 1.45 | 319 | P | Pn | 15 25 40.4 | +1.1 |
| | 506nm,0.3s,baz=97,slow=2.0,SNR=42 | | | | | | |
| DAV | | | | S | Sn | 15 26 00.2 | +1.8 |
| | 540nm,0.3s,baz=274,slow=21,SNR=12 | | | | | | |
| DAV | Davao City (W) | 1.45 | 319 | Pn | Pn | 15 25 40.1 | +0.8 |
| DAV | Davao City (W) | 1.45 | 319 | P | Pn | 15 25 41.1 | +1.8 |
| GSPH | General Santos | 1.58 | 275 | ⇓*e*P | Pn | 15 25 39.1 | -1.9 |
| GSPH | | | | *e*S | Sn | 15 25 58.6 | -2.9 |
| KCP | Kidapawan | 1.77 | 306 | ⇓*i*P | Pn | 15 25 43.6 | +0.2 |
| KCP | | | | *i* S | Sn | 15 26 06.0 | +0.2 |
| BIPH | Bislig | 2.21 | 356 | ⇑*i*P | Pn | 15 25 48.1 | -1.1 |
| BIPH | | | | *i* S | Sn | 15 26 17.5 | +1.5 |
| SGSI | Sangihe | 2.47 | 204 | P | Pn | 15 25 54.8 | +2.2 |
| SGSI | | | | S | Sn | 15 26 25.6 | +3.5 |
| CTBH | Cotabato--PC H | 2.59 | 299 | ⇓*i*P | Pn | 15 25 54.1 | -0.1 |
| CTBH | | | | *i* S | Sn | 15 26 28.3 | +3.3 |
| PAGZ | Pagadian | 3.65 | 301 | ⇑*e*P | Pn | 15 26 09.3 | +1.0 |
| GLSP | General Luna, | 3.82 | 354 | ⇑*e*P | Pn | 15 26 11.9 | +1.3 |
| GLSP | | | | *e*S | Sn | 15 27 00.8 | +6.3 |
| MSLP | Maasin | 4.46 | 338 | ⇑*e*P | Pn | 15 26 19.9 | +0.5 |
| ZCP | Zamboanga City | 4.53 | 283 | ⇓*i*P | Pn | 15 26 20.9 | +0.6 |
| ZCP | | | | *i* S | Sn | 15 27 13.7 | +1.8 |
| TBP | Tagbilaran | 4.55 | 325 | ⇓*e*P | Pn | 15 26 20.6 | 0.0 |
| TBP | | | | *i* S | Sn | 15 27 12.2 | -0.1 |
| SNPH | Sibulan | 4.69 | 316 | *e*P | Pn | 15 26 24.5 | +2.1 |
| LLP | Lapu-Lapu | 5.02 | 330 | ⇓*e*P | Pn | 15 26 27.1 | +0.2 |
| LLP | | | | *e*S | Sn | 15 27 24.9 | +1.3 |
| TNTI | Ternate | 5.22 | 171 | P | Pn | 15 26 30.6 | +0.9 |
| | 0.6nm2μm156nm,0.8s | | | | | | |
| TNTI | | | | S | Sn | 15 27 29.7 | +1.0 |
| | 0.6nm2μm156nm,0.8s | | | | | | |
| TNTI | Ternate | 5.22 | 171 | Pn | Pn | 15 26 30.2 | +0.5 |
| TNTI | Ternate | 5.22 | 171 | P | Pn | 15 26 31.0 | +1.3 |
| CNOP | Candoni, Negro | 5.44 | 315 | ⇑*i*P | Pn | 15 26 34.3 | +1.7 |
| BESP | Borongan | 5.71 | 349 | ⇓*i*P | Pn | 15 26 34.8 | -1.4 |
| KMSI | Cibinong | 5.93 | 206 | P | Pn | 15 26 41.6 | +2.3 |
| | 1.4nm2μm251nm,0.6s | | | | | | |
| GTOI | Gorontalo | 6.35 | 214 | P | Pn | 15 26 46.0 | +0.9 |
| | 0.8nm2μm233nm,0.6s | | | | | | |
| JAP | San Jose, Anti | 6.57 | 317 | ⇑*e*P | Pn | 15 26 58.3 | +10 |
| LBMI | Labuha | 6.63 | 172 | P | Pn | 15 26 50.8 | +2.0 |
| | 0.7nm1μm66nm,0.5s | | | | | | |
| MRSI | Marisa | 7.12 | 220 | P | Pn | 15 26 57.7 | +2.2 |
| | 0.9nm3μm289nm,0.7s | | | | | | |
| TOLI2 | Tolitoli | 7.49 | 230 | Pn | Pn | 15 27 00.4 | -0.2 |
| TOLI2 | Tolitoli | 7.49 | 230 | P | Pn | 15 27 00.9 | +0.3 |
| SANI | Sanana | 7.98 | 184 | P | Pn | 15 27 05.4 | -1.8 |
| MYLDM | Lahad Datu | 8.03 | 265 | Pn | Pn | 15 27 10.3 | +2.3 |
| SWI | Sorong | 8.26 | 145 | P | Pn | 15 27 12.2 | +1.1 |
| | 48nm,0.5s | | | | | | |
| SIJI | Sorong | 8.27 | 145 | P | Pn | 15 27 10.8 | -0.4 |
| | 7.5nm,0.3s,baz=337,slow=16,SNR=24 | | | | | | |
| SIJI | | | | LR | LR | 15 30 55.6 | |
| | comp=Z,94nm,18.5s,baz=147,slow=41 | | | | | | |
| APSI | Ampana | 8.39 | 216 | P | Pn | 15 27 15.0 | +2.1 |
| | 1μm105nm,1.2s | | | | | | |
| LQP | Lukban | 9.47 | 329 | ⇓*e*P | Pn | 15 27 29.0 | +1.2 |
| KKM | Kota Kinabalu | 10.26 | 271 | P | Pn | 15 27 40.7 | +2.2 |
| FAKI | Fak Fak | 10.51 | 147 | Pn | Pn | 15 27 41.3 | -0.4 |
| FAKI | Fak Fak | 10.51 | 147 | P | Pn | 15 27 42.1 | +0.4 |
| TTSI | Tana Toraja | 11.18 | 217 | P | Pn | 15 27 54.1 | +3.2 |
| | 2μm210nm,1.1s | | | | | | |
| BAKI | Biak | 11.91 | 126 | P | Pn | 15 28 02.2 | +1.5 |
| | 71nm,1.1s | | | | | | |
| SPSI | Sidrap Palu | 11.95 | 215 | P | Pn | 15 28 02.6 | +1.4 |
| | 32nm,0.8s | | | | | | |
| BNSI | Bone | 12.13 | 212 | P | Pn | 15 28 06.4 | +2.8 |
| | 51nm,0.8s | | | | | | |
| KAPI | Kappang | 12.84 | 212 | P | Pn | 15 28 12.8 | -0.2 |
| | 2.5nm,0.3s,baz=46,slow=9.1,SNR=27 | | | | | | |
| KAPI | Kappang | 12.84 | 212 | Pn | Pn | 15 28 13.2 | +0.2 |
| BKSI | Bulukumba | 12.91 | 210 | P | Pn | 15 28 14.5 | +0.5 |
| | 19nm,0.8s | | | | | | |
| BSSI | Bau Bau, Buton | 13.45 | 207 | P | P | 15 28 24.8 | -2.3 |
| | 38nm,1.0s | | | | | | |
| MTKI | Muara Teweh, K | 13.49 | 240 | P | Pn | 15 28 24.5 | +2.8 |
| | 4μm28nm,0.6s | | | | | | |
| KBKI | Kotabaru | 13.85 | 229 | P | P | 15 28 30.2 | -1.3 |
| | 40nm,0.9s | | | | | | |
| SBUM | Sibu | 14.69 | 257 | | P | 15 28 41.0 | +0.1 |
| BBKI | Banjar Baru | 14.97 | 232 | P | P | 15 28 44.3 | +0.4 |
| | 1μm24nm,0.8s | | | | | | |
| MMRI | Maumere | 15.12 | 196 | P | P | 15 28 45.4 | -0.2 |
| | 2μm45nm,0.6s | | | | | | |
| MMRI | Maumere | 15.12 | 196 | | P | 15 28 47.0 | +1.4 |
| MMRI | | | | IAmb | IAmb | 15 28 52.1 | |
| | comp=Z,36nm,0.7s | | | | | | |
| SOEI | Soe | 15.78 | 188 | P | P | 15 28 53.4 | +0.4 |
| | comp=Z,70nm,0.7s | | | | | | |
| SOEI | Soe | 15.78 | 188 | | P | 15 28 53.2 | +0.2 |
| SOEI | Soe | 15.78 | 188 | P | P | 15 28 53.4 | +0.4 |
| BATI | Baumata | 16.32 | 190 | P | Pn | 15 28 58.3 | +0.7 |
| | comp=Z,16nm,0.3s,baz=358,slow=2.1,SNR=27 | | | | | | |
| BATI | Baumata | 16.32 | 190 | P | P | 15 28 59.3 | +0.4 |
| | comp=Z,941nmcomp=Z,102nm,0.6s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JAY | Jayapura | 16.47 | 120 | LR | | LR | 15 34 49.9 | |
| | comp=Z,50nm,21.4s,baz=350,slow=35 | | | | | | | |
| KSM | Kuching | 16.79 | 255 | | | P | 15 29 05.3 | +1.2 |
| KSM | | | | IAmb | | IAmb | 15 29 23.4 | |
| | comp=Z,68nm,1.5s | | | | | | | |
| KSM | Kuching | 16.79 | 255 | P | | P | 15 29 05.6 | +1.4 |
| WBSI | Waikabubak, Su | 17.06 | 205 | P | | P | 15 29 07.3 | +0.2 |
| | comp=Z,58nm,0.7s | | | | | | | |
| PBKI | Pangkalan Bun | 17.16 | 240 | P | | P | 15 29 09.1 | +0.8 |
| | comp=Z,89nm,0.9s | | | | | | | |
| SRBI | Singaraja | 17.95 | 219 | P | | Pn | 15 29 17.6 | 0.0 |
| | comp=Z,31nm,0.7s | | | | | | | |
| KMMI | Kalianget | 18.01 | 224 | P | | Pn | 15 29 19.4 | +1.1 |
| | comp=Z,48nm,1.1s | | | | | | | |
| TPUB | Ta-pu | 18.15 | 342 | | | P | 15 29 19.0 | -0.1 |
| TPUB | | | | IAmb | | IAmb | 15 29 30.3 | |
| | comp=Z,49nm,1.5s | | | | | | | |
| ABJI | Asem Bagus | 18.37 | 222 | P | | Pn | 15 29 24.7 | +2.1 |
| | comp=Z,37nm,0.8s | | | | | | | |
| DNP | Denpasar | 18.41 | 218 | P | | Pn | 15 29 24.4 | +1.3 |
| | comp=Z,11μmcomp=Z,153nm,0.9s | | | | | | | |
| DRS | Darwin Rock St | 18.78 | 167 | P | | Pn | 15 29 26.9 | -0.6 |
| JAGI | Jajag, Banyuwa | 18.92 | 221 | P | | P | 15 29 28.1 | +0.5 |
| | comp=Z,24nm,0.5s | | | | | | | |
| JAGI | Jajag, Banyuwa | 18.92 | 221 | P | | P | 15 29 27.6 | 0.0 |
| JAGI | | | | IAmb | | IAmb | 15 29 29.5 | |
| | comp=Z,35nm,1.1s | | | | | | | |
| JAGI | Jajag, Banyuwa | 18.92 | 221 | P | | P | 15 29 28.2 | +0.6 |
| MTN | Manton Dam | 19.23 | 166 | P | | Pn | 15 29 32.7 | -0.2 |
| GMJI | Gumulas | 19.25 | 223 | P | | P | 15 29 31.8 | +0.7 |
| | comp=Z,718nmcomp=Z,28nm,0.9s | | | | | | | |
| YHNB | Yeheng | 19.25 | 346 | P | | P | 15 29 31.0 | -0.2 |
| YHNB | | | | IAmb | | IAmb | 15 29 41.0 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| KDU | Kakadu | 19.45 | 162 | P | | Pn | 15 29 34.6 | -0.8 |
| GUMO | Guam | 19.58 | 66 | LR | | LR | 15 37 57.4 | |
| | comp=Z,23nm,18.7s,baz=104,slow=39 | | | | | | | |
| KNMB | Chin-men Tao | 19.99 | 338 | P | | P | 15 29 39.7 | +0.6 |
| KNMB | | | | IAmb | | IAmb | 15 29 51.9 | |
| | comp=Z,38nm,1.4s | | | | | | | |
| JOW | Kunigami | 20.82 | 4 | LR | | LR | 15 39 58.9 | |
| | comp=Z,48nm,18.0s,baz=214,slow=42 | | | | | | | |
| UGM | Wanagama | 21.09 | 229 | P | | P | 15 29 50.5 | -0.6 |
| UGM | Wanagama | 21.09 | 229 | P | | P | 15 29 52.3 | +1.1 |
| KNRA | Kununurra | 21.61 | 174 | P | | P | 15 29 57.4 | +0.8 |
| LEM | Lembang | 22.75 | 236 | P | | P | 15 30 08.4 | -0.5 |
| | comp=Z,19nm,0.5s,baz=122,slow=8.9,SNR=7.5 | | | | | | | |
| LEM | | | | LR | | LR | 15 41 37.9 | |
| | comp=Z,48nm,18.5s,baz=278,slow=43 | | | | | | | |
| FITZ | Fitzroy Crossi | 23.92 | 182 | P | | P | 15 30 19.1 | -0.4 |
| | comp=Z,15nm,0.8s,baz=12,slow=7.0,SNR=26 | | | | | | | |
| PMG | Port Moresby | 25.61 | 126 | LR | | LR | 15 41 52.1 | |
| | comp=Z,50nm,21.1s,baz=352,slow=39 | | | | | | | |
| XMIS | Christmas Isla | 26.44 | 232 | P | | P | 15 30 42.8 | +0.4 |
| | comp=Z,37nm,1.6s | | | | | | | |
| WB0 | Warramunga Arr | 26.71 | 163 | P | | P | 15 30 44.2 | -0.5 |
| WB0 | | | | IAmb | | IAmb | 15 30 52.0 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 26.86 | 164 | P | | P | 15 30 44.7 | -1.3 |
| WRAB | | | | IAmb | | IAmb | 15 30 53.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| WRAB | Tennant Creek | 26.86 | 164 | P | | P | 15 30 46.2 | +0.1 |
| WRA | Warramunga Arr | 26.86 | 164 | P | | P | 15 30 46.1 | 0.0 |
| | comp=Z,3.4nm,0.6s,baz=330,slow=12,SNR=21 | | | | | | | |
| WRA | Warramunga Arr | 26.86 | 164 | P | | P | 15 30 45.4 | -0.7 |
| WB2 | Warramunga Arr | 26.87 | 164 | P | | P | 15 30 45.9 | -0.2 |
| WB2 | | | | IAmb | | IAmb | 15 30 53.9 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| NJ2 | Nanjing | 26.93 | 345 | *e*P | | P | 15 30 48.2 | +1.6 |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| WR0 | Warramunga Arr | 26.94 | 163 | P | | P | 15 30 47.3 | +0.5 |
| WR0 | | | | IAmb | | IAmb | 15 30 54.2 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| MBWA | Marble Bar | 27.77 | 194 | P | | P | 15 30 53.4 | -0.8 |
| MBWA | | | | IAmb | | IAmb | 15 30 58.0 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| MBWA | Marble Bar | 27.77 | 194 | P | | P | 15 30 53.8 | -0.3 |
| PSA00 | Pilbara Seismi | 28.14 | 193 | P | | P | 15 30 56.8 | -0.7 |
| PSA00 | | | | IAmb | | IAmb | 15 30 58.3 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| PSA00 | Pilbara Seismi | 28.14 | 193 | P | | P | 15 30 57.4 | -0.1 |
| QIS | Mount Isa | 29.32 | 154 | P | | P | 15 31 08.9 | +0.9 |
| CMAR | Chiang Mai Arr | 29.63 | 297 | P | | P | 15 31 10.6 | -0.3 |
| | comp=Z,1.1nm,0.7s,baz=119,slow=7.8,SNR=9.1 | | | | | | | |
| CMAR | | | | PcP | | PcP | 15 34 13.2 | -0.3 |
| | comp=Z,0.7nm,0.7s,baz=76,slow=1.2,SNR=5.8 | | | | | | | |
| CMAR | | | | ScP | | ScP | 15 37 46.5 | -0.7 |
| | comp=Z,1.6nm,0.9s,baz=126,slow=1.1,SNR=8.5 | | | | | | | |
| CMAR | | | | LR | | LR | 15 44 17.1 | |
| | comp=Z,25nm,18.3s,baz=305,slow=39 | | | | | | | |
| AS31 | Alice Springs | 30.31 | 167 | P | | P | 15 31 16.8 | 0.0 |
| ASAR | Alice Springs | 30.32 | 167 | P | | P | 15 31 16.9 | +0.2 |
| | comp=Z,4.9nm,0.5s,baz=342,slow=7.0,SNR=80 | | | | | | | |
| ASAR | | | | PcP | | PcP | 15 34 14.8 | -0.3 |
| | comp=Z,1.4nm,0.6s,baz=2.1,slow=1.3,SNR=6.1 | | | | | | | |
| ASAR | | | | S | | S | 15 36 08.8 | -1.5 |
| | comp=Z,1.3nm,1.0s,baz=357,slow=19,SNR=5.8 | | | | | | | |
| WRKA | Warakurna | 30.86 | 177 | P | | P | 15 31 22.1 | +0.5 |
| GIRL | Giralia | 30.87 | 203 | P | | P | 15 31 22.4 | +0.8 |
| PZH | PanZhiHua | 31.24 | 314 | P | | P | 15 31 27.4 | +2.3 |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,80nm,6.5s | | | | | | | |
| MJAR | Matsushiro Arr | 32.26 | 18 | LR | | LR | 15 44 36.9 | |
| | comp=Z,41nm,19.6s,baz=359,slow=36 | | | | | | | |
| XAN | Xi'an | 32.36 | 332 | P | | P | 15 31 36.8 | +2.1 |
| XAN | | | | pP | pP | | 15 31 53.6 | -2.4 |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| HNS | HongShan | 33.10 | 343 | ⇑P | | P | 15 31 41.7 | +0.7 |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| MEEK | Meekatharra | 33.30 | 193 | P | | P | 15 31 42.8 | -0.1 |
| OOD | Oodnadatta | 34.70 | 166 | P | | P | 15 31 55.6 | +0.6 |
| BJT | Baijiatuau | 35.17 | 346 | P | | P | 15 31 59.2 | +0.3 |
| BJT | | | | IAmb | | IAmb | 15 32 22.8 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| BJI | Beijing | 35.19 | 346 | P | | P | 15 31 59.6 | +0.6 |
| BJI | | | | pP | | pP | 15 32 18.7 | -1.4 |
| BJI | | | | sP | | sP | 15 32 27.5 | -3.3 |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| INKA | Innaminka | 36.21 | 158 | P | | P | 15 32 08.9 | +1.0 |
| MORW | Morawa | 36.26 | 196 | P | | P | 15 32 08.3 | -0.1 |
| LZH | Lanzhou | 36.50 | 328 | *e*P | | P | 15 32 11.8 | +1.2 |
| LZH | | | | pP | | pP | 15 32 34.7 | +2.6 |
| LZH | | | | sP | | sP | 15 32 46.3 | +3.4 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| FORT | Forrest | 36.56 | 178 | P | | P | 15 32 11.5 | +0.6 |
| MULG | Mulgathing | 36.75 | 169 | P | | P | 15 32 13.4 | +0.9 |
| HHC | Hu-ho-hao-te | 37.23 | 341 | *e*P | | P | 15 32 19.6 | +3.0 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,180nm,6.3s | | | | | | | |
| BLDU | Ballidu | 37.57 | 194 | P | | P | 15 32 19.2 | -0.2 |
| LCRK | Leigh Creek | 37.90 | 163 | P | | P | 15 32 23.0 | +0.8 |
| KLBR | Kellerberrin | 38.27 | 192 | P | | P | 15 32 25.4 | +0.1 |
| SHL | Shillong | 38.43 | 304 | P | | P | 15 32 26.7 | -0.3 |
| SHL | | | | IAmb | | IAmb | 15 32 54.9 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| XLT | XiLinHaoTe | 38.89 | 348 | *e*P | | P | 15 32 31.0 | +0.6 |
| XLT | | | | pP | | pP | 15 32 53.1 | +1.2 |
| XLT | | | | sP | | sP | 15 33 05.8 | +3.3 |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,250nm,5.4s | | | | | | | |
| MUN | Mundaring | 38.99 | 194 | P | | P | 15 32 31.6 | +0.3 |
| BBOO | Buckleboo | 39.61 | 167 | P | | P | 15 32 37.3 | +0.8 |
| NWAO | Narrogin (SRO) | 39.67 | 192 | P | | P | 15 32 37.3 | +0.3 |
| NWAO | Narrogin (SRO) | 39.67 | 192 | P | | P | 15 32 37.7 | +0.7 |
| STKA | Stephens Creek | 40.28 | 160 | P | | P | 15 32 41.1 | -0.9 |
| | comp=Z,7.8nm,0.8s,baz=334,slow=8.6,SNR=12 | | | | | | | |
| STKA | Stephens Creek | 40.28 | 160 | P | | P | 15 32 42.5 | +0.5 |
| STKA | Stephens Creek | 40.28 | 160 | P | | P | 15 32 42.8 | +0.8 |
| NAPP | Napperby | 40.46 | 165 | P | | P | 15 32 44.9 | +1.4 |
| ASAJ | Asahikawa | 40.53 | 18 | P | | P | 15 32 44.0 | 0.0 |
| | comp=Z,5.3nm,0.7s,baz=209,slow=8.2,SNR=7.4 | | | | | | | |
| JKA | Kamikawa-asahi | 40.53 | 18 | P | | P | 15 32 44.0 | 0.0 |
| JKA | Kamikawa-asahi | 40.53 | 18 | IAmb | | IAmb | 15 32 48.4 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HTT | Hallett | 40.90 | 164 | P | | P | 15 32 48.6 | +1.4 |
| GTA | Gaotai | 41.10 | 328 | *e*P | | P | 15 32 52.3 | +3.4 |
| GTA | | | | pP | pP | | 15 33 08.9 | -2.0 |
| GTA | | | | sP | sP | | 15 33 21.0 | -0.6 |
| GTA | | | | PcP | | PcP | 15 34 47.9 | +1.0 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,200nm,5.1s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=N,190nm,15.6s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=E,230nm,15.6s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,270nm,14.5s | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.52 | 67 | T | | T | 16 17 55.5 | |
| | baz=264,slow=75,SNR=6.2 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.53 | 67 | T | | T | 16 18 00.7 | |
| | baz=264,slow=75,SNR=4.5 | | | | | | | |
| CMSA | Cobar Meteorol | 41.53 | 155 | P | | P | 15 32 53.7 | +1.3 |
| H11N3 | WAKE ISLAND Hy | 41.54 | 67 | T | | T | 16 17 55.5 | |
| | baz=264,slow=75,SNR=5.3 | | | | | | | |
| TWOA | Tennyson Woods | 42.33 | 165 | P | | P | 15 33 00.4 | +1.7 |
| ARPS | Mount Arapiles | 44.86 | 163 | P | | P | 15 33 20.4 | +1.4 |
| SONM | Songino Array | 45.14 | 341 | P | | P | 15 33 21.0 | -0.3 |
| | comp=Z,1.0nm,0.7s,baz=151,slow=6.3,SNR=7.7 | | | | | | | |
| WMQ | Urumqi | 50.80 | 324 | *e*P | | P | 15 34 07.1 | +2.1 |
| PETK | Petropavlovsk- | 53.46 | 23 | P | | P | 15 34 24.1 | -0.3 |
| | comp=Z,2.3nm,0.7s,baz=215,slow=7.2,SNR=5.8 | | | | | | | |
| MK31 | Makanchi Array | 55.63 | 324 | P | | P | 15 34 40.1 | -0.2 |
| MKAR | Makanchi Array | 55.63 | 324 | P | | P | 15 34 39.1 | -1.2 |
| | comp=Z,1.9nm,0.7s,baz=125,slow=8.7,SNR=18 | | | | | | | |
| MKAR | Makanchi Array | 55.63 | 324 | P | | P | 15 34 39.0 | -1.3 |
| MAKZ | Makanchi | 55.82 | 324 | P | | P | 15 34 40.4 | -1.2 |
| MAKZ | | | | pP | | pP | 15 35 04.0 | -0.5 |
| MAKZ | | | | IAmb | | IAmb | 15 35 05.8 | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| YAK | Yakutsk | 56.00 | 2 | P | | P | 15 34 42.4 | -0.1 |
| KSH | Kashi | 56.35 | 314 | P | | P | 15 34 45.1 | -0.6 |
| MA2 | Magadan | 56.60 | 14 | P | | P | 15 34 47.4 | +0.5 |
| MA2 | | | | IAmb | | IAmb | 15 34 49.6 | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| ZAA0 | Zalesovo Array | 58.53 | 333 | P | | P | 15 35 00.2 | -0.3 |
| ZAA0 | | | | IAmb | | IAmb | 15 35 05.2 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| ZALV | Zalesovo Beam | 58.53 | 333 | P | | P | 15 34 59.8 | -0.7 |
| | comp=Z,3.7nm,0.8s,baz=115,slow=6.7,SNR=12 | | | | | | | |
| KURBB | Kurchatov Arra | 59.77 | 327 | P | | P | 15 35 08.3 | -0.9 |
| | comp=Z,2.0nm,0.7s,baz=126,slow=6.3,SNR=10 | | | | | | | |
| KURK | Kurchatov | 59.77 | 327 | P | | P | 15 35 06.8 | -2.4 |
| KBL | Kabul | 60.03 | 307 | P | | P | 15 35 10.1 | -1.5 |
| KBL | | | | IAmb | | IAmb | 15 35 11.6 | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| GAR | Garm | 60.29 | 312 | P | | P | 15 35 11.2 | -1.9 |
| CHGR | Chuyangaron | 61.05 | 311 | P | | P | 15 35 16.2 | -2.1 |
| CHGR | | | | IAmb | | IAmb | 15 35 19.9 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| KKAR | Karatay Array | 61.48 | 316 | P | | P | 15 35 18.7 | -2.3 |
| THZ | Tophouse | 63.58 | 143 | P | | P | 15 35 33.9 | -1.1 |
| LTZ | Lake Taylor | 63.82 | 144 | P | | P | 15 35 36.4 | -0.1 |
| KHZ | Kahutara | 64.35 | 143 | P | | P | 15 35 39.6 | -0.2 |
| BVAR | Borovoye Array | 65.36 | 327 | P | | P | 15 35 46.8 | +0.5 |
| | comp=Z,1.3nm,0.6s,baz=88,slow=12,SNR=8.3 | | | | | | | |
| BRVK | Borovoye | 65.43 | 327 | P | | P | 15 35 47.0 | +0.2 |
| BRVK | | | | | | pP | 15 36 10.1 | -0.1 |
| BRVK | | | | IAmb | | IAmb | 15 36 11.2 | |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| TIXI | Tiksi | 65.63 | 1 | P | | P | 15 35 47.2 | -0.5 |
| WSAR | Wadi Sarin | 67.38 | 293 | P | | P | 15 35 58.5 | -1.3 |
| | comp=Z,3.1nm,0.7s,baz=225,slow=3.6,SNR=4.2 | | | | | | | |
| NRIK | Noril'sk | 68.23 | 346 | P | | P | 15 36 03.0 | -1.2 |
| | comp=Z,2.1nm,0.5s,baz=124,slow=8.3,SNR=5.8 | | | | | | | |
| NRIK | Noril'sk | 68.23 | 346 | P | | P | 15 36 04.8 | +0.5 |
| ABKAR | Akbulak array | 70.31 | 320 | P | | P | 15 36 16.0 | -1.5 |
| ABKAR | Akbulak array | 70.31 | 320 | P | | P | 15 36 15.6 | -1.9 |
| ABKAR | | | | IAmb | | IAmb | 15 36 41.6 | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| AKTO | Aktyubinsk | 71.80 | 321 | P | | P | 15 36 25.5 | -1.0 |
| | comp=Z,1.2nm,0.5s,baz=80,slow=7.1,SNR=4.2 | | | | | | | |
| ARU | Arti | 72.96 | 327 | P | | P | 15 36 31.8 | -1.4 |
| | comp=Z,0.8nm,0.4s,baz=241,slow=5.5,SNR=3.9 | | | | | | | |
| CASY | Casey | 73.00 | 187 | P | | P | 15 36 31.8 | -1.4 |
| RAYN | Ar Rayn | 79.44 | 293 | P | | P | 15 37 08.7 | -2.0 |
| COLD | Coldfoot | 81.93 | 23 | P | | P | 15 37 24.1 | +1.1 |
| H24K | Noodor Dome | 82.79 | 24 | P | | P | 15 37 28.3 | +0.7 |
| H24K | | | | IAmb | | IAmb | 15 37 30.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| ILAR | Eielson Array | 83.19 | 26 | P | | P | 15 37 28.4 | -1.3 |
| | comp=Z,1.4nm,0.9s,baz=234,slow=6.4,

1.7nm,0.6s,baz=183,slow=8.9,SNR=15
**H08S2 Diego Garcia H 30.94 266** T T 16 07 47.4
baz=90,slow=75,SNR=5.2
**H08S3 Diego Garcia H 30.95 266** T T 16 07 48.4
baz=90,slow=75,SNR=7.9
**H08S1 Diego Garcia H 30.96 266** T T 16 07 49.2
baz=90,slow=75,SNR=9.2
**WRA Warramunga Arr 32.60 117** P **P** **15 35 25.6 +0.2**
0.7nm,0.5s,baz=289,slow=9.5,SNR=2.6
**ASAR Alice Springs 33.66 124** P **P** **15 35 34.7 +0.1**
0.6nm,0.7s,baz=311,slow=8.5,SNR=3.1
**SONM Songino Array 54.24 2** P **P** **15 38 19.1 -0.1**
0.4nm,0.8s,baz=187,slow=5.8,SNR=3.3
**MKAR Makanchi Array 56.43 343** P **P** **15 38 34.9 0.0**
0.2nm,0.5s,baz=148,slow=9.2,SNR=5.5
**KURBB Kurchatov Arra 60.98 342** P **P** **15 39 05.5 -0.9**
0.3nm,0.3s,baz=153,slow=6.3,SNR=4.4
**ZALV Zalesovo Beam 62.36 348** P **P** **15 39 15.7 0.0**
0.9nm,0.4s,baz=162,slow=5.4,SNR=4.9
**BVAR Borovoye Array 65.73 339** P **P** **15 39 37.6 -0.2**
1.0nm,0.6s,baz=110,slow=13,SNR=4.7

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*IDC **08** 15:35:42.4±0.8,36.93N×14.97E,h0km,mb4.1/17, mb1 4.2/29,mb1mx4.0/60,mbtmp4.1/29,ML4.1/11,MS3.6/7, Ms1 3.6/7,ms1mx3.2/94,Error ellipse: s-maj=15.9km s-min=7.7km az=34.0*
*PDG **08** 15:35:42.8±0.4,37.04N×14.89E,h25km±1km,ML4.4/13, Error ellipse: s-maj=1.4km s-min=1.0km az=90.0*
*LDG **08** 15:35:42.0±0.3,36.86N×15.02E,h4km,Ml3.6/10,Error ellipse: s-maj=7.4km s-min=4.3km az=15.0*
*MED_RC **08** 15:35:43.0±0.6,36.83N×14.94E,h10km,MW4.5/18, Moment Tensor Solution.Mantle waves: s18,c27; Duration: 1s1 Moment tensor: Scale 10^15Nm; Mrr0.10±.28; Mθθ-1.83±.19; Mϕϕ 1.73±.34; Mrθ0.17±.52; Mθϕ-3.53±.17; Mϕr4.55±.74; Best double couple: M○5.98000×10^15 NP1:ϕs12.00000°,δ88.00000°, λ49.00000°. NP2:ϕs280.00000°,δ42.00000°,λ178.00000°. Principal axes: T 6.4200, Plg33.0000°, Azm248.0000°; N -0.8700, Plg41.0000°, Azm13.0000°; P -5.5500, Plg31.0000°, Azm135.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*
*MOS **08** 15:35:43.9±0.9,37.12N×14.94E,h12km,mb4.6/20 Error ellipse: s-maj=10.4km s-min=4.8km az=59.5*
*NEIC **08** 15:35:43.7±2.1,37.02N±0.07×14.88E±0.06,h10km±1km, mb4.5/34,ML4.6(ROM),Error ellipse: s-maj=11.6km s-min=7.0km az=195.0*
*ROM **08** 15:35:43.4±0.1,36.975N±0.008×14.868E±0.008, h7km,ML4.6/52,Mw4.2,Error ellipse: s-maj=0.8km s-min=0.6km az=176.0,Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr-0.06; Mθθ-1.00; Mϕϕ 1.06; Mrθ0.50; Mθϕ-2.37; Mϕr0.22; Fault plane solution: M○2.64444×10^15 NP1:ϕs282.00000°,δ83.00000°, λ-170.00000°. NP2:ϕs191.00000°,δ80.00000°, λ-7.00000°.*
*GII **08** 15:35:57.4±0.0,36.67N×17.01E,h5km,mb4.8/1,MD4.7/1, Mm5.2/2*

**ISC 08 15:35:43.5±0.7,37.01N±0.02×14.86E±0.02,h10km±4km, n369,σ1§67/409,mb4.6/61,MS3.9/6,53C-32D,Sicily**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **HMDC** | **Modica** | **0.08** | **233** | ⇑P | | **Pg** | | **15 35 45.4** | **-0.5** |
| HMDC | | | | S | | **Sg** | | **15 35 46.6** | **-1.0** |
| **MEU** | **Monte Lauro** | **0.11** | **30** | ⇑P | | **Pg** | | **15 35 46.7** | **+0.3** |
| MEU | | | | S | | **Sg** | | **15 35 49.1** | **+0.7** |
| MEU | | | | AML | | AML | | | |
| MEU | | | | AML | | AML | | | |
| MEU | | | | AML | | AML | | | |
| **HVZN** | **Vizzini** | **0.21** | **326** | ⇓P | | **Pg** | | **15 35 47.8** | **0.0** |
| HVZN | | | | S | | **Sg** | | **15 35 51.6** | **+0.7** |
| **HAVL** | **Avola** | **0.22** | **102** | ⇑P | | **Pg** | | **15 35 48.8** | **+0.7** |
| HAVL | | | | S | | **Sg** | | **15 35 52.4** | **+1.3** |
| **SSY** | **Sortino** | **0.23** | **49** | ⇑P | | **Pb** | | **15 35 49.3** | **-0.5** |
| SSY | | | | S | | **Sg** | | **15 35 54.2** | **+2.9** |
| SSY | | | | AML | | AML | | | |
| SSY | | | | AML | | AML | | | |
| **HLNI** | **Lentini** | **0.34** | **2** | P | | **Pg** | | **15 35 50.6** | **+0.3** |
| HLNI | | | | S | | **Sb** | | **15 35 56.3** | **-0.9** |
| HLNI | | | | AML | | AML | | | |
| | comp=N,58400μm,1.2s | | | | | | | | |
| HLNI | | | | AML | | AML | | | |
| | comp=E,81600μm,1.3s | | | | | | | | |
| **HAGA** | **Augusta** | **0.36** | **40** | ⇑P | | **Pb** | | **15 35 51.6** | **-0.5** |
| HAGA | | | | S | | **Sb** | | **15 35 58.1** | **+0.3** |
| HAGA | | | | AML | | AML | | | |
| HAGA | | | | AML | | AML | | | |
| **HPAC** | **Pachino** | **0.37** | **147** | ⇓P | | **Pg** | | **15 35 50.4** | **-0.3** |
| **AGST** | **Augusta-Monte** | **0.39** | **49** | ⇑P | | **Pb** | | **15 35 51.9** | **-0.5** |
| AGST | | | | S | | **Sb** | | **15 35 58.9** | **+0.5** |
| AGST | | | | AML | | AML | | | |
| | comp=E,94750μm,0.3s | | | | | | | | |
| AGST | | | | AML | | AML | | | |
| | comp=E,94800μm,0.3s | | | | | | | | |
| AGST | | | | AML | | AML | | | |
| | comp=N,95700μm,0.9s | | | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.45** | **299** | ⇓P | | **Pg** | | **15 35 52.7** | **+0.3** |
| **RAFF** | **Raffo Rosso** | **0.45** | **299** | | | **Pg** | | **15 35 52.5** | **+0.2** |
| RAFF | | | | Sg | | **Sg** | | **15 35 59.1** | **+0.8** |
| **VAE** | **Valguarnera** | **0.59** | **323** | Pg | | **Pb** | | **15 35 56.8** | **+0.8** |
| | comp=N,327nm,0.3s,baz=114,slow=2.6,SNR=322 | | | | | | | | |
| VAE | | | | Lg | | Lg | | 15 36 07.8 | |
| | comp=N,1μm,0.3s,baz=162,slow=21,SNR=14 | | | | | | | | |
| **ECNV** | **Catenanuova** | **0.60** | **349** | ⇓P | | **Pb** | | **15 35 56.6** | **+0.5** |
| **ESML** | **S. M. di Licod** | **0.61** | **1** | ⇓P | | **Pb** | | **15 35 56.4** | **+0.1** |
| ESML | | | | S | | **Sb** | | **15 36 06.7** | **+1.7** |
| ESML | | | | AML | | AML | | | |
| | comp=E,69800μm,0.8s | | | | | | | | |
| ESML | | | | AML | | AML | | | |
| | comp=N,54000μm,0.6s | | | | | | | | |
| **CAGR** | **Agira** | **0.68** | **335** | ⇓P | | **Pb** | | **15 35 58.0** | **+0.5** |
| CAGR | | | | AML | | AML | | | |
| | comp=E,78650μm,0.8s | | | | | | | | |
| CAGR | | | | AML | | AML | | | |
| | comp=N,48950μm,0.4s | | | | | | | | |
| **ESLN** | **Serra La Nave** | **0.69** | **8** | P | | **Pb** | | **15 35 58.3** | **+0.5** |
| ESLN | | | | S | | **Sb** | | **15 36 08.9** | **+1.4** |
| ESLN | | | | AML | | AML | | | |
| | comp=N,89200μm,1.1s | | | | | | | | |
| ESLN | | | | AML | | AML | | | |
| **CLTA** | **Licata** | **0.73** | **282** | P | | **Pb** | | **15 35 58.6** | **+0.3** |
| CLTA | | | | AML | | AML | | | |
| CLTA | | | | AML | | AML | | | |
| **GALF** | **Gagliano Caste** | **0.74** | **342** | ⇓P | | **Pb** | | **15 35 59.1** | **+0.5** |
| GALF | | | | AML | | AML | | | |
| | comp=E,84500μm,0.7s | | | | | | | | |
| GALF | | | | AML | | AML | | | |
| | comp=N,62100μm,0.8s | | | | | | | | |
| **EMSG** | **Monte Spagnolo** | **0.82** | **5** | P | | **Pn** | | **15 36 00.7** | **-0.5** |
| EMSG | | | | AML | | AML | | | |
| EMSG | | | | AML | | AML | | | |
| **EPZF** | **Pizzo Felice** | **0.82** | **360** | P | | **Pn** | | **15 36 01.1** | **-0.1** |
| EPZF | | | | AML | | AML | | | |
| EPZF | | | | AML | | AML | | | |
| **RESU** | **Resuttano** | **0.91** | **315** | ⇓P | | **Pn** | | **15 36 02.3** | **0.0** |
| RESU | | | | AML | | AML | | | |
| | comp=N,17700μm,0.5s | | | | | | | | |
| RESU | | | | AML | | AML | | | |
| | comp=E,13050μm,0.4s | | | | | | | | |
| **MNO** | **Monte Soro** | **0.94** | **352** | ⇓P | | **Pn** | | **15 36 02.7** | **-0.2** |
| MNO | | | | AML | | AML | | | |
| MNO | | | | AML | | AML | | | |
| **CMDO** | **Montedoro** | **0.95** | **299** | P | | **Pn** | | **15 36 03.5** | **+0.7** |
| **FAVR** | **Favara** | **0.99** | **286** | P | | **Pn** | | **15 36 03.3** | **-0.1** |
| FAVR | | | | AML | | AML | | | |
| | comp=E,56450μm,0.6s | | | | | | | | |
| FAVR | | | | AML | | AML | | | |
| | comp=N,49600μm,1.2s | | | | | | | | |
| **AIO** | **Antillo** | **1.01** | **17** | ⇑P | | **Pb** | | **15 36 03.3** | **+0.2** |
| AIO | | | | AML | | AML | | | |
| AIO | | | | AML | | AML | | | |
| | comp=N,63350μm,0.3s | | | | | | | | |
| **PETRA** | **Petralia Sopra** | **1.02** | **325** | ⇓P | | **Pb** | | **15 36 03.8** | **+0.5** |
| PETRA | | | | AML | | AML | | | |
| | comp=E,31000μm,0.5s | | | | | | | | |
| PETRA | | | | AML | | AML | | | |
| | comp=N,29350μm,0.4s | | | | | | | | |
| **MUCR** | **Ucria** | **1.04** | **1** | P | | **Pn** | | **15 36 04.4** | **+0.3** |
| MUCR | | | | AML | | AML | | | |
| | comp=N,54100μm,1.1s | | | | | | | | |
| MUCR | | | | AML | | AML | | | |
| | comp=E,73250μm,0.7s | | | | | | | | |
| **NOV** | **Novara** | **1.04** | **12** | ⇑P | | **Pb** | | **15 36 04.0** | **+0.3** |
| NOV | | | | AML | | AML | | | |
| NOV | | | | AML | | AML | | | |
| | comp=N,88700μm,0.7s | | | | | | | | |
| **MSFR** | **San Fratello** | **1.05** | **348** | ⇓P | | **Pn** | | **15 36 04.2** | **-0.1** |
| MSFR | | | | AML | | AML | | | |
| | comp=E,26150μm,0.9s | | | | | | | | |
| MSFR | | | | AML | | AML | | | |
| | comp=N,31900μm,0.5s | | | | | | | | |
| **MCSR** | **Castroreale** | **1.10** | **16** | ⇑P | | **Pb** | | **15 36 04.5** | **-0.2** |
| MCSR | | | | AML | | AML | | | |
| MCSR | | | | AML | | AML | | | |
| **CSLB** | **Castelbuono** | **1.13** | **326** | ⇓P | | **Pb** | | **15 36 05.1** | **0.0** |
| CSLB | | | | AML | | AML | | | |
| | comp=N,17500μm,0.7s | | | | | | | | |
| CSLB | | | | AML | | AML | | | |
| | comp=E,13850μm,0.6s | | | | | | | | |
| **PLLN** | **Pollina** | **1.14** | **330** | ⇓P | | **Pn** | | **15 36 05.7** | **+0.2** |
| PLLN | | | | AML | | AML | | | |
| | comp=E,64600μm,0.7s | | | | | | | | |
| PLLN | | | | AML | | AML | | | |
| | comp=N,88900μm,0.8s | | | | | | | | |
| **ALJA** | **Alia** | **1.15** | **310** | ⇓P | | **Pn** | | **15 36 06.4** | **+0.7** |
| ALJA | | | | AML | | AML | | | |
| | comp=E,16600μm,0.5s | | | | | | | | |
| ALJA | | | | AML | | AML | | | |
| | comp=N,20800μm,0.6s | | | | | | | | |
| **MCT** | **Mte Cammarata** | **1.16** | **303** | P | | **Pn** | | **15 36 07.0** | **+1.0** |
| MCT | | | | AML | | AML | | | |
| | comp=E,19250μm,1.2s | | | | | | | | |
| MCT | | | | AML | | AML | | | |
| | comp=N,20200μm,0.6s | | | | | | | | |
| **GIB** | **Gibilmanna** | **1.19** | **326** | ⇓P | | **Pb** | | **15 36 06.2** | **+0.1** |
| GIB | | | | AML | | AML | | | |
| | comp=E,46750μm,1.4s | | | | | | | | |
| GIB | | | | AML | | AML | | | |
| | comp=N,53950μm,0.5s | | | | | | | | |
| **MTTG** | **Motta San Giov** | **1.20** | **33** | ⇑P | | **Pb** | | **15 36 06.2** | **0.0** |
| MTTG | | | | AML | | AML | | | |
| | comp=N,21550μm,0.5s | | | | | | | | |
| MTTG | | | | AML | | AML | | | |
| | comp=E,18900μm,0.6s | | | | | | | | |
| **WDD** | **Wied Dalam** | **1.20** | **193** | P | | **Pb** | | **15 36 05.0** | **-1.2** |
| **MPNC** | **Port Mandanici** | **1.20** | **19** | ⇑P | | **Pn** | | **15 36 06.3** | **0.0** |
| MPNC | | | | AML | | AML | | | |
| | comp=E,85750μm,0.5s | | | | | | | | |
| MPNC | | | | AML | | AML | | | |
| | comp=N,71750μm,0.8s | | | | | | | | |
| **MILZ** | **Milazzo** | **1.30** | **13** | ⇑P | | **Pn** | | **15 36 07.6** | **0.0** |
| MILZ | | | | S | | **Sg** | | **15 36 26.6** | **+1.3** |
| MILZ | | | | AML | | AML | | | |
| | comp=E,47350μm,1.3s | | | | | | | | |
| MILZ | | | | AML | | AML | | | |
| | comp=N,40000μm,1.0s | | | | | | | | |
| **MSRU** | **Castanea** | **1.36** | **22** | ⇑P | | **Pn** | | **15 36 08.8** | **+0.3** |
| MSRU | | | | S | | **Sg** | | **15 36 28.9** | **+1.8** |
| MSRU | | | | AML | | AML | | | |
| | comp=N,34300μm,0.4s | | | | | | | | |
| MSRU | | | | AML | | AML | | | |
| | comp=E,36600μm,0.4s | | | | | | | | |
| **VPL** | **Vulcano Piano** | **1.38** | **4** | P | | **Pn** | | **15 36 08.8** | **+0.1** |
| VPL | | | | AML | | AML | | | |
| VPL | | | | AML | | AML | | | |
| **GMB** | **Gambarie** | **1.39** | **33** | ⇑P | | **Pn** | | **15 36 09.0** | **-0.1** |
| GMB | | | | AML | | AML | | | |
| | comp=E,65850μm,0.4s | | | | | | | | |
| GMB | | | | AML | | AML | | | |
| | comp=N,35700μm,0.3s | | | | | | | | |
| **SOI** | **Samo** | **1.43** | **41** | ⇑P | | **Pn** | | **15 36 09.1** | **-0.3** |
| SOI | | | | AML | | AML | | | |
| | comp=E,5550μm,0.5s | | | | | | | | |
| SOI | | | | AML | | AML | | | |
| | comp=N,5285μm,0.6s | | | | | | | | |
| **MSCL** | **Scilla** | **1.43** | **31** | ⇑P | | **Pn** | | **15 36 09.6** | **0.0** |
| MSCL | | | | AML | | AML | | | |
| | comp=N,21700μm,0.5s | | | | | | | | |
| MSCL | | | | AML | | AML | | | |
| | comp=E,23300μm,0.5s | | | | | | | | |
| **CLTB** | **Caltabellotta** | **1.43** | **294** | P | | **Pb** | | **15 36 10.4** | **+0.1** |
| CLTB | | | | AML | | AML | | | |
| | comp=E,67350μm,0.5s | | | | | | | | |
| CLTB | | | | AML | | AML | | | |
| | comp=N,91800μm,0.7s | | | | | | | | |
| **CLTB** | **Caltabellotta** | **1.43** | **294** | Pn | | **Pn** | | **15 36 08.9** | **-0.6** |
| **LLI** | **Lipari** | **1.44** | **3** | P | | **Pb** | | **15 36 10.8** | **+0.4** |
| **CEL** | **Celeste** | **1.50** | **33** | ⇑P | | **Pn** | | **15 36 10.5** | **0.0** |
| CEL | | | | AML | | AML | | | |
| | comp=E,7030μm,0.4s | | | | | | | | |
| CEL | | | | AML | | AML | | | |
| | comp=N,9430μm,0.5s | | | | | | | | |
| CEL | | | | AML | | AML | | | |
| | comp=N,11550μm,0.5s | | | | | | | | |
| CEL | | | | AML | | AML | | | |
| | comp=E,8455μm,0.4s | | | | | | | | |
| **CEL** | **Celeste** | **1.50** | **33** | | | **Pn** | | **15 36 10.4** | **-0.1** |
| **SOLUN** | **Solunto** | **1.51** | **316** | ⇓P | | **Pb** | | **15 36 11.7** | **+0.1** |
| SOLUN | | | | AML | | AML | | | |
| | comp=N,9545μm,0.9s | | | | | | | | |
| SOLUN | | | | AML | | AML | | | |
| | comp=E,14450μm,1.5s | | | | | | | | |
| **IFIL** | **Filicudi I Eol** | **1.57** | **352** | P | | **Pn** | | **15 36 11.7** | **+0.3** |
| IFIL | | | | AML | | AML | | | |
| IFIL | | | | AML | | AML | | | |
| | comp=N,78850μm,0.6s | | | | | | | | |
| **IACL** | **Alicudi** | **1.58** | **346** | ⇓P | | **Pn** | | **15 36 11.8** | **+0.2** |
| IACL | | | | AML | | AML | | | |
| | comp=N,22700μm,0.5s | | | | | | | | |
| IACL | | | | AML | | AML | | | |
| | comp=E,38150μm,0.5s | | | | | | | | |
| **MMGO** | **Monte Magaggia** | **1.64** | **294** | P | | **Pn** | | **15 36 11.7** | **-0.7** |
| **MPG** | **Monte Pellegri** | **1.66** | **315** | ⇓P | | **Pb** | | **15 36 13.7** | **-0.5** |
| MPG | | | | AML | | AML | | | |
| | comp=N,7525μm,0.6s | | | | | | | | |
| MPG | | | | AML | | AML | | | |
| | comp=E,8345μm,0.7s | | | | | | | | |
| **MFNL** | **Monte Finestre** | **1.73** | **298** | P | | **Pn** | | **15 36 14.5** | **+0.8** |
| **JOPP** | **Joppolo** | **1.79** | **27** | ⇑P | | **Pn** | | **15 36 14.6** | **0.0** |
| JOPP | | | | AML | | AML | | | |
| | comp=E,5340μm,0.4s | | | | | | | | |
| JOPP | | | | AML | | AML | | | |
| | comp=N,5670μm,0.5s | | | | | | | | |
| **ISTR** | **Stromboli Gino** | **1.80** | **8** | ⇑P | | **Pn** | | **15 36 14.7** | **+0.1** |
| **IST3** | **Stromboli F** | **1.81** | **9** | ⇑P | | **Pn** | | **15 36 14.8** | **0.0** |
| **PLAC** | **Placanica** | **1.91** | **40** | ⇑P | | **Pn** | | **15 36 16.2** | **+0.1** |
| PLAC | | | | AML | | AML | | | |
| | comp=N,3950μm,0.6s | | | | | | | | |
| PLAC | | | | AML | | AML | | | |
| | comp=E,4495μm,0.7s | | | | | | | | |
| PLAC | | | | AML | | AML | | | |
| | comp=E,4110μm,0.6s | | | | | | | | |
| PLAC | | | | AML | | AML | | | |
| | comp=N,4510μm,0.7s | | | | | | | | |
| **USI** | **Ustica** | **2.16** | **322** | ⇓P | | **Pn** | | **15 36 19.4** | **-0.2** |
| USI | | | | AML | | AML | | | |
| | comp=N,16800μm,0.4s | | | | | | | | |
| USI | | | | AML | | AML | | | |
| | comp=E,14535μm,0.6s | | | | | | | | |
| **GRI** | **Girifalco** | **2.19** | **34** | P | | **Pn** | | **15 36 20.5** | **+0.5** |
| GRI | | | | AML | | AML | | | |
| | comp=N,3530μm,0.6s | | | | | | | | |
| GRI | | | | AML | | AML | | | |
| | comp=E,2860μm,0.4s | | | | | | | | |
| **SERS** | **Sersale** | **2.49** | **35** | ⇑P | | **Pn** | | **15 36 24.8** | **+0.6** |
| SERS | | | | AML | | AML | | | |
| | comp=N,1520μm,0.6s | | | | | | | | |
| SERS | | | | AML | | AML | | | |
| | comp=N,1320μm,1.4s | | | | | | | | |
| SERS | | | | AML | | AML | | | |
| | comp=E,1530μm,0.6s | | | | | | | | |
| SERS | | | | AML | | AML | | | |
| | comp=E,1425μm,1.4s | | | | | | | | |
| **SPS2** | **Spezzano della** | **2.56** | **27** | P | | **Pn** | | **15 36 25.6** | **+0.5** |
| SPS2 | | | | AML | | AML | | | |
| | comp=E,1200μm,0.9s | | | | | | | | |
| SPS2 | | | | AML | | AML | | | |
| | comp=N,1450μm,0.3s | | | | | | | | |
| **CET2** | **Cetraro** | **2.66** | **19** | ⇑P | | **Pn** | | **15 36 26.6** | **+0.1** |
| CET2 | | | | AML | | AML | | | |
| | comp=E,12650μm,0.5s | | | | | | | | |
| CET2 | | | | AML | | AML | | | |
| | comp=N,10700μm,0.6s | | | | | | | | |
| **CELI** | **Celico** | **2.72** | **28** | P | | **Pn** | | **15 36 28.1** | **+0.8** |
| **T0702** | **Acquaformosa (** | **2.88** | **19** | P | | **Pn** | | **15 36 29.4** | **0.0** |
| **TDS** | **Terranova Siba** | **2.89** | **23** | P | | **Pn** | | **15 36 29.8** | **+0.2** |
| **PIPA** | **Pietrapaola** | **2.92** | **31** | P | | **Pn** | | **15 36 30.9** | **+1.0** |
| PIPA | | | | AML | | AML | | | |
| | comp=N,1530μm,1.0s | | | | | | | | |
| PIPA | | | | AML | | AML | | | |
| | comp=E,2020μm,1.2s | | | | | | | | |
| PIPA | | | | AML | | AML | | | |
| | comp=E,2050μm,1.2s | | | | | | | | |
| PIPA | | | | AML | | AML | | | |
| | comp=N,1545μm,1.0s | | | | | | | | |
| **CUC** | **Castrocucco** | **3.08** | **14** | P | | **Pn** | | **15 36 31.7** | **-0.5** |
| **BULG** | **Bulgheria - Ca** | **3.10** | **7** | P | | **Pn** | | **15 36 32.9** | **+0.4** |
| BULG | | | | AML | | AML | | | |
| | comp=E,983μm,0.6s | | | | | | | | |
| BULG | | | | AML | | AML | | | |
| | comp=E,1026μm,0.6s | | | | | | | | |
| BULG | | | | AML | | AML | | | |
| | comp=N,1475μm,0.5s | | | | | | | | |
| BULG | | | | AML | | AML | | | |
| | comp=N,1445μm,0.5s | | | | | | | | |
| **SALB** | **San Lorenzo Be** | **3.10** | **22** | P | | **Pn** | | **15 36 33.5** | **+1.0** |
| SALB | | | | AML | | AML | | | |
| | comp=E,1180μm,0.9s | | | | | | | | |
| SALB | | | | AML | | AML | | | |
| | comp=E,1235μm,0.9s | | | | | | | | |
| SALB | | | | AML | | AML | | | |
| | comp=N,996μm,0.8s | | | | | | | | |
| SALB | | | | AML | | AML | | | |
| | comp=N,978μm,0.8s | | | | | | | | |
| **MGR** | **Morigerati** | **3.17** | **10** | P | | **Pn** | | **15 36 33.7** | **+0.2** |
| **SIRI** | **Monte Sirino -** | **3.27** | **14** | P | | **Pn** | | **15 36 35.5** | **+0.7** |
| **ORI** | **Oriolo Calabro** | **3.30** | **22** | AML | | AML | | | |
| | comp=N,2305μm,0.6s | | | | | | | | |
| ORI | | | | AML | | AML | | | |
| | comp=E,2415μm,0.5s | | | | | | | | |
| **CMPR** | **Campora** | **3.33** | **6** | P | | **Pn** | | **15 36 36.1** | **+0.5** |
| **SCHR** | **S. Chirico Rap** | **3.33** | **16** | P | | **Pn** | | **15 36 36.5** | **+0.8** |
| **MTSN** | **Montesano sull** | **3.33** | **12** | P | | **Pn** | | **15 36 36.3** | **+0.6** |
| MTSN | | | | AML | | AML | | | |
| | comp=E,1175μm,0.8s | | | | | | | | |
| MTSN | | | | AML | | AML | | | |
| | comp=N,1018μm,0.4s | | | | | | | | |
| **MCEL** | **Monticello** | **3.40** | **12** | P | | **Pn** | | **15 36 37.4** | **+0.8** |
| **SLCN** | **Sala Consilina** | **3.43** | **10** | P | | **Pn** | | **15 36 38.6** | **+1.5** |
| **CDRU** | **Civita di Ruta** | **3.50** | **6** | P | | **Pn** | | **15 36 38.6** | **+0.6** |
| **MRLC** | **Muro Lucano** | **3.78** | **7** | P | | **Pn** | | **15 36 43.6** | **+1.8** |
| **MCRV** | **Calabrutti - M** | **3.78** | **4** | P | | **Pn** | | **15 36 43.0** | **+1.1** |
| **MIGL** | **Miglionico** | **3.80** | **18** | P | | **Pn** | | **15 36 43.8** | **+1.7** |
| **ACER** | **Acerenza** | **3.87** | **12** | P | | **Pn** | | **15 36 45.2** | **+2.1** |
| **LTRZ** | **Laterza** | **3.91** | **22** | P | | **Pn** | | **15 36 43.2** | **-0.3** |
| **MATE** | **Matera** | **3.91** | **21** | ⇑P | | **Pn** | | **15 36 44.8** | **+1.2** |
| MATE | | | | ⇓S | | Sn | | 15 37 17.5 | -12 |
| **MATE** | **Matera** | **3.91** | **21** | P | | **Pn** | | **15 36 43.9** | **+0.3** |
| MATE | | | | AML | | AML | | | |
| | comp=E,422μm,1.5s | | | | | | | | |
| MATE | | | | AML | | AML | | | |
| | comp=N,498μm,0.6s | | | | | | | | |
| **SNAL** | **S. Angelo Dei** | **3.92** | **4** | P | | **Pn** | | **15 36 45.9** | **+2.1** |
| **PALZ** | **Palazzo San Ge** | **4.03** | **12** | P | | **Pn** | | **15 36 46.7** | **+1.5** |
| **PAOL** | **Paolisi** | **4.03** | **357** | | | **Pn** | | **15 36 43.9** | **-1.4** |
| **CAFE** | **Carife** | **4.03** | **4** | P | | **Pn** | | **15 36 47.4** | **+2.1** |
| **AMUR** | **Altamura** | **4.13** | **19** | P | | **Pn** | | **15 36 46.8** | **+0.2** |
| AMUR | | | | AML | | AML | | | |
| | comp=E,708μm,0.9s | | | | | | | | |
| AMUR | | | | AML | | AML | | | |
| | comp=N,394μm,0.7s | | | | | | | | |
| **NOCI** | **Noci** | **4.15** | **24** | P | | **Pn** | | **15 36 46.1** | **-0.8** |
| **SCTE** | **Santa Cesarea** | **4.17** | **42** | P | | **Pn** | | **15 36 45.9** | **-1.2** |
| **SCTE** | **Santa Cesarea** | **4.17** | **42** | Pn | | **Pn** | | **15 36 45.7** | **-1.4** |
| **MRVN** | **Minervino Murg** | **4.18** | **14** | P | | **Pn** | | **15 36 48.0** | **+0.7** |
| **MESG** | **Mesagne** | **4.27** | **32** | P | | **Pn** | | **15 36 47.5** | **-1.0** |
| **LIK** | **San Giovanni I** | **4.61** | **348** | AML | | AML | | | |
| | comp=E,650μm,1.6s | | | | | | | | |
| LIK | | | | AML | | AML | | | |
| | comp=N,700μm,1.6s | | | | | | | | |
| LIK | | | | AML | | AML | | | |
| | comp=N,700μm,1.6s | | | | | | | | |
| **KEST** | **Kesra** | **4.63** | **256** | Pn | | **Pn** | | **15 36 54.0** | **+0.5** |
| | comp=N,5.7nm,0.3s,baz=20,slow=4.4,SNR=47 | | | | | | | | |
| KEST | | | | Sn | | **Sn** | | **15 37 49.4** | **+2.0** |
| | comp=N,7.4nm,0.3s,baz=216,slow=21,SNR=1.9 | | | | | | | | |
| KEST | | | | LR | | LR | | 15 39 12.7 | |
| | comp=N,582nm,19.9s,baz=56,slow=45 | | | | | | | | |
| **KEST** | **Kesra** | **4.63** | **256** | Pn | | **Pn** | | **15 36 52.5** | **-1.0** |
| **MSAG** | **Monte S. Angel** | **4.77** | **9** | P | | **Pn** | | **15 36 56.9** | **+1.4** |
| **SGRT** | **San Giovanni R** | **4.79** | **8** | P | | **Pn** | | **15 36 57.0** | **+1.2** |
| **SGRT** | **San Giovanni R** | **4.79** | **8** | Pn | | **Pn** | | **15 36 55.7** | **0.0** |
| **CGL** | **Cagliari Serpe** | **4.97** | **300** | P | | **Pn** | | **15 36 58.2** | **-0.1** |
| **VSL** | **Villasalto** | **4.98** | **302** | P | | **Pn** | | **15 36 58.2** | **-0.1** |
| **VSL** | **Villasalto** | **4.98** | **302** | Pn | | **Pn** | | **15 36 57.7** | **-0.6** |
| **VLO** | **Vlora** | **5.01** | **45** | | | **Pn** | | **15 36 57.9** | **-0.7** |
| **DGI** | **Dorgali Grotta** | **5.28** | **310** | P | | **Pn** | | **15 37 02.7** | **+0.3** |
| **ITM** | **Ithomi** | **5.65** | **86** | Pn | | **Pn** | | **15 37 06.5** | **-1.1** |
| **TIR** | **Tirane** | **5.82** | **40** | ⇑P | | **Pn** | | **15 37 09.1** | **-0.8** |
| **TIR** | **Tirane** | **5.82** | **40** | ⇑P | | **Pn** | | **15 37 09.1** | **-0.8** |
| **TIR** | **Tirane** | **5.82** | **40** | Pn | | **Pn** | | **15 37 08.0** | **-1.9** |
| **KBN** | **Korca** | **5.87** | **50** | | | **Pn** | | **15 37 09.6** | **-1.0** |
| **LSTV** | **Lastovo** | **5.96** | **15** | *e*Pn | | **Pn** | | **15 37 10.9** | **-0.8** |
| LSTV | | | | Sn | | **Sn** | | **15 38 17.4** | **-2.7** |
| **ULC** | **Ulcinj** | **6.00** | **33** | ⇓*i*Pn | | **Pn** | | **15 37 10.8** | **-1.5** |
| ULC | | | | *i* Sn | | **Sn** | | **15 38 17.2** | **-3.9** |
| **HCY** | **Herceg Novi** | **6.11** | **26** | *e*Pn | | **Pn** | | **15 37 11.2** | **-2.7** |
| **HCY** | **Herceg Novi** | **6.11** | **26** | ⇓*i*Pn | | **Pn** | | **15 37 12.3** | **-1.6** |
| HCY | | | | *i* Sn | | **Sn** | | **15 38 19.8** | **-4.0** |
| **BUM** | **Brajici-Budva** | **6.13** | **29** | *e*Pn | | **Pn** | | **15 37 12.6** | **-1.6** |
| BUM | | | | *e*Sn | | **Sn** | | **15 38 20.3** | **-4.2** |
| **DRME** | **Dracevica, Mon** | **6.16** | **31** | *e*Pn | | **Pn** | | **15 37 12.1** | **-2.4** |
| **DRME** | **Dracevica, Mon** | **6.16** | **31** | ⇑*i*Pn | | **Pn** | | **15 37 13.2** | **-1.3** |
| DRME | | | | *i* Sn | | **Sn** | | **15 38 20.4** | **-4.5** |
| **OHR** | **Ohrid** | **6.18** | **47** | *i* Pn | | **Pn** | | **15 37 13.6** | **-1.2** |
| OHR | | | | *i* Sn | | **Sn** | | **15 38 23.6** | **-1.9** |
| **AGG** | **Agios Georgios** | **6.23** | **69** | Pn | | **Pn** | | **15 37 15.2** | **-0.4** |
| **STON** | **Ston** | **6.25** | **20** | *e*Pn | | **Pn** | | **15 37 14.2** | **-1.5** |
| **STON** | **Ston** | **6.25** | **20** | *e*Pn | | **Pn** | | **15 37 14.5** | **-1.2** |
| STON | | | | Sn | | **Sn** | | **15 38 22.5** | **-4.7** |
| **HVAR** | **Hvar** | **6.28** | **11** | *e*Pn | | **Pn** | | **15 37 16.1** | **-0.1** |
| **CEME** | **Cevo** | **6.36** | **28** | *e*Pn | | **Pn** | | **15 37 15.1** | **-2.1** |
| CEME | | | | *i* Sn | | **Sn** | | **15 38 25.9** | **-4.0** |
| **PDG** | **Podgorica** | **6.39** | **31** | ⇓P | | **Pn** | | **15 37 16.0** | **-1.6** |
| **PDG** | **Podgorica** | **6.39** | **31** | *e*Pn | | **Pn** | | **15 37 15.6** | **-2.0** |
| **PDG** | **Podgorica** | **6.39** | **31** | Pn | | **Pn** | | **15 37 15.5** | **-2.1** |
| **TTG** | **Podgorica** | **6.39** | **31** | ⇑*i*Pn | | **Pn** | | **15 37 16.3** | **-1.3** |
| TTG | | | | *i* Sn | | **Sn** | | **15 38 26.5** | **-4.1** |
| **BRY** | **Bratogost** | **6.53** | **24** | *e*Pn | | **Pn** | | **15 37 17.4** | **-2.3** |
| **BRY** | **Bratogost** | **6.53** | **24** | ⇓*i*Pn | | **Pn** | | **15 37 18.4** | **-1.3** |
| BRY | | | | *i* Sn | | **Sn** | | **15 38 29.8** | **-4.5** |
| **NKME** | **Niksic** | **6.56** | **27** | ⇓*i*Pn | | **Pn** | | **15 37 18.6** | **-1.4** |
| NKME | | | | *e*Sn | | **Sn** | | **15 38 30.1** | **-4.7** |
| **RICI** | **Ricice** | **6.71** | **14** | *e*Pn | | **Pn** | | **15 37 20.9** | **-1.2** |
| RICI | | | | Sn | | **Sn** | | **15 38 37.0** | **-1.6** |
| **LIT** | **Litokhoron** | **6.73** | **60** | Pn | | **Pn** | | **15 37 20.7** | **-1.7** |
| **PVY** | **Plav** | **6.82** | **34** | *e*Pn | | **Pn** | | **15 37 22.3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SANT | Santorini | 8.54 | 91 | Pn | | Pn | 15 37 45.4 | -1.8 | | |
| VTS | Vitosha | 8.54 | 46 | ⇑P | | Pn | 15 37 45.8 | -1.5 | | |
| VTS | Vitosha | 8.54 | 46 | ⇑P | | Pn | 15 37 45.8 | -1.5 | | |
| VTS | Vitosha | 8.54 | 46 | Pn | | Pn | 15 37 45.4 | -1.9 | | |
| VTS | Vitosha | 8.54 | 46 | P | | Pn | 15 37 46.3 | -1.0 | | |
| SBF | Sospel | 8.88 | 323 | *e*Pn | | Pn | 15 37 52.4 | +0.5 | | |
| SBF | | | | *e*Sn | | Sn | 15 39 27.7 | -4.3 | | |
| | comp=N,7.6nm,0.5s | | | | | | | | | |
| RZN | Rozhen | 8.95 | 55 | P | | Pn | 15 37 51.6 | -1.4 | | |
| LMR | La Mourre | 8.99 | 317 | *e*Pn | | Pn | 15 37 53.7 | +0.5 | | |
| LMR | | | | *e*Sn | | Sn | 15 39 31.0 | -3.5 | | |
| | comp=N,7.9nm,0.4s | | | | | | | | | |
| PGB | Panagyurishte | 9.05 | 49 | P | | Pn | 15 37 53.3 | -0.9 | | |
| MPEP | Malo Peshtene | 9.29 | 44 | P | | Pn | 15 37 57.4 | -0.1 | | |
| MDVR | Moldovita | 9.34 | 32 | ⇑P | | Pn | 15 37 58.2 | +0.1 | | |
| CTI | Castel Tesino | 9.35 | 346 | Pn | | Pn | 15 37 58.1 | -0.3 | | |
| OBKA | Obir | 9.50 | 359 | *e*Pn | | Pn | 15 38 04.0 | +3.6 | | |
| | comp=N,2.3nm,0.5s | | | | | | | | | |
| ALN | Alexandroupoli | 9.54 | 63 | Pn | | Pn | 15 37 58.1 | -2.7 | | |
| MORH | Mrgy, Hungar | 9.63 | 16 | *e*Pn | | Pn | 15 37 53.8 | -8.2 | | |
| MYKA | Terra Mystica | 9.66 | 355 | *e*Pn | | Pn | 15 38 05.8 | +3.3 | | |
| | comp=N,3.2nm,0.5s | | | | | | | | | |
| HERR | Herculane | 9.72 | 34 | ⇓P | | Pn | 15 38 01.8 | -1.5 | | |
| MBDF | Montbardon | 9.85 | 324 | *e*P | | Pn | 15 38 09.3 | +4.1 | | |
| MBDF | | | | *e*Sn | | Sn | 15 39 55.1 | -0.7 | | |
| | comp=N,1.2nm,0.4s | | | | | | | | | |
| SMRF | Simiane la Rot | 9.92 | 317 | *e*Pn | | Pn | 15 38 06.6 | +0.5 | | |
| SMRF | | | | *e*Sn | | Sn | 15 39 55.1 | -2.4 | | |
| | comp=N,2.4nm,0.4s | | | | | | | | | |
| KBA | Koelnbreinsper | 10.13 | 354 | *e*Pn | | Pn | 15 38 11.7 | +2.6 | | |
| | comp=N,3.7nm,0.6s | | | | | | | | | |
| ARSA | Arzberg | 10.25 | 3 | *e*Pn | | Pn | 15 38 12.5 | +1.9 | | |
| | comp=N,2.8nm,0.6s | | | | | | | | | |
| GZR | Gura Zlata | 10.28 | 33 | ⇑P | | Pn | 15 38 10.4 | -0.6 | | |
| GZR | Gura Zlata | 10.28 | 33 | ⇑P | | Pn | 15 38 10.4 | -0.6 | | |
| TUE | Stuetta | 10.31 | 338 | Pn | | Pn | 15 38 11.9 | +0.3 | | |
| ORIF | Oris-en-Rattie | 10.41 | 322 | *e*Pn | | Pn | 15 38 12.7 | -0.2 | | |
| ORIF | | | | *e*Sn | | Sn | 15 40 08.5 | -1.2 | | |
| | comp=N,0.6nm,0.3s | | | | | | | | | |
| DAVOX | Davos/Dischmat | 10.45 | 341 | Pn | | Pn | 15 38 15.5 | +2.0 | | |
| | comp=N,0.1nm,0.3s,baz=349,slow=23,SNR=1.2 | | | | | | | | | |
| LPG | La Plagne | 10.45 | 327 | *e*P | | Pn | 15 38 18.9 | +5.4 | | |
| LPG | | | | *e*Sn | | Sn | 15 40 09.0 | -1.7 | | |
| | comp=N,1.6nm,0.5s | | | | | | | | | |
| FETA | Feichten | 10.47 | 344 | Pn | | Pn | 15 38 18.1 | +4.4 | | |
| | comp=N,4.8nm,0.9s | | | | | | | | | |
| LPL | La Plagne | 10.47 | 327 | *e*P | | Pn | 15 38 18.9 | +5.1 | | |
| MOTA | Moosalm | 10.70 | 346 | Pn | | Pn | 15 38 20.1 | +3.2 | | |
| | comp=N,4.6nm,0.6s | | | | | | | | | |
| MOA | Molln | 10.85 | 358 | Pn | | Pn | 15 38 22.2 | +3.4 | | |
| | comp=N,9.6nm,0.7s | | | | | | | | | |
| SENIN | Lac Senin/Sane | 10.92 | 331 | Pn | | Pn | 15 38 20.1 | +0.2 | | |
| CONA | Conrad Observa | 10.94 | 4 | *e*Pn | | Pn | 15 38 22.0 | +1.9 | | |
| | comp=N,0.8nm,0.3s | | | | | | | | | |
| LASF | Ste Croix | 10.95 | 314 | *e*P | | Pn | 15 38 23.7 | +3.6 | | |
| LASF | | | | *e*Sn | | Sn | 15 40 20.6 | -2.0 | | |
| VIVF | Saint-Julien-l | 10.99 | 319 | *e*Sn | | Sn | 15 40 22.0 | -1.6 | | |
| VOIR | | 11.39 | 39 | ⇑P | | Pn | 15 38 26.1 | -0.1 | | |
| VOIR | | 11.39 | 39 | ⇑P | | Pn | 15 38 26.1 | -0.1 | | |
| DRGR | | 11.39 | 28 | ⇓P | | Pn | 15 38 27.3 | +1.1 | | |
| DRGR | | 11.39 | 28 | ⇓P | | Pn | 15 38 27.3 | +1.1 | | |
| MTLF | Montolieu | 11.55 | 307 | *e*Pn | | Pn | 15 38 28.0 | -0.4 | | |
| MTLF | | | | *e*Sn | | Sn | 15 40 34.6 | -2.8 | | |
| | comp=N,2.4nm,0.4s | | | | | | | | | |
| CABF | La Chapelle | 11.61 | 329 | *e*Pn | | Pn | 15 38 29.1 | -0.1 | | |
| CKRC | Cesky Krumlov | 11.81 | 358 | *e*PDIFF | | Pn | 15 38 40.0 | +8.0 | | |
| GERES | GERESS Array B | 11.86 | 356 | Pn | | Pn | 15 38 34.6 | +1.9 | | |
| | comp=N,0.2nm,0.3s,baz=166,slow=13,SNR=12 | | | | | | | | | |
| AKAS | Kas | 11.88 | 89 | | | Pn | 15 38 32.4 | -0.6 | | |
| MLR | Muntele Rosu | 11.88 | 41 | ⇓P | | Pn | 15 38 32.3 | -0.8 | | |
| MLR | Muntele Rosu | 11.88 | 41 | Pn | | Pn | 15 38 34.7 | +1.6 | | |
| | comp=N,0.6nm,0.3s,baz=153,slow=15,SNR=7.5 | | | | | | | | | |
| MLR | Muntele Rosu | 11.88 | 41 | Pn | | Pn | 15 38 32.3 | -0.8 | | |
| ELL | Elmali | 12.06 | 87 | Pn | | Pn | 15 38 34.5 | -0.9 | | |
| KHC | Kasperske Hory | 12.16 | 356 | *e*P | | Pn | 15 38 42.9 | +6.2 | | |
| KHC | Kasperske Hory | 12.16 | 356 | *e*PDIFF | | Pn | 15 38 42.9 | +6.2 | | |
| HINF | Hinteralfeld | 12.31 | 334 | *e*Pn | | Pn | 15 38 35.9 | -2.9 | | |
| HINF | | | | *e*Sn | | Sn | 15 40 51.8 | -4.2 | | |
| VRAC | Vranov | 12.36 | 5 | Pn | | Pn | 15 38 40.8 | +1.3 | | |
| | comp=N,0.4nm,0.3s,baz=16,slow=17,SNR=2.7 | | | | | | | | | |
| ISP | Isparta | 12.48 | 82 | *i* P | | Pn | 15 38 43.4 | +2.1 | | |
| VRI | Vrincioaia | 12.54 | 41 | ⇑P | | Pn | 15 38 41.4 | -0.6 | | |
| VRI | Vrincioaia | 12.54 | 41 | ⇑P | | Pn | 15 38 41.4 | -0.6 | | |
| SMF | Signal de Mont | 12.65 | 323 | *e*Pn | | Pn | 15 38 43.7 | +0.3 | | |
| HAU | Haudompre | 12.65 | 333 | *e*Pn | | Pn | 15 38 42.8 | -0.6 | | |
| HAU | | | | *e*Sn | | Sn | 15 41 00.1 | -4.2 | | |
| CFR | Carcaliu | 12.91 | 47 | ⇑P | | Pn | 15 38 45.1 | -1.8 | | |
| CFR | Carcaliu | 12.91 | 47 | ⇑P | | Pn | 15 38 45.1 | -1.8 | | |
| GRF | Grafenberg Arr | 12.95 | 349 | *e*Pn | | P | 15 38 55.6 | -2.5 | | |
| | baz=167,slow=13 | | | | | | | | | |
| BURAR | Bucovina Array | 13.07 | 33 | ⇑P | | Pn | 15 38 50.0 | +0.8 | | |
| BURAR | Bucovina Array | 13.07 | 33 | ⇑P | | Pn | 15 38 50.0 | +0.8 | | |
| BURAR | Bucovina Array | 13.07 | 33 | Pn | | Pn | 15 38 48.8 | -0.4 | | |
| BGF | Bois d'Agland | 13.08 | 321 | *e*Pn | | Pn | 15 38 49.1 | -0.2 | | |
| LOR | Lormes | 13.09 | 325 | *e*P | | P | 15 38 56.2 | -3.6 | | |
| | baz=144 | | | | | | | | | |
| SSF | Saint Saulge | 13.11 | 324 | *e*P | | P | 15 38 55.0 | -4.9 | | |
| TCF | Toulx Ste Croi | 13.23 | 318 | *e*Pn | | Pn | 15 38 50.6 | -0.8 | | |
| DPC | Dobruska-Polom | 13.38 | 4 | *e*P | | P | 15 39 04.1 | +1.1 | | |
| DPC | Dobruska-Polom | 13.38 | 4 | *e*PDIFF | | P | 15 39 04.1 | +1.1 | | |
| HYF | Humbligny | 13.67 | 322 | *e*P | | P | 15 39 03.0 | -3.2 | | |
| BRG | Berggiesshubel | 13.88 | 358 | *e*P | | P | 15 39 06.5 | -2.0 | | |
| BRG | | | | Amp | | | 15 39 10.6 | | | |
| | comp=Z,7.7nm,1.0s | | | | | | | | | |
| BRG | Berggiesshubel | 13.88 | 358 | *e*P | | P | 15 39 06.4 | -2.0 | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| CLL | Collm | 14.36 | 355 | *i* P | | P | 15 39 13.4 | -0.4 | | |
| CLL | | | | *i* Pmax | | | 15 39 15.7 | | | |
| | comp=Z,30nm,1.3s | | | | | | | | | |
| BR131 | Keskin Array S | 14.98 | 74 | *i* P | | Pn | 15 39 17.1 | +1.7 | | |
| BRTR | Keskin Array B | 14.98 | 74 | Pn | | Pn | 15 39 15.1 | -0.3 | | |
| | comp=Z,0.2nm,0.3s,baz=258,slow=13,SNR=5.9 | | | | | | | | | |
| BRTR | | | | LR | | LR | 15 46 15.9 | | | |
| | comp=Z,146nm,18.3s,baz=290,slow=42 | | | | | | | | | |
| BRTR | Keskin Array B | 14.98 | 74 | *ce*P | | Pn | 15 39 16.5 | +1.1 | | |
| BRTR | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| BRTR | Keskin Array B | 14.98 | 74 | Pn | | Pn | 15 39 15.7 | +0.3 | | |
| ESDC | Sonseca Array | 15.01 | 286 | Pn | | Pn | 15 39 17.8 | +2.1 | | |
| | comp=Z,0.0nm,0.3s,baz=92,slow=11,SNR=1.5 | | | | | | | | | |
| CSS | Mathiatis | 15.10 | 92 | | | Pn | 15 39 13.9 | -2.9 | | |
| CSS | | | | IAmb | | IAmb | 15 39 24.0 | | | |
| | comp=Z,29nm,1.3s | | | | | | | | | |
| PAB | San Pablo | 15.30 | 285 | P | | P | 15 39 24.3 | -0.1 | | |
| MDT | Midelt | 16.50 | 261 | LR | | LR | 15 45 37.7 | | | |
| | comp=Z,220nm,19.2s,baz=34,slow=36 | | | | | | | | | |
| BNN | Bunyan | 16.66 | 77 | Pn | | Pn | 15 39 36.4 | -0.7 | | |
| BNN | | | | IAmb | | IAmb | 15 39 41.5 | | | |
| | comp=Z,46nm,1.3s | | | | | | | | | |
| AKASG | Malin Array Be | 17.12 | 32 | P | | Pn | 15 39 43.3 | +0.5 | | |
| | comp=Z,0.9nm,0.3s,baz=226,slow=9.9,SNR=12 | | | | | | | | | |
| AKASG | Malin Array Be | 17.12 | 32 | *ce*P | | P | 15 39 43.7 | -0.7 | | |
| AKASG | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | |
| AKASG | Malin Array Be | 17.12 | 32 | P | | P | 15 39 43.9 | -0.6 | | |
| AKBB | Malin Array Si | 17.12 | 32 | *ce*P | | P | 15 39 45.0 | +0.6 | | |
| AKBB | Malin Array Si | 17.12 | 32 | P | | P | 15 39 44.6 | +0.2 | | |
| SLTI | Sal'it | 17.27 | 100 | Pn | | Pn | 15 39 43.4 | -1.3 | | |
| MMA0B | Mount Meron ar | 17.29 | 97 | Pn | | Pn | 15 39 44.1 | -0.9 | | |
| MMA0B | | | | Sn | | Sn | 15 42 40.7 | -17 | | |
| MMAI | Mount Meron Ar | 17.29 | 97 | P | | Pn | 15 39 42.9 | -2.1 | | |
| | comp=Z,3.3nm,0.3s,baz=279,slow=11,SNR=12 | | | | | | | | | |
| MMAI | | | | LR | | LR | 15 48 41.0 | | | |
| | comp=Z,86nm,20.6s,baz=108,slow=45 | | | | | | | | | |
| KZIT | Kziot | 17.30 | 105 | Pn | | Pn | 15 39 43.1 | -2.0 | | |
| GEM | Giv'at Ha'Em | 17.43 | 96 | Pn | | Pn | 15 39 44.9 | -1.9 | | |
| NATI | Neve Ativ | 17.48 | 96 | Pn | | Pn | 15 39 44.9 | -2.4 | | |
| NATI | | | | Sn | | Sn | 15 42 44.2 | -18 | | |
| MMLI | Mount Malkishu | 17.50 | 99 | Pn | | Pn | 15 39 45.7 | -1.9 | | |
| HMDT | Nahal Hemdat | 17.65 | 99 | Pn | | Pn | 15 39 48.6 | -0.8 | | |
| HMDT | | | | Sn | | Sn | 15 42 48.7 | -17 | | |
| YTIR | Yattir | 17.67 | 103 | Pn | | Pn | 15 39 48.6 | -1.2 | | |
| YTIR | | | | Sn | | Sn | 15 42 49.7 | -17 | | |
| DSI | Dead Sea | 17.79 | 102 | Pn | | Pn | 15 39 50.2 | -1.0 | | |
| DSI | | | | Sn | | Sn | 15 42 51.7 | -18 | | |
| KRMI | Paran Flat | 17.91 | 107 | Pn | | Pn | 15 39 52.2 | -0.5 | | |
| KLNR | Kaliningrad | 17.98 | 10 | *i* P | | P | 15 39 54.3 | +0.4 | | |
| PRNI | Paran | 18.02 | 106 | Pn | | Pn | 15 39 54.0 | 0.0 | | |
| PRNI | | | | Sn | | Sn | 15 42 59.0 | -16 | | |
| GHAJ | Ghor Haditha | 18.05 | 102 | | | Pn | 15 39 53.7 | -0.6 | | |
| HRFI | Mount Harif | 18.19 | 107 | Pn | | Pn | 15 39 56.1 | 0.0 | | |
| HRFI | | | | Sn | | Sn | 15 43 01.7 | -17 | | |
| MBRI | Mt Berech | 18.21 | 107 | Pn | | Pn | 15 39 56.3 | -0.1 | | |
| EIL | Elat | 18.29 | 108 | P | | Pn | 15 39 55.6 | -1.7 | | |
| | comp=Z,1.3nm,0.3s,baz=322,slow=5.4,SNR=9.8 | | | | | | | | | |
| EIL | Elat | 18.29 | 108 | Pn | | Pn | 15 39 57.4 | 0.0 | | |
| ASF | Jabal al Asfar | 18.76 | 98 | P | | P | 15 40 02.1 | -0.7 | | |
| | comp=Z,1.1nm,0.3s,baz=337,slow=7.8,SNR=4.3 | | | | | | | | | |
| PABE | Paberze | 19.52 | 16 | P | | P | 15 40 10.4 | -0.3 | | |
| PABE | | | | IAmb | | IAmb | 15 40 19.4 | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| MNK | Minsk | 19.66 | 23 | *i* P | | P | 15 40 07.4 | -4.9 | | |
| MNK | | | | *i* S | | S | 15 43 49.0 | -4.9 | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=N,14nm,0.9s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=E,2.0nm,0.9s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=Z,161nm,14.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=E,27nm,14.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=N,107nm,12.0s | | | | | | | | | |
| MNK | Minsk | 19.66 | 23 | *i* P | | P | 15 40 07.5 | -4.8 | | |
| | comp=E,2.0nm,0.9s | | | | | | | | | |
| MNK | | | | *i* P | | P | 15 40 07.5 | -4.8 | | |
| | comp=N,14nm,0.9s | | | | | | | | | |
| MNK | | | | *i* P | | P | 15 40 07.5 | -4.8 | | |
| | comp=Z,11nm,0.9s,baz=213 | | | | | | | | | |
| MNK | | | | *i* PP | | PnPn | 15 40 22.4 | -4.8 | | |
| MNK | | | | *i* PPP | | PPP | 15 40 30.1 | | | |
| MNK | | | | *i* S | | S | 15 43 49.1 | -4.8 | | |
| MNK | | | | *i* SS | | SnSn | 15 44 06.1 | -2.4 | | |
| MNK | | | | *i* SSS | | SSS | 15 44 19.1 | | | |
| MNK | | | | *i* LQ | | LQ | 15 45 48.5 | | | |
| MNK | | | | *i* LR | | LR | 15 47 25.4 | | | |
| MNK | | | | *i* LRM | | MLR | 15 48 34.9 | | | |
| | comp=Z,161nm,13.6s | | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 15 48 36.2 | | | |
| | comp=E,27nm,14.0s | | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 15 48 52.3 | | | |
| | comp=N,107nm,11.9s | | | | | | | | | |
| NACGM | Naroch | 19.68 | 21 | *i* P | | P | 15 40 11.8 | -0.6 | | |
| MARD | Mardin | 20.64 | 81 | P | | P | 15 40 23.3 | -0.1 | | |
| MARD | | | | IAmb | | IAmb | 15 40 30.0 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| SIRT | Sirnak | 21.93 | 80 | P | | P | 15 40 37.2 | 0.0 | | |
| EKA | Eskdalemuir Ar | 22.06 | 332 | P | | P | 15 40 38.7 | +0.5 | | |
| | comp=Z,2.6nm,0.7s,baz=142,slow=11,SNR=6.0 | | | | | | | | | |
| NEY | Neytrino | 22.14 | 65 | *i* P | | P | 15 40 40.8 | +1.4 | | |
| NEY | | | | pmax | pmax | | | | | |
| | comp=Z,15nm,1.3s | | | | | | | | | |
| SHA1 | Shidzhatmaz | 22.16 | 64 | *i* P | | P | 15 40 40.7 | +1.0 | | |
| KIV | Kislovodsk | 22.21 | 63 | *e*P | | P | 15 40 41.7 | +1.6 | | |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,17nm,1.1s | | | | | | | | | |
| KIV | Kislovodsk | 22.21 | 63 | P | | P | 15 40 39.6 | -0.5 | | |
| KIV | | | | IAmb | | IAmb | 15 40 58.1 | | | |
| | comp=Z,23nm,1.2s | | | | | | | | | |
| VORD | Divnogorie | 22.31 | 44 | *e*P | | P | 15 40 41.4 | +0.5 | | |
| VORD | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| KBZ | Khabaz | 22.33 | 64 | P | | P | 15 40 42.5 | +1.3 | | |
| | comp=Z,9.5nm,0.9s,baz=279,slow=7.0,SNR=14 | | | | | | | | | |
| KBZ | Khabaz | 22.33 | 64 | *ce*P | | P | 15 40 43.3 | +2.1 | | |
| KBZ | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| GEVA | Gevas | 22.33 | 78 | P | | P | 15 40 40.0 | -1.5 | | |
| VSR | Storozhevoye | 22.36 | 43 | *e*P | | P | 15 40 41.7 | +0.2 | | |
| VSR | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | | |
| ONI | Oni | 22.61 | 67 | P | | P | 15 40 44.8 | +0.5 | | |
| ONI | | | | IAmb | | IAmb | 15 40 52.9 | | | |
| | comp=Z,33nm,1.3s | | | | | | | | | |
| VORR | Voronezh | 22.62 | 42 | *e*P | | P | 15 40 45.9 | +1.7 | | |
| VORR | | | | pmax | pmax | | | | | |
| | comp=Z,90nm,0.4s | | | | | | | | | |
| GOF | Gofitskoye | 22.65 | 60 | ⇑*e*P | | P | 15 40 46.0 | +1.4 | | |
| GOF | | | | pmax | pmax | | | | | |
| | comp=Z,29nm,0.8s | | | | | | | | | |
| ZEI | Tsey | 22.95 | 66 | *e*P | | P | 15 40 47.3 | -0.8 | | |
| ZEI | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| LPSR | Galich'ya Gora | 22.97 | 40 | *e*P | | P | 15 40 48.0 | +0.1 | | |
| LPSR | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| HFS | Hagfors | 23.16 | 359 | P | | P | 15 40 49.9 | +0.1 | | |
| | comp=Z,2.9nm,0.5s,baz=164,slow=7.4,SNR=7.5 | | | | | | | | | |
| OBN | Obninsk | 23.39 | 32 | *ce*P | | P | 15 40 51.6 | -0.5 | | |
| OBN | | | | *e* | | | 15 41 25.1 | | | |
| OBN | | | | pmax | pmax | | | | | |
| | comp=Z,39nm,1.7s | | | | | | | | | |
| OBN | | | | MLR | MLR | | | | | |
| | comp=Z,148nm,11.0s | | | | | | | | | |
| GNI | Garni | 23.52 | 73 | P | | P | 15 40 53.1 | -0.8 | | |
| | comp=Z,7.9nm,0.7s,baz=39,slow=4.6,SNR=5.6 | | | | | | | | | |
| VRH | Novokhopyorsk | 23.78 | 45 | *e*P | | P | 15 40 53.0 | -3.0 | | |
| VRH | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,0.5s | | | | | | | | | |
| NC602 | NORSAR Array S | 23.84 | 356 | P | | P | 15 40 56.3 | -0.2 | | |
| NB2 | NORSAR Subarra | 24.17 | 356 | P | | P | 15 40 59.8 | +0.1 | | |
| | comp=Z,6.4nm,1.0s,baz=173,slow=9.3 | | | | | | | | | |
| NOA | NORSAR Array B | 24.17 | 356 | P | | P | 15 40 59.5 | -0.2 | | |
| | comp=Z,1.2nm,0.7s,baz=174,slow=9.5,SNR=4.0 | | | | | | | | | |
| NBO00 | NORSAR Array S | 24.18 | 355 | P | | P | 15 40 58.9 | -0.9 | | |
| NC405 | NORSAR Array S | 24.21 | 356 | P | | P | 15 40 58.7 | -1.4 | | |
| NC405 | | | | IAmb | | IAmb | 15 41 00.6 | | | |
| | comp=Z,8.2nm,0.8s | | | | | | | | | |
| GROC | Groznyy | 24.37 | 66 | *e*P | | P | 15 41 02.2 | +0.5 | | |
| GROC | | | | *e*S | | S | 15 45 25.2 | +4.2 | | |
| GROC | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| NC204 | NORSAR Array S | 24.43 | 355 | P | | P | 15 41 01.0 | -1.1 | | |
| FINES | FINESS Array B | 25.46 | 13 | P | | P | 15 41 10.3 | -1.0 | | |
| | comp=Z,13nm,0.8s,baz=181,slow=8.7,SNR=24 | | | | | | | | | |
| FINES | FINESS Array B | 25.46 | 13 | P | | P | 15 41 10.0 | -1.3 | | |
| FIA1 | FINESS Array S | 25.46 | 13 | P | | P | 15 41 10.0 | -1.3 | | |
| FIA1 | | | | IAmb | | IAmb | 15 41 11.9 | | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| TORD | Torodi Ar. Bea | 26.52 | 210 | P | | P | 15 41 21.9 | +0.6 | | |
| | comp=Z,1.2nm,0.8s,baz=27,slow=10,SNR=6.6 | | | | | | | | | |
| BELG | Belogornoye | 27.61 | 46 | *i* P | | P | 15 41 32.3 | +1.5 | | |
| BELG | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| KIRV | Kirov | 31.15 | 35 | *ce*P | | P | 15 42 03.0 | +0.9 | | |
| ABKAR | Akbulak array | 34.60 | 55 | P | | P | 15 42 31.7 | -0.8 | | |
| ABKAR | Akbulak array | 34.60 | 55 | P | | P | 15 42 31.3 | -1.1 | | |
| ABKAR | | | | IAmb | | IAmb | 15 42 35.0 | | | |
| | comp=Z,3.1nm,0.8s | | | | | | | | | |
| ARU | Arti | 34.93 | 42 | *d* P | | P | 15 42 36.0 | +0.8 | | |
| ARU | | | | | | | 15 43 50.2 | | | |
| ARU | | | | S | | S | 15 48 08.4 | +1.9 | | |
| ARU | | | | SS | | SnSn | 15 50 21.8 | +0.8 | | |
| ARU | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | | |
| ARU | Arti | 34.93 | 42 | P | | P | 15 42 35.0 | -0.2 | | |
| ARU | | | | IAmb | | IAmb | 15 42 36.5 | | | |
| | comp=Z,12nm,1.2s | | | | | | | | | |
| DBIC | Dimbokro | 35.14 | 216 | LR | | LR | 15 58 02.3 | | | |
| | comp=Z,120nm,19.8s,baz=16,slow=38 | | | | | | | | | |
| SVE | Sverdlovsk | 36.14 | 42 | *e*P | | P | 15 42 46.6 | +1.0 | | |
| SVE | | | | pmax | pmax | | | | | |
| | comp=Z,21nm,1.0s | | | | | | | | | |
| UOSS | Minazif | 37.16 | 97 | P | | P | 15 42 55.0 | +0.3 | | |
| UOSS | | | | IAmb | | IAmb | 15 43 16.3 | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| SCO | Scoresbysund | 38.75 | 341 | P | | P | 15 43 09.3 | +1.8 | | |
| SCO | | | | IAmb | | IAmb | 15 43 20.6 | | | |
| | comp=Z,15nm,1.2s | | | | | | | | | |
| WSAR | Wadi Sarin | 39.93 | 98 | P | | P | 15 43 17.9 | -0.1 | | |
| | baz=311,slow=9.3 | | | | | | | | | |
| MBAR | Mbarara | 40.21 | 155 | LR | | LR | 15 59 59.5 | | | |
| | comp=Z,81nm,18.3s,baz=294,slow=36 | | | | | | | | | |
| BRVK | Borovoye | 41.23 | 49 | *ce*P | | P | 15 43 30.0 | +1.6 | | |
| BRVK | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | | |
| BRVK | Borovoye | 41.23 | 49 | P | | P | 15 43 29.5 | +1.1 | | |
| BRVK | | | | IAmb | | IAmb | 15 43 30.8 | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| KKAR | Karatay Array | 42.37 | 64 | P | | P | 15 43 38.4 | +0.6 | | |
| KMBO | Kilima Mbogo | 43.26 | 146 | *ce*P | | P | 15 43 47.8 | +2.3 | | |
| KMBO | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | |
| AAK | Ala-Archa | 45.33 | 64 | P | | P | 15 44 02.5 | +0.8 | | |
| | comp=Z,0.7nm,0.6s,baz=294,slow=7.6,SNR=4.1 | | | | | | | | | |
| AAK | | | | LR | | LR | 16 06 12.2 | | | |
| | comp=Z,187nm,20.0s,baz=327,slow=40 | | | | | | | | | |
| AAK | Ala-Archa | 45.33 | 64 | IAmb | | IAmb | 15 44 09.7 | | | |
| | comp=Z,4.3nm,1.4s | | | | | | | | | |
| KURBB | Kurchatov Arra | 46.52 | 52 | P | | P | 15 44 11.8 | +0.9 | | |
| | comp=Z,4.0nm,0.6s,baz=281,slow=8.8,SNR=15 | | | | | | | | | |
| KURK | Kurchatov | 46.56 | 52 | P | | P | 15 44 11.5 | +0.3 | | |
| KSH | Kashi | 47.24 | 67 | P | | P | 15 44 09.0 | -7.8 | | |
| KSH | | | | sP | | pP | 15 44 17.9 | -2.3 | | |
| KSH | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| MAKZ | Makanchi | 49.51 | 56 | P | | P | 15 44 34.4 | +0.3 | | |
| MAKZ | | | | IAmb | | IAmb | 15 44 37.0 | | | |
| | comp=Z,4.6nm,1.3s | | | | | | | | | |
| MK31 | Makanchi Array | 49.72 | 56 | P | | P | 15 44 35.7 | 0.0 | | |
| MKAR | Makanchi Array | 49.72 | 56 | P | | P | 15 44 36.5 | +0.7 | | |
| | comp=Z,2.4nm,0.7s,baz=284,slow=6.4,SNR=32 | | | | | | | | | |
| MKAR | Makanchi Array | 49.72 | 56 | P | | P | 15 44 35.9 | +0.2 | | |
| ZAA0 | Zalesovo Array | 49.79 | 47 | P | | P | 15 44 36.4 | +0.3 | | |
| ZALV | Zalesovo Beam | 49.79 | 47 | P | | P | 15 44 36.8 | +0.7 | | |
| | comp=Z,6.5nm,0.7s,baz=283,slow=8.3,SNR=29 | | | | | | | | | |
| ZALV | Zalesovo Beam | 49.79 | 47 | P | | P | 15 44 36.2 | +0.1 | | |
| NRIK | Noril'sk | 49.85 | 26 | P | | P | 15 44 37.2 | +0.9 | | |
| | comp=Z,2.9nm,0.6s,baz=253,slow=5.4,SNR=6.7 | | | | | | | | | |
| NRIK | Noril'sk | 49.85 | 26 | P | | P | 15 44 36.9 | +0.6 | | |
| NRIK | | | | IAmb | | IAmb | 15 44 38.0 | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | | |
| DGZ | Jazzator, Alta | 52.30 | 52 | *i* P | | P | 15 44 55.6 | +0.3 | | |
| DGZ | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | | |
| WMQ | Urumqi | 54.23 | 58 | *e*P | | P | 15 45 10.4 | +1.0 | | |
| WMQ | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| WMQ | | | | pmax | pmax | | | | | |
| | comp=Z,290nm,6.1s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=N,220nm,29.1s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=E,560nm,28.8s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,140nm,28.5s | | | | | | | | | |
| PYUN | Piuthan | 57.03 | 78 | *e*P | | P | 15 45 30.8 | +0.9 | | |
| | comp=Z,29nm,0.9s | | | | | | | | | |
| DANN | Dangsing | 57.51 | 77 | *e*P | | P | 15 45 34.2 | +0.7 | | |
| | comp=Z,31nm,0.9s | | | | | | | | | |
| KOLN | Koldanda | 57.66 | 78 | *e*P | | P | 15 45 34.8 | +0.4 | | |
| | comp=Z,29nm,1.4s | | | | | | | | | |
| GKN | Gorkha | 58.36 | 77 | *e*P | | P | 15 45 39.6 | +0.4 | | |
| DMN | Daman | 58.91 | 77 | *e*P | | P | 15 45 43.2 | 0.0 | | |
| | comp=Z,21nm,0.9s | | | | | | | | | |
| KKN | Kakani | 58.96 | 77 | *e*P | | P | 15 45 43.5 | 0.0 | | |
| PKIN | Phulchoki | 59.15 | 77 | *e*P | | P | 15 45 45.5 | +0.6 | | |
| PKI | Pulchoki | 59.16 | 77 | *e*P | | P | 15 45 45.1 | 0.0 | | |
| GUN | Gumba | 59.37 | 77 | *e*P | | P | 15 45 47.3 | +0.8 | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| GGN | Saint George | 59.67 | 306 | P | | P | 15 45 46.0 | -1.8 | | |
| JIRN | Jiri | 59.73 | 77 | *e*P | | P | 15 45 49.7 | +0.7 | | |
| RAMN | Ramite | 60.39 | 77 | *e*P | | P | 15 45 53.8 | +0.4 | | |
| | comp=Z,6.2nm,0.6s | | | | | | | | | |
| ODAN | Odare | 61.05 | 77 | *e*P | | P | 15 45 58.6 | +0.7 | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| TAPN | Taplejung | 61.06 | 76 | *e*P | | P | 15 45 58.6 | +0.5 | | |
| | comp=Z,38nm,1.0s | | | | | | | | | |
| ZAK | Zakamensk | 61.67 | 47 | *e*P | | P | 15 46 01.6 | 0.0 | | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | | |
| TIXI | Tiksi | 62.27 | 19 | P | | P | 15 46 04.3 | -0.8 | | |
| | comp=Z,1.0nm,0.3s,baz=270,slow=20,SNR=5.6 | | | | | | | | | |
| TIXI | Tiksi | 62.27 | 19 | *i* P

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.94** | **202** | Pn | Pn | 16 13 23.8 | -0.1 |
| | 152nm,0.3s,baz=116,slow=9.8,SNR=9.9 | | | | | | |
| RAO | | | | Sn | Sn | 16 13 39.4 | +1.4 |
| | 428nm,0.3s,baz=110,slow=23,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **43.69** | **265** | P | P | 16 21 10.3 | 0.0 |
| | 0.3nm,0.5s,baz=106,slow=7.5,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.49** | **270** | P | P | 16 21 16.5 | -0.3 |
| | 0.3nm,0.4s,baz=111,slow=7.8,SNR=8.1 | | | | | | |
| **FINES** | **FINESS Array B** | **143.39** | **341** | PKP | PKPdf | 16 32 38.7 | -0.5 |
| | 7.6nm,1.1s,baz=41,slow=6.1,SNR=4.6 | | | | | | |

*IDC **08** 16:15:27.5±0.9,35°.29N×23°.69E,h0km,mb3.8/8, mb1 3.7/11,mb1mx3.6/46,mbtmp3.7/11,ML3.4/2,Error ellipse: s-maj=23.9km s-min=15.1km az=165.0*
*ISK **08** 16:15:28.7,35°.38N×23°.55E,h5km,ML3.5/11*
*NEIC **08** 16:15:28.4±1.4,35°.16N±0°.07×23°.65E±0°.06,h10km±5km, mb4.1/6,Error ellipse: s-maj=11.4km s-min=6.6km az=203.0*
*ATH **08** 16:15:29.0,35°.39N×23°.59E,h21km±1km,ML3.4/15,Error ellipse: s-maj=1.7km s-min=0.7km az=42.0*
*THE **08** 16:15:29.2,35°.38N×23°.58E,h0km±1km,ML3.4/12,Error ellipse: s-maj=1.2km s-min=0.4km az=224.0*
**ISC 08 16:15:29.3±0.9,35°.39N±0°.02×23°.60E±0°.02,h8km±6km, n94,σ1°21/120,mb3.8/11,Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.17** | **155** | P | **Pg** | **16 15 32.5** | **-0.2** |
| KNDR | | | | S | **Sg** | **16 15 35.1** | **0.0** |
| | 26μm,0.2s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **0.17** | **155** | PG | **Pg** | **16 15 32.5** | **-0.2** |
| KNDR | | | | SG | **Sg** | **16 15 35.2** | **+0.1** |
| **IMMV** | **Iera Moni Meta** | **0.32** | **76** | P | **Pg** | **16 15 35.9** | **+0.3** |
| IMMV | | | | S | **Sb** | **16 15 42.0** | **-0.6** |
| | 8μm,0.3s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.32** | **76** | P | **Pg** | **16 15 35.9** | **+0.3** |
| IMMV | | | | S | **Sb** | **16 15 42.0** | **-0.6** |
| IMMV | | | | AML | AML | 16 15 43.6 | |
| | comp=E,17239μm,0.2s | | | | | | |
| IMMV | | | | AML | AML | 16 15 45.1 | |
| | comp=N,15473μm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.32** | **76** | PG | **Pb** | **16 15 36.2** | **-1.0** |
| IMMV | | | | SG | **Sb** | **16 15 42.1** | **-0.6** |
| **VAM** | **Vamos** | **0.49** | **87** | P | **Pg** | **16 15 38.9** | **+0.1** |
| VAM | | | | S | **Sb** | **16 15 47.1** | **-0.4** |
| | comp=N,10μm,0.3s | | | | | | |
| **VAM** | **Vamos** | **0.49** | **87** | P | **Pg** | **16 15 39.0** | **+0.1** |
| VAM | | | | S | **Sb** | **16 15 46.7** | **-0.8** |
| VAM | | | | AML | AML | 16 15 48.1 | |
| | comp=E,19463μm,0.4s | | | | | | |
| VAM | | | | AML | AML | 16 15 49.1 | |
| | comp=N,21651μm,0.3s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.54** | **333** | P | **Pg** | **16 15 39.8** | **+0.1** |
| ANKY | | | | S | **Sg** | **16 15 47.4** | **+0.6** |
| | comp=N,3μm,0.5s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.54** | **333** | P | **Pg** | **16 15 39.9** | **+0.1** |
| ANKY | | | | S | **Sb** | **16 15 47.8** | **-1.0** |
| ANKY | | | | AML | AML | 16 15 48.7 | |
| | comp=N,8583μm,0.4s | | | | | | |
| ANKY | | | | AML | AML | 16 15 58.0 | |
| | comp=E,5201μm,0.6s | | | | | | |
| **GVDS** | **Gavdos** | **0.67** | **143** | P | **Pg** | **16 15 41.7** | **-0.6** |
| GVDS | | | | S | **Sb** | **16 15 52.8** | **+0.1** |
| | comp=E,10μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.68** | **144** | P | **Pg** | **16 15 41.8** | **-0.5** |
| GVD | | | | S | **Sb** | **16 15 53.3** | **+0.5** |
| | comp=E,8μm,0.5s | | | | | | |
| **GVD** | **Gavdhos** | **0.68** | **144** | P | **Pg** | **16 15 41.8** | **-0.5** |
| GVD | | | | S | **Sb** | **16 15 52.7** | **-0.1** |
| GVD | | | | AML | AML | 16 15 55.9 | |
| | comp=N,19537μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 16 15 57.6 | |
| | comp=E,15106μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.68** | **144** | PG | **Pb** | **16 15 42.8** | **-0.5** |
| GVD | | | | SG | **Sb** | **16 15 53.0** | **+0.2** |
| **PRNS** | **Prines Rethymn** | **0.74** | **91** | P | **Pg** | **16 15 42.1** | **-1.4** |
| PRNS | | | | S | **Sg** | **16 15 52.9** | **-0.2** |
| | comp=E,2μm,0.4s | | | | | | |
| **KTHA** | **Kythira Island** | **0.97** | **333** | P | **Pb** | **16 15 47.8** | **-0.6** |
| KTHA | | | | S | **Sn** | **16 16 02.5** | **-0.7** |
| | comp=E,2μm,0.6s | | | | | | |
| **KTHA** | **Kythira Island** | **0.97** | **333** | P | **Pg** | **16 15 47.7** | **-0.3** |
| KTHA | | | | S | **Sg** | **16 16 00.4** | **-0.2** |
| KTHA | | | | AML | AML | 16 16 05.5 | |
| | comp=E,5732μm,0.5s | | | | | | |
| KTHA | | | | AML | AML | 16 16 05.8 | |
| | comp=N,2018μm,1.0s | | | | | | |
| **KTHR** | **Kythira** | **1.00** | **331** | P | **Pg** | **16 15 47.9** | **-0.6** |
| KTHR | | | | S | **Sb** | **16 16 02.4** | **+0.3** |
| | comp=N,1μm,0.4s | | | | | | |
| **TMBK** | **Timbaki Herakl** | **1.00** | **108** | P | **Pg** | **16 15 48.0** | **-0.6** |
| TMBK | | | | S | **Sn** | **16 16 03.7** | **-0.2** |
| | comp=N,2μm,0.5s | | | | | | |
| **SIVA** | **Sivas** | **1.06** | **110** | P | **Pg** | **16 15 48.8** | **-0.7** |
| SIVA | | | | S | **Sb** | **16 16 03.5** | **-0.3** |
| SIVA | | | | AML | AML | 16 16 11.9 | |
| | comp=N,7473μm,0.5s | | | | | | |
| SIVA | | | | AML | AML | 16 16 15.1 | |
| | comp=E,7766μm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.06** | **95** | Pn | **Pg** | **16 15 49.0** | **-0.6** |
| | comp=E,30nm,0.3s,baz=279,slow=16,SNR=90 | | | | | | |
| IDI | | | | Sn | **Sg** | **16 16 03.4** | **0.0** |
| | comp=E,119nm,0.3s,baz=3.3,slow=22,SNR=13 | | | | | | |
| **IDI** | **Anoyia** | **1.06** | **95** | P | **Pb** | **16 15 49.5** | **-0.4** |
| **IDI** | **Anoyia** | **1.06** | **95** | P | **Pg** | **16 15 48.5** | **-1.1** |
| IDI | | | | S | **Sb** | **16 16 03.9** | **0.0** |
| IDI | | | | AML | AML | 16 16 14.7 | |
| | comp=E,3624μm,0.5s | | | | | | |
| IDI | | | | AML | AML | 16 16 16.8 | |
| | comp=N,3953μm,0.5s | | | | | | |
| **IACM** | **Heraklion** | **1.21** | **93** | P | **Pg** | **16 15 51.8** | **-0.6** |
| **KSTL** | **Kastelli Herak** | **1.21** | **93** | P | **Pn** | **16 15 57.1** | **+4.7** |
| **HRKL** | **Herakleio** | **1.23** | **93** | PN | **Pn** | **16 15 53.5** | **+0.8** |
| HRKL | | | | SN | **Sn** | **16 16 11.7** | **+2.2** |
| **VLI** | **Veliai** | **1.43** | **338** | P | **Pb** | **16 15 55.8** | **-0.4** |
| VLI | | | | S | **Sg** | **16 16 15.8** | **+0.4** |
| | comp=N,588nm,0.7s | | | | | | |
| **VLI** | **Veliai** | **1.43** | **338** | P | **Pb** | **16 15 55.9** | **-0.3** |
| VLI | | | | AML | AML | 16 16 22.7 | |
| | comp=N,1296μm,0.9s | | | | | | |
| VLI | | | | AML | AML | 16 16 22.8 | |
| | comp=E,1049μm,0.6s | | | | | | |
| **MHLO** | **Agia Marina, M** | **1.46** | **26** | P | **Pn** | **16 15 56.1** | **+0.3** |
| MHLO | | | | S | **Sg** | **16 16 17.0** | **+0.9** |
| | comp=E,3μm,0.5s | | | | | | |
| **MHLO** | **Agia Marina, M** | **1.46** | **26** | P | **Pn** | **16 15 56.2** | **+0.3** |
| MHLO | | | | AML | AML | 16 16 22.7 | |
| | comp=N,6301μm,0.5s | | | | | | |
| MHLO | | | | AML | AML | 16 16 25.4 | |
| | comp=E,6103μm,0.6s | | | | | | |
| **NPS** | **Neapolis** | **1.65** | **94** | P | **Pg** | **16 16 00.3** | **-0.6** |
| **NPS** | **Neapolis** | **1.65** | **94** | P | **Pb** | **16 15 59.8** | **-0.1** |
| NPS | | | | S | **Sb** | **16 16 20.9** | **+0.1** |
| **THR9** | **Santorini-Faro** | **1.73** | **55** | P | **Pn** | **16 15 59.3** | **-0.2** |
| **THR6** | **Thira Island,** | **1.75** | **56** | P | **Pb** | **16 16 00.9** | **-0.8** |
| **THR5** | **Thira Island,** | **1.75** | **54** | P | **Pn** | **16 16 00.3** | **+0.4** |
| **THR3** | **Thira Island,** | **1.78** | **55** | P | **Pn** | **16 16 00.9** | **+0.5** |
| **SANT** | **Santorini** | **1.80** | **56** | P | **Pn** | **16 16 01.2** | **+0.6** |
| SANT | | | | AML | AML | 16 16 31.2 | |
| | comp=E,1664μm,0.5s | | | | | | |
| SANT | | | | AML | AML | 16 16 34.0 | |
| | comp=N,594μm,0.9s | | | | | | |
| **SANT** | **Santorini** | **1.80** | **56** | PN | **Pb** | **16 16 01.8** | **-0.7** |
| SANT | | | | SN | **Sb** | **16 16 26.0** | **+0.7** |
| **SANT** | **Santorini** | **1.80** | **56** | Pn | **Pn** | **16 16 01.0** | **+0.4** |
| **CMBO** | **Columbo, Santo** | **1.82** | **53** | P | **Pn** | **16 16 01.6** | **+0.7** |
| CMBO | | | | AML | AML | 16 16 34.4 | |
| | comp=N,3755μm,0.5s | | | | | | |
| CMBO | | | | AML | AML | 16 16 41.9 | |
| | comp=E,3190μm,0.6s | | | | | | |
| **THR2** | **Thira island,** | **1.83** | **54** | P | **Pn** | **16 16 00.6** | **-0.4** |
| **THR8** | **Santorini-Mono** | **1.83** | **56** | P | **Pn** | **16 16 01.6** | **+0.6** |
| **KRND** | **KRANIDI** | **2.03** | **350** | P | **Pb** | **16 16 04.9** | **-1.4** |
| KRND | | | | AML | AML | 16 16 46.0 | |
| | comp=E,576μm,0.6s | | | | | | |
| KRND | | | | AML | AML | 16 16 50.6 | |
| | comp=N,518μm,0.5s | | | | | | |
| **PYL** | **PYLOS** | **2.13** | **316** | P | **Pn** | **16 16 05.2** | **+0.1** |
| **ZKR** | **Zakros** | **2.16** | **96** | P | **Pb** | **16 16 07.1** | **-1.5** |
| ZKR | | | | AML | AML | 16 16 46.6 | |
| | comp=E,817μm,0.7s | | | | | | |
| ZKR | | | | AML | AML | 16 16 52.3 | |
| | comp=N,375μm,0.7s | | | | | | |
| **ZKR** | **Zakros** | **2.16** | **96** | PN | **Pb** | **16 16 08.0** | **-0.6** |
| **ITM** | **Ithomi** | **2.24** | **323** | PN | **Pn** | **16 16 07.4** | **+0.7** |
| **ITM** | **Ithomi** | **2.24** | **323** | Pn | **Pb** | **16 16 08.6** | **-1.4** |
| **EPID** | **Epidavros** | **2.26** | **350** | P | **Pn** | **16 16 08.3** | **+1.4** |
| **VLY** | **Voula,Athens** | **2.47** | **4** | P | **Pn** | **16 16 10.4** | **+0.7** |
| VLY | | | | AML | AML | 16 16 56.1 | |
| | comp=E,486μm,0.6s | | | | | | |
| VLY | | | | AML | AML | 16 17 04.9 | |
| | comp=N,266μm,0.6s | | | | | | |
| **LTK** | **Loutraki** | **2.68** | **349** | P | **Pn** | **16 16 13.2** | **+0.5** |
| **DION** | **Dionisos Attik** | **2.70** | **6** | P | **Pn** | **16 16 13.2** | **+0.2** |
| **KARY** | **Karystos** | **2.73** | **14** | P | **Pn** | **16 16 13.3** | **0.0** |
| **VIL2** | **Platees** | **2.83** | **355** | P | **Pn** | **16 16 14.9** | **+0.1** |
| VIL2 | | | | AML | AML | 16 16 57.8 | |
| | comp=N,277μm,0.8s | | | | | | |
| VIL2 | | | | AML | AML | 16 17 03.6 | |
| | comp=E,492μm,0.6s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **2.90** | **337** | P | **Pn** | **16 16 16.9** | **+1.2** |
| **BODT** | **Bodrum** | **3.44** | **60** | PN | **Pn** | **16 16 25.2** | **+2.1** |
| **AGG** | **Agios Georgios** | **3.77** | **345** | Pn | **Pn** | **16 16 30.1** | **+2.4** |
| **ARG** | **Arkhangelos** | **3.77** | **76** | PN | **Pn** | **16 16 29.9** | **+2.2** |
| **URLA** | **Izmir** | **3.82** | **38** | PN | **Pn** | **16 16 30.8** | **+2.4** |
| **TURN** | **Turunc** | **4.01** | **68** | PN | **Pn** | **16 16 33.3** | **+2.4** |
| **YER** | **Yerkesik** | **4.17** | **64** | PN | **Pn** | **16 16 35.6** | **+2.4** |
| **DALY** | **Dalyan (Mula)** | **4.33** | **69** | PN | **Pn** | **16 16 38.2** | **+2.8** |
| **FETY** | **Fethiye** | **4.62** | **73** | PN | **Pn** | **16 16 42.1** | **+2.8** |
| **LIT** | **Litokhoron** | **4.79** | **350** | Pn | **Pn** | **16 16 44.2** | **+2.5** |
| **AKAS** | **Kas** | **4.95** | **78** | Pn | **Pn** | **16 16 43.0** | **-1.1** |
| **ALN** | **Alexandroupoli** | **5.83** | **19** | Pn | **Pn** | **16 16 58.2** | **+2.3** |
| **TIP** | **Timpagrande** | **6.64** | **307** | Pn | **Pn** | **16 17 07.7** | **+0.6** |
| **BORA** | **Eskisehir** | **7.05** | **48** | Pn | **Pn** | **16 17 13.9** | **+1.1** |
| **RAFF** | **Raffo Rosso** | **7.68** | **287** | Pn | **Pn** | **16 17 21.1** | **-0.3** |
| **CSS** | **Mathiatis** | **7.98** | **90** | Pn | **Pn** | **16 17 22.7** | **-2.8** |
| **BRTR** | **Keskin Array B** | **9.07** | **59** | Pn | **Pn** | **16 17 41.9** | **+1.3** |
| | comp=E,0.1nm,0.3s,baz=236,slow=13,SNR=8.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **9.07** | **59** | | **Pn** | **16 17 39.7** | **-0.9** |
| **MMAI** | **Mount Meron Ar** | **10.06** | **100** | Pn | **Pn** | **16 17 53.2** | **-0.9** |
| | comp=E,0.9nm,0.3s,baz=268,slow=10.0,SNR=2.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **15.84** | **13** | Pn | **Pn** | **16 19 13.1** | **+0.7** |
| | baz=207,slow=11,SNR=1.3 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **16.92** | **331** | Pn | **Pn** | **16 19 27.0** | **+0.7** |
| GRA1 | | | | IAmb | IAmb | 16 19 32.8 | |
| | comp=E,21nm,1.1s | | | | | | |
| **GRFO** | **Grafenberg** | **16.92** | **331** | Pn | **Pn** | **16 19 27.1** | **+0.8** |
| GRFO | | | | IAmb | IAmb | 16 19 32.8 | |
| | comp=E,22nm,1.2s | | | | | | |
| **KBZ** | **Khabaz** | **17.03** | **55** | P | **P** | **16 19 30.8** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=341,slow=19,SNR=1.8 | | | | | | |
| **PABE** | **Paberze** | **20.12** | **1** | P | **P** | **16 20 03.1** | **-0.3** |
| PABE | | | | IAmb | IAmb | 16 20 31.0 | |
| | comp=E,13nm,1.0s | | | | | | |
| **PAB** | **San Pablo** | **22.53** | **289** | P | **P** | **16 20 27.8** | **-1.8** |
| **HFS** | **Hagfors** | **25.58** | **348** | P | **P** | **16 20 59.6** | **+1.0** |
| | comp=Z,3.5nm,0.9s,baz=126,slow=9.5,SNR=5.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.68** | **227** | P | **P** | **16 21 35.0** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=25,slow=8.8,SNR=4.4 | | | | | | |
| **DBIC** | **Dimbokro** | **38.73** | **229** | *e*PKIKP | **P** | **16 22 53.8** | **-0.2** |
| | comp=Z,2.1nm,0.5s,baz=31,slow=9.1,SNR=6.7 | | | | | | |
| **TIC** | **Toumodi** | **38.85** | **229** | *e*PKIKP | **P** | **16 22 57.6** | **+2.5** |
| **TIC** | **Toumodi** | **38.85** | **229** | P | **P** | **16 22 57.6** | **+2.5** |
| **KIC** | **Kosan Boka** | **38.90** | **229** | *e*PKIKP | **P** | **16 22 58.1** | **+2.6** |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **KIC** | **Kosan Boka** | **38.90** | **229** | P | **P** | **16 22 58.1** | **+2.6** |
| **LIC** | **Lamto** | **39.18** | **229** | *e*PKIKP | **P** | **16 22 58.1** | **+0.3** |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **LIC** | **Lamto** | **39.18** | **229** | P | **P** | **16 22 58.1** | **+0.3** |
| **MK31** | **Makanchi Array** | **44.72** | **57** | P | **P** | **16 23 41.7** | **-1.1** |
| MK31 | | | | IAmb | IAmb | 16 23 57.1 | |
| | comp=Z,2.3nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.72** | **57** | P | **P** | **16 23 41.7** | **-1.1** |
| | comp=Z,0.6nm,0.5s,baz=269,slow=7.9,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.77** | **46** | P | **P** | **16 23 50.8** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=264,slow=9.9,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **60.33** | **50** | P | **P** | **16 25 37.8** | **-0.8** |
| | comp=Z,0.1nm,0.4s,baz=288,slow=7.3,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.84** | **341** | P | **P** | **16 27 20.3** | **-0.9** |
| | comp=Z,0.1nm,0.5s,baz=32,slow=5.5,SNR=4.5 | | | | | | |
| **KSRS** | **Korea Array** | **79.15** | **52** | P | **P** | **16 27 33.9** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=306,slow=5.4,SNR=4.1 | | | | | | |
| **BCAR** | **Beaver Creek A** | **81.19** | **353** | P | **P** | **16 27 45.5** | **+0.3** |

*IDC **08** 16:19:12.0±1.3,6°.55S×154°.73E,h26km±8km,mb5.9/34, mb1 5.9/38,mb1mx5.8/39,mbtmp6.0/38,ML4.8/5,MS6.2/60, Ms1 6.2/60,ms1mx6.2/62,Error ellipse: s-maj=10.6km s-min=8.6km az=39.0*
*NEIC **08** 16:19:12.8±1.3,6°.62S±0°.07×154°.74E±0°.07,h29km±1km, mb6.3/426,Ms_20 6.6/403,Mwb6.3/43,Mww6.4,Error ellipse: s-maj=12.5km s-min=11.1km az=182.0*
*MOS **08** 16:19:12.2±1.3,6°.43S×154°.61E,h34km,mb6.4/37, MS6.2/30,Error ellipse: s-maj=7.9km s-min=5.3km az=120.3*
*BJI **08** 16:19:12.3±0.0,6°.58S×154°.78E,h30km,mb6.2/92, mB6.4/81,Ms6.4/99,Ms7 6.2/94*
*NEIC **08** 16:19:12.9,6°.62S×154°.70E,h35km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr3.46; Mθθ-1.48; Mϕϕ-1.97; Mrθ-0.00; Mθϕ1.17; Mϕr-1.38; Fault plane solution: M₀3.50000×10¹⁸ NP1:ϕs153.36000°, δ55.48000°,λ102.82000°. NP2:ϕs311.49000°,δ36.54000°, λ72.13000°. Principal axes: T 3.7989, Plg76.0000°, Azm103.0000°; N -0.6994, Plg11.0000°, Azm326.0000°; P -3.0995, Plg10.0000°, Azm234.0000°;*
*DJA **08** 16:19:16.0±0.4,7°.5S×15°.5E±°,h56km±3km,M6.4/146, mB6.7/139,mb6.2/146,MLv6.5/3,Mw(mB)6.6/139, MwMwp6.2/120,Mwp6.2/120*
*GCMT **08** 16:19:17.8±0.0,6°.83S×154°.57E,h41km,MW6.4/169, Moment Tensor Solution. s169,c410; s167,c655; Duration: 4ᵗ0 Moment tensor: Scale 10¹⁸Nm; Mrr5.06±.02; Mθθ-2.20±.02; Mϕϕ-2.85±.02; Mrθ0.70±.02; Mθϕ1.91±.01; Mϕr-2.41±.02; Best double couple: M₀5.36900×10¹⁸ NP1:ϕs312.00000°,δ33.00000°, λ75.00000°. NP2:ϕs150.00000°,δ59.00000°,λ99.00000°. Principal axes: T 5.7400, Plg75.0000°, Azm85.0000°; N -0.7320, Plg8.0000°, Azm325.0000°; P -4.9980, Plg13.0000°, Azm233.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
*NEIC **08** 16:19:17,6°.63S×154°.49E,h40km,Moment Tensor Solution. Duration: 10s0 Moment tensor: Scale 10¹⁸Nm; Mrr5.49; Mθθ-2.27; Mϕϕ-3.22; Mrθ1.76; Mθϕ1.99; Mϕr-1.48; Fault plane solution: M₀5.66000×10¹⁸ NP1: ϕs325.00000°,δ33.00000°,λ96.00000°. NP2: ϕs137.00000°,δ57.00000°,λ86.00000°. Principal axes: T 5.9929, Plg78.0000°, Azm33.0000°; N -0.7308, Plg4.0000°, Azm140.0000°; P -5.2621, Plg12.0000°, Azm231.0000°;*
**ISC 08 16:19:14.2±0.3,6°.65S±0°.03×154°.76E±0°.03,h46km±2km, h47km:pP-P,n2468,σ1s49/2701,mb6.2/389,MS6.5/332, 405C-106D,Fault plane solution: NP1:ϕ182.65175°, δ57.31497°,λ119.82429°. NP2:ϕ315.94113°,δ43.09859°, λ52.21949°. Principal axes: T Plg63.9181°, Azm145.7709°; N Plg24.7455°, Azm345.4504°; P Plg7.7275°, Azm251.8646°; Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **3.56** | **313** | ⇓P | **Pn** | **16 20 07.1** | **+0.1** |
| **RABL** | **Rabaul** | **3.56** | **313** | P | **Pn** | **16 20 08.0** | **+1.0** |
| **HNR** | **Honiara** | **5.83** | **119** | Pn | **Pn** | **16 20 36.6** | **-1.5** |
| | 19nm,0.3s,baz=184,slow=5.2,SNR=6.6 | | | | | | |
| HNR | | | | Sn | Sn | 16 21 53.3 | +9.5 |
| | 416nm,0.3s,baz=243,slow=21,SNR=4.2 | | | | | | |
| HNR | | | | LR | LR | 16 23 10.6 | |
| | comp=Z,732μm,19.0s,baz=259,slow=40 | | | | | | |
| **HNR** | **Honiara** | **5.83** | **119** | Pn | **Pn** | **16 20 36.2** | **-1.9** |
| **HNR** | **Honiara** | **5.83** | **119** | P | Pn | 16 20 44.3 | +6.1 |
| **PMG** | **Port Moresby** | **8.01** | **250** | Pn | **Pn** | **16 21 08.3** | **+0.2** |
| | 95nm,0.3s,baz=66,slow=5.3,SNR=15.8 | | | | | | |
| PMG | | | | Sn | **Sn** | **16 22 41.7** | **+4.3** |
| | 264nm,0.3s,baz=89,slow=20,SNR=9.5 | | | | | | |
| **PMG** | **Port Moresby** | **8.01** | **250** | ⇑P | **Pn** | **16 21 07.9** | **-0.1** |
| PMG | | | | ⇓S | **Sn** | **16 22 42.0** | **+4.7** |
| **PMG** | **Port Moresby** | **8.01** | **250** | Pn | **Pn** | **16 21 08.1** | **0.0** |
| **PMG** | **Port Moresby** | **8.01** | **250** | P | **Pn** | **16 21 09.7** | **+1.7** |
| **MANU** | **Manus Island** | **8.68** | **302** | ⇓P | **Pn** | **16 21 17.6** | **+0.4** |
| **COEN** | **Coen** | **13.51** | **237** | ⇓P | **Pn** | **16 22 21.6** | **-1.7** |
| **COEN** | **Coen** | **13.51** | **237** | P | **Pn** | **16 22 23.0** | **-0.3** |
| **PATS** | **Pohnpei** | **13.86** | **15** | P | **Pn** | **16 22 28.5** | **+0.3** |
| | baz=14,SNR=14 | | | | | | |
| **PATS** | **Pohnpei** | **13.86** | **15** | Pn | **Pn** | **16 22 28.0** | **-0.1** |
| **PATS** | **Pohnpei** | **13.86** | **15** | P | **Pn** | **16 22 30.0** | **+1.8** |
| **MMPI** | **Merauke** | **14.37** | **262** | P | **Pn** | **16 22 35.2** | **+0.3** |
| | 135μm146μm7μm,1.7s | | | | | | |
| **JAY** | **Jayapura** | **14.60** | **286** | Pn | **Pn** | **16 22 36.7** | **-1.4** |
| | 2.8nm,0.3s,baz=107,slow=9.1,SNR=37 | | | | | | |
| JAY | | | | LR | LR | 16 29 29.7 | |
| | comp=Z,124μm,18.0s,baz=100,slow=42 | | | | | | |
| **JAY** | **Jayapura** | **14.60** | **286** | P | **Pn** | **16 22 37.2** | **-0.9** |
| | 40μm12μm210nm,1.1s | | | | | | |
| **SANVU** | **Saraoutou** | **15.01** | **127** | ⇑P | **P** | **16 22 46.1** | **-2.0** |
| **SANVU** | **Saraoutou** | **15.01** | **127** | Pn | **Pn** | **16 22 43.7** | **+0.3** |
| SANVU | | | | IAmb | IAmb | 16 22 50.2 | |
| | comp=Z,2μm,1.4s | | | | | | |
| **SANVU** | **Saraoutou** | **15.01** | **127** | P | **P** | **16 22 47.7** | **-0.4** |
| **GENI** | **Genyem** | **15.09** | **285** | ⇓P | **Pn** | **16 22 41.9** | **-2.7** |
| **GENI** | **Genyem** | **15.09** | **285** | P | **Pn** | **16 22 43.2** | **-1.3** |
| | comp=Z,86μmcomp=Z,28μmcomp=Z,873nm,1.9s | | | | | | |
| **GENI** | **Genyem** | **15.09** | **285** | P | **Pn** | **16 22 45.1** | **+0.6** |
| **MTSU** | **Mount Surprise** | **15.29** | **221** | P | **Pn** | **16 22 47.3** | **+0.2** |
| | baz=15,SNR=236 | | | | | | |
| **MTSU** | **Mount Surprise** | **15.29** | **221** | P | **Pn** | **16 22 48.8** | **+1.6** |
| **CTA** | **Charters Tower** | **15.70** | **211** | Pn | **Pn** | **16 22 53.1** | **+0.7** |
| | comp=Z,4.0nm,0.3s,baz=31,slow=13,SNR=56 | | | | | | |
| CTA | | | | LR | LR | 16 28 11.5 | |
| | comp=Z,132μm,21.6s,baz=36,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **15.70** | **211** | ⇓P | **Pn** | **16 22 52.2** | **-0.2** |
| **CTAO** | **Charters Tower** | **15.70** | **211** | Pn | **Pn** | **16 22 50.8** | **-1.7** |
| **CTAO** | **Charters Tower** | **15.70** | **211** | P | **Pn** | **16 22 53.2** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.62** | **147** | ⇑P | **P** | **16 23 05.6** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **16.62** | **147** | P | **P** | **16 23 07.1** | **+1.2** |
| **SMPI** | **Sarmi** | **16.66** | **285** | P | **Pn** | **16 23 05.3** | **+0.7** |
| | comp=Z,15μmcomp=Z,861nm,1.4s | | | | | | |
| **DVP** | **Devils Point** | **17.11** | **131** | P | **P** | **16 23 16.0** | **+4.6** |
| **RK1H** | **Rockhampton Ha** | **17.14** | **193** | P | **P** | **16 23 11.3** | **-0.3** |
| | comp=Z,375nm,0.7s | | | | | | |
| **RTV** | **Rentapao** | **17.33** | **131** | P | **P** | **16 23 17.4** | **+3.6** |
| **EIDS** | **Eidsvold** | **18.94** | **190** | P | **Pn** | **16 23 32.7** | **+0.2** |
| | baz=19,SNR=96 | | | | | | |
| **EIDS** | **Eidsvold** | **18.94** | **190** | ⇑P | **Pn** | **16 23 32.7** | **+0.2** |
| **EIDS** | **Eidsvold** | **18.94** | **190** | P | **Pn** | **16 23 33.7** | **+1.2** |
| **NOUC** | **Port Laguerre** | **18.98** | **145** | P | **Pn** | **16 23 34.7** | **+1.8** |
| **DZM** | **Mont Dzumac** | **19.03** | **145** | *e*P | **Pn** | **16 23 34.3** | **+0.6** |
| | comp=Z,1μm,0.9s | | | | | | |
| DZM | | | | *e*S | **Sn** | **16 27 00.9** | **-5.3** |
| | comp=Z,90μm,26.8s | | | | | | |
| DZM | | | | *e*LR | LR | 16 28 02.2 | |
| | comp=Z,258μm,25.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.03** | **145** | P | **Pn** | **16 23 34.3** | **+0.6** |
| | comp=Z,25nm,0.3s,baz=314,slow=6.8,SNR=284 | | | | | | |
| DZM | | | | LR | LR | 16 30 06.4 | |
| | comp=Z,111μm,21.3s,baz=314,slow=34 | | | | | | |
| DZM | | | | ScP | **ScP** | **16 31 32.1** | **+3.4** |
| | comp=Z,0.4nm,0.3s,baz=88,slow=5.1,SNR=7.2 | | | | | | |
| DZM | | | | PKiKP | **PKiKP** | **16 35 47.5** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=186,slow=11,SNR=5.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.03** | **145** | ⇑P | **Pn** | **16 23 34.1** | **+0.4** |
| **DZM** | **Mont Dzumac** | **19.03** | **145** | P | **P** | **16 23 33.1** | **+0.5** |
| **DZM** | **Mont Dzumac** | **19.03** | **145** | P | **Pn** | **16 23 35.6** | **+1.9** |
| **SRPI** | **Serui, Papua** | **19.07** | **284** | P | **Pn** | **16 23 34.3** | **+0.2** |
| | comp=Z,39μmcomp=Z,11μmcomp=Z,434nm,1.3s | | | | | | |
| **ONTNC** | **Ouen Toro** | **19.22** | **145** | P | **Pn** | **16 23 35.4** | **-0.5** |
| **ONTNC** | **Ouen Toro** | **19.22** | **145** | P | **Pn** | **16 23 37.1** | **+1.2** |
| **YATNC** | **Mamie plateau,** | **19.28** | **144** | P | **Pn** | **16 23 38.2** | **+1.6** |
| **BAKI** | **Biak** | **19.38** | **285** | P | **P** | **16 23 36.5** | **+0.1** |
| | comp=Z,1μm,1.4s | | | | | | |
| **OUENC** | **Ouen Island, N** | **19.53** | **145** | P | **P** | **16 23 38.7** | **+0.7** |
| **OUENC** | **Ouen Island, N** | **19.53** | **145** | P | **Pn** | **16 23 40.4** | **+0.8** |
| **KWAJ** | **Kwajalein Atol** | **20.00** | **40** | ⇑P | **Pn** | **16 23 46.1** | **+0.9** |
| **KWAJ** | **Kwajalein Atol** | **20.00** | **40** | P | **Pn** | **16 23 44.4** | **-0.8** |
| **KWAJ** | **Kwajalein Atol** | **20.00** | **40** | P | **Pn** | **16 23 48.9** | **+3.8** |
| **QIS** | **Mount Isa** | **20.17** | **225** | P | **P** | **16 23 45.1** | **+0.1** |
| | baz=20,SNR=328 | | | | | | |
| **QIS** | **Mount Isa** | **20.17** | **225** | P | **P** | **16 23 45.7** | **+0.7** |
| **RMQ** | **Roma** | **20.54** | **195** | P | **P** | **16 23 50.1** | **+1.2** |
| | baz=21,SNR=573 | | | | | | |
| **RMQ** | **Roma** | **20.54** | **195** | P | Pn | 16 23 50.3 | -1.2 |
| **QLP** | **Quilpie** | **22.21** | **206** | P | **P** | **16 24 06.9** | **+0.1** |
| | baz=22,SNR=211 | | | | | | |
| **QLP** | **Quilpie** | **22.21** | **206** | ⇑P | **P** | **16 

DRS Darwin Rock St 24.21 254 P P 16 24 26.7 -0.1
comp=Z,332nm,0.8s
FUNA Funafuti 24.29 96 P P 16 24 27.1 -0.4
FUNA IAmb IAmb 16 24 53.8
comp=Z,680nm,1.1s
I39PW PALAU INFRASON 24.60 305 *i* 18 50 20.0
baz=125,slow=315,SNR=2.2
BNDI Bandanaira 24.82 274 ⇓P P 16 24 32.2 -0.2
BNDI Bandanaira 24.82 274 P P 16 24 34.0 +1.6
INKA Innaminka 24.83 211 P P 16 24 33.3 +1.0
LHI Lord Howe Isla 25.07 171 P P 16 24 35.0 +0.6
baz=25,SNR=25
LHI Lord Howe Isla 25.07 171 ⇑P P 16 24 35.0 +0.6
LHI Lord Howe Isla 25.07 171 P P 16 24 35.4 +1.0
MSVF Nonsavu 25.25 118 P P 16 24 36.8 +0.5
comp=Z,186nm,1.0s,baz=274,slow=11,SNR=131
MSVF PcP PcP 16 28 10.2 +1.2
comp=Z,24nm,0.8s,baz=267,slow=5.0,SNR=3.6
MSVF ScP ScP 16 31 46.4 +1.7
comp=Z,7.1nm,0.8s,baz=303,slow=4.7,SNR=3.9
MSVF LR LR 16 33 47.5
comp=Z,109µm,20.2s,baz=290,slow=35
MSVF Nonsavu 25.25 118 ⇑P P 16 24 36.7 +0.4
MSVF Nonsavu 25.25 118 P P 16 24 36.6 +0.2
MSVF Nonsavu 25.25 118 P P 16 24 38.7 +2.4
NFK Norfolk Island 25.51 152 P P 16 24 39.8 +1.3
baz=26,SNR=3.6
NFK Norfolk Island 25.51 152 ⇑P P 16 24 39.2 +0.7
MSAI Masohi 25.94 276 P P 16 24 42.6 +0.1
comp=Z,282nmcomp=Z,843nmcomp=Z,66nm,0.8s
CMSA Cobar Meteorol 26.17 198 P P 16 24 44.1 -0.3
baz=26,SNR=338
CMSA Cobar Meteorol 26.17 198 P P 16 24 45.3 +0.9
AS31 Alice Springs 26.22 228 P P 16 24 43.9 -1.1
ASAR Alice Springs 26.23 228 P P 16 24 44.8 -0.3
comp=Z,99nm,0.7s,baz=58,slow=8.7,SNR=201
ASAR PcP PcP 16 28 12.1 +0.9
comp=Z,35nm,0.6s,baz=56,slow=2.7,SNR=4.9
ASAR ScP ScP 16 31 48.6 +1.3
comp=Z,56nm,0.8s,baz=53,slow=3.1,SNR=17
ASAR LR LR 16 34 40.8
comp=Z,97µm,21.0s,baz=90,slow=35
ASAR PKiKP PKiKP 16 35 50.2 -0.2
comp=Z,2.8nm,0.8s,baz=56,slow=1.5,SNR=4.3
ASAR P3KPbc 16 57 27.9
comp=Z,1.1nm,0.6s,baz=226,slow=3.3,SNR=20
ASAR Alice Springs 26.23 228 P P 16 24 43.8 -1.2
DGTI Dogotuki 26.26 114 P P 16 24 46.3 +0.9
NTLH Newcastle Hard 26.27 186 P P 16 24 47.1 +1.8
comp=Z,715nm,0.8s
NTLS Newcastle Soft 26.30 186 P P 16 24 48.1 +2.6
comp=Z,1µm,0.7s
AAI Ambon 26.62 275 P P 16 24 48.1 -0.6
comp=Z,52µmcomp=Z,13µmcomp=Z,1µm,0.9s
MGCD Mangrove Creek 26.64 187 P P 16 24 49.7 +1.0
baz=27,SNR=103
MGCD Mangrove Creek 26.64 187 P P 16 24 50.5 +1.9
TAVE Taveuni 26.71 114 P P 16 24 52.4 +2.9
KNRA Kununurra 27.01 248 P P 16 24 52.0 -0.1
baz=27,SNR=278
KNRA Kununurra 27.01 248 P P 16 24 52.4 +0.3
SYDH Sydney Hard Ro 27.23 187 P P 16 24 56.4 +2.5
comp=Z,212nm,0.8s
RIV Riverview 27.25 187 P P 16 24 55.3 +1.3
baz=27,SNR=35
RIV Riverview 27.25 187 ⇑P P 16 24 55.1 +1.0
OOD Oodnadatta 27.73 218 P P 16 24 58.5 0.0
LBMI Labuha 27.84 281 P P 16 25 01.1 +1.5
comp=Z,22µmcomp=Z,30µmcomp=Z,2µm,1.9s
STKA Stephens Creek 27.95 204 P P 16 24 59.6 -0.8
comp=Z,94nm,0.5s,baz=12,slow=9.1,SNR=105
STKA PcP PcP 16 28 16.1 +1.1
comp=Z,62nm,0.9s,baz=308,slow=5.2,SNR=2.8
STKA ScP ScP 16 31 54.3 +2.1
comp=Z,57nm,1.0s,baz=341,slow=2.9,SNR=7.6
STKA PKiKP PKiKP 16 35 50.9 -0.3
comp=Z,3.7nm,0.6s,baz=333,slow=3.9,SNR=4.5
STKA LR LR 16 36 09.6
comp=Z,83µm,20.8s,baz=21,slow=36
STKA P3KPbc 16 57 24.8
comp=Z,2.6nm,0.6s,baz=143,slow=4.1,SNR=7.1
STKA Stephens Creek 27.95 204 P P 16 24 59.4 -1.0
baz=28,SNR=280
STKA Stephens Creek 27.95 204 P P 16 24 58.7 -1.7
STKA Stephens Creek 27.95 204 P P 16 25 00.3 -0.1
WAKE Wake Island 28.31 24 IAMs_20 IAMs_20 16 37 52.3
comp=Z,128µm,18.0s
LCRK Leigh Creek 28.31 211 P P 16 25 03.5 -0.2
TNTI Ternate 28.32 284 ⇑P P 16 25 03.8 -0.1
TNTI Ternate 28.32 284 P P 16 25 04.1 +0.2
comp=Z,7µmcomp=Z,537nm,1.6s
TNTI Ternate 28.32 284 P P 16 25 02.8 -1.0
TNTI IAmb IAmb 16 25 14.0
comp=Z,892nm,1.3s
TNTI Ternate 28.32 284 P P 16 25 04.1 +0.2
H11N1 WAKE ISLAND Hy 28.80 24 P P 16 25 09.2 +1.5
baz=212,slow=11,SNR=6.9
H11N3 WAKE ISLAND Hy 28.81 24 P P 16 25 10.5 +2.6
baz=212,slow=11,SNR=6.8
H11N2 WAKE ISLAND Hy 28.81 24 P P 16 25 09.5 +1.5
baz=212,slow=11,SNR=7.0
CNB Canberra Magne 28.95 189 P P 16 25 10.6 +1.2
baz=29,SNR=20
CNB Canberra Magne 28.95 189 P P 16 25 10.5 +1.2
CAN Canberra 29.02 190 ⇑P P 16 25 10.9 +1.0
CAN Canberra 29.02 190 P P 16 25 10.2 +0.2
CAN IAMs_20 IAMs_20 16 36 01.2
comp=Z,97µm,20.0s
CAN Canberra 29.02 190 P P 16 25 11.5 +1.6
SANI Sanana 29.04 278 ⇑P P 16 25 09.8 -0.6
SANI Sanana 29.04 278 P P 16 25 10.9 +0.6
comp=Z,31µmcomp=Z,13µmcomp=Z,961nm,1.1s
SANI Sanana 29.04 278 P P 16 25 11.4 +1.1
SOEI Soe 30.33 262 ⇓P P 16 25 22.2 +0.3
SOEI Soe 30.33 262 P P 16 25 22.7 +0.8
comp=Z,55µmcomp=Z,24µmcomp=Z,711nm,1.4s
SOEI Soe 30.33 262 P P 16 25 21.1 -0.8
SOEI IAmb IAmb 16 25 47.3
comp=Z,499nm,1.1s
SOEI Soe 30.33 262 P P 16 25 23.9 +2.0
HTT Hallett 30.43 207 P P 16 25 21.8 -0.6
baz=31,SNR=46
HTT Hallett 30.43 207 ⇓P P 16 25 21.9 -0.6
HTT Hallett 30.43 207 P P 16 25 22.7 +0.3
MULG Mulgathing 30.51 217 P P 16 25 22.6 -0.5
NAPP Napperby 30.57 208 P P 16 25 24.3 +0.6
comp=Z,256nm,1.0s
FITZ Fitzroy Crossi 30.58 245 P P 16 25 23.2 -0.6
comp=Z,251nm,0.6s,baz=60,slow=8.9,SNR=239
FITZ LR LR 16 37 52.8
comp=Z,104µm,20.9s,baz=70,slow=37
FITZ P3KPbc 16 57 16.3
comp=Z,3.6nm,0.7s,baz=246,slow=6.1,SNR=7.5
FITZ Fitzroy Crossi 30.58 245 P P 16 25 22.7 -1.2
baz=31,SNR=730
MILA Mila 30.69 189 P P 16 25 25.8 +1.1
baz=31,SNR=3.4
WHYH Whyalla 30.72 209 P P 16 25 24.4 -0.6
comp=Z,283nm,0.7s
SGSI Sangihe 30.94 289 P P 16 25 28.0 +0.9
comp=Z,9µmcomp=Z,535nm,0.7s
BATI Baumata 30.95 261 P P 16 25 28.3 +1.0
comp=Z,158nm,0.9s,baz=140,slow=1.4,SNR=34
BATI LR LR 16 39 29.8
comp=Z,87µm,21.1s,baz=116,slow=39
BATI P3KPbc 16 57 14.9
comp=Z,33nm,0.7s,baz=291,slow=0.3,SNR=12
BATI Baumata 30.95 261 P P 16 25 28.1 +0.8
comp=Z,28µmcomp=Z,13µmcomp=Z,500nm,1.4s
WRKA Warakurna 31.23 231 P P 16 25 28.2 -1.4
baz=31,SNR=416
WRKA Warakurna 31.23 231 ⇑P P 16 25 28.1 -1.5
WRKA Warakurna 31.23 231 P P 16 25 28.8 -0.8
BBOO Buckleboo 31.30 211 P P 16 25 29.0 -1.2
baz=31,SNR=86
BBOO Buckleboo 31.30 211 P P 16 25 29.1 -1.0
MATI Mati 31.48 295 *i*eP P 16 25 31.0 -0.9
KMSI Cibinong 31.54 282 P P 16 25 32.9 +0.5
comp=Z,982nmcomp=Z,22µmcomp=Z,3µm,0.9s
GHSS Government Hou 31.83 206 P P 16 25 35.7 +1.0
comp=Z,198nm,0.7s
TOO Toolangi 31.91 194 P P 16 25 36.6 +1.1
baz=32,SNR=18
TOO Toolangi 31.91 194 ⇓P P 16 25 36.0 +0.5
TOO Toolangi 31.91 194 P P 16 25 36.9 +1.5
TWOA Tennyson Woods 31.93 206 P P 16 25 36.2 +0.6
comp=Z,193nm,0.7s
BBSI Bau Bau 32.03 270 P P 16 25 38.9 +2.2
comp=Z,1µmcomp=Z,81nm,1.3s
DAV Davao City (W) 32.15 295 LR LR 16 36 54.7
comp=Z,30µm,20.8s,baz=106,slow=33
ARPS Mount Arapiles 32.22 200 P P 16 25 38.1 0.0
baz=32,SNR=80
ARPS Mount Arapiles 32.22 200 P P 16 25 38.1 0.0
MMRI Maumere 32.29 264 ⇓P P 16 25 38.1 -0.9
MMRI Maumere 32.29 264 P P 16 25 39.2 +0.2
comp=Z,40µmcomp=Z,37µmcomp=Z,2µm,2.1s
MMRI Maumere 32.29 264 P P 16 25 38.8 -0.2
BRAT Ballarat 32.30 196 P P 16 25 39.8 +1.1
comp=Z,73nm,0.9s
MLBS Spotswood, Mel 32.30 195 P P 16 25 41.4 +2.6
comp=Z,206nm,0.7s
KCP Kidapawan 32.56 294 ⇓*e*P P 16 25 43.2 +1.7
KCP Kidapawan 32.56 294 ⇓*e*P PcP 16 28 28.4 +1.0
KCP Kidapawan 32.56 294 ⇓*e*P ScS 16 36 08.9 +1.2
GEXS Deakin Univers 32.81 195 P P 16 25 45.7 +2.5
comp=Z,191nm,1.1s
OUZ Omahuta 33.30 151 ⇑P P 16 25 49.8 +2.3
CTBH Cotabato--PC H 33.41 294 ⇓*i*P P 16 25 49.4 +0.5
MRSI Marisa 33.51 281 P P 16 25 49.2 -0.5
comp=Z,23µmcomp=Z,8µmcomp=Z,580nm,1.2s
APSI Ampana 33.51 278 P P 16 25 49.9 +0.2
comp=Z,17µmcomp=Z,8µmcomp=Z,489nm,1.3s
AFI Afiamalu 33.67 105 P P 16 25 51.9 +0.7
comp=Z,245nm,1.0s,baz=30,slow=1.7,SNR=18
AFI LR LR 16 37 55.5
comp=Z,63µm,19.2s,baz=284,slow=33
AFI Afiamalu 33.67 105 ⇑P P 16 25 51.2 0.0
AFI Afiamalu 33.67 105 P P 16 25 50.9 -0.3
AFI IAmb IAmb 16 25 54.9
comp=Z,322nm,1.1s
AFI Afiamalu 33.67 105 P P 16 25 52.1 +0.9
BASI Baing, Sumba 33.98 262 P P 16 25 53.8 0.0
comp=Z,23µmcomp=Z,15µmcomp=Z,826nm,1.2s
BSSI Bau Bau, Buton 34.06 269 P P 16 25 55.1 +0.7
comp=Z,18µmcomp=Z,13µmcomp=Z,547nm,0.9s
MSLP Maasin 34.13 299 ⇑*e*P P 16 25 55.0 -0.1
RAO Raoul Island 34.19 134 P P 16 25 57.1 +1.7
comp=Z,1µm,0.8s,baz=78,slow=3.7,SNR=12
RAO Raoul Island 34.19 134 ⇑P P 16 25 55.6 +0.2
RAO Raoul Island 34.19 134 P P 16 25 56.0 +0.6
RAO Raoul Island 34.19 134 P P 16 25 57.8 +2.4
BESP Borongan 34.35 302 ⇑*e*P P 16 25 57.6 +0.7
BKSI Bulukumba 34.47 270 P P 16 25 58.0 0.0
comp=Z,26µmcomp=Z,8µmcomp=Z,235nm,1.2s
BNSI Bone 34.56 272 P P 16 25 59.7 +0.9
comp=Z,23µmcomp=Z,8µmcomp=Z,340nm,1.3s
FORT Forrest 34.68 223 P P 16 25 58.8 -0.8
baz=35,SNR=131
FORT Forrest 34.68 223 ⇑P P 16 25 58.4 -1.2
FORT Forrest 34.68 223 P P 16 25 59.3 -0.3
GLAD Gladstone 34.71 189 P P 16 26 01.4 +1.7
comp=Z,261nm,1.0s
TOLI2 Tolitoli 34.78 282 P P 16 25 59.2 -1.5
TOLI2 IAmb IAmb 16 26 02.9
comp=Z,462nm,1.1s
TOLI2 Tolitoli 34.78 282 P P 16 26 01.1 +0.4
TBP Tagbilaran 34.80 297 *e*P P 16 26 00.3 -0.5
KAPI Kappang 34.86 271 P P 16 26 00.9 -0.5
comp=Z,182nm,1.0s,baz=91,slow=8.0,SNR=40
KAPI ScP ScP 16 32 16.9 +1.2
comp=Z,150nm,1.1s,baz=157,slow=0.0,SNR=12
KAPI LR LR 16 42 37.6
comp=Z,11µm,20.6s,baz=102,slow=40
KAPI Kappang 34.86 271 P P 16 26 01.6 +0.2
KAPI Kappang 34.86 271 ⇑P P 16 26 01.3 -0.1
KAPI Kappang 34.86 271 P P 16 26 00.9 -0.5
KAPI IAmb IAmb 16 26 29.7
comp=Z,437nm,1.1s
KAPI Kappang 34.86 271 P P 16 26 02.4 +1.0
SPSI Sidrap Palu 34.94 273 P P 16 26 01.6 -0.5
comp=Z,22µmcomp=Z,6µmcomp=Z,302nm,1.2s
TTSI Tana Toraja 34.99 274 P P 16 26 03.2 +0.7
comp=Z,21µmcomp=Z,9µmcomp=Z,262nm,1.1s
LLP Lapu-Lapu 34.99 299 *e*P P 16 26 02.5 0.0
WBSI Waikabubak, Su 35.13 263 P P 16 26 03.2 -0.5
comp=Z,34µmcomp=Z,19µmcomp=Z,602nm,0.8s
SNPH Sibulan 35.20 296 *e*P P 16 26 06.3 +1.9
CORO Coronation Par 35.31 190 P P 16 26 07.0 +2.1
comp=Z,230nm,1.1s
MPSI Mapaga 35.47 280 P P 16 26 06.5 -0.2
comp=Z,23µmcomp=Z,7µmcomp=Z,388nm,0.8s
CNOP Candoni, Negro 35.94 297 ⇑*i*P P 16 26 09.9 -0.8
MOO Moorlands 36.27 189 P P 16 26 15.1 +2.0
baz=36,SNR=14
MOO Moorlands 36.27 189 P P 16 26 14.3 +1.2
NIUE Niue 36.49 113 P P 16 26 15.7 +0.4
baz=36,SNR=7.1
NIUE Niue 36.49 113 P P 16 26 17.3 +2.0
KMRZ Kaimai 36.53 151 P P 16 26 24.9 +9.5
HIZ Hauiti 36.56 153 P P 16 26 15.6 0.0
HIZ IAmb IAmb 16 26 35.6
comp=Z,335nm,1.0s
TAU Tasmania Unive 36.70 189 ⇓P P 16 26 18.1 +1.4
TAU Tasmania Unive 36.70 189 P P 16 26 17.4 +0.7
TAU IAmb IAmb 16 26 20.5
comp=Z,365nm,0.8s
TAU Tasmania Unive 36.70 189 P P 16 26 18.8 +2.0
TLZ Tolley Road 36.72 152 P P 16 26 20.7 +3.6
KARZ Kaharoa 36.81 151 P P 16 26 20.3 +2.5
MBWA Marble Bar 36.82 243 P P 16 26 17.3 -0.8
MBWA P P 16 26 17.3 -0.8
MBWA Marble Bar 36.82 243 P P 16 26 16.6 -1.5
MBWA Marble Bar 36.82 243 IAMs_20 IAMs_20 16 41 20.5
comp=Z,110µm,21.0s
MBWA Marble Bar 36.82 243 P P 16 26 18.6 +0.5
OPRZ Ohinepanea 36.82 151 P P 16 26 22.6 +4.7
PSA00 Pilbara Seismi 36.84 243 P P 16 26 16.9 -1.4
PSA00 Pilbara Seismi 36.84 243 P P 16 26 18.4 +0.1
UTU Utuhina 36.91 151 P P 16 26 28.3 +10
OMRZ Omania 36.94 151 P P 16 26 23.3 +4.4
MARZ Manawahe 36.99 151 P P 16 26 23.0 +3.6
GRRZ Galatos Road 37.01 152 P P 16 26 24.2 +4.6
MKRZ Makatiti 37.01 151 P P 16 26 24.7 +5.1
WHRZ Whale Island 37.04 150 P P 16 26 29.1 +9.4
TARZ Mount Tarawera 37.11 151 P P 16 26 25.8 +5.4
EDRZ Edgecumbe 37.12 151 P P 16 26 23.4 +2.9
WATZ Wairara 37.12 152 P P 16 26 24.7 +4.2
WPRZ Whakapapatarin 37.17 152 P P 16 26 31.0 +10
PRRZ Plateau Road 37.26 151 P P 16 26 28.6 +7.0
RATZ Rangitukua 37.27 152 P P 16 26 25.6 +3.9
TWVZ Taurewa 37.28 153 P P 16 26 24.5 +2.6
KATZ Kakaramea 37.32 153 P P 16 26 27.0 +4.7
HAZ Te Kaha 37.36 149 P P 16 26 24.6 +2.1
WTVZ West Tongariro 37.38 153 P P 16 26 25.6 +2.8
KRVZ Karewarewa 37.39 153 P P 16 26 27.3 +4.5
NNVZ North Ngauruho 37.41 153 P P 16 26 25.7 +2.6
NTVZ North Tongarir 37.41 153 P P 16 26 25.5 +2.5
PKVZ Pokaka 37.42 153 P P 16 26 25.9 +2.9
URZ Urewera 37.42 150 P P 16 26 23.3 +0.4
comp=Z,160nm,0.6s,baz=254,slow=3.4,SNR=35
URZ ScP ScP 16 32 26.9 +2.2
comp=Z,57nm,1.0s,baz=204,slow=8.9,SNR=7.6
URZ LR LR 16 41 40.0
comp=Z,31µm,18.4s,baz=327,slow=36
URZ Urewera 37.42 150 ⇑P P 16 26 23.8 +0.8
URZ Urewera 37.42 150 P P 16 26 24.5 +1.6
URZ Urewera 37.42 150 P P 16 26 23.2 +0.3
URZ Urewera 37.42 150 P P 16 26 24.8 +1.9
MUGZ Murupara 37.42 151 P P 16 26 27.8 +4.8
TMVZ Te Maari 37.44 153 P P 16 26 27.1 +3.9
NGZ Ngauruhoe 37.44 153 P P 16 26 25.8 +2.5
ETVZ East Tongariro 37.45 153 P P 16 26 26.3 +2.9
OTVZ Oturere 37.46 153 P P 16 26 26.2 +2.7
SNVZ South Ngauruho 37.46 153 P P 16 26 26.0 +2.5
RUGZ Raukumara Rang 37.47 150 P P 16 26 25.0 +1.5
FWVZ Far West T-bar 37.48 153 P P 16 26 26.1 +2.4
MXZ Matakaoa Point 37.48 149 P P 16 26 25.7 +2.2
MXZ Matakaoa Point 37.48 149 P P 16 26 24.9 +1.4
MXZ IAmb IAmb 16 26 37.7
comp=Z,324nm,1.1s
TRVZ Turoa 37.51 153 P P 16 26 26.4 +2.4
TUVZ Tukino 37.54 153 P P 16 26 28.6 +4.5
MRHZ Matea Rd 37.54 152 P P 16 26 29.6 +5.6
QRZ Quartz Range 37.55 158 P P 16 26 24.7 +0.6
QRZ IAmb IAmb 16 39 39.6
comp=Z,67µm,20.0s
QRZ Quartz Range 37.55 158 P P 16 26 26.0 +2.0
WNVZ Wahianoa 37.56 153 P P 16 26 27.0 +2.7
PKGZ Pakihiroa 37.61 149 P P 16 26 27.7 +3.0
RTZ Ruatahuna 37.63 151 P P 16 26 27.0 +2.1
WAZ Wanganui 37.64 154 P P 16 26 27.9 +3.1
MWZ Matawai 37.68 150 P P 16 26 27.5 +2.3
MOVZ Moawhango 37.69 153 P P 16 26 28.1 +2.7
WMGZ Waiomatatini S 37.73 149 P P 16 26 27.4 +1.8
RAGZ Rawiri 37.75 150 P P 16 26 27.6 +1.8
MTHZ Maungataniwha 37.75 151 P P 16 26 27.4 +1.5
TWGZ Tauwhareparae 37.79 150 P P 16 26 28.3 +2.2
CUYO Cuyo Island 37.82 297 ⇑*e*P P 16 26 28.1 +1.5
BKZ Black Stump Fm 37.84 152 P P 16 26 27.6 +1.0
BKZ Black Stump Fm 37.84 152 P P 16 26 27.1 +0.6
BKZ Black Stump Fm 37.84 152 P P 16 26 27.9 +1.3
PUZ Puketiti 37.85 149 P P 16 26 27.8 +1.2
BHHZ Black Hill Sta 37.90 153 P P 16 26 28.8 +1.7
TKGZ Te Karaka 37.92 150 P P 16 26 28.9 +1.7
SNGZ Shannon Statio 37.94 151 P P 16 26 28.7 +1.3
SMKI Samarinda 37.96 278 P P 16 26 28.2 +0.3
comp=Z,30µmcomp=Z,14µmcomp=Z,512nm,1.4s
KWHZ Kaweka Forest 38.01 152 P P 16 26 30.4 +2.3
GQP Guinayangan 38.02 303 ⇓*e*P P 16 26 28.1 -0.3
MYLDM Lahad Datu 38.05 287 ⇑P P 16 26 30.0 +1.4
MYLDM Lahad Datu 38.05 287 P P 16 26 27.9 -0.8
RIGZ Rimuhau 38.09 150 P P 16 26 30.2 +1.6
ARHZ Aropaoanui 38.15 152 P P 16 26 30.6 +1.5
NNZ Nelson 38.21 157 P P 16 26 29.2 -0.4
NNZ IAMs_20 IAMs_20 16 39 40.1
comp=Z,69µm,22.0s
TSZ Takapari Road 38.32 153 P P 16 26 31.2 +0.6
SJMP San Jose 38.46 300 ⇓*i*P P 16 26 33.7 +1.7
THZ Tophouse 38.50 158 P P 16 26 31.6 -0.6
THZ IAmb IAmb 16 26 42.3
comp=Z,458nm,0.7s
THZ IAMs_20 IAMs_20 16 40 39.8
comp=Z,79µm,19.0s
POWZ Post Office Ro 38.50 154 P P 16 26 33.3 +1.2
KBKI Kotabaru 38.58 273 P P 16 26 33.3 +0.2
comp=Z,1µmcomp=Z,3µmcomp=Z,94nm,1.0s
TUWZ Tuamarina 38.61 157 P P 16 26 32.9 -0.1
SNZO South Karori 38.82 156 ⇑P P 16 26 34.8 +0.1
SNZO South Karori 38.82 156 P P 16 26 34.7 +0.1
SNZO South Karori 38.82 156 P P 16 26 36.7 +2.0
BSWZ Blackbirch Sta 38.83 157 P P 16 26 34.4 -0.4
LQP Lukban 38.89 302 ⇓*i*P P 16 26 36.7 +0.9
BFZ Birch Farm 38.95 154 P P 16 26 36.0 +0.2
BFZ Birch Farm 38.95 154 P P 16 26 37.5 +1.7
BHW Baring Head 38.97 156 P P 16 26 36.1 +0.1
CMWZ Cape Campbell 38.99 157 P P 16 26 36.2 0.0
FOZ Fox Glacier 39.05 163 P P 16 26 37.0 +0.5
FOZ IAMs_20 IAMs_20 16 41 29.9
comp=Z,95µm,20.0s
PGP Puerto Galera 39.09 301 ⇑*e*P P 16 26 37.2 -0.2
MSWZ Moikau Station 39.13 155 P P 16 26 36.9 -0.5
LTZ Lake Taylor 39.17 159 P P 16 26 37.1 -0.6
LTZ IAMs_20 IAMs_20 16 42 58.4
comp=Z,76µm,18.0s
DNP Denpasar 39.23 264 P P 16 26 37.7 -0.9
comp=Z,28µmcomp=Z,34µmcomp=Z,818nm,1.0s
SRBI Singaraja 39.24 265 P P 16 26 37.7 -0.9
comp=Z,23µmcomp=Z,12µmcomp=Z,381nm,1.5s
PLWZ Palliser 39.26 155 P P 16 26 37.5 -1.0
IGBI Denpasar 39.30 264 P P 16 26 37.9 -1.2
comp=Z,13µmcomp=Z,8µmcomp=Z,326nm,0.9s
KHZ Kahutara 39.30 158 ⇑P P 16 26 38.7 0.0
KHZ Kahutara 39.30 158 IAMs_20 IAMs_20 16 41 07.0
comp=Z,97µm,20.0s
ENPP Ei Nido 39.38 297 ⇑*e*P P 16 26 39.6 -0.1
TGY Tagaytay City 39.39 302 LR LR 16 40 53.3
comp=Z,58µm,21.7s,baz=111,slow=33
PPR Puerto Princes 39.43 294 ⇑*e*P P 16 26 41.4 +1.2
OXZ Oxford 39.57 160 IAMs_20 IAMs_20 16 40 55.0
comp=Z,75µm,20.0s
RPZ Rata Peaks 39.59 161 P P 16 26 43.6 +2.5
MACP Maragondon, Ca 39.66 302 ⇓*i*P P 16 26 41.2 -0.8
MEEK Meekatharra 39.71 236 P P 16 26 41.7 -0.7
baz=40,SNR=93
MEEK Meekatharra 39.71 236 P P 16 26 42.4 0.0
LUBP Lubang 39.80 301 ⇓*i*P P 16 26 43.5 +0.3
SPMM Sagulut 39.86 285 P P 16 26 45.0 +1.2
BBKI Banjar Baru 39.88 273 P P 16 26 45.1 +1.1
comp=Z,17µmcomp=Z,13µmcomp=Z,378nm,1.3s
BATP Bataraza 39.91 292 ⇑*e*P P 16 26 45.5 +1.3
LBZ Lake Benmore 39.93 163 P P 16 26 43.7 -0.3
PCPH Palayan 39.99 304 ⇑*e*P P 16 26 45.0 +0.3
WKZ Wanaka 40.01 164 IAMs_20 IAMs_20 16 40 42.6
comp=Z,132µm,21.0s
MQZ McQueen's Vall 40.11 160 P P 16 26 45.0 -0.4
MQZ IAmb IAmb 16 26 52.0
comp=Z,577nm,1.5s
DCZ Deep Cove 40.13 166 P P 16 26 45.1 -0.5
MTKI Muara Teweh, K 40.16 276 P P 16 26 46.1 -0.2
comp=Z,12µmcomp=Z,12µmcomp=Z,136nm,0.6s
ABJI Asem Bagus 40.21 266 P P 16 26 45.8 -0.9
comp=Z,25µmcomp=Z,12µmcomp=Z,283nm,0.8s
MLZ Mavora Lakes 40.27 165 P P 16 26 46.5 -0.4
JAGI Jajag, Banyuwa 40.28 265 ⇑P P 16 26 44.7 -2.6
JAGI Jajag, Banyuwa 40.28 265 P P 16 26 45.3 -2.0
comp=Z,21µmcomp=Z,11µmcomp=Z,908nm,1.1s
JAGI Jajag, Banyuwa 40.28 265 P P 16 26 44.5 -2.8
JAGI IAmb IAmb 16 26 48.9
comp=Z,588nm,0.9s
JAGI Jajag, Banyuwa 40.28 265 P P 16 26 46.2 -1.1
KKM Kota Kinabalu 40.48 287 ⇑P P 16 26 48.9 -0.1
KKM Kota Kinabalu 40.48 287 P P 16 26 48.1 -0.9
KKM IAmb IAmb 16 26 52.3
comp=Z,743nm,1.3s
KKM Kota Kinabalu 40.48 287 P P 16 26 50.6 +1.6
KMMI Kalianget 40.49 267 P P 16 26 48.1 -0.9
comp=Z,25µmcomp=Z,9µmcomp=Z,324nm,1.8s
SMPP San Manuel, Pa 40.63 304 ⇓*i*P P 16 26 50.7 +0.5
ODZ Otahua Downs 40.67 163 ⇑P P 16 26 49.9 -0.1
ODZ Otahua Downs 40.67 163 P P 16 26 49.4 -0.6
ODZ IAMs_20 IAMs_20 16 42 11.1
comp=Z,111µm,20.0s
ODZ Otahua Downs 40.67 163 P P 16 26 50.7 +0.7
PYZ Puysegur Point 40.69 167 P P 16 26 50.2 +0.1
WHZ Wether Hill Ro 40.73 166 P P 16 26 49.9 -0.6
BLJI Banyuglugur 40.84 266 P P 16 26 50.8 -1.1
comp=Z,13µmcomp=Z,6µmcomp=Z,177nm,1.5s
SAMP Sagada Mountai 40.94 306 ⇑*e*P P 16 26 51.9 -0.8
GMJI Gumukmas 40.98 265 P P 16 26 52.6 -0.5
comp=Z,18µmcomp=Z,8µmcomp=Z,260nm,1.2s
SCZP Santa Cruz 41.08 303 ⇑*e*P P 16 26 54.0 +0.2
BWJI Bawean 41.85 269 P P 16 27 00.8 +0.6
comp=Z,15µmcomp=Z,10µmcomp=Z,774nm,1.2s
GRJI Gresik 41.98 267 P P 16 27 01.2 0.0
comp=Z,2µmcomp=Z,263nm,1.1s
JOW Kunigami 42.03 323 LR LR 16 45 25.9
comp=Z,12µm,18.1s,baz=162,slow=38
JOW Kunigami 42.03 323 ⇑P P 16 27 02.1 +0.7
JOW Kunigami 42.03 323 P P 16 27 00.5 -1.0
JOW IAmb IAmb 16 27 04.4
comp=Z,565nm,1.2s
JOW Kunigami 42.03 323 P P 16 27 01.9 +0.5
GIRL Giralia 42.13 243 P P 16 27 03.8 +1.4
baz=42,SNR=15
GIRL Giralia 42.13 243 ⇓P P 16 27 02.9 +0.6
GIRL Giralia 42.13 243 P P 16 27 02.7 +0.3
JOHN Johnston Islan 42.28 56 P P 16 27 06.0 +2.5
JMJ Miyako jima 2 42.45 319 P P 16 27 05.1 +0.3
KLBR Kellerberrin 42.53 229 P P 16 27 04.3 -1.1
baz=43,SNR=69
KLBR Kellerberrin 42.53 229 P P 16 27 04.4 -1.1
TBJI Tambak Boyo 42.60 267 P P 16 27 06.1 -0.2
comp=Z,13µmcomp=Z,5µmcomp=Z,267nm,1.9s
PWJI Pagerwojo 42.61 265 P P 16 27 04.9 -1.5
comp=Z,11µmcomp=Z,787nm,1.2s
MORW Morawa 42.77 234 P P 16 27 06.4 -1.1
baz=43,SNR=64
MORW Morawa 42.77 234 ⇑P P 16 27 06.3 -1.1
MORW Morawa 42.77 234 P P 16 27 05.9 -1.6
BLDU Ballidu 42.89 231 P P 16 27 07.3 -1.1
baz=43,SNR=110
BLDU Ballidu 42.89 231 P P 16 27 07.6 -0.8
PBKI Pangkalan Bun 43.11 273 P P 16 27 11.5 +1.1
comp=Z,16µmcomp=Z,1µm,1.4s
PCJI Pacitan 43.23 265 P P 16 27 11.3 -0.1
comp=Z,22µmcomp=Z,31µmcomp=Z,3µm,1.4s
SBUM Sibu 43.42 281 ⇑P P 16 27 13.7 +0.8
SBUM Sibu 43.42 281 P P 16 27 12.2 -0.7
SBUM Sibu 43.42 281 P P 16 27 15.0 +2.1
UWJI Ujung Watu 43.52 268 P P 16 27 13.3 -0.4
comp=Z,12µmcomp=Z,830nm,2.0s
NWAO Narrogin (SRO) 43.55 228 P P 16 27 13.2 -0.5

NWAO P P 16 27 13.2 -0.5
**NWAO Narrogin (SRO) 43.55 228** P P **16 27 12.8 -0.9**
**NWAO Narrogin (SRO) 43.55 228** IAMs_20 IAMs_20 16 45 00.2
comp=Z,79µm,21.0s
**NWAO Narrogin (SRO) 43.55 228** P P **16 27 13.6 -0.1**
**STKI Sintang 43.70 277** P P **16 27 16.4 +1.2**
comp=Z,10µmcomp=Z,182nm,1.9s
**YOJ Yonaguni jima 43.75 316** ⇑P P **16 27 16.1 +0.8**
**YOJ Yonaguni jima 43.75 316** P P **16 27 15.4 0.0**
**YOJ Yonaguni jima 43.75 316** P P **16 27 16.2 +0.8**
**MUN Mundaring 43.87 230** P P **16 27 15.5 -0.8**
baz=44, SNR=41
**MUN Mundaring 43.87 230** P P **16 27 15.9 -0.5**
**MIDW Midway 43.88 37** ⇑P P **16 27 18.2 +1.8**
**MIDW Midway 43.88 37** P P **16 27 16.9 +0.5**
MIDW IAmb IAmb 16 27 30.8
comp=Z,394nm,0.8s
MIDW IAMs_20 IAMs_20 16 42 46.6
comp=Z,68µm,21.0s
**MIDW Midway 43.88 37** P P **16 27 18.4 +2.1**
**UGM Wanagama 43.88 266** P P **16 27 17.1 +0.4**
comp=Z,31µmcomp=Z,928nm,1.3s
**UGM Wanagama 43.88 266** P P **16 27 16.5 -0.1**
**UGM Wanagama 43.88 266** P P **16 27 16.6 -0.1**
**SMRI Semarang 43.99 267** ⇓P P **16 27 18.5 +0.9**
**SMRI Semarang 43.99 267** P P **16 27 17.4 -0.2**
comp=Z,30µmcomp=Z,22µmcomp=Z,923nm,1.0s
**SMRI Semarang 43.99 267** P P **16 27 17.2 -0.3**
**SMRI Semarang 43.99 267** P P **16 27 20.3 +2.7**
**TWG Pinlang 44.09 313** P P **16 27 17.0 -1.2**
TWG IAmb IAmb 16 27 21.9
comp=Z,514nm,1.3s
**YOGI Yogyakarta 44.11 266** P P **16 27 19.2 +0.7**
comp=Z,15µmcomp=Z,23µmcomp=Z,1µm,1.6s
**MTKN Mount Kenneth 44.19 230** P P **16 27 19.8 +1.0**
**YULB Yu-li 44.28 313** P P **16 27 18.7 -1.0**
YULB IAMs_20 IAMs_20 16 41 59.1
comp=Z,64µm,22.0s
**JSU Suzuyama 44.49 330** P P **16 27 20.4 -0.8**
**RKGY Rocky Gully 44.55 226** P P **16 27 22.2 +0.5**
baz=45,SNR=20
**RKGY Rocky Gully 44.55 226** P P **16 27 22.6 +0.9**
**NACB Ninganchiao 44.55 315** P P **16 27 21.4 -0.4**
**TPUB Ta-pu 44.71 313** P P **16 27 21.9 -1.2**
TPUB IAMs_20 IAMs_20 16 42 14.4
comp=Z,56µm,22.0s
**TPUB Ta-pu 44.71 313** P P **16 27 23.6 +0.5**
**SSLB Suanglung 44.77 314** P P **16 27 23.0 -0.6**
SSLB IAMs_20 IAMs_20 16 42 27.1
comp=Z,79µm,22.0s
**SSLB Suanglung 44.77 314** P P **16 27 24.5 +0.9**
**JMN Monobe 44.77 335** ⇑P P **16 27 22.7 -0.8**
**JMN Monobe 44.77 335** P P **16 27 22.6 -0.8**
**JYT Yasato 44.79 343** ⇑P P **16 27 21.9 -1.6**
**JYT Yasato 44.79 343** P P **16 27 22.4 -1.1**
**INU Inuyama 45.00 339** ⇓P P **16 27 23.9 -1.3**
**INU Inuyama 45.00 339** P P **16 27 23.2 -2.0**
**INU Inuyama 45.00 339** P P **16 27 25.6 +0.4**
**YHNB Yeheng 45.02 315** P P **16 27 25.2 -0.5**
YHNB IAMs_20 IAMs_20 16 42 59.7
comp=Z,52µm,22.0s
**YHNB Yeheng 45.02 315** P P **16 27 27.3 +1.7**
**KSM Kuching 45.09 279** ⇑P P **16 27 26.7 +0.4**
**KSM Kuching 45.09 279** P P **16 27 25.9 -0.4**
**KSM Kuching 45.09 279** P P **16 27 28.0 +1.7**
**KSM Kuching 45.09 279** P P **16 27 26.7 +0.4**
**JGF Kuroka 45.11 340** ⇑P P **16 27 25.0 -1.1**
**JGF Kuroka 45.11 340** P P **16 27 25.5 -0.6**
**TATO Taipei 45.14 315** P P **16 27 26.2 -0.2**
TATO P P **16 27 26.2 -0.2**
**TATO Taipei 45.14 315** P P **16 27 26.0 -0.5**
**TATO Taipei 45.14 315** IAMs_20 IAMs_20 16 43 26.6
comp=Z,49µm,21.0s
**KPJI Karang Pucung 45.48 266** P P **16 27 29.5 +0.1**
comp=Z,14µmcomp=Z,962nm,0.9s
**JNU Nakatsue 45.60 332** P P **16 27 29.5 -0.6**
comp=Z,314nm,0.8s,baz=130,slow=1.0,SNR=106
JNU LR LR 16 44 12.9
comp=Z,9µm,21.7s,baz=174,slow=33
**JNU Nakatsue 45.60 332** ⇑P P **16 27 29.5 -0.6**
**JNU Nakatsue 45.60 332** P P **16 27 29.0 -1.1**
JNU IAmb IAmb 16 27 31.0
comp=Z,375nm,0.9s
**JNU Nakatsue 45.60 332** P P **16 27 30.1 0.0**
**MJAR Matsushiro Arr 45.69 341** P P **16 27 28.4 -2.2**
comp=Z,25nm,0.8s,baz=166,slow=8.7,SNR=34
MJAR ScP ScP **16 32 58.4 +0.9**
comp=Z,28nm,1.2s,baz=177,slow=4.0,SNR=6.4
**MJAR Matsushiro Arr 45.69 341** P P **16 27 27.9 -2.7**
MJAR ScP **16 32 57.8 +0.3**
**MAJO Matsushiro 45.69 341** *c i*P P **16 27 27.9 -2.8**
MAJO pmax pmax
comp=Z,128nm,1.5s
MAJO MLR MLR
comp=Z,10µm,17.0s
**MAJO Matsushiro 45.69 341** ⇑P P **16 27 28.7 -1.9**
**MAJO Matsushiro 45.69 341** P P **16 27 28.4 -2.3**
**MAJO Matsushiro 45.69 341** P P **16 27 29.6 -1.1**
**MAT Matsushiro 45.69 341** P P **16 27 27.4 -3.3**
MAT S S **16 34 11.6 +1.0**
**MJB9 Matsu-Tunnel 45.69 341** P P **16 27 28.3 -2.4**
**CMJI Cimerak 45.94 266** P P **16 27 32.5 -0.5**
comp=Z,14µmcomp=Z,10µmcomp=Z,629nm,1.0s
**JMM Marumori 46.16 345** ⇑P P **16 27 33.5 -0.9**
**JMM Marumori 46.16 345** P P **16 27 32.8 -1.6**
**JCJI Jatiwangi 46.17 267** P P **16 27 35.3 +0.5**
comp=Z,29µmcomp=Z,39µmcomp=Z,3µm,1.6s
**JHS Saijyo 46.19 335** ⇑P P **16 27 33.8 -0.8**
**JHS Saijyo 46.19 335** P P **16 27 32.3 -2.3**
JHS IAmb IAmb 16 27 37.1
comp=Z,315nm,1.3s
**RAR Rarotonga 46.26 113** P P **16 27 36.1 +0.7**
comp=Z,56nm,0.8s,baz=255,slow=9.2,SNR=9.2
RAR LR LR 16 43 52.4
comp=Z,13µm,20.7s,baz=283,slow=32
**RAR Rarotonga 46.26 113** ⇓P P **16 27 36.5 +1.1**
**RAR Rarotonga 46.26 113** P P **16 27 34.7 -0.7**
**RAR Rarotonga 46.26 113** P P **16 27 38.6 +3.2**
**LEM Lembang 46.80 267** P P **16 27 40.0 0.0**
comp=Z,507nm,0.8s,baz=95,slow=6.3,SNR=87
**LEM Lembang 46.80 267** P P **16 27 40.0 0.0**
**LEM Lembang 46.80 267** P P **16 27 40.6 +0.6**
comp=Z,15µmcomp=Z,14µmcomp=Z,807nm,1.9s
**KNMB Chin-men Tao 47.04 312** P P **16 27 41.9 +0.5**
**JSD Sado 47.04 342** P P **16 27 40.5 -0.7**
**TPI Tanjungpandan 47.09 272** P P **16 27 43.8 +1.7**
**QZH Quanzhou 47.18 313** ⇑*i*P P **16 27 43.1 +0.6**
QZH pP pP **16 27 51.9 -2.1**
QZH ScP ScP **16 33 03.3 -0.6**
QZH S S **16 34 27.3 -4.9**
QZH sS sS **16 34 48.9 -4.0**
QZH pmax pmax
comp=Z,1µm,1.1s
QZH pmax pmax
comp=Z,4µm,6.1s
QZH LR LR
comp=Z,17µm,20.8s
QZH LR LR
comp=Z,10µm,18.9s
QZH LR LR
comp=Z,22µm,20.8s
**CNJI Cibinong 47.26 266** P P **16 27 42.9 -0.5**
comp=Z,22µmcomp=Z,39µmcomp=Z,3µm,1.4s
**JTU Tsushima 47.45 331** P P **16 27 43.1 -1.3**
**CBJI Citeko 47.58 267** P P **16 27 44.2 -1.7**
comp=Z,26µmcomp=Z,20µmcomp=Z,1µm,1.1s
**DBJI Dramaga 47.68 267** P P **16 27 46.9 +0.3**
comp=Z,64µmcomp=Z,11µmcomp=Z,753nm,1.6s
**TNG Tangerang 47.80 268** P P **16 27 47.3 -0.3**
comp=Z,15µmcomp=Z,736nm,1.6s
TNG P P **16 27 45.8 -1.8**
comp=Z,21µmcomp=Z,734nm,0.5s
**SKJI Sukabumi 47.85 267** P P **16 27 47.1 -0.8**
comp=Z,11µmcomp=Z,1µm,0.7s
**XMAS Kiritimati 48.48 81** ⇑P P **16 27 54.0 +1.1**
**XMAS Kiritimati 48.48 81** P P **16 27 52.2 -0.6**
XMAS IAmb IAmb 16 27 56.4
comp=Z,310nm,0.8s
**XMAS Kiritimati 48.48 81** IAMs_20 IAMs_20 16 46 10.3
comp=Z,58µm,20.0s
**XMAS Kiritimati 48.48 81** P P **16 27 55.1 +2.2**
**XMI Christmas Isla 48.63 262** ⇓P P **16 27 55.2 +1.2**
**XMI Christmas Isla 48.63 262** P P **16 27 55.8 +1.8**
comp=Z,422nm,1.6s
**XMIS Christmas Isla 48.67 262** P P **16 27 56.4 +2.1**
**CGJI Cibinong 48.72 267** P P **16 27 53.3 -1.4**
**JTM Tenmabayashi 48.86 346** ⇑P P **16 27 54.4 -0.8**
**JTM Tenmabayashi 48.86 346** P P **16 27 54.4 -0.8**
JTM IAmb IAmb 16 27 56.0
comp=Z,295nm,1.2s
**HKC Hong Kong Obse 49.06 307** ⇑P P **16 27 59.0 +1.9**
**HKPS Hong Kong Po S 49.08 307** IAMs_20 IAMs_20 16 45 37.2
comp=Z,56µm,20.0s
**BLSI Bandar Lampung 49.24 269** P P **16 27 57.1 -1.6**
comp=Z,18µmcomp=Z,5µmcomp=Z,402nm,1.2s
**SSE Sheshan 49.40 321** P P **16 27 59.6 +0.1**
SSE S S **16 35 02.8 -0.6**
SSE pmax pmax
comp=Z,2µm,6.0s
SSE LR LR
comp=Z,4µm,19.4s
SSE LR LR
comp=Z,4µm,19.6s
**MCO Taipa Grande 49.46 307** P P **16 28 03.0 +2.8**
**ERM Erimo 49.58 349** *c e*P P **16 28 00.9 +0.2**
ERM pmax pmax
comp=Z,71nm,1.3s
**ERM Erimo 49.58 349** ⇑P P **16 28 00.9 +0.2**
**KLI Kotabumi 49.67 269** P P **16 28 00.5 -1.4**
comp=Z,20µmcomp=Z,9µmcomp=Z,329nm,1.3s
**KLSI 49.81 269** P P **16 28 01.8 -1.2**
comp=Z,7µmcomp=Z,3µmcomp=Z,188nm,1.7s
**TJN Taejon 49.92 331** *c e*P P **16 28 02.7 -0.7**
**TJN Taejon 49.92 331** P P **16 28 01.6 -1.8**
**TJN Taejon 49.92 331** P P **16 28 04.0 +0.6**
**PMBI Palembang 49.93 272** P P **16 28 05.4 +1.5**
comp=Z,23µmcomp=Z,13µmcomp=Z,1µm,1.4s
**PMBI Palembang 49.93 272** P P **16 28 06.5 +2.6**
**KASI Kota Agung 49.98 268** P P **16 28 02.4 -1.9**
comp=Z,16µmcomp=Z,11µmcomp=Z,1µm,1.1s
**GZH Guangzhou 50.12 307** P P **16 28 05.7 +0.5**
GZH sP **sP** **16 28 22.5 +0.7**
GZH S S **16 35 13.9 +0.1**
GZH sS **sS** **16 35 33.6 -1.0**
GZH pmax pmax
comp=Z,6µm,6.5s
GZH LR LR
comp=Z,12µm,22.5s
GZH LR LR
comp=Z,28µm,19.6s
**MDSI Maura Dua 50.37 270** P P **16 28 05.7 -1.6**
comp=Z,11µmcomp=Z,7µmcomp=Z,536nm,1.4s
**DSRI Dabo 50.43 275** P P **16 28 07.8 +0.1**
comp=Z,14µmcomp=Z,4µmcomp=Z,252nm,1.5s
**LWLI Liwa 50.45 269** P P **16 28 07.5 -0.5**
comp=Z,19µmcomp=Z,1µm,1.0s
**KSRS Korea Array 50.53 332** P P **16 28 07.7 -0.3**
comp=Z,128nm,0.9s,baz=149,slow=8.4,SNR=183
KSRS ScP ScP **16 33 19.4 +1.5**
comp=Z,15nm,1.0s,baz=141,slow=5.4,SNR=8.2
KSRS PKiKP PKiKP **16 36 09.8 -0.3**
comp=Z,1.7nm,0.6s,baz=196,slow=0.8,SNR=6.6
KSRS LR LR 16 49 35.9
comp=Z,5µm,18.2s,baz=140,slow=36
**KSAR Wonju Array Be 50.54 332** P P **16 28 07.3 -0.8**
**KS19 Wonju Array Si 50.59 332** P P **16 28 07.4 -1.1**
**TPRI Tanjung Pinang 50.69 277** P P **16 28 09.7 0.0**
comp=Z,7µmcomp=Z,368nm,1.6s
**JEW Eniwo 50.73 347** P P **16 28 08.7 -0.7**
JEW IAmb IAmb 16 28 10.7
comp=Z,448nm,1.2s
**LHSI Lahat 51.08 270** P P **16 28 12.6 0.0**
comp=Z,8µmcomp=Z,426nm,1.6s
**QIZ Qiongzhong 51.09 301** P P **16 28 14.4 +1.9**
QIZ sP **pP** **16 28 24.7 +1.1**
QIZ S S **16 35 26.3 -1.0**
QIZ pmax pmax
comp=Z,83nm,2.0s
QIZ pmax pmax
comp=Z,4µm,7.2s
QIZ LR LR
comp=Z,14µm,21.5s
QIZ LR LR
comp=Z,28µm,22.3s
QIZ LR LR
comp=Z,42µm,23.0s
**QIZ Qiongzhong 51.09 301** IAMs_20 IAMs_20 16 46 12.0
comp=Z,54µm,22.0s
**QIZ Qiongzhong 51.09 301** P P **16 28 14.6 +2.1**
**INCN Inchon 51.16 331** P P **16 28 12.6 -0.1**
INCN P P **16 28 12.6 -0.1**
**INCN Inchon 51.16 331** ⇑P P **16 28 12.7 -0.1**
**INCN Inchon 51.16 331** P P **16 28 11.2 -1.6**
INCN IAmb IAmb 16 28 14.7
comp=Z,615nm,1.0s
**INCN Inchon 51.16 331** P P **16 28 13.3 +0.5**
**JMBI JAMBI 51.20 273** P P **16 28 13.7 +0.2**
comp=Z,44µmcomp=Z,361nm,1.4s
**MYKOM Kota Tinggi 51.50 278** ⇑P P **16 28 15.9 +0.2**
**MYKOM Kota Tinggi 51.50 278** P P **16 28 14.4 -1.3**
MYKOM IAmb IAmb 16 28 18.5
comp=Z,540nm,1.5s
**MYKOM Kota Tinggi 51.50 278** P P **16 28 18.0 +2.2**
**NJ2 Nanjing 51.50 320** ⇑*i*P P **16 28 15.5 +0.1**
NJ2 pP pP **16 28 25.8 -1.6**
NJ2 sP **pwP** **16 28 29.9 -1.0**
NJ2 PP PP **16 30 11.4 -1.8**
NJ2 S S **16 35 32.0 -0.6**
NJ2 sS sS 16 35 44.3 -7.9
NJ2 pmax pmax
comp=Z,190nm,1.1s
NJ2 pmax pmax
comp=Z,7µm,6.1s
NJ2 LR LR
comp=Z,21µm,22.5s
NJ2 LR LR
comp=Z,10µm,18.7s
NJ2 LR LR
comp=Z,30µm,21.3s
**JKA Kamikawa-asahi 51.71 349** P P **16 28 16.4 -0.4**
**ASAJ Asahikawa 51.72 349** LR LR 16 48 09.1
comp=Z,32µm,20.8s,baz=172,slow=34
**KUR Kuril'sk 52.02 354** *c i*P P **16 28 19.3 +0.3**
KUR eS S **16 35 39.1 -0.1**
KUR pmax pmax
comp=Z,4µm,8.2s
KUR pmax pmax
comp=Z,358nm,2.0s
KUR pmax pmax
comp=E,159nm,1.3s
KUR pmax pmax
comp=N,88nm,1.5s
KUR MLR MLR
comp=Z,13µm,18.0s
KUR MLR MLR
comp=N,8µm,17.0s
KUR MLR MLR
comp=E,13µm,17.0s
**KSI Kapahiang 52.02 271** P P **16 28 19.5 -0.2**
comp=E,216nm,0.9s
**HJU Haeju 52.04 331** P P **16 28 19.1 -0.2**
**RGRI Rengat 52.67 275** P P **16 28 24.7 +0.2**
comp=E,16µmcomp=E,209nm,1.2s
**HHU Hamhung 52.73 334** P P **16 28 23.9 -0.4**
HHU pP pP **16 28 32.8 -4.1**
HHU S S **16 35 49.8 +0.7**
HHU AmB
comp=Z,417nm,1.1s
HHU AMS AMS
comp=N,986nm,15.5s
HHU AMS AMS
comp=E,1µm,17.0s
HHU AMS AMS
comp=Z,136nm,2.1s
**PYAG Pyongyang 52.82 332** P P **16 28 25.2 +0.1**
PYAG pP pP **16 28 34.5 -2.4**
PYAG S S **16 35 54.3 +3.8**
PYAG AmB
comp=Z,2µm,2.6s
PYAG AMS AMS
comp=N,90nm,1.1s
PYAG AMS AMS
comp=E,1µm,15.6s
PYAG AMS AMS
comp=Z,90nm,1.1s
**CNSH ChangSha 53.18 313** ⇑P P **16 28 24.4 -3.5**
CNSH S S **16 35 53.0 -2.7**
CNSH pmax pmax
comp=Z,5µm,5.4s
CNSH LR LR
comp=N,16µm,21.7s
CNSH LR LR
comp=E,22µm,21.6s
CNSH LR LR
comp=Z,32µm,23.0s
**JRMM Jerantut 53.23 280** P P **16 28 30.0 +1.4**
**MSHR Mys Shultsa 53.51 338** *c e*P P **16 28 29.8 -0.3**
MSHR pmax pmax
comp=Z,83nm,1.4s
MSHR MLR MLR
comp=Z,5µm,19.0s
**WHN Wuhan 53.53 316** ⇑*i*P P **16 28 31.5 +1.0**
WHN pP **pP** **16 28 41.6 -0.4**
WHN S S **16 36 01.3 +0.9**
WHN pmax pmax
comp=Z,3µm,1.5s
WHN pmax pmax
comp=Z,11µm,4.7s
WHN LR LR
comp=Z,44µm,22.0s
WHN LR LR
comp=Z,39µm,17.9s
WHN LR LR
comp=Z,91µm,23.7s
**GULI GuiLin 53.58 308** ⇑P P **16 28 34.4 +3.4**
GULI S S **16 36 05.2 +3.9**
GULI pmax pmax
comp=Z,1µm,1.1s
GULI LR LR
comp=Z,13µm,22.8s
GULI LR LR
comp=Z,17µm,21.4s
GULI LR LR
comp=Z,33µm,21.7s
**VLA Vladivostok 53.72 339** *i* P P **16 28 30.3 -1.3**
VLA pmax pmax
comp=Z,139nm,1.0s
VLA MLR MLR
comp=Z,8µm,18.0s
**TEY Ternei 53.98 344** ⇑ *e*P P **16 28 32.9 -0.5**
TEY *e*S S **16 36 05.0 -0.9**
TEY pmax pmax
comp=E,10.0nm,1.2s
TEY pmax pmax
comp=N,20nm,1.4s
TEY pmax pmax
comp=Z,20nm,1.2s
TEY smax smax
comp=N,2µm,24.6s
TEY smax smax
comp=E,2µm,20.2s
**HON Honolulu 54.04 58** P P **16 28 34.6 +0.3**
HON IAmb IAmb 16 28 39.1
comp=Z,578nm,1.1s
**BKNI Bangkinang 54.05 275** ⇑P P **16 28 33.9 -0.7**
**BKNI Bangkinang 54.05 275** P P **16 28 34.6 0.0**
comp=Z,21µmcomp=Z,10µmcomp=Z,763nm,1.8s
**BKNI Bangkinang 54.05 275** P P **16 28 33.4 -1.2**
BKNI IAmb IAmb 16 28 50.1
comp=Z,326nm,0.9s
**BKNI Bangkinang 54.05 275** P P **16 28 36.3 +1.7**
**KIP Kipapa 54.07 58** *c e*P P **16 28 36.3 +1.7**
KIP pmax pmax
comp=Z,1µm,1.7s
**KIP Kipapa 54.07 58** P P **16 28 34.8 +0.2**
**KIP Kipapa 54.07 58** P P **16 28 36.9 +2.3**
**KIP Kipapa 54.07 58** P P **16 28 37.0 +2.3**
**OPA Opana 54.19 57** P P **16 28 35.7 +0.2**
**YSS Yuzh-Sakhalins 54.43 350** *ce*P P **16 28 36.3 -0.4**
YSS *e**SP **pP** **16 28 48.4 -0.6**
YSS *e* 16 29 38.4
YSS *e* 16 30 40.6
YSS *e*S S **16 36 09.7 -2.2**
YSS *e* 16 38 18.0
YSS *e*SSS SSS 16 41 45.0
YSS pmax pmax
comp=N,1µm,7.4s
YSS pmax pmax
comp=Z,3µm,7.4s
YSS pmax pmax
comp=Z,110nm,1.2s
YSS MLR MLR
comp=Z,20µm,18.0s
YSS MLR MLR
comp=N,14µm,19.0s
**YSS Yuzh-Sakhalins 54.43 350** ⇑P P **16 28 36.1 -0.5**
**YSS Yuzh-Sakhalins 54.43 350** P P **16 28 36.0 -0.6**
**YSS Yuzh-Sakhalins 54.43 350** P P **16 28 37.9 +1.2**
**PPI Padang Panjang 54.57 274** P P **16 28 37.7 -0.7**
comp=N,258nm,1.0s
**USRK Ussuriysk Ar. 54.63 340** P P **16 28 38.0 -0.2**
comp=N,133nm,0.9s,baz=160,slow=6.9,SNR=129
USRK LR LR 16 50 16.8
comp=N,7µm,21.8s,baz=143,slow=34
USRK PKP2bc **P'P'bc** **16 59 01.3 -0.7**
comp=N,2.5nm,0.9s,baz=318,slow=2.6,SNR=4.1
**USRK Ussuriysk Ar. 54.63 340** P P **16 28 37.6 -0.7**
**USA0B Ussuriysk Arra 54.63 340** P P **16 28 37.6 -0.7**
USA0B IAmb IAmb 16 28 39.7
comp=Z,313nm,1.1s
**PPSI Pulau Pagai 54.68 271** P P **16 28 38.2 -1.0**
comp=Z,17µmcomp=Z,11µmcomp=Z,590nm,1.2s
**DL2 Dalian 54.76 329** ⇑*i*P P **16 28 39.1 -0.1**
DL2 S S **16 36 14.2 -2.5**
DL2 pmax pmax
comp=Z,260nm,1.0s
DL2 pmax pmax
comp=Z,3µm,7.0s
DL2 LR LR
comp=Z,10µm,19.8s
DL2 LR LR
comp=Z,8µm,18.2s
DL2 LR LR
comp=Z,16µm,19.7s
**IPM Ipoh 54.77 280** P P **16 28 38.6 -1.2**
**IPM Ipoh 54.77 280** P P **16 28 40.0 +0.2**
**IPM Ipoh 54.77 280** P P **16 28 40.2 +0.4**
**KHLU Kahalu`u 55.13 61** P P **16 28 42.5 0.0**
**KHLH Kahului Airpor 55.19 59** P P **16 28 42.0 -0.7**
**HUH Hualalai 55.21 61** P P **16 28 43.2 0.0**
**KHU Kahuku 55.23 61** P P **16 28 43.3 -0.1**
**HLK Haleakala 55.29 59** P P **16 28 44.1 +0.4**
**KULM Kulim 55.30 281** ⇑P P **16 28 43.3 -0.4**
**KULM Kulim 55.30 281** P P **16 28 42.6 -1.0**
KULM IAmb IAmb 16 28 45.5
comp=Z,613nm,1.4s
**KULM Kulim 55.30 281** P P **16 28 44.0 +0.4**
**PPT Papeete 55.32 107** P P **16 28 44.5 +0.7**
comp=Z,165nm,1.2s,baz=71,slow=8.6,SNR=7.0
PPT LR LR 16 48 41.6
comp=Z,17µm,19.7s,baz=264,slow=32
**PPT2 Papeete2 55.32 107** *e*P P **16 28 45.1 +1.3**
comp=Z,209nm,1.3s
PPT2 *e*S S **16 36 25.2 +0.1**
comp=Z,18µm,25.8s
PPT2 *e*LQ LQ 16 42 32.2
comp=Z,27µm,31.5s
PPT2 *e*LR LR 16 44 53.0
comp=Z,24µm,21.8s,baz=274
**PAE Paea 55.32 107** *e*P P **16 28 44.7 +1.0**
comp=Z,60nm,1.3s
**PPTF Pamatai, Papee 55.33 107** ⇑P P **16 28 46.9 +3.0**
**PPTF Pamatai, Papee 55.33 107** P P **16 28 43.6 -0.3**
PPTF IAmb IAmb 16 28 49.3
comp=Z,404nm,1.5s
**PPTF Pamatai, Papee 55.33 107** P P **16 28 46.9 +3.0**
**TIA Tai'an 55.35 323** ⇑P P **16 28 42.6 -1.1**
TIA S S **16 36 20.4 -4.4**
TIA pmax pmax
comp=Z,130nm,1.2s
TIA pmax pmax
comp=Z,4µm,6.3s
TIA LR LR
comp=Z,7µm,16.5s
TIA LR LR
comp=Z,13µm,18.8s
TIA LR LR
comp=Z,15µm,18.1s
**MLOA Mauna Loa Obse 55.38 61** P P **16 28 44.6 0.0**
**AIN Ainahou 55.42 61** P P **16 28 44.2 -0.4**
**HPAH Hawaii Prepara 55.47 60** P P **16 28 45.1 +0.3**
**POHA Pohakuloa 55.50 61** ⇑P P **16 28 46.7 +1.4**
**POHA Pohakuloa 55.50 61** P P **16 28 45.6 +0.3**
**POHA Pohakuloa 55.50 61** IAMs_20 IAMs_20 16 50 00.2

comp=Z,33μm,20.0s
**POHA Pohakuloa 55.50 61 P P 16 28 47.4 +2.1**
**MLH Mauna Loa 55.53 61 P P 16 28 44.7 -0.8**
**MNSI Mandailing Nat 55.56 276 P P 16 28 44.8 -0.7**
comp=Z,20μmcomp=Z,8μmcomp=Z,316nm,1.1s
**PUH Pauahi 55.63 61 P P 16 28 45.2 -0.8**
PUH IAmb IAmb 16 29 07.1
comp=Z,331nm,1.1s
**SISI Saibi 55.76 273 P P 16 28 46.8 -0.1**
comp=Z,12μmcomp=Z,7μmcomp=Z,384nm,1.7s
**MDJ Mudanjiang 55.84 338 P P 16 28 47.0 +0.1**
MDJ pP pP 16 28 53.7 -5.8
MDJ sP sP 16 29 01.2 -3.4
MDJ PcS **PcS 16 33 47.7 +2.1**
MDJ S **S 16 36 29.8 -1.2**
MDJ ScS **ScS 16 38 29.8 -2.5**
MDJ pmax pmax
comp=Z,260nm,1.6s
MDJ LR LR
comp=Z,8μm,19.1s
MDJ LR LR
comp=Z,9μm,19.1s
MDJ LR LR
comp=Z,11μm,26.0s
**MDJ Mudanjiang 55.84 338 P P 16 28 46.4 -0.6**
MDJ IAmb IAmb 16 28 48.3
comp=Z,266nm,1.1s
**MDJ Mudanjiang 55.84 338 P P 16 28 47.2 +0.3**
**SNY Shenyang 56.03 332 ⇑P P 16 28 47.5 -0.9**
SNY S **S 16 36 31.2 -2.4**
SNY pmax pmax
comp=Z,68nm,1.2s
SNY pmax pmax
comp=Z,4μm,5.4s
SNY LR LR
comp=Z,9μm,19.3s
SNY LR LR
comp=Z,12μm,20.3s
SNY LR LR
comp=Z,21μm,20.8s
**RPSI Rantau Prapat 56.51 278 P P 16 28 50.9 -1.4**
**PSI Prapat 56.52 278 P P 16 28 50.9 -1.7**
comp=Z,37nm,0.8s,baz=100,slow=4.8,SNR=40
PSI LR LR 16 58 40.0
comp=Z,6μm,18.3s,baz=117,slow=42
**UGL Uglegorsk 56.60 350 eP P 16 28 52.2 0.0**
UGL eS **S 16 36 44.0 +3.2**
UGL e 16 38 39.0
UGL pmax pmax
comp=Z,160nm,1.1s
UGL pmax pmax
comp=Z,3μm,8.0s
UGL smax smax
comp=Z,4μm,13.0s
UGL smax smax
comp=E,2μm,8.0s
UGL smax smax
comp=N,4μm,17.0s
**CN2 Changchun 56.78 335 eP P 16 28 52.4 -1.3**
CN2 PP **PP 16 31 00.5 0.0**
CN2 eS **S 16 36 40.5 -3.0**
CN2 pmax pmax
comp=N,200nm,1.8s
CN2 pmax pmax
comp=N,3μm,6.0s
CN2 LR LR
comp=N,10μm,18.0s
CN2 LR LR
comp=N,11μm,18.0s
CN2 LR LR
comp=N,12μm,19.2s
**PMOR Pomariorio Ree 56.80 104 eP P 16 28 55.3 +1.0**
comp=N,1μm,1.3s
**ENH Enshi 56.84 313 P P 16 28 54.1 -0.3**
ENH IAMs_20 IAMs_20 16 50 30.3
comp=Z,39μm,22.0s
**TSI Tuntungan 57.00 279 P P 16 28 55.6 -0.2**
comp=Z,17μmcomp=Z,8μmcomp=Z,417nm,1.3s
**SRIT Nakonsritamara 57.03 285 P P 16 28 55.2 -0.8**
SRIT IAmb IAmb 16 28 58.9
comp=Z,361nm,1.3s
**GYA Guiyang 57.06 307 ⇑iP P 16 28 56.9 +0.7**
GYA pP pP 16 29 08.2 +0.2
GYA PP **PP 16 31 06.1 +2.7**
GYA ScP **ScP 16 33 46.8 -0.1**
GYA S **S 16 36 48.2 +0.1**
GYA sS sS 16 37 06.8 -0.4
GYA ScS **ScS 16 38 43.4 +1.2**
GYA SS **SS 16 40 40.2 +2.6**
GYA pmax pmax
comp=Z,630nm,1.3s
GYA pmax pmax
comp=Z,5μm,5.3s
GYA LR LR
comp=Z,19μm,20.8s
GYA LR LR
comp=Z,26μm,20.9s
GYA LR LR
comp=Z,42μm,21.5s
**VAH Vaihoa 57.07 104 eP P 16 28 57.0 +0.8**
comp=Z,388nm,1.3s
**SKR Severo-Kuril's 57.12 1 eP P 16 28 56.1 +0.2**
SKR e 16 29 45.5
SKR e 16 31 06.4
SKR eS **S 16 36 49.0 +1.4**
SKR pmax pmax
comp=Z,88nm,1.0s
SKR pmax pmax
comp=Z,2μm,7.2s
SKR pmax pmax
comp=Z,1μm,7.4s
SKR MLR MLR
comp=Z,12μm,18.0s
SKR MLR MLR
comp=Z,11μm,18.0s
**LYN LuoYang 57.21 319 ⇑iP P 16 28 56.0 -0.9**
LYN pP pP 16 29 05.2 -3.3
LYN S **S 16 36 48.1 -1.4**
LYN pmax pmax
comp=Z,160nm,1.2s
LYN pmax pmax
comp=Z,4μm,9.1s
LYN LR LR
comp=Z,12μm,28.4s
LYN LR LR
comp=Z,16μm,25.5s
LYN LR LR
comp=Z,34μm,24.0s
**COCO West Island 57.32 260 P P 16 28 57.0 -1.0**
**HNS HongShan 57.59 323 ⇑P P 16 28 59.0 -0.5**
HNS pP **pP 16 29 10.2 -1.4**
HNS PP **PP 16 31 05.1 -2.7**
HNS ScP **ScP 16 33 49.7 +0.9**
HNS S **S 16 36 49.3 -5.0**
HNS ScS **ScS 16 38 45.0 -0.3**
HNS pmax pmax
comp=Z,270nm,1.3s
HNS LR LR
comp=Z,18μm,21.5s
HNS LR LR
comp=Z,17μm,23.3s
**BNX BinXian 57.61 338 ⇑P P 16 28 58.6 -0.9**
BNX pP **pP 16 29 13.2 +1.1**
BNX sP **sP 16 29 17.6 +0.4**
BNX PP **PP 16 31 10.8 +3.0**
BNX S **S 16 36 51.0 -3.3**
BNX pmax pmax
comp=Z,690nm,0.9s
BNX pmax pmax
comp=Z,5μm,5.3s
BNX LR LR
comp=Z,4μm,14.7s
BNX LR LR
comp=Z,3μm,16.4s
BNX LR LR
comp=Z,12μm,19.4s
**GSI Gunungsitoli 57.62 276 ⇑P P 16 28 57.9 -2.3**
**GSI Gunungsitoli 57.62 276 P P 16 28 59.6 -0.6**
comp=Z,17μmcomp=Z,8μmcomp=Z,555nm,1.0s
**GSI Gunungsitoli 57.62 276 P P 16 28 58.6 -1.6**
GSI IAmb IAmb 16 29 03.3
comp=Z,572nm,1.1s
**GSI Gunungsitoli 57.62 276 P P 16 29 00.6 +0.4**
**KCSI Kotacane, Aceh 57.78 278 P P 16 28 59.9 -1.4**
comp=Z,5μmcomp=Z,198nm,1.5s

**TYV Tymovskoe 58.23 351 eP P 16 29 04.0 +0.3**
TYV eS **S 16 37 08.0 +5.8**
TYV pmax pmax
comp=Z,109nm,1.0s
TYV pmax pmax
comp=Z,3μm,7.2s
TYV smax smax
comp=N,3μm,10.6s
TYV smax smax
comp=E,1μm,10.6s
**BJT Baijiatuau 58.50 326 P P 16 29 04.7 -1.1**
**BJI Beijing 58.51 326 P P 16 29 05.0 -0.9**
BJI PP **PP 16 31 16.4 +0.5**
BJI PcS **PcS 16 33 55.6 -1.9**
BJI S **S 16 37 04.5 -1.7**
BJI ScS **ScS 16 38 53.1 +1.2**
BJI SS **SS 16 41 02.8 +3.2**
BJI pmax pmax
comp=E,79nm,1.3s
BJI pmax pmax
comp=E,3μm,6.5s
BJI LR LR
comp=E,6μm,27.2s
BJI LR LR
comp=E,12μm,23.5s
BJI LR LR
comp=E,20μm,24.1s
**LHMI Lhok Sumawe 58.90 280 P P 16 29 09.0 -0.1**
comp=E,21μmcomp=E,13μmcomp=E,550nm,1.3s
**LHMI Lhok Sumawe 58.90 280 P P 16 29 07.6 -1.5**
**LHMI Lhok Sumawe 58.90 280 P P 16 29 11.3 +2.2**
**KLR Kul'dur 59.17 343 LR LR** 16 54 24.5
comp=E,10μm,20.4s,baz=155,slow=36
**KLR Kul'dur 59.17 343 ceP P 16 29 10.2 -0.1**
KLR pmax pmax
comp=Z,432nm,1.1s
KLR MLR MLR
comp=Z,12μm,18.0s
**TIY Taiyuan 59.18 322 ⇑iP P 16 29 10.4 -0.3**
TIY S **S 16 37 12.6 -2.7**
TIY pmax pmax
comp=Z,82nm,1.5s
TIY pmax pmax
comp=Z,4μm,4.6s
TIY LR LR
comp=Z,12μm,21.0s
TIY LR LR
comp=Z,8μm,20.6s
TIY LR LR
comp=Z,19μm,21.4s
**XAN Xi'an 59.30 316 P P 16 29 11.6 0.0**
XAN pP sP 16 29 28.4 +0.4
XAN S **S 16 37 13.6 -3.3**
XAN SS **SS 16 41 15.4 +3.0**
XAN pmax pmax
comp=Z,390nm,1.7s
XAN pmax pmax
comp=Z,6μm,6.8s
XAN LR LR
comp=Z,16μm,19.6s
XAN LR LR
comp=Z,25μm,21.4s
XAN LR LR
comp=Z,46μm,21.7s
**GRNR Gornyy 59.35 347 ⇑iP P 16 29 11.6 +0.1**
GRNR eS **S 16 37 21.3 +4.5**
GRNR pmax pmax
comp=N,40nm,1.3s
GRNR pmax pmax
comp=Z,70nm,1.2s
GRNR smax smax
comp=N,1.0nm,0.9s
GRNR MLR MLR
comp=N,2μm,17.0s
GRNR MLR MLR
comp=E,2μm,17.0s
GRNR MLR MLR
comp=Z,3μm,17.0s
**PET Petropavlovsk 59.54 3 ⇑iP P 16 29 12.8 +0.1**
PET i S **S 16 37 19.7 +0.6**
PET ePS 16 37 35.1
PET e 16 38 57.3
PET eSS **SS 16 41 10.9 -4.4**
PET pmax pmax
comp=Z,177nm,1.5s
PET pmax pmax
comp=Z,5μm,8.5s
PET pmax pmax
comp=Z,6μm,17.2s
PET smax smax
comp=E,4μm,9.1s
PET smax smax
comp=E,4μm,11.4s
**PET Petropavlovsk 59.54 3 ⇑P P 16 29 12.8 +0.1**
**PET Petropavlovsk 59.54 3 P P 16 29 12.4 -0.3**
PET IAmb IAmb 16 29 22.1
comp=Z,178nm,0.7s
**PET Petropavlovsk 59.54 3 P P 16 29 13.1 +0.4**
comp=Z,1μm,0.8s
**PEA0B Petropavlovsk- 59.59 2 ceP P 16 29 13.1 0.0**
**PEA0B Petropavlovsk- 59.59 2 P P 16 29 13.0 0.0**
**PETK Petropavlovsk- 59.59 2 P P 16 29 12.3 -0.8**
comp=Z,52nm,0.6s,baz=168,slow=7.4,SNR=172
PETK LR LR 16 51 19.3
comp=Z,30μm,21.9s,baz=187,slow=32
PETK PKP2bc **P'P'bc 16 58 52.8 +2.7**
comp=Z,6.6nm,0.9s,baz=85,slow=3.1,SNR=4.8
**PETK Petropavlovsk- 59.59 2 P P 16 29 12.5 -0.6**
**KMI Kunming 59.63 304 ⇑P P 16 29 15.3 +1.0**
KMI sP pP 16 29 27.6 +1.4
KMI PcP **PcP 16 30 02.1 +1.0**
KMI S **S 16 37 24.1 +2.3**
KMI sS sS 16 37 38.9 -1.9
KMI SS **SS 16 41 20.9 +2.7**
KMI pmax pmax
comp=Z,1μm,1.0s
KMI pmax pmax
comp=Z,4μm,5.7s
KMI LR LR
comp=Z,10μm,21.4s
KMI LR LR
comp=Z,18μm,22.7s
KMI LR LR
comp=Z,27μm,23.2s
**CM31 Chiang Mai Arr 60.43 295 P P 16 29 20.3 +0.7**
SNR=164
CM31 P P **16 29 20.3 +0.7**
SNR=164
**CM31 Chiang Mai Arr 60.43 295 P P 16 29 18.8 -0.8**
CM31 IAmb IAmb 16 29 24.1
comp=Z,383nm,0.9s
**CMAR Chiang Mai Arr 60.43 295 P P 16 29 20.2 +0.7**
comp=Z,181nm,0.8s,baz=115,slow=4.9,SNR=198
CMAR PcP **PcP 16 30 05.8 +1.6**
comp=Z,78nm,1.0s,baz=112,slow=3.9,SNR=7.1
CMAR PKiKP **PKiKP 16 36 22.7 +0.6**
comp=Z,3.1nm,0.8s,baz=185,slow=0.9,SNR=6.7
CMAR S **S 16 37 38.5 +6.7**
comp=Z,6.0nm,1.2s,baz=94,slow=12,SNR=6.7
CMAR LR LR 16 54 07.3
comp=Z,13μm,21.2s,baz=115,slow=35
CMAR PKPPKP 16 58 38.7
comp=Z,2.8nm,0.8s,baz=278,slow=3.4,SNR=7.7
**CMAR Chiang Mai Arr 60.43 295 P P 16 29 19.9 +0.4**
**CHTO Chiang Mai 60.54 296 ⇑P P 16 29 20.6 +0.3**
**CHTO Chiang Mai 60.54 296 P P 16 29 20.3 0.0**
CHTO IAmb IAmb 16 29 25.1
comp=Z,524nm,1.3s
**CHTO Chiang Mai 60.54 296 P P 16 29 21.7 +1.4**
**NKL Nikolayevsk 60.76 350 eP P 16 29 20.6 -0.5**
NKL eS **S 16 37 33.4 -1.3**
NKL pmax pmax
comp=E,2.0nm,0.8s
NKL pmax pmax
comp=N,443nm,0.7s
NKL pmax pmax
comp=Z,78nm,1.1s
**PZH PanZhiHua 61.03 305 ⇑P P 16 29 23.6 -0.1**
PZH pP **pP 16 29 35.6 0.0**
PZH sP **sP 16 29 43.5 +3.0**
PZH S **S 16 37 37.5 -2.0**
PZH sS **pS 16 37 53.2 +0.3**
PZH ScS **SKKSac 16 39 06.1 -5.4**
PZH pmax pmax
comp=Z,420nm,1.2s
PZH pmax pmax
comp=Z,5μm,6.9s
PZH LR LR
comp=Z,17μm,21.6s
PZH LR LR
comp=Z,15μm,23.0s
PZH LR LR
comp=Z,26μm,24.8s
**XLT XiLinHaoTe 61.25 329 ⇑iP P 16 29 24.9 +0.1**
XLT pP pP 16 29 34.1 -2.7
XLT sP pwP 16 29 40.0 -1.2
XLT PcP **PcP 16 30 05.8 -1.2**
XLT ScP **ScP 16 34 01.7 -3.3**
XLT S **S 16 37 38.6 -3.0**
XLT sS pS 16 37 55.0 -1.5
XLT SS **SS 16 41 42.8 +0.1**
XLT pmax pmax
comp=Z,590nm,1.1s
XLT pmax pmax
comp=Z,5μm,6.0s
XLT LR LR
comp=Z,10μm,21.1s
XLT LR LR
comp=Z,13μm,24.3s
XLT LR LR
comp=Z,21μm,21.9s
**SHEM Shemya Is, Ala 61.40 13 LR LR** 16 54 04.7
comp=Z,51μm,19.9s,baz=190,slow=34
**SMY Shemya 61.40 13 ⇑P P 16 29 26.4 +0.9**
**CD2 Chengdu 61.42 310 P P 16 29 26.5 +0.4**
CD2 pP pP 16 29 35.6 -2.4
CD2 PP **PP 16 31 45.6 +3.7**
CD2 S **S 16 37 40.5 -3.6**
CD2 SS **SS 16 41 46.0 +0.3**
CD2 pmax pmax
comp=Z,2μm,0.8s
CD2 pmax pmax
comp=Z,5μm,6.5s
CD2 LR LR
comp=Z,23μm,19.9s
CD2 LR LR
comp=Z,28μm,21.8s
**HHC Hu-ho-hao-te 61.68 324 ⇑iP P 16 29 27.8 0.0**
HHC sP pwP 16 29 45.7 -0.1
HHC S **S 16 37 47.1 -0.1**
HHC sS sS 16 38 07.0 -0.8
HHC pmax pmax
comp=Z,120nm,1.1s
HHC pmax pmax
comp=Z,3μm,4.9s
HHC LR LR
comp=Z,12μm,21.6s
HHC LR LR
comp=Z,15μm,20.6s
HHC LR LR
comp=Z,32μm,21.8s
**BTO Baotou 62.45 323 eP P 16 29 33.4 +0.5**
BTO S **S 16 38 01.1 +4.2**
BTO LR LR
comp=Z,44μm,20.2s
BTO LR LR
comp=Z,40μm,20.2s
**KIWB Kanaga Island 63.05 19 P P 16 29 36.8 +0.3**
**HIA Hailar 63.52 335 P P 16 29 39.3 -0.4**
HIA IAmb IAmb 16 29 41.2
comp=Z,276nm,0.9s
**GSTR Great Sitkin T 63.61 20 P P 16 29 40.6 +0.3**
**LZH Lanzhou 63.91 316 ⇑P P 16 29 43.5 +0.7**
LZH pP pP 16 29 51.5 -3.1
LZH sP sP 16 29 58.0 -1.3
LZH S **S 16 38 16.4 +0.9**
LZH sS pS 16 38 31.6 +2.5
LZH SS **SS 16 42 27.5 +2.7**
LZH pmax pmax
comp=Z,870nm,1.3s
LZH pmax pmax
comp=Z,7μm,6.2s
LZH LR LR
comp=Z,10μm,17.0s
LZH LR LR
comp=Z,18μm,16.9s
LZH LR LR
comp=Z,24μm,18.1s
**ATKA Atka Island 64.34 21 ⇑P P 16 29 45.2 +0.2**
**ATKA Atka Island 64.34 21 P P 16 29 46.8 +1.8**
**TAOE Nuku Hiva Isla 64.47 97 eP P 16 29 47.3 +0.5**
comp=Z,701nm,1.2s
TAOE eS **S 16 38 21.8 -1.2**
comp=Z,14μm,25.9s
TAOE eSS **SS 16 42 34.0 0.0**
comp=Z,8μm,30.4s
TAOE eLR LR 16 49 02.6
comp=Z,29μm,21.8s,baz=268
**TAOE Nuku Hiva Isla 64.47 97 P P 16 29 46.6 -0.2**
TAOE IAmb IAmb 16 29 50.1
comp=Z,230nm,1.0s
**TAOE Nuku Hiva Isla 64.47 97 P P 16 29 49.2 +2.4**
**ZEA Zeya 64.48 342 ciP P 16 29 46.0 +0.1**
ZEA eS **S 16 38 24.9 +3.4**
ZEA eSS **SS 16 42 28.3 -4.4**
ZEA pmax pmax
comp=E,30nm,1.0s
ZEA pmax pmax
comp=N,150nm,1.3s
ZEA pmax pmax
comp=Z,260nm,1.3s
ZEA pmax pmax
comp=N,600nm,4.9s
ZEA pmax pmax
comp=Z,800nm,7.1s
ZEA smax smax
comp=N,1μm,13.1s
**MA2 Magadan 66.09 358 ceP P 16 29 55.5 -0.8**
MA2 pmax pmax
comp=Z,335nm,1.7s
MA2 MLR MLR
comp=Z,14μm,20.0s
**MA2 Magadan 66.09 358 ⇑P P 16 29 55.5 -0.8**
**MA2 Magadan 66.09 358 P P 16 29 55.3 -1.0**
MA2 IAmb IAmb 16 30 05.7
comp=Z,166nm,0.8s
**MA2 Magadan 66.09 358 P P 16 29 55.9 -0.4**
**CASY Casey 66.84 198 P P 16 30 00.4 -0.6**
CASY IAmb IAmb 16 30 06.6
comp=Z,285nm,1.4s
**CASY Casey 66.84 198** IAMs_20 IAMs_20 16 55 15.7
comp=Z,36μm,21.0s
**IMP Imphal 66.92 300 eP P 16 30 02.5 +0.2**
**NIKH Nikolski High 66.92 23 P P 16 30 01.6 -0.1**
NIKH IAmb IAmb 16 30 20.1
comp=Z,292nm,0.8s
**NIKH Nikolski High 66.92 23 P P 16 30 02.0 +0.4**
baz=220,SNR=8.2
NIKH S **S 16 38 52.6 +1.3**
baz=220
**MOKO MOKOCHONG 66.94 302 eP P 16 30 02.8 +0.3**
**DIBR DIBRUGARH 67.01 303 eP P 16 30 03.8 +1.0**
**KOHI KOHIMA 67.08 301 eP P 16 30 03.5 0.0**
**ITAN ITANAGAR 67.89 303 eP P 16 30 09.5 +1.1**
**CIT Chita 68.20 334 eP P 16 30 10.2 +0.3**
CIT e 16 30 20.5
CIT e 16 30 28.5
CIT e 16 30 41.8
CIT eS **S 16 39 06.9 0.0**
CIT e 16 40 02.6
CIT pmax pmax
comp=Z,497nm,1.9s
**GTA Gaotai 68.33 317 ⇑P P 16 30 11.2 +0.1**
GTA pP pP 16 30 23.0 +0.1
GTA sP pwP 16 30 29.7 +1.0
GTA S **S 16 39 04.9 -4.2**
GTA sS pS 16 39 23.1 -0.6
GTA pmax pmax
comp=Z,390nm,1.5s
GTA pmax pmax
comp=Z,5μm,7.3s
GTA LR LR
comp=Z,8μm,21.1s
GTA LR LR
comp=Z,13μm,20.0s
GTA LR LR
comp=Z,16μm,20.4s
**UNV Unalaska Valle 68.50 23 P P 16 30 11.5 -0.1**
**UNV Unalaska Valle 68.50 23 P P 16 30 11.6 -0.1**
baz=222,SNR=11
**UNV Unalaska Valle 68.50 23 P P 16 30 12.9 +1.3**

**BELO BELONIA 68.58 298** *e*P **P** **16 30 15.0 +2.2**
**ULN Ulaanbaatar 68.59 328** *i* P **P** **16 30 12.7 +0.1**
ULN pmax pmax
comp=Z,299nm,1.2s
ULN MLR MLR
comp=Z,18μm,19.0s
**ULN Ulaanbaatar 68.59 328** ⇑P **P** **16 30 12.6 +0.1**
**ULN Ulaanbaatar 68.59 328** P **P** **16 30 12.4 -0.1**
ULN IAmb IAmb 16 30 14.9
comp=Z,270nm,1.1s
**SHL Shillong 68.92 301** *e*P **P** **16 30 15.3 +0.2**
SHL IAmb IAmb 16 30 18.0
comp=Z,2μm,1.3s
**SHL Shillong 68.92 301** P **P** **16 30 15.3 +0.2**
SNR=521
**SHL Shillong 68.92 301** P **P** **16 30 14.7 -0.4**
**SONM Songino Array 68.92 327** P **P** **16 30 15.1 +0.5**
comp=Z,137nm,0.9s,baz=139,slow=2.9,SNR=368
SONM PKiKP **PKiKP** **16 36 34.4 +1.7**
comp=Z,3.3nm,0.9s,baz=108,slow=1.2,SNR=6.0
SONM PKPPKP 16 58 25.3
comp=Z,4.6nm,0.8s,baz=282,slow=3.0,SNR=12
SONM LR LR 17 02 06.0
comp=Z,11μm,18.8s,baz=120,slow=37
**SONM Songino Array 68.92 327** P **P** **16 30 14.2 -0.4**
SONM IAmb IAmb 16 30 16.7
comp=Z,330nm,1.2s
**AKUT Akutan 69.01 24** ⇓P **P** **16 30 15.2 +0.4**
**GUWA GUWAHATI 69.28 301** *e*P **P** **16 30 17.8 +0.7**
**SEY Seymchan 69.41 359** PKPPKP **P'P'bc** **16 58 24.2 +0.8**
comp=Z,22nm,1.3s,baz=357,slow=2.6,SNR=9.6
SEY LR LR 17 01 17.6
comp=Z,6μm,19.2s,baz=163,slow=36
**SEY Seymchan 69.41 359***c i*P **P** **16 30 15.9 -1.2**
**SPIA Saint Paul Isl 69.72 19** P **P** **16 30 19.4 +0.4**
**SPIA Saint Paul Isl 69.72 19** P **P** **16 30 19.9 +0.8**
baz=217
**GOMU GeErMu 70.44 312** P **P** **16 30 25.0 +0.5**
GOMU pP pP 16 30 35.1 -1.4
GOMU PP **PP** **16 33 00.3 -0.7**
GOMU S **S** **16 39 36.1 +1.5**
GOMU SS **SS** **16 44 05.9 -0.6**
GOMU pmax pmax
comp=Z,170nm,1.8s
GOMU pmax pmax
comp=Z,3μm,6.2s
GOMU LR LR
comp=Z,8μm,21.0s
GOMU LR LR
comp=Z,17μm,21.1s
GOMU LR LR
comp=Z,21μm,22.7s
**FALS False Pass 70.48 24** P **P** **16 30 23.7 -0.1**
**FALS False Pass 70.48 24** P **P** **16 30 23.8 0.0**
baz=225,SNR=8.7
**FALS False Pass 70.48 24** P **P** **16 30 25.7 +1.9**
**LSA Lhasa 70.89 304** P **P** **16 30 29.0 +1.6**
LSA S **S** **16 39 36.4 -3.8**
LSA pmax pmax
comp=Z,2μm,1.6s
LSA LR LR
comp=Z,15μm,26.3s
LSA LR LR
comp=Z,23μm,23.5s
LSA LR LR
comp=Z,25μm,26.3s
**VNDA Vanda 70.93 178** P **P** **16 30 26.6 +0.4**
comp=Z,56nm,0.7s,baz=328,slow=7.0,SNR=100
VNDA LR LR 16 57 09.0
comp=Z,8μm,21.0s,baz=354,slow=32
VNDA PKPPKP 16 58 20.3
comp=Z,2.5nm,0.8s,baz=190,slow=8.8,SNR=16
**VNDA Vanda 70.93 178** P **P** **16 30 26.4 +0.2**
**YAK Yakutsk 71.18 348** LR LR 16 59 26.3
comp=Z,11μm,21.7s,baz=147,slow=34
**YAK Yakutsk 71.18 348***c i*P **P** **16 30 27.7 -0.2**
YAK *e**PP **sP** **16 30 45.6 -0.1**
YAK *e*S **S** **16 39 40.4 -0.8**
YAK *e**SS **SKiKP** **16 40 07.3 +2.3**
YAK *e*SS **SS** **16 44 17.1 +1.2**
YAK *e*SSS SSS 16 47 14.8
YAK pmax pmax
comp=Z,540nm,1.0s
YAK pmax pmax
comp=N,178nm,1.2s
YAK pmax pmax
comp=E,63nm,1.2s
YAK pmax pmax
comp=Z,416nm,2.8s
YAK pmax pmax
comp=N,265nm,2.8s
YAK pmax pmax
comp=E,158nm,2.9s
YAK smax smax
comp=N,2μm,4.6s
YAK smax smax
comp=E,1μm,4.4s
**YAK Yakutsk 71.18 348** ⇑P **P** **16 30 27.6 -0.3**
**YAK Yakutsk 71.18 348** P **P** **16 30 27.2 -0.6**
**SBA Scott Base 71.44 177** P **P** **16 30 30.6 +1.3**
**SDPT Sand Point 72.04 25** P **P** **16 30 32.4 -0.8**
baz=227,SNR=10
**CNBA Chernabura Isl 72.06 26** P **P** **16 30 33.5 +0.2**
CNBA IAmb IAmb 16 30 37.4
comp=Z,613nm,1.5s
CNBA IAMs_20 IAMs_20 16 56 14.3
comp=Z,39μm,22.0s
**CHNA Chernabura Isl 72.07 26** P **P** **16 30 33.3 -0.1**
baz=228,SNR=10.0
CHNA S **S** **16 39 52.0 +0.3**
baz=228
**ZAK Zakamensk 72.08 328** *e*P **P** **16 30 33.6 -0.2**
ZAK pmax pmax
comp=Z,584nm,1.2s
ZAK pmax pmax
comp=Z,474nm,1.4s
**IRK Irkutsk 72.67 330** *e*P **P** **16 30 36.8 -0.3**
IRK *e* 16 40 00.5
IRK pmax pmax
comp=Z,323nm,0.6s
**BWNR Bhubaneshwar 72.83 294** *e*P **P** **16 30 39.6 +0.9**
**TAPN Taplejung 73.03 301** *e*P **P** **16 30 40.6 +0.5**
**ODAN Odare 73.16 301** *e*P **P** **16 30 41.8 +1.0**
**CHGN Chignik 73.54 25** P **P** **16 30 42.2 +0.1**
baz=229
**BOK Bokaro 73.63 297** *e*P **P** **16 30 43.9 +0.5**
BOK IAmb IAmb 16 30 47.1
comp=Z,646nm,0.7s
**RAMN Ramite 73.86 300** *e*P **P** **16 30 45.7 +0.7**
comp=Z,505nm,0.6s
**MOY Mondy 74.00 328** *e*P **P** **16 30 45.1 0.0**
MOY pmax pmax
comp=Z,335nm,1.2s
**CHLP Challavanipeta 74.03 291** *e*P **P** **16 30 46.3 +0.6**
CHLP IVmB_BB 16 30 58.8
comp=Z,5μm,3.2s
CHLP IVMs_BB IVMs_BB 16 58 16.6
comp=Z,2μm,27.2s
**JIRN Jiri 74.41 301** *e*P **P** **16 30 49.3 +1.0**
**CHIR Chirikof Islan 74.44 27** P **P** **16 30 48.0 +0.6**
CHIR IAmb IAmb 16 30 59.5
comp=Z,420nm,1.3s
CHIR IAMs_20 IAMs_20 16 59 27.4
comp=Z,35μm,20.0s
**CHIR Chirikof Islan 74.44 27** P **P** **16 30 47.9 +0.5**
baz=232
**GAMB Gambell 74.65 15** P **P** **16 30 48.8 +0.4**
GAMB IAmb IAmb 16 30 50.8
comp=Z,240nm,1.1s
GAMB IAMs_20 IAMs_20 17 00 43.3
comp=Z,34μm,20.0s
**GAMB Gambell 74.65 15** P **P** **16 30 49.0 +0.6**
baz=215,SNR=132
GAMB S **S** **16 40 21.2 +0.6**
baz=215
**GUN Gumba 74.74 301** *e*P **P** **16 30 51.2 +1.0**
**RAGD RAYAGADA 74.74 292** *e*P **P** **16 30 50.9 +1.0**
**BILL Bilibino 74.96 4***d i*P **P** **16 30 50.3 +0.1**
BILL *e* 16 31 03.5
BILL *e* 16 33 44.2
BILL *e*PPP PPP 16 35 30.6
BILL *i* S **S** **16 40 26.2 +2.2**
BILL pmax pmax
comp=Z,579nm,1.7s
BILL MLR MLR
comp=Z,8μm,19.0s

**BILL Bilibino 74.96 4** P **P** **16 30 50.2 0.0**
BILL IAmb IAmb 16 30 52.1
comp=Z,258nm,0.9s
**JHSG JHARSUGUGA 75.02 295** *e*P **P** **16 30 52.5 +1.0**
**PKI Pulchoki 75.05 301** *e*P **P** **16 30 52.5 +0.5**
**PKIN Phulchoki 75.06 301** *e*P **P** **16 30 52.5 +0.5**
**PALK Pallekele 75.16 279** P **P** **16 30 52.4 -0.1**
comp=Z,131nm,0.7s,baz=198,slow=5.8,SNR=57
PALK LR LR 17 10 41.6
comp=Z,2μm,18.4s,baz=212,slow=41
**PALK Pallekele 75.16 279** P **P** **16 30 52.3 -0.2**
PALK IAmb IAmb 16 30 56.2
comp=Z,283nm,0.9s
**KKN Kakani 75.22 301** *e*P **P** **16 30 53.7 +0.9**
**DMN Daman 75.32 301** *e*P **P** **16 30 54.5 +1.1**
**SII Sitkinak Islan 75.53 26** P **P** **16 30 53.6 -0.1**
SII IAmb IAmb 16 30 56.0
comp=Z,695nm,1.3s
SII IAMs_20 IAMs_20 17 01 39.9
comp=Z,30μm,20.0s
**SII Sitkinak Islan 75.53 26** P **P** **16 30 54.5 +0.8**
baz=233
**SII Sitkinak Islan 75.53 26** P **P** **16 30 55.7 +2.0**
comp=Z,420nm,1.6s
**GKN Gorkha 75.83 301** *e*P **P** **16 30 56.9 +0.7**
**AIS Amsterdam Isla 75.83 233** ⇓P **P** **16 30 57.5 +1.7**
**AIS Amsterdam Isla 75.83 233** P **P** **16 30 56.0 +0.1**
AIS IAMs_20 IAMs_20 17 03 30.7
comp=Z,25μm,19.0s
**PVM Polavaram 76.03 290** *e*P **P** **16 30 57.4 +0.1**
PVM IVmB_BB 16 31 07.5
comp=Z,3μm,4.0s
PVM IVMs_BB IVMs_BB 16 57 36.2
comp=Z,2μm,29.7s
**VLK Valmikinagar 76.30 300** *e*P **P** **16 31 00.4 +1.7**
**OHAK Old Harbor 76.32 26** P **P** **16 30 58.7 +0.6**
baz=234,SNR=6.8
OHAK S **S** **16 40 38.1 -1.3**
baz=234
**MDRS Chennai 76.55 285** *e*P **P** **16 31 00.9 +0.5**
MDRS IAmb IAmb 16 31 03.2
comp=Z,411nm,1.4s
**KOLN Koldanda 76.65 300** *e*P **P** **16 31 01.5 +0.6**
**DANN Dangsing 76.66 301** *e*P **P** **16 31 01.5 +0.4**
**VJD Vijayawada 76.80 289** *e*P **P** **16 31 02.5 +0.9**
**P18K Big Mountain, 76.83 24** P **P** **16 31 00.4 -0.6**
P18K IAmb IAmb 16 31 03.3
comp=Z,316nm,1.4s
P18K IAMs_20 IAMs_20 17 03 08.2
comp=Z,33μm,20.0s
**P18K Big Mountain, 76.83 24** P **P** **16 31 00.6 -0.5**
baz=231,SNR=7.0
**MYLAV Mylavaram 76.86 289** *e*P **P** **16 31 02.0 0.0**
MYLAV IVmB_BB 16 31 12.2
comp=Z,3μm,4.3s
MYLAV IVMs_BB IVMs_BB 17 06 15.5
comp=Z,2μm,22.6s
**KDAK Kodiak Island 76.96 26** LR LR 17 00 05.1
comp=Z,17μm,21.7s,baz=257,slow=32
**KDAK Kodiak Island 76.96 26** P **P** **16 31 01.8 +0.1**
KDAK IAmb IAmb 16 31 03.9
comp=Z,470nm,1.5s
**KDAK Kodiak Island 76.96 26** P **P** **16 31 02.0 +0.2**
baz=234
**ANM Nome 76.97 17** P **P** **16 31 02.5 +0.8**
baz=221
**TNA Tin City 77.06 15** P **P** **16 31 02.0 -0.1**
**TNA Tin City 77.06 15** P **P** **16 31 02.5 +0.4**
baz=218,SNR=107
TNA S **S** **16 40 47.6 +0.5**
baz=218
**O18K Koktuh Hills 77.13 23** P **P** **16 31 02.8 +0.1**
baz=231
**SKHT Srikalahasti 77.18 286** *e*P **P** **16 31 03.9 0.0**
SKHT IVmB_BB 16 31 14.0
comp=Z,2μm,3.7s
SKHT IVMs_BB IVMs_BB 17 00 45.4
comp=Z,2μm,26.7s
**Q19K Cape Douglas, 77.19 25** P **P** **16 31 02.2 -0.9**
Q19K IAMs_20 IAMs_20 16 59 32.7
comp=Z,38μm,22.0s
**Q19K Cape Douglas, 77.19 25** P **P** **16 31 03.3 +0.2**
baz=233,SNR=9.1
**PYUN Piuthan 77.25 301** *e*P **P** **16 31 04.5 +0.1**
**ADKI Addanki 77.31 288** *e*P **P** **16 31 04.9 +0.3**
ADKI IVmB_BB 16 31 14.7
comp=Z,2μm,3.9s
ADKI IVMs_BB IVMs_BB 17 03 15.7
comp=Z,1μm,20.6s
**ALBI Allahabad 77.60 298** *e*P **P** **16 31 06.1 0.0**
**O19K Port Alsworth 77.69 23** P **P** **16 31 04.5 -1.3**
O19K IAMs_20 IAMs_20 16 59 52.9
comp=Z,43μm,22.0s
**O19K Port Alsworth 77.69 23** P **P** **16 31 05.8 0.0**
baz=232
O19K S **S** **16 40 53.4 -0.8**
baz=232
**N19K Bonanza Creek 78.01 23** P **P** **16 31 07.5 -0.2**
**N19K Bonanza Creek 78.01 23** P **P** **16 31 08.2 +0.5**
baz=232
**ILSW Iliamna Southw 78.03 24** P **P** **16 31 06.6 -1.3**
ILSW IAmb IAmb 16 31 09.9
comp=Z,692nm,1.5s
**NJS Nagarjunasagar 78.07 288** *e*P **P** **16 31 08.2 -0.6**
NJS IVmB_BB 16 31 18.6
comp=Z,3μm,3.8s
NJS IVMs_BB IVMs_BB 17 03 51.7
comp=Z,1μm,22.9s
**RCLA Racherla 78.20 287** *e*P **P** **16 31 08.7 -0.9**
RCLA IVmB_BB 16 31 12.7
comp=Z,4μm,7.2s
RCLA IVMs_BB IVMs_BB 16 58 00.3
comp=Z,2μm,36.2s
**SALM Salem 78.28 283** *e*P **P** **16 31 11.5 +1.5**
**O20K Slope Mountain 78.30 24** P **P** **16 31 09.4 +0.1**
baz=234,SNR=5.6
O20K S **S** **16 40 59.3 -1.7**
baz=234
**SRLM Srisailam 78.38 288** *e*P **P** **16 31 10.0 -0.6**
SRLM IVmB_BB 16 31 20.1
comp=Z,3μm,4.1s
SRLM IVMs_BB IVMs_BB 17 02 27.0
comp=Z,926nm,21.9s
**WMQ Urumqi 78.42 317** P **P** **16 31 10.4 +0.1**
WMQ pP pP 16 31 23.4 +1.1
WMQ sP pwP 16 31 29.6 +1.4
WMQ S **S** **16 41 03.2 +0.3**
WMQ sS pS 16 41 19.4 +1.0
WMQ SS **SS** **16 46 12.4 +5.5**
WMQ pmax pmax
comp=Z,250nm,1.5s
WMQ pmax pmax
comp=Z,6μm,6.5s
WMQ LR LR
comp=Z,8μm,22.3s
WMQ LR LR
comp=Z,7μm,23.9s
WMQ LR LR
comp=Z,12μm,25.5s
**HOM Homer 78.46 25** P **P** **16 31 09.1 -0.9**
HOM IAMs_20 IAMs_20 17 01 59.0
comp=Z,38μm,21.0s
**HOM Homer 78.46 25** P **P** **16 31 10.8 +0.8**
baz=235
**RSO Redoubt South 78.48 24** P **P** **16 31 08.8 -1.6**
**RPR Rampur 78.52 291** *e*P **P** **16 31 11.2 0.0**
RPR IVmBBB 16 31 23.1
comp=Z,3μm,3.8s
RPR IVMs_BB IVMs_BB 16 59 44.8
comp=Z,1μm,32.8s
**CNPM China Poot 78.55 25** P **P** **16 31 10.8 +0.2**
CNPM IAmb IAmb 16 31 15.9
comp=Z,327nm,0.8s
CNPM IAMs_20 IAMs_20 17 02 22.5
comp=Z,43μm,20.0s
**CUPL Choutuppal 78.57 289** *e*P **P** **16 31 10.9 -0.7**
CUPL IVmB_BB 16 31 21.2
comp=Z,3μm,4.2s
CUPL IVMs_BB IVMs_BB 17 01 37.5
comp=Z,1μm,23.5s
**M19K Big River Lodg 78.72 22** P **P** **16 31 11.8 +0.3**
M19K IAmb IAmb 16 31 33.1
comp=Z,467nm,1.2s
**M19K Big River Lodg 78.72 22** P **P** **16 31 12.8 +1.3**
baz=232
**L19K White Mountain 78.73 22** P **P** **16 31 11.9 +0.4**

L19K IAmb IAmb 16 31 32.8
comp=Z,684nm,1.4s
**L19K White Mountain 78.73 22** P **P** **16 31 12.6 +1.1**
baz=231,SNR=89
L19K S **S** **16 41 07.4 +2.0**
baz=231
**JBP Jabalpur 78.75 295** *e*P **P** **16 31 11.1 -1.3**
JBP IAmb IAmb 16 31 16.9
comp=Z,425nm,1.0s
JBP *e*S **S** **16 41 05.3 -1.7**
**KOD Kodaikanal 78.77 282** *e*P **P** **16 31 13.9 +0.8**
**TTA Tatalina 78.79 21** ⇑P **P** **16 31 12.4 +0.5**
TTA ⇑P **P** **16 31 12.7 +0.8**
**TTA Tatalina 78.79 21** P **P** **16 31 12.4 +0.5**
baz=230,SNR=70
TTA S **S** **16 41 10.6 +4.5**
baz=230
**BRLK Bradley Lake 78.83 25** P **P** **16 31 12.0 -0.2**
BRLK IAmb IAmb 16 31 14.2
comp=Z,516nm,1.5s
**BRSE Bradley Lake S 78.88 25** P **P** **16 31 12.8 +0.4**
baz=236,SNR=17
BRSE S **S** **16 41 08.2 +1.2**
baz=236
**HYB Hyderabad 78.94 289** *e*P **P** **16 31 12.5 -1.1**
HYB *e*P **P** **16 31 13.5 -0.2**
HYB IAmb IAmb 16 31 16.0
comp=Z,191nm,0.6s
HYB *e*S **S** **16 41 06.0 -3.3**
**HYBB Hyderabad (bro 78.94 289** *e*P **P** **16 31 12.9 -0.8**
HYBB IVmBBB 16 31 25.3
comp=Z,3μm,4.1s
HYBB IVMs_BB IVMs_BB 17 01 07.8
comp=Z,1μm,33.0s
**TRD Trivandrum 79.01 280** *e*P **P** **16 31 15.0 +1.0**
TRD IAmb IAmb 16 31 17.7
comp=Z,642nm,1.1s
**SPU Mount Spurr 79.18 23** P **P** **16 31 13.1 -1.0**
**L20K Farewell, AK 79.27 22** P **P** **16 31 15.4 +0.9**
baz=232
**CAPN Captain Cook N 79.30 24** IAMs_20 IAMs_20 17 00 08.3
comp=Z,31μm,22.0s
**CAPN Captain Cook N 79.30 24** P **P** **16 31 15.0 +0.4**
baz=235
**SRSP Sriramsagar 79.41 291** *e*P **P** **16 31 15.9 -0.3**
SRSP IVmB_BB 16 31 18.2
comp=Z,2μm,0.6s
**SEW Seward 79.62 25** P **P** **16 31 16.5 +0.1**
SEW IAmb IAmb 16 31 42.7
comp=Z,393nm,1.2s
**SEW Seward 79.62 25** P **P** **16 31 16.2 -0.1**
baz=237,SNR=10
SEW S **S** **16 41 17.1 +2.2**
baz=237
**GCSA Galena City Sc 79.68 19** P **P** **16 31 17.0 +0.4**
baz=229
GCSA S **S** **16 41 17.4 +2.1**
baz=229
**O22K Cooper Landing 79.72 25** P **P** **16 31 17.1 +0.2**
**O22K Cooper Landing 79.72 25** P **P** **16 31 17.1 +0.2**
baz=236,SNR=15
O22K S **S** **16 41 16.3 +0.5**
baz=236
**URV Uravakonda 79.73 286** *e*P **P** **16 31 17.8 -0.2**
URV IVmB_BB 16 31 28.1
comp=Z,3μm,3.8s
URV IVMs_BB IVMs_BB 17 01 57.0
comp=Z,2μm,26.6s
**K20K Telida 79.74 21** P **P** **16 31 17.4 +0.4**
K20K IAmb IAmb 16 31 19.9
comp=Z,423nm,1.4s
**K20K Telida 79.74 21** P **P** **16 31 17.9 +0.9**
baz=232
**FIS Fire Island 79.89 24** P **P** **16 31 18.5 +0.7**
FIS IAMs_20 IAMs_20 17 00 49.9
comp=Z,31μm,22.0s
**LGTI Lohaghat 79.92 301** *e*P **P** **16 31 17.6 -1.0**
**PTH Pithoragarh 79.97 301** *e*P **P** **16 31 19.5 +0.3**
**TIXI Tiksi 79.99 352** LR LR 17 05 59.1
comp=Z,5μm,20.5s,baz=179,slow=35
**TIXI Tiksi 79.99 352***c e*P **P** **16 31 17.0 -1.2**
TIXI pmax pmax
comp=Z,308nm,1.7s
TIXI MLR MLR
comp=Z,6μm,20.0s
**TIXI Tiksi 79.99 352** ⇑P **P** **16 31 17.0 -1.2**
**TIXI Tiksi 79.99 352** P **P** **16 31 16.4 -1.7**
TIXI IAmb IAmb 16 31 22.2
comp=Z,369nm,1.5s
**RC01 Rabbit Creek A 80.05 24** P **P** **16 31 18.5 -0.2**
RC01 IAmb IAmb 16 31 21.4
comp=Z,707nm,1.4s
RC01 IAMs_20 IAMs_20 17 01 19.2
comp=Z,26μm,22.0s
**RC01 Rabbit Creek A 80.05 24** P **P** **16 31 19.0 +0.3**
baz=236,SNR=37
RC01 S **S** **16 41 18.7 -0.7**
baz=236
**PPLA Purkeypile 80.14 22** P **P** **16 31 18.5 -0.9**
PPLA IAmb IAmb 16 31 40.2
comp=Z,344nm,1.5s
**PPLA Purkeypile 80.14 22** P **P** **16 31 19.0 -0.3**
baz=234,SNR=26
PPLA S **S** **16 41 19.9 -0.7**
baz=234
**J20K Nowinta River 80.23 20** P **P** **16 31 20.1 +0.5**
J20K IAmb IAmb 16 31 22.4
comp=Z,515nm,1.4s
**J20K Nowinta River 80.23 20** P **P** **16 31 20.4 +0.8**
baz=232
**RDOG Red Dog Mine 80.25 15** P **P** **16 31 20.1 +0.4**
RDOG IAmb IAmb 16 31 22.2
comp=Z,210nm,0.9s
RDOG IAMs_20 IAMs_20 17 04 37.9
comp=Z,29μm,20.0s
**RDOG Red Dog Mine 80.25 15** P **P** **16 31 20.4 +0.7**
baz=223,SNR=110
RDOG S **S** **16 41 21.4 +0.1**
baz=223
**M22K Willow 80.27 23** P **P** **16 31 19.3 -0.6**
M22K IAMs_20 IAMs_20 17 01 26.0
comp=Z,30μm,22.0s
**M22K Willow 80.27 23** P **P** **16 31 19.6 -0.2**
baz=236,SNR=16
M22K S **S** **16 41 20.5 -1.0**
baz=236
**KRAR Krasnoyarsk 80.35 330** *i* P **P** **16 31 16.8 -3.6**
**CAST Castle Rocks 80.49 21** P **P** **16 31 20.4 -0.7**
CAST IAmb IAmb 16 31 41.0
comp=Z,351nm,1.4s
**CAST Castle Rocks 80.49 21** P **P** **16 31 20.7 -0.4**
baz=234,SNR=60
CAST S **S** **16 41 22.4 -1.6**
baz=234
**PWL Port Wells 80.50 25** P **P** **16 31 21.2 0.0**
PWL IAmb IAmb 16 31 32.7
comp=Z,469nm,1.0s
PWL IAMs_20 IAMs_20 17 02 41.0
comp=Z,41μm,21.0s
**PWL Port Wells 80.50 25** P **P** **16 31 21.7 +0.6**
baz=238,SNR=24
PWL S **S** **16 41 24.3 +0.2**
baz=238
**JHNI Jhansi 80.52 297** *e*P **P** **16 31 21.1 -1.0**
**PMR Palmer 80.57 24** P **P** **16 31 21.7 +0.2**
baz=237,SNR=30
PMR S **S** **16 41 25.0 +0.3**
baz=237
**CUT Chulitna 80.58 23** P **P** **16 31 20.3 -1.2**
CUT IAmb IAmb 16 31 40.5
comp=Z,499nm,1.2s
**CUT Chulitna 80.58 23** P **P** **16 31 21.2 -0.4**
baz=236,SNR=24
CUT S **S** **16 41 22.9 -2.0**
baz=236
**Q23K Middleton Isla 80.60 26** P **P** **16 31 22.6 +1.0**
baz=240
**CHUM Lake Minchumin 80.69 21** P **P** **16 31 22.5 +0.4**
baz=234,SNR=53
CHUM S **S** **16 41 24.4 -1.6**
baz=234
**DGZ Jazzator, Alta 80.73 323***c i*P **P** **16 31 22.0 -0.8**
DGZ pmax pmax
comp=Z,107nm,0.9s
DGZ MLR MLR
comp=Z,8μm,20.0s

**KNK Knik Glacier** 80.75 24 P P 16 31 22.4 -0.1
KNK IAmb IAmb 16 31 28.0
comp=Z,437nm,1.4s
KNK IAMs_20 IAMs_20 17 02 01.6
comp=Z,29µm,21.0s
**KNK Knik Glacier** 80.75 24 P P 16 31 23.0 +0.5
baz=237,SNR=13
KNK S S 16 41 26.3 -0.5
baz=237
**GHO Glory Hole Cre** 80.75 24 IAMs_20 IAMs_20 17 01 52.8
comp=Z,31µm,22.0s
**KLRI Killari** 80.89 289 eP P 16 31 23.6 -0.6
KLRI IVmBBB 16 31 33.6
comp=Z,3µm,6.2s
KLRI IVMs_BB IVMs_BB 17 00 05.7
comp=Z,2µm,26.4s
**AKL Akola** 80.97 292 eP P 16 31 23.1 -1.5
**LATR Latur** 80.98 290 eP P 16 31 24.6 -0.1
**KTH Kantishna Hill** 81.00 22 P P 16 31 22.5 -1.4
**SML Sawmill** 81.01 24 IAMs_20 IAMs_20 17 02 23.0
comp=Z,31µm,21.0s
**SML Sawmill** 81.01 24 P P 16 31 24.3 +0.4
baz=237,SNR=40
SML S S 16 41 30.5 +1.0
baz=237
**GLI Glacier Island** 81.02 25 P P 16 31 23.9 0.0
GLI IAmb IAmb 16 31 44.4
comp=Z,236nm,1.0s
GLI IAMs_20 IAMs_20 17 04 00.9
comp=Z,33µm,21.0s
**GLI Glacier Island** 81.02 25 P P 16 31 24.3 +0.3
baz=239,SNR=8.4
GLI S S 16 41 32.2 +2.6
baz=239
**BHPL Bhopal** 81.07 295 eP P 16 31 24.5 -0.6
BHPL IAmb IAmb 16 31 27.3
comp=Z,606nm,0.8s
**TRF Thorofare Moun** 81.17 22 P P 16 31 23.6 -1.3
TRF IAmb IAmb 16 31 44.3
comp=Z,263nm,1.3s
**TRF Thorofare Moun** 81.17 22 P P 16 31 24.0 -0.9
baz=235,SNR=19
**FID Port Fidalgo** 81.21 25 IAMs_20 IAMs_20 17 04 04.4
comp=Z,27µm,21.0s
**BPAW Bear Paw Mtn.** 81.29 21 P P 16 31 24.0 -1.3
**BPAW Bear Paw Mtn.** 81.29 21 P P 16 31 24.9 -0.4
baz=235,SNR=11
BPAW S S 16 41 29.1 -3.1
baz=235
**EYAK Cordova Ski Ar** 81.42 26 P P 16 31 24.4 -1.7
EYAK IAmb IAmb 16 31 47.6
comp=Z,335nm,1.4s
**EYAK Cordova Ski Ar** 81.42 26 P P 16 31 26.7 +0.7
baz=240,SNR=8.0
EYAK S S 16 41 35.0 +1.3
baz=240
**SCM Sheep Creek Mo** 81.43 24 P P 16 31 25.8 -0.4
SCM IAmb IAmb 16 31 46.9
comp=Z,402nm,1.2s
SCM IAMs_20 IAMs_20 17 02 01.6
comp=Z,34µm,22.0s
**SCM Sheep Creek Mo** 81.43 24 P P 16 31 27.0 +0.8
baz=238,SNR=14
SCM S S 16 41 35.3 +1.4
baz=238
**PAF Port-aux-Franc** 81.44 221 ⇑P P 16 31 28.0 +1.5
PAF ⇑P PcP 16 31 28.9 -3.5
**PAF Port-aux-Franc** 81.44 221 P P 16 31 26.8 +0.4
**IMAR Indian Mountai** 81.48 19 P P 16 31 26.4 +0.1
**H08S2 Diego Garcia H** 81.50 263 P P 16 31 29.2 +2.0
baz=70,slow=4.2,SNR=8.2
**H08S3 Diego Garcia H** 81.52 263 P P 16 31 30.0 +2.7
baz=70,slow=4.2,SNR=8.4
**H08S1 Diego Garcia H** 81.52 263 P P 16 31 28.8 +1.5
baz=70,slow=4.2,SNR=5.6
**ZSN Zaisan** 81.53 320 eP P 16 31 24.3 -2.7
ZSN eS S 16 41 33.7 -1.8
ZSN pmax pmax
comp=Z,399nm,2.4s
**ZSN Zaisan** 81.53 320 eP P 16 31 24.4 -2.6
comp=Z,399nm,2.4s,baz=320
ZSN eS S 16 41 33.7 -1.8
baz=320
**DGAR Diego Garcia** 81.57 263 ceP P 16 31 27.2 -0.7
DGAR pmax pmax
comp=Z,202nm,1.2s
**DGAR Diego Garcia** 81.57 263 P P 16 31 27.9 +0.1
DGAR IAmb IAmb 16 31 40.9
comp=Z,606nm,1.4s
**I21K Tanana** 81.58 20 P P 16 31 27.3 +0.5
I21K IAmb IAmb 16 31 47.8
comp=Z,341nm,1.3s
**I21K Tanana** 81.58 20 P P 16 31 27.4 +0.6
baz=234,SNR=72
**H21K Melozitna Rive** 81.59 19 IAMs_20 IAMs_20 17 04 54.9
comp=Z,23µm,20.0s
**H21K Melozitna Rive** 81.59 19 P P 16 31 27.6 +0.7
baz=233
**RND Reindeer** 81.68 22 P P 16 31 26.4 -1.1
RND IAmb IAmb 16 31 28.8
comp=Z,496nm,1.5s
**KAIM Kayak Island** 81.69 26 IAMs_20 IAMs_20 17 05 18.8
comp=Z,24µm,20.0s
**KAIM Kayak Island** 81.69 26 P P 16 31 28.8 +1.3
baz=241
**DIV Divide** 81.70 25 P P 16 31 27.8 +0.2
DIV IAmb IAmb 16 31 48.4
comp=Z,278nm,1.2s
**KLU Klutina** 81.83 25 IAMs_20 IAMs_20 17 04 47.2
comp=Z,33µm,20.0s
**KLU Klutina** 81.83 25 P P 16 31 29.0 +0.7
baz=240,SNR=28
KLU S S 16 41 39.0 +0.9
baz=240
**MCK McKinley** 81.83 22 P P 16 31 27.5 -0.7
MCK IAmb IAmb 16 31 48.7
comp=Z,618nm,1.2s
**MCK McKinley** 81.83 22 P P 16 31 27.6 -0.6
baz=237,SNR=185
MCK S S 16 41 33.9 -4.0
baz=237
**KAAM Kaadhehdhoo** 81.88 271 P P 16 31 30.3 +0.8
SNR=11
**KAAM Kaadhehdhoo** 81.88 271 ⇑P P 16 31 30.5 +1.0
KAAM ⇓P PcP 16 31 30.7 -4.3
**BWN Browne** 81.88 21 P P 16 31 27.6 -0.8
**MLY Manley** 81.92 20 P P 16 31 28.3 -0.4
MLY IAmb IAmb 16 31 49.1
comp=Z,339nm,1.4s
**MLY Manley** 81.92 20 P P 16 31 29.0 +0.3
baz=235
**HMT Hamilton** 81.96 26 P P 16 31 29.3 +0.4
HMT IAmb IAmb 16 31 32.4
comp=Z,453nm,1.4s
HMT IAMs_20 IAMs_20 17 03 14.8
comp=Z,24µm,20.0s
**DDI Dehra Dun** 81.97 302 eP P 16 31 30.0 +0.3
**M24K Tolsona, Glenn** 82.03 24 P P 16 31 30.0 +0.7
M24K IAMs_20 IAMs_20 17 02 18.7
comp=Z,26µm,22.0s
**M24K Tolsona, Glenn** 82.03 24 P P 16 31 30.5 +1.1
baz=239,SNR=30
M24K S S 16 41 38.5 -1.7
baz=239
**SUCK Suckling Hills** 82.05 26 IAMs_20 IAMs_20 17 07 30.1
comp=Z,28µm,20.0s
**BMRM Bremner River** 82.12 25 P P 16 31 30.0 +0.2
BMRM IAmb IAmb 16 31 37.0
comp=Z,655nm,1.4s
BMRM IAMs_20 IAMs_20 17 03 02.0
comp=Z,34µm,22.0s
**BMRM Bremner River** 82.12 25 P P 16 31 30.2 +0.4
baz=241,SNR=40
BMRM S S 16 41 41.8 +0.8
baz=241
**BERG Berg Lake** 82.23 26 P P 16 31 30.8 +0.4
BERG IAMs_20 IAMs_20 17 04 16.0
comp=Z,23µm,21.0s
**NEA2 Nenana** 82.26 21 P P 16 31 29.3 -1.1
NEA2 IAmb IAmb 16 31 31.5
comp=Z,338nm,1.4s
NEA2 IAMs_20 IAMs_20 17 04 25.4
comp=Z,33µm,20.0s
**NEA2 Nenana** 82.26 21 P P 16 31 29.7 -0.7
baz=236,SNR=43
NEA2 S S 16 41 39.6 -2.6
baz=236

**BGLC Bering Glacier** 82.29 26 P P 16 31 31.8 +1.2
baz=242
**NDI New Delhi** 82.34 300 eP P 16 31 30.9 -0.7
NDI eP P 16 31 31.0 -0.7
NDI eS S 16 41 40.0 -4.5
**SONA Sohna** 82.37 300 eP P 16 31 31.4 -0.3
**AYAN Aya Nagar** 82.38 300 eP P 16 31 31.1 -0.6
**N25K Chitina, Valde** 82.43 25 P P 16 31 31.5 0.0
N25K IAmb IAmb 16 31 35.0
comp=Z,465nm,1.4s
N25K IAMs_20 IAMs_20 17 05 36.2
comp=Z,22µm,20.0s
**N25K Chitina, Valde** 82.43 25 P P 16 31 32.2 +0.7
baz=241,SNR=48
N25K S S 16 41 43.7 -0.6
baz=241
**I23K Minto, Yukon-K** 82.46 21 P P 16 31 30.8 -0.7
**I23K Minto, Yukon-K** 82.46 21 P P 16 31 31.0 -0.4
baz=236,SNR=25
I23K S S 16 41 42.0 -2.2
baz=236
**HMDM Hanimaadhoo** 82.47 278 P P 16 31 32.7 +0.1
SNR=8.6
**HMDM Hanimaadhoo** 82.47 278 ⇑P P 16 31 33.3 +0.7
HMDM ⇑P PcP 16 31 34.2 -3.5
**HMDM Hanimaadhoo** 82.47 278 P P 16 31 32.0 -0.6
HMDM IAmb IAmb 16 31 36.6
comp=Z,449nm,1.0s
**SNH Sunshine Point** 82.51 27 IAMs_20 IAMs_20 17 07 25.4
comp=Z,30µm,20.0s
**WRH Wood River Hil** 82.55 22 P P 16 31 30.8 -1.0
WRH IAmb IAmb 16 31 33.0
comp=Z,403nm,1.5s
**HARP HAARP** 82.59 24 P P 16 31 32.6 +0.4
baz=240,SNR=11
**WAX Waxell Ridge** 82.63 26 P P 16 31 33.1 +0.6
WAX IAmb IAmb 16 31 36.8
comp=Z,570nm,1.4s
WAX IAMs_20 IAMs_20 17 07 49.5
comp=Z,29µm,20.0s
**GLB Gilahina Butte** 82.68 25 P P 16 31 33.0 +0.2
GLB IAMs_20 IAMs_20 17 03 51.9
comp=Z,22µm,21.0s
**VRDI Verde Repeater** 82.73 25 P P 16 31 33.2 0.0
VRDI IAmb IAmb 16 31 36.3
comp=Z,284nm,1.2s
VRDI IAMs_20 IAMs_20 17 03 10.2
comp=Z,30µm,22.0s
**CCB Clear Creek Bu** 82.74 21 P P 16 31 31.7 -1.2
CCB IAmb IAmb 16 31 33.9
comp=Z,306nm,1.4s
CCB IAMs_20 IAMs_20 17 03 27.2
comp=Z,43µm,22.0s
**PAX Paxson** 82.75 23 P P 16 31 32.0 -1.1
**PAX Paxson** 82.75 23 P P 16 31 33.3 +0.2
baz=240,SNR=30
**MDM Murphy Dome** 82.76 21 P P 16 31 31.7 -1.3
MDM IAmb IAmb 16 31 34.1
comp=Z,302nm,1.4s
MDM IAMs_20 IAMs_20 17 04 39.6
comp=Z,30µm,20.0s
**TCOL CIGO, UAF Yank** 82.84 21 P P 16 31 32.1 -1.3
TCOL IAmb IAmb 16 31 53.0
comp=Z,252nm,1.1s
TCOL IAMs_20 IAMs_20 17 03 50.9
comp=Z,31µm,21.0s
**TCOL CIGO, UAF Yank** 82.84 21 P P 16 31 32.5 -0.9
baz=238,SNR=30
TCOL S S 16 41 45.2 -2.9
baz=238
**COLA College** 82.85 21 c/P P 16 31 32.1 -1.4
COLA pmax pmax
comp=Z,203nm,1.2s
**COLA College** 82.85 21 ⇑P P 16 31 32.0 -1.4
COLA ⇑P P 16 31 32.7 -0.7
**COLA College** 82.85 21 P P 16 31 32.0 -1.4
COLA IAmb IAmb 16 31 53.0
comp=Z,250nm,1.1s
**COLA College** 82.85 21 IAMs_20 IAMs_20 17 03 50.9
comp=Z,30µm,21.0s
**COLA College** 82.85 21 P P 16 31 32.6 -0.7
baz=238
COLA S S 16 41 45.5 -2.6
baz=238
**KUDL Kundal** 82.86 299 eP P 16 31 33.7 -0.6
**SMLA Simla** 82.89 302 eP P 16 31 34.6 +0.2
SMLA IAmb IAmb 16 31 37.2
comp=Z,2µm,1.1s
**MESA MESA** 82.91 27 IAMs_20 IAMs_20 17 07 46.9
comp=Z,23µm,20.0s
**MESA MESA** 82.91 27 P P 16 31 34.8 +0.7
baz=243,SNR=9.8
**ISLE Juniper Island** 82.93 26 P P 16 31 34.3 +0.2
ISLE IAmb IAmb 16 31 54.9
comp=Z,308nm,1.1s
ISLE IAMs_20 IAMs_20 17 07 39.4
comp=Z,26µm,20.0s
**HDA Harding Lake** 82.93 22 P P 16 31 33.1 -0.8
**HDA Harding Lake** 82.93 22 P P 16 31 33.4 -0.5
baz=238
HDA S S 16 41 45.4 -3.7
baz=238
HDA S S 16 41 45.4 -3.7
baz=238
**MK31 Makanchi Array** 83.00 319 eP P 16 31 34.6 -0.1
**MK31 Makanchi Array** 83.00 319 P P 16 31 33.9 -0.7
**MKAR Makanchi Array** 83.00 319 P P 16 31 34.3 -0.4
comp=Z,95nm,0.6s,baz=92,slow=7.3,SNR=454
MKAR PKiKP PKiKP 16 36 53.0 -0.6
comp=Z,6.2nm,0.6s,baz=230,slow=2.1,SNR=11
MKAR S S 16 41 57.4 +6.9
comp=Z,10nm,1.2s,baz=102,slow=10,SNR=6.5
MKAR PKKPbc PKKPbc 16 49 57.5 -1.3
comp=Z,2.9nm,0.8s,baz=266,slow=2.2,SNR=12
MKAR PKPPKP P'P'df 16 57 54.8 -6.9
comp=Z,1.0nm,0.9s,baz=299,slow=1.2,SNR=6.3
MKAR LR LR 17 10 20.5
comp=Z,12µm,19.1s,baz=99,slow=37
**KAD Karad** 83.03 288 eP P 16 31 34.9 -0.6
**YAH Yahtse** 83.08 27 P P 16 31 35.0 -0.1
YAH IAmb IAmb 16 31 39.3
comp=Z,309nm,1.4s
YAH IAMs_20 IAMs_20 17 03 26.8
comp=Z,27µm,21.0s
**GOA Goa** 83.09 286 eP P 16 31 36.0 +0.3
GOA IAmb IAmb 16 31 38.7
comp=Z,122nm,0.7s
**POKR Poker Plat Res** 83.13 21 P P 16 31 33.6 -1.3
POKR IAMs_20 IAMs_20 17 03 04.4
comp=Z,31µm,22.0s
**POKR Poker Plat Res** 83.13 21 P P 16 31 34.0 -0.9
baz=238,SNR=14
POKR S S 16 41 46.7 -4.4
baz=238
**IL31** 83.14 22 P P 16 31 33.7 -1.2
IL31 IAmb IAmb 16 31 35.8
comp=Z,214nm,1.4s
**ILAR Eielson Array** 83.14 22 P P 16 31 34.0 -1.0
comp=Z,37nm,0.6s,baz=257,slow=4.5,SNR=146
ILAR PKiKP PKiKP 16 36 54.2 +1.0
comp=Z,0.9nm,0.5s,baz=289,slow=3.1,SNR=4.6
ILAR S S 16 41 56.1 +4.9
comp=Z,5.4nm,1.2s,baz=252,slow=7.6,SNR=5.2
ILAR PKKPbc PKKPbc 16 49 56.9 -2.4
comp=Z,2.1nm,0.7s,baz=354,slow=1.5,SNR=11
ILAR PKPPKP P'P'df 16 58 01.8 +1.8
comp=Z,2.0nm,0.9s,baz=355,slow=2.5,SNR=5.2
ILAR LR LR 17 05 46.5
comp=Z,42µm,20.3s,baz=252,slow=34
**ILAR Eielson Array** 83.14 22 P P 16 31 34.0 -1.0
**ILAR Eielson Array** 83.14 22 P P 16 31 33.8 -1.2
**MAKZ Makanchi** 83.20 319 ⇑P P 16 31 34.7 -1.1
**MAKZ Makanchi** 83.20 319 P P 16 31 35.1 -0.7
MAKZ IAmb IAmb 16 31 38.5
comp=Z,182nm,0.8s
MAKZ IAMs_20 IAMs_20 17 10 16.5
comp=Z,16µm,19.0s
**QSPA South Pole Qui** 83.32 180 LR LR 17 03 27.3
comp=Z,7µm,21.4s,baz=10,slow=32
**QSPA South Pole Qui** 83.32 180 P P 16 31 36.1 0.0
**H24K Noodor Dome** 83.36 20 P P 16 31 36.1 0.0
**H24K Noodor Dome** 83.36 20 P P 16 31 35.6 -0.5
baz=237
**COLD Coldfoot** 83.36 19 P P 16 31 36.3 +0.3
COLD IAmb IAmb 16 31 38.8
comp=Z,314nm,1.5s

**COLD Coldfoot** 83.36 19 P P 16 31 37.0 +0.9
baz=235,SNR=73
COLD S S 16 41 54.3 +0.9
baz=235
**RIDG Independent Ri** 83.38 23 P P 16 31 36.3 0.0
RIDG IAmb IAmb 16 31 39.1
comp=Z,580nm,1.4s
**RIDG Independent Ri** 83.38 23 P P 16 31 36.3 0.0
baz=240,SNR=75
RIDG S S 16 41 52.8 -1.0
baz=240
**TABL Table Mountain** 83.39 27 P P 16 31 36.1 -0.5
TABL IAmb IAmb 16 31 40.6
comp=Z,456nm,1.4s
TABL IAMs_20 IAMs_20 17 03 36.5
comp=Z,26µm,22.0s
**BARN Barnard Glacie** 83.43 26 P P 16 31 36.7 -0.1
BARN IAmb IAmb 16 31 57.9
comp=Z,227nm,1.0s
BARN IAMs_20 IAMs_20 17 03 31.7
comp=Z,19µm,22.0s
**M26K Nabesna, AK** 83.48 25 P P 16 31 36.6 -0.2
M26K IAMs_20 IAMs_20 17 05 40.2
comp=Z,25µm,20.0s
**M26K Nabesna, AK** 83.48 25 P P 16 31 37.5 +0.7
baz=242
**POO Poona** 83.54 289 eP P 16 31 37.6 -0.4
**BHK Bhakra** 83.58 303 eP P 16 31 37.4 -0.6
**J25K Salcha River,** 83.62 22 P P 16 31 37.3 -0.2
**J25K Salcha River,** 83.62 22 P P 16 31 37.6 +0.1
baz=240,SNR=207
J25K S S 16 41 53.7 -2.5
baz=240
**L26K Log Cabin Wild** 83.63 24 P P 16 31 37.7 +0.2
L26K IAmb IAmb 16 31 40.7
comp=Z,212nm,1.4s
L26K IAMs_20 IAMs_20 17 03 21.2
comp=Z,39µm,22.0s
**L26K Log Cabin Wild** 83.63 24 P P 16 31 37.9 +0.3
baz=242,SNR=50
L26K S S 16 41 55.6 -0.6
baz=242
**PCA Pinnacle** 83.64 27 P P 16 31 38.1 +0.4
PCA IAmb IAmb 16 31 54.1
comp=Z,308nm,1.0s
**PINM Pinnacle** 83.64 27 P P 16 31 38.5 +0.8
baz=245,SNR=20
**DOT Dot Lake** 83.64 23 P P 16 31 37.6 0.0
DOT IAmb IAmb 16 31 40.4
comp=Z,291nm,1.2s
**ZAA0 Zalesovo Array** 83.77 326 P P 16 31 37.0 -1.5
ZAA0 IAmb IAmb 16 31 39.5
comp=Z,157nm,0.7s
**ZALV Zalesovo Beam** 83.77 326 P P 16 31 37.2 -1.2
comp=Z,158nm,0.7s,baz=115,slow=5.5,SNR=289
ZALV PKKPbc PKKPbc 16 49 55.3 -2.0
comp=Z,1.7nm,0.5s,baz=290,slow=3.4,SNR=6.1
ZALV PKPPKP P'P'df 16 58 00.3 +0.7
comp=Z,7.0nm,1.1s,baz=294,slow=3.6,SNR=12
ZALV LR LR 17 10 43.2
comp=Z,8µm,19.5s,baz=111,slow=37
**SCRK Sand Creek** 83.83 23 P P 16 31 37.5 -1.2
SCRK IAmb IAmb 16 31 40.9
comp=Z,337nm,1.5s
**SCRK Sand Creek** 83.83 23 P P 16 31 39.0 +0.3
baz=241,SNR=80
SCRK S S 16 41 57.9 -0.5
baz=241
**PNL Peninsula** 83.85 28 P P 16 31 39.8 +1.0
baz=246,SNR=11
**BCPM Bancas Point** 83.86 27 P P 16 31 39.1 +0.3
BCPM IAMs_20 IAMs_20 17 13 31.5
comp=Z,17µm,19.0s
**M27K Edge Creek, AK** 83.92 25 P P 16 31 39.5 +0.3
M27K IAMs_20 IAMs_20 17 07 46.8
comp=Z,29µm,20.0s
**M27K Edge Creek, AK** 83.92 25 P P 16 31 40.3 +1.1
baz=243
**PRP Porcupine Dome** 84.02 21 IAMs_20 IAMs_20 17 05 10.1
comp=Z,36µm,21.0s
**PRP Porcupine Dome** 84.02 21 P P 16 31 37.9 -1.8
baz=240
PRP S S 16 41 56.0 -4.3
baz=240
**A21K Barrow** 84.11 14 P P 16 31 39.8 0.0
**A21K Barrow** 84.11 14 P P 16 31 40.1 +0.3
baz=229
A21K S S 16 41 59.7 -1.0
baz=229
**AJM Ajmer** 84.16 297 eP P 16 31 41.0 -0.1
**UZB Uzunbulak** 84.22 315 eP P 16 31 38.7 -2.5
UZB eS SKSac 16 41 57.4 -3.8
UZB pmax pmax
comp=Z,281nm,1.4s
**UZB Uzunbulak** 84.22 315 eP P 16 31 38.7 -2.5
comp=Z,281nm,1.4s,baz=314
UZB eS SKSac 16 41 57.5 -3.8
baz=314
**J26L Joseph Creek** 84.25 23 P P 16 31 40.7 -0.1
J26L IAmb IAmb 16 32 01.7
comp=Z,224nm,1.4s
**J26L Joseph Creek** 84.25 23 P P 16 31 41.5 +0.7
baz=242
**L27K Beaver Creek,** 84.26 24 P P 16 31 41.1 +0.3
L27K IAmb IAmb 16 32 02.9
comp=Z,262nm,1.4s
L27K IAMs_20 IAMs_20 17 04 02.7
comp=Z,21µm,22.0s
**L27K Beaver Creek,** 84.26 24 P P 16 31 41.8 +1.0
baz=243
**YUK3 Moose Creek** 84.26 26 P P 16 31 41.8 +0.7
baz=245,SNR=53
YUK3 S S 16 42 04.0 +0.9
baz=245
**BCAR Beaver Creek A** 84.28 24 P P 16 31 41.1 +0.2
**THN Thein Dam** 84.36 303 eP P 16 31 42.0 0.0
**TOLK Toolik Lake Re** 84.37 18 P P 16 31 41.5 +0.2
TOLK IAMs_20 IAMs_20 17 04 34.0
comp=Z,20µm,22.0s
**TOLK Toolik Lake Re** 84.37 18 P P 16 31 41.7 +0.5
baz=236,SNR=93
TOLK S S 16 42 02.2 -1.3
baz=236
**BVCY Beaver Creek** 84.37 25 P P 16 31 42.2 +0.9
baz=244,SNR=77
BVCY S S 16 42 04.8 +1.1
baz=244
**KPKS Kokpek** 84.54 315 eP P 16 31 40.0 -2.7
KPKS eS SKSac 16 42 00.2 -3.0
KPKS pmax pmax
comp=Z,344nm,1.6s
**KPKS Kokpek** 84.54 315 eP P 16 31 40.0 -2.7
comp=Z,344nm,1.6s,baz=315
KPKS eS SKSac 16 42 00.2 -3.0
baz=315
**BOM Bombay** 84.57 290 eP P 16 31 44.9 +1.6
**MAW Mawson** 84.62 203 P P 16 31 43.4 +0.9
comp=Z,142nm,0.6s,baz=102,slow=7.2,SNR=52
MAW LR LR 17 06 17.6
comp=Z,13µm,20.5s,baz=88,slow=33
**MAW Mawson** 84.62 203 P P 16 31 43.4 +0.9
baz=85,SNR=39
**MAW Mawson** 84.62 203 P P 16 31 42.7 +0.2
**SATY Saty** 84.64 314 eP P 16 31 40.3 -3.0
SATY eS SKSac 16 42 00.6 -3.3
SATY pmax pmax
comp=Z,357nm,1.8s
**SATY Saty** 84.64 314 eP P 16 31 40.3 -3.0
comp=Z,357nm,1.8s,baz=314
SATY eS SKSac 16 42 00.7 -3.3
baz=314
**ZHN Zhinishke** 84.64 314 eP P 16 31 40.8 -2.5
ZHN eS SKSac 16 42 01.0 -2.9
ZHN pmax pmax
comp=Z,85nm,1.8s
**ZHN Zhinishke** 84.64 314 eP P 16 31 40.8 -2.5
comp=Z,85nm,1.8s,baz=314
ZHN eS SKSac 16 42 01.1 -2.9
baz=314
**FYU Fort Yukon** 84.66 20 P P 16 31 42.9 +0.3
FYU IAmb IAmb 16 31 45.1
comp=Z,272nm,1.4s
**SIT Sitka** 84.84 31 P P 16 31 44.6 +0.8
baz=250
**YUK6 Outpost Mounta** 84.84 27 P P 16 31 45.2 +1.2
baz=247,SNR=27
YUK6 S S 16 42 11.3 +2.4

baz=247
**YUK4 Talbot Arm** 84.87 26 S **S** 16 42 12.2 +3.1
baz=246
**JMU Jammu** 85.09 304 eP **P** 16 31 47.0 +1.4
**TDK Taldyqorghan** 85.11 316 eP **P** 16 31 42.7 -2.8
TDK MLR MLR
comp=Z,6µm,19.0s
**TDK Taldyqorghan** 85.11 316 eP **P** 16 31 42.8 -2.8
baz=316
TDK LR LR 17 10 49.6
comp=Z,6µm,19.2s,baz=316
**DIB Dawson Inlet,** 85.12 35 P **P** 16 31 45.8 +0.5
**HYT Haines Junctio** 85.18 27 P **P** 16 31 45.5 0.0
**HYT Haines Junctio** 85.18 27 P **P** 16 31 46.8 +1.2
baz=247,SNR=124
HYT S **S** 16 42 14.6 +2.6
baz=247
**EGAK Eagle** 85.29 23 P **P** 16 31 46.0 +0.2
EGAK IAmb IAmb 16 32 06.9
comp=Z,232nm,1.1s
**EGAK Eagle** 85.29 23 P **P** 16 31 46.9 +1.0
baz=244
**BMAR Burnt Mountain** 85.31 20 P **P** 16 31 46.6 +0.6
**ARXS Arharly** 85.32 315 i P **P** 16 31 46.2 -0.4
**SEM Semipalatinsk** 85.34 322 eP **P** 16 31 43.1 -3.6
SEM pmax pmax
comp=Z,68nm,1.0s
**SEM Semipalatinsk** 85.34 322 eP **P** 16 31 43.1 -3.6
comp=Z,68nm,1.0s,baz=322
**CRAG Craig** 85.47 33 P **P** 16 31 48.2 +1.3
baz=252,SNR=8.9
CRAG S **S** 16 42 17.6 +2.9
baz=252
**BESE Bessie Mountai** 85.61 30 P **P** 16 31 47.3 -0.3
BESE IAmb IAmb 16 31 51.5
comp=Z,399nm,1.2s
**KSH Kashi** 85.61 310 P **P** 16 31 50.0 +1.8
KSH pP sP 16 32 04.2 -1.0
KSH sP pwP 16 32 07.4 +1.4
KSH PP **PP** 16 35 11.9 +4.3
KSH SKS **SKSac** 16 42 09.4 -0.8
KSH S **SKKSac** 16 42 19.3 +2.1
KSH sS sS 16 42 39.2 +1.4
KSH pmax pmax
comp=Z,1µm,1.2s
KSH pmax pmax
comp=Z,5µm,5.5s
KSH LR LR
comp=Z,10µm,20.6s
KSH LR LR
comp=Z,13µm,19.9s
KSH LR LR
comp=Z,14µm,23.0s
**BHV Bhavnagar** 85.62 292 eP **P** 16 31 48.2 -0.3
**MDOK Medeo** 85.63 314 eP **P** 16 31 45.5 -2.7
MDOK eS **SKSac** 16 42 07.2 -3.0
**MDOK Medeo** 85.63 314 eP **P** 16 31 45.6 -2.7
baz=314
MDOK eS **SKSac** 16 42 07.3 -3.0
baz=314
**TNSS Tian-Shan** 85.67 314 eP **P** 16 31 46.0 -2.8
baz=314
**DAWY Dawson** 85.68 24 P **P** 16 31 47.1 -0.8
DAWY IAmb IAmb 16 31 51.8
comp=Z,213nm,1.3s
**DAWY Dawson** 85.68 24 P **P** 16 31 49.0 +1.0
baz=245,SNR=90
DAWY S **S** 16 42 18.3 +1.7
baz=245
**SKAG Skagway** 85.68 29 P **P** 16 31 49.2 +1.3
baz=249,SNR=56
SKAG S **S** 16 42 19.0 +2.3
baz=249
**KNDC Almaty** 85.70 314 P **P** 16 31 48.7 +0.2
**AAA Alma-Ata** 85.73 314 eP **P** 16 31 46.5 -2.2
**AAA Alma-Ata** 85.73 314 eP **P** 16 31 46.5 -2.2
baz=314
**JIS Juneau Island** 85.73 30 P **P** 16 31 48.6 +0.4
JIS IAmb IAmb 16 31 52.2
comp=Z,261nm,1.4s
JIS IAMs_20 IAMs_20 17 02 36.8
comp=Z,20µm,22.0s
**CHKK Chushkaly** 85.83 315 eP **P** 16 31 46.6 -2.4
baz=315
**ULHL Ulahol** 86.00 313 P **P** 16 31 52.0 +1.8
SNR=14
**WRAK Wrangell Islan** 86.18 32 P **P** 16 31 50.5 +0.1
**WRAK Wrangell Islan** 86.18 32 IAMs_20 IAMs_20 17 05 19.7
comp=Z,17µm,20.0s
**WRAK Wrangell Islan** 86.18 32 P **P** 16 31 51.7 +1.3
baz=252,SNR=35
**N31M Braeburn, Yuko** 86.20 27 P **P** 16 31 51.2 +0.7
**N31M Braeburn, Yuko** 86.20 27 P **P** 16 31 51.6 +1.1
baz=249,SNR=91
N31M S **S** 16 42 23.8 +1.9
baz=249
**KUU Kurty** 86.29 315 eP **P** 16 31 48.5 -2.9
KUU eS **SKSac** 16 42 11.2 -2.8
**KUU Kurty** 86.29 315 eP **P** 16 31 48.5 -2.9
baz=315
KUU eS **SKSac** 16 42 11.3 -2.8
baz=315
**J29M Klondike Camp** 86.31 24 P **P** 16 31 51.2 +0.2
J29M IAMs_20 IAMs_20 17 05 30.6
comp=Z,33µm,21.0s
**J29M Klondike Camp** 86.31 24 P **P** 16 31 52.4 +1.3
baz=246,SNR=50
J29M S **S** 16 42 23.0 +0.2
baz=246
**WHY Whitehorse** 86.32 28 P **P** 16 31 51.4 +0.2
WHY IAmb IAmb 16 31 54.8
comp=Z,307nm,1.4s
**WHY Whitehorse** 86.32 28 P **P** 16 31 52.0 +0.8
baz=250,SNR=47
WHY S **S** 16 42 24.3 +1.2
baz=250
**KURK Kurchatov** 86.42 322 ceP **P** 16 31 50.4 -1.4
KURK pmax pmax
comp=Z,302nm,1.7s
**KURK Kurchatov** 86.42 322 P **P** 16 31 50.4 -1.4
KURK IAmb IAmb 16 32 11.3
comp=Z,243nm,1.4s
**KURBB Kurchatov Arra** 86.45 322 PKKPbc PKKPbc 16 49 50.4 -0.4
comp=Z,2.2nm,0.6s,baz=295,slow=3.0,SNR=10.0
KURBB PKPPKP **P'P'df** 16 57 57.9 +2.9
comp=Z,3.2nm,1.0s,baz=290,slow=2.5,SNR=11
KURBB LR LR 17 10 56.0
comp=Z,9µm,20.2s,baz=91,slow=36
**KURBB Kurchatov Arra** 86.45 322 P **P** 16 31 49.9 -2.0
**TKM2 Tokmak 2** 86.61 314 P **P** 16 31 53.2 0.0
SNR=170
**TKM2 Tokmak 2** 86.61 314 P **P** 16 31 52.7 -0.5
**NIL Nilore** 86.62 304 P **P** 16 31 52.4 -0.8
**I29M Ogilvie Camp,** 86.64 23 P **P** 16 31 52.5 -0.1
I29M IAmb IAmb 16 31 55.7
comp=Z,431nm,1.4s
**I29M Ogilvie Camp,** 86.64 23 P **P** 16 31 53.1 +0.5
baz=246,SNR=173
I29M S **S** 16 42 26.5 +0.6
baz=246
**GRNB Grenville Isla** 86.74 35 P **P** 16 31 53.8 +0.4
GRNB IAmb IAmb 16 31 56.3
comp=Z,368nm,1.5s
**MAYO Mayo, Yukon** 86.92 25 P **P** 16 31 55.4 +1.4
baz=249,SNR=6.2
**HOLB Holberg** 87.00 38 P **P** 16 31 54.6 0.0
**KBK Karagaybulak** 87.02 313 P **P** 16 31 55.2 0.0
SNR=75
**M31M Drury Creek, Y** 87.07 26 P **P** 16 31 54.6 -0.2
M31M IAmb IAmb 16 31 58.5
comp=Z,342nm,1.3s
M31M IAMs_20 IAMs_20 17 05 22.9
comp=Z,26µm,22.0s
**M31M Drury Creek, Y** 87.07 26 P **P** 16 31 55.5 +0.7
baz=250,SNR=116
M31M S **S** 16 42 35.3 +5.1
baz=250
**P33M Teslin, Yukon** 87.13 28 P **P** 16 31 54.7 -0.4
P33M IAmb IAmb 16 31 59.1
comp=Z,191nm,1.4s
P33M IAMs_20 IAMs_20 17 07 02.7
comp=Z,21µm,20.0s
**P33M Teslin, Yukon** 87.13 28 P **P** 16 31 55.9 +0.7
baz=252,SNR=49
P33M S **S** 16 42 32.1 +1.1
baz=252
**CHMS Chumysh** 87.23 314 P **P** 16 31 55.8 -0.2
SNR=84
**UCH Uchtor** 87.25 313 P **P** 16 31 58.0 +1.4
SNR=235
**AAK Ala-Archa** 87.35 313 PKKPbc PKKPbc 16 49 48.4 -0.1
comp=Z,4.2nm,0.7s,baz=219,slow=2.4,SNR=7.3
AAK PKPPKP **P'P'df** 16 57 55.1 +0.8
comp=Z,4.5nm,0.9s,baz=213,slow=2.8,SNR=8.8
AAK LR LR 17 11 29.2
comp=Z,18µm,21.2s,baz=100,slow=36
**AAK Ala-Archa** 87.35 313 P **P** 16 31 57.5 +0.8
SNR=13
**AAK Ala-Archa** 87.35 313 P **P** 16 31 56.3 -0.4
**AAK Ala-Archa** 87.35 313 P **P** 16 31 56.0 -0.7
**AAK Ala-Archa** 87.35 313 IAMs_20 IAMs_20 17 11 16.0
comp=Z,16µm,21.0s
**AAK Ala-Archa** 87.35 313 i P **P** 16 31 56.6 -0.1
SNR=37
**BBB Bella Bella** 87.39 37 LR LR 17 04 26.4
comp=Z,24µm,21.6s,baz=262,slow=31
**SGDS Sogindy** 87.41 314 eP **P** 16 31 54.4 -2.5
baz=314
SGDS eS **SKSac** 16 42 18.2 -2.9
baz=314
**USP Ospenovka** 87.47 314 P **P** 16 31 56.7 -0.5
SNR=141
**JASL Jaisalmer** 87.53 297 eP **P** 16 31 58.6 +0.9
**FARO Faro, Yukon** 87.54 26 P **P** 16 31 57.6 +0.6
baz=251,SNR=84
FARO S **S** 16 42 37.3 +2.5
baz=251
**JCC Jacoby Creek,** 87.69 49 IAMs_20 IAMs_20 17 12 59.2
comp=Z,18µm,18.0s
**TLCB Telegraph Cove** 87.78 39 P **P** 16 31 58.1 -0.3
TLCB IAmb IAmb 16 32 02.5
comp=Z,380nm,1.4s
**KCPM Cahto Peak** 87.82 50 P **P** 16 31 59.8 +0.8
KCPM IAmb IAmb 16 32 04.1
comp=Z,117nm,0.9s
**KMRM Mail Ridge** 87.82 49 P **P** 16 31 59.2 +0.3
KMRM IAmb IAmb 16 32 07.2
comp=Z,380nm,1.5s
**AML Almayashu** 87.83 313 P **P** 16 32 01.9 +2.5
SNR=339
**AML Almayashu** 87.83 313 i P **P** 16 31 59.2 -0.2
SNR=373
**EKS2 Erkin-Say** 87.87 313 P **P** 16 31 59.1 0.0
SNR=154
**DLBC Dease Lake** 87.97 31 LR LR 17 06 35.2
comp=Z,20µm,19.9s,baz=270,slow=32
**DLBC Dease Lake** 87.97 31 P **P** 16 32 00.1 +0.8
**KSXB Camp Six Broad** 87.99 48 P **P** 16 32 00.2 +0.5
**HOPS Hopland Field** 88.09 51 P **P** 16 32 00.5 +0.3
HOPS IAmb IAmb 16 32 05.3
comp=Z,164nm,1.2s
HOPS IAMs_20 IAMs_20 17 04 13.8
comp=Z,21µm,20.0s
**MCCM Marconi Confer** 88.09 51 IAMs_20 IAMs_20 17 05 41.0
comp=Z,17µm,20.0s
**BHUJ Bhuj** 88.12 294 eP **P** 16 32 00.8 +0.2
BHUJ IAmb IAmb 16 32 03.5
comp=Z,1µm,1.0s
**BTLS Baital** 88.14 316 eP **P** 16 31 57.3 -2.9
BTLS eS **SKSac** 16 42 22.4 -2.8
BTLS pmax pmax
comp=Z,212nm,2.1s
**BTLS Baital** 88.14 316 eP **P** 16 31 57.4 -2.9
comp=Z,212nm,2.1s,baz=316
BTLS eS **SKSac** 16 42 22.4 -2.8
baz=316
**J01E Myrtle Point** 88.20 46 P **P** 16 32 00.6 0.0
J01E IAmb IAmb 16 32 05.8
comp=Z,131nm,0.9s
**J01E Myrtle Point** 88.20 46 P **P** 16 32 01.4 +0.9
baz=259,SNR=16
**L02E Cave Junction** 88.25 47 P **P** 16 31 59.9 -1.0
**L02E Cave Junction** 88.25 47 P **P** 16 32 02.0 +1.1
baz=260,SNR=21
L02E S **S** 16 42 47.0 +4.7
baz=260
**GDXM Geysers** 88.27 51 P **P** 16 32 00.1 -1.0
**K02D Willamette Mer** 88.31 47 P **P** 16 32 02.3 +1.1
baz=260,SNR=37
K02D S **S** 16 42 48.2 +5.2
baz=260
**NRIK Noril'sk** 88.34 341 P **P** 16 31 59.3 -1.3
comp=Z,256nm,1.1s,baz=113,slow=4.7,SNR=154
NRIK PKKPbc **PKKPbc** 16 49 47.3 +0.4
comp=Z,1.3nm,0.5s,baz=290,slow=23,SNR=4.1
NRIK PKPPKP **P'P'df** 16 57 48.6 -1.8
comp=Z,1.1nm,0.7s,baz=156,slow=2.0,SNR=5.6
NRIK LR LR 17 11 50.7
comp=Z,8µm,20.2s,baz=102,slow=36
**NRIK Noril'sk** 88.34 341 P **P** 16 31 59.0 -1.6
**I02E Swisshome, OR** 88.44 45 P **P** 16 32 01.3 -0.3
I02E IAmb IAmb 16 32 06.9
comp=Z,201nm,1.4s
**I02E Swisshome, OR** 88.44 45 P **P** 16 32 02.8 +1.1
baz=259,SNR=9.2
**MMPY Sheldon Lake,** 88.58 26 P **P** 16 32 03.0 +1.0
baz=253,SNR=71
MMPY S **S** 16 42 46.0 +1.3
baz=253
**CBB Campbell River** 88.59 39 P **P** 16 32 02.0 -0.2
CBB IAmb IAmb 16 32 05.2
comp=Z,291nm,1.1s
**M02C Callahan** 88.67 48 P **P** 16 32 02.6 -0.3
**M02C Callahan** 88.67 48 P **P** 16 32 04.1 +1.1
baz=260,SNR=23
M02C S **S** 16 42 50.3 +3.8
baz=260
**C03A Quillayute Air** 88.68 42 P **P** 16 32 02.6 0.0
**DBO Dodson Butte** 88.69 46 P **P** 16 32 02.9 0.0
**HEBO Mount Hebo** 88.71 44 P **P** 16 32 03.1 +0.1
**N02D Trinity Center** 88.71 49 P **P** 16 32 03.0 -0.1
N02D IAMs_20 IAMs_20 17 04 00.9
comp=Z,25µm,22.0s
**N02D Trinity Center** 88.71 49 P **P** 16 32 04.3 +1.1
baz=260,SNR=56
N02D S **S** 16 42 50.1 +3.3
baz=260
**I03D Drain, OR** 88.72 46 P **P** 16 32 03.9 +0.9
baz=260,SNR=11
**WDC Whiskeytown Da** 88.77 49 P **P** 16 32 03.1 -0.2
**HUMO Hull Mountain** 88.81 47 P **P** 16 32 04.1 +0.7
HUMO IAmb IAmb 16 32 09.6
comp=Z,117nm,1.0s
**YBH Yreka Blue Hor** 88.83 48 LR LR 17 05 21.1
comp=Z,53µm,20.8s,baz=292,slow=31
**YBH Yreka Blue Hor** 88.83 48 P **P** 16 32 04.1 +0.4
**RADR Raider Ridge** 88.90 43 P **P** 16 32 04.0 +0.1
**COR Corvallis** 88.91 45 P **P** 16 32 04.0 +0.1
COR IAmb IAmb 16 32 07.6
comp=Z,198nm,1.3s
**SAO San Andreas Ge** 88.99 53 P **P** 16 32 04.6 +0.1
SAO IAMs_20 IAMs_20 17 04 39.9
comp=Z,23µm,21.0s
**WTLY Watson Lake, Y** 89.03 29 P **P** 16 32 05.5 +1.4
baz=255,SNR=18
**NLWA Neilton Lookou** 89.04 42 P **P** 16 32 04.7 +0.2
NLWA IAmb IAmb 16 32 08.6
comp=Z,340nm,1.3s
**G03D McMinnville, O** 89.05 44 P **P** 16 32 04.4 -0.1
**G03D McMinnville, O** 89.05 44 P **P** 16 32 05.5 +1.0
baz=260,SNR=13
G03D S **S** 16 42 52.3 +2.7
baz=260
**WISH Wishkah** 89.05 42 P **P** 16 32 04.6 +0.2
**BUCK Buck Mountain** 89.06 45 P **P** 16 32 04.8 0.0
BUCK IAmb IAmb 16 32 09.8
comp=Z,341nm,1.4s
**E03A Lebam** 89.09 43 P **P** 16 32 05.0 +0.4
**CLRS Cowichan Lake** 89.14 41 P **P** 16 32 05.0 +0.2
**L04D Klamath Falls** 89.22 47 P **P** 16 32 05.6 +0.1
L04D IAMs_20 IAMs_20 17 06 13.2
comp=Z,26µm,20.0s
**L04D Klamath Falls** 89.22 47 P **P** 16 32 06.5 +1.0
baz=260,SNR=16
L04D S **S** 16 42 53.1 +1.4
baz=260
**BBGB Big Mountain B** 89.28 53 P **P** 16 32 07.0 +1.1
**H04D Lebanon** 89.30 45 P **P** 16 32 06.0 +0.4
H04D IAmb IAmb 16 32 09.1
comp=Z,195nm,1.1s
**H04D Lebanon** 89.30 45 P **P** 16 32 06.7 +1.0
baz=260,SNR=36
H04D S **S** 16 42 54.5 +2.4
baz=260
**F04D Rainier, OR** 89.38 44 P **P** 16 32 06.9 +0.9
baz=260
F04D S **S** 16 42 54.5 +1.8
baz=260
**ORV Oroville** 89.39 50 P **P** 16 32 06.6 +0.3
ORV IAmb IAmb 16 32 10.4
comp=Z,148nm,1.4s
**B04A Port Angeles** 89.40 42 P **P** 16 32 06.1 0.0
B04A IAmb IAmb 16 32 10.3
comp=Z,303nm,1.1s
**I04A Tendick Farm,** 89.40 46 P **P** 16 32 06.8 +0.5
baz=260
**PMPB Monarch Peak** 89.42 54 P **P** 16 32 05.0 -1.6
PMPB IAmb IAmb 16 32 16.3
comp=Z,430nm,1.5s
**INK Inuvik** 89.48 21 PKKPbc PKKPbc 16 49 41.0 -3.0
comp=Z,6.5nm,0.9s,baz=36,slow=6.3,SNR=7.6
INK LR LR 17 09 54.7
comp=Z,38µm,20.6s,baz=239,slow=34
**INK Inuvik** 89.48 21 P **P** 16 32 05.7 -0.3
INK IAmb IAmb 16 32 07.9
comp=Z,253nm,1.4s
**INK Inuvik** 89.48 21 P **P** 16 32 06.2 +0.2
baz=251,SNR=83
INK S **S** 16 42 51.1 -1.6
baz=251
**M04C Macdoel** 89.49 48 P **P** 16 32 06.2 -0.7
M04C IAMs_20 IAMs_20 17 07 12.5
comp=Z,34µm,20.0s
**M04C Macdoel** 89.49 48 P **P** 16 32 07.9 +1.1
baz=261,SNR=32
M04C S **S** 16 42 56.0 +1.8
baz=261
**J04D Umpqua Nationa** 89.53 47 P **P** 16 32 06.3 -0.7
J04D IAmb IAmb 16 32 12.7
comp=Z,206nm,1.0s
**J04D Umpqua Nationa** 89.53 47 P **P** 16 32 07.9 +0.8
baz=260,SNR=15
**PGC Sidney** 89.55 41 P **P** 16 32 06.7 0.0
**D03D Eldon** 89.58 42 P **P** 16 32 08.0 +1.1
baz=260,SNR=53
D03D S **S** 16 42 57.1 +2.5
baz=260
**DZA Taraz** 89.69 313 eP **P** 16 32 05.2 -2.4
DZA eS **SKSac** 16 42 32.5 -2.0
**DZA Taraz** 89.69 313 eP **P** 16 32 05.2 -2.4
baz=313
DZA eS **SKSac** 16 42 32.6 -2.0
baz=313
**K04D Chiloquin, OR** 89.69 47 P **P** 16 32 08.6 +0.9
baz=261,SNR=13
K04D S **S** 16 42 59.5 +3.5
baz=261
**H04A Detroit Lake** 89.71 45 P **P** 16 32 07.2 -0.5
H04A IAmb IAmb 16 32 10.4
comp=Z,292nm,1.4s
**D04E Lakebay** 89.73 43 P **P** 16 32 08.8 +1.2
baz=260,SNR=9.0
**F04A Amboy** 89.76 44 P **P** 16 32 07.6 -0.2
**E04D Cinebar** 89.76 43 P **P** 16 32 07.9 +0.1
**E04D Cinebar** 89.76 43 P **P** 16 32 08.7 +0.9
baz=260,SNR=49
E04D S **S** 16 42 57.6 +1.3
baz=260
**PAGB Antelope Grade** 89.79 54 P **P** 16 32 10.0 +1.7
**GAR Garm** 89.84 309 P **P** 16 32 07.5 -1.0
**SMMC Simmler** 89.94 55 P **P** 16 32 11.2 +2.3
baz=262,SNR=58
SMMC S **S** 16 43 02.2 +3.7
baz=262
**BRZS Berezniki** 89.97 320 eP **P** 16 32 06.3 -2.4
**BRZS Berezniki** 89.97 320 eP **P** 16 32 06.3 -2.4
baz=320
**CMB Columbia Colle** 90.02 52 P **P** 16 32 09.8 +0.5
CMB IAMs_20 IAMs_20 17 06 40.8
comp=Z,16µm,20.0s
**PKM Mcpherson Peak** 90.03 55 P **P** 16 32 11.9 +2.3
baz=262,SNR=116
PKM S **S** 16 43 03.6 +4.0
baz=262
**SNCC San Nicolas Is** 90.04 57 P **P** 16 32 10.7 +1.3
**SNCC San Nicolas Is** 90.04 57 P **P** 16 32 11.7 +2.3
baz=262,SNR=18
**A04D Lummi Island** 90.04 41 P **P** 16 32 09.9 +0.9
baz=260,SNR=13
A04D S **S** 16 43 01.1 +2.4
baz=260
A04D S **ScS** 16 43 04.0 +1.3
baz=260
**SBC Santa Barbara** 90.05 55 P **P** 16 32 11.6 +2.2
baz=262
**J05D Fort Rock, OR** 90.17 47 P **P** 16 32 11.2 +1.2
baz=261,SNR=107
**HOOD Mount Hood Mea** 90.19 45 P **P** 16 32 09.5 -0.5
**KBL Kabul** 90.21 305 P **P** 16 32 09.1 -1.4
SNR=172
KBL P **P** 16 32 09.1 -1.4
SNR=172
**KBL Kabul** 90.21 305 P **P** 16 32 08.9 -1.6
KBL IAmb IAmb 16 32 11.6
comp=Z,252nm,1.1s
**I05D Terrebonne, OR** 90.25 46 P **P** 16 32 11.0 +0.8
baz=261,SNR=43
I05D S **S** 16 43 04.0 +3.0
baz=261
**D05A Enumclaw** 90.26 43 P **P** 16 32 09.4 -0.7
**KKAR Karatay Array** 90.31 313 P **P** 16 32 09.4 -1.1
**K05A Summer Lake** 90.33 47 P **P** 16 32 10.0 -0.8
K05A IAmb IAmb 16 32 13.7
comp=Z,260nm,1.4s
**BCW Bitter Crk WRg** 90.36 55 P **P** 16 32 10.4 -0.6
**B05A Bryant** 90.37 42 P **P** 16 32 11.2 +0.6
baz=260,SNR=39
B05A S **S** 16 43 02.3 +0.6
baz=260
**EMB Emerald Bay** 90.37 51 P **P** 16 32 10.2 -0.9
EMB IAmb IAmb 16 32 14.3
comp=Z,150nm,0.8s
**G05D Wamic, OR** 90.41 45 P **P** 16 32 11.5 +0.6
baz=261,SNR=42
G05D S **S** 16 43 02.8 +0.4
baz=261
**F05D White Salmon** 90.41 44 P **P** 16 32 10.8 -0.1
F05D IAmb IAmb 16 32 14.8
comp=Z,309nm,1.4s
**F05D White Salmon** 90.41 44 P **P** 16 32 11.4 +0.5
baz=261,SNR=35
**PINE Pine Mountain** 90.45 46 P **P** 16 32 11.1 -0.3
PINE IAmb IAmb 16 32 16.3
comp=Z,263nm,1.4s
**IUG Iuzhnay** 90.52 312 eP **P** 16 32 09.4 -2.2
**IUG Iuzhnay** 90.52 312 eP **P** 16 32 09.4 -2.2
baz=312
**VOG Valley Oaks Go** 90.57 54 P **P** 16 32 12.9 +1.1
baz=262
**MOD Modoc Plateau** 90.64 48 P **P** 16 32 12.3 +0.1
**CHGR Chuyangaron** 90.69 309 P **P** 16 32 11.6 -0.8
**VES Vestal, Richgr** 90.74 54 P **P** 16 32 13.6 +1.0
baz=262,SNR=13
VES S **S** 16 43 11.4 +5.6
baz=262
**VCNR Virginia City** 90.76 51 P **P** 16 32 12.9 -0.1
VCNR IAmb IAmb 16 32 16.3
comp=Z,128nm,1.0s
**PNTR Pine Nut** 90.78 51 P **P** 16 32 13.4 +0.4
PNTR IAmb IAmb 16 32 16.4
comp=Z,214nm,0.9s
**BRLS Borolday** 90.79 313 eP **P** 16 32 10.7 -2.0
BRLS pmax pmax
comp=Z,87nm,2.1s
**BRLS Borolday** 90.79 313 eP **P** 16 32 10.8 -2.0
comp=Z,87nm,2.1s,baz=313
**SCI2 San Clemente I** 90.81 57 P **P** 16 32 14.6 +1.6
baz=263,SNR=12
**ARVC Arvin** 90.86 55 P **P** 16 32 15.0 +1.8
baz=263,SNR=38
**OSI Osito Audit: C** 90.88 55 P **P** 16 32 15.0 +1.6
baz=263,SNR=7.4
OSI S **S** 16 43 09.1 +1.9
baz=263
**LLLB Lillooet** 90.89 39 P **P** 16 32 13.0 0.0
LLLB IAmb IAmb 16 32 15.2
comp=Z,196nm,1.4s
**TAS Tashkent** 90.95 311 P **P** 16 32 13.1 -0.4

**CIS Catalina Islan 90.98 57** P **P** **16 32 15.4 +1.5**
baz=263,SNR=58
CIS S **S** **16 43 11.2 +3.1**
baz=263
**PAHR Pah Rah Range 91.02 50** P **P** **16 32 14.2 +0.2**
PAHR IAmb IAmb 16 32 17.2
comp=Z,185nm,1.0s
**YERR Yerington 91.04 51** P **P** **16 32 14.7 +0.5**
YERR IAmb IAmb 16 32 18.9
comp=Z,151nm,0.9s
**C06D Leavenworth 91.11 42** P **P** **16 32 14.6 +0.5**
baz=261,SNR=16
C06D S **S** **16 43 09.9 +1.2**
baz=261
**FMP Fort Macarthur 91.12 56** P **P** **16 32 15.9 +1.5**
baz=263
**DECC Green Verdugo 91.15 56** P **P** **16 32 16.3 +1.7**
baz=263,SNR=14
DECC S **S** **16 43 11.4 +1.7**
baz=263
**LTY Liberty 91.16 43** P **P** **16 32 13.6 -0.8**
LTY IAmb IAmb 16 32 17.9
comp=Z,212nm,1.2s
**MLAC Mammoth, Mammo 91.18 52** P **P** **16 32 16.6 +1.7**
baz=263,SNR=10
MLAC S **S** **16 43 13.4 +3.2**
baz=263
**ISA Isabella, Lake 91.21 54** P **P** **16 32 15.6 +0.6**
ISA IAmb IAmb 16 32 19.7
comp=Z,233nm,1.2s
**ISA Isabella, Lake 91.21 54** P **P** **16 32 16.4 +1.4**
baz=263,SNR=63
ISA S **S** **16 43 10.7 +0.4**
baz=263
**PASC Pasadena Art C 91.26 56** P **P** **16 32 15.7 +0.5**
**PASC Pasadena Art C 91.26 56** IAMs_20 IAMs_20 17 06 32.2
comp=Z,17µm,20.0s
**F07A Phinny Hill Vi 91.47 44** P **P** **16 32 15.8 0.0**
F07A IAmb IAmb 16 32 19.8
comp=Z,308nm,1.4s
**EDW2 Edwards Air Fo 91.51 55** P **P** **16 32 18.3 +2.0**
baz=263,SNR=184
EDW2 S **S** **16 43 15.9 +3.0**
baz=263
**LHV Little Huntoon 91.52 52** P **P** **16 32 17.1 +0.9**
LHV IAmb IAmb 16 32 19.9
comp=Z,246nm,1.0s
**CCAC Calif City Air 91.52 55** P **P** **16 32 16.5 +0.2**
**I07A Izee 91.52 46** P **P** **16 32 16.7 +0.4**
I07A IAmb IAmb 16 32 19.6
comp=Z,159nm,1.2s
**RYN Ryan 91.55 51** P **P** **16 32 16.7 +0.2**
**TIN Tinemaha, Big 91.58 53** P **P** **16 32 18.3 +1.6**
baz=263
TIN S **S** **16 43 16.6 +2.9**
baz=263
**E07A Sunnyside 91.61 43** P **P** **16 32 16.0 -0.5**
**CWC Cottonwood Cre 91.63 54** P **P** **16 32 18.5 +1.5**
baz=263
CWC S **S** **16 43 17.1 +2.9**
baz=263
**NVAR Mina Array Bea 91.69 52** P **P** **16 32 18.4 +1.0**
comp=Z,102nm,0.7s,baz=253,slow=6.6,SNR=407
NVAR PKiKP **PKiKP** **16 37 09.5 +1.1**
comp=Z,1.2nm,0.6s,baz=235,slow=3.5,SNR=3.6
NVAR PKKPbc **PKKPbc** **16 49 38.8 +1.3**
comp=Z,2.2nm,0.7s,baz=88,slow=3.3,SNR=8.4
NVAR PKPPKP **P'P'df** **16 57 44.9 -1.8**
comp=Z,2.3nm,0.9s,baz=70,slow=3.4,SNR=9.2
NVAR LR LR 17 06 22.9
comp=Z,17µm,21.9s,baz=278,slow=31
**NVAR Mina Array Bea 91.69 52** P **P** **16 32 17.6 +0.3**
**NV11 Mina Array Sit 91.81 52** P **P** **16 32 17.4 -0.4**
**HAWA Hanford 91.81 44** P **P** **16 32 17.3 0.0**
HAWA IAMs_20 IAMs_20 17 08 16.6
comp=Z,32µm,20.0s
**ELS Elsinore Mount 91.83 57** P **P** **16 32 18.1 +0.2**
ELS IAmb IAmb 16 32 22.8
comp=Z,238nm,1.2s
**LRMC Laurel Mtn Rad 91.83 55** P **P** **16 32 19.6 +1.7**
baz=263,SNR=80
LRMC S **S** **16 43 18.7 +2.7**
baz=263
**BVAR Borovoye Array 91.88 323** PKiKP **PKiKP** **16 37 08.5 +0.5**
BVAR PKKPbc **PKKPbc** **16 49 39.7 +2.3**
comp=Z,1.6nm,0.6s,baz=28,slow=6.7,SNR=6.3
**KVN Kaiserville 91.93 51** P **P** **16 32 18.3 -0.1**
KVN IAmb IAmb 16 32 21.5
comp=Z,207nm,0.9s
**WVOR Wild Horse Val 91.94 48** P **P** **16 32 18.1 -0.1**
WVOR IAmb IAmb 16 32 20.9
comp=Z,273nm,1.4s
**BRVK Borovoye 91.95 323** *ce*P **P** **16 32 16.3 -1.5**
BRVK pmax pmax
comp=Z,134nm,1.7s
**BRVK Borovoye 91.95 323** P **P** **16 32 16.0 -1.8**
BRVK IAmb IAmb 16 32 18.0
comp=Z,154nm,1.4s
**109C Camp Elliot, M 92.01 57** IAMs_20 IAMs_20 17 05 43.0
comp=Z,26µm,21.0s
**109C Camp Elliot, M 92.01 57** P **P** **16 32 20.4 +1.8**
baz=264,SNR=13
109C S **S** **16 43 20.1 +2.8**
baz=264
**MURC Murrieta 92.01 57** P **P** **16 32 20.3 +1.6**
baz=263,SNR=33
MURC S **S** **16 43 19.5 +2.0**
baz=263
**MPMC Manual Prospec 92.06 54** P **P** **16 32 20.7 +1.7**
baz=263,SNR=188
MPMC S **S** **16 43 21.3 +3.2**
baz=263
**G08A Pilot Rock 92.07 45** P **P** **16 32 18.4 -0.3**
**LCH Last Change Ra 92.07 53** P **P** **16 32 19.1 +0.1**
LCH IAmb IAmb 16 32 22.1
comp=Z,168nm,1.4s
**E08A Dider Farm, El 92.15 44** P **P** **16 32 19.3 +0.4**
**J08A Circle Bar Ran 92.17 47** P **P** **16 32 19.4 +0.2**
J08A IAmb IAmb 16 32 21.6
comp=Z,65nm,0.6s
**WRGLY Wrigley 92.20 27** P **P** **16 32 19.5 +0.8**
baz=260,SNR=8.1
WRGLY S **S** **16 43 19.3 +1.6**
baz=260
**B08A Colville Reser 92.20 42** P **P** **16 32 19.0 -0.2**
**RPN Rapa Nui 92.23 117** LR LR 17 05 44.1
comp=Z,24µm,21.9s,baz=262,slow=30
**RPN Rapa Nui 92.23 117** P **P** **16 32 20.2 +0.5**
**RPN Rapa Nui 92.23 117** IAMs_20 IAMs_20 17 05 08.2
comp=Z,24µm,22.0s
**GRAC Grapevine Rang 92.26 53** P **P** **16 32 20.2 +0.5**
**GRAC Grapevine Rang 92.26 53** P **P** **16 32 21.6 +1.9**
baz=264,SNR=19
GRAC S **S** **16 43 22.9 +3.3**
baz=264
**BBRC Big Bear Solar 92.31 56** P **P** **16 32 21.9 +1.6**
baz=264,SNR=12
**D08A Wollman Farm, 92.31 43** P **P** **16 32 19.8 +0.2**
D08A IAmb IAmb 16 32 22.0
comp=Z,270nm,1.3s
**RRX Edison Barstow 92.32 55** P **P** **16 32 21.9 +1.9**
baz=264,SNR=7.9
**BAR Barrett 92.34 58** P **P** **16 32 19.9 -0.3**
BAR IAmb IAmb 16 32 23.8
comp=Z,287nm,1.5s
**TPH Tonopah 92.50 52** P **P** **16 32 20.7 -0.3**
**GSC Goldstone, Bar 92.52 55** P **P** **16 32 22.7 +1.7**
baz=264,SNR=103
GSC S **S** **16 43 25.7 +3.6**
baz=264
**QSM Queen of Sheba 92.55 54** P **P** **16 32 21.2 +0.2**
**SYO Syowa Base 92.57 199** ‖ *eP* **P** **16 32 21.2 +0.8**
**SYO Syowa Base 92.57 199** ‖ *i*PcP **PcP** **16 32 22.6 +1.5**
**MONP2 Monument Peak 92.58 57** P **P** **16 32 23.5 +2.0**
baz=264,SNR=89
MONP2 S **S** **16 43 25.9 +3.0**
baz=264
**FURC Furnace Creek, 92.60 54** P **P** **16 32 23.2 +2.0**
baz=264,SNR=140
FURC S **S** **16 43 25.4 +2.9**
baz=264
**Q09A Carvers 92.61 51** P **P** **16 32 21.6 +0.1**
**PFO Pinyon Flats O 92.62 57** PKKPbc PKKPbc 16 49 34.8 0.0
comp=Z,1.8nm,0.6s,baz=129,slow=3.4,SNR=4.0
PFO LR LR 17 06 24.2
comp=Z,27µm,21.5s,baz=280,slow=31

**PFO Pinyon Flats O 92.62 57** P **P** **16 32 21.6 +0.1**
PFO IAmb IAmb 16 32 26.5
comp=Z,175nm,1.0s
**PFO Pinyon Flats O 92.62 57** IAMs_20 IAMs_20 17 09 13.2
comp=Z,24µm,19.0s
**PFO Pinyon Flats O 92.62 57** P **P** **16 32 23.3 +1.7**
baz=264,SNR=102
PFO S **S** **16 43 25.5 +2.4**
baz=264
**TPFO Pinon Flats 92.63 57** P **P** **16 32 23.2 +1.6**
baz=264,SNR=107
TPFO S **S** **16 43 25.5 +2.3**
baz=264
**PMD Palm Desert 92.70 57** P **P** **16 32 22.2 +0.5**
PMD IAmb IAmb 16 32 26.7
comp=Z,248nm,1.1s
**GWY Greenwater Val 92.73 54** P **P** **16 32 22.2 +0.1**
GWY IAmb IAmb 16 32 25.3
comp=Z,143nm,0.9s
**BMN Battle Mountai 92.76 50** P **P** **16 32 22.5 +0.4**
**E09A Wood Farm, Sta 92.78 44** P **P** **16 32 22.1 +0.3**
**IKP In-Ko-Pah, Jac 92.81 58** P **P** **16 32 24.2 +1.7**
baz=264,SNR=49
IKP S **S** **16 43 26.7 +1.9**
baz=264
**RMX La Rumorosa 92.83 58** P **P** **16 32 22.5 -0.1**
**C09A Chrisman Ranch 92.84 42** P **P** **16 32 22.0 -0.1**
C09A IAmb IAmb 16 32 24.0
comp=Z,247nm,1.4s
**HEC Hector,Ludlow 92.86 55** P **P** **16 32 24.1 +1.6**
baz=264,SNR=198
HEC S **S** **16 43 25.9 +0.9**
baz=264
**BELC Belle Mtn. Jos 93.05 56** P **P** **16 32 25.5 +1.9**
baz=264,SNR=130
BELC S **S** **16 43 27.1 +0.2**
baz=264
**C36M Paulatuk 93.07 21** P **P** **16 32 22.1 -0.5**
C36M IAMs_20 IAMs_20 17 12 22.5
comp=Z,29µm,20.0s
**C36M Paulatuk 93.07 21** P **P** **16 32 22.5 -0.1**
baz=260
C36M S **S** **16 43 24.3 -1.0**
baz=260
**SWSC Sam W. Stewart 93.10 57** P **P** **16 32 25.5 +1.9**
baz=264,SNR=36
**TPNV Topopah Spring 93.15 53** P **P** **16 32 24.4 +0.4**
TPNV IAmb IAmb 16 32 28.9
comp=Z,214nm,1.2s
**TPNV Topopah Spring 93.15 53** P **P** **16 32 25.7 +1.7**
baz=264,SNR=205
TPNV S **S** **16 43 28.8 +1.1**
baz=264
**BMO Blue Mountains 93.18 45** P **P** **16 32 23.6 -0.2**
BMO IAmb IAmb 16 32 26.8
comp=Z,292nm,1.5s
**A36M Sachs Harbour 93.19 18** P **P** **16 32 22.8 -0.4**
A36M IAmb IAmb 16 32 24.5
comp=Z,93nm,0.9s
A36M IAMs_20 IAMs_20 17 13 19.6
comp=Z,31µm,21.0s
**A36M Sachs Harbour 93.19 18** P **P** **16 32 23.1 0.0**
baz=258
**TUQ Turquoise Moun 93.25 55** P **P** **16 32 26.1 +1.6**
baz=264,SNR=16
**F10A Beach Ranch, E 93.35 44** P **P** **16 32 24.4 -0.2**
F10A IAmb IAmb 16 32 26.6
comp=Z,228nm,1.3s
**GMRC Granite Mounta 93.40 56** P **P** **16 32 27.0 +1.8**
baz=264,SNR=171
**BC3 Big Chuckawall 93.46 57** P **P** **16 32 27.3 +1.8**
baz=264,SNR=64
**NEW Newport 93.66 42** LR LR 17 07 42.7
comp=Z,64µm,21.6s,baz=292,slow=31
**NEW Newport 93.66 42** P **P** **16 32 25.8 -0.1**
NEW IAmb IAmb 16 32 27.7
comp=Z,297nm,1.4s
**NEW Newport 93.66 42** P **P** **16 32 26.3 +0.4**
baz=264,SNR=54
NEW S **S** **16 43 32.5 +1.0**
baz=264
**IRM Iron Mountain 93.77 56** P **P** **16 32 28.8 +2.0**
baz=265,SNR=358
IRM S **S** **16 43 35.2 +2.2**
baz=265
**R11A Troy Canyon, C 93.81 52** P **P** **16 32 27.0 0.0**
**R11A Troy Canyon, C 93.81 52** P **P** **16 32 28.5 +1.5**
baz=265,SNR=302
R11A S **S** **16 43 35.1 +1.5**
baz=265
**GLA Glamis 93.93 57** P **P** **16 32 27.9 +0.4**
**GLA Glamis 93.93 57** P **P** **16 32 29.8 +2.3**
baz=265
**SHPR Sheep Range 93.97 54** P **P** **16 32 28.2 +0.4**
SHPR IAmb IAmb 16 32 31.6
comp=Z,179nm,0.9s
**CRZF Crozet Islands 94.03 223** P **P** **16 32 27.6 -0.1**
**MFID Camas Ranch 94.09 47** P **P** **16 32 28.2 +0.1**
MFID IAmb IAmb 16 32 32.1
comp=Z,124nm,1.4s
**PLID Pearl Lake 94.12 45** P **P** **16 32 27.8 -0.5**
PLID IAmb IAmb 16 32 30.7
comp=Z,120nm,1.4s
**PRN Pahroc Range 94.14 53** P **P** **16 32 29.4 +0.9**
**BLYC Blythe 94.24 57** P **P** **16 32 29.3 +0.5**
BLYC IAmb IAmb 16 32 34.2
comp=Z,164nm,1.0s
**NEE2 Needles Airpor 94.26 56** P **P** **16 32 30.8 +1.9**
baz=265,SNR=31
NEE2 S **S** **16 43 39.0 +1.8**
baz=265
**ELK Elko 94.29 50** LR LR 17 08 55.4
comp=Z,23µm,20.6s,baz=282,slow=32
**ELK Elko 94.29 50** P **P** **16 32 29.7 +0.4**
ELK IAmb IAmb 16 32 32.2
comp=Z,168nm,1.2s
ELK IAMs_20 IAMs_20 17 08 43.8
comp=Z,22µm,20.0s
**PDMCI Parker Dam,Lak 94.61 56** P **P** **16 32 32.5 +2.0**
baz=265,SNR=33
**113A Mohawk Valley, 94.79 58** P **P** **16 32 31.3 -0.1**
**SPR3 Spring Creek 3 94.84 51** P **P** **16 32 31.7 -0.3**
**HLID Hailey 95.13 47** P **P** **16 32 32.3 -0.6**
**HLID Hailey 95.13 47** P **P** **16 32 33.9 +1.0**
baz=266,SNR=51
**PSUT Pine Spring 95.18 52** P **P** **16 32 33.0 -0.3**
**BELA Belgrano 2 95.43 178** P **P** **16 32 33.1 -0.3**
**CCUT Cedar City 95.49 53** P **P** **16 32 35.3 +0.5**
CCUT IAmb IAmb 16 32 39.6
comp=Z,154nm,1.0s
**JTMT Jette 95.52 43** P **P** **16 32 33.5 -1.0**
**214A Organ Pipe Nat 95.53 59** P **P** **16 32 35.1 +0.3**
**214A Organ Pipe Nat 95.53 59** P **P** **16 32 36.6 +1.7**
baz=266,SNR=19
**LCMT Little Creek M 95.55 53** P **P** **16 32 35.3 +0.3**
LCMT IAmb IAmb 16 32 40.2
comp=Z,260nm,1.4s
**MSO Missoula 95.69 44** P **P** **16 32 34.4 -0.9**
MSO IAMs_20 IAMs_20 17 10 37.2
comp=Z,24µm,20.0s
**MSO Missoula 95.69 44** P **P** **16 32 34.7 -0.6**
baz=266,SNR=6.6
**SZCU Shurtz Canyon 95.71 53** P **P** **16 32 35.8 -0.1**
SZCU IAmb IAmb 16 32 40.4
comp=Z,211nm,1.2s
**HRA Herat 95.78 304** P **P** **16 32 35.0 -1.2**
**WALA Waterton Lakes 95.84 41** P **P** **16 32 35.7 -0.3**
WALA IAmb IAmb 16 32 40.6
comp=Z,250nm,1.2s
**KNB Kanab 95.89 54** P **P** **16 32 36.4 -0.1**
**BCYI Bear Canyon 95.91 46** P **P** **16 32 36.0 -0.5**
**DUG Dugway, Tooele 96.10 50** P **P** **16 32 37.7 +0.3**
DUG IAmb IAmb 16 32 40.4
comp=Z,113nm,1.4s
**DUG Dugway, Tooele 96.10 50** P **P** **16 32 38.4 +1.0**
baz=266,SNR=37
**YKA Yellowknife Ar 96.15 28** P **P** **16 32 37.2 +0.3**
comp=Z,35nm,0.6s,baz=265,slow=4.5,SNR=320
YKA PKiKP **PKiKP** **16 37 15.2 +0.1**
comp=Z,2.2nm,0.6s,baz=257,slow=1.1,SNR=10
YKA PKKPbc **PKKPbc** **16 49 23.4 -3.0**
comp=Z,4.3nm,0.6s,baz=88,slow=2.8,SNR=41
YKA PKPPKP **P'P'df** **16 57 37.0 +0.8**
comp=Z,1.0nm,0.9s,baz=74,slow=2.1,SNR=6.4
YKA LR LR 17 12 47.1
comp=Z,13µm,19.9s,baz=292,slow=33

**YKA Yellowknife Ar 96.15 28** P **P** **16 32 36.8 0.0**
**HVU Hansel Valley 96.22 49** P **P** **16 32 37.8 -0.1**
HVU IAmb IAmb 16 32 43.4
comp=Z,116nm,1.2s
**U15A North Rim 96.27 54** P **P** **16 32 38.8 +0.4**
U15A IAmb IAmb 16 32 42.4
comp=Z,140nm,1.1s
**TCRU Three Creeks R 96.28 52** P **P** **16 32 39.0 +0.5**
TCRU IAmb IAmb 16 33 00.2
comp=Z,132nm,1.5s
**PKCU Pink Cliffs 96.32 53** P **P** **16 32 38.8 +0.1**
**MCMT McKenzie Canyo 96.34 46** P **P** **16 32 38.0 -0.5**
**EDM Edmonton 96.41 37** P **P** **16 32 38.3 -0.1**
**DLMT Dillon 96.54 45** P **P** **16 32 38.9 -0.4**
DLMT IAMs_20 IAMs_20 17 10 30.9
comp=Z,23µm,20.0s
**NLU North Lily Min 96.65 51** P **P** **16 32 39.5 -0.5**
**LRM Limekiln Ridge 96.67 45** P **P** **16 32 39.3 -0.7**
**X16A Lo Mia Camp, P 96.84 56** P **P** **16 32 41.0 0.0**
**CTU Camp Tracy 96.94 50** P **P** **16 32 40.7 -0.5**
**WUAZ Wupatki 96.96 55** P **P** **16 32 41.0 -0.4**
WUAZ IAmb IAmb 16 32 47.3
comp=Z,101nm,1.1s
WUAZ IAMs_20 IAMs_20 17 11 01.9
comp=Z,21µm,20.0s
**WUAZ Wupatki 96.96 55** P **P** **16 32 43.4 +2.0**
baz=267,SNR=51
**HRY Holter Researc 97.13 44** P **P** **16 32 39.8 -2.1**
**JLU Jordanelle 97.16 50** P **P** **16 32 41.9 -0.4**
**LPIG La Paz 97.17 67** LR LR 17 10 37.7
comp=Z,32µm,19.5s,baz=281,slow=32
**BOZ Bozeman (W) 97.23 45** P **P** **16 32 41.5 -0.9**
BOZ IAMs_20 IAMs_20 17 10 21.1
comp=Z,27µm,21.0s
**BOZ Bozeman (W) 97.23 45** P Pdif 16 32 42.9 +0.4
baz=268,SNR=28
**TUC Tucson 97.27 58** P **P** **16 32 41.8 -1.1**
**TUC Tucson 97.27 58** IAMs_20 IAMs_20 17 08 34.5
comp=Z,19µm,21.0s
**TUC Tucson 97.27 58** P Pdif 16 32 44.7 +1.8
baz=267
**TMUT Trail Mountain 97.28 51** P **P** **16 32 42.8 -0.2**
TMUT IAmb IAmb 16 32 46.3
comp=Z,87nm,0.9s
**Q16A Castle Valley 97.30 52** P **P** **16 32 42.1 -0.8**
Q16A IAmb IAmb 16 32 48.7
comp=Z,204nm,1.4s
**ECR Eagle Creek 97.32 48** P **P** **16 32 41.2 -1.8**
**QLMT Earthquake Lak 97.34 46** P **P** **16 32 41.8 -1.2**
**JLN Jalan Bani Buh 97.41 291** P **P** **16 32 42.3 -1.2**
SNR=60
JLN P **P** **16 32 42.3 -1.2**
SNR=60
**SLBS Sierra La Lagu 97.47 67** P **P** **16 32 43.3 -0.6**
SLBS IAmb IAmb 16 32 48.8
comp=Z,50nm,0.8s
**AHID Auburn Hatcher 97.51 48** P **P** **16 32 42.5 -1.3**
AHID IAMs_20 IAMs_20 17 12 29.8
comp=Z,26µm,20.0s
**TPAW Teton Pass 97.64 47** P **P** **16 32 43.5 -1.0**
TPAW IAmb IAmb 16 32 47.8
comp=Z,102nm,1.2s
**P17A Butcher Ranch, 97.66 51** P **P** **16 32 44.2 -0.3**
P17A IAmb IAmb 16 32 47.6
comp=Z,118nm,1.3s
**YMR Madison River 97.67 46** P **P** **16 32 44.2 -0.3**
**REDW Red Top Meadow 97.71 47** P **P** **16 32 44.7 -0.1**
REDW IAmb IAmb 16 32 48.4
comp=Z,123nm,1.3s
REDW IAMs_20 IAMs_20 17 09 50.1
comp=Z,31µm,21.0s
**YHH Holmes Hill 97.76 46** P Pdif 16 32 45.2 +0.2
**SVE Sverdlovsk 97.78 326** *eP* **P** **16 32 42.6 -1.8**
SVE *eS* **SKSac** **16 43 15.9 -2.2**
SVE pmax pmax
comp=Z,31nm,1.1s
SVE MLR MLR
comp=Z,14µm,19.0s
**SNOW Snow King Moun 97.78 47** P Pdif 16 32 45.1 0.0
SNOW IAmb IAmb 16 32 48.8
comp=Z,86nm,1.3s
**MOOW Moose Ponds 97.80 47** P **P** **16 32 45.1 -0.1**
**SRU San Rafael Swe 97.81 52** P **P** **16 32 45.0 -0.2**
**FLWY Flagg Ranch 97.84 46** P Pdif 16 32 45.4 +0.1
**WBK Wadi Bani Khal 97.85 292** P **P** **16 32 44.8 -0.8**
SNR=36
**YNR Norris Junctio 97.88 46** P Pdif 16 32 45.5 0.0
**LOHW Long Hollow 97.90 47** P **P** **16 32 45.3 -0.3**
**H17A Grant Village 97.94 46** P Pdif 16 32 46.0 +0.2
**H17A Grant Village 97.94 46** P Pdif 16 32 47.4 +1.6
baz=268,SNR=22
**P18A Preston Nutter 98.04 51** P **P** **16 32 46.3 -0.1**
P18A IAmb IAmb 16 32 50.8
comp=Z,73nm,1.2s
**LKWY Lake 98.07 46** P **P** **16 32 45.9 -0.4**
**X18A Snowflake 98.08 56** P **P** **16 32 46.0 -0.5**
X18A IAmb IAmb 16 32 53.6
comp=Z,173nm,1.5s
**AB31 Akbulak array 98.14 319** *i*P **P** **16 32 43.4 -2.8**
**ABKAR Akbulak array 98.14 319** P **P** **16 32 43.4 -2.8**
**WSAR Wadi Sarin 98.20 292** PKiKP **PKiKP** **16 37 21.3 +1.4**
comp=Z,7.9nm,0.8s,baz=244,slow=9.6,SNR=5.1
WSAR PKKPbc **PKKPdf** **16 49 23.1 +0.6**
comp=Z,3.3nm,0.7s,baz=250,slow=3.0,SNR=4.2
WSAR LR LR 17 18 09.6
comp=Z,5µm,21.5s,baz=106,slow=36
**WSAR Wadi Sarin 98.20 292** P **P** **16 32 46.2 -1.0**
SNR=38
**YMP Mirror Lake Pl 98.25 46** P **P** **16 32 46.6 -0.6**
YMP IAmb IAmb 16 33 00.9
comp=Z,128nm,1.4s
**W18A Petrified Fore 98.28 56** P Pdif 16 32 47.7 +0.3
W18A IAmb IAmb 16 32 53.4
comp=Z,179nm,1.3s
**W18A Petrified Fore 98.28 56** Pdiff Pdif 16 32 49.1 +1.6
baz=268
**EGMT Eagleton 98.57 43** P **P** **16 32 48.2 -0.1**
**EGMT Eagleton 98.57 43** Pdiff Pdif 16 32 48.5 +0.2
baz=270
**RDMU Red Mountain 98.59 50** P Pdif 16 32 49.0 +0.3
RDMU IAmb IAmb 16 32 51.8
comp=Z,102nm,1.0s
**JMDO Jabal Madar 98.63 292** P **P** **16 32 47.7 -1.3**
SNR=24
JMDO P **P** **16 32 47.7 -1.3**
SNR=24
**BW06 Boulder Array 98.64 48** P **P** **16 32 48.2 -0.8**
BW06 IAmb IAmb 16 32 52.6
comp=Z,113nm,1.4s
BW06 IAMs_20 IAMs_20 17 13 36.8
comp=Z,23µm,20.0s
**BW06 Boulder Array 98.64 48** Pdiff **P** **16 32 48.7 -0.2**
baz=269
**PD31 Pinedale Array 98.64 48** P **P** **16 32 48.0 -0.9**
PD31 IAmb IAmb 16 32 52.6
comp=Z,102nm,1.4s
**PDAR Pinedale Array 98.64 48** P **P** **16 32 48.9 -0.1**
comp=Z,11nm,0.6s,baz=230,slow=2.2,SNR=108
PDAR PKiKP **PKiKP** **16 37 21.2 +0.8**
comp=Z,2.4nm,0.8s,baz=143,slow=1.8,SNR=4.7
PDAR PKKPbc **PKKPdf** **16 49 21.9 -0.7**
comp=Z,0.6nm,0.5s,baz=96,slow=5.8,SNR=4.1
PDAR PKPPKP **P'P'df** **16 57 34.6 +1.3**
comp=Z,6.4nm,1.3s,baz=93,slow=3.0,SNR=7.5
PDAR LR LR 17 13 28.9
comp=Z,17µm,19.2s,baz=290,slow=33
**PDAR Pinedale Array 98.64 48** P **P** **16 32 48.2 -0.7**
**BIDO Bidbid 98.68 293** P **P** **16 32 47.7 -1.5**
SNR=38
**SMDO Samad 98.73 292** P **P** **16 32 47.9 -1.6**
SNR=23
**NVL N'lazarevskaya 98.86 192** ⇑ *i*P Pdif 16 32 53.9 +4.9
NVL *i* S **SKSac** **16 43 28.1 +4.9**
NVL pmax pmax
comp=Z,74nm,1.9s
NVL MLR MLR
comp=N,32µm,20.0s
NVL MLR MLR
comp=E,36µm,20.0s
NVL MLR MLR
comp=Z,48µm,20.0s
**RLMT Red Lodge 98.89 45** IAMs_20 IAMs_20 17 12 15.0
comp=Z,18µm,20.0s
**RLMT Red Lodge 98.89 45** Pdiff Pdif 16 32 50.9 +1.0
baz=270

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ARU** | **Arti** | **98.93** | **326** | PKiKP | **PKiKP** | **16 37 20.3** | **+0.2** | | |
| | comp=Z,3.9nm,0.6s,baz=120,slow=1.9,SNR=9.1 | | | | | | | | |
| ARU | | | | PKKPbc | **PKKPbc** | **16 49 16.2** | **-2.3** | | |
| | comp=Z,2.3nm,0.6s,baz=45,slow=2.7,SNR=8.6 | | | | | | | | |
| ARU | | | | LR | LR | 17 20 20.1 | | | |
| | comp=Z,13µm,20.1s,baz=87,slow=37 | | | | | | | | |
| **ARU** | **Arti** | **98.93** | **326** | *c* *i* P | **P** | **16 32 47.8** | **-1.8** | | |
| ARU | | | | | | 16 36 49.6 | | | |
| ARU | | | | S | **SKSac** | **16 43 20.5** | **-3.4** | | |
| ARU | | | | SP | SP | 16 45 40.0 | -1.8 | | |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| ARU | | | | MLR | MLR | | | | |
| | comp=Z,12µm,19.0s | | | | | | | | |
| **ARU** | **Arti** | **98.93** | **326** | P | **P** | **16 32 47.3** | **-2.3** | | |
| **PV10** | **Paradox Valley** | **98.95** | **52** | P | **P** | **16 32 50.1** | **-0.3** | | |
| PV10 | | | | IAmb | IAmb | 16 32 55.1 | | | |
| | comp=Z,116nm,1.2s | | | | | | | | |
| **PV23** | **Carpenter Ridg** | **98.97** | **52** | P | **P** | **16 32 50.1** | **-0.4** | | |
| PV23 | | | | IAmb | IAmb | 16 32 55.8 | | | |
| | comp=Z,173nm,1.1s | | | | | | | | |
| **PV11** | **David Mesa, Pa** | **99.08** | **52** | P | **Pdif** | **16 32 50.9** | **-0.1** | | |
| PV11 | | | | IAmb | IAmb | 16 32 55.5 | | | |
| | comp=Z,167nm,1.2s | | | | | | | | |
| **GEYT** | **Alibeck** | **99.28** | **307** | P | **Pdif** | **16 32 51.3** | **-0.4** | | |
| | comp=Z,29nm,0.9s,baz=238,slow=8.5,SNR=46 | | | | | | | | |
| GEYT | | | | PP | **PP** | **16 36 59.5** | **+4.4** | | |
| | comp=Z,24nm,1.1s,baz=106,slow=2.8,SNR=4.2 | | | | | | | | |
| GEYT | | | | PKKPbc | **PKKPdf** | **16 49 19.2** | **-1.8** | | |
| | comp=Z,2.9nm,0.5s,baz=164,slow=3.6,SNR=3.6 | | | | | | | | |
| GEYT | | | | LR | LR | 17 20 05.7 | | | |
| | comp=Z,6µm,21.8s,baz=104,slow=37 | | | | | | | | |
| **GEYT** | **Alibeck** | **99.28** | **307** | P | **Pdif** | **16 32 50.8** | **-0.9** | | |
| GEYT | | | | IAmb | IAmb | 16 32 54.0 | | | |
| | comp=Z,113nm,1.3s | | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **99.28** | **307** | P | **Pdif** | **16 32 50.8** | **-0.8** | | |
| GYA0B | | | | IAmb | IAmb | 16 32 53.9 | | | |
| | comp=Z,138nm,1.3s | | | | | | | | |
| **MVCO** | **Mesa Verde** | **99.35** | **53** | IAMs_20 | IAMs_20 | 17 21 29.9 | | | |
| | comp=Z,15µm,18.0s | | | | | | | | |
| **MVCO** | **Mesa Verde** | **99.35** | **53** | Pdiff | **Pdif** | **16 32 53.9** | **+1.7** | | |
| | baz=269 | | | | | | | | |
| **PV15** | **Paradox Valley** | **99.38** | **52** | P | **Pdif** | **16 32 52.0** | **-0.3** | | |
| PV15 | | | | IAmb | IAmb | 16 32 56.9 | | | |
| | comp=Z,149nm,1.4s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **99.39** | **320** | PP | **PP** | **16 36 56.8** | **+1.4** | | |
| | comp=Z,16nm,1.1s,baz=54,slow=12,SNR=6.2 | | | | | | | | |
| AKTO | | | | PKKPbc | **PKKPbc** | **16 49 16.2** | **-0.8** | | |
| | comp=Z,2.0nm,0.6s,baz=248,slow=4.8,SNR=5.6 | | | | | | | | |
| AKTO | | | | LR | LR | 17 17 30.0 | | | |
| | comp=Z,5µm,21.5s,baz=78,slow=35 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **99.39** | **320** | P | **Pdif** | **16 32 48.6** | **-3.2** | | |
| **HOQ** | **Hoqain** | **99.44** | **293** | P | **Pdif** | **16 32 51.1** | **-1.5** | | |
| | SNR=33 | | | | | | | | |
| **BSY** | **Bisya** | **99.49** | **292** | P | **Pdif** | **16 32 52.6** | **-0.3** | | |
| | SNR=20 | | | | | | | | |
| **O20A** | **White River Ci** | **99.60** | **51** | | **Pdif** | **16 32 53.2** | **0.0** | | |
| O20A | | | | IAmb | IAmb | 16 32 57.3 | | | |
| | comp=Z,203nm,1.4s | | | | | | | | |
| **O20A** | **White River Ci** | **99.60** | **51** | Pdiff | **Pdif** | **16 32 54.3** | **+1.1** | | |
| | baz=269 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **99.82** | **58** | Pdiff | **Pdif** | **16 32 56.0** | **+1.7** | | |
| | baz=268 | | | | | | | | |
| **ARQ** | **Araqi** | **100.15** | **292** | P | **Pdif** | **16 32 54.7** | **-1.1** | | |
| | SNR=38 | | | | | | | | |
| **RWWY** | **Rawlins** | **100.38** | **49** | IAMs_20 | IAMs_20 | 17 14 38.8 | | | |
| | comp=Z,26µm,20.0s | | | | | | | | |
| **SNAA** | **Sanae** | **100.45** | **187** | Pdiff | **Pdif** | **16 32 56.0** | **-0.2** | | |
| **SNAA** | **Sanae** | **100.45** | **187** | P | **Pdif** | **16 32 56.7** | **+0.5** | | |
| | comp=Z,12nm,1.0s,baz=182,slow=3.0,SNR=15 | | | | | | | | |
| SNAA | | | | PP | **PP** | **16 37 05.4** | **+2.9** | | |
| | comp=Z,12nm,1.1s,baz=151,slow=12,SNR=5.0 | | | | | | | | |
| SNAA | | | | PKiKP | **PKiKP** | **16 37 24.0** | **+1.3** | | |
| | comp=Z,8.0nm,0.7s,baz=185,slow=4.2,SNR=6.5 | | | | | | | | |
| SNAA | | | | PKKPbc | **PKKPbc** | **16 49 11.9** | **-2.7** | | |
| | comp=Z,5.3nm,1.0s,baz=249,slow=2.7,SNR=4.7 | | | | | | | | |
| **SNAA** | **Sanae** | **100.45** | **187** | | **Pdif** | **16 32 55.8** | **-0.4** | | |
| **SNAA** | **Sanae** | **100.45** | **187** | IAMs_20 | IAMs_20 | 17 16 15.5 | | | |
| | comp=Z,29µm,21.0s | | | | | | | | |
| **BANOM** | **Banah** | **100.47** | **295** | P | **Pdif** | **16 32 55.9** | **-1.3** | | |
| | SNR=19 | | | | | | | | |
| **BANOM** | **Banah** | **100.47** | **295** | *i* P | **Pdif** | **16 32 56.3** | **-0.9** | | |
| | SNR=24 | | | | | | | | |
| **UOSS** | **Minazif** | **100.51** | **294** | *i* P | **Pdif** | **16 32 55.8** | **-1.5** | | |
| | SNR=14 | | | | | | | | |
| **MSFE** | **Esma-Masafi** | **100.57** | **294** | *i* P | **Pdif** | **16 32 56.3** | **-1.4** | | |
| | SNR=26 | | | | | | | | |
| **MASF** | **Masafi** | **100.57** | **295** | P | **Pdif** | **16 32 56.9** | **-0.7** | | |
| | SNR=30 | | | | | | | | |
| **SMCO** | **Snowmass** | **100.57** | **51** | IAMs_20 | IAMs_20 | 17 14 22.1 | | | |
| | comp=Z,15µm,20.0s | | | | | | | | |
| **HATD** | **Hatta, Dubai** | **100.57** | **294** | P | **Pdif** | **16 32 56.8** | **-0.8** | | |
| | SNR=18 | | | | | | | | |
| **HATD** | **Hatta, Dubai** | **100.57** | **294** | *i* P | **Pdif** | **16 32 56.3** | **-1.4** | | |
| | SNR=15 | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **100.57** | **57** | IAMs_20 | IAMs_20 | 17 11 13.8 | | | |
| | comp=Z,18µm,20.0s | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **100.57** | **57** | Pdiff | **Pdif** | **16 32 59.4** | **+1.7** | | |
| | baz=269 | | | | | | | | |
| **SHME** | **Shamm** | **100.61** | **295** | P | **Pdif** | **16 32 57.1** | **-0.7** | | |
| | SNR=19 | | | | | | | | |
| **SHME** | **Shamm** | **100.61** | **295** | *i* P | **Pdif** | **16 32 56.1** | **-1.7** | | |
| | SNR=19 | | | | | | | | |
| **ASHO** | **Ashiyiah** | **100.63** | **294** | P | **Pdif** | **16 32 56.9** | **-1.1** | | |
| | SNR=18 | | | | | | | | |
| **ASHO** | **Ashiyiah** | **100.63** | **294** | *i* P | **Pdif** | **16 32 56.4** | **-1.6** | | |
| | SNR=23 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **100.68** | **53** | Pdiff | **Pdif** | **16 33 00.3** | **+2.1** | | |
| | baz=270 | | | | | | | | |
| **SHAO** | **Shalim** | **100.69** | **287** | P | **Pdif** | **16 32 57.0** | **-1.3** | | |
| | SNR=5.0 | | | | | | | | |
| **SHAO** | **Shalim** | **100.69** | **287** | *i* P | **Pdif** | **16 32 56.3** | **-1.9** | | |
| | SNR=15 | | | | | | | | |
| **K22A** | **Casper** | **100.88** | **48** | Pdiff | **Pdif** | **16 32 59.0** | **+0.1** | | |
| | baz=271 | | | | | | | | |
| **ALNE** | **Al Ain** | **100.89** | **293** | P | **Pdif** | **16 32 58.2** | **-0.9** | | |
| | SNR=48 | | | | | | | | |
| **ALNE** | **Al Ain** | **100.89** | **293** | *i* P | **Pdif** | **16 32 57.7** | **-1.4** | | |
| | SNR=22 | | | | | | | | |
| **ANMO** | **Albuquerque** | **100.97** | **56** | *i* P | **Pdif** | **16 32 58.0** | **-1.4** | | |
| ANMO | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| **ANMO** | **Albuquerque** | **100.97** | **56** | IAMs_20 | IAMs_20 | 17 12 21.1 | | | |
| | comp=Z,19µm,21.0s | | | | | | | | |
| **ANMO** | **Albuquerque** | **100.97** | **56** | Pdiff | **Pdif** | **16 33 01.3** | **+1.9** | | |
| | baz=270 | | | | | | | | |
| **LAO** | **LASA Array** | **100.99** | **44** | IAMs_20 | IAMs_20 | 17 10 34.5 | | | |
| | comp=Z,22µm,22.0s | | | | | | | | |
| **LAO** | **LASA Array** | **100.99** | **44** | Pdiff | **Pdif** | **16 32 59.9** | **+0.8** | | |
| | baz=272 | | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **101.03** | **295** | P | **Pdif** | **16 32 59.3** | **-0.3** | | |
| | SNR=8.9 | | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **101.03** | **295** | *i* P | **Pdif** | **16 32 59.2** | **-0.4** | | |
| | SNR=9.2 | | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **101.06** | **294** | P | **Pdif** | **16 32 58.4** | **-1.4** | | |
| | SNR=18 | | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **101.06** | **294** | *i* P | **Pdif** | **16 32 58.4** | **-1.4** | | |
| | SNR=12 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **101.29** | **294** | P | **Pdif** | **16 33 00.1** | **-0.7** | | |
| | SNR=32 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **101.29** | **294** | *i* P | **Pdif** | **16 32 59.7** | **-1.1** | | |
| | SNR=52 | | | | | | | | |
| **DMTO** | **DMTO** | **101.31** | **287** | P | **Pdif** | **16 32 58.8** | **-2.2** | | |
| | SNR=5.3 | | | | | | | | |
| **N23A** | **Red Feather La** | **101.34** | **50** | Pdiff | **Pdif** | **16 33 02.3** | **+1.2** | | |
| | baz=271 | | | | | | | | |
| **UMZA** | **Um Al Zommool** | **101.37** | **292** | P | **Pdif** | **16 32 58.4** | **-2.8** | | |
| **VNA3** | **Neumayer Olymp** | **101.58** | **185** | PP | **PP** | **16 37 12.6** | **+1.7** | | |
| **VNA3** | **Neumayer Olymp** | **101.58** | **185** | Pdiff | **Pdif** | **16 33 00.7** | **-0.5** | | |
| **AJN** | **Ajban** | **101.60** | **294** | *i* P | **Pdif** | **16 33 00.9** | **-1.3** | | |
| | SNR=14 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **101.62** | **51** | IAMs_20 | IAMs_20 | 17 14 42.8 | | | |
| | comp=Z,15µm,20.0s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **101.62** | **51** | Pdiff | **Pdif** | **16 33 03.4** | **+1.0** | | |
| | baz=271 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **101.66** | **186** | PP | **PP** | **16 37 13.4** | **+1.9** | | |
| | baz=166,slow=6.4 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **101.66** | **186** | Pdiff | **Pdif** | **16 33 01.2** | **-0.3** | | |
| | baz=179,slow=3.3 | | | | | | | | |
| **PHWY** | **Pilot Hill** | **101.70** | **49** | IAMs_20 | IAMs_20 | 17 15 33.9 | | | |
| | comp=Z,23µm,20.0s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **101.73** | **53** | IAMs_20 | IAMs_20 | 17 14 49.0 | | | |
| | comp=Z,16µm,20.0s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **101.73** | **53** | Pdiff | **Pdif** | **16 33 04.4** | **+1.5** | | |
| | baz=271 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **101.84** | **59** | IAMs_20 | IAMs_20 | 17 11 11.5 | | | |
| | comp=Z,28µm,21.0s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **101.84** | **59** | Pdiff | **Pdif** | **16 33 05.0** | **+1.8** | | |
| | baz=270 | | | | | | | | |
| **Q24A** | **Divide** | **101.99** | **52** | Pdiff | **Pdif** | **16 33 05.7** | **+1.7** | | |
| | baz=271 | | | | | | | | |
| **RBK** | **Rabkut** | **102.01** | **286** | P | **Pdif** | **16 33 02.8** | **-1.4** | | |
| | SNR=19 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **102.01** | **186** | Pdiff | **Pdif** | **16 32 59.3** | **-3.7** | | |
| **DOK** | **Doka** | **102.14** | **288** | P | **Pdif** | **16 33 02.7** | **-2.0** | | |
| | SNR=14 | | | | | | | | |
| **DGMT** | **Dagmar** | **102.27** | **42** | Pdiff | **Pdif** | **16 33 04.8** | **+0.1** | | |
| | baz=274 | | | | | | | | |
| **WHFO** | **Wadi Hawf** | **102.44** | **287** | P | **Pdif** | **16 33 04.0** | **-2.2** | | |
| | SNR=14 | | | | | | | | |
| **T25A** | **Trinidad** | **102.61** | **54** | Pdiff | **Pdif** | **16 33 08.6** | **+1.9** | | |
| | baz=271 | | | | | | | | |
| **RSSD** | **Black Hills** | **102.64** | **46** | Pdiff | **Pdif** | **16 33 06.7** | **0.0** | | |
| | baz=273 | | | | | | | | |
| **ABTO** | **Aybut** | **102.86** | **286** | P | **Pdif** | **16 33 05.9** | **-2.2** | | |
| | SNR=16 | | | | | | | | |
| **MZR** | **Muzera** | **102.93** | **292** | P | **Pdif** | **16 33 07.9** | **-0.3** | | |
| | SNR=20 | | | | | | | | |
| **MZR** | **Muzera** | **102.93** | **292** | *i* P | **Pdif** | **16 33 07.4** | **-0.8** | | |
| | SNR=33 | | | | | | | | |
| **FFC** | **Flin Flon** | **103.06** | **35** | IAMs_20 | IAMs_20 | 17 17 19.4 | | | |
| | comp=Z,13µm,20.0s | | | | | | | | |
| **PMSA** | **Palmer Station** | **103.16** | **164** | IAMs_20 | IAMs_20 | 17 14 51.6 | | | |
| | comp=Z,13µm,20.0s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **103.30** | **62** | Pdiff | **Pdif** | **16 33 11.8** | **+2.0** | | |
| | comp=Z,4.3nm,0.8s,baz=239,slow=4.1,SNR=13 | | | | | | | | |
| TXAR | | | | PKiKP | **PP** | **16 37 27.1** | **+1.4** | | |
| | comp=Z,1.0nm,0.7s,baz=289,slow=7.6,SNR=3.6 | | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **16 49 07.0** | **+2.0** | | |
| | comp=Z,3.9nm,0.7s,baz=96,slow=3.6,SNR=11 | | | | | | | | |
| TXAR | | | | PKPPKP | | 16 57 27.6 | | | |
| | comp=Z,0.9nm,0.8s,baz=143,slow=4.4,SNR=4.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **103.30** | **62** | PKKPbc | PKKPbc | 16 49 03.8 | -1.2 | | |
| **KIRV** | **Kirov** | **103.63** | **329** | PKiKP | **PKiKP** | **16 37 29.1** | **+0.5** | | |
| | comp=Z,15nm,0.5s,baz=100,slow=1.0,SNR=6.2 | | | | | | | | |
| KIRV | | | | PKKPbc | **PKKPbc** | **16 49 02.6** | **-2.3** | | |
| | comp=Z,13nm,0.7s,baz=326,slow=3.6,SNR=5.1 | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **103.95** | **52** | Pdiff | **Pdif** | **16 33 14.1** | **+1.5** | | |
| | baz=273 | | | | | | | | |
| **VOI** | **Vohitsoka** | **104.00** | **246** | IAMs_20 | IAMs_20 | 17 16 19.4 | | | |
| | comp=Z,12µm,20.0s | | | | | | | | |
| **MSTX** | **Muleshoe** | **104.02** | **57** | Pdiff | **Pdif** | **16 33 14.5** | **+1.6** | | |
| | baz=272 | | | | | | | | |
| **OGNE** | **Ogallala** | **104.30** | **50** | Pdiff | **Pdif** | **16 33 14.8** | **+0.8** | | |
| | baz=274 | | | | | | | | |
| **OPO** | **Ambohidratompo** | **104.36** | **249** | Pdiff | **Pdif** | **16 33 15.1** | **+0.3** | | |
| | comp=Z,6.6nm,0.9s,baz=100,slow=5.5,SNR=6.1 | | | | | | | | |
| OPO | | | | PKiKP | **PKiKP** | **16 37 32.2** | **+0.9** | | |
| | comp=Z,11nm,0.9s,baz=322,slow=1.4,SNR=8.1 | | | | | | | | |
| **PRGR** | **Permogore** | **104.87** | **332** | *e*P | **Pdif** | **16 33 11.6** | **-4.2** | | |
| PRGR | | | | *e* | | 16 43 51.0 | | | |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,54nm,0.9s | | | | | | | | |
| **AMTX** | **Amarillo** | **104.89** | **56** | IAMs_20 | IAMs_20 | 17 14 35.9 | | | |
| | comp=Z,18µm,21.0s | | | | | | | | |
| **AMTX** | **Amarillo** | **104.89** | **56** | Pdiff | **Pdif** | **16 33 17.7** | **+1.0** | | |
| | baz=272 | | | | | | | | |
| **HOPEN** | **Hopen** | **105.13** | **349** | *e*PP | **PP** | **16 37 39.6** | **+2.0** | | |
| HOPEN | | | | *e*SP | SP | 16 46 48.5 | +2.0 | | |
| **MDND** | **Maddock** | **105.39** | **42** | PKiKP | **PKiKP** | **16 37 32.5** | **+0.3** | | |
| | baz=277 | | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **105.41** | **352** | *e*PP | **PKiKP** | **16 37 29.8** | **-1.6** | | |
| SPA0 | | | | *e*SKSac | **SKSac** | **16 43 56.2** | **+2.3** | | |
| SPA0 | | | | *e*SP | SP | 16 46 48.8 | -0.6 | | |
| **SPITS** | **Spitsbergen Ar** | **105.41** | **352** | PKKPbc | PKKPbc | 16 48 55.6 | -4.3 | | |
| | comp=Z,20nm,0.9s,baz=145,slow=3.1,SNR=9.1 | | | | | | | | |
| **KBS** | **Kingsbay** | **105.42** | **353** | *e*PP | PP | 16 37 48.8 | +9.1 | | |
| KBS | | | | *e*SP | SP | 16 46 54.6 | +5.1 | | |
| KBS | | | | IVMs_BB | IVMs_BB | 17 21 10.9 | | | |
| | comp=Z,4µm,18.9s | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **106.22** | **52** | IAMs_20 | IAMs_20 | 17 15 10.6 | | | |
| | comp=Z,23µm,21.0s | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **106.22** | **52** | PKiKP | **PKiKP** | **16 37 34.2** | **+0.2** | | |
| | baz=275 | | | | | | | | |
| **TULEG** | **Thule** | **106.29** | **10** | *e*P | **PKiKP** | **16 37 34.1** | **+1.0** | | |
| **HSPB** | **Hornsund (broa** | **106.40** | **351** | *e*Pdif | **Pdif** | **16 33 19.5** | **-2.9** | | |
| HSPB | | | | *e*PP | **PP** | **16 37 46.9** | **-0.1** | | |
| HSPB | | | | *e*SP | SP | 16 47 00.6 | +1.0 | | |
| HSPB | | | | IVMs_BB | IVMs_BB | 17 19 38.7 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **JCT** | **Junction City** | **106.64** | **60** | PKiKP | **PKiKP** | **16 37 35.5** | **+0.4** | | |
| | baz=272 | | | | | | | | |
| **833A** | **Chaparral WMA,** | **107.06** | **63** | PKiKP | **PKiKP** | **16 37 36.5** | **+0.6** | | |
| | baz=272 | | | | | | | | |
| **MAK** | **Makhachkala** | **107.12** | **313** | *i* P | **Pdif** | **16 33 25.8** | **-0.5** | | |
| MAK | | | | *e* | | 16 37 52.4 | | | |
| MAK | | | | *e*PPP | PPP | 16 40 11.0 | | | |
| MAK | | | | *e* | | 16 44 00.8 | | | |
| MAK | | | | *e*PS | PS | 16 47 18.1 | +3.1 | | |
| MAK | | | | *e*SS | SS | 16 52 50.5 | -7.2 | | |
| MAK | | | | *e*SSS | SSS | 16 56 59.5 | | | |
| MAK | | | | pmax | pmax | | | | |
| | comp=Z,40nm,0.4s | | | | | | | | |
| MAK | | | | MLR | MLR | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **OK035** | **E0210 Rd and N** | **107.20** | **54** | IAMs_20 | IAMs_20 | 17 17 43.7 | | | |
| | comp=Z,22µm,20.0s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **107.28** | **56** | IAMs_20 | IAMs_20 | 17 23 23.2 | | | |
| | comp=Z,18µm,18.0s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **107.28** | **56** | PKiKP | **PKiKP** | **16 37 36.0** | **-0.1** | | |
| | baz=274 | | | | | | | | |
| **UNM** | **Universidad Na** | **107.30** | **72** | IAMs_20 | IAMs_20 | 17 15 21.9 | | | |
| | comp=Z,17µm,20.0s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **107.44** | **39** | Pdiff | **Pdif** | **16 33 27.4** | **-0.2** | | |
| | comp=Z,21nm,1.1s,baz=301,slow=5.6,SNR=12 | | | | | | | | |
| ULM | | | | PKiKP | **PKiKP** | **16 37 35.9** | **0.0** | | |
| | comp=Z,6.6nm,0.6s,baz=350,slow=3.4,SNR=5.5 | | | | | | | | |
| **OK032** | **Salt Plains WL** | **107.59** | **54** | IAMs_20 | IAMs_20 | 17 25 30.1 | | | |
| | comp=Z,22µm,18.0s | | | | | | | | |
| **BJO1** | **Bjornoya** | **107.59** | **349** | *e*Pdif | **Pdif** | **16 33 27.3** | **-0.4** | | |
| BJO1 | | | | *e*PP | **PP** | **16 37 57.2** | **+1.5** | | |
| BJO1 | | | | *e*SP | SP | 16 47 12.3 | +0.5 | | |
| **APA** | **Apatity** | **107.74** | **340** | ⇓ *i* P | **Pdif** | **16 33 24.0** | **-4.5** | | |
| APA | | | | *i* | | 16 37 57.0 | | | |
| APA | | | | *i* | | 16 44 39.0 | | | |
| APA | | | | *i* SS | SS | 16 53 14.0 | +10 | | |
| APA | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **107.81** | **41** | PKiKP | **PKiKP** | **16 37 37.2** | **+0.5** | | |
| | baz=280 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **107.92** | **332** | *e*P | **Pdif** | **16 33 25.5** | **-3.9** | | |
| KLMR | | | | *e* | | 16 44 01.3 | | | |
| KLMR | | | | *e*PS | **PS** | **16 47 18.7** | **-3.6** | | |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,79nm,1.4s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **107.92** | **332** | *e*Pdif | **Pdif** | **16 33 25.6** | **-3.9** | | |
| KLMR | | | | AMP | | 16 33 29.9 | | | |
| | comp=Z,79nm,1.4s | | | | | | | | |
| KLMR | | | | *e*PKiKP | **PKiKP** | **16 37 34.4** | **-2.0** | | |
| KLMR | | | | *e*SKSac | **SKSac** | **16 44 01.3** | **-4.2** | | |
| KLMR | | | | *e*SKSac | **SKSac** | **16 44 01.3** | **-4.2** | | |
| KLMR | | | | *e*PS | **PS** | **16 47 18.8** | **-3.6** | | |
| KLMR | | | | *e*PS | **PS** | **16 47 18.8** | **-3.6** | | |
| KLMR | | | | *e*PKKPbc | **PKKPbc** | **16 48 45.9** | **-5.9** | | |
| KLMR | | | | *e*PKKPab | **PKKPab** | **16 48 59.1** | **-4.3** | | |
| KLMR | | | | *e*SKKS | **SKKSdf** | **16 56 07.9** | **-6.3** | | |
| KLMR | | | | *e*SKKS | **SKKSdf** | **16 56 07.9** | **-6.3** | | |
| KLMR | | | | LQ | LQ | 17 13 34.4 | | | |
| KLMR | | | | LQ | LQ | 17 13 34.4 | | | |
| KLMR | | | | LR | LR | 17 22 18.1 | | | |
| KLMR | | | | AMP | | 17 26 45.2 | | | |
| | comp=Z,10µm,16.7s | | | | | | | | |
| **NEEM** | **North Greenlan** | **107.93** | **6** | *e*P | **PKiKP** | **16 37 39.7** | **+3.2** | | |
| **ECSD** | **EROS Data Cent** | **108.02** | **46** | IAMs_20 | IAMs_20 | 17 23 04.6 | | | |
| | comp=Z,19µm,19.0s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **108.02** | **46** | PKiKP | **PKiKP** | **16 37 37.3** | **+0.1** | | |
| | baz=278 | | | | | | | | |
| **GROC** | **Groznyy** | **108.33** | **313** | *i* P | **Pdif** | **16 33 29.7** | **-2.0** | | |
| GROC | | | | *e* | | 16 37 59.3 | | | |
| GROC | | | | *e* | | 16 44 05.5 | | | |
| GROC | | | | *e* | | 16 44 40.6 | | | |
| GROC | | | | *e*PS | PS | 16 47 23.1 | -4.3 | | |
| GROC | | | | pmax | pmax | | | | |
| | comp=Z,32nm,0.7s | | | | | | | | |
| **OK025** | **Westminster Rd** | **108.40** | **55** | IAMs_20 | IAMs_20 | 17 17 41.5 | | | |
| | comp=Z,23µm,21.0s | | | | | | | | |
| **435B** | **Jarrell** | **108.54** | **60** | PKiKP | **PKiKP** | **16 37 38.7** | **+0.2** | | |
| | baz=273 | | | | | | | | |
| **WHTX** | **Lake Whitney,** | **108.57** | **59** | PKiKP | **PKiKP** | **16 37 38.9** | **+0.3** | | |
| | baz=274 | | | | | | | | |
| **KSU1** | **Kansas State U** | **108.62** | **51** | IAMs_20 | IAMs_20 | 17 17 59.0 | | | |
| | comp=Z,20µm,20.0s | | | | | | | | |
| **KSU1** | **Kansas State U** | **108.62** | **51** | PKiKP | **PKiKP** | **16 37 39.0** | **+0.6** | | |
| | baz=277 | | | | | | | | |
| **OK033** | **Mehan** | **108.68** | **54** | IAMs_20 | IAMs_20 | 17 18 32.1 | | | |
| | comp=Z,25µm,20.0s | | | | | | | | |
| **HAMF** | **Hammerfest** | **109.03** | **345** | *e* | **PKiKP** | **16 37 38.0** | **-0.2** | | |
| HAMF | | | | *e*PP | **PP** | **16 38 09.0** | **+2.6** | | |
| HAMF | | | | *e*SKSac | **SKSac** | **16 44 09.3** | **-0.6** | | |
| HAMF | | | | *e*SP | SP | 16 47 26.1 | -0.6 | | |
| HAMF | | | | IVMs_BB | IVMs_BB | 17 28 57.4 | | | |
| | comp=Z,3µm,3.8s | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **109.20** | **343** | *e* | **PKiKP** | **16 37 38.4** | **-0.3** | | |
| **ARCES** | **ARCESS Array B** | **109.20** | **343** | Pdiff | **Pdif** | **16 33 35.5** | **+0.6** | | |
| | comp=Z,5.4nm,0.9s,baz=37,slow=4.7,SNR=3.8 | | | | | | | | |
| ARCES | | | | PKiKP | **PKiKP** | **16 37 38.0** | **-0.7** | | |
| | comp=Z,5.8nm,0.5s,baz=82,slow=1.7,SNR=20 | | | | | | | | |
| ARCES | | | | PKKPbc | **PKKPbc** | **16 48 44.6** | **-3.4** | | |
| | comp=Z,7.6nm,0.7s,baz=235,slow=2.0,SNR=18 | | | | | | | | |
| **GNI** | **Garni** | **109.55** | **310** | Pdiff | **Pdif** | **16 33 38.0** | **+0.6** | | |
| | comp=Z,8.0nm,0.9s,baz=192,slow=8.7,SNR=6.9 | | | | | | | | |
| GNI | | | | PKiKP | **PKiKP** | **16 37 41.2** | **+0.8** | | |
| | comp=Z,13nm,0.6s,baz=99,slow=4.9,SNR=8.5 | | | | | | | | |
| **GNI** | **Garni** | **109.55** | **310** | | **Pdif** | **16 33 36.3** | **-1.1** | | |
| **TUL1** | **Leonard** | **109.62** | **54** | PKiKP | **PKiKP** | **16 37 40.8** | **+0.3** | | |
| | baz=276 | | | | | | | | |
| **ZEI** | **Tsey** | **109.77** | **313** | *e*P | **Pdif** | **16 33 38.0** | **-0.4** | | |
| ZEI | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **109.83** | **358** | *i* P | **Pdif** | **16 33 36.0** | **-1.7** | | |
| **DAG** | **Danmarks Havn** | **109.83** | **358** | *i* P | **PKiKP** | **16 37 38.0** | **-1.7** | | |
| **KTK1** | **Kautokeino** | **110.16** | **343** | *e*PP | **PP** | **16 38 13.5** | **-1.0** | | |
| KTK1 | | | | *e*SP | SP | 16 47 38.0 | 0.0 | | |
| **RAYN** | **Ar Rayn** | **110.27** | **293** | ⇑ PKiKP | **PKiKP** | **16 37 42.5** | **+0.5** | | |
| **AKH** | **Akhalkalaki** | **110.30** | **312** | ⇑ P | **PKiKP** | **16 37 42.9** | **+1.1** | | |
| **KBZ** | **Khabaz** | **110.33** | **314** | PKiKP | **PKiKP** | **16 37 41.9** | **+0.4** | | |
| | comp=Z,7.1nm,0.7s,baz=105,slow=7.8,SNR=15 | | | | | | | | |
| KBZ | | | | PKKPbc | **PKKPbc** | **16 48 43.1** | **-0.4** | | |
| | comp=Z,6.0nm,0.8s,baz=276,slow=2.8,SNR=10 | | | | | | | | |
| **KIV** | **Kislovodsk** | **110.44** | **314** | *i* P | **Pdif** | **16 33 39.3** | **-1.9** | | |
| KIV | | | | *i* | | 16 37 39.9 | | | |
| KIV | | | | *e* | | 16 38 15.5 | | | |
| KIV | | | | *e* | | 16 44 15.6 | | | |
| KIV | | | | *e*PS | **PS** | **16 47 45.7** | **-2.7** | | |
| KIV | | | | *e*SS | SS | 16 53 42.4 | -0.1 | | |
| KIV | | | | *e*SSS | SSS | 16 57 50.6 | | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| KIV | | | | MLR | MLR | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **SPMN** | **Marine on St.** | **110.45** | **44** | PKiKP | **PKiKP** | **16 37 42.2** | **+0.5** | | |
| | baz=282 | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **110.50** | **314** | *i* PKiKP | **PKiKP** | **16 37 40.2** | **-2.0** | | |
| **NEY** | **Neytrino** | **110.54** | **314** | *i* PKiKP | **PKiKP** | **16 37 41.6** | **-0.6** | | |
| **JETT** | **Jettan, Norway** | **110.59** | **344** | *e*Pdif | **Pdif** | **16 33 43.1** | **+1.9** | | |
| JETT | | | | *e*PP | **PP** | **16 38 18.7** | **+1.0** | | |
| JETT | | | | *e*SKSac | **SKSac** | **16 44 12.3** | **-4.3** | | |
| JETT | | | | *e*SP | **SP** | **16 47 39.1** | **-2.9** | | |
| **EYMN** | **Ely** | **110.74** | **41** | PKiKP | **PKiKP** | **16 37 42.3** | **+0.1** | | |
| | baz=284 | | | | | | | | |
| **SCIA** | **State Center** | **110.77** | **48** | PKiKP | **PKiKP** | **16 37 42.8** | **+0.3** | | |
| | baz=280 

comp=Z,9µm,18.0s
**KONS Konsvik 114.70 344** *e*PKPdf **PKiKP 16 37 49.1 -0.1**
**HQIL Hanson Quary C 114.71 47** IAMs_20 IAMs_20 17 28 44.9
comp=Z,16µm,19.0s
**VSU Vasula 114.81 333** *i* PKIKP **PKiKP 16 37 47.3 -2.2**
**VSU Vasula 114.81 333** *e*P **PKiKP 16 37 49.4 -0.1**
**STOK Stokkvaagen 114.85 344** *e*PKPdf PKPdf 16 37 49.8 +0.4
**OXF Oxford 114.98 55** PKiKP **PKiKP 16 37 50.1 -0.5**
baz=280
**ILULI Ilulisaat 115.25 10** *e*P **PKiKP 16 37 49.4 -0.8**
**G45A Suttons Bay 115.39 43** PKiKP **PKiKP 16 37 50.5 -0.6**
**POGA Pongola 115.42 236** *e*P **PKPdf 16 37 53.6 +1.8**
POGA IAmb IAmb 16 37 53.7
comp=Z,32nm,0.9s
**EFI East Falkland 115.45 158***c* *i*PKIKP **PKiKP 16 37 49.9 -1.2**
EFI pmax pmax
comp=Z,168nm,2.5s
**146A Union 115.57 57 PKPdf 16 37 51.5 -0.4**
**SFIN Lafayette 115.61 48 PKiKP 16 37 51.0 -0.6**
**SFIN Lafayette 115.61 48** PKiKP **PKiKP 16 37 51.5 -0.2**
baz=284
**P46A Rosedale 115.70 49 PKiKP 16 37 51.3 -0.6**
**TOKA Tokat 115.72 312 PKiKP 16 37 51.6 -0.4**
**L46A Eue Claire 115.79 46 PKiKP 16 37 51.3 -0.7**
**GAZ Gaziantep 115.86 308 PKPdf 16 37 51.1 -1.3**
**E46A Sault Ste Mari 115.89 41 PKiKP 16 37 51.1 -1.0**
**WVT Waverly 115.96 53 PKPdf 16 37 51.4 -1.1**
**WVT Waverly 115.96 53** IAMs_20 IAMs_20 17 22 26.8
comp=Z,13µm,20.0s
**WVT Waverly 115.96 53** PKiKP **PKPdf 16 37 52.1 -0.4**
baz=281
**MTSE Matsula 115.97 334** *e*P **PKPdf 16 37 51.8 0.0**
MTSE *e*S **PKKPbc 16 48 25.1 +0.1**
**PLAL Pickwick Lake 115.98 54 PKPdf 16 37 51.4 -1.1**
PLAL IAMs_20 IAMs_20 17 22 42.5
comp=Z,18µm,20.0s
**SIM Simferopol' 116.14 317** *i* PKIKP **PKPdf 16 37 52.1 -0.5**
SIM PPP PPP 16 41 24.0
SIM pmax pmax
comp=Z,66nm,0.5s
**GLMI Grayling 116.17 43** PKiKP **PKPdf 16 37 52.6 -0.1**
baz=288
**MNK Minsk 116.18 329** *i* PKIKP **PKiKP 16 37 53.7 +1.4**
MNK *i* 16 38 59.3
MNK *i* PPP PPP 16 41 26.6
MNK *i* 16 45 03.1
MNK *i* PS PKKPdf 16 48 41.4 -8.3
MNK *i* SS SS 16 54 50.2 -7.1
MNK *i* SSS SSS 16 59 20.3
MNK pmax pmax
comp=N,19nm,1.0s
MNK pmax pmax
comp=E,6.0nm,1.2s
MNK pmax pmax
comp=Z,25nm,0.8s
MNK MLR MLR
comp=N,4µm,19.0s
MNK MLR MLR
comp=Z,7µm,22.0s
MNK MLR MLR
comp=E,454nm,19.0s
**MNK Minsk 116.18 329** *i* PKP **PKiKP 16 37 53.7 +1.4**
comp=E,6.0nm,1.2s
MNK *i* PKP **PKiKP 16 37 53.7 +1.4**
comp=N,19nm,1.0s
MNK *i* PKP **PKiKP 16 37 53.7 +1.4**
comp=Z,25nm,0.8s,baz=242
MNK *i* PP **PP 16 38 59.4 +1.7**
MNK *i* PPP PPP 16 41 26.6
MNK *i* SKS **SKSdf 16 45 03.2 +2.5**
MNK *i* PS PKKPdf 16 48 41.4 -8.2
MNK *i* SS **SS 16 54 50.2 -7.1**
MNK *i* SSS SSS 16 59 20.3
MNK *i* LQ LQ 17 17 42.7
MNK *i* LR LR 17 24 58.1
MNK *i* LRM MLR 17 26 54.7
comp=N,4µm,19.4s
MNK *i* LRM MLR 17 26 58.0
comp=Z,7µm,21.9s
MNK *i* LRM MLR 17 27 03.1
comp=E,454nm,19.3s
**KIBK Kibwezi 116.20 264** P **PKiKP 16 37 54.4 +0.7**
SNR=21
**SCO Scoresbysund 116.21 359** *i* P **PKPdf 16 37 53.4 +1.4**
**SNOP Sinop 116.22 314 PKPdf 16 37 52.8 0.0**
**MAGG Maguga Dam 116.28 237** *e*P **PKiKP 16 37 54.6 +1.1**
MAGG IAmb IAmb 16 37 56.6
comp=Z,247nm,2.1s
**Z47A Carrollton 116.30 56 PKPdf 16 37 52.4 -0.8**
**BLO Bloomington 116.32 50 PKPdf 16 37 52.3 -0.8**
**T47A Sharon Grove 116.36 52** PKPdf **PKPdf 16 37 52.5 -0.8**
**IDID Didziasalis 116.37 330** *e*P **PKiKP 16 37 53.5 +0.8**
IDID *e*S **PKKPbc 16 48 24.5 +1.0**
**NSS Namsos 116.48 343** *e*PKPdf **PKPdf 16 37 52.2 -0.4**
NSS *e*SP SP 16 48 38.2 +2.4
NSS IVMs_BB IVMs_BB 17 31 20.0
comp=Z,4µm,14.5s
**J47A Sunmer 116.50 45 PKPdf 16 37 52.7 -0.6**
**N47A Urbana 116.52 47 PKPdf 16 37 52.5 -0.9**
**BNN Bunyan 116.55 310 PKPdf 16 37 53.2 -0.5**
**ISAL Salakas 116.55 330** *e*P **PKiKP 16 37 54.8 +1.8**
ISAL *e*S **PKKPbc 16 48 24.7 +1.8**
**NACGM Naroch 116.55 329** *i* PKP **PKiKP 16 37 53.6 +0.5**
**IIGN Ignalina 116.61 330** *e*P **PKiKP 16 37 53.6 +0.5**
IIGN *e*S **PKKPbc 16 48 24.3 +1.6**
**WCI Wyandotte Cave 116.72 50 PKPdf 16 37 52.6 -1.3**
**WCI Wyandotte Cave 116.72 50** PKiKP **PKPdf 16 37 53.4 -0.5**
baz=283
**NWCL Newcastle 116.75 235** *e*P **PKPdf 16 37 54.4 -0.1**
NWCL IAmb IAmb 16 37 56.4
comp=Z,273nm,1.9s
**V48A Smith Brothers 116.84 53 PKPdf 16 37 52.5 -1.8**
**X48A Hartselle 116.92 55 PKPdf 16 37 52.8 -1.6**
**ICESG Greenland Ices 116.92 6** *i* P **PKPdf 16 37 52.4 -1.5**
**ASF Jabal al Asfar 117.05 303** PKP **PKiKP 16 37 55.5 +0.7**
comp=Z,29nm,0.6s,baz=150,slow=3.6,SNR=35
ASF PP **PP 16 39 07.8 +2.9**
comp=Z,74nm,1.1s,baz=93,slow=2.8,SNR=8.7
ASF PKKPbc **PKKPab 16 48 22.8 -0.9**
comp=Z,7.8nm,0.8s,baz=150,slow=2.6,SNR=6.8
**O48B Farmland 117.08 48** PKiKP **PKPdf 16 37 54.2 -0.4**
baz=285
**P48A Milroy 117.08 49 PKPdf 16 37 53.7 -0.9**
**BZK Bozkurt 117.10 314 PKPdf 16 37 54.2 -0.3**
**MOPA Mopani 117.11 239**⇑ *i*P **PKiKP 16 37 56.4 +1.3**
MOPA IAmb IAmb 16 38 01.2
comp=Z,8.5nm,0.8s
**AKASG Malin Array Be 117.13 324** Pdiff **Pdif 16 34 09.2 -1.4**
comp=Z,0.3nm,0.5s,baz=51,slow=4.7,SNR=6.0
AKASG PKP **PKPdf 16 37 53.9 -0.4**
comp=Z,27nm,0.6s,baz=51,slow=2.4,SNR=135
AKASG PP **PP 16 39 04.2 -0.3**
comp=Z,7.0nm,0.9s,baz=55,slow=7.4,SNR=9.4
AKASG PKKPbc **PKKPbc 16 48 19.1 -1.6**
comp=Z,10nm,0.7s,baz=265,slow=3.6,SNR=32
AKASG SKKPbc SKKPbc 16 52 13.9 +9.4
comp=Z,0.2nm,0.3s,baz=263,slow=3.5,SNR=5.4
**AKASG Malin Array Be 117.13 324** PKPdf **PKPdf 16 37 53.3 -1.0**
**AKBB Malin Array Si 117.13 324***c* *i*PKIKP **PKPdf 16 37 53.0 -1.3**
**AKBB Malin Array Si 117.13 324 PKPdf 16 37 53.4 -0.8**
**PLCA Paso Flores 117.13 143** PKP **PKiKP 16 37 55.2 +0.4**
comp=Z,8.2nm,0.5s,baz=252,slow=2.8,SNR=40
PLCA PP **PP 16 39 03.1 -1.5**
comp=Z,15nm,1.1s,baz=221,slow=4.5,SNR=3.2
PLCA SKP **SKPdf 16 41 28.9 +2.2**
comp=Z,4.3nm,1.0s,baz=135,slow=1.1,SNR=2.9
PLCA PKKPbc **PKKPbc 16 48 19.8 -0.8**
comp=Z,3.5nm,0.9s,baz=34,slow=3.9,SNR=6.7
**PLCA Paso Flores 117.13 143 PKPdf 16 37 54.7 -0.1**
**L48A N Adams 117.14 46 PKPdf 16 37 54.1 -0.5**
**KMBO Kilima Mbogo 117.16 265** PKP **PKiKP 16 37 56.1 +0.3**
comp=Z,29nm,1.1s,baz=52,slow=1.5,SNR=30
KMBO PKKPbc **PKKPbc 16 48 20.9 +1.1**
comp=Z,2.9nm,0.9s,baz=296,slow=2.6,SNR=3.9
**KMBO Kilima Mbogo 117.16 265**⇑ *i*P **PKPdf 16 37 55.5 -0.3**
KMBO IAmb IAmb 16 37 57.7
comp=Z,210nm,1.4s
**CLTN Cedars of Leba 117.16 53 PKPdf 16 37 54.0 -0.8**
**LRAL Lakeview Retre 117.21 56 PKPdf 16 37 54.2 -0.7**
LRAL IAMs_20 IAMs_20 17 25 00.3
comp=Z,21µm,20.0s
**LRAL Lakeview Retre 117.21 56** PKiKP **PKPdf 16 37 54.6 -0.4**
baz=280
**SFJD Kangerlussuaq 117.30 11** *i* P **PKPdf 16 37 52.4 -1.8**
**SFJD Kangerlussuaq 117.30 11 PKiKP 16 37 54.3 +0.2**
**SFJD Kangerlussuaq 117.30 11** IAMs_20 IAMs_20 17 28 52.8
comp=Z,11µm,20.0s
**LC01 Cunco 117.40 140 PKPdf 16 37 54.7 -0.5**
**BRAL Brewton 117.48 58** IAMs_20 IAMs_20 17 21 51.6
comp=Z,16µm,21.0s
**BRAL Brewton 117.48 58** PKiKP **PKPdf 16 37 55.3 -0.3**
baz=279
**U49A Red Boiling Sp 117.50 52 PKPdf 16 37 54.4 -1.1**
**Y49A Blount Mountai 117.54 55 PKPdf 16 37 55.1 -0.5**
**TETE Tete 117.55 248** *e*P **PKiKP 16 37 56.5 +0.4**
TETE IAmb IAmb 16 37 59.2
comp=Z,348nm,1.9s
**R49A Shelbyville 117.56 50 PKPdf 16 37 55.4 -0.1**
**ILGA Ilgaz 117.56 313 PKPdf 16 37 55.4 -0.4**
**AAM Ann Arbor 117.59 45 PKPdf 16 37 55.1 -0.3**
AAM IAMs_20 IAMs_20 17 22 56.1
comp=Z,16µm,21.0s
**AAM Ann Arbor 117.59 45** PKiKP **PKPdf 16 37 55.2 -0.3**
baz=287
**P49A Miami Univ. Ec 117.59 49 PKPdf 16 37 55.1 -0.4**
P49A IAMs_20 IAMs_20 17 23 19.4
comp=Z,21µm,20.0s
**P49A Miami Univ. Ec 117.59 49** PKiKP **PKPdf 16 37 55.2 -0.3**
baz=285
**N49A Columbus Grove 117.61 47 PKPdf 16 37 55.1 -0.4**
**PABE Paberze 117.64 331** *e*P **PKiKP 16 37 55.8 +0.7**
PABE *e*S PKKPbc 16 48 10.8 -8.2
**PABE Paberze 117.64 331 PKPdf 16 37 55.0 0.0**
PABE IAMs_20 IAMs_20 17 33 17.1
comp=Z,16µm,22.0s
**SWET Sewanee 117.66 54 PKPdf 16 37 54.6 -1.3**
**I49A Point Hope 117.66 44 PKPdf 16 37 55.1 -0.5**
**O49A Covington 117.70 48 PKPdf 16 37 54.8 -1.0**
**BHL Bhannes 117.76 305** *e*P **PKiKP 16 37 56.3 +0.1**
**SHBL Chebaa 117.79 304** *e*P **PKiKP 16 37 56.7 +0.3**
**ROSN Rosenhof 117.90 226** *e*P **PKiKP 16 37 57.4 +1.1**
**TBLU Trondheim 117.94 343** *e*PKPdf **PKPdf 16 37 55.1 -0.3**
**BR131 Keskin Array S 117.98 312** *i* PKIKP **PKPdf 16 37 54.9 -1.6**
**BR131 Keskin Array S 117.98 312** P **PKPdf 16 37 56.3 -0.2**
SNR=34
**BR131 Keskin Array S 117.98 312 PKPdf 16 37 55.6 -0.9**
**BRTR Keskin Array B 117.98 312** Pdiff **Pdif 16 34 15.2 +0.2**
comp=Z,0.7nm,0.8s,baz=72,slow=4.0,SNR=6.5
BRTR PKP **PKPdf 16 37 56.1 -0.4**
comp=Z,34nm,0.6s,baz=137,slow=3.2,SNR=123
BRTR PP **PP 16 39 11.2 0.0**
comp=Z,19nm,1.1s,baz=116,slow=5.7,SNR=6.7
BRTR PKKPbc **PKKPbc 16 48 18.0 +0.5**
comp=Z,12nm,0.7s,baz=222,slow=3.4,SNR=29
**BRTR Keskin Array B 117.98 312** PKPdf **PKPdf 16 37 55.9 -0.6**
**250A Grady 118.01 57 PKPdf 16 37 56.3 -0.3**
**FPAL Fort Paine 118.06 54 PKPdf 16 37 55.5 -1.1**
**T50A Nancy 118.12 52 PKPdf 16 37 55.6 -1.0**
**MMAI Mount Meron Ar 118.14 304** Pdiff **Pdif 16 34 16.7 +1.0**
comp=Z,9.1nm,1.1s,baz=258,slow=5.9,SNR=5.4
MMAI PKP **PKiKP 16 37 57.4 +0.5**
comp=Z,42nm,0.8s,baz=80,slow=9.4,SNR=64
MMAI PP **PP 16 39 16.1 +3.7**
comp=Z,51nm,1.2s,baz=81,slow=11,SNR=5.7
MMAI PKKPbc **PKKPab 16 48 18.1 -0.8**
comp=Z,7.0nm,0.6s,baz=299,slow=0.9,SNR=11
**W50A Signal Mountai 118.16 54 PKPdf 16 37 55.9 -1.0**
**R50A Paris 118.20 50 PKPdf 16 37 56.7 -0.1**
**SNKL Senekal, Frees 118.22 233**⇑ *i*P **PKiKP 16 37 57.8 +0.4**
SNKL IAmb IAmb 16 38 00.1
comp=Z,238nm,1.5s
**MQOL MQOL 118.22 290** *i* P **PKiKP 16 37 58.1 +0.8**
**M50A Fremont 118.30 46 PKPdf 16 37 56.4 -0.4**
**PURM Purcari 118.39 320**⇑P **PKiKP 16 37 57.1 +0.2**
**DY2G Dye2 118.53 9** *i* P **PKPdf 16 37 55.4 -1.5**
**HOPE Hope Point 118.56 173 PKPdf 16 37 56.7 -0.3**
**HOPE Hope Point 118.56 173** IAMs_20 IAMs_20 17 24 07.2
comp=Z,13µm,20.0s
**BR231 Keskin MP Arra 118.59 312 PKPdf 16 37 57.2 -0.4**
**X51A Calhoun 118.66 54 PKPdf 16 37 57.0 -0.7**
**Z51A Franklin 118.66 56 PKPdf 16 37 57.0 -0.8**
**TGUH Tegucigalpa,Un 118.68 78** IAMs_20 IAMs_20 17 22 35.6
comp=Z,19µm,19.0s
**ACSO Alum Creek Sta 118.68 48 PKPdf 16 37 56.8 -0.8**
ACSO IAMs_20 IAMs_20 17 32 03.0
comp=Z,12µm,19.0s
**ACSO Alum Creek Sta 118.68 48** PKiKP **PKPdf 16 37 57.3 -0.3**
baz=287
**SORM Soroca 118.71 322**⇑P **PKPdf 16 37 57.2 -0.2**
**SORM Soroca 118.71 322**⇑PKIKP **PKPdf 16 37 57.2 -0.2**
**MSNA Messina 118.72 240**⇑*i*P **PKiKP 16 37 59.0 +0.6**
MSNA IAmb IAmb 16 38 01.5
comp=Z,131nm,1.2s
**CPCT Cooper Cave 118.73 53 PKPdf 16 37 57.0 -0.9**
**Q51A Peebles 118.75 49 PKPdf 16 37 57.1 -0.7**
**V51A Loudon 118.79 53 PKPdf 16 37 57.1 -0.8**
**SUW Suwalki 118.82 330** *e*PKPdf **PKiKP 16 37 58.0 +0.5**
SUW *e*L L 17 25 42.7
comp=Z,8µm,25.0s
**SUW Suwalki 118.82 330** *e*P **PKiKP 16 37 58.2 +0.7**
SUW *e*S **PKKPbc 16 48 12.3 -2.4**
**SUW Suwalki 118.82 330 PKPdf 16 37 57.0 -0.4**
SUW IAMs_20 IAMs_20 17 32 58.3
comp=Z,14µm,21.0s
**P51A Williamsport 118.84 48 PKPdf 16 37 56.7 -1.3**
**SLR Silverton 118.88 236**⇑ *i*P **PKPdf 16 37 58.6 -0.1**
SLR IAmb IAmb 16 38 00.9
comp=Z,568nm,2.0s
**KIS Kishinev 118.88 321** *e*PP PP 16 39 26.0 +9.2
KIS *e*LR LR 17 22 25.0
comp=Z,2µm,22.5s
**MILM Milestii Mici 118.92 321** *e*PKP **PKPdf 16 37 57.0 -0.8**
comp=Z,50nm,0.5s
**MILM Milestii Mici 118.92 321** *e*PP PP 16 39 26.0 +9.0
MILM *e*LR LR 17 22 10.0
comp=Z,5µm,25.0s
**MILM Milestii Mici 118.92 321**⇑P **PKPdf 16 37 57.5 -0.3**
**MILM Milestii Mici 118.92 321** *e*PKIKP **PKPdf 16 37 57.0 -0.8**
MILM *e* 16 38 09.0
MILM pmax pmax
comp=Z,50nm,0.5s
MILM MLR MLR
comp=E,5µm,25.0s
MILM MLR MLR
comp=N,5µm,22.5s
**N51A Ashland 118.92 47 PKPdf 16 37 57.2 -0.9**
**S51A Beattyville 118.93 51 PKPdf 16 37 57.3 -0.9**
**NC405 NORSAR Array S 119.08 340 PKPdf 16 37 56.8 -1.0**
**HFS Hagfors 119.10 339** PKP **PKPdf 16 37 57.3 -0.5**
comp=N,25nm,0.5s,baz=106,slow=3.7,SNR=80
HFS PKKPbc **PKKPab 16 48 14.8 +0.8**
comp=N,5.0nm,0.7s,baz=194,slow=1.1,SNR=6.3
**EIL Elat 119.11 300** PKP **PKiKP 16 37 59.1 +0.3**
comp=N,54nm,0.7s,baz=110,slow=0.8,SNR=42
EIL PKKPbc **PKKPab 16 48 14.5 -0.1**
comp=N,9.9nm,0.7s,baz=129,slow=0.9,SNR=7.3
**NC303 NORSAR Array S 119.11 341 PKPdf 16 37 57.1 -0.8**
**PRYS Parys 119.13 234**⇑ *i*P **PKiKP 16 37 59.3 +0.1**
PRYS IAmb IAmb 16 38 01.1
comp=Z,117nm,1.6s
**DOMB Dombas 119.22 342** *e*PKPdf **PKPdf 16 37 57.6 -0.4**
DOMB *e*SP SP 16 49 01.9 +1.2
**TZTN Tazewell 119.24 52 PKPdf 16 37 58.4 -0.5**
**TZTN Tazewell 119.24 52** PKiKP **PKPdf 16 37 58.7 -0.1**
baz=284
**MOL Molde 119.26 343** *e*PKPdf **PKiKP 16 37 58.3 +0.2**
MOL *e*SP SP 16 49 01.5 +0.6
**NB201 NORSAR Array S 119.27 341 PKPdf 16 37 57.7 -0.5**
**NC204 NORSAR Array S 119.27 341 PKPdf 16 37 57.7 -0.5**
**TKL Tuckaleechee C 119.28 53 PKPdf 16 37 58.5 -0.4**
**W52A Murphy 119.29 53 PKPdf 16 37 58.2 -0.8**
**NB2 NORSAR Subarra 119.30 341** PKPdf **PKPdf 16 37 57.7 -0.5**
comp=Z,33nm,0.7s,baz=40,slow=1.9
**NB2 NORSAR Subarra 119.30 341** PKPdf **PKPdf 16 37 57.7 -0.5**
baz=40,slow=1.9
**NOA NORSAR Array B 119.30 341** PKP **PKPdf 16 37 57.8 -0.5**
comp=Z,18nm,0.6s,baz=45,slow=1.9,SNR=110
NOA PKKPbc **PKKPab 16 48 12.0 -1.2**
comp=Z,5.9nm,0.8s,baz=42,slow=3.6,SNR=20
**V52A Sevierville 119.38 53 PKPdf 16 37 58.0 -1.1**
**CSS Mathiatis 119.41 306 PKPdf 16 37 58.6 -0.7**
**NC602 NORSAR Array S 119.42 340** *e*PKPdf **PKPdf 16 37 58.2 -0.2**
NC602 *e*SP SP 16 49 03.9 +1.5
**NC602 NORSAR Array S 119.42 340 PKPdf 16 37 57.9 -0.5**
**LEOM Leova 119.45 320**⇑P **PKiKP 16 37 59.5 +0.6**
**LEOM Leova 119.45 320**⇑PKIKP **PKiKP 16 37 59.5 +0.6**
**NBO00 NORSAR Array S 119.45 341 PKPdf 16 37 57.3 -1.2**
**Y52A Lilburn 119.46 55 PKPdf 16 37 58.8 -0.6**
**M52A Chesterland 119.46 46 PKPdf 16 37 58.4 -0.7**
**P52A Corning 119.48 48 PKPdf 16 37 58.0 -1.1**
P52A IAMs_20 IAMs_20 17 37 23.2
comp=Z,13µm,18.0s
**P52A Corning 119.48 48** PKiKP **PKPdf 16 37 58.6 -0.6**
baz=287
**NAO01 NORSAR Array S 119.55 341 PKPdf 16 37 58.4 -0.3**
**O52A Adamsville 119.56 47 PKPdf 16 37 58.3 -1.0**
**VLDG Val d'Or 119.56 38 PKPdf 16 37 57.5 -1.5**
**MDUB Mudurnu 119.56 313 PKPdf 16 37 58.4 -1.1**
**LODK Lodwar 119.58 270** P **PKiKP 16 38 01.5 +1.2**
SNR=25
**Q52A Bidwell 119.58 49 PKPdf 16 37 58.3 -1.0**
**TLCR 119.59 319**⇑P **PKiKP 16 37 59.4 +0.2**
**TLCR 119.59 319**⇑PKIKP **PKiKP 16 37 59.4 +0.2**
**VASR Vaslui 119.67 321**⇑P **PKPdf 16 37 58.1 -1.3**
**AKN Aaknes 119.73 343** *e*PKPdf **PKiKP 16 37 59.5 +0.4**
**LEF Lefka 119.73 307**⇑P **PKPdf 16 37 59.7 -0.1**
**VLDR Vladesti 119.81 320**⇑P **PKiKP 16 38 00.3 +0.6**
**SADO Sadowa 119.85 42 PKPdf 16 37 58.6 -1.1**
**TATR Tatarca 119.92 320**⇑P **PKiKP 16 38 00.4 +0.5**
**BIR Birlad 119.93 320**⇑P **PKiKP 16 38 00.5 +0.6**
**BIR Birlad 119.93 320**⇑PKIKP **PKiKP 16 38 00.5 +0.6**
**SCTR Scanteiesti 119.93 320**⇑P **PKiKP 16 38 00.8 +0.9**
**VARL Varlezi 119.93 320**⇑P **PKiKP 16 38 00.1 +0.2**
**KLNR Kaliningrad 119.94 331** *i* PKIKP **PKiKP 16 37 59.8 +0.2**
KLNR pmax pmax
comp=Z,389nm,1.5s
**O53A New Philadelph 119.97 47 PKPdf 16 37 59.0 -1.1**
O53A IAMs_20 IAMs_20 17 28 29.0
comp=Z,17µm,22.0s
**O53A New Philadelph 119.97 47** PKiKP **PKPdf 16 37 59.9 -0.2**
baz=288
**TPGR Topolog 119.97 319**⇓P **PKiKP 16 38 00.2 +0.1**
**M53A WI Miller and 119.97 46 PKPdf 16 37 59.0 -1.0**
**M53A WI Miller and 119.97 46** PKiKP **PKPdf 16 37 59.7 -0.4**
baz=289
**R53A Hurricane 119.99 49 PKPdf 16 37 59.4 -0.8**
**CFR Carcaliu 120.03 319**⇑P **PKiKP 16 38 00.3 +0.2**
**CFR Carcaliu 120.03 319**⇑PKIKP **PKiKP 16 38 00.3 +0.2**
**V53A Saluda 120.04 53 PKPdf 16 38 00.0 -0.4**
**GOGA Godfrey 120.04 55 PKPdf 16 37 59.8 -0.6**
**GOGA Godfrey 120.04 55** IAMs_20 IAMs_20 17 32 20.9
comp=Z,16µm,19.0s
**GOGA Godfrey 120.04 55** PKiKP **PKPdf 16 38 00.2 -0.2**
baz=283
**BOSA Boshof 120.05 232** PKP **PKiKP 16 38 01.4 +0.5**
comp=Z,40nm,0.8s,baz=122,slow=1.9,SNR=55
BOSA PKKPbc **PKKPbc 16 48 10.1 +0.4**
comp=Z,15nm,0.6s,baz=299,slow=3.3,SNR=29
**BOSA Boshof 120.05 232**⇑ *i*P **PKiKP 16 38 01.2 +0.3**
BOSA IAmb IAmb 16 38 03.1
comp=Z,426nm,2.0s
**N53A Lisbon 120.06 46 PKPdf 16 37 59.7 -0.6**
**P53A Whipple 120.07 48 PKPdf 16 37 59.7 -0.6**
**SCHL Schela 120.10 319**⇑P **PKPdf 16 37 59.9 -0.2**
**BG3 Lake Jocassee 120.11 53 PKPdf 16 38 00.0 -0.5**
**SLCR Slobozia Conac 120.11 320**⇑P **PKiKP 16 38 01.2 +0.9**
**IZVR Izvoarele 120.13 320**⇑P **PKiKP 16 38 00.6 +0.3**
**TIRR Tirgusor 120.13 318**⇑P **PKiKP 16 38 00.3 0.0**
**TIRR Tirgusor 120.13 318**⇑PKIKP **PKiKP 16 38 00.3 0.0**
**TIRR Tirgusor 120.13 318 PKPdf 16 37 59.7 -0.5**
TIRR IAMs_20 IAMs_20 17 31 11.0
comp=Z,21µm,22.0s
**MFTR Murfatlar 120.23 318**⇓P **PKiKP 16 38 01.0 +0.5**
**ERPA Erie 120.23 45 PKPdf 16 38 00.0 -0.5**
ERPA IAMs_20 IAMs_20 17 24 15.9
comp=Z,20µm,21.0s
**ERPA Erie 120.23 45** PKiKP **PKPdf 16 38 00.2 -0.4**
baz=290
**MANR Mangalia 120.25 317**⇑P **PKiKP 16 38 00.9 +0.4**
**ALLY Alegheny Colle 120.28 45 PKPdf 16 37 59.9 -0.8**
**OSL Oslo 120.28 340** *e*PKPdf **PKPdf 16 38 00.1 0.0**
**BORA Eskisehir 120.29 313 PKPdf 16 38 00.2 -0.6**
**TLBR Topalu 120.34 318**⇑P **PKiKP 16 38 01.3 +0.6**
**PRAR RASCA 120.34 322**⇑P **PKiKP 16 38 01.0 +0.3**
**TIGA Tifton 120.35 57 PKPdf 16 37 59.9 -1.1**
**TIGA Tifton 120.35 57** PKiKP **PKPdf 16 38 00.8 -0.3**
baz=282
**HARR Harsova 120.36 319**⇓P **PKiKP 16 38 01.2 +0.4**
**HARR Harsova 120.36 319**⇓PKIKP **PKiKP 16 38 01.2 +0.4**
**PANC Panciu 120.39 320**⇑P **PKiKP 16 38 01.6 +0.8**
**TESR Tescani 120.44 321**⇑P **PKPdf 16 38 00.8 -0.1**
**BO02 Sierra Bellavi 120.48 137 PKPdf 16 38 00.9 -0.5**
**ANGG Ammassalik, Gr 120.50 6** *e*P **PKPdf 16 37 59.4 -0.9**
**LVV L'vov 120.50 325** *i* PKIKP **PKPdf 16 38 00.6 -0.2**
LVV *e* 16 38 17.5
LVV *e* 16 39 30.9
LVV *e* 16 44 59.5
LVV *e*PS **PS 16 49 15.0 -4.4**
LVV MLR MLR
comp=E,8µm,24.0s
LVV MLR MLR
comp=N,3µm,21.0s
LVV MLR MLR
comp=Z,9µm,23.0s
**SKAR Skarslia 120.51 342** *e*PKPdf **PKPdf 16 38 00.6 +0.1**
SKAR *e*SP SP 16 48 59.7 -13
**PSN Preselentsi 120.57 317** *i* P **PKiKP 16 38 01.4 +0.2**
**U54A Nelsons Funny 120.59 51 PKPdf 16 38 00.9 -0.6**
**O54A Avella 120.60 47 PKPdf 16 38 01.1 -0.2**
**N54A Moraine State 120.62 46 PKPdf 16 38 00.8 -0.6**
**N54A Moraine State 120.62 46** PKiKP **PKPdf 16 38 01.1 -0.2**
baz=290
**S54A Dingess, Beckl 120.63 50 PKPdf 16 38 00.7 -0.9**
**Q54A Coxs Mills 120.64 48 PKPdf 16 38 00.7 -0.8**
**SWZ Schweizer 120.64 233** *e*P **PKiKP 16 38 02.1 0.0**
SWZ IAmb IAmb 16 38 04.3
comp=Z,406nm,1.9s
**VRI Vrincioaia 120.66 320**⇑P **PKPdf 16 38 01.0 -0.3**
**VRI Vrincioaia 120.66 320**⇑PKIKP **PKPdf 16 38 01.0 -0.3**
**ICOR Ion Corvin 120.67 318**⇑P **PKiKP 16 38 01.9 +0.5**
**M54A Oil Creek Stat 120.67 45 PKPdf 16 38 00.6 -0.8**
**M54A Oil Creek Stat 120.67 45** PKiKP **PKPdf 16 38 01.1 -0.3**
baz=290
**MT01 Popeta 120.68 136 PKPdf 16 38 01.1 -0.6**
**PLOR Plostina 120.72 320**⇑P **PKPdf 16 38 00.7 -0.7**
**PLOR Plostina 120.72 320**⇑PKIKP **PKPdf 16 38 00.7 -0.7**
**MATP Matopo 120.74 242** PKP **PKiKP 16 38 02.5 +0.1**
comp=Z,22nm,0.6s,baz=123,slow=4.2,SNR=40
MATP PKKPbc **PKKPab 16 48 08.2 -0.3**
comp=Z,5.2nm,0.7s,baz=348,slow=8.1,SNR=9.3
**BLWY Bulawayo 120.74 242**⇑ *i*P **PKiKP 16 38 02.5 +0.1**
BLWY IAmb IAmb 16 38 04.3
comp=Z,459nm,0.8s
**J54A Appleton 120.75 43 PKPdf 16 38 00.6 -0.9**
**FOO Floro 120.75 344** *e*PKPdf **PKiKP 16 38 01.2 +0.2**
FOO *e*SP SP 16 49 15.4 +1.2
**AMRR Amara 120.78 319**⇑P **PKiKP 16 38 03.0 +1.4**
**AMRR Amara 120.78 319**⇑PKIKP **PKiKP 16 38 03.0 +1.4**
**BISRR Bisoca 120.81 320**⇑P **PKiKP 16 38 02.4 +0.7**
**BURAR Bucovina Array 120.84 323 PKPdf 16 38 01.5 -0.2**
**ISP Isparta 120.86 310 PKPdf 16 38 00.8 -1.2**
**VA01 Torpederas 120.86 135 PKPdf 16 38 01.7 -0.4**
**KONO Kongsberg 120.88 340***c* *i*PKIKP **PKPdf 16 38 00.5 -0.7**
KONO pmax pmax
comp=Z,112nm,1.7s
**KONO Kongsberg 120.88 340** *e*PKPdf **PKPdf 16 38 00.9 -0.3**
**KONO Kongsberg 120.88 340 PKPdf 16 38 00.9 -0.3**
**KONO Kongsberg 120.88 340** IAMs_20 IAMs_20 17 31 53.2
comp=Z,12µm,21.0s
**PGOR Pogoanele 120.89 319**⇑P **PKPdf 16 38 01.3 -0.3**
**JTS Las Juntas de 120.89 82** IAMs_20 IAMs_20 17 22 33.5
comp=Z,11µm,20.0s
**MT09 Talagante 120.91 136 PKPdf 16 38 01.5 -0.8**
**DELO Deloro Mine 120.95 41 PKPdf 16 38 01.1 -0.7**
**ELIM Elim 120.97 223**⇑ *i*P **PKiKP 16 38 03.2 +0.8**
ELIM IAmb IAmb 16 38 05.0
comp=Z,740nm,1.8s
**PAULI Pauline 121.04 53 PKPdf 16 38 01.8 -0.5**
**RASA Rasa 121.06 318**⇑P **PKiKP 16 38 02.2 0.0**
**WVNY West Valley, N 121.09 44 PKPdf 16 38 01.5 -0.7**
**MT02 Curacav 121.09 135 PKPdf 16 38 01.9 -0.7**
**NEHR Nehoiu 121.12 320**⇑P **PKiKP 16 38 02.5 +0.2**
**MCWV Mont Chateau 121.15 47 PKPdf 16 38 01.9 -0.5**
**MCWV Mont Chateau 121.15 47** PKiKP **PKPdf 16 38 02.0 -0.4**
baz=289
**OZUR 121.16 321**⇑P **PKPdf 16 38 02.2 -0.1**
**LEHL Lehliu 121.17 319**⇑P **PKiKP 16 38 02.4 +0.1**
**BEL Belsk 121.21 329** *e*PKPdf **PKiKP 16 38 03.2 +0.9**
**V55A Taylorsville 121.24 52 PKPdf 16 38 02.3 -0.4**
**SUE Sulen 121.27 343** *e*PKPdf **PKiKP 16 38 05.4 +3.4**

PRD Provadia 121.28 317 *i* P PKiKP 16 38 03.4 +0.8
J55A Hilton 121.30 43 PKPdf 16 38 02.3 -0.3
M55A Ridgway 121.31 45 PKPdf 16 38 02.2 -0.4
MLR Muntele Rosu 121.32 320 ⇑P PKPdf 16 38 02.7 0.0
MLR Muntele Rosu 121.32 320 PKP PKPdf 16 38 02.5 -0.2
comp=Z,39nm,0.7s,baz=0.8,slow=2.6,SNR=43
MLR PKKPbc PKKPbc 16 48 05.3 0.0
comp=Z,19nm,0.6s,baz=192,slow=3.6,SNR=18
MLR Muntele Rosu 121.32 320 ⇑PKiKP PKPdf 16 38 02.7 0.0
MLR Muntele Rosu 121.32 320 PKPdf 16 38 01.9 -0.8
MLR PKKPab 16 48 03.4 -1.4
MLR IAMs_20 IAMs_20 17 35 07.3
comp=Z,11µm,21.0s
ROC1 El Roble 121.33 135 PKPdf 16 38 01.8 -1.6
KWP Kalwaria Pacla 121.34 326 *e*PKPdf PKiKP 16 38 03.2 +0.6
KWP *e*L L 17 28 36.9
comp=Z,12µm,25.5s
KWP Kalwaria Pacla 121.34 326 PKPdf 16 38 02.3 -0.2
KMSC Kings Mountain 121.34 53 PKPdf 16 38 02.4 -0.5
KMSC Kings Mountain 121.34 53 PKiKP PKPdf 16 38 02.9 0.0
baz=285
LBTB Lobatse 121.38 235 PKP PKiKP 16 38 04.0 +0.4
comp=Z,35nm,0.7s,baz=142,slow=3.8,SNR=32
LBTB Lobatse 121.38 235⇑*i*P PKiKP 16 38 04.2 +0.6
LBTB IAmb IAmb 16 38 05.8
comp=Z,364nm,1.8s
LBTB Lobatse 121.38 235 PKPdf 16 38 02.7 -0.7
R55A Marlinton 121.38 49 PKPdf 16 38 02.7 -0.2
LMEL Las Melosas 121.41 136 PKPdf 16 38 02.9 -0.5
SECR 121.43 320 ⇑P PKiKP 16 38 03.3 +0.4
MMNY Mt. Morris Dam 121.45 43 PKPdf 16 38 02.1 -0.8
SULR 121.46 319 ⇑P PKiKP 16 38 03.0 +0.1
DOPR Dopca 121.47 321 ⇑P PKiKP 16 38 03.3 +0.3
SUR Sutherland 121.47 226 PKP PKiKP 16 38 04.9 +1.3
comp=Z,62nm,0.7s,baz=160,slow=2.0,SNR=30
SUR PKKPbc PKKPab 16 48 05.4 -0.1
comp=Z,7.1nm,0.6s,baz=288,slow=3.7,SNR=12
SUR Sutherland 121.47 226 PKiKP 16 38 04.8 +1.1
SUR Sutherland 121.47 226 IAMs_20 IAMs_20 17 24 45.0
comp=Z,15µm,20.0s
PEL Peldehue 121.47 135 PKPdf 16 38 02.6 -0.8
BLA Blacksburg 121.48 50 PKPdf 16 38 02.4 -0.7
BLA Blacksburg 121.48 50 PKiKP PKPdf 16 38 02.8 -0.3
baz=287
DEL Delary 121.57 336 *e*P PKiKP 16 38 02.8 +0.1
SCHQ Schefferville 121.58 27 PKP PKPdf 16 38 02.5 -0.3
comp=Z,16nm,0.5s,baz=294,slow=2.2,SNR=43
SCHQ PKKPbc PKKPab 16 48 02.5 -0.7
comp=Z,11nm,0.7s,baz=106,slow=3.6,SNR=19
PECO Prince Edward 121.59 42 PKPdf 16 38 02.4 -0.7
ARCR ARCALIA 121.60 322 ⇑P PKiKP 16 38 03.6 +0.5
ASK Askoy 121.61 343 *e*PKPdf PKiKP 16 38 02.9 +0.1
ODD1 Odda 121.63 342 *e*PKPdf PKiKP 16 38 03.2 +0.3
ELL Elmali 121.63 309 PKPdf 16 38 02.9 -0.7
BER Bergen 121.65 343 *e*PKPdf PKiKP 16 38 03.3 +0.5
HDC Heredia 121.71 82 IAMs_20 IAMs_20 17 18 55.2
comp=Z,12µm,22.0s
RAZG Razgrad 121.74 318 ⇑P PKPdf 16 38 03.2 -0.2
U56A King 121.75 51 PKPdf 16 38 03.2 -0.5
VA03 San Esteban 121.78 135 PKPdf 16 38 03.4 -0.6
SGRR Singureni 121.83 319 ⇑P PKiKP 16 38 03.9 +0.3
Q56A Snyder Ridge, 121.84 48 PKPdf 16 38 03.3 -0.4
BMR Baia Mare 121.84 323 ⇑P PKiKP 16 38 03.7 +0.1
BMR Baia Mare 121.84 323 ⇑PKiKP PKiKP 16 38 03.7 +0.1
O56A Blue Knob Stat 121.88 46 PKPdf 16 38 03.3 -0.5
O56A Blue Knob Stat 121.88 46 PKiKP PKPdf 16 38 03.7 -0.1
baz=290
L56A Greenwood 121.91 44 PKPdf 16 38 03.1 -0.7
VOIR 121.91 320 ⇑P PKiKP 16 38 03.9 0.0
VOIR 121.91 320 ⇑PKiKP PKiKP 16 38 03.9 0.0
J56A Wolcott 121.94 42 PKPdf 16 38 03.5 -0.2
MTUR Matau 121.99 320 ⇑P PKPdf 16 38 03.5 -0.5
MTUR Matau 121.99 320 ⇑PKiKP PKPdf 16 38 03.5 -0.5
AKAS Kas 122.02 309 PKPdf 16 38 03.2 -1.1
BSD Bornholm Skovb 122.03 334 *e*P PKiKP 16 38 04.2 +0.4
BSD Bornholm Skovb 122.03 334 *e*P PKiKP 16 38 03.8 +0.1
BLS5 Blasjo 122.07 342 *e*PKPdf PKiKP 16 38 04.0 +0.2
UZH Uzhgorod 122.08 325⇑*i*PKiKP PKPdf 16 38 02.6 -1.3
JMB Yambol 122.12 317 *i* P PKiKP 16 38 04.9 +0.6
CO06 Fray Jorge 122.13 133 PKPdf 16 38 03.9 -0.7
GKP Gorka Klasztor 122.15 331 *e*PKPdf PKiKP 16 38 04.8 +0.8
GKP *e*L L 17 31 08.6
comp=Z,19µm,24.1s
GKP Gorka Klasztor 122.15 331 *e*P PKiKP 16 38 05.2 +1.2
TRPA Tarpa 122.18 324 ⇑P PKPdf 16 38 04.1 +0.1
TRPA Tarpa 122.18 324 PKPDF PKPdf 16 38 04.0 -0.1
TRPA PKiKP PKiKP 16 38 04.4 +0.2
ARR Arges 122.20 320 ⇓P PKiKP 16 38 05.3 +0.8
STFAR Stefanesti-Arg 122.22 320 ⇑P PKPdf 16 38 04.3 0.0
SSPA Standing Stone 122.23 46 PKPdf 16 38 04.0 -0.4
SSPA Standing Stone 122.23 46 IAMs_20 IAMs_20 17 24 25.7
comp=Z,17µm,22.0s
SSPA Standing Stone 122.23 46 PKiKP PKPdf 16 38 04.3 -0.1
baz=291
CJR Cluj-Napoca 122.23 322 ⇑P PKiKP 16 38 05.1 +0.6
CJR Cluj-Napoca 122.23 322 ⇑PKiKP PKiKP 16 38 05.1 +0.6
SZH Strazhica 122.25 318 *i* P PKPdf 16 38 04.2 -0.2
STHS Stebnicka Huta 122.27 326 *e*PKP PKiKP 16 38 04.4 0.0
HOMB Homborsund 122.29 340 *e*PKPdf PKPdf 16 38 04.0 +0.1
CO02 Combarbal 122.31 133 PKPdf 16 38 04.7 -0.4
HUMR Humele 122.35 319 ⇑P PKPdf 16 38 04.6 +0.1
COPA Copaceanca 122.36 319 ⇑P PKPdf 16 38 04.6 0.0
K57A Scipio Center 122.39 43 PKPdf 16 38 04.2 -0.5
W57A Gilead 122.39 52 PKPdf 16 38 04.5 -0.3
CRVS Cervenica-Dubn 122.41 325 *e*PKP PKiKP 16 38 04.9 +0.2
CRVS *e* 16 48 01.6
T57A Hurt 122.43 50 PKPdf 16 38 04.5 -0.5
ZIMR 122.46 318 ⇑P PKiKP 16 38 05.0 +0.1
ZIMR 122.46 318 ⇑PKiKP PKiKP 16 38 05.0 +0.1
J57A Williamstown 122.47 42 PKPdf 16 38 04.4 -0.4
M57A Sunshine Farm, 122.51 45 PKPdf 16 38 04.6 -0.3
P57A Homestead Farm 122.55 47 PKPdf 16 38 04.5 -0.6
KMY Karmoy 122.62 342 *e*PKPdf PKiKP 16 38 05.0 +0.3
OJC Ojcow 122.62 327 *e*PKPdf PKiKP 16 38 05.5 +0.4
OJC *e*SS SS 16 56 35.2 +15
OJC *e*L L 17 28 25.9
comp=Z,8µm,25.7s
OJC Ojcow 122.62 327 PKPdf 16 38 04.7 -0.2
PVL Pavlikeni 122.67 318 *i* P PKiKP 16 38 05.5 +0.1
SNART Snartemo 122.68 340 *e*PKPdf PKiKP 16 38 05.1 +0.2
COP Copenhagen 122.69 336 *e*P PKiKP 16 38 05.7 +0.7
CVNA Calvinia 122.70 226⇑*i*P PKiKP 16 38 07.1 +1.1
CVNA IAmb IAmb 16 38 09.8
comp=Z,149nm,1.1s
LOT Lotru 122.71 321 ⇑P PKPdf 16 38 05.1 -0.3
CO03 El Pedregal 122.73 133 PKPdf 16 38 05.2 -0.7
DRGR 122.73 323 ⇑P PKiKP 16 38 05.4 -0.1
DRGR 122.73 323 ⇑PKiKP PKiKP 16 38 05.4 -0.1
LSZ Lusaka 122.76 247 PKP PKiKP 16 38 07.0 +0.6
comp=Z,34nm,0.6s,baz=106,slow=1.5,SNR=48
NHSC New Hope 122.79 55 IAMs_20 IAMs_20 17 28 07.6
comp=Z,17µm,20.0s
NHSC New Hope 122.79 55 PKiKP PKPdf 16 38 05.7 0.0
baz=285
NIE Niedzica 122.79 326 *e*PKPdf PKiKP 16 38 06.9 +1.4
NIE *e*L L 17 30 22.6
comp=Z,7µm,25.3s
JAWL J.Aulia 122.82 284 *i* P PKiKP 16 38 07.1 +0.6
JAWL *i* 16 38 20.2
baz=331,slow=22
CO05 La Serena 122.82 132 PKPdf 16 38 05.1 -0.8
DWPF Disney Wildern 122.83 61 IAMs_20 IAMs_20 17 26 20.5
comp=Z,13µm,22.0s
DWPF Disney Wildern 122.83 61 PKiKP PKPdf 16 38 05.7 -0.2
baz=281
LONY Lake Ozonia 122.87 40 PKiKP PKPdf 16 38 05.3 -0.3
baz=296
LTVH Ltavrtes, Hu 122.93 324 ⇑P PKPdf 16 38 05.4 -0.2
LTVH Ltavrtes, Hu 122.93 324 PKPDF PKiKP 16 38 07.2 +1.5
IVI Ivigtut 122.93 13 *i* P PKPdf 16 38 03.3 -1.8
IVI Ivigtut 122.93 13 PKPdf 16 38 05.0 -0.1
VLAD Vladila 122.95 319 ⇑P PKiKP 16 38 06.9 +1.0
J58A Remsen 122.96 42 PKPdf 16 38 05.3 -0.5
BINY Binghamton 122.96 43 PKPdf 16 38 05.3 -0.6
BINY Binghamton 122.96 43 PKiKP PKPdf 16 38 05.6 -0.2
baz=294
N58A Sunbury 122.98 45 PKPdf 16 38 05.3 -0.6
GO04 Tololo Observa 123.01 132 PKPdf 16 38 05.5 -1.1
DEV Deva 123.05 322 ⇑P PKiKP 16 38 06.3 +0.2
DEV Deva 123.05 322 ⇑PKiKP PKiKP 16 38 06.3 +0.2
MNTQ Montreal, Queb 123.08 39 PKPdf 16 38 05.0 -0.8
ALN Alexandroupoli 123.09 315 PKPdf PKPdf 16 38 04.9 -1.2

RGN Rugen 123.10 334 IAMs_20 IAMs_20 17 36 16.3
comp=Z,12µm,21.0s
KECS Kecovo 123.18 325 *e*PKP PKiKP 16 38 06.2 0.0
PAGS Pennsylvania G 123.21 46 PKPdf 16 38 05.5 -0.7
KDZ Kurdzhali 123.24 316 *i* P PKPdf 16 38 06.3 -0.1
JSRW J. Sargeant Re 123.25 49 PKPdf 16 38 05.6 -0.8
UPI Upington 123.25 230⇑*i*P PKiKP 16 38 07.6 +0.5
UPI IAmb IAmb 16 38 10.0
comp=Z,227nm,1.6s
KEIM Keimoes 123.29 229⇑*i*P PKiKP 16 38 08.0 +0.8
KEIM IAmb IAmb 16 38 10.7
comp=Z,770nm,1.9s
GZR Gura Zlata 123.36 321 ⇑P PKPdf 16 38 06.4 -0.1
GZR Gura Zlata 123.36 321 ⇑PKiKP PKPdf 16 38 06.4 -0.1
KSPA Keystone Colle 123.37 44 PKPdf 16 38 06.4 -0.2
NCB Newcomb 123.39 41 PKPdf 16 38 06.2 -0.4
LANS Liptovska Anna 123.39 326 *e*PKP PKiKP 16 38 07.8 +1.1
LANS *e* 16 47 58.4
FRNY Flat Rock 123.41 40 PKPdf 16 38 05.8 -0.8
MUD Monsted U'grnd 123.41 338 *e*P PKiKP 16 38 06.3 -0.1
SDMD Soldier's Deli 123.42 47 PKPdf 16 38 06.2 -0.6
SRE Strehaia 123.42 320 ⇑P PKiKP 16 38 07.3 +0.5
SRE Strehaia 123.42 320 ⇑PKiKP PKiKP 16 38 07.3 +0.5
J59A Piesco 123.43 41 PKPdf 16 38 06.2 -0.5
CBN Corbin Frederi 123.45 48 PKiKP PKPdf 16 38 06.7 -0.2
baz=290
NRS Narsarsuaq 123.56 12 *i* P PKPdf 16 38 04.3 -2.0
NRS Narsarsuaq 123.56 12 PKPdf 16 38 05.7 -0.7
NRS IAMs_20 IAMs_20 17 28 43.3
comp=Z,18µm,20.0s
MVL Millersville 123.56 46 PKPdf 16 38 06.3 -0.7
L59A Walton 123.61 43 PKPdf 16 38 06.3 -0.8
LRW Lerwick 123.61 346 *e*P PKPdf 16 38 06.5 +0.1
N59A State Game Lan 123.62 45 PKPdf 16 38 06.7 -0.4
N59A State Game Lan 123.62 45 PKiKP PKPdf 16 38 07.1 0.0
baz=293
SIRR Siria 123.62 323 ⇑P PKiKP 16 38 07.5 +0.3
BAIL Bailesti 123.62 319 ⇑P PKiKP 16 38 08.0 +0.8
MBAR Mbarara 123.68 265 PKP PKiKP 16 38 09.2 +0.7
comp=Z,80nm,1.2s,baz=74,slow=3.5,SNR=69
MBAR Mbarara 123.68 265*c i*PKiKP PKPdf 16 38 07.9 -0.3
MBAR pmax pmax
comp=Z,217nm,1.7s
MBAR Mbarara 123.68 265 PKPdf 16 38 07.8 -0.5
MBAR Mbarara 123.68 265 IAMs_20 IAMs_20 17 28 54.7
comp=Z,9µm,21.0s
RZN Rozhen 123.71 316 *i* P PKPdf 16 38 07.3 -0.2
OKC Ostrava-Krasne 123.72 328 *e*PKiKP PKiKP 16 38 08.6 +1.3
OKC MLR MLR
comp=E,8µm,23.2s
OKC MLR MLR
comp=Z,9µm,21.3s
OKC Ostrava-Krasne 123.72 328 *e*PKPDF PKiKP 16 38 08.6 +1.3
OKC AMS AMS 17 33 40.0
OKC AMS AMS 17 35 50.0
comp=Z,9µm,21.3s
T59A Double "B" Far 123.73 50 PKPdf 16 38 07.3 -0.1
ZON Zonda 123.77 135 PKPdf 16 38 07.3 -0.5
PUNG Punghina 123.77 320 ⇑P PKPdf 16 38 07.3 +0.1
PSZ Piszkesteto 123.82 325 ⇑P PKiKP 16 38 07.6 -0.1
PSZ Piszkesteto 123.82 325 ⇑PKiKP PKiKP 16 38 07.6 -0.1
PSZ Piszkesteto 123.82 325 PKiKP 16 38 07.7 0.0
PSZ IAMs_20 IAMs_20 17 37 02.0
comp=Z,12µm,21.0s
PSZ Piszkesteto 123.82 325 PKiKP PKiKP 16 38 07.6 0.0
PSZ PKPDF PKiKP 16 38 07.5 0.0
AUGR Augrabies 123.82 229 *e*P PKiKP 16 38 09.0 +0.8
HERR Herculane 123.82 321 ⇑P PKPdf 16 38 07.3 0.0
DJES Djerdap 123.86 320 ⇑P PKiKP 16 38 14.1 +6.4
BSZH Besenyszg 123.93 324 PKPDF PKiKP 16 38 09.6 +1.9
BZS Buzias 123.97 322 ⇑P PKPdf 16 38 07.7 +0.1
BZS Buzias 123.97 322 ⇑PKiKP PKPdf 16 38 07.7 +0.1
ACCN Adirondack Com 124.01 41 PKPdf 16 38 07.1 -0.7
CNNC Cliffs of the 124.02 52 PKiKP PKPdf 16 38 07.9 0.0
baz=288
LMQ La Malbaie 124.04 35 PKPdf 16 38 06.9 -0.8
MORC Moravsky Berou 124.08 328 ⇑P PKiKP 16 38 08.6 +0.5
MORC Moravsky Berou 124.08 328 ⇑PKiKP PKiKP 16 38 08.6 +0.5
MORC Moravsky Berou 124.08 328 *e*PKP PKiKP 16 38 08.3 +0.3
MORC *e* 16 47 52.9
MORC Moravsky Berou 124.08 328 PKPdf 16 38 07.7 0.0
KSP Ksiaz 124.09 329 *e*PKPdf PKiKP 16 38 08.7 +0.7
KSP *e*L L 17 31 34.9
comp=Z,11µm,24.7s
VYHS Vyhne 124.10 326 *e*PKP PKPdf 16 38 07.9 +0.1
VYHS *e* 16 47 55.0
WUPA West Chester U 124.11 46 PKPdf 16 38 07.6 -0.4
Y60A Bolivia 124.12 53 PKiKP 16 38 08.5 0.0
AMBH Ambrzfalva 124.14 323 ⇑P PKiKP 16 38 09.0 +0.8
AMBH Ambrzfalva 124.14 323 PKPDF PKiKP 16 38 09.9 +1.7
RUE Ruedersdorf 124.27 332 *e*P PKiKP 16 38 08.8 +0.6
RUE Ruedersdorf 124.27 332 *e*PKPdf PKiKP 16 38 08.5 +0.3
baz=49,slow=1.9
T60A Surry 124.29 49 PKiKP 16 38 08.6 -0.1
KOLL Kolacno 124.29 326 *e*PKP PKiKP 16 38 08.5 +0.1
KRLC Kraliky 124.30 329 *e*PKiKP PKiKP 16 38 09.1 +0.6
KRLC MLR MLR
comp=Z,10µm,22.8s
KRLC Kraliky 124.30 329 *e*PKPDF PKiKP 16 38 09.1 +0.6
KRLC AMS AMS 17 34 30.0
comp=Z,10µm,22.8s
OSTC Ostas 124.30 329 *e*PKPDF PKiKP 16 38 09.5 +1.1
OSTC AMS AMS 17 34 40.0
comp=Z,10µm,19.6s
MDVR Moldovita 124.31 321 ⇑P PKPdf 16 38 08.3 0.0
VTS Vitosha 124.31 318 ⇑P PKiKP 16 38 08.9 0.0
VTS Vitosha 124.31 318 ⇑PKiKP PKiKP 16 38 08.9 0.0
VTS Vitosha 124.31 318 PKPdf 16 38 08.3 -0.3
VTS Vitosha 124.31 318 *i* P PKiKP 16 38 09.1 +0.2
ODNJ Ogdensburg 124.36 44 PKPdf 16 38 08.0 -0.5
CHVC Chvalec 124.36 329 *e*PKPDF PKiKP 16 38 09.2 +0.6
CHVC AMS AMS 17 34 40.0
comp=Z,12µm,20.5s
DPC Dobruska-Polom 124.37 329 *e*PKiKP PKiKP 16 38 09.3 +0.7
DPC MLR MLR
comp=Z,11µm,24.3s
DPC Dobruska-Polom 124.37 329 *e*PKPDF PKiKP 16 38 09.3 +0.7
DPC AMS AMS 17 34 10.0
comp=Z,11µm,24.3s
BANR Banloc 124.38 322 ⇑P PKiKP 16 38 09.8 +1.1
MMB Musomiste 124.42 317 *i* P PKiKP 16 38 08.9 -0.1
UPC Upice 124.43 329 *e*PKiKP PKiKP 16 38 09.2 +0.5
UPC MLR MLR
comp=Z,12µm,19.8s
UPC Upice 124.43 329 *e*PKPDF PKiKP 16 38 09.2 +0.5
UPC AMS AMS 17 34 30.0
comp=Z,12µm,19.8s
JAVC Velka Javorina 124.53 327 *e*PKP PKiKP 16 38 10.0 +1.0
JAVC *e* 16 47 53.3
BUD Budapest 124.55 325 PKPDF PKiKP 16 38 09.9 +1.0
BRNJ Basking Ridge 124.55 44 PKPdf 16 38 08.4 -0.4
TRNY Table Rock, Ra 124.60 44 PKPdf 16 38 08.4 -0.5
LBNH Lisbon 124.74 40 PKPdf 16 38 08.9 -0.2
LBNH Lisbon 124.74 40 PKiKP PKiKP 16 38 09.4 -0.1
baz=299
KKB Krupnik 124.74 317 *i* P PKPdf 16 38 08.6 -0.6
SRO Srobarova 124.77 326 *e*PKP PKiKP 16 38 09.8 +0.4
BSEG Bad Segeberg 124.80 335 *e*PKPdf PKiKP 16 38 09.6 +0.4
baz=49,slow=1.9
VRAC Vranov 124.85 328 ⇑P PKiKP 16 38 10.0 +0.4
VRAC Vranov 124.85 328 PKP PKiKP 16 38 10.2 +0.6
comp=Z,59nm,1.2s,baz=61,slow=1.1,SNR=31
VRAC Vranov 124.85 328 *e*PKP PKiKP 16 38 09.5 0.0
VRAC *e* 16 47 51.3
BOVS Bovan 124.86 320 ⇑P PKPdf 16 38 09.0 -0.4
SMOL Smolenice 124.86 327 *e*PKP PKiKP 16 38 10.1 +0.5
PAL Palisades 124.87 44 PKPdf 16 38 09.1 -0.3
PAL Palisades 124.87 44 PKiKP PKPdf 16 38 09.5 0.0
baz=295
D62A Allapoint, All 125.02 35 PKPdf 16 38 08.9 -0.6
MODS Modra-Piesok 125.03 327 *e*PKP PKiKP 16 38 12.6 +2.7
CSKK Cskako 125.05 325 PKPDF PKiKP 16 38 10.1 +0.1
CSKK PKiKP PKPdf 16 38 10.4 +0.8
L61B Northampton 125.08 42 PKPdf 16 38 09.8 0.0
L61B Northampton 125.08 42 PKiKP PKPdf 16 38 09.8 0.0
baz=297
KRUC Moravsky 125.10 328 *e*PKP PKiKP 16 38 10.0 0.0
KRUC *e* 16 47 49.7
F62A Pittston Farm, 125.12 37 PKPdf 16 38 09.1 -0.7
G62A West of Eustis 125.12 38 PKPdf 16 38 08.9 -0.9
PVCC Panska Ves 125.14 330 *e*PKiKP PKiKP 16 38 10.7 +0.6
PVCC MLR MLR
comp=Z,11µm,20.5s
PVCC Panska Ves 125.14 330 *e*PKPDF PKiKP 16 38 10.7 +0.6
PVCC AMS AMS 17 36 50.0
comp=Z,11µm,20.5s
SANT Santorini 125.15 310 PKPdf 16 38 09.1 -1.1
ZST Bratislava 125.22 327 *e*PKP PKiKP 16 38 10.9 +0.6
BRG Berggiesshubel 125.23 331 *e*PKP PKiKP 16 38 10.3 +0.1
BRG Amp 16 38 13.4
comp=Z,273nm,1.4s
BRG *ex* x 16 38 22.1
BRG Amp 16 38 24.4
comp=Z,58nm,1.3s
BRG *ex* x 16 38 49.5
BRG Amp 16 38 51.3
comp=Z,80nm,1.3s
BRG PP PP 16 39 56.0 -3.5
BRG Amp 16 40 21.2
comp=Z,57nm,1.4s
BRG SKP 16 41 47.8
BRG Amp 16 41 50.3
comp=Z,71nm,1.6s
BRG PKKP PKKPbc 16 47 51.1 +1.0
BRG Amp 16 47 52.8
comp=Z,17nm,1.3s
BRG SKKP 16 51 25.4
BRG Amp 16 51 42.1
comp=Z,32nm,1.8s
BRG Berggiesshubel 125.23 331 SS SS 16 57 07.0 +14
BRG Berggiesshubel 125.23 331 *e*PKIKP PKiKP 16 38 10.3 +0.1
BRG *e* 16 38 22.1
BRG 16 39 56.0
BRG 16 51 25.4
BRG S SS 16 57 07.0 +14
BRG pmax pmax
comp=Z,273nm,1.4s
BRG pmax pmax
comp=Z,58nm,1.3s
BRG pmax pmax
comp=Z,80nm,1.3s
BRG pmax pmax
comp=Z,57nm,1.4s
BRG pmax pmax
comp=Z,71nm,1.6s
BRG pmax pmax
comp=Z,17nm,1.3s
BRG pmax pmax
comp=Z,32nm,1.8s
BRG Berggiesshubel 125.23 331 *e*PKPdf PKiKP 16 38 10.3 +0.1
baz=49,slow=1.9
K62A Royalston 125.27 41 PKiKP 16 38 10.5 -0.1
I62A Tamworth 125.29 40 PKiKP 16 38 10.4 -0.1
FRGS Fruska Gora 125.30 322 ⇑P PKPdf 16 38 09.7 -0.5
FRGS Fruska Gora 125.30 322⇑*i*P PKPdf 16 38 08.9 -1.3
VAY Valandovo 125.32 317 *i* P PKPdf 16 38 09.4 -0.9
CLL Collm 125.40 332⇑*i*PKPdf PKPdf 16 38 10.3 +0.1
comp=Z,112nm,1.0s
CLL *es*PKPdf *p*PKPdf 16 38 23.0 0.0
CLL *e*PP PP 16 40 06.0 +5.4
CLL *e*SKKSac SKKSac 16 46 56.0 +0.5
CLL *e*SP SP 16 49 57.0 +1.1
CLL *e*PPS PPS 16 51 24.0
CLL *e*PKKSbc PKKSbc 16 51 38.0 -4.4
comp=Z,43nm,1.5s
CLL *e*PPPrev 16 55 24.0
CLL *e*SS SS 16 57 00.0 +4.8
CLL *e*SSS SSS 17 01 36.0
CLL *e*SSSS 17 05 18.0
CLL Lm MLR 17 39 00.0
comp=N,8µm,19.9s
CLL Lm MLR 17 39 00.0
comp=E,7µm,19.3s
CLL Lm MLR 17 39 00.0
comp=Z,14µm,19.3s
CLL Collm 125.40 332 *e*PKPdf PKiKP 16 38 10.6 0.0
baz=49,slow=1.9
CLL Collm 125.40 332 PKPdf 16 38 10.1 -0.1
CLL IAMs_20 IAMs_20 17 39 29.4
comp=Z,13µm,19.0s
STIP Stip 125.42 317 *i* P PKPdf 16 38 08.7 -1.9
TREC Trest 125.44 328 *e*PKiKP PKiKP 16 38 11.0 +0.3
TREC MLR MLR
comp=Z,12µm,23.8s
TREC Trest 125.44 328 *e*PKPDF PKiKP 16 38 11.0 +0.3
TREC AMS AMS 17 35 10.0
comp=Z,12µm,23.8s
MORH Mrgy, Hungar 125.45 324 ⇑P PKPdf 16 38 10.6 +0.2
MORH Mrgy, Hungar 125.45 324⇑*i*P PKPdf 16 38 10.4 0.0
MORH Mrgy, Hungar 125.45 324 PKiKP PKiKP 16 38 10.7 -0.1
MORH PKPDF PKPdf 16 38 10.4 0.0
NNA Nana 125.45 110*c i*PKiKP PKiKP 16 38 12.7 +0.9
NNA pmax pmax
comp=Z,180nm,1.7s
FBE Freiberg 125.49 331 *e*PKPdf PKiKP 16 38 11.1 +0.4
baz=49,slow=1.9
PRU Pruhonice 125.50 330 *e*PKiKP PKiKP 16 38 11.1 +0.3
PRU MLR MLR
comp=Z,9µm,19.8s
PRU Pruhonice 125.50 330 *e*PKPDF PKiKP 16 38 11.1 +0.3
PRU AMS AMS 17 36 40.0
comp=Z,9µm,19.8s
TIH Tihany 125.51 325 PKPDF PKPdf 16 38 10.6 +0.1
TIH PKiKP PKiKP 16 38 10.9 0.0
FLTG Flechtingen 125.52 333 *e*PKPdf PKiKP 16 38 10.8 +0.1
baz=49,slow=1.9
EGYH Egyhazaskeszo 125.54 326 PKPDF PKiKP 16 38 11.8 +0.8
MPLH Magyarpolny 125.56 325 PKPDF PKiKP 16 38 10.9 -0.1
MPLH PKiKP PKPdf 16 38 11.2 +0.6
HLG Helgoland 125.60 337 *e*PKPdf PKiKP 16 38 11.2 +0.4
baz=49,slow=1.9
DIVS Divibare 125.72 321⇑*i*P PKPdf 16 38 10.9 -0.2
DIVS Divibare 125.72 321 PKPdf 16 38 11.1 -0.1
BIGH Upper Bighouse 125.72 346 *e*P PKPdf 16 38 10.2 -0.3
F63A Nahmakanta, Br 125.73 37 PKPdf 16 38 11.0 0.0
MLA1 Latheron 125.76 346 *e*P PKPdf 16 38 10.6 0.0
TEKS Tekeris 125.78 322⇑*i*P PKPdf 16 38 10.5 -0.7
HRV Adam Dziewonsk 125.79 41 PKiKP PKiKP 16 38 11.4 -0.2
baz=298
SKO Skopje 125.80 318 *i* P PKPdf 16 38 10.8 -0.4
SOP Sopron 125.82 326 PKPDF PKiKP 16 38 12.1 +0.7
KOVH Kovagotottos 125.83 324 PKPDF PKPdf 16 38 11.3 +0.1
KOVH PKiKP PKiKP 16 38 11.9 +0.3
PQI Presque Isle 125.84 35 PKPdf 16 38 10.8 -0.3
PKME Peaks-Kenny Pk 125.85 37 PKPdf 16 38 11.6 0.0
PKME Peaks-Kenny Pk 125.85 37 PKiKP PKiKP 16 38 11.5 -0.1
baz=302
LIT Litokhoron 125.90 316 PKPdf 16 38 10.7 -0.8
BCIP Isla Barro Col 125.91 84 IAMs_20 IAMs_20 17 29 17.4
comp=Z,10µm,20.0s
NRDL Niedersach Rie 125.91 334 *e*PKPdf PKiKP 16 38 11.8 +0.4
baz=49,slow=1.9
ASSE Asse, Remlinge 125.91 333 *e*PKPdf PKiKP 16 38 11.7 +0.3
baz=49,slow=1.9
IDI Anoyia 125.95 309 PKP PKiKP 16 38 12.1 -0.1
comp=Z,120nm,0.6s,baz=141,slow=8.3,SNR=31
IDI PKKPbc PKKPbc 16 47 48.0 +1.0
comp=Z,68nm,1.3s,baz=230,slow=4.0,SNR=10
PBCC Pribram 125.96 329 *e*PKPdf PKiKP 16 38 12.1 +0.4
PBCC AMS AMS 17 37 20.0
comp=Z,4µm,18.5s
M63A Gales Ferry 125.97 43 PKiKP 16 38 11.8 -0.1
NEUB Neuenburg 126.04 332 *e*PKPdf PKiKP 16 38 11.9 0.0
baz=49,slow=1.9
RETH Rethem/Aller, 126.05 335 *e*PKPdf PKiKP 16 38 12.1 +0.4
baz=49,slow=1.9
CONA Conrad Observa 126.06 327 *i* P PKPdf 16 38 11.8 +0.1
comp=Z,203nm,1.5s,SNR=34
F64A Sherman 126.09 36 PKPdf 16 38 11.3 -0.3
BBLS Lazići 126.20 321⇑*i*P PKiKP 16 38 12.3 -0.2
CLZ Clausthal 126.25 333 *e*PKPdf PKiKP 16 38 12.7 +0.4
baz=49,slow=1.9
TANN Tannenbergstha 126.25 331 *e*PKPdf PKiKP 16 38 12.3 0.0
baz=49,slow=1.9
WERD Werda 126.30 331 *e*PKPdf PKPdf 16 38 12.1 +0.2
baz=49,slow=1.9
A252A Venje 126.34 323 P PKPdf 16 38 12.3 +0.2
CKRC Cesky Krumlov 126.34 329 *e*PKPDF PKiKP 16 38 13.2 +0.7
CKRC AMS AMS 17 38 40.0
comp=Z,7µm,20.6s
GUNZ Gunzen 126.34 331 *e*PKPdf PKiKP 16 38 12.5 0.0
baz=49,slow=1.9
PLN Plauen 126.35 331 *e*PKPdf PKiKP 16 38 12.5 0.0
baz=49,slow=1.9
RUDO Rudo 126.35 321⇑*i*P PKPdf 16 38 12.0 -0.3
WERN Wernitzgruen 126.37 331 *e*PKPdf PKiKP 16 38 12.7 +0.1
baz=49,slow=1.9

**NKC Novy Kostel 126.37 331** *e*PKIKP **PKiKP 16 38 13.0 +0.4**
NKC MLR MLR
comp=Z,11µm,19.5s
**NKC Novy Kostel 126.37 331** *e*PKPDF **PKiKP 16 38 13.0 +0.4**
NKC AMS AMS 17 38 50.0
comp=Z,11µm,19.5s
**MCD Coleburn Disti 126.38 345** *e*P **PKPdf 16 38 11.6 -0.3**
**AGG Agios Georgios 126.46 314** **PKPdf 16 38 11.6 -1.1**
**MOX Moxa 126.50 332** *e*PKPdf **PKiKP 16 38 12.6 -0.2**
baz=49,slow=1.9
MOX *e*L L 17 36 33.1
comp=Z,11µm,21.6s
**BCI Bajram Curri 126.51 319** *i* P **PKiKP 16 38 13.6 +0.5**
**KHC Kasperske Hory 126.52 329** *e*PKIKP **PKiKP 16 38 13.4 +0.5**
KHC MLR MLR
comp=Z,13µm,25.0s
**KHC Kasperske Hory 126.52 329** *e*PKPDF **PKiKP 16 38 13.4 +0.5**
KHC AMS AMS 17 34 30.0
comp=Z,13µm,25.0s
**KHC Kasperske Hory 126.52 329** **PKPdf 16 38 12.0 -0.5**
**OTAV Otavalo 126.54 95** ⇓ PKIKP **PKiKP 16 38 15.2 +0.7**
**PHP Peshkopia 126.59 318** *i* P **PKPdf 16 38 12.0 -0.9**
**BATG Bathurst New B 126.60 34** **PKPdf 16 38 12.4 -0.2**
**OHR Ohrid 126.61 317** *i* P **PKPdf 16 38 12.6 -0.3**
**GTTG Gottingen 126.64 333** *e*PKPdf **PKiKP 16 38 13.2 +0.2**
baz=49,slow=1.9
**GEC2 GERESS Array S 126.64 329** *e*PKPdf **PKiKP 16 38 13.1 -0.2**
baz=49,slow=1.9
**GEC2 GERESS Array S 126.64 329** **PKPdf 16 38 12.5 -0.3**
**GERES GERESS Array B 126.64 329** PKP **PKiKP 16 38 13.1 -0.2**
comp=Z,28nm,0.6s,baz=22,slow=4.3,SNR=3.6
GERES PKKPbc **PKKPbc 16 47 48.1 +3.2**
comp=Z,1.1nm,0.9s,baz=238,slow=2.5,SNR=3.6
GERES SKKPbc SKKPbc 16 51 39.9 +6.5
comp=Z,2.6nm,1.0s,baz=233,slow=1.3,SNR=5.4
**GERES GERESS Array B 126.64 329** **PKPdf 16 38 12.5 -0.3**
**ARSA Arzberg 126.64 326** *i* P **PKPdf 16 38 12.8 0.0**
comp=Z,83nm,1.6s,SNR=13
ARSA *e*S **SKKPbc 16 51 25.7 -7.6**
comp=Z,15nm,1.2s
**LEWI Lewis, Hebride 126.69 348** *e*P **PKiKP 16 38 13.2 +0.2**
**KOGS Kog 126.70 325** *i* PKPdf **PKPdf 16 38 12.7 -0.1**
**MANZ Manzenberg 126.70 331** *e*PKPdf **PKiKP 16 38 13.3 +0.1**
baz=49,slow=1.9
**DRUM Mains of Drumt 126.78 345** *e*P **PKiKP 16 38 12.9 -0.2**
**MDO Dochfour 126.78 346** *e*P **PKiKP 16 38 13.0 -0.1**
**ROTZ Rotzenmuhle 126.80 331** *e*PKPdf **PKiKP 16 38 13.2 -0.2**
baz=49,slow=1.9
**KBN Korca 126.84 317** **PKPdf 16 38 12.9 -0.5**
**KBN Korca 126.84 317** *i* P **PKPdf 16 38 12.4 -0.9**
**WET Wettzell 126.87 330** *e*PKPdf **PKiKP 16 38 13.6 0.0**
baz=49,slow=1.9
**MOSL Moslavina 126.88 324** P **PKiKP 16 38 13.9 +0.2**
**KAC Achnashellach 126.94 347** *e*P **PKPdf 16 38 12.8 -0.2**
**MOA Molln 126.96 328** *i* P **PKPdf 16 38 13.3 0.0**
comp=Z,82nm,1.5s,SNR=15
**PDG Podgorica 127.01 319** ⇓ P **PKPdf 16 38 13.3 -0.2**
**PDG Podgorica 127.01 319** *e*P **PKPdf 16 38 13.5 0.0**
**PDG Podgorica 127.01 319** **PKPdf 16 38 13.2 -0.3**
**IBBN Ibbenburen 127.04 335** *e*PKPdf **PKiKP 16 38 13.9 +0.1**
baz=49,slow=1.9
**BLY Banja Luka 127.10 323** ⇑ *i*P **PKPdf 16 38 12.6 -1.0**
**MRAK Mrakovica 127.13 323** ⇑ *i*P **PKPdf 16 38 13.8 0.0**
**UBBA Unterbreizbach 127.13 333** *e*PKPdf **PKiKP 16 38 13.9 +0.1**
baz=49,slow=1.9
**TIR Tirane 127.13 318** ⇑ P **PKiKP 16 38 14.8 +0.5**
**TIR Tirane 127.13 318** ⇑ PKIKP **PKiKP 16 38 14.8 +0.5**
**TIR Tirane 127.13 318** IAMs_20 IAMs_20 17 41 36.4
comp=Z,11µm,22.0s
**TIR Tirane 127.13 318** *i* P **PKiKP 16 38 15.8 +1.5**
**KPL Plockton 127.17 347** *e*P **PKPdf 16 38 13.3 0.0**
**LSK Leskovik 127.18 316** *i* P **PKPdf 16 38 13.6 -0.4**
**BRY Bratogost 127.23 320** ⇑ *i*P **PKPdf 16 38 13.5 -0.6**
**EDU Dundee 127.24 345** *e*P **PKiKP 16 38 14.2 +0.1**
**SOKA Soboth 127.25 326** *i* P **PKPdf 16 38 13.7 -0.3**
comp=Z,189nm,1.4s,SNR=36
SOKA *e*S **SKKPbc 16 51 22.5 -8.7**
comp=Z,22nm,1.6s
**GRA1 Grafenberg Arr 127.33 331** **PKPdf 16 38 14.0 +0.1**
**GRF Grafenberg Arr 127.33 331** *e*PKPdf **PKiKP 16 38 14.4 -0.1**
baz=49,slow=1.9
GRF *e*L L 17 39 41.4
comp=Z,7µm,20.3s
**GRFO Grafenberg 127.33 331** IAMs_20 IAMs_20 17 39 30.4
comp=Z,8µm,19.0s
**MGRS Mrkonjic Grad 127.34 323** *e*P **PKPdf 16 38 14.0 -0.2**
**ITM Ithomi 127.49 312** **PKPdf 16 38 14.0 -0.6**
**CRES Cresnjev 127.51 325** ⇑ *i*P **PKPdf 16 38 14.1 -0.3**
**KASTN Kahler Asten 127.56 334** *e*PKPdf **PKiKP 16 38 15.1 +0.1**
baz=49,slow=1.9
**OBKA Obir 127.62 326** *i* P **PKPdf 16 38 14.5 -0.2**
comp=Z,84nm,1.3s,SNR=14
**IGT Igoumenitsa 127.64 316** *i* P **PKPdf 16 38 13.8 -1.0**
**SRN Sarande 127.72 316** *i* P **PKiKP 16 38 16.4 +1.0**
**STON Ston 127.78 321** ⇑ *i*P **PKPdf 16 38 13.1 -1.8**
**STON Ston 127.78 321** P **PKPdf 16 38 14.8 -0.1**
**RICI Ricice 127.81 322** P **PKPdf 16 38 14.5 -0.5**
**RJOB Jochberg 127.81 328** *e*PKPdf **PKPdf 16 38 14.7 -0.3**
baz=49,slow=1.9
**MTDJ Mount Denham 127.82 72** **PKPdf 16 38 14.9 -0.9**
MTDJ IAMs_20 IAMs_20 17 29 50.6
comp=Z,9µm,18.0s
**EDI Edinburgh 127.83 344** *e*P **PKiKP 16 38 15.5 +0.3**
**BUG Bochum--Univer 127.88 335** *e*PKPdf **PKiKP 16 38 15.4 -0.1**
baz=49,slow=1.9
**PB03 IPOC Station P 127.89 124** **PKPdf 16 38 15.6 -0.4**
**LJU Ljubljana 127.91 326** ⇑ *i*P **PKPdf 16 38 14.7 -0.5**
**LJU Ljubljana 127.91 326** *i* PKPdf **PKPdf 16 38 15.4 +0.2**
**KBA Koelnbreinsper 127.93 327** *i* P **PKPdf 16 38 14.8 -0.6**
comp=Z,123nm,1.4s,SNR=17
**KIJV Kijevo 127.98 323** P **PKiKP 16 38 15.9 -0.1**
**MYKA Terra Mystica 128.05 327** *i* P **PKPdf 16 38 14.9 -0.5**
comp=Z,78nm,1.3s,SNR=11
**LMN Caledonia Moun 128.14 34** **PKPdf 16 38 15.1 -0.5**
**CEY Cerknica 128.15 325** ⇑ *i*P **PKPdf 16 38 15.5 -0.2**
**TNS Taunus Mts 128.25 333** *e*PKPdf **PKiKP 16 38 16.1 -0.2**
baz=49,slow=1.9
**VOJS Vojsko 128.28 326** *i* PKPdf **PKPdf 16 38 15.5 -0.5**
**FUR Furstenfeldbru 128.31 329** *e*PKPdf **PKPdf 16 38 16.0 +0.1**
baz=49,slow=1.9
**LVC Limon Verde 128.31 126** IAMs_20 IAMs_20 17 23 44.5
comp=Z,12µm,21.0s
**LSTV Lastovo 128.34 321** P **PKPdf 16 38 15.7 -0.4**
**EKA Eskdalemuir Ar 128.35 344** PKhKP PKPpre 16 38 05.8
comp=Z,2.0nm,0.7s,baz=20,slow=2.7,SNR=5.1
EKA PKP **PKPdf 16 38 14.6 -1.1**
comp=Z,5.0nm,0.5s,baz=18,slow=2.4,SNR=5.0
EKA SKPbc SKPbc 16 41 34.2
comp=Z,10.0nm,0.9s,baz=22,slow=3.1,SNR=4.8
**RIY Rijeka 128.36 325** ⇑ *i*P **PKPdf 16 38 15.6 -0.4**
**ESK Eskdalemuir 128.37 344** *e*P **PKPdf 16 38 15.9 +0.2**
**HVAR Hvar 128.40 322** P **PKPdf 16 38 16.1 0.0**
**LPA La Plata 128.43 145** *c i*PKIKP **PKPdf 16 38 09.6 -6.9**
LPA PP **PP 16 40 15.7 -5.0**
LPA PPP PPP 16 43 07.1
LPA SKS **SKSac 16 45 16.5 -4.2**
LPA SDIFF 16 48 17.6
LPA PPP PPP 16 54 57.8
**EDMD Edmundbyers 128.45 343** *e*P **PKiKP 16 38 16.3 -0.2**
**GDLE Glaisdale, N Y 128.46 342** *e*P **PKiKP 16 38 17.2 +0.7**
**MORI Morici 128.47 323** P **PKiKP 16 38 16.7 -0.2**
**SKDS Skadanscina 128.49 325** ⇑ *i*P **PKPdf 16 38 15.2 -1.1**
**NVLJ Novalja 128.58 324** P **PKPdf 16 38 15.4 -1.0**
**ABTA Abfaltersbach 128.58 327** *i* P **PKPdf 16 38 16.0 -0.5**
comp=Z,129nm,0.9s,SNR=30
ABTA *e*S **SKKPbc 16 51 18.8 -7.8**
comp=Z,36nm,1.7s
**AHRW Bad Neuenahr-A 128.63 334** *e*PKPdf **PKiKP 16 38 17.0 0.0**
baz=49,slow=1.9
**WATA Walderalm 128.70 329** *i* P **PKPdf 16 38 16.7 -0.1**
comp=Z,283nm,1.6s,SNR=38
WATA *e*S **SKKPbc 16 51 19.4 -6.9**
comp=Z,37nm,1.7s
**SMRN Sveta Marina 128.72 325** P **PKPdf 16 38 16.4 -0.2**
**WTTA Wattenberg 128.72 328** *i* P **PKPdf 16 38 17.0 +0.1**
comp=Z,460nm,1.6s,SNR=45
WTTA *e*S **SKKPbc 16 51 19.7 -6.6**
comp=Z,35nm,1.3s
**NEWG New Galloway 128.82 345** *e*P **PKPdf 16 38 16.9 +0.3**
**STU Stuttgart 128.93 331** *e*PKPdf **PKiKP 16 38 17.5 -0.2**
baz=49,slow=1.9
**STU Stuttgart 128.93 331** IAMs_20 IAMs_20 17 40 08.6
comp=Z,9µm,19.0s
**MOTA Moosalm 128.94 329** *i* P **PKPdf 16 38 17.3 0.0**
comp=Z,265nm,1.5s,SNR=32
MOTA *e*S **SKKPbc 16 51 18.3 -7.1**
comp=Z,28nm,1.7s
**PB12 IPOC Station P 128.95 120** **PKPdf 16 38 17.3 -0.7**
**SQTA Sankt Quirin 128.97 329** *i* P **PKPdf 16 38 17.4 +0.1**
comp=Z,272nm,1.6s,SNR=38
SQTA *e*S **SKKPbc 16 51 21.0 -4.3**
comp=Z,37nm,1.4s
**KESW Keswick, Cumbr 128.99 344** *e*P **PKiKP 16 38 17.6 0.0**
**BTNL Ternell 129.00 335** *d*PKiKP **PKPdf 16 38 17.5 +0.3**
**PB11 IPOC Station P 129.02 122** PKPdf **PKPdf 16 38 17.3 -0.9**
**RETA Reutte 129.02 329** *i* P **PKPdf 16 38 17.0 -0.3**
comp=Z,122nm,1.7s,SNR=12
RETA *e*S **SKKPbc 16 51 17.7 -7.3**
comp=Z,21nm,1.4s
**MEM Membach 129.04 335** *d*PKPdf **PKPdf 16 38 17.5 +0.3**
MEM *d*PKiKP **PKiKP 16 38 18.3 +0.5**
**HPK Haverah Park 129.10 342** *e*P **PKiKP 16 38 18.3 +0.4**
**GAL1 Galloway 129.17 345** *e*P **PKiKP 16 38 17.7 -0.2**
**UBR Ueberruh 129.22 330** *e*PKPdf **PKPdf 16 38 17.8 +0.2**
baz=49,slow=1.9
**BHOU Houvegnez 129.23 335** *d*PKiKP **PKiKP 16 38 18.7 +0.4**
**BSTI Sart Tilman 129.24 335** *d*PKiKP **PKiKP 16 38 18.8 +0.6**
**NOCI Noci 129.25 319** *i* P **PKPdf 16 38 15.2 -2.7**
**CLGH Cloghs, Cushen 129.33 346** *e*P **PKiKP 16 38 18.1 -0.2**
**FETA Feichten 129.34 329** *i* P **PKPdf 16 38 18.3 +0.2**
comp=Z,144nm,1.1s,SNR=28
FETA *e*S **SKKPbc 16 51 15.7 -8.3**
comp=Z,16nm,1.3s
**BCLA Clavier 129.47 335** *d*PKiKP **PKiKP 16 38 18.5 -0.2**
BCLA *dp*PKiKP **pPKPdf 16 38 28.7 -2.1**
**CTI Castel Tesino 129.49 327** **PKPdf 16 38 18.3 0.0**
**MATE Matera 129.56 319** ⇑ P **PKiKP 16 38 19.1 -0.1**
**UCC Ucle 129.57 336** *d*PKiKP **PKiKP 16 38 19.2 +0.3**
**DRLN Deer Lake 129.59 27** **PKPdf 16 38 17.6 -0.6**
**BGES Gesves 129.59 335** *d*PKiKP **PKiKP 16 38 18.9 0.0**
BGES *dp*PKiKP **pPKPdf 16 38 29.3 -1.7**
**SGRT San Giovanni R 129.60 320** **PKPdf 16 38 18.1 -0.5**
**DAVA Damuels 129.60 329** *i* P **PKPdf 16 38 18.5 0.0**
comp=Z,223nm,1.9s,SNR=11
DAVA *e*S **SKKPbc 16 51 14.1 -9.0**
comp=Z,29nm,1.6s
**LBWR Ladybower, Pea 129.61 342** *e*P **PKPdf 16 38 18.4 +0.2**
**BFO Black Forest 129.65 331** *e*PKPdf **PKPdf 16 38 18.4 0.0**
baz=49,slow=1.9
**BFO Black Forest 129.65 331** **PKPdf 16 38 17.8 -0.6**
BFO IAMs_20 IAMs_20 17 40 28.7
comp=Z,12µm,20.0s
**WLF Walferdange 129.68 334** *e*PKPdf **PKiKP 16 38 19.5 +0.4**
baz=49,slow=1.9
**WLF Walferdange 129.68 334** IAMs_20 IAMs_20 17 39 54.3
comp=Z,12µm,21.0s
**WLF Walferdange 129.68 334** *d*PKiKP **PKiKP 16 38 19.8 +0.6**
**RCHB Rochefort 129.71 335** *d*PKiKP **PKiKP 16 38 19.3 +0.1**
**BMRD Maredsous 129.79 335** *d*PKiKP **PKiKP 16 38 19.3 -0.1**
**WIM Isle of Man 129.81 344** *e*P **PKiKP 16 38 19.1 -0.2**
**SNF Seneffe 129.83 336** *d*PKP **PKiKP 16 38 19.8 +0.4**
**GTBY Guantanamo Bay 129.89 70** **PKPdf 16 38 18.8 -0.8**
GTBY IAMs_20 IAMs_20 17 31 53.4
comp=Z,11µm,19.0s
**TEOL Teolo 129.91 326** **PKPdf 16 38 18.4 -0.6**
**DAVOX Davos/Dischmat 129.94 329** PKhKP PKPpre 16 38 06.2
comp=Z,23nm,0.5s,baz=243,slow=0.8,SNR=41
DAVOX PKP **PKPdf 16 38 19.6 +0.3**
comp=Z,52nm,0.6s,baz=117,slow=1.8,SNR=35
DAVOX SKPbc SKPbc 16 41 40.8 +2.6
comp=Z,22nm,0.9s,baz=100,slow=3.4,SNR=3.7
**MOTC Monteria, Cord 130.02 84** **PKPdf 16 38 19.1 -1.0**
**DOU Dourbes 130.02 335** *d*PKiKP **PKiKP 16 38 20.0 +0.2**
**TIP Timpagrande 130.26 317** ⇑ P **PKiKP 16 38 20.5 -0.2**
**TIP Timpagrande 130.26 317** **PKPdf 16 38 19.5 -0.5**
**ECH Echery 130.28 332** **PKPdf 16 38 19.1 -0.5**
**SALO Salr 130.37 327** **PKPdf 16 38 19.4 -0.5**
**WME Myndd Eilian 130.37 344** *e*P **PKiKP 16 38 20.3 -0.1**
**TUE Stuetta 130.42 329** PKPdf **PKPdf 16 38 19.8 -0.4**
TUE IAMs_20 IAMs_20 17 44 49.3
comp=Z,13µm,20.0s
**TUE Stuetta 130.42 329** P **PKPdf 16 38 20.2 0.0**
**WPS Cemaes, Angles 130.43 344** *e*P **PKiKP 16 38 20.5 0.0**
**WLF1 Llynfaes 130.50 344** *e*P **PKiKP 16 38 20.4 -0.3**
**FOEL Foel Wylfa 130.50 343** *e*P **PKiKP 16 38 20.8 +0.1**
**CZSB Cruzeiro do Su 130.55 106** **PKPdf 16 38 19.5 -1.6**
**YLL Llanberis 130.56 343** *e*P **PKPdf 16 38 20.2 +0.3**
**YRC Rhoscolyn 130.58 344** *e*P **PKPdf 16 38 20.2 +0.2**
**TSUM Tsumeb 130.61 238** PKP **PKiKP 16 38 21.8 -0.3**
comp=Z,35nm,0.8s,baz=53,slow=3.8,SNR=11
TSUM SKPbc **SKPab 16 41 43.9 +2.5**
comp=Z,38nm,1.1s,baz=102,slow=4.2,SNR=9.6
**TSUM Tsumeb 130.61 238** IAMs_20 IAMs_20 17 31 19.5
comp=Z,15µm,20.0s
**NRCA Norcia 130.62 323** **PKPdf 16 38 19.8 -0.7**
**LLW Llanuwychllyn 130.68 343** *e*P **PKPdf 16 38 20.5 +0.4**
**AQU L'Aquila 130.72 322** ⇑ *i*P **PKPdf 16 38 20.7 0.0**
**AQU L'Aquila 130.72 322** **PKPdf 16 38 19.8 -0.9**
AQU IAMs_20 IAMs_20 17 35 27.9
comp=Z,10µm,22.0s
**PAOL Paolisi 130.74 320** **PKPdf 16 38 19.5 -1.2**
**ZARC Zaragoza, Cauc 130.77 86** PKPdf **PKPdf 16 38 20.5 -1.1**
**ZCCA Zocca 130.93 326** **PKPdf 16 38 20.5 -0.5**
**ROSC El Rosal 131.15 89** PKP **PKPdf 16 38 22.9 +0.3**
comp=Z,34nm,0.4s,baz=85,slow=1.9,SNR=27
**ROSC El Rosal 131.15 89** PKIKP **PKPdf 16 38 23.0 +0.3**
**MCH1 Michaelchurch 131.22 342** *e*P **PKiKP 16 38 22.1 0.0**
**SWN1 Swindon 131.25 341** *e*P **PKiKP 16 38 22.4 +0.2**
**OSSC Osservatorio P 131.29 325** **PKPdf 16 38 21.1 -0.6**
**CEL Celeste 131.30 316** **PKPdf 16 38 21.4 -0.5**
**VLC Villacollemand 131.38 326** IAMs_20 IAMs_20 17 39 57.0
comp=Z,12µm,22.0s
**LATE Latera 131.52 324** **PKPdf 16 38 21.6 -0.6**
**MSSA Maissana 131.76 327** **PKPdf 16 38 21.7 -0.9**
**OCAC Ocana 132.32 85** **PKPdf 16 38 23.2 -1.4**
**CLF Chambon-Foret 132.59 335** IAMs_20 IAMs_20 17 41 42.3
comp=Z,14µm,20.0s
**BNI Bardonecchia 132.75 329** PKPdf **PKPdf 16 38 23.6 -0.9**
BNI IAMs_20 IAMs_20 17 41 05.1
comp=Z,14µm,20.0s
**GRTK Grand Turk 133.30 67** IAMs_20 IAMs_20 17 27 55.2
comp=Z,18µm,22.0s
**CLTB Caltabellotta 133.47 317** PKPdf **PKPdf 16 38 26.0 -0.1**
**CPUP Villa Florida 134.79 138** PKP **PKPdf 16 38 28.1 -0.6**
comp=Z,33nm,0.7s,baz=288,slow=1.2,SNR=12
**CPUP Villa Florida 134.79 138** PKPdf **PKPdf 16 38 28.6 -0.1**
**VSL Villasalto 134.87 322** PKPdf **PKPdf 16 38 28.6 +0.1**
**SDV Santo Domingo 134.99 84** PKPdf **PKPdf 16 38 29.5 -0.2**
**BBSR BB Station 135.26 50** IAMs_20 IAMs_20 17 34 10.3
comp=Z,18µm,21.0s
**HATO Hato, Curacao 136.56 79** IAMs_20 IAMs_20 17 35 41.7
comp=Z,7µm,19.0s
**KEST Kesra 137.08 317** PKhKP PKPpre 16 38 20.8
comp=Z,11nm,0.8s,baz=1.5,slow=3.0,SNR=4.3
KEST PKP **PKPdf 16 38 32.7 -0.2**
comp=Z,72nm,1.0s,baz=117,slow=2.0,SNR=19
KEST SKPbc **SKPbc 16 42 04.5 +2.2**
comp=Z,69nm,1.0s,baz=308,slow=2.5,SNR=8.2
**KEST Kesra 137.08 317** P **PKPdf 16 38 31.4 -1.4**
SNR=9.3
**BAUV El Baul 137.55 84** *e* PKPpre 16 38 27.3
**MLPR Magueyes Islan 137.74 71** PKPdf **PKPdf 16 38 33.2 -1.2**
**SJG San Juan 138.55 70** IAMs_20 IAMs_20 17 32 36.8
comp=Z,11µm,22.0s
**PDPR Patillas Dam, 138.69 70** PKPdf **PKPdf 16 38 35.6 -0.5**
**BIRV Birongo 139.27 82** PKPdf **PKPdf 16 38 37.0 -0.4**
**CDVI St. Croix 139.91 70** *e* PKPpre 16 38 31.4
**PBRG Braganca 141.33 338** *e*PKP **PKPdf 16 38 40.7 +0.3**
**SMRT St. Maarten 141.43 69** *e* PKPpre 16 38 34.6
**SMRT St. Maarten 141.43 69** IAMs_20 IAMs_20 17 36 57.0
comp=Z,13µm,21.0s
**SEUS St. Eustatius 141.63 70** IAMs_20 IAMs_20 17 39 40.4
comp=Z,11µm,21.0s
**PGAV Gavieira, Arco 141.74 339** *e*PKP **PKPdf 16 38 41.5 +0.3**
**PCAB Cabril 141.88 339** *e*PKP **PKPdf 16 38 38.9 -2.5**
**SKI Saint Kitts 141.89 70** *e* **PKPdf 16 38 37.5 -4.5**
**ESDC Sonseca Array 141.96 333** PKhKP PKPpre 16 38 37.1
comp=Z,15nm,1.1s,baz=19,slow=3.8,SNR=23
ESDC PP **PP 16 41 46.5 +0.4**
comp=Z,19nm,1.3s,baz=27,slow=6.9,SNR=5.2
**MVO Moncorvo 141.99 337** *e*PKP **PKPdf 16 38 41.7 +0.1**
**MVO Moncorvo 141.99 337** *e*LR LR 17 33 35.4
comp=Z,6µm,20.0s
**POLO Lamas de Olo 142.09 338** *e*PKP **PKPdf 16 38 41.8 0.0**
**CART Cartagena 142.13 328** PKPdf **PKPdf 16 38 40.6 -1.3**
**PVRL Vila Real 142.15 338** *e*PKP **PKPdf 16 38 42.5 +0.6**
**PAB San Pablo 142.24 333** IAMs_20 IAMs_20 17 48 02.8
comp=Z,10µm,20.0s
**PAB San Pablo 142.24 333** P **PKPdf 16 38 40.5 -1.7**
**OKGL Djebel Kef Gue 142.35 325** P **PKPdf 16 38 42.0 -0.4**
**OJGS Djebel Guires 142.66 324** P **PKPdf 16 38 41.0 -2.0**
**PVIS Viseu 142.70 338** *e*PKP **PKPdf 16 38 42.6 -0.3**
**ANWB Willy Bob 142.71 70** *e* PKPpre 16 38 33.1
**ANWB Willy Bob 142.71 70** IAMs_20 IAMs_20 17 39 58.9
comp=Z,10µm,21.0s
**OJBR Djebel Berber 142.84 324** P **PKPdf 16 38 44.0 +0.7**
**MTE Manteigas 142.85 337** *e*PKP **PKPdf 16 38 41.4 -1.8**
**MTE Manteigas 142.85 337** *e*LR LR 17 34 27.5
comp=Z,5µm,20.0s
**MTE Manteigas 142.85 337** **PKPdf 16 38 42.6 -0.5**
**ANBD Bethesda, Anti 142.86 71** *e* PKPpre 16 38 35.4
**CBE Ff, Capester 143.20 72** *e* PKPbc 16 38 41.5 +0.1
**TDBA Terre de Bas, 143.21 72** *e* PKPab 16 38 40.2 +0.2
**ABD La Joyeuse, An 143.23 71** *e* PKPab 16 38 34.7 -5.4
**MACA Manacapuru-AM 143.30 104** PKPbc 16 38 41.4 -0.3
**PCBR Castelo Branco 143.30 337** *e*PKP PKPbc 16 38 41.8 +0.8
**ODJA Bouhanifia 143.31 325** P **PKPdf 16 38 45.0 +0.9**
**COI Coimbra 143.34 338** *e*PKP **PKPdf 16 38 44.5 +0.6**
**MDVC Dominica, Viel 143.47 73** *e* PKPbc 16 38 42.1 0.0
**DSLB Salisbury 143.48 73** *e* PKPbc 16 38 43.0 +0.8
**PCAS Casmilo, Conde 143.51 338** *e*PKP **PKPdf 16 38 43.6 -0.7**
**MAGL Barre de l'ile 143.53 72** *e* PKPbc 16 38 41.8 -0.4
**MDN Morne-Daniel 143.53 73** *e* PKPbc 16 38 43.2 +0.9
**PMRV Marv??o 143.62 336** *e*PKP **PKPdf 16 38 44.0 -0.5**
**PMRV Marv??o 143.62 336** *e*LR LR 17 34 37.0
comp=Z,6µm,22.0s
**DLPL La Plaine 143.67 73** *e* PKPbc 16 38 43.6 +0.9
**DLPL La Plaine 143.67 73** PKPbc 16 38 42.4 -0.4
**GRGR Grenville 143.69 79** *e* PKPab 16 38 37.6 -4.4
**GRGR Grenville 143.69 79** IAMs_20 IAMs_20 17 57 24.4
comp=Z,8µm,20.0s
**SVN Savane Anatole 143.82 74** PKPbc 16 38 44.0 +0.8
SVN IAMs_20 IAMs_20 17 52 01.7
comp=Z,9µm,19.0s
**FDF Fort de France 143.85 74** *e* PKPab 16 38 42.1 -0.5
**FDF Fort de France 143.85 74** IAMs_20 IAMs_20 17 40 33.7
comp=Z,10µm,21.0s
**GCMP Arenada, Carri 143.88 78** *e* PKPab 16 38 35.1 -7.6
**SVB Belmont 143.96 77** *e* PKPab 16 38 42.1 -0.9
**BIM Bigot 143.97 75** *e* PKPab 16 38 41.4 -1.6
**BIM Bigot 143.97 75** PKPbc 16 38 44.4 +0.7
**SVV Soufriere Volc 143.99 77** *e* PKPab 16 38 43.3 +0.2
**TPP Pointe-a-Pierr 144.02 82** *e* **PKPdf 16 38 45.1 -0.7**
**TRN Trinidad (W) 144.04 81** *e* **PKPab 16 38 43.1 -0.2**
**PSBE So Bento 144.09 338** *e*PKP PKPbc 16 38 43.2 -0.1
**ILAM Ilet Lapin Mar 144.11 74** *e* **PKPab 16 38 43.0 -0.6**
**ILAM Ilet Lapin Mar 144.11 74** PKPbc 16 38 44.3 +0.3
**SLBI Saint Lucia, B 144.13 75** *e* **PKPab 16 38 42.1 -1.5**
**MPOM Morne Pois Mar 144.18 75** *e* **PKPab 16 38 41.7 -2.1**
**MPOM Morne Pois Mar 144.18 75** **PKPab 16 38 43.9 +0.1**
**PESTR Estremoz 144.18 336** *e*PKP **PKPdf 16 38 44.7 -0.8**
**PESTR Estremoz 144.18 336** PKPbc 16 38 44.0 +0.4
**PESTR Estremoz 144.18 336** P PKPbc 16 38 44.3 +0.6
**MCLT Moulin Chique 144.20 76** *e* **PKPab 16 38 40.9 -3.0**
**PMTG Montargil 144.26 337** *e*PKP **PKPdf 16 38 44.9 -0.7**
**EMAL Malaga-Limoner 144.51 331** PKP PKPbc 16 38 45.4 +0.7
**BOAV Boa Vista 144.59 95** **PKPab 16 38 45.1 -0.3**
**EVO Evora 144.64 336** PKP **PKPab 16 38 44.1 -0.8**
**EVO Evora 144.64 336** *e*PKP PKPbc 16 38 45.2 +0.1
**CHAS Isla Isabel II 144.69 327** PKP **PKPab 16 38 42.4 -2.8**
**PACT Alcochete 144.75 338** *e*PKP PKPbc 16 38 45.7 +0.3
**PMAFR Mafra 144.76 338** *e*PKP **PKPab 16 38 45.3 0.0**
**TOSP Speyside 144.85 80** *e* **PKPab 16 38 45.4 -0.9**
**TOSP Speyside 144.85 80** **PKPab 16 38 46.0 -0.3**
**PMST Lisbon--Monsan 144.91 338** *e*PKP PKPbc 16 38 46.3 +0.4
**LIS Lisbon 144.92 338** *e*PKPdf **PKPdf 16 38 46.4 -0.3**
LIS IAMs_20 IAMs_20 17 47 06.3
comp=Z,16µm,23.7s
**LIS Lisbon 144.92 338** *e*PKIKP PKPbc 16 38 46.3 +0.4
**PBEJ Beja 145.01 336** *e*PKP **PKPab 16 38 46.3 0.0**
**PNCL Nicolau / Gran 145.21 337** *e*PKP **PKPbc 16 38 46.9 0.0**
**ARNO Arenosillo 145.31 334** PKP **PKPbc 16 38 47.0 -0.2**
**MESJ Messejana 145.32 336** *e*PKPdf **PKPbc 16 38 47.1 -0.1**
MESJ IAMs_20 IAMs_20 17 48 41.8
comp=Z,8µm,16.1s
**MESJ Messejana 145.32 336** *e*PKP **PKPdf 16 38 47.7 +0.3**
**MESJ Messejana 145.32 336** *e*PKIKP **PKPbc 16 38 47.1 -0.1**
**JBK JBK 145.40 326** P **PKPdf 16 38 48.0 0.0**
**PCVE Castro Verde 145.42 336** *e*PKP **PKPab 16 38 48.0 +0.2**
**PALE Palemas 145.47 328** P **PKPab 16 38 50.0 +1.9**
**PVAQ Vaqueiros 145.48 335** *e*PKP **PKPab 16 38 48.0 0.0**
**PVAQ Vaqueiros 145.48 335** *e*LR LR 17 35 47.9
comp=Z,10µm,20.0s
**PVAQ Vaqueiros 145.48 335** P **PKPab 16 38 48.2 +0.2**
**EKNA Africa Flyway - 145.51 268** ⇑ *e*P **PKPab 16 38 49.5 +0.7**
**SFS San Fernando 145.60 332** PKP **PKPab 16 38 48.4 0.0**
**SFS San Fernando 145.60 332** P **PKiKP 16 38 51.3 -0.6**
**BBGH Gun Hill 145.61 77** *e* **PKPab 16 38 49.4 +0.2**
**BBGH Gun Hill 145.61 77** IAMs_20 IAMs_20 17 41 33.2
comp=Z,15µm,22.0s
**CEU Ceuta 145.66 331** PKP **PKPdf 16 38 44.0 -4.0**
**BBSP Saint Philip 145.71 77** *e* **PKPab 16 38 49.5 0.0**
**PTEO Sao Teotonio 145.77 336** *e*PKP **PKPab 16 38 49.1 0.0**
**SMIR Smir Dam 145.84 330** P **PKPab 16 38 50.0 +0.6**
**MORF Marmelete 145.95 336** *e*PKPdf **PKPdf 16 38 48.1 -0.5**
MORF IAMs_20 IAMs_20 17 46 19.8
comp=Z,12µm,26.7s
**MORF Marmelete 145.95 336** *e*PKP **PKPbc 16 38 49.3 0.0**
**MORF Marmelete 145.95 336** *e*PKP2 **PKPdf 16 38 48.1 -0.5**
**CPS Cap Spartel 146.01 331** P **PKiKP 16 38 52.0 -0.9**
**TDRA Tendrara 146.03 324** P **PKPab 16 38 51.0 +0.5**
**PFVI Vila Bisbo 146.17 336** *e*PKP **PKPbc 16 38 49.8 -0.1**
**PFVI Vila Bisbo 146.17 336** P **PKPbc 16 38 51.8 +1.1**
**FIGM Figuig 146.20 322** P **PKPbc 16 38 50.6 +0.2**
**CHEFC Chefchaouen 146.27 330** P **PKPab 16 38 51.0 -0.2**
**H07N1 FLORES T-PHASB 146.68 8** *e*PKP **PKPbc 16 38 51.9 +0.5**
**H07S1 FLORES T-PHASB 146.98 8** *e*PKP **PKPdf 16 38 50.0 -0.3**
**SICH Sidi Chahed 147.05 329** P **PKPbc 16 38 53.0 +0.4**
**LCRM LCR 147.13 328** P **PKPbc 16 38 53.0 -0.1**
**IFR Ifrane 147.41 328** PKP **PKPbc 16 38 52.8 -1.1**
**MDT Midelt 147.66 326** P **PKPbc 16 38 53.9 -0.6**
**SRBC Serra Branca 147.66 4** *e*PKP **PKPbc 16 38 54.9 +0.8**
**PGRA Graciosa 147.67 4** *e*PKP **PKPdf 16 38 51.9 +0.5**
**ROSA Rosais 147.96 4** *e*PKP **PKPbc 16 38 53.6 -1.4**
**PAGU Aguaiva, Azore 147.98 3** *e*PKP **PKPbc 16 38 54.4 -0.6**
**PCED Cedros 148.01 5** *e*PKP **PKPbc 16 38 54.1 -1.0**
**PMAN Manadas 148.06 4** *e*PKP **PKPbc 16 38 52.8 +0.8**
**CALA Caldeira 148.06 5** *e*PKP **PKPbc 16 38 54.9 -0.4**
**ADH Angra Heroismo 148.09 3** *e*PKP **PKiKP 16 38 56.3 -0.7**
**PICO Pico 148.16 5** *e*PKP **PKPdf 16 38 52.5 +0.2**
**PCAN Candelaria 148.20 5** *e*PKP **PKPdf 16 38 52.0 -0.3**
**PPNO Prainha do Nor 148.21 5** *e*PKP **PKPbc 16 38 55.5 -0.2**
**ZHG ZHG 148.25 330** P **PKPdf 16 38 54.0 +1.4**
**BDFB Brasilia 148.38 135** PKP **PKPdf 16 38 54.2 +0.8**
comp=Z,97nm,0.8

comp=Z,6μm,20.0s

| | | | | | | |
|---|---|---|---|---|---|---|
| **PMAR** | **Madeira** | **152.93 344** | *e*PKP | **PKPdf** | **16 39 01.0** | **+1.0** |
| **KOWA** | **Kowa** | **157.74 292** | IAMs_20 | IAMs_20 | 18 00 48.1 | |
| | comp=Z,14μm,21.0s | | | | | |
| **KIC** | **Kosan Boka** | **159.63 270** | *e*PKIKP | **PKPdf** | **16 39 09.0** | **-0.1** |
| | comp=Z,521nm,1.3s | | | | | |
| **KIC** | **Kosan Boka** | **159.63 270** | | **PKPdf** | **16 39 09.0** | **-0.1** |
| **DBIC** | **Dimbokro** | **159.75 271** | PKP | **PKPdf** | **16 39 09.0** | **-0.2** |
| | comp=Z,50nm,1.0s,baz=119,slow=1.3,SNR=40 | | | | | |
| DBIC | | | PKPab | **PKPab** | **16 39 48.5** | **+0.3** |
| | comp=Z,305nm,1.2s,baz=116,slow=4.4,SNR=12 | | | | | |
| DBIC | | | PP | **PP** | **16 43 34.4** | **+4.2** |
| | comp=Z,59nm,1.1s,baz=130,slow=11,SNR=3.5 | | | | | |
| **DBIC** | **Dimbokro** | **159.75 271** | PKPdf | **PKPdf** | **16 39 08.8** | **-0.4** |
| **LIC** | **Lamto** | **159.91 270** | *e*PKIKP | **PKPdf** | **16 39 09.3** | **-0.1** |
| | comp=Z,910nm,1.5s | | | | | |
| **LIC** | **Lamto** | **159.91 270** | | **PKPdf** | **16 39 09.3** | **-0.1** |
| **TIC** | **Toumodi** | **159.91 271** | *e*PKIKP | **PKPdf** | **16 39 09.3** | **-0.1** |
| **TIC** | **Toumodi** | **159.91 271** | | **PKPdf** | **16 39 09.3** | **-0.1** |

*IDC **08** 16:35:42.3±1.7, 14°.78S×174°.51W, h0km, mb4.3/2, mb1 4.6/3, mb1mx3.9/35, mbtmp4.4/3, ML4.6/1 Error ellipse: s-maj=135.7km s-min=27.2km az=160.0*
*NEIC **08** 16:35:45.9±1.5, 13°.4S±0°.2×174°.5W±0°.1, h35km±2km, mb4.6/9, Error ellipse: s-maj=26.7km s-min=16.7km az=177.0*

**ISC 08 16:35:40.6±0.9, 13°.5S±0°.3×174°.39W±0°.07, h10km, n16, σ1§05/17, mb4.7/5, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.58** | **100** | Pn | | **Pg** | **16 36 28.8** | **-1.3** |
| | 95nm,0.3s,baz=184,slow=1.7,SNR=213 | | | | | | | |
| AFI | | | | Sn | | **Sn** | **16 36 54.5** | **+0.4** |
| | 85nm,0.3s,baz=344,slow=18,SNR=6.5 | | | | | | | |
| **AFI** | **Afiamalu** | **2.58** | **100** | Pn | | **Pb** | **16 36 28.1** | **+1.1** |
| AFI | | | | Sn | | **Sn** | **16 36 54.7** | **+0.6** |
| **DZM** | **Mont Dzumac** | **20.15** | **242** | P | | **P** | **16 40 16.6** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **20.23** | **242** | P | | **P** | **16 40 17.1** | **+1.0** |
| ONTNC | | | | IAmb | IAmb | | 16 40 24.1 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **WR0** | **Warramunga Arr** | **49.19** | **255** | P | | **P** | **16 44 29.1** | **-0.3** |
| WR0 | | | | IAmb | IAmb | | 16 44 43.9 | |
| | comp=Z,16nm,1.6s | | | | | | | |
| **WB0** | **Warramunga Arr** | **49.33** | **255** | P | | **P** | **16 44 30.2** | **-0.3** |
| WB0 | | | | IAmb | IAmb | | 16 44 51.5 | |
| | comp=Z,13nm,1.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **49.37** | **255** | P | | **P** | **16 44 30.5** | **-0.3** |
| WB2 | | | | IAmb | IAmb | | 16 45 58.1 | |
| | comp=Z,22nm,1.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **49.37** | **255** | P | | **P** | **16 44 30.8** | **0.0** |
| **WRA** | **Warramunga Arr** | **49.38** | **255** | P | | **P** | **16 44 31.2** | **+0.3** |
| | comp=Z,1.5nm,0.6s,baz=92,slow=6.9,SNR=19 | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.38** | **255** | IAmb | IAmb | | 16 44 58.9 | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **49.83** | **250** | P | | **P** | **16 44 32.8** | **-1.5** |
| **ASAR** | **Alice Springs** | **49.83** | **250** | P | | **P** | **16 44 33.0** | **-1.2** |
| | comp=Z,6.3nm,0.7s,baz=84,slow=8.4,SNR=69 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.83** | **250** | P | | **P** | **16 44 32.5** | **-1.7** |
| **YAK** | **Yakutsk** | **86.96** | **337** | P | | **P** | **16 48 26.5** | **+0.8** |
| **BRTR** | **Keskin Array B** | **144.05** | **322** | PKPbc | | **PKiKP** | **16 55 20.1** | **-0.6** |
| | comp=Z,1.4nm,0.8s,baz=76,slow=3.1,SNR=7.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.05** | **322** | | | **PKPdf** | **16 55 16.1** | **-1.0** |

**ATH 08 16:36:22.3, 38°.72N×23°.98E, h13km±3km, ML1.7/10, Error ellipse: s-maj=3.4km s-min=0.9km az=90.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KYMI** | **Kymi, Euboea I** | **0.12** | **133** | P | | Pg | 16 36 26.0 | +0.4 |
| KYMI | | | | S | | Sg | 16 36 27.8 | -0.2 |
| KYMI | | | | AML | AML | | 16 36 28.5 | |
| | comp=N,693μm,0.2s | | | | | | | |
| KYMI | | | | AML | AML | | 16 36 28.5 | |
| | comp=E,864μm,0.2s | | | | | | | |
| **SKY** | **Skiros Island** | **0.47** | **70** | P | | Pg | 16 36 31.7 | +0.1 |
| SKY | | | | S | | Sg | 16 36 37.7 | -0.2 |
| SKY | | | | AML | AML | | 16 36 41.6 | |
| | comp=E,512μm,0.1s | | | | | | | |
| SKY | | | | AML | AML | | 16 36 42.2 | |
| | comp=N,342μm,0.1s | | | | | | | |
| **DION** | **Dionisos Attik** | **0.64** | **184** | P | | Pg | 16 36 35.1 | +0.3 |
| DION | | | | S | | Sg | 16 36 42.9 | -0.4 |
| DION | | | | AML | AML | | 16 36 46.4 | |
| | comp=E,398μm,0.2s | | | | | | | |
| DION | | | | AML | AML | | 16 36 46.7 | |
| | comp=N,311μm,0.4s | | | | | | | |
| **PTL** | **Penteli** | **0.68** | **188** | P | | Pg | 16 36 35.6 | +0.1 |
| PTL | | | | S | | Sg | 16 36 44.5 | +0.1 |
| **ATAL** | **Atalanti** | **0.75** | **268** | P | | Pg | 16 36 36.2 | -0.7 |
| ATAL | | | | S | | Sb | 16 36 47.3 | -0.3 |
| ATAL | | | | AML | AML | | 16 36 49.8 | |
| | comp=N,70μm,0.3s | | | | | | | |
| ATAL | | | | AML | AML | | 16 36 50.2 | |
| | comp=E,56μm,0.2s | | | | | | | |
| **VIL2** | **Platees** | **0.76** | **228** | P | | Pg | 16 36 36.0 | -1.0 |
| VIL2 | | | | S | | Sb | 16 36 48.4 | +0.8 |
| VIL2 | | | | AML | AML | | 16 36 50.2 | |
| | comp=N,127μm,0.7s | | | | | | | |
| VIL2 | | | | AML | AML | | 16 36 53.4 | |
| | comp=E,84μm,0.3s | | | | | | | |
| **ATHU** | **Athens Univers** | **0.77** | **192** | P | | Pg | 16 36 36.8 | -0.4 |
| ATHU | | | | S | | Sb | 16 36 48.0 | +0.1 |
| **KARY** | **Karystos** | **0.77** | **152** | P | | Pg | 16 36 37.3 | 0.0 |
| KARY | | | | S | | Sg | 16 36 47.2 | -0.3 |
| **LKR** | **Lokris** | **0.77** | **265** | P | | Pb | 16 36 37.8 | +0.1 |
| LKR | | | | AML | AML | | 16 36 50.5 | |
| | comp=N,70μm,0.2s | | | | | | | |
| LKR | | | | AML | AML | | 16 36 53.0 | |
| | comp=E,73μm,0.2s | | | | | | | |
| **NEO** | **Neokhori** | **0.83** | **315** | P | | Pg | 16 36 37.8 | -0.7 |
| NEO | | | | S | | Sg | 16 36 49.6 | +0.2 |
| NEO | | | | AML | AML | | 16 36 52.0 | |
| | comp=E,94μm,0.3s | | | | | | | |
| NEO | | | | AML | AML | | 16 36 52.1 | |
| | comp=N,98μm,0.2s | | | | | | | |
| **VLY** | **Voula,Athens** | **0.88** | **190** | P | | Pg | 16 36 39.1 | -0.2 |
| VLY | | | | S | | Sg | 16 36 50.5 | -0.3 |
| VLY | | | | AML | AML | | 16 36 53.7 | |
| | comp=N,180μm,0.4s | | | | | | | |
| VLY | | | | AML | AML | | 16 36 54.0 | |
| | comp=E,217μm,0.5s | | | | | | | |
| **XOR** | **Xorichti** | **0.89** | **317** | P | | Pb | 16 36 40.0 | +0.2 |
| XOR | | | | S | | Sg | 16 36 51.0 | -0.3 |
| XOR | | | | AML | AML | | 16 36 54.1 | |
| | comp=E,89μm,0.3s | | | | | | | |
| XOR | | | | AML | AML | | 16 36 54.5 | |
| | comp=N,124μm,0.3s | | | | | | | |
| **LTK** | **Loutraki** | **1.06** | **229** | P | | Pn | 16 36 43.0 | 0.0 |
| LTK | | | | S | | Sg | 16 36 56.7 | +0.1 |
| LTK | | | | AML | AML | | 16 36 58.8 | |
| | comp=N,60μm,0.3s | | | | | | | |
| LTK | | | | AML | AML | | 16 37 00.6 | |
| | comp=E,68μm,0.5s | | | | | | | |

**GEN 08 16:38:10.8, 46°.37N×8°.76E, h20km±8km, Ml0.0, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TUE** | **Stuetta** | **0.42** | **75** | S | | Sb | 16 38 26.7 | +1.1 |
| **MUGIO** | **Muggio** | **0.49** | **156** | P | | Pb | 16 38 21.1 | +0.4 |
| **VDL** | **Val di Lei** | **0.49** | **76** | S | | Sn | 16 38 29.7 | -1.2 |
| **VARE** | **Varese** | **0.50** | **179** | P | | Pb | 16 38 20.4 | -0.5 |
| **LAUCH** | **Lauchernalp** | **0.68** | **274** | S | | Sb | 16 38 34.2 | +1.0 |
| **DAVOX** | **Davos/Dischmat** | **0.88** | **62** | S | | Sn | 16 38 40.9 | +0.4 |
| **DIX** | **Grande Dixence** | **0.98** | **253** | S | | Sn | 16 38 42.9 | 0.0 |
| **REMY** | **Saint-Rhmy-en** | **1.23** | **245** | P | | Pb | 16 38 35.2 | +1.7 |

*ANF **08** 16:50:07.5±0.3, 46°.10N×122°.17W, h6km±3km, ML3.1/11, Error ellipse: s-maj=3.6km s-min=2.3km az=68.0*
*NEIC **08** 16:50:07.5±1.7, 46°.12N±0°.01×122°.12W±0°.02, h10km±3km, Error ellipse: s-maj=2.2km s-min=1.6km az=80.0*
*PGC **08** 16:50:08.0, 46°.12N×122°.16W, h7km, ML2.9, ML2.6/9, 165km south of Seattle, Wa Washington*
*IASPEI **08** 16:50:07.3±0.8, 46°.13N±0°.02×122°.16W±0°.02, h16km±4km, Error ellipse: s-maj=3.1km s-min=2.5km az=82.8, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*PNSN **08** 16:50:08.0, 46°.12N×122°.16W, h6km, MD2.9, Fault plane solution: NP1:φs115.00000°, δ50.00000°, λ80.00000°.*
*SEA **08** 16:50:08.0±1.6, 46°.12N±0°.01×122°.16W±0°.02, h7km, ML2.9/119, ML2.6(OTT), ML2.8/32(NEIC), Error ellipse: s-maj=2.3km s-min=1.6km az=94.0*

**ISC 08 16:50:07.6±0.8, 46°.13N±0°.01×122°.15W±0°.02, h15km±4km, n152, σ1§10/185, Washington**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SWF2** | **Southwest Flan** | **0.07** | **320** | | | **Pg** | **16 50 12.2** | **+1.4** |
| **SHW** | **Mount Saint He** | **0.09** | **319** | | | **Pg** | **16 50 10.5** | **-0.4** |
| **VALT** | **Mount Saint He** | **0.09** | **344** | | | **Pg** | **16 50 10.6** | **-0.4** |
| VALT | | | | | | **Sg** | **16 50 12.9** | **-0.4** |
| **SOSW** | **Source of Smit** | **0.12** | **6** | | | **Pg** | **16 50 10.8** | **-0.4** |
| **STD** | **Studebaker Rid** | **0.12** | **336** | | | **Pg** | **16 50 10.8** | **-0.4** |
| STD | | | | | | **Sg** | **16 50 13.2** | **-0.5** |
| **B203** | **Quarry, Mount** | **0.13** | **289** | | | **Pg** | **16 50 10.9** | **-0.4** |
| B203 | | | | | | **Sg** | **16 50 13.2** | **-0.6** |
| **FL2** | **Flat Top 2** | **0.15** | **297** | | | **Pg** | **16 50 11.4** | **-0.3** |
| **JRO** | **Jston Ridge Ob** | **0.15** | **343** | | | **Pg** | **16 50 11.4** | **-0.4** |
| JRO | | | | | | **Sg** | **16 50 14.1** | **-0.3** |
| **B201** | **Coldwater, Mou** | **0.19** | **336** | | | **Pg** | **16 50 11.9** | **-0.3** |
| B201 | | | | | | **Sg** | **16 50 15.0** | **-0.3** |
| **ERK** | **Elk Rock** | **0.22** | **324** | | | **Pg** | **16 50 12.4** | **-0.3** |
| **TDL** | **Tradedollar La** | **0.23** | **349** | | | **Pg** | **16 50 12.6** | **-0.2** |
| **F04A** | **Amboy** | **0.27** | **224** | | | **Pg** | **16 50 13.0** | **-0.3** |
| F04A | | | | | | **Sg** | **16 50 17.1** | **-0.2** |
| **F04A** | **Amboy** | **0.27** | **224** | IAML | | | 16 50 17.7 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **RVW** | **Rose Valley** | **0.41** | **273** | | | **Pg** | **16 50 15.6** | **-0.2** |
| **APM** | **Augspurger Mou** | **0.51** | **140** | | | **Pg** | **16 50 17.6** | **-0.2** |
| **E04D** | **Cinebar** | **0.52** | **326** | | | **Pg** | **16 50 17.9** | **+0.1** |
| E04D | | | | | | **Sg** | **16 50 25.7** | **+0.9** |
| **E04D** | **Cinebar** | **0.52** | **326** | IAML | | | 16 50 25.9 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **E04D** | **Cinebar** | **0.52** | **326** | P | | **Pg** | **16 50 17.9** | **+0.1** |
| | baz=147,SNR=84 | | | | | | | |
| E04D | | | | S | | **Sg** | **16 50 25.6** | **+0.9** |
| | baz=147 | | | | | | | |
| **F05D** | **White Salmon** | **0.54** | **116** | | | **Pb** | **16 50 18.3** | **-0.5** |
| **F05D** | **White Salmon** | **0.54** | **116** | IAML | | | 16 50 26.9 | |
| | comp=E,1μm,0.4s | | | | | | | |
| F05D | | | | IAML | | | 16 50 31.0 | |
| | comp=N,961nm,0.2s | | | | | | | |
| **F05D** | **White Salmon** | **0.54** | **116** | P | | **Pb** | **16 50 18.2** | **-0.5** |
| | baz=296,SNR=17 | | | | | | | |
| F05D | | | | S | | **Sb** | **16 50 25.9** | **-0.5** |
| | baz=296 | | | | | | | |
| **F04D** | **Rainier, OR** | **0.60** | **266** | | | **Pg** | **16 50 19.2** | **-0.1** |
| F04D | | | | | | **Sg** | **16 50 28.1** | **+0.8** |
| **F04D** | **Rainier, OR** | **0.60** | **266** | P | | **Pg** | **16 50 19.2** | **-0.1** |
| | baz=86,SNR=25 | | | | | | | |
| F04D | | | | S | | **Sg** | **16 50 28.0** | **+0.8** |
| | baz=86 | | | | | | | |
| **HUBA** | **Hudson Bay Hig** | **0.61** | **215** | | | **Sg** | **16 50 27.2** | **-0.3** |
| **B023** | **Clatskanie** | **0.64** | **269** | | | **Pg** | **16 50 19.8** | **-0.4** |
| B023 | | | | | | **Sg** | **16 50 29.0** | **+0.3** |
| **LON** | **Longmire** | **0.67** | **21** | | | **Pg** | **16 50 20.4** | **-0.3** |
| **REMR** | **Mount Rainier-** | **0.73** | **17** | | | **Pg** | **16 50 21.5** | **-0.3** |
| **HIYU** | **Hiyu Mountain** | **0.73** | **161** | | | **Pg** | **16 50 21.4** | **-0.5** |
| **SHRK** | **Shell Rock** | **0.79** | **146** | | | **Pg** | **16 50 22.8** | **-0.2** |
| **RCS** | **Mount Rainier-** | **0.80** | **21** | | | **Pg** | **16 50 22.6** | **-0.6** |
| **OBSR** | **Observation Ro** | **0.81** | **17** | | | **Pg** | **16 50 23.0** | **-0.3** |
| **PANH** | **Panhandle Gap,** | **0.81** | **26** | | | **Pg** | **16 50 22.5** | **-0.9** |
| **BMW** | **Boistfort Moun** | **0.82** | **295** | | | **Pg** | **16 50 22.9** | **-0.7** |
| **RVC** | **Mount Rainier-** | **0.83** | **9** | | | **Pg** | **16 50 23.1** | **-0.5** |
| **PALME** | **Palmer Lift, M** | **0.83** | **158** | | | **Pg** | **16 50 23.2** | **-0.6** |
| **TIMB** | **Timberline** | **0.85** | **158** | | | **Pg** | **16 50 23.5** | **-0.6** |
| **B941** | **Kapowsin** | **0.86** | **357** | | | **Pg** | **16 50 23.3** | **-1.0** |
| **FMW** | **Mount Fremont** | **0.87** | **22** | | | **Pg** | **16 50 23.9** | **-0.6** |
| **FMW** | **Mount Fremont** | **0.87** | **22** | P | | **Pg** | **16 50 23.9** | **-0.6** |
| FMW | | | | S | | **Sg** | **16 50 34.2** | **-1.8** |
| **HOOD** | **Mount Hood Mea** | **0.88** | **156** | | | **Pg** | **16 50 23.4** | **-1.2** |
| HOOD | | | | IAML | | | 16 50 36.3 | |
| | comp=N,200nm,0.2s | | | | | | | |
| **GHW** | **Garrison Hill** | **0.92** | **355** | | | **Pg** | **16 50 24.4** | **-1.0** |
| **G04A** | **Mulino** | **0.95** | **194** | | | **Pg** | **16 50 24.6** | **-1.4** |
| **G05D** | **Wamic, OR** | **1.06** | **146** | | | **Pg** | **16 50 27.4** | **-0.7** |
| **G05D** | **Wamic, OR** | **1.06** | **146** | P | | **Pg** | **16 50 27.3** | **-0.8** |
| | baz=326,SNR=53 | | | | | | | |
| G05D | | | | S | | **Sb** | **16 50 41.8** | **+0.4** |
| | baz=326 | | | | | | | |
| **E03A** | **Lebam** | **1.06** | **294** | | | **Pb** | **16 50 26.6** | **-1.0** |
| **E03A** | **Lebam** | **1.06** | **294** | P | | **Pb** | **16 50 27.1** | **-0.6** |
| E03A | | | | S | | **Sg** | **16 50 41.3** | **-0.7** |
| **D05A** | **Enumclaw** | **1.07** | **6** | | | **Pg** | **16 50 26.9** | **-1.3** |
| **D05A** | **Enumclaw** | **1.07** | **6** | P | | **Pg** | **16 50 27.3** | **-0.9** |
| D05A | | | | S | | **Sg** | **16 50 41.0** | **-1.2** |
| **CPW** | **Capitol Peak** | **1.08** | **322** | P | | **Pb** | **16 50 27.4** | **-0.7** |
| CPW | | | | S | | **Sg** | **16 50 40.6** | **-2.1** |
| **NAC** | **Naches** | **1.10** | **56** | | | **Pn** | **16 50 29.4** | **+0.8** |
| **GSM** | **Grass Mountain** | **1.10** | **13** | | | **Pg** | **16 50 27.9** | **-1.0** |
| **TRW** | **Toppenish Ridg** | **1.13** | **81** | | | **Pn** | **16 50 29.6** | **+0.7** |
| **D04E** | **Lakebay** | **1.14** | **338** | P | | **Pb** | **16 50 28.9** | **0.0** |
| | baz=158 | | | | | | | |
| D04E | | | | S | | **Sn** | **16 50 45.0** | **+0.8** |
| | baz=158 | | | | | | | |
| **VBEM** | **Beaver Butte** | **1.14** | **159** | | | **Pb** | **16 50 28.7** | **-0.4** |
| **B019** | **Raymond** | **1.16** | **297** | | | **Pb** | **16 50 29.0** | **-0.4** |
| **RADR** | **Rader Ridge** | **1.18** | **285** | Pg | | **Pb** | **16 50 28.6** | **-1.1** |
| RADR | | | | IAML | | | 16 50 51.0 | |
| | comp=N,133nm,0.4s | | | | | | | |
| **G03D** | **McMinnville, O** | **1.20** | **221** | | | **Pn** | **16 50 28.6** | **-1.3** |
| G03D | | | | IAML | | | 16 50 47.2 | |
| | comp=N,233nm,0.4s | | | | | | | |
| **G03D** | **McMinnville, O** | **1.20** | **221** | P | | **Pn** | **16 50 28.8** | **-1.0** |
| | baz=40,SNR=43 | | | | | | | |
| G03D | | | | S | | **Sb** | **16 50 45.4** | **+0.1** |
| | baz=40 | | | | | | | |
| **B022** | **Seaside** | **1.25** | **263** | | | **Pn** | **16 50 30.1** | **-0.3** |
| **B017** | **Montesano** | **1.30** | **312** | | | **Pn** | **16 50 31.2** | **0.0** |
| **RATT** | **Rattlesnake La** | **1.32** | **10** | | | **Pn** | **16 50 31.4** | **-0.1** |
| **EBG** | **Ellensburg** | **1.35** | **54** | | | **Pg** | **16 50 33.0** | **-0.5** |
| **BLTW** | **Bickleton** | **1.39** | **98** | | | **Pb** | **16 50 33.2** | **-0.1** |
| **CROR** | **Criterion Ridg** | **1.41** | **144** | | | **Pb** | **16 50 33.7** | **+0.2** |
| **H04A** | **Detroit Lake** | **1.44** | **181** | | | **Pn** | **16 50 32.8** | **-0.4** |
| **HEBO** | **Mount Hebo** | **1.45** | **231** | | | **Pn** | **16 50 33.0** | **-0.2** |
| HEBO | | | | IAML | | | 16 50 53.9 | |
| | comp=E,180nm,0.2s | | | | | | | |
| HEBO | | | | IAML | | | 16 50 53.9 | |
| | comp=N,147nm,0.2s | | | | | | | |
| **SMW** | **South Mountain** | **1.45** | **326** | P | | **Pn** | **16 50 33.6** | **+0.3** |
| **GMW** | **Gold Mountain** | **1.49** | **343** | | | **Pn** | **16 50 33.9** | **+0.1** |
| **WISH** | **Wishkah** | **1.49** | **312** | | | **Pn** | **16 50 34.5** | **+0.7** |
| WISH | | | | IAML | | | 16 51 03.6 | |
| | comp=E,97nm,0.8s | | | | | | | |
| **WISH** | **Wishkah** | **1.49** | **312** | P | | **Pn** | **16 50 34.5** | **+0.7** |
| **GNW** | **Green Mountain** | **1.51** | **342** | | | **Pn** | **16 50 34.4** | **+0.3** |
| **GNW** | **Green Mountain** | **1.51** | **342** | P | | **Pn** | **16 50 34.1** | **0.0** |
| GNW | | | | S | | **Sn** | **16 50 54.4** | **+0.9** |
| **LTY** | **Liberty** | **1.52** | **42** | | | **Pn** | **16 50 35.0** | **+0.7** |
| LTY | | | | IAML | | | 16 50 55.9 | |
| | comp=E,116nm,0.6s | | | | | | | |
| LTY | | | | IAML | | | 16 50 56.0 | |
| | comp=N,83nm,0.3s | | | | | | | |
| **LTY** | **Liberty** | **1.52** | **42** | P | | **Pn** | **16 50 35.1** | **+0.8** |
| LTY | | | | Sg | | **Sb** | **16 50 54.9** | **+0.2** |
| **D03D** | **Eldon** | **1.55** | **336** | | | **Pn** | **16 50 35.3** | **+0.7** |
| **D03D** | **Eldon** | **1.55** | **336** | P | | **Pn** | **16 50 35.0** | **+0.4** |
| | baz=156,SNR=10 | | | | | | | |
| D03D | | | | S | | **Sb** | **16 50 56.1** | **+0.7** |
| | baz=156 | | | | | | | |
| **F07A** | **Phinny Hill Vi** | **1.57** | **98** | | | **Pb** | **16 50 35.7** | **-0.5** |
| **C05A** | **Tolt Reservoir** | **1.60** | **11** | | | **Pb** | **16 50 36.7** | **-0.1** |
| **C05A** | **Tolt Reservoir** | **1.60** | **11** | P | | **Pn** | **16 50 36.5** | **+1.2** |
| C05A | | | | S | | **Sn** | **16 50 56.6** | **+0.8** |
| **HDW** | **Hoodsport** | **1.64** | **338** | P | | **Pn** | **16 50 36.5** | **+0.5** |
| HDW | | | | S | | **Sn** | **16 50 57.3** | **+0.4** |
| **E07A** | **Sunnyside** | **1.65** | **74** | | | **Pn** | **16 50 36.6** | **+0.6** |
| **H04D** | **Lebanon** | **1.66** | **195** | | | **Pn** | **16 50 36.0** | **0.0** |
| H04D | | | | IAML | | | 16 51 03.6 | |
| | comp=N,136nm,0.3s | | | | | | | |
| **H04D** | **Lebanon** | **1.66** | **195** | P | | **Pn** | **16 50 36.1** | **0.0** |
| | baz=14,SNR=35 | | | | | | | |
| H04D | | | | S | | **Sn** | **16 50 58.3** | **+1.3** |
| | baz=14 | | | | | | | |
| **C04A** | **Brinnon** | **1.69** | **341** | | | **Pn** | **16 50 37.3** | **+0.8** |
| **HTW** | **Haystack Looko** | **1.70** | **9** | | | **Pn** | **16 50 37.8** | **+1.1** |
| **NLWA** | **Neilton Lookou** | **1.73** | **318** | | | **Pn** | **16 50 38.1** | **+0.9** |
| **COR** | **Corvallis** | **1.74** | **208** | | | **Pn** | **16 50 37.7** | **+0.5** |
| COR | | | | IAML | | | 16 51 02.7 | |
| | comp=N,94nm,0.8s | | | | | | | |
| COR | | | | IAML | | | 16 51 05.4 | |
| | comp=N,85nm,0.5s | | | | | | | |
| **JBO** | **Jordan Butte** | **1.75** | **111** | | | **Pn** | **16 50 38.0** | **+0.6** |
| **B013** | **Quilcene** | **1.77** | **343** | | | **Pn** | **16 50 35.4** | **-2.1** |
| **OLQ** | **Olympics--Lake** | **1.80** | **321** | | | **Pn** | **16 50 38.9** | **+0.9** |
| **RSW** | **Rattlesnake Hi** | **1.80** | **81** | | | **Pg** | **16 50 42.1** | **0.0** |
| **HAWA** | **Hanford** | **1.84** | **81** | | | **Pn** | **16 50 39.2** | **+0.7** |
| **BROR** | **Big Rock Looko** | **1.87** | **187** | | | **Pn** | **16 50 40.3** | **+1.2** |
| **I05D** | **Terrebonne, OR** | **1.88** | **162** | | | **Pb** | **16 50 41.3** | **-0.3** |
| **I05D** | **Terrebonne, OR** | **1.88** | **162** | Pb | | **Pb** | **16 50 41.2** | **-0.3** |
| | baz=342 | | | | | | | |
| I05D | | | | Sb | | **Sb** | **16 51 05.8** | **+0.9** |
| | baz=342 | | | | | | | |
| **TCBUT** | **Trout Creek Bu** | **1.92** | **169** | | | **Pb** | **16 50 42.9** | **+0.6** |
| **PRLK** | **Prince Lake** | **1.92** | **176** | | | **Pb** | **16 50 41.8** | **-0.6** |
| **ETW** | **Entiat** | **1.94** | **40** | | | **Pb** | **16 50 41.9** | **-0.7** |
| **C06D** | **Leavenworth** | **1.99** | **25** | | | **Pb** | **16 50 44.4** | **+0.9** |
| **C06D** | **Leavenworth** | **1.99** | **25** | P | | **Pb** | **16 50 42.7** | **-0.8** |
| | baz=206 | | | | | | | |
| **BUCK** | **Buck Mountain** | **2.02** | **197** | | | **Pn** | **16 50 42.1** | **+1.0** |
| BUCK | | | | IAML | | | 16 51 14.1 | |
| | comp=E,53nm,0.6s | | | | | | | |
| **HUOR** | **Husband** | **2.02** | **174** | | | **Pb** | **16 50 43.1** | **-1.0** |
| **JCW** | **Jim Creek** | **2.07** | **4** | P | | **Pn** | **16 50 43.7** | **+1.9** |
| JCW | | | | S | | **Sb** | **16 51 10.7** | **+0.2** |
| **WIFE** | **Three Sisters-** | **2.08** | **173** | | | **Pb** | **16 50 44.3** | **-0.8** |
| **MOON** | **Moon Mountain** | **2.10** | **170** | | | **Pn** | **16 50 40.8** | **-1.4** |
| MOON | | | | | | **Pb** | **16 50 44.8** | **-0.6** |
| **GPW** | **Glacier Peak** | **2.11** | **19** | P | | **Pb** | **16 50 45.0** | **-0.6** |
| GPW | | | | S | | **Sb** | **16 51 11.2** | **-0.5** |
| **B05A** | **Bryant** | **2.14** | **1** | P | | **Pn** | **16 50 44.7** | **+2.0** |
| | baz=181 | | | | | | | |
| B05A | | | | S | | **Sb** | **16 51 12.1** | **-0.2** |
| | baz=181 | | | | | | | |
| **E08A** | **Dider Farm, El** | **2.17** | **79** | | | **Pn** | **16 50 44.1** | **+0.9** |
| **WTV** | **Waterville** | **2.18** | **43** | | | **Pn** | **16 50 44.9** | **+1.6** |
| **STW** | **Striped Peak** | **2.27** | **333** | P | | **Pb** | **16 50 47.8** | **-0.5** |
| **HBO** | **Huckleberry Mo** | **2.29** | **183** | | | **Pn** | **16 50 47.0** | **+2.1** |
| **I02E** | **Swisshome, OR** | **2.35** | **211** | Pn | | **Pn** | **16 50 47.2** | **+1.6** |
| I02E | | | | IAML | | | 16 51 28.7 | |
| | comp=N,38nm,0.8s | | | | | | | |
| I02E | | | | IAML | | | 16 51 31.5 | |
| | comp=E,56nm,1.0s | | | | | | | |
| **I02E** | **Swisshome, OR** | **2.35** | **211** | P | | **Pn** | **16 50 47.4** | **+1.8** |
| | baz=30 | | | | | | | |
| **RPW** | **Rockport** | **2.36** | **10** | P | | **Pn** | **16 50 48.1** | **+2.2** |
| RPW | | | | S | | **Sb** | **16 51 17.8** | **-1.1** |
| **ASBU** | **Astronaut Butt** | **2.37** | **166** | | | **Pb** | **16 50 49.0** | **-1.0** |
| **G08A** | **Pilot Rock** | **2.39** | **109** | Pn | | **Pn** | **16 50 45.8** | **-0.4** |
| **D08A** | **Wollman Farm,** | **2.42** | **66** | Pn | | **Pn** | **16 50 45.8** | **-0.8** |
| **VGZ** | **Gonzales** | **2.42** | **341** | P | | **Pn** | **16 50 48.8** | **+2.2** |
| VGZ | | | | Sg | | **Sb** | **16 51 20.3** | **-0.2** |
| **SAW** | **Saint Andrews** | **2.46** | **49** | | | **Pn** | **16 50 48.1** | **+1.0** |
| **RNO** | **Roman Nose** | **2.48** | **208** | | | **Pn** | **16 50 47.7** | **+0.1** |
| **PINE** | **Pine Mountain** | **2.49** | **159** | | | **Pn** | **16 50 48.2** | **+0.5** |
| **I03D** | **Drain, OR** | **2.57** | **200** | P | | **Pn** | **16 50 50.8** | **+2.2** |
| | baz=19 | | | | | | | |
| **MCW** | **Mount Constitu** | **2.60** | **350** | P | | **Pb** | **16 50 52.0** | **-1.8** |
| MCW | | | | Sg | | **Sb** | **16 51 25.9** | **+0.3** |
| **MBW** | **Mount Baker** | **2.66** | **4** | | | **Pb** | **16 50 54.4** | **-0.6** |
| **B009** | **North Saanich** | **2.67** | **341** | P | | **Pn** | **16 50 51.9** | **+1.8** |
| **B011** | **North Saanich** | **2.67** | **341** | P | | **Pn** | **16 50 51.7** | **+1.7** |
| **B010** | **North Saanich** | **2.67** | **341** | P | | **Pn** | **16 50 51.9** | **+1.9** |
| **PGC** | **Sidney** | **2.67** | **341** | Pn | | **Pn** | **16 50 51.5** | **+1.5** |
| **PGC** | **Sidney** | **2.67** | **341** | P | | **Pn** | **16 50 52.0** | **+2.0** |
| **SNB** | **Saturna Island** | **2.74** | **346** | P | | **Pn** | **16 50 54.1** | **+3.2** |
| **I07A** | **Izee** | **2.77** | **137** | Pn | | **Pn** | **16 50 52.5** | **+1.0** |
| **E09A** | **Wood Farm, Sta** | **2.80** | **81** | Pn | | **Pn** | **16 50 52.5** | **+0.6** |
| **A05A** | **Maple Falls** | **2.87** | **1** | P | | **Pb** | **16 50 56.9** | **-1.6** |
| A05A | | | | Sg | | **Sb** | **16 51 31.7** | **-1.7** |
| **J04D** | **Umpqua Nationa** | **2.89** | **179** | Pn | | **Pn** | **16 50 53.6** | **+0.4** |
| **VDB** | **Vedder Mountai** | **2.90** | **1** | P | | **Pn** | **16 50 55.8** | **+2.6** |
| VDB | | | | Sg | | **Sb** | **16 51 32.1** | **-2.2** |
| **J05D** | **Fort Rock, OR** | **2.92** | **167** | P | | **Pn** | **16 50 55.0** | **+1.4** |
| | baz=347,SNR=12 | | | | | | | |
| **B08A** | **Colville Reser** | **2.94** | **40** | Pn | | **Pn** | **16 50 54.3** | **+0.4** |
| **CLRS** | **Cowichan Lake** | **3.01** | **334** | Pn | | **Pn** | **16 50 56.3** | **+1.6** |
| **CLRS** | **Cowichan Lake** | **3.01** | **334** | P | | **Pb** | **16 50 58.5** | **-2.3** |
| **DBO** | **Dodson Butte** | **3.11** | **195** | | | **Pn**

38nm,0.3s,baz=335,slow=21,SNR=14
JHJ S Sn 16 56 43.3 -0.8
21nm,0.3s,baz=92,slow=22,SNR=3.6
JKA Kamikawa-asahi 6.02 4 Pn Pn 16 55 53.1 -1.0
ASAJ Asahikawa 6.02 4 P Pn 16 55 54.1 +0.1
4.0nm,0.3s,baz=224,slow=13,SNR=45
ASAJ S Sn 16 57 04.8 +3.2
2.6nm,0.3s,baz=89,slow=32,SNR=4.6
JHS Saijyo 7.83 249 Pn Pn 16 56 20.6 +1.6
JMN Monobe 7.94 239 Pn Pn 16 56 21.8 +1.3
YSS Yuzh-Sakhalins 8.86 3 Pn Pn 16 56 32.7 -0.3
USA0B Ussuriysk Arra 9.73 312 Pn 16 56 45.5 +0.6
USRK Ussuriysk Ar. 9.73 312 P Pn 16 56 45.9 +1.0
baz=123,slow=15,SNR=20
USRK Ussuriysk Ar. 9.73 312 Pn Pn 16 56 44.7 -0.2
KSRS Korea Array 11.21 271 P Pn 16 57 07.8 +2.7
0.4nm,0.3s,baz=81,slow=14,SNR=7.0
KSAR Wonju Array Be 11.24 271 Pn Pn 16 57 08.6 +3.0
KS19 Wonju Array Si 11.25 271 Pn Pn 16 57 08.6 +3.0
MDJ Mudanjiang 11.40 309 Pn Pn 16 57 09.9 +2.2
KLR Kul'dur 13.38 330 P Pn 16 57 37.5 +2.8
0.2nm,0.3s,baz=135,slow=10.0,SNR=2.0
SEY Seymchan 25.64 11 P P 16 59 54.1 +1.5
4.7nm,1.0s,baz=202,slow=10,SNR=4.6
ULN Ulaanbaatar 27.20 302 P P 17 00 06.3 -0.8
ULN IAmb IAmb 17 00 32.4
comp=Z,10nm,1.4s
SONM Songino Array 27.63 302 P P 17 00 11.2 +0.3
comp=Z,1.7nm,0.9s,baz=121,slow=10,SNR=6.7
SONM Songino Array 27.63 302 IAmb IAmb 17 00 14.1
comp=Z,4.1nm,1.4s
ENH Enshi 27.95 264 P P 17 00 13.0 -0.7
H11N2 WAKE ISLAND Hy 28.28 123 T T 17 30 36.0
baz=316,slow=75,SNR=298
H11N1 WAKE ISLAND Hy 28.29 123 T T 17 30 36.8
baz=316,slow=75,SNR=258
H11N3 WAKE ISLAND Hy 28.30 123 T T 17 30 37.4
baz=316,slow=75,SNR=161
H11S1 WAKE ISLAND Hy 29.03 125 T T 17 31 32.2
baz=318,slow=75,SNR=181
H11S3 WAKE ISLAND Hy 29.04 125 T T 17 31 32.3
baz=318,slow=75,SNR=85
H11S2 WAKE ISLAND Hy 29.05 125 T T 17 31 37.6
baz=318,slow=75,SNR=105
ANM Nome 40.42 32 P P 17 02 00.4 -0.6
ZAA0 Zalesovo Array 41.58 312 P P 17 02 09.8 -0.9
ZAA0 IAmb IAmb 17 02 13.4
comp=Z,9.4nm,1.3s
ZALV Zalesovo Beam 41.58 312 P P 17 02 10.0 -0.7
comp=Z,1.9nm,0.4s,baz=84,slow=7.6,SNR=6.5
CMAR Chiang Mai Arr 42.27 255 P P 17 02 14.8 -1.9
comp=Z,0.3nm,0.7s,baz=58,slow=7.5,SNR=1.7
MK31 Makanchi Array 43.99 301 P P 17 02 30.0 -0.4
MK31 IAmb IAmb 17 02 32.9
comp=Z,3.4nm,0.8s
MKAR Makanchi Array 43.99 301 P P 17 02 30.1 -0.3
comp=Z,2.4nm,0.5s,baz=83,slow=12,SNR=43
MKAR Makanchi Array 43.99 301 P P 17 02 30.0 -0.4
MAKZ Makanchi 44.20 301 P P 17 02 31.1 -0.9
MAKZ IAmb IAmb 17 02 35.8
comp=Z,6.4nm,1.2s
IMAR Indian Mountai 45.47 31 P P 17 02 41.8 -0.1
KURK Kurchatov 45.68 307 P P 17 02 43.2 -0.5
KURK IAmb IAmb 17 02 55.8
comp=Z,6.0nm,0.8s
KURBB Kurchatov Arra 45.76 307 P P 17 02 43.6 -0.6
comp=Z,3.2nm,0.4s,baz=82,slow=8.7,SNR=30
TAPN Taplejung 46.38 273 eP P 17 02 47.8 -2.1
JIRN Jiri 47.44 275 eP P 17 02 57.7 -0.5
PMG Port Moresby 47.50 173 P P 17 02 56.9 -1.3
RND Reindeer 47.51 35 P P 17 02 55.7 -2.2
RND IAmb IAmb 17 03 04.4
comp=Z,13nm,1.4s
GUN Gumba 47.57 275 eP P 17 02 58.4 -0.8
comp=Z,10nm,0.4s
H24K Noodor Dome 47.87 31 P P 17 03 01.9 +1.2
PKI Pulchoki 48.09 275 eP P 17 03 01.8 -1.4
KKN Kakani 48.09 275 eP P 17 03 01.5 -1.6
comp=Z,8.9nm,0.6s
PKIN Phulchoki 48.10 275 eP P 17 03 01.7 -1.5
DMN Daman 48.31 275 eP P 17 03 04.1 -0.8
IL31 48.32 33 P P 17 03 05.1 +1.1
IL31 IAmb IAmb 17 03 05.7
comp=Z,2.8nm,0.8s
ILAR Eielson Array 48.32 33 P P 17 03 04.9 +0.8
comp=Z,1.7nm,0.8s,baz=268,slow=6.8,SNR=18
GKN Gorkha 48.50 276 eP P 17 03 06.0 -0.2
comp=Z,12nm,0.6s
KDJ Kajisay 48.71 296 P P 17 03 06.5 -1.2
KDJ IAmb IAmb 17 03 12.8
comp=Z,2.0nm,0.6s
KLU Klutina 49.00 37 P P 17 03 10.3 +0.8
DANN Dangsing 49.03 277 eP P 17 03 10.6 +0.2
comp=Z,21nm,0.5s
KOLN Koldamda 49.42 276 eP P 17 03 13.1 -0.2
PYUN Piuthan 49.75 277 eP P 17 03 15.7 -0.1
BCAR Beaver Creek A 50.72 35 P P 17 03 24.2 +1.7
KKAR Karatay Array 53.04 300 P P 17 03 39.9 -0.1
CHGR Chuyangaron 55.67 295 P P 17 03 59.1 -0.2
ARU Arti 55.90 318 P P 17 04 00.3 -0.2
ARU IAmb IAmb 17 04 07.8
comp=Z,3.8nm,0.8s
ABKAR Akbulak array 57.65 310 P P 17 04 12.2 -0.8
WB0 Warramunga Arr 58.01 189 P P 17 04 15.8 0.0
WB0 IAmb IAmb 17 04 16.5
comp=Z,3.8nm,0.8s
WRAB Tennant Creek 58.18 189 P P 17 04 16.8 -0.1
WRAB IAmb IAmb 17 04 32.1
comp=Z,6.8nm,1.1s
WR0 Warramunga Arr 58.18 188 P P 17 04 16.8 -0.2
WR0 IAmb IAmb 17 04 17.6
comp=Z,3.0nm,0.9s
WB2 Warramunga Arr 58.19 189 P P 17 04 16.9 -0.1
WRA Warramunga Arr 58.19 189 P P 17 04 17.1 +0.1
comp=Z,1.0nm,0.6s,baz=5.3,slow=6.9,SNR=11
WRA Warramunga Arr 58.19 189 P P 17 04 16.9 -0.2
AKTO Aktyubinsk 58.35 312 P P 17 04 19.3 +1.4
comp=Z,1.2nm,0.5s,baz=47,slow=11,SNR=4.7
EUNU Eureka 59.05 9 P P 17 04 22.7 +0.3
RES Resolute Bay 61.44 15 P P 17 04 38.9 +0.2
ASAR Alice Springs 61.92 188 P P 17 04 43.0 +0.5
comp=Z,0.8nm,0.7s,baz=4.6,slow=4.9,SNR=20
YKA Yellowknife Ar 62.63 31 P P 17 04 47.4 +0.6
comp=Z,0.5nm,0.6s,baz=302,slow=6.6,SNR=9.9
ARCES ARCESS Array B 63.18 339 P P 17 04 52.0 +1.5
comp=Z,9.6nm,1.1s,baz=40,slow=6.4,SNR=6.4
FIA1 FINESS Array S 68.11 332 P P 17 05 21.4 -0.8
FINES FINESS Array B 68.11 332 P P 17 05 21.9 -0.4
comp=Z,1.1nm,0.6s,baz=42,slow=8.9,SNR=5.3
FINES FINESS Array B 68.11 332 P P 17 05 21.4 -0.9
AKASG Malin Array Be 73.77 322 P P 17 05 55.5 -1.3
comp=Z,1.0nm,0.6s,baz=45,slow=6.0,SNR=5.4
NVAR Mina Array Bea 73.94 54 P P 17 05 58.0 -0.4
comp=Z,0.9nm,0.8s,baz=286,slow=6.1,SNR=6.9
GWY Greenwater Val 76.32 55 P P 17 06 12.6 +0.6
BW06 Boulder Array 76.55 46 P P 17 06 14.1 +0.8
BW06 IAmb IAmb 17 06 14.4
comp=Z,2.7nm,0.9s
PD31 Pinedale Array 76.55 46 P P 17 06 13.9 +0.5
PDAR Pinedale Array 76.55 46 P P 17 06 14.3 +1.0
comp=Z,1.5nm,0.5s,baz=269,slow=1.3,SNR=16
TX31 Lajitas Ar. Si 89.06 53 P P 17 07 18.9 +0.8
TX31 IAmb IAmb 17 07 22.7
comp=Z,3.7nm,1.1s
TX32 Lajitas Array 89.06 53 P P 17 07 18.9 +0.7
TX32 IAmb IAmb 17 07 24.7
comp=Z,3.6nm,1.5s
TXAR Lajitas Array 89.06 53 P P 17 07 19.4 +1.2
comp=Z,0.8nm,0.5s,baz=293,slow=2.6,SNR=7.5
TXAR Lajitas Array 89.06 53 P P 17 07 18.9 +0.7
LPAZ La Paz 145.71 59 PKPbc PKPbc 17 14 02.8 +0.2
comp=Z,3.4nm,0.7s,baz=337,slow=6.5,SNR=8.1
LPAZ La Paz 145.71 59 PKPdf PKPdf 17 14 00.7 -1.5
H03N3 Juan Fernandez 146.62 95 T T 19 58 46.2
baz=292,slow=74,SNR=5.6
H03N1 Juan Fernandez 146.63 95 T T 19 58 48.0
baz=97,slow=74,SNR=8.1

*NNC **08** 17:22:12.8±0.7,42°.91N×77°.92E,h8km±4km,mb3.8,*
*mpv3.8,Error ellipse: s-maj=7.6km s-min=2.1km az=177.0*
*KRNET **08** 17:22:13.3±0.1,42°.89N×77°.91E,h22km,mb3.6*
*SOME **08** 17:22:13.6,42°.97N×77°.88E,h10km*
**ISC 08 17:22:13.3**±0.9,**42°.88N**±0°.02×**77°.91E**±0°.01,**h16**km±7km,
**n66**,σ9**60**/120,**9C-6D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ANVS** | **Anan'yevo** | **0.20** | **243** | ⇑*i*P | | **Pg** | **17 22 18.5** | **+0.2** |
| ANVS | baz=39 | | | ⇑*i*S | | **Sg** | **17 22 21.8** | **+0.2** |
| **SATY** | **Saty** | **0.41** | **63** | *e*P | | **Pg** | **17 22 21.4** | **-0.2** |
| SATY | 67nm,0.3s<br>1μm,0.1s | | | *e*S | | **Sg** | **17 22 27.3** | **0.0** |
| **SATY** | **Saty** | **0.41** | **63** | P | | **Pg** | **17 22 21.4** | **-0.2** |
| SATY | 67nm,0.3s<br>1μm,0.1s | | | S | | **Sb** | **17 22 27.9** | **-0.3** |
| **SATY** | **Saty** | **0.41** | **63** | *e*P | | **Pg** | **17 22 21.4** | **-0.2** |
| SATY | baz=65 | | | *e*S | | **Sg** | **17 22 27.3** | **0.0** |
| **ZHN** | **Zhinishke** | **0.48** | **53** | *e*P | | **Pg** | **17 22 22.8** | **-0.2** |
| ZHN | 171nm,0.1s<br>1μm,0.2s | | | *e*S | | **Sg** | **17 22 29.4** | **-0.2** |
| **ZHN** | **Zhinishke** | **0.48** | **53** | P | | **Pg** | **17 22 22.8** | **-0.2** |
| ZHN | 171nm,0.1s<br>1μm,0.2s | | | S | | **Sg** | **17 22 29.4** | **-0.2** |
| **ZHN** | **Zhinishke** | **0.48** | **53** | *e*P | | **Pg** | **17 22 22.8** | **-0.2** |
| ZHN | baz=54 | | | *e*S | | **Sg** | **17 22 29.4** | **-0.2** |
| **PRZ** | **Przheval'sk** | **0.53** | **137** | ⇑*i*P | | **Pg** | **17 22 24.1** | **+0.1** |
| PRZ | baz=37 | | | ⇑*i*S | | **Sg** | **17 22 31.4** | **+0.3** |
| **KURS** | **Kuram** | **0.64** | **17** | *e*P | | **Pg** | **17 22 25.6** | **-0.4** |
| KURS | 29nm,0.2s<br>74nm,0.2s | | | *e*S | | **Sg** | **17 22 34.1** | **-0.4** |
| **KURS** | **Kuram** | **0.64** | **17** | P | | **Pg** | **17 22 25.5** | **-0.4** |
| KURS | 29nm,0.2s<br>74nm,0.2s | | | S | | **Sg** | **17 22 34.1** | **-0.4** |
| **KURS** | **Kuram** | **0.64** | **17** | *e*P | | **Pg** | **17 22 25.6** | **-0.4** |
| KURS | baz=18 | | | *e*S | | **Sg** | **17 22 34.1** | **-0.4** |
| **KOTS** | **Kotyrbulak** | **0.69** | **302** | *e*P | | **Pg** | **17 22 26.4** | **-0.4** |
| KOTS | 27nm,0.2s<br>244nm,0.2s | | | *e*S | | **Sg** | **17 22 35.9** | **-0.1** |
| **KOTS** | **Kotyrbulak** | **0.69** | **302** | P | | **Pg** | **17 22 26.4** | **-0.4** |
| KOTS | 27nm,0.2s<br>113nm,0.2s | | | S | | **Sg** | **17 22 35.9** | **-0.1** |
| **KOTS** | **Kotyrbulak** | **0.69** | **302** | *e*P | | **Pg** | **17 22 26.4** | **-0.4** |
| KOTS | baz=0.0<br>baz=0.0 | | | *e*S | | **Sg** | **17 22 35.9** | **-0.1** |
| **MDOK** | **Medeo** | **0.69** | **295** | *e*P | | **Pg** | **17 22 26.4** | **-0.6** |
| MDOK | 21nm,0.3s<br>204nm,0.4s | | | *e*S | | **Sg** | **17 22 35.6** | **-0.6** |
| **MDOK** | **Medeo** | **0.69** | **295** | ⇓P | | **Pg** | **17 22 26.1** | **-0.9** |
| MDOK | 17nm,0.5s<br>4.5nm,0.3s | | | ⇓S | | **Sg** | **17 22 33.7** | **-2.5** |
| **MDOK** | **Medeo** | **0.69** | **295** | Pg | | **Pg** | **17 22 26.4** | **-0.6** |
| MDOK | 21nm,0.3s<br>204nm,0.4s | | | Lg | | Lg | 17 22 35.6 | |
| **MDOK** | **Medeo** | **0.69** | **295** | *e*P | | **Pg** | **17 22 26.4** | **-0.6** |
| MDOK | baz=93<br>baz=93 | | | *e*S | | **Sg** | **17 22 35.7** | **-0.6** |
| **TNSS** | **Tian-Shan** | **0.73** | **283** | *e*P | | **Pg** | **17 22 27.1** | **-0.5** |
| TNSS | 37nm,0.1s<br>68nm,0.2s | | | *e*S | | **Sg** | **17 22 37.0** | **-0.2** |
| **TNSS** | **Tian-Shan** | **0.73** | **283** | P | | **Pg** | **17 22 27.1** | **-0.5** |
| TNSS | 37nm,0.1s<br>68nm,0.2s | | | S | | **Sg** | **17 22 37.2** | **-0.1** |
| **TNSS** | **Tian-Shan** | **0.73** | **283** | *e*P | | **Pg** | **17 22 27.1** | **-0.5** |
| TNSS | baz=82<br>baz=82 | | | *e*S | | **Sg** | **17 22 37.1** | **-0.2** |
| **KNDC** | **Almaty** | **0.77** | **296** | ⇑P | | **Pn** | **17 22 29.2** | **-0.4** |
| KNDC | 5.1nm,0.2s<br>84nm,0.6s | | | ⇑S | | **Sb** | **17 22 38.8** | **+0.1** |
| **AAA** | **Alma-Ata** | **0.80** | **295** | *e*P | | **Pb** | **17 22 28.8** | **-0.1** |
| AAA | 78nm,0.2s<br>130nm,0.2s | | | *e*S | | **Sg** | **17 22 39.9** | **+0.3** |
| **AAA** | **Alma-Ata** | **0.80** | **295** | P | | **Pb** | **17 22 28.8** | **-0.1** |
| AAA | 78nm,0.2s<br>130nm,0.2s | | | S | | **Sg** | **17 22 39.9** | **+0.3** |
| **KPKS** | **Kokpek** | **0.82** | **44** | *e*P | | **Pb** | **17 22 28.7** | **-0.5** |
| KPKS | 92nm,0.1s<br>649nm,0.3s | | | *e*S | | **Sb** | **17 22 39.4** | **-0.6** |
| **KPKS** | **Kokpek** | **0.82** | **44** | *e*P | | **Pb** | **17 22 28.7** | **-0.5** |
| KPKS | baz=44<br>baz=44 | | | *e*S | | **Sb** | **17 22 39.4** | **-0.6** |
| **UZB** | **Uzynbulak** | **0.86** | **71** | *e*P | | **Pb** | **17 22 29.2** | **-0.7** |
| UZB | 54nm,0.2s<br>220nm,0.1s | | | *e*S | | **Sb** | **17 22 40.5** | **-0.7** |
| **UZB** | **Uzynbulak** | **0.86** | **71** | P | | **Pb** | **17 22 29.2** | **-0.7** |
| UZB | 54nm,0.2s<br>220nm,0.1s | | | S | | **Sb** | **17 22 40.5** | **-0.7** |
| **UZB** | **Uzynbulak** | **0.86** | **71** | *e*P | | **Pb** | **17 22 29.2** | **-0.7** |
| UZB | baz=72<br>baz=72 | | | *e*S | | **Sb** | **17 22 40.5** | **-0.7** |
| **KDJ** | **Kajisay** | **0.92** | **216** | ⇓*i*P | | **Pb** | **17 22 30.8** | **-0.2** |
| KDJ | baz=15<br>baz=15 | | | ⇓*i*S | | **Sb** | **17 22 43.1** | **0.0** |
| **MTBS** | **Maitube** | **1.12** | **284** | *e*P | | **Pb** | **17 22 34.0** | **-0.3** |
| MTBS | 55nm,0.2s<br>57nm,0.3s | | | *e*S | | **Sb** | **17 22 48.6** | **0.0** |
| **MTBS** | **Maitube** | **1.12** | **284** | P | | **Pb** | **17 22 34.0** | **-0.3** |
| MTBS | 55nm,0.2s<br>57nm,0.3s | | | S | | **Sb** | **17 22 48.6** | **0.0** |
| **MTBS** | **Maitube** | **1.12** | **284** | *e*P | | **Pb** | **17 22 34.0** | **-0.3** |
| MTBS | baz=83<br>baz=83 | | | *e*S | | **Sb** | **17 22 48.6** | **0.0** |
| **CHKK** | **Chushkaly** | **1.19** | **326** | *e*P | | **Pn** | **17 22 35.1** | **-0.2** |
| CHKK | 10nm,0.1s<br>333nm,0.3s | | | *e*S | | **Sb** | **17 22 50.4** | **-0.2** |
| **CHKK** | **Chushkaly** | **1.19** | **326** | *e*P | | **Pn** | **17 22 35.1** | **-0.2** |
| CHKK | baz=26<br>baz=26 | | | *e*S | | **Sb** | **17 22 50.4** | **-0.2** |
| **KTBS** | **Karatobe** | **1.23** | **313** | *e*P | | **Pb** | **17 22 36.1** | **0.0** |
| KTBS | 19nm,0.2s<br>174nm,0.3s | | | *e*S | | **Sn** | **17 22 52.0** | **-0.1** |
| **KTBS** | **Karatobe** | **1.23** | **313** | P | | **Pb** | **17 22 36.1** | **0.0** |
| KTBS | 19nm,0.2s<br>174nm,0.3s | | | S | | **Sn** | **17 22 52.0** | **-0.1** |
| **KTBS** | **Karatobe** | **1.23** | **313** | *e*P | | **Pb** | **17 22 36.1** | **0.0** |
| KTBS | baz=13<br>baz=13 | | | *e*S | | **Sn** | **17 22 52.0** | **-0.1** |
| **PDGK** | **Podgornoye** | **1.24** | **68** | P | | **Pn** | **17 22 35.3** | **-0.8** |
| PDGK | 4.5nm,0.2s<br>20nm,0.4s | | | S | | **Sb** | **17 22 51.4** | **-0.9** |
| **BLB** | **Baldybastay** | **1.29** | **18** | *e*P | | **Pb** | **17 22 37.0** | **-0.2** |
| BLB | 165nm,0.2s<br>209nm,0.2s | | | *e*S | | **Sn** | **17 22 53.7** | **0.0** |
| **BLB** | **Baldybastay** | **1.29** | **18** | P | | **Pb** | **17 22 37.0** | **-0.2** |
| BLB | 165nm,0.2s<br>209nm,0.2s | | | S | | **Sn** | **17 22 53.7** | **0.0** |
| **ARXS** | **Arharly** | **1.34** | **357** | *e*P | | **Pb** | **17 22 37.9** | **-0.1** |
| ARXS | 52nm,0.2s<br>68nm,0.1s | | | *e*S | | **Sb** | **17 22 55.6** | **+0.6** |
| **ARXS** | **Arharly** | **1.34** | **357** | P | | **Pb** | **17 22 37.9** | **-0.1** |
| ARXS | 52nm,0.2s<br>68nm,0.1s | | | S | | **Sb** | **17 22 55.6** | **+0.6** |
| **KST** | **Kastek** | **1.44** | **277** | *e*S | | **Sn** | **17 22 57.4** | **-0.1** |
| KST | 167nm,0.5s<br>167nm,0.5s | | | S | | **Sn** | **17 22 57.4** | **-0.1** |
| **BOOM** | **Boomskoye usch** | **1.50** | **256** | ⇑*i*P | | **Pb** | **17 22 41.2** | **+0.3** |
| BOOM | baz=55<br>baz=55 | | | ⇑*i*S | | **Sb** | **17 23 00.7** | **+0.9** |
| **KUU** | **Kurty** | **1.53** | **312** | *e*P | | **Pb** | **17 22 41.3** | **0.0** |
| KUU | 16nm,0.2s<br>130nm,0.3s | | | *e*S | | **Sb** | **17 23 00.9** | **+0.5** |
| **KUU** | **Kurty** | **1.53** | **312** | P | | **Pb** | **17 22 41.3** | **0.0** |
| KUU | 16nm,0.2s<br>130nm,0.3s | | | S | | **Sb** | **17 23 01.0** | **+0.5** |
| **KUU** | **Kurty** | **1.53** | **312** | *e*P | | **Pb** | **17 22 41.3** | **0.0** |
| KUU | baz=12<br>baz=12 | | | *e*S | | **Sb** | **17 23 01.0** | **+0.5** |
| **DGS** | **Degeres** | **1.61** | **284** | *e*P | | **Pn** | **17 22 41.7** | **+0.6** |
| DGS | 55nm,0.3s<br>114nm,0.3s | | | *e*S | | **Sn** | **17 23 02.1** | **+0.5** |
| **DGS** | **Degeres** | **1.61** | **284** | S | | **Sb** | **17 23 02.6** | **-0.3** |
| **DGS** | 114nm,0.3s<br>**Degeres** | **1.61** | **284** | P | | **Pn** | **17 22 41.7** | **+0.6** |
| **KNOS** | 55nm,0.3s<br>**Konyrlen** | **1.75** | **31** | *e*P | | **Pb** | **17 22 44.7** | **-0.3** |
| KNOS | 8.9nm,0.3s<br>79nm,0.3s | | | *e*S | | **Sb** | **17 23 06.9** | **+0.2** |
| **KRBS** | **Karabastau** | **1.83** | **297** | *e*S | | **Sb** | **17 23 08.2** | **-0.9** |
| **KRBS** | 98nm,0.4s<br>**Karabastau** | **1.83** | **297** | S | | **Sb** | **17 23 08.2** | **-0.9** |
| **KTMS** | 98nm,0.4s<br>**Ketmen** | **1.87** | **71** | *e*P | | **Pb** | **17 22 46.8** | **-0.5** |
| KTMS | 19nm,0.2s<br>40nm,0.2s | | | *e*S | | **Sb** | **17 23 10.4** | **0.0** |
| **KTMS** | **Ketmen** | **1.87** | **71** | P | | **Pb** | **17 22 46.8** | **-0.5** |
| KTMS | 19nm,0.2s<br>40nm,0.2s | | | S | | **Sb** | **17 23 10.4** | **0.0** |
| **KTMS** | **Ketmen** | **1.87** | **71** | *e*P | | **Pb** | **17 22 46.8** | **-0.5** |
| KTMS | baz=72<br>baz=72 | | | *e*S | | **Sb** | **17 23 10.5** | **0.0** |
| **DJR** | **Jarkent** | **2.00** | **43** | *e*P | | **Pb** | **17 22 49.0** | **-0.3** |
| DJR | 7.4nm,0.1s<br>58nm,0.3s | | | *e*S | | **Sb** | **17 23 14.9** | **+1.0** |
| **DJR** | **Jarkent** | **2.00** | **43** | Pg | | **Pb** | **17 22 49.0** | **-0.3** |
| DJR | 7.4nm,0.1s<br>58nm,0.3s | | | Lg | | Lg | 17 23 14.9 | |
| **TDK** | **Taldyqorghan** | **2.15** | **9** | *e*P | | **Pb** | **17 22 51.6** | **-0.3** |
| TDK | 50nm,0.4s<br>28nm,0.5s | | | *e*S | | **Sb** | **17 23 19.1** | **+0.7** |
| **TDK** | **Taldyqorghan** | **2.15** | **9** | Pg | | **Pb** | **17 22 51.6** | **-0.3** |
| TDK | 50nm,0.4s<br>28nm,0.5s | | | Lg | | Lg | 17 23 19.1 | |
| **KAPS** | **Kapalarasan** | **2.62** | **23** | *e*P | | **Pb** | **17 23 00.6** | **+0.6** |
| KAPS | 3.7nm,0.1s<br>93nm,0.4s | | | *e*S | | **Sb** | **17 23 34.5** | **+2.6** |
| **KAPS** | **Kapalarasan** | **2.62** | **23** | Pg | | **Pb** | **17 23 00.6** | **+0.6** |
| KAPS | 3.7nm,0.1s<br>93nm,0.4s | | | Lg | | Lg | 17 23 34.5 | |
| **MAKZ** | **Makanchi** | **4.88** | **35** | ⇑Pn | | **Pn** | **17 23 28.3** | **+2.3** |
| MAKZ | 0.1nm,0.3s<br>3.1nm,0.7s | | | ⇓Lg | | Lg | 17 24 41.9 | |
| **MK31** | **Makanchi Array** | **5.00** | **37** | ⇓Pn | | **Pn** | **17 23 29.7** | **+2.0** |
| MK31 | 0.1nm,0.3s,baz=218,slow=12,SNR=8.8<br>1.0nm,0.4s,baz=214,slow=27,SNR=6.7 | | | Lg | | Lg | 17 24 46.3 | |

*KNET **08** 17:22:22.0±0.4,42°.57N×75°.15E,h14km±3km,ml2.7,Error*
*ellipse: s-maj=3.3km s-min=1.8km az=145.0*
*NNC **08** 17:22:22.4±1.4,42°.46N×75°.15E,h1km±8km,mb4.3,*
*mpv3.9,Error ellipse: s-maj=13.5km s-min=6.7km*
*az=170.0*
*KRNET **08** 17:22:23.2±0.1,42°.59N×75°.12E,h20km,mb3.5*
*SOME **08** 17:22:24.1,42°.67N×75°.12E,h10km*
**ISC 08 17:22:22.8**±0.9,**42°.52N**±0°.02×**75°.11E**±0°.01,**h8**km±7km,
**n100**,σ1**02**/164,**36C-19D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **0.18** | **318** | ⇑P | | **Pg** | **17 22 27.1** | **+0.5** |
| KBK | 459nm,0.1s,SNR=5.3<br>2μm,0.1s | | | ⇓S | | **Sg** | **17 22 29.8** | **+0.6** |
| **KBK** | **Karagaybulak** | **0.18** | **318** | ⇑*i*P | | **Pg** | **17 22 27.1** | **+0.5** |
| KBK | baz=98<br>baz=98 | | | ⇑*i*S | | **Sg** | **17 22 29.5** | **+0.3** |
| **FRU1** | **Bishkek** | **0.46** | **309** | ⇑*i*P | | **Pb** | **17 22 32.3** | **-0.8** |
| FRU1 | baz=4.0<br>baz=4.0 | | | ⇑*i*S | | **Sg** | **17 22 38.6** | **+0.9** |
| **AAK** | **Ala-Archa** | **0.47** | **284** | ⇑P | | **Pb** | **17 22 32.7** | **-0.6** |
| AAK | 102nm,0.3s,SNR=125<br>450nm,0.3s | | | ⇑S | | **Sb** | **17 22 39.3** | **-1.2** |
| **AAK** | **Ala-Archa** | **0.47** | **284** | ⇑P | | **Pb** | **17 22 32.8** | **-0.6** |
| AAK | 20nm,0.2s<br>114nm,0.3s | | | ⇓S | | **Sb** | **17 22 39.4** | **-1.2** |
| **AAK** | **Ala-Archa** | **0.47** | **284** | ⇑*i*P | | **Pg** | **17 22 32.4** | **+0.5** |
| AAK | baz=76<br>baz=76 | | | ⇑*i*S | | **Sg** | **17 22 38.9** | **+0.8** |
| **UCH** | **Uchtor** | **0.53** | **237** | ⇓P | | **Pb** | **17 22 34.7** | **0.0** |
| UCH | 44nm,0.1s,SNR=66<br>316nm,0.2s | | | ⇑S | | **Sb** | **17 22 42.5** | **-0.1** |
| **UCH** | **Uchtor** | **0.53** | **237** | ⇑*i*P | | **Pb** | **17 22 34.6** | **0.0** |
| UCH | baz=32<br>baz=32 | | | ⇑*i*S | | **Sb** | **17 22 42.5** | **-0.1** |
| **TKM2** | **Tokmak 2** | **0.54** | **42** | ⇓P | | **Pg** | **17 22 32.4** | **-0.8** |
| TKM2 | 150nm,0.1s,SNR=71<br>725nm,0.1s | | | ⇑S | | **Sg** | **17 22 39.0** | **-1.3** |
| **TKM2** | **Tokmak 2** | **0.54** | **42** | ⇓P | | **Pg** | **17 22 32.2** | **-1.0** |
| TKM2 | 33nm,0.2s<br>92nm,0.1s | | | ⇓S | | **Sg** | **17 22 38.8** | **-1.5** |
| **TKM2** | **Tokmak 2** | **0.54** | **42** | ⇓*i*P | | **Pg** | **17 22 32.6** | **-0.6** |
| TKM2 | baz=46<br>baz=46 | | | ⇓*i*S | | **Sg** | **17 22 39.6** | **-0.7** |
| **CHMS** | **Chumysh** | **0.55** | **331** | ⇑P | | **Pg** | **17 22 33.0** | **-0.3** |
| CHMS | 153nm,0.2s,SNR=175<br>381nm,0.1s | | | ⇓S | | **Sg** | **17 22 39.0** | **-1.5** |
| **CHMS** | **Chumysh** | **0.55** | **331** | ⇓*i*P | | **Pg** | **17 22 33.0** | **-0.3** |
| CHMS | baz=26<br>baz=26 | | | ⇓*i*S | | **Sg** | **17 22 39.9** | **-0.6** |
| **BOOM** | **Boomskoye usch** | **0.61** | **93** | ⇑*i*P | | **Pb** | **17 22 34.9** | **-1.0** |
| BOOM | baz=99<br>baz=99 | | | ⇑*i*S | | **Sg** | **17 22 42.9** | **+0.1** |
| **KST** | **Kastek** | **0.82** | **50** | *e*P | | **Pg** | **17 22 37.8** | **-0.7** |
| KST | 30nm,0.2s<br>237nm,0.6s | | | *e*S | | **Sg** | **17 22 48.2** | **-1.0** |
| **KST** | **Kastek** | **0.82** | **50** | S | | **Sg** | **17 22 48.2** | **-1.0** |
| **KST** | 237nm,0.6s<br>**Kastek** | **0.82** | **50** | P | | **Pb** | **17 22 38.8** | **-0.5** |
| **KST** | 77nm,0.4s<br>**Kastek** | **0.82** | **50** | *e*P | | **Pg** | **17 22 37.8** | **-0.7** |
| | baz=53 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KST | | | | | *e*S | Sg | 17 22 48.2 | -1.0 |
| | baz=53 | | | | | | | |
| **KST** | **Kastek** | **0.82** | **50** | P | | Pg | 17 22 37.8 | -0.7 |
| | 77nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **0.82** | **50** | *e*P | | Pb | 17 22 38.8 | -0.5 |
| | 77nm,0.4s | | | | | | | |
| **DGS** | **Degeres** | **0.87** | **34** | *e*P | | Pg | 17 22 38.5 | -1.0 |
| | 48nm,0.5s | | | | | | | |
| DGS | | | | | *e*S | Sg | 17 22 49.4 | -1.4 |
| | 90nm,0.2s | | | | | | | |
| **DGS** | **Degeres** | **0.87** | **34** | S | | Sg | 17 22 49.4 | -1.4 |
| **DGS** | **Degeres** | **0.87** | **34** | *e*P | | Pg | 17 22 38.5 | -1.0 |
| | baz=36 | | | | | | | |
| DGS | | | | | *e*S | Sg | 17 22 49.4 | -1.4 |
| | baz=36 | | | | | | | |
| **DGS** | **Degeres** | **0.87** | **34** | P | | Pg | 17 22 38.5 | -1.0 |
| **USP** | **Ospenovka** | **0.87** | **329** | ⇓P | | Pg | 17 22 38.9 | -0.6 |
| | 130nm,0.2s,SNR=240 | | | | | | | |
| USP | | | | | ⇑S | Sg | 17 22 50.0 | -0.8 |
| | 148nm,0.2s | | | | | | | |
| **USP** | **Ospenovka** | **0.87** | **329** | ⇑*i*P | | Pg | 17 22 38.5 | -1.0 |
| | baz=26 | | | | | | | |
| USP | | | | | ⇑*i*S | Sg | 17 22 49.5 | -1.3 |
| | baz=26 | | | | | | | |
| **ARLS** | **Aral** | **0.88** | **222** | ⇑*i*P | | Pn | 17 22 41.0 | -0.6 |
| | baz=19 | | | | | | | |
| ARLS | | | | | ⇑*i*S | Sb | 17 22 53.3 | +0.9 |
| | baz=19 | | | | | | | |
| **ULHL** | **Ulahol** | **0.88** | **108** | ⇑P | | Pg | 17 22 38.7 | -1.0 |
| | 23nm,0.1s,SNR=70 | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.99** | **279** | ⇓P | | Pb | 17 22 42.5 | +0.2 |
| | 26nm,0.2s,SNR=73 | | | | | | | |
| EKS2 | | | | | ⇓S | Sn | 17 22 57.0 | -0.4 |
| | 46nm,0.1s | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.99** | **279** | ⇓*i*P | | Pb | 17 22 41.9 | -0.4 |
| | baz=75 | | | | | | | |
| EKS2 | | | | | ⇓*i*S | Sb | 17 22 55.4 | -0.2 |
| | baz=75 | | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **339** | *e*P | | Pg | 17 22 40.8 | -1.1 |
| | 36nm,0.2s | | | | | | | |
| SGDS | | | | | *e*S | Sg | 17 22 53.4 | -1.4 |
| | 49nm,0.2s | | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **339** | S | | Sg | 17 22 53.4 | -1.4 |
| | 49nm,0.2s | | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **339** | P | | Pg | 17 22 40.8 | -1.1 |
| | 36nm,0.2s | | | | | | | |
| **AML** | **Almayashu** | **1.12** | **250** | ⇑P | | Pn | 17 22 44.8 | -0.3 |
| | 25nm,0.2s,SNR=66 | | | | | | | |
| AML | | | | | ⇓S | Sn | 17 23 01.2 | +0.3 |
| | 162nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.15** | **58** | *e*P | | Pg | 17 22 43.9 | -0.9 |
| | 17nm,0.2s | | | | | | | |
| MTBS | | | | | *e*S | Sg | 17 22 58.5 | -1.1 |
| | 212nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **1.15** | **58** | P | | Pg | 17 22 43.9 | -0.9 |
| | 17nm,0.2s | | | | | | | |
| MTBS | | | | | S | Sg | 17 22 58.5 | -1.1 |
| | 212nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **1.15** | **58** | *e*P | | Pg | 17 22 43.9 | -0.9 |
| | baz=60 | | | | | | | |
| MTBS | | | | | *e*S | Sg | 17 22 58.5 | -1.1 |
| | baz=60 | | | | | | | |
| **KRBS** | **Karabastau** | **1.24** | **19** | *e*P | | Pg | 17 22 46.2 | -0.5 |
| | 44nm,0.2s | | | | | | | |
| KRBS | | | | | *e*S | Sg | 17 23 02.8 | -0.1 |
| | 74nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.24** | **19** | S | | Sb | 17 23 03.2 | +0.4 |
| | 74nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.24** | **19** | P | | Pg | 17 22 46.2 | -0.5 |
| | 44nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.24** | **19** | P | | Pg | 17 22 45.2 | -1.4 |
| | 44nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.24** | **19** | *e*P | | Pg | 17 22 45.2 | -1.4 |
| | 44nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **1.41** | **280** | *e*P | | Pg | 17 22 50.9 | +1.1 |
| | 45nm,0.3s | | | | | | | |
| MRKS | | | | | *e*S | Sn | 17 23 09.8 | +2.2 |
| | 122nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **1.41** | **280** | S | | Sn | 17 23 09.7 | +2.1 |
| | 122nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **1.41** | **280** | P | | Pg | 17 22 50.9 | +1.1 |
| | 45nm,0.3s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.45** | **69** | *e*P | | Pb | 17 22 49.9 | -0.3 |
| | 17nm,0.2s | | | | | | | |
| TNSS | | | | | *e*S | Sg | 17 23 08.6 | -0.8 |
| | 37nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.45** | **69** | P | | Pb | 17 22 49.8 | -0.3 |
| | 17nm,0.2s | | | | | | | |
| TNSS | | | | | S | Sg | 17 23 08.6 | -0.8 |
| | 37nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.45** | **69** | *e*P | | Pb | 17 22 49.9 | -0.3 |
| | baz=71 | | | | | | | |
| TNSS | | | | | *e*S | Sg | 17 23 08.6 | -0.8 |
| | baz=71 | | | | | | | |
| **AAA** | **Alma-Ata** | **1.49** | **62** | *e*P | | Pb | 17 22 50.6 | -0.2 |
| | 56nm,0.3s | | | | | | | |
| AAA | | | | | *e*S | Sb | 17 23 10.1 | +0.1 |
| | 94nm,0.3s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.49** | **62** | P | | Pb | 17 22 50.6 | -0.2 |
| | 56nm,0.3s | | | | | | | |
| AAA | | | | | S | Sb | 17 23 10.1 | +0.1 |
| | 94nm,0.3s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.49** | **62** | *e*P | | Pb | 17 22 50.6 | -0.2 |
| | baz=64 | | | | | | | |
| AAA | | | | | *e*S | Sb | 17 23 10.1 | +0.1 |
| | baz=64 | | | | | | | |
| **KNDC** | **Almaty** | **1.53** | **62** | ⇑Lg | | Lg | 17 23 11.6 | |
| | 94nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **1.56** | **65** | *e*P | | Pb | 17 22 51.5 | -0.5 |
| | 32nm,0.5s | | | | | | | |
| MDOK | | | | | *e*S | Sn | 17 23 11.6 | +0.1 |
| | 53nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **1.56** | **65** | Pg | | Pb | 17 22 51.5 | -0.5 |
| | 32nm,0.5s | | | | | | | |
| MDOK | | | | | Lg | Lg | 17 23 11.6 | |
| | 53nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **1.56** | **65** | *e*P | | Pb | 17 22 51.6 | -0.5 |
| | baz=67 | | | | | | | |
| MDOK | | | | | *e*S | Sn | 17 23 11.7 | +0.2 |
| | baz=67 | | | | | | | |
| **KDJ** | **Kajisay** | **1.58** | **104** | ⇑*i*P | | Pg | 17 22 52.7 | -0.5 |
| | baz=6.0 | | | | | | | |
| KDJ | | | | | ⇑*i*S | Sg | 17 23 13.1 | -0.6 |
| | baz=6.0 | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.64** | **64** | *e*P | | Pg | 17 22 53.5 | -0.6 |
| | 27nm,0.2s | | | | | | | |
| KOTS | | | | | *e*S | Sg | 17 23 14.8 | -0.5 |
| | 78nm,0.5s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.64** | **64** | P | | Pg | 17 22 53.6 | -0.6 |
| | 27nm,0.2s | | | | | | | |
| KOTS | | | | | S | Sg | 17 23 14.8 | -0.5 |
| | 78nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **1.64** | **33** | *e*P | | Pn | 17 22 52.3 | +0.4 |
| | 52nm,0.4s | | | | | | | |
| KUU | | | | | *e*S | Sn | 17 23 12.8 | -0.3 |
| | 259nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **1.64** | **33** | P | | Pn | 17 22 52.3 | +0.4 |
| | 52nm,0.4s | | | | | | | |
| KUU | | | | | S | Sn | 17 23 12.8 | -0.3 |
| | 259nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **1.64** | **33** | *e*P | | Pn | 17 22 52.3 | +0.4 |
| | baz=34 | | | | | | | |
| KUU | | | | | *e*S | Sn | 17 23 12.9 | -0.3 |
| | baz=34 | | | | | | | |
| **KTBS** | **Karatobe** | **1.66** | **44** | *e*P | | Pn | 17 22 52.7 | +0.5 |
| | 53nm,0.2s | | | | | | | |
| KTBS | | | | | *e*S | Sn | 17 23 13.7 | +0.1 |
| | 135nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **1.66** | **44** | P | | Pn | 17 22 52.7 | +0.5 |
| | 53nm,0.2s | | | | | | | |
| KTBS | | | | | S | Sn | 17 23 13.7 | +0.1 |
| | 135nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **1.66** | **44** | *e*P | | Pn | 17 22 52.7 | +0.5 |
| | baz=45 | | | | | | | |
| KTBS | | | | | *e*S | Sn | 17 23 13.7 | +0.1 |
| | baz=45 | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.90** | **81** | ⇑*i*P | | Pn | 17 22 56.6 | +0.9 |
| | baz=83 | | | | | | | |
| ANVS | | | | | ⇑*i*S | Sb | 17 23 21.4 | -0.5 |
| | baz=83 | | | | | | | |
| **CHKK** | **Chushkaly** | **1.91** | **45** | *e*P | | Pb | 17 22 57.6 | -0.3 |
| | 33nm,0.3s | | | | | | | |
| CHKK | | | | | *e*S | Sb | 17 23 22.0 | +0.1 |
| | 252nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **1.91** | **45** | *e*P | | Pb | 17 22 57.6 | -0.3 |
| | baz=47 | | | | | | | |
| CHKK | | | | | *e*S | Sb | 17 23 22.1 | +0.1 |
| | baz=47 | | | | | | | |
| **MNAS** | **Manas** | **1.93** | **270** | ⇓*i*P | | Pb | 17 22 57.8 | -0.4 |
| | baz=68 | | | | | | | |
| MNAS | | | | | ⇓*i*S | Sb | 17 23 22.8 | +0.3 |
| | baz=68 | | | | | | | |
| **KURS** | **Kuram** | **2.44** | **66** | *e*P | | Pb | 17 23 07.3 | +0.3 |
| | 19nm,0.5s | | | | | | | |
| KURS | | | | | *e*S | Sb | 17 23 38.6 | +1.3 |
| | 77nm,0.7s | | | | | | | |
| **KURS** | **Kuram** | **2.44** | **66** | Pg | | Pb | 17 23 07.3 | +0.3 |
| | 19nm,0.5s | | | | | | | |
| KURS | | | | | Lg | Lg | 17 23 38.6 | |
| | 77nm,0.7s | | | | | | | |
| **ARK** | **Arkit** | **2.45** | **254** | ⇑*i*P | | Pb | 17 23 05.2 | -1.9 |
| | baz=53 | | | | | | | |
| ARK | | | | | ⇑*i*S | Sb | 17 23 36.4 | -1.1 |
| | baz=53 | | | | | | | |
| **SATY** | **Saty** | **2.48** | **76** | *e*P | | Pb | 17 23 08.5 | +0.8 |
| | 44nm,0.3s | | | | | | | |
| SATY | | | | | *e*S | Sg | 17 23 40.6 | -2.0 |
| | 159nm,0.8s | | | | | | | |
| **SATY** | **Saty** | **2.48** | **76** | Pg | | Pb | 17 23 08.5 | +0.8 |
| | 44nm,0.3s | | | | | | | |
| SATY | | | | | Lg | Lg | 17 23 40.6 | |
| | 159nm,0.8s | | | | | | | |
| **ZHN** | **Zhinishke** | **2.53** | **74** | *e*P | | Pg | 17 23 09.8 | -1.5 |
| | 75nm,0.2s | | | | | | | |
| ZHN | | | | | *e*S | Sg | 17 23 42.8 | -1.2 |
| | 38nm,0.4s | | | | | | | |
| **ZHN** | **Zhinishke** | **2.53** | **74** | Pg | | Pg | 17 23 09.8 | -1.5 |
| | 75nm,0.2s | | | | | | | |
| ZHN | | | | | Lg | Lg | 17 23 42.8 | |
| | 38nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.60** | **49** | *e*P | | Pb | 17 23 09.4 | -0.3 |
| | 25nm,0.3s | | | | | | | |
| ARXS | | | | | *e*S | Sb | 17 23 42.3 | +0.4 |
| | 114nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.60** | **49** | Pg | | Pb | 17 23 09.4 | -0.3 |
| | 25nm,0.3s | | | | | | | |
| ARXS | | | | | Lg | Lg | 17 23 42.3 | |
| | 114nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **2.63** | **343** | *e*P | | Pb | 17 23 10.2 | 0.0 |
| | 25nm,0.3s | | | | | | | |
| BTLS | | | | | *e*S | Sb | 17 23 43.6 | +0.9 |
| | 7.4nm,0.6s | | | | | | | |
| **BTLS** | **Baital** | **2.63** | **343** | Lg | | Lg | 17 23 43.6 | |
| | 7.4nm,0.6s | | | | | | | |
| **BTLS** | **Baital** | **2.63** | **343** | Pg | | Pb | 17 23 10.2 | 0.0 |
| | 25nm,0.3s | | | | | | | |
| **KPKS** | **Kokpek** | **2.79** | **69** | *e*P | | Pb | 17 23 13.2 | +0.4 |
| | 31nm,0.3s | | | | | | | |
| KPKS | | | | | *e*S | Sb | 17 23 48.9 | +1.7 |
| | 92nm,0.5s | | | | | | | |
| **DZA** | **Taraz** | **2.81** | **279** | *e*P | | Pg | 17 23 14.9 | -1.7 |
| | 38nm,0.1s | | | | | | | |
| DZA | | | | | *e*S | Sg | 17 23 51.7 | -1.3 |
| | 201nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **2.92** | **56** | *e*P | | Pb | 17 23 15.0 | -0.2 |
| | 39nm,0.2s | | | | | | | |
| BLB | | | | | *e*S | Sb | 17 23 51.7 | +0.7 |
| | 131nm,0.8s | | | | | | | |
| **BLB** | **Baldybastay** | **2.92** | **56** | Pg | | Pb | 17 23 15.0 | -0.2 |
| | 39nm,0.2s | | | | | | | |
| BLB | | | | | Lg | Lg | 17 23 51.7 | |
| | 131nm,0.8s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.94** | **76** | *e*P | | Pb | 17 23 16.3 | +0.7 |
| | 39nm,0.5s | | | | | | | |
| UZB | | | | | *e*S | Sb | 17 23 53.9 | +2.2 |
| | 61nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.94** | **76** | Pg | | Pb | 17 23 16.3 | +0.7 |
| | 39nm,0.5s | | | | | | | |
| UZB | | | | | Lg | Lg | 17 23 53.9 | |
| | 61nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **3.32** | **74** | ⇑Pg | | Pb | 17 23 22.3 | +0.4 |
| | 11nm,0.7s | | | | | | | |
| PDGK | | | | | ⇑Lg | Lg | 17 24 04.4 | |
| | 41nm,1.1s | | | | | | | |
| **KK02** | **Karatay Array** | **3.43** | **281** | ⇑Pg | | Pg | 17 23 27.8 | -0.7 |
| | 2.1nm,0.3s | | | | | | | |
| KK02 | | | | | ⇑Lg | Lg | 17 24 08.8 | |
| | 8.2nm,0.3s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.44** | **43** | *e*P | | Pb | 17 23 24.9 | +1.0 |
| | 55nm,0.2s | | | | | | | |
| TDK | | | | | *e*S | Sb | 17 24 08.8 | +2.8 |
| | 38nm,0.8s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.44** | **43** | Lg | | Lg | 17 24 08.8 | |
| | 38nm,0.8s | | | | | | | |
| **KNOS** | **Konyrlen** | **3.49** | **57** | *e*P | | Pb | 17 23 25.0 | +0.2 |
| | 7.0nm,0.2s | | | | | | | |
| KNOS | | | | | *e*S | Sb | 17 24 09.1 | +1.8 |
| | 28nm,0.5s | | | | | | | |
| **IUG** | **Iuzhnay** | **3.78** | **266** | *e*P | | Pg | 17 23 34.2 | -1.1 |
| | 302nm,0.6s | | | | | | | |
| IUG | | | | | *e*S | Sg | 17 24 24.5 | +0.2 |
| | 52nm,0.8s | | | | | | | |
| **DJR** | **Jarkent** | **3.86** | **60** | *e*P | | Pb | 17 23 32.5 | +1.4 |
| | 16nm,0.4s | | | | | | | |
| DJR | | | | | *e*S | Sb | 17 24 21.8 | +3.8 |
| | 27nm,0.8s | | | | | | | |
| **DJR** | **Jarkent** | **3.86** | **60** | Pg | | Pb | 17 23 32.5 | +1.4 |
| | 16nm,0.4s | | | | | | | |
| DJR | | | | | Lg | Lg | 17 24 22.6 | |
| | 27nm,0.8s | | | | | | | |
| **BRLS** | **Boroldday** | **3.92** | **279** | *e*P | | Pg | 17 23 37.1 | -0.7 |
| | 2.4nm,0.6s | | | | | | | |
| BRLS | | | | | *e*S | Sg | 17 24 29.0 | +0.5 |
| | 16nm,0.7s | | | | | | | |
| **KTMS** | **Ketmen** | **3.96** | **75** | *e*P | | Pb | 17 23 33.9 | +1.1 |
| | 10nm,0.3s | | | | | | | |
| KTMS | | | | | *e*S | Sb | 17 24 24.1 | +3.2 |
| | 18nm,0.5s | | | | | | | |
| **KTMS** | **Ketmen** | **3.96** | **75** | Pg | | Pb | 17 23 33.9 | +1.1 |
| | 10nm,0.3s | | | | | | | |
| KTMS | | | | | Lg | Lg | 17 24 24.1 | |
| | 18nm,0.5s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.13** | **47** | *e*P | | Pb | 17 23 36.8 | +1.1 |
| | 12nm,0.2s | | | | | | | |
| KAPS | | | | | *e*S | Sb | 17 24 28.9 | +3.2 |
| | 30nm,0.7s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.13** | **47** | Pg | | Pb | 17 23 36.8 | +1.1 |
| | 12nm,0.2s | | | | | | | |
| KAPS | | | | | Lg | Lg | 17 24 29.9 | |
| | 30nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **6.67** | **48** | ⇑Lg | | Lg | 17 25 50.9 | |
| | 3.0nm,0.6s,baz=214,slow=30,SNR=3.8 | | | | | | | |

*IDC **08** 17:34:38.0±1.9,29°.35N×142°.13E,h0km,mb3.4/5, mb1 3.6/6,mb1mx3.3/44,mbtmp3.4/6,ML2.8/1,Error ellipse: s-maj=63.6km s-min=10.4km az=79.0*

**ISC 08 17:34:38.9±5.9,29°.6N±0°.5×14°.3E±°,h22km,n6,⌀0°46/6, mb3.5/5,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **8.00** | **332** | Pn | | **Pn** | **17 36 33.7** | **-0.1** |
| | 0.1nm,0.3s,baz=161,slow=10,SNR=8.8 | | | | | | | |
| **SONM** | **Songino Array** | **33.44** | **313** | P | | **P** | **17 41 16.7** | **+0.6** |
| | 0.4nm,0.7s,baz=119,slow=7.4,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.43** | **308** | P | | **P** | **17 43 26.7** | **-0.5** |
| | 0.5nm,0.9s,baz=90,slow=8.9,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.91** | **191** | P | | **P** | **17 43 30.9** | **-0.1** |
| | 0.7nm,0.8s,baz=5.9,slow=7.6,SNR=3.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.80** | **313** | P | | **P** | **17 43 44.8** | **-0.2** |
| | 0.7nm,0.6s,baz=91,slow=7.1,SNR=20 | | | | | | | |
| **ASAR** | **Alice Springs** | **53.63** | **190** | P | | **P** | **17 43 58.8** | **+0.1** |
| | 0.2nm,0.8s,baz=3.2,slow=5.2,SNR=1.6 | | | | | | | |

**ROM 08 17:57:38.1±0.1,36°.984N±0°.005×14°.843E±0°.006, h7km,ML3.7/44,13C-15D,Error ellipse: s-maj=0.6km s-min=0.5km az=193.0,Sicily**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HMDC** | **Modica** | **0.06** | **242** | ⇑P | | Pg | 17 57 40.0 | +0.2 |
| HMDC | | | | S | | Sg | 17 57 41.1 | +0.2 |
| HMDC | | | | AML | | AML | | |
| HMDC | | | | AML | | AML | | |
| **MEU** | **Monte Lauro** | **0.14** | **31** | ⇑P | | Pg | 17 57 41.4 | +0.4 |
| MEU | | | | S | | Sg | 17 57 43.6 | +0.6 |
| MEU | | | | AML | | AML | | |
| MEU | | | | AML | | AML | | |
| MEU | | | | AML | | AML | | |
| **HVZN** | **Vizzini** | **0.22** | **332** | ⇓P | | Pg | 17 57 42.5 | +0.1 |
| HVZN | | | | S | | Sg | 17 57 46.0 | +0.6 |
| **HAVL** | **Avola** | **0.23** | **96** | ⇑P | | Pg | 17 57 43.4 | +0.8 |
| HAVL | | | | S | | Sg | 17 57 47.4 | +1.7 |
| HAVL | | | | AML | | AML | | |
| | comp=N,63700μm,0.3s | | | | | | | |
| HAVL | | | | AML | | AML | | |
| | comp=E,70800μm,0.3s | | | | | | | |
| **SSY** | **Sortino** | **0.25** | **47** | ⇑P | | Pg | 17 57 44.0 | +1.0 |
| SSY | | | | S | | Sg | 17 57 48.4 | +2.0 |
| SSY | | | | AML | | AML | | |
| | comp=N,49500μm,0.5s | | | | | | | |
| SSY | | | | AML | | AML | | |
| | comp=E,24900μm,0.4s | | | | | | | |
| **HPAC** | **Pachino** | **0.36** | **143** | P | | Pg | 17 57 44.8 | -0.3 |
| HPAC | | | | AML | | AML | | |
| | comp=E,14500μm,0.3s | | | | | | | |
| HPAC | | | | AML | | AML | | |
| | comp=N,22150μm,0.6s | | | | | | | |
| **HLNI** | **Lentini** | **0.36** | **4** | ⇓P | | Pg | 17 57 45.3 | +0.1 |
| HLNI | | | | S | | Sg | 17 57 51.1 | +1.1 |
| HLNI | | | | AML | | AML | | |
| | comp=E,8915μm,0.9s | | | | | | | |
| HLNI | | | | AML | | AML | | |
| | comp=N,7155μm,1.1s | | | | | | | |
| **HAGA** | **Augusta** | **0.39** | **40** | ⇑P | | Pg | 17 57 46.1 | +0.4 |
| HAGA | | | | S | | Sb | 17 57 52.6 | -1.0 |
| HAGA | | | | AML | | AML | | |
| | comp=E,14900μm,0.6s | | | | | | | |
| HAGA | | | | AML | | AML | | |
| | comp=N,18350μm,1.5s | | | | | | | |
| **AGST** | **Augusta-Monte** | **0.41** | **48** | ⇑P | | Pg | 17 57 46.4 | +0.4 |
| AGST | | | | S | | Sb | 17 57 53.5 | -0.6 |
| AGST | | | | AML | | AML | | |
| | comp=E,11950μm,0.6s | | | | | | | |
| AGST | | | | AML | | AML | | |
| | comp=N,12400μm,0.2s | | | | | | | |
| AGST | | | | AML | | AML | | |
| | comp=E,12000μm,0.6s | | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.45** | **302** | ⇓P | | Pg | 17 57 47.2 | +0.4 |
| RAFF | | | | AML | | AML | | |
| | comp=E,9015μm,1.1s | | | | | | | |
| RAFF | | | | AML | | AML | | |
| | comp=N,12850μm,0.7s | | | | | | | |
| **ECNV** | **Catenanuova** | **0.62** | **350** | ⇓P | | Pb | 17 57 51.1 | -0.1 |
| **ESML** | **S. M. di Licod** | **0.63** | **2** | ⇓P | | Pb | 17 57 50.9 | -0.6 |
| ESML | | | | AML | | AML | | |
| | comp=E,6005μm,1.1s | | | | | | | |
| ESML | | | | AML | | AML | | |
| | comp=N,5240μm,0.6s | | | | | | | |
| **CAGR** | **Agira** | **0.69** | **337** | ⇓P | | Pb | 17 57 52.6 | +0.1 |
| CAGR | | | | AML | | AML | | |
| | comp=N,4120μm,0.5s | | | | | | | |
| CAGR | | | | AML | | AML | | |
| | comp=E,6720μm,0.7s | | | | | | | |
| **ESLN** | **Serra La Nave** | **0.72** | **8** | ⇓P | | Pb | 17 57 52.9 | -0.2 |
| ESLN | | | | S | | Sb | 17 58 04.0 | +0.8 |
| ESLN | | | | AML | | AML | | |
| | comp=E,9985μm,0.3s | | | | | | | |
| ESLN | | | | AML | | AML | | |
| | comp=N,8755μm,0.3s | | | | | | | |
| **CLTA** | **Licata** | **0.72** | **284** | P | | Pb | 17 57 53.2 | +0.1 |
| CLTA | | | | AML | | AML | | |
| | comp=E,14150μm,0.5s | | | | | | | |
| CLTA | | | | AML | | AML | | |
| | comp=N,14400μm,0.6s | | | | | | | |
| **GALF** | **Gagliano Caste** | **0.76** | **343** | ⇓P | | Pb | 17 57 53.8 | +0.1 |
| GALF | | | | AML | | AML | | |
| | comp=E,6925μm,0.5s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=N,4600μm,0.8s | | | | | | | |
| **EPZF** | **Pizzo Felice** | **0.84** | **1** | P | | Pb | 17 57 55.6 | +0.5 |
| EPZF | | | | AML | | AML | | |
| | comp=E,27900μm,0.5s | | | | | | | |
| EPZF | | | | AML | | AML | | |
| | comp=N,9590μm,0.3s | | | | | | | |
| **EMSG** | **Monte Spagnolo** | **0.84** | **6** | P | | Pb | 17 57 55.5 | +0.4 |
| EMSG | | | | S | | Sb | 17 58 07.7 | +1.0 |
| EMSG | | | | AML | | AML | | |
| | comp=E,18300μm,0.5s | | | | | | | |
| EMSG | | | | AML | | AML | | |
| | comp=N,13450μm,0.5s | | | | | | | |
| **RESU** | **Resuttano** | **0.91** | **317** | P | | Pn | 17 57 57.2 | -0.2 |
| RESU | | | | AML | | AML | | |
| | comp=E,1295μm,1.6s | | | | | | | |
| RESU | | | | AML | | AML | | |
| | comp=N,1435μm,0.7s | | | | | | | |
| RESU | | | | AML | | AML | | |
| | comp=N,1430μm,0.7s | | | | | | | |
| **CMDO** | **Montedoro** | **0.94** | **301** | P | | Pn | 17 57 58.3 | +0.4 |
| **MNO** | **Monte Soro** | **0.95** | **353** | P | | Pb | 17 57 57.3 | +0.2 |
| MNO | | | | AML | | AML | | |
| | comp=E,12850μm,0.6s | | | | | | | |
| MNO | | | | AML | | AML | | |
| | comp=N,9445μm,1.6s | | | | | | | |
| MNO | | | | AML | | AML | | |
| | comp=E,12800μm,0.6s | | | | | | | |
| **FAVR** | **Favara** | **0.98** | **287** | P | | Pn | 17 57 58.1 | -0.1 |
| FAVR | | | | AML | | AML | | |
| | comp=N,3860μm,0.5s | | | | | | | |
| FAVR | | | | AML | | AML | | |
| | comp=E,4660μm,0.7s | | | | | | | |
| **PETRA** | **Petralia Sopra** | **1.03** | **326** | ⇓P | | Pb | 17 57 58.4 | +0.1 |
| PETRA | | | | AML | | AML | | |
| | comp=N,2900μm,0.6s | | | | | | | |
| PETRA | | | | AML | | AML | | |
| | comp=N,2895μm,0.6s | | | | | | | |
| PETRA | | | | AML | | AML | | |
| | comp=E,2525μm,0.7s | | | | | | | |
| **AIO** | **Antillo** | **1.03** | **17** | ⇑P | | Pg | 17 57 57.9 | 0.0 |
| AIO | | | | AML | | AML | | |
| | comp=N,6670μm,0.3s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=E,14300μm,0.4s | | | | | | | |
| **MUCR** | **Ucria** | **1.06** | **1** | ⇓P | | Pb | 17 57 58.8 | 0.0 |
| MUCR | | | | S | | Sn | 17 58 14.9 | +0.4 |
| MUCR | | | | AML | | AML | | |
| | comp=E,5560μm,0.7s | | | | | | | |
| MUCR | | | | AML | | AML | | |
| | comp=N,4655μm,0.4s | | | | | | | |
| **MSFR** | **San Fratello** | **1.07** | **349** | ⇓P | | Pb | 17 57 58.9 | 0.0 |
| MSFR | | | | S | | Sn | 17 58 14.4 | -0.3 |
| MSFR | | | | AML | | AML | | |
| | comp=N,2455μm,0.5s | | | | | | | |
| MSFR | | | | AML | | AML | | |
| | comp=E,2150μm,0.9s | | | | | | | |
| **NOV** | **Novara** | **1.07** | **13** | ⇑P | | Pg | 17 57 58.6 | 0.0 |
| NOV | | | | S | | Sb | 17 58 13.9 | +0.7 |
| NOV | | | | AML | | AML | | |
| | comp=E,18150μm,0.7s | | | | | | | |
| NOV | | | | AML | | AML | | |
| | comp=N,7860μm,1.2s | | | | | | | |
| **MCSR** | **Castroreale** | **1.12** | **17** | ⇑P | | Pg | 17 57 59.2 | -0.4 |
| MCSR | | | | S | | Sn | 17 58 16.1 | -0.1 |
| MCSR | | | | AML | | AML | | |
| | comp=N,11000μm,0.4s | | | | | | | |
| MCSR | | | | AML | | AML | | |
| | comp=E,9650μm,0.5s | | | | | | | |
| **CSLB** | **Castelbuono** | **1.14** | **327** | P | | Pg | 17 57 59.8 | -0.2 |
| CSLB | | | | AML | | AML | | |
| | comp=E,1275μm,1.2s | | | | | | | |
| CSLB | | | | AML | | AML | | |
| | comp=N,1385μm,0.8s | | | | | | | |
| **PLLN** | **Pollina** | **1.15** | **331** | P | | Pb | 17 58 00.5 | +0.1 |
| PLLN | | | | AML | | AML | | |
| | comp=E,4540μm,0.7s | | | | | | | |
| PLLN | | | | AML | | AML | | |
| | comp=N,6755μm,1.2s | | | | | | | |
| **ALJA** | **Alia** | **1.16** | **312** | P | | Pn | 17 58 01.0 | +0.3 |
| ALJA | | | | AML | | AML | | |
| | comp=N,1685μm,0.6s | | | | | | | |
| ALJA | | | | AML | | AML | | |
| | comp=E,1135μm,0.4s | | | | | | | |
| **MCT** | **Mte Cammarata** | **1.16** | **304** | P | | Pn | 17 58 01.9 | +1.0 |
| MCT | | | | AML | | AML | | |
| | comp=E,1445μm,1.4s | | | | | | | |
| MCT | | | | AML | | AML | | |
| | comp=N,1790μm,0.6s | | | | | | | |
| **WDD** | **Wied Dalam** | **1.17** | **193** | P | | Pg | 17 57 59.8 | -0.8 |
| WDD | | | | S | | Sn | 17 58 16.7 | -0.4 |
| **GIB** | **Gibilmanna** | **1.20** | **327** | P | | Pg | 17 58 01.0 | 0.0 |
| GIB | | | | AML | | AML | | |
| | comp=E,3585μm,0.6s | | | | | | | |
| GIB | | | | AML | | AML | | |
| | comp=N,4330μm,0.5s | | | | | | | |
| **MTTG** | **Motta San Giov** | **1.22** | **33** | ⇑P | | Pg | 17 58 00.9 | -0.6 |
| MTTG | | | | AML | | AML | | |
| | comp=N,1860μm,0.6s | | | | | | | |
| MTTG | | | | AML | | AML | | |
| | comp=E,1545μm,0.5s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MPNC** | **Port Mandanici** | **1.23** | **19** | ⇑P | Pg | 17 58 01.0 | -0.6 | | |
| MPNC | | | | S | Sn | 17 58 19.0 | +0.4 | | |
| MPNC | | | | AML | AML | | | | |
| | comp=E,6810μm,0.5s | | | | | | | | |
| MPNC | | | | AML | AML | | | | |
| | comp=N,5350μm,0.9s | | | | | | | | |
| **MILZ** | **Milazzo** | **1.32** | **13** | ⇓P | Pn | 17 58 02.7 | -0.3 | | |
| MILZ | | | | S | Sn | 17 58 21.3 | +0.5 | | |
| MILZ | | | | AML | AML | | | | |
| | comp=E,4770μm,0.6s | | | | | | | | |
| MILZ | | | | AML | AML | | | | |
| | comp=N,3410μm,1.1s | | | | | | | | |
| **MSRU** | **Castanea** | **1.38** | **22** | ⇑P | Pn | 17 58 03.4 | -0.5 | | |
| MSRU | | | | S | Sg | 17 58 23.7 | +1.2 | | |
| MSRU | | | | AML | AML | | | | |
| | comp=N,2890μm,1.0s | | | | | | | | |
| MSRU | | | | AML | AML | | | | |
| | comp=E,3155μm,1.1s | | | | | | | | |
| **VPL** | **Vulcano Piano** | **1.40** | **5** | P | Pn | 17 58 03.6 | -0.4 | | |
| VPL | | | | AML | AML | | | | |
| | comp=N,12800μm,0.4s | | | | | | | | |
| VPL | | | | AML | AML | | | | |
| | comp=E,13550μm,0.4s | | | | | | | | |
| **CLTB** | **Caltabellotta** | **1.43** | **295** | P | Pb | 17 58 05.2 | +0.2 | | |
| CLTB | | | | AML | AML | | | | |
| | comp=E,4765μm,0.5s | | | | | | | | |
| CLTB | | | | AML | AML | | | | |
| | comp=N,10850μm,0.6s | | | | | | | | |
| **SOI** | **Samo** | **1.45** | **41** | ⇑P | Pn | 17 58 03.8 | -1.0 | | |
| SOI | | | | AML | AML | | | | |
| | comp=E,585μm,0.6s | | | | | | | | |
| SOI | | | | AML | AML | | | | |
| | comp=N,392μm,1.0s | | | | | | | | |
| **SOLUN** | **Solunto** | **1.52** | **317** | ⇓P | Pb | 17 58 06.3 | -0.2 | | |
| SOLUN | | | | AML | AML | | | | |
| | comp=E,1070μm,0.8s | | | | | | | | |
| SOLUN | | | | AML | AML | | | | |
| | comp=N,714μm,0.9s | | | | | | | | |
| **CEL** | **Celeste** | **1.52** | **33** | P | Pn | 17 58 05.4 | -0.4 | | |
| **IFIL** | **Filicudi I Eol** | **1.59** | **352** | P | Pn | 17 58 06.2 | -0.5 | | |
| IFIL | | | | AML | AML | | | | |
| | comp=E,14650μm,0.5s | | | | | | | | |
| IFIL | | | | AML | AML | | | | |
| | comp=N,6645μm,0.6s | | | | | | | | |
| **IACL** | **Alicudi** | **1.59** | **346** | ⇓P | Pn | 17 58 06.2 | -0.5 | | |
| IACL | | | | AML | AML | | | | |
| | comp=N,2365μm,0.5s | | | | | | | | |
| IACL | | | | AML | AML | | | | |
| | comp=E,2895μm,0.5s | | | | | | | | |
| **MMGO** | **Monte Magaggia** | **1.63** | **295** | P | Pn | 17 58 06.7 | -0.6 | | |
| **MPG** | **Monte Pellegri** | **1.66** | **315** | ⇓P | Pn | 17 58 08.3 | +0.6 | | |
| MPG | | | | AML | AML | | | | |
| | comp=N,662μm,1.0s | | | | | | | | |
| MPG | | | | AML | AML | | | | |
| | comp=E,660μm,1.1s | | | | | | | | |
| **JOPP** | **Joppolo** | **1.82** | **27** | P | Pn | 17 58 10.0 | +0.2 | | |
| JOPP | | | | AML | AML | | | | |
| | comp=N,552μm,0.4s | | | | | | | | |
| JOPP | | | | AML | AML | | | | |
| | comp=E,459μm,0.5s | | | | | | | | |
| **PLAC** | **Placanica** | **1.93** | **40** | P | Pn | 17 58 11.4 | -0.1 | | |
| PLAC | | | | AML | AML | | | | |
| | comp=N,408μm,0.9s | | | | | | | | |
| PLAC | | | | AML | AML | | | | |
| | comp=E,416μm,1.0s | | | | | | | | |
| PLAC | | | | AML | AML | | | | |
| | comp=E,335μm,0.5s | | | | | | | | |
| PLAC | | | | AML | AML | | | | |
| | comp=N,322μm,0.6s | | | | | | | | |
| **USI** | **Ustica** | **2.17** | **323** | P | Pn | 17 58 14.0 | -0.6 | | |
| USI | | | | AML | AML | | | | |
| | comp=E,1441μm,1.2s | | | | | | | | |
| USI | | | | AML | AML | | | | |
| | comp=N,1535μm,0.6s | | | | | | | | |
| **SERS** | **Sersale** | **2.51** | **35** | P | Pn | 17 58 19.8 | +0.3 | | |
| **TIP** | **Timpagrande** | **2.66** | **34** | P | Pn | 17 58 21.4 | 0.0 | | |
| TIP | | | | AML | AML | | | | |
| | comp=N,85μm,0.6s | | | | | | | | |
| TIP | | | | AML | AML | | | | |
| | comp=E,89μm,0.9s | | | | | | | | |
| **CET2** | **Cetraro** | **2.69** | **19** | P | Pn | 17 58 21.4 | -0.4 | | |
| CET2 | | | | AML | AML | | | | |
| | comp=E,887μm,0.6s | | | | | | | | |
| CET2 | | | | AML | AML | | | | |
| | comp=N,917μm,0.6s | | | | | | | | |
| **CELI** | **Celico** | **2.75** | **28** | P | Pn | 17 58 22.9 | +0.1 | | |
| **T0702** | **Acquaformosa (** | **2.90** | **19** | P | Pn | 17 58 24.6 | -0.2 | | |
| **PIPA** | **Pietrapaola** | **2.94** | **31** | P | Pn | 17 58 25.8 | +0.5 | | |
| **VSL** | **Villasalto** | **4.98** | **302** | P | Pn | 17 58 52.7 | -0.5 | | |

*JMA **08** 18:28:20.7±0.3,23°.30N×121°.70E,h11km±5km,M2.5*
*TAP **08** 18:28:22.0,23°.29N×121°.58E,h40km,ML3.0,C*
**ISC 08 18:28:21.9±1.0,23°.27N±0°.02×121°.62E±0°.02,h34km±2km,**
**n115,σ0s99/223,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ECBN** | **Changbin** | **0.16** | **285** | *i* | P | | **Pb** | **18 28 29.0** | **+0.8** |
| | baz=282 | | | | | | | | |
| ECBN | | | | | S | | **Sb** | **18 28 34.0** | **+1.4** |
| | baz=282 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.28** | **320** | *i* | P | | **Pb** | **18 28 29.6** | **0.0** |
| | baz=325 | | | | | | | | |
| HGSD | | | | *e* | S | | **Sb** | **18 28 35.0** | **+0.3** |
| | baz=325 | | | | | | | | |
| **EYUL** | **Yuli** | **0.29** | **285** | *i* | P | | **Pn** | **18 28 30.3** | **+0.7** |
| | baz=283 | | | | | | | | |
| EYUL | | | | | S | | **Sb** | **18 28 36.6** | **+1.8** |
| | baz=283 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.29** | **234** | *i* | P | | **Pb** | **18 28 29.8** | **+0.1** |
| | baz=218 | | | | | | | | |
| CHKT | | | | | S | | **Sb** | **18 28 35.5** | **+0.6** |
| | baz=218 | | | | | | | | |
| **TWF1** | **Yuli** | **0.31** | **285** | *i* | P | | **Pb** | **18 28 30.1** | **+0.2** |
| | baz=283 | | | | | | | | |
| TWF1 | | | | | S | | **Sb** | **18 28 36.0** | **+0.7** |
| | baz=283 | | | | | | | | |
| **FULB** | **Fuli** | **0.31** | **256** | *i* | P | | **Pb** | **18 28 30.0** | **+0.1** |
| | baz=249 | | | | | | | | |
| FULB | | | | | S | | **Sb** | **18 28 36.1** | **+0.7** |
| | baz=249 | | | | | | | | |
| **YULB** | **Yu-li** | **0.32** | **292** | *i* | P | | **Pb** | **18 28 30.1** | **+0.1** |
| | baz=291 | | | | | | | | |
| YULB | | | | | S | | **Sb** | **18 28 35.9** | **+0.4** |
| | baz=291 | | | | | | | | |
| **EHY** | **Hungye** | **0.36** | **310** | *i* | P | | **Pb** | **18 28 30.5** | **-0.1** |
| | baz=313 | | | | | | | | |
| EHY | | | | | S | | **Sb** | **18 28 36.4** | **-0.1** |
| | baz=313 | | | | | | | | |
| **ECS** | **Chishang** | **0.41** | **245** | | P | | **Pn** | **18 28 31.9** | **+0.3** |
| | baz=249 | | | | | | | | |
| ECS | | | | | S | | **Sn** | **18 28 39.1** | **+1.1** |
| | baz=249 | | | | | | | | |
| **EDH** | **Donghe** | **0.42** | **224** | | P | | **Pb** | **18 28 31.6** | **+0.3** |
| | baz=210 | | | | | | | | |
| EDH | | | | | S | | **Sn** | **18 28 38.7** | **+0.5** |
| | baz=210 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.44** | **350** | *i* | P | | **Pb** | **18 28 31.7** | **0.0** |
| | baz=2.0 | | | | | | | | |
| TEGC | | | | | S | | **Sn** | **18 28 39.0** | **+0.3** |
| | baz=2.0 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.56** | **262** | *i* | P | | **Pb** | **18 28 32.9** | **-0.8** |
| | baz=253 | | | | | | | | |
| ELDTW | | | | *e* | S | | **Sb** | **18 28 40.3** | **-1.4** |
| | baz=253 | | | | | | | | |
| **ESL** | **Shilin** | **0.56** | **342** | | P | | **Pb** | **18 28 32.7** | **-0.9** |
| | baz=337 | | | | | | | | |
| ESL | | | | | S | | **Sb** | **18 28 40.7** | **-0.9** |
| | baz=337 | | | | | | | | |
| **LONT** | **Longtian** | **0.58** | **231** | | P | | **Pn** | **18 28 33.5** | **-0.3** |
| | baz=235 | | | | | | | | |
| LONT | | | | | S | | **Sb** | **18 28 41.9** | **-0.2** |
| | baz=235 | | | | | | | | |
| **LDUT** | **Ludao** | **0.61** | **193** | *e* | P | | **Pn** | **18 28 33.3** | **-0.9** |
| | baz=182 | | | | | | | | |
| LDUT | | | | *e* | S | | **Sb** | **18 28 42.5** | **-0.5** |
| | baz=182 | | | | | | | | |
| **VWDT** | **VWDT** | **0.65** | **317** | *i* | P | | **Pn** | **18 28 34.6** | **-0.1** |
| | baz=319 | | | | | | | | |
| VWDT | | | | *e* | S | | **Sb** | **18 28 42.1** | **-1.8** |
| | baz=319 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.65** | **289** | *i* | P | | **Pn** | **18 28 35.0** | **-0.3** |
| | baz=289 | | | | | | | | |
| YUS | | | | *e* | S | | **Sb** | **18 28 43.7** | **-0.9** |
| | baz=289 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.68** | **228** | *i* | P | | **Pn** | **18 28 34.3** | **-0.8** |
| | baz=233 | | | | | | | | |
| TWGBT | | | | *e* | S | | **Sb** | **18 28 43.0** | **-1.6** |
| | baz=233 | | | | | | | | |
| **TTN** | **Taitung** | **0.68** | **220** | *e* | P | | **Pn** | **18 28 34.4** | **-0.8** |
| | baz=226 | | | | | | | | |
| TTN | | | | *e* | S | | **Sb** | **18 28 46.2** | **+1.6** |
| | baz=226 | | | | | | | | |
| **HWA** | **Hwalien** | **0.70** | **359** | *e* | P | | **Pn** | **18 28 35.0** | **-0.5** |
| | baz=11 | | | | | | | | |
| HWA | | | | *e* | S | | **Sn** | **18 28 45.5** | **+0.4** |
| | baz=11 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.79** | **263** | *e* | P | | **Pn** | **18 28 36.6** | **0.0** |
| | baz=260 | | | | | | | | |
| STYH | | | | *e* | S | | **Sn** | **18 28 47.0** | **-0.3** |
| | baz=260 | | | | | | | | |
| **ALS** | **Alishan** | **0.79** | **288** | *i* | P | | **Pn** | **18 28 37.3** | **+0.4** |
| | baz=287 | | | | | | | | |
| ALS | | | | *e* | S | | **Sn** | **18 28 47.7** | **0.0** |
| | baz=287 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.80** | **310** | *i* | P | | **Pn** | **18 28 36.5** | **-0.3** |
| | baz=311 | | | | | | | | |
| SSLB | | | | *e* | S | | **Sn** | **18 28 46.3** | **-1.3** |
| | baz=311 | | | | | | | | |
| **TWD** | **Chiawan** | **0.80** | **358** | | P | | **Pn** | **18 28 36.0** | **-0.8** |
| | baz=349 | | | | | | | | |
| TWD | | | | | S | | **Sn** | **18 28 46.9** | **-0.8** |
| | baz=349 | | | | | | | | |
| **WUSB** | **Renai** | **0.85** | **327** | *i* | P | | **Pn** | **18 28 37.4** | **-0.3** |
| | baz=336 | | | | | | | | |
| WUSB | | | | *e* | S | | **Sn** | **18 28 47.5** | **-1.6** |
| | baz=336 | | | | | | | | |
| **ETL** | **Fush Village** | **0.88** | **0** | *e* | P | | **Pn** | **18 28 37.6** | **-0.5** |
| | baz=352 | | | | | | | | |
| ETL | | | | *e* | S | | **Sn** | **18 28 48.8** | **-0.9** |
| | baz=352 | | | | | | | | |
| **CHGB** | **Renai** | **0.88** | **332** | *i* | P | | **Pn** | **18 28 37.9** | **-0.3** |
| | baz=339 | | | | | | | | |
| CHGB | | | | *e* | S | | **Sn** | **18 28 48.6** | **-1.3** |
| | baz=339 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.90** | **358** | *e* | P | | **Pn** | **18 28 37.5** | **-0.7** |
| | baz=350 | | | | | | | | |
| NACB | | | | *e* | S | | **Sn** | **18 28 48.8** | **-1.2** |
| | baz=350 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.90** | **313** | | P | | **Pn** | **18 28 38.5** | **+0.2** |
| | baz=317 | | | | | | | | |
| SMLT | | | | *e* | S | | **Sn** | **18 28 50.2** | **0.0** |
| | baz=317 | | | | | | | | |
| **ECL** | **Taimali** | **0.91** | **223** | *e* | P | | **Pn** | **18 28 37.1** | **-1.3** |
| | baz=218 | | | | | | | | |
| ECL | | | | *e* | S | | **Sn** | **18 28 48.7** | **-1.7** |
| | baz=218 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.91** | **272** | | P | | **Pn** | **18 28 39.0** | **+0.6** |
| | baz=270 | | | | | | | | |
| TPUB | | | | | S | | **Sn** | **18 28 51.4** | **+0.9** |
| | baz=270 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.93** | **291** | *e* | P | | **Pn** | **18 28 39.5** | **+0.8** |
| | baz=290 | | | | | | | | |
| CHN5 | | | | *e* | S | | **Sb** | **18 28 52.1** | **+0.4** |
| | baz=290 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.93** | **339** | *e* | P | | **Pn** | **18 28 38.3** | **-0.7** |
| | baz=342 | | | | | | | | |
| WHF | | | | *e* | S | | **Sn** | **18 28 49.9** | **-1.4** |
| | baz=342 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.93** | **268** | *e* | P | | **Pn** | **18 28 39.4** | **+0.7** |
| | baz=266 | | | | | | | | |
| WTP | | | | *e* | S | | **Sb** | **18 28 52.3** | **+0.5** |
| | baz=266 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.94** | **352** | *e* | P | | **Pn** | **18 28 37.5** | **-1.3** |
| | baz=354 | | | | | | | | |
| ETLH | | | | *e* | S | | **Sn** | **18 28 48.8** | **-2.3** |
| | baz=354 | | | | | | | | |
| **TYC** | **Yuchr** | **0.94** | **312** | *e* | P | | **Pn** | **18 28 39.1** | **+0.4** |
| | baz=320 | | | | | | | | |
| TYC | | | | *e* | S | | **Sn** | **18 28 51.1** | **0.0** |
| | baz=320 | | | | | | | | |
| **SGST** | **Jiashian** | **0.98** | **259** | *e* | P | | **Pn** | **18 28 39.4** | **+0.1** |
| | baz=256 | | | | | | | | |
| SGST | | | | *e* | S | | **Sn** | **18 28 52.6** | **+0.7** |
| | baz=256 | | | | | | | | |
| **WJS** | **Zhushan** | **0.99** | **304** | *e* | P | | **Pb** | **18 28 40.8** | **+0.2** |
| | baz=304 | | | | | | | | |
| WJS | | | | *e* | S | | **Sb** | **18 28 53.8** | **+0.5** |
| | baz=304 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.01** | **265** | *e* | P | | **Pn** | **18 28 40.5** | **+0.8** |
| | baz=263 | | | | | | | | |
| CHN1 | | | | *e* | S | | **Sb** | **18 28 54.9** | **+0.9** |
| | baz=263 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.02** | **320** | *e* | P | | **Pn** | **18 28 40.2** | **+0.4** |
| | baz=321 | | | | | | | | |
| WCS | | | | *e* | S | | **Sn** | **18 28 53.2** | **+0.3** |
| | baz=321 | | | | | | | | |
| **FUSS** | **Fushou** | **1.03** | **340** | *e* | P | | **Pn** | **18 28 40.1** | **-0.1** |
| | baz=350 | | | | | | | | |
| FUSS | | | | *e* | S | | **Sn** | **18 28 52.8** | **-0.9** |
| | baz=350 | | | | | | | | |
| **SNST** | **Tainan City** | **1.04** | **267** | | P | | **Pn** | **18 28 41.2** | **+1.1** |
| | baz=265 | | | | | | | | |
| SNST | | | | | S | | **Sb** | **18 28 55.5** | **+0.7** |
| | baz=265 | | | | | | | | |
| **TWK** | **Hsinying** | **1.04** | **270** | *e* | P | | **Pn** | **18 28 41.0** | **+0.7** |
| | baz=268 | | | | | | | | |
| TWK | | | | *e* | S | | **Sb** | **18 28 55.1** | **+0.1** |
| | baz=268 | | | | | | | | |
| **TSMG** | **Majia** | **1.06** | **238** | *e* | P | | **Pb** | **18 28 42.0** | **+0.1** |
| | baz=230 | | | | | | | | |
| TSMG | | | | *e* | S | | **Sn** | **18 28 54.5** | **+0.4** |
| | baz=230 | | | | | | | | |
| **WDLH** | **Douliu** | **1.08** | **293** | *e* | P | | **Pb** | **18 28 42.1** | **0.0** |
| | baz=292 | | | | | | | | |
| WDLH | | | | *e* | S | | **Sb** | **18 28 56.5** | **+0.5** |
| | baz=292 | | | | | | | | |
| **CHY** | **Chiayi** | **1.12** | **282** | *e* | P | | **Pn** | **18 28 42.4** | **+1.1** |
| | baz=281 | | | | | | | | |
| CHY | | | | *e* | S | | **Sb** | **18 28 57.0** | **-0.2** |
| | baz=281 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.13** | **234** | *e* | P | | **Pn** | **18 28 41.4** | **0.0** |
| | baz=226 | | | | | | | | |
| MASBT | | | | *e* | S | | **Sb** | **18 28 58.1** | **+0.8** |
| | baz=226 | | | | | | | | |
| **TAW** | **Tawu** | **1.13** | **216** | *e* | P | | **Pn** | **18 28 42.2** | **+0.8** |
| | baz=212 | | | | | | | | |
| TAW | | | | *e* | S | | **Sn** | **18 28 54.4** | **-1.4** |
| | baz=212 | | | | | | | | |
| **EAST** | **Anshuo** | **1.14** | **219** | *e* | P | | **Pn** | **18 28 40.9** | **-0.7** |
| | baz=208 | | | | | | | | |
| **TAWH** | **Dawu Township** | **1.15** | **216** | *e* | P | | **Pn** | **18 28 42.1** | **+0.5** |
| | baz=212 | | | | | | | | |
| TAWH | | | | *e* | S | | **Sn** | **18 28 54.7** | **-1.6** |
| | baz=212 | | | | | | | | |
| **ENA** | **Nanau** | **1.15** | **5** | *e* | P | | **Pn** | **18 28 41.4** | **-0.3** |
| | baz=17 | | | | | | | | |
| ENA | | | | *e* | S | | **Sn** | **18 28 55.7** | **-0.7** |
| | baz=17 | | | | | | | | |
| **NNSB** | **Datong** | **1.17** | **349** | *e* | P | | **Pn** | **18 28 42.0** | **0.0** |
| | baz=2.0 | | | | | | | | |
| **WHP** | **Taichung City** | **1.18** | **328** | *e* | P | | **Pb** | **18 28 43.7** | **-0.1** |
| | baz=334 | | | | | | | | |
| WHP | | | | *e* | S | | **Sb** | **18 28 59.3** | **+0.5** |
| | baz=334 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.18** | **349** | *e* | P | | **Pn** | **18 28 42.2** | **-0.1** |
| | baz=360 | | | | | | | | |
| NNS | | | | *e* | S | | **Sn** | **18 28 57.5** | **+0.2** |
| | baz=360 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.19** | **248** | *e* | P | | **Pb** | **18 28 44.7** | **+0.7** |
| | baz=246 | | | | | | | | |
| TWM1 | | | | *e* | S | | **Sb** | **18 29 01.6** | **+2.4** |
| | baz=246 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.20** | **258** | *e* | P | | **Pb** | **18 28 44.9** | **+0.7** |
| | baz=256 | | | | | | | | |
| SHHT | | | | *e* | S | | **Sb** | **18 29 01.1** | **+1.7** |
| | baz=256 | | | | | | | | |
| **WTK** | **Tuku** | **1.21** | **290** | *e* | P | | **Pn** | **18 28 43.1** | **+0.7** |
| | baz=290 | | | | | | | | |
| WTK | | | | *e* | S | | **Sn** | **18 28 58.5** | **+0.9** |
| | baz=290 | | | | | | | | |
| **TCU** | **Taichung** | **1.23** | **315** | *e* | P | | **Pb** | **18 28 44.6** | **0.0** |
| | baz=304 | | | | | | | | |
| TCU | | | | *e* | S | | **Sb** | **18 28 60.0** | **-0.2** |
| | baz=304 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.23** | **183** | *e* | P | | **Pn** | **18 28 42.2** | **-0.6** |
| | baz=175 | | | | | | | | |
| LAY | | | | *e* | S | | **Sn** | **18 28 56.6** | **-1.7** |
| | baz=175 | | | | | | | | |
| **ICHU** | **Yijhu** | **1.24** | **274** | *e* | P | | **Pn** | **18 28 44.1** | **+1.2** |
| | baz=273 | | | | | | | | |
| ICHU | | | | *e* | S | | **Sn** | **18 28 59.6** | **+1.2** |
| | baz=273 | | | | | | | | |
| **SSPT** | **Xinbi** | **1.25** | **231** | *e* | P | | **Pn** | **18 28 44.2** | **+1.2** |
| | baz=220 | | | | | | | | |
| SSPT | | | | *e* | S | | **Sb** | **18 29 01.8** | **+0.9** |
| | baz=220 | | | | | | | | |
| **LATG** | **Datong** | **1.26** | **356** | *e* | P | | **Pn** | **18 28 43.0** | **-0.3** |
| | baz=360 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.26** | **310** | *e* | P | | **Pn** | **18 28 43.7** | **+0.5** |
| | baz=310 | | | | | | | | |
| WCHH | | | | *e* | S | | **Sn** | **18 29 00.2** | **+1.2** |
| | baz=310 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.27** | **182** | *e* | P | | **Pn** | **18 28 42.0** | **-1.2** |
| | baz=174 | | | | | | | | |
| LYUB | | | | *e* | S | | **Sn** | **18 28 56.0** | **-3.1** |
| | baz=174 | | | | | | | | |
| **SCZT** | **Fangliau** | **1.29** | **226** | *e* | P | | **Pn** | **18 28 44.1** | **+0.5** |
| | baz=214 | | | | | | | | |
| SCZT | | | | *e* | S | | **Sb** | **18 29 01.6** | **-0.3** |
| | baz=214 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **1.29** | **247** | *e* | P | | **Pb** | **18 28 45.6** | **-0.1** |
| | baz=244 | | | | | | | | |
| SNJT | | | | *e* | S | | **Sb** | **18 29 04.0** | **+1.9** |
| | baz=244 | | | | | | | | |
| **SLIU** | **Shizi** | **1.30** | **216** | *e* | P | | **Pn** | **18 28 43.1** | **-0.6** |
| | baz=200 | | | | | | | | |
| **CHN8** | **Yiju** | **1.30** | **273** | *e* | P | | **Pn** | **18 28 44.6** | **+0.8** |
| | baz=272 | | | | | | | | |
| CHN8 | | | | *e* | S | | **Sn** | **18 29 01.6** | **+1.7** |
| | baz=272 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.30** | **299** | *e* | P | | **Pn** | **18 28 44.6** | **+0.8** |
| | baz=299 | | | | | | | | |
| WRL | | | | *e* | S | | **Sn** | **18 29 00.8** | **+0.8** |
| | baz=299 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.30** | **281** | *e* | P | | **Pn** | **18 28 45.0** | **+1.2** |
| | baz=280 | | | | | | | | |
| WSL | | | | *e* | S | | **Sn** | **18 29 00.7** | **+0.6** |
| | baz=280 | | | | | | | | |
| **SCLT** | **Jiali** | **1.32** | **266** | *e* | P | | **Pn** | **18 28 45.1** | **+1.2** |
| | baz=264 | | | | | | | | |
| SCLT | | | | *e* | S | | **Sb** | **18 29 02.6** | **-0.1** |
| | baz=264 | | | | | | | | |
| **WSF** | **Szhu** | **1.34** | **286** | *e* | P | | **Pn** | **18 28 45.2** | **+1.0** |
| | baz=285 | | | | | | | | |
| WSF | | | | *e* | S | | **Sn** | **18 29 01.9** | **+1.1** |
| | baz=285 | | | | | | | | |
| **NDS** | **Dongshan** | **1.36** | **4** | *e* | P | | **Pn** | **18 28 45.4** | **+0.8** |
| | baz=355 | | | | | | | | |
| NDS | | | | *e* | S | | **Sn** | **18 29 02.4** | **+1.0** |
| | baz=355 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.36** | **358** | *e* | P | | **Pn** | **18 28 44.6** | **0.0** |
| | baz=2.0 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.36** | **296** | *e* | P | | **Pn** | **18 28 45.2** | **+0.6** |
| | baz=296 | | | | | | | | |
| WTCT | | | | *e* | S | | **Sn** | **18 29 01.3** | **-0.2** |
| | baz=296 | | | | | | | | |
| **NSY** | **Sanyi** | **1.38** | **325** | *e* | P | | **Pb** | **18 28 46.7** | **-0.6** |
| | baz=326 | | | | | | | | |
| NSY | | | | *e* | S | | **Sb** | **18 29 04.4** | **-0.3** |
| | baz=326 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.40** | **320** | *e* | P | | **Pb** | **18 28 46.9** | **-0.6** |
| | baz=333 | | | | | | | | |
| WDJ | | | | *e* | S | | **Sb** | **18 29 04.7** | **-0.3** |
| | baz=333 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.41** | **351** | *e* | P | | **Pn** | **18 28 45.6** | **+0.2** |
| | baz=352 | | | | | | | | |
| YHNB | | | | *e* | S | | **Sn** | **18 29 02.8** | **+0.1** |
| | baz=352 | | | | | | | | |
| **NSK** | **Sanguang** | **1.42** | **350** | *e* | P | | **Pn** | **18 28 46.0** | **+0.6** |
| | baz=352 | | | | | | | | |
| NSK | | | | *e* | S | | **Sn** | **18 29 02.9** | **0.0** |
| | baz=352 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.43** | **341** | *e* | P | | **Pn** | **18 28 47.0** | **+1.4** |
| | baz=347 | | | | | | | | |
| NFF | | | | *e* | S | | **Sb** | **18 29 05.5** | **-0.5** |
| | baz=347 | | | | | | | | |
| **TWE** | **Neicheng** | **1.44** | **2** | *e* | P | | **Pn** | **18 28 47.0** | **+1.3** |
| | baz=355 | | | | | | | | |
| TWE | | | | *e* | S | | **Sn** | **18 29 04.2** | **+0.8** |
| | baz=355 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.47** | **329** | *e* | P | | **Pn** | **18 28 47.2** | **+1.1** |
| | baz=329 | | | | | | | | |
| NMLH | | | | *e* | S | | **Sn** | **18 29 06.0** | **+1.8** |
| | baz=329 | | | | | | | | |
| **LIOB** | **Emei** | **1.47** | **338** | *e* | P | | **Pn** | **18 28 47.4** | **+1.2** |
| | baz=341 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.48** | **359** | *e* | P | | **Pn** | **18 28 46.7** | **+0.4** |
| | baz=352 | | | | | | | | |
| FUSB | | | | *e* | S | | **Sn** | **18 29 04.6** | **+0.1** |
| | baz=352 | | | | | | | | |
| **NWLT** | **Wulai** | **1.50** | **356** | *e* | P | | **Pn** | **18 28 47.4** | **+0.9** |
| | baz=357 | | | | | | | | |
| NWLT | | | | *e* | S | | **Sn** | **18 29 05.4** | **+0.4** |
| | baz=357 | | | | | | | | |
| **HEN** | **Hengchun** | **1.50** | **213** | *e* | P | | **Pn** | **18 28 48.1** | **+1.5** |
| | baz=198 | | | | | | | | |
| HEN | | | | *e* | S | | **Sn** | **18 29 05.7** | **+0.8** |
| | baz=198 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.52** | **206** | *e* | P | | **Pb** | **18 28 48.8** | **-0.8** |
| | baz=195 | | | | | | | | |
| TSEB | | | | *e* | S | | **Sn** | **18 29 06.5** | **+1.0** |
| | baz=195 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.52** | **210** | *e* | P | | **Pn** | **18 28 47.0** | **+0.2** |
| | baz=195 | | | | | | | | |
| TWK1 | | | | *e* | S | | **Sn** | **18 29 05.5** | **0.0** |
| | baz=195 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.52** | **210** | *e* | P | | **Pn** | **18 28 46.6** | **-0.2** |
| | baz=195 | | | | | | | | |
| TWKBT | | | | *e* | S | | **Sn** | **18 29 05.4** | **0.0** |
| | baz=195 | | | | | | | | |
| **NTC** | **Toucheng** | **1.58** | **7** | *e* | P | | **Pn** | **18 28 48.9** | **+1.2** |
| | baz=357 | | | | | | | | |
| NTC | | | | *e* | S | | **Sn** | **18 29 08.1** | **+1.1** |
| | baz=357 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.68** | **357** | *e* | P | | **Pn** | **18 28 50.4** | **+1.3** |
| | baz=358 | | | | | | | | |
| NHDH | | | | *e* | S | | **Sn** | **18 29 10.6** | **+1.2** |
| | baz=358 | | | | | | | | |
| **JYNG** | **Yonaguniijimaku** | **1.69** | **46** | | P | | **Pn** | **18 28 49.9** | **+0.9** |
| JYNG | | | | | S | | **Sn** | **18 29 09.9** | **+0.4** |
| **TIPB** | **Shuangxi** | **1.70** | **6** | *e* | P | | **Pn** | **18 28 50.7** | **+1.4** |
| | baz=357 | | | | | | | | |
| TIPB | | | | *e* | S | | **Sn** | **18 29 11.1** | **+1.2** |
| | baz=357 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.74** | **47** | | P | | **Pn** | **18 28 50.8** | **+1.1** |
| YOJ | | | | | S | | **Sn** | **18 29 11.5** | **+0.8** |
| **YOJ** | **Yonaguni jima** | **1.74** | **47** | *e* | P | | **Pn** | **18 28 50.8** | **+1.1** |
| | baz=50 | | | | | | | | |
| YOJ | | | | *e* | S | | **Sn** | **18 29 11.5** | **+0.8** |
| | baz=50 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.79** | **5** | *e* | P | | **Pn** | **18 28 52.5** | **+1.9** |
| | baz=353 | | | | | | | | |
| NWF | | | | *e* | S | | **Sn** | **18 29 14.1** | **+1.8** |
| | baz=353 | | | | | | | | |
| **WDGT** | **Dungji** | **1.81** | **270** | *e* | P | | **Pn** | **18 28 50.9** | **+0.2** |
| | baz=268 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.83** | **7** | *e* | P | | **Pn** | **18 28 52.5** | **+1.5** |
| | baz=355 | | | | | | | | |
| SXI1 | | | | *e* | S | | **Sn** | **18 29 14.7** | **+1.6** |
| | baz=355 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.90** | **278** | *e* | P | | **Pn** | **18 28 51.9** | **-0.1** |
| | baz=264 | | | | | | | | |
| PHUB | | | | *e* | S | | **Sn** | **18 29 13.5** | **-1.2** |
| | baz=264 | | | | | | | | |
| **PNG** | **Penghu** | **1.92** | **279** | *e* | P | | **Pn** | **18 28 52.4** | **+0.1** |
| | baz=266 | | | | | | | | |
| PNG | | | | *e* | S | | **Sn** | **18 29 14.9** | **-0.3** |
| | baz=266 | | | | | | | | |
| **VCHM** | **Qimei** | **2.02** | **269** | *e* | P | | **Pn** | **18 28 53.5** | **-0.1** |
| | baz=267 | | | | | | | | |
| VCHM | | | | *e* | S | | **Sn** | **18 29 17.3** | **-0.4** |
| | baz=267 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.15** | **68** | | P | | **Pn** | **18 28 55.8** | **+0.4** |
| HATJ | | | | | S | | **Sn** | **18 29 20.9** | **0.0** |
| **IRIF** | **Iriomote-Funau** | **2.20** | **61** | | P | | **Pn** | **18 28 57.1** | **+1.0** |
| IRIF | | | | | S | | **Sn** | **18 29 23.5** | **+1.3** |
| **JKRS** | **Kuro-shima** | **2.39** | **66** | | P | | **Pn** | **18 28 59.7** | **+1.0** |
| JKRS | | | | | S | | **Sn** | **18 29 27.7** | **+0.9** |
| **JIJ** | **Ishigaki jima** | **2.55** | **64** | | P | | **Pn** | **18 29 01.2** | **+0.3** |
| JIJ | | | | | S | | **Sn** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KNMB** | **Chin-men Tao** | **3.19** | **292** | *eP* | **Pn** | **18 29 09.1** | **-0.6** |
| | baz=292 | | | | | | | |
| KNMB | | | | *eS* | **Sn** | **18 29 43.7** | **-2.9** |
| | baz=292 | | | | | | | |
| **MATB** | **Ma-tsu** | **3.25** | **332** | *eP* | **Pn** | **18 29 10.1** | **-0.4** |
| | baz=330 | | | | | | | |
| MATB | | | | *eS* | **Sn** | **18 29 45.4** | **-2.6** |
| | baz=330 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.67** | **321** | *eP* | **Pn** | **18 29 16.4** | **+0.1** |
| | baz=320 | | | | | | | |
| MHZQ | | | | *eS* | **Sn** | **18 29 57.0** | **-1.5** |
| | baz=320 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.67** | **333** | *eP* | **Pn** | **18 29 17.2** | **+0.8** |
| | baz=331 | | | | | | | |
| LYJJ | | | | *eS* | **Sn** | **18 29 56.4** | **-2.2** |
| | baz=331 | | | | | | | |
| **AXDP** | **Jialang** | **3.71** | **297** | *eP* | **Pn** | **18 29 16.2** | **-0.6** |
| | baz=296 | | | | | | | |
| AXDP | | | | *eS* | **Sn** | **18 29 57.1** | **-2.3** |
| | baz=296 | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.87** | **341** | *eP* | **Pn** | **18 29 18.9** | **-0.1** |
| | baz=337 | | | | | | | |
| XPSS | | | | *eS* | **Sn** | **18 30 00.2** | **-3.1** |
| | baz=337 | | | | | | | |

*IDC* ***08*** *18:28:51.5±1.9, 7°.58S×128°.08E, h155km±20km, mb3.5/5, mb1 3.8/10, mb1mx3.5/32, mbtmp4.1/10, Error ellipse: s-maj=20.1km s-min=16.2km az=85.0*
*NEIC* ***08*** *18:28:52.1±1.8, 7°.49S±0°.08×128°.10E±0°.09, h154km±12km, mb4.2/10, Error ellipse: s-maj=13.3km s-min=10.8km az=130.0*

**ISC 08 18:28:49.7±0.6, 7°.65S±0°.06×128°.20E±0°.06, h142km, n29, σ2ᵠ41/32, mb3.9/6, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **3.09** | **96** | Pn | **Pn** | **18 29 41.8** | **+3.8** |
| SAUI | | | | Sn | **Sn** | **18 30 16.6** | **+1.5** |
| **SOEI** | **Soe** | **4.42** | **241** | | **Pn** | **18 29 58.5** | **+3.1** |
| **BATI** | **Baumata** | **5.15** | **240** | P | **Pn** | **18 30 06.9** | **+1.8** |
| | 9.7nm,0.3s,baz=94,slow=2.2,SNR=21 | | | | | | |
| BATI | | | | S | **Sn** | **18 31 05.3** | **+1.5** |
| | 11nm,0.3s,baz=329,slow=6.7,SNR=16 | | | | | | |
| **FAKI** | **Fak Fak** | **6.19** | **41** | Pn | **Pn** | **18 30 20.0** | **+1.0** |
| **SIJI** | **Sorong** | **7.40** | **25** | P | **Pn** | **18 30 36.6** | **+1.4** |
| | 1.8nm,0.3s,baz=231,slow=23,SNR=25 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.68** | **193** | P | **Pn** | **18 31 19.2** | **+0.3** |
| | 1.8nm,0.3s,baz=27,slow=11,SNR=39 | | | | | | |
| FITZ | | | | S | **Sn** | **18 33 13.3** | **-3.6** |
| | 3.1nm,0.3s,baz=89,slow=22,SNR=9.0 | | | | | | |
| **WB0** | **Warramunga Arr** | **13.46** | **154** | | **Pn** | **18 31 55.4** | **+0.2** |
| **WRAB** | **Tennant Creek** | **13.59** | **155** | P | **Pn** | **18 31 57.8** | **+1.0** |
| **WRA** | **Warramunga Arr** | **13.59** | **155** | P | **Pn** | **18 31 57.8** | **+0.9** |
| | 1.7nm,0.3s,baz=342,slow=11,SNR=49 | | | | | | |
| WRA | | | | S | **Sn** | **18 34 21.9** | **-5.3** |
| | 3.8nm,0.3s,baz=325,slow=24,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.59** | **155** | P | **Pn** | **18 31 56.9** | **0.0** |
| **WB2** | **Warramunga Arr** | **13.59** | **155** | | **Pn** | **18 31 57.7** | **+0.8** |
| **WR0** | **Warramunga Arr** | **13.69** | **154** | P | **Pn** | **18 31 58.4** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **16.02** | **209** | | **P** | **18 32 29.3** | **+1.5** |
| PSA00 | | | | IAmb | IAmb | 18 32 30.9 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.02** | **209** | P | **P** | **18 32 30.9** | **+3.1** |
| PSA00 | | | | IAmb | IAmb | 18 32 45.9 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **16.84** | **162** | P | **Pn** | **18 32 40.6** | **+3.4** |
| AS31 | | | | IAmb | IAmb | 18 32 42.2 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **16.84** | **162** | P | **Pn** | **18 32 39.9** | **+2.7** |
| | comp=Z,2.4nm,0.3s,baz=340,slow=11,SNR=278 | | | | | | |
| ASAR | | | | S | **S** | **18 35 41.0** | **-4.1** |
| | comp=Z,1.0nm,0.3s,baz=330,slow=19,SNR=8.4 | | | | | | |
| **ASAR** | **Alice Springs** | **16.84** | **162** | P | **Pn** | **18 32 39.7** | **+2.5** |
| **KKM** | **Kota Kinabalu** | **18.11** | **318** | P | **P** | **18 32 46.8** | **-4.3** |
| **SBUM** | **Sibu** | **18.84** | **302** | P | **P** | **18 32 56.8** | **-2.1** |
| SBUM | | | | IAmb | IAmb | 18 33 02.7 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **KSM** | **Kuching** | **20.02** | **296** | P | **P** | **18 33 11.4** | **-0.2** |
| KSM | | | | IAmb | IAmb | 18 33 17.3 | |
| | comp=Z,37nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **27.14** | **154** | P | **P** | **18 34 22.2** | **+2.5** |
| | comp=Z,1.1nm,0.5s,baz=332,slow=12,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **27.14** | **154** | IAmb | IAmb | 18 34 23.8 | |
| | comp=Z,1.5nm,1.4s | | | | | | |
| **IPM** | **Ipoh** | **29.67** | **293** | P | **P** | **18 34 41.3** | **-1.2** |
| **ENH** | **Enshi** | **41.77** | **335** | P | **P** | **18 36 23.8** | **-1.5** |
| ENH | | | | IAmb | IAmb | 18 36 32.5 | |
| | comp=Z,6.5nm,1.5s | | | | | | |
| **KSRS** | **Korea Array** | **44.87** | **360** | P | **P** | **18 36 49.9** | **-0.1** |
| | comp=Z,1.0nm,0.8s,baz=170,slow=9.5,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **58.52** | **343** | P | **P** | **18 38 31.6** | **+0.4** |
| | comp=Z,0.9nm,0.8s,baz=164,slow=5.8,SNR=7.7 | | | | | | |
| **SONM** | **Songino Array** | **58.52** | **343** | IAmb | IAmb | 18 38 33.0 | |
| | comp=Z,1.8nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.81** | **328** | P | **P** | **18 39 31.9** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=117,slow=8.6,SNR=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.39** | **335** | P | **P** | **18 39 52.4** | **-1.8** |
| | comp=Z,0.7nm,0.4s,baz=135,slow=6.3,SNR=6.2 | | | | | | |

**TAP 08 18:37:01.5, 24°.27N×122°.16E, h51km, ML1.9, C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EHP** | **Heping Village** | **0.39** | **277** | *eP* | Pn | 18 37 12.0 | +0.4 |
| | baz=276 | | | | | | |
| **EWUT** | **Wuta** | **0.39** | **297** | *eP* | Pn | 18 37 11.7 | 0.0 |
| | baz=304 | | | | | | |
| EWUT | | | | *eS* | Sn | 18 37 18.7 | -0.1 |
| | baz=304 | | | | | | |
| **ENA** | **Nanau** | **0.42** | **293** | P | Pn | 18 37 12.2 | +0.2 |
| | baz=299 | | | | | | |
| ENA | | | | S | Sn | 18 37 19.8 | +0.4 |
| | baz=299 | | | | | | |
| **TWC** | **Suao** | **0.45** | **320** | P | Pn | 18 37 12.4 | +0.2 |
| | baz=324 | | | | | | |
| TWC | | | | *eS* | Sn | 18 37 19.4 | -0.5 |
| | baz=324 | | | | | | |
| **NACB** | **Ninganchiao** | **0.53** | **260** | P | Pn | 18 37 12.8 | -0.3 |
| | baz=260 | | | | | | |
| NACB | | | | S | Sn | 18 37 21.2 | -0.3 |
| | baz=260 | | | | | | |
| **NDS** | **Dongshan** | **0.55** | **312** | *eP* | Pn | 18 37 14.0 | +0.5 |
| | baz=312 | | | | | | |
| NDS | | | | *eS* | Sn | 18 37 22.7 | +0.7 |
| | baz=312 | | | | | | |
| **TWD** | **Chiawan** | **0.55** | **251** | P | Pn | 18 37 13.3 | -0.1 |
| | baz=243 | | | | | | |
| TWD | | | | *eS* | Sn | 18 37 21.7 | -0.3 |
| | baz=243 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.62** | **265** | *eP* | Pn | 18 37 14.1 | -0.3 |
| | baz=260 | | | | | | |
| ETLH | | | | *eS* | Sn | 18 37 23.6 | -0.1 |
| | baz=260 | | | | | | |
| **LATG** | **Datong** | **0.64** | **295** | P | Pn | 18 37 15.0 | +0.3 |
| | baz=295 | | | | | | |
| LATG | | | | *eS* | Sn | 18 37 25.0 | +0.8 |
| | baz=295 | | | | | | |
| **TWE** | **Neicheng** | **0.64** | **315** | P | Pn | 18 37 15.2 | +0.7 |
| | baz=311 | | | | | | |
| TWE | | | | S | Sn | 18 37 24.9 | +1.0 |
| | baz=311 | | | | | | |
| **ENTT** | **Nioudou** | **0.66** | **305** | *eP* | Pn | 18 37 15.3 | +0.5 |
| | baz=304 | | | | | | |
| ENTT | | | | *eS* | Sn | 18 37 25.2 | +0.7 |
| | baz=304 | | | | | | |
| **NTC** | **Toucheng** | **0.66** | **333** | *eP* | Pn | 18 37 15.8 | +0.9 |
| | baz=341 | | | | | | |
| NTC | | | | *eS* | Sn | 18 37 25.3 | +0.9 |
| | baz=341 | | | | | | |
| **NDT** | **Datong Townshi** | **0.68** | **300** | *eP* | Pn | 18 37 15.7 | +0.6 |
| | baz=295 | | | | | | |
| NDT | | | | *eS* | Sn | 18 37 26.0 | +1.1 |
| | baz=295 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.72** | **313** | P | Pn | 18 37 16.4 | +0.7 |
| | baz=305 | | | | | | |
| FUSB | | | | *eS* | Sn | 18 37 27.4 | +1.5 |
| | baz=305 | | | | | | |
| **NNSB** | **Datong** | **0.73** | **283** | *eP* | Pn | 18 37 15.9 | +0.1 |
| | baz=283 | | | | | | |
| NNSB | | | | *eS* | Sn | 18 37 26.6 | +0.4 |
| | baz=283 | | | | | | |
| **NNS** | **Nan Shan** | **0.74** | **284** | *eP* | Pn | 18 37 16.1 | +0.2 |
| | baz=283 | | | | | | |
| NNS | | | | *eS* | Sn | 18 37 27.0 | +0.5 |
| | baz=283 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.76** | **348** | *eP* | Pn | 18 37 16.0 | 0.0 |
| | baz=348 | | | | | | |
| **TIPB** | **Shuangxi** | **0.77** | **337** | P | Pn | 18 37 16.7 | +0.4 |
| | baz=343 | | | | | | |
| TIPB | | | | *eS* | Sn | 18 37 27.4 | +0.5 |
| | baz=343 | | | | | | |
| **NWLT** | **Wulai** | **0.79** | **310** | P | Pn | 18 37 17.2 | +0.7 |
| | baz=302 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.80** | **76** | *eP* | Pn | 18 37 17.9 | +1.3 |
| | baz=75 | | | | | | |
| **YHNB** | **Yeheng** | **0.82** | **300** | P | Pn | 18 37 17.6 | +0.6 |
| | baz=292 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.83** | **262** | *eP* | Pn | 18 37 17.2 | -0.2 |
| | baz=252 | | | | | | |
| WHF | | | | *eS* | Sn | 18 37 29.1 | +0.1 |
| | baz=252 | | | | | | |
| **FUSS** | **Fushou** | **0.84** | **269** | *eP* | Pn | 18 37 17.9 | +0.5 |
| | baz=269 | | | | | | |
| FUSS | | | | *eS* | Sn | 18 37 29.3 | +0.4 |
| | baz=269 | | | | | | |
| **NSK** | **Sanguang** | **0.84** | **299** | *eP* | Pn | 18 37 17.8 | +0.5 |
| | baz=299 | | | | | | |
| NSK | | | | *eS* | Sn | 18 37 29.6 | +0.9 |
| | baz=299 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.87** | **343** | *eP* | Pn | 18 37 17.9 | +0.3 |
| | baz=351 | | | | | | |
| SXI1 | | | | *eS* | Sn | 18 37 30.3 | +1.0 |
| | baz=351 | | | | | | |
| **TWA** | **Mucha** | **0.89** | **324** | *eP* | Pn | 18 37 18.5 | +0.8 |
| | baz=324 | | | | | | |

**JMA 08 18:37:55.1±0.1, 24°.46N×123°.81E, h10km±2km, M0.3, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.14** | **210** | P | Pg | 18 37 58.5 | +0.1 |
| IRIF | | | | S | Sg | 18 38 00.8 | +0.2 |
| **JKRS** | **Kuro-shima** | **0.29** | **141** | P | Pg | 18 38 00.8 | -0.1 |
| JKRS | | | | S | Sg | 18 38 04.9 | +0.2 |
| **JIJ** | **Ishigaki jima** | **0.32** | **108** | P | Pg | 18 38 01.3 | -0.2 |
| JIJ | | | | S | Sg | 18 38 05.5 | -0.2 |
| **HATJ** | **Hateruma jima** | **0.40** | **181** | P | Pg | 18 38 03.0 | 0.0 |
| HATJ | | | | S | Sg | 18 38 08.7 | +0.4 |
| **JISG** | **Ishigakijimahi** | **0.47** | **74** | P | Pg | 18 38 04.2 | -0.2 |
| JISG | | | | S | Sg | 18 38 11.0 | +0.4 |

*DJA* ***08*** *19:17:50.6±0.2, 2°.S±2°×12°.5E±°, h10km, M4.2/18, mb4.4/11, MLv4.2/18*
*NEIC* ***08*** *19:17:53.6±1.4, 2°.28S±0°.08×124°.75E±0°.03, h30km±8km, mb4.0/10, Error ellipse: s-maj=11.7km s-min=2.3km az=164.0*
*IDC* ***08*** *19:17:55.4±2.9, 2°.35S×124°.79E, h51km±32km, mb3.8/9, mb1 3.8/13, mb1mx3.6/51, mbtmp4.0/13, ML3.7/4, MS4.2/2, Ms1 4.3/2, ms1mx3.4/76, Error ellipse: s-maj=27.0km s-min=21.2km az=71.0*

**ISC 08 19:17:53.8±0.7, 2°.30S±0°.07×124°.81E±0°.06, h35km, n44, σ1ᵠ00/44, mb4.0/10, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANI** | **Sanana** | **1.21** | **78** | P | **Pn** | **19 18 12.1** | **-2.1** |
| SANI | | | | S | **Sn** | **19 18 28.3** | **-1.1** |
| **KMSI** | **Cibinong** | **2.97** | **344** | P | **Pn** | **19 18 37.9** | **-0.6** |
| **LBMI** | **Labuha** | **3.16** | **59** | P | **Pn** | **19 18 41.0** | **-0.1** |
| LBMI | | | | S | **Sn** | **19 19 17.2** | **-0.5** |
| **GTOI** | **Gorontalo** | **3.43** | **328** | P | **Pn** | **19 18 46.4** | **+1.7** |
| **APSI** | **Ampana** | **3.44** | **294** | P | **Pn** | **19 18 43.9** | **-1.1** |
| **MRSI** | **Marisa** | **3.98** | **314** | P | **Pn** | **19 18 51.3** | **-1.0** |
| **TNTI** | **Ternate** | **3.99** | **40** | P | **Pn** | **19 18 52.1** | **-0.4** |
| **TNTI** | **Ternate** | **3.99** | **40** | Pn | **Pn** | **19 18 52.9** | **+0.4** |
| **BNSI** | **Bone** | **5.13** | **246** | P | **Pn** | **19 19 06.6** | **-1.6** |
| | 0.1nm18nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **5.26** | **310** | | **Pn** | **19 19 09.2** | **-0.8** |
| **SPSI** | **Sidrap Palu** | **5.29** | **252** | P | **Pn** | **19 19 10.0** | **-0.4** |
| | 0.3nm69nm,0.7s | | | | | | |
| **BKSI** | **Bulukumba** | **5.55** | **237** | P | **Pn** | **19 19 13.7** | **-0.3** |
| | 0.1nm27nm,0.5s | | | | | | |
| **MPSI** | **Mapaga** | **5.56** | **298** | P | **Pn** | **19 19 13.3** | **-0.8** |
| | 0.3nm15nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **5.72** | **242** | P | **Pn** | **19 19 16.5** | **+0.3** |
| | 1.7nm,0.3s,baz=124,slow=16,SNR=2.6 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.75** | **228** | P | **Pn** | **19 19 15.8** | **-0.9** |
| | 0.2nm39nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **6.61** | **78** | P | **Pn** | **19 19 29.4** | **+0.8** |
| | 1.5nm,0.3s,baz=243,slow=21,SNR=7.4 | | | | | | |
| **SOEI** | **Soe** | **7.42** | **184** | Pn | **Pn** | **19 19 39.9** | **0.0** |
| **FAKI** | **Fak Fak** | **7.46** | **95** | Pn | **Pn** | **19 19 42.1** | **+1.8** |
| **BATI** | **Baumata** | **7.93** | **188** | P | **Pn** | **19 19 49.5** | **+2.8** |
| | 0.9nm,0.3s,baz=16,slow=3.0,SNR=6.1 | | | | | | |
| **BATI** | **Baumata** | **7.93** | **188** | P | **Pn** | **19 19 46.9** | **+0.1** |
| **WB0** | **Warramunga Arr** | **19.73** | **152** | P | **P** | **19 22 20.7** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 19 22 36.1 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **19.85** | **153** | P | **P** | **19 22 20.8** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=12,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.85** | **153** | P | **P** | **19 22 22.9** | **+0.9** |
| **WB2** | **Warramunga Arr** | **19.86** | **153** | P | **P** | **19 22 20.9** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 19 22 36.0 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **19.96** | **152** | P | **P** | **19 22 22.3** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 19 22 33.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **22.99** | **158** | P | **P** | **19 22 54.5** | **-1.2** |
| **ASAR** | **Alice Springs** | **22.99** | **158** | P | **P** | **19 22 56.1** | **+0.5** |
| | comp=Z,1.8nm,0.8s,baz=340,slow=13,SNR=23 | | | | | | |
| **KSRS** | **Korea Array** | **39.66** | **4** | P | **P** | **19 25 24.2** | **+1.8** |
| | comp=Z,1.6nm,0.7s,baz=187,slow=8.8,SNR=5.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.88** | **17** | LR | LR | 19 47 56.0 | |
| | comp=Z,238nm,21.9s,baz=166,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **52.46** | **344** | P | **P** | **19 27 03.1** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=162,slow=8.8,SNR=6.7 | | | | | | |
| **MK31** | **Makanchi Array** | **61.51** | **328** | P | **P** | **19 28 07.2** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 19 28 30.8 | |
| | comp=Z,1.8nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.51** | **328** | P | **P** | **19 28 06.4** | **-0.8** |
| | comp=Z,0.4nm,0.4s,baz=119,slow=8.6,SNR=19 | | | | | | |
| **KBL** | **Kabul** | **63.80** | **310** | P | **P** | **19 28 23.4** | **+0.4** |
| **ZAA0** | **Zalesovo Array** | **65.14** | **335** | P | **P** | **19 28 30.6** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **65.14** | **335** | P | **P** | **19 28 30.8** | **-0.3** |
| | comp=Z,1.8nm,0.7s,baz=123,slow=5.5,SNR=8.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **65.14** | **335** | P | **P** | **19 28 30.2** | **-0.9** |
| **KURBB** | **Kurchatov Arra** | **65.85** | **330** | P | **P** | **19 28 36.0** | **+0.3** |
| | comp=Z,3.6nm,0.8s,baz=139,slow=6.2,SNR=28 | | | | | | |
| **KURK** | **Kurchatov** | **65.86** | **330** | P | **P** | **19 28 35.7** | **-0.1** |
| **BVAR** | **Borovoye Array** | **71.37** | **329** | P | **P** | **19 29 10.5** | **+0.3** |
| | comp=Z,0.5nm,0.4s,baz=98,slow=11,SNR=6.3 | | | | | | |
| **TIXI** | **Tiksi** | **73.87** | **1** | P | **P** | **19 29 24.6** | **0.0** |
| | comp=Z,1.8nm,0.4s,baz=265,slow=18,SNR=20 | | | | | | |
| **TIXI** | **Tiksi** | **73.87** | **1** | P | **P** | **19 29 24.1** | **-0.5** |
| TIXI | | | | IAmb | IAmb | 19 29 25.2 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.64** | **322** | P | **P** | **19 29 34.7** | **-0.7** |
| **AKTO** | **Aktyubinsk** | **77.22** | **323** | P | **P** | **19 29 44.7** | **+0.4** |
| | comp=Z,1.7nm,0.7s,baz=104,slow=7.5,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **91.34** | **25** | LR | LR | 20 10 32.7 | |
| | comp=Z,177nm,21.2s,baz=232,slow=34 | | | | | | |

**GUC 08 19:21:26.3±0.7, 18°.86S×69°.22W, h119km±2km, ML3.5, 9C-2D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNMC** | **Minye Minye** | **0.45** | **232** | ↑*iP* | Pn | 19 21 43.5 | -0.7 |
| MNMC | | | | *i* S | Sn | 19 21 57.4 | -0.2 |
| MNMC | | | | IAML | | 19 21 59.3 | |
| | comp=E,5μm,0.6s | | | | | | |
| **GO01** | **Chusmiza** | **0.81** | **178** | ↑*iP* | Pn | 19 21 46.6 | -0.4 |
| GO01 | | | | ↑*iP* | | 19 21 46.7 | |
| GO01 | | | | *i* S | Sn | 19 22 02.9 | +0.3 |
| GO01 | | | | *i* S | | 19 22 03.0 | |
| GO01 | | | | IAML | | 19 22 03.8 | |
| | comp=E,818nm,0.2s | | | | | | |
| GO01 | | | | IAML | | 19 22 03.9 | |
| | comp=E,831nm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **0.99** | **204** | ↑*iP* | Pn | 19 21 47.7 | -0.6 |
| PB11 | | | | *i* S | Sn | 19 22 04.5 | -0.4 |
| PB11 | | | | IAML | | 19 22 05.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| **PB12** | **IPOC Station P** | **1.07** | **283** | ↑*iP* | Pn | 19 21 48.0 | -1.0 |
| PB12 | | | | *i* S | Sn | 19 22 05.3 | -1.0 |
| PB12 | | | | IAML | | 19 22 09.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **AP01** | **Chacalluta** | **1.17** | **294** | ↓*iP* | Pn | 19 21 49.3 | -0.6 |
| AP01 | | | | *i* S | Sn | 19 22 07.6 | -0.2 |
| AP01 | | | | IAML | | 19 22 08.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **1.28** | **177** | ↑*iP* | Pn | 19 21 51.4 | -0.1 |
| PB08 | | | | *i* S | Sn | 19 22 11.2 | +0.5 |
| PB08 | | | | IAML | | 19 22 12.2 | |
| | comp=E,498nm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **1.55** | **204** | ↑*iP* | Pn | 19 21 53.3 | -1.1 |
| HMBC | | | | *i* S | Sn | 19 22 15.0 | -0.7 |
| HMBC | | | | IAML | | 19 22 19.4 | |
| | comp=N,519nm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **1.65** | **211** | *eP* | Pn | 19 21 54.5 | -0.9 |
| TA02 | | | | IAML | | 19 22 18.2 | |
| | comp=N,851nm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.93** | **208** | ↑*iP* | Pn | 19 21 57.8 | -0.9 |
| TA01 | | | | *i* S | Sn | 19 22 21.8 | -1.8 |
| TA01 | | | | IAML | | 19 22 29.2 | |
| | comp=N,224nm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **2.14** | **204** | ↓*iP* | Pn | 19 22 00.7 | -0.9 |
| PATCX | | | | *i* S | Sn | 19 22 27.1 | -1.5 |
| PATCX | | | | IAML | | 19 22 35.9 | |
| | comp=E,225nm,0.7s | | | | | | |
| **PB01** | **IPOC Station P** | **2.19** | **187** | ↑*iP* | Pn | 19 22 01.4 | -0.8 |
| PB01 | | | | *i* S | Sn | 19 22 28.4 | -1.3 |
| PB01 | | | | IAML | | 19 22 32.4 | |
| | comp=N,204nm,0.1s | | | | | | |
| **PB02** | **IPOC Station P** | **2.53** | **194** | *eP* | Pn | 19 22 06.0 | -0.6 |
| PB02 | | | | *i* S | Sn | 19 22 36.4 | -1.1 |
| PB02 | | | | IAML | | 19 22 47.3 | |
| | comp=E,313nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.92** | **192** | *eP* | Pn | 19 22 11.8 | +0.1 |
| PB07 | | | | IAML | | 19 22 53.7 | |
| | comp=N,112nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **2.92** | **180** | *eP* | Pn | 19 22 12.0 | +0.3 |
| PB09 | | | | IAML | | 19 22 56.5 | |
| | comp=N,62nm,0.4s | | | | | | |
| **PB03** | **IPOC Station P** | **3.21** | **189** | *eP* | Pn | 19 22 14.8 | -0.8 |
| PB03 | | | | IAML | | 19 23 06.4 | |
| | comp=E,66nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **3.57** | **194** | *eP* | Pn | 19 22 19.7 | -0.5 |
| **PB06** | **IPOC Station P** | **3.84** | **185** | *eP* | Pn | 19 22 22.6 | -1.3 |
| PB06 | | | | IAML | | 19 23 22.1 | |
| | comp=N,46nm,0.2s | | | | | | |
| **PB15** | **IPOC Station P** | **4.34** | **183** | *eP* | Pn | 19 22 29.6 | -0.9 |

*IDC* ***08*** *19:23:07.4±1.4, 34°.99N×23°.87E, h0km, mb3.8/7, mb1 3.6/10, mb1mx3.4/55, mbtmp3.6/10, ML3.2/3, Error ellipse: s-maj=30.3km s-min=18.1km az=169.0*
*THE* ***08*** *19:23:08.9, 34°.68N×24°.04E, h0km±7km, ML3.2/1, Error ellipse: s-maj=9.2km s-min=2.4km az=177.0*
*ISK* ***08*** *19:23:10.9, 34°.81N×23°.97E, h16km, ML3.1/11*
*ATH* ***08*** *19:23:11.3, 34°.83N×24°.03E, h20km±1km, ML2.9/9, Error ellipse: s-maj=3.5km s-min=1.2km az=217.0*

**ISC 08 19:23:10.7±0.9, 34°.80N±0°.06×23°.96E±0°.04, h27km, n46, σ1ᵠ91/57, mb3.8/7, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GVD** | **Gavdhos** | **0.11** | **67** | P | **Pb** | **19 23 14.7** | **-1.0** |
| **GVD** | **Gavdhos** | **0.11** | **67** | P | **Pb** | **19 23 14.7** | **-1.0** |
| GVD | | | | S | **Sb** | **19 23 17.5** | **-1.6** |
| GVD | | | | AML | AML | 19 23 18.7 | |
| GVD | | | | AML | AML | 19 23 20.2 | |
| | comp=E,94487μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.11** | **67** | PG | **Pb** | **19 23 14.7** | **-1.0** |
| GVD | | | | SG | **Sb** | **19 23 17.2** | **-1.9** |
| **KNDR** | **Palaiochora Ch** | **0.49** | **333** | PG | **Pb** | **19 23 21.5** | **+0.6** |
| KNDR | | | | SG | **Sb** | **19 23 29.2** | **+1.4** |
| **VAM** | **Vamos** | **0.64** | **18** | P | **Pb** | **19 23 22.9** | **-0.4** |
| **VAM** | **Vamos** | **0.64** | **18** | P | **Pb** | **19 23 22.8** | **-0.6** |
| VAM | | | | AML | AML | 19 23 41.8 | |
| | comp=N,3408μm,0.4s | | | | | | |
| VAM | | | | AML | AML | 19 23 43.1 | |
| | comp=E,4709μm,0.7s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.66** | **1** | P | **Pb** | **19 23 23.4** | **-0.3** |
| IMMV | | | | S | **Sn** | **19 23 36.2** | **+2.3** |
| | comp=E,2μm,0.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.66** | **1** | P | **Pb** | **19 23 23.2** | **-0.5** |
| IMMV | | | | S | **Sb** | **19 23 33.5** | **+1.0** |
| IMMV | | | | AML | AML | 19 23 41.0 | |
| | comp=N,3056μm,0.3s | | | | | | |
| IMMV | | | | AML | AML | 19 23 52.5 | |
| | comp=E,4466μm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.66** | **1** | PG | **Pb** | **19 23 24.0** | **+0.3** |
| IMMV | | | | SG | **Sn** | **19 23 33.8** | **-0.1** |
| **SIVA** | **Sivas** | **0.73** | **72** | P | **Pb** | **19 23 24.7** | **-0.1** |
| SIVA | | | | AML | AML | 19 23 47.3 | |
| | comp=E,5452μm,0.7s | | | | | | |
| SIVA | | | | AML | AML | 19 23 48.9 | |
| | comp=N,3757μm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **0.91** | **57** | Pn | **Pb** | **19 23 27.0** | **-0.8** |
| | comp=N,6.5nm,0.3s,baz=309,slow=4.8,SNR=45 | | | | | | |
| IDI | | | | Sn | **Sn** | **19 23 42.9** | **+3.0** |
| | comp=N,33nm,0.3s,baz=322,slow=16,SNR=11 | | | | | | |
| **IDI** | **Anoyia** | **0.91** | **57** | P | **Pb** | **19 23 27.0** | **-0.8** |
| IDI | | | | S | **Sn** | **19 23 41.7** | **+1.8** |
| **IDI** | **Anoyia** | **0.91** | **57** | P | **Pb** | **19 23 26.8** | **-1.0** |
| IDI | | | | AML | AML | 19 23 48.1 | |
| | comp=N,1325μm,0.7s | | | | | | |
| IDI | | | | AML | AML | 19 23 55.2 | |
| | comp=E,921μm,0.6s | | | | | | |
| **HRKL** | **Herakleio** | **1.07** | **61** | PG | **Pb** | **19 23 31.8** | **+1.3** |
| HRKL | | | | SG | **Sb** | **19 23 46.9** | **+2.9** |
| **ANKY** | **Antikythira Is** | **1.20** | **333** | P | **Pb** | **19 23 34.1** | **+1.4** |
| **ANKY** | **Antikythira Is** | **1.20** | **333** | P | **Pb** | **19 23 33.9** | **+1.2** |
| ANKY | | | | AML | AML | 19 24 02.1 | |
| | comp=E,775μm,0.7s | | | | | | |
| ANKY | | | | AML | AML | 19 24 08.3 | |
| | comp=N,708μm,1.0s | | | | | | |
| **NPS** | **Neapolis** | **1.43** | **71** | P | **Pb** | **19 23 37.8** | **+1.1** |
| NPS | | | | AML | AML | 19 24 13.6 | |
| | comp=E,651μm,0.8s | | | | | | |
| NPS | | | | AML | AML | 19 24 14.9 | |
| | comp=N,524μm,0.9s | | | | | | |
| **KTHA** | **Kythira Island** | **1.63** | **333** | P | **Pb** | **19 23 41.3** | **+1.2** |
| KTHA | | | | AML | AML | 19 24 14.2 | |
| | comp

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **45.96** | **46** | P | **P** | **19 31 30.9** | **-0.2** |
| | comp=E,1.1nm,0.5s,baz=273,slow=9.0,SNR=6.6 | | | | | | |
| **SONM** | **Songino Array** | **60.47** | **50** | P | **P** | **19 33 18.8** | **+0.6** |
| | comp=E,0.4nm,0.5s,baz=283,slow=6.3,SNR=8.2 | | | | | | |

*NNC **08** 19:34:17.7±1.1,41°.64N×71°.18E,h0km,mb2.9,mpv2.9,*
*Error ellipse: s-maj=8.9km s-min=4.0km az=11.0*
*KRNET **08** 19:34:17.4±0.1,41°.61N×71°.17E,h17km,mb2.6*
*SOME **08** 19:34:17.5,41°.60N×71°.08E,h20km*
*ISU **08** 19:34:20,41°.40N×71°.10E,h5km*

**ISC 08 19:34:17.8**±0.9,**41°.63N**±0°.03×**71°.20E**±0°.02,**h11**km±7km,
**n24,**σ1§**46**/42,**14C-6D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TRKS** | **Terek-Say** | **0.11** | **204** | ⇑ | *iP* | **Pg** | **19 34 20.6** | **-0.3** |
| | baz=80 | | | | | | | |
| TRKS | | | | ⇑ | *iS* | **Sg** | **19 34 23.1** | **0.0** |
| | baz=80 | | | | | | | |
| **ARK** | **Arkit** | **0.59** | **74** | ⇓ | *iP* | **Pg** | **19 34 29.3** | **0.0** |
| | baz=72 | | | | | | | |
| ARK | | | | ⇓ | *iS* | **Sg** | **19 34 38.0** | **+0.8** |
| | baz=72 | | | | | | | |
| **IUG** | **Iuzhnay** | **1.01** | **301** | | *eP* | **Pb** | **19 34 36.6** | **-0.8** |
| | 160nm,0.3s | | | | | | | |
| IUG | | | | | *eS* | **Sg** | **19 34 50.4** | **-0.1** |
| | 78nm,0.3s | | | | | | | |
| **IUG** | **Iuzhnay** | **1.01** | **301** | | P | **Pb** | **19 34 36.6** | **-0.8** |
| | 160nm,0.3s | | | | | | | |
| IUG | | | | | S | **Sg** | **19 34 50.4** | **-0.1** |
| | 78nm,0.3s | | | | | | | |
| **IUG** | **Iuzhnay** | **1.01** | **301** | | *eP* | **Pb** | **19 34 36.6** | **-0.8** |
| | baz=2.0 | | | | | | | |
| IUG | | | | | *eS* | **Sg** | **19 34 50.4** | **-0.1** |
| | baz=2.0 | | | | | | | |
| **YBZ** | **Yangibazar** | **1.26** | **255** | | *i* P | **Pg** | **19 34 43.0** | **+1.0** |
| YBZ | | | | | *i* S | **Sg** | **19 35 02.0** | **+3.6** |
| **MNAS** | **Manas** | **1.29** | **48** | ⇓ | *eP* | **Pb** | **19 34 42.1** | **0.0** |
| | baz=48 | | | | | | | |
| MNAS | | | | ⇓ | *iS* | **Sg** | **19 35 00.1** | **+0.7** |
| | baz=48 | | | | | | | |
| **KK02** | **Karatay Array** | **1.56** | **341** | ⇑ | P | **Pb** | **19 34 45.8** | **-0.8** |
| | 2.3nm,0.4s | | | | | | | |
| KK02 | | | | ⇑ | S | **Sg** | **19 35 07.2** | **-0.6** |
| | 3.8nm,0.2s | | | | | | | |
| **BTK** | **Batken** | **1.60** | **191** | | P | **Pb** | **19 34 47.0** | **-0.4** |
| BTK | | | | | S | Sg | 19 35 20.0 | +11 |
| **BTK** | **Batken** | **1.60** | **191** | ⇑ | *iP* | **Pb** | **19 34 46.5** | **-0.9** |
| | baz=90 | | | | | | | |
| BTK | | | | ⇑ | *iS* | **Sg** | **19 35 08.0** | **-1.3** |
| | baz=90 | | | | | | | |
| **OHH** | **Osh** | **1.63** | **132** | ⇑ | *eP* | **Pb** | **19 34 47.7** | **-0.2** |
| | baz=31 | | | | | | | |
| OHH | | | | ⇑ | *iS* | **Sg** | **19 35 09.7** | **-0.5** |
| | baz=31 | | | | | | | |
| **BRLS** | **Boroldav** | **1.72** | **324** | | *eP* | **Pn** | **19 34 47.4** | **-0.4** |
| | 12nm,0.2s | | | | | | | |
| BRLS | | | | | *eS* | **Sn** | **19 35 09.2** | **-0.5** |
| | 33nm,0.2s | | | | | | | |
| **BRLS** | **Boroldav** | **1.72** | **324** | | P | **Pn** | **19 34 47.4** | **-0.4** |
| | 12nm,0.2s | | | | | | | |
| BRLS | | | | | S | **Sn** | **19 35 09.2** | **-0.5** |
| | 33nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **1.87** | **53** | | *eP* | **Pb** | **19 34 53.0** | **+1.0** |
| | 1.0nm,0.3s | | | | | | | |
| MRKS | | | | | *eS* | **Sg** | **19 35 18.3** | **+0.4** |
| | 7.0nm,0.5s | | | | | | | |
| **MRKS** | **Merke** | **1.87** | **53** | | Pg | **Pb** | **19 34 53.0** | **+1.0** |
| | 1.0nm,0.3s | | | | | | | |
| MRKS | | | | | Lg | Lg | 19 35 18.3 | |
| | 7.0nm,0.5s | | | | | | | |
| **ARLS** | **Aral** | **2.35** | **83** | ⇑ | *iP* | **Pb** | **19 34 58.9** | **-1.2** |
| | baz=83 | | | | | | | |
| ARLS | | | | ⇑ | *iS* | **Sb** | **19 35 29.2** | **+0.1** |
| | baz=83 | | | | | | | |
| **UCH** | **Uchtor** | **2.54** | **75** | ⇑ | *iP* | **Pb** | **19 35 01.7** | **-1.9** |
| | baz=75 | | | | | | | |
| UCH | | | | ⇑ | *iS* | **Sb** | **19 35 34.2** | **-0.8** |
| | baz=75 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.65** | **67** | ⇓ | Pg | **Pg** | **19 35 07.4** | **-1.0** |
| | 1.3nm,0.5s | | | | | | | |
| AAK | | | | ⇑ | Lg | Lg | 19 35 40.6 | |
| | 1.1nm,0.7s | | | | | | | |
| **SGDS** | **Sogindy** | **3.12** | **53** | | *eP* | **Pb** | **19 35 14.4** | **+1.2** |
| | 0.4nm,0.2s | | | | | | | |
| SGDS | | | | | *eS* | **Sb** | **19 35 55.0** | **+3.8** |
| | 2.1nm,0.5s | | | | | | | |
| **SGDS** | **Sogindy** | **3.12** | **53** | | Pg | **Pb** | **19 35 14.4** | **+1.2** |
| | 0.4nm,0.2s | | | | | | | |
| SGDS | | | | | Lg | Lg | 19 35 55.0 | |
| | 2.1nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.50** | **67** | ⇓ | Pg | **Pb** | **19 35 21.0** | **+1.1** |
| | 1.0nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑ | Lg | Lg | 19 36 06.0 | |
| | 1.4nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **3.89** | **57** | | *eP* | **Pb** | **19 35 27.7** | **+1.3** |
| | 0.6nm,0.5s | | | | | | | |
| KRBS | | | | | *eS* | **Sb** | **19 36 17.7** | **+4.2** |
| | 0.8nm,0.6s | | | | | | | |
| **BTLS** | **Baital** | **3.99** | **30** | | *eP* | **Pg** | **19 35 31.7** | **-2.4** |
| | 1.1nm,0.5s | | | | | | | |
| BTLS | | | | | *eS* | **Sg** | **19 36 24.7** | **-1.0** |
| | 1.7nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **3.99** | **30** | | Pg | **Pg** | **19 35 31.7** | **-2.4** |
| | 1.1nm,0.5s | | | | | | | |
| BTLS | | | | | Lg | Lg | 19 36 24.7 | |
| | 1.7nm,0.4s | | | | | | | |

*SKHL **08** 19:36:08.4±0.6,44°.40N×148°.20E,h56km±4km,mb4.2/4*
*JMA **08** 19:36:08.0±0.3,44°.01N×147°.94E,h0km,M4.1*

**ISC 08 19:36:05.6**±3.0,**44°.27N**±0°.08×**148°.5E**±0°.2,**h50**km,**n22,**
σ1§**69**/32,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.05** | **337** | | *iP* | **Pn** | **19 36 24.2** | **+0.3** |
| KUR | | | | | AMB | AMB | 19 36 25.5 | |
| | 20nm,0.2s | | | | | | | |
| KUR | | | | | AMB | AMB | 19 36 25.5 | |
| | 10.0nm,0.2s | | | | | | | |
| KUR | | | | | AMB | AMB | 19 36 25.5 | |
| | 80nm,0.2s | | | | | | | |
| KUR | | | | | *i* S | **Sn** | **19 36 36.3** | **-1.2** |
| KUR | | | | | A | A | 19 36 36.9 | |
| | 340nm,0.3s | | | | | | | |
| KUR | | | | | A | A | 19 36 36.9 | |
| | 1µm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **1.23** | **252** | | *i* P | **Pn** | **19 36 26.9** | **+0.5** |
| SHO | | | | | AMB | AMB | 19 36 27.1 | |
| | 40nm,0.2s | | | | | | | |
| SHO | | | | | *i* S | **Sn** | **19 36 40.0** | **-1.9** |
| SHO | | | | | A | A | 19 36 41.1 | |
| | 400nm,0.3s | | | | | | | |
| SHO | | | | | A | A | 19 36 41.1 | |
| | 810nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.88** | **264** | | *i* P | **Pn** | **19 36 35.7** | **+0.5** |
| YUK | | | | | AMB | AMB | 19 36 37.3 | |
| | 60nm,0.3s | | | | | | | |
| YUK | | | | | *e*S | **Sn** | **19 36 56.3** | **-1.4** |
| YUK | | | | | A | A | 19 36 58.7 | |
| | 210nm,0.3s | | | | | | | |
| YUK | | | | | A | A | 19 36 58.7 | |
| | 600nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.16** | **246** | | P | **Pn** | **19 36 39.3** | **+0.3** |
| NEM2 | | | | | *e*S | **Sn** | **19 37 02.3** | **-2.3** |
| **NMR** | **Nemuro--Hokkai** | **2.16** | **246** | | *i* P | **Pn** | **19 36 39.4** | **+0.2** |
| NMR | | | | | *i* S | **Sn** | **19 37 02.8** | **-1.9** |
| **GLVR** | **Golovnino** | **2.18** | **257** | | *i* P | **Pn** | **19 36 40.4** | **+1.1** |
| GLVR | | | | | AMB | AMB | 19 36 42.8 | |
| | 20nm,0.3s | | | | | | | |
| GLVR | | | | | *e*S | **Sn** | **19 37 04.4** | **-0.7** |
| GLVR | | | | | A | A | 19 37 11.3 | |
| | 400nm,0.4s | | | | | | | |
| GLVR | | | | | A | A | 19 37 11.3 | |
| | 570nm,0.4s | | | | | | | |
| **JRA** | **Rausu** | **2.42** | **263** | | P | **Pn** | **19 36 44.3** | **+1.7** |
| **JNSB** | **Nemuroshibetsu** | **2.53** | **260** | | P | **Pn** | **19 36 45.6** | **+1.4** |
| **JKHN** | **Kushirohamanak** | **2.66** | **245** | | P | **Pn** | **19 36 46.8** | **+0.8** |
| **JNK** | **Nakash** | **2.78** | **257** | | P | **Pn** | **19 36 48.8** | **+1.2** |
| JNK | | | | | *e*S | **Sn** | **19 37 18.8** | **-1.1** |
| **AKK** | **Akkeshi** | **2.90** | **246** | | *i* P | **Pn** | **19 36 50.2** | **+0.9** |
| AKK | | | | | *i* S | **Sn** | **19 37 22.1** | **-0.8** |
| **JAK** | **Akkeshi** | **3.01** | **246** | | P | **Pn** | **19 36 51.6** | **+0.9** |
| JAK | | | | | *e*S | **Sn** | **19 37 22.7** | **-2.7** |
| **JTKR** | **Abashiri--Toko** | **3.28** | **266** | | P | **Pn** | **19 36 56.5** | **+2.0** |
| **JAR** | **Ashorobuto** | **3.52** | **256** | | P | **Pn** | **19 36 59.8** | **+2.0** |
| **JOB** | **Onbets** | **3.62** | **249** | | *e*S | **Sn** | **19 37 39.6** | **-0.9** |
| **JMP** | **Maruseppu** | **3.67** | **268** | | P | **Pn** | **19 37 01.9** | **+2.0** |
| **JCH** | **Churui** | **4.05** | **248** | | P | **Pn** | **19 37 06.2** | **+1.1** |
| **JKK2** | **Kamakawa 2** | **4.13** | **266** | | P | **Pn** | **19 37 09.6** | **+3.5** |
| **JSE** | **Soyaes** | **4.24** | **281** | | P | **Pn** | **19 37 08.9** | **+1.3** |
| **JFR** | **Furan** | **4.38** | **257** | | P | **Pn** | **19 37 12.8** | **+3.2** |
| **JNBK** | **Urakawa-nobuka** | **4.61** | **246** | | P | **Pn** | **19 37 14.4** | **+1.7** |
| **YSS** | **Yuzh-Sakhalins** | **4.81** | **306** | | *e*P | **Pn** | **19 37 16.5** | **+1.1** |
| YSS | | | | | AMB | AMB | 19 37 18.2 | |
| | 10.0nm,0.3s | | | | | | | |
| YSS | | | | | *e*S | **Sn** | **19 38 07.8** | **-2.0** |
| YSS | | | | | A | A | 19 38 23.1 | |
| | 10.0nm,0.5s | | | | | | | |
| YSS | | | | | A | A | 19 38 23.1 | |
| | 10.0nm,0.5s | | | | | | | |

*IDC **08** 19:36:14.2±1.1,34°.23N×138°.06E,h0km,mb3.6/4,*
*mb1 3.7/5,mb1mx3.3/73,mbtmp3.5/5,ML2.8/1,Error*
*ellipse: s-maj=35.9km s-min=17.3km az=50.0*
*JMA **08** 19:36:17.7±0.2,34°.94N×140°.07E,h81km±2km,M3.1*

**ISC 08 19:36:17.9**±1.0,**34°.96N**±0°.04×**140°.09E**±0°.05,**h81**km±7km,
**n22,**σ0§**67**/34,**mb3.6/4,Near east coast of eastern**
**Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TATJ** | **Tateyama 2** | **0.18** | **295** | | P | **Pn** | **19 36 30.1** | **+0.4** |
| **BSO4** | **Boso 4** | **0.21** | **81** | | P | **Pn** | **19 36 30.3** | **+0.6** |
| **JKUC** | **kamogawauchiur** | **0.22** | **24** | | P | **Pn** | **19 36 29.9** | **0.0** |
| JKUC | | | | | S | **Sn** | **19 36 39.1** | **+0.3** |
| **KTR** | **Katsuura** | **0.27** | **44** | | P | **Pn** | **19 36 30.2** | **+0.1** |
| KTR | | | | | S | **Sn** | **19 36 39.4** | **+0.3** |
| **BSO3** | **Boso 3** | **0.38** | **114** | | P | **Pn** | **19 36 30.9** | **+0.4** |
| **JIM2** | **Oshima 3** | **0.59** | **246** | | P | **Pn** | **19 36 32.3** | **-0.3** |
| JIM2 | | | | | S | **Sn** | **19 36 42.7** | **-0.8** |
| **BSO1** | **Boso 1** | **0.79** | **112** | | P | **Pn** | **19 36 34.3** | **+0.3** |
| **JOD2** | **Odawara 2** | **0.88** | **291** | | P | **Pn** | **19 36 35.2** | **-0.3** |
| JOD2 | | | | | S | **Sn** | **19 36 48.0** | **-0.8** |
| **JIZS** | **Izushimoda** | **1.02** | **257** | | P | **Pn** | **19 36 37.4** | **+0.2** |
| JIZS | | | | | S | **Sn** | **19 36 51.9** | **+0.1** |
| **JMKN** | **Mikurajimanish** | **1.14** | **201** | | P | **Pn** | **19 36 39.1** | **+0.4** |
| JMKN | | | | | S | **Sn** | **19 36 54.8** | **+0.6** |
| **JFNN** | **Fujinakano** | **1.18** | **282** | | P | **Pn** | **19 36 39.6** | **+0.5** |
| JFNN | | | | | S | **Sn** | **19 36 55.9** | **+0.9** |
| **JYN** | **Shimob** | **1.38** | **294** | | P | **Pn** | **19 36 42.2** | **+0.5** |
| JYN | | | | | S | **Sn** | **19 37 00.2** | **+0.6** |
| **JRY** | **Ryogami san** | **1.43** | **318** | | P | **Pn** | **19 36 42.8** | **+0.4** |
| JRY | | | | | S | **Sn** | **19 37 02.0** | **+1.1** |
| **SHZ3** | **Shizuoka 3** | **1.55** | **275** | | P | **Pn** | **19 36 44.8** | **+0.9** |
| **JAG** | **Ashikaga** | **1.55** | **341** | | P | **Pn** | **19 36 43.9** | **0.0** |
| **JHJ** | **Hachijo jima 2** | **1.85** | **188** | | Pn | **Pn** | **19 36 48.3** | **+0.5** |
| | 52nm,0.3s,baz=319,slow=19,SNR=44 | | | | | | | |
| JHJ | | | | | Sn | **Sn** | **19 37 11.8** | **+1.2** |
| | 59nm,0.3s,baz=79,slow=23,SNR=11 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.20** | **317** | | Pn | **Pn** | **19 36 52.4** | **-0.1** |
| | 2.6nm,0.3s,baz=180,slow=16,SNR=72 | | | | | | | |
| MJAR | | | | | Sn | **Sn** | **19 37 19.3** | **+0.4** |
| | 3.7nm,0.3s,baz=39,slow=31,SNR=6.3 | | | | | | | |
| **MAT** | **Matsushiro** | **2.20** | **316** | | P | **Pn** | **19 36 53.7** | **+1.2** |
| MAT | | | | | S | **Sn** | **19 37 19.8** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **42.55** | **314** | | P | **P** | **19 44 05.7** | **+0.4** |
| | 0.5nm,0.5s,baz=103,slow=3.3,SNR=1.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.34** | **304** | | P | **P** | **19 44 18.4** | **-1.4** |
| | 0.4nm,0.8s,baz=81,slow=11,SNR=5.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.46** | **309** | | P | **P** | **19 44 36.4** | **0.0** |
| | 0.3nm,0.4s,baz=82,slow=7.5,SNR=5.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.87** | **187** | | P | **P** | **19 45 39.2** | **-0.7** |
| | 0.7nm,0.7s,baz=2.5,slow=7.8,SNR=9.5 | | | | | | | |

*IDC **08** 19:39:07.3±0.9,34°.30N×24°.01E,h0km,mb3.6/3,*
*mb1 3.5/4,mb1mx3.2/56,mbtmp3.5/4,ML3.9/1,Error*
*ellipse: s-maj=28.9km s-min=9.1km az=118.0*
*ISK **08** 19:39:14.5,34°.78N×23°.88E,h15km,ML3.1/11*
*ATH **08** 19:39:14.9,34°.77N×24°.02E,h22km±1km,ML2.7/10,Error*
*ellipse: s-maj=3.1km s-min=1.1km az=205.0*
*THE **08** 19:39:15.1,34°.64N×24°.07E,h8km±3km,ML3.1/4,Error*
*ellipse: s-maj=4.7km s-min=1.6km az=7.0*
*DDA **08** 19:39:20.0±0.0,34°.17N×25°.02E,h15km,ML2.5*

**ISC 08 19:39:12.4**±1.8,**34°.63N**±0°.08×**23°.93E**±0°.04,**h17**km±9km,
**n52,**σ1§**89**/67,**mb3.6/3,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GVD** | **Gavdhos** | **0.24** | **32** | | P | **Pb** | **19 39 19.1** | **+0.8** |
| GVD | | | | | S | **Sb** | **19 39 22.6** | **+0.3** |
| | 42µm,0.2s | | | | | | | |
| **GVD** | **Gavdhos** | **0.24** | **32** | | P | **Pb** | **19 39 19.2** | **+0.8** |
| GVD | | | | | S | **Sb** | **19 39 21.7** | **-0.6** |
| GVD | | | | | AML | AML | 19 39 23.0 | |
| | comp=N,87161µm,0.2s | | | | | | | |
| GVD | | | | | AML | AML | 19 39 23.3 | |
| | comp=E,75005µm,0.2s | | | | | | | |
| **GVD** | **Gavdhos** | **0.24** | **32** | | PG | **Pb** | **19 39 19.2** | **+0.9** |
| GVD | | | | | SG | **Sb** | **19 39 22.6** | **+0.3** |
| **KNDR** | **Palaiochora Ch** | **0.63** | **342** | | PG | **Pg** | **19 39 24.8** | **-0.1** |
| KNDR | | | | | SG | **Sg** | **19 39 32.4** | **-0.9** |
| **VAM** | **Vamos** | **0.80** | **16** | | P | **Pg** | **19 39 27.6** | **-0.5** |
| **VAM** | **Vamos** | **0.80** | **16** | | P | **Pg** | **19 39 27.2** | **-0.8** |
| VAM | | | | | AML | AML | 19 39 45.7 | |
| | comp=E,2088µm,0.5s | | | | | | | |
| VAM | | | | | AML | AML | 19 39 47.7 | |
| | comp=N,1737µm,0.3s | | | | | | | |
| **SIVA** | **Sivas** | **0.82** | **62** | | P | **Pn** | **19 39 29.3** | **+0.2** |
| SIVA | | | | | S | **Sb** | **19 39 39.5** | **+0.6** |
| | comp=N,2µm,0.6s | | | | | | | |
| **SIVA** | **Sivas** | **0.82** | **62** | | P | **Pn** | **19 39 29.0** | **-0.1** |
| SIVA | | | | | S | **Sb** | **19 39 38.9** | **0.0** |
| SIVA | | | | | AML | AML | 19 39 50.7 | |
| | comp=N,2124µm,0.5s | | | | | | | |
| SIVA | | | | | AML | AML | 19 39 52.8 | |
| | comp=E,3132µm,0.7s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.83** | **3** | | P | **Pg** | **19 39 27.9** | **-0.6** |
| **IMMV** | **Iera Moni Meta** | **0.83** | **3** | | P | **Pg** | **19 39 27.7** | **-0.8** |
| IMMV | | | | | S | **Sg** | **19 39 38.9** | **-0.5** |
| IMMV | | | | | AML | AML | 19 39 42.8 | |
| | comp=E,1834µm,0.3s | | | | | | | |
| IMMV | | | | | AML | AML | 19 39 47.7 | |
| | comp=N,2567µm,0.4s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.83** | **3** | | PG | **Pg** | **19 39 28.1** | **-0.4** |
| IMMV | | | | | SG | **Sg** | **19 39 38.4** | **-1.0** |
| **IDI** | **Anoyia** | **1.02** | **50** | | Pn | **Pb** | **19 39 31.5** | **-0.2** |
| | comp=N,11nm,0.3s,baz=254,slow=13,SNR=45 | | | | | | | |
| IDI | | | | | Sn | **Sn** | **19 39 51.2** | **+5.2** |
| | comp=N,33nm,0.3s,baz=353,slow=20,SNR=8.0 | | | | | | | |
| **IDI** | **Anoyia** | **1.02** | **50** | | P | **Pg** | **19 39 31.6** | **-0.7** |
| IDI | | | | | S | **Sn** | **19 39 46.0** | **0.0** |
| | comp=N,340nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **1.02** | **50** | | P | **Pb** | **19 39 31.1** | **-0.5** |
| IDI | | | | | AML | AML | 19 39 52.1 | |
| | comp=E,498µm,0.5s | | | | | | | |
| IDI | | | | | AML | AML | 19 39 52.6 | |
| | comp=N,857µm,0.6s | | | | | | | |
| **HRKL** | **Herakleio** | **1.18** | **55** | | PN | **Pg** | **19 39 36.2** | **+1.1** |
| HRKL | | | | | SN | **Sg** | **19 39 52.3** | **+1.8** |
| **ANKY** | **Antikythira Is** | **1.33** | **338** | | P | **Pg** | **19 39 38.8** | **+0.7** |
| **ANKY** | **Antikythira Is** | **1.33** | **338** | | P | **Pg** | **19 39 38.2** | **+0.1** |
| ANKY | | | | | AML | AML | 19 40 07.4 | |
| | comp=E,469µm,0.8s | | | | | | | |
| ANKY | | | | | AML | AML | 19 40 12.7 | |
| | comp=N,267µm,0.7s | | | | | | | |
| **NPS** | **Neapolis** | **1.52** | **65** | | P | **Pg** | **19 39 41.2** | **-0.4** |
| NPS | | | | | AML | AML | 19 40 17.0 | |
| | comp=E,305µm,1.0s | | | | | | | |
| NPS | | | | | AML | AML | 19 40 17.5 | |
| | comp=N,260µm,1.0s | | | | | | | |
| **KTHA** | **Kythira Island** | **1.77** | **337** | | P | **Pg** | **19 39 46.0** | **-0.4** |
| **KTHA** | **Kythira Island** | **1.77** | **337** | | P | **Pg** | **19 39 45.6** | **-0.8** |
| KTHA | | | | | AML | AML | 19 40 18.5 | |
| | comp=N,240µm,0.4s | | | | | | | |
| KTHA | | | | | AML | AML | 19 40 20.5 | |
| | comp=E,295µm,0.5s | | | | | | | |
| **KTHR** | **Kythira** | **1.79** | **335** | | P | **Pg** | **19 39 46.3** | **-0.5** |
| **ZKR** | **Zakros** | **1.94** | **75** | | P | **Pb** | **19 39 47.4** | **+0.1** |
| ZKR | | | | | AML | AML | 19 40 34.8 | |
| | comp=N,56µm,0.5s | | | | | | | |
| ZKR | | | | | AML | AML | 19 40 35.0 | |
| | comp=E,181µm,0.9s | | | | | | | |
| **ZKR** | **Zakros** | **1.94** | **75** | | PN | **Pg** | **19 39 48.3** | **-1.4** |
| **MHLO** | **Agia Marina, M** | **2.09** | **10** | | P | **Pb** | **19 39 48.8** | **-0.9** |
| MHLO | | | | | AML | AML | 19 40 30.1 | |
| | comp=E,662µm,0.6s | | | | | | | |
| MHLO | | | | | AML | AML | 19 40 35.4 | |
| | comp=N,696µm,0.6s | | | | | | | |
| **THR6** | **Thira Island,** | **2.10** | **34** | | P | **Pb** | **19 39 48.8** | **-1.1** |
| **THR5** | **Thira Island,** | **2.12** | **33** | | P | **Pb** | **19 39 49.0** | **-1.4** |
| **SANT** | **Santorini** | **2.14** | **35** | | P | **Pb** | **19 39 49.5** | **-1.1** |
| **SANT** | **Santorini** | **2.14** | **35** | | PN | **Pb** | **19 39 49.3** | **-1.3** |
| **THR3** | **Thira Island,** | **2.14** | **34** | | P | **Pb** | **19 39 49.4** | **-1.3** |
| **THR8** | **Santorini-Mono** | **2.17** | **35** | | P | **Pb** | **19 39 49.5** | **-1.7** |
| **VLI** | **Veliai** | **2.23** | **339** | | P | **Pb** | **19 39 52.3** | **+0.1** |
| **KRND** | **KRANIDI** | **2.81** | **347** | | P | **Pn** | **19 39 59.0** | **+2.5** |
| **ITM** | **Ithomi** | **3.02** | **328** | | PN | **Pn** | **19 40 01.3** | **+2.0** |
| **KLV** | **Kalavryta, Ach** | **3.69** | **338** | | P | **Pn** | **19 40 11.7** | **+3.0** |
| **ARG** | **Arkhangelos** | **3.77** | **64** | | PN | **Pn** | **19 40 12.6** | **+2.9** |
| **TURN** | **Turunc** | **4.11** | **57** | | PN | **Pn** | **19 40 18.2** | **+3.9** |
| **TURN** | **Turunc** | **4.11** | **57** | | P | **Pn** | **19 40 16.8** | **+2.4** |
| TURN | | | | | S | **Sn** | **19 41 01.7** | **-0.3** |
| TURN | | | | | *i* AML | AML | 19 41 05.0 | |
| | comp=N,8.1nm,0.3s | | | | | | | |
| **YER** | **Yerkesik** | **4.33** | **54** | | PN | **Pn** | **19 40 20.9** | **+3.5** |
| **DALY** | **Dalyan (Mula)** | **4.42** | **59** | | PN | **Pn** | **19 40 21.8** | **+3.3** |
| **FETY** | **Fethiye** | **4.65** | **63** | | P | **Pn** | **19 40 23.3** | **+1.5** |
| FETY | | | | | S | **Sn** | **19 41 12.4** | **-2.9** |
| FETY | | | | | *i* AML | AML | 19 41 14.0 | |
| | comp=N,5.3nm,1.2s | | | | | | | |
| **AKAS** | **Kas** | **4.90** | **69** | | P | **Pn** | **19 40 26.9** | **+1.6** |
| AKAS | | | | | S | **Sn** | **19 41 15.0** | **-6.7** |
| AKAS | | | | | *i* AML | AML | 19 41 25.0 | |
| | comp=N,7.5nm,0.7s | | | | | | | |
| AKAS | | | | | *i* AML | AML | 19 41 30.0 | |
| | comp=N,12nm,0.5s | | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **4.93** | **54** | | P | **Pn** | **19 40 28.2** | **+2.5** |
| TAVA | | | | | *i* AML | AML | 19 41 26.0 | |
| | comp=N,4.1nm,1.1s | | | | | | | |
| TAVA | | | | | *i* AML | AML | 19 41 27.0 | |
| | comp=N,5.2nm,1.2s | | | | | | | |
| **CAEL** | **Denizli, Camel** | **5.03** | **59** | | P | **Pn** | **19 40 29.1** | **+2.0** |
| CAEL | | | | | S | **Sn** | **19 41 21.4** | **-3.6** |
| CAEL | | | | | *i* AML | AML | 19 41 30.0 | |
| | comp=N,9.5nm,0.6s | | | | | | | |
| CAEL | | | | | *i* AML | AML | 19 41 31.0 | |
| | comp=N,5.4nm,0.3s | | | | | | | |
| **GOLH** | **Golhisar** | **5.26** | **59** | | P | **Pn** | **19 40 33.1** | **+2.9** |
| GOLH | | | | | *i* AML | AML | 19 41 36.0 | |
| | comp=N,8.7nm,1.0s | | | | | | | |
| GOLH | | | | | *i* AML | AML | 19 41 39.0 | |
| | comp=N,9.8nm,0.5s | | | | | | | |
| **STON** | **Ston** | **9.55** | **331** | | *e*Pn | **Pn** | **19 41 27.1** | **-1.9** |
| **KIJV** | **Kijevo** | **11.02** | **330** | | *e*Pn | **Pn** | **19 41 47.1** | **-2.0** |
| KIJV | | | | | Sn | Sn | 19 43 40.5 | -11 |
| **MORI** | **Morici** | **11.20** | **328** | | *e*Pn | **Pn** | **19 41 51.7** | **+0.1** |
| MORI | | | | | Sn | Sn | 19 43 46.2 | -10 |
| **AKASG** | **Malin Array Be** | **16.52** | **12** | | Pn | **P** | **19 43 06.3** | **+0.8** |
| | comp=N,0.4nm,0.3s,baz=210,slow=10,SNR=4.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.24** | **51** | | P | **P** | **19 47 03.5** | **-0.9** |
| | comp=N,0.7nm,0.7s,baz=278,slow=8.9,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.91** | **56** | | P | **P** | **19 47 25.9** | **-0.1** |
| | comp=N,0.3nm,0.3s,baz=273,slow=7.7,SNR=9.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.91** | **56** | | P | **P** | **19 47 25.9** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **46.10** | **46** | | P | **P** | **19 47 34.4** | **-0.8** |
| | comp=N,0.5nm,0.5s,baz=253,slow=9.8,SNR=2.2 | | | | | | | |

*UPA **08** 19:40:04.1±5.7,11°.33N×83°.04W,h10km±326km,MW4.5*
*UCR **08** 19:40:20.6±1.6,9°.96N×83°.70W,h9km±1km,MW3.7,Fault*
*plane solution: NP1:φs84.85000°,δ66.14000°,*
*λ-13.02000°.*

**ISC 08 19:40:20.9**±1.0,**9°.98N**±0°.04×**83°.70W**±0°.03,**h17**km±6km,
**n28,**σ1§**55**/30,**9C-7D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **VTCV** | **VTCV, Calle Va** | **0.03** | **281** | ⇑ | *eP* | **Pg** | **19 40 23.3** | **-1.0** |
| **CVTR** | **Volcan Turrial** | **0.08** | **304** | ⇑ | *iP* | **Pg** | **19 40 23.7** | **-1.0** |
| **VTUC** | **Crater, Volcan** | **0.08** | **305** | ⇑ | *eP* | **Pg** | **19 40 23.7** | **-1.1** |
| **VTUN** | **Crater Central** | **0.08** | **304** | ⇑ | *eP* | **Pg** | **19 40 23.7** | **-1.1** |
| **VTRT** | **Volcan Turrial** | **0.10** | **284** | ⇑ | *eP* | **Pg** | **19 40 24.2** | **-0.7** |
| **RIMA** | **Rio Macho** | **0.27** | **218** | ⇓ | *eP* | **Pg** | **19 40 26.3** | **-0.6** |
| **OCM** | **Ochomogo** | **0.27** | **253** | ⇓ | *eP* | **Pg** | **19 40 26.5** | **-0.6** |
| **BATAN** | **Batan** | **0.34** | **69** | | *eP* | **Pg** | **19 40 27.4** | **-0.6** |
| **LCR2** | **La Lucha 2** | **0.39** | **233** | ⇓ | *eP* | **Pg** | **19 40 28.3** | **-0.7** |
| LCR2 | | | | | *e*S | **Sg** | **19 40 33.9** | **-0.6** |
| **RIFO** | **Rio Frio, Sara** | **0.41** | **326** | ⇓ | *eP* | **Pg** | **19 40 28.5** | **-0.7** |
| **HDC3** | **Heredia 3** | **0.41** | **274** | | *eP* | **Pb** | **19 40 29.6** | **-0.2** |
| **HDC** | **Heredia** | **0.41** | **273** | | *eP* | **Pg** | **19 40 29.4** | **-0.1** |
| **CDM** | **Cerro de Muert** | **0.43** | **189** | ⇓ | *eP* | **Pg** | **19 40 29.0** | **-0.8** |
| **CRPO** | **Crater poas** | **0.57** | **293** | ⇓ | *eP* | **Pg** | **19 40 32.1** | **-0.2** |
| **PEZE** | **Perez Zeledon,** | **0.59** | **178** | | *eP* | **Pg** | **19 40 31.5** | **-1.2** |
| **EDDO** | **Dominical** | **0.74** | **193** | ⇓ | *eP* | **Pg** | **19 40 34.9** | **-0.5** |
| **SRBA** | **San Rafael, Bu** | **0.81** | **156** | ⇓ | *eP* | **Pg** | **19 40 34.9** | **-1.8** |
| **EDBA** | **Buenos Aires** | **0.91** | **153** | | *eP* | **Pg** | **19 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,966nm,0.3s | | | | | | | |
| **DBC** | **Dubki** | **0.45** | **91** | *i* Pg | | **Pn** | **19 42 27.4** | **+0.4** |
| DBC | | | | *e*Sg | | **Sn** | **19 42 37.5** | **+0.2** |
| **UNCR** | **Uncukul** | **0.53** | **127** | *e*P | | **Pn** | **19 42 27.7** | **+0.1** |
| UNCR | | | | *e*S | | **Sn** | **19 42 37.8** | **-0.6** |
| UNCR | | | | *e*S | | **Sn** | **19 42 38.1** | **-0.3** |
| UNCR | | | | pmax | pmax | | | |
| | comp=Z,218nm,0.2s | | | | | | | |
| UNCR | | | | smax | smax | | | |
| | comp=N,483nm,0.4s | | | | | | | |
| UNCR | | | | smax | smax | | | |
| | comp=E,459nm,0.5s | | | | | | | |
| UNCR | | | | smax | smax | | | |
| | comp=N,354nm,0.4s | | | | | | | |
| **UNCR** | **Uncukul** | **0.53** | **127** | *e*Pg | | **Pn** | **19 42 27.8** | **+0.1** |
| UNCR | | | | *e*Sg | | **Sn** | **19 42 37.8** | **-0.6** |
| **KRNR** | **Karanay** | **0.55** | **112** | ⇑*i* P | | **Pn** | **19 42 28.1** | **+0.3** |
| KRNR | | | | *e*S | | **Sn** | **19 42 38.9** | **+0.2** |
| KRNR | | | | *e*S | | **Sn** | **19 42 39.1** | **+0.3** |
| KRNR | | | | pmax | pmax | | | |
| | comp=Z,192nm,0.4s | | | | | | | |
| KRNR | | | | smax | smax | | | |
| | comp=E,624nm,0.6s | | | | | | | |
| KRNR | | | | smax | smax | | | |
| | comp=N,464nm,0.3s | | | | | | | |
| KRNR | | | | smax | smax | | | |
| | comp=E,490nm,0.5s | | | | | | | |
| **KRNR** | **Karanay** | **0.55** | **112** | *i* Pg | | **Pn** | **19 42 28.2** | **+0.3** |
| KRNR | | | | *e*Sg | | **Sn** | **19 42 39.0** | **+0.2** |
| **XNZR** | **Khunzakh** | **0.61** | **143** | *e*P | | **Pn** | **19 42 29.3** | **+0.8** |
| XNZR | | | | *e*S | | **Sn** | **19 42 40.4** | **+0.5** |
| XNZR | | | | *e*S | | **Sn** | **19 42 40.7** | **+0.8** |
| XNZR | | | | pmax | pmax | | | |
| | comp=Z,411nm,0.1s | | | | | | | |
| XNZR | | | | smax | smax | | | |
| | comp=E,658nm,0.2s | | | | | | | |
| XNZR | | | | smax | smax | | | |
| | comp=N,700nm,0.2s | | | | | | | |
| XNZR | | | | smax | smax | | | |
| | comp=N,679nm,0.2s | | | | | | | |
| **XNZR** | **Khunzakh** | **0.61** | **143** | *e*Pg | | **Pn** | **19 42 29.6** | **+1.2** |
| XNZR | | | | *e*Sg | | **Sn** | **19 42 41.7** | **+1.8** |
| **BUJR** | **Buynaksk** | **0.69** | **107** | *e*P | | **Pn** | **19 42 30.1** | **+1.1** |
| BUJR | | | | *e*S | | **Sn** | **19 42 41.8** | **+0.9** |
| BUJR | | | | *e*S | | **Sn** | **19 42 42.1** | **+1.2** |
| BUJR | | | | pmax | pmax | | | |
| | comp=Z,166nm,0.4s | | | | | | | |
| BUJR | | | | smax | smax | | | |
| | comp=N,1μm,0.4s | | | | | | | |
| BUJR | | | | smax | smax | | | |
| | comp=E,1μm,0.5s | | | | | | | |
| BUJR | | | | smax | smax | | | |
| | comp=E,1μm,0.5s | | | | | | | |
| **BUJR** | **Buynaksk** | **0.69** | **107** | *e*Pg | | **Pn** | **19 42 30.1** | **+1.1** |
| BUJR | | | | *e*Sg | | **Sn** | **19 42 41.8** | **+0.9** |
| **ARKR** | **Arakani** | **0.72** | **127** | *e*P | | **Pn** | **19 42 30.2** | **+0.9** |
| ARKR | | | | *e*S | | **Sn** | **19 42 42.6** | **+1.1** |
| ARKR | | | | *e*S | | **Sn** | **19 42 43.0** | **+1.5** |
| ARKR | | | | pmax | pmax | | | |
| | comp=Z,219nm,0.3s | | | | | | | |
| ARKR | | | | smax | smax | | | |
| | comp=N,502nm,0.3s | | | | | | | |
| ARKR | | | | smax | smax | | | |
| | comp=E,467nm,0.4s | | | | | | | |
| ARKR | | | | smax | smax | | | |
| | comp=N,413nm,0.2s | | | | | | | |
| **ARKR** | **Arakani** | **0.72** | **127** | *e*Pg | | **Pn** | **19 42 30.3** | **+0.9** |
| ARKR | | | | *e*Sg | | **Sn** | **19 42 42.7** | **+1.2** |
| **GNBR** | **Gunib** | **0.85** | **139** | *e*P | | **Pn** | **19 42 32.2** | **+1.4** |
| GNBR | | | | *e*S | | **Sn** | **19 42 46.0** | **+2.0** |
| GNBR | | | | *e*S | | **Sn** | **19 42 46.5** | **+2.5** |
| GNBR | | | | pmax | pmax | | | |
| | comp=Z,123nm,0.1s | | | | | | | |
| GNBR | | | | smax | smax | | | |
| | comp=N,527nm,0.2s | | | | | | | |
| GNBR | | | | smax | smax | | | |
| | comp=E,488nm,0.4s | | | | | | | |
| GNBR | | | | smax | smax | | | |
| | comp=N,507nm,0.2s | | | | | | | |
| **GNBR** | **Gunib** | **0.85** | **139** | *e*Pg | | **Pn** | **19 42 32.2** | **+1.4** |
| GNBR | | | | *e*Sg | | **Sn** | **19 42 46.5** | **+2.5** |
| **KANR** | **Karaman** | **0.95** | **80** | *e*P | | **Pn** | **19 42 33.3** | **+1.5** |
| KANR | | | | *e*S | | **Sn** | **19 42 47.7** | **+1.9** |
| KANR | | | | *e*S | | **Sn** | **19 42 48.0** | **+2.2** |
| KANR | | | | pmax | pmax | | | |
| | comp=Z,195nm,0.4s | | | | | | | |
| KANR | | | | smax | smax | | | |
| | comp=E,737nm,0.5s | | | | | | | |
| KANR | | | | smax | smax | | | |
| | comp=N,544nm,0.3s | | | | | | | |
| KANR | | | | smax | smax | | | |
| | comp=E,517nm,0.5s | | | | | | | |
| **KANR** | **Karaman** | **0.95** | **80** | *e*Pg | | **Pn** | **19 42 33.3** | **+1.5** |
| KANR | | | | *e*Sg | | **Sn** | **19 42 47.7** | **+1.9** |
| **MAK** | **Makhachkala** | **0.95** | **94** | *e*P | | **Pn** | **19 42 33.6** | **+1.8** |
| MAK | | | | *e*S | | **Sn** | **19 42 48.1** | **+2.2** |
| **MAK** | **Makhachkala** | **0.95** | **94** | *e*Pg | | **Pn** | **19 42 33.2** | **+1.4** |
| MAK | | | | *e*Sg | | **Sn** | **19 42 48.0** | **+2.2** |
| **KMGR** | **Komgaron** | **0.99** | **272** | *e*P | | **Pn** | **19 42 34.0** | **+1.7** |
| KMGR | | | | *e*S | | **Sn** | **19 42 49.7** | **+3.0** |
| **KMGR** | **Komgaron** | **0.99** | **272** | *i* Pg | | **Pn** | **19 42 34.0** | **+1.7** |
| KMGR | | | | *e*Sg | | **Sn** | **19 42 51.1** | **+4.4** |
| **KMKR** | **Kumukh** | **1.11** | **144** | *e*P | | **Pn** | **19 42 35.7** | **+1.7** |
| KMKR | | | | *e*S | | **Sn** | **19 42 51.9** | **+2.3** |
| KMKR | | | | *e*S | | **Sn** | **19 42 52.1** | **+2.5** |
| KMKR | | | | pmax | pmax | | | |
| | comp=Z,287nm,0.2s | | | | | | | |
| KMKR | | | | smax | smax | | | |
| | comp=E,602nm,0.2s | | | | | | | |
| KMKR | | | | smax | smax | | | |
| | comp=N,561nm,0.2s | | | | | | | |
| KMKR | | | | smax | smax | | | |
| | comp=E,545nm,0.2s | | | | | | | |
| **KMKR** | **Kumukh** | **1.11** | **144** | *e*Pg | | **Pn** | **19 42 35.7** | **+1.7** |
| KMKR | | | | *e*Sg | | **Sn** | **19 42 50.2** | **+0.5** |
| **VLKR** | **Vladikavkaz** | **1.12** | **271** | *e*P | | **Pn** | **19 42 35.5** | **+1.5** |
| VLKR | | | | *e*S | | **Sn** | **19 42 52.6** | **+3.0** |
| **VLKR** | **Vladikavkaz** | **1.12** | **271** | *i* Pg | | **Pn** | **19 42 35.5** | **+1.5** |
| VLKR | | | | *e*Sg | | **Sn** | **19 42 53.3** | **+3.7** |
| **SGKR** | **Sergokala** | **1.21** | **118** | *e*P | | **Pn** | **19 42 36.2** | **+1.2** |
| SGKR | | | | *e*S | | **Sn** | **19 42 52.5** | **+1.1** |
| SGKR | | | | *e*S | | **Sn** | **19 42 53.2** | **+1.8** |
| SGKR | | | | pmax | pmax | | | |
| | comp=Z,65nm,0.1s | | | | | | | |
| SGKR | | | | smax | smax | | | |
| | comp=E,308nm,0.3s | | | | | | | |
| SGKR | | | | smax | smax | | | |
| | comp=N,310nm,0.3s | | | | | | | |
| SGKR | | | | smax | smax | | | |
| | comp=N,233nm,0.4s | | | | | | | |
| **SGKR** | **Sergokala** | **1.21** | **118** | *e*Pg | | **Pn** | **19 42 37.0** | **+2.0** |
| SGKR | | | | *e*Sg | | **Sn** | **19 42 54.8** | **+3.4** |
| **BTKR** | **Batakoyurt** | **1.27** | **286** | ⇑*i* P | | **Pn** | **19 42 37.5** | **+1.8** |
| BTKR | | | | *e*S | | **Sn** | **19 42 55.8** | **+3.1** |
| **BTKR** | **Batakoyurt** | **1.27** | **286** | *i* Pg | | **Pn** | **19 42 37.3** | **+1.7** |
| BTKR | | | | *e*Sg | | **Sn** | **19 42 55.8** | **+3.1** |
| **TRKR** | **Terskaya** | **1.28** | **303** | *e*P | | **Pn** | **19 42 37.2** | **+1.4** |
| TRKR | | | | *e*S | | **Sn** | **19 42 55.7** | **+2.8** |
| **TRKR** | **Terskaya** | **1.28** | **303** | *e*Pg | | **Pn** | **19 42 37.2** | **+1.4** |
| TRKR | | | | *e*Sg | | **Sn** | **19 42 55.6** | **+2.8** |
| **URKR** | **Urkarakh** | **1.36** | **129** | *e*P | | **Pn** | **19 42 39.0** | **+2.1** |
| URKR | | | | *e*S | | **Sn** | **19 42 57.1** | **+2.2** |
| URKR | | | | *e*S | | **Sn** | **19 42 57.8** | **+2.9** |
| URKR | | | | pmax | pmax | | | |
| | comp=Z,48nm,0.3s | | | | | | | |
| URKR | | | | smax | smax | | | |
| | comp=E,308nm,0.6s | | | | | | | |
| URKR | | | | smax | smax | | | |
| | comp=N,277nm,0.3s | | | | | | | |
| URKR | | | | smax | smax | | | |
| | comp=E,201nm,0.6s | | | | | | | |
| **URKR** | **Urkarakh** | **1.36** | **129** | *e*Pg | | **Pn** | **19 42 39.1** | **+2.1** |
| URKR | | | | *e*Sg | | **Sn** | **19 42 57.2** | **+2.2** |
| **ARNR** | **Ardon** | **1.42** | **277** | ⇑*i* P | | **Pn** | **19 42 39.2** | **+1.6** |
| ARNR | | | | *e*S | | **Sn** | **19 42 58.7** | **+2.6** |
| **ARNR** | **Ardon** | **1.42** | **277** | *i* Pg | | **Pn** | **19 42 39.2** | **+1.6** |
| ARNR | | | | *e*Sg | | **Sn** | **19 42 58.2** | **+2.1** |
| **LACR** | **Lac** | **1.42** | **262** | ⇓*i* P | | **Pn** | **19 42 38.2** | **+0.5** |
| LACR | | | | *e*S | | **Sn** | **19 42 56.8** | **+0.5** |
| **LACR** | **Lac** | **1.42** | **262** | *e*Pg | | **Pn** | **19 42 38.1** | **+0.5** |
| LACR | | | | *e*Sg | | **Sn** | **19 42 56.8** | **+0.5** |
| **ZKTA** | **Zakatala** | **1.43** | **168** | P | | **Pn** | **19 42 38.4** | **+0.7** |
| **ZKTA** | **Zakatala** | **1.43** | **168** | P | | **Pn** | **19 42 38.5** | **+0.7** |
| | SNR=52 | | | | | | | |
| ZKTA | | | | S | | **Sn** | **19 42 57.3** | **+1.0** |
| **KORR** | **Kora** | **1.57** | **273** | *e*P | | **Pn** | **19 42 40.6** | **+1.1** |
| KORR | | | | *e*S | | **Sn** | **19 43 01.5** | **+1.9** |
| **KORR** | **Kora** | **1.57** | **273** | *i* Pg | | **Pn** | **19 42 40.6** | **+1.1** |
| KORR | | | | *e*Sg | | **Sn** | **19 43 01.5** | **+1.9** |
| **PRTR** | **Priterechnaya** | **1.58** | **298** | ⇓*i* P | | **Pn** | **19 42 41.1** | **+1.5** |
| PRTR | | | | *e*S | | **Sn** | **19 43 02.3** | **+2.7** |
| **PRTR** | **Priterechnaya** | **1.58** | **298** | *e*Pg | | **Pn** | **19 42 41.0** | **+1.5** |
| PRTR | | | | *e*Sg | | **Sn** | **19 43 02.3** | **+2.7** |
| **STDR** | **Stavd-Durt** | **1.61** | **283** | ⇓*i* P | | **Pn** | **19 42 41.5** | **+1.5** |
| STDR | | | | *e*S | | **Sn** | **19 43 02.8** | **+2.5** |
| **STDR** | **Stavd-Durt** | **1.61** | **283** | *i* Pg | | **Pn** | **19 42 41.5** | **+1.5** |
| STDR | | | | *e*Sg | | **Sn** | **19 43 02.6** | **+2.3** |
| **ZEI** | **Tsey** | **1.71** | **263** | *e*P | | **Pn** | **19 42 41.7** | **+0.1** |
| ZEI | | | | *e*S | | **Sn** | **19 43 02.5** | **-0.6** |
| **ZEI** | **Tsey** | **1.71** | **263** | *e*Pg | | **Pn** | **19 42 41.6** | **+0.1** |
| ZEI | | | | *e*Sg | | **Sn** | **19 43 02.5** | **-0.6** |
| **LSNR** | **Lesken** | **1.76** | **279** | ⇓*i* P | | **Pn** | **19 42 43.2** | **+1.2** |
| LSNR | | | | *e*S | | **Sn** | **19 43 05.1** | **+1.1** |
| **LSNR** | **Lesken** | **1.76** | **279** | *i* Pg | | **Pn** | **19 42 43.2** | **+1.2** |
| LSNR | | | | *e*Sg | | **Sn** | **19 43 05.1** | **+1.1** |
| **DRN** | **Derbent** | **1.86** | **122** | *e*P | | **Pn** | **19 42 44.7** | **+1.5** |
| DRN | | | | *e*S | | **Sn** | **19 43 08.6** | **+2.5** |
| DRN | | | | *e*S | | **Sn** | **19 43 09.3** | **+3.2** |
| DRN | | | | pmax | pmax | | | |
| | comp=Z,42nm,0.3s | | | | | | | |
| DRN | | | | smax | smax | | | |
| | comp=E,288nm,0.2s | | | | | | | |
| DRN | | | | smax | smax | | | |
| | comp=N,367nm,0.2s | | | | | | | |
| DRN | | | | smax | smax | | | |
| | comp=N,367nm,0.2s | | | | | | | |
| **DRN** | **Derbent** | **1.86** | **122** | *e*Pg | | **Pn** | **19 42 43.1** | **-0.1** |
| DRN | | | | *e*Sg | | **Sn** | **19 43 08.6** | **+2.5** |
| **AKT** | **Akhty** | **1.92** | **144** | *e*P | | **Pn** | **19 42 45.7** | **+1.6** |
| AKT | | | | *e*S | | **Sn** | **19 43 09.6** | **+1.9** |
| AKT | | | | *e*S | | **Sn** | **19 43 10.0** | **+2.2** |
| AKT | | | | pmax | pmax | | | |
| | comp=Z,42nm,0.4s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=N,187nm,0.4s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=E,220nm,0.4s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=E,199nm,0.2s | | | | | | | |
| **AKT** | **Akhty** | **1.92** | **144** | *e*Pg | | **Pn** | **19 42 45.8** | **+1.6** |
| AKT | | | | *e*Sg | | **Sn** | **19 43 09.6** | **+1.9** |
| **DIGR** | **Digorskoe uzhe** | **1.94** | **267** | *e*P | | **Pn** | **19 42 44.6** | **+0.1** |
| DIGR | | | | *e*S | | **Sn** | **19 43 09.6** | **+1.3** |
| **DIGR** | **Digorskoe uzhe** | **1.94** | **267** | *e*Pg | | **Pn** | **19 42 44.5** | **+0.1** |
| DIGR | | | | *e*Sg | | **Sn** | **19 43 07.7** | **-0.6** |
| **SEKA** | **Sheki** | **1.96** | **158** | P | | **Pn** | **19 42 45.4** | **+0.7** |
| **SEKA** | **Sheki** | **1.96** | **158** | P | | **Pn** | **19 42 45.4** | **+0.7** |
| | SNR=39 | | | | | | | |
| SEKA | | | | S | | **Sn** | **19 43 09.5** | **+0.7** |
| **NCK** | **Nalchik** | **1.97** | **284** | *e*P | | **Pn** | **19 42 45.9** | **+1.2** |
| NCK | | | | *e*S | | **Sn** | **19 43 10.0** | **+1.3** |
| **NCK** | **Nalchik** | **1.97** | **284** | *e*Pg | | **Pn** | **19 42 45.9** | **+1.2** |
| NCK | | | | *e*Sg | | **Sn** | **19 43 09.4** | **+0.7** |
| **KSMR** | **Kasumkent** | **2.02** | **135** | *e*P | | **Pn** | **19 42 47.8** | **+2.4** |
| KSMR | | | | *e*S | | **Sn** | **19 43 13.1** | **+3.1** |
| KSMR | | | | *e*S | | **Sn** | **19 43 13.7** | **+3.7** |
| KSMR | | | | pmax | pmax | | | |
| | comp=Z,26nm,0.2s | | | | | | | |
| KSMR | | | | smax | smax | | | |
| | comp=E,2.0nm,0.4s | | | | | | | |
| KSMR | | | | smax | smax | | | |
| | comp=N,313nm,0.4s | | | | | | | |
| KSMR | | | | smax | smax | | | |
| | comp=N,267nm,0.4s | | | | | | | |
| **KSMR** | **Kasumkent** | **2.02** | **135** | *e*Pg | | **Pn** | **19 42 47.8** | **+2.4** |
| KSMR | | | | *e*Sg | | **Sn** | **19 43 13.1** | **+3.1** |
| **QZX** | **Qazax, Azerbai** | **2.07** | **198** | P | | **Pn** | **19 42 46.7** | **+0.6** |
| QZX | | | | S | | **Sn** | **19 43 11.7** | **+0.5** |
| **ONI** | **Oni** | **2.08** | **259** | *e*Pg | | **Pn** | **19 42 49.1** | **+2.9** |
| ONI | | | | *e*Sg | | **Sn** | **19 43 15.5** | **+4.0** |
| **QSAR** | **Qusar** | **2.15** | **134** | P | | **Pn** | **19 42 50.0** | **+2.8** |
| | SNR=9.8 | | | | | | | |
| QSAR | | | | S | | **Sn** | **19 43 16.2** | **+3.1** |
| **GDB** | **GEDABAY** | **2.34** | **189** | P | | **Pn** | **19 42 50.0** | **+0.2** |
| | SNR=35 | | | | | | | |
| GDB | | | | S | | **Sn** | **19 43 17.0** | **-0.8** |
| **XNQ** | **Khinaliq** | **2.35** | **142** | P | | **Pn** | **19 42 52.0** | **+2.0** |
| | SNR=20 | | | | | | | |
| XNQ | | | | S | | **Sn** | **19 43 19.8** | **+1.7** |
| **MNGR** | **Mingechevir, A** | **2.35** | **164** | P | | **Pn** | **19 42 51.1** | **+1.3** |
| **MNGR** | **Mingechevir, A** | **2.35** | **164** | P | | **Pn** | **19 42 51.1** | **+1.3** |
| MNGR | | | | S | | **Sn** | **19 43 18.9** | **+1.1** |
| **QUBA** | **Quba, Azerbaij** | **2.38** | **134** | P | | **Pn** | **19 42 52.6** | **+2.3** |
| QUBA | | | | S | | **Sn** | **19 43 20.2** | **+1.5** |
| **GANJ** | **Ganja** | **2.39** | **178** | P | | **Pn** | **19 42 50.5** | **+0.2** |
| **GANJ** | **Ganja** | **2.39** | **178** | P | | **Pn** | **19 42 50.5** | **+0.2** |
| | SNR=18 | | | | | | | |
| GANJ | | | | S | | **Sn** | **19 43 18.1** | **-0.7** |
| **QBL** | **Gabala** | **2.41** | **149** | P | | **Pn** | **19 42 51.8** | **+1.2** |
| QBL | | | | S | | **Sn** | **19 43 21.9** | **+2.5** |
| **PYA1** | **Pyatigorsk** | **2.49** | **295** | *e*Pn | | **Pn** | **19 42 51.9** | **+0.3** |
| PYA1 | | | | *e*Sn | | **Sn** | **19 43 19.3** | **-1.9** |
| **KBZ** | **Khabaz** | **2.52** | **287** | *d i*P | | **Pn** | **19 42 51.8** | **-0.1** |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.3s | | | | | | | |
| **KBZ** | **Khabaz** | **2.52** | **287** | *e*Pn | | **Pn** | **19 42 51.9** | **0.0** |
| KBZ | | | | *e*Sn | | **Sn** | **19 43 19.9** | **-1.8** |
| **NEY** | **Neytrino** | **2.56** | **276** | *e*P | | **Pn** | **19 42 53.5** | **+0.7** |
| NEY | | | | *e*S | | **Sn** | **19 43 22.6** | **-0.6** |
| **NEY** | **Neytrino** | **2.56** | **276** | *e*Pn | | **Pn** | **19 42 53.4** | **+0.7** |
| NEY | | | | *e*Sn | | **Sn** | **19 43 22.2** | **-1.0** |
| **BEYR** | **Belyy Ugol+** | **2.66** | **293** | *i* Pn | | **Pn** | **19 42 54.1** | **+0.2** |
| BEYR | | | | *e*Sn | | **Sn** | **19 43 23.6** | **-1.6** |
| **IML** | **Ismayilli** | **2.68** | **146** | P | | **Pn** | **19 42 55.4** | **+1.1** |
| IML | | | | S | | **Sn** | **19 43 26.8** | **+1.0** |
| **SHA1** | **Shidzhatmaz** | **2.69** | **286** | ⇑*i* P | | **Pn** | **19 42 54.7** | **+0.2** |
| SHA1 | | | | *e*S | | **Sn** | **19 43 24.6** | **-1.6** |
| **SHA1** | **Shidzhatmaz** | **2.69** | **286** | *i* Pn | | **Pn** | **19 42 54.6** | **+0.1** |
| SHA1 | | | | *e*Sn | | **Sn** | **19 43 24.2** | **-2.0** |
| **KIV0** | **Kislovodsk Arr** | **2.72** | **291** | *e*Pn | | **Pn** | **19 42 55.1** | **+0.2** |
| KIV0 | | | | *e*Sn | | **Sn** | **19 43 25.7** | **-1.2** |
| **KIV** | **Kislovodsk** | **2.73** | **291** | *e*Pn | | **Pn** | **19 42 55.2** | **+0.3** |
| KIV | | | | *e*Sn | | **Sn** | **19 43 25.7** | **-1.3** |
| **SIZA** | **Siyzn** | **2.80** | **133** | P | | **Pn** | **19 42 59.2** | **+3.3** |
| SIZA | | | | S | | **Sn** | **19 43 31.2** | **+2.5** |
| **BRDA** | **Brd** | **2.86** | **165** | P | | **Pn** | **19 42 57.0** | **+0.3** |
| BRDA | | | | S | | **Sn** | **19 43 31.9** | **+1.7** |
| **PQL** | **Pirkuli** | **2.86** | **141** | P | | **Pn** | **19 42 58.1** | **+1.3** |
| PQL | | | | S | | **Sn** | **19 43 34.1** | **+3.7** |
| **ALER** | **Alexandrovskoy** | **2.94** | **307** | *e*Pn | | **Pn** | **19 42 58.7** | **+0.9** |
| ALER | | | | *e*Sn | | **Sn** | **19 43 32.0** | **-0.2** |
| **ZRD** | **Zardab** | **2.96** | **158** | P | | **Pn** | **19 42 59.2** | **+1.2** |
| | SNR=13 | | | | | | | |
| ZRD | | | | S | | **Sn** | **19 43 33.6** | **+1.0** |
| **ATGJ** | **Altiaghaj** | **2.97** | **136** | P | | **Pn** | **19 43 01.0** | **+2.8** |
| ATGJ | | | | S | | **Sn** | **19 43 34.3** | **+1.3** |
| **AGDM** | **Agdam** | **3.00** | **167** | P | | **Pn** | **19 42 59.4** | **+0.9** |
| | SNR=12 | | | | | | | |
| AGDM | | | | S | | **Sn** | **19 43 34.6** | **+1.1** |
| **GOF** | **Gofitskoye** | **3.05** | **313** | ⇑*e*P | | **Pn** | **19 42 59.6** | **+0.4** |
| GOF | | | | *e*S | | **Sn** | **19 43 35.1** | **+0.4** |
| GOF | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| GOF | | | | smax | smax | | | |
| | comp=N,79nm,0.6s | | | | | | | |
| GOF | | | | smax | smax | | | |
| | comp=E,88nm,0.4s | | | | | | | |
| **GOF** | **Gofitskoye** | **3.05** | **313** | *e*Pn | | **Pn** | **19 42 59.9** | **+0.7** |
| GOF | | | | *e*Sn | | **Sn** | **19 43 35.0** | **+0.2** |
| **GNI** | **Garni** | **3.08** | **201** | *e*Pn | | **Pn** | **19 43 02.5** | **+2.7** |
| GNI | | | | *e*Sn | | **Sn** | **19 43 39.2** | **+3.4** |
| **GBS** | **Qobustan** | **3.23** | **140** | P | | **Pn** | **19 43 03.9** | **+2.3** |
| GBS | | | | S | | **Sn** | **19 43 40.3** | **+1.3** |
| **NVNR** | **Nevinnomyssk** | **3.46** | **299** | *e*Pn | | **Pn** | **19 43 05.5** | **+0.8** |
| NVNR | | | | *e*Sn | | **Sn** | **19 43 43.7** | **-0.8** |
| **BLQ** | **Beylaqan** | **3.46** | **163** | P | | **Pn** | **19 43 05.0** | **+0.2** |
| BLQ | | | | S | | **Sn** | **19 43 44.8** | **+0.1** |
| **ARXR** | **Arkhyz** | **3.64** | **280** | *e*Pn | | **Pn** | **19 43 09.3** | **+1.9** |
| ARXR | | | | *e*Sn | | **Sn** | **19 43 53.7** | **+4.4** |
| **QRD** | **Qoradiz** | **3.67** | **166** | P | | **Pn** | **19 43 07.4** | **-0.1** |
| QRD | | | | S | | **Sn** | **19 43 48.6** | **-1.1** |
| **SBZ** | **Shahbuz** | **3.67** | **188** | P | | **Pn** | **19 43 08.2** | **+0.5** |
| SBZ | | | | S | | **Sn** | **19 43 46.9** | **-3.0** |
| **ORD** | **Ordubad** | **4.11** | **182** | P | | **Pn** | **19 43 14.0** | **+0.4** |
| ORD | | | | S | | **Sn** | **19 43 58.7** | **-1.7** |
| **GLBA** | **Clilabad** | **4.13** | **156** | P | | **Pn** | **19 43 15.0** | **+1.1** |
| | SNR=6.0 | | | | | | | |
| GLBA | | | | S | | **Sn** | **19 43 59.9** | **-1.0** |
| **YRD** | **Yardimli** | **4.39** | **159** | P | | **Pn** | **19 43 17.8** | **+0.2** |
| | SNR=38 | | | | | | | |
| YRD | | | | S | | **Sn** | **19 44 05.7** | **-1.9** |
| **GUZR** | **Guzeripl'** | **4.54** | **284** | *e*Pn | | **Pn** | **19 43 21.7** | **+2.3** |
| GUZR | | | | *e*Sn | | **Sn** | **19 44 13.3** | **+2.4** |
| **LRK** | **Lerik** | **4.67** | **159** | P | | **Pn** | **19 43 22.0** | **+0.6** |
| | SNR=35 | | | | | | | |
| LRK | | | | S | | **Sn** | **19 44 13.4** | **-1.0** |
| **LKRN** | **Lenkeran, Azer** | **4.74** | **155** | P | | **Pn** | **19 43 23.8** | **+1.7** |
| **LKRN** | **Lenkeran, Azer** | **4.74** | **155** | P | | **Pn** | **19 43 23.8** | **+1.7** |
| LKRN | | | | S | | **Sn** | **19 44 13.3** | **-2.4** |
| **ASTR** | **Astara** | **4.88** | **155** | P | | **Pn** | **19 43 25.8** | **+1.8** |
| ASTR | | | | S | | **Sn** | **19 44 15.8** | **-3.4** |
| **AKTO** | **Aktyubinsk** | **10.96** | **43** | ⇓Pn | | **Pn** | **19 44 50.5** | **+3.6** |
| | comp=E,0.9nm,0.7s | | | | | | | |
| AKTO | | | | ⇑Sn | | **Sn** | **19 46 39.1** | **-8.4** |
| | comp=E,2.0nm,0.7s | | | | | | | |
| **AB31** | **Akbulak array** | **11.37** | **52** | ⇑Pn | | **Pn** | **19 44 50.9** | **-1.5** |
| | comp=E,0.2nm,0.3s,baz=240,slow=12,SNR=25 | | | | | | | |
| AB31 | | | | ⇓Sn | | **Sn** | **19 46 49.8** | **-7.6** |
| | comp=E,1.1nm,0.6s,baz=242,slow=22,SNR=9.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **22.01** | **334** | *e*P | | **P** | **19 47 02.4** | **+2.3** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |

*KNET **08** 20:02:13.8±0.3, 42.59N×75.17E, h5km±9km, ml1.1, Error ellipse: s-maj=3.3km s-min=1.2km az=156.0*
*NNC **08** 20:02:14.7±0.3, 42.66N×75.11E, h0km, mb2.6, mpv2.3, Error ellipse: s-maj=4.8km s-min=1.0km az=162.0*
*SOME **08** 20:02:15.0, 42.60N×75.12E, h10km*
**ISC 08 20:02:14.7±1.1, 42.60N±0.04×75.14E±0.02, h4km±9km, n44, σ0.976/80, 8C-7D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **0.15** | **291** | | ⇓P | | **Pg** | **20 02 17.7** | **0.0** |
| | 18nm,0.1s,SNR=60 | | | | | | | | |
| KBK | | | | | ⇑S | | **Sg** | **20 02 20.6** | **+0.9** |
| | 60nm,0.2s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.46** | **47** | | ⇑P | | **Pg** | **20 02 23.1** | **-0.5** |
| | 1.7nm,0.1s,SNR=22 | | | | | | | | |
| TKM2 | | | | | ⇓S | | **Sg** | **20 02 29.5** | **-0.2** |
| | 32nm,0.2s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.46** | **47** | | ⇑P | | **Pg** | **20 02 22.9** | **-0.7** |
| | 0.3nm,0.3s | | | | | | | | |
| TKM2 | | | | | ⇑S | | **Sg** | **20 02 29.5** | **-0.2** |
| | 1.8nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.48** | **274** | | ⇓P | | **Pg** | **20 02 23.5** | **-0.4** |
| | 1.9nm,0.1s,SNR=8.1 | | | | | | | | |
| AAK | | | | | ⇓S | | **Sg** | **20 02 30.3** | **+0.2** |
| | 9.5nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.48** | **274** | | ⇓P | | **Pg** | **20 02 23.3** | **-0.5** |
| | 1.2nm,0.4s | | | | | | | | |
| AAK | | | | | ⇑S | | **Sg** | **20 02 30.1** | **+0.1** |
| | 5.6nm,0.7s | | | | | | | | |
| **CHMS** | **Chumysh** | **0.49** | **324** | | ⇓P | | **Pg** | **20 02 23.8** | **-0.2** |
| | 7.7nm,0.2s,SNR=11 | | | | | | | | |
| CHMS | | | | | ⇑S | | **Sg** | **20 02 30.8** | **+0.4** |
| | 10nm,0.1s | | | | | | | | |
| **UCH** | **Uchtor** | **0.59** | **231** | | ⇑P | | **Pg** | **20 02 25.4** | **-0.8** |
| | 1.0nm,0.1s,SNR=5.8 | | | | | | | | |
| **KST** | **Kastek** | **0.75** | **54** | | *e*P | | **Pg** | **20 02 28.9** | **-0.1** |
| | 1.1nm,0.1s | | | | | | | | |
| KST | | | | | *e*S | | **Sg** | **20 02 38.8** | **0.0** |
| | 5.1nm,0.4s | | | | | | | | |
| **KST** | **Kastek** | **0.75** | **54** | | P | | **Pg** | **20 02 29.0** | **-0.1** |
| | 1.1nm,0.1s | | | | | | | | |
| KST | | | | | S | | **Sg** | **20 02 38.8** | **0.0** |
| | 5.1nm,0.4s | | | | | | | | |
| **DGS** | **Degeres** | **0.79** | **36** | | *e*P | | **Pg** | **20 02 29.8** | **0.0** |
| | 0.4nm,0.1s | | | | | | | | |
| DGS | | | | | *e*S | | **Sg** | **20 02 40.2** | **+0.1** |
| | 2.3nm,0.2s | | | | | | | | |
| **DGS** | **Degeres** | **0.79** | **36** | | P | | **Pg** | **20 02 29.8** | **0.0** |
| | 0.4nm,0.1s | | | | | | | | |
| DGS | | | | | S | | **Sg** | **20 02 40.2** | **+0.1** |
| | 2.3nm,0.2s | | | | | | | | |
| **SGDS** | **Sogindy** | **0.93** | **337** | | *e*P | | **Pg** | **20 02 32.0** | **-0.4** |
| | 1.7nm,0.2s | | | | | | | | |
| SGDS | | | | | *e*S | | **Sg** | **20 02 44.1** | **-0.4** |
| | 2.6nm,0.1s | | | | | | | | |
| **SGDS** | **Sogindy** | **0.93** | **337** | | P | | **Pg** | **20 02 32.0** | **-0.4** |
| | 1.7nm,0.2s | | | | | | | | |
| SGDS | | | | | S | | **Sg** | **20 02 44.1** | **-0.4** |
| | 2.6nm,0.1s | | | | | | | | |
| **MTBS** | **Maitube** | **1.09** | **61** | | *e*P | | **Pg** | **20 02 35.1** | **-0.4** |
| | 0.8nm,0.2s | | | | | | | | |
| MTBS | | | | | *e*S | | **Sg** | **20 02 49.2** | **-0.4** |
| | 4.7nm,0.2s | | | | | | | | |
| **MTBS** | **Maitube** | **1.09** | **61** | | P | | **Pg** | **20 02 35.1** | **-0.4** |
| | 0.8nm,0.2s | | | | | | | | |
| MTBS | | | | | S | | **Sg** | **20 02 49.2** | **-0.4** |
| | 4.7nm,0.2s | | | | | | | | |
| **KRBS** | **Karabastau** | **1.16** | **20** | | *e*P | | **Pg** | **20 02 36.2** | **-0.7** |
| | 0.5nm,0.1s | | | | | | | | |
| KRBS | | | | | *e*S | | **Sg** | **20 02 51.4** | **-0.6** |
| | 1.8nm,0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1.0nm,0.4s | | | | | | | | |
| **SATY** | **Saty** | **2.45** | **78** | *e*P | | **Pg** | **20 03 01.1** | **-0.5** |
| | 0.8nm,0.3s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **20 03 33.6** | **+0.3** |
| | 2.4nm,0.4s | | | | | | | | |
| **SATY** | **Saty** | **2.45** | **78** | Pg | | **Pg** | **20 03 00.8** | **-0.8** |
| | 0.8nm,0.3s | | | | | | | | |
| SATY | | | | Lg | | Lg | 20 03 33.2 | | |
| | 2.4nm,0.4s | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.49** | **76** | Pg | | **Pn** | **20 02 52.8** | **-3.2** |
| ZHN | | | | Lg | | Lg | 20 03 19.5 | | |
| **ARXS** | **Arharly** | **2.54** | **50** | *e*P | | **Pb** | **20 03 01.1** | **+0.4** |
| | 0.6nm,0.3s | | | | | | | | |
| ARXS | | | | *e*S | | **Sb** | **20 03 33.8** | **+1.4** |
| | 2.8nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.54** | **50** | Pg | | **Pb** | **20 03 01.1** | **+0.4** |
| | 0.6nm,0.3s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 20 03 33.8 | | |
| | 2.8nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **2.56** | **342** | *e*P | | **Pb** | **20 03 01.4** | **+0.3** |
| | 2.1nm,0.9s | | | | | | | | |
| BTLS | | | | *e*S | | **Sb** | **20 03 34.2** | **+1.2** |
| | 2.3nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **2.74** | **70** | *e*P | | **Pb** | **20 03 05.0** | **+0.8** |
| | 0.6nm,0.4s | | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **20 03 40.7** | **+2.5** |
| | 2.6nm,0.6s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.86** | **57** | *e*P | | **Pb** | **20 03 06.5** | **+0.2** |
| | 0.7nm,0.1s | | | | | | | | |
| BLB | | | | *e*S | | **Sb** | **20 03 43.0** | **+1.3** |
| | 1.1nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.86** | **57** | Pg | | **Pb** | **20 03 06.5** | **+0.2** |
| | 0.7nm,0.1s | | | | | | | | |
| BLB | | | | Lg | | Lg | 20 03 43.0 | | |
| | 1.1nm,0.3s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.91** | **78** | *e*P | | **Pb** | **20 03 08.7** | **+1.5** |
| | 1.9nm,0.3s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **20 03 46.6** | **-1.4** |
| | 1.6nm,0.7s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.91** | **78** | Pg | | **Pb** | **20 03 08.7** | **+1.5** |
| | 1.9nm,0.3s | | | | | | | | |
| UZB | | | | Lg | | Lg | 20 03 46.6 | | |
| | 1.6nm,0.7s | | | | | | | | |

*KNET* ***08*** *20:13:57.2±0.3, 42.˚58N×75.˚14E, h16km±2km, ml2.2, Error ellipse: s-maj=2.7km s-min=2.3km az=167.0*
*KRNET* ***08*** *20:13:57.9±0.1, 42.˚58N×75.˚13E, h18km, mb3.0*
*NNC* ***08*** *20:13:58.8±0.3, 42.˚67N×75.˚13E, h0km, mb3.5, mpv3.4, Error ellipse: s-maj=3.7km s-min=1.6km az=169.0*
*SOME* ***08*** *20:13:58.7, 42.˚60N×75.˚15E, h15km*
**ISC 08 20:13:58.5±0.8, 42˚59N±0.˚02×75˚12E±0.˚01, h11km±6km, n91, σ1§08/163, 44C-25D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KBK** | **Karagaybulak** | **0.14** | **297** | P | | **Pg** | **20 14 01.9** | **0.0** |
| | 219nm,0.1s,SNR=649 | | | | | | | |
| KBK | | | | ⇓S | | **Sg** | **20 14 04.7** | **+0.3** |
| | 1µm,0.2s | | | | | | | |
| **KBK** | **Karagaybulak** | **0.14** | **297** | ⇑*i*P | | **Pg** | **20 14 01.8** | **-0.2** |
| | baz=1.0 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sg** | **20 14 04.4** | **0.0** |
| | baz=1.0 | | | | | | | |
| **FRU1** | **Bishkek** | **0.42** | **301** | ⇑*i*P | | **Pb** | **20 14 07.0** | **-1.0** |
| | baz=4.0 | | | | | | | |
| FRU1 | | | | ⇑*i*S | | **Sb** | **20 14 13.4** | **-1.0** |
| | baz=4.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **0.46** | **276** | ⇓P | | **Pg** | **20 14 07.6** | **0.0** |
| | 23nm,0.2s,SNR=61 | | | | | | | |
| AAK | | | | ⇑S | | **Sb** | **20 14 14.3** | **-1.4** |
| | 115nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.46** | **276** | ⇓P | | **Pg** | **20 14 07.4** | **-0.3** |
| | 6.7nm,0.3s | | | | | | | |
| AAK | | | | ⇓S | | **Sb** | **20 14 14.3** | **-1.4** |
| | 102nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.46** | **276** | ⇑*i*P | | **Pg** | **20 14 07.2** | **-0.4** |
| | baz=78 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sg** | **20 14 13.9** | **+0.1** |
| | baz=78 | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **47** | ⇓P | | **Pg** | **20 14 07.3** | **-0.7** |
| | 71nm,0.1s,SNR=64 | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **20 14 13.8** | **-0.7** |
| | 652nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **47** | ⇓P | | **Pg** | **20 14 07.2** | **-0.8** |
| | 18nm,0.3s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sg** | **20 14 13.7** | **-0.7** |
| | 78nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **47** | ⇓*i*P | | **Pg** | **20 14 07.4** | **-0.7** |
| | baz=45 | | | | | | | |
| TKM2 | | | | ⇓*i*S | | **Sg** | **20 14 14.4** | **0.0** |
| | baz=45 | | | | | | | |
| **CHMS** | **Chumysh** | **0.49** | **327** | P | | **Pb** | **20 14 07.9** | **-1.2** |
| | 108nm,0.2s,SNR=127 | | | | | | | |
| CHMS | | | | ⇑S | | **Sb** | **20 14 14.8** | **-1.5** |
| | 65nm,0.1s | | | | | | | |
| **CHMS** | **Chumysh** | **0.49** | **327** | ⇑*i*P | | **Pg** | **20 14 07.7** | **-0.4** |
| | baz=27 | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sb** | **20 14 15.1** | **-1.2** |
| | baz=27 | | | | | | | |
| **UCH** | **Uchtor** | **0.58** | **231** | ⇓P | | **Pg** | **20 14 09.6** | **-0.3** |
| | 9.7nm,0.1s,SNR=35 | | | | | | | |
| UCH | | | | ⇑S | | **Sg** | **20 14 17.4** | **-0.3** |
| | 45nm,0.2s | | | | | | | |
| **UCH** | **Uchtor** | **0.58** | **231** | ⇑*i*P | | **Pg** | **20 14 09.3** | **-0.6** |
| | baz=33 | | | | | | | |
| UCH | | | | ⇑*i*S | | **Sg** | **20 14 17.3** | **-0.3** |
| | baz=33 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.62** | **99** | ⇓*i*P | | **Pg** | **20 14 09.5** | **-1.1** |
| | baz=98 | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sg** | **20 14 17.9** | **-0.8** |
| | baz=98 | | | | | | | |
| **KST** | **Kastek** | **0.77** | **54** | *e*P | | **Pg** | **20 14 12.7** | **-0.7** |
| | 12nm,0.2s | | | | | | | |
| KST | | | | *e*S | | **Sg** | **20 14 22.9** | **-0.5** |
| | 65nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **0.77** | **54** | P | | **Pg** | **20 14 12.7** | **-0.7** |
| | 12nm,0.2s | | | | | | | |
| KST | | | | S | | **Sg** | **20 14 22.9** | **-0.5** |
| | 65nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **0.77** | **54** | *e*P | | **Pg** | **20 14 12.7** | **-0.7** |
| | baz=52 | | | | | | | |
| KST | | | | *e*S | | **Sg** | **20 14 23.0** | **-0.5** |
| | baz=52 | | | | | | | |
| **DGS** | **Degeres** | **0.81** | **36** | *e*P | | **Pg** | **20 14 13.4** | **-0.7** |
| | 18nm,0.2s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **20 14 23.9** | **-0.9** |
| | 44nm,0.2s | | | | | | | |
| **DGS** | **Degeres** | **0.81** | **36** | P | | **Pg** | **20 14 13.4** | **-0.7** |
| | 18nm,0.2s | | | | | | | |
| DGS | | | | S | | **Sg** | **20 14 23.9** | **-0.9** |
| | 44nm,0.2s | | | | | | | |
| **DGS** | **Degeres** | **0.81** | **36** | *e*P | | **Pg** | **20 14 13.4** | **-0.7** |
| | baz=35 | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **20 14 23.8** | **-0.9** |
| | baz=35 | | | | | | | |
| **USP** | **Ospenovka** | **0.81** | **326** | ⇓P | | **Pg** | **20 14 13.7** | **-0.5** |
| | 45nm,0.1s,SNR=52 | | | | | | | |
| USP | | | | ⇓S | | **Sb** | **20 14 24.9** | **-0.8** |
| | 54nm,0.2s | | | | | | | |
| **USP** | **Ospenovka** | **0.81** | **326** | ⇑*i*P | | **Pg** | **20 14 13.5** | **-0.7** |
| | baz=26 | | | | | | | |
| USP | | | | ⇑*i*S | | **Sb** | **20 14 25.0** | **-0.8** |
| | baz=26 | | | | | | | |
| **ULHL** | **Ulahol** | **0.90** | **112** | ⇑P | | **Pg** | **20 14 14.8** | **-1.2** |
| | 18nm,0.2s,SNR=99 | | | | | | | |
| ULHL | | | | ⇓S | | **Sg** | **20 14 26.6** | **-1.2** |
| | 51nm,0.2s | | | | | | | |
| **ULHL** | **Ulahol** | **0.90** | **112** | ⇑*e*P | | **Pg** | **20 14 14.4** | **-1.6** |
| | baz=11 | | | | | | | |
| ULHL | | | | ⇑*i*S | | **Sg** | **20 14 26.2** | **-1.6** |
| | baz=11 | | | | | | | |
| **SGDS** | **Sogindy** | **0.93** | **338** | *e*P | | **Pg** | **20 14 15.6** | **-0.9** |
| | 20nm,0.2s | | | | | | | |
| SGDS | | | | *e*S | | **Sg** | **20 14 27.5** | **-1.1** |
| | 28nm,0.2s | | | | | | | |
| **SGDS** | **Sogindy** | **0.93** | **338** | P | | **Pg** | **20 14 15.6** | **-0.9** |
| | 20nm,0.2s | | | | | | | |
| SGDS | | | | S | | **Sg** | **20 14 27.5** | **-1.1** |
| | 28nm,0.2s | | | | | | | |
| **ARLS** | **Aral** | **0.94** | **219** | ⇑*i*P | | **Pg** | **20 14 15.3** | **-1.4** |
| | baz=20 | | | | | | | |
| ARLS | | | | ⇑*i*S | | **Sg** | **20 14 28.1** | **-0.8** |
| | baz=20 | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.99** | **274** | ⇑P | | **Pb** | **20 14 17.6** | **-0.2** |
| | 11nm,0.2s,SNR=30 | | | | | | | |
| EKS2 | | | | ⇓S | | **Sn** | **20 14 31.8** | **-0.8** |
| | 12nm,0.1s | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.99** | **274** | ⇑*i*P | | **Pg** | **20 14 16.5** | **-1.1** |
| | baz=75 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sb** | **20 14 30.2** | **-0.7** |
| | baz=75 | | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | *e*P | | **Pb** | **20 14 18.7** | **-1.0** |
| | 11nm,0.1s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **20 14 33.3** | **-0.9** |
| | 130nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | P | | **Pb** | **20 14 18.7** | **-1.0** |
| | 11nm,0.1s | | | | | | | |
| MTBS | | | | S | | **Sg** | **20 14 33.3** | **-0.9** |
| | 130nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | *e*P | | **Pb** | **20 14 18.7** | **-1.0** |
| | baz=59 | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **20 14 33.3** | **-0.9** |
| | baz=59 | | | | | | | |
| **AML** | **Almayashu** | **1.15** | **247** | ⇑P | | **Pg** | **20 14 20.0** | **-0.7** |
| | 5.5nm,0.2s,SNR=18 | | | | | | | |
| AML | | | | ⇑S | | **Sb** | **20 14 36.2** | **+0.3** |
| | 18nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.18** | **20** | *e*P | | **Pb** | **20 14 20.0** | **-0.9** |
| | 19nm,0.2s | | | | | | | |
| KRBS | | | | *e*S | | **Sb** | **20 14 35.1** | **-1.1** |
| | 21nm,0.2s | | | | | | | |
| **KRBS** | **Karabastau** | **1.18** | **20** | P | | **Pb** | **20 14 20.0** | **-0.9** |
| | 19nm,0.2s | | | | | | | |
| KRBS | | | | S | | **Sb** | **20 14 35.1** | **-1.1** |
| | 21nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **1.40** | **277** | *e*P | | **Pg** | **20 14 25.6** | **+0.2** |
| | 12nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **20 14 44.5** | **+0.8** |
| | 58nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **1.40** | **277** | P | | **Pg** | **20 14 25.6** | **+0.2** |
| | 12nm,0.3s | | | | | | | |
| MRKS | | | | S | | **Sg** | **20 14 44.5** | **+0.8** |
| | 58nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **71** | *e*P | | **Pn** | **20 14 24.8** | **+0.1** |
| | 5.1nm,0.2s | | | | | | | |
| TNSS | | | | *e*S | | **Sb** | **20 14 43.4** | **-0.1** |
| | 26nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **71** | P | | **Pn** | **20 14 24.8** | **+0.1** |
| | 5.1nm,0.2s | | | | | | | |
| TNSS | | | | S | | **Sb** | **20 14 43.4** | **-0.1** |
| | 26nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **71** | *e*P | | **Pn** | **20 14 24.8** | **+0.1** |
| | baz=70 | | | | | | | |
| TNSS | | | | *e*S | | **Sb** | **20 14 43.4** | **-0.1** |
| | baz=70 | | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **64** | *e*P | | **Pb** | **20 14 25.8** | **+0.1** |
| | 20nm,0.2s | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **20 14 45.3** | **-0.1** |
| | 72nm,0.2s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **64** | P | | **Pb** | **20 14 25.8** | **+0.1** |
| | 20nm,0.2s | | | | | | | |
| AAA | | | | S | | **Sg** | **20 14 45.3** | **-0.1** |
| | 72nm,0.2s | | | | | | | |
| **KNDC** | **Almaty** | **1.50** | **65** | ⇑P | | **Pb** | **20 14 26.2** | **-0.2** |
| | 4.3nm,0.2s | | | | | | | |
| KNDC | | | | ⇓S | | **Sg** | **20 14 46.4** | **-0.2** |
| | 20nm,0.2s | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **68** | *e*P | | **Pb** | **20 14 26.6** | **-0.4** |
| | 7.5nm,0.3s | | | | | | | |
| MDOK | | | | *e*S | | **Sb** | **20 14 46.8** | **+0.3** |
| | 22nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **68** | ⇓P | | **Pn** | **20 14 26.2** | **+0.3** |
| | 2.2nm,0.3s | | | | | | | |
| MDOK | | | | ⇑S | | **Sb** | **20 14 46.4** | **0.0** |
| | 7.0nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **68** | Pg | | **Pb** | **20 14 26.6** | **-0.4** |
| | 7.5nm,0.3s | | | | | | | |
| MDOK | | | | Lg | | Lg | 20 14 46.8 | |
| | 22nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **1.53** | **68** | *e*P | | **Pb** | **20 14 26.6** | **-0.4** |
| | baz=67 | | | | | | | |
| MDOK | | | | *e*S | | **Sb** | **20 14 46.8** | **+0.3** |
| | baz=67 | | | | | | | |
| **KDJ** | **Kajisay** | **1.60** | **106** | ⇑*e*P | | **Pn** | **20 14 26.9** | **0.0** |
| | baz=6.0 | | | | | | | |
| KDJ | | | | ⇑*i*S | | **Sn** | **20 14 48.0** | **+0.3** |
| | baz=6.0 | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.60** | **66** | *e*P | | **Pb** | **20 14 27.9** | **-0.3** |
| | 13nm,0.2s | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **20 14 49.3** | **-0.7** |
| | 50nm,0.3s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.60** | **66** | P | | **Pb** | **20 14 27.9** | **-0.3** |
| | 13nm,0.2s | | | | | | | |
| KOTS | | | | S | | **Sg** | **20 14 49.3** | **-0.7** |
| | 50nm,0.3s | | | | | | | |
| **KTBS** | **Karatobe** | **1.60** | **45** | *e*P | | **Pb** | **20 14 27.6** | **-0.5** |
| | 15nm,0.2s | | | | | | | |
| KTBS | | | | *e*S | | **Sb** | **20 14 48.5** | **+0.1** |
| | 88nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **1.60** | **45** | P | | **Pb** | **20 14 27.6** | **-0.5** |
| | 15nm,0.2s | | | | | | | |
| KTBS | | | | S | | **Sb** | **20 14 48.5** | **+0.1** |
| | 88nm,0.4s | | | | | | | |
| **CHKK** | **Chushkaly** | **1.86** | **47** | *e*P | | **Pb** | **20 14 32.5** | **0.0** |
| | 8.1nm,0.3s | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | **20 14 56.5** | **+0.6** |
| | 76nm,0.2s | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.89** | **83** | ⇑*e*P | | **Pn** | **20 14 31.8** | **+0.8** |
| | baz=83 | | | | | | | |
| ANVS | | | | ⇑*i*S | | **Sb** | **20 14 57.3** | **+0.4** |
| | baz=83 | | | | | | | |
| **MNAS** | **Manas** | **1.93** | **268** | ⇑*i*P | | **Pb** | **20 14 32.8** | **-1.1** |
| | baz=68 | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sb** | **20 14 58.4** | **+0.3** |
| | baz=68 | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.18** | **112** | ⇓*i*P | | **Pn** | **20 14 35.3** | **+0.2** |
| | baz=12 | | | | | | | |
| TARG | | | | ⇓*i*S | | **Sb** | **20 15 04.3** | **-1.1** |
| | baz=12 | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **67** | *e*P | | **Pb** | **20 14 41.9** | **-0.1** |
| | 6.6nm,0.6s | | | | | | | |
| KURS | | | | *e*S | | **Sb** | **20 15 13.2** | **+1.5** |
| | 35nm,0.5s | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **67** | Pg | | **Pb** | **20 14 41.9** | **-0.1** |
| | 6.6nm,0.6s | | | | | | | |
| KURS | | | | Lg | | Lg | 20 15 13.2 | |
| | 35nm,0.5s | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.43** | **91** | ⇑*i*P | | **Pn** | **20 14 39.1** | **+0.7** |
| | baz=91 | | | | | | | |
| PRZ | | | | ⇑*i*S | | **Sn** | **20 15 09.5** | **+1.3** |
| | baz=91 | | | | | | | |
| **SATY** | **Saty** | **2.46** | **78** | *e*P | | **Pb** | **20 14 44.0** | **+1.1** |
| | 18nm,0.3s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **20 15 16.2** | **-1.5** |
| | 56nm,0.6s | | | | | | | |
| **SATY** | **Saty** | **2.46** | **78** | Pg | | **Pb** | **20 14 44.0** | **+1.1** |
| | 18nm,0.3s | | | | | | | |
| SATY | | | | Lg | | Lg | 20 15 16.2 | |
| | 56nm,0.6s | | | | | | | |
| **ARK** | **Arkit** | **2.48** | **252** | ⇑*i*P | | **Pn** | **20 14 39.8** | **+0.9** |
| | baz=53 | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sn** | **20 15 11.0** | **+1.8** |
| | baz=53 | | | | | | | |
| **ZHN** | **Zhinishke** | **2.50** | **76** | *e*P | | **Pb** | **20 14 44.6** | **+1.0** |
| | 33nm,0.2s | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **20 15 17.5** | **-1.6** |
| | 72nm,0.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **2.50** | **76** | Pg | | **Pb** | **20 14 44.6** | **+1.0** |
| | 33nm,0.2s | | | | | | | |
| ZHN | | | | Lg | | Lg | 20 15 17.5 | |
| | 72nm,0.2s | | | | | | | |
| **ARXS** | **Arharly** | **2.55** | **50** | *e*P | | **Pb** | **20 14 44.7** | **+0.3** |
| | 5.6nm,0.3s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **20 15 17.8** | **-2.8** |
| | 67nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **2.55** | **50** | Pg | | **Pb** | **20 14 44.7** | **+0.3** |
| | 5.6nm,0.3s | | | | | | | |
| ARXS | | | | Lg | | Lg | 20 15 17.8 | |
| | 67nm,0.3s | | | | | | | |
| **BTLS** | **Baital** | **2.57** | **343** | *e*P | | **Pb** | **20 14 44.9** | **+0.3** |
| | 13nm,0.3s | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **20 15 18.3** | **-2.7** |
| | 2.3nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **2.57** | **343** | Pg | | **Pb** | **20 14 44.9** | **+0.3** |
| | 13nm,0.3s | | | | | | | |
| BTLS | | | | Lg | | Lg | 20 15 18.3 | |
| | 2.3nm,0.4s | | | | | | | |
| **KPKS** | **Kokpek** | **2.76** | **70** | *e*P | | **Pb** | **20 14 49.1** | **+1.2** |
| | 8.2nm,0.1s | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **20 15 24.9** | **-2.2** |
| | 72nm,0.3s | | | | | | | |
| **DZA** | **Taraz** | **2.81** | **277** | *e*P | | **Pb** | **20 14 49.1** | **+0.4** |
| | 13nm,0.2s | | | | | | | |
| DZA | | | | *e*S | | **Sb** | **20 15 24.9** | **+1.8** |
| | 72nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **57** | *e*P | | **Pb** | **20 14 49.9** | **0.0** |
| | 15nm,0.4s | | | | | | | |
| BLB | | | | *e*S | | **Sb** | **20 15 26.6** | **+1.4** |
| | 70nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **57** | Pg | | **Pb** | **20 14 49.9** | **0.0** |
| | 15nm,0.4s | | | | | | | |
| BLB | | | | Lg | | Lg | 20 15 26.6 | |
| | 70nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.92** | **78** | *e*P | | **Pb** | **20 14 52.1** | **+1.4** |
| | 10nm,0.3s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **20 15 30.1** | **-2.3** |
| | 25nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.92** | **78** | Pg | | **Pb** | **20 14 52.1** | **+1.4** |
| | 10nm,0.3s | | | | | | | |
| UZB | | | | Lg | | Lg | 20 15 30.1 | |
| | 25nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **3.29** | **76** | ⇑Pg | | **Pb** | **20 14 55.6** | **-1.5** |
| | 4.9nm,0.8s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 20 15 39.6 | |
| | 8.0nm,0.5s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.39** | **44** | *e*P | | **Pb** | **20 14 58.2** | **-0.4** |
| | 13nm,0.5s | | | | | | | |
| TDK | | | | *e*S | | **Sb** | **20 15 40.5** | **+0.7** |
| | 12nm,0.6s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.39** | **44** | Pg | | **Pb** | **20 14 58.2** | **-0.4** |
| | 13nm,0.5s | | | | | | | |
| TDK | | | | Lg | | Lg | 20 15 40.5 | |
| | 12nm,0.6s | | | | | | | |
| **KK02** | **Karatay Array** | **3.42** | **280** | ⇓Pg | | **Pg** | **20 15 02.5** | **-1.6** |
| | 1.1nm,0.3s | | | | | | | |
| KK02 | | | | ⇓Lg | | Lg | 20 15 44.9 | |
| | 3.5nm,0.3s | | | | | | | |
| **IUG** | **Iuzhnay** | **3.79** | **265** | *e*P | | **Pg** | **20 15 09.0** | **-2.2** |
| | 35nm,0.6s | | | | | | | |
| IUG | | | | *e*S | | **Sg** | **20 15 59.1** | **-1.3** |
| | 12nm,0.5s | | | | | | | |
| **IUG** | **Iuzhnay** | **3.79** | **265** | Pg | | **Pg** | **20 15 09.0** | **-2.2** |
| | 35nm,0.6s | | | | | | | |
| IUG | | | | Lg | | Lg | 20 15 59.1 | |
| | 12nm,0.5s | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **61** | *e*P | | **Pb** | **20 15 06.0** | **-0.1** |
| | 1.8nm,0.4s | | | | | | | |
| DJR | | | | *e*S | | **Sb** | **20 15 53.9** | **+1.6** |
| | 4.9nm,0.4s | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **61** | Pg | | **Pb** | **20 15 05.9** | **-0.1** |
| | 1.8nm,0.4s | | | | | | | |
| DJR | | | | Lg | | Lg | 20 15 53.9 | |
| | 4.9nm,0.4s | | | | | | | |
| **BRLS** | **Boroldaу** | **3.91** | **278** | *e*P | | **Pg** | **20 15 11.9** | **-1.5** |
| | 1.2nm,0.7s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **20 16 04.2** | **+0.1** |
| | 7.9nm,0.4s | | | | | | | |
| **BRLS** | **Boroldaу** | **3.91** | **278** | Pg | | **Pg** | **20 15 12.0** | **-1.5** |
| | 1.2nm,0.7s | | | | | | | |
| BRLS | | | | Lg | | Lg | 20 16 04.2 | |
| | 7.9nm,0.4s | | | | | | | |
| **KTMS** | **Ketmen** | **3.93** | **76** | *e*P | | **Pb** | **20 15 10.5** | **+2.5** |
| | 3.8nm,0.4s | | | | | | | |
| KTMS | | | | *e*S | | **Sg** | **20 16 01.5** | **-3.3** |
| | 14nm,0.3s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.08** | **47** | *e*P | | **Pb** | **20 15 10.9** | **+0.6** |
| | 0.9nm,0.3s | | | | | | | |
| KAPS | | | | *e*S | | **Sb** | **20 16 02.1** | **+2.5** |
| | 6.1nm,0.4s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.08** | **47** | Pg | | **Pb** | **20 15 10.9** | **+0.6** |
| | 0.9nm,0.3s | | | | | | | |
| KAPS | | | | Lg | | Lg | 20 16 02.1 | |
| | 6.1nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **6.45** | **47** | ⇑Pn | | **Pn** | **20 15 37.0** | **+3.6** |
| | 0.6nm,0.7s | | | | | | | |
| MAKZ | | | | ⇓Sn | | **Sn** | **20 16 49.0** | **+1.9** |
| | 0.7nm,0.7s | | | | | | | |
| MAKZ | | | | ⇓Lg | | Lg | 20 17 20.2 | |
| | 1.5nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **6.61** | **48** | Pn | | **Pn** | **20 15 38.0** | **+2.3** |
| | 0.8nm,0.7s,baz=226,slow=14,SNR=12 | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sn** | **20 16 52.3** | **+1.2** |
| | 0.3nm,0.3s,baz=225,slow=24,SNR=8.9 | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 20 17 24.1 | |
| | 0.8nm,0.6s,baz=223,slow=26,SNR=3.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.37** | **15** | ⇑Lg | | Lg | 20 18 20.6 | |
| | 5.7nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **8.47** | **15** | ⇑Lg | | Lg | 20 18 24.2 | |
| | 2.6nm,0.7s | | | | | | | |

*IDC* ***08*** *20:17:30.6±2.0, 9.˚32S×113.˚11E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.2/42, mbtmp3.4/4, Error ellipse: s-maj=136.6km s-min=9.6km az=48.0*
*DJA* ***08*** *20:17:41.5±0.7, 9.˚5S×3.˚3×11.˚3E±.˚, h14km±4km, M3.7/14, mb4.6/6, mB6.1/1, MLv3.3/14, Mw(mB)5.8/1*
**ISC 08 20:17:39.4±1.5, 9.˚4S±0.˚1×112.˚96E±0.˚05, h71km±16km, n17, σ1§67/22, mb3.3/4, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GMJI** | **Gumukmas** | **1.21** | **23** | P | | **Pn** | **20 18 00.9** | **+0.4** |
| GMJI | | | | S | | **Sn** | **20 18 13.5** | **-2.9** |
| **JAGI** | **Jajag, Banyuwa** | **1.49** | **52** | P | | **Pn** | **20 18 03.4** | **-0.8** |
| JAGI | | | | S | | **Sn** | **20 18 23.2** | **+0.2** |
| **BLJI** | **Banyuglugur** | **1.75** | **21** | P | | **Pn** | **20 18 09.0** | **+1.3** |
| **PWJI** | **Pagerwojo** | **1.78** | **320** | P | | **Pn** | **20 18 07.1** | **-1.0** |
| PWJI | | | | S | | **Sn** | **20 18 32.5** | **+2.7** |
| **ABJI** | **Asem Bagus** | **2.02** | **39** | P | | **Pn** | **20 18 13.6** | **+2.3** |
| **PCJI** | **Pacitan** | **2.13** | **304** | P | | **Pn** | **20 18 12.1** | **-0.7** |
| PCJI | | | | S | | **Sn** | **20 18 40.2** | **+2.0** |
| **IGBI** | **Denpasar** | **2.23** | **75** | P | | **Pn** | **20 18 16.4** | **+2.3** |
| **DNP** | **Denpasar** | **2.33** | **73** | P | | **Pn** | **20 18 16.6** | **+1.1** |
| **GRJI** | **Gresik** | **2.50** | **349** | P | | **Pn** | **20 18 18.9** | **+1.0** |
| GRJI | | | | S | | **Sn** | **20 18 45.6** | **-1.8** |
| **KMMI** | **Kalianget** | **2.53** | **23** | P | | **Pn** | **20 18 19.9** | **+1.7** |
| **SRBI** | **Singaraja** | **2.57** | **60** | P | | **Pn** | **20 18 20.0** | **+1.2** |
| **UGM** | **Wanagama** | **2.82** | **301** | P | | **Pn** | **20 18 22.4** | **+0.1** |
| **KPJI** | **Karang Pucung** | **4.48** | **297** | P | | **Pn** | **20 18 46.2** | **+1.4** |
| **WRA** | **Warramunga Arr** | **23.16** | **119** | P | | **P** | **20 22 38.3** | **-1.8** |
| | 0.5nm,0.9s,baz=296,slow=10,SNR=1.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.54** | **128** | P | | **P** | **20 22 51.4** | **-1.3** |
| | 0.5nm,0.8s,baz=311,slow=9.8,SNR=6.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.27** | **337** | P | | **P** | **20 27 54.3** | **+0.4** |
| | 0.4nm,0.5s,baz=151,slow=7.9,SNR=14 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.44** | **342** | P | | **P** | **20 28 27.1** | **-0.3** |
| | 0.3nm,0.4s,baz=134,slow=12,SNR=2.3 | | | | | | | |

*IDC* ***08*** *20:20:43.5±2.4, 43.˚31N×105.˚18W, h0km, mb2.6/1, mb1 3.6/3, mb1mx3.3/51, mbtmp3.4/3, ML2.7/1, Error ellipse: s-maj=45.8km s-min=9.8km az=154.0*
*NEIC* ***08*** *20:20:44.9±1.8, 43.˚68N±0.˚03×105.˚

LKWY IAML 20 22 54.9
comp=N,87nm,1.4s

LKWY IAML 20 23 07.6
comp=N,113nm,1.8s

**H17A Grant Village 3.96 283 Pn 20 21 46.5 +0.5**
H17A IAML 20 22 51.6
comp=E,55nm,1.9s

H17A IAML 20 23 02.4
comp=N,82nm,1.3s

**FLWY Flagg Ranch 4.00 278 Pn 20 21 46.7 0.0**
FLWY IAML 20 23 09.3
comp=N,108nm,2.4s

**MOOW Moose Ponds 4.03 274 Pn Pn 20 21 48.5 +1.5**
**YNR Norris Junctio 4.09 287 Pn Pn 20 21 49.7 +1.9**
YNR IAML 20 23 01.3
comp=E,46nm,2.4s

YNR IAML 20 23 16.0
comp=N,51nm,3.0s

**REDW Red Top Meadow 4.12 268 Pn 20 21 50.6 +2.4**
**O20A White River Ci 4.16 214 Pn 20 21 50.5 +1.7**
**TPAW Teton Pass 4.18 270 Pn 20 21 49.7 +0.6**
TPAW IAML 20 23 09.1
comp=N,43nm,1.9s

TPAW IAML 20 23 26.7
comp=N,90nm,1.6s

**YHH Holmes Hill 4.23 288 Pn Pn 20 21 50.7 +1.0**
YHH IAML 20 23 17.9
comp=E,42nm,2.5s

**YMR Madison River 4.28 286 Pn 20 21 51.9 +1.5**
YMR IAML 20 23 07.2
comp=E,84nm,1.3s

**AHID Auburn Hatcher 4.40 261 Pn 20 21 53.8 +1.8**
AHID IAML 20 23 08.1
comp=E,82nm,1.2s

AHID IAML 20 23 19.7
comp=E,66nm,1.1s

**RDMU Red Mountain 4.46 228 Pn 20 21 55.2 +2.3**
RDMU IAML 20 23 13.5
comp=E,66nm,1.2s

RDMU IAML 20 23 30.8
comp=N,51nm,1.4s

**ECR Eagle Creek 4.54 265 Pn 20 21 56.6 +2.7**
**QLMT Earthquake Lak 4.64 287 Pn 20 21 55.3 0.0**
**Q24A Divide 4.66 180 Pn 20 21 57.1 +1.5**
Q24A IAML 20 23 18.7
comp=E,38nm,1.1s

Q24A IAML 20 24 25.9
comp=N,29nm,4.0s

**DGMT Dagmar 4.90 8 Pn Pn 20 21 56.2 -2.6**
**BOZ Bozeman (W) 5.00 295 Pn 20 21 59.7 -0.5**
BOZ IAML 20 24 26.0
comp=N,29nm,4.7s

BOZ IAML 20 24 40.1
comp=N,26nm,4.8s

**EGMT Eagleton 5.43 326** Pn **Pn 20 22 03.0 -3.1**
**P18A Preston Nutter 5.50 225 Pn 20 22 07.0 -0.2**
**JLU Jordanelle 5.54 239 Pn 20 22 07.0 -0.8**
**HRY Holter Researc 5.61 306 Pn 20 22 09.7 +1.1**
**MCMT McKenzie Canyo 5.63 285 Pn 20 22 08.4 -0.6**
**PV07 Paradox Valley 5.80 208 Pn 20 22 10.2 -1.0**
**SDCO Great Sand Dun 5.88 182** Pn **Pn 20 22 11.5 -0.9**
**PV23 Carpenter Ridg 5.91 210 Pn 20 22 12.2 -0.7**
**NLU North Lily Min 6.31 237** Pn **Pn 20 22 18.0 -0.3**
**Q16A Castle Valley 6.50 226 Pn 20 22 21.3 +0.3**
**T25A Trinidad 6.50 174 Pn 20 22 22.5 +1.5**
**DUG Dugway, Tooele 6.63 242** Pn **Pn 20 22 22.3 -0.3**
**HLID Hailey 6.69 273 Pn 20 22 21.4 -2.1**
**MVCO Mesa Verde 6.88 203 Pn 20 22 27.8 +1.6**
**MSU Marysvale 7.34 228 Pn 20 22 31.6 -0.9**
**MTPU Mount Pierson 7.69 226 Pn 20 22 38.5 +1.1**
**ULM Lac du Bonnet 9.19 41** Pn **Pn 20 22 58.0 +0.4**
comp=N,1.3nm,0.3s,baz=235,slow=14,SNR=5.3
ULM Lg Lg 20 25 34.5
comp=N,0.2nm,0.3s,baz=331,slow=11,SNR=3.7

**I56US NEWPUT INFRAS 9.51 303** *i* 21 17 40.0
baz=124,slow=319,SNR=2.5

**YKA Yellowknife Ar 19.69 347** P **Pn 20 25 17.6 +1.9**
comp=N,0.1nm,0.3s,baz=158,slow=9.0,SNR=4.9

**IDC 08 20:37:30.1**±1.4,**1°19N**×**123°35E,h0**km,**mb3.1**/3,
**mb1 3.3**/3,**mb1mx3.2**/33,**mbtmp3.2**/3,**Error ellipse:**
**s-maj=250.3km s-min=15.6km az=63.0,Minahassa**
**Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.61** | **153** | P | P | 20 42 43.1 | +0.1 |
| | 0.3nm,0.5s,baz=329,slow=11,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **26.75** | **158** | P | P | 20 43 11.8 | 0.0 |
| | 0.2nm,0.5s,baz=347,slow=14,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.79** | **328** | P | P | 20 47 23.2 | -0.1 |
| | 0.1nm,0.3s,baz=126,slow=8.2,SNR=4.4 | | | | | | |

*IDC **08** 20:39:43.7±0.5,28°.37N×43°.82W,h0km,mb4.4/27,*
*mb1 4.6/27,mb1mx4.5/41,mbtmp4.4/27,MS4.3/60,*
*Ms1 4.3/60,ms1mx4.2/93,Error ellipse: s-maj=14.4km*
*s-min=12.5km az=165.0*
*BJI **08** 20:39:44.3±0.0,28°.06N×43°.33W,h12km,mb4.6/7,*
*Ms5.3/2,Ms7 5.2/1*
*NEIC **08** 20:39:45.6±1.7,28°.31N±0°.10×43°.8W±0°.1,h10km±1km,*
*mb5.0/206,Error ellipse: s-maj=16.2km s-min=15.4km*
*az=191.0*
*GCMT **08** 20:39:47.6±0.2,28°.53N±0°.03×43°.86W±0°.02,h16km±1km,*
*MW5.2/104,Moment Tension Solution. s26,c28;*
*s104,c140; Duration: 1s0 Moment tensor: Scale 10¹⁶*
*Nm; Mrr-5.31±.35; Mθθ1.03±.21; Mφφ4.28±.22;*
*Mrθ5.22±.91; Mrφ1.77±.14; Mθφ2.34±.53; Best double*
*couple: M○7.61400×10¹⁶ NP1:φs8.00000°,δ27.00000°,*
*λ-130.00000°. NP2:φs231.00000°,δ70.00000°,*
*λ-72.00000°. Principal axes: T 6.8670, Plg22.0000°,*
*Azm308.0000°; N 1.4940, Plg17.0000°, Azm45.0000°; P*
*-8.3610, Plg61.0000°, Azm168.0000°; nsta1 refers to*
*body waves, cutoff=40s. nsta2 refers to surface waves,*
*cutoff=50s. Triangular moment-rate function*
*MOS **08** 20:39:47.4±0.9,28°.90N×43°.52W,h10km,mb5.0/26 Error*
*ellipse: s-maj=25.5km s-min=7.2km az=49.9*
**ISC 08 20:39:45.8**±0.3,**28°.28N**±0°.06×**43°.82W**±0°.06,**h14**km,**n564,**
**σ0s95**/516,**mb5.0**/172,**MS4.3**/63,**36C-5D,Northern**
**Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SJG** | **San Juan** | **22.85** | **249** | LR | LR | 20 51 54.9 | |
| | comp=Z,351nm,21.4s,baz=80,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **24.53** | **202** | P | **P** | **20 45 06.5 +1.4** | |
| | 21nm,1.1s,baz=21,slow=7.7,SNR=2.3 | | | | | | |
| **BAUV** | **El Baul** | **29.84** | **235** | P | **P** | **20 45 51.8 -1.0** | |
| **SSPA** | **Standing Stone** | **30.49** | **303** | P | **P** | **20 45 58.5 +0.2** | |
| | baz=103 | | | | | | |
| **O56A** | **Blue Knob Stat** | **30.91** | **302** | P | **P** | **20 46 01.8 -0.4** | |
| | baz=102 | | | | | | |
| **SCHQ** | **Schefferville** | **31.34** | **334** | LR | LR | 20 58 56.7 | |
| | comp=Z,587nm,18.2s,baz=153,slow=37 | | | | | | |
| **SDV** | **Santo Domingo** | **31.78** | **238** | LR | LR | 20 57 42.9 | |
| | comp=Z,228nm,21.4s,baz=50,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **31.78** | **238** | *eP* | **P** | **20 46 13.4 +3.3** | |
| **SDV** | **Santo Domingo** | **31.78** | **238** | P | **P** | **20 46 07.5 -2.6** | |
| SDV | | | | IAmb | IAmb | 20 46 19.3 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **BLA** | **Blacksburg** | **31.89** | **296** | P | **P** | **20 46 09.7 -1.1** | |
| | baz=95 | | | | | | |
| **M54A** | **Oil Creek Stat** | **31.99** | **304** | P | **P** | **20 46 11.8 +0.2** | |
| | baz=103 | | | | | | |
| **SADO** | **Sadowa** | **32.50** | **310** | LR | LR | 20 57 05.4 | |
| | comp=Z,1μm,21.4s,baz=165,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **32.74** | **211** | LR | LR | 20 58 08.5 | |
| | comp=Z,217nm,18.9s,baz=26,slow=34 | | | | | | |
| **P52A** | **Corning** | **33.51** | **300** | P | **P** | **20 46 23.0 -1.8** | |
| | baz=98 | | | | | | |
| **MDT** | **Midelt** | **33.94** | **72** | LR | LR | 20 57 09.6 | |
| | comp=Z,836nm,19.5s,baz=316,slow=31 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.23** | **301** | P | **P** | **20 46 30.3 -0.8** | |
| | baz=98 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.50** | **293** | P | **P** | **20 46 34.8 +1.2** | |
| | comp=Z,8.6nm,1.1s,baz=122,slow=11,SNR=3.4 | | | | | | |
| TKL | | | | LR | LR | 20 58 06.8 | |
| | comp=Z,947nm,19.6s,baz=104,slow=32 | | | | | | |
| **ESDC** | **Sonseca Array** | **34.69** | **60** | P | **P** | **20 46 35.0 -0.2** | |
| | comp=Z,1.4nm,0.9s,baz=268,slow=9.4,SNR=4.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **34.69** | **60** | P | **P** | **20 46 33.5 -1.7** | |

**ZARC Zaragoza, Cauc 35.87 241 P P 20 46 44.8 -0.8**
**CLTN Cedars of Leba 36.58 293 P P 20 46 51.1 -0.3**
**ROSC El Rosal 37.18 237** LR LR 21 02 37.7
comp=Z,246nm,19.7s,baz=44,slow=37
**T47A Sharon Grove 37.21 295 P P 20 46 57.8 +1.1**
T47A IAmb IAmb 20 47 15.8
comp=Z,25nm,1.4s
**LRAL Lakeview Retre 37.25 288 P P 20 46 56.8 -0.3**
baz=86
**SFIN Lafayette 37.38 300 P P 20 46 57.8 -0.3**
**SFIN Lafayette 37.38 300 P P 20 46 57.9 -0.2**
baz=95
**WVT Waverly 37.80 293 P P 20 47 01.4 -0.3**
**WVT Waverly 37.80 293 P P 20 47 01.9 +0.2**
baz=89
**PLAL Pickwick Lake 38.03 292 P P 20 47 03.4 -0.3**
PLAL IAmb IAmb 20 47 23.4
comp=Z,38nm,1.5s
**OLIL Olney 38.04 298 P P 20 47 04.2 +0.4**
OLIL IAmb IAmb 20 47 11.2
comp=Z,51nm,1.4s
**Z47A Carrollton 38.14 289 P P 20 47 03.4 -1.2**
Z47A IAmb IAmb 20 47 08.1
comp=Z,29nm,0.8s
**FRB Frobisher Bay 38.88 343 P P 20 47 09.6 -0.9**
comp=Z,5.7nm,0.8s,baz=154,slow=8.4,SNR=15
FRB LR LR 21 01 52.9
comp=Z,331nm,21.7s,baz=174,slow=34
**S44A Carbondale 38.93 296 P P 20 47 08.7 -2.5**
**W45A Hickory Valley 38.93 292 P P 20 47 11.1 -0.2**
**SFJD Kangerlussuaq 38.96 356** LR LR 20 58 29.3
comp=Z,357nm,20.8s,baz=144,slow=29
**OXF Oxford 39.15 291 P P 20 47 13.8 +0.6**
baz=86
**NBLA Lagarto - SE 39.48 171** *eP* **P 20 47 14.7 -1.2**
**PBMO Poplar Bluff 39.88 294 P P 20 47 19.1 0.0**
PBMO IAmb IAmb 20 47 37.7
comp=Z,48nm,1.4s
**JFWS Jewell Farm 39.97 304 P P 20 47 19.4 -0.5**
baz=96
**N41A Harden Midland 40.26 301 P P 20 47 21.4 -0.9**
N41A IAmb IAmb 20 47 26.4
comp=Z,33nm,1.2s
**T42A Van Buren 40.40 295 P P 20 47 23.9 +0.4**
T42A IAmb IAmb 20 47 25.6
comp=Z,20nm,0.8s
**LCAR Lake Charles 40.49 293 P P 20 47 24.9 +0.7**
**CCM Cathedral Cave 40.51 296 P P 20 47 24.4 +0.1**
**CCM Cathedral Cave 40.51 296 P P 20 47 24.6 +0.2**
baz=89
**TBTG Tabatinga, AM 40.91 222 P P 20 47 27.8 0.0**
**ICESG Greenland Ices 40.91 2** *i* **P P 20 47 27.5 -0.2**
ICESG IAmb IAmb 20 47 29.2
comp=Z,27nm,1.1s
**P40A Paris 41.13 299 P P 20 47 29.4 -0.2**
**FCAR Ozark Folk Cen 41.28 293 P P 20 47 30.5 -0.3**
FCAR IAmb IAmb 20 47 48.6
comp=Z,38nm,1.5s
**MGMO Mountain Grove 41.34 295 P P 20 47 32.2 +0.9**
**W41B Gary Mavity, V 41.44 292 P P 20 47 31.2 -0.8**
W41B IAmb IAmb 20 47 39.2
comp=Z,46nm,1.5s
**W41B Gary Mavity, V 41.44 292 P P 20 47 31.7 -0.3**
baz=86
**WHAR Wooly Hollow 41.46 292 P P 20 47 32.4 +0.1**
**U40A Yellville 41.85 294 P P 20 47 35.2 -0.2**
**U40A Yellville 41.85 294 P P 20 47 35.1 -0.4**
baz=87,SNR=5.3
**GDU01 Guandu, BA 41.95 174** *eP* **P 20 47 36.9 +0.6**
**X40A Basin Creek Fa 41.97 291 P P 20 47 36.4 -0.1**
baz=84
**Z41A Richland Creek 42.08 289 P P 20 47 36.5 -0.8**
baz=83
**S39A Bolivar 42.16 296 P P 20 47 38.0 +0.1**
**P38A Dawn 42.28 299 P P 20 47 39.3 +0.4**
P38A IAmb IAmb 20 47 57.1
comp=Z,31nm,1.2s
**JTS Las Juntas de 42.49 253** LR LR 21 02 47.8
comp=Z,145nm,20.0s,baz=138,slow=33
**MIAR Mount Ida 42.58 291 P P 20 47 41.9 +0.5**
baz=84
**DBIC Dimbokro 42.64 113 P P 20 47 42.3 +0.2**
comp=Z,1.2nm,0.5s,baz=356,slow=5.6,SNR=1.8
DBIC LR LR 21 03 06.0
comp=Z,1μm,18.8s,baz=308,slow=33
**W39A Magazine 42.69 292 P P 20 47 42.3 0.0**
baz=85
**U38A Gravette 43.08 294 P P 20 47 45.3 -0.1**
**MEM Membach 43.46 45** *dP* **P 20 47 48.2 -0.1**
comp=Z,13nm,1.3s
**ETMB Extrema 43.63 213 P P 20 47 49.7 -0.3**
ETMB IAmb IAmb 20 47 57.2
comp=Z,40nm,1.3s
**BDFB Brasilia 43.85 186 P P 20 47 53.4 +1.5**
comp=Z,2.2nm,0.5s,baz=46,slow=3.2,SNR=4.2
BDFB LR LR 21 04 47.7
comp=Z,286nm,18.7s,baz=343,slow=34
**BDFB Brasilia 43.85 186 P P 20 47 50.6 -1.3**
**VILB Vilhena 43.95 203 P P 20 47 52.2 -0.4**
VILB IAmb IAmb 20 48 01.0
comp=Z,30nm,1.0s
**TUL1 Leonard 44.25 294 P P 20 47 53.5 -1.4**
TUL1 IAmb IAmb 20 48 02.6
comp=Z,31nm,1.1s
**TUL1 Leonard 44.25 294 P P 20 47 54.5 -0.4**
baz=84
**MTO3 Montecristo 44.36 262 P P 20 47 57.4 +1.2**
**SUMG Summit 44.44 2** *i* **P P 20 47 55.0 -1.3**
SUMG IAmb IAmb 20 47 57.9
comp=Z,23nm,1.0s
**SUMG Summit 44.44 2 P P 20 47 54.0 -2.3**
SUMG IAmb IAmb 20 48 03.9
comp=Z,23nm,1.2s
**BFO Black Forest 44.59 49 P P 20 47 57.0 -0.5**
**ECSD EROS Data Cent 44.66 305 P P 20 47 57.0 -1.1**
baz=92
**T35A Sooner Cattle 44.74 295 P P 20 47 58.5 -0.3**
T35A IAmb IAmb 20 48 00.1
comp=Z,29nm,0.9s
**ULM Lac du Bonnet 44.80 314 P P 20 47 57.9 -1.2**
comp=Z,4.2nm,0.8s,baz=68,slow=10,SNR=4.3
ULM LR LR 21 06 16.1
comp=Z,119nm,19.1s,baz=80,slow=36
**ULM Lac du Bonnet 44.80 314** IAmb IAmb 20 47 59.4
comp=Z,6.3nm,1.1s
**TORD Torodi Ar. Bea 44.88 100 P P 20 47 58.9 -1.2**
comp=Z,4.2nm,0.7s,baz=300,slow=8.8,SNR=30
**TORD Torodi Ar. Bea 44.88 100 P P 20 47 59.1 -1.0**
TORD IAmb IAmb 20 48 06.4
comp=Z,16nm,1.1s
**APG El Apazote 45.06 263** LR LR 21 03 26.3
comp=Z,320nm,22.0s,baz=10.0,slow=32
**TUE Stuetta 45.08 51 P P 20 48 01.4 -0.2**
TUE IAmb IAmb 20 48 10.4
comp=Z,37nm,1.3s
**HKT Hockley 45.15 285** *i* **P P 20 48 03.6 +1.5**
HKT pmax pmax
comp=Z,9.0nm,1.1s
**W35A Tecumseh 45.21 293 P P 20 48 02.0 -0.6**
W35A IAmb IAmb 20 48 20.6
comp=Z,16nm,1.0s
**KEST Kesra 45.23 67 P P 20 48 02.1 -0.7**
comp=Z,11nm,0.9s,baz=213,slow=7.3,SNR=7.2
**KEST Kesra 45.23 67** P **P 20 48 03.1 +0.3**
KEST IAmb IAmb 20 48 16.9
comp=Z,22nm,1.1s
**DAVA Damuels 45.51 50** *eP* **P 20 48 04.5 -0.5**
comp=Z,38nm,1.2s
**H10N2 ASCENSION HYDR 45.73 137** T T 21 36 35.5
baz=322,slow=75,SNR=734
**H10N3 ASCENSION HYDR 45.73 137** T T 21 36 35.6
baz=322,slow=75,SNR=783
**H10N1 ASCENSION HYDR 45.75 137** T T 21 36 47.1
baz=322,slow=75,SNR=764
**SALO Salr 45.84 53 P P 20 48 06.2 -1.3**
SALO IAmb IAmb 20 48 14.4
comp=Z,23nm,0.9s
**FCC Fort Churchill 45.89 326 P P 20 48 07.9 +0.4**
FCC IAmb IAmb 20 48 09.5
comp=Z,18nm,0.9s
**PTLB Pontes e Lacer 45.93 201 P P 20 48 08.8 +0.5**
**FETA Feichten 46.07 51** *eP* **P 20 48 10.2 +0.8**
comp=Z,23nm,1.3s
**RETA Reutte 46.13 50** *i* P **P 20 48 09.9 +0.1**
comp=Z,25nm,1.2s
**DIAM Diamantina, MG 46.30 180** *eP* **P 20 48 13.6 +2.2**

**OSSC Osservatorio P 46.30 56 P P 20 48 11.3 +0.2**
**MOTA Moosalm 46.35 50** *eP* **P 20 48 12.8 +1.3**
comp=Z,29nm,1.6s
**SQTA Sankt Quirin 46.41 50** *eP* **P 20 48 12.9 +0.8**
comp=Z,42nm,1.5s
**H10S3 ASCENSION HYDR 46.52 138** T T 21 37 50.9
baz=322,slow=74,SNR=799
**H10S2 ASCENSION HYDR 46.54 138** T T 21 38 02.4
baz=258,slow=74,SNR=358
**CTI Castel Tesino 46.65 52 P P 20 48 12.2 -1.7**
**WATA Walderalm 46.67 50** *eP* **P 20 48 14.7 +0.6**
comp=Z,47nm,1.8s
**WTTA Wattenberg 46.70 50** *eP* **P 20 48 13.8 -0.6**
comp=Z,34nm,1.5s
**JMIC Jan Mayen 47.06 15** LR LR 21 03 23.4
comp=Z,190nm,19.9s,baz=142,slow=30
**ABTA Abfaltersbach 47.28 51** *eP* **P 20 48 18.9 +0.1**
comp=Z,32nm,1.2s
**ABTX Abilene, Hawle 47.86 290 P P 20 48 22.8 -0.6**
**ABTX Abilene, Hawle 47.86 290 P P 20 48 23.1 -0.4**
baz=80
**KBA Koelnbreinsper 47.86 51** *eP* **P 20 48 23.5 +0.1**
comp=Z,13nm,1.1s
**CLL Collm 47.94 45** *eP* **P 20 48 23.0 -0.7**
**CMIG Matias Romero 48.11 268** LR LR 21 08 14.8
comp=Z,243nm,19.7s,baz=354,slow=36
**KHC Kasperske Hory 48.12 48** *eP* **P 20 48 25.5 +0.3**
KHC *e* 20 48 31.9
**KHC Kasperske Hory 48.12 48** *eP* **P 20 48 25.5 +0.3**
KHC *ex* x 20 48 31.9
**KHC Kasperske Hory 48.12 48 P P 20 48 25.3 +0.1**
KHC IAmb IAmb 20 48 33.1
comp=Z,22nm,1.3s
**GEC2 GERESS Array S 48.18 48 P P 20 48 25.3 -0.5**
**GERES GERESS Array B 48.18 48 P P 20 48 23.8 -2.0**
comp=Z,2.6nm,0.9s,baz=305,slow=4.7,SNR=6.1
**GERES GERESS Array B 48.18 48 P P 20 48 25.3 -0.5**
**JCT Junction City 48.41 287 P P 20 48 27.7 -0.1**
JCT IAmb IAmb 20 48 35.5
comp=Z,13nm,0.9s
**JCT Junction City 48.41 287 P P 20 48 27.6 -0.1**
baz=78
**BRG Berggiesshubel 48.49 46** *eP* P 20 48 34.9 +6.9
BRG Amp 20 48 36.7
comp=Z,27nm,1.8s
**BRG Berggiesshubel 48.49 46** *eP* P 20 48 34.9 +6.9
BRG pmax pmax
comp=Z,27nm,1.8s
**ATAH Atahualpa 48.51 229** LR LR 21 10 30.8
comp=Z,165nm,20.2s,baz=19,slow=38
**MOA Molln 48.51 50** *eP* **P 20 48 29.7 +1.5**
comp=Z,25nm,1.6s
**CKRC Cesky Krumlov 48.58 48** *eP* **P 20 48 29.1 +0.3**
CKRC *ex* x 20 48 35.2
**OBKA Obir 48.67 52** *eP* **P 20 48 29.6 0.0**
comp=Z,28nm,1.0s
**OGNE Ogallala 48.73 301 P P 20 48 28.9 -1.2**
baz=86
**PRU Pruhonice 48.80 47** *eP* **P 20 48 30.6 +0.2**
PRU *e* 20 48 37.1
**PRU Pruhonice 48.80 47** *eP* **P 20 48 30.6 +0.2**
PRU *ex* x 20 48 37.1
**NB2 NORSAR Subarra 48.87 32 P P 20 48 30.8 0.0**
comp=Z,58nm,2.0s,baz=253,slow=7.9
**NB2 NORSAR Subarra 48.87 32 P P 20 48 30.8 0.0**
baz=253,slow=7.9
**NOA NORSAR Array B 48.87 32 P P 20 48 30.5 -0.3**
comp=Z,2.1nm,0.8s,baz=253,slow=7.5,SNR=5.3
**SOKA Soboth 49.01 51** *eP* **P 20 48 32.6 +0.5**
comp=Z,21nm,1.5s
**VAE Valguarnera 49.08 64** LR LR 21 05 46.2
comp=Z,411nm,20.2s,baz=100,slow=32
**AMTX Amarillo 49.15 293 P P 20 48 34.3 +0.8**
AMTX IAmb IAmb 20 48 52.9
comp=Z,23nm,1.3s
**AMTX Amarillo 49.15 293 P P 20 48 33.1 -0.3**
baz=81
**FFC Flin Flon 49.17 319 P P 20 48 33.1 0.0**
**ARSA Arzberg 49.35 51** *eP* **P 20 48 34.4 -0.3**
comp=Z,21nm,1.2s
**NEEM North Greenlan 49.36 358** *i* P **P 20 48 35.1 +0.4**
NEEM IAmb IAmb 20 48 36.9
comp=Z,16nm,0.9s
**CONA Conrad Observa 49.59 50** *eP* **P 20 48 36.6 0.0**
comp=Z,18nm,1.9s
**TULEG Thule 49.80 353** *i* P **P 20 48 38.2 +0.6**
TULEG IAmb IAmb 20 48 38.7
comp=Z,13nm,0.9s
**TULEG Thule 49.80 353 P P 20 48 37.8 +0.2**
TULEG IAmb IAmb 20 48 40.0
comp=Z,13nm,0.9s
**CHVC Chvalec 49.81 46** *eP* **P 20 48 38.6 +0.5**
CHVC *ex* x 20 48 44.7
**AQDB Aquidauana 49.81 195 P P 20 48 39.4 +1.1**
**OSTC Ostas 49.91 46** *eP* **P 20 48 39.3 +0.4**
OSTC *ex* x 20 48 46.3
**DPC Dobruska-Polom 49.97 47** *eP* **P 20 48 40.1 +0.7**
**DPC Dobruska-Polom 49.97 47** *eP* **P 20 48 40.1 +0.7**
**KRUC Moravsky 49.97 48** *eP* **P 20 48 39.4 +0.1**
**KSP Ksiaz 49.97 46** *eP* **P 20 48 41.2 +1.9**
**DAG Danmarks Havn 50.02 7** *i* **P P 20 48 39.0 -0.3**
DAG IAmb IAmb 20 48 40.5
comp=Z,8.3nm,1.0s
**VRAC Vranov 50.10 48** *eP* **P 20 48 39.8 -0.6**
**LPAZ La Paz 50.17 211 P P 20 48 42.6 +0.7**
comp=Z,6.3nm,0.8s,baz=17,slow=7.8,SNR=11
LPAZ LR LR 21 08 49.8
comp=Z,181nm,19.7s,baz=38,slow=35
**LPAZ La Paz 50.17 211 P P 20 48 42.0 +0.1**
**MODS Modra-Piesok 50.54 49** *eP* **P 20 48 46.0 +2.3**
MODS *e* 20 48 52.1
**SMOL Smolenice 50.64 49** *eP* **P 20 48 44.7 +0.3**
**MPLH Magyarpolny 50.73 51 P P 20 48 49.7 +4.7**
**MORC Moravsky Berou 50.73 47** ⇑P **P 20 48 44.8 -0.4**
**MORC Moravsky Berou 50.73 47** ⇑P **P 20 48 44.8 -0.4**
**KOVH Kovagotottos 51.14 52 P P 20 48 48.0 -0.3**
**NNA Nana 51.23 223** LR LR 21 09 55.5
comp=Z,96nm,20.7s,baz=22,slow=35
**Q24A Divide 51.31 299 P P 20 48 51.0 +0.9**
Q24A IAmb IAmb 20 48 58.5
comp=Z,31nm,1.3s
**Q24A Divide 51.31 299 P P 20 48 49.3 -0.7**
baz=82,SNR=5.2
**MORH Mrgy, Hungar 51.51 52** ⇑P **P 20 48 50.9 -0.1**
**MORH Mrgy, Hungar 51.51 52 P P 20 48 50.6 -0.4**
**ISCO Idaho Springs 51.56 300 P P 20 48 50.7 -1.2**
baz=83
**VYHS Vyhne 51.58 49** *e* P 20 48 57.6 +6.1
**SDCO Great Sand Dun 51.76 297 P P 20 48 55.9 +2.5**
baz=81
**TX32 Lajitas Array 51.94 286 P P 20 48 54.2 -0.4**
**TXAR Lajitas Array 51.94 286 P P 20 48 53.2 -1.4**
comp=Z,1.3nm,0.8s,baz=96,slow=7.6,SNR=10
TXAR LR LR 21 11 25.9
comp=Z,191nm,18.6s,baz=79,slow=37
**TXAR Lajitas Array 51.94 286 P P 20 48 53.3 -1.3**
**TX31 Lajitas Ar. Si 51.94 286 P P 20 48 54.4 -0.2**
**OJC Ojcow 52.19 47** *eP* **P 20 48 56.4 +0.4**
**OJC Ojcow 52.19 47 P P 20 48 55.7 -0.3**
OJC IAmb IAmb 20 49 04.2
comp=Z,39nm,1.5s
**PSZ Piszkesteto 52.30 50** ⇑P P 20 49 03.7 +6.7
**PSZ Piszkesteto 52.30 50** ⇑P P 20 49 03.7 +6.7
**NIE Niedzica 52.53 48** *eP* **P 20 49 00.6 +2.1**
**S22A 4UR Ranch, Cre 52.80 298 P P 20 49 02.1 +1.0**
baz=80
**MNTX Cornudas Mount 52.81 290 P P 20 49 01.9 +0.9**
baz=77
**ANMO Albuquerque 53.01 294** LR LR 21 09 07.7
comp=Z,547nm,21.3s,baz=74,slow=33
**ANMO Albuquerque 53.01 294** *i* P **P 20 49 03.4 +0.9**
ANMO pmax pmax
comp=Z,11nm,1.5s
**ANMO Albuquerque 53.01 294 P P 20 49 02.1 -0.4**
ANMO IAmb IAmb 20 49 11.0
comp=Z,18nm,1.3s
**ANMO Albuquerque 53.01 294 P P 20 49 04.0 +1.5**
baz=79
**RES Resolute Bay 53.01 345 P P 20 49 00.9 -0.8**
comp=Z,9.4nm,1.0s,baz=121,slow=6.8,SNR=15
RES LR LR 21 09 30.0
comp=Z,324nm,21.7s,baz=90,slow=34
**RES Resolute Bay 53.01 345 P P 20 49 02.1 +0.4**
**BNM Barren Site 53.30 293 P P 20 49 03.9 -0.9**
**CRVS Cervenica-Dubn 53.31 48** *eP* **P 20 49 06.3 +2.0**

**LENM Lemitar 53.58 293** P **P** **20 49 09.3 +2.6**
**KBN Korca 53.59 59** P **P** **20 49 08.0 +1.4**
KBN IAmb IAmb 20 49 21.6
comp=Z,27nm,1.3s
**GO01 Chusmiza 53.61 210** P **P** **20 49 06.2 -1.1**
**BZS Buzias 53.62 52** ⇑P **P** **20 49 06.7 0.0**
**BZS Buzias 53.62 52** ⇑P **P** **20 49 06.7 0.0**
**RLMT Red Lodge 53.68 307** P **P** **20 49 06.6 -0.7**
baz=85
**EGMT Eagleton 53.79 311** P **P** **20 49 08.1 +0.2**
**EGMT Eagleton 53.79 311** P **P** **20 49 07.8 -0.2**
baz=86
**UZH Uzhgorod 53.87 49** *e*P **P** **20 49 10.0 +1.6**
UZH *i* 20 49 14.8
**PB11 IPOC Station P 53.90 211** P **P** **20 49 07.9 -1.1**
**PB08 IPOC Station P 54.01 210** P **P** **20 49 09.5 -0.7**
**TRPA Tarpa 54.06 49** ⇑P **P** **20 49 09.5 -0.3**
**TRPA Tarpa 54.06 49** P **P** **20 49 10.9 +1.1**
**PD31 Pinedale Array 54.15 304** P **P** **20 49 07.8 -3.0**
PD31 IAmb IAmb 20 49 12.4
comp=Z,11nm,0.8s
**PDAR Pinedale Array 54.15 304** P **P** **20 49 09.4 -1.4**
comp=Z,18nm,1.0s,baz=90,slow=8.9,SNR=28
PDAR LR LR 21 10 21.7
comp=Z,776nm,21.4s,baz=82,slow=34
**BW06 Boulder Array 54.15 304** P **P** **20 49 08.2 -2.7**
BW06 IAmb IAmb 20 49 11.9
comp=Z,15nm,0.9s
**BW06 Boulder Array 54.15 304** P **P** **20 49 10.3 -0.5**
baz=83,SNR=6.4
**MVCO Mesa Verde 54.20 297** P **P** **20 49 12.0 +0.7**
baz=79
**HERR Herculane 54.26 53** ⇑P **P** **20 49 08.9 -2.4**
**DRGR 54.28 51** ⇑P **P** **20 49 11.9 +0.4**
**DRGR 54.28 51** ⇑P **P** **20 49 11.9 +0.4**
**NOR Nord 54.43 5** *i* P **P** **20 49 12.0 0.0**
NOR IAmb IAmb 20 49 13.7
comp=Z,7.9nm,1.1s
**GZR Gura Zlata 54.46 53** ⇑P **P** **20 49 13.2 +0.4**
**GZR Gura Zlata 54.46 53** ⇑P **P** **20 49 13.2 +0.4**
**LKWY Lake 54.54 306** P **P** **20 49 15.7 +2.0**
LKWY IAmb IAmb 20 49 33.7
comp=Z,22nm,1.4s
**H17A Grant Village 54.68 306** P **P** **20 49 16.1 +1.4**
baz=83
**EUNU Eureka 54.76 352** P **P** **20 49 14.9 +0.4**
EUNU IAmb IAmb 20 49 33.5
comp=Z,13nm,1.2s
**LOHW Long Hollow 54.80 305** P **P** **20 49 14.1 -1.4**
LOHW IAmb IAmb 20 49 24.6
comp=Z,23nm,1.4s
**YHH Holmes Hill 54.83 307** P **P** **20 49 14.0 -1.9**
**MOOW Moose Ponds 54.88 305** P **P** **20 49 15.4 -0.7**
**YMR Madison River 54.93 307** P **P** **20 49 15.8 -0.7**
**LVV L'vov 54.94 47** *e*P **P** **20 49 17.8 +1.7**
LVV *e*S **S** **20 56 55.7 -1.7**
LVV pmax pmax
comp=Z,70nm,1.6s
**PB01 IPOC Station P 54.95 210** P **P** **20 49 15.5 -1.1**
**LIT Litokhoron 54.95 59** P **P** **20 49 17.4 +0.9**
LIT IAmb IAmb 20 49 28.8
comp=Z,15nm,1.4s
**REDW Red Top Meadow 55.01 305** P **P** **20 49 16.4 -0.7**
**TPAW Teton Pass 55.06 305** P **P** **20 49 15.2 -2.3**
TPAW IAmb IAmb 20 49 18.1
comp=Z,12nm,0.9s
**VTS Vitosha 55.12 56** ⇑P **P** **20 49 18.5 +0.7**
**VTS Vitosha 55.12 56** ⇑P **P** **20 49 18.5 +0.7**
**VTS Vitosha 55.12 56** P **P** **20 49 18.3 +0.5**
VTS IAmb IAmb 20 49 25.4
comp=Z,15nm,1.3s
**AHID Auburn Hatcher 55.27 304** P **P** **20 49 18.1 -0.8**
AHID IAmb IAmb 20 49 37.6
comp=Z,14nm,0.9s
**BOZ Bozeman (W) 55.29 308** P **P** **20 49 18.6 -0.4**
baz=83
**ARCR ARCALIA 55.37 50** ⇑P **P** **20 49 19.6 +0.3**
**ECR Eagle Creek 55.43 305** P **P** **20 49 20.2 +0.1**
**SRU San Rafael Swe 55.43 300** P **P** **20 49 20.9 +0.8**
SRU IAmb IAmb 20 49 22.2
comp=Z,14nm,0.7s
**W18A Petrified Fore 55.60 295** P **P** **20 49 21.8 +0.4**
W18A IAmb IAmb 20 49 40.3
comp=Z,12nm,1.1s
**W18A Petrified Fore 55.60 295** P **P** **20 49 22.5 +1.0**
baz=77
**ARR Arges 55.76 52** ⇑P **P** **20 49 23.0 +0.8**
**VLAD Vladila 55.78 54** ⇓P **P** **20 49 23.1 +0.8**
**EDM Edmonton 55.80 317** P **P** **20 49 21.6 -0.8**
EDM IAmb IAmb 20 49 23.2
comp=Z,19nm,1.0s
**CPUP Villa Florida 55.83 195** LR LR 21 11 10.7
comp=Z,127nm,20.8s,baz=18,slow=34
**CPUP Villa Florida 55.83 195** P **P** **20 49 22.3 -0.4**
**LRM Limekiln Ridge 55.83 308** P **P** **20 49 22.7 -0.3**
**JLU Jordanelle 55.87 302** P **P** **20 49 22.6 -0.8**
JLU IAmb IAmb 20 49 30.5
comp=Z,18nm,1.2s
**BUR08 Bucovina Ar. S 55.89 50** P **P** **20 49 24.2 +1.0**
**BURAR Bucovina Array 55.90 50** ⇑P **P** **20 49 24.5 +1.2**
**BURAR Bucovina Array 55.90 50** ⇑P **P** **20 49 24.5 +1.2**
**BURAR Bucovina Array 55.90 50** P **P** **20 49 23.7 +0.4**
BURAR IAmb IAmb 20 49 32.3
comp=Z,17nm,1.1s
**ISAL Salakas 55.96 40** *e*P **P** **20 49 24.0 +0.6**
**FINES FINESS Array B 56.01 33** P **P** **20 49 22.9 -0.7**
comp=Z,5.7nm,0.7s,baz=224,slow=5.3,SNR=12
**FINES FINESS Array B 56.01 33** P **P** **20 49 23.4 -0.2**
**IIGN Ignalina 56.02 40** *e*P **P** **20 49 24.6 +0.7**
**VOIR 56.04 52** ⇑P **P** **20 49 24.7 +0.4**
**VOIR 56.04 52** ⇑P **P** **20 49 24.7 +0.4**
**LVC Limon Verde 56.09 208** LR LR 21 13 16.6
comp=Z,122nm,18.4s,baz=359,slow=36
**LVC Limon Verde 56.09 208** P **P** **20 49 24.2 -0.9**
LVC IAmb IAmb 20 49 34.2
comp=Z,18nm,1.1s
**HUMR Humele 56.11 53** ⇓P **P** **20 49 24.7 0.0**
**DOPR Dopca 56.21 52** ⇑P **P** **20 49 25.6 +0.2**
**MCMT McKenzie Canyo 56.24 307** P **P** **20 49 24.2 -1.7**
**VSU Vasula 56.27 37** *i* P **P** **20 49 25.8 +0.3**
VSU pmax pmax
comp=Z,46nm,0.9s
**VSU Vasula 56.27 37** *e*P **P** **20 49 25.9 +0.3**
**IDID Didziasalis 56.32 40** *e*P **P** **20 49 26.2 +0.3**
**NACGM Naroch 56.36 41** *i* P **P** **20 49 26.0 -0.3**
**NLU North Lily Min 56.45 301** P **P** **20 49 27.3 -0.2**
NLU IAmb IAmb 20 49 35.1
comp=Z,30nm,1.5s
**WALA Waterton Lakes 56.46 312** P **P** **20 49 26.4 -0.8**
WALA IAmb IAmb 20 49 28.0
comp=Z,13nm,1.0s
**YKA Yellowknife Ar 56.48 328** P **P** **20 49 26.6 -0.4**
comp=Z,6.3nm,0.8s,baz=91,slow=7.5,SNR=84
YKA LR LR 21 13 18.9
comp=Z,990nm,19.2s,baz=74,slow=36
**YKA Yellowknife Ar 56.48 328** P **P** **20 49 26.2 -0.8**
**ARCES ARCESS Array B 56.58 23** P **P** **20 49 27.2 -0.5**
comp=Z,6.7nm,0.9s,baz=256,slow=4.9,SNR=6.0
**ARCES ARCESS Array B 56.58 23** P **P** **20 49 26.6 -1.0**
**PRAR RASCA 56.61 50** ⇑P **P** **20 49 28.7 +0.5**
**HVU Hansel Valley 56.65 303** P **P** **20 49 28.9 0.0**
**MLR Muntele Rosu 56.66 52** ⇑P **P** **20 49 29.3 +0.5**
**MLR Muntele Rosu 56.66 52** LR LR 21 12 38.0
comp=Z,282nm,18.9s,baz=280,slow=35
**MLR Muntele Rosu 56.66 52** ⇑P **P** **20 49 29.3 +0.5**
**MLR Muntele Rosu 56.66 52** P **P** **20 49 29.3 +0.5**
**MSO Missoula 56.73 309** P **P** **20 49 29.6 +0.4**
**COVR Voineasa-Covas 56.79 52** ⇑P **P** **20 49 28.3 -1.3**
**MSU Marysvale 56.81 299** P **P** **20 49 30.2 +0.1**
**WUAZ Wupatki 56.82 296** P **P** **20 49 29.5 -0.6**
WUAZ IAmb IAmb 20 49 48.6
comp=Z,21nm,1.4s
**WUAZ Wupatki 56.82 296** P **P** **20 49 31.5 +1.4**
baz=77
**DUG Dugway, Tooele 56.97 301** P **P** **20 49 31.6 +0.5**
DUG IAmb IAmb 20 49 34.4
comp=Z,19nm,1.2s
**DUG Dugway, Tooele 56.97 301** P **P** **20 49 31.8 +0.8**
baz=79,SNR=9.2
**MNK Minsk 57.02 41** *i* P **P** **20 49 30.6 -0.4**
MNK *i* 20 50 25.7
MNK *i* 20 51 37.2
MNK *i* PPP PPP 20 52 52.8
MNK *i* S **S** **20 57 24.6 -0.3**
MNK *i* 20 59 20.0
MNK pmax pmax
comp=N,15nm,1.0s
MNK pmax pmax
comp=Z,40nm,0.9s
MNK pmax pmax
comp=E,3.0nm,1.0s
MNK MLR MLR
comp=E,13nm,9.0s
MNK MLR MLR
comp=N,67nm,10.0s
MNK MLR MLR
comp=Z,110nm,9.0s
**MNK Minsk 57.02 41** *i* P **P** **20 49 30.6 -0.3**
comp=E,3.0nm,1.0s
MNK *i* P **P** **20 49 30.6 -0.3**
comp=N,15nm,1.0s
MNK *i* P **P** **20 49 30.6 -0.3**
comp=Z,40nm,0.8s,baz=94
MNK *i* PcP **PcP** **20 50 25.7 -0.2**
MNK *i* PP **PP** **20 51 37.2 -0.2**
MNK *i* PPP PPP 20 52 52.9
MNK *i* S **S** **20 57 24.6 -0.2**
MNK *i* SS **SS** **21 01 15.3 +2.2**
MNK *i* SSS SSS 21 03 36.8
MNK *i* LR LR 21 13 36.6
MNK *i* LRM MLR 21 16 59.7
comp=E,13nm,9.1s
MNK *i* LRM MLR 21 17 01.1
comp=N,67nm,9.5s
MNK *i* LRM MLR 21 17 03.3
comp=Z,110nm,9.1s
**PLOR Plostina 57.10 52** ⇑P **P** **20 49 31.7 0.0**
**PLOR Plostina 57.10 52** ⇑P **P** **20 49 31.7 0.0**
**TUC Tucson 57.12 292** P **P** **20 49 32.3 +0.1**
**TUC Tucson 57.12 292** P **P** **20 49 33.6 +1.4**
baz=75
**X16A Lo Mia Camp, P 57.13 294** P **P** **20 49 33.4 +1.1**
**VRI Vrincioaia 57.15 52** ⇑P **P** **20 49 31.1 -1.0**
**VRI Vrincioaia 57.15 52** ⇑P **P** **20 49 31.1 -1.0**
**U15A North Rim 57.34 297** P **P** **20 49 34.1 +0.2**
U15A IAmb IAmb 20 50 02.4
comp=Z,15nm,1.5s
**ALN Alexandroupoli 57.48 58** P **P** **20 49 33.3 -1.1**
ALN IAmb IAmb 20 49 42.0
comp=Z,16nm,1.4s
**HLID Hailey 57.54 306** P **P** **20 49 34.1 -1.0**
**HLID Hailey 57.54 306** P **P** **20 49 35.5 +0.4**
baz=80
**IDI Anoyia 57.79 64** LR LR 21 13 31.9
comp=Z,78nm,20.4s,baz=317,slow=35
**CCUT Cedar City 57.93 298** P **P** **20 49 38.0 0.0**
**SORM Soroca 57.94 49** ⇓P **P** **20 49 36.0 -1.5**
**SORM Soroca 57.94 49** ⇓P **P** **20 49 36.0 -1.5**
**AKASG Malin Array Be 58.17 46** P **P** **20 49 38.9 -0.3**
comp=Z,13nm,0.8s,baz=276,slow=6.1,SNR=74
AKASG LR LR 21 12 58.4
comp=Z,213nm,18.2s,baz=267,slow=34
**AKASG Malin Array Be 58.17 46** *i* P **P** **20 49 38.9 -0.3**
AKASG pmax pmax
comp=Z,14nm,0.8s
**AKASG Malin Array Be 58.17 46** P **P** **20 49 38.1 -1.0**
**AKBB Malin Array Si 58.17 46** *i* P **P** **20 49 38.9 -0.3**
**AKBB Malin Array Si 58.17 46** P **P** **20 49 38.1 -1.0**
AKBB IAmb IAmb 20 49 46.2
comp=Z,20nm,1.0s
**SPR3 Spring Creek 3 58.35 300** P **P** **20 49 41.7 +0.6**
SPR3 IAmb IAmb 20 49 43.5
comp=Z,11nm,0.9s
**PLID Pearl Lake 58.41 308** P **P** **20 49 41.6 +0.3**
PLID IAmb IAmb 20 49 42.6
comp=Z,11nm,0.9s
**MILM Milestii Mici 58.42 50** ⇑P **P** **20 49 40.2 -0.7**
**MILM Milestii Mici 58.42 50** ⇑P **P** **20 49 40.2 -0.7**
**Y14A Wickenburg 58.50 294** P **P** **20 49 42.5 +0.6**
Y14A IAmb IAmb 20 49 50.8
comp=Z,15nm,1.3s
**MFID Camas Ranch 58.58 306** P **P** **20 49 42.1 -0.2**
MFID IAmb IAmb 20 49 49.7
comp=Z,29nm,1.5s
**NEW Newport 58.67 311** LR LR 21 13 08.0
comp=Z,579nm,20.7s,baz=84,slow=34
**NEW Newport 58.67 311** P **P** **20 49 42.9 +0.2**
NEW IAmb IAmb 20 49 44.0
comp=Z,16nm,0.9s
**NEW Newport 58.67 311** P **P** **20 49 43.0 +0.2**
baz=81,SNR=14
**ELK Elko 58.67 303** LR LR 21 14 51.9
comp=Z,408nm,18.2s,baz=78,slow=36
**ELK Elko 58.67 303** P **P** **20 49 43.0 -0.2**
ELK IAmb IAmb 20 49 50.4
comp=Z,15nm,1.4s
**214A Organ Pipe Nat 58.87 292** P **P** **20 49 45.5 +1.1**
214A IAmb IAmb 20 50 04.2
comp=Z,25nm,1.5s
**214A Organ Pipe Nat 58.87 292** P **P** **20 49 45.7 +1.3**
baz=74
**ITQB Itaqui 58.91 193** P **P** **20 49 43.2 -1.2**
**W13A Hualapai Mount 58.91 296** P **P** **20 49 45.6 +0.7**
**F10A Beach Ranch, E 59.11 309** P **P** **20 49 45.3 -0.6**
**PRN Pahroc Range 59.27 299** P **P** **20 49 46.6 -0.6**
**BMO Blue Mountains 59.36 308** P **P** **20 49 47.3 -0.4**
**113A Mohawk Valley, 59.43 293** P **P** **20 49 49.1 +0.9**
113A IAmb IAmb 20 49 56.1
comp=Z,9.3nm,1.2s
**R11A Troy Canyon, C 59.46 300** P **P** **20 49 48.4 -0.2**
R11A IAmb IAmb 20 49 56.0
comp=Z,11nm,1.4s
**R11A Troy Canyon, C 59.46 300** P **P** **20 49 49.1 +0.6**
baz=76,SNR=6.3
**C09A Chrisman Ranch 59.51 311** P **P** **20 49 46.4 -2.1**
**E09A Wood Farm, Sta 59.64 310** P **P** **20 49 47.4 -2.1**
**BLYC Blythe 59.77 294** P **P** **20 49 49.9 -0.7**
BLYC IAmb IAmb 20 49 58.7
comp=Z,13nm,1.5s
**D08A Wollman Farm, 60.07 310** P **P** **20 49 52.4 0.0**
D08A IAmb IAmb 20 49 53.6
comp=Z,13nm,0.8s
**IRM Iron Mountain 60.16 295** P **P** **20 49 54.7 +1.4**
baz=74
**BMN Battle Mountai 60.21 303** P **P** **20 49 53.4 -0.3**
**E08A Dider Farm, El 60.27 310** P **P** **20 49 52.6 -1.1**
E08A IAmb IAmb 20 50 16.7
comp=Z,11nm,1.2s
**TPNV Topopah Spring 60.31 298** P **P** **20 49 54.2 -0.1**
**TPNV Topopah Spring 60.31 298** P **P** **20 49 55.7 +1.3**
baz=75
**GMRC Granite Mounta 60.40 296** P **P** **20 49 55.6 +0.5**
baz=74
**C36M Paulatuk 60.42 336** P **P** **20 49 54.2 -0.1**
baz=88
**G08A Pilot Rock 60.43 308** P **P** **20 49 54.2 -0.9**
**J08A Circle Bar Ran 60.48 306** P **P** **20 49 52.7 -2.7**
J08A IAmb IAmb 20 50 03.0
comp=Z,14nm,1.1s
**HAWA Hanford 60.61 310** P **P** **20 49 54.2 -1.9**
HAWA IAmb IAmb 20 49 57.9
comp=Z,10nm,0.7s
**A36M Sachs Harbour 60.73 339** P **P** **20 49 57.0 +0.5**
A36M IAmb IAmb 20 49 58.9
comp=Z,9.7nm,0.8s
**A36M Sachs Harbour 60.73 339** P **P** **20 49 57.2 +0.7**
baz=88,SNR=7.8
**TPH Tonopah 60.77 300** P **P** **20 49 55.6 -2.0**
**E07A Sunnyside 60.79 310** P **P** **20 49 56.9 -0.5**
E07A IAmb IAmb 20 49 59.2
comp=Z,10nm,0.7s
**WVOR Wild Horse Val 60.80 305** P **P** **20 49 57.4 -0.3**
WVOR IAmb IAmb 20 50 05.0
comp=Z,9.0nm,1.1s
**F07A Phinny Hill Vi 60.97 309** P **P** **20 49 57.4 -1.2**
F07A IAmb IAmb 20 50 01.5
comp=Z,15nm,1.1s
**GRAC Grapevine Rang 61.16 299** P **P** **20 49 59.6 -0.5**
**KVN Kaiserville 61.20 301** P **P** **20 50 00.6 +0.1**
KVN IAmb IAmb 20 50 07.5
comp=Z,12nm,1.3s
**LTY Liberty 61.20 311** P **P** **20 49 59.0 -1.3**
LTY IAmb IAmb 20 50 08.6
comp=Z,15nm,1.2s
**YUH Yuha Desert 61.20 294** P **P** **20 50 01.1 +0.7**
YUH IAmb IAmb 20 50 04.1
comp=Z,14nm,1.4s
**C06D Leavenworth 61.22 312** P **P** **20 50 00.1 -0.2**
baz=79
**LCH Last Change Ra 61.31 299** P **P** **20 50 02.2 +1.0**
**RMX La Rumorosa 61.34 294** P **P** **20 50 01.8 +0.3**
RMX IAmb IAmb 20 50 25.2
comp=Z,22nm,1.3s
**LLLB Lillooet 61.35 315** P **P** **20 49 59.7 -1.4**
LLLB IAmb IAmb 20 50 21.8
comp=Z,24nm,1.5s
**IKP In-Ko-Pah, Jac 61.35 294** P **P** **20 50 02.0 +0.6**
baz=73
**TPFO Pinon Flats 61.36 295** P **P** **20 50 02.8 +1.2**
baz=74
**ELL Elmali 61.36 61** P **P** **20 50 00.1 -1.4**
**PFO Pinyon Flats O 61.36 295** LR LR 21 16 11.5
comp=Z,278nm,18.7s,baz=93,slow=36
**PFO Pinyon Flats O 61.36 295** P **P** **20 49 58.2 -3.4**
**NV11 Mina Array Sit 61.40 301** P **P** **20 50 00.1 -1.7**
NV11 IAmb IAmb 20 50 20.6
comp=Z,10nm,1.4s
**MPMC Manual Prospec 61.50 298** P **P** **20 50 03.8 +1.2**
baz=74
**NVAR Mina Array Bea 61.51 301** P **P** **20 50 03.0 +0.4**
comp=Z,2.4nm,0.7s,baz=77,slow=6.7,SNR=16
NVAR LR LR 21 16 25.0
comp=Z,597nm,18.5s,baz=98,slow=36
**NVAR Mina Array Bea 61.51 301** P **P** **20 50 01.7 -0.9**
**MONP2 Monument Peak 61.54 294** P **P** **20 50 03.9 +1.1**
baz=73
**RYN Ryan 61.62 301** P **P** **20 50 03.7 +0.3**
RYN IAmb IAmb 20 50 10.3
comp=Z,9.9nm,1.2s
**LHV Little Huntoon 61.71 300** P **P** **20 50 03.8 +0.1**
**OBN Obninsk 61.94 40** LR LR 21 14 54.4
comp=Z,34nm,19.0s,baz=270,slow=34
**OBN Obninsk 61.94 40**⇑ *e*P **P** **20 50 05.2 +0.3**
OBN *e* 20 50 50.1
OBN *e* 20 52 18.4
OBN *e*S S 20 58 15.1 -13
OBN pmax pmax
comp=Z,32nm,1.2s
**OBN Obninsk 61.94 40** P **P** **20 50 04.8 0.0**
**B05A Bryant 61.94 312** P **P** **20 50 03.5 -1.5**
baz=78
**PAHR Pah Rah Range 62.00 302** P **P** **20 50 05.5 -0.3**
**F05D White Salmon 62.02 309** P **P** **20 50 05.8 +0.1**
baz=77
**G05D Wamic, OR 62.07 309** P **P** **20 50 06.7 +0.7**
baz=77
**MOD Modoc Plateau 62.13 305** P **P** **20 50 07.3 +0.6**
MOD IAmb IAmb 20 50 08.4
comp=Z,8.8nm,0.9s
**EDW2 Edwards Air Fo 62.22 297** P **P** **20 50 08.2 +0.9**
baz=73
**HOOD Mount Hood Mea 62.28 309** P **P** **20 50 06.7 -0.9**
**I05D Terrebonne, OR 62.29 308** P **P** **20 50 07.3 -0.2**
baz=76
**VCNR Virginia City 62.30 302** P **P** **20 50 05.7 -2.2**
**K05A Summer Lake 62.35 306** P **P** **20 50 08.3 +0.1**
**ISA Isabella, Lake 62.38 298** P **P** **20 50 09.4 +1.0**
baz=74
**J05D Fort Rock, OR 62.46 307** P **P** **20 50 09.6 +0.7**
baz=76
**KLMR Klimovskoe 62.54 33** *e*P **P** **20 50 07.9 -0.9**
KLMR pmax pmax
comp=Z,31nm,1.5s
**KLMR Klimovskoe 62.54 33** *e*P **P** **20 50 07.9 -0.9**
KLMR AMP 20 50 16.0
comp=Z,31nm,1.5s
**H04A Detroit Lake 62.80 308** P **P** **20 50 11.3 +0.4**
**K04D Chiloquin, OR 62.99 306** P **P** **20 50 13.0 +0.6**
baz=75
**I04A Tendick Farm, 63.17 307** P **P** **20 50 13.4 0.0**
baz=76
**CMB Columbia Colle 63.20 301** P **P** **20 50 14.2 +0.5**
**H04D Lebanon 63.22 308** P **P** **20 50 13.8 +0.1**
baz=78
**M04C Macdoel 63.27 305** P **P** **20 50 14.7 +0.4**
M04C IAmb IAmb 20 50 20.2
comp=Z,8.9nm,0.8s
**BR131 Keskin Array S 63.40 57** *i* P **P** **20 50 15.5 +0.4**
**BR131 Keskin Array S 63.40 57** P **P** **20 50 14.2 -0.9**
**BRTR Keskin Array B 63.40 57** P **P** **20 50 15.8 +0.6**
comp=Z,4.0nm,0.8s,baz=272,slow=5.1,SNR=23
BRTR LR LR 21 15 09.2
comp=Z,148nm,20.6s,baz=310,slow=34
**BRTR Keskin Array B 63.40 57** P **P** **20 50 14.2 -0.9**
**L04D Klamath Falls 63.49 306** P **P** **20 50 15.3 -0.4**
baz=75
**ORV Oroville 63.62 303** P **P** **20 50 15.8 -0.6**
**PKM Mcpherson Peak 63.65 297** P **P** **20 50 17.1 +0.2**
baz=73
**LPSR Galich'ya Gora 63.80 42** *e*P **P** **20 50 17.2 -0.2**
LPSR pmax pmax
comp=Z,30nm,0.9s
**YBH Yreka Blue Hor 63.91 305** LR LR 21 18 29.1
comp=Z,310nm,18.1s,baz=124,slow=36
**INK Inuvik 63.95 336** LR LR 21 17 24.7
comp=Z,359nm,18.1s,baz=60,slow=35
**INK Inuvik 63.95 336** P **P** **20 50 17.5 -0.5**
INK IAmb IAmb 20 50 24.6
comp=Z,16nm,1.2s
**INK Inuvik 63.95 336** P **P** **20 50 17.9 -0.1**
baz=79,SNR=8.4
**ZON Zonda 64.04 204** P **P** **20 50 18.5 -0.6**
ZON IAmb IAmb 20 50 26.8
comp=Z,13nm,1.2s
**N02D Trinity Center 64.11 304** P **P** **20 50 19.5 -0.3**
baz=74
**MMPY Sheldon Lake, 64.14 329** P **P** **20 50 20.3 +0.7**
baz=78
**VORR Voronezh 64.18 43** *e*P **P** **20 50 19.6 -0.3**
VORR pmax pmax
comp=Z,20nm,0.3s
**VSR Storozhevoye 64.27 44** *e*P **P** **20 50 20.1 -0.3**
VSR pmax pmax
comp=Z,20nm,1.2s
**K02D Willamette Mer 64.34 306** P **P** **20 50 20.8 -0.4**
baz=74
**DLBC Dease Lake 64.44 324** LR LR 21 17 30.3
comp=Z,305nm,19.8s,baz=88,slow=35
**BBB Bella Bella 64.83 317** LR LR 21 17 06.7
comp=Z,353nm,20.6s,baz=72,slow=35
**FARO Faro, Yukon 65.18 329** P **P** **20 50 25.9 -0.3**
baz=76,SNR=8.5
**PRGR Permogore 65.28 32** *e*P **P** **20 50 25.5 -1.3**
PRGR pmax pmax
comp=Z,12nm,0.8s
**BNN Bunyan 65.29 58** P **P** **20 50 28.1 +0.6**
**P33M Teslin, Yukon 65.41 327** P **P** **20 50 28.0 +0.2**
baz=76
**M31M Drury Creek, Y 65.66 329** P **P** **20 50 29.6 +0.3**
**M31M Drury Creek, Y 65.66 329** P **P** **20 50 29.6 +0.3**
baz=75,SNR=5.9
**VRH Novokhopyorsk 65.82 43** *e*P **P** **20 50 30.2 -0.4**
VRH pmax pmax
comp=Z,20nm,0.8s
**N31M Braeburn, Yuko 66.48 328** P **P** **20 50 34.5 -0.2**
**N31M Braeburn, Yuko 66.48 328** P **P** **20 50 34.8 +0.1**
baz=74,SNR=7.2
**MMAI Mount Meron Ar 66.78 64** LR LR 21 17 58.8
comp=Z,99nm,20.2s,baz=86,slow=34
**DAWY Dawson 67.31 332** P **P** **20 50 39.8 -0.2**
DAWY IAmb IAmb 20 50 47.5
comp=Z,11nm,1.0s
**DAWY Dawson 67.31 332** P **P** **20 50 40.1 +0.1**
baz=72,SNR=7.7
**HYT Haines Junctio 67.47 328** P **P** **20 50 40.6 -0.5**
baz=72
**EGAK Eagle 67.81 333** P **P** **20 50 42.2 -0.9**
baz=71
**YUK6 Outpost Mounta 67.84 328** P **P** **20 50 43.0 -0.5**
baz=72
**YUK4 Talbot Arm 67.84 329** P **P** **20 50 43.0 -0.5**
baz=72
**BMAR Burnt Mountain 68.21 336** P **P** **20 50 46.3 +0.8**
**BVCY Beaver Creek 68.48 330** P **P** **20 50 47.3 0.0**
baz=70
**YUK3 Moose Creek 68.52 330** P **P** **20 50 47.6 -0.2**
baz=70
**KIV Kislovodsk 68.60 51** *e*P **P** **20 50 49.0 +0.5**
KIV pmax pmax
comp=Z,18nm,1.1s
**KIV Kislovodsk 68.60 51** P **P** **20 50 48.1 -0.4**
**SHA1 Shidzhatmaz 68.65 51** *i* P **P** **20 50 49.3 +0.3**
**BCAR Beaver Creek A 68.66 331** P **P** **20 50 48.4 0.0**
**L27K Beaver Creek, 68.68 331** P **P** **20 50 48.1 -0.4**
baz=70

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ML02 | Panimavida | 68.81 | 204 | P | | P | 20 50 47.7 | -1.8 |
| KBZ | Khabaz | 68.82 | 51 | P | | P | 20 50 50.8 | +1.1 |
| | comp=Z,7.0nm,0.9s,baz=271,slow=4.4,SNR=16 | | | | | | | |
| KBZ | Khabaz | 68.82 | 51 | *i* P | | P | 20 50 50.4 | +0.7 |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| NEY | Neytrino | 68.86 | 51 | *i* P | | P | 20 50 50.6 | +0.4 |
| NEY | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | | |
| J26L | Joseph Creek | 68.88 | 333 | P | | P | 20 50 48.7 | -1.2 |
| J26L | | | | IAmb | | IAmb | 20 50 56.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| J26L | Joseph Creek | 68.88 | 333 | P | | P | 20 50 49.1 | -0.7 |
| | baz=69 | | | | | | | |
| M27K | Edge Creek, AK | 68.94 | 330 | P | | P | 20 50 47.9 | -2.4 |
| M27K | | | | IAmb | | IAmb | 20 50 57.3 | |
| | comp=Z,20nm,1.3s | | | | | | | |
| M27K | Edge Creek, AK | 68.94 | 330 | P | | P | 20 50 49.5 | -0.8 |
| | baz=69 | | | | | | | |
| BELG | Belogornoye | 68.97 | 41 | LR | | LR | 21 17 09.0 | |
| | comp=Z,214nm,21.9s,baz=307,slow=33 | | | | | | | |
| BELG | Belogornoye | 68.97 | 41 | *i* P | | P | 20 50 51.3 | +0.9 |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| SCRK | Sand Creek | 69.25 | 332 | P | | P | 20 50 52.0 | -0.2 |
| | baz=68 | | | | | | | |
| L26K | Log Cabin Wild | 69.34 | 331 | P | | P | 20 50 52.9 | +0.3 |
| | baz=68 | | | | | | | |
| NCK | Nalchik | 69.38 | 51 | *c*eP | | P | 20 50 54.3 | +1.1 |
| NCK | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| M26K | Nabesna, AK | 69.42 | 331 | P | | P | 20 50 52.6 | -0.6 |
| | baz=68 | | | | | | | |
| TOLK | Toolik Lake Re | 69.46 | 338 | P | | P | 20 50 54.1 | +0.8 |
| TOLK | | | | IAmb | | IAmb | 20 51 13.9 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| TOLK | Toolik Lake Re | 69.46 | 338 | P | | P | 20 50 54.0 | +0.7 |
| | baz=65 | | | | | | | |
| MARD | Mardin | 69.47 | 58 | P | | P | 20 50 54.7 | +0.6 |
| MARD | | | | IAmb | | IAmb | 20 51 01.8 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| J25K | Salcha River, | 69.56 | 333 | P | | P | 20 50 54.3 | +0.2 |
| | baz=67 | | | | | | | |
| ONI | Oni | 69.58 | 52 | P | | P | 20 50 54.4 | -0.1 |
| RIDG | Independent Ri | 69.69 | 332 | P | | P | 20 50 54.7 | -0.2 |
| | baz=67 | | | | | | | |
| ZEI | Tsey | 69.83 | 52 | *e*P | | P | 20 50 56.1 | -0.1 |
| ZEI | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| GURO | Guroymak-BITLI | 69.97 | 56 | P | | P | 20 50 57.3 | +0.2 |
| GURO | | | | IAmb | | IAmb | 20 51 05.2 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| H24K | Noodor Dome | 70.04 | 335 | P | | P | 20 50 57.2 | +0.3 |
| H24K | | | | IAmb | | IAmb | 20 51 23.4 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| H24K | Noodor Dome | 70.04 | 335 | P | | P | 20 50 57.9 | +1.0 |
| | baz=66 | | | | | | | |
| IL31 | | 70.10 | 334 | P | | P | 20 50 57.5 | +0.3 |
| ILAR | Eielson Array | 70.10 | 334 | P | | P | 20 50 57.6 | +0.3 |
| | comp=Z,7.3nm,0.9s,baz=65,slow=4.5,SNR=34 | | | | | | | |
| ILAR | | | | LR | | LR | 21 22 41.4 | |
| | comp=Z,166nm,18.4s,baz=76,slow=37 | | | | | | | |
| ILAR | Eielson Array | 70.10 | 334 | P | | P | 20 50 57.1 | -0.2 |
| PAX | Paxson | 70.25 | 332 | P | | P | 20 50 57.8 | -0.5 |
| | baz=66 | | | | | | | |
| HDA | Harding Lake | 70.27 | 333 | P | | P | 20 50 58.4 | +0.1 |
| | baz=66 | | | | | | | |
| COLD | Coldfoot | 70.29 | 337 | P | | P | 20 50 58.9 | +0.6 |
| COLD | | | | IAmb | | IAmb | 20 51 06.4 | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| COLD | Coldfoot | 70.29 | 337 | P | | P | 20 50 59.0 | +0.7 |
| | baz=64 | | | | | | | |
| HARP | HAARP | 70.35 | 331 | P | | P | 20 50 59.0 | +0.2 |
| | baz=67 | | | | | | | |
| COLA | College | 70.43 | 334 | P | | P | 20 50 59.5 | +0.3 |
| COLA | | | | IAmb | | IAmb | 20 51 06.4 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| TCOL | CIGO, UAF Yank | 70.44 | 334 | P | | P | 20 50 59.1 | -0.1 |
| TCOL | | | | IAmb | | IAmb | 20 51 06.4 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| CCB | Clear Creek Bu | 70.51 | 334 | P | | P | 20 50 59.9 | +0.1 |
| CCB | | | | IAmb | | IAmb | 20 51 08.5 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| SIRT | Sirnak | 70.64 | 57 | P | | P | 20 51 01.2 | 0.0 |
| WRH | Wood River Hil | 70.70 | 334 | P | | P | 20 51 01.0 | +0.1 |
| I23K | Minto, Yukon-K | 70.89 | 334 | P | | P | 20 51 02.8 | +0.7 |
| I23K | | | | IAmb | | IAmb | 20 51 10.3 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| I23K | Minto, Yukon-K | 70.89 | 334 | P | | P | 20 51 02.4 | +0.3 |
| | baz=64 | | | | | | | |
| NEA2 | Nenana | 71.03 | 334 | P | | P | 20 51 03.1 | +0.2 |
| NEA2 | | | | IAmb | | IAmb | 20 51 10.0 | |
| | comp=Z,21nm,1.2s | | | | | | | |
| NEA2 | Nenana | 71.03 | 334 | P | | P | 20 51 02.9 | 0.0 |
| | baz=64 | | | | | | | |
| KLU | Klutina | 71.05 | 330 | P | | P | 20 51 03.4 | +0.2 |
| | baz=66 | | | | | | | |
| MCK | McKinley | 71.35 | 333 | P | | P | 20 51 05.1 | +0.2 |
| | baz=64 | | | | | | | |
| GNI | Garni | 71.35 | 54 | LR | | LR | 21 23 49.1 | |
| | comp=Z,74nm,18.9s,baz=333,slow=37 | | | | | | | |
| GNI | Garni | 71.35 | 54 | P | | P | 20 51 05.7 | +0.1 |
| EYAK | Cordova Ski Ar | 71.36 | 329 | P | | P | 20 51 05.7 | +0.7 |
| | baz=66 | | | | | | | |
| H09N1 | TRISTAN DA CUN | 71.42 | 154 | T | | T | 22 09 03.2 | |
| | SNR=10.0 | | | | | | | |
| MLY | Manley | 71.47 | 335 | P | | P | 20 51 06.3 | +0.7 |
| | baz=63 | | | | | | | |
| LC01 | Cunco | 71.79 | 203 | P | | P | 20 51 07.7 | 0.0 |
| LC01 | | | | IAmb | | IAmb | 20 51 15.2 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| I21K | Tanana | 71.87 | 335 | P | | P | 20 51 08.3 | +0.4 |
| I21K | | | | IAmb | | IAmb | 20 51 09.7 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| I21K | Tanana | 71.87 | 335 | P | | P | 20 51 08.1 | +0.2 |
| | baz=62 | | | | | | | |
| H21K | Melozitna Rive | 71.94 | 336 | P | | P | 20 51 09.5 | +1.1 |
| H21K | | | | IAmb | | IAmb | 20 51 16.3 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| H21K | Melozitna Rive | 71.94 | 336 | P | | P | 20 51 09.1 | +0.7 |
| | baz=61 | | | | | | | |
| BPAW | Bear Paw Mtn. | 71.99 | 334 | P | | P | 20 51 09.0 | +0.2 |
| BPAW | | | | IAmb | | IAmb | 20 51 16.8 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| BPAW | Bear Paw Mtn. | 71.99 | 334 | P | | P | 20 51 09.2 | +0.4 |
| | baz=62 | | | | | | | |
| IMAR | Indian Mountai | 72.12 | 336 | P | | P | 20 51 10.2 | +0.7 |
| KNK | Knik Glacier | 72.18 | 331 | P | | P | 20 51 10.4 | +0.5 |
| | baz=64 | | | | | | | |
| KTH | Kantishna Hill | 72.22 | 333 | P | | P | 20 51 10.6 | +0.4 |
| PWL | Port Wells | 72.37 | 330 | P | | P | 20 51 12.2 | +1.1 |
| | baz=64 | | | | | | | |
| PMR | Palmer | 72.39 | 331 | P | | P | 20 51 11.0 | -0.1 |
| | baz=63 | | | | | | | |
| CUT | Chulitna | 72.49 | 332 | P | | P | 20 51 12.3 | +0.6 |
| | baz=62 | | | | | | | |
| M22K | Willow | 72.73 | 331 | P | | P | 20 51 12.8 | -0.4 |
| | baz=62 | | | | | | | |
| PLCA | Paso Flores | 73.01 | 201 | P | | P | 20 51 15.4 | +0.4 |
| | comp=Z,5.1nm,1.1s,baz=351,slow=3.2,SNR=4.8 | | | | | | | |
| PLCA | Paso Flores | 73.01 | 201 | *e*P | | P | 20 51 16.2 | +1.1 |
| PLCA | Paso Flores | 73.01 | 201 | P | | P | 20 51 15.7 | +0.6 |
| PLCA | | | | IAmb | | IAmb | 20 51 22.8 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| PPLA | Purkeypile | 73.04 | 333 | P | | P | 20 51 15.2 | 0.0 |
| PPLA | Purkeypile | 73.04 | 333 | P | | P | 20 51 15.7 | +0.5 |
| | baz=61 | | | | | | | |
| J20K | Nowinta River | 73.17 | 335 | P | | P | 20 51 16.2 | +0.4 |
| | baz=60 | | | | | | | |
| ARU | Arti | 73.33 | 35 | *c* *i* P | | P | 20 51 17.1 | +0.3 |
| ARU | | | | | | | 20 53 54.9 | |
| ARU | | | | S | | SKiKP | 21 00 47.6 | -0.1 |
| ARU | | | | SS | | SS | 21 05 25.1 | -1.1 |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,50nm,2.9s | | | | | | | |
| ARU | Arti | 73.33 | 35 | P | | P | 20 51 16.7 | -0.1 |
| L20K | Farewell, AK | 73.93 | 333 | P | | P | 20 51 19.8 | -0.5 |
| | baz=60 | | | | | | | |
| RDOG | Red Dog Mine | 74.00 | 340 | P | | P | 20 51 21.4 | +0.9 |
| RDOG | Red Dog Mine | 74.00 | 340 | P | | P | 20 51 21.1 | +0.5 |
| | baz=53 | | | | | | | |
| SVE | Sverdlovsk | 74.17 | 34 | *e*P | | P | 20 51 22.7 | +0.9 |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,36nm,1.5s | | | | | | | |
| M19K | Big River Lodg | 74.43 | 333 | P | | P | 20 51 22.2 | -1.0 |
| | baz=59 | | | | | | | |
| L19K | White Mountain | 74.47 | 333 | P | | P | 20 51 23.1 | -0.3 |
| | baz=59 | | | | | | | |
| AKTO | Aktyubinsk | 75.72 | 40 | LR | | LR | 21 23 57.2 | |
| | comp=Z,172nm,19.0s,baz=303,slow=35 | | | | | | | |
| KDAK | Kodiak Island | 75.76 | 328 | LR | | LR | 21 26 20.0 | |
| | comp=Z,604nm,18.3s,baz=106,slow=37 | | | | | | | |
| TSUM | Tsumeb | 75.83 | 121 | LR | | LR | 21 20 01.9 | |
| | comp=Z,164nm,18.6s,baz=324,slow=32 | | | | | | | |
| OHAK | Old Harbor | 76.37 | 328 | P | | P | 20 51 34.0 | -0.4 |
| | baz=59 | | | | | | | |
| NRIK | Noril'sk | 76.48 | 16 | P | | P | 20 51 35.6 | +0.8 |
| | comp=Z,1.4nm,0.4s,baz=315,slow=4.5,SNR=4.8 | | | | | | | |
| NRIK | Noril'sk | 76.48 | 16 | *i* P | | P | 20 51 35.9 | +1.1 |
| NRIK | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| NRIK | Noril'sk | 76.48 | 16 | P | | P | 20 51 36.2 | +1.4 |
| MBAR | Mbarara | 76.71 | 98 | LR | | LR | 21 25 32.1 | |
| | comp=Z,179nm,18.0s,baz=300,slow=36 | | | | | | | |
| ANM | Nome | 76.95 | 338 | P | | P | 20 51 36.6 | -1.0 |
| ANM | Nome | 76.95 | 338 | P | | P | 20 51 37.7 | +0.1 |
| | baz=50 | | | | | | | |
| TNA | Tin City | 77.12 | 339 | P | | P | 20 51 39.5 | +1.0 |
| TNA | | | | IAmb | | IAmb | 20 51 47.1 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| TNA | Tin City | 77.12 | 339 | P | | P | 20 51 38.9 | +0.5 |
| | baz=48 | | | | | | | |
| ABKAR | Akbulak array | 77.37 | 41 | P | | P | 20 51 38.6 | -1.6 |
| ABKAR | Akbulak array | 77.37 | 41 | P | | P | 20 51 38.9 | -1.3 |
| ABKAR | | | | IAmb | | IAmb | 20 51 48.7 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| LODK | Lodwar | 78.86 | 92 | P | | P | 20 51 49.6 | +0.5 |
| LODK | | | | IAmb | | IAmb | 20 51 59.1 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| TIXI | Tiksi | 80.21 | 2 | *i* P | | P | 20 51 56.4 | +1.0 |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| TIXI | Tiksi | 80.21 | 2 | P | | P | 20 51 55.9 | +0.6 |
| BRVK | Borovoye | 80.88 | 34 | *i* P | | P | 20 51 59.9 | +0.6 |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| BRVK | Borovoye | 80.88 | 34 | P | | P | 20 51 59.4 | +0.1 |
| BILL | Bilibino | 81.39 | 349 | ⇑*e* | | P | 20 52 04.8 | +3.0 |
| BILL | | | | *e* | | | 20 55 08.1 | |
| BILL | | | | *e* | PPP | PPP | 20 57 05.2 | |
| BILL | | | | *e* | SS | SS | 21 07 32.9 | +5.9 |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,108nm,17.0s | | | | | | | |
| ATD | Arta Tunnel | 81.73 | 81 | LR | | LR | 21 28 56.3 | |
| | comp=Z,157nm,18.1s,baz=340,slow=36 | | | | | | | |
| LSZ | Lusaka | 81.98 | 112 | LR | | LR | 21 26 26.2 | |
| | comp=Z,170nm,20.4s,baz=314,slow=34 | | | | | | | |
| KMBO | Kilima Mbogo | 82.67 | 95 | LR | | LR | 21 29 01.0 | |
| | comp=Z,620nm,18.6s,baz=277,slow=36 | | | | | | | |
| KMBO | Kilima Mbogo | 82.67 | 95 | *i* P | | P | 20 52 12.4 | +2.7 |
| SPIA | Saint Paul Isl | 83.68 | 334 | P | | P | 20 52 13.7 | -0.1 |
| | baz=46 | | | | | | | |
| LBTB | Lobatse | 85.23 | 122 | LR | | LR | 21 22 35.6 | |
| | comp=Z,211nm,21.2s,baz=326,slow=30 | | | | | | | |
| SUR | Sutherland | 86.07 | 130 | LR | | LR | 21 24 26.8 | |
| | comp=Z,207nm,18.4s,baz=336,slow=31 | | | | | | | |
| KURK | Kurchatov | 86.38 | 33 | *i* P | | P | 20 52 27.7 | +0.1 |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| KURK | Kurchatov | 86.38 | 33 | P | | P | 20 52 27.6 | +0.1 |
| UOSS | Minazif | 86.65 | 64 | P | | P | 20 52 29.8 | +0.3 |
| ZAA0 | Zalesovo Array | 86.86 | 28 | P | | P | 20 52 30.0 | +0.1 |
| ZAA0 | | | | IAmb | | IAmb | 20 52 37.9 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| ZALV | Zalesovo Beam | 86.86 | 28 | P | | P | 20 52 28.1 | -1.8 |
| | comp=Z,0.9nm,0.8s,baz=318,slow=6.4,SNR=4.7 | | | | | | | |
| ZALV | Zalesovo Beam | 86.86 | 28 | *i* P | | P | 20 52 30.8 | +0.9 |
| ZALV | Zalesovo Beam | 86.86 | 28 | P | | P | 20 52 29.8 | 0.0 |
| BOSA | Boshof | 87.00 | 125 | LR | | LR | 21 26 37.3 | |
| | comp=Z,178nm,18.0s,baz=343,slow=32 | | | | | | | |
| SEY | Seymchan | 88.18 | 353 | *i* P | | P | 20 52 37.0 | +1.0 |
| CHGR | Chuyangaron | 88.64 | 46 | P | | P | 20 52 39.4 | +0.5 |
| GAR | Garm | 89.17 | 45 | P | | P | 20 52 39.1 | -2.3 |
| WSAR | Wadi Sarin | 89.42 | 64 | LR | | LR | 21 32 56.4 | |
| | comp=Z,70nm,20.6s,baz=341,slow=36 | | | | | | | |
| AAK | Ala-Archa | 89.46 | 41 | LR | | LR | 21 32 43.0 | |
| | comp=Z,226nm,18.7s,baz=332,slow=36 | | | | | | | |
| YAK | Yakutsk | 89.85 | 3 | *i* P | | P | 20 52 45.1 | +1.2 |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| MAKZ | Makanchi | 90.67 | 34 | P | | P | 20 52 47.7 | -0.4 |
| MK31 | Makanchi Array | 90.84 | 34 | P | | P | 20 52 48.9 | 0.0 |
| MKAR | Makanchi Array | 90.84 | 34 | P | | P | 20 52 49.0 | +0.2 |
| | comp=Z,2.0nm,1.0s,baz=310,slow=3.3,SNR=13 | | | | | | | |
| MKAR | Makanchi Array | 90.84 | 34 | P | | P | 20 52 48.2 | -0.7 |
| DGZ | Jazzator, Alta | 91.09 | 29 | *i* P | | P | 20 52 49.6 | -0.6 |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,2.2s | | | | | | | |
| KSH | Kashi | 92.31 | 42 | P | | P | 20 52 57.5 | +1.5 |
| KSH | | | | sP | | pwP | 20 53 03.5 | -0.5 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| SHEM | Shemya Is, Ala | 92.81 | 338 | LR | | LR | 21 37 17.8 | |
| | comp=Z,338nm,20.2s,baz=124,slow=37 | | | | | | | |
| WMQ | Urumqi | 95.62 | 33 | *e*P | | P | 20 53 12.8 | +1.8 |
| WMQ | | | | LR | | LR | | |
| | comp=Z,350nm,25.7s | | | | | | | |
| WMQ | | | | LR | | LR | | |
| | comp=Z,500nm,29.1s | | | | | | | |
| PETK | Petropavlovsk- | 96.81 | 347 | LR | | LR | 21 38 10.0 | |
| | comp=Z,96nm,20.5s,baz=67,slow=36 | | | | | | | |
| OPO | Ambohidratompo | 99.43 | 106 | LR | | LR | 21 38 17.6 | |
| | comp=Z,180nm,19.9s,baz=160,slow=35 | | | | | | | |
| LZH | Lanzhou | 109.10 | 27 | *e*Pdif | | Pdif | 20 54 14.0 | +2.5 |
| CD2 | Chengdu | 113.51 | 30 | PKP | | PKiKP | 20 58 25.1 | +1.1 |
| PZH | PanZhiHua | 116.27 | 34 | PKP | | PKiKP | 20 58 29.3 | -0.2 |
| NJ2 | Nanjing | 117.78 | 17 | *e*PKP | | PKiKP | 20 58 32.2 | +0.1 |
| CMAR | Chiang Mai Arr | 121.21 | 42 | PKP | | PKPdf | 20 58 38.9 | -0.1 |
| | comp=Z,0.4nm,0.3s,baz=287,slow=2.3,SNR=6.8 | | | | | | | |
| CMAR | Chiang Mai Arr | 121.21 | 42 | | | PKPdf | 20 58 36.5 | -2.5 |
| DZM | Mont Dzumac | 151.97 | 276 | PKPbc | | PKPbc | 20 59 40.4 | -0.8 |
| | comp=Z,6.4nm,0.8s,baz=119,slow=13,SNR=4.8 | | | | | | | |
| DZM | Mont Dzumac | 151.97 | 276 | | | PKPbc | 20 59 40.7 | -0.5 |
| WRA | Warramunga Arr | 171.53 | 12 | PKP | | PKPdf | 20 59 54.0 | -0.5 |
| | comp=Z,0.7nm,0.9s,baz=321,slow=1.5,SNR=4.9 | | | | | | | |
| ASAR | Alice Springs | 174.97 | 25 | PKP | | PKPdf | 20 59 55.9 | 0.0 |
| | comp=Z,0.2nm,0.6s,baz=37,slow=1.1,SNR=4.1 | | | | | | | |

*IDC **08** 20:45:45.8±8.8,3.°45N×124.°00E,h409km±110km, mb3.2/6, mb1 3.4/7,mb1mx3.0/44,mbtmp4.1/7, Error ellipse: s-maj=78.1km s-min=19.1km az=62.0*
*NEIC **08** 20:45:49.4±1.9,3.°3N±0.°1×123.°6E±0.°2,h450km±11km, mb4.0/16, Error ellipse: s-maj=25.9km s-min=15.3km az=47.0*

**ISC 08 20:45:48.9±0.7,3.°3N±0.°1×123.°6E±0.°1,h450km,n45, σ0°83/45,mb3.9/26,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TOLI2 | Tolitoli | 3.57 | 233 | | P | 20 46 59.8 | -0.7 |
| TNTI | Ternate | 4.47 | 124 | P | P | 20 47 08.9 | +0.6 |
| MYLDM | Lahad Datu | 5.47 | 291 | P | P | 20 47 19.6 | +1.7 |
| KKM | Kota Kinabalu | 7.90 | 291 | P | P | 20 47 42.3 | -1.1 |
| FAKI | Fak Fak | 10.57 | 125 | P | P | 20 48 11.2 | -1.1 |
| SOEI | Soe | 12.95 | 177 | P | P | 20 48 39.1 | +0.9 |
| BATI | Baumata | 13.38 | 180 | P | P | 20 48 43.7 | +0.9 |
| | 4.6nm,0.3s,baz=76,slow=2.4,SNR=12 | | | | | | |
| KSM | Kuching | 13.44 | 263 | P | P | 20 48 43.3 | -0.2 |
| SAUI | Saumlaki | 13.53 | 146 | P | P | 20 48 45.4 | +1.0 |
| MTN | Manton Dam | 17.65 | 155 | P | P | 20 49 27.5 | -0.6 |
| KNRA | Kununurra | 19.49 | 165 | P | P | 20 49 45.4 | -0.3 |
| FITZ | Fitzroy Crossi | 21.32 | 175 | P | P | 20 50 02.4 | 0.0 |
| | 1.6nm,0.4s,baz=360,slow=5.4,SNR=28 | | | | | | |
| WB0 | Warramunga Arr | 25.21 | 156 | P | P | 20 50 36.8 | -0.5 |
| WB0 | | | | IAmb | IAmb | 20 50 46.3 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 25.34 | 156 | P | P | 20 50 38.0 | -0.5 |
| | comp=Z,1.7nm,0.4s,baz=340,slow=11,SNR=44 | | | | | | |
| WRA | Warramunga Arr | 25.34 | 156 | P | P | 20 50 36.8 | -1.7 |
| WB2 | Warramunga Arr | 25.35 | 156 | P | P | 20 50 38.0 | -0.5 |
| WB2 | | | | IAmb | IAmb | 20 50 39.6 | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| WR0 | Warramunga Arr | 25.44 | 156 | P | P | 20 50 38.7 | -0.6 |
| WR0 | | | | IAmb | IAmb | 20 50 49.8 | |
| | comp=Z,8.6nm,1.5s | | | | | | |
| COEN | Coen | 25.84 | 132 | P | P | 20 50 43.1 | +0.1 |
| COEN | | | | IAmb | IAmb | 20 51 05.0 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| AS31 | Alice Springs | 28.57 | 160 | P | P | 20 51 04.6 | -2.4 |
| ASAR | Alice Springs | 28.57 | 160 | P | P | 20 51 07.1 | +0.1 |
| | comp=Z,0.7nm,0.4s,baz=339,slow=7.0,SNR=20 | | | | | | |
| ASAR | Alice Springs | 28.57 | 160 | P | P | 20 51 05.2 | -1.7 |
| MORW | Morawa | 32.96 | 192 | P | P | 20 51 43.9 | -0.9 |
| MORW | | | | IAmb | IAmb | 20 51 58.0 | |
| | comp=Z,15nm,1.4s | | | | | | |
| FORT | Forrest | 34.11 | 173 | P | P | 20 51 54.7 | +0.2 |
| BBOO | Buckleboo | 37.76 | 163 | P | P | 20 52 25.3 | +0.3 |
| BBOO | | | | IAmb | IAmb | 20 52 51.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| STKA | Stephens Creek | 38.89 | 155 | P | P | 20 52 35.4 | +1.1 |
| | comp=Z,2.1nm,0.5s,baz=320,slow=10,SNR=5.3 | | | | | | |
| STKA | Stephens Creek | 38.89 | 155 | P | P | 20 52 34.3 | +0.1 |
| TAPN | Taplejung | 41.85 | 309 | *e*P | P | 20 52 58.8 | +0.2 |
| | comp=Z,4.1nm,0.4s | | | | | | |
| ODAN | Odare | 41.87 | 308 | *e*P | P | 20 52 59.5 | +0.8 |
| | comp=Z,4.4nm,0.5s | | | | | | |
| RAMN | Ramite | 42.54 | 307 | *e*P | P | 20 53 04.8 | +0.8 |
| | comp=Z,5.9nm,0.5s | | | | | | |
| JIRN | Jiri | 43.19 | 308 | *e*P | P | 20 53 09.4 | +0.2 |
| | comp=Z,5.8nm,0.5s | | | | | | |
| GUN | Gumba | 43.55 | 308 | *e*P | P | 20 53 12.1 | +0.1 |
| | comp=Z,11nm,0.6s | | | | | | |
| PKI | Pulchoki | 43.76 | 307 | *e*P | P | 20 53 13.3 | -0.4 |
| | comp=Z,3.0nm,0.4s | | | | | | |
| PKIN | Phulchoki | 43.78 | 307 | *e*P | P | 20 53 13.5 | -0.2 |
| | comp=Z,3.1nm,0.4s | | | | | | |
| KKN | Kakani | 43.97 | 308 | *e*P | P | 20 53 14.8 | -0.3 |
| | comp=Z,4.7nm,0.4s | | | | | | |
| GKN | Gorkha | 44.57 | 308 | *e*P | P | 20 53 19.8 | 0.0 |
| KOLN | Koldanda | 45.29 | 307 | *e*P | P | 20 53 25.7 | +0.3 |
| | comp=Z,20nm,0.5s | | | | | | |
| DANN | Dangsing | 45.42 | 307 | *e*P | P | 20 53 26.3 | -0.2 |
| | comp=Z,20nm,0.5s | | | | | | |
| PYUN | Piuthan | 45.92 | 307 | *e*P | P | 20 53 30.5 | +0.2 |
| | comp=Z,21nm,0.5s | | | | | | |
| SONM | Songino Array | 46.83 | 344 | P | P | 20 53 37.1 | +0.4 |
| | comp=Z,0.1nm,0.3s,baz=156,slow=10,SNR=2.3 | | | | | | |
| MK31 | Makanchi Array | 56.22 | 327 | P | P | 20 54 45.1 | +0.1 |
| MKAR | Makanchi Array | 56.22 | 327 | P | P | 20 54 45.1 | +0.1 |
| | comp=Z,0.7nm,0.3s,baz=124,slow=7.7,SNR=50 | | | | | | |
| KDJ | Kajisay | 56.68 | 320 | P | P | 20 54 49.2 | +0.7 |
| KDJ | | | | IAmb | IAmb | 20 54 53.3 | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| KURK | Kurchatov | 60.51 | 329 | P | P | 20 55 13.6 | -0.5 |
| KURK | | | | IAmb | IAmb | 20 55 14.3 | |
| | comp=Z,5.4nm,1.4s | | | | | | |
| BKZ | Black Stump Fm | 64.33 | 137 | P | P | 20 55 40.2 | +1.0 |
| BKZ | | | | IAmb | IAmb | 20 56 08.3 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| ABKAR | Akbulak array | 70.58 | 321 | P | P | 20 56 16.6 | -0.9 |

**IDC 08 20:48:11.0±2.5,28.°49S×177.°66W,h0km,mb3.7/2, mb1 3.9/2,mb1mx3.6/28,mbtmp3.7/2, Error ellipse: s-maj=57.2km s-min=20.3km az=90.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RAO | Raoul Island | 0.79 | 197 | Pn | Pn | 20 48 29.7 | +0.2 |
| | 249nm,0.3s,baz=101,slow=9.1,SNR=15 | | | | | | |
| RAO | | | | Sn | Sn | 20 48 42.5 | +0.5 |
| | 547nm,0.3s,baz=79,slow=23,SNR=14 | | | | | | |
| ASAR | Alice Springs | 43.54 | 265 | P | P | 20 56 16.7 | -0.1 |
| | 0.6nm,0.6s,baz=107,slow=7.9,SNR=9.8 | | | | | | |
| WRA | Warramunga Arr | 44.36 | 270 | P | P | 20 56 23.2 | -0.1 |
| | 0.5nm,0.4s,baz=110,slow=7.9,SNR=8.2 | | | | | | |
| FINES | FINESS Array B | 143.45 | 341 | PKP | PKPbc | 21 07 44.3 | +0.3 |
| | 4.2nm,0.9s,baz=45,slow=2.2,SNR=6.0 | | | | | | |
| AKASG | Malin Array Be | 149.94 | 325 | PKPbc | PKPbc | 21 08 03.0 | 0.0 |
| | 0.3nm,0.4s,baz=44,slow=2.9,SNR=1.9 | | | | | | |

*IDC **08** 20:51:06.8±2.1,28.°26N×43.°83W,h0km,mb4.0/9, mb1 4.2/9,mb1mx3.8/41,mbtmp4.0/9,MS3.9/1,Ms1 3.9/1, ms1mx3.0/91,Error ellipse: s-maj=61.7km s-min=22.4km az=14.0*
*NEIC **08** 20:51:09.1±1.7,28.°3N±0.°1×43.°9W±0.°2,h10km±2km, mb4.4/7,Error ellipse: s-maj=29.6km s-min=14.3km az=243.0*

**ISC 08 20:51:08.0±1.8,28.°2N±0.°4×43.°9W±0.°2,h10km,n23, σ0°95/17,mb4.2/13,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SADO | Sadowa | 32.52 | 310 | LR | LR | 21 09 36.6 | |
| | comp=Z,181nm,18.3s,baz=165,slow=34 | | | | | | |
| TORD | Torodi Ar. Bea | 44.90 | 100 | P | P | 20 59 23.5 | +0.3 |
| | 1.5nm,0.9s,baz=299,slow=9.7,SNR=7.6 | | | | | | |
| H10N2 | ASCENSION HYDR | 45.70 | 137 | T | T | 21 48 12.5 | |
| | baz=323,slow=75,SNR=70 | | | | | | |
| H10N3 | ASCENSION HYDR | 45.70 | 137 | T | T | 21 48 12.8 | |
| | baz=323,slow=75,SNR=63 | | | | | | |
| H10N1 | ASCENSION HYDR | 45.71 | 137 | T | T | 21 48 14.0 | |
| | baz=323,slow=75,SNR=80 | | | | | | |
| H10S3 | ASCENSION HYDR | 46.49 | 138 | T | T | 21 49 17.8 | |
| | baz=258,slow=74,SNR=124 | | | | | | |
| H10S2 | ASCENSION HYDR | 46.50 | 138 | T | T | 21 49 07.5 | |
| | baz=322,slow=74,SNR=46 | | | | | | |
| GERES | GERESS Array B | 48.27 | 48 | P | P | 20 59 49.2 | -0.1 |
| | 0.7nm,0.7s,baz=259,slow=11,SNR=3.4 | | | | | | |
| PD31 | Pinedale Array | 54.16 | 304 | P | P | 21 00 32.7 | -1.1 |
| PD31 | | | | IAmb | IAmb | 21 00 42.7 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| PDAR | Pinedale Array | 54.16 | 304 | P | P | 21 00 33.6 | -0.2 |
| | comp=Z,2.2nm,1.0s,baz=77,slow=5.7,SNR=10 | | | | | | |
| BUR08 | Bucovina Ar. S | 55.97 | 50 | P | P | 21 00 47.2 | +0.6 |
| BUR08 | | | | IAmb | IAmb | 21 00 55.8 | |
| | comp=Z,6.6nm,1.3s | | | | | | |
| FINES | FINESS Array B | 56.10 | 33 | P | P | 21 00 47.1 | 0.0 |
| | comp=Z,4.9nm,1.0s,baz=261,slow=11,SNR=2.0 | | | | | | |
| YKA | Yellowknife Ar | 56.53 | 328 | P | P | 21 00 49.6 | -0.6 |
| | comp=Z,0.7nm,0.8s,baz=94,slow=7.4,SNR=7.9 | | | | | | |
| MLR | Muntele Rosu | 56.74 | 52 | P | P | 21 00 52.4 | +0.2 |
| MSO | Missoula | 56.75 | 309 | P | P | 21 00 53.8 | +1.5 |
| CCUT | Cedar City | 57.93 | 299 | | P | 21 01 00.7 | -0.

**AAK Ala-Archa** 0.47 278 ⇑P Pg 20 52 34.7 +0.3
1.4nm,0.3s
AAK ⇓S Sg 20 52 41.0 +0.1
9.5nm,0.3s
**AAK Ala-Archa** 0.47 278 ⇑*i*P Pg 20 52 34.2 -0.1
baz=78
AAK ⇑*i*S Sg 20 52 41.0 +0.1
baz=78
**TKM2 Tokmak 2** 0.49 44 ⇓P Pg 20 52 34.4 -0.2
6.3nm,0.1s,SNR=74
TKM2 ⇑S Sg 20 52 40.9 -0.4
52nm,0.1s
**TKM2 Tokmak 2** 0.49 44 ⇑P Pg 20 52 34.3 -0.3
3.0nm,0.4s
TKM2 ⇑S Sg 20 52 40.7 -0.6
21nm,0.3s
**TKM2 Tokmak 2** 0.49 44 ⇑*i*P Pg 20 52 34.4 -0.2
baz=45
TKM2 ⇑*i*S Sg 20 52 41.6 +0.3
baz=45
**CHMS Chumysh** 0.51 327 ⇓P Pg 20 52 35.0 +0.1
15nm,0.1s,SNR=34
CHMS ⇑S Sg 20 52 42.0 +0.1
32nm,0.1s
**CHMS Chumysh** 0.51 327 ⇓*i*P Pg 20 52 34.7 -0.2
baz=27
CHMS ⇓*i*S Sg 20 52 42.0 +0.1
baz=27
**UCH Uchtor** 0.57 233 ⇑P Pg 20 52 36.7 +0.4
3.4nm,0.3s,SNR=13
UCH ⇓S Sb 20 52 44.4 0.0
12nm,0.1s
**UCH Uchtor** 0.57 233 ⇓*i*P Pb 20 52 36.0 -0.4
baz=33
UCH ⇓*e*S Sb 20 52 44.2 -0.2
baz=33
**BOOM Boomskoye usch** 0.60 98 ⇑*i*P Pb 20 52 36.4 -0.4
baz=98
BOOM ⇑*i*S Sb 20 52 44.8 -0.2
baz=98
**KST Kastek** 0.77 52 *e*P Pb 20 52 39.9 +0.3
3.1nm,0.1s
KST *e*S Sb 20 52 50.1 +0.3
9.6nm,0.3s
**KST Kastek** 0.77 52 P Pb 20 52 39.9 +0.3
3.1nm,0.1s
KST S Sb 20 52 50.1 +0.3
9.6nm,0.3s
**KST Kastek** 0.77 52 *e*P Pb 20 52 39.9 +0.3
baz=52
KST *e*S Sb 20 52 50.1 +0.3
baz=52
**DGS Degeres** 0.82 35 *e*P Pb 20 52 40.6 +0.2
1.4nm,0.1s
DGS *e*S Sb 20 52 51.1 0.0
7.7nm,0.2s
**DGS Degeres** 0.82 35 P Pb 20 52 40.6 +0.2
1.4nm,0.1s
DGS S Sb 20 52 51.1 0.0
7.7nm,0.2s
**DGS Degeres** 0.82 35 *e*P Pb 20 52 40.6 +0.2
baz=35
DGS *e*S Sb 20 52 51.1 0.0
baz=35
**USP Ospenovka** 0.83 326 ⇓P Pb 20 52 40.9 +0.2
12nm,0.2s,SNR=16
USP ⇑S Sb 20 52 51.9 +0.3
8.6nm,0.1s
**USP Ospenovka** 0.83 326 ⇑*i*P Pb 20 52 40.5 -0.2
baz=26
USP ⇑*i*S Sg 20 52 52.0 0.0
baz=26
**ULHL Ulahol** 0.89 111 ⇓P Pb 20 52 41.8 +0.2
2.2nm,0.1s,SNR=20
**ULHL Ulahol** 0.89 111 ⇓*i*P Pb 20 52 41.4 -0.2
baz=11
ULHL ⇓*i*S Sb 20 52 53.2 0.0
baz=11
**ARLS Aral** 0.93 220 ⇓*i*P Pb 20 52 42.3 -0.1
baz=20
ARLS ⇓*i*S Sg 20 52 55.1 0.0
baz=20
**SGDS Sogindy** 0.95 337 *e*P Pn 20 52 43.2 -0.1
5.4nm,0.2s
SGDS *e*S Sb 20 52 55.2 +0.2
9.3nm,0.1s
**SGDS Sogindy** 0.95 337 P Pn 20 52 43.2 -0.1
5.4nm,0.2s
SGDS S Sb 20 52 55.2 +0.2
9.3nm,0.1s
**EKS2 Erkin-Say** 1.00 276 ⇑P Pg 20 52 44.5 +0.4
2.5nm,0.3s,SNR=10
**EKS2 Erkin-Say** 1.00 276 ⇑*i*P Pb 20 52 43.6 0.0
baz=75
EKS2 ⇑*i*S Sg 20 52 57.3 -0.1
baz=75
**MTBS Maitube** 1.10 59 *e*P Pg 20 52 46.2 +0.1
1.1nm,0.1s
MTBS *e*S Sg 20 53 00.7 +0.1
7.4nm,0.3s
**MTBS Maitube** 1.10 59 P Pg 20 52 46.2 +0.1
1.1nm,0.1s
MTBS S Sg 20 53 00.7 +0.1
7.4nm,0.3s
**MTBS Maitube** 1.10 59 *e*P Pg 20 52 46.2 +0.1
baz=59
MTBS *e*S Sg 20 53 00.7 +0.1
baz=59
**AML Almayashu** 1.15 248 ⇑P Pb 20 52 46.7 +0.4
1.6nm,0.1s,SNR=5.8
**KRBS Karabastau** 1.19 19 *e*P Pb 20 52 47.2 +0.5
2.3nm,0.1s
KRBS *e*S Sn 20 53 02.3 0.0
4.1nm,0.2s
**KRBS Karabastau** 1.19 19 P Pb 20 52 47.2 +0.5
2.3nm,0.1s
KRBS S Sn 20 53 02.3 0.0
4.1nm,0.2s
**KRBS Karabastau** 1.19 19 *e*P Pb 20 52 47.2 +0.5
baz=19
KRBS *e*S Sn 20 53 02.3 0.0
baz=19
**TNSS Tian-Shan** 1.41 70 *e*P Pg 20 52 52.2 +0.3
0.8nm,0.2s
TNSS *e*S Sg 20 53 11.2 +0.7
2.1nm,0.2s
**TNSS Tian-Shan** 1.41 70 P Pg 20 52 52.2 +0.3
0.8nm,0.2s
TNSS S Sg 20 53 11.2 +0.7
2.1nm,0.2s
**MRKS Merke** 1.42 278 *e*P Pg 20 52 52.8 +0.8
3.3nm,0.2s
MRKS *e*S Sg 20 53 11.4 +0.9
17nm,0.3s
**MRKS Merke** 1.42 278 P Pg 20 52 52.8 +0.8
3.3nm,0.2s
MRKS S Sg 20 53 11.4 +0.9
17nm,0.3s
**MDOK Medeo** 1.53 67 *e*P Pg 20 52 54.4 +0.3
2.1nm,0.4s
MDOK *e*S Sg 20 53 14.5 +0.5
2.8nm,0.2s
**MDOK Medeo** 1.53 67 Pg Pg 20 52 54.4 +0.3
2.1nm,0.4s
MDOK Lg Lg 20 53 14.5
2.8nm,0.2s
**KDJ Kajisay** 1.58 106 ⇑*i*P Pb 20 52 53.9 +0.4
baz=6.0
KDJ ⇑*i*S Sg 20 53 15.4 -0.3
baz=6.0
**KOTS Kotyrbulak** 1.60 65 *e*P Pg 20 52 55.4 0.0
1.7nm,0.3s
KOTS *e*S Sg 20 53 17.0 +0.7
9.2nm,0.2s
**KOTS Kotyrbulak** 1.60 65 P Pg 20 52 55.4 0.0
1.7nm,0.3s
KOTS S Sg 20 53 17.0 +0.7
9.2nm,0.2s
**KTBS Karatobe** 1.61 44 *e*P Pg 20 52 55.0 -0.6
2.1nm,0.1s
KTBS *e*S Sg 20 53 15.8 -0.8
18nm,0.3s
**KTBS Karatobe** 1.61 44 P Pg 20 52 55.0 -0.6
2.1nm,0.1s
KTBS S Sg 20 53 15.8 -0.8
18nm,0.3s
**KTBS Karatobe** 1.61 44 *e*P Pg 20 52 55.0 -0.6
baz=44
KTBS *e*S Sg 20 53 15.7 -0.8
baz=44
**CHKK Chushkaly** 1.87 46 *e*P Pg 20 53 00.2 -0.3
1.0nm,0.2s
CHKK *e*S Sg 20 53 24.4 -0.4
20nm,0.2s
**ANVS Anan'yevo** 1.88 83 ⇑*i*P Pb 20 52 58.5 -0.1
baz=83
ANVS ⇑*i*S Sb 20 53 23.3 +1.5
baz=83
**KURS Kuram** 2.41 67 *e*P Pg 20 53 10.6 -0.3
1.2nm,0.4s
KURS *e*S Sg 20 53 42.2 +0.1
2.4nm,0.6s
**KURS Kuram** 2.41 67 Pg Pg 20 53 10.6 -0.3
1.2nm,0.4s
KURS Lg Lg 20 53 42.2
2.4nm,0.6s
**SATY Saty** 2.46 77 *e*P Pg 20 53 11.4 -0.4
2.0nm,0.3s
SATY *e*S Sg 20 53 43.6 -0.1
11nm,0.3s
**SATY Saty** 2.46 77 Pg Pg 20 53 11.4 -0.4
2.0nm,0.3s
SATY Lg Lg 20 53 43.6
11nm,0.3s
**ARK Arkit** 2.48 253 ⇑*i*P Pb 20 53 07.2 -1.5
baz=53
ARK ⇑*i*S Sb 20 53 37.8 -1.2
baz=53
**ZHN Zhinishke** 2.50 75 *e*P Pg 20 53 12.6 0.0
2.8nm,0.1s
ZHN *e*S Sg 20 53 45.7 +0.7
9.3nm,0.2s
**ZHN Zhinishke** 2.50 75 Pg Pg 20 53 12.6 0.0
ZHN Lg Lg 20 53 45.7
**ARXS Arharly** 2.56 49 *e*P Pg 20 53 12.3 -1.4
1.8nm,0.5s
ARXS *e*S Sg 20 53 45.3 -1.6
8.0nm,0.3s
**ARXS Arharly** 2.56 49 Pg Pg 20 53 12.3 -1.4
1.8nm,0.5s
ARXS Lg Lg 20 53 45.3
8.0nm,0.3s
**KPKS Kokpek** 2.75 70 *e*P Pg 20 53 16.1 -1.3
2.1nm,0.3s
KPKS *e*S Sg 20 53 51.9 -1.2
5.8nm,0.3s
**BLB Baldybastay** 2.88 57 *e*P Pb 20 53 17.4 +1.9
2.3nm,0.2s
BLB *e*S Sg 20 53 54.2 -2.9
4.0nm,0.5s
**BLB Baldybastay** 2.88 57 Pg Pb 20 53 17.4 +1.9
2.3nm,0.2s
BLB Lg Lg 20 53 54.2
4.0nm,0.5s
**UZB Uzynbulak** 2.92 77 *e*P Pg 20 53 19.6 -1.0
2.1nm,0.2s
UZB *e*S Sg 20 53 57.6 -0.8
4.5nm,0.5s
**UZB Uzynbulak** 2.92 77 Pg Pg 20 53 19.6 -1.0
2.1nm,0.2s
UZB Lg Lg 20 53 57.6
4.5nm,0.5s
**PDGK Podgornoye** 3.29 75 ⇑Pg Pb 20 53 24.7 +2.2
1.2nm,0.8s
PDGK ⇑Lg Lg 20 54 08.5
3.2nm,1.0s
**KK02 Karatay Array** 3.44 280 ⇓Pg Pg 20 53 30.0 -0.5
0.3nm,0.4s
KK02 ⇑Lg Lg 20 54 11.6
1.4nm,0.5s

**WEL 08 20:56:56.9±2.0, 33°S±36'×17°9E±5°0, h296km±47km, M4.2/5, mB4.5/1, ML4.1/6, MLv4.2/5, Mw(mB)3.6/1, Error ellipse: s-maj=0.1km s-min=0.0km az=120.8, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WMGZ** | **Waiomatatini S** | **4.41** | **191** | P | Pn | 20 58 07.7 | +0.4 |
| WMGZ | | | | S | S | 20 59 05.1 | +1.4 |
| **HAZ** | **Te Kaha** | **4.48** | **198** | P | Pn | 20 58 06.7 | -1.4 |
| HAZ | | | | S | S | 20 59 05.1 | 0.0 |
| **PKGZ** | **Pakihiroa** | **4.53** | **194** | P | Pn | 20 58 09.3 | +0.5 |
| PKGZ | | | | S | S | 20 59 06.9 | +0.4 |
| **PUZ** | **Puketiti** | **4.68** | **192** | P | Pn | 20 58 09.2 | -1.2 |
| PUZ | | | | S | S | 20 59 09.5 | +0.1 |
| **RUGZ** | **Raukumara Rang** | **4.70** | **198** | P | Pn | 20 58 11.1 | +0.3 |
| RUGZ | | | | S | S | 20 59 09.6 | -0.5 |
| **MUGZ** | **Murupara** | **5.44** | **203** | P | Pn | 20 58 19.3 | 0.0 |
| **RTZ** | **Ruatahuna** | **5.50** | **201** | P | Pn | 20 58 20.6 | +0.5 |
| **MTHZ** | **Maungataniwha** | **5.76** | **201** | P | Pn | 20 58 23.5 | +0.3 |
| **OTVZ** | **Oturere** | **6.45** | **208** | P | Pn | 20 58 32.0 | +0.5 |
| **PRHZ** | **Porangahau** | **7.14** | **198** | P | Pn | 20 58 39.1 | -0.6 |
| **TSZ** | **Takapari Road** | **7.14** | **202** | P | Pn | 20 58 39.5 | -0.2 |

**IDC 08 20:57:09.4±2.5, 28°14N×43°66W, h0km, mb3.5/5, mb1 3.8/5, mb1mx3.5/35, mbtmp3.5/5, Error ellipse: s-maj=88.4km s-min=29.1km az=18.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **44.72** | **100** | P | P | 21 05 24.3 | -0.3 |
| | 1.0nm,1.0s,baz=302,slow=8.3,SNR=1.7 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.53** | **137** | T | T | 21 54 10.3 | |
| | baz=323,slow=75,SNR=12 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.53** | **137** | T | T | 21 54 16.8 | |
| | baz=323,slow=75,SNR=12 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.55** | **137** | T | T | 21 54 15.3 | |
| | baz=323,slow=75,SNR=13 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.32** | **139** | T | T | 21 55 13.6 | |
| | baz=322,slow=74,SNR=23 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.34** | **139** | T | T | 21 55 20.9 | |
| | baz=258,slow=74,SNR=5.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.34** | **304** | P | P | 21 06 38.2 | +0.1 |
| | 0.7nm,0.7s,baz=92,slow=8.9,SNR=7.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.68** | **328** | P | P | 21 06 53.8 | -0.4 |
| | 0.3nm,0.7s,baz=86,slow=7.4,SNR=3.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **58.17** | **46** | P | P | 21 07 05.2 | +0.3 |
| | 0.2nm,0.3s,baz=278,slow=6.1,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **70.29** | **334** | P | P | 21 08 24.1 | -0.1 |
| | 0.3nm,0.8s,baz=58,slow=5.9,SNR=2.3 | | | | | | |

*IDC **08** 20:59:27.6±0.5, 19°.45S×172°.85W, h0km, mb5.0/24, mb1 5.2/25, mb1mx5.0/35, mbtmp5.0/25, ML5.1/1, MS4.5/59, Ms1 4.6/59, ms1mx4.5/68, Error ellipse: s-maj=17.7km s-min=12.5km az=157.0*

*MOS **08** 20:59:27.6±1.3, 19°.41S×172°.86W, h10km, mb5.3/22, Error ellipse: s-maj=9.3km s-min=7.8km az=145.5*

*NEIC **08** 20:59:29.3±1.5, 19°.09S±0°.09×172°.47W±0°.05, h36km±5km, mb5.3/296, Error ellipse: s-maj=13.1km s-min=7.4km az=178.0*

*NOU **08** 20:59:32.3, 19°.30S×172°.53W, h45km, mb5.3/82, Tonga Islands Region*

*GCMT **08** 20:59:33.3±0.1, 19°.54S±0°.02×172°.50W±0°.01, h15km, MW5.3/136, Moment Tensor Solution. s75,c101; s136,c208; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr-0.94±.03; Mθθ0.05±.02; Mφφ0.89±.02; Mrθ-0.00±.06; Mθφ-0.01±.01; Mφr0.40±.05; Best double couple: M0.99800×10^17 NP1:φs359.00000°, δ33.00000°, λ-90.00000°. NP2:φs179.00000°, δ57.00000°, λ-90.00000°. Principal axes: T 0.9750, Plg12.0000°, Azm269.0000°; N 0.0470, Plg0.0000°, Azm359.0000°; P -1.0220, Plg78.0000°, Azm90.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BJI **08** 20:59:33.1±0.0, 19°.23S×172°.41W, h47km, mb5.1/49, mB5.6/28, Ms5.3/12, Ms7 4.9/12*

*BGR **08** 20:59:34.9±0.0, 18°.76S×170°.95W, h33km*

**ISC 08 20:59:30.7±0.2, 19°.44S±0°.03×172°.60W±0°.03, h35km, n1014, σ2.941/880, mb5.3/251, MS4.7/67, 58C-21D, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **2.55** | **82** | P | **Pn** | **21 00 07.4** | **-2.2** |
| | baz=2.5,SNR=117 | | | | | | |
| NIUE | | | | S | **Sn** | **21 00 35.3** | **-4.1** |
| | baz=2.5 | | | | | | |
| **NIUE** | **Niue** | **2.55** | **82** | Pn | **Pn** | **21 00 06.5** | **-3.0** |
| NIUE | | | | Sn | **Sn** | **21 00 35.5** | **-3.9** |
| **NIUE** | **Niue** | **2.55** | **82** | P | **Pn** | **21 00 08.8** | **-0.8** |
| **AFI** | **Afiamalu** | **5.55** | **8** | Pn | **Pn** | **21 00 48.7** | **-2.2** |
| | 27nm,0.3s,baz=346,slow=4.8,SNR=13 | | | | | | |
| AFI | | | | Sn | **Sn** | **21 01 52.1** | **-1.5** |
| | 101nm,0.3s,baz=320,slow=23,SNR=7.1 | | | | | | |
| **AFI** | **Afiamalu** | **5.55** | **8** | P | Pn | 21 00 44.6 | -6.3 |
| **AFI** | **Afiamalu** | **5.55** | **8** | Pn | Pn | 21 00 44.6 | -6.3 |
| **AFI** | **Afiamalu** | **5.55** | **8** | P | **Pn** | **21 00 49.9** | **-1.0** |
| **LKBA** | **Tubou, Lakemba** | **6.01** | **280** | P | **Pn** | **21 00 59.6** | **+2.5** |
| **TAVE** | **Taveuni** | **7.46** | **290** | P | **Pn** | **21 01 20.1** | **+3.0** |
| **DGTI** | **Dogotuki** | **7.94** | **292** | P | **Pn** | **21 01 25.9** | **+2.3** |
| **MSVF** | **Nonsavu** | **9.03** | **279** | Pn | **Pn** | **21 01 41.6** | **+3.0** |
| | 2.7nm,0.3s,baz=118,slow=10,SNR=28 | | | | | | |
| **MSVF** | **Nonsavu** | **9.03** | **279** | *i* P | **Pn** | **21 01 39.5** | **+0.8** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,243nm,1.5s | | | | | | |
| **MSVF** | **Nonsavu** | **9.03** | **279** | Pn | **Pn** | **21 01 39.0** | **+0.4** |
| **MSVF** | **Nonsavu** | **9.03** | **279** | P | **Pn** | **21 01 41.4** | **+2.7** |
| **RAO** | **Raoul Island** | **10.91** | **205** | Sn | Sn | 21 03 56.8 | -8.3 |
| | comp=Z,129nm,0.3s,baz=83,slow=23,SNR=9.8 | | | | | | |
| **RAR** | **Rarotonga** | **12.16** | **101** | Pn | **Pn** | **21 02 19.6** | **-1.9** |
| | comp=Z,14nm,0.3s,baz=263,slow=7.7,SNR=28 | | | | | | |
| RAR | | | | LR | LR | 21 07 03.8 | |
| | comp=Z,3μm,18.6s,baz=287,slow=37 | | | | | | |
| **RAR** | **Rarotonga** | **12.16** | **101** | P | **Pn** | **21 02 19.2** | **-2.4** |
| **RAR** | **Rarotonga** | **12.16** | **101** | Pn | **Pn** | **21 02 19.1** | **-2.4** |
| **RAR** | **Rarotonga** | **12.16** | **101** | P | **Pn** | **21 02 23.1** | **+1.6** |
| **RTV** | **Rentapao** | **18.06** | **272** | P | **P** | **21 03 40.2** | **+1.1** |
| | comp=Z,7μm,0.9s | | | | | | |
| **DVP** | **Devils Point** | **18.29** | **272** | P | **Pn** | **21 03 43.8** | **+2.0** |
| **YATNC** | **Mamie plateau,** | **19.36** | **259** | P | **P** | **21 03 53.9** | **+0.5** |
| **OUENC** | **Ouen Island, N** | **19.43** | **258** | P | **P** | **21 03 53.6** | **-0.5** |
| OUENC | | | | IAmb | IAmb | 21 03 55.0 | |
| | comp=Z,126nm,1.0s | | | | | | |
| **OUENC** | **Ouen Island, N** | **19.43** | **258** | P | **P** | **21 03 55.3** | **+1.1** |
| **SANVU** | **Saraoutou** | **19.67** | **278** | P | **P** | **21 03 55.1** | **-1.7** |
| **SANVU** | **Saraoutou** | **19.67** | **278** | P | **Pn** | **21 03 59.8** | **+1.4** |
| **DZM** | **Mont Dzumac** | **19.77** | **259** | *e*P | **P** | **21 03 56.7** | **-1.3** |
| | comp=Z,293nm,0.9s | | | | | | |
| DZM | | | | *e*S | **S** | **21 07 31.0** | **-8.1** |
| | comp=Z,1μm,22.8s | | | | | | |
| DZM | | | | *e*LQ | LQ | 21 07 48.3 | |
| | comp=Z,3μm,26.3s | | | | | | |
| DZM | | | | *e*LR | LR | 21 08 38.6 | |
| | comp=Z,5μm,26.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.77** | **259** | P | **P** | **21 03 57.4** | **-0.6** |
| | comp=Z,5.3nm,0.3s,baz=80,slow=18,SNR=87 | | | | | | |
| DZM | | | | LR | LR | 21 10 58.3 | |
| | comp=Z,3μm,18.1s,baz=94,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.77** | **259** | P | **P** | **21 03 56.2** | **-1.8** |
| DZM | | | | IAmb | IAmb | 21 03 59.8 | |
| | comp=Z,124nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.77** | **259** | P | **P** | **21 03 59.3** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **19.78** | **258** | P | **P** | **21 03 56.5** | **-1.5** |
| ONTNC | | | | IAmb | IAmb | 21 04 02.2 | |
| | comp=Z,122nm,0.9s | | | | | | |
| **ONTNC** | **Ouen Toro** | **19.78** | **258** | P | **P** | **21 03 59.5** | **+1.5** |
| **NOUC** | **Port Laguerre** | **19.90** | **259** | P | **P** | **21 04 00.1** | **+0.8** |
| **OUZ** | **Omahuta** | **19.90** | **215** | P | **P** | **21 03 59.4** | **+0.1** |
| **WMGZ** | **Waiomatatini S** | **19.92** | **201** | P | Pn | 21 04 05.2 | +4.0 |
| WMGZ | | | | S | S | 21 07 26.5 | -15 |
| **HAZ** | **Te Kaha** | **20.09** | **203** | P | **P** | **21 04 01.1** | **-0.1** |
| HAZ | | | | S | S | 21 07 33.1 | -12 |
| **PKGZ** | **Pakihiroa** | **20.10** | **202** | P | **P** | **21 03 56.4** | **-5.0** |
| PKGZ | | | | S | S | 21 07 31.1 | -14 |
| **NFK** | **Norfolk Island** | **20.13** | **238** | P | **P** | **21 04 04.2** | **+2.4** |
| **PUZ** | **Puketiti** | **20.20** | **201** | P | **P** | **21 04 01.1** | **-1.4** |
| PUZ | | | | S | S | 21 07 36.2 | -11 |
| **RUGZ** | **Raukumara Rang** | **20.31** | **203** | P | Pn | 21 04 09.9 | +3.9 |
| RUGZ | | | | S | S | 21 07 31.1 | -19 |
| **TWGZ** | **Tauwhareparae** | **20.39** | **202** | P | Pn | 21 04 12.5 | +5.7 |
| TWGZ | | | | S | S | 21 07 37.0 | -14 |
| **MWZ** | **Matawai** | **20.69** | **202** | P | **P** | **21 04 08.7** | **+0.9** |
| MWZ | | | | S | S | 21 07 43.3 | -14 |
| **URZ** | **Urewera** | **20.78** | **203** | P | **P** | **21 04 11.0** | **+2.3** |
| | comp=Z,68nm,0.9s,baz=25,slow=3.3,SNR=21 | | | | | | |
| URZ | | | | S | **S** | **21 07 53.0** | **-5.7** |
| | comp=Z,22nm,0.6s,baz=104,slow=12,SNR=6.1 | | | | | | |
| URZ | | | | LR | LR | 21 14 50.9 | |
| | comp=Z,283nm,18.0s,baz=12,slow=45 | | | | | | |
| **URZ** | **Urewera** | **20.78** | **203** | P | **P** | **21 04 11.3** | **+2.6** |
| URZ | | | | S | S | 21 07 46.7 | -12 |
| **URZ** | **Urewera** | **20.78** | **203** | P | **P** | **21 04 10.0** | **+1.3** |
| **URZ** | **Urewera** | **20.78** | **203** | P | **P** | **21 04 11.5** | **+2.8** |
| **RAGZ** | **Rawiri** | **20.88** | **202** | P | **P** | **21 04 14.9** | **+5.0** |
| **TOZ** | **Tahuroa Road** | **20.98** | **207** | P | **P** | **21 04 15.9** | **+5.1** |
| **MUGZ** | **Murupara** | **21.10** | **204** | P | **P** | **21 04 16.0** | **+3.8** |
| **SNGZ** | **Shannon Statio** | **21.16** | **202** | P | **P** | **21 04 18.7** | **+5.9** |
| SNGZ | | | | S | S | 21 07 54.9 | -11 |
| **WHTZ** | **Whakaora** | **21.58** | **205** | P | **P** | **21 04 21.3** | **+4.0** |
| **BKZ** | **Black Stump Fm** | **21.81** | **203** | P | **P** | **21 04 20.6** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **21.81** | **203** | P | **P** | **21 04 22.8** | **+3.0** |
| **PAE** | **Paea** | **21.89** | **89** | *e*P | **P** | **21 04 19.5** | **-1.3** |
| | comp=Z,28nm,1.2s | | | | | | |
| **HIZ** | **Hauiti** | **21.91** | **207** | | **P** | **21 04 23.3** | **+2.4** |
| HIZ | | | | IAmb | IAmb | 21 04 26.6 | |
| | comp=Z,161nm,1.1s | | | | | | |
| **PPT2** | **Papeete2** | **21.91** | **89** | *e*P | **P** | **21 04 19.9** | **-1.2** |
| | comp=Z,115nm,1.4s | | | | | | |
| PPT2 | | | | *e*S | **S** | **21 08 14.8** | **-6.6** |
| | comp=Z,1μm,24.5s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 21 08 45.4 | |
| | comp=Z,642nm,20.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 21 09 29.9 | |
| | comp=Z,5μm,27.2s,baz=257 | | | | | | |
| **PPT** | **Papeete** | **21.91** | **89** | P | **P** | **21 04 26.4** | **+5.4** |
| | comp=Z,74nm,1.1s,baz=323,slow=12,SNR=3.6 | | | | | | |
| PPT | | | | LR | LR | 21 11 42.6 | |
| | comp=Z,2μm,18.3s,baz=290,slow=33 | | | | | | |
| **PPTF** | **Pamatai, Papee** | **21.92** | **89** | P | **P** | **21 04 17.4** | **-3.9** |
| PPTF | | | | IAmb | IAmb | 21 04 43.5 | |
| | comp=Z,222nm,1.4s | | | | | | |
| **NTVZ** | **North Tongarir** | **22.06** | **205** | P | **P** | **21 04 27.2** | **+4.6** |
| **BFZ** | **Birch Farm** | **23.23** | **202** | P | **P** | **21 04 36.4** | **+1.6** |
| BFZ | | | | IAmb | IAmb | 21 04 55.3 | |
| | comp=Z,144nm,1.5s | | | | | | |
| **BFZ** | **Birch Farm** | **23.23** | **202** | P | **P** | **21 04 38.6** | **+3.9** |
| **MSWZ** | **Moikau Station** | **24.23** | **203** | P | **P** | **21 04 47.1** | **+2.8** |
| **SNZO** | **South Karori** | **24.34** | **204** | P | **P** | **21 04 44.0** | **-1.3** |
| SNZO | | | | IAmb | IAmb | 21 04 57.0 | |
| | comp=Z,154nm,1.4s | | | | | | |
| **BHW** | **Baring Head** | **24.37** | **203** | P | **P** | **21 04 45.8** | **+0.4** |
| **PLWZ** | **Palliser** | **24.37** | **202** | P | **P** | **21 04 46.8** | **+1.2** |
| **TUWZ** | **Tuamarina** | **24.74** | **205** | P | **P** | **21 04 50.2** | **+1.4** |
| **NNZ** | **Nelson** | **24.79** | **206** | P | **P** | **21 04 49.5** | **+0.2** |
| **QRZ** | **Quartz Range** | **24.83** | **208** | P | **P** | **21 04 50.2** | **+0.6** |
| QRZ | | | | IAmb | IAmb | 21 05 01.1 | |
| | comp=Z,86nm,0.8s | | | | | | |
| **QRZ** | **Quartz Range** | **24.83** | **208** | P | **P** | **21 04 53.7** | **+4.1** |
| **BSWZ** | **Blackbirch Sta** | **25.01** | **204** | P | **P** | **21 04 52.1** | **+0.8** |
| **THZ** | **Tophouse** | **25.44** | **206** | P | **P** | **21 04 55.2** | **-0.1** |
| THZ | | | | IAmb | IAmb | 21 05 12.4 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **KHZ** | **Kahutara** | **25.74** | **204** | P | **P** | **21 04 57.2** | **-0.7** |
| **KHZ** | **Kahutara** | **25.74** | **204** | P | **P** | **21 05 00.9** | **+3.0** |
| **LTZ** | **Lake Taylor** | **26.55** | **205** | P | **P** | **21 05 05.3** | **0.0** |
| LTZ | | | | IAmb | IAmb | 21 05 20.1 | |
| | comp=Z,64nm,0.6s | | | | | | |
| **OXZ** | **Oxford** | **27.10** | **205** | P | **P** | **21 05 10.7** | **+0.6** |
| OXZ | | | | IAmb | IAmb | 21 05 23.4 | |
| | comp=Z,68nm,1.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.82** | **206** | P | **P** | **21 05 17.7** | **+1.0** |
| RPZ | | | | IAmb | IAmb | 21 05 34.0 | |
| | comp=Z,41nm,0.6s | | | | | | |
| **FOZ** | **Fox Glacier** | **28.20** | **208** | P | **P** | **21 05 20.5** | **+0.5** |
| FOZ | | | | IAmb | IAmb | 21 05 32.5 | |
| | comp=Z,58nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **28.34** | **287** | LR | LR | 21 16 34.3 | |
| | comp=Z,819nm,18.1s,baz=121,slow=36 | | | | | | |
| **ODZ** | **Otahua Downs** | **29.08** | **205** | P | **P** | **21 05 29.2** | **+1.4** |
| **MLZ** | **Mavora Lakes** | **30.39** | **207** | P | **P** | **21 05 38.7** | **-0.8** |
| **WHZ** | **Wether Hill Ro** | **30.88** | **207** | P | **P** | **21 05 44.6** | **+0.8** |
| WHZ | | | | IAmb | IAmb | 21 05 56.2 | |
| | comp=Z,85nm,1.4s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **33.12** | **76** | *e*LR | LR | 21 14 34.6 | |
| | comp=Z,3μm,26.8s | | | | | | |
| **EIDS** | **Eidsvold** | **34.02** | **253** | P | **P** | **21 06 10.7** | **-0.8** |
| | baz=34,SNR=21 | | | | | | |
| **EIDS** | **Eidsvold** | **34.02** | **253** | P | **P** | **21 06 10.4** | **-1.1** |
| EIDS | | | | IAmb | IAmb | 21 06 13.0 | |

comp=Z,61nm,1.5s
**EIDS Eidsvold 34.02 253 P P 21 06 12.3 +0.8**
comp=Z,27nm,1.0s
**ARMA Armidale 34.10 244 P P 21 06 12.6 +0.3**
baz=34,SNR=4.3
**ARMA Armidale 34.10 244 P P 21 06 12.0 -0.3**
ARMA IAmb IAmb 21 06 13.4
comp=Z,46nm,1.1s
**ARMA Armidale 34.10 244 P P 21 06 13.2 +0.9**
comp=Z,38nm,1.0s
**NTLH Newcastle Hard 34.56 240 P P 21 06 17.4 +1.4**
comp=Z,127nm,1.0s
**MGCD Mangrove Creek 35.11 240 P P 21 06 21.6 +0.7**
baz=35,SNR=15
**MGCD Mangrove Creek 35.11 240 P P 21 06 21.6 +0.7**
**SYDH Sydney Hard Ro 35.55 239 P P 21 06 25.4 +0.8**
comp=Z,103nm,0.9s
**RMQ Roma 36.16 252 P P 21 06 30.1 +0.1**
baz=36,SNR=10
**RMQ Roma 36.16 252 P P 21 06 30.4 +0.4**
comp=Z,20nm,1.4s
**CNB Canberra Magne 37.04 237 P P 21 06 38.4 +0.9**
baz=37,SNR=15
**CNB Canberra Magne 37.04 237 P P 21 06 38.7 +1.3**
**CAN Canberra 37.33 237 P P 21 06 39.9 0.0**
CAN pmax pmax
comp=Z,65nm,0.9s
**CAN Canberra 37.33 237 P P 21 06 39.9 0.0**
**CAN Canberra 37.33 237 P P 21 06 41.2 +1.3**
**MILA Mila 37.68 234 P P 21 06 43.8 +1.0**
baz=38,SNR=6.2
**CTA Charters Tower 38.66 262 P P 21 06 49.6 -1.6**
comp=Z,35nm,0.6s,baz=86,slow=9.7,SNR=37
CTA LR LR 21 22 11.8
comp=Z,2µm,18.2s,baz=94,slow=36
**CTA Charters Tower 38.66 262 P P 21 06 49.6 -1.6**
**CTA Charters Tower 38.66 262 P P 21 06 51.9 +0.7**
**CTAO Charters Tower 38.66 262 P P 21 06 49.5 -1.6**
CTAO pmax pmax
comp=Z,42nm,0.8s
**CTAO Charters Tower 38.66 262 P P 21 06 49.5 -1.6**
CTAO IAmb IAmb 21 06 52.3
comp=Z,42nm,0.8s
**CTAO Charters Tower 38.66 262 P P 21 06 52.0 +0.7**
**CMSA Cobar Meteorol 39.31 244 P P 21 06 56.1 -0.4**
baz=39,SNR=22
**CMSA Cobar Meteorol 39.31 244 P P 21 06 56.5 0.0**
**PMG Port Moresby 40.14 279 P P 21 07 03.3 -0.2**
comp=Z,7.1nm,0.3s,baz=340,slow=6.0,SNR=6.7
PMG LR LR 21 22 32.5
comp=Z,1µm,18.0s,baz=96,slow=35
**PMG Port Moresby 40.14 279***ce* **P P 21 07 04.4 +0.8**
PMG pmax pmax
comp=Z,34nm,1.3s
**PMG Port Moresby 40.14 279 P P 21 07 01.1 -2.4**
**PMG Port Moresby 40.14 279 P P 21 07 04.2 +0.6**
**PMG Port Moresby 40.14 279 P P 21 07 04.1 +0.5**
**QLP Quilpie 40.22 252 P P 21 07 03.3 -0.8**
baz=40,SNR=5.4
**QLP Quilpie 40.22 252 P P 21 07 03.5 -0.6**
**CORO Coronation Par 40.58 228 P P 21 07 09.2 +2.3**
**TOO Toolangi 40.63 235 P P 21 07 08.4 +0.9**
baz=41,SNR=13
**TOO Toolangi 40.63 235 P P 21 07 07.4 -0.1**
TOO pmax pmax
comp=Z,84nm,1.5s
**TOO Toolangi 40.63 235 P P 21 07 07.4 -0.1**
TOO IAmb IAmb 21 07 09.4
comp=Z,84nm,1.4s
**TOO Toolangi 40.63 235 P P 21 07 09.6 +2.1**
**MTSU Mount Surprise 40.73 265 P P 21 07 07.4 -1.1**
baz=41,SNR=32
**MTSU Mount Surprise 40.73 265 P P 21 07 08.2 -0.3**
comp=Z,22nm,0.9s
**TAU Tasmania Unive 40.98 226 P P 21 07 12.4 +2.2**
TAU pmax pmax
comp=Z,28nm,0.7s
**TAU Tasmania Unive 40.98 226 P P 21 07 12.4 +2.2**
**BRAT Ballarat 41.83 235 P P 21 07 18.7 +1.5**
comp=Z,26nm,0.7s
**COEN Coen 42.62 270 P P 21 07 22.7 -1.3**
**COEN Coen 42.62 270 P P 21 07 24.7 +0.7**
**STKA Stephens Creek 42.82 244 P P 21 07 25.3 -0.1**
comp=Z,19nm,1.0s,baz=97,slow=9.3,SNR=20
STKA LR LR 21 24 08.5
comp=Z,1µm,18.3s,baz=70,slow=35
**STKA Stephens Creek 42.82 244 P P 21 07 25.4 -0.1**
baz=43,SNR=14
**STKA Stephens Creek 42.82 244 P P 21 07 24.8 -0.6**
**STKA Stephens Creek 42.82 244 P P 21 07 25.8 +0.4**
**KIP Kipapa 43.04 20***ce* **P P 21 07 27.3 +0.1**
KIP pmax pmax
comp=Z,268nm,2.5s
**ARPS Mount Arapiles 43.31 237 P P 21 07 30.0 +0.7**
baz=43,SNR=8.2
**ARPS Mount Arapiles 43.31 237 P P 21 07 31.4 +2.1**
comp=Z,48nm,0.9s
**QIS Mount Isa 44.80 260 P P 21 07 42.7 +1.2**
baz=45,SNR=6.0
**QIS Mount Isa 44.80 260 P P 21 07 42.9 +1.4**
**HTT Hallett 45.21 242 P P 21 07 44.8 +0.2**
baz=45,SNR=6.4
**HTT Hallett 45.21 242 P P 21 07 45.3 +0.7**
comp=Z,24nm,1.0s
**LCRK Leigh Creek 45.62 246 P P 21 07 48.3 +0.5**
comp=Z,48nm,1.4s
**NAPP Napperby 45.83 242 P P 21 07 51.5 +2.0**
comp=Z,26nm,0.9s
**BBOO Buckleboo 47.56 243 P P 21 08 02.9 -0.1**
baz=48,SNR=12
**BBOO Buckleboo 47.56 243 P P 21 08 02.5 -0.5**
BBOO IAmb IAmb 21 08 03.7
comp=Z,25nm,0.9s
**BBOO Buckleboo 47.56 243 P P 21 08 03.5 +0.5**
comp=Z,32nm,1.6s
**OOD Oodnadatta 47.82 250 P P 21 08 05.9 +0.8**
comp=Z,50nm,1.7s
**JAY Jayapura 48.62 284 P P 21 08 11.7 +0.2**
comp=Z,24nm,1.0s,baz=106,slow=6.2,SNR=4.9
JAY LR LR 21 27 21.8
comp=Z,382nm,19.8s,baz=112,slow=35
**JAY Jayapura 48.62 284 P P 21 08 13.2 +1.7**
comp=Z,12nm,0.9s
**GENI Genyem 49.08 284 P P 21 08 16.0 +1.0**
**MULG Mulgathing 49.21 246 P P 21 08 15.6 -0.2**
comp=Z,41nm,0.8s
**WR0 Warramunga Arr 49.59 260 P P 21 08 16.9 -2.0**
WR0 IAmb IAmb 21 08 21.9
comp=Z,24nm,0.9s
**AS31 Alice Springs 49.70 255 P P 21 08 17.8 -1.9**
**ASAR Alice Springs 49.70 255 P P 21 08 19.1 -0.6**
comp=Z,49nm,1.0s,baz=88,slow=8.6,SNR=232
ASAR S S 21 15 22.6 -3.9
comp=Z,1.6nm,0.9s,baz=95,slow=16,SNR=11
ASAR LR LR 21 28 54.1
comp=Z,696nm,19.9s,baz=92,slow=36
**ASAR Alice Springs 49.70 255 P P 21 08 18.5 -1.2**
ASAR S S 21 15 22.6 -3.9
**ASAR Alice Springs 49.70 255 P P 21 08 18.5 -1.2**
**ASAR Alice Springs 49.70 255 S 21 15 22.6 -3.9**
**WB0 Warramunga Arr 49.76 260 P P 21 08 19.1 -1.1**
WB0 IAmb IAmb 21 08 19.9
comp=Z,28nm,0.8s
**WB2 Warramunga Arr 49.77 260 P P 21 08 18.7 -1.5**
**WRAB Tennant Creek 49.77 260***ce* **P P 21 08 19.2 -1.0**
WRAB pmax pmax
comp=Z,42nm,1.0s
**WRAB Tennant Creek 49.77 260 P P 21 08 18.7 -1.5**
WRAB IAmb IAmb 21 08 20.1
comp=Z,42nm,1.1s
**WRAB Tennant Creek 49.77 260 P P 21 08 19.4 -0.8**
**WRA Warramunga Arr 49.78 260 P P 21 08 18.7 -1.7**
comp=Z,21nm,0.9s,baz=98,slow=5.3,SNR=108
WRA S S 21 15 24.9 -2.8
comp=Z,5.1nm,1.1s,baz=95,slow=14,SNR=8.6
WRA LR LR 21 29 08.7
comp=Z,2µm,18.3s,baz=70,slow=36
**WRA Warramunga Arr 49.78 260 P P 21 08 18.6 -1.7**
**KDU Kakadu 53.03 269 P P 21 08 44.1 -0.6**
baz=53,SNR=18
**KDU Kakadu 53.03 269 P P 21 08 44.2 -0.4**
comp=Z,25nm,0.6s
**GUMO Guam 53.20 305 LR LR 21 28 37.6**
comp=Z,152nm,21.6s,baz=114,slow=33
**MTN Manton Dam 54.26 268 P P 21 08 52.8 -0.8**
baz=54,SNR=9.5

**MTN Manton Dam 54.26 268 P P 21 08 52.3 -1.4**
MTN IAmb IAmb 21 08 56.4
comp=Z,29nm,0.8s
**MTN Manton Dam 54.26 268 P P 21 08 53.2 -0.4**
comp=Z,41nm,0.8s
**FORT Forrest 54.37 246 P P 21 08 54.3 0.0**
baz=54,SNR=14
**FORT Forrest 54.37 246 P P 21 08 53.5 -0.8**
**FORT Forrest 54.37 246 P P 21 08 55.5 +1.2**
comp=Z,51nm,1.0s
**DRS Darwin Rock St 54.58 268 P P 21 08 58.2 +2.2**
comp=Z,12nm,0.8s
**WRKA Warakurna 54.63 253 P P 21 08 56.1 -0.3**
baz=55,SNR=128
**WRKA Warakurna 54.63 253 P P 21 08 56.1 -0.3**
comp=Z,89nm,1.1s
**KNRA Kununurra 55.81 264 P P 21 09 04.5 -0.3**
baz=56,SNR=7.8
**KNRA Kununurra 55.81 264 P P 21 09 03.7 -1.2**
KNRA IAmb IAmb 21 09 07.9
comp=Z,44nm,1.1s
**KNRA Kununurra 55.81 264 P P 21 09 06.8 +1.9**
comp=Z,25nm,0.8s
**SIJI Sorong 57.94 282 LR LR 21 34 48.0**
comp=Z,448nm,18.0s,baz=111,slow=37
**SWI Sorong 57.95 282 P P 21 09 20.4 +0.4**
comp=Z,920nmcomp=Z,68nm,0.7s
**SWI Sorong 57.95 282 P P 21 09 20.3 +0.3**
comp=Z,920nmcomp=Z,68nm,0.7s
**RPN Rapa Nui 58.10 110 LR LR 21 29 22.5**
comp=Z,1µm,18.4s,baz=248,slow=31
**FITZ Fitzroy Crossi 58.21 260 P P 21 09 21.8 0.0**
comp=Z,11nm,0.8s,baz=107,slow=4.1,SNR=42
FITZ LR LR 21 34 10.8
comp=Z,398nm,18.1s,baz=98,slow=36
**FITZ Fitzroy Crossi 58.21 260 P P 21 09 22.0 +0.1**
baz=58,SNR=15
**FITZ Fitzroy Crossi 58.21 260 P P 21 09 21.8 0.0**
**LBMI Labuha 61.52 280 P P 21 09 46.3 +1.7**
comp=Z,21nm,1.1s
**LBMI Labuha 61.52 280 P P 21 09 47.9 +3.3**
comp=Z,29nm,1.2s
**SOEI Soe 61.57 269 P P 21 09 46.8 +1.7**
comp=Z,97nm,0.9s
**SOEI Soe 61.57 269 P P 21 09 46.9 +1.8**
comp=Z,97nm,0.9s
**SOEI Soe 61.57 269 P P 21 09 45.2 +0.1**
**SOEI Soe 61.57 269 P P 21 09 47.3 +2.2**
comp=Z,99nm,0.9s
**BATI Baumata 62.01 269 P P 21 09 49.1 +1.1**
comp=Z,16nm,0.8s,baz=145,slow=3.5,SNR=6.2
BATI LR LR 21 38 30.0
comp=Z,842nm,18.1s,baz=131,slow=38
**BATI Baumata 62.01 269 P P 21 09 48.3 +0.3**
comp=Z,16nm,1.1s
**SANI Sanana 62.42 278 P P 21 09 50.3 -0.4**
comp=Z,19nm,1.4s
**SANI Sanana 62.42 278 P P 21 09 51.0 +0.3**
**PSA00 Pilbara Seismi 62.85 255 P P 21 09 53.4 -0.2**
PSA00 IAmb IAmb 21 09 57.7
comp=Z,34nm,1.2s
**PSA00 Pilbara Seismi 62.85 255 P P 21 09 53.1 -0.4**
PSA00 IAmb IAmb 21 09 57.7
comp=Z,17nm,1.2s
**PSA00 Pilbara Seismi 62.85 255 P P 21 09 54.5 +1.0**
comp=Z,27nm,1.0s
**MBWA Marble Bar 63.04 256 P P 21 09 54.4 -0.4**
MBWA IAmb IAmb 21 09 58.9
comp=Z,46nm,1.4s
**MBWA Marble Bar 63.04 256 P P 21 09 54.9 +0.2**
**MEEK Meekatharra 63.05 249 P P 21 09 55.2 +0.4**
baz=63,SNR=7.6
**KLBR Kellerberrin 63.09 244 P P 21 09 56.4 +1.4**
baz=63,SNR=17
**KLBR Kellerberrin 63.09 244 P P 21 09 56.7 +1.7**
comp=Z,135nm,1.0s
**NWAO Narrogin (SRO) 63.37 242 P P 21 09 57.9 +1.1**
NWAO pmax pmax
comp=Z,44nm,1.1s
**NWAO Narrogin (SRO) 63.37 242 P P 21 09 57.9 +1.1**
**NWAO Narrogin (SRO) 63.37 242 P P 21 09 58.7 +1.9**
**RKGY Rocky Gully 63.40 240 P P 21 09 59.6 +2.7**
baz=63,SNR=5.1
**RKGY Rocky Gully 63.40 240 P P 21 09 59.8 +2.9**
**MMRI Maumere 63.81 270 P P 21 10 00.1 +0.1**
comp=Z,1µmcomp=Z,27nm,1.9s
**MMRI Maumere 63.81 270 P P 21 09 59.8 -0.2**
MMRI IAmb IAmb 21 10 14.3
comp=Z,36nm,1.2s
**BLDU Ballidu 64.11 245 P P 21 10 03.1 +1.4**
baz=64,SNR=25
**BLDU Ballidu 64.11 245 P P 21 10 04.9 +3.2**
comp=Z,35nm,1.0s
**MUN Mundaring 64.35 243 P P 21 10 05.2 +2.0**
baz=64,SNR=9.0
**MUN Mundaring 64.35 243 P P 21 10 06.0 +2.8**
comp=Z,45nm,1.3s
**MORW Morawa 64.92 246 P P 21 10 08.4 +1.4**
baz=65,SNR=11
**MORW Morawa 64.92 246 P P 21 10 07.8 +0.8**
MORW IAmb IAmb 21 10 10.7
comp=Z,21nm,0.8s
**MORW Morawa 64.92 246 P P 21 10 10.1 +3.1**
comp=Z,27nm,1.1s
**BASI Baing, Sumba 64.92 268 P P 21 10 06.3 -0.9**
comp=Z,33nm,1.4s
**WBSI Waikabubak, Su 66.20 268 P P 21 10 16.1 +0.5**
comp=Z,27nm,1.2s
**WBSI Waikabubak, Su 66.20 268 P P 21 10 16.4 +0.8**
comp=Z,27nm,1.2s
**DAV Davao City (W) 66.31 287 LR LR 21 39 20.4**
comp=Z,148nm,18.0s,baz=104,slow=36
**KAPI Kappang 67.28 273 LR LR 21 40 32.2**
comp=Z,49nm,18.5s,baz=130,slow=37
**GIRL Giralia 67.72 253 P P 21 10 27.5 +2.5**
baz=68,SNR=6.0
**TOLI2 Tolitoli 68.40 279 P P 21 10 29.4 0.0**
**JHJ Hachijo jima 2 69.27 318 LR LR 21 41 22.0**
comp=Z,232nm,18.0s,baz=94,slow=36
**IGBI Denpasar 70.45 267 P P 21 10 43.2 +1.1**
comp=Z,40nm,1.1s
**IGBI Denpasar 70.45 267 P P 21 10 43.1 +1.0**
comp=Z,40nm,1.1s
**SRBI Singaraja 70.61 268 P P 21 10 43.9 +0.9**
comp=Z,42nm,1.2s
**QSPA South Pole Qui 70.63 180 P P 21 10 46.1 +3.6**
comp=Z,30nm,1.0s,baz=34,slow=2.6,SNR=36
QSPA LR LR 21 40 00.7
comp=Z,252nm,18.0s,baz=60,slow=34
**QSPA South Pole Qui 70.63 180 P P 21 10 43.6 +1.1**
**JYT Yasato 71.11 321 P P 21 10 42.4 -3.2**
**KBKI Kotabaru 71.22 273 P P 21 10 48.5 +1.8**
comp=Z,23nm,1.1s
**JAGI Jajag, Banyuwa 71.49 267 P P 21 10 48.0 -0.4**
comp=Z,55nm,1.0s
**JAGI Jajag, Banyuwa 71.49 267 P P 21 10 46.9 -1.5**
**JAGI Jajag, Banyuwa 71.49 267 P P 21 10 49.4 +1.0**
comp=Z,55nm,1.0s
**ABJI Asem Bagus 71.62 268 P P 21 10 50.7 +1.5**
comp=Z,50nm,1.0s
**ABJI Asem Bagus 71.62 268 P P 21 10 50.4 +1.2**
comp=Z,55nm,1.2s
**KMMI Kalianget 72.10 269 P P 21 10 53.2 +1.1**
comp=Z,32nm,1.6s
**GMJI Gumukmas 72.22 267 P P 21 10 53.0 +0.2**
comp=Z,24nm,0.8s
**BBKI Banjar Baru 72.41 273 P P 21 10 56.4 +2.4**
**MJA0 Matsu Arr-Jizo 72.48 320 *eP* P 21 10 56.4 +2.5**
MJA0 pmax pmax
comp=Z,16nm,1.0s
**MJAR Matsushiro Arr 72.51 320 P P 21 10 56.4 +2.4**
comp=Z,16nm,1.0s,baz=160,slow=5.3,SNR=12
MJAR LR LR 21 44 32.8
comp=Z,140nm,18.1s,baz=116,slow=37
**MJAR Matsushiro Arr 72.51 320 P P 21 10 50.2 -3.8**
**MAJO Matsushiro 72.51 320 P P 21 10 50.7 -3.3**
MAJO pmax pmax
comp=Z,64nm,1.5s
**MAJO Matsushiro 72.51 320 P P 21 10 50.7 -3.3**
MAJO IAmb IAmb 21 10 57.5
comp=Z,64nm,1.5s
**MAJO Matsushiro 72.51 320 P P 21 10 55.0 +1.0**
**MAT Matsushiro 72.51 320 P P 21 10 56.2 +2.2**
MAT *e*S S 21 20 10.4 -5.6
**MJB9 Matsu-Tunnel 72.51 320 P P 21 10 51.0 -3.1**
MJB9 IAmb IAmb 21 10 57.5
comp=Z,63nm,1.5s

**SNCC San Nicolas Is 72.87 45 P P 21 11 00.7 +4.5**
baz=232
**SBC Santa Barbara 73.48 43 P P 21 11 05.0 +5.2**
baz=232
**JOW Kunigami 73.49 307 LR LR 21 41 34.8**
comp=Z,158nm,18.5s,baz=118,slow=34
**PKM Mcpherson Peak 73.69 43 P P 21 11 04.3 +3.0**
baz=232
**CIS Catalina Islan 73.70 45 P P 21 11 04.3 +3.1**
baz=233
**SMMC Simmler 73.84 43 P P 21 11 05.6 +3.7**
baz=231
**PWJI Pagerwojo 73.84 267 P P 21 11 04.1 +1.7**
comp=Z,46nm,1.1s
**SAO San Andreas Ge 73.85 41 P P 21 10 58.4 -3.5**
SAO pmax pmax
comp=Z,24nm,1.1s
**SAO San Andreas Ge 73.85 41 P 21 10 58.4 -3.5**
**PMPB Monarch Peak 73.90 41 P P 21 10 59.1 -3.2**
PMPB IAmb IAmb 21 11 06.8
comp=Z,52nm,1.5s
**PAGB Antelope Grade 73.94 42 P P 21 10 58.2 -4.3**
**BBGB Big Mountain B 73.98 41 P P 21 10 58.4 -4.4**
**PASC Pasadena Art C 74.31 44 P P 21 11 01.4 -3.3**
**HOPS Hopland Field 74.33 38 P 21 11 01.1 -3.6**
**PCJI Pacitan 74.38 267 P P 21 11 07.5 +2.0**
comp=Z,109nm,1.1s
**PCJI Pacitan 74.38 267 P P 21 11 07.3 +1.8**
comp=Z,109nm,1.1s
**KKM Kota Kinabalu 74.45 282 P P 21 11 02.9 -3.1**
KKM IAmb IAmb 21 11 19.2
comp=Z,30nm,1.1s
**KCPM Cahto Peak 74.50 37 P P 21 11 03.9 -1.9**
KCPM IAmb IAmb 21 11 10.8
comp=Z,42nm,1.3s
**ELS Elsinore Mount 74.50 45 P P 21 11 09.6 +3.7**
**LPIG La Paz 74.53 57 LR LR 21 38 31.0**
comp=Z,856nm,18.2s,baz=212,slow=31
**KMPM Mount Pierce 74.69 36 P P 21 11 02.2 -4.6**
KMPM IAmb IAmb 21 11 11.9
comp=Z,64nm,1.3s
**MONP2 Monument Peak 74.74 46 P P 21 11 10.7 +3.2**
baz=234
**VES Vestal, Richgr 74.75 43 P P 21 11 10.5 +3.3**
baz=232
**KMRM Mail Ridge 74.79 37 P 21 11 04.2 -3.3**
KMRM IAmb IAmb 21 11 12.6
comp=Z,54nm,1.1s
**IKP In-Ko-Pah, Jac 74.82 47 P P 21 11 11.5 +3.7**
baz=235,SNR=6.4
**EDW2 Edwards Air Fo 74.87 44 P P 21 11 11.4 +3.4**
baz=233,SNR=12
**YUH Yuha Desert 74.94 47 P P 21 11 11.8 +3.4**
**CCAC Calif City Air 75.02 44 P P 21 11 03.5 -5.3**
**ISA Isabella, Lake 75.03 43 P P 21 11 11.9 +3.0**
ISA pmax pmax
comp=Z,40nm,1.3s
**ISA Isabella, Lake 75.03 43 P P 21 11 11.9 +3.0**
ISA IAmb IAmb 21 11 13.9
comp=Z,40nm,1.3s
**ISA Isabella, Lake 75.03 43 P P 21 11 11.9 +3.0**
baz=232,SNR=11
**UGM Wanagama 75.08 267 P P 21 11 11.5 +1.9**
comp=Z,54nm,1.2s
**PFO Pinyon Flats O 75.14 46 LR LR 21 38 49.7**
comp=Z,231nm,18.2s,baz=200,slow=31
**PFO Pinyon Flats O 75.14 46 P P 21 11 04.6 -5.0**
PFO pmax pmax
comp=Z,21nm,1.3s
**PFO Pinyon Flats O 75.14 46 P P 21 11 04.6 -5.0**
**PFO Pinyon Flats O 75.14 46 P P 21 11 12.9 +3.3**
baz=234,SNR=5.5
**TPFO Pinon Flats 75.14 46 P P 21 11 12.8 +3.2**
baz=234,SNR=5.4
**SWSC Sam W. Stewart 75.20 47 P P 21 11 13.3 +3.5**
baz=235
**PMD Palm Desert 75.21 46 P P 21 11 06.2 -3.7**
**CMB Columbia Colle 75.31 40 P P 21 11 06.4 -4.0**
CMB pmax pmax
comp=Z,23nm,1.2s
**CMB Columbia Colle 75.31 40 P 21 11 06.4 -4.0**
**ASAJ Asahikawa 75.36 328 LR LR 21 40 12.6**
comp=Z,190nm,20.1s,baz=167,slow=32
**LRMC Laurel Mtn Rad 75.43 44 P P 21 11 15.1 +3.8**
baz=233
**ORV Oroville 75.62 38 P P 21 11 14.4 +2.3**
ORV pmax pmax
comp=Z,21nm,1.4s
**ORV Oroville 75.62 38 P P 21 11 14.4 +2.3**
**BELC Belle Mtn. Jos 75.67 46 P P 21 11 16.0 +3.3**
baz=234,SNR=6.2
**WDC Whiskeytown Da 75.69 37 P P 21 11 15.7 +3.2**
WDC pmax pmax
comp=Z,33nm,1.4s
**WDC Whiskeytown Da 75.69 37 P 21 11 15.7 +3.2**
WDC IAmb IAmb 21 11 17.4
comp=Z,33nm,1.4s
**CWC Cottonwood Cre 75.75 43 P P 21 11 16.7 +3.5**
baz=232
**BC3 Big Chuckawall 75.84 46 P P 21 11 17.6 +3.9**
baz=235
**N02D Trinity Center 75.86 37 P P 21 11 08.8 -4.7**
N02D IAmb IAmb 21 11 18.7
comp=Z,37nm,1.4s
**N02D Trinity Center 75.86 37 P P 21 11 17.2 +3.6**
baz=228,SNR=14
**GSC Goldstone, Bar 75.90 44 P P 21 11 16.9 +3.0**
GSC pmax pmax
comp=Z,23nm,1.4s
**GSC Goldstone, Bar 75.90 44 P 21 11 16.9 +3.0**
**GSC Goldstone, Bar 75.90 44 P P 21 11 17.4 +3.4**
baz=234,SNR=7.0
**MPMC Manual Prospec 75.90 43 P P 21 11 17.6 +3.6**
baz=233,SNR=20
**GLA Glamis 75.93 47 P P 21 11 16.6 +2.5**
GLA pmax pmax
comp=Z,27nm,1.3s
**GLA Glamis 75.93 47 P P 21 11 16.6 +2.5**
**GLA Glamis 75.93 47 P P 21 11 17.9 +3.8**
baz=235
**HEC Hector,Ludlow 75.93 45 P P 21 11 17.4 +3.2**
baz=234,SNR=6.6
**M02C Callahan 76.06 36 P P 21 11 11.6 -3.1**
M02C IAmb IAmb 21 11 20.0
comp=Z,42nm,1.4s
**M02C Callahan 76.06 36 P P 21 11 18.3 +3.6**
baz=228,SNR=12
**L02E Cave Junction 76.16 35 P P 21 11 18.6 +3.5**
**L02E Cave Junction 76.16 35 P P 21 11 19.1 +3.9**
baz=227
**QSM Queen of Sheba 76.25 44 P P 21 11 11.2 -4.7**
QSM IAmb IAmb 21 11 20.6
comp=Z,32nm,1.3s
**MPK Martis Peak 76.32 39 P P 21 11 17.8 +1.3**
MPK IAmb IAmb 21 11 21.2
comp=Z,49nm,1.2s
**PET Petropavlovsk 76.34 343***ce* **P P 21 11 16.7 +0.9**
PET pmax pmax
comp=Z,10.0nm,1.0s
**IRM Iron Mountain 76.34 46 P P 21 11 20.1 +3.7**
baz=235,SNR=18
**GMRC Granite Mounta 76.36 45 P P 21 11 20.2 +3.6**
baz=234,SNR=8.7
**YBH Yreka Blue Hor 76.37 36 LR LR 21 41 15.7**
comp=Z,419nm,18.9s,baz=202,slow=33
**YBH Yreka Blue Hor 76.37 36 P P 21 11 14.0 -2.4**
YBH pmax pmax
comp=Z,33nm,1.2s
**YBH Yreka Blue Hor 76.37 36 P 21 11 14.0 -2.4**
YBH IAmb IAmb 21 11 21.4
comp=Z,33nm,1.2s
**PNTR Pine Nut 76.45 40 P P 21 11 14.1 -3.1**
PNTR IAmb IAmb 21 11 22.0
comp=Z,41nm,1.2s
**K02D Willamette Mer 76.49 35 P P 21 11 20.3 +3.2**
baz=227
**113A Mohawk Valley, 76.51 48 P P 21 11 14.3 -3.0**
**GWY Greenwater Val 76.51 44 P P 21 11 20.5 +3.0**
**LCH Last Change Ra 76.51 42 P P 21 11 13.5 -3.9**
**BLYC Blythe 76.53 47 P 21 11 20.7 +3.3**
**GRAC Grapevine Rang 76.55 43 P P 21 11 21.1 +3.6**
GRAC IAmb IAmb 21 11 23.7
comp=Z,49nm,1.3s
**GRAC Grapevine Rang 76.55 43 P P 21 11 21.2 +3.7**
baz=233
**VCNR Virginia City 76.55 40 P P 21 11 14.9 -2.8**

**FURC Furnace Creek, 76.55 43** P P 21 11 21.0 +3.5
baz=233
**TUQ Turquoise Moun 76.56 45** P **P** **21 11 20.8 +3.1**
baz=234
**LHV Little Huntoon 76.60 41** P P 21 11 13.6 -4.1
LHV IAmb IAmb 21 11 23.0
comp=Z,43nm,1.3s
**YERR Yerington 76.60 40** P **P** **21 11 20.7 +2.7**
YERR IAmb IAmb 21 11 22.6
comp=Z,32nm,1.2s
**J01E Myrtle Point 76.67 34** P P 21 11 21.6 +3.7
baz=227
**PEA0B Petropavlovsk- 76.69 342** P **P** **21 11 20.2 +2.4**
PEA0B pmax pmax
comp=Z,81nm,1.3s
**PEA0B Petropavlovsk- 76.69 342** P **P** **21 11 20.2 +2.4**
**PETK Petropavlovsk- 76.69 342** P **P** **21 11 20.0 +2.1**
comp=Z,13nm,0.9s,baz=131,slow=8.4,SNR=7.1
**PETK Petropavlovsk- 76.69 342** P **P** **21 11 19.9 +2.1**
**214A Organ Pipe Nat 76.74 49** P P 21 11 13.4 -5.2
214A IAmb IAmb 21 11 24.0
comp=Z,35nm,1.5s
**214A Organ Pipe Nat 76.74 49** P P 21 11 22.3 +3.7
baz=237
**KPJI Karang Pucung 76.76 267** P **P** **21 11 20.6 +1.4**
comp=Z,18nm,1.3s
**KPJI Karang Pucung 76.76 267** P **P** **21 11 20.8 +1.6**
comp=Z,18nm,1.3s
**HUMO Hull Mountain 76.82 35** P P 21 11 22.7 +3.9
**RYN Ryan 76.82 41** P P 21 11 22.6 +3.4
RYN IAmb IAmb 21 11 24.0
comp=Z,32nm,1.3s
**NVAR Mina Array Bea 76.83 41** P P 21 11 22.8 +3.5
comp=Z,16nm,1.0s,baz=226,slow=8.3,SNR=66
NVAR LR LR 21 41 42.4
comp=Z,572nm,18.1s,baz=210,slow=33
**NVAR Mina Array Bea 76.83 41** P **P** **21 11 22.1 +2.8**
**M04C Macdoel 76.89 36** P **P** **21 11 21.9 +2.5**
M04C IAmb IAmb 21 11 24.2
comp=Z,43nm,1.4s
**M04C Macdoel 76.89 36** P P 21 11 22.8 +3.4
baz=229,SNR=5.7
**L04D Klamath Falls 76.92 36** P P 21 11 13.9 -5.7
L04D IAmb IAmb 21 11 24.2
comp=Z,46nm,1.2s
**L04D Klamath Falls 76.92 36** P **P** **21 11 22.9 +3.3**
baz=228,SNR=6.9
**NV11 Mina Array Sit 76.92 41** P P 21 11 15.7 -4.1
NV11 IAmb IAmb 21 11 24.6
comp=Z,51nm,1.2s
**DBO Dodson Butte 77.01 35** P **P** **21 11 16.2 -3.8**
DBO IAmb IAmb 21 11 25.0
comp=Z,30nm,1.4s
**PDMCI Parker Dam,Lak 77.11 46** P P 21 11 24.6 +3.9
baz=236
**TPNV Topopah Spring 77.24 43** P P 21 11 16.7 -4.8
TPNV pmax pmax
comp=Z,11nm,1.4s
**TPNV Topopah Spring 77.24 43** P P 21 11 16.7 -4.8
**TPNV Topopah Spring 77.24 43** P **P** **21 11 24.9 +3.4**
baz=234
**SII Sitkinak Islan 77.27 10** P P 21 11 25.8 +4.7
baz=198
**TPH Tonopah 77.29 42** P **P** **21 11 25.0 +3.1**
TPH pmax pmax
comp=Z,225nm,1.3s
**TPH Tonopah 77.29 42** P **P** **21 11 25.0 +3.1**
**KVN Kaiserville 77.34 41** P **P** **21 11 24.8 +2.7**
KVN pmax pmax
comp=Z,37nm,1.3s
**KVN Kaiserville 77.34 41** P **P** **21 11 24.8 +2.7**
KVN IAmb IAmb 21 11 26.8
comp=Z,37nm,1.3s
**I03D Drain, OR 77.34 34** P P 21 11 26.0 +4.2
baz=227
**YSS Yuzh-Sakhalins 77.35 330** *e*P **P** **21 11 23.2 +1.6**
YSS *e* 21 11 36.1
YSS *e*S **S** **21 21 08.0 -1.4**
YSS *e* 21 21 30.7
YSS *e*SS **SS** **21 26 16.1 +7.2**
YSS pmax pmax
comp=Z,700nm,4.1s
YSS pmax pmax
comp=E,400nm,5.6s
YSS pmax pmax
comp=Z,40nm,1.3s
YSS MLR MLR
comp=Z,700nm,16.0s
**YSS Yuzh-Sakhalins 77.35 330** P **P** **21 11 24.1 +2.4**
**YSS Yuzh-Sakhalins 77.35 330** P **P** **21 11 23.3 +1.6**
**I02E Swisshome, OR 77.36 34** P P 21 11 26.1 +4.2
baz=227
**NACB Ninganchiao 77.38 301** P **P** **21 11 23.7 +1.4**
NACB IAmb IAmb 21 11 25.5
comp=Z,38nm,1.2s
**SHPR Sheep Range 77.69 44** P P 21 11 27.7 +3.6
SHPR IAmb IAmb 21 11 29.3
comp=Z,32nm,1.5s
**Y14A Wickenburg 77.69 47** P **P** **21 11 21.2 -2.8**
**J04D Umpqua Nationa 77.70 35** P **P** **21 11 26.9 +2.8**
**J04D Umpqua Nationa 77.70 35** P P 21 11 27.7 +3.6
baz=228
**W13A Hualapai Mount 77.73 46** P **P** **21 11 20.6 -3.8**
**TPUB Ta-pu 77.75 300** P **P** **21 11 26.4 +1.8**
**YHNB Yeheng 77.78 302** P **P** **21 11 26.4 +1.7**
YHNB IAmb IAmb 21 11 28.1
comp=Z,30nm,1.2s
**YHNB Yeheng 77.78 302** P **P** **21 11 26.5 +1.7**
**MOD Modoc Plateau 77.83 37** P **P** **21 11 27.4 +2.6**
MOD IAmb IAmb 21 11 29.4
comp=Z,38nm,1.3s
**I04A Tendick Farm, 77.91 35** P P 21 11 29.1 +4.1
baz=228
**S11A Rachel 77.97 43** P **P** **21 11 27.6 +2.0**
S11A IAmb IAmb 21 11 29.8
comp=Z,33nm,1.3s
**K05A Summer Lake 78.03 36** P **P** **21 11 29.0 +3.1**
**LEM Lembang 78.15 267** LR LR 21 48 49.1
comp=Z,106nm,18.5s,baz=118,slow=38
**J05D Fort Rock, OR 78.21 36** P P 21 11 30.4 +3.6
baz=229
**H04D Lebanon 78.23 34** P P 21 11 30.2 +3.5
baz=228
**PRN Pahroc Range 78.28 43** P P 21 11 30.9 +3.6
PRN IAmb IAmb 21 11 32.8
comp=Z,52nm,1.3s
**KSM Kuching 78.33 276** P **P** **21 11 29.3 +1.3**
**TUC Tucson 78.38 50** P P 21 11 31.6 +3.7
TUC pmax pmax
comp=Z,31nm,1.3s
**TUC Tucson 78.38 50** P P 21 11 31.6 +3.7
TUC IAmb IAmb 21 11 33.5
comp=Z,31nm,1.3s
**TUC Tucson 78.38 50** P P 21 11 32.0 +4.1
baz=238
**CNJI Cibinong 78.46 266** P **P** **21 11 30.8 +2.1**
comp=Z,51nm,1.1s
**R11A Troy Canyon, C 78.49 42** P **P** **21 11 31.0 +2.5**
**R11A Troy Canyon, C 78.49 42** P P 21 11 32.1 +3.6
baz=234,SNR=18
**H04A Detroit Lake 78.63 34** P **P** **21 11 31.7 +2.8**
H04A IAmb IAmb 21 11 33.1
comp=Z,39nm,1.4s
**PINE Pine Mountain 78.71 35** P **P** **21 11 31.7 +2.1**
**KDAK Kodiak Island 78.72 11** LR LR 21 39 45.9
comp=Z,329nm,19.3s,baz=199,slow=31
**BMN Battle Mountai 78.72 40** P **P** **21 11 32.6 +2.9**
BMN pmax pmax
comp=Z,42nm,1.2s
**BMN Battle Mountai 78.72 40** P **P** **21 11 32.6 +2.9**
BMN IAmb IAmb 21 11 34.4
comp=Z,42nm,1.2s
**I05D Terrebonne, OR 78.85 35** P **P** **21 11 33.6 +3.4**
baz=229
**319A Douglas 78.98 51** P P 21 11 35.0 +3.7
319A IAmb IAmb 21 11 36.9
comp=Z,32nm,1.1s
**X16A Lo Mia Camp, P 79.03 48** P P 21 11 35.5 +3.8
X16A IAmb IAmb 21 11 37.2
comp=Z,36nm,1.4s
**WVOR Wild Horse Val 79.13 38** P **P** **21 11 34.6 +2.8**
WVOR pmax pmax
comp=Z,34nm,1.2s
**WVOR Wild Horse Val 79.13 38** P **P** **21 11 34.6 +2.8**
WVOR IAmb IAmb 21 11 36.5
comp=Z,34nm,1.2s

**UGL Uglegorsk 79.22 332** *e*P **P** **21 11 33.0 +1.0**
UGL pmax pmax
comp=Z,40nm,1.2s
**LCMT Little Creek M 79.24 45** P **P** **21 11 35.4 +2.8**
**HOOD Mount Hood Mea 79.34 34** P **P** **21 11 35.4 +2.5**
**F04A Amboy 79.35 33** P **P** **21 11 35.9 +3.1**
F04A IAmb IAmb 21 11 38.8
comp=Z,37nm,1.4s
**G05D Wamic, OR 79.46 34** P P 21 11 37.3 +3.9
baz=228
**CCUT Cedar City 79.46 44** pP 21 11 37.8 -4.9
**KNB Kanab 79.52 45** pP 21 11 38.4 -4.6
**U15A North Rim 79.55 45** pP 21 11 38.9 -4.4
**KSRS Korea Array 79.56 316** P **P** **21 11 37.4 +3.2**
comp=Z,15nm,1.0s,baz=137,slow=5.4,SNR=26
KSRS LR LR 21 43 29.2
comp=Z,154nm,19.4s,baz=120,slow=33
**KSRS Korea Array 79.56 316** *e*P **P** **21 11 37.8 +3.7**
KSRS pmax pmax
comp=Z,15nm,1.0s
**HPIG 79.57 57** P **P** **21 11 37.7 +3.0**
**KSAR Wonju Array Be 79.58 316** P **P** **21 11 37.3 +3.0**
**KSAR Wonju Array Be 79.58 316** P **P** **21 11 37.3 +3.0**
**SPR3 Spring Creek 3 79.66 42** P **P** **21 11 37.0 +1.9**
**SZCU Shurtz Canyon 79.67 44** P **P** **21 11 38.4 +3.4**
**WUAZ Wupatki 79.67 47** P **P** **21 11 31.5 -3.5**
WUAZ IAmb IAmb 21 11 40.7
comp=Z,38nm,1.5s
**WUAZ Wupatki 79.67 47** P P 21 11 38.9 +3.8
baz=237
**I07A Izee 79.68 36** P **P** **21 11 31.7 -3.2**
**E04D Cinebar 79.69 33** P P 21 11 38.3 +3.6
E04D IAmb IAmb 21 11 39.6
comp=Z,48nm,1.2s
**E04D Cinebar 79.69 33** P **P** **21 11 37.9 +3.3**
baz=227
**J08A Circle Bar Ran 79.80 37** P **P** **21 11 38.4 +2.9**
J08A IAmb IAmb 21 11 40.0
comp=Z,30nm,1.2s
**P18K Big Mountain, 79.82 9** P **P** **21 11 37.5 +2.4**
**P18K Big Mountain, 79.82 9** P P 21 11 38.8 +3.7
baz=196
**BELA Belgrano 2 79.92 172** P **P** **21 11 37.1 +1.5**
BELA IAmb IAmb 21 11 39.3
comp=Z,50nm,1.2s
**CGJI Cibinong 80.03 266** P **P** **21 11 39.7 +2.4**
**PKCU Pink Cliffs 80.09 45** P **P** **21 11 40.1 +2.6**
PKCU IAmb IAmb 21 11 43.0
comp=Z,67nm,1.4s
**D03D Eldon 80.10 32** P P 21 11 40.4 +3.6
baz=227
**ELK Elko 80.12 40** LR LR 21 43 45.9
comp=Z,596nm,18.4s,baz=218,slow=33
**ELK Elko 80.12 40** P **P** **21 11 40.2 +2.8**
ELK pmax pmax
comp=Z,19nm,1.3s
**ELK Elko 80.12 40** P **P** **21 11 40.2 +2.8**
**X18A Snowflake 80.14 48** P **P** **21 11 41.0 +3.4**
**PMSA Palmer Station 80.20 156** LR LR 21 42 48.7
comp=Z,319nm,18.0s,baz=294,slow=32
**TYV Tymovskoe 80.28 333** *e*P **P** **21 11 40.1 +2.4**
TYV pmax pmax
comp=Z,31nm,1.4s
TYV pmax pmax
comp=Z,400nm,3.4s
**D05A Enumclaw 80.41 32** P **P** **21 11 41.9 +3.4**
**MTPU Mount Pierson 80.51 44** pP 21 11 43.9 -4.7
**W18A Petrified Fore 80.59 48** P **P** **21 11 42.6 +2.6**
**W18A Petrified Fore 80.59 48** P P 21 11 43.6 +3.5
baz=238
**121A Cookes Peak, D 80.67 51** P **P** **21 11 43.9 +3.4**
**121A Cookes Peak, D 80.67 51** P P 21 11 44.5 +4.0
baz=240
**O19K Port Alsworth 80.73 9** P **P** **21 11 42.1 +2.2**
**O19K Port Alsworth 80.73 9** P **P** **21 11 41.8 +2.0**
baz=197
**G08A Pilot Rock 80.76 35** P **P** **21 11 43.4 +2.8**
G08A IAmb IAmb 21 11 45.0
comp=Z,42nm,1.3s
**CBB Campbell River 80.77 29** P **P** **21 11 36.9 -3.5**
CBB IAmb IAmb 21 11 45.0
comp=Z,53nm,1.4s
**MSU Marysvale 80.78 44** P **P** **21 11 44.4 +3.4**
**MSU Marysvale 80.78 44** P **P** **21 11 44.4 +3.4**
**BRSE Bradley Lake S 80.89 11** P **P** **21 11 43.4 +2.6**
baz=201
**USRK Ussuriysk Ar. 81.05 323** P **P** **21 11 44.3 +2.3**
comp=Z,5.1nm,0.9s,baz=122,slow=9.4,SNR=6.1
USRK LR LR 21 43 14.4
comp=Z,320nm,20.3s,baz=131,slow=32
**USRK Ussuriysk Ar. 81.05 323** P **P** **21 11 44.3 +2.3**
**B05A Bryant 81.08 31** P **P** **21 11 45.0 +2.9**
baz=228
**E07A Sunnyside 81.09 34** P **P** **21 11 44.9 +2.6**
E07A IAmb IAmb 21 11 46.8
comp=Z,43nm,1.3s
**LTY Liberty 81.13 33** P **P** **21 11 45.5 +3.0**
**BBB Bella Bella 81.15 26** LR LR 21 45 15.8
comp=Z,228nm,18.5s,baz=222,slow=34
**HAWA Hanford 81.16 34** P **P** **21 11 45.8 +3.2**
HAWA IAmb IAmb 21 11 47.1
comp=Z,46nm,1.4s
**N19K Bonanza Creek 81.30 9** P **P** **21 11 45.0 +1.9**
N19K IAmb IAmb 21 11 46.3
comp=Z,54nm,1.4s
**N19K Bonanza Creek 81.30 9** P **P** **21 11 45.4 +2.3**
baz=197
**DUG Dugway, Tooele 81.31 42** P **P** **21 11 46.2 +2.5**
DUG pmax pmax
comp=Z,21nm,1.5s
**DUG Dugway, Tooele 81.31 42** P **P** **21 11 46.2 +2.5**
**DUG Dugway, Tooele 81.31 42** P **P** **21 11 46.8 +3.1**
baz=236
**MFID Camas Ranch 81.36 38** P **P** **21 11 40.5 -3.4**
**BMO Blue Mountains 81.39 36** P **P** **21 11 40.4 -3.6**
BMO pmax pmax
comp=Z,22nm,1.5s
**BMO Blue Mountains 81.39 36** P **P** **21 11 40.4 -3.6**
**E08A Dider Farm, El 81.47 34** P **P** **21 11 46.5 +2.3**
E08A IAmb IAmb 21 11 48.7
comp=Z,33nm,1.3s
**TMUT Trail Mountain 81.84 43** P **P** **21 11 49.8 +3.1**
TMUT IAmb IAmb 21 11 52.4
comp=Z,36nm,1.4s
**D08A Wollman Farm, 81.91 34** P **P** **21 11 49.6 +3.1**
D08A IAmb IAmb 21 11 51.0
comp=Z,58nm,1.4s
**E09A Wood Farm, Sta 81.97 35** P **P** **21 11 46.8 0.0**
E09A IAmb IAmb 21 11 51.0
comp=Z,44nm,1.4s
**MNTX Cornudas Mount 82.04 53** P **P** **21 11 50.4 +2.8**
MNTX IAmb IAmb 21 11 53.1
comp=Z,36nm,1.2s
**MNTX Cornudas Mount 82.04 53** P P 21 11 51.5 +4.0
baz=242
**LENM Lemitar 82.07 50** P **P** **21 11 50.9 +3.0**
**F10A Beach Ranch, E 82.13 35** P **P** **21 11 48.1 +0.3**
F10A IAmb IAmb 21 11 52.7
comp=Z,39nm,1.5s
**MDSI Maura Dua 82.14 268** P **P** **21 11 49.3 +0.8**
comp=Z,9.3nm,1.1s
**USHA Ushuaia 82.17 146** LR LR 21 46 03.2
comp=Z,235nm,18.5s,baz=247,slow=34
**SRU San Rafael Swe 82.18 44** P **P** **21 11 49.6 +1.2**
SRU pmax pmax
comp=Z,48nm,1.5s
**SRU San Rafael Swe 82.18 44** P **P** **21 11 49.6 +1.2**
SRU IAmb IAmb 21 11 53.6
comp=Z,48nm,1.5s
**HVU Hansel Valley 82.23 41** P P 21 11 44.0 -4.5
HVU pmax pmax
comp=Z,17nm,1.3s
**HVU Hansel Valley 82.23 41** P P 21 11 44.0 -4.5
**P17A Butcher Ranch, 82.24 44** P **P** **21 11 44.7 -4.0**
P17A IAmb IAmb 21 11 54.2
comp=Z,44nm,1.4s
**TXAR Lajitas Array 82.24 55** P P 21 11 53.0 +4.2
comp=Z,11nm,1.1s,baz=216,slow=6.2,SNR=54
TXAR LR LR 21 43 50.1
comp=Z,386nm,18.7s,baz=256,slow=32
**TXAR Lajitas Array 82.24 55** P P 21 11 53.0 +4.2
**TXAR Lajitas Array 82.24 55** P **P** **21 11 52.3 +3.5**
**PLID Pearl Lake 82.27 37** P P 21 11 44.3 -4.5
**HLID Hailey 82.27 39** P P 21 11 52.3 +3.6
HLID IAmb IAmb 21 11 53.8

comp=Z,29nm,1.3s
**HLID Hailey 82.27 39** P P 21 11 52.3 +3.5
baz=234,SNR=14
**BNM Barren Site 82.31 50** pP 21 11 53.3 -4.8
**RC01 Rabbit Creek A 82.33 11** P **P** **21 11 51.3 +2.9**
**RC01 Rabbit Creek A 82.33 11** P **P** **21 11 51.0 +2.7**
baz=202
**H03S2 Juan Fernandez 82.36 123** T T 22 44 56.4
baz=246,SNR=14
**H03S1 Juan Fernandez 82.37 123** T T 22 44 58.8
baz=246,SNR=18
**H03S3 Juan Fernandez 82.37 123** T T 22 44 56.2
baz=246,SNR=17
**PWL Port Wells 82.38 12** P P 21 11 52.7 +4.0
baz=203
**JLU Jordanelle 82.40 42** P **P** **21 11 46.2 -3.3**
**H03N2 Juan Fernandez 82.48 123** T T 22 44 54.3
baz=257,slow=71,SNR=16
**H03N3 Juan Fernandez 82.48 123** T T 22 44 58.6
baz=257,slow=71,SNR=7.8
**H03N1 Juan Fernandez 82.49 123** T T 22 44 56.9
baz=257,slow=71,SNR=8.8
**B08A Colville Reser 82.53 33** P **P** **21 11 51.6 +1.8**
**L19K White Mountain 82.56 8** P **P** **21 11 52.1 +2.5**
baz=197
**GLI Glacier Island 82.64 12** P **P** **21 11 52.9 +2.9**
baz=204
**P18A Preston Nutter 82.64 44** P **P** **21 11 53.7 +2.8**
**MDJ Mudanjiang 82.67 322** P **P** **21 11 54.4 +3.9**
MDJ pmax pmax
comp=Z,32nm,1.2s
MDJ pmax pmax
comp=Z,320nm,5.3s
**C09A Chrisman Ranch 82.72 34** P **P** **21 11 53.2 +2.5**
C09A IAmb IAmb 21 11 55.8
comp=Z,30nm,1.3s
**LLLB Lillooet 82.78 30** P **P** **21 11 47.8 -3.2**
**PV10 Paradox Valley 82.78 45** P P 21 11 47.5 -4.1
PV10 IAmb IAmb 21 11 57.4
comp=Z,35nm,1.3s
**PV13 Radium Mtn., P 82.81 45** P **P** **21 11 55.1 +3.4**
PV13 IAmb IAmb 21 11 56.9
comp=Z,58nm,1.4s
**ANMO Albuquerque 82.82 49** LR LR 21 45 55.3
comp=Z,324nm,18.0s,baz=250,slow=34
**ANMO Albuquerque 82.82 49***ce*P P 21 11 55.6 +3.8
ANMO pmax pmax
comp=Z,42nm,1.7s
**ANMO Albuquerque 82.82 49** P P 21 11 55.5 +3.7
ANMO IAmb IAmb 21 11 58.5
comp=Z,44nm,1.4s
**ANMO Albuquerque 82.82 49** P P 21 11 56.1 +4.3
baz=240
**PV23 Carpenter Ridg 82.83 45** P P 21 11 55.8 +3.9
PV23 IAmb IAmb 21 11 57.1
comp=Z,32nm,1.0s
**PV11 David Mesa, Pa 82.85 45** pP 21 11 55.8 -4.9
**KNK Knik Glacier 82.86 11** P **P** **21 11 53.6 +2.4**
baz=203
**M22K Willow 82.88 11** P **P** **21 11 53.4 +2.2**
**M22K Willow 82.88 11** P **P** **21 11 53.7 +2.5**
baz=201
**PMR Palmer 82.91 11** P **P** **21 11 53.6 +2.3**
baz=202
**GAMB Gambell 82.94 0** P **P** **21 11 54.4 +2.9**
GAMB IAmb IAmb 21 11 56.2
comp=Z,43nm,1.4s
**GAMB Gambell 82.94 0** P **P** **21 11 54.4 +2.9**
baz=181
**L20K Farewell, AK 82.98 9** P **P** **21 11 54.0 +2.3**
baz=198
**PV07 Paradox Valley 83.07 45** P **P** **21 11 56.3 +3.3**
PV07 IAmb IAmb 21 11 58.2
comp=Z,34nm,1.3s
**GHO Glory Hole Cre 83.11 11** P **P** **21 11 54.4 +1.9**
**TTA Tatalina 83.13 8** P **P** **21 11 55.6 +3.0**
TTA pmax pmax
comp=Z,39nm,1.3s
**TTA Tatalina 83.13 8** P **P** **21 11 55.6 +3.0**
TTA IAmb IAmb 21 11 57.0
comp=Z,39nm,1.3s
**TTA Tatalina 83.13 8** P **P** **21 11 55.6 +3.0**
baz=196,SNR=8.4
**PV15 Paradox Valley 83.13 45** P **P** **21 11 50.0 -3.4**
PV15 IAmb IAmb 21 11 58.4
comp=Z,49nm,1.5s
**DIV Divide 83.14 13** P **P** **21 11 55.0 +2.3**
**NJ2 Nanjing 83.20 307** *e*P **P** **21 11 57.4 +3.8**
NJ2 pmax pmax
comp=Z,6.0nm,0.8s
**BMRM Bremner River 83.24 13** P **P** **21 11 56.2 +3.0**
**BMRM Bremner River 83.24 13** P **P** **21 11 55.8 +2.6**
baz=206
**SML Sawmill 83.25 11** P P 21 11 56.8 +3.6
baz=203
**BCYI Bear Canyon 83.30 38** P **P** **21 11 51.0 -3.1**
**PNL Peninsula 83.35 16** P **P** **21 11 56.7 +3.0**
baz=211
**ISLE Juniper Island 83.43 14** P **P** **21 11 56.6 +2.4**
**COYC Coyhaique 83.43 136** P **P** **21 11 58.4 +3.7**
COYC IAmb IAmb 21 12 00.6
comp=Z,23nm,1.0s
**KLU Klutina 83.44 13** P **P** **21 11 57.1 +2.9**
baz=205
**CUT Chulitna 83.47 10** P **P** **21 11 56.5 +2.3**
**CUT Chulitna 83.47 10** P **P** **21 11 56.3 +2.1**
baz=201,SNR=6.4
**SCM Sheep Creek Mo 83.47 12** P **P** **21 11 56.8 +2.5**
SCM pmax pmax
comp=Z,46nm,1.2s
**SCM Sheep Creek Mo 83.47 12** P **P** **21 11 56.8 +2.5**
**SCM Sheep Creek Mo 83.47 12** P **P** **21 11 56.9 +2.5**
baz=204
**PINM Pinnacle 83.50 16** P **P** **21 11 57.1 +2.6**
baz=210
**RDMU Red Mountain 83.58 43** P **P** **21 11 58.9 +3.2**
RDMU IAmb IAmb 21 12 00.4
comp=Z,34nm,1.3s
**NEW Newport 83.61 34** LR LR 21 46 06.9
comp=Z,908nm,18.1s,baz=208,slow=33
**NEW Newport 83.61 34** P **P** **21 11 57.7 +2.3**
**NEW Newport 83.61 34** P **P** **21 11 57.7 +2.3**
**NEW Newport 83.61 34** P **P** **21 11 58.0 +2.6**
baz=232
**VRDI Verde Repeater 83.73 14** P **P** **21 11 58.4 +2.6**
VRDI IAmb IAmb 21 11 59.8
comp=Z,35nm,1.2s
**K20K Telida 83.79 8** P **P** **21 11 58.6 +2.7**
K20K IAmb IAmb 21 12 00.0
comp=Z,45nm,1.4s
**K20K Telida 83.79 8** P **P** **21 11 58.6 +2.7**
baz=198
**AHID Auburn Hatcher 83.81 41** P **P** **21 11 58.0 +1.3**
AHID IAmb IAmb 21 12 01.4
comp=Z,38nm,1.4s
**N25K Chitina, Valde 83.81 13** P **P** **21 11 58.5 +2.3**
N25K IAmb IAmb 21 12 00.1
comp=Z,43nm,1.2s
**N25K Chitina, Valde 83.81 13** P **P** **21 11 58.8 +2.6**
baz=206,SNR=5.5
**GLB Gilahina Butte 83.84 13** P **P** **21 11 58.9 +2.6**
GLB IAmb IAmb 21 12 00.2
comp=Z,47nm,1.3s
**MCMT McKenzie Canyo 83.92 38** P **P** **21 12 00.5 +3.2**
**M24K Tolsona, Glenn 83.94 12** P **P** **21 11 57.1 +0.4**
**M24K Tolsona, Glenn 83.94 12** P **P** **21 11 60.0 +3.2**
baz=205
**S22A 4UR Ranch, Cre 83.95 47** pP 21 12 01.7 -4.9
**S22A 4UR Ranch, Cre 83.95 47** P P 21 12 02.3 +4.6
baz=240
**BARN Barnard Glacie 83.99 15** P **P** **21 12 00.1 +2.9**
**CAST Castle Rocks 84.13 9** P **P** **21 11 58.3 +0.6**
baz=199
**O20A White River Ci 84.22 44** P **P** **21 12 02.1 +3.3**
O20A IAmb IAmb 21 12 03.8
comp=Z,31nm,1.2s
**O20A White River Ci 84.22 44** P P 21 12 02.5 +3.6
baz=239
**MA2 Magadan 84.22 342***ce*P **P** **21 12 00.4 +2.3**
MA2 pmax pmax
comp=Z,38nm,1.7s
**MA2 Magadan 84.22 342** P **P** **21 11 59.2 +1.1**
MA2 IAmb IAmb 21 12 01.7
comp=Z,38nm,1.4s
**MA2 Magadan 84.22 342** P **P** **21 11 58.8 +0.7**
**REDW Red Top Meadow 84.29 40** P **P** **21 12 02.4 +3.2**

REDW IAmb IAmb 21 12 03.9
comp=Z,36nm,1.2s
**TPAW Teton Pass 84.30 40 P P 21 12 00.0 +0.7**
TPAW IAmb IAmb 21 12 03.2
comp=Z,24nm,1.2s
**KLR Kul'dur 84.30 327 LR LR** 21 45 30.4
comp=Z,145nm,20.1s,baz=88,slow=33
**KLR Kul'dur 84.30 327** *ce*P **P 21 12 01.2 +2.4**
KLR pmax pmax
comp=Z,9.0nm,1.5s
**SKAG Skagway 84.31 18 P P 21 12 02.1 +3.5**
**SKAG Skagway 84.31 18** P P 21 12 02.3 +3.7
baz=215
**DLMT Dillon 84.37 38 P P 21 11 55.6 -3.9**
DLMT IAmb IAmb 21 12 04.1
comp=Z,27nm,1.2s
**SNOW Snow King Moun 84.40 40 P P 21 11 57.4 -2.4**
SNOW IAmb IAmb 21 12 04.6
comp=Z,33nm,1.2s
**HARP HAARP 84.41 12 P P 21 12 01.4 +2.3**
baz=206
**KTH Kantishna Hill 84.44 10 P P 21 11 59.7 +0.4**
KTH IAmb IAmb 21 12 03.3
comp=Z,25nm,1.2s
**TRF Thorofare Moun 84.44 10 P P 21 12 01.2 +1.8**
**TRF Thorofare Moun 84.44 10 P P 21 12 01.8 +2.4**
baz=201
**LL02 Futaleuf 84.44 134 P P 21 11 56.5 -3.3**
**MSO Missoula 84.46 36 P P 21 11 55.8 -4.0**
**MSO Missoula 84.46 36 P P 21 12 02.3 +2.5**
baz=234
**CMIG Matias Romero 84.53 70 LR LR** 21 42 58.3
comp=Z,508nm,18.1s,baz=211,slow=31
**DL2 Dalian 84.53 314 P P 21 12 03.2 +3.0**
DL2 pmax pmax
comp=Z,29nm,1.2s
**CHUM Lake Minchumin 84.54 9 P P 21 12 01.4 +1.7**
baz=199
**J20K Nowinta River 84.57 8 P P 21 11 56.7 -3.1**
**J20K Nowinta River 84.57 8 P P 21 12 02.5 +2.7**
baz=197
**MOOW Moose Ponds 84.57 40 P P** 21 11 55.1 -5.5
MOOW IAmb IAmb 21 12 05.4
comp=Z,29nm,1.5s
**SMCO Snowmass 84.57 45 P P 21 11 57.3 -3.6**
SMCO IAmb IAmb 21 12 06.1
comp=Z,38nm,1.4s
**LOHW Long Hollow 84.58 40 P P 21 11 57.4 -3.2**
**BNX BinXian 84.58 322** ⇑P **P 21 12 03.2 +2.9**
BNX pmax pmax
comp=Z,62nm,1.2s
BNX pmax pmax
comp=Z,560nm,3.8s
**RND Reindeer 84.64 10 P P 21 11 56.4 -3.9**
RND pmax pmax
comp=Z,69nm,1.3s
**RND Reindeer 84.64 10 P P 21 11 56.4 -3.9**
**CN2 Changchun 84.66 320** *e*P **P 21 12 03.8 +3.1**
CN2 pmax pmax
comp=Z,20nm,1.6s
**YUK6 Outpost Mounta 84.71 16 P P 21 12 02.7 +1.8**
baz=212
**LRM Limekiln Ridge 84.72 38 P P 21 11 57.9 -3.5**
**QLMT Earthquake Lak 84.76 39 P P 21 12 04.9 +3.4**
**BW06 Boulder Array 84.76 41 P P 21 12 04.6 +3.0**
baz=238
**PDAR Pinedale Array 84.76 41 P P 21 12 04.5 +2.9**
comp=Z,7.5nm,1.0s,baz=204,slow=3.3,SNR=13
PDAR LR LR 21 46 44.9
comp=Z,354nm,18.5s,baz=259,slow=33
**FLWY Flagg Ranch 84.78 40 P P 21 11 59.0 -2.6**
FLWY IAmb IAmb 21 12 06.8
comp=Z,39nm,1.3s
**GCSA Galena City Sc 84.78 7 P P 21 12 04.4 +3.5**
baz=195
**TNA Tin City 84.81 2 P P 21 11 57.1 -3.8**
**TNA Tin City 84.81 2 P P 21 12 03.8 +2.9**
baz=184
**HYT Haines Junctio 84.84 16 P P 21 11 59.0 -2.4**
HYT IAmb IAmb 21 12 06.1
comp=Z,38nm,1.4s
**HYT Haines Junctio 84.84 16 P P 21 12 04.7 +3.3**
baz=213
**PAX Paxson 84.86 12 P P 21 11 59.9 -1.6**
PAX pmax pmax
comp=Z,36nm,1.4s
**PAX Paxson 84.86 12 P P 21 11 59.9 -1.6**
PAX IAmb IAmb 21 12 05.0
comp=Z,36nm,1.4s
**PAX Paxson 84.86 12 P P 21 12 03.6 +2.1**
baz=206,SNR=6.1
**SDCO Great Sand Dun 84.87 47 P P 21 11 58.9 -3.5**
SDCO IAmb IAmb 21 12 07.3
comp=Z,25nm,1.3s
**SDCO Great Sand Dun 84.87 47 P P 21 12 05.8 +3.5**
baz=241
**M26K Nabesna, AK 84.87 13 P P** 21 11 57.3 -4.2
**M26K Nabesna, AK 84.87 13 P P 21 12 04.2 +2.8**
baz=208
**YUK3 Moose Creek 84.90 15 P P 21 12 04.5 +2.7**
baz=210,SNR=12
**MCK McKinley 84.93 10 P P 21 12 04.1 +2.4**
MCK pmax pmax
comp=Z,71nm,1.2s
**MCK McKinley 84.93 10 P P 21 12 04.0 +2.4**
**MCK McKinley 84.93 10 P P 21 12 04.1 +2.4**
baz=202,SNR=13
**BPAW Bear Paw Mtn. 84.94 9 P P 21 12 03.1 +1.4**
**BPAW Bear Paw Mtn. 84.94 9 P P 21 12 02.7 +1.0**
baz=200
**YMR Madison River 84.94 39 P P 21 12 03.7 +1.3**
YMR IAmb IAmb 21 12 07.8
comp=Z,45nm,1.4s
**YUK4 Talbot Arm 84.98 16 P P 21 12 05.6 +3.4**
baz=212
**H17A Grant Village 85.02 39 P P 21 12 04.0 +1.1**
**H17A Grant Village 85.02 39 P P** 21 12 07.3 +4.3
baz=237
**MSTX Muleshoe 85.04 52 P P 21 12 04.5 +1.4**
**MSTX Muleshoe 85.04 52 P P** 21 12 06.8 +3.8
baz=243
**BOZ Bozeman (W) 85.07 38 P P 21 12 02.6 -0.4**
BOZ pmax pmax
comp=Z,41nm,1.4s
**BOZ Bozeman (W) 85.07 38 P P 21 12 02.6 -0.4**
BOZ IAmb IAmb 21 12 07.6
comp=Z,41nm,1.4s
**BOZ Bozeman (W) 85.07 38 P P 21 12 06.4 +3.4**
baz=236,SNR=18
**YHH Holmes Hill 85.08 39 P P 21 12 03.2 -0.1**
YHH IAmb IAmb 21 12 09.4
comp=Z,31nm,1.4s
**M27K Edge Creek, AK 85.08 14 P P 21 12 02.7 +0.1**
**M27K Edge Creek, AK 85.08 14 P P 21 12 06.1 +3.4**
baz=209
**YNR Norris Junctio 85.14 39 P P 21 12 03.5 0.0**
YNR IAmb IAmb 21 12 09.9
comp=Z,20nm,1.3s
**833A Chaparral WMA, 85.17 58 P P 21 12 06.8 +3.1**
baz=245
**DLBC Dease Lake 85.17 21** LR LR 21 47 08.1
comp=Z,215nm,18.2s,baz=138,slow=34
**MENT Mentasta 85.19 13 P P 21 12 00.5 -2.6**
MENT IAmb IAmb 21 12 07.4
comp=Z,29nm,1.2s
**LKWY Lake 85.22 39 P P 21 12 03.6 -0.3**
LKWY pmax pmax
comp=Z,27nm,1.3s
**LKWY Lake 85.22 39 P P 21 12 03.6 -0.3**
LKWY IAmb IAmb 21 12 10.0
comp=Z,26nm,1.3s
**T25A Trinidad 85.33 48 P P 21 12 03.6 -1.0**
**T25A Trinidad 85.33 48 P P 21 12 08.0 +3.4**
baz=242
**L26K Log Cabin Wild 85.35 13 P P 21 12 06.0 +2.2**
L26K IAmb IAmb 21 12 08.2
comp=Z,30nm,1.2s
**L26K Log Cabin Wild 85.35 13 P P 21 12 06.9 +3.1**
baz=208,SNR=5.1
**BVCY Beaver Creek 85.36 14 P P 21 12 07.0 +3.1**
baz=210,SNR=6.5
**WHY Whitehorse 85.42 18 P P 21 12 07.5 +3.2**
WHY IAmb IAmb 21 12 08.0
comp=Z,21nm,1.2s
**WHY Whitehorse 85.42 18 P P 21 12 07.1 +2.8**
baz=215

**HRY Holter Researc 85.58 37 P P 21 12 06.9 +1.4**
**P33M Teslin, Yukon 85.67 19 P P 21 12 08.3 +2.8**
P33M IAmb IAmb 21 12 09.1
comp=Z,24nm,1.4s
**P33M Teslin, Yukon 85.67 19 P P 21 12 08.4 +2.8**
baz=217
**RIDG Independent Ri 85.68 12 P P 21 12 08.1 +2.7**
RIDG IAmb IAmb 21 12 09.5
comp=Z,34nm,1.2s
**RIDG Independent Ri 85.68 12 P P 21 12 08.2 +2.7**
baz=206,SNR=5.6
**Q24A Divide 85.70 46 P P 21 12 05.4 -1.1**
Q24A IAmb IAmb 21 12 12.5
comp=Z,33nm,1.4s
**Q24A Divide 85.70 46 P P 21 12 09.8 +3.2**
baz=241
**NEA2 Nenana 85.71 10 P P 21 12 05.9 +0.3**
**NEA2 Nenana 85.71 10 P P 21 12 08.9 +3.4**
baz=202
**L27K Beaver Creek, 85.71 14 P P 21 12 06.4 +0.8**
L27K IAmb IAmb 21 12 12.1
comp=Z,26nm,1.4s
**L27K Beaver Creek, 85.71 14 P P 21 12 08.9 +3.3**
baz=209,SNR=6.7
**BCAR Beaver Creek A 85.72 14 P P 21 12 08.2 +2.5**
**JCT Junction City 85.76 56 P P 21 12 09.7 +3.1**
JCT pmax pmax
comp=Z,23nm,1.3s
**JCT Junction City 85.76 56 P P 21 12 09.7 +3.1**
JCT IAmb IAmb 21 12 10.3
comp=Z,23nm,1.2s
**JCT Junction City 85.76 56 P P 21 12 09.7 +3.1**
baz=245
**WRH Wood River Hil 85.76 10 P P 21 12 05.7 0.0**
**WALA Waterton Lakes 85.79 34 P P 21 12 08.4 +2.0**
WALA IAmb IAmb 21 12 12.9
comp=Z,29nm,1.4s
**ISCO Idaho Springs 85.79 45 P P 21 12 06.5 -0.4**
ISCO pmax pmax
comp=Z,9.0nm,1.3s
**ISCO Idaho Springs 85.79 45 P P 21 12 06.5 -0.4**
**ISCO Idaho Springs 85.79 45 P P** 21 12 10.7 +3.7
baz=241
**I21K Tanana 85.82 9 P P 21 12 07.1 +1.0**
I21K IAmb IAmb 21 12 09.8
comp=Z,30nm,1.4s
**I21K Tanana 85.82 9 P P 21 12 08.6 +2.6**
baz=199
**N31M Braeburn, Yuko 85.85 17 P P 21 12 08.8 +2.4**
**N31M Braeburn, Yuko 85.85 17 P P 21 12 09.4 +3.0**
baz=214
**MLY Manley 85.86 9 P P 21 12 08.1 +1.8**
MLY IAmb IAmb 21 12 09.6
comp=Z,25nm,1.2s
**MLY Manley 85.86 9 P P 21 12 08.3 +2.0**
baz=200
**HDA Harding Lake 85.90 11 P P 21 12 08.2 +1.7**
**HDA Harding Lake 85.90 11 P P 21 12 08.7 +2.2**
baz=204
**CCB Clear Creek Bu 85.97 10 P P 21 12 08.0 +1.2**
**WHN Wuhan 85.98 304** ⇑P **P 21 12 11.2 +3.6**
WHN pmax pmax
comp=Z,90nm,1.6s
**LC01 Cunco 86.00 130 P P 21 12 11.3 +3.5**
LC01 IAmb IAmb 21 12 12.7
comp=Z,32nm,1.1s
**SCRK Sand Creek 86.07 12 P P 21 12 08.6 +1.1**
SCRK IAmb IAmb 21 12 10.9
comp=Z,24nm,1.3s
**SCRK Sand Creek 86.07 12 P P 21 12 10.0 +2.5**
baz=207,SNR=8.5
**H21K Melozitna Rive 86.16 8 P P 21 12 07.4 -0.4**
H21K IAmb IAmb 21 12 12.2
comp=Z,38nm,1.4s
**H21K Melozitna Rive 86.16 8 P P 21 12 10.7 +3.0**
baz=199
**TCOL CIGO, UAF Yank 86.17 10 P P 21 12 08.6 +0.8**
**TCOL CIGO, UAF Yank 86.17 10 P P 21 12 10.3 +2.6**
baz=203,SNR=5.4
**COLA College 86.17 10** *i* P **P 21 12 10.2 +2.5**
COLA pmax pmax
comp=Z,39nm,1.2s
**COLA College 86.17 10 P P 21 12 09.8 +2.1**
**COLA College 86.17 10 P P 21 12 09.6 +1.9**
baz=203
**I23K Minto, Yukon-K 86.18 10 P P 21 12 09.7 +1.9**
I23K IAmb IAmb 21 12 11.4
comp=Z,35nm,1.3s
**I23K Minto, Yukon-K 86.18 10 P P 21 12 09.9 +2.1**
baz=202,SNR=8.5
**MDM Murphy Dome 86.18 10 P P 21 12 08.7 +0.8**
**IL31 86.24 11 P P 21 12 09.1 +1.0**
**ILAR Eielson Array 86.24 11 P P 21 12 10.3 +2.1**
comp=Z,18nm,1.3s,baz=210,slow=4.9,SNR=27
ILAR LR LR 21 48 00.0
comp=Z,143nm,19.0s,baz=114,slow=34
**ILAR Eielson Array 86.24 11 P P 21 12 09.4 +1.3**
**AMTX Amarillo 86.26 51 P P 21 12 10.5 +1.5**
**AMTX Amarillo 86.26 51 P P 21 12 12.6 +3.5**
baz=243
**PLCA Paso Flores 86.26 132 P P 21 12 12.2 +3.1**
comp=Z,14nm,1.1s,baz=249,slow=5.2,SNR=12
PLCA LR LR 21 44 47.7
comp=Z,389nm,18.5s,baz=260,slow=32
**PLCA Paso Flores 86.26 132** *e*P **P 21 12 13.8 +4.7**
PLCA pmax pmax
comp=Z,14nm,1.1s
**PLCA Paso Flores 86.26 132 P P 21 12 10.6 +1.5**
PLCA IAmb IAmb 21 12 14.6
comp=Z,33nm,1.2s
**IMAR Indian Mountai 86.35 8 P P 21 12 11.0 +2.4**
**J25K Salcha River, 86.37 11 P P 21 12 11.1 +2.2**
J25K IAmb IAmb 21 12 12.3
comp=Z,23nm,1.2s
**J25K Salcha River, 86.37 11 P P 21 12 11.5 +2.6**
baz=206,SNR=13
**TIA Tai'an 86.39 310** ⇓P **P 21 12 12.5 +2.9**
TIA pmax pmax
comp=Z,24nm,1.3s
**POKR Poker Plat Res 86.46 10 P P 21 12 11.3 +2.0**
**POKR Poker Plat Res 86.46 10 P P 21 12 11.5 +2.2**
baz=204,SNR=9.8
**SEY Seymchan 86.59 345 P P 21 12 12.4 +2.5**
comp=Z,15nm,1.1s,baz=156,slow=7.3
**SEY Seymchan 86.59 345 P P 21 12 12.4 +2.5**
**J26L Joseph Creek 86.62 12 P P 21 12 07.0 -3.2**
**J26L Joseph Creek 86.62 12 P P 21 12 13.6 +3.5**
baz=207
**ABTX Abilene, Hawle 86.79 54 P P 21 12 09.8 -1.9**
**ABTX Abilene, Hawle 86.79 54 P P 21 12 15.2 +3.6**
baz=245
**M31M Drury Creek, Y 86.82 17 P P 21 12 13.6 +2.4**
M31M IAmb IAmb 21 12 14.9
comp=Z,23nm,1.4s
**M31M Drury Creek, Y 86.82 17 P P 21 12 13.5 +2.4**
baz=216
**DAWY Dawson 87.13 14 P P 21 12 08.7 -3.8**
**DAWY Dawson 87.13 14 P P 21 12 15.7 +3.2**
baz=211,SNR=16
**FARO Faro, Yukon 87.13 17 P P 21 12 15.5 +2.8**
baz=217
**PRP Porcupine Dome 87.16 11 P P 21 12 10.2 -2.6**
PRP IAmb IAmb 21 12 19.2
comp=Z,23nm,1.3s
**PRP Porcupine Dome 87.16 11 P P 21 12 15.9 +3.0**
baz=205
**EGAK Eagle 87.36 13 P P 21 12 11.9 -1.7**
**EGAK Eagle 87.36 13 P P 21 12 16.6 +3.0**
baz=210
**RDOG Red Dog Mine 87.53 4 P P 21 12 11.9 -2.5**
**RDOG Red Dog Mine 87.53 4 P P 21 12 16.8 +2.4**
baz=189
**APG El Apazote 87.73 73** LR LR 21 44 46.2
comp=Z,341nm,18.1s,baz=283,slow=31
**COLD Coldfoot 88.00 9 P P 21 12 14.1 -2.5**
**COLD Coldfoot 88.00 9 P P 21 12 20.0 +3.4**
baz=201
**MMPY Sheldon Lake, 88.03 18 P P 21 12 19.9 +2.9**
baz=218
**WMOK Wichita Mounta 88.34 52 P P 21 12 22.0 +3.0**
baz=245
**MT01 Popeta 88.34 125 P P 21 12 17.2 -2.0**
**I29M Ogilvie Camp, 88.48 14 P P 21 12 16.5 -2.5**
I29M IAmb IAmb 21 12 24.7
comp=Z,20nm,1.2s
**I29M Ogilvie Camp, 88.48 14 P P 21 12 21.7 +2.8**
baz=212
**EDM Edmonton 88.52 31 P P 21 12 16.0 -3.4**
EDM pmax pmax
comp=Z,49nm,1.2s
**EDM Edmonton 88.52 31** ⇑P **P 21 12 16.0 -3.4**
**BILL Bilibino 88.59 352** *e*P **P 21 12 21.3 +1.9**
BILL *e* 21 15 54.9
BILL *e*PPP PPP 21 17 49.9
BILL *e*S **S 21 22 56.5 -6.3**
BILL pmax pmax
comp=Z,21nm,1.7s
**BILL Bilibino 88.59 352 P P 21 12 16.4 -3.0**
BILL IAmb IAmb 21 12 23.2
comp=Z,15nm,1.2s
**HNS HongShan 88.65 310** ⇓P **P 21 12 23.6 +3.2**
HNS S **S 21 23 11.7 +7.1**
HNS pmax pmax
comp=Z,25nm,1.6s
HNS LR LR
comp=Z,390nm,19.6s
HNS LR LR
comp=Z,550nm,18.4s
HNS LR LR
comp=Z,500nm,22.9s
**HKT Hockley 88.67 58** *i* P P 21 12 24.5 +3.9
HKT pmax pmax
comp=Z,16nm,1.7s
**HKT Hockley 88.67 58** P P 21 12 16.4 -4.2
HKT IAmb IAmb 21 12 26.1
comp=Z,29nm,1.4s
**BJT Baijiatuau 88.78 313** P P 21 12 16.8 -4.1
BJT pmax pmax
comp=Z,45nm,1.4s
**BJT Baijiatuau 88.78 313** P P 21 12 16.8 -4.1
**BJI Beijing 88.78 313** P **P 21 12 23.9 +3.0**
BJI pP **pwP 21 12 36.7 -2.1**
BJI sP sP 21 12 42.9 +10
BJI pmax pmax
comp=Z,22nm,1.4s
**VNA3 Neumayer Olymp 88.79 175** P **P 21 12 23.0 +2.4**
**SYO Syowa Base 88.81 191** ⇓ *i* PcP **PcP 21 12 24.0 +1.8**
**SYO Syowa Base 88.81 191** ⇑ *e*PP PP 21 15 49.4 +0.1
**LAO LASA Array 88.83 39** P **P 21 12 24.6 +3.5**
baz=240
**SNAA Sanae 88.86 177** P **P 21 12 23.3 +2.3**
**SNAA Sanae 88.86 177** *ce*P **P 21 12 22.2 +1.3**
SNAA pmax pmax
comp=Z,873nm,1.0s
**SNAA Sanae 88.86 177** P **P 21 12 20.1 -0.8**
SNAA IAmb IAmb 21 12 24.7
comp=Z,17nm,1.1s
**RSSD Black Hills 88.92 42** P **P 21 12 24.4 +2.6**
baz=242
**X34A Smith Ranch, M 88.99 53** P P 21 12 17.8 -4.3
**BMAR Burnt Mountain 89.06 10** P **P 21 12 17.8 -3.9**
**LYN LuoYang 89.10 307** ⇓P **P 21 12 25.6 +3.0**
LYN pP pwP 21 12 38.6 -2.9
LYN S **S 21 23 11.6 +2.6**
LYN pmax pmax
comp=Z,10.0nm,1.5s
LYN pmax pmax
comp=Z,140nm,8.1s
LYN LR LR
comp=Z,340nm,12.2s
LYN LR LR
comp=Z,330nm,18.2s
**EFI East Falkland 89.15 145** *ce*P **P 21 12 25.7 +3.1**
EFI pmax pmax
comp=Z,80nm,1.3s
**EFI East Falkland 89.15 145** P **P 21 12 21.5 -1.1**
**ZEA Zeya 89.26 329** *e*P **P 21 12 26.1 +3.3**
ZEA pmax pmax
comp=N,10.0nm,1.5s
ZEA pmax pmax
comp=Z,30nm,1.3s
**VNA2 Neumayer--Watz 89.29 175** P **P 21 12 25.8 +2.9**
baz=186,slow=4.0
**TOLK Toolik Lake Re 89.40 8** P **P 21 12 19.7 -3.6**
**TOLK Toolik Lake Re 89.40 8** P **P 21 12 25.9 +2.6**
baz=202
**PSI Prapat 89.48 273** LR LR 21 55 23.8
comp=Z,119nm,18.1s,baz=126,slow=38
**VNA1 Neumayer--Stat 89.49 175** P **P 21 12 26.3 +2.5**
**ENH Enshi 89.71 302** P **P 21 12 27.6 +2.0**
**CO03 El Pedregal 89.93 123** P P 21 12 22.4 -4.5
**W35A Tecumseh 89.94 53** P **P 21 12 24.7 -1.8**
**XLT XiLinHaoTe 90.58 317** *e*P **P 21 12 32.4 +3.0**
XLT sP pwP 21 12 49.5 +2.2
XLT pmax pmax
comp=Z,9.0nm,1.4s
XLT pmax pmax
comp=Z,290nm,5.0s
**GYA Guiyang 90.59 298** ⇑ *i*P **P 21 12 33.7 +3.8**
GYA pP pwP 21 12 46.1 -2.7
GYA pmax pmax
comp=Z,20nm,1.2s
**DGMT Dagmar 90.90 38** P **P 21 12 33.7 +3.0**
baz=241
**JTS Las Juntas de 91.18 80** LR LR 21 45 28.5
comp=Z,293nm,19.3s,baz=124,slow=30
**JTS Las Juntas de 91.18 80** *i* P **P 21 12 36.5 +3.7**
JTS pmax pmax
comp=Z,27nm,1.2s
**JTS Las Juntas de 91.18 80** P **P 21 12 30.6 -2.2**
**ZON Zonda 91.24 124** P **P 21 12 31.8 -1.1**
ZON pmax pmax
comp=Z,37nm,1.5s
**ZON Zonda 91.24 124** P **P 21 12 31.8 -1.1**
**NNA Nana 91.40 103** LR LR 21 45 23.7
comp=Z,305nm,19.3s,baz=262,slow=30
**XAN Xi'an 91.59 306** P **P 21 12 37.5 +3.2**
XAN pP pwP 21 12 50.0 -3.2
XAN pmax pmax
comp=Z,16nm,1.3s
**ATAH Atahualpa 91.60 98** LR LR 21 46 18.7
comp=Z,706nm,18.3s,baz=283,slow=31
**INK Inuvik 91.99 14** LR LR 21 53 23.8
comp=Z,347nm,18.4s,baz=180,slow=35
**INK Inuvik 91.99 14** P **P 21 12 37.3 +2.1**
INK pmax pmax
comp=Z,34nm,1.5s
**INK Inuvik 91.99 14** P **P 21 12 37.2 +2.1**
**INK Inuvik 91.99 14** P **P 21 12 37.7 +2.5**
baz=216
**W39A Magazine 92.29 54** P **P 21 12 40.8 +3.4**
baz=248
**HHC Hu-ho-hao-te 92.31 313** *e*P **P 21 12 40.9 +3.4**
HHC pmax pmax
comp=Z,17nm,1.4s
HHC pmax pmax
comp=Z,130nm,4.3s
**YAK Yakutsk 93.10 336** P **P 21 12 41.8 +1.3**
comp=Z,2.0nm,0.3s,baz=144,slow=2.5,SNR=4.3
YAK LR LR 21 56 06.2
comp=Z,80nm,18.1s,baz=340,slow=36
**YAK Yakutsk 93.10 336** *e*P **P 21 12 42.3 +1.8**
YAK pmax pmax
comp=Z,10.0nm,1.1s
**YAK Yakutsk 93.10 336** IAmb IAmb 21 12 43.2
comp=Z,10nm,1.0s
**U40A Yellville 93.42 53** P **P 21 12 38.6 -4.0**
**U40A Yellville 93.42 53** P **P 21 12 45.2 +2.5**
baz=249
**KMI Kunming 93.44 295** ⇑P **P 21 12 47.4 +4.1**
KMI pP pwP 21 12 59.3 -2.9
KMI pmax pmax
comp=Z,12nm,1.2s
KMI LR LR
comp=Z,250nm,24.9s
**W41B Gary Mavity, V 93.45 54** P P 21 12 46.4 +3.7
baz=249
**YKA Yellowknife Ar 93.48 23** P **P 21 12 45.1 +2.8**
comp=Z,3.2nm,1.0s,baz=231,slow=4.3,SNR=25
YKA PP PP 21 16 35.1 +7.9
comp=Z,0.2nm,0.6s,baz=227,slow=8.1,SNR=4.0
YKA LR LR 21 49 12.0
comp=Z,110nm,18.4s,baz=267,slow=32
**S39A Bolivar 93.56 51** P **P 21 12 39.5 -3.8**
S39A IAmb IAmb 21 12 47.6
comp=Z,19nm,1.2s
**ECSD EROS Data Cent 93.57 45** P **P 21 12 40.0 -3.2**
**ECSD EROS Data Cent 93.57 45** P **P 21 12 45.9 +2.8**
baz=247
**PB15 IPOC Station P 93.88 116** P **P 21 12 48.9 +3.5**
**PB06 IPOC Station P 93.98 116** P **P 21 12 50.2 +4.4**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PB03** | **IPOC Station P** | **94.08** | **115** | P | | **P** | | **21 12 42.9** | **-3.4** |
| **P38A** | **Dawn** | **94.12** | **49** | P | | **P** | | **21 12 48.6** | **+2.8** |
| P38A | | | | IAmb | | IAmb | | 21 12 49.0 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **94.14** | **52** | P | | **P** | | **21 12 48.8** | **+2.8** |
| **CD2** | **Chengdu** | **94.55** | **301** | P | | **P** | | **21 12 50.3** | **+2.3** |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | | |
| **R40A** | **Maddies Statio** | **94.55** | **51** | P | | P | | 21 12 42.7 | -5.0 |
| **LVC** | **Limon Verde** | **94.58** | **116** | LR | | LR | | 21 47 17.2 | |
| | comp=Z,368nm,19.5s,baz=236,slow=30 | | | | | | | | |
| **LVC** | **Limon Verde** | **94.58** | **116** | P | | P | | 21 12 54.2 | +5.4 |
| LVC | | | | pmax | | pmax | | | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| **LVC** | **Limon Verde** | **94.58** | **116** | P | | P | | 21 12 54.2 | +5.3 |
| **CMAR** | **Chiang Mai Arr** | **94.59** | **288** | P | | **P** | | **21 12 49.6** | **+1.2** |
| | comp=Z,8.7nm,1.2s,baz=104,slow=3.0,SNR=18 | | | | | | | | |
| CMAR | | | | LR | | LR | | 21 56 10.2 | |
| | comp=Z,67nm,18.4s,baz=315,slow=36 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.59** | **288** | *e*P | | **P** | | **21 12 52.1** | **+3.7** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.59** | **288** | P | | **P** | | **21 12 51.1** | **+2.7** |
| **PZH** | **PanZhiHua** | **94.75** | **296** | P | | **P** | | **21 12 51.6** | **+2.5** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,150nm,7.3s | | | | | | | | |
| **C36M** | **Paulatuk** | **95.02** | **15** | P | | **P** | | **21 12 51.2** | **+2.1** |
| | baz=225 | | | | | | | | |
| **MNMC** | **Minye Minye** | **95.34** | **112** | P | | P | | 21 12 48.0 | -4.2 |
| **I37A** | **Lemond, Waseca** | **95.82** | **45** | P | | **P** | | **21 12 56.6** | **+3.1** |
| **AGMN** | **Agassiz Nation** | **95.83** | **41** | P | | **P** | | **21 12 56.1** | **+2.7** |
| AGMN | | | | IAmb | | IAmb | | 21 12 56.7 | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **95.83** | **41** | P | | **P** | | **21 12 55.3** | **+1.9** |
| | baz=248 | | | | | | | | |
| **LZH** | **Lanzhou** | **96.21** | **306** | *e*P | | **P** | | **21 12 59.3** | **+3.7** |
| LZH | | | | pP | | pwP | | 21 13 12.5 | -2.1 |
| LZH | | | | sP | | sP | | 21 13 17.2 | +10 |
| LZH | | | | SKS | | **SKSac** | | **21 23 25.0** | **-4.8** |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,260nm,8.7s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,250nm,16.8s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,320nm,17.0s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,370nm,19.6s | | | | | | | | |
| **F36A** | **Milaca** | **96.41** | **44** | P | | **P** | | **21 12 53.1** | **-2.9** |
| **ULM** | **Lac du Bonnet** | **96.57** | **39** | LR | | LR | | 21 53 27.5 | |
| | comp=Z,434nm,18.2s,baz=268,slow=34 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **96.63** | **13** | P | | **P** | | **21 12 58.8** | **+2.4** |
| | baz=224 | | | | | | | | |
| **LPAZ** | **La Paz** | **97.72** | **110** | LR | | LR | | 21 49 27.7 | |
| | comp=Z,410nm,19.0s,baz=260,slow=31 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.93** | **318** | *i* P | | Pdif | | 21 13 05.3 | +2.1 |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **SONM** | **Songino Array** | **98.34** | **318** | P | | Pdif | | 21 13 06.5 | +1.6 |
| | comp=Z,0.4nm,0.8s,baz=101,slow=4.6,SNR=2.9 | | | | | | | | |
| SONM | | | | PP | | **PP** | | **21 17 11.9** | **+6.5** |
| | comp=Z,0.5nm,1.0s,baz=145,slow=5.4,SNR=3.7 | | | | | | | | |
| SONM | | | | LR | | LR | | 21 53 32.2 | |
| | comp=Z,91nm,21.6s,baz=242,slow=33 | | | | | | | | |
| **TIXI** | **Tiksi** | **99.07** | **344** | LR | | LR | | 22 00 37.3 | |
| | comp=Z,65nm,18.1s,baz=359,slow=37 | | | | | | | | |
| **TIXI** | **Tiksi** | **99.07** | **344** | *ce*P | | Pdif | | 21 13 10.5 | +3.1 |
| TIXI | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| **ROSC** | **El Rosal** | **99.39** | **88** | LR | | LR | | 21 50 06.6 | |
| | comp=Z,296nm,18.5s,baz=244,slow=30 | | | | | | | | |
| **GTA** | **Gaotai** | **100.27** | **308** | *e*P | | **Pdif** | | **21 13 16.9** | **+3.1** |
| GTA | | | | pP | | sP | | 21 13 26.6 | +0.7 |
| GTA | | | | sP | | pwP | | 21 13 34.9 | +3.2 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **GOMU** | **GeErMu** | **103.23** | **304** | P | | **Pdif** | | **21 13 27.0** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **112.85** | **321** | PP | | **PP** | | **21 18 56.9** | **+4.6** |
| | comp=Z,0.2nm,0.4s,baz=94,slow=4.5,SNR=3.7 | | | | | | | | |
| ZALV | | | | PKKPbc | | **PKKPab** | | **21 29 02.1** | **+4.1** |
| | comp=Z,0.4nm,0.5s,baz=238,slow=2.8,SNR=3.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **114.16** | **313** | PKP | | **PKiKP** | | **21 18 07.2** | **+0.8** |
| | comp=Z,0.5nm,0.7s,baz=167,slow=0.4,SNR=7.3 | | | | | | | | |
| MKAR | | | | PKKPbc | | **PKKPab** | | **21 28 50.6** | **-1.9** |
| | comp=Z,0.7nm,0.8s,baz=266,slow=3.6,SNR=7.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **114.16** | **313** | | | **PKiKP** | | **21 18 07.2** | **+0.8** |
| **KURK** | **Kurchatov** | **116.64** | **318** | PKIKP | | **PKiKP** | | **21 18 12.1** | **+1.1** |
| **KURK** | **Kurchatov** | **116.64** | **318** | | | **PKPdf** | | **21 18 08.2** | **-2.8** |
| **KURBB** | **Kurchatov Arra** | **116.70** | **318** | PKP | | **PKiKP** | | **21 18 12.1** | **+1.0** |
| | comp=Z,0.8nm,0.9s,baz=84,slow=1.8,SNR=7.4 | | | | | | | | |
| **KSH** | **Kashi** | **118.44** | **305** | PKP | | **PKiKP** | | **21 18 17.1** | **+2.1** |
| **AAK** | **Ala-Archa** | **119.62** | **309** | PKP | | **PKiKP** | | **21 18 18.1** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=188,slow=5.7,SNR=3.9 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **121.50** | **321** | PKP | | **PKiKP** | | **21 18 21.9** | **+1.5** |
| | comp=Z,0.9nm,0.6s,baz=87,slow=5.0,SNR=8.3 | | | | | | | | |
| **BRVK** | **Borovoye** | **121.56** | **321** | *c i* PKIKP | | **PKiKP** | | **21 18 22.6** | **+2.1** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.7s | | | | | | | | |
| **GAR** | **Garm** | **122.83** | **304** | | | **PKiKP** | | **21 18 25.4** | **+1.8** |
| **CHGR** | **Chuyangaron** | **123.74** | **304** | | | **PKPdf** | | **21 18 22.2** | **-2.9** |
| **ARU** | **Arti** | **127.14** | **327** | PKP | | **PKiKP** | | **21 18 33.0** | **+1.6** |
| | comp=Z,0.3nm,0.4s,baz=27,slow=4.1,SNR=4.5 | | | | | | | | |
| **ARU** | **Arti** | **127.14** | **327** | *i* PKIKP | | **PKiKP** | | **21 18 32.1** | **+0.6** |
| ARU | | | | | | | | 21 20 28.8 | |
| ARU | | | | | | | | 21 25 40.6 | |
| **ARCES** | **ARCESS Array B** | **128.69** | **352** | PKP | | **PKiKP** | | **21 18 36.1** | **+1.9** |
| | comp=Z,2.1nm,0.7s,baz=14,slow=5.4,SNR=5.9 | | | | | | | | |
| **KIRV** | **Kirov** | **130.47** | **333** | *c i* PKIKP | | **PKiKP** | | **21 18 41.1** | **+3.1** |
| **FINES** | **FINESS Array B** | **136.03** | **347** | PKP | | **PKiKP** | | **21 18 50.1** | **+0.9** |
| | comp=Z,3.3nm,1.0s,baz=38,slow=2.5,SNR=1.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **136.03** | **347** | | | **PKiKP** | | **21 18 50.1** | **+0.9** |
| **OBN** | **Obninsk** | **138.09** | **335** | *e* PKIKP | | **PKiKP** | | **21 18 52.8** | **-0.8** |
| OBN | | | | *e* | | | | 21 21 44.2 | |
| OBN | | | | *e* | | | | 21 26 00.3 | |
| OBN | | | | *e*SS | | SS | | 21 40 27.4 | +39 |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.6s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,180nm,12.0s | | | | | | | | |
| **NACGM** | **Naroch** | **141.64** | **342** | *i* PKP | | PKPpre | | 21 18 50.2 | |
| **MNK** | **Minsk** | **141.66** | **341** | *i* PKIKP | | **PKiKP** | | **21 19 00.4** | **-0.5** |
| MNK | | | | *i* | | | | 21 22 04.1 | |
| MNK | | | | *i* PPP | | PPP | | 21 25 11.0 | |
| MNK | | | | *i* | | | | 21 26 07.7 | |
| MNK | | | | *i* SS | | SS | | 21 40 33.8 | +4.0 |
| MNK | | | | *i* SSS | | SSS | | 21 45 51.2 | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,22nm,1.1s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,0.8s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=Z,196nm,15.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=E,64nm,19.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=N,185nm,19.0s | | | | | | | | |
| **MNK** | **Minsk** | **141.66** | **341** | *i* PKP | | **PKiKP** | | **21 19 00.4** | **-0.5** |
| | comp=E,3.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* PKP | | **PKiKP** | | **21 19 00.4** | **-0.5** |
| | comp=N,22nm,1.1s | | | | | | | | |
| MNK | | | | *i* PKP | | **PKiKP** | | **21 19 00.4** | **-0.5** |
| | comp=Z,15nm,1.1s,baz=32 | | | | | | | | |
| MNK | | | | *i* PP | | **PP** | | **21 22 04.2** | **+2.5** |
| MNK | | | | *i* PPP | | PPP | | 21 25 11.1 | |
| MNK | | | | *i* SKS | | **SKSdf** | | **21 26 07.7** | **+2.4** |
| MNK | | | | *i* SKKS | | **SKKSdf** | | **21 35 32.2** | **+3.7** |
| MNK | | | | *i* SS | | SS | | **21 40 33.9** | **+4.1** |
| MNK | | | | *i* SSS | | SSS | | 21 45 51.3 | |
| MNK | | | | *i* LR | | LR | | 22 20 07.6 | |
| MNK | | | | *i* LRM | | MLR | | 22 21 17.9 | |
| | comp=Z,196nm,15.5s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | | 22 21 23.0 | |
| | comp=E,64nm,19.3s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | | 22 21 31.3 | |
| | comp=N,185nm,19.3s | | | | | | | | |
| **KIV** | **Kislovodsk** | **141.73** | **318** | *e*PKIKP | | **PKiKP** | | **21 19 00.8** | **-0.8** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **141.85** | **317** | *i* PKIKP | | **PKiKP** | | **21 19 00.4** | **-1.6** |
| **KIBK** | **Kibwezi** | **142.92** | **238** | PKPdf | | **PKPdf** | | **21 19 01.0** | **-0.8** |
| **KMBO** | **Kilima Mbogo** | **144.28** | **238** | PKP | | **PKPdf** | | **21 19 05.0** | **+0.7** |
| | comp=Z,18nm,1.1s,baz=103,slow=4.0,SNR=26 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.28** | **238** | PKPdf | | **PKPdf** | | **21 19 04.6** | **+0.3** |
| **AKASG** | **Malin Array Be** | **144.33** | **336** | PKP | | **PKPdf** | | **21 19 03.2** | **+0.3** |
| | comp=Z,2.5nm,0.5s,baz=34,slow=3.9,SNR=27 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.33** | **336** | PKPdf | | **PKPdf** | | **21 19 02.4** | **-0.5** |
| **AKBB** | **Malin Array Si** | **144.33** | **336** | PKHKP | | PKPpre | | 21 19 00.8 | |
| **AKBB** | **Malin Array Si** | **144.33** | **336** | PKPdf | | PKPbc | | 21 19 00.8 | -0.5 |
| **RAYN** | **Ar Rayn** | **144.38** | **283** | ⇑PKIKP | | **PKPdf** | | **21 19 05.2** | **+1.3** |
| **RAYN** | **Ar Rayn** | **144.38** | **283** | PKPdf | | PKPbc | | 21 19 02.9 | +0.5 |
| **GURO** | **Guroymak-BITLI** | **144.50** | **310** | | | **PKPab** | | **21 19 01.5** | **-0.8** |
| **SIRT** | **Sirnak** | **144.59** | **308** | | | **PKPdf** | | **21 19 03.9** | **-0.1** |
| **BSEG** | **Bad Segeberg** | **145.49** | **357** | *e*PKPbc | | **PKiKP** | | **21 19 07.8** | **-1.0** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **MARD** | **Mardin** | **145.89** | **309** | | | **PKPab** | | **21 19 08.0** | **+0.6** |
| **BEL** | **Belsk** | **146.00** | **345** | *e*PKPbc | | **PKiKP** | | **21 19 09.7** | **-0.2** |
| **SIM** | **Simferopol'** | **146.25** | **325** | *i* PKP2 | | **PKiKP** | | **21 19 10.0** | **-0.7** |
| SIM | | | | PPP | | PPP | | 21 25 48.0 | |
| SIM | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| **RUE** | **Ruedersdorf** | **146.65** | **353** | *e*PKPbc | | **PKiKP** | | **21 19 11.4** | **+0.1** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **SORM** | **Soroca** | **146.72** | **334** | ⇓P | | **PKiKP** | | **21 19 10.9** | **-0.6** |
| **SORM** | **Soroca** | **146.72** | **334** | ⇓PKP2 | | **PKiKP** | | **21 19 10.9** | **-0.6** |
| **LVV** | **L'vov** | **146.90** | **340** | *i* PKP2 | | **PKiKP** | | **21 19 12.2** | **+0.3** |
| **FLTG** | **Flechtingen** | **147.03** | **356** | *e*PKPbc | | **PKiKP** | | **21 19 12.4** | **+0.3** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **ASSE** | **Asse, Remlinge** | **147.27** | **356** | *e*PKPbc | | **PKiKP** | | **21 19 13.3** | **+0.8** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **PURM** | **Purcari** | **147.28** | **331** | ⇑P | | **PKiKP** | | **21 19 13.8** | **+1.1** |
| **MILM** | **Milestii Mici** | **147.47** | **332** | ⇑P | | **PKiKP** | | **21 19 13.4** | **+0.4** |
| **MILM** | **Milestii Mici** | **147.47** | **332** | ⇑PKP2 | | **PKiKP** | | **21 19 13.5** | **+0.4** |
| **CLZ** | **Clausthal** | **147.58** | **357** | *e*PKPbc | | **PKiKP** | | **21 19 14.4** | **+1.1** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **OJC** | **Ojcow** | **147.74** | **345** | *e*PKPbc | | **PKPab** | | **21 19 14.2** | **+0.3** |
| **OJC** | **Ojcow** | **147.74** | **345** | PKHKP | | PKPpre | | 21 19 06.2 | |
| **OJC** | **Ojcow** | **147.74** | **345** | PKPdf | | **PKPdf** | | **21 19 06.2** | **-2.6** |
| **KSP** | **Ksiaz** | **147.88** | **349** | *e*PKPbc | | **PKPab** | | **21 19 13.6** | **-0.9** |
| **CLL** | **Collm** | **147.89** | **353** | PKP2 | | **PKPab** | | **21 19 14.4** | **-0.1** |
| **CLL** | **Collm** | **147.89** | **353** | *i* PKPbc | | **PKPab** | | **21 19 14.7** | **+0.2** |
| | comp=Z,108nm,1.6s | | | | | | | | |
| **CLL** | **Collm** | **147.89** | **353** | *e*PKPbc | | **PKPab** | | **21 19 14.8** | **+0.2** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **CLL** | **Collm** | **147.89** | **353** | | | **PKPab** | | **21 19 14.4** | **-0.1** |
| **CHVC** | **Chvalec** | **148.16** | **350** | *e*PKP | | **PKPab** | | **21 19 16.4** | **+0.7** |
| **OSTC** | **Ostas** | **148.17** | **349** | *e*PKP | | **PKPab** | | **21 19 16.5** | **+0.8** |
| **BRG** | **Berggiesshubel** | **148.21** | **352** | *e*PKP | | **PKPab** | | **21 19 15.9** | **0.0** |
| BRG | | | | Amp | | | | 21 19 21.5 | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| BRG | | | | *ex* | | x | | 21 19 37.6 | |
| BRG | | | | Amp | | | | 21 19 39.3 | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| BRG | | | | *ex* | | x | | 21 19 48.2 | |
| BRG | | | | Amp | | | | 21 19 50.2 | |
| | comp=Z,41nm,1.9s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.21** | **352** | *e*PKP2 | | **PKPab** | | **21 19 15.8** | **0.0** |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.9s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.21** | **352** | *e*PKPbc | | **PKPab** | | **21 19 15.8** | **0.0** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **FBE** | **Freiberg** | **148.23** | **353** | *e*PKPbc | | **PKPab** | | **21 19 16.1** | **+0.2** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **UPC** | **Upice** | **148.25** | **350** | *e*PKP2 | | **PKPab** | | **21 19 16.3** | **+0.3** |
| **UPC** | **Upice** | **148.25** | **350** | *e*PKP | | **PKPab** | | **21 19 16.3** | **+0.3** |
| **NIE** | **Niedzica** | **148.35** | **344** | *e*PKPbc | | **PKPab** | | **21 19 17.4** | **+1.0** |
| **DPC** | **Dobruska-Polom** | **148.35** | **349** | *e*PKP2 | | **PKPab** | | **21 19 16.4** | **0.0** |
| **DPC** | **Dobruska-Polom** | **148.35** | **349** | *e*PKP | | **PKPab** | | **21 19 16.4** | **0.0** |
| **BUR08** | **Bucovina Ar. S** | **148.35** | **337** | | | **PKiKP** | | **21 19 14.8** | **-0.3** |
| **BURAR** | **Bucovina Array** | **148.37** | **337** | ⇑P | | **PKPab** | | **21 19 16.6** | **-0.1** |
| **BURAR** | **Bucovina Array** | **148.37** | **337** | ⇑PKP2 | | **PKPab** | | **21 19 16.6** | **-0.1** |
| **BURAR** | **Bucovina Array** | **148.37** | **337** | | | **PKPab** | | **21 19 15.8** | **-0.9** |
| **LODK** | **Lodwar** | **148.40** | **243** | PKPab | | **PKiKP** | | **21 19 15.9** | **-0.3** |
| **PVCC** | **Panska Ves** | **148.46** | **351** | *e*PKP2 | | **PKPab** | | **21 19 16.3** | **-0.5** |
| **PVCC** | **Panska Ves** | **148.46** | **351** | *e*PKP | | **PKPab** | | **21 19 16.3** | **-0.5** |
| **UZH** | **Uzhgorod** | **148.49** | **341** | ⇑*i* PKP2 | | **PKPab** | | **21 19 16.1** | **-0.9** |
| **CRVS** | **Cervenica-Dubn** | **148.49** | **342** | *e*PKP | | **PKPab** | | **21 19 17.0** | **0.0** |
| **GAZ** | **Gaziantep** | **148.55** | **310** | | | **PKiKP** | | **21 19 14.8** | **-1.0** |
| **BNN** | **Bunyan** | **148.71** | **314** | PKPab | | **PKPbc** | | **21 19 13.7** | **-1.0** |
| **PLN** | **Plauen** | **148.79** | **354** | *e*PKPbc | | **PKPab** | | **21 19 17.4** | **-0.8** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **LANS** | **Liptovska Anna** | **148.81** | **345** | *e*PKP | | **PKPab** | | **21 19 18.2** | **-0.1** |
| **TANN** | **Tannenbergstha** | **148.83** | **354** | *e*PKPbc | | **PKPab** | | **21 19 17.5** | **-0.9** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **TRPA** | **Tarpa** | **148.85** | **340** | ⇓P | | **PKPab** | | **21 19 17.5** | **-0.9** |
| **TRPA** | **Tarpa** | **148.85** | **340** | PKPDF | | **PKPab** | | **21 19 17.3** | **-1.2** |
| **ILGA** | **Ilgaz** | **148.89** | **320** | | | **PKPdf** | | **21 19 09.6** | **-1.7** |
| **BMR** | **Baia Mare** | **148.93** | **339** | ⇑P | | **PKPab** | | **21 19 17.8** | **-1.0** |
| **BMR** | **Baia Mare** | **148.93** | **339** | ⇑PKP2 | | **PKPab** | | **21 19 17.8** | **-1.0** |
| **WERN** | **Wernitzgruen** | **148.96** | **354** | *e*PKPbc | | **PKPab** | | **21 19 18.0** | **-0.9** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **PRU** | **Pruhonice** | **148.99** | **351** | *e*PKP2 | | **PKPab** | | **21 19 18.0** | **-1.0** |
| **PRU** | **Pruhonice** | **148.99** | **351** | *e*PKP | | **PKPab** | | **21 19 18.0** | **-1.0** |
| **NKC** | **Novy Kostel** | **149.01** | **354** | *e*PKP2 | | **PKPab** | | **21 19 22.1** | **+3.0** |
| **NKC** | **Novy Kostel** | **149.01** | **354** | *e*PKP | | **PKPab** | | **21 19 22.1** | **+3.0** |
| **CFR** | **Carcaliu** | **149.10** | **331** | ⇑P | | **PKPab** | | **21 19 18.2** | **-1.3** |
| **CFR** | **Carcaliu** | **149.10** | **331** | ⇑PKP2 | | **PKPab** | | **21 19 18.2** | **-1.3** |
| **ARCR** | **ARCALIA** | **149.13** | **337** | ⇑P | | **PKPab** | | **21 19 18.8** | **-0.8** |
| **VRI** | **Vrincioaia** | **149.19** | **333** | ⇓P | | **PKPab** | | **21 19 18.2** | **-1.8** |
| **VRI** | **Vrincioaia** | **149.19** | **333** | ⇓PKP2 | | **PKPab** | | **21 19 18.2** | **-1.8** |
| **TPGR** | **Topolog** | **149.21** | **330** | ⇓P | | **PKPab** | | **21 19 19.4** | **-0.7** |
| **TNS** | **Taunus Mts** | **149.27** | **359** | *e*PKPbc | | **PKPab** | | **21 19 18.4** | **-1.8** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **MANZ** | **Manzenberg** | **149.29** | **354** | *e*PKPbc | | **PKPab** | | **21 19 18.6** | **-1.6** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **VRAC** | **Vranov** | **149.29** | **348** | ⇓P | | **PKPab** | | **21 19 19.6** | **-0.7** |
| **VRAC** | **Vranov** | **149.29** | **348** | ⇓PKP2 | | **PKPab** | | **21 19 19.6** | **-0.7** |
| **VRAC** | **Vranov** | **149.29** | **348** | *e*PKP | | **PKPab** | | **21 19 18.3** | **-2.0** |
| **PBCC** | **Pribram** | **149.36** | **352** | *e*PKP | | **PKiKP** | | **21 19 16.5** | **-0.5** |
| **OZUR** | | **149.40** | **334** | ⇓P | | **PKPab** | | **21 19 19.2** | **-1.6** |
| **COVR** | **Voineasa-Covas** | **149.43** | **334** | ⇑P | | **PKPab** | | **21 19 18.7** | **-2.2** |
| **ROTZ** | **Rotzenmuhle** | **149.50** | **354** | *e*PKPbc | | **PKPab** | | **21 19 19.0** | **-2.1** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **JAVC** | **Velka Javorina** | **149.50** | **347** | *e*PKP | | **PKPab** | | **21 19 20.0** | **-1.2** |
| **HARR** | **Harsova** | **149.56** | **330** | ⇑P | | **PKPab** | | **21 19 18.9** | **-2.6** |
| **HARR** | **Harsova** | **149.56** | **330** | ⇑PKP2 | | **PKPab** | | **21 19 18.9** | **-2.6** |
| **KRUC** | **Moravsky** | **149.57** | **348** | *e*PKP | | **PKPab** | | **21 19 19.1** | **-2.3** |
| **VYHS** | **Vyhne** | **149.57** | **345** | *e*PKP | | **PKPab** | | **21 19 19.7** | **-1.7** |
| **KOLL** | **Kolacno** | **149.60** | **345** | *e*PKP | | **PKPab** | | **21 19 19.9** | **-1.6** |
| **MBAR** | **Mbarara** | **149.66** | **232** | *c i* PKP2 | | **PKPab** | | **21 19 21.6** | **-1.4** |
| MBAR | | | | pmax | | pmax | | | |
| | comp=Z,28nm,1.7s | | | | | | | | |
| **MBAR** | **Mbarara** | **149.66** | **232** | | | **PKiKP** | | **21 19 19.8** | **+0.9** |
| **GRF** | **Grafenberg Arr** | **149.66** | **355** | *e*PKPbc | | **PKPab** | | **21 19 19.3** | **-2.4** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| GRF | | | | *e*PKPab | | **pPKPbc** | | **21 19 25.4** | **-0.2** |
| **DOPR** | **Dopca** | **149.66** | **335** | ⇑P | | **PKPab** | | **21 19 20.4** | **-1.5** |
| **BR131** | **Keskin Array S** | **149.70** | **317** | PKIKP | | **PKPdf** | | **21 19 10.6** | **-1.9** |
| **BR131** | **Keskin Array S** | **149.70** | **317** | | | **PKPdf** | | **21 19 10.6** | **-1.9** |
| **BRTR** | **Keskin Array B** | **149.70** | **317** | PKPbc | | **PKiKP** | | **21 19 19.6** | **+1.4** |
| | comp=Z,8.7nm,1.0s,baz=122,slow=1.6,SNR=35 | | | | | | | | |
| **LTVH** | **Ltavrtes, Hu** | **149.71** | **340** | ⇑P | | **PKPab** | | **21 19 20.6** | **-1.4** |
| **LTVH** | **Ltavrtes, Hu** | **149.71** | **340** | PKPDF | | **PKPab** | | **21 19 21.9** | **-0.1** |
| **CJR** | **Cluj-Napoca** | **149.72** | **338** | ⇓P | | **PKPab** | | **21 19 20.2** | **-1.9** |
| **CJR** | **Cluj-Napoca** | **149.72** | **338** | ⇓PKP2 | | **PKPab** | | **21 19 20.2** | **-1.9** |
| **MLR** | **Muntele Rosu** | **149.82** | **334** | ⇑P | | **PKPab** | | **21 19 20.0** | **-2.7** |
| **MLR** | **Muntele Rosu** | **149.82** | **334** | ⇑PKP2 | | **PKPab** | | **21 19 20.0** | **-2.7** |
| **WLF** | **Walferdange** | **149.82** | **2** | PKIKP | | **PKPdf** | | **21 19 12.8** | **+0.6** |
| **WLF** | **Walferdange** | **149.82** | **2** | | | **PKPdf** | | **21 19 12.8** | **+0.6** |
| **PSZ** | **Piszkesteto** | **149.83** | **343** | ⇑P | | **PKPab** | | **21 19 20.2** | **-2.4** |
| **PSZ** | **Piszkesteto** | **149.83** | **343** | ⇑PKP2 | | **PKPab** | | **21 19 20.2** | **-2.4** |
| **PSZ** | **Piszkesteto** | **149.83** | **343** | PKPdf | | **PKPdf** | | **21 19 10.3** | **-2.0** |
| **PSZ** | **Piszkesteto** | **149.83** | **343** | PKPDF | | **PKPab** | | **21 19 20.6** | **-2.0** |
| PSZ | | | | PKPDF | | **PKPab** | | **21 19 20.5** | **-2.0** |
| **ISR** | **Istrita** | **149.86** | **332** | ⇑P | | **PKPab** | | **21 19 20.4** | **-2.4** |
| **ISR** | **Istrita** | **149.86** | **332** | ⇑PKP2 | | **PKPab** | | **21 19 20.4** | **-2.4** |
| **SMOL** | **Smolenice** | **149.88** | **347** | *e*PKP | | **PKPab** | | **21 19 20.8** | **-1.9** |
| **KHC** | **Kasperske Hory** | **149.96** | **352** | *e*PKP2 | | **PKPab** | | **21 19 20.2** | **-2.8** |
| **KHC** | **Kasperske Hory** | **149.96** | **352** | *e*PKP | | **PKPab** | | **21 19 20.2** | **-2.8** |
| **KHC** | **Kasperske Hory** | **149.96** | **352** | PKPdf | | **PKPdf** | | **21 19 11.2** | **-1.2** |
| **DRGR** | | **149.97** | **339** | ⇑P | | **PKPab** | | **21 19 20.4** | **-2.8** |
| **DRGR** | | **149.97** | **339** | ⇑PKP2 | | **PKPab** | | **21 19 20.4** | **-2.8** |
| **MODS** | **Modra-Piesok** | **150.04** | **347** | *e*PKP | | **PKPab** | | **21 19 23.3** | **-0.1** |
| **SECR** | | **150.13** | **333** | ⇑P | | **PKPab** | | **21 19 20.9** | **-3.0** |
| **ANTO** | **Ankara** | **150.15** | **318** | PKP2 | | **PKiKP** | | **21 19 20.0** | **+1.0** |
| **ANTO** | **Ankara** | **150.15** | **318** | PKPab | | **PKiKP** | | **21 19 20.0** | **+1.0** |
| **CKRC** | **Cesky Krumlov** | **150.16** | **351** | *e*PKP | | **PKPab** | | **21 19 21.1** | **-2.7** |
| **GEC2** | **GERESS Array S** | **150.22** | **352** | | | **PKPdf** | | **21 19 09.2** | **-3.8** |
| **GERES** | **GERESS Array B** | **150.22** | **352** | PKPbc | | **PKPab** | | **21 19 21.2** | **-3.0** |
| | comp=Z,6.0nm,0.9s,baz=29,slow=3.0,SNR=15 | | | | | | | | |
| **GERES** | **GERESS Array B** | **150.22** | **352** | PKIKP | | **PKPdf** | | **21 19 11.0** | **-2.0** |
| **GERES** | **GERESS Array B** | **150.22** | **352** | PKPdf | | **PKPdf** | | **21 19 11.0** | **-2.0** |
| **VOIR** | | **150.23** | **335** | ⇓P | | **PKPab** | | **21 19 22.3** | **-2.1** |
| **VOIR** | | **150.23** | **335** | ⇓PKIKP | | **PKPab** | | **21 19 22.3** | **-2.1** |
| **RASA** | **Rasa** | **150.29** | **331** | ⇑P | | **PKPab** | | **21 19 21.6** | **-2.9** |
| **ARR** | **Arges** | **150.46** | **335** | ⇑P | | **PKPab** | | **21 19 22.6** | **-2.6** |
| **BUD** | **Budapest** | **150.46** | **344** | PKPDF | | **PKPab** | | **21 19 26.2** | **+1.2** |
| **DEV** | **Deva** | **150.68** | **338** | ⇑P | | **PKPab** | | **21 19 22.4** | **-3.6** |
| **STU** | **Stuttgart** | **150.70** | **358** | *e*PKPbc | | **PKiKP** | | **21 19 22.0** | **+2.2** |
| | baz=4.0,slow=2.7 | | | | | | | | |
| **CONA** | **Conrad Observa** | **150.76** | **348** | *e*P | | **PKPab** | | **21 19 22.8** | **-3.6** |
| | comp=Z,41nm,1.3s | | | | | | | | |
| **CSKK** | **Cskako** | **150.77** | **345** | PKPDF | | **PKPab** | | **21 19 23.0** | **-3.3** |
| **EGYH** | **Egyhazaskeszo** | **150.94** | **346** | PKPDF | | **PKPab** | | **21 19 24.7** | **-2.3** |
| **HUMR** | **Humele** | **151.00** | **334** | ⇓P | | **PKiKP** | | **21 19 22.7** | **+2.2** |
| **MOA** | **Molln** | **151.11** | **350** | *i* P | | **PKiKP** | | **21 19 23.1** | **+2.4** |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **MPLH** | **Magyarpolny** | **151.12** | **346** | PKPDF | | **PKiKP** | | **21 19 23.0** | **+2.3** |
| **MPLH** | **Magy

PTVM Pico Tres Padr 1.60 267 Pn 21 16 33.0 -0.6
PTVM Sb 21 16 55.6 +0.4
PTVM Pico Tres Padr 1.60 267 eP Pn 21 16 33.0 -0.6
PTVM eS Sn 21 16 53.6 -1.4
GMVM Gustavo A Made 1.60 263 eP Pn 21 16 33.0 -0.8
GMVM eS Sn 21 16 53.0 -2.1
TOIG Toxpalan 1.62 168 eP Pn 21 16 33.6 -0.1
TOIG eS Sb 21 16 56.6 +1.0
VRVM Mexico City 1.62 261 eP Pb 21 16 35.9 +1.1
DEIG Demacu 1.64 292 eP Pn 21 16 33.9 -0.3
DEIG eS Sn 21 16 54.1 -1.8
XCVM Xochimilco 1.66 255 eP Pn 21 16 34.5 +0.1
BJVM Benito Juarez 1.68 260 i P Pn 21 16 35.0 +0.2
BJVM eS Sn 21 16 55.6 -1.3
UNM Universidad Na 1.69 258 Pn Pn 21 16 34.8 -0.2
TLVM San Miguel Top 1.70 254 eP Pn 21 16 35.8 +0.7
TLVM i S Sn 21 16 45.9 -12
YAIG Yautepec 1.76 243 Pn 21 16 35.9 +0.2
YAIG Yautepec 1.76 243 eP Pn 21 16 35.9 +0.2
AZVM Cuida Lopez Ma 1.76 267 Pn 21 16 36.0 +0.2
AZVM Sb 21 17 00.3 +0.4
AZVM Cuida Lopez Ma 1.76 267 eP Pn 21 16 35.7 -0.1
AZVM eS Sn 21 16 57.3 -1.6
CJVM Cuajimalpa 1.79 260 eP Pn 21 16 36.3 +0.1
CJVM i S Sn 21 16 58.9 -0.7
AOVM Tlapan 1.84 257 eP Pn 21 16 37.3 +0.2
AOVM eS Sn 21 16 59.5 -1.7
HLIG Huajuapan de L 1.88 191 eP Pn 21 16 37.8 +0.3
HLIG eS Sn 21 17 01.8 -0.1
FTIG Fresnillo de T 1.89 201 eP Pn 21 16 37.4 -0.1
FTIG eS Sn 21 17 00.2 -1.8
INVM La Marquesa 1.89 258 eP Pn 21 16 38.7 +1.0
INVM eS Sb 21 17 03.7 -0.1
MAVM Malinalco, Edo 2.09 250 Pn 21 16 40.8 +0.5
MAVM Sb 21 17 10.0 +0.7
MAVM Malinalco, Edo 2.09 250 eP Pn 21 16 40.4 +0.1
MAVM eS Sb 21 17 10.0 +0.7
HMTT Tlapaneco 2.16 210 Pn 21 16 42.2 +0.9
HMTT Sn 21 17 08.7 0.0
HMTT Tlapaneco 2.16 210 eP Pn 21 16 42.2 +0.9
HMTT eS Sn 21 17 08.7 0.0
TOVM TOLUCA 2.17 260 Pn 21 16 42.2 +0.8
TOVM TOLUCA 2.17 260 eP Pn 21 16 42.2 +0.8
ATVM ATLACOMULCO 2.28 272 Pb 21 16 45.6 -0.6
ATVM Sb 21 17 16.1 +1.2
ATVM ATLACOMULCO 2.28 272 eP Pb 21 16 45.6 -0.6
ATVM eS Sb 21 17 16.1 +1.2
ACIG Acambay 2.33 278 eP Pn 21 16 44.3 +0.6
ACIG eS Sb 21 17 16.9 +0.5
PLIG Platanillo 2.35 237 Pn 21 16 44.8 +0.9
PLIG Platanillo 2.35 237 eP Pn 21 16 44.8 +0.9
TXIG Tlaxiaco 2.44 188 eP Pn 21 16 46.1 +0.9
NEUV Arroyo Zacate 2.49 142 eP Pb 21 16 48.7 -0.8
NEUV eS Sb 21 17 21.1 +0.4
VHO Vista Hermosa 2.68 166 eP Pn 21 16 49.7 +1.3
OXLC Oaxaca 2.69 165 i P Pn 21 16 50.4 +1.7
OXLC eS Sn 21 17 17.9 -4.0
MGIG Malinaltepec 2.70 205 eP Pn 21 16 49.8 +1.1
MGIG eS Sb 21 17 24.9 -1.8
YOIG Yosondua 2.81 182 eP Pn 21 16 51.5 +1.2
YOIG eS Sb 21 17 29.8 -0.5
ARIG Puente Sto Nin 3.10 244 Pn 21 16 54.8 +0.7
ARIG Puente Sto Nin 3.10 244 eP Pn 21 16 54.8 +0.7
PNIG Pinotepa 3.34 192 Pn 21 16 59.5 +2.1
PNIG Pinotepa 3.34 192 eP Pn 21 16 59.5 +2.1
DAIG Los Arroyos 3.39 219 Pn 21 16 57.3 -0.7
DAIG Los Arroyos 3.39 219 eP Pn 21 16 57.3 -0.7
CMIG Matias Romero 3.53 137 Pn Pn 21 16 58.7 -1.2
10nm,0.3s,baz=314,slow=11,SNR=56
CMIG Matias Romero 3.53 137 Pn 21 16 59.8 -0.2
CMIG Matias Romero 3.53 137 eP Pn 21 16 59.8 -0.2
MOIG Morelia 3.55 271 Pn 21 17 03.4 +2.9
PEIG Puerto Escondi 3.68 176 eP Pn 21 17 05.8 +3.8
PEIG eS Sn 21 17 47.8 +1.9
UXUV UXUV 3.90 127 eP Pn 21 17 04.5 -0.5
HUIG Huatulco 4.09 162 Pn 21 17 10.7 +3.0
HUIG Sb 21 18 09.9 +3.1
HUIG Huatulco 4.09 162 eP Pn 21 17 10.7 +3.0
HUIG eS Sn 21 18 00.9 +4.8
TGIG 5.00 125 Pn 21 17 20.9 +0.7
TGIG 5.00 125 eP Pn 21 17 20.9 +0.7
PCIG 5.63 134 Pn 21 17 29.5 +0.7
PCIG 5.63 134 eP Pn 21 17 29.5 +0.7
CCIG Comitan 6.06 123 Pn Pn 21 17 36.4 +0.4
CCIG Comitan 6.06 123 eP Pn 21 17 36.8 +1.9
PETF Flores 7.69 110 Pn Pn 21 17 57.4 +0.4
APG El Apazote 8.11 124 Pn Pn 21 18 01.0 -2.1
0.3nm,0.3s,baz=56,slow=12,SNR=1.8
APG LR LR 21 21 44.6
comp=Z,508nm,21.1s,baz=294,slow=43
833A Chaparral WMA, 8.79 349 P Pn 21 18 14.8 +2.6
baz=168
MTO3 Montecristo 9.33 123 Pn Pn 21 18 20.2 +0.4
TXAR Lajitas Array 11.16 331 Pn Pn 21 18 43.7 -1.1
TX21 Lajitas Ar. Si 11.16 331 Pn Pn 21 18 43.7 +0.5
SLBS Sierra La Lagu 12.30 291 Pn Pn 21 18 59.7 -0.8
LPIG La Paz 12.74 292 LR LR 21 24 01.3
comp=Z,754nm,18.4s,baz=98,slow=37
SOR Soroa 13.79 75 Pn Pn 21 19 19.6 -1.1
MNTX Cornudas Mount 13.94 331 Pn Pn 21 19 25.8 +3.0
MNTX Cornudas Mount 13.94 331 P Pn 21 19 25.9 +3.1
baz=147
BRAL Brewton 14.77 37 P Pn 21 19 37.3 +3.3
baz=222
X37A Clayton 14.96 7 Pn Pn 21 19 37.1 +0.5
MSTX Muleshoe 15.00 343 Pn Pn 21 19 36.8 -0.5
MSTX IAmb IAmb 21 19 51.0
comp=Z,40nm,1.2s
MSTX Muleshoe 15.00 343 P P 21 19 40.8 -2.2
baz=160
WMOK Wichita Mounta 15.04 356 P P 21 19 41.6 -1.7
baz=175
MIAR Mount Ida 15.19 12 Pn 21 19 40.0 +0.3
MIAR IAmb IAmb 21 19 42.6
comp=Z,46nm,1.4s
MIAR Mount Ida 15.19 12 P Pn 21 19 41.2 +1.6
baz=194
JTS Las Juntas de 15.23 126 LR LR 21 26 03.1
comp=Z,213nm,21.3s,baz=340,slow=40
FNO Franklin 15.51 0 P P 21 19 49.1 +0.6
FNO IAmb IAmb 21 19 53.0
comp=Z,45nm,1.1s
AMTX Amarillo 15.60 347 Pn Pn 21 19 46.5 +1.3
AMTX Amarillo 15.60 347 P P 21 19 48.6 -1.1
baz=165
W39A Magazine 15.78 11 P Pn 21 19 48.5 +1.1
baz=193
121A Cookes Peak, D 15.81 326 Pn 21 19 47.8 -0.2
121A IAmb IAmb 21 19 56.8
comp=Z,42nm,1.0s
121A Cookes Peak, D 15.81 326 P P 21 19 50.5 -1.5
baz=142,SNR=11
OK029 Liberty Lake 16.05 360 P P 21 19 55.5 +1.0
OK029 IAmb IAmb 21 19 57.5
comp=Z,72nm,1.1s
TUL1 Leonard 16.23 5 P P 21 19 57.5 +1.1
TUL1 IAmb IAmb 21 19 59.2
comp=Z,85nm,1.4s
TUL1 Leonard 16.23 5 P P 21 19 56.4 0.0
baz=186,SNR=6.0
LRAL Lakeview Retre 16.23 33 P P 21 19 55.3 -1.2
baz=217
BNM Barren Site 16.57 332 P P 21 20 01.0 +0.5
U32A Winter Ranch, 16.69 356 P P 21 20 00.9 -0.7
U32A IAmb IAmb 21 20 18.3
comp=Z,92nm,1.4s
LENM Lemitar 16.74 331 P P 21 20 02.3 0.0
U40A Yellville 17.09 13 P P 21 20 07.0 +1.0
baz=195
TIGA Tifton 17.09 44 P Pn 21 20 05.3 +1.2
baz=230
ANMO Albuquerque 17.18 334 P P 21 20 07.6 +0.4
comp=Z,0.2nm,0.3s,baz=144,slow=12,SNR=10
ANMO Albuquerque 17.18 334 P P 21 20 07.6 +0.4
ANMO Albuquerque 17.18 334 P P 21 20 08.7 +1.5
baz=150
Y49A Blount Mountai 17.18 33 P P 21 20 07.1 +0.1
Y49A IAmb IAmb 21 20 12.7
comp=Z,83nm,1.2s
T35A Sooner Cattle 17.19 2 P P 21 20 06.9 -0.2
T35A IAmb IAmb 21 20 13.2
comp=Z,30nm,0.9s

X48A Hartselle 17.35 30 P P 21 20 10.1 +1.2
TUC Tucson 17.37 319 P P 21 20 10.5 +1.3
baz=133
MGMO Mountain Grove 17.98 13 P Pn 21 20 15.5 +0.2
154A Montrose 18.16 42 P P 21 20 18.4 +0.5
S39A Bolivar 18.29 10 P Pn 21 20 19.5 +0.4
WVT Waverly 18.43 25 P P 21 20 20.4 -0.4
WVT Waverly 18.43 25 P Pn 21 20 22.2 +1.5
baz=210
T25A Trinidad 18.43 342 P Pn 21 20 23.2 +2.2
baz=159,SNR=17
214A Organ Pipe Nat 18.45 315 P Pn 21 20 23.2 +2.2
baz=128
GOGA Godfrey 18.48 40 P Pn 21 20 23.2 +1.8
baz=226
W18A Petrified Fore 18.84 327 P Pn 21 20 27.2 +1.2
baz=142
CLTN Cedars of Leba 19.03 29 P P 21 20 27.0 -0.4
CLTN IAmb IAmb 21 20 33.4
comp=Z,39nm,1.3s
CCM Cathedral Cave 19.08 15 P Pn 21 20 30.4 +1.8
baz=198
S44A Carbondale 19.30 20 P P 21 20 30.4 0.0
SDCO Great Sand Dun 19.32 340 P P 21 20 30.8 -0.1
SDCO Great Sand Dun 19.32 340 P Pn 21 20 33.3 +1.4
baz=156,SNR=13
T47A Sharon Grove 19.46 25 P P 21 20 32.1 0.0
S22A 4UR Ranch, Cre 19.78 337 P Pn 21 20 38.0 +0.7
baz=153,SNR=12
HODGE Hodges 19.78 40 P P 21 20 35.8 +0.2
KSCO Kaye Shedlock' 19.78 348 P P 21 20 35.6 -0.1
KSCO IAmb IAmb 21 20 43.4
comp=Z,51nm,1.1s
KSCO Kaye Shedlock' 19.78 348 P Pn 21 20 38.0 +0.8
baz=165
BG3 Lake Jocassee 19.92 37 P P 21 20 37.6 +0.5
BG3 IAmb IAmb 21 20 42.4
comp=Z,51nm,1.0s
TKL Tuckaleechee C 19.95 34 LR LR 21 30 17.5
comp=Z,112nm,20.0s,baz=130,slow=43
MVCO Mesa Verde 19.97 333 P Pn 21 20 39.8 +0.3
baz=148
WUAZ Wupatki 20.00 325 Pn 21 20 40.5 +0.6
WUAZ IAmb IAmb 21 20 43.4
comp=Z,39nm,1.1s
WUAZ Wupatki 20.00 325 P Pn 21 20 40.6 +0.7
baz=138
Q24A Divide 20.34 342 P Pn 21 20 45.4 +1.4
baz=159
NHSC New Hope 20.39 46 P Pn 21 20 43.7 -0.6
baz=233
PAULI Pauline 20.45 39 P P 21 20 44.0 +1.1
GLA Glamis 20.46 314 P Pn 21 20 46.2 +1.0
baz=126
OLIL Olney 20.63 21 P P 21 20 44.5 -0.3
OLIL IAmb IAmb 21 20 52.4
comp=Z,41nm,1.1s
TZTN Tazewell 20.74 33 P Pn 21 20 48.3 0.0
baz=220
PDMCI Parker Dam,Lak 20.79 318 P Pn 21 20 49.5 +0.6
baz=130
WCI Wyandotte Cave 20.85 25 P P 21 20 46.7 -0.5
WCI Wyandotte Cave 20.85 25 P Pn 21 20 50.5 +0.8
baz=211
KMSC Kings Mountain 20.95 39 P 21 20 48.5 +0.2
KMSC IAmb IAmb 21 20 53.7
comp=Z,49nm,1.1s
KMSC Kings Mountain 20.95 39 P Pn 21 20 50.8 -0.1
baz=227
PV11 David Mesa, Pa 21.05 334 P P 21 20 49.0 -0.5
PV11 IAmb IAmb 21 21 17.9
comp=Z,21nm,1.0s
SWSC Sam W. Stewart 21.07 312 P P 21 20 51.9 +2.3
baz=124
SMCO Snowmass 21.11 339 P P 21 20 49.8 -0.6
IKP In-Ko-Pah, Jac 21.12 311 P P 21 20 53.0 +2.6
baz=123
BC3 Big Chuckawall 21.24 315 P P 21 20 54.5 +2.9
baz=126
ISCO Idaho Springs 21.25 342 P P 21 20 53.2 +1.3
ISCO IAmb IAmb 21 20 57.9
comp=Z,43nm,1.1s
ISCO Idaho Springs 21.25 342 P P 21 20 54.8 +2.9
baz=158,SNR=22
IRM Iron Mountain 21.34 316 P P 21 20 55.7 +3.1
baz=128,SNR=14
MONP2 Monument Peak 21.48 312 P P 21 20 57.2 +2.9
baz=123
OGNE Ogallala 21.55 350 P P 21 20 57.2 +2.3
baz=168
BELC Belle Mtn. Jos 21.81 315 P P 21 21 00.4 +2.6
baz=125
TPFO Pinon Flats 21.90 313 P P 21 21 01.4 +2.8
baz=125
PFO Pinyon Flats O 21.90 313 P P 21 20 59.9 +1.2
comp=Z,3.9nm,1.0s,baz=119,slow=13,SNR=6.1
PFO Pinyon Flats O 21.90 313 P P 21 21 01.7 +3.0
baz=125
GMRC Granite Mounta 22.06 317 P P 21 21 02.9 +2.5
baz=135,SNR=11
MTPU Mount Pierson 22.35 328 P P 21 21 02.4 -1.4
N23A Red Feather La 22.36 343 P P 21 21 05.8 +2.1
baz=158,SNR=9.9
O20A White River Ci 22.40 338 P P 21 21 06.5 +2.4
baz=152,SNR=12
SRU San Rafael Swe 22.43 332 P P 21 21 04.0 -0.4
SFIN Lafayette 22.45 21 P P 21 21 05.4 +1.1
baz=206
HEC Hector,Ludlow 22.53 316 P P 21 21 07.5 +2.1
baz=127
Q16A Castle Valley 22.56 331 P P 21 21 05.7 -0.1
Q16A IAmb IAmb 21 21 10.6
comp=Z,28nm,1.1s
P49A Miami Univ. Ec 22.61 26 P P 21 21 07.2 +1.0
baz=212
TUQ Turquoise Moun 22.64 318 P P 21 21 09.1 +2.5
baz=129
BLA Blacksburg 22.92 37 P P 21 21 11.6 +2.1
baz=225
O48B Farmland 23.05 25 P P 21 21 11.2 +0.5
baz=211
GSC Goldstone, Bar 23.12 316 P P 21 21 14.3 +2.7
baz=127
CIS Catalina Islan 23.16 310 P P 21 21 13.9 +1.9
baz=121
N47A Urbana 23.38 23 P P 21 21 13.2 -0.9
PRN Pahroc Range 23.42 323 P P 21 21 15.2 +0.5
PRN IAmb IAmb 21 21 18.1
comp=Z,22nm,1.3s
EDW2 Edwards Air Fo 23.67 314 P P 21 21 19.1 +2.0
baz=124
LRMC Laurel Mtn Rad 23.80 316 P P 21 21 20.3 +1.8
baz=126
TPNV Topopah Spring 23.81 320 P P 21 21 20.4 +1.8
baz=131
P52A Corning 23.84 30 P P 21 21 18.8 +0.1
P52A Corning 23.84 30 P P 21 21 19.9 +1.2
baz=218
FURC Furnace Creek, 23.88 318 P P 21 21 21.1 +2.1
baz=129
ACSO Alum Creek Sta 23.93 28 P P 21 21 20.5 +1.0
baz=215
JFWS Jewell Farm 23.94 13 P P 21 21 20.7 +1.1
baz=197
ECSD EROS Data Cent 23.99 1 P P 21 21 21.7 +1.6
baz=182
N49A Columbus Grove 24.00 25 P P 21 21 19.7 -0.4
N49A IAmb IAmb 21 21 21.8
comp=Z,25nm,1.1s
MPMC Mutual Prospec 24.02 317 P P 21 21 22.0 +1.3
baz=128
K22A Casper 24.15 343 P P 21 21 23.4 +1.7
baz=159
DUG Dugway, Tooele 24.34 330 P P 21 21 25.1 +1.6
baz=143
O52A Adamsville 24.36 30 P P 21 21 22.4 -1.1
GRAC Grapevine Rang 24.53 319 P P 21 21 26.3 +1.2
baz=129
CWC Cottonwood Cre 24.63 317 P P 21 21 27.7 +1.4
baz=127
N51A Ashland 24.76 28 P P 21 21 24.1 -3.0
O53A New Philadelph 24.77 31 P P 21 21 30.0 +2.8
baz=219
PKM Mcpherson Peak 24.93 312 P P 21 21 30.4 +1.5
baz=122
RSSD Black Hills 24.99 349 P P 21 21 31.2 +1.8
baz=165

MCWV Mont Chateau 25.00 33 P P 21 21 31.1 +1.8
baz=222,SNR=6.1
BW06 Boulder Array 25.19 339 P P 21 21 32.8 +1.6
baz=152
PDAR Pinedale Array 25.19 339 P P 21 21 31.9 +0.6
comp=Z,2.0nm,0.8s,baz=149,slow=8.3,SNR=12
AAM Ann Arbor 25.38 24 P P 21 21 35.2 +2.5
baz=211
SPMN Marine on St. 25.76 8 P P 21 21 34.8 -1.3
SPMN Marine on St. 25.76 8 P P 21 21 37.7 +1.6
baz=190
N54A Moraine State 25.91 31 P P 21 21 39.6 +2.0
baz=220
ELK Elko 25.93 328 P P 21 21 40.3 +2.2
comp=Z,4.3nm,0.9s,baz=157,slow=5.0,SNR=10
NVAR Mina Array Bea 26.01 320 P P 21 21 40.6 +1.9
comp=Z,10nm,1.0s,baz=134,slow=9.9,SNR=46
O56A Blue Knob Stat 26.12 34 P P 21 21 41.2 +1.7
baz=224
TPAW Teton Pass 26.31 337 P P 21 21 40.5 -1.0
TPAW IAmb IAmb 21 21 43.9
comp=Z,27nm,1.2s
ROSC El Rosal 26.91 120 LR LR 21 33 13.1
comp=Z,191nm,20.9s,baz=352,slow=38
RLMT Red Lodge 27.20 341 P P 21 21 51.3 +1.8
baz=155,SNR=14
HLID Hailey 27.75 333 P P 21 21 55.6 +1.3
baz=144
SDV Santo Domingo 28.05 109 P P 21 21 57.6 +0.4
comp=Z,4.7nm,0.6s,baz=283,slow=3.9,SNR=6.0
SDV LR LR 21 36 17.5
comp=Z,252nm,18.5s,baz=324,slow=44
BOZ Bozeman (W) 28.39 339 P P 21 22 00.3 +0.4
baz=151
AGMN Agassiz Nation 28.57 2 P P 21 22 02.3 +1.0
baz=183
BINY Binghanton 28.86 34 P P 21 22 06.1 +2.0
baz=225
SJG San Juan 29.61 88 LR LR 21 33 19.5
comp=Z,134nm,20.7s,baz=262,slow=35
M04C Macdoel 30.24 322 P P 21 22 18.3 +1.9
baz=129
N02D Trinity Center 30.25 320 P P 21 22 18.1 +1.7
baz=127
MSO Missoula 30.26 337 P P 21 22 18.2 +1.6
baz=148
C06D Leavenworth 33.99 331 P P 21 22 50.7 +1.5
baz=138
D03D Eldon 34.74 329 P P 21 22 56.7 +1.1
baz=134
PTGA Pitinga 41.95 115 P P 21 23 54.8 -1.9
comp=Z,4.3nm,0.8s,baz=296,slow=8.6,SNR=7.3
SCHQ Schefferville 42.06 26 P P 21 23 57.2 +0.1
comp=Z,3.7nm,0.9s,baz=247,slow=13,SNR=4.6
MACA Manacapuru-AM 42.64 118 P 21 23 58.2 -4.1
YKA Yellowknife Ar 44.40 349 P P 21 24 15.8 0.0
comp=Z,2.4nm,0.8s,baz=154,slow=7.5,SNR=17
LPAZ La Paz 45.90 139 P P 21 24 25.3 -3.8
comp=Z,1.2nm,0.4s,baz=336,slow=4.1,SNR=4.9
LPAZ La Paz 45.90 139 P 21 24 26.2 -2.9
P33M Teslin, Yukon 47.65 337 P P 21 24 43.0 +1.3
baz=132
MMPY Sheldon Lake, 48.80 340 P P 21 24 51.6 +1.2
baz=136
FARO Faro, Yukon 49.22 339 P P 21 24 54.9 +1.2
baz=133
M31M Drury Creek, Y 49.56 338 P P 21 24 57.4 +1.2
baz=132
N31M Braeburn, Yuko 49.59 337 P P 21 24 58.0 +1.5
baz=130
HYT Haines Junctio 49.82 336 P P 21 25 00.0 +1.6
baz=128
PNL Peninsula 49.91 334 P P 21 25 00.6 +1.6
baz=125
YUK6 Outpost Mounta 50.23 335 P P 21 25 02.9 +1.2
baz=127
PTLB Pontes e Lacer 51.35 130 P P 21 25 07.5 -2.8
PTLB IAmb IAmb 21 25 13.4
comp=Z,6.3nm,1.1s
YUK3 Moose Creek 51.54 336 P P 21 25 13.2 +1.7
baz=125
BVCY Beaver Creek 52.06 336 P P 21 25 16.6 +1.5
baz=125
GLB Gilahina Butte 52.70 334 P P 21 25 18.9 -1.0
GLB IAmb IAmb 21 25 23.8
comp=Z,14nm,1.1s
L27K Beaver Creek, 52.79 336 P P 21 25 21.1 +0.5
baz=124
M26K Nabesna, AK 52.88 335 P P 21 25 22.6 +1.3
baz=122
L26K Log Cabin Wild 53.35 336 P P 21 25 26.0 +1.3
baz=122
EGAK Eagle 53.54 338 P P 21 25 26.2 +0.3
EGAK IAmb IAmb 21 25 33.2
comp=Z,8.0nm,1.0s
EGAK Eagle 53.54 338 P P 21 25 27.4 +1.4
baz=126
INK Inuvik 53.57 344 P P 21 25 26.1 0.0
INK IAmb IAmb 21 25 32.3
comp=Z,15nm,1.3s
INK Inuvik 53.57 344 P P 21 25 27.1 +1.1
baz=136,SNR=7.8
SCRK Sand Creek 54.11 337 P P 21 25 31.7 +1.3
baz=122
PAX Paxson 54.15 335 P P 21 25 31.9 +1.2
baz=120
J26L Joseph Creek 54.24 337 P P 21 25 31.6 +0.4
J26L IAmb IAmb 21 25 34.2
comp=Z,9.1nm,1.2s
J26L Joseph Creek 54.24 337 P P 21 25 32.7 +1.5
baz=123
RIDG Independent Ri 54.30 336 P P 21 25 33.1 +1.4
baz=121
A36M Sachs Harbour 54.73 350 P P 21 25 35.9 +1.4
baz=147
J25K Salcha River, 54.96 337 P P 21 25 36.9 +0.5
J25K IAmb IAmb 21 25 39.1
comp=Z,12nm,1.5s
J25K Salcha River, 54.96 337 P P 21 25 38.0 +1.6
baz=121
HDA Harding Lake 55.44 336 P P 21 25 41.0 +1.2
baz=120
M22K Willow 55.52 333 P P 21 25 41.7 +1.4
baz=115
IL31 55.60 337 P P 21 25 39.6 -1.3
IL31 IAmb IAmb 21 25 43.8
comp=Z,11nm,1.4s
ILAR Eielson Array 55.60 337 P P 21 25 40.8 -0.2
comp=Z,2.6nm,1.1s,baz=131,slow=4.9,SNR=13
ILAR PcP PcP 21 26 40.9 +0.3
comp=Z,0.6nm,0.6s,baz=150,slow=1.9,SNR=7.6
ILAR Eielson Array 55.60 337 P P 21 25 41.3 +0.3
CUT Chulitna 55.85 333 P P 21 25 44.0 +1.2
baz=115
MCK McKinley 55.89 335 P P 21 25 44.6 +1.5
baz=117
TRF Thorofare Moun 56.31 334 P P 21 25 47.3 +1.1
baz=116
H24K Noodor Dome 56.49 338 P P 21 25 48.3 +0.9
baz=119
I23K Minto, Yukon-K 56.70 337 P P 21 25 49.6 +0.8
baz=118
O19K Port Alsworth 56.83 330 P P 21 25 50.5 +0.8
baz=110
PPLA Purkeypile 56.86 333 P P 21 25 50.7 +0.5
baz=113
BPAW Bear Paw Mtn. 56.87 335 P P 21 25 50.7 +0.7
baz=115
CAST Castle Rocks 57.03 334 P P 21 25 52.1 +0.9
baz=114
N19K Bonanza Creek 57.11 331 P P 21 25 52.7 +0.7
baz=110
MLY Manley 57.17 336 P P 21 25 53.1 +0.9
baz=116
L20K Farewell, AK 57.43 333 P P 21 25 54.9 +0.8
baz=111
M19K Big River Lodg 57.45 332 P P 21 25 53.9 -0.3
M19K Big River Lodg 57.45 332 P P 21 25 55.2 +1.0
baz=110
I21K Tanana 57.71 336 P P 21 25 56.9 +1.0
baz=115
L19K White Mountain 57.75 332 P P 21 25 57.0 +0.7
baz=110
K20K Telida 57.83 334 P P 21 25 57.1 +0.3
baz=112
J20K Nowinta River 58.17 334 P P 21 25 59.2 0.0
J20K Nowinta River 58.17 334 P P 21 25 59.8 +0.6
baz=112

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **H21K** | **Melozitna Rive** | **58.23** | **336** | P | | **P** | | **21 25 59.9** | **+0.3** |
| | baz=114 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **58.44** | **340** | P | | **P** | | **21 26 02.0** | **+0.9** |
| | baz=119 | | | | | | | | |
| **TTA** | **Tatalina** | **58.51** | **333** | P | | **P** | | **21 26 02.3** | **+0.7** |
| | baz=109 | | | | | | | | |
| **CPUP** | **Villa Florida** | **60.05** | **138** | LR | | LR | | 21 52 24.9 | |
| | comp=Z,187nm,18.4s,baz=248,slow=36 | | | | | | | | |
| **RDOG** | **Red Dog Mine** | **62.79** | **337** | P | | **P** | | **21 26 30.6** | **-0.1** |
| | baz=105 | | | | | | | | |
| **ANM** | **Nome** | **62.95** | **333** | P | | **P** | | **21 26 32.2** | **+0.4** |
| | baz=101 | | | | | | | | |
| **PPT** | **Papeete** | **63.19** | **238** | LR | | LR | | 21 46 54.8 | |
| | comp=Z,89nm,21.3s,baz=321,slow=29 | | | | | | | | |
| **TNA** | **Tin City** | **64.19** | **334** | P | | **P** | | **21 26 41.1** | **+1.1** |
| | baz=99 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **80.27** | **51** | P | | **P** | | **21 28 15.9** | **-0.9** |
| | comp=Z,1.2nm,1.1s,baz=290,slow=3.8,SNR=2.8 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **80.27** | **51** | P | | **P** | | **21 28 16.6** | **-0.2** |
| **SEY** | **Seymchan** | **81.44** | **334** | P | | **P** | | **21 28 22.3** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=86,slow=8.7,SNR=6.2 | | | | | | | | |
| **TIXI** | **Tiksi** | **83.61** | **347** | P | | **P** | | **21 28 30.8** | **-2.8** |
| TIXI | | | | IAmb | | IAmb | | 21 28 41.5 | |
| | comp=Z,5.4nm,1.1s | | | | | | | | |
| **MA2** | **Magadan** | **83.68** | **332** | P | | **P** | | **21 28 32.6** | **-1.6** |

**IDC 08 21:17:12.4±5.4, 3°19N×94°65E, h0km, mb3.4/4, mb1 3.5/5, mb1mx3.1/57, mbtmp3.4/5, Error ellipse: s-maj=118.0km s-min=28.0km az=136.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **15.75** | **15** | Pn | Pn | 21 20 55.8 | 0.0 |
| | baz=210,slow=12,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.74** | **348** | P | P | 21 25 27.4 | -0.2 |
| | 0.5nm,0.6s,baz=159,slow=7.9,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **45.62** | **11** | P | P | 21 25 34.2 | -0.5 |
| | 0.2nm,0.7s,baz=193,slow=5.8,SNR=1.7 | | | | | | |
| **KURBB** | **Kurchatov Array** | **49.19** | **346** | P | P | 21 26 02.2 | 0.0 |
| | 0.2nm,0.6s,baz=169,slow=7.1,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.24** | **353** | P | P | 21 26 17.9 | +0.2 |
| | 0.3nm,0.3s,baz=156,slow=5.8,SNR=2.2 | | | | | | |

*SFS **08** 21:18:06.0, 35°44N×3°85W, h12km, ML2.1, ALBORAN SUR*

*CNRM **08** 21:18:08.8, 35°53N×3°91W, h15km, ml2.5*

**ISC 08 21:18:07.9±1.2, 35°48N±0°03×3°87W±0°03, h12km±10km, n16, σ2s09/30, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.27** | **193** | P | **Pb** | **21 18 14.7** | **0.0** |
| PALE | | | | S | **Sb** | **21 18 19.0** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **1.21** | **104** | P | **Pg** | **21 18 31.0** | **-0.2** |
| CHAS | | | | S | **Sb** | **21 18 45.1** | **-1.2** |
| **SMIR** | **Smir Dam** | **1.25** | **280** | P | **Pg** | **21 18 31.9** | **0.0** |
| SMIR | | | | S | **Sg** | **21 18 47.6** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.26** | **253** | P | **Pg** | **21 18 33.9** | **+1.8** |
| CHEFC | | | | S | **Sg** | **21 18 48.0** | **-0.6** |
| **CEU** | **Ceuta** | **1.29** | **289** | P | **Pg** | **21 18 32.6** | **-0.2** |
| CEU | | | | S | **Sb** | **21 18 47.2** | **-1.5** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **341** | P | **Pg** | **21 18 38.1** | **+4.2** |
| EMAL | | | | S | **Sg** | **21 18 52.7** | **+1.1** |
| **JBK** | **JBK** | **1.56** | **137** | P | **Pn** | **21 18 35.5** | **-0.2** |
| JBK | | | | S | **Sb** | **21 18 56.2** | **-0.5** |
| **LCRM** | **LCR** | **1.97** | **205** | P | **Pg** | **21 18 46.4** | **+0.8** |
| LCRM | | | | S | **Sg** | **21 19 11.4** | **+0.2** |
| **IFR** | **Ifrane** | **2.22** | **208** | P | **Pg** | **21 18 53.9** | **+3.4** |
| IFR | | | | S | **Sn** | **21 19 12.9** | **+0.7** |
| **MD31** | **MD31** | **2.71** | **196** | P | **Pb** | **21 18 53.4** | **-2.9** |
| MD31 | | | | S | **Sn** | **21 19 25.9** | **+1.8** |
| **MDT** | **Midelt** | **2.73** | **193** | P | **Pb** | **21 18 55.0** | **-1.7** |
| MDT | | | | S | **Sn** | **21 19 25.5** | **+0.9** |
| **TDRA** | **Tendrara** | **2.87** | **147** | P | **Pb** | **21 18 56.6** | **-2.6** |
| TDRA | | | | S | **Sn** | **21 19 30.6** | **+2.4** |
| **PVAQ** | **Vaqueiros** | **3.65** | **303** | *e*Pn | **Pb** | **21 19 08.0** | **-4.3** |
| PVAQ | | | | *e*Sn | **Sn** | **21 19 49.5** | **+2.4** |
| PVAQ | | | | A | A | 21 19 51.6 | |
| | 2.5nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.65** | **303** | P | **Pn** | **21 19 01.7** | **-2.5** |
| PVAQ | | | | S | **Sn** | **21 19 47.0** | **-0.1** |
| **MESJ** | **Messejana** | **4.22** | **305** | *e*Sn | **Sn** | **21 20 03.4** | **+2.3** |
| **PNCL** | **Nicolau / Gran** | **4.57** | **306** | *e*Pn | **Pn** | **21 19 20.2** | **+3.4** |

*NNC **08** 21:50:11.0±10.0, 37°00N×70°29E, h0km, mb4.1, mpv3.9, Error ellipse: s-maj=86.3km s-min=60.9km az=173.0*

*IDC **08** 21:50:12.5±8.3, 36°34N×71°80E, h183km±62km, mb3.0/1, mb1 3.0/5, mb1mx2.6/42, mbtmp3.5/5, Error ellipse: s-maj=160.1km s-min=54.1km az=93.0*

**ISC 08 21:50:10.7±1.6, 36°5N±0°1×70°8E±0°1, h188km, n16, σ1s47/21, 6C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **6.01** | **21** | P | **Pn** | **21 51 38.9** | **+0.7** |
| | SNR=45 | | | | | | |
| **UCH** | **Uchtor** | **6.36** | **26** | P | **Pn** | **21 51 43.6** | **+0.9** |
| | SNR=23 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.52** | **20** | P | **Pn** | **21 51 45.6** | **+1.0** |
| | SNR=11 | | | | | | |
| **KK02** | **Karatay Array** | **6.56** | **358** | ↑P | **Pn** | **21 51 45.1** | **+0.1** |
| | 2.1nm,0.4s,baz=182,slow=15 | | | | | | |
| KK02 | | | | ↑S | **Sn** | **21 52 55.5** | **-4.1** |
| | 9.3nm,0.3s,baz=191,slow=25 | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **24** | P | **Pn** | **21 51 48.2** | **+1.1** |
| | 2.2nm,0.3s,baz=182,slow=5.1,SNR=34 | | | | | | |
| AAK | | | | S | **Sn** | **21 53 02.0** | **-1.6** |
| | 0.9nm,0.3s,baz=339,slow=22,SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **24** | P | **Pn** | **21 51 48.2** | **+1.1** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **24** | ↑P | **Pn** | **21 51 47.7** | **+0.5** |
| | 3.3nm,0.4s | | | | | | |
| AAK | | | | ↑S | **Sn** | **21 53 01.9** | **-1.6** |
| | 8.4nm,0.7s | | | | | | |
| **KBK** | **Karagaybulak** | **6.89** | **26** | P | **Pn** | **21 51 50.8** | **+1.4** |
| | SNR=8.5 | | | | | | |
| **CHMS** | **Chumysh** | **7.12** | **24** | P | **Pn** | **21 51 53.3** | **+0.9** |
| | SNR=5.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **29** | P | **Pn** | **21 51 56.5** | **+0.9** |
| | SNR=23 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **29** | ↓P | **Pn** | **21 51 56.0** | **+0.4** |
| | 17nm,0.7s | | | | | | |
| TKM2 | | | | ↑S | **Sn** | **21 53 19.8** | **+1.1** |
| | 2.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.34** | **36** | P | **Pn** | **21 53 12.2** | **-0.6** |
| | 0.1nm,0.3s,baz=215,slow=8.2,SNR=10 | | | | | | |
| **AB31** | **Akbulak array** | **14.98** | **331** | ↑P | **P** | **21 53 35.4** | **+1.6** |
| | 1.0nm,0.8s,baz=170,slow=11,SNR=11 | | | | | | |
| AB31 | | | | ↓S | **Sn** | **21 56 20.1** | **0.0** |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.13** | **19** | P | **P** | **21 53 36.3** | **+0.8** |
| | 0.1nm,0.3s,baz=216,slow=8.7,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.94** | **25** | P | **P** | **21 54 28.9** | **+1.0** |
| | 0.3nm,0.3s,baz=222,slow=11,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **84.40** | **125** | P | **P** | **22 02 20.2** | **-1.8** |
| | 0.3nm,0.8s,baz=310,slow=5.6,SNR=4.2 | | | | | | |

*NEIC **08** 22:29:44.1±1.0, 45°575N±0°010×67°34W±0°02, h5km±2km, Error ellipse: s-maj=3.0km s-min=2.4km az=206.0*

*OTT **08** 22:29:45.1±0.1, 45°60N×67°34W, h1km, MN2.5/9*

*OTT 2km west from McAdam, Nb. Felt Northern Appalachians Seismic Zone. Felt at McAdam, Nb.*

**ISC 08 22:29:44.1±1.2, 45°58N±0°03×67°33W±0°02, h2km±10km, n32, σ0s60/51, Maine**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **G65A** | **Princeton** | **0.42** | **203** | Pg | **Pg** | **22 29 52.2** | **+0.1** |
| G65A | | | | Sg | **Sg** | **22 29 57.3** | **-0.1** |
| G65A | | | | IAML | | 22 29 59.1 | |
| | comp=N,108nm,0.3s | | | | | | |
| G65A | | | | IAML | | 22 30 01.7 | |
| | comp=E,147nm,0.6s | | | | | | |
| **HANN** | **Hanwell** | **0.49** | **53** | Pg | **Pg** | **22 29 53.8** | **+0.2** |
| HANN | | | | Sg | **Sg** | **22 30 00.4** | **+0.4** |
| **HANN** | **Hanwell** | **0.49** | **53** | PG | **Pg** | **22 29 53.8** | **+0.2** |
| HANN | | | | SG | **Sg** | **22 30 00.4** | **+0.4** |
| HANN | | | | Trac | | 22 30 00.8 | |
| | comp=E,5.0nm,0.0s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GGN** | **Saint George** | **0.58** | **143** | Pg | **Pg** | | **22 29 55.5** | **+0.4** |
| GGN | | | | Sg | **Sg** | | **22 30 03.4** | **+0.7** |
| **GGN** | **Saint George** | **0.58** | **143** | PG | **Pg** | | **22 29 55.6** | **+0.4** |
| GGN | | | | SG | **Sg** | | **22 30 03.7** | **+1.1** |
| GGN | | | | Trac | | | 22 30 08.6 | |
| | comp=E,14nm,0.1s | | | | | | | |
| **F64A** | **Sherman** | **0.77** | **292** | Pg | **Pg** | | **22 29 59.1** | **+0.3** |
| F64A | | | | IAML | | | 22 30 04.5 | |
| | comp=N,58nm,3.0s | | | | | | | |
| F64A | | | | Sg | **Sg** | | **22 30 09.1** | **+0.4** |
| **PQI** | **Presque Isle** | **1.19** | **337** | Pg | **Pg** | | **22 30 06.5** | **-0.4** |
| PQI | | | | IAML | | | 22 30 17.1 | |
| | comp=N,55nm,4.2s | | | | | | | |
| **SRNB** | **Snider Mountai** | **1.21** | **78** | Pg | **Pg** | | **22 30 06.9** | **-0.5** |
| SRNB | | | | Sg | **Sg** | | **22 30 22.4** | **-0.6** |
| **SRNB** | **Snider Mountai** | **1.21** | **78** | PG | **Pg** | | **22 30 06.9** | **-0.5** |
| SRNB | | | | SG | **Sg** | | **22 30 22.4** | **-0.6** |
| SRNB | | | | Trac | | | 22 30 25.4 | |
| | comp=N,15nm,0.1s | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **1.25** | **276** | Pg | **Pg** | | **22 30 07.9** | **-0.1** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | Pg | **Pg** | | **22 30 08.1** | **-0.5** |
| WCNB | | | | Sg | **Sg** | | **22 30 25.2** | **0.0** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | PG | **Pg** | | **22 30 08.1** | **-0.5** |
| WCNB | | | | SG | **Sg** | | **22 30 25.2** | **0.0** |
| WCNB | | | | Trac | | | 22 30 26.0 | |
| | comp=N,28nm,0.1s | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **258** | Pn | **Pn** | | **22 30 10.3** | **-0.6** |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **258** | PG | **Pn** | | **22 30 10.4** | **-0.5** |
| PKME | | | | SG | **Sg** | | **22 30 29.1** | **-0.5** |
| PKME | | | | Trac | | | 22 30 32.0 | |
| | comp=N,17nm,0.1s | | | | | | | |
| **HKNB** | **Havelock Quarr** | **1.42** | **73** | | **Pn** | | **22 30 10.5** | **-0.4** |
| HKNB | | | | Sg | **Sb** | | **22 30 29.4** | **-0.5** |
| **HKNB** | **Havelock Quarr** | **1.42** | **73** | PG | **Pn** | | **22 30 10.5** | **-0.4** |
| HKNB | | | | SG | **Sb** | | **22 30 29.4** | **-0.5** |
| HKNB | | | | Trac | | | 22 30 31.5 | |
| | comp=N,75nm,0.3s | | | | | | | |
| **ELNB** | **Elgin, New Bru** | **1.55** | **79** | | **Pn** | | **22 30 12.7** | **0.0** |
| ELNB | | | | | **Sn** | | **22 30 33.3** | **-0.1** |
| **ELNB** | **Elgin, New Bru** | **1.55** | **79** | PG | **Pn** | | **22 30 12.7** | **0.0** |
| ELNB | | | | SG | **Sn** | | **22 30 33.3** | **-0.1** |
| ELNB | | | | Trac | | | 22 30 37.7 | |
| | comp=N,7.9nm,0.2s | | | | | | | |
| **LMN** | **Caledonia Moun** | **1.79** | **80** | Pn | **Pn** | | **22 30 15.2** | **-0.8** |
| **LMN** | **Caledonia Moun** | **1.79** | **80** | PN | **Pn** | | **22 30 16.2** | **+0.2** |
| LMN | | | | SN | **Sb** | | **22 30 40.4** | **-0.1** |
| LMN | | | | Trac | | | 22 30 41.4 | |
| | comp=N,33nm,0.3s | | | | | | | |
| **SVNB** | **Stilesville Qu** | **1.81** | **70** | Pn | **Pn** | | **22 30 16.9** | **+0.7** |
| SVNB | | | | Sn | **Sn** | | **22 30 40.7** | **+0.9** |
| **SVNB** | **Stilesville Qu** | **1.81** | **70** | PN | **Pn** | | **22 30 16.9** | **+0.7** |
| SVNB | | | | SN | **Sn** | | **22 30 40.7** | **+0.9** |
| SVNB | | | | Trac | | | 22 30 44.0 | |
| | comp=N,19nm,0.1s | | | | | | | |
| **F62A** | **Pittston Farm,** | **1.87** | **281** | Pn | **Pn** | | **22 30 18.1** | **+0.9** |
| **BATG** | **Bathurst New B** | **1.91** | **27** | Pn | **Pn** | | **22 30 16.4** | **-1.3** |
| **BATG** | **Bathurst New B** | **1.91** | **27** | PN | **Pn** | | **22 30 18.8** | **+1.2** |
| BATG | | | | SN | **Sn** | | **22 30 42.9** | **+0.6** |
| BATG | | | | Trac | | | 22 30 45.4 | |
| | comp=N,12nm,0.1s | | | | | | | |
| **D62A** | **Allapoint, All** | **1.91** | **322** | Pn | **Pn** | | **22 30 18.9** | **+1.2** |
| **G62A** | **West of Eustis** | **2.28** | **262** | Pn | **Pn** | | **22 30 22.5** | **-0.3** |
| **I63A** | **Otisfield** | **2.77** | **238** | Pn | **Pn** | | **22 30 29.4** | **-0.2** |
| **LMQ** | **La Malbaie** | **2.85** | **315** | Pn | **Pn** | | **22 30 30.1** | **-0.6** |
| **H62A** | **Milan** | **2.89** | **251** | Pn | **Pn** | | **22 30 30.2** | **-0.9** |
| **I62A** | **Tamworth** | **3.33** | **241** | Pn | **Pn** | | **22 30 36.7** | **-0.5** |
| **GBN** | **Guysborough** | **4.09** | **90** | Pn | **Pn** | | **22 30 47.4** | **-0.2** |

**IDC 08 22:30:23.7±2.9, 8°24N×125°81E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.1/49, mbtmp3.3/3, MS3.5/2, Ms1 3.5/2, ms1mx2.7/34, Error ellipse: s-maj=274.8km s-min=15.9km az=65.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **29.23** | **163** | P | P | 22 36 28.0 | +0.5 |
| | 0.4nm,0.6s,baz=345,slow=9.7,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **32.68** | **166** | P | P | 22 36 57.6 | -0.3 |
| | 0.2nm,0.3s,baz=341,slow=7.3,SNR=4.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **38.62** | **19** | LR | LR | 22 53 12.1 | |
| | comp=Z,45nm,21.6s,baz=12,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **42.76** | **341** | LR | LR | 22 58 36.4 | |
| | comp=Z,111nm,19.7s,baz=294,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.37** | **324** | P | P | 22 39 45.0 | -0.1 |
| | 0.1nm,0.5s,baz=119,slow=7.2,SNR=4.9 | | | | | | |

*IDC **08** 22:50:22.6±0.7, 28°19N×43°87W, h0km, mb4.1/19, mb1 4.3/19, mb1mx4.1/51, mbtmp4.1/19, MS3.5/1, Ms1 3.5/1, ms1mx3.0/92, Error ellipse: s-maj=20.2km s-min=16.3km az=163.0*

*NEIC **08** 22:50:24.9±1.2, 28°3N±0°1×43°8W±0°1, h10km±1km, mb4.9/53, Error ellipse: s-maj=20.7km s-min=13.7km az=140.0*

*GCMT **08** 22:50:25.9±0.4, 28°48N±0°05×43°73W±0°04, h23km±1km, MW5.0/76, Moment Tensor Solution. s18,c19; s76,c89; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~3.89±.29; Mθθ 1.41±.18; Mϕϕ 2.48±.18; Mrθ 0.69±.33; Mϕθ 0.80±.11; Mϕr~0.65±.27; Best double couple: Mo 3.49100×10^16 NP1: ϕs 218.00000°, δ 44.00000°, λ -75.00000°. NP2: ϕs 17.00000°, δ 48.00000°, λ -104.00000°. Principal axes: T 2.9170, Plg2.0000°, Azm117.0000°; N 1.1460, Plg10.0000°, Azm27.0000°; P -4.0640, Plg80.0000°, Azm219.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 08 22:50:25.1±0.5, 28°27N±0°10×43°76W±0°09, h14km, n110, σ0s86/104, mb4.8/61, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMRT** | **St. Maarten** | **20.44** | **244** | Pn | **P** | **22 55 03.4** | **+1.1** |
| **SJG** | **San Juan** | **22.89** | **249** | LR | LR | 23 02 21.6 | |
| | comp=Z,139nm,21.8s,baz=58,slow=32 | | | | | | |
| **BAUV** | **El Baul** | **29.87** | **235** | P | **P** | **22 56 32.0** | **-0.4** |
| BAUV | | | | IAmb | IAmb | 22 56 32.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **DY2G** | **Dye2** | **38.26** | **358** | *i* P | P | 22 57 50.0 | +5.2 |
| DY2G | | | | IAmb | IAmb | 22 57 52.6 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **FRB** | **Frobisher Bay** | **38.91** | **343** | P | **P** | **22 57 49.3** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=146,slow=8.1,SNR=4.8 | | | | | | |
| **ICESG** | **Greenland Ices** | **40.92** | **2** | *i* P | **P** | **22 58 04.4** | **-2.8** |
| ICESG | | | | IAmb | IAmb | 22 58 10.1 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **BOAB** | **BOACO BROADBAND** | **42.09** | **257** | P | **P** | **22 58 17.4** | **+0.5** |
| BOAB | | | | IAmb | IAmb | 22 58 39.1 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **ETMB** | **Extrema** | **43.65** | **213** | P | **P** | **22 58 28.6** | **-0.9** |
| **VILB** | **Vilhena** | **43.96** | **203** | P | **P** | **22 58 32.0** | **0.0** |
| **SUMG** | **Summit** | **44.45** | **2** | *i* P | **P** | **22 58 35.0** | **-0.8** |
| SUMG | | | | IAmb | IAmb | 22 58 43.2 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.83** | **100** | P | **P** | **22 58 37.6** | **-1.4** |
| | comp=Z,2.6nm,0.9s,baz=300,slow=8.6,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.83** | **100** | P | **P** | **22 58 39.2** | **+0.1** |
| **DAVA** | **Damuels** | **45.48** | **50** | *e*P | **P** | **22 58 42.0** | **-2.1** |
| | comp=Z,21nm,1.4s | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.68** | **137** | T | T | 23 47 14.2 | |
| | baz=322,slow=76,SNR=95 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.69** | **137** | T | T | 23 47 14.3 | |
| | baz=322,slow=76,SNR=79 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.70** | **137** | T | T | 23 47 15.6 | |
| | baz=322,slow=76,SNR=105 | | | | | | |
| **FCC** | **Fort Churchill** | **45.93** | **326** | P | **P** | **22 58 48.1** | **+0.9** |
| FCC | | | | IAmb | IAmb | 22 58 55.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **FETA** | **Feichten** | **46.04** | **51** | *e*P | **P** | **22 58 48.7** | **+0.2** |
| | comp=Z,10nm,1.2s | | | | | | |
| **RETA** | **Reutte** | **46.10** | **50** | *e*P | **P** | **22 58 50.1** | **+1.3** |
| | comp=Z,14nm,1.5s | | | | | | |
| **MOTA** | **Moosalm** | **46.32** | **50** | *e*P | **P** | **22 58 51.9** | **+1.2** |
| | comp=Z,13nm,1.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **46.38** | **50** | *e*P | **P** | **22 58 52.5** | **+1.4** |
| | comp=Z,27nm,1.7s | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.48** | **139** | T | T | 23 48 13.1 | |
| | baz=322,slow=74,SNR=206 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.49** | **138** | T | T | 23 48 14.3 | |
| | baz=258,slow=74,SNR=92 | | | | | | |
| **WATA** | **Walderalm** | **46.64** | **50** | *e*P | **P** | **22 58 54.2** | **+1.0** |
| | comp=Z,13nm,1.1s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WTTA** | **Wattenberg** | **46.67** | **50** | *e*P | | **P** | | **22 58 52.0** | **-1.5** |
| | comp=Z,20nm,1.3s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **47.24** | **51** | *e*P | | **P** | | **22 58 56.1** | **-1.8** |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **CLL** | **Collm** | **47.91** | **45** | *e*P | | **P** | | **22 59 03.0** | **+0.1** |
| **KHC** | **Kasperske Hory** | **48.09** | **48** | *e*P | | **P** | | **22 59 04.5** | **+0.2** |
| **GERES** | **GERESS Array B** | **48.15** | **48** | P | | **P** | | **22 59 04.9** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=274,slow=7.9,SNR=6.7 | | | | | | | | |
| **GERES** | **GERESS Array B** | **48.15** | **48** | P | | **P** | | **22 59 04.7** | **-0.2** |
| **MOA** | **Molln** | **48.48** | **50** | *e*P | | **P** | | **22 59 07.1** | **-0.3** |
| | comp=Z,9.9nm,1.5s | | | | | | | | |
| **OBKA** | **Obir** | **48.64** | **52** | *e*P | | **P** | | **22 59 08.4** | **-0.2** |
| | comp=Z,27nm,1.5s | | | | | | | | |
| **ARSA** | **Arzberg** | **49.32** | **51** | *e*P | | **P** | | **22 59 13.8** | **0.0** |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **CONA** | **Conrad Observa** | **49.56** | **50** | *e*P | | **P** | | **22 59 15.6** | **-0.1** |
| | comp=Z,0.1nm,0.5s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **50.03** | **7** | *i* P | | **P** | | **22 59 18.0** | **-0.7** |
| DAG | | | | IAmb | | IAmb | | 22 59 26.4 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **LPAZ** | **La Paz** | **50.19** | **211** | P | | **P** | | **22 59 20.4** | **-0.9** |
| | comp=Z,4.0nm,0.7s,baz=16,slow=4.9,SNR=7.5 | | | | | | | | |
| **LPAZ** | **La Paz** | **50.19** | **211** | P | | **P** | | **22 59 21.3** | **0.0** |
| **MODS** | **Modra-Piesok** | **50.51** | **49** | *e*P | | **P** | | **22 59 21.8** | **-1.0** |
| **TXAR** | **Lajitas Array** | **51.99** | **286** | P | | **P** | | **22 59 33.9** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=90,slow=9.9,SNR=1.9 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **51.99** | **286** | P | | **P** | | **22 59 35.3** | **+1.0** |
| **RLMT** | **Red Lodge** | **53.73** | **307** | P | | **P** | | **22 59 48.6** | **+1.5** |
| RLMT | | | | IAmb | | IAmb | | 23 00 07.0 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **55.87** | **50** | P | | **P** | | **23 00 02.1** | **-0.3** |
| **FINES** | **FINESS Array B** | **55.99** | **33** | P | | **P** | | **23 00 03.5** | **+0.6** |
| | comp=Z,6.6nm,1.0s,baz=241,slow=3.9,SNR=12 | | | | | | | | |
| **FIA1** | **FINESS Array S** | **55.99** | **33** | P | | **P** | | **23 00 03.7** | **+0.8** |
| FIA1 | | | | IAmb | | IAmb | | 23 00 20.8 | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.52** | **328** | P | | **P** | | **23 00 06.0** | **-0.6** |
| | comp=Z,1.7nm,0.9s,baz=91,slow=7.4,SNR=17 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.52** | **328** | P | | **P** | | **23 00 05.2** | **-1.4** |
| **ARCES** | **ARCESS Array B** | **56.57** | **23** | P | | **P** | | **23 00 09.0** | **+2.0** |
| | comp=Z,7.5nm,0.9s,baz=283,slow=11,SNR=4.7 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.57** | **23** | P | | **P** | | **23 00 06.5** | **-0.4** |
| **MLR** | **Muntele Rosu** | **56.63** | **52** | P | | **P** | | **23 00 09.0** | **+1.1** |
| **DUG** | **Dugway, Tooele** | **57.02** | **301** | P | | **P** | | **23 00 11.5** | **+0.7** |
| DUG | | | | IAmb | | IAmb | | 23 00 18.5 | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **58.15** | **46** | P | | **P** | | **23 00 18.4** | **0.0** |
| | comp=Z,4.7nm,0.8s,baz=276,slow=6.1,SNR=22 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **58.15** | **46** | P | | **P** | | **23 00 18.1** | **-0.2** |
| **AKBB** | **Malin Array Si** | **58.15** | **46** | P | | **P** | | **23 00 18.0** | **-0.3** |
| AKBB | | | | IAmb | | IAmb | | 23 00 25.6 | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **SPR3** | **Spring Creek 3** | **58.41** | **300** | P | | **P** | | **23 00 21.3** | **+0.5** |
| SPR3 | | | | IAmb | | IAmb | | 23 00 29.3 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **PLID** | **Pearl Lake** | **58.46** | **308** | P | | **P** | | **23 00 20.8** | **-0.1** |
| PLID | | | | IAmb | | IAmb | | 23 00 27.5 | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **MFID** | **Camas Ranch** | **58.63** | **306** | P | | **P** | | **23 00 21.7** | **-0.3** |
| MFID | | | | IAmb | | IAmb | | 23 00 29.7 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **NEW** | **Newport** | **58.72** | **311** | P | | **P** | | **23 00 21.2** | **-1.3** |
| | comp=Z,3.2nm,0.7s,baz=103,slow=7.5,SNR=7.8 | | | | | | | | |
| **NEW** | **Newport** | **58.72** | **311** | P | | **P** | | **23 00 22.7** | **+0.2** |
| NEW | | | | IAmb | | IAmb | | 23 00 29.8 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **59.16** | **309** | P | | **P** | | **23 00 25.0** | **-0.6** |
| F10A | | | | IAmb | | IAmb | | 23 00 47.6 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **D08A** | **Wollman Farm,** | **60.12** | **310** | P | | **P** | | **23 00 31.4** | **-0.7** |
| D08A | | | | IAmb | | IAmb | | 23 00 39.3 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **G08A** | **Pilot Rock** | **60.48** | **308** | P | | **P** | | **23 00 34.5** | **-0.2** |
| G08A | | | | IAmb | | IAmb | | 23 00 41.5 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **60.53** | **306** | P | | **P** | | **23 00 35.1** | **0.0** |
| J08A | | | | IAmb | | IAmb | | 23 00 42.9 | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **60.77** | **339** | P | | **P** | | **23 00 36.0** | **0.0** |
| A36M | | | | IAmb | | IAmb | | 23 00 44.4 | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **LCH** | **Last Change Ra** | **61.36** | **299** | P | | **P** | | **23 00 40.4** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **61.56** | **301** | P | | **P** | | **23 00 41.5** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=73,slow=7.3,SNR=4.9 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.56** | **301** | P | | **P** | | **23 00 42.0** | **-0.3** |
| **OBN** | **Obninsk** | **61.92** | **40** | P | | **P** | | **23 00 44.0** | **-0.1** |
| **PAHR** | **Pah Rah Range** | **62.05** | **302** | P | | **P** | | **23 00 44.5** | **-1.0** |
| PAHR | | | | IAmb | | IAmb | | 23 00 52.9 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **MOD** | **Modoc Plateau** | **62.18** | **305** | P |

*IDC* ***08*** *23:03:01.1±1.4,2°.29N×126°.52E,h0km,mb3.3/6, mb1 3.5/6,mb1mx3.3/46,mbtmp3.4/6,Error ellipse: s-maj=110.0km s-min=19.2km az=71.0*

**ISC 08 23:03:07.4±1.5,2°.3N±0°.2×126°.8E±0.8,h50km,n6,σ0s68/6, mb3.3/5,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.34** | **183** | P | **P** | **23 07 39.9** | **+0.2** |
| | 1.8nm,1.0s,baz=21,slow=8.6,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.34** | **162** | P | **P** | **23 08 10.8** | **-0.7** |
| | 0.4nm,0.3s,baz=338,slow=10,SNR=9.6 | | | | | | |
| **ASAR** | **Alice Springs** | **26.75** | **165** | P | **P** | **23 08 43.2** | **+0.5** |
| | 0.2nm,0.3s,baz=348,slow=7.6,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **48.64** | **342** | P | **P** | **23 11 47.0** | **+0.5** |
| | 0.2nm,0.8s,baz=146,slow=7.3,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.74** | **326** | P | **P** | **23 12 59.9** | **-0.5** |
| | 0.2nm,0.4s,baz=119,slow=8.0,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.95** | **328** | P | **P** | **23 13 28.5** | **-0.3** |
| | 0.4nm,0.8s,baz=129,slow=6.7,SNR=3.0 | | | | | | |

*IDC* ***08*** *23:03:22.6±0.3,28°.32N×43°.78W,h0km,mb4.9/43, mb1 5.0/43,mb1mx5.0/46,mbtmp4.9/43,MS4.6/84, Ms1 4.6/84,ms1mx4.5/94,Error ellipse: s-maj=11.6km s-min=9.7km az=134.0*

*BGR* ***08*** *23:03:23.9±0.0,27°.35N×43°.36W,h24km±2km,mb5.6, Ms4.8*

*BJI* ***08*** *23:03:23.0±0.0,28°.30N×43°.80W,h10km,mb4.9/13, Ms5.2/3,Ms7 5.1/3*

*MOS* ***08*** *23:03:23.4±0.9,28°.35N×43°.75W,h13km,mb5.6/37,Error ellipse: s-maj=7.7km s-min=4.6km az=56.5*

*NEIC* ***08*** *23:03:26.2±1.8,28°.38N±0°.09×43°.76W±0°.1,h10km±1km, mb5.4/657,Error ellipse: s-maj=15.4km s-min=14.2km az=150.0*

*GCMT* ***08*** *23:03:27.2±0.1,28°.47N±0°.01×43°.72W±0°.01,h12km, MW5.3/144,Moment Tensor Solution. s75,c94; s144,c240; Duration: 1†1 Moment tensor: Scale 10^17 Nm; Mrr-1.05±.01; Mθθ0.19±.02; Mϕϕ0.86±.01; Mrθ0.20±.06; Mθϕ0.37±.01; Mϕr-0.33±.04; Best double couple: M☼1.10100×10^17 NP1:ϕ☼218.00000°,δ41.00000°, λ-68.00000°. NP2:ϕ☼9.00000°,δ53.00000°,λ-108.00000°. Principal axes: T 1.0480, Plg6.0000°, Azm112.0000°; N 0.1080, Plg14.0000°, Azm20.0000°; P -1.1540, Plg74.0000°, Azm225.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 08 23:03:25.4±0.5,28°.35N±0°.04×43°.77W±0°.04,h16km±2km, h16km:pP-P,n1288,σ1†15/1095,mb5.4/480,MS4.6/91, 46C-38D,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWB** | **Willy Bob** | **19.67** | **241** | P | **Pn** | **23 07 54.7** | **-0.7** |
| **H05N1** | **Guadeloupe/Mar** | **19.95** | **237** | T | T | 23 28 10.0 | |
| **SMRT** | **St. Maarten** | **20.47** | **244** | P | Pn | 23 08 04.9 | +0.2 |
| SMRT | | | | IAmb | IAmb | 23 08 13.1 | |
| | comp=Z,344nm,1.4s | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **21.05** | **232** | T | T | 23 29 28.8 | |
| | SNR=5.5 | | | | | | |
| **FDF** | **Fort de France** | **21.06** | **234** | P | **P** | **23 08 09.2** | **+0.2** |
| FDF | | | | pmax | pmax | | |
| | comp=Z,186nm,1.1s | | | | | | |
| **FDF** | **Fort de France** | **21.06** | **234** | P | **P** | **23 08 09.2** | **+0.2** |
| FDF | | | | IAmb | IAmb | 23 08 15.9 | |
| | comp=Z,186nm,1.1s | | | | | | |
| **SJG** | **San Juan** | **22.92** | **248** | P | **P** | **23 08 29.1** | **+0.2** |
| | comp=Z,9.4nm,0.2s,baz=79,slow=8.4,SNR=4.7 | | | | | | |
| SJG | | | | LR | LR | 23 15 33.8 | |
| | comp=Z,1μm,21.7s,baz=66,slow=32 | | | | | | |
| **SJG** | **San Juan** | **22.92** | **248** | P | **P** | **23 08 29.7** | **+0.8** |
| SJG | | | | pmax | pmax | | |
| | comp=Z,105nm,1.4s | | | | | | |
| **SJG** | **San Juan** | **22.92** | **248** | P | **P** | **23 08 29.7** | **+0.8** |
| **SACV** | **Santiago Islan** | **22.93** | **121** | P | **P** | **23 08 29.4** | **+0.3** |
| **GRGR** | **Grenville** | **23.23** | **230** | P | **P** | **23 08 31.9** | **-0.2** |
| **PMOZ** | **Porto Moniz, M** | **23.28** | **72** | *eP* | **P** | **23 08 35.4** | **+2.8** |
| | comp=Z,316nm,1.5s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **23.28** | **72** | P | **P** | **23 08 33.0** | **+0.3** |
| **DRLN** | **Deer Lake** | **23.39** | **337** | P | **P** | **23 08 33.6** | **+0.2** |
| **PMAR** | **Madeira** | **23.51** | **73** | *eP* | **P** | **23 08 35.7** | **+0.7** |
| | comp=Z,328nm,1.8s | | | | | | |
| **FUL** | **Funchal** | **23.52** | **73** | *eP* | **P** | **23 08 41.1** | **+6.2** |
| | comp=Z,249nm,1.9s | | | | | | |
| **PMPS** | **Porto Santo** | **24.02** | **72** | *eP* | **P** | **23 08 41.5** | **+1.8** |
| | comp=Z,401nm,1.7s | | | | | | |
| **PMPST** | **Porto Santo, M** | **24.02** | **72** | *eP* | **P** | **23 08 40.2** | **+0.5** |
| | comp=Z,401nm,1.7s | | | | | | |
| **MDP** | **Montagnes des** | **24.61** | **202** | P | **P** | **23 08 44.3** | **-0.8** |
| | comp=Z,42nm,0.9s,baz=22,slow=9.2,SNR=7.1 | | | | | | |
| MDP | | | | LR | LR | 23 16 30.7 | |
| | comp=Z,337nm,18.4s,baz=28,slow=32 | | | | | | |
| **DR12** | **Loma Pena Alta** | **25.29** | **253** | P | **P** | **23 08 52.3** | **+0.9** |
| **SC01** | **Santiago de lo** | **26.16** | **256** | P | **P** | **23 09 00.3** | **+1.1** |
| **SDDR** | **Presa de Saban** | **26.82** | **256** | P | **P** | **23 09 06.3** | **+1.1** |
| SDDR | | | | IAmb | IAmb | 23 09 13.4 | |
| | comp=Z,128nm,1.3s | | | | | | |
| **LBNH** | **Lisbon** | **27.51** | **313** | P | **P** | **23 09 12.3** | **+1.1** |
| | baz=116 | | | | | | |
| **BIRV** | **Birongo** | **27.60** | **234** | P | **P** | **23 09 12.1** | **-0.1** |
| **MBO** | **M'Bour** | **28.48** | **114** | P | **P** | **23 09 21.9** | **+1.8** |
| **MVL** | **Millersville** | **29.20** | **302** | P | **P** | **23 09 27.8** | **+1.5** |
| **SDMD** | **Soldier's Deli** | **29.44** | **301** | P | **P** | **23 09 29.7** | **+1.2** |
| **BINY** | **Binghamton** | **29.52** | **306** | P | **P** | **23 09 30.0** | **+0.8** |
| | baz=108 | | | | | | |
| **MCPB** | **Macapa, AP** | **29.63** | **197** | *eP* | **P** | **23 09 29.5** | **-0.7** |
| **BAUV** | **El Baul** | **29.91** | **235** | P | **P** | **23 09 31.9** | **-0.9** |
| **JSRW** | **J. Sargeant Re** | **29.95** | **297** | P | **P** | **23 09 34.8** | **+1.9** |
| **K57A** | **Scipio Center** | **30.05** | **307** | P | **P** | **23 09 35.9** | **+2.1** |
| K57A | | | | IAmb | IAmb | 23 09 42.8 | |
| | comp=Z,112nm,1.5s | | | | | | |
| **BOAV** | **Boa Vista** | **30.36** | **215** | *eP* | **P** | **23 09 36.4** | **-0.3** |
| **BOAV** | **Boa Vista** | **30.36** | **215** | P | **P** | **23 09 36.7** | **0.0** |
| BOAV | | | | IAmb | IAmb | 23 09 44.0 | |
| | comp=Z,68nm,1.3s | | | | | | |
| **SSPA** | **Standing Stone** | **30.49** | **303** | P | **P** | **23 09 38.9** | **+1.2** |
| SSPA | | | | IAmb | IAmb | 23 10 00.2 | |
| | comp=Z,67nm,1.4s | | | | | | |
| **SSPA** | **Standing Stone** | **30.49** | **303** | P | **P** | **23 09 38.7** | **+1.0** |
| | baz=103 | | | | | | |
| **MORF** | **Marmelete** | **30.69** | **64** | *eP* | **P** | **23 09 39.8** | **+0.2** |
| | comp=Z,76nm,1.3s | | | | | | |
| **S57A** | **Dark Hollow, R** | **30.80** | **297** | P | **P** | **23 09 42.1** | **+1.6** |
| **TMAB** | **Tom-Au,PA,Br** | **30.82** | **188** | *eP* | **P** | **23 09 41.2** | **+0.4** |
| **PNCL** | **Nicolau / Gran** | **30.89** | **62** | *eP* | **P** | **23 09 41.9** | **+0.7** |
| | comp=Z,44nm,1.7s | | | | | | |
| **O56A** | **Blue Knob Stat** | **30.92** | **302** | P | **P** | **23 09 43.0** | **+1.4** |
| **O56A** | **Blue Knob Stat** | **30.92** | **302** | P | **P** | **23 09 42.8** | **+1.2** |
| | baz=102 | | | | | | |
| **ROSB** | **Rosrio** | **31.07** | **181** | *eP* | **P** | **23 09 43.1** | **+0.1** |
| **MESJ** | **Messejana** | **31.09** | **63** | *eP* | **P** | **23 09 43.9** | **+0.8** |
| | comp=Z,169nm,1.6s | | | | | | |
| **Q56A** | **Snyder Ridge,** | **31.16** | **299** | P | **P** | **23 09 44.6** | **+0.9** |
| **PMTG** | **Montargil** | **31.26** | **61** | *eP* | **P** | **23 09 44.8** | **+0.3** |
| | comp=Z,72nm,1.8s | | | | | | |
| **SCHQ** | **Schefferville** | **31.30** | **334** | P | **P** | **23 09 44.0** | **-0.7** |
| | comp=Z,4.5nm,0.7s,baz=112,slow=7.6,SNR=8.8 | | | | | | |
| SCHQ | | | | LR | LR | 23 22 44.1 | |
| | comp=Z,1μm,18.0s,baz=146,slow=37 | | | | | | |
| **SCHQ** | **Schefferville** | **31.30** | **334** | P | **P** | **23 09 43.5** | **-1.2** |
| **M55A** | **Ridgway** | **31.32** | **304** | P | **P** | **23 09 46.4** | **+1.3** |
| M55A | | | | IAmb | IAmb | 23 10 37.4 | |
| | comp=Z,174nm,1.9s | | | | | | |
| **EVO** | **Evora** | **31.35** | **62** | *eP* | **P** | **23 09 44.6** | **-0.7** |
| | comp=Z,36nm,1.6s | | | | | | |
| **PBEJ** | **Beja** | **31.39** | **63** | *eP* | **P** | **23 09 46.4** | **+0.7** |
| | comp=Z,69nm,1.5s | | | | | | |
| **W57A** | **Gilead** | **31.42** | **292** | P | **P** | **23 09 47.8** | **+1.8** |
| **PVAQ** | **Vaqueiros** | **31.44** | **64** | *eP* | **P** | **23 09 46.9** | **+0.8** |
| | comp=Z,79nm,1.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **31.44** | **64** | P | **P** | **23 09 46.1** | **0.0** |
| PVAQ | | | | IAmb | IAmb | 23 09 49.3 | |
| | comp=Z,89nm,2.0s | | | | | | |
| **MALB** | **Monte Alegre** | **31.68** | **200** | *eP* | **P** | **23 09 48.3** | **-0.1** |
| **PESTR** | **Estremoz** | **31.72** | **61** | *eP* | **P** | **23 09 48.3** | **-0.3** |
| | comp=Z,83nm,1.6s | | | | | | |
| **MCWV** | **Mont Chateau** | **31.77** | **300** | P | **P** | **23 09 50.4** | **+1.3** |
| MCWV | | | | IAmb | IAmb | 23 09 53.7 | |
| | comp=Z,71nm,1.1s | | | | | | |
| **MCWV** | **Mont Chateau** | **31.77** | **300** | P | **P** | **23 09 50.0** | **+1.0** |
| | baz=100,SNR=6.3 | | | | | | |
| **R55A** | **Marlinton** | **31.78** | **298** | P | **P** | **23 09 50.2** | **+1.0** |
| R55A | | | | IAmb | IAmb | 23 10 04.3 | |
| | comp=Z,83nm,1.6s | | | | | | |
| **BIRD** | **Birdtown, Kers** | **31.79** | **291** | P | **P** | **23 09 50.6** | **+1.4** |
| **U56A** | **King** | **31.80** | **294** | P | **P** | **23 09 50.9** | **+1.5** |
| U56A | | | | IAmb | IAmb | 23 09 53.5 | |
| | comp=Z,62nm,1.1s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **31.80** | **55** | *eP* | **P** | **23 09 50.0** | **+0.6** |
| | comp=Z,248nm,1.6s | | | | | | |
| **PVIS** | **Viseu** | **31.81** | **58** | *eP* | **P** | **23 09 49.7** | **+0.3** |
| | comp=Z,79nm,2.0s | | | | | | |
| **SDV** | **Santo Domingo** | **31.85** | **238** | LR | LR | 23 20 53.2 | |
| | comp=Z,573nm,21.8s,baz=52,slow=33 | | | | | | |
| **SDV** | **Santo Domingo** | **31.85** | **238** | *eP* | **P** | **23 09 50.7** | **+0.6** |
| **SDV** | **Santo Domingo** | **31.85** | **238** | *eP* | **P** | **23 09 51.4** | **+1.3** |
| **SDV** | **Santo Domingo** | **31.85** | **238** | P | **P** | **23 09 50.9** | **+0.8** |
| SDV | | | | IAmb | IAmb | 23 09 58.3 | |
| | comp=Z,50nm,1.1s | | | | | | |
| **BLA** | **Blacksburg** | **31.90** | **296** | P | **P** | **23 09 50.5** | **+0.2** |
| | baz=95 | | | | | | |
| **PMRV** | **Marv??o** | **31.96** | **60** | *eP* | **P** | **23 09 51.1** | **+0.4** |
| | comp=Z,81nm,1.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **31.96** | **59** | *eP* | **P** | **23 09 51.1** | **+0.4** |
| | comp=Z,53nm,2.1s | | | | | | |
| **M54A** | **Oil Creek Stat** | **31.99** | **304** | P | **P** | **23 09 52.8** | **+1.8** |
| M54A | | | | IAmb | IAmb | 23 09 55.5 | |
| | comp=Z,70nm,1.4s | | | | | | |
| **M54A** | **Oil Creek Stat** | **31.99** | **304** | P | **P** | **23 09 52.0** | **+1.0** |
| | baz=103 | | | | | | |
| **MTE** | **Manteigas** | **32.01** | **58** | *eP* | **P** | **23 09 51.8** | **+0.6** |
| | comp=Z,126nm,1.5s | | | | | | |
| **MTE** | **Manteigas** | **32.01** | **58** | P | **P** | **23 09 51.4** | **+0.2** |
| **POLO** | **Lamas de Olo** | **32.02** | **56** | *eP* | **P** | **23 09 51.7** | **+0.4** |
| | comp=Z,52nm,1.4s | | | | | | |
| **PVRL** | **Vila Real** | **32.05** | **57** | *eP* | **P** | **23 09 52.3** | **+0.7** |
| | comp=Z,123nm,2.3s | | | | | | |
| **N54A** | **Moraine State** | **32.12** | **303** | P | **P** | **23 09 53.1** | **+1.0** |
| | baz=102 | | | | | | |
| **O54A** | **Avella** | **32.26** | **301** | P | **P** | **23 09 54.9** | **+1.5** |
| **ERPA** | **Erie** | **32.37** | **305** | P | **P** | **23 09 55.0** | **+0.7** |
| | baz=103 | | | | | | |
| **SOCV** | **Socops** | **32.41** | **237** | *eP* | **P** | **23 09 54.5** | **-0.3** |
| **V55A** | **Taylorsville** | **32.45** | **293** | P | **P** | **23 09 57.0** | **+2.0** |
| V55A | | | | IAmb | IAmb | 23 10 03.7 | |
| | comp=Z,119nm,1.7s | | | | | | |
| **SADO** | **Sadowa** | **32.49** | **310** | LR | LR | 23 20 44.4 | |
| | comp=Z,3μm,21.4s,baz=162,slow=32 | | | | | | |
| **KMSC** | **Kings Mountain** | **32.52** | **292** | P | **P** | **23 09 57.3** | **+1.7** |
| KMSC | | | | IAmb | IAmb | 23 10 14.2 | |
| | comp=Z,90nm,1.6s | | | | | | |
| **KMSC** | **Kings Mountain** | **32.52** | **292** | P | **P** | **23 09 56.3** | **+0.7** |
| | baz=91 | | | | | | |
| **MVO** | **Moncorvo** | **32.54** | **57** | *eP* | **P** | **23 09 56.7** | **+0.9** |
| | comp=Z,85nm,1.5s | | | | | | |
| **NBPS** | **Pedro II - PI** | **32.63** | **176** | *eP* | **P** | **23 09 57.0** | **+0.2** |
| **N53A** | **Lisbon** | **32.72** | **302** | P | **P** | **23 09 59.1** | **+1.8** |
| **M53A** | **WI Miller and** | **32.72** | **303** | P | **P** | **23 09 58.1** | **+0.8** |
| | baz=102 | | | | | | |
| **NBCL** | **Cascavel-CE** | **32.81** | **170** | *eP* | **P** | **23 09 58.7** | **+0.4** |
| **PTGA** | **Pitinga** | **32.82** | **211** | LR | LR | 23 21 48.2 | |
| | comp=Z,620nm,18.4s,baz=24,slow=34 | | | | | | |
| **NRS** | **Narsarsuaq** | **32.83** | **359** | P | **P** | **23 09 58.8** | **+0.8** |
| NRS | | | | pmax | pmax | | |
| | comp=Z,134nm,1.6s | | | | | | |
| **NRS** | **Narsarsuaq** | **32.83** | **359** | P | **P** | **23 09 58.8** | **+0.8** |
| NRS | | | | IAmb | IAmb | 23 10 18.4 | |
| | comp=Z,134nm,1.6s | | | | | | |
| **PBRG** | **Braganca** | **32.88** | **56** | *eP* | **P** | **23 09 59.3** | **+0.5** |
| | comp=Z,111nm,1.7s | | | | | | |
| **O53A** | **New Philadelph** | **32.90** | **301** | P | **P** | **23 10 00.1** | **+1.1** |
| | baz=99 | | | | | | |
| **PAULI** | **Pauline** | **32.91** | **291** | P | **P** | **23 10 00.0** | **+1.0** |
| PAULI | | | | IAmb | IAmb | 23 10 07.5 | |
| | comp=Z,54nm,1.3s | | | | | | |
| **U54A** | **Nelsons Funny** | **32.97** | **294** | P | **P** | **23 10 01.0** | **+1.3** |
| U54A | | | | IAmb | IAmb | 23 10 19.2 | |
| | comp=Z,77nm,1.4s | | | | | | |
| **HODGE** | **Hodges** | **33.27** | **290** | IAmb | IAmb | 23 10 20.7 | |
| | comp=Z,134nm,2.0s | | | | | | |
| **P52A** | **Corning** | **33.51** | **300** | P | **P** | **23 10 05.0** | **+0.7** |
| | baz=98 | | | | | | |
| **Q52A** | **Bidwell** | **33.53** | **299** | P | **P** | **23 10 05.9** | **+1.4** |
| Q52A | | | | IAmb | IAmb | 23 10 22.5 | |
| | comp=Z,83nm,1.4s | | | | | | |
| **V53A** | **Saluda** | **33.74** | **293** | P | **P** | **23 10 07.8** | **+1.5** |
| V53A | | | | IAmb | IAmb | 23 10 14.0 | |
| | comp=Z,82nm,1.4s | | | | | | |
| **BG3** | **Lake Jocassee** | **33.83** | **291** | IAmb | IAmb | 23 10 15.6 | |
| | comp=Z,102nm,1.5s | | | | | | |
| **MDT** | **Midelt** | **33.87** | **73** | LR | LR | 23 20 37.4 | |
| | comp=Z,2μm,21.6s,baz=292,slow=30 | | | | | | |
| **NBPB** | **Penha Branca-C** | **33.93** | **173** | *eP* | **P** | **23 10 08.2** | **+0.2** |
| **154A** | **Montrose** | **34.04** | **287** | P | **P** | **23 10 10.2** | **+1.3** |
| **P51A** | **Williamsport** | **34.20** | **299** | P | **P** | **23 10 11.4** | **+1.1** |
| P51A | | | | IAmb | IAmb | 23 10 14.4 | |
| | comp=Z,110nm,2.0s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.24** | **301** | IAmb | IAmb | 23 10 32.5 | |
| | comp=Z,91nm,1.4s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.24** | **301** | P | **P** | **23 10 11.4** | **+0.8** |
| | baz=98 | | | | | | |
| **GOGA** | **Godfrey** | **34.30** | **289** | IAmb | IAmb | 23 10 19.5 | |
| | comp=Z,53nm,1.2s | | | | | | |
| **GOGA** | **Godfrey** | **34.30** | **289** | P | **P** | **23 10 12.1** | **+1.0** |
| | baz=88 | | | | | | |
| **PAB** | **San Pablo** | **34.31** | **61** | P | **P** | **23 10 12.1** | **+0.8** |
| PAB | | | | pmax | pmax | | |
| | comp=Z,41nm,1.3s | | | | | | |
| **PAB** | **San Pablo** | **34.31** | **61** | P | **P** | **23 10 12.1** | **+0.8** |
| **TAMC** | **Tame, Arauca** | **34.33** | **236** | *eP* | **P** | **23 10 12.6** | **+1.0** |
| **TZTN** | **Tazewell** | **34.36** | **294** | P | **P** | **23 10 13.5** | **+1.8** |
| TZTN | | | | IAmb | IAmb | 23 10 15.2 | |
| | comp=Z,102nm,1.7s | | | | | | |
| **TZTN** | **Tazewell** | **34.36** | **294** | P | **P** | **23 10 12.9** | **+1.2** |
| | baz=92 | | | | | | |
| **Q51A** | **Peebles** | **34.37** | **298** | IAmb | IAmb | 23 10 18.7 | |
| | comp=Z,81nm,1.5s | | | | | | |
| **K50A** | **Casco** | **34.41** | **305** | P | **P** | **23 10 13.2** | **+1.2** |
| K50A | | | | IAmb | IAmb | 23 10 15.9 | |
| | comp=Z,68nm,1.4s | | | | | | |
| **S51A** | **Beattyville** | **34.45** | **296** | P | **P** | **23 10 13.7** | **+1.3** |
| **M50A** | **Fremont** | **34.46** | **303** | P | **P** | **23 10 13.5** | **+1.0** |
| M50A | | | | IAmb | IAmb | 23 10 30.3 | |
| | comp=Z,79nm,1.5s | | | | | | |
| **ITTB** | **Itatiuba** | **34.51** | **201** | *eP* | **P** | **23 10 11.8** | **-1.3** |
| **SMLC** | **San Martn de** | **34.52** | **242** | *eP* | **P** | **23 10 11.7** | **-1.6** |
| **TKL** | **Tuckaleechee C** | **34.52** | **293** | LR | LR | 23 21 45.9 | |
| | comp=Z,2μm,20.7s,baz=96,slow=32 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.52** | **293** | IAmb | IAmb | 23 10 21.1 | |
| | comp=Z,89nm,1.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **34.62** | **60** | P | **P** | **23 10 13.8** | **-0.1** |
| | comp=Z,6.4nm,1.0s,baz=266,slow=8.4,SNR=14 | | | | | | |
| ESDC | | | | PcP | **PcP** | **23 12 48.6** | **+0.4** |
| | comp=Z,3.8nm,1.0s,baz=275,slow=3.7,SNR=6.9 | | | | | | |
| ESDC | | | | LR | LR | 23 20 54.3 | |
| | comp=Z,865nm,18.3s,baz=244,slow=30 | | | | | | |
| **ESDC** | **Sonseca Array** | **34.62** | **60** | P | **P** | **23 10 14.0** | **0.0** |
| **ESBB** | **Sonseca Array** | **34.62** | **60** | P | **P** | **23 10 14.3** | **+0.4** |
| **W52A** | **Murphy** | **34.64** | **292** | IAmb | IAmb | 23 10 17.5 | |
| | comp=Z,46nm,1.1s | | | | | | |
| **SJCC** | **San Jacinto, C** | **34.73** | **244** | *eP* | **P** | **23 10 16.4** | **+1.3** |
| **Y52A** | **Lilburn** | **34.78** | **289** | | **P** | **23 10 16.5** | **+1.2** |
| Y52A | | | | IAmb | IAmb | 23 10 35.0 | |
| | comp=Z,96nm,1.8s | | | | | | |
| **PRPB** | **Parauapebas** | **34.81** | **191** | *eP* | **P** | **23 10 15.1** | **-0.6** |
| **RCBR** | **Riachuelo** | **34.81** | **166** | P | **P** | **23 10 17.5** | **+1.8** |
| RCBR | | | | pmax | pmax | | |
| | comp=Z,68nm,1.4s | | | | | | |
| **RCBR** | **Riachuelo** | **34.81** | **166** | *eP* | **P** | **23 10 17.2** | **+1.5** |
| **RCBR** | **Riachuelo** | **34.81** | **166** | P | **P** | **23 10 17.5** | **+1.8** |
| RCBR | | | | IAmb | IAmb | 23 10 23.9 | |
| | comp=Z,68nm,1.4s | | | | | | |
| **V51A** | **Loudon** | **34.99** | **293** | IAmb | IAmb | 23 10 20.0 | |
| | comp=Z,52nm,1.0s | | | | | | |
| **AAM** | **Ann Arbor** | **35.07** | **304** | P | **P** | **23 10 19.8** | **+2.0** |
| AAM | | | | pmax | pmax | | |
| | comp=Z,173nm,1.7s | | | | | | |
| **AAM** | **Ann Arbor** | **35.07** | **304** | P | **P** | **23 10 19.8** | **+2.0** |
| **AAM** | **Ann Arbor** | **35.07** | **304** | P | **P** | **23 10 18.8** | **+1.1** |
| | baz=100 | | | | | | |
| **R50A** | **Paris** | **35.07** | **297** | P | **P** | **23 10 19.6** | **+1.8** |
| R50A | | | | IAmb | IAmb | 23 10 36.5 | |
| | comp=Z,85nm,1.6s | | | | | | |
| **CPCT** | **Cooper Cave** | **35.13** | **292** | P | **P** | **23 10 19.2** | **+0.9** |
| **O49A** | **Covington** | **35.26** | **300** | P | **P** | **23 10 19.3** | **-0.1** |
| **MACA** | **Manacapuru-AM** | **35.30** | **210** | P | **P** | **23 10 19.9** | **0.0** |
| **152A** | **Waverly Hall** | **35.39** | **287** | P | **P** | **23 10 21.9** | **+1.3** |
| 152A | | | | IAmb | IAmb | 23 10 28.3 | |
| | comp=Z,92nm,2.0s | | | | | | |
| **T50A** | **Nancy** | **35.41** | **295** | P | **P** | **23 10 21.9** | **+1.1** |
| **X51A** | **Calhoun** | **35.41** | **291** | P | **P** | **23 10 21.9** | **+1.0** |
| X51A | | | | IAmb | IAmb | 23 10 28.8 | |
| | comp=Z,72nm,1.3s | | | | | | |
| **P49A** | **Miami Univ. Ec** | **35.48** | **299** | IAmb | IAmb | 23 10 27.9 | |
| | comp=Z,99nm,1.6s | | | | | | |
| **P49A** | **Miami Univ. Ec** | **35.48** | **299** | P | **P** | **23 10 22.1** | **+0.8** |
| | baz=96 | | | | | | |
| **NBPV** | **Pedro Velho** | **35.52** | **165** | *eP* | **P** | **23 10 22.6** | **+0.9** |
| **L48A** | **N Adams** | **35.58** | **303** | P | **P** | **23 10 23.5** | **+1.3** |
| L48A | | | | IAmb | IAmb | 23 10 28.7 | |
| | comp=Z,71nm,1.6s | | | | | | |
| **RUSC** | **La Rusia** | **35.64** | **237** | *eP* | **P** | **23 10 22.1** | **-1.3** |
| **352A** | **Blakely** | **35.67** | **285** | P | **P** | **23 10 23.6** | **+0.6** |
| **Z51A** | **Franklin** | **35.73** | **288** | P | **P** | **23 10 24.5** | **+0.9** |
| Z51A | | | | IAmb | IAmb | 23 10 57.2 | |
| | comp=Z,136nm,2.0s | | | | | | |
| **R49A** | **Shelbyville** | **35.74** | **297** | P | **P** | **23 10 25.5** | **+1.9** |
| R49A | | | | IAmb | IAmb | 23 10 27.8 | |
| | comp=Z,104nm,1.8s | | | | | | |
| **W50A** | **Signal Mountai** | **35.78** | **292** | P | **P** | **23 10 24.6** | **+0.7** |
| **MOTC** | **Monteria, Cord** | **35.78** | **243** | *eP* | **P** | **23 10 25.0** | **+0.9** |
| **NBMA** | **Muriti-CE** | **35.83** | **172** | *eP* | **P** | **23 10 24.1** | **-0.4** |
| **O48B** | **Farmland** | **35.89** | **300** | P | **P** | **23 10 25.4** | **+0.5** |
| | baz=96 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **35.94** | **241** | *eP* | **P** | **23 10 24.0** | **-1.5** |
| **P48A** | **Milroy** | **36.02** | **299** | IAmb | IAmb | 23 10 28.1 | |
| | comp=Z,116nm,1.8s | | | | | | |
| **FPAL** | **Fort Paine** | **36.04** | **291** | IAmb | IAmb | 23 10 34.2 | |
| | comp=Z,68nm,1.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **36.24** | **239** | *eP* | **P** | **23 10 25.0** | **-3.1** |
| **SWET** | **Sewanee** | **36.28** | **292** | P | **P** | **23 10 29.3** | **+1.0** |
| SWET | | | | IAmb | IAmb | 23 10 46.5 | |
| | comp=Z,89nm,1.8s | | | | | | |
| **UREC** | **San Jos de Ur** | **36.30** | **242** | *eP* | **P** | **23 10 27.8** | **-0.8** |
| **CLTN** | **Cedars of Leba** | **36.60** | **293** | IAmb | IAmb | 23 10 34.3 | |
| | comp=Z,57nm,0.9s | | | | | | |
| **WCI** | **Wyandotte Cave** | **36.62** | **297** | P | **P** | **23 10 32.3** | **+1.3** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,54nm,1.4s | | | | | | |
| **WCI** | **Wyandotte Cave** | **36.62** | **297** | P | **P** | **23 10 32.3** | **+1.3** |
| **WCI** | **Wyandotte Cave** | **36.62** | **297** | P | **P** | **23 10 31.4** | **+0.4** |
| | baz=93 | | | | | | |
| **CART** | **Cartagena** | **36.78** | **64** | P | **P** | **23 10 34.0** | **+1.6** |
| CART | | | | IAmb | IAmb | 23 10 39.8 | |
| | comp=Z,84nm,1.2s | | | | | | |
| **V48A** | **Smith Brothers** | **37.00** | **293** | IAmb | IAmb | 23 10 41.7 | |
| | comp=Z,106nm,1.6s | | | | | | |
| **SMTB** | **Santa Maria do** | **37.17** | **186** | *eP* | **P** | **23 10 35.5** | **-0.4** |
| **ROSC** | **El Rosal** | **37.26** | **237** | P | **P** | **23 10 36.9** | **-0.3** |
| | comp=Z,8.5nm,0.4s,baz=52,slow=16,SNR=3.8 | | | | | | |
| ROSC | | | | LR | LR | 23 26 27.3 | |
| | comp=Z,734nm,19.8s,baz=44,slow=37 | | | | | | |
| **LRAL** | **Lakeview Retre** | **37.28** | **288** | P | **P** | **23 10 37.5** | **+0.8** |
| | baz=85 | | | | | | |
| **HELC** | **Santa Helena** | **37.28** | **240** | *eP* | **P** | **23 10 36.4** | **-0.9** |
| **DBBC** | **Dabeiba** | **37.28** | **242** | *eP* | **P** | **23 10 37.3** | **+0.3** |
| **ISOG** | **Isortoq, Green** | **37.34** | **3** | *i P* | **P** | **23 10 36.4** | **-0.3** |
| ISOG | | | | *eP* | **pP** | **23 10 37.6** | **-3.0** |
| ISOG | | | | IAmb | IAmb | 23 10 39.3 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **SFIN** | **Lafayette** | **37.38** | **300** | IAmb | IAmb | 23 10 44.3 | |
| | comp=Z,77nm,1.4s | | | | | | |
| **SFIN** | **Lafayette** | **37.38** | **300** | P | **P** | **23 10 38.0** | **+0.5** |
| | baz=95 | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **37.78** | **238** | *eP* | **P** | **23 10 41.1** | **-0.5** |
| **WVT** | **Waverly** | **37.81** | **293** | P | **P** | **23 10 42.0** | **+0.8** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,38nm,0.9s | | | | | | |
| **WVT** | **Waverly** | **37.81** | **293** | P | **P** | **23 10 42.0** | **+0.8** |
| **WVT** | **Waverly** | **37.81** | **293** | P | **P** | **23 10 41.5** | **+0.3** |
| | baz=89 | | | | | | |
| **PLAL** | **Pickwick Lake** | **38.05** | **291** | P | **P** | **23 10 44.4** | **+1.2** |
| PLAL | | | | IAmb | IAmb | 23 10 51.5 | |
| | comp=Z,100nm,1.4s | | | | | | |
| **Z47A** | **Carrollton** | **38.16** | **289** | IAmb | IAmb | 23 10 47.6 | |
| | comp=Z,91nm,0.9s | | | | | | |
| **L44A** | **Lake County Fo** | **38.18** | **303** | P | **P** | **23 10 43.7** | **-0.5** |
| | baz=97 | | | | | | |
| **NBAN** | **Anadia - AL** | **38.48** | **168** | *eP* | **P** | **23 10 46.8** | **-0.2** |
| **ORTC** | **Ortega, Tolima** | **38.56** | **237** | *eP* | **P** | **23 10 45.9** | **-1.9** |
| **MACC** | **Macarena, Meta** | **38.76** | **233** | *eP* | **P** | **23 10 46.9** | **-2.6** |
| **FRB** | **Frobisher Bay** | **38.83** | **343** | P | **P** | **23 10 48.9** | **-0.5** |
| | comp=Z,9.0nm,0.8s,baz=143,slow=8.5,SNR=20 | | | | | | |
| FRB | | | | LR | LR | 23 25 20.9 | |
| | comp=Z,1μm,21.2s,baz=152,slow=34 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **38.90** | **356** | P | **P** | **23 10 49.4** | **-0.5** |
| | comp=Z,6.9nm,0.9s,baz=174,slow=9.2,SNR=3.1 

ICESG IAmb IAmb 23 11 08.3
comp=Z,90nm,1.2s
**TBTG Tabatinga, AM 40.98 222** *e*P **P 23 11 07.0 -0.9**
**TBTG Tabatinga, AM 40.98 222** P **P 23 11 07.8 -0.1**
**143A Socs Landing, 41.00 288** P **P 23 11 09.0 +1.1**
143A IAmb IAmb 23 11 15.8
comp=Z,163nm,1.5s
**ESPN Las Esperanzas 41.05 255** P **P 23 11 10.2 +1.7**
ESPN IAmb IAmb 23 11 17.3
comp=Z,97nm,1.2s
**P40A Paris 41.14 299** IAmb IAmb 23 11 27.5
comp=Z,109nm,1.6s
**MGMO Mountain Grove 41.35 295** IAmb IAmb 23 11 29.5
comp=Z,92nm,1.4s
**W41B Gary Mavity, V 41.45 292** IAmb IAmb 23 11 18.9
comp=Z,84nm,1.2s
**W41B Gary Mavity, V 41.45 292** P **P 23 11 11.2 -0.3**
baz=85,SNR=14
**BRU2 Volcan 41.45 250** P **P 23 11 12.9 +0.9**
BRU2 IAmb IAmb 23 11 31.6
comp=Z,150nm,1.5s
**EYMN Ely 41.56 311** P **P 23 11 11.9 -0.4**
baz=100
**PDRB Porto dos Gac 41.66 199** *e*P **P 23 11 13.2 -0.2**
**SRBA San Rafael, Bu 41.77 251** P **P 23 11 15.8 +1.3**
**K38A Parkersburg 41.80 303** P **P 23 11 15.3 +1.0**
K38A IAmb IAmb 23 11 17.0
comp=Z,67nm,1.1s
**U40A Yellville 41.86 294** P **P 23 11 14.3 -0.6**
baz=86,SNR=20
**COVE Coope Vega, Sa 41.87 254** P **P 23 11 15.9 +0.7**
COVE IAmb IAmb 23 11 40.6
comp=Z,53nm,0.8s
**342A Flagon Creek P 41.95 286** P **P 23 11 18.1 +2.4**
342A IAmb IAmb 23 11 24.3
comp=Z,159nm,1.6s
**PEZE Perez Zeledon, 41.96 251** P **P 23 11 16.7 +0.7**
PEZE IAmb IAmb 23 11 24.5
comp=Z,224nm,1.8s
**X40A Basin Creek Fa 41.99 291** P **P 23 11 15.2 -0.8**
baz=84,SNR=12
**GDU01 Guandu, BA 42.02 174** *e*P **P 23 11 15.3 -1.0**
**SPMN Marine on St. 42.05 307** P **P 23 11 16.8 +0.5**
baz=96
**N38A Joes South For 42.07 301** IAmb IAmb 23 11 23.9
comp=Z,79nm,1.1s
**SCIA State Center 42.09 302** IAmb IAmb 23 11 19.7
comp=Z,63nm,0.9s
**SCIA State Center 42.09 302** P **P 23 11 17.0 +0.3**
baz=92
**MATN Matagalpa 42.09 257** P **P 23 11 18.6 +1.5**
**BOAB BOACO BROADBAN 42.10 257** P **P 23 11 19.1 +2.0**
**Z41A Richland Creek 42.10 289** P **P 23 11 16.9 0.0**
baz=83
**S39A Bolivar 42.17 296** IAmb IAmb 23 11 23.9
comp=Z,126nm,1.9s
**P38A Dawn 42.29 299** IAmb IAmb 23 11 21.1
comp=Z,70nm,1.1s
**WLAR White Oak Lake 42.30 290** P **P 23 11 19.2 +0.6**
WLAR IAmb IAmb 23 11 25.9
comp=Z,202nm,1.6s
**I37A Lemond, Waseca 42.36 305** P **P 23 11 20.4 +1.5**
I37A IAmb IAmb 23 11 38.6
comp=Z,192nm,1.8s
**DOU Dourbes 42.40 46** *d*P **P 23 11 18.8 -0.2**
**UCC Uccle 42.40 44** P **P 23 11 19.0 -0.1**
UCC pmax pmax
comp=Z,8.0nm,0.8s
**UCC Uccle 42.40 44** P **P 23 11 19.0 -0.1**
**TIC Toumodi 42.51 113** *e*P **P 23 11 19.5 -0.9**
**BMRD Maredsous 42.55 45** *d*P **P 23 11 20.3 0.0**
**JTS Las Juntas de 42.55 253** P **P 23 11 21.1 +0.3**
JTS pmax pmax
comp=Z,27nm,1.3s
**JTS Las Juntas de 42.55 253** P **P 23 11 21.1 +0.3**
**MIAR Mount Ida 42.60 291** P **P 23 11 21.2 +0.3**
baz=84,SNR=11
**DBIC Dimbokro 42.63 113** P **P 23 11 20.4 -0.9**
comp=Z,11nm,1.0s,baz=316,slow=8.2,SNR=11
DBIC PP **PP 23 13 00.2 -0.2**
comp=Z,10.0nm,1.2s,baz=286,slow=11,SNR=2.5
DBIC PcP **PcP 23 13 10.6 -2.9**
comp=Z,16nm,1.3s,baz=323,slow=11,SNR=4.6
DBIC LR LR 23 26 44.9
comp=Z,3µm,18.2s,baz=293,slow=33
**DBIC Dimbokro 42.63 113** P **P 23 11 20.7 -0.6**
**W39A Magazine 42.70 292** P **P 23 11 21.8 0.0**
baz=85,SNR=8.7
**HHAR Hobbs 42.74 294** IAmb IAmb 23 11 28.6
comp=Z,104nm,1.5s
**LIC Lamto 42.74 114** *e*P **P 23 11 21.6 -0.7**
comp=Z,214nm,1.3s
**BGES Gesves 42.77 45** *d*P **P 23 11 22.2 +0.2**
**RCHB Rochefort 42.81 46** *b*P **P 23 11 22.4 0.0**
**KIC Kosan Boka 42.90 113** *e*P **P 23 11 22.7 -0.9**
comp=Z,68nm,1.3s
**ORTG Ortega, Santa 42.95 254** P **P 23 11 24.7 +0.6**
**CNGN Cerro Negro 42.96 257** P **P 23 11 25.6 +1.5**
CNGN IAmb IAmb 23 11 32.8
comp=Z,104nm,1.0s
**BNI Bardonecchia 43.03 53** P **P 23 11 25.9 +1.5**
BNI pmax pmax
comp=Z,87nm,1.1s
**BNI Bardonecchia 43.03 53** P **P 23 11 25.9 +1.5**
BNI IAmb IAmb 23 11 33.8
comp=Z,87nm,1.1s
**U38A Gravette 43.09 294** IAmb IAmb 23 11 27.2
comp=Z,63nm,0.9s
**BSTI Sart Tilman 43.11 45** *b*P **P 23 11 25.1 +0.3**
**JANB Januaria 43.15 181** *e*P **P 23 11 24.2 -1.3**
**BEBN Eben Emael 43.22 45** *d*P **P 23 11 26.2 +0.5**
**NBIT Itapeh - BA 43.23 174** *e*P **P 23 11 26.3 +0.2**
**WLF Walferdange 43.30 46** *e*P **P 23 11 26.5 +0.1**
comp=Z,96nm,1.3s,baz=262,slow=7.8
WLF *e*pP **sP 23 11 32.8 +0.9**
baz=263,slow=7.8
**WLF Walferdange 43.30 46** IAmb IAmb 23 11 35.4
comp=Z,102nm,1.4s
**WLF Walferdange 43.30 46** *b*P **P 23 11 27.0 +0.6**
**MEM Membach 43.39 45** *d*P **P 23 11 27.6 +0.5**
**OTAV Otavalo 43.39 236** P **P 23 11 28.4 +0.3**
OTAV pmax pmax
comp=Z,77nm,1.4s
**OTAV Otavalo 43.39 236** *e*P **P 23 11 28.7 +0.7**
**OTAV Otavalo 43.39 236** *e*P **P 23 11 27.8 -0.3**
**OTAV Otavalo 43.39 236** P **P 23 11 28.4 +0.3**
OTAV IAmb IAmb 23 11 35.7
comp=Z,77nm,1.4s
**BTNL Ternell 43.46 45** *b*P **P 23 11 28.4 +0.7**
**CMC01 Camacan, BA 43.64 174** *e*P **P 23 11 30.7 +1.3**
**ETMB Extrema 43.71 213** *e*P **P 23 11 28.6 -1.4**
**ETMB Extrema 43.71 213** P **P 23 11 28.6 -1.4**
ETMB IAmb IAmb 23 11 36.3
comp=Z,101nm,1.5s
**NATX Nacogdoches 43.86 287** P **P 23 11 32.9 +1.6**
NATX IAmb IAmb 23 12 50.3
comp=Z,74nm,0.9s
**N35A Tabor 43.90 301** IAmb IAmb 23 11 33.1
comp=Z,52nm,1.0s
**BDFB Brasilia 43.92 186** P **P 23 11 31.4 -0.4**
comp=Z,8.8nm,0.9s,baz=15,slow=8.5,SNR=12
BDFB LR LR 23 28 27.9
comp=Z,795nm,18.5s,baz=341,slow=34
**BDFB Brasilia 43.92 186** P **P 23 11 32.2 +0.4**
BDFB pmax pmax
comp=Z,76nm,1.9s
**BDFB Brasilia 43.92 186** P **P 23 11 32.2 +0.4**
**SCO Scoresbysund 43.95 10** P **P 23 11 32.5 +1.1**
SCO pmax pmax
comp=Z,70nm,1.1s
**SCO Scoresbysund 43.95 10** *i* P **P 23 11 30.7 -0.6**
SCO IAmb IAmb 23 11 33.7
comp=Z,77nm,1.2s
**SCO Scoresbysund 43.95 10** P **P 23 11 32.5 +1.1**
SCO IAmb IAmb 23 11 33.4
comp=Z,70nm,1.1s
**VILB Vilhena 44.03 203** *e*P **P 23 11 32.6 0.0**
**VILB Vilhena 44.03 203** P **P 23 11 32.6 0.0**
VILB IAmb IAmb 23 11 40.0
comp=Z,82nm,1.1s
**AHRW Bad Neuenahr-A 44.04 45** *e*P **P 23 11 33.5 +1.1**
comp=Z,136nm,1.6s,baz=262,slow=7.8
AHRW *e*pP **pwP 23 11 40.0 -0.5**
baz=263,slow=7.8
**X37A Clayton 44.06 292** IAmb IAmb 23 11 39.9
comp=Z,56nm,1.1s
**TUL1 Leonard 44.27 294** P **P 23 11 33.9 -0.5**
baz=84,SNR=18
**ESQI Esquipulas 44.32 262** P **P 23 11 37.2 +2.0**
**BUG Bochum--Univer 44.33 44** *e*P **P 23 11 35.0 +0.4**
comp=Z,105nm,1.6s,baz=262,slow=7.8
BUG *e*pP **pwP 23 11 41.5 -1.3**
baz=263,slow=7.8
**SUMG Summit 44.37 2** P **P 23 11 34.8 -0.4**
SUMG pmax pmax
comp=Z,38nm,0.9s
**SUMG Summit 44.37 2** *i* P **P 23 11 33.8 -1.4**
SUMG IAmb IAmb 23 11 40.2
comp=Z,52nm,1.1s
**SUMG Summit 44.37 2** P **P 23 11 34.8 -0.4**
**MTO3 Montecristo 44.41 262** IAmb IAmb 23 11 39.4
comp=Z,65nm,1.1s
**L34A Svendsen Farm, 44.45 302** IAmb IAmb 23 11 38.2
comp=Z,87nm,1.1s
**ARAG Araguaiana, MT 44.48 191** *e*P **P 23 11 34.9 -1.3**
**AGMN Agassiz Nation 44.51 311** P **P 23 11 35.6 -0.6**
baz=97
**BFO Black Forest 44.51 49** P **P 23 11 36.7 +0.5**
BFO pmax pmax
comp=Z,126nm,1.3s
**BFO Black Forest 44.51 49** *e*P **P 23 11 36.4 +0.2**
comp=Z,171nm,1.5s,baz=262,slow=7.8
BFO *e*pP **sP 23 11 42.8 +1.1**
baz=263,slow=7.8
**BFO Black Forest 44.51 49** P **P 23 11 36.7 +0.5**
**ECSD EROS Data Cent 44.66 305** P **P 23 11 36.8 -0.7**
baz=92,SNR=6.0
**KSU1 Kansas State U 44.69 298** IAmb IAmb 23 11 39.5
comp=Z,48nm,0.8s
**KSU1 Kansas State U 44.69 298** P **P 23 11 37.2 -0.5**
baz=87,SNR=9.1
**ULM Lac du Bonnet 44.79 314** P **P 23 11 37.9 -0.5**
comp=Z,11nm,0.8s,baz=95,slow=6.5,SNR=12
ULM LR LR 23 30 07.6
comp=Z,389nm,19.6s,baz=100,slow=36
**IBBN Ibbenburen 44.80 43** *e*P **P 23 11 38.8 +0.4**
comp=Z,140nm,1.5s,baz=262,slow=7.8
IBBN *e*pP **pwP 23 11 45.3 -1.2**
baz=263,slow=7.8
**GUA01 Guaratinga, BA 44.83 175** *e*P **P 23 11 38.2 -0.7**
**TORD Torodi Ar. Bea 44.85 100** P **P 23 11 38.4 -0.8**
comp=Z,24nm,0.8s,baz=301,slow=7.1,SNR=124
**TORD Torodi Ar. Bea 44.85 100** IAmb IAmb 23 11 45.5
comp=Z,48nm,1.1s
**TNS Taunus Mts 44.85 46** *e*P **P 23 11 39.6 +0.6**
comp=Z,150nm,1.6s,baz=262,slow=7.8
TNS *e*pP **pwP 23 11 46.1 -1.0**
baz=263,slow=7.8
**VSL Villasalto 44.91 61** P **P 23 11 40.1 +0.6**
VSL IAmb IAmb 23 11 46.9
comp=Z,106nm,1.3s
**QUOK Quay 44.98 294** P **P 23 11 40.9 +0.8**
**KASTN Kahler Asten 45.00 45** *e*P **P 23 11 40.1 +0.1**
comp=Z,42nm,1.4s,baz=262,slow=7.8
KASTN *e*pP **pwP 23 11 46.8 -1.3**
baz=263,slow=7.8
**TUE Stuetta 45.01 51** IAmb IAmb 23 11 49.3
comp=Z,104nm,1.3s
**OK031 S. Brethren Rd 45.11 294** P **P 23 11 41.9 +0.8**
**APG El Apazote 45.12 263** LR LR 23 27 27.4
comp=Z,758nm,21.2s,baz=62,slow=32
**STU Stuttgart 45.13 48** *e*P **P 23 11 41.1 -0.1**
comp=Z,198nm,1.2s,baz=262,slow=7.8
STU *e*pP **sP 23 11 47.4 +0.8**
baz=263,slow=7.8
**STU Stuttgart 45.13 48** IAmb IAmb 23 11 48.8
comp=Z,86nm,1.3s
**KEST Kesra 45.16 67** P **P 23 11 40.1 -1.6**
comp=Z,56nm,0.9s,baz=245,slow=4.1,SNR=30
KEST LR LR 23 27 55.9
comp=Z,1µm,18.2s,baz=192,slow=33
**KEST Kesra 45.16 67** P **P 23 11 42.6 +1.0**
SNR=9.6
**KEST Kesra 45.16 67** IAmb IAmb 23 11 44.9
comp=Z,80nm,1.0s
**HKT Hockley 45.18 285** P **P 23 11 43.4 +1.7**
HKT pmax pmax
comp=Z,38nm,1.2s
**HKT Hockley 45.18 285** P **P 23 11 43.4 +1.7**
**W35A Tecumseh 45.23 293** IAmb IAmb 23 11 49.3
comp=Z,79nm,1.1s
**DAVOX Davos/Dischmat 45.40 51** LR LR 23 26 51.9
comp=Z,808nm,19.9s,baz=261,slow=31
**DAVA Damuels 45.44 50** *e*P **P 23 11 44.6 +0.8**
comp=Z,132nm,1.2s,SNR=10
**CZSB Cruzeiro do Su 45.47 222** *e*P **P 23 11 43.2 -0.9**
**CZSB Cruzeiro do Su 45.47 222** IAmb IAmb 23 11 51.7
comp=Z,72nm,1.3s
**SALV Santo Antonio 45.48 196** *e*P **P 23 11 43.4 -0.7**
**OK025 Westminster Rd 45.55 293** IAmb IAmb 23 11 46.9
comp=Z,41nm,0.8s
**PRMA PARMA 45.59 54** P **P 23 11 44.9 +0.1**
**OK029 Liberty Lake 45.62 294** IAmb IAmb 23 11 47.6
comp=Z,60nm,0.9s
**UBR Ueberruh 45.63 50** *e*P **P 23 11 45.6 +0.4**
comp=Z,94nm,1.3s,baz=262,slow=7.8
UBR *e*pP **pwP 23 11 51.9 -1.3**
baz=263,slow=7.8
**FNO Franklin 45.64 293** P **P 23 11 45.9 +0.5**
FNO IAmb IAmb 23 11 47.3
comp=Z,41nm,0.9s
**OKCFA Oklahoma City 45.66 293** P **P 23 11 45.8 +0.3**
**KAN01 Argonia South 45.73 295** P **P 23 11 45.2 -0.8**
**KAN17 Caldwell West 45.74 295** P **P 23 11 46.7 +0.6**
**H10N2 ASCENSION HYDR 45.75 137** T T 00 00 30.4
baz=322,slow=76,SNR=252
**H10N3 ASCENSION HYDR 45.75 137** T T 00 00 30.5
baz=322,slow=76,SNR=186
**BCOK Bluff Creek, N 45.76 293** P **P 23 11 46.2 -0.1**
BCOK IAmb IAmb 23 11 53.6
comp=Z,88nm,1.2s
**H10N1 ASCENSION HYDR 45.77 137** T T 00 00 29.6
baz=322,slow=76,SNR=275
**Z35A Perchaven, San 45.78 290** P **P 23 11 47.7 +1.2**
Z35A IAmb IAmb 23 11 49.6
comp=Z,41nm,1.1s
**BGNE Belgrade 45.79 301** P **P 23 11 45.4 -1.1**
**BGNE Belgrade 45.79 301** P **P 23 11 45.3 -1.2**
baz=89
**KAN06 Argonia West S 45.80 296** IAmb IAmb 23 11 49.1
comp=Z,58nm,1.0s
**RETH Rethem/Aller, 45.85 43** *e*P **P 23 11 47.2 +0.5**
comp=Z,149nm,1.6s,baz=262,slow=7.8
**FCC Fort Churchill 45.86 326** P **P 23 11 47.3 +0.6**
FCC pmax pmax
comp=Z,56nm,1.0s
**FCC Fort Churchill 45.86 326** P **P 23 11 47.3 +0.6**
FCC IAmb IAmb 23 11 49.6
comp=Z,56nm,0.9s
**UBBA Unterbreizbach 45.92 45** *e*P **P 23 11 47.5 +0.3**
comp=Z,87nm,1.7s,baz=262,slow=7.8
UBBA *e*pP **sP 23 11 53.9 +1.2**
baz=263,slow=7.8
**CASP Castiglione de 45.95 57** IAmb IAmb 23 11 54.8
comp=Z,65nm,1.1s
**FETA Feichten 46.00 51** *e*P **P 23 11 48.9 +0.7**
comp=Z,88nm,1.2s,SNR=8.3
**GTTG Gottingen 46.01 44** *e*P **P 23 11 48.6 +0.6**
comp=Z,110nm,1.7s,baz=262,slow=7.8
GTTG *e*pP **pwP 23 11 55.1 -1.0**
baz=263,slow=7.8
**PTLB Pontes e Lacer 46.01 201** *e*P **P 23 11 48.2 -0.2**
**PTLB Pontes e Lacer 46.01 201** P **P 23 11 48.1 -0.2**
**RETA Reutte 46.05 50** *i* P **P 23 11 49.1 +0.6**
comp=Z,79nm,1.1s,SNR=12
**OK032 Salt Plains WL 46.12 295** P **P 23 11 49.4 +0.3**
**WHTX Lake Whitney, 46.17 288** P **P 23 11 50.8 +1.2**
**WHTX Lake Whitney, 46.17 288** P **P 23 11 48.8 -0.8**
baz=80
**K31A O'Neill 46.22 303** P **P 23 11 50.6 +0.8**
**OSSC Osservatorio P 46.23 56** P **P 23 11 49.1 -0.8**
**NRDL Niedersach Rie 46.25 43** *e*P **P 23 11 50.7 +0.9**
comp=Z,79nm,1.2s,baz=262,slow=7.8
**IPMB Ipameri, GO 46.26 186** *e*P **P 23 11 49.6 -0.7**
**MOTA Moosalm 46.27 50** *e*P **P 23 11 50.9 +0.6**
comp=Z,82nm,1.7s,SNR=10
**CLZ Clausthal 46.31 44** *e*P **P 23 11 51.0 +0.6**
comp=Z,72nm,1.4s,baz=262,slow=7.8
CLZ *e*pP **pwP 23 11 57.3 -1.2**
baz=263,slow=7.8
**SQTA Sankt Quirin 46.34 50** *e*P **P 23 11 51.5 +0.7**
comp=Z,146nm,1.5s,SNR=16
**SUSD Miller 46.37 306** P **P 23 11 50.5 -0.5**
SUSD IAmb IAmb 23 11 54.0
comp=Z,59nm,1.1s
**SUSD Miller 46.37 306** P **P 23 11 50.3 -0.7**
baz=91
**DIAM Diamantina, MG 46.37 180** *e*P **P 23 11 50.7 -0.6**
**435B Jarrell 46.50 287** P **P 23 11 53.1 +0.9**
435B IAmb IAmb 23 11 59.1
comp=Z,62nm,1.5s
**435B Jarrell 46.50 287** P **P 23 11 51.3 -0.9**
baz=79
**ASSE Asse, Remlinge 46.53 44** *e*pP pP 23 11 59.0 +3.0
baz=263,slow=7.8
**H10S3 ASCENSION HYDR 46.54 139** T T 00 01 20.9
baz=322,slow=74,SNR=307
**H10S2 ASCENSION HYDR 46.56 139** T T 00 01 22.1
baz=258,slow=74,SNR=190
**GRFO Grafenberg 46.56 47** P **P 23 11 53.1 +0.8**
GRFO pmax pmax
comp=Z,234nm,1.9s
**GRFO Grafenberg 46.56 47** P **P 23 11 53.1 +0.8**
**GRF Grafenberg Arr 46.56 47** *e*P **P 23 11 52.6 +0.2**
comp=Z,199nm,1.8s,baz=262,slow=7.8
GRF *e*pP **sP 23 11 59.1 +1.2**
baz=263,slow=7.8
GRF *es*P **pwP 23 12 03.0 +2.4**
GRF *e*L L 23 27 31.6
comp=Z,732nm,21.6s
**WATA Walderalm 46.59 50** *i* P **P 23 11 53.2 +0.4**
comp=Z,99nm,1.2s,SNR=12
**WTTA Wattenberg 46.63 50** *i* P **P 23 11 53.8 +0.6**
comp=Z,121nm,1.7s,SNR=13
**BSEG Bad Segeberg 46.63 41** *e*P **P 23 11 53.4 +0.6**
comp=Z,138nm,1.1s,baz=262,slow=7.8
**LATE Laterza 46.65 57** P **P 23 11 54.5 +1.3**
**WMOK Wichita Mounta 46.83 292** P **P 23 11 54.6 -0.1**
baz=82,SNR=7.5
**SJMB Sao Joao De Ma 46.84 177** *e*P **P 23 11 54.6 -0.2**
**FLTG Flechtingen 46.91 44** *e*P **P 23 11 55.2 +0.2**
comp=Z,95nm,1.6s,baz=262,slow=7.8
FLTG *e*pP **sP 23 12 01.5 +1.0**
baz=263,slow=7.8
**MOX Moxa 46.92 46** *e*P **P 23 11 55.4 +0.2**
comp=Z,156nm,2.2s,baz=262,slow=7.8
MOX *e*L L 23 27 25.3
comp=Z,1µm,18.8s
**PP1B Ponte de Pedra 46.93 195** *e*P **P 23 11 55.2 -0.2**
**MDND Maddock 46.96 310** P **P 23 11 54.8 -0.8**
baz=94
**JMIC Jan Mayen 46.99 15** LR LR 23 26 22.5
comp=Z,325nm,21.2s,baz=268,slow=29
**NEUB Neuenburg 47.09 45** *e*pP pP 23 12 03.0 +2.6
baz=263,slow=7.8
**735A Kenedy 47.09 284** P **P 23 11 57.6 +0.8**
**CBKS Cedar Bluff 47.14 298** IAmb IAmb 23 11 59.3
comp=Z,42nm,1.1s
**CBKS Cedar Bluff 47.14 298** P **P 23 11 56.2 -0.9**
baz=85
**SIV San Ignacio 47.15 203** LR LR 23 30 46.2
comp=Z,189nm,20.3s,baz=356,slow=35
**MANZ Manzenberg 47.16 47** *e*P **P 23 11 57.3 +0.2**
comp=Z,30nm,1.6s,baz=262,slow=7.8
**ABTA Abfaltersbach 47.20 51** *e*P **P 23 11 57.6 +0.1**
comp=Z,76nm,1.1s,SNR=19
**ROTZ Rotzenmuhle 47.20 47** *e*P **P 23 11 57.2 -0.3**
comp=Z,15nm,1.7s,baz=262,slow=7.8
ROTZ *e*pP **sP 23 12 03.7 +0.8**
baz=263,slow=7.8
**PLN Plauen 47.24 46** *e*P **P 23 11 57.9 +0.2**
comp=Z,98nm,1.9s,baz=262,slow=7.8
PLN *e*pP **sP 23 12 04.2 +1.0**
baz=263,slow=7.8
**STAL STALIGIAL 47.32 52** IAmb IAmb 23 12 06.4
comp=Z,68nm,1.4s
**WERD Werda 47.33 46** *e*P **P 23 11 58.4 -0.1**
comp=Z,127nm,2.1s,baz=262,slow=7.8
**WERN Wernitzgruen 47.36 46** *e*P **P 23 11 59.1 +0.4**
comp=Z,168nm,2.0s,baz=262,slow=7.8
WERN *e*pP **pwP 23 12 05.6 -1.2**
baz=263,slow=7.8
**NKC Novy Kostel 47.40 46** *e*P **P 23 12 00.0 +1.0**
NKC *e**PP **sP 23 12 05.6 +1.1**
**NKC Novy Kostel 47.40 46** *e*P **P 23 12 00.0 +1.0**
NKC *e*pP **sP 23 12 05.6 +1.1**
**RJOB Jochberg 47.44 50** *e*P **P 23 11 59.4 0.0**
comp=Z,367nm,2.5s,baz=262,slow=7.8
RJOB *e*pP **sP 23 12 05.9 +1.1**
baz=263,slow=7.8
**RIB01 Linhares ES 47.49 176** *e*P **P 23 11 59.4 -0.5**
**WET Wettzell 47.59 48** *e*P **P 23 12 00.4 0.0**
comp=Z,33nm,1.4s,baz=262,slow=7.8
WET *e*pP **sP 23 12 06.9 +0.9**
baz=263,slow=7.8
**NRCA Norcia 47.61 57** IAmb IAmb 23 12 18.5
comp=Z,54nm,1.3s
**KONO Kongsberg 47.62 33** P **P 23 12 01.7 +1.2**
KONO pmax pmax
comp=Z,192nm,1.8s
**KONO Kongsberg 47.62 33** P **P 23 12 01.7 +1.2**
**E28A Huff 47.64 309** IAmb IAmb 23 12 02.6
comp=Z,48nm,0.9s
**KBA Koelnbreinsper 47.78 51** *e*P **P 23 12 01.8 -0.4**
comp=Z,30nm,1.1s,SNR=7.7
**CLL Collm 47.86 45** *i* P **P 23 12 02.6 +0.1**
comp=Z,41nm,1.3s
CLL comp=Z,31nm,1.1s *i* x x 23 12 08.6
CLL *i* x x 23 12 13.4
CLL *e*PP **PP 23 13 52.0 -2.3**
CLL *e*PPPP 23 14 54.0
**CLL Collm 47.86 45** *e*P **P 23 12 02.7 +0.2**
comp=Z,41nm,1.3s,baz=262,slow=7.8
CLL *e*pP **sP 23 12 09.1 +1.1**
baz=263,slow=7.8
**ROBS Robic 47.87 52** *e*P **P 23 12 02.3 -0.4**
**ABTX Abilene, Hawle 47.88 290** IAmb IAmb 23 12 05.7
comp=Z,57nm,1.2s
**ABTX Abilene, Hawle 47.88 290** P **P 23 12 02.6 -0.4**
baz=80,SNR=7.2
**MYKA Terra Mystica 47.98 51** *e*P **P 23 12 03.2 -0.3**
comp=Z,30nm,1.1s,SNR=8.6
**FBE Freiberg 48.05 46** *e*P **P 23 12 04.3 +0.4**
comp=Z,39nm,1.2s,baz=262,slow=7.8
FBE *e*pP **sP 23 12 10.6 +1.2**
baz=263,slow=7.8
**KHC Kasperske Hory 48.05 48** *e*P **P 23 12 04.3 +0.3**
KHC *e**PP **sP 23 12 10.7 +1.2**
**KHC Kasperske Hory 48.05 48** *e*P **P 23 12 04.3 +0.3**
KHC *e*pP **sP 23 12 10.7 +1.2**
**CLTB Caltabellotta 48.05 64** P **P 23 12 05.4 +1.1**
**GEC2 GERESS Array S 48.11 48** *e*P **P 23 12 04.6 0.0**
comp=Z,63nm,1.4s,baz=262,slow=7.8
GEC2 *e*pP **sP 23 12 10.9 +0.8**
baz=263,slow=7.8
**GEC2 GERESS Array S 48.11 48** P **P 23 12 04.6 0.0**
**GERES GERESS Array B 48.11 48** P **P 23 12 03.9 -0.7**
comp=Z,16nm,1.0s,baz=265,slow=6.7,SNR=48
GERES LR LR 23 28 48.6
comp=Z,327nm,18.6s,baz=264,slow=32
**CMIG Matias Romero 48.15 268** LR LR 23 31 53.7
comp=Z,654nm,19.8s,baz=79,slow=36
**SKDS Skadanscina 48.22 53** *e*P **P 23 12 05.3 -0.1**
**JAVS Javornik 48.26 52** *i* P **P 23 12 06.1 +0.4**
**PBCC Pribram 48.35 47** *e*P **P 23 12 06.6 +0.3**
PBCC *e*pP **sP 23 12 12.8 +0.9**
**BRG Berggiesshubel 48.41 46** *e*P **P 23 12 06.9 +0.2**
BRG Amp 23 12 10.5
comp=Z,84nm,1.9s
BRG *ex* x 23 12 13.2
BRG Amp 23 12 15.0
comp=Z,76nm,1.6s
**BRG Berggiesshubel 48.41 46** *e*P **P 23 12 06.9 +0.2**
BRG *e* 23 12 13.2
BRG pmax pmax
comp=Z,84nm,1.9s
BRG pmax pmax
comp=Z,76nm,1.6s
**BRG Berggiesshubel 48.41 46** *e*P **P 23 12 07.1 +0.4**
comp=Z,84nm,1.9s,baz=262,slow=7.8
BRG *e*pP **sP 23 12 13.4 +1.1**
baz=263,slow=7.8
**JCT Junction City 48.43 287** IAmb IAmb 23 12 14.3
comp=Z,48nm,1.1s
**JCT Junction City 48.43 287** P **P 23 12 06.5 -0.7**
baz=78
**MOA Molln 48.44 50** *e*P **P 23 12 06.7 -0.4**

comp=Z,50nm,1.3s,SNR=6.2
**RUE Ruedersdorf 48.47 44** *e*P **P 23 12 07.6 +0.5**
comp=Z,70nm,1.3s,baz=262,slow=7.8
RUE *e*pP **sP 23 12 13.7 +1.0**
baz=263,slow=7.8
**CEY Cerknica 48.51 53** *e*P **P 23 12 07.3 -0.3**
**CKRC Cesky Krumlov 48.51 48** *e*P **P 23 12 07.7 +0.1**
CKRC *e*pP **sP 23 12 14.1 +1.0**
**RIY Rijeka 48.55 53** *e*P **P 23 12 07.8 -0.1**
**833A Chaparral WMA, 48.57 284** P **P 23 12 09.6 +1.3**
**833A Chaparral WMA, 48.57 284** P **P 23 12 07.2 -1.1**
baz=76
**LJU Ljubljana 48.58 52** *e*P **P 23 12 07.8 -0.3**
**LJU Ljubljana 48.58 52** *e*P **P 23 12 08.4 +0.3**
LJU *i* sP **sP 23 12 14.8 +1.2**
**ATAH Atahualpa 48.59 229** LR LR 23 33 59.7
comp=Z,361nm,20.2s,baz=18,slow=38
**OBKA Obir 48.60 52** *i* P **P 23 12 08.2 -0.2**
comp=Z,72nm,1.0s,SNR=13
**PRU Pruhonice 48.73 47** *e*P **P 23 12 09.8 +0.6**
PRU *e*'PP **pwP 23 12 16.3 -1.0**
**PRU Pruhonice 48.73 47** P **P 23 12 09.8 +0.6**
PRU epP **pwP 23 12 16.3 -1.0**
**OGNE Ogallala 48.73 301** P **P 23 12 08.0 -1.5**
baz=86
**ALF01 Guarapari-ES 48.77 176** *e*P **P 23 12 09.4 -0.3**
**PVCC Panska Ves 48.78 46** *e*P **P 23 12 09.9 +0.3**
**PVCC Panska Ves 48.78 46** *e*P **P 23 12 09.9 +0.3**
**NB2 NORSAR Subarra 48.79 32** P **P 23 12 10.0 +0.5**
comp=Z,3.4nm,0.8s,baz=253,slow=7.9
**NOA NORSAR Array B 48.79 32** P **P 23 12 10.1 +0.5**
comp=Z,8.0nm,0.9s,baz=254,slow=7.8,SNR=16
NOA LR LR 23 28 57.5
comp=Z,304nm,21.3s,baz=245,slow=31
**NC602 NORSAR Array S 48.86 32** P **P 23 12 11.1 +1.0**
NC602 IAmb IAmb 23 12 11.1
comp=Z,63nm,1.2s
**NC303 NORSAR Array S 48.92 32** P **P 23 12 11.5 +1.0**
NC303 IAmb IAmb 23 12 19.0
comp=Z,56nm,1.3s
**SOKA Soboth 48.93 51** *i* P **P 23 12 10.1 -0.9**
comp=Z,29nm,1.1s,SNR=8.2
**VAE Valguarnera 49.01 64** LR LR 23 29 25.0
comp=Z,885nm,21.8s,baz=330,slow=32
**LEGS Legarje 49.13 52** *e*P **P 23 12 12.6 +0.2**
LEGS *es*P **sP 23 12 18.9 +1.0**
**AMTX Amarillo 49.17 293** P **P 23 12 12.4 -0.6**
baz=81
**CRES Cresnjev 49.23 52** *e*P **P 23 12 13.4 +0.3**
**ARSA Arzberg 49.27 51** *e*P **P 23 12 12.7 -0.8**
comp=Z,39nm,1.0s,SNR=14
**NEEM North Greenlan 49.30 358** *i* P **P 23 12 12.4 -1.1**
NEEM IAmb IAmb 23 12 16.4
comp=Z,39nm,1.0s
**KSCO Kaye Shedlock' 49.37 299** P **P 23 12 15.3 +0.8**
KSCO IAmb IAmb 23 12 17.1
comp=Z,72nm,1.3s
**KSCO Kaye Shedlock' 49.37 299** P **P 23 12 14.0 -0.5**
baz=84
**CONA Conrad Observa 49.51 50** *e*P **P 23 12 14.9 -0.4**
comp=Z,28nm,1.1s,SNR=10
**UPC Upice 49.70 46** *e*P **P 23 12 17.2 +0.6**
**UPC Upice 49.70 46** *e*P **P 23 12 17.2 +0.6**
**CHVC Chvalec 49.73 46** *e*P **P 23 12 17.4 +0.5**
CHVC epP **pwP 23 12 23.9 -1.1**
**TULEG Thule 49.74 353** *i* P **P 23 12 15.5 -1.0**
TULEG IAmb IAmb 23 12 17.7
comp=Z,51nm,1.1s
**TULEG Thule 49.74 353** P **P 23 12 16.7 +0.2**
TULEG IAmb IAmb 23 12 18.1
comp=Z,48nm,1.1s
**OSTC Ostas 49.83 46** *e*P **P 23 12 18.2 +0.5**
OSTC *e*pP **pwP 23 12 24.9 -0.9**
**AQDB Aquidauana 49.89 195** *e*P **P 23 12 18.4 +0.1**
**AQDB Aquidauana 49.89 195** P **P 23 12 18.3 +0.1**
**DPC Dobruska-Polom 49.89 47** *e*P **P 23 12 18.5 +0.4**
DPC *e*'PP **pwP 23 12 25.0 -1.3**
**DPC Dobruska-Polom 49.89 47** *e*P **P 23 12 18.5 +0.4**
DPC epP **pwP 23 12 25.6 -1.3**
**KRUC Moravsky 49.89 48** *e*P **P 23 12 18.2 +0.1**
**KSP Ksiaz 49.90 46** *e*P **P 23 12 18.0 -0.1**
**CAM01 Campos-RJ 49.92 177** *e*P **P 23 12 17.9 -0.5**
**DAG Danmarks Havn 49.95 7** *i* P **P 23 12 17.1 -1.1**
DAG IAmb IAmb 23 12 26.3
comp=Z,95nm,1.7s
**SOP Sopron 49.98 50** P **P 23 12 18.7 -0.1**
**RSSD Black Hills 50.02 305** P **P 23 12 19.1 -0.4**
RSSD pmax pmax
comp=Z,14nm,1.0s
**RSSD Black Hills 50.02 305** P **P 23 12 19.1 -0.4**
**RSSD Black Hills 50.02 305** P **P 23 12 18.5 -1.0**
baz=87
**VRAC Vranov 50.03 48** ⇑P **P 23 12 19.4 +0.3**
**VRAC Vranov 50.03 48** LR LR 23 31 09.0
comp=Z,283nm,18.4s,baz=276,slow=33
**VRAC Vranov 50.03 48** *e*P **P 23 12 19.0 -0.2**
**DGMT Dagmar 50.06 311** P **P 23 12 18.9 -0.5**
baz=91
**DUB01 Friburgo-RJ 50.15 178** *e*P **P 23 12 20.4 +0.1**
**PCMB Pacaembu 50.19 189** *e*P **P 23 12 20.9 +0.3**
**MSTX Muleshoe 50.22 292** IAmb IAmb 23 12 27.6
comp=Z,81nm,1.3s
**MSTX Muleshoe 50.22 292** P **P 23 12 20.6 -0.4**
baz=79
**LPAZ La Paz 50.25 211** P **P 23 12 21.3 -0.6**
comp=Z,23nm,0.9s,baz=20,slow=8.8,SNR=47
LPAZ LR LR 23 32 39.0
comp=Z,544nm,19.3s,baz=20,slow=35
**LPAZ La Paz 50.25 211** *e*P **P 23 12 20.6 -1.2**
**LPAZ La Paz 50.25 211** IAmb IAmb 23 12 36.2
comp=Z,70nm,1.2s
**MRAK Mrakovica 50.27 54** *e*P **P 23 12 21.5 +0.4**
**ZST Bratislava 50.35 49** *e*P **P 23 12 21.5 -0.1**
**MGRS Mrkonjic Grad 50.42 54** *e*P **P 23 12 22.6 +0.3**
**MODS Modra-Piesok 50.47 49** *e*P **P 23 12 24.8 +2.3**
**BLY Banja Luka 50.48 54** *e*P **P 23 12 22.7 +0.1**
**SMOL Smolenice 50.57 49** *e*P **P 23 12 23.5 +0.3**
**RCLB Rio Claro- Sao 50.60 185** *e*P **P 23 12 24.0 +0.3**
**GKP Gorka Klasztor 50.63 43** *e*P **P 23 12 24.7 +1.1**
**TIP Timpagrande 50.63 61** P **P 23 12 23.9 -0.1**
TIP IAmb IAmb 23 12 30.7
comp=Z,62nm,1.5s
**MPLH Magyarpolny 50.65 51** P **P 23 12 24.1 +0.3**
MPLH SP 23 12 29.3
**MORC Moravsky Berou 50.66 47** ⇓P **P 23 12 25.0 +1.1**
**MORC Moravsky Berou 50.66 47** P **P 23 12 24.3 +0.3**
MORC pmax pmax
comp=Z,73nm,1.6s
**MORC Moravsky Berou 50.66 47** *e*P **P 23 12 24.2 +0.3**
**MORC Moravsky Berou 50.66 47** P **P 23 12 24.3 +0.3**
MORC IAmb IAmb 23 12 32.1
comp=Z,73nm,1.6s
**JAVC Velka Javorina 50.73 49** *e*P **P 23 12 25.3 +0.8**
**T25A Trinidad 51.01 296** P **P 23 12 26.5 -0.5**
baz=81,SNR=23
**KOVH Kovagotottos 51.07 52** P **P 23 12 27.2 +0.2**
**CSKK Cskako 51.14 50** P **P 23 12 28.0 +0.5**
CSKK SP 23 12 33.7
**VAO Valinhos 51.14 184** *e*P **P 23 12 27.3 -0.5**
**SRO Srobarova 51.16 50** *e*P **P 23 12 27.8 +0.1**
**KOLL Kolacno 51.21 49** *e*P **P 23 12 28.4 +0.3**
**SRO2 Moca 51.22 50** *e*P **P 23 12 27.1 -1.0**
**NNA Nana 51.30 223** P **P 23 12 28.7 -0.4**
NNA pmax pmax
comp=Z,104nm,1.5s
**NNA Nana 51.30 223** P **P 23 12 28.7 -0.4**
NNA IAmb IAmb 23 12 44.9
comp=Z,104nm,1.5s
**Q24A Divide 51.32 299** IAmb IAmb 23 12 37.4
comp=Z,84nm,1.2s
**Q24A Divide 51.32 299** P **P 23 12 29.3 -0.2**
baz=82,SNR=16
**LAO LASA Array 51.45 309** P **P 23 12 29.7 -0.3**
baz=88
**VYHS Vyhne 51.50 49** *e*P **P 23 12 30.4 +0.1**
**ISCO Idaho Springs 51.57 300** P **P 23 12 31.3 0.0**
baz=83,SNR=11
**BUD Budapest 51.65 50** P **P 23 12 31.9 +0.6**
BUD SP 23 12 37.4
**N23A Red Feather La 51.69 301** P **P 23 12 32.5 +0.4**
baz=83,SNR=9.4
**SDCO Great Sand Dun 51.77 297** P **P 23 12 32.9 +0.1**
baz=81,SNR=21
**LANS Liptovska Anna 51.91 48** *e*P **P 23 12 34.6 +1.2**

**K22A Casper 51.94 304** P **P 23 12 33.2 -0.6**
baz=84,SNR=13
**TXAR Lajitas Array 51.96 286** P **P 23 12 33.5 -0.7**
comp=Z,6.6nm,0.9s,baz=94,slow=6.9,SNR=40
TXAR PcP **PcP 23 13 46.5 0.0**
comp=Z,3.0nm,1.0s,baz=97,slow=3.6,SNR=4.1
TXAR LR LR 23 35 13.8
comp=Z,537nm,18.4s,baz=75,slow=37
**TX31 Lajitas Ar. Si 51.96 286** P **P 23 12 34.2 0.0**
**TX32 Lajitas Array 51.96 286** P **P 23 12 33.9 -0.2**
**OJC Ojcow 52.12 47** *e*P **P 23 12 35.0 +0.2**
**OJC Ojcow 52.12 47** IAmb IAmb 23 12 43.2
comp=Z,98nm,1.5s
**RUDO Rudo 52.12 55** *e*P **P 23 12 33.6 -1.4**
**BBLS Lazići 52.13 55** *e*P **P 23 12 35.5 +0.4**
**PDG Podgorica 52.15 57** ⇑P **P 23 12 36.9 +1.7**
**PDG Podgorica 52.15 57** *e*P **P 23 12 32.2 -3.0**
**PDG Podgorica 52.15 57** P **P 23 12 36.3 +1.1**
**TEKS Tekeris 52.16 54** *e*P P 23 12 29.9 -5.4
**PSZ Piszkesteto 52.23 50** ⇑P **P 23 12 36.2 +0.5**
**PSZ Piszkesteto 52.23 50** P **P 23 12 35.7 0.0**
**FRGS Fruska Gora 52.32 53** *e*P **P 23 12 35.5 -0.9**
**PET01 Itanhaem-SP 52.44 184** *e*P **P 23 12 36.3 -1.1**
**NIE Niedzica 52.45 48** *e*P **P 23 12 39.1 +1.7**
**KLNR Kaliningrad 52.47 41** *i* P **P 23 12 37.2 -0.1**
KLNR pmax pmax
comp=Z,111nm,1.1s
**DIVS Divibare 52.53 55** *e*P **P 23 12 37.2 -0.9**
**DIVS Divibare 52.53 55** IAmb IAmb 23 12 46.2
comp=Z,61nm,1.1s
**BEL Belsk 52.74 45** *e*P **P 23 12 40.5 +1.1**
**MOIG Morelia 52.75 274** P **P 23 12 41.6 +1.3**
**S22A 4UR Ranch, Cre 52.81 297** P **P 23 12 40.7 +0.2**
baz=80,SNR=10
**MNTX Cornudas Mount 52.83 290** P **P 23 12 40.6 +0.2**
baz=77
**AMBH Ambrzfalva 52.87 52** ⇓P **P 23 12 42.4 +1.9**
**AMBH Ambrzfalva 52.87 52** P **P 23 12 41.3 +0.9**
**ZAIG Zacatecas 52.90 278** P **P 23 12 42.4 +1.0**
**RES Resolute Bay 52.96 345** LR LR 23 34 05.1
comp=Z,439nm,20.0s,baz=100,slow=35
**RES Resolute Bay 52.96 345** P **P 23 12 41.3 +0.6**
RES pmax pmax
comp=Z,51nm,1.2s
**RES Resolute Bay 52.96 345** P **P 23 12 41.3 +0.6**
RES IAmb IAmb 23 12 43.7
comp=Z,51nm,1.2s
**ANMO Albuquerque 53.02 294** LR LR 23 33 07.8
comp=Z,1µm,20.8s,baz=80,slow=34
**ANMO Albuquerque 53.02 294** P **P 23 12 43.3 +1.3**
ANMO pmax pmax
comp=Z,58nm,1.3s
**ANMO Albuquerque 53.02 294** P **P 23 12 43.3 +1.3**
ANMO IAmb IAmb 23 12 50.6
comp=Z,58nm,1.2s
**ANMO Albuquerque 53.02 294** P **P 23 12 42.5 +0.5**
baz=78
**CRVS Cervenica-Dubn 53.23 48** *e*P **P 23 12 44.3 +1.2**
**BANR Banloc 53.23 53** ⇑P **P 23 12 44.9 +1.7**
**PTGB Pitanga 53.36 189** *e*P **P 23 12 43.5 -0.7**
**MNMC Minye Minye 53.40 211** IAmb IAmb 23 12 50.3
comp=Z,110nm,1.6s
**OHR Ohrid 53.46 58** *i* P **P 23 12 42.0 -3.0**
**KBN Korca 53.52 59** P **P 23 12 45.4 0.0**
KBN pmax pmax
comp=Z,157nm,1.6s
**KBN Korca 53.52 59** P **P 23 12 45.4 0.0**
**O20A White River Ci 53.53 301** IAmb IAmb 23 13 06.5
comp=Z,52nm,1.3s
**O20A White River Ci 53.53 301** P **P 23 12 46.0 +0.3**
baz=82,SNR=10
**BZS Buzias 53.55 52** ⇓P **P 23 12 47.3 +1.8**
**Y22D IRIS PASSCAL I 53.57 293** P **P 23 12 48.2 +2.1**
**LENM Lemitar 53.60 293** P **P 23 12 48.9 +2.7**
**RLMT Red Lodge 53.67 307** P **P 23 12 46.5 -0.2**
RLMT IAmb IAmb 23 12 54.5
comp=Z,47nm,1.1s
**RLMT Red Lodge 53.67 307** P **P 23 12 47.0 +0.3**
baz=84,SNR=7.3
**MDVR Moldevita 53.69 54** ⇑P **P 23 12 47.3 +0.7**
**EGMT Eagleton 53.78 311** IAmb IAmb 23 12 49.8
comp=Z,61nm,1.0s
**EGMT Eagleton 53.78 311** P **P 23 12 47.0 -0.3**
baz=86,SNR=17
**UZH Uzhgorod 53.79 49** ⇑*i* P **P 23 12 46.7 -0.5**
UZH *e* 23 12 53.3
**SKO Skopje 53.82 57** *i* P **P 23 12 48.4 +0.9**
**TRPA Tarpa 53.99 49** ⇑P **P 23 12 49.4 +0.8**
**TRPA Tarpa 53.99 49** P **P 23 12 49.1 +0.5**
**PV15 Paradox Valley 53.99 298** P **P 23 12 49.9 +0.7**
**KWP Kalwaria Pacla 54.01 47** *e*P **P 23 12 50.0 +1.2**
**KWP Kalwaria Pacla 54.01 47** P **P 23 12 49.7 +0.9**
KWP pmax pmax
comp=Z,915nm,1.3s
**KWP Kalwaria Pacla 54.01 47** P **P 23 12 49.7 +0.9**
**PV07 Paradox Valley 54.11 299** P **P 23 12 51.1 +1.1**
**BW06 Boulder Array 54.15 304** IAmb IAmb 23 12 52.4
comp=Z,54nm,0.9s
**BW06 Boulder Array 54.15 304** P **P 23 12 49.2 -1.0**
baz=83,SNR=59
**PD31 Pinedale Array 54.15 304** P **P 23 12 49.4 -0.8**
PD31 IAmb IAmb 23 12 52.5
comp=Z,48nm,0.9s
**PDAR Pinedale Array 54.15 304** P **P 23 12 49.8 -0.4**
comp=Z,42nm,0.9s,baz=85,slow=8.2,SNR=123
PDAR LR LR 23 34 00.9
comp=Z,2µm,21.3s,baz=92,slow=34
**PDAR Pinedale Array 54.15 304** P **P 23 12 50.3 +0.1**
**HERR Herculane 54.18 53** ⇓P **P 23 12 51.2 +1.1**
**SUW Suwalki 54.20 42** *e*P **P 23 12 49.7 -0.4**
**SUW Suwalki 54.20 42** *e*P **P 23 12 50.2 +0.2**
**DRGR 54.20 51** ⇓P **P 23 12 50.5 +0.2**
**MVCO Mesa Verde 54.21 297** IAmb IAmb 23 12 59.2
comp=Z,52nm,1.1s
**MVCO Mesa Verde 54.21 297** P **P 23 12 51.5 +0.7**
baz=79,SNR=15
**HPIG 54.30 284** P **P 23 12 51.8 +0.3**
**PV11 David Mesa, Pa 54.31 299** P **P 23 12 53.0 +1.6**
PV11 IAmb IAmb 23 14 03.5
comp=Z,54nm,1.5s
**NOR Nord 54.37 5** *i* P **P 23 12 49.2 -1.8**
NOR IAmb IAmb 23 12 51.7
comp=Z,31nm,1.1s
**GZR Gura Zlata 54.38 53** ⇓P **P 23 12 52.2 +0.5**
**PV23 Carpenter Ridg 54.39 299** P **P 23 12 53.4 +1.3**
**STIP Stip 54.41 57** *i* P **P 23 12 53.6 +1.7**
**PV10 Paradox Valley 54.42 299** P **P 23 12 53.6 +1.3**
**RDMU Red Mountain 54.46 301** IAmb IAmb 23 13 00.2
comp=Z,100nm,1.6s
**LKWY Lake 54.53 306** IAmb IAmb 23 13 12.7
comp=Z,56nm,1.1s
**121A Cookes Peak, D 54.62 291** IAmb IAmb 23 13 01.7
comp=Z,61nm,1.4s
**121A Cookes Peak, D 54.62 291** P **P 23 12 54.4 +0.6**
baz=76,SNR=8.7
**PABE Paberze 54.66 40** *e*P **P 23 12 53.2 -0.2**
**BMR Baia Mare 54.66 50** ⇑P **P 23 12 54.2 +0.6**
**H17A Grant Village 54.68 306** P **P 23 12 55.7 +1.6**
baz=83,SNR=14
**EUNU Eureka 54.70 352** IAmb IAmb 23 13 06.5
comp=Z,69nm,1.5s
**YNR Norris Junctio 54.72 307** IAmb IAmb 23 13 03.2
comp=Z,79nm,1.8s
**VAY Valandovo 54.75 58** *i* P **P 23 12 55.1 +0.8**
**LOHW Long Hollow 54.80 305** IAmb IAmb 23 13 02.3
comp=Z,32nm,0.9s
**FLWY Flagg Ranch 54.81 306** IAmb IAmb 23 12 57.8
comp=Z,42nm,1.0s
**CJR Cluj-Napoca 54.82 51** ⇑P **P 23 12 55.6 +0.8**
**YHH Holmes Hill 54.83 307** IAmb IAmb 23 13 03.3
comp=Z,48nm,1.4s
**LVV L'vov 54.86 47** *e*P **P 23 12 55.3 +0.3**
LVV pmax pmax
comp=Z,220nm,1.4s
**SNOW Snow King Moun 54.92 305** IAmb IAmb 23 13 03.4
comp=Z,50nm,1.0s
**AGG Agios Georgios 54.94 60** IAmb IAmb 23 13 04.5
comp=Z,97nm,1.6s
**ITM Ithomi 54.97 63** IAmb IAmb 23 13 05.3
comp=Z,48nm,1.3s
**REDW Red Top Meadow 55.01 305** IAmb IAmb 23 13 03.2
comp=Z,65nm,1.3s
**PB01 IPOC Station P 55.03 210** IAmb IAmb 23 13 04.1
comp=Z,56nm,1.1s
**KKB Krupnik 55.05 57** *i* P **P 23 12 58.2 +1.7**

**VTS Vitosha 55.05 56** ⇑P **P 23 12 57.5 +0.8**
**VTS Vitosha 55.05 56** *i* P **P 23 12 56.6 -0.1**
**TPAW Teton Pass 55.06 305** IAmb IAmb 23 12 58.6
comp=Z,36nm,0.9s
**LOT Lotru 55.07 53** ⇑P **P 23 12 57.2 +0.5**
**AHID Auburn Hatcher 55.27 304** IAmb IAmb 23 13 01.9
comp=Z,38nm,1.1s
**BOZ Bozeman (W) 55.28 308** P **P 23 12 57.9 -0.4**
baz=83,SNR=14
**ARCR ARCALIA 55.30 50** ⇑P **P 23 12 58.5 +0.3**
**MPEP Malo Peshtene 55.31 55** *i* P **P 23 12 58.6 +0.2**
**SRU San Rafael Swe 55.43 300** IAmb IAmb 23 13 02.3
comp=Z,53nm,0.9s
**PB02 IPOC Station P 55.45 210** P **P 23 12 58.7 -0.9**
**P17A Butcher Ranch, 55.53 300** IAmb IAmb 23 13 07.1
comp=Z,86nm,1.8s
**MMB Musomiste 55.57 57** *i* P **P 23 13 01.6 +1.3**
**PB09 IPOC Station P 55.59 209** IAmb IAmb 23 13 12.5
comp=Z,64nm,1.2s
**W18A Petrified Fore 55.62 295** IAmb IAmb 23 13 04.1
comp=Z,40nm,1.1s
**W18A Petrified Fore 55.62 295** P **P 23 13 01.1 +0.2**
baz=77,SNR=13
**ARR Arges 55.69 53** ⇑P **P 23 13 01.7 +0.6**
**VLAD Vladila 55.70 54** ⇑P **P 23 13 02.9 +1.8**
**PGB Panagyurishte 55.74 56** *i* P **P 23 13 02.3 +0.8**
**PB07 IPOC Station P 55.80 210** IAmb IAmb 23 13 08.1
comp=Z,77nm,1.4s
**BUR08 Bucovina Ar. S 55.81 50** P **P 23 13 03.0 +1.0**
**BURAR Bucovina Array 55.83 50** ⇓P **P 23 13 02.7 +0.6**
**BURAR Bucovina Array 55.83 50** IAmb IAmb 23 13 11.3
comp=Z,47nm,1.1s
**ITAB Concordia 55.84 189** *e*P **P 23 12 59.2 -3.0**
**ITAB Concordia 55.84 189** P **P 23 13 02.0 -0.2**
ITAB IAmb IAmb 23 13 16.1
comp=Z,81nm,1.5s
**JLU Jordanelle 55.87 302** IAmb IAmb 23 13 10.2
comp=Z,57nm,1.1s
**ISAL Salakas 55.88 40** *e*P **P 23 13 02.5 +0.2**
**CPUP Villa Florida 55.91 195** P **P 23 13 01.5 -1.1**
comp=Z,9.1nm,1.2s,baz=2.4,slow=7.0,SNR=6.7
CPUP LR LR 23 36 51.9
comp=Z,132nm,19.2s,baz=8.0,slow=36
**CPUP Villa Florida 55.91 195** IAmb IAmb 23 13 09.4
comp=Z,57nm,1.6s
**X18A Snowflake 55.92 294** P **P 23 13 04.1 +1.0**
**TMUT Trail Mountain 55.92 300** IAmb IAmb 23 13 11.0
comp=Z,50nm,1.3s
**FINES FINESS Array B 55.93 33** P **P 23 13 02.3 -0.2**
comp=Z,266nm,1.0s,baz=256,slow=6.3,SNR=22
FINES LR LR 23 33 16.5
comp=Z,266nm,18.5s,baz=242,slow=32
**FIA1 FINESS Array S 55.93 33** P **P 23 13 03.0 +0.5**
FIA1 IAmb IAmb 23 13 10.3
comp=Z,78nm,1.4s
**IIGN Ignalina 55.95 40** *e*P **P 23 13 02.9 +0.2**
**Q16A Castle Valley 55.97 300** IAmb IAmb 23 13 11.1
comp=Z,41nm,1.2s
**VOIR 55.97 52** ⇑P **P 23 13 03.4 +0.3**
**DLMT Dillon 55.99 308** IAmb IAmb 23 13 10.2
comp=Z,40nm,1.2s
**HUMR Humele 56.04 53** ⇑P **P 23 13 04.0 +0.4**
**CTU Camp Tracy 56.08 302** IAmb IAmb 23 13 11.2
comp=Z,37nm,1.2s
**DOPR Dopca 56.13 52** ⇑P **P 23 13 05.7 +1.5**
**319A Douglas 56.14 290** P **P 23 13 05.5 +0.9**
**LVC Limon Verde 56.17 208** LR LR 23 36 56.8
comp=Z,419nm,18.4s,baz=4.0,slow=36
**LVC Limon Verde 56.17 208** P **P 23 13 04.2 -0.8**
LVC pmax pmax
comp=Z,42nm,1.1s
**LVC Limon Verde 56.17 208** *e*P **P 23 13 03.7 -1.3**
**LVC Limon Verde 56.17 208** P **P 23 13 04.2 -0.8**
LVC IAmb IAmb 23 13 13.2
comp=Z,42nm,1.1s
**VSU Vasula 56.19 37** *i* P **P 23 13 03.3 -1.0**
VSU pmax pmax
comp=Z,136nm,1.0s
**VSU Vasula 56.19 37** *e*P **P 23 13 04.8 +0.4**
**IDID Didziasalis 56.24 40** *e*P **P 23 13 05.0 +0.2**
**COPA Copaceanca 56.26 54** ⇑P **P 23 13 04.9 -0.3**
**NACGM Naroch 56.28 41** *i* P **P 23 13 04.9 -0.1**
**OZUR 56.39 52** ⇓P **P 23 13 08.5 +2.3**
**SPITS Spitsbergen Ar 56.45 12** LR LR 23 32 30.7
comp=Z,184nm,19.1s,baz=74,slow=31
**WALA Waterton Lakes 56.45 312** IAmb IAmb 23 13 08.4
comp=Z,41nm,1.0s
**YKA Yellowknife Ar 56.45 328** P **P 23 13 05.3 -0.9**
comp=Z,22nm,0.9s,baz=92,slow=7.5,SNR=112
YKA LR LR 23 37 07.4
comp=Z,3µm,18.9s,baz=84,slow=36
**YKA Yellowknife Ar 56.45 328** *i* P **P 23 13 05.3 -0.9**
YKA pmax pmax
comp=Z,23nm,0.9s
**NLU North Lily Min 56.46 301** IAmb IAmb 23 13 14.7
comp=Z,71nm,1.3s
**PVL Pavlikeni 56.48 55** *i* P **P 23 13 05.4 -1.3**
**ARCES ARCESS Array B 56.50 23** P **P 23 13 06.3 -0.2**
comp=Z,23nm,0.9s,baz=268,slow=5.9,SNR=15
**PRAR RASCA 56.54 50** ⇑P **P 23 13 07.7 +0.7**
**MLR Muntele Rosu 56.58 52** ⇑P **P 23 13 08.1 +0.5**
**MLR Muntele Rosu 56.58 52** LR LR 23 36 25.4
comp=Z,641nm,18.5s,baz=271,slow=35
**HVU Hansel Valley 56.65 303** IAmb IAmb 23 13 14.6
comp=Z,48nm,1.4s
**COVR Voineasa-Covas 56.72 52** ⇑P **P 23 13 08.9 +0.5**
**MSO Missoula 56.73 309** IAmb IAmb 23 13 15.9
comp=Z,43nm,1.4s
**MSO Missoula 56.73 309** P **P 23 13 08.2 -0.4**
baz=83,SNR=9.1
**WUAZ Wupatki 56.83 296** IAmb IAmb 23 13 17.4
comp=Z,78nm,1.4s
**WUAZ Wupatki 56.83 296** P **P 23 13 10.3 +0.8**
baz=77,SNR=25
**NEHR Nehoiu 56.84 52** ⇓P **P 23 13 09.0 -0.3**
**SZH Strazhica 56.91 55** *i* P **P 23 13 10.6 +0.8**
**SULR 56.92 53** ⇑P **P 23 13 10.0 +0.2**
**TESR Tescani 56.93 51** ⇑P **P 23 13 08.9 -1.0**
**PB15 IPOC Station P 56.94 208** P **P 23 13 08.8 -1.5**
PB15 IAmb IAmb 23 13 21.5
comp=Z,48nm,1.0s
**MNK Minsk 56.94 41** *i* P **P 23 13 09.6 -0.2**
MNK *i* 23 14 04.7
MNK *i* 23 15 16.1
MNK *i* PPP PPP 23 16 31.7
MNK *i* S **S 23 21 03.4 +0.4**
MNK *i* 23 22 59.0
MNK *i* SS **SS 23 24 54.0 +2.9**
MNK pmax pmax
comp=N,22nm,1.0s
MNK pmax pmax
comp=E,18nm,1.2s
MNK pmax pmax
comp=Z,155nm,1.0s
MNK MLR MLR
comp=E,54nm,19.0s
MNK MLR MLR
comp=N,178nm,11.0s
MNK MLR MLR
comp=Z,178nm,13.0s
**MNK Minsk 56.94 41** *i* P **P 23 13 09.6 -0.2**
comp=E,18nm,1.2s
MNK *i* P **P 23 13 09.6 -0.2**
comp=N,22nm,1.0s
MNK *i* P **P 23 13 09.6 -0.2**
comp=Z,155nm,1.0s,baz=93
MNK *i* PcP **PcP 23 14 04.8 -0.2**
MNK *i* PP **PP 23 15 16.1 0.0**
MNK *i* PPP PPP 23 16 31.8
MNK *i* S **S 23 21 03.5 +0.4**
MNK *i* SS **SS 23 24 54.1 +2.9**
MNK *i* SSS SSS 23 27 15.3
MNK *i* LQ LQ 23 33 13.9
MNK *i* LR LR 23 37 53.0
MNK *i* LRM MLR 23 40 38.1
comp=E,54nm,18.6s
MNK *i* LRM MLR 23 40 49.0
comp=N,178nm,11.3s
MNK *i* LRM MLR 23 40 58.0
comp=Z,178nm,12.7s
**DUG Dugway, Tooele 56.97 301** IAmb IAmb 23 13 13.4
comp=Z,53nm,1.1s
**DUG Dugway, Tooele 56.97 301** P **P 23 13 10.2 -0.2**
baz=79,SNR=53
**TCRU Three Creeks R 57.00 300** IAmb IAmb 23 13 19.3

comp=Z,48nm,1.2s
**PLOR Plostina 57.02 52** ⇑P **P 23 13 10.8 +0.2**
**VRI Vrincioaia 57.08 52** ⇓P **P 23 13 11.0 +0.1**
**BISRR Bisoca 57.11 52** ⇓P **P 23 13 12.1 +0.9**
**TUC Tucson 57.13 292** P **P 23 13 12.3 +0.6**
TUC pmax pmax
comp=Z,32nm,1.4s
**TUC Tucson 57.13 292** P **P 23 13 12.3 +0.6**
**TUC Tucson 57.13 292** P **P 23 13 11.8 +0.2**
baz=75
**PKCU Pink Cliffs 57.14 298** P **P 23 13 11.9 0.0**
PKCU IAmb IAmb 23 13 18.8
comp=Z,82nm,1.7s
**ODBI Odobesti 57.32 52** ⇑P **P 23 13 14.0 +1.4**
**U15A North Rim 57.35 297** IAmb IAmb 23 13 21.2
comp=Z,47nm,1.4s
**PANC Panciu 57.36 52** ⇓P **P 23 13 13.5 +0.6**
**IAS Iasi 57.46 50** ⇑P **P 23 13 13.3 -0.3**
**HLID Hailey 57.54 306** P **P 23 13 14.5 0.0**
baz=80,SNR=13
**IDI Anoyia 57.72 64** LR LR 23 37 41.2
comp=Z,147nm,19.5s,baz=284,slow=36
**SLCR Slobozia Conac 57.84 52** ⇓P **P 23 13 15.6 -0.6**
**SORM Soroca 57.86 49** ⇓P **P 23 13 15.0 -1.4**
**SANT Santorini 57.91 63** P **P 23 13 16.9 -0.1**
SANT IAmb IAmb 23 13 23.8
comp=Z,53nm,1.3s
**CCUT Cedar City 57.93 298** IAmb IAmb 23 13 20.6
comp=Z,31nm,1.0s
**PRD Provadia 57.98 55** *i*P **P 23 13 17.3 0.0**
**AKASG Malin Array Be 58.10 46** P **P 23 13 17.2 -0.8**
comp=Z,57nm,0.9s,baz=276,slow=6.1,SNR=46
**AKASG Malin Array Be 58.10 46** *i*P **P 23 13 17.3 -0.7**
AKASG pmax pmax
comp=Z,57nm,0.9s
**AKBB Malin Array Si 58.10 46** P **P 23 13 17.6 -0.4**
AKBB pmax pmax
comp=Z,66nm,1.0s
**AKBB Malin Array Si 58.10 46** P **P 23 13 17.6 -0.4**
AKBB IAmb IAmb 23 13 18.6
comp=Z,66nm,1.0s
**HARR Harsova 58.10 53** ⇑P **P 23 13 17.5 -0.6**
**PSUT Pine Spring 58.10 300** P **P 23 13 19.4 +0.8**
PSUT IAmb IAmb 23 13 22.2
comp=Z,81nm,1.6s
**ICOR Ion Corvin 58.10 54** ⇑P **P 23 13 18.1 -0.1**
**CFR Carcaliu 58.16 52** ⇑P **P 23 13 17.1 -1.4**
**KIS Kishinev 58.34 50** *e*P **P 23 13 17.0 -2.7**
**KIS Kishinev 58.34 50** *e*P **P 23 13 17.0 -2.7**
KIS *e* 23 13 25.0
**MILM Milestii Mici 58.34 50** ⇓*i*P **P 23 13 18.2 -1.6**
comp=Z,160nm,1.0s
**MILM Milestii Mici 58.34 50** ⇑P **P 23 13 19.0 -0.8**
**MILM Milestii Mici 58.34 50** *i*P **P 23 13 18.2 -1.6**
MILM *e* 23 13 25.0
MILM pmax pmax
comp=Z,160nm,1.0s
**SPR3 Spring Creek 3 58.36 300** IAmb IAmb 23 13 28.9
comp=Z,54nm,1.1s
**PLID Pearl Lake 58.41 308** IAmb IAmb 23 13 23.0
comp=Z,48nm,1.0s
**Y14A Wickenburg 58.52 294** IAmb IAmb 23 13 24.8
comp=Z,33nm,1.1s
**MFID Camas Ranch 58.58 306** IAmb IAmb 23 13 24.4
comp=Z,39nm,0.9s
**PB14 IPOC Station P 58.58 209** IAmb IAmb 23 13 28.3
comp=Z,61nm,1.1s
**NEW Newport 58.66 311** LR LR 23 36 46.9
comp=Z,1μm,21.1s,baz=82,slow=34
**NEW Newport 58.66 311** IAmb IAmb 23 13 23.0
comp=Z,59nm,1.1s
**NEW Newport 58.66 311** P **P 23 13 21.7 -0.4**
baz=81,SNR=37
**ELK Elko 58.67 303** LR LR 23 38 22.4
comp=Z,985nm,18.5s,baz=82,slow=36
**214A Organ Pipe Nat 58.89 292** IAmb IAmb 23 13 32.3
comp=Z,49nm,1.3s
**214A Organ Pipe Nat 58.89 292** P **P 23 13 24.4 +0.5**
baz=74,SNR=10.0
**W13A Hualapai Mount 58.92 296** IAmb IAmb 23 13 32.3
comp=Z,47nm,1.5s
**ITQB Itaqui 58.99 193** *e*P **P 23 13 23.3 -1.0**
**ITQB Itaqui 58.99 193** P **P 23 13 23.7 -0.6**
**F10A Beach Ranch, E 59.10 309** IAmb IAmb 23 13 27.3
comp=Z,33nm,1.1s
**PURM Purcari 59.13 51** ⇑P **P 23 13 25.2 -0.1**
**LPIG La Paz 59.17 283** LR LR 23 38 20.2
comp=Z,771nm,20.3s,baz=62,slow=36
**APA Apatity 59.25 26** ⇓*i*P **P 23 13 24.9 -0.8**
APA *i* 23 14 17.0
APA *i* 23 15 45.0
APA *i*S **S 23 21 26.0 -6.9**
APA pmax pmax
comp=Z,23nm,0.9s
APA MLR MLR
comp=Z,1μm,15.0s
**PDMCI Parker Dam,Lak 59.33 295** P **P 23 13 27.3 +0.4**
baz=75
**113A Mohawk Valley, 59.44 293** IAmb IAmb 23 13 35.8
comp=Z,87nm,1.9s
**R11A Troy Canyon, C 59.46 300** IAmb IAmb 23 13 35.0
comp=Z,31nm,1.2s
**R11A Troy Canyon, C 59.46 300** P **P 23 13 27.9 -0.1**
baz=76,SNR=21
**NEE2 Needles Airpor 59.59 296** P **P 23 13 28.6 -0.1**
baz=75
**LVZ Lovozero 59.72 25** *i*P **P 23 13 28.7 -0.4**
LVZ pmax pmax
comp=Z,123nm,2.2s
**SRIG Santa Rosalia 59.78 287** P **P 23 13 32.1 +2.1**
**BLYC Blythe 59.79 294** IAmb IAmb 23 13 38.4
comp=Z,73nm,1.8s
**AC02 Maricunga 60.03 206** IAmb IAmb 23 13 39.4
comp=Z,36nm,1.1s
**IRM Iron Mountain 60.17 295** P **P 23 13 33.3 +0.6**
baz=74,SNR=10.0
**BMN Battle Mountai 60.22 303** IAmb IAmb 23 13 40.5
comp=Z,28nm,1.2s
**GLA Glamis 60.22 294** P **P 23 13 33.9 +0.8**
GLA pmax pmax
comp=Z,60nm,1.5s
**GLA Glamis 60.22 294** P **P 23 13 33.9 +0.8**
GLA IAmb IAmb 23 13 40.6
comp=Z,60nm,1.4s
**GLA Glamis 60.22 294** P **P 23 13 33.4 +0.3**
baz=74
**E08A Dider Farm, El 60.26 310** IAmb IAmb 23 13 35.6
comp=Z,40nm,1.1s
**TPNV Topopah Spring 60.31 298** P **P 23 13 33.6 -0.3**
baz=75,SNR=17
**C36M Paulatuk 60.38 336** P **P 23 13 32.2 -1.3**
C36M IAmb IAmb 23 14 12.2
comp=Z,44nm,1.7s
**C36M Paulatuk 60.38 336** P **P 23 13 33.3 -0.1**
baz=88
**GMRC Granite Mounta 60.41 296** P **P 23 13 34.8 +0.3**
baz=74,SNR=15
**G08A Pilot Rock 60.42 308** IAmb IAmb 23 13 41.2
comp=Z,37nm,1.3s
**TUQ Turquoise Moun 60.45 297** P **P 23 13 34.5 -0.2**
baz=75
**WRGLY Wrigley 60.49 329** P **P 23 13 33.9 -0.4**
baz=85,SNR=8.0
**PLTB Pedras Altas 60.51 190** *e*P **P 23 13 33.7 -1.1**
**PLTB Pedras Altas 60.51 190** P **P 23 13 34.3 -0.5**
PLTB IAmb IAmb 23 13 36.6
comp=Z,52nm,1.5s
**BC3 Big Chuckawall 60.56 295** P **P 23 13 35.2 -0.3**
baz=74
**Q09A Carvers 60.56 301** P **P 23 13 36.1 +0.6**
**HAWA Hanford 60.60 310** IAmb IAmb 23 13 38.0
comp=Z,47nm,0.9s
**A36M Sachs Harbour 60.69 339** IAmb IAmb 23 13 38.9
comp=Z,29nm,0.8s
**A36M Sachs Harbour 60.69 339** P **P 23 13 35.5 -0.1**
baz=88,SNR=23
**E07A Sunnyside 60.78 310** IAmb IAmb 23 13 39.3
comp=Z,46nm,0.9s
**WVOR Wild Horse Val 60.80 305** IAmb IAmb 23 13 44.6
comp=Z,41nm,1.4s
**BELC Belle Mtn. Jos 60.90 295** P **P 23 13 37.4 -0.5**
baz=74
**BORA Eskisehir 60.91 58** IAmb IAmb 23 13 44.8
comp=Z,29nm,1.2s
**FURC Furnace Creek, 60.91 298** P **P 23 13 38.3 +0.7**
baz=75

**HEC Hector,Ludlow 60.94 296** P **P 23 13 38.5 +0.5**
baz=74
**F07A Phinny Hill Vi 60.97 309** IAmb IAmb 23 13 40.5
comp=Z,42nm,1.0s
**SWSC Sam W. Stewart 61.03 294** P **P 23 13 38.8 +0.2**
baz=73
**QSM Queen of Sheba 61.05 297** IAmb IAmb 23 13 46.4
comp=Z,36nm,1.3s
**GO03 Copiap 61.14 207** P **P 23 13 38.6 -0.6**
**GRAC Grapevine Rang 61.17 299** IAmb IAmb 23 13 47.0
comp=Z,46nm,1.3s
**GRAC Grapevine Rang 61.17 299** P **P 23 13 39.8 +0.3**
baz=75
**GSC Goldstone, Bar 61.18 297** P **P 23 13 39.7 0.0**
baz=74,SNR=7.5
**AKAS Kas 61.19 62** IAmb IAmb 23 13 47.5
comp=Z,68nm,1.3s
**LTY Liberty 61.19 311** IAmb IAmb 23 13 45.7
comp=Z,40nm,1.2s
**KVN Kaiserville 61.20 301** IAmb IAmb 23 13 47.2
comp=Z,37nm,1.2s
**C06D Leavenworth 61.21 312** P **P 23 13 38.4 -1.2**
baz=79,SNR=6.3
**YUH Yuha Desert 61.22 294** IAmb IAmb 23 13 43.2
comp=Z,28nm,1.1s
**PMD Palm Desert 61.30 295** IAmb IAmb 23 13 47.8
comp=Z,35nm,1.4s
**LCH Last Change Ra 61.32 299** IAmb IAmb 23 13 47.9
comp=Z,37nm,1.4s
**RMX La Rumorosa 61.36 294** P **P 23 13 41.9 +0.9**
**IKP In-Ko-Pah, Jac 61.37 294** P **P 23 13 41.1 +0.2**
baz=73,SNR=10
**TPFO Pinon Flats 61.37 295** P **P 23 13 41.6 +0.6**
baz=73
**PFO Pinyon Flats O 61.38 295** LR LR 23 39 41.3
comp=Z,792nm,18.9s,baz=80,slow=36
**PFO Pinyon Flats O 61.38 295** P **P 23 13 42.0 +0.9**
PFO pmax pmax
comp=Z,31nm,1.5s
**PFO Pinyon Flats O 61.38 295** P **P 23 13 42.0 +0.9**
**PFO Pinyon Flats O 61.38 295** P **P 23 13 41.7 +0.7**
baz=73
**NV11 Mina Array Sit 61.40 301** P **P 23 13 41.1 -0.1**
NV11 IAmb IAmb 23 13 47.7
comp=Z,35nm,1.4s
**B06A Marblemount 61.48 312** P **P 23 13 40.8 -0.5**
**MPMC Manual Prospec 61.51 298** P **P 23 13 42.3 +0.3**
baz=73,SNR=12
**NVAR Mina Array Bea 61.51 301** P **P 23 13 41.2 -0.8**
comp=Z,11nm,0.9s,baz=75,slow=6.2,SNR=39
NVAR PP **PP 23 15 51.9 -5.4**
comp=Z,0.8nm,0.9s,baz=80,slow=11,SNR=1.3
NVAR LR LR 23 39 54.5
comp=Z,2μm,18.6s,baz=76,slow=36
**MONP2 Monument Peak 61.55 294** P **P 23 13 42.9 +0.6**
baz=73,SNR=7.8
**RYN Ryan 61.63 301** IAmb IAmb 23 13 49.3
comp=Z,32nm,1.3s
**LHV Little Huntoon 61.71 300** IAmb IAmb 23 13 50.1
comp=Z,29nm,1.2s
**BAR Barrett 61.81 294** IAmb IAmb 23 13 51.2
comp=Z,32nm,1.4s
**OBN Obninsk 61.86 40** ⇑P **P 23 13 44.3 +0.6**
**OBN Obninsk 61.86 40** LR LR 23 38 32.2
comp=Z,80nm,18.5s,baz=284,slow=34
**OBN Obninsk 61.86 40** *de*P **P 23 13 43.6 -0.1**
OBN *e* 23 14 22.0
OBN *e* 23 16 01.9
OBN *e*S **S 23 22 02.7 -3.9**
OBN pmax pmax
comp=Z,131nm,1.0s
**OBN Obninsk 61.86 40** P **P 23 13 43.8 +0.1**
**CWC Cottonwood Cre 61.87 298** P **P 23 13 44.8 +0.4**
baz=74
**CBX Cerro Bola 61.92 293** P **P 23 13 45.1 +0.4**
**B05A Bryant 61.93 312** P **P 23 13 41.8 -2.6**
baz=78,SNR=8.0
**F05D White Salmon 62.02 309** IAmb IAmb 23 13 47.7
comp=Z,29nm,0.9s
**F05D White Salmon 62.02 309** P **P 23 13 44.7 -0.3**
baz=77,SNR=5.7
**G05D Wamic, OR 62.06 309** P **P 23 13 45.6 +0.3**
baz=77,SNR=12
**109C Camp Elliot, M 62.10 294** P **P 23 13 46.7 +0.9**
109C IAmb IAmb 23 13 53.1
comp=Z,52nm,1.4s
**CCAC Calif City Air 62.17 297** P **P 23 13 47.6 +1.3**
CCAC IAmb IAmb 23 13 48.4
comp=Z,29nm,1.2s
**EDW2 Edwards Air Fo 62.23 297** P **P 23 13 47.0 +0.3**
baz=73,SNR=10
**HOOD Mount Hood Mea 62.27 309** IAmb IAmb 23 13 54.5
comp=Z,43nm,1.0s
**I05D Terrebonne, OR 62.28 308** P **P 23 13 47.8 +0.9**
baz=76
**VCNR Virginia City 62.31 302** IAmb IAmb 23 13 49.6
comp=Z,32nm,1.0s
**SIM Simferopol' 62.36 52** *e*P **P 23 13 47.0 -0.3**
SIM S **S 23 22 11.7 -1.6**
SIM pmax pmax
comp=Z,61nm,1.0s
**ISA Isabella, Lake 62.39 298** IAmb IAmb 23 13 55.7
comp=Z,38nm,1.3s
**ISA Isabella, Lake 62.39 298** P **P 23 13 48.6 +0.9**
baz=74,SNR=12
**J05D Fort Rock, OR 62.46 306** P **P 23 13 48.2 0.0**
baz=76,SNR=21
**KLMR Klimovskoe 62.46 33** *e*P **P 23 13 44.2 -3.5**
KLMR pmax pmax
comp=Z,60nm,1.3s
**KLMR Klimovskoe 62.46 33** *e*P **P 23 13 44.2 -3.5**
KLMR AMP 23 13 48.5
comp=Z,60nm,1.3s
KLMR *e*PP **PP 23 15 59.6 -5.2**
**LCO Las Campanas 62.59 207** P **P 23 13 49.3 +0.1**
LCO pmax pmax
comp=Z,26nm,1.1s
**LCO Las Campanas 62.59 207** P **P 23 13 49.3 +0.1**
LCO IAmb IAmb 23 14 05.6
comp=Z,26nm,1.1s
**E04D Cinebar 62.61 310** P **P 23 13 47.8 -1.1**
baz=77
**BR231 Keskin MP Arra 62.66 57** P **P 23 13 49.8 +0.3**
BR231 IAmb IAmb 23 13 57.8
comp=Z,36nm,1.0s
**ANTO Ankara 62.66 57** P **P 23 13 50.4 +0.9**
ANTO pmax pmax
comp=Z,37nm,1.0s
**ANTO Ankara 62.66 57** P **P 23 13 50.4 +0.9**
ANTO IAmb IAmb 23 13 51.3
comp=Z,37nm,0.9s
**PGC Sidney 62.73 313** P **P 23 13 50.0 +0.3**
PGC IAmb IAmb 23 13 51.5
comp=Z,23nm,0.9s
**H04A Detroit Lake 62.79 308** IAmb IAmb 23 13 57.5
comp=Z,51nm,1.2s
**B04A Port Angeles 62.90 312** P **P 23 13 50.4 -0.4**
**CIS Catalina Islan 63.00 295** P **P 23 13 51.6 -0.2**
baz=72
**ILGA Ilgaz 63.03 56** IAmb IAmb 23 14 07.4
comp=Z,41nm,1.1s
**J04D Umpqua Nationa 63.09 307** IAmb IAmb 23 13 55.0
comp=Z,39nm,0.9s
**J04D Umpqua Nationa 63.09 307** P **P 23 13 52.2 -0.3**
baz=75
**CLRS Cowichan Lake 63.13 313** IAmb IAmb 23 13 54.2
comp=Z,25nm,1.0s
**I04A Tendick Farm, 63.16 307** P **P 23 13 51.6 -1.1**
baz=76,SNR=8.3
**CMB Columbia Colle 63.20 301** IAmb IAmb 23 14 00.5
comp=Z,55nm,1.6s
**H04D Lebanon 63.21 308** IAmb IAmb 23 13 54.9
comp=Z,28nm,0.9s
**H04D Lebanon 63.21 308** P **P 23 13 51.9 -1.1**
baz=76,SNR=6.1
**SCI2 San Clemente I 63.23 295** P **P 23 13 53.6 +0.3**
baz=72
**M04C Macdoel 63.27 305** IAmb IAmb 23 14 04.6
comp=Z,38nm,1.1s
**M04C Macdoel 63.27 305** P **P 23 13 53.5 -0.1**
baz=75,SNR=9.2
**BR131 Keskin Array S 63.33 57** P **P 23 13 54.6 +0.5**
BR131 pmax pmax
comp=Z,46nm,1.0s
**BR131 Keskin Array S 63.33 57** P **P 23 13 54.6 +0.5**
SNR=21
**BR131 Keskin Array S 63.33 57** P **P 23 13 54.6 +0.5**

BR131 IAmb IAmb 23 13 55.5
comp=Z,46nm,1.0s
**BRTR Keskin Array B 63.33 57** P **P 23 13 53.4 -0.7**
comp=Z,21nm,0.9s,baz=274,slow=4.7,SNR=92
BRTR LR LR 23 39 20.7
comp=Z,374nm,19.7s,baz=298,slow=34
**BRTR Keskin Array B 63.33 57** *i*P **P 23 13 54.2 +0.2**
BRTR pmax pmax
comp=Z,21nm,0.9s
**BCW Bitter Crk WRg 63.33 297** P **P 23 13 55.7 +1.6**
BCW IAmb IAmb 23 14 01.3
comp=Z,74nm,1.6s
**G03D McMinnville, O 63.41 309** P **P 23 13 53.6 -0.7**
baz=76
**WTLY Watson Lake, Y 63.44 326** P **P 23 13 54.0 -0.3**
baz=79
**BUCK Buck Mountain 63.47 308** P **P 23 13 56.7 +1.9**
**L04D Klamath Falls 63.49 306** P **P 23 13 54.4 -0.7**
baz=75,SNR=11
**COR Corvallis 63.59 308** P **P 23 13 56.1 +0.6**
COR pmax pmax
comp=Z,67nm,1.0s
**COR Corvallis 63.59 308** P **P 23 13 56.1 +0.6**
**CBB Campbell River 63.64 315** IAmb IAmb 23 13 56.7
comp=Z,65nm,1.4s
**PKM Mcpherson Peak 63.66 297** P **P 23 13 56.7 +0.3**
baz=72
**LPSR Galich'ya Gora 63.73 42** *e*P **P 23 13 56.0 -0.2**
LPSR pmax pmax
comp=Z,180nm,1.0s
**I03D Drain, OR 63.85 307** P **P 23 13 57.2 0.0**
baz=75
**INK Inuvik 63.91 336** P **P 23 13 56.5 -0.6**
comp=Z,32nm,1.0s,baz=68,slow=8.2,SNR=52
INK LR LR 23 40 53.9
comp=Z,799nm,19.1s,baz=68,slow=35
**INK Inuvik 63.91 336** IAmb IAmb 23 13 59.3
comp=Z,44nm,1.1s
**INK Inuvik 63.91 336** P **P 23 13 56.4 -0.8**
baz=79,SNR=36
**YBH Yreka Blue Hor 63.91 305** LR LR 23 40 08.6
comp=Z,992nm,21.4s,baz=80,slow=34
**DBO Dodson Butte 63.92 307** IAmb IAmb 23 13 59.7
comp=Z,30nm,1.1s
**SNCC San Nicolas Is 63.93 295** P **P 23 14 00.5 +2.5**
**LEF Lefka 64.07 62** ⇑P **P 23 13 58.9 +0.1**
**I02E Swisshome, OR 64.09 308** P **P 23 13 59.8 +1.1**
**WDC Whiskeytown Da 64.10 304** IAmb IAmb 23 14 27.2
comp=Z,52nm,1.9s
**VORR Voronezh 64.11 43** *e*P **P 23 13 59.0 +0.3**
VORR pmax pmax
comp=Z,130nm,1.0s
**M02C Callahan 64.11 305** P **P 23 13 58.2 -0.8**
baz=74
**MMPY Sheldon Lake, 64.11 329** P **P 23 13 58.6 -0.1**
baz=78,SNR=15
**ZON Zonda 64.11 204** IAmb IAmb 23 14 06.6
comp=Z,61nm,1.3s
**N02D Trinity Center 64.11 304** P **P 23 13 57.5 -1.6**
baz=74,SNR=9.3
**VSR Storozhevoye 64.19 44** *e*P **P 23 13 58.8 -0.5**
VSR pmax pmax
comp=Z,90nm,1.1s
**CO03 El Pedregal 64.21 206** IAmb IAmb 23 15 08.9
comp=Z,19nm,0.9s
**K02D Willamette Mer 64.33 306** P **P 23 13 59.7 -0.8**
baz=74,SNR=7.4
**SAO San Andreas Ge 64.37 300** P **P 23 14 01.6 +0.8**
SAO pmax pmax
comp=Z,32nm,1.6s
**SAO San Andreas Ge 64.37 300** P **P 23 14 01.6 +0.8**
SAO IAmb IAmb 23 14 08.5
comp=Z,32nm,1.6s
**J01E Myrtle Point 64.40 307** P **P 23 14 00.0 -0.8**
baz=74
**DLBC Dease Lake 64.41 324** LR LR 23 41 19.6
comp=Z,839nm,20.0s,baz=80,slow=35
**DLBC Dease Lake 64.41 324** IAmb IAmb 23 14 17.4
comp=Z,33nm,1.8s
**CO06 Fray Jorge 64.43 207** P **P 23 14 01.2 +0.1**
**L02E Cave Junction 64.44 306** IAmb IAmb 23 14 40.4
comp=Z,32nm,1.4s
**L02E Cave Junction 64.44 306** P **P 23 14 00.0 -1.1**
baz=74
**CSS Mathiatis 64.46 63** IAmb IAmb 23 14 09.7
comp=Z,45nm,1.3s
**GDXM Geysers 64.79 302** P **P 23 14 04.5 +0.8**
GDXM IAmb IAmb 23 14 07.5
comp=Z,30nm,1.2s
**BBB Bella Bella 64.81 317** LR LR 23 40 45.2
comp=Z,982nm,20.5s,baz=74,slow=35
**KHMM Horse Mountain 64.89 304** IAmb IAmb 23 14 11.9
comp=Z,52nm,1.6s
**KCPM Cahto Peak 65.12 303** IAmb IAmb 23 14 08.8
comp=Z,42nm,1.1s
**FARO Faro, Yukon 65.14 329** P **P 23 14 05.4 0.0**
baz=76,SNR=25
**PRGR Permogore 65.20 32** *e*P **P 23 14 04.4 -1.3**
PRGR *e**SP **pP 23 14 09.5 -0.3**
PRGR *e* 23 14 36.3
PRGR pmax pmax
comp=Z,45nm,1.5s
**TOKA Tokat 65.25 56** IAmb IAmb 23 14 09.2
comp=Z,28nm,1.0s
**P33M Teslin, Yukon 65.38 327** IAmb IAmb 23 14 13.4
comp=Z,37nm,1.1s
**P33M Teslin, Yukon 65.38 327** P **P 23 14 06.6 -0.5**
baz=76,SNR=9.4
**M31M Drury Creek, Y 65.62 329** IAmb IAmb 23 14 11.5
comp=Z,33nm,0.9s
**M31M Drury Creek, Y 65.62 329** P **P 23 14 08.5 0.0**
baz=75,SNR=20
**VRH Novokhopyorsk 65.75 43** *e*P **P 23 14 09.7 +0.3**
VRH pmax pmax
comp=Z,130nm,1.0s
**MAYO Mayo, Yukon 65.93 331** P **P 23 14 10.4 0.0**
baz=75
**WRAK Wrangell Islan 66.12 323** P **P 23 14 11.4 -0.4**
baz=74
**WHY Whitehorse 66.26 327** IAmb IAmb 23 14 16.4
comp=Z,44nm,1.6s
**WHY Whitehorse 66.26 327** P **P 23 14 11.9 -0.9**
baz=74,SNR=5.2
**PEL Peldehue 66.28 205** IAmb IAmb 23 14 25.2
comp=Z,42nm,1.1s
**I29M Ogilvie Camp, 66.45 333** IAmb IAmb 23 14 15.9
comp=Z,40nm,1.1s
**I29M Ogilvie Camp, 66.45 333** P **P 23 14 13.3 -0.5**
baz=73,SNR=25
**N31M Braeburn, Yuko 66.45 328** P **P 23 14 13.2 -0.6**
baz=74,SNR=26
**MT05 Renca 66.52 204** P **P 23 14 15.0 +0.5**
**SOC Sochi 66.60 52** *e*P **P 23 14 11.6 -3.5**
SOC *e*PPP PPP 23 18 20.2
SOC *e*S **S 23 23 01.3 -4.4**
SOC pmax pmax
comp=Z,63nm,0.9s
SOC MLR MLR
comp=Z,130nm,12.0s
**J29M Klondike Camp 66.67 332** P **P 23 14 15.1 -0.2**
baz=73
**MMAI Mount Meron Ar 66.72 64** LR LR 23 41 38.2
comp=Z,162nm,21.9s,baz=96,slow=34
**LMEL Las Melosas 66.74 204** IAmb IAmb 23 14 23.1
comp=Z,38nm,1.1s
**GAZ Gaziantep 66.76 59** IAmb IAmb 23 14 17.9
comp=Z,32nm,1.0s
**CRAG Craig 66.80 322** P **P 23 14 16.1 0.0**
baz=74
**SKAG Skagway 66.81 326** IAmb IAmb 23 14 22.7
comp=Z,59nm,1.4s
**SKAG Skagway 66.81 326** P **P 23 14 15.7 -0.3**
baz=73
**DAWY Dawson 67.28 332** IAmb IAmb 23 14 20.1
comp=Z,37nm,1.1s
**DAWY Dawson 67.28 332** P **P 23 14 18.6 -0.5**
baz=72,SNR=24
**HYT Haines Junctio 67.44 328** IAmb IAmb 23 14 23.9
comp=Z,32nm,1.1s
**HYT Haines Junctio 67.44 328** P **P 23 14 19.5 -0.8**
baz=72
**EIL Elat 67.50 67** LR LR 23 44 32.6
comp=Z,311nm,19.4s,baz=280,slow=37
**EGAK Eagle 67.78 333** IAmb IAmb 23 14 24.3
comp=Z,22nm,1.0s
**EGAK Eagle 67.78 333** P **P 23 14 21.2 -1.0**
baz=71,SNR=14

**YUK6 Outpost Mounta 67.81 328** P **P** **23 14 22.6 -0.1**
baz=72,SNR=9.7
**YUK4 Talbot Arm 67.81 329** P **P** **23 14 21.8 -0.9**
baz=72
**KIRV Kirov 67.87 34** LR LR 23 40 28.4
comp=Z,271nm,20.9s,baz=281,slow=33
**KIRV Kirov 67.87 34***ce*P **P** **23 14 22.4 -0.4**
**GO05 Huala 68.40 205** IAmb IAmb 23 14 33.2
comp=Z,47nm,1.2s
**GOF Gofitskoye 68.41 50**⇓*i*P **P** **23 14 27.2 +0.7**
GOF pmax pmax
comp=Z,88nm,1.0s
**BVCY Beaver Creek 68.45 330** P **P** **23 14 25.9 -0.5**
baz=70,SNR=14
**YUK3 Moose Creek 68.49 330** P **P** **23 14 26.4 -0.5**
baz=70,SNR=12
**KIV Kislovodsk 68.53 51** ⇓P **P** **23 14 28.5 +1.1**
**KIV Kislovodsk 68.53 51** *e*P **P** **23 14 28.3 +1.0**
KIV pmax pmax
comp=Z,50nm,1.1s
**KIV Kislovodsk 68.53 51** P **P** **23 14 28.4 +1.0**
**KIV Kislovodsk 68.53 51** P **P** **23 14 28.4 +1.0**
**KIV Kislovodsk 68.53 51** *i* P **P** **23 14 28.0 +0.6**
SNR=24
**SHA1 Shidzhatmaz 68.58 51***d i*P **P** **23 14 28.9 +1.0**
**L27K Beaver Creek, 68.64 331** IAmb IAmb 23 14 30.2
comp=Z,30nm,1.0s
**L27K Beaver Creek, 68.64 331** P **P** **23 14 27.1 -0.5**
baz=70,SNR=27
**KBZ Khabaz 68.74 51** P **P** **23 14 29.2 +0.6**
comp=Z,35nm,0.9s,baz=294,slow=4.0,SNR=60
KBZ LR LR 23 42 33.3
comp=Z,198nm,20.3s,baz=307,slow=34
**KBZ Khabaz 68.74 51***ce*P **P** **23 14 29.7 +1.1**
KBZ pmax pmax
comp=Z,45nm,1.0s
**NEY Neytrino 68.78 51***d i*P **P** **23 14 29.9 +0.8**
NEY pmax pmax
comp=Z,7.0nm,1.2s
**J26L Joseph Creek 68.84 333** P **P** **23 14 28.7 -0.3**
baz=69
**BELG Belogornoye 68.89 41** LR LR 23 43 11.6
comp=Z,176nm,18.1s,baz=323,slow=35
**BELG Belogornoye 68.89 41***d i*P **P** **23 14 29.2 -0.1**
BELG pmax pmax
comp=Z,32nm,1.0s
**M27K Edge Creek, AK 68.91 330** IAmb IAmb 23 14 32.0
comp=Z,38nm,1.1s
**M27K Edge Creek, AK 68.91 330** P **P** **23 14 29.4 -0.1**
baz=69
**PINM Pinnacle 68.97 328** P **P** **23 14 29.4 -0.4**
baz=70
**SCRK Sand Creek 69.21 332** P **P** **23 14 30.9 -0.4**
baz=68,SNR=7.7
**PRP Porcupine Dome 69.24 334** IAmb IAmb 23 14 38.8
comp=Z,33nm,1.0s
**PRP Porcupine Dome 69.24 334** P **P** **23 14 31.6 +0.1**
baz=67,SNR=12
**TABL Table Mountain 69.26 328** IAmb IAmb 23 14 43.6
comp=Z,47nm,1.0s
**NCK Nalchik 69.30 51***d i*P **P** **23 14 33.3 +1.2**
NCK pmax pmax
comp=Z,82nm,1.0s
**L26K Log Cabin Wild 69.30 331** IAmb IAmb 23 14 34.2
comp=Z,32nm,1.4s
**L26K Log Cabin Wild 69.30 331** P **P** **23 14 31.6 -0.2**
baz=68,SNR=5.6
**M26K Nabesna, AK 69.38 331** IAmb IAmb 23 14 35.4
comp=Z,51nm,1.6s
**M26K Nabesna, AK 69.38 331** P **P** **23 14 31.8 -0.5**
baz=68
**MARD Mardin 69.40 58** P **P** **23 14 33.6 +0.6**
MARD IAmb IAmb 23 14 41.4
comp=Z,54nm,1.1s
**TOLK Toolik Lake Re 69.42 338** IAmb IAmb 23 14 34.3
comp=Z,40nm,1.2s
**TOLK Toolik Lake Re 69.42 338** P **P** **23 14 32.8 +0.4**
baz=65,SNR=19
**ONI Oni 69.51 52** P **P** **23 14 35.2 +1.7**
ONI pmax pmax
comp=Z,49nm,1.1s
**ONI Oni 69.51 52** P **P** **23 14 35.1 +1.7**
ONI IAmb IAmb 23 14 36.5
comp=Z,49nm,1.1s
**J25K Salcha River, 69.53 333** P **P** **23 14 33.0 -0.2**
baz=67,SNR=10
**YAH Yahtse 69.57 328** IAmb IAmb 23 14 45.6
comp=Z,44nm,1.0s
**RIDG Independent Ri 69.65 332** IAmb IAmb 23 14 36.2
comp=Z,33nm,1.1s
**RIDG Independent Ri 69.65 332** P **P** **23 14 34.4 +0.5**
baz=67,SNR=7.1
**MESA MESA 69.73 328** P **P** **23 14 34.7 0.0**
baz=68
**ZEI Tsey 69.75 52** *e*P **P** **23 14 34.7 -0.4**
ZEI pmax pmax
comp=Z,35nm,1.0s
**GURO Guroymak-BITLI 69.89 56** IAmb IAmb 23 14 44.8
comp=Z,36nm,1.2s
**AKH Akhalkalaki 69.94 53** ⇓P **P** **23 14 37.8 +1.5**
**H24K Noodor Dome 70.00 335** IAmb IAmb 23 14 44.6
comp=Z,54nm,1.4s
**H24K Noodor Dome 70.00 335** P **P** **23 14 36.1 0.0**
baz=65
**VRDI Verde Repeater 70.02 330** IAmb IAmb 23 14 38.7
comp=Z,40nm,1.0s
**WAX Waxell Ridge 70.05 329** IAmb IAmb 23 14 42.2
comp=Z,57nm,1.1s
**ILAR Eielson Array 70.06 334** P **P** **23 14 36.2 -0.2**
comp=Z,28nm,0.9s,baz=67,slow=4.8,SNR=87
ILAR LR LR 23 46 11.5
comp=Z,677nm,18.6s,baz=80,slow=37
**GLB Gilahina Butte 70.10 330** IAmb IAmb 23 14 43.4
comp=Z,66nm,1.2s
**POKR Poker Plat Res 70.13 334** P **P** **23 14 37.0 +0.2**
baz=66
**PAX Paxson 70.22 332** P **P** **23 14 36.3 -1.2**
baz=66,SNR=9.3
**HDA Harding Lake 70.23 333** IAmb IAmb 23 14 40.0
comp=Z,28nm,1.2s
**HDA Harding Lake 70.23 333** P **P** **23 14 37.5 +0.1**
baz=66
**COLD Coldfoot 70.25 337** IAmb IAmb 23 14 41.2
comp=Z,47nm,1.2s
**COLD Coldfoot 70.25 337** P **P** **23 14 38.4 +0.9**
baz=64,SNR=30
**HARP HAARP 70.31 331** P **P** **23 14 37.9 -0.1**
baz=66
**N25K Chitina, Valde 70.38 330** IAmb IAmb 23 14 39.4
comp=Z,34nm,1.2s
**N25K Chitina, Valde 70.38 330** P **P** **23 14 38.1 -0.4**
baz=67,SNR=5.1
**COLA College 70.39 334** P **P** **23 14 38.9 +0.5**
COLA pmax pmax
comp=Z,87nm,0.3s
**COLA College 70.39 334** P **P** **23 14 38.9 +0.5**
**COLA College 70.39 334** P **P** **23 14 38.0 -0.4**
baz=65
**TCOL CIGO, UAF Yank 70.40 334** P **P** **23 14 38.1 -0.3**
baz=65
**MDM Murphy Dome 70.50 334** IAmb IAmb 23 14 40.3
comp=Z,39nm,1.2s
**BMRM Bremner River 70.64 329** IAmb IAmb 23 14 41.3
comp=Z,55nm,1.2s
**BMRM Bremner River 70.64 329** P **P** **23 14 39.3 -0.7**
baz=66
**WRH Wood River Hil 70.66 334** IAmb IAmb 23 14 42.5
comp=Z,43nm,1.0s
**GEVA Gevas 70.73 56** P **P** **23 14 41.4 +0.2**
GEVA IAmb IAmb 23 15 03.8
comp=Z,42nm,1.2s
**I23K Minto, Yukon-K 70.86 334** IAmb IAmb 23 14 44.4
comp=Z,44nm,1.1s
**I23K Minto, Yukon-K 70.86 334** P **P** **23 14 41.4 +0.2**
baz=64,SNR=30
**M24K Tolsona, Glenn 70.87 331** P **P** **23 14 41.4 0.0**
baz=66
**GROC Groznyy 70.91 51** *e*P **P** **23 14 38.8 -3.1**
GROC *e* 23 14 59.7
GROC *e* 23 17 14.3
GROC pmax pmax
comp=Z,41nm,1.2s
**KAIM Kayak Island 70.97 328** P **P** **23 14 41.4 -0.6**
baz=66
**NEA2 Nenana 70.99 334** IAmb IAmb 23 14 43.2
comp=Z,56nm,1.4s
**NEA2 Nenana 70.99 334** P **P** **23 14 41.8 -0.3**
baz=64,SNR=9.8
**KLU Klutina 71.01 330** P **P** **23 14 41.8 -0.5**
baz=66,SNR=11
**GNI Garni 71.28 54** LR LR 23 46 16.7
comp=Z,102nm,18.8s,baz=301,slow=36
**GNI Garni 71.28 54***ce*P **P** **23 14 45.3 +0.8**
GNI pmax pmax
comp=Z,73nm,1.0s
**GNI Garni 71.28 54** P **P** **23 14 45.5 +1.1**
GNI P **P** **23 14 45.5 +1.1**
**GNI Garni 71.28 54** P **P** **23 14 45.6 +1.1**
**MCK McKinley 71.31 333** IAmb IAmb 23 14 46.4
comp=Z,44nm,1.0s
**MCK McKinley 71.31 333** P **P** **23 14 43.3 -0.8**
baz=64,SNR=13
**RND Reindeer 71.42 333** IAmb IAmb 23 14 51.3
comp=Z,65nm,1.7s
**MLY Manley 71.43 335** IAmb IAmb 23 14 47.7
comp=Z,36nm,1.3s
**MLY Manley 71.43 335** P **P** **23 14 45.0 +0.2**
baz=63
**H09N1 TRISTAN DA CUN 71.46 154** T T 00 32 44.1
SNR=10
**H09W1 TRISTAN DA CUN 71.48 154** T T 00 32 47.8
SNR=17
**I21K Tanana 71.83 335** IAmb IAmb 23 14 50.2
comp=Z,58nm,1.1s
**I21K Tanana 71.83 335** P **P** **23 14 47.6 +0.5**
**LC01 Cunco 71.86 203** IAmb IAmb 23 14 54.4
comp=Z,40nm,1.2s
**H21K Melozitna Rive 71.90 336** IAmb IAmb 23 14 50.9
comp=Z,46nm,1.1s
**H21K Melozitna Rive 71.90 336** P **P** **23 14 48.2 +0.7**
baz=61
**SML Sawmill 71.92 331** P **P** **23 14 46.9 -0.8**
baz=64
**BPAW Bear Paw Mtn. 71.96 334** IAmb IAmb 23 14 50.1
comp=Z,37nm,1.0s
**BPAW Bear Paw Mtn. 71.96 334** P **P** **23 14 47.0 -0.9**
baz=62,SNR=12
**TRF Thorofare Moun 71.98 333** P **P** **23 14 47.6 -0.6**
baz=63
**Q23K Middleton Isla 72.07 328** P **P** **23 14 48.2 -0.4**
baz=65
**KNK Knik Glacier 72.14 331** IAmb IAmb 23 14 51.6
comp=Z,37nm,1.0s
**KNK Knik Glacier 72.14 331** P **P** **23 14 48.5 -0.6**
baz=64,SNR=5.9
**GHO Glory Hole Cre 72.18 331** IAmb IAmb 23 14 53.4
comp=Z,32nm,1.1s
**PWL Port Wells 72.34 330** P **P** **23 14 49.7 -0.6**
baz=64
**PMR Palmer 72.35 331** IAmb IAmb 23 14 52.6
comp=Z,36nm,1.0s
**PMR Palmer 72.35 331** P **P** **23 14 50.0 -0.3**
baz=63,SNR=7.2
**CUT Chulitna 72.46 332** P **P** **23 14 50.6 -0.3**
baz=62,SNR=5.5
**CHUM Lake Minchumin 72.58 334** P **P** **23 14 50.8 -0.7**
baz=61,SNR=25
**M22K Willow 72.70 331** P **P** **23 14 52.2 -0.2**
baz=62,SNR=7.4
**CAST Castle Rocks 72.71 333** IAmb IAmb 23 14 52.8
comp=Z,46nm,1.4s
**CAST Castle Rocks 72.71 333** P **P** **23 14 51.7 -0.7**
baz=61,SNR=11
**RC01 Rabbit Creek A 72.84 331** IAmb IAmb 23 14 60.0
comp=Z,45nm,1.1s
**RC01 Rabbit Creek A 72.84 331** P **P** **23 14 52.9 -0.3**
baz=62
**PPLA Purkeypile 73.00 333** P **P** **23 14 54.0 -0.4**
baz=61,SNR=7.7
**PLCA Paso Flores 73.09 201** P **P** **23 14 54.0 -0.9**
comp=Z,15nm,0.9s,baz=20,slow=7.8,SNR=19
PLCA LR LR 23 47 55.0
comp=Z,291nm,20.5s,baz=34,slow=37
**PLCA Paso Flores 73.09 201** *e*P **P** **23 14 54.4 -0.5**
**J20K Nowinta River 73.13 335** IAmb IAmb 23 15 02.5
comp=Z,44nm,1.3s
**J20K Nowinta River 73.13 335** P **P** **23 14 55.4 +0.5**
baz=60
**ARU Arti 73.25 35** P **P** **23 14 55.7 0.0**
comp=Z,11nm,1.0s,baz=288,slow=4.6,SNR=33
ARU LR LR 23 46 08.6
comp=Z,374nm,18.0s,baz=280,slow=35
**ARU Arti 73.25 35***d i*P **P** **23 14 55.8 +0.1**
ARU S **S** **23 24 25.5 +2.2**
ARU SS **SS** **23 28 59.6 -4.6**
ARU pmax pmax
comp=Z,72nm,1.2s
**ARU Arti 73.25 35** P **P** **23 14 55.7 0.0**
**K20K Telida 73.52 334** IAmb IAmb 23 14 57.8
comp=Z,39nm,1.2s
**K20K Telida 73.52 334** P **P** **23 14 56.9 -0.3**
baz=60
**GCSA Galena City Sc 73.84 336** P **P** **23 14 58.5 -0.5**
baz=58
**LL04 Puerto Octay 73.85 202** IAmb IAmb 23 15 05.4
comp=Z,34nm,1.0s
**L20K Farewell, AK 73.89 333** P **P** **23 14 59.2 -0.3**
baz=59
**BRSE Bradley Lake S 73.92 330** P **P** **23 14 59.7 +0.1**
baz=61
**RDOG Red Dog Mine 73.96 340** IAmb IAmb 23 15 01.5
comp=Z,62nm,1.0s
**RDOG Red Dog Mine 73.96 340** P **P** **23 14 60.0 +0.3**
baz=53,SNR=25
**SVE Sverdlovsk 74.10 34***ce*P **P** **23 15 01.2 +0.5**
SVE pmax pmax
comp=Z,98nm,1.5s
**M19K Big River Lodg 74.39 333** IAmb IAmb 23 15 05.3
comp=Z,32nm,1.0s
**M19K Big River Lodg 74.39 333** P **P** **23 15 02.5 +0.2**
baz=59
**L19K White Mountain 74.43 333** P **P** **23 15 02.3 -0.3**
L19K IAmb IAmb 23 15 04.7
comp=Z,40nm,1.1s
**L19K White Mountain 74.43 333** P **P** **23 15 01.9 -0.7**
baz=59,SNR=9.7
**O20K Slope Mountain 74.58 331** P **P** **23 15 03.1 -0.4**
baz=60
**N19K Bonanza Creek 75.00 332** IAmb IAmb 23 15 53.3
comp=Z,122nm,1.9s
**N19K Bonanza Creek 75.00 332** P **P** **23 15 05.9 0.0**
baz=58
**O19K Port Alsworth 75.25 331** IAmb IAmb 23 15 13.8
comp=Z,35nm,1.1s
**O19K Port Alsworth 75.25 331** P **P** **23 15 07.3 0.0**
baz=58
**SVW2 Sparrevohn 75.30 332** IAmb IAmb 23 15 14.8
comp=Z,55nm,1.2s
**AKTO Akbinsk 75.64 40** P **P** **23 15 09.3 -0.4**
comp=Z,44nm,0.9s,baz=301,slow=5.4,SNR=76
AKTO LR LR 23 47 34.8
comp=Z,246nm,18.4s,baz=298,slow=35
**KDAK Kodiak Island 75.73 328** LR LR 23 49 49.5
comp=Z,2µm,18.7s,baz=72,slow=37
**TSUM Tsumeb 75.82 121** LR LR 23 44 20.2
comp=Z,405nm,18.4s,baz=331,slow=32
**TSUM Tsumeb 75.82 121** P **P** **23 15 12.4 +1.1**
**NRIK Noril'sk 76.41 16** P **P** **23 15 15.0 +1.2**
comp=Z,16nm,1.0s,baz=327,slow=3.7,SNR=19
**NRIK Noril'sk 76.41 16** P **P** **23 15 15.0 +1.2**
**MBAR Mbarara 76.67 98** LR LR 23 47 24.6
comp=Z,503nm,21.7s,baz=291,slow=34
**MBAR Mbarara 76.67 98** P **P** **23 15 17.0 +0.6**
MBAR pmax pmax
comp=Z,28nm,1.2s
**MBAR Mbarara 76.67 98** P **P** **23 15 17.6 +1.2**
**MBAR Mbarara 76.67 98** P **P** **23 15 17.0 +0.6**
**ANM Nome 76.91 338** P **P** **23 15 17.0 +0.3**
baz=50
**TNA Tin City 77.08 339** IAmb IAmb 23 15 21.1
comp=Z,32nm,1.2s
**TNA Tin City 77.08 339** P **P** **23 15 18.4 +0.8**
baz=48,SNR=11
**ABKAR Akbulak array 77.29 41** IAmb IAmb 23 15 27.6
comp=Z,46nm,1.2s
**RAYN Ar Rayn 78.59 69** P **P** **23 15 26.7 -0.2**
RAYN pmax pmax
comp=Z,20nm,1.3s
**RAYN Ar Rayn 78.59 69** P **P** **23 15 27.0 0.0**
**RAYN Ar Rayn 78.59 69** P **P** **23 15 26.7 -0.2**
**RAYN Ar Rayn 78.59 69** *i* P **P** **23 15 26.9 0.0**
SNR=15
**LODK Lodwar 78.82 92** P **P** **23 15 30.5 +2.2**
SNR=12
**LODK Lodwar 78.82 92** P **P** **23 15 29.2 +1.0**
**GAMB Gambell 79.49 339** P **P** **23 15 31.2 +0.2**
baz=45
**TIXI Tiksi 80.15 2** P **P** **23 15 34.1 -0.3**
comp=Z,15nm,0.9s,baz=26,slow=5.8,SNR=27
**TIXI Tiksi 80.15 2***ce*P **P** **23 15 34.9 +0.5**
TIXI pmax pmax
comp=Z,36nm,1.3s
**TIXI Tiksi 80.15 2** P **P** **23 15 34.7 +0.3**
**EFI East Falkland 80.66 189***d i*P **P** **23 15 37.5 +0.3**
EFI pmax pmax
comp=Z,27nm,1.1s
**SDPT Sand Point 80.71 329** P **P** **23 15 37.8 +0.1**
baz=53
**BRVK Borovoye 80.81 34** P **P** **23 15 39.1 +0.8**
BRVK pmax pmax
comp=Z,50nm,1.4s
**BRVK Borovoye 80.81 34** P **P** **23 15 39.1 +0.8**
BRVK IAmb IAmb 23 15 51.7
comp=Z,50nm,1.4s
**BVAR Borovoye Array 80.88 34** P **P** **23 15 39.1 +0.4**
comp=Z,9.8nm,1.0s,baz=349,slow=5.4,SNR=34
**BILL Bilibino 81.34 349**⇓*e*P **P** **23 15 41.0 +0.2**
BILL *e* 23 15 50.1
BILL *e* 23 18 44.9
BILL *e*S SKSac 23 26 38.3 +39
BILL *e*SS **SS** **23 31 13.5 +8.1**
BILL pmax pmax
comp=Z,43nm,2.5s
BILL MLR MLR
comp=Z,166nm,16.0s
**BILL Bilibino 81.34 349** P **P** **23 15 40.7 -0.1**
**GEYT Alibeck 81.63 51** P **P** **23 15 43.9 +0.9**
comp=Z,9.8nm,0.9s,baz=248,slow=28,SNR=14
GEYT LR LR 23 51 22.3
comp=Z,122nm,21.5s,baz=324,slow=35
**GEYT Alibeck 81.63 51** IAmb IAmb 23 15 55.5
comp=Z,60nm,1.6s
**GYA0B ALIBECK ARRAY 81.63 51** IAmb IAmb 23 15 56.3
comp=Z,113nm,1.9s
**ATD Arta Tunnel 81.67 81** LR LR 23 52 26.0
comp=Z,542nm,18.5s,baz=324,slow=36
**ATD Arta Tunnel 81.67 81** P **P** **23 15 44.7 +1.0**
**LSZ Lusaka 81.96 112** LR LR 23 50 15.0
comp=Z,375nm,20.0s,baz=315,slow=34
**LSZ Lusaka 81.96 112** P **P** **23 15 46.5 +1.4**
LSZ pmax pmax
comp=Z,16nm,1.0s
**LSZ Lusaka 81.96 112** P **P** **23 15 46.5 +1.4**
**KMBO Kilima Mbogo 82.63 95** P **P** **23 15 50.5 +1.6**
comp=Z,2.6nm,0.9s,baz=304,slow=3.8,SNR=9.8
KMBO LR LR 23 52 30.6
comp=Z,2µm,18.7s,baz=281,slow=36
**KMBO Kilima Mbogo 82.63 95** P **P** **23 15 50.1 +1.2**
**KMBO Kilima Mbogo 82.63 95** *i* P **P** **23 15 50.7 +1.9**
SNR=7.4
**RPN Rapa Nui 83.64 235** LR LR 23 47 51.9
comp=Z,139nm,21.1s,baz=72,slow=32
**BRZS Berezniki 83.84 36** *e*P **P** **23 15 54.1 -0.1**
BRZS pmax pmax
comp=Z,44nm,2.3s
**BRZS Berezniki 83.84 36** *e*P **P** **23 15 54.1 -0.1**
comp=Z,44nm,2.3s,baz=36
**KIBK Kibwezi 83.90 96** P **P** **23 15 58.0 +2.7**
SNR=11
**KIBK Kibwezi 83.90 96** P **P** **23 15 56.3 +1.0**
KIBK IAmb IAmb 23 16 05.8
comp=Z,58nm,1.4s
**UNV Unalaska Valle 84.37 330** P **P** **23 15 56.9 +0.1**
baz=48
**LBTB Lobatse 85.23 122** LR LR 23 48 58.3
comp=Z,396nm,18.2s,baz=316,slow=32
**MZR Muzera 85.35 67** P **P** **23 16 03.2 +0.8**
SNR=5.6
MZR P **P** **23 16 03.2 +0.8**
SNR=5.6
**MZR Muzera 85.35 67** *i* P **P** **23 16 02.9 +0.5**
SNR=13
**USHA Ushuaia 85.52 194** LR LR 23 53 29.0
comp=Z,243nm,20.2s,baz=32,slow=35
**SHME Shamm 85.99 63** P **P** **23 16 05.5 0.0**
SNR=5.6
**SHME Shamm 85.99 63** *i* P **P** **23 16 06.0 +0.5**
SNR=6.9
**ASUD Al Ashush, Dub 86.05 64** P **P** **23 16 06.3 +0.5**
**ASUD Al Ashush, Dub 86.05 64** *i* P **P** **23 16 06.1 +0.3**
SNR=8.3
**SUR Sutherland 86.08 130** LR LR 23 48 24.8
comp=Z,542nm,18.9s,baz=314,slow=31
**BANOM Banah 86.18 63** P **P** **23 16 06.9 +0.4**
SNR=8.0
**BANOM Banah 86.18 63** *i* P **P** **23 16 06.9 +0.4**
SNR=9.5
**FAQ Al Faqa, Dubai 86.20 64** P **P** **23 16 06.9 +0.4**
SNR=6.1
FAQ P **P** **23 16 06.9 +0.4**
SNR=6.1
**FAQ Al Faqa, Dubai 86.20 64** *i* P **P** **23 16 06.1 -0.4**
SNR=9.2
**KURK Kurchatov 86.30 33***ce*P **P** **23 16 07.1 +0.6**
KURK pmax pmax
comp=Z,24nm,1.0s
**KURK Kurchatov 86.30 33** P **P** **23 16 06.6 0.0**
**KURK Kurchatov 86.30 33** P **P** **23 16 06.6 0.0**
KURK IAmb IAmb 23 16 08.0
comp=Z,27nm,1.1s
**KURBB Kurchatov Arra 86.32 33** P **P** **23 16 06.7 +0.1**
comp=Z,12nm,0.9s,baz=311,slow=5.4,SNR=74
KURBB LR LR 23 51 51.0
comp=Z,168nm,20.9s,baz=277,slow=34
**MASF Masafi 86.34 63** P **P** **23 16 08.0 +0.7**
SNR=11
MASF P **P** **23 16 08.0 +0.7**
SNR=11
**MSFE Esma-Masafi 86.35 63** *i* P **P** **23 16 07.7 +0.4**
SNR=11
**BRLS Boroldav 86.42 42** *e*P **P** **23 16 07.2 -0.2**
**BRLS Boroldav 86.42 42** *e*P **P** **23 16 07.2 -0.2**
baz=43
**UOSS Minazif 86.58 64** P **P** **23 16 08.5 0.0**
**UOSS Minazif 86.58 64** *i* P **P** **23 16 08.2 -0.3**
SNR=8.9
**HATD Hatta, Dubai 86.59 64** P **P** **23 16 09.0 +0.5**
SNR=11
HATD P **P** **23 16 09.0 +0.5**
SNR=11
**HATD Hatta, Dubai 86.59 64** *i* P **P** **23 16 08.4 -0.1**
SNR=10
**ASHO Ashiyiah 86.60 64** P **P** **23 16 09.1 +0.5**
SNR=7.8
**ASHO Ashiyiah 86.60 64** *i* P **P** **23 16 08.4 -0.1**
SNR=15
**ALNE Al Ain 86.66 65** P **P** **23 16 10.1 +1.2**
SNR=11
**ALNE Al Ain 86.66 65** *i* P **P** **23 16 09.3 +0.4**
SNR=12
**ZALV Zalesovo Beam 86.79 28** P **P** **23 16 08.7 -0.2**
comp=Z,7.2nm,1.1s,baz=302,slow=6.8,SNR=22
ZALV PP **PP** **23 19 32.0 +1.4**
comp=Z,0.4nm,0.4s,baz=306,slow=9.8,SNR=2.2
ZALV LR LR 23 53 36.5
comp=Z,155nm,19.7s,baz=271,slow=35
**ZALV Zalesovo Beam 86.79 28** *i* P **P** **23 16 09.1 +0.2**
ZALV pmax pmax
comp=Z,7.0nm,1.1s
**BOSA Boshof 87.00 125** LR LR 23 50 05.9
comp=Z,385nm,18.9s,baz=324,slow=32
**IUG Iuzhnay 87.06 43** *e*P **P** **23 16 10.0 -0.6**
**IUG Iuzhnay 87.06 43** *e*P **P** **23 16 10.1 -0.6**
baz=43
**SEM Semipalatinsk 87.28 32** *e*P **P** **23 16 10.4 -1.2**
**SEM Semipalatinsk 87.28 32** *e*P **P** **23 16 10.4 -1.2**
baz=32
**BTLS Baital 87.62 39** *e*P **P** **23 16 13.2 +0.1**
BTLS pmax pmax
comp=Z,30nm,2.0s
**BTLS Baital 87.62 39** *e*P **P** **23 16 13.3 +0.1**
comp=Z,30nm,2.0s,baz=39
**ARQ Araqi 87.63 65** P **P** **23 16 14.1 +0.5**
SNR=5.2
ARQ P **P** **23 16 14.1 +0.5**
SNR=5.2
**ABTO Aybut 87.91 72** P **P** **23 16 15.7 +0.7**
SNR=11
ABTO P **P** **23 16 15.7 +0.7**
SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DOK** | **Doka** | **87.99** | **70** | P | **P** | **23 16 15.6** | **+0.2** |
| | SNR=5.5 | | | | | | |
| DOK | | | | P | **P** | **23 16 15.6** | **+0.2** |
| | SNR=5.5 | | | | | | |
| **WHFO** | **Wadi Hawf** | **88.03** | **71** | P | **P** | **23 16 15.8** | **+0.2** |
| | SNR=9.7 | | | | | | |
| WHFO | | | | P | **P** | **23 16 15.8** | **+0.2** |
| | SNR=9.7 | | | | | | |
| **SEY** | **Seymchan** | **88.12** | **353** | P | **P** | **23 16 14.7** | **-0.4** |
| | comp=Z,3.6nm,0.9s,baz=30,slow=6.1,SNR=9.4 | | | | | | |
| **HOQ** | **Hoqain** | **88.14** | **64** | P | **P** | **23 16 15.6** | **-0.3** |
| | SNR=13 | | | | | | |
| HOQ | | | | P | **P** | **23 16 15.6** | **-0.3** |
| | SNR=13 | | | | | | |
| **BSY** | **Bisya** | **88.47** | **65** | P | **P** | **23 16 17.4** | **-0.2** |
| BSY | | | | P | **P** | **23 16 17.4** | **-0.2** |
| **SGDS** | **Sogindy** | **88.94** | **40** | *e*P | **P** | **23 16 18.9** | **-0.6** |
| | baz=40 | | | | | | |
| **EKS2** | **Erkin-Say** | **88.95** | **41** | P | **P** | **23 16 20.8** | **+1.2** |
| | SNR=14 | | | | | | |
| **SMDO** | **Samad** | **88.98** | **64** | P | **P** | **23 16 20.3** | **+0.2** |
| SMDO | | | | P | **P** | **23 16 20.3** | **+0.2** |
| **GAR** | **Garm** | **89.09** | **45** | P | **P** | **23 16 20.8** | **+0.4** |
| GAR | | | | IAmb | IAmb | 23 16 22.6 | |
| | comp=Z,37nm,1.2s | | | | | | |
| **AML** | **Almayashu** | **89.23** | **41** | P | **P** | **23 16 22.5** | **+1.2** |
| | SNR=25 | | | | | | |
| **AML** | **Almayashu** | **89.23** | **41** | P | **P** | **23 16 22.7** | **+1.4** |
| **AML** | **Almayashu** | **89.23** | **41** | *i* P | **P** | **23 16 22.1** | **+0.8** |
| | SNR=25 | | | | | | |
| **CHMS** | **Chumysh** | **89.30** | **40** | P | **P** | **23 16 22.5** | **+1.4** |
| | SNR=10 | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.36** | **64** | LR | LR | 23 56 47.6 | |
| | comp=Z,218nm,21.7s,baz=319,slow=36 | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.36** | **64** | P | **P** | **23 16 23.1** | **+1.3** |
| | SNR=9.1 | | | | | | |
| **AAK** | **Ala-Archa** | **89.38** | **41** | P | **P** | **23 16 22.5** | **+0.8** |
| | comp=Z,8.4nm,1.0s,baz=301,slow=2.5,SNR=28 | | | | | | |
| AAK | | | | PP | PP | 23 19 41.0 | -11 |
| | comp=Z,2.0nm,1.0s,baz=298,slow=9.4,SNR=3.6 | | | | | | |
| AAK | | | | LR | LR | 23 56 20.7 | |
| | comp=Z,360nm,19.6s,baz=315,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **89.38** | **41** | P | **P** | **23 16 22.9** | **+1.3** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **89.38** | **41** | *ce*P | **P** | **23 16 23.0** | **+1.3** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **89.38** | **41** | P | **P** | **23 16 22.7** | **+1.1** |
| **AAK** | **Ala-Archa** | **89.38** | **41** | P | **P** | **23 16 22.8** | **+1.1** |
| **AAK** | **Ala-Archa** | **89.38** | **41** | *i* P | **P** | **23 16 22.2** | **+0.5** |
| | SNR=18 | | | | | | |
| **KUU** | **Kurty** | **89.62** | **39** | *e*P | **P** | **23 16 22.4** | **-0.2** |
| KUU | | | | pmax | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | |
| **KUU** | **Kurty** | **89.62** | **39** | *e*P | **P** | **23 16 22.5** | **-0.2** |
| | comp=Z,11nm,1.2s,baz=39 | | | | | | |
| **KBK** | **Karagaybulak** | **89.63** | **40** | P | **P** | **23 16 23.9** | **+1.1** |
| | SNR=9.3 | | | | | | |
| **UCH** | **Uchtor** | **89.65** | **41** | P | **P** | **23 16 24.9** | **+1.6** |
| | SNR=21 | | | | | | |
| **YAK** | **Yakutsk** | **89.79** | **3** | P | **P** | **23 16 22.4** | **-0.6** |
| | comp=Z,3.0nm,0.4s,baz=5.4,slow=3.2,SNR=1.1 | | | | | | |
| YAK | | | | LR | LR | 23 52 29.4 | |
| | comp=Z,144nm,21.4s,baz=62,slow=33 | | | | | | |
| **YAK** | **Yakutsk** | **89.79** | **3** | *ce*P | **P** | **23 16 23.0** | **+0.1** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,40nm,2.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **89.83** | **40** | P | **P** | **23 16 24.7** | **+0.9** |
| | SNR=13 | | | | | | |
| **CHKK** | **Chushkaly** | **90.00** | **38** | *e*P | **P** | **23 16 23.8** | **-0.6** |
| | baz=38 | | | | | | |
| **TDK** | **Taldyqorghan** | **90.00** | **37** | *e*P | **P** | **23 16 24.2** | **-0.2** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **TDK** | **Taldyqorghan** | **90.00** | **37** | *e*P | **P** | **23 16 24.2** | **-0.2** |
| | comp=Z,12nm,1.0s,baz=37 | | | | | | |
| **AAA** | **Alma-Ata** | **90.38** | **39** | *i* P | **P** | **23 16 25.8** | **-0.4** |
| **AAA** | **Alma-Ata** | **90.38** | **39** | *i* P | **P** | **23 16 25.8** | **-0.4** |
| | baz=39 | | | | | | |
| **MDOK** | **Medeo** | **90.48** | **39** | *e*P | **P** | **23 16 26.4** | **-0.4** |
| **MDOK** | **Medeo** | **90.48** | **39** | *e*P | **P** | **23 16 26.4** | **-0.4** |
| | baz=39 | | | | | | |
| **TNSS** | **Tian-Shan** | **90.51** | **39** | *e*P | **P** | **23 16 26.5** | **-0.8** |
| | baz=39 | | | | | | |
| **JLN** | **Jalan Bani Buh** | **90.53** | **65** | P | **P** | **23 16 28.0** | **+0.8** |
| | SNR=7.7 | | | | | | |
| JLN | | | | P | **P** | **23 16 28.0** | **+0.8** |
| | SNR=7.7 | | | | | | |
| **MAKZ** | **Makanchi** | **90.59** | **34** | P | **P** | **23 16 27.0** | **-0.1** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **90.59** | **34** | P | **P** | **23 16 27.0** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 23 16 28.3 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **90.76** | **34** | P | **P** | **23 16 27.9** | **+0.1** |
| | comp=Z,9.4nm,1.0s,baz=309,slow=3.5,SNR=47 | | | | | | |
| MKAR | | | | LR | LR | 23 53 59.5 | |
| | comp=Z,250nm,22.0s,baz=298,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **90.76** | **34** | P | **P** | **23 16 28.0** | **+0.1** |
| **KPKS** | **Kokpek** | **91.18** | **38** | *e*P | **P** | **23 16 29.2** | **-0.7** |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,44nm,2.1s | | | | | | |
| **KPKS** | **Kokpek** | **91.18** | **38** | *e*P | **P** | **23 16 29.3** | **-0.7** |
| | comp=Z,44nm,2.1s,baz=38 | | | | | | |
| **KDJ** | **Kajisay** | **91.23** | **40** | P | **P** | **23 16 29.9** | **-0.5** |
| KDJ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **KDJ** | **Kajisay** | **91.23** | **40** | P | **P** | **23 16 29.9** | **-0.5** |
| **ZHN** | **Zhinishke** | **91.24** | **38** | *e*P | **P** | **23 16 30.4** | **+0.1** |
| **ZHN** | **Zhinishke** | **91.24** | **38** | *e*P | **P** | **23 16 30.5** | **+0.1** |
| | baz=38 | | | | | | |
| **SATY** | **Saty** | **91.30** | **38** | *e*P | **P** | **23 16 30.2** | **-0.4** |
| **SATY** | **Saty** | **91.30** | **38** | *e*P | **P** | **23 16 30.2** | **-0.4** |
| | baz=38 | | | | | | |
| **ZSN** | **Zaisan** | **91.52** | **32** | *e*P | **P** | **23 16 30.9** | **-0.5** |
| **ZSN** | **Zaisan** | **91.52** | **32** | *e*P | **P** | **23 16 30.9** | **-0.5** |
| | baz=32 | | | | | | |
| **UZB** | **Uzynbulak** | **91.58** | **38** | *e*P | **P** | **23 16 31.4** | **-0.5** |
| **UZB** | **Uzynbulak** | **91.58** | **38** | *e*P | **P** | **23 16 31.5** | **-0.5** |
| | baz=38 | | | | | | |
| **MA2** | **Magadan** | **91.58** | **353** | *ce*P | **P** | **23 16 32.1** | **+0.7** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,27nm,2.5s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **91.84** | **40** | IAmb | IAmb | 23 16 47.9 | |
| | comp=Z,50nm,2.0s | | | | | | |
| **KSH** | **Kashi** | **92.23** | **42** | P | **P** | **23 16 36.4** | **+1.4** |
| KSH | | | | pP | sP | 23 16 41.2 | +0.5 |
| KSH | | | | sP | pwP | 23 16 43.0 | -0.2 |
| KSH | | | | PP | **PP** | **23 20 20.3** | **+5.7** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **92.76** | **338** | LR | LR | 23 58 41.3 | |
| | comp=Z,387nm,21.9s,baz=76,slow=36 | | | | | | |
| **PMSA** | **Palmer Station** | **94.16** | **189** | LR | LR | 00 00 56.7 | |
| | comp=Z,170nm,18.5s,baz=351,slow=37 | | | | | | |
| **NIL** | **Nilore** | **94.21** | **48** | P | **P** | **23 16 44.4** | **+0.3** |
| **NIL** | **Nilore** | **94.21** | **48** | P | **P** | **23 16 44.4** | **+0.3** |
| **WMQ** | **Urumqi** | **95.54** | **33** | *e*P | **P** | **23 16 51.1** | **+1.1** |
| WMQ | | | | pP | sP | 23 16 56.9 | +1.1 |
| WMQ | | | | sP | pwP | 23 17 02.4 | +4.1 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,410nm,29.0s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,560nm,29.0s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,270nm,23.3s | | | | | | |
| **ZAK** | **Zakamensk** | **96.35** | **21** | *e*P | **P** | **23 16 53.3** | **-0.3** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **96.76** | **347** | LR | LR | 00 02 18.9 | |
| | comp=Z,99nm,19.3s,baz=46,slow=36 | | | | | | |
| **OPO** | **Ambohidratompo** | **99.41** | **106** | LR | LR | 00 01 46.2 | |
| | comp=Z,415nm,20.1s,baz=155,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **99.56** | **20** | P | **Pdif** | **23 17 07.3** | **-0.8** |
| | comp=Z,0.8nm,1.0s,baz=344,slow=4.7,SNR=3.4 | | | | | | |
| SONM | | | | PP | **PP** | **23 21 11.4** | **+0.6** |
| | comp=Z,0.5nm,1.0s,baz=317,slow=8.3,SNR=2.0 | | | | | | |
| SONM | | | | LR | LR | 00 03 43.7 | |
| | comp=Z,159nm,18.2s,baz=345,slow=36 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **99.73** | **265** | *e*LR | LR | 23 49 33.6 | |
| | comp=Z,368nm,24.1s | | | | | | |
| **PPT2** | **Papeete2** | **111.77** | **261** | *e*LQ | LQ | 23 50 26.9 | |
| | comp=Z,1µm,30.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 23 55 17.2 | |
| | comp=Z,346nm,25.5s | | | | | | |
| **CD2** | **Chengdu** | **113.43** | **30** | PKP | **PKiKP** | **23 22 05.1** | **+1.9** |
| **SYO** | **Syowa Base** | **113.82** | **157** | *e*Pdiff | **Pdif** | **23 18 12.4** | **+1.8** |
| **SYO** | **Syowa Base** | **113.82** | **157** | *e*X | **Pdif** | **23 18 21.4** | **+11** |
| **PZH** | **PanZhiHua** | **116.19** | **34** | PKP | **PKiKP** | **23 22 07.4** | **-1.3** |
| **NJ2** | **Nanjing** | **117.70** | **17** | *e*PKP | **PKiKP** | **23 22 12.3** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **121.13** | **42** | PKP | **PKPdf** | **23 22 17.8** | **-0.4** |
| | comp=Z,2.1nm,0.7s,baz=300,slow=3.5,SNR=12 | | | | | | |
| CMAR | | | | PP | **PP** | **23 23 46.0** | **-1.1** |
| | comp=Z,5.6nm,1.0s,baz=308,slow=7.4,SNR=15 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **121.13** | **42** | | **PKPdf** | **23 22 17.3** | **-1.0** |
| **VNDA** | **Vanda** | **129.34** | **187** | PKP | **PKPdf** | **23 22 32.4** | **+0.2** |
| | comp=Z,8.5nm,1.0s,baz=210,slow=0.9,SNR=6.2 | | | | | | |
| **URZ** | **Urewera** | **144.68** | **243** | PKP | PKPbc | 23 23 00.3 | -0.1 |
| | comp=Z,33nm,0.9s,baz=26,slow=3.3,SNR=17 | | | | | | |
| **URZ** | **Urewera** | **144.68** | **243** | PKPdf | PKPbc | 23 23 00.5 | +0.1 |
| **CNJI** | **Cibinong** | **145.45** | **58** | P | **PKiKP** | **23 23 10.9** | **+3.4** |
| | comp=Z,89nm,1.1s | | | | | | |
| **LEM** | **Lembang** | **145.50** | **57** | P | **PKPdf** | **23 23 02.3** | **-1.6** |
| | comp=Z,995nmcomp=Z,39nm,1.3s | | | | | | |
| **KPJI** | **Karang Pucung** | **146.80** | **56** | P | **PKPdf** | **23 23 06.4** | **+0.5** |
| | comp=Z,2µmcomp=Z,101nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **147.17** | **29** | | **PKPbc** | **23 23 08.2** | **-0.5** |
| **THZ** | **Tophouse** | **147.39** | **236** | | **PKPbc** | **23 23 08.1** | **-0.4** |
| **MPSI** | **Mapaga** | **147.46** | **32** | P | **PKPdf** | **23 23 00.5** | **-6.5** |
| | comp=Z,3µmcomp=Z,92nm,1.0s | | | | | | |
| **PCJI** | **Pacitan** | **149.01** | **55** | P | **PKPbc** | **23 23 12.4** | **-1.1** |
| | comp=Z,1µmcomp=Z,72nm,1.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **149.34** | **53** | P | **PKPdf** | **23 23 11.4** | **+1.4** |
| | comp=Z,1µmcomp=Z,48nm,1.4s | | | | | | |
| **APSI** | **Ampana** | **149.36** | **30** | P | **PKPab** | **23 23 22.4** | **+3.4** |
| | comp=Z,29nm,1.0s | | | | | | |
| **TTSI** | **Tana Toraja** | **150.37** | **35** | P | **PKPbc** | **23 23 14.4** | **-2.5** |
| | comp=Z,42nm,1.2s | | | | | | |
| **BLJI** | **Banyuglugur** | **150.39** | **51** | P | **PKPdf** | **23 23 11.8** | **+0.1** |
| | comp=Z,28nm,1.1s | | | | | | |
| **GMJI** | **Gumukmas** | **150.67** | **51** | P | **PKPbc** | **23 23 16.2** | **-1.4** |
| | comp=Z,871nmcomp=Z,17nm,1.0s | | | | | | |
| **ABJI** | **Asem Bagus** | **150.86** | **50** | P | **PKPdf** | **23 23 14.4** | **+2.0** |
| | comp=Z,50nm,2.1s | | | | | | |
| **SPSI** | **Sidrap Palu** | **151.13** | **36** | P | **PKPbc** | **23 23 18.7** | **0.0** |
| | comp=Z,3µmcomp=Z,37nm,2.2s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **151.29** | **51** | P | **PKiKP** | **23 23 20.2** | **+0.6** |
| | comp=Z,28nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **151.29** | **51** | | **PKPbc** | **23 23 16.5** | **-2.6** |
| **BNSI** | **Bone** | **151.68** | **36** | P | **PKiKP** | **23 23 24.0** | **+3.6** |
| | comp=Z,703nmcomp=Z,15nm,1.6s | | | | | | |
| **SRBI** | **Singaraja** | **151.72** | **49** | P | **PKiKP** | **23 23 20.7** | **+0.2** |
| | comp=Z,35nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **152.01** | **276** | *e*SS | SS | 23 46 34.9 | +5.1 |
| | comp=Z,270nm,30.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **152.01** | **276** | *e*LR | LR | 00 13 56.7 | |
| | comp=Z,638nm,32.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **152.01** | **276** | PKP | **PKPdf** | **23 23 15.0** | **+0.9** |
| | comp=Z,7.1nm,1.0s,baz=47,slow=8.1,SNR=3.2 | | | | | | |
| DZM | | | | PKPbc | **PKiKP** | **23 23 21.1** | **+0.2** |
| | comp=Z,24nm,0.9s,baz=67,slow=12,SNR=14 | | | | | | |
| **DZM** | **Mont Dzumac** | **152.01** | **276** | PKPbc | **PKPbc** | **23 23 20.3** | **-0.3** |
| **ONTNC** | **Ouen Toro** | **152.07** | **276** | PKPdf | **PKPdf** | **23 23 15.5** | **+1.5** |
| **SIJI** | **Sorong** | **152.27** | **11** | PKPbc | **PKPbc** | **23 23 20.8** | **-0.6** |
| | comp=Z,4.6nm,0.4s,baz=349,slow=6.9,SNR=4.8 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **163.69** | **69** | PKPab | **PKPab** | **23 24 20.1** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **165.91** | **46** | PKPab | **PKPab** | **23 24 29.6** | **-0.4** |
| | comp=Z,8.4nm,0.9s,baz=354,slow=3.2,SNR=11 | | | | | | |
| FITZ | | | | PP | **PP** | **23 28 17.1** | **+0.5** |
| | comp=Z,2.1nm,0.9s,baz=330,slow=5.5,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **171.46** | **12** | PKP | **PKPdf** | **23 23 33.1** | **-0.7** |
| | comp=Z,1.7nm,0.9s,baz=325,slow=1.0,SNR=6.7 | | | | | | |
| WRA | | | | PKPab | **PKPab** | **23 24 53.5** | **-0.9** |
| | comp=Z,3.7nm,1.0s,baz=354,slow=4.8,SNR=7.4 | | | | | | |
| WRA | | | | PP | **PP** | **23 28 42.8** | **-1.1** |
| | comp=Z,1.2nm,1.0s,baz=5.9,slow=4.5,SNR=4.9 | | | | | | |
| **WB2** | **Warramunga Arr** | **171.46** | **12** | PKPdf | **PKPdf** | **23 23 33.4** | **-0.5** |
| **STKA** | **Stephens Creek** | **174.17** | **232** | PKP | **PKPdf** | **23 23 34.4** | **-0.3** |
| | comp=Z,7.7nm,1.0s,baz=45,slow=2.3,SNR=9.0 | | | | | | |
| **ASAR** | **Alice Springs** | **174.89** | **25** | PKP | **PKPdf** | **23 23 34.4** | **-0.8** |
| | comp=Z,1.7nm,0.9s,baz=326,slow=0.8,SNR=11 | | | | | | |
| ASAR | | | | PKPab | **PKPab** | **23 25 09.1** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=333,slow=4.9,SNR=7.8 | | | | | | |
| ASAR | | | | PP | **PP** | **23 28 59.9** | **-1.2** |
| | comp=Z,1.6nm,1.0s,baz=341,slow=5.2,SNR=7.2 | | | | | | |

*NNC* ***08*** *23:22:26.6±5.8, 36°.95N×70°.43E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=44.8km s-min=38.8km az=168.0*
**ISC 08 23:22:22.2**±2.3, **36°.35N**±0°.10×**70°.5E**±0°.2, **h50km, n18,** σ1**8**0/21, **4C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **6.28** | **22** | P | **Pn** | **23 23 54.8** | **+2.2** |
| | SNR=54 | | | | | | |
| **UCH** | **Uchtor** | **6.64** | **27** | P | **Pn** | **23 23 59.7** | **+2.1** |
| | SNR=21 | | | | | | |
| **KK02** | **Karatay Array** | **6.75** | **0** | ⇑P | **Pn** | **23 23 59.7** | **+1.1** |
| | 1.4nm,0.3s,baz=182,slow=12 | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **23 25 11.2** | **-2.8** |
| | 1.7nm,0.5s,baz=184,slow=24 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.79** | **21** | P | **Pn** | **23 24 02.4** | **+3.0** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **25** | P | **Pn** | **23 24 04.9** | **+2.7** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **25** | ⇓P | **Pn** | **23 24 03.8** | **+1.6** |
| | 3.1nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **23 25 19.9** | **-0.5** |
| | 7.7nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.65** | **29** | P | **Pn** | **23 24 12.9** | **+1.7** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.65** | **29** | ⇑P | **Pn** | **23 24 11.6** | **+0.4** |
| | 6.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **23 25 34.5** | **-2.0** |
| | 0.4nm,0.3s | | | | | | |
| **PYUN** | **Piuthan** | **13.39** | **124** | *e*P | **Pn** | **23 25 29.1** | **-0.6** |
| | 4.5nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **13.75** | **122** | *e*P | **Pn** | **23 25 34.6** | **-0.1** |
| **KOLN** | **Koldanda** | **14.01** | **124** | *e*P | **Pn** | **23 25 36.6** | **-1.6** |
| **GKN** | **Gorkha** | **14.57** | **121** | *e*P | **Pn** | **23 25 46.0** | **+0.5** |
| | 5.2nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **15.15** | **120** | *e*P | **Pn** | **23 25 53.0** | **-0.2** |
| **PKIN** | **Phulchoki** | **15.36** | **121** | *e*P | **Pn** | **23 25 56.2** | **+0.2** |
| | 7.1nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **15.37** | **121** | *e*P | **Pn** | **23 25 56.5** | **+0.3** |
| **GUN** | **Gumba** | **15.50** | **119** | *e*P | **Pn** | **23 25 56.9** | **-0.9** |
| **JIRN** | **Jiri** | **15.87** | **119** | *e*P | **Pn** | **23 26 01.7** | **-0.9** |
| **TAPN** | **Taplejung** | **17.14** | **117** | *e*P | **Pn** | **23 26 15.6** | **-2.9** |

*BGR* ***08*** *23:26:40.5±0.0, 26°.84N×43°.13W, h10km, mb5.4, Ms4.5*
*IDC* ***08*** *23:26:41.9±0.4, 28°.28N×43°.86W, h0km, mb4.4/31, mb1 4.5/31, mb1mx4.5/39, mbtmp4.4/31, MS4.4/77, Ms1 4.4/77, ms1mx4.3/91, Error ellipse: s-maj=12.8km s-min=11.4km az=136.0*
*BJI* ***08*** *23:26:42.0±0.0, 28°.30N×43°.80W, h10km, mb4.8/7, Ms5.4/3, Ms7 5.0/2*
*NEIC* ***08*** *23:26:45.6±1.2, 28°.38N±0°.09×43°.8W±0°.1, h10km±1km, mb5.3/409, Error ellipse: s-maj=16.4km s-min=15.4km az=138.0*
*GCMT* ***08*** *23:26:45.6±0.2, 28°.63N±0°.02×43°.74W±0°.01, h12km, MW5.2/127, Moment Tensor Solution. s41,c46; s127,c188; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr=0.60±.01; Mθθ=0.15±.01; Mφφ=0.44±.01; Mrθ=0.63±.06; Mθφ=0.19±.01; Mφr=-0.06±.04; Best double couple: M0=0.79300×10^17 NP1:φs=15.00000°, δ33.00000°, λ=136.00000°. NP2:φs=246.00000°, δ68.00000°, λ=-65.00000°. Principal axes: T 0.6190, Plg19.0000°, Azm318.0000°; N 0.3480, Plg23.0000°, Azm56.0000°; P -0.9670, Plg59.0000°, Azm191.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MOS* ***08*** *23:26:46.8±1.0, 28°.33N×43°.75W, h38km, mb5.2/31, MS4.3/4 Error ellipse: s-maj=8.0km s-min=5.6km az=48.9*
**ISC 08 23:26:45.1**±0.3, **28°.32N**±0°.06×**43.77W**±0°.05, **h14km, n819,** σ0**8**4/683, **mb5.3**/294, **MS4.4**/83, **36C-7D, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMRT** | **St. Maarten** | **20.45** | **244** | P | Pn | 23 31 23.5 | -0.9 |
| **MTP** | **Monte Pirata** | **22.42** | **248** | P | **P** | **23 31 44.3** | **+0.8** |
| MTP | | | | IAmb | IAmb | 23 32 00.3 | |
| | comp=Z,261nm,1.9s | | | | | | |
| **SJG** | **San Juan** | **22.90** | **249** | P | **P** | **23 31 46.0** | **-2.6** |
| | comp=Z,8.4nm,0.8s,baz=34,slow=14,SNR=4.4 | | | | | | |
| SJG | | | | LR | LR | 23 38 52.9 | |
| | comp=Z,718nm,21.7s,baz=72,slow=32 | | | | | | |
| **SJG** | **San Juan** | **22.90** | **249** | P | **P** | **23 31 48.9** | **+0.3** |
| SJG | | | | pmax | pmax | | |
| | comp=Z,61nm,1.6s | | | | | | |
| **SJG** | **San Juan** | **22.90** | **249** | P | **P** | **23 31 48.9** | **+0.3** |
| **CELP** | **Cerrillos** | **23.27** | **249** | P | **P** | **23 31 51.9** | **-0.6** |
| **ICMP** | **Isla Caja de M** | **23.33** | **248** | P | **P** | **23 31 52.8** | **-0.1** |
| **DRLN** | **Deer Lake** | **23.42** | **337** | P | **P** | **23 31 53.8** | **+0.2** |
| DRLN | | | | IAmb | IAmb | 23 31 55.5 | |
| | comp=Z,163nm,1.7s | | | | | | |
| **MDP** | **Montagnes des** | **24.58** | **202** | P | **P** | **23 32 04.9** | **+0.1** |
| | comp=Z,20nm,1.0s,baz=26,slow=7.7,SNR=4.3 | | | | | | |
| MDP | | | | LR | LR | 23 39 41.5 | |
| | comp=Z,253nm,19.3s,baz=11,slow=32 | | | | | | |
| **HRV** | **Adam Dziewonsk** | **26.56** | **310** | P | **P** | **23 32 23.2** | **+0.6** |
| | baz=113 | | | | | | |
| **SDDR** | **Presa de Saban** | **26.81** | **256** | P | **P** | **23 32 25.6** | **+0.5** |
| SDDR | | | | IAmb | IAmb | 23 32 32.8 | |
| | comp=Z,177nm,1.8s | | | | | | |
| **BIRV** | **Birongo** | **27.58** | **234** | P | **P** | **23 32 34.1** | **+2.2** |
| BIRV | | | | IAmb | IAmb | 23 32 49.2 | |
| | comp=Z,114nm,1.7s | | | | | | |
| **PAL** | **Palisades** | **27.69** | **305** | P | **P** | **23 32 32.8** | **+0.1** |
| | baz=108 | | | | | | |
| **MVL** | **Millersville** | **29.21** | **302** | P | **P** | **23 32 47.9** | **+1.6** |
| MVL | | | | IAmb | IAmb | 23 32 54.5 | |
| | comp=Z,128nm,2.0s | | | | | | |
| **BINY** | **Binghamton** | **29.54** | **307** | P | **P** | **23 32 49.4** | **+0.2** |
| | baz=108 | | | | | | |
| **BAUV** | **El Baul** | **29.89** | **235** | | **P** | **23 32 52.2** | **-0.3** |
| **JSRW** | **J. Sargeant Re** | **29.96** | **297** | P | **P** | **23 32 53.5** | **+0.6** |
| **BOAV** | **Boa Vista** | **30.33** | **215** | | **P** | **23 32 56.4** | **0.0** |
| **SSPA** | **Standing Stone** | **30.50** | **303** | P | **P** | **23 32 58.8** | **+1.0** |
| | baz=103 | | | | | | |
| **O56A** | **Blue Knob Stat** | **30.93** | **302** | P | **P** | **23 33 02.5** | **+0.9** |
| | baz=102 | | | | | | |
| **T57A** | **Hurt** | **30.96** | **295** | P | **P** | **23 33 02.8** | **+1.0** |
| T57A | | | | IAmb | IAmb | 23 33 27.9 | |
| | comp=Z,63nm,1.6s | | | | | | |
| **SCHQ** | **Schefferville** | **31.33** | **334** | P | **P** | **23 33 04.7** | **-0.2** |
| | comp=Z,2.8nm,0.7s,baz=135,slow=8.5,SNR=6.9 | | | | | | |
| SCHQ | | | | LR | LR | 23 44 42.3 | |
| | comp=Z,556nm,19.3s,baz=155,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **31.33** | **334** | IAmb | IAmb | 23 33 10.1 | |
| | comp=Z,52nm,1.8s | | | | | | |
| **M55A** | **Ridgway** | **31.34** | **304** | P | **P** | **23 33 05.4** | **+0.3** |
| **MCWV** | **Mont Chateau** | **31.78** | **300** | P | **P** | **23 33 10.0** | **+1.0** |
| | baz=100 | | | | | | |
| **U56A** | **King** | **31.81** | **294** | P | **P** | **23 33 09.9** | **+0.5** |
| **SDV** | **Santo Domingo** | **31.83** | **238** | LR | LR | 23 44 52.5 | |
| | comp=Z,370nm,20.9s,baz=57,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **31.83** | **238** | | **P** | **23 33 10.8** | **+1.0** |
| SDV | | | | IAmb | IAmb | 23 33 11.6 | |
| | comp=Z,41nm,1.4s | | | | | | |
| **M54A** | **Oil Creek Stat** | **32.01** | **304** | P | **P** | **23 33 12.2** | **+1.2** |
| | baz=103 | | | | | | |
| **N54A** | **Moraine State** | **32.13** | **303** | P | **P** | **23 33 12.9** | **+0.8** |
| | baz=102 | | | | | | |
| **SADO** | **Sadowa** | **32.51** | **310** | LR | LR | 23 44 53.0 | |
| | comp=Z,1µm,19.2s,baz=165,slow=34 | | | | | | |
| **KMSC** | **Kings Mountain** | **32.53** | **292** | P | **P** | **23 33 16.4** | **+0.8** |
| | baz=91 | | | | | | |
| **M53A** | **WI Miller and** | **32.73** | **303** | P | **P** | **23 33 18.4** | **+1.1** |
| | baz=102 | | | | | | |
| **PTGA** | **Pitinga** | **32.80** | **211** | LR | LR | 23 45 07.9 | |
| | comp=Z,362nm,18.0s,baz=24,slow=34 | | | | | | |
| **O52A** | **Adamsville** | **33.37** | **301** | P | **P** | **23 33 23.2** | **+0.3** |
| O52A | | | | IAmb | IAmb | 23 33 25.1 | |
| | comp=Z,64nm,1.6s | | | | | | |
| **BG3** | **Lake Jocassee** | **33.84** | **291** | P | **P** | **23 33 28.4** | **+1.4** |
| **MDT** | **Midelt** | **33.88** | **73** | LR | LR | 23 43 56.5 | |
| | comp=Z,2µm,21.4s,baz=296,slow=30 | | | | | | |
| **N51A** | **Ashland** | **33.90** | **302** | P | **P** | **23 33 27.3** | **-0.3** |
| N51A | | | | IAmb | IAmb | 23 33 35.3 | |
| | comp=Z,112nm,1.9s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.25** | **301** | P | **P** | **23 33 31.1** | **+0.5** |
| | baz=98 | | | | | | |
| **GOGA** | **Godfrey** | **34.31** | **289** | P | **P** | **23 33 31.8** | **+0.6** |
| | baz=88 | | | | | | |
| **TZTN** | **Tazewell** | **34.37** | **294** | P | **P** | **23 33 32.9** | **+1.2** |
| | baz=92 | | | | | | |
| **Q51A** | **Peebles** | **34.39** | **299** | P | **P** | **23 33 31.7** | **-0.1** |
| **V52A** | **Sevierville** | **34.39** | **293** | P | **P** | **23 33 32.7** | **+0.9** |
| V52A | | | | IAmb | IAmb | 23 33 34.4 | |
| | comp=Z,71nm,1.5s | | | | | | |
| **M50A** | **Fremont** | **34.48** | **303** | P | **P** | **23 33 32.7** | **+0.2** |
| **TKL** | **Tuckaleechee C** | **34.53** | **293** | LR | LR | 23 45 15.0 | |
| | comp=Z,1µm,20.0s,baz=101,slow=32 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.53** | **293** | P | **P** | **23 33 34.0** | **+0.9** |

**WVT Waverly 37.82 293 P P 23 34 02.1 +0.9**
WVT pmax pmax
comp=Z,23nm,1.1s
**WVT Waverly 37.82 293 P P 23 34 02.1 +0.9**
**WVT Waverly 37.82 293 P P 23 34 01.9 +0.7**
baz=89
**PLAL Pickwick Lake 38.06 291 P P 23 34 03.0 -0.2**
PLAL IAmb IAmb 23 34 05.8
comp=Z,89nm,1.6s
**OLIL Olney 38.07 298 P P 23 34 03.5 +0.2**
OLIL IAmb IAmb 23 34 05.6
comp=Z,112nm,1.8s
**HQIL Hanson Quary C 38.11 303 P P 23 34 03.9 +0.4**
HQIL IAmb IAmb 23 35 02.1
comp=Z,48nm,1.0s
**Z47A Carrollton 38.17 289 P P 23 34 04.9 +0.8**
Z47A IAmb IAmb 23 34 12.8
comp=Z,40nm,0.9s
**L44A Lake County Fo 38.19 303 P P 23 34 04.9 +0.7**
baz=97
**O44A Mansfield 38.42 300 P P 23 34 06.5 +0.3**
O44A IAmb IAmb 23 34 08.1
comp=Z,98nm,1.7s
**FRB Frobisher Bay 38.86 343 P P 23 34 08.2 -1.3**
comp=Z,4.0nm,0.6s,baz=148,slow=8.3,SNR=16
FRB LR LR 23 48 49.7
comp=Z,512nm,20.2s,baz=160,slow=34
**SFJD Kangerlussuaq 38.93 356 LR LR 23 45 43.2**
comp=Z,528nm,19.2s,baz=168,slow=29
**S44A Carbondale 38.95 296 P P 23 34 10.9 +0.1**
S44A IAmb IAmb 23 34 13.0
comp=Z,124nm,1.9s
**W45A Hickory Valley 38.96 292 P P 23 34 11.2 +0.4**
**146A Union 39.05 288 P P 23 34 12.0 +0.5**
146A IAmb IAmb 23 34 32.2
comp=Z,213nm,2.0s
**HDIL Hopedale 39.08 300 P P 23 34 11.6 -0.1**
**BORG Borgarnes 39.12 15 LR LR 23 44 25.2**
comp=Z,160nm,19.6s,baz=165,slow=27
**P43A Skaggs, Pawnee 39.21 299 P P 23 34 12.9 +0.1**
**KOXA Kowa 39.29 102 P P 23 34 14.0 +0.2**
**PARMO Parma 39.36 294 P P 23 34 12.2 -1.9**
**346A Big Creek Wild 39.54 286 P P 23 34 16.1 +0.5**
346A IAmb IAmb 23 34 18.5
comp=Z,44nm,0.8s
**GNAR Gosnell 39.60 293 P P 23 34 16.1 0.0**
**EKA Eskdalemuir Ar 39.67 36 LR LR 23 47 32.5**
comp=Z,425nm,20.9s,baz=245,slow=32
**SLM Saint Louis 39.73 297 P P 23 34 17.9 +0.7**
SLM pmax pmax
comp=Z,121nm,1.7s
**SLM Saint Louis 39.73 297 P P 23 34 17.9 +0.7**
SLM IAmb IAmb 23 34 19.3
comp=Z,121nm,1.6s
**FVM French Village 39.88 296 P P 23 34 19.0 +0.5**
FVM pmax pmax
comp=Z,27nm,1.3s
**FVM French Village 39.88 296 P P 23 34 19.0 +0.5**
**PBMO Poplar Bluff 39.90 294 IAmb IAmb 23 34 20.7**
comp=Z,95nm,1.6s
**JFWS Jewell Farm 39.99 304 P P 23 34 19.8 +0.5**
baz=96
**VBMS Vicksburg 40.32 287 P P 23 34 23.5 +1.3**
**CCM Cathedral Cave 40.53 296 P P 23 34 23.6 -0.2**
CCM pmax pmax
comp=Z,49nm,1.6s
**CCM Cathedral Cave 40.53 296 P P 23 34 23.6 -0.2**
**CCM Cathedral Cave 40.53 296 P P 23 34 24.2 +0.4**
baz=89
**TBTG Tabatinga, AM 40.96 222 P P 23 34 27.2 -0.4**
**143A Socs Landing, 41.01 288 P P 23 34 28.1 +0.3**
143A IAmb IAmb 23 34 30.1
comp=Z,132nm,1.6s
**ESPN Las Esperanzas 41.04 255 P P 23 34 28.9 +0.6**
ESPN IAmb IAmb 23 34 31.5
comp=Z,85nm,1.4s
**P40A Paris 41.16 299 P P 23 34 29.3 +0.3**
P40A IAmb IAmb 23 34 30.0
comp=Z,80nm,1.8s
**MGMO Mountain Grove 41.36 295 IAmb IAmb 23 34 32.6**
comp=Z,99nm,1.7s
**BRU2 Volcan 41.44 250 P P 23 34 32.4 +0.6**
BRU2 IAmb IAmb 23 34 34.6
comp=Z,130nm,1.6s
**W41B Gary Mavity, V 41.46 292 P P 23 34 31.6 0.0**
baz=85,SNR=7.5
**WHAR Wooly Hollow 41.48 292 P P 23 34 32.1 +0.3**
**SRBA San Rafael, Bu 41.76 251 P P 23 34 34.8 +0.4**
**U40A Yellville 41.87 294 P P 23 34 34.3 -0.6**
U40A IAmb IAmb 23 34 36.5
comp=Z,116nm,1.8s
**U40A Yellville 41.87 294 P P 23 34 35.2 +0.3**
baz=86,SNR=9.6
**PEZE Perez Zeledon, 41.95 251 P P 23 34 36.7 +0.8**
PEZE IAmb IAmb 23 34 38.6
comp=Z,26nm,0.6s
**342A Flagon Creek P 41.96 286 P P 23 34 36.0 +0.4**
**X40A Basin Creek Fa 42.00 291 P P 23 34 36.1 +0.1**
baz=84
**SPMN Marine on St. 42.07 307 P P 23 34 35.1 -1.3**
SPMN IAmb IAmb 23 34 38.0
comp=Z,110nm,1.8s
**SPMN Marine on St. 42.07 307 P P 23 34 36.2 -0.2**
baz=96
**MATN Matagalpa 42.09 258 P P 23 34 37.8 +0.9**
**N38A Joes South For 42.09 301 P P 23 34 36.5 -0.1**
N38A IAmb IAmb 23 35 18.4
comp=Z,25nm,0.6s
**BOAB BOACO BROADBAN 42.09 257 P P 23 34 37.2 +0.3**
**SCIA State Center 42.11 302 P P 23 34 36.9 +0.1**
baz=92
**Z41A Richland Creek 42.11 289 P P 23 34 37.1 +0.3**
Z41A IAmb IAmb 23 34 39.3
comp=Z,120nm,1.6s
**Z41A Richland Creek 42.11 289 P P 23 34 37.6 +0.7**
baz=83
**S39A Bolivar 42.18 296 P P 23 34 37.8 +0.3**
**P38A Dawn 42.30 299 P P 23 34 37.9 -0.5**
**I37A Lemond, Waseca 42.38 305 P P 23 34 40.4 +1.5**
I37A IAmb IAmb 23 34 41.0
comp=Z,146nm,1.8s
**TIC Toumodi 42.50 113 eP P 23 34 45.2 +5.0**
**MIAR Mount Ida 42.60 291 P P 23 34 41.4 +0.5**
baz=84
**DBIC Dimbokro 42.62 113 P P 23 34 40.0 -1.1**
comp=Z,2.0nm,0.8s,baz=304,slow=7.9,SNR=3.8
DBIC LR LR 23 50 04.2
comp=Z,1µm,18.2s,baz=306,slow=33
**DBIC Dimbokro 42.62 113 P P 23 34 41.1 -0.1**
DBIC pmax pmax
comp=Z,15nm,1.1s
**DBIC Dimbokro 42.62 113 P P 23 34 41.1 -0.1**
**W39A Magazine 42.71 292 P P 23 34 42.0 +0.2**
W39A IAmb IAmb 23 34 43.6
comp=Z,84nm,1.8s
**W39A Magazine 42.71 292 P P 23 34 41.8 0.0**
baz=85
**LIC Lamto 42.73 114 eP P 23 34 47.0 +4.9**
comp=Z,81nm,1.2s
**KIC Kosan Boka 42.89 113 eP P 23 34 48.3 +4.9**
comp=Z,17nm,1.1s
**BNI Bardonecchia 43.05 53 P P 23 34 45.6 +1.1**
BNI pmax pmax
comp=Z,79nm,1.8s
**BNI Bardonecchia 43.05 53 P P 23 34 45.6 +1.1**
BNI IAmb IAmb 23 34 46.8
comp=Z,79nm,1.8s
**U38A Gravette 43.10 294 P P 23 34 43.8 -1.1**
**OTAV Otavalo 43.37 236 P P 23 34 47.9 +0.1**
OTAV pmax pmax
comp=Z,49nm,1.6s
**OTAV Otavalo 43.37 236 P P 23 34 47.9 +0.1**
**ETMB Extrema 43.68 213 P P 23 34 48.4 -1.3**
ETMB IAmb IAmb 23 34 49.5
comp=Z,77nm,1.5s
**NATX Nacogdoches 43.87 287 P P 23 34 51.9 +0.7**
baz=81
**BDFB Brasilia 43.89 186 P P 23 34 50.6 -0.9**
comp=Z,3.7nm,0.8s,baz=12,slow=12,SNR=5.7
BDFB LR LR 23 51 48.6
comp=Z,278nm,19.9s,baz=330,slow=34
**BDFB Brasilia 43.89 186 P P 23 34 52.0 +0.5**
BDFB pmax pmax
comp=Z,42nm,1.9s
**BDFB Brasilia 43.89 186 P P 23 34 52.0 +0.5**

**N35A Tabor 43.91 301 P P 23 34 51.0 -0.4**
**VILB Vilhena 44.00 203 P P 23 34 52.8 +0.5**
VILB IAmb IAmb 23 34 53.3
comp=Z,40nm,1.0s
**X37A Clayton 44.07 292 P P 23 34 53.2 +0.5**
X37A IAmb IAmb 23 34 53.8
comp=Z,76nm,1.8s
**TUL1 Leonard 44.28 294 P P 23 34 54.2 -0.1**
baz=84,SNR=7.0
**ESQI Esquipulas 44.32 262 P P 23 34 56.1 +1.1**
**SUMG Summit 44.40 2 P P 23 34 54.7 -0.6**
SUMG pmax pmax
comp=Z,23nm,1.1s
**SUMG Summit 44.40 2 *i* P P 23 34 54.0 -1.3**
**SUMG Summit 44.40 2 P P 23 34 54.7 -0.6**
**MTO3 Montecristo 44.40 262 P P 23 34 56.8 +1.0**
**L34A Svendsen Farm, 44.47 302 P P 23 34 55.9 +0.1**
L34A IAmb IAmb 23 34 57.1
comp=Z,55nm,1.2s
**AGMN Agassiz Nation 44.52 311 P P 23 34 56.1 -0.1**
baz=97
**BFO Black Forest 44.53 49 eP P 23 34 56.4 +0.1**
comp=Z,46nm,1.4s,baz=262,slow=7.8
**ECSD EROS Data Cent 44.68 305 P P 23 34 57.5 0.0**
baz=92
**KSU1 Kansas State U 44.70 298 P P 23 34 57.3 -0.4**
baz=87
**T35A Sooner Cattle 44.77 295 IAmb IAmb 23 35 05.8**
comp=Z,35nm,0.9s
**ULM Lac du Bonnet 44.81 314 P P 23 34 57.6 -0.8**
comp=Z,4.5nm,0.6s,baz=96,slow=5.9,SNR=5.5
ULM LR LR 23 53 35.8
comp=Z,316nm,18.2s,baz=98,slow=36
**ULM Lac du Bonnet 44.81 314 IAmb IAmb 23 34 59.0**
comp=Z,64nm,1.7s
**TORD Torodi Ar. Bea 44.84 100 P P 23 34 58.2 -0.9**
comp=Z,5.1nm,0.8s,baz=301,slow=7.4,SNR=35
**TORD Torodi Ar. Bea 44.84 100 P P 23 34 58.4 -0.7**
**TUE Stuetta 45.03 51 P P 23 35 00.8 +0.4**
TUE IAmb IAmb 23 35 12.8
comp=Z,52nm,1.4s
**APG El Apazote 45.11 263 LR LR 23 50 46.4**
comp=Z,411nm,20.7s,baz=64,slow=32
**OK031 S. Brethren Rd 45.12 294 IAmb IAmb 23 35 12.6**
comp=Z,41nm,0.8s
**KEST Kesra 45.18 67 P P 23 35 02.2 +0.5**
comp=Z,6.6nm,0.8s,baz=294,slow=6.1,SNR=5.5
KEST LR LR 23 50 54.6
comp=Z,845nm,18.3s,baz=173,slow=32
**KEST Kesra 45.18 67 P P 23 35 02.6 +0.9**
**KEST Kesra 45.18 67 P P 23 35 01.9 +0.3**
KEST IAmb IAmb 23 35 14.9
comp=Z,40nm,1.1s
**HKT Hockley 45.19 285 *i* P P 23 35 02.4 +0.8**
HKT pmax pmax
comp=Z,42nm,2.1s
**HKT Hockley 45.19 285 P P 23 35 01.9 +0.3**
HKT IAmb IAmb 23 35 03.2
comp=Z,67nm,1.9s
**OK033 Mehan 45.19 294 P P 23 35 01.1 -0.5**
OK033 IAmb IAmb 23 35 03.0
comp=Z,58nm,1.4s
**W35A Tecumseh 45.23 293 IAmb IAmb 23 35 03.5**
comp=Z,77nm,1.5s
**N33A J Bar K, Exete 45.29 301 P P 23 35 02.0 -0.4**
N33A IAmb IAmb 23 35 02.8
comp=Z,54nm,1.0s
**BLOK Blackwell 45.34 295 P P 23 35 02.7 -0.1**
**CZSB Cruzeiro do Su 45.44 222 P P 23 35 02.5 -1.3**
CZSB IAmb IAmb 23 35 04.6
comp=Z,98nm,1.8s
**DAVA Damuels 45.46 50 eP P 23 35 03.9 +0.1**
comp=Z,37nm,1.3s
**OK025 Westminster Rd 45.56 293 P P 23 35 04.4 -0.3**
OK025 IAmb IAmb 23 35 12.1
comp=Z,22nm,0.8s
**OK029 Liberty Lake 45.63 294 P 23 35 05.2 0.0**
**FNO Franklin 45.65 293 P P 23 35 04.5 -0.8**
**OKCFA Oklahoma City 45.67 293 P P 23 35 05.8 +0.3**
OKCFA IAmb IAmb 23 35 13.1
comp=Z,29nm,0.5s
**H10N2 ASCENSION HYDR 45.73 137 T T 00 23 51.0**
baz=322,slow=76,SNR=124
**H10N3 ASCENSION HYDR 45.73 137 T T 00 23 51.0**
baz=322,slow=76,SNR=175
**H10N1 ASCENSION HYDR 45.74 137 T T 00 23 51.0**
baz=322,slow=76,SNR=152
**BCOK Bluff Creek, N 45.77 293 P P 23 35 06.4 +0.1**
**Z35A Perchaven, San 45.79 290 P P 23 35 06.5 0.0**
Z35A IAmb IAmb 23 36 25.7
comp=Z,23nm,0.6s
**BGNE Belgrade 45.80 301 P P 23 35 06.4 0.0**
**BGNE Belgrade 45.80 301 P P 23 35 06.3 -0.2**
baz=89
**KAN06 Argonia West S 45.81 296 P P 23 35 06.7 +0.1**
**FCC Fort Churchill 45.88 326 P P 23 35 06.3 -0.5**
FCC pmax pmax
comp=Z,42nm,1.3s
**FCC Fort Churchill 45.88 326 P P 23 35 06.3 -0.5**
FCC IAmb IAmb 23 35 08.6
comp=Z,42nm,1.2s
**KAN16 Harper SW Stat 45.98 296 P P 23 35 09.0 +1.1**
**CROK Carrier 45.98 295 P 23 35 08.4 +0.4**
**PTLB Pontes e Lacer 45.98 201 P P 23 35 08.0 0.0**
**FETA Feichten 46.02 51 eP P 23 35 08.2 0.0**
comp=Z,24nm,1.6s
**ZCCA Zocca 46.06 54 P P 23 35 10.6 +2.1**
**RETA Reutte 46.07 50 eP P 23 35 09.2 +0.6**
comp=Z,38nm,1.4s,SNR=6.3
**X34A Smith Ranch, M 46.09 292 IAmb IAmb 23 35 11.0**
comp=Z,54nm,1.3s
**WHTX Lake Whitney, 46.18 288 P P 23 35 09.8 +0.3**
**WHTX Lake Whitney, 46.18 288 P P 23 35 10.2 +0.7**
baz=80
**OSSC Osservatorio P 46.25 56 IAmb IAmb 23 35 22.6**
comp=Z,32nm,0.9s
**MOTA Mosalm 46.29 50 eP P 23 35 10.8 +0.3**
comp=Z,24nm,1.4s,SNR=5.7
**SQTA Sankt Quirin 46.36 50 eP P 23 35 11.5 +0.6**
comp=Z,45nm,1.7s,SNR=5.4
**SUSD Miller 46.38 306 P P 23 35 10.4 -0.5**
**SUSD Miller 46.38 306 P P 23 35 10.5 -0.5**
baz=91
**435B Jarrell 46.51 287 P P 23 35 12.2 0.0**
**435B Jarrell 46.51 287 P P 23 35 12.7 +0.6**
baz=79
**H10S3 ASCENSION HYDR 46.52 139 T T 00 24 45.2**
baz=322,slow=74,SNR=234
**H10S2 ASCENSION HYDR 46.53 139 T T 00 24 46.6**
baz=258,slow=74
**GRF Grafenberg Arr 46.58 47 eP P 23 35 12.6 +0.2**
comp=Z,81nm,1.8s,baz=262,slow=7.8
GRF eL L 23 50 39.3
comp=Z,629nm,20.7s
**CTI Castel Tesino 46.60 52 P P 23 35 13.1 +0.3**
CTI pmax pmax
comp=Z,26nm,1.0s
**CTI Castel Tesino 46.60 52 P P 23 35 13.1 +0.3**
CTI IAmb IAmb 23 35 25.3
comp=Z,26nm,1.0s
**WATA Walderalm 46.61 50 eP P 23 35 13.1 +0.2**
comp=Z,34nm,1.4s,SNR=7.5
**WTTA Wattenberg 46.65 50 eP P 23 35 13.7 +0.5**
comp=Z,36nm,1.5s,SNR=6.0
**BSEG Bad Segeberg 46.66 41 eP P 23 35 13.5 +0.6**
comp=Z,107nm,1.5s,baz=262,slow=7.8
**LATE Laterza 46.66 57 P P 23 35 14.4 +1.1**
**WMOK Wichita Mounta 46.84 292 P P 23 35 14.8 0.0**
baz=82,SNR=5.6
**MOX Moxa 46.94 46 eP P 23 35 15.1 -0.2**
comp=Z,49nm,1.8s,baz=262,slow=7.8
MOX eL L 23 51 07.0
comp=Z,595nm,21.4s
**MDND Maddock 46.98 310 P P 23 35 15.7 +0.1**
baz=94
**JMIC Jan Mayen 47.02 15 LR LR 23 49 41.4**
comp=Z,219nm,19.6s,baz=292,slow=29
**735A Kenedy 47.10 284 P P 23 35 17.0 +0.2**
**CBKS Cedar Bluff 47.15 298 P P 23 35 17.2 +0.1**
CBKS pmax pmax
comp=Z,23nm,1.1s
**CBKS Cedar Bluff 47.15 298 P P 23 35 17.2 +0.1**
CBKS IAmb IAmb 23 35 18.4
comp=Z,23nm,1.1s
**CBKS Cedar Bluff 47.15 298 P P 23 35 17.0 -0.1**
baz=85

**ABTA Abfaltersbach 47.22 51 eP P 23 35 17.7 +0.1**
comp=Z,29nm,1.2s,SNR=7.2
**WERN Wernitzgruen 47.38 46 eP P 23 35 19.0 +0.3**
comp=Z,57nm,1.7s,baz=262,slow=7.8
**WET Wettzell 47.61 48 eP P 23 35 20.5 0.0**
comp=Z,77nm,2.0s,baz=262,slow=7.8
**KONO Kongsberg 47.65 33 *i* P P 23 35 20.8 +0.2**
KONO pmax pmax
comp=Z,16nm,1.1s
**E28A Huff 47.66 309 P P 23 35 19.9 -1.0**
E28A IAmb IAmb 23 35 20.9
comp=Z,52nm,1.3s
**KBA Koelnbreinsper 47.80 51 eP P 23 35 21.9 -0.3**
comp=Z,16nm,1.5s
**CLL Collm 47.89 45 P P 23 35 22.5 -0.1**
CLL pmax pmax
comp=Z,32nm,1.7s
**CLL Collm 47.89 45 eP P 23 35 23.0 +0.4**
ex x 23 35 27.0
**CLL Collm 47.89 45 P P 23 35 22.5 -0.1**
**ABTX Abilene, Hawle 47.89 290 IAmb IAmb 23 35 24.7**
comp=Z,65nm,1.6s
**ABTX Abilene, Hawle 47.89 290 P P 23 35 22.8 -0.1**
baz=80
**MYKA Terra Mystica 47.99 51 *i* P P 23 35 22.5 -1.1**
comp=Z,12nm,1.1s
**KHC Kasperske Hory 48.06 48 eP P 23 35 24.4 +0.3**
**KHC Kasperske Hory 48.06 48 eP P 23 35 24.4 +0.3**
**KHC Kasperske Hory 48.06 48 IAmb IAmb 23 35 25.9**
comp=Z,32nm,1.5s
**GEC2 GERESS Array S 48.13 48 eP P 23 35 24.6 0.0**
comp=Z,64nm,1.7s,baz=262,slow=7.8
**GEC2 GERESS Array S 48.13 48 IAmb IAmb 23 35 26.2**
comp=Z,60nm,1.7s
**GERES GERESS Array B 48.13 48 P P 23 35 23.6 -1.1**
comp=Z,2.2nm,0.8s,baz=243,slow=4.4,SNR=16
GERES LR LR 23 52 10.5
comp=Z,371nm,18.0s,baz=274,slow=32
**CMIG Matias Romero 48.15 268 LR LR 23 55 12.7**
comp=Z,370nm,19.8s,baz=60,slow=36
**BRG Berggiesshubel 48.43 46 eP P 23 35 25.5 -1.3**
BRG Amp 23 35 28.7
comp=Z,97nm,2.3s
**BRG Berggiesshubel 48.43 46 eP P 23 35 25.5 -1.3**
BRG pmax pmax
comp=Z,97nm,2.3s
**JCT Junction City 48.44 287 IAmb IAmb 23 35 28.5**
comp=Z,66nm,1.6s
**JCT Junction City 48.44 287 P P 23 35 27.0 -0.2**
baz=78
**MOA Molln 48.46 50 eP P 23 35 26.7 -0.4**
comp=Z,14nm,1.4s
**CKRC Cesky Krumlov 48.53 48 eP P 23 35 27.2 -0.4**
**ATAH Atahualpa 48.57 229 LR LR 23 57 18.5**
comp=Z,275nm,20.2s,baz=16,slow=38
**833A Chaparral WMA, 48.58 284 P P 23 35 27.7 -0.6**
baz=76
**OBKA Obir 48.62 52 eP P 23 35 27.5 -0.9**
comp=Z,29nm,0.8s,SNR=7.1
**OGNE Ogallala 48.75 301 P P 23 35 29.1 -0.4**
baz=86
**PAOL Paolisi 48.80 59 P P 23 35 30.7 +0.8**
PAOL IAmb IAmb 23 35 43.5
comp=Z,58nm,1.6s
**NB2 NORSAR Subarra 48.82 32 P P 23 35 29.9 +0.2**
comp=Z,55nm,2.0s,baz=251,slow=7.9
**NB2 NORSAR Subarra 48.82 32 P P 23 35 29.9 +0.2**
baz=251,slow=7.9
**NOA NORSAR Array B 48.82 32 P P 23 35 28.2 -1.4**
comp=Z,1.5nm,0.9s,baz=254,slow=7.8,SNR=4.0
NOA LR LR 23 53 02.7
comp=Z,82nm,19.7s,baz=240,slow=32
**SOKA Soboth 48.95 51 eP P 23 35 30.0 -1.0**
comp=Z,19nm,1.5s
**VAE Valguarnera 49.02 64 LR LR 23 53 58.9**
comp=Z,502nm,19.9s,baz=338,slow=33
**AMTX Amarillo 49.18 293 P P 23 35 33.3 +0.4**
baz=81
**ARSA Arzberg 49.30 51 eP P 23 35 33.0 -0.6**
comp=Z,21nm,1.2s,SNR=6.8
**NEEM North Greenlan 49.32 358 eP P 23 35 33.3 -0.4**
**KSCO Kaye Shedlock' 49.38 299 P P 23 35 34.4 0.0**
baz=84
**CONA Conrad Observa 49.53 50 eP P 23 35 35.1 -0.3**
comp=Z,13nm,1.3s
**UPC Upice 49.72 46 eP P 23 35 37.1 +0.4**
**UPC Upice 49.72 46 eP P 23 35 37.1 +0.4**
**TULEG Thule 49.77 353 P P 23 35 35.9 -0.8**
TULEG IAmb IAmb 23 35 38.6
comp=Z,36nm,1.3s
**AQDB Aquidauana 49.86 195 P P 23 35 38.5 +0.5**
AQDB IAmb IAmb 23 35 39.4
comp=Z,67nm,1.7s
**DPC Dobruska-Polom 49.91 47 eP P 23 35 39.2 +1.0**
**DPC Dobruska-Polom 49.91 47 eP P 23 35 39.2 +1.0**
**KRUC Moravsky 49.91 48 eP P 23 35 37.6 -0.6**
**KSP Ksiaz 49.92 46 eP P 23 35 38.3 +0.1**
**DAG Danmarks Havn 49.98 7 *i* P P 23 35 37.0 -1.3**
DAG IAmb IAmb 23 35 39.4
comp=Z,57nm,1.7s
**SOP Sopron 50.00 50 P P 23 35 39.1 +0.3**
**RSSD Black Hills 50.04 305 P P 23 35 39.3 -0.2**
RSSD pmax pmax
comp=Z,15nm,1.4s
**RSSD Black Hills 50.04 305 P P 23 35 39.3 -0.2**
**RSSD Black Hills 50.04 305 P P 23 35 38.9 -0.6**
baz=87
**VRAC Vranov 50.05 48 ⇑P P 23 35 38.3 -0.9**
**VRAC Vranov 50.05 48 LR LR 23 54 38.9**
comp=Z,312nm,18.2s,baz=286,slow=34
**VRAC Vranov 50.05 48 eP P 23 35 39.3 +0.1**
**DGMT Dagmar 50.07 311 IAmb IAmb 23 35 39.9**
comp=Z,82nm,1.7s
**DGMT Dagmar 50.07 311 P P 23 35 39.4 -0.1**
baz=91
**LPAZ La Paz 50.22 211 P P 23 35 40.2 -1.3**
comp=Z,8.9nm,0.6s,baz=23,slow=9.5,SNR=23
LPAZ LR LR 23 55 57.9
comp=Z,354nm,19.7s,baz=26,slow=35
**LPAZ La Paz 50.22 211 IAmb IAmb 23 35 57.9**
comp=Z,41nm,1.1s
**MSTX Muleshoe 50.22 292 P P 23 35 40.7 -0.2**
baz=79
**ZST Bratislava 50.37 49 eP P 23 35 42.2 +0.6**
**MODS Modra-Piesok 50.48 49 eP P 23 35 44.3 +1.7**
**SMOL Smolenice 50.59 49 eP P 23 35 43.0 -0.3**
**GKP Gorka Klasztor 50.66 43 eP P 23 35 44.1 +0.4**
**MPLH Magyarpolny 50.67 51 P P 23 35 43.7 -0.2**
**MORC Moravsky Berou 50.68 47 eP P 23 35 43.2 -0.8**
**JAVC Velka Javorina 50.75 49 eP P 23 35 43.9 -0.7**
**T25A Trinidad 51.02 296 P P 23 35 47.3 +0.3**
**T25A Trinidad 51.02 296 P P 23 35 46.3 -0.7**
baz=81
**KOVH Kovagotottos 51.09 52 P P 23 35 46.9 -0.1**
KOVH SP 23 35 52.2
**SRO Srobarova 51.18 50 eP P 23 35 48.6 +0.8**
**SRO2 Moca 51.24 50 eP P 23 35 47.8 -0.4**
**PHWY Pilot Hill 51.30 302 P P 23 35 49.2 +0.1**
**Q24A Divide 51.34 299 IAmb IAmb 23 35 51.7**
comp=Z,33nm,1.2s
**Q24A Divide 51.34 299 P P 23 35 49.9 +0.4**
baz=82,SNR=10.0
**LAO LASA Array 51.47 309 P P 23 35 49.5 -0.5**
baz=88
**ISCO Idaho Springs 51.58 300 IAmb IAmb 23 35 54.0**
comp=Z,54nm,1.9s
**ISCO Idaho Springs 51.58 300 P P 23 35 51.7 +0.4**
baz=83
**N23A Red Feather La 51.70 301 P P 23 35 51.6 -0.6**
baz=83
**SDCO Great Sand Dun 51.78 297 P P 23 35 53.3 +0.4**
baz=81,SNR=6.4
**K22A Casper 51.95 304 P P 23 35 53.1 -0.8**
**K22A Casper 51.95 304 P P 23 35 53.1 -0.8**
baz=84
**TX31 Lajitas Ar. Si 51.97 286 IAmb IAmb 23 36 08.7**
comp=Z,51nm,1.5s
**TXAR Lajitas Array 51.97 286 P P 23 35 52.5 -1.6**
comp=Z,1.0nm,0.8s,baz=95,slow=8.9,SNR=7.9
TXAR LR LR 23 58 42.1
comp=Z,308nm,18.2s,baz=70,slow=37
**TXAR Lajitas Array 51.97 286 P P 23 35 53.4 -0.7**
**TXAR Lajitas Array 51.97 286 P P 23 35 53.4 -0.7**
**OJC Ojcow 52.14 47 eP P 23 35 55.6 +0.7**
**OJC Ojcow 52.14 47 IAmb IAmb 23 35 57.1**
comp=Z,69nm,1.7s

NIE Niedzica 52.47 48 eP P 23 35 59.0 +1.5
RWWY Rawlins 52.56 302 lAmb lAmb 23 35 59.3
comp=Z,112nm,1.9s
PB16 IPOC Station P 52.64 211 lAmb lAmb 23 35 58.4
comp=Z,59nm,1.9s
MOIG Morelia 52.75 274 P P 23 36 01.1 +1.0
MOIG lAmb lAmb 23 37 41.3
comp=Z,26nm,0.6s
BEL Belsk 52.77 45 eP P 23 36 00.1 +0.6
S22A 4UR Ranch, Cre 52.82 298 P P 23 35 59.9 -0.6
S22A 4UR Ranch, Cre 52.82 298 P P 23 36 01.1 +0.5
baz=80,SNR=6.2
MNTX Cornudas Mount 52.84 290 P P 23 36 00.7 +0.3
baz=77
ZAIG Zacatecas 52.90 278 P P 23 36 01.6 +0.3
ZAIG lAmb lAmb 23 36 04.5
comp=Z,67nm,2.0s
RES Resolute Bay 52.99 345 P P 23 36 01.1 +0.3
comp=Z,8.0nm,1.1s,baz=107,slow=9.4,SNR=12
RES LR LR 23 56 27.7
comp=Z,366nm,21.8s,baz=107,slow=34
RES Resolute Bay 52.99 345 P P 23 36 01.1 +0.3
RES pmax pmax
comp=Z,46nm,1.6s
RES Resolute Bay 52.99 345 lAmb lAmb 23 36 02.7
comp=Z,46nm,1.6s
ANMO Albuquerque 53.03 294 LR LR 23 56 37.3
comp=Z,806nm,20.4s,baz=85,slow=34
ANMO Albuquerque 53.03 294 P P 23 36 02.5 +0.5
ANMO pmax pmax
comp=Z,71nm,1.7s
ANMO Albuquerque 53.03 294 P P 23 36 02.5 +0.5
ANMO lAmb lAmb 23 36 04.9
comp=Z,71nm,1.7s
ANMO Albuquerque 53.03 294 P P 23 36 02.8 +0.8
baz=78
MNMC Minye Minye 53.38 211 lAmb lAmb 23 36 03.6
comp=Z,34nm,1.1s
KBN Korca 53.53 59 lAmb lAmb 23 36 09.6
comp=Z,95nm,1.9s
O20A White River Ci 53.54 301 P P 23 36 06.1 +0.4
baz=82,SNR=6.5
BZS Buzias 53.57 52 ⇑P P 23 36 06.3 +0.8
BZS Buzias 53.57 52 ⇑P P 23 36 06.3 +0.8
RLMT Red Lodge 53.69 307 lAmb lAmb 23 36 08.0
comp=Z,55nm,1.6s
RLMT Red Lodge 53.69 307 P P 23 36 06.9 +0.2
baz=84,SNR=9.3
EGMT Eagleton 53.80 311 P P 23 36 07.1 -0.2
baz=86,SNR=12
UZH Uzhgorod 53.81 49 eP P 23 36 05.4 -1.9
UZH e 23 36 11.9
TRPA Tarpa 54.01 49 ⇑P P 23 36 08.9 +0.2
TRPA Tarpa 54.01 49 P P 23 36 08.4 -0.3
PV15 Paradox Valley 54.01 299 P P 23 36 09.3 +0.1
BW06 Boulder Array 54.16 304 lAmb lAmb 23 36 11.5
comp=Z,31nm,1.1s
BW06 Boulder Array 54.16 304 P P 23 36 10.2 -0.1
baz=83,SNR=24
PD31 Pinedale Array 54.16 304 lAmb lAmb 23 36 11.5
comp=Z,30nm,1.1s
PDAR Pinedale Array 54.16 304 P P 23 36 08.9 -1.3
comp=Z,8.0nm,0.6s,baz=90,slow=7.1,SNR=69
PDAR LR LR 23 57 30.3
comp=Z,1μm,20.7s,baz=90,slow=34
HERR Herculane 54.20 53 ⇑P P 23 36 10.4 +0.2
MVCO Mesa Verde 54.22 297 lAmb lAmb 23 36 12.7
comp=Z,65nm,1.7s
MVCO Mesa Verde 54.22 297 P P 23 36 11.5 +0.7
baz=79,SNR=7.0
DRGR 54.22 51 ⇑P P 23 36 09.4 -1.0
DRGR 54.22 51 ⇑P P 23 36 09.4 -1.0
HPIG 54.31 284 P P 23 36 11.8 +0.3
HPIG lAmb lAmb 23 36 12.5
comp=Z,51nm,1.7s
YMP Mirror Lake Pl 54.36 307 lAmb lAmb 23 36 13.7
comp=Z,60nm,1.4s
NOR Nord 54.40 5 eP P 23 36 09.2 -1.9
NOR lAmb lAmb 23 36 13.2
comp=Z,122nm,2.1s
GZR Gura Zlata 54.40 53 ⇑P P 23 36 12.2 +0.5
GZR Gura Zlata 54.40 53 ⇑P P 23 36 12.2 +0.5
RDMU Red Mountain 54.48 301 lAmb lAmb 23 36 14.4
comp=Z,73nm,1.6s
LKWY Lake 54.55 306 lAmb lAmb 23 36 15.8
comp=Z,50nm,1.5s
121A Cookes Peak, D 54.63 291 lAmb lAmb 23 36 15.7
comp=Z,92nm,2.0s
121A Cookes Peak, D 54.63 291 P P 23 36 14.4 +0.7
baz=76
PABE Paberze 54.68 40 eP P 23 36 13.7 +0.2
H17A Grant Village 54.70 306 P P 23 36 14.4 +0.2
baz=83
EUNU Eureka 54.73 352 P P 23 36 13.1 -0.5
EUNU lAmb lAmb 23 36 15.5
comp=Z,56nm,1.6s
LOHW Long Hollow 54.81 305 lAmb lAmb 23 36 15.6
comp=Z,75nm,1.8s
FLWY Flagg Ranch 54.82 306 lAmb lAmb 23 36 18.2
comp=Z,46nm,1.5s
YHH Holmes Hill 54.84 307 lAmb lAmb 23 36 17.5
comp=Z,41nm,1.7s
LVV L'vov 54.88 47 eP P 23 36 15.0 0.0
LVV eS S 23 43 53.1 -2.8
LVV pmax pmax
comp=Z,70nm,1.8s
LVV MLR MLR
comp=Z,400nm,16.0s
LIT Litokhoron 54.90 59 P P 23 36 15.7 +0.3
LIT pmax pmax
comp=Z,74nm,2.0s
LIT Litokhoron 54.90 59 P P 23 36 15.7 +0.3
LIT lAmb lAmb 23 36 26.8
comp=Z,74nm,2.0s
SNOW Snow King Moun 54.94 305 lAmb lAmb 23 36 17.6
comp=Z,20nm,0.8s
YMR Madison River 54.94 307 P P 23 36 16.9 +1.0
AGG Agios Georgios 54.96 60 lAmb lAmb 23 36 18.2
comp=Z,52nm,1.9s
ITM Ithomi 54.98 63 lAmb lAmb 23 36 18.2
comp=Z,31nm,1.3s
PB01 IPOC Station P 55.00 210 lAmb lAmb 23 36 17.3
comp=Z,26nm,0.9s
REDW Red Top Meadow 55.02 305 lAmb lAmb 23 36 18.1
comp=Z,47nm,1.4s
VTS Vitosha 55.07 56 ⇓P P 23 36 17.5 +0.8
VTS Vitosha 55.07 56 ⇓P P 23 36 17.5 +0.8
TPAW Teton Pass 55.08 305 lAmb lAmb 23 36 16.9
comp=Z,74nm,1.8s
P18A Preston Nutter 55.14 300 lAmb lAmb 23 36 18.5
comp=Z,77nm,1.7s
QLMT Earthquake Lak 55.25 307 P P 23 36 18.7 +0.6
AHID Auburn Hatcher 55.29 304 lAmb lAmb 23 36 19.0
comp=Z,46nm,1.6s
BOZ Bozeman (W) 55.30 308 lAmb lAmb 23 36 18.9
comp=Z,56nm,1.9s
BOZ Bozeman (W) 55.30 308 P P 23 36 18.3 -0.1
baz=83,SNR=10
SRU San Rafael Swe 55.45 300 lAmb lAmb 23 36 20.5
comp=Z,73nm,1.7s
P17A Butcher Ranch, 55.55 300 lAmb lAmb 23 36 22.6
comp=Z,47nm,2.0s
W18A Petrified Fore 55.63 295 lAmb lAmb 23 36 23.2
comp=Z,77nm,1.8s
W18A Petrified Fore 55.63 295 P P 23 36 21.5 +0.6
baz=77,SNR=6.7
ARR Arges 55.70 53 ⇑P P 23 36 21.2 +0.1
VLAD Vladila 55.72 54 ⇑P P 23 36 21.7 +0.5
BUR08 Bucovina Ar. S 55.83 50 lAmb lAmb 23 36 24.7
comp=Z,58nm,1.6s
BURAR Bucovina Array 55.85 50 ⇑P P 23 36 22.2 0.0
BURAR Bucovina Array 55.85 50 ⇑P P 23 36 22.2 0.0
CPUP Villa Florida 55.88 195 P P 23 36 21.0 -1.3
comp=Z,3.3nm,0.8s,baz=20,slow=9.8,SNR=8.8
CPUP LR LR 23 59 13.8
comp=Z,99nm,19.9s,baz=356,slow=35
CPUP Villa Florida 55.88 195 P P 23 36 21.5 -0.8
CPUP pmax pmax
comp=Z,85nm,1.9s
CPUP Villa Florida 55.88 195 P P 23 36 21.5 -0.8
CPUP lAmb lAmb 23 36 22.4
comp=Z,85nm,1.9s
JLU Jordanelle 55.89 302 lAmb lAmb 23 36 24.4
comp=Z,40nm,1.4s
X18A Snowflake 55.93 294 P P 23 36 23.6 +0.5
X18A lAmb lAmb 23 36 24.4
comp=Z,40nm,1.8s
TMUT Trail Mountain 55.94 300 lAmb lAmb 23 36 25.3
comp=Z,55nm,1.7s
FINES FINESS Array B 55.96 33 P P 23 36 22.2 -0.4
comp=Z,5.3nm,0.7s,baz=251,slow=4.3,SNR=22
FINES LR LR 23 56 05.8
comp=Z,242nm,21.8s,baz=231,slow=32
IIGN Ignalina 55.97 40 eP P 23 36 23.0 +0.2
Q16A Castle Valley 55.98 300 lAmb lAmb 23 36 25.3
comp=Z,47nm,1.6s
HUMR Humele 56.06 53 ⇑P P 23 36 24.0 +0.4
CTU Camp Tracy 56.09 302 P P 23 36 24.1 0.0
LVC Limon Verde 56.14 208 LR LR 00 00 16.6
comp=Z,180nm,18.9s,baz=5.5,slow=36
LVC Limon Verde 56.14 208 P P 23 36 24.4 -0.4
LVC pmax pmax
comp=Z,74nm,1.6s
LVC Limon Verde 56.14 208 P P 23 36 24.4 -0.4
LVC lAmb lAmb 23 36 25.7
comp=Z,74nm,1.6s
DOPR Dopca 56.15 52 ⇓P P 23 36 23.1 -1.2
VSU Vasula 56.21 37 iP P 23 36 23.1 -1.3
VSU pmax pmax
comp=Z,42nm,1.0s
VSU Vasula 56.21 37 eP P 23 36 23.9 -0.5
IDID Didziasalis 56.26 40 eP P 23 36 25.1 +0.3
OZUR 56.41 52 ⇑P P 23 36 25.7 -0.5
WALA Waterton Lakes 56.47 312 lAmb lAmb 23 36 26.6
comp=Z,69nm,1.8s
NLU North Lily Min 56.47 301 lAmb lAmb 23 36 29.0
comp=Z,40nm,1.4s
YKA Yellowknife Ar 56.47 328 P P 23 36 24.1 -2.2
comp=Z,4.4nm,0.7s,baz=90,slow=7.4,SNR=47
YKA LR LR 00 00 16.9
comp=Z,1μm,19.4s,baz=91,slow=36
YKA Yellowknife Ar 56.47 328 iP P 23 36 24.7 -1.5
YKA pmax pmax
comp=Z,4.0nm,0.7s
ARCES ARCESS Array B 56.53 23 P P 23 36 25.6 -1.0
comp=Z,3.0nm,0.7s,baz=283,slow=7.4,SNR=4.7
ARCES LR LR 23 56 08.6
comp=Z,157nm,18.9s,baz=228,slow=31
MLR Muntele Rosu 56.60 52 ⇑P P 23 36 28.1 +0.5
MLR Muntele Rosu 56.60 52 LR LR 00 00 03.0
comp=Z,316nm,18.0s,baz=264,slow=35
MLR Muntele Rosu 56.60 52 ⇑P P 23 36 28.1 +0.5
HVU Hansel Valley 56.67 303 lAmb lAmb 23 36 28.7
comp=Z,47nm,1.8s
COVR Voineasa-Covas 56.73 52 ⇑P P 23 36 27.8 -0.7
MSO Missoula 56.74 309 P P 23 36 28.3 -0.3
baz=83
WUAZ Wupatki 56.84 296 lAmb lAmb 23 36 32.4
comp=Z,74nm,1.6s
WUAZ Wupatki 56.84 296 P P 23 36 30.2 +0.7
baz=77,SNR=13
PB15 IPOC Station P 56.91 208 lAmb lAmb 23 36 29.9
comp=Z,52nm,1.3s
MNK Minsk 56.96 41 iP P 23 36 29.3 -0.5
MNK i 23 37 24.2
MNK i 23 38 36.0
MNK iPPP PPP 23 39 51.8
MNK iS S 23 44 23.4 0.0
MNK i 23 46 18.7
MNK iSS SS 23 48 14.4 +2.9
MNK pmax pmax
comp=E,8.0nm,1.2s
MNK pmax pmax
comp=N,15nm,0.9s
MNK pmax pmax
comp=Z,26nm,1.0s
MNK MLR MLR
comp=Z,149nm,14.0s
MNK MLR MLR
comp=N,331nm,18.0s
MNK MLR MLR
comp=E,45nm,17.0s
MNK Minsk 56.96 41 iP P 23 36 29.4 -0.5
comp=E,8.0nm,1.2s
MNK iP P 23 36 29.4 -0.5
comp=N,15nm,0.9s
MNK iP P 23 36 29.4 -0.5
comp=Z,26nm,1.0s,baz=274
MNK iPcP PcP 23 37 24.3 -0.7
MNK iPP PP 23 38 36.0 -0.2
MNK iPPP PPP 23 39 51.8
MNK iS S 23 44 23.5 0.0
MNK iSS SS 23 48 14.5 +3.0
MNK iSSS SSS 23 50 36.4
MNK iLQ LQ 23 56 34.5
MNK iLR LR 00 01 15.0
MNK iLRM MLR 00 03 27.0
comp=Z,149nm,14.5s
MNK iLRM MLR 00 03 30.9
comp=N,331nm,18.1s
MNK iLRM MLR 00 03 37.8
comp=E,45nm,16.6s
DUG Dugway, Tooele 56.98 301 P P 23 36 30.6 +0.1
baz=79,SNR=15
TCRU Three Creeks R 57.02 300 P P 23 36 31.1 +0.2
TCRU lAmb lAmb 23 36 32.6
comp=Z,68nm,1.8s
PLOR Plostina 57.04 52 ⇓P P 23 36 30.8 +0.2
PLOR Plostina 57.04 52 ⇓P P 23 36 30.8 +0.2
VRI Vrincioaia 57.09 52 ⇑P P 23 36 30.4 -0.6
VRI Vrincioaia 57.09 52 ⇑P P 23 36 30.4 -0.6
TUC Tucson 57.14 292 P P 23 36 32.7 +1.1
TUC pmax pmax
comp=Z,39nm,1.7s
TUC Tucson 57.14 292 P P 23 36 32.7 +1.1
TUC lAmb lAmb 23 36 34.3
comp=Z,39nm,1.7s
TUC Tucson 57.14 292 P P 23 36 32.0 +0.4
baz=75
X16A Lo Mia Camp, P 57.15 294 P P 23 36 33.2 +1.4
PKCU Pink Cliffs 57.15 298 P P 23 36 31.5 -0.4
PKCU lAmb lAmb 23 36 46.9
comp=Z,36nm,1.5s
U15A North Rim 57.36 297 P P 23 36 33.8 +0.4
U15A lAmb lAmb 23 36 36.2
comp=Z,44nm,1.6s
ALN Alexandroupoli 57.43 58 P P 23 36 33.7 +0.4
ALN pmax pmax
comp=Z,28nm,1.6s
ALN Alexandroupoli 57.43 58 P P 23 36 33.7 +0.4
HLID Hailey 57.56 306 P P 23 36 34.5 0.0
baz=80,SNR=5.9
IDI Anoyia 57.73 64 LR LR 00 00 18.8
comp=Z,152nm,20.8s,baz=280,slow=35
SORM Soroca 57.88 49 ⇑P P 23 36 35.0 -1.4
SORM Soroca 57.88 49 ⇑P P 23 36 35.0 -1.4
AKASG Malin Array Be 58.12 46 P P 23 36 36.6 -1.4
comp=Z,5.5nm,0.7s,baz=275,slow=6.1,SNR=35
AKASG LR LR 23 59 56.8
comp=Z,342nm,18.4s,baz=283,slow=34
AKASG Malin Array Be 58.12 46 iP P 23 36 37.4 -0.6
AKASG pmax pmax
comp=Z,6.0nm,0.7s
AKASG Malin Array Be 58.12 46 lAmb lAmb 23 36 38.7
comp=Z,43nm,1.9s
AKBB Malin Array Si 58.12 46 P P 23 36 37.8 -0.2
AKBB pmax pmax
comp=Z,29nm,1.3s
AKBB Malin Array Si 58.12 46 P P 23 36 37.8 -0.2
AKBB lAmb lAmb 23 36 39.0
comp=Z,29nm,1.2s
MILM Milestii Mici 58.37 50 ⇑P P 23 36 38.0 -1.9
MILM Milestii Mici 58.37 50 ⇑P P 23 36 38.0 -1.9
Y14A Wickenburg 58.53 294 P P 23 36 41.7 +0.4
Y14A lAmb lAmb 23 36 43.8
comp=Z,39nm,1.6s
PB14 IPOC Station P 58.55 209 lAmb lAmb 23 36 41.5
comp=Z,44nm,1.2s
MFID Camas Ranch 58.60 306 lAmb lAmb 23 36 42.6
comp=Z,68nm,1.7s
NEW Newport 58.68 311 LR LR 00 00 05.7
comp=Z,711nm,20.9s,baz=78,slow=34
NEW Newport 58.68 311 lAmb lAmb 23 36 43.5
comp=Z,32nm,1.1s
NEW Newport 58.68 311 P P 23 36 42.3 +0.2
baz=81,SNR=13
ELK Elko 58.69 303 LR LR 00 00 28.0
comp=Z,558nm,20.2s,baz=84,slow=35
214A Organ Pipe Nat 58.90 292 P P 23 36 44.7 +0.9
214A lAmb lAmb 23 36 46.4
comp=Z,58nm,1.8s
214A Organ Pipe Nat 58.90 292 P P 23 36 44.4 +0.6
baz=74
W13A Hualapai Mount 58.94 296 P P 23 36 45.0 +0.7
W13A lAmb lAmb 23 36 46.4
comp=Z,41nm,1.8s
ITQB Itaqui 58.96 193 P P 23 36 43.8 -0.2
F10A Beach Ranch, E 59.12 309 P P 23 36 44.7 -0.6
F10A lAmb lAmb 23 36 45.7
comp=Z,40nm,1.4s
PURM Purcari 59.15 51 ⇑P P 23 36 44.9 -0.4
LPIG La Paz 59.18 283 LR LR 00 01 39.5
comp=Z,464nm,20.2s,baz=35,slow=36
PRN Pahroc Range 59.29 299 P P 23 36 46.4 -0.2
PRN lAmb lAmb 23 36 48.5
comp=Z,38nm,1.8s
PDMCI Parker Dam,Lak 59.34 295 P P 23 36 47.3 +0.5
baz=75
113A Mohawk Valley, 59.45 293 P P 23 36 48.3 +0.6
113A lAmb lAmb 23 36 50.0
comp=Z,39nm,1.8s
R11A Troy Canyon, C 59.48 300 lAmb lAmb 23 36 49.2
comp=Z,36nm,1.9s
R11A Troy Canyon, C 59.48 300 P P 23 36 48.3 +0.3
baz=76,SNR=7.5
C09A Chrisman Ranch 59.52 311 lAmb lAmb 23 36 49.0
comp=Z,48nm,1.6s
SHPR Sheep Range 59.59 298 P P 23 36 48.6 -0.1
SHPR lAmb lAmb 23 36 50.2
comp=Z,36nm,2.0s
E09A Wood Farm, Sta 59.65 310 lAmb lAmb 23 36 50.0
comp=Z,60nm,1.9s
BLYC Blythe 59.80 294 lAmb lAmb 23 36 51.4
comp=Z,54nm,1.9s
YER Yerkesik 59.95 61 P P 23 37 05.9 +15
YER pmax pmax
comp=Z,26nm,2.0s
AC02 Maricunga 60.00 206 P P 23 36 51.5 -0.4
PNT Penticton 60.14 313 P P 23 37 07.7 +16
PNT pmax pmax
comp=Z,7.0nm,0.9s
IRM Iron Mountain 60.18 295 P P 23 36 53.4 +0.6
baz=74,SNR=8.4
BMN Battle Mountai 60.23 303 P P 23 36 53.0 -0.1
BMN pmax pmax
comp=Z,28nm,1.6s
BMN Battle Mountai 60.23 303 P P 23 36 53.0 -0.1
BMN lAmb lAmb 23 36 53.9
comp=Z,28nm,1.6s
GLA Glamis 60.23 294 P P 23 36 53.4 +0.3
GLA pmax pmax
comp=Z,72nm,1.9s
GLA Glamis 60.23 294 P P 23 36 53.4 +0.3
GLA Glamis 60.23 294 P P 23 36 53.8 +0.8
baz=74
TPNV Topopah Spring 60.33 298 P P 23 36 54.6 +0.8
baz=75,SNR=5.1
GMRC Granite Mounta 60.43 296 P P 23 36 54.9 +0.4
baz=74,SNR=6.3
G08A Pilot Rock 60.44 308 lAmb lAmb 23 36 54.5
comp=Z,42nm,1.8s
WRGLY Wrigley 60.52 329 P P 23 36 54.1 -0.3
baz=85,SNR=6.1
BC3 Big Chuckawall 60.57 295 P P 23 36 55.9 +0.4
baz=74
HAWA Hanford 60.62 310 P P 23 36 54.9 -0.6
HAWA lAmb lAmb 23 36 57.1
comp=Z,25nm,1.1s
A36M Sachs Harbour 60.72 339 lAmb lAmb 23 36 57.1
comp=Z,59nm,1.8s
A36M Sachs Harbour 60.72 339 P P 23 36 56.7 +1.0
baz=88,SNR=5.9
WVOR Wild Horse Val 60.82 305 lAmb lAmb 23 36 58.8
comp=Z,46nm,1.6s
GWY Greenwater Val 60.85 298 P P 23 36 58.3 +0.9
BELC Belle Mtn. Jos 60.91 295 P P 23 36 58.3 +0.5
baz=74
FURC Furnace Creek, 60.93 298 P P 23 36 59.0 +1.3
baz=75
BORA Eskisehir 60.93 58 P P 23 36 57.7 -0.1
HEC Hector,Ludlow 60.95 296 P P 23 36 58.5 +0.5
baz=74
SWSC Sam W. Stewart 61.05 294 P P 23 36 58.8 +0.3
baz=73
QSM Queen of Sheba 61.06 298 P P 23 36 58.5 -0.1
GO03 Copiap 61.12 207 P P 23 36 58.3 -0.6
GSC Goldstone, Bar 61.19 297 P P 23 36 59.9 +0.3
GSC pmax pmax
comp=Z,36nm,2.0s
GSC Goldstone, Bar 61.19 297 P P 23 36 59.9 +0.3
GSC lAmb lAmb 23 37 01.1
comp=Z,36nm,1.9s
GSC Goldstone, Bar 61.19 297 P P 23 36 59.4 -0.2
baz=74
KVN Kaiserville 61.22 301 lAmb lAmb 23 37 01.5
comp=Z,61nm,1.8s
C06D Leavenworth 61.23 312 P P 23 36 59.3 -0.3
baz=79
YUH Yuha Desert 61.23 294 lAmb lAmb 23 37 01.5
comp=Z,42nm,1.8s
ELL Elmali 61.30 61 P P 23 37 01.5 +1.1
ELL pmax pmax
comp=Z,252nm,1.8s
ELL Elmali 61.30 61 P P 23 37 01.5 +1.1
PMD Palm Desert 61.31 295 P P 23 37 01.5 +1.1
PMD lAmb lAmb 23 37 02.7
comp=Z,43nm,1.9s
MDUB Mudurnu 61.34 57 P P 23 37 00.9 +0.3
RMX La Rumorosa 61.37 294 P P 23 37 01.4 +0.4
IKP In-Ko-Pah, Jac 61.38 294 P P 23 37 01.8 +0.8
baz=73,SNR=5.7
TPFO Pinon Flats 61.38 295 P P 23 37 00.8 -0.3
baz=73
PFO Pinyon Flats O 61.39 295 LR LR 00 01 15.3
comp=Z,455nm,20.9s,baz=76,slow=34
PFO Pinyon Flats O 61.39 295 P P 23 37 01.6 +0.6
PFO pmax pmax
comp=Z,65nm,2.0s
PFO Pinyon Flats O 61.39 295 P P 23 37 01.6 +0.6
PFO lAmb lAmb 23 37 02.6
comp=Z,65nm,2.0s
PFO Pinyon Flats O 61.39 295 P P 23 37 01.1 +0.1
baz=73
NV11 Mina Array Sit 61.41 301 lAmb lAmb 23 37 01.5
comp=Z,45nm,1.9s
MPMC Manual Prospec 61.52 298 P P 23 37 02.7 +0.7
baz=74,SNR=5.7
NVAR Mina Array Bea 61.53 301 P P 23 37 00.8 -1.2
comp=Z,2.5nm,0.7s,baz=74,slow=8.0,SNR=16
NVAR LR LR 00 03 13.6
comp=Z,928nm,18.8s,baz=70,slow=36
MONP2 Monument Peak 61.56 294 P P 23 37 01.9 -0.5
baz=73
RYN Ryan 61.64 301 lAmb lAmb 23 37 03.3
comp=Z,64nm,1.9s
LHV Little Huntoon 61.73 300 lAmb lAmb 23 37 04.3
comp=Z,38nm,1.8s
CWC Cottonwood Cre 61.88 298 P P 23 37 04.5 +0.1
baz=74
OBN Obninsk 61.88 40 LR LR 00 00 34.0
comp=Z,97nm,20.6s,baz=290,slow=33
OBN Obninsk 61.88 40 ⇓eP P 23 37 04.3 +0.5
OBN e 23 37 47.1
OBN e 23 39 22.9
OBN pmax pmax
comp=Z,96nm,1.7s
OBN Obninsk 61.88 40 P P 23 37 04.5 +0.7
CCX Cicese 62.06 293 P P 23 37 05.9 +0.5
CCX lAmb lAmb 23 37 08.1
comp=Z,50nm,1.6s
G05D Wamic, OR 62.08 309 P P 23 37 05.2 -0.2
baz=77
YERR Yerington 62.09 301 P P 23 37 05.9 +0.1
109C Camp Elliot, M 62.11 294 P P 23 37 06.1 +0.4
109C lAmb lAmb 23 37 08.0
comp=Z,17nm,1.1s
ELS Elsinore Mount 62.15 295 P P 23 37 06.3 +0.2
PINE Pine Mountain 62.15 307 P P 23 37 05.8 -0.3
PINE lAmb lAmb 23 37 23.5
comp=Z,33nm,1.9s
CCAC Calif City Air 62.19 297 P P 23 37 07.2 +0.9
CCAC lAmb lAmb 23 37 08.8
comp=Z,51nm,1.7s
EDW2 Edwards Air Fo 62.24 297 P P 23 37 07.3 +0.6
baz=73
HOOD Mount Hood Mea 62.29 309 P P 23 37 07.2 +0.2
I05D Terrebonne, OR 62.30 308 P P 23 37 08.0 +1.0
baz=76

**PNTR Pine Nut** 62.34 302 P P 23 37 07.7 +0.3
**ISA Isabella, Lake** 62.40 298 IAmb IAmb 23 37 10.6
comp=Z,36nm,1.6s
**ISA Isabella, Lake** 62.40 298 P P 23 37 08.6 +0.8
baz=74
**J05D Fort Rock, OR** 62.48 307 P P 23 37 08.8 +0.6
baz=76,SNR=5.6
**KLMR Klimovskoe** 62.49 33 eP P 23 37 05.8 -2.0
KLMR pmax pmax
comp=Z,49nm,1.5s
**KLMR Klimovskoe** 62.49 33 eP P 23 37 05.8 -2.0
KLMR AMP 23 37 08.9
comp=Z,49nm,1.5s
**BR231 Keskin MP Arra** 62.67 57 P P 23 37 10.2 +0.7
BR231 IAmb IAmb 23 37 11.8
comp=Z,46nm,1.7s
**ANTO Ankara** 62.68 57 P P 23 37 10.3 +0.8
ANTO pmax pmax
comp=Z,14nm,0.9s
**ANTO Ankara** 62.68 57 P P 23 37 10.3 +0.8
ANTO IAmb IAmb 23 37 11.7
comp=Z,14nm,0.9s
**H04A Detroit Lake** 62.81 308 IAmb IAmb 23 37 10.8
comp=Z,53nm,1.7s
**ARVC Arvin** 62.83 297 P P 23 37 11.5 +0.9
baz=73
**K04D Chiloquin, OR** 63.01 306 P P 23 37 11.7 -0.1
baz=75
**CIS Catalina Islan** 63.01 295 P P 23 37 12.2 +0.4
baz=72
**J04D Umpqua Nationa** 63.11 307 P P 23 37 12.4 -0.1
**J04D Umpqua Nationa** 63.11 307 P P 23 37 12.3 -0.1
baz=75
**I04A Tendick Farm,** 63.18 307 P P 23 37 12.3 -0.5
baz=76
**H04D Lebanon** 63.23 308 P P 23 37 12.6 -0.5
baz=76
**M04C Macdoel** 63.28 305 P P 23 37 14.0 +0.4
baz=75
**BR131 Keskin Array S** 63.34 57 i P P 23 37 14.0 0.0
**BR131 Keskin Array S** 63.34 57 P P 23 37 15.1 +1.1
SNR=6.7
**BRTR Keskin Array B** 63.34 57 P P 23 37 14.2 +0.2
comp=Z,3.4nm,0.9s,baz=264,slow=5.2,SNR=18
BRTR LR LR 00 02 29.1
comp=Z,340nm,19.8s,baz=292,slow=34
**BRTR Keskin Array B** 63.34 57 i P P 23 37 14.1 0.0
BRTR pmax pmax
comp=Z,3.0nm,0.9s
**BRTR Keskin Array B** 63.34 57 P P 23 37 13.1 -1.0
**G03D McMinnville, O** 63.42 309 P P 23 37 14.2 -0.1
baz=76
**L04D Klamath Falls** 63.51 306 P P 23 37 14.7 -0.4
baz=75,SNR=5.3
**COR Corvallis** 63.60 308 P P 23 37 14.7 -0.8
COR pmax pmax
comp=Z,120nm,1.8s
**COR Corvallis** 63.60 308 P P 23 37 14.7 -0.8
**PKM Mcpherson Peak** 63.67 297 P P 23 37 16.9 +0.6
baz=72
**LPSR Galich'ya Gora** 63.75 42 eP P 23 37 15.5 -0.8
LPSR pmax pmax
comp=Z,80nm,1.6s
**YBH Yreka Blue Hor** 63.93 305 LR LR 00 05 17.9
comp=Z,477nm,18.0s,baz=83,slow=36
**INK Inuvik** 63.93 336 LR LR 00 04 03.3
comp=Z,304nm,18.9s,baz=76,slow=35
**INK Inuvik** 63.93 336 P P 23 37 16.2 -1.0
INK pmax pmax
comp=Z,28nm,1.3s
**INK Inuvik** 63.93 336 P P 23 37 16.2 -1.0
INK IAmb IAmb 23 37 18.3
comp=Z,28nm,1.3s
**INK Inuvik** 63.93 336 P P 23 37 16.7 -0.5
baz=79,SNR=9.5
**ZON Zonda** 64.08 204 P P 23 37 18.9 +0.2
ZON pmax pmax
comp=Z,87nm,1.7s
**ZON Zonda** 64.08 204 P P 23 37 18.9 +0.2
**VORR Voronezh** 64.13 43 eP P 23 37 18.8 0.0
VORR pmax pmax
comp=Z,25nm,0.4s
**N02D Trinity Center** 64.13 304 P P 23 37 18.7 -0.5
baz=74
**MMPY Sheldon Lake,** 64.14 329 P P 23 37 18.9 +0.2
baz=78,SNR=6.1
**VSR Storozhevoye** 64.21 44 eP P 23 37 18.8 -0.5
VSR pmax pmax
comp=Z,40nm,1.6s
**VORD Divnogorie** 64.35 44 eP P 23 37 19.3 -0.9
VORD pmax pmax
comp=Z,10.0nm,1.0s
**K02D Willamette Mer** 64.35 306 P P 23 37 20.8 +0.2
baz=74
**CO06 Fray Jorge** 64.41 207 P P 23 37 19.8 -1.0
**J01E Myrtle Point** 64.41 307 P P 23 37 21.4 +0.6
baz=74
**DLBC Dease Lake** 64.43 324 LR LR 00 04 48.3
comp=Z,467nm,19.5s,baz=82,slow=36
**BBB Bella Bella** 64.83 317 LR LR 00 04 04.3
comp=Z,559nm,20.2s,baz=69,slow=35
**KBO Bosley Butte** 64.88 306 P 23 37 23.5 -0.6
**FARO Faro, Yukon** 65.17 329 P P 23 37 25.8 +0.3
baz=76,SNR=7.7
**PRGR Permogore** 65.22 32 eP P 23 37 25.7 -0.1
PRGR pmax pmax
comp=Z,16nm,0.8s
**P33M Teslin, Yukon** 65.41 327 IAmb IAmb 23 37 27.6
comp=Z,53nm,1.8s
**P33M Teslin, Yukon** 65.41 327 P P 23 37 27.0 -0.1
baz=76
**M31M Drury Creek, Y** 65.65 329 P P 23 37 28.8 +0.2
baz=75,SNR=6.2
**VRH Novokhopyorsk** 65.77 43 eP P 23 37 28.9 -0.6
VRH pmax pmax
comp=Z,50nm,1.5s
**WHY Whitehorse** 66.28 327 P P 23 37 32.8 +0.1
baz=74
**I29M Ogilvie Camp,** 66.47 333 IAmb IAmb 23 37 35.0
comp=Z,39nm,1.5s
**I29M Ogilvie Camp,** 66.47 333 P P 23 37 33.5 -0.4
baz=73,SNR=6.0
**N31M Braeburn, Yuko** 66.47 328 P P 23 37 33.3 -0.6
**N31M Braeburn, Yuko** 66.47 328 P P 23 37 33.7 -0.2
baz=74,SNR=9.9
**SOC Sochi** 66.62 52 eP P 23 37 34.2 -0.9
SOC e 23 40 01.9
SOC ePPP PPP 23 41 36.2
SOC eS S 23 46 26.3 +0.3
SOC eSS SS 23 50 37.3 -5.6
SOC pmax pmax
comp=Z,30nm,1.1s
SOC MLR MLR
comp=Z,68nm,13.0s
**MMAI Mount Meron Ar** 66.73 64 LR LR 00 04 57.4
comp=Z,130nm,21.9s,baz=110,slow=34
**GAZ Gaziantep** 66.78 59 P P 23 37 35.8 -0.5
**DAWY Dawson** 67.30 332 P P 23 37 38.4 -0.8
DAWY IAmb IAmb 23 37 40.6
comp=Z,36nm,1.4s
**DAWY Dawson** 67.30 332 P P 23 37 39.2 0.0
baz=72,SNR=10
**HYT Haines Junctio** 67.47 328 P P 23 37 40.6 +0.3
baz=72
**EIL Elat** 67.51 67 LR LR 00 08 01.8
comp=Z,183nm,19.0s,baz=278,slow=37
**EGAK Eagle** 67.80 333 P P 23 37 42.1 -0.1
baz=71
**YUK6 Outpost Mounta** 67.83 328 P P 23 37 42.9 +0.1
baz=72
**KIRV Kirov** 67.89 34 LR LR 00 05 34.6
comp=Z,213nm,18.8s,baz=279,slow=34
**KIRV Kirov** 67.89 34 ceP P 23 37 42.6 -0.3
**GOF Gofitskoye** 68.43 50⇑ eP P 23 37 46.8 +0.3
**BVCY Beaver Creek** 68.47 330 P P 23 37 46.9 +0.4
baz=70
**YUK3 Moose Creek** 68.51 330 P P 23 37 47.3 +0.3
baz=70
**KIV Kislovodsk** 68.55 51 eP P 23 37 48.2 +0.8
KIV pmax pmax
comp=Z,15nm,1.0s
**KIV Kislovodsk** 68.55 51 P P 23 37 48.1 +0.7
**KIV Kislovodsk** 68.55 51 P P 23 37 47.8 +0.4
**KIV Kislovodsk** 68.55 51 i P P 23 37 48.9 +1.5
SNR=6.1
**SHA1 Shidzhatmaz** 68.60 51 i P P 23 37 49.1 +1.2

**L27K Beaver Creek,** 68.67 331 IAmb IAmb 23 37 49.1
comp=Z,23nm,1.4s
**L27K Beaver Creek,** 68.67 331 P P 23 37 47.7 -0.1
baz=70
**KBZ Khabaz** 68.76 51 P P 23 37 49.1 +0.5
comp=Z,5.0nm,0.9s,baz=261,slow=6.3,SNR=15
KBZ LR LR 00 05 30.4
comp=Z,142nm,19.4s,baz=311,slow=34
**KBZ Khabaz** 68.76 51 ceP P 23 37 49.8 +1.2
KBZ pmax pmax
comp=Z,30nm,1.9s
**NEY Neytrino** 68.80 51 i P P 23 37 50.4 +1.3
NEY pmax pmax
comp=Z,5.0nm,1.4s
**ML02 Panimavida** 68.86 204 P P 23 37 49.6 +0.4
**J26L Joseph Creek** 68.87 333 P P 23 37 48.5 -0.6
baz=69
**BELG Belogornoye** 68.91 41 LR LR 00 04 45.2
comp=Z,230nm,21.4s,baz=322,slow=33
**BELG Belogornoye** 68.91 41 i P P 23 37 49.6 +0.2
BELG pmax pmax
comp=Z,9.0nm,1.2s
**M27K Edge Creek, AK** 68.94 330 IAmb IAmb 23 37 51.0
comp=Z,20nm,1.2s
**M27K Edge Creek, AK** 68.94 330 P P 23 37 49.6 0.0
baz=69
**PINM Pinnacle** 68.99 328 P P 23 37 49.5 -0.4
baz=70
**SCRK Sand Creek** 69.24 332 P P 23 37 51.3 -0.1
baz=68
**PRP Porcupine Dome** 69.26 334 P P 23 37 51.5 -0.1
baz=67
**BARN Barnard Glacie** 69.30 329 IAmb IAmb 23 37 53.7
comp=Z,31nm,1.0s
**NCK Nalchik** 69.32 51 i P P 23 37 53.6 +1.5
NCK pmax pmax
comp=Z,14nm,0.9s
**L26K Log Cabin Wild** 69.33 331 IAmb IAmb 23 37 52.6
comp=Z,46nm,1.8s
**L26K Log Cabin Wild** 69.33 331 P P 23 37 51.8 -0.1
baz=68
**M26K Nabesna, AK** 69.41 331 P P 23 37 52.7 +0.3
baz=68
**MARD Mardin** 69.41 58 IAmb IAmb 23 38 05.0
comp=Z,17nm,1.1s
**TOLK Toolik Lake Re** 69.44 338 IAmb IAmb 23 37 54.9
comp=Z,33nm,1.4s
**TOLK Toolik Lake Re** 69.44 338 P P 23 37 53.0 +0.5
baz=65,SNR=10
**J25K Salcha River,** 69.55 333 P P 23 37 53.6 +0.4
baz=67
**RIDG Independent Ri** 69.68 332 P P 23 37 54.4 +0.4
baz=67
**MESA MESA** 69.76 328 P P 23 37 55.4 +0.6
baz=68
**ZEI Tsey** 69.77 52 eP P 23 37 55.2 0.0
ZEI pmax pmax
comp=Z,7.0nm,0.9s
**ISLE Juniper Island** 69.78 329 IAmb IAmb 23 37 56.5
comp=Z,38nm,1.2s
**AKH Akhalkalaki** 69.96 53 ⇓P P 23 37 57.2 +0.9
**H24K Noodor Dome** 70.03 335 P P 23 37 56.4 +0.3
baz=65
**IL31** 70.09 334 IAmb IAmb 23 37 58.1
comp=Z,27nm,1.2s
**ILAR Eielson Array** 70.09 334 P P 23 37 55.5 -1.0
comp=Z,5.9nm,0.9s,baz=60,slow=3.8,SNR=22
ILAR LR LR 00 09 40.2
comp=Z,313nm,18.4s,baz=86,slow=37
**POKR Poker Plat Res** 70.16 334 P P 23 37 57.3 +0.4
baz=66
**PAX Paxson** 70.24 332 P P 23 37 57.7 +0.2
baz=66
**HDA Harding Lake** 70.26 333 IAmb IAmb 23 37 59.2
comp=Z,71nm,1.9s
**HDA Harding Lake** 70.26 333 P P 23 37 57.8 +0.3
baz=66
**COLD Coldfoot** 70.27 337 P P 23 37 58.7 +1.2
baz=64,SNR=5.4
**HARP HAARP** 70.34 331 P P 23 37 58.5 +0.5
baz=66
**A21K Barrow** 70.34 342 P P 23 37 58.5 +0.7
baz=60
**N25K Chitina, Valde** 70.41 330 P P 23 37 59.0 +0.4
baz=67
**COLA College** 70.42 334 i P P 23 37 58.7 +0.3
COLA pmax pmax
comp=Z,12nm,1.2s
**MDM Murphy Dome** 70.53 334 IAmb IAmb 23 38 00.8
comp=Z,34nm,1.4s
**BMRM Bremner River** 70.67 329 P P 23 37 60.0 -0.1
baz=66
**WRH Wood River Hil** 70.68 334 IAmb IAmb 23 38 01.6
comp=Z,39nm,1.4s
**I23K Minto, Yukon-K** 70.88 334 IAmb IAmb 23 38 03.4
comp=Z,34nm,1.2s
**I23K Minto, Yukon-K** 70.88 334 P P 23 38 02.0 +0.7
baz=64,SNR=8.7
**M24K Tolsona, Glenn** 70.89 331 P P 23 38 01.5 0.0
baz=66
**GROC Groznyy** 70.93 51 eP P 23 38 01.9 0.0
GROC e 23 38 23.1
GROC ePPP PPP 23 42 28.8
GROC pmax pmax
comp=Z,14nm,1.0s
**NEA2 Nenana** 71.01 334 P P 23 38 02.4 +0.3
baz=64,SNR=5.6
**KLU Klutina** 71.03 330 P P 23 38 02.2 -0.2
baz=66
**GNI Garni** 71.30 54 LR LR 00 11 13.8
comp=Z,73nm,18.3s,baz=311,slow=37
**GNI Garni** 71.30 54 ceP P 23 38 06.8 +2.3
GNI pmax pmax
comp=Z,33nm,1.7s
**GNI Garni** 71.30 54 P P 23 38 04.8 +0.3
GNI IAmb IAmb 23 38 16.9
comp=Z,42nm,1.1s
**MCK McKinley** 71.34 333 P P 23 38 03.8 -0.3
baz=64
**H09N1 TRISTAN DA CUN** 71.44 154 T T 00 55 56.0
SNR=19
**H09W1 TRISTAN DA CUN** 71.45 154 T T 00 56 01.1
SNR=36
**MLY Manley** 71.45 335 IAmb IAmb 23 38 05.8
comp=Z,42nm,1.8s
**MLY Manley** 71.45 335 P P 23 38 04.8 -0.1
baz=63
**LC01 Cunco** 71.84 203 IAmb IAmb 23 38 07.4
comp=Z,42nm,1.4s
**I21K Tanana** 71.85 335 IAmb IAmb 23 38 09.3
comp=Z,54nm,1.4s
**I21K Tanana** 71.85 335 P P 23 38 06.9 -0.2
baz=62
**H21K Melozitna Rive** 71.93 336 IAmb IAmb 23 38 09.2
comp=Z,63nm,1.8s
**H21K Melozitna Rive** 71.93 336 P P 23 38 08.0 +0.4
baz=61
**BPAW Bear Paw Mtn.** 71.98 334 IAmb IAmb 23 38 30.5
comp=Z,58nm,2.0s
**BPAW Bear Paw Mtn.** 71.98 334 P P 23 38 07.9 -0.1
baz=62
**TRF Thorofare Moun** 72.01 333 P P 23 38 08.3 0.0
baz=63
**KNK Knik Glacier** 72.17 331 P P 23 38 09.3 +0.1
baz=64
**PWL Port Wells** 72.36 330 P P 23 38 09.8 -0.6
baz=64
**PMR Palmer** 72.38 331 P P 23 38 10.4 +0.1
baz=63
**CUT Chulitna** 72.48 332 P P 23 38 10.8 -0.2
baz=62
**CHUM Lake Minchumin** 72.60 334 P P 23 38 11.3 -0.4
baz=61
**CAST Castle Rocks** 72.73 333 P P 23 38 12.2 -0.3
baz=61
**PPLA Purkeypile** 73.03 333 P P 23 38 14.4 0.0
baz=61
**PLCA Paso Flores** 73.06 201 P P 23 38 11.8 -2.8
comp=Z,9.1nm,1.0s,baz=14,slow=9.5,SNR=10
PLCA LR LR 00 10 53.3
comp=Z,129nm,20.4s,baz=40,slow=36
**PLCA Paso Flores** 73.06 201 IAmb IAmb 23 38 15.6
comp=Z,48nm,1.5s
**J20K Nowinta River** 73.16 335 P P 23 38 15.0 +0.1
baz=60
**ARU Arti** 73.28 35 LR LR 00 08 10.1
comp=Z,160nm,18.9s,baz=281,slow=34
**ARU Arti** 73.28 35 ci P P 23 38 16.1 +0.3

ARU 23 38 26.5
ARU S S 23 47 46.9 +3.2
ARU pmax pmax
comp=Z,62nm,1.8s
**ARU Arti** 73.28 35 P P 23 38 15.5 -0.3
**K20K Telida** 73.54 334 IAmb IAmb 23 38 18.2
comp=Z,46nm,1.6s
**K20K Telida** 73.54 334 P P 23 38 17.1 -0.2
baz=60
**L20K Farewell, AK** 73.92 333 P P 23 38 19.3 -0.2
baz=59
**RDOG Red Dog Mine** 73.98 340 P P 23 38 20.4 +0.7
baz=53,SNR=6.1
**SVE Sverdlovsk** 74.12 34 eP P 23 38 21.4 +0.7
SVE pmax pmax
comp=Z,60nm,1.9s
**M19K Big River Lodg** 74.42 333 P P 23 38 22.4 0.0
baz=59
**L19K White Mountain** 74.46 333 P P 23 38 22.8 +0.1
baz=59
**O19K Port Alsworth** 75.28 331 P P 23 38 27.7 +0.4
baz=58
**AKTO Aktyubinsk** 75.66 40 LR LR 00 10 05.8
comp=Z,222nm,19.3s,baz=303,slow=34
**KDAK Kodiak Island** 75.75 328 LR LR 00 13 08.2
comp=Z,814nm,18.7s,baz=75,slow=37
**TSUM Tsumeb** 75.81 121 LR LR 00 07 31.3
comp=Z,163nm,19.2s,baz=330,slow=32
**NRIK Noril'sk** 76.43 16 P P 23 38 34.8 +0.9
comp=Z,2.3nm,0.6s,baz=335,slow=5.5,SNR=12
**NRIK Noril'sk** 76.43 16 ceP P 23 38 35.1 +1.3
NRIK pmax pmax
comp=Z,39nm,1.7s
**NRIK Noril'sk** 76.43 16 P P 23 38 34.4 +0.5
NRIK IAmb IAmb 23 38 37.1
comp=Z,67nm,1.8s
**MBAR Mbarara** 76.67 98 LR LR 00 10 44.7
comp=Z,295nm,21.7s,baz=298,slow=34
**MBAR Mbarara** 76.67 98 eP P 23 38 37.1 +0.8
MBAR pmax pmax
comp=Z,12nm,1.4s
**MBAR Mbarara** 76.67 98 P P 23 38 38.4 +2.1
**MBAR Mbarara** 76.67 98 P P 23 38 36.9 +0.6
**ANM Nome** 76.93 338 P P 23 38 37.5 +0.8
ANM pmax pmax
comp=Z,13nm,1.4s
**ANM Nome** 76.93 338 P P 23 38 37.5 +0.8
**ANM Nome** 76.93 338 P P 23 38 36.6 -0.2
baz=50
**TNA Tin City** 77.10 339 P P 23 38 37.9 +0.2
**TNA Tin City** 77.10 339 P P 23 38 37.7 +0.1
baz=48
**CHIR Chirikof Islan** 78.21 328 P P 23 38 44.3 +0.3
baz=57
**RAYN Ar Rayn** 78.61 69 P P 23 38 47.5 +0.7
RAYN pmax pmax
comp=Z,9.0nm,1.2s
**RAYN Ar Rayn** 78.61 69 P P 23 38 47.6 +0.7
**RAYN Ar Rayn** 78.61 69 P P 23 38 47.5 +0.7
**LODK Lodwar** 78.82 92 P P 23 38 50.4 +2.2
SNR=8.7
**LODK Lodwar** 78.82 92 P P 23 38 48.7 +0.6
**CHGN Chignik** 79.23 329 P P 23 38 49.3 -0.3
baz=55
**GAMB Gambell** 79.52 339 P P 23 38 51.1 +0.1
GAMB IAmb IAmb 23 38 52.3
comp=Z,50nm,1.9s
**GAMB Gambell** 79.52 339 P P 23 38 51.4 +0.4
baz=45
**TIXI Tiksi** 80.17 2 LR LR 00 09 04.2
comp=Z,107nm,21.9s,baz=358,slow=32
**TIXI Tiksi** 80.17 2 ceP P 23 38 54.3 -0.1
TIXI pmax pmax
comp=Z,38nm,2.5s
**TIXI Tiksi** 80.17 2 P P 23 38 54.2 -0.3
TIXI IAmb IAmb 23 38 55.7
comp=Z,49nm,1.8s
**BRVK Borovoye** 80.83 34 ceP P 23 38 59.5 +1.2
BRVK pmax pmax
comp=Z,31nm,2.5s
**BRVK Borovoye** 80.83 34 P P 23 38 59.2 +0.9
BRVK IAmb IAmb 23 38 59.9
comp=Z,48nm,1.8s
**BILL Bilibino** 81.36 349⇑ iP P 23 39 01.2 +0.3
BILL e 23 39 07.7
BILL e 23 42 10.1
BILL pmax pmax
BILL comp=Z,20nm,1.7s MLR MLR
comp=Z,149nm,17.0s
**BILL Bilibino** 81.36 349 P P 23 39 00.8 -0.1
**GEYT Alibeck** 81.65 51 P P 23 39 02.3 -0.8
comp=Z,1.6nm,0.3s,baz=270,slow=23,SNR=5.2
**ATD Arta Tunnel** 81.68 81 LR LR 00 15 35.9
comp=Z,322nm,18.6s,baz=345,slow=36
**LSZ Lusaka** 81.95 112 LR LR 00 13 34.4
comp=Z,172nm,20.5s,baz=326,slow=34
**KMBO Kilima Mbogo** 82.62 95 P P 23 39 10.0 +1.2
comp=Z,0.3nm,0.3s,baz=310,slow=9.2,SNR=5.4
KMBO LR LR 00 15 49.9
comp=Z,1μm,18.8s,baz=278,slow=36
**KMBO Kilima Mbogo** 82.62 95 i P P 23 39 12.0 +3.2
**KMBO Kilima Mbogo** 82.62 95 P P 23 39 09.3 +0.5
**RPN Rapa Nui** 83.63 235 LR LR 00 12 45.3
comp=Z,72nm,21.8s,baz=52,slow=33
**SPIA Saint Paul Isl** 83.67 334 P P 23 39 12.8 -0.3
baz=45
**KIBK Kibwezi** 83.90 96 P P 23 39 18.1 +3.0
SNR=5.7
**KIBK Kibwezi** 83.90 96 IAmb IAmb 23 39 19.7
comp=Z,42nm,1.7s
**LBTB Lobatse** 85.21 122 LR LR 00 09 57.8
comp=Z,324nm,21.0s,baz=328,slow=30
**MZR Muzera** 85.36 67 P P 23 39 23.4 +1.0
MZR P P 23 39 23.4 +1.0
**MZR Muzera** 85.36 67 i P P 23 39 23.2 +0.9
SNR=6.3
**NIKH Nikolski High** 86.03 330 P P 23 39 24.6 -0.4
baz=46
**SUR Sutherland** 86.06 130 LR LR 00 12 11.9
comp=Z,273nm,18.0s,baz=328,slow=32
**ASUD Al Ashush, Dub** 86.06 64 P P 23 39 25.8 0.0
**BANOM Banah** 86.19 63 P P 23 39 28.1 +1.6
**KURK Kurchatov** 86.33 33 ceP P 23 39 27.3 +0.7
KURK pmax pmax
comp=Z,29nm,2.5s
**KURK Kurchatov** 86.33 33 P P 23 39 27.1 +0.5
KURK IAmb IAmb 23 39 27.5
comp=Z,38nm,1.8s
**MASF Masafi** 86.36 63 P P 23 39 28.7 +1.4
SNR=6.4
MASF P P 23 39 28.7 +1.4
SNR=6.4
**MSFE Esma-Masafi** 86.36 63 i P P 23 39 28.9 +1.5
SNR=6.2
**UOSS Minazif** 86.60 64 P P 23 39 28.3 -0.2
UOSS P P 23 39 28.3 -0.2
**UOSS Minazif** 86.60 64 P P 23 39 28.6 +0.1
UOSS IAmb IAmb 23 39 39.8
comp=Z,29nm,0.9s
**UOSS Minazif** 86.60 64 i P P 23 39 28.4 0.0
SNR=8.5
**HATD Hatta, Dubai** 86.60 64 P P 23 39 30.0 +1.5
SNR=9.5
HATD P P 23 39 30.0 +1.5
SNR=9.5
**HATD Hatta, Dubai** 86.60 64 i P P 23 39 30.1 +1.6
SNR=6.2
**ASHO Ashiyiah** 86.61 64 P P 23 39 29.4 +0.8
**ASHO Ashiyiah** 86.61 64 i P P 23 39 29.0 +0.4
SNR=6.3
**ALNE Al Ain** 86.68 65 P P 23 39 31.6 +2.7
SNR=5.3
**ZAA0 Zalesovo Array** 86.81 28 IAmb IAmb 23 39 30.7
comp=Z,35nm,1.8s
**ZALV Zalesovo Beam** 86.81 28 P P 23 39 28.8 -0.2
comp=Z,0.8nm,0.8s,baz=333,slow=1.6,SNR=7.7
**ZALV Zalesovo Beam** 86.81 28 i P P 23 39 29.3 +0.4
ZALV pmax pmax
comp=Z,1.0nm,0.8s
**UMZA Um Al Zommool** 86.86 66 P P 23 39 30.5 +0.7
UMZA P P 23 39 30.5 +0.7
**BOSA Boshof** 86.98 125 LR LR 00 13 43.5
comp=Z,234nm,19.1s,baz=340,slow=32
**ABTO Aybut** 87.92 72 P P 23 39 37.0 +2.0
SNR=6.5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ABTO | | | | | P | | **P** | **23 39 37.0** | **+2.0** |
| | SNR=6.5 | | | | | | | | |
| **DOK** | **Doka** | **88.00** | **70** | | P | | **P** | **23 39 35.6** | **+0.3** |
| DOK | | | | | P | | **P** | **23 39 35.6** | **+0.3** |
| **WHFO** | **Wadi Hawf** | **88.04** | **71** | | P | | **P** | **23 39 35.9** | **+0.3** |
| WHFO | | | | | P | | **P** | **23 39 35.9** | **+0.3** |
| **HOQ** | **Hoqain** | **88.15** | **64** | | P | | **P** | **23 39 37.0** | **+1.0** |
| | SNR=6.0 | | | | | | | | |
| HOQ | | | | | P | | **P** | **23 39 37.0** | **+1.0** |
| | SNR=6.0 | | | | | | | | |
| **SEY** | **Seymchan** | **88.15** | **353** | *i* | P | | **P** | **23 39 35.8** | **+0.6** |
| **CHGR** | **Chuyangaron** | **88.59** | **46** | | P | | **P** | **23 39 38.2** | **+0.3** |
| CHGR | | | | | IAmb | | IAmb | 23 39 39.2 | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **SMDO** | **Samad** | **89.00** | **64** | | P | | **P** | **23 39 42.1** | **+2.0** |
| | SNR=5.6 | | | | | | | | |
| SMDO | | | | | P | | **P** | **23 39 42.1** | **+2.0** |
| | SNR=5.6 | | | | | | | | |
| **GAR** | **Garm** | **89.12** | **45** | | P | | **P** | **23 39 40.5** | **+0.1** |
| **AML** | **Almayashu** | **89.26** | **41** | | P | | **P** | **23 39 42.4** | **+1.1** |
| **AML** | **Almayashu** | **89.26** | **41** | *i* | P | | **P** | **23 39 42.6** | **+1.2** |
| | SNR=8.0 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.37** | **64** | | LR | | LR | 00 19 44.6 | |
| | comp=Z,155nm,21.6s,baz=308,slow=36 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.37** | **64** | | P | | **P** | **23 39 41.8** | **+0.1** |
| | SNR=5.5 | | | | | | | | |
| **AAK** | **Ala-Arcba** | **89.40** | **41** | | LR | | LR | 00 18 03.0 | |
| | comp=Z,212nm,20.3s,baz=322,slow=34 | | | | | | | | |
| **AAK** | **Ala-Arcba** | **89.40** | **41** | *ce* | P | | **P** | **23 39 42.8** | **+1.1** |
| AAK | | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | | | |
| **AAK** | **Ala-Arcba** | **89.40** | **41** | | P | | **P** | **23 39 42.7** | **+1.1** |
| **AAK** | **Ala-Arcba** | **89.40** | **41** | | P | | **P** | **23 39 42.8** | **+1.1** |
| **AAK** | **Ala-Arcba** | **89.40** | **41** | | P | | **P** | **23 39 41.9** | **+0.1** |
| **YAK** | **Yakutsk** | **89.82** | **3** | | LR | | LR | 00 18 51.6 | |
| | comp=Z,150nm,18.1s,baz=72,slow=35 | | | | | | | | |
| **YAK** | **Yakutsk** | **89.82** | **3** | *i* | P | | **P** | **23 39 43.1** | **+0.1** |
| YAK | | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **WBK** | **Wadi Bani Khal** | **89.96** | **64** | | P | | **P** | **23 39 46.6** | **+2.1** |
| WBK | | | | | P | | **P** | **23 39 46.6** | **+2.1** |
| **JLN** | **Jalan Bani Buh** | **90.54** | **65** | | P | | **P** | **23 39 49.0** | **+1.8** |
| | SNR=5.1 | | | | | | | | |
| JLN | | | | | P | | **P** | **23 39 49.0** | **+1.8** |
| | SNR=5.1 | | | | | | | | |
| **MAKZ** | **Makanchi** | **90.62** | **34** | | P | | **P** | **23 39 47.6** | **+0.4** |
| MAKZ | | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| **MAKZ** | **Makanchi** | **90.62** | **34** | | P | | **P** | **23 39 47.6** | **+0.4** |
| **MKAR** | **Makanchi Array** | **90.78** | **34** | | P | | **P** | **23 39 47.7** | **-0.2** |
| | comp=Z,2.2nm,1.1s,baz=336,slow=2.7,SNR=11 | | | | | | | | |
| MKAR | | | | | LR | | LR | 00 18 53.9 | |
| | comp=Z,218nm,20.1s,baz=308,slow=34 | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **91.04** | **29** | *i* | P | | **P** | **23 39 49.7** | **+0.5** |
| DGZ | | | | | pmax | | pmax | | |
| | comp=Z,19nm,2.1s | | | | | | | | |
| **MA2** | **Magadan** | **91.61** | **353** | *i* | P | | **P** | **23 39 52.4** | **+1.0** |
| MA2 | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.7s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **92.79** | **338** | | LR | | LR | 00 21 37.9 | |
| | comp=Z,231nm,21.9s,baz=94,slow=36 | | | | | | | | |
| **WMQ** | **Urumqi** | **95.56** | **33** | *eP* | | | **P** | **23 40 10.9** | **+0.9** |
| WMQ | | | | | LR | | LR | | |
| | comp=Z,320nm,23.7s | | | | | | | | |
| WMQ | | | | | LR | | LR | | |
| | comp=Z,180nm,29.2s | | | | | | | | |
| **RSD** | **Rainshed** | **98.55** | **297** | | P | | Pdif | 23 40 24.1 | +0.1 |
| **OPO** | **Ambohidratompo** | **99.40** | **106** | | LR | | LR | 00 24 55.2 | |
| | comp=Z,264nm,19.9s,baz=156,slow=35 | | | | | | | | |
| **SONM** | **Songino Array** | **99.59** | **20** | | LR | | LR | 00 25 15.1 | |
| | comp=Z,193nm,20.0s,baz=358,slow=35 | | | | | | | | |
| **KLR** | **Kul'dur** | **102.70** | **3** | *i* | P | | **Pdif** | **23 40 42.5** | **+0.7** |
| KLR | | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | | | |
| **CD2** | **Chengdu** | **113.46** | **30** | | PKP | | **PKiKP** | **23 45 24.1** | **+0.9** |
| **PZH** | **PanZhiHua** | **116.22** | **34** | | PKP | | **PKPdf** | **23 45 29.0** | **+0.3** |
| **NJ2** | **Nanjing** | **117.73** | **17** | *e* | PKP | | **PKPdf** | **23 45 31.2** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **121.15** | **42** | | PKP | | **PKPdf** | **23 45 37.3** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=321,slow=3.3,SNR=1.8 | | | | | | | | |
| **MSWZ** | **Moikau Station** | **145.71** | **237** | | | | **PKPab** | **23 46 24.4** | **+0.5** |
| **WRA** | **Warramunga Arr** | **171.49** | **12** | | PKP | | **PKPdf** | **23 46 51.8** | **-2.0** |
| | comp=Z,0.6nm,0.9s,baz=0.0,slow=1.2,SNR=5.4 | | | | | | | | |
| WRA | | | | | PKPab | | **PKPab** | **23 48 11.1** | **-3.2** |
| | comp=Z,1.6nm,1.1s,baz=349,slow=4.3,SNR=5.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **174.92** | **25** | | PKP | | **PKPdf** | **23 46 53.9** | **-1.3** |
| | comp=Z,0.4nm,0.6s,baz=321,slow=1.8,SNR=4.7 | | | | | | | | |
| ASAR | | | | | PKPab | | **PKPab** | **23 48 26.5** | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=352,slow=1.9,SNR=1.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **174.92** | **25** | | PKIKP | | **PKPdf** | **23 46 54.0** | **-1.1** |
| **ASAR** | **Alice Springs** | **174.92** | **25** | | | | **PKPdf** | **23 46 54.0** | **-1.1** |

*ASRS **08** 23:28:38.9±0.4, 48°N±1°×8°1E±°, h5km, MLh3.2/5, Error ellipse: s-maj=4.8km s-min=3.1km az=88.4, confirmed*
*NNC **08** 23:28:40.4±0.4, 47°.43N×81°.10E, h7km±11km, mb3.4, mpv3.1, Error ellipse: s-maj=3.5km s-min=2.5km az=25.0*
*SOME **08** 23:28:40.7, 47°.42N×81°.00E, h5km*

**ISC 08 23:28:36.8±1.1, 47°.48N±0°.03×81°.09E±0°.03, h4km±12km, n40, σ1$27/58, 8C-3D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **0.90** | **138** | ⇓P | | **Pn** | **23 28 57.4** | **+1.2** |
| | 4.1nm,0.2s | | | | | | | |
| MAKZ | | | | ⇓S | | **Sn** | **23 29 09.4** | **-0.3** |
| | 39nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **0.90** | **138** | Pg | | **Pn** | **23 28 57.6** | **+1.3** |
| MAKZ | | | | Sg | | **Sn** | **23 29 09.2** | **-0.4** |
| **MK31** | **Makanchi Array** | **1.07** | **129** | ⇑P | | **Pn** | **23 29 00.5** | **+2.0** |
| | 1.2nm,0.3s,baz=301,slow=14,SNR=2800 | | | | | | | |
| MK31 | | | | ⇑S | | **Sn** | **23 29 14.3** | **+0.5** |
| | 34nm,0.4s,baz=310,slow=28,SNR=6.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **1.07** | **129** | Pg | | **Pn** | **23 29 00.5** | **+2.0** |
| MKAR | | | | Sg | | **Sn** | **23 29 14.4** | **+0.6** |
| **KAPS** | **Kapalarasan** | **2.50** | **209** | *eP* | | **Pg** | **23 29 25.7** | **+1.1** |
| | 0.4nm,0.1s | | | | | | | |
| KAPS | | | | *eS* | | **Sg** | **23 29 58.5** | **+1.5** |
| | 21nm,0.3s | | | | | | | |
| **KAPS** | **Kapalarasan** | **2.50** | **209** | Pg | | **Pg** | **23 29 25.7** | **+1.1** |
| | 0.4nm,0.1s | | | | | | | |
| KAPS | | | | Lg | | Lg | 23 29 58.5 | |
| | 21nm,0.3s | | | | | | | |
| **ZSN** | **Zaisan** | **2.56** | **89** | *eP* | | **Pg** | **23 29 26.3** | **+0.5** |
| | 2.2nm,0.2s | | | | | | | |
| ZSN | | | | *eS* | | **Sg** | **23 29 59.1** | **+0.1** |
| | 8.4nm,0.3s | | | | | | | |
| **ZSN** | **Zaisan** | **2.56** | **89** | Pg | | **Pg** | **23 29 27.0** | **+1.2** |
| | 2.2nm,0.2s | | | | | | | |
| ZSN | | | | Lg | | Lg | 23 30 01.0 | |
| | 7.5nm,0.4s | | | | | | | |
| **SEM** | **Semipalatinsk** | **2.99** | **350** | *eP* | | **Pg** | **23 29 36.2** | **+2.2** |
| | 4.0nm,0.1s | | | | | | | |
| SEM | | | | *eS* | | **Sg** | **23 30 16.0** | **+3.3** |
| | 20nm,0.3s | | | | | | | |
| **SEM** | **Semipalatinsk** | **2.99** | **350** | Pg | | **Pg** | **23 29 36.2** | **+2.2** |
| | 4.0nm,0.1s | | | | | | | |
| SEM | | | | Lg | | Lg | 23 30 16.0 | |
| | 20nm,0.3s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.10** | **218** | *eP* | | **Pg** | **23 29 37.0** | **+0.9** |
| | 17nm,0.2s | | | | | | | |
| TDK | | | | *eS* | | **Sg** | **23 30 17.9** | **+1.6** |
| | 34nm,0.5s | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.10** | **218** | Pg | | **Pg** | **23 29 37.0** | **+0.9** |
| | 17nm,0.2s | | | | | | | |
| TDK | | | | Lg | | Lg | 23 30 17.9 | |
| | 34nm,0.5s | | | | | | | |
| **DJR** | **Jarkent** | **3.27** | **197** | *eP* | | **Pg** | **23 29 40.5** | **+1.0** |
| | 1.5nm,0.3s | | | | | | | |
| DJR | | | | *eS* | | **Sg** | **23 30 23.6** | **+1.7** |
| | 7.5nm,0.4s | | | | | | | |
| **DJR** | **Jarkent** | **3.27** | **197** | Pg | | **Pg** | **23 29 40.5** | **+1.0** |
| | 1.5nm,0.3s | | | | | | | |
| DJR | | | | Lg | | Lg | 23 30 23.6 | |
| | 7.5nm,0.4s | | | | | | | |
| **KNOS** | **Konyrlen** | **3.39** | **204** | *eP* | | **Pg** | **23 29 42.0** | **+0.3** |
| | 0.3nm,0.1s | | | | | | | |
| KNOS | | | | *eS* | | **Sg** | **23 30 25.9** | **+0.2** |
| | 9.7nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **3.57** | **333** | ⇑Pg | | **Pg** | **23 29 44.8** | **-0.4** |
| | 2.8nm,0.7s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 23 30 34.7 | |
| | 16nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **3.63** | **334** | ⇓Pg | | **Pg** | **23 29 47.1** | **+0.9** |
| | 1.0nm,0.3s | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 23 30 35.0 | |
| | 7.9nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **3.63** | **334** | Pg | | **Pg** | **23 29 45.6** | **-0.6** |
| KURK | | | | Sg | | **Sg** | **23 30 34.7** | **+1.5** |
| **BLB** | **Baldybastay** | **3.84** | **209** | *eP* | | **Pg** | **23 29 50.1** | **-0.3** |
| | 2.7nm,0.2s | | | | | | | |
| BLB | | | | *eS* | | **Sg** | **23 30 40.1** | **-0.1** |
| | 9.3nm,0.5s | | | | | | | |
| **BLB** | **Baldybastay** | **3.84** | **209** | Pg | | **Pg** | **23 29 50.1** | **-0.3** |
| | 2.7nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 23 30 40.1 | |
| | 9.3nm,0.5s | | | | | | | |
| **ARXS** | **Arharly** | **3.98** | **216** | *eP* | | **Pg** | **23 29 52.3** | **-0.7** |
| | 0.6nm,0.2s | | | | | | | |
| ARXS | | | | *eS* | | **Sg** | **23 30 43.8** | **-0.8** |
| | 18nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **3.98** | **216** | Pg | | **Pg** | **23 29 52.3** | **-0.7** |
| | 1.7nm,0.3s | | | | | | | |
| ARXS | | | | Lg | | Lg | 23 30 43.8 | |
| | 6.4nm,0.5s | | | | | | | |
| **UKR** | **Ust'-Kan** | **4.22** | **33** | Pn | | **Pb** | **23 29 48.1** | **-3.5** |
| UKR | | | | Pg | | **Pg** | **23 29 56.4** | **-1.3** |
| UKR | | | | Sg | | **Sg** | **23 30 50.5** | **-1.9** |
| **PDGK** | **Podgornoye** | **4.30** | **196** | ⇑Lg | | Lg | 23 30 55.1 | |
| | 11nm,0.7s | | | | | | | |
| **KPKS** | **Kokpek** | **4.35** | **204** | *eP* | | **Pg** | **23 30 00.0** | **-0.2** |
| | 1.9nm,0.4s | | | | | | | |
| KPKS | | | | *eS* | | **Sg** | **23 30 56.8** | **+0.3** |
| | 21nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **4.49** | **208** | *eP* | | **Pg** | **23 30 02.2** | **-0.5** |
| | 2.2nm,0.6s | | | | | | | |
| KURS | | | | *eS* | | **Sg** | **23 31 00.5** | **-0.3** |
| | 4.5nm,0.5s | | | | | | | |
| **KURS** | **Kuram** | **4.49** | **208** | Pg | | **Pg** | **23 30 02.2** | **-0.5** |
| | 2.2nm,0.6s | | | | | | | |
| KURS | | | | Lg | | Lg | 23 31 00.5 | |
| | 4.5nm,0.5s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **4.76** | **60** | Pn | | Pb | 23 29 56.2 | -4.7 |
| DGZ | | | | Pg | | **Pg** | **23 30 08.8** | **+0.8** |
| DGZ | | | | Sg | | **Sg** | **23 31 09.7** | **+0.1** |
| **SATY** | **Saty** | **4.81** | **204** | *eP* | | **Pg** | **23 30 08.3** | **-0.5** |
| | 0.9nm,0.1s | | | | | | | |
| SATY | | | | *eS* | | **Sg** | **23 31 11.3** | **+0.2** |
| | 10nm,0.3s | | | | | | | |
| **SATY** | **Saty** | **4.81** | **204** | Pg | | **Pg** | **23 30 08.3** | **-0.5** |
| | 0.9nm,0.1s | | | | | | | |
| SATY | | | | Lg | | Lg | 23 31 11.3 | |
| | 10nm,0.3s | | | | | | | |
| **KUU** | **Kurty** | **4.89** | **225** | *eP* | | **Pg** | **23 30 09.4** | **-1.1** |
| | 0.6nm,0.3s | | | | | | | |
| KUU | | | | *eS* | | **Sg** | **23 31 13.7** | **-0.1** |
| | 9.8nm,0.3s | | | | | | | |
| **KUU** | **Kurty** | **4.89** | **225** | Pg | | **Pg** | **23 30 09.4** | **-1.1** |
| | 0.6nm,0.3s | | | | | | | |
| KUU | | | | Lg | | Lg | 23 31 13.7 | |
| | 9.8nm,0.3s | | | | | | | |
| **CHBI** | **Chibit, Altay** | **5.09** | **54** | Pn | | Pb | 23 30 01.9 | -4.5 |
| CHBI | | | | Pg | | **Pg** | **23 30 16.1** | **+1.8** |
| CHBI | | | | Sg | | **Sg** | **23 31 20.2** | **-0.1** |
| **AKAR** | **Aktash** | **5.16** | **54** | Sg | | **Sg** | **23 31 21.3** | **-1.1** |
| **MDOK** | **Medeo** | **5.17** | **215** | ⇑Lg | | Lg | 23 31 23.6 | |
| | 3.5nm,0.6s | | | | | | | |
| **CUR** | **Chagan-Uzun** | **5.47** | **59** | Pn | | Pn | 23 30 05.2 | +6.1 |
| CUR | | | | Sg | | **Sg** | **23 31 30.0** | **-2.3** |
| **ULGR** | **Ulagan, Altay** | **5.51** | **53** | Pn | | Pb | 23 30 07.6 | -5.9 |
| ULGR | | | | Sg | | **Sg** | **23 31 32.1** | **-1.4** |
| **ARTR** | **Artybash** | **5.91** | **41** | Sg | | **Sg** | **23 31 46.0** | **-0.3** |
| **OTUK** | **Ortayu** | **5.94** | **281** | ⇑Lg | | Lg | 23 31 45.1 | |
| | 5.8nm,0.8s | | | | | | | |
| **ELT** | **Eltsovka** | **6.66** | **28** | Sg | | **Sg** | **23 32 10.3** | **-0.2** |

*SJA **08** 23:45:53.3±0.6, 32°.06S×72°.39W, h13km, ML4.2, MW4.1*
*IDC **08** 23:45:54.8±1.1, 32°.08S×71°.83W, h0km, mb4.4/4, mb1 4.1/9, mb1mx3.9/27, mbtmp4.0/9, ML3.9/5, Error ellipse: s-maj=42.8km s-min=20.2km az=115.0*
*GUC **08** 23:45:59.6±0.7, 32°.13S×71°.77W, h48km±5km, ML4.0*
*NEIC **08** 23:45:59.2±1.6, 32°.11S±0°.02×71°.94W±0°.07, h24km±4km, mb4.4/9, Mwr3.9/40, ML4.0(GUC), Error ellipse: s-maj=8.4km s-min=3.3km az=83.0*
*NEIC **08** 23:45:59.6, 32°.10S×71°.92W, h28km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; Mrr0.93; Mθθ0.03; Mφφ-0.96; Mrθ0.09; Mrφ-0.08; Mθφ-0.44; Fault plane solution: $M_0$1.05000×$10^{15}$ NP1:$\phi_s$177.51000°, δ57.76000°, λ82.20000°. NP2:$\phi_s$11.90000°, δ33.07000°, λ102.14000°. Principal axes: T 1.0414, Plg76.0000°, Azm64.0000°; N 0.0186, Plg7.0000°, Azm182.0000°; P -1.0600, Plg12.0000°, Azm273.0000°:*

**ISC 08 23:45:56.7±1.1, 32°.06S±0°.02×71°.91W±0°.04, h11km±7km, n101, σ1$81/138, mb4.5/7, 3C-7D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VA06** | **Catapilco** | **0.72** | **134** | ⇓*i*P | | **Pb** | **23 46 11.8** | **+0.5** |
| VA06 | | | | *i* S | | **Sg** | **23 46 20.8** | **+0.8** |
| VA06 | | | | IAML | | | 23 46 23.0 | |
| | comp=E,17µm,0.4s | | | | | | | |
| **VA01** | **Torpederas** | **0.98** | **167** | *eP* | | **Pg** | **23 46 16.1** | **+0.4** |
| VA01 | | | | IAML | | | 23 46 34.2 | |
| | comp=N,2µm,0.4s | | | | | | | |
| **VA01** | **Torpederas** | **0.98** | **167** | | | **Pg** | **23 46 16.0** | **+0.4** |
| VA01 | | | | | | **Sg** | **23 46 28.6** | **+0.2** |
| **VA01** | **Torpederas** | **0.98** | **167** | *eP* | | **Pg** | **23 46 16.0** | **+0.4** |
| VA01 | | | | *eS* | | **Sn** | **23 46 31.3** | **+0.9** |
| **CO02** | **Combarbal** | **1.15** | **42** | ⇓*i*P | | **Pn** | **23 46 19.9** | **+0.9** |
| CO02 | | | | *i* S | | **Sn** | **23 46 35.1** | **+0.4** |
| CO02 | | | | IAML | | | 23 46 37.0 | |
| | comp=E,25µm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **1.15** | **42** | | | **Pn** | **23 46 19.8** | **+0.9** |
| CO02 | | | | | | **Sn** | **23 46 35.5** | **+0.7** |
| **ROCH** | **El Roble** | **1.18** | **140** | ⇓*i*P | | **Pn** | **23 46 19.3** | **-0.1** |
| ROCH | | | | ⇓*i*P | | **Pb** | **23 46 18.2** | **-1.1** |
| ROCH | | | | *i* S | | **Sb** | **23 46 33.1** | **-1.6** |
| ROCH | | | | *i* S | | **Sg** | **23 46 34.1** | **-0.7** |
| ROCH | | | | IAML | | | 23 46 37.3 | |
| | comp=N,5µm,0.3s | | | | | | | |
| ROCH | | | | IAML | | | 23 46 38.5 | |
| | comp=N,7µm,0.4s | | | | | | | |
| **ROC1** | **El Roble** | **1.18** | **141** | | | **Pb** | **23 46 18.2** | **-1.1** |
| ROC1 | | | | Sn | | **Sb** | **23 46 33.2** | **-1.5** |
| **ROC1** | **El Roble** | **1.18** | **141** | *eP* | | **Pb** | **23 46 18.3** | **-1.1** |
| ROC1 | | | | *eS* | | **Sb** | **23 46 33.5** | **-1.2** |
| **VA03** | **San Esteban** | **1.34** | **122** | ⇓*i*P | | **Pn** | **23 46 21.8** | **+0.3** |
| VA03 | | | | *i* S | | **Sb** | **23 46 38.4** | **-0.8** |
| VA03 | | | | IAML | | | 23 46 41.8 | |
| | comp=E,10µm,0.2s | | | | | | | |
| **VA03** | **San Esteban** | **1.34** | **122** | | | **Pn** | **23 46 21.8** | **+0.3** |
| VA03 | | | | Sn | | **Sb** | **23 46 38.5** | **-0.8** |
| **MT02** | **Curacav** | **1.36** | **152** | ⇓*i*P | | **Pn** | **23 46 22.0** | **+0.3** |
| MT02 | | | | *i* S | | **Sb** | **23 46 38.1** | **-1.5** |
| MT02 | | | | IAML | | | 23 46 40.9 | |
| | comp=N,3µm,0.4s | | | | | | | |
| **MT02** | **Curacav** | **1.36** | **152** | | | **Pn** | **23 46 22.0** | **+0.3** |
| MT02 | | | | Sn | | **Sb** | **23 46 38.8** | **-0.7** |
| **MT02** | **Curacav** | **1.36** | **152** | *eP* | | **Pn** | **23 46 22.1** | **+0.4** |
| MT02 | | | | *eS* | | **Sb** | **23 46 38.9** | **-0.7** |
| MT02 | | | | IAML | | | 23 46 39.7 | |
| | comp=Z,2µm,0.5s | | | | | | | |
| **CO06** | **Fray Jorge** | **1.40** | **10** | | | **Pg** | **23 46 23.4** | **-0.2** |
| CO06 | | | | Sn | | **Sg** | **23 46 41.8** | **0.0** |
| **PEL** | **Peldehue** | **1.49** | **137** | ⇓*i*P | | **Pn** | **23 46 24.2** | **+0.7** |
| PEL | | | | *i* S | | **Sn** | **23 46 42.5** | **-0.6** |
| PEL | | | | IAML | | | 23 46 44.5 | |
| | comp=N,4µm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **1.49** | **137** | | | **Pn** | **23 46 24.2** | **+0.7** |
| PEL | | | | Sn | | **Sn** | **23 46 43.1** | **+0.1** |
| **PEL** | **Peldehue** | **1.49** | **137** | *eP* | | **Pn** | **23 46 24.0** | **+0.5** |
| PEL | | | | *eP* | | **Pn** | **23 46 24.3** | **+0.7** |
| PEL | | | | *eS* | | **Sn** | **23 46 43.7** | **+0.6** |
| **CO03** | **El Pedregal** | **1.60** | **41** | | | **Pb** | **23 46 26.9** | **+0.6** |
| **CO03** | **El Pedregal** | **1.60** | **41** | *eP* | | **Pb** | **23 46 27.1** | **+0.7** |
| CO03 | | | | *eS* | | **Sg** | **23 46 49.3** | **+1.0** |
| CO03 | | | | IAML | | | 23 46 51.6 | |
| | comp=Z,2µm,0.3s | | | | | | | |
| **VA05** | **Santo Domingo** | **1.61** | **171** | | | **Pn** | **23 46 25.5** | **+0.4** |
| **MT05** | **Renca** | **1.65** | **144** | ⇑*i*P | | **Pn** | **23 46 26.5** | **+0.8** |
| MT05 | | | | IAML | | | 23 46 54.1 | |
| | comp=E,5µm,0.4s | | | | | | | |
| **MT05** | **Renca** | **1.65** | **144** | | | **Pn** | **23 46 26.5** | **+0.8** |
| **MT05** | **Renca** | **1.65** | **144** | *eP* | | **Pn** | **23 46 26.8** | **+1.1** |
| MT05 | | | | *eS* | | **Sb** | **23 46 49.2** | **+1.1** |
| MT05 | | | | IAML | | | 23 46 55.0 | |
| | comp=Z,2µm,0.5s | | | | | | | |
| **MT09** | **Talagante** | **1.88** | **156** | ⇑*i*P | | **Pn** | **23 46 30.3** | **+1.4** |
| MT09 | | | | *i* S | | **Sn** | **23 46 53.0** | **+0.3** |
| MT09 | | | | IAML | | | 23 46 59.6 | |
| | comp=N,3µm,0.4s | | | | | | | |
| **MT09** | **Talagante** | **1.88** | **156** | | | **Pn** | **23 46 30.4** | **+1.4** |
| **MT01** | **Popeta** | **1.88** | **163** | | | **Pn** | **23 46 29.4** | **+0.5** |
| **MT01** | **Popeta** | **1.88** | **163** | *eP* | | **Pn** | **23 46 29.4** | **+0.5** |
| MT01 | | | | *eS* | | **Sb** | **23 46 56.7** | **+2.1** |
| MT01 | | | | IAML | | | 23 47 00.8 | |
| | comp=Z,1µm,0.8s | | | | | | | |
| **GO04** | **Tololo Observa** | **2.11** | **27** | | | **Pb** | **23 46 34.0** | **-1.1** |
| **GO04** | **Tololo Observa** | **2.11** | **27** | *eP* | | **Pb** | **23 46 34.0** | **-1.1** |
| GO04 | | | | *eS* | | **Sg** | **23 47 05.0** | **+0.5** |
| **AUSP** | **Uspallata** | **2.14** | **95** | *eP* | | **Pb** | **23 46 36.7** | **+1.0** |
| AUSP | | | | *eS* | | **Sg** | **23 47 07.2** | **+1.6** |
| **BO04** | **La Punta** | **2.21** | **151** | ⇑*i*P | | **Pn** | **23 46 34.8** | **+1.4** |
| BO04 | | | | IAML | | | 23 47 08.4 | |
| | comp=N,2µm,0.4s | | | | | | | |
| **CO05** | **La Serena** | **2.21** | **15** | | | **Pn** | **23 46 35.2** | **+1.8** |
| **LMEL** | **Las Melosas** | **2.29** | **142** | Pn | | **Pn** | **23 46 35.6** | **+1.1** |
| **BO01** | **Tunca** | **2.42** | **164** | | | **Pn** | **23 46 37.0** | **+0.7** |
| **BO01** | **Tunca** | **2.42** | **164** | *eP* | | Pn | 23 46 32.0 | -4.3 |
| BO01 | | | | *eP* | | **Pn** | **23 46 37.0** | **+0.7** |
| BO01 | | | | *eS* | | **Sb** | **23 47 10.2** | **0.0** |
| BO01 | | | | IAML | | | 23 47 14.8 | |
| | comp=Z,694nm,1.4s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.63** | **108** | *eP* | | **Pb** | **23 46 44.0** | **0.0** |
| ARCO | | | | *eS* | | **Sg** | **23 47 23.5** | **+2.2** |
| ARCO | | | | IAML | | | 23 47 25.8 | |
| | comp=Z,607nm,0.6s | | | | | | | |
| **ASAL** | **Salagasta** | **2.65** | **102** | *eP* | | **Pb** | **23 46 44.0** | **-0.3** |
| ASAL | | | | *eS* | | **Sg** | **23 47 21.0** | **-1.0** |
| **AAGR** | **Agrelo** | **2.79** | **112** | *eP* | | **Pb** | **23 46 46.0** | **-0.7** |
| AAGR | | | | *eS* | | **Sg** | **23 47 25.4** | **-1.0** |
| **ZON** | **Zonda** | **2.80** | **80** | | | **Pn** | **23 46 44.3** | **+2.9** |
| **ZON** | **Zonda** | **2.80** | **80** | *eP* | | **Pb** | **23 46 46.0** | **-0.7** |
| ZON | | | | IAML | | | 23 47 35.4 | |
| | comp=Z,361nm,0.7s | | | | | | | |
| **AROD** | **Rodeo** | **2.81** | **48** | *eP* | | **Pb** | **23 46 46.0** | **-1.2** |
| AROD | | | | *eS* | | **Sg** | **23 47 26.4** | **-0.7** |
| **ACCO** | **Cerro Coronel** | **2.84** | **60** | *eP* | | **Pb** | **23 46 47.0** | **-0.6** |
| ACCO | | | | *eS* | | **Sg** | **23 47 28.7** | **+0.8** |
| **BO02** | **Sierra Bellavi** | **2.88** | **161** | | | **Pn** | **23 46 43.8** | **+1.2** |
| **BO02** | **Sierra Bellavi** | **2.88** | **161** | *eP* | | **Pn** | **23 46 43.0** | **+0.3** |
| BO02 | | | | *eP* | | Pb | 23 46 43.7 | -4.5 |
| BO02 | | | | *eS* | | **Sb** | **23 47 21.6** | **-1.9** |
| BO02 | | | | IAML | | | 23 47 36.1 | |
| | comp=Z,763nm,0.6s | | | | | | | |
| **GO05** | **Huala** | **2.94** | **180** | | | **Pn** | **23 46 43.3** | **-0.1** |
| **GO05** | **Huala** | **2.94** | **180** | *eP* | | **Pn** | **23 46 43.0** | **-0.4** |
| GO05 | | | | *eS* | | **Sg** | **23 47 32.0** | **+0.8** |
| **RTLL** | **Cerro Villicun** | **3.02** | **77** | *eP* | | **Pb** | **23 46 48.7** | **-1.7** |
| RTLL | | | | *eP* | | **Pn** | **23 46 49.0** | **+4.5** |
| RTLL | | | | *eS* | | **Sb** | **23 47 30.9** | **+3.6** |
| **LCO** | **Las Campanas** | **3.21** | **19** | | | **Pn** | **23 46 49.1** | **+1.7** |
| **LCO** | **Las Campanas** | **3.21** | **19** | *eP* | | **Pn** | **23 46 49.0** | **+1.6** |
| **ML02** | **Panimavida** | **3.71** | **174** | Pn | | **Pn** | **23 46 54.6** | **+0.6** |
| **AC04** | **Llanos de Chal** | **3.91** | **11** | | | **Pn** | **23 46 57.4** | **+0.7** |
| **AVFE** | **Valle Fertil** | **4.05** | **71** | *eP* | | **Pn** | **23 47 02.6** | **+3.8** |
| AVFE | | | | *eS* | | **Sb** | **23 47 54.5** | **-2.8** |
| AVFE | | | | IAML | | | 23 48 01.0 | |
| | comp=Z,665nm,1.0s | | | | | | | |
| **ACHE** | **Chepes** | **4.56** | **80** | *eP* | | **Pn** | **23 47 08.6** | **+2.7** |
| ACHE | | | | *eS* | | **Sb** | **23 48 09.7** | **-2.3** |
| **VCA** | **Vinchina** | **4.61** | **45** | *eP* | | **Pn** | **23 47 07.5** | **+1.0** |
| VCA | | | | *eP* | | Pb | 23 47 11.0 | -6.6 |
| VCA | | | | *eS* | | **Sb** | **23 48 09.5** | **-3.7** |
| VCA | | | | *eS* | | Sg | 23 48 15.5 | -9.1 |
| VCA | | | | IAML | | | 23 48 24.4 | |
| | comp=Z,510nm,0.6s | | | | | | | |
| **GO03** | **Copiap** | **4.68** | **18** | | | **Pn** | **23 47 09.6** | **+2.1** |
| **GO03** | **Copiap** | **4.68** | **18** | *eP* | | **Pn** | **23 47 09.2** | **+1.7** |
| GO03 | | | | *eS* | | **Sn** | **23 48 07.5** | **+5.6** |
| **APLL** | **PUNTA DE LOS L** | **4.90** | **72** | *eP* | | **Pn** | **23 47 14.0** | **+3.6** |
| APLL | | | | *eS* | | **Sb** | **23 48 20.6** | **-0.9** |
| **ACLC** | **CERRO LA CRUZ** | **5.01** | **60** | *eP* | | **Pn** | **23 47 15.5** | **+3.5** |
| ACLC | | | | *eS* | | **Sn** | **23 48 17.0** | **+6.9** |
| **MRA** | **San Martin** | **5.26** | **96** | *eP* | | **Pn** | **23 47 12.0** | **-3.4** |
| MRA | | | | *eP* | | Pb | 23 47 17.9 | -11 |
| MRA | | | | *eS* | | **Sn** | **23 48 12.0** | **-4.1** |
| MRA | | | | *eS* | | Sb | 23 48 17.0 | -15 |
| **AC02** | **Maricunga** | **5.74** | **26** | *eP* | | **Pn** | **23 47 24.0** | **+1.6** |
| AC02 | | | | *eS* | | **Sb** | **23 48 44.0** | **-2.3** |
| **H03N1** | **Juan Fernandez** | **6.06** | **255** | T | | T | 23 

*NEIC **09** 00:24:55.9±2.0, 45°.57N±0°.02×67°.35W±0°.02, h5$^{km}$±2$^{km}$, Error ellipse: s-maj=3.7km s-min=3.0km az=195.0*
*OTT **09** 00:24:57.3±0.1, 45°.60N×67°.35W, h1$^{km}$, MN3.3/26*
*OTT 4km west from McAdam, Nb. Felt Northern Appalachians Seismic Zone. Felt at McAdam, Nb.*

**ISC 09 00:24:56.5**±1.0, **45°.59N**±0°.03×**67°.33W**±0°.02, **h13**$^{km}$±8$^{km}$, **n92**, σ1§**18**/129, **Maine**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **G65A** | **Princeton** | **0.42** | **203** | | **Pg** | **00 25 05.0** | **+0.2** |
| G65A | | | | Sg | **Sg** | **00 25 10.3** | **-0.1** |
| **HANN** | **Hanwell** | **0.49** | **53** | Pg | **Pg** | **00 25 06.3** | **+0.2** |
| HANN | | | | Sg | **Sg** | **00 25 12.8** | **+0.2** |
| **HANN** | **Hanwell** | **0.49** | **53** | PG | **Pg** | **00 25 06.3** | **+0.2** |
| HANN | | | | SG | **Sg** | **00 25 12.8** | **+0.2** |
| HANN | | | | Trac | | 00 25 13.7 | |
| | comp=Z,252nm,0.2s | | | | | | |
| **GGN** | **Saint George** | **0.58** | **144** | | **Pg** | **00 25 08.1** | **+0.3** |
| **GGN** | **Saint George** | **0.58** | **144** | Sg | **Sg** | **00 25 15.8** | **+0.3** |
| **GGN** | **Saint George** | **0.58** | **144** | PG | **Pg** | **00 25 08.2** | **+0.3** |
| GGN | | | | SG | **Sg** | **00 25 15.9** | **+0.3** |
| GGN | | | | Trac | | 00 25 22.5 | |
| | comp=Z,110nm,0.1s | | | | | | |
| **F64A** | **Sherman** | **0.77** | **291** | | **Pb** | **00 25 11.7** | **0.0** |
| F64A | | | | Sg | **Sb** | **00 25 21.8** | **-0.2** |
| **PQI** | **Presque Isle** | **1.18** | **336** | | **Pn** | **00 25 18.9** | **+0.2** |
| **SRNB** | **Snider Mountai** | **1.21** | **78** | Pg | **Pn** | **00 25 19.4** | **+0.2** |
| SRNB | | | | Sg | **Sg** | **00 25 35.6** | **+0.1** |
| **SRNB** | **Snider Mountai** | **1.21** | **78** | PG | **Pn** | **00 25 19.3** | **+0.2** |
| SRNB | | | | SG | **Sb** | **00 25 35.4** | **+0.6** |
| SRNB | | | | Trac | | 00 25 37.9 | |
| | comp=Z,251nm,0.2s | | | | | | |
| **F63A** | **Nahmakanta, Br** | **1.25** | **276** | | **Pg** | **00 25 20.4** | **0.0** |
| **WCNB** | **Wards Creek** | **1.28** | **87** | PG | **Pb** | **00 25 20.6** | **+0.2** |
| WCNB | | | | SG | **Sg** | **00 25 37.8** | **+0.1** |
| WCNB | | | | Trac | | 00 25 38.8 | |
| | comp=Z,245nm,0.2s | | | | | | |
| **HKNB** | **Havelock Quarr** | **1.42** | **73** | | **Pb** | **00 25 23.1** | **+0.3** |
| HKNB | | | | Sg | **Sg** | **00 25 42.3** | **+0.2** |
| **HKNB** | **Havelock Quarr** | **1.42** | **73** | PG | **Pb** | **00 25 23.1** | **+0.3** |
| HKNB | | | | SG | **Sg** | **00 25 42.1** | **0.0** |
| HKNB | | | | Trac | | 00 25 44.2 | |
| | comp=Z,543nm,0.2s | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **257** | | **Pb** | **00 25 23.0** | **+0.2** |
| **PKME** | **Peaks-Kenny Pk** | **1.42** | **257** | PG | **Pb** | **00 25 22.9** | **+0.2** |
| PKME | | | | SG | **Sb** | **00 25 41.3** | **+0.5** |
| PKME | | | | Trac | | 00 25 44.2 | |
| | comp=Z,342nm,0.2s | | | | | | |
| **ELNB** | **Elgin, New Bru** | **1.55** | **79** | PG | **Pb** | **00 25 25.2** | **+0.2** |
| ELNB | | | | SG | **Sg** | **00 25 45.8** | **-0.5** |
| ELNB | | | | Trac | | 00 25 53.0 | |
| | comp=Z,54nm,0.2s | | | | | | |
| **LMN** | **Caledonia Moun** | **1.79** | **81** | | **Pn** | **00 25 27.2** | **+0.1** |
| LMN | | | | Sn | **Sn** | **00 25 50.4** | **+0.8** |
| **LMN** | **Caledonia Moun** | **1.79** | **81** | PN | **Pn** | **00 25 28.2** | **+1.2** |
| LMN | | | | SN | **Sb** | **00 25 52.1** | **+0.7** |
| LMN | | | | Trac | | 00 25 53.6 | |
| | comp=Z,129nm,0.2s | | | | | | |
| **SVNB** | **Stilesville Qu** | **1.81** | **71** | PN | **Pb** | **00 25 29.4** | **0.0** |
| SVNB | | | | SN | **Sb** | **00 25 53.1** | **+1.1** |
| SVNB | | | | Trac | | 00 25 56.1 | |
| | comp=Z,145nm,0.2s | | | | | | |
| **F62A** | **Pittston Farm,** | **1.87** | **280** | Pn | **Pn** | **00 25 29.1** | **+0.9** |
| F62A | | | | IAmb_Lg | | 00 25 54.5 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **BATG** | **Bathurst New B** | **1.90** | **27** | | **Pn** | **00 25 29.1** | **+0.4** |
| BATG | | | | IAmb_Lg | | 00 25 56.6 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **BATG** | **Bathurst New B** | **1.90** | **27** | PN | **Pn** | **00 25 29.8** | **+1.1** |
| BATG | | | | SN | **Sb** | **00 25 55.7** | **+1.0** |
| BATG | | | | Trac | | 00 25 57.4 | |
| | comp=Z,151nm,0.1s | | | | | | |
| **D62A** | **Allapoint, All** | **1.91** | **322** | | **Pn** | **00 25 29.4** | **+0.7** |
| **WVL** | **Waterville** | **1.94** | **239** | | **Pn** | **00 25 29.9** | **+0.8** |
| **G62A** | **West of Eustis** | **2.29** | **262** | | **Pn** | **00 25 33.9** | **-0.1** |
| **A11** | **Saint Roch-des** | **2.58** | **311** | PN | **Pn** | **00 25 39.5** | **+1.5** |
| A11 | | | | SN | **Sn** | **00 26 11.0** | **+1.7** |
| A11 | | | | LG | Lg | 00 26 16.9 | |
| A11 | | | | Trac | | 00 26 23.1 | |
| | comp=Z,163nm,0.7s | | | | | | |
| **A16** | **Riviere Ouelle** | **2.64** | **316** | PN | **Pn** | **00 25 40.3** | **+1.5** |
| A16 | | | | SN | **Sn** | **00 26 12.5** | **+1.9** |
| A16 | | | | Trac | | 00 26 28.3 | |
| | comp=Z,62nm,0.3s | | | | | | |
| **A21** | **Saint Andre** | **2.67** | **323** | PN | **Pn** | **00 25 40.7** | **+1.6** |
| A21 | | | | SN | **Sn** | **00 26 12.0** | **+0.7** |
| A21 | | | | LG | Lg | 00 26 20.8 | |
| A21 | | | | Trac | | 00 26 30.2 | |
| | comp=Z,79nm,0.4s | | | | | | |
| **I63A** | **Otisfield** | **2.78** | **238** | Pn | **Pn** | **00 25 41.0** | **+0.4** |
| **HAL** | **Halifax** | **2.81** | **108** | Pn | **Pn** | **00 25 42.3** | **+1.2** |
| **HAL** | **Halifax** | **2.81** | **108** | PN | **Pn** | **00 25 43.9** | **+2.8** |
| HAL | | | | SN | **Sn** | **00 26 17.4** | **+2.6** |
| HAL | | | | LG | Lg | 00 26 25.3 | |
| HAL | | | | Trac | | 00 26 32.2 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **A54** | **Misere** | **2.83** | **312** | PN | **Pn** | **00 25 42.8** | **+1.4** |
| A54 | | | | SN | **Sn** | **00 26 16.9** | **+1.5** |
| A54 | | | | Trac | | 00 26 31.0 | |
| | comp=Z,39nm,0.3s | | | | | | |
| **A61** | **Sainte Mathild** | **2.84** | **319** | PN | **Pn** | **00 25 42.8** | **+1.3** |
| A61 | | | | SN | **Sn** | **00 26 17.3** | **+1.8** |
| A61 | | | | LG | Lg | 00 26 24.6 | |
| A61 | | | | Trac | | 00 26 30.8 | |
| | comp=Z,35nm,0.3s | | | | | | |
| **A64** | **Saint Simeon** | **2.85** | **323** | PN | **Pn** | **00 25 42.9** | **+1.3** |
| A64 | | | | SN | **Sn** | **00 26 16.8** | **+1.0** |
| A64 | | | | Trac | | 00 26 36.3 | |
| | comp=Z,37nm,0.3s | | | | | | |
| **LMQ** | **La Malbaie** | **2.85** | **315** | | **Pn** | **00 25 42.7** | **+1.0** |
| LMQ | | | | IAmb_Lg | | 00 26 34.4 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **LMQ** | **La Malbaie** | **2.85** | **315** | PN | **Pn** | **00 25 42.8** | **+1.2** |
| LMQ | | | | SN | **Sn** | **00 26 17.1** | **+1.2** |
| LMQ | | | | Trac | | 00 26 30.9 | |
| | comp=Z,88nm,0.3s | | | | | | |
| **H62A** | **Milan** | **2.89** | **251** | | **Pn** | **00 25 43.3** | **+1.0** |
| **BCLQ** | **Boischatel** | **2.98** | **298** | PN | **Pn** | **00 25 44.9** | **+1.4** |
| BCLQ | | | | SN | **Sn** | **00 26 20.9** | **+1.8** |
| BCLQ | | | | LG | Lg | 00 26 31.2 | |
| BCLQ | | | | Trac | | 00 26 37.7 | |
| | comp=Z,43nm,0.3s | | | | | | |
| **GSQ** | **Grosses Roches** | **3.33** | **2** | PN | **Pn** | **00 25 50.5** | **+2.3** |
| GSQ | | | | SN | **Sn** | **00 26 28.5** | **+0.9** |
| GSQ | | | | Trac | | 00 26 53.0 | |
| | comp=Z,32nm,0.3s | | | | | | |
| **I62A** | **Tamworth** | **3.33** | **240** | Pn | **Pn** | **00 25 48.5** | **+0.2** |
| **FORQ** | **Forestville** | **3.39** | **340** | PN | **Pn** | **00 25 50.3** | **+1.2** |
| FORQ | | | | SN | **Sn** | **00 26 29.6** | **+0.4** |
| FORQ | | | | LG | Lg | 00 26 42.0 | |
| FORQ | | | | Trac | | 00 26 48.9 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **MOQ** | **Mont Orford** | **3.48** | **267** | PN | **Pn** | **00 25 51.6** | **+1.2** |
| MOQ | | | | SN | **Sn** | **00 26 32.5** | **+1.1** |
| MOQ | | | | Trac | | 00 26 48.5 | |
| | comp=Z,52nm,0.4s | | | | | | |
| **LBNH** | **Lisbon** | **3.53** | **249** | Pn | **Pn** | **00 25 50.9** | **-0.1** |
| **LBNH** | **Lisbon** | **3.53** | **249** | PN | **Pn** | **00 25 52.0** | **+1.0** |
| LBNH | | | | SN | **Sn** | **00 26 34.0** | **+1.3** |
| LBNH | | | | LG | Lg | 00 26 46.9 | |
| **BACQ** | **Baie-Comeau** | **3.75** | **352** | PN | **Pn** | **00 25 55.2** | **+1.3** |
| BACQ | | | | SN | **Sn** | **00 26 37.5** | **-0.4** |
| BACQ | | | | Trac | | 00 26 58.4 | |
| | comp=Z,75nm,0.5s | | | | | | |
| **FFD** | **Franklin Falls** | **3.75** | **237** | Pn | **Pn** | **00 25 54.9** | **+0.9** |
| **CNQ** | **Baie Comeau** | **3.75** | **353** | PN | **Pn** | **00 25 55.5** | **+1.5** |
| CNQ | | | | SN | **Sn** | **00 26 38.7** | **+0.7** |
| CNQ | | | | Trac | | 00 26 58.1 | |
| | comp=Z,29nm,0.3s | | | | | | |
| **ICQ** | **Pointe Anglais** | **3.94** | **1** | PN | **Pn** | **00 25 57.9** | **+1.4** |
| ICQ | | | | SN | **Sn** | **00 26 43.2** | **+0.7** |
| ICQ | | | | Trac | | 00 26 52.2 | |
| | comp=Z,144nm,0.8s | | | | | | |
| ICQ | | | | LG | Lg | 00 27 00.1 | |
| **DPQ** | **Saint Jean** | **3.94** | **288** | PN | **Pn** | **00 25 57.5** | **+0.9** |
| DPQ | | | | SN | **Sn** | **00 26 42.0** | **-0.7** |
| DPQ | | | | Trac | | 00 27 04.3 | |
| | comp=Z,19nm,0.2s | | | | | | |
| **HNH** | **Hanover** | **4.01** | **244** | Pn | **Pn** | **00 25 57.6** | **0.0** |
| **VT1** | **Waterbury** | **4.05** | **254** | Pn | **Pn** | **00 25 58.3** | **+0.1** |
| **GBN** | **Guysborough** | **4.09** | **90** | Pn | **Pn** | **00 25 58.8** | **+0.1** |
| **GBN** | **Guysborough** | **4.09** | **90** | PN | **Pn** | **00 26 00.8** | **+2.1** |
| GBN | | | | SN | **Sn** | **00 26 48.2** | **+1.8** |
| GBN | | | | Trac | | 00 27 00.0 | |
| | comp=Z,414nm,1.5s | | | | | | |
| GBN | | | | LG | Lg | 00 27 04.1 | |
| **BCX** | **Boston College** | **4.27** | **222** | Pn | **Pn** | **00 26 01.4** | **+0.1** |
| **WES** | **Weston** | **4.31** | **223** | Pn | **Pn** | **00 26 01.9** | **+0.3** |
| **K62A** | **Royalston** | **4.58** | **232** | Pn | **Pn** | **00 26 06.6** | **+0.1** |
| **GAAQ** | **Galiote** | **4.62** | **35** | PN | **Pn** | **00 26 07.4** | **+1.5** |
| GAAQ | | | | SN | **Sn** | **00 26 58.1** | **-1.4** |
| GAAQ | | | | Trac | | 00 27 15.4 | |
| | comp=Z,821nm,2.1s | | | | | | |
| **SMQ** | **Clarke City** | **4.66** | **5** | PN | **Pn** | **00 26 07.7** | **+1.2** |
| SMQ | | | | SN | **Sn** | **00 27 00.2** | **-0.1** |
| SMQ | | | | Trac | | 00 27 37.1 | |
| | comp=Z,19nm,0.3s | | | | | | |
| **M65A** | **Busby, Falmout** | **4.69** | **212** | Pn | **Pn** | **00 26 05.5** | **-1.4** |
| **BRYW** | **Bryant College** | **4.77** | **221** | Pn | **Pn** | **00 26 07.9** | **-0.1** |
| **QUA2** | **Belchertown** | **4.91** | **229** | Pn | **Pn** | **00 26 09.6** | **-0.3** |
| **L61B** | **Northampton** | **4.97** | **233** | Pn | **Pn** | **00 26 11.4** | **+0.6** |
| **ACCN** | **Adirondack Com** | **5.04** | **246** | Pn | **Pn** | **00 26 12.1** | **+0.3** |
| **TRQ** | **Mont Tremblant** | **5.08** | **280** | Pn | **Pn** | **00 26 12.2** | **-0.2** |
| **NCB** | **Newcomb** | **5.17** | **254** | Pn | **Pn** | **00 26 13.7** | **+0.2** |
| **UCCT** | **U. Connecticut** | **5.20** | **225** | Pn | **Pn** | **00 26 12.9** | **-1.0** |
| **LONY** | **Lake Ozonia** | **5.23** | **262** | Pn | **Pn** | **00 26 13.5** | **-0.8** |
| **TRY** | **Troy** | **5.38** | **240** | Pn | **Pn** | **00 26 14.9** | **-1.5** |
| **M63A** | **Gales Ferry** | **5.41** | **221** | Pn | **Pn** | **00 26 16.6** | **-0.2** |
| **J59A** | **Piesco** | **5.55** | **250** | Pn | **Pn** | **00 26 18.7** | **-0.2** |
| **NATG** | **Natashquan Que** | **5.59** | **31** | PN | **Pn** | **00 26 20.4** | **+1.0** |
| NATG | | | | SN | **Sn** | **00 27 21.2** | **-2.2** |
| NATG | | | | Trac | | 00 27 25.4 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **KSCT** | **Kent School, K** | **5.90** | **231** | Pn | **Pn** | **00 26 22.4** | **-1.2** |
| **J58A** | **Remsen** | **6.11** | **251** | Pn | **Pn** | **00 26 25.0** | **-1.5** |
| **WSPT** | **Westport, CT** | **6.21** | **227** | Pn | **Pn** | **00 26 27.1** | **-0.8** |
| **L59A** | **Walton** | **6.53** | **241** | Pn | **Pn** | **00 26 30.1** | **-2.1** |
| **J57A** | **Williamstown** | **6.57** | **254** | Pn | **Pn** | **00 26 31.2** | **-1.5** |
| **TRNY** | **Table Rock, Ra** | **6.71** | **231** | Pn | **Pn** | **00 26 32.6** | **-2.0** |
| **ODNJ** | **Ogdensburg** | **6.96** | **232** | Pn | **Pn** | **00 26 36.5** | **-1.6** |
| **PECO** | **Prince Edward** | **7.08** | **260** | Pn | **Pn** | **00 26 36.5** | **-3.2** |
| **K57A** | **Scipio Center** | **7.20** | **250** | Pn | **Pn** | **00 26 39.4** | **-2.0** |
| **KSPA** | **Keystone Colle** | **7.33** | **240** | Pn | **Pn** | **00 26 42.1** | **-1.2** |
| **VLDQ** | **Val d'Or** | **7.39** | **294** | Pn | **Pn** | **00 26 46.0** | **+2.1** |
| **DRLN** | **Deer Lake** | **7.61** | **58** | Pn | **Pn** | **00 26 46.8** | **-0.2** |
| **SADO** | **Sadowa** | **8.39** | **269** | Pn | **Pn** | **00 26 57.4** | **-0.3** |
| **SCHQ** | **Schefferville** | **9.26** | **2** | Pn | **Pn** | **00 27 08.4** | **-1.2** |
| **SDMD** | **Soldier's Deli** | **9.35** | **232** | Pn | **Pn** | **00 27 07.9** | **-3.0** |
| **R61A** | **Willards** | **9.39** | **222** | Pn | **Pn** | **00 27 08.8** | **-2.6** |

*MOS **09** 00:38:57.3±1.5, 42°.00S×173°.06E, h32$^{km}$, mb5.5/11, Error ellipse: s-maj=13.7km s-min=11.5km az=124.9*
*NOU **09** 00:39:00.3, 42°.27S×173°.37E, h58$^{km}$, mb5.2/79, South Island, New Zealand*
*NEIC **09** 00:39:00.5, 42°.13S×173°.08E, h50$^{km}$, Moment Tensor Solution. Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$0.90; $M_{\theta\theta}$-0.16; $M_{\phi\phi}$-0.75; $M_{r\theta}$5.59; $M_{\theta\phi}$4.52; $M_{\phi r}$-0.44; Fault plane solution: $M_o$7.25000×10$^{16}$ NP1:φ$_s$95.60000°, δ85.56000°, λ51.76000°. NP2:φ$_s$359.99000°, δ38.46000°, λ172.86000°. Principal axes: T 7.0870, Plg37.0000°, Azm332.0000°; N 0.3242, Plg38.0000°, Azm99.0000°; P -7.4112, Plg30.0000°, Azm216.0000°.*
*NEIC **09** 00:39:00.6±2.4, 42°.12S±0°.02×173°.08E±0°.04, h54$^{km}$±3$^{km}$, mb5.3/51, Mwr5.2/44 Error ellipse: s-maj=5.2km s-min=3.0km az=114.0*
*WEL **09** 00:39:00.1, 42°.S±4°×17°.3E±°, h48$^{km}$±8$^{km}$, M5.8/13, ML6.0/13, MLv5.8/13, Error ellipse: s-maj=0.0km s-min=0.0km az=62.5*
*WEL **09** 00:39:00, 42°.07S×173°.08E, h45$^{km}$, ML5.7, Mw5.2, Moment Tensor Solution. s13 Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$0.03; $M_{\theta\theta}$0.68; $M_{\phi\phi}$-0.71; $M_{r\theta}$5.54; $M_{\theta\phi}$4.43; $M_{\phi r}$-0.67; Fault plane solution: $M_o$7.16000×10$^{16}$ NP1: φ$_s$5.00000°, δ39.00000°, λ180.00000°. NP2:φ$_s$95.00000°, δ90.00000°, λ51.00000°. Principal axes: T -7274.5800, Plg33.0000°, Azm333.0000°; N 7038.4700, Plg39.0000°, Azm95.0000°; P 236.1100, Plg33.0000°, Azm217.0000°;*
*GCMT **09** 00:39:02.6±0.2, 41°.91S±0°.01×173°.14E±0°.02, h52$^{km}$±2$^{km}$, MW5.2/94, Moment Tensor Solution. s50,c67; s94,c139; Duration: 1s0 Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$0.34±.29; $M_{\theta\theta}$1.52±.23; $M_{\phi\phi}$-1.87±.23; $M_{r\theta}$5.84±.23; $M_{\theta\phi}$4.24±.16; $M_{\phi r}$-1.48±.17; Best double couple: $M_o$7.55900×10$^{16}$ NP1:φ$_s$11.00000°, δ37.00000°, λ177.00000°. NP2:φ$_s$103.00000°, δ88.00000°, λ53.00000°. Principal axes: T 7.3810, Plg36.0000°, Azm341.0000°; N 0.3500, Plg37.0000°, Azm104.0000°; P -7.7380, Plg33.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*IDC **09** 00:39:04.0±1.9, 41°.71S×173°.26E, h86$^{km}$±16$^{km}$, mb4.6/11, mb1 4.7/12, mb1mx4.5/29, mbtmp4.9/12, MS4.2/32, Ms1 4.3/32, ms1mx4.2/42 Error ellipse: s-maj=16.6km s-min=13.6km az=9.0*

**ISC 09 00:39:00.9**±0.5, **42°.12S**±0°.02×**173°.12E**±0°.03, **h59**$^{km}$±4$^{km}$, **n481**, σ1§**58**/454, **mb5.3**/91, **MS4.3**/36, **15C-5D, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **THZ** | **Tophouse** | **0.39** | **336** | P | **Pn** | **00 39 10.2** | **-1.6** |
| THZ | | | | S | **Sn** | **00 39 16.7** | **-2.8** |
| **THZ** | **Tophouse** | **0.39** | **336** | Pn | **Pn** | **00 39 10.1** | **-1.6** |
| THZ | | | | Sn | **Sn** | **00 39 16.8** | **-2.8** |
| **KHZ** | **Kahutara** | **0.43** | **133** | P | **Pn** | **00 39 11.8** | **-0.3** |
| KHZ | | | | S | **Sn** | **00 39 19.8** | **-0.3** |
| **KHZ** | **Kahutara** | **0.43** | **133** | Pn | **Pn** | **00 39 11.6** | **-0.5** |
| KHZ | | | | Sn | **Sn** | **00 39 19.8** | **-0.3** |
| **KHZ** | **Kahutara** | **0.43** | **133** | P | **Pn** | **00 39 11.9** | **-0.1** |
| **BSWZ** | **Blackbirch Sta** | **0.70** | **55** | P | **Pn** | **00 39 14.7** | **-0.4** |
| **BSWZ** | **Blackbirch Sta** | **0.70** | **55** | | **Pn** | **00 39 14.7** | **-0.4** |
| BSWZ | | | | Sn | **Sn** | **00 39 26.7** | **+1.3** |
| **MRNZ** | **Matariki Terra** | **0.77** | **339** | P | **Pn** | **00 39 15.2** | **-0.8** |
| MRNZ | | | | S | **Sn** | **00 39 25.5** | **-1.5** |
| **GVZ** | **Greta Valley S** | **0.85** | **184** | P | **Pn** | **00 39 16.8** | **-0.2** |
| **CMWZ** | **Cape Campbell** | **0.90** | **66** | P | **Pn** | **00 39 18.1** | **+0.5** |
| **CMWZ** | **Cape Campbell** | **0.90** | **66** | Pn | **Pn** | **00 39 17.7** | **0.0** |
| CMWZ | | | | | **Sn** | **00 39 31.9** | **+2.0** |
| **LTZ** | **Lake Taylor** | **0.91** | **223** | P | **Pn** | **00 39 17.6** | **-0.2** |
| LTZ | | | | S | **Sn** | **00 39 30.2** | **-0.1** |
| **LTZ** | **Lake Taylor** | **0.91** | **223** | Pn | **Pn** | **00 39 17.5** | **-0.2** |
| LTZ | | | | | **Sn** | **00 39 30.0** | **-0.2** |
| **NNZ** | **Nelson** | **0.93** | **12** | P | **Pn** | **00 39 17.3** | **-0.6** |
| NNZ | | | | S | **Sn** | **00 39 30.1** | **-0.4** |
| **NNZ** | **Nelson** | **0.93** | **12** | | **Pn** | **00 39 17.4** | **-0.6** |
| NNZ | | | | Sn | **Sn** | **00 39 29.8** | **-0.6** |
| **TUWZ** | **Tuamarina** | **0.93** | **42** | P | **Pn** | **00 39 17.7** | **-0.3** |
| TUWZ | | | | S | **Sn** | **00 39 30.7** | **+0.2** |
| **TUWZ** | **Tuamarina** | **0.93** | **42** | | **Pn** | **00 39 17.7** | **-0.3** |
| TUWZ | | | | Sn | **Sn** | **00 39 30.7** | **+0.2** |
| **DSZ** | **Denniston Nort** | **1.05** | **291** | P | **Pn** | **00 39 19.1** | **-0.5** |
| **TKNZ** | **Takaka Hill** | **1.09** | **354** | P | **Pn** | **00 39 19.9** | **-0.2** |
| TKNZ | | | | S | **Sn** | **00 39 34.2** | **-0.3** |
| **AMCZ** | **Amberley** | **1.11** | **198** | P | **Pn** | **00 39 20.0** | **-0.4** |
| **TCW** | **Tory Channel** | **1.26** | **44** | P | **Pn** | **00 39 22.0** | **-0.4** |
| TCW | | | | S | **Sn** | **00 39 38.1** | **-0.3** |
| **QRZ** | **Quartz Range** | **1.37** | **341** | P | **Pn** | **00 39 23.4** | **-0.4** |
| QRZ | | | | S | **Sn** | **00 39 40.8** | **-0.1** |
| **QRZ** | **Quartz Range** | **1.37** | **341** | | **Pn** | **00 39 23.4** | **-0.4** |
| QRZ | | | | Sn | **Sn** | **00 39 40.0** | **-1.0** |
| **QRZ** | **Quartz Range** | **1.37** | **341** | P | **Pn** | **00 39 23.9** | **+0.1** |
| **INZ** | **Inchbonnie** | **1.38** | **243** | P | **Pn** | **00 39 23.7** | **-0.2** |
| INZ | | | | S | **Sn** | **00 39 41.5** | **+0.4** |
| **SNZO** | **South Karori** | **1.44** | **56** | Pn | **Pn** | **00 39 22.8** | **-1.9** |
| SNZO | | | | Sn | **Sn** | **00 39 41.7** | **-0.9** |
| **SNZO** | **South Karori** | **1.44** | **56** | P | **Pn** | **00 39 24.5** | **-0.2** |
| **OXZ** | **Oxford** | **1.44** | **213** | P | **Pn** | **00 39 23.8** | **-1.1** |
| **OXZ** | **Oxford** | **1.44** | **213** | | **Pn** | **00 39 23.8** | **-1.1** |
| OXZ | | | | Sn | **Sn** | **00 39 41.3** | **-1.5** |
| **DUWZ** | **D'Urville Isla** | **1.45** | **25** | P | **Pn** | **00 39 24.7** | **-0.2** |
| **WEL** | **Wellington** | **1.49** | **56** | P | **Pn** | **00 39 25.0** | **-0.5** |
| **BHW** | **Baring Head** | **1.49** | **62** | P | **Pn** | **00 39 24.7** | **-0.8** |
| **BHW** | **Baring Head** | **1.49** | **62** | | **Pn** | **00 39 24.6** | **-0.8** |
| **OKCZ** | **Okains Bay** | **1.60** | **181** | P | **Pn** | **00 39 26.0** | **-1.0** |
| **MQZ** | **McQueen's Vall** | **1.62** | **192** | P | **Pn** | **00 39 25.4** | **-1.7** |
| **MQZ** | **McQueen's Vall** | **1.62** | **192** | Pn | **Pn** | **00 39 25.5** | **-1.7** |
| MQZ | | | | | Sn | **Sn** | **00 39 44.5** | **-2.5** |
| **PLWZ** | **Palliser** | **1.69** | **72** | P | **Pn** | **00 39 26.8** | **-1.4** |
| **PLWZ** | **Palliser** | **1.69** | **72** | Pn | **Pn** | **00 39 26.6** | **-1.6** |
| **MSWZ** | **Moikau Station** | **1.75** | **67** | P | **Pn** | **00 39 27.6** | **-1.3** |
| **MSWZ** | **Moikau Station** | **1.75** | **67** | | **Pn** | **00 39 27.6** | **-1.3** |
| **AKCZ** | **Akaroa Harbour** | **1.76** | **185** | P | **Pn** | **00 39 27.6** | **-1.5** |
| **RACZ** | **Rakaia** | **1.76** | **204** | P | **Pn** | **00 39 27.6** | **-1.4** |
| **CAW** | **Cannon Point** | **1.78** | **56** | P | **Pn** | **00 39 28.5** | **-0.8** |
| **MHCZ** | **Mount Hutt** | **1.81** | **218** | P | **Pn** | **00 39 28.4** | **-1.4** |
| **KIW** | **Kapiti Island** | **1.84** | **48** | P | **Pn** | **00 39 29.9** | **-0.4** |
| **PAWZ** | **Paruwai Farm** | **1.88** | **68** | P | **Pn** | **00 39 29.1** | **-1.6** |
| **WVZ** | **Waitaha Valley** | **2.00** | **241** | P | **Pn** | **00 39 31.8** | **-0.5** |
| **OGWZ** | **Otaki Gorge** | **2.02** | **50** | P | **Pn** | **00 39 31.9** | **-0.8** |
| **MTW** | **Mount Morrison** | **2.03** | **62** | P | **Pn** | **00 39 31.1** | **-1.7** |
| **WACZ** | **Wakanui South** | **2.05** | **207** | P | **Pn** | **00 39 31.4** | **-1.6** |
| **TRWZ** | **Traveller** | **2.06** | **70** | P | **Pn** | **00 39 31.3** | **-1.8** |
| **HOWZ** | **Holdsworth Sta** | **2.18** | **57** | P | **Pn** | **00 39 33.2** | **-1.6** |
| **RPZ** | **Rata Peaks** | **2.20** | **223** | P | **Pn** | **00 39 33.6** | **-1.5** |
| **RPZ** | **Rata Peaks** | **2.20** | **223** | Pn | **Pn** | **00 39 33.5** | **-1.6** |
| **RPZ** | **Rata Peaks** | **2.20** | **223** | P | **Pn** | **00 39 34.2** | **-0.9** |
| **ARCZ** | **Arundel** | **2.31** | **217** | P | **Pn** | **00 39 34.8** | **-1.9** |
| **TMWZ** | **Te Maipa** | **2.31** | **65** | P | **Pn** | **00 39 34.6** | **-2.0** |
| **MRZ** | **Mangatainoka R** | **2.36** | **53** | P | **Pn** | **00 39 35.9** | **-1.4** |
| **GCSZ** | **Gaunt Creek Bo** | **2.38** | **239** | P | **Pn** | **00 39 36.6** | **-0.8** |
| **TIWZ** | **Tintock** | **2.48** | **58** | P | **Pn** | **00 39 37.0** | **-1.9** |
| **OHWZ** | **Ohakea** | **2.53** | **42** | P | **Pn** | **00 39 39.7** | **0.0** |
| **CPWZ** | **Castlepoint** | **2.61** | **63** | P | **Pn** | **00 39 39.1** | **-1.6** |
| **POWZ** | **Post Office Ro** | **2.64** | **50** | P | **Pn** | **00 39 39.6** | **-1.5** |
| **PRWZ** | **Pori Road** | **2.66** | **55** | P | **Pn** | **00 39 39.6** | **-1.8** |
| **TMZ** | **Timaru** | **2.74** | **214** | P | **Pn** | **00 39 40.7** | **-1.8** |
| **WAZ** | **Wanganui** | **2.76** | **32** | P | **Pn** | **00 39 43.6** | **+0.9** |
| **BFZ** | **Birch Farm** | **2.76** | **60** | P | **Pn** | **00 39 40.2** | **-2.5** |
| **BFZ** | **Birch Farm** | **2.76** | **60** | Pn | **Pn** | **00 39 40.2** | **-2.5** |
| **BFZ** | **Birch Farm** | **2.76** | **60** | P | **Pn** | **00 39 40.6** | **-2.1** |
| **NMEZ** | **Namu Road** | **2.77** | **12** | P | **Pn** | **00 39 43.9** | **+1.1** |
| **FOZ** | **Fox Glacier** | **2.81** | **239** | P | **Pn** | **00 39 42.3** | **-1.1** |
| **FOZ** | **Fox Glacier** | **2.81** | **239** | Pn | **Pn** | **00 39 42.1** | **-1.2** |
| **LREZ** | **Lake Rotokare** | **2.83** | **21** | P | **Pn** | **00 39 45.6** | **+1.9** |
| **PREZ** | **Palmer Road** | **2.89** | **16** | P | **Pn** | **00 39 45.8** | **+1.2** |
| **KHEZ** | **Kahui Hut** | **2.91** | **14** | P | **Pn** | **00 39 45.7** | **+0.9** |
| **NBEZ** | **Newall Road No** | **2.91** | **12** | P | **Pn** | **00 39 46.0** | **+1.2** |
| **DVHZ** | **Dannevirke** | **2.93** | **53** | P | **Pn** | **00 39 42.8** | **-2.3** |
| **NEZ** | **North Egmont** | **2.94** | **15** | P | **Pn** | **00 39 46.0** | **+0.7** |
| **TSZ** | **Takapari Road** | **2.98** | **47** | P | **Pn** | **00 39 44.1** | **-1.7** |
| **PKE** | **Pukeiti** | **3.00** | **13** | P | **Pn** | **00 39 47.1** | **+1.1** |
| **ANWZ** | **Angora Road** | **3.03** | **58** | P | **Pn** | **00 39 43.8** | **-2.6** |
| **DREZ** | **Durham Road** | **3.04** | **16** | P | **Pn** | **00 39 47.7** | **+1.1** |
| **LBZ** | **Lake Benmore** | **3.12** | **222** | P | **Pn** | **00 39 46.2** | **-1.5** |
| **LBZ** | **Lake Benmore** | **3.12** | **222** | Pn | **Pn** | **00 39 46.1** | **-1.5** |
| **PNHZ** | **Pukenui** | **3.21** | **48** | P | **Pn** | **00 39 46.9** | **-2.1** |
| **PRHZ** | **Porangahau** | **3.24** | **56** | P | **Pn** | **00 39 46.5** | **-2.8** |
| **VRZ** | **Vera Road** | **3.24** | **23** | P | **Pn** | **00 39 50.5** | **+1.1** |
| **WPHZ** | **Waipukurau** | **3.25** | **52** | P | **Pn** | **00 39 47.1** | **-2.3** |
| **MTVZ** | **Mangateitei** | **3.27** | **34** | P | **Pn** | **00 39 50.1** | **+0.3** |
| **WNVZ** | **Wahianoa** | **3.37** | **35** | P | **Pn** | **00 39 50.9** | **-0.3** |
| **MOVZ** | **Moawhango** | **3.37** | **37** | P | **Pn** | **00 39 50.0** | **-1.1** |
| **TRVZ** | **Turoa** | **3.37** | **34** | P | **Pn** | **00 39 51.1** | **-0.2** |
| **WHVZ** | **Whangaehu Hut** | **3.40** | **34** | P | **Pn** | **00 39 51.6** | **-0.1** |
| **FWVZ** | **Far West T-bar** | **3.41** | **34** | P | **Pn** | **00 39 51.7** | **-0.2** |
| **ODZ** | **Otahua Downs** | **3.43** | **211** | P | **Pn** | **00 39 49.9** | **-2.0**

RTV **Rentapao** **24.58 349** P **P** **00 44 17.8 +2.4**
ARPS **Mount Arapiles** **24.66 272** P **P** **00 44 17.5 +1.5**
baz=25,SNR=17
ARPS **Mount Arapiles** **24.66 272** P **P** **00 44 17.0 +1.0**
MSVF **Nonsavu** **24.67 11** P **P** **00 44 15.7 -0.7**
comp=Z,39nm,0.9s,baz=167,slow=7.5,SNR=19
MSVF LR LR 00 52 37.2
comp=Z,2µm,20.8s,baz=185,slow=34
MSVF **Nonsavu** **24.67 11** *i* P **P** **00 44 16.3 -0.1**
MSVF pmax pmax
comp=Z,54nm,0.8s
MSVF **Nonsavu** **24.67 11** P **P** **00 44 15.2 -1.1**
MSVF IAmb IAmb 00 44 32.2
comp=Z,69nm,0.9s
MSVF **Nonsavu** **24.67 11** P **P** **00 44 15.3 -1.1**
comp=Z,71nm,0.8s
DVP **Devils Point** **24.68 349** P **P** **00 44 17.6 +1.3**
EIDS **Eidsvold** **24.69 306** P **P** **00 44 17.3 +1.0**
baz=25,SNR=16
EIDS **Eidsvold** **24.69 306** P **P** **00 44 16.2 -0.2**
EIDS **Eidsvold** **24.69 306** P **P** **00 44 17.5 +1.1**
RMQ **Roma** **25.34 300** P **P** **00 44 23.3 +1.0**
baz=26,SNR=8.9
RMQ **Roma** **25.34 300** P **P** **00 44 25.6 +3.3**
TAVE **Taveuni** **26.03 15** P **P** **00 44 28.4 -0.2**
DGTI **Dogotuki** **26.36 14** P **P** **00 44 30.5 -1.0**
STKA **Stephens Creek** **27.04 282** P **P** **00 44 38.9 +1.3**
comp=Z,5.2nm,0.7s,baz=111,slow=11,SNR=12
STKA **Stephens Creek** **27.04 282** P **P** **00 44 39.1 +1.5**
baz=27,SNR=8.5
STKA **Stephens Creek** **27.04 282** P **P** **00 44 36.7 -0.9**
STKA **Stephens Creek** **27.04 282** P **P** **00 44 41.6 +4.0**
comp=Z,3.6nm,1.0s
SANVU **Saraoutou** **27.07 347** P **P** **00 44 38.0 0.0**
SANVU IAmb IAmb 00 44 41.5
comp=Z,77nm,0.9s
SANVU **Saraoutou** **27.07 347** P **P** **00 44 39.3 +1.4**
TWOA **Tennyson Woods** **27.78 273** P **P** **00 44 45.9 +1.7**
comp=Z,28nm,0.8s
HTT **Hallett** **28.23 277** P **P** **00 44 49.1 +0.7**
baz=28,SNR=5.3
HTT **Hallett** **28.23 277** P **P** **00 44 49.2 +0.8**
comp=Z,13nm,1.3s
QLP **Quilpie** **28.27 294** P **P** **00 44 50.0 +1.4**
baz=28,SNR=7.7
QLP **Quilpie** **28.27 294** P **P** **00 44 50.0 +1.4**
comp=Z,48nm,1.2s
LCRK **Leigh Creek** **30.25 281** P **P** **00 45 06.4 +0.2**
comp=Z,68nm,1.3s
BBOO **Buckleboo** **30.65 275** P **P** **00 45 09.7 0.0**
baz=31,SNR=6.3
BBOO **Buckleboo** **30.65 275** P **P** **00 45 09.3 -0.4**
BBOO **Buckleboo** **30.65 275** P **P** **00 45 09.3 -0.4**
comp=Z,17nm,1.2s
RAR **Rarotonga** **30.88 56** P **P** **00 45 12.8 +1.1**
comp=Z,44nm,0.8s,baz=230,slow=4.8,SNR=6.3
RAR LR LR 00 56 25.9
comp=Z,350nm,21.2s,baz=245,slow=34
RAR **Rarotonga** **30.88 56** P **P** **00 45 12.3 +0.6**
RAR pmax pmax
comp=Z,63nm,0.9s
RAR **Rarotonga** **30.88 56** P **P** **00 45 12.3 +0.6**
RAR IAmb IAmb 00 45 16.5
comp=Z,63nm,0.9s
CTA **Charters Tower** **31.57 306** LR LR 00 57 37.6
comp=Z,476nm,18.4s,baz=133,slow=35
CTA **Charters Tower** **31.57 306** P **P** **00 45 18.9 +0.9**
comp=Z,60nm,1.1s
CTAO **Charters Tower** **31.57 306** P **P** **00 45 18.3 +0.3**
CTAO pmax pmax
comp=Z,46nm,1.0s
CTAO **Charters Tower** **31.57 306** P **P** **00 45 18.3 +0.3**
CTAO IAmb IAmb 00 45 19.8
comp=Z,46nm,1.0s
CTAO **Charters Tower** **31.57 306** P **P** **00 45 18.8 +0.8**
comp=Z,52nm,1.1s
MULG **Mulgathing** **33.39 278** P **P** **00 45 33.8 +0.1**
comp=Z,20nm,0.9s
OOD **Oodnadatta** **33.56 283** P **P** **00 45 35.7 +0.5**
comp=Z,27nm,1.5s
MTSU **Mount Surprise** **34.24 305** P **P** **00 45 42.3 +1.1**
baz=34,SNR=26
MTSU **Mount Surprise** **34.24 305** P **P** **00 45 42.4 +1.1**
comp=Z,36nm,0.8s
HNR **Honiara** **34.56 337** LR LR 00 57 23.1
comp=Z,469nm,21.4s,baz=194,slow=32
QIS **Mount Isa** **35.46 297** P **P** **00 45 52.0 +0.3**
baz=36,SNR=18
QIS **Mount Isa** **35.46 297** P **P** **00 45 52.5 +0.8**
comp=Z,24nm,0.8s
VNDA **Vanda** **35.81 184** P **P** **00 45 58.4 +4.3**
comp=Z,3.8nm,0.9s,baz=16,slow=8.7,SNR=4.7
VNDA LR LR 00 57 58.8
comp=Z,537nm,21.4s,baz=24,slow=31
ASAR **Alice Springs** **37.32 287** P **P** **00 46 07.0 -0.6**
comp=Z,8.0nm,0.7s,baz=128,slow=7.5,SNR=42
ASAR PcP **PcP** **00 48 24.4 -1.5**
comp=Z,2.3nm,0.6s,baz=129,slow=4.0,SNR=1.9
ASAR ScP **ScP** **00 52 05.6 -2.2**
comp=Z,0.6nm,0.7s,baz=120,slow=5.5,SNR=2.3
ASAR **Alice Springs** **37.32 287** P **P** **00 46 07.4 -0.2**
FORT **Forrest** **37.58 273** P **P** **00 46 09.9 +0.3**
baz=38,SNR=15
FORT **Forrest** **37.58 273** P **P** **00 46 09.9 +0.3**
FORT **Forrest** **37.58 273** P **P** **00 46 09.2 -0.4**
comp=Z,125nm,0.9s
COEN **Coen** **38.18 308** IAmb IAmb 00 46 16.0
comp=Z,50nm,0.9s
COEN **Coen** **38.18 308** P **P** **00 46 14.5 -0.4**
comp=Z,60nm,1.1s
WB2 **Warramunga Arr** **39.44 292** P **P** **00 46 25.4 0.0**
WB2 IAmb IAmb 00 46 26.3
comp=Z,29nm,0.6s
WRAB **Tennant Creek** **39.45 292** *c i* P **P** **00 46 25.3 -0.2**
WRAB pmax pmax
comp=Z,23nm,0.7s
WRAB **Tennant Creek** **39.45 292** P **P** **00 46 24.7 -0.8**
comp=Z,31nm,1.5s
WRA **Warramunga Arr** **39.45 292** P **P** **00 46 25.2 -0.4**
comp=Z,14nm,0.4s,baz=128,slow=8.6,SNR=254
WRA PcP **PcP** **00 48 31.2 -1.3**
comp=Z,1.4nm,0.7s,baz=124,slow=3.2,SNR=1.0
WRA ScP **ScP** **00 52 12.4 -3.6**
comp=Z,1.0nm,0.8s,baz=121,slow=4.1,SNR=2.9
WRA S **S** **00 52 21.1 -2.2**
comp=Z,1.4nm,1.0s,baz=133,slow=14,SNR=4.9
WRA LR LR 01 02 47.0
comp=Z,404nm,19.7s,baz=176,slow=36
WRA **Warramunga Arr** **39.45 292** P **P** **00 46 25.1 -0.4**
WB0 **Warramunga Arr** **39.53 292** P **P** **00 46 25.6 -0.5**
WB0 IAmb IAmb 00 46 27.0
comp=Z,27nm,0.6s
PMG **Port Moresby** **39.78 318** LR LR 01 01 02.6
comp=Z,689nm,21.7s,baz=169,slow=33
PMG **Port Moresby** **39.78 318** P **P** **00 46 29.5 +1.3**
PMG pmax pmax
comp=Z,201nm,1.0s
PMG **Port Moresby** **39.78 318** P **P** **00 46 29.5 +1.3**
PMG **Port Moresby** **39.78 318** P **P** **00 46 29.5 +1.3**
comp=Z,223nm,1.0s
PAE **Paea** **40.03 64** *e* T T 01 27 15.7
comp=Z,8.0nm,0.3s
PPT2 **Papeete2** **40.08 64** *e* LR LR 00 57 29.7
comp=Z,1µm,30.2s,baz=228
PPT2 **Papeete2** **40.08 64** *e* T T 01 27 20.7
comp=Z,10nm,0.4s
PPT **Papeete** **40.10 64** LR LR 01 00 05.5
comp=Z,429nm,19.3s,baz=200,slow=32
WRKA **Warakurna** **40.54 280** P **P** **00 46 33.6 -1.0**
baz=41,SNR=49
WRKA **Warakurna** **40.54 280** P **P** **00 46 33.2 -1.3**
comp=Z,78nm,1.5s
CASY **Casey** **41.44 213** P **P** **00 46 42.5 +1.2**
CASY IAmb IAmb 00 46 43.9
comp=Z,40nm,1.1s
RABL **Rabaul** **42.15 328** P **P** **00 46 47.7 0.0**
RABL **Rabaul** **42.15 328** P **P** **00 46 49.3 +1.6**
comp=Z,289nm,0.5s
PMOR **Pomariorio Ree** **43.06 63** *e* T T 01 31 04.7
comp=Z,5.6nm,0.2s
VAH **Vaihoa** **43.06 63** *e* T T 01 31 02.6
comp=Z,11nm,0.3s
TARA **Tarawa** **43.28 360** P **P** **00 46 56.6 -0.1**
KLBR **Kellerberrin** **44.83 265** P **P** **00 47 09.6 +0.4**
KDU **Kakadu** **45.84 298** P **P** **00 47 17.3 0.0**
baz=46,SNR=13
KDU **Kakadu** **45.84 298** P **P** **00 47 17.2 0.0**

comp=Z,81nm,1.3s
BLDU **Ballidu** **46.09 265** P **P** **00 47 21.0 +1.8**
comp=Z,20nm,1.7s
MANU **Manus Island** **46.11 323** P **P** **00 47 18.8 -0.5**
MANU IAmb IAmb 00 47 20.8
comp=Z,61nm,1.4s
KNRA **Kununurra** **46.22 291** P **P** **00 47 21.3 +1.0**
baz=46,SNR=7.9
KNRA **Kununurra** **46.22 291** P **P** **00 47 20.7 +0.4**
KNRA IAmb IAmb 00 47 24.8
comp=Z,45nm,1.2s
KNRA **Kununurra** **46.22 291** P **P** **00 47 22.3 +2.0**
comp=Z,38nm,1.1s
MTN **Manton Dam** **46.61 296** P **P** **00 47 23.5 +0.2**
baz=47,SNR=23
MTN **Manton Dam** **46.61 296** P **P** **00 47 23.5 +0.2**
MTN **Manton Dam** **46.61 296** P **P** **00 47 23.2 -0.1**
comp=Z,81nm,0.9s
MEEK **Meekatharra** **46.79 271** P **P** **00 47 24.0 -0.7**
baz=47,SNR=45
MEEK **Meekatharra** **46.79 271** P **P** **00 47 23.5 -1.2**
comp=Z,66nm,1.0s
FITZ **Fitzroy Crossi** **46.80 286** P **P** **00 47 24.3 -0.5**
baz=47,SNR=16
DRS **Darwin Rock St** **47.07 296** P **P** **00 47 27.6 +0.7**
comp=Z,37nm,0.9s
MORW **Morawa** **47.39 267** P **P** **00 47 28.7 -0.6**
MORW IAmb IAmb 00 47 37.3
comp=Z,18nm,1.0s
QSPA **South Pole Qui** **48.01 180** LR LR 01 05 40.1
comp=Z,341nm,20.4s,baz=41,slow=33
QSPA **South Pole Qui** **48.01 180** P **P** **00 47 35.5 +1.7**
PSA00 **Pilbara Seismi** **48.82 278** P **P** **00 47 39.8 -0.6**
PSA00 IAmb IAmb 00 47 40.4
comp=Z,21nm,0.8s
PSA00 **Pilbara Seismi** **48.82 278** IAmb IAmb 00 48 00.2
comp=Z,28nm,1.4s
PSA00 **Pilbara Seismi** **48.82 278** P **P** **00 47 39.4 -1.0**
comp=Z,31nm,1.1s
JAY **Jayapura** **48.96 315** P **P** **00 47 40.9 -0.6**
comp=Z,12nm,0.9s
MBWA **Marble Bar** **49.16 278** P **P** **00 47 42.0 -1.0**
MBWA **Marble Bar** **49.16 278** P **P** **00 47 44.2 +1.2**
comp=Z,18nm,0.9s
GIRL **Giralia** **52.34 272** P **P** **00 48 07.6 +0.6**
baz=52,SNR=6.2
GIRL **Giralia** **52.34 272** P **P** **00 48 07.4 +0.4**
GIRL **Giralia** **52.34 272** P **P** **00 48 07.3 +0.4**
comp=Z,144nm,1.6s
TAOE **Nuku Hiva Isla** **52.69 65** *e* LR LR 01 03 20.0
comp=Z,512nm,23.6s
TAOE **Nuku Hiva Isla** **52.69 65** P **P** **00 48 08.1 -1.7**
FAKI **Fak Fak** **53.44 306** P **P** **00 48 14.1 -1.0**
comp=Z,48nm,0.7s
FAKI **Fak Fak** **53.44 306** P **P** **00 48 13.6 -1.5**
FAKI IAmb IAmb 00 48 14.6
comp=Z,32nm,0.7s
SOEI **Soe** **53.48 293** P **P** **00 48 17.3 +1.7**
comp=Z,71nm,1.0s
SOEI **Soe** **53.48 293** P **P** **00 48 16.5 +0.9**
SOEI **Soe** **53.48 293** P **P** **00 48 17.6 +2.0**
BATI **Baumata** **53.58 292** P **P** **00 48 16.2 0.0**
comp=Z,470nmcomp=Z,31nm,1.0s
SIJI **Sorong** **55.66 306** P **P** **00 48 30.3 -0.8**
comp=Z,37nm,0.8s,baz=59,slow=8.0,SNR=16
SIJI LR LR 01 14 27.9
comp=Z,167nm,18.1s,baz=125,slow=38
SWI **Sorong** **55.66 306** P **P** **00 48 30.9 -0.3**
comp=Z,76nm,0.8s
MMRI **Maumere** **55.68 292** P **P** **00 48 31.8 +0.5**
comp=Z,82nm,1.0s
MMRI **Maumere** **55.68 292** P **P** **00 48 31.2 -0.1**
MMRI **Maumere** **55.68 292** P **P** **00 48 31.8 +0.5**
comp=Z,79nm,1.1s
BASI **Baing, Sumba** **55.72 289** P **P** **00 48 32.4 +0.8**
comp=Z,1µmcomp=Z,79nm,1.5s
WBSI **Waikabubak, Su** **56.96 289** P **P** **00 48 40.8 +0.3**
comp=Z,44nm,1.0s
BBSI **Bau Bau** **57.72 295** P **P** **00 48 46.3 +0.5**
comp=Z,288nmcomp=Z,8.1nm,0.9s
SANI **Sanana** **58.02 300** P **P** **00 48 47.9 0.0**
comp=Z,59nm,0.8s
SANI **Sanana** **58.02 300** P **P** **00 48 48.5 +0.6**
comp=Z,60nm,0.8s
LBMI **Labuha** **58.15 303** P **P** **00 48 49.0 +0.2**
comp=Z,55nm,1.2s
BSSI **Bau Bau, Buton** **58.66 292** P **P** **00 48 52.1 -0.3**
comp=Z,11nm,0.9s
MAW **Mawson** **58.76 205** LR LR 01 12 39.8
comp=Z,194nm,21.9s,baz=82,slow=34
BELA **Belgrano 2** **59.07 173** P **P** **00 48 56.0 +1.6**
BKSI **Bulukumba** **59.51 293** P **P** **00 48 58.5 +0.3**
comp=Z,42nm,1.0s
KAPI **Kappang** **59.98 293** P **P** **00 49 02.5 +1.0**
comp=Z,9.4nm,0.5s,baz=142,slow=8.8,SNR=6.9
KAPI **Kappang** **59.98 293** P **P** **00 49 01.9 +0.4**
KAPI IAmb IAmb 00 49 03.5
comp=Z,23nm,0.8s
KAPI **Kappang** **59.98 293** P **P** **00 49 03.3 +1.8**
comp=Z,34nm,1.1s
BNSI **Bone** **60.18 293** P **P** **00 49 03.6 +0.7**
comp=Z,2µmcomp=Z,38nm,1.2s
SPSI **Sidrap Palu** **60.73 293** P **P** **00 49 06.7 +0.1**
comp=Z,49nm,1.0s
SRBI **Singaraja** **61.00 286** P **P** **00 49 08.8 +0.3**
comp=Z,28nm,0.8s
TTSI **Tana Toraja** **61.36 294** P **P** **00 49 11.2 +0.3**
comp=Z,47nm,1.0s
JAGI **Jajag, Banyuwa** **61.50 285** P **P** **00 49 11.8 0.0**
comp=Z,32nm,1.2s
JAGI **Jajag, Banyuwa** **61.50 285** P **P** **00 49 10.5 -1.4**
JAGI IAmb IAmb 00 49 39.8
comp=Z,28nm,1.1s
ABJI **Asem Bagus** **61.90 286** P **P** **00 49 14.9 +0.4**
comp=Z,61nm,1.4s
GTOI **Gorontalo** **61.98 300** P **P** **00 49 15.5 +0.5**
comp=Z,14nm,0.7s
GMJI **Gumukmas** **62.14 285** P **P** **00 49 16.0 -0.1**
comp=Z,44nm,0.9s
BLJI **Banyuglugur** **62.39 285** P **P** **00 49 18.5 +0.7**
comp=Z,48nm,0.9s
MRSI **Marisa** **62.56 299** P **P** **00 49 18.1 -0.8**
comp=Z,51nm,0.8s
PWJI **Pagerwojo** **63.49 284** P **P** **00 49 25.4 +0.3**
comp=Z,31nm,1.1s
KBKI **Kobaru** **63.69 291** P **P** **00 49 26.7 +0.3**
comp=Z,71nm,1.0s
TOLI2 **Tolitoli** **63.79 298** P **P** **00 49 26.3 -0.8**
TOLI2 IAmb IAmb 00 49 29.3
comp=Z,48nm,1.0s
TOLI2 **Tolitoli** **63.79 298** P **P** **00 49 27.7 +0.6**
MPSI **Mapaga** **63.80 297** P **P** **00 49 27.2 +0.1**
comp=Z,960nmcomp=Z,55nm,0.9s
SYO **Syowa Base** **63.98 197** *e* P **P** **00 49 28.9 +1.4**
PMSA **Palmer Station** **64.48 156** LR LR 01 12 43.6
comp=Z,960nm,20.4s,baz=277,slow=31
PMSA **Palmer Station** **64.48 156** P **P** **00 49 28.9 -1.9**
BBKI **Banjar Baru** **64.50 290** P **P** **00 49 32.3 +0.6**
comp=Z,41nm,1.1s
DAV **Davao City (W)** **65.37 306** LR LR 01 17 11.5
comp=Z,210nm,21.3s,baz=254,slow=35
KPJI **Karang Pucung** **66.04 282** P **P** **00 49 42.0 +0.3**
comp=Z,45nm,0.8s
MTKI **Muara Teweh, K** **66.25 292** P **P** **00 49 43.9 +0.8**
comp=Z,46nm,0.5s
SNAA **Sanae** **66.48 181** P **P** **00 49 45.0 +1.2**
SNAA **Sanae** **66.48 181** PP PP 00 52 08.6 -1.5
SNAA **Sanae** **66.48 181** LR LR 01 15 54.8
comp=Z,446nm,21.9s,baz=176,slow=33
SNAA **Sanae** **66.48 181** *d i* P **P** **00 49 45.0 +1.2**
SNAA **Sanae** **66.48 181** P **P** **00 49 44.8 +1.0**
SNAA IAmb IAmb 00 49 46.4
comp=Z,54nm,1.3s
NVL **N'lazarevskaya** **66.61 187** *e* P P 00 49 52.6 +8.1
NVL pmax pmax
comp=Z,59nm,1.3s
VNA3 **Neumayer Olymp** **66.93 179** P **P** **00 49 48.0 +1.4**
VNA2 **Neumayer--Watz** **67.26 180** P **P** **00 49 50.4 +1.7**
baz=173,slow=6.5
LEM **Lembang** **67.34 282** LR LR 01 20 14.6
comp=Z,94nm,18.8s,baz=91,slow=37
LEM **Lembang** **67.34 282** P **P** **00 49 50.1 -0.1**
comp=Z,33nm,0.9s
CNJI **Cibinong** **67.37 281** P **P** **00 49 50.0 -0.2**
comp=Z,68nm,1.3s
VNA1 **Neumayer--Stat** **67.54 180** P **P** **00 49 52.2 +1.8**
MYLDM **Lahad Datu** **68.34 299** IAmb IAmb 00 50 11.7
comp=Z,48nm,0.9s
STKI **Sintang** **69.35 290** P **P** **00 50 01.9 -0.7**
comp=Z,30nm,1.0s
USHA **Ushuaia** **70.12 147** LR LR 01 14 12.4
comp=Z,348nm,18.1s,baz=252,slow=30
KKM **Kota Kinabalu** **70.48 298** IAmb IAmb 00 50 10.4
comp=Z,51nm,0.8s
SBUM **Sibu** **70.54 292** P **P** **00 50 09.6 -0.2**
KSM **Kuching** **71.17 290** IAmb IAmb 00 50 14.5
comp=Z,43nm,0.9s
MDSI **Maura Dua** **71.43 281** P **P** **00 50 14.1 -1.1**
comp=Z,14nm,1.0s
PPI **Padang Panjang** **76.92 281** P **P** **00 50 45.5 -1.7**
comp=Z,12nm,0.8s
PLCA **Paso Flores** **79.42 136** P **P** **00 51 03.9 +3.0**
comp=Z,1.6nm,0.7s,baz=239,slow=9.3,SNR=4.0
PLCA LR LR 01 17 52.5
comp=Z,232nm,22.0s,baz=207,slow=29
PLCA **Paso Flores** **79.42 136** *eP* P 00 51 09.8 +8.9
H03N3 **Juan Fernandez** **79.93 126** T T 02 16 34.5
baz=228,slow=72,SNR=16
H03N2 **Juan Fernandez** **79.93 126** T T 02 16 33.4
baz=228,slow=72,SNR=14
H03N1 **Juan Fernandez** **79.94 126** T T 02 16 33.5
baz=228,slow=72,SNR=20
JOW **Kunigami** **80.13 320** LR LR 01 23 37.0
comp=Z,153nm,19.4s,baz=299,slow=34
GSI **Gunungsitoli** **80.18 281** P **P** **00 51 06.0 +0.8**
comp=Z,68nm,1.2s
PSI **Prapat** **80.21 283** LR LR 01 25 08.6
comp=Z,95nm,21.9s,baz=127,slow=34
MJAR **Matsushiro Arr** **84.54 332** P **P** **00 51 25.6 -1.7**
comp=Z,3.9nm,0.5s,baz=177,slow=6.9,SNR=6.4
MJAR LR LR 01 25 46.1
comp=Z,96nm,21.4s,baz=114,slow=33
MJAR **Matsushiro Arr** **84.54 332** P **P** **00 51 27.3 0.0**
MJAR pmax pmax
comp=Z,22nm,1.5s
MJAR **Matsushiro Arr** **84.54 332** P **P** **00 51 27.3 0.0**
KSRS **Korea Array** **89.28 326** P **P** **00 51 50.6 +0.3**
comp=Z,16nm,0.8s,baz=151,slow=5.7,SNR=17
KSRS LR LR 01 29 53.8
comp=Z,56nm,19.8s,baz=160,slow=34
JKA **Kamikawa-asahi** **90.11 339** P **P** **00 51 53.3 -0.7**
JKA **Kamikawa-asahi** **90.11 339** IAmb IAmb 00 52 10.9
comp=Z,26nm,1.1s
ASAJ **Asahikawa** **90.11 339** P **P** **00 51 53.3 -0.7**
comp=Z,9.6nm,0.8s,baz=291,slow=26,SNR=2.5
ASAJ LR LR 01 28 14.0
comp=Z,204nm,19.9s,baz=152,slow=33
CMAR **Chiang Mai Arr** **91.01 294** P **P** **00 51 59.5 +0.6**
comp=Z,16nm,0.9s,baz=148,slow=3.8,SNR=12
CMAR LR LR 01 35 34.6
comp=Z,33nm,20.5s,baz=145,slow=37
CMAR **Chiang Mai Arr** **91.01 294** *i* P **P** **00 51 59.9 +1.0**
CMAR pmax pmax
comp=Z,11nm,0.7s
YSS **Yuzh-Sakhalins** **92.70 340** *eP* **P** **00 52 07.9 +2.0**
SHEM **Shemya Is, Ala** **94.48 1** LR LR 01 29 24.1
comp=Z,233nm,21.7s,baz=159,slow=32
PZH **PanZhiHua** **94.80 302** P **P** **00 52 18.2 +1.9**
PZH pmax pmax
comp=Z,10.0nm,1.3s
PZH pmax pmax
comp=Z,110nm,4.7s
PETK **Petropavlovsk-** **95.78 351** LR LR 01 31 52.5
comp=Z,83nm,18.9s,baz=153,slow=33
NNA **Nana** **96.41 112** LR LR 01 26 22.2
comp=Z,146nm,21.7s,baz=248,slow=29
PALK **Pallekele** **96.61 274** LR LR 01 33 55.7
comp=Z,83nm,19.3s,baz=230,slow=34
CPUP **Villa Florida** **97.49 136** LR LR 01 29 39.2
comp=Z,97nm,19.6s,baz=206,slow=31
KLR **Kul'dur** **97.97 334** LR LR 01 31 33.9
comp=Z,68nm,20.7s,baz=110,slow=32
KLR **Kul'dur** **97.97 334** *i* P Pdif 00 52 32.0 +2.0
KLR pmax pmax
comp=Z,18nm,0.9s
ATAH **Atahualpa** **98.72 108** LR LR 01 29 53.0
comp=Z,103nm,20.0s,baz=308,slow=31
LPAZ **La Paz** **99.06 122** LR LR 01 27 35.2
comp=Z,105nm,20.6s,baz=233,slow=29
HHC **Hu-ho-hao-te** **99.59 317** *eP* **Pdif** **00 52 40.7 +3.1**
HHC pmax pmax
comp=Z,5.0nm,1.2s
HHC pmax pmax
comp=Z,270nm,8.0s
LZH **Lanzhou** **100.29 310** *eP* **Pdif** **00 52 45.3 +4.4**
LZH pP pPdif 00 52 55.8 -2.3
LZH sP sPdif 00 53 01.4 -3.2
LZH pmax pmax
comp=Z,24nm,1.4s
LZH LR LR
comp=N,310nm,17.2s
LZH LR LR
comp=E,370nm,17.3s
LZH LR LR
comp=Z,330nm,19.7s
NVAR **Mina Array Bea** **101.55 48** P **Pdif** **00 52 46.0 -0.5**
comp=Z,0.2nm,0.5s,baz=206,slow=6.0,SNR=1.9
TXAR **Lajitas Array** **104.42 64** PKKPbc PKKPbc 01 08 46.1 +1.4
comp=Z,0.4nm,0.7s,baz=75,slow=3.8,SNR=4.3
SEY **Seymchan** **106.02 350** *i* P **Pdif** **00 53 00.5 -4.9**
SONM **Songino Array** **107.20 320** PKKPab PKKPab 01 08 51.0 +2.6
comp=Z,0.4nm,0.7s,baz=271,slow=2.3,SNR=4.3
PDAR **Pinedale Array** **109.38 50** PP **PP** **00 57 53.8 -1.7**
comp=Z,1.6nm,1.2s,baz=210,slow=5.2,SNR=2.3
ILAR **Eielson Array** **111.07 17** PKKPab PKKPab 01 08 33.6 +3.3
comp=Z,0.5nm,0.8s,baz=3.5,slow=3.0,SNR=5.1
WMQ **Urumqi** **114.71 307** *eP* **PKiKP** **00 57 34.8 +0.5**
WMQ LR LR
comp=N,89nm,29.1s
WMQ LR LR
comp=E,480nm,29.5s
WMQ LR LR
comp=Z,170nm,21.3s
INK **Inuvik** **117.08 20** PKP **PKPdf** **00 57 36.0 -1.9**
comp=Z,0.7nm,0.5s,baz=106,slow=3.6,SNR=4.3
INK **Inuvik** **117.08 20** PKIKP **PKPdf** **00 57 36.0 -1.9**
TIXI **Tiksi** **117.71 346** *i* PKIKP **PKiKP** **00 57 40.8 +1.7**
TIXI pmax pmax
comp=Z,4.0nm,1.3s
DGZ **Jazzator, Alta** **118.16 313** *i* PKIKP **PKPdf** **00 57 40.0 -0.8**
NBPN **Ponto Novo - B** **119.06 142** *eP* **PKiKP** **00 57 49.8 +6.2**
YKA **Yellowknife Ar** **119.12 30** PKP **PKPdf** **00 57 40.2 -1.8**
comp=Z,0.8nm,0.6s,baz=256,slow=1.7,SNR=14
YKA PKKPbc **PKKPbc** **01 07 56.4 -0.1**
comp=Z,0.6nm,0.7s,baz=51,slow=4.2,SNR=5.3
YKA PKKP **PKKPdf** **01 08 28.7 +1.1**
comp=Z,0.8nm,0.8s,baz=51,slow=5.0,SNR=4.5
MKAR **Makanchi Array** **119.53 308** PKP **PKPdf** **00 57 41.5 -1.9**
comp=Z,1.8nm,0.6s,baz=96,slow=0.7,SNR=14
ULM **Lac du Bonnet** **121.38 49** PKP **PKPdf** **00 57 43.8 -2.9**
comp=Z,2.1nm,0.5s,baz=12,slow=4.4,SNR=3.0
KMBO **Kilima Mbogo** **121.38 235** PKP **PKiKP** **00 57 49.0 +0.6**
comp=Z,1.9nm,0.6s,baz=77,slow=5.8,SNR=7.3
KMBO **Kilima Mbogo** **121.38 235** PKIKP **PKiKP** **00 57 49.0 +0.6**
TKL **Tuckaleechee C** **121.68 69** PKP **PKPdf** **00 57 47.1 -0.8**
comp=Z,4.8nm,1.0s,baz=191,slow=5.2,SNR=4.3
ZALV **Zalesovo Beam** **121.73 316** PKP **PKPdf** **00 57 45.1 -2.2**
comp=Z,1.6nm,0.7s,baz=126,slow=2.5,SNR=2.3
AAK **Ala-Archa** **122.23 300** PKP **PKPdf** **00 57 48.2 -0.7**
comp=Z,1.8nm,0.3s,baz=187,slow=8.8,SNR=2.6
NBRF **Rio Formoso -** **123.22 146** *eP* **PKiKP** **00 57 57.5 +5.7**
KURK **Kurchatov** **123.56 310** PKIKP **PKPdf** **00 57 49.1 -1.8**
KURK **Kurchatov** **123.56 310** **PKPdf** **00 57 49.1 -1.8**
KURBB **Kurchatov Arra** **123.57 310** PKP **PKPdf** **00 57 49.1 -1.8**
comp=Z,4.1nm,0.6s,baz=114,slow=1.9,SNR=27
ROSB **Rosrio** **123.92 133** *eP* **PKiKP** **00 57 57.9 +4.8**
NRIK **Noril'sk** **127.18 334** PKP **PKPdf** **00 57 56.1 -1.1**
comp=Z,3.7nm,0.8s,baz=90,slow=3.6,SNR=4.5
BVAR **Borovoye Array** **129.16 311** PKP **PKPdf** **00 58 00.4 -1.2**
comp=Z,2.0nm,0.6s,baz=75,slow=6.3,SNR=6.4
AKTO **Aktyubinsk** **135.69 304** PKP **PKiKP** **00 58 15.1 -0.5**
comp=Z,3.0nm,0.8s,baz=117,slow=6.8,SNR=4.1
ARU **Arti** **136.67 313** PKP **PKPdf** **00 58 14.6 -1.0**
comp=Z,1.3nm,0.7s,baz=130,slow=2.0,SNR=3.5
TULEG **Thule** **137.02 18** *i* P **PKPdf** **00 58 13.8 -1.9**
NEEM **North Greenlan** **140.24 14** *i* P **PKPdf** **00 58 22.4 +0.4**
GNI **Garni** **141.55 285** PKP **PKPdf** **00 58 24.9 -0.3**
comp=Z,5.0nm,0.8s,baz=90,slow=3.0,SNR=1.7
GNI **Garni** **141.55 285** *i* PKIKP **PKPdf** **00 58 25.9 +0.6**
KBZ **Khabaz** **143.95 290** PKP PKPab 00 58 26.2 -0.3
comp=Z,8.5nm,0.8s,baz=135,slow=3.7,SNR=10
KBZ **Khabaz** **143.95 290** *i* PKIKP PKPab 00 58 26.3 -0.3
KBZ pmax pmax
comp=Z,13nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASF | Jabal al Asfar | 144.06 269 | | PKP | PKPbc | 00 58 28.3 | +0.3 | |
| | comp=Z,5.9nm,1.2s,baz=96,slow=5.2,SNR=4.7 | | | | | | | |
| SHA1 | Shidzhatmaz | 144.12 290 | *i* | PKIKP | **PKPab** | **00 58 27.8** | **+0.2** | |
| KIV | Kislovodsk | 144.16 290 | *e* | PKIKP | **PKPdf** | **00 58 29.1** | **-0.6** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| GOF | Gofitskoye | 144.18 292 | ⇑ | *e*PKIKP | **PKPab** | **00 58 27.2** | **-0.2** | |
| GOF | | | | pmax | pmax | | | |
| | comp=Z,87nm,1.1s | | | | | | | |
| LIC | Lamto | 144.22 183 | | *e*PKP1 | **PKPdf** | **00 58 30.7** | **+0.1** | |
| | comp=Z,73nm,0.9s | | | | | | | |
| EIL | Elat | 144.24 263 | | PKP | **PKPab** | **00 58 27.9** | **-0.3** | |
| | comp=Z,4.8nm,0.9s,baz=72,slow=6.4,SNR=3.2 | | | | | | | |
| CHVG | Ch'k'valeri | 144.25 288 | ⇑ | P | **PKPab** | **00 58 24.5** | **-3.3** | |
| CHVG | Ch'k'valeri | 144.25 288 | ⇑ | PKHKP | PKPpre | 00 58 24.5 | | |
| KIC | Kosan Boka | 144.34 184 | *e* | PKP1 | **PKPdf** | **00 58 31.2** | **+0.4** | |
| | comp=Z,32nm,0.6s | | | | | | | |
| TIC | Toumodi | 144.63 183 | *e* | PKP1 | **PKPdf** | **00 58 31.9** | **+0.6** | |
| DBIC | Dimbokro | 144.65 183 | | PKPbc | PKPbc | 00 58 30.7 | +0.6 | |
| | comp=Z,8.7nm,0.5s,baz=190,slow=3.4,SNR=19 | | | | | | | |
| DBIC | Dimbokro | 144.65 183 | ⇑ | PKIKP | PKPbc | 00 58 30.9 | +0.7 | |
| DBIC | Dimbokro | 144.65 183 | | | PKPbc | 00 58 30.9 | +0.7 | |
| DAG | Danmarks Havn | 144.88 5 | *i* | P | **PKPab** | **00 58 26.0** | **-3.1** | |
| KTUT | Trabzon | 145.41 284 | ⇑ | P | **PKPdf** | **00 58 27.2** | **-4.5** | |
| MMAI | Mount Meron Ar | 145.57 269 | | PKPbc | **PKPab** | **00 58 33.3** | **+0.2** | |
| | comp=Z,12nm,0.5s,baz=90,slow=5.1,SNR=66 | | | | | | | |
| SUMG | Summit | 145.91 16 | *i* | P | **PKPdf** | **00 58 31.7** | **-0.5** | |
| VRH | Novokhopyorsk | 145.99 302 | *e* | PKIKP | **PKPdf** | **00 58 32.2** | **-0.2** | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.7s | | | | | | | |
| LVZ | Lovozero | 146.02 333 | ⇑ | PKIKP | **PKPdf** | **00 58 30.9** | **-1.2** | |
| KLMR | Klimovskoe | 146.49 320 | *e* | PKIKP | **PKPdf** | **00 58 32.5** | **-0.5** | |
| KLMR | | | *e* | | | 01 02 01.1 | | |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,74nm,0.8s | | | | | | | |
| KLMR | Klimovskoe | 146.49 320 | *e* | PKPdf | **PKPdf** | **00 58 32.5** | **-0.5** | |
| KLMR | | | | AMP | | 00 58 34.7 | | |
| | comp=Z,74nm,0.8s | | | | | | | |
| KLMR | | | *e* | PP | **PP** | **01 02 01.2** | **+2.6** | |
| DY2G | Dye2 | 147.44 28 | *i* | P | **PKPdf** | **00 58 35.4** | **+0.7** | |
| VORD | Divnogorie | 147.50 302 | *e* | PKIKP | **PKPdf** | **00 58 35.5** | **+0.5** | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| HAMF | Hammerfest | 147.52 342 | *e* | PKPdf | **PKPdf** | **00 58 35.4** | **+0.9** | |
| VORR | Voronezh | 147.58 303 | *e* | PKP2 | **PKPbc** | **00 58 37.2** | **-0.6** | |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.4s | | | | | | | |
| VSR | Storozhevoye | 147.59 302 | *e* | PKIKP | **PKPdf** | **00 58 36.5** | **+1.4** | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.2s | | | | | | | |
| LPSR | Galich'ya Gora | 147.76 305 | *e* | PKP2 | **PKPbc** | **00 58 37.2** | **-1.1** | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.2s | | | | | | | |
| ARA0 | ARCESS Array S | 147.83 339 | *e* | PKPdf | **PKPdf** | **00 58 36.6** | **+1.6** | |
| ARCES | ARCESS Array B | 147.83 339 | | PKPbc | **PKPdf** | **00 58 36.5** | **+1.5** | |
| | comp=Z,16nm,0.5s,baz=54,slow=2.4,SNR=82 | | | | | | | |
| ARCES | ARCESS Array B | 147.83 339 | | PKIKP | **PKPdf** | **00 58 36.6** | **+1.6** | |
| ICESG | Greenland Ices | 148.02 22 | *i* | P | **PKPdf** | **00 58 37.0** | **+1.2** | |
| LEF | Lefka | 148.37 271 | ⇑ | P | **PKPbc** | **00 58 39.9** | **-0.6** | |
| KTK1 | Kautokeino | 148.78 340 | *e* | PKPdf | **PKPdf** | **00 58 38.2** | **+1.7** | |
| OBN | Obninsk | 149.01 310 | ⇑ | P | **PKPbc** | **00 58 40.6** | **-0.8** | |
| OBN | Obninsk | 149.01 310 | ⇑ | *e*PKIKP | **PKPbc** | **00 58 40.4** | **-1.0** | |
| OBN | | | | *i* | | 00 58 55.8 | | |
| OBN | | | | *e* | | 01 02 14.0 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| JETT | Jettan, Norway | 149.08 342 | *e* | PKPbc | **PKPbc** | **00 58 40.1** | **-1.2** | |
| TRO | Tromso | 149.36 343 | *e* | PKPdf | **PKPbc** | **00 58 40.1** | **-1.8** | |
| BRTR | Keskin Array B | 149.49 279 | | PKPbc | **PKPbc** | **00 58 42.6** | **-0.8** | |
| | comp=Z,9.0nm,0.8s,baz=38,slow=4.9,SNR=20 | | | | | | | |
| BR131 | Keskin Array S | 149.49 279 | *i* | PKHKP | PKPpre | 00 58 38.6 | | |
| TORD | Torodi Ar. Bea | 150.19 197 | | PKP | **PKPdf** | **00 58 40.3** | **-0.2** | |
| | comp=Z,2.9nm,0.8s,baz=165,slow=0.7,SNR=16 | | | | | | | |
| TORD | | | | PKPbc | **PKPbc** | **00 58 45.9** | **+0.3** | |
| | comp=Z,16nm,0.7s,baz=170,slow=1.4,SNR=24 | | | | | | | |
| STEI | Steigen | 151.54 343 | *e* | PKPdf | **PKPdf** | **00 58 43.2** | **+2.3** | |
| LOF | Lofoten | 151.73 344 | *e* | PKPdf | **PKPdf** | **00 58 42.3** | **+1.1** | |
| FAUS | Fauske | 151.97 342 | *e* | PKPbc | **PKPbc** | **00 58 46.1** | **-2.0** | |
| FINES | FINESS Array B | 152.37 326 | | PKPbc | **PKPbc** | **00 58 47.7** | **-1.5** | |
| | comp=Z,14nm,0.7s,baz=78,slow=2.5,SNR=20 | | | | | | | |
| MOR8 | Moi Rana | 153.15 341 | *e* | PKPdf | **PKPdf** | **00 58 44.5** | **+1.2** | |
| KONS | Konsvik | 153.19 342 | *e* | PKPdf | **PKPdf** | **00 58 44.1** | **+0.7** | |
| PURM | Purcari | 153.50 292 | ⇑ | P | **PKPbc** | **00 58 50.4** | **-1.7** | |
| AKASG | Malin Array Be | 153.89 302 | | PKPbc | **PKPbc** | **00 58 51.6** | **-1.3** | |
| | comp=Z,5.6nm,0.8s,baz=69,slow=2.4,SNR=13 | | | | | | | |
| AKASG | | | | PKPab | **PKPab** | **00 59 05.2** | **-1.1** | |
| | comp=Z,4.4nm,0.6s,baz=66,slow=4.2,SNR=9.3 | | | | | | | |
| IDI | Anoyia | 154.38 265 | | PKPbc | **PKPbc** | **00 58 54.1** | **-0.5** | |
| | comp=Z,5.8nm,0.7s,baz=118,slow=8.2,SNR=5.2 | | | | | | | |
| SORM | Soroca | 154.58 296 | ⇓ | P | **PKPbc** | **00 58 51.1** | **-3.3** | |
| SORM | Soroca | 154.58 296 | ⇓ | PKIKP | **PKPbc** | **00 58 51.1** | **-3.3** | |
| NSS | Namsos | 155.09 341 | *e* | PKPdf | **PKPdf** | **00 58 46.5** | **+0.4** | |
| MLR | Muntele Rosu | 156.16 289 | | PKPbc | PKPbc | 00 58 55.2 | | |
| | comp=Z,1.9nm,0.7s,baz=342,slow=10,SNR=7.9 | | | | | | | |
| SUW | Suwalki | 156.84 311 | *e* | PKPab | **PKPab** | **00 59 18.2** | **-0.6** | |
| ARR | Arges | 157.08 289 | ⇑ | P | **PKPdf** | **00 58 47.3** | **-2.1** | |
| VLAD | Vladila | 157.13 285 | ⇑ | P | **PKPab** | **00 59 19.6** | **-0.8** | |
| BMR | Baia Mare | 157.86 295 | ⇓ | P | **PKPab** | **00 59 19.4** | **-4.1** | |
| BMR | Baia Mare | 157.86 295 | ⇓ | PKP2 | **PKPab** | **00 59 19.4** | **-4.1** | |
| HFS | Hagfors | 157.99 332 | | PKPab | **PKPab** | **00 59 21.3** | **-2.3** | |
| | comp=Z,3.1nm,0.5s,baz=58,slow=4.1,SNR=14 | | | | | | | |
| NOA | NORSAR Array B | 158.11 336 | | PKPab | **PKPab** | **00 59 22.4** | **-1.8** | |
| | comp=Z,3.7nm,0.9s,baz=40,slow=4.7,SNR=6.9 | | | | | | | |
| HERR | Herculane | 158.62 287 | ⇑ | P | **PKPab** | **00 59 26.3** | **-0.6** | |
| CRVS | Cervenica-Dubn | 159.09 299 | *e* | PKP2 | **PKPab** | **00 59 29.5** | **+0.7** | |
| KSP | Ksiaz | 161.87 307 | *e* | PKPab | **PKPab** | **00 59 41.3** | **+0.5** | |
| KSP | | | *ep* | PKPab | **pPKPab** | **00 59 56.4** | **-1.7** | |
| OSTC | Ostas | 162.01 306 | *e* | PKP | **PKPab** | **00 59 41.9** | **+0.4** | |
| DPC | Dobruska-Polom | 162.01 305 | *e* | PKP2 | **PKPab** | **00 59 34.8** | **-6.8** | |
| DPC | Dobruska-Polom | 162.01 305 | *e* | PKP | **PKPab** | **00 59 34.8** | **-6.8** | |
| VRAC | Vranov | 162.14 302 | | PKPab | **PKPab** | **00 59 41.2** | **-0.9** | |
| | comp=Z,2.9nm,0.7s,baz=108,slow=3.2,SNR=3.1 | | | | | | | |
| UPC | Upice | 162.15 306 | *e* | PKP2 | **PKPab** | **00 59 42.6** | **+0.5** | |
| UPC | Upice | 162.15 306 | *e* | PKP | **PKPab** | **00 59 42.6** | **+0.5** | |
| BRG | Berggiesshubel | 163.25 309 | *i* | PKP2 | **PKPab** | **00 59 46.9** | **0.0** | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| ARSA | Arzberg | 163.28 295 | *e* | P | **PKPab** | **00 59 45.8** | **-1.5** | |
| | comp=Z,9.1nm,1.1s | | | | | | | |
| CLL | Collm | 163.60 311 | *e* | PKP2 | **PKPab** | **00 59 46.0** | **-2.4** | |
| CLL | Collm | 163.60 311 | *e* | PKPab | **PKPab** | **00 59 47.0** | **-1.4** | |
| | comp=Z,16nm,1.4s | | | | | | | |
| CLL | | | *ep* | PKPab | **pPKPab** | **01 00 03.0** | **-2.6** | |
| SOKA | Soboth | 163.70 294 | *e* | P | **PKPab** | **00 59 47.7** | **-1.5** | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| MOA | Molln | 164.00 298 | *e* | P | **PKPab** | **00 59 48.7** | **-1.7** | |
| | comp=Z,10nm,1.2s | | | | | | | |
| OBKA | Obir | 164.06 293 | *e* | P | **PKPab** | **00 59 50.7** | **-0.1** | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| KHC | Kasperske Hory | 164.09 303 | *ex* | | **PKPab** | **00 59 50.3** | **-0.4** | |
| GERES | GERESS Array B | 164.10 302 | | PKPab | **PKPab** | **00 59 46.2** | **-4.6** | |
| | comp=Z,2.4nm,0.9s,baz=74,slow=4.2,SNR=5.6 | | | | | | | |
| NKC | Novy Kostel | 164.38 308 | *e* | PKP2 | **PKPab** | **00 59 51.3** | **-0.6** | |
| NKC | Novy Kostel | 164.38 308 | *e* | PKP | **PKPab** | **00 59 51.3** | **-0.6** | |
| ABTA | Abfaltersbach | 165.40 295 | *e* | P | **PKPab** | **00 59 55.4** | **-1.3** | |
| | comp=Z,8.7nm,1.2s | | | | | | | |
| KEST | Kesra | 165.86 249 | | PKPab | **PKPab** | **00 59 59.0** | **0.0** | |
| | comp=Z,8.2nm,1.0s,baz=242,slow=16,SNR=2.9 | | | | | | | |
| WTTA | Wattenberg | 165.87 298 | *e* | P | **PKPab** | **00 59 56.3** | **-2.6** | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| WATA | Walderalm | 165.89 298 | *i* | P | **PKPab** | **00 59 57.4** | **-1.5** | |
| | comp=Z,4.9nm,1.0s | | | | | | | |
| SQTA | Sankt Quirin | 166.16 298 | *e* | P | **PKPab** | **00 59 58.6** | **-1.4** | |
| | comp=Z,9.5nm,1.2s | | | | | | | |
| MOTA | Moosalm | 166.20 298 | *e* | P | **PKPab** | **00 59 59.8** | **-0.5** | |
| | comp=Z,14nm,1.5s | | | | | | | |
| DAVA | Damuels | 167.01 299 | *e* | P | **PKPab** | **01 00 02.8** | **-1.1** | |
| | comp=Z,12nm,1.5s | | | | | | | |

*IDC* ***09*** *00:40:08.1±0.8,28˚.34N×43˚.76W,h0km,mb4.2/23, mb1 4.4/23,mb1mx4.2/47,mbtmp4.2/23,MS3.7/6, Ms1 3.7/6,ms1mx3.2/91,Error ellipse: s-maj=23.1km s-min=13.8km az=175.0*

*NEIC* ***09*** *00:40:10.9±1.4,28˚.4N±0˚.1×43˚.8W±0˚.1,h10km±1km, mb4.8/121,Error ellipse: s-maj=19.9km s-min=16.9km az=149.0*

**ISC 09 00:40:09.9±0.5,28˚.30N±0˚.09×43˚.74W±0˚.07,h10km,n196, σ0.986/168,mb4.7/90,MS3.6/6,16C-1D,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ANWB | Willy Bob | 19.67 241 | | P | | **P** | **00 44 37.8** | **-1.3** |
| ANWB | | | | IAmb | | IAmb | 00 44 52.9 | |
| | comp=Z,58nm,0.8s | | | | | | | |
| GDSD | La Dsirade Is | 19.95 237 | | | | **Pn** | **00 44 45.6** | **+1.7** |
| ABD | La Joyeuse, An | 20.16 238 | | P | | **P** | **00 44 44.6** | **+0.1** |
| MAGL | Barre de l'ile | 20.34 237 | | P | | **P** | **00 44 46.1** | **-0.4** |
| GDHS | Morne Mazeau, | 20.50 238 | | P | | **P** | **00 44 43.8** | **-4.4** |
| CBE | Ff, Capester | 20.51 237 | | P | | P | 00 44 38.4 | -10 |
| TDBA | Terre de Bas, | 20.67 237 | | P | | **P** | **00 44 50.1** | **+0.1** |
| DLPL | La Plaine | 20.72 235 | | P | | **P** | **00 44 46.8** | **-3.8** |
| ILAM | Ilet Lapin Mar | 20.82 233 | | P | | P | 00 44 45.3 | -6.3 |
| STVI | Saint Thomas | 21.82 248 | | P | | **P** | **00 44 58.5** | **-3.9** |
| SJG | San Juan | 22.92 249 | | LR | | LR | 00 54 51.6 | |
| | comp=Z,45nm,18.5s,baz=77,slow=38 | | | | | | | |
| DRLN | Deer Lake | 23.44 337 | | P | | **P** | **00 45 18.3** | **-0.9** |
| DRLN | | | | IAmb | | IAmb | 00 45 33.0 | |
| | comp=Z,33nm,1.1s | | | | | | | |
| ODNJ | Ogdensburg | 28.24 305 | | P | | **P** | **00 46 04.0** | **+1.0** |
| ODNJ | | | | IAmb | | IAmb | 00 46 10.4 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| BAUV | El Baul | 29.90 235 | | P | | **P** | **00 46 18.3** | **+0.2** |
| SADO | Sadowa | 32.54 310 | | LR | | LR | 00 58 18.0 | |
| | comp=Z,150nm,19.2s,baz=164,slow=34 | | | | | | | |
| IVI | Ivigtut | 33.03 356 | | P | | **P** | **00 46 46.1** | **+1.1** |
| MDT | Midelt | 33.87 73 | | LR | | LR | 00 57 33.3 | |
| | comp=Z,104nm,20.4s,baz=358,slow=31 | | | | | | | |
| GOGA | Godfrey | 34.33 289 | | P | | **P** | **00 46 57.6** | **+0.9** |
| ESDC | Sonseca Array | 34.62 60 | | P | | **P** | **00 46 58.8** | **-0.5** |
| | comp=Z,1.0nm,1.0s,baz=277,slow=10,SNR=2.4 | | | | | | | |
| Y49A | Blount Mountai | 36.77 290 | | P | | **P** | **00 47 18.1** | **+0.3** |
| Y49A | | | | IAmb | | IAmb | 00 47 20.2 | |
| | comp=Z,36nm,1.4s | | | | | | | |
| H43A | Windswept, Lux | 38.44 307 | | P | | **P** | **00 47 32.6** | **+0.9** |
| FRB | Frobisher Bay | 38.88 343 | | P | | **P** | **00 47 34.4** | **-0.8** |
| | comp=Z,2.7nm,0.8s,baz=140,slow=6.9,SNR=7.3 | | | | | | | |
| T42A | Van Buren | 40.45 295 | | P | | **P** | **00 47 48.7** | **+0.1** |
| LCAR | Lake Charles | 40.54 293 | | P | | **P** | **00 47 49.6** | **+0.2** |
| CCM | Cathedral Cave | 40.55 296 | | P | | **P** | **00 47 49.4** | **-0.1** |
| U40A | Yellville | 41.90 294 | | P | | **P** | **00 48 00.7** | **+0.1** |
| U40A | | | | IAmb | | IAmb | 00 48 07.1 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| RIMA | Rio Macho | 41.92 252 | | P | | **P** | **00 48 00.6** | **-0.5** |
| 342A | Flagon Creek P | 41.99 286 | | P | | **P** | **00 48 01.8** | **+0.5** |
| 342A | | | | IAmb | | IAmb | 00 48 14.5 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| DBIC | Dimbokro | 42.59 113 | | LR | | LR | 01 02 41.8 | |
| | comp=Z,149nm,21.7s,baz=338,slow=32 | | | | | | | |
| HHAR | Hobbs | 42.78 294 | | P | | **P** | **00 48 08.5** | **+0.8** |
| U38A | Gravette | 43.13 294 | | P | | **P** | **00 48 10.3** | **-0.2** |
| U38A | | | | IAmb | | IAmb | 00 48 17.0 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| TUL1 | Leonard | 44.30 294 | | | | **P** | **00 48 20.1** | **+0.1** |
| ESQI | Esquipulas | 44.34 262 | | P | | **P** | **00 48 21.7** | **+1.1** |
| SUMG | Summit | 44.42 2 | *i* | P | | **P** | **00 48 20.0** | **-0.9** |
| F33A | 5 Mile Ranch, | 44.59 308 | | P | | **P** | **00 48 22.3** | **+0.1** |
| KSU1 | Kansas State U | 44.73 298 | | P | | **P** | **00 48 23.6** | **+0.2** |
| KSU1 | | | | IAmb | | IAmb | 00 48 35.3 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| T35A | Sooner Cattle | 44.79 295 | | P | | **P** | **00 48 23.9** | **-0.1** |
| TORD | Torodi Ar. Bea | 44.82 100 | | P | | **P** | **00 48 23.8** | **-0.5** |
| | comp=Z,4.7nm,0.9s,baz=298,slow=0.8,SNR=27 | | | | | | | |
| TORD | Torodi Ar. Bea | 44.82 100 | | P | | **P** | **00 48 24.1** | **-0.3** |
| TUE | Stuetta | 45.02 51 | | P | | **P** | **00 48 25.7** | **-0.1** |
| APG | El Apazote | 45.13 263 | | P | | **P** | **00 48 27.6** | **+0.5** |
| | comp=Z,5.9nm,0.8s,baz=44,slow=18,SNR=3.9 | | | | | | | |
| APG | | | | LR | | LR | 01 06 43.3 | |
| | comp=Z,55nm,18.4s,baz=84,slow=35 | | | | | | | |
| KEST | Kesra | 45.16 67 | | P | | **P** | **00 48 27.1** | **+0.2** |
| | comp=Z,11nm,0.9s,baz=238,slow=5.9,SNR=6.9 | | | | | | | |
| KEST | Kesra | 45.16 67 | | IAmb | | IAmb | 00 48 29.9 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| OK033 | Mehan | 45.22 294 | | P | | **P** | **00 48 27.5** | **+0.2** |
| BLOK | Blackwell | 45.37 295 | | P | | **P** | **00 48 28.7** | **+0.2** |
| DAVA | Damuels | 45.45 50 | *i* | P | | **P** | **00 48 30.0** | **+0.8** |
| | comp=Z,12nm,1.0s | | | | | | | |
| H10N2 | ASCENSION HYDR | 45.70 137 | | T | | T | 01 37 14.2 | |
| | baz=322,slow=75,SNR=43 | | | | | | | |
| H10N3 | ASCENSION HYDR | 45.70 137 | | T | | T | 01 37 15.5 | |
| | baz=322,slow=75,SNR=45 | | | | | | | |
| H10N1 | ASCENSION HYDR | 45.72 137 | | T | | T | 01 37 15.6 | |
| | baz=322,slow=75,SNR=32 | | | | | | | |
| FCC | Fort Churchill | 45.91 326 | | P | | **P** | **00 48 32.6** | **+0.2** |
| FCC | | | | IAmb | | IAmb | 00 48 33.3 | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| PTLB | Pontes e Lacer | 45.98 201 | | P | | **P** | **00 48 34.6** | **+1.2** |
| FETA | Feichten | 46.01 51 | *e* | P | | **P** | **00 48 34.5** | **+0.9** |
| | comp=Z,10nm,1.2s | | | | | | | |
| RETA | Reutte | 46.06 50 | *i* | P | | **P** | **00 48 34.6** | **+0.6** |
| | comp=Z,11nm,1.2s | | | | | | | |
| X34A | Smith Ranch, M | 46.11 292 | | | | **P** | **00 48 34.7** | **+0.3** |
| OK032 | Sail Plains WL | 46.16 295 | | P | | **P** | **00 48 35.6** | **+0.9** |
| WHTX | Lake Whitney, | 46.20 288 | | P | | **P** | **00 48 35.8** | **+0.7** |
| WHTX | | | | IAmb | | IAmb | 00 48 43.5 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| K31A | O'Neill | 46.26 303 | | P | | **P** | **00 48 36.1** | **+0.6** |
| MOTA | Moosalm | 46.28 50 | *e* | P | | **P** | **00 48 36.3** | **+0.6** |
| | comp=Z,11nm,1.2s | | | | | | | |
| SQTA | Sankt Quirin | 46.35 50 | *e* | P | | **P** | **00 48 37.0** | **+0.8** |
| | comp=Z,7.7nm,0.9s | | | | | | | |
| H10S3 | ASCENSION HYDR | 46.49 139 | | T | | T | 01 38 19.1 | |
| | baz=257,slow=74,SNR=90 | | | | | | | |
| H10S2 | ASCENSION HYDR | 46.51 139 | | T | | T | 01 38 15.5 | |
| | baz=323,slow=74,SNR=40 | | | | | | | |
| OK035 | E0210 Rd and N | 46.57 295 | | P | | **P** | **00 48 38.4** | **+0.4** |
| WATA | Walderalm | 46.60 50 | *e* | P | | **P** | **00 48 38.9** | **+0.6** |
| | comp=Z,11nm,0.9s | | | | | | | |
| WTTA | Wattenberg | 46.64 50 | *e* | P | | **P** | **00 48 39.4** | **+0.7** |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| WMOK | Wichita Mounta | 46.87 292 | | P | | **P** | **00 48 40.9** | **+0.5** |
| ABTA | Abfaltersbach | 47.21 51 | *e* | P | | **P** | **00 48 43.2** | **+0.2** |
| | comp=Z,15nm,1.0s | | | | | | | |
| CLL | Collm | 47.88 45 | *e* | P | | **P** | **00 48 47.0** | **-1.0** |
| ABTX | Abilene, Hawle | 47.91 290 | | P | | **P** | **00 48 49.3** | **+0.8** |
| ABTX | | | | IAmb | | IAmb | 00 48 56.2 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| KHC | Kasperske Hory | 48.06 48 | *e* | P | | **P** | **00 48 49.6** | **+0.2** |
| GEC2 | GERESS Array S | 48.12 48 | | P | | **P** | **00 48 51.2** | **+1.2** |
| GERES | GERESS Array B | 48.12 48 | | P | | **P** | **00 48 49.4** | **-0.6** |
| | comp=Z,1.8nm,0.9s,baz=267,slow=7.3,SNR=6.7 | | | | | | | |
| GERES | GERESS Array B | 48.12 48 | | P | | **P** | **00 48 50.2** | **+0.2** |
| CKRC | Cesky Krumlov | 48.52 48 | *e* | P | | **P** | **00 48 52.9** | **-0.1** |
| OBKA | Obir | 48.61 52 | *e* | P | | **P** | **00 48 53.9** | **+0.1** |
| | comp=Z,12nm,0.8s | | | | | | | |
| NB2 | NORSAR Subarra | 48.82 32 | | P | | **P** | **00 48 55.1** | **0.0** |
| | comp=Z,5.8nm,1.2s,baz=254,slow=7.9 | | | | | | | |
| NOA | NORSAR Array B | 48.82 32 | | P | | **P** | **00 48 55.0** | **-0.2** |
| | comp=Z,2.2nm,0.9s,baz=254,slow=7.8,SNR=4.6 | | | | | | | |
| ARSA | Arzberg | 49.29 51 | *i* | P | | **P** | **00 48 58.4** | **-0.5** |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| CONA | Conrad Observa | 49.52 50 | *e* | P | | **P** | **00 49 00.4** | **-0.4** |
| | comp=Z,7.2nm,1.2s | | | | | | | |
| CHVC | Chvalec | 49.75 46 | *e* | P | | **P** | **00 49 02.1** | **-0.3** |
| LPAZ | La Paz | 50.22 211 | | P | | **P** | **00 49 06.8** | **-0.2** |
| | comp=Z,2.8nm,0.8s,baz=5.1,slow=9.5,SNR=6.3 | | | | | | | |
| LPAZ | La Paz | 50.22 211 | | P | | **P** | **00 49 07.0** | **0.0** |
| Q24A | Divide | 51.36 299 | | P | | **P** | **00 49 15.2** | **+0.1** |
| Q24A | | | | IAmb | | IAmb | 00 49 22.4 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| K22A | Casper | 51.98 304 | | P | | **P** | **00 49 19.5** | **0.0** |
| K22A | | | | IAmb | | IAmb | 00 49 25.3 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| TXAR | Lajitas Array | 51.99 286 | | P | | **P** | **00 49 19.1** | **-0.5** |
| | comp=Z,0.7nm,0.9s,baz=94,slow=8.2,SNR=6.2 | | | | | | | |
| TXAR | Lajitas Array | 51.99 286 | | P | | **P** | **00 49 19.8** | **+0.1** |
| RES | Resolute Bay | 53.01 345 | | P | | **P** | **00 49 26.0** | **-0.4** |
| | comp=Z,3.3nm,1.0s,baz=98,slow=7.1,SNR=5.6 | | | | | | | |
| RES | Resolute Bay | 53.01 345 | | P | | **P** | **00 49 26.5** | **+0.1** |
| ANMO | Albuquerque | 53.06 294 | | P | | **P** | **00 49 27.5** | **-0.1** |
| BNM | Barren Site | 53.35 293 | | P | | **P** | **00 49 30.0** | **+0.1** |
| BZS | Buzias | 53.56 52 | ⇑ | P | | **P** | **00 49 31.3** | **+0.5** |
| EGMT | Eagleton | 53.83 311 | | P | | **P** | **00 49 32.5** | **-0.5** |
| TRPA | Tarpa | 54.00 49 | ⇑ | P | | **P** | **00 49 34.7** | **+0.6** |
| BW06 | Boulder Array | 54.19 304 | | P | | **P** | **00 49 35.6** | **-0.3** |
| BW06 | | | | IAmb | | IAmb | 00 49 36.3 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| PD31 | Pinedale Array | 54.19 304 | | P | | **P** | **00 49 35.5** | **-0.3** |
| PD31 | | | | IAmb | | IAmb | 00 49 36.3 | |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| PDAR | Pinedale Array | 54.19 304 | | P | | **P** | **00 49 35.5** | **-0.3** |
| | comp=Z,5.3nm,0.8s,baz=87,slow=8.4,SNR=36 | | | | | | | |
| HERR | Herculane | 54.19 53 | ⇑ | P | | **P** | **00 49 35.7** | **+0.2** |
| DRGR | | 54.22 51 | ⇑ | P | | **P** | **00 49 35.7** | **-0.1** |
| MVCO | Mesa Verde | 54.25 297 | | P | | **P** | **00 49 37.1** | **+0.7** |
| MVCO | | | | IAmb | | IAmb | 00 49 44.1 | |
| | comp=Z,19nm,1.4s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YMP | Mirror Lake Pl | 54.38 307 | | P | | **P** | **00 49 37.5** | **+0.1** |
| YMP | | | | IAmb | | IAmb | 00 49 38.3 | |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| RDMU | Red Mountain | 54.51 301 | | P | | **P** | **00 49 38.4** | **+0.2** |
| LKWY | Lake | 54.58 306 | | P | | **P** | **00 49 39.5** | **+0.8** |
| LKWY | | | | IAmb | | IAmb | 00 49 40.6 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| 121A | Cookes Peak, D | 54.66 291 | | P | | **P** | **00 49 40.1** | **+0.7** |
| H17A | Grant Village | 54.72 306 | | P | | **P** | **00 49 41.4** | **+1.6** |
| EUNU | Eureka | 54.75 352 | | P | | **P** | **00 49 39.1** | **0.0** |
| EUNU | | | | IAmb | | IAmb | 00 49 39.5 | |
| | comp=Z,9.2nm,1.2s | | | | | | | |
| LOHW | Long Hollow | 54.84 305 | | P | | **P** | **00 49 40.5** | **-0.1** |
| FLWY | Flagg Ranch | 54.85 306 | | P | | **P** | **00 49 41.9** | **+1.2** |
| FLWY | | | | IAmb | | IAmb | 00 49 47.1 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| YHH | Holmes Hill | 54.87 307 | | P | | **P** | **00 49 42.1** | **+1.2** |
| MOOW | Moose Ponds | 54.92 305 | | P | | **P** | **00 49 41.0** | **-0.2** |
| SNOW | Snow King Moun | 54.97 305 | | P | | **P** | **00 49 41.2** | **-0.4** |
| SNOW | | | | IAmb | | IAmb | 00 49 48.3 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| YMR | Madison River | 54.97 307 | | P | | **P** | **00 49 42.3** | **+0.8** |
| YMR | | | | IAmb | | IAmb | 00 49 49.0 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| REDW | Red Top Meadow | 55.05 305 | | P | | **P** | **00 49 42.8** | **+0.6** |
| VTS | Vitosha | 55.06 56 | ⇓ | P | | **P** | **00 49 41.5** | **-0.5** |
| VTS | Vitosha | 55.06 56 | | P | | **P** | **00 49 42.8** | **+0.7** |
| TPAW | Teton Pass | 55.10 305 | | IAmb | | IAmb | 00 49 48.4 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| P18A | Preston Nutter | 55.17 300 | | P | | **P** | **00 49 43.4** | **+0.3** |
| P18A | | | | IAmb | | IAmb | 00 49 50.0 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| ARCR | ARCALIA | 55.31 50 | ⇑ | P | | **P** | **00 49 43.1** | **-0.5** |
| AHID | Auburn Hatcher | 55.31 304 | | P | | **P** | **00 49 44.4** | **+0.4** |
| SRU | San Rafael Swe | 55.47 300 | | IAmb | | IAmb | 00 49 52.1 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| ARR | Arges | 55.70 52 | ⇑ | P | | **P** | **00 49 47.0** | **+0.5** |
| BUR08 | Bucovina Ar. S | 55.83 50 | | P | | **P** | **00 49 48.4** | **+0.9** |
| BUR08 | | | | IAmb | | IAmb | 00 49 48.8 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| EDM | Edmonton | 55.83 317 | | IAmb | | IAmb | 00 49 53.0 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| BURAR | Bucovina Array | 55.84 50 | ⇑ | P | | **P** | **00 49 48.5** | **+0.9** |
| BURAR | Bucovina Array | 55.84 50 | | P | | **P** | **00 49 48.5** | **+0.9** |
| JLU | Jordanelle | 55.91 302 | | P | | **P** | **00 49 49.0** | **+0.6** |
| JLU | | | | IAmb | | IAmb | 00 49 55.1 | |
| | comp=Z,9.5nm,1.0s | | | | | | | |
| FINES | FINESS Array B | 55.96 33 | | P | | **P** | **00 49 47.5** | **-0.4** |
| | comp=Z,2.1nm,0.7s,baz=280,slow=11,SNR=4.5 | | | | | | | |
| Q16A | Castle Valley | 56.00 300 | | P | | **P** | **00 49 49.3** |

| | | | | | | |
|---|---|---|---|---|---|---|
| COLD | | | | IAmb | IAmb | 00 51 24.9 |
| | comp=Z,9.3nm,1.2s | | | | | |
| **CCB** | **Clear Creek Bu** | **70.52** | **334** | P | **P** | **00 51 24.8 +0.3** |
| CCB | | | | IAmb | IAmb | 00 51 25.2 |
| | comp=Z,11nm,1.2s | | | | | |
| **GNI** | **Garni** | **71.29** | **54** | P | **P** | **00 51 30.0 +0.1** |
| **I21K** | **Tanana** | **71.87** | **335** | IAmb | IAmb | 00 51 40.0 |
| | comp=Z,11nm,1.1s | | | | | |
| **NRIK** | **Noril'sk** | **76.44** | **16** | P | **P** | **00 52 00.6 +1.3** |
| | comp=Z,1.1nm,0.4s,baz=344,slow=2.9,SNR=3.8 | | | | | |
| **ABKAR** | **Akbulak array** | **77.31** | **41** | P | **P** | **00 52 04.8 +0.2** |
| **KURBB** | **Kurchatov Arra** | **86.35** | **33** | P | **P** | **00 52 52.0 -0.1** |
| | comp=Z,1.2nm,0.8s,baz=313,slow=6.3,SNR=3.8 | | | | | |
| **UOSS** | **Minazif** | **86.58** | **64** | P | **P** | **00 52 53.6 -0.2** |
| **ZALV** | **Zalesovo Beam** | **86.82** | **28** | P | **P** | **00 52 53.7 -0.7** |
| | comp=Z,0.2nm,0.4s,baz=308,slow=5.3,SNR=5.4 | | | | | |
| **CHGR** | **Chuyangaron** | **88.58** | **46** | P | **P** | **00 53 02.9 -0.4** |
| **MKAR** | **Makanchi Array** | **90.78** | **34** | P | **P** | **00 53 13.1 -0.3** |
| | comp=Z,0.9nm,0.9s,baz=332,slow=4.9,SNR=6.6 | | | | | |

*NIED* ***09*** *00:46:58.1, 23.˙78N× 121.˙61E, h0km, MW4.9, Moment Tensor Solution. s3 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.55; $M_{\theta\theta}$-0.09; $M_{\phi\phi}$-1.45; $M_{r\theta}$0.74; $M_{\theta\phi}$-0.18; $M_{\phi r}$2.14; Fault plane solution: $M_o$2.72000×$10^{16}$ NP1:$\phi_s$17.00000°, δ73.00000°, λ95.00000°. NP2:$\phi_s$179.00000°, δ17.00000°, λ73.00000°.*

*MOS* ***09*** *00:46:58.4± 1.0, 23.˙93N× 121.˙66E, h2km, mb5.0/50, MS4.6/4 Error ellipse: s-maj=8.1km s-min=5.0km az=117.9*

*JMA* ***09*** *00:46:58.1± 0.1, 23.˙78N× 121.˙61E, h0km, M4.8*

*IDC* ***09*** *00:46:59.4± 0.5, 23.˙88N× 121.˙74E, h0km, mb4.5/36, mb1 4.6/38, mb1mx4.5/59, mbtmp4.5/38, ML4.0/2, MS4.2/34, Ms1 4.3/34, ms1mx4.0/90, Error ellipse: s-maj=14.2km s-min=11.9km az=45.0*

*TAP* ***09*** *00:47:00.6, 23.˙89N× 121.˙69E, h6km, ML5.1, C*

*BJI* ***09*** *00:47:00.5± 0.0, 24.˙06N× 121.˙79E, h10km, mb4.6/52, mB5.2/44, ML5.2/9, Ms5.3/82, Ms7 5.2/76*

*ASIES* ***09*** *00:47:01.6, 23.˙91N× 121.˙69E, h14km, MW4.9*

*NEIC* ***09*** *00:47:01.4± 1.7, 23.˙89N± 0.˙06× 121.˙71E± 0.˙05, h10km± 1km, mb5.1/143, Mwr4.9/22, ML5.1(TAP), Error ellipse: s-maj=10.9km s-min=7.2km az=206.0*

*NEIC* ***09*** *00:47:01.2, 23.˙86N× 121.˙71E, h8km, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.42; $M_{\theta\theta}$0.08; $M_{\phi\phi}$-1.49; $M_{r\theta}$0.57; $M_{\theta\phi}$-0.67; $M_{\phi r}$2.41; Fault plane solution: $M_o$2.95000×$10^{16}$ NP1:$\phi_s$13.93000°, δ73.85000°, λ85.59000°. NP2:$\phi_s$209.43000°, δ16.72000°, λ104.87000°. Principal axes: T 2.7921, Plg61.0000°, Azm278.0000°; N 0.3008, Plg4.0000°, Azm15.0000°; P -3.0929, Plg29.0000°, Azm107.0000°;*

*GCMT* ***09*** *00:47:02.4± 0.4, 23.˙91N± 0.˙03× 121.˙76E± 0.˙02, h14km± 1km, MW4.8/73, Moment Tensor Solution. s19,c20; s73,c99; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.76±.15; $M_{\theta\theta}$-0.09±.08; $M_{\phi\phi}$-1.67±.10; $M_{r\theta}$0.19±.20; $M_{\theta\phi}$-0.44±.05; $M_{\phi r}$0.70±.18; Best double couple: $M_o$1.91400×$10^{16}$ NP1:$\phi_s$194.00000°, δ34.00000°, λ90.00000°. NP2: $\phi_s$15.00000°, δ56.00000°, λ90.00000°. Principal axes: T 1.9010, Plg79.0000°, Azm285.0000°; N 0.0240, Plg0.0000°, Azm195.0000°; P -1.9260, Plg11.0000°, Azm105.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 09 00:47:02.2± 0.5, 23.˙89N± 0.˙01× 121.˙71E± 0.˙02, h14km± 2km, n571, σ1s72/683, mb5.0/151, MS4.4/42, 88C-10D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEYL** | **Yanliau Villag** | **0.10** | **259** | P | **Pg** | **00 47 03.0** | **-2.3** |
| | baz=282 | | | | | | |
| TEYL | | | | *i* S | **Sg** | **00 47 05.1** | **-2.3** |
| | baz=282 | | | | | | |
| **HWA** | **Hwalien** | **0.13** | **313** | ⇓*i*P | **Pg** | **00 47 03.7** | **-2.0** |
| | baz=319 | | | | | | |
| HWA | | | | S | **Sg** | **00 47 07.0** | **-1.0** |
| | baz=319 | | | | | | |
| **ETM** | **Tongmen** | **0.21** | **291** | P | **Pg** | **00 47 05.0** | **-1.9** |
| | baz=287 | | | | | | |
| ETM | | | | S | **Sg** | **00 47 08.5** | **-1.6** |
| | baz=287 | | | | | | |
| **TWD** | **Chiawan** | **0.22** | **332** | ⇑*i*P | **Pg** | **00 47 05.4** | **-1.6** |
| | baz=336 | | | | | | |
| TWD | | | | *i* S | **Sg** | **00 47 09.3** | **-0.9** |
| | baz=336 | | | | | | |
| **TEGC** | **Jichi Village** | **0.24** | **221** | P | **Pg** | **00 47 07.0** | **-0.3** |
| | baz=216 | | | | | | |
| TEGC | | | | S | **Sb** | **00 47 12.2** | **-0.1** |
| | baz=216 | | | | | | |
| **ESL** | **Shilin** | **0.26** | **254** | ⇑*i*P | **Pg** | **00 47 06.0** | **-1.8** |
| | baz=257 | | | | | | |
| ESL | | | | *i* S | **Sg** | **00 47 10.0** | **-1.6** |
| | baz=257 | | | | | | |
| **ETL** | **Fush Village** | **0.28** | **344** | P | **Pg** | **00 47 06.8** | **-1.4** |
| | baz=332 | | | | | | |
| ETL | | | | S | **Sg** | **00 47 11.6** | **-0.5** |
| | baz=332 | | | | | | |
| **NACB** | **Ninganchiao** | **0.30** | **340** | ⇑*i*P | **Pg** | **00 47 06.9** | **-1.6** |
| | baz=342 | | | | | | |
| NACB | | | | S | **Sg** | **00 47 11.6** | **-1.2** |
| | baz=342 | | | | | | |
| **NACB** | **Ninganchiao** | **0.30** | **340** | | **Pg** | **00 47 06.3** | **-2.2** |
| NACB | | | | Sg | **Sg** | **00 47 11.6** | **-1.2** |
| **ETLH** | **Xiulin Townshi** | **0.38** | **327** | ⇑*i*P | **Pg** | **00 47 08.4** | **-1.5** |
| | baz=327 | | | | | | |
| ETLH | | | | S | **Sg** | **00 47 13.4** | **-1.7** |
| | baz=327 | | | | | | |
| **EHP** | **Heping Village** | **0.42** | **4** | P | **Pg** | **00 47 10.2** | **-0.4** |
| | baz=350 | | | | | | |
| EHP | | | | S | **Sb** | **00 47 17.5** | **-0.2** |
| | baz=350 | | | | | | |
| **HGSD** | **Ruisui** | **0.47** | **214** | *e*P | **Pg** | **00 47 11.8** | **+0.2** |
| | baz=212 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.48** | **302** | ⇑*i*P | **Pg** | **00 47 10.0** | **-1.8** |
| | baz=304 | | | | | | |
| WHF | | | | *i* S | **Sg** | **00 47 16.9** | **-1.4** |
| | baz=304 | | | | | | |
| **CHGB** | **Renai** | **0.52** | **289** | ⇑*i*P | **Pg** | **00 47 11.1** | **-1.4** |
| | baz=291 | | | | | | |
| CHGB | | | | S | **Sg** | **00 47 17.8** | **-1.7** |
| | baz=291 | | | | | | |
| **EHY** | **Hungye** | **0.52** | **223** | ⇑*i*P | **Pg** | **00 47 11.6** | **-0.8** |
| | baz=222 | | | | | | |
| EHY | | | | S | **Sg** | **00 47 19.6** | **+0.3** |
| | baz=222 | | | | | | |
| **VWDT** | **VWDT** | **0.54** | **256** | P | **Pg** | **00 47 11.8** | **-1.0** |
| | baz=267 | | | | | | |
| VWDT | | | | S | **Sg** | **00 47 19.1** | **-0.8** |
| | baz=267 | | | | | | |
| **ENA** | **Nanau** | **0.54** | **3** | ⇑*i*P | **Pg** | **00 47 11.9** | **-0.9** |
| | baz=350 | | | | | | |
| ENA | | | | *i* S | **Sb** | **00 47 21.2** | **+0.1** |
| | baz=350 | | | | | | |
| **WUSB** | **Renai** | **0.55** | **281** | ⇑*i*P | **Pg** | **00 47 11.8** | **-1.3** |
| | baz=293 | | | | | | |
| WUSB | | | | S | **Sg** | **00 47 19.5** | **-1.0** |
| | baz=293 | | | | | | |
| **FUSS** | **Fushou** | **0.56** | **310** | P | **Pg** | **00 47 12.2** | **-1.0** |
| | baz=310 | | | | | | |
| FUSS | | | | S | **Sg** | **00 47 19.6** | **-1.1** |
| | baz=310 | | | | | | |
| **EWUT** | **Wuta** | **0.56** | **6** | P | **Pg** | **00 47 12.4** | **-0.7** |
| | baz=353 | | | | | | |
| EWUT | | | | S | **Sb** | **00 47 21.1** | **-0.5** |
| | baz=353 | | | | | | |
| **TWT** | **Tachien** | **0.61** | **307** | P | **Pg** | **00 47 13.1** | **-1.0** |
| | baz=306 | | | | | | |
| TWT | | | | S | **Sg** | **00 47 22.2** | **0.0** |
| | baz=306 | | | | | | |
| **NNSB** | **Datong** | **0.61** | **331** | ⇑P | **Pg** | **00 47 13.0** | **-1.3** |
| | baz=331 | | | | | | |
| NNSB | | | | S | **Sg** | **00 47 21.5** | **-0.9** |
| | baz=331 | | | | | | |
| **ECBN** | **Changbin** | **0.62** | **203** | P | **Pg** | **00 47 14.1** | **-0.1** |
| | baz=201 | | | | | | |
| ECBN | | | | *e*S | **Sn** | **00 47 25.2** | **-1.1** |
| | baz=201 | | | | | | |
| **TDCB** | **Techi** | **0.62** | **306** | P | **Pg** | **00 47 13.1** | **-1.2** |
| | baz=306 | | | | | | |
| TDCB | | | | *e*S | **Sg** | **00 47 22.3** | **-0.4** |
| | baz=306 | | | | | | |
| **YULB** | **Yu-li** | **0.62** | **217** | ⇑*i*P | **Pg** | **00 47 13.1** | **-1.3** |
| | baz=229 | | | | | | |
| YULB | | | | S | **Sg** | **00 47 22.4** | **-0.2** |
| | baz=229 | | | | | | |
| **YULB** | **Yu-li** | **0.62** | **217** | Pg | **Pg** | **00 47 13.0** | **-1.3** |
| **NNS** | **Nan Shan** | **0.63** | **331** | ⇑*i*P | **Pg** | **00 47 13.6** | **-1.0** |
| | baz=331 | | | | | | |
| NNS | | | | *e*S | **Sb** | **00 47 23.4** | **-0.4** |
| | baz=331 | | | | | | |
| **EYUL** | **Yuli** | **0.65** | **214** | *e*P | **Pg** | **00 47 14.9** | **+0.1** |
| | baz=234 | | | | | | |
| EYUL | | | | *e*S | **Sb** | **00 47 24.9** | **+0.8** |
| | baz=234 | | | | | | |
| **TWF1** | **Yuli** | **0.65** | **215** | P | **Pg** | **00 47 13.8** | **-1.2** |
| | baz=235 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **00 47 25.1** | **+0.7** |
| | baz=235 | | | | | | |
| **LATG** | **Datong** | **0.67** | **346** | ⇑*i*P | **Pg** | **00 47 13.9** | **-1.3** |
| | baz=345 | | | | | | |
| LATG | | | | S | **Sb** | **00 47 24.9** | **+0.1** |
| | baz=345 | | | | | | |
| **SSLB** | **Suanglung** | **0.70** | **262** | ⇑*i*P | **Pg** | **00 47 14.7** | **-1.1** |
| | baz=271 | | | | | | |
| SSLB | | | | S | **Sg** | **00 47 22.8** | **-2.2** |
| | baz=271 | | | | | | |
| **SSLB** | **Suanglung** | **0.70** | **262** | Pg | **Pg** | **00 47 14.6** | **-1.3** |
| SSLB | | | | Sg | **Sg** | **00 47 23.2** | **-1.8** |
| **WPL** | **Puli Township** | **0.70** | **280** | *e*P | **Pg** | **00 47 14.5** | **-1.3** |
| | baz=281 | | | | | | |
| WPL | | | | *e*S | **Sg** | **00 47 23.9** | **-1.1** |
| | baz=281 | | | | | | |
| **TWC** | **Suao** | **0.73** | **10** | P | **Pg** | **00 47 15.7** | **-0.7** |
| | baz=358 | | | | | | |
| TWC | | | | S | **Sb** | **00 47 26.9** | **+0.3** |
| | baz=358 | | | | | | |
| **NDT** | **Datong Townshi** | **0.73** | **346** | P | **Pg** | **00 47 15.4** | **-1.1** |
| | baz=346 | | | | | | |
| NDT | | | | *e*S | **Sb** | **00 47 26.7** | **0.0** |
| | baz=346 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.74** | **270** | ⇑*i*P | **Pg** | **00 47 15.4** | **-1.3** |
| | baz=270 | | | | | | |
| SMLT | | | | *i* S | **Sg** | **00 47 25.4** | **-1.0** |
| | baz=270 | | | | | | |
| **NDS** | **Dongshan** | **0.74** | **0** | P | **Pg** | **00 47 15.8** | **-0.8** |
| | baz=350 | | | | | | |
| NDS | | | | S | **Sb** | **00 47 27.3** | **+0.3** |
| | baz=350 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.75** | **283** | *e*P | **Pg** | **00 47 14.0** | **-2.8** |
| | baz=284 | | | | | | |
| WCS | | | | *e*S | **Sg** | **00 47 25.0** | **-1.6** |
| | baz=284 | | | | | | |
| **ENTT** | **Nioudou** | **0.76** | **350** | ⇑*i*P | **Pg** | **00 47 16.0** | **-1.0** |
| | baz=350 | | | | | | |
| ENTT | | | | *i* S | **Sb** | **00 47 27.3** | **-0.1** |
| | baz=350 | | | | | | |
| **TYC** | **Yuchr** | **0.78** | **271** | ⇑*i*P | **Pg** | **00 47 15.9** | **-1.4** |
| | baz=282 | | | | | | |
| TYC | | | | *i* S | **Sg** | **00 47 25.9** | **-1.7** |
| | baz=282 | | | | | | |
| **FULB** | **Fuli** | **0.79** | **209** | P | **Pb** | **00 47 17.7** | **0.0** |
| | baz=228 | | | | | | |
| FULB | | | | *e*S | **Sn** | **00 47 29.6** | **-0.8** |
| | baz=228 | | | | | | |
| **WHP** | **Taichung City** | **0.80** | **299** | P | **Pg** | **00 47 16.6** | **-1.1** |
| | baz=290 | | | | | | |
| WHP | | | | S | **Sg** | **00 47 27.7** | **-0.5** |
| | baz=290 | | | | | | |
| **TWE** | **Neicheng** | **0.83** | **357** | ⇑*i*P | **Pg** | **00 47 17.4** | **-0.8** |
| | baz=346 | | | | | | |
| TWE | | | | *i* S | **Sb** | **00 47 30.3** | **+0.9** |
| | baz=346 | | | | | | |
| **YHNB** | **Yeheng** | **0.83** | **339** | ⇑*i*P | **Pg** | **00 47 17.4** | **-1.1** |
| | baz=328 | | | | | | |
| YHNB | | | | *e*S | **Sg** | **00 47 29.4** | **0.0** |
| | baz=328 | | | | | | |
| **YHNB** | **Yeheng** | **0.83** | **339** | | **Pg** | **00 47 17.5** | **-0.9** |
| **CHKT** | **Chengkung** | **0.85** | **202** | P | **Pg** | **00 47 17.8** | **-0.8** |
| | baz=201 | | | | | | |
| CHKT | | | | S | **Sn** | **00 47 31.9** | **-0.1** |
| | baz=201 | | | | | | |
| **NSK** | **Sanguang** | **0.85** | **338** | ⇑*i*P | **Pg** | **00 47 17.5** | **-1.1** |
| | baz=328 | | | | | | |
| NSK | | | | *i* S | **Sb** | **00 47 30.1** | **0.0** |
| | baz=328 | | | | | | |
| **ILA** | **Ilan** | **0.87** | **2** | ⇑*i*P | **Pg** | **00 47 18.8** | **-0.3** |
| | baz=351 | | | | | | |
| ILA | | | | *i* S | **Sn** | **00 47 31.9** | **-0.7** |
| | baz=351 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.88** | **353** | ⇑*i*P | **Pg** | **00 47 18.3** | **-0.9** |
| | baz=352 | | | | | | |
| FUSB | | | | S | **Sg** | **00 47 29.9** | **-0.7** |
| | baz=352 | | | | | | |
| **WJS** | **Zhushan** | **0.90** | **266** | P | **Pb** | **00 47 19.7** | **+0.1** |
| | baz=273 | | | | | | |
| WJS | | | | S | **Sn** | **00 47 33.4** | **+0.1** |
| | baz=273 | | | | | | |
| **NWLT** | **Wulai** | **0.91** | **348** | P | **Pg** | **00 47 18.9** | **-0.8** |
| | baz=335 | | | | | | |
| NWLT | | | | S | **Sg** | **00 47 31.5** | **-0.1** |
| | baz=335 | | | | | | |
| **ALS** | **Alishan** | **0.91** | **246** | ⇑*i*P | **Pg** | **00 47 18.9** | **-0.9** |
| | baz=246 | | | | | | |
| ALS | | | | S | **Sg** | **00 47 32.0** | **+0.1** |
| | baz=246 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.92** | **324** | ⇑*i*P | **Pb** | **00 47 19.3** | **-0.7** |
| | baz=323 | | | | | | |
| NFF | | | | S | **Sg** | **00 47 30.3** | **-1.6** |
| | baz=323 | | | | | | |
| **WNT** | **Mingjian** | **0.94** | **270** | ⇑*i*P | **Pb** | **00 47 20.1** | **-0.1** |
| | baz=280 | | | | | | |
| WNT | | | | *i* S | **Sn** | **00 47 34.3** | **+0.1** |
| | baz=280 | | | | | | |
| **ELDTW** | **Lidau** | **0.94** | **223** | P | **Pb** | **00 47 18.5** | **-1.8** |
| | baz=209 | | | | | | |
| ELDTW | | | | *e*S | **Sg** | **00 47 32.1** | **-0.7** |
| | baz=209 | | | | | | |
| **NTC** | **Toucheng** | **0.97** | **7** | *e*P | **Pb** | **00 47 20.3** | **-0.5** |
| | baz=354 | | | | | | |
| NTC | | | | *e*S | **Sn** | **00 47 34.7** | **-0.3** |
| | baz=354 | | | | | | |
| **TWQ1** | **Liyutan** | **0.97** | **298** | ⇑*i*P | **Pb** | **00 47 20.4** | **-0.4** |
| | baz=299 | | | | | | |
| TWQ1 | | | | S | **Sn** | **00 47 35.6** | **+0.6** |
| | baz=299 | | | | | | |
| **EGS** | | **0.97** | **12** | *e*P | **Pg** | **00 47 21.0** | **0.0** |
| | baz=1.0 | | | | | | |
| **TCU** | **Taichung** | **0.98** | **285** | P | **Pn** | **00 47 21.5** | **-0.1** |
| | baz=280 | | | | | | |
| TCU | | | | S | **Sn** | **00 47 36.2** | **+0.9** |
| | baz=280 | | | | | | |
| **EDH** | **Donghe** | **0.98** | **202** | *e*P | **Pb** | **00 47 20.4** | **-0.6** |
| | baz=184 | | | | | | |
| EDH | | | | *e*S | **Sb** | **00 47 33.8** | **-0.1** |
| | baz=184 | | | | | | |
| **LIOB** | **Emei** | **0.98** | **320** | P | **Pb** | **00 47 20.7** | **-0.3** |
| | baz=319 | | | | | | |
| LIOB | | | | *e*S | **Sg** | **00 47 34.4** | **+0.3** |
| | baz=319 | | | | | | |
| **CHN5** | **Tsauling** | **0.99** | **253** | ⇑*i*P | **Pb** | **00 47 20.9** | **-0.3** |
| | baz=254 | | | | | | |
| CHN5 | | | | *i* S | **Sn** | **00 47 36.8** | **+1.2** |
| | baz=254 | | | | | | |
| **NSY** | **Sanyi** | **1.01** | **301** | ⇑*i*P | **Pb** | **00 47 21.7** | **+0.1** |
| | baz=313 | | | | | | |
| NSY | | | | *i* S | **Sn** | **00 47 36.8** | **+0.7** |
| | baz=313 | | | | | | |
| **NMLH** | **Miaoli** | **1.06** | **308** | P | **Pn** | **00 47 22.7** | **+0.1** |
| | baz=318 | | | | | | |
| NMLH | | | | *e*S | **Sn** | **00 47 38.4** | **+1.2** |
| | baz=318 | | | | | | |
| **WCHH** | **Zhanghua** | **1.07** | **280** | P | **Pb** | **00 47 22.5** | **0.0** |
| | baz=282 | | | | | | |
| WCHH | | | | S | **Sn** | **00 47 38.2** | **+0.8** |
| | baz=282 | | | | | | |
| **WDJ** | **Dajia District** | **1.08** | **295** | ⇑*i*P | **Pg** | **00 47 23.1** | **+0.1** |
| | baz=298 | | | | | | |
| WDJ | | | | *e*S | **Sn** | **00 47 39.2** | **+1.5** |
| | baz=298 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.08** | **351** | P | **Pb** | **00 47 22.1** | **-0.6** |
| | baz=339 | | | | | | |
| NHDH | | | | *e*S | **Sb** | **00 47 36.9** | **+0.2** |
| | baz=339 | | | | | | |
| **TIPB** | **Shuangxi** | **1.08** | **6** | ⇑*i*P | **Pb** | **00 47 22.2** | **-0.5** |
| | baz=354 | | | | | | |
| TIPB | | | | S | **Sb** | **00 47 36.6** | **-0.2** |
| | baz=354 | | | | | | |
| **WDLH** | **Douliu** | **1.09** | **260** | *e*P | **Pb** | **00 47 23.0** | **+0.1** |
| | baz=261 | | | | | | |
| WDLH | | | | *e*S | **Sn** | **00 47 39.4** | **+1.5** |
| | baz=261 | | | | | | |
| **TWA** | **Mucha** | **1.09** | **354** | ⇑*i*P | **Pb** | **00 47 22.2** | **-0.7** |
| | baz=341 | | | | | | |
| TWA | | | | *i* S | **Sg** | **00 47 37.6** | **0.0** |
| | baz=341 | | | | | | |
| **TATO** | **Taipei** | **1.10** | **350** | | **Pb** | **00 47 22.4** | **-0.6** |
| TATO | | | | Sg | **Sb** | **00 47 37.1** | **-0.1** |
| **LONT** | **Longtian** | **1.11** | **209** | P | **Pb** | **00 47 21.6** | **-1.6** |
| | baz=208 | | | | | | |
| **STYH** | **Taoyuan** | **1.11** | **230** | *e*P | **Pb** | **00 47 22.8** | **-0.5** |
| | baz=220 | | | | | | |
| STYH | | | | *e*S | **Sg** | **00 47 38.4** | **+0.1** |
| | baz=220 | | | | | | |
| **SBCB** | **Hsinchu** | **1.12** | **324** | ⇑*i*P | **Pg** | **00 47 23.6** | **-0.1** |
| | baz=322 | | | | | | |
| SBCB | | | | S | **Sn** | **00 47 38.9** | **+0.3** |
| | baz=322 | | | | | | |
| **HSN** | **Hsinchu** | **1.13** | **324** | ⇑*i*P | **Pg** | **00 47 24.0** | **-0.1** |
| | baz=324 | | | | | | |
| HSN | | | | *i* S | **Sn** | **00 47 39.6** | **+0.6** |
| | baz=324 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.14** | **13** | P | **Pb** | **00 47 23.4** | **-0.4** |
| | baz=1.0 | | | | | | |
| TWB1 | | | | S | **Sg** | **00 47 39.0** | **-0.2** |
| | baz=1.0 | | | | | | |
| **TPUB** | **Ta-pu** | **1.15** | **240** | ⇑*i*P | **Pb** | **00 47 23.3** | **-0.6** |
| | baz=240 | | | | | | |
| TPUB | | | | *i* S | **Sn** | **00 47 40.3** | **+0.8** |
| | baz=240 | | | | | | |
| **TPUB** | **Ta-pu** | **1.15** | **240** | | **Pb** | **00 47 22.9** | **-1.0** |
| **CHN4** | **Tsaushan** | **1.16** | **243** | ⇑*i*P | **Pn** | **00 47 23.7** | **-0.3** |
| | baz=244 | | | | | | |
| CHN4 | | | | *i* S | **Sn** | **00 47 41.4** | **+1.9** |
| | baz=244 | | | | | | |
| **TAP** | **Taipei** | **1.16** | **351** | P | **Pn** | **00 47 23.9** | **-0.1** |
| | baz=349 | | | | | | |
| TAP | | | | *e*S | **Sn** | **00 47 39.7** | **0.0** |
| | baz=349 | | | | | | |
| **NCUH** | **Zhongli** | **1.18** | **336** | P | **Pb** | **00 47 24.4** | **+0.1** |
| | baz=334 | | | | | | |
| NCUH | | | | *e*S | **Sg** | **00 47 42.0** | **+1.7** |
| | baz=334 | | | | | | |
| **NCU** | **National Centr** | **1.18** | **336** | ⇑P | **Pn** | **00 47 24.3** | **0.0** |
| | baz=334 | | | | | | |
| NCU | | | | S | **Sg** | **00 47 41.9** | **+1.6** |
| | baz=334 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.18** | **3** | ⇑*i*P | **Pn** | **00 47 24.2** | **-0.2** |
| | baz=341 | | | | | | |
| NWF | | | | S | **Sn** | **00 47 40.7** | **+0.4** |
| | baz=341 | | | | | | |
| **CHN2** | **Minshiung** | **1.19** | **253** | ⇓*i*P | **Pb** | **00 47 24.6** | **+0.1** |
| | baz=254 | | | | | | |
| CHN2 | | | | S | **Sg** | **00 47 43.5** | **+3.0** |
| | baz=254 | | | | | | |
| **WTP** | **Ta-pu** | **1.19** | **238** | ⇑*i*P | **Pn** | **00 47 23.9** | **-0.6** |
| | baz=246 | | | | | | |
| WTP | | | | *i* S | **Sg** | **00 47 42.1** | **+1.4** |
| | baz=246 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.21** | **7** | ⇑*i*P | **Pn** | **00 47 24.8** | **0.0** |
| | baz=345 | | | | | | |
| SXI1 | | | | *e*S | **Sg** | **00 47 42.1** | **+0.8** |
| | baz=345 | | | | | | |
| **TWGBT** | **Beinan** | **1.21** | **209** | *e*P | **Pn** | **00 47 22.4** | **-2.4** |
| | baz=208 | | | | | | |
| **TWG** | **Pinlang** | **1.21** | **209** | | **Pn** | **00 47 22.6** | **-2.2** |
| **WTK** | **Tuku** | **1.23** | **261** | P | **Pn** | **00 47 25.0** | **+0.1** |
| | baz=262 | | | | | | |
| **LDUT** | **Ludao** | **1.23** | **190** | *e*P | **Pn** | **00 47 22.2** | **-2.7** |
| | baz=189 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.24** | **348** | P | **Pn** | **00 47 24.9** | **-0.2** |
| | baz=345 | | | | | | |
| TWS1 | | | | S | **Sg** | **00 47 44.0** | **+1.9** |
| | baz=345 | | | | | | |
| **CHY** | **Chiayi** | **1.24** | **252** | P | **Pn** | **00 47 25.2** | **+0.1** |
| | baz=253 | | | | | | |
| CHY | | | | *e*S | **Sg** | **00 47 43.2** | **+1.0** |
| | baz=253 | | | | | | |
| **TTN** | **Taitung** | **1.24** | **205** | *e*P | **Pn** | **00 47 24.3** | **-0.8** |
| | baz=218 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.26** | **63** | P | **Pn** | **00 47 24.8** | **-0.6** |
| JYNG | | | | *e*S | **Sg** | **00 47 43.2** | **+0.3** |
| **TWK** | **Hsinying** | **1.28** | **241** | ⇓*i*P | **Pn** | **00 47 25.8** | **+0.1** |
| | baz=242 | | | | | | |
| TWK | | | | *e*S | **Sg** | **00 47 45.7** | **+2.2** |
| | baz=242 | | | | | | |
| **CHN1** | **Nanshi** | **1.29** | **237** | ⇑*i*P | **Pn** | **00 47 25.6** | **-0.3** |
| | baz=238 | | | | | | |
| CHN1 | | | | *i* S | **Sg** | **00 47 45.1** | **+1.3** |
| | baz=238 | | | | | | |
| **NTST** | **Danshui** | **1.29** | **350** | *e*P | **Pg** | **00 47 26.9** | **-0.1** |
| | baz=347 | | | | | | |
| NTST | | | | *e*S | **Sg** | **00 47 45.9** | **+1.9** |
| | baz=347 | | | | | | |
| **SNST** | **Tainan City** | **1.30** | **239** | *e*P | **Pb** | **00 47 26.7** | **+0.4** |
| | baz=240 | | | | | | |
| SNST | | | | *e*S | **Sg** | **00 47 44.6** | **+0.6** |
| | baz=240 | | | | | | |
| **ANP** | **Anpu** | **1.30** | **352** | *e*P | **Pb** | **00 47 26.7** | **+0.1** |
| | baz=351 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.31** | **269** | ⇑*i*P | **Pn** | **00 47 25.9** | **-0.2** |
| | baz=271 | | | | | | |
| WTCT | | | | S | **Sg** | **00 47 44.4** | **0.0** |
| | baz=271 | | | | | | |
| **SGST** | **Jiashian** | **1.31** | **232** | ⇓P | **Pn** | **00 47 25.3** | **-0.8** |
| | baz=217 | | | | | | |
| SGST | | | | S | **Sg** | **00 47 45.2** | **+0.8** |
| | baz=217 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.32** | **64** | P | **Pn** | **00 47 25.7** | **-0.5** |
| YOJ | | | | *e*S | **Sg** | **00 47 44.4** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **1.32** | **64** | P | **Pn** | **00 47 25.0** | **-1.2** |
| **YOJ** | **Yonaguni jima** | **1.32** | **64** | *e*P | **Pn** | **00 47 25.8** | **-0.5** |
| | baz=68 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.32** | **64** | | **Pn** | **00 47 25.0** | **-1.2** |
| **SLGT** | **Liugui** | **1.32** | **228** | *e*P | **Pn** | **00 47 26.3** | **+0.1** |
| | baz=214 | | | | | | |
| SLGT | | | | *e*S | **Sg** | **00 47 45.0** | **+0.2** |
| | baz=214 | | | | | | |
| **TWY** | **Chenhua** | **1.39** | **356** | P | **Pg** | **00 47 28.5** | **-0.4** |
| | baz=355 | | | | | | |
| **WSF** | **Szhu** | **1.39** | **260** | *e*P | **Pn** | **00 47 27.5** | **+0.4** |
| | baz=261 | | | | | | |
| WSF | | | | *e*S | **Sg** | **00 47 47.3** | **+0.4** |
| | baz=261 | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.41** | **255** | *e*P | **Pb** | **00 47 27.9** | **-0.3** |
| | baz=257 | | | | | | |
| WSL | | | | *e*S | **Sg** | **00 47 48.9** | **+1.4** |
| | baz=257 | | | | | | |
| **ICHU** | **Yijhu** | **1.41** | **248** | *e*P | **Pn** | **00 47 28.0** | **+0.5** |
| | baz=249 | | | | | | |
| ICHU | | | | *e*S | **Sg** | **00 47 49.1** | **+1.4** |
| | baz=249 | | | | | | |
| **ECL** | **Taimali** | **1.46** | **209** | *e*P | **Pn** | **00 47 26.2** | **-1.9** |
| | baz=193 | | | | | | |
| **CHN3** | **Shinhua** | **1.48** | **237** | *e*P | **Pg** | **00 47 30.8** | **+0.3** |
| | baz=237 | | | | | | |
| CHN3 | | | | *e*S | **Sg** | **00 47 52.0** | **+2.3** |
| | baz=237 | | | | | | |
| **CHN8** | **Yiju** | **1.48** | **249** | *e*P | **Pn** | **00 47 28.7** | **+0.4** |
| | baz=250 | | | | | | |
| CHN8 | | | | *e*S | **Sg** | **00 47 50.2** | **+0.5** |
| | baz=250 | | | | | | |
| **SCST** | **Cishan** | **1.50** | **228** | *e*P | **Pg** | **00 47 31.1** | **+0.1** |
| | baz=228 | | | | | | |
| **SSD** | **Sandimen** | **1.51** | **221** | *e*P | **Pn** | **00 47 28.9** | **+0.1** |
| | baz=209 | | | | | | |
| SSD | | | | *e*S | **Sg** | **00 47 51.5** | **+0.7** |
| | baz=209 | | | | | | |
| **SHHT** | **Tainan City** | **1.52** | **236** | *e*P | **Pg** | **00 47 31.4** | **0.0** |
| | baz=235 | | | | | | |
| **TSMG** | **Majia** | **1.53** | **220** | *e*P | **Pb** | **00 47 29.9** | **-0.5** |
| | baz=209 | | | | | | |
| **SCLT** | **Jiali** | **1.56** | **243** | *e*P | **Pn** | **00 47 30.0** | **+0.5** |
| | baz=243 | | | | | | |
| SCLT | | | | *e*S | **Sg** | **00 47 52.8** | **+0.3** |
| | baz=243 | | | | | | |
| **TWM1** | **Shoushan** | **1.59** | **228** | ⇑*i*P | **Pb** | **00 47 31.3** | **0.0** |
| | baz=228 | | | | | | |
| TWM1 | | | | *e*S | **Sg** | **00 47 55.2** | **+1.8** |
| | baz=228 | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.60** | **238** | *e*P | **Pb** | **00 47 31.1** | **-0.4** |
| | baz=238 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.61** | **218** | *e*P | **Pn** | **00 

**SSPT Xinbi** 1.75 217 *e*P Pb 00 47 33.6 -0.5
baz=216
**PCYT Pengchaiyu** 1.77 11 *e*P Pn 00 47 33.2 +0.9
baz=9.0
PCYT *e*S Sg 00 47 58.6 -0.4
baz=9.0
**SCZT Fangliau** 1.81 214 P Pn 00 47 34.0 +1.0
baz=195
**LAY Lan-yu** 1.85 185 *e*P Pn 00 47 31.0 -2.5
baz=182
**SLIU Shizi** 1.86 207 *e*P Pb 00 47 35.2 -0.8
baz=206
**LYUB Lan-yu** 1.88 184 *e*P Pn 00 47 30.3 -3.7
baz=181
**IRIF Iriomote-Funau** 1.90 76 P Pn 00 47 33.7 -0.5
**HATJ Hateruma jima** 1.93 85 P Pn 00 47 33.9 -0.6
HATJ *e*S Sn 00 47 59.2 +0.6
**WLCH Liuqiu** 1.96 219 *e*P Pb 00 47 38.6 +0.9
baz=217
**WDGT Dungji** 1.98 252 *e*P Pn 00 47 34.1 -1.2
baz=252
**PHUB P'eng-hu** 1.99 260 *e*P Pn 00 47 34.7 -0.8
baz=261
**PNG Penghu** 2.00 261 *e*P Pn 00 47 35.4 -0.2
baz=263
PNG *e*S Sn 00 48 01.6 +1.2
baz=263
**HEN Hengchun** 2.08 206 *e*P Pb 00 47 39.1 -0.6
baz=195
**TWK1 Hengchun** 2.11 203 *e*P Pn 00 47 37.7 +0.6
baz=189
**TWKBT Hengchun** 2.11 203 *e*P Pn 00 47 36.6 -0.4
baz=189
**TSEB Hengchuen, Pin** 2.12 201 *e*P Pb 00 47 39.5 -0.8
baz=201
**JKRS Kuro-shima** 2.13 80 P Pn 00 47 37.1 -0.3
JKRS *e*S Sn 00 48 04.9 +1.2
**VCHM Qimei** 2.20 253 *e*P Pn 00 47 38.8 +0.5
baz=252
**JIJ Ishigaki jima** 2.27 77 P Pn 00 47 38.5 -0.8
JIJ S Sn 00 48 07.1 -0.1
**JISG Ishigakijimahi** 2.48 73 P Pn 00 47 41.3 -0.8
JISG *e*S Sn 00 48 11.6 -0.5
**PTMZ Houxiangcun** 2.62 296 *e*P Pn 00 47 43.5 -0.7
baz=299
**MATB Ma-tsu** 2.76 325 *e*P Pn 00 47 44.7 -1.4
baz=321
**JTJ Tarama** 2.83 74 P Pn 00 47 46.6 -0.4
JTJ *e*S Sn 00 48 23.5 +2.5
**QZH Quanzhou** 3.03 291 ⇑*i*Pn Pn 00 47 48.3 -1.4
QZH Sn Sn 00 48 23.7 -2.1
QZH LR LR
comp=N,15μm,4.0s
QZH LR LR
comp=E,46μm,7.6s
QZH LR LR
comp=Z,48μm,8.0s
**KNM Kinmen** 3.04 281 *e*P Pn 00 47 50.8 +1.0
baz=286
**KNMB Chin-men Tao** 3.09 281 *e*P Pn 00 47 48.8 -1.7
baz=287
**KNMB Chin-men Tao** 3.09 281 Pn Pn 00 47 49.3 -1.2
**MHZQ Yeshan** 3.28 313 *e*P Pn 00 47 52.1 -1.1
baz=308
**XPSS Dashiqiu** 3.33 336 *e*P Pn 00 47 52.5 -1.3
baz=334
**JMJ2 Miyako jima3** 3.41 75 P Pn 00 47 55.0 0.0
**AXDP Jialang** 3.56 287 *e*P Pn 00 47 55.5 -1.5
baz=295
**ZPLA Ao Xicun** 3.62 271 *e*P Pn 00 47 56.4 -1.5
baz=277
**JOW Kunigami** 6.62 62 Pn Pn 00 48 37.5 -1.7
10nm,0.3s,baz=160,slow=11,SNR=30
JOW Sn Sn 00 49 52.0 -2.5
baz=46,slow=24,SNR=1.2
**JOW Kunigami** 6.62 62 Pn Pn 00 48 36.9 -2.3
**HKPS Hong Kong Po S** 7.15 259 Pn Pn 00 48 45.5 -0.9
**SSE Sheshan** 7.20 356 Pn Pn 00 48 45.3 -1.7
SSE Sn Sn 00 50 08.0 -0.5
**GZH Guangzhou** 7.72 266 ⇑*i*Pn Pn 00 48 49.4 -4.8
GZH Sn Sn 00 50 14.3 -7.2
GZH smax smax
comp=N,1μm,1.2s
GZH smax smax
comp=E,750nm,1.1s
**NJ2 Nanjing** 8.52 343 ⇑P Pn 00 49 03.8 -1.3
NJ2 S Sn 00 50 40.0 -1.0
NJ2 pmax pmax
comp=Z,110nm,0.7s
NJ2 smax smax
comp=E,620nm,1.9s
NJ2 LR LR
comp=N,14μm,7.1s
NJ2 LR LR
comp=E,9μm,6.4s
NJ2 LR LR
comp=Z,14μm,8.1s
**CNSH ChangSha** 8.98 300 *e*P Pn 00 49 05.8 -5.6
CNSH S Sn 00 50 44.4 -8.0
CNSH smax smax
comp=N,840nm,1.7s
CNSH smax smax
comp=E,700nm,1.5s
**WHN Wuhan** 9.32 317 ⇑P Pn 00 49 14.7 -1.4
WHN S Sn 00 50 56.1 -4.6
WHN pmax pmax
comp=E,52nm,0.7s
WHN LR LR
comp=E,24μm,8.0s
WHN LR LR
comp=E,27μm,9.0s
WHN LR LR
comp=E,36μm,8.0s
**QIZ Qiongzhong** 12.06 249 P Pn 00 49 52.7 -1.0
QIZ S Sn 00 52 19.6 +12
QIZ pmax pmax
comp=E,520nm,3.0s
QIZ LR LR
comp=E,6μm,14.7s
QIZ LR LR
comp=E,2μm,11.1s
QIZ LR LR
comp=E,2μm,12.4s
**QIZ Qiongzhong** 12.06 249 Pn Pn 00 49 54.6 +0.9
**JNU Nakatsue** 12.23 39 Pn Pn 00 49 54.6 -1.4
comp=E,0.4nm,0.3s,baz=209,slow=19,SNR=2.5
**ENH Enshi** 12.60 303 Pn Pn 00 50 00.3 -0.9
**LYN LuoYang** 13.33 325 ⇑P Pn 00 50 10.2 -0.8
LYN pP P 00 50 16.1 -4.6
LYN PP PnPn 00 50 20.0 +0.9
LYN S Sn 00 52 46.7 +7.6
LYN pmax pmax
comp=E,340nm,6.1s
LYN LR LR
comp=E,17μm,8.0s
LYN LR LR
comp=E,7μm,9.0s
LYN LR LR
comp=E,15μm,8.3s
**TJN Taejon** 13.37 20 P Pn 00 50 11.6 +0.1
**TJN Taejon** 13.37 20 Pn Pn 00 50 11.6 +0.1
**GYA Guiyang** 13.86 284 ⇓P Pn 00 50 18.7 +0.3
GYA S Sn 00 52 47.7 -4.6
GYA pmax pmax
comp=E,27nm,1.3s
GYA LR LR
comp=E,4μm,6.2s
GYA LR LR
comp=E,13μm,8.5s
GYA LR LR
comp=E,15μm,8.8s
**INCN Inchon** 14.19 16 P P 00 50 29.0 -1.3
**INCN Inchon** 14.19 16 P 00 50 29.0 -1.3
**JMN Monobe** 14.48 45 Pn Pn 00 50 26.2 -0.5
**KSAR Wonju Array Be** 14.51 20 P Pn 00 50 27.9 +0.7
**KSAR Wonju Array Be** 14.51 20 P Pn 00 50 27.9 +0.7
**KSRS Korea Array** 14.53 20 Pn Pn 00 50 30.3 +2.8
comp=E,1.2nm,0.3s,baz=210,slow=7.0,SNR=35
KSRS LR LR 00 56 33.2
comp=E,816nm,19.1s,baz=195,slow=40
**KS19 Wonju Array Si** 14.56 20 P P 00 50 32.3 -2.0
**HNS HongShan** 14.75 338 ⇓P Pn 00 50 29.3 -1.0
HNS S Sn 00 53 16.2 +2.7
HNS SS S 00 53 30.6 -1.6
HNS pmax pmax
comp=E,10.0nm,1.2s
HNS LR LR
comp=E,5μm,10.3s
HNS LR LR
comp=E,5μm,8.4s
**DL2 Dalian** 14.97 360 P P 00 50 38.6 -0.3
DL2 S Sn 00 53 24.7 +5.7
DL2 pmax pmax
comp=Z,19nm,1.4s
DL2 pmax pmax
comp=Z,260nm,3.9s
DL2 LR LR
comp=N,1μm,6.1s
DL2 LR LR
comp=E,1μm,8.1s
DL2 LR LR
comp=Z,2μm,13.3s
**XAN Xi'an** 15.07 315 P Pn 00 50 34.8 0.0
XAN pP pP 00 50 44.0 +0.1
XAN PP sP 00 50 48.8 +3.0
XAN pmax pmax
comp=Z,15nm,1.0s
XAN pmax pmax
comp=Z,450nm,5.7s
XAN LR LR
comp=Z,9μm,8.6s
XAN LR LR
comp=Z,7μm,9.3s
XAN LR LR
comp=Z,11μm,9.7s
**TIY Taiyuan** 15.90 332 *e*P P 00 50 50.9 +1.6
TIY PP pwP 00 51 00.6 +7.4
TIY S S 00 53 51.0 -5.0
TIY SS SnSn 00 54 06.8 +12
TIY pmax pmax
comp=Z,33nm,1.4s
TIY LR LR
comp=N,7μm,8.2s
TIY LR LR
comp=E,4μm,8.2s
TIY LR LR
comp=Z,5μm,8.5s
**BJT Baijiatuan** 16.75 345 P P 00 51 00.8 +2.2
BJT pmax pmax
comp=Z,55nm,1.5s
**BJT Baijiatuan** 16.75 345 P P 00 51 00.8 +2.2
**BJI Beijing** 16.77 345 P P 00 51 00.7 +1.9
BJI PP PnPn 00 51 11.3 +5.1
BJI S S 00 54 10.9 -2.6
BJI SS SnSn 00 54 24.1 +8.0
BJI pmax pmax
comp=Z,17nm,1.7s
BJI LR LR
comp=N,3μm,8.3s
BJI LR LR
comp=E,1μm,8.7s
BJI LR LR
comp=Z,2μm,9.6s
**KMI Kunming** 17.31 278 ⇑P Pn 00 51 03.2 -0.6
KMI sP pP 00 51 08.5 -0.3
KMI PP PnPn 00 51 17.2 +3.4
KMI S S 00 54 21.6 -3.6
KMI SS SnSn 00 54 36.1 +6.4
KMI LR LR
comp=Z,2μm,8.1s
KMI LR LR
comp=Z,6μm,10.0s
KMI LR LR
comp=Z,7μm,9.6s
**CD2 Chengdu** 17.40 298 P Pn 00 51 04.7 +0.1
CD2 pmax pmax
comp=Z,60nm,1.5s
CD2 pmax pmax
comp=Z,470nm,4.1s
CD2 LR LR
comp=Z,11μm,6.9s
CD2 LR LR
comp=Z,10μm,8.5s
**PZH PanZhiHua** 18.26 282 P P 00 51 18.1 +2.6
PZH sP sP 00 51 21.8 +0.8
PZH S Sn 00 54 35.5 -3.7
PZH pmax pmax
comp=Z,30nm,1.3s
PZH pmax pmax
comp=Z,210nm,4.7s
PZH LR LR
comp=Z,3μm,8.8s
PZH LR LR
comp=Z,7μm,9.8s
PZH LR LR
comp=Z,5μm,9.1s
**JHJ Hachijo jima 2** 18.33 56 LR LR 00 57 59.6
comp=Z,686nm,20.5s,baz=100,slow=36
**KKM Kota Kinabalu** 18.51 197 P P 00 51 17.4 -1.0
KKM lAmb lAmb 00 51 29.6
comp=Z,127nm,1.4s
**HHC Hu-ho-hao-te** 18.93 336 *e*P Pn 00 51 23.7 +0.2
HHC PP PnPn 00 51 40.2 +4.2
HHC S Sn 00 54 52.0 -3.3
HHC pmax pmax
comp=Z,760nm,7.9s
HHC LR LR
comp=Z,5μm,16.2s
HHC LR LR
comp=Z,2μm,15.5s
HHC LR LR
comp=Z,4μm,17.7s
**MJAR Matsushiro Arr** 19.00 45 LR LR 00 59 57.1
comp=Z,642nm,18.7s,baz=228,slow=41
**MJAR Matsushiro Arr** 19.00 45 P P 00 51 22.8 -0.8
MJAR lAmb lAmb 00 51 33.6
comp=Z,22nm,1.4s
**BTO Baotou** 19.35 332 *e*P Pn 00 51 30.9 +2.4
BTO LR LR
comp=Z,16μm,9.2s
BTO LR LR
comp=Z,10μm,8.6s
**LZH Lanzhou** 19.64 312 ⇑P Pn 00 51 33.8 +1.7
LZH pP sP 00 51 35.7 -0.7
LZH sP pP 00 51 38.8 +4.2
LZH S Sn 00 55 14.5 +2.0
LZH sS sS 00 55 19.6 +2.8
LZH pmax pmax
comp=Z,61nm,1.2s
LZH pmax pmax
comp=Z,970nm,5.0s
LZH LR LR
comp=Z,7μm,11.4s
LZH LR LR
comp=Z,5μm,10.8s
LZH LR LR
comp=Z,8μm,12.5s
**SPMM Sapulut** 19.73 196 P Pn 00 51 36.0 +2.9
**CN2 Changchun** 20.10 8 *e*P P 00 51 36.2 +0.8
CN2 *e*S S 00 55 16.4 -4.4
CN2 pmax pmax
comp=Z,20nm,1.3s
CN2 pmax pmax
comp=Z,200nm,4.0s
CN2 LR LR
comp=Z,3μm,10.0s
CN2 LR LR
comp=Z,1μm,10.0s
CN2 LR LR
comp=Z,2μm,10.0s
**XLT XiLinHaoTe** 20.49 348 ⇓*i*P P 00 51 40.4 +0.6
XLT S Sn 00 55 31.4 -1.3
XLT pmax pmax
comp=Z,36nm,1.6s
XLT pmax pmax
comp=Z,550nm,4.7s
XLT LR LR
comp=Z,3μm,9.5s
XLT LR LR
comp=Z,1μm,9.6s
XLT LR LR
comp=Z,4μm,9.3s
**MDJ Mudanjiang** 21.66 15 P P 00 51 53.8 +1.6
MDJ pP pP 00 51 56.6 +0.7
MDJ sP sP 00 51 58.0 +0.5
MDJ PP PnPn 00 52 14.7 +1.6
MDJ SS Sn 00 56 21.6 +21
MDJ pmax pmax
comp=Z,39nm,1.1s
MDJ pmax pmax
comp=Z,290nm,3.7s
MDJ LR LR
comp=Z,3μm,12.8s
MDJ LR LR
comp=Z,3μm,11.6s
MDJ LR LR
comp=Z,3μm,13.1s
**CHTO Chiang Mai** 21.79 261 P P 00 51 53.5 -0.4
CHTO pmax pmax
comp=Z,26nm,1.1s
**CHTO Chiang Mai** 21.79 261 P P 00 51 53.5 -0.4
**CMAR Chiang Mai Arr** 21.89 260 P P 00 51 56.1 +1.1
comp=Z,11nm,0.7s,baz=62,slow=10,SNR=34
CMAR LR LR 01 01 25.7
comp=Z,974nm,18.2s,baz=75,slow=40
**CMAR Chiang Mai Arr** 21.89 260 P P 00 51 55.9 +0.8
**USRK Ussuriysk Ar.** 21.94 20 P P 00 51 54.8 -0.5
comp=Z,3.1nm,0.6s,baz=211,slow=8.0,SNR=5.8
USRK LR LR 01 01 09.9
comp=Z,444nm,18.6s,baz=176,slow=39
**USRK Ussuriysk Ar.** 21.94 20 P P 00 51 54.1 -1.2
**USRK Ussuriysk Ar.** 21.94 20 P P 00 51 54.0 -1.2
**BNX BinXian** 22.28 11 ⇑P P 00 51 57.3 -1.7
BNX pP pP 00 52 00.9 -1.6
BNX S S 00 56 03.1 -0.6
BNX pmax pmax
comp=Z,77nm,1.9s
BNX pmax pmax
comp=Z,510nm,4.9s
BNX LR LR
comp=Z,1μm,8.4s
BNX LR LR
comp=Z,1μm,9.4s
BNX LR LR
comp=Z,4μm,10.6s
**TOLI2 Tolitoli** 22.66 182 P P 00 52 01.9 -1.3
TOLI2 lAmb lAmb 00 52 08.0
comp=Z,167nm,1.9s
**SBUM Sibu** 23.20 205 P P 00 52 07.6 -1.2
**SBUM Sibu** 23.20 205 P P 00 52 08.0 -0.9
**MPSI Mapaga** 23.48 185 P P 00 52 15.4 +3.8
comp=Z,31nm,1.5s
**GTA Gaotai** 24.13 315 ⇑P P 00 52 17.4 -0.5
GTA sP pwP 00 52 25.6 +3.5
GTA S S 00 56 37.7 +2.3
GTA sS sS 00 56 46.0 +4.0
GTA pmax pmax
comp=Z,240nm,6.2s
GTA LR LR
comp=Z,2μm,10.9s
GTA LR LR
comp=Z,3μm,11.3s
GTA LR LR
comp=Z,3μm,11.6s
**GUMO Guam** 24.17 111 P P 00 52 18.4 +0.2
comp=Z,112nm,0.9s,baz=302,slow=19,SNR=2.5
GUMO LR LR 00 59 30.8
comp=Z,268nm,20.4s,baz=303,slow=31
**KSM Kuching** 24.87 208 P P 00 52 23.2 -1.4
KSM lAmb lAmb 00 52 30.1
comp=Z,56nm,1.1s
**KSM Kuching** 24.87 208 P P 00 52 25.0 +0.4
**HIA Hailar** 25.38 357 P P 00 52 27.8 -1.1
HIA pmax pmax
comp=Z,18nm,1.1s
**HIA Hailar** 25.38 357 P P 00 52 27.8 -1.1
**MTKI Muara Teweh, K** 25.55 196 P P 00 52 34.0 +3.2
**STKI Sintang** 25.68 204 P P 00 52 34.9 +3.0
comp=Z,8μmcomp=Z,23nm,0.9s
**GOMU GeErMu** 26.22 304 P P 00 52 36.6 -0.6
GOMU sP pP 00 52 41.3 -0.1
GOMU PcP PcP 00 56 06.7 +2.8
GOMU S S 00 57 08.6 -0.7
GOMU pmax pmax
comp=Z,6.0nm,1.1s
GOMU pmax pmax
comp=Z,360nm,6.4s
GOMU LR LR
comp=Z,2μm,8.0s
GOMU LR LR
comp=Z,2μm,8.3s
GOMU LR LR
comp=Z,3μm,8.4s
**ASAJ Asahikawa** 26.45 35 LR LR 01 03 20.7
comp=Z,583nm,19.7s,baz=220,slow=37
**KLR Kul'dur** 26.50 15 P P 00 52 38.1 -0.9
comp=Z,8.9nm,1.0s,baz=218,slow=8.9,SNR=14
KLR LR LR 01 02 54.1
comp=Z,374nm,19.0s,baz=198,slow=36
**KLR Kul'dur** 26.50 15 *ce*P P 00 52 38.6 -0.5
KLR pmax pmax
comp=Z,19nm,1.0s
**ULN Ulaanbaatar** 26.62 338 *ce*P P 00 52 40.3 -0.1
ULN pmax pmax
comp=Z,41nm,1.3s
**ULN Ulaanbaatar** 26.62 338 P P 00 52 39.8 -0.6
ULN lAmb lAmb 00 52 47.9
comp=Z,48nm,1.2s
**SONM Songino Array** 26.83 337 P P 00 52 42.0 -0.2
comp=Z,15nm,0.9s,baz=154,slow=8.6,SNR=69
SONM LR LR 01 03 23.8
comp=Z,812nm,18.4s,baz=143,slow=37
**SONM Songino Array** 26.83 337 P P 00 52 41.3 -0.9
SONM pmax pmax
comp=Z,36nm,1.2s
**SONM Songino Array** 26.83 337 P P 00 52 41.3 -0.9
SONM lAmb lAmb 00 52 46.0
comp=Z,36nm,1.2s
**LSA Lhasa** 27.84 289 P P 00 52 52.9 +1.0
LSA S S 00 57 41.3 +6.2
LSA pmax pmax
comp=Z,6.0nm,0.7s
LSA LR LR
comp=Z,990nm,12.1s
LSA LR LR
comp=Z,4μm,8.9s
LSA LR LR
comp=Z,4μm,8.5s
**YSS Yuzh-Sakhalins** 28.53 31 *e*P P 00 53 01.4 +4.1
YSS pmax pmax
comp=Z,20nm,1.3s
YSS MLR MLR
comp=Z,900nm,12.0s
YSS MLR MLR
comp=E,700nm,15.0s
**YSS Yuzh-Sakhalins** 28.53 31 P P 00 52 58.6 +1.3
YSS lAmb lAmb 00 53 03.5
comp=Z,13nm,0.6s
**FAKI Fak Fak** 28.55 158 P P 00 52 57.5 -0.3
**BAKI Biak** 28.59 149 P P 00 53 00.3 +2.2
comp=Z,158nm,0.5s
**ZAK Zakamensk** 30.08 336 *e*P P 00 53 09.3 -1.9
ZAK pmax pmax
comp=Z,7.0nm,1.2s
ZAK pmax pmax
comp=Z,5.0nm,1.3s
**ZEA Zeya** 30.10 7 *e*P P 00 53 14.5 +3.4
ZEA *e*S S 00 58 10.9 +1.7
ZEA pmax pmax
comp=E,10.0nm,1.2s
ZEA pmax pmax
comp=N,20nm,1.4s
ZEA pmax pmax
comp=Z,30nm,1.5s
ZEA pmax pmax
comp=Z,200nm,6.1s
ZEA MLR MLR
comp=N,900nm,15.0s
ZEA MLR MLR
comp=Z,900nm,13.0s
**TAPN Taplejung** 30.80 284 *e*P P 00 53 22.4 +4.4
comp=Z,84nm,1.1s
**MNSI Mandailing Nat** 31.42 226 P P 00 53 23.3 +0.1
comp=Z,13nm,0.7s
**RAMN Ramite** 31.80 283 *e*P P 00 53 31.4 +4.7
comp=Z,38nm,0.9s
**PPI Padang Panjang** 31.84 224 P P 00 53 28.1 +1.2
comp=Z,506nmcomp=Z,6.6nm,0.8s
**JIRN Jiri** 32.14 284 *e*P P 00 53 33.5 +3.6
comp=Z,79nm,1.1s
**GUN Gumba** 32.41 285 *e*P P 00 53 35.6 +3.4
comp=Z,80nm,1.2s
**PKI Pulchoki** 32.83 284 *e*P P 00 53 38.8 +2.9
comp=Z,39nm,1.0s
**PKIN Phulchoki** 32.84 284 *e*P P 00 53 38.8 +2.8
**KLSI** 32.88 212 P P 00 53 38.6 +2.7
comp=Z,14nm,1.4s
**KKN Kakani** 32.94 285 *e*P P 00 53 39.0 +2.3

comp=Z,58nm,1.0s
**MDSI Maura Dua 32.98 213** P **P** **00 53 39.5 +2.7**
comp=Z,19nm,1.2s
**DMN Daman 33.10 284** *e*P **P** **00 53 41.1 +2.9**
comp=Z,66nm,1.0s
**GKN Gorkha 33.50 285** *e*P **P** **00 53 43.9 +2.3**
comp=Z,68nm,1.1s
**WMQ Urumqi 34.20 314** *e*P **P** **00 53 49.2 +1.8**
WMQ pmax pmax
comp=Z,360nm,4.9s
WMQ LR LR
comp=Z,1µm,8.7s
WMQ LR LR
comp=Z,1µm,9.7s
WMQ LR LR
comp=Z,500nm,12.1s
**DANN Dangsing 34.27 286** *e*P **P** **00 53 49.2 +0.8**
comp=Z,48nm,0.9s
**KOLN Koldanda 34.43 285** *e*P **P** **00 53 50.8 +1.1**
comp=Z,70nm,1.0s
**PYUN Piuthan 34.95 285** *e*P **P** **00 53 54.5 +0.3**
comp=Z,48nm,0.9s
**DGZ Jazzator, Alta 37.12 323** *i* P **P** **00 54 11.7 -0.8**
DGZ pmax pmax
comp=Z,11nm,1.5s
**ZSN Zaisan 37.54 318** *e*P **P** **00 54 15.3 -0.6**
**ZSN Zaisan 37.54 318** *e*P **P** **00 54 15.3 -0.6**
baz=318
**MTN Manton Dam 37.65 165** P **P** **00 54 14.5 -2.6**
**YAK Yakutsk 38.51 6** LR LR 01 12 27.1
comp=Z,600nm,18.7s,baz=96,slow=40
**YAK Yakutsk 38.51 6** *e*P **P** **00 54 25.2 +1.4**
YAK *e* 00 55 52.3
YAK *e* 00 56 35.8
YAK *e*S **S** **01 00 21.7 +2.9**
YAK pmax pmax
comp=Z,20nm,1.3s
YAK pmax pmax
comp=N,13nm,1.4s
YAK pmax pmax
comp=E,4.0nm,1.3s
YAK pmax pmax
comp=Z,238nm,4.7s
YAK pmax pmax
comp=E,96nm,4.3s
YAK pmax pmax
comp=N,125nm,4.7s
YAK smax smax
comp=E,140nm,4.6s
YAK smax smax
comp=N,106nm,4.3s
YAK MLR MLR
comp=Z,1µm,15.0s
YAK MLR MLR
comp=N,718nm,15.0s
YAK MLR MLR
comp=E,461nm,12.0s
**YAK Yakutsk 38.51 6** P **P** **00 54 23.5 -0.3**
YAK IAmb IAmb 00 55 38.0
comp=Z,15nm,0.5s
**MK31 Makanchi Array 38.88 316** *i* P **P** **00 54 26.6 -0.6**
MK31 pmax pmax
comp=Z,10.0nm,0.8s
**MK31 Makanchi Array 38.88 316** P **P** **00 54 26.4 -0.8**
**MKAR Makanchi Array 38.88 316** P **P** **00 54 26.9 -0.3**
comp=Z,14nm,0.9s,baz=104,slow=10,SNR=44
MKAR PcP **PcP** **00 56 37.3 -0.6**
comp=Z,2.8nm,0.9s,baz=106,slow=4.7,SNR=3.5
MKAR LR LR 01 11 44.2
comp=Z,430nm,18.6s,baz=100,slow=38
**MKAR Makanchi Array 38.88 316** P **P** **00 54 26.2 -1.0**
MKAR 00 56 37.4
**MKAR Makanchi Array 38.88 316** P **P** **00 54 26.1 -1.0**
**MAKZ Makanchi 39.09 316** P **P** **00 54 27.9 -1.0**
MAKZ pmax pmax
comp=Z,20nm,1.0s
**MAKZ Makanchi 39.09 316** P **P** **00 54 27.9 -1.0**
**KNRA Kununurra 39.92 169** P **P** **00 54 35.5 -0.6**
**UZB Uzynbulak 39.93 309** *e*P **P** **00 54 35.1 -1.0**
**UZB Uzynbulak 39.93 309** *e*P **P** **00 54 35.1 -1.0**
baz=309
**PRZ Przheval'sk 40.21 308** P **P** **00 54 39.2 +0.7**
PRZ pmax pmax
comp=Z,19nm,1.2s
**PRZ Przheval'sk 40.21 308** P **P** **00 54 39.2 +0.7**
**KPKS Kokpek 40.25 310** *e*P **P** **00 54 37.8 -0.9**
**KPKS Kokpek 40.25 310** *e*P **P** **00 54 37.8 -0.9**
baz=310
**SATY Saty 40.34 309** *e*P **P** **00 54 39.2 -0.4**
**SATY Saty 40.34 309** *e*P **P** **00 54 39.2 -0.4**
baz=309
**TARG Taragay, Kyrgy 40.48 307** P **P** **00 54 40.9 -0.2**
**ZAA0 Zalesovo Array 40.75 327** P **P** **00 54 39.4 -3.2**
ZAA0 IAmb IAmb 00 54 45.4
comp=Z,38nm,1.4s
**ZALV Zalesovo Beam 40.75 327** P **P** **00 54 41.4 -1.2**
comp=Z,9.5nm,0.8s,baz=116,slow=6.9,SNR=37
ZALV PcP **PcP** **00 56 42.3 -1.4**
comp=Z,0.9nm,0.6s,baz=114,slow=3.6,SNR=1.8
ZALV LR LR 01 12 53.8
comp=Z,354nm,18.7s,baz=110,slow=38
**ZALV Zalesovo Beam 40.75 327** *i* P **P** **00 54 41.7 -0.9**
ZALV pmax pmax
comp=Z,10.0nm,0.8s
**ZALV Zalesovo Beam 40.75 327** P **P** **00 54 39.9 -2.7**
**TDK Taldyqorghan 40.85 312** *e*P **P** **00 54 43.3 -0.3**
**TDK Taldyqorghan 40.85 312** *e*P **P** **00 54 43.3 -0.3**
baz=312
**KDJ Kajisay 41.02 307** P **P** **00 54 44.8 -0.4**
KDJ pmax pmax
comp=Z,41nm,1.8s
**KDJ Kajisay 41.02 307** P **P** **00 54 44.8 -0.4**
**MA2 Magadan 41.08 22** P **P** **00 54 45.2 0.0**
MA2 pmax pmax
comp=Z,9.0nm,1.2s
**MA2 Magadan 41.08 22** P **P** **00 54 45.2 0.0**
**MDOK Medeo 41.34 309** *e*P **P** **00 54 47.4 -0.4**
**MDOK Medeo 41.34 309** *e*P **P** **00 54 47.4 -0.4**
baz=309
**PMG Port Moresby 41.40 140** *ce*P **P** **00 54 48.5 +0.2**
PMG pmax pmax
comp=Z,16nm,1.0s
**PMG Port Moresby 41.40 140** P **P** **00 54 47.0 -1.3**
PMG IAmb IAmb 00 55 09.2
comp=Z,32nm,1.1s
**KSH Kashi 41.46 303** P **P** **00 54 52.2 +3.4**
KSH pP sP 00 54 56.3 +2.9
KSH sP pP 00 54 58.4 +5.2
KSH PcP **PcP** **00 56 51.5 +5.0**
KSH pmax pmax
comp=Z,5.0nm,1.1s
KSH LR LR
comp=Z,870nm,10.8s
KSH LR LR
comp=Z,1µm,11.5s
KSH LR LR
comp=Z,1µm,10.6s
**SEM Semipalatinsk 41.55 320** *e*P **P** **00 54 47.7 -1.8**
**SEM Semipalatinsk 41.55 320** *e*P **P** **00 54 47.7 -1.8**
baz=320
**BOOM Boomskoye usch 41.99 308** P **P** **00 54 53.1 -0.1**
BOOM pmax pmax
comp=Z,5.0nm,1.0s
**BOOM Boomskoye usch 41.99 308** P **P** **00 54 53.1 -0.1**
**KUU Kurty 42.00 310** *e*P **P** **00 54 52.4 -0.7**
**KUU Kurty 42.00 310** *e*P **P** **00 54 52.4 -0.7**
baz=310
**H11N1 WAKE ISLAND Hy 42.02 87** T T 01 40 09.5
baz=276
**H11N2 WAKE ISLAND Hy 42.03 87** T T 01 40 11.0
baz=276
**H11N3 WAKE ISLAND Hy 42.04 87** T T 01 40 07.3
baz=276
**H11S3 WAKE ISLAND Hy 42.15 88** T T 01 39 56.0
baz=280,slow=75,SNR=567
**H11S1 WAKE ISLAND Hy 42.16 88** T T 01 40 09.8
baz=280,slow=75,SNR=194
**H11S2 WAKE ISLAND Hy 42.16 88** T T 01 39 55.2
baz=280,slow=75,SNR=236
**PALK Pallekele 42.62 254** LR LR 01 14 26.5
comp=Z,164nm,18.4s,baz=193,slow=39
**KURK Kurchatov 42.62 320** *ce*P **P** **00 54 57.7 -0.3**
KURK pmax pmax
comp=Z,23nm,1.7s
**KURK Kurchatov 42.62 320** P **P** **00 54 56.6 -1.4**
KURK IAmb IAmb 00 55 19.4
comp=Z,61nm,1.8s
**KURBB Kurchatov Arra 42.64 320** P **P** **00 54 57.6 -0.5**
comp=Z,5.8nm,0.9s,baz=115,slow=7.4,SNR=16
KURBB LR LR 01 14 55.6
comp=Z,185nm,20.9s,baz=76,slow=39
**KURBB Kurchatov Arra 42.64 320** P **P** **00 54 56.3 -1.8**
**FRU1 Bishkek 43.00 308** P **P** **00 55 02.0 +0.8**
FRU1 pmax pmax
comp=Z,26nm,1.4s
**FRU1 Bishkek 43.00 308** P **P** **00 55 02.0 +0.8**
**AAK Ala-Archa 43.07 308** P **P** **00 55 02.1 +0.2**
comp=Z,2.3nm,0.9s,baz=118,slow=7.5,SNR=2.4
AAK LR LR 01 13 14.9
comp=Z,308nm,18.1s,baz=92,slow=37
**AAK Ala-Archa 43.07 308** *ce*P **P** **00 55 02.5 +0.6**
AAK pmax pmax
comp=Z,10.0nm,1.7s
**AAK Ala-Archa 43.07 308** P **P** **00 55 01.8 -0.1**
**COEN Coen 43.07 149** P **P** **00 55 01.2 -0.8**
COEN IAmb IAmb 00 55 12.8
comp=Z,38nm,1.1s
**SGDS Sogindy 43.12 309** *e*P **P** **00 55 02.0 -0.3**
baz=309
**NIL Nilore 43.24 294** P **P** **00 55 03.5 +0.2**
NIL pmax pmax
comp=Z,15nm,1.0s
**NIL Nilore 43.24 294** P **P** **00 55 03.5 +0.2**
**BTLS Baital 43.86 311** *e*P **P** **00 55 07.1 -0.9**
**BTLS Baital 43.86 311** *e*P **P** **00 55 07.2 -0.9**
baz=311
**SEY Seymchan 44.09 20** *i* P **P** **00 55 08.7 -0.9**
**DRK Karamyk 44.66 303** P **P** **00 55 15.4 +0.4**
DRK IAmb IAmb 00 55 20.4
comp=Z,33nm,1.6s
**MBWA Marble Bar 44.82 183** P **P** **00 55 14.4 -1.5**
MBWA IAmb IAmb 00 55 17.6
comp=Z,46nm,1.8s
**WB0 Warramunga Arr 45.12 163** P **P** **00 55 17.2 -1.1**
WB0 IAmb IAmb 00 55 21.6
comp=Z,17nm,1.1s
**PSA00 Pilbara Seismi 45.22 182** P **P** **00 55 15.8 -3.3**
PSA00 IAmb IAmb 00 55 25.8
comp=Z,27nm,1.7s
**PSA00 Pilbara Seismi 45.22 182** P **P** **00 55 16.2 -2.9**
PSA00 IAmb IAmb 00 55 26.6
comp=Z,14nm,1.0s
**WRAB Tennant Creek 45.27 163** P **P** **00 55 18.9 -0.6**
WRAB pmax pmax
comp=Z,47nm,0.8s
**WRAB Tennant Creek 45.27 163** P **P** **00 55 18.9 -0.6**
**WRA Warramunga Arr 45.27 163** P **P** **00 55 17.4 -2.1**
comp=Z,7.1nm,0.8s,baz=346,slow=8.7,SNR=17
WRA PcP **PcP** **00 56 59.1 -0.3**
comp=Z,0.6nm,0.7s,baz=356,slow=3.9,SNR=1.4
**WRA Warramunga Arr 45.27 163** *i* P **P** **00 55 19.8 +0.3**
WRA pmax pmax
comp=Z,7.0nm,0.8s
**WRA Warramunga Arr 45.27 163** P **P** **00 55 18.8 -0.7**
**WB2 Warramunga Arr 45.27 163** P **P** **00 55 17.4 -2.1**
WB2 IAmb IAmb 00 55 23.0
comp=Z,15nm,1.0s
**WR0 Warramunga Arr 45.34 163** P **P** **00 55 19.8 -0.3**
**BTK Batken 45.47 303** P **P** **00 55 21.1 0.0**
BTK pmax pmax
comp=Z,41nm,1.9s
**BTK Batken 45.47 303** P **P** **00 55 21.1 0.0**
BTK IAmb IAmb 00 55 31.3
comp=Z,41nm,1.9s
**GAR Garm 45.78 302** P **P** **00 55 23.2 -0.4**
**BRZS Berezniki 45.98 317** *e*P **P** **00 55 24.2 -0.7**
**BRZS Berezniki 45.98 317** *e*P **P** **00 55 24.2 -0.7**
baz=317
**KKAR Karatay Array 46.03 308** P **P** **00 55 25.0 -0.4**
**KKAR Karatay Array 46.03 308** P **P** **00 55 25.0 -0.4**
**IUG luzhnay 46.27 306** *e*P **P** **00 55 26.8 -0.6**
**IUG luzhnay 46.27 306** *e*P **P** **00 55 26.9 -0.6**
baz=306
**BRLS Borolday 46.51 307** *e*P **P** **00 55 28.9 -0.3**
**BRLS Borolday 46.51 307** *e*P **P** **00 55 28.9 -0.3**
baz=307
**CHGR Chuyangaron 46.66 301** P **P** **00 55 30.3 -0.2**
CHGR IAmb IAmb 00 56 07.2
comp=Z,50nm,1.5s
**KBL Kabul 46.72 296** P **P** **00 55 31.2 0.0**
KBL pmax pmax
comp=Z,32nm,1.3s
**KBL Kabul 46.72 296** P **P** **00 55 31.2 0.0**
KBL IAmb IAmb 00 55 36.0
comp=Z,32nm,1.2s
**TIXI Tiksi 47.96 3** LR LR 01 17 46.1
comp=Z,626nm,18.6s,baz=181,slow=38
**TIXI Tiksi 47.96 3** *i* P **P** **00 55 38.9 -1.1**
**TIXI Tiksi 47.96 3** P **P** **00 55 37.4 -2.6**
TIXI IAmb IAmb 00 55 43.8
comp=Z,35nm,1.2s
**BVAR Borovoye Array 48.20 321** P **P** **00 55 41.8 -0.4**
comp=Z,4.8nm,0.8s,baz=77,slow=15,SNR=16
BVAR PcP **PcP** **00 57 08.2 -1.1**
comp=Z,2.8nm,0.8s,baz=51,slow=11,SNR=4.2
**BRVK Borovoye 48.28 321** *ce*P **P** **00 55 42.4 -0.3**
BRVK pmax pmax
comp=Z,111nm,1.0s
**BRVK Borovoye 48.28 321** P **P** **00 55 41.3 -1.5**
**AS31 Alice Springs 48.73 165** P **P** **00 55 44.3 -2.3**
**ASAR Alice Springs 48.73 165** P **P** **00 55 45.4 -1.2**
comp=Z,4.3nm,0.8s,baz=339,slow=6.5,SNR=15
**ASAR Alice Springs 48.73 165** P **P** **00 55 44.2 -2.4**
**ASAR Alice Springs 48.73 165** P **P** **00 55 44.2 -2.4**
**NRIK Noril'sk 49.81 345** P **P** **00 55 52.4 -1.9**
comp=Z,5.6nm,0.9s,baz=135,slow=8.2,SNR=9.3
NRIK LR LR 01 19 58.6
comp=Z,219nm,18.9s,baz=114,slow=40
**NRIK Noril'sk 49.81 345** *i* P **P** **00 55 52.6 -1.6**
NRIK pmax pmax
comp=Z,13nm,1.0s
**NRIK Noril'sk 49.81 345** P **P** **00 55 51.4 -2.8**
**CTA Charters Tower 49.83 149** LR LR 01 14 44.8
comp=Z,231nm,22.0s,baz=286,slow=33
**HNR Honiara 49.92 127** LR LR 01 12 57.2
comp=Z,121nm,22.0s,baz=286,slow=31
**BILL Bilibino 51.80 20** *ce*P **P** **00 56 07.8 -1.5**
BILL *e* 00 58 09.5
BILL *e*S **S** **01 03 35.4 +4.7**
BILL pmax pmax
comp=Z,13nm,1.3s
BILL MLR MLR
comp=Z,415nm,16.0s
**BILL Bilibino 51.80 20** P **P** **00 56 08.3 -0.9**
**HRA Herat 52.34 296** P **P** **00 56 13.9 -0.2**
**AB31 Akbulak array 53.99 314** *i* P **P** **00 56 25.6 -0.1**
**ABKAR Akbulak array 53.99 314** P **P** **00 56 24.9 -0.9**
**ABKAR Akbulak array 53.99 314** P **P** **00 56 25.3 -0.4**
ABKAR IAmb IAmb 00 56 29.1
comp=Z,16nm,1.1s
**SVE Sverdlovsk 54.56 324** *e*P **P** **00 56 29.6 -0.2**
SVE pmax pmax
comp=Z,20nm,1.1s
**FORT Forrest 54.70 173** P **P** **00 56 29.6 -1.3**
FORT IAmb IAmb 00 56 43.0
comp=Z,39nm,1.4s
**AKTO Aktyubinsk 55.32 316** P **P** **00 56 35.0 -0.3**
comp=Z,2.9nm,0.7s,baz=80,slow=8.5,SNR=8.0
AKTO ScP **ScP** **01 01 37.5 +3.0**
comp=Z,2.5nm,0.9s,baz=95,slow=6.4,SNR=4.6
AKTO LR LR 01 21 48.0
comp=Z,253nm,21.8s,baz=89,slow=38
**AKTO Aktyubinsk 55.32 316** P **P** **00 56 32.9 -2.5**
**GEYT Alibeck 55.36 301** P **P** **00 56 35.8 -0.2**
comp=Z,6.7nm,0.9s,baz=91,slow=17,SNR=8.7
GEYT LR LR 01 22 42.9
comp=Z,341nm,19.9s,baz=95,slow=39
**GEYT Alibeck 55.36 301** P **P** **00 56 35.5 -0.4**
**GYA0B ALIBECK ARRAY 55.36 301** P **P** **00 56 36.4 +0.4**
GYA0B IAmb IAmb 00 56 40.4
comp=Z,15nm,1.1s
**ARU Arti 55.63 323** P **P** **00 56 36.8 -0.7**
comp=Z,3.3nm,0.8s,baz=117,slow=2.0,SNR=16
ARU LR LR 01 20 02.3
comp=Z,237nm,21.1s,baz=85,slow=36
**ARU Arti 55.63 323** *di* P **P** **00 56 36.8 -0.7**
ARU 00 57 31.5
ARU S **S** **01 04 25.0 +2.0**
ARU SS **SS** **01 08 01.0 -6.8**
ARU pmax pmax
comp=Z,16nm,0.9s
**ARU Arti 55.63 323** P **P** **00 56 35.8 -1.7**
ARU IAmb IAmb 00 56 40.3
comp=Z,14nm,0.9s
**BBOO Buckleboo 58.02 166** P **P** **00 56 52.9 -1.7**
BBOO IAmb IAmb 00 57 12.1
comp=Z,42nm,1.4s
**STKA Stephens Creek 58.62 160** P **P** **00 56 57.6 -1.2**
comp=Z,4.7nm,0.7s,baz=354,slow=6.2,SNR=8.2
**STKA Stephens Creek 58.62 160** P **P** **00 56 56.2 -2.7**
STKA pmax pmax
comp=Z,7.0nm,1.7s
**STKA Stephens Creek 58.62 160** P **P** **00 56 56.2 -2.7**
**TNA Tin City 60.39 27** P **P** **00 57 11.3 +0.7**
TNA IAmb IAmb 00 57 15.3
comp=Z,31nm,1.5s
**KIRV Kirov 60.73 325** P **P** **00 57 12.0 -1.1**
comp=Z,22nm,0.7s,baz=107,slow=1.3,SNR=11
KIRV LR LR 01 23 39.1
comp=Z,170nm,20.9s,baz=85,slow=36
**ANM Nome 61.36 28** P **P** **00 57 17.8 +0.5**
ANM pmax pmax
comp=Z,22nm,1.5s
**ANM Nome 61.36 28** P **P** **00 57 17.8 +0.5**
ANM IAmb IAmb 00 57 20.7
comp=Z,22nm,1.5s
**RDOG Red Dog Mine 62.61 24** P **P** **00 57 25.3 -0.4**
**DZM Mont Dzumac 63.08 133** *e*P P 00 57 34.9 +5.3
comp=Z,30nm,1.4s
**DZM Mont Dzumac 63.08 133** *e*LR LR 01 16 14.9
comp=Z,598nm,24.2s
**DZM Mont Dzumac 63.08 133** LR LR 01 22 02.5
comp=Z,184nm,20.4s,baz=286,slow=33
**SDPT Sand Point 63.84 38** P **P** **00 57 31.4 -2.6**
**GROC Groznyy 64.05 308** *e*P **P** **00 57 30.9 -4.7**
GROC *e* 00 58 05.9
GROC pmax pmax
comp=Z,11nm,1.2s
**GNI Garni 65.36 305** P **P** **00 57 44.6 +0.1**
comp=Z,5.8nm,1.0s,baz=48,slow=16,SNR=3.3
GNI LR LR 01 29 27.6
comp=Z,140nm,19.9s,baz=4.5,slow=39
**ZEI Tsey 65.49 308** *i* P **P** **00 57 43.5 -1.8**
ZEI pmax pmax
comp=Z,12nm,1.2s
**TTA Tatalina 65.52 30** P **P** **00 57 44.5 -0.5**
TTA pmax pmax
comp=Z,20nm,1.4s
**TTA Tatalina 65.52 30** P **P** **00 57 44.5 -0.5**
TTA IAmb IAmb 00 57 47.9
comp=Z,20nm,1.4s
**KLMR Klimovskoe 65.67 328** *e*P **P** **00 57 43.7 -2.1**
KLMR pmax pmax
comp=Z,19nm,1.3s
**KLMR Klimovskoe 65.67 328** *e*P **P** **00 57 43.8 -2.1**
KLMR AMP 00 57 45.4
comp=Z,19nm,1.3s
**KBZ Khabaz 66.04 309** P **P** **00 57 48.2 -0.3**
comp=Z,4.2nm,1.0s,baz=98,slow=1.2,SNR=5.8
**KBZ Khabaz 66.04 309** *ce*P **P** **00 57 48.2 -0.3**
KBZ pmax pmax
comp=Z,11nm,1.3s
**L19K White Mountain 66.13 31** P **P** **00 57 48.1 -0.8**
L19K IAmb IAmb 00 57 56.2
comp=Z,33nm,1.4s
**KIV Kislovodsk 66.15 309** ⇑P **P** **00 57 49.5 +0.1**
**KIV Kislovodsk 66.15 309** ⇑P **P** **00 57 49.5 +0.1**
**KIV Kislovodsk 66.15 309** P **P** **00 57 47.4 -2.0**
KIV IAmb IAmb 00 58 06.9
comp=Z,30nm,1.4s
**SHA1 Shidzhatmaz 66.21 309** *i* P **P** **00 57 49.0 -1.0**
**J20K Nowinta River 66.24 28** P **P** **00 57 49.0 -0.5**
J20K IAmb IAmb 00 57 58.7
comp=Z,23nm,1.2s
**VORR Voronezh 67.08 318** *e*P **P** **00 57 53.7 -1.3**
VORR pmax pmax
comp=Z,10.0nm,0.5s
**CAST Castle Rocks 67.24 29** P **P** **00 57 55.9 -0.1**
CAST IAmb IAmb 00 58 03.4
comp=Z,27nm,1.2s
**PPLA Purkeypile 67.27 30** P **P** **00 57 56.2 -0.1**
**TOLK Toolik Lake Re 67.53 23** P **P** **00 57 57.5 -0.3**
TOLK IAmb IAmb 00 58 04.9
comp=Z,16nm,1.2s
**KTH Kantishna Hill 67.74 29** P **P** **00 57 58.7 -0.4**
KTH IAmb IAmb 00 58 07.4
comp=Z,21nm,1.0s
**KDAK Kodiak Island 67.87 35** P **P** **00 58 00.7 +0.8**
comp=Z,8.2nm,0.6s,baz=306,slow=8.7,SNR=5.7
**KDAK Kodiak Island 67.87 35** P **P** **00 58 01.6 +1.7**
KDAK pmax pmax
comp=Z,230nm,1.8s
**KDAK Kodiak Island 67.87 35** P **P** **00 58 01.6 +1.7**
**OBN Obninsk 68.03 322** *ce*P **P** **00 58 02.3 +1.3**
OBN pmax pmax
comp=Z,26nm,1.7s
**TRF Thorofare Moun 68.03 29** P **P** **00 58 02.1 +1.0**
**MCK McKinley 68.58 29** P **P** **00 58 03.8 -0.5**
MCK pmax pmax
comp=Z,39nm,1.3s
**MCK McKinley 68.58 29** P **P** **00 58 03.8 -0.5**
**MDM Murphy Dome 68.66 27** P **P** **00 58 04.7 -0.2**
**RND Reindeer 68.68 29** P **P** **00 58 03.9 -1.1**
RND pmax pmax
comp=Z,39nm,0.8s
**RND Reindeer 68.68 29** P **P** **00 58 03.9 -1.1**
**WRH Wood River Hil 68.81 28** P **P** **00 58 06.4 +0.7**
**COLA College 68.83 27** *i* P **P** **00 58 06.9 +1.1**
COLA pmax pmax
comp=Z,8.0nm,0.9s
**RAYN Ar Rayn 68.89 287** ⇑P **P** **00 58 06.6 -0.4**
**RAYN Ar Rayn 68.89 287** P **P** **00 58 05.8 -1.2**
RAYN IAmb IAmb 00 58 13.0
comp=Z,13nm,1.2s
**KNK Knik Glacier 69.25 31** P **P** **00 58 09.8 +1.3**
**ILAR Eielson Array 69.25 27** P **P** **00 58 08.6 0.0**
comp=Z,2.8nm,0.7s,baz=294,slow=9.0,SNR=5.2
**BMAR Burnt Mountain 69.60 24** P **P** **00 58 11.2 +0.6**
**J25K Salcha River, 69.93 27** P **P** **00 58 12.2 -0.5**
J25K IAmb IAmb 00 58 19.5
comp=Z,39nm,1.9s
**M24K Tolsona, Glenn 70.16 30** P **P** **00 58 13.6 -0.5**
**J26L Joseph Creek 70.71 27** IAmb IAmb 00 58 21.4
comp=Z,14nm,0.8s
**DOT Dot Lake 70.72 28** P **P** **00 58 16.4 -1.2**
DOT IAmb IAmb 00 58 21.5
comp=Z,18nm,1.1s
**L26K Log Cabin Wild 71.19 29** P **P** **00 58 21.0 +0.6**
L26K IAmb IAmb 00 58 28.8
comp=Z,23nm,1.2s
**GLB Gilahina Butte 71.41 30** P **P** **00 58 22.9 +1.1**
GLB IAmb IAmb 00 58 28.8
comp=Z,26nm,1.0s
**EGAK Eagle 71.63 27** P **P** **00 58 21.8 -1.2**
EGAK IAmb IAmb 00 58 27.2
comp=Z,8.4nm,0.8s
**GAZ Gaziantep 71.80 303** P **P** **00 58 25.8 +1.2**
GAZ IAmb IAmb 00 58 34.0
comp=Z,23nm,0.7s
**BCAR Beaver Creek A 71.86 28** P **P** **00 58 25.3 +0.7**
**FINES FINESS Array B 71.94 330** P **P** **00 58 24.0 -1.0**
comp=Z,4.4nm,0.9s,baz=57,slow=5.6,SNR=9.1
FINES LR LR 01 32 07.0
comp=Z,517nm,18.9s,baz=58,slow=38
**FINES FINESS Array B 71.94 330** *i* P **P** **00 58 27.1 +2.2**
FINES pmax pmax
comp=Z,4.0nm,0.9s
**BNN Bunyan 72.35 305** P **P** **00 58 27.2 -0.9**
**DAWY Dawson 72.58 27** P **P** **00 58 28.4 -0.3**
**INK Inuvik 73.32 22** P **P** **00 58 31.9 -1.0**
comp=Z,6.7nm,0.8s,baz=299,slow=5.4,SNR=6.1
**INK Inuvik 73.32 22** P **P** **00 58 32.3 -0.7**
INK pmax pmax
comp=Z,28nm,1.4s
**INK Inuvik 73.32 22** P **P** **00 58 32.3 -0.7**
INK IAmb IAmb 00 58 36.4
comp=Z,28nm,1.4s
**AKASG Malin Array Be 73.41 318** P **P** **00 58 32.5 -1.3**
comp=Z,3.3nm,0.8s,baz=60,slow=5.9,SNR=7.5
AKASG LR LR 01 34 51.8
comp=Z,207nm,19.2s,baz=337,slow=39
**AKBB Malin Array Si 73.41 318** *ce*PKIKP **P** **00 58 34.2 +0.4**
**NACGM Naroch 73.54 323** *i* PKP **P** **00 58 32.8 -1.7**
**BR131 Keskin Array S 73.73 307** IAmb IAmb 00 59 05.2
comp=Z,23nm,0.8s
**BRTR Keskin Array B 73.73 307** P **P** **00 58 35.9 -0.3**

comp=Z,4.2nm,1.0s,baz=99,slow=6.4,SNR=14
BRTR LR LR 01 36 52.9
comp=Z,203nm,18.5s,baz=297,slow=41
**BRTR Keskin Array B 73.73 307** P **P** **00 58 35.7 -0.5**
**A36M Sachs Harbour 74.26 17** IAmb IAmb 00 58 41.6
comp=Z,13nm,1.0s
**MMAI Mount Meron Ar 74.46 300** LR LR 01 36 24.6
comp=Z,110nm,21.6s,baz=209,slow=40
**HYT Haines Junctio 74.51 30** P **P** **00 58 39.6 -0.7**
HYT IAmb IAmb 00 58 47.0
comp=Z,16nm,1.0s
**MDUB Mudurnu 75.28 308** P **P** **00 58 44.0 -1.1**
**M31M Drury Creek, Y 75.37 28** P **P** **00 58 45.2 +0.1**
M31M IAmb IAmb 00 58 49.1
comp=Z,20nm,1.4s
**CSS Mathiatis 75.46 302** IAmb IAmb 00 59 04.4
comp=Z,24nm,0.9s
**CFR Carcaliu 75.86 313** ⇑P **P** **00 58 48.2 0.0**
**CFR Carcaliu 75.86 313** ⇑P **P** **00 58 48.2 0.0**
**C36M Paulatuk 75.92 19** P **P** **00 58 46.4 -1.6**
C36M IAmb IAmb 00 58 51.1
comp=Z,28nm,1.3s
**BORA Eskisehir 76.01 308** IAmb IAmb 00 59 08.9
comp=Z,12nm,1.0s
**HARR Harsova 76.16 313** ⇑P **P** **00 58 54.3 +4.4**
**HARR Harsova 76.16 313** ⇑P **P** **00 58 54.3 +4.4**
**TESR Tescani 76.38 315** ⇑P **P** **00 58 50.4 -0.7**
**VRI Vrincioaia 76.55 314** ⇑P **P** **00 58 50.4 -1.8**
**VRI Vrincioaia 76.55 314** ⇑P **P** **00 58 50.4 -1.8**
**PLOR Plostina 76.61 314** ⇓P P 00 58 58.6 +6.1
**PLOR Plostina 76.61 314** ⇓P P 00 58 58.6 +6.1
**COVR Voineasa-Covas 76.90 314** ⇑P P 00 59 05.9 +12
**BURAR Bucovina Array 76.91 316** ⇑P **P** **00 58 52.6 -1.7**
**BURAR Bucovina Array 76.91 316** ⇑P **P** **00 58 52.6 -1.7**
**BURAR Bucovina Array 76.91 316** P **P** **00 58 53.7 -0.6**
**NEHR Nehoiu 76.99 314** ⇑P **P** **00 58 58.3 +3.6**
**MLR Muntele Rosu 77.20 314** ⇑P **P** **00 58 57.0 +1.1**
**MLR Muntele Rosu 77.20 314** ⇑P **P** **00 58 57.0 +1.1**
**MLR Muntele Rosu 77.20 314** P **P** **00 58 56.0 +0.1**
MLR IAmb IAmb 00 59 16.5
comp=Z,16nm,1.1s
**DOPR Dopca 77.39 315** ⇑P P 00 59 07.7 +11
**HUMR Humele 78.19 313** ⇑P **P** **00 59 01.6 +0.3**
**UZH Uzhgorod 78.35 318** *e*P **P** **00 59 05.2 +3.1**
**NC405 NORSAR Array S 78.46 332** P **P** **00 59 00.8 -1.7**
**NB2 NORSAR Subarra 78.71 332** P **P** **00 59 02.8 -1.1**
comp=Z,9.9nm,0.7s,baz=61,slow=5.6
**NOA NORSAR Array B 78.71 332** P **P** **00 59 02.4 -1.5**
comp=Z,0.7nm,0.6s,baz=58,slow=5.5,SNR=2.9
NOA LR LR 01 37 04.0
comp=Z,341nm,20.0s,baz=20,slow=38
**DRGR 78.80 316** ⇑P **P** **00 59 00.6 -4.2**
**DRGR 78.80 316** ⇑P **P** **00 59 00.6 -4.2**
**RES Resolute Bay 78.88 9** P **P** **00 59 03.5 -0.9**
comp=Z,3.0nm,1.0s,baz=315,slow=1.4,SNR=3.6
**RES Resolute Bay 78.88 9** P **P** **00 59 03.6 -0.9**
RES pmax pmax
comp=Z,8.0nm,1.1s
**RES Resolute Bay 78.88 9** IAmb IAmb 00 59 11.3
comp=Z,8.2nm,1.1s
**DLBC Dease Lake 78.95 31** P **P** **00 59 05.4 +0.1**
comp=Z,4.6nm,0.9s,baz=284,slow=4.2,SNR=3.4
**OJC Ojcow 79.21 320** *e*PKPdf **P** **00 59 08.8 +1.9**
**GZR Gura Zlata 79.30 315** ⇑P **P** **00 59 08.5 +1.0**
**GZR Gura Zlata 79.30 315** ⇑P **P** **00 59 08.5 +1.0**
**BZS Buzias 79.96 315** ⇑P P 00 59 06.2 -4.8
**BZS Buzias 79.96 315** ⇑P P 00 59 06.2 -4.8
**VTS Vitosha 80.09 312** ⇑P **P** **00 59 12.0 0.0**
**VTS Vitosha 80.09 312** ⇑P **P** **00 59 12.0 0.0**
**VYHS Vyhne 80.50 319** *e*P **P** **00 59 18.3 +4.4**
**VYHS Vyhne 80.50 319** *e*P **P** **00 59 18.3 +4.4**
**URZ Urewera 80.74 139** LR LR 01 34 52.7
comp=Z,72nm,18.9s,baz=330,slow=36
**WHZ Wether Hill Ro 81.14 149** P **P** **00 59 17.6 +0.5**
**FRGS Fruska Gora 81.31 316** ⇑P **P** **00 59 15.4 -2.9**
**AGG Agios Georgios 82.17 309** IAmb IAmb 00 59 52.8
comp=Z,12nm,1.1s
**CKRC Cesky Krumlov 83.03 321** *e*PKP **P** **00 59 30.0 +2.7**
**YKA Yellowknife Ar 83.05 23** P **P** **00 59 26.4 -0.6**
comp=Z,6.2nm,0.8s,baz=314,slow=4.9,SNR=25
**YKA Yellowknife Ar 83.05 23** *i* P **P** **00 59 26.7 -0.3**
YKA pmax pmax
comp=Z,6.0nm,0.8s
**ITM Ithomi 83.22 308** IAmb IAmb 00 59 42.7
comp=Z,31nm,1.4s
**KHC Kasperske Hory 83.31 321** *e*P **P** **00 59 30.7 +2.0**
**KHC Kasperske Hory 83.31 321** *e*PKP **P** **00 59 30.7 +2.0**
**GERES GERESS Array B 83.37 321** P **P** **00 59 28.1 -1.0**
comp=Z,1.8nm,0.8s,baz=56,slow=3.9,SNR=6.2
GERES LR LR 01 37 37.7
comp=Z,308nm,21.7s,baz=306,slow=36
**KIBK Kibwezi 85.15 265** P **P** **00 59 38.6 -0.1**
KIBK IAmb IAmb 00 59 43.5
comp=Z,11nm,1.3s
**KMBO Kilima Mbogo 85.38 267** P **P** **00 59 40.6 +0.5**
comp=Z,5.3nm,1.0s,baz=54,slow=7.4,SNR=7.6
**KMBO Kilima Mbogo 85.38 267** P **P** **00 59 39.9 -0.2**
**LLLB Lillooet 87.08 35** P **P** **00 59 48.5 +0.9**
**EDM Edmonton 89.63 30** P **P** **01 00 00.3 +0.7**
EDM pmax pmax
comp=Z,83nm,1.9s
**EDM Edmonton 89.63 30** P **P** **01 00 00.3 +0.7**
**B08A Colville Reser 89.75 36** IAmb IAmb 01 00 03.9
comp=Z,16nm,1.1s
**BUCK Buck Mountain 90.09 41** P **P** **01 00 02.3 +0.3**
**H04A Detroit Lake 90.29 40** P **P** **01 00 02.7 -0.2**
H04A IAmb IAmb 01 00 10.2
comp=Z,16nm,1.2s
**C09A Chrisman Ranch 90.65 36** P **P** **01 00 03.6 -0.8**
**D08A Wollman Farm, 90.75 37** P **P** **01 00 04.2 -0.7**
D08A IAmb IAmb 01 00 08.8
comp=Z,23nm,1.4s
**HAWA Hanford 90.81 37** P **P** **01 00 05.2 0.0**
**NEW Newport 90.97 35** P **P** **01 00 05.7 -0.3**
comp=Z,1.9nm,0.6s,baz=296,slow=3.4,SNR=5.2
**NEW Newport 90.97 35** P **P** **01 00 06.0 0.0**
NEW pmax pmax
comp=Z,42nm,2.0s
**NEW Newport 90.97 35** P **P** **01 00 06.0 0.0**
**HUMO Hull Mountain 91.01 42** P **P** **01 00 06.2 0.0**
HUMO IAmb IAmb 01 00 10.3
comp=Z,13nm,1.4s
**J04D Umpqua Nationa 91.16 41** P **P** **01 00 06.1 -1.0**
**PINE Pine Mountain 91.54 40** P **P** **01 00 08.4 -0.4**
**L04D Klamath Falls 91.62 42** P **P** **01 00 08.6 -0.7**
**YBH Yreka Blue Hor 91.65 42** P **P** **01 00 09.6 +0.3**
comp=Z,6.4nm,1.1s,baz=328,slow=4.2,SNR=6.5
**YBH Yreka Blue Hor 91.65 42** P **P** **01 00 09.0 -0.3**
**YBH Yreka Blue Hor 91.65 42** P **P** **01 00 08.9 -0.3**
YBH IAmb IAmb 01 00 13.7
comp=Z,12nm,1.2s
**M02C Callahan 91.75 43** P **P** **01 00 09.2 -0.6**
M02C IAmb IAmb 01 00 13.9
comp=Z,19nm,1.5s
**WALA Waterton Lakes 92.10 33** P **P** **01 00 10.4 -0.9**
**M04C Macdoel 92.16 42** P **P** **01 00 10.7 -1.0**
**K05A Summer Lake 92.19 41** P **P** **01 00 11.2 -0.7**
**I07A Izee 92.21 39** P **P** **01 00 10.4 -1.5**
I07A IAmb IAmb 01 00 15.8
comp=Z,13nm,1.4s
**WDC Whiskeytown Da 92.40 43** P **P** **01 00 11.7 -1.0**
WDC pmax pmax
comp=Z,17nm,1.5s
**WDC Whiskeytown Da 92.40 43** P **P** **01 00 11.7 -1.0**
WDC IAmb IAmb 01 00 16.1
comp=Z,17nm,1.4s
**FCC Fort Churchill 92.48 18** P **P** **01 00 10.8 -1.8**
FCC pmax pmax
comp=Z,16nm,1.2s
**FCC Fort Churchill 92.48 18** P **P** **01 00 10.8 -1.8**
FCC IAmb IAmb 01 00 19.3
comp=Z,16nm,1.2s
**JTMT Jette 92.77 34** IAmb IAmb 01 00 43.4
comp=Z,27nm,1.8s
**KEST Kesra 92.82 311** P **P** **01 00 14.8 -0.1**
comp=Z,11nm,1.0s,baz=45,slow=4.3,SNR=3.3
**KEST Kesra 92.82 311** IAmb IAmb 01 00 19.8
comp=Z,19nm,1.1s
**BMO Blue Mountains 92.99 38** P **P** **01 00 14.2 -1.3**
BMO pmax pmax
comp=Z,5.0nm,1.3s
**BMO Blue Mountains 92.99 38** P **P** **01 00 14.2 -1.3**
**MOD Modoc Plateau 93.02 41** P **P** **01 00 15.0 -0.7**
**MSO Missoula 93.55 35** P **P** **01 00 18.2 +0.2**
MSO IAmb IAmb 01 00 21.5
comp=Z,14nm,1.4s
**ORV Oroville 93.64 44** P **P** **01 00 17.6 -0.8**
ORV pmax pmax
comp=Z,11nm,1.4s
**ORV Oroville 93.64 44** P **P** **01 00 17.6 -0.8**
ORV IAmb IAmb 01 00 21.7
comp=Z,11nm,1.4s
**MFID Camas Ranch 94.72 38** P **P** **01 00 22.1 -1.3**
MFID IAmb IAmb 01 00 27.1
comp=Z,9.2nm,1.4s
**PAHR Pah Rah Range 94.88 43** P **P** **01 00 22.7 -1.7**
PAHR IAmb IAmb 01 00 27.6
comp=Z,16nm,1.5s
**CMB Columbia Colle 95.23 44** P **P** **01 00 25.4 -0.4**
CMB pmax pmax
comp=Z,11nm,1.3s
**CMB Columbia Colle 95.23 44** P **P** **01 00 25.4 -0.4**
CMB IAmb IAmb 01 00 28.8
comp=Z,11nm,1.3s
**HLID Hailey 95.42 37** P **P** **01 00 25.9 -0.8**
HLID IAmb IAmb 01 00 30.8
comp=Z,15nm,1.6s
**PPT Papeete 95.81 107** LR LR 01 33 42.8
comp=Z,89nm,21.3s,baz=326,slow=29
**PPT2 Papeete2 95.82 107** *e*LR LR 01 31 27.0
comp=Z,295nm,26.5s
**KVN Kaiserville 96.07 43** P **P** **01 00 30.0 +0.2**
KVN pmax pmax
comp=Z,10.0nm,1.3s
**KVN Kaiserville 96.07 43** P **P** **01 00 30.0 +0.2**
KVN IAmb IAmb 01 00 34.0
comp=Z,9.8nm,1.3s
**NVAR Mina Array Bea 96.32 43** P **P** **01 00 31.2 +0.3**
comp=Z,1.5nm,0.9s,baz=305,slow=6.5,SNR=8.5
**ULM Lac du Bonnet 99.03 23** LR LR 01 48 42.6
comp=Z,183nm,18.0s,baz=305,slow=37
**SDV Santo Domingo 145.26 22** *e*P **PKPbc** **01 06 40.1 -0.2**
**CBOC Ciudad Bolivar 145.75 33** *e*P **PKPbc** **01 06 41.7 -0.2**
**SOCV Socops 145.75 22** *e*P **PKPdf** **01 06 40.8 -0.5**
**PTBC PUERTO BERRIO 145.89 30** *e*P **PKPdf** **01 06 41.5 -0.1**
**BARC Barichara 146.40 27** *e*P **PKPbc** **01 06 43.6 -0.3**
**PLMC San Jos del P 146.43 34** *e*P **PKPdf** **01 06 42.4 -0.1**
**NORC Norcasia 146.56 31** *e*P **PKPbc** **01 06 44.4 +0.2**
**GUY2C Guyana, Caldas 146.62 32** *e*P **PKPdf** **01 06 43.7 +0.3**
**SPBC San Pablo de B 146.85 30** *e*P **PKPbc** **01 06 44.2 -0.8**
**RUSC La Rusia 147.07 28** *e*P **PKPdf** **01 06 43.2 -0.9**
**CHIC Chingaza 147.91 30** *e*P **PKPbc** **01 06 48.0 -0.4**
**POPC Popayan, Colom 148.22 37** *e*P **PKPbc** **01 06 48.8 -0.2**
**SOTA Rioblanco 148.59 37** *e*P **PKPdf** **01 06 47.8 +1.1**

*UCR **09** 00:54:16.2±1.7,8.7°16N×82.7°76W,h8km±6km,MW4.3*
*UPA **09** 00:54:16.2±2.4,8.7°17N×82.7°76W,h6km±6km,MW4.0*
**ISC 09 00:54:16.0**±0.9,**8.2°15N**±0.7°04×**82.7°76W**±0.7°02,**h12**km±7km,
**n49,σ1°902/62,1C-5D,Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LIMO3** | **Limones** | **0.11** | **247** | ⇓*i* | P | **Pg** | | **00 54 17.9** | **-1.0** |
| **PTPM** | **Petroterminale** | **0.13** | **297** | ⇓*i* | P | **Pg** | | **00 54 18.9** | **-0.3** |
| PTPM | | | | | *i* S | **Sg** | | **00 54 22.1** | **+0.6** |
| **LESP3** | **La Esperanza,** | **0.26** | **354** | *i* | P | **Pg** | | **00 54 21.6** | **+0.2** |
| LESP3 | | | | | *i* S | **Sg** | | **00 54 26.5** | **+1.4** |
| **CCOL** | **Caracol de Cor** | **0.33** | **321** | *e* | P | **Pg** | | **00 54 23.0** | **+0.3** |
| **DVD** | **David** | **0.42** | **47** | *e* | P | **Pg** | | **00 54 24.4** | **+0.1** |
| DVD | | | | | *i* S | **Sb** | | **00 54 32.2** | **+0.4** |
| **CDITO** | **Canoas** | **0.44** | **346** | *e* | P | **Pg** | | **00 54 24.8** | **+0.1** |
| **CDITO** | **Canoas** | **0.44** | **346** | *e* | P | **Pg** | | **00 54 24.6** | **-0.1** |
| CDITO | | | | | eS | **Sb** | | **00 54 32.0** | **-0.3** |
| **LOMA3** | **Las Lomas, Chi** | **0.46** | **52** | *e* | P | **Pg** | | **00 54 24.5** | **-0.7** |
| **CHIR3** | **Chiriqui UPA,** | **0.49** | **60** | ⇓*i* | P | **Pg** | | **00 54 25.9** | **+0.2** |
| **BCO2** | **Palmira** | **0.61** | **22** | *i* | P | **Pg** | | **00 54 28.1** | **+0.1** |
| BCO2 | | | | | *i* S | **Sb** | | **00 54 38.4** | **+0.9** |
| **PIRO** | **Carate, Puerto** | **0.62** | **294** | *e* | P | **Pg** | | **00 54 27.4** | **-0.7** |
| **PIRO** | **Carate, Puerto** | **0.62** | **294** | ⇓*i* | P | **Pg** | | **00 54 27.3** | **-0.8** |
| **MLIR3** | **Monte Lirio, C** | **0.65** | **355** | *i* | P | **Pb** | | **00 54 29.2** | **-0.1** |
| MLIR3 | | | | | eS | **Sb** | | **00 54 38.7** | **+0.3** |
| **BRU2** | **Volcan** | **0.65** | **6** | *i* | P | **Pg** | | **00 54 28.4** | **-0.3** |
| BRU2 | | | | | *i* S | **Sb** | | **00 54 39.1** | **+0.6** |
| **PTJ1** | **Puerto Jimnez** | **0.66** | **306** | *e* | P | **Pg** | | **00 54 29.1** | **+0.2** |
| **LNBQ3** | **Los Naranjos,** | **0.72** | **26** | *i* | P | **Pg** | | **00 54 29.7** | **-0.2** |
| LNBQ3 | | | | | *i* S | **Sb** | | **00 54 39.9** | **-0.5** |
| **REME3** | **Remedios, Chir** | **0.93** | **85** | *i* | P | **Pg** | | **00 54 32.8** | **-1.1** |
| **CHGR2** | **Aguacate** | **1.00** | **38** | *e* | P | **Pg** | | **00 54 33.7** | **-1.5** |
| CHGR2 | | | | | eS | **Sg** | | **00 54 47.5** | **-0.7** |
| **EDPN** | **Palmar Norte** | **1.06** | **320** | *e* | P | **Pg** | | **00 54 35.4** | **-1.1** |
| EDPN | | | | | eS | **Sb** | | **00 54 50.4** | **+0.2** |
| **DRK0** | **Durika** | **1.21** | **337** | *e* | P | **Pg** | | **00 54 37.5** | **-1.8** |
| **DRK0** | **Durika** | **1.21** | **337** | ⇓*e* | P | **Pg** | | **00 54 37.6** | **-1.6** |
| **SRBA** | **San Rafael, Bu** | **1.23** | **331** | *e* | P | **Pg** | | **00 54 37.6** | **-2.1** |
| SRBA | | | | | eS | **Sg** | | **00 54 55.0** | **-0.8** |
| **CNI2** | **El Empalme, Bo** | **1.30** | **13** | *e* | P | **Pn** | | **00 54 38.3** | **-1.8** |
| **PEZE** | **Perez Zeledon,** | **1.53** | **324** | *e* | P | **Pn** | | **00 54 42.9** | **-0.3** |
| **EDDO** | **Dominical** | **1.55** | **315** | *e* | P | **Pn** | | **00 54 43.9** | **+0.4** |
| **GMAL** | **Guarumal, Vera** | **1.56** | **104** | *e* | P | **Pn** | | **00 54 41.5** | **-2.2** |
| **GMAL** | **Guarumal, Vera** | **1.56** | **104** | *e* | P | **Pn** | | **00 54 41.8** | **-1.9** |
| **CDM** | **Cerro de Muert** | **1.71** | **325** | *e* | P | **Pn** | | **00 54 45.8** | **-0.4** |
| **MRVA** | **Moravia de Chi** | **1.80** | **338** | *e* | P | **Pn** | | **00 54 47.2** | **+0.2** |
| **MARI3** | **Mariato, Verag** | **1.82** | **106** | *e* | P | **Pb** | | **00 54 50.4** | **+1.1** |
| **RIMA** | **Rio Macho** | **1.94** | **326** | *e* | P | **Pn** | | **00 54 49.2** | **+0.1** |
| **BATAN** | **Batan** | **2.03** | **343** | *e* | P | **Pb** | | **00 54 52.2** | **-0.7** |
| **CACAO** | **El Cacao, Vera** | **2.04** | **113** | *i* | P | **Pn** | | **00 54 50.8** | **+0.5** |
| CACAO | | | | | *i* S | **Sn** | | **00 55 17.1** | **+1.3** |
| **OCM** | **Ochomogo** | **2.10** | **326** | *e* | P | **Pn** | | **00 54 52.6** | **+1.3** |
| **HDC** | **Heredia** | **2.28** | **324** | *e* | P | **Pb** | | **00 54 57.5** | **+0.3** |
| **CHIT3** | **Chitre** | **2.33** | **94** | *e* | P | **Pn** | | **00 54 54.9** | **+0.7** |
| **JACO** | **JACO, Garabito** | **2.41** | **309** | *e* | P | **Pn** | | **00 54 54.5** | **-0.8** |
| **PNME** | **Penonome** | **2.43** | **82** | *e* | P | **Pn** | | **00 54 56.5** | **+0.8** |
| **AZU** | **Azuero** | **2.49** | **98** | *e* | P | **Pn** | | **00 54 57.2** | **+0.8** |
| AZU | | | | | eS | **Sn** | | **00 55 28.3** | **+1.6** |
| **VTON** | **El Valle, Cocl** | **2.66** | **80** | *e* | P | **Pn** | | **00 55 00.8** | **+1.9** |
| **ZANG** | **Zanguenga, Cho** | **2.98** | **74** | *e* | P | **Pb** | | **00 55 06.7** | **-2.3** |
| **JTS** | **Las Juntas de** | **3.04** | **315** | *e* | P | **Pn** | | **00 55 05.5** | **+1.5** |
| **JTS** | **Las Juntas de** | **3.04** | **315** | ⇑*e* | P | **Pn** | | **00 55 04.3** | **+0.3** |
| **BCIP** | **Isla Barro Col** | **3.06** | **70** | *e* | P | **Pb** | | **00 55 09.5** | **-1.0** |
| **INDI** | **Punta indio, G** | **3.20** | **302** | *e* | P | **Pn** | | **00 55 06.2** | **0.0** |
| **GRZA** | **Playa Garza** | **3.34** | **302** | *e* | P | **Pn** | | **00 55 07.8** | **-0.3** |
| **PLVR** | **Palo Verde** | **3.36** | **311** | *e* | P | **Pn** | | **00 55 09.7** | **+1.1** |
| **ORTG** | **Ortega, Santa** | **3.46** | **310** | *e* | P | **Pn** | | **00 55 10.8** | **+1.0** |
| **SAJU** | **San Juanillo,** | **3.48** | **303** | *e* | P | **Pn** | | **00 55 09.6** | **-0.4** |

*IDC **09** 00:54:20.9±2.2,28.2°32N×43.7°79W,h0km,mb3.7/6,*
*mb1 3.9/6,mb1mx3.5/62,mbtmp3.7/6, Error ellipse:*
*s-maj=75.8km s-min=26.7km az=15.0*
**ISC 09 00:54:22.9**±2.0,**28.3°3N**±0.5°×**43.8°8W**±0.2,**h14**km,**n11,**
**σ0°550/6,mb3.8/6,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **44.87** | **100** | P | | **P** | | **01 02 37.2** | **0.0** |
| | 1.1nm,1.0s,baz=289,slow=7.2,SNR=3.5 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.72** | **137** | T | | T | | 01 51 29.0 | |
| | baz=322,slow=75,SNR=32 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.72** | **137** | T | | T | | 01 51 29.2 | |
| | baz=322,slow=75,SNR=34 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.74** | **137** | T | | T | | 01 51 30.4 | |
| | baz=322,slow=75,SNR=34 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.51** | **138** | T | | T | | 01 52 29.1 | |
| | baz=323,slow=74,SNR=69 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.52** | **138** | T | | T | | 01 52 29.8 | |
| | baz=257,slow=74,SNR=32 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **54.16** | **304** | P | | **P** | | **01 03 48.6** | **+0.6** |
| | 1.1nm,0.8s,baz=87,slow=7.5,SNR=6.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.49** | **328** | P | | **P** | | **01 04 03.7** | **-0.5** |
| | 0.4nm,0.8s,baz=85,slow=7.6,SNR=3.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **58.18** | **46** | P | | **P** | | **01 04 16.3** | **0.0** |
| | 1.0nm,0.7s,baz=276,slow=5.7,SNR=5.7 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.52** | **301** | P | | **P** | | **01 04 39.5** | **-0.3** |
| | 0.3nm,0.6s,baz=80,slow=7.4,SNR=2.5 | | | | | | | | |
| **INK** | **Inuvik** | **63.96** | **336** | P | | **P** | | **01 04 55.5** | **+0.3** |
| | 1.2nm,0.9s,baz=55,slow=5.8,SNR=3.1 | | | | | | | | |

*BJI **09** 01:11:18.0±0.0,53.°30N×171.°36E,h8km,mb4.5/28,*
*mB5.2/10,Ms4.8/3,Ms7 4.5/2*
*IDC **09** 01:11:18.7±0.5,52.°88N×171.°44E,h0km,mb4.3/35,*
*mb1 4.5/36,mb1mx4.4/57,mbtmp4.3/36,ML3.5/1,MS3.7/5,*
*Ms1 3.7/5,ms1mx3.1/94,Error ellipse: s-maj=15.6km*
*s-min=9.5km az=172.0*

*KRSC **09** 01:11:19.3±2.5,52.°58N×171.°04E,h33km±73km,ML4.7*
*MOS **09** 01:11:22.6±1.0,52.°82N×171.°22E,h38km,mb4.7/28,Error*
*ellipse: s-maj=7.2km s-min=4.2km az=130.1*
*NEIC **09** 01:11:24±1.4,52.°8N±0.°1×171.°43E±0.°10,h36km±6km,*
*mb4.6/85,Error ellipse: s-maj=18.6km s-min=8.4km*
*az=179.0*
**ISC 09 01:11:23.7**±0.5,**52.°64N**±0.°07×**171.°35E**±0.°04,**h37**km±1km,
**n349,σ1°969/375,mb4.6**/119,**MS3.8**/4,**37C-9D,Near**
**Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SHEM** | **Shemya Is, Ala** | **1.68** | **86** | Pg | | **Pn** | | **01 11 49.2** | **-1.2** |
| | 166nm,0.3s,baz=295,slow=2.1,SNR=73 | | | | | | | | |
| SHEM | | | | Lg | | Lg | | 01 12 10.3 | |
| | 360nm,0.3s,baz=252,slow=15,SNR=23 | | | | | | | | |
| SHEM | | | | LR | | LR | | 01 12 11.2 | |
| | comp=Z,312nm,19.4s,baz=180,slow=32 | | | | | | | | |
| **SMY** | **Shemya** | **1.68** | **86** | Pn | | **Pn** | | **01 11 48.8** | **-1.6** |
| SMY | | | | Sn | | Sn | | **01 12 09.7** | **-0.8** |
| **BKI** | **Bering** | **4.09** | **311** | P | | **Pn** | | **01 12 21.8** | **-1.7** |
| **BKI** | **Bering** | **4.09** | **311** | P | | **Pn** | | **01 12 22.1** | **-1.4** |
| BKI | | | | S | | **Sn** | | **01 13 07.7** | **-2.3** |
| **MKZ** | **Mys Kozlova** | **6.04** | **292** | P | | **Pn** | | **01 12 48.8** | **-1.5** |
| **MKZ** | **Mys Kozlova** | **6.04** | **292** | P | | **Pn** | | **01 12 48.2** | **-2.1** |
| MKZ | | | | S | | **Sn** | | **01 13 53.9** | **-4.2** |
| **KBTR** | **Krutoberegovo** | **6.13** | **309** | P | | **Pn** | | **01 12 49.8** | **-1.7** |
| **KBTR** | **Krutoberegovo** | **6.13** | **309** | P | | **Pn** | | **01 12 49.8** | **-1.7** |
| KBTR | | | | S | | **Sn** | | **01 13 57.3** | **-3.0** |
| **SPN** | **Mys Shipunski** | **6.88** | **278** | P | | **Pn** | | **01 13 00.1** | **-1.7** |
| SPN | | | | S | | **Sn** | | **01 14 10.4** | **-8.3** |
| **SPN** | **Mys Shipunski** | **6.88** | **278** | P | | **Pn** | | **01 12 59.1** | **-2.7** |
| SPN | | | | S | | **Sn** | | **01 14 14.0** | **-4.7** |
| **TUMD** | **Tumrok D** | **6.96** | **296** | P | | **Pn** | | **01 13 01.2** | **-1.8** |
| TUMD | | | | S | | **Sn** | | **01 14 18.6** | **-2.2** |
| **SMKR** | **Semkarok** | **6.96** | **308** | P | | **Pn** | | **01 13 03.4** | **+0.3** |
| **ZLN** | **Zelenaya** | **7.03** | **303** | P | | **Pn** | | **01 13 04.3** | **+0.3** |
| **BZGR** | **Bezymyannyi-Gr** | **7.06** | **302** | P | | **Pn** | | **01 13 05.1** | **+0.7** |
| **BZGR** | **Bezymyannyi-Gr** | **7.06** | **302** | P | | **Pn** | | **01 13 04.8** | **+0.4** |
| BZGR | | | | S | | **Sn** | | **01 14 21.2** | **-2.1** |
| **BDR** | **Baidarnaya** | **7.08** | **308** | P | | **Pn** | | **01 13 06.1** | **+1.4** |
| **CIRR** | **Tsirk** | **7.10** | **304** | P | | **Pn** | | **01 13 04.6** | **-0.4** |
| **LGNR** | **Loginova** | **7.12** | **303** | P | | **Pn** | | **01 13 04.9** | **-0.4** |
| **LGNR** | **Loginova** | **7.12** | **303** | P | | **Pn** | | **01 13 05.0** | **-0.4** |
| LGNR | | | | S | | **Sn** | | **01 14 23.2** | **-1.8** |
| **TUMR** | **Tumrok** | **7.12** | **296** | P | | **Pn** | | **01 13 05.1** | **-0.2** |
| **TUMR** | **Tumrok** | **7.12** | **296** | P | | **Pn** | | **01 13 04.9** | **-0.4** |
| TUMR | | | | S | | **Sn** | | **01 14 23.8** | **-1.1** |
| **SRKR** | **Sorokina** | **7.14** | **308** | P | | **Pn** | | **01 13 06.9** | **+1.4** |
| **SRKR** | **Sorokina** | **7.14** | **308** | P | | **Pn** | | **01 13 05.7** | **+0.2** |
| **BZWR** | **Bezymyannyi-We** | **7.17** | **302** | P | | **Pn** | | **01 13 05.1** | **-0.9** |
| **BZWR** | **Bezymyannyi-We** | **7.17** | **302** | P | | **Pn** | | **01 13 04.9** | **-1.1** |
| **KMNR** | **Kamenistaya** | **7.23** | **300** | P | | **Pn** | | **01 13 05.7** | **-1.0** |
| **KMNR** | **Kamenistaya** | **7.23** | **300** | P | | **Pn** | | **01 13 05.7** | **-1.0** |
| KMNR | | | | S | | **Sn** | | **01 14 26.3** | **-1.2** |
| **KLY** | **Klyuchi** | **7.24** | **305** | P | | **Pn** | | **01 13 05.1** | **-1.6** |
| **KLY** | **Klyuchi** | **7.24** | **305** | P | | **Pn** | | **01 13 05.7** | **-1.0** |
| KLY | | | | S | | **Sn** | | **01 14 24.9** | **-2.6** |
| **KRSR** | **Krestovskiy** | **7.24** | **304** | P | | **Pn** | | **01 13 04.7** | **-2.2** |
| **KRSR** | **Krestovskiy** | **7.24** | **304** | P | | **Pn** | | **01 13 07.1** | **+0.2** |
| KRSR | | | | S | | **Sn** | | **01 14 26.1** | **-1.6** |
| **KIRR** | **Kirishev** | **7.25** | **302** | P | | **Pn** | | **01 13 06.1** | **-0.2** |
| **KIRR** | **Kirishev** | **7.25** | **302** | P | | **Pn** | | **01 13 06.4** | **-0.6** |
| KIRR | | | | S | | **Sn** | | **01 14 26.0** | **-2.0** |
| **KII** | **Karymskiy** | **7.26** | **286** | P | | **Pn** | | **01 13 06.5** | **-0.7** |
| **NLC** | **Nalytchevo** | **7.28** | **279** | P | | **Pn** | | **01 13 06.7** | **-0.7** |
| **NLC** | **Nalytchevo** | **7.28** | **279** | S | | **Sn** | | **01 14 22.6** | **-6.1** |
| **KPT** | **Kopyto** | **7.31** | **301** | P | | **Pn** | | **01 13 07.5** | **-0.4** |
| **KPT** | **Kopyto** | **7.31** | **301** | P | | **Pn** | | **01 13 07.3** | **-0.6** |
| KPT | | | | S | | **Sn** | | **01 14 28.9** | **-0.6** |
| **KOZ** | **Kozyrevsk** | **7.53** | **302** | P | | **Pn** | | **01 13 11.2** | **+0.4** |
| **KOZ** | **Kozyrevsk** | **7.53** | **302** | P | | **Pn** | | **01 13 10.6** | **-0.2** |
| KOZ | | | | S | | **Sn** | | **01 14 32.9** | **-1.9** |
| **SDLR** | **Sedlovina** | **7.56** | **280** | P | | **Pn** | | **01 13 10.4** | **-0.9** |
| **SDLR** | **Sedlovina** | **7.56** | **280** | P | | **Pn** | | **01 13 10.3** | **-1.0** |
| **UGLR** | **Uglovaya** | **7.60** | **279** | P | | **Pn** | | **01 13 10.9** | **-0.9** |
| **UGLR** | **Uglovaya** | **7.60** | **279** | P | | **Pn** | | **01 13 11.1** | **-0.7** |
| **SMAR** | **Somma** | **7.61** | **280** | P | | **Pn** | | **01 13 10.9** | **-1.2** |
| **SMAR** | **Somma** | **7.61** | **280** | P | | **Pn** | | **01 13 10.7** | **-1.4** |
| **KRER** | **Koryakskii** | **7.64** | **280** | P | | **Pn** | | **01 13 11.7** | **-0.8** |
| **KRER** | **Koryakskii** | **7.64** | **280** | P | | **Pn** | | **01 13 11.7** | **-0.8** |
| **DALK** | **Dalny** | **7.64** | **278** | P | | **Pn** | | **01 13 11.8** | **-0.5** |
| **DALK** | **Dalny** | **7.64** | **278** | P | | **Pn** | | **01 13 10.9** | **-1.4** |
| **AVH** | **Avacha** | **7.65** | **280** | P | | **Pn** | | **01 13 11.9** | **-0.6** |
| **AVH** | **Avacha** | **7.65** | **280** | P | | **Pn** | | **01 13 11.8** | **-0.7** |
| AVH | | | | S | | **Sn** | | **01 14 35.1** | **-2.7** |
| **PET** | **Petropavlovsk** | **7.70** | **278** | *e*P | | **Pn** | | **01 13 15.2** | **+2.1** |
| PET | | | | *e*S | | **Sn** | | **01 14 34.0** | **-5.0** |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,28nm,0.5s | | | | | | | | |
| PET | | | | smax | smax | | | | |
| | comp=N,80nm,0.6s | | | | | | | | |
| PET | | | | smax | smax | | | | |
| | comp=E,106nm,0.7s | | | | | | | | |
| **PET** | **Petropavlovsk** | **7.70** | **278** | | | **Pn** | | **01 13 14.1** | **+1.0** |
| **KOK** | **Koryaka** | **7.71** | **280** | P | | **Pn** | | **01 13 12.3** | **-1.0** |
| **KOK** | **Koryaka** | **7.71** | **280** | P | | **Pn** |

**KDAK Kodiak Island** 21.03 62 P **P** **01 16 03.4 -0.5**
**RSO Redoubt South** 21.04 54 P **P** **01 16 04.4 +0.1**
**J20K Nowinta River** 21.14 43 P **P** **01 16 03.6 -1.3**
**H21K Melozitna Rive** 22.13 40 P **P** **01 16 14.2 -1.4**
H21K IAmb IAmb 01 16 19.6
comp=Z,19nm,0.7s
**KTH Kantishna Hill** 22.37 46 P **P** **01 16 17.3 -0.9**
KTH IAmb IAmb 01 16 22.7
comp=Z,17nm,0.9s
**BPAW Bear Paw Mtn.** 22.45 45 P **P** **01 16 18.7 -0.5**
**TRF Thorofare Moun** 22.62 46 P **P** **01 16 19.5 -1.6**
TRF IAmb IAmb 01 16 30.8
comp=Z,24nm,1.2s
**MLY Manley** 22.78 42 P **P** **01 16 21.8 -0.8**
**BWN Browne** 23.12 45 P **P** **01 16 25.7 -0.4**
**KNK Knik Glacier** 23.21 52 P **P** **01 16 25.2 -1.9**
KNK IAmb IAmb 01 16 29.7
comp=Z,21nm,0.8s
**MCK McKinley** 23.27 46 P **P** **01 16 26.4 -1.2**
MCK pmax pmax
comp=Z,12nm,0.8s
**MCK McKinley** 23.27 46 P **P** **01 16 26.4 -1.2**
MCK IAmb IAmb 01 16 30.2
comp=Z,12nm,0.8s
**SML Sawmill** 23.30 51 P **P** **01 16 26.2 -1.7**
SML IAmb IAmb 01 16 38.2
comp=Z,28nm,1.2s
**NEA2 Nenana** 23.38 44 P **P** **01 16 26.9 -1.7**
NEA2 IAmb IAmb 01 16 32.4
comp=Z,9.2nm,0.7s
**I23K Minto, Yukon-K** 23.38 42 P **P** **01 16 26.1 -2.4**
I23K IAmb IAmb 01 16 39.9
comp=Z,20nm,1.4s
**COLD Coldfoot** 23.63 37 P **P** **01 16 28.1 -3.0**
**WRH Wood River Hil** 23.77 44 P **P** **01 16 30.0 -2.3**
**MDM Murphy Dome** 23.80 43 P **P** **01 16 30.7 -2.0**
MDM IAmb IAmb 01 16 35.7
comp=Z,16nm,0.6s
**CCB Clear Creek Bu** 23.92 44 P **P** **01 16 32.0 -1.7**
CCB IAmb IAmb 01 16 35.9
comp=Z,12nm,0.7s
**TCOL CIGO, UAF Yank** 23.94 43 P **P** **01 16 32.8 -1.1**
**COLA College** 23.94 43 *i* P **P** **01 16 34.9 +1.0**
COLA pmax pmax
comp=Z,21nm,0.9s
**COLA College** 23.94 43 P **P** **01 16 32.9 -1.0**
**YAK Yakutsk** 23.96 309 P **P** **01 16 33.0 -1.0**
comp=Z,7.1nm,0.5s,baz=288,slow=0.6,SNR=1.5
**YAK Yakutsk** 23.96 309 *eP* **P** **01 16 33.1 -1.0**
YAK *e**PP **pwP** **01 16 45.6 -1.9**
YAK *e* 01 17 01.8
YAK *e*S **S** **01 20 45.3 -2.7**
YAK *e**SS Sn 01 21 06.2 -6.7
YAK *e*SS **SnSn** **01 21 33.7 +4.2**
YAK *e* 01 27 41.4
YAK pmax pmax
comp=Z,14nm,1.0s
YAK pmax pmax
comp=N,5.0nm,1.3s
YAK pmax pmax
comp=E,3.0nm,1.1s
YAK pmax pmax
comp=Z,347nm,5.3s
YAK pmax pmax
comp=N,261nm,6.2s
YAK pmax pmax
comp=E,315nm,6.2s
YAK smax smax
comp=E,118nm,4.6s
YAK smax smax
comp=N,90nm,4.1s
**H24K Noodor Dome** 24.14 41 P **P** **01 16 35.2 -0.7**
**POKR Poker Plat Res** 24.17 43 P **P** **01 16 35.6 -0.4**
POKR IAmb IAmb 01 16 39.2
comp=Z,21nm,0.8s
**HDA Harding Lake** 24.25 45 P **P** **01 16 36.0 -0.7**
**IL31** 24.33 44 P **P** **01 16 35.2 -2.3**
**ILAR Eielson Array** 24.33 44 P **P** **01 16 35.0 -2.6**
comp=Z,6.1nm,0.6s,baz=249,slow=7.2,SNR=33
**ILAR Eielson Array** 24.33 44 P **P** **01 16 35.6 -1.9**
**ILAR Eielson Array** 24.33 44 P **P** **01 16 35.6 -1.9**
**TOLK Toolik Lake Re** 24.35 34 P **P** **01 16 35.9 -1.8**
TOLK IAmb IAmb 01 16 41.7
comp=Z,8.5nm,0.6s
**KLU Klutina** 24.43 52 P **P** **01 16 37.3 -1.3**
KLU IAmb IAmb 01 16 41.9
comp=Z,18nm,0.8s
**PAX Paxson** 24.73 48 P **P** **01 16 38.8 -2.5**
PAX pmax pmax
comp=Z,18nm,0.9s
**PAX Paxson** 24.73 48 P **P** **01 16 38.8 -2.5**
PAX IAmb IAmb 01 16 51.0
comp=Z,18nm,0.9s
**J25K Salcha River,** 24.95 44 P **P** **01 16 39.8 -3.4**
J25K IAmb IAmb 01 16 44.6
comp=Z,6.7nm,0.6s
**KLR Kul'dur** 24.97 278 P **P** **01 16 44.2 +0.8**
comp=Z,9.6nm,0.8s,baz=67,slow=7.7,SNR=31
**KLR Kul'dur** 24.97 278 *ceP* **P** **01 16 44.7 +1.3**
KLR pmax pmax
comp=Z,12nm,0.9s
**BMRM Bremner River** 25.07 53 P **P** **01 16 42.7 -1.6**
**FYU Fort Yukon** 25.35 40 P **P** **01 16 45.6 -1.0**
**DOT Dot Lake** 25.41 47 P **P** **01 16 46.7 -0.7**
DOT IAmb IAmb 01 16 50.4
comp=Z,17nm,0.8s
**GLB Gilahina Butte** 25.45 52 P **P** **01 16 47.0 -0.7**
GLB IAmb IAmb 01 16 51.5
comp=Z,17nm,0.7s
**SCRK Sand Creek** 25.48 46 P **P** **01 16 45.2 -2.9**
SCRK IAmb IAmb 01 16 49.3
comp=Z,11nm,0.8s
**MENT Mentasta** 25.52 49 P **P** **01 16 46.9 -1.5**
**VRDI Verde Repeater** 25.62 53 P **P** **01 16 47.8 -1.7**
VRDI IAmb IAmb 01 16 53.9
comp=Z,22nm,0.8s
**L26K Log Cabin Wild** 25.70 48 P **P** **01 16 49.0 -1.0**
L26K IAmb IAmb 01 16 54.3
comp=Z,8.4nm,0.8s
**J26L Joseph Creek** 25.71 45 P **P** **01 16 47.6 -2.6**
J26L IAmb IAmb 01 16 52.7
comp=Z,6.9nm,0.6s
**BMAR Burnt Mountain** 25.78 38 P **P** **01 16 49.6 -1.1**
**ZEA Zeya** 26.13 290 *eP* **P** **01 16 54.1 +0.2**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**M27K Edge Creek, AK** 26.36 50 P **P** **01 16 55.7 -0.4**
M27K IAmb IAmb 01 17 02.1
comp=Z,15nm,0.9s
**L27K Beaver Creek,** 26.39 48 P **P** **01 16 55.2 -1.0**
L27K IAmb IAmb 01 17 00.2
comp=Z,8.0nm,0.7s
**BARN Barnard Glacie** 26.50 53 P **P** **01 16 55.2 -2.2**
BARN IAmb IAmb 01 17 03.6
comp=Z,22nm,0.9s
**TIXI Tiksi** 26.57 331 P **P** **01 16 55.9 -1.8**
comp=Z,3.7nm,0.8s,baz=270,slow=23,SNR=8.0
**TIXI Tiksi** 26.57 331 *ceP* **P** **01 16 57.0 -0.7**
TIXI pmax pmax
comp=Z,9.0nm,1.3s
**TIXI Tiksi** 26.57 331 P **P** **01 16 56.1 -1.5**
**EGAK Eagle** 26.77 45 P **P** **01 16 57.8 -1.7**
**USRK Ussuriysk Ar.** 27.16 268 P **P** **01 17 03.7 +0.4**
comp=Z,5.2nm,0.7s,baz=76,slow=14,SNR=4.3
**DAWY Dawson** 27.50 46 P **P** **01 17 04.9 -1.3**
DAWY IAmb IAmb 01 17 12.5
comp=Z,24nm,1.4s
**J29M Klondike Camp** 28.02 45 P **P** **01 17 10.3 -0.6**
**BNX BinXian** 29.16 274 ⇓P **P** **01 17 21.3 +0.2**
BNX pmax pmax
comp=Z,29nm,0.8s
BNX pmax pmax
comp=Z,390nm,5.4s
**M31M Drury Creek, Y** 29.86 50 P **P** **01 17 25.7 -1.5**
M31M IAmb IAmb 01 17 30.5
comp=Z,10nm,1.1s
**INK Inuvik** 30.05 38 P **P** **01 17 26.5 -2.2**
comp=Z,1.9nm,0.5s,baz=261,slow=10,SNR=11
INK PcP **PcP** **01 20 29.8 +0.2**
comp=Z,0.9nm,0.5s,baz=286,slow=2.3,SNR=5.3
**INK Inuvik** 30.05 38 P **P** **01 17 26.6 -2.2**
INK PcP **PcP** **01 20 29.5 -0.1**
**CN2 Changchun** 31.36 272 *eP* **P** **01 17 40.4 -0.1**
CN2 pmax pmax
comp=Z,10.0nm,0.6s

**H11N2 WAKE ISLAND Hy** 33.03 188 T T 01 53 15.2
baz=5.0,slow=76,SNR=88
**H11N3 WAKE ISLAND Hy** 33.04 188 T T 01 53 15.7
baz=5.0,slow=76,SNR=75
**H11N1 WAKE ISLAND Hy** 33.05 188 T T 01 53 16.2
baz=5.0,slow=76,SNR=79
**C36M Paulatuk** 33.48 36 P **P** **01 17 57.5 -1.2**
C36M IAmb IAmb 01 18 01.5
comp=Z,8.7nm,0.9s
**KSRS Korea Array** 33.66 261 P **P** **01 18 02.8 +2.1**
comp=Z,4.5nm,1.2s,baz=55,slow=6.4,SNR=4.6
**H11S1 WAKE ISLAND Hy** 34.26 188 T T 01 54 53.5
baz=5.0,slow=76,SNR=352
**H11S3 WAKE ISLAND Hy** 34.27 188 T T 01 54 58.8
baz=5.0,slow=76,SNR=277
**H11S2 WAKE ISLAND Hy** 34.27 188 T T 01 54 52.9
baz=5.0,slow=76,SNR=214
**YKA Yellowknife Ar** 38.74 46 P **P** **01 18 42.8 -1.0**
comp=Z,3.6nm,0.7s,baz=292,slow=7.7,SNR=16
YKA PcP **PcP** **01 20 54.1 -0.5**
comp=Z,0.7nm,0.7s,baz=292,slow=3.3,SNR=7.9
**YKA Yellowknife Ar** 38.74 46 P **P** **01 18 41.5 -2.2**
**NRIK Noril'sk** 40.12 327 P **P** **01 18 53.9 -1.4**
comp=Z,0.7nm,0.3s,baz=90,slow=13,SNR=1.7
**ULN Ulaanbaatar** 40.17 290 *ceP* **P** **01 18 56.6 +0.5**
ULN pmax pmax
comp=Z,4.0nm,1.3s
**ULN Ulaanbaatar** 40.17 290 P **P** **01 18 56.0 -0.1**
**SONM Songino Array** 40.56 290 P **P** **01 18 59.8 +0.5**
comp=Z,2.0nm,0.6s,baz=63,slow=7.9,SNR=21
SONM PcP **PcP** **01 21 01.3 +0.3**
comp=Z,0.9nm,0.9s,baz=80,slow=1.3,SNR=3.8
**SONM Songino Array** 40.56 290 P **P** **01 18 57.5 -1.8**
**EDM Edmonton** 43.41 58 P **P** **01 19 19.9 -2.5**
EDM pmax pmax
comp=Z,9.0nm,0.9s
**EDM Edmonton** 43.41 58 P **P** **01 19 19.9 -2.5**
EDM IAmb IAmb 01 19 31.9
comp=Z,8.8nm,0.9s
**LYN LuoYang** 44.96 270 ⇓P **P** **01 19 37.1 +2.1**
LYN pmax pmax
comp=Z,10.0nm,1.3s
**ZALV Zalesovo Beam** 48.60 308 P **P** **01 20 01.9 -1.2**
comp=Z,0.4nm,0.4s,baz=59,slow=6.9,SNR=4.3
ZALV PcP **PcP** **01 21 28.8 +0.6**
comp=Z,0.3nm,0.3s,baz=48,slow=2.1,SNR=2.0
**ZALV Zalesovo Beam** 48.60 308 P **P** **01 20 01.4 -1.7**
**LZH Lanzhou** 49.17 278 *eP* **P** **01 20 09.7 +1.7**
LZH pP pP 01 20 14.9 -2.9
LZH pmax pmax
comp=Z,17nm,1.4s
**NVAR Mina Array Bea** 49.33 77 P **P** **01 20 09.1 -0.1**
comp=Z,0.8nm,0.8s,baz=294,slow=6.8,SNR=4.8
NVAR PcP **PcP** **01 21 31.9 +0.5**
comp=Z,0.5nm,0.6s,baz=316,slow=2.5,SNR=2.6
**NVAR Mina Array Bea** 49.33 77 P **P** **01 20 07.8 -1.4**
**FCC Fort Churchill** 49.35 43 P **P** **01 20 06.9 -1.9**
FCC pmax pmax
comp=Z,8.0nm,1.1s
**FCC Fort Churchill** 49.35 43 P **P** **01 20 06.9 -1.9**
FCC IAmb IAmb 01 20 09.3
comp=Z,8.0nm,1.1s
**GTA Gaotai** 49.39 285 *eP* **P** **01 20 10.2 +0.6**
GTA pP pP 01 20 17.3 -2.1
GTA sP sP 01 20 20.2 -2.2
GTA pmax pmax
comp=Z,5.0nm,0.9s
**DGZ Jazzator, Alta** 49.84 302 *i* P **P** **01 20 11.8 -1.1**
DGZ pmax pmax
comp=Z,2.0nm,1.0s
**PD31 Pinedale Array** 51.59 67 P **P** **01 20 25.4 -0.9**
**PDAR Pinedale Array** 51.59 67 P **P** **01 20 25.6 -0.7**
comp=Z,1.1nm,0.8s,baz=296,slow=3.2,SNR=9.3
**SUMG Summit** 53.36 11 *i* P **P** **01 20 38.0 -1.2**
**KURK Kurchatov** 53.59 308 P **P** **01 20 39.8 -0.8**
KURK pmax pmax
comp=Z,10.0nm,1.2s
**KURK Kurchatov** 53.59 308 P **P** **01 20 39.8 -0.8**
KURK IAmb IAmb 01 20 50.8
comp=Z,9.7nm,1.1s
**MDND Maddock** 53.64 57 P **P** **01 20 40.4 -0.6**
**ULM Lac du Bonnet** 53.91 53 P **P** **01 20 42.0 -1.0**
comp=Z,4.7nm,0.7s,baz=304,slow=6.3,SNR=6.2
**ULM Lac du Bonnet** 53.91 53 P **P** **01 20 42.0 -1.0**
**MK31 Makanchi Array** 54.34 302 P **P** **01 20 44.9 -1.3**
MK31 pmax pmax
comp=Z,1.0nm,1.0s
**MK31 Makanchi Array** 54.34 302 P **P** **01 20 44.9 -1.3**
**MKAR Makanchi Array** 54.34 302 P **P** **01 20 44.8 -1.5**
comp=Z,0.8nm,0.5s,baz=59,slow=6.3,SNR=20
**MKAR Makanchi Array** 54.34 302 *ceP* **P** **01 20 49.0 +2.8**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**GOMU GeErMu** 54.48 285 P **P** **01 20 45.5 -2.3**
GOMU PcP **PcP** **01 21 46.1 -4.8**
GOMU pmax pmax
comp=Z,4.0nm,1.0s
**MAKZ Makanchi** 54.49 302 P **P** **01 20 45.6 -1.7**
MAKZ pmax pmax
comp=Z,3.0nm,1.1s
**MAKZ Makanchi** 54.49 302 P **P** **01 20 45.6 -1.7**
**PV13 Radium Mtn., P** 55.06 71 P **P** **01 20 51.8 0.0**
PV13 IAmb IAmb 01 20 52.7
comp=Z,5.8nm,0.7s
**AGMN Agassiz Nation** 55.22 54 P **P** **01 20 52.0 -0.6**
**ARCES ARCESS Array B** 55.61 346 P **P** **01 20 54.6 -0.4**
comp=Z,3.2nm,0.8s,baz=21,slow=7.7,SNR=5.4
**BRVK Borovoye** 55.84 314 *ceP* **P** **01 20 56.3 -0.6**
BRVK pmax pmax
comp=Z,9.0nm,1.0s
**BRVK Borovoye** 55.84 314 P **P** **01 20 56.2 -0.6**
BRVK IAmb IAmb 01 20 57.0
comp=Z,9.2nm,1.0s
**ARU Arti** 58.12 323 *d i* P **P** **01 21 12.6 -0.4**
ARU 01 23 19.8
ARU S **S** **01 29 09.5 -1.7**
ARU SS **SS** **01 32 56.3 -5.8**
ARU pmax pmax
comp=Z,9.0nm,0.8s
**ARU Arti** 58.12 323 P **P** **01 21 12.1 -0.9**
**PRGR Permogore** 58.22 333 *eP* **P** **01 21 12.8 -0.7**
PRGR pmax pmax
comp=Z,20nm,0.9s
**KIRV Kirov** 59.56 329 *ceP* **P** **01 21 22.1 -0.8**
**KLMR Klimovskoe** 60.50 335 *eP* **P** **01 21 27.7 -1.6**
KLMR pmax pmax
comp=Z,18nm,1.2s
**KLMR Klimovskoe** 60.50 335 *eP* **P** **01 21 27.7 -1.6**
KLMR AMP 01 21 30.1
comp=Z,18nm,1.2s
**BOOM Boomskoye usch** 60.59 302 P **P** **01 21 29.6 -0.9**
BOOM pmax pmax
comp=Z,4.0nm,1.2s
**BOOM Boomskoye usch** 60.59 302 P **P** **01 21 29.6 -0.9**
BOOM IAmb IAmb 01 21 32.7
comp=Z,3.6nm,1.1s
**AAK Ala-Archa** 61.22 303 LR LR 01 47 38.0
comp=Z,142nm,21.6s,baz=34,slow=36
**AAK Ala-Archa** 61.22 303 *ceP* **P** **01 21 35.1 +0.3**
AAK pmax pmax
comp=Z,2.0nm,1.3s
**SCHQ Schefferville** 62.56 34 P **P** **01 21 42.1 -1.2**
comp=Z,10nm,0.8s,baz=334,slow=7.1,SNR=11
**SCHQ Schefferville** 62.56 34 P **P** **01 21 42.7 -0.6**
**KSH Kashi** 62.72 300 P **P** **01 21 48.4 +3.6**
KSH pmax pmax
comp=Z,5.0nm,0.8s
**FINES FINESS Array B** 62.95 342 P **P** **01 21 44.6 -1.2**
comp=Z,5.0nm,0.8s,baz=35,slow=10,SNR=7.2
**FINES FINESS Array B** 62.95 342 P **P** **01 21 45.0 -0.8**
**FINES FINESS Array B** 62.95 342 P **P** **01 21 45.0 -0.8**
**ABKAR Akbulak array** 63.05 317 P **P** **01 21 46.3 -0.4**
ABKAR IAmb IAmb 01 21 46.9
comp=Z,6.4nm,1.1s
**LPIG La Paz** 64.25 84 LR LR 01 47 03.4
comp=Z,65nm,18.1s,baz=290,slow=33
**TX31 Lajitas Ar. Si** 64.34 75 P **P** **01 21 55.5 -0.1**
**TX32 Lajitas Array** 64.34 75 P **P** **01 21 55.3 -0.3**
TX32 IAmb IAmb 01 22 01.5
comp=Z,7.1nm,1.4s
**TXAR Lajitas Array** 64.34 75 P **P** **01 21 55.5 -0.1**
comp=Z,1.9nm,0.6s,baz=307,slow=4.4,SNR=32
**TXAR Lajitas Array** 64.34 75 P **P** **01 21 55.2 -0.5**
**CMAR Chiang Mai Arr** 64.89 268 P **P** **01 22 00.4 +1.2**
comp=Z,3.5nm,0.6s,baz=27,slow=7.6,SNR=14

**CMAR Chiang Mai Arr** 64.89 268 *ceP* **P** **01 22 00.7 +1.5**
CMAR pmax pmax
comp=Z,4.0nm,0.6s
**TAPN Taplejung** 65.02 283 *eP* **P** **01 22 00.7 +0.4**
comp=Z,25nm,0.9s
**BELG Belogornoye** 65.22 326 *i* P **P** **01 22 00.9 +0.1**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**NB2 NORSAR Subarra** 65.56 350 P **P** **01 22 02.2 -0.8**
comp=Z,1.8nm,0.6s,baz=13,slow=6.5
**NOA NORSAR Array B** 65.56 350 P **P** **01 22 02.0 -1.0**
comp=Z,4.3nm,0.8s,baz=14,slow=6.5,SNR=12
**NOA NORSAR Array B** 65.56 350 P **P** **01 22 02.0 -1.0**
**GUN Gumba** 65.68 285 *eP* **P** **01 22 04.8 +0.1**
**JIRN Jiri** 65.69 284 *eP* **P** **01 22 05.5 +0.8**
**RAMN Ramite** 65.97 283 *eP* **P** **01 22 06.6 +0.2**
comp=Z,33nm,0.4s
**KKN Kakani** 66.13 285 *eP* **P** **01 22 07.5 +0.1**
comp=Z,20nm,0.5s
**PKI Pulchoki** 66.21 285 *eP* **P** **01 22 07.9 -0.2**
comp=Z,13nm,0.6s
**PKIN Phulchoki** 66.22 285 *eP* **P** **01 22 07.9 -0.1**
comp=Z,8.5nm,0.4s
**OBN Obninsk** 66.28 334 *eP* **P** **01 22 07.3 -0.3**
OBN pmax pmax
comp=Z,7.0nm,0.9s
**DANN Dangsing** 66.60 286 *eP* **P** **01 22 10.4 -0.1**
comp=Z,20nm,0.8s
**PYUN Piuthan** 67.24 287 *eP* **P** **01 22 13.4 -1.0**
comp=Z,11nm,1.0s
**LPSR Galich'ya Gora** 67.82 331 *eP* **P** **01 22 16.4 -1.0**
LPSR pmax pmax
comp=Z,10.0nm,1.2s
**AFI Afiamalu** 67.86 162 LR LR 01 47 57.0
comp=Z,43nm,20.3s,baz=38,slow=32
**O52A Adamsville** 68.06 52 P **P** **01 22 18.4 -0.7**
**VRH Novokhopyorsk** 68.17 329 *eP* **P** **01 22 18.4 -1.3**
VRH pmax pmax
comp=Z,20nm,0.6s
**VORR Voronezh** 68.55 330 *eP* **P** **01 22 21.0 -1.0**
VORR pmax pmax
comp=Z,20nm,0.4s
**NACGM Naroch** 68.87 339 *i* P **P** **01 22 21.4 -2.6**
**CLTN Cedars of Leba** 68.92 58 P **P** **01 22 23.9 -0.7**
**VSR Storozhevoye** 68.96 330 *eP* **P** **01 22 24.0 -0.6**
VSR pmax pmax
comp=Z,10.0nm,1.1s
**KBL Kabul** 70.11 301 P **P** **01 22 30.8 -1.4**
KBL pmax pmax
comp=Z,4.0nm,0.8s
**KBL Kabul** 70.11 301 P **P** **01 22 30.8 -1.4**
KBL IAmb IAmb 01 22 31.4
comp=Z,4.1nm,0.8s
**TKL Tuckaleechee C** 70.56 57 P **P** **01 22 35.4 +0.6**
comp=Z,4.7nm,0.9s,baz=0.0,slow=5.1,SNR=2.3
**TKL Tuckaleechee C** 70.56 57 P **P** **01 22 34.1 -0.6**
TKL IAmb IAmb 01 22 35.6
comp=Z,5.5nm,0.9s
**AKASG Malin Array Be** 72.18 336 P **P** **01 22 43.2 -1.0**
comp=Z,2.8nm,0.5s,baz=27,slow=6.1,SNR=12
**AKASG Malin Array Be** 72.18 336 *ceP* **P** **01 22 43.5 -0.7**
AKASG pmax pmax
comp=Z,3.0nm,0.5s
**AKBB Malin Array Si** 72.18 336 *ceP* **P** **01 22 44.3 +0.1**
**GEYT Alibeck** 72.83 310 P **P** **01 22 48.8 +0.5**
comp=Z,2.2nm,0.7s,baz=2.5,slow=30,SNR=2.7
**GOF Gofitskoye** 73.05 324 ⇑*eP* **P** **01 22 50.2 +0.7**
GOF pmax pmax
comp=Z,34nm,0.9s
**KIV Kislovodsk** 74.13 324 ⇑P **P** **01 22 56.4 +0.4**
**KIV Kislovodsk** 74.13 324 ⇑P **P** **01 22 56.4 +0.4**
**KIV Kislovodsk** 74.13 324 P **P** **01 22 55.5 -0.5**
KIV IAmb IAmb 01 22 57.4
comp=Z,7.7nm,1.1s
**NCK Nalchik** 74.20 323 *i* P **P** **01 22 56.4 +0.1**
NCK pmax pmax
comp=Z,7.0nm,0.8s
**KBZ Khabaz** 74.25 324 P **P** **01 22 57.2 +0.7**
comp=Z,7.9nm,0.8s,baz=17,slow=3.5,SNR=24
**SHA1 Shidzhatmaz** 74.33 324 *i* P **P** **01 22 56.7 -0.6**
**ZEI Tsey** 74.70 323 *eP* **P** **01 22 58.9 -0.6**
ZEI pmax pmax
comp=Z,10.0nm,1.0s
**SORM Soroca** 74.77 335 ⇑P **P** **01 22 57.2 -2.2**
**SORM Soroca** 74.77 335 ⇑P **P** **01 22 57.2 -2.2**
**UPC Upice** 75.13 344 *eP* **P** **01 23 01.1 -0.5**
**UPC Upice** 75.13 344 *eP* **P** **01 23 01.1 -0.5**
**DPC Dobruska-Polom** 75.23 344 *eP* **P** **01 23 01.0 -1.2**
**DPC Dobruska-Polom** 75.23 344 *eP* **P** **01 23 01.0 -1.2**
**MORC Moravsky Berou** 75.57 343 ⇑P **P** **01 23 04.0 -0.1**
**MORC Moravsky Berou** 75.57 343 ⇑P **P** **01 23 04.0 -0.1**
**MORC Moravsky Berou** 75.57 343 *eP* **P** **01 23 03.9 -0.2**
**CRVS Cervenica-Dubn** 75.64 340 *eP* **P** **01 23 04.7 +0.2**
**CRVS Cervenica-Dubn** 75.64 340 *eP* **P** **01 23 04.7 +0.2**
**PRU Pruhonice** 75.88 345 *eP* **P** **01 23 05.8 0.0**
**PRU Pruhonice** 75.88 345 *eP* **P** **01 23 05.8 0.0**
**BUR08 Bucovina Ar. S** 76.00 337 P **P** **01 23 06.0 -0.7**
BUR08 IAmb IAmb 01 23 07.7
comp=Z,5.8nm,0.8s
**BURAR Bucovina Array** 76.03 337 ⇑P **P** **01 23 06.5 -0.3**
**BURAR Bucovina Array** 76.03 337 ⇑P **P** **01 23 06.5 -0.3**
**TRPA Tarpa** 76.15 339 ⇑P **P** **01 23 08.1 +0.8**
**VRAC Vranov** 76.19 343 ⇑P **P** **01 23 08.0 +0.3**
**VRAC Vranov** 76.19 343 ⇑P **P** **01 23 08.0 +0.3**
**VRAC Vranov** 76.19 343 *eP* **P** **01 23 07.6 0.0**
**JAVC Velka Javorina** 76.43 342 *eP* **P** **01 23 09.9 +0.8**
**KRUC Moravsky** 76.46 343 *eP* **P** **01 23 09.2 0.0**
**TESR Tescani** 76.71 336 ⇓P **P** **01 23 10.3 -0.3**
**ARCR ARCALIA** 76.72 338 ⇑P **P** **01 23 11.2 +0.5**
**KHC Kasperske Hory** 76.86 345 *eP* **P** **01 23 11.4 -0.1**
**KHC Kasperske Hory** 76.86 345 *eP* **P** **01 23 11.4 -0.1**
**KHC Kasperske Hory** 76.86 345 P **P** **01 23 10.9 -0.5**
**MODS Modra-Piesok** 76.97 343 *eP* **P** **01 23 14.9 +2.8**
**MODS Modra-Piesok** 76.97 343 *eP* **P** **01 23 14.9 +2.8**
**CKRC Cesky Krumlov** 77.05 345 *eP* **P** **01 23 11.9 -0.6**
**GERES GERESS Array B** 77.12 345 P **P** **01 23 12.7 -0.4**
comp=Z,9.9nm,0.8s,baz=34,slow=5.9,SNR=4.6
**ZST Bratislava** 77.17 343 *eP* **P** **01 23 14.3 +1.1**
**ZST Bratislava** 77.17 343 *eP* **P** **01 23 14.2 +1.1**
**PLOR Plostina** 77.32 336 ⇓P **P** **01 23 12.4 -1.7**
**PLOR Plostina** 77.32 336 ⇓P **P** **01 23 12.4 -1.7**
**DRGR** 77.38 339 ⇑P **P** **01 23 14.6 +0.2**
**DRGR** 77.38 339 ⇑P **P** **01 23 14.6 +0.2**
**COVR Voineasa-Covas** 77.44 336 ⇑P **P** **01 23 15.1 +0.3**
**CONA Conrad Observa** 77.65 343 *i* P **P** **01 23 16.7 +0.8**
comp=Z,4.4nm,1.2s
**MLR Muntele Rosu** 77.84 336 P **P** **01 23 17.2 +0.1**
comp=Z,5.7nm,1.1s,baz=5.7,slow=10,SNR=6.4
**VOIR** 78.11 336 ⇑P **P** **01 23 19.1 +0.5**
**VOIR** 78.11 336 ⇑P **P** **01 23 19.1 +0.5**
**ARR Arges** 78.27 337 ⇑P **P** **01 23 20.2 +0.7**
**ARSA Arzberg** 78.36 343 *i* P **P** **01 23 20.7 +0.8**
comp=Z,4.5nm,0.9s
**GZR Gura Zlata** 78.68 338 ⇓P **P** **01 23 22.0 +0.3**
**GZR Gura Zlata** 78.68 338 ⇓P **P** **01 23 22.0 +0.3**
**KBA Koelnbreinsper** 78.89 345 *eP* **P** **01 23 23.8 +0.8**
comp=Z,17nm,0.9s
**WATA Walderalm** 78.91 346 *i* P **P** **01 23 23.2 +0.2**
comp=Z,8.1nm,1.0s
**MOTA Moosalm** 78.97 346 *i* P **P** **01 23 24.0 +0.6**
comp=Z,11nm,1.1s
**WTTA Wattenberg** 78.97 346 *i* P **P** **01 23 23.7 +0.2**
comp=Z,6.1nm,0.7s
**SOKA Soboth** 79.00 344 *i* P **P** **01 23 24.8 +1.4**
comp=Z,14nm,1.2s
**SQTA Sankt Quirin** 79.08 346 *i* P **P** **01 23 24.9 +1.0**
comp=Z,11nm,1.0s
**WRA Warramunga Arr** 79.11 215 P **P** **01 23 25.3 +1.2**
comp=Z,1.2nm,0.8s,baz=28,slow=6.1,SNR=5.8
**WRA Warramunga Arr** 79.11 215 *ceP* **P** **01 23 26.7 +2.6**
WRA pmax pmax
comp=Z,1.0nm,0.6s
**OBKA Obir** 79.25 344 *eP* **P** **01 23 25.4 +0.5**
comp=Z,2.2nm,0.7s
**HERR Herculane** 79.25 338 ⇑P **P** **01 23 24.1 -0.6**
**ABTA Abfaltersbach** 79.35 345 *i* P **P** **01 23 25.5 +0.2**
comp=Z,8.2nm,1.0s
**TOKA Tokat** 79.49 327 P **P** **01 23 26.2 0.0**
TOKA IAmb IAmb 01 23 28.2
comp=Z,6.8nm,0.7s
**FRGS Fruska Gora** 79.56 340 ⇑P **P** **01 23 25.5 -1.0**
**DAVOX Davos/Dischmat** 79.69 347 P **P** **01 23 27.7 +0.3**
comp=Z,6.4nm,0.9s,baz=345,slow=8.1,SNR=9.4
**MARD Mardin** 80.64 322 P **P** **01 23 32.4 -0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARD | | | | | IAmb | IAmb | 01 23 34.2 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **80.80** | **224** | | P | **P** | **01 23 34.8** | **+1.5** |
| | comp=Z,2.6nm,0.7s,baz=9.4,slow=4.6,SNR=14 | | | | | | | |
| **TEOL** | **Teolo** | **80.83** | **346** | | P | **P** | **01 23 33.3** | **0.0** |
| **BR131** | **Keskin Array S** | **80.96** | **328** | | P | **P** | **01 23 33.5** | **-0.8** |
| BR131 | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BR131** | **Keskin Array S** | **80.96** | **328** | | P | **P** | **01 23 33.5** | **-0.8** |
| BR131 | | | | | IAmb | IAmb | 01 23 35.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **80.97** | **328** | | P | **P** | **01 23 34.5** | **+0.2** |
| | comp=Z,2.9nm,0.7s,baz=57,slow=3.4,SNR=21 | | | | | | | |
| **BRTR** | **Keskin Array B** | **80.97** | **328** | *ce* | P | **P** | **01 23 34.7** | **+0.4** |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **80.97** | **328** | | P | **P** | **01 23 33.1** | **-1.1** |
| **BNN** | **Bunyan** | **81.03** | **326** | | P | **P** | **01 23 33.8** | **-0.9** |
| **VTS** | **Vitosha** | **81.20** | **337** | ⇑ | P | **P** | **01 23 35.3** | **-0.2** |
| **VTS** | **Vitosha** | **81.20** | **337** | ⇑ | P | **P** | **01 23 35.3** | **-0.2** |
| **GAZ** | **Gaziantep** | **82.06** | **325** | | P | **P** | **01 23 39.2** | **-0.9** |
| **ALN** | **Alexandroupoli** | **82.11** | **334** | | P | **P** | **01 23 39.8** | **-0.3** |
| ALN | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **ALN** | **Alexandroupoli** | **82.11** | **334** | | P | **P** | **01 23 39.8** | **-0.3** |
| ALN | | | | | IAmb | IAmb | 01 23 41.0 | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **82.70** | **214** | | P | **P** | **01 23 45.0** | **+1.8** |
| | comp=Z,0.7nm,0.7s,baz=17,slow=5.1,SNR=8.9 | | | | | | | |
| **NRCA** | **Norcia** | **83.06** | **344** | | P | **P** | **01 23 43.9** | **-1.2** |
| **ESDC** | **Sonseca Array** | **87.97** | **356** | | P | **P** | **01 24 08.0** | **-1.7** |
| | comp=Z,1.5nm,0.8s,baz=3.1,slow=3.6,SNR=5.9 | | | | | | | |
| **ESDC** | **Sonseca Array** | **87.97** | **356** | | P | **P** | **01 24 07.9** | **-1.7** |
| **STKA** | **Stephens Creek** | **88.09** | **205** | | P | **P** | **01 24 12.6** | **+2.7** |
| | comp=Z,1.0nm,0.5s,baz=25,slow=12,SNR=2.1 | | | | | | | |
| **RAYN** | **Ar Rayn** | **90.74** | **312** | ⇑ | P | **P** | **01 24 22.3** | **-0.5** |
| **SJG** | **San Juan** | **93.81** | **54** | | LR | LR | 02 07 39.2 | |
| | comp=Z,34nm,21.8s,baz=36,slow=36 | | | | | | | |
| **BOSA** | **Boshof** | **145.33** | **300** | | PKPbc | **PKPbc** | **01 30 57.0** | **-0.2** |
| | comp=Z,4.4nm,0.7s,baz=74,slow=2.9,SNR=8.5 | | | | | | | |
| **BOSA** | **Boshof** | **145.33** | **300** | | PKIKP | **PKPbc** | **01 30 57.0** | **-0.2** |

**IDC 09 01:12:55.5±2.3, 28°.40N×43°.73W, h0km, mb3.7/5, mb1 4.0/5, mb1mx3.6/43, mbtmp3.7/5, Error ellipse: s-maj=112.6km s-min=29.2km az=25.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **44.83** | **100** | P | P | 01 21 11.4 | -0.2 |
| | 0.6nm,0.7s,baz=303,slow=8.2,SNR=4.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.14** | **304** | P | P | 01 22 22.7 | 0.0 |
| | 1.2nm,0.8s,baz=88,slow=6.4,SNR=6.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.42** | **328** | P | P | 01 22 38.1 | -0.4 |
| | 0.8nm,0.9s,baz=89,slow=7.5,SNR=5.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.52** | **301** | P | P | 01 23 14.3 | -0.3 |
| | 0.1nm,0.3s,baz=81,slow=5.8,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **70.03** | **334** | P | P | 01 24 09.2 | +0.4 |
| | 1.2nm,1.0s,baz=61,slow=4.6,SNR=5.4 | | | | | | |

*IDC **09** 01:13:12.0±1.0, 28°.42N×43°.76W, h0km, mb4.2/12, mb1 4.4/12, mb1mx4.0/43, mbtmp4.2/12, MS3.8/3, Ms1 3.7/3, ms1mx3.1/89, Error ellipse: s-maj=28.8km s-min=19.4km az=5.0*

*NEIC **09** 01:13:14.2±1.1, 28°.4N±0°.1×43°.7W±0°.1, h10km±1km, mb4.7/28, Error ellipse: s-maj=23.4km s-min=16.0km az=188.0*

**ISC 09 01:13:13.9±0.7, 28°.4N±0°.1×43°.7W±0°.1, h12km, n55, σ0$63/47, mb4.6/26, MS3.8/3, 1C, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDD** | **Santo Domingo** | **25.92** | **253** | P | **P** | **01 18 47.6** | **+1.6** |
| **F64A** | **Sherman** | **26.10** | **319** | P | **P** | **01 18 48.0** | **+0.6** |
| **NHSC** | **New Hope** | **31.57** | **288** | P | **P** | **01 19 35.0** | **-1.3** |
| **T42A** | **Van Buren** | **40.43** | **295** | P | **P** | **01 20 52.4** | **+0.3** |
| **JTS** | **Las Juntas de** | **42.58** | **253** | LR | LR | 01 40 46.5 | |
| | comp=Z,66nm,18.1s,baz=79,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **43.95** | **186** | LR | LR | 01 38 34.7 | |
| | comp=Z,110nm,20.7s,baz=304,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.83** | **100** | P | **P** | **01 21 27.8** | **-0.4** |
| | 2.9nm,1.0s,baz=298,slow=8.3,SNR=7.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.83** | **100** | P | **P** | **01 21 27.7** | **-0.4** |
| **H10N2** | **ASCENSION HYDR** | **45.75** | **137** | T | T | 02 10 13.5 | |
| | baz=322,slow=75,SNR=11 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.75** | **138** | T | T | 02 10 16.0 | |
| | baz=322,slow=75,SNR=7.8 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.77** | **137** | T | T | 02 10 15.0 | |
| | baz=322,slow=75,SNR=11 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.54** | **139** | T | T | 02 11 18.7 | |
| | baz=257,slow=74,SNR=15 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.56** | **139** | T | T | 02 11 18.7 | |
| | baz=323,slow=74,SNR=16 | | | | | | |
| **LPAZ** | **La Paz** | **50.28** | **211** | P | **P** | **01 22 11.4** | **+0.3** |
| | 2.8nm,0.9s,baz=0.0,slow=11,SNR=4.6 | | | | | | |
| **LPAZ** | **La Paz** | **50.28** | **211** | P | **P** | **01 22 10.9** | **-0.2** |
| **GO01** | **Chusmiza** | **53.73** | **210** | P | **P** | **01 22 36.0** | **-0.6** |
| GO01 | | | | IAmb | IAmb | 01 22 51.1 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **EGMT** | **Eagleton** | **53.78** | **311** | P | **P** | **01 22 36.9** | **+0.6** |
| **PD31** | **Pinedale Array** | **54.15** | **304** | P | **P** | **01 22 39.6** | **+0.2** |
| **PDAR** | **Pinedale Array** | **54.15** | **304** | P | **P** | **01 22 39.3** | **0.0** |
| | comp=Z,2.5nm,0.7s,baz=91,slow=7.6,SNR=12 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.15** | **304** | P | **P** | **01 22 39.5** | **+0.2** |
| **BW06** | **Boulder Array** | **54.15** | **304** | P | **P** | **01 22 39.6** | **+0.3** |
| BW06 | | | | IAmb | IAmb | 01 22 40.3 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **54.35** | **307** | P | **P** | **01 22 40.7** | **-0.1** |
| YMP | | | | IAmb | IAmb | 01 22 43.1 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **TPAW** | **Teton Pass** | **55.07** | **305** | P | **P** | **01 22 46.0** | **0.0** |
| **P18A** | **Preston Nutter** | **55.14** | **300** | P | **P** | **01 22 47.2** | **+0.6** |
| P18A | | | | IAmb | IAmb | 01 22 48.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **EDM** | **Edmonton** | **55.78** | **317** | P | **P** | **01 22 51.0** | **+0.4** |
| EDM | | | | IAmb | IAmb | 01 22 52.1 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **55.90** | **33** | P | **P** | **01 22 51.6** | **+0.3** |
| | comp=Z,1.8nm,0.7s,baz=232,slow=6.8,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **55.90** | **33** | P | **P** | **01 22 51.8** | **+0.6** |
| **YKA** | **Yellowknife Ar** | **56.44** | **328** | P | **P** | **01 22 54.1** | **-1.0** |
| | comp=Z,2.1nm,0.9s,baz=92,slow=7.4,SNR=11 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.44** | **328** | P | **P** | **01 22 55.0** | **-0.1** |
| **NLU** | **North Lily Min** | **56.47** | **301** | P | **P** | **01 22 56.0** | **0.0** |
| NLU | | | | IAmb | IAmb | 01 22 58.5 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **56.55** | **52** | ⇑ P | **P** | **01 22 57.3** | **+0.9** |
| **MLR** | **Muntele Rosu** | **56.55** | **52** | P | **P** | **01 22 57.0** | **+0.6** |
| | comp=Z,7.1nm,1.1s,baz=251,slow=8.0,SNR=5.4 | | | | | | |
| **MLR** | **Muntele Rosu** | **56.55** | **52** | P | **P** | **01 22 56.6** | **+0.2** |
| **DUG** | **Dugway, Tooele** | **56.98** | **301** | P | **P** | **01 22 59.4** | **-0.2** |
| DUG | | | | IAmb | IAmb | 01 23 02.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **CCUT** | **Cedar City** | **57.94** | **298** | P | **P** | **01 23 07.1** | **+0.6** |
| **AKASG** | **Malin Array Be** | **58.06** | **46** | P | **P** | **01 23 05.6** | **-1.2** |
| | comp=Z,2.2nm,0.6s,baz=276,slow=6.2,SNR=9.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **58.06** | **46** | P | **P** | **01 23 06.4** | **-0.4** |
| **SPR3** | **Spring Creek 3** | **58.37** | **300** | P | **P** | **01 23 09.0** | **-0.6** |
| SPR3 | | | | IAmb | IAmb | 01 23 12.0 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **PLID** | **Pearl Lake** | **58.41** | **308** | P | **P** | **01 23 10.2** | **+0.6** |
| PLID | | | | IAmb | IAmb | 01 23 11.7 | |
| | comp=Z,9.2nm,1.3s | | | | | | |
| **MFID** | **Camas Ranch** | **58.59** | **306** | P | **P** | **01 23 11.1** | **+0.4** |
| **NEW** | **Newport** | **58.66** | **311** | P | **P** | **01 23 11.3** | **+0.2** |
| NEW | | | | IAmb | IAmb | 01 23 12.3 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **D08A** | **Wollman Farm,** | **60.06** | **310** | P | **P** | **01 23 21.3** | **+0.5** |
| D08A | | | | IAmb | IAmb | 01 23 22.0 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| **G08A** | **Pilot Rock** | **60.43** | **308** | P | **P** | **01 23 23.4** | **0.0** |
| G08A | | | | IAmb | IAmb | 01 23 24.1 | |
| | comp=Z,8.6nm,1.5s | | | | | | |
| **LTY** | **Liberty** | **61.20** | **311** | P | **P** | **01 23 28.3** | **-0.3** |
| LTY | | | | IAmb | IAmb | 01 23 32.5 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.52** | **301** | P | **P** | **01 23 30.7** | **-0.4** |
| | comp=Z,0.8nm,0.7s,baz=74,slow=6.6,SNR=4.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.52** | **301** | P | **P** | **01 23 29.2** | **-1.9** |
| **PAHR** | **Pah Rah Range** | **62.01** | **302** | P | **P** | **01 23 35.0** | **+0.7** |
| PAHR | | | | IAmb | IAmb | 01 23 35.7 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **63.29** | **57** | P | **P** | **01 23 43.2** | **+0.3** |
| | comp=Z,1.2nm,0.7s,baz=276,slow=2.2,SNR=4.8 | | | | | | |
| **INK** | **Inuvik** | **63.89** | **336** | P | **P** | **01 23 46.1** | **0.0** |
| | comp=Z,3.1nm,1.0s,baz=43,slow=6.8,SNR=6.7 | | | | | | |
| **ILAR** | **Eielson Array** | **70.05** | **334** | P | **P** | **01 24 25.1** | **-0.3** |
| | comp=Z,2.7nm,0.9s,baz=70,slow=4.7,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **70.05** | **334** | P | **P** | **01 24 24.9** | **-0.5** |
| **CCB** | **Clear Creek Bu** | **70.46** | **334** | P | **P** | **01 24 27.5** | **-0.3** |
| **MKAR** | **Makanchi Array** | **90.72** | **34** | P | **P** | **01 26 17.3** | **+0.5** |
| | comp=Z,1.7nm,1.2s,baz=307,slow=5.2,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **90.72** | **34** | P | **P** | **01 26 16.5** | **-0.3** |
| **PMSA** | **Palmer Station** | **94.19** | **189** | LR | LR | 02 08 57.8 | |
| | comp=Z,52nm,18.1s,baz=288,slow=36 | | | | | | |

*IDC **09** 01:14:07.6±0.9, 4°.03N×126°.05E, h0km, mb3.7/9, mb1 3.8/9, mb1mx3.7/32, mbtmp3.7/9, Error ellipse: s-maj=79.5km s-min=15.9km az=74.0*

*DJA **09** 01:14:10.9±0.5, 4°.N±4°×12°.7E±°, h21km±3km, M4.0/7, MLv4.0/7*

*NEIC **09** 01:14:13.6±0.8, 4°.1N±0°.2×126°.6E±0°.4, h57km±9km, mb4.2/12, Error ellipse: s-maj=60.0km s-min=17.0km az=73.0*

**ISC 09 01:14:12.7±0.7, 4°.09N±0°.07×126°.58E±0°.09, h45km, n26, σ1$45/27, mb3.8/11, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.12** | **249** | P | **Pn** | **01 14 31.2** | **-0.8** |
| SGSI | | | | S | **Sn** | **01 14 46.3** | **0.0** |
| **TNTI** | **Ternate** | **3.39** | **166** | P | **Pn** | **01 15 01.5** | **-1.7** |
| **GTOI** | **Gorontalo** | **4.95** | **226** | P | **Pn** | **01 15 24.5** | **-0.1** |
| **YULB** | **Yu-li** | **19.86** | **346** | P | **P** | **01 18 38.8** | **-1.3** |
| YULB | | | | IAmb | IAmb | 01 18 42.3 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **TPUB** | **Ta-pu** | **19.94** | **344** | P | **P** | **01 18 40.7** | **-0.4** |
| TPUB | | | | IAmb | IAmb | 01 18 44.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **20.32** | **345** | P | **P** | **01 18 44.5** | **-0.7** |
| SSLB | | | | IAmb | IAmb | 01 18 55.5 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **NACB** | **Ninganchiao** | **20.54** | **347** | P | **P** | **01 18 44.3** | **-3.2** |
| NACB | | | | IAmb | IAmb | 01 18 57.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **NACB** | **Ninganchiao** | **20.54** | **347** | *e*S | **P** | **01 18 44.5** | **-3.1** |
| | baz=218 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.07** | **182** | P | **P** | **01 19 03.5** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=333,slow=9.0,SNR=1.5 | | | | | | |
| **WB0** | **Warramunga Arr** | **24.92** | **162** | P | **P** | **01 19 31.0** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 01 19 50.3 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **25.07** | **163** | P | **P** | **01 19 34.1** | **+0.9** |
| | comp=Z,0.6nm,0.4s,baz=340,slow=10,SNR=10 | | | | | | |
| **WB2** | **Warramunga Arr** | **25.07** | **163** | P | **P** | **01 19 32.0** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 01 19 48.1 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **26.34** | **194** | P | **P** | **01 19 43.8** | **-0.9** |
| **ASAR** | **Alice Springs** | **28.50** | **166** | P | **P** | **01 20 05.6** | **+1.5** |
| | comp=Z,0.2nm,0.4s,baz=346,slow=12,SNR=3.1 | | | | | | |
| **KSRS** | **Korea Array** | **33.23** | **2** | P | **P** | **01 20 46.6** | **+1.1** |
| | comp=Z,9.9nm,0.6s,baz=179,slow=9.6,SNR=4.1 | | | | | | |
| **BBOO** | **Buckleboo** | **37.78** | **167** | P | **P** | **01 21 23.5** | **-1.2** |
| **STKA** | **Stephens Creek** | **38.52** | **159** | P | **P** | **01 21 34.0** | **+3.1** |
| | comp=Z,1.1nm,0.6s,baz=327,slow=11,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **46.91** | **341** | P | **P** | **01 22 39.7** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=156,slow=9.1,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **46.91** | **341** | P | **P** | **01 22 39.7** | **+0.7** |
| **MK31** | **Makanchi Array** | **57.17** | **325** | P | **P** | **01 23 54.6** | **-0.5** |
| **MKAR** | **Makanchi Array** | **57.17** | **325** | P | **P** | **01 23 54.9** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=122,slow=7.7,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.17** | **325** | P | **P** | **01 23 54.7** | **-0.5** |
| **MAKZ** | **Makanchi** | **57.36** | **325** | P | **P** | **01 23 56.2** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **60.20** | **333** | P | **P** | **01 24 15.0** | **-1.0** |
| | comp=Z,0.4nm,0.4s,baz=132,slow=8.0,SNR=1.8 | | | | | | |
| **KURK** | **Kurchatov** | **61.36** | **327** | P | **P** | **01 24 23.0** | **-0.9** |
| **NRIK** | **Noril'sk** | **70.05** | **346** | P | **P** | **01 25 20.9** | **+1.3** |
| | comp=Z,1.4nm,0.5s,baz=127,slow=5.1,SNR=2.2 | | | | | | |

**TAP 09 01:18:13.5, 24°.70N×121°.69E, h3km, ML0.7, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWE** | **Neicheng** | **0.03** | **328** | *i* P | Pg | 01 18 14.6 | +0.2 |
| | baz=354 | | | | | | |
| TWE | | | | *i* S | Sg | 01 18 15.4 | +0.5 |
| | baz=354 | | | | | | |
| **NDS** | **Dongshan** | **0.07** | **155** | P | Pg | 01 18 15.6 | +0.7 |
| | baz=154 | | | | | | |
| NDS | | | | S | Sg | 01 18 16.9 | +1.0 |
| | baz=154 | | | | | | |
| **ILA** | **Ilan** | **0.09** | **39** | P | Pg | 01 18 16.6 | +1.2 |
| | baz=43 | | | | | | |
| ILA | | | | S | Sg | 01 18 18.0 | +1.4 |
| | baz=43 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.11** | **306** | P | Pg | 01 18 16.8 | +1.0 |
| | baz=305 | | | | | | |
| FUSB | | | | *i* S | Sg | 01 18 18.7 | +1.5 |
| | baz=305 | | | | | | |
| **ENTT** | **Nioudou** | **0.12** | **243** | P | Pg | 01 18 16.8 | +0.9 |
| | baz=240 | | | | | | |
| ENTT | | | | S | Sg | 01 18 19.3 | +1.7 |
| | baz=240 | | | | | | |
| **TWC** | **Suao** | **0.17** | **120** | P | Pg | 01 18 18.5 | +1.6 |
| | baz=118 | | | | | | |
| TWC | | | | *e*S | Sg | 01 18 21.1 | +2.0 |
| | baz=118 | | | | | | |
| **NWLT** | **Wulai** | **0.18** | **296** | *e*P | Pg | 01 18 18.0 | +0.9 |
| | baz=296 | | | | | | |
| NWLT | | | | *e*S | Sg | 01 18 20.6 | +1.0 |
| | baz=296 | | | | | | |
| **LATG** | **Datong** | **0.21** | **222** | P | Pg | 01 18 19.1 | +1.4 |
| | baz=222 | | | | | | |
| LATG | | | | S | Sg | 01 18 22.2 | +1.6 |
| | baz=222 | | | | | | |

**TAP 09 01:18:30.5, 24°.49N×121°.87E, h8km, ML1.1, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.09** | **240** | *i* P | Pg | 01 18 33.4 | +0.7 |
| | baz=240 | | | | | | |
| EWUT | | | | *i* S | Sg | 01 18 35.5 | +1.2 |
| | baz=240 | | | | | | |
| **TWC** | **Suao** | **0.12** | **352** | *i* P | Pg | 01 18 33.6 | +0.5 |
| | baz=356 | | | | | | |
| TWC | | | | *e*S | Sg | 01 18 35.7 | +0.7 |
| | baz=356 | | | | | | |
| **ENA** | **Nanau** | **0.13** | **241** | *i* P | Pg | 01 18 34.2 | +0.8 |
| | baz=238 | | | | | | |
| ENA | | | | S | Sg | 01 18 36.5 | +1.1 |
| | baz=238 | | | | | | |
| **NDS** | **Dongshan** | **0.20** | **316** | *e*P | Pg | 01 18 36.0 | +1.4 |
| | baz=315 | | | | | | |
| NDS | | | | S | Sg | 01 18 38.9 | +1.7 |
| | baz=315 | | | | | | |
| **ENTT** | **Nioudou** | **0.31** | **298** | P | Pb | 01 18 37.9 | -0.5 |
| | baz=298 | | | | | | |
| ENTT | | | | *i* S | Sb | 01 18 42.8 | -0.8 |
| | baz=298 | | | | | | |
| **LATG** | **Datong** | **0.31** | **278** | P | Pb | 01 18 37.9 | -0.6 |
| | baz=277 | | | | | | |
| LATG | | | | S | Sb | 01 18 42.8 | -1.0 |
| | baz=277 | | | | | | |
| **NTC** | **Toucheng** | **0.36** | **354** | P | Pb | 01 18 38.5 | -0.6 |
| | baz=354 | | | | | | |
| NTC | | | | S | Sb | 01 18 44.0 | -1.1 |
| | baz=354 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.37** | **316** | P | Pb | 01 18 39.1 | -0.3 |
| | baz=316 | | | | | | |
| FUSB | | | | S | Sb | 01 18 45.1 | -0.2 |
| | baz=316 | | | | | | |
| **NACB** | **Ninganchiao** | **0.40** | **218** | P | Pb | 01 18 39.5 | -0.4 |
| | baz=218 | | | | | | |
| **NWLT** | **Wulai** | **0.44** | **311** | P | Pb | 01 18 40.1 | -0.4 |
| | baz=310 | | | | | | |
| NWLT | | | | S | Sb | 01 18 47.0 | -0.2 |
| | baz=310 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.45** | **231** | P | Pb | 01 18 40.0 | -0.7 |
| | baz=231 | | | | | | |
| ETLH | | | | S | Sb | 01 18 47.4 | -0.3 |
| | baz=231 | | | | | | |
| **TIPB** | **Shuangxi** | **0.48** | **355** | P | Pb | 01 18 40.8 | -0.4 |
| | baz=355 | | | | | | |
| TIPB | | | | S | Sb | 01 18 48.6 | +0.1 |
| | baz=355 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.53** | **12** | P | Pb | 01 18 42.5 | +0.5 |
| | baz=12 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.04** | **91** | *e*P | Pg | 01 18 50.5 | 0.0 |
| | baz=91 | | | | | | |

**IDC 09 01:38:37.8±9.6, 12°.10S×167°.26E, h0km, mb3.8/3, mb1 3.9/3, mb1mx3.2/30, mbtmp3.7/3, Error ellipse: s-maj=296.2km s-min=53.7km az=126.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **32.54** | **252** | P | P | 01 45 11.4 | +0.5 |
| | 0.6nm,0.7s,baz=84,slow=9.7,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **33.68** | **245** | P | P | 01 45 20.4 | -0.3 |
| | 1.0nm,0.7s,baz=68,slow=10.0,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **95.30** | **317** | P | P | 01 52 03.6 | -0.3 |
| | 0.1nm,0.4s,baz=121,slow=7.7,SNR=8.0 | | | | | | |

*SKHL **09** 01:50:19.5±0.4, 46°.80N×153°.30E, h79km±4km, mb4.9/12*

*MOS **09** 01:50:20.5±1.2, 47°.05N×152°.95E, h76km, mb4.2/9, Error ellipse: s-maj=9.8km s-min=5.9km az=65.6*

*NEIC **09** 01:50:22.6±1.6, 47°.1N±0°.1×152°.7E±0°.2, h76km±6km, mb4.5/26, Error ellipse: s-maj=17.3km s-min=12.1km az=137.0*

*IDC **09** 01:50:24.4±2.3, 47°.24N×152°.75E, h90km±21km, mb3.7/21, mb1 3.9/26, mb1mx3.8/48, mbtmp4.0/26, MS3.1/6, Ms1 3.1/6, ms1mx2.8/95, Error ellipse: s-maj=16.6km s-min=10.6km az=142.0*

**ISC 09 01:50:21.5±1.1, 47°.06N±0°.06×153°.00E±0°.06, h72km±9km, n140, σ1$58/150, mb4.3/35, 3C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **4.01** | **245** | ⇑ *i* PN | **Pn** | **01 51 21.2** | **+0.8** |
| KUR | | | | S | **Sn** | **01 52 08.3** | **+2.2** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,159nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,40nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,501nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,163nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **4.01** | **245** | *i* P | **Pn** | **01 51 20.3** | **-0.1** |
| KUR | | | | AMB | AMB | 01 51 22.3 | |
| | comp=E,160nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **01 52 06.2** | **+0.1** |
| KUR | | | | A | A | 01 52 18.3 | |
| | comp=E,500nm,0.6s | | | | | | |
| KUR | | | | A | A | 01 52 18.3 | |
| | comp=E,160nm,0.6s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.17** | **28** | *e*PN | **Pn** | **01 51 23.2** | **+0.6** |
| SKR | | | | *e*S | **Sn** | **01 52 06.8** | **-3.2** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,69nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,511nm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,526nm,0.6s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.17** | **28** | *e*P | **Pn** | **01 51 22.6** | **0.0** |
| SKR | | | | AMB | AMB | 01 51 23.7 | |
| | comp=E,70nm,0.5s | | | | | | |
| SKR | | | | *e*S | **Sn** | **01 52 09.6** | **-0.4** |
| SKR | | | | A | A | 01 52 17.1 | |
| | comp=E,510nm,0.7s | | | | | | |
| SKR | | | | A | A | 01 52 17.1 | |
| | comp=E,530nm,0.7s | | | | | | |
| **PAU** | **Pauzhetka** | **5.07** | **28** | *e*P | **Pn** | **01 51 34.9** | **0.0** |
| PAU | | | | AMB | AMB | 01 51 35.7 | |
| | comp=E,30nm,0.7s | | | | | | |
| PAU | | | | *e*S | **Sn** | **01 52 31.6** | **-0.4** |
| PAU | | | | A | A | 01 52 37.5 | |
| | comp=E,20nm,0.5s | | | | | | |
| PAU | | | | A | A | 01 52 37.5 | |
| | comp=E,30nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **5.39** | **236** | *e*PN | **Pn** | **01 51 37.0** | **-2.2** |
| SHO | | | | *e*S | **Sn** | **01 52 35.8** | **-4.0** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,43nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,39nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,21nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,236nm,0.6s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,184nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **5.39** | **236** | *i* P | **Pn** | **01 51 37.7** | **-1.5** |
| SHO | | | | AMB | AMB | 01 51 49.5 | |
| | comp=N,20nm,0.4s | | | | | | |
| SHO | | | | AMB | AMB | 01 51 49.5 | |
| | comp=N,40nm,0.4s | | | | | | |
| SHO | | | | AMB | AMB | 01 51 49.5 | |
| | comp=N,50nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **01 52 36.7** | **-3.1** |
| SHO | | | | A | A | 01 52 55.7 | |
| | comp=N,180nm,0.5s | | | | | | |
| SHO | | | | A | A | 01 52 55.7 | |
| | comp=N,240nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.86** | **242** | *e*PN | **Pn** | **01 51 45.3** | **-0.3** |
| YUK | | | | *e*S | **Sn** | **01 52 48.5** | **-2.8** |
| YUK | | | | smax | smax | | |
| | comp=E,429nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,329nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.86** | **242** | *e*P | **Pn** | **01 51 45.5** | **-0.1** |
| YUK | | | | AMB | AMB | 01 51 48.7 | |
| | comp=N,140nm,0.7s | | | | | | |
| YUK | | | | *e*S | **Sn** | **01 52 49.2** | **-2.1** |
| YUK | | | | A | A | 01 53 07.7 | |
| | comp=N,330nm,0.5s | | | | | | |
| YUK | | | | A | A | 01 53 07.7 | |
| | comp=N,430nm,0.5s | | | | | | |
| **RUSJ** | **Misakicho** | **6.19** | **244** | *e*PN | **Pn** | **01 51 52.0** | **+1.8** |
| RUSJ | | | | *e*S | **Sn** | **01 53 06.7** | **+7.1** |
| **GLVR** | **Golovnino** | **6.23** | **240** | *e*PN | **Pn** | **01 51 49.6** | **-1.1** |
| GLVR | | | | *e*S | **Sn** | **01 53 06.0** | **+5.6** |
| **GLVR** | **Golovnino** | **6.23** | **240** | *e*P | **Pn** | **01 51 49.6** | **-1.1** |
| **NMR** | **Nemuro--Hokkai** | **6.32** | **237** | ⇓ *i* PN | **Pn** | **01 51 49.7** | **-2.4** |
| **NMR** | **Nemuro--Hokkai** | **6.32** | **237** | *i* P | **Pn** | **01 51 51.5** | **-0.6** |
| NMR | | | | *e*S | **Sn** | **01 52 59.6** | **-3.2** |
| **PEA0B** | **Petropavlovsk-** | **6.77** | **25** | PN | **Pn** | **01 51 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| UGL | | | | | pmax | pmax | | | |
| | comp=Z,120nm,0.9s | | | | | | | | |
| **UGL** | **Uglegorsk** | **7.60** | **289** | *e*P | **Pn** | | **01 52 11.7** | **+2.2** |
| UGL | | | | | AMB | AMB | 01 52 13.0 | | |
| | comp=Z,120nm,0.9s | | | | | | | | |
| **TYV** | **Tymovskoe** | **7.80** | **303** | *e*PN | **Pn** | | **01 52 13.7** | **+1.5** |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,200nm,3.7s | | | | | | | | |
| **TYV** | **Tymovskoe** | **7.80** | **303** | *e*P | **Pn** | | **01 52 14.8** | **+2.6** |
| TYV | | | | | AMB | AMB | 01 52 16.0 | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| TYV | | | | | AMB | AMB | 01 52 16.3 | | |
| | comp=Z,200nm,3.7s | | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **01 53 39.5** | **+0.6** | |
| TYV | | | | | A | A | 01 53 41.5 | | |
| | comp=Z,500nm,5.0s | | | | | | | | |
| TYV | | | | | A | A | 01 53 41.5 | | |
| | comp=Z,300nm,5.0s | | | | | | | | |
| TYV | | | | | A | A | 01 53 42.0 | | |
| | comp=Z,50nm,0.6s | | | | | | | | |
| TYV | | | | | A | A | 01 53 42.0 | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **7.87** | **252** | Pn | | **Pn** | **01 52 11.6** | **-1.5** | |
| **JKA** | **Kamikawa-asahi** | **7.87** | **252** | *e*P | | **Pn** | **01 52 15.1** | **+1.9** | |
| **ASAJ** | **Asahikawa** | **7.87** | **252** | P | | **Pn** | **01 52 15.1** | **+1.9** | |
| | comp=Z,2.3nm,0.3s,baz=75,slow=16,SNR=11 | | | | | | | | |
| ASAJ | | | | | S | Sn | 01 53 51.0 | +10 | |
| | baz=126,slow=32,SNR=1.8 | | | | | | | | |
| ASAJ | | | | | LR | LR | 01 54 53.2 | | |
| | comp=Z,148nm,21.4s,baz=59,slow=35 | | | | | | | | |
| **ERM** | **Erimo** | **8.65** | **238** | *i* PN | | **Pn** | **01 52 23.4** | **-0.4** | |
| **ERM** | **Erimo** | **8.65** | **238** | Pn | | **Pn** | **01 52 22.9** | **-0.9** | |
| **GRNR** | **Gornyy** | **11.52** | **295** | *e*P | | **Pn** | **01 53 04.3** | **+1.3** | |
| GRNR | | | | | AMB | AMB | 01 53 05.3 | | |
| | comp=Z,10.0nm,0.4s | | | | | | | | |
| **TEY** | **Ternei** | **11.58** | **266** | *e*P | | **Pn** | **01 53 02.8** | **-0.9** | |
| TEY | | | | | AMB | AMB | 01 53 04.6 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **MA2** | **Magadan** | **12.61** | **355** | *ce*PN | | **Pn** | **01 53 17.5** | **-0.2** | |
| MA2 | | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **MA2** | **Magadan** | **12.61** | **355** | Pn | | **Pn** | **01 53 17.8** | **+0.1** | |
| **MA2** | **Magadan** | **12.61** | **355** | *e*P | | **Pn** | **01 53 17.5** | **-0.2** | |
| MA2 | | | | | AMB | AMB | 01 53 18.6 | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **KLR** | **Kul'dur** | **14.35** | **287** | P | | **P** | **01 53 45.1** | **-0.7** | |
| | comp=Z,0.2nm,0.3s,baz=84,slow=10,SNR=5.4 | | | | | | | | |
| KLR | | | | | LR | LR | 01 59 00.8 | | |
| | comp=Z,136nm,20.4s,baz=46,slow=36 | | | | | | | | |
| **KLR** | **Kul'dur** | **14.35** | **287** | *e*P | | **Pn** | **01 53 41.5** | **+0.7** | |
| **USRK** | **Ussuriysk Ar.** | **14.97** | **267** | P | | **Pn** | **01 53 49.3** | **+0.3** | |
| | baz=74,slow=11,SNR=2.3 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.97** | **267** | P | | **Pn** | **01 53 48.4** | **-0.5** | |
| **MJA0** | **Matsu Arr-Izo** | **15.19** | **232** | *e*P | | **P** | **01 53 55.9** | **+0.6** | |
| **MJAR** | **Matsushiro Arr** | **15.21** | **232** | P | | **P** | **01 53 55.7** | **+0.3** | |
| | comp=Z,0.3nm,0.3s,baz=47,slow=9.6,SNR=7.7 | | | | | | | | |
| MJAR | | | | | LR | LR | 01 59 05.5 | | |
| | comp=Z,57nm,20.5s,baz=38,slow=34 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.21** | **232** | P | | **Pn** | **01 53 53.1** | **+1.0** | |
| MJAR | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.21** | **232** | P | | **Pn** | **01 53 53.1** | **+1.0** | |
| **SEY** | **Seymchan** | **15.91** | **359** | P | | **P** | **01 54 01.6** | **-1.4** | |
| | comp=Z,0.2nm,0.3s,baz=174,slow=14,SNR=5.0 | | | | | | | | |
| **YAK** | **Yakutsk** | **20.02** | **327** | LR | | LR | 02 02 56.1 | | |
| | comp=Z,95nm,18.1s,baz=232,slow=38 | | | | | | | | |
| **YAK** | **Yakutsk** | **20.02** | **327** | *i* P | | **Pn** | **01 54 50.0** | **-0.5** | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **YAK** | **Yakutsk** | **20.02** | **327** | *i* P | | **Pn** | **01 54 50.0** | **-0.5** | |
| **KSRS** | **Korea Array** | **20.82** | **252** | P | | **P** | **01 54 57.8** | **+0.8** | |
| | comp=Z,2.9nm,0.6s,baz=55,slow=11,SNR=11 | | | | | | | | |
| KSRS | | | | | LR | LR | 02 01 50.4 | | |
| | comp=Z,29nm,20.9s,baz=5.0,slow=33 | | | | | | | | |
| **KSRS** | **Korea Array** | **20.82** | **252** | *e*P | | **P** | **01 54 58.6** | **+1.7** | |
| KSRS | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **KSRS** | **Korea Array** | **20.82** | **252** | *e*P | | **P** | **01 54 58.6** | **+1.7** | |
| **BILL** | **Bilibino** | **22.11** | **13** | *e*P | | **P** | **01 55 08.0** | **-2.5** | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,15nm,4.6s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.53** | **153** | T | | T | 02 27 58.7 | | |
| | baz=340,slow=76,SNR=614 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.54** | **153** | T | | T | 02 27 59.8 | | |
| | baz=340,slow=76,SNR=551 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.55** | **153** | T | | T | 02 27 60.0 | | |
| | baz=340,slow=76,SNR=450 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.62** | **154** | T | | T | 02 29 29.7 | | |
| | baz=341,slow=76,SNR=472 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.63** | **154** | T | | T | 02 29 14.6 | | |
| | baz=341,slow=76,SNR=603 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.64** | **154** | T | | T | 02 29 15.5 | | |
| | baz=341,slow=76,SNR=412 | | | | | | | | |
| **SONM** | **Songino Array** | **31.16** | **289** | P | | **P** | **01 56 32.2** | **-1.3** | |
| | comp=Z,0.3nm,0.4s,baz=72,slow=9.4,SNR=2.7 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | **01 59 27.5** | **+0.8** | |
| | comp=Z,0.5nm,0.7s,baz=96,slow=1.4,SNR=3.3 | | | | | | | | |
| **SONM** | **Songino Array** | **31.16** | **289** | | | **PcP** | **01 59 26.6** | **-0.1** | |
| **H21K** | **Melozitna Rive** | **33.91** | **37** | P | | **P** | **01 56 58.1** | **+1.0** | |
| H21K | | | | | IAmb | IAmb | 01 56 59.9 | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **I21K** | **Tanana** | **34.20** | **38** | P | | **P** | **01 57 01.5** | **+1.9** | |
| I21K | | | | | IAmb | IAmb | 01 57 02.6 | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **COLD** | **Coldfoot** | **35.12** | **34** | P | | **P** | **01 57 08.7** | **+1.2** | |
| COLD | | | | | IAmb | IAmb | 01 57 09.7 | | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **NEA2** | **Nenana** | **35.41** | **39** | P | | **P** | **01 57 12.0** | **+1.9** | |
| NEA2 | | | | | IAmb | IAmb | 01 57 12.3 | | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **35.52** | **32** | P | | **P** | **01 57 11.6** | **+0.6** | |
| TOLK | | | | | IAmb | IAmb | 01 57 12.8 | | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **MDM** | **Murphy Dome** | **35.78** | **38** | P | | **P** | **01 57 14.2** | **+0.9** | |
| MDM | | | | | IAmb | IAmb | 01 57 15.5 | | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **COLA** | **College** | **35.94** | **39** | *i* P | | **P** | **01 57 15.9** | **+1.4** | |
| COLA | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **36.35** | **39** | P | | **P** | **01 57 18.1** | **0.0** | |
| | comp=Z,2.9nm,1.1s,baz=268,slow=7.5,SNR=13 | | | | | | | | |
| **ILAR** | **Eielson Array** | **36.35** | **39** | *e*P | | **P** | **01 57 18.9** | **+0.8** | |
| ILAR | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **ILAR** | **Eielson Array** | **36.35** | **39** | P | | **P** | **01 57 17.5** | **-0.6** | |
| **FYU** | **Fort Yukon** | **37.04** | **36** | P | | **P** | **01 57 23.1** | **-0.8** | |
| **INK** | **Inuvik** | **41.43** | **33** | P | | **P** | **01 58 01.6** | **+1.2** | |
| | comp=Z,3.6nm,0.8s,baz=273,slow=7.7,SNR=11 | | | | | | | | |
| **INK** | **Inuvik** | **41.43** | **33** | P | | **P** | **01 58 00.1** | **-0.3** | |
| **ZALV** | **Zalesovo Beam** | **42.37** | **305** | P | | **P** | **01 58 08.1** | **-0.2** | |
| | comp=Z,0.4nm,0.4s,baz=72,slow=6.5,SNR=2.5 | | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **02 00 00.4** | **+0.1** | |
| | comp=Z,2.7nm,0.7s,baz=50,slow=2.4,SNR=15 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.37** | **305** | P | | **P** | **01 58 07.3** | **-0.9** | |
| ZALV | | | | PcP | | **PcP** | **02 00 00.2** | **-0.1** | |
| **A36M** | **Sachs Harbour** | **43.61** | **27** | P | | **P** | **01 58 19.3** | **+1.3** | |
| **C36M** | **Paulatuk** | **44.59** | **30** | P | | **P** | **01 58 26.2** | **+0.4** | |
| C36M | | | | | IAmb | IAmb | 01 58 27.8 | | |
| | comp=Z,8.5nm,1.1s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.73** | **297** | P | | **P** | **01 58 41.1** | **-2.0** | |
| | comp=Z,0.3nm,0.6s,baz=71,slow=6.8,SNR=7.7 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **02 00 15.3** | **-0.1** | |
| | comp=Z,1.1nm,0.6s,baz=83,slow=1.6,SNR=20 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.73** | **297** | P | | **P** | **01 58 41.0** | **-2.1** | |
| MKAR | | | | PcP | | **PcP** | **02 00 15.2** | **-0.3** | |
| **RES** | **Resolute Bay** | **50.57** | **19** | P | | **P** | **01 59 12.2** | **+0.2** | |
| | comp=Z,1.4nm,0.9s,baz=324,slow=8.7,SNR=3.0 | | | | | | | | |
| **RES** | **Resolute Bay** | **50.57** | **19** | P | | **P** | **01 59 12.7** | **+0.6** | |
| **RES** | **Resolute Bay** | **50.57** | **19** | P | | **P** | **01 59 12.7** | **+0.6** | |
| **YKA** | **Yellowknife Ar** | **50.72** | **37** | P | | **P** | **01 59 14.4** | **+1.0** | |
| | comp=Z,0.8nm,0.5s,baz=298,slow=7.0,SNR=16 | | | | | | | | |
| YKA | | | | PcP | | **PcP** | **02 00 29.9** | **+0.4** | |
| | comp=Z,0.3nm,0.5s,baz=306,slow=3.7,SNR=4.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.72** | **37** | P | | **P** | **01 59 13.8** | **+0.4** | |
| **CMAR** | **Chiang Mai Arr** | **52.37** | **256** | P | | **P** | **01 59 27.4** | **+1.1** | |
| | comp=Z,0.8nm,0.3s,baz=39,slow=7.1,SNR=7.0 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.37** | **256** | *ce*P | | **P** | **01 59 28.6** | **+2.3** | |
| CMAR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.37** | **256** | P | | **P** | **01 59 25.3** | **-0.9** | |
| **ARCES** | **ARCESS Array B** | **57.54** | **341** | P | | **P** | **02 00 02.0** | **-0.9** | |
| | comp=Z,3.7nm,0.9s,baz=46,slow=7.7,SNR=1.6 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.54** | **341** | P | | **P** | **02 00 02.0** | **-0.9** | |
| **PLID** | **Pearl Lake** | **59.56** | **55** | P | | **P** | **02 00 18.8** | **+1.3** | |
| **KLMR** | **Klimovskoe** | **59.80** | **329** | *e*P | | **P** | **02 00 15.1** | **-3.6** | |
| KLMR | | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **59.80** | **329** | *e*P | | **P** | **02 00 15.2** | **-3.5** | |
| KLMR | | | | | AMP | | 02 00 24.1 | | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **SUMG** | **Summit** | **60.40** | **4** | P | | **P** | **02 00 22.4** | **-0.7** | |
| SUMG | | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **SUMG** | **Summit** | **60.40** | **4** | *i* P | | **P** | **02 00 22.0** | **-1.1** | |
| **SUMG** | **Summit** | **60.40** | **4** | P | | **P** | **02 00 22.4** | **-0.7** | |
| **NVAR** | **Mina Array Bea** | **62.36** | **62** | P | | **P** | **02 00 38.5** | **+1.8** | |
| | comp=Z,0.7nm,0.5s,baz=295,slow=7.4,SNR=6.3 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.36** | **62** | P | | **P** | **02 00 37.8** | **+1.2** | |
| **FINES** | **FINESS Array B** | **63.73** | **335** | P | | **P** | **02 00 43.6** | **-1.4** | |
| | comp=Z,1.4nm,0.5s,baz=46,slow=7.9,SNR=10 | | | | | | | | |
| **FINES** | **FINESS Array B** | **63.73** | **335** | *e*P | | **P** | **02 00 44.1** | **-0.9** | |
| FINES | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **PD31** | **Pinedale Array** | **64.63** | **54** | P | | **P** | **02 00 52.2** | **+0.6** | |
| **PDAR** | **Pinedale Array** | **64.63** | **54** | P | | **P** | **02 00 52.6** | **+1.1** | |
| | comp=Z,1.1nm,0.7s,baz=314,slow=1.5,SNR=12 | | | | | | | | |
| **GWY** | **Greenwater Val** | **64.80** | **63** | P | | **P** | **02 00 54.1** | **+1.5** | |
| GWY | | | | | IAmb | IAmb | 02 00 55.0 | | |
| | comp=Z,4.6nm,1.1s | | | | | | | | |
| **TMUT** | **Trail Mountain** | **66.00** | **58** | P | | **P** | **02 01 02.5** | **+2.0** | |
| **RDMU** | **Red Mountain** | **66.08** | **56** | P | | **P** | **02 01 01.4** | **+0.5** | |
| **LCMT** | **Little Creek M** | **66.32** | **61** | P | | **P** | **02 01 03.7** | **+1.2** | |
| LCMT | | | | | IAmb | IAmb | 02 01 05.2 | | |
| | comp=Z,4.5nm,1.0s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **66.52** | **57** | P | | **P** | **02 01 04.9** | **+1.2** | |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **66.52** | **57** | P | | **P** | **02 01 04.9** | **+1.2** | |
| SRU | | | | | IAmb | IAmb | 02 01 06.0 | | |
| | comp=Z,3.9nm,0.9s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.91** | **341** | P | | **P** | **02 01 11.5** | **-0.5** | |
| | comp=Z,0.5nm,0.6s,baz=28,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.91** | **341** | P | | **P** | **02 01 11.4** | **-0.5** | |
| | comp=Z,0.9nm,0.7s,baz=27,slow=6.5,SNR=4.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **68.78** | **199** | P | | **P** | **02 01 18.0** | **+0.2** | |
| | comp=Z,0.4nm,0.5s,baz=17,slow=6.8,SNR=4.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **68.78** | **199** | *e*P | | **P** | **02 01 19.3** | **+1.5** | |
| WRA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **68.78** | **199** | P | | **P** | **02 01 17.5** | **-0.2** | |
| **FITZ** | **Fitzroy Crossi** | **69.38** | **208** | P | | **P** | **02 01 22.1** | **+0.7** | |
| | comp=Z,1.6nm,0.8s,baz=44,slow=3.9,SNR=4.1 | | | | | | | | |
| **KBZ** | **Khabaz** | **70.59** | **314** | P | | **P** | **02 01 28.9** | **+0.2** | |
| | comp=Z,1.6nm,0.8s,baz=124,slow=4.5,SNR=6.7 | | | | | | | | |
| **KBZ** | **Khabaz** | **70.59** | **314** | *e*P | | **P** | **02 01 29.3** | **+0.6** | |
| KBZ | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **70.59** | **314** | *e*P | | **P** | **02 01 29.3** | **+0.6** | |
| **AKASG** | **Malin Array Be** | **71.25** | **326** | P | | **P** | **02 01 31.1** | **-1.5** | |
| | comp=Z,0.5nm,0.3s,baz=34,slow=6.1,SNR=9.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.25** | **326** | P | | **P** | **02 01 31.3** | **-1.3** | |
| AKASG | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.4s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.25** | **326** | P | | **P** | **02 01 31.3** | **-1.3** | |
| **ASAR** | **Alice Springs** | **72.48** | **198** | P | | **P** | **02 01 41.9** | **+1.6** | |
| | comp=Z,1.6nm,0.8s,baz=20,slow=5.6,SNR=16 | | | | | | | | |
| **319A** | **Douglas** | **72.57** | **63** | P | | **P** | **02 01 41.3** | **+0.3** | |
| 319A | | | | | IAmb | IAmb | 02 01 43.6 | | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **75.27** | **326** | P | | **P** | **02 01 55.8** | **-0.7** | |
| BUR08 | | | | | IAmb | IAmb | 02 01 57.2 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **76.01** | **333** | *e*P | | P | 02 01 49.9 | -11 | |
| **DPC** | **Dobruska-Polom** | **76.01** | **333** | *e*P | | P | 02 01 49.9 | -11 | |
| **TX31** | **Lajitas Ar. Si** | **77.41** | **61** | P | | **P** | **02 02 09.9** | **+1.1** | |
| **TX32** | **Lajitas Array** | **77.41** | **61** | P | | **P** | **02 02 09.7** | **+0.8** | |
| TX32 | | | | | IAmb | IAmb | 02 02 10.9 | | |
| | comp=Z,4.3nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.41** | **61** | P | | **P** | **02 02 10.1** | **+1.2** | |
| | comp=Z,3.9nm,0.6s,baz=299,slow=4.4,SNR=57 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.41** | **61** | P | | **P** | **02 02 09.4** | **+0.5** | |
| **KHC** | **Kasperske Hory** | **77.93** | **334** | *e*P | | **P** | **02 02 11.3** | **-0.1** | |
| **KHC** | **Kasperske Hory** | **77.93** | **334** | *e*P | | **P** | **02 02 11.3** | **-0.1** | |
| **GERES** | **GERESS Array B** | **78.14** | **334** | P | | **P** | **02 02 11.8** | **-0.9** | |
| | comp=Z,0.8nm,0.6s,baz=19,slow=4.5,SNR=5.4 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **138.83** | **90** | T | | T | 04 45 09.5 | | |
| | baz=308,slow=77,SNR=12 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **138.84** | **90** | T | | T | 04 45 04.4 | | |
| | baz=308,slow=77,SNR=27 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **138.84** | **90** | T | | T | 04 45 11.7 | | |
| | baz=308,slow=77,SNR=17 | | | | | | | | |
| **PLCA** | **Paso Flores** | **148.31** | **95** | PKPbc | | **PKPbc** | **02 09 59.8** | **+0.7** | |
| | comp=Z,1.9nm,0.8s,baz=304,slow=5.4,SNR=3.7 | | | | | | | | |
| **PLCA** | **Paso Flores** | **148.31** | **95** | PKP2 | | **PKPbc** | **02 09 59.5** | **+0.5** | |
| **PLCA** | **Paso Flores** | **148.31** | **95** | | | **PKPbc** | **02 09 59.5** | **+0.5** | |
| **CPUP** | **Villa Florida** | **148.38** | **60** | PKPbc | | **PKPbc** | **02 09 59.8** | **+0.3** | |
| | comp=Z,2.1nm,0.8s,baz=286,slow=7.4,SNR=3.1 | | | | | | | | |

**IDC 09 02:02:41.3±4.9, 7.03S×154.85E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/26, mbtmp3.5/3, MS3.5/1, Ms1 3.5/1, ms1mx2.5/34, Error ellipse: s-maj=176.2km s-min=40.7km az=116.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.68** | **235** | P | P | 02 07 54.8 | -0.1 |
| | 0.7nm,1.0s,baz=61,slow=10,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **26.04** | **228** | P | P | 02 08 16.6 | +0.1 |
| | 0.8nm,0.9s,baz=68,slow=10,SNR=5.5 | | | | | | |
| **PPT** | **Papeete** | **55.13** | **106** | LR | LR | 02 32 34.0 | |
| | comp=Z,38nm,19.1s,baz=317,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.33** | **319** | P | P | 02 15 10.2 | -0.1 |
| | 0.3nm,0.6s,baz=104,slow=5.0,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.89** | **285** | PKPbc | PKPbc | 02 22 41.6 | 0.0 |
| | 0.1nm,0.3s,baz=77,slow=2.7,SNR=1.7 | | | | | | |

*KRSC **09** 02:12:57.0±0.7, 52.95N×159.55E, h70km±6km, ML4.6*
*MOS **09** 02:12:57.2±1.0, 52.92N×159.49E, h72km, mb3.9/5, Error ellipse: s-maj=9.8km s-min=5.1km az=83.2*
*IDC **09** 02:13:00.5±0.9, 53.17N×159.12E, h90km±7km, mb3.4/16, mb1 3.6/16, mb1mx3.4/45, mbtmp3.7/16, MS3.9/1, Ms1 3.9/1, ms1mx2.7/52, Error ellipse: s-maj=22.0km s-min=14.3km az=153.0*

**ISC 09 02:12:58.1±0.7, 52.97N±0.04×159.51E±0.04, h72km±5km, n96, σ1s18/119, mb3.7/22, 1D, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NLC** | **Nalytchevo** | **0.23** | **333** | *e*S | **Sn** | **02 13 17.4** | **+0.5** |
| **SPN** | **Mys Shipunski** | **0.33** | **67** | PN | **Pn** | **02 13 09.9** | **+0.3** |
| SPN | | | | S | **Sn** | **02 13 18.2** | **+0.1** |
| **SPN** | **Mys Shipunski** | **0.33** | **67** | *e*P | **Pn** | **02 13 09.9** | **+0.3** |
| SPN | | | | *e*S | **Sn** | **02 13 18.2** | **+0.1** |
| **DALK** | **Dalny** | **0.46** | **278** | PN | **Pn** | **02 13 10.8** | **+0.2** |
| DALK | | | | S | **Sn** | **02 13 19.7** | **-0.2** |
| **DALK** | **Dalny** | **0.46** | **278** | *e*P | **Pn** | **02 13 10.8** | **+0.2** |
| DALK | | | | *e*S | **Sn** | **02 13 19.7** | **-0.2** |
| **UGLR** | **Uglovaya** | **0.48** | **300** | PN | **Pn** | **02 13 11.6** | **+0.7** |
| **UGLR** | **Uglovaya** | **0.48** | **300** | *i* P | **Pn** | **02 13 11.6** | **+0.7** |
| **SMAR** | **Somma** | **0.52** | **305** | PN | **Pn** | **02 13 11.7** | **+0.3** |
| **SMAR** | **Somma** | **0.52** | **305** | *i* P | **Pn** | **02 13 11.7** | **+0.3** |
| **PET** | **Petropavlovsk** | **0.52** | **276** | PN | **Pn** | **02 13 11.5** | **+0.3** |
| PET | | | | S | **Sn** | **02 13 20.9** | **+0.1** |
| **PET** | **Petropavlovsk** | **0.52** | **276** | *e*P | **Pn** | **02 13 11.5** | **+0.3** |
| PET | | | | *e*S | **Sn** | **02 13 20.9** | **+0.1** |
| **AVH** | **Avacha** | **0.55** | **303** | PN | **Pn** | **02 13 12.4** | **+0.8** |
| AVH | | | | S | **Sn** | **02 13 22.5** | **+0.9** |
| **AVH** | **Avacha** | **0.55** | **303** | *i* P | **Pn** | **02 13 12.4** | **+0.8** |
| AVH | | | | *e*S | **Sn** | **02 13 22.5** | **+0.9** |
| **KRER** | **Koryakskii** | **0.57** | **306** | PN | **Pn** | **02 13 12.6** | **+0.7** |
| KRER | | | | S | **Sn** | **02 13 22.8** | **+0.7** |
| **KRER** | **Koryakskii** | **0.57** | **306** | *e*P | **Pn** | **02 13 12.6** | **+0.7** |
| KRER | | | | *e*S | **Sn** | **02 13 22.8** | **+0.7** |
| **KOK** | **Koryaka** | **0.62** | **302** | PN | **Pn** | **02 13 12.9** | **+0.6** |
| KOK | | | | S | **Sn** | **02 13 23.7** | **+0.9** |
| **KOK** | **Koryaka** | **0.62** | **302** | *e*P | **Pn** | **02 13 12.9** | **+0.6** |
| KOK | | | | *e*S | **Sn** | **02 13 23.7** | **+0.9** |
| **RUS** | **Russkaya** | **0.81** | **229** | PN | **Pn** | **02 13 14.3** | **0.0** |
| RUS | | | | S | **Sn** | **02 13 25.9** | **-0.5** |
| **RUS** | **Russkaya** | **0.81** | **229** | *e*P | **Pn** | **02 13 14.3** | **0.0** |
| RUS | | | | *e*S | **Sn** | **02 13 25.9** | **-0.5** |
| **KRMR** | **Karymshinskiy** | **0.85** | **261** | PN | **Pn** | **02 13 14.8** | **0.0** |
| KRMR | | | | S | **Sn** | **02 13 27.0** | **-0.1** |
| **KRMR** | **Karymshinskiy** | **0.85** | **261** | *e*P | **Pn** | **02 13 14.8** | **0.0** |
| KRMR | | | | *e*S | **Sn** | **02 13 27.0** | **-0.1** |
| **MTVR** | **Mutnovka** | **0.94** | **239** | PN | **Pn** | **02 13 16.7** | **+0.6** |
| MTVR | | | | S | **Sn** | **02 13 29.5** | **0.0** |
| **MTVR** | **Mutnovka** | **0.94** | **239** | *i* P | **Pn** | **02 13 16.7** | **+0.6** |
| MTVR | | | | *e*S | **Sn** | **02 13 29.5** | **0.0** |
| **GRL** | **Gorelyy** | **0.97** | **245** | PN | **Pn** | **02 13 17.3** | **+0.9** |
| GRL | | | | S | **Sn** | **02 13 30.7** | **+0.7** |
| **GRL** | **Gorelyy** | **0.97** | **245** | *e*P | **Pn** | **02 13 17.3** | **+0.9** |
| GRL | | | | *e*S | **Sn** | **02 13 30.7** | **+0.7** |
| **KII** | **Karymskiy** | **1.07** | **358** | PN | **Pn** | **02 13 18.0** | **+0.4** |
| **KII** | **Karymskiy** | **1.07** | **358** | *e*P | **Pn** | **02 13 18.0** | **+0.4** |
| **PEA0B** | **Petropavlovsk-** | **1.10** | **278** | *d* PN | **Pn** | **02 13 18.0** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **1.10** | **278** | P | **Pn** | **02 13 17.7** | **-0.2** |
| | 262nm,0.3s,baz=100,slow=18,SNR=4116 | | | | | | |
| PETK | | | | S | **Sn** | **02 13 33.0** | **+0.2** |
| | 151nm,0.3s,baz=97,slow=28,SNR=12 | | | | | | |
| **GNL** | **Ganaly** | **1.19** | **308** | PN | **Pn** | **02 13 19.4** | **+0.3** |
| **GNL** | **Ganaly** | **1.19** | **308** | *e*P | **Pn** | **02 13 19.4** | **+0.3** |
| **APC** | **Apacha** | **1.43** | **269** | PN | **Pn** | **02 13 22.7** | **+0.7** |
| APC | | | | S | **Sn** | **02 13 40.4** | **+0.3** |
| **APC** | **Apacha** | **1.43** | **269** | *e*P | **Pn** | **02 13 22.7** | **+0.7** |
| APC | | | | *e*S | **Sn** | **02 13 40.4** | **+0.3** |
| **KDTR** | **Khodutka, Kamc** | **1.46** | **218** | PN | **Pn** | **02 13 22.9** | **+0.4** |
| KDTR | | | | S | **Sn** | **02 13 40.9** | **0.0** |
| **KDTR** | **Khodutka, Kamc** | **1.46** | **218** | *e*P | **Pn** | **02 13 22.9** | **+0.4** |
| KDTR | | | | *e*S | **Sn** | **02 13 40.9** | **0.0** |
| **MKZ** | **Mys Kozlova** | **2.06** | **39** | PN | **Pn** | **02 13 30.7** | **+0.2** |
| MKZ | | | | S | **Sn** | **02 13 54.0** | **-1.3** |
| **MKZ** | **Mys Kozlova** | **2.06** | **39** | *i* P | **Pn** | **02 13 30.7** | **+0.2** |
| MKZ | | | | *e*S | **Sn** | **02 13 54.0** | **-1.3** |
| **PAU** | **Pauzhetka** | **2.24** | **229** | PN | **Pn** | **02 13 34.6** | **+1.6** |
| **PAU** | **Pauzhetka** | **2.24** | **229** | *e*P | **Pn** | **02 13 34.6** | **+1.6** |
| **TUMD** | **Tumrok D** | **2.30** | **13** | *e*P | **Pn** | **02 13 34.7** | **+1.0** |
| TUMD | | | | *e*S | **Sn** | **02 14 01.5** | **+0.5** |
| **TUMR** | **Tumrok** | **2.35** | **9** | PN | **Pn** | **02 13 34.7** | **+0.2** |
| TUMR | | | | S | **Sn** | **02 14 01.5** | **-0.8** |
| **TUMR** | **Tumrok** | **2.35** | **9** | *e*P | **Pn** | **02 13 36.0** | **+1.5** |
| **KMNR** | **Kamenistaya** | **2.82** | **8** | PN | **Pn** | **02 13 42.9** | **+2.0** |
| **KMNR** | **Kamenistaya** | **2.82** | **8** | *i* P | **Pn** | **02 13 42.9** | **+2.0** |
| **KIRR** | **Kirishev** | **3.03** | **9** | PN | **Pn** | **02 13 45.4** | **+1.7** |
| **KIRR** | **Kirishev** | **3.03** | **9** | *e*P | **Pn** | **02 13 45.4** | **+1.7** |
| **KPT** | **Kopyto** | **3.03** | **8** | PN | **Pn** | **02 13 45.4** | **+1.7** |
| **KPT** | **Kopyto** | **3.03** | **8** | *e*P | **Pn** | **02 13 45.4** | **+1.7** |
| **BZWR** | **Bezymyannyi-We** | **3.05** | **10** | PN | **Pn** | **02 13 46.5** | **+2.4** |
| **BZWR** | **Bezymyannyi-We** | **3.05** | **10** | *e*P | **Pn** | **02 13 46.5** | **+2.4** |
| **BZGR** | **Bezymyannyi-Gr** | **3.06** | **13** | PN | **Pn** | **02 13 47.8** | **+3.7** |
|

GUN eSn Sg 02 30 33.6 +1.5
386nm,0.4s
**JIRN Jiri** 3.07 183 ePn Pb 02 29 55.8 +0.3
JIRN eSn Sg 02 30 38.5 -0.7
348nm,0.3s
**KKN Kakani** 3.08 198 ePn Pb 02 29 55.0 -0.7
**GKN Gorkha** 3.11 209 ePn Pb 02 29 55.4 -0.7
GKN eSn Sb 02 30 37.6 +3.4
673nm,0.3s
**PKIN Phulchoki** 3.26 195 ePn Pb 02 29 57.3 -1.4
PKIN eSn Sg 02 30 42.7 -2.6
149nm,0.4s
**PKI Pulchoki** 3.26 195 ePn Pb 02 29 57.4 -1.4
PKI eSn Sg 02 30 43.0 -2.4
**DANN Dangsing** 3.29 224 ePn Pb 02 29 57.2 -2.0
DANN eSn Sb 02 30 40.8 +1.4
575nm,0.5s
**DMN Daman** 3.30 200 ePn Pb 02 29 58.0 -1.5
**TAPN Taplejung** 3.57 160 ePn Pb 02 30 01.2 -2.9
TAPN eSn Sb 02 30 48.4 +0.8
668nm,0.8s
**RAMN Ramite** 3.77 177 ePn Pb 02 30 03.4 -4.1
RAMN eSn Sb 02 30 54.7 +1.3
301nm,0.4s
**KOLN Koldanda** 3.81 220 ePn Pn 02 30 03.9 +4.3
KOLN eSn Sb 02 30 53.7 -0.8
196nm,0.6s
**PYUN Piuthan** 3.94 229 ePn Pn 02 30 04.8 +3.4
PYUN eSn Sn 02 30 55.2 +7.3
**ODAN Odare** 3.96 167 ePn Pb 02 30 06.2 -4.5
ODAN eSn Sb 02 30 58.2 -0.6
816nm,0.7s
**LSA Lhasa** 4.27 103 Pg Pb 02 30 10.8 -5.2
LSA LR LR
comp=N,2μm,5.3s
LSA LR LR
comp=E,4μm,7.5s
LSA LR LR
comp=Z,4μm,7.8s
**LGTI Lohaghat** 5.45 258 eP Pg 02 30 43.3 -1.8
LGTI eS Sb 02 31 47.9 +6.4
**PTH Pithoragarh** 5.45 259 eP Pn 02 30 25.8 +3.7
PTH eS Sn 02 31 28.4 +3.3
**TURI Tura** 6.24 145 eP Pn 02 30 36.2 +3.5
TURI eS Sn 02 31 47.2 +3.0
TURI IAML 02 31 49.6
comp=N,189nm,0.3s
TURI IAML 02 31 49.7
comp=E,208nm,0.5s
**GUWA GUWAHATI** 6.51 133 eP Pn 02 30 38.4 +1.9
GUWA eS Sn 02 31 51.8 +0.9
**SHL Shillong** 7.08 135 Pn Pn 02 30 44.9 +0.3
SHL Sn Sn 02 32 01.9 -3.4
**NDI New Delhi** 8.21 258 eP Pn 02 31 01.6 +1.7
NDI eS Sn 02 32 31.8 -1.0
**MOKO MOKOCHONG** 8.41 120 eP Pn 02 31 04.4 +1.7
MOKO eS Sn 02 32 36.5 -1.2
MOKO IAML 02 32 46.5
comp=E,269nm,0.7s
MOKO IAML 02 32 47.3
comp=N,167nm,0.6s
**KOHI KOHIMA** 8.46 124 eP Pn 02 31 05.6 +2.2
KOHI eS Sn 02 32 39.2 +0.2
KOHI IAML 02 32 49.8
comp=E,300nm,1.2s
KOHI IAML 02 32 58.0
comp=N,191nm,1.0s
**SONA Sohna** 8.46 255 eP Pn 02 31 06.4 +3.2
SONA eS Sn 02 32 39.4 +0.6
**GOMU GeErMu** 8.91 50 P Pn 02 31 11.4 +1.6
GOMU S Sn 02 32 51.6 +1.1
GOMU pmax pmax
comp=N,5.0nm,1.0s
GOMU LR LR
comp=N,880nm,6.6s
GOMU LR LR
comp=N,790nm,6.6s
GOMU LR LR
comp=N,460nm,6.6s
**IMP Imphal** 8.92 129 eP Pn 02 31 12.9 +3.3
IMP eS Sn 02 32 48.6 -1.8
**KUDL Kundal** 8.99 256 eP Pn 02 31 11.2 +0.8
KUDL eS Sn 02 32 51.4 -0.4
**AJM Ajmer** 11.14 251 eP Pn 02 31 43.3 +3.3
AJM eS Sn 02 33 42.5 -2.2
**CHCP Chirah Chowk** 11.47 288 P Pn 02 31 43.4 -1.2
**NIL Nilore** 11.48 288 P Pn 02 31 43.6 -1.1
**NIL Nilore** 11.48 288 Pn 02 31 43.6 -1.1
**SARP Sargodha** 11.77 279 P Pn 02 31 46.8 -1.8
**KSH Kashi** 12.20 319 P Pn 02 31 55.0 +0.4
KSH pP 02 32 03.0
KSH S Sn 02 34 08.3 -2.5
KSH pmax pmax
comp=N,13nm,0.8s
KSH LR LR
comp=N,2μm,13.9s
KSH LR LR
comp=N,3μm,13.6s
KSH LR LR
comp=N,2μm,11.7s
**CHLP Challavanipeta** 12.35 190 ePn Pn 02 31 58.1 +1.5
**THW Thamme Wali** 12.61 283 P Pn 02 31 58.5 -1.7
**CEP Cherat** 12.62 288 P Pn 02 31 57.1 -3.2
CEP S Sn 02 34 14.0 -6.9
**TARG Taragay, Kyrgy** 12.96 330 Pn 02 32 04.2 -1.0
**WMQ Urumqi** 13.11 4 eP Pn 02 32 10.3 +3.4
**KDJ Kajisay** 13.55 330 P Pn 02 32 12.8 -0.3
**KDJ Kajisay** 13.55 330 Pn 02 32 12.8 -0.3
**SRSP Sriramsagar** 13.82 214 eP Pn 02 32 16.3 -0.3
**GTA Gaotai** 14.00 48 eP Pn 02 32 17.5 -1.6
GTA pP P 02 32 25.0 -2.1
GTA sP 02 32 28.8
GTA pmax pmax
comp=N,2.0nm,1.3s
GTA pmax pmax
comp=N,67nm,5.8s
GTA LR LR
comp=N,1μm,15.6s
GTA LR LR
comp=N,690nm,16.7s
GTA LR LR
comp=N,410nm,15.6s
**ULHL Ulahol** 14.07 328 P Pn 02 32 20.8 +0.7
SNR=7.8
**PVM Polavaram** 14.10 199 eP Pn 02 32 21.9 +1.5
**PZH PanZhiHua** 14.15 104 P P 02 32 24.1 -4.8
PZH pmax pmax
comp=N,8.0nm,0.9s
PZH pmax pmax
comp=N,100nm,5.1s
**BOOM Boomskoye usch** 14.40 327 P Pn 02 32 23.0 -1.6
**BOOM Boomskoye usch** 14.40 327 Pn 02 32 23.0 -1.6
**MDOK Medeo** 14.46 332 P Pn 02 32 25.7 +0.3
**MYLAV Mylavaram** 14.87 202 eP Pn 02 32 32.9 +1.9
**TKM2 Tokmak 2** 14.89 328 P Pn 02 32 32.1 +0.7
SNR=6.6
**UCH Uchtor** 14.90 324 P Pn 02 32 31.6 -0.1
SNR=24
**CD2 Chengdu** 14.95 85 P P 02 32 37.4 -0.3
CD2 S Sn 02 35 18.3 +0.5
CD2 pmax pmax
comp=N,20nm,1.0s
CD2 LR LR
comp=N,50nm,8.1s
CD2 LR LR
comp=N,450nm,9.9s
CD2 LR LR
comp=N,690nm,6.5s
**KBK Karagaybulak** 15.00 326 P Pn 02 32 34.9 +2.1
SNR=10
**CUPL Choutuppal** 15.00 209 eP Pn 02 32 34.9 +2.1
**HYBB Hyderabad (bro** 15.04 210 eP Pn 02 32 33.0 -0.3
HYBB e 02 35 16.7
**ARXS Arharly** 15.05 336 eP P 02 32 40.8 +2.0
**KBL Kabul** 15.08 289 P Pn 02 32 30.3 -3.7
KBL 02 35 11.3
**KBL Kabul** 15.08 289 P Pn 02 32 30.3 -3.7
KBL Sn 02 35 11.3 -10
**AAK Ala-Archa** 15.21 325 Pn Pn 02 32 35.7 +0.2
comp=N,0.1nm,0.3s,baz=164,slow=12,SNR=19
AAK Sn Sn 02 35 20.7 -3.4
comp=N,0.1nm,0.3s,baz=180,slow=20,SNR=1.6
AAK LR LR 02 38 33.1
comp=N,234nm,21.1s,baz=142,slow=38
**AAK Ala-Archa** 15.21 325 P Pn 02 32 37.9 +2.4
SNR=11
**AAK Ala-Archa** 15.21 325 Pn Pn 02 32 34.8 -0.8
**AML Almayashu** 15.26 322 P Pn 02 32 35.8 -0.6
SNR=12
**FRU1 Bishkek** 15.27 325 P Pn 02 32 36.0 -0.3
FRU1 pmax pmax
comp=Z,45nm,0.5s
**FRU1 Bishkek** 15.27 325 Pn Pn 02 32 36.0 -0.3
**CHMS Chumysh** 15.35 326 P Pn 02 32 38.5 +1.2
SNR=9.4
**KLRI Killari** 15.42 217 eP Pn 02 32 39.0 +0.7
**KMI Kunming** 15.51 107 ⇑P P 02 32 41.2 -2.9
KMI pP sP 02 32 47.9 -2.5
KMI PP pP 02 32 53.9 +5.5
KMI pmax pmax
comp=Z,24nm,0.6s
KMI LR LR
comp=Z,510nm,19.3s
KMI LR LR
comp=Z,230nm,13.5s
KMI LR LR
comp=Z,460nm,9.2s
**GAR Garm** 15.53 306 Pn Pn 02 32 33.5 -6.2
GAR IAmb IAmb 02 32 37.6
comp=Z,40nm,0.8s
**LZH Lanzhou** 15.54 65 eP P 02 32 44.6 +0.3
LZH pP sP 02 32 49.0 -1.3
LZH sP pP 02 32 51.2 +2.8
LZH pmax pmax
comp=Z,12nm,1.0s
LZH LR LR
comp=Z,1μm,11.6s
LZH LR LR
comp=Z,670nm,12.3s
LZH LR LR
comp=Z,530nm,13.7s
**EKS2 Erkin-Say** 15.59 323 P Pn 02 32 42.6 +2.1
SNR=8.4
**BTK Batken** 15.71 311 Pn 02 32 38.3 -3.8
BTK IAmb IAmb 02 32 49.0
comp=Z,35nm,0.6s
BTK Sn 02 35 30.1 -6.1
**ADKI Addanki** 15.94 203 ePn Pn 02 32 45.3 +0.3
ADKI eP P 02 32 45.5 -3.1
**SRLM Srisailam** 16.09 207 eP Pn 02 32 47.9 +0.8
**MK31 Makanchi Array** 16.34 350 P Pn 02 32 49.7 -0.4
MK31 pmax pmax
comp=Z,24nm,0.9s
**MK31 Makanchi Array** 16.34 350 P Pn 02 32 49.7 -0.4
**MKAR Makanchi Array** 16.34 350 Pn Pn 02 32 49.5 -0.6
comp=Z,0.2nm,0.3s,baz=168,slow=11,SNR=64
MKAR LR LR 02 40 17.1
comp=Z,234nm,20.2s,baz=167,slow=41
**MKAR Makanchi Array** 16.34 350 P Pn 02 32 49.4 -0.8
**MAKZ Makanchi** 16.41 349 P Pn 02 32 50.4 -0.5
MAKZ pmax pmax
comp=Z,23nm,1.0s
**MAKZ Makanchi** 16.41 349 Pn 02 32 50.4 -0.5
**CHTO Chiang Mai** 16.45 133 P P 02 32 53.7 -0.7
CHTO pmax pmax
comp=Z,16nm,0.9s
**CHTO Chiang Mai** 16.45 133 P P 02 32 53.7 -0.7
**RCLA Racherla** 16.65 206 eP Pn 02 32 54.1 -0.1
**CMAR Chiang Mai Arr** 16.72 134 Pn Pn 02 32 54.6 -0.5
comp=Z,0.6nm,0.3s,baz=317,slow=12,SNR=18
CMAR LR LR 02 39 57.0
comp=Z,178nm,19.3s,baz=310,slow=39
**CMAR Chiang Mai Arr** 16.72 134 *i* P P 02 32 56.7 -0.7
CMAR pmax pmax
comp=Z,5.0nm,0.9s
**CMAR Chiang Mai Arr** 16.72 134 Pn P 02 32 54.8 -2.6
**BTLS Baital** 17.25 329 eP Pn 02 33 02.7 +1.2
**IUG Iuzhnay** 17.36 315 eP Pn 02 33 00.6 -2.5
**KKAR Karatay Array** 17.66 319 P Pn 02 33 04.9 -1.8
**KKAR Karatay Array** 17.66 319 P Pn 02 33 04.9 -1.8
**GYA Guiyang** 18.32 98 ⇓P P 02 33 14.8 -0.4
GYA pP sP 02 33 23.0 +1.5
GYA S Sn 02 36 35.4 -4.4
GYA pmax pmax
comp=Z,20nm,1.0s
GYA LR LR
comp=Z,280nm,7.6s
**DGZ Jazzator, Alta** 18.96 2 *i* P P 02 33 22.1 0.0
DGZ pmax pmax
comp=Z,16nm,1.1s
**XAN Xi'an** 19.33 74 P Pn 02 33 25.3 -1.8
XAN pP sP 02 33 31.9 -0.2
XAN PP PnPn 02 33 44.1 +4.0
XAN S S 02 37 07.0 +2.1
XAN pmax pmax
comp=Z,10.0nm,1.0s
XAN pmax pmax
comp=Z,140nm,5.4s
XAN LR LR
comp=Z,420nm,11.5s
XAN LR LR
comp=Z,320nm,11.3s
XAN LR LR
comp=Z,450nm,17.9s
**ENH Enshi** 19.93 85 P Pn 02 33 33.4 -0.9
ENH IAmb IAmb 02 33 46.2
comp=Z,18nm,0.8s
**OTUK Ortayu** 20.51 332 P P 02 33 37.2 -1.6
**HRA Herat** 20.64 287 P 02 33 36.9 -3.7
**KURBB Kurchatov Arra** 20.71 346 P P 02 33 41.0 +0.1
comp=Z,39nm,0.9s,baz=162,slow=10,SNR=165
KURBB ScP ScP 02 41 26.7 -0.5
comp=Z,0.1nm,0.3s,baz=182,slow=2.3,SNR=4.5
KURBB LR LR 02 42 24.6
comp=Z,202nm,19.0s,baz=87,slow=39
**KURBB Kurchatov Arra** 20.71 346 P P 02 33 39.4 -1.6
**KURK Kurchatov** 20.78 346 P P 02 33 41.1 -0.6
**KURK Kurchatov** 20.78 346 P 02 33 41.0 -0.6
KURK IAmb IAmb 02 33 43.5
comp=Z,63nm,1.1s
**BTO Baotou** 21.54 56 eP P 02 33 49.0 -1.1
BTO S S 02 37 50.2 +1.3
BTO LR LR
comp=Z,3μm,14.3s
BTO LR LR
comp=Z,2μm,14.3s
**BRZS Berezniki** 21.81 336 eP P 02 33 53.9 +1.1
**GULI GuiLin** 21.85 98 P P 02 33 54.8 +1.3
GULI pmax pmax
comp=Z,10.0nm,1.1s
GULI LR LR
comp=Z,280nm,6.0s
GULI LR LR
comp=Z,250nm,8.9s
GULI LR LR
comp=Z,340nm,15.2s
**LYN LuoYang** 22.29 73 ⇓P P 02 33 58.0 0.0
LYN pP sP 02 34 03.3 -0.8
LYN pmax pmax
comp=Z,10.0nm,0.6s
LYN LR LR
comp=Z,270nm,6.8s
LYN LR LR
comp=Z,270nm,8.6s
**HHC Hu-ho-hao-te** 22.73 57 eP P 02 34 03.7 +0.9
HHC pmax pmax
comp=Z,9.0nm,1.2s
HHC pmax pmax
comp=Z,250nm,8.5s
**SONM Songino Array** 22.95 36 P P 02 34 06.0 +0.8
comp=Z,3.8nm,0.8s,baz=220,slow=7.4,SNR=27
SONM PcP PcP 02 37 54.9 -0.3
comp=Z,0.5nm,0.6s,baz=227,slow=3.5,SNR=4.0
SONM LR LR 02 44 23.5
comp=Z,89nm,18.2s,baz=270,slow=40
**SONM Songino Array** 22.95 36 P P 02 34 05.2 +0.1
**ZAA0 Zalesovo Array** 23.23 358 P P 02 34 06.5 -1.2
ZAA0 IAmb IAmb 02 34 14.3
comp=Z,16nm,1.1s
**ZALV Zalesovo Beam** 23.23 358 P P 02 34 06.9 -0.8
comp=Z,2.4nm,0.3s,baz=178,slow=10,SNR=16
ZALV LR LR 02 44 43.5
comp=Z,425nm,18.6s,baz=315,slow=41
**ZALV Zalesovo Beam** 23.23 358 *i* P P 02 34 08.3 +0.6
ZALV pmax pmax
comp=Z,2.0nm,0.3s
**ZALV Zalesovo Beam** 23.23 358 P P 02 34 06.6 -1.1
**UBPT Khong Chiam** 23.30 127 P P 02 34 08.2 -0.6
UBPT IAmb IAmb 02 34 10.2
comp=Z,39nm,1.3s
**ULN Ulaanbaatar** 23.31 37 P P 02 34 09.4 +0.6
ULN pmax pmax
comp=Z,29nm,1.3s
**ULN Ulaanbaatar** 23.31 37 P P 02 34 09.4 +0.6
ULN IAmb IAmb 02 34 16.2
comp=Z,29nm,1.3s
**ZAK Zakamensk** 23.36 28 eP P 02 34 09.8 +0.6
ZAK pmax pmax
comp=Z,12nm,1.1s
**PALK Pallekele** 23.94 194 LR LR 02 43 47.0
comp=Z,122nm,19.8s,baz=118,slow=37
**WHN Wuhan** 24.06 83 ⇓P P 02 34 16.5 +0.4
WHN S S 02 38 31.6 -1.8
WHN LR LR
comp=Z,1μm,14.5s
WHN LR LR
comp=Z,650nm,10.1s
WHN LR LR
comp=Z,700nm,9.4s
**QIZ Qiongzhong** 24.22 113 P P 02 34 18.5 +0.8
QIZ LR LR
comp=Z,430nm,23.1s
QIZ LR LR
comp=Z,360nm,22.3s
**GEYT Alibeck** 24.35 295 P P 02 34 19.6 +0.9
comp=Z,4.6nm,0.8s,baz=238,slow=28,SNR=5.9
GEYT LR LR 02 45 37.0
comp=Z,153nm,19.8s,baz=138,slow=41
**GEYT Alibeck** 24.35 295 P P 02 34 18.4 -0.3
**GYA0B ALIBECK ARRAY** 24.35 295 P P 02 34 18.3 -0.4
GYA0B IAmb IAmb 02 34 24.9
comp=Z,11nm,0.9s
**HNS HongShan** 24.35 67 ⇓P P 02 34 19.7 +1.0
HNS S S 02 38 43.6 +5.7
HNS pmax pmax
comp=Z,9.0nm,1.0s
HNS LR LR
comp=Z,480nm,18.8s
HNS LR LR
comp=Z,290nm,14.7s
**BVAR Borovoye Array** 25.14 337 P P 02 34 25.8 +0.1
comp=Z,2.1nm,0.8s,baz=102,slow=14,SNR=9.9
BVAR ScP ScP 02 41 39.2 +0.4
comp=Z,0.8nm,0.8s,baz=90,slow=7.2,SNR=4.4
**BRVK Borovoye** 25.20 337 *ce*P P 02 34 26.1 -0.1
BRVK pmax pmax
comp=Z,9.0nm,1.7s
**BRVK Borovoye** 25.20 337 P P 02 34 23.7 -2.6
**WSAR Wadi Sarin** 25.77 260 P P 02 34 33.8 +2.0
comp=Z,5.1nm,0.8s,baz=104,slow=9.9,SNR=2.7
**BJT Baijiatuau** 25.91 61 P P 02 34 32.7 -0.1
BJT pmax pmax
comp=Z,8.0nm,0.9s
**BJT Baijiatuau** 25.91 61 P P 02 34 32.7 -0.1
**BJI Beijing** 25.92 61 P P 02 34 34.1 +1.2
BJI pP sP 02 34 43.2 +3.8
BJI pmax pmax
comp=Z,6.0nm,0.8s
BJI LR LR
comp=Z,640nm,15.3s
BJI LR LR
comp=Z,210nm,13.8s
BJI LR LR
comp=Z,120nm,10.4s
**XLT XiLinHaoTe** 26.88 52 eP P 02 34 44.4 +2.7
XLT S S 02 39 22.5 +4.2
XLT pmax pmax
comp=Z,7.0nm,1.2s
XLT pmax pmax
comp=Z,260nm,5.8s
XLT LR LR
comp=Z,540nm,8.2s
XLT LR LR
comp=Z,530nm,8.5s
XLT LR LR
comp=Z,490nm,7.4s
**AB31 Akbulak array** 27.20 320 eP P 02 34 44.4 0.0
**ABKAR Akbulak array** 27.20 320 P P 02 34 44.2 -0.2
**ABKAR Akbulak array** 27.20 320 P P 02 34 44.5 +0.1
ABKAR IAmb IAmb 02 34 49.1
comp=Z,5.7nm,0.9s
**NJ2 Nanjing** 27.71 79 eP P 02 34 49.2 +0.1
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**AKTO Aktyubinsk** 28.89 321 P P 02 34 59.4 -0.1
comp=Z,1.3nm,0.5s,baz=130,slow=7.1,SNR=10
**PSI Prapat** 30.21 154 LR LR 02 48 22.1
comp=Z,55nm,20.1s,baz=350,slow=38
**SVE Sverdlovsk** 31.66 333 eP P 02 35 25.5 +1.7
SVE pmax pmax
comp=Z,21nm,1.1s
**SNY Shenyang** 31.75 59 ⇑P P 02 35 25.6 +0.8
SNY S S 02 40 42.8 +8.2
SNY pmax pmax
comp=Z,7.0nm,0.7s
SNY pmax pmax
comp=Z,260nm,4.6s
SNY LR LR
comp=Z,370nm,6.7s
SNY LR LR
comp=Z,250nm,4.7s
SNY LR LR
comp=Z,390nm,6.3s
**ARU Arti** 32.23 331 P P 02 35 28.9 +0.1
comp=Z,2.6nm,0.4s,baz=162,slow=3.2
ARU LR LR 02 48 51.0
comp=Z,180nm,18.7s,baz=295,slow=37
**ARU Arti** 32.23 331 *d* P 02 35 29.4 +0.6
ARU 02 36 32.1
ARU S S 02 40 42.7 +0.9
ARU SS SnSn 02 42 36.0 +3.3
ARU pmax pmax
comp=Z,21nm,1.1s
**ARU Arti** 32.23 331 P P 02 35 27.3 -1.5
ARU IAmb IAmb 02 35 30.6
comp=Z,19nm,1.0s
**GROC Groznyy** 34.40 303 eP P 02 35 48.0 +0.1
GROC *e* 02 37 03.5
GROC *e* 02 38 22.1
GROC pmax pmax
comp=Z,9.0nm,0.7s
**KSRS Korea Array** 34.85 68 P P 02 35 51.0 -0.9
comp=Z,1.4nm,0.7s,baz=280,slow=9.7,SNR=4.9
KSRS LR LR 02 51 21.7
comp=Z,132nm,18.3s,baz=290,slow=38
**BELG Belogornoye** 35.57 319 LR LR 02 53 26.8
comp=Z,107nm,19.5s,baz=315,slow=41
**BELG Belogornoye** 35.57 319 *i* P P 02 35 56.4 -1.5
**ZEI Tsey** 35.73 302 eP P 02 36 00.4 +0.7
ZEI pmax pmax
comp=Z,3.0nm,1.0s
**KBZ Khabaz** 36.55 303 P P 02 36 05.5 -0.9
comp=Z,0.9nm,0.9s,baz=102,slow=9.3,SNR=2.2
**KIV Kislovodsk** 36.73 303 eP P 02 36 06.6 -1.5
KIV pmax pmax
comp=Z,5.0nm,1.0s
KIV MLR MLR
comp=Z,102nm,16.0s
**JOW Kunigami** 36.78 85 LR LR 02 54 00.1
comp=Z,112nm,18.3s,baz=324,slow=41
**KIRV Kirov** 37.48 329 P P 02 36 14.9 +0.9
comp=Z,30nm,0.8s,baz=120,slow=2.6,SNR=20
**USRK Ussuriysk Ar.** 38.15 56 P P 02 36 20.9 +0.9
comp=Z,5.9nm,0.8s,baz=258,slow=7.2,SNR=7.6
**NRIK Noril'sk** 38.65 1 P P 02 36 24.1 +0.2
comp=Z,4.4nm,0.7s,baz=219,slow=6.6,SNR=4.1
NRIK LR LR 02 54 29.2
comp=Z,284nm,19.8s,baz=241,slow=40
**KLR Kul'dur** 38.70 48 P P 02 36 24.7 +0.1
comp=Z,1.6nm,0.7s,baz=269,slow=14,SNR=4.0
**VORR Voronezh** 40.32 315 eP P 02 36 38.9 +0.9
VORR pmax pmax
comp=Z,40nm,0.4s
**PRGR Permogore** 40.68 331 eP P 02 36 39.9 -1.0
PRGR pmax pmax
comp=Z,16nm,0.8s
**YAK Yakutsk** 41.94 29 LR LR 02 55 22.4
comp=Z,124nm,19.0s,baz=267,slow=38
**YAK Yakutsk** 41.94 29 *ce*P P 02 36 51.6 +0.4
YAK pmax pmax
comp=Z,11nm,0.8s
**LEM Lembang** 42.54 148 LR LR 02 56 48.5
comp=Z,51nm,21.5s,baz=236,slow=39
**OBN Obninsk** 42.65 320 LR LR 02 54 45.8
comp=Z,68nm,19.0s,baz=328,slow=36

**OBN Obninsk 42.65 320** *ce*P P **02 36 57.5 +0.5**
OBN *e* 02 38 38.7
OBN *eS* **S** **02 43 20.8 +0.9**
OBN pmax pmax
comp=Z,44nm,1.7s
OBN MLR MLR
comp=Z,171nm,14.0s
**KLMR Klimovskoe 42.97 328** *e*P P **02 36 58.0 -1.5**
KLMR *e* 02 38 48.6
KLMR pmax pmax
comp=Z,51nm,1.3s
**KLMR Klimovskoe 42.97 328** *e*P P **02 36 58.1 -1.5**
KLMR AMP 02 37 01.3
comp=Z,51nm,1.3s
KLMR *e*PcP **PcP** **02 38 48.7 -1.2**
**MMAI Mount Meron Ar 42.99 287** P P **02 37 00.1 -0.2**
comp=Z,0.2nm,0.3s,baz=337,slow=43,SNR=2.0
**MJAR Matsushiro Arr 43.12 68** LR LR 02 57 53.6
comp=Z,22nm,19.1s,baz=318,slow=40
**ILGA Ilgaz 43.30 299** P P **02 37 03.0 +0.2**
ILGA IAmb IAmb 02 37 09.3
comp=Z,40nm,1.3s
**BR131 Keskin Array S 43.46 297** P P **02 37 03.8 -0.3**
BR131 pmax pmax
comp=Z,5.0nm,1.0s
**BR131 Keskin Array S 43.46 297** P P **02 37 03.8 -0.3**
**BRTR Keskin Array B 43.46 297** P P **02 37 03.9 -0.3**
comp=Z,1.9nm,0.9s,baz=107,slow=6.6,SNR=11
BRTR LR LR 02 57 21.2
comp=Z,182nm,20.7s,baz=313,slow=39
**BRTR Keskin Array B 43.46 297** *i* P P **02 37 04.3 +0.2**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**BRTR Keskin Array B 43.46 297** P P **02 37 03.6 -0.5**
**DAV Davao City (W) 43.59 114** P P **02 37 07.0 +1.8**
**ATD Arta Tunnel 44.52 254** LR LR 02 56 20.2
comp=Z,36nm,19.2s,baz=10,slow=37
**MDUB Mudurnu 45.25 298** P P **02 37 17.2 -1.2**
**ASAJ Asahikawa 45.77 57** LR LR 02 57 33.6
comp=Z,74nm,20.7s,baz=22,slow=37
**PURM Purcari 45.89 307** ⇑P P **02 37 23.6 +0.5**
**AKASG Malin Array Be 46.41 312** P P **02 37 26.9 -0.3**
comp=Z,8.9nm,0.6s,baz=80,slow=7.4,SNR=56
AKASG PP **PP** **02 39 14.9 -1.1**
comp=Z,0.4nm,0.5s,baz=90,slow=12,SNR=4.1
AKASG LR LR 02 59 58.8
comp=Z,217nm,20.9s,baz=3.5,slow=40
**AKASG Malin Array Be 46.41 312** P P **02 37 25.4 -1.7**
AKASG IAmb IAmb 02 37 29.1
comp=Z,6.6nm,1.5s
**AKBB Malin Array Si 46.41 312** *ce*P P **02 37 26.8 -0.4**
**KIS Kishinev 46.61 307** ⇑P P **02 37 28.8 0.0**
**MILM Milestii Mici 46.61 307** ⇑P P **02 37 28.9 0.0**
**TLCR 46.67 305** ⇑P P **02 37 29.1 -0.1**
**ELL Elmali 46.76 293** P P **02 37 29.3 -1.0**
ELL pmax pmax
comp=Z,123nm,0.8s
**ELL Elmali 46.76 293** P P **02 37 29.3 -1.0**
**TIXI Tiksi 46.89 17** *ce*P P **02 37 30.5 -0.1**
TIXI pmax pmax
comp=Z,5.0nm,0.8s
**TIXI Tiksi 46.89 17** P P **02 37 29.6 -1.0**
TIXI IAmb IAmb 02 37 35.6
comp=Z,5.2nm,0.8s
**SORM Soroca 46.91 309** ⇓P P **02 37 30.9 -0.3**
**TPGR Topolog 46.96 304** ⇑P P **02 37 31.6 -0.1**
**PUL Pulkovo 47.00 325** *ce*P P **02 37 32.6 +0.9**
PUL pmax pmax
comp=Z,46nm,0.5s
**LEOM Leova 47.01 307** ⇑P P **02 37 32.2 +0.2**
**CFR Carcaliu 47.15 305** ⇓P P **02 37 33.3 +0.3**
**HARR Harsova 47.32 304** ⇑P P **02 37 34.8 +0.4**
**SLCR Slobozia Conac 47.38 305** ⇑P P **02 37 35.2 +0.3**
**BIR Birlad 47.45 306** ⇑P P **02 37 35.2 -0.2**
**ICOR Ion Corvin 47.45 303** ⇑P P **02 37 36.0 +0.6**
**KAPI Kappang 47.77 132** LR LR 02 59 48.0
comp=Z,54nm,20.9s,baz=316,slow=39
**ODBI Odobesti 47.87 306** ⇑P P **02 37 39.4 +0.7**
**VRI Vrincioaia 48.10 306** ⇑P P **02 37 40.9 +0.4**
**TESR Tescani 48.12 307** ⇑P P **02 37 40.6 0.0**
**PLOR Plostina 48.15 306** ⇓P P **02 37 41.4 +0.5**
**NACGM Naroch 48.17 318** *i* P P **02 37 39.1 -1.8**
**IDID Didziasalis 48.23 319** *e*P P **02 37 42.6 +1.3**
**PRAR RASCA 48.36 308** ⇑P P **02 37 42.4 -0.1**
**NEHR Nehoiu 48.43 305** ⇑P P **02 37 43.8 +0.8**
**RAZG Razgrad 48.43 303** ⇑P P **02 37 42.9 -0.2**
**COVR Voineasa-Covas 48.46 306** ⇑P P **02 37 44.1 +0.8**
**IIGN Ignalina 48.53 319** *e*P P **02 37 45.0 +1.4**
**VSU Vasula 48.59 323** *i* P P **02 37 42.7 -1.3**
VSU pmax pmax
comp=Z,97nm,1.0s
**VSU Vasula 48.59 323** *e*P P **02 37 44.7 +0.6**
**ISAL Salakas 48.60 319** *e*P P **02 37 45.3 +1.1**
**MLR Muntele Rosu 48.67 305** ⇑P P **02 37 45.9 +0.9**
**MLR Muntele Rosu 48.67 305** P P **02 37 45.2 +0.2**
comp=Z,34nm,0.9s,baz=79,slow=2.2,SNR=54
**MLR Muntele Rosu 48.67 305** P P **02 37 44.4 -0.6**
**OZUR 48.74 306** ⇑P P **02 37 45.5 0.0**
**DOPR Dopca 49.02 306** ⇑P P **02 37 48.0 +0.4**
**BURAR Bucovina Array 49.04 308** ⇓P P **02 37 48.0 +0.2**
**BURAR Bucovina Array 49.04 308** P P **02 37 46.5 -1.3**
BURAR IAmb IAmb 02 37 49.3
comp=Z,5.9nm,0.9s
**BUR08 Bucovina Ar. S 49.05 308** P P **02 37 47.4 -0.5**
BUR08 IAmb IAmb 02 37 49.0
comp=Z,4.3nm,0.8s
**VOIR 49.30 305** ⇑P P **02 37 49.8 0.0**
**FINES FINESS Array B 49.38 327** P P **02 37 50.6 +0.5**
comp=Z,2.9nm,0.4s,baz=110,slow=8.6,SNR=56
FINES LR LR 02 59 30.2
comp=Z,151nm,20.0s,baz=246,slow=37
**ARR Arges 49.60 305** ⇑P P **02 37 52.2 +0.1**
**ARCR ARCALIA 49.66 308** ⇓P P **02 37 52.9 +0.5**
**LVV L'vov 49.73 311** *e*P P **02 37 52.9 0.0**
LVV *eS* **S** **02 45 04.1 +2.2**
LVV pmax pmax
comp=Z,60nm,1.0s
LVV MLR MLR
comp=N,600nm,12.0s
LVV MLR MLR
comp=E,800nm,12.0s
LVV MLR MLR
comp=Z,500nm,11.0s
**PABE Paberze 49.82 319** *e*P P **02 37 54.4 +0.9**
**PABE Paberze 49.82 319** P P **02 37 52.3 -1.2**
**MTSE Matsula 50.14 323** *e*P P **02 37 56.1 +0.3**
**BMR Baia Mare 50.20 308** ⇑P P **02 37 57.3 +0.8**
**LOT Lotru 50.20 306** ⇑P P **02 37 57.2 +0.5**
**SANT Santorini 50.35 294** ⇓P P **02 37 56.9 -0.9**
**SANT Santorini 50.35 294** P P **02 37 56.9 -0.9**
**DRGR 50.80 307** ⇓P P **02 38 01.9 +0.8**
**TRPA Tarpa 50.80 309** ⇑P P **02 38 02.0 +1.0**
**TRPA Tarpa 50.80 309** P P **02 38 02.5 +1.4**
**GZR Gura Zlata 50.90 306** ⇑P P **02 38 01.8 -0.1**
**VTS Vitosha 50.93 302** ⇓P P **02 38 02.3 0.0**
**VTS Vitosha 50.93 302** P P **02 38 00.5 -1.8**
VTS pmax pmax
comp=Z,8.0nm,0.9s
**VTS Vitosha 50.93 302** P P **02 38 00.5 -1.8**
VTS IAmb IAmb 02 38 03.9
comp=Z,8.2nm,0.9s
**UZH Uzhgorod 50.93 310** *e*P P **02 38 01.6 -0.4**
UZH *e* 02 38 13.7
UZH *e* 02 38 19.8
**IDI Anoyia 51.04 292** P P **02 38 02.5 -0.7**
comp=Z,2.2nm,0.3s,baz=24,slow=19,SNR=13
**MA2 Magadan 51.17 36** *ce*P P **02 38 04.0 +0.4**
MA2 pmax pmax
comp=Z,7.0nm,1.0s
**MA2 Magadan 51.17 36** P P **02 38 02.6 -1.1**
MA2 IAmb IAmb 02 38 09.1
comp=Z,6.2nm,1.0s
**ARCES ARCESS Array B 51.43 337** P P **02 38 06.0 +0.6**
comp=Z,5.8nm,0.9s,baz=104,slow=7.6,SNR=40
ARCES PcP **PcP** **02 39 19.8 0.0**
comp=Z,2.2nm,0.7s,baz=122,slow=3.4,SNR=9.2
**VAY Valandovo 51.62 300** *i* P P 02 38 01.2 -6.1
**BZS Buzias 51.68 306** ⇑P P **02 38 07.6 -0.1**
**STIP Stip 51.84 301** *i* P P **02 38 07.1 -1.9**
**LIT Litokhoron 51.90 299** P P **02 38 07.9 -1.5**
LIT pmax pmax
comp=Z,18nm,1.0s
**LIT Litokhoron 51.90 299** P P **02 38 07.9 -1.5**
LIT IAmb IAmb 02 38 10.4
comp=Z,18nm,1.0s
**AGG Agios Georgios 52.23 298** P P **02 38 11.1 -0.8**
AGG pmax pmax
comp=Z,23nm,0.8s
**AGG Agios Georgios 52.23 298** P P **02 38 11.1 -0.8**
**SEY Seymchan 52.24 32** LR LR 03 01 48.5
comp=Z,124nm,19.8s,baz=342,slow=38
**SEY Seymchan 52.24 32** *i* P P **02 38 11.0 -0.6**
**SKO Skopje 52.34 301** *i* P P **02 38 12.0 -0.7**
**PSZ Piszkesteto 52.59 309** P P **02 38 13.4 -1.1**
**FRGS Fruska Gora 53.01 306** ⇓P P **02 38 16.9 -0.6**
**BUD Budapest 53.23 309** P P **02 38 21.2 +2.1**
**UPP Uppsala 53.38 324** *e*P P **02 38 20.1 +0.2**
**MORH Mrgy, Hungar 53.66 307** P P **02 38 20.5 -1.9**
**VIKU Vikbolandet 53.85 322** *e*P P **02 38 23.8 +0.3**
**MORC Moravsky Berou 53.93 312** ⇑P P **02 38 24.2 -0.1**
**MORC Moravsky Berou 53.93 312** *e*P P **02 38 24.8 +0.5**
**VRAC Vranov 54.60 311** ⇑P P **02 38 29.6 +0.5**
**VRAC Vranov 54.60 311** P P **02 38 29.5 +0.3**
comp=Z,4.1nm,0.8s,baz=57,slow=6.7,SNR=7.4
VRAC LR LR 03 03 19.8
comp=Z,262nm,18.7s,baz=297,slow=38
**VRAC Vranov 54.60 311** *e*P P **02 38 28.6 -0.6**
**DPC Dobruska-Polom 54.64 312** *e*P P **02 38 29.4 -0.1**
**DPC Dobruska-Polom 54.64 312** *e*P P **02 38 29.4 -0.1**
**KRUC Moravsky 54.76 311** *e*P P **02 38 30.2 -0.1**
**CHVC Chvalec 54.78 313** *e*P P **02 38 30.5 0.0**
**UPC Upice 54.82 313** *e*P P **02 38 31.4 +0.7**
**UPC Upice 54.82 313** *e*P P **02 38 31.4 +0.7**
**RICI Ricice 55.18 304** P P **02 38 32.2 -1.3**
**CONA Conrad Observa 55.28 310** *e*P P **02 38 34.7 +0.5**
comp=Z,7.5nm,1.0s
**HFS Hagfors 55.35 324** P P **02 38 34.3 0.0**
comp=Z,7.7nm,0.5s,baz=94,slow=7.7,SNR=34
**KIJV Kijevo 55.60 305** P P **02 38 36.0 -0.5**
**ARSA Arzberg 55.62 309** *e*P P **02 38 36.8 +0.2**
comp=Z,5.5nm,1.2s
**PRU Pruhonice 55.82 312** *e*P P **02 38 42.3 +4.3**
**SOKA Soboth 56.05 308** *i* P P **02 38 40.1 +0.4**
comp=Z,9.0nm,1.1s
**ZIRJ Zirje 56.21 304** P P **02 38 39.1 -1.7**
**NC405 NORSAR Array S 56.27 326** P P **02 38 39.9 -1.2**
**MOA Molln 56.35 310** *i* P P **02 38 41.9 +0.1**
comp=Z,6.8nm,1.1s
**KMBO Kilima Mbogo 56.39 245** P P **02 38 42.6 -0.1**
comp=Z,0.8nm,0.5s,baz=45,slow=4.3,SNR=2.1
**KMBO Kilima Mbogo 56.39 245** P P **02 38 42.0 -0.8**
KMBO IAmb IAmb 02 38 47.6
comp=Z,6.7nm,1.5s
**NB2 NORSAR Subarra 56.52 326** P P **02 38 42.3 -0.5**
comp=Z,1.8nm,0.5s,baz=86,slow=6.9
**NOA NORSAR Array B 56.52 326** P P **02 38 42.6 -0.2**
comp=Z,3.7nm,0.6s,baz=87,slow=7.1,SNR=17
**GEC2 GERESS Array S 56.55 311** P P **02 38 41.7 -1.6**
GEC2 IAmb IAmb 02 38 44.3
comp=Z,3.7nm,0.9s
**GERES GERESS Array B 56.55 311** P P **02 38 43.0 -0.3**
comp=Z,3.0nm,0.8s,baz=78,slow=6.2,SNR=14
**DUGI Dugi Otok 56.55 305** P P **02 38 41.5 -1.8**
**KHC Kasperske Hory 56.58 311** *e*P P **02 38 43.2 -0.2**
**KHC Kasperske Hory 56.58 311** *e*P P **02 38 43.2 -0.2**
**CLL Collm 56.59 314** *e*P P **02 38 47.0 +3.6**
CLL pmax pmax
comp=Z,20nm,1.7s
**CLL Collm 56.59 314** *e*Px Px 02 38 47.0
comp=Z,20nm,1.7s
CLL *e*pP sP 02 38 53.0 +3.1
**NC204 NORSAR Array S 56.73 326** P P **02 38 43.2 -1.1**
NC204 IAmb IAmb 02 38 59.3
comp=Z,8.8nm,1.1s
**ABTA Abfaltersbach 57.73 309** *e*P P **02 38 49.9 -1.8**
comp=Z,11nm,1.8s
**BILL Bilibino 58.13 26** ⇓*e*P P **02 38 54.9 +0.8**
BILL *e* 02 41 04.2
BILL pmax pmax
comp=Z,6.0nm,1.0s
BILL MLR MLR
comp=Z,77nm,15.0s
**WTTA Wattenberg 58.21 309** *e*P P **02 38 54.5 -0.6**
comp=Z,4.4nm,0.7s
**SQTA Sankt Quirin 58.51 309** *e*P P **02 38 56.4 -0.7**
comp=Z,4.0nm,0.6s
**MOTA Moosalm 58.55 310** *i* P P **02 38 56.6 -0.9**
comp=Z,5.2nm,0.8s
**FETA Feichten 58.87 309** *i* P P **02 38 59.0 -0.7**
comp=Z,4.7nm,0.9s
**DAVOX Davos/Dischmat 59.49 309** P P **02 39 03.1 -1.0**
comp=Z,9.2nm,0.7s,baz=50,slow=7.9,SNR=11
**MBAR Mbarara 61.26 250** P LR 03 03 29.1
comp=Z,66nm,18.9s,baz=308,slow=34
**MBAR Mbarara 61.26 250** *ce*P P **02 39 18.4 +1.8**
MBAR pmax pmax
comp=Z,4.0nm,0.8s
**FITZ Fitzroy Crossi 61.51 137** P P **02 39 17.7 -0.1**
comp=Z,1.3nm,0.6s,baz=339,slow=9.9,SNR=2.4
FITZ LR LR 03 09 46.6
comp=Z,43nm,18.1s,baz=300,slow=40
**NOR Nord 61.68 351** *i* P **02 39 17.2 -1.1**
NOR IAmb IAmb 02 39 20.7
comp=Z,6.2nm,1.1s
**KEST Kesra 63.06 297** P P **02 39 28.4 0.0**
comp=Z,8.3nm,1.1s,baz=3.0,slow=7.5,SNR=5.4
**DAG Danmarks Havn 63.68 346** *i* P P **02 39 30.8 -0.8**
DAG IAmb IAmb 02 39 32.8
comp=Z,9.6nm,1.2s
**DBG Daneborg 65.01 343** *i* P P **02 39 40.8 +0.4**
**EKA Eskdalemuir Ar 65.08 321** P P **02 39 40.8 -0.3**
comp=Z,2.8nm,0.7s,baz=68,slow=6.5,SNR=6.3
**WRA Warramunga Arr 68.29 131** P P **02 40 02.1 +0.1**
comp=Z,3.3nm,0.8s,baz=326,slow=6.2,SNR=7.1
WRA LR LR 03 15 11.9
comp=Z,40nm,18.1s,baz=108,slow=41
**WRA Warramunga Arr 68.29 131** P P **02 40 02.2 +0.1**
**WB2 Warramunga Arr 68.30 131** P P **02 40 02.2 +0.1**
WB2 IAmb IAmb 02 40 08.0
comp=Z,4.9nm,0.8s
**NEEM North Greenlan 69.06 351** *i* P P **02 40 06.4 0.0**
NEEM IAmb IAmb 02 40 11.6
comp=Z,23nm,0.7s
**EUNU Eureka 69.38 359** P P **02 40 06.7 -1.4**
EUNU IAmb IAmb 02 40 14.0
comp=Z,11nm,0.8s
**SUMG Summit 70.32 345** P P **02 40 14.0 -0.4**
SUMG pmax pmax
comp=Z,20nm,1.0s
**SUMG Summit 70.32 345** *i* P P **02 40 15.0 +0.6**
SUMG IAmb IAmb 02 40 16.6
comp=Z,27nm,1.1s
**SUMG Summit 70.32 345** P P **02 40 14.0 -0.4**
**AS31 Alice Springs 70.73 134** P P **02 40 17.1 0.0**
**ASAR Alice Springs 70.73 134** P P **02 40 17.5 +0.4**
comp=Z,1.7nm,0.6s,baz=316,slow=5.9,SNR=19
**ASAR Alice Springs 70.73 134** P P **02 40 17.7 +0.6**
**ASAR Alice Springs 70.73 134** P P **02 40 17.7 +0.6**
**ESDC Sonseca Array 71.36 305** P P **02 40 20.6 -0.3**
comp=Z,1.0nm,1.0s,baz=58,slow=4.1,SNR=3.6
**TULEG Thule 71.87 354** *i* P P **02 40 21.9 -1.3**
TULEG IAmb IAmb 02 40 23.6
comp=Z,8.2nm,1.0s
**TULEG Thule 71.87 354** P P **02 40 22.0 -1.2**
TULEG IAmb IAmb 02 40 23.5
comp=Z,9.1nm,1.0s
**TOLK Toolik Lake Re 72.75 19** P P **02 40 28.6 -0.1**
TOLK IAmb IAmb 02 40 33.0
comp=Z,3.8nm,0.8s
**ICESG Greenland Ices 72.97 342** *i* P P **02 40 30.1 -0.3**
ICESG IAmb IAmb 02 40 32.2
comp=Z,29nm,1.1s
**A36M Sachs Harbour 75.22 10** P P **02 40 41.4 -1.5**
A36M IAmb IAmb 02 40 48.6
comp=Z,6.2nm,0.9s
**ILAR Eielson Array 76.19 21** P P **02 40 47.9 -0.9**
comp=Z,1.0nm,0.8s,baz=322,slow=4.8,SNR=8.8
ILAR PP **PP** **02 43 38.9 -0.3**
comp=Z,0.6nm,0.9s,baz=308,slow=9.0,SNR=5.0
ILAR LR LR 03 16 47.5
comp=Z,131nm,18.2s,baz=326,slow=38
**INK Inuvik 76.91 14** P P **02 40 51.8 -0.8**
comp=Z,2.0nm,0.9s,baz=323,slow=6.7,SNR=3.6
**SFJD Kangerlussuaq 77.28 344** P P **02 40 55.0 +0.2**
SFJD pmax pmax
comp=Z,16nm,1.0s
**SFJD Kangerlussuaq 77.28 344** *i* P P **02 40 54.0 -0.7**
**SFJD Kangerlussuaq 77.28 344** P P **02 40 55.0 +0.2**
**C36M Paulatuk 77.76 11** P P **02 40 57.0 -0.4**
C36M IAmb IAmb 02 40 57.8
comp=Z,15nm,1.4s
**TORD Torodi Ar. Bea 78.88 279** P P **02 41 03.5 -1.0**
comp=Z,1.2nm,0.7s,baz=61,slow=4.8,SNR=9.0
**STKA Stephens Creek 81.34 135** P P **02 41 18.0 +0.6**
comp=Z,0.7nm,0.3s,baz=304,slow=11,SNR=1.7
STKA LR LR 03 26 15.4
comp=Z,79nm,18.7s,baz=5.7,slow=42
**STKA Stephens Creek 81.34 135** P P **02 41 18.0 +0.6**
**BOSA Boshof 82.91 231** P P **02 41 25.7 -0.2**
comp=Z,3.9nm,0.7s,baz=40,slow=4.9,SNR=8.9
**BOSA Boshof 82.91 231** P P **02 41 26.0 +0.1**
BOSA pmax pmax
comp=Z,7.0nm,1.0s
**BOSA Boshof 82.91 231** P P **02 41 26.0 +0.1**
BOSA IAmb IAmb 02 41 26.1
comp=Z,6.8nm,1.0s
**YKA Yellowknife Ar 85.58 10** P P **02 41 37.8 -1.1**
comp=Z,1.0nm,0.6s,baz=335,slow=5.0,SNR=18
**YKA Yellowknife Ar 85.58 10** *i* P P **02 41 41.5 +2.7**
YKA pmax pmax
comp=Z,1.0nm,0.6s
**YKA Yellowknife Ar 85.58 10** P P **02 41 37.5 -1.3**
**DBIC Dimbokro 87.68 276** P P **02 41 49.7 -0.3**
comp=Z,2.3nm,0.5s,baz=41,slow=4.0,SNR=4.7
**DBIC Dimbokro 87.68 276** P P **02 41 48.6 -1.4**
**SUR Sutherland 88.25 230** LR LR 03 18 14.1
comp=Z,70nm,21.2s,baz=342,slow=34
**TXAR Lajitas Array 119.51 10** PKP **PKiKP** **02 47 52.5 +1.3**
comp=Z,0.1nm,0.5s,baz=48,slow=1.3,SNR=2.2
**CPUP Villa Florida 147.89 269** PKPbc **PKPbc** **02 48 46.1 -0.3**
comp=Z,2.2nm,0.9s,baz=224,slow=11,SNR=3.4
**LPAZ La Paz 152.63 296** PKPbc **PKPbc** **02 48 59.1 +0.2**
comp=Z,2.2nm,0.9s,baz=38,slow=5.3,SNR=5.9

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*IDC **09** 02:36:13.4± 1.9, 7.56S× 124.97E, h510km± 24km, mb2.9/4, mb1 2.9/8, mb1mx2.6/47, mbtmp3.7/8, Error ellipse: s-maj=76.0km s-min=12.1km az=63.0*

**ISC 09 02:36:12.7± 1.0, 7.4S± 0.1° × 125.1E± 0.2, h500km, n8, σ0 65/11, mb3.3/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **3.11** | **208** | P | **P** | **02 37 24.7** | **+0.3** |
| | 5.6nm,0.3s,baz=85,slow=11,SNR=5.7 | | | | | | |
| BATI | | | | S | **S** | **02 38 23.0** | **+0.3** |
| | 13nm,0.3s,baz=5.4,slow=6.9,SNR=7.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.61** | **177** | P | **P** | **02 38 36.3** | **-0.1** |
| | 0.3nm,0.3s,baz=1.1,slow=10,SNR=6.2 | | | | | | |
| FITZ | | | | S | **S** | **02 40 34.0** | **-0.7** |
| | 0.2nm,0.3s,baz=338,slow=19,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.30** | **145** | P | **P** | **02 39 27.1** | **+1.0** |
| | 0.2nm,0.3s,baz=322,slow=11,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.20** | **153** | P | **P** | **02 39 55.6** | **+0.7** |
| | 0.3nm,0.3s,baz=343,slow=14,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **02 42 55.4** | **-0.8** |
| | 0.1nm,0.3s,baz=352,slow=21,SNR=7.6 | | | | | | |
| **SONM** | **Songino Array** | **57.48** | **345** | P | **P** | **02 45 13.0** | **-0.4** |
| | 0.4nm,0.5s,baz=143,slow=7.0,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.04** | **329** | P | **P** | **02 46 09.8** | **+0.4** |
| | 0.8nm,0.6s,baz=130,slow=7.6,SNR=9.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.93** | **336** | P | **P** | **02 46 32.3** | **-0.5** |
| | 0.8nm,0.6s,baz=135,slow=6.0,SNR=4.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.44** | **331** | P | **P** | **02 46 36.1** | **+0.2** |
| | 0.4nm,0.6s,baz=136,slow=5.2,SNR=6.8 | | | | | | |

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*UPP **09** 02:44:19.5± 3.3, 51.45N× 15.63E, h0km, ML2.1, Suspected explosion*
*IPEC **09** 02:44:19.7± 0.2, 51.45N× 16.22E, h0km, ML2.7/3, Error ellipse: s-maj=1.4km s-min=0.8km az=31.0*
*IDC **09** 02:44:19.3± 0.6, 51.50N× 16.02E, h0km, mb3.3/5, mb1 3.5/13, mb1mx3.3/50, mbtmp3.3/13, ML3.1/8, Error ellipse: s-maj=9.9km s-min=5.8km az=110.0*
*DNK **09** 02:44:19.0± 2.4, 51.57N× 16.23E, h0km± 94km, ML1.9*
*BGR **09** 02:44:20.3± 0.2, 51.46N× 16.19E, h1km, ML3.2/23, Error ellipse: s-maj=3.3km s-min=2.2km az=31.0*
*PRU **09** 02:44:20.0± 0.0, 51.44N× 16.13E, h0km*
*VIE **09** 02:44:22.6± 0.5, 51.29N× 15.96E, h0km, mb3.0/14, ml2.9/14, Error ellipse: s-maj=3.7km s-min=2.6km az=47.0 76 km WNW of Wroclaw Suspected Mining induced.*

**ISC 09 02:44:17.7± 0.5, 51.53N± 0.02× 16.24E± 0.02, h0km, n107, σ1 34/219, mb3.3/5, 7C, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.68** | **177** | *i* Pg | **Pb** | **02 44 31.8** | **-0.6** |
| KSP | | | | *e*Sg | **Sg** | **02 44 40.2** | **+0.6** |
| **KSP** | **Ksiaz** | **0.68** | **177** | *e*Pg | **Pb** | **02 44 31.9** | **-0.6** |
| KSP | | | | *e*Sg | **Sg** | **02 44 40.4** | **+0.8** |
| **CHVC** | **Chvalec** | **0.94** | **187** | *e*PG | **Pg** | **02 44 36.3** | **+0.5** |
| CHVC | | | | *e*SG | **Sg** | **02 44 46.0** | **-2.0** |
| | comp=Z,128nm,0.5s | | | | | | |
| **OSTC** | **Ostas** | **0.97** | **181** | *e*PG | **Pg** | **02 44 36.8** | **+0.6** |
| OSTC | | | | *e*SG | **Sg** | **02 44 48.9** | **+0.1** |
| | comp=Z,116nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.03** | **188** | *e*PG | **Pg** | **02 44 38.0** | **+0.6** |
| UPC | | | | *e*SG | **Sg** | **02 44 50.4** | **-0.3** |
| | comp=Z,335nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **177** | *e*PG | **Pg** | **02 44 40.7** | **+0.5** |
| DPC | | | | *e*SG | **Sg** | **02 44 54.6** | **-0.9** |
| | comp=Z,129nm,0.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **177** | *e*Pg | **Pg** | **02 44 40.7** | **+0.5** |
| DPC | | | | *e*Sg | **Sg** | **02 44 56.1** | **+0.6** |
| **PVCC** | **Panska Ves** | **1.45** | **227** | *e*PG | **Pn** | **02 44 45.2** | **0.0** |
| PVCC | | | | *e*SG | **Sg** | **02 45 03.7** | **-0.6** |
| | comp=Z,302nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.45** | **227** | *e*Pn | **Pb** | **02 44 45.7** | **+0.2** |
| PVCC | | | | *e*Sg | **Sn** | **02 45 05.4** | **+0.6** |
| **KRLC** | **Kraliky** | **1.49** | **166** | *e*PG | **Pb** | **02 44 46.5** | **+0.2** |
| KRLC | | | | *e*SG | **Sg** | **02 45 05.3** | **-0.3** |
| | comp=Z,88nm,0.7s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.58** | **247** | Pn | **Pn** | **02 44 46.8** | **-0.2** |
| BRG | | | | Pg | **Pg** | **02 44 49.3** | **+1.3** |
| BRG | | | | Sg | **Sg** | **02 45 09.0** | **+0.4** |
| BRG | | | | Amp | | 02 45 12.2 | |
| | comp=Z,110nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.58** | **247** | *e*Pn | **Pn** | **02 44 47.0** | **0.0** |
| BRG | | | | *e*Pg | **Pg** | **02 44 48.6** | **+0.5** |
| BRG | | | | *e*Sg | **Sg** | **02 45 08.9** | **+0.4** |
| **RUE** | **Ruedersdorf** | **1.79** | **303** | *e*Pn | **Pn** | **02 44 50.6** | **+0.7** |
| RUE | | | | *e*Pg | **Pg** | **02 44 54.0** | **+1.9** |
| RUE | | | | *e*Sg | **Sg** | **02 45 17.6** | **+2.3** |
| **PRU** | **Pruhonice** | **1.88** | **216** | *e*PG | **Pn** | **02 44 51.2** | **+0.2** |
| PRU | | | | *e*SG | **Sb** | **02 45 16.6** | **-0.2** |
| | comp=Z,112nm,0.8s | | | | | | |
| **PRU** | **Pruhonice** | **1.88** | **216** | *e*Pn | **Pn** | **02 44 51.3** | **+0.2** |
| PRU | | | | *e*Pg | **Pb** | **02 44 53.2** | **+0.4** |
| PRU | | | | *e*Sg | **Sb** | **02 45 17.4** | **+0.5** |
| **FBE** | **Freiberg** | **1.91** | **253** | *e*Pg | **Pg** | **02 44 55.0** | **+0.7** |
| FBE | | | | *e*Sg | **Sg** | **02 45 19.8** | **+0.7** |
| **MORC** | **Moravsky Berou** | **1.94** | **154** | ⇑P | **Pn** | **02 44 52.6** | **+0.7** |
| MORC | | | | ⇑S | **Sn** | **02 45 16.8** | **-0.1** |
| **MORC** | **Moravsky Berou** | **1.94** | **154** | *e*Pn | **Pn** | **02 44 52.3** | **+0.4** |
| | baz=334 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **02 45 17.6** | **+0.6** |
| | comp=Z,37nm,0.4s,baz=334 | | | | | | |
| **MORC** | **Moravsky Berou** | **1.94** | **154** | *e*PN | **Pn** | **02 44 52.4** | **+0.5** |
| MORC | | | | *e*SG | **Sn** | **02 45 17.7** | **+0.7** |
| **MORC** | **Moravsky Berou** | **1.94** | **154** | *e*Pn | **Pn** | **02 44 52.5** | **+0.5** |
| **CLL** | **Collm** | **2.04** | **265** | *e*Pn | **Pn** | **02 44 53.0** | **-0.2** |
| CLL | | | | *e*Pg | **Pb** | **02 44 56.0** | **+0.5** |
| CLL | | | | *i* x | x | 02 44 57.4 | |
| CLL | | | | *e*Sg | **Sg** | **02 45 23.0** | **-0.1** |
| | comp=Z,60nm,0.6s | | | | | | |
| **CLL** | **Collm** | **2.04** | **265** | *e*Pn | **Pn** | **02 44 53.4** | **+0.2** |
| CLL | | | | *e*Pg | **Pg** | **02 44 56.4** | **-0.3** |
| CLL | | | | *e*Sg | **Sg** | **02 45 23.8** | **+0.7** |
| **OKC** | **Ostrava-Krasne** | **2.08** | **144** | *e*PG | **Pg** | **02 44 57.8** | **+0.3** |
| OKC | | | | *e*SG | **Sg** | **02 45 24.7** | **+0.2** |
| | comp=Z,57nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.08** | **144** | *e*Pn | **Pn** | **02 44 54.1** | **+0.3** |
| OKC | | | | *e*Pg | **Pg** | **02 44 59.4** | **+1.9** |
| OKC | | | | *e*Sg | **Sb** | **02 45 23.6** | **+1.0** |
| **VRAC** | **Vranov** | **2.23** | **174** | ⇑P | **Pn** | **02 44 57.4** | **+1.5** |
| VRAC | | | | ⇑S | **Sb** | **02 45 27.4** | **+0.4** |
| **VRAC** | **Vranov** | **2.23** | **174** | Pn | **Pn** | **02 44 56.8** | **+0.9** |
| | comp=Z,6.0nm,0.3s,baz=342,slow=14,SNR=28 | | | | | | |
| VRAC | | | | Sn | **Sb** | **02 45 27.3** | **+0.3** |
| | comp=Z,8.5nm,0.3s,baz=240,slow=16,SNR=5.9 | | | | | | |
| **VRAC** | **Vranov** | **2.23** | **174** | *e*Pn | **Pn** | **02 44 57.1** | **+1.2** |
| | baz=354 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VRAC | | | | *e*Sg | | **Sb** | **02 45 27.0** | **+0.1** |
| | comp=Z,35nm,0.5s,baz=354 | | | | | | | | |
| **VRAC** | **Vranov** | **2.23** | **174** | *e*PN | | **Pn** | **02 44 57.2** | **+1.3** |
| VRAC | | | | *e*SG | | **Sb** | **02 45 27.1** | **+0.1** |
| **VRAC** | **Vranov** | **2.23** | **174** | *e*Pn | | **Pn** | **02 44 57.3** | **+1.5** |
| VRAC | | | | *e*Pg | | **Pg** | **02 45 01.7** | **+1.3** |
| VRAC | | | | *e*Sg | | **Sg** | **02 45 29.0** | **-0.3** |
| **TREC** | **Trest** | **2.28** | **192** | *e*PG | | **Pb** | **02 45 00.5** | **+0.7** |
| TREC | | | | *e*SG | | **Sb** | **02 45 29.3** | **+0.8** |
| | comp=Z,43nm,0.5s | | | | | | | | |
| **TREC** | **Trest** | **2.28** | **192** | *e*Pn | | **Pb** | **02 44 58.6** | **-1.1** |
| TREC | | | | *e*Pg | | **Pg** | **02 45 01.0** | **-0.4** |
| TREC | | | | *e*Sg | | **Sb** | **02 45 28.6** | **0.0** |
| **LNIZ** | **Loecknitz** | **2.33** | **329** | *e*Pn | | **Pn** | **02 44 57.9** | **+0.7** |
| **PBCC** | **Pribram** | **2.33** | **219** | *e*PG | | **Pb** | **02 45 01.2** | **+0.7** |
| PBCC | | | | *e*SG | | **Sb** | **02 45 30.0** | **+0.1** |
| **KRUC** | **Moravsky** | **2.47** | **178** | *e*Pn | | **Pn** | **02 45 00.5** | **+1.4** |
| | baz=357 | | | | | | | | |
| **KRUC** | **Moravsky** | **2.47** | **178** | *e*Pg | | **Pb** | **02 45 03.8** | **+0.9** |
| | baz=357 | | | | | | | | |
| KRUC | | | | *e*Sg | | **Sb** | **02 45 34.9** | **+1.1** |
| | comp=Z,46nm,0.7s,baz=357 | | | | | | | | |
| **KRUC** | **Moravsky** | **2.47** | **178** | *e*Pn | | **Pn** | **02 45 00.9** | **+1.8** |
| KRUC | | | | *e*Pg | | **Pg** | **02 45 04.3** | **-0.7** |
| KRUC | | | | *e*Sg | | **Sg** | **02 45 36.6** | **-0.3** |
| **OJC** | **Ojcow** | **2.61** | **119** | *e*Pn | | **Pn** | **02 45 00.6** | **-0.4** |
| OJC | | | | *e*Pg | | **Pg** | **02 45 09.5** | **+1.9** |
| OJC | | | | *e*Sg | | **Sg** | **02 45 44.1** | **+2.7** |
| **OJC** | **Ojcow** | **2.61** | **119** | *e*Pn | | **Pn** | **02 45 00.8** | **-0.3** |
| OJC | | | | *e*Pg | | **Pg** | **02 45 08.4** | **+0.8** |
| OJC | | | | *e*Sg | | **Sg** | **02 45 42.2** | **+0.8** |
| **TANN** | **Tannenbergstha** | **2.63** | **247** | *e*Pn | | **Pn** | **02 45 02.4** | **+0.9** |
| TANN | | | | *e*Pg | | **Pg** | **02 45 09.2** | **+1.1** |
| TANN | | | | *e*Sg | | **Sg** | **02 45 40.8** | **-1.4** |
| **WERD** | **Werda** | **2.71** | **248** | *e*Pg | | **Pg** | **02 45 09.5** | **0.0** |
| WERD | | | | *e*Sg | | **Sg** | **02 45 43.8** | **-0.8** |
| **NKC** | **Novy Kostel** | **2.73** | **243** | *e*PN | | **Pn** | **02 45 03.5** | **+0.8** |
| NKC | | | | *e*SG | | **Sg** | **02 45 43.9** | **-1.3** |
| | comp=Z,68nm,0.5s | | | | | | | | |
| **GUNZ** | **Gunzen** | **2.73** | **246** | *e*Pn | | **Pn** | **02 45 04.1** | **+1.3** |
| GUNZ | | | | *e*Pg | | **Pg** | **02 45 11.4** | **+1.5** |
| GUNZ | | | | *e*Sg | | **Sg** | **02 45 44.4** | **-1.0** |
| **WERN** | **Wernitzgruen** | **2.74** | **245** | *e*Pn | | **Pn** | **02 45 04.6** | **+1.7** |
| WERN | | | | *e*Pg | | **Pg** | **02 45 11.4** | **+1.2** |
| WERN | | | | *e*Sg | | **Sg** | **02 45 45.5** | **-0.2** |
| **PLN** | **Plauen** | **2.78** | **250** | *e*Pn | | **Pn** | **02 45 04.2** | **+0.8** |
| PLN | | | | *e*Pg | | **Pg** | **02 45 11.1** | **+0.2** |
| PLN | | | | *e*Sg | | **Sg** | **02 45 47.2** | **+0.2** |
| **NEUB** | **Neuenburg** | **2.81** | **265** | *e*Pg | | **Pg** | **02 45 12.0** | **+0.4** |
| NEUB | | | | *e*Sg | | **Sg** | **02 45 49.6** | **+1.5** |
| **JAVC** | **Velka Javorina** | **2.82** | **160** | *e*PN | | **Pn** | **02 45 04.5** | **+0.4** |
| **JAVC** | **Velka Javorina** | **2.82** | **160** | *e*Pn | | **Pb** | **02 45 06.8** | **-2.2** |
| JAVC | | | | *e*Pg | | **Pg** | **02 45 14.5** | **+2.8** |
| JAVC | | | | *e*Sg | | **Sg** | **02 45 50.1** | **+1.8** |
| **KHC** | **Kasperske Hory** | **2.94** | **216** | *e*PN | | **Pn** | **02 45 06.4** | **+0.7** |
| KHC | | | | *e*PG | | **Pb** | **02 45 11.2** | **+0.2** |
| KHC | | | | *e*SN | | **Sn** | **02 45 41.2** | **-0.5** |
| KHC | | | | *e*SG | | **Sb** | **02 45 49.4** | **+1.9** |
| | comp=Z,40nm,0.8s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.94** | **216** | *e*Pn | | **Pn** | **02 45 06.2** | **+0.6** |
| KHC | | | | *e*Pg | | **Pb** | **02 45 12.4** | **+1.4** |
| KHC | | | | *e*Sn | | **Sn** | **02 45 42.0** | **+0.3** |
| KHC | | | | *e*Sg | | **Sb** | **02 45 50.0** | **+2.5** |
| **CKRC** | **Cesky Krumlov** | **2.98** | **205** | *e*PN | | **Pn** | **02 45 07.3** | **+1.1** |
| CKRC | | | | *e*PG | | **Pb** | **02 45 12.6** | **+1.0** |
| CKRC | | | | *e*SG | | **Sb** | **02 45 50.5** | **+2.0** |
| **CKRC** | **Cesky Krumlov** | **2.98** | **205** | *e*Pn | | **Pn** | **02 45 07.5** | **+1.3** |
| CKRC | | | | *e*Pg | | **Pg** | **02 45 13.6** | **-1.1** |
| CKRC | | | | *e*Sn | | **Sn** | **02 45 42.2** | **-0.4** |
| CKRC | | | | *e*Sg | | **Sb** | **02 45 50.8** | **+2.3** |
| **MOX** | **Moxa** | **3.04** | **255** | *e*Pn | | **Pn** | **02 45 07.9** | **+0.8** |
| MOX | | | | *e*Pg | | **Pg** | **02 45 16.5** | **+0.5** |
| MOX | | | | *e*Sg | | **Sg** | **02 45 56.2** | **+0.8** |
| **SMOL** | **Smolenice** | **3.11** | **165** | *e*PN | | **Pn** | **02 45 10.8** | **+2.8** |
| SMOL | | | | *e*PG | | **Pg** | **02 45 18.7** | **+1.4** |
| SMOL | | | | *e*SG | | **Sg** | **02 45 58.2** | **+0.6** |
| **GEC2** | **GERESS Array S** | **3.14** | **212** | *e*Pn | | **Pn** | **02 45 09.9** | **+1.4** |
| GEC2 | | | | *e*Pg | | **Pb** | **02 45 16.1** | **+1.8** |
| GEC2 | | | | *e*Sg | | **Sb** | **02 45 55.5** | **+2.3** |
| **GERES** | **GERESS Array B** | **3.14** | **212** | Pn | | **Pn** | **02 45 09.1** | **+0.7** |
| | comp=Z,1.6nm,0.3s,baz=32,slow=13,SNR=32 | | | | | | | | |
| GERES | | | | Pg | | **Pb** | **02 45 15.3** | **+0.9** |
| | comp=Z,5.6nm,0.3s,baz=37,slow=16,SNR=28 | | | | | | | | |
| GERES | | | | Sn | | **Sn** | **02 45 44.9** | **-1.7** |
| | comp=Z,3.3nm,0.3s,baz=35,slow=21,SNR=6.7 | | | | | | | | |
| GERES | | | | Lg | | Lg | 02 45 54.5 | | |
| | comp=Z,10nm,0.3s,baz=36,slow=26,SNR=11 | | | | | | | | |
| **LANS** | **Liptovska Anna** | **3.15** | **138** | *e*PN | | **Pn** | **02 45 09.8** | **+1.2** |
| LANS | | | | *e*PG | | **Pg** | **02 45 18.8** | **+0.7** |
| LANS | | | | *e*SG | | **Sg** | **02 45 59.4** | **+0.5** |
| **FLTG** | **Flechtingen** | **3.20** | **287** | *e*Pg | | **Pg** | **02 45 20.0** | **+1.1** |
| FLTG | | | | *e*Sg | | **Sg** | **02 46 02.6** | **+2.2** |
| **WET** | **Wettzell** | **3.21** | **223** | *e*Pn | | **Pn** | **02 45 09.9** | **+0.5** |
| WET | | | | *e*Sg | | **Sg** | **02 45 59.0** | **-1.8** |
| **MODS** | **Modra-Piesok** | **3.23** | **168** | *e*PN | | **Pb** | **02 45 13.7** | **-2.1** |
| MODS | | | | *e*PG | | **Pg** | **02 45 21.6** | **+2.1** |
| MODS | | | | *e*SG | | **Sg** | **02 46 03.3** | **+2.1** |
| **NIE** | **Niedzica** | **3.34** | **128** | *e*P | | **Pg** | **02 45 23.0** | **+1.2** |
| NIE | | | | *e*S | | **Sg** | **02 46 07.3** | **+2.2** |
| **VYHS** | **Vyhne** | **3.47** | **150** | *e*PN | | **Pn** | **02 45 13.6** | **+0.7** |
| VYHS | | | | *e*PG | | **Pg** | **02 45 25.5** | **+1.4** |
| VYHS | | | | *e*SG | | **Sg** | **02 46 07.2** | **-1.8** |
| **CONA** | **Conrad Observa** | **3.61** | **184** | *i* Pn | | **Pn** | **02 45 16.1** | **+1.1** |
| | comp=Z,0.8nm,0.2s,SNR=5.6 | | | | | | | | |
| CONA | | | | *e*Sg | | **Sg** | **02 46 14.0** | **+0.4** |
| | comp=Z,26nm,0.4s | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **3.68** | **348** | *e*P | | **Pn** | **02 45 16.9** | **+1.1** |
| BSD | | | | *e*S | | **Sn** | **02 45 56.5** | **-3.3** |
| BSD | | | | IAML | | | 02 46 00.3 | | |
| | comp=Z,1.1nm,0.2s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **3.68** | **242** | *e*Pn | | **Pn** | **02 45 17.0** | **+1.1** |
| GRF | | | | *e*Sg | | **Sg** | **02 46 15.8** | **-0.2** |
| **MOA** | **Molln** | **3.90** | **200** | *i* Pn | | **Pn** | **02 45 20.0** | **+1.2** |
| | comp=Z,3.0nm,0.3s,SNR=9.1 | | | | | | | | |
| MOA | | | | Sg | | **Sg** | **02 46 21.1** | **-1.6** |
| | comp=Z,25nm,0.5s | | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **4.26** | **126** | *e*PG | | **Pg** | **02 45 41.4** | **+2.1** |
| **ARSA** | **Arzberg** | **4.30** | **186** | *e*Pn | | **Pn** | **02 45 26.7** | **+2.3** |
| | comp=Z,2.1nm,0.3s | | | | | | | | |
| ARSA | | | | *e*Sg | | **Sg** | **02 46 35.3** | **-0.6** |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **PSZ** | **Piszkesteto** | **4.32** | **145** | ⇑P | | **Pn** | **02 45 26.4** | **+1.7** |
| **LUNU** | **Lund** | **4.44** | **339** | P | | **Pn** | **02 45 26.5** | **+0.3** |
| LUNU | | | | S | | **Sn** | **02 46 17.8** | **-0.8** |
| **LUNU** | **Lund** | **4.44** | **339** | P | | **Pn** | **02 45 26.5** | **+0.3** |
| LUNU | | | | S | | **Sn** | **02 46 17.8** | **-0.8** |
| **BLEU** | **Blekinge** | **4.80** | **357** | *i* P | | **Pn** | **02 45 31.4** | **+0.3** |
| BLEU | | | | P | | **Pn** | **02 45 32.3** | **+1.2** |
| BLEU | | | | *i* S | | **Sn** | **02 46 25.8** | **-1.5** |
| **BLEU** | **Blekinge** | **4.80** | **357** | P | | **Pn** | **02 45 32.3** | **+1.2** |
| **OBKA** | **Obir** | **5.14** | **193** | Pn | | **Pn** | **02 45 37.1** | **+1.2** |
| | comp=Z,1.1nm,0.3s | | | | | | | | |
| OBKA | | | | *e*Sg | | **Sg** | **02 47 04.0** | **+1.3** |
| | comp=Z,10nm,0.7s | | | | | | | | |
| **DEL** | **Delary** | **5.15** | **345** | *i* P | | **Pn** | **02 45 36.0** | **+0.1** |
| DEL | | | | P | | **Pn** | **02 45 36.3** | **+0.4** |
| DEL | | | | *i* S | | **Sn** | **02 46 33.6** | **-2.4** |
| **DEL** | **Delary** | **5.15** | **345** | P | | **Pn** | **02 45 36.3** | **+0.4** |
| **WATA** | **Walderalm** | **5.18** | **218** | *i* Pn | | **Pn** | **02 45 38.0** | **+1.4** |
| | comp=Z,3.6nm,0.3s,SNR=5.5 | | | | | | | | |
| WATA | | | | *e*Sg | | **Sg** | **02 47 03.3** | **-0.7** |
| | comp=Z,8.6nm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **5.19** | **200** | Sg | | **Sg** | **02 47 05.1** | **+0.8** |
| | comp=Z,9.6nm,0.7s | | | | | | | | |
| **WTTA** | **Wattenberg** | **5.22** | **217** | *i* Pn | | **Pn** | **02 45 38.7** | **+1.7** |
| | comp=Z,1.6nm,0.3s,SNR=4.1 | | | | | | | | |
| WTTA | | | | *e*Sg | | **Sg** | **02 47 05.7** | **+0.5** |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **MOTA** | **Moosalm** | **5.36** | **221** | *i* Pn | | **Pn** | **02 45 39.7** | **+0.7** |
| | comp=Z,0.5nm,0.2s | | | | | | | | |
| MOTA | | | | *e*Sg | | **Sg** | **02 47 10.8** | **+1.0** |
| | comp=Z,8.6nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.37** | **209** | *i* Pn | | **Pn** | **02 45 41.2** | **+2.1** |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| ABTA | | | | Sg | | **Sg** | **02 47 10.0** | **-0.1** |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **RETA** | **Reutte** | **5.39** | **224** | *i* Pn | | **Pn** | **02 45 39.8** | **+0.4** |
| | comp=Z,1.2nm,0.2s,SNR=5.0 | | | | | | | | |
| RETA | | | | *e*Sg | | **Sg** | **02 47 09.6** | **-1.1** |
| | comp=Z,6.9nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.42** | **219** | *i* Pn | | **Pn** | **02 45 41.8** | **+2.0** |
| | comp=Z,4.3nm,0.3s,SNR=8.1 | | | | | | | | |
| SQTA | | | | *e*Sg | | **Sg** | **02 47 13.7** | **+2.1** |
| | comp=Z,6.4nm,0.4s | | | | | | | | |
| **VXJU** | **Vaexsjoe** | **5.46** | **352** | P | | **Pn** | **02 45 41.1** | **+0.9** |
| **VXJU** | **Vaexsjoe** | **5.46** | **352** | P | | **Pn** | **02 45 41.1** | **+0.9** |
| **FETA** | **Feichten** | **5.77** | **221** | *i* Pn | | **Pn** | **02 45 46.0** | **+1.3** |
| | comp=Z,1.1nm,0.5s | | | | | | | | |
| FETA | | | | Sg | | **Sg** | **02 47 23.7** | **+0.7** |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **DAVA** | **Damuels** | **5.93** | **227** | *i* Pn | | **Pn** | **02 45 47.0** | **+0.1** |
| | comp=Z,0.9nm,0.2s | | | | | | | | |
| DAVA | | | | *e*Sg | | **Sg** | **02 47 27.7** | **-0.4** |
| | comp=Z,5.4nm,0.5s | | | | | | | | |
| **GNOU** | **Gnosjoe** | **5.96** | **347** | P | | **Pn** | **02 45 47.8** | **+0.8** |
| **GNOU** | **Gnosjoe** | **5.96** | **347** | P | | **Pn** | **02 45 47.8** | **+0.8** |
| **EKSU** | **Eksjoe** | **6.09** | **355** | P | | **Pn** | **02 45 50.2** | **+1.4** |
| **EKSU** | **Eksjoe** | **6.09** | **355** | P | | **Pn** | **02 45 50.2** | **+1.4** |
| **DAVOX** | **Davos/Dischmat** | **6.32** | **224** | Pn | | **Pn** | **02 45 51.0** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=36,slow=2.7,SNR=3.2 | | | | | | | | |
| DAVOX | | | | Sn | | **Sn** | **02 47 02.5** | **-2.7** |
| | comp=Z,0.3nm,0.3s,baz=189,slow=19,SNR=1.4 | | | | | | | | |
| DAVOX | | | | Lg | | Lg | 02 47 35.5 | | |
| | comp=Z,0.6nm,0.3s,baz=0.0,slow=20,SNR=3.2 | | | | | | | | |
| **DRGR** | | **6.36** | **136** | ⇑P | | **Pn** | **02 45 53.6** | **+0.9** |
| **BORU** | **Boraas** | **6.45** | **343** | *e*S | | **Sn** | **02 47 05.3** | **-2.6** |
| **LNKU** | **Linkoeping** | **6.73** | **357** | P | | **Pn** | **02 45 58.7** | **+1.1** |
| **LNKU** | **Linkoeping** | **6.73** | **357** | P | | **Pn** | **02 45 58.7** | **+1.1** |
| **BURAR** | **Bucovina Array** | **7.03** | **120** | ⇑P | | **Pn** | **02 46 02.2** | **+0.4** |
| **AKASG** | **Malin Array Be** | **8.22** | **91** | Pn | | **Pn** | **02 46 18.1** | **+0.1** |
| | comp=Z,1.7nm,0.3s,baz=280,slow=12,SNR=11 | | | | | | | | |
| AKASG | | | | Sn | | **Sn** | **02 47 47.4** | **-4.2** |
| | comp=Z,0.9nm,0.3s,baz=249,slow=34,SNR=1.9 | | | | | | | | |
| AKASG | | | | Lg | | Lg | 02 48 43.5 | | |
| | baz=195,slow=25,SNR=1.3 | | | | | | | | |
| **HFS** | **Hagfors** | **8.75** | **352** | Pn | | **Pn** | **02 46 25.5** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=165,slow=15,SNR=6.5 | | | | | | | | |
| HFS | | | | Sn | | **Sn** | **02 48 00.9** | **-3.6** |
| | comp=Z,0.2nm,0.3s,baz=167,slow=22,SNR=1.3 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **9.94** | **346** | Pn | | **Pn** | **02 46 39.6** | **-2.0** |
| | comp=Z,0.0nm,0.3s,baz=167,slow=12,SNR=4.8 | | | | | | | | |
| **FINES** | **FINESS Array B** | **11.32** | **25** | Pn | | **Pn** | **02 46 59.0** | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=214,slow=10,SNR=8.0 | | | | | | | | |
| FINES | | | | Sn | | **Sn** | **02 49 00.8** | **-6.6** |
| | comp=Z,0.3nm,0.3s,baz=210,slow=22,SNR=2.2 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.17** | **296** | Pn | | **Pn** | **02 47 10.2** | **-1.9** |
| | baz=99,slow=14,SNR=2.1 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.59** | **10** | P | | **P** | **02 48 34.0** | **-2.0** |
| | baz=193,slow=12,SNR=9.8 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.10** | **66** | P | | **P** | **02 51 40.0** | **+2.1** |
| | comp=Z,0.2nm,0.5s,baz=296,slow=9.2,SNR=2.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **40.04** | **202** | P | | **P** | **02 51 55.2** | **+0.7** |
| | comp=Z,0.8nm,1.0s,baz=17,slow=8.4,SNR=2.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.13** | **69** | P | | **P** | **02 52 13.9** | **+2.5** |
| | comp=Z,0.1nm,0.4s,baz=308,slow=6.4,SNR=2.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.88** | **336** | P | | **P** | **02 54 26.1** | **+1.5** |
| | comp=Z,0.2nm,0.5s,baz=32,slow=6.6,SNR=4.8 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.98** | **322** | P | | **P** | **02 56 01.3** | **+0.4** |
| | comp=Z,0.2nm,0.7s,baz=54,slow=4.6,SNR=1.9 | | | | | | | | |

*DDA **09** 03:04:46.3±0.0,36.01N×26.92E,h7km±2km,ML2.9*
*ISK **09** 03:04:48.8,36.03N×26.94E,h10km,ML3.1/14*
*ATH **09** 03:04:48.4,36.04N×26.92E,h4km±8km,ML3.3/8, Error ellipse: s-maj=8.1km s-min=1.1km az=38.0*
*THE **09** 03:04:49.5,36.04N×26.93E,h11km±2km,ML3.2/8, Error ellipse: s-maj=2.4km s-min=0.7km az=84.0*
*NIC **09** 03:04:51.5±0.0,35.58N×27.25E,h10km±1km,Ml3.6/4*

**ISC 09 03:04:48.4±1.1,36.01N±0.02×26.93E±0.02,h11km±9km, n90,σ1°08/117, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NISR** | **Nisiros** | **0.62** | **15** | P | **Pg** | **03 05 00.7** | **+0.2** |
| NISR | | | | S | **Sb** | **03 05 10.9** | **+0.8** |
| **NISR** | **Nisiros** | **0.62** | **15** | P | **Pg** | **03 05 00.6** | **+0.1** |
| NISR | | | | S | **Sb** | **03 05 10.2** | **+0.2** |
| **KOSK** | **Kos Island** | **0.74** | **3** | PG | **Pb** | **03 05 03.4** | **+0.1** |
| KOSK | | | | SG | **Sb** | **03 05 13.7** | **+0.2** |
| **ARG** | **Arkhangelos** | **0.99** | **78** | P | **Pg** | **03 05 07.5** | **0.0** |
| ARG | | | | S | **Sg** | **03 05 20.1** | **-0.3** |
| | 2µm,0.3s | | | | | | |
| **ARG** | **Arkhangelos** | **0.99** | **78** | P | **Pg** | **03 05 07.5** | **0.0** |
| ARG | | | | S | **Sg** | **03 05 20.1** | **-0.3** |
| ARG | | | | AML | AML | 03 05 21.3 | |
| | comp=N,2242µm,0.3s | | | | | | |
| ARG | | | | AML | AML | 03 05 24.0 | |
| | comp=E,3772µm,0.3s | | | | | | |
| **ARG** | **Arkhangelos** | **0.99** | **78** | PG | **Pg** | **03 05 07.7** | **+0.2** |
| ARG | | | | SG | **Sb** | **03 05 21.5** | **+0.8** |
| **ARG** | **Arkhangelos** | **0.99** | **78** | P | **Pg** | **03 05 07.7** | **+0.2** |
| **STIA** | **Sitia Lasithi** | **1.05** | **220** | P | **Pb** | **03 05 09.0** | **+0.4** |
| STIA | | | | S | **Sg** | **03 05 23.3** | **+0.9** |
| **ZKR** | **Zakros** | **1.06** | **213** | P | **Pb** | **03 05 09.3** | **+0.5** |
| ZKR | | | | S | **Sn** | **03 05 24.9** | **+0.9** |
| | comp=E,625nm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **1.06** | **213** | P | **Pb** | **03 05 09.2** | **+0.5** |
| ZKR | | | | AML | AML | 03 05 28.2 | |
| | comp=N,730µm,0.3s | | | | | | |
| ZKR | | | | AML | AML | 03 05 29.7 | |
| | comp=E,1690µm,0.3s | | | | | | |
| **ZKR** | **Zakros** | **1.06** | **213** | PN | **Pn** | **03 05 10.3** | **+1.1** |
| ZKR | | | | SN | **Sn** | **03 05 25.9** | **+1.9** |
| **ZKR** | **Zakros** | **1.06** | **213** | P | **Pb** | **03 05 09.2** | **+0.5** |
| ZKR | | | | S | **Sb** | **03 05 24.1** | **+1.4** |
| ZKR | | | | AMI | | 03 05 26.4 | |
| | comp=E,0.6nm,0.4s | | | | | | |
| ZKR | | | | AMI | | 03 05 26.4 | |
| | comp=E,0.6nm,0.4s | | | | | | |
| ZKR | | | | AMI | | 03 05 28.6 | |
| | comp=E,1.5nm,0.4s | | | | | | |
| ZKR | | | | AMI | | 03 05 28.6 | |
| | comp=E,1.5nm,0.4s | | | | | | |
| **BODT** | **Bodrum** | **1.10** | **16** | P | **Pg** | **03 05 08.3** | **-1.2** |
| BODT | | | | S | **Sn** | **03 05 24.6** | **-0.3** |
| **BODT** | **Bodrum** | **1.10** | **16** | PG | **Pg** | **03 05 09.3** | **-0.2** |
| BODT | | | | SG | **Sn** | **03 05 25.2** | **+0.3** |
| **THR8** | **Santorini-Mono** | **1.24** | **289** | P | **Pn** | **03 05 10.8** | **-0.8** |
| **THR8** | **Santorini-Mono** | **1.24** | **289** | P | **Pn** | **03 05 10.9** | **-0.7** |
| **SANT** | **Santorini** | **1.24** | **287** | P | **Pn** | **03 05 11.1** | **-0.6** |
| SANT | | | | S | **Sb** | **03 05 28.2** | **+0.3** |
| | comp=E,1µm,0.2s | | | | | | |
| **SANT** | **Santorini** | **1.24** | **287** | P | **Pn** | **03 05 10.8** | **-0.9** |
| SANT | | | | AML | AML | 03 05 32.1 | |
| | comp=E,3958µm,0.3s | | | | | | |
| SANT | | | | AML | AML | 03 05 32.7 | |
| | comp=N,1688µm,0.2s | | | | | | |
| **SANT** | **Santorini** | **1.24** | **287** | PN | **Pn** | **03 05 11.7** | **0.0** |
| **MRSB** | **Marmaris-Mugla** | **1.25** | **55** | PN | **Pg** | **03 05 12.5** | **+0.2** |
| **SFIR** | **Foira Santorin** | **1.28** | **289** | P | **Pn** | **03 05 11.7** | **-0.5** |
| SFIR | | | | S | **Sb** | **03 05 28.2** | **-0.7** |
| | comp=N,2µm,0.5s | | | | | | |
| **THR2** | **Thira island,** | **1.28** | **290** | P | **Pn** | **03 05 11.6** | **-0.6** |
| **THR2** | **Thira island,** | **1.28** | **290** | P | **Pn** | **03 05 11.8** | **-0.5** |
| **THR6** | **Thira Island,** | **1.28** | **286** | P | **Pn** | **03 05 11.9** | **-0.4** |
| **THR6** | **Thira Island,** | **1.28** | **286** | P | **Pn** | **03 05 11.8** | **-0.4** |
| **THR3** | **Thira Island,** | **1.30** | **288** | P | **Pn** | **03 05 11.8** | **-0.6** |
| **THR3** | **Thira Island,** | **1.30** | **288** | P | **Pn** | **03 05 11.8** | **-0.6** |
| **SNT5** | **Nea Kammeni, S** | **1.30** | **288** | P | **Pn** | **03 05 11.9** | **-0.5** |
| SNT5 | | | | AML | AML | 03 05 35.2 | |
| | comp=N,2226µm,0.3s | | | | | | |
| SNT5 | | | | AML | AML | 03 05 37.0 | |
| | comp=E,5065µm,0.4s | | | | | | |
| **NPS** | **Neapolis** | **1.30** | **236** | P | **Pn** | **03 05 12.5** | **0.0** |
| NPS | | | | S | **Sb** | **03 05 29.6** | **0.0** |
| | comp=E,1µm,0.4s | | | | | | |
| **NPS** | **Neapolis** | **1.30** | **236** | P | **Pn** | **03 05 12.3** | **-0.2** |
| NPS | | | | S | **Sb** | **03 05 29.8** | **+0.1** |
| NPS | | | | AML | AML | 03 05 33.3 | |
| | comp=E,2259µm,0.4s | | | | | | |
| NPS | | | | AML | AML | 03 05 35.2 | |
| | comp=N,1950µm,0.4s | | | | | | |
| **TURN** | **Turunc** | **1.31** | **54** | PN | **Pb** | **03 05 13.3** | **+0.3** |
| **TURN** | **Turunc** | **1.31** | **54** | P | **Pn** | **03 05 11.7** | **-0.9** |
| TURN | | | | S | **Sb** | **03 05 28.7** | **-1.1** |
| TURN | | | | *i* AML | AML | 03 05 33.0 | |
| | comp=N,160nm,0.4s | | | | | | |
| TURN | | | | *i* AML | AML | 03 05 33.0 | |
| | comp=N,195nm,0.5s | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.31** | **291** | P | **Pn** | **03 05 12.0** | **-0.7** |
| CMBO | | | | S | **Sb** | **03 05 29.9** | **0.0** |
| | comp=N,2µm,0.3s | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.31** | **291** | P | **Pn** | **03 05 12.0** | **-0.7** |
| CMBO | | | | AML | AML | 03 05 35.0 | |
| | comp=N,5462µm,0.4s | | | | | | |
| CMBO | | | | AML | AML | 03 05 35.6 | |
| | comp=E,5335µm,0.3s | | | | | | |
| **THR9** | **Santorini-Faro** | **1.32** | **286** | P | **Pn** | **03 05 12.4** | **-0.2** |
| **THR9** | **Santorini-Faro** | **1.32** | **286** | P | **Pn** | **03 05 12.5** | **-0.2** |
| **SAP4** | **Santorini-Oia** | **1.34** | **291** | P | **Pn** | **03 05 12.3** | **-0.7** |
| **THR5** | **Thira Island,** | **1.34** | **288** | P | **Pn** | **03 05 12.5** | **-0.5** |
| **THR5** | **Thira Island,** | **1.34** | **288** | P | **Pn** | **03 05 12.7** | **-0.3** |
| **FRMA** | **Ierapetra Chan** | **1.39** | **225** | P | **Pn** | **03 05 13.3** | **-0.4** |
| FRMA | | | | S | **Sn** | **03 05 31.7** | **-0.3** |
| | comp=E,345nm,0.5s | | | | | | |
| **MLSB** | **Milas** | **1.46** | **28** | PN | **Pn** | **03 05 14.9** | **+0.2** |
| **DDIM** | **Aydin, Didim** | **1.47** | **10** | P | **Pg** | **03 05 16.8** | **+0.2** |
| **YER** | **Yerkesik** | **1.57** | **44** | P | **Pn** | **03 05 15.9** | **-0.3** |
| **YER** | **Yerkesik** | **1.57** | **44** | PN | **Pn** | **03 05 16.6** | **+0.4** |
| **DALY** | **Dalyan (Mula)** | **1.61** | **59** | PN | **Pn** | **03 05 17.8** | **+0.3** |
| **HRKL** | **Herakleio** | **1.64** | **245** | PN | **Pn** | **03 05 18.2** | **+1.1** |
| **KSTL** | **Kastelli Herak** | **1.67** | **246** | P | **Pn** | **03 05 16.1** | **-1.4** |
| **MULA** | **Mugla, Merkez-** | **1.68** | **42** | P | **Pb** | **03 05 19.8** | **+0.4** |
| MULA | | | | S | **Sb** | **03 05 41.0** | **+0.5** |
| **SMG** | **Samos** | **1.70** | **358** | P | **Pn** | **03 05 16.4** | **-1.6** |
| SMG | | | | S | **Sn** | **03 05 39.5** | **-0.2** |
| | comp=E,245nm,0.3s | | | | | | |
| **GCAM** | **G?zelcaml?** | **1.71** | **8** | PN | **Pn** | **03 05 19.0** | **+0.9** |
| **GCAM** | **G?zelcaml?** | **1.71** | **8** | P | **Pn** | **03 05 18.4** | **+0.4** |
| **IDI** | **Anoyia** | **1.81** | **247** | P | **Pn** | **03 05 19.4** | **-0.1** |
| **IDI** | **Anoyia** | **1.81** | **247** | P | **Pn** | **03 05 19.3** | **-0.2** |
| IDI | | | | AML | AML | 03 05 49.2 | |
| | comp=N,594µm,0.4s | | | | | | |
| IDI | | | | AML | AML | 03 05 52.1 | |
| | comp=E,484µm,0.5s | | | | | | |
| **FETY** | **Fethiye** | **1.85** | **70** | P | **Pn** | **03 05 20.8** | **+0.7** |
| **FETY** | **Fethiye** | **1.85** | **70** | PN | **Pb** | **03 05 21.6** | **-0.6** |
| **FETY** | **Fethiye** | **1.85** | **70** | P | **Pn** | **03 05 21.1** | **+1.0** |
| FETY | | | | S | **Sg** | **03 05 47.2** | **-0.7** |
| FETY | | | | *i* AML | AML | 03 05 52.0 | |
| | comp=E,121nm,0.4s | | | | | | |
| FETY | | | | *i* AML | AML | 03 05 53.0 | |
| | comp=E,78nm,0.3s | | | | | | |
| **SIVA** | **Sivas** | **1.99** | **241** | P | **Pn** | **03 05 23.6** | **+1.7** |
| SIVA | | | | AML | AML | 03 05 59.3 | |
| | comp=E,1316µm,0.6s | | | | | | |
| SIVA | | | | AML | AML | 03 06 01.4 | |
| | comp=N,796µm,0.5s | | | | | | |
| **CAME** | **Cameli-Denizli** | **2.13** | **63** | PN | **Pn** | **03 05 25.6** | **+1.6** |
| **KSL** | **Kastellorizon** | **2.16** | **85** | P | **Pn** | **03 05 25.3** | **+1.0** |
| **KSL** | **Kastellorizon** | **2.16** | **85** | P | **Pn** | **03 05 25.0** | **+0.7** |
| **KSL** | **Kastellorizon** | **2.16** | **85** | P | **Pn** | **03 05 25.0** | **+0.7** |
| KSL | | | | S | **Sn** | **03 05 50.9** | **-0.1** |
| KSL | | | | AMI | | 03 05 57.3 | |
| | comp=N,0.2nm,0.5s | | | | | | |
| KSL | | | | AMI | | 03 05 57.3 | |
| | comp=N,0.2nm,0.5s | | | | | | |
| KSL | | | | AMI | | 03 05 59.6 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| KSL | | | | AMI | | 03 05 59.6 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **2.16** | **47** | P | **Pb** | **03 05 26.3** | **-1.2** |
| TAVA | | | | S | **Sb** | **03 05 54.6** | **+0.3** |
| **AKAS** | **Kas** | **2.18** | **83** | PN | **Pn** | **03 05 25.7** | **+1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ATAH** | **Atahualpa** | **49.12 229** | LR | LR | 03 39 22.9 | | |
| | comp=Z,57nm,21.7s,baz=7.6,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.04 286** | LR | LR | 03 40 03.6 | | |
| | comp=Z,98nm,20.7s,baz=50,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **53.02 294** | LR | LR | 03 40 25.0 | | |
| | comp=Z,67nm,19.3s,baz=60,slow=34 | | | | | | |
| **PD31** | **Pinedale Array** | **54.05 304** | P | **P** | **03 20 06.6** | **0.0** | |
| **PDAR** | **Pinedale Array** | **54.05 304** | P | **P** | **03 20 06.2** | **-0.4** | |
| | comp=Z,3.4nm,1.0s,baz=90,slow=8.9,SNR=15 | | | | | | |
| PDAR | | | LR | LR | 03 41 57.3 | | |
| | comp=Z,105nm,19.3s,baz=64,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.05 304** | P | **P** | **03 20 06.7** | **0.0** | |
| **BW06** | **Boulder Array** | **54.05 304** | P | **P** | **03 20 06.2** | **-0.4** | |
| BW06 | | | IAmb | IAmb | 03 20 08.2 | | |
| | comp=Z,10nm,1.3s | | | | | | |
| **TPAW** | **Teton Pass** | **54.95 305** | P | **P** | **03 20 13.3** | **+0.1** | |
| TPAW | | | IAmb | IAmb | 03 20 14.4 | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.12 328** | P | **P** | **03 20 21.6** | **+0.6** | |
| | comp=Z,1.6nm,1.0s,baz=93,slow=7.4,SNR=12 | | | | | | |
| YKA | | | LR | LR | 03 43 42.7 | | |
| | comp=Z,184nm,19.9s,baz=292,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.12 328** | P | **P** | **03 20 20.7** | **-0.3** | |
| **DUG** | **Dugway, Tooele** | **56.90 301** | P | **P** | **03 20 26.4** | **-0.7** | |
| **ALN** | **Alexandroupoli** | **56.92 58** | P | **P** | **03 20 26.7** | **-0.3** | |
| **AKASG** | **Malin Array Be** | **57.55 46** | P | **P** | **03 20 32.5** | **+1.2** | |
| | comp=Z,1.7nm,0.8s,baz=276,slow=5.7,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **57.55 46** | P | **P** | **03 20 31.7** | **+0.4** | |
| **PLID** | **Pearl Lake** | **58.27 307** | P | **P** | **03 20 34.9** | **-1.9** | |
| PLID | | | IAmb | IAmb | 03 20 39.4 | | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **SPR3** | **Spring Creek 3** | **58.30 300** | P | **P** | **03 20 38.4** | **+1.2** | |
| SPR3 | | | IAmb | IAmb | 03 21 12.8 | | |
| | comp=Z,15nm,1.9s | | | | | | |
| **NEW** | **Newport** | **58.49 311** | LR | LR | 03 46 11.8 | | |
| | comp=Z,105nm,18.1s,baz=56,slow=36 | | | | | | |
| **ELK** | **Elko** | **58.59 302** | LR | LR | 03 44 23.6 | | |
| | comp=Z,52nm,19.2s,baz=57,slow=34 | | | | | | |
| **D08A** | **Wollman Farm,** | **59.90 310** | P | **P** | **03 20 48.1** | **+0.3** | |
| D08A | | | IAmb | IAmb | 03 20 50.1 | | |
| | comp=Z,9.6nm,1.2s | | | | | | |
| **PFO** | **Pinyon Flats O** | **61.37 295** | LR | LR | 03 47 39.5 | | |
| | comp=Z,59nm,18.8s,baz=20,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.45 300** | P | **P** | **03 20 58.5** | **-0.2** | |
| | comp=Z,0.2nm,0.6s,baz=61,slow=7.3,SNR=2.5 | | | | | | |
| NVAR | | | LR | LR | 03 47 20.1 | | |
| | comp=Z,133nm,18.3s,baz=28,slow=36 | | | | | | |
| **PAHR** | **Pah Rah Range** | **61.92 302** | P | **P** | **03 21 00.9** | **-0.9** | |
| PAHR | | | IAmb | IAmb | 03 21 03.5 | | |
| | comp=Z,9.8nm,1.3s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **63.80 305** | LR | LR | 03 47 02.0 | | |
| | comp=Z,76nm,19.8s,baz=28,slow=34 | | | | | | |
| **DLBC** | **Dease Lake** | **64.11 324** | LR | LR | 03 46 35.3 | | |
| | comp=Z,103nm,21.7s,baz=28,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **69.69 334** | P | **P** | **03 21 52.4** | **+1.1** | |
| | comp=Z,1.9nm,1.1s,baz=65,slow=5.0,SNR=9.3 | | | | | | |
| ILAR | | | LR | LR | 03 53 19.3 | | |
| | comp=Z,56nm,18.6s,baz=122,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **69.69 334** | P | **P** | **03 21 50.5** | **-0.7** | |
| **KDAK** | **Kodiak Island** | **75.40 328** | LR | LR | 03 54 47.5 | | |
| | comp=Z,70nm,21.1s,baz=147,slow=35 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **82.44 95** | LR | LR | 03 58 47.7 | | |
| | comp=Z,82nm,20.0s,baz=260,slow=35 | | | | | | |
| **LBTB** | **Lobatse** | **85.30 122** | LR | LR | 03 56 21.3 | | |
| | comp=Z,78nm,18.7s,baz=328,slow=32 | | | | | | |
| **AAK** | **Ala-Archa** | **88.82 41** | LR | LR | 04 03 30.9 | | |
| | comp=Z,106nm,18.4s,baz=330,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **96.29 347** | LR | LR | 04 07 42.7 | | |
| | comp=Z,43nm,20.6s,baz=352,slow=36 | | | | | | |

*IDC **09** 03:23:43.2±1.9,9°.21S×124°.68E,h0km,mb3.1/1, mb1 3.3/4,mb1mx3.1/28,mbtmp3.2/4,ML3.1/3,Error ellipse: s-maj=31.5km s-min=19.2km az=128.0*
*DJA **09** 03:23:48.7±0.4,9°.5±3°×12°.4E±°,h10km,M2.8/4,MLv2.8/4*
**ISC 09 03:23:46.9±1.5,9°.5S±0°.1×124°.64E±0°.08,h25km,n7, σ1s49/12,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **0.47** | **232** | P | **Pb** | **03 23 56.8** | **0.0** |
| SOEI | | | | S | **Sn** | **03 24 04.8** | **-1.0** |
| **BATI** | **Baumata** | **1.22** | **233** | Pg | **Pb** | **03 24 09.5** | **+0.2** |
| | 34nm,0.3s,baz=49,slow=2.0,SNR=16 | | | | | | |
| BATI | | | | Lg | Lg | 03 24 28.2 | |
| | 14nm,0.3s,baz=62,slow=23,SNR=6.3 | | | | | | |
| BATI | | | | LR | LR | 03 24 38.9 | |
| | comp=Z,62nm,19.7s,baz=304,slow=39 | | | | | | |
| **BATI** | **Baumata** | **1.22** | **233** | P | **Pb** | **03 24 09.6** | **+0.3** |
| BATI | | | | S | **Sn** | **03 24 23.4** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **8.64** | **174** | Pn | **Pn** | **03 25 53.1** | **+2.7** |
| | 0.2nm,0.3s,baz=3.6,slow=12,SNR=7.8 | | | | | | |
| FITZ | | | | Sn | **Sn** | **03 27 24.7** | **-2.4** |
| | 0.1nm,0.3s,baz=144,slow=14,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.01** | **139** | Pn | **Pn** | **03 27 04.9** | **+0.9** |
| | 0.1nm,0.3s,baz=317,slow=14,SNR=2.9 | | | | | | |
| WRA | | | | Sn | **Sn** | **03 29 38.7** | **0.0** |
| | 0.1nm,0.3s,baz=315,slow=24,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **16.67** | **149** | Pn | **P** | **03 27 41.5** | **+0.3** |
| | 0.1nm,0.3s,baz=320,slow=12,SNR=2.3 | | | | | | |
| ASAR | | | | Sn | **Sn** | **03 30 41.6** | **-1.9** |
| | 0.1nm,0.3s,baz=318,slow=23,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.53** | **330** | P | **P** | **03 34 40.1** | **-1.0** |
| | 0.1nm,0.6s,baz=140,slow=7.6,SNR=1.6 | | | | | | |

**GUC 09 03:28:53.5±0.6,37°.50S×72°.34W,h76km±20km,ML3.8,1C, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LC01** | **Cunco** | **1.44** | **166** | ⇑*i*P | Pn | 03 29 17.5 | -0.5 |
| LC01 | | | | *e*S | Sn | 03 29 36.2 | -0.2 |
| **LC02** | **Puerto Saavedr** | **1.53** | **212** | *e*P | Pn | 03 29 18.8 | -0.2 |
| **ML02** | **Panimavida** | **1.88** | **23** | *e*P | Pn | 03 29 23.5 | -0.2 |
| ML02 | | | | *e*S | Sn | 03 29 46.4 | -0.3 |
| ML02 | | | | IAML | | 03 29 53.2 | |
| | comp=E,681nm,0.4s | | | | | | |
| **LR03** | **Panguipulli** | **2.13** | **180** | *e*P | Pn | 03 29 27.6 | +0.5 |
| LR03 | | | | *e*S | Sn | 03 29 52.2 | -0.4 |
| LR03 | | | | IAML | | 03 30 00.7 | |
| | comp=E,762nm,0.4s | | | | | | |
| **GO05** | **Huala** | **2.50** | **8** | *e*P | Pn | 03 29 31.0 | -1.1 |
| GO05 | | | | IAML | | 03 30 11.0 | |
| | comp=N,334nm,0.4s | | | | | | |
| **LR04** | **Corral** | **2.53** | **199** | *e*P | Pn | 03 29 30.5 | -1.9 |
| LR04 | | | | IAML | | 03 30 13.2 | |
| | comp=E,708nm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.98** | **25** | *e*P | Pn | 03 29 38.8 | +0.2 |
| BO02 | | | | *e*S | Sn | 03 30 12.8 | -0.5 |
| **BO01** | **Tunca** | **3.26** | **18** | *e*P | Pn | 03 29 41.4 | -0.9 |
| **LL04** | **Puerto Octay** | **3.41** | **181** | *e*P | Pn | 03 29 43.9 | -0.4 |
| **MT01** | **Popeta** | **3.73** | **14** | *e*P | Pn | 03 29 47.4 | -1.3 |
| **BO04** | **La Punta** | **3.77** | **22** | *e*P | Pn | 03 29 48.6 | -0.7 |
| **MT09** | **Talagante** | **3.87** | **17** | *e*P | Pn | 03 29 49.5 | -1.3 |
| **MT02** | **Curacav** | **4.34** | **13** | *e*P | Pn | 03 29 55.1 | -1.9 |
| **ROCH** | **El Roble** | **4.64** | **14** | *e*P | | 03 29 59.3 | |
| ROCH | | | | *e*P | Pn | 03 29 58.3 | -3.1 |

*NEIC **09** 03:33:28.6±1.1,5°.73N±0°.09×124°.2E±0°.2,h498km±14km, mb4.1/9,Error ellipse: s-maj=29.3km s-min=12.6km az=98.0*
*IDC **09** 03:33:29.3±1.9,5°.53N×123°.90E,h506km±20km,mb3.2/7, mb1 3.3/7,mb1mx2.9/39,mbtmp4.1/7,Error ellipse: s-maj=77.0km s-min=11.3km az=68.0*
**ISC 09 03:33:28.3±0.8,5°.69N±0°.10×124°.2E±0°.2,h500km,n21, σ0s65/25,mb4.0/12,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOLI2** | **Tolitoli** | **5.69** | **217** | P | **P** | **03 35 00.7** | **-1.0** |
| **MYLDM** | **Lahad Datu** | **5.72** | **265** | P | **P** | **03 35 02.4** | **+0.5** |
| **SBUM** | **Sibu** | **12.39** | **255** | P | **P** | **03 36 11.1** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **17.28** | **216** | P | **P** | **03 37 02.3** | **+0.2** |
| **TPUB** | **Ta-pu** | **17.85** | **349** | P | **P** | **03 37 06.5** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **23.67** | **177** | P | **P** | **03 37 59.9** | **-0.2** |
| | 0.6nm,0.4s,baz=13,slow=7.7,SNR=10 | | | | | | |
| **WB0** | **Warramunga Arr** | **27.20** | **159** | P | **P** | **03 38 30.7** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 03 38 31.3 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.34** | **159** | P | **P** | **03 38 32.1** | **-0.4** |
| | comp=Z,1.7nm,0.4s,baz=333,slow=11,SNR=28 | | | | | | |
| WRA | | | | ScP | **ScP** | **03 44 28.9** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=341,slow=3.1,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.34** | **159** | P | **P** | **03 38 31.9** | **-0.6** |
| **WB2** | **Warramunga Arr** | **27.35** | **159** | P | **P** | **03 38 32.4** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 03 38 33.1 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **AS31** | **Alice Springs** | **30.66** | **162** | P | **P** | **03 39 02.0** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 03 39 02.6 | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **30.67** | **162** | P | **P** | **03 39 02.2** | **+0.7** |
| | comp=Z,4.4nm,0.3s,baz=339,slow=7.0,SNR=84 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 41 44.7** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=349,slow=1.9,SNR=2.3 | | | | | | |
| ASAR | | | | S | **S** | **03 43 27.7** | **-0.7** |
| | comp=Z,1.1nm,0.9s,baz=353,slow=23,SNR=8.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 44 39.2** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=340,slow=2.8,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **30.67** | **162** | P | **P** | **03 39 01.9** | **+0.4** |
| **FORT** | **Forrest** | **36.44** | **174** | P | **P** | **03 39 50.4** | **+0.3** |
| FORT | | | | IAmb | IAmb | 03 39 51.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **39.90** | **164** | P | **P** | **03 40 19.3** | **+0.9** |
| BBOO | | | | IAmb | IAmb | 03 40 30.7 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **40.86** | **157** | P | **P** | **03 40 27.1** | **+1.1** |
| | comp=Z,2.5nm,0.7s,baz=326,slow=8.1,SNR=6.7 | | | | | | |
| **STKA** | **Stephens Creek** | **40.86** | **157** | P | **P** | **03 40 27.0** | **+0.9** |
| **SONM** | **Songino Array** | **44.68** | **343** | P | **P** | **03 40 56.5** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=158,slow=9.5,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.54** | **326** | P | **P** | **03 42 09.0** | **+0.3** |
| | comp=Z,2.1nm,0.5s,baz=123,slow=8.6,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.54** | **326** | P | **P** | **03 42 08.5** | **-0.2** |
| **BRTR** | **Keskin Array B** | **86.86** | **309** | P | **P** | **03 45 18.7** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=117,slow=3.3,SNR=6.3 | | | | | | |

*ASRS **09** 03:39:25.1±0.4,48°.N±2°.×8°.1E±°,h5km,MLh3.3/7,Error ellipse: s-maj=4.8km s-min=3.3km az=87.7,confirmed*
*NNC **09** 03:39:27.0±0.5,47°.61N×81°.15E,h0km,mb3.5,mpv3.3, Error ellipse: s-maj=4.5km s-min=2.6km az=36.0*
*SOME **09** 03:39:29.2,47°.62N×80°.73E,h10km*
**ISC 09 03:39:26.9±0.8,47°.59N±0°.03×81°.14E±0°.03,h10km,n41, σ2s70/63,6C-3D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MAKZ** | **Makanchi** | **0.97** | **143** | ⇑P | **Pg** | **03 39 45.8** | **+0.3** |
| | 1.2nm,0.2s | | | | | | |
| MAKZ | | | | ⇓S | **Sb** | **03 39 59.4** | **+0.8** |
| | 5.6nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **0.97** | **143** | Pg | **Pg** | **03 39 45.9** | **+0.3** |
| MAKZ | | | | Sg | **Sb** | **03 39 59.5** | **+0.8** |
| **MK31** | **Makanchi Array** | **1.12** | **135** | ⇓P | **Pb** | **03 39 48.5** | **+0.1** |
| | 0.6nm,0.2s,baz=318,slow=16,SNR=890 | | | | | | |
| MK31 | | | | ⇑S | **Sb** | **03 40 03.8** | **+0.8** |
| | 7.2nm,0.3s,baz=317,slow=28,SNR=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **1.12** | **135** | Pg | **Pn** | **03 39 48.8** | **+0.1** |
| MKAR | | | | Sg | **Sn** | **03 40 04.0** | **-0.1** |
| **ZSN** | **Zaisan** | **2.53** | **92** | *e*P | **Pg** | **03 40 15.4** | **0.0** |
| | 2.9nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sg** | **03 40 48.5** | **+0.3** |
| | 10nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.61** | **209** | *e*P | **Pb** | **03 40 14.9** | **+1.1** |
| | 6.4nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sb** | **03 40 47.9** | **+1.9** |
| | 29nm,0.1s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.61** | **209** | Pg | **Pb** | **03 40 15.0** | **+1.1** |
| | 6.4nm,0.2s | | | | | | |
| KAPS | | | | Lg | Lg | 03 40 47.9 | |
| | 29nm,0.1s | | | | | | |
| **DJR** | **Jarkent** | **3.39** | **197** | *e*P | **Pg** | **03 40 30.0** | **-1.8** |
| | 1.6nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **03 41 13.5** | **-2.3** |
| | 3.9nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **3.49** | **332** | ⇑Pg | **Pb** | **03 40 30.5** | **+1.8** |
| | 2.7nm,0.9s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 03 41 16.9 | |
| | 12nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **3.54** | **333** | ⇓Pg | **Pb** | **03 40 30.6** | **+1.0** |
| | 3.2nm,0.9s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 03 41 17.7 | |
| | 7.0nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **3.54** | **333** | Pg | **Pb** | **03 40 31.0** | **+1.4** |
| KURK | | | | Sg | **Sg** | **03 41 16.9** | **-3.6** |
| **BLB** | **Baldybastay** | **3.96** | **209** | *e*P | **Pg** | **03 40 41.6** | **-1.1** |
| | 5.7nm,0.2s | | | | | | |
| BLB | | | | *e*S | **Sg** | **03 41 33.4** | **-0.5** |
| | 9.7nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **3.96** | **209** | Pg | **Pg** | **03 40 41.6** | **-1.1** |
| | 5.7nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 03 41 33.4 | |
| | 9.7nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.09** | **216** | *e*P | **Pg** | **03 40 42.8** | **-2.5** |
| | 3.4nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **03 41 35.5** | **-2.8** |
| | 13nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **4.09** | **216** | Pg | **Pg** | **03 40 42.8** | **-2.5** |
| | 3.4nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 03 41 35.5 | |
| | 13nm,0.3s | | | | | | |
| **UKR** | **Ust'-Kan** | **4.11** | **34** | Pg | **Pg** | **03 40 43.3** | **-2.3** |
| UKR | | | | Sg | **Sg** | **03 41 38.1** | **-0.8** |
| **KURS** | **Kuram** | **4.60** | **208** | *e*P | **Pg** | **03 40 52.9** | **-2.2** |
| | 6.5nm,0.7s | | | | | | |
| KURS | | | | *e*S | **Sg** | **03 41 52.7** | **-1.9** |
| | 8.2nm,0.8s | | | | | | |
| **KURS** | **Kuram** | **4.60** | **208** | Pg | **Pg** | **03 40 52.9** | **-2.2** |
| | 6.5nm,0.7s | | | | | | |
| KURS | | | | Lg | Lg | 03 41 52.7 | |
| | 8.2nm,0.8s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **4.68** | **61** | Pg | **Pg** | **03 40 54.3** | **-2.1** |
| DGZ | | | | Sg | **Sg** | **03 41 57.5** | **+0.4** |
| **UZB** | **Uzynbulak** | **4.69** | **199** | *e*P | **Pg** | **03 40 55.1** | **-1.5** |
| | 4.1nm,0.1s | | | | | | |
| UZB | | | | *e*S | **Sg** | **03 41 56.5** | **-0.8** |
| | 3.5nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **4.69** | **199** | Pg | **Pg** | **03 40 55.1** | **-1.5** |
| | 4.1nm,0.1s | | | | | | |
| UZB | | | | Lg | Lg | 03 41 56.5 | |
| | 3.5nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **4.73** | **219** | *e*P | **Pb** | **03 40 53.0** | **+3.1** |
| | 0.6nm,0.1s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **03 41 53.0** | **+6.0** |
| | 9.4nm,0.1s | | | | | | |
| **CHKK** | **Chushkaly** | **4.73** | **219** | Pg | **Pb** | **03 40 53.0** | **+3.1** |
| | 0.6nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 03 41 53.0 | |
| | 9.4nm,0.1s | | | | | | |
| **SATY** | **Saty** | **4.92** | **204** | *e*P | **Pg** | **03 40 58.3** | **-2.9** |
| | 1.4nm,0.2s | | | | | | |
| SATY | | | | *e*S | **Sg** | **03 42 01.9** | **-3.0** |
| | 7.2nm,0.1s | | | | | | |
| **SATY** | **Saty** | **4.92** | **204** | Pg | **Pg** | **03 40 58.3** | **-2.9** |
| | 1.4nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 03 42 01.9 | |
| | 7.2nm,0.1s | | | | | | |
| **KTBS** | **Karatobe** | **4.98** | **220** | *e*P | **Pb** | **03 40 58.2** | **+4.0** |
| | 1.8nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **03 42 02.1** | **-4.6** |
| | 9.1nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **4.98** | **220** | Pg | **Pb** | **03 40 58.2** | **+4.0** |
| | 1.8nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 03 42 02.1 | |
| | 9.1nm,0.2s | | | | | | |
| **CHBI** | **Chibit, Altay** | **5.00** | **55** | Pn | Pn | 03 40 47.9 | +5.7 |
| CHBI | | | | Pg | **Pg** | **03 40 59.2** | **-3.5** |
| CHBI | | | | Sg | **Sg** | **03 42 06.1** | **-1.3** |
| **AKAR** | **Aktash** | **5.07** | **55** | Pg | **Pb** | **03 40 58.6** | **+2.8** |
| AKAR | | | | Sg | **Sg** | **03 42 06.8** | **-2.9** |
| **KOTS** | **Kotyrbulak** | **5.20** | **215** | *e*P | **Pg** | **03 41 03.4** | **-3.0** |
| | 2.6nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **03 42 10.7** | **-3.0** |
| | 9.9nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.20** | **215** | Pg | **Pg** | **03 41 03.4** | **-3.0** |
| | 2.6nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 03 42 10.7 | |
| | 9.9nm,0.4s | | | | | | |
| **CUR** | **Chagan-Uzun** | **5.38** | **60** | Pg | **Pb** | **03 41 05.2** | **+4.1** |
| CUR | | | | Sg | **Sg** | **03 42 18.0** | **-1.8** |
| **ULGR** | **Ulagan, Altay** | **5.41** | **53** | Sg | **Sg** | **03 42 19.1** | **-1.6** |
| **TNSS** | **Tian-Shan** | **5.43** | **215** | *e*P | **Pg** | **03 41 07.8** | **-3.0** |
| | 1.5nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **03 42 18.4** | **-2.8** |
| | 2.0nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.43** | **215** | Pg | **Pg** | **03 41 07.8** | **-3.0** |
| | 1.5nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 03 42 18.3 | |
| | 2.0nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **5.53** | **245** | *e*P | **Pb** | **03 41 07.0** | **+3.4** |
| | 4.6nm,1.1s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **03 42 17.0** | **+7.0** |
| | 2.1nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **5.53** | **245** | Pg | **Pb** | **03 41 07.0** | **+3.4** |
| | 4.6nm,1.1s | | | | | | |
| BTLS | | | | Lg | Lg | 03 42 17.0 | |
| | 2.1nm,0.4s | | | | | | |
| **ARTR** | **Artybash** | **5.80** | **41** | Sg | **Sg** | **03 42 30.2** | **-2.8** |
| **OTUK** | **Ortayu** | **5.95** | **280** | ⇑Lg | Lg | 03 42 37.6 | |
| | 2.2nm,0.5s | | | | | | |
| **USP** | **Ospenovka** | **6.36** | **230** | Sg | **Sg** | **03 42 48.5** | **-2.6** |
| **AAK** | **Ala-Archa** | **6.82** | **226** | Sg | **Sg** | **03 43 01.1** | **-4.8** |

*IDC **09** 03:43:11.0±2.2,28°.35N×43°.73W,h0km,mb3.6/7, mb1 3.8/7,mb1mx3.6/38,mbtmp3.6/7,MS3.8/5,Ms1 3.8/5, ms1mx3.2/76,Error ellipse: s-maj=76.3km s-min=24.8km az=13.0*
**ISC 09 03:43:12.8±2.0,28°.3N±0°.5×43°.7W±0°.2,h12km,n15, σ0s55/7,mb3.7/7,MS3.8/5,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **44.82** | **100** | P | **P** | **03 51 26.6** | **-0.3** |
| | 0.4nm,0.7s,baz=298,slow=9.1,SNR=1.7 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.71** | **137** | T | T | 04 40 04.8 | |
| | baz=323,slow=75 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.71** | **137** | T | T | 04 40 06.5 | |
| | baz=323,slow=75 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.73** | **137** | T | T | 04 40 05.4 | |
| | baz=323,slow=75 | | | | | | |
| **ANMO** | **Albuquerque** | **53.05** | **294** | LR | LR | 04 13 43.9 | |
| | comp=Z,69nm,19.3s,baz=62,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.18** | **304** | P | **P** | **03 52 38.3** | **-0.1** |
| | 0.5nm,0.7s,baz=83,slow=7.6,SNR=5.1 | | | | | | |
| **LVC** | **Limon Verde** | **56.16** | **208** | LR | LR | 04 17 56.6 | |
| | comp=Z,50nm,18.4s,baz=314,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.48** | **328** | P | **P** | **03 52 53.8** | **-0.6** |
| | 0.8nm,1.1s,baz=97,slow=7.4,SNR=3.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **58.09** | **46** | P | **P** | **03 53 05.6** | **-0.3** |
| | 0.7nm,0.6s,baz=274,slow=6.2,SNR=5.4 | | | | | | |
| **NEW** | **Newport** | **58.70** | **311** | LR | LR | 04 16 33.4 | |
| | comp=Z,76nm,19.8s,baz=61,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.55** | **301** | P | **P** | **03 53 30.6** | **+0.4** |
| | 0.1nm,0.4s,baz=95,slow=6.4,SNR=2.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **63.32** | **57** | P | **P** | **03 53 42.6** | **+0.7** |
| | 0.5nm,0.8s,baz=299,slow=9.0,SNR=2.9 | | | | | | |
| **DLBC** | **Dease Lake** | **64.44** | **324** | LR | LR | 04 21 18.4 | |
| | comp=Z,78nm,18.7s,baz=350,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **70.09** | **334** | P | **P** | **03 54 24.8** | **+0.3** |
| | 0.9nm,1.0s,baz=84,slow=3.8,SNR=5.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **75.76** | **328** | LR | LR | 04 28 43.1 | |
| | comp=Z,84nm,20.2s,baz=242,slow=36 | | | | | | |

*IDC **09** 03:56:49.4±4.6,24°.57N×95°.19E,h61km±44km,mb3.3/5, mb1 3.5/6,mb1mx3.1/46,mbtmp3.6/6,ML4.0/1,Error ellipse: s-maj=69.7km s-min=18.8km az=69.0*
**ISC 09 03:56:48.9±1.9,24°.7N±0°.2×95°.4E±0°.6,h50km,n6,σ0s72/6, mb3.6/5,Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **7.01** | **151** | P | **Pn** | **03 58 29.5** | **+0.3** |
| | 0.7nm,0.3s,baz=316,slow=13,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.44** | **338** | P | **P** | **04 02 02.9** | **0.0** |
| | 0.7nm,0.5s,baz=150,slow=10,SNR=20 | | | | | | |
| **SONM** | **Songino Array** | **24.72** | **18** | P | **P** | **04 02 05.9** | **+0.3** |
| | 0.5nm,0.3s,baz=198,slow=9.5,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.74** | **142** | P | **P** | **04 05 51.6** | **+0.1** |
| | 0.0nm,1.0s,baz=259,slow=10,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.35** | **136** | P | **P** | **04 06 38.3** | **-1.0** |
| | 0.2nm,0.4s,baz=324,slow=7.2,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **60.86** | **139** | P | **P** | **04 06 56.0** | **-0.6** |
| | 0.2nm,0.4s,baz=321,slow=6.9,SNR=3.0 | | | | | | |

*NEIC **09** 04:17:19.1±1.6,9°.28S±0°.08×110°.7E±0°.1,h41km±9km, mb4.2/12,Error ellipse: s-maj=17.1km s-min=9.4km az=64.0*
*DJA **09** 04:17:20.7±0.9,9°.5±3°×11°.1E±°,h20km±8km,M4.4/24, mb4.6/3,MLv4.4/24*
*IDC **09** 04:17:23.0±2.7,8°.94S×110°.96E,h68km±24km,mb3.9/12, mb1 4.0/15,mb1mx3.7/59,mbtmp4.3/15,MS3.2/5, Ms1 3.3/5,ms1mx2.9/77,Error ellipse: s-maj=30.9km s-min=13.5km az=46.0*
**ISC 09 04:17:19.5±1.1,9°.22S±0°.06×110°.80E±0°.05,h45km±11km, n63,σ1s80/67,mb4.3/16,South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCJI** | **Pacitan** | **1.08** | **20** | P | **Pn** | **04 17 37.2** | **-1.1** |
| PCJI | | | | S | **Sn** | **04 17 50.5** | **-1.6** |
| **UGM** | **Wanagama** | **1.32** | **348** | P | **Pn** | **04 17 41.3** | **-0.4** |
| UGM | | | | S | **Sn** | **04 17 56.0** | **-2.1** |
| **UGM** | **Wanagama** | **1.32** | **348** | | **Pn** | **04 17 41.2** | **-0.4** |
| UGM | | | | Sn | **Sn** | **04 17 56.4** | **-1.7** |
| **YOGI** | **Yogyakarta** | **1.48** | **340** | P | **Pn** | **04 17 43.9** | **+0.2** |
| **PWJI** | **Pagerwojo** | **1.55** | **40** | P | **Pn** | **04 17 44.2** | **-0.5** |
| PWJI | | | | S | **Sn**

comp=Z,52nm,19.4s,baz=308,slow=39
**CMAR Chiang Mai Arr 29.89 337** LR LR 04 36 26.8
comp=Z,60nm,18.6s,baz=145,slow=38
**STKA Stephens Creek 36.38 133** P **P** **04 24 21.3 +1.7**
comp=Z,1.5nm,0.5s,baz=309,slow=8.0,SNR=6.4
**STKA Stephens Creek 36.38 133** P **P** **04 24 18.9 -0.7**
**H08S2 Diego Garcia H 37.91 269** T T 05 05 04.7
baz=94,slow=75,SNR=4.4
**H08S3 Diego Garcia H 37.92 269** T T 05 05 12.3
baz=94,slow=75,SNR=4.3
**H08S1 Diego Garcia H 37.93 269** T T 05 05 11.0
baz=94,slow=75,SNR=2.9
**KSRS Korea Array 49.12 18** P **P** **04 26 03.7 +1.0**
comp=Z,1.9nm,1.0s,baz=203,slow=8.4,SNR=4.1
**BJT Baijiatuau 49.24 5** P **P** **04 26 03.7 +0.2**
BJT IAmb IAmb 04 26 05.2
comp=Z,3.7nm,1.1s
**MJAR Matsushiro Arr 52.31 28** P **P** **04 26 24.9 -1.9**
comp=Z,2.9nm,0.5s,baz=208,slow=7.8,SNR=5.0
**USRK Ussuriysk Ar. 56.53 18** P **P** **04 26 56.1 -1.1**
comp=Z,4.9nm,0.7s,baz=147,slow=3.0,SNR=8.0
**USRK Ussuriysk Ar. 56.53 18** P **P** **04 26 57.7 +0.5**
**SONM Songino Array 56.94 356** P **P** **04 26 59.9 -0.4**
comp=Z,0.7nm,0.5s,baz=177,slow=7.3,SNR=6.6
**SONM Songino Array 56.94 356** P **P** **04 27 00.1 -0.1**
SONM IAmb IAmb 04 27 13.5
comp=Z,1.1nm,0.9s
**MK31 Makanchi Array 61.29 338** P **P** **04 27 30.3 +0.1**
MK31 IAmb IAmb 04 27 31.0
comp=Z,2.7nm,0.9s
**MKAR Makanchi Array 61.29 338** P **P** **04 27 30.2 -0.1**
comp=Z,2.9nm,0.6s,baz=151,slow=7.2,SNR=46
**MKAR Makanchi Array 61.29 338** P **P** **04 27 30.0 -0.2**
**KURBB Kurchatov Arra 65.85 338** P **P** **04 27 59.7 -0.5**
comp=Z,1.3nm,0.3s,baz=155,slow=5.5,SNR=10
**KURK Kurchatov 65.90 338** P **P** **04 27 59.5 -1.0**
**MAW Mawson 66.39 198** P **P** **04 28 03.2 -0.3**
**ZAA0 Zalesovo Array 66.66 344** P **P** **04 28 04.0 -1.3**
**ZALV Zalesovo Beam 66.66 344** P **P** **04 28 04.7 -0.6**
comp=Z,3.5nm,0.6s,baz=159,slow=4.5,SNR=18
**BVAR Bovoyge Array 70.90 336** P **P** **04 28 31.4 -0.4**
comp=Z,2.4nm,0.7s,baz=98,slow=11,SNR=13
**ABKAR Akbulak array 73.25 328** P **P** **04 28 46.1 +0.2**
**PETK Petropavlovsk- 73.76 27** P **P** **04 28 48.2 -0.6**
comp=Z,2.4nm,0.9s,baz=252,slow=2.9,SNR=4.9
**BRTR Keskin Array B 86.11 311** P **P** **04 29 57.0 +1.0**
comp=Z,0.5nm,0.6s,baz=139,slow=6.0,SNR=3.8

**IDC 09 04:23:40.2±4.8, 40°17N×50°96E, h0km, mb3.4/2, mb1 3.4/5, mb1mx3.2/44, mbtmp3.4/5, ML3.4/3, MS3.2/1, Ms1 3.2/1, ms1mx2.5/57, Error ellipse: s-maj=66.8km s-min=24.7km az=77.0, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GEYT** | **Alibeck** | **6.00** | **110** | Pn | Pn | 04 25 10.7 | +0.5 |
| | 0.9nm,0.3s,baz=289,slow=14,SNR=5.6 | | | | | | |
| GEYT | | | | Sn | Sn | 04 26 20.5 | +0.9 |
| | 0.1nm,0.3s,baz=146,slow=2.9,SNR=1.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.40** | **23** | Pn | Pn | 04 26 22.0 | -2.2 |
| | 0.3nm,0.3s,baz=204,slow=12,SNR=7.2 | | | | | | |
| AKTO | | | | Sn | Sn | 04 28 25.2 | -7.0 |
| | 0.3nm,0.3s,baz=314,slow=13,SNR=6.1 | | | | | | |
| **BELG** | **Belogornoye** | **12.45** | **350** | LR | LR | 04 33 41.3 | |
| | comp=Z,121nm,21.3s,baz=359,slow=48 | | | | | | |
| **BVAR** | **Borovoye Array** | **18.46** | **39** | P | P | 04 27 57.3 | 0.0 |
| | 0.1nm,0.3s,baz=231,slow=9.1,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **23.57** | **63** | P | P | 04 28 51.8 | -0.5 |
| | 0.5nm,0.6s,baz=260,slow=8.5,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.57** | **47** | P | P | 04 29 20.0 | +0.4 |
| | 0.3nm,0.3s,baz=246,slow=11,SNR=1.1 | | | | | | |

*BJI **09** 05:03:17.6±0.0, 4.7°S×150.0°E, h599km, mb4.8/74, mB4.8/32*
*DJA **09** 05:03:19.3±0.3, 5.5°S×151.0°E±1.1°, h595km±3km, M4.8/49, mb5.1/49, mB5.3/24, MLv4.8/3, Mw(mB)4.8/24, MwMwp5.5/1, Mwp5.7/1*
*IDC **09** 05:03:20.0±0.7, 4.7°S×149.7°E, h603km±9km, mb4.2/27, mb1 4.4/32, mb1mx4.2/37, mbtmp5.3/32, Error ellipse: s-maj=9.2km s-min=6.9km az=65.0*
*NEIC **09** 05:03:20.0±1.5, 4.75°S±0.06°×149.74°E±0.09°, h600km±7km, mb4.9/89, Error ellipse: s-maj=14.0km s-min=6.0km az=117.0*
**ISC 09 05:03:19.5±0.4, 4.79°S±0.04°×149.76°E±0.04°, h599km±5km, n299, σθ94/299, mb4.9/109, 67C-88D, Fault plane solution: NP1:** φ±255.31738°, δ74.46886°, λ-20.68642°. **NP2:** φ351.09073°, δ70.10156°, λ-163.45531°. **Principal axes:** T Plg2.9423°, Azm303.8349°; N Plg64.3383°, Azm39.9762°; P Plg25.4678°, Azm212.4321°; **Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **2.31** | **78** | P | **P** | **05 04 35.2** | **+0.1** |
| KRVT | | | | S | **S** | **05 05 33.8** | **-2.8** |
| **RABL** | **Rabaul** | **2.47** | **76** | P | **P** | **05 04 34.3** | **-1.6** |
| **RABL** | **Rabaul** | **2.47** | **76** | P | **P** | **05 04 35.2** | **-0.7** |
| **MANU** | **Manus Island** | **3.62** | **319** | P | **P** | **05 04 42.5** | **+0.1** |
| **PMG** | **Port Moresby** | **5.26** | **209** | P | **P** | **05 04 55.8** | **+1.4** |
| | 58nm,0.3s,baz=28,slow=5.9,SNR=128 | | | | | | |
| PMG | | | | S | **S** | **05 06 12.5** | **+0.5** |
| | baz=6.5,slow=8.2,SNR=27 | | | | | | |
| **PMG** | **Port Moresby** | **5.26** | **209** | P | **P** | **05 04 55.3** | **+0.8** |
| **PMG** | **Port Moresby** | **5.26** | **209** | P | **P** | **05 04 55.8** | **+1.4** |
| **PMG** | **Port Moresby** | **5.26** | **209** | P | **P** | **05 04 55.9** | **+1.4** |
| **JAY** | **Jayapura** | **9.31** | **284** | P | **P** | **05 05 30.6** | **-0.9** |
| | 51nm,0.3s,baz=151,slow=5.7,SNR=148 | | | | | | |
| JAY | | | | S | **S** | **05 07 18.8** | **-1.1** |
| | 3.8nm,0.3s,baz=194,slow=24,SNR=9.1 | | | | | | |
| **JAY** | **Jayapura** | **9.31** | **284** | P | **P** | **05 05 30.4** | **-1.2** |
| | 2μm188nm,0.9s | | | | | | |
| JAY | | | | S | **S** | **05 07 18.8** | **-1.1** |
| | 2μm188nm,0.9s | | | | | | |
| **GENI** | **Genyem** | **9.81** | **282** | P | **P** | **05 05 35.5** | **-1.0** |
| | 7μm585nm,0.5s | | | | | | |
| **GENI** | **Genyem** | **9.81** | **282** | P | **P** | **05 05 35.9** | **-0.6** |
| **HNR** | **Honiara** | **11.12** | **115** | P | **P** | **05 05 48.2** | **-1.2** |
| | 41nm,0.3s,baz=191,slow=4.1,SNR=4.5 | | | | | | |
| HNR | | | | S | **S** | **05 07 50.8** | **-1.8** |
| | 3.9nm,0.3s,baz=260,slow=20,SNR=0.9 | | | | | | |
| **COEN** | **Coen** | **11.19** | **215** | P | **P** | **05 05 51.0** | **+0.9** |
| **COEN** | **Coen** | **11.19** | **215** | P | **P** | **05 05 51.2** | **+1.1** |
| **SMPI** | **Sarmi** | **11.37** | **284** | P | **P** | **05 05 51.6** | **-0.4** |
| | 334nm,0.9s | | | | | | |
| **BAKI** | **Biak** | **14.09** | **284** | P | **P** | **05 06 19.0** | **-0.4** |
| | 3μm272nm,1.1s | | | | | | |
| **MTSU** | **Mount Surprise** | **14.29** | **201** | P | **P** | **05 06 22.2** | **+0.9** |
| | baz=14,SNR=68 | | | | | | |
| **MTSU** | **Mount Surprise** | **14.29** | **201** | P | **P** | **05 06 22.4** | **+1.2** |
| **PATS** | **Pohnpei** | **14.36** | **37** | P | **P** | **05 06 20.7** | **-1.2** |
| **PATS** | **Pohnpei** | **14.36** | **37** | P | **P** | **05 06 21.4** | **-0.5** |
| **CTA** | **Charters Tower** | **15.59** | **192** | P | **P** | **05 06 34.6** | **+1.5** |
| | 22nm,0.3s,baz=4.4,slow=10,SNR=262 | | | | | | |
| CTA | | | | S | **S** | **05 09 12.8** | **+1.8** |
| | 0.5nm,0.3s,baz=145,slow=19,SNR=2.9 | | | | | | |
| **CTA** | **Charters Tower** | **15.59** | **192** | P | **P** | **05 06 34.7** | **+1.6** |
| **CTAO** | **Charters Tower** | **15.59** | **192** | P | **P** | **05 06 34.2** | **+1.1** |
| **CTAO** | **Charters Tower** | **15.59** | **192** | P | **P** | **05 06 34.7** | **+1.6** |
| **FAKI** | **Fak Fak** | **17.57** | **275** | P | **P** | **05 06 51.1** | **-0.2** |
| | 1μm56nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **17.57** | **275** | P | **P** | **05 06 50.8** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 05 06 56.2 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **18.51** | **178** | P | **P** | **05 07 00.7** | **+1.0** |
| **QIS** | **Mount Isa** | **18.52** | **211** | P | **P** | **05 07 00.4** | **+0.4** |
| | baz=19,SNR=148 | | | | | | |
| **QIS** | **Mount Isa** | **18.52** | **211** | P | **P** | **05 07 00.2** | **+0.2** |
| **KDU** | **Kakadu** | **18.79** | **244** | P | **P** | **05 07 02.0** | **-0.4** |
| | baz=19,SNR=111 | | | | | | |
| **KDU** | **Kakadu** | **18.79** | **244** | P | **P** | **05 07 02.1** | **-0.3** |
| **SIJI** | **Sorong** | **18.87** | **281** | P | **P** | **05 07 03.0** | **-0.2** |
| | comp=Z,9.2nm,0.3s,baz=75,slow=7.2,SNR=15 | | | | | | |
| **SWI** | **Sorong** | **18.88** | **281** | P | **P** | **05 07 03.2** | **-0.1** |
| | comp=Z,2μmcomp=Z,77nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **20.05** | **245** | P | **P** | **05 07 14.2** | **+0.3** |
| | baz=20,SNR=20 | | | | | | |
| **MTN** | **Manton Dam** | **20.05** | **245** | P | **P** | **05 07 13.2** | **-0.6** |
| MTN | | | | IAmb | IAmb | 05 07 14.5 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **20.05** | **245** | P | **P** | **05 07 13.9** | **0.0** |
| **SANVU** | **Saraoutou** | **20.16** | **123** | P | **P** | **05 07 14.3** | **-0.4** |
| **SANVU** | **Saraoutou** | **20.16** | **123** | P | **P** | **05 07 16.1** | **+1.3** |
| **EIDS** | **Eidsvold** | **20.51** | **177** | P | **P** | **05 07 18.6** | **+0.8** |
| | baz=21,SNR=9.3 | | | | | | |
| **EIDS** | **Eidsvold** | **20.51** | **177** | P | **P** | **05 07 18.2** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 05 07 19.2 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **20.51** | **177** | P | **P** | **05 07 18.3** | **+0.5** |
| **WB0** | **Warramunga Arr** | **21.11** | **224** | P | **P** | **05 07 23.4** | **0.0** |
| **WR0** | **Warramunga Arr** | **21.14** | **223** | P | **P** | **05 07 23.6** | **0.0** |
| **WRAB** | **Tennant Creek** | **21.25** | **224** | P | **P** | **05 07 24.9** | **+0.3** |
| **WRAB** | **Tennant Creek** | **21.25** | **224** | P | **P** | **05 07 24.9** | **+0.3** |
| **WB2** | **Warramunga Arr** | **21.26** | **224** | P | **P** | **05 07 25.0** | **+0.3** |
| **WRA** | **Warramunga Arr** | **21.27** | **224** | P | **P** | **05 07 25.2** | **+0.4** |
| | comp=Z,147nm,0.5s,baz=49,slow=8.7,SNR=587 | | | | | | |
| WRA | | | | S | **S** | **05 10 40.1** | **-2.3** |
| | comp=Z,11nm,0.8s,baz=55,slow=13,SNR=4.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 11 03.9** | **+0.1** |
| | comp=Z,3.7nm,0.4s,baz=52,slow=2.4,SNR=1.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **05 13 45.0** | **+0.1** |
| | comp=Z,5.8nm,0.6s,baz=44,slow=2.5,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.27** | **224** | P | **P** | **05 07 23.4** | **-1.3** |
| WRA | | | | IAmb | IAmb | 05 08 16.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **RMQ** | **Roma** | **21.60** | **182** | P | **P** | **05 07 28.4** | **+0.8** |
| | baz=22,SNR=16 | | | | | | |
| **RMQ** | **Roma** | **21.60** | **182** | P | **P** | **05 07 28.3** | **+0.7** |
| **QLP** | **Quilpie** | **22.31** | **193** | P | **P** | **05 07 34.4** | **+0.6** |
| | baz=22,SNR=57 | | | | | | |
| **QLP** | **Quilpie** | **22.31** | **193** | P | **P** | **05 07 34.5** | **+0.6** |
| **LBMI** | **Labuha** | **22.60** | **280** | P | **P** | **05 07 38.5** | **+1.7** |
| | comp=Z,2μmcomp=Z,159nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **23.29** | **241** | P | **P** | **05 07 42.4** | **-0.5** |
| | baz=23,SNR=52 | | | | | | |
| **KNRA** | **Kununurra** | **23.29** | **241** | P | **P** | **05 07 42.1** | **-0.7** |
| **KNRA** | **Kununurra** | **23.29** | **241** | P | **P** | **05 07 42.3** | **-0.5** |
| **DZM** | **Mont Dzumac** | **23.59** | **138** | P | **P** | **05 07 45.7** | **+0.2** |
| | comp=Z,22nm,0.5s,baz=265,slow=8.4,SNR=74 | | | | | | |
| **DZM** | **Mont Dzumac** | **23.59** | **138** | P | **P** | **05 07 45.6** | **+0.2** |
| DZM | | | | IAmb | IAmb | 05 07 46.6 | |
| | comp=Z,68nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.59** | **138** | P | **P** | **05 07 45.8** | **+0.3** |
| **SANI** | **Sanana** | **23.88** | **276** | P | **P** | **05 07 48.0** | **0.0** |
| | comp=Z,60nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **23.88** | **276** | P | **P** | **05 07 48.3** | **+0.3** |
| **YATNC** | **Mamie plateau,** | **23.88** | **138** | P | **P** | **05 07 48.7** | **+0.8** |
| **AS31** | **Alice Springs** | **24.21** | **218** | P | **P** | **05 07 50.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **24.21** | **218** | P | **P** | **05 07 50.8** | **-0.1** |
| | comp=Z,73nm,0.4s,baz=49,slow=8.3,SNR=1653 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 11 08.6** | **-1.3** |
| | comp=Z,3.6nm,0.6s,baz=63,slow=4.3,SNR=2.5 | | | | | | |
| ASAR | | | | S | **S** | **05 11 27.1** | **-1.6** |
| | comp=Z,5.1nm,0.8s,baz=40,slow=18,SNR=4.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **05 13 52.4** | **-0.4** |
| | comp=Z,8.0nm,0.8s,baz=50,slow=3.1,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **24.21** | **218** | P | **P** | **05 07 50.7** | **-0.2** |
| **INKA** | **Innaminka** | **24.39** | **200** | P | **P** | **05 07 52.5** | **+0.2** |
| **ARMA** | **Armidale** | **25.56** | **176** | P | **P** | **05 08 04.1** | **+1.3** |
| | baz=26,SNR=53 | | | | | | |
| **ARMA** | **Armidale** | **25.56** | **176** | P | **P** | **05 08 03.8** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 05 08 04.7 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **25.56** | **176** | P | **P** | **05 08 04.4** | **+1.7** |
| **SOEI** | **Soe** | **25.75** | **258** | P | **P** | **05 08 04.7** | **0.0** |
| | comp=Z,40nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **25.75** | **258** | P | **P** | **05 08 05.1** | **+0.4** |
| SOEI | | | | IAmb | IAmb | 05 08 23.4 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **25.75** | **258** | P | **P** | **05 08 04.4** | **-0.3** |
| **KMSI** | **Cibinong** | **26.29** | **281** | P | **P** | **05 08 09.5** | **+0.2** |
| | comp=Z,281nm,0.6s | | | | | | |
| **BATI** | **Baumata** | **26.41** | **257** | P | **P** | **05 08 11.8** | **+1.4** |
| | comp=Z,66nm,0.5s,baz=97,slow=5.3,SNR=6.9 | | | | | | |
| BATI | | | | S | **S** | **05 12 03.4** | **+0.1** |
| | comp=Z,18nm,0.5s,baz=75,slow=16,SNR=1.7 | | | | | | |
| **BATI** | **Baumata** | **26.41** | **257** | P | **P** | **05 08 10.5** | **+0.1** |
| | comp=Z,63nm,0.8s | | | | | | |
| **OOD** | **Oodnadatta** | **26.51** | **209** | P | **P** | **05 08 10.6** | **-0.4** |
| **CMSA** | **Cobar Meteorol** | **26.88** | **188** | P | **P** | **05 08 14.7** | **+0.4** |
| | baz=27,SNR=62 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.88** | **188** | P | **P** | **05 08 14.6** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **27.04** | **239** | P | **P** | **05 08 15.2** | **-0.6** |
| | comp=Z,81nm,0.4s,baz=53,slow=8.2,SNR=1123 | | | | | | |
| FITZ | | | | S | **S** | **05 12 10.4** | **-2.4** |
| | comp=Z,4.0nm,0.5s,baz=188,slow=23,SNR=1.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.04** | **239** | P | **P** | **05 08 14.9** | **-0.8** |
| | baz=27,SNR=696 | | | | | | |
| **GTOI** | **Gorontalo** | **27.25** | **281** | P | **P** | **05 08 19.1** | **+1.4** |
| | comp=Z,490nmcomp=Z,53nm,0.7s | | | | | | |
| **LCRK** | **Leigh Creek** | **27.75** | **202** | P | **P** | **05 08 21.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **28.02** | **195** | P | **P** | **05 08 23.6** | **-0.6** |
| | comp=Z,25nm,0.5s,baz=358,slow=8.5,SNR=55 | | | | | | |
| STKA | | | | S | **S** | **05 12 25.3** | **-2.5** |
| | comp=Z,3.6nm,0.7s,baz=202,slow=17,SNR=1.7 | | | | | | |
| STKA | | | | ScP | **ScP** | **05 14 04.1** | **+0.2** |
| | comp=Z,7.5nm,1.1s,baz=274,slow=3.2,SNR=4.3 | | | | | | |
| **STKA** | **Stephens Creek** | **28.02** | **195** | P | **P** | **05 08 24.1** | **0.0** |
| | baz=28,SNR=5.7 | | | | | | |
| **STKA** | **Stephens Creek** | **28.02** | **195** | P | **P** | **05 08 23.3** | **-0.8** |
| **STKA** | **Stephens Creek** | **28.02** | **195** | P | **P** | **05 08 23.7** | **-0.4** |
| **MRSI** | **Marisa** | **28.27** | **280** | P | **P** | **05 08 26.2** | **-0.4** |
| | comp=Z,42nm,1.1s | | | | | | |
| **MGCD** | **Mangrove Creek** | **28.31** | **178** | P | **P** | **05 08 28.0** | **+1.4** |
| | baz=29,SNR=4.5 | | | | | | |
| **MGCD** | **Mangrove Creek** | **28.31** | **178** | P | **P** | **05 08 27.9** | **+1.3** |
| **APSI** | **Ampana** | **28.33** | **277** | P | **P** | **05 08 27.6** | **+0.5** |
| | comp=Z,636nmcomp=Z,80nm,0.5s | | | | | | |
| **WRKA** | **Warakurna** | **28.81** | **224** | P | **P** | **05 08 30.4** | **-0.7** |
| | baz=29,SNR=794 | | | | | | |
| **WRKA** | **Warakurna** | **28.81** | **224** | P | **P** | **05 08 30.4** | **-0.7** |
| **MULG** | **Mulgathing** | **29.37** | **209** | P | **P** | **05 08 35.3** | **-0.5** |
| **BASI** | **Baing, Sumba** | **29.41** | **258** | P | **P** | **05 08 36.5** | **+0.1** |
| | comp=Z,1μmcomp=Z,70nm,0.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **29.53** | **281** | P | **P** | **05 08 36.0** | **-1.4** |
| TOLI2 | | | | IAmb | IAmb | 05 08 38.6 | |
| | comp=Z,26nm,0.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **29.53** | **281** | P | **P** | **05 08 37.0** | **-0.5** |
| **KAPI** | **Kappang** | **29.89** | **268** | P | **P** | **05 08 40.6** | **0.0** |
| | comp=Z,5.2nm,0.4s,baz=142,slow=6.7,SNR=2.5 | | | | | | |
| KAPI | | | | S | **S** | **05 12 56.8** | **-0.5** |
| | comp=Z,4.4nm,0.3s,baz=146,slow=15,SNR=1.1 | | | | | | |
| **HTT** | **Hallett** | **30.23** | **198** | P | **P** | **05 08 43.4** | **+0.1** |
| **MPSI** | **Mapaga** | **30.26** | **279** | P | **P** | **05 08 43.5** | **-0.2** |
| | comp=Z,136nm,0.7s | | | | | | |
| **NAPP** | **Napperby** | **30.26** | **200** | P | **P** | **05 08 43.4** | **0.0** |
| **WHYH** | **Whyalla** | **30.32** | **201** | P | **P** | **05 08 43.9** | **0.0** |
| **CNB** | **Canberra Magne** | **30.38** | **181** | P | **P** | **05 08 45.9** | **+1.4** |
| | baz=31,SNR=35 | | | | | | |
| **CNB** | **Canberra Magne** | **30.38** | **181** | P | **P** | **05 08 45.7** | **+1.2** |
| **CAN** | **Canberra** | **30.39** | **181** | P | **P** | **05 08 45.4** | **+0.8** |
| CAN | | | | IAmb | IAmb | 05 08 46.8 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **30.39** | **181** | P | **P** | **05 08 45.9** | **+1.3** |
| **WBSI** | **Waikabubak, Su** | **30.50** | **259** | P | **P** | **05 08 45.3** | **-0.5** |
| | comp=Z,87nm,0.7s | | | | | | |
| **MSVF** | **Nonsavu** | **30.52** | **117** | P | **P** | **05 08 47.5** | **+1.5** |
| | comp=Z,25nm,0.7s,baz=273,slow=7.8,SNR=28 | | | | | | |
| **MSVF** | **Nonsavu** | **30.52** | **117** | P | **P** | **05 08 47.4** | **+1.3** |
| **MSVF** | **Nonsavu** | **30.52** | **117** | P | **P** | **05 08 47.5** | **+1.5** |
| **BBOO** | **Buckleboo** | **30.68** | **203** | P | **P** | **05 08 46.6** | **-0.4** |
| | baz=31,SNR=50 | | | | | | |
| **BBOO** | **Buckleboo** | **30.68** | **203** | P | **P** | **05 08 46.6** | **-0.4** |
| **DGTI** | **Dogotuki** | **31.56** | **114** | P | **P** | **05 08 55.8** | **+1.0** |
| **TWOA** | **Tennyson Woods** | **31.82** | **198** | P | **P** | **05 08 57.2** | **+0.5** |
| **MILA** | **Mila** | **32.12** | **181** | P | **P** | **05 09 00.6** | **+1.3** |
| | baz=32,SNR=12 | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.65** | **192** | P | **P** | **05 09 04.4** | **+0.7** |
| | baz=33,SNR=50 | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.65** | **192** | P | **P** | **05 09 04.0** | **+0.3** |
| **TOO** | **Toolangi** | **32.86** | **186** | P | **P** | **05 09 06.6** | **+1.1** |
| | baz=33,SNR=32 | | | | | | |
| **TOO** | **Toolangi** | **32.86** | **186** | P | **P** | **05 09 06.8** | **+1.3** |
| **FORT** | **Forrest** | **32.95** | **216** | P | **P** | **05 09 05.9** | **-0.4** |
| | baz=33,SNR=31 | | | | | | |
| **FORT** | **Forrest** | **32.95** | **216** | P | **P** | **05 09 05.9** | **-0.4** |
| **BRAT** | **Ballarat** | **33.04** | **189** | P | **P** | **05 09 08.3** | **+1.4** |
| **MBWA** | **Marble Bar** | **33.37** | **238** | P | **P** | **05 09 09.0** | **-1.0** |
| **MBWA** | **Marble Bar** | **33.37** | **238** | P | **P** | **05 09 09.2** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **33.45** | **237** | IAmb | IAmb | 05 09 10.8 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **33.45** | **237** | P | **P** | **05 09 09.8** | **-0.9** |
| **GEXS** | **Deakin Univers** | **33.63** | **188** | P | **P** | **05 09 12.4** | **+0.5** |
| **TGY** | **Tagaytay City** | **34.20** | **304** | P | **P** | **05 09 18.3** | **+1.2** |
| | comp=Z,131nm,0.3s,baz=186,slow=5.0,SNR=2.1 | | | | | | |
| **SPMM** | **Sapulut** | **34.56** | **285** | P | **P** | **05 09 20.0** | **-0.1** |
| **IGBI** | **Denpasar** | **34.59** | **261** | P | **P** | **05 09 19.0** | **-1.2** |
| | comp=Z,2μmcomp=Z,84nm,0.4s | | | | | | |
| **KKM** | **Kota Kinabalu** | **35.17** | **287** | P | **P** | **05 09 24.2** | **-1.0** |
| KKM | | | | IAmb | IAmb | 05 09 26.1 | |
| | comp=Z,90nm,1.3s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **35.54** | **262** | P | **P** | **05 09 25.8** | **-2.4** |
| | comp=Z,5μmcomp=Z,32nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **35.54** | **262** | IAmb | IAmb | 05 09 31.3 | |
| | comp=Z,20nm,0.5s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **35.54** | **262** | P | **P** | **05 09 26.5** | **-1.7** |
| **MEEK** | **Meekatharra** | **36.83** | **231** | P | **P** | **05 09 38.0** | **-0.5** |
| | baz=37,SNR=37 | | | | | | |
| **MEEK** | **Meekatharra** | **36.83** | **231** | P | **P** | **05 09 38.1** | **-0.5** |
| **MOO** | **Moorlands** | **37.56** | **183** | P | **P** | **05 09 46.2** | **+2.0** |
| | baz=38,SNR=4.1 | | | | | | |
| **JOW** | **Kunigami** | **37.68** | **328** | P | **P** | **05 09 46.0** | **+0.6** |
| **JOW** | **Kunigami** | **37.68** | **328** | P | **P** | **05 09 46.5** | **+1.0** |
| **PWJI** | **Pagerwojo** | **37.84** | **263** | P | **P** | **05 09 45.7** | **-1.2** |
| | comp=Z,32nm,0.9s | | | | | | |
| **PCJI** | **Pacitan** | **38.47** | **263** | P | **P** | **05 09 51.9** | **-0.1** |
| | comp=Z,77nm,0.7s | | | | | | |
| **STKI** | **Sintang** | **38.54** | **276** | P | **P** | **05 09 54.1** | **+1.5** |
| **GIRL** | **Giralia** | **38.64** | **239** | P | **P** | **05 09 52.4** | **-0.9** |
| | baz=39,SNR=18 | | | | | | |
| **GIRL** | **Giralia** | **38.64** | **239** | P | **P** | **05 09 53.4** | **+0.1** |
| **AFI** | **Afiamalu** | **38.97** | **106** | P | **P** | **05 09 56.8** | **+0.7** |
| | comp=Z,21nm,0.6s,baz=218,slow=2.6,SNR=7.8 | | | | | | |
| **AFI** | **Afiamalu** | **38.97** | **106** | IAmb | IAmb | 05 10 08.3 | |
| | comp=Z,130nm,1.6s | | | | | | |
| **YOJ** | **Yonaguni jima** | **39.03** | **319** | P | **P** | **05 09 56.7** | **+0.4** |
| **UGM** | **Wanagama** | **39.10** | **263** | P | **P** | **05 09 57.1** | **-0.1** |
| | comp=Z,116nm,1.9s | | | | | | |
| **TWG** | **Pinlang** | **39.22** | **316** | IAmb | IAmb | 05 09 58.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **TPUB** | **Ta-pu** | **39.84** | **316** | P | **P** | **05 10 02.2** | **-0.7** |
| **KSM** | **Kuching** | **39.90** | **278** | IAmb | IAmb | 05 10 04.8 | |
| | comp=Z,32nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **39.90** | **278** | P | **P** | **05 10 04.0** | **+0.5** |
| **SSLB** | **Suanglung** | **39.94** | **317** | P | **P** | **05 10 03.2** | **-0.5** |
| SSLB | | | | IAmb | IAmb | 05 10 05.3 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **39.94** | **317** | P | **P** | **05 10 03.6** | **-0.1** |
| **MORW** | **Morawa** | **40.03** | **229** | P | **P** | **05 10 03.4** | **-1.0** |
| | baz=40,SNR=17 | | | | | | |
| **MORW** | **Morawa** | **40.03** | **229** | P | **P** | **05 10 03.0** | **-1.3** |
| MORW | | | | IAmb | IAmb | 05 10 04.4 | |
| | comp=Z,39nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **40.03** | **229** | P | **P** | **05 10 03.3** | **-1.0** |
| **KLBR** | **Kellerberrin** | **40.15** | **225** | P | **P** | **05 10 03.9** | **-1.2** |
| | baz=40,SNR=50 | | | | | | |
| **KLBR** | **Kellerberrin** | **40.15** | **225** | P | **P** | **05 10 04.0** | **-1.2** |
| **YHNB** | **Yeheng** | **40.24** | **318** | P | **P** | **05 10 06.3** | **+0.2** |
| **YHNB** | **Yeheng** | **40.24** | **318** | P | **P** | **05 10 06.9** | **+0.7** |
| **BLDU** | **Balliduu** | **40.35** | **227** | P | **P** | **05 10 05.8** | **-0.9** |
| | baz=40,SNR=92 | | | | | | |
| **BLDU** | **Balliduu** | **40.35** | **227** | P | **P** | **05 10 05.9** | **-0.9** |
| **TATO** | **Taipei** | **40.38** | **318** | P | **P** | **05 10 07.8** | **+0.7** |
| **JMN** | **Monobe** | **41.15** | **340** | IAmb | IAmb | 05 10 14.8 | |
| | comp=Z,67nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **41.28** | **223** | P | **P** | **05 10 12.4** | **-1.7** |
| NWAO | | | | IAmb | IAmb | 05 10 14.1 | |
| | comp=Z,59nm,1.4s | | | | | | |
| **MUN** | **Mundaring** | **41.45** | **225** | P | **P** | **05 10 14.6** | **-0.9** |
| | baz=42,SNR=10 | | | | | | |
| **MUN** | **Mundaring** | **41.45** | **225** | P | **P** | **05 10 14.9** | **-0.6** |
| **URZ** | **Urewera** | **41.59** | **147** | P | **P** | **05 10 17.1** | **+0.7** |
| | comp=Z,9.2nm,0.4s,baz=271,slow=3.1,SNR=22 | | | | | | |
| URZ | | | | PcP | **PcP** | **05 11 57.3** | **-1.7** |
| | comp=Z,2.6nm,0.4s,baz=321,slow=6.5,SNR=1.7 | | | | | | |
| **URZ** | **Urewera** | **41.59** | **147** | IAmb | IAmb | 05 10 19.4 | |
| | comp=Z,44nm,1.6s | | | | | | |
| **JNU** | **Nakatsue** | **41.73** | **336** | P | **P** | **05 10 17.9** | **+0.2** |
| | comp=Z,55nm,0.8s,baz=158,slow=2.3,SNR=22 | | | | | | |
| **JNU** | **Nakatsue** | **41.73** | **336** | P | **P** | **05 10 17.1** | **-0.6** |
| **JNU** | **Nakatsue** | **41.73** | **336** | P | **P** | **05 10 18.1** | **+0.4** |
| **KNMB** | **Chin-men Tao** | **42.16** | **315** | P | **P** | **05 10 21.0** | **-0.1** |
| KNMB |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **55.90** | **306** | P | **P** | **05 12 04.3** | **+1.9** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.7s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **57.16** | **332** | *i*P | **P** | **05 12 10.5** | **-0.1** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.2s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,300nm,6.1s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.30** | **326** | *e*P | **P** | **05 12 14.0** | **+2.4** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,340nm,9.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.07** | **6** | P | **P** | **05 12 16.5** | **+0.1** |
| | comp=Z,7.5nm,0.6s,baz=163,slow=6.2,SNR=5.9 | | | | | | | |
| **LZH** | **Lanzhou** | **59.13** | **317** | ⇑P | **P** | **05 12 25.1** | **+1.0** |
| LZH | | | | sP | sP | 05 15 23.3 | +0.6 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,82nm,1.3s | | | | | | | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,130nm,7.0s | | | | | | | |
| **HIA** | **Hailar** | **59.83** | **338** | IAmb | IAmb | 05 12 29.4 | | |
| | comp=Z,35nm,0.6s | | | | | | | |
| **PPT** | **Papeete** | **60.62** | **107** | P | **P** | **05 12 35.8** | **+1.7** |
| | comp=Z,9.2nm,0.5s,baz=274,slow=5.8,SNR=4.5 | | | | | | | |
| **GTA** | **Gaotai** | **63.61** | **319** | ⇑P | **P** | **05 12 53.7** | **+0.5** |
| GTA | | | | PcP | **PcP** | **05 13 24.0** | **+1.0** | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **SHL** | **Shillong** | **63.70** | **301** | IAmb | IAmb | 05 12 55.0 | | |
| | comp=Z,57nm,1.0s | | | | | | | |
| **MA2** | **Magadan** | **64.17** | **1** | P | **P** | **05 12 56.3** | **+0.2** |
| MA2 | | | | IAmb | IAmb | 05 12 57.0 | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **64.42** | **330** | P | **P** | **05 12 59.0** | **+0.9** |
| ULN | | | | IAmb | IAmb | 05 12 59.5 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **64.73** | **329** | P | **P** | **05 13 00.7** | **+0.6** |
| | comp=Z,19nm,0.5s,baz=150,slow=4.4,SNR=197 | | | | | | | |
| **SONM** | **Songino Array** | **64.73** | **329** | IAmb | IAmb | 05 13 01.8 | | |
| | comp=Z,55nm,1.2s | | | | | | | |
| **GOMU** | **GeErMu** | **65.53** | **313** | P | **P** | **05 13 06.2** | **+0.6** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **65.74** | **305** | P | **P** | **05 13 07.6** | **+0.4** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,62nm,0.7s | | | | | | | |
| **CASY** | **Casey** | **67.16** | **196** | P | **P** | **05 13 14.2** | **-0.4** |
| CASY | | | | IAmb | IAmb | 05 13 15.3 | | |
| | comp=Z,36nm,0.9s | | | | | | | |
| **TAPN** | **Taplejung** | **67.81** | **302** | *e*P | **P** | **05 13 19.4** | **-0.3** |
| | comp=Z,53nm,0.8s | | | | | | | |
| **ODAN** | **Odare** | **67.93** | **301** | *e*P | **P** | **05 13 20.8** | **+0.4** |
| | comp=Z,91nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **68.63** | **301** | *e*P | **P** | **05 13 24.4** | **-0.2** |
| | comp=Z,23nm,0.4s | | | | | | | |
| **CHLP** | **Challavanipeta** | **68.71** | **292** | *e*P | **P** | **05 13 25.0** | **+0.1** |
| **JIRN** | **Jiri** | **69.19** | **302** | *e*P | **P** | **05 13 28.2** | **+0.1** |
| | comp=Z,50nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **69.53** | **302** | *e*P | **P** | **05 13 30.4** | **+0.3** |
| | comp=Z,132nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **69.83** | **302** | *e*P | **P** | **05 13 31.8** | **-0.1** |
| | comp=Z,27nm,0.5s | | | | | | | |
| **KKN** | **Kakani** | **70.00** | **302** | *e*P | **P** | **05 13 32.9** | **+0.2** |
| | comp=Z,68nm,0.6s | | | | | | | |
| **DMN** | **Daman** | **70.10** | **301** | *e*P | **P** | **05 13 33.7** | **+0.3** |
| | comp=Z,102nm,0.6s | | | | | | | |
| **GKN** | **Gorkha** | **70.61** | **302** | *e*P | **P** | **05 13 36.4** | **+0.2** |
| | comp=Z,70nm,0.5s | | | | | | | |
| **KOLN** | **Koldanda** | **71.42** | **301** | *e*P | **P** | **05 13 41.0** | **-0.1** |
| | comp=Z,90nm,0.7s | | | | | | | |
| **DANN** | **Dangsing** | **71.45** | **302** | *e*P | **P** | **05 13 41.1** | **-0.2** |
| | comp=Z,64nm,0.6s | | | | | | | |
| **MYLAV** | **Mylavaram** | **71.55** | **289** | *e*P | **P** | **05 13 41.7** | **+0.1** |
| **ADKI** | **Addanki** | **72.01** | **288** | *e*P | **P** | **05 13 44.3** | **0.0** |
| **PYUN** | **Piuthan** | **72.03** | **301** | *e*P | **P** | **05 13 44.2** | **-0.4** |
| | comp=Z,104nm,0.8s | | | | | | | |
| **RCLA** | **Racherla** | **72.90** | **288** | *e*P | **P** | **05 13 48.6** | **-0.9** |
| **VNDA** | **Vanda** | **72.97** | **177** | P | **P** | **05 13 49.4** | **+0.7** |
| | comp=Z,16nm,0.5s,baz=334,slow=7.2,SNR=90 | | | | | | | |
| **VNDA** | **Vanda** | **72.97** | **177** | P | **P** | **05 13 49.5** | **+0.7** |
| VNDA | | | | IAmb | IAmb | 05 13 50.2 | | |
| | comp=Z,44nm,1.3s | | | | | | | |
| **SRLM** | **Srisailam** | **73.07** | **288** | *e*P | **P** | **05 13 50.2** | **-0.3** |
| **CUPL** | **Choutuppal** | **73.26** | **290** | *e*P | **P** | **05 13 50.8** | **-0.8** |
| **BILL** | **Bilibino** | **73.58** | **6** | P | **P** | **05 13 52.7** | **+0.4** |
| **HYBB** | **Hyderabad (bro** | **73.63** | **290** | *e*P | **P** | **05 13 53.0** | **-0.7** |
| **WMQ** | **Urumqi** | **73.69** | **318** | *e*P | **P** | **05 13 53.9** | **+0.3** |
| WMQ | | | | PcP | **PcP** | **05 14 06.7** | **+1.2** | |
| WMQ | | | | sP | sP | 05 17 01.5 | +3.9 | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,380nm,5.1s | | | | | | | |
| **SRSP** | **Sriramsagar** | **74.10** | **291** | *e*P | **P** | **05 13 55.7** | **-0.5** |
| **URV** | **Uravakonda** | **74.43** | **287** | *e*P | **P** | **05 13 58.0** | **-0.2** |
| **KLRI** | **Killari** | **75.57** | **290** | *e*P | **P** | **05 14 03.5** | **-1.0** |
| **TIXI** | **Tiksi** | **77.51** | **353** | P | **P** | **05 14 12.3** | **-1.6** |
| **MKAR** | **Makanchi Array** | **78.33** | **320** | P | **P** | **05 14 19.1** | **+0.2** |
| | comp=Z,12nm,0.6s,baz=98,slow=7.6,SNR=258 | | | | | | | |
| MKAR | | | | PP | **sP** | **05 17 25.1** | **+0.9** | |
| | comp=Z,1.2nm,0.8s,baz=113,slow=9.3,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **78.33** | **320** | P | **P** | **05 14 19.4** | **+0.5** |
| **MAKZ** | **Makanchi** | **78.54** | **320** | P | **P** | **05 14 20.2** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 05 14 21.1 | | |
| | comp=Z,59nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.47** | **327** | P | **P** | **05 14 23.8** | **-1.0** |
| | comp=Z,12nm,0.6s,baz=111,slow=5.5,SNR=51 | | | | | | | |
| **KDJ** | **Kajisay** | **80.41** | **314** | IAmb | IAmb | 05 14 31.8 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **80.63** | **311** | P | **P** | **05 14 33.4** | **+2.1** |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **ULHL** | **Ulahol** | **81.11** | **314** | P | **P** | **05 14 34.4** | **+0.5** |
| | SNR=9.7 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **81.39** | **314** | IAmb | IAmb | 05 14 36.8 | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| **NIL** | **Nilore** | **81.47** | **305** | P | **P** | **05 14 35.1** | **-0.5** |
| NIL | | | | IAmb | IAmb | 05 14 36.5 | | |
| | comp=Z,34nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **81.75** | **314** | P | **P** | **05 14 37.1** | **+0.1** |
| | SNR=16 | | | | | | | |
| **KURK** | **Kurchatov** | **81.90** | **323** | P | **P** | **05 14 37.2** | **-0.1** |
| KURK | | | | IAmb | IAmb | 05 14 38.1 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| **MCK** | **McKinley** | **82.03** | **23** | IAmb | IAmb | 05 14 39.0 | | |
| | comp=Z,72nm,2.0s | | | | | | | |
| **KBK** | **Karagaybulak** | **82.14** | **314** | P | **P** | **05 14 39.7** | **+0.7** |
| | SNR=9.5 | | | | | | | |
| **UCH** | **Uchtor** | **82.35** | **314** | P | **P** | **05 14 41.6** | **+1.1** |
| | SNR=24 | | | | | | | |
| **CHMS** | **Chumysh** | **82.36** | **314** | P | **P** | **05 14 40.5** | **+0.5** |
| | SNR=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **82.46** | **314** | P | **P** | **05 14 41.8** | **+1.1** |
| | SNR=10 | | | | | | | |
| **USP** | **Ospenovka** | **82.61** | **315** | P | **P** | **05 14 41.8** | **+0.6** |
| | SNR=36 | | | | | | | |
| **AML** | **Almayashu** | **82.92** | **313** | P | **P** | **05 14 44.2** | **+1.0** |
| | SNR=52 | | | | | | | |
| **EKS2** | **Erkin-Say** | **82.98** | **314** | P | **P** | **05 14 44.2** | **+1.0** |
| | SNR=20 | | | | | | | |
| **COLD** | **Coldfoot** | **83.26** | **20** | P | **P** | **05 14 44.7** | **+0.9** |
| **IL31** | | **83.30** | **23** | IAmb | IAmb | 05 14 43.1 | | |
| | comp=Z,33nm,1.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.30** | **23** | P | **P** | **05 14 42.7** | **-1.4** |
| | comp=Z,5.5nm,0.5s,baz=253,slow=4.8,SNR=116 | | | | | | | |
| **MAW** | **Mawson** | **84.42** | **203** | P | **P** | **05 14 49.4** | **-0.1** |
| | comp=Z,11nm,0.5s,baz=82,slow=4.9,SNR=12 | | | | | | | |
| **J26L** | **Joseph Creek** | **84.49** | **24** | IAmb | IAmb | 05 18 14.4 | | |
| | comp=Z,31nm,1.9s | | | | | | | |
| **NRIK** | **Noril'sk** | **84.98** | **342** | P | **P** | **05 14 51.5** | **-0.7** |
| | comp=Z,9.0nm,0.5s,baz=109,slow=4.0,SNR=14 | | | | | | | |
| **NRIK** | **Noril'sk** | **84.98** | **342** | IAmb | IAmb | 05 14 52.9 | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **KKAR** | **Karatay Array** | **85.42** | **314** | P | **P** | **05 14 54.6** | **-0.3** |
| **DAWY** | **Dawson** | **86.03** | **25** | IAmb | IAmb | 05 14 59.2 | | |
| | comp=Z,24nm,1.6s | | | | | | | |
| **BRVK** | **Borovoye** | **87.49** | **324** | P | **P** | **05 15 03.1** | **-1.3** |
| **ABKAR** | **Akbulak array** | **93.47** | **319** | P | **P** | **05 15 29.8** | **-2.3** |
| ABKAR | | | | IAmb | IAmb | 05 16 01.3 | | |
| | comp=Z,10nm,1.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.46** | **52** | P | **P** | **05 15 38.0** | **+0.8** |
| | comp=Z,0.2nm,0.7s,baz=268,slow=27,SNR=2.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.83** | **28** | P | **P** | **05 15 46.5** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=271,slow=5.0,SNR=7.2 | | | | | | | |
| **PDAR** | **Pinedale Array** | **101.08** | **48** | P | **Pdif** | **05 16 05.9** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=188,slow=3.0,SNR=2.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **109.77** | **335** | Pdiff | **Pdif** | **05 16 42.4** | **-2.1** |
| | comp=Z,3.6nm,1.0s,baz=95,slow=2.1,SNR=4.2 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **115.84** | **339** | PKP | PKiKP | 05 21 05.7 | +11 | |
| | comp=Z,0.8nm,0.6s,baz=12,slow=2.7 | | | | | | | |
| **BOSA** | **Boshof** | **117.18** | **235** | PKP | **PKPdf** | **05 20 57.6** | **-0.8** |
| | comp=Z,3.4nm,1.1s,baz=128,slow=3.2,SNR=3.6 | | | | | | | |
| **S44A** | **Carbondale** | **117.23** | **50** | PKP | **PKPdf** | **05 20 55.9** | **-2.1** |
| **PLCA** | **Paso Flores** | **121.58** | **145** | PKP | **PKPdf** | **05 21 07.0** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=242,slow=2.0,SNR=8.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **122.43** | **327** | PKP | **PKPdf** | **05 21 07.0** | **-0.9** |
| | comp=Z,0.8nm,0.6s,baz=117,slow=1.8,SNR=3.9 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **125.72** | **327** | PKP | **PKPdf** | **05 21 13.8** | **-0.5** |
| | comp=Z,1.3nm,0.6s,baz=324,slow=22,SNR=2.1 | | | | | | | |
| **CPUP** | **Villa Florida** | **139.44** | **141** | PKP | **PKPdf** | **05 21 40.7** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=180,slow=3.0,SNR=1.5 | | | | | | | |
| **MDT** | **Midelt** | **143.25** | **322** | PKP | PKPab | 05 21 45.6 | +0.3 | |
| | comp=Z,1.7nm,0.4s,baz=126,slow=1.4,SNR=15 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.41** | **287** | PKPbc | **PKPbc** | **05 21 57.5** | **-0.5** |
| | comp=Z,1.4nm,0.3s,baz=86,slow=2.3,SNR=28 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.41** | **287** | PKPdf | **PKPdf** | **05 21 56.4** | **+1.9** |
| **BDFB** | **Brasilia** | **153.14** | **139** | PKPbc | **PKPbc** | **05 22 11.1** | **-0.4** |
| | comp=Z,2.9nm,0.5s,baz=320,slow=1.3,SNR=13 | | | | | | | |
| **DBIC** | **Dimbokro** | **154.67** | **275** | PKPbc | **PKiKP** | **05 22 13.6** | **-1.0** |
| | comp=Z,2.8nm,0.9s,baz=170,slow=6.7,SNR=2.2 | | | | | | | |

*TUL **09** 05:17:42.2±1.4, 36.25N±0.01×96.75W±0.02, h5km±6km, ML2.7, mb_Lg2.6/5(NEIC) Error ellipse: s-maj=1.8km s-min=1.7km az=94.0*

**NEIC 09 05:17:42.4±1.0, 36.27N±0.01×96.75W±0.02, h2km±7km, Error ellipse: s-maj=2.1km s-min=1.4km az=60.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **QUOK** | **Quay** | **0.10** | **160** | Pg | Pg | 05 17 44.5 | +0.2 |
| QUOK | | | | Sg | Sg | 05 17 46.0 | +0.4 |
| **OK034** | **N. Norfolk Rd.** | **0.26** | **173** | Pg | Pg | 05 17 47.4 | +0.1 |
| OK034 | | | | Sg | Sg | 05 17 50.9 | +0.3 |
| **OK033** | **Mehan** | **0.27** | **215** | Pg | Pg | 05 17 47.6 | 0.0 |
| OK033 | | | | Sg | Sg | 05 17 51.3 | +0.3 |
| **OK031** | **S. Brethren Rd** | **0.32** | **193** | Pg | Pg | 05 17 48.6 | +0.1 |
| OK031 | | | | Sg | Sg | 05 17 52.9 | +0.2 |
| **OK030** | **Cody Creek RV** | **0.34** | **185** | Pg | Pg | 05 17 48.9 | 0.0 |
| OK030 | | | | Sg | Sg | 05 17 53.6 | +0.3 |
| **BLOK** | **Blackwell** | **0.62** | **323** | Pg | Pg | 05 17 54.4 | 0.0 |
| BLOK | | | | Sg | Sg | 05 18 02.4 | 0.0 |
| **T35A** | **Sooner Cattle** | **0.68** | **16** | Pg | Pg | 05 17 55.4 | -0.1 |
| T35A | | | | Sg | Sg | 05 18 04.4 | +0.1 |
| **OK029** | **Liberty Lake** | **0.74** | **231** | Pg | Pg | 05 17 56.3 | -0.3 |
| OK029 | | | | Sg | Sg | 05 18 06.1 | 0.0 |
| **OK025** | **Westminster Rd** | **0.83** | **215** | Pg | Pg | 05 17 57.7 | -0.7 |
| OK025 | | | | Sg | Sg | 05 18 09.2 | +0.1 |
| **TUL1** | **Leonard** | **0.85** | **114** | Pg | Pg | 05 17 58.3 | -0.5 |
| TUL1 | | | | Sg | Sg | 05 18 09.5 | -0.3 |
| **BCOK** | **Bluff Creek, N** | **0.92** | **229** | Pg | Pg | 05 17 59.6 | -0.5 |
| BCOK | | | | Sg | Sg | 05 18 12.1 | 0.0 |
| **KAN13** | **South Haven SW** | **0.95** | **322** | Pg | Pg | 05 18 00.2 | -0.4 |
| KAN13 | | | | Sg | Sg | 05 18 12.9 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.02** | **214** | Pg | Pg | 05 18 01.0 | -1.0 |
| OKCFA | | | | Sg | Sg | 05 18 15.2 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **1.02** | **213** | Pg | Pg | 05 18 01.0 | -1.1 |
| **CROK** | **Carrier** | **1.02** | **284** | Pg | Pg | 05 18 01.2 | -0.8 |
| **GC02** | **Grant County #** | **1.07** | **304** | Pg | Pg | 05 18 02.3 | -0.6 |
| **W35A** | **Tecumseh** | **1.11** | **185** | Pg | Pg | 05 18 02.7 | -1.1 |
| **KAN17** | **Caldwell West** | **1.13** | **314** | Pg | Pg | 05 18 03.6 | -0.4 |
| **FNO** | **Franklin** | **1.14** | **208** | Pg | Pg | 05 18 02.9 | -1.3 |
| **KAN14** | **Manchester OK** | **1.20** | **306** | Pg | Pg | 05 18 04.8 | -0.6 |
| **KAN01** | **Argonia South** | **1.20** | **318** | Pg | Pg | 05 18 04.9 | -0.6 |
| **OK032** | **Salt Plains WL** | **1.29** | **295** | Pg | Pg | 05 18 06.5 | -0.8 |
| **KAN08** | **Anthony NE Sta** | **1.37** | **315** | Pn | Pn | 05 18 08.3 | -0.3 |
| **X34A** | **Smith Ranch, M** | **1.88** | **208** | Pn | Pn | 05 18 16.2 | +0.5 |
| X34A | | | | IAmb_Lg | | 05 18 43.2 | | |
| | comp=Z,41nm,0.7s | | | | | | | |
| **U38A** | **Gravette** | **1.92** | **84** | Pn | Pn | 05 18 16.4 | +0.2 |
| **X37A** | **Clayton** | **2.02** | **146** | Pn | Pn | 05 18 17.5 | 0.0 |
| **WMOK** | **Wichita Mounta** | **2.25** | **228** | Pn | Pn | 05 18 21.5 | +0.7 |
| WMOK | | | | IAmb_Lg | | 05 18 54.8 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **HHAR** | **Hobbs** | **2.27** | **89** | Pn | Pn | 05 18 21.3 | +0.3 |
| **LOOK** | **Love County** | **2.29** | **189** | Pn | Pn | 05 18 21.6 | +0.2 |
| **W39A** | **Magazine** | **2.64** | **113** | Pn | Pn | 05 18 26.6 | +0.5 |
| **S39A** | **Bolivar** | **3.09** | **62** | IAmb_Lg | | 05 19 26.8 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.15** | **87** | Pn | Pn | 05 18 33.0 | -0.1 |
| **X40A** | **Basin Creek Fa** | **3.66** | **118** | Pn | Pn | 05 18 40.4 | +0.3 |
| **MGMO** | **Mountain Grove** | **3.71** | **75** | Pn | Pn | 05 18 41.0 | +0.2 |
| **WHAR** | **Wooly Hollow** | **3.76** | **104** | Pn | Pn | 05 18 40.3 | -1.1 |
| **W41B** | **Gary Mavity, V** | **3.82** | **105** | Pn | Pn | 05 18 42.0 | -0.3 |
| **R40A** | **Maddies Statio** | **4.11** | **59** | Pn | Pn | 05 18 47.2 | +0.9 |
| **237A** | **Washetta, Mont** | **4.32** | **169** | Pn | Pn | 05 18 49.0 | -0.2 |

*IDC **09** 05:28:34.2±4.0, 52.05N×160.63E, h0km, mb3.7/2, mb1 3.7/3, mb1mx3.3/30, mbtmp3.6/3, ML2.7/1, MS4.1/1, Ms1 4.1/1, ms1mx2.6/102, Error ellipse: s-maj=96.1km s-min=46.7km az=15.0*

*KRSC **09** 05:28:39.2±2.0, 52.53N×160.76E, h43km±19km, ML3.6*

**ISC 09 05:28:35.4±1.8, 52.50N±0.06×161.07E±0.05, h15km±12km, n34, σ1s82/45, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.87** | **314** | *e*P | **Pg** | **05 28 53.4** | **+1.1** |
| SPN | | | | *e*S | **Sb** | **05 29 00.8** | **-2.8** |
| **NLC** | **Nalytchevo** | **1.24** | **303** | *e*P | **Pn** | **05 28 58.6** | **+0.5** |
| NLC | | | | *e*S | **Sn** | **05 29 11.2** | **-3.3** |
| **DALK** | **Dalny** | **1.50** | **292** | *e*P | **Pn** | **05 29 02.7** | **+1.0** |
| DALK | | | | *e*S | **Sn** | **05 29 18.5** | **-2.5** |
| **UGLR** | **Uglovaya** | **1.54** | **298** | *e*P | **Pn** | **05 29 03.3** | **+1.1** |
| **SDLR** | **Sedlovina** | **1.54** | **301** | *e*P | **Pn** | **05 29 03.3** | **+1.0** |
| **PET** | **Petropavlovsk** | **1.56** | **291** | *e*P | **Pn** | **05 29 03.7** | **+1.3** |
| PET | | | | *e*S | **Sn** | **05 29 18.8** | **-3.5** |
| **RUS** | **Russkaya** | **1.56** | **269** | *e*P | **Pb** | **05 29 04.0** | **+0.1** |
| RUS | | | | *e*S | **Sn** | **05 29 19.8** | **-2.7** |
| **SMAR** | **Somma** | **1.57** | **300** | *e*P | **Pn** | **05 29 03.8** | **+0.9** |
| **AVH** | **Avacha** | **1.61** | **299** | *e*P | **Pn** | **05 29 04.5** | **+1.3** |
| **KRER** | **Koryakskii** | **1.62** | **301** | *e*P | **Pn** | **05 29 04.7** | **+1.2** |
| **KOK** | **Koryaka** | **1.67** | **299** | *e*P | **Pn** | **05 29 05.4** | **+1.3** |
| **MTVR** | **Mutnovka** | **1.76** | **271** | *e*P | **Pn** | **05 29 07.0** | **+1.6** |
| MTVR | | | | *e*S | **Sn** | **05 29 27.0** | **-0.6** |
| **KII** | **Karymskiy** | **1.82** | **328** | *e*P | **Pb** | **05 29 09.0** | **+0.6** |
| **KRMR** | **Karymshinskiy** | **1.82** | **282** | *e*P | **Pn** | **05 29 07.2** | **+1.2** |
| KRMR | | | | *e*S | **Sn** | **05 29 27.3** | **-1.5** |
| **GRL** | **Gorelyy** | **1.83** | **273** | *e*P | **Pb** | **05 29 08.8** | **+0.3** |
| GRL | | | | *e*S | **Sn** | **05 29 29.6** | **+0.4** |
| **KDTR** | **Khodutka, Kamc** | **1.97** | **251** | *e*P | **Pb** | **05 29 10.6** | **-0.2** |
| KDTR | | | | *e*S | **Sn** | **05 29 31.0** | **-1.4** |
| **MKZ** | **Mys Kozlova** | **2.10** | **11** | *e*P | **Pg** | **05 29 15.2** | **-0.4** |
| MKZ | | | | *e*S | **Sb** | **05 29 39.7** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **2.13** | **288** | Pn | **Pn** | **05 29 11.1** | **+0.7** |
| | 12nm,0.3s,baz=122,slow=14,SNR=82 | | | | | | |
| PETK | | | | Sn | **Sn** | **05 29 36.6** | **+0.1** |
| | 12nm,0.3s,baz=126,slow=38,SNR=3.1 | | | | | | |
| **GNL** | **Ganaly** | **2.23** | **304** | *e*P | **Pn** | **05 29 14.5** | **+2.7** |
| GNL | | | | *e*S | **Sn** | **05 29 40.1** | **+0.9** |
| **APC** | **Apacha** | **2.42** | **282** | *e*P | **Pb** | **05 29 17.5** | **-0.9** |
| APC | | | | *e*S | **Sn** | **05 29 44.3** | **+0.8** |
| **TUMD** | **Tumrok D** | **2.74** | **352** | *e*P | **Pb** | **05 29 22.8** | **-1.1** |
| TUMD | | | | *e*S | **Sn** | **05 29 55.1** | **+3.6** |
| **TUMR** | **Tumrok** | **2.84** | **349** | *e*P | **Pb** | **05 29 25.7** | **-0.1** |
| TUMR | | | | *e*S | **Sb** | **05 29 59.1** | **-1.3** |
| **KMNR** | **Kamenistaya** | **3.30** | **352** | *e*P | **Pb** | **05 29 32.4** | **-1.2** |
| **KIRR** | **Kirishev** | **3.49** | **353** | *e*P | **Pb** | **05 29 35.5** | **-1.3** |
| **KPT** | **Kopyto** | **3.51** | **352** | *e*P | **Pb** | **05 29 35.9** | **-1.2** |
| **KRSR** | **Krestovskiy** | **3.74** | **356** | *e*P | **Pb** | **05 29 39.7** | **-1.3** |
| **KBTR** | **Krutoberegovo** | **3.85** | **15** | *e*P | **Pb** | **05 29 39.7** | **-3.2** |
| **BKI** | **Bering** | **3.97** | **45** | *e*P | **Pb** | **05 29 41.5** | **-3.4** |
| BKI | | | | *e*S | **Sn** | **05 30 25.5** | **+3.7** |
| **H11N2** | **WAKE ISLAND Hy** | **33.02** | **170** | T | T | 06 10 33.7 | |
| | baz=354 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.03** | **170** | T | T | 06 10 35.2 | |
| | baz=354 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.04** | **170** | T | T | 06 10 34.4 | |
| | baz=354 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.95** | **297** | P | **P** | **05 37 21.4** | **+0.8** |
| | 0.3nm,0.8s,baz=55,slow=7.6,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **54.03** | **342** | LR | LR | 06 06 20.8 | |
| | comp=Z,153nm,18.8s,baz=242,slow=42 | | | | | | |
| **FINES** | **FINESS Array B** | **60.90** | **337** | P | P | 05 38 50.1 | +3.3 |
| | 2.4nm,1.0s,baz=32,slow=8.2,SNR=4.4 | | | | | | |

*IDC **09** 05:56:39.6±2.9, 54.31N×87.36E, h0km, mb1 2.9/2, mb1mx2.8/35, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=23.3km s-min=16.8km az=51.0*

*NNC **09** 05:56:41.7±2.0, 54.19N×87.14E, h0km, mb2.9, mpv2.8, Error ellipse: s-maj=18.7km s-min=10.1km az=11.0, Suspected Mining explosion.*

**ISC 09 05:56:41.8±4.3, 54.3N±0.2×87.0E±0.2, h0km, n8, σ0s93/12, 6C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.34** | **255** | *i* | | 06 06 52.2 | |
| | baz=75,slow=338,SNR=0.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.34** | **255** | ⇓P | **Pg** | **05 57 07.1** | **-0.4** |
| | 0.4nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **05 57 26.7** | **+0.4** |
| | 1.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.34** | **255** | Pg | **Pn** | **05 57 07.1** | **-0.7** |
| | 3.2nm,0.3s,baz=75,slow=14,SNR=41 | | | | | | |
| ZALV | | | | Lg | Lg | 05 57 28.2 | |
| | 1.8nm,0.3s,baz=74,slow=26,SNR=11 | | | | | | |
| ZALV | | | | *i* | | 06 06 55.8 | |
| | 1.4nm,0.3s,baz=77,slow=39,SNR=14 | | | | | | |
| **KURK** | **Kurchatov** | **6.26** | **238** | ⇓Sn | **Sn** | **05 59 28.5** | **+0.9** |
| | 1.5nm,1.1s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 59 58.7 | |
| | 4.2nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.37** | **238** | Pn | **Pn** | **05 58 17.7** | **+0.9** |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=7.1 | | | | | | |
| KURBB | | | | Sn | **Sn** | **05 59 30.2** | **+0.1** |
| | 0.0nm,0.3s,baz=60,slow=21,SNR=1.3 | | | | | | |
| KURBB | | | | Lg | Lg | 06 00 08.4 | |
| | 0.0nm,0.3s,baz=60,slow=34,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.37** | **238** | ⇑Pn | **Pn** | **05 58 17.5** | **+0.8** |
| | 2.2nm,1.2s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **05 59 29.7** | **-0.4** |
| | 0.9nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 00 04.5 | |
| | 3.3nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.11** | **204** | Pn | **Pn** | **05 58 41.8** | **+1.1** |
| | 1.3nm,1.1s,baz=28,slow=14,SNR=10 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 00 11.2** | **-1.8** |
| | 0.2nm,0.4s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 00 56.9 | |
| | 3.7nm,1.3s,baz=19,slow=30 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.11** | **204** | Pn | **Pn** | **05 58 40.5** | **-0.2** |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=7.6 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 00 13.4** | **+0.4** |
| | 0.1nm,0.3s,baz=34,slow=21,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 06 00 57.7 | |
| | 0.0nm,0.3s,baz=25,slow=38,SNR=1.9 | | | | | | |

*IDC **09** 06:14:51.2±0.9, 14.44N×54.15E, h0km, mb3.9/17, mb1 4.0/17, mb1mx3.8/51, mbtmp3.9/17, MS3.7/17, Ms1 3.7/17, ms1mx3.3/85, Error ellipse: s-maj=22.3km s-min=19.3km az=145.0*

*NEIC **09** 06:14:52.9±2.1, 14.29N±0.09×54.1E±0.1, h10km±2km, mb4.3/15, Error ellipse: s-maj=24.9km s-min=13.6km az=76.0*

*OMAN **09** 06:14:53.3±0.9, 14.44N×54.07E, h49km±164km, ml3.7/6, Error ellipse: s-maj=15.0km s-min=7.2km az=243.0*

**ISC 09 06:14:51.6±0.6, 14.31N±0.04×54.11E±0.09, h10km, n54, σ2s74/45, mb4.1/24, MS3.6/17, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCY** | **Socotra** | **2.11** | **183** | P | **Pn** | **06 15 23.5** | **-3.5** |
| | SNR=122 | | | | | | |
| SOCY | | | | S | **Sn** | **06 15 45.9** | **-7.5** |
| **SOCY** | **Socotra** | **2.11** | **183** | | Pn | 06 15 23.4 | -3.6 |
| **ABTO** | **Aybut** | **3.13** | **346** | P | **Pn** | **06 15 38.5** | **-2.6** |
| | SNR=5.5 | | | | | | |
| ABTO | | | | S | **Sn** | **06 16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **51.21 343** | P | **P** | **06 23 53.8** | **-1.1** |
| | comp=Z,4.3nm,1.0s,baz=139,slow=9.1,SNR=7.5 | | | | | |
| FINES | | | LR | LR | 06 47 52.9 | |
| | comp=Z,272nm,18.2s,baz=258,slow=39 | | | | | |
| **SONM** | **Songino Array** | **54.48 41** | P | **P** | **06 24 19.6** | **0.0** |
| | comp=Z,0.9nm,1.1s,baz=232,slow=3.5,SNR=3.7 | | | | | |
| **SUR** | **Sutherland** | **56.31 214** | LR | LR | 06 47 28.8 | |
| | comp=Z,61nm,19.8s,baz=360,slow=35 | | | | | |
| **ESDC** | **Sonseca Array** | **56.51 308** | P | **P** | **06 24 34.3** | **0.0** |
| | comp=Z,1.9nm,1.0s,baz=101,slow=8.5,SNR=5.7 | | | | | |
| **ESDC** | **Sonseca Array** | **56.51 308** | IAmb | IAmb | 06 24 42.3 | |
| | comp=Z,0.5nm,1.1s | | | | | |
| **ARCES** | **ARCESS Array B** | **58.05 349** | P | **P** | **06 24 43.6** | **-0.9** |
| | comp=Z,6.9nm,1.1s,baz=138,slow=4.3,SNR=5.1 | | | | | |
| ARCES | | | LR | LR | 06 53 32.7 | |
| | comp=Z,161nm,21.4s,baz=250,slow=40 | | | | | |
| **KSRS** | **Korea Array** | **68.67 55** | P | **P** | **06 25 56.3** | **+0.9** |
| | comp=Z,0.9nm,0.6s,baz=266,slow=4.7,SNR=3.1 | | | | | |
| **MAW** | **Mawson** | **81.93 177** | LR | LR | 07 00 28.2 | |
| | comp=Z,61nm,18.0s,baz=225,slow=33 | | | | | |
| **WRA** | **Warramunga Arr** | **85.90 112** | P | **P** | **06 27 33.3** | **+0.9** |
| | comp=Z,0.4nm,0.8s,baz=304,slow=3.8,SNR=2.9 | | | | | |
| **ASAR** | **Alice Springs** | **86.59 115** | P | **P** | **06 27 36.6** | **+0.8** |
| | comp=Z,0.3nm,0.7s,baz=279,slow=5.2,SNR=4.0 | | | | | |
| **NVAR** | **Mina Array Bea** | **127.06 353** | PKP | **PKPdf** | **06 33 58.1** | **+1.3** |
| | comp=Z,0.7nm,0.9s,baz=16,slow=2.2,SNR=5.3 | | | | | |

**IDC 09 06:15:11.6±2.5, 54°.16N×86°.33E, h0km, mb1 3.1/2, mb1mx2.4/50, mbtmp3.1/2, ML2.9/2, Error ellipse: s-maj=20.2km s-min=12.6km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.91 257** | *i* | | | 06 20 04.0 | |
| | baz=73,slow=337,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.91 257** | | Pg | Pg | 06 15 29.2 | +0.1 |
| | 2.1nm,0.3s,baz=79,slow=17,SNR=28 | | | | | | |
| ZALV | | | | Lg | Lg | 06 15 41.2 | |
| | 0.9nm,0.3s,baz=84,slow=28,SNR=6.1 | | | | | | |
| ZALV | | | | Rg | Rg | 06 15 46.5 | |
| | 2.2nm,0.3s,baz=161,slow=33,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.94 237** | | Pn | Pn | 06 16 42.1 | +1.4 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=4.2 | | | | | | |
| KURBB | | | | Lg | Lg | 06 18 21.9 | |
| | 0.0nm,0.3s,baz=54,slow=33,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.81 201** | | Pn | Pn | 06 17 07.1 | +0.7 |
| | 0.4nm,0.3s,baz=24,slow=13,SNR=32 | | | | | | |
| MKAR | | | | Sn | Sn | 06 18 34.8 | -0.7 |
| | 0.0nm,0.3s,baz=20,slow=27,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 06 19 18.5 | |
| | 0.0nm,0.3s,baz=23,slow=28,SNR=5.2 | | | | | | |

*UPA **09** 06:24:34.6±1.2, 8°.69N×83°.33W, h14km±3km, MW3.6*
*UCR **09** 06:24:35.0±1.4, 8°.65N×83°.35W, h10km±4km, MW3.5*
**ISC 09 06:24:35.0±1.0, 8°.66N±0°.03×83°.31W±0°.03, h18km±3km, n28, σ0°89/48, 4C-6D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTJ1** | **Puerto Jimnez** | **0.12 177** | *i* | *P* | **Pg** | **06 24 38.7** | **-0.2** |
| PTJ1 | | | | *eS* | **Sg** | **06 24 42.8** | **+1.2** |
| **PIRO** | **Carate, Puerto** | **0.26 186** | *eP* | | **Pg** | **06 24 40.3** | **-0.5** |
| **PIRO** | **Carate, Puerto** | **0.26 186** | *i* | *P* | **Pg** | **06 24 40.4** | **-0.5** |
| PIRO | | | | *eS* | **Sb** | **06 24 45.1** | **0.0** |
| **EDPN** | **Palmar Norte** | **0.33 334** | *i* | *P* | **Pg** | **06 24 41.8** | **-0.3** |
| EDPN | | | | *eS* | **Sb** | **06 24 47.4** | **-0.1** |
| **EDSV** | **San Vito** | **0.37 65** | *eP* | | **Pb** | **06 24 43.4** | **+0.3** |
| **CDITO** | **Canoas** | **0.44 101** | *i* | *P* | **Pg** | **06 24 43.7** | **-0.3** |
| CDITO | | | | *eS* | **Sb** | **06 24 52.2** | **+1.7** |
| **MLIR3** | **Monte Lirio, C** | **0.50 75** | *i* | *P* | **Pb** | **06 24 45.5** | **+0.2** |
| MLIR3 | | | | *eS* | **Sb** | **06 24 52.9** | **+0.7** |
| **EDBA** | **Buenos Aires** | **0.50 4** | *eP* | | **Pg** | **06 24 45.1** | **0.0** |
| EDBA | | | | *eS* | **Sb** | **06 24 53.4** | **+1.1** |
| **SRBA** | **San Rafael, Bu** | **0.57 355** | *eP* | | **Pb** | **06 24 45.9** | **-0.6** |
| **DRK0** | **Durika** | **0.60 6** | *i* | *P* | **Pb** | **06 24 46.5** | **-0.5** |
| DRK0 | | | | *i* | **Sg** | **06 24 55.9** | **+0.8** |
| **PTPM** | **Petroterminale** | **0.62 137** | *eP* | | **Pg** | **06 24 47.9** | **+0.5** |
| PTPM | | | | *eS* | **Sn** | **06 24 58.9** | **+0.5** |
| **BRU2** | **Volcan** | **0.62 78** | *i* | *P* | **Pb** | **06 24 47.3** | **-0.2** |
| BRU2 | | | | *i* | **Sn** | **06 24 58.1** | **-0.6** |
| **BCO2** | **Palmira** | **0.77 86** | *i* | *P* | **Pb** | **06 24 49.6** | **-0.4** |
| BCO2 | | | | *i* | **Sn** | **06 25 01.7** | **-0.7** |
| **EDDO** | **Dominical** | **0.80 317** | *eP* | | **Pb** | **06 24 50.4** | **-0.1** |
| EDDO | | | | *eS* | **Sb** | **06 25 00.8** | **-0.2** |
| **PEZE** | **Perez Zeledon,** | **0.80 333** | *eP* | | **Pb** | **06 24 49.7** | **-0.8** |
| **LNBQ3** | **Los Naranjos,** | **0.87 81** | *eP* | | **Pb** | **06 24 50.7** | **-0.9** |
| LNBQ3 | | | | *eS* | **Sg** | **06 25 03.7** | **+0.2** |
| **DVD** | **David** | **0.88 105** | *eP* | | **Pb** | **06 24 50.9** | **-0.8** |
| DVD | | | | *eS* | **Sn** | **06 25 04.7** | **-0.1** |
| **LOMA3** | **Las Lomas, Chi** | **0.94 104** | *eP* | | **Pb** | **06 24 50.5** | **-2.2** |
| LOMA3 | | | | *eS* | **Sn** | **06 25 09.6** | **+3.4** |
| **CHIR3** | **Chiriqui UPA,** | **1.00 105** | *eP* | | **Pb** | **06 24 53.3** | **-0.5** |
| CHIR3 | | | | *eS* | **Sg** | **06 25 08.6** | **+0.9** |
| **CNI2** | **El Empalme, Bo** | **1.12 47** | *eP* | | **Pn** | **06 24 54.8** | **-1.0** |
| CNI2 | | | | *i* | **Sg** | **06 25 11.0** | **-0.5** |
| **CHGR2** | **Aguacate** | **1.18 77** | *eP* | | **Pn** | **06 24 56.4** | **-0.3** |
| CHGR2 | | | | *eS* | **Sn** | **06 25 12.3** | **0.0** |
| **RIMA** | **Rio Macho** | **1.23 334** | *eP* | | **Pn** | **06 24 56.2** | **-1.2** |
| **LCR2** | **La Lucha 2** | **1.27 327** | *eP* | | **Pn** | **06 24 57.7** | **-0.4** |
| **BATAN** | **Batan** | **1.43 357** | *eP* | | **Pb** | **06 25 00.5** | **-0.6** |
| BATAN | | | | *eS* | **Sg** | **06 25 21.5** | **+0.2** |
| **HDC** | **Heredia** | **1.55 329** | *eP* | | **Pn** | **06 25 03.4** | **+0.1** |
| **HDC** | **Heredia** | **1.55 329** | *eP* | | **Pn** | **06 25 02.4** | **+0.6** |
| HDC | | | | *eS* | **Sb** | **06 25 23.1** | **+0.5** |
| **JACO** | **JACO, Garabito** | **1.66 307** | *eP* | | **Pn** | **06 25 03.9** | **+0.6** |
| **GMAL** | **Guarumal, Vera** | **2.24 113** | *eP* | | **Pn** | **06 25 10.3** | **-0.9** |
| GMAL | | | | *eS* | **Sb** | **06 25 42.5** | **+0.1** |

**IDC 09 06:50:06.4±3.2, 54°.04N×86°.73E, h0km, mb1 2.5/2, mb1mx2.5/35, mbtmp2.5/2, ML2.4/2, Error ellipse: s-maj=28.2km s-min=15.9km az=49.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.13 266** | *i* | | | 06 58 00.0 | |
| | baz=84,slow=331,SNR=0.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.13 266** | | Pg | Pg | 06 50 27.3 | -0.8 |
| | 0.5nm,0.3s,baz=88,slow=16,SNR=7.4 | | | | | | |
| ZALV | | | | Lg | Lg | 06 50 43.5 | |
| | 1.4nm,0.3s,baz=93,slow=30,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.08 239** | | Pn | Pn | 06 51 38.9 | +1.5 |
| | 0.1nm,0.3s,baz=56,slow=13,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.79 203** | | Pn | Pn | 06 52 01.8 | +0.8 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=7.0 | | | | | | |

**IDC 09 07:00:34.8±2.9, 53°.68N×87°.10E, h0km, mb1 2.5/2, mb1mx2.5/35, mbtmp2.5/2, ML2.1/2, Error ellipse: s-maj=25.9km s-min=16.7km az=64.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.38 282** | *i* | | | 07 09 41.0 | |
| | baz=99,slow=348,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.38 282** | | Pg | Pg | 07 01 00.3 | -0.9 |
| | 0.4nm,0.3s,baz=98,slow=16,SNR=3.6 | | | | | | |
| ZALV | | | | Lg | Lg | 07 01 19.2 | |
| | 1.1nm,0.3s,baz=112,slow=29,SNR=9.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.10 243** | | Pn | Pn | 07 02 06.1 | +0.1 |
| | 0.0nm,0.3s,baz=63,slow=15,SNR=3.2 | | | | | | |
| KURBB | | | | Lg | Lg | 07 03 46.9 | |
| | 0.0nm,0.3s,baz=66,slow=33,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.55 206** | | Pn | Pn | 07 02 27.9 | +1.9 |
| | 0.1nm,0.3s,baz=23,slow=13,SNR=4.6 | | | | | | |
| MKAR | | | | Sn | Sn | 07 03 46.4 | -5.9 |
| | 0.0nm,0.3s,baz=17,slow=25,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 04 31.5 | |
| | 0.0nm,0.3s,baz=29,slow=34,SNR=2.7 | | | | | | |

**IDC 09 07:03:03.1±2.5, 53°.64N×87°.02E, h0km, mb1 2.8/2, mb1mx2.8/36, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=23.9km s-min=13.8km az=68.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.34 284** | *i* | | | 07 12 00.0 | |
| | baz=99,slow=329,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.34 284** | | Pg | Pg | 07 03 27.4 | -1.3 |
| | 1.1nm,0.3s,baz=103,slow=17,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 07 03 45.8 | |
| | 1.9nm,0.3s,baz=108,slow=29,SNR=12 | | | | | | |
| ZALV | | | | Rg | Rg | 07 03 55.8 | |
| | 4.7nm,0.6s,baz=106,slow=26,SNR=9.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.04 243** | | Pn | Pn | 07 04 35.2 | +1.6 |
| | 0.1nm,0.3s,baz=59,slow=13,SNR=3.8 | | | | | | |
| KURBB | | | | Lg | Lg | 07 06 13.8 | |
| | 0.1nm,0.3s,baz=58,slow=32,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.50 206** | | Pn | Pn | 07 04 55.4 | +1.8 |
| | 0.2nm,0.3s,baz=27,slow=14,SNR=16 | | | | | | |
| MKAR | | | | Sn | Sn | 07 06 17.1 | -2.2 |
| | 0.1nm,0.3s,baz=27,slow=26,SNR=2.7 | | | | | | |
| MKAR | | | | Lg | Lg | 07 06 58.5 | |
| | baz=29,slow=30,SNR=6.1 | | | | | | |

*BGR **09** 07:19:28.2±0.0, 27°.26N×43°.36W, h10km, mb5.6, Ms4.6*
*IDC **09** 07:19:29.3±0.5, 28°.36N×43°.81W, h0km, mb4.5/33, mb1 4.6/33, mb1mx4.5/45, mbtmp4.5/33, MS4.5/76, Ms1 4.5/76, ms1mx4.4/90, Error ellipse: s-maj=14.5km s-min=12.2km az=10.0*
*BJI **09** 07:19:30.0±0.0, 28°.50N×43°.70W, h10km, mb4.8/10, Ms4.8/1, Ms7 4.5/1*
*MOS **09** 07:19:30.4±1.0, 28°.35N×43°.70W, h17km, mb5.4/62, MS4.4/4, Error ellipse: s-maj=7.5km s-min=5.3km az=57.4*
*NEIC **09** 07:19:31.8±2.0, 28°.3N±0°.1×43°.6W±0°.1, h10km±1km, mb5.3/169, Error ellipse: s-maj=19.0km s-min=15.5km az=137.0*
*GCMT **09** 07:19:32.8±0.2, 28°.54N±0°.01×43°.64W±0°.01, h12km, MW5.2/134, Moment Tensor Solution. s69,c97; s134,c220; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr=0.78±.01; Mθθ=0.07±.02; Mφφ=0.70±.01; Mrθ=0.09±.04; Mrφ=0.34±.01; Mθφ=-0.26±.04; Best double couple: M=0.86500×10^17 NP1=φs217.00000°, δ39.00000°, λ-69.00000°. NP2=φs10.00000°, δ54.00000°, λ-106.00000°. Principal axes: T 0.8820, Plg7.0000°, Azm112.0000°; N -0.0340, Plg13.0000°, Azm20.0000°; P -0.8480, Plg75.0000°, Azm230.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 09 07:19:31.5±0.3, 28°.35N±0°.05×43°.67W±0°.05, h12km, n708, σ1°92/663, mb5.3/214, MS4.5/86, 24C-17D, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **19.75 241** | | P | **P** | **07 23 59.5** | **-1.8** |
| **SMRT** | **St. Maarten** | **20.54 244** | | P | Pn | 07 24 11.5 | -0.7 |
| SMRT | | | | IAmb | IAmb | 07 24 19.9 | |
| | comp=Z,165nm,1.4s | | | | | | |
| **FDF** | **Fort de France** | **21.13 234** | | P | **P** | **07 24 16.3** | **-0.1** |
| FDF | | | | pmax | pmax | | |
| | comp=Z,185nm,1.2s | | | | | | |
| **FDF** | **Fort de France** | **21.13 234** | | P | **P** | **07 24 16.3** | **-0.1** |
| FDF | | | | IAmb | IAmb | 07 24 27.5 | |
| | comp=Z,185nm,1.2s | | | | | | |
| **STVI** | **Saint Thomas** | **21.90 248** | | P | **P** | **07 24 25.6** | **+1.1** |
| **CBYP** | **Canovanas** | **22.68 249** | | P | **P** | **07 24 35.3** | **+2.4** |
| **HUMP** | **Col San Antoni** | **22.73 248** | | P | **P** | **07 24 36.5** | **+2.9** |
| HUMP | | | | IAmb | IAmb | 07 24 42.5 | |
| | comp=Z,110nm,1.5s | | | | | | |
| **GCPR** | **Guaynabo City** | **22.84 249** | | P | **P** | **07 24 37.2** | **+2.5** |
| **PDPR** | **Patillas Dam,** | **22.94 248** | | P | **P** | **07 24 37.0** | **+1.4** |
| PDPR | | | | IAmb | IAmb | 07 24 44.2 | |
| | comp=Z,113nm,1.4s | | | | | | |
| **SJG** | **San Juan** | **23.00 249** | | LR | LR | 07 31 42.7 | |
| | comp=Z,757nm,21.6s,baz=61,slow=32 | | | | | | |
| **EMPR** | **Esperanza - Ma** | **23.13 250** | | P | **P** | **07 24 40.8** | **+3.2** |
| EMPR | | | | IAmb | IAmb | 07 24 45.6 | |
| | comp=Z,94nm,1.1s | | | | | | |
| **CELP** | **Cerrillos** | **23.37 249** | | P | **P** | **07 24 42.6** | **+2.6** |
| **DRLN** | **Deer Lake** | **23.42 337** | | P | **P** | **07 24 40.6** | **+0.4** |
| **MDP** | **Montagnes des** | **24.64 202** | | LR | LR | 07 32 14.4 | |
| | comp=Z,217nm,18.6s,baz=1,0,slow=31 | | | | | | |
| **DR12** | **Loma Pena Alta** | **25.37 254** | | P | **P** | **07 25 00.4** | **+1.7** |
| **SC01** | **Santiago de lo** | **26.24 256** | | P | **P** | **07 25 07.7** | **+1.1** |
| SC01 | | | | IAmb | IAmb | 07 25 16.3 | |
| | comp=Z,99nm,1.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **26.91 256** | | P | **P** | **07 25 14.1** | **+1.5** |
| **BAUV** | **El Baul** | **29.98 235** | | P | **P** | **07 25 39.5** | **-0.5** |
| **BOAV** | **Boa Vista** | **30.41 215** | *eP* | | **P** | **07 25 44.8** | **+0.9** |
| **SSPA** | **Standing Stone** | **30.55 303** | | P | **P** | **07 25 45.6** | **+0.7** |
| | baz=103 | | | | | | |
| **O56A** | **Blue Knob Stat** | **30.98 302** | | P | **P** | **07 25 48.2** | **-0.6** |
| | baz=102 | | | | | | |
| **SCHQ** | **Schefferville** | **31.33 334** | | P | **P** | **07 25 49.9** | **-1.7** |
| | comp=Z,2.7nm,0.8s,baz=126,slow=8.7,SNR=2.0 | | | | | | |
| SCHQ | | | | LR | LR | 07 38 41.4 | |
| | comp=Z,844nm,18.0s,baz=148,slow=37 | | | | | | |
| **W57A** | **Gilead** | **31.49 292** | | P | **P** | **07 25 54.4** | **+1.2** |
| W57A | | | | IAmb | IAmb | 07 26 04.9 | |
| | comp=Z,60nm,1.4s | | | | | | |
| **MALB** | **Monte Alegre** | **31.71 200** | *eP* | | **P** | **07 25 55.1** | **-0.1** |
| **MCWV** | **Mont Chateau** | **31.84 300** | | P | **P** | **07 25 58.4** | **+2.2** |
| MCWV | | | | IAmb | IAmb | 07 26 08.4 | |
| | comp=Z,63nm,1.3s | | | | | | |
| **MCWV** | **Mont Chateau** | **31.84 300** | | P | **P** | **07 25 56.9** | **+0.7** |
| | baz=100 | | | | | | |
| **BIRD** | **Birdtown, Kers** | **31.86 291** | | P | **P** | **07 25 57.8** | **+1.3** |
| **U56A** | **King** | **31.87 294** | | P | **P** | **07 25 58.8** | **+2.2** |
| U56A | | | | IAmb | IAmb | 07 26 05.6 | |
| | comp=Z,69nm,1.4s | | | | | | |
| **SDV** | **Santo Domingo** | **31.92 238** | | LR | LR | 07 37 41.4 | |
| | comp=Z,335nm,21.1s,baz=52,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **31.92 238** | *eP* | | **P** | **07 25 58.7** | **+1.3** |
| **SDV** | **Santo Domingo** | **31.92 238** | | P | **P** | **07 25 57.3** | **0.0** |
| **M54A** | **Oil Creek Stat** | **32.06 304** | | P | **P** | **07 25 57.8** | **-0.4** |
| | baz=103 | | | | | | |
| **SADO** | **Sadowa** | **32.55 310** | | LR | LR | 07 36 51.3 | |
| | comp=Z,2μm,21.4s,baz=162,slow=32 | | | | | | |
| **KMSC** | **Kings Mountain** | **32.59 292** | | P | **P** | **07 26 03.5** | **+0.6** |
| | baz=91 | | | | | | |
| **NBPS** | **Pedro II - PI** | **32.63 176** | *eP* | | **P** | **07 26 04.4** | **+1.0** |
| **M53A** | **WI Miller and** | **32.79 303** | | P | **P** | **07 26 05.3** | **+0.8** |
| | baz=102 | | | | | | |
| **PTGA** | **Pitinga** | **32.87 211** | | LR | LR | 07 37 39.0 | |
| | comp=Z,463nm,19.4s,baz=26,slow=33 | | | | | | |
| **Q52A** | **Bidwell** | **33.60 299** | | P | **P** | **07 26 13.3** | **+1.7** |
| Q52A | | | | IAmb | IAmb | 07 26 20.4 | |
| | comp=Z,43nm,1.2s | | | | | | |
| **MDT** | **Midelt** | **33.79 73** | | LR | LR | 07 37 01.8 | |
| | comp=Z,2μm,18.7s,baz=296,slow=31 | | | | | | |
| **V53A** | **Saluda** | **33.81 293** | | P | **P** | **07 26 14.6** | **+1.0** |
| V53A | | | | IAmb | IAmb | 07 26 25.2 | |
| | comp=Z,57nm,1.5s | | | | | | |
| **BG3** | **Lake Jocassee** | **33.90 291** | | P | **P** | **07 26 15.8** | **+1.5** |
| **NBPB** | **Pedra_Branca-C** | **33.93 173** | *eP* | | **P** | **07 26 15.3** | **+0.7** |
| **ACSO** | **Alum Creek Sta** | **34.31 301** | | P | **P** | **07 26 18.6** | **+0.8** |
| ACSO | | | | IAmb | IAmb | 07 26 24.7 | |
| | comp=Z,43nm,1.1s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.31 301** | | P | **P** | **07 26 18.4** | **+0.6** |
| | baz=98 | | | | | | |
| **TZTN** | **Tazewell** | **34.43 294** | | P | **P** | **07 26 19.9** | **+1.0** |
| TZTN | | | | IAmb | IAmb | 07 26 25.6 | |
| | comp=Z,49nm,1.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **34.54 60** | | P | **P** | **07 26 18.9** | **-1.0** |
| | comp=Z,4.5nm,1.2s,baz=261,slow=8.8,SNR=7.5 | | | | | | |
| ESDC | | | | LR | LR | 07 36 39.5 | |
| | comp=Z,793nm,21.2s,baz=275,slow=30 | | | | | | |
| **ESDC** | **Sonseca Array** | **34.54 60** | | P | **P** | **07 26 18.5** | **-1.4** |
| **TKL** | **Tuckaleechee C** | **34.59 292** | | LR | LR | 07 37 53.1 | |
| | comp=Z,2μm,20.2s,baz=104,slow=32 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.59 292** | | P | **P** | **07 26 22.6** | **+2.3** |
| TKL | | | | pmax | pmax | | |
| | comp=Z,108nm,1.5s | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.59 292** | | P | **P** | **07 26 22.6** | **+2.3** |
| **W52A** | **Murphy** | **34.72 292** | | P | **P** | **07 26 22.2** | **+0.8** |
| **V51A** | **Loudon** | **35.06 293** | | P | **P** | **07 26 26.5** | **+2.1** |
| **AAM** | **Ann Arbor** | **35.14 304** | | P | **P** | **07 26 23.8** | **-1.0** |
| | baz=100 | | | | | | |
| **R50A** | **Paris** | **35.15 297** | | P | **P** | **07 26 26.8** | **+1.7** |
| **CPCT** | **Cooper Cave** | **35.20 292** | | P | **P** | **07 26 27.1** | **+1.5** |
| **P49A** | **Miami Univ. Ec** | **35.55 299** | | P | **P** | **07 26 29.4** | **+0.9** |
| **P49A** | **Miami Univ. Ec** | **35.55 299** | | P | **P** | **07 26 28.5** | **0.0** |
| | baz=96 | | | | | | |
| **MOTC** | **Monteria, Cord** | **35.86 243** | | P | **P** | **07 26 32.0** | **+0.7** |
| MOTC | | | | IAmb | IAmb | 07 26 44.9 | |
| | comp=Z,48nm,1.3s | | | | | | |
| **O48B** | **Farmland** | **35.96 300** | | P | **P** | **07 26 32.3** | **+0.2** |
| | baz=96 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **36.02 241** | | P | **P** | **07 26 32.6** | **-0.1** |
| **FPAL** | **Fort Paine** | **36.11 291** | | P | **P** | **07 26 34.8** | **+1.4** |
| FPAL | | | | IAmb | IAmb | 07 26 41.1 | |
| | comp=Z,76nm,1.5s | | | | | | |
| **U49A** | **Red Boiling Sp** | **36.23 294** | | P | **P** | **07 26 36.0** | **+1.6** |
| U49A | | | | IAmb | IAmb | 07 26 41.9 | |
| | comp=Z,57nm,1.4s | | | | | | |
| **GLMI** | **Grayling** | **36.33 308** | | P | **P** | **07 26 35.6** | **+0.5** |
| | baz=103 | | | | | | |
| **N47A** | **Urbana** | **36.44 301** | | P | **P** | **07 26 37.2** | **+1.1** |
| N47A | | | | IAmb | IAmb | 07 26 42.8 | |
| | comp=Z,97nm,1.5s | | | | | | |
| **CLTN** | **Cedars of Leba** | **36.67 293** | | P | **P** | **07 26 39.7** | **+1.6** |
| CLTN | | | | IAmb | IAmb | 07 26 45.8 | |
| | comp=Z,72nm,1.3s | | | | | | |
| **SMTB** | **Santa Maria do** | **37.19 186** | *eP* | | **P** | **07 26 44.1** | **+1.4** |
| **T47A** | **Sharon Grove** | **37.30 295** | | P | **P** | **07 26 44.8** | **+1.4** |
| T47A | | | | IAmb | IAmb | 07 26 50.9 | |
| | comp=Z,62nm,1.4s | | | | | | |
| **ROSC** | **El Rosal** | **37.33 237** | | LR | LR | 07 42 35.3 | |
| | comp=Z,513nm,20.1s,baz=51,slow=37 | | | | | | |
| **LRAL** | **Lakeview Retre** | **37.35 288** | | P | **P** | **07 26 44.2** | **+0.2** |
| | baz=85 | | | | | | |
| **SFIN** | **Lafayette** | **37.45 300** | | P | **P** | **07 26 44.7** | **0.0** |
| | baz=95 | | | | | | |
| **WVT** | **Waverly** | **37.89 293** | | P | **P** | **07 26 49.6** | **+1.2** |
| WVT | | | | IAmb | IAmb | 07 26 55.8 | |
| | comp=Z,79nm,1.4s | | | | | | |
| **WVT** | **Waverly** | **37.89 293** | | P | **P** | **07 26 48.8** | **+0.3** |
| | baz=89 | | | | | | |
| **PLAL** | **Pickwick Lake** | **38.12 291** | | P | **P** | **07 26 51.1** | **+0.7** |
| PLAL | | | | IAmb | IAmb | 07 26 58.1 | |
| | comp=Z,91nm,1.4s | | | | | | |
| **OLIL** | **Olney** | **38.12 298** | | P | **P** | **07 26 51.4** | **+1.0** |
| **DY2G** | **Dye2** | **38.17 358** | *i* | P | **P** | **07 26 50.5** | **-0.2** |
| DY2G | | | | IAmb | IAmb | 07 26 56.6 | |
| | comp=Z,126nm,1.5s | | | | | | |
| **Z47A** | **Carrollton** | **38.23 289** | | P | **P** | **07 26 52.2** | **+0.7** |
| **O44A** | **Mansfield** | **38.48 300** | | P | **P** | **07 26 54.7** | **+1.3** |
| O44A | | | | IAmb | IAmb | 07 27 00.5 | |
| | comp=Z,101nm,1.4s | | | | | | |
| **FRB** | **Frobisher Bay** | **38.85 343** | | P | **P** | **07 26 55.1** | **-1.0** |
| | comp=Z,11nm,1.2s,baz=136,slow=9.5,SNR=6.2 | | | | | | |
| FRB | | | | LR | LR | 07 41 15.8 | |
| | comp=Z,995nm,21.8s,baz=159,slow=34 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **38.90 356** | | P | **P** | **07 26 54.8** | **-1.7** |
| | comp=Z,7.2nm,0.9s,baz=186,slow=10,SNR=2.8 | | | | | | |
| SFJD | | | | LR | LR | 07 38 42.1 | |
| | comp=Z,738nm,21.2s,baz=154,slow=30 | | | | | | |
| **BORG** | **Borgarnes** | **39.06 15** | | P | **P** | **07 26 58.8** | **+0.8** |
| | comp=Z,21nm,1.1s,baz=246,slow=10.0,SNR=2.0 | | | | | | |
| BORG | | | | LR | LR | 07 38 38.8 | |
| | comp=Z,656nm,19.5s,baz=208,slow=29 | | | | | | |
| **NBPN** | **Ponto Novo - B** | **39.11 175** | *eP* | | **P** | **07 26 59.6** | **+0.7** |
| **OXF** | **Oxford** | **39.25 291** | | P | **P** | **07 27 00.7** | **+0.8** |
| OXF | | | | pmax | pmax | | |
| | comp=Z,70nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **39.25 291** | | P | **P** | **07 27 00.7** | **+0.8** |
| OXF | | | | IAmb | IAmb | 07 27 11.2 | |
| | comp=Z,70nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **39.25 291** | | P | **P** | **07 26 59.9** | **0.0** |
| | baz=86 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.59 36** | | LR | LR | 07 38 43.2 | |
| | comp=Z,440nm,20.6s,baz=270,slow=29 | | | | | | |
| **346A** | **Big Creek Wild** | **39.61 286** | | P | **P** | **07 27 04.2** | **+1.3** |
| **SLM** | **Saint Louis** | **39.79 297** | | P | **P** | **07 27 05.8** | **+1.4** |
| SLM | | | | pmax | pmax | | |
| | comp=Z,47nm,1.2s | | | | | | |
| **SLM** | **Saint Louis** | **39.79 297** | | P | **P** | **07 27 05.8** | **+1.4** |
| **JFWS** | **Jewell Farm** | **40.04 304** | | P | **P** | **07 27 06.0** | **-0.4** |
| | baz=96 | | | | | | |
| **HBAR** | **Harrisburg** | **40.20 293** | | P | **P** | **07 27 08.7** | **+0.9** |
| **T42A** | **Van Buren** | **40.49 295** | | P | **P** | **07 27 10.4** | **+0.2** |
| T42A | | | | IAmb | IAmb | 07 27 17.2 | |
| | comp=Z,93nm,1.3s | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **40.54 182** | *eP* | | **P** | **07 27 10.2** | **-0.6** |
| **LCAR** | **Lake Charles** | **40.58 293** | | P | **P** | **07 27 12.4** | **+1.4** |
| LCAR | | | | IAmb | IAmb | 07 27 17.9 | |
| | comp=Z,74nm,1.4s | | | | | | |
| **CCM** | **Cathedral Cave** | **40.59 296** | | P | **P** | **07 27 11.6** | **+0.6** |
| CCM | | | | pmax | pmax | | |
| | comp=Z,36nm,1.2s | | | | | | |
| **CCM** | **Cathedral Cave** | **40.59 296** | | P | **P** | **07 27 11.6** | **+0.6** |
| **CCM** | **Cathedral Cave** | **40.59 296** | | P | **P** | **07 27 10.9** | **-0.2** |
| | baz=89 | | | | | | |
| **ICESG** | **Greenland Ices** | **40.84 2** | *i* | P | **P** | **07 27 12.1** | **-0.9** |
| ICESG | | | | IAmb | IAmb | 07 27 15.1 | |
| | comp=Z,72nm,1.3s | | | | | | |
| **TBTG** | **Tabatinga, AM** | **41.04 222** | *eP* | | **P** | **07 27 15.9** | **+1.0** |
| **TBTG** | **Tabatinga, AM** | **41.04 222** | | P | **P** | **07 27 14.4** | **-0.5** |
| TBTG | | | | IAmb | IAmb | 07 27 25.9 | |
| | comp=Z,77nm,1.5s | | | | | | |
| **W41B** | **Gary Mavity, V** | **41.53 292** | | P | **P** | **07 27 18.9** | **+0.1** |
| W41B | | | | IAmb | IAmb | 07 27 25.5 | |
| | comp=Z,97nm,1.4s | | | | | | |
| **W41B** | **Gary Mavity, V** | **41.53 292** | | P | **P** | **07 27 17.9** | **-0.9** |
| | baz=86,SNR=11 | | | | | | |
| **WHAR** | **Wooly Hollow** | **41.55 292** | | P | **P** | **07 27 19.7** | **+0.7** |
| WHAR | | | | IAmb | IAm

X37A IAmb IAmb 07 27 47.4
comp=Z,70nm,1.4s
**TUL1 Leonard 44.34 294** P **P** **07 27 40.5 -1.1**
baz=84,SNR=15
**SUMG Summit 44.36 2** P **P** **07 27 41.4 -0.3**
SUMG pmax pmax
comp=Z,55nm,1.3s
**SUMG Summit 44.36 2** *i* P **P** **07 27 40.8 -0.9**
SUMG IAmb IAmb 07 27 44.4
comp=Z,58nm,1.3s
**SUMG Summit 44.36 2** P **P** **07 27 41.4 -0.3**
SUMG IAmb IAmb 07 27 43.9
comp=Z,55nm,1.3s
**BFO Black Forest 44.44 49** P **P** **07 27 42.7 +0.4**
BFO pmax pmax
comp=Z,76nm,1.5s
**BFO Black Forest 44.44 49** *eP* **P** **07 27 42.8 +0.5**
comp=Z,70nm,1.4s,baz=262,slow=7.8
**BFO Black Forest 44.44 49** P **P** **07 27 42.7 +0.4**
BFO IAmb IAmb 07 27 43.8
comp=Z,76nm,1.5s
**MTO3 Montecristo 44.49 262** P **P** **07 27 43.6 +0.4**
MTO3 IAmb IAmb 07 27 53.2
comp=Z,55nm,1.3s
**ARAG Araguaiana, MT 44.50 191** *eP* **P** **07 27 42.4 -0.5**
**ECSD EROS Data Cent 44.73 305** P **P** **07 27 43.6 -1.0**
baz=92
**IBBN Ibbenburen 44.74 43** *eP* **P** **07 27 45.4 +0.9**
comp=Z,427nm,2.8s,baz=262,slow=7.8
**KSU1 Kansas State U 44.76 298** P **P** **07 27 44.1 -0.8**
baz=87
**TORD Torodi Ar. Bea 44.77 100** P **P** **07 27 44.3 -0.9**
comp=Z,9.0nm,1.0s,baz=301,slow=9.2,SNR=26
**TORD Torodi Ar. Bea 44.77 100** P **P** **07 27 44.7 -0.5**
**TNS Taunus Mts 44.79 46** *eP* **P** **07 27 46.1 +1.0**
comp=Z,133nm,2.0s,baz=262,slow=7.8
**ULM Lac du Bonnet 44.85 314** P **P** **07 27 43.5 -1.9**
comp=Z,8.1nm,1.1s,baz=120,slow=9.5,SNR=4.1
ULM LR LR 07 43 56.9
comp=Z,296nm,21.0s,baz=100,slow=33
**TUE Stuetta 44.94 51** P **P** **07 27 46.9 +0.4**
TUE IAmb IAmb 07 27 48.9
comp=Z,48nm,1.3s
**STU Stuttgart 45.07 48** *eP* **P** **07 27 47.4 +0.1**
comp=Z,144nm,1.4s,baz=262,slow=7.8
**KEST Kesra 45.09 67** P **P** **07 27 48.8 +1.1**
comp=Z,11nm,0.9s,baz=100,slow=3.0,SNR=7.2
KEST LR LR 07 43 40.3
comp=Z,860nm,20.7s,baz=232,slow=32
**KEST Kesra 45.09 67** P **P** **07 27 49.3 +1.6**
KEST P **P** **07 27 49.3 +1.6**
**OK031 S. Brethren Rd 45.18 294** P **P** **07 27 49.3 +1.0**
**APG El Apazote 45.20 263** LR LR 07 43 35.5
comp=Z,579nm,21.2s,baz=72,slow=32
**HKT Hockley 45.26 285**⇑ *i* P **P** **07 27 49.1 +0.2**
HKT pmax pmax
comp=Z,13nm,1.6s
**DAVOX Davos/Dischmat 45.33 51** LR LR 07 43 39.4
comp=Z,468nm,21.8s,baz=260,slow=32
**DAVA Damuels 45.37 50** *eP* **P** **07 27 50.9 +1.0**
comp=Z,40nm,1.1s,SNR=6.8
**SALV Santo Antonio 45.51 196** *eP* **P** **07 27 52.5 +1.6**
**CZSB Cruzeiro do Su 45.53 222** *eP* **P** **07 27 49.3 -1.9**
**CZSB Cruzeiro do Su 45.53 222** P **P** **07 27 50.7 -0.5**
CZSB IAmb IAmb 07 28 02.9
comp=Z,41nm,1.3s
**UBR Ueberruh 45.56 50** *eP* **P** **07 27 52.1 +0.9**
comp=Z,92nm,1.8s,baz=262,slow=7.8
**H10N2 ASCENSION HYDR 45.70 138** T T 08 16 30.1
baz=324,slow=76
**H10N3 ASCENSION HYDR 45.70 138** T T 08 16 21.1
baz=324,slow=76
**H10N1 ASCENSION HYDR 45.71 138** T T 08 16 29.3
baz=324,slow=76
**RETH Rethem/Aller, 45.79 43** *eP* **P** **07 27 54.0 +1.2**
comp=Z,229nm,2.5s,baz=262,slow=7.8
**UBBA Unterbreizbach 45.86 45** *eP* **P** **07 27 54.3 +1.0**
comp=Z,129nm,2.3s,baz=262,slow=7.8
**FCC Fort Churchill 45.90 326** P **P** **07 27 53.5 -0.1**
FCC pmax pmax
comp=Z,69nm,1.3s
**FCC Fort Churchill 45.90 326** P **P** **07 27 53.5 -0.1**
**FETA Feichten 45.93 51** *i* P **P** **07 27 55.0 +0.8**
comp=Z,28nm,1.2s,SNR=7.4
**GTTG Gottingen 45.95 44** *eP* **P** **07 27 55.0 +0.9**
comp=Z,43nm,1.5s,baz=262,slow=7.8
**RETA Reutte 45.98 50** *i* P **P** **07 27 55.5 +0.9**
comp=Z,28nm,1.1s,SNR=5.9
**PTLB Pontes e Lacer 46.05 201** *eP* **P** **07 27 56.5 +1.4**
**NAN01 Guarapari, ES 46.05 175** *eP* **P** **07 27 56.1 +0.9**
**OSSC Osservatorio P 46.16 56** P **P** **07 27 55.6 -0.4**
**NRDL Niedersach Rie 46.19 43** *eP* **P** **07 27 57.2 +1.3**
comp=Z,65nm,1.4s,baz=262,slow=7.8
**MOTA Moosalm 46.20 50** *eP* **P** **07 27 57.2 +0.8**
comp=Z,56nm,1.8s,SNR=7.6
**CLZ Clausthal 46.24 44** *eP* **P** **07 27 57.4 +0.9**
comp=Z,62nm,1.9s,baz=262,slow=7.8
**WHTX Lake Whitney, 46.24 288** P **P** **07 27 56.7 -0.1**
baz=80
**SQTA Sankt Quirin 46.27 50** *i* P **P** **07 27 57.6 +0.7**
comp=Z,39nm,1.1s,SNR=9.3
**DIAM Diamantina, MG 46.38 180** *eP* **P** **07 27 58.0 +0.1**
**ASSE Asse, Remlinge 46.47 44** *eP* **P** **07 27 59.7 +1.5**
comp=Z,122nm,2.0s,baz=262,slow=7.8
**GRF Grafenberg Arr 46.49 47** *eP* **P** **07 27 59.2 +0.7**
comp=Z,86nm,1.7s,baz=262,slow=7.8
GRF *eL* L 07 44 17.9
comp=Z,594nm,19.1s
**WATA Walderalm 46.52 50** *eP* **P** **07 27 59.5 +0.6**
comp=Z,46nm,1.5s,SNR=10
**WTTA Wattenberg 46.56 50** *eP* **P** **07 28 00.0 +0.8**
comp=Z,29nm,1.0s,SNR=9.6
**BSEG Bad Segeberg 46.58 41** *eP* **P** **07 27 60.0 +1.0**
comp=Z,88nm,1.2s,baz=262,slow=7.8
**FLTG Flechtingen 46.85 43** *eP* **P** **07 28 01.7 +0.6**
comp=Z,160nm,2.2s,baz=262,slow=7.8
**MOX Moxa 46.85 46** *eP* **P** **07 28 01.8 +0.5**
comp=Z,81nm,2.0s,baz=262,slow=7.8
MOX *eL* L 07 44 12.0
comp=Z,699nm,21.8s
**WMOK Wichita Mounta 46.91 292** P **P** **07 28 01.9 -0.1**
WMOK pmax pmax
comp=Z,56nm,1.3s
**WMOK Wichita Mounta 46.91 292** P **P** **07 28 01.9 -0.1**
**WMOK Wichita Mounta 46.91 292** P **P** **07 28 01.3 -0.7**
baz=82,SNR=21
**JMIC Jan Mayen 46.96 15** LR LR 07 44 12.6
comp=Z,104nm,18.8s,baz=244,slow=32
**MDND Maddock 47.02 310** P **P** **07 28 03.0 +0.4**
baz=94
**NEUB Neuenburg 47.02 45** *eP* **P** **07 28 03.4 +0.9**
comp=Z,211nm,2.4s,baz=262,slow=7.8
**MANZ Manzenberg 47.10 47** *eP* **P** **07 28 04.1 +0.9**
comp=Z,28nm,1.9s,baz=262,slow=7.8
**ABTA Abfaltersbach 47.13 51** *eP* **P** **07 28 03.9 +0.3**
comp=Z,36nm,1.1s,SNR=8.4
**ROTZ Rotzenmuhle 47.14 47** *eP* **P** **07 28 04.0 +0.5**
comp=Z,21nm,2.0s,baz=262,slow=7.8
**PLN Plauen 47.18 46** *eP* **P** **07 28 04.4 +0.5**
comp=Z,90nm,2.3s,baz=262,slow=7.8
**SIV San Ignacio 47.19 203** LR LR 07 45 56.9
comp=Z,179nm,19.9s,baz=26,slow=34
**CBKS Cedar Bluff 47.21 298** P **P** **07 28 04.4 +0.1**
baz=85
**STAL STALIGIAL 47.25 52** P **P** **07 28 04.6 +0.1**
STAL IAmb IAmb 07 28 05.4
comp=Z,28nm,1.3s
**WERD Werda 47.27 46** *eP* **P** **07 28 05.2 +0.7**
comp=Z,164nm,2.3s,baz=262,slow=7.8
**GUNZ Gunzen 47.28 46** *eP* **P** **07 28 05.4 +0.8**
comp=Z,100nm,2.2s,baz=262,slow=7.8
**WERN Wernitzgruen 47.30 46** *eP* **P** **07 28 05.6 +0.8**
comp=Z,144nm,2.0s,baz=262,slow=7.8
**TANN Tannenbergstha 47.37 46** *eP* **P** **07 28 06.0 +0.7**
comp=Z,176nm,2.5s,baz=262,slow=7.8
**RJOB Jochberg 47.37 50** *eP* **P** **07 28 06.0 +0.6**
comp=Z,104nm,2.2s,baz=262,slow=7.8
**WET Wettzell 47.52 48** *eP* **P** **07 28 07.1 +0.6**
comp=Z,71nm,1.9s,baz=262,slow=7.8
**KONO Kongsberg 47.57 33**⇑ *eP* **P** **07 28 06.7 0.0**
KONO pmax pmax
comp=Z,11nm,1.0s
**KBA Koelnbreinsper 47.72 51** *eP* **P** **07 28 08.3 0.0**
comp=Z,19nm,1.2s,SNR=5.7
**CLL Collm 47.80 45** *i* P **P** **07 28 08.2 -0.4**
CLL *e* 07 28 16.0
CLL pmax pmax
comp=Z,151nm,2.2s
**CLL Collm 47.80 45** *i* P **P** **07 28 08.2 -0.4**
comp=Z,151nm,2.2s
CLL *ex* x 07 28 16.0
CLL *e*SS SS 07 38 42.0 +8.8
**CLL Collm 47.80 45** *eP* **P** **07 28 09.2 +0.6**
comp=Z,150nm,2.2s,baz=262,slow=7.8
**CLL Collm 47.80 45** P **P** **07 28 08.5 -0.1**
CLL IAmb IAmb 07 28 11.3
comp=Z,38nm,1.5s
**MYKA Terra Mystica 47.91 51** *eP* **P** **07 28 09.5 -0.1**
comp=Z,25nm,1.5s
**ABTX Abilene, Hawle 47.96 290** P **P** **07 28 10.4 +0.3**
**ABTX Abilene, Hawle 47.96 290** P **P** **07 28 09.8 -0.4**
baz=80,SNR=9.3
**KHC Kasperske Hory 47.98 48** *eP* **P** **07 28 10.1 0.0**
KHC *e* 07 28 16.5
**KHC Kasperske Hory 47.98 48** *eP* **P** **07 28 10.1 0.0**
KHC *e*pP **pwP** **07 28 16.5 -0.2**
**KHC Kasperske Hory 47.98 48** P **P** **07 28 10.6 +0.5**
KHC IAmb IAmb 07 28 11.7
comp=Z,50nm,1.5s
**FBE Freiberg 47.98 46** *eP* **P** **07 28 10.9 +0.9**
comp=Z,112nm,1.9s,baz=262,slow=7.8
**GEC2 GERESS Array S 48.04 48** *eP* **P** **07 28 11.2 +0.5**
comp=Z,131nm,2.0s,baz=262,slow=7.8
**GEC2 GERESS Array S 48.04 48** P **P** **07 28 10.8 +0.1**
GEC2 IAmb IAmb 07 28 12.0
comp=Z,51nm,1.4s
**GERES GERESS Array B 48.04 48** P **P** **07 28 10.8 +0.1**
comp=Z,4.0nm,0.9s,baz=258,slow=6.7,SNR=17
GERES LR LR 07 44 32.5
comp=Z,236nm,20.9s,baz=276,slow=31
**CMIG Matias Romero 48.24 268** LR LR 07 48 11.1
comp=Z,507nm,19.4s,baz=80,slow=36
**BRG Berggiesshubel 48.35 46** *eP* **P** **07 28 13.4 +0.5**
BRG Amp 07 28 16.4
comp=Z,119nm,2.3s
BRG *ex* x 07 28 28.4
BRG Amp 07 28 30.3
comp=Z,38nm,1.6s
**BRG Berggiesshubel 48.35 46** *eP* **P** **07 28 13.3 +0.5**
BRG pmax pmax
comp=Z,119nm,2.3s
BRG pmax pmax
comp=Z,38nm,1.6s
**BRG Berggiesshubel 48.35 46** *eP* **P** **07 28 13.6 +0.8**
comp=Z,118nm,2.3s,baz=262,slow=7.8
**MOA Molln 48.37 50** *i* P **P** **07 28 13.1 0.0**
comp=Z,14nm,1.1s
**RUE Ruedersdorf 48.41 44** *eP* **P** **07 28 14.0 +0.7**
comp=Z,226nm,2.2s,baz=262,slow=7.8
**CKRC Cesky Krumlov 48.44 48** *eP* **P** **07 28 13.9 +0.2**
**JCT Junction City 48.51 287** P **P** **07 28 14.5 0.0**
JCT pmax pmax
comp=Z,53nm,1.4s
**JCT Junction City 48.51 287** P **P** **07 28 14.5 0.0**
**JCT Junction City 48.51 287** P **P** **07 28 14.4 0.0**
baz=78
**OBKA Obir 48.53 52** *eP* **P** **07 28 14.7 +0.3**
comp=Z,35nm,0.9s,SNR=12
**ATAH Atahualpa 48.66 229** LR LR 07 49 58.3
comp=Z,308nm,19.4s,baz=21,slow=38
**PRU Pruhonice 48.66 47** *eP* **P** **07 28 16.1 +0.8**
**PRU Pruhonice 48.66 47** *eP* **P** **07 28 16.1 +0.8**
**NB2 NORSAR Subarra 48.74 32** P **P** **07 28 16.3 +0.5**
comp=Z,10.0nm,1.4s,baz=254,slow=7.9
**NOA NORSAR Array B 48.74 32** P **P** **07 28 16.4 +0.6**
comp=Z,3.5nm,0.9s,baz=254,slow=7.7,SNR=7.1
NOA LR LR 07 44 50.4
comp=Z,384nm,21.0s,baz=245,slow=31
**OGNE Ogallala 48.80 301** P **P** **07 28 17.7 +1.0**
**OGNE Ogallala 48.80 301** P **P** **07 28 16.7 +0.1**
baz=86
**SOKA Soboth 48.86 51** *eP* **P** **07 28 16.7 -0.4**
comp=Z,14nm,1.2s,SNR=5.9
**VAE Valguarnera 48.93 64** LR LR 07 47 35.2
comp=Z,576nm,18.3s,baz=204,slow=34
**ARSA Arzberg 49.21 51** *i* P **P** **07 28 19.2 -0.3**
comp=Z,25nm,1.1s,SNR=12
**AMTX Amarillo 49.24 293** P **P** **07 28 19.9 -0.2**
baz=81
**NEEM North Greenlan 49.29 358** *i* P **P** **07 28 19.6 -0.5**
NEEM IAmb IAmb 07 28 22.9
comp=Z,59nm,1.4s
**KSCO Kaye Shedlock' 49.44 299** P **P** **07 28 21.4 -0.2**
**KSCO Kaye Shedlock' 49.44 299** P **P** **07 28 21.3 -0.2**
baz=84
**CONA Conrad Observa 49.45 50** *eP* **P** **07 28 21.3 -0.1**
comp=Z,17nm,1.4s,SNR=5.8
**UPC Upice 49.63 46** *eP* **P** **07 28 23.3 +0.5**
**UPC Upice 49.63 46** *eP* **P** **07 28 23.3 +0.5**
**CHVC Chvalec 49.67 46** *eP* **P** **07 28 23.2 +0.2**
**HFS Hagfors 49.69 34** LR LR 07 45 27.2
comp=Z,306nm,19.0s,baz=313,slow=31
**TULEG Thule 49.74 353** *i* P **P** **07 28 20.0 -3.2**
TULEG IAmb IAmb 07 28 24.7
comp=Z,43nm,1.2s
**TULEG Thule 49.74 353** P **P** **07 28 23.1 0.0**
TULEG IAmb IAmb 07 28 30.7
comp=Z,38nm,1.2s
**OSTC Ostas 49.77 46** *eP* **P** **07 28 24.4 +0.6**
**DPC Dobruska-Polom 49.82 47** *eP* **P** **07 28 24.4 +0.1**
**DPC Dobruska-Polom 49.82 47** *eP* **P** **07 28 24.4 +0.1**
**KRUC Moravsky 49.82 48** *eP* **P** **07 28 24.2 0.0**
**SOP Sopron 49.91 50** P **P** **07 28 26.2 +1.3**
**AQDB Aquidauana 49.92 195** *eP* **P** **07 28 26.8 +1.7**
**DAG Danmarks Havn 49.93 7** *i* P **P** **07 28 24.0 -0.6**
DAG IAmb IAmb 07 28 31.7
comp=Z,36nm,1.2s
**VRAC Vranov 49.96 48** LR LR 07 46 31.2
comp=Z,205nm,19.1s,baz=313,slow=32
**VRAC Vranov 49.96 48** *eP* **P** **07 28 25.5 +0.2**
**RSSD Black Hills 50.09 305** P **P** **07 28 26.3 -0.3**
RSSD pmax pmax
comp=Z,23nm,1.4s
**RSSD Black Hills 50.09 305** P **P** **07 28 26.3 -0.3**
**RSSD Black Hills 50.09 305** P **P** **07 28 25.9 -0.7**
baz=87
**DGMT Dagmar 50.12 311** P **P** **07 28 26.8 +0.4**
DGMT IAmb IAmb 07 28 40.1
comp=Z,49nm,1.5s
**DGMT Dagmar 50.12 311** P **P** **07 28 26.2 -0.2**
baz=91
**MSTX Muleshoe 50.29 292** P **P** **07 28 27.6 -0.5**
baz=79
**MODS Modra-Piesok 50.40 49** *eP* **P** **07 28 30.8 +2.2**
**MODS Modra-Piesok 50.40 49** *eP* **P** **07 28 30.8 +2.2**
**MPLH Magyarpolny 50.58 51** P **P** **07 28 29.4 -0.5**
**MORC Moravsky Berou 50.59 47**⇑ P **P** **07 28 31.8 +1.8**
**MORC Moravsky Berou 50.59 47** P **P** **07 28 29.4 -0.7**
MORC pmax pmax
comp=Z,17nm,1.5s
**MORC Moravsky Berou 50.59 47** *eP* **P** **07 28 30.1 0.0**
**MORC Moravsky Berou 50.59 47** P **P** **07 28 29.4 -0.7**
**JAVC Velka Javorina 50.66 49** *eP* **P** **07 28 30.9 +0.3**
**KOVH Kovagotottos 51.00 52** P **P** **07 28 32.4 -0.7**
**T25A Trinidad 51.08 296** P **P** **07 28 33.3 -0.8**
baz=81
**SRO Srobarova 51.09 50** *eP* **P** **07 28 34.7 +0.9**
**SRO Srobarova 51.09 50** *eP* **P** **07 28 34.7 +0.9**
**Q24A Divide 51.39 299** P **P** **07 28 35.5 -1.1**
baz=82,SNR=13
**VYHS Vyhne 51.44 49** *eP* **P** **07 28 36.6 +0.2**
VYHS pmax pmax
comp=Z,83nm,2.0s
**VYHS Vyhne 51.44 49** *eP* **P** **07 28 36.6 +0.2**
**LAO LASA Array 51.51 309** P **P** **07 28 36.5 -0.6**
baz=88
**ISCO Idaho Springs 51.64 300** P **P** **07 28 38.9 +0.5**
ISCO pmax pmax
comp=Z,27nm,1.5s
**ISCO Idaho Springs 51.64 300** P **P** **07 28 38.9 +0.5**
**ISCO Idaho Springs 51.64 300** P **P** **07 28 37.8 -0.6**
baz=83
**N23A Red Feather La 51.76 301** P **P** **07 28 38.4 -0.9**
baz=83
**SDCO Great Sand Dun 51.84 297** P **P** **07 28 40.2 +0.2**
baz=81
**LANS Liptovska Anna 51.84 48** *eP* **P** **07 28 40.9 +1.4**
**LANS Liptovska Anna 51.84 48** *eP* **P** **07 28 40.9 +1.4**
**K22A Casper 52.00 304** P **P** **07 28 40.2 -0.7**
baz=84
**TXAR Lajitas Array 52.04 286** P **P** **07 28 40.2 -1.1**
comp=Z,1.6nm,0.9s,baz=95,slow=6.8,SNR=11
TXAR LR LR 07 51 21.3
comp=Z,441nm,18.3s,baz=74,slow=37
**TXAR Lajitas Array 52.04 286** P **P** **07 28 41.5 +0.2**
**TXAR Lajitas Array 52.04 286** P **P** **07 28 41.5 +0.2**
**TX31 Lajitas Ar. Si 52.04 286** P **P** **07 28 41.3 -0.1**
TX31 IAmb IAmb 07 28 47.0
comp=Z,44nm,1.3s
**PSZ Piszkesteto 52.16 50** P **P** **07 28 43.4 +1.5**
**KLNR Kaliningrad 52.41 41**⇑ *eP* **P** **07 28 43.7 +0.2**
KLNR pmax pmax
comp=Z,44nm,0.6s
**SMCO Snowmass 52.77 299** P **P** **07 28 46.6 -0.4**
**S22A 4UR Ranch, Cre 52.88 297** P **P** **07 28 47.7 0.0**
**S22A 4UR Ranch, Cre 52.88 297** P **P** **07 28 47.6 0.0**
baz=80
**MNTX Cornudas Mount 52.91 290** P **P** **07 28 47.9 +0.3**
baz=77
**RES Resolute Bay 52.98 345** P **P** **07 28 47.6 +0.2**
comp=Z,11nm,1.1s,baz=120,slow=5.1,SNR=15
RES LR LR 07 50 00.5
comp=Z,255nm,21.1s,baz=106,slow=35
**RES Resolute Bay 52.98 345** P **P** **07 28 47.0 -0.4**
RES pmax pmax
comp=Z,22nm,1.2s
**RES Resolute Bay 52.98 345** P **P** **07 28 47.0 -0.4**
**ANMO Albuquerque 53.09 294** LR LR 07 49 15.1
comp=Z,1μm,20.6s,baz=79,slow=34
**ANMO Albuquerque 53.09 294** P **P** **07 28 50.0 +0.9**
ANMO pmax pmax
comp=Z,58nm,1.4s
**ANMO Albuquerque 53.09 294** P **P** **07 28 50.0 +0.9**
ANMO IAmb IAmb 07 28 57.3
comp=Z,58nm,1.4s
**ANMO Albuquerque 53.09 294** P **P** **07 28 49.6 +0.4**
baz=79
**CRVS Cervenica-Dubn 53.16 48** *eP* **P** **07 28 50.3 +1.1**
**CRVS Cervenica-Dubn 53.16 48** *eP* **P** **07 28 50.3 +1.1**
**BNM Barren Site 53.39 293** P **P** **07 28 51.7 +0.3**
**BZS Buzias 53.48 53**⇓ P **P** **07 28 52.3 +0.7**
**O20A White River Ci 53.59 301** P **P** **07 28 53.3 +0.5**
baz=82
**LENM Lemitar 53.67 293** P **P** **07 28 56.1 +2.7**
**UZH Uzhgorod 53.73 49** *eP* **P** **07 28 53.0 -0.3**
UZH *i* 07 28 55.5
UZH *e* 07 29 01.2
**RLMT Red Lodge 53.74 307** P **P** **07 28 53.2 -0.6**
baz=84,SNR=11
**EGMT Eagleton 53.84 311** P **P** **07 28 53.6 -0.7**
baz=86,SNR=22
**TRPA Tarpa 53.92 49**⇓ P **P** **07 28 56.1 +1.4**
**TRPA Tarpa 53.92 49** P **P** **07 28 54.9 +0.2**
**HERR Herculane 54.11 53**⇑ P **P** **07 28 57.4 +1.1**
**DRGR 54.13 51**⇑ P **P** **07 28 56.7 +0.2**
**BW06 Boulder Array 54.21 304** P **P** **07 28 56.6 -0.7**
**BW06 Boulder Array 54.21 304** P **P** **07 28 56.2 -1.1**
baz=83,SNR=51
**PD31 Pinedale Array 54.21 304** P **P** **07 28 56.4 -0.9**
**PDAR Pinedale Array 54.21 304** P **P** **07 28 56.5 -0.9**
comp=Z,8.7nm,0.8s,baz=86,slow=6.2,SNR=50
PDAR LR LR 07 50 07.8
comp=Z,2μm,21.2s,baz=92,slow=34
**MVCO Mesa Verde 54.28 297** P **P** **07 28 57.9 0.0**
baz=79
**GZR Gura Zlata 54.31 53**⇓ P **P** **07 28 58.3 +0.5**
**NOR Nord 54.35 5** *i* P **P** **07 28 56.9 -0.6**
NOR IAmb IAmb 07 29 09.8
comp=Z,272nm,2.3s
**YMP Mirror Lake Pl 54.41 307** P **P** **07 28 58.6 -0.1**
**RDMU Red Mountain 54.53 301** P **P** **07 28 58.9 -0.7**
**121A Cookes Peak, D 54.70 291** P **P** **07 29 01.1 +0.2**
baz=76
**EUNU Eureka 54.70 352** P **P** **07 28 59.6 -0.5**
EUNU IAmb IAmb 07 29 07.7
comp=Z,31nm,1.2s
**H17A Grant Village 54.74 306** P **P** **07 29 01.5 +0.4**
baz=83
**LVV L'vov 54.79 47** *eP* **P** **07 28 58.7 -2.4**
LVV *e* 07 31 02.9
LVV *e*PPP PPP 07 32 15.2
LVV pmax pmax
comp=Z,100nm,1.6s
LVV MLR MLR
comp=E,300nm,10.0s
LVV MLR MLR
comp=N,400nm,11.0s
LVV MLR MLR
comp=Z,600nm,12.0s
**VTS Vitosha 54.98 56**⇓ P **P** **07 29 04.6 +1.9**
**BOZ Bozeman (W) 55.34 308** P **P** **07 29 04.6 -0.7**
baz=83,SNR=10
**ARR Arges 55.61 53**⇓ P **P** **07 29 07.4 +0.2**
**W18A Petrified Fore 55.69 295** P **P** **07 29 08.2 +0.2**
baz=77
**BUR08 Bucovina Ar. S 55.74 50** P **P** **07 29 08.8 +0.7**
BUR08 IAmb IAmb 07 29 21.3
comp=Z,35nm,1.4s
**BURAR Bucovina Array 55.76 50**⇑ P **P** **07 29 09.9 +1.6**
**FINES FINESS Array B 55.88 33** P **P** **07 29 08.9 +0.2**
comp=Z,7.9nm,0.8s,baz=232,slow=2.2,SNR=12
FINES LR LR 07 48 50.3
comp=Z,315nm,21.1s,baz=240,slow=32
**VOIR 55.90 52**⇓ P **P** **07 29 11.5 +2.2**
**CPUP Villa Florida 55.93 195** P **P** **07 29 09.3 -0.1**
comp=Z,1.4nm,0.7s,baz=356,slow=9.7,SNR=2.6
CPUP LR LR 07 53 01.3
comp=Z,123nm,18.4s,baz=10,slow=36
**X18A Snowflake 55.99 294** P **P** **07 29 11.4 +1.2**
**DOPR Dopca 56.06 52**⇑ P **P** **07 29 09.9 -0.5**
**PB03 IPOC Station P 56.08 209** P **P** **07 29 09.4 -1.3**
PB03 IAmb IAmb 07 29 21.2
comp=Z,43nm,1.2s
**VSU Vasula 56.13 37**⇑ *i* P **P** **07 29 10.0 -0.6**
VSU pmax pmax
comp=Z,66nm,0.8s
**LVC Limon Verde 56.22 208** LR LR 07 53 06.9
comp=Z,268nm,18.3s,baz=4.5,slow=36
**NACGM Naroch 56.22 41** *i* P **P** **07 29 12.1 +0.8**
**MCMT McKenzie Canyo 56.30 307** P **P** **07 29 12.2 -0.1**
**ARCES ARCESS Array B 56.47 23** P **P** **07 29 12.4 -0.4**
comp=Z,7.2nm,0.8s,baz=273,slow=7.2,SNR=5.4
**ARCES ARCESS Array B 56.47 23** P **P** **07 29 13.1 +0.3**
ARCES pmax pmax
comp=Z,29nm,1.5s
**ARCES ARCESS Array B 56.47 23** P **P** **07 29 13.1 +0.3**
ARCES IAmb IAmb 07 29 30.0
comp=Z,29nm,1.4s
**YKA Yellowknife Ar 56.49 328** P **P** **07 29 11.8 -1.2**
comp=Z,7.0nm,0.9s,baz=91,slow=7.2,SNR=46
YKA LR LR 07 53 13.5
comp=Z,2μm,18.8s,baz=84,slow=36
**YKA Yellowknife Ar 56.49 328** P **P** **07 29 11.4 -1.6**
**WALA Waterton Lakes 56.51 312** P **P** **07 29 13.3 -0.3**
WALA IAmb IAmb 07 29 19.8
comp=Z,36nm,1.1s
**MLR Muntele Rosu 56.51 52**⇓ P **P** **07 29 15.3 +1.6**
**MLR Muntele Rosu 56.51 52** LR LR 07 52 49.0
comp=Z,432nm,18.4s,baz=304,slow=35
**NLU North Lily Min 56.53 301** P **P** **07 29 13.2 -0.8**
**MSO Missoula 56.78 309** P **P** **07 29 15.7 +0.1**
baz=83
**MNK Minsk 56.88 41** *i* P **P** **07 29 13.4 -2.6**
comp=E,6.0nm,0.8s
MNK *i* P **P** **07 29 13.4 -2.6**
comp=N,13nm,0.8s
MNK *i* P **P** **07 29 13.4 -2.6**
comp=Z,14nm,0.8s,baz=274
MNK *i* PcP PcP 07 29 56.0 -15
MNK *i* PP **PP** **07 31 19.5 -2.7**
MNK *i* PPP PPP 07 32 34.6
MNK *i* S **S** **07 37 06.6 -2.7**
MNK *i* SS SS 07 41 31.2 +34
MNK *i* SSS SSS 07 44 02.5
MNK *i* LQ LQ 07 48 28.8
MNK *i* LR LR 07 50 50.3
MNK *i* LRM MLR 07 55 15.4
comp=Z,139nm,15.9s
MNK *i* LRM MLR 07 55 16.2
comp=N,848nm,15.9s
MNK *i* LRM MLR 07 55 18.9
comp=E,139nm,15.9s
**WUAZ Wupatki 56.90 296** P **P** **07 29 17.3 +0.6**
baz=77
**PLOR Plostina 56.95 52**⇓ P **P** **07 29 17.8 +1.1**
**VRI Vrincioaia 57.01 52**⇑ P **P** **07 29 17.9 +0.8**
**DUG Dugway, Tooele 57.04 301** P **P** **07 29 17.4 -0.1**

baz=79,SNR=32
**BISRR Bisoca** 57.04 52 ⇓P P 07 29 10.8 -6.5
**TUC Tucson** 57.21 292 P **P** **07 29 19.2 +0.4**
TUC pmax pmax
comp=Z,28nm,1.4s
**TUC Tucson** 57.21 292 P **P** **07 29 19.2 +0.4**
TUC IAmb IAmb 07 29 26.5
comp=Z,28nm,1.4s
**TUC Tucson** 57.21 292 P **P** **07 29 18.9 +0.1**
baz=75
**U15A North Rim** 57.42 297 P **P** **07 29 20.7 +0.2**
U15A IAmb IAmb 07 29 33.0
comp=Z,32nm,1.4s
**HLID Hailey** 57.60 306 P **P** **07 29 21.8 +0.2**
**HLID Hailey** 57.60 306 P **P** **07 29 20.8 -0.7**
baz=80,SNR=9.0
**IDI Anoyia** 57.64 64 LR LR 07 52 42.8
comp=Z,123nm,20.8s,baz=284,slow=34
**KNB Kanab** 57.70 298 P **P** **07 29 23.5 +1.2**
KNB pmax pmax
comp=Z,18nm,1.3s
**KNB Kanab** 57.70 298 P **P** **07 29 23.5 +1.2**
**PUL Pulkovo** 57.96 35 ⇓*i*P **P** **07 29 22.8 -0.7**
PUL pmax pmax
comp=Z,34nm,0.5s
**CCUT Cedar City** 58.00 298 P **P** **07 29 24.5 0.0**
CCUT IAmb IAmb 07 29 32.2
comp=Z,37nm,1.2s
**AKASG Malin Array Be** 58.03 46 P **P** **07 29 23.5 -0.6**
comp=Z,13nm,0.8s,baz=276,slow=6.1,SNR=33
AKASG LR LR 07 52 41.0
comp=Z,507nm,18.4s,baz=316,slow=34
**AKBB Malin Array Si** 58.03 46 P **P** **07 29 23.9 -0.3**
AKBB pmax pmax
comp=Z,37nm,1.3s
**AKBB Malin Array Si** 58.03 46 P **P** **07 29 23.9 -0.3**
AKBB IAmb IAmb 07 29 24.9
comp=Z,37nm,1.2s
**MILM Milestii Mici** 58.28 50 ⇓*i*P **P** **07 29 24.0 -1.9**
**MILM Milestii Mici** 58.28 50 *d*P **P** **07 29 24.0 -1.9**
MILM pmax pmax
comp=Z,170nm,2.0s
**SPR3 Spring Creek 3** 58.43 300 P **P** **07 29 27.3 -0.3**
**PLID Pearl Lake** 58.47 308 P **P** **07 29 27.1 -0.5**
**NEW Newport** 58.72 311 LR LR 07 52 43.4
comp=Z,969nm,21.4s,baz=82,slow=34
**NEW Newport** 58.72 311 P **P** **07 29 28.8 -0.3**
baz=81,SNR=14
**ELK Elko** 58.74 303 LR LR 07 52 45.0
comp=Z,859nm,21.5s,baz=84,slow=34
**214A Organ Pipe Nat** 58.96 292 P **P** **07 29 30.5 -0.6**
baz=74
**APA Apatity** 59.21 26 ⇓*i*P **P** **07 29 29.3 -2.8**
APA pmax pmax
comp=Z,11nm,1.0s
APA MLR MLR
comp=Z,1μm,14.0s
**LPIG La Paz** 59.25 283 LR LR 07 54 27.6
comp=Z,582nm,20.2s,baz=56,slow=36
**PDMCI Parker Dam,Lak** 59.41 295 P **P** **07 29 33.8 -0.2**
baz=75
**R11A Troy Canyon, C** 59.53 300 P **P** **07 29 34.7 -0.4**
baz=76,SNR=15
**IRM Iron Mountain** 60.25 295 P **P** **07 29 39.5 -0.3**
baz=74
**TPNV Topopah Spring** 60.38 298 P **P** **07 29 40.3 -0.6**
baz=75
**C36M Paulatuk** 60.40 336 P **P** **07 29 39.8 -0.5**
baz=88
**GMRC Granite Mounta** 60.49 296 P **P** **07 29 41.2 -0.5**
baz=74
**WRGLY Wrigley** 60.53 329 P **P** **07 29 40.9 -0.3**
baz=85
**BC3 Big Chuckawall** 60.63 295 P **P** **07 29 41.9 -0.7**
baz=74
**A36M Sachs Harbour** 60.71 339 P **P** **07 29 42.7 +0.4**
baz=88,SNR=8.8
**BELC Belle Mtn. Jos** 60.97 295 P **P** **07 29 44.6 -0.4**
baz=74
**FURC Furnace Creek,** 60.98 298 P **P** **07 29 45.0 +0.2**
baz=75
**HEC Hector,Ludlow** 61.01 296 P **P** **07 29 45.2 +0.1**
baz=74
**SWSC Sam W. Stewart** 61.11 294 P **P** **07 29 44.8 -0.8**
baz=73
**GRAC Grapevine Rang** 61.24 299 P **P** **07 29 46.4 -0.1**
baz=75
**GSC Goldstone, Bar** 61.25 297 P **P** **07 29 45.9 -0.9**
baz=74
**C06D Leavenworth** 61.27 312 P **P** **07 29 46.1 -0.5**
baz=79
**KVN Kaiserville** 61.27 301 P **P** **07 29 45.9 -1.1**
KVN pmax pmax
comp=Z,31nm,1.3s
**KVN Kaiserville** 61.27 301 P **P** **07 29 45.9 -1.1**
KVN IAmb IAmb 07 29 53.8
comp=Z,31nm,1.3s
**YUH Yuha Desert** 61.29 294 P **P** **07 29 46.5 -0.4**
YUH IAmb IAmb 07 29 54.0
comp=Z,26nm,1.4s
**PMD Palm Desert** 61.37 295 P **P** **07 29 47.3 -0.2**
PMD IAmb IAmb 07 29 55.2
comp=Z,21nm,1.4s
**LLLB Lillooet** 61.39 315 P **P** **07 29 47.4 0.0**
LLLB IAmb IAmb 07 29 57.6
comp=Z,39nm,1.4s
**LCH Last Change Ra** 61.39 299 P **P** **07 29 47.9 +0.2**
LCH IAmb IAmb 07 29 59.7
comp=Z,27nm,1.5s
**IKP In-Ko-Pah, Jac** 61.44 294 P **P** **07 29 48.0 -0.1**
baz=73,SNR=5.6
**TPFO Pinon Flats** 61.45 295 P **P** **07 29 46.7 -1.5**
baz=73
**PFO Pinyon Flats O** 61.45 295 LR LR 07 53 53.2
comp=Z,750nm,21.8s,baz=76,slow=34
**PFO Pinyon Flats O** 61.45 295 P **P** **07 29 48.6 +0.4**
PFO pmax pmax
comp=Z,9.0nm,1.4s
**PFO Pinyon Flats O** 61.45 295 P **P** **07 29 48.6 +0.4**
**PFO Pinyon Flats O** 61.45 295 P **P** **07 29 48.3 +0.1**
baz=73
**NV11 Mina Array Sit** 61.47 301 P **P** **07 29 47.7 -0.6**
NV11 IAmb IAmb 07 29 55.1
comp=Z,25nm,1.4s
**MPMC Manual Prospec** 61.58 298 P **P** **07 29 49.2 +0.1**
baz=74,SNR=8.8
**NVAR Mina Array Bea** 61.58 301 P **P** **07 29 48.4 -0.7**
comp=Z,2.2nm,0.7s,baz=78,slow=7.4,SNR=12
NVAR LR LR 07 56 01.6
comp=Z,1μm,18.5s,baz=74,slow=36
**NVAR Mina Array Bea** 61.58 301 P **P** **07 29 48.2 -0.9**
**MONP2 Monument Peak** 61.62 294 P **P** **07 29 49.7 +0.2**
baz=73
**BBRC Big Bear Solar** 61.63 296 P **P** **07 29 48.8 -0.7**
baz=74
**RYN Ryan** 61.70 301 P **P** **07 29 49.4 -0.5**
RYN IAmb IAmb 07 29 56.6
comp=Z,27nm,1.3s
**LHV Little Huntoon** 61.78 300 P **P** **07 29 50.2 +0.1**
LHV IAmb IAmb 07 29 57.5
comp=Z,26nm,1.4s
**OBN Obninsk** 61.80 40 LR LR 07 53 19.6
comp=Z,88nm,21.4s,baz=276,slow=33
**OBN Obninsk** 61.80 40 ⇑*i*P **P** **07 29 50.3 +0.3**
OBN *e* 07 29 57.3
OBN *e* 07 32 06.1
OBN *i*S S 07 38 24.3 +11
OBN pmax pmax
comp=Z,105nm,1.7s
**LRMC Laurel Mtn Rad** 61.89 297 P **P** **07 29 51.2 +0.1**
baz=74
**CWC Cottonwood Cre** 61.94 298 P **P** **07 29 51.5 +0.1**
baz=74
**B05A Bryant** 61.99 312 P **P** **07 29 49.3 -2.0**
baz=78
**MURC Murrieta** 62.04 295 P **P** **07 29 51.6 -0.4**
baz=73
**PAHR Pah Rah Range** 62.07 302 P **P** **07 29 51.2 -1.1**
**F05D White Salmon** 62.08 309 P **P** **07 29 51.7 -0.4**
baz=77
**G05D Wamic, OR** 62.12 309 P **P** **07 29 51.6 -0.8**
baz=77
**YERR Yerington** 62.15 301 P **P** **07 29 52.9 0.0**
**109C Camp Elliot, M** 62.17 294 P **P** **07 29 53.2 +0.3**
baz=73
**MOD Modoc Plateau** 62.19 305 P **P** **07 29 52.7 -0.4**

**MLAC Mammoth, Mammo** 62.20 300 P **P** **07 29 53.4 +0.1**
baz=74
**EDW2 Edwards Air Fo** 62.30 297 P **P** **07 29 53.6 -0.3**
baz=73
**KLMR Klimovskoe** 62.41 33 *e*P **P** **07 29 50.3 -3.7**
KLMR pmax pmax
comp=Z,33nm,1.2s
**KLMR Klimovskoe** 62.41 33 *e*P **P** **07 29 50.3 -3.7**
KLMR AMP 07 29 54.8
comp=Z,33nm,1.2s
**ISA Isabella, Lake** 62.46 298 P **P** **07 29 54.6 -0.3**
baz=74,SNR=5.1
**J05D Fort Rock, OR** 62.52 307 P **P** **07 29 54.5 -0.8**
baz=76,SNR=9.4
**BEKR Beckworth** 62.75 303 P **P** **07 29 55.8 -1.1**
BEKR IAmb IAmb 07 30 08.0
comp=Z,28nm,1.3s
**D03D Eldon** 62.80 312 P **P** **07 29 55.6 -1.3**
baz=77
**H04A Detroit Lake** 62.85 308 P **P** **07 29 57.0 -0.3**
**VES Vestal, Richgr** 62.88 298 P **P** **07 29 58.0 +0.4**
baz=73
**ARVC Arvin** 62.89 297 P **P** **07 29 58.8 +1.2**
baz=73
**B04A Port Angeles** 62.95 312 P **P** **07 29 56.9 -1.0**
**CIS Catalina Islan** 63.07 295 P **P** **07 29 59.0 +0.1**
baz=72
**J04D Umpqua Nationa** 63.15 307 P **P** **07 29 59.7 +0.1**
baz=75
**I04A Tendick Farm,** 63.23 307 P **P** **07 29 59.6 -0.2**
baz=76
**BR131 Keskin Array S** 63.25 57 ⇑*i*P **P** **07 30 00.9 +0.8**
**BR131 Keskin Array S** 63.25 57 P **P** **07 30 01.0 +0.8**
SNR=5.1
**BRTR Keskin Array B** 63.25 57 P **P** **07 30 00.6 +0.4**
comp=Z,4.2nm,0.8s,baz=268,slow=6.3,SNR=10
**BRTR Keskin Array B** 63.25 57 P **P** **07 29 59.7 -0.5**
**CMB Columbia Colle** 63.27 301 P **P** **07 29 59.8 -0.4**
CMB pmax pmax
comp=Z,30nm,1.5s
**CMB Columbia Colle** 63.27 301 P **P** **07 29 59.8 -0.4**
CMB IAmb IAmb 07 30 07.2
comp=Z,30nm,1.5s
**H04D Lebanon** 63.27 308 P **P** **07 29 60.0 0.0**
baz=76
**M04C Macdoel** 63.33 305 P **P** **07 30 00.7 0.0**
baz=75
**G03D McMinnville, O** 63.47 309 P **P** **07 30 01.6 +0.3**
baz=76
**L04D Klamath Falls** 63.55 306 P **P** **07 30 01.8 -0.4**
baz=75
**LPSR Galich'ya Gora** 63.66 42 *e*P **P** **07 30 02.6 +0.2**
LPSR pmax pmax
comp=Z,60nm,1.0s
**ORV Oroville** 63.68 303 P **P** **07 30 02.5 -0.3**
ORV pmax pmax
comp=Z,63nm,1.5s
**ORV Oroville** 63.68 303 P **P** **07 30 02.5 -0.3**
**PKM Mcpherson Peak** 63.73 297 P **P** **07 30 03.6 +0.1**
baz=72
**I03D Drain, OR** 63.91 307 P **P** **07 30 04.0 -0.2**
baz=75
**INK Inuvik** 63.93 336 LR LR 07 57 00.1
comp=Z,497nm,19.2s,baz=80,slow=35
**INK Inuvik** 63.93 336 P **P** **07 30 03.4 -0.5**
INK pmax pmax
comp=Z,32nm,1.2s
**INK Inuvik** 63.93 336 P **P** **07 30 03.4 -0.5**
INK IAmb IAmb 07 30 10.6
comp=Z,32nm,1.1s
**INK Inuvik** 63.93 336 P **P** **07 30 03.3 -0.6**
baz=79,SNR=14
**YBH Yreka Blue Hor** 63.98 305 P **P** **07 30 03.1 -1.8**
comp=Z,1.3nm,0.7s,baz=41,slow=7.5
YBH LR LR 07 56 25.6
comp=Z,686nm,20.5s,baz=82,slow=35
**VORR Voronezh** 64.04 43 *e*P **P** **07 30 05.1 +0.1**
VORR pmax pmax
comp=Z,100nm,0.4s
**VSR Storozhevoye** 64.12 44 *e*P **P** **07 30 04.9 -0.6**
VSR pmax pmax
comp=Z,40nm,1.1s
**MMPY Sheldon Lake,** 64.15 329 P **P** **07 30 05.3 -0.3**
baz=78
**I02E Swisshome, OR** 64.15 308 P **P** **07 30 06.0 +0.2**
baz=75
**WDC Whiskeytown Da** 64.17 304 P **P** **07 30 04.9 -1.1**
WDC pmax pmax
comp=Z,10.0nm,1.2s
**WDC Whiskeytown Da** 64.17 304 P **P** **07 30 04.9 -1.1**
**M02C Callahan** 64.17 305 P **P** **07 30 04.5 -1.6**
baz=74
**N02D Trinity Center** 64.18 304 P **P** **07 30 04.4 -1.8**
baz=74,SNR=5.1
**BBGB Big Mountain B** 64.18 299 P **P** **07 30 06.4 +0.1**
**VORD Divnogorie** 64.26 44 *e*P **P** **07 30 06.4 0.0**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**K02D Willamette Mer** 64.40 306 P **P** **07 30 07.0 -0.6**
baz=75
**DLBC Dease Lake** 64.45 324 P **P** **07 30 06.2 -1.4**
comp=Z,2.7nm,0.5s,baz=359,slow=7.7,SNR=3.6
DLBC LR LR 07 57 15.9
comp=Z,640nm,19.8s,baz=82,slow=35
**J01E Myrtle Point** 64.46 307 P **P** **07 30 09.0 +1.1**
baz=74
**L02E Cave Junction** 64.50 306 P **P** **07 30 07.2 -1.0**
baz=74
**BBB Bella Bella** 64.86 317 LR LR 07 56 51.7
comp=Z,806nm,20.2s,baz=78,slow=35
**PRGR Permogore** 65.15 32 *e*P **P** **07 30 11.5 -0.5**
PRGR pmax pmax
comp=Z,83nm,1.9s
**FARO Faro, Yukon** 65.18 329 P **P** **07 30 11.7 -0.6**
baz=76,SNR=8.9
**P33M Teslin, Yukon** 65.42 327 P **P** **07 30 13.0 -0.9**
baz=76
**EPYK Eagle Plains** 65.58 334 P **P** **07 30 13.9 -0.9**
baz=75
**M31M Drury Creek, Y** 65.66 329 P **P** **07 30 15.8 +0.4**
baz=75
**VRH Novokhopyorsk** 65.68 43 *e*P **P** **07 30 15.6 0.0**
VRH pmax pmax
comp=Z,40nm,0.9s
**VA03 San Esteban** 65.93 205 P **P** **07 30 16.0 -1.5**
VA03 IAmb IAmb 07 30 19.8
comp=Z,16nm,0.8s
**MAYO Mayo, Yukon** 65.96 331 P **P** **07 30 18.1 +0.8**
baz=75
**WHY Whitehorse** 66.30 327 P **P** **07 30 20.1 +0.5**
baz=74
**I29M Ogilvie Camp,** 66.48 333 P **P** **07 30 20.1 -0.5**
baz=73,SNR=5.1
**N31M Braeburn, Yuko** 66.49 328 P **P** **07 30 20.4 -0.3**
**N31M Braeburn, Yuko** 66.49 328 P **P** **07 30 20.4 -0.3**
baz=74,SNR=10
**SOC Sochi** 66.53 52 *e*P **P** **07 30 19.6 -1.6**
SOC *e*PPP PPP 07 34 20.0
SOC *e*S **S** **07 39 09.6 -2.3**
SOC *e*SS **SS** **07 43 28.8 +0.4**
SOC *e*SSS SSS 07 46 32.8
SOC pmax pmax
comp=Z,29nm,0.9s
SOC MLR MLR
comp=Z,138nm,17.0s
**M30M Minto, Yukon** 66.64 330 P **P** **07 30 21.0 -0.6**
baz=73
**MMAI Mount Meron Ar** 66.64 64 LR LR 07 57 32.1
comp=Z,125nm,21.9s,baz=82,slow=34
**J29M Klondike Camp** 66.71 332 P **P** **07 30 22.0 -0.1**
baz=73
**SKAG Skagway** 66.85 326 P **P** **07 30 22.9 0.0**
baz=73
**DAWY Dawson** 67.31 332 P **P** **07 30 25.4 -0.5**
baz=72,SNR=12
**EIL Elat** 67.42 68 LR LR 08 00 27.8
comp=Z,252nm,19.7s,baz=276,slow=36
**HYT Haines Junctio** 67.48 328 P **P** **07 30 26.6 -0.6**
baz=72
**EGAK Eagle** 67.81 333 P **P** **07 30 28.2 -0.8**
EGAK IAmb IAmb 07 30 40.1
comp=Z,28nm,1.2s
**EGAK Eagle** 67.81 333 P **P** **07 30 28.8 -0.2**
baz=71
**KIRV Kirov** 67.82 34 LR LR 07 58 10.2
comp=Z,218nm,19.0s,baz=292,slow=34
**YUK6 Outpost Mounta** 67.84 328 P **P** **07 30 29.2 -0.3**
baz=72
**YUK4 Talbot Arm** 67.84 329 P **P** **07 30 28.6 -1.0**
baz=72
**BMAR Burnt Mountain** 68.19 336 P **P** **07 30 31.5 0.0**
**KIV Kislovodsk** 68.46 51 *e*P **P** **07 30 34.3 +0.7**
KIV pmax pmax
comp=Z,19nm,1.1s
KIV MLR MLR
comp=Z,151nm,17.0s
**BVCY Beaver Creek** 68.48 330 P **P** **07 30 33.6 +0.2**
baz=70
**YUK3 Moose Creek** 68.52 330 P **P** **07 30 33.4 -0.4**
baz=70
**KBZ Khabaz** 68.67 51 P **P** **07 30 36.0 +1.2**
comp=Z,10nm,0.8s,baz=313,slow=6.1,SNR=22
KBZ LR LR 07 57 51.7
comp=Z,114nm,21.8s,baz=310,slow=34
**L27K Beaver Creek,** 68.67 331 P **P** **07 30 34.1 -0.4**
baz=69
**NEY Neytrino** 68.71 52 ⇑*i*P **P** **07 30 35.6 +0.3**
NEY pmax pmax
comp=Z,2.0nm,0.9s
**BELG Belogornoye** 68.83 41 LR LR 07 59 51.3
comp=Z,212nm,18.1s,baz=321,slow=35
**BELG Belogornoye** 68.83 41 ⇑*i*P **P** **07 30 35.3 -0.3**
BELG pmax pmax
comp=Z,17nm,1.5s
**J26L Joseph Creek** 68.88 333 P **P** **07 30 35.1 -0.7**
baz=68,SNR=10
**M27K Edge Creek, AK** 68.95 330 P **P** **07 30 36.0 -0.3**
baz=69
**NCK Nalchik** 69.23 51 ⇓*e*P **P** **07 30 38.9 +0.6**
NCK pmax pmax
comp=Z,23nm,0.7s
**SCRK Sand Creek** 69.24 332 P **P** **07 30 37.6 -0.5**
baz=68
**PRP Porcupine Dome** 69.27 334 P **P** **07 30 38.3 0.0**
baz=67,SNR=10
**L26K Log Cabin Wild** 69.33 331 P **P** **07 30 37.5 -1.1**
baz=68
**M26K Nabesna, AK** 69.42 331 P **P** **07 30 38.6 -0.6**
baz=68
**ONI Oni** 69.44 52 P **P** **07 30 41.1 +1.4**
ONI pmax pmax
comp=Z,38nm,1.4s
**ONI Oni** 69.44 52 P **P** **07 30 41.0 +1.4**
ONI IAmb IAmb 07 30 58.1
comp=Z,38nm,1.4s
**J25K Salcha River,** 69.56 333 P **P** **07 30 39.4 -0.6**
baz=67
**ZEI Tsey** 69.68 52 *e*P **P** **07 30 40.4 -0.9**
ZEI pmax pmax
comp=Z,25nm,1.8s
**RIDG Independent Ri** 69.69 332 P **P** **07 30 40.1 -0.7**
baz=67
**MESA MESA** 69.77 328 P **P** **07 30 40.3 -1.2**
baz=68
**GURO Guroymak-BITLI** 69.82 56 P **P** **07 30 42.8 +0.6**
**H24K Noodor Dome** 70.03 335 P **P** **07 30 43.2 +0.4**
baz=65
**IL31** 70.09 334 P **P** **07 30 42.4 -0.7**
IL31 IAmb IAmb 07 30 50.3
comp=Z,24nm,0.9s
**ILAR Eielson Array** 70.09 334 P **P** **07 30 42.8 -0.4**
comp=Z,8.1nm,0.9s,baz=68,slow=4.4,SNR=36
ILAR LR LR 08 02 17.6
comp=Z,524nm,18.6s,baz=82,slow=37
**ILAR Eielson Array** 70.09 334 P **P** **07 30 43.2 0.0**
**ILAR Eielson Array** 70.09 334 P **P** **07 30 43.2 0.0**
**POKR Poker Plat Res** 70.16 334 P **P** **07 30 43.4 -0.2**
baz=66
**PAX Paxson** 70.25 332 P **P** **07 30 43.8 -0.5**
baz=66
**HDA Harding Lake** 70.27 333 P **P** **07 30 43.2 -1.1**
baz=66
**COLD Coldfoot** 70.27 337 P **P** **07 30 44.7 +0.4**
baz=64,SNR=12
**HARP HAARP** 70.35 331 P **P** **07 30 44.3 -0.6**
baz=66
**N25K Chitina, Valde** 70.42 330 P **P** **07 30 45.2 -0.1**
N25K IAmb IAmb 07 30 56.6
comp=Z,35nm,1.3s
**N25K Chitina, Valde** 70.42 330 P **P** **07 30 45.0 -0.4**
baz=67
**COLA College** 70.42 334 P **P** **07 30 45.0 -0.2**
COLA pmax pmax
comp=Z,43nm,1.2s
**COLA College** 70.42 334 P **P** **07 30 45.0 -0.2**
**COLA College** 70.42 334 P **P** **07 30 45.8 +0.6**
baz=65
**TCOL CIGO, UAF Yank** 70.43 334 P **P** **07 30 44.9 -0.3**
**TCOL CIGO, UAF Yank** 70.43 334 P **P** **07 30 45.6 +0.3**
baz=65
**BERG Berg Lake** 70.50 329 P **P** **07 30 47.3 +1.5**
**CCB Clear Creek Bu** 70.50 334 P **P** **07 30 44.9 -0.8**
**MDM Murphy Dome** 70.53 334 P **P** **07 30 46.0 0.0**
MDM IAmb IAmb 07 30 53.1
comp=Z,28nm,1.2s
**BMRM Bremner River** 70.68 330 P **P** **07 30 46.8 -0.2**
baz=66
**GROC Groznyy** 70.84 51 *e*P **P** **07 30 47.9 -0.2**
GROC *e* 07 31 08.8
GROC pmax pmax
comp=Z,31nm,0.4s
**I23K Minto, Yukon-K** 70.89 334 P **P** **07 30 48.1 +0.1**
baz=64,SNR=7.8
**M24K Tolsona, Glenn** 70.90 331 P **P** **07 30 47.5 -0.7**
baz=66
**NEA2 Nenana** 71.02 334 P **P** **07 30 48.6 -0.3**
baz=64
**KLU Klutina** 71.05 330 P **P** **07 30 48.5 -0.6**
baz=66
**GNI Garni** 71.21 54 LR LR 08 01 40.1
comp=Z,101nm,20.5s,baz=306,slow=36
**GNI Garni** 71.21 54 ⇓*e*P **P** **07 30 51.3 +0.6**
GNI pmax pmax
comp=Z,66nm,1.7s
**GNI Garni** 71.21 54 P **P** **07 30 51.5 +0.8**
**GNI Garni** 71.21 54 P **P** **07 30 51.0 +0.4**
**MCK McKinley** 71.34 333 P **P** **07 30 51.2 +0.3**
MCK pmax pmax
comp=Z,33nm,1.1s
**MCK McKinley** 71.34 333 P **P** **07 30 51.1 +0.3**
MCK IAmb IAmb 07 30 57.7
comp=Z,33nm,1.1s
**MCK McKinley** 71.34 333 P **P** **07 30 50.2 -0.7**
baz=64,SNR=5.3
**BWN Browne** 71.36 334 P **P** **07 30 50.3 -0.6**
**WAT6 Susitna Watana** 71.36 332 P **P** **07 30 49.9 -1.2**
baz=64
**MLY Manley** 71.46 335 P **P** **07 30 51.2 -0.3**
baz=63
**SCM Sheep Creek Mo** 71.51 331 P **P** **07 30 51.8 -0.2**
baz=64
**I21K Tanana** 71.86 335 P **P** **07 30 53.9 +0.1**
baz=62,SNR=11
**LC01 Cunco** 71.90 203 P **P** **07 30 52.3 -2.1**
**H21K Melozitna Rive** 71.93 336 P **P** **07 30 54.5 +0.1**
baz=61
**SML Sawmill** 71.95 331 P **P** **07 30 54.1 -0.5**
baz=64
**BPAW Bear Paw Mtn.** 71.99 334 P **P** **07 30 54.9 +0.2**
BPAW IAmb IAmb 07 31 07.3
comp=Z,41nm,1.3s
**BPAW Bear Paw Mtn.** 71.99 334 P **P** **07 30 54.4 -0.3**
baz=62
**TRF Thorofare Moun** 72.01 333 P **P** **07 30 54.5 -0.6**
TRF IAmb IAmb 07 31 01.6
comp=Z,29nm,1.2s
**TRF Thorofare Moun** 72.01 333 P **P** **07 30 54.2 -0.9**
baz=63
**KNK Knik Glacier** 72.18 331 P **P** **07 30 55.6 -0.4**
baz=64
**PMR Palmer** 72.39 331 P **P** **07 30 56.8 -0.3**
baz=63
**CHUM Lake Minchumin** 72.61 334 P **P** **07 30 57.5 -0.9**
baz=61,SNR=10
**M22K Willow** 72.73 331 P **P** **07 30 58.6 -0.5**
baz=62
**CAST Castle Rocks** 72.74 333 P **P** **07 30 58.3 -0.9**
baz=61,SNR=7.8
**RC01 Rabbit Creek A** 72.88 331 P **P** **07 30 59.4 -0.7**
baz=62
**PPLA Purkeypile** 73.04 333 P **P** **07 31 00.3 -0.9**
baz=61
**PLCA Paso Flores** 73.12 201 P **P** **07 31 01.6 -0.1**
comp=Z,2.4nm,0.8s,baz=16,slow=4.2,SNR=10

PLCA LR LR 08 04 33.3
comp=Z,201nm,18.9s,baz=40,slow=37
**PLCA Paso Flores 73.12 201** *e*P **P 07 31 00.6 -1.2**
**J20K Nowinta River 73.16 335** P **P 07 31 01.1 -0.5**
baz=60
**ARU Arti 73.20 35** LR LR 07 59 40.6
comp=Z,167nm,21.1s,baz=296,slow=33
**ARU Arti 73.20 35***c i*P **P 07 31 02.6 +0.6**
ARU S **S 07 40 30.3 +0.6**
ARU pmax pmax
comp=Z,74nm,1.9s
**ARU Arti 73.20 35** P **P 07 31 02.6 +0.6**
**K20K Telida 73.55 334** P **P 07 31 03.8 -0.2**
K20K IAmb IAmb 07 31 10.6
comp=Z,29nm,1.1s
**K20K Telida 73.55 334** P **P 07 31 03.9 -0.2**
baz=59
**L20K Farewell, AK 73.92 333** P **P 07 31 05.7 -0.5**
baz=59
**RDOG Red Dog Mine 73.98 340** P **P 07 31 07.1 +0.6**
**RDOG Red Dog Mine 73.98 340** P **P 07 31 05.8 -0.6**
baz=53,SNR=9.2
**SVE Sverdlovsk 74.04 34** *e*P **P 07 31 07.1 +0.1**
SVE pmax pmax
comp=Z,70nm,1.9s
**M19K Big River Lodg 74.42 333** P **P 07 31 08.5 -0.6**
baz=59
**L19K White Mountain 74.46 333** P **P 07 31 08.8 -0.6**
baz=58
**O19K Port Alsworth 75.28 331** P **P 07 31 13.4 -0.7**
baz=58
**AKTO Aktyubinsk 75.58 40** LR LR 08 02 41.5
comp=Z,139nm,18.0s,baz=302,slow=34
**TSUM Tsumeb 75.75 121** LR LR 08 00 25.4
comp=Z,328nm,19.1s,baz=328,slow=32
**KDAK Kodiak Island 75.76 328** LR LR 08 05 55.2
comp=Z,1µm,18.8s,baz=74,slow=37
**O18K Koktuh Hills 75.84 331** P **P 07 31 17.1 -0.3**
baz=58
**P18K Big Mountain, 76.10 331** P **P 07 31 17.9 -1.0**
baz=58
**NRIK Noril'sk 76.38 16** P **P 07 31 21.5 +1.3**
comp=Z,6.5nm,0.9s,baz=351,slow=2.7,SNR=15
**NRIK Noril'sk 76.38 16** P **P 07 31 21.3 +1.1**
NRIK IAmb IAmb 07 31 22.0
comp=Z,27nm,1.4s
**MBAR Mbarara 76.59 98** LR LR 08 03 40.5
comp=Z,342nm,21.4s,baz=286,slow=35
**MBAR Mbarara 76.59 98**‖ *e*P **P 07 31 20.2 -2.4**
**MBAR Mbarara 76.59 98** P **P 07 31 23.5 +0.9**
**ANM Nome 76.93 338** P **P 07 31 23.4 0.0**
baz=50
**TNA Tin City 77.10 339** P **P 07 31 24.6 +0.3**
baz=48
**ABKAR Akbulak array 77.23 41** P **P 07 31 25.6 +0.2**
**ABKAR Akbulak array 77.23 41** P **P 07 31 25.0 -0.4**
ABKAR IAmb IAmb 07 31 33.8
comp=Z,13nm,1.1s
**RAYN Ar Rayn 78.51 69** P **P 07 31 32.9 -0.2**
RAYN pmax pmax
comp=Z,17nm,1.5s
**RAYN Ar Rayn 78.51 69** P **P 07 31 32.9 -0.2**
**LODK Lodwar 78.73 92** P **P 07 31 34.6 +0.2**
SNR=5.8
**TIXI Tiksi 80.14 2** LR LR 08 04 35.4
comp=Z,79nm,18.9s,baz=359,slow=34
**TIXI Tiksi 80.14 2** P **P 07 31 41.0 0.0**
TIXI pmax pmax
comp=Z,21nm,1.4s
**TIXI Tiksi 80.14 2** P **P 07 31 41.0 0.0**
**BRVK Borovoye 80.75 34** P **P 07 31 45.5 +0.9**
BRVK pmax pmax
comp=Z,22nm,1.3s
**BRVK Borovoye 80.75 34** P **P 07 31 45.6 +1.0**
**BRVK Borovoye 80.75 34** P **P 07 31 45.5 +0.9**
**BILL Bilibino 81.34 349**‖ *e*P **P 07 31 47.3 -0.2**
BILL *i* 07 31 53.9
BILL *e*S **S 07 42 01.8 +3.9**
BILL *e*SS **SS 07 47 15.6 +3.1**
BILL pmax pmax
comp=Z,17nm,2.5s
BILL MLR MLR
comp=Z,90nm,17.0s
**GEYT Alibeck 81.56 51** P **P 07 31 49.9 +0.6**
comp=Z,3.0nm,0.6s,baz=327,slow=6.9,SNR=4.4
**ATD Arta Tunnel 81.59 81** LR LR 08 08 39.7
comp=Z,459nm,18.2s,baz=336,slow=36
**LSZ Lusaka 81.89 112** LR LR 08 06 20.7
comp=Z,285nm,20.7s,baz=323,slow=34
**KMBO Kilima Mbogo 82.54 95** P **P 07 31 57.5 +2.4**
comp=Z,0.6nm,0.3s,baz=252,slow=4.2,SNR=4.5
KMBO LR LR 08 08 26.3
comp=Z,1µm,19.1s,baz=282,slow=36
**KMBO Kilima Mbogo 82.54 95** *i*P **P 07 31 58.5 +3.4**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**KIBK Kibwezi 83.82 96** P **P 07 32 03.9 +2.4**
SNR=5.5
**MATP Matopo 84.88 116** LR LR 08 05 51.5
comp=Z,120nm,20.1s,baz=314,slow=33
**LBTB Lobatse 85.16 122** LR LR 08 03 07.7
comp=Z,372nm,21.8s,baz=316,slow=31
**USHA Ushuaia 85.54 194** LR LR 08 09 35.9
comp=Z,200nm,20.2s,baz=28,slow=35
**SUR Sutherland 86.02 130** LR LR 08 04 49.2
comp=Z,426nm,18.0s,baz=313,slow=32
**BANOM Banah 86.10 63** P **P 07 32 12.8 +0.1**
**KURK Kurchatov 86.25 33***ce*P **P 07 32 13.2 +0.2**
KURK pmax pmax
comp=Z,28nm,1.7s
**KURK Kurchatov 86.25 33** P **P 07 32 13.8 +0.8**
**KURK Kurchatov 86.25 33** P **P 07 32 13.2 +0.2**
KURK IAmb IAmb 07 32 25.3
comp=Z,28nm,1.4s
**MASF Masafi 86.26 63** P **P 07 32 13.7 +0.1**
**KURBB Kurchatov Arra 86.27 33** LR LR 08 07 43.6
comp=Z,160nm,20.4s,baz=301,slow=34
**UOSS Minazif 86.51 64** P **P 07 32 15.1 +0.4**
**UOSS Minazif 86.51 64** P **P 07 32 14.2 -0.5**
UOSS IAmb IAmb 07 32 16.7
comp=Z,18nm,0.8s
**HATD Hatta, Dubai 86.51 64** P **P 07 32 15.5 +0.8**
**ASHO Ashiyiah 86.52 64** P **P 07 32 15.1 +0.3**
**KKAR Karatay Array 86.72 42** P **P 07 32 15.3 -0.2**
**KKAR Karatay Array 86.72 42** P **P 07 32 15.3 -0.2**
**ZALV Zalesovo Beam 86.74 28** P **P 07 32 15.5 +0.2**
comp=Z,0.5nm,0.5s,baz=298,slow=9.5,SNR=7.5
**BOSA Boshof 86.93 125** LR LR 08 06 11.0
comp=Z,284nm,18.3s,baz=328,slow=32
**ABTO Aybut 87.83 72** P **P 07 32 23.0 +1.7**
SNR=6.2
**DOK Doka 87.91 70** P **P 07 32 22.0 +0.4**
**WHFO Wadi Hawf 87.95 71** P **P 07 32 22.0 +0.2**
**HOQ Hoqain 88.06 64** P **P 07 32 23.0 +0.7**
SNR=6.5
**SEY Seymchan 88.13 353**‖ *i*P **P 07 32 21.7 -0.1**
**BSY Bisya 88.39 65** P **P 07 32 25.7 +1.9**
**CHGR Chuyangaron 88.50 46** P **P 07 32 24.2 0.0**
CHGR IAmb IAmb 07 32 27.4
comp=Z,18nm,0.9s
**RBK Rabkut 88.51 71** P **P 07 32 27.0 +2.5**
**BIDO Bidbid 88.74 64** P **P 07 32 28.0 +2.6**
SNR=5.8
**SMDO Samad 88.91 64** P **P 07 32 29.0 +2.6**
SNR=6.4
**GAR Garm 89.03 45** P **P 07 32 26.4 -0.3**
GAR IAmb IAmb 07 32 45.4
comp=Z,32nm,1.4s
**AML Almayashu 89.17 41** P **P 07 32 29.0 +1.3**
**WSAR Wadi Sarin 89.28 64** LR LR 08 16 00.7
comp=Z,136nm,18.2s,baz=311,slow=38
**AAK Ala-Archa 89.32 41** LR LR 08 12 32.5
comp=Z,278nm,19.0s,baz=324,slow=36
**AAK Ala-Archa 89.32 41**‖ *eP* **P 07 32 29.4 +1.3**
AAK pmax pmax
comp=Z,16nm,2.5s
**AAK Ala-Archa 89.32 41** P **P 07 32 29.1 +1.0**
**AAK Ala-Archa 89.32 41** P **P 07 32 28.9 +0.8**
**SHAO Shalim 89.44 70** P **P 07 32 31.3 +2.4**
**YAK Yakutsk 89.78 3**‖ *i*P **P 07 32 29.8 +0.3**
YAK pmax pmax
comp=Z,8.0nm,1.1s
**WBK Wadi Bani Khal 89.86 64** P **P 07 32 34.0 +3.2**
SNR=6.3
**BOOM Boomskoye usch 90.24 40** P **P 07 32 32.9 +0.5**
BOOM pmax pmax
comp=Z,4.0nm,1.4s
**BOOM Boomskoye usch 90.24 40** P **P 07 32 32.9 +0.5**
**MAKZ Makanchi 90.54 34** P **P 07 32 33.6 +0.1**
MAKZ pmax pmax
comp=Z,19nm,1.5s
**MAKZ Makanchi 90.54 34** P **P 07 32 33.6 +0.1**
MAKZ IAmb IAmb 07 32 45.7
comp=Z,19nm,1.5s
**MK31 Makanchi Array 90.71 34***ce*P **P 07 32 34.3 0.0**
**MK31 Makanchi Array 90.71 34** P **P 07 32 33.8 -0.5**
**MKAR Makanchi Array 90.71 34** P **P 07 32 34.2 -0.1**
comp=Z,2.5nm,0.9s,baz=337,slow=2.8,SNR=15
**MKAR Makanchi Array 90.71 34** P **P 07 32 34.4 +0.1**
**MKAR Makanchi Array 90.71 34** P **P 07 32 34.4 +0.1**
**DGZ Jazzator, Alta 90.97 29**‖ *i*P **P 07 32 36.4 +0.8**
DGZ pmax pmax
comp=Z,17nm,2.0s
**MA2 Magadan 91.59 353**‖ *i*P **P 07 32 38.2 +0.2**
MA2 pmax pmax
comp=Z,2.0nm,1.1s
**KSH Kashi 92.17 42** P **P 07 32 42.1 +0.8**
KSH sP pwP 07 32 49.8 +1.8
KSH PP **PP 07 36 24.6 +3.8**
KSH pmax pmax
comp=Z,5.0nm,1.0s
**SHEM Shemya Is, Ala 92.79 338** LR LR 08 14 47.2
comp=Z,327nm,21.5s,baz=46,slow=36
**WMQ Urumqi 95.49 33** *eP* **P 07 32 58.4 +2.0**
WMQ pmax pmax
comp=Z,9.0nm,2.1s
WMQ LR LR
comp=Z,150nm,29.3s
WMQ LR LR
comp=Z,210nm,29.3s
WMQ LR LR
comp=Z,220nm,27.1s
**SONM Songino Array 99.53 20** P **Pdif 07 33 16.3 +1.6**
comp=Z,0.6nm,0.9s,baz=316,slow=4.0,SNR=3.5
**TAOE Nuku Hiva Isla 99.82 265** *e*LR LR 08 05 46.6
comp=Z,404nm,30.6s
**HIA Hailar 101.32 11**‖ *eP* **Pdif 07 33 21.0 -1.4**
**PPT2 Papeete2 111.86 261** *e*LR LR 08 11 19.8
comp=Z,290nm,25.2s
**XAN Xi'an 112.74 24** P **PKiKP 07 38 14.4 +5.9**
XAN pP pPKiKP 07 38 18.0 +6.5
**CD2 Chengdu 113.38 30** PKP **PKiKP 07 38 10.1 +0.3**
**SYO Syowa Base 113.80 157**‖ *ep*Pdiff pPdif 07 34 19.0 -1.1
**PZH PanZhiHua 116.14 35** PKP **PKiKP 07 38 14.7 -0.6**
**NJ2 Nanjing 117.67 17** *e*PKP **PKiKP 07 38 17.9 0.0**
**CMAR Chiang Mai Arr 121.07 42** PKP **PKPdf 07 38 24.2 -0.5**
comp=Z,0.9nm,0.3s,baz=329,slow=3.6,SNR=5.5
**CMAR Chiang Mai Arr 121.07 42 PKPdf 07 38 24.0 -0.7**
**VNDA Vanda 129.36 187** PKP **PKPdf 07 38 38.1 -0.8**
comp=Z,2.4nm,0.8s,baz=314,slow=2.2,SNR=2.4
**BKZ Black Stump Fm 145.16 241 PKPbc 07 39 08.0 -0.7**
**DZM Mont Dzumac 152.09 276** *e*LR LR 08 30 07.2
comp=Z,560nm,35.4s
**MTN Manton Dam 163.82 18 PKPdf 07 39 32.7 -2.5**
MTN PKPab **PKPab 07 40 25.6 -1.7**
**FITZ Fitzroy Crossi 165.84 46** PKPab **PKPab 07 40 35.8 -0.5**
comp=Z,1.7nm,0.9s,baz=293,slow=0.8,SNR=4.6
**WRA Warramunga Arr 171.43 13** PKPab **PKPab 07 41 00.3 -0.6**
comp=Z,0.9nm,1.0s,baz=340,slow=3.7,SNR=4.7
**ASAR Alice Springs 174.85 26** PKP **PKPdf 07 39 40.8 -1.0**
comp=Z,0.3nm,0.6s,baz=56,slow=1.7,SNR=5.1
ASAR PKPab **PKPab 07 41 15.6 -0.5**
comp=Z,0.4nm,0.8s,baz=335,slow=4.1,SNR=3.4
**ASAR Alice Springs 174.85 26 PKPdf 07 39 39.5 -2.3**
ASAR PKPab **PKPab 07 41 15.2 -0.8**

*IDC **09** 07:22:42.2±0.6,28.24N×43.77W,h0km,mb4.5/28, mb1 4.6/28,mb1mx4.5/49,mbtmp4.5/28,Error ellipse: s-maj=18.1km s-min=12.5km az=1.0*
*MOS **09** 07:22:42.6±1.1,28.35N×43.79W,h10km,mb5.0/41,Error ellipse: s-maj=8.5km s-min=6.3km az=60.2*
*NEIC **09** 07:22:44.6±1.4,28.3N±0.1×43.76W±0.06,h10km±1km, mb5.0/117,Error ellipse: s-maj=19.4km s-min=5.9km az=155.0*

**ISC 09 07:22:43.6**±0.4,**28.22N**±0.07×**43.75W**±0.06,**h10**km,**n414,** σ1§**22**/418,**mb4.9**/128,**MS4.6**/3,**21C-4D,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HRV** | **Adam Dziewonsk** | **26.64** | **310** | P | **P** | **07 28 22.7** | **+0.3** |
| baz=113 | | | | | | | |
| **BAUV** | **El Baul** | **29.85** | **235** | P | **P** | **07 28 52.0** | **+0.7** |
| **SCHQ** | **Schefferville** | **31.43** | **334** | P | **P** | **07 29 04.4** | **-0.5** |
| 2.8nm,0.7s,baz=107,slow=14,SNR=1.8 | | | | | | | |
| **SCHQ** | **Schefferville** | **31.43** | **334** | P | **P** | **07 29 03.5** | **-1.3** |
| SCHQ | | | | IAmb | IAmb | 07 29 09.0 | |
| comp=Z,20nm,1.4s | | | | | | | |
| **MCWV** | **Mont Chateau** | **31.85** | **300** | P | **P** | **07 29 09.0** | **+0.3** |
| baz=100 | | | | | | | |
| **DWPF** | **Disney Wildern** | **33.14** | **279** | P | **P** | **07 29 20.1** | **0.0** |
| baz=80 | | | | | | | |
| **P52A** | **Corning** | **33.59** | **300** | P | **P** | **07 29 23.6** | **-0.4** |
| baz=98 | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.32** | **301** | P | **P** | **07 29 30.8** | **+0.5** |
| baz=98 | | | | | | | |
| **GOGA** | **Godfrey** | **34.36** | **289** | P | **P** | **07 29 30.1** | **-0.6** |
| baz=88 | | | | | | | |
| **ESDC** | **Sonseca Array** | **34.67** | **60** | P | **P** | **07 29 32.3** | **-1.1** |
| comp=Z,0.6nm,0.7s,baz=273,slow=6.7,SNR=3.7 | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **35.89** | **241** | P | **P** | **07 29 44.5** | **+0.3** |
| **O48B** | **Farmland** | **35.97** | **300** | P | **P** | **07 29 45.0** | **+0.5** |
| baz=96 | | | | | | | |
| **CLTN** | **Cedars of Leba** | **36.67** | **293** | P | **P** | **07 29 51.6** | **+1.0** |
| CLTN | | | | IAmb | IAmb | 07 29 59.2 | |
| comp=Z,28nm,1.1s | | | | | | | |
| **T47A** | **Sharon Grove** | **37.30** | **295** | P | **P** | **07 29 56.4** | **+0.5** |
| T47A | | | | IAmb | IAmb | 07 30 00.7 | |
| comp=Z,29nm,1.4s | | | | | | | |
| **SFIN** | **Lafayette** | **37.46** | **300** | P | **P** | **07 29 58.0** | **+0.8** |
| baz=95 | | | | | | | |
| **WVT** | **Waverly** | **37.88** | **293** | P | **P** | **07 30 01.6** | **+0.8** |
| WVT | | | | pmax | pmax | | |
| comp=Z,17nm,1.1s | | | | | | | |
| **WVT** | **Waverly** | **37.88** | **293** | P | **P** | **07 30 01.6** | **+0.8** |
| **WVT** | **Waverly** | **37.88** | **293** | P | **P** | **07 30 01.5** | **+0.6** |
| baz=89 | | | | | | | |
| **Z47A** | **Carrollton** | **38.22** | **289** | P | **P** | **07 30 05.5** | **+1.8** |
| Z47A | | | | IAmb | IAmb | 07 30 06.6 | |
| comp=Z,37nm,1.0s | | | | | | | |
| **FRB** | **Frobisher Bay** | **38.96** | **343** | P | **P** | **07 30 08.9** | **-0.5** |
| comp=Z,5.7nm,0.7s,baz=141,slow=8.8,SNR=11 | | | | | | | |
| **FRB** | **Frobisher Bay** | **38.96** | **343** | P | **P** | **07 30 09.0** | **-0.5** |
| **W45A** | **Hickory Valley** | **39.01** | **292** | P | **P** | **07 30 11.5** | **+1.1** |
| **OXF** | **Oxford** | **39.23** | **291** | P | **P** | **07 30 12.8** | **+0.6** |
| baz=86 | | | | | | | |
| **PBMO** | **Poplar Bluff** | **39.96** | **295** | P | **P** | **07 30 18.5** | **+0.2** |
| **T42A** | **Van Buren** | **40.49** | **295** | P | **P** | **07 30 23.2** | **+0.6** |
| T42A | | | | IAmb | IAmb | 07 30 24.7 | |
| comp=Z,27nm,1.1s | | | | | | | |
| **LCAR** | **Lake Charles** | **40.57** | **294** | P | **P** | **07 30 23.9** | **+0.5** |
| **CCM** | **Cathedral Cave** | **40.59** | **297** | P | **P** | **07 30 23.8** | **+0.3** |
| CCM | | | | pmax | pmax | | |
| comp=Z,16nm,1.2s | | | | | | | |
| **CCM** | **Cathedral Cave** | **40.59** | **297** | P | **P** | **07 30 23.8** | **+0.3** |
| **CCM** | **Cathedral Cave** | **40.59** | **297** | P | **P** | **07 30 23.8** | **+0.3** |
| baz=89 | | | | | | | |
| **ICESG** | **Greenland Ices** | **40.97** | **2** | *i* P | **P** | **07 30 25.3** | **-1.3** |
| ICESG | | | | IAmb | IAmb | 07 30 27.0 | |
| comp=Z,38nm,1.2s | | | | | | | |
| **W41B** | **Gary Mavity, V** | **41.52** | **292** | P | **P** | **07 30 31.0** | **-0.1** |
| **W41B** | **Gary Mavity, V** | **41.52** | **292** | P | **P** | **07 30 31.2** | **+0.1** |
| baz=86 | | | | | | | |
| **U40A** | **Yellville** | **41.93** | **294** | P | **P** | **07 30 34.6** | **+0.1** |
| **U40A** | **Yellville** | **41.93** | **294** | P | **P** | **07 30 33.9** | **-0.6** |
| baz=87,SNR=5.5 | | | | | | | |
| **X40A** | **Basin Creek Fa** | **42.05** | **291** | P | **P** | **07 30 34.6** | **-0.9** |
| **X40A** | **Basin Creek Fa** | **42.05** | **291** | P | **P** | **07 30 35.8** | **+0.2** |
| baz=84 | | | | | | | |
| **Z41A** | **Richland Creek** | **42.16** | **289** | P | **P** | **07 30 37.4** | **+1.0** |
| baz=83 | | | | | | | |
| **W39A** | **Magazine** | **42.77** | **292** | P | **P** | **07 30 41.9** | **+0.5** |
| baz=85 | | | | | | | |
| **HHAR** | **Hobbs** | **42.81** | **294** | P | **P** | **07 30 41.2** | **-0.5** |
| **U38A** | **Gravette** | **43.16** | **294** | P | **P** | **07 30 44.2** | **-0.3** |
| U38A | | | | IAmb | IAmb | 07 30 47.2 | |
| comp=Z,19nm,1.0s | | | | | | | |
| **ETMB** | **Extrema** | **43.61** | **213** | P | **P** | **07 30 48.4** | **+0.1** |
| **BDFB** | **Brasilia** | **43.80** | **186** | P | **P** | **07 30 49.1** | **-0.8** |
| comp=Z,2.6nm,0.8s,baz=23,slow=20,SNR=2.9 | | | | | | | |
| **NATX** | **Nacogdoches** | **43.92** | **288** | P | **P** | **07 30 50.9** | **+0.2** |
| baz=81 | | | | | | | |
| **TUL1** | **Leonard** | **44.33** | **294** | | **P** | **07 30 54.0** | **0.0** |
| **TUL1** | **Leonard** | **44.33** | **294** | P | **P** | **07 30 53.3** | **-0.7** |
| baz=85,SNR=7.7 | | | | | | | |
| **SUMG** | **Summit** | **44.50** | **2** | P | **P** | **07 30 54.6** | **-0.7** |
| SUMG | | | | pmax | pmax | | |
| comp=Z,16nm,1.0s | | | | | | | |
| **SUMG** | **Summit** | **44.50** | **2** | *i* P | **P** | **07 30 54.1** | **-1.1** |
| SUMG | | | | IAmb | IAmb | 07 30 55.6 | |
| comp=Z,20nm,1.1s | | | | | | | |
| **SUMG** | **Summit** | **44.50** | **2** | P | **P** | **07 30 54.6** | **-0.7** |
| SUMG | | | | IAmb | IAmb | 07 30 55.3 | |
| comp=Z,16nm,1.0s | | | | | | | |
| **BFO** | **Black Forest** | **44.58** | **49** | P | **P** | **07 30 55.9** | **+0.1** |
| BFO | | | | pmax | pmax | | |
| comp=Z,20nm,1.0s | | | | | | | |
| **BFO** | **Black Forest** | **44.58** | **49** | P | **P** | **07 30 55.9** | **+0.1** |
| BFO | | | | IAmb | IAmb | 07 30 56.9 | |
| comp=Z,20nm,1.0s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **44.75** | **305** | P | **P** | **07 30 56.6** | **-0.6** |
| baz=92 | | | | | | | |
| **KSU1** | **Kansas State U** | **44.76** | **298** | P | **P** | **07 30 57.2** | **-0.2** |
| baz=87 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.81** | **100** | P | **P** | **07 30 58.0** | **+0.1** |
| comp=Z,6.7nm,0.9s,baz=300,slow=8.7,SNR=13 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.81** | **100** | P | **P** | **07 30 57.3** | **-0.7** |
| **T35A** | **Sooner Cattle** | **44.83** | **295** | P | **P** | **07 30 58.1** | **+0.2** |
| **ULM** | **Lac du Bonnet** | **44.89** | **314** | P | **P** | **07 30 57.2** | **-1.0** |
| comp=Z,7.3nm,1.0s,baz=111,slow=5.4,SNR=4.7 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.89** | **314** | P | **P** | **07 30 57.4** | **-0.8** |
| ULM | | | | pmax | pmax | | |
| comp=Z,8.0nm,1.0s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.89** | **314** | P | **P** | **07 30 57.4** | **-0.8** |
| **KEST** | **Kesra** | **45.20** | **66** | P | **P** | **07 31 01.7** | **+0.7** |
| comp=Z,12nm,0.9s,baz=264,slow=4.3,SNR=7.3 | | | | | | | |
| **KEST** | **Kesra** | **45.20** | **66** | P | **P** | **07 31 01.6** | **+0.7** |
| KEST | | | | IAmb | IAmb | 07 31 04.3 | |
| comp=Z,19nm,1.0s | | | | | | | |
| **HKT** | **Hockley** | **45.23** | **285**‖ *i*P | | **P** | **07 31 02.6** | **+1.5** |
| HKT | | | | pmax | pmax | | |
| comp=Z,4.0nm,1.0s | | | | | | | |
| **W35A** | **Tecumseh** | **45.29** | **293** | | **P** | **07 31 02.2** | **+0.5** |
| **BLOK** | **Blackwell** | **45.40** | **295** | | **P** | **07 31 03.0** | **+0.6** |
| **DAVA** | **Damuels** | **45.51** | **50** | *e*P | **P** | **07 31 04.4** | **+1.0** |
| comp=Z,23nm,1.0s,SNR=5.4 | | | | | | | |
| **KAN13** | **South Haven SW** | **45.59** | **295** | | **P** | **07 31 03.7** | **-0.3** |
| **H10N2** | **ASCENSION HYDR** | **45.64** | **137** | T | T | 08 19 32.6 | |
| baz=322,slow=76 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.64** | **137** | T | T | 08 19 33.6 | |
| baz=322,slow=76 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.66** | **137** | T | T | 08 19 33.8 | |
| baz=322,slow=76 | | | | | | | |
| **LOOK** | **Love County** | **45.69** | **291** | P | **P** | **07 31 05.1** | **+0.3** |
| **OK029** | **Liberty Lake** | **45.69** | **294** | | **P** | **07 31 03.6** | **-1.2** |
| **FNO** | **Franklin** | **45.71** | **293** | | **P** | **07 31 05.3** | **+0.4** |
| FNO | | | | IAmb | IAmb | 07 31 07.2 | |
| comp=Z,13nm,0.9s | | | | | | | |
| **KAN01** | **Argonia South** | **45.80** | **296** | P | **P** | **07 31 05.5** | **-0.1** |
| **FCC** | **Fort Churchill** | **45.98** | **326** | P | **P** | **07 31 06.4** | **-0.2** |
| FCC | | | | pmax | pmax | | |
| comp=Z,24nm,0.9s | | | | | | | |
| **FCC** | **Fort Churchill** | **45.98** | **326** | P | **P** | **07 31 06.4** | **-0.2** |
| **KAN14** | **Manchester OK** | **45.98** | **295** | | **P** | **07 31 07.8** | **+0.8** |
| **CROK** | **Carrier** | **46.04** | **295** | | **P** | **07 31 08.1** | **+0.5** |
| **FETA** | **Feichten** | **46.06** | **51** | *e*P | **P** | **07 31 08.9** | **+1.2** |
| comp=Z,14nm,1.2s,SNR=5.7 | | | | | | | |
| **RETA** | **Reutte** | **46.12** | **50** | *e*P | **P** | **07 31 08.9** | **+0.8** |
| comp=Z,12nm,0.8s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **46.14** | **292** | P | **P** | **07 31 08.3** | **-0.1** |
| **OSSC** | **Osservatorio P** | **46.29** | **56** | P | **P** | **07 31 09.4** | **0.0** |
| **MOTA** | **Moosalm** | **46.34** | **50** | *e*P | **P** | **07 31 10.8** | **+0.9** |
| comp=Z,20nm,1.5s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **46.41** | **50** | *i* P | **P** | **07 31 11.4** | **+1.0** |
| comp=Z,31nm,1.6s | | | | | | | |
| **R32A** | **Long Quarter,** | **46.45** | **297** | P | **P** | **07 31 10.6** | **-0.1** |
| **CTI** | **Castel Tesino** | **46.64** | **52** | P | **P** | **07 31 12.2** | **-0.1** |
| CTI | | | | pmax | pmax | | |
| comp=Z,22nm,1.1s | | | | | | | |
| **CTI** | **Castel Tesino** | **46.64** | **52** | P | **P** | **07 31 12.2** | **-0.1** |
| CTI | | | | IAmb | IAmb | 07 31 13.3 | |
| comp=Z,22nm,1.1s | | | | | | | |
| **WATA** | **Walderalm** | **46.66** | **50** | *i* P | **P** | **07 31 13.1** | **+0.7** |
| comp=Z,16nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **46.70** | **50** | *i* P | **P** | **07 31 13.6** | **+0.8** |
| comp=Z,17nm,0.9s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **46.90** | **292** | P | **P** | **07 31 14.4** | **+0.1** |
| WMOK | | | | pmax | pmax | | |
| comp=Z,20nm,1.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **46.90** | **292** | P | **P** | **07 31 14.4** | **+0.1** |
| WMOK | | | | IAmb | IAmb | 07 31 21.7 | |
| comp=Z,20nm,1.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **46.90** | **292** | P | **P** | **07 31 14.4** | **+0.1** |
| baz=82,SNR=7.4 | | | | | | | |
| **MDND** | **Maddock** | **47.06** | **310** | P | **P** | **07 31 15.6** | **+0.2** |
| baz=94 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **47.27** | **51** | *i* P | **P** | **07 31 17.5** | **+0.3** |
| comp=Z,25nm,1.0s | | | | | | | |
| **KONO** | **Kongsberg** | **47.72** | **33**‖ *eP* | | **P** | **07 31 21.9** | **+1.6** |
| KONO | | | | pmax | pmax | | |
| comp=Z,10.0nm,1.0s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **47.85** | **51** | *eP* | **P** | **07 31 21.9** | **+0.2** |
| comp=Z,9.3nm,1.0s,SNR=4.5 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **47.94** | **290** | P | **P** | **07 31 22.6** | **+0.2** |
| **ABTX** | **Abilene, Hawle** | **47.94** | **290** | P | **P** | **07 31 22.8** | **+0.3** |
| baz=80 | | | | | | | |
| **CLL** | **Collm** | **47.94** | **45** | *i* P | **P** | **07 31 22.1** | **-0.1** |
| CLL | | | | *e* | | 07 31 28.0 | |
| CLL | | | | pmax | pmax | | |
| comp=Z,19nm,1.4s | | | | | | | |
| **CLL** | **Collm** | **47.94** | **45** | *i* P | **P** | **07 31 22.1** | **-0.1** |
| comp=Z,19nm,1.4s | | | | | | | |
| CLL | | | | *ex* | x | 07 31 28.0 | |
| CLL | | | | *e*PPP | PPP | 07 34 02.0 | |
| **MYKA** | **Terra Mystica** | **48.04** | **51** | *eP* | **P** | **07 31 23.1** | **-0.1** |
| comp=Z,11nm,1.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **48.12** | **48** | *eP* | **P** | **07 31 23.3** | **-0.3** |
| **KHC** | **Kasperske Hory** | **48.12** | **48** | *eP* | **P** | **07 31 23.3** | **-0.3** |
| **KHC** | **Kasperske Hory** | **48.12** | **48** | P | **P** | **07 31 22.7** | **-0.9** |
| **GERES** | **GERESS Array B** | **48.18** | **48** | P | **P** | **07 31 24.1** | **-0.1** |
| comp=Z,3.3nm,0.8s,baz=266,slow=7.6,SNR=9.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **48.18** | **48** | P | **P** | **07 31 23.9** | **-0.3** |
| **JCT** | **Junction City** | **48.49** | **287** | P | **P** | **07 31 27.6** | **+0.9** |
| JCT | | | | pmax | pmax | | |
| comp=Z,23nm,1.4s | | | | | | | |
| **JCT** | **Junction City** | **48.49** | **287** | P | **P** | **07 31 27.6** | **+0.9** |
| JCT | | | | IAmb | IAmb | 07 31 34.4 | |
| comp=Z,23nm,1.4s | | | | | | | |
| **JCT** | **Junction City** | **48.49** | **287** | P | **P** | **07 31 27.3** | **+0.5** |
| baz=78 | | | | | | | |
| **MOA** | **Molln** | **48.51** | **50** | *i* P | **P** | **07 31 26.5** | **-0.1** |
| comp=Z,12nm,1.6s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **48.58** | **48** | *eP* | **P** | **07 31 26.6** | **-0.6** |
| **833A** | **Chaparral WMA,** | **48.62** | **284** | P | **P** | **07 31 28.3** | **+0.6** |
| baz=76 | | | | | | | |
| **OBKA** | **Obir** | **48.66** | **51** | *i* P | **P** | **07 31 28.2** | **+0.3** |
| comp=Z,20nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **48.89** | **32** | P | **P** | **07 31 29.5** | **+0.1** |
| comp=Z,1.6nm,0.8s,baz=254,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **48.89** | **32** | P | **P** | **07 31 29.7** | **+0.3** |
| comp=Z,3.6nm,0.9s,baz=254,slow=7.7,SNR=7.3 | | | | | | | |
| **SOKA** | **Soboth** | **49.00** | **51** | *i* P | **P** | **07 31 30.1** | **-0.4** |
| comp=Z,9.1nm,1.2s | | | | | | | |
| **AMTX** | **Amarillo** | **49.23** | **293** | P | **P** | **07 31 33.7** | **+1.2** |
| AMTX | | | | IAmb | IAmb | 07 31 41.0 | |
| comp=Z,28nm,1.2s | | | | | | | |
| **AMTX** | **Amarillo** | **49.23** | **293** | P | **P** | **07 31 33.1** | **+0.6** |
| baz=81 | | | | | | | |
| **ARSA** | **Arzberg** | **49.34** | **51** | *i* P | **P** | **07 31 32.8** | **-0.3** |
| comp=Z,9.3nm,0.9s | | | | | | | |
| **NEEM** | **North Greenlan** | **49.42** | **358** | *i* P | **P** | **07 31 33.0** | **-0.5** |
| NEEM | | | | IAmb | IAmb | 07 31 34.2 | |
| comp=Z,14nm,1.0s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **49.44** | **299** | P | **P** | **07 31 34.3** | **+0.2** |
| baz=84 | | | | | | | |
| **CONA** | **Conrad Observa** | **49.58** | **50** | *i* P | **P** | **07 31 34.8** | **-0.1** |
| comp=Z,7.4nm,1.0s | | | | | | | |
| **UPC** | **Upice** | **49.78** | **46** | *eP* | **P** | **07 31 36.8** | **+0.5** |
| **UPC** | **Upice** | **49.78** | **46** | *eP* | **P** | **07 31 36.8** | **+0.5** |
| **CHVC** | **Chvalec** | **49.81** | **46** | *eP* | **P** | **07 31 36.7** | **+0.2** |
| **TULEG** | **Thule** | **49.87** | **353**

comp=Z,19nm,1.0s
**OSTC Ostas 49.91 46** *e*P **P 07 31 38.0 +0.7**
**KRUC Moravsky 49.96 48** *e*P **P 07 31 37.8 +0.1**
**DPC Dobruska-Polom 49.97 46** *e*P **P 07 31 38.0 +0.2**
**DPC Dobruska-Polom 49.97 46** *e*P **P 07 31 38.0 +0.2**
**DAG Danmarks Havn 50.08 7** *i*P **P 07 31 37.2 -0.9**
DAG IAmb IAmb 07 31 38.7
comp=Z,8.0nm,0.9s
**VRAC Vranov 50.10 48** *e*P **P 07 31 38.7 -0.1**
**RSSD Black Hills 50.11 305** P **P 07 31 39.3 +0.1**
baz=87
**MSTX Muleshoe 50.28 292** P **P 07 31 40.6 +0.1**
MSTX IAmb IAmb 07 31 47.6
comp=Z,18nm,1.2s
**MSTX Muleshoe 50.28 292** P **P 07 31 41.0 +0.5**
baz=80
**MODS Modra-Piesok 50.54 49** *e*P **P 07 31 44.3 +2.2**
**MODS Modra-Piesok 50.54 49** *e*P **P 07 31 44.3 +2.2**
**T25A Trinidad 51.08 296** P **P 07 31 47.5 +0.9**
T25A IAmb IAmb 07 31 50.6
comp=Z,15nm,1.1s
**T25A Trinidad 51.08 296** P **P 07 31 46.7 +0.1**
baz=81
**Q24A Divide 51.40 299** P **P 07 31 49.8 +0.7**
Q24A IAmb IAmb 07 31 57.5
comp=Z,23nm,1.2s
**Q24A Divide 51.40 299** P **P 07 31 49.5 +0.4**
baz=82,SNR=6.1
**LAO LASA Array 51.55 309** P **P 07 31 49.5 -0.3**
baz=88
**VYHS Vyhne 51.57 49** *e*P **P 07 31 49.9 0.0**
**VYHS Vyhne 51.57 49** *e*P **P 07 31 49.9 0.0**
**SDCO Great Sand Dun 51.84 297** P **P 07 31 52.3 -0.1**
**SDCO Great Sand Dun 51.84 297** P **P 07 31 52.8 +0.3**
baz=81
**TXAR Lajitas Array 52.01 287** P **P 07 31 53.5 -0.1**
comp=Z,1.9nm,1.0s,baz=96,slow=8.0,SNR=5.5
**TXAR Lajitas Array 52.01 287** P **P 07 31 52.6 -1.0**
**K22A Casper 52.02 304** P **P 07 31 53.3 -0.2**
**K22A Casper 52.02 304** P **P 07 31 53.8 +0.2**
baz=84
**S22A 4UR Ranch, Cre 52.88 298** P **P 07 32 00.6 +0.4**
**S22A 4UR Ranch, Cre 52.88 298** P **P 07 32 00.8 +0.7**
baz=80
**ANMO Albuquerque 53.09 294** P **P 07 32 02.2 +0.6**
comp=Z,4.7nm,1.0s,baz=89,slow=8.2
**ANMO Albuquerque 53.09 294**⇑ *i*P **P 07 32 03.2 +1.6**
ANMO pmax pmax
comp=Z,13nm,1.4s
**ANMO Albuquerque 53.09 294** P **P 07 32 02.0 +0.5**
ANMO IAmb IAmb 07 32 15.3
comp=Z,16nm,1.4s
**ANMO Albuquerque 53.09 294** P **P 07 32 02.6 +1.0**
baz=79
**RES Resolute Bay 53.09 345** P **P 07 32 00.8 +0.2**
comp=Z,8.7nm,0.9s,baz=28,slow=0.7,SNR=16
**RES Resolute Bay 53.09 345** P **P 07 32 00.7 0.0**
RES IAmb IAmb 07 32 02.4
comp=Z,13nm,1.1s
**CRVS Cervenica-Dubn 53.30 48** *e*P **P 07 32 04.1 +1.4**
**CRVS Cervenica-Dubn 53.30 48** *e*P **P 07 32 04.1 +1.4**
**GO01 Chusmiza 53.59 210** P **P 07 32 05.6 0.0**
**O20A White River Ci 53.61 301** P **P 07 32 06.1 +0.7**
baz=82
**RLMT Red Lodge 53.77 307** P **P 07 32 06.5 +0.1**
RLMT IAmb IAmb 07 32 19.3
comp=Z,14nm,1.1s
**RLMT Red Lodge 53.77 307** P **P 07 32 06.8 +0.4**
baz=85
**UZH Uzhgorod 53.86 49** *e*P **P 07 32 07.4 +0.6**
UZH *e* 07 32 09.7
UZH *i* 07 32 14.7
**PB11 IPOC Station P 53.88 211** P **P 07 32 07.8 +0.5**
**EGMT Eagleton 53.88 311** P **P 07 32 06.9 -0.1**
**EGMT Eagleton 53.88 311** P **P 07 32 06.9 -0.1**
baz=86,SNR=8.5
**GCMT Greycliff 53.99 308** P **P 07 32 08.4 +0.4**
**PD31 Pinedale Array 54.23 304** P **P 07 32 09.5 -0.4**
PD31 IAmb IAmb 07 32 10.9
comp=Z,14nm,0.8s
**PDAR Pinedale Array 54.23 304** P **P 07 32 09.9 0.0**
comp=Z,8.0nm,0.7s,baz=80,slow=6.4,SNR=24
**PDAR Pinedale Array 54.23 304** P **P 07 32 09.0 -0.9**
**BW06 Boulder Array 54.23 304** P **P 07 32 09.5 -0.4**
BW06 IAmb IAmb 07 32 10.9
comp=Z,15nm,0.8s
**BW06 Boulder Array 54.23 304** P **P 07 32 09.5 -0.4**
baz=83,SNR=14
**MVCO Mesa Verde 54.28 297** P **P 07 32 11.1 +0.7**
baz=79
**YMP Mirror Lake Pl 54.43 307** P **P 07 32 11.9 +0.5**
**NOR Nord 54.49 5** *i*P **P 07 32 09.9 -1.0**
NOR IAmb IAmb 07 32 13.4
comp=Z,30nm,1.5s
**LKWY Lake 54.62 306** P **P 07 32 13.7 +1.0**
LKWY pmax pmax
comp=Z,15nm,1.2s
**LKWY Lake 54.62 306** P **P 07 32 13.7 +1.0**
LKWY IAmb IAmb 07 32 15.8
comp=Z,15nm,1.2s
**121A Cookes Peak, D 54.69 291** P **P 07 32 14.3 +1.1**
baz=76
**H17A Grant Village 54.77 306** P **P 07 32 14.7 +0.9**
baz=83
**LOHW Long Hollow 54.88 305** P **P 07 32 14.8 +0.2**
LOHW IAmb IAmb 07 32 21.7
comp=Z,20nm,1.4s
**BOZ Bozeman (W) 55.37 308** P **P 07 32 18.4 +0.3**
baz=83
**SRU San Rafael Swe 55.51 300** P **P 07 32 20.0 +0.8**
SRU pmax pmax
comp=Z,13nm,0.8s
**SRU San Rafael Swe 55.51 300** P **P 07 32 20.0 +0.8**
SRU IAmb IAmb 07 32 20.7
comp=Z,13nm,0.8s
**BUR08 Bucovina Ar. S 55.88 50** P **P 07 32 22.3 +0.7**
BUR08 IAmb IAmb 07 32 23.8
comp=Z,20nm,1.2s
**EDM Edmonton 55.89 317** P **P 07 32 21.1 -0.4**
EDM pmax pmax
comp=Z,56nm,1.3s
**EDM Edmonton 55.89 317** P **P 07 32 21.1 -0.4**
**BURAR Bucovina Array 55.90 50** P **P 07 32 22.1 +0.5**
**FINES FINESS Array B 56.03 33** P **P 07 32 22.0 -0.3**
comp=Z,8.3nm,0.7s,baz=242,slow=4.1,SNR=17
**FINES FINESS Array B 56.03 33** P **P 07 32 22.3 +0.1**
**FINES FINESS Array B 56.03 33** P **P 07 32 22.3 +0.1**
**CTU Camp Tracy 56.16 302** P **P 07 32 23.8 0.0**
**VSU Vasula 56.28 37**⇑ *e*P **P 07 32 24.1 0.0**
VSU pmax pmax
comp=Z,82nm,1.1s
**NACGM Naroch 56.37 41** *i*P **P 07 32 25.2 +0.4**
**NLU North Lily Min 56.54 301** P **P 07 32 26.3 -0.3**
NLU IAmb IAmb 07 32 35.4
comp=Z,18nm,1.2s
**WALA Waterton Lakes 56.55 312** P **P 07 32 25.5 -0.9**
WALA IAmb IAmb 07 32 28.3
comp=Z,14nm,0.9s
**YKA Yellowknife Ar 56.57 328** P **P 07 32 25.1 -0.9**
comp=Z,5.7nm,0.9s,baz=90,slow=7.5,SNR=21
**YKA Yellowknife Ar 56.57 328** P **P 07 32 25.6 -0.5**
**YKA Yellowknife Ar 56.57 328** P **P 07 32 25.6 -0.5**
**ARCES ARCESS Array B 56.62 23** P **P 07 32 25.4 -0.9**
comp=Z,8.6nm,0.9s,baz=282,slow=5.4,SNR=5.9
**MLR Muntele Rosu 56.65 52** P **P 07 32 28.0 +0.9**
MLR pmax pmax
comp=Z,41nm,1.2s
**MLR Muntele Rosu 56.65 52** P **P 07 32 28.0 +0.9**
**MSO Missoula 56.82 309** P **P 07 32 29.2 +0.9**
baz=83
**MSU Marysvale 56.89 299** P **P 07 32 30.5 +1.4**
**MSU Marysvale 56.89 299** P **P 07 32 30.5 +1.4**
**WUAZ Wupatki 56.90 296** P **P 07 32 29.9 +0.8**
baz=77
**MNK Minsk 57.02 41** *i*P **P 07 32 28.2 -1.2**
MNK *i*S **S 07 40 23.0 -0.8**
MNK pmax pmax
comp=Z,40nm,0.9s
**MNK Minsk 57.02 41** *i*P **P 07 32 28.3 -1.2**
MNK *i*P **P 07 32 28.3 -1.2**
MNK *i*P **P 07 32 28.3 -1.2**
comp=Z,40nm,0.8s,baz=274
MNK *i*S **S 07 40 23.1 -0.8**
**DUG Dugway, Tooele 57.05 302** P **P 07 32 30.1 0.0**
DUG pmax pmax
comp=Z,12nm,1.0s
**DUG Dugway, Tooele 57.05 302** P **P 07 32 30.1 0.0**
DUG IAmb IAmb 07 32 33.3
comp=Z,12nm,0.9s
**DUG Dugway, Tooele 57.05 302** P **P 07 32 30.3 +0.2**
baz=79,SNR=13
**HLID Hailey 57.63 306** P **P 07 32 34.4 +0.3**
baz=80
**CCUT Cedar City 58.01 299** P **P 07 32 38.0 +1.0**
**PUL Pulkovo 58.11 35**⇑ *e*P **P 07 32 39.5 +2.5**
PUL pmax pmax
comp=Z,49nm,0.8s
**AKASG Malin Array Be 58.17 46** P **P 07 32 36.8 -0.8**
comp=Z,13nm,0.8s,baz=275,slow=6.1,SNR=35
**AKASG Malin Array Be 58.17 46** P **P 07 32 37.0 -0.6**
AKASG pmax pmax
comp=Z,5.0nm,1.2s
**AKASG Malin Array Be 58.17 46** P **P 07 32 37.0 -0.6**
**AKBB Malin Array Si 58.17 46** P **P 07 32 36.7 -0.9**
AKBB pmax pmax
comp=Z,16nm,1.0s
**AKBB Malin Array Si 58.17 46** P **P 07 32 36.7 -0.9**
AKBB IAmb IAmb 07 32 38.1
comp=Z,16nm,0.9s
**PLID Pearl Lake 58.50 308** P **P 07 32 39.8 -0.5**
PLID IAmb IAmb 07 32 41.5
comp=Z,14nm,1.0s
**Y14A Wickenburg 58.59 294** P **P 07 32 42.2 +1.4**
**MFID Camas Ranch 58.67 306** P **P 07 32 41.6 +0.3**
MFID IAmb IAmb 07 32 42.8
comp=Z,12nm,0.9s
**NEW Newport 58.76 312** P **P 07 32 41.7 -0.1**
comp=Z,14nm,1.0s,baz=86,slow=6.9,SNR=16
**NEW Newport 58.76 312** P **P 07 32 41.9 +0.1**
baz=81,SNR=12
**APA Apatity 59.36 26**⇓ *i*P **P 07 32 44.2 -1.4**
APA MLR MLR
comp=Z,2μm,17.0s
**PDMCI Parker Dam,Lak 59.40 295** P **P 07 32 47.3 +0.9**
baz=75
**R11A Troy Canyon, C 59.54 300** P **P 07 32 47.7 +0.2**
baz=76,SNR=5.3
**IRM Iron Mountain 60.24 295** P **P 07 32 51.8 -0.5**
baz=74
**TPNV Topopah Spring 60.39 299** P **P 07 32 54.3 +0.9**
baz=75
**GMRC Granite Mounta 60.49 296** P **P 07 32 54.6 +0.6**
baz=74
**C36M Paulatuk 60.50 336** P **P 07 32 53.3 0.0**
baz=88
**WRGLY Wrigley 60.61 329** P **P 07 32 54.1 -0.1**
baz=85,SNR=5.6
**A36M Sachs Harbour 60.82 339** P **P 07 32 56.0 +0.5**
baz=88,SNR=6.5
**E07A Sunnyside 60.88 310** P **P 07 32 56.6 +0.2**
E07A IAmb IAmb 07 32 57.7
comp=Z,12nm,0.8s
**FURC Furnace Creek, 60.99 298** P **P 07 32 58.0 +0.8**
baz=75
**I07A Izee 61.15 307** P **P 07 32 58.1 -0.2**
**GSC Goldstone, Bar 61.25 297** P **P 07 33 00.1 +0.8**
baz=74
**KVN Kaiserville 61.28 301** P **P 07 32 59.4 -0.1**
KVN pmax pmax
comp=Z,11nm,1.3s
**KVN Kaiserville 61.28 301** P **P 07 32 59.4 -0.1**
KVN IAmb IAmb 07 33 00.7
comp=Z,11nm,1.3s
**LLLB Lillooet 61.44 315** P **P 07 33 00.6 +0.4**
LLLB IAmb IAmb 07 33 18.1
comp=Z,16nm,1.4s
**IKP In-Ko-Pah, Jac 61.44 294** P **P 07 33 00.6 +0.1**
baz=73
**PFO Pinyon Flats O 61.45 295** P **P 07 33 00.9 +0.3**
comp=Z,0.4nm,0.3s,baz=53,slow=10,SNR=1.5
**MPMC Manual Prospec 61.59 298** P **P 07 33 02.3 +0.7**
baz=74
**NVAR Mina Array Bea 61.59 301** P **P 07 33 01.9 +0.3**
comp=Z,2.8nm,0.8s,baz=75,slow=7.3,SNR=9.1
**MONP2 Monument Peak 61.62 294** P **P 07 33 02.8 +1.0**
baz=73
**BBRC Big Bear Solar 61.63 296** P **P 07 33 03.0 +1.0**
baz=74
**OBN Obninsk 61.95 40**⇓ *e*P **P 07 33 04.0 +0.6**
OBN *e* 07 33 09.3
OBN pmax pmax
comp=Z,33nm,1.0s
**B05A Bryant 62.03 312** P **P 07 33 01.7 -2.4**
baz=78
**F05D White Salmon 62.11 309** P **P 07 33 05.5 +0.8**
baz=77
**G05D Wamic, OR 62.16 309** P **P 07 33 05.8 +0.8**
baz=77
**MOD Modoc Plateau 62.22 305** P **P 07 33 05.9 +0.2**
MOD IAmb IAmb 07 33 07.3
comp=Z,12nm,1.0s
**EDW2 Edwards Air Fo 62.31 297** P **P 07 33 07.2 +0.9**
baz=73
**I05D Terrebonne, OR 62.38 308** P **P 07 33 07.6 +1.0**
baz=76
**ISA Isabella, Lake 62.46 298** P **P 07 33 08.1 +0.7**
baz=74
**J05D Fort Rock, OR 62.55 307** P **P 07 33 07.6 -0.3**
baz=76,SNR=5.3
**KLMR Klimovskoe 62.56 33** *e*P **P 07 33 05.8 -1.6**
KLMR pmax pmax
comp=Z,8.0nm,1.0s
**KLMR Klimovskoe 62.56 33** *e*P **P 07 33 05.8 -1.6**
KLMR AMP 07 33 07.0
comp=Z,8.0nm,1.0s
**H04A Detroit Lake 62.88 308** P **P 07 33 09.8 -0.1**
H04A IAmb IAmb 07 33 17.5
comp=Z,16nm,1.2s
**ARVC Arvin 62.89 297** P **P 07 33 11.0 +0.9**
baz=73
**B04A Port Angeles 62.99 312** P **P 07 33 10.6 0.0**
**H04D Lebanon 63.30 308** P **P 07 33 12.7 0.0**
baz=76
**M04C Macdoel 63.36 305** P **P 07 33 13.5 +0.2**
baz=75
**BR131 Keskin Array S 63.38 57**⇑ *e*P **P 07 33 13.9 +0.4**
**BRTR Keskin Array B 63.38 57** P **P 07 33 13.8 +0.3**
comp=Z,6.3nm,1.0s,baz=270,slow=6.2,SNR=8.3
**BRTR Keskin Array B 63.38 57** *i*P **P 07 33 14.1 +0.6**
BRTR pmax pmax
comp=Z,6.0nm,1.0s
**BRTR Keskin Array B 63.38 57** P **P 07 33 13.4 -0.1**
**L04D Klamath Falls 63.58 306** P **P 07 33 15.4 +0.6**
baz=75
**ORV Oroville 63.70 303** P **P 07 33 15.1 -0.3**
ORV pmax pmax
comp=Z,16nm,1.4s
**ORV Oroville 63.70 303** P **P 07 33 15.1 -0.3**
ORV IAmb IAmb 07 33 16.8
comp=Z,16nm,1.4s
**LPSR Galich'ya Gora 63.81 42** *e*P **P 07 33 15.4 -0.4**
LPSR pmax pmax
comp=Z,50nm,0.9s
**HUMO Hull Mountain 63.95 306** P **P 07 33 15.4 -1.5**
HUMO IAmb IAmb 07 33 18.1
comp=Z,9.3nm,1.4s
**INK Inuvik 64.03 336** P **P 07 33 16.7 -0.3**
INK pmax pmax
comp=Z,11nm,1.1s
**INK Inuvik 64.03 336** P **P 07 33 16.7 -0.3**
INK IAmb IAmb 07 33 18.2
comp=Z,11nm,1.1s
**INK Inuvik 64.03 336** P **P 07 33 16.1 -0.9**
baz=79,SNR=8.0
**I02E Swisshome, OR 64.18 308** P **P 07 33 18.9 +0.5**
baz=75
**VORR Voronezh 64.19 43** *e*P **P 07 33 18.4 0.0**
VORR pmax pmax
comp=Z,60nm,0.4s
**WDC Whiskeytown Da 64.19 304** P **P 07 33 17.7 -0.9**
WDC pmax pmax
comp=Z,6.0nm,1.2s
**WDC Whiskeytown Da 64.19 304** P **P 07 33 17.7 -0.9**
**N02D Trinity Center 64.20 304** P **P 07 33 18.3 -0.4**
baz=74
**MMPY Sheldon Lake, 64.23 329** P **P 07 33 18.5 -0.1**
baz=78
**VSR Storozhevoye 64.27 44** *e*P **P 07 33 18.1 -0.8**
VSR pmax pmax
comp=Z,20nm,0.9s
**VORD Divnogorie 64.41 44** *e*P **P 07 33 18.5 -1.3**
VORD pmax pmax
comp=Z,10.0nm,0.6s
**K02D Willamette Mer 64.43 306** P **P 07 33 20.1 -0.1**
baz=74
**FARO Faro, Yukon 65.26 329** P **P 07 33 25.2 -0.1**
baz=76,SNR=5.1
**P33M Teslin, Yukon 65.50 327** P **P 07 33 26.8 -0.1**
baz=76
**EPYK Eagle Plains 65.67 334** P **P 07 33 28.2 +0.4**
baz=75
**M31M Drury Creek, Y 65.74 329** P **P 07 33 29.0 +0.6**
baz=75
**VRH Novokhopyorsk 65.83 43** *e*P **P 07 33 28.4 -0.6**
VRH pmax pmax
comp=Z,30nm,0.8s
**MAYO Mayo, Yukon 66.05 331** P **P 07 33 30.5 +0.2**
baz=75
**N31M Braeburn, Yuko 66.57 328** P **P 07 33 33.4 -0.3**
**N31M Braeburn, Yuko 66.57 328** P **P 07 33 33.5 -0.2**
baz=74,SNR=6.2
**I29M Ogilvie Camp, 66.57 333** P **P 07 33 33.8 +0.2**
baz=73
**M30M Minto, Yukon 66.72 330** P **P 07 33 34.6 -0.1**
baz=74
**J29M Klondike Camp 66.80 332** P **P 07 33 35.0 -0.1**
**J29M Klondike Camp 66.80 332** P **P 07 33 35.6 +0.5**
baz=73
**DAWY Dawson 67.40 332** P **P 07 33 38.6 -0.3**
DAWY IAmb IAmb 07 33 39.9
comp=Z,14nm,1.1s
**DAWY Dawson 67.40 332** P **P 07 33 38.9 -0.1**
baz=72,SNR=6.9
**EGAK Eagle 67.90 333** P **P 07 33 42.1 +0.1**
baz=71
**YUK6 Outpost Mounta 67.92 328** P **P 07 33 42.9 +0.3**
baz=72
**YUK4 Talbot Arm 67.93 329** P **P 07 33 42.3 -0.2**
baz=72
**BMAR Burnt Mountain 68.29 336** P **P 07 33 44.9 +0.3**
**BVCY Beaver Creek 68.57 330** P **P 07 33 46.6 +0.3**
baz=70
**KIV Kislovodsk 68.59 51** *e*P **P 07 33 48.1 +1.2**
KIV pmax pmax
comp=Z,17nm,1.1s
**YUK3 Moose Creek 68.61 330** P **P 07 33 46.8 0.0**
baz=70
**BCAR Beaver Creek A 68.74 331** P **P 07 33 47.1 -0.3**
**L27K Beaver Creek, 68.76 331** P **P 07 33 47.6 +0.1**
baz=72
**KBZ Khabaz 68.81 51** P **P 07 33 49.7 +1.7**
comp=Z,9.7nm,0.8s,baz=308,slow=5.5,SNR=16
**NEY Neytrino 68.85 51**⇑ *e*P **P 07 33 51.3 +2.7**
NEY pmax pmax
comp=Z,2.0nm,1.2s
**J26L Joseph Creek 68.97 333** P **P 07 33 49.1 +0.3**
baz=69
**BELG Belogornoye 68.98 41** *d i*P **P 07 33 48.8 -0.1**
BELG pmax pmax
comp=Z,10.0nm,1.0s
**M27K Edge Creek, AK 69.03 330** P **P 07 33 49.5 +0.2**
baz=69
**PRP Porcupine Dome 69.36 334** P **P 07 33 51.5 +0.2**
baz=67
**L26K Log Cabin Wild 69.42 331** P **P 07 33 51.9 +0.3**
baz=68
**ONI Oni 69.57 52** P **P 07 33 54.7 +1.8**
ONI pmax pmax
comp=Z,13nm,1.0s
**ONI Oni 69.57 52** P **P 07 33 54.7 +1.8**
ONI IAmb IAmb 07 33 56.0
comp=Z,13nm,1.0s
**J25K Salcha River, 69.65 333** P **P 07 33 53.1 +0.1**
baz=67
**RIDG Independent Ri 69.78 332** P **P 07 33 53.9 +0.1**
baz=67
**ZEI Tsey 69.82 52** *e*P **P 07 33 55.4 +0.8**
ZEI pmax pmax
comp=Z,11nm,1.1s
**GURO Guroymak-BITLI 69.95 56** P **P 07 33 56.4 +1.0**
GURO IAmb IAmb 07 33 57.8
comp=Z,12nm,1.3s
**H24K Noodor Dome 70.12 335** P **P 07 33 54.3 -1.6**
baz=66
**IL31 70.18 334** P **P 07 33 56.6 +0.5**
IL31 IAmb IAmb 07 33 57.4
comp=Z,13nm,1.1s
**ILAR Eielson Array 70.18 334** P **P 07 33 56.4 +0.2**
comp=Z,6.9nm,1.0s,baz=66,slow=4.4,SNR=16
**ILAR Eielson Array 70.18 334** P **P 07 33 55.8 -0.5**
**PAX Paxson 70.34 332** P **P 07 33 57.4 +0.1**
baz=66
**HDA Harding Lake 70.36 333** P **P 07 33 57.9 +0.6**
baz=66
**COLD Coldfoot 70.37 337** P **P 07 33 58.2 +0.9**
COLD IAmb IAmb 07 34 05.9
comp=Z,14nm,1.3s
**COLD Coldfoot 70.37 337** P **P 07 33 58.0 +0.6**
baz=64,SNR=6.0
**HARP HAARP 70.43 331** P **P 07 33 58.1 +0.3**
baz=67
**N25K Chitina, Valde 70.50 330** P **P 07 33 58.2 -0.1**
baz=67
**COLA College 70.52 334**⇑ *e*P **P 07 33 58.7 +0.5**
COLA pmax pmax
comp=Z,8.0nm,1.1s
**COLA College 70.52 334** P **P 07 33 58.3 +0.1**
**COLA College 70.52 334** P **P 07 33 58.3 +0.1**
baz=65
**TCOL CIGO, UAF Yank 70.52 334** P **P 07 33 58.5 +0.3**
TCOL IAmb IAmb 07 34 06.0
comp=Z,23nm,1.4s
**TCOL CIGO, UAF Yank 70.52 334** P **P 07 33 58.7 +0.4**
baz=65
**CCB Clear Creek Bu 70.59 334** P **P 07 33 59.2 +0.5**
CCB IAmb IAmb 07 33 59.8
comp=Z,19nm,1.3s
**MDM Murphy Dome 70.63 334** P **P 07 33 59.6 +0.7**
MDM IAmb IAmb 07 34 11.3
comp=Z,26nm,1.5s
**BMRM Bremner River 70.76 330** P **P 07 34 00.2 +0.3**
baz=67
**I23K Minto, Yukon-K 70.98 334** P **P 07 34 01.3 +0.3**
baz=64,SNR=5.6
**KLU Klutina 71.13 330** P **P 07 34 02.4 +0.2**
baz=66
**GNI Garni 71.34 54** *ce*P **P 07 34 05.4 +1.5**
GNI pmax pmax
comp=Z,23nm,1.1s
**GNI Garni 71.34 54** P **P 07 34 05.0 +1.1**
**MCK McKinley 71.44 333** P **P 07 34 04.1 +0.2**
MCK pmax pmax
comp=Z,23nm,1.3s
**MCK McKinley 71.44 333** P **P 07 34 04.1 +0.2**
MCK IAmb IAmb 07 34 04.7
comp=Z,23nm,1.3s
**MCK McKinley 71.44 333** P **P 07 34 03.9 0.0**
baz=64
**MLY Manley 71.55 335** P **P 07 34 05.3 +0.7**
baz=63
**LC01 Cunco 71.75 203** P **P 07 34 06.8 +0.8**
**GLI Glacier Island 71.91 330** P **P 07 34 06.9 +0.2**
baz=64
**I21K Tanana 71.95 335** P **P 07 34 07.2 +0.3**
baz=62,SNR=6.2
**H21K Melozitna Rive 72.02 336** P **P 07 34 07.5 +0.1**
baz=61
**SML Sawmill 72.04 331** P **P 07 34 07.2 -0.4**
baz=64
**BPAW Bear Paw Mtn. 72.08 334** P **P 07 34 08.1 +0.3**
baz=62
**PWL Port Wells 72.46 330** P **P 07 34 10.4 +0.3**
baz=64
**PMR Palmer 72.47 331** P **P 07 34 10.3 +0.3**
baz=63
**CUT Chulitna 72.58 332** P **P 07 34 10.8 +0.1**
baz=62
**CHUM Lake Minchumin 72.70 334** P **P 07 34 11.0 -0.4**
baz=61,SNR=6.4
**M22K Willow 72.82 331** P **P 07 34 12.0 -0.1**
baz=62
**CAST Castle Rocks 72.83 333** P **P 07 34 12.0 -0.3**
baz=61
**PLCA Paso Flores 72.97 201** P **P 07 34 13.8 +0.5**
comp=Z,4.8nm,1.1s,baz=29,slow=6.4,SNR=7.9
**PLCA Paso Flores 72.97 201** P **P 07 34 13.8 +0.5**
PLCA IAmb IAmb 07 34 17.2
comp=Z,11nm,1.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PPLA** | **Purkeypile** | **73.13** | **333** | P | | **P** | **07 34 13.9** | **-0.3** |
| | baz=61 | | | | | | | |
| **J20K** | **Nowinta River** | **73.25** | **335** | P | | **P** | **07 34 14.8** | **+0.1** |
| | baz=60 | | | | | | | |
| **ARU** | **Arti** | **73.35** | **35***c* | *i*P | | **P** | **07 34 16.0** | **+0.6** |
| ARU | | | | S | | **SKiKP** | **07 43 46.7** | **0.0** |
| ARU | | | | SS | | **SS** | **07 48 24.9** | **-0.4** |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **ARU** | **Arti** | **73.35** | **35** | P | | **P** | **07 34 15.3** | **-0.1** |
| ARU | | | | IAmb | IAmb | | 07 34 17.0 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **K20K** | **Telida** | **73.64** | **334** | P | | **P** | **07 34 16.8** | **-0.3** |
| | baz=60 | | | | | | | |
| **L20K** | **Farewell, AK** | **74.01** | **333** | P | | **P** | **07 34 18.8** | **-0.4** |
| | baz=60 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **74.04** | **330** | P | | **P** | **07 34 20.0** | **+0.6** |
| | baz=61 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **74.08** | **340** | P | | **P** | **07 34 20.4** | **+0.9** |
| RDOG | | | | IAmb | IAmb | | 07 34 21.2 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **RDOG** | **Red Dog Mine** | **74.08** | **340** | P | | **P** | **07 34 20.2** | **+0.7** |
| | baz=53 | | | | | | | |
| **M19K** | **Big River Lodg** | **74.51** | **333** | P | | **P** | **07 34 22.7** | **+0.5** |
| | baz=59 | | | | | | | |
| **L19K** | **White Mountain** | **74.56** | **333** | P | | **P** | **07 34 22.2** | **-0.2** |
| | baz=59 | | | | | | | |
| **N19K** | **Bonanza Creek** | **75.12** | **332** | P | | **P** | **07 34 25.7** | **0.0** |
| | baz=59 | | | | | | | |
| **NRIK** | **Noril'sk** | **76.53** | **16** | P | | **P** | **07 34 34.9** | **+1.4** |
| | comp=Z,7.4nm,1.0s,baz=71,slow=3.9,SNR=5.4 | | | | | | | |
| **NRIK** | **Noril'sk** | **76.53** | **16** | P | | **P** | **07 34 34.3** | **+0.8** |
| NRIK | | | | IAmb | IAmb | | 07 34 38.2 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **MBAR** | **Mbarara** | **76.64** | **98**⇑ | *i*P | | **P** | **07 34 37.4** | **+2.1** |
| **ANM** | **Nome** | **77.03** | **338** | P | | **P** | **07 34 36.9** | **+0.4** |
| | baz=50 | | | | | | | |
| **TNA** | **Tin City** | **77.20** | **339** | P | | **P** | **07 34 37.5** | **+0.1** |
| **TNA** | **Tin City** | **77.20** | **339** | P | | **P** | **07 34 38.0** | **+0.6** |
| | baz=48 | | | | | | | |
| **ABKAR** | **Akbulak array** | **77.38** | **41** | P | | **P** | **07 34 39.4** | **+0.7** |
| ABKAR | | | | IAmb | IAmb | | 07 34 40.7 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **ABKAR** | **Akbulak array** | **77.38** | **41** | P | | **P** | **07 34 39.0** | **+0.3** |
| **LODK** | **Lodwar** | **78.79** | **92** | P | | **P** | **07 34 48.8** | **+1.5** |
| **TIXI** | **Tiksi** | **80.27** | **2**⇑ | *e*P | | **P** | **07 34 54.7** | **+0.5** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **TIXI** | **Tiksi** | **80.27** | **2** | P | | **P** | **07 34 54.1** | **0.0** |
| TIXI | | | | IAmb | IAmb | | 07 34 55.7 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **BRVK** | **Borovoye** | **80.90** | **34**⇑ | *e*P | | **P** | **07 34 59.1** | **+1.2** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **BILL** | **Bilibino** | **81.47** | **349**⇑ | *e*P | | **P** | **07 35 00.5** | **-0.1** |
| BILL | | | | *e* | | | 07 38 09.2 | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,178nm,18.0s | | | | | | | |
| **GEYT** | **Alibeck** | **81.69** | **51** | P | | **P** | **07 35 03.4** | **+0.9** |
| | comp=Z,4.4nm,0.8s,baz=66,slow=8.3,SNR=4.0 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **82.60** | **95**⇑ | *e*P | | **P** | **07 35 10.4** | **+2.6** |
| **KURK** | **Kurchatov** | **86.40** | **33**⇑ | *e*P | | **P** | **07 35 26.7** | **+0.6** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **KURK** | **Kurchatov** | **86.40** | **33** | P | | **P** | **07 35 26.1** | **0.0** |
| KURK | | | | IAmb | IAmb | | 07 35 27.7 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **86.89** | **28** | P | | **P** | **07 35 29.7** | **+1.2** |
| | comp=Z,2.5nm,1.0s,baz=299,slow=3.1,SNR=5.7 | | | | | | | |
| **SEY** | **Seymchan** | **88.25** | **353**⇑ | *i*P | | **P** | **07 35 35.2** | **+0.4** |
| **AAK** | **Ala-Archa** | **89.47** | **41**⇑ | *e*P | | **P** | **07 35 42.8** | **+1.6** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **AAK** | **Ala-Archa** | **89.47** | **41** | P | | **P** | **07 35 42.1** | **+0.9** |
| **MAKZ** | **Makanchi** | **90.69** | **34** | P | | **P** | **07 35 46.6** | **-0.1** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **MAKZ** | **Makanchi** | **90.69** | **34** | P | | **P** | **07 35 46.5** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | | 07 35 48.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **90.86** | **34***ce* | P | | **P** | **07 35 47.9** | **+0.5** |
| **MK31** | **Makanchi Array** | **90.86** | **34** | P | | **P** | **07 35 47.5** | **+0.1** |
| **MKAR** | **Makanchi Array** | **90.86** | **34** | P | | **P** | **07 35 47.8** | **+0.4** |
| | comp=Z,2.9nm,1.0s,baz=309,slow=4.1,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **90.86** | **34** | P | | **P** | **07 35 47.1** | **-0.3** |
| **DGZ** | **Jazzator, Alta** | **91.12** | **29**⇑ | *e*P | | **P** | **07 35 50.0** | **+1.2** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **MA2** | **Magadan** | **91.71** | **353**‖ | *e*P | | **P** | **07 35 51.7** | **+0.6** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| **KSH** | **Kashi** | **92.31** | **42** | P | | **P** | **07 35 55.4** | **+1.0** |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **WMQ** | **Urumqi** | **95.64** | **33** | *e*P | | **P** | **07 36 11.0** | **+1.4** |
| WMQ | | | | LR | LR | | | |
| | comp=N,210nm,26.1s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=E,200nm,27.5s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,230nm,23.3s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **102.04** | **169** | P | | **Pdif** | **07 36 24.3** | **-13** |
| **VNA2** | **Neumayer--Watz** | **102.16** | **169** | P | | **Pdif** | **07 36 26.1** | **-12** |
| | baz=327,slow=15 | | | | | | | |
| **SNAA** | **Sanae** | **103.60** | **168** | P | | **Pdif** | **07 36 47.9** | **+3.6** |
| **HHC** | **Hu-ho-hao-te** | **107.56** | **19** | *e*P | | **Pdif** | **07 37 02.0** | **-1.0** |
| **LZH** | **Lanzhou** | **109.13** | **27** | *e*P | | **Pdif** | **07 37 10.3** | **+0.2** |
| **SYO** | **Syowa Base** | **113.70** | **157**⇑ | *i*X | | **Pdif** | **07 37 20.0** | **-9.1** |
| **PZH** | **PanZhiHua** | **116.29** | **34** | PKP | | **PKiKP** | **07 41 27.5** | **-0.5** |
| **NJ2** | **Nanjing** | **117.82** | **17** | *e*P | | **PKPdf** | **07 41 30.9** | **+0.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **171.58** | **12** | PKP | | **PKPdf** | **07 42 52.7** | **-0.4** |
| | comp=Z,0.8nm,1.0s,baz=331,slow=1.3,SNR=3.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **175.00** | **26** | PKP | | **PKPdf** | **07 42 53.8** | **-0.6** |
| | comp=Z,0.7nm,0.9s,baz=38,slow=0.6,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **175.00** | **26** | PKIKP | | **PKPdf** | **07 42 53.3** | **-1.0** |
| ASAR | | | | | | | 07 44 28.6 | |
| **ASAR** | **Alice Springs** | **175.00** | **26** | | | **PKPdf** | **07 42 53.3** | **-1.0** |
| ASAR | | | | PKPab | | **PKPab** | **07 44 28.6** | **-0.6** |

**IDC 09 07:30:02.4±3.2, 27°69N×44°03W, h0km, mb3.6/4, mb1 3.9/4, mb1mx3.5/53, mbtmp3.6/4, Error ellipse: s-maj=152.7km s-min=30.9km az=27.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **44.97** | **99** | P | P | 07 38 19.5 | -0.1 |
| | 0.8nm,0.9s,baz=311,slow=6.6,SNR=4.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.32** | **304** | P | P | 07 39 31.1 | +0.2 |
| | 0.2nm,0.5s,baz=78,slow=10,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.89** | **328** | P | P | 07 39 47.8 | -0.9 |
| | 0.6nm,0.9s,baz=97,slow=6.7,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **70.55** | **334** | P | P | 07 41 19.4 | +0.5 |
| | 0.8nm,1.0s,baz=81,slow=5.1,SNR=5.2 | | | | | | |

*IDC **09** 07:37:11.8±0.4, 74°11N×71°79W, h0km, mb4.2/26, mb1 4.4/33, mb1mx4.2/58, mbtmp4.2/33, ML4.1/7, MS3.9/3, Ms1 4.0/3, ms1mx3.2/92, Error ellipse: s-maj=14.0km s-min=9.3km az=139.0*

*OTT **09** 07:37:12.2±0.2, 74°06N×72°14W, h18km, ML4.6/5, 241km northeast from Pond Inlet, Nu Baffin Bay Seismic Zone.*

*NEIC **09** 07:37:14.3±1.5, 74°18N±0°06×71°7W±0°2, h14km±4km, Error ellipse: s-maj=10.2km s-min=3.2km az=220.0*

*DNK **09** 07:37:14.4±4.9, 74°15N×71°07W, h20km±165km, ML3.1*

**ISC 09 07:37:12.4±0.3, 74°10N±0°04×71°83W±0°04, h10km, n258, σ2s14/262, mb4.5/65, MS4.2/5, 1C-1D, Baffin Bay**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TULEG** | **Thule** | **2.57** | **16**‖ | *i*P | **Pn** | **07 37 52.1** | **-1.9** |
| TULEG | | | | *i* S | **Sn** | **07 38 19.5** | **-5.7** |
| TULEG | | | | IAML | | 07 38 22.4 | |
| | comp=Z,947nm,0.3s | | | | | | |
| **TULEG** | **Thule** | **2.57** | **16** | | **Pn** | **07 37 52.5** | **-1.4** |
| **CLRN** | **Clyde River** | **3.77** | **163** | PN | **Pn** | **07 38 09.8** | **-0.6** |
| CLRN | | | | SN | **Sn** | **07 38 50.9** | **-3.9** |
| CLRN | | | | Trac | | 07 38 54.8 | |
| | comp=Z,377nm,0.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UPNV** | **Upernavik** | **4.67** | **99** | *i*P | | **Pn** | **07 38 21.6** | **-1.2** |
| UPNV | | | | *i* S | | **Sn** | **07 39 10.4** | **-6.6** |
| UPNV | | | | IAML | | | 07 39 20.1 | |
| | comp=Z,206nm,0.4s | | | | | | | |
| **NUUG** | **Nuugaatsiaq** | **6.07** | **106** | *i*P | | **Pn** | **07 38 41.8** | **-0.2** |
| NUUG | | | | *i* S | | **Sn** | **07 39 47.6** | **-3.7** |
| NUUG | | | | IAML | | | 07 39 50.7 | |
| | comp=Z,47nm,0.4s | | | | | | | |
| **NEEM** | **North Greenlan** | **6.09** | **47**⇑ | *i*P | | **Pn** | **07 38 41.1** | **-1.4** |
| NEEM | | | | *i* S | | **Sn** | **07 39 45.9** | **-6.4** |
| NEEM | | | | IAML | | | 07 39 49.4 | |
| | comp=Z,118nm,0.4s | | | | | | | |
| **RES** | **Resolute Bay** | **6.23** | **286** | Pn | | **Pn** | **07 38 42.7** | **-1.5** |
| | comp=Z,6.4nm,0.3s,baz=75,slow=11,SNR=101 | | | | | | | |
| RES | | | | | Sn | Sn | 07 39 46.8 | -8.5 |
| | comp=Z,14nm,0.3s,baz=188,slow=15,SNR=7.3 | | | | | | | |
| **RES** | **Resolute Bay** | **6.23** | **286** | | | **Pn** | **07 38 42.5** | **-1.6** |
| **RES** | **Resolute Bay** | **6.23** | **286** | PN | | **Pn** | **07 38 42.7** | **-1.5** |
| RES | | | | SN | | **Sn** | **07 39 48.0** | **-7.4** |
| RES | | | | Trac | | | 07 40 31.4 | |
| | comp=Z,217nm,0.9s | | | | | | | |
| **EUNU** | **Eureka** | **6.79** | **338** | | | **Pn** | **07 38 49.8** | **-2.0** |
| **EUNU** | **Eureka** | **6.79** | **338** | PN | | **Pn** | **07 38 49.9** | **-2.0** |
| EUNU | | | | SN | | **Sn** | **07 40 01.6** | **-7.4** |
| EUNU | | | | Trac | | | 07 40 22.6 | |
| | comp=Z,355nm,1.9s | | | | | | | |
| **ILULI** | **Ilulissat** | **8.13** | **117** | *i*P | | **Pn** | **07 39 10.0** | **-0.1** |
| ILULI | | | | *i* S | | **Sn** | **07 40 36.7** | **-5.2** |
| ILULI | | | | IAML | | | 07 40 47.8 | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **ILULI** | **Ilulissat** | **8.13** | **117** | | | **Pn** | **07 39 12.3** | **+2.1** |
| **ILULI** | **Ilulissat** | **8.13** | **117** | PN | | **Pn** | **07 39 09.7** | **-0.5** |
| ILULI | | | | SN | | **Sn** | **07 40 36.2** | **-5.6** |
| ILULI | | | | Trac | | | 07 41 00.1 | |
| | comp=Z,36nm,0.5s | | | | | | | |
| **SUMG** | **Summit** | **9.62** | **83** | *i*P | | **Pn** | **07 39 27.5** | **-3.4** |
| SUMG | | | | *i* S | | Sn | 07 41 07.2 | -12 |
| SUMG | | | | IAML | | | 07 41 20.4 | |
| | comp=Z,61nm,0.3s | | | | | | | |
| **SUMG** | **Summit** | **9.62** | **83** | Pn | | **Pn** | **07 39 28.0** | **-2.9** |
| **SFJD** | **Kangerlussuaq** | **9.97** | **125** | Pn | | **Pn** | **07 39 34.0** | **-1.3** |
| | comp=Z,1.2nm,0.3s,baz=323,slow=12,SNR=6.8 | | | | | | | |
| SFJD | | | | | Sn | Sn | 07 41 17.3 | -10 |
| | comp=Z,1.5nm,0.3s,baz=7.1,slow=15,SNR=1.9 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **9.97** | **125** | *e*P | | **Pn** | **07 39 31.8** | **-3.5** |
| **SFJD** | **Kangerlussuaq** | **9.97** | **125** | Pn | | **Pn** | **07 39 35.7** | **+0.3** |
| **SFJD** | **Kangerlussuaq** | **9.97** | **125** | PN | | **Pn** | **07 39 34.2** | **-1.1** |
| SFJD | | | | SN | | Sn | 07 41 18.5 | -8.5 |
| SFJD | | | | Trac | | | 07 42 05.5 | |
| | comp=Z,112nm,5.2s | | | | | | | |
| **FRB** | **Frobisher Bay** | **10.46** | **172** | Pn | | **Pn** | **07 39 40.0** | **-2.2** |
| | comp=Z,2.2nm,0.3s,baz=354,slow=12,SNR=46 | | | | | | | |
| FRB | | | | | Sn | Sn | 07 41 29.5 | -10 |
| | comp=Z,11nm,0.3s,baz=302,slow=16,SNR=8.4 | | | | | | | |
| **FRB** | **Frobisher Bay** | **10.46** | **172** | PN | | **Pn** | **07 39 39.3** | **-2.9** |
| FRB | | | | SN | | Sn | 07 41 28.9 | -10 |
| FRB | | | | Trac | | | 07 41 31.8 | |
| | comp=Z,47nm,0.5s | | | | | | | |
| **ICESG** | **Greenland Ices** | **11.21** | **100** | *i*P | | **Pn** | **07 39 50.6** | **-2.0** |
| ICESG | | | | *i* S | | Sn | 07 41 47.4 | -10 |
| ICESG | | | | IAML | | | 07 41 58.3 | |
| | comp=Z,23nm,0.4s | | | | | | | |
| **NOR** | **Nord** | **13.10** | **32** | *i*P | | Pn | 07 40 12.3 | -5.8 |
| NOR | | | | *i* S | | Sn | 07 42 28.6 | -15 |
| NOR | | | | IAML | | | 07 42 37.5 | |
| | comp=Z,20nm,0.4s | | | | | | | |
| **DAG** | **Danmarks Havn** | **13.23** | **54** | *i*P | | **Pn** | **07 40 15.9** | **-3.9** |
| DAG | | | | *i* S | | Sn | 07 42 28.0 | -19 |
| DAG | | | | IAML | | | 07 42 38.3 | |
| | comp=Z,37nm,0.4s | | | | | | | |
| **DBG** | **Daneborg** | **13.70** | **64** | *i*P | | Pn | 07 40 20.4 | -5.9 |
| DBG | | | | *i* S | | Sn | 07 42 40.6 | -18 |
| DBG | | | | IAML | | | 07 43 00.1 | |
| | comp=Z,12nm,0.4s | | | | | | | |
| **ISOG** | **Isortoq, Green** | **13.97** | **111** | *e*P | | **Pn** | **07 40 28.4** | **-1.6** |
| **SOEG** | **Soedalen** | **14.06** | **94** | *e*P | | Pn | 07 40 27.1 | -4.1 |
| SOEG | | | | *i* S | | Sn | 07 42 49.3 | -18 |
| SOEG | | | | IAML | | | 07 43 32.8 | |
| | comp=Z,20nm,0.4s | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **14.27** | **109** | *e*P | | **Pn** | **07 40 31.4** | **-2.5** |
| **ANGG** | **Ammassalik, Gr** | **14.27** | **109** | Pn | | **Pn** | **07 40 30.8** | **-3.2** |
| **KUKN** | **Kugluktuk,NWT** | **15.09** | **268** | PN | | **Pn** | **07 40 41.2** | **-4.1** |
| KUKN | | | | SN | | Sn | 07 43 14.9 | -17 |
| KUKN | | | | Trac | | | 07 43 46.6 | |
| | comp=Z,2μm,5.6s | | | | | | | |
| **SCO** | **Scoresbysund** | **15.20** | **79** | *i*P | | **Pn** | **07 40 41.0** | **-5.6** |
| SCO | | | | *i* S | | Sn | 07 43 16.4 | -18 |
| SCO | | | | IAML | | | 07 43 23.2 | |
| | comp=Z,5.2nm,0.4s | | | | | | | |
| **SCO** | **Scoresbysund** | **15.20** | **79** | Pn | | Pn | 07 40 39.9 | -6.6 |
| SCO | | | | IAmb | | IAmb | 07 41 05.3 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **A36M** | **Sachs Harbour** | **15.28** | **289** | PN | | **Pn** | **07 40 45.0** | **-2.7** |
| A36M | | | | SN | | Sn | 07 43 23.1 | -14 |
| A36M | | | | Trac | | | 07 43 31.4 | |
| | comp=Z,1μm,5.1s | | | | | | | |
| **A36M** | **Sachs Harbour** | **15.28** | **289** | P | | **Pn** | **07 40 43.4** | **-4.3** |
| | baz=57,SNR=13 | | | | | | | |
| **C36M** | **Paulatuk** | **16.54** | **280** | P | | **Pn** | **07 41 01.8** | **-2.2** |
| **C36M** | **Paulatuk** | **16.54** | **280** | PN | | **Pn** | **07 41 00.8** | **-3.2** |
| C36M | | | | SN | | Sn | 07 43 52.0 | -15 |
| C36M | | | | Trac | | | 07 44 24.9 | |
| | comp=Z,2μm,5.3s | | | | | | | |
| **C36M** | **Paulatuk** | **16.54** | **280** | P | | **Pn** | **07 41 00.4** | **-3.6** |
| | baz=50 | | | | | | | |
| **FCC** | **Fort Churchill** | **17.57** | **221** | | | **Pn** | **07 41 12.7** | **-4.2** |
| **FCC** | **Fort Churchill** | **17.57** | **221** | PN | | **Pn** | **07 41 13.0** | **-3.8** |
| FCC | | | | SN | | Sn | 07 44 16.4 | -16 |
| FCC | | | | Trac | | | 07 45 58.1 | |
| | comp=Z,2μm,5.8s | | | | | | | |
| **SAKN** | **Sanikiluaq** | **17.88** | **193** | PN | | **Pn** | **07 41 17.3** | **-3.4** |
| **KBS** | **Kingsbay** | **18.40** | **38** | *i*P | | **Pn** | **07 41 25.2** | **-1.8** |
| **YKA** | **Yellowknife Ar** | **19.04** | **255** | Pn | | **P** | **07 41 30.0** | **-4.0** |
| | comp=Z,1.2nm,0.3s,baz=42,slow=11,SNR=57 | | | | | | | |
| YKA | | | | | Sn | Sn | 07 44 44.5 | -23 |
| | comp=Z,0.3nm,0.3s,baz=31,slow=22,SNR=4.4 | | | | | | | |
| **KJKQ** | **Kuujjuarapik** | **19.05** | **190** | PN | | **P** | **07 41 31.9** | **-2.3** |
| KJKQ | | | | SN | | Sn | 07 44 51.3 | -17 |
| KJKQ | | | | Trac | | | 07 45 59.3 | |
| | comp=Z,99nm,0.8s | | | | | | | |
| **SCHQ** | **Schefferville** | **19.45** | **171** | Pn | | **P** | **07 41 35.3** | **-3.4** |
| | comp=Z,0.7nm,0.3s,baz=3.5,slow=9.4,SNR=14 | | | | | | | |
| SCHQ | | | | | Sn | Sn | 07 45 00.4 | -17 |
| | comp=Z,0.6nm,0.3s,baz=48,slow=15,SNR=2.6 | | | | | | | |
| **SCHQ** | **Schefferville** | **19.45** | **171** | P | | **P** | **07 41 36.0** | **-2.7** |
| **SCHQ** | **Schefferville** | **19.45** | **171** | PN | | **P** | **07 41 35.5** | **-3.1** |
| SCHQ | | | | SN | | Sn | 07 45 01.2 | -17 |
| SCHQ | | | | Trac | | | 07 47 21.9 | |
| | comp=Z,3μm,6.0s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **19.55** | **38** | P | | **P** | **07 41 39.8** | **+0.2** |
| | baz=276,slow=8.2,SNR=32 | | | | | | | |
| SPITS | | | | | S | Sn | 07 45 02.1 | -18 |
| | baz=320,slow=21,SNR=1.8 | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **19.55** | **38** | P | | **Pn** | **07 41 40.9** | **-0.1** |
| SPB2 | | | | | IAmb | IAmb | 07 41 56.0 | |
| | comp=Z,35nm,1.1s | | | | | | | |
| **MKVL** | **Makkovik** | **19.75** | **158** | PN | | **P** | **07 41 43.0** | **+1.2** |
| MKVL | | | | SN | | **S** | **07 45 17.8** | **-6.2** |
| **INK** | **Inuvik** | **19.79** | **285** | P | | **P** | **07 41 42.9** | **+0.7** |
| | comp=Z,0.6nm,0.3s,baz=24,slow=10.0,SNR=18 | | | | | | | |
| INK | | | | | S | S | 07 45 07.9 | -17 |
| | comp=Z,0.1nm,0.3s,baz=311,slow=5.9,SNR=4.4 | | | | | | | |
| **INK** | **Inuvik** | **19.79** | **285** | P | | **P** | **07 41 42.5** | **+0.3** |
| **INK** | **Inuvik** | **19.79** | **285** | PN | | **P** | **07 41 42.1** | **-0.1** |
| INK | | | | SN | | S | 07 45 08.3 | -16 |
| INK | | | | Trac | | | 07 46 26.5 | |
| | comp=Z,1μm,6.4s | | | | | | | |
| **INK** | **Inuvik** | **19.79** | **285** | P | | **P** | **07 41 42.5** | **+0.3** |
| | baz=46,SNR=11 | | | | | | | |
| **LG4Q** | **La Grande 4** | **20.57** | **184** | PN | | **P** | **07 41 49.6** | **-1.3** |
| LG4Q | | | | SN | | S | 07 45 25.7 | -15 |
| LG4Q | | | | Trac | | | 07 45 40.5 | |
| | comp=Z,18nm,0.5s | | | | | | | |
| **WRGLY** | **Wrigley** | **20.85** | **266** | P | | **P** | **07 41 54.8** | **+1.1** |
| | baz=38 | | | | | | | |
| **VIMO** | **Victor Mine** | **21.92** | **200** | PN | | **P** | **07 42 05.7** | **+0.3** |
| **EPYK** | **Eagle Plains** | **22.05** | **284** | P | | **P** | **07 42 06.8** | **+0.1** |
| EPYK | | | | | IAmb | IAmb | 07 42 32.4 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **EPYK** | **Eagle Plains** | **22.05** | **284** | P | | **P** | **07 42 07.0** | **+0.3** |
| | baz=42 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **23.25** | **283** | P | | **P** | **07 42 21.3** | **+2.0** |
| I29M | | | | | IAmb | IAmb | 07 42 35.5 | |
| | comp=Z,17nm,1.1s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **I29M** | **Ogilvie Camp,** | **23.25** | **283** | P | | **P** | **07 42 19.8** | **+0.5** |
| | baz=40 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **23.32** | **291** | P | | **P** | **07 42 20.3** | **+0.2** |
| **MMPY** | **Sheldon Lake,** | **23.49** | **273** | P | | **P** | **07 42 22.9** | **+1.1** |
| | baz=37 | | | | | | | |
| **J29M** | **Klondike Camp** | **23.93** | **282** | P | | **P** | **07 42 27.4** | **+1.4** |
| J29M | | | | | IAmb | IAmb | 07 42 29.0 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **J29M** | **Klondike Camp** | **23.93** | **282** | P | | **P** | **07 42 27.1** | **+1.0** |
| | baz=39 | | | | | | | |
| **MAYO** | **Mayo, Yukon** | **23.97** | **278** | P | | **P** | **07 42 27.3** | **+0.9** |
| | baz=38 | | | | | | | |
| **FYU** | **Fort Yukon** | **24.14** | **290** | P | | **P** | **07 42 29.1** | **+1.2** |
| FYU | | | | | IAmb | IAmb | 07 42 36.7 | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **FARO** | **Faro, Yukon** | **24.38** | **274** | P | | **P** | **07 42 30.1** | **-0.1** |
| | baz=36 | | | | | | | |
| **EGAK** | **Eagle** | **24.46** | **285** | P | | **P** | **07 42 31.6** | **+0.7** |
| **EGAK** | **Eagle** | **24.46** | **285** | P | | **P** | **07 42 31.4** | **+0.5** |
| | baz=39 | | | | | | | |
| **DAWY** | **Dawson** | **24.55** | **282** | P | | **P** | **07 42 32.7** | **+0.9** |
| DAWY | | | | | IAmb | IAmb | 07 42 48.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **DAWY** | **Dawson** | **24.55** | **282** | P | | **P** | **07 42 32.7** | **+0.9** |
| | baz=38 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **24.68** | **275** | P | | **P** | **07 42 33.9** | **+1.0** |
| **M31M** | **Drury Creek, Y** | **24.68** | **275** | P | | **P** | **07 42 33.5** | **+0.6** |
| | baz=36 | | | | | | | |
| **COLD** | **Coldfoot** | **24.90** | **295** | P | | **P** | **07 42 36.3** | **+1.5** |
| COLD | | | | | IAmb | IAmb | 07 42 37.2 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **COLD** | **Coldfoot** | **24.90** | **295** | P | | **P** | **07 42 35.8** | **+1.0** |
| | baz=40,SNR=13 | | | | | | | |
| **PRP** | **Porcupine Dome** | **25.03** | **289** | P | | **P** | **07 42 37.3** | **+1.1** |
| | baz=39,SNR=7.6 | | | | | | | |
| **M30M** | **Minto, Yukon** | **25.04** | **278** | P | | **P** | **07 42 38.8** | **+2.7** |
| M30M | | | | | IAmb | IAmb | 07 42 42.6 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **M30M** | **Minto, Yukon** | **25.04** | **278** | P | | **P** | **07 42 37.0** | **+0.9** |
| | baz=36 | | | | | | | |
| **J26L** | **Joseph Creek** | **25.32** | **286** | P | | **P** | **07 42 40.6** | **+1.9** |
| **J26L** | **Joseph Creek** | **25.32** | **286** | P | | **P** | **07 42 39.5** | **+0.7** |
| | baz=38 | | | | | | | |
| **H24K** | **Noodor Dome** | **25.39** | **291** | P | | **P** | **07 42 41.4** | **+2.0** |
| **H24K** | **Noodor Dome** | **25.39** | **291** | P | | **P** | **07 42 40.4** | **+1.0** |
| | baz=39 | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **25.65** | **275** | P | | **P** | **07 42 43.1** | **+1.4** |
| | baz=35 | | | | | | | |
| **J25K** | **Salcha River,** | **25.71** | **288** | P | | **P** | **07 42 43.8** | **+1.5** |
| **J25K** | **Salcha River,** | **25.71** | **288** | P | | **P** | **07 42 43.1** | **+0.8** |
| | baz=38 | | | | | | | |
| **SCRK** | **Sand Creek** | **25.85** | **286** | P | | **P** | **07 42 44.3** | **+0.7** |
| | baz=37 | | | | | | | |
| **P33M** | **Teslin, Yukon** | **25.89** | **271** | P | | **P** | **07 42 45.7** | **+1.8** |
| | baz=34 | | | | | | | |
| **IL31** | | **25.98** | **289** | P | | **P** | **07 42 46.0** | **+1.5** |
| IL31 | | | | | IAmb | IAmb | 07 43 03.3 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **25.98** | **289** | P | | **P** | **07 42 46.2** | **+1.5** |
| | comp=Z,3.8nm,0.9s,baz=34,slow=11,SNR=24 | | | | | | | |
| **ILAR** | **Eielson Array** | **25.98** | **289** | P | | **P** | **07 42 45.6** | **+1.0** |
| **BCAR** | **Beaver Creek A** | **26.00** | **283** | P | | **P** | **07 42 47.7** | **+2.9** |
| **L27K** | **Beaver Creek,** | **26.01** | **283** | P | | **P** | **07 42 47.9** | **+2.9** |
| L27K | | | | | IAmb | IAmb | 07 42 48.2 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **L27K** | **Beaver Creek,** | **26.01** | **283** | P | | **P** | **07 42 46.7** | **+1.8** |
| | baz=36 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **26.02** | **217** | P | | **P** | **07 42 45.6** | **+0.5** |
| | comp=Z,10nm,0.8s,baz=12,slow=10,SNR=9.8 | | | | | | | |
| **WHY** | **Whitehorse** | **26.09** | **273** | P | | **P** | **07 42 47.0** | **+1.2** |
| | baz=34 | | | | | | | |
| **DOT** | **Dot Lake** | **26.14** | **285** | P | | **P** | **07 42 48.2** | **+2.2** |
| DOT | | | | | IAmb | IAmb | 07 42 49.4 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **VLDQ** | **Val d'Or** | **26.19** | **189** | P | | **P** | **07 42 47.5** | **+0.9** |
| **RIDG** | **Independent Ri** | **26.27** | **286** | P | | **P** | **07 42 49.0** | **+1.7** |
| | baz=37 | | | | | | | |
| **BVCY** | **Beaver Creek** | **26.28** | **281** | P | | **P** | **07 42 49.7** | **+2.4** |
| | baz=36 | | | | | | | |
| **HDA** | **Harding Lake** | **26.29** | **289** | P | | **P** | **07 42 48.7** | **+1.3** |
| HDA | | | | | IAmb | IAmb | 07 42 50.1 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **HDA** | **Harding Lake** | **26.29** | **289** | P | | **P** | **07 42 49.3** | **+1.9** |
| | baz=37 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **26.32** | **291** | P | | **P** | **07 42 49.7** | **+2.1** |
| | baz=38 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **26.45** | **284** | P | | **P** | **07 42 51.3** | **+2.4** |
| | baz=36 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **26.60** | **282** | P | | **P** | **07 42 52.8** | **+2.4** |
| | baz=36 | | | | | | | |
| **D

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TIXI** | **Tiksi** | **33.90** | **348** | P | **P** | **07 43 55.9** | **+1.3** |
| | comp=Z,2.8nm,0.7s,baz=272,slow=22,SNR=9.6 | | | | | | |
| **YHH** | **Holmes Hill** | **34.16** | **233** | P | **P** | **07 43 59.7** | **+2.1** |
| YHH | | | | IAmb | IAmb | 07 44 00.8 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **LKWY** | **Lake** | **34.28** | **232** | P | **P** | **07 44 01.5** | **+3.0** |
| LKWY | | | | IAmb | IAmb | 07 44 02.7 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **34.36** | **195** | P | **P** | **07 44 00.4** | **+1.5** |
| | baz=5.3 | | | | | | |
| **FINES** | **FINESS Array B** | **34.44** | **57** | P | **P** | **07 44 01.4** | **+2.1** |
| | comp=Z,2.9nm,0.8s,baz=340,slow=7.6,SNR=1.6 | | | | | | |
| **H17A** | **Grant Village** | **34.48** | **232** | P | **P** | **07 44 03.5** | **+3.2** |
| | baz=18,SNR=5.6 | | | | | | |
| **MCWV** | **Mont Chateau** | **34.74** | **191** | P | **P** | **07 44 03.9** | **+1.7** |
| | baz=3.7 | | | | | | |
| **D04E** | **Lakebay** | **34.78** | **248** | P | **P** | **07 44 03.6** | **+1.2** |
| | baz=22 | | | | | | |
| **FLWY** | **Flagg Ranch** | **34.80** | **232** | P | **P** | **07 44 03.9** | **+0.9** |
| **PLID** | **Pearl Lake** | **35.06** | **239** | P | **P** | **07 44 06.1** | **+0.9** |
| **MOOW** | **Moose Ponds** | **35.13** | **232** | P | **P** | **07 44 07.4** | **+1.6** |
| **LOHW** | **Long Hollow** | **35.23** | **232** | P | **P** | **07 44 09.5** | **+2.8** |
| LOHW | | | | IAmb | IAmb | 07 44 10.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **K22A** | **Casper** | **35.30** | **227** | P | **P** | **07 44 07.4** | **+0.2** |
| | baz=16,SNR=5.6 | | | | | | |
| **SNOW** | **Snow King Moun** | **35.41** | **232** | P | **P** | **07 44 11.3** | **+3.1** |
| SNOW | | | | IAmb | IAmb | 07 44 11.9 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **BW06** | **Boulder Array** | **35.81** | **230** | P | **P** | **07 44 13.5** | **+1.8** |
| BW06 | | | | IAmb | IAmb | 07 44 14.5 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **BW06** | **Boulder Array** | **35.81** | **230** | P | **P** | **07 44 13.0** | **+1.2** |
| | baz=17,SNR=5.8 | | | | | | |
| **PD31** | **Pinedale Array** | **35.81** | **230** | P | **P** | **07 44 13.4** | **+1.7** |
| PD31 | | | | IAmb | IAmb | 07 44 14.5 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **35.81** | **230** | P | **P** | **07 44 13.4** | **+1.7** |
| | comp=Z,3.1nm,0.7s,baz=29,slow=6.4,SNR=28 | | | | | | |
| **PDAR** | **Pinedale Array** | **35.81** | **230** | P | **P** | **07 44 13.7** | **+2.0** |
| **OGNE** | **Ogallala** | **36.10** | **220** | P | **P** | **07 44 16.3** | **+2.3** |
| | baz=14 | | | | | | |
| **HLID** | **Hailey** | **36.13** | **237** | P | **P** | **07 44 16.4** | **+2.0** |
| HLID | | | | IAmb | IAmb | 07 44 17.3 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **HLID** | **Hailey** | **36.13** | **237** | P | **P** | **07 44 15.7** | **+1.4** |
| | baz=18,SNR=8.6 | | | | | | |
| **NRIK** | **Noril'sk** | **36.19** | **12** | P | **P** | **07 44 15.4** | **+1.1** |
| | comp=Z,1.3nm,0.5s,baz=9.3,slow=11,SNR=1.9 | | | | | | |
| **G03D** | **McMinnville, O** | **36.73** | **248** | P | **P** | **07 44 20.7** | **+1.4** |
| | baz=21 | | | | | | |
| **I07A** | **Izee** | **36.85** | **243** | P | **P** | **07 44 23.5** | **+3.1** |
| I07A | | | | IAmb | IAmb | 07 44 37.4 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **N23A** | **Red Feather La** | **36.88** | **225** | P | **P** | **07 44 22.9** | **+2.1** |
| N23A | | | | IAmb | IAmb | 07 44 26.5 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **36.88** | **225** | P | **P** | **07 44 22.4** | **+1.5** |
| | baz=15,SNR=5.2 | | | | | | |
| **R40A** | **Maddies Statio** | **37.20** | **207** | P | **P** | **07 44 24.6** | **+1.2** |
| **ISCO** | **Idaho Springs** | **37.87** | **224** | P | **P** | **07 44 31.1** | **+1.7** |
| | baz=14,SNR=5.8 | | | | | | |
| **KLMR** | **Klimovskoe** | **37.90** | **48** | *e*P | **P** | **07 44 27.5** | **-1.5** |
| KLMR | | | | AMP | | 07 44 36.1 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **J05D** | **Fort Rock, OR** | **38.03** | **244** | P | **P** | **07 44 32.6** | **+2.2** |
| | baz=20 | | | | | | |
| **TZTN** | **Tazewell** | **38.07** | **195** | P | **P** | **07 44 32.5** | **+1.8** |
| | baz=5.1 | | | | | | |
| **O20A** | **White River Ci** | **38.07** | **228** | P | **P** | **07 44 32.3** | **+1.4** |
| | baz=15,SNR=8.3 | | | | | | |
| **Q24A** | **Divide** | **38.59** | **223** | P | **P** | **07 44 37.4** | **+2.0** |
| | baz=14 | | | | | | |
| **V55A** | **Taylorsville** | **38.60** | **192** | P | **P** | **07 44 37.0** | **+1.9** |
| **V52A** | **Sevierville** | **38.77** | **195** | P | **P** | **07 44 39.0** | **+2.5** |
| V52A | | | | IAmb | IAmb | 07 44 44.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **TKL** | **Tuckaleechee C** | **38.96** | **196** | P | **P** | **07 44 39.6** | **+1.4** |
| | comp=Z,3.1nm,0.8s,baz=67,slow=7.7,SNR=1.7 | | | | | | |
| **DUG** | **Dugway, Tooele** | **38.98** | **233** | P | **P** | **07 44 40.9** | **+2.4** |
| **DUG** | **Dugway, Tooele** | **38.98** | **233** | P | **P** | **07 44 40.6** | **+2.2** |
| | baz=17,SNR=22 | | | | | | |
| **ELK** | **Elko** | **39.00** | **236** | P | **P** | **07 44 40.0** | **+1.3** |
| | comp=Z,1.9nm,0.8s,baz=358,slow=9.7,SNR=7.0 | | | | | | |
| **U40A** | **Yellville** | **39.19** | **207** | P | **P** | **07 44 40.7** | **+0.6** |
| | baz=8.9 | | | | | | |
| **SDCO** | **Great Sand Dun** | **39.84** | **223** | P | **P** | **07 44 47.6** | **+1.8** |
| SDCO | | | | IAmb | IAmb | 07 44 48.6 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **39.84** | **223** | P | **P** | **07 44 47.4** | **+1.6** |
| | baz=14,SNR=9.4 | | | | | | |
| **PV23** | **Carpenter Ridg** | **39.85** | **228** | P | **P** | **07 44 48.0** | **+2.2** |
| PV23 | | | | IAmb | IAmb | 07 44 50.0 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **TUL1** | **Leonard** | **40.02** | **211** | P | **P** | **07 44 47.7** | **+0.7** |
| | baz=9.9 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **40.09** | **225** | P | **P** | **07 44 49.8** | **+1.8** |
| | baz=14 | | | | | | |
| **CLL** | **Collm** | **40.19** | **76** | *e*pP | **pP** | **07 44 55.0** | **+4.0** |
| CLL | | | | *ex* | x | 07 45 04.0 | |
| **T25A** | **Trinidad** | **40.22** | **222** | P | **P** | **07 44 51.1** | **+2.2** |
| | baz=13 | | | | | | |
| **W41B** | **Gary Mavity, V** | **40.28** | **206** | P | **P** | **07 44 50.1** | **+1.0** |
| | baz=8.4 | | | | | | |
| **NACGM** | **Naroch** | **40.46** | **62** | *i* P | **P** | **07 44 51.0** | **+0.6** |
| **MVCO** | **Mesa Verde** | **40.94** | **227** | P | **P** | **07 44 57.2** | **+2.3** |
| | baz=14,SNR=9.2 | | | | | | |
| **R11A** | **Troy Canyon, C** | **41.36** | **235** | P | **P** | **07 44 60.0** | **+1.7** |
| | baz=17 | | | | | | |
| **WMOK** | **Wichita Mounta** | **41.61** | **214** | P | **P** | **07 45 01.5** | **+1.4** |
| | baz=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.91** | **238** | P | **P** | **07 45 04.5** | **+1.6** |
| | comp=Z,1.0nm,0.7s,baz=20,slow=6.2,SNR=9.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.91** | **238** | P | **P** | **07 45 04.0** | **+1.2** |
| **GERES** | **GERESS Array B** | **42.62** | **77** | P | **P** | **07 45 09.7** | **+1.4** |
| | comp=Z,0.4nm,0.4s,baz=327,slow=8.5,SNR=2.4 | | | | | | |
| **ANMO** | **Albuquerque** | **42.73** | **223** | P | **P** | **07 45 10.5** | **+1.0** |
| | comp=Z,2.7nm,1.0s,baz=20,slow=7.1,SNR=8.4 | | | | | | |
| **ANMO** | **Albuquerque** | **42.73** | **223** | P | **P** | **07 45 11.4** | **+1.9** |
| **ANMO** | **Albuquerque** | **42.73** | **223** | P | **P** | **07 45 11.0** | **+1.5** |
| | baz=13 | | | | | | |
| **LCH** | **Last Change Ra** | **42.90** | **237** | P | **P** | **07 45 11.9** | **+1.1** |
| **CWC** | **Cottonwood Cre** | **43.76** | **237** | P | **P** | **07 45 19.5** | **+1.7** |
| | baz=17 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **43.82** | **215** | P | **P** | **07 45 20.0** | **+2.0** |
| **ABTX** | **Abilene, Hawle** | **43.82** | **215** | P | **P** | **07 45 19.6** | **+1.5** |
| | baz=11,SNR=6.1 | | | | | | |
| **MPMC** | **Manual Prospec** | **43.99** | **237** | P | **P** | **07 45 20.8** | **+1.2** |
| | baz=16 | | | | | | |
| **WHTX** | **Lake Whitney,** | **44.11** | **212** | P | **P** | **07 45 21.3** | **+0.9** |
| | baz=9.7 | | | | | | |
| **ISA** | **Isabella, Lake** | **44.60** | **237** | P | **P** | **07 45 26.1** | **+1.8** |
| **ISA** | **Isabella, Lake** | **44.60** | **237** | P | **P** | **07 45 26.0** | **+1.6** |
| | baz=16 | | | | | | |
| **GMRC** | **Granite Mounta** | **44.80** | **234** | P | **P** | **07 45 27.0** | **+1.0** |
| | baz=16 | | | | | | |
| **AKASG** | **Malin Array Be** | **44.91** | **62** | P | **P** | **07 45 26.8** | **+0.2** |
| | comp=Z,2.6nm,0.4s,baz=339,slow=8.3,SNR=12 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **45.23** | **237** | P | **P** | **07 45 30.9** | **+1.5** |
| | baz=16 | | | | | | |
| **121A** | **Cookes Peak, D** | **45.33** | **224** | P | **P** | **07 45 32.2** | **+1.9** |
| | baz=13 | | | | | | |
| **MNTX** | **Cornudas Mount** | **45.69** | **221** | P | **P** | **07 45 34.5** | **+1.4** |
| | baz=12 | | | | | | |
| **JCT** | **Junction City** | **45.94** | **214** | P | **P** | **07 45 36.8** | **+1.8** |
| | baz=10 | | | | | | |
| **ESDC** | **Sonseca Array** | **46.26** | **98** | P | **P** | **07 45 39.1** | **+1.6** |
| | comp=Z,1.9nm,0.8s,baz=339,slow=8.3,SNR=6.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **46.26** | **98** | P | **P** | **07 45 38.6** | **+1.2** |
| **DWPF** | **Disney Wildern** | **46.32** | **192** | P | **P** | **07 45 39.5** | **+1.6** |
| | baz=3.5 | | | | | | |
| **SNCC** | **San Nicolas Is** | **47.15** | **238** | P | **P** | **07 45 45.0** | **+0.6** |
| | baz=16 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **47.70** | **219** | P | **P** | **07 45 50.5** | **+1.7** |
| **TX32** | **Lajitas Array** | **47.70** | **219** | P | **P** | **07 45 50.5** | **+1.7** |
| TX32 | | | | IAmb | IAmb | 07 45 51.1 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **47.70** | **219** | P | **P** | **07 45 50.5** | **+1.7** |
| | comp=Z,3.1nm,0.7s,baz=26,slow=5.8,SNR=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **47.70** | **219** | P | **P** | **07 45 50.3** | **+1.5** |
| **ZALV** | **Zalesovo Beam** | **51.27** | **17** | P | **P** | **07 46 16.4** | **+0.8** |
| | comp=Z,9.7nm,0.7s,baz=344,slow=7.1,SNR=38 | | | | | | |
| **ABKAR** | **Akbulak array** | **52.71** | **38** | P | **P** | **07 46 28.2** | **+1.8** |
| **ABKAR** | **Akbulak array** | **52.71** | **38** | P | **P** | **07 46 27.8** | **+1.4** |
| ABKAR | | | | IAmb | IAmb | 07 46 35.7 | |
| | comp=Z,4.6nm,1.1s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **VAE** | **Valguarnera** | **53.36** | **82** | LR | LR | 08 08 51.3 | |
| | comp=Z,180nm,18.3s,baz=254,slow=36 | | | | | | |
| **KURK** | **Kurchatov** | **53.88** | **23** | P | **P** | **07 46 35.7** | **+0.7** |
| KURK | | | | IAmb | IAmb | 07 46 42.7 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **KBZ** | **Khabaz** | **54.66** | **54** | P | **P** | **07 46 42.7** | **+1.9** |
| | comp=Z,1.8nm,0.2s,baz=31,slow=9.6,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **56.28** | **63** | P | **P** | **07 46 54.3** | **+1.6** |
| | comp=Z,2.0nm,0.6s,baz=339,slow=4.4,SNR=4.8 | | | | | | |
| **MAKZ** | **Makanchi** | **58.09** | **21** | P | **P** | **07 47 05.7** | **+0.5** |
| MAKZ | | | | IAmb | IAmb | 07 47 06.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **58.13** | **21** | P | **P** | **07 47 06.6** | **+1.0** |
| MK31 | | | | IAmb | IAmb | 07 47 14.5 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.13** | **21** | P | **P** | **07 47 05.8** | **+0.3** |
| | comp=Z,2.5nm,0.8s,baz=46,slow=5.2,SNR=9.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.13** | **21** | P | **P** | **07 47 06.3** | **+0.7** |
| **SONM** | **Songino Array** | **58.36** | **1** | P | **P** | **07 47 08.4** | **+1.2** |
| | comp=Z,2.5nm,0.9s,baz=345,slow=6.4,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **58.36** | **1** | P | **P** | **07 47 08.1** | **+0.9** |
| SONM | | | | IAmb | IAmb | 07 47 14.2 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **60.36** | **31** | P | **P** | **07 47 22.6** | **+1.6** |
| **WMQ** | **Urumqi** | **61.56** | **17** | *e*P | **P** | **07 47 31.9** | **+2.7** |
| WMQ | | | | LR | LR | | |
| | comp=N,290nm,29.2s | | | | | | |
| WMQ | comp=E,1μm,28.8s | | | LR | LR | | |
| WMQ | comp=Z,230nm,24.1s | | | LR | LR | | |
| **BOOM** | **Boomskoye usch** | **61.68** | **27** | P | **P** | **07 47 32.1** | **+1.9** |
| **BTK** | **Batken** | **63.39** | **31** | P | **P** | **07 47 43.0** | **+1.5** |
| **KSH** | **Kashi** | **64.61** | **27** | P | **P** | **07 47 53.7** | **+4.1** |
| KSH | | | | pP | sP | 07 47 59.1 | +5.5 |
| KSH | | | | sP | pP | 07 48 01.4 | +8.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **BAUV** | **El Baul** | **65.15** | **176** | P | **P** | **07 47 54.1** | **+1.0** |
| **HHC** | **Hu-ho-hao-te** | **65.32** | **357** | *e*P | **P** | **07 47 55.7** | **+1.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,9.5s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **66.58** | **183** | P | **P** | **07 48 03.8** | **+1.4** |
| ZARC | | | | IAmb | IAmb | 07 48 04.6 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **66.64** | **7** | *e*P | **P** | **07 48 03.0** | **+0.3** |
| GTA | | | | pP | sP | 07 48 09.1 | +2.4 |
| GTA | | | | sP | pP | 07 48 11.7 | +6.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.8s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,81nm,7.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,130nm,17.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,180nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,180nm,16.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.81** | **334** | P | **P** | **07 48 10.4** | **+0.4** |
| | comp=Z,0.9nm,0.3s,baz=360,slow=8.4,SNR=2.1 | | | | | | |
| **GOMU** | **GeErMu** | **69.62** | **11** | P | **P** | **07 48 19.8** | **-1.9** |
| GOMU | | | | pP | pP | 07 48 22.7 | -2.0 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **71.94** | **168** | P | **P** | **07 48 36.1** | **+0.5** |
| BOAV | | | | IAmb | IAmb | 07 48 52.2 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.94** | **102** | P | **P** | **07 48 41.6** | **0.0** |
| | comp=Z,1.3nm,0.8s,baz=332,slow=7.5,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.94** | **102** | P | **P** | **07 48 42.2** | **+0.7** |
| **OTAV** | **Otavalo** | **73.87** | **187** | P | **P** | **07 48 48.9** | **+1.4** |
| OTAV | | | | IAmb | IAmb | 07 48 49.9 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **NJ2** | **Nanjing** | **73.88** | **351** | *e*P | **P** | **07 48 47.6** | **+0.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **79.56** | **6** | P | **P** | **07 49 21.0** | **+1.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.47** | **9** | LR | LR | 08 31 41.3 | |
| | comp=Z,66nm,21.5s,baz=350,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.97** | **330** | PKP | **PKPdf** | **07 56 09.2** | **-0.9** |
| | comp=Z,0.5nm,0.9s,baz=340,slow=1.8,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **127.69** | **330** | PKP | **PKPdf** | **07 56 17.1** | **-0.1** |
| | comp=Z,1.2nm,1.1s,baz=344,slow=4.9,SNR=5.3 | | | | | | |

**NOU 09 07:38:44.2, 19.38S×169.71E, h180km, MLv4.0/12,**
**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **2.00** | **322** | P | Pn | 07 39 21.4 | +0.2 |
| **DVP** | **Devils Point** | **2.19** | **318** | P | Pn | 07 39 23.4 | 0.0 |
| **MARNC** | **Mare, Loyalty** | **2.62** | **217** | P | Pn | 07 39 27.3 | -0.9 |
| **YATNC** | **Mamie plateau,** | **3.75** | **224** | P | Pn | 07 39 40.8 | -1.4 |
| **OUENC** | **Ouen Island, N** | **4.04** | **221** | P | Pn | 07 39 46.7 | +0.9 |
| **DZM** | **Mont Dzumac** | **4.06** | **228** | P | Pn | 07 39 46.1 | -0.1 |
| **NOUC** | **Port Laguerre** | **4.18** | **229** | P | Pn | 07 39 48.3 | +0.7 |
| **ONTNC** | **Ouen Toro** | **4.21** | **226** | P | Pn | 07 39 48.8 | +0.8 |
| **KOUNC** | **Koumac, New Ca** | **5.23** | **256** | P | Pn | 07 40 01.1 | -0.1 |

*DJA **09** 07:44:26.6±0.8, 0°S±2°×12°5E±°, h35km±13km, M4.2/12, mb4.5/2, MLv4.0/12*
*IDC **09** 07:44:30.7±4.8, 0.06S×124.29E, h129km±47km, mb3.4/6, mb1 3.5/8, mb1mx3.3/38, mbtmp3.8/8, MS2.9/2, Ms1 2.9/2, ms1mx2.5/41, Error ellipse: s-maj=37.9km s-min=16.5km az=54.0*
**ISC 09 07:44:25.4±0.8, 0.03N±0.06×124.59E±0.05, h73km, n18,**
**σ1s22/22, mb3.7/6, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.81** | **312** | P | **Pn** | **07 44 42.2** | **+0.4** |
| KMSI | | | | S | **Sn** | **07 44 54.4** | **+0.5** |
| **SANI** | **Sanana** | **2.50** | **146** | P | **Pn** | **07 45 03.1** | **-0.7** |
| SANI | | | | S | **Sn** | **07 45 32.1** | **-1.2** |
| **MRSI** | **Marisa** | **2.68** | **280** | P | **Pn** | **07 45 05.3** | **-1.0** |
| **LBMI** | **Labuha** | **2.99** | **103** | P | **Pn** | **07 45 12.1** | **+1.6** |
| LBMI | | | | S | **Sn** | **07 45 46.0** | **+0.7** |
| **APSI** | **Ampana** | **3.08** | **252** | P | **Pn** | **07 45 13.8** | **+2.1** |
| **MPSI** | **Mapaga** | **4.70** | **274** | P | **Pn** | **07 45 34.5** | **+0.7** |
| **TTSI** | **Tana Toraja** | **5.66** | **237** | P | **Pn** | **07 45 48.7** | **+1.8** |
| **SPSI** | **Sidrap Palu** | **6.24** | **230** | P | **Pn** | **07 45 54.9** | **0.0** |
| | 0.1nm24nm,0.4s | | | | | | |
| **BNSI** | **Bone** | **6.28** | **225** | P | **Pn** | **07 45 55.7** | **+0.3** |
| **KAPI** | **Kappang** | **6.96** | **224** | P | **Pn** | **07 46 06.0** | **+1.3** |
| | 1.0nm,0.3s,baz=94,slow=15,SNR=4.5 | | | | | | |
| KAPI | | | | S | **Sn** | **07 47 23.0** | **+0.6** |
| | 1.3nm,0.3s,baz=299,slow=22,SNR=2.0 | | | | | | |
| KAPI | | | | LR | LR | 07 49 01.7 | |
| | comp=Z,30nm,19.2s,baz=38,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.04** | **177** | P | **Pn** | **07 48 29.6** | **-1.7** |
| | 0.1nm,0.3s,baz=348,slow=10,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.03** | **155** | P | **P** | **07 49 14.2** | **+0.1** |
| | 1.3nm,0.7s,baz=335,slow=9.5,SNR=9.9 | | | | | | |
| **PMG** | **Port Moresby** | **24.35** | **113** | P | **P** | **07 49 39.1** | **+2.4** |
| | 16nm,0.9s,baz=270,slow=16,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **25.23** | **160** | P | **P** | **07 49 45.3** | **+0.6** |
| | 0.5nm,0.5s,baz=340,slow=7.3,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 53 16.6** | **-0.1** |
| | 0.3nm,0.4s,baz=354,slow=2.0,SNR=6.5 | | | | | | |
| **STKA** | **Stephens Creek** | **35.58** | **155** | P | **P** | **07 51 15.7** | **-0.3** |
| | 1.2nm,0.5s,baz=343,slow=9.1,SNR=3.3 | | | | | | |
| **HNR** | **Honiara** | **36.43** | **106** | LR | LR | 08 07 28.3 | |
| | comp=Z,47nm,19.7s,baz=152,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **50.17** | **344** | P | **P** | **07 53 13.6** | **-0.2** |
| | 0.3nm,0.5s,baz=160,slow=8.8,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.43** | **328** | P | **P** | **07 54 18.8** | **-1.8** |
| | 0.3nm,0.3s,baz=128,slow=8.7,SNR=8.6 | | | | | | |

*JMA **09** 07:50:54.5±0.1, 42.98N×145.42E, h48km±1km, M2.7*
*SKHL **09** 07:50:55.5±0.5, 43.00N×145.40E, h28km±1km, mb4.1/6*
**ISC 09 07:50:54.5±2.4, 43.0N±0.1×145.43E±0.08, h46km±13km,**
**n12, σ0s44/22, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKHN** | **Kushirohamanak** | **0.23** | **300** | P | **Pn** | **07 51 02.9** | **+0.3** |
| JKHN | | | | *e*S | **Sn** | **07 51 08.7** | **+0.5** |
| **AKK** | **Akkeshi** | **0.43** | **276** | *i* P | **Pn** | **07 51 04.7** | **0.0** |
| AKK | | | | AMB | AMB | 07 51 04.9 | |
| | 120nm,0.2s | | | | | | |
| AKK | | | | *i* S | **Sn** | **07 51 11.9** | **0.0** |
| AKK | | | | A | A | 07 51 12.3 | |
| | 240nm,0.2s | | | | | | |
| AKK | | | | A | A | 07 51 12.3 | |
| | 290nm,0.2s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **0.45** | **29** | *i* P | **Pn** | **07 51 04.8** | **-0.1** |
| NMR | | | | AMB | AMB | 07 51 05.3 | |
| | 70nm,0.2s | | | | | | |
| NMR | | | | *i* S | **Sn** | **07 51 11.7** | **-0.6** |
| NMR | | | | A | A | 07 51 12.7 | |
| | 260nm,0.2s | | | | | | |
| NMR | | | | A | A | 07 51 12.7 | |
| | 410nm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **0.46** | **30** | P | **Pn** | **07 51 04.8** | **-0.2** |
| NEM2 | | | | S | **Sn** | **07 51 11.9** | **-0.5** |
| **JAK** | **Akkeshi** | **0.54** | **273** | P | **Pn** | **07 51 05.9** | **-0.1** |
| JAK | | | | S | **Sn** | **07 51 14.2** | **+0.1** |
| **GLVR** | **Golovnino** | **0.77** | **5** | *e*P | **Pn** | **07 51 09.6** | **+0.6** |
| GLVR | | | | AMB | AMB | 07 51 10.5 | |
| | 80nm,0.2s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **07 51 19.7** | **+0.2** |
| GLVR | | | | A | A | 07 51 20.2 | |
| | 290nm,0.3s | | | | | | |
| GLVR | | | | A | A | 07 51 20.2 | |
| | 340nm,0.3s | | | | | | |
| **JNK** | **Nakash** | **0.80** | **320** | P | **Pn** | **07 51 09.1** | **-0.4** |
| JNK | | | | S | **Sn** | **07 51 19.3** | **-1.1** |
| **JRA** | **Rausu** | **0.99** | **347** | P | **Pn** | **07 51 12.1** | **+0.1** |
| JRA | | | | *e*S | **Sn** | **07 51 24.8** | **-0.1** |
| **YUK** | **Yuzh-Kuril'sk** | **1.11** | **16** | *e*P | **Pn** | **07 51 14.2** | **+0.6** |
| YUK | | | | AMB | AMB | 07 51 15.0 | |
| | 60nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **07 51 27.6** | **-0.1** |
| YUK | | | | A | A | 07 51 29.1 | |
| | 170nm,0.4s | | | | | | |
| YUK | | | | A | A | 07 51 29.1 | |
| | 180nm,0.4s | | | | | | |
| **JOB** | **Onbets** | **1.17** | **267** | P | **Pn** | **07 51 14.4** | **-0.1** |
| JOB | | | | *e*S | **Sn** | **07 51 29.1** | **-0.2** |
| **JAR** | **Ashorobuto** | **1.26** | **286** | P | **Pn** | **07 51 15.7** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **1.49** | **313** | P | **Pn** | **07 51 19.4** | **+0.6** |

*FUNV **09** 08:11:37.2, 8.50N×71.43W, h5km, MW3.6*
**ISC 09 08:11:35.2±1.3, 8.51N±0.03×71.37W±0.03, h3km±11km,**
**n22, σ1s25/43, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.55** | **114** | *e*P | **Pg** | **08 11 46.7** | **+0.9** |
| SOCV | | | | *e*S | **Sb** | **08 11 55.0** | **-0.9** |
| **SDV** | **Santo Domingo** | **0.81** | **63** | *e*P | **Pg** | **08 11 51.5** | **+0.6** |
| SDV | | | | *e*S | **Sg** | **08 12 02.2** | **+0.7** |
| **CAPV** | **Capacho** | **1.14** | **236** | *e*P | **Pg** | **08 11 56.5** | **-0.5** |
| CAPV | | | | *e*S | **Sb** | **08 12 12.8** | **-0.2** |
| **PAMC** | **Pamplona, Colo** | **1.76** | **229** | *e*P | **Pg** | **08 12 09.1** | **+0.1** |
| PAMC | | | | *e*S | **Sg** | **08 12 32.9** | **+1.0** |
| **MCQV** | **Machiques** | **1.92** | **323** | *e*P | **Pn** | **08 12 09.6** | **+0.8** |
| MCQV | | | | *e*S | **Sn** | **08 12 33.7** | **+0.2** |
| **OCAC** | **Ocana** | **1.95** | **262** | *e*P | **Pn** | **08 12 09.6** | **+0.2** |
| OCAC | | | | *e*S | **Sn** | **08 12 35.6** | **+1.0** |
| **TAMC** | **Tame, Arauca** | **2.10** | **192** | *e*P | **Pb** | **08 12 13.9** | **-0.2** |
| TAMC | | | | *e*S | **Sg** | **08 12 42.2** | **-0.7** |
| **ELOV** | **Elorza** | **2.39** | **129** | *e*P | **Pb** | **08 12 18.3** | **-0.7** |
| ELOV | | | | *e*S | **Sb** | **08 12 49.9** | **+1.0** |
| **DABV** | **Dabajuro** | **2.50** | **17** | *e*P | **Pn** | **08 12 18.8** | **+1.9** |
| DABV | | | | *e*S | **Sn** | **08 12 48.8** | **+0.9** |
| **BARC** | **Barichara** | **2.62** | **224** | *e*P | **Pb** | **08 12 23.5** | **+0.5** |
| BARC | | | | *e*S | **Sg** | **08 12 58.5** | **-1.0** |
| **SIQV** | **Siquisique** | **2.62** | **36** | *e*P | **Pn** | **08 12 20.3** | **+1.7** |
| SIQV | | | | *e*S | **Sn** | **08 12 51.6** | **+0.6** |
| **SMLC** | **San Martn de** | **2.69** | **276** | *e*P | **Pn** | **08 12 19.3** | **-0.2** |
| SMLC | | | | *e*S | **Sn** | **08 12 52.5** | **-0.1** |
| **RUSC** | **La Rusia** | **3.11** | **213** | *e*P | **Pn** | **08 12 27.4** | **+1.8** |
| RUSC | | | | *e*S | **Sn** | **08 13 04.6** | **+1.0** |
| **MAPV** | **Macapo** | **3.16** | **65** | *e*P | **Pn** | **08 12 27.9** | **+2.0** |
| MAPV | | | | *e*S | **Sn** | **08 13 04.9** | **+0.7** |
| **BAUV** | **El Baul** | **3.31** | **82** | *e*P | **Pn** | **08 12 29.6** | **+1.5** |
| BAUV | | | | *e*S | **Sn** | **08 13 07.9** | **-0.2** |
| **ZARC** | **Zaragoza, Cauc** | **3.60** | **254** | *e*P | **Pn** | **08 12 32.8** | **+0.8** |
| **PTBC** | **PUERTO BERRIO,** | **3.64** | **238** | *e*P | **Pn** | **08 12 32.2** | **-0.3** |
| PTBC | | | | *e*S | **Sn** | **08 13 15.6** | **-0.4** |
| **MONV** | **Montecano** | **3.69** | **22** | *e*P | **Pn** | **08 12 33.5** | **+0.3** |
| MONV | | | | *e*S | **Sn** | **08 13 16.4** | **-0.8** |
| **SPBC** | **San Pablo de B** | **3.91** | **224** | *e*P | **Pn** | **08 12 38.0** | **+1.7** |
| SPBC | | | | *e*S | **Sn** | **08 13 23.2** | **+0.3** |
| **BENV** | **Beln** | **3.99** | **69** | *e*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 59nm,0.9s | | | | | | |
| **KPJI** | **Karang Pucung** | **17.11** | **240** | P | **Pn** | **08 18 18.7** | **+1.8** |
| | 76nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **17.39** | **164** | P | **Pn** | **08 18 21.7** | **+1.2** |
| **CMJI** | **Cimerak** | **17.74** | **240** | P | **Pn** | **08 18 24.9** | **+0.1** |
| | 50nm,0.9s | | | | | | |
| **CNJI** | **Cibinong** | **18.68** | **243** | P | **P** | **08 18 37.4** | **+1.6** |
| | 84nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.19** | **175** | P | **P** | **08 18 41.2** | **-0.1** |
| | 0.8nm,0.3s,baz=1.3,slow=6.6,SNR=25 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **22.91** | **190** | P | **P** | **08 19 20.4** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 08 19 43.7 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.20** | **154** | P | **P** | **08 19 22.8** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 08 19 24.4 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.33** | **154** | P | **P** | **08 19 24.9** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 08 19 27.2 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.33** | **154** | P | **P** | **08 19 24.1** | **-1.6** |
| | comp=Z,6.2nm,0.4s,baz=335,slow=10,SNR=82 | | | | | | |
| WRA | | | | S | **S** | **08 23 30.7** | **-5.5** |
| | comp=Z,2.0nm,1.0s,baz=339,slow=15,SNR=7.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.33** | **154** | P | **P** | **08 19 23.4** | **-2.3** |
| **WB2** | **Warramunga Arr** | **23.34** | **154** | P | **P** | **08 19 24.2** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 08 19 26.4 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.43** | **154** | P | **P** | **08 19 25.8** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 08 19 52.5 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **COEN** | **Coen** | **24.31** | **129** | P | **P** | **08 19 34.4** | **-0.6** |
| **PSI** | **Prapat** | **24.98** | **274** | P | **P** | **08 19 42.3** | **+1.2** |
| | comp=Z,5.8nm,0.8s,baz=86,slow=8.3,SNR=3.8 | | | | | | |
| **GIRL** | **Giralia** | **25.43** | **201** | P | **P** | **08 19 43.9** | **-1.0** |
| **AS31** | **Alice Springs** | **26.52** | **159** | P | **P** | **08 19 56.0** | **+1.1** |
| **ASAR** | **Alice Springs** | **26.52** | **159** | P | **P** | **08 19 54.2** | **-0.7** |
| | comp=Z,2.2nm,0.4s,baz=331,slow=7.9,SNR=48 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 23 18.3** | **-1.0** |
| | comp=Z,0.9nm,0.3s,baz=348,slow=2.2,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **26.52** | **159** | P | **P** | **08 19 54.5** | **-0.4** |
| **NJ2** | **Nanjing** | **31.11** | **352** | *e*P | **P** | **08 20 38.2** | **+2.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **31.99** | **173** | P | **P** | **08 20 42.3** | **-1.1** |
| **ENH** | **Enshi** | **32.03** | **336** | P | **P** | **08 20 43.7** | **-0.2** |
| ENH | | | | IAmb | IAmb | 08 20 48.6 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **32.99** | **322** | P | **P** | **08 20 54.3** | **+1.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| **XAN** | **Xi'an** | **35.60** | **338** | P | **P** | **08 21 15.4** | **+0.6** |
| XAN | | | | pP | pP | 08 21 20.7 | -3.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **36.33** | **5** | LR | LR | 08 35 53.9 | |
| | comp=Z,29nm,21.8s,baz=45,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **36.89** | **154** | P | **P** | **08 21 25.3** | **-0.5** |
| | comp=Z,1.7nm,0.4s,baz=330,slow=8.3,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **36.89** | **154** | P | **P** | **08 21 25.1** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **37.65** | **19** | P | **P** | **08 21 31.3** | **-0.9** |
| | comp=Z,4.3nm,0.8s,baz=200,slow=9.5,SNR=5.6 | | | | | | |
| **SHL** | **Shillong** | **39.24** | **311** | P | **P** | **08 21 46.0** | **0.0** |
| SHL | | | | IAmb | IAmb | 08 21 48.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **39.42** | **334** | *e*P | **P** | **08 21 48.1** | **+0.8** |
| LZH | | | | sP | sP | 08 22 01.1 | +0.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,260nm,14.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,270nm,14.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,240nm,16.3s | | | | | | |
| **ARMA** | **Armidale** | **41.04** | **142** | P | **P** | **08 22 00.4** | **-0.3** |
| ARMA | | | | IAmb | IAmb | 08 22 15.4 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.07** | **346** | *e*P | **P** | **08 22 03.3** | **+2.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,170nm,8.3s | | | | | | |
| **JTM** | **Tenmabayashi** | **42.44** | **19** | | **P** | **08 22 11.9** | **+0.1** |
| **CAN** | **Canberra** | **43.21** | **150** | P | **P** | **08 22 19.1** | **+0.8** |
| CAN | | | | IAmb | IAmb | 08 22 24.4 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **43.96** | **333** | *e*P | **P** | **08 22 25.5** | **+1.1** |
| GTA | | | | pP | sP | 08 22 38.6 | +0.8 |
| GTA | | | | sP | pwP | 08 22 46.6 | +9.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,160nm,4.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,160nm,18.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,170nm,17.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,190nm,16.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **45.92** | **19** | P | **P** | **08 22 39.7** | **0.0** |
| | comp=Z,4.1nm,0.6s,baz=281,slow=18,SNR=1.5 | | | | | | |
| **KLR** | **Kul'dur** | **48.39** | **7** | P | **P** | **08 22 57.7** | **-1.2** |
| | comp=Z,0.7nm,0.5s,baz=195,slow=7.3,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **48.92** | **344** | P | **P** | **08 23 04.0** | **+0.9** |
| | comp=Z,1.2nm,0.9s,baz=154,slow=8.3,SNR=7.1 | | | | | | |
| **SONM** | **Songino Array** | **48.92** | **344** | P | **P** | **08 23 01.9** | **-1.3** |
| **WMQ** | **Urumqi** | **53.29** | **328** | *e*P | **P** | **08 23 38.0** | **+2.1** |
| **MK31** | **Makanchi Array** | **58.11** | **328** | P | **P** | **08 24 10.8** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 08 24 24.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.11** | **328** | P | **P** | **08 24 10.5** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=119,slow=9.0,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.11** | **328** | P | **P** | **08 24 10.2** | **-0.4** |
| **MAKZ** | **Makanchi** | **58.29** | **327** | P | **P** | **08 24 11.6** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 08 24 25.8 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **60.41** | **320** | P | **P** | **08 24 26.7** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=188,slow=7.1,SNR=1.6 | | | | | | |
| **GAR** | **Garm** | **61.62** | **315** | P | **P** | **08 24 35.0** | **+0.1** |
| GAR | | | | IAmb | IAmb | 08 24 48.6 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.65** | **335** | P | **P** | **08 24 33.7** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=114,slow=7.2,SNR=3.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.43** | **329** | P | **P** | **08 24 39.5** | **-0.3** |
| | comp=Z,1.7nm,0.7s,baz=131,slow=5.8,SNR=19 | | | | | | |
| **KURK** | **Kurchatov** | **62.44** | **329** | P | **P** | **08 24 39.7** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **62.65** | **136** | P | **P** | **08 24 41.5** | **-0.3** |
| **KKAR** | **Karatay Array** | **63.22** | **319** | P | **P** | **08 24 45.7** | **+0.3** |
| **BVAR** | **Borovoye Array** | **67.97** | **328** | P | **P** | **08 25 14.7** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=94,slow=12,SNR=2.4 | | | | | | |
| **NRIK** | **Noril'sk** | **72.28** | **347** | P | **P** | **08 25 40.3** | **-1.6** |
| | comp=Z,1.2nm,0.4s,baz=152,slow=3.9,SNR=3.9 | | | | | | |
| **ABKAR** | **Akbulak array** | **72.37** | **322** | P | **P** | **08 25 42.4** | **-0.4** |
| **AKTO** | **Aktyubinsk** | **73.93** | **323** | P | **P** | **08 25 51.3** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=137,slow=9.0,SNR=3.6 | | | | | | |
| **OHAK** | **Old Harbor** | **85.17** | **33** | P | **P** | **08 26 53.4** | **+0.4** |
| **IMAR** | **Indian Mountai** | **85.86** | **24** | P | **P** | **08 26 56.0** | **-0.3** |
| **KMBO** | **Kilima Mbogo** | **86.63** | **269** | LR | LR | 09 08 35.4 | |
| | comp=Z,30nm,18.2s,baz=292,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **88.66** | **25** | P | **P** | **08 27 07.8** | **-2.0** |
| | comp=Z,0.4nm,1.0s,baz=246,slow=4.4,SNR=2.0 | | | | | | |
| **BMAR** | **Burnt Mountain** | **89.56** | **23** | P | **P** | **08 27 14.8** | **+0.8** |
| **QSPA** | **South Pole Qui** | **91.06** | **180** | P | **P** | **08 27 19.8** | **-1.3** |
| QSPA | | | | IAmb | IAmb | 08 27 42.5 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **NACGM** | **Naroch** | **93.16** | **325** | *i* P | **P** | **08 27 28.4** | **-2.5** |

**IDC 09 08:17:58.1±2.9, 54°25N×86°51E, h0km, mb1 2.8/2, mb1mx2.7/45, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=23.3km s-min=13.4km az=58.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.04** | **254** | *i* | | 08 25 30.0 | |
| | baz=74,slow=335,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.04** | **254** | Pg | Pg | 08 18 16.5 | -1.5 |
| | 1.8nm,0.3s,baz=76,slow=17,SNR=24 | | | | | | |
| ZALV | | | | Lg | Lg | 08 18 33.0 | |
| | 1.7nm,0.3s,baz=70,slow=29,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.08** | **237** | Pn | Pn | 08 19 30.3 | +1.2 |
| | 0.0nm,0.3s,baz=54,slow=14,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.93** | **201** | Pn | Pn | 08 19 55.6 | +1.0 |
| | 0.2nm,0.3s,baz=25,slow=13,SNR=5.3 | | | | | | |
| MKAR | | | | Lg | Lg | 08 22 10.2 | |
| | 0.0nm,0.3s,baz=23,slow=22,SNR=8.0 | | | | | | |

*ARE **09** 08:18:54±3.9, 15°.62S±0°.07×73°.45W±0°.09, h101km±5km, Error ellipse: s-maj=0.0km s-min=0.0km az=156.0*
*NEIC **09** 08:18:58.3±1.5, 15°.51S±0°.07×73°.28W±0°.09, h73km±6km, mb4.8/45, ML5.0(ARE), Error ellipse: s-maj=14.2km s-min=9.1km az=56.0*
*VAO **09** 08:18:59.2±0.4, 15°.45S×73°.07W, h74km, mb4.9*
*IDC **09** 08:19:00.2±0.6, 15°.56S×73°.20W, h101km±4km, mb4.3/9, mb1 4.3/11, mb1mx4.1/28, mbtmp4.6/11, MS3.5/6, Ms1 3.5/6, ms1mx3.1/65, Error ellipse: s-maj=19.7km s-min=12.9km az=51.0*

**ISC 09 08:18:59.9±0.4, 15°.50S±0°.05×73°.18W±0°.06, h102km, n177, σ1°64/185, mb4.6/27, 1C, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **3.94** | **137** | *e*P | Pn | 08 19 50.5 | -7.9 |
| AP01 | | | | *i* S | **Sn** | **08 20 41.0** | **-2.7** |
| **AP01** | **Chacalluta** | **3.94** | **137** | | **Pn** | **08 19 57.9** | **-0.4** |
| **PB12** | **IPOC Station P** | **4.13** | **139** | *e*P | **Pn** | **08 19 58.5** | **-2.5** |
| PB12 | | | | *i* S | **Sn** | **08 20 44.6** | **-3.7** |
| **PB12** | **IPOC Station P** | **4.13** | **139** | Pn | **Pn** | **08 19 59.4** | **-1.6** |
| **MNMC** | **Minye Minye** | **4.98** | **137** | | **Pn** | **08 20 11.5** | **-1.2** |
| **NNA** | **Nana** | **4.98** | **314** | P | **Pn** | **08 20 09.1** | **-3.4** |
| | 15nm,0.3s,baz=128,slow=7.6,SNR=28 | | | | | | |
| NNA | | | | S | **Sn** | **08 21 03.7** | **-5.2** |
| | 38nm,0.3s,baz=14,slow=2.6,SNR=3.5 | | | | | | |
| NNA | | | | LR | LR | 08 22 16.3 | |
| | comp=Z,526nm,21.0s,baz=168,slow=39 | | | | | | |
| **NNA** | **Nana** | **4.98** | **314** | Pn | **Pn** | **08 20 09.5** | **-3.0** |
| **PB11** | **IPOC Station P** | **5.41** | **142** | *e*P | **Pn** | **08 20 16.4** | **-2.0** |
| PB11 | | | | *e*S | **Sn** | **08 21 14.6** | **-4.9** |
| **TA02** | **Huaiquique** | **5.57** | **149** | | **Pn** | **08 20 18.4** | **-2.0** |
| **GO01** | **Chusmiza** | **5.63** | **138** | *e*P | **Pn** | **08 20 20.3** | **-1.4** |
| GO01 | | | | *i* S | **Sn** | **08 21 22.7** | **-2.5** |
| **GO01** | **Chusmiza** | **5.63** | **138** | | **Pn** | **08 20 20.5** | **-1.1** |
| **PATCX** | **Punta Patache** | **6.03** | **152** | | **Pn** | **08 20 23.9** | **-2.8** |
| **CZSB** | **Cruzeiro do Su** | **7.73** | **4** | *e*P | **Pn** | **08 20 48.1** | **-1.8** |
| **CZSB** | **Cruzeiro do Su** | **7.73** | **4** | Pn | **Pn** | **08 20 48.4** | **-1.5** |
| **LVC** | **Limon Verde** | **8.15** | **151** | P | **Pn** | **08 20 54.1** | **-1.7** |
| | 47nm,0.3s,baz=348,slow=8.8,SNR=557 | | | | | | |
| LVC | | | | S | **Sn** | **08 22 21.7** | **-4.7** |
| | 22nm,0.3s,baz=284,slow=21,SNR=11 | | | | | | |
| **LVC** | **Limon Verde** | **8.15** | **151** | *e*P | **Pn** | **08 20 54.1** | **-1.7** |
| **ETMB** | **Extrema** | **8.84** | **51** | *e*P | **Pn** | **08 21 04.5** | **-0.4** |
| **ETMB** | **Extrema** | **8.84** | **51** | Pn | **Pn** | **08 21 04.5** | **-0.4** |
| **PB14** | **IPOC Station P** | **9.45** | **164** | | **Pn** | **08 21 08.9** | **-4.5** |
| **ATAH** | **Atahualpa** | **9.75** | **328** | P | **Pn** | **08 21 14.5** | **-3.2** |
| | 0.4nm,0.3s,baz=34,slow=11,SNR=2.9 | | | | | | |
| ATAH | | | | S | **Sn** | **08 22 59.3** | **-6.4** |
| | 1.4nm,0.3s,baz=318,slow=22,SNR=1.0 | | | | | | |
| **SIV** | **San Ignacio** | **11.67** | **94** | P | **Pn** | **08 21 41.3** | **-2.0** |
| | 3.0nm,0.3s,baz=276,slow=10,SNR=207 | | | | | | |
| SIV | | | | LR | LR | 08 27 08.6 | |
| | comp=Z,227nm,18.2s,baz=300,slow=42 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **11.69** | **16** | *e*P | **Pn** | **08 21 41.1** | **-2.5** |
| **TBTG** | **Tabatinga, AM** | **11.69** | **16** | *e*P | **Pn** | **08 21 40.2** | **-3.4** |
| **AC02** | **Maricunga** | **11.90** | **162** | Pn | **Pn** | **08 21 45.6** | **-1.0** |
| **VILB** | **Vilhena** | **12.84** | **80** | *e*P | **Pn** | **08 21 56.5** | **-2.3** |
| **VILB** | **Vilhena** | **12.84** | **80** | Pn | **Pn** | **08 21 56.8** | **-2.0** |
| **PTLB** | **Pontes e Lacer** | **13.54** | **92** | *e*P | **Pn** | **08 22 05.6** | **-2.3** |
| **PTLB** | **Pontes e Lacer** | **13.54** | **92** | Pn | **Pn** | **08 22 05.7** | **-2.3** |
| **PDRB** | **Porto dos Gac** | **16.45** | **78** | *e*P | **Pn** | **08 22 42.7** | **-2.1** |
| **OTAV** | **Otavalo** | **16.48** | **341** | *e*P | **P** | **08 22 47.8** | **+1.3** |
| **OTAV** | **Otavalo** | **16.48** | **341** | *e*P | **Pn** | **08 22 46.9** | **+1.3** |
| **OTAV** | **Otavalo** | **16.48** | **341** | P | **Pn** | **08 22 45.2** | **-0.4** |
| **SALV** | **Santo Antonio** | **16.85** | **94** | *e*P | **Pn** | **08 22 48.3** | **-1.4** |
| **GCUF** | **Volcan Galeras** | **17.12** | **346** | *e*P | **Pn** | **08 22 54.3** | **+0.8** |
| **FLOC** | **Florencia** | **17.15** | **352** | *e*P | **Pn** | **08 22 53.3** | **-0.1** |
| **AQDB** | **Aquidauana** | **17.35** | **109** | *e*P | **Pn** | **08 22 59.9** | **+0.2** |
| **AQDB** | **Aquidauana** | **17.35** | **109** | P | **P** | **08 22 55.4** | **-0.2** |
| AQDB | | | | IAmb | IAmb | 08 22 57.8 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **MACA** | **Manacapuru-AM** | **17.37** | **46** | *e*P | **P** | **08 22 55.0** | **-0.9** |
| **MACA** | **Manacapuru-AM** | **17.37** | **46** | | **P** | **08 22 55.3** | **-0.6** |
| **ROC1** | **El Roble** | **17.51** | **174** | P | **P** | **08 22 56.1** | **-1.4** |
| ROC1 | | | | IAmb | IAmb | 08 22 58.9 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **CLDB** | **Colider** | **17.54** | **77** | *e*P | **P** | **08 22 58.1** | **+0.3** |
| **PP1B** | **Ponte de Pedra** | **17.67** | **99** | *e*P | **P** | **08 22 59.5** | **+0.3** |
| **SOTA** | **Rioblanco** | **17.84** | **349** | *e*P | **Pn** | **08 23 03.6** | **+1.3** |
| **POPC** | **Popayan, Colom** | **18.25** | **349** | *e*P | **Pn** | **08 23 07.4** | **+0.5** |
| **CPUP** | **Villa Florida** | **18.30** | **129** | P | **P** | **08 23 05.8** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=313,slow=12,SNR=7.9 | | | | | | |
| **CPUP** | **Villa Florida** | **18.30** | **129** | *e*P | **Pn** | **08 23 06.8** | **-0.3** |
| **CPUP** | **Villa Florida** | **18.30** | **129** | P | **P** | **08 23 05.5** | **-0.4** |
| **MT09** | **Talagante** | **18.31** | **174** | P | **P** | **08 23 06.4** | **+0.2** |
| **H03N1** | **Juan Fernandez** | **18.60** | **195** | T | T | 08 41 39.5 | |
| | baz=17,slow=74 | | | | | | |
| **H03N2** | **Juan Fernandez** | **18.61** | **195** | T | T | 08 41 43.7 | |
| | baz=17,slow=74 | | | | | | |
| **H03N3** | **Juan Fernandez** | **18.62** | **195** | T | T | 08 41 41.7 | |
| | baz=17,slow=74 | | | | | | |
| **BO01** | **Tunca** | **18.91** | **175** | P | **P** | **08 23 12.6** | **0.0** |
| **NPGB** | **Novo Progresso** | **19.38** | **66** | *e*P | **P** | **08 23 17.9** | **0.0** |
| **ORTC** | **Ortega, Tolima** | **19.39** | **354** | *e*P | **P** | **08 23 19.4** | **+1.4** |
| **VILC** | **Villavicencio,** | **19.49** | **358** | *e*P | **Pn** | **08 23 21.3** | **-0.1** |
| **YOTC** | **Yotoco, Valle** | **19.61** | **351** | *e*P | **Pn** | **08 23 24.6** | **+1.8** |
| **PTGA** | **Pitinga** | **19.64** | **43** | P | **P** | **08 23 21.5** | **+0.8** |
| | comp=Z,5.4nm,0.3s,baz=230,slow=16,SNR=84 | | | | | | |
| PTGA | | | | S | **S** | **08 26 50.9** | **-5.9** |
| | comp=Z,0.4nm,0.3s,baz=329,slow=20,SNR=2.7 | | | | | | |
| **ANIL** | **Santa Ana** | **19.98** | **354** | *e*P | Pn | 08 23 28.9 | +1.5 |
| **ROSC** | **El Rosal** | **20.24** | **357** | P | Pn | 08 23 31.6 | +1.2 |
| | comp=Z,27nm,0.8s,baz=132,slow=20,SNR=8.5 | | | | | | |
| ROSC | | | | LR | LR | 08 32 48.8 | |
| | comp=Z,177nm,21.2s,baz=306,slow=41 | | | | | | |
| **ITTB** | **Itaituba** | **20.42** | **59** | *e*P | **P** | **08 23 29.5** | **+0.4** |
| **PLMC** | **San Jos del P** | **20.50** | **351** | *e*P | **P** | **08 23 31.5** | **+1.4** |
| **ARAG** | **Araguaiana, MT** | **20.59** | **93** | *e*P | **P** | **08 23 30.6** | **-0.4** |
| **GUY2C** | **Guyana, Caldas** | **20.70** | **354** | *e*P | **P** | **08 23 35.0** | **+2.4** |
| **ITQB** | **Itaqui** | **20.77** | **136** | *e*P | **P** | **08 23 33.5** | **+0.8** |
| **ITQB** | **Itaqui** | **20.77** | **136** | | Pn | 08 23 35.3 | -0.7 |
| ITQB | | | | IAmb | IAmb | 08 23 39.8 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **NORC** | **Norcasia** | **20.99** | **355** | *e*P | **P** | **08 23 36.0** | **+0.7** |
| **SPBC** | **San Pablo de B** | **21.03** | **358** | *e*P | **P** | **08 23 37.6** | **+1.8** |
| **RUSC** | **La Rusia** | **21.25** | **0** | *e*P | **P** | **08 23 38.5** | **0.0** |
| **CBOC** | **Ciudad Bolivar** | **21.41** | **352** | *e*P | **P** | **08 23 40.0** | **+0.1** |
| **SNDB** | **Serra Nova Dou** | **21.55** | **83** | *e*P | **P** | **08 23 40.6** | **-0.6** |
| **PCMB** | **Pacaembu** | **21.64** | **110** | *e*P | **P** | **08 23 42.8** | **+0.6** |
| **HELC** | **Santa Helena** | **21.67** | **354** | *e*P | **P** | **08 23 44.5** | **+1.6** |
| **BOAV** | **Boa Vista** | **21.75** | **36** | *e*P | **P** | **08 23 44.4** | **+1.1** |
| **BOAV** | **Boa Vista** | **21.75** | **36** | P | **P** | **08 23 44.0** | **+0.6** |
| **PTGB** | **Pitanga** | **21.82** | **118** | *e*P | **P** | **08 23 46.1** | **+1.9** |
| **PTBC** | **PUERTO BERRIO,** | **21.93** | **357** | *e*P | **P** | **08 23 43.5** | **-1.7** |
| **ITRB** | **Iturama** | **22.15** | **104** | *e*P | **P** | **08 23 47.9** | **+0.3** |
| **ITAB** | **Concordia** | **22.78** | **124** | *e*P | **P** | **08 23 55.4** | **+1.5** |
| **ITAB** | **Concordia** | **22.78** | **124** | P | **P** | **08 23 56.7** | **+2.8** |
| ITAB | | | | IAmb | IAmb | 08 24 04.2 | |
| | comp=Z,73nm,1.4s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **22.90** | **356** | P | **P** | **08 23 55.6** | **+0.3** |
| **MALB** | **Monte Alegre** | **23.06** | **56** | *e*P | **P** | **08 23 57.5** | **+0.7** |
| **UREC** | **San Jos de Ur** | **23.22** | **354** | *e*P | **P** | **08 23 58.2** | **0.0** |
| **LC01** | **Cunco** | **23.34** | **177** | P | **P** | **08 23 58.7** | **-0.5** |
| LC01 | | | | IAmb | IAmb | 08 23 59.8 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **CPSB** | **Cacapava Do Su** | **23.41** | **133** | *e*P | **P** | **08 24 01.0** | **+1.1** |
| **IPMB** | **Ipameri, GO** | **24.04** | **99** | *e*P | **P** | **08 24 06.0** | **+0.2** |
| **BB19B** | **Bebedouro** | **24.04** | **107** | *e*P | **P** | **08 24 06.7** | **+0.9** |
| **PLTB** | **Pedras Altas** | **24.10** | **136** | *e*P | **P** | **08 24 08.6** | **+2.4** |
| **BDFB** | **Brasilia** | **24.24** | **94** | P | **P** | **08 24 07.9** | **+0.2** |
| | comp=Z,11nm,0.6s,baz=262,slow=12,SNR=24 | | | | | | |
| BDFB | | | | LR | LR | 08 34 37.4 | |
| | comp=Z,127nm,21.4s,baz=323,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **24.24** | **94** | P | **P** | **08 24 08.6** | **+0.9** |
| **SDV** | **Santo Domingo** | **24.36** | **6** | P | **P** | **08 24 09.1** | **+0.3** |
| | comp=Z,14nm,0.7s,baz=168,slow=14,SNR=5.8 | | | | | | |
| **SDV** | **Santo Domingo** | **24.36** | **6** | *e*P | **P** | **08 24 09.4** | **+0.6** |
| **PEXB** | **Peixe** | **24.39** | **85** | *e*P | **P** | **08 24 09.5** | **+0.5** |
| **PRPB** | **Paraupebas** | **24.73** | **71** | *e*P | **P** | **08 24 12.5** | **+0.5** |
| **BAUV** | **El Baul** | **24.81** | **12** | P | **P** | **08 24 14.1** | **+1.4** |
| **RCLB** | **Rio Claro- Sao** | **25.20** | **110** | *e*P | **P** | **08 24 18.3** | **+2.0** |
| **PLCA** | **Paso Flores** | **25.25** | **175** | P | **P** | **08 24 16.8** | **+0.3** |
| | comp=Z,20nm,0.9s,baz=347,slow=11,SNR=42 | | | | | | |
| **PLCA** | **Paso Flores** | **25.25** | **175** | *e*P | **P** | **08 24 17.0** | **+0.5** |
| **PLCA** | **Paso Flores** | **25.25** | **175** | P | **P** | **08 24 16.7** | **+0.1** |
| PLCA | | | | IAmb | IAmb | 08 24 17.9 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **SJCC** | **San Jacinto, C** | **25.31** | **355** | P | **P** | **08 24 20.5** | **+3.3** |
| SJCC | | | | IAmb | IAmb | 08 24 47.8 | |
| | comp=Z,41nm,0.9s | | | | | | |
| **LL04** | **Puerto Octay** | **25.33** | **179** | P | **P** | **08 24 16.6** | **-0.5** |
| **MCPB** | **Macapa, AP** | **25.72** | **56** | *e*P | **P** | **08 24 23.0** | **+2.0** |
| **VAO** | **Valinhos** | **25.82** | **111** | *e*P | **P** | **08 24 24.6** | **+2.6** |
| **SMTB** | **Santa Maria do** | **25.86** | **78** | *e*P | **P** | **08 24 23.5** | **+1.2** |
| **BIRV** | **Birongo** | **26.70** | **15** | P | **P** | **08 24 30.4** | **+0.7** |
| BIRV | | | | IAmb | IAmb | 08 24 38.0 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **PARB** | **Paraibuna** | **27.10** | **111** | *e*P | **P** | **08 24 34.5** | **+1.0** |
| **BSCB** | **Bom Sucesso** | **27.51** | **106** | *e*P | **P** | **08 24 38.2** | **+1.1** |
| **SDBA** | **SAO DESIDERIO** | **27.61** | **87** | *e*P | **P** | **08 24 37.6** | **-0.4** |
| **JANB** | **Januaria** | **27.85** | **93** | *e*P | **P** | **08 24 40.3** | **+0.1** |
| **TMAB** | **Tom-Au,PA,Br** | **27.95** | **65** | *e*P | **P** | **08 24 42.1** | **+1.0** |
| **DIAM** | **Diamantina, MG** | **28.36** | **100** | *e*P | **P** | **08 24 46.1** | **+1.3** |
| **MDP** | **Montagnes des** | **28.86** | **46** | LR | LR | 08 37 07.8 | |
| | comp=Z,77nm,20.2s,baz=210,slow=38 | | | | | | |
| **DUB01** | **Friburgo-RJ** | **29.86** | **107** | *e*P | **P** | **08 24 59.4** | **+1.4** |
| **SJMB** | **Sao Joao De Ma** | **30.73** | **101** | *e*P | **P** | **08 25 06.9** | **+1.3** |
| **BSFB** | **Barra de Sao F** | **31.05** | **101** | *e*P | **P** | **08 25 09.4** | **+1.0** |
| **ROSB** | **Rosrio** | **31.24** | **69** | *e*P | **P** | **08 25 11.2** | **+1.0** |
| **RIB01** | **Linhares ES** | **31.49** | **102** | *e*P | **P** | **08 25 13.5** | **+1.2** |
| **NAN01** | **Guarapari, ES** | **31.73** | **99** | *e*P | **P** | **08 25 16.1** | **+1.7** |
| **GUA01** | **Guaratinga, BA** | **32.08** | **97** | *e*P | **P** | **08 25 18.8** | **+1.3** |
| **NBPN** | **Ponto Novo - B** | **32.43** | **86** | *e*P | **P** | **08 25 21.0** | **+0.4** |
| **GDU01** | **Guandu, BA** | **32.55** | **91** | *e*P | **P** | **08 25 22.7** | **+1.1** |
| **NBIT** | **Itapeh - BA** | **32.55** | **94** | *e*P | **P** | **08 25 23.2** | **+1.5** |
| **CRPR** | **Cabo Rojo, PR** | **33.83** | **10** | P | **P** | **08 25 32.4** | **-0.2** |
| **CBYP** | **Canovanas** | **34.32** | **12** | P | **P** | **08 25 36.1** | **-0.9** |
| CBYP | | | | IAmb | IAmb | 08 25 36.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **34.43** | **77** | *e*P | **P** | **08 25 38.5** | **+0.5** |
| **NBLA** | **Lagarto - SE** | **34.72** | **87** | *e*P | **P** | **08 25 40.4** | **-0.1** |
| **NBAN** | **Anadia - AL** | **36.45** | **85** | *e*P | **P** | **08 25 55.8** | **+0.6** |
| **RCBR** | **Riachuelo** | **37.82** | **79** | P | **P** | **08 26 07.5** | **+0.6** |
| RCBR | | | | IAmb | IAmb | 08 26 08.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **CMIG** | **Matias Romero** | **38.82** | **326** | LR | LR | 08 40 17.1 | |
| | comp=Z,70nm,18.4s,baz=86,slow=33 | | | | | | |
| **T59A** | **Double "B" Far** | **52.35** | **356** | P | **P** | **08 28 02.4** | **+1.0** |
| T59A | | | | IAmb | IAmb | 08 28 19.1 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **R58B** | **Mineral** | **53.36** | **355** | P | **P** | **08 28 09.8** | **+1.0** |
| **TXAR** | **Lajitas Array** | **53.41** | **327** | P | **P** | **08 28 09.8** | **+0.3** |
| | comp=Z,1.5nm,0.9s,baz=148,slow=7.4,SNR=9.4 | | | | | | |
| TXAR | | | | pP | **pP** | **08 28 34.2** | **-1.3** |
| | comp=Z,1.8nm,0.8s,baz=154,slow=7.7,SNR=8.8 | | | | | | |
| TXAR | | | | sP | **sP** | **08 28 45.6** | **-1.7** |
| | comp=Z,3.9nm,0.9s,baz=139,slow=8.3,SNR=8.1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DABV | | | | *e*S | Sn | 08 21 56.9 | -1.7 |
| **SIQV** | **Siquisique** | **2.63** | **35** | *e*P | Pn | 08 21 28.8 | -0.3 |
| SIQV | | | | *e*S | Sn | 08 22 00.1 | -1.4 |
| **BAUV** | **El Baul** | **3.31** | **82** | *e*P | Pn | 08 21 37.1 | -1.3 |
| BAUV | | | | *e*S | Sn | 08 22 16.0 | -2.1 |
| **BENV** | **Beln** | **3.99** | **68** | *e*P | Pn | 08 21 47.1 | -0.6 |

*FUNV **09** 08:22:54.7, 8˚.48N×71˚.35W, h5km, MW3.1*
**ISC 09 08:22:53.9±1.4, 8˚.49N±0˚.05×71˚.35W±0˚.04, h8km±12km, n12, σ0s98, 19, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.53** | **113** | *e*P | **Pg** | **08 23 04.8** | **+0.5** |
| SOCV | | | | *e*S | **Sb** | **08 23 13.0** | **-0.3** |
| **SDV** | **Santo Domingo** | **0.81** | **61** | *e*P | **Pg** | **08 23 08.3** | **-1.3** |
| **CAPV** | **Capacho** | **1.14** | **237** | *e*P | **Pg** | **08 23 15.6** | **-0.2** |
| CAPV | | | | *e*S | **Sg** | **08 23 30.9** | **+0.3** |
| **OCAC** | **Ocana** | **1.96** | **263** | *e*P | **Pn** | **08 23 27.5** | **-0.2** |
| **CURV** | **Curarigua** | **2.04** | **42** | *e*S | **Sn** | **08 23 55.1** | **+0.7** |
| **ELOV** | **Elorza** | **2.37** | **129** | *e*P | **Pn** | **08 23 34.3** | **+1.1** |
| ELOV | | | | *e*S | **Sn** | **08 24 02.1** | **-0.3** |
| **DABV** | **Dabajuro** | **2.52** | **16** | *e*P | **Pn** | **08 23 36.3** | **+1.2** |
| DABV | | | | *e*S | **Sn** | **08 24 06.0** | **0.0** |
| **BARC** | **Barichara** | **2.62** | **224** | *e*P | **Pb** | **08 23 41.1** | **-0.2** |
| **SIQV** | **Siquisique** | **2.63** | **35** | *e*P | **Pn** | **08 23 38.5** | **+1.7** |
| SIQV | | | | *e*S | **Sn** | **08 24 08.9** | **0.0** |
| **BAUV** | **El Baul** | **3.30** | **82** | *e*P | **Pn** | **08 23 46.5** | **+0.5** |
| BAUV | | | | *e*S | **Sn** | **08 24 24.2** | **-1.2** |
| **ZARC** | **Zaragoza, Cauc** | **3.61** | **254** | *e*P | **Pn** | **08 23 51.0** | **+0.7** |
| **BENV** | **Beln** | **3.98** | **68** | *e*P | **Pn** | **08 23 55.9** | **+0.5** |
| BENV | | | | *e*S | **Sn** | **08 24 40.5** | **-1.8** |

**WEL 09 08:33:45.1±1.1, 35˚S±8˚×18˚0E±1˚1, h33km, M3.6/11, ML3.8/12, MLv3.6/11, Error ellipse: s-maj=0.0km s-min=0.0km az=118.9, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.75** | **208** | P | Pn | 08 34 26.0 | -0.9 |
| MXZ | | | | S | Sn | 08 34 57.1 | -1.8 |
| **WMGZ** | **Waiomatatini S** | **2.94** | **204** | P | Pn | 08 34 30.2 | +0.7 |
| **PKGZ** | **Pakihiroa** | **3.12** | **208** | P | Pn | 08 34 32.4 | +0.3 |
| PKGZ | | | | S | Sn | 08 35 10.3 | +2.1 |
| **HAZ** | **Te Kaha** | **3.13** | **213** | P | Pn | 08 34 33.1 | +1.0 |
| **PUZ** | **Puketiti** | **3.22** | **204** | P | Pn | 08 34 32.7 | -0.7 |
| **RUGZ** | **Raukumara Rang** | **3.35** | **212** | P | Pn | 08 34 35.5 | +0.2 |
| RUGZ | | | | S | Sn | 08 35 14.5 | +0.6 |
| **TWGZ** | **Tauwhareparae** | **3.41** | **207** | P | Pn | 08 34 34.4 | -1.6 |
| TWGZ | | | | S | Sn | 08 35 18.0 | +2.6 |
| **TKGZ** | **Te Karaka** | **3.69** | **206** | P | Pn | 08 34 40.4 | +0.6 |
| TKGZ | | | | S | Sn | 08 35 24.8 | +2.6 |
| **MWZ** | **Matawai** | **3.72** | **210** | P | Pn | 08 34 39.9 | -0.4 |
| MWZ | | | | S | Sn | 08 35 23.1 | 0.0 |
| **KUZ** | **Kuaotunu** | **3.77** | **244** | S | Sn | 08 35 24.6 | +0.5 |
| **URZ** | **Urewera** | **3.85** | **215** | P | Pn | 08 34 41.7 | -0.3 |
| **RAGZ** | **Rawiri** | **3.91** | **210** | P | Pn | 08 34 42.3 | -0.6 |
| **RIGZ** | **Rimuhau** | **3.96** | **205** | P | Pn | 08 34 43.1 | -0.5 |
| RIGZ | | | | S | Sn | 08 35 29.1 | +0.2 |
| **SNGZ** | **Shannon Statio** | **4.18** | **209** | P | Pn | 08 34 46.6 | -0.1 |
| SNGZ | | | | S | Sn | 08 35 34.4 | 0.0 |
| **TOZ** | **Tahuroa Road** | **4.41** | **233** | P | Pn | 08 34 50.9 | +1.3 |
| **MTHZ** | **Maungataniwha** | **4.45** | **213** | P | Pn | 08 34 51.2 | +0.8 |
| MTHZ | | | | S | Sn | 08 35 40.7 | -0.3 |
| **NMHZ** | **Naumai** | **4.67** | **211** | P | Pn | 08 34 53.5 | +0.1 |
| **BKZ** | **Black Stump Fm** | **4.86** | **213** | P | Pn | 08 34 55.6 | -0.4 |
| **KWHZ** | **Kaweka Forest** | **5.11** | **212** | P | Pn | 08 34 59.4 | 0.0 |
| **TMVZ** | **Te Maari** | **5.21** | **219** | P | Pn | 08 35 02.7 | +1.9 |
| **NTVZ** | **North Tongarir** | **5.21** | **219** | P | Pn | 08 35 05.0 | +4.2 |
| **ETVZ** | **East Tongariro** | **5.22** | **219** | P | Pn | 08 35 04.1 | +3.1 |
| **OTVZ** | **Oturere** | **5.26** | **219** | P | Pn | 08 35 05.6 | +4.0 |
| **BHHZ** | **Black Hill Sta** | **5.32** | **214** | P | Pn | 08 35 04.7 | +2.4 |
| **TSZ** | **Takapari Road** | **5.83** | **211** | P | Pn | 08 35 13.2 | +4.0 |

*KRSC **09** 08:38:29.3±1.6, 52˚.15N×160˚.62E, h54km±22km, ML4.5*
*MOS **09** 08:38:32.6±1.2, 52˚.24N×160˚.33E, h58km, mb4.5/11, Error ellipse: s-maj=7.9km s-min=3.9km az=101.7*
*IDC **09** 08:38:34.6±2.5, 52˚.29N×160˚.14E, h44km±22km, mb3.6/21, mb1 3.8/24, mb1mx3.7/46, mbtmp3.8/24, ML3.8/4, MS3.5/6, Ms1 3.5/6, ms1mx3.0/94, Error ellipse: s-maj=19.4km s-min=15.0km az=151.0*
*NEIC **09** 08:38:35.5±1.6, 52˚.3N±0˚.1×160˚.07E±0˚.08, h49km±8km, mb4.3/16, Error ellipse: s-maj=21.5km s-min=6.8km az=171.0*
**ISC 09 08:38:32.4±0.6, 52˚.20N±0˚.05×160˚.49E±0˚.04, h36km±1km, n161, σ1s71/184, mb4.2/32, 5C-3b, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.95** | **343** | PN | **Pn** | **08 38 48.3** | **-0.8** |
| SPN | | | | S | **Sn** | **08 39 01.0** | **-0.4** |
| **SPN** | **Mys Shipunski** | **0.95** | **343** | *i* P | **Pn** | **08 38 48.3** | **-0.8** |
| SPN | | | | *e*S | **Sn** | **08 39 01.0** | **-0.4** |
| **NLC** | **Nalytchevo** | **1.20** | **325** | PN | **Pn** | **08 38 52.6** | **+0.1** |
| NLC | | | | S | **Sn** | **08 39 09.4** | **+1.9** |
| **NLC** | **Nalytchevo** | **1.20** | **325** | *e*P | **Pn** | **08 38 52.6** | **+0.1** |
| NLC | | | | *e*S | **Sn** | **08 39 09.4** | **+1.9** |
| **RUS** | **Russkaya** | **1.24** | **282** | PN | **Pn** | **08 38 52.9** | **-0.1** |
| RUS | | | | S | **Sn** | **08 39 09.6** | **+1.1** |
| **RUS** | **Russkaya** | **1.24** | **282** | *e*P | **Pn** | **08 38 52.9** | **-0.1** |
| RUS | | | | *e*S | **Sn** | **08 39 09.6** | **+1.1** |
| **DALK** | **Dalny** | **1.35** | **309** | PN | **Pn** | **08 38 54.7** | **+0.1** |
| DALK | | | | S | **Sn** | **08 39 13.6** | **+2.4** |
| **DALK** | **Dalny** | **1.35** | **309** | *e*P | **Pn** | **08 38 54.7** | **+0.1** |
| DALK | | | | *e*S | **Sn** | **08 39 13.6** | **+2.4** |
| **PET** | **Petropavlovsk** | **1.39** | **307** | PN | **Pn** | **08 38 55.4** | **+0.2** |
| PET | | | | S | **Sn** | **08 39 13.4** | **+1.1** |
| **PET** | **Petropavlovsk** | **1.39** | **307** | | **Pn** | **08 38 55.4** | **+0.2** |
| **PET** | **Petropavlovsk** | **1.39** | **307** | *e*P | **Pn** | **08 38 55.4** | **+0.2** |
| PET | | | | *e*S | **Sn** | **08 39 13.4** | **+1.1** |
| **UGLR** | **Uglovaya** | **1.43** | **316** | PN | **Pn** | **08 38 56.7** | **+0.8** |
| **UGLR** | **Uglovaya** | **1.43** | **316** | *e*P | **Pn** | **08 38 56.7** | **+0.8** |
| **MTVR** | **Mutnovka** | **1.45** | **282** | PN | **Pn** | **08 38 56.4** | **+0.3** |
| MTVR | | | | S | **Sn** | **08 39 15.2** | **+1.4** |
| **MTVR** | **Mutnovka** | **1.45** | **282** | *e*P | **Pn** | **08 38 56.4** | **+0.3** |
| MTVR | | | | *e*S | **Sn** | **08 39 15.2** | **+1.4** |
| **SDLR** | **Sedlovina** | **1.46** | **319** | PN | **Pn** | **08 38 56.7** | **+0.5** |
| **SDLR** | **Sedlovina** | **1.46** | **319** | *e*P | **Pn** | **08 38 56.7** | **+0.5** |
| **SMAR** | **Somma** | **1.48** | **317** | PN | **Pn** | **08 38 57.1** | **+0.5** |
| **SMAR** | **Somma** | **1.48** | **317** | *e*P | **Pn** | **08 38 57.1** | **+0.5** |
| **AVH** | **Avacha** | **1.51** | **316** | PN | **Pn** | **08 38 57.8** | **+0.9** |
| **AVH** | **Avacha** | **1.51** | **316** | *e*P | **Pn** | **08 38 57.8** | **+0.9** |
| **GRL** | **Gorelyy** | **1.52** | **284** | PN | **Pn** | **08 38 58.1** | **+1.0** |
| **GRL** | **Gorelyy** | **1.52** | **284** | P | **Pn** | **08 38 58.1** | **+1.0** |
| **KRER** | **Koryakskii** | **1.53** | **317** | PN | **Pn** | **08 38 58.2** | **+0.9** |
| **KRER** | **Koryakskii** | **1.53** | **317** | *e*P | **Pn** | **08 38 58.2** | **+0.9** |
| **KDTR** | **Khodutka, Kamc** | **1.54** | **256** | PN | **Pn** | **08 38 56.9** | **-0.3** |
| KDTR | | | | S | **Sn** | **08 39 16.2** | **+0.2** |
| **KDTR** | **Khodutka, Kamc** | **1.54** | **256** | *e*P | **Pn** | **08 38 56.9** | **-0.3** |
| KDTR | | | | *e*S | **Sn** | **08 39 16.2** | **+0.2** |
| **KOK** | **Koryaka** | **1.57** | **315** | PN | **Pn** | **08 38 58.8** | **+1.0** |
| **KOK** | **Koryaka** | **1.57** | **315** | *e*P | **Pn** | **08 38 58.8** | **+1.0** |
| **KRMR** | **Karymshinskiy** | **1.58** | **295** | PN | **Pn** | **08 38 58.1** | **+0.4** |
| KRMR | | | | S | **Sn** | **08 39 18.0** | **+1.2** |
| **KRMR** | **Karymshinskiy** | **1.58** | **295** | *i* P | **Pn** | **08 38 58.1** | **+0.4** |
| KRMR | | | | *i* S | **Sn** | **08 39 18.0** | **+1.2** |
| **PEA0B** | **Petropavlovsk-** | **1.93** | **299** | PN | **Pn** | **08 39 03.7** | **+1.1** |
| **PEA0B** | **Petropavlovsk-** | **1.93** | **299** | Pn | **Pn** | **08 39 03.7** | **+1.1** |
| **PETK** | **Petropavlovsk-** 28nm,0.3s,baz=225,slow=6.0,SNR=474 | **1.93** | **299** | P | **Pn** | **08 39 02.8** | **+0.1** |
| PETK | | | | S | **Sn** | **08 39 30.8** | **+5.1** |
| PETK | 53nm,0.3s,baz=108,slow=22,SNR=3.0 | | | LR | LR | 08 39 35.6 | |
| **KII** | comp=Z,295nm,21.5s,baz=30,slow=36 **Karymskiy** | **1.95** | **342** | PN | **Pn** | **08 39 03.4** | **+0.5** |
| **KII** | **Karymskiy** | **1.95** | **342** | *e*P | **Pn** | **08 39 03.4** | **+0.5** |
| **GNL** | **Ganaly** | **2.15** | **315** | PN | **Pn** | **08 39 07.4** | **+1.7** |
| GNL | | | | S | **Sn** | **08 39 33.5** | **+2.3** |
| **GNL** | **Ganaly** | **2.15** | **315** | *e*P | **Pn** | **08 39 07.4** | **+1.7** |
| GNL | | | | *e*S | **Sn** | **08 39 33.5** | **+2.3** |
| **APC** | **Apacha** | **2.16** | **291** | PN | **Pn** | **08 39 07.3** | **+1.6** |
| APC | | | | S | **Sn** | **08 39 33.9** | **+2.7** |
| **APC** | **Apacha** | **2.16** | **291** | *e*P | **Pn** | **08 39 07.3** | **+1.6** |
| APC | | | | *e*S | **Sn** | **08 39 33.9** | **+2.7** |
| **PAU** | **Pauzhetka** | **2.40** | **254** | PN | **Pn** | **08 39 09.3** | **+0.3** |
| **PAU** | **Pauzhetka** | **2.40** | **254** | *e*P | **Pn** | **08 39 09.3** | **+0.3** |
| **MKZ** | **Mys Kozlova** | **2.48** | **17** | PN | **Pn** | **08 39 09.6** | **-0.5** |
| MKZ | | | | S | **Sn** | **08 39 38.5** | **-0.5** |
| **MKZ** | **Mys Kozlova** | **2.48** | **17** | *e*P | **Pn** | **08 39 09.6** | **-0.5** |
| MKZ | | | | *e*S | **Sn** | **08 39 38.5** | **-0.5** |
| **TUMD** | **Tumrok D** | **3.01** | **359** | *e*P | **Pn** | **08 39 18.0** | **+0.5** |
| TUMD | | | | *e*S | **Sn** | **08 39 53.3** | **+1.0** |
| **TUMR** | **Tumrok** | **3.10** | **356** | PN | **Pn** | **08 39 18.0** | **-0.7** |
| TUMR | | | | S | **Sn** | **08 39 53.3** | **-1.2** |
| **TUMR** | **Tumrok** | **3.10** | **356** | *e*P | **Pn** | **08 39 20.2** | **+1.5** |
| **SKR** | **Severo-Kuril's** | **3.13** | **243** | *e*PN | **Pn** | **08 39 19.7** | **+0.7** |
| SKR | | | | *e*S | **Sn** | **08 39 56.9** | **+1.8** |
| SKR | comp=Z,56nm,0.4s | | | pmax | pmax | | |
| SKR | comp=N,269nm,0.8s | | | smax | smax | | |
| SKR | comp=E,295nm,0.6s | | | smax | smax | | |
| **SKR** | **Severo-Kuril's** | **3.13** | **243** | *e*P | **Pn** | **08 39 19.6** | **+0.6** |
| SKR | | | | S | **Sn** | **08 39 55.5** | **+0.4** |
| **KMNR** | **Kamenistaya** | **3.57** | **358** | PN | **Pn** | **08 39 27.3** | **+2.1** |
| **KMNR** | **Kamenistaya** | **3.57** | **358** | *e*P | **Pn** | **08 39 27.3** | **+2.1** |
| **BZGR** | **Bezymyannyi-Gr** | **3.75** | **2** | PN | **Pn** | **08 39 31.4** | **+3.7** |
| **BZGR** | **Bezymyannyi-Gr** | **3.75** | **2** | P | **Pn** | **08 39 31.4** | **+3.7** |
| **KIRR** | **Kirishev** | **3.76** | **359** | PN | **Pn** | **08 39 29.7** | **+1.8** |
| **KIRR** | **Kirishev** | **3.76** | **359** | *e*P | **Pn** | **08 39 29.7** | **+1.8** |
| **BZWR** | **Bezymyannyi-We** | **3.77** | **0** | PN | **Pn** | **08 39 30.8** | **+2.7** |
| **BZWR** | **Bezymyannyi-We** | **3.77** | **0** | *e*P | **Pn** | **08 39 30.8** | **+2.7** |
| **KPT** | **Kopyto** | **3.78** | **358** | PN | **Pn** | **08 39 29.5** | **+1.4** |
| **KPT** | **Kopyto** | **3.78** | **358** | *e*P | **Pn** | **08 39 29.5** | **+1.4** |
| **ZLN** | **Zelenaya** | **3.83** | **3** | PN | **Pn** | **08 39 32.0** | **+3.2** |
| **ZLN** | **Zelenaya** | **3.83** | **3** | *e*P | **Pn** | **08 39 32.0** | **+3.2** |
| **ESO** | **Esso** | **3.88** | **345** | PN | **Pn** | **08 39 31.2** | **+1.8** |
| **ESO** | **Esso** | **3.88** | **345** | *e*P | **Pn** | **08 39 31.2** | **+1.8** |
| **KOZ** | **Kozyrevsk** | **3.89** | **355** | PN | **Pn** | **08 39 29.1** | **-0.4** |
| **KOZ** | **Kozyrevsk** | **3.89** | **355** | *e*P | **Pn** | **08 39 29.1** | **-0.4** |
| **KLY** | **Klyuchi** | **4.12** | **1** | PN | **Pn** | **08 39 34.0** | **+1.3** |
| **KLY** | **Klyuchi** | **4.12** | **1** | P | **Pn** | **08 39 34.0** | **+1.3** |
| **KBTR** | **Krutoberegovo** | **4.25** | **18** | PN | **Pn** | **08 39 35.0** | **+0.6** |
| **KBTR** | **Krutoberegovo** | **4.25** | **18** | *e*P | **Pn** | **08 39 35.0** | **+0.6** |
| **KBG** | **Krutoberegovo** | **4.27** | **17** | PN | **Pn** | **08 39 36.0** | **+1.3** |
| **KBG** | **Krutoberegovo** | **4.27** | **17** | *e*P | **Pn** | **08 39 36.0** | **+1.3** |
| **BKI** | **Bering** | **4.43** | **45** | PN | **Pn** | **08 39 36.4** | **-0.6** |
| **BKI** | **Bering** | **4.43** | **45** | *e*P | **Pn** | **08 39 36.4** | **-0.6** |
| BKI | | | | *e*S | **Sn** | **08 40 23.9** | **-3.4** |
| **SHEM** | **Shemya Is, Ala** comp=E,171nm,19.3s,baz=310,slow=37 | **8.33** | **81** | LR | LR | 08 43 47.0 | |
| **TILK** | **Tilichiki** | **8.84** | **19** | PN | **Pn** | **08 40 40.7** | **+3.3** |
| **TILK** | **Tilichiki** | **8.84** | **19** | P | **Pn** | **08 40 40.7** | **+3.3** |
| **MA2** | **Magadan** | **9.18** | **327** | *i e*PN | **Pn** | **08 40 41.5** | **-0.6** |
| MA2 | comp=Z,2.0nm,1.0s | | | pmax | pmax | | |
| **SEY** | **Seymchan** comp=Z,0.1nm,0.3s,baz=135,slow=14,SNR=1.7 | **11.60** | **341** | P | **Pn** | **08 41 14.9** | **-0.2** |
| SEY | comp=Z,244nm,20.2s,baz=16,slow=40 | | | LR | LR | 08 46 09.3 | |
| **ASAJ** | **Asahikawa** comp=Z,0.5nm,0.3s,baz=45,slow=12,SNR=2.7 | **14.39** | **243** | P | **Pn** | **08 41 52.4** | **-1.0** |
| ASAJ | comp=Z,160nm,20.0s,baz=28,slow=36 | | | LR | LR | 08 47 02.9 | |
| **BILL** | **Bilibino** | **16.14** | **8** | *i e*P | **Pn** | **08 42 11.9** | **-4.2** |
| BILL | comp=Z,1.0nm,0.3s | | | pmax | pmax | | |
| BILL | comp=Z,125nm,17.0s | | | MLR | MLR | | |
| **KLR** | **Kul'dur** comp=Z,0.1nm,0.3s,baz=48,slow=12,SNR=4.7 | **18.39** | **272** | P | **P** | **08 42 43.2** | **-0.7** |
| KLR | comp=Z,204nm,19.2s,baz=32,slow=40 | | | LR | LR | 08 50 43.4 | |
| **YAK** | **Yakutsk** comp=Z,0.1nm,0.3s,baz=292,slow=7.9,SNR=5.6 | **19.22** | **313** | P | **P** | **08 42 51.0** | **-1.9** |
| **YAK** | **Yakutsk** | **19.22** | **313** | *e*P | **P** | **08 42 50.9** | **-1.9** |
| YAK | | | | *e*S | **Sn** | **08 46 26.9** | **-1.2** |
| YAK | comp=Z,29nm,1.0s | | | pmax | pmax | | |
| YAK | comp=E,11nm,1.0s | | | pmax | pmax | | |
| YAK | comp=N,4.0nm,1.0s | | | pmax | pmax | | |
| YAK | comp=N,166nm,6.3s | | | smax | smax | | |
| YAK | comp=E,130nm,4.4s | | | smax | smax | | |
| **YAK** | **Yakutsk** | **19.22** | **313** | P | **P** | **08 42 50.6** | **-2.3** |
| YAK | comp=Z,28nm,1.0s | | | IAmb | IAmb | 08 42 52.8 | |
| **MJAR** | **Matsushiro Ar** comp=Z,1.1nm,0.4s,baz=41,slow=8.4,SNR=1.8 | **22.20** | **234** | P | **P** | **08 43 24.2** | **-1.2** |
| **RDOG** | **Red Dog Mine** | **23.64** | **34** | P | **P** | **08 43 39.9** | **+0.1** |
| RDOG | comp=Z,7.2nm,0.6s | | | IAmb | IAmb | 08 43 46.9 | |
| **TIXI** | **Tiksi** | **24.00** | **336** | *i e*P | **P** | **08 43 41.3** | **-1.8** |
| TIXI | | | | *i* *PP | **pP** | **08 43 51.7** | **-0.9** |
| TIXI | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| **TIXI** | **Tiksi** | **24.00** | **336** | P | **P** | **08 43 42.0** | **-1.0** |
| **HIA** | **Hailar** | **25.72** | **280** | *i e*P | **P** | **08 43 56.2** | **-2.8** |
| HIA | comp=Z,6.0nm,1.0s | | | pmax | pmax | | |
| **J20K** | **Nowinta River** | **26.11** | **45** | P | **P** | **08 44 07.1** | **+4.7** |
| **IMAR** | **Indian Mountai** | **26.51** | **41** | P | **P** | **08 44 07.1** | **+1.1** |
| **KSRS** | **Korea Array** comp=Z,51nm,20.4s,baz=335,slow=38 | **27.12** | **250** | LR | LR | 08 55 41.4 | |
| **TJN** | **Taejon** | **28.19** | **249** | *i e*P | **P** | **08 44 18.5** | **-2.7** |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,1.0s,baz=248,slow=7.4,SNR=2.2 | **29.28** | **44** | P | **P** | **08 44 31.5** | **+0.8** |
| **BMAR** | **Burnt Mountain** | **30.28** | **39** | P | **P** | **08 44 43.4** | **+3.8** |
| **BCAR** | **Beaver Creek A** | **31.64** | **47** | P | **P** | **08 44 54.4** | **+2.8** |
| **H11N2** | **WAKE ISLAND Hy** baz=353,slow=74,SNR=29 | **32.79** | **169** | T | T | 09 19 48.6 | |
| **H11N3** | **WAKE ISLAND Hy** baz=353,slow=74,SNR=31 | **32.80** | **169** | T | T | 09 19 46.4 | |
| **H11N1** | **WAKE ISLAND Hy** baz=353,SNR=36 | **32.80** | **169** | T | T | 09 19 46.9 | |
| **ULN** | **Ulaanbaatar** | **33.95** | **284** | *i e*P | **P** | **08 45 09.8** | **-2.2** |
| ULN | comp=Z,1.0nm,1.1s | | | pmax | pmax | | |
| **H11S1** | **WAKE ISLAND Hy** baz=354 | **33.97** | **169** | T | T | 09 21 19.4 | |
| **H11S3** | **WAKE ISLAND Hy** baz=354 | **33.98** | **169** | T | T | 09 21 20.8 | |
| **H11S2** | **WAKE ISLAND Hy** baz=354 | **33.99** | **169** | T | T | 09 21 21.7 | |
| **SONM** | **Songino Array** comp=Z,0.2nm,0.3s,baz=66,slow=8.2,SNR=5.6 | **34.35** | **285** | P | **P** | **08 45 14.5** | **-1.0** |
| SONM | comp=Z,265nm,18.3s,baz=356,slow=39 | | | LR | LR | 09 00 52.9 | |
| **SONM** | **Songino Array** | **34.35** | **285** | P | **P** | **08 45 14.7** | **-0.8** |
| SONM | comp=Z,1.0nm,1.4s | | | pmax | pmax | | |
| **SONM** | **Songino Array** | **34.35** | **285** | P | **P** | **08 45 14.7** | **-0.8** |
| **ZAK** | **Zakamensk** | **35.03** | **290** | *e*P | **P** | **08 45 20.9** | **-0.4** |
| ZAK | comp=Z,4.0nm,1.1s | | | pmax | pmax | | |
| **YKA** | **Yellowknife Ar** comp=Z,0.1nm,0.4s,baz=301,slow=8.5,SNR=3.5 | **43.66** | **42** | P | **P** | **08 46 34.0** | **+1.1** |
| **YKA** | **Yellowknife Ar** | **43.66** | **42** | P | **P** | **08 46 34.0** | **+1.1** |
| **DGZ** | **Jazzator, Alta** | **44.29** | **297** | *i e*P | **P** | **08 46 34.8** | **-3.5** |
| DGZ | | | | *i* *PP | **pP** | **08 46 48.2** | **-0.2** |
| DGZ | comp=Z,2.0nm,1.0s | | | pmax | pmax | | |
| **SPITS** | **Spitsbergen Ar** | **48.06** | **351** | P | **P** | **08 47 08.3** | **+0.9** |
| SPITS | comp=Z,44nm,1.3s | | | pmax | pmax | | |
| **SPB2** | **Spitsbergen Ar** | **48.06** | **351** | P | **P** | **08 47 08.8** | **+1.3** |
| **KURK** | **Kurchatov** | **48.42** | **303** | P | **P** | **08 47 09.8** | **-0.7** |
| KURK | comp=Z,11nm,1.3s | | | pmax | pmax | | |
| **KURK** | **Kurchatov** | **48.42** | **303** | P | **P** | **08 47 09.8** | **-0.7** |
| **MK31** | **Makanchi Array** | **48.77** | **297** | P | **P** | **08 47 11.9** | **-1.4** |
| MK31 | comp=Z,3.0nm,1.0s | | | pmax | pmax | | |
| **MK31** | **Makanchi Array** | **48.77** | **297** | P | **P** | **08 47 11.9** | **-1.4** |
| MK31 | comp=Z,2.5nm,0.9s | | | IAmb | IAmb | 08 47 22.1 | |
| **MKAR** | **Makanchi Array** comp=Z,1.7nm,0.9s,baz=70,slow=8.2,SNR=5.3 | **48.77** | **297** | P | **P** | **08 47 12.0** | **-1.4** |
| **MKAR** | **Makanchi Array** | **48.77** | **297** | P | **P** | **08 47 12.1** | **-1.2** |
| **MKAR** | **Makanchi Array** | **48.77** | **297** | P | **P** | **08 47 12.1** | **-1.2** |
| **BVAR** | **Borovoye Array** comp=Z,1.3nm,0.4s,baz=57,slow=16,SNR=9.1 | **51.14** | **309** | P | **P** | **08 47 30.2** | **-1.0** |
| **BRVK** | **Borovoye** | **51.17** | **309** | P | **P** | **08 47 30.4** | **-1.0** |
| BRVK | comp=Z,7.0nm,1.2s | | | pmax | pmax | | |
| **BRVK** | **Borovoye** | **51.17** | **309** | P | **P** | **08 47 30.4** | **-1.0** |
| BRVK | comp=Z,6.8nm,1.2s | | | IAmb | IAmb | 08 47 31.1 | |
| **ARCES** | **ARCESS Array B** comp=Z,5.1nm,0.9s,baz=27,slow=8.3,SNR=2.0 | **54.22** | **342** | P | **P** | **08 47 54.8** | **+1.1** |
| **ARU** | **Arti** comp=Z,2.0nm,0.2s,baz=126,slow=8.7,SNR=3.5 | **54.22** | **318** | P | **P** | **08 47 53.2** | **-0.7** |
| **ARU** | **Arti** | **54.22** | **318** | *d i*P | **P** | **08 47 51.1** | **-2.8** |
| ARU | | | | S | **S** | **08 55 28.2** | **0.0** |
| ARU | | | | SS | **SS** | **08 59 03.2** | **-6.4** |
| ARU | comp=Z,22nm,2.6s | | | pmax | pmax | | |
| **ARU** | **Arti** | **54.22** | **318** | P | **P** | **08 47 53.4** | **-0.5** |
| ARU | comp=Z,5.3nm,1.0s | | | IAmb | IAmb | 08 48 12.5 | |
| **SUMG** | **Summit** | **54.82** | **7** | *i* P | **P** | **08 48 00.0** | **+1.5** |
| **AAK** | **Ala-Archa** comp=Z,0.5nm,0.4s,baz=4.1,slow=1.3,SNR=3.6 | **55.70** | **297** | P | **P** | **08 48 04.0** | **-0.9** |
| **AAK** | **Ala-Archa** | **55.70** | **297** | P | **P** | **08 48 04.3** | **-0.7** |
| AAK | comp=Z,3.0nm,1.1s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** | **55.70** | **297** | P | **P** | **08 48 04.3** | **-0.7** |
| AAK | comp=Z,3.5nm,1.1s | | | IAmb | IAmb | 08 48 05.2 | |
| **NVAR** | **Mina Array Bea** comp=Z,0.3nm,0.8s,baz=296,slow=6.9,SNR=2.0 | **55.82** | **70** | P | **P** | **08 48 09.9** | **+3.9** |
| **KKAR** | **Karatay Array** | **57.54** | **300** | P | **P** | **08 48 17.4** | **-0.5** |
| **KKAR** | **Karatay Array** | **57.54** | **300** | P | **P** | **08 48 17.4** | **-0.5** |
| **PDAR** | **Pinedale Array** comp=Z,0.4nm,0.8s,baz=320,slow=3.9,SNR=3.9 | **57.75** | **61** | P | **P** | **08 48 22.4** | **+2.8** |
| **PDAR** | **Pinedale Array** | **57.75** | **61** | P | **P** | **08 48 22.1** | **+2.5** |
| **KLMR** | **Klimovskoe** | **57.85** | **330** | *e*P | **P** | **08 48 16.2** | **-3.5** |
| KLMR | comp=Z,27nm,1.5s | | | pmax | pmax | | |
| **KLMR** | **Klimovskoe** | **57.85** | **330** | *e*P | **P** | **08 48 16.3** | **-3.5** |
| KLMR | comp=Z,27nm,1.5s | | | AMP | | 08 48 19.9 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.3nm,0.3s,baz=34,slow=6.6,SNR=7.1 | **58.24** | **259** | P | **P** | **08 48 24.2** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **58.24** | **259** | P | **P** | **08 48 23.1** | **0.0** |
| **ABKAR** | **Akbulak array** | **58.56** | **311** | P | **P** | **08 48 25.4** | **+0.5** |
| ABKAR | comp=Z,2.4nm,1.1s | | | IAmb | IAmb | 08 48 42.8 | |
| **ABKAR** | **Akbulak array** | **58.56** | **311** | P | **P** | **08 48 24.9** | **0.0** |
| **AKTO** | **Aktyubinsk** comp=Z,1.7nm,0.9s,baz=63,slow=4.5,SNR=4.3 | **58.61** | **313** | P | **P** | **08 48 24.1** | **-1.1** |
| **FIA1** | **FINESS Array S** | **61.04** | **337** | P | **P** | **08 48 42.8** | **+1.1** |
| **FINES** | **FINESS Array B** comp=Z,1.7nm,0.4s,baz=29,slow=8.9,SNR=22 | **61.04** | **337** | P | **P** | **08 48 42.6** | **+0.9** |
| **FINES** | **FINESS Array B** | **61.04** | **337** | P | **P** | **08 48 43.0** | **+1.3** |
| **FINES** | **FINESS Array B** | **61.04** | **337** | P | **P** | **08 48 43.0** | **+1.3** |
| **NB2** | **NORSAR Subarra** comp=Z,0.7nm,0.5s,baz=28,slow=6.2 | **64.47** | **344** | P | **P** | **08 49 05.6** | **+1.0** |
| **NOA** | **NORSAR Array B** comp=Z,1.3nm,0.8s,baz=21,slow=6.6,SNR=4.7 | **64.47** | **344** | P | **P** | **08 49 04.6** | **0.0** |
| **NACGM** | **Naroch** | **66.56** | **333** | *i* P | P | 08 49 04.9 | -13 |
| **AKASG** | **Malin Array Be** comp=Z,0.9nm,0.4s,baz=30,slow=6.4,SNR=8.1 | **69.51** | **329** | P | **P** | **08 49 36.7** | **0.0** |
| **AKASG** | **Malin Array Be** | **69.51** | **329** | P | **P** | **08 49 37.1** | **+0.4** |
| AKASG | comp=Z,4.0nm,1.4s | | | pmax | pmax | | |
| **AKASG** | **Malin Array Be** | **69.51** | **329** | P | **P** | **08 49 37.1** | **+0.4** |
| AKASG | comp=Z,4.5nm,1.4s | | | IAmb | IAmb | 08 49 38.1 | |
| **KIV** | **Kislovodsk** | **70.26** | **317** | *e*P | P | 08 49 36.4 | -5.2 |
| KIV | comp=Z,4.0nm,1.1s | | | pmax | pmax | | |
| **TXAR** | **Lajitas Array** comp=Z,0.3nm,0.8s,baz=326,slow=4.4,SNR=2.4 | **70.77** | **67** | P | **P** | **08 49 46.1** | **+1.2** |
| **TXAR** | **Lajitas Array** | **70.77** | **67** | P | **P** | **08 49 47.3** | **+2.4** |
| **TXAR** | **Lajitas Array** | **70.77** | **67** | P | **P** | **08 49 47.3** | **+2.4** |
| **BURAR** | **Bucovina Array** | **73.47** | **330** | P | **P** | **08 50 01.1** | **+0.2** |
| **WRA** | **Warramunga Arr** comp=Z,0.7nm,0.9s,baz=25,slow=6.6,SNR=3.6 | **75.37** | **205** | P | **P** | **08 50 12.9** | **+1.0** |
| **GERES** | **GERESS Array B** comp=Z,0.6nm,0.8s,baz=30,slow=4.9,SNR=2.2 | **75.44** | **338** | P | **P** | **08 50 13.7** | **+1.5** |
| **BRTR** | **Keskin Array B** comp=Z,1.1nm,0.8s,baz=247,slow=2.5,SNR=3.6 | **77.47** | **321** | P | **P** | **08 50 24.6** | **+0.7** |
| **ASAR** | **Alice

**mb1 3.8/4, mb1mx3.2/33, mbtmp3.5/4, ML3.4/1, Error ellipse: s-maj=233.3km s-min=23.0km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **6.32** | **61** | Pn | Pn | 08 59 45.3 | +0.3 |
| | 0.8nm,0.3s,baz=249,slow=14,SNR=1.3 | | | | | | |
| AFI | | | | Sn | Sn | 09 01 00.1 | +2.1 |
| | 0.6nm,0.3s,baz=102,slow=20,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.69** | **259** | P | P | 09 06 34.1 | +0.5 |
| | 1.0nm,1.1s,baz=96,slow=8.1,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **45.90** | **253** | P | P | 09 06 34.8 | -0.4 |
| | 0.2nm,0.8s,baz=83,slow=7.8,SNR=4.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.21** | **44** | P | P | 09 10 12.3 | 0.0 |
| | 0.5nm,0.6s,baz=228,slow=8.1,SNR=5.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **141.59** | **5** | PKP | PKPdf | 09 17 43.7 | +0.2 |
| | 2.4nm,0.8s,baz=0.0,slow=2.5,SNR=4.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.06** | **346** | PKPbc | PKPdf | 09 17 54.1 | +0.7 |
| | 1.1nm,0.5s,baz=9.5,slow=2.4,SNR=6.5 | | | | | | |

*NNC **09** 09:08:08.8±6.1, 53°.82N×90°.87E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=43.9km s-min=32.5km az=51.0, Suspected Mining explosion.*

*IDC **09** 09:08:11.4±3.4, 53°.67N×90°.73E, h0km, mb1 3.1/3, mb1mx2.6/49, mbtmp3.1/3, ML2.3/3, Error ellipse: s-maj=28.0km s-min=23.8km az=58.0*

**ISC 09 09:08:11.2±4.0, 53°.7N±0°.1×90°.7E±0°.2, h0km, n9, σ1s77/11, 6C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.50** | **276** | *i* | | 09 31 10.0 | |
| | baz=87,slow=342,SNR=1.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.50** | **276** | ⇑Pg | **Pb** | **09 09 12.5** | **-1.6** |
| | 0.9nm,0.8s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 09 10 01.5 | |
| | 6.3nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.50** | **276** | Pn | **Pn** | **09 09 08.5** | **+1.5** |
| | 0.2nm,0.3s,baz=89,slow=14,SNR=2.0 | | | | | | |
| ZALV | | | | Lg | Lg | 09 10 03.0 | |
| | 2.0nm,0.3s,baz=96,slow=27,SNR=10.0 | | | | | | |
| **KURK** | **Kurchatov** | **8.02** | **253** | ⇓Sn | **Sn** | **09 11 41.4** | **+1.2** |
| | 3.7nm,1.0s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 09 12 28.9 | |
| | 16nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.12** | **252** | Pn | **Pn** | **09 10 10.2** | **0.0** |
| | 0.1nm,0.3s,baz=64,slow=14,SNR=6.9 | | | | | | |
| KURBB | | | | Sn | **Sn** | **09 11 40.6** | **-2.0** |
| | 0.0nm,0.3s,baz=70,slow=28,SNR=1.6 | | | | | | |
| KURBB | | | | Lg | Lg | 09 12 25.3 | |
| | 0.0nm,0.3s,baz=70,slow=31,SNR=2.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.12** | **252** | ⇑Pn | **Pn** | **09 10 09.9** | **-0.3** |
| | 1.1nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **09 11 45.8** | **+3.3** |
| | 5.5nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 12 29.0 | |
| | 15nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **8.79** | **221** | ⇑Pn | **Pn** | **09 10 21.5** | **+1.9** |
| | 0.5nm,0.7s,baz=34,slow=13,SNR=7.1 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 11 59.5** | **+0.2** |
| | 1.0nm,0.7s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 12 52.0 | |
| | 4.5nm,1.0s,baz=40,slow=28,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.79** | **221** | Pn | **Pn** | **09 10 19.3** | **-0.3** |
| | 0.1nm,0.3s,baz=37,slow=13,SNR=6.0 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 11 58.7** | **-0.6** |
| | 0.1nm,0.3s,baz=37,slow=22,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 09 12 47.7 | |
| | 0.0nm,0.3s,baz=40,slow=26,SNR=5.3 | | | | | | |
| **MAKZ** | **Makanchi** | **8.91** | **222** | ⇑Lg | Lg | 09 12 56.0 | |
| | 5.7nm,1.1s | | | | | | |

*SFS **09** 09:14:16.0, 35°.60N×3°.84W, h4km, ML2.5, ALBORAN SUR*

*CNRM **09** 09:14:17.9, 35°.63N×3°.73W, h25km, ml2.7*

*INMG **09** 09:14:17.0±1.4, 35°.61N×3°.84W, h0km, ML2.4, Error ellipse: s-maj=3.5km s-min=2.9km az=9.0*

*IGIL **09** 09:14:19.0, 35°.61N×3°.85W, h0km, ML2.2*

**ISC 09 09:14:17.3±1.4, 35°.62N±0°.04×3°.71W±0°.04, h23km±14km, n27, σ1s35/46, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.44** | **205** | P | **Pb** | **09 14 26.5** | **0.0** |
| PALE | | | | S | **Sb** | **09 14 32.9** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.13** | **112** | P | **Pn** | **09 14 37.2** | **-0.5** |
| CHAS | | | | S | **Sb** | **09 14 51.7** | **-0.7** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **333** | P | **Pn** | **09 14 39.7** | **-0.2** |
| EMAL | | | | S | **Sn** | **09 14 55.0** | **-1.4** |
| **TAF** | **Taforalt** | **1.33** | **127** | P | **Pn** | **09 14 41.0** | **+0.4** |
| TAF | | | | S | **Sn** | **09 14 57.6** | **0.0** |
| **SMIR** | **Smir Dam** | **1.36** | **273** | P | **Pn** | **09 14 38.9** | **-2.1** |
| SMIR | | | | S | **Sn** | **09 14 56.2** | **-2.2** |
| **CHEFC** | **Chefchaouen** | **1.43** | **250** | P | **Pb** | **09 14 43.3** | **0.0** |
| CHEFC | | | | S | **Sb** | **09 15 03.1** | **+2.0** |
| **JBK** | **JBK** | **1.59** | **143** | P | **Pn** | **09 14 44.4** | **+0.2** |
| JBK | | | | S | **Sn** | **09 15 04.2** | **+0.1** |
| **LCRM** | **LCR** | **2.15** | **207** | P | **Pb** | **09 14 54.5** | **-1.1** |
| LCRM | | | | S | **Sb** | **09 15 21.9** | **+0.1** |
| **IFR** | **Ifrane** | **2.40** | **210** | P | **Pb** | **09 14 59.1** | **-0.8** |
| IFR | | | | S | **Sn** | **09 15 25.3** | **+1.1** |
| **MD31** | **MD31** | **2.88** | **198** | P | **Pn** | **09 15 03.7** | **+1.7** |
| **MDT** | **Midelt** | **2.89** | **195** | P | **Pn** | **09 15 04.5** | **+2.4** |
| **TDRA** | **Tendrara** | **2.92** | **151** | P | **Pn** | **09 15 05.3** | **+2.7** |
| **PVAQ** | **Vaqueiros** | **3.69** | **300** | *e*Pn | **Pn** | **09 15 14.6** | **+1.6** |
| PVAQ | | | | *e*Sn | **Sn** | **09 15 54.6** | **-1.1** |
| PVAQ | | | | A | A | 09 15 57.7 | |
| | 7.1nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **300** | P | **Pn** | **09 15 14.1** | **+1.1** |
| PVAQ | | | | S | **Sn** | **09 15 55.3** | **-0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **297** | *e*Pn | **Pn** | **09 15 14.5** | **+0.4** |
| PBDV | | | | *e*Sn | **Sn** | **09 15 56.9** | **-0.9** |
| **PCVE** | **Castro Verde** | **4.02** | **301** | *e*Pn | **Pn** | **09 15 18.4** | **+0.9** |
| PCVE | | | | *e*Sn | **Sn** | **09 16 02.5** | **-1.5** |
| PCVE | | | | A | A | 09 16 15.4 | |
| | 3.8nm,0.8s | | | | | | |
| **FIGM** | **Figuig** | **4.03** | **149** | P | **Pn** | **09 15 17.7** | **-0.1** |
| **MESJ** | **Messejana** | **4.25** | **303** | *e*P | **Pn** | **09 15 21.7** | **+1.1** |
| MESJ | | | | *e*S | **Sn** | **09 16 07.8** | **-1.8** |
| MESJ | | | | IAML | | 09 16 12.6 | |
| | comp=N,4.5nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **303** | *e*Pn | **Pn** | **09 15 21.7** | **+1.1** |
| MESJ | | | | *e*Sn | **Sn** | **09 16 08.2** | **-1.3** |
| MESJ | | | | A | A | 09 16 17.6 | |
| | comp=N,4.4nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **317** | *e*Sn | **Sn** | **09 16 15.4** | **0.0** |
| PESTR | | | | A | A | 09 16 28.9 | |
| | comp=N,3.2nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **317** | P | **Pn** | **09 15 25.7** | **+1.7** |
| **EVO** | **Evora** | **4.51** | **311** | P | **Pn** | **09 15 25.5** | **+1.3** |
| EVO | | | | S | **Sn** | **09 16 15.2** | **-0.7** |
| **EVO** | **Evora** | **4.51** | **311** | *e*Pn | **Pn** | **09 15 25.3** | **+1.1** |
| EVO | | | | *e*Sn | **Sn** | **09 16 15.3** | **-0.6** |
| EVO | | | | A | A | 09 16 19.9 | |
| | comp=N,5.4nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **304** | *e*Pn | **Pn** | **09 15 26.5** | **+1.1** |
| PNCL | | | | *e*Sn | **Sn** | **09 16 17.2** | **-0.9** |
| PNCL | | | | A | A | 09 16 32.0 | |
| | comp=N,5.5nm,0.8s | | | | | | |
| **PMRV** | **Marv??o** | **4.80** | **324** | *e*Pn | **Pn** | **09 15 30.4** | **+2.1** |
| PMRV | | | | *e*Sn | **Sn** | **09 16 23.0** | **-0.2** |
| PMRV | | | | A | A | 09 16 55.8 | |
| | comp=N,5.6nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.98** | **315** | *e*Pn | **Pn** | **09 15 32.4** | **+1.7** |
| **PBRG** | **Braganca** | **6.62** | **340** | *e*Pn | **Pn** | **09 15 56.3** | **+3.1** |

**IDC 09 09:23:36.7±2.5, 53°.84N×86°.59E, h0km, mb1 2.7/2, mb1mx2.7/49, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=20.4km s-min=12.5km az=68.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.05** | **277** | *i* | | 09 28 40.0 | |
| | baz=94,slow=320,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.05** | **277** | Pg | Pg | 09 23 56.4 | -0.4 |
| | 0.4nm,0.3s,baz=97,slow=14,SNR=4.3 | | | | | | |
| ZALV | | | | Lg | Lg | 09 24 11.3 | |
| | 1.7nm,0.3s,baz=95,slow=29,SNR=16 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.90** | **240** | Pn | Pn | 09 25 06.1 | +0.8 |
| | 0.1nm,0.3s,baz=56,slow=13,SNR=4.3 | | | | | | |
| KURBB | | | | Lg | Lg | 09 26 45.3 | |
| | 0.0nm,0.3s,baz=61,slow=34,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.57** | **203** | Pn | Pn | 09 25 29.4 | +1.2 |
| | 0.1nm,0.3s,baz=23,slow=13,SNR=7.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 27 33.8 | |
| | 0.0nm,0.3s,baz=23,slow=30,SNR=2.7 | | | | | | |

**IDC 09 09:27:24.9±2.5, 53°.45N×87°.30E, h0km, mb1 2.9/2, mb1mx2.8/47, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=23.7km s-min=13.1km az=69.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.56** | **290** | *i* | | 09 38 00.0 | |
| | baz=104,slow=335,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.56** | **290** | Pg | Pn | 09 27 52.4 | -1.4 |
| | 0.9nm,0.3s,baz=110,slow=16,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 09 28 14.0 | |
| | 1.3nm,0.3s,baz=109,slow=27,SNR=8.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.11** | **246** | Pn | Pn | 09 28 57.1 | +0.8 |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=15 | | | | | | |
| KURBB | | | | Lg | Lg | 09 30 37.6 | |
| | 0.0nm,0.3s,baz=63,slow=32,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.40** | **208** | Pn | Pn | 09 29 15.6 | +1.5 |
| | 0.1nm,0.3s,baz=27,slow=14,SNR=16 | | | | | | |
| MKAR | | | | Sn | Sn | 09 30 37.9 | -0.8 |
| | 0.0nm,0.3s,baz=30,slow=30,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 31 17.9 | |
| | 0.0nm,0.3s,baz=26,slow=30,SNR=5.4 | | | | | | |

*IDC **09** 09:29:30.8±1.5, 16°.14S×174°.93W, h310km±14km, mb3.6/17, mb1 3.8/20, mb1mx3.7/38, mbtmp4.2/20, Error ellipse: s-maj=17.8km s-min=11.3km az=133.0*

*NEIC **09** 09:29:31.2±0.8, 16°.1S±0°.1×174°.89W±0°.10, h308km±7km, mb4.3/22, Error ellipse: s-maj=17.3km s-min=11.9km az=149.0*

*NOU **09** 09:29:32.8, 16°.20S×174°.83W, h285km, ML4.7/8, Tonga Islands*

**ISC 09 09:29:29.9±0.5, 16°.09S±0°.09×174°.88W±0°.08, h300km, n55, σ1s07/55, mb4.1/25, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.69** | **55** | P | **Pn** | **09 30 34.7** | **+1.7** |
| | 19nm,0.3s,baz=231,slow=0.8,SNR=38 | | | | | | |
| AFI | | | | S | **S** | **09 31 22.0** | **-1.4** |
| | 123nm,0.3s,baz=54,slow=22,SNR=18 | | | | | | |
| **AFI** | **Afiamalu** | **3.69** | **55** | Pn | **Pn** | **09 30 34.3** | **+1.4** |
| **AFI** | **Afiamalu** | **3.69** | **55** | P | **Pn** | **09 30 34.6** | **+1.7** |
| **TAVE** | **Taveuni** | **4.87** | **262** | P | **Pn** | **09 30 48.8** | **+2.9** |
| **DGTI** | **Dogotuki** | **5.18** | **267** | P | **Pn** | **09 30 52.1** | **+2.5** |
| **NIUE** | **Niue** | **5.58** | **123** | Pn | **Pn** | **09 30 55.6** | **+1.4** |
| **NIUE** | **Niue** | **5.58** | **123** | P | **Pn** | **09 30 55.5** | **+1.4** |
| **MSVF** | **Nonsavu** | **6.97** | **255** | P | **Pn** | **09 31 12.4** | **+1.4** |
| | 0.5nm,0.3s,baz=122,slow=11,SNR=4.5 | | | | | | |
| **MARNC** | **Mare, Loyalty** | **17.05** | **249** | P | **P** | **09 33 10.1** | **+0.8** |
| **SANVU** | **Saraoutou** | **17.26** | **270** | P | **P** | **09 33 12.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **18.63** | **248** | P | **P** | **09 33 25.8** | **-0.6** |
| | 0.2nm,0.3s,baz=54,slow=19,SNR=1.7 | | | | | | |
| **URZ** | **Urewera** | **23.19** | **196** | P | **P** | **09 34 09.0** | **-1.6** |
| | 1.9nm,0.3s,baz=333,slow=2.3,SNR=0.9 | | | | | | |
| **URZ** | **Urewera** | **23.19** | **196** | IAmb | IAmb | 09 34 19.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **33.77** | **239** | P | **P** | **09 35 44.2** | **-0.2** |
| **CTA** | **Charters Tower** | **37.11** | **258** | P | **P** | **09 36 12.8** | **+0.2** |
| | comp=Z,2.6nm,0.4s,baz=73,slow=9.9,SNR=5.9 | | | | | | |
| **CTAO** | **Charters Tower** | **37.11** | **258** | P | **P** | **09 36 13.2** | **+0.6** |
| CTAO | | | | IAmb | IAmb | 09 36 13.5 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **37.49** | **232** | P | **P** | **09 36 15.5** | **-0.1** |
| CAN | | | | IAmb | IAmb | 09 36 22.8 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **COEN** | **Coen** | **40.52** | **267** | P | **P** | **09 36 41.4** | **+0.6** |
| **STKA** | **Stephens Creek** | **42.47** | **240** | P | **P** | **09 36 55.7** | **-0.6** |
| | comp=Z,6nm,0.8s,baz=90,slow=8.6,SNR=6.5 | | | | | | |
| **STKA** | **Stephens Creek** | **42.47** | **240** | P | **P** | **09 36 55.8** | **-0.5** |
| **BBOO** | **Buckleboo** | **47.24** | **240** | P | **P** | **09 37 33.2** | **-0.5** |
| **WR0** | **Warramunga Arr** | **48.12** | **257** | P | **P** | **09 37 39.0** | **-1.6** |
| **WB0** | **Warramunga Arr** | **48.27** | **258** | P | **P** | **09 37 41.1** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 09 37 41.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **48.30** | **257** | P | **P** | **09 37 41.2** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 09 37 42.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.30** | **257** | P | **P** | **09 37 41.3** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 09 37 45.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.31** | **257** | P | **P** | **09 37 41.0** | **-0.9** |
| | comp=Z,5.1nm,0.6s,baz=90,slow=6.9,SNR=83 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.31** | **257** | P | **P** | **09 37 41.1** | **-0.9** |
| **AS31** | **Alice Springs** | **48.55** | **252** | P | **P** | **09 37 43.4** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 09 37 44.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **48.55** | **252** | P | **P** | **09 37 43.2** | **-0.6** |
| | comp=Z,26nm,0.6s,baz=85,slow=7.9,SNR=461 | | | | | | |
| **ASAR** | **Alice Springs** | **48.55** | **252** | P | **P** | **09 37 43.4** | **-0.5** |
| **MTN** | **Manton Dam** | **52.26** | **266** | P | **P** | **09 38 10.8** | **-0.7** |
| **FORT** | **Forrest** | **53.84** | **243** | P | **P** | **09 38 21.8** | **-1.0** |
| **KNRA** | **Kununurra** | **54.06** | **262** | P | **P** | **09 38 23.8** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 09 38 24.9 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.68** | **259** | P | **P** | **09 38 41.9** | **-1.1** |
| | comp=Z,1.3nm,0.5s,baz=18,slow=1.5,SNR=11 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.65** | **254** | P | **P** | **09 39 16.0** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 09 39 17.3 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **61.81** | **254** | P | **P** | **09 39 17.5** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 09 39 18.3 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **62.55** | **186** | P | **P** | **09 39 21.7** | **-0.2** |
| | comp=Z,2.8nm,0.8s,baz=57,slow=4.9,SNR=2.6 | | | | | | |
| **VNDA** | **Vanda** | **62.55** | **186** | P | **P** | **09 39 23.4** | **+1.4** |
| VNDA | | | | IAmb | IAmb | 09 39 35.0 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **72.86** | **343** | P | **P** | **09 40 27.5** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **72.86** | **343** | P | **P** | **09 40 26.1** | **0.0** |
| | comp=Z,4.2nm,0.7s,baz=126,slow=9.5,SNR=17 | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.86** | **343** | P | **P** | **09 40 26.7** | **+0.6** |
| **QSPA** | **South Pole Qui** | **73.96** | **180** | P | **P** | **09 40 32.5** | **-0.1** |
| | comp=Z,5.1nm,0.7s,baz=326,slow=0.8,SNR=21 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.96** | **180** | P | **P** | **09 40 33.1** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 09 40 34.2 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **75.66** | **316** | P | **P** | **09 40 42.0** | **-0.5** |
| | comp=Z,2.3nm,1.1s,baz=133,slow=8.4,SNR=5.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.79** | **43** | P | **P** | **09 40 45.0** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=213,slow=7.9,SNR=4.1 | | | | | | |
| **SEY** | **Seymchan** | **82.82** | **346** | P | **P** | **09 41 20.7** | **+0.3** |
| | comp=Z,3.5nm,0.8s,baz=155,slow=8.4,SNR=7.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.40** | **12** | P | **P** | **09 41 23.9** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=227,slow=5.6,SNR=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **83.72** | **42** | P | **P** | **09 41 25.0** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=221,slow=3.6,SNR=2.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.29** | **24** | P | **P** | **09 42 00.3** | **-0.9** |
| | comp=Z,0.4nm,1.0s,baz=231,slow=5.1,SNR=3.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.48** | **289** | P | **P** | **09 42 02.2** | **-0.9** |
| | comp=Z,2.8nm,0.3s,baz=108,slow=2.9,SNR=1.8 | | | | | | |
| **SONM** | **Songino Array** | **94.41** | **318** | P | **P** | **09 42 15.3** | **-0.8** |
| | comp=Z,0.3nm,0.7s,baz=114,slow=3.6,SNR=2.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.08** | **351** | PKP | **PKPdf** | **09 47 52.7** | **-1.3** |
| | comp=Z,5.1nm,1.0s,baz=33,slow=2.2,SNR=2.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.77** | **319** | PKPbc | **PKPdf** | **09 48 33.9** | **+0.6** |
| | comp=Z,2.0nm,0.9s,baz=79,slow=3.1,SNR=4.3 | | | | | | |
| **MLR** | **Muntele Rosu** | **145.87** | **334** | PKPbc | **PKPdf** | **09 48 34.1** | **+0.8** |
| | comp=Z,2.6nm,0.6s,baz=190,slow=7.0,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **146.58** | **350** | PKPbc | **PKPdf** | **09 48 35.1** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=4.3,slow=3.9,SNR=3.0 | | | | | | |

*IDC **09** 09:34:16.1±2.8, 53°.68N×88°.12E, h0km, mb1 2.9/2, mb1mx2.8/57, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=23.4km s-min=16.3km az=61.0*

*NNC **09** 09:34:17.1±3.0, 53°.71N×88°.01E, h0km, mb3.3, mpv2.9, Error ellipse: s-maj=23.7km s-min=13.8km az=56.0, Suspected Mining explosion.*

**ISC 09 09:34:18.2±3.9, 53°.7N±0°.1×88°.0E±0°.2, h0km, n8, σ0s98/10, 5C-4D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.87** | **279** | *i* | | 09 47 00.3 | |
| | baz=93,slow=336,SNR=1.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.87** | **279** | ⇓Pg | **Pn** | **09 34 51.2** | **-0.2** |
| | 0.7nm,0.5s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 09 35 18.4 | |
| | 3.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.87** | **279** | Pn | **Pn** | **09 34 51.3** | **-0.1** |
| | 1.1nm,0.3s,baz=98,slow=11,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 09 35 18.4 | |
| | 3.6nm,0.3s,baz=95,slow=28,SNR=14 | | | | | | |
| ZALV | | | | *i* | | 09 47 05.4 | |
| | 0.6nm,0.3s,baz=106,slow=41,SNR=4.7 | | | | | | |
| **KURK** | **Kurchatov** | **6.46** | **246** | ⇓Lg | Lg | 09 37 44.5 | |
| | 4.8nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.56** | **246** | Pn | **Pn** | **09 35 55.8** | **0.0** |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=7.5 | | | | | | |
| KURBB | | | | Sn | **Sn** | **09 37 11.1** | **-0.1** |
| | 0.0nm,0.3s,baz=52,slow=30,SNR=1.3 | | | | | | |
| KURBB | | | | Lg | Lg | 09 37 45.6 | |
| | 0.0nm,0.3s,baz=63,slow=32,SNR=5.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.56** | **246** | ⇑Pn | **Pn** | **09 35 56.0** | **+0.3** |
| | 5.8nm,1.5s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **09 37 12.0** | **+0.9** |
| | 4.0nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 37 47.9 | |
| | 6.1nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.79** | **210** | ⇑Pn | **Pn** | **09 36 14.4** | **+1.6** |
| | 1.6nm,1.1s,baz=29,slow=14,SNR=9.2 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 37 41.4** | **-0.3** |
| | 1.1nm,0.9s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 38 24.1 | |
| | 1.5nm,0.7s,baz=37,slow=32,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.79** | **210** | Pn | **Pn** | **09 36 12.3** | **-0.4** |
| | 0.1nm,0.3s,baz=28,slow=14,SNR=7.6 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 37 40.0** | **-1.7** |
| | 0.1nm,0.3s,baz=18,slow=16,SNR=5.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 38 23.2 | |
| | 0.1nm,0.3s,baz=32,slow=30,SNR=4.9 | | | | | | |

**IDC 09 09:44:20.9±3.6, 54°.24N×87°.52E, h0km, mb1 2.6/2, mb1mx2.6/63, mbtmp2.6/2, ML2.2/2, Error ellipse: s-maj=30.3km s-min=19.5km az=49.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.62** | **261** | *i* | | 09 54 26.3 | |
| | baz=76,slow=344,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.62** | **261** | Pg | Pn | 09 44 49.5 | -1.2 |
| | 0.7nm,0.3s,baz=82,slow=17,SNR=8.5 | | | | | | |
| ZALV | | | | Lg | Lg | 09 45 11.9 | |
| | 0.5nm,0.3s,baz=75,slow=31,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **240** | Pn | Pn | 09 46 00.6 | +1.7 |
| | 0.0nm,0.3s,baz=55,slow=13,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.16** | **206** | Pn | Pn | 09 46 21.2 | +0.6 |
| | 0.0nm,0.3s,baz=28,slow=19,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 48 37.1 | |
| | 0.0nm,0.3s,baz=28,slow=28,SNR=2.2 | | | | | | |

**IDC 09 10:24:22.9±810.0, 52°.90N×33°.76E, h0km, Error ellipse: s-maj=328.8km s-min=94.5km az=31.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.32** | **26** | *i* | | 10 52 30.0 | |
| | baz=210,slow=312,SNR=1.4 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.25** | **90** | *i* | | 11 56 13.2 | |
| | baz=292,slow=321,SNR=4.6 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.91** | **67** | *i* | | 13 27 30.0 | |
| | baz=284,slow=328,SNR=1.8 | | | | | | |

*MEX **09** 10:29:15.6±7.3, 27°.11N×112°.51W, h20km±999km, MD3.8*

**ECX 09 10:29:16.1±0.4, 27°.06N×112°.25W, h17km±12km, MD3.6, ML3.0, 3D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRIG** | **Santa Rosalia** | **0.26** | **2** | *i* P | Pg | 10 29 21.3 | -0.5 |
| | baz=195,slow=8.6 | | | | | | |
| SRIG | | | | *e*S | Sg | 10 29 25.3 | -0.5 |
| **SRIG** | **Santa Rosalia** | **0.26** | **2** | ⇓*i* P | Pg | 10 29 21.3 | -0.5 |
| SRIG | | | | *e*S | Sg | 10 29 25.6 | -0.2 |
| SRIG | | | | IAML | | 10 29 30.1 | |
| | comp=E,2μm,0.8s | | | | | | |
| SRIG | | | | ⇓*e* | | 10 29 30.1 | |
| SRIG | | | | ⇓*e* | | 10 29 34.6 | |
| SRIG | | | | IAML | | 10 29 34.6 | |
| | comp=N,2μm,0.8s | | | | | | |
| **GUYB** | **Guaymas** | **1.48** | **55** | *e*P | Pn | 10 29 41.0 | -1.0 |
| GUYB | | | | *e*S | Sn | 10 29 59.9 | -1.1 |
| **GUYB** | **Guaymas** | **1.48** | **55** | *e*P | Pn | 10 29 41.5 | -0.4 |
| GUYB | | | | *e*S | Sn | 10 30 00.4 | -0.6 |
| **BAHB** | **Baha de los** | **2.21** | **329** | *e*P | Pn | 10 29 52.0 | +0.1 |

*TUL **09** 10:47:05.4±1.1, 36°.142N±0°.009×97°.459W±0°.009, h6km±7km, ML2.6, mb_Lg1.9/3(NEIC), Error ellipse: s-maj=1.5km s-min=0.7km az=145.0*

**NEIC 09 10:47:05.6±1.1, 36°.14N±0°.01×97°.46W±0°.01, h5km±2km, Error ellipse: s-

**σ1§37/35, mb4.3/14, MS3.1/3, 1C, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.01** | **155** | P | **Pn** | **10 49 30.3** | **-0.5** |
| SGSI | | | | S | **Sn** | **10 49 39.0** | **-5.0** |
| **DAV** | **Davao City (W)** | **2.49** | **11** | P | **Pn** | **10 49 51.0** | **0.0** |
| | 118nm,0.3s,baz=297,slow=3.1,SNR=2.5 | | | | | | |
| DAV | | | | S | **Sn** | **10 50 20.5** | **+0.3** |
| | 44nm,0.3s,baz=72,slow=23,SNR=1.3 | | | | | | |
| DAV | | | | LR | LR | 10 50 21.5 | |
| | comp=Z,164nm,20.2s,baz=300,slow=28 | | | | | | |
| **CTBH** | **Cotabato--PC H** | **2.73** | **342** | *i* P | **Pn** | **10 49 53.2** | **-1.1** |
| CTBH | | | | *i* S | **Sn** | **10 50 24.7** | **-1.5** |
| **TNTI** | **Ternate** | **4.43** | **149** | Pn | **Pn** | **10 50 19.5** | **+1.8** |
| **GTOI** | **Gorontalo** | **4.47** | **208** | P | **Pn** | **10 50 16.4** | **-1.8** |
| **MRSI** | **Marisa** | **5.18** | **218** | P | **Pn** | **10 50 29.6** | **+1.6** |
| **TOLI2** | **Tolitoli** | **5.54** | **231** | Pn | **Pn** | **10 50 32.2** | **-0.7** |
| **MYLDM** | **Lahad Datu** | **6.61** | **275** | Pn | **Pn** | **10 50 49.5** | **+1.9** |
| **SIJI** | **Sorong** | **8.21** | **131** | P | **Pn** | **10 51 10.3** | **+0.8** |
| | 1.6nm,0.3s,baz=317,slow=22,SNR=4.2 | | | | | | |
| **KAPI** | **Kappang** | **10.96** | **209** | LR | LR | 10 56 01.4 | |
| | comp=Z,50nm,19.9s,baz=49,slow=37 | | | | | | |
| **MTN** | **Manton Dam** | **18.34** | **161** | P | **P** | **10 53 23.4** | **0.0** |
| MTN | | | | IAmb | IAmb | 10 53 27.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **20.48** | **170** | P | **P** | **10 53 48.1** | **+1.4** |
| KNRA | | | | IAmb | IAmb | 10 54 10.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.57** | **179** | P | **P** | **10 54 09.6** | **+0.4** |
| | comp=Z,2.5nm,0.6s,baz=9.1,slow=7.1,SNR=9.6 | | | | | | |
| **WB0** | **Warramunga Arr** | **25.89** | **160** | P | **P** | **10 54 41.6** | **+1.3** |
| WB0 | | | | IAmb | IAmb | 10 54 44.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **26.02** | **122** | LR | LR | 11 05 23.2 | |
| | comp=Z,50nm,18.4s,baz=314,slow=37 | | | | | | |
| **WRAB** | **Tennant Creek** | **26.03** | **160** | P | **P** | **10 54 42.5** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 10 54 46.1 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.03** | **160** | P | **P** | **10 54 42.6** | **+1.0** |
| | comp=Z,11nm,1.0s,baz=342,slow=10,SNR=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.03** | **160** | P | **P** | **10 54 42.2** | **+0.5** |
| **WB2** | **Warramunga Arr** | **26.04** | **160** | P | **P** | **10 54 42.7** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 10 54 46.1 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.04** | **300** | LR | LR | 11 05 32.1 | |
| | comp=Z,14nm,21.5s,baz=120,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **29.38** | **163** | P | **P** | **10 55 12.5** | **+0.9** |
| **ASAR** | **Alice Springs** | **29.38** | **163** | P | **P** | **10 55 12.4** | **+0.8** |
| | comp=Z,1.4nm,0.6s,baz=353,slow=7.2,SNR=20 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.98** | **19** | P | **P** | **10 55 50.2** | **-1.7** |
| | comp=Z,3.6nm,0.8s,baz=199,slow=10,SNR=4.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.98** | **19** | IAmb | IAmb | 10 56 09.6 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **JMM** | **Marumori** | **36.07** | **21** | P | **P** | **10 56 10.4** | **+0.6** |
| **BBOO** | **Buckleboo** | **38.64** | **165** | P | **P** | **10 56 32.7** | **+1.1** |
| **STKA** | **Stephens Creek** | **39.53** | **158** | P | **P** | **10 56 39.0** | **-0.2** |
| | comp=Z,4.6nm,0.8s,baz=326,slow=9.5,SNR=9.6 | | | | | | |
| **STKA** | **Stephens Creek** | **39.53** | **158** | P | **P** | **10 56 40.8** | **+1.7** |
| **MK31** | **Makanchi Array** | **55.92** | **326** | P | **P** | **10 58 46.0** | **0.0** |
| MK31 | | | | IAmb | IAmb | 10 59 05.0 | |
| | comp=Z,2.5nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.92** | **326** | P | **P** | **10 58 46.5** | **+0.6** |
| | comp=Z,0.6nm,0.6s,baz=120,slow=7.9,SNR=8.5 | | | | | | |
| **MSVF** | **Nonsavu** | **56.74** | **115** | LR | LR | 11 23 00.2 | |
| | comp=Z,28nm,18.4s,baz=17,slow=36 | | | | | | |
| **MA2** | **Magadan** | **58.26** | **15** | P | **P** | **10 59 03.0** | **+0.8** |
| **KURBB** | **Kurchatov Arra** | **60.13** | **328** | P | **P** | **10 59 15.4** | **+0.1** |
| | comp=Z,0.6nm,0.3s,baz=126,slow=5.8,SNR=4.9 | | | | | | |
| **KURK** | **Kurchatov** | **60.14** | **328** | P | **P** | **10 59 15.4** | **+0.1** |
| **KURK** | **Kurchatov** | **60.14** | **328** | IAmb | IAmb | 10 59 16.2 | |
| | comp=Z,4.1nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **61.56** | **14** | P | **P** | **10 59 24.5** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=274,slow=5.3,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **85.01** | **25** | P | **P** | **11 01 42.1** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=246,slow=4.4,SNR=5.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.36** | **24** | P | **Pdif** | **11 02 48.8** | **-0.9** |
| | comp=Z,0.2nm,0.9s,baz=292,slow=3.3,SNR=3.8 | | | | | | |

**KRSC 09 10:51:53.9±1.6, 52°21'N×160°63'E, h60km±22km, ML3.5, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.96** | **338** | *e*P | Pn | 10 52 12.3 | +0.9 |
| SPN | | | | *e*S | Sn | 10 52 24.7 | +0.4 |
| **NLC** | **Nalytchevo** | **1.24** | **321** | *e*P | Pn | 10 52 16.8 | +1.8 |
| NLC | | | | *e*S | Sn | 10 52 33.6 | +2.8 |
| **RUS** | **Russkaya** | **1.32** | **281** | *e*P | Pn | 10 52 17.1 | +1.0 |
| **DALK** | **Dalny** | **1.41** | **306** | *e*P | Pn | 10 52 18.9 | +1.6 |
| DALK | | | | *e*S | Sn | 10 52 35.8 | +0.9 |
| **PET** | **Petropavlovsk** | **1.46** | **305** | *e*P | Pn | 10 52 20.0 | +2.1 |
| PET | | | | *e*S | Sn | 10 52 38.0 | +2.0 |
| **UGLR** | **Uglovaya** | **1.49** | **313** | *e*P | Pn | 10 52 21.1 | +2.7 |
| **SDLR** | **Sedlovina** | **1.51** | **316** | *e*P | Pn | 10 52 21.0 | +2.3 |
| **MTVR** | **Mutnovka** | **1.53** | **281** | *e*P | Pn | 10 52 20.6 | +1.6 |
| MTVR | | | | *e*S | Sn | 10 52 39.3 | +1.4 |
| **SMAR** | **Somma** | **1.53** | **314** | *e*P | Pn | 10 52 21.9 | +2.7 |
| **AVH** | **Avacha** | **1.56** | **313** | *e*P | Pn | 10 52 22.1 | +2.7 |
| **KRER** | **Koryakskii** | **1.58** | **314** | *e*P | Pn | 10 52 22.4 | +2.6 |
| **GRL** | **Gorelyy** | **1.60** | **283** | *e*P | Pn | 10 52 22.4 | +2.4 |
| **KOK** | **Koryaka** | **1.63** | **313** | *e*P | Pn | 10 52 23.1 | +2.8 |
| **KDTR** | **Khodutka, Kamc** | **1.63** | **257** | *e*P | Pn | 10 52 21.2 | +1.0 |
| KDTR | | | | *e*S | Sn | 10 52 40.6 | +0.4 |
| **KRMR** | **Karymshinskiy** | **1.65** | **293** | *e*P | Pn | 10 52 22.2 | +1.7 |
| KRMR | | | | *e*S | Sn | 10 52 42.7 | +2.0 |
| **KII** | **Karymskiy** | **1.96** | **339** | *e*P | Pn | 10 52 27.9 | +3.1 |
| **GNL** | **Ganaly** | **2.20** | **313** | *e*P | Pn | 10 52 32.2 | +4.0 |
| **APC** | **Apacha** | **2.24** | **290** | *e*P | Pn | 10 52 31.5 | +3.0 |
| APC | | | | *e*S | Sn | 10 52 57.3 | +2.3 |
| **MKZ** | **Mys Kozlova** | **2.44** | **15** | *e*P | Pn | 10 52 33.7 | +2.5 |
| MKZ | | | | *e*S | Sn | 10 53 02.5 | +2.6 |
| **TUMD** | **Tumrok D** | **3.00** | **357** | *e*P | Pn | 10 52 42.0 | +3.1 |
| TUMD | | | | *e*S | Sn | 10 53 16.4 | +2.7 |
| **TUMR** | **Tumrok** | **3.09** | **355** | *e*P | Pn | 10 52 44.3 | +4.0 |
| **KMNR** | **Kamenistaya** | **3.56** | **356** | *e*P | Pn | 10 52 48.3 | +1.7 |
| **KBTR** | **Krutoberegovo** | **4.21** | **17** | *e*P | Pn | 10 52 59.3 | +3.9 |
| **BKI** | **Bering** | **4.37** | **45** | *e*S | Sn | 10 53 47.9 | +0.9 |

**KRSC 09 10:56:35.5±1.6, 52°20'N×160°60'E, h55km±20km, ML3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.97** | **339** | *i* P | Pn | 10 56 53.9 | +1.0 |
| SPN | | | | *e*S | Sn | 10 57 06.3 | +0.5 |
| **NLC** | **Nalytchevo** | **1.24** | **322** | *e*P | Pn | 10 56 58.3 | +1.8 |
| NLC | | | | *e*S | Sn | 10 57 14.0 | +1.8 |
| **RUS** | **Russkaya** | **1.30** | **281** | *e*P | Pn | 10 56 58.6 | +1.2 |
| RUS | | | | *e*S | Sn | 10 57 14.8 | +1.1 |
| **DALK** | **Dalny** | **1.40** | **307** | *e*P | Pn | 10 57 00.4 | +1.7 |
| DALK | | | | *e*S | Sn | 10 57 18.3 | +2.2 |
| **PET** | **Petropavlovsk** | **1.45** | **306** | *e*P | Pn | 10 57 01.5 | +2.2 |
| PET | | | | *e*S | Sn | 10 57 19.7 | +2.5 |
| **UGLR** | **Uglovaya** | **1.48** | **314** | *e*P | Pn | 10 57 02.5 | +2.6 |
| **SDLR** | **Sedlovina** | **1.50** | **317** | *e*P | Pn | 10 57 02.4 | +2.2 |
| **MTVR** | **Mutnovka** | **1.51** | **282** | *e*P | Pn | 10 57 02.0 | +1.7 |
| MTVR | | | | *e*S | Sn | 10 57 20.9 | +1.9 |
| **SMAR** | **Somma** | **1.53** | **315** | *e*P | Pn | 10 57 03.0 | +2.3 |
| **AVH** | **Avacha** | **1.56** | **314** | *e*P | Pn | 10 57 03.7 | +2.8 |
| **KRER** | **Koryakskii** | **1.58** | **315** | *e*P | Pn | 10 57 04.6 | +3.3 |
| **GRL** | **Gorelyy** | **1.59** | **284** | *e*P | Pn | 10 57 03.7 | +2.3 |
| **KDTR** | **Khodutka, Kamc** | **1.61** | **257** | *e*P | Pn | 10 57 02.5 | +1.0 |
| KDTR | | | | *e*S | Sn | 10 57 21.9 | +0.8 |
| **KOK** | **Koryaka** | **1.62** | **313** | *e*P | Pn | 10 57 04.6 | +2.8 |
| **KRMR** | **Karymshinskiy** | **1.64** | **294** | *e*P | Pn | 10 57 03.7 | +1.8 |
| KRMR | | | | *e*S | Sn | 10 57 23.8 | +2.0 |
| **KII** | **Karymskiy** | **1.97** | **340** | *e*P | Pn | 10 57 09.7 | +3.2 |
| **GNL** | **Ganaly** | **2.20** | **314** | *e*P | Pn | 10 57 13.5 | +3.8 |
| **APC** | **Apacha** | **2.22** | **290** | *e*P | Pn | 10 57 12.3 | +2.4 |
| APC | | | | *e*S | Sn | 10 57 38.3 | +2.1 |
| **MKZ** | **Mys Kozlova** | **2.46** | **16** | *e*P | Pn | 10 57 15.3 | +2.2 |
| MKZ | | | | *e*S | Sn | 10 57 43.3 | +1.4 |
| **TUMD** | **Tumrok D** | **3.01** | **358** | *e*P | Pn | 10 57 23.7 | +2.9 |
| TUMD | | | | *e*S | Sn | 10 57 58.3 | +2.7 |
| **TUMR** | **Tumrok** | **3.10** | **355** | *e*P | Pn | 10 57 25.5 | +3.4 |
| **KMNR** | **Kamenistaya** | **3.57** | **357** | *e*P | Pn | 10 57 33.5 | +5.0 |
| **ESO** | **Esso** | **3.90** | **344** | *e*P | Pn | 10 57 37.7 | +4.8 |
| **KBTR** | **Krutoberegovo** | **4.22** | **17** | *e*P | Pn | 10 57 40.5 | +3.2 |
| **BKI** | **Bering** | **4.39** | **45** | S | Sn | 10 58 30.6 | +1.3 |

*IDC **09** 10:58:10.8±2.3, 0.°53'N×98.°42'E, h0km, mb3.5/5, mb1 3.5/6, mb1mx3.3/46, mbtmp3.5/6, ML3.0/1, MS3.6/1, Ms1 3.6/1, ms1mx2.5/62, Error ellipse: s-maj=78.7km s-min=22.9km az=63.0*

*DJA **09** 10:58:15.0±0.3, 1.°N×2.°×9.°9E×.°, h10km, M3.9/7, MLv3.9/7*

**ISC 09 10:58:15.4±1.4, 0.°59N±0.°04×98.°80E±0.°04, h23km±12km, n18, σ1§50/20, mb3.6/5, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNSI** | **Mandailing Nat** | **0.81** | **75** | P | **Pb** | **10 59 30.1** | **-0.6** |
| MNSI | | | | S | **Sb** | **10 58 40.8** | **-0.4** |
| **PBSI** | **Pulau Batu** | **0.82** | **219** | P | **Pn** | **10 58 31.7** | **+0.1** |
| PBSI | | | | S | **Sn** | **10 58 44.5** | **+1.4** |
| **SBSI** | **Sibolga** | **0.96** | **5** | P | **Pn** | **10 58 33.6** | **0.0** |
| SBSI | | | | S | **Sn** | **10 58 46.6** | **0.0** |
| **GSI** | **Gunungsitoli** | **1.42** | **300** | P | **Pn** | **10 58 40.6** | **+0.8** |
| GSI | | | | S | **Sb** | **10 59 00.0** | **+1.2** |
| **PPI** | **Padang Panjang** | **1.90** | **123** | P | **Pb** | **10 58 48.4** | **-1.0** |
| PPI | | | | S | **Sb** | **10 59 15.3** | **+2.6** |
| **SISI** | **Saibi** | **1.92** | **171** | P | **Pb** | **10 58 47.4** | **-2.3** |
| **PSI** | **Prapat** | **2.20** | **3** | Pn | **Pn** | **10 58 49.2** | **-1.6** |
| | 4.7nm,0.3s,baz=222,slow=2.2,SNR=11 | | | | | | |
| PSI | | | | Sn | **Sb** | **10 59 24.3** | **+2.7** |
| | 1.7nm,0.3s,baz=57,slow=17,SNR=1.4 | | | | | | |
| **BKNI** | **Bangkinang** | **2.25** | **97** | P | **Pn** | **10 58 52.1** | **+0.8** |
| **KCSI** | **Kotacane, Aceh** | **3.09** | **341** | P | **Pn** | **10 59 03.9** | **+1.0** |
| **DAV** | **Davao City (W)** | **27.47** | **76** | LR | LR | 11 17 46.8 | |
| | comp=Z,122nm,19.0s,baz=320,slow=42 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.48** | **252** | T | T | 11 31 36.9 | |
| | baz=73,slow=76,SNR=14 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.48** | **252** | T | T | 11 31 34.0 | |
| | baz=73,slow=76,SNR=17 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.50** | **252** | T | T | 11 31 36.3 | |
| | baz=73,slow=76,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.35** | **122** | P | **P** | **11 05 53.5** | **+1.7** |
| | 0.4nm,0.7s,baz=288,slow=8.5,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **41.75** | **128** | P | **P** | **11 06 03.9** | **+0.6** |
| | 0.3nm,0.9s,baz=306,slow=8.7,SNR=2.3 | | | | | | |
| **SONM** | **Songino Array** | **47.52** | **7** | P | **P** | **11 06 48.2** | **-0.8** |
| | 0.7nm,0.5s,baz=193,slow=9.2,SNR=9.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.23** | **345** | P | **P** | **11 06 52.9** | **-1.5** |
| | 0.4nm,0.6s,baz=166,slow=8.2,SNR=9.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.43** | **350** | P | **P** | **11 07 40.0** | **-0.7** |
| | 0.5nm,0.4s,baz=156,slow=7.2,SNR=3.2 | | | | | | |

**IDC 09 10:58:30.6±9.4, 6.°06S×129.°32E, h401km±123km, mb2.4/1, mb1 2.4/4, mb1mx1.9/40, mbtmp3.2/4, Error ellipse: s-maj=78.2km s-min=50.0km az=66.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **12.49** | **196** | P | P | 11 01 15.6 | -0.1 |
| | 0.1nm,0.3s,baz=16,slow=11,SNR=1.4 | | | | | | |
| FITZ | | | | S | S | 11 03 33.7 | +1.5 |
| | 0.3nm,0.3s,baz=152,slow=16,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.63** | **161** | P | P | 11 01 38.0 | -1.1 |
| | 0.0nm,0.3s,baz=332,slow=12,SNR=1.9 | | | | | | |
| WRA | | | | S | S | 11 04 13.4 | -1.7 |
| | 0.1nm,0.3s,baz=318,slow=39,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.05** | **166** | P | P | 11 02 16.5 | +0.8 |
| | 0.1nm,0.3s,baz=347,slow=11,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.08** | **327** | P | P | 11 08 42.3 | -0.1 |
| | 0.1nm,0.5s,baz=122,slow=5.2,SNR=2.2 | | | | | | |

*HEL **09** 11:00:24.7±0.1, 64.°65N×30.°70E, h0km, ML2.0, Explosion*
*IDC **09** 11:00:26.0±2.2, 64.°58N×30.°68E, h0km, mb1 3.0/3, mb1mx2.9/43, mbtmp2.9/3, ML2.1/3, Error ellipse: s-maj=30.3km s-min=8.8km az=105.0*
*UPP **09** 11:00:25.0±3.0, 64.°45N×30.°69E, h0km, ML1.8, Suspected explosion*

**ISC 09 11:00:23.3±1.3, 64.°74N±0.°03×31.°10E±0.°07, h0km, n33, σ1§67/44, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KU6** | **Riekki** | **1.38** | **339** | PG | **Pb** | **11 00 50.2** | **+0.2** |
| | baz=167 | | | | | | |
| KU6 | | | | MSG | | 11 01 07.5 | |
| | comp=Z,7.6nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sb** | **11 01 08.2** | **-0.1** |
| **MSF** | **Maaselka** | **1.46** | **324** | PG | **Pn** | **11 00 50.6** | **-0.3** |
| | baz=150 | | | | | | |
| MSF | | | | SG | **Sg** | **11 01 09.5** | **-0.6** |
| **JOF** | **Joensuu** | **1.83** | **177** | PG | **Pn** | **11 00 56.2** | **+0.2** |
| JOF | | | | SN | **Sb** | **11 01 21.1** | **-0.1** |
| **OUL** | **Oulu** | **2.25** | **281** | PG | **Pn** | **11 01 02.3** | **+0.6** |
| | baz=96 | | | | | | |
| OUL | | | | SG | **Sn** | **11 01 28.9** | **-1.1** |
| **OUF** | **Merijarvi** | **2.78** | **265** | PB | **Pn** | **11 01 09.0** | **0.0** |
| | baz=76 | | | | | | |
| OUF | | | | MSG | | 11 01 41.4 | |
| | comp=Z,12nm,0.2s | | | | | | |
| OUF | | | | SG | **Sn** | **11 01 44.1** | **+1.0** |
| **RNF** | **Rovaniemi** | **2.82** | **314** | PG | **Pb** | **11 01 13.2** | **-1.3** |
| RNF | | | | SB | **Sb** | **11 01 47.9** | **-1.6** |
| **OBF0** | **Syolatti, Pyha** | **2.97** | **268** | PG | **Pn** | **11 01 12.9** | **+1.3** |
| **SUF** | **Sumiainen** | **3.00** | **230** | PB | **Pn** | **11 01 13.4** | **+1.4** |
| SUF | | | | MSG | | 11 01 47.4 | |
| | comp=Z,5.5nm,0.2s | | | | | | |
| SUF | | | | SG | **Sn** | **11 01 51.2** | **+2.6** |
| **VRF** | **Varrio** | **3.08** | **349** | PB | **Pb** | **11 01 16.7** | **-2.2** |
| VRF | | | | MSG | | 11 01 56.9 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **TOF** | **Tornio** | **3.14** | **298** | PG | **Pb** | **11 01 19.5** | **-0.4** |
| TOF | | | | MSG | | 11 01 53.6 | |
| | comp=Z,5.2nm,0.2s | | | | | | |
| TOF | | | | SG | **Sb** | **11 01 56.2** | **-2.4** |
| **KAF** | **Kangasniemi** | **3.41** | **221** | PB | **Pn** | **11 01 19.8** | **+2.1** |
| **KALU** | **Kalix** | **3.44** | **292** | P | **Pn** | **11 01 18.9** | **+0.8** |
| KALU | | | | S | **Sn** | **11 01 59.6** | **+0.2** |
| **KALU** | **Kalix** | **3.44** | **292** | PG | **Pb** | **11 01 25.2** | **+0.2** |
| **KEF** | **Keuruu** | **3.81** | **230** | PB | **Pn** | **11 01 24.5** | **+1.3** |
| **KLF** | **Kolari** | **3.84** | **314** | SG | **Sb** | **11 02 20.8** | **+1.9** |
| **PAJU** | **Pajala** | **4.00** | **309** | P | **Pn** | **11 01 27.7** | **+1.9** |
| **PAJU** | **Pajala** | **4.00** | **309** | SG | **Sb** | **11 02 24.5** | **+1.0** |
| **FIA0** | **FINESS Array S** | **4.02** | **217** | PN | **Pn** | **11 01 25.7** | **-0.4** |
| | baz=36 | | | | | | |
| FIA0 | | | | SG | **Sb** | **11 02 24.4** | **+0.3** |
| **FINES** | **FINESS Array B** | **4.02** | **217** | Pn | **Pn** | **11 01 26.1** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=33,slow=14,SNR=6.3 | | | | | | |
| FINES | | | | Sn | **Sn** | **11 02 08.9** | **-5.0** |
| | comp=Z,0.4nm,0.3s,baz=32,slow=20,SNR=1.4 | | | | | | |
| FINES | | | | Lg | Lg | 11 02 24.3 | |
| | comp=Z,1.9nm,0.3s,baz=36,slow=26,SNR=15 | | | | | | |
| **SJUU** | **Sjulsmark** | **4.09** | **285** | P | **Pn** | **11 01 27.3** | **+0.4** |
| **VAF** | **Ylistaro** | **4.10** | **249** | PB | **Pn** | **11 01 27.7** | **+0.6** |
| | baz=64 | | | | | | |
| **ERTU** | **Ertsjaerv** | **4.11** | **300** | P | **Pn** | **11 01 28.8** | **+1.5** |
| **ERTU** | **Ertsjaerv** | **4.11** | **300** | PG | **Pb** | **11 01 38.3** | **+1.8** |
| | baz=114 | | | | | | |
| **HARU** | **Harads** | **4.46** | **293** | P | **Pn** | **11 01 33.0** | **+0.9** |
| **ODEU** | **Stanfors** | **4.49** | **270** | P | **Pn** | **11 01 31.0** | **-1.6** |
| **VJF** | **Virojoki** | **4.53** | **203** | SG | **Sb** | **11 02 40.0** | **+1.5** |
| **HEF** | **Hetta** | **4.73** | **324** | SG | **Sb** | **11 02 47.5** | **+3.2** |
| **LILU** | **Lilltraesk** | **4.80** | **282** | P | **Pn** | **11 01 36.6** | **-0.2** |
| **PVF** | **Pernaja** | **4.86** | **212** | SG | **Sb** | **11 02 49.5** | **+1.4** |
| **SVAU** | **Svanoeiden** | **4.97** | **272** | P | **Pn** | **11 01 38.2** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **5.28** | **338** | Pn | **Pn** | **11 01 44.9** | **+1.5** |
| | baz=157,slow=13,SNR=23 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 02 43.9** | **-0.9** |
| | baz=154,slow=25,SNR=2.6 | | | | | | |
| ARCES | | | | Lg | Lg | 11 03 05.5 | |
| | baz=157,slow=29,SNR=7.3 | | | | | | |
| **I37NO** | **I37NO** | **6.55** | **317** | *i* | | 11 46 20.0 | |
| | baz=122,slow=303,SNR=1.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **9.79** | **257** | Pn | **Pn** | **11 02 41.0** | **-4.2** |
| | comp=Z,0.0nm,0.3s,baz=65,slow=11,SNR=3.8 | | | | | | |
| NOA | | | | Lg | Lg | 11 05 26.9 | |
| | comp=Z,0.0nm,0.3s,baz=44,slow=24,SNR=1.9 | | | | | | |

*IDC **09** 11:09:19.3±1.5, 7.°11S×154.°62E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.7/28, mbtmp3.6/6, MS2.8/1, Ms1 2.8/1, ms1mx2.4/53, Error ellipse: s-maj=61.2km s-min=28.0km az=130.0*

**ISC 09 11:09:25.0±1.3, 7.°2S±0.°3×154.°6E±0.°3, h39km, n8, σ0§83/8, mb3.5/6, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.70** | **253** | LR | LR | 11 14 30.6 | |
| | comp=Z,67nm,18.1s,baz=347,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.41** | **235** | P | **P** | **11 14 31.1** | **+0.4** |
| | 0.8nm,0.7s,baz=58,slow=9.4,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **25.78** | **228** | P | **P** | **11 14 51.6** | **-1.0** |
| | 0.4nm,0.8s,baz=59,slow=9.8,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **69.26** | **328** | P | **P** | **11 20 28.1** | **-0.2** |
| | 0.4nm,0.9s,baz=141,slow=4.3,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.27** | **319** | P | **P** | **11 21 47.6** | **-0.1** |
| | 0.7nm,0.6s,baz=104,slow=5.6,SNR=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.12** | **52** | P | **P** | **11 22 31.5** | **+0.6** |
| | 0.1nm,0.5s,baz=270,slow=6.0,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.66** | **28** | P | **P** | **11 22 50.1** | **-0.7** |
| | 0.2nm,0.7s,baz=281,slow=4.6,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.69** | **285** | PKPbc | **PKPbc** | **11 29 18.7** | **0.0** |
| | 0.4nm,0.7s,baz=91,slow=1.1,SNR=1.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **11 29 30.6** | **+1.2** |
| | 0.7nm,0.6s,baz=74,slow=2.7,SNR=3.9 | | | | | | |

*EAF **09** 11:23:53.0±1.5, 26.°09S×29.°51E, h10km, MD3.5*

**BUL 09 11:23:52.9±1.0, 26.°14S×29.°47E, h10km, MD3.6, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.45** | **94** | *i* P | Pn | 11 24 32.1 | -0.8 |
| CNG | | | | *e*S | Sn | 11 25 01.9 | -0.9 |
| **CNG** | **Changalane** | **2.45** | **94** | *i* P | Pn | 11 24 32.1 | -0.8 |
| CNG | | | | *e*S | Sn | 11 25 01.9 | -0.9 |
| **MOPA** | **Mopani** | **3.14** | **34** | *i* P | Pn | 11 24 40.3 | -2.2 |
| MOPA | | | | *e*S | Sn | 11 25 15.7 | -4.4 |
| **MOPA** | **Mopani** | **3.14** | **34** | *i* P | Pn | 11 24 40.3 | -2.2 |
| MOPA | | | | *e*S | Sn | 11 25 15.7 | -4.4 |
| **LBTB** | **Lobatse** | **3.67** | **287** | *e*P | Pn | 11 24 49.7 | -0.2 |
| LBTB | | | | *e*S | Sn | 11 25 31.3 | -2.0 |
| **LBTB** | **Lobatse** | **3.67** | **287** | *e*P | Pn | 11 24 49.7 | -0.2 |
| LBTB | | | | *e*S | Sn | 11 25 31.3 | -2.0 |
| **MATP** | **Matopo** | **5.76** | **351** | *e*P | Pn | 11 25 17.1 | -1.5 |
| MATP | | | | *e*S | Sn | 11 26 20.2 | -4.6 |
| **MATP** | **Matopo** | **5.76** | **351** | *e*P | Pn | 11 25 17.1 | -1.5 |
| MATP | | | | *e*S | Sn | 11 26 20.2 | -4.6 |
| **BLWY** | **Bulawayo** | **6.02** | **352** | *e*P | Pn | 11 25 20.6 | -1.7 |
| BLWY | | | | *e*S | Sn | 11 26 25.6 | -5.8 |
| **BLWY** | **Bulawayo** | **6.02** | **352** | *e*P | Pn | 11 25 20.6 | -1.7 |
| BLWY | | | | *e*S | Sn | 11 26 25.6 | -5.8 |

*TEH **09** 12:06:44.8, 32.°52N×46.°77E, h14km, ML3.0*
*ISN **09** 12:06:51.1±1.1, 32.°57N×46.°47E, h13km±101km, ML2.6*

**ISC 09 12:06:48.1±1.1, 32.°68N±0.°04×46.°81E±0.°04, h20km, n16, σ1§48/19, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.86** | **300** | *e*Pg | **Pn** | **12 07 04.2** | **-0.8** |
| | baz=140 | | | | | | |
| IBDR | | | | *e*Sg | **Sb** | **12 07 14.8** | **-0.5** |
| **RAFI** | **Al-Rafai** | **1.13** | **212** | *e*Pg | **Pb** | **12 07 09.0** | **+0.2** |
| RAFI | | | | *e*Sg | **Sb** | **12 07 22.0** | **-1.0** |
| RAFI | | | | AML | AML | 12 07 27.5 | |
| | comp=E,209nm,0.2s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.21** | **46** | *e*Sg | **Sn** | **12 07 29.2** | **+3.6** |
| IKFM | | | | *e*Pg | **Pb** | **12 07 09.7** | **-0.5** |
| IKFM | | | | *e* | | 12 07 32.8 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.59** | **46** | *e*Pn | **Pb** | **12 07 16.1** | **-0.8** |
| **KCHF** | **Cheshme Sefid,** | **1.60** | **7** | *e*Pg | **Pb** | **12 07 17.3** | **+0.3** |
| KCHF | | | | *e* | | 12 07 43.7 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.66** | **353** | *e*Pg | **Pb** | **12 07 18.7** | **+0.7** |
| IGHG | | | | *e* | | 12 07 54.4 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **BMDN** | **Meydan** | **1.95** | **59** | *e*Pn | **Pb** | **12 07 21.0** | **-2.1** |
| BMDN | | | | *e* | | 12 07 55.4 | |
| | comp=Z,677nm,0.7s | | | | | | |
| **IBZA** | **Bozab** | **1.98** | **26** | *e*Pn | **Pb** | **12 07 22.8** | **-0.9** |
| IBZA | | | | *e* | | 12 07 27.2 | |
| | comp=Z,754nm,0.2s | | | | | | |
| **IDHR** | **Dehrash** | **2.04** | **350** | *e*P

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPIA | Saint Paul Isl | 8.26 | 41 | | | Sn | 12 15 37.6 | +2.1 | | |
| SPIA | Saint Paul Isl | 8.26 | 41 | P | | Pn | 12 14 06.1 | +2.4 | | |
| | baz=229,SNR=18 | | | | | | | | | |
| MAPS | Pakushin South | 8.47 | 68 | | | Pn | 12 14 08.8 | +2.1 | | |
| MSW | Makushin Switc | 8.58 | 67 | | | Pn | 12 14 10.7 | +2.5 | | |
| MREP | Makushin Rep't | 8.59 | 68 | | | Pn | 12 14 10.6 | +2.2 | | |
| UNV | Unalaska Valle | 8.73 | 68 | Pn | | Pn | 12 14 08.6 | -1.7 | | |
| UNV | Unalaska Valle | 8.73 | 68 | P | | Pn | 12 14 12.2 | +2.0 | | |
| | baz=259,SNR=19 | | | | | | | | | |
| AKGG | Akutan Green G | 9.10 | 66 | | | Pn | 12 14 17.6 | +2.3 | | |
| AKUT | Akutan | 9.21 | 67 | Pn | | Pn | 12 14 16.9 | +0.1 | | |
| AKSA | Akutan Strait | 9.26 | 67 | | | Pn | 12 14 20.5 | +3.1 | | |
| WECS | Westdahl Cape | 9.87 | 65 | | | Pn | 12 14 28.4 | +2.6 | | |
| WESE | West Dahl East | 9.96 | 66 | | | Pn | 12 14 29.1 | +1.9 | | |
| FALS | False Pass | 10.71 | 64 | Pn | | Pn | 12 14 36.3 | -0.9 | | |
| FALS | False Pass | 10.71 | 64 | P | | Pn | 12 14 37.4 | +0.2 | | |
| | baz=258 | | | | | | | | | |
| SDPT | Sand Point | 12.46 | 64 | Pn | | Pn | 12 14 60.0 | -1.1 | | |
| SDPT | Sand Point | 12.46 | 64 | P | | Pn | 12 15 01.0 | -0.1 | | |
| | baz=260 | | | | | | | | | |
| CNBA | Chernabura Isl | 12.88 | 66 | Pn | | Pn | 12 15 05.0 | -1.9 | | |
| CHNA | Chernabura Isl | 12.88 | 66 | P | | Pn | 12 15 06.4 | -0.5 | | |
| | baz=263 | | | | | | | | | |
| PET | Petropavlovsk | 13.04 | 286 | *e*P | | Pn | 12 15 08.8 | -0.3 | | |
| PET | | | | *e*S | | Sn | 12 17 33.5 | +1.0 | | |
| PET | | | | pmax | pmax | | | | | |
| | comp=Z,600nm,4.1s | | | | | | | | | |
| PET | | | | pmax | pmax | | | | | |
| | comp=Z,700nm,14.6s | | | | | | | | | |
| PET | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| PET | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,16.0s | | | | | | | | | |
| PET | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,14.0s | | | | | | | | | |
| PET | Petropavlovsk | 13.04 | 286 | Pn | | Pn | 12 15 07.9 | -1.2 | | |
| GAMB | Gambell | 13.25 | 17 | P | | Pn | 12 15 14.4 | +2.6 | | |
| | baz=204,SNR=21 | | | | | | | | | |
| PEA0B | Petropavlovsk- | 13.62 | 286 | *e*P | | Pn | 12 15 17.9 | +0.9 | | |
| PEA0B | Petropavlovsk- | 13.62 | 286 | Pn | | Pn | 12 15 15.5 | -1.5 | | |
| PETK | Petropavlovsk- | 13.62 | 286 | Pn | | Pn | 12 15 15.8 | -1.2 | | |
| | comp=Z,1.1nm,0.3s,baz=93,slow=15,SNR=17 | | | | | | | | | |
| PETK | | | | LR | | LR | 12 20 24.5 | | | |
| | comp=Z,5µm,21.8s,baz=95,slow=37 | | | | | | | | | |
| PETK | Petropavlovsk- | 13.62 | 286 | P | | Pn | 12 15 15.9 | -1.1 | | |
| CHGN | Chignik | 13.79 | 60 | | | Pn | 12 15 18.5 | -0.7 | | |
| CHGN | Chignik | 13.79 | 60 | P | | Pn | 12 15 19.4 | +0.2 | | |
| | baz=258 | | | | | | | | | |
| SKR | Severo-Kuril's | 14.88 | 277 | *e*P | | Pn | 12 15 32.7 | -0.9 | | |
| SKR | | | | pmax | pmax | | | | | |
| | comp=Z,76nm,1.0s | | | | | | | | | |
| SKR | | | | pmax | pmax | | | | | |
| | comp=Z,200nm,6.7s | | | | | | | | | |
| SKR | | | | MLR | MLR | | | | | |
| | comp=Z,800nm,19.0s | | | | | | | | | |
| CHIR | Chirikof Islan | 15.26 | 63 | Pn | | Pn | 12 15 36.7 | -1.8 | | |
| CHIR | | | | IAmb | IAmb | | 12 15 46.7 | | | |
| | comp=Z,176nm,0.8s | | | | | | | | | |
| CHIR | Chirikof Islan | 15.26 | 63 | P | | Pn | 12 15 38.9 | +0.3 | | |
| | baz=263 | | | | | | | | | |
| ANM | Nome | 15.35 | 25 | P | | P | 12 15 41.8 | -1.6 | | |
| ANM | | | | pmax | pmax | | | | | |
| | comp=Z,112nm,1.4s | | | | | | | | | |
| ANM | Nome | 15.35 | 25 | | | P | 12 15 41.8 | -1.6 | | |
| ANM | Nome | 15.35 | 25 | P | | P | 12 15 41.6 | -1.8 | | |
| | baz=218 | | | | | | | | | |
| TNA | Tin City | 15.59 | 19 | | | Pn | 12 15 43.8 | +1.1 | | |
| TNA | | | | IAmb | IAmb | | 12 15 50.5 | | | |
| | comp=Z,391nm,1.8s | | | | | | | | | |
| TNA | Tin City | 15.59 | 19 | P | | P | 12 15 44.4 | -1.6 | | |
| | baz=210,SNR=50 | | | | | | | | | |
| SII | Sitkinak Islan | 16.15 | 61 | | | Pn | 12 15 48.4 | -1.5 | | |
| SII | Sitkinak Islan | 16.15 | 61 | P | | Pn | 12 15 50.2 | +0.3 | | |
| | baz=262 | | | | | | | | | |
| P18K | Big Mountain, | 16.26 | 51 | Pn | | Pn | 12 15 50.4 | -0.9 | | |
| P18K | Big Mountain, | 16.26 | 51 | P | | Pn | 12 15 52.1 | +0.8 | | |
| | baz=251,SNR=16 | | | | | | | | | |
| O18K | Koktuh Hills | 16.42 | 49 | P | | Pn | 12 15 53.8 | +0.5 | | |
| O18K | | | | IAmb | IAmb | | 12 16 04.2 | | | |
| | comp=Z,247nm,0.8s | | | | | | | | | |
| O18K | Koktuh Hills | 16.42 | 49 | P | | P | 12 15 54.5 | -0.9 | | |
| | baz=250,SNR=32 | | | | | | | | | |
| SVW2 | Sparrevohn | 16.72 | 45 | Pn | | Pn | 12 15 56.6 | -0.5 | | |
| OHAK | Old Harbor | 16.73 | 59 | Pn | | Pn | 12 15 54.7 | -2.5 | | |
| OHAK | | | | IAmb | IAmb | | 12 16 08.8 | | | |
| | comp=Z,252nm,0.7s | | | | | | | | | |
| OHAK | Old Harbor | 16.73 | 59 | P | | Pn | 12 15 54.5 | -2.7 | | |
| | baz=261,SNR=26 | | | | | | | | | |
| Q19K | Cape Douglas, | 16.90 | 53 | | | Pn | 12 15 59.9 | +0.5 | | |
| Q19K | Cape Douglas, | 16.90 | 53 | P | | P | 12 16 00.1 | -0.6 | | |
| | baz=255 | | | | | | | | | |
| O19K | Port Alsworth | 16.96 | 49 | | | Pn | 12 15 59.9 | -0.1 | | |
| O19K | | | | IAmb | IAmb | | 12 16 10.7 | | | |
| | comp=Z,382nm,1.4s | | | | | | | | | |
| O19K | Port Alsworth | 16.96 | 49 | P | | P | 12 16 01.1 | -0.1 | | |
| | baz=250,SNR=26 | | | | | | | | | |
| N19K | Bonanza Creek | 17.10 | 46 | P | | P | 12 16 04.2 | +1.3 | | |
| N19K | | | | IAmb | IAmb | | 12 16 21.2 | | | |
| | comp=Z,222nm,0.9s | | | | | | | | | |
| N19K | Bonanza Creek | 17.10 | 46 | P | | P | 12 16 03.8 | +0.8 | | |
| | baz=248 | | | | | | | | | |
| KDAK | Kodiak Island | 17.20 | 57 | P | | Pn | 12 15 59.7 | -3.3 | | |
| | comp=Z,15nm,0.3s,baz=266,slow=7.1,SNR=84 | | | | | | | | | |
| KDAK | | | | S | | Sn | 12 19 06.4 | -6.8 | | |
| | comp=Z,0.6nm,0.3s,baz=291,slow=18,SNR=1.2 | | | | | | | | | |
| KDAK | Kodiak Island | 17.20 | 57 | P | | Pn | 12 16 00.8 | -2.2 | | |
| KDAK | | | | pmax | pmax | | | | | |
| | comp=Z,142nm,0.8s | | | | | | | | | |
| KDAK | Kodiak Island | 17.20 | 57 | P | | Pn | 12 16 00.8 | -2.2 | | |
| KDAK | | | | IAmb | IAmb | | 12 16 15.3 | | | |
| | comp=Z,142nm,0.8s | | | | | | | | | |
| KDAK | Kodiak Island | 17.20 | 57 | P | | Pn | 12 16 00.1 | -2.9 | | |
| | baz=260 | | | | | | | | | |
| TTA | Tatalina | 17.40 | 39 | P | | P | 12 16 07.7 | +1.6 | | |
| TTA | | | | pmax | pmax | | | | | |
| | comp=Z,57nm,0.8s | | | | | | | | | |
| TTA | Tatalina | 17.40 | 39 | | | P | 12 16 07.7 | +1.6 | | |
| TTA | Tatalina | 17.40 | 39 | P | | P | 12 16 05.9 | -0.2 | | |
| | baz=240,SNR=39 | | | | | | | | | |
| ILSW | Iliamna Southw | 17.45 | 50 | P | | P | 12 16 08.0 | +1.2 | | |
| L19K | White Mountain | 17.51 | 42 | P | | P | 12 16 09.0 | +1.7 | | |
| L19K | White Mountain | 17.51 | 42 | P | | P | 12 16 08.2 | +0.8 | | |
| | baz=243,SNR=44 | | | | | | | | | |
| M19K | Big River Lodg | 17.58 | 43 | P | | P | 12 16 10.5 | +2.3 | | |
| M19K | Big River Lodg | 17.58 | 43 | P | | P | 12 16 08.7 | +0.6 | | |
| | baz=245 | | | | | | | | | |
| O20K | Slope Mountain | 17.73 | 50 | P | | P | 12 16 10.7 | +0.9 | | |
| | baz=253 | | | | | | | | | |
| RSO | Redoubt South | 17.78 | 49 | P | | P | 12 16 12.8 | +2.3 | | |
| BILL | Bilibino | 17.98 | 344 | *d i*P | | Pn | 12 16 14.3 | +1.7 | | |
| BILL | | | | *e*S | | Sn | 12 19 32.6 | +0.6 | | |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,116nm,1.0s | | | | | | | | | |
| BILL | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,15.0s | | | | | | | | | |
| BILL | Bilibino | 17.98 | 344 | P | | Pn | 12 16 14.4 | +1.8 | | |
| L20K | Farewell, AK | 18.05 | 42 | P | | Pn | 12 16 14.5 | +1.0 | | |
| | baz=244 | | | | | | | | | |
| HOM | Homer | 18.08 | 52 | P | | Pn | 12 16 14.7 | +0.9 | | |
| | baz=255 | | | | | | | | | |
| GCSA | Galena City Sc | 18.09 | 33 | P | | Pn | 12 16 14.4 | +0.6 | | |
| | baz=233,SNR=80 | | | | | | | | | |
| MA2 | Magadan | 18.25 | 308 | *ce*P | | Pn | 12 16 16.6 | +0.8 | | |
| MA2 | | | | pmax | pmax | | | | | |
| | comp=Z,23nm,0.8s | | | | | | | | | |
| MA2 | Magadan | 18.25 | 308 | P | | Pn | 12 16 15.8 | -0.1 | | |
| CNPM | China Poot | 18.25 | 52 | P | | Pn | 12 16 18.3 | +2.4 | | |
| SPU | Mount Spurr | 18.34 | 47 | P | | Pn | 12 16 18.0 | +1.0 | | |
| K20K | Telida | 18.37 | 39 | P | | Pn | 12 16 17.8 | +0.4 | | |
| K20K | Telida | 18.37 | 39 | P | | Pn | 12 16 17.7 | +0.3 | | |
| | baz=241 | | | | | | | | | |
| BRLK | Bradley Lake | 18.48 | 52 | P | | Pn | 12 16 18.9 | +0.2 | | |
| BRSE | Bradley Lake S | 18.55 | 52 | P | | Pn | 12 16 19.3 | -0.2 | | |
| | baz=256 | | | | | | | | | |
| CAPN | Captain Cook N | 18.63 | 48 | P | | Pn | 12 16 20.1 | -0.3 | | |
| | baz=253 | | | | | | | | | |
| SEY | Seymchan | 18.66 | 319 | P | | Pn | 12 16 20.5 | -0.2 | | |
| | comp=Z,0.2nm,0.3s,baz=118,slow=12,SNR=24 | | | | | | | | | |
| SEY | | | | LR | | LR | 12 22 48.9 | | | |
| | comp=Z,4µm,21.7s,baz=110,slow=35 | | | | | | | | | |
| SEY | | | | ScP | | ScP | 12 24 19.4 | +2.5 | | |
| | comp=Z,0.2nm,0.3s,baz=186,slow=10,SNR=4.5 | | | | | | | | | |
| J20K | Nowinta River | 18.75 | 37 | P | | Pn | 12 16 21.8 | -0.1 | | |
| J20K | | | | IAmb | IAmb | | 12 16 26.6 | | | |
| | comp=Z,172nm,1.2s | | | | | | | | | |
| J20K | Nowinta River | 18.75 | 37 | P | | Pn | 12 16 22.3 | +0.4 | | |
| | baz=239 | | | | | | | | | |
| RDOG | Red Dog Mine | 18.77 | 20 | P | | Pn | 12 16 23.7 | +1.7 | | |
| RDOG | | | | IAmb | IAmb | | 12 16 30.6 | | | |
| | comp=Z,145nm,1.0s | | | | | | | | | |
| RDOG | Red Dog Mine | 18.77 | 20 | P | | Pn | 12 16 23.1 | +1.0 | | |
| | baz=216,SNR=33 | | | | | | | | | |
| PPLA | Purkeypile | 18.93 | 42 | P | | Pn | 12 16 23.8 | -0.4 | | |
| PPLA | | | | IAmb | IAmb | | 12 16 44.0 | | | |
| | comp=Z,170nm,1.0s | | | | | | | | | |
| PPLA | Purkeypile | 18.93 | 42 | P | | P | 12 16 23.3 | +0.2 | | |
| | baz=245,SNR=21 | | | | | | | | | |
| CAST | Castle Rocks | 19.20 | 40 | P | | Pn | 12 16 28.2 | +0.9 | | |
| CAST | Castle Rocks | 19.20 | 40 | P | | Pn | 12 16 26.9 | -0.3 | | |
| | baz=244,SNR=84 | | | | | | | | | |
| O22K | Cooper Landing | 19.22 | 50 | P | | P | 12 16 25.5 | -0.6 | | |
| O22K | Cooper Landing | 19.22 | 50 | P | | P | 12 16 26.3 | +0.2 | | |
| | baz=255,SNR=20 | | | | | | | | | |
| SEW | Seward | 19.26 | 51 | P | | P | 12 16 26.4 | -0.2 | | |
| SEW | Seward | 19.26 | 51 | P | | P | 12 16 27.2 | +0.7 | | |
| | baz=257 | | | | | | | | | |
| CHUM | Lake Minchumin | 19.31 | 39 | P | | Pn | 12 16 28.3 | -0.3 | | |
| | baz=243,SNR=57 | | | | | | | | | |
| RC01 | Rabbit Creek A | 19.38 | 48 | P | | P | 12 16 27.0 | -0.8 | | |
| RC01 | Rabbit Creek A | 19.38 | 48 | P | | P | 12 16 27.9 | +0.1 | | |
| | baz=254,SNR=5.3 | | | | | | | | | |
| M22K | Willow | 19.41 | 46 | P | | P | 12 16 28.6 | +0.6 | | |
| M22K | | | | IAmb | IAmb | | 12 16 37.9 | | | |
| | comp=Z,192nm,0.8s | | | | | | | | | |
| M22K | Willow | 19.41 | 46 | P | | P | 12 16 28.3 | +0.3 | | |
| | baz=251,SNR=21 | | | | | | | | | |
| CUT | Chulitna | 19.56 | 44 | P | | P | 12 16 30.6 | +0.8 | | |
| CUT | | | | IAmb | IAmb | | 12 16 40.9 | | | |
| | comp=Z,205nm,0.8s | | | | | | | | | |
| CUT | Chulitna | 19.56 | 44 | P | | P | 12 16 29.8 | +0.1 | | |
| | baz=249,SNR=35 | | | | | | | | | |
| KTH | Kantishna Hill | 19.73 | 41 | P | | Pn | 12 16 33.2 | -0.4 | | |
| KTH | | | | IAmb | IAmb | | 12 16 34.5 | | | |
| | comp=Z,262nm,1.0s | | | | | | | | | |
| PMR | Palmer | 19.81 | 47 | P | | P | 12 16 31.9 | -0.5 | | |
| PMR | | | | pmax | pmax | | | | | |
| | comp=Z,35nm,0.8s | | | | | | | | | |
| PMR | Palmer | 19.81 | 47 | P | | P | 12 16 31.9 | -0.5 | | |
| PMR | Palmer | 19.81 | 47 | P | | P | 12 16 32.0 | -0.5 | | |
| | baz=253,SNR=8.1 | | | | | | | | | |
| IMAR | Indian Mountai | 19.88 | 32 | P | | Pn | 12 16 35.0 | -0.2 | | |
| BPAW | Bear Paw Mtn. | 19.93 | 39 | P | | Pn | 12 16 35.8 | -0.1 | | |
| BPAW | Bear Paw Mtn. | 19.93 | 39 | P | | P | 12 16 34.9 | +1.0 | | |
| | baz=244,SNR=72 | | | | | | | | | |
| TRF | Thorofare Moun | 19.95 | 41 | P | | P | 12 16 34.3 | +0.2 | | |
| TRF | | | | IAmb | IAmb | | 12 16 47.7 | | | |
| | comp=Z,346nm,1.4s | | | | | | | | | |
| TRF | Thorofare Moun | 19.95 | 41 | P | | P | 12 16 34.4 | +0.3 | | |
| | baz=247,SNR=29 | | | | | | | | | |
| GHO | Glory Hole Cre | 19.95 | 46 | P | | P | 12 16 33.7 | -0.4 | | |
| PWL | Port Wells | 19.98 | 49 | P | | P | 12 16 33.7 | -0.7 | | |
| PWL | | | | IAmb | IAmb | | 12 16 44.6 | | | |
| | comp=Z,116nm,0.8s | | | | | | | | | |
| PWL | Port Wells | 19.98 | 49 | P | | P | 12 16 33.5 | -0.9 | | |
| | baz=256,SNR=21 | | | | | | | | | |
| H21K | Melozitna Rive | 20.02 | 34 | P | | Pn | 12 16 36.1 | -0.9 | | |
| H21K | | | | IAmb | IAmb | | 12 16 41.4 | | | |
| | comp=Z,306nm,1.4s | | | | | | | | | |
| H21K | Melozitna Rive | 20.02 | 34 | P | | P | 12 16 35.1 | +0.3 | | |
| | baz=238 | | | | | | | | | |
| KNK | Knik Glacier | 20.07 | 48 | P | | P | 12 16 34.4 | -0.9 | | |
| KNK | | | | IAmb | IAmb | | 12 16 48.1 | | | |
| | comp=Z,85nm,0.6s | | | | | | | | | |
| KNK | Knik Glacier | 20.07 | 48 | P | | P | 12 16 34.7 | -0.7 | | |
| | baz=254,SNR=19 | | | | | | | | | |
| I21K | Tanana | 20.07 | 36 | P | | P | 12 16 36.0 | +0.8 | | |
| I21K | | | | IAmb | IAmb | | 12 16 42.6 | | | |
| | comp=Z,175nm,1.1s | | | | | | | | | |
| I21K | Tanana | 20.07 | 36 | P | | Pn | 12 16 37.1 | -0.3 | | |
| | baz=240 | | | | | | | | | |
| SML | Sawmill | 20.23 | 47 | P | | P | 12 16 36.6 | -0.5 | | |
| SML | | | | IAmb | IAmb | | 12 16 55.8 | | | |
| | comp=Z,72nm,0.7s | | | | | | | | | |
| SML | | | | IAMs_20 | IAMs_20 | | 12 24 46.0 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| SML | Sawmill | 20.23 | 47 | P | | P | 12 16 36.5 | -0.7 | | |
| | baz=254,SNR=20 | | | | | | | | | |
| MLY | Manley | 20.45 | 37 | P | | Pn | 12 16 40.9 | -1.2 | | |
| MLY | | | | IAmb | IAmb | | 12 16 42.6 | | | |
| | comp=Z,214nm,1.5s | | | | | | | | | |
| MLY | Manley | 20.45 | 37 | P | | Pn | 12 16 40.9 | -1.1 | | |
| | baz=242,SNR=48 | | | | | | | | | |
| RND | Reindeer | 20.52 | 42 | P | | P | 12 16 40.0 | -0.3 | | |
| RND | | | | pmax | pmax | | | | | |
| | comp=Z,92nm,1.1s | | | | | | | | | |
| RND | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| RND | Reindeer | 20.52 | 42 | P | | P | 12 16 40.0 | -0.3 | | |
| BWN | Browne | 20.57 | 40 | P | | P | 12 16 42.0 | +1.2 | | |
| GLI | Glacier Island | 20.57 | 50 | P | | P | 12 16 39.3 | -1.5 | | |
| GLI | | | | IAmb | IAmb | | 12 16 54.7 | | | |
| | comp=Z,87nm,0.7s | | | | | | | | | |
| GLI | Glacier Island | 20.57 | 50 | P | | P | 12 16 39.4 | -1.5 | | |
| | baz=257,SNR=18 | | | | | | | | | |
| MCK | McKinley | 20.61 | 41 | P | | P | 12 16 41.8 | +0.6 | | |
| MCK | | | | pmax | pmax | | | | | |
| | comp=Z,76nm,0.9s | | | | | | | | | |
| MCK | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| MCK | McKinley | 20.61 | 41 | P | | P | 12 16 41.8 | +0.6 | | |
| MCK | | | | IAMs_20 | IAMs_20 | | 12 25 24.8 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| MCK | McKinley | 20.61 | 41 | P | | P | 12 16 40.9 | -0.3 | | |
| | baz=248,SNR=26 | | | | | | | | | |
| SCM | Sheep Creek Mo | 20.70 | 47 | P | | P | 12 16 41.7 | -0.5 | | |
| SCM | | | | pmax | pmax | | | | | |
| | comp=Z,121nm,0.8s | | | | | | | | | |
| SCM | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| SCM | Sheep Creek Mo | 20.70 | 47 | P | | P | 12 16 41.7 | -0.5 | | |
| SCM | | | | IAmb | IAmb | | 12 17 10.1 | | | |
| | comp=Z,121nm,0.8s | | | | | | | | | |
| SCM | | | | IAMs_20 | IAMs_20 | | 12 25 00.2 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| SCM | Sheep Creek Mo | 20.70 | 47 | P | | P | 12 16 41.5 | -0.8 | | |
| | baz=255,SNR=29 | | | | | | | | | |
| WAT6 | Susitna Watana | 20.73 | 45 | P | | P | 12 16 42.0 | -0.6 | | |
| | baz=252 | | | | | | | | | |
| FID | Port Fidalgo | 20.84 | 50 | P | | P | 12 16 42.6 | -1.1 | | |
| FID | | | | IAmb | IAmb | | 12 16 47.3 | | | |
| | comp=Z,82nm,0.6s | | | | | | | | | |
| FID | | | | IAMs_20 | IAMs_20 | | 12 26 08.6 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| NEA2 | Nenana | 20.90 | 39 | P | | P | 12 16 44.7 | +0.4 | | |
| NEA2 | | | | IAmb | IAmb | | 12 16 53.9 | | | |
| | comp=Z,142nm,0.9s | | | | | | | | | |
| NEA2 | Nenana | 20.90 | 39 | P | | P | 12 16 44.9 | +0.5 | | |
| | baz=246,SNR=63 | | | | | | | | | |
| I23K | Minto, Yukon-K | 21.03 | 37 | P | | P | 12 16 45.1 | -0.6 | | |
| I23K | Minto, Yukon-K | 21.03 | 37 | P | | P | 12 16 46.2 | +0.6 | | |
| | baz=244,SNR=25 | | | | | | | | | |
| EYAK | Cordova Ski Ar | 21.16 | 51 | P | | P | 12 16 46.6 | -0.4 | | |
| EYAK | Cordova Ski Ar | 21.16 | 51 | P | | P | 12 16 46.7 | -0.4 | | |
| | baz=260 | | | | | | | | | |
| WRH | Wood River Hil | 21.24 | 40 | P | | P | 12 16 47.3 | -0.6 | | |
| DIV | Divide | 21.26 | 49 | P | | P | 12 16 47.3 | -0.9 | | |
| DIV | | | | IAmb | IAmb | | 12 17 01.0 | | | |
| | comp=Z,78nm,0.6s | | | | | | | | | |
| KLU | Klutina | 21.27 | 48 | P | | P | 12 16 47.7 | -0.6 | | |
| KLU | | | | IAmb | IAmb | | 12 17 08.1 | | | |
| | comp=Z,79nm,0.8s | | | | | | | | | |
| KLU | | | | IAMs_20 | IAMs_20 | | 12 26 18.3 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| KLU | Klutina | 21.27 | 48 | P | | P | 12 16 48.5 | +0.1 | | |
| | baz=257,SNR=18 | | | | | | | | | |
| M24K | Tolsona, Glenn | 21.30 | 47 | P | | P | 12 16 48.8 | +0.2 | | |
| M24K | Tolsona, Glenn | 21.30 | 47 | P | | P | 12 16 48.3 | -0.3 | | |
| | baz=255,SNR=25 | | | | | | | | | |
| MDM | Murphy Dome | 21.38 | 38 | P | | P | 12 16 49.9 | +0.4 | | |
| CCB | Clear Creek Bu | 21.42 | 39 | P | | P | 12 16 48.9 | -1.0 | | |
| TCOL | CIGO, UAF Yank | 21.49 | 39 | P | | P | 12 16 49.9 | -0.7 | | |
| TCOL | | | | IAmb | IAmb | | 12 17 01.6 | | | |
| | comp=Z,79nm,0.8s | | | | | | | | | |
| TCOL | CIGO, UAF Yank | 21.49 | 39 | P | | P | 12 16 51.4 | +0.8 | | |
| | baz=246,SNR=22 | | | | | | | | | |
| COLA | College | 21.49 | 39 | *e*P | | P | 12 16 51.7 | +1.1 | | |
| COLA | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,0.4s | | | | | | | | | |
| COLA | College | 21.49 | 39 | P | | P | 12 16 49.9 | -0.7 | | |
| COLA | | | | IAmb | IAmb | | 12 17 01.6 | | | |
| | comp=Z,77nm,0.8s | | | | | | | | | |
| COLA | College | 21.49 | 39 | P | | P | 12 16 50.1 | -0.5 | | |
| | baz=246 | | | | | | | | | |
| HDA | Harding Lake | 21.68 | 40 | P | | P | 12 16 52.1 | -0.5 | | |
| HDA | Harding Lake | 21.68 | 40 | P | | P | 12 16 52.1 | -0.5 | | |
| | baz=249 | | | | | | | | | |
| COLD | Coldfoot | 21.75 | 32 | P | | P | 12 16 54.5 | +1.2 | | |
| COLD | Coldfoot | 21.75 | 32 | P | | P | 12 16 53.9 | +0.6 | | |
| | baz=238,SNR=52 | | | | | | | | | |
| POKR | Poker Plat Res | 21.75 | 38 | P | | P | 12 16 54.5 | +1.1 | | |
| POKR | Poker Plat Res | 21.75 | 38 | P | | P | 12 16 54.2 | +0.7 | | |
| | baz=246,SNR=17 | | | | | | | | | |
| BMRM | Bremner River | 21.79 | 50 | P | | P | 12 16 54.2 | +0.3 | | |
| BMRM | | | | IAmb | IAmb | | 12 17 20.4 | | | |
| | comp=Z,113nm,0.9s | | | | | | | | | |
| BMRM | | | | IAMs_20 | IAMs_20 | | 12 25 31.1 | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| BMRM | Bremner River | 21.79 | 50 | P | | P | 12 16 53.9 | 0.0 | | |
| | baz=260,SNR=18 | | | | | | | | | |
| HARP | HAARP | 21.83 | 46 | P | | P | 12 16 54.4 | +0.1 | | |
| | baz=256,SNR=22 | | | | | | | | | |
| IL31 | | 21.83 | 39 | P | | P | 12 16 52.1 | -2.1 | | |
| ILAR | Eielson Array | 21.83 | 39 | P | | P | 12 16 52.5 | -1.8 | | |
| | comp=Z,12nm,0.7s,baz=248,slow=10,SNR=68 | | | | | | | | | |
| ILAR | | | | PcP | | PcP | 12 20 51.9 | -0.1 | | |
| | comp=Z,4.3nm,0.6s,baz=278,slow=3.1,SNR=9.0 | | | | | | | | | |
| ILAR | | | | ScP | | ScP | 12 24 25.9 | +1.5 | | |
| | comp=Z,2.3nm,0.7s,baz=267,slow=3.0,SNR=8.1 | | | | | | | | | |
| PAX | Paxson | 21.84 | 44 | P | | P | 12 16 54.2 | -0.3 | | |
| PAX | | | | pmax | pmax | | | | | |
| | comp=Z,76nm,0.8s | | | | | | | | | |
| PAX | Paxson | 21.84 | 44 | P | | P | 12 16 54.2 | -0.3 | | |
| PAX | | | | IAmb | IAmb | | 12 17 06.7 | | | |
| | comp=Z,76nm,0.8s | | | | | | | | | |
| PAX | Paxson | 21.84 | 44 | P | | P | 12 16 53.9 | -0.5 | | |
| | baz=254,SNR=33 | | | | | | | | | |
| HMT | Hamilton | 21.85 | 52 | P | | P | 12 16 54.8 | +0.3 | | |
| HMT | | | | IAmb | IAmb | | 12 17 10.7 | | | |
| | comp=Z,60nm,0.7s | | | | | | | | | |
| HMT | | | | IAMs_20 | IAMs_20 | | 12 25 50.9 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| H24K | Noodor Dome | 21.89 | 36 | P | | P | 12 16 55.7 | +0.8 | | |
| H24K | | | | IAmb | IAmb | | 12 16 58.3 | | | |
| | comp=Z,108nm,0.8s | | | | | | | | | |
| H24K | Noodor Dome | 21.89 | 36 | P | | P | 12 16 55.9 | +1.0 | | |
| | baz=244 | | | | | | | | | |
| N25K | Chitina, Valde | 21.91 | 48 | P | | P | 12 16 55.1 | -0.1 | | |
| N25K | | | | IAmb | IAmb | | 12 17 12.6 | | | |
| | comp=Z,75nm,0.8s | | | | | | | | | |
| N25K | | | | IAMs_20 | IAMs_20 | | 12 26 48.3 | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| N25K | Chitina, Valde | 21.91 | 48 | P | | P | 12 16 54.9 | -0.4 | | |
| | baz=258,SNR=26 | | | | | | | | | |
| KUR | Kuril'sk | 21.96 | 266 | *e*P | | P | 12 16 55.7 | -0.1 | | |
| KUR | | | | *e* | | | 12 17 19.3 | | | |
| KUR | | | | S | | S | 12 20 56.1 | +1.1 | | |
| KUR | | | | pmax | pmax | | | | | |
| | comp=Z,829nm,1.1s | | | | | | | | | |
| SUCK | Suckling Hills | 22.06 | 53 | P | | P | 12 16 57.6 | +0.9 | | |
| SUCK | | | | IAMs_20 | IAMs_20 | | 12 26 16.4 | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| BERG | Berg Lake | 22.14 | 52 | P | | P | 12 16 58.5 | +0.9 | | |
| BERG | | | | IAmb | IAmb | | 12 17 18.3 | | | |
| | comp=Z,204nm,1.4s | | | | | | | | | |
| GLB | Gilahina Butte | 22.25 | 49 | P | | P | 12 16 58.4 | -0.4 | | |
| GLB | | | | IAmb | IAmb | | 12 17 15.8 | | | |
| | comp=Z,100nm,0.8s | | | | | | | | | |
| RIDG | Independent Ri | 22.33 | 43 | P | | P | 12 16 59.3 | -0.4 | | |
| RIDG | | | | IAMs_20 | IAMs_20 | | 12 25 53.2 | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| RIDG | Independent Ri | 22.33 | 43 | P | | P | 12 16 58.8 | -0.9 | | |
| | baz=253,SNR=19 | | | | | | | | | |
| VRDI | Verde Repeater | 22.38 | 50 | P | | P | 12 17 00.8 | +0.4 | | |
| VRDI | | | | IAmb | IAmb | | 12 17 02.0 | | | |
| | comp=Z,64nm,0.8s | | | | | | | | | |
| VRDI | | | | IAMs_20 | IAMs_20 | | 12 25 49.8 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| J25K | Salcha River, | 22.39 | 40 | P | | P | 12 16 59.3 | -1.0 | | |
| J25K | Salcha River, | 22.39 | 40 | P | | P | 12 16 59.3 | -1.0 | | |
| | baz=250,SNR=12 | | | | | | | | | |
| WAX | Waxell Ridge | 22.56 | 52 | P | | P | 12 17 02.4 | +0.2 | | |
| WAX | | | | IAmb | IAmb | | 12 17 26.1 | | | |
| | comp=Z,359nm,1.8s | | | | | | | | | |
| MENT | Mentasta | 22.61 | 45 | P | | P | 12 17 02.1 | -0.5 | | |
| DOT | Dot Lake | 22.64 | 43 | P | | P | 12 17 01.6 | -1.4 | | |
| DOT | | | | | | PcP | 12 20 54.9 | +1.2 | | |
| PRP | Porcupine Dome | 22.65 | 38 | P | | P | 12 17 02.4 | -0.8 | | |
| PRP | Porcupine Dome | 22.65 | 38 | P | | P | 12 17 02.0 | -1.1 | | |
| | baz=248,SNR=54 | | | | | | | | | |
| A21K | Barrow | 22.70 | 20 | P | | P | 12 17 03.9 | +0.5 | | |
| A21K | | | | IAmb | IAmb | | 12 17 06.0 | | | |
| | comp=Z,150nm,0.8s | | | | | | | | | |
| A21K | Barrow | 22.70 | 20 | P | | P | 12 17 03.7 | +0.2 | | |
| | baz=221,SNR=13 | | | | | | | | | |
| SCRK | Sand Creek | 22.76 | 42 | IAMs_20 | IAMs_20 | | 12 26 06.6 | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| SCRK | Sand Creek | 22.76 | 42 | P | | P | 12 17 03.0 | -1.4 | | |
| | baz=254,SNR=28 | | | | | | | | | |
| L26K | Log Cabin Wild | 22.79 | 45 | IAmb | IAmb | | 12 17 06.4 | | | |
| L26K | comp=Z,72nm,0.6s | | | IAMs_20 | IAMs_20 | | 12 26 16.5 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| L26K | Log Cabin Wild | 22.79 | 45 | P | | P | 12 17 04.2 | -0.4 | | |
| | baz=256,SNR=65 | | | | | | | | | |
| M26K | Nabesna, AK | 22.81 | 47 | P | | P | 12 17 04.0 | -0.8 | | |
| M26K | | | | IAMs_20 | IAMs_20 | | 12 26 20.1 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| M26K | Nabes

NKL MLR MLR
comp=N,7µm,14.0s
NKL MLR MLR
comp=Z,2µm,21.0s
**BVCY Beaver Creek 23.79 47** P **P** **12 17 13.7 -0.5**
baz=261,SNR=49
**PCA Pinnacle 23.82 53** P **P** **12 17 14.0 -0.5**
PCA IAmb IAmb 12 17 47.0
comp=Z,149nm,1.3s
**PINM Pinnacle 23.82 53** P **P** **12 17 13.7 -0.8**
baz=266,SNR=5.2
**YUK3 Moose Creek 23.88 49** P **P** **12 17 14.7 -0.6**
baz=262,SNR=56
**UGL Uglegorsk 24.05 279** *e*P **P** **12 17 16.8 +0.2**
UGL *e*S **S** **12 21 27.4 -2.5**
UGL pmax pmax
comp=Z,160nm,0.8s
UGL pmax pmax
comp=Z,1µm,6.0s
**EGAK Eagle 24.16 41** P **P** **12 17 17.7 +0.1**
EGAK IAmb IAmb 12 17 19.4
comp=Z,124nm,1.1s
EGAK IAMs_20 IAMs_20 12 27 52.7
comp=Z,2µm,19.0s
**EGAK Eagle 24.16 41** P **P** **12 17 17.0 -0.5**
baz=255,SNR=44
**PNL Peninsula 24.23 54** P **P** **12 17 17.5 -0.7**
baz=268
**YSS Yuzh-Sakhalins 24.41 274**α *i*P **P** **12 17 20.5 +0.5**
YSS *e**SP **pP** **12 17 34.3 +0.9**
YSS *e*S **S** **12 21 35.4 -0.5**
YSS pmax pmax
comp=Z,80nm,1.1s
YSS pmax pmax
comp=Z,400nm,5.4s
YSS smax smax
comp=N,300nm,2.9s
YSS MLR MLR
comp=E,700nm,19.0s
YSS MLR MLR
comp=Z,1µm,19.0s
**YSS Yuzh-Sakhalins 24.41 274** P **P** **12 17 20.0 0.0**
YSS IAmb IAmb 12 17 24.1
comp=Z,102nm,1.1s
**YUK4 Talbot Arm 24.70 50** P **P** **12 17 22.7 0.0**
baz=265
**DAWY Dawson 24.75 43** P **P** **12 17 22.9 -0.1**
DAWY IAmb IAmb 12 17 35.1
comp=Z,57nm,0.9s
**DAWY Dawson 24.75 43** P **P** **12 17 22.9 -0.1**
baz=258,SNR=41
**YUK6 Outpost Mounta 24.81 51** P **P** **12 17 23.0 -0.7**
baz=266
**HYT Haines Junctio 25.22 51** P **P** **12 17 26.9 -0.4**
**HYT Haines Junctio 25.22 51** P **P** **12 17 26.4 -0.9**
baz=267
**J29M Klondike Camp 25.33 43** P **P** **12 17 28.2 0.0**
J29M IAMs_20 IAMs_20 12 27 47.5
comp=Z,4µm,20.0s
**J29M Klondike Camp 25.33 43** P **P** **12 17 27.8 -0.4**
baz=259
**I29M Ogilvie Camp, 25.48 41** P **P** **12 17 28.7 -0.8**
baz=257,SNR=24
**M30M Minto, Yukon 25.68 47** IAmb IAmb 12 17 34.4
comp=Z,48nm,0.7s
**M30M Minto, Yukon 25.68 47** P **P** **12 17 31.1 -0.3**
baz=264
**JKA Kamikawa-asahi 25.79 268** P **P** **12 17 33.1 +0.6**
JKA IAmb IAmb 12 17 34.8
comp=Z,155nm,1.0s
**ASAJ Asahikawa 25.80 268** P **P** **12 17 32.4 -0.2**
comp=Z,149nm,1.0s,baz=56,slow=5.9,SNR=36
ASAJ LR LR 12 27 28.1
comp=Z,1µm,20.4s,baz=70,slow=36
**ASAJ Asahikawa 25.80 268** P **P** **12 17 33.1 +0.6**
ASAJ pmax pmax
comp=Z,155nm,1.0s
**N31M Braeburn, Yuko 26.08 50** P **P** **12 17 35.7 +0.6**
**N31M Braeburn, Yuko 26.08 50** P **P** **12 17 34.9 -0.1**
baz=268
**MAYO Mayo, Yukon 26.20 45** P **P** **12 17 36.0 -0.1**
baz=263,SNR=10
**SKAG Skagway 26.30 54** P **P** **12 17 36.7 -0.2**
baz=272
**EPYK Eagle Plains 26.34 39** P **P** **12 17 36.9 -0.5**
**EPYK Eagle Plains 26.34 39** P **P** **12 17 36.7 -0.6**
baz=257,SNR=20
**WHY Whitehorse 26.50 52** P **P** **12 17 38.2 -0.7**
baz=270
**ERM Erimo 26.54 264** P **P** **12 17 39.5 +0.3**
ERM pmax pmax
comp=Z,117nm,1.2s
ERM MLR MLR
comp=Z,2µm,21.0s
**ERM Erimo 26.54 264** P **P** **12 17 39.5 +0.3**
ERM IAmb IAmb 12 17 44.4
comp=Z,117nm,1.2s
**ERM Erimo 26.54 264** IAMs_20 IAMs_20 12 26 45.8
comp=Z,2µm,21.0s
**M31M Drury Creek, Y 26.77 48** P **P** **12 17 41.1 -0.1**
baz=267,SNR=7.3
**GRNR Gornyy 26.95 286**⇑ *i*P **P** **12 17 43.3 +0.4**
GRNR pmax pmax
comp=N,10.0nm,1.0s
GRNR pmax pmax
comp=E,30nm,1.0s
GRNR pmax pmax
comp=Z,70nm,1.1s
GRNR MLR MLR
comp=E,720nm,18.0s
GRNR MLR MLR
comp=N,330nm,12.0s
GRNR MLR MLR
comp=Z,830nm,17.0s
**FARO Faro, Yukon 27.26 48** P **P** **12 17 44.7 -1.0**
baz=268
**P33M Teslin, Yukon 27.54 53** P **P** **12 17 48.7 +0.6**
**P33M Teslin, Yukon 27.54 53** P **P** **12 17 47.7 -0.5**
baz=273
**INK Inuvik 28.00 35** P **P** **12 17 51.8 -0.3**
comp=Z,13nm,1.0s,baz=237,slow=9.0,SNR=40
INK PcP **PcP** **12 21 06.1 +0.6**
comp=Z,19nm,0.8s,baz=299,slow=3.0,SNR=9.2
INK ScP **ScP** **12 24 44.2 +2.6**
comp=Z,3.4nm,0.9s,baz=297,slow=6.0,SNR=5.7
INK LR LR 12 29 49.0
comp=Z,1µm,19.8s,baz=239,slow=38
**INK Inuvik 28.00 35** P **P** **12 17 52.4 +0.4**
**INK Inuvik 28.00 35** P **P** **12 17 52.2 +0.1**
baz=257,SNR=17
**WRAK Wrangell Islan 28.21 61** IAMs_20 IAMs_20 12 28 03.3
comp=Z,2µm,22.0s
**MMPY Sheldon Lake, 28.24 48** P **P** **12 17 54.4 0.0**
baz=270,SNR=18
**YAK Yakutsk 28.75 311** P **P** **12 17 58.2 -0.6**
comp=Z,6.6nm,0.4s,baz=81,slow=1.9,SNR=8.7
YAK S **S** **12 22 46.5 +2.4**
comp=Z,2.0nm,0.3s,baz=106,slow=2.8,SNR=0.9
YAK LR LR 12 29 25.8
comp=Z,2µm,18.7s,baz=111,slow=36
**YAK Yakutsk 28.75 311***c i*P **P** **12 17 57.6 -1.2**
YAK *e**PP **sP** **12 18 15.8 -2.5**
YAK *e* 12 18 48.2
YAK *e* 12 21 07.3
YAK *e*S **S** **12 22 36.6 -7.5**
YAK *e* 12 28 43.5
YAK pmax pmax
comp=Z,36nm,1.2s
YAK pmax pmax
comp=E,14nm,1.1s
YAK pmax pmax
comp=N,2.0nm,1.0s
YAK pmax pmax
comp=Z,341nm,6.8s
YAK pmax pmax
comp=N,166nm,6.7s
YAK pmax pmax
comp=E,274nm,6.4s
YAK smax smax
comp=E,196nm,4.3s
YAK smax smax
comp=N,127nm,3.7s
YAK MLR MLR
comp=Z,2µm,18.0s
YAK MLR MLR
comp=E,1µm,16.0s
YAK MLR MLR
comp=N,828nm,18.0s
**YAK Yakutsk 28.75 311** P **P** **12 17 57.7 -1.0**
YAK IAMs_20 IAMs_20 12 28 54.9
comp=Z,2µm,20.0s
**TEY Ternei 29.11 275**⇓ *e*P **P** **12 18 02.5 +0.4**
TEY *e* 12 21 16.5
TEY pmax pmax
comp=N,30nm,1.2s
TEY pmax pmax
comp=E,30nm,1.2s
TEY pmax pmax
comp=Z,50nm,1.2s
**DLBC Dease Lake 29.13 56** LR LR 12 29 20.8
comp=Z,2µm,21.8s,baz=284,slow=36
**TIXI Tiksi 30.21 331** P **P** **12 18 10.6 -1.0**
comp=Z,0.7nm,0.3s,baz=90,slow=20,SNR=1.8
TIXI PcP **PcP** **12 21 11.2 +0.1**
comp=Z,16nm,0.8s,baz=90,slow=19,SNR=13
TIXI ScP **ScP** **12 24 50.2 +1.7**
comp=Z,4.6nm,0.8s,baz=90,slow=20,SNR=7.3
TIXI LR LR 12 31 23.8
comp=Z,3µm,18.1s,baz=19,slow=38
**TIXI Tiksi 30.21 331** P **P** **12 18 11.2 -0.4**
TIXI **PcP** **12 21 11.2 +0.1**
**KLR Kul'dur 30.31 285** LR LR 12 32 00.4
comp=Z,1µm,18.5s,baz=70,slow=40
**KLR Kul'dur 30.31 285***c i*P **P** **12 18 12.6 -0.2**
KLR pmax pmax
comp=Z,152nm,0.9s
**JMM Marumori 30.45 259** P **P** **12 18 13.8 -0.3**
JMM IAmb IAmb 12 18 15.6
comp=Z,93nm,1.2s
**ZEA Zeya 31.42 295** *e*P **P** **12 18 21.7 -0.8**
ZEA *e*S **S** **12 23 19.7 -6.4**
ZEA pmax pmax
comp=E,30nm,0.9s
ZEA pmax pmax
comp=Z,80nm,0.9s
ZEA pmax pmax
comp=E,200nm,7.7s
ZEA pmax pmax
comp=N,100nm,5.5s
ZEA pmax pmax
comp=Z,200nm,6.1s
ZEA MLR MLR
comp=E,600nm,17.0s
ZEA MLR MLR
comp=N,1µm,22.0s
**A36M Sachs Harbour 31.55 29** P **P** **12 18 25.0 +1.6**
**A36M Sachs Harbour 31.55 29** P **P** **12 18 24.9 +1.5**
baz=259,SNR=150
**C36M Paulatuk 31.56 34** P **P** **12 18 24.0 +0.5**
**C36M Paulatuk 31.56 34** P **P** **12 18 23.8 +0.3**
baz=265,SNR=17
**BBB Bella Bella 31.70 68** LR LR 12 31 00.4
comp=N,822nm,18.7s,baz=294,slow=36
**WRGLY Wrigley 31.78 46** P **P** **12 18 25.9 +0.3**
baz=275,SNR=27
**JYT Yasato 31.87 257** P **P** **12 18 26.5 0.0**
JYT IAmb IAmb 12 18 28.1
comp=Z,56nm,1.1s
**USA0B Ussuriysk Arra 32.39 276** P **P** **12 18 31.0 -0.2**
USA0B pmax pmax
comp=Z,36nm,1.1s
**USA0B Ussuriysk Arra 32.39 276** P **P** **12 18 31.0 -0.2**
USA0B IAmb IAmb 12 18 33.4
comp=Z,36nm,1.1s
**USRK Ussuriysk Ar. 32.39 276** P **P** **12 18 30.6 -0.5**
comp=Z,26nm,0.9s,baz=61,slow=8.0,SNR=18
USRK LR LR 12 34 06.0
comp=Z,839nm,18.2s,baz=52,slow=41
**MJAR Matsushiro Arr 32.88 260** P **P** **12 18 35.2 -0.3**
comp=Z,22nm,0.9s,baz=52,slow=7.9,SNR=22
MJAR PcP **PcP** **12 21 19.2 +0.3**
comp=Z,5.8nm,1.1s,baz=70,slow=1.2,SNR=3.2
MJAR LR LR 12 29 56.8
comp=Z,2µm,21.5s,baz=53,slow=33
**MAJO Matsushiro 32.88 260***c i*P **P** **12 18 35.7 +0.2**
MAJO pmax pmax
comp=Z,51nm,1.1s
**MAJO Matsushiro 32.88 260** P **P** **12 18 35.4 -0.2**
MAJO IAmb IAmb 12 18 36.9
comp=Z,47nm,0.9s
**MAJO Matsushiro 32.88 260** IAMs_20 IAMs_20 12 29 44.9
comp=Z,2µm,22.0s
**MAT Matsushiro 32.88 260** P **P** **12 18 35.5 0.0**
MAT *e*S **S** **12 23 52.8 +3.5**
**MJB9 Matsu-Tunnel 32.88 260** P **P** **12 18 35.8 +0.2**
MJB9 IAmb IAmb 12 18 36.9
comp=Z,48nm,1.0s
**VLA Vladivostok 33.01 275**⇓ *i*P **P** **12 18 35.8 -0.7**
VLA pmax pmax
comp=Z,98nm,1.5s
**H11N2 WAKE ISLAND Hy 33.14 203** T T 12 53 41.6
baz=18,slow=75,SNR=388
**H11N3 WAKE ISLAND Hy 33.15 203** T T 12 53 39.7
baz=18,slow=75,SNR=373
**H11N1 WAKE ISLAND Hy 33.16 203** T T 12 53 44.5
baz=18,slow=75,SNR=381
**MDJ Mudanjiang 33.68 279** P **P** **12 18 41.6 -0.7**
MDJ S **S** **12 24 03.6 +2.2**
MDJ pmax pmax
comp=Z,31nm,0.8s
MDJ pmax pmax
comp=Z,290nm,3.6s
MDJ LR LR
comp=Z,910nm,9.3s
MDJ LR LR
comp=Z,1µm,19.5s
MDJ LR LR
comp=Z,2µm,20.0s
**MDJ Mudanjiang 33.68 279** P **P** **12 18 40.9 -1.4**
MDJ IAmb IAmb 12 18 43.0
comp=Z,27nm,0.8s
MDJ IAMs_20 IAMs_20 12 31 06.1
comp=Z,2µm,22.0s
**JGF Kuroka 34.02 259** P **P** **12 18 46.2 +0.8**
JGF IAmb IAmb 12 18 47.6
comp=Z,46nm,1.1s
**JHJ Hachijo jima 2 34.22 253** LR LR 12 32 28.1
comp=Z,504nm,19.2s,baz=66,slow=36
**H11S1 WAKE ISLAND Hy 34.37 202** T T 12 55 12.8
baz=18,slow=77,SNR=352
**H11S2 WAKE ISLAND Hy 34.38 202** T T 12 55 20.8
baz=18,slow=77,SNR=179
**H11S3 WAKE ISLAND Hy 34.38 202** T T 12 55 13.1
baz=18,slow=77,SNR=147
**BNX BinXian 34.48 282**⇑ P **P** **12 18 48.0 -1.3**
BNX pmax pmax
comp=Z,180nm,1.0s
BNX pmax pmax
comp=Z,360nm,4.4s
**KIP Kipapa 34.55 142**⇑ *i*P **P** **12 18 50.0 0.0**
KIP pmax pmax
comp=Z,46nm,1.0s
**CLRS Cowichan Lake 35.35 72** P **P** **12 18 58.3 +1.6**
**YKA Yellowknife Ar 35.91 46** P **P** **12 19 01.4 +0.1**
comp=Z,44nm,0.7s,baz=280,slow=7.8,SNR=421
YKA PcP **PcP** **12 21 27.7 +0.6**
comp=Z,9.5nm,0.7s,baz=290,slow=3.2,SNR=13
YKA ScP **ScP** **12 25 10.2 +1.7**
comp=Z,1.6nm,0.7s,baz=288,slow=3.4,SNR=9.6
**LLLB Lillooet 35.91 68** P **P** **12 19 02.5 +0.9**
**NLWA Neilton Lookou 36.15 74** P **P** **12 19 04.5 +0.8**
NLWA IAmb IAmb 12 19 06.8
comp=Z,61nm,1.2s
**A04D Lummi Island 36.24 71** P **P** **12 19 05.4 +1.0**
baz=297
**WISH Wishkah 36.34 74** P **P** **12 19 07.0 +1.8**
WISH IAmb IAmb 12 19 17.3
comp=Z,82nm,1.2s
**D03D Eldon 36.55 73** P **P** **12 19 08.7 +1.7**
baz=298,SNR=27
**CN2 Changchun 36.66 280** *e*P **P** **12 19 07.1 -0.8**
CN2 S **S** **12 24 45.6 -1.5**
CN2 pmax pmax
comp=Z,20nm,1.0s
CN2 LR LR
comp=Z,1µm,17.0s
CN2 LR LR
comp=Z,600nm,17.0s
CN2 LR LR
comp=Z,1µm,19.0s
**E03A Lebam 36.74 75** P **P** **12 19 10.2 +1.6**
**B05A Bryant 36.81 71** P **P** **12 19 10.2 +1.0**
baz=297,SNR=18
**D04E Lakebay 36.91 73** P **P** **12 19 11.6 +1.6**
baz=298,SNR=5.4
**B06A Marblemount 37.06 71** P **P** **12 19 12.2 +1.0**
B06A IAmb IAmb 12 19 13.2
comp=Z,44nm,1.4s
**F04D Rainier, OR 37.30 75** P **P** **12 19 15.0 +1.6**
baz=300,SNR=5.8
**E04D Cinebar 37.34 74** P **P** **12 19 15.4 +1.7**
**E04D Cinebar 37.34 74** P **P** **12 19 15.1 +1.4**
baz=299,SNR=14
**D05A Enumclaw 37.38 73** P **P** **12 19 16.0 +2.0**
**HIA Hailar 37.45 291** P **P** **12 19 14.0 -0.6**
HIA 12 21 32.2
HIA pmax pmax
comp=Z,118nm,1.5s
HIA MLR MLR
comp=Z,2µm,20.0s
**HIA Hailar 37.45 291** P **P** **12 19 14.0 -0.6**
HIA **PcP** **12 21 32.2 +0.1**
**HIA Hailar 37.45 291** IAMs_20 IAMs_20 12 34 46.4
comp=Z,1µm,20.0s
**G03D McMinnville, O 37.58 76** P **P** **12 19 17.8 +2.0**
**G03D McMinnville, O 37.58 76** P **P** **12 19 17.4 +1.6**
baz=301
**C06D Leavenworth 37.68 71** P **P** **12 19 17.5 +0.9**
baz=298
**F04A Amboy 37.73 75** P **P** **12 19 17.7 +0.6**
**I02E Swisshome, OR 37.79 78** P **P** **12 19 19.1 +1.6**
I02E IAmb IAmb 12 19 26.4
comp=Z,58nm,0.8s
**I02E Swisshome, OR 37.79 78** P **P** **12 19 18.6 +1.1**
baz=302
**COR Corvallis 37.88 77** P **P** **12 19 20.5 +2.2**
COR pmax pmax
comp=Z,66nm,1.0s
**COR Corvallis 37.88 77** P **P** **12 19 20.5 +2.2**
COR IAmb IAmb 12 19 28.0
comp=Z,66nm,1.0s
**COR Corvallis 37.88 77** IAMs_20 IAMs_20 12 31 04.7
comp=Z,2µm,20.0s
**LTY Liberty 38.13 72** P **P** **12 19 21.2 +0.7**
LTY IAmb IAmb 12 19 21.9
comp=Z,21nm,0.7s
**H04D Lebanon 38.26 77** P **P** **12 19 23.1 +1.7**
H04D IAmb IAmb 12 19 31.9
comp=Z,55nm,0.8s
**H04D Lebanon 38.26 77** P **P** **12 19 21.9 +0.5**
baz=301,SNR=18
**BUCK Buck Mountain 38.27 78** P **P** **12 19 23.9 +2.1**
BUCK IAmb IAmb 12 19 44.3
comp=Z,60nm,1.1s
**I03D Drain, OR 38.31 79** P **P** **12 19 23.1 +1.2**
baz=302
**F05D White Salmon 38.34 74** P **P** **12 19 22.4 +0.2**
F05D IAmb IAmb 12 19 32.1
comp=Z,82nm,1.6s
**F05D White Salmon 38.34 74** P **P** **12 19 22.4 +0.2**
baz=300
**B08A Colville Reser 38.40 70** P **P** **12 19 23.3 +0.6**
B08A IAmb IAmb 12 19 23.9
comp=Z,23nm,0.7s
**HOOD Mount Hood Mea 38.51 75** P **P** **12 19 24.7 +1.0**
**H04A Detroit Lake 38.51 76** P **P** **12 19 25.2 +1.6**
**KBO Bosley Butte 38.58 81** P **P** **12 19 26.6 +2.2**
**K02D Willamette Mer 38.66 80** P **P** **12 19 26.2 +1.2**
baz=303,SNR=7.0
**DBO Dodson Butte 38.69 79** P **P** **12 19 27.4 +2.2**
DBO IAmb IAmb 12 19 44.1
comp=Z,46nm,1.1s
**KSRS Korea Array 38.73 270** P **P** **12 19 25.8 +0.3**
comp=Z,27nm,0.9s,baz=61,slow=8.4,SNR=54
KSRS PcP **PcP** **12 21 36.8 +0.6**
comp=Z,3.1nm,0.8s,baz=59,slow=2.7,SNR=5.9
KSRS LR LR 12 34 36.3
comp=Z,429nm,21.7s,baz=60,slow=35
**KS19 Wonju Array Si 38.73 270** P **P** **12 19 25.1 -0.5**
KS19 IAmb IAmb 12 19 27.6
comp=Z,32nm,1.0s
**G05D Wamic, OR 38.75 75** P **P** **12 19 26.6 +1.0**
baz=301,SNR=11
**KSAR Wonju Array Be 38.76 270** P **P** **12 19 25.9 +0.2**
**KSAR Wonju Array Be 38.76 270** P **P** **12 19 25.9 +0.2**
**I04A Tendick Farm, 38.84 78** P **P** **12 19 27.6 +1.2**
baz=302,SNR=24
**SNY Shenyang 38.88 278**⇓ P **P** **12 19 26.7 0.0**
SNY S **S** **12 25 22.5 +1.7**
SNY pmax pmax
comp=Z,44nm,1.2s
SNY pmax pmax
comp=Z,450nm,3.5s
SNY LR LR
comp=Z,1µm,21.3s
SNY LR LR
comp=Z,860nm,19.7s
SNY LR LR
comp=Z,2µm,23.5s
**E07A Sunnyside 38.96 73** P **P** **12 19 28.0 +0.6**
E07A IAmb IAmb 12 19 37.9
comp=Z,140nm,1.8s
**L02E Cave Junction 38.99 81** P **P** **12 19 29.3 +1.6**
**L02E Cave Junction 38.99 81** P **P** **12 19 29.4 +1.7**
baz=304
**KSXB Camp Six Broad 39.01 81** P **P** **12 19 29.2 +1.3**
KSXB IAmb IAmb 12 19 46.4
comp=Z,34nm,0.9s
**HUMO Hull Mountain 39.15 80** P **P** **12 19 30.1 +1.2**
HUMO IAMs_20 IAMs_20 12 31 50.4
comp=Z,2µm,21.0s
**I05D Terrebonne, OR 39.20 76** P **P** **12 19 30.4 +0.9**
baz=302,SNR=12
**HAWA Hanford 39.24 73** P **P** **12 19 30.8 +1.1**
HAWA IAmb IAmb 12 19 31.9
comp=Z,57nm,0.8s
**F07A Phinny Hill Vi 39.25 74** IAmb IAmb 12 19 45.8
comp=Z,39nm,0.9s
**D08A Wollman Farm, 39.27 71** P **P** **12 19 30.6 +0.6**
**C09A Chrisman Ranch 39.29 70** P **P** **12 19 30.6 +0.5**
C09A IAmb IAmb 12 19 31.1
comp=Z,23nm,0.6s
**J04D Umpqua Nationa 39.32 78** P **P** **12 19 31.5 +0.9**
**J04D Umpqua Nationa 39.32 78** P **P** **12 19 31.8 +1.1**
baz=303
**E08A Dider Farm, El 39.47 72** IAmb IAmb 12 19 33.5
comp=Z,37nm,0.8s
**INCN Inchon 39.52 271** P **P** **12 19 32.9 +0.8**
INCN pmax pmax
comp=Z,108nm,1.1s
**INCN Inchon 39.52 271** P **P** **12 19 32.8 +0.7**
**INCN Inchon 39.52 271** P **P** **12 19 32.9 +0.7**
**EDM Edmonton 39.62 60** P **P** **12 19 32.6 -0.2**
EDM pmax pmax
comp=Z,39nm,0.6s
**EDM Edmonton 39.62 60** P **P** **12 19 32.6 -0.2**
EDM IAmb IAmb 12 19 38.9
comp=Z,39nm,0.6s
**KHMM Horse Mountain 39.64 83** IAmb IAmb 12 19 43.7
comp=Z,56nm,1.0s
**KMPM Mount Pierce 39.66 83** P **P** **12 19 34.0 +0.6**
KMPM IAmb IAmb 12 19 43.9
comp=Z,60nm,1.1s
**JNU Nakatsue 39.67 262** P **P** **12 19 33.5 +0.1**
comp=Z,48nm,0.9s,baz=40,slow=7.8,SNR=12
JNU LR LR 12 34 46.6
comp=Z,1µm,21.7s,baz=61,slow=34
**JNU Nakatsue 39.67 262** P **P** **12 19 33.5 +0.1**
JNU IAmb IAmb 12 19 35.3
comp=Z,79nm,1.1s
**PINE Pine Mountain 39.74 77** P **P** **12 19 35.9 +1.8**
PINE IAmb IAmb 12 19 50.4
comp=Z,62nm,1.1s
**NEW Newport 39.74 69** LR LR 12 34 58.6
comp=Z,838nm,20.6s,baz=296,slow=35
**NEW Newport 39.74 69** P **P** **12 19 33.9 0.0**
NEW pmax pmax
comp=Z,30nm,0.6s
**NEW Newport 39.74 69** P **P** **12 19 33.9 0.0**
NEW IAmb IAmb 12 19 35.1
comp=Z,30nm,0.6s
**NEW Newport 39.74 69** IAMs_20 IAMs_20 12 34 38.7
comp=Z,1µm,19.0s
**NEW Newport 39.74 69** P **P** **12 19 34.0 +0.1**
baz=299,SNR=36
**TJN Taejon 39.75 269***c i*P **P** **12 19 34.4 +0.4**
**TJN Taejon 39.75 269** P **P** **12 19 33.4 -0.6**
**L04D Klamath Falls 39.76 80** P **P** **12 19 33.9 -0.3**
L04D IAmb IAmb 12 19 52.2
comp=Z,73nm,1.1s

**L04D Klamath Falls 39.76 80** P **P** **12 19 35.2 +1.0**
baz=304,SNR=15
**YBH Yreka Blue Hor 39.78 81** P **P** **12 19 35.0 +0.7**
comp=Z,12nm,0.8s,baz=290,slow=5.4,SNR=25
YBH LR LR 12 32 41.6
comp=Z,805nm,21.0s,baz=296,slow=31
**YBH Yreka Blue Hor 39.78 81** P **P** **12 19 35.7 +1.3**
YBH pmax pmax
comp=Z,30nm,0.9s
**YBH Yreka Blue Hor 39.78 81** P **P** **12 19 35.7 +1.3**
**J05D Fort Rock, OR 39.83 78** P **P** **12 19 36.2 +1.4**
baz=303,SNR=16
**K04D Chiloquin, OR 39.88 79** P **P** **12 19 36.2 +1.0**
baz=304
**M02C Callahan 39.89 81** P **P** **12 19 36.0 +0.7**
M02C IAMs_20 IAMs_20 12 32 10.1
comp=Z,1µm,21.0s
**M02C Callahan 39.89 81** P **P** **12 19 36.8 +1.6**
baz=305,SNR=8.0
**E09A Wood Farm, Sta 40.01 72** P **P** **12 19 36.6 +0.5**
E09A IAmb IAmb 12 19 37.8
comp=Z,62nm,1.2s
**KMRM Mail Ridge 40.03 83** P **P** **12 19 35.9 -0.5**
KMRM IAmb IAmb 12 19 47.1
comp=Z,38nm,1.0s
**RES Resolute Bay 40.14 24** P **P** **12 19 36.9 +0.1**
comp=Z,13nm,0.8s,baz=280,slow=6.1,SNR=8.9
RES PcP **PcP** **12 21 41.0 +0.9**
comp=Z,5.5nm,0.7s,baz=258,slow=4.5,SNR=2.4
RES ScP **ScP** **12 25 26.1 +1.7**
comp=Z,10nm,1.2s,baz=297,slow=2.6,SNR=7.8
RES LR LR 12 38 34.9
comp=Z,1µm,20.4s,baz=279,slow=40
**RES Resolute Bay 40.14 24** P **P** **12 19 36.7 -0.1**
**G08A Pilot Rock 40.15 74** P **P** **12 19 38.1 +0.7**
G08A IAmb IAmb 12 19 45.5
comp=Z,88nm,1.9s
**N02D Trinity Center 40.22 82** IAmb IAmb 12 19 48.4
comp=Z,58nm,1.4s
**N02D Trinity Center 40.22 82** P **P** **12 19 39.5 +1.5**
baz=305,SNR=10
**M04C Macdoel 40.29 80** IAmb IAmb 12 19 49.2
comp=Z,56nm,0.8s
**M04C Macdoel 40.29 80** P **P** **12 19 40.0 +1.3**
baz=304,SNR=15
**K05A Summer Lake 40.35 78** P **P** **12 19 41.2 +2.0**
K05A IAmb IAmb 12 19 47.8
comp=Z,34nm,0.7s
**I07A Izee 40.46 76** P **P** **12 19 41.2 +1.3**
I07A IAmb IAmb 12 20 01.7
comp=Z,58nm,1.2s
**WDC Whiskeytown Da 40.55 82** P **P** **12 19 41.5 +0.9**
WDC pmax pmax
comp=Z,30nm,1.1s
**WDC Whiskeytown Da 40.55 82** P **P** **12 19 41.5 +0.9**
**EUNU Eureka 40.55 15** P **P** **12 19 41.0 +0.8**
**F10A Beach Ranch, E 40.83 72** P **P** **12 19 43.4 +0.4**
**JSU Suzuyama 41.03 261** IAmb IAmb 12 19 46.8
comp=Z,55nm,1.0s
**HOPS Hopland Field 41.15 84** P **P** **12 19 46.3 +0.7**
**MOD Modoc Plateau 41.17 79** P **P** **12 19 46.9 +1.0**
**WALA Waterton Lakes 41.21 66** P **P** **12 19 46.2 0.0**
**BMO Blue Mountains 41.37 73** P **P** **12 19 48.4 +0.9**
BMO pmax pmax
comp=Z,27nm,0.9s
**BMO Blue Mountains 41.37 73** P **P** **12 19 48.4 +0.9**
**GDXM Geysers 41.43 84** P **P** **12 19 46.8 -1.2**
**J08A Circle Bar Ran 41.48 76** P **P** **12 19 48.4 0.0**
**JTMT Jette 41.66 68** P **P** **12 19 50.0 +0.2**
**DL2 Dalian 41.79 276** ⇑*i*P **P** **12 19 50.6 -0.2**
DL2 S **S** **12 26 04.6 +0.4**
DL2 pmax pmax
comp=Z,60nm,1.0s
DL2 pmax pmax
comp=Z,200nm,4.2s
DL2 LR LR
comp=Z,590nm,16.1s
DL2 LR LR
comp=Z,380nm,16.1s
DL2 LR LR
comp=Z,630nm,17.8s
**ORV Oroville 41.79 83** P **P** **12 19 51.0 +0.2**
ORV pmax pmax
comp=Z,19nm,1.1s
**ORV Oroville 41.79 83** P **P** **12 19 51.0 +0.2**
**WVOR Wild Horse Val 41.90 77** P **P** **12 19 52.7 +0.9**
WVOR pmax pmax
comp=Z,46nm,0.9s
**WVOR Wild Horse Val 41.90 77** P **P** **12 19 52.7 +0.9**
WVOR IAmb IAmb 12 20 06.9
comp=Z,46nm,0.9s
WVOR IAMs_20 IAMs_20 12 33 47.0
comp=Z,1µm,20.0s
**XLT XiLinHaoTe 42.33 286** ⇑*i*P **P** **12 19 55.9 +0.7**
XLT pP pP 12 20 12.0 +2.9
XLT S **S** **12 26 14.6 +2.3**
XLT ScS **ScS** **12 29 45.9 -6.0**
XLT pmax pmax
comp=Z,93nm,1.0s
XLT pmax pmax
comp=Z,350nm,5.5s
XLT LR LR
comp=Z,2µm,15.8s
XLT LR LR
comp=Z,1µm,16.5s
XLT LR LR
comp=Z,2µm,21.6s
**MSO Missoula 42.33 69** P **P** **12 19 55.3 0.0**
MSO IAmb IAmb 12 19 55.8
comp=Z,27nm,0.6s
**MSO Missoula 42.33 69** P **P** **12 19 55.2 0.0**
baz=302,SNR=30
**MPK Martis Peak 42.86 82** IAmb IAmb 12 20 10.0
comp=Z,125nm,1.6s
**RUBR Rubicon Trail 42.93 82** IAmb IAmb 12 20 09.0
comp=Z,147nm,1.9s
**PAHR Pah Rah Range 43.02 81** P **P** **12 20 01.3 +0.4**
**VCNR Virginia City 43.10 82** IAmb IAmb 12 20 11.2
comp=Z,164nm,1.8s
**PNTR Pine Nut 43.25 82** P **P** **12 20 03.8 +0.8**
PNTR IAmb IAmb 12 20 29.0
comp=Z,46nm,0.7s
**CMB Columbia Colle 43.40 84** IAMs_20 IAMs_20 12 34 40.3
comp=Z,1µm,20.0s
**YERR Yerington 43.54 82** IAmb IAmb 12 20 14.9
comp=Z,158nm,1.9s
**HRY Holter Researc 43.62 68** P **P** **12 20 05.7 0.0**
**HLID Hailey 43.82 73** IAmb IAmb 12 20 09.5
comp=Z,55nm,1.1s
**HLID Hailey 43.82 73** P **P** **12 20 08.0 +0.6**
baz=304,SNR=62
**BBGB Big Mountain B 43.90 86** IAmb IAmb 12 20 28.7
comp=Z,37nm,0.9s
**DLMT Dillon 43.90 70** P **P** **12 20 07.6 -0.4**
**NRIK Norif'sk 43.97 329** P **P** **12 20 07.8 -0.2**
comp=Z,11nm,0.9s,baz=81,slow=7.9,SNR=19
NRIK PcP **PcP** **12 21 53.8 +1.0**
comp=Z,10nm,0.8s,baz=62,slow=3.1,SNR=6.4
NRIK ScP **ScP** **12 25 44.1 +4.3**
comp=Z,1.9nm,0.6s,baz=22,slow=3.3,SNR=4.4
NRIK LR LR 12 41 45.8
comp=Z,1µm,18.1s,baz=60,slow=41
**MCMT McKenzie Canyo 44.05 71** P **P** **12 20 09.4 +0.1**
**EGMT Eagleton 44.12 65** P **P** **12 20 09.4 -0.2**
baz=302,SNR=18
**BOZ Bozeman (W) 44.34 69** P **P** **12 20 11.6 +0.1**
BOZ pmax pmax
comp=Z,41nm,0.7s
**BOZ Bozeman (W) 44.34 69** P **P** **12 20 11.6 +0.1**
BOZ IAmb IAmb 12 20 12.3
comp=Z,41nm,0.7s
**BOZ Bozeman (W) 44.34 69** P **P** **12 20 11.7 +0.1**
baz=303,SNR=60
**LHV Little Huntoon 44.44 82** IAmb IAmb 12 20 23.0
comp=Z,73nm,1.3s
**NVAR Mina Array Bea 44.46 82** P **P** **12 20 12.5 -0.2**
comp=Z,7.6nm,0.7s,baz=289,slow=8.0,SNR=42
NVAR PcP **PP** **12 21 56.6 -0.2**
comp=Z,2.0nm,0.7s,baz=294,slow=4.6,SNR=1.5
NVAR ScP **ScP** **12 25 47.4 +4.7**
comp=Z,1.5nm,0.8s,baz=280,slow=4.9,SNR=5.7
NVAR LR LR 12 35 50.9
comp=Z,814nm,21.4s,baz=306,slow=32
**NVAR Mina Array Bea 44.46 82** P **P** **12 20 12.6 0.0**
**BJI Beijing 44.49 281** P **P** **12 20 12.5 0.0**
BJI S **S** **12 26 43.8 +0.1**
BJI pmax pmax
comp=Z,59nm,1.0s
BJI LR LR
comp=Z,610nm,19.8s
BJI LR LR
comp=Z,710nm,21.4s
BJI LR LR
comp=Z,1µm,17.3s
**BJT Baijiatuau 44.50 281** IAmb IAmb 12 20 15.2
comp=Z,54nm,0.9s
**BJT Baijiatuau 44.50 281** IAMs_20 IAMs_20 12 41 09.6
comp=Z,962nm,18.0s
**NV11 Mina Array Sit 44.55 82** P **P** **12 20 13.8 +0.5**
**PAGB Antelope Grade 44.93 86** P **P** **12 20 16.5 +0.3**
PAGB IAmb IAmb 12 20 24.1
comp=Z,30nm,0.8s
**ELK Elko 44.95 77** P **P** **12 20 17.1 +0.6**
ELK pmax pmax
comp=Z,24nm,0.8s
**ELK Elko 44.95 77** P **P** **12 20 17.1 +0.6**
**YHH Holmes Hill 45.25 70** P **P** **12 20 18.8 -0.1**
**TULEG Thule 45.28 18** *i*P **P** **12 20 18.0 -0.4**
TULEG IAmb IAmb 12 20 19.3
comp=Z,17nm,0.7s
**TULEG Thule 45.28 18** P **P** **12 20 18.2 -0.1**
**SMMC Simmler 45.36 86** P **P** **12 20 20.0 +0.4**
baz=310
**YNR Norris Junctio 45.39 70** P **P** **12 20 20.6 +0.6**
YNR IAmb IAmb 12 20 22.1
comp=Z,64nm,0.9s
**ULN Ulaanbaatar 45.45 296***c i*P **P** **12 20 20.8 +0.5**
ULN pmax pmax
comp=Z,47nm,1.0s
**ULN Ulaanbaatar 45.45 296** P **P** **12 20 20.4 +0.1**
ULN IAmb IAmb 12 20 21.9
comp=Z,44nm,1.0s
**LCH Last Change Ra 45.61 83** P **P** **12 20 22.4 +0.8**
LCH IAmb IAmb 12 20 31.2
comp=Z,41nm,1.2s
**H17A Grant Village 45.63 70** P **P** **12 20 23.6 +1.7**
H17A IAmb IAmb 12 20 24.8
comp=Z,64nm,0.9s
**H17A Grant Village 45.63 70** P **P** **12 20 23.4 +1.5**
baz=305,SNR=51
**LKWY Lake 45.64 70** IAmb IAmb 12 20 24.7
comp=Z,45nm,0.8s
**JOW Kunigami 45.67 258** LR LR 12 38 27.7
comp=Z,325nm,20.6s,baz=84,slow=35
**JOW Kunigami 45.67 258** P **P** **12 20 21.5 -0.7**
JOW IAmb IAmb 12 20 23.2
comp=Z,31nm,0.9s
**YMP Mirror Lake Pl 45.69 69** P **P** **12 20 22.3 -0.1**
YMP IAmb IAmb 12 20 40.1
comp=Z,86nm,1.5s
**CWC Cottonwood Cre 45.84 84** P **P** **12 20 23.7 +0.2**
baz=310
**SONM Songino Array 45.84 296** P **P** **12 20 23.6 +0.3**
comp=Z,25nm,0.8s,baz=62,slow=8.6,SNR=194
SONM PcP **PcP** **12 22 00.1 +0.3**
comp=Z,10nm,0.8s,baz=56,slow=2.4,SNR=5.9
SONM ScP **ScP** **12 25 50.3 +2.3**
comp=Z,1.2nm,0.8s,baz=40,slow=3.8,SNR=3.7
SONM LR LR 12 41 05.7
comp=Z,3µm,18.3s,baz=56,slow=38
**SONM Songino Array 45.84 296** P **P** **12 20 23.9 +0.6**
SONM IAmb IAmb 12 20 25.3
comp=Z,40nm,1.1s
SONM **PcP** **12 22 00.1 +0.3**
**BCW Bitter Crk WRg 45.96 86** IAmb IAmb 12 20 33.5
comp=Z,25nm,0.8s
**RLMT Red Lodge 45.99 69** P **P** **12 20 24.8 +0.1**
baz=305,SNR=22
**ISA Isabella, Lake 46.08 85** P **P** **12 20 25.2 -0.1**
baz=310
**ZAK Zakamensk 46.18 300** *e*P **P** **12 20 26.2 +0.2**
ZAK *e* 12 21 59.2
ZAK pmax pmax
comp=Z,59nm,1.2s
ZAK pmax pmax
comp=Z,25nm,1.1s
**R11A Troy Canyon, C 46.19 80** P **P** **12 20 27.2 +0.9**
**R11A Troy Canyon, C 46.19 80** P **P** **12 20 26.8 +0.5**
baz=308,SNR=9.6
**TIA Tai'an 46.26 276** ⇑P **P** **12 20 26.8 +0.1**
TIA pmax pmax
comp=Z,80nm,0.9s
TIA pmax pmax
comp=Z,330nm,8.2s
TIA LR LR
comp=Z,510nm,16.1s
TIA LR LR
comp=Z,540nm,20.2s
TIA LR LR
comp=Z,770nm,24.7s
**MPMC Manual Prospec 46.45 84** P **P** **12 20 29.0 +0.6**
baz=310
**FURC Furnace Creek, 46.58 83** P **P** **12 20 29.8 +0.7**
baz=310
**FCC Fort Churchill 46.63 46** P **P** **12 20 28.7 -0.5**
FCC pmax pmax
comp=Z,20nm,0.8s
**FCC Fort Churchill 46.63 46** P **P** **12 20 28.7 -0.5**
FCC IAmb IAmb 12 20 29.8
comp=Z,20nm,0.8s
**TPNV Topopah Spring 46.65 82** P **P** **12 20 30.0 +0.1**
baz=309,SNR=9.3
**DUG Dugway, Tooele 46.76 76** P **P** **12 20 30.7 0.0**
DUG pmax pmax
comp=Z,61nm,1.0s
**DUG Dugway, Tooele 46.76 76** P **P** **12 20 30.7 0.0**
DUG IAmb IAmb 12 20 45.7
comp=Z,61nm,0.9s
**DUG Dugway, Tooele 46.76 76** P **P** **12 20 31.1 +0.4**
baz=308,SNR=8.6
**HHC Hu-ho-hao-te 46.82 285** *e*P **P** **12 20 30.9 -0.2**
HHC PP **PP** **12 22 21.0 -0.5**
HHC S **S** **12 27 14.4 -3.1**
HHC pmax pmax
comp=Z,20nm,1.4s
HHC pmax pmax
comp=Z,520nm,8.7s
HHC LR LR
comp=Z,860nm,19.2s
HHC LR LR
comp=Z,760nm,17.9s
HHC LR LR
comp=Z,1µm,18.7s
**LAO LASA Array 46.86 65** P **P** **12 20 31.4 +0.1**
baz=304
**GWY Greenwater Val 46.88 83** P **P** **12 20 31.4 -0.2**
GWY IAmb IAmb 12 20 44.2
comp=Z,83nm,1.5s
**EDW2 Edwards Air Fo 46.89 85** P **P** **12 20 31.7 0.0**
baz=311
**NOR Nord 46.99 3** *i*P **P** **12 20 31.4 -0.4**
NOR IAmb IAmb 12 20 33.1
comp=Z,8.8nm,1.0s
**GUMO Guam 47.00 229** LR LR 12 38 13.5
comp=Z,468nm,20.2s,baz=52,slow=33
**HNS HongShan 47.01 279** ⇓P **P** **12 20 32.8 +0.3**
HNS PP **PP** **12 22 24.1 +0.8**
HNS S **S** **12 27 23.4 +3.3**
HNS SS **SS** **12 30 40.9 -6.2**
HNS pmax pmax
comp=Z,100nm,1.0s
HNS LR LR
comp=Z,310nm,15.5s
HNS LR LR
comp=Z,1µm,17.6s
HNS LR LR
comp=Z,1µm,24.0s
**SSE Sheshan 47.09 268** P **P** **12 20 33.6 +0.5**
SSE S **S** **12 27 26.3 +5.1**
SSE pmax pmax
comp=Z,34nm,1.0s
SSE pmax pmax
comp=Z,170nm,9.2s
SSE LR LR
comp=Z,68nm,15.3s
SSE LR LR
comp=Z,160nm,17.0s
**PRN Pahroc Range 47.11 81** P **P** **12 20 34.2 +0.8**
**PSUT Pine Spring 47.14 79** IAmb IAmb 12 20 43.1
comp=Z,36nm,0.7s
**BW06 Boulder Array 47.18 71** P **P** **12 20 34.5 +0.5**
baz=306,SNR=31
**PD31 Pinedale Array 47.18 71** P **P** **12 20 34.1 +0.1**
**PDAR Pinedale Array 47.18 71** P **P** **12 20 34.5 +0.4**
comp=Z,64nm,0.7s,baz=305,slow=3.8,SNR=234
PDAR PcP **PcP** **12 22 05.4 +0.6**
comp=Z,4.1nm,0.8s,baz=292,slow=3.2,SNR=0.7
PDAR ScP **ScP** **12 25 56.9 +3.0**
comp=Z,0.5nm,0.5s,baz=246,slow=0.8,SNR=4.6
**PDAR Pinedale Array 47.18 71** P **P** **12 20 34.3 +0.2**
**JLU Jordanelle 47.34 75** P **P** **12 20 36.3 +1.0**
JLU IAmb IAmb 12 20 50.0
comp=Z,42nm,1.1s
**NLU North Lily Min 47.35 76** IAmb IAmb 12 20 50.1
comp=Z,44nm,1.0s
**GSC Goldstone, Bar 47.36 84** IAmb IAmb 12 20 46.2
comp=Z,32nm,0.8s
**GSC Goldstone, Bar 47.36 84** P **P** **12 20 35.8 +0.4**
baz=310,SNR=15
**NEEM North Greenlan 47.67 13** *i*P **P** **12 20 36.6 -0.8**
NEEM IAmb IAmb 12 20 38.2
comp=Z,94nm,0.7s
**BTO Baotou 47.90 286** *e*P **P** **12 20 40.4 +0.9**
BTO S **S** **12 27 35.2 +2.4**
BTO LR LR
comp=Z,4µm,17.2s
BTO LR LR
comp=Z,4µm,20.1s
**NJ2 Nanjing 47.90 271** ⇑P **P** **12 20 39.2 -0.2**
NJ2 S **S** **12 27 37.9 +5.1**
NJ2 sS **sS** **12 27 58.3 +2.2**
NJ2 pmax pmax
comp=Z,34nm,1.0s
NJ2 pmax pmax
comp=Z,490nm,4.9s
NJ2 LR LR
comp=Z,590nm,23.2s
NJ2 LR LR
comp=Z,680nm,22.7s
NJ2 LR LR
comp=Z,1µm,22.7s
**HEC Hector,Ludlow 47.96 84** P **P** **12 20 40.6 +0.7**
baz=311
**TCRU Three Creeks R 47.96 78** IAmb IAmb 12 20 55.5
comp=Z,34nm,0.8s
**BBRC Big Bear Solar 47.96 85** P **P** **12 20 40.5 +0.3**
baz=311
**ELS Elsinore Mount 48.05 86** IAmb IAmb 12 20 56.2
comp=Z,55nm,1.6s
**CCUT Cedar City 48.06 79** P **P** **12 20 41.6 +0.7**
**MSU Marysvale 48.18 78** P **P** **12 20 43.4 +1.5**
**MSU Marysvale 48.18 78** P **P** **12 20 43.4 +1.5**
**TIY Taiyuan 48.22 281** ⇑*i*P **P** **12 20 43.0 +1.1**
TIY pP **pP** **12 20 52.2 -3.9**
TIY S **S** **12 27 42.8 +5.4**
TIY sS **sS** **12 28 04.8 +4.1**
TIY pmax pmax
comp=Z,49nm,0.9s
TIY LR LR
comp=Z,590nm,19.2s
TIY LR LR
comp=Z,410nm,20.0s
TIY LR LR
comp=Z,600nm,20.2s
**MURC Murrieta 48.23 86** P **P** **12 20 41.5 -0.5**
baz=312
**TMUT Trail Mountain 48.29 76** P **P** **12 20 43.3 +0.5**
**GMRC Granite Mounta 48.41 84** P **P** **12 20 43.8 +0.2**
baz=311,SNR=17
**Q16A Castle Valley 48.55 76** IAmb IAmb 12 21 01.5
comp=Z,41nm,1.0s
**PFO Pinyon Flats O 48.68 86** P **P** **12 20 45.4 -0.2**
comp=Z,3.6nm,0.6s,baz=338,slow=8.7,SNR=2.1
PFO LR LR 12 38 01.6
comp=Z,865nm,20.6s,baz=293,slow=32
**PFO Pinyon Flats O 48.68 86** P **P** **12 20 45.7 +0.1**
PFO pmax pmax
comp=Z,14nm,1.1s
**PFO Pinyon Flats O 48.68 86** P **P** **12 20 45.7 +0.1**
**PFO Pinyon Flats O 48.68 86** P **P** **12 20 45.2 -0.4**
baz=312
**TPFO Pinon Flats 48.68 86** P **P** **12 20 45.5 -0.2**
baz=312
**PMD Palm Desert 48.70 85** P **P** **12 20 45.2 -0.5**
**BELC Belle Mtn. Jos 48.71 85** P **P** **12 20 45.8 -0.1**
baz=311
**109C Camp Elliot, M 48.75 87** P **P** **12 20 45.7 -0.3**
109C IAmb IAmb 12 20 57.7
comp=Z,23nm,0.9s
**109C Camp Elliot, M 48.75 87** P **P** **12 20 46.3 +0.2**
baz=312
**K22A Casper 49.04 70** IAmb IAmb 12 20 49.2
comp=Z,37nm,0.8s
**K22A Casper 49.04 70** P **P** **12 20 48.2 -0.2**
baz=307,SNR=9.8
**NEE2 Needles Airpor 49.07 83** P **P** **12 20 48.4 0.0**
baz=311
**IRM Iron Mountain 49.14 84** P **P** **12 20 49.0 0.0**
baz=311
**BAR Barrett 49.16 87** IAmb IAmb 12 20 57.6
comp=Z,34nm,1.2s
**MONP2 Monument Peak 49.18 86** P **P** **12 20 49.4 -0.1**
baz=312
**RWWY Rawlins 49.22 71** P **P** **12 20 49.5 -0.4**
RWWY IAmb IAmb 12 20 50.8
comp=Z,36nm,0.8s
**BC3 Big Chuckawall 49.28 85** P **P** **12 20 49.9 -0.3**
baz=312
**TKX Tecate 49.28 87** P **P** **12 20 50.1 0.0**
**W13A Hualapai Mount 49.31 82** P **P** **12 20 51.0 +0.5**
W13A IAmb IAmb 12 20 59.3
comp=Z,31nm,1.3s
**CBX Cerro Bola 49.41 87** P **P** **12 20 51.5 +0.2**
**U15A North Rim 49.43 80** P **P** **12 20 52.4 +0.9**
U15A IAmb IAmb 12 21 03.1
comp=Z,39nm,0.8s
**SWSC Sam W. Stewart 49.53 86** P **P** **12 20 51.9 -0.1**
baz=312
**IKP In-Ko-Pah, Jac 49.53 86** P **P** **12 20 51.9 -0.2**
baz=312
**O20A White River Ci 49.56 73** P **P** **12 20 52.4 0.0**
baz=308,SNR=12
**RSSD Black Hills 49.61 67** P **P** **12 20 52.2 -0.5**
RSSD pmax pmax
comp=Z,13nm,0.9s
**RSSD Black Hills 49.61 67** P **P** **12 20 52.1 -0.5**
**RSSD Black Hills 49.61 67** P **P** **12 20 52.1 -0.6**
baz=307
**YUH Yuha Desert 49.65 86** P **P** **12 20 53.0 +0.1**
**PDMCI Parker Dam,Lak 49.67 83** P **P** **12 20 52.6 -0.4**
baz=311
**BLYC Blythe 49.79 84** P **P** **12 20 54.6 +0.7**
BLYC IAmb IAmb 12 21 04.6
comp=Z,19nm,0.8s
**MDND Maddock 49.88 60** P **P** **12 20 54.1 -0.4**
baz=306
**GLA Glamis 50.07 85** IAmb IAmb 12 21 04.4
comp=Z,27nm,1.0s
**GLA Glamis 50.07 85** P **P** **12 20 56.0 -0.1**
baz=312
**LYN LuoYang 50.23 278** ⇑*i*P **P** **12 20 57.6 +0.3**
LYN pP pP 12 21 09.1 -2.4
LYN sP sP 12 21 18.7 +1.1
LYN pmax pmax
comp=Z,40nm,0.9s
LYN pmax pmax
comp=Z,270nm,4.9s
LYN LR LR
comp=Z,540nm,17.8s
LYN LR LR
comp=Z,570nm,24.3s
**UPNV Upernavik 50.29 19** *i*P **P** **12 20 56.6 -0.6**
UPNV IAmb IAmb 12 20 57.6
comp=Z,30nm,0.7s
**SPA0 Spitsbergen Ar 50.33 356** *e*P **P** **12 20 57.4 -0.1**
**SPITS Spitsbergen Ar 50.33 356** P **P** **12 20 57.0 -0.5**
comp=Z,45nm,0.6s
SPITS LR LR 12 41 36.1
comp=Z,1µm,21.9s,baz=288,slow=35
**SPITS Spitsbergen Ar 50.33 356** P **P** **12 20 57.4 -0.1**
SPITS pmax pmax
comp=Z,139nm,1.3s
**PV11 David Mesa, Pa 50.33 76** P **P** **12 20 58.4 +0.2**
**SPB2 Spitsbergen Ar 50.33 356** P **P** **12 20 57.6 +0.1**
**PV07 Paradox Valley 50.38 75** P **P** **12 20 58.8 +0.2**
PV07 IAmb IAmb 12 21 18.4
comp=Z,29nm,0.7s
**ULM Lac du Bonnet 50.45 56** P **P** **12 20 57.8 -0.9**

comp=Z,8.2nm,0.6s,baz=302,slow=6.2,SNR=6.0
ULM LR LR 12 42 31.8
comp=Z,966nm,20.4s,baz=305,slow=36
**N23A Red Feather La 50.46 71** IAmb IAmb 12 21 01.1
comp=Z,53nm,1.2s
**N23A Red Feather La 50.46 71** P **P** **12 20 59.8 +0.5**
baz=309,SNR=10
**PV15 Paradox Valley 50.54 75** IAmb IAmb 12 21 16.2
comp=Z,35nm,0.8s
**WUAZ Wupatki 50.59 80** P **P** **12 21 00.8 +0.6**
WUAZ IAmb IAmb 12 21 12.7
comp=Z,30nm,0.8s
**WUAZ Wupatki 50.59 80** P **P** **12 21 01.0 +0.8**
baz=311,SNR=8.7
**SMCO Snowmass 50.92 74** P **P** **12 21 03.2 +0.2**
SMCO IAmb IAmb 12 21 13.2
comp=Z,32nm,1.2s
**TATO Taipei 51.21 262** P **P** **12 21 04.2 -0.5**
**TATO Taipei 51.21 262** IAMs_20 IAMs_20 12 40 55.0
comp=Z,1μm,21.0s
**MVCO Mesa Verde 51.26 76** P **P** **12 21 05.3 0.0**
baz=310
**X16A Lo Mia Camp, P 51.27 81** IAmb IAmb 12 21 17.5
comp=Z,26nm,1.1s
**ISCO Idaho Springs 51.34 72** P **P** **12 21 06.5 +0.5**
ISCO pmax pmax
comp=Z,20nm,0.9s
**ISCO Idaho Springs 51.34 72** P **P** **12 21 06.5 +0.5**
ISCO IAmb IAmb 12 21 20.6
comp=Z,20nm,0.9s
**ISCO Idaho Springs 51.34 72** P **P** **12 21 06.8 +0.8**
baz=309,SNR=10
**YHNB Yeheng 51.50 262** IAMs_20 IAMs_20 12 40 52.8
comp=Z,1μm,21.0s
**HSPB Hornsund (broa 51.52 355** *e*P **P** **12 21 06.0 -0.4**
**DAG Danmarks Havn 51.61 5** *i* P **P** **12 21 06.0 -1.0**
DAG IAmb IAmb 12 21 07.2
comp=Z,15nm,0.8s
**AGMN Agassiz Nation 51.62 58** P **P** **12 21 06.7 -0.8**
baz=307
**NACB Ninganchiao 51.73 261** P **P** **12 21 07.3 -1.3**
**WHN Wuhan 51.75 273** ⇑P **P** **12 21 08.4 -0.3**
WHN pmax pmax
comp=Z,110nm,1.0s
WHN LR LR
comp=Z,2μm,19.0s
WHN LR LR
comp=Z,2μm,19.3s
WHN LR LR
comp=Z,2μm,31.5s
**W18A Petrified Fore 51.86 79** P **P** **12 21 10.0 +0.3**
W18A IAmb IAmb 12 21 34.3
comp=Z,24nm,0.8s
**W18A Petrified Fore 51.86 79** P **P** **12 21 10.2 +0.5**
baz=311,SNR=7.9
**S22A 4UR Ranch, Cre 51.93 75** IAmb IAmb 12 21 26.8
comp=Z,36nm,1.1s
**S22A 4UR Ranch, Cre 51.93 75** P **P** **12 21 11.0 +0.7**
baz=310,SNR=8.5
**214A Organ Pipe Nat 52.06 84** P **P** **12 21 11.9 +0.9**
baz=313
**X18A Snowflake 52.12 80** P **P** **12 21 12.1 +0.4**
X18A IAmb IAmb 12 21 23.1
comp=Z,28nm,0.8s
**Q24A Divide 52.15 73** P **P** **12 21 12.0 0.0**
baz=310
**SUSD Miller 52.30 63** IAmb IAmb 12 21 13.7
comp=Z,40nm,0.8s
**SUSD Miller 52.30 63** P **P** **12 21 12.8 +0.2**
baz=309
**SSLB Suanglung 52.41 261** P **P** **12 21 13.4 -0.3**
SSLB IAmb IAmb 12 21 15.0
comp=Z,54nm,1.0s
**YULB Yu-li 52.48 261** IAmb IAmb 12 21 24.0
comp=Z,25nm,1.0s
YULB IAMs_20 IAMs_20 12 41 28.9
comp=Z,785nm,22.0s
**B35A Bob, Littlefor 52.72 57** P **P** **12 21 14.4 -1.2**
**SDCO Great Sand Dun 52.73 74** IAmb IAmb 12 21 27.2
comp=Z,45nm,1.2s
**SDCO Great Sand Dun 52.73 74** P **P** **12 21 16.8 +0.5**
baz=311,SNR=10
**OGNE Ogallala 52.73 69** P **P** **12 21 16.2 +0.2**
**OGNE Ogallala 52.73 69** P **P** **12 21 16.1 +0.1**
baz=310
**XAN Xi'an 52.77 280** P **P** **12 21 16.0 -0.3**
XAN pP pP 12 21 27.3 -3.3
XAN PP **PP** **12 23 18.4 +2.6**
XAN pmax pmax
comp=Z,41nm,1.1s
XAN pmax pmax
comp=Z,310nm,8.6s
XAN LR LR
comp=Z,620nm,16.7s
XAN LR LR
comp=Z,600nm,17.1s
XAN LR LR
comp=Z,1μm,17.4s
**TPUB Ta-pu 52.97 261** P **P** **12 21 16.8 -1.0**
TPUB IAmb IAmb 12 21 19.5
comp=Z,57nm,1.2s
TPUB IAMs_20 IAMs_20 12 41 42.6
comp=Z,1μm,22.0s
**QZH Quanzhou 53.04 264** ⇑*i*P **P** **12 21 18.5 +0.2**
QZH sS **sS** **12 29 10.8 +5.0**
QZH pmax pmax
comp=Z,32nm,1.1s
QZH LR LR
comp=Z,410nm,17.5s
QZH LR LR
comp=Z,510nm,19.4s
**TUC Tucson 53.09 83** P **P** **12 21 18.7 0.0**
TUC pmax pmax
comp=Z,38nm,1.3s
**TUC Tucson 53.09 83** P **P** **12 21 18.7 0.0**
TUC IAmb IAmb 12 21 27.9
comp=Z,38nm,1.3s
**TUC Tucson 53.09 83** P **P** **12 21 19.0 +0.3**
baz=313
**ZAA0 Zalesovo Array 53.38 313** P **P** **12 21 20.1 -0.3**
**ZALV Zalesovo Beam 53.38 313** P **P** **12 21 20.0 -0.4**
comp=Z,14nm,0.8s,baz=51,slow=7.6,SNR=49
ZALV PcP **PcP** **12 22 28.0 +0.9**
comp=Z,19nm,0.8s,baz=33,slow=3.8,SNR=9.2
ZALV ScP **ScP** **12 26 23.5 +3.5**
comp=Z,1.5nm,0.8s,baz=46,slow=8.3,SNR=3.3
ZALV LR LR 12 45 31.1
comp=Z,964nm,19.8s,baz=54,slow=38
**KNMB Chin-men Tao 53.51 264** P **P** **12 21 21.8 +0.1**
KNMB IAmb IAmb 12 21 22.9
comp=Z,34nm,1.0s
**FRB Frobisher Bay 53.52 31** LR LR 12 45 20.5
comp=Z,1μm,21.0s,baz=297,slow=37
**SUMG Summit 53.53 13** P **P** **12 21 22.3 +0.5**
SUMG pmax pmax
comp=Z,31nm,0.9s
**SUMG Summit 53.53 13** *i* P **P** **12 21 20.5 -1.3**
SUMG IAmb IAmb 12 21 23.2
comp=Z,54nm,1.2s
**SUMG Summit 53.53 13** P **P** **12 21 22.3 +0.5**
SUMG IAmb IAmb 12 21 22.8
comp=Z,31nm,0.9s
**KSCO Kaye Shedlock' 53.63 71** P **P** **12 21 23.3 +0.7**
**KSCO Kaye Shedlock' 53.63 71** P **P** **12 21 23.3 +0.7**
baz=311,SNR=9.4
**T25A Trinidad 53.78 74** P **P** **12 21 24.9 +1.0**
**T25A Trinidad 53.78 74** P **P** **12 21 24.8 +1.0**
baz=311,SNR=11
**DBG Daneborg 53.90 7** *e*P **P** **12 21 22.2 -1.7**
DBG IAmb IAmb 12 21 24.2
comp=Z,25nm,1.0s
**ANMO Albuquerque 53.99 77** P **P** **12 21 25.6 +0.2**
comp=Z,4.5nm,0.9s,baz=305,slow=11,SNR=5.0
ANMO LR LR 12 44 22.2
comp=Z,497nm,19.2s,baz=322,slow=36
**ANMO Albuquerque 53.99 77**‖ *e*P **P** **12 21 26.0 +0.6**
ANMO pmax pmax
comp=Z,8.0nm,1.3s
**ANMO Albuquerque 53.99 77** P **P** **12 21 25.6 +0.2**
**ANMO Albuquerque 53.99 77** P **P** **12 21 25.3 -0.1**
baz=312
**ECSD EROS Data Cent 54.06 63** P **P** **12 21 24.3 -1.3**
**ECSD EROS Data Cent 54.06 63** P **P** **12 21 24.6 -1.0**
baz=310
**ILULI Ilulissat 54.10 20** P **P** **12 21 25.0 -0.5**
ILULI pmax pmax
comp=Z,20nm,0.8s
**ILULI Ilulissat 54.10 20** *i* P **P** **12 21 24.2 -1.3**
ILULI IAmb IAmb 12 21 25.8
comp=Z,21nm,0.7s
**ILULI Ilulissat 54.10 20** P **P** **12 21 25.0 -0.5**
ILULI IAmb IAmb 12 21 25.6
comp=Z,20nm,0.8s
**EYMN Ely 54.14 56** P **P** **12 21 25.0 -1.1**
baz=309
**LENM Lemitar 54.19 78** P **P** **12 21 28.3 +1.4**
**BNM Barren Site 54.42 78** P **P** **12 21 29.2 +0.7**
**LZH Lanzhou 54.51 285** ⇑P **P** **12 21 30.0 +0.8**
LZH pP pP 12 21 42.9 -0.4
LZH sP sP 12 21 48.1 -1.3
LZH PP **PP** **12 23 35.6 +4.1**
LZH S **S** **12 29 03.9 -0.4**
LZH SS **SS** **12 32 46.5 -0.4**
LZH pmax pmax
comp=Z,61nm,1.3s
LZH pmax pmax
comp=Z,390nm,6.2s
LZH LR LR
comp=Z,1μm,15.2s
LZH LR LR
comp=Z,1μm,15.3s
LZH LR LR
comp=Z,2μm,17.6s
**319A Douglas 54.66 82** P **P** **12 21 30.3 +0.1**
319A IAmb IAmb 12 21 52.6
comp=Z,36nm,1.2s
**BGNE Belgrade 54.68 66** P **P** **12 21 29.5 -0.6**
baz=311
**GTA Gaotai 54.73 291** ⇑P **P** **12 21 30.7 +0.1**
GTA pP sP 12 21 49.8 -1.1
GTA sS sS 12 29 27.7 -3.5
GTA pmax pmax
comp=Z,51nm,1.0s
GTA pmax pmax
comp=Z,230nm,9.1s
GTA LR LR
comp=Z,730nm,17.1s
GTA LR LR
comp=Z,1μm,16.7s
GTA LR LR
comp=Z,1μm,16.7s
**121A Cookes Peak, D 54.80 80** P **P** **12 21 31.7 +0.4**
121A IAmb IAmb 12 21 43.3
comp=Z,52nm,1.5s
**121A Cookes Peak, D 54.80 80** P **P** **12 21 31.6 +0.3**
baz=313
**DGZ Jazzator, Alta 54.83 307** *c i*P **P** **12 21 31.7 +0.4**
DGZ pmax pmax
comp=Z,32nm,1.0s
**E38A The Farm, Brul 54.97 57** P **P** **12 21 31.4 -0.7**
**ENH Enshi 54.98 276** P **P** **12 21 31.7 -0.7**
ENH IAmb IAmb 12 21 32.9
comp=Z,32nm,0.9s
**SPMN Marine on St. 55.19 59** P **P** **12 21 33.9 +0.2**
baz=310
**CBKS Cedar Bluff 55.46 69** P **P** **12 21 36.2 +0.4**
CBKS pmax pmax
comp=Z,85nm,0.9s
**CBKS Cedar Bluff 55.46 69** P **P** **12 21 36.2 +0.4**
**CBKS Cedar Bluff 55.46 69** P **P** **12 21 36.1 +0.4**
baz=312,SNR=12
**I37A Lemond, Waseca 55.65 61** P **P** **12 21 36.5 -0.6**
I37A IAmb IAmb 12 21 51.3
comp=Z,43nm,1.1s
**SFJD Kangerlussuaq 56.01 21** LR LR 12 48 14.2
comp=Z,309nm,18.9s,baz=326,slow=39
**SFJD Kangerlussuaq 56.01 21** *e*P **P** **12 21 35.1 -4.1**
SFJD *i* P **P** **12 21 38.6 -0.6**
**R32A Long Quarter, 56.32 69** P **P** **12 21 41.8 -0.1**
R32A IAmb IAmb 12 21 42.9
comp=Z,47nm,1.0s
**ICESG Greenland Ices 56.42 16** *i* P **P** **12 21 41.6 -1.0**
ICESG IAmb IAmb 12 21 42.9
comp=Z,29nm,0.7s
**N35A Tabor 56.47 65** P **P** **12 21 42.9 -0.1**
**MNTX Cornudas Mount 56.85 79** P **P** **12 21 46.8 +1.0**
MNTX IAmb IAmb 12 21 57.6
comp=Z,25nm,0.9s
**MNTX Cornudas Mount 56.85 79** P **P** **12 21 46.5 +0.7**
baz=314,SNR=18
**MSTX Muleshoe 56.89 76** P **P** **12 21 46.4 +0.2**
MSTX IAmb IAmb 12 22 01.9
comp=Z,37nm,0.9s
**MSTX Muleshoe 56.89 76** P **P** **12 21 46.9 +0.8**
baz=313,SNR=5.7
**AMTX Amarillo 56.93 74** P **P** **12 21 46.3 -0.1**
**AMTX Amarillo 56.93 74** P **P** **12 21 46.3 -0.1**
baz=313
**KSU1 Kansas State U 57.09 67** P **P** **12 21 46.8 -0.6**
KSU1 IAmb IAmb 12 21 48.0
comp=Z,32nm,0.8s
**KSU1 Kansas State U 57.09 67** P **P** **12 21 46.9 -0.5**
baz=312
**HAMF Hammerfest 57.09 351** *e*P **P** **12 21 45.2 -1.7**
**I40A Norwalk 57.24 59** P **P** **12 21 47.8 -0.6**
I40A IAmb IAmb 12 22 36.2
comp=Z,31nm,1.1s
**DY2G Dye2 57.41 20** *i* P **P** **12 21 48.1 -1.4**
DY2G IAmb IAmb 12 21 50.8
comp=Z,15nm,0.7s
**OK035 E0210 Rd and N 57.47 71** **P** **12 21 50.1 0.0**
**KAN08 Anthony NE Sta 57.55 70** IAmb IAmb 12 21 54.3
comp=Z,17nm,0.7s
**ZSN Zaisan 57.60 307** *e*P **P** **12 21 49.7 -1.1**
ZSN pmax pmax
comp=Z,12nm,0.8s
**ZSN Zaisan 57.60 307** *e*P **P** **12 21 49.8 -1.1**
comp=Z,12nm,0.8s,baz=307
**KAN01 Argonia South 57.73 70** P **P** **12 21 51.5 -0.4**
KAN01 IAmb IAmb 12 22 01.4
comp=Z,32nm,0.9s
**JMIC Jan Mayen 57.82 3** LR LR 12 46 44.1
comp=Z,339nm,21.5s,baz=284,slow=36
**SEM Semipalatinsk 57.83 312** *e*P **P** **12 21 50.9 -1.8**
SEM pmax pmax
comp=Z,10.0nm,0.8s
**SEM Semipalatinsk 57.83 312** *e*P **P** **12 21 50.9 -1.8**
comp=Z,10.0nm,0.8s,baz=312
**GULI GuiLin 57.94 271** P **P** **12 21 54.8 +1.3**
**ARA0 ARCESS Array S 57.95 350** *e*P **P** **12 21 52.3 -0.7**
**ARCES ARCESS Array B 57.95 350** P **P** **12 21 52.6 -0.4**
comp=Z,23nm,0.7s,baz=27,slow=8.0,SNR=66
ARCES PcP **PcP** **12 22 44.3 -0.3**
comp=Z,5.7nm,0.7s,baz=353,slow=6.4,SNR=1.9
ARCES LR LR 12 49 55.4
comp=Z,1μm,18.7s,baz=4.0,slow=39
**ARCES ARCESS Array B 57.95 350** P **P** **12 21 52.7 -0.3**
**CROK Carrier 58.04 70** **P** **12 21 53.8 -0.3**
**CD2 Chengdu 58.09 281** P **P** **12 21 54.2 -0.3**
CD2 S **S** **12 29 57.2 +5.7**
CD2 pmax pmax
comp=Z,40nm,1.0s
CD2 pmax pmax
comp=Z,220nm,9.3s
CD2 LR LR
comp=Z,710nm,22.7s
CD2 LR LR
comp=Z,760nm,20.6s
**JFWS Jewell Farm 58.10 60** IAmb IAmb 12 21 59.2
comp=Z,27nm,0.8s
**JFWS Jewell Farm 58.10 60** P **P** **12 21 53.1 -1.3**
baz=312
**L40A Anamosa 58.14 61** P **P** **12 21 53.5 -1.2**
L40A IAmb IAmb 12 22 31.7
comp=Z,41nm,1.2s
**I42A Draeger Farm, 58.16 58** IAmb IAmb 12 21 56.6
comp=Z,27nm,0.8s
**LVZ Lovozero 58.23 345** P **P** **12 21 54.2 -0.8**
LVZ pmax pmax
comp=Z,53nm,0.9s
**LVZ Lovozero 58.23 345** P **P** **12 21 54.2 -0.8**
**BLOK Blackwell 58.32 70** P **P** **12 21 55.9 -0.1**
BLOK IAmb IAmb 12 21 56.9
comp=Z,46nm,1.1s
**KURK Kurchatov 58.37 313** P **P** **12 21 57.0 +0.8**
KURK 12 22 47.3
**KURK Kurchatov 58.37 313** P **P** **12 21 56.5 +0.3**
**KURK Kurchatov 58.37 313** P **P** **12 21 56.4 +0.3**
**JETT Jettan, Norway 58.45 352** *e*P **P** **12 21 57.7 +1.1**
**KURBB Kurchatov Arra 58.48 313** P **P** **12 21 57.0 +0.1**
comp=Z,126nm,0.9s,baz=42,slow=6.6,SNR=771
KURBB PcP **PcP** **12 22 47.3 +0.3**
comp=Z,16nm,0.9s,baz=42,slow=2.6,SNR=6.4
KURBB LR LR 12 48 41.6
comp=Z,1μm,18.6s,baz=29,slow=38
**KURBB Kurchatov Arra 58.48 313** P **P** **12 21 56.8 -0.1**
**P38A Dawn 58.50 65** IAmb IAmb 12 22 07.1
comp=Z,26nm,0.7s
**TRO Tromso 58.51 352** *e*P **P** **12 21 56.6 -0.2**
**WMQ Urumqi 58.59 302** *e*P **P** **12 21 58.5 +0.6**
WMQ PcP **PcP** **12 22 48.0 +0.4**
WMQ PP **PP** **12 24 06.6 -0.9**
WMQ pmax pmax
comp=Z,56nm,0.9s
WMQ pmax pmax
comp=Z,380nm,4.1s
WMQ LR LR
comp=Z,2μm,19.5s
WMQ LR LR
comp=Z,2μm,21.3s
WMQ LR LR
comp=Z,2μm,23.1s
**T35A Sooner Cattle 58.62 69** P **P** **12 21 57.5 -0.7**
T35A IAmb IAmb 12 21 58.8
comp=Z,35nm,1.1s
**KTK1 Kautokeino 58.70 350** *e*P **P** **12 21 57.7 -0.5**
**APA Apatity 58.73 346**‖ *i*P **P** **12 21 56.2 -2.2**
APA pmax pmax
comp=Z,7.0nm,1.1s
APA MLR MLR
comp=Z,2μm,16.0s
**WMOK Wichita Mounta 58.77 72** P **P** **12 21 59.4 +0.1**
WMOK pmax pmax
comp=Z,21nm,0.8s
**WMOK Wichita Mounta 58.77 72** P **P** **12 21 59.4 +0.1**
WMOK IAmb IAmb 12 22 00.3
comp=Z,20nm,0.8s
**WMOK Wichita Mounta 58.77 72** P **P** **12 21 59.5 +0.3**
baz=314,SNR=16
**OK029 Liberty Lake 58.83 70** **P** **12 21 59.5 -0.1**
**BCOK Bluff Creek, N 58.84 71** **P** **12 21 60.0 +0.3**
BCOK IAmb IAmb 12 22 00.3
comp=Z,31nm,0.7s
**OK033 Mehan 58.97 70** **P** **12 22 00.1 -0.4**
OK033 IAmb IAmb 12 22 01.5
comp=Z,35nm,1.0s
**OK031 S. Brethren Rd 59.09 70** **P** **12 22 01.6 +0.2**
**LPIG La Paz 59.15 89** LR LR 12 44 57.6
comp=Z,276nm,18.2s,baz=278,slow=33
**FNO Franklin 59.23 71** **P** **12 22 02.6 +0.1**
**MK31 Makanchi Array 59.33 308** P **P** **12 22 02.5 -0.4**
MK31 pmax pmax
comp=Z,18nm,0.9s
**MK31 Makanchi Array 59.33 308** P **P** **12 22 02.5 -0.4**
MK31 IAmb IAmb 12 22 05.3
comp=Z,18nm,0.8s
**MKAR Makanchi Array 59.33 308** P **P** **12 22 02.5 -0.4**
comp=Z,12nm,0.6s,baz=48,slow=6.1,SNR=209
MKAR PcP **PcP** **12 22 51.5 +1.0**
comp=Z,5.8nm,0.7s,baz=54,slow=9.1,SNR=4.4
MKAR S S 12 29 44.9 -22
comp=Z,0.7nm,0.7s,baz=307,slow=21,SNR=2.0
MKAR LR LR 12 48 06.1
comp=Z,1μm,21.8s,baz=31,slow=36
**GYA Guiyang 59.42 275** ⇑*i*P **P** **12 22 03.3 -0.6**
GYA pP pP 12 22 17.2 -1.3
GYA S **S** **12 30 06.6 -2.5**
GYA sS sS 12 30 29.8 -3.5
GYA pmax pmax
comp=Z,20nm,0.9s
GYA pmax pmax
comp=Z,250nm,5.2s
GYA LR LR
comp=Z,690nm,21.9s
**X34A Smith Ranch, M 59.43 72** P **P** **12 22 04.7 +1.0**
**MAKZ Makanchi 59.48 308** P **P** **12 22 03.4 -0.5**
MAKZ pmax pmax
comp=Z,60nm,1.4s
MAKZ MLR MLR
comp=Z,1μm,21.0s
**MAKZ Makanchi 59.48 308** P **P** **12 22 03.4 -0.5**
**TXAR Lajitas Array 59.55 80** P **P** **12 22 05.0 +0.2**
comp=Z,8.3nm,0.6s,baz=305,slow=4.6,SNR=52
TXAR ScP **ScP** **12 26 51.8 +4.0**
comp=Z,0.3nm,0.5s,baz=271,slow=2.3,SNR=1.4
TXAR LR LR 12 47 45.7
comp=Z,446nm,18.2s,baz=328,slow=36
**W35A Tecumseh 59.62 71** **P** **12 22 05.2 +0.2**
**ABTX Abilene, Hawle 59.71 75** P **P** **12 22 06.3 +0.5**
ABTX IAmb IAmb 12 22 17.2
comp=Z,39nm,1.0s
**ABTX Abilene, Hawle 59.71 75** P **P** **12 22 05.5 -0.3**
baz=314
**TUL1 Leonard 59.73 69** P **P** **12 22 05.6 -0.2**
TUL1 IAmb IAmb 12 22 06.9
comp=Z,42nm,1.0s
**TUL1 Leonard 59.73 69** P **P** **12 22 05.7 -0.2**
baz=314,SNR=6.7
**GOMU GeErMu 59.81 291** P **P** **12 22 06.8 0.0**
GOMU PcP **PcP** **12 22 54.8 +1.8**
GOMU S **S** **12 30 19.0 +4.6**
GOMU pmax pmax
comp=Z,44nm,1.0s
GOMU pmax pmax
comp=Z,200nm,5.8s
GOMU LR LR
comp=Z,670nm,17.7s
GOMU LR LR
comp=Z,490nm,16.4s
GOMU LR LR
comp=Z,820nm,17.8s
**HPIG 60.02 84** P **P** **12 22 08.3 +0.2**
**R40A Maddies Statio 60.13 65** P **P** **12 22 07.2 -1.3**
R40A IAmb IAmb 12 22 08.3
comp=Z,22nm,0.6s
**HDIL Hopedale 60.23 61** P **P** **12 22 09.3 +0.1**
**HDIL Hopedale 60.23 61** P **P** **12 22 08.9 -0.3**
baz=314
**LOOK Love County 60.24 72** P **P** **12 22 09.9 +0.6**
**BRVK Borovoye 60.33 319** P **P** **12 22 10.0 +0.3**
BRVK pmax pmax
comp=Z,25nm,0.8s
BRVK MLR MLR
comp=Z,3μm,21.0s
**BRVK Borovoye 60.33 319** P **P** **12 22 10.5 +0.8**
**BRVK Borovoye 60.33 319** P **P** **12 22 10.0 +0.3**
BRVK IAmb IAmb 12 22 11.4
comp=Z,25nm,0.8s
**LOF Lofoten 60.39 354** *e*P **P** **12 22 08.1 -1.7**
**STEI Steigen 60.47 353** *e*P **P** **12 22 09.9 -0.4**
**HHAR Hobbs 60.56 68** P **P** **12 22 10.5 -0.9**
HHAR IAmb IAmb 12 22 34.1
comp=Z,17nm,0.9s
**SCHQ Schefferville 60.58 38** P **P** **12 22 10.6 -0.8**
comp=Z,13nm,0.8s,baz=318,slow=5.4,SNR=10
**SCHQ Schefferville 60.58 38** P **P** **12 22 11.1 -0.3**
**Z35A Perchaven, San 60.66 72** P **P** **12 22 12.3 +0.1**
Z35A IAmb IAmb 12 22 22.4
comp=Z,33nm,0.9s
**P43A Skaggs, Pawnee 60.74 62** P **P** **12 22 12.4 -0.2**
**CCM Cathedral Cave 60.87 65** P **P** **12 22 12.0 -1.6**
CCM pmax pmax
comp=Z,85nm,1.8s
**CCM Cathedral Cave 60.87 65** P **P** **12 22 12.0 -1.6**
**CCM Cathedral Cave 60.87 65** P **P** **12 22 13.1 -0.4**
baz=314
**X37A Clayton 60.90 70** P **P** **12 22 13.8 0.0**
X37A IAmb IAmb 12 22 29.2
comp=Z,30nm,1.1s
**MGMO Mountain Grove 60.91 66** P **P** **12 22 12.7 -1.2**
**O44A Mansfield 60.96 61** IAmb IAmb 12 22 15.2
comp=Z,49nm,1.2s
**VLDQ Val d'Or 60.98 48** IAmb IAmb 12 22 22.3
comp=Z,29nm,1.2s
**FAUS Fauske 61.01 353** *e*P **P** **12 22 13.7 -0.3**
**SVE Sverdlovsk 61.12 327** *e*P **P** **12 22 15.4 +0.5**
SVE pmax pmax
comp=Z,20nm,0.9s
SVE MLR MLR
comp=Z,1μm,19.0s
**JCT Junction City 61.12 76** P **P** **12 22 15.0 -0.5**
baz=315
**U40A Yellville 61.13 67** IAmb IAmb 12 22 15.6
comp=Z,27nm,0.9s
**U40A Yellville 61.13 67** P **P** **12 22 14.6 -0.8**
baz=314,SNR=7.7
**FVM French Village 61.38 64** IAmb IAmb 12 22 26.8
comp=Z,18nm,0.8s

**W39A Magazine 61.41 69** IAmb IAmb 12 22 18.5
comp=Z,37nm,1.1s
**W39A Magazine 61.41 69** P **P** **12 22 16.7 -0.5**
baz=315,SNR=5.8
**WHTX Lake Whitney, 61.48 74** P **P** **12 22 18.1 +0.4**
WHTX IAmb IAmb 12 22 25.3
comp=Z,22nm,0.8s
**WHTX Lake Whitney, 61.48 74** P **P** **12 22 17.6 -0.1**
baz=315
**Q44A Meyer Farm, Va 61.53 63** P **P** **12 22 17.4 -0.6**
Q44A IAmb IAmb 12 22 33.5
comp=Z,40nm,1.1s
**SFIN Lafayette 61.55 60** P **P** **12 22 18.0 -0.1**
**SFIN Lafayette 61.55 60** P **P** **12 22 18.0 -0.1**
baz=315,SNR=8.2
**BRZS Berezniki 61.57 315** *e*P **P** **12 22 17.2 -0.9**
BRZS pmax pmax
comp=Z,25nm,0.9s
**BRZS Berezniki 61.57 315** *e*P **P** **12 22 17.2 -0.9**
comp=Z,25nm,0.9s,baz=315
**PRGR Permogore 61.58 337** *e*P **P** **12 22 14.1 -3.8**
PRGR *e* 12 22 58.9
PRGR pmax pmax
comp=Z,20nm,0.6s
**T42A Van Buren 61.67 65** P **P** **12 22 17.8 -1.2**
T42A IAmb IAmb 12 23 01.0
comp=Z,23nm,1.1s
**FCAR Ozark Folk Cen 61.88 67** P **P** **12 22 19.6 -0.8**
**MIAR Mount Ida 61.98 69** P **P** **12 22 21.2 +0.1**
baz=315,SNR=14
**KONS Konsvik 62.03 354** *e*P **P** **12 22 20.3 -0.6**
**Z38A Mt. Pleasant 62.06 71** P **P** **12 22 21.9 +0.3**
**ARU Arti 62.14 327** LR LR 12 51 49.6
comp=Z,1μm,20.3s,baz=34,slow=38
**ARU Arti 62.14 327** *d i*P **P** **12 22 21.8 0.0**
ARU 12 23 01.2
ARU S **S** **12 30 44.5 +1.8**
ARU SS **SS** **12 34 51.5 +6.3**
ARU pmax pmax
comp=Z,17nm,0.7s
ARU MLR MLR
comp=Z,818nm,16.0s
**ARU Arti 62.14 327** P **P** **12 22 21.2 -0.5**
ARU IAmb IAmb 12 22 24.1
comp=Z,18nm,0.6s
**STOK Stokkvaagen 62.20 354** *e*P **P** **12 22 21.9 -0.2**
**WHAR Wooly Hollow 62.21 68** P **P** **12 22 22.2 -0.4**
WHAR IAmb IAmb 12 22 23.3
comp=Z,31nm,0.9s
**PBMO Poplar Bluff 62.23 65** P **P** **12 22 21.9 -0.8**
PBMO IAmb IAmb 12 22 37.9
comp=Z,30nm,0.9s
**MOR8 Moi Rana 62.27 353** *e*P **P** **12 22 20.3 -2.2**
**LCAR Lake Charles 62.31 66** P **P** **12 22 22.1 -1.2**
LCAR IAmb IAmb 12 22 23.3
comp=Z,12nm,0.7s
**W41B Gary Mavity, V 62.31 68** P **P** **12 22 22.9 -0.3**
W41B IAmb IAmb 12 22 24.0
comp=Z,41nm,1.2s
**W41B Gary Mavity, V 62.31 68** P **P** **12 22 22.8 -0.5**
baz=315,SNR=7.5
**PZH PanZhiHua 62.45 279** ⇑P **P** **12 22 24.3 -0.2**
PZH sP **sP** **12 22 45.8 +0.6**
PZH S **S** **12 30 45.6 -2.1**
PZH pmax pmax
comp=Z,30nm,0.9s
PZH pmax pmax
comp=Z,110nm,5.2s
PZH LR LR
comp=Z,710nm,17.7s
PZH LR LR
comp=Z,1μm,17.6s
PZH LR LR
comp=Z,920nm,17.3s
**X40A Basin Creek Fa 62.46 69** P **P** **12 22 24.0 -0.2**
**X40A Basin Creek Fa 62.46 69** P **P** **12 22 24.2 0.0**
baz=315,SNR=7.2
**SADO Sadowa 62.57 52** P **P** **12 22 23.6 -1.2**
comp=Z,9.9nm,0.7s,baz=270,slow=2.9,SNR=4.3
SADO LR LR 12 50 50.6
comp=Z,819nm,20.1s,baz=350,slow=37
**DAV Davao City (W) 62.64 245** LR LR 12 45 23.2
comp=Z,762nm,21.5s,baz=20,slow=32
**O48B Farmland 62.69 59** P **P** **12 22 25.3 -0.5**
baz=316
**KMI Kunming 62.83 277** ⇑P **P** **12 22 25.3 -1.8**
KMI pP sP 12 22 45.5 -2.4
KMI PP **PP** **12 24 45.0 -0.5**
KMI S **S** **12 30 48.3 -4.3**
KMI sS sS 12 31 19.2 +2.1
KMI SS **SS** **12 34 52.6 -5.3**
KMI pmax pmax
comp=Z,14nm,1.2s
KMI pmax pmax
comp=Z,190nm,4.5s
KMI LR LR
comp=Z,560nm,20.4s
KMI LR LR
comp=Z,230nm,18.5s
KMI LR LR
comp=Z,490nm,25.6s
**QIZ Qiongzhong 62.85 267** P **P** **12 22 26.0 -1.1**
QIZ S **S** **12 30 52.2 -0.4**
QIZ LR LR
comp=Z,490nm,19.6s
QIZ LR LR
comp=Z,440nm,20.6s
QIZ LR LR
comp=Z,310nm,23.5s
**WLAR White Oak Lake 62.86 69** P **P** **12 22 27.6 +0.6**
**833A Chaparral WMA, 62.90 78** P **P** **12 22 27.4 +0.1**
baz=316
**HNR Honiara 62.92 202** LR LR 12 46 53.4
comp=Z,471nm,18.8s,baz=358,slow=33
**OTUK Ortayu 63.00 314** P **P** **12 22 27.4 -0.3**
**BORG Borgarnes 63.08 10** LR LR 12 50 11.3
comp=Z,412nm,21.3s,baz=351,slow=36
**JAY Jayapura 63.09 225** LR LR 12 44 16.1
comp=Z,460nm,21.9s,slow=31
**P48A Milroy 63.11 60** P **P** **12 22 28.7 +0.1**
P48A IAmb IAmb 12 22 29.2
comp=Z,24nm,0.6s
**KIRV Kirov 63.19 333** LR LR 12 53 53.3
comp=Z,1μm,19.1s,baz=25,slow=40
**KIRV Kirov 63.19 333** *d i*P **P** **12 22 28.1 -0.6**
**NATX Nacogdoches 63.31 72** P **P** **12 22 30.6 +0.5**
**NATX Nacogdoches 63.31 72** P **P** **12 22 30.1 +0.1**
baz=316
**Z41A Richland Creek 63.35 69** P **P** **12 22 30.4 +0.2**
baz=316
**ARXS Arharly 63.37 308** *e*P **P** **12 22 30.3 0.0**
**P49A Miami Univ. Ec 63.44 59** P **P** **12 22 30.1 -0.6**
baz=316
**KPKS Kokpek 63.49 307** *e*P **P** **12 22 30.0 -1.1**
KPKS pmax pmax
comp=Z,14nm,0.9s
**KPKS Kokpek 63.49 307** *e*P **P** **12 22 30.1 -1.1**
comp=Z,14nm,0.9s,baz=307
**WCI Wyandotte Cave 63.52 61** P **P** **12 22 30.9 -0.3**
WCI pmax pmax
comp=Z,23nm,0.9s
**WCI Wyandotte Cave 63.52 61** P **P** **12 22 30.9 -0.3**
WCI IAmb IAmb 12 23 08.2
comp=Z,23nm,0.8s
**WCI Wyandotte Cave 63.52 61** P **P** **12 22 30.4 -0.8**
baz=316
**UZB Uzynbulak 63.55 307** *e*P **P** **12 22 30.3 -1.3**
UZB pmax pmax
comp=Z,29nm,1.5s
**UZB Uzynbulak 63.55 307** *e*P **P** **12 22 30.4 -1.2**
comp=Z,29nm,1.5s,baz=307
**KLMR Klimovskoe 63.68 340** *e*P **P** **12 22 30.5 -1.4**
KLMR pmax pmax
comp=Z,23nm,1.3s
**KLMR Klimovskoe 63.68 340** *e*P **P** **12 22 30.6 -1.4**
KLMR AMP 12 22 34.6
comp=Z,23nm,1.3s
**N51A Ashland 63.70 57** P **P** **12 22 31.7 -0.7**
**ZHN Zhinishke 63.83 307** *e*P **P** **12 22 32.1 -1.3**
**ZHN Zhinishke 63.83 307** *e*P **P** **12 22 32.2 -1.3**
baz=307
**ACSO Alum Creek Sta 63.87 58** P **P** **12 22 32.8 -0.7**
baz=316
**HKT Hockley 63.90 74** ⇓*e*P **P** **12 22 34.6 +0.8**
HKT pmax pmax
comp=Z,34nm,1.5s
**HKT Hockley 63.90 74** P **P** **12 22 34.2 +0.4**
HKT IAmb IAmb 12 22 45.1
comp=Z,26nm,1.1s
**SATY Saty 63.92 307** *e*P **P** **12 22 32.9 -1.1**
**SATY Saty 63.92 307** *e*P **P** **12 22 33.0 -1.1**
baz=307
**T47A Sharon Grove 63.95 63** P **P** **12 22 34.1 -0.1**
**NSS Namsos 64.06 354** *e*P **P** **12 22 34.0 -0.3**
**ERPA Erie 64.06 54** P **P** **12 22 34.0 -0.8**
baz=317
**W45A Hickory Valley 64.09 66** P **P** **12 22 35.0 -0.1**
**WVT Waverly 64.16 64** P **P** **12 22 35.2 -0.3**
WVT pmax pmax
comp=Z,18nm,0.9s
**WVT Waverly 64.16 64** P **P** **12 22 35.2 -0.3**
WVT IAmb IAmb 12 22 37.0
comp=Z,18nm,0.8s
**WVT Waverly 64.16 64** P **P** **12 22 35.3 -0.2**
baz=316
**M53A WI Miller and 64.20 55** P **P** **12 22 35.5 -0.3**
**M53A WI Miller and 64.20 55** P **P** **12 22 35.1 -0.6**
baz=317
**KUU Kurty 64.34 309** *e*P **P** **12 22 35.4 -1.2**
KUU pmax pmax
comp=Z,30nm,0.9s
**KUU Kurty 64.34 309** *e*P **P** **12 22 35.5 -1.2**
comp=Z,30nm,0.9s,baz=309
**OXF Oxford 64.42 66** P **P** **12 22 37.1 -0.1**
baz=316,SNR=10
**MDOK Medeo 64.53 308** P **P** **12 22 37.3 -0.7**
**MDOK Medeo 64.53 308** *e*P **P** **12 22 36.8 -1.2**
baz=308
**Q51A Peebles 64.55 59** IAmb IAmb 12 23 12.9
comp=Z,25nm,0.8s
**O52A Adamsville 64.56 57** IAmb IAmb 12 22 55.7
comp=Z,45nm,1.1s
**BTLS Baital 64.59 311** *e*P **P** **12 22 37.3 -0.9**
BTLS pmax pmax
comp=Z,25nm,0.7s
**BTLS Baital 64.59 311** *e*P **P** **12 22 37.3 -0.9**
comp=Z,25nm,0.7s,baz=311
**MMNY Mt. Morris Dam 64.67 53** P **P** **12 22 38.5 -0.2**
MMNY IAmb IAmb 12 22 40.4
comp=Z,45nm,1.0s
**M54A Oil Creek Stat 64.67 55** P **P** **12 22 38.5 -0.3**
baz=317
**O53A New Philadelph 64.79 57** P **P** **12 22 38.7 -0.9**
baz=317
**PLAL Pickwick Lake 64.85 65** P **P** **12 22 39.4 -0.6**
**N54A Moraine State 64.91 55** P **P** **12 22 39.8 -0.5**
baz=317
**ZAIG Zacatecas 64.96 84** P **P** **12 22 41.6 +0.3**
**V48A Smith Brothers 65.01 64** IAmb IAmb 12 22 42.3
comp=Z,20nm,0.8s
**CLTN Cedars of Leba 65.03 63** IAmb IAmb 12 22 43.5
comp=Z,38nm,0.8s
**U49A Red Boiling Sp 65.03 62** IAmb IAmb 12 23 25.0
comp=Z,22nm,0.9s
**T50A Nancy 65.19 61** P **P** **12 22 42.0 -0.2**
T50A IAmb IAmb 12 22 43.8
comp=Z,24nm,0.8s
**P53A Whipple 65.25 57** IAmb IAmb 12 22 50.0
comp=Z,74nm,1.5s
**L56A Greenwood 65.28 53** P **P** **12 22 42.6 -0.2**
**AFI Afiamalu 65.41 171** LR LR 12 47 12.9
comp=Z,701nm,19.7s,baz=344,slow=32
**TKM2 Tokmak 2 65.42 308** P **P** **12 22 44.7 +0.8**
SNR=67
**TBLU Trondheim 65.44 355** *e*P **P** **12 22 42.5 -0.8**
**SGDS Sogindy 65.50 309** *e*P **P** **12 22 43.0 -1.2**
comp=Z,20nm,0.9s,baz=309
**FIA1 FINESS Array S 65.60 346** P **P** **12 22 43.2 -1.3**
FIA1 IAmb IAmb 12 22 44.9
comp=Z,18nm,0.9s
**FINES FINESS Array B 65.60 346** P **P** **12 22 43.5 -1.0**
comp=Z,18nm,0.8s,baz=32,slow=7.6,SNR=25
FINES LR LR 12 52 25.6
comp=Z,708nm,21.7s,baz=10,slow=37
**FINES FINESS Array B 65.60 346** P **P** **12 22 43.6 -0.8**
**FINES FINESS Array B 65.60 346** P **P** **12 22 43.6 -0.8**
**ULHL Ulahol 65.60 308** P **P** **12 22 46.0 +0.9**
SNR=8.1
**USP Osenovka 65.70 309** P **P** **12 22 46.4 +0.9**
SNR=147
**CHMS Chumysh 65.78 309** P **P** **12 22 46.9 +0.9**
SNR=30
**R53A Hurricane 65.80 59** P **P** **12 22 46.5 +0.3**
R53A IAmb IAmb 12 22 53.5
comp=Z,30nm,0.9s
**X48A Hartselle 65.81 65** IAmb IAmb 12 23 20.4
comp=Z,54nm,1.7s
**344A Westbrook Farm 65.86 69** P **P** **12 22 46.6 0.0**
**SWET Sewanee 65.89 63** P **P** **12 22 46.4 -0.4**
SWET IAmb IAmb 12 22 47.3
comp=Z,16nm,0.6s
**KBK Karagaybulak 65.94 309** P **P** **12 22 48.2 +1.0**
SNR=55
**MCWV Mont Chateau 65.94 56** P **P** **12 22 45.8 -1.2**
baz=318
**FRU1 Bishkek 65.98 309** P **P** **12 22 48.6 +1.3**
FRU1 pmax pmax
comp=Z,126nm,0.9s
**FRU1 Bishkek 65.98 309** P **P** **12 22 48.6 +1.3**
**BINY Binghamton 66.01 52** P **P** **12 22 47.0 -0.5**
baz=318
**Z47A Carrollton 66.14 66** P **P** **12 22 48.1 -0.3**
**AAK Ala-Archa 66.17 309** LR LR 12 52 59.4
comp=Z,861nm,20.3s,baz=49,slow=37
**AAK Ala-Archa 66.17 309** P **P** **12 22 49.7 +1.0**
SNR=71
**AAK Ala-Archa 66.17 309** P **P** **12 22 49.6 +1.0**
AAK pmax pmax
comp=Z,70nm,0.9s
AAK MLR MLR
comp=Z,900nm,21.0s
**AAK Ala-Archa 66.17 309** P **P** **12 22 49.5 +0.9**
**AAK Ala-Archa 66.17 309** P **P** **12 22 49.6 +0.9**
**SWI Sorong 66.18 235** P **P** **12 22 47.4 -1.4**
comp=Z,1μmcomp=Z,47nm,1.1s
**SIJI Sorong 66.18 235** P **P** **12 22 48.0 -0.9**
comp=Z,36nm,1.0s,baz=23,slow=6.3,SNR=8.3
SIJI LR LR 12 46 20.9
comp=Z,391nm,21.7s,baz=18,slow=31
**SSPA Standing Stone 66.22 54** P **P** **12 22 48.6 -0.2**
SSPA IAmb IAmb 12 22 57.1
comp=Z,54nm,1.4s
**SSPA Standing Stone 66.22 54** P **P** **12 22 48.4 -0.4**
baz=318
**TZTN Tazewell 66.24 61** P **P** **12 22 48.8 -0.2**
baz=317
**W50A Signal Mountai 66.25 63** P **P** **12 22 48.8 -0.3**
**MOL Molde 66.25 356** *e*P **P** **12 22 46.8 -1.8**
**V51A Loudon 66.34 62** IAmb IAmb 12 22 50.9
comp=Z,60nm,1.4s
**LBNH Lisbon 66.43 48** P **P** **12 22 48.8 -1.3**
baz=320
**UCH Uchtor 66.47 309** P **P** **12 22 51.9 +0.9**
SNR=41
**EKS2 Erkin-Say 66.50 309** P **P** **12 22 51.9 +1.2**
SNR=127
**CPCT Cooper Cave 66.50 62** P **P** **12 22 50.1 -0.6**
CPCT IAmb IAmb 12 23 10.0
comp=Z,42nm,1.4s
**FPAL Fort Paine 66.56 64** P **P** **12 22 50.4 -0.7**
FPAL IAmb IAmb 12 23 18.5
comp=Z,33nm,1.0s
**LSA Lhasa 66.59 289** P **P** **12 22 52.9 +1.0**
LSA pmax pmax
comp=Z,81nm,1.0s
**Y49A Blount Mountai 66.61 65** IAmb IAmb 12 23 29.1
comp=Z,82nm,1.9s
**AKN Aaknes 66.67 356** *e*P **P** **12 22 51.1 -0.2**
**DOMB Dombas 66.71 355** *e*P **P** **12 22 50.8 -0.8**
**V52A Sevierville 66.73 61** IAmb IAmb 12 22 54.2
comp=Z,24nm,0.9s
**PMG Port Moresby 66.75 215** LR LR 12 50 16.7
comp=Z,453nm,19.3s,baz=44,slow=34
**TKL Tuckaleechee C 66.77 62** P **P** **12 22 51.9 -0.5**
comp=Z,17nm,0.8s,baz=208,slow=2.9,SNR=13
TKL LR LR 12 53 07.5
comp=Z,490nm,19.1s,baz=322,slow=37
**TKL Tuckaleechee C 66.77 62** P **P** **12 22 52.4 0.0**
TKL pmax pmax
comp=Z,30nm,1.1s
**TKL Tuckaleechee C 66.77 62** P **P** **12 22 52.4 0.0**
TKL IAmb IAmb 12 22 53.8
comp=Z,30nm,1.1s
**LRAL Lakeview Retre 66.87 66** P **P** **12 22 52.6 -0.5**
**LRAL Lakeview Retre 66.87 66** P **P** **12 22 52.2 -0.8**
baz=317
**AML Almayashu 66.94 309** P **P** **12 22 55.2 +1.4**
SNR=76
**AML Almayashu 66.94 309** P **P** **12 22 55.3 +1.4**
**N59A State Game Lan 67.08 53** P **P** **12 22 53.3 -1.0**
baz=319
**AKTO Aktyubinsk 67.17 324** LR LR 12 55 07.4
comp=Z,2μm,18.6s,baz=31,slow=38
**AKTO Aktyubinsk 67.17 324** P **P** **12 22 53.0 -1.7**
**V53A Saluda 67.29 61** IAmb IAmb 12 23 09.2
comp=Z,27nm,1.1s
**NC303 NORSAR Array S 67.38 354** P **P** **12 22 56.0 +0.1**
**AB31 Akbulak array 67.40 322** *i* P **P** **12 22 56.1 0.0**
**ABKAR Akbulak array 67.40 322** P **P** **12 22 56.2 0.0**
ABKAR IAmb IAmb 12 22 58.4
comp=Z,30nm,1.1s
**L61B Northampton 67.43 50** P **P** **12 22 55.7 -0.8**
baz=320
**FAKI Fak Fak 67.44 233** IAMs_20 IAMs_20 12 46 03.5
comp=Z,584nm,21.0s
**NC405 NORSAR Array S 67.47 354** P **P** **12 22 55.4 -1.0**
**LUPA Lehigh Univers 67.52 53** IAmb IAmb 12 23 07.8
comp=Z,30nm,0.8s
**NB2 NORSAR Subarra 67.58 354** P **P** **12 22 56.7 -0.4**
comp=Z,21nm,0.7s,baz=6.9,slow=6.5
**NB2 NORSAR Subarra 67.58 354** P **P** **12 22 56.7 -0.4**
baz=6.9,slow=6.5
**NOA NORSAR Array B 67.58 354** P **P** **12 22 57.0 -0.2**
comp=Z,35nm,0.7s,baz=7.7,slow=6.3,SNR=98
**NOA NORSAR Array B 67.58 354** P **P** **12 22 57.0 -0.2**
**BG3 Lake Jocassee 67.72 62** IAmb IAmb 12 23 31.6
comp=Z,58nm,1.4s
**KKAR Karatay Array 67.72 312** P **P** **12 22 58.8 +0.4**
**KKAR Karatay Array 67.72 312** P **P** **12 22 58.8 +0.4**
**KSH Kashi 67.78 306** P **P** **12 23 03.5 +4.6**
KSH pP pP 12 23 19.1 +5.5
KSH sP sP 12 23 27.1 +7.6
KSH PcP **PcP** **12 23 29.4 +4.1**
KSH pmax pmax
comp=Z,56nm,1.0s
KSH LR LR
comp=Z,2μm,19.6s
KSH LR LR
comp=Z,1μm,18.3s
KSH LR LR
comp=Z,2μm,21.3s
**NAO01 NORSAR Array S 67.79 354** IAmb IAmb 12 22 59.0
comp=Z,32nm,0.8s
**NC602 NORSAR Array S 67.86 354** *e*P **P** **12 22 58.7 -0.1**
**NC602 NORSAR Array S 67.86 354** P **P** **12 22 58.2 -0.6**
**HRV Adam Dziewonsk 67.93 49** P **P** **12 22 59.4 -0.2**
baz=320
**Y52A Lilburn 67.93 63** IAmb IAmb 12 23 14.8
comp=Z,21nm,0.9s
**PAL Palisades 67.94 52** P **P** **12 22 58.8 -0.9**
baz=320
**BRLS Boroldav 68.09 312** *e*P **P** **12 23 01.9 +1.2**
**BRLS Boroldav 68.09 312** *e*P **P** **12 23 01.9 +1.2**
baz=312
**SKAR Skarslia 68.10 355** *e*P **P** **12 22 60.0 -0.5**
**UPP Uppsala 68.20 350** *e*P **P** **12 23 00.8 -0.1**
**BRAL Brewton 68.21 67** P **P** **12 23 01.8 +0.2**
baz=318
**MYLDM Lahad Datu 68.27 250** IAmb IAmb 12 23 28.4
comp=Z,46nm,1.1s
**HFS Hagfors 68.30 353** P **P** **12 23 01.0 -0.5**
comp=Z,32nm,0.7s,baz=26,slow=3.8,SNR=61
HFS LR LR 12 53 58.6
comp=Z,396nm,19.1s,baz=352,slow=37
**VSU Vasula 68.34 345** ⇓*e*P **P** **12 23 01.5 -0.4**
VSU pmax pmax
comp=Z,97nm,1.0s
**VSU Vasula 68.34 345** *e*P **P** **12 23 01.7 -0.2**
**UBPT Khong Chiam 68.41 268** IAmb IAmb 12 23 04.0
comp=Z,34nm,1.1s
**ASK Askoy 68.43 357** *e*P **P** **12 23 02.8 +0.4**
**KMSC Kings Mountain 68.49 60** P **P** **12 23 02.9 -0.3**
KMSC IAmb IAmb 12 23 04.9
comp=Z,48nm,1.0s
**KMSC Kings Mountain 68.49 60** P **P** **12 23 03.0 -0.3**
baz=318,SNR=6.6
**MTSE Matsula 68.55 347** *e*P **P** **12 23 02.9 -0.2**
**GOGA Godfrey 68.59 63** P **P** **12 23 03.7 -0.2**
GOGA pmax pmax
comp=Z,57nm,1.5s
**GOGA Godfrey 68.59 63** P **P** **12 23 03.6 -0.2**
GOGA IAmb IAmb 12 23 09.1
comp=Z,57nm,1.5s
**GOGA Godfrey 68.59 63** P **P** **12 23 03.5 -0.4**
baz=318
**HODGE Hodges 68.66 62** P **P** **12 23 04.0 -0.2**
HODGE IAmb IAmb 12 23 05.8
comp=Z,23nm,0.7s
**IUG luzhnay 68.69 311** *e*P **P** **12 23 03.1 -1.4**
**IUG luzhnay 68.69 311** *e*P **P** **12 23 03.2 -1.4**
baz=311
**OSL Oslo 68.71 354** *e*P **P** **12 23 03.8 -0.3**
**MSVF Nonsavu 68.81 182** LR LR 12 47 13.5
comp=Z,500nm,20.5s,baz=5.4,slow=31
**KKM Kota Kinabalu 68.94 253** IAMs_20 IAMs_20 12 48 15.3
comp=Z,478nm,21.0s
**ODD1 Odda 68.95 356** *e*P **P** **12 23 06.0 +0.3**
**BELG Belogornoye 69.03 331** LR LR 12 58 51.9
comp=Z,587nm,18.3s,baz=347,slow=41
**BELG Belogornoye 69.03 331** *d i*P **P** **12 23 06.2 -0.1**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**KONO Kongsberg 69.06 355** P **P** **12 23 06.5 +0.1**
KONO pmax pmax
comp=Z,62nm,0.8s
**KONO Kongsberg 69.06 355** *e*P **P** **12 23 04.8 -1.5**
**KONO Kongsberg 69.06 355** P **P** **12 23 06.5 +0.1**
**SHL Shillong 69.18 285** P **P** **12 23 07.5 -0.3**
SHL pmax pmax
comp=Z,103nm,0.9s
**SHL Shillong 69.18 285** P **P** **12 23 07.5 -0.3**
SNR=29
**SHL Shillong 69.18 285** P **P** **12 23 07.5 -0.3**
**TAOE Nuku Hiva Isla 69.22 137** *e*LR LR 12 44 23.9
comp=Z,2μm,22.7s,baz=338
**TAOE Nuku Hiva Isla 69.22 137** *e*T T 13 38 33.0
comp=Z,56nm,0.3s
**OBN Obninsk 69.56 338** LR LR 12 57 19.6
comp=Z,244nm,19.4s,baz=13,slow=39
**OBN Obninsk 69.56 338** ⇓*e*P **P** **12 23 09.2 -0.3**
OBN *e* 12 25 43.9
OBN pmax pmax
comp=Z,15nm,0.4s
OBN MLR MLR
comp=Z,2μm,24.0s
**VIKU Vikbolandet 69.63 351** *e*P **P** **12 23 08.8 -1.0**
**TAS Tashkent 69.67 311** P **P** **12 23 11.9 +1.4**
TAS pmax pmax
comp=Z,198nm,1.2s
**TAS Tashkent 69.67 311** P **P** **12 23 11.9 +1.4**
**CHTO Chiang Mai 69.84 275** P **P** **12 23 11.2 -0.6**
CHTO pmax pmax
comp=Z,27nm,0.9s
CHTO MLR MLR
comp=Z,300nm,21.0s
**CHTO Chiang Mai 69.84 275** P **P** **12 23 11.4 -0.4**
**CHTO Chiang Mai 69.84 275** P **P** **12 23 11.2 -0.6**
CHTO IAmb IAmb 12 23 13.0
comp=Z,27nm,0.8s
**MRSI Marisa 70.09 244** P **P** **12 23 12.0 -1.3**
comp=Z,42nm,1.0s
**CM31 Chiang Mai Arr 70.11 275** P **P** **12 23 13.5 0.0**
SNR=11
**CM31 Chiang Mai Arr 70.11 275** P **P** **12 23 13.2 -0.3**
CM31 IAmb IAmb 12 23 14.5
comp=Z,31nm,0.9s
**CMAR Chiang Mai Arr 70.11 275** P **P** **12 23 13.4 0.0**
comp=Z,20nm,0.8s,baz=25,slow=7.0,SNR=109
CMAR LR LR 12 54 13.1
comp=Z,211nm,21.7s,baz=70,slow=36
**CMAR Chiang Mai Arr 70.11 275** P **P** **12 23 13.0 -0.4**
**TAPN Taplejung 70.36 289** *e*P **P** **12 23 16.0 +0.8**
comp=Z,292nm,1.0s
**NHSC New Hope 70.64 61** P **P** **12 23 16.7 +0.2**
baz=319
**ODAN Odare 70.91 289** *e*P **P** **12 23 18.7 +0.2**
comp=Z,93nm,0.9s
**GAR Garm 70.99 309** P **P** **12 23 19.6 +0.9**

GUN **Gumba** 71.02 291 *e*P P 12 23 20.2 +0.9
JIRN **Jiri** 71.02 291 *e*P P 12 23 20.3 +0.9
comp=Z,248nm,0.9s
LPSR **Galich'ya Gora** 71.28 336 *e*P P 12 23 18.5 -1.6
LPSR pmax pmax
comp=Z,10.0nm,0.8s
RAMN **Ramite** 71.31 290 *e*P P 12 23 21.6 +0.6
comp=Z,97nm,0.5s
IDID **Didziasalis** 71.35 344 *e*P P 12 23 20.5 0.0
MPSI **Mapaga** 71.37 246 P P 12 23 18.6 -2.5
comp=Z,26nm,1.0s
MCD **Coleburn Disti** 71.39 2 *e*P P 12 23 20.8 +0.2
IIGN **Ignalina** 71.41 344 *e*P P 12 23 20.7 -0.1
KKN **Kakani** 71.46 291 *e*P P 12 23 22.5 +0.7
comp=Z,49nm,0.6s
MDO **Dochfour** 71.51 2 *e*P P 12 23 21.8 +0.5
PKI **Pulchoki** 71.55 291 *e*P P 12 23 22.9 +0.4
comp=Z,189nm,1.0s
PKIN **Phulchoki** 71.55 291 *e*P P 12 23 22.8 +0.4
comp=Z,180nm,1.0s
KPL **Plockton** 71.58 3 *e*P P 12 23 22.2 +0.5
PABE **Paberze** 71.62 346 *e*P P 12 23 21.9 -0.1
PABE **Paberze** 71.62 346 P P 12 23 21.5 -0.5
PABE IAmb IAmb 12 23 22.5
comp=Z,45nm,0.9s
GKN **Gorkha** 71.67 292 *e*P P 12 23 23.6 +0.6
DMN **Daman** 71.69 291 *e*P P 12 23 24.1 +0.8
comp=Z,161nm,0.9s
NACGM **Naroch** 71.74 344 *i* P P 12 23 22.8 0.0
VRH **Novokhopyorsk** 71.81 334 *e*P P 12 23 22.0 -1.2
VRH pmax pmax
comp=Z,20nm,0.6s
CHGR **Chuyangaron** 71.82 310 P P 12 23 24.2 +0.5
PMOR **Pomariorio Ree** 71.85 147 *e*T T 13 41 50.6
comp=Z,24nm,0.3s
DEL **Delary** 71.91 352 *e*P P 12 23 23.3 -0.4
DANN **Dangsing** 71.92 293 *e*P P 12 23 25.4 +0.7
comp=Z,305nm,0.9s
MNK **Minsk** 71.92 343 *i* P P 12 23 22.0 -1.9
MNK *i* *PP pP 12 23 38.5 -0.1
MNK *i* 12 23 40.1
MNK *i* *SP sP 12 23 45.4 +0.9
MNK *i* 12 26 02.2
MNK *i* PPP PPP 12 27 46.1
MNK *i* S S 12 32 39.6 -0.9
MNK *i* *SS sS 12 33 07.6 +1.9
MNK pmax pmax
comp=E,2.0nm,0.9s
MNK pmax pmax
comp=N,24nm,0.9s
MNK pmax pmax
comp=Z,34nm,0.9s
MNK MLR MLR
comp=N,749nm,19.0s
MNK MLR MLR
comp=Z,586nm,19.0s
MNK MLR MLR
comp=E,144nm,19.0s
MNK **Minsk** 71.92 343 *i* P P 12 23 22.1 -1.8
comp=E,2.0nm,0.9s
MNK *i* P P 12 23 22.1 -1.8
comp=N,24nm,0.9s
MNK *i* P P 12 23 22.1 -1.8
comp=Z,34nm,0.9s,baz=18
MNK *i* pP pP 12 23 38.5 -0.1
MNK *i* sP sP 12 23 45.5 +1.0
MNK *i* PP PP 12 26 02.2 -1.2
MNK *i* PPP PPP 12 27 46.2
MNK *i* S S 12 32 39.6 -0.8
MNK *i* sS sS 12 33 07.6 +1.9
MNK *i* SS SS 12 37 01.4 -15
MNK *i* SSS SSS 12 40 19.5
MNK *i* LQ LQ 12 50 10.9
MNK *i* LR LR 12 54 17.2
MNK *i* LRM MLR 12 59 12.3
comp=N,749nm,19.2s
MNK *i* LRM MLR 12 59 27.7
comp=Z,586nm,19.2s
MNK *i* LRM MLR 12 59 57.9
comp=E,144nm,19.2s
DRUM **Mains of Drumt** 72.08 1 *e*P P 12 23 24.4 -0.3
KOLN **Koldanda** 72.45 292 *e*P P 12 23 28.2 +0.5
comp=E,133nm,0.9s
VSR **Storozhevoye** 72.48 335 *e*P P 12 23 25.7 -1.6
VSR pmax pmax
comp=Z,10.0nm,0.9s
PYUN **Piuthan** 72.55 293 *e*P P 12 23 28.9 +0.5
comp=Z,237nm,0.9s
VORD **Divnogorie** 72.68 335 *e*P P 12 23 27.4 -1.0
VORD pmax pmax
comp=Z,10.0nm,0.7s
EAB **Aberfoyle** 72.77 2 *e*P P 12 23 29.2 +0.4
ESY **Stoneypath** 73.08 1 *e*P P 12 23 30.8 +0.1
EKA **Eskdalemuir Ar** 73.65 2 P P 12 23 34.4 +0.3
comp=Z,28nm,0.7s,baz=358,slow=5.0,SNR=69
ESK **Eskdalemuir** 73.67 2 *e*P P 12 23 34.4 +0.3
ESK **Eskdalemuir** 73.67 2 P P 12 23 34.5 +0.3
ESK pmax pmax
comp=Z,142nm,1.8s
ESK **Eskdalemuir** 73.67 2 P P 12 23 34.5 +0.3
NIL **Nilore** 73.67 304 P P 12 23 35.5 +0.9
NIL pmax pmax
comp=Z,52nm,0.7s
NIL MLR MLR
comp=Z,2µm,22.0s
NIL **Nilore** 73.67 304 P P 12 23 35.9 +1.3
NIL **Nilore** 73.67 304 P P 12 23 35.5 +0.9
PPT **Papeete** 73.69 150 LR LR 12 48 37.8
comp=Z,491nm,20.2s,baz=336,slow=30
PPT2 **Papeete2** 73.72 150 *e*S S 12 33 06.1 +4.4
comp=Z,890nm,29.5s
PPT2 **Papeete2** 73.72 150 *e*LR LR 12 46 34.2
comp=Z,2µm,25.2s,baz=342
PPT2 **Papeete2** 73.72 150 *e*T T 13 44 10.4
comp=Z,11nm,0.2s
DWPF **Disney Wildern** 73.73 65 P P 12 23 35.4 +0.4
baz=320
PAE **Paea** 73.78 150 *e*T T 13 44 15.2
comp=Z,3.2nm,0.3s
NEWG **New Galloway** 73.84 2 *e*P P 12 23 35.3 +0.1
CMIG **Matias Romero** 73.98 83 P P 12 23 35.9 -0.7
comp=Z,5.2nm,0.9s,baz=308,slow=6.6,SNR=3.0
CMIG LR LR 12 51 58.1
comp=Z,436nm,21.6s,baz=303,slow=32
DZM **Mont Dzumac** 74.04 193 *e*S S 12 33 09.0 +3.8
comp=Z,270nm,25.9s
DZM **Mont Dzumac** 74.04 193 *e*LR LR 12 46 49.3
comp=Z,1µm,22.9s
DZM **Mont Dzumac** 74.04 193 LR LR 12 49 42.8
comp=Z,680nm,21.9s,baz=31,slow=30
GAL1 **Galloway** 74.08 3 *e*P P 12 23 36.6 0.0
EDMD **Edmundbyers** 74.17 1 *e*P P 12 23 37.2 +0.1
TTSI **Tana Toraja** 74.18 244 P P 12 23 37.0 -0.7
comp=Z,31nm,1.1s
RAR **Rarotonga** 74.46 160 LR LR 12 50 03.1
comp=Z,1µm,19.6s,baz=326,slow=31
BSEG **Bad Segeberg** 74.71 354 *e*P P 12 23 40.9 +0.7
comp=Z,46nm,0.9s,baz=8.3,slow=5.5
SPSI **Sidrap Palu** 74.96 243 P P 12 23 40.4 -1.8
comp=Z,13nm,1.0s
HPK **Haverah Park** 75.05 1 *e*P P 12 23 42.6 +0.3
KBL **Kabul** 75.13 307 P P 12 23 43.2 -0.2
KBL pmax pmax
comp=Z,87nm,0.9s
KBL **Kabul** 75.13 307 P P 12 23 43.1 -0.2
SNR=33
KBL **Kabul** 75.13 307 P P 12 23 43.2 -0.2
BNSI **Bone** 75.13 243 P P 12 23 42.9 -0.3
comp=Z,15nm,1.2s
AKASG **Malin Array Be** 75.28 341 P P 12 23 43.0 -0.6
comp=Z,5.7nm,0.4s,baz=22,slow=6.6,SNR=27
AKASG LR LR 13 01 12.3
comp=Z,1µm,19.1s,baz=17,slow=39
LBWR **Ladybower, Pea** 75.61 1 *e*P P 12 23 45.4 -0.1
LBWR IAmb IAmb 12 23 46.9
comp=Z,57nm,0.9s
KAPI **Kappang** 75.83 243 LR LR 12 55 16.1
comp=Z,127nm,19.9s,baz=72,slow=34
KAPI **Kappang** 75.83 243 P P 12 23 48.1 +0.9
RETH **Rethem/Aller,** 75.96 354 *e*P P 12 23 48.0 +0.5
comp=Z,30nm,1.0s,baz=8.3,slow=5.5
FOEL **Foel Wylfa** 76.10 2 *e*P P 12 23 47.8 -0.5
FOEL IAmb IAmb 12 23 49.8
comp=Z,49nm,0.8s
NRDL **Niedersach Rie** 76.16 353 *e*P P 12 23 48.7 +0.2
comp=Z,34nm,1.2s,baz=8.3,slow=5.5
FLTG **Flechtingen** 76.23 353 *e*P P 12 23 48.8 -0.2
comp=Z,25nm,0.8s,baz=8.3,slow=5.5
WACR **West Acre** 76.29 359 *e*P P 12 23 49.1 -0.2
WACR IAmb IAmb 12 23 50.6
comp=Z,334nm,1.1s
ASSE **Asse, Remlinge** 76.48 353 *e*P P 12 23 50.5 +0.2
comp=Z,24nm,1.2s,baz=8.3,slow=5.5
IBBN **Ibbenburen** 76.49 355 *e*P P 12 23 51.1 +0.6
comp=Z,68nm,1.0s,baz=8.3,slow=5.5
MTN **Manton Dam** 76.57 229 P P 12 23 50.4 -0.9
MTN IAmb IAmb 12 23 51.4
comp=Z,58nm,1.2s
CLZ **Clausthal** 76.78 353 *e*P P 12 23 52.7 +0.5
comp=Z,31nm,0.9s,baz=8.3,slow=5.5
GOF **Gofitskoye** 76.93 330‖ *e*P P 12 23 53.7 +0.6
GOF pmax pmax
comp=Z,65nm,0.9s
MCH1 **Michaelchurch** 77.00 2 *e*P P 12 23 52.9 -0.4
MCH1 IAmb IAmb 12 23 54.3
comp=Z,54nm,0.8s
RSBS **Rosebush, Pemb** 77.00 3 *e*P P 12 23 53.4 +0.1
CLL **Collm** 77.10 352 *i* P P 12 23 53.2 -0.7
CLL *e**PP pP 12 24 08.0 -0.8
CLL pmax pmax
comp=Z,13nm,0.8s
CLL MLR MLR
comp=Z,600nm,18.2s
CLL **Collm** 77.10 352 *i* P P 12 23 53.2 -0.7
comp=Z,13nm,0.8s
CLL *epP pP 12 24 08.0 -0.8
CLL *ePP PP 12 26 45.0 -2.2
CLL *eS S 12 33 47.0 +8.6
CLL **Collm** 77.10 352 *e*SS SS 12 38 36.0 +1.0
CLL *eSSS SSS 12 42 00.0
CLL Lm MLR 13 03 00.0
comp=Z,600nm,18.2s
CLL **Collm** 77.10 352 *e*P P 12 23 53.4 -0.5
comp=Z,13nm,0.8s,baz=8.3,slow=5.5
CLL **Collm** 77.10 352 P P 12 23 53.5 -0.4
LVV **L'vov** 77.10 344 *e*P P 12 23 52.7 -1.3
MONM **Monmouth** 77.16 2 *e*P P 12 23 54.5 +0.2
MONM IAmb IAmb 12 23 55.7
comp=Z,57nm,0.7s
STRD **Stroud** 77.23 1 *e*P P 12 23 55.1 +0.5
STRD IAmb IAmb 12 23 55.4
comp=Z,86nm,0.7s
NEUB **Neuenburg** 77.30 352 *e*P P 12 23 55.1 0.0
comp=Z,42nm,0.8s,baz=8.3,slow=5.5
MAK **Makhachkala** 77.32 326 *e*P P 12 23 50.8 -4.5
MAK *e*PP PcP 12 24 07.7 +2.0
MAK *e*SP pP 12 24 12.6 +2.5
MAK *e* 12 26 47.0
MAK *ePPP PPP 12 28 35.7
MAK *eS S 12 33 34.7 -6.3
MAK *e*SS SKSac 12 34 03.6 +0.1
MAK *e*SS ScS 12 34 07.6 -0.8
MAK *eSS SS 12 38 39.8 +1.0
MAK pmax pmax
comp=Z,349nm,2.1s
MAK MLR MLR
comp=Z,1µm,20.0s
SOEI **Soe** 77.34 236 P P 12 23 53.6 -2.3
comp=Z,30nm,1.1s
OJC **Ojcow** 77.37 347 P P 12 23 55.5 0.0
OJC pmax pmax
comp=Z,21nm,1.0s
OJC **Ojcow** 77.37 347 P P 12 23 55.5 0.0
OJC IAmb IAmb 12 23 56.6
comp=Z,20nm,1.0s
BUG **Bochum--Univer** 77.38 355 *e*P P 12 23 55.7 +0.2
comp=Z,33nm,1.2s,baz=8.3,slow=5.5
BRG **Berggiesshubel** 77.44 351 *e*P P 12 23 55.5 -0.3
BRG Amp 12 23 57.3
comp=Z,10nm,0.9s
BRG *ex x 12 24 05.5
BRG Amp 12 24 08.3
comp=Z,5.0nm,0.7s
BRG **Berggiesshubel** 77.44 351 *e*P P 12 23 55.5 -0.3
BRG *e 12 24 05.5
BRG pmax pmax
comp=Z,11nm,0.9s
BRG pmax pmax
comp=Z,5.0nm,0.7s
BRG **Berggiesshubel** 77.44 351 *e*P P 12 23 55.5 -0.3
comp=Z,10nm,0.9s,baz=8.3,slow=5.5
FBE **Freiberg** 77.45 351 *e*P P 12 23 55.9 0.0
comp=Z,17nm,0.9s,baz=8.3,slow=5.5
GEYT **Alibeck** 77.48 316 P P 12 23 56.9 +0.5
comp=Z,11nm,0.8s,baz=272,slow=11,SNR=14
GEYT PP PP 12 26 48.6 -2.2
comp=Z,6.0nm,0.8s,baz=55,slow=3.6,SNR=5.2
GEYT LR LR 13 00 41.7
comp=Z,1µm,21.0s,baz=46,slow=38
GEYT **Alibeck** 77.48 316 P P 12 23 57.0 +0.6
GYA0B **ALIBECK ARRAY** 77.48 316 P P 12 23 56.9 +0.5
GYA0B IAmb IAmb 12 23 58.5
comp=Z,20nm,0.9s
CHVC **Chvalec** 77.49 349 *e*P P 12 23 52.4 -3.8
KASTN **Kahler Asten** 77.55 354 *e*P P 12 23 56.8 +0.3
comp=Z,15nm,0.9s,baz=8.3,slow=5.5
UPC **Upice** 77.58 349 *e*P P 12 23 56.1 -0.6
UPC **Upice** 77.58 349 *e*P P 12 23 56.1 -0.6
DPC **Dobruska-Polom** 77.69 349 *e*P P 12 23 57.3 -0.1
DPC **Dobruska-Polom** 77.69 349 *e*P P 12 23 57.3 -0.1
PVCC **Panska Ves** 77.71 350 *e*P P 12 23 57.5 +0.1
PVCC **Panska Ves** 77.71 350 *e*P P 12 23 57.5 +0.1
MOX **Moxa** 77.88 352 *e*P P 12 23 58.3 0.0
comp=Z,16nm,0.8s,baz=8.3,slow=5.5
MOX *eL L 12 55 13.9
comp=Z,472nm,21.3s
SORM **Soroca** 77.90 341 ⇑P P 12 23 57.9 -0.6
KRLC **Kraliky** 77.91 349 *e*P P 12 23 58.5 -0.1
KRLC **Kraliky** 77.91 349 *e*P P 12 23 58.5 -0.1
PLN **Plauen** 77.99 352 *e*P P 12 23 58.9 0.0
comp=Z,12nm,0.9s,baz=8.3,slow=5.5
TANN **Tannenbergstha** 78.03 352 *e*P P 12 23 59.2 0.0
comp=Z,40nm,1.9s,baz=8.3,slow=5.5
KIV **Kislovodsk** 78.04 330 ⇑P P 12 23 59.5 +0.1
KIV **Kislovodsk** 78.04 330 *e*P P 12 23 58.9 -0.5
KIV pmax pmax
comp=Z,14nm,1.1s
KIV MLR MLR
comp=Z,447nm,18.0s
KIV **Kislovodsk** 78.04 330 P P 12 23 59.5 +0.1
BATI **Baumata** 78.04 237 P P 12 23 59.4 -0.3
comp=Z,19nm,0.8s,baz=79,slow=5.2,SNR=2.1
BATI **Baumata** 78.04 237 P P 12 23 59.2 -0.4
comp=Z,20nm,1.1s
GUNZ **Gunzen** 78.09 352 *e*P P 12 23 59.3 -0.2
comp=Z,14nm,0.8s,baz=8.3,slow=5.5
MORC **Moravsky Berou** 78.11 348 ⇑P P 12 23 59.9 +0.2
MORC **Moravsky Berou** 78.11 348 *e*P P 12 24 00.1 +0.4
NCK **Nalchik** 78.16 329‖ *e*P P 12 24 00.9 +0.9
NCK pmax pmax
comp=Z,29nm,1.0s
WERN **Wernitzgruen** 78.17 352 *e*P P 12 24 00.3 +0.3
comp=Z,21nm,0.8s,baz=8.3,slow=5.5
KBZ **Khabaz** 78.17 330 P P 12 23 59.9 -0.1
comp=Z,5.0nm,0.6s,baz=66,slow=2.7,SNR=17
KBZ LR LR 13 02 28.2
comp=Z,849nm,21.8s,baz=9.5,slow=39
KBZ **Khabaz** 78.17 330 *ceP P 12 24 00.3 +0.3
KBZ pmax pmax
comp=Z,9.0nm,0.9s
NKC **Novy Kostel** 78.21 352 *e*P P 12 23 59.7 -0.5
NKC **Novy Kostel** 78.21 352 *e*P P 12 23 59.7 -0.5
PRU **Pruhonice** 78.25 350 *e*P P 12 24 00.3 -0.1
PRU **Pruhonice** 78.25 350 *e*P P 12 24 00.3 -0.1
MEM **Membach** 78.27 356 *d*P P 12 24 00.9 +0.4
comp=Z,37nm,0.9s
AHRW **Bad Neuenahr-A** 78.29 355 *e*P P 12 24 00.9 +0.4
comp=Z,45nm,1.3s,baz=8.3,slow=5.5
BTNL **Ternell** 78.29 356 *d*P P 12 24 00.7 0.0
comp=Z,28nm,0.8s
APG **El Apazote** 78.31 81 LR LR 12 58 30.1
comp=Z,309nm,19.2s,baz=292,slow=36
BSTI **Sart Tilman** 78.32 356 *d*P P 12 24 01.0 +0.2
comp=Z,8.5nm,0.7s
BSTI *dPcP PcP 12 24 09.2 -0.7
CRVS **Cervenica-Dubn** 78.41 346 *e*P P 12 24 01.7 +0.4
CRVS **Cervenica-Dubn** 78.41 346 *e*P P 12 24 01.6 +0.3
SNF **Seneffe** 78.44 357 *d*P P 12 24 01.9 +0.5
LANS **Liptovska Anna** 78.46 347 *e*P P 12 24 02.7 +1.1
LANS **Liptovska Anna** 78.46 347 *e*P P 12 24 02.7 +1.1
MANZ **Manzenberg** 78.49 352 *e*P P 12 24 01.6 -0.2
comp=Z,6.5nm,1.4s,baz=8.3,slow=5.5
TNS **Taunus Mts** 78.53 354 *e*P P 12 24 02.1 +0.1
comp=Z,22nm,0.8s,baz=8.3,slow=5.5
BGES **Gesves** 78.53 357 κP P 12 24 02.1 +0.1
comp=Z,21nm,0.9s
BGES *dpP pP 12 24 17.6 +0.7
UZH **Uzhgorod** 78.54 345 *e*P P 12 23 56.4 -5.6
UZH *e* 12 24 05.3
UZH *i* 12 24 11.4
HRA **Herat** 78.55 312 IAmb IAmb 12 24 04.8
comp=Z,42nm,0.9s
BMRD **Maredsous** 78.63 357 *d*P P 12 24 02.8 +0.3
comp=Z,31nm,0.8s
VRAC **Vranov** 78.69 349 ⇑P P 12 24 03.1 +0.3
VRAC **Vranov** 78.69 349 P P 12 24 03.1 +0.3
comp=Z,14nm,0.8s,baz=18,slow=4.6,SNR=11
VRAC LR LR 13 00 03.2
comp=Z,405nm,21.2s,baz=18,slow=37
VRAC **Vranov** 78.69 349 *e*P P 12 24 02.9 +0.1
ZEI **Tsey** 78.69 328 *e*P P 12 24 02.5 -0.7
ZEI pmax pmax
comp=Z,18nm,0.9s
ROTZ **Rotzenmuhle** 78.70 352 *e*P P 12 24 02.9 0.0
comp=Z,2.9nm,1.0s,baz=8.3,slow=5.5
RCHB **Rochefort** 78.76 356 *d*P P 12 24 03.3 +0.2
comp=Z,17nm,0.9s
DOU **Dourbes** 78.84 357 *b*P P 12 24 03.8 +0.2
GRA1 **Grafenberg Arr** 78.86 352 IAmb IAmb 12 24 05.1
comp=Z,22nm,0.7s
GRF **Grafenberg Arr** 78.86 352 *e*P P 12 24 04.2 +0.4
comp=Z,27nm,0.8s,baz=8.3,slow=5.5
GRF *eL L 12 56 21.3
comp=Z,547nm,18.4s
KRUC **Moravsky** 78.95 349 *e*P P 12 24 04.0 -0.3
KECS **Kecovo** 78.97 346 *e*P P 12 24 04.9 +0.5
KECS **Kecovo** 78.97 346 *e*P P 12 24 04.9 +0.5
TRPA **Tarpa** 78.98 345 ⇑P P 12 24 05.2 +0.7
TRPA **Tarpa** 78.98 345 P P 12 24 04.9 +0.5
BUR08 **Bucovina Ar. S** 78.99 343 P P 12 24 05.0 +0.4
BUR08 IAmb IAmb 12 24 06.9
comp=Z,21nm,0.8s
JAVC **Velka Javorina** 78.99 348 *e*P P 12 24 05.6 +1.0
BURAR **Bucovina Array** 79.01 343 ⇑P P 12 24 05.1 +0.3
BURAR **Bucovina Array** 79.01 343 P P 12 24 05.1 +0.3
BURAR IAmb IAmb 12 24 06.4
comp=Z,36nm,0.9s
VYHS **Vyhne** 79.19 347 *e*P P 12 24 06.0 +0.4
VYHS **Vyhne** 79.19 347 *e*P P 12 24 06.0 +0.4
KHC **Kasperske Hory** 79.20 351 ⇑ *e*P P 12 24 05.7 0.0
KHC pmax pmax
comp=Z,25nm,1.0s
KHC **Kasperske Hory** 79.20 351 *e*P P 12 24 05.4 -0.3
KHC **Kasperske Hory** 79.20 351 P P 12 24 05.7 0.0
CHLP **Challavanipeta** 79.24 286 *e*P P 12 24 05.1 -1.1
WET **Wettzell** 79.25 351 *e*P P 12 24 06.1 +0.2
comp=Z,8.5nm,1.0s,baz=8.3,slow=5.5
SOC **Sochi** 79.28 332 *e*P P 12 24 04.4 -1.8
SOC *e 12 27 04.6
SOC *ePPP PPP 12 28 54.9
SOC *eS S 12 34 00.5 -1.6
SOC *eSS SS 12 39 07.1 -1.2
SOC *eSSS SSS 12 42 32.7
SOC pmax pmax
comp=Z,9.0nm,0.7s
SOC MLR MLR
comp=Z,1µm,18.0s
VSLR **Vesyoloye** 79.30 331 ⇑ *e*P P 12 24 06.8 +0.5
SMOL **Smolenice** 79.36 348 *e*P P 12 24 07.2 +0.7
SMOL **Smolenice** 79.36 348 *e*P P 12 24 07.2 +0.7
CKRC **Cesky Krumlov** 79.43 350 *e*P P 12 24 06.3 -0.6
GEC2 **GERESS Array S** 79.47 351 *e*P P 12 24 07.1 -0.1
comp=Z,11nm,0.8s,baz=8.3,slow=5.5
GEC2 **GERESS Array S** 79.47 351 P P 12 24 06.8 -0.4
GERES **GERESS Array B** 79.47 351 P P 12 24 07.0 -0.2
comp=Z,5.0nm,0.7s,baz=32,slow=5.4,SNR=25
GERES LR LR 13 01 21.2
comp=Z,303nm,20.0s,baz=11,slow=37
GERES **GERESS Array B** 79.47 351 P P 12 24 06.5 -0.7
MODS **Modra-Piesok** 79.52 348 *e*P P 12 24 10.1 +2.7
MODS **Modra-Piesok** 79.52 348 *e*P P 12 24 10.1 +2.7
PSZ **Piszkesteto** 79.61 346 P P 12 24 08.3 +0.4
ARCR **ARCALIA** 79.68 343 ⇑P P 12 24 09.6 +1.3
ZST **Bratislava** 79.72 348 *e*P P 12 24 09.7 +1.3
ZST **Bratislava** 79.72 348 *e*P P 12 24 09.6 +1.2
JSA **Saint Aubin** 79.82 1 *e*P P 12 24 09.1 +0.2
JSA IAmb IAmb 12 24 10.0
comp=Z,60nm,0.7s
CONA **Conrad Observa** 80.13 349 *i* P P 12 24 11.3 +0.5
comp=Z,16nm,1.0s,SNR=5.5
BSZH **Besenyszg** 80.15 346 P P 12 24 09.2 -1.5
BUD **Budapest** 80.16 347 P P 12 24 13.1 +2.3
DRGR 80.25 344 ⇑P P 12 24 11.6 +0.1
RAO **Raoul Island** 80.28 178 LR LR 12 54 57.4
comp=Z,566nm,19.8s,baz=16,slow=32
OZUR 80.36 342 ⇑P P 12 24 13.3 +1.3
CSKK **Cskako** 80.38 347 P P 12 24 13.6 +1.5
VRI **Vrincioaia** 80.40 341 ⇑P P 12 24 07.3 -4.9
BFO **Black Forest** 80.42 354 *e*P P 12 24 12.2 -0.1
comp=Z,12nm,0.8s,baz=8.3,slow=5.5
PLOR **Plostina** 80.43 341 ⇑P P 12 24 12.7 +0.3
BATM **Batumi** 80.47 329 ⇑P P 12 24 13.0 +0.4
COVR **Voineasa-Covas** 80.52 342 ⇑P P 12 24 13.7 +0.8
DOPR **Dopca** 80.56 342 ⇑P P 12 24 14.8 +1.7
RJOB **Jochberg** 80.65 351 *e*P P 12 24 13.7 +0.1
comp=Z,14nm,0.8s,baz=8.3,slow=5.5
MPLH **Magyarpolny** 80.67 348 P P 12 24 12.9 -0.6
GNI **Garni** 80.77 327 P P 12 24 14.3 -0.2
comp=Z,4.2nm,0.6s,baz=292,slow=6.9,SNR=3.8
GNI LR LR 13 05 03.2
comp=Z,1µm,19.2s,baz=32,slow=39
GNI **Garni** 80.77 327‖ *e*P P 12 24 15.9 +1.4
GNI pmax pmax
comp=Z,14nm,1.3s
KMMI **Kalianget** 80.77 246 P P 12 24 13.8 -0.7
ARSA **Arzberg** 80.84 349 *i* P P 12 24 15.3 +0.7
comp=Z,16nm,0.9s
MLR **Muntele Rosu** 80.91 342 ⇑P P 12 24 16.7 +1.6
MLR **Muntele Rosu** 80.91 342 P P 12 24 14.4 -0.7
comp=Z,11nm,0.8s,baz=316,slow=2.5,SNR=12
MLR LR LR 13 04 08.9
comp=Z,982nm,19.8s,baz=16,slow=39
MLR **Muntele Rosu** 80.91 342 P P 12 24 15.4 +0.3
MLR pmax pmax
comp=Z,11nm,0.8s
MLR **Muntele Rosu** 80.91 342 P P 12 24 15.3 +0.3
UBR **Ueberruh** 80.94 353 *e*P P 12 24 15.1 -0.1
baz=8.3,slow=5.5
CLF **Chambon-Foret** 80.97 358 P P 12 24 15.7 +0.6
RETA **Reutte** 81.08 352 *e*P P 12 24 15.8 -0.1
comp=Z,8.0nm,0.8s
VOIR 81.14 342 ⇑P P 12 24 16.8 +0.6
WATA **Walderalm** 81.16 352 *e*P P 12 24 16.7 +0.2
comp=Z,20nm,0.6s,SNR=7.3
WB0 **Warramunga Arr** 81.19 223 P P 12 24 15.2 -1.4
MOTA **Moosalm** 81.19 352 *e*P P 12 24 16.8 +0.2
comp=Z,31nm,1.2s,SNR=5.5
WTTA **Wattenberg** 81.23 352 *i* P P 12 24 17.4 +0.6
comp=Z,33nm,0.6s,SNR=7.6
KBA **Koelnbreinsper** 81.25 351 *e*P P 12 24 17.9 +0.9
comp=Z,56nm,0.6s,SNR=23
ARR **Arges** 81.28 343 ⇑P P 12 24 18.0 +1.0
WR0 **Warramunga Arr** 81.30 222 P P 12 24 15.8 -1.3
SQTA **Sankt Quirin** 81.31 352 *e*P P 12 24 17.6 +0.4
comp=Z,21nm,0.8s
WRAB **Tennant Creek** 81.36 223 *ceP P 12 24 16.1 -1.4
WRAB pmax pmax
comp=Z,24nm,1.3s
WB2 **Warramunga Arr** 81.37 223 P P 12 24 16.3 -1.3
WRA **Warramunga Arr** 81.37 223 P P 12 24 15.8 -1.7
comp=Z,11nm,1.0s,baz=38,slow=6.0,SNR=41
MORH **Mrgy, Hungar** 81.45 347 ⇑P P 12 24 17.5 -0.3
MORH **Mrgy, Hungar** 81.45 347 P P 12 24 16.5 -1.3
SOKA **Soboth** 81.46 349 *e*P P 12 24 18.4 +0.4
comp=Z,44nm,1.3s,SNR=15
PERS **Pernice** 81.49 349 *i* P P 12 24 18.4 +0.3
comp=Z,69nm,0.9s
FETA **Feichten** 81.55 352 *e*P P 12 24 18.9 +0.4
comp=Z,19nm,0.9s
BZS **Buzias** 81.58 345 ⇑P P 12 24 18.6 +0.1
GZR **Gura Zlata** 81.60 344 ⇑P P 12 24 19.1 +0.4
KOVH **Kovagotottos** 81.65 347 P P 12 24 17.8 -1.1
ABTA **Abfaltersbach** 81.66 351 *e*P P 12 24 19.1 +0.1
comp=Z,26nm,1.0s,SNR=6.3

**MYKA Terra Mystica 81.66 350** *e*P P 12 24 20.0 +1.0
comp=Z,12nm,0.8s
**PVM Polavaram 81.67 287** *e*P P 12 24 19.4 0.0
**OBKA Obir 81.68 350** *e*P P 12 24 19.3 +0.1
comp=Z,23nm,0.6s,SNR=6.3
**RPR Rampur 81.81 290** *e*P P 12 24 19.4 -0.7
**DAVOX Davos/Dischmat 81.86 353** P P 12 24 20.4 +0.2
comp=Z,14nm,0.7s,baz=3.6,slow=4.4,SNR=16
DAVOX LR LR 13 02 48.8
comp=Z,205nm,19.5s,baz=250,slow=37
**PSI Prapat 82.09 265** LR LR 13 03 13.5
comp=Z,85nm,20.0s,baz=31,slow=37
**HERR Herculane 82.16 344** ⇑P P 12 24 21.5 0.0
**TUE Stuetta 82.20 353** IAmb IAmb 12 24 26.4
comp=Z,28nm,0.8s
**CRES Cresnjev 82.25 349** *i* P P 12 24 21.6 -0.4
**SRSP Sriramsagar 82.31 291** *e*P P 12 24 21.6 -1.1
**FRGS Fruska Gora 82.31 346** ⇑P P 12 24 22.0 -0.4
**MDVR Moldovita 82.37 344** ⇑P P 12 24 22.2 -0.5
**CTI Castel Tesino 82.43 352** P P 12 24 22.9 -0.2
CTI pmax pmax
comp=Z,15nm,1.0s
**CTI Castel Tesino 82.43 352** P P 12 24 22.9 -0.2
**MYLAV Mylavaram 82.65 287** *e*P P 12 24 24.2 -0.3
**SALO Salr 82.96 352** P P 12 24 25.4 -0.3
SALO IAmb IAmb 12 24 26.4
comp=Z,36nm,0.8s
**TEOL Teolo 83.11 352** P P 12 24 26.7 +0.2
**CUPL Choutuppal 83.24 289** *e*P P 12 24 26.6 -1.0
**DIVS Divibare 83.32 345** P P 12 24 27.8 +0.1
DIVS IAmb IAmb 12 24 28.8
comp=Z,26nm,1.0s
**HYBB Hyderabad (bro 83.36 289** *e*P P 12 24 27.2 -1.0
**BOVS Bovan 83.49 344** ⇑P P 12 24 27.6 -0.8
**NJS Nagarjunasagar 83.59 288** *e*P P 12 24 28.7 -0.6
**FITZ Fitzroy Crossi 83.74 231** P P 12 24 29.6 -0.3
comp=Z,17nm,0.8s,baz=38,slow=6.5,SNR=29
**ADKI Addanki 83.75 287** *e*P P 12 24 30.1 -0.1
**KLRI Killari 84.00 291** *e*P P 12 24 30.6 -0.9
**SRLM Srisailam 84.19 288** *e*P P 12 24 31.5 -0.9
**VTS Vitosha 84.20 343** ⇑P P 12 24 32.4 +0.1
**VTS Vitosha 84.20 343** P P 12 24 32.4 +0.1
VTS pmax pmax
comp=Z,6.0nm,0.8s
**VTS Vitosha 84.20 343** P P 12 24 32.4 +0.1
**MDUB Mudurnu 84.52 336** P P 12 24 34.7 +0.9
**BR131 Keskin Array S 84.58 334** *d* P P 12 24 34.2 0.0
**BR131 Keskin Array S 84.58 334** P P 12 24 34.4 +0.2
SNR=5.8
**BR131 Keskin Array S 84.58 334** P P 12 24 33.4 -0.8
BR131 IAmb IAmb 12 24 36.0
comp=Z,17nm,0.9s
**BRTR Keskin Array B 84.58 334** P P 12 24 34.0 -0.3
comp=Z,11nm,0.9s,baz=46,slow=3.6,SNR=18
BRTR LR LR 13 09 27.2
comp=Z,255nm,18.4s,baz=37,slow=41
**BRTR Keskin Array B 84.58 334** P P 12 24 34.0 -0.3
**BRTR Keskin Array B 84.58 334** P P 12 24 33.3 -1.0
**RCLA Racherla 84.66 288** *e*P P 12 24 33.8 -1.0
**MARD Mardin 84.66 328** P P 12 24 35.1 +0.5
MARD IAmb IAmb 12 24 36.7
comp=Z,35nm,0.9s
**AS31 Alice Springs 84.86 221** P P 12 24 35.2 -0.3
**ASAR Alice Springs 84.86 221** P P 12 24 34.8 -0.7
comp=Z,9.6nm,1.0s,baz=30,slow=4.5,SNR=47
ASAR PP PP 12 27 47.6 -5.3
comp=Z,0.3nm,0.6s,baz=89,slow=8.0,SNR=4.9
**OSSC Osservatorio P 84.97 352** P P 12 24 35.6 -0.4
**PDG Podgorica 85.06 346** ⇑P P 12 24 37.0 +0.6
**MURB Monte Urbino 85.11 351** P P 12 24 36.8 +0.1
**BORA Eskisehir 85.26 337** P P 12 24 36.5 -1.0
BORA IAmb IAmb 12 24 38.4
comp=Z,22nm,0.9s
**NRCA Norcia 85.47 350** P P 12 24 38.8 +0.2
**SKHT Srikalahasti 85.55 286** *e*P P 12 24 38.7 -0.5
**GAZ Gaziantep 85.92 331** P P 12 24 40.2 -0.7
GAZ IAmb IAmb 12 24 41.8
comp=Z,26nm,1.0s
**URV Uravakonda 86.07 289** *e*P P 12 24 40.7 -1.1
**SDDR Presa de Saban 86.61 64** P P 12 24 44.4 -0.1
SDDR IAmb IAmb 12 24 45.9
comp=Z,17nm,0.8s
**SHME Shamm 88.39 311** P P 12 24 52.3 -0.6
**BANOM Banah 88.43 311** P P 12 24 52.4 -0.7
**TIP Timpagrande 88.62 347** ⇑P P 12 24 52.0 -1.8
**MASF Masafi 88.96 311** P P 12 24 55.0 -0.7
**CSS Mathiatis 89.12 333** P P 12 24 55.6 -0.6
CSS IAmb IAmb 12 24 59.2
comp=Z,14nm,1.0s
**URZ Urewera 89.27 182** LR LR 12 59 00.1
comp=Z,618nm,21.0s,baz=42,slow=32
**ESDC Sonseca Array 89.29 3** P P 12 24 56.5 -0.5
comp=Z,2.4nm,0.9s,baz=345,slow=4.0,SNR=4.4
ESDC LR LR 13 05 20.2
comp=Z,329nm,20.5s,baz=346,slow=36
**UOSS Minazif 89.30 311** P P 12 24 56.1 -1.1
**UOSS Minazif 89.30 311** IAMs_20 IAMs_20 13 12 41.0
comp=Z,351nm,20.0s
**STKA Stephens Creek 89.42 212** P P 12 24 56.9 -0.5
comp=Z,14nm,1.0s,baz=351,slow=6.4,SNR=19
**STKA Stephens Creek 89.42 212** P P 12 24 57.1 -0.2
STKA pmax pmax
comp=Z,4.0nm,1.0s
**STKA Stephens Creek 89.42 212** P P 12 24 57.1 -0.2
**HATD Hatta, Dubai 89.44 311** P P 12 24 57.2 -0.6
**NAZ Nazwa, Dubai 89.52 311** P P 12 24 57.8 -0.5
**PSA00 Pilbara Seismi 89.55 234** P P 12 24 56.9 -1.3
**WSAR Wadi Sarin 89.57 308** LR LR 13 09 37.8
comp=Z,312nm,21.8s,baz=68,slow=39
**WSAR Wadi Sarin 89.57 308** P P 12 24 58.6 +0.1
**BIDO Bidbid 89.58 309** P P 12 24 58.4 -0.1
**ASHO Ashiyiah 89.59 311** P P 12 24 57.7 -0.9
**SANT Santorini 89.77 340** IAMs_20 IAMs_20 13 11 43.0
comp=Z,454nm,20.0s
**HOQ Hoqain 89.92 309** P P 12 24 59.5 -0.7
SNR=5.7
**WBK Wadi Bani Khal 89.93 307** P P 12 25 00.3 +0.1
SNR=7.2
**CELP Cerrillos 89.96 61** P P 12 25 00.7 +0.4
CELP IAmb IAmb 12 25 01.9
comp=Z,21nm,0.9s
**OBIP Obispado Ponce 89.97 61** P P 12 24 59.7 -0.7
**ASUD Al Ashush, Dub 89.99 311** P P 12 25 00.1 -0.3
**PALK Pallekele 89.99 282** LR LR 13 08 18.8
comp=Z,212nm,20.5s,baz=136,slow=38
**SMDO Samad 90.00 308** P P 12 25 00.2 -0.4
SNR=6.2
**GCPR Guaynabo City 90.04 60** P P 12 25 00.5 -0.2
**JLN Jalan Bani Buh 90.09 307** P P 12 25 00.9 0.0
**SJG San Juan 90.16 60** P P 12 25 01.8 +0.5
comp=Z,5.2nm,0.4s,baz=188,slow=20,SNR=3.8
**ALNE Al Ain 90.27 311** P P 12 25 01.5 -0.3
**MMAI Mount Meron Ar 90.32 331** P P 12 25 00.4 -1.6
comp=Z,0.8nm,0.3s,baz=58,slow=8.8,SNR=2.3
MMAI LR LR 13 11 35.9
comp=Z,324nm,19.2s,baz=184,slow=40
**MTP Monte Pirata 90.50 60** P P 12 25 03.5 +0.6
**ARQ Araqi 90.51 310** P P 12 25 02.4 -0.5
**JMDO Jabal Madar 90.56 308** P P 12 25 02.9 -0.2
SNR=7.3
**VAE Valguarnera 90.61 348** LR LR 13 09 30.0
comp=Z,414nm,18.8s,baz=8.0,slow=38
**BSY Bisya 90.69 309** P P 12 25 03.2 -0.6
SNR=5.9
**IDI Anoyia 90.94 340** P P 12 25 03.3 -1.5
comp=Z,2.3nm,0.6s,baz=328,slow=13,SNR=2.4
IDI LR LR 13 11 07.7
comp=Z,397nm,19.0s,baz=16,slow=39
**GHWR Ruwais 91.69 313** P P 12 25 08.1 -0.2
**UMZA Um Al Zommool 91.70 310** P P 12 25 07.5 -0.8
**KEST Kesra 92.87 352** P P 12 25 12.8 -1.0
comp=Z,8.3nm,0.9s,baz=348,slow=4.9,SNR=5.5
KEST LR LR 13 10 28.8
comp=Z,141nm,18.1s,baz=338,slow=38
**DQM DQM 92.89 307** P P 12 25 13.0 -1.0
**EIL Elat 93.57 330** LR LR 13 13 11.7
comp=Z,491nm,19.9s,baz=44,slow=39
**SDV Santo Domingo 95.08 69** P P 12 25 23.6 -0.6
comp=Z,6.5nm,0.6s,baz=320,slow=3.6,SNR=6.7
**RAYN Ar Rayn 95.30 319** P P 12 25 23.5 -1.6
RAYN pmax pmax
comp=Z,5.0nm,0.9s
**RAYN Ar Rayn 95.30 319** P P 12 25 25.4 +0.4
**RAYN Ar Rayn 95.30 319** P P 12 25 23.5 -1.6

**DOK Doka 95.69 309** P P 12 25 25.7 -1.1
**ROSC El Rosal 96.10 75** LR LR 13 12 40.9
comp=Z,159nm,19.1s,baz=35,slow=38
**WHFO Wadi Hawf 96.46 309** P P 12 25 29.0 -1.4
**ABTO Aybut 97.17 309** P P 12 25 32.6 -1.0
**NWAO Narrogin (SRO) 100.26 229** IAMs_20 IAMs_20 13 17 48.1
comp=Z,318nm,18.0s
**SOCY Socotra 101.24 306** IAMs_20 IAMs_20 13 14 04.1
comp=Z,377nm,22.0s
**BOAV Boa Vista 106.16 65** *e*P Pdif 12 26 11.4 -2.2
**TORD Torodi Ar. Bea 115.75 358** PKP PKiKP 12 30 42.9 -0.4
comp=Z,2.1nm,0.5s,baz=348,slow=2.3,SNR=15
**TORD Torodi Ar. Bea 115.75 358** PKiKP 12 30 42.8 -0.5
**LPAZ La Paz 116.35 83** PKP PKiKP 12 30 45.6 +0.5
comp=Z,1.0nm,0.7s,baz=6.0,slow=3.9,SNR=3.9
**KMBO Kilima Mbogo 120.83 315** PKP PKiKP 12 30 53.6 +0.1
comp=Z,1.5nm,0.5s,baz=23,slow=2.4,SNR=5.6
**H03N2 Juan Fernandez 122.02 105** T T 14 45 13.8
baz=317,slow=77,SNR=47
**H03N1 Juan Fernandez 122.03 105** T T 14 45 14.7
baz=317,slow=77,SNR=43
**H03N3 Juan Fernandez 122.03 105** T T 14 45 07.3
baz=317,slow=77,SNR=5.5
**DBIC Dimbokro 122.07 5** PKP PKPdf 12 30 55.0 -0.4
comp=Z,6.4nm,0.6s,baz=358,slow=2.3,SNR=15
**TIC Toumodi 122.08 6** *e*PKiKP PKPdf 12 30 54.5 -1.0
**KIC Kosan Boka 122.38 5** *e*PKiKP PKPdf 12 30 55.0 -1.1
comp=Z,14nm,0.6s
**LIC Lamto 122.50 6** *e*PKiKP PKPdf 12 30 55.1 -1.2
comp=Z,36nm,0.8s
**LIC Lamto 122.50 6** PKPdf 12 30 55.1 -1.2
**ZON Zonda 127.04 96** PKiKP PKiKP 12 31 05.0 0.0
**ZON Zonda 127.04 96** PKPdf PKiKP 12 31 05.0 0.0
**VNDA Vanda 129.09 185** PKP PKiKP 12 31 07.4 -0.2
comp=Z,3.3nm,1.0s,baz=186,slow=14,SNR=1.7
**LC01 Cunco 129.90 105** PKPdf PKPdf 12 31 09.7 +0.1
**CPUP Villa Florida 130.50 82** PKP PKPdf 12 31 11.4 +0.3
comp=Z,3.3nm,0.9s,baz=347,slow=8.5,SNR=2.9
**PLCA Paso Flores 131.84 106** PKP PKPdf 12 31 13.6 +0.3
comp=Z,10nm,1.0s,baz=302,slow=2.0,SNR=5.5
PLCA SKPbc SKPab 12 34 36.9 +1.6
comp=Z,2.9nm,0.8s,baz=295,slow=5.2,SNR=8.7
**PLCA Paso Flores 131.84 106** PKPdf PKiKP 12 31 14.2 -0.2
**MAW Mawson 145.91 218** PKPbc PKPdf 12 31 37.5 -0.4
comp=Z,20nm,0.9s,baz=79,slow=3.4,SNR=2.3
**LBTB Lobatse 147.09 313** PKPbc PKPbc 12 31 44.2 +0.6
comp=Z,34nm,0.6s,baz=63,slow=3.1,SNR=7.8
**BOSA Boshof 150.31 310** PKPbc PKiKP 12 31 52.2 -0.4
comp=Z,25nm,0.7s,baz=30,slow=2.3,SNR=68
**BELA Belgrano 2 150.55 166** PKPbc 12 31 50.3 -0.5

*IDC **09** 12:12:52.9±0.6, 11°.40N×86°.62W, h0km, mb4.4/21, mb1 4.6/25, mb1mx4.3/59, mbtmp4.4/25, ML3.4/4, MS4.3/9, Ms1 4.3/9, ms1mx3.8/66, Error ellipse: s-maj=21.0km s-min=9.0km az=48.0*
*INET **09** 12:12:56.2±0.6, 11°.02N×86°.94W, h15km±34km, MW4.9*
*NEIC **09** 12:12:58.7±2.2, 11°.20N±0°.05×86°.72W±0°.06, h33km±4km, mb5.1/219, Md5.0(SNET), Error ellipse: s-maj=9.3km s-min=5.9km az=56.0*
*MOS **09** 12:12:58.8±1.2, 11°.32N×86°.59W, h53km, mb5.2/20, Error ellipse: s-maj=14.4km s-min=6.4km az=114.3*
*BJI **09** 12:12:58.5±0.0, 11°.10N×86°.80W, h35km, mB5.4/3, Ms5.2/6, Ms7 4.9/6*
*GCMT **09** 12:12:59.7±0.4, 10°.91N±0°.03×87°.10W±0°.04, h27km±1km, MW5.0/79, Moment Tensor Solution. s26,c28; s79,c99; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr3.45±.27; Mθθ-2.07±.16; Mϕϕ-1.38±.17; Mrθ1.67±.24; Mrϕ1.80±.11; Mθϕ-1.48±.29; Best double couple: M₀4.15400×10¹⁶ NP1:ϕ₁308.00000°, δ29.00000°, λ88.00000°. NP2: ϕ₂131.00000°, δ61.00000°, λ91.00000°. Principal axes: T 4.1010, Plg74.0000°, Azm243.0000°; N 0.1070, Plg1.0000°, Azm310.0000°; P -4.2070, Plg16.0000°, Azm220.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 09 12:12:57.5±1.4, 11°.16N±0°.04×86°.80W±0°.05, h32km±10km, n625, σ1°.12/622, mb5.1/121, MS4.3/10, 10C-1D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MASN** | **Masaya** | **1.04** | **38** | *e*P | | **Pb** | **12 13 17.4** | **+0.4** |
| **TISN** | **Laguna Tiscapa** | **1.11** | **28** | *e*P | | **Pb** | **12 13 18.3** | **+0.1** |
| **MGAN** | **Managua** | **1.12** | **29** | *e*P | | **Pb** | **12 13 18.4** | **+0.1** |
| MGAN | | | | *e*P | | **Pn** | **12 13 18.6** | **+1.7** |
| **HZTE** | **Horizontes, Gu** | **1.27** | **110** | ⇑*e*P | | **Pn** | **12 13 19.1** | **+0.2** |
| **HZTE** | **Horizontes, Gu** | **1.27** | **110** | P | Pn | **Pn** | **12 13 19.4** | **+0.4** |
| **HZTE** | **Horizontes, Gu** | **1.27** | **110** | *e*P | | **Pn** | **12 13 19.3** | **+0.4** |
| **MOMN** | **Momotombo** | **1.27** | **12** | *e*P | | **Pb** | **12 13 20.0** | **-0.8** |
| **HUEN** | | **1.32** | **28** | *e*P | | **Pb** | **12 13 21.2** | **-0.6** |
| **CNGN** | **Cerro Negro** | **1.33** | **4** | | | **Pn** | **12 13 21.0** | **+1.1** |
| **GBS3** | **Finca Las Img** | **1.37** | **106** | *e*P | | **Pn** | **12 13 20.4** | **0.0** |
| **LAPC** | **Finca la Perla** | **1.40** | **106** | *e*P | | **Pn** | **12 13 20.7** | **-0.1** |
| **BUEV** | **Buena Vista** | **1.42** | **105** | *e*P | | **Pn** | **12 13 21.4** | **+0.3** |
| **GB1A** | **Boringuen Arri** | **1.42** | **104** | *i* P | | **Pn** | **12 13 22.1** | **+0.9** |
| **VRLE** | **La Escondida,** | **1.46** | **105** | *e*P | | **Pn** | **12 13 21.8** | **+0.2** |
| **GPS3** | **Bodega del ICE** | **1.47** | **106** | *e*P | | **Pb** | **12 13 24.8** | **+0.5** |
| **BUAI** | **Buenos Aires** | **1.47** | **101** | *e*P | | **Pn** | **12 13 22.7** | **+0.9** |
| **GPS2** | **Hotel Rincn d** | **1.48** | **106** | *e*P | | **Pn** | **12 13 22.2** | **+0.3** |
| **SAJU** | **San Juanillo,** | **1.53** | **135** | *e*P | | **Pn** | **12 13 21.0** | **-1.6** |
| **ORTG** | **Ortega, Santa** | **1.54** | **121** | *e*P | | **Pn** | **12 13 22.4** | **-0.3** |
| **ORTG** | **Ortega, Santa** | **1.54** | **121** | | | **Pn** | **12 13 22.5** | **-0.3** |
| **ORTG** | **Ortega, Santa** | **1.54** | **121** | *e*P | | **Pn** | **12 13 22.2** | **-0.5** |
| **GUAI** | **GUAI** | **1.55** | **125** | *e*P | | **Pn** | **12 13 22.4** | **-0.4** |
| **CRIN** | **San Cristobal** | **1.55** | **351** | | | **Pn** | **12 13 23.9** | **+0.9** |
| **CRIN** | **San Cristobal** | **1.55** | **351** | *e*P | | **Pn** | **12 13 23.7** | **+0.8** |
| **LIM1** | **Limonal** | **1.59** | **107** | *e*P | | **Pn** | **12 13 24.0** | **+0.5** |
| **GUAB** | **Guayabo de Bag** | **1.61** | **106** | *i* P | | **Pn** | **12 13 24.6** | **+0.9** |
| **BRAN** | **Las Pilas** | **1.61** | **16** | *e*P | | **Pn** | 12 13 18.2 | -5.5 |
| **PLVR** | **Palo Verde** | **1.64** | **119** | *e*P | | **Pn** | **12 13 24.1** | **-0.1** |
| **COLC** | **Colonia** | **1.64** | **107** | *e*P | | **Pn** | **12 13 24.8** | **+0.7** |
| **HORNC** | **Hornillas** | **1.66** | **105** | *i* P | | **Pn** | **12 13 25.0** | **+0.7** |
| **DUNO** | **Dulce Nombre,** | **1.68** | **130** | | | **Pn** | **12 13 23.9** | **-0.7** |
| **DUNO** | **Dulce Nombre,** | **1.68** | **130** | *e*P | | **Pn** | **12 13 23.8** | **-0.7** |
| **NICO** | **Nicoya** | **1.68** | **127** | *e*P | | **Pn** | **12 13 23.8** | **-0.8** |
| **CUI** | **Cuipilapa** | **1.68** | **107** | *e*P | | **Pn** | **12 13 25.9** | **+1.2** |
| **VMAR** | **Armenia, Volca** | **1.69** | **102** | ‖*e*P | | **Pn** | **12 13 25.8** | **+1.1** |
| **GRZA** | **Playa Garza** | **1.69** | **137** | *e*P | | **Pn** | **12 13 22.9** | **-1.8** |
| **BOAB** | **BOACO BROADBAN** | **.69** | **41** | | | **Pn** | **12 13 26.1** | **+1.3** |
| **BOAB** | **BOACO BROADBAN** | **.69** | **41** | *e*P | | **Pn** | **12 13 26.1** | **+1.3** |
| **ACON** | **Acoyapa** | **1.79** | **63** | *e*P | | **Pn** | **12 13 26.8** | **+0.7** |
| **ACON** | **Acoyapa** | **1.79** | **63** | | | **Pn** | **12 13 27.0** | **+0.9** |
| **ACON** | **Acoyapa** | **1.79** | **63** | *e*P | | **Pn** | **12 13 26.5** | **+0.5** |
| **ACAL** | **Aguas Claras** | **1.81** | **107** | ⇑*i*P | | **Pn** | **12 13 27.9** | **+1.3** |
| **PTEN** | **Parque Tenorio** | **1.84** | **104** | ⇑*i*P | | **Pn** | **12 13 27.9** | **+1.1** |
| **CSGN** | **Cosiguina Volc** | **1.95** | **338** | *e*P | | **Pn** | **12 13 28.7** | **+0.3** |
| **MATN** | **Matagalpa** | **1.96** | **26** | | | **Pn** | **12 13 29.7** | **+1.2** |
| **MATN** | **Matagalpa** | **1.96** | **26** | *e*P | | **Pn** | **12 13 29.8** | **+1.3** |
| **JTS** | **Las Juntas de** | **2.01** | **115** | Pn | | **Pn** | **12 13 29.4** | **+0.2** |
| | 93nm,0.3s,baz=25,slow=8.7,SNR=77 | | | | | | | |
| JTS | | | | Lg | | Lg | 12 13 54.8 | |
| | 196nm,0.3s,baz=314,slow=21,SNR=7.1 | | | | | | | |
| JTS | | | | Rg | | Rg | 12 14 05.5 | |
| | 1μm,0.5s,baz=54,slow=22,SNR=5.8 | | | | | | | |
| **JTS** | **Las Juntas de** | **2.01** | **115** | ‖*e*P | | **Pn** | **12 13 30.1** | **+0.8** |
| **JTS** | **Las Juntas de** | **2.01** | **115** | *e*P | | **Pn** | **12 13 31.0** | **+1.8** |
| **JTS** | **Las Juntas de** | **2.01** | **115** | *e*P | | **Pn** | **12 13 29.9** | **+0.7** |
| **CEDE** | **Laguna Cedeo** | **2.17** | **108** | *e*P | | **Pn** | **12 13 32.8** | **+1.4** |
| **CAO2** | **Cobano, Puntar** | **2.22** | **131** | | | **Pn** | **12 13 31.5** | **-0.5** |
| **LAFE** | **Finca La Fe, P** | **2.29** | **126** | *e*P | | **Pn** | **12 13 32.2** | **-0.9** |
| **CNCH** | **Conchagua** | **2.33** | **334** | *e*P | | **Pn** | **12 13 34.5** | **+0.7** |
| CNCH | | | | *e*S | | **Sn** | **12 14 02.5** | **+1.1** |
| **CNCH** | **Conchagua** | **2.33** | **334** | *e*P | | **Pn** | **12 13 34.5** | **+0.7** |
| CNCH | | | | *e*S | | **Sn** | **12 14 02.5** | **+1.1** |
| **LCND** | **La Caada** | **2.39** | **334** | *e*P | | **Pn** | **12 13 35.1** | **+0.7** |
| LCND | | | | *e*S | | **Sn** | **12 14 03.5** | **+1.0** |
| **LCND** | **La Caada** | **2.39** | **334** | *e*P | | **Pn** | **12 13 35.1** | **+0.7** |
| LCND | | | | *e*S | | **Sn** | **12 14 03.5** | **+1.0** |
| **COVE** | **Coope Vega, Sa** | **2.40** | **100** | ‖*e*P | | **Pn** | **12 13 35.0** | **+0.6** |
| **COVE** | **Coope Vega, Sa** | **2.40** | **100** | | | **Pn** | **12 13 35.0** | **+0.6** |
| **JACO** | **JACO, Garabito** | **2.58** | **125** | *e*P | | **Pn** | **12 13 39.0** | **+2.0** |
| **JACO** | **JACO, Garabito** | **2.58** | **125** | Pn | | **Pn** | **12 13 38.5** | **+1.5** |
| **ESPN** | **Las Esperanzas** | **2.66** | **67** | *e*P | | **Pn** | **12 13 39.3** | **+1.2** |
| **ESPN** | **Las Esperanzas** | **2.66** | **67** | | | **Pn** | **12 13 39.5** | **+1.5** |
| **ESPN** | **Las Esperanzas** | **2.66** | **67** | *e*P | | **Pn** | **12 13 39.7** | **+1.6** |
| **VSM** | **San Miguel** | **2.67** | **328** | *e*P | | **Pn** | **12 13 39.6** | **+1.0** |
| **VSM** | **San Miguel** | **2.67** | **328** | *e*P | | **Pn** | **12 13 39.6** | **+1.0** |
| VSM | | | | *e*S | | **Sn** | **12 14 10.6** | **+0.6** |

**RANC El Ranchito 2.69 327** *e*P Pn 12 13 39.4 +0.7
**CRPO Crater poas 2.71 111** *e*P Pn 12 13 40.3 +1.3
**PACA Pacayal 2.73 327** *e*P Pn 12 13 40.0 +0.7
**PACA Pacayal 2.73 327** *e*P Pn 12 13 40.9 +1.7
**PACA Pacayal 2.73 327** *e*P Pn 12 13 40.0 +0.7
PACA *e*S Sn 12 14 11.7 +0.4
**COEB Comit de Eme 2.87 324** *e*P Pn 12 13 41.3 +0.2
**COEB Comit de Eme 2.87 324** *e*P Pn 12 13 41.4 +0.2
**HDC Heredia 2.88 113** Pn 12 13 42.0 +0.7
**HDC3 Heredia 3 2.88 113** *e*P Pn 12 13 43.7 +2.4
**TGUH Tegucigalpa,Un 2.92 351** *e*P Pn 12 13 42.8 +1.0
**TGUH Tegucigalpa,Un 2.92 351** *e*P Pn 12 13 43.2 +1.4
**TGUH Tegucigalpa,Un 2.92 351** Pn Pn 12 13 43.1 +1.3
**TGUH Tegucigalpa,Un 2.92 351** *e*P Pn 12 13 42.7 +0.9
**TGUH Tegucigalpa,Un 2.92 351** *e*P Pn 12 13 42.8 +1.0
**PQSS Presa 15 de Se 2.99 325** *e*P Pn 12 13 43.3 +0.6
**PQSS Presa 15 de Se 2.99 325** *e*P Pn 12 13 43.3 +0.6
PQSS *e*S Sn 12 14 16.9 -0.6
**TECO Alcaldia de Te 3.05 321** *e*P Pn 12 13 44.0 +0.5
TECO *e*S Sn 12 14 17.4 -1.6
**OCM Ochomogo 3.06 114** *e*P Pn 12 13 46.7 +2.8
**LCR2 La Lucha 2 3.09 117** *e*P Pn 12 13 46.5 +2.3
**COEG Centro de Oper 3.18 320** *e*P Pn 12 13 45.5 +0.2
**CVTR Volcan Turrial 3.20 110** *e*P Pn 12 13 48.1 +2.2
**CVTR Volcan Turrial 3.20 110** Pn 12 13 46.0 +0.1
**RIMA Rio Macho 3.20 115** *e*P Pn 12 13 48.3 +2.5
**RIMA Rio Macho 3.20 115** Pn 12 13 46.3 +0.5
**RIMA Rio Macho 3.20 115** *e*P Pn 12 13 48.6 +2.8
**VTCV VTCV, Calle Va 3.24 111** *e*P Pn 12 13 49.3 +3.0
**SJTE Alcalda de S 3.25 319** *e*P Pn 12 13 46.1 -0.3
**CDM Cerro de Muert 3.39 118** *e*P Pn 12 13 50.9 +2.4
**SNET Serv Nac Est T 3.46 317** Pn 12 13 51.7 +2.6
**BATAN Batan 3.53 107** Pn 12 13 51.1 +1.0
**PEZE Perez Zeledon, 3.55 120** Pn 12 13 52.0 +1.7
**MRVA Moravia de Chi 3.56 112** *e*P Pn 12 13 53.4 +2.7
**SRBA San Rafael, Bu 3.89 119** ⇑*e*P Pn 12 13 57.0 +1.8
**SRBA San Rafael, Bu 3.89 119** Pn Pn 12 13 57.0 +1.8
**MTO3 Montecristo 4.07 322** Pn 12 14 00.3 +2.5
**ESQI Esquipulas 4.19 324** Pn 12 14 01.3 +2.1
**PTJ1 Puerto Jimnez 4.32 127** *e*P Pn 12 14 01.6 +0.7
**PIRO Carate, Puerto 4.38 128** ‖*e*P Pn 12 14 03.4 +1.6
**PIRO Carate, Puerto 4.38 128** *e*P Pn 12 14 03.4 +1.6
**CDITO Canoas 4.65 123** Pn 12 14 07.0 +1.6
**CCOL Caracol de Cor 4.66 126** *e*P Pn 12 14 07.6 +2.0
**BRU2 Volcan 4.68 120** *e*P Pn 12 14 08.2 +2.1
**BRU2 Volcan 4.68 120** *e*P Pn 12 14 08.0 +1.9
**BRU2 Volcan 4.68 120** Pn 12 14 08.0 +1.9
**APG El Apazote 5.23 317** Pn Pn 12 14 10.5 -3.2
1.2nm,0.3s,baz=159,slow=13,SNR=1.6
**PRVC Isla de Provid 5.75 67** *e*P Pn 12 14 18.5 -2.2
**PRVC Isla de Provid 5.75 67** Pn 12 14 18.6 -2.0
**PETF Flores 6.45 333** Pn 12 14 31.5 +1.2
**BCIP Isla Barro Col 7.14 105** P Pn 12 14 41.9 +2.2
**BCIP Isla Barro Col 7.14 105** *e*P Pn 12 14 39.8 +0.1
**BCIP Isla Barro Col 7.14 105** Pn Pn 12 14 41.9 +2.2
**CCIG Comitan 7.26 315** Pn 12 14 44.1 +2.5
**CMIG Matias Romero 9.81 308** Pn Pn 12 15 16.7 +0.4
1.5nm,0.3s,baz=135,slow=10,SNR=17
CMIG Sn Sn 12 17 04.7 -0.6
0.2nm,0.3s,baz=68,slow=19,SNR=0.8
**MOTC Monteria, Cord 11.22 101** *e*P Pn 12 15 35.8 +0.1
**MOTC Monteria, Cord 11.22 101** Pn 12 15 34.7 -1.6
**SJCC San Jacinto, C 11.50 95** *e*P Pn 12 15 42.1 +2.6
**SJCC San Jacinto, C 11.50 95** Pn Pn 12 15 39.2 -0.3
**URCC San Jos de Ur 11.62 106** *e*P Pn 12 15 43.9 +2.7
**SOR Soroa 12.12 17** P Pn 12 15 47.3 -0.7
**SOR Soroa 12.12 17** Pn Pn 12 15 47.3 -0.7
**ZARC Zaragoza, Cauc 12.34 106** *e*P Pn 12 15 51.5 +0.5
**ZARC Zaragoza, Cauc 12.34 106** Pn 12 15 53.0 +2.0
**YOTC Yotoco, Valle 12.58 124** *e*P Pn 12 15 53.5 -0.9
**SMLC San Martn de 12.76 99** *e*P P 12 16 05.2 -2.2
**GUY2C Guyana, Caldas 12.76 117** *e*P P 12 16 03.2 -4.7
**PTBC PUERTO BERRIO, 13.03 110** *e*P Pn 12 16 03.3 +2.8
**NORC Norcasia 13.05 114** *e*P P 12 16 06.5 -4.2
**ANIL Santa Ana 13.09 120** *e*P P 12 16 14.3 +2.9
**POPC Popayan, Colom 13.20 130** *e*P Pn 12 16 03.2 +0.2
**SOTA Rioblanco 13.52 131** *e*P Pn 12 16 08.6 +1.0
**ORTC Ortega, Tolima 13.53 121** *e*P Pn 12 16 09.8 +2.5
**OCAC Ocana 13.60 101** *e*P P 12 16 16.9 -0.1
**GCUF Volcan Galeras 13.62 136** *e*P P 12 16 17.9 +1.3
**OTAV Otavalo 13.66 142** *e*P Pn 12 16 12.0 +2.5
**OTAV Otavalo 13.66 142** *e*P Pn 12 16 13.2 +3.7
**SPBC San Pablo de B 13.73 112** *e*P P 12 16 20.6 +2.3
**ROSC El Rosal 13.86 116** Pn Pn 12 16 10.1 -2.0
2.1nm,0.3s,baz=304,slow=23,SNR=1.5
ROSC LR LR 12 21 30.4
comp=Z,860nm,20.6s,baz=326,slow=38
**ROSC El Rosal 13.86 116** *e*P Pn 12 16 13.1 +0.9
**BARC Barichara 14.20 108** *e*P P 12 16 24.6 +0.9
**CHIC Chingaza 14.47 116** *e*P Pn 12 16 23.6 +3.0
**RUSC La Rusia 14.54 110** *e*P Pn 12 16 23.2 +1.7
**FLOC Florencia 14.60 130** *e*P P 12 16 26.3 -1.6
**MACC Macarena, Meta 15.67 124** *e*P P 12 16 37.9 +1.5
**SOCV Socops 15.97 99** *e*P P 12 16 43.2 0.0
**SDV Santo Domingo 16.08 97** Pn Pn 12 16 39.7 -1.8
0.8nm,0.3s,baz=303,slow=4.9,SNR=2.7
SDV LR LR 12 24 58.0
comp=Z,742nm,19.2s,baz=276,slow=46
**SDV Santo Domingo 16.08 97** *e*P P 12 16 43.4 -1.2
**SDV Santo Domingo 16.08 97** *e*P P 12 16 43.4 -1.2
**SDV Santo Domingo 16.08 97** Pn Pn 12 16 41.7 +0.2
**MOIG Morelia 16.24 303** Pn P 12 16 45.8 -0.6
MOIG IAmb IAmb 12 16 50.6
comp=Z,246nm,1.8s
**ELOV Elorza 17.59 102** *e*P Pn 12 16 58.9 -1.5
**BAUV El Baul 18.60 95** P P 12 17 11.7 -0.5
**ZAIG Zacatecas 18.97 310** Pn 12 17 17.9 +0.5
**BRAL Brewton 19.91 359** P Pn 12 17 28.3 0.0
**BRAL Brewton 19.91 359** P Pn 12 17 27.9 -0.4
baz=179
**ATAH Atahualpa 20.01 155** P Pn 12 17 31.0 +1.1
comp=Z,3.9nm,0.7s,baz=7.1,slow=8.1,SNR=2.7
ATAH LR LR 12 24 16.6
comp=Z,1μm,19.7s,baz=336,slow=34
**BIRV Birongo 20.18 90** P P 12 17 28.4 -1.1
**352A Blakely 20.29 5** P P 12 17 31.4 +0.8
352A IAmb IAmb 12 17 37.1
comp=Z,74nm,0.9s
**441A DeRidder 20.38 344** P Pn 12 17 33.8 +0.1
**735A Kenedy 20.39 331** P Pn 12 17 33.3 -0.6
735A IAmb IAmb 12 17 47.7
comp=Z,225nm,1.9s
**TIGA Tifton 20.40 8** P Pn 12 17 34.0 0.0
**TIGA Tifton 20.40 8** P P 12 17 32.3 +0.6
baz=189,SNR=5.5
**HKT

comp=Z,115nm,1.1s
**MTP Monte Pirata 21.67 69** P **P** **12 17 46.8 +1.2**
**NATX Nacogdoches 21.75 342** P **P** **12 17 47.5 +1.2**
NATX IAmb IAmb 12 17 50.1
comp=Z,92nm,1.1s
**NATX Nacogdoches 21.75 342** P **P** **12 17 47.4 +1.1**
baz=159
**LRAL Lakeview Retre 21.77 360** P **P** **12 17 47.7 +1.2**
**LRAL Lakeview Retre 21.77 360** P **P** **12 17 47.7 +1.2**
baz=179,SNR=11
**PCRV Puerto La Cruz 21.80 90** P **P** **12 17 45.8 -1.3**
comp=Z,24nm,1.0s,baz=217,slow=8.6,SNR=5.1
**PLCV Puerto La Cruz 21.85 91** P **P** **12 17 45.8 -1.7**
**435B Jarrell 21.94 334** P **P** **12 17 49.5 +1.1**
**Z47A Carrollton 21.97 357** P **P** **12 17 49.0 +0.4**
Z47A IAmb IAmb 12 18 00.9
comp=Z,55nm,1.1s
**Z51A Franklin 22.10 4** P **P** **12 17 51.0 +0.9**
**STVI Saint Thomas 22.29 69** P **P** **12 17 52.0 -0.3**
STVI IAmb IAmb 12 17 54.0
comp=Z,82nm,1.2s
**GOGA Godfrey 22.36 7** P **P** **12 17 53.5 +0.7**
GOGA pmax pmax
comp=Z,57nm,1.1s
**GOGA Godfrey 22.36 7** P **P** **12 17 53.5 +0.7**
GOGA IAmb IAmb 12 17 56.0
comp=Z,57nm,1.1s
**GOGA Godfrey 22.36 7** P **P** **12 17 53.7 +0.9**
baz=188,SNR=11
**Y49A Blount Mountai 22.59 1** P **P** **12 17 56.9 +1.6**
Y49A IAmb IAmb 12 17 58.0
comp=Z,45nm,0.9s
**Z41A Richland Creek 22.67 347** P **P** **12 17 55.5 -0.7**
Z41A IAmb IAmb 12 17 58.0
comp=Z,53nm,0.9s
**Z41A Richland Creek 22.67 347** P **P** **12 17 56.5 +0.3**
baz=165,SNR=6.4
**TBTG Tabatinga, AM 22.70 131** *e*P **P** **12 17 57.8 +1.2**
**JCT Junction City 22.70 330** P **P** **12 17 56.8 +0.2**
JCT pmax pmax
comp=Z,40nm,1.1s
**JCT Junction City 22.70 330** P **P** **12 17 56.8 +0.2**
**JCT Junction City 22.70 330** P **P** **12 17 56.1 -0.5**
baz=145,SNR=5.2
**Y52A Lilburn 22.74 6** P **P** **12 17 57.7 +0.8**
Y52A IAmb IAmb 12 18 07.2
comp=Z,59nm,1.1s
**Y45A Yeager Farm, C 22.74 354** P **P** **12 17 57.7 +0.9**
**WHTX Lake Whitney, 22.95 336** P **P** **12 17 59.7 +0.7**
WHTX IAmb IAmb 12 18 05.6
comp=Z,66nm,0.9s
**WHTX Lake Whitney, 22.95 336** P **P** **12 17 59.1 +0.1**
baz=152,SNR=6.1
**CCAR Cane Creek 23.10 349** P **P** **12 18 01.5 +0.9**
CCAR IAmb IAmb 12 18 09.4
comp=Z,50nm,0.7s
**WLAR White Oak Lake 23.16 347** P **P** **12 18 01.1 0.0**
WLAR IAmb IAmb 12 18 04.5
comp=Z,43nm,0.9s
**X48A Hartselle 23.18 359** P **P** **12 18 01.4 -0.1**
X48A IAmb IAmb 12 18 03.0
comp=Z,75nm,1.6s
**Z38A Mt. Pleasant 23.24 342** P **P** **12 18 01.8 -0.2**
**FPAL Fort Paine 23.30 2** P **P** **12 18 02.1 -0.5**
**X51A Calhoun 23.36 4** P **P** **12 18 02.6 +0.4**
X51A IAmb IAmb 12 18 06.0
comp=Z,42nm,0.8s
**OXF Oxford 23.37 355** P **P** **12 18 02.7 -0.6**
OXF pmax pmax
comp=Z,97nm,0.9s
**OXF Oxford 23.37 355** P **P** **12 18 02.6 -0.6**
**OXF Oxford 23.37 355** P **P** **12 18 02.2 -1.0**
baz=174,SNR=8.9
**CZSB Cruzeiro do Su 23.43 143** *e*P **P** **12 18 07.3 +3.2**
**HPIG 23.70 314** P **P** **12 18 09.7 +2.9**
**PLAL Pickwick Lake 23.74 357** P **P** **12 18 06.8 0.0**
PLAL IAmb IAmb 12 18 08.0
comp=Z,48nm,1.1s
**X40A Basin Creek Fa 23.86 348** P **P** **12 18 07.4 -0.6**
**X40A Basin Creek Fa 23.86 348** P **P** **12 18 07.4 -0.6**
baz=165,SNR=7.0
**SWET Sewanee 23.96 2** P **P** **12 18 09.2 +0.3**
**W50A Signal Mountai 23.97 3** P **P** **12 18 08.8 -0.3**
W50A IAmb IAmb 12 18 11.2
comp=Z,32nm,0.8s
**TXAR Lajitas Array 23.97 321** P **P** **12 18 08.6 -0.6**
comp=Z,9.5nm,0.8s,baz=138,slow=9.8,SNR=100
**TXAR Lajitas Array 23.97 321** P **P** **12 18 09.6 +0.4**
**TXAR Lajitas Array 23.97 321** P **P** **12 18 09.6 +0.4**
**TX31 Lajitas Ar. Si 23.97 321** P **P** **12 18 09.2 0.0**
TX31 IAmb IAmb 12 18 16.3
comp=Z,79nm,0.9s
**TX32 Lajitas Array 23.97 321** P **P** **12 18 10.1 +0.8**
**BG3 Lake Jocassee 23.98 8** P **P** **12 18 10.1 +0.9**
**W45A Hickory Valley 23.99 355** P **P** **12 18 08.4 -0.7**
W45A IAmb IAmb 12 18 09.8
comp=Z,73nm,0.9s
**Z35A Perchaven, San 24.06 338** P **P** **12 18 09.7 -0.1**
Z35A IAmb IAmb 12 18 17.7
comp=Z,89nm,1.4s
**MIAR Mount Ida 24.09 346** P **P** **12 18 09.8 -0.3**
MIAR pmax pmax
comp=Z,144nm,1.8s
**MIAR Mount Ida 24.09 346** P **P** **12 18 09.8 -0.3**
MIAR IAmb IAmb 12 18 10.8
comp=Z,144nm,1.8s
**MIAR Mount Ida 24.09 346** P **P** **12 18 09.6 -0.5**
baz=164,SNR=13
**CPCT Cooper Cave 24.27 5** P **P** **12 18 12.2 +0.4**
CPCT IAmb IAmb 12 18 14.8
comp=Z,44nm,0.8s
**KMSC Kings Mountain 24.39 11** P **P** **12 18 12.7 -0.1**
baz=193
**ABTX Abilene, Hawle 24.41 333** P **P** **12 18 12.2 -1.0**
ABTX IAmb IAmb 12 18 21.3
comp=Z,48nm,1.1s
**ABTX Abilene, Hawle 24.41 333** P **P** **12 18 12.6 -0.6**
baz=148,SNR=13
**W41B Gary Mavity, V 24.41 349** P **P** **12 18 12.4 -0.6**
W41B IAmb IAmb 12 18 13.6
comp=Z,88nm,1.6s
**W41B Gary Mavity, V 24.41 349** P **P** **12 18 12.5 -0.6**
baz=167,SNR=6.8
**V48A Smith Brothers 24.47 360** P **P** **12 18 13.6 0.0**
**WHAR Wooly Hollow 24.53 349** P **P** **12 18 13.8 -0.4**
WHAR IAmb IAmb 12 18 14.5
comp=Z,34nm,0.9s
**TKL Tuckaleechee C 24.54 6** P **P** **12 18 13.4 -0.9**
comp=Z,35nm,1.1s,baz=184,slow=12,SNR=10
**TKL Tuckaleechee C 24.54 6** P **P** **12 18 15.3 +1.0**
TKL pmax pmax
comp=Z,80nm,1.3s
**TKL Tuckaleechee C 24.54 6** P **P** **12 18 15.3 +1.0**
TKL IAmb IAmb 12 18 18.0
comp=Z,80nm,1.3s
**X37A Clayton 24.60 343** P **P** **12 18 15.8 +1.0**
**LOOK Love County 24.63 339** P **P** **12 18 15.3 +0.2**
**V51A Loudon 24.63 5** P **P** **12 18 15.8 +0.7**
V51A IAmb IAmb 12 18 18.4
comp=Z,66nm,1.2s
**V53A Saluda 24.67 8** P **P** **12 18 16.3 +0.8**
**W39A Magazine 24.76 346** P **P** **12 18 16.3 +0.1**
**W39A Magazine 24.76 346** P **P** **12 18 15.9 -0.3**
baz=164,SNR=7.8
**WVT Waverly 24.88 358** P **P** **12 18 16.6 -0.7**
baz=178
**FCAR Ozark Folk Cen 25.09 350** P **P** **12 18 18.3 -0.9**
**GLAT Glass 25.10 355** P **P** **12 18 19.0 -0.3**
**LCAR Lake Charles 25.11 352** P **P** **12 18 18.5 -0.9**
**U49A Red Boiling Sp 25.26 2** P **P** **12 18 20.5 -0.2**
U49A IAmb IAmb 12 18 28.4
comp=Z,55nm,1.3s
**SLBS Sierra La Lagu 25.30 303** P **P** **12 18 20.0 -1.4**
**HICK Hickman 25.36 355** P **P** **12 18 21.3 -0.4**
**X34A Smith Ranch, M 25.41 338** P **P** **12 18 22.8 +0.7**
**PARMO Parma 25.53 354** P **P** **12 18 22.1 -1.1**
**W35A Tecumseh 25.58 341** P **P** **12 18 23.5 -0.2**
**U54A Nelsons Funny 25.65 9** P **P** **12 18 22.6 -1.8**
**U40A Yellville 25.68 349** P **P** **12 18 24.3 -0.2**
U40A IAmb IAmb 12 18 25.0
comp=Z,43nm,0.9s
**U40A Yellville 25.68 349** P **P** **12 18 23.7 -0.8**
baz=166,SNR=19
**PBMO Poplar Bluff 25.71 353** P **P** **12 18 23.8 -1.1**
**T47A Sharon Grove 25.72 359** P **P** **12 18 24.1 -0.7**
T47A IAmb IAmb 12 18 25.4
comp=Z,38nm,0.9s
**T45A Paducah 25.80 357** P **P** **12 18 24.9 -0.7**
**HHAR Hobbs 25.83 347** P **P** **12 18 25.5 -0.5**
**FNO Franklin 25.85 340** P **P** **12 18 25.7 -0.4**
FNO IAmb IAmb 12 18 29.6
comp=Z,80nm,1.0s
**WMOK Wichita Mounta 25.89 337** P **P** **12 18 26.9 +0.4**
WMOK pmax pmax
comp=Z,111nm,1.2s
**WMOK Wichita Mounta 25.89 337** P **P** **12 18 26.9 +0.4**
**WMOK Wichita Mounta 25.89 337** P **P** **12 18 27.5 +1.0**
baz=152,SNR=38
**TUL1 Leonard 25.95 343** P **P** **12 18 26.6 -0.4**
TUL1 IAmb IAmb 12 18 27.2
comp=Z,35nm,0.9s
**TUL1 Leonard 25.95 343** P **P** **12 18 26.4 -0.6**
baz=160,SNR=7.8
**T42A Van Buren 26.05 352** P **P** **12 18 27.1 -0.8**
**U38A Gravette 26.09 346** P **P** **12 18 27.6 -0.7**
**OK025 Westminster Rd 26.12 340** P **P** **12 18 28.4 -0.2**
OK025 IAmb IAmb 12 18 49.7
comp=Z,83nm,1.5s
**OK030 Cody Creek RV 26.26 341** P **P** **12 18 29.4 -0.4**
OK030 IAmb IAmb 12 18 30.2
comp=Z,41nm,0.8s
**OK031 S. Brethren Rd 26.30 341** P **P** **12 18 29.4 -0.9**
OK031 IAmb IAmb 12 18 30.5
comp=Z,53nm,0.8s
**OK034 N. Norfolk Rd. 26.32 342** P **P** **12 18 29.4 -1.0**
OK034 IAmb IAmb 12 18 30.7
comp=Z,45nm,0.8s
**S44A Carbondale 26.51 356** P **P** **12 18 31.5 -0.6**
S44A IAmb IAmb 12 18 32.5
comp=Z,38nm,0.9s
**MNTX Cornudas Mount 26.69 323** P **P** **12 18 34.6 +0.8**
**MNTX Cornudas Mount 26.69 323** P **P** **12 18 33.5 -0.3**
baz=136,SNR=9.9
**WCI Wyandotte Cave 26.96 1** P **P** **12 18 35.3 -0.8**
WCI pmax pmax
comp=Z,45nm,1.1s
**WCI Wyandotte Cave 26.96 1** P **P** **12 18 35.3 -0.8**
WCI IAmb IAmb 12 18 36.7
comp=Z,45nm,1.1s
**WCI Wyandotte Cave 26.96 1** P **P** **12 18 35.7 -0.4**
baz=181
**MSTX Muleshoe 27.00 330** P **P** **12 18 36.4 -0.2**
MSTX IAmb IAmb 12 18 43.4
comp=Z,48nm,1.0s
**MSTX Muleshoe 27.00 330** P **P** **12 18 36.1 -0.5**
baz=144,SNR=11
**R49A Shelbyville 27.06 3** P **P** **12 18 36.3 -0.7**
R49A IAmb IAmb 12 18 37.8
comp=Z,59nm,1.2s
**S39A Bolivar 27.06 349** P **P** **12 18 35.8 -1.2**
S39A IAmb IAmb 12 18 37.5
comp=Z,36nm,0.8s
**CCM Cathedral Cave 27.08 352** P **P** **12 18 36.5 -0.6**
baz=170
**R50A Paris 27.10 4** P **P** **12 18 37.4 0.0**
**R40A Maddies Statio 27.46 351** P **P** **12 18 39.8 -0.8**
**OLIL Olney 27.48 358** P **P** **12 18 40.3 -0.5**
OLIL IAmb IAmb 12 18 52.6
comp=Z,113nm,1.9s
**R55A Marlinton 27.66 11** P **P** **12 18 43.2 +0.7**
R55A IAmb IAmb 12 18 52.1
comp=Z,110nm,1.8s
**Q44A Meyer Farm, Va 27.70 356** P **P** **12 18 42.1 -0.6**
Q44A IAmb IAmb 12 18 42.8
comp=Z,44nm,0.8s
**BLO Bloomington 27.90 0** P **P** **12 18 43.7 -0.8**
BLO pmax pmax
comp=Z,47nm,1.1s
**BLO Bloomington 27.90 0** P **P** **12 18 43.7 -0.8**
BLO IAmb IAmb 12 18 44.9
comp=Z,47nm,1.1s
**Q51A Peebles 27.92 6** P **P** **12 18 45.0 +0.3**
**Q52A Bidwell 27.98 8** P **P** **12 18 45.4 +0.1**
Q52A IAmb IAmb 12 18 46.5
comp=Z,58nm,0.9s
**P48A Milroy 28.21 2** P **P** **12 18 46.2 -1.1**
P48A IAmb IAmb 12 18 48.0
comp=Z,52nm,0.9s
**Q54A Coxs Mills 28.21 10** P **P** **12 18 48.1 +0.8**
Q54A IAmb IAmb 12 18 49.2
comp=Z,34nm,0.8s
**P49A Miami Univ. Ec 28.32 3** P **P** **12 18 47.9 -0.4**
P49A IAmb IAmb 12 18 48.4
comp=Z,39nm,1.1s
**P49A Miami Univ. Ec 28.32 3** P **P** **12 18 47.5 -0.8**
baz=184
**P46A Rosedale 28.34 359** P **P** **12 18 47.9 -0.6**
**Q56A Snyder Ridge, 28.58 12** P **P** **12 18 51.5 +0.9**
Q56A IAmb IAmb 12 18 52.9
comp=Z,42nm,0.9s
**P53A Whipple 28.62 9** P **P** **12 18 51.8 +0.9**
**P52A Corning 28.66 8** P **P** **12 18 51.3 0.0**
P52A IAmb IAmb 12 18 52.3
comp=Z,53nm,0.9s
**P52A Corning 28.66 8** P **P** **12 18 51.1 -0.1**
baz=190,SNR=7.4
**121A Cookes Peak, D 28.73 321** P **P** **12 18 52.6 +0.4**
baz=133,SNR=6.8
**O44A Mansfield 28.91 357** P **P** **12 18 52.5 -1.0**
O44A IAmb IAmb 12 18 53.6
comp=Z,37nm,0.8s
**319A Douglas 28.93 317** P **P** **12 18 54.6 +0.7**
**P38A Dawn 28.97 349** P **P** **12 18 52.6 -1.5**
P38A IAmb IAmb 12 18 53.8
comp=Z,35nm,0.8s
**O48B Farmland 29.02 3** P **P** **12 18 53.7 -0.8**
baz=183,SNR=7.3
**MCWV Mont Chateau 29.05 11** P **P** **12 18 54.9 +0.2**
baz=194
**SFIN Lafayette 29.10 360** P **P** **12 18 54.3 -0.9**
SFIN IAmb IAmb 12 18 55.1
comp=Z,34nm,0.9s
**SFIN Lafayette 29.10 360** P **P** **12 18 53.7 -1.5**
baz=179,SNR=5.5
**ACSO Alum Creek Sta 29.15 6** P **P** **12 18 55.8 +0.1**
ACSO IAmb IAmb 12 18 56.5
comp=Z,44nm,0.8s
**ACSO Alum Creek Sta 29.15 6** P **P** **12 18 55.3 -0.3**
baz=188,SNR=7.5
**KSU1 Kansas State U 29.16 344** P **P** **12 18 55.3 -0.5**
KSU1 IAmb IAmb 12 18 56.5
comp=Z,30nm,0.8s
**KSU1 Kansas State U 29.16 344** P **P** **12 18 54.8 -1.0**
baz=160,SNR=5.2
**O52A Adamsville 29.17 8** P **P** **12 18 56.2 +0.4**
O52A IAmb IAmb 12 18 56.9
comp=Z,48nm,0.8s
**PTGA Pitinga 29.17 112** P **P** **12 18 56.1 0.0**
comp=Z,1.6nm,0.2s,baz=337,slow=22,SNR=1.4
PTGA PcP **PcP** **12 22 05.1 +1.7**
comp=Z,2.4nm,0.3s,baz=342,slow=19,SNR=1.4
PTGA LR LR 12 33 22.2
comp=Z,576nm,19.6s,baz=160,slow=42
**BNM Barren Site 29.18 325** P **P** **12 18 56.1 -0.2**
**ETMB Extrema 29.21 135** *e*P **P** **12 18 58.3 +1.8**
**P57A Homestead Farm 29.27 14** P **P** **12 18 57.6 +0.9**
P57A IAmb IAmb 12 18 58.9
comp=Z,24nm,0.8s
**HDIL Hopedale 29.36 356** P **P** **12 18 57.1 -0.4**
HDIL IAmb IAmb 12 18 57.6
comp=Z,52nm,0.9s
**HDIL Hopedale 29.36 356** P **P** **12 18 56.9 -0.6**
baz=175
**O53A New Philadelph 29.39 9** P **P** **12 18 58.2 +0.4**
**O53A New Philadelph 29.39 9** P **P** **12 18 57.8 0.0**
baz=191,SNR=8.7
**MACA Manacapuru-AM 29.62 117** *e*P **P** **12 19 01.1 +1.0**
**MACA Manacapuru-AM 29.62 117** P **P** **12 19 00.0 -0.1**
MACA IAmb IAmb 12 19 03.5
comp=Z,32nm,0.8s
**ANMO Albuquerque 29.68 326** P **P** **12 19 00.3 -0.4**
comp=Z,4.1nm,0.9s,baz=149,slow=7.9,SNR=19
**ANMO Albuquerque 29.68 326** P **P** **12 19 01.7 +1.1**
ANMO pmax pmax
comp=Z,11nm,1.0s
**ANMO Albuquerque 29.68 326** P **P** **12 19 01.7 +1.1**
**ANMO Albuquerque 29.68 326** P **P** **12 19 01.5 +0.9**
baz=138
**N49A Columbus Grove 29.73 4** P **P** **12 19 00.6 -0.2**
**O56A Blue Knob Stat 29.89 13** P **P** **12 19 02.7 +0.4**
baz=196
**N53A Lisbon 29.99 9** P **P** **12 19 03.2 +0.1**
**N54A Moraine State 30.29 10** P **P** **12 19 05.8 +0.1**
baz=193
**M50A Fremont 30.30 6** P **P** **12 19 05.0 -0.8**
**T25A Trinidad 30.34 331** P **P** **12 19 08.3 +1.8**
**T25A Trinidad 30.34 331** P **P** **12 19 07.7 +1.2**
baz=144
**SSPA Standing Stone 30.39 13** P **P** **12 19 06.8 +0.2**
SSPA IAmb IAmb 12 19 08.1
comp=Z,36nm,0.8s
**SSPA Standing Stone 30.39 13** P **P** **12 19 07.3 +0.6**
baz=197
**TUC Tucson 30.51 317** P **P** **12 19 08.6 +0.7**
TUC pmax pmax
comp=Z,10.0nm,1.2s
**TUC Tucson 30.51 317** P **P** **12 19 08.6 +0.7**
**N35A Tabor 30.59 347** P **P** **12 19 07.2 -1.2**
**M53A WI Miller and 30.64 9** P **P** **12 19 08.8 0.0**
**M53A WI Miller and 30.64 9** P **P** **12 19 08.4 -0.4**
baz=192,SNR=8.3
**L48A N Adams 30.73 3** P **P** **12 19 09.4 -0.3**
**L42A Oliver, Polo 30.83 356** P **P** **12 19 09.6 -0.8**
**N58A Sunbury 30.87 15** P **P** **12 19 10.5 -0.4**
N58A IAmb IAmb 12 19 12.4
comp=Z,33nm,0.9s
**M54A Oil Creek Stat 30.87 10** P **P** **12 19 11.4 +0.5**
M54A IAmb IAmb 12 19 12.2
comp=Z,16nm,0.7s
**M54A Oil Creek Stat 30.87 10** P **P** **12 19 10.7 -0.2**
baz=194
**N33A J Bar K, Exete 30.92 344** P **P** **12 19 11.5 +0.2**
**L40A Anamosa 31.03 354** P **P** **12 19 11.5 -0.7**
L40A IAmb IAmb 12 19 11.9
comp=Z,36nm,0.9s
**N59A State Game Lan 31.19 16** P **P** **12 19 14.6 +0.8**
N59A IAmb IAmb 12 19 15.6
comp=Z,31nm,0.9s
**N59A State Game Lan 31.19 16** P **P** **12 19 14.1 +0.4**
baz=201
**M57A Sunshine Farm, 31.24 14** P **P** **12 19 15.0 +0.9**
**SDCO Great Sand Dun 31.34 331** P **P** **12 19 16.5 +1.1**
**SDCO Great Sand Dun 31.34 331** P **P** **12 19 15.5 +0.1**
baz=143,SNR=12
**ERPA Erie 31.41 10** P **P** **12 19 15.3 -0.3**
**ERPA Erie 31.41 10** P **P** **12 19 15.2 -0.3**
baz=193,SNR=6.0
**W18A Petrified Fore 31.68 323** P **P** **12 19 18.8 +0.5**
W18A IAmb IAmb 12 19 26.8
comp=Z,22nm,0.9s
**W18A Petrified Fore 31.68 323** P **P** **12 19 19.0 +0.7**
baz=133,SNR=10
**JFWS Jewell Farm 31.78 355** P **P** **12 19 18.1 -0.7**
JFWS pmax pmax
comp=Z,37nm,0.9s
**JFWS Jewell Farm 31.78 355** P **P** **12 19 18.1 -0.7**
JFWS IAmb IAmb 12 19 18.6
comp=Z,37nm,0.9s
**JFWS Jewell Farm 31.78 355** P **P** **12 19 17.7 -1.1**
baz=174
**K38A Parkersburg 31.80 352** P **P** **12 19 17.8 -1.2**
**PAL Palisades 31.82 19** P **P** **12 19 18.8 -0.4**
baz=204
**S22A 4UR Ranch, Cre 31.99 329** P **P** **12 19 21.4 +0.2**
**S22A 4UR Ranch, Cre 31.99 329** P **P** **12 19 21.3 +0.2**
baz=141,SNR=11
**BINY Binghamton 32.34 15** P **P** **12 19 24.6 +0.8**
**BINY Binghamton 32.34 15** P **P** **12 19 24.0 +0.3**
baz=200
**MVCO Mesa Verde 32.46 327** P **P** **12 19 25.6 +0.4**
**MVCO Mesa Verde 32.46 327** P **P** **12 19 25.7 +0.5**
baz=138,SNR=9.7
**I42A Draeger Farm, 32.66 357** P **P** **12 19 25.9 -0.7**
**I40A Norwalk 32.78 355** P **P** **12 19 26.5 -1.1**
**WUAZ Wupatki 32.94 321** P **P** **12 19 30.9 +1.6**
WUAZ IAmb IAmb 12 19 37.9
comp=Z,21nm,1.1s
**WUAZ Wupatki 32.94 321** P **P** **12 19 29.9 +0.6**
baz=132,SNR=9.3
**LPAZ La Paz 32.94 146** P **P** **12 19 29.9 -0.1**
comp=Z,0.7nm,0.8s,baz=310,slow=7.9,SNR=2.1
LPAZ PcP **PcP** **12 22 16.1 +2.1**
comp=Z,1.5nm,0.7s,baz=308,slow=6.4,SNR=4.9
LPAZ LR LR 12 33 08.4
comp=Z,493nm,18.0s,baz=334,slow=37
**LPAZ La Paz 32.94 146** *e*P **P** **12 19 31.6 +1.7**
**LPAZ La Paz 32.94 146** P **P** **12 19 30.9 +1.0**
**K31A O'Neill 33.03 344** P **P** **12 19 29.4 -0.5**
**ISCO Idaho Springs 33.05 333** P **P** **12 19 30.2 -0.1**
baz=145
**J56A Wolcott 33.14 13** P **P** **12 19 30.4 -0.3**
**SMCO Snowmass 33.18 331** P **P** **12 19 32.2 +0.5**
**PV13 Radium Mtn., P 33.33 327** P **P** **12 19 33.1 +0.3**
**ECSD EROS Data Cent 33.55 347** P **P** **12 19 33.6 -0.8**
ECSD IAmb IAmb 12 19 33.7
comp=Z,34nm,1.0s
**ECSD EROS Data Cent 33.55 347** P **P** **12 19 32.5 -1.9**
baz=162,SNR=12
**GLMI Grayling 33.60 3** P **P** **12 19 33.9 -0.8**
baz=184
**GLA Glamis 33.70 315** P **P** **12 19 34.0 -1.9**
baz=124
**PDMCI Parker Dam,Lak 33.95 317** P **P** **12 19 40.3 +2.3**
baz=126
**N23A Red Feather La 34.08 334** P **P** **12 19 40.7 +1.4**
baz=145
**G40A Rib Lake 34.11 356** P **P** **12 19 38.0 -1.2**
G40A IAmb IAmb 12 19 38.8
comp=Z,31nm,0.9s
**SADO Sadowa 34.13 10** P **P** **12 19 37.3 -2.0**
comp=Z,22nm,0.9s,baz=245,slow=5.8,SNR=8.2
**SADO Sadowa 34.13 10** P **P** **12 19 38.5 -0.8**
**W13A Hualapai Mount 34.26 318** P **P** **12 19 43.2 +2.3**
**MDP Montagnes des 34.33 97** LR LR 12 34 51.3
comp=Z,528nm,18.7s,baz=272,slow=39
**SWSC Sam W. Stewart 34.33 314** P **P** **12 19 44.1 +2.8**
baz=123
**SPMN Marine on St. 34.33 352** P **P** **12 19 39.2 -1.9**
baz=170,SNR=9.7
**IKP In-Ko-Pah, Jac 34.40 313** P **P** **12 19 44.4 +2.4**
baz=122
**BC3 Big Chuckawall 34.47 315** P **P** **12 19 44.4 +1.8**
baz=124
**O20A White River Ci 34.54 330** P **P** **12 19 43.6 +0.4**
**O20A White River Ci 34.54 330** P **P** **12 19 43.6 +0.4**
baz=141
**IRM Iron Mountain 34.54 316** P **P** **12 19 45.8 +2.7**
baz=125
**ITTB Itaituba 34.55 115** *e*P **P** **12 19 43.1 -0.3**
**CBX Cerro Bola 34.62 312** P **P** **12 19 46.0 +2.0**
**MONP2 Monument Peak 34.75 313** P **P** **12 19 46.2 +1.0**
baz=122
**SUSD Miller 34.78 345** P **P** **12 19 44.3 -0.7**
**SUSD Miller 34.78 345** P **P** **12 19 44.5 -0.6**
baz=159
**KNB Kanab 34.80 322** IAmb IAmb 12 20 55.6
comp=Z,26nm,1.0s
**COWI Conover 34.88 357** P **P** **12 19 44.3 -1.5**
**SRU San Rafael Swe 34.94 327** P **P** **12 19 47.3 +0.7**
SRU pmax pmax
comp=Z,55nm,0.8s
**SRU San Rafael Swe 34.94 327** P **P** **12 19 47.3 +0.7**
**LONY Lake Ozonia 34.96 15** P **P** **12 19 45.9 -0.6**
LONY IAmb IAmb 12 19 47.2
comp=Z,33nm,1.0s
**LONY Lake Ozonia 34.96 15** P **P** **12 19 46.0 -0.6**
baz=201
**BELC Belle Mtn. Jos 35.04 315** P **P** **12 19 49.8 +2.2**
baz=124
**LCMT Little Creek M 35.05 322** P **P** **12 19 48.8 +1.1**
LCMT IAmb IAmb 12 20 54.0
comp=Z,28nm,0.9s
**MTPU Mount Pierson 35.11 324** P **P** **12 19 49.4 +1.0**
MTPU IAmb IAmb 12 21 01.2
comp=Z,24nm,0.9s
**PMD Palm Desert 35.12 314** P **P** **12 19 50.2 +2.2**
**TPFO Pinon Flats 35.15 314** P **P** **12 19 50.4 +1.9**
baz=123
**PFO Pinyon Flats O 35.15 314** P **P** **12 19 50.8 +2.3**
PFO pmax pmax
comp=Z,14nm,1.1s
**PFO Pinyon Flats O 35.15 314** P **P** **12 19 50.8 +2.3**
**PFO Pinyon Flats O 35.15 314** P **P** **12 19 50.4 +1.8**
baz=123
**P18A Preston Nutter 35.17 328** P **P** **12 19 49.6 +0.8**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GMRC | Granite Mounta | 35.25 | 317 | P | | P | 12 19 51.1 +1.8 |
| | baz=125 | | | | | | |
| P17A | Butcher Ranch, | 35.31 | 327 | P | | P | 12 19 50.2 +0.3 |
| P17A | | | | IAmb | | IAmb | 12 20 58.7 |
| | comp=Z,35nm,1.0s | | | | | | |
| CCUT | Cedar City | 35.48 | 322 | P | | P | 12 19 51.8 +0.4 |
| F33A | 5 Mile Ranch, | 35.50 | 349 | P | | P | 12 19 49.6 -1.5 |
| VILB | Vilhena | 35.65 | 132 | eP | | P | 12 19 54.8 +2.0 |
| VILB | Vilhena | 35.65 | 132 | P | | P | 12 19 54.3 +1.4 |
| VILB | | | | IAmb | | IAmb | 12 19 55.2 |
| | comp=Z,28nm,0.9s | | | | | | |
| MURC | Murrieta | 35.67 | 314 | P | | P | 12 19 55.3 +2.5 |
| | baz=122 | | | | | | |
| HEC | Hector,Ludlow | 35.73 | 316 | P | | P | 12 19 55.6 +2.1 |
| | baz=124 | | | | | | |
| RSSD | Black Hills | 36.06 | 339 | P | | P | 12 19 58.3 +2.1 |
| RSSD | | | | pmax | | pmax | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| RSSD | Black Hills | 36.06 | 339 | P | | P | 12 19 58.3 +2.1 |
| RSSD | Black Hills | 36.06 | 339 | P | | P | 12 19 58.1 +1.8 |
| | baz=150 | | | | | | |
| NPGB | Novo Progresso | 36.14 | 119 | eP | | P | 12 19 56.1 -0.9 |
| GSC | Goldstone, Bar | 36.32 | 316 | P | | P | 12 19 59.7 +1.2 |
| | baz=124 | | | | | | |
| MCPB | Macapa, AP | 36.38 | 106 | eP | | P | 12 19 59.1 0.0 |
| CIS | Catalina Islan | 36.44 | 312 | P | | P | 12 20 01.7 +2.2 |
| | baz=120 | | | | | | |
| PASC | Pasadena Art C | 36.67 | 314 | P | | P | 12 20 03.2 +1.9 |
| PASC | | | | IAmb | | IAmb | 12 20 41.4 |
| | comp=Z,11nm,0.6s | | | | | | |
| CTU | Camp Tracy | 36.73 | 328 | P | | P | 12 20 02.5 +0.5 |
| CTU | | | | IAmb | | IAmb | 12 20 44.1 |
| | comp=Z,40nm,1.1s | | | | | | |
| TPNV | Topopah Spring | 36.90 | 319 | P | | P | 12 20 03.7 +0.2 |
| | baz=127 | | | | | | |
| EDW2 | Edwards Air Fo | 36.91 | 315 | P | | P | 12 20 05.1 +1.7 |
| | baz=122 | | | | | | |
| DUG | Dugway, Tooele | 36.95 | 326 | P | | P | 12 20 04.1 +0.3 |
| | baz=134 | | | | | | |
| S11A | Rachel | 37.00 | 320 | P | | P | 12 20 06.3 +2.0 |
| SPR3 | Spring Creek 3 | 37.00 | 323 | P | | P | 12 20 05.2 +0.7 |
| SPR3 | | | | IAmb | | IAmb | 12 20 46.0 |
| | comp=Z,14nm,0.7s | | | | | | |
| LRMC | Laurel Mtn Rad | 37.01 | 316 | P | | P | 12 20 06.1 +1.7 |
| | baz=123 | | | | | | |
| FURC | Furnace Creek, | 37.02 | 318 | P | | P | 12 20 05.8 +1.5 |
| | baz=125 | | | | | | |
| SIV | San Ignacio | 37.10 | 136 | LR | | LR | 12 35 18.5 |
| | comp=Z,458nm,20.1s,baz=313,slow=36 | | | | | | |
| MPMC | Manual Prospec | 37.20 | 317 | P | | P | 12 20 07.4 +1.3 |
| | baz=124 | | | | | | |
| BW06 | Boulder Array | 37.20 | 332 | P | | P | 12 20 05.8 -0.3 |
| | baz=141 | | | | | | |
| PDAR | Pinedale Array | 37.20 | 332 | P | | P | 12 20 05.0 -1.0 |
| | comp=Z,2.2nm,0.7s,baz=128,slow=10,SNR=24 | | | | | | |
| E28A | Huff | 37.21 | 344 | P | | P | 12 20 04.8 -1.0 |
| E28A | | | | IAmb | | IAmb | 12 21 02.6 |
| | comp=Z,34nm,1.2s | | | | | | |
| R11A | Troy Canyon, C | 37.34 | 321 | P | | P | 12 20 07.9 +0.7 |
| R11A | | | | IAmb | | IAmb | 12 20 35.8 |
| | comp=Z,16nm,0.8s | | | | | | |
| R11A | Troy Canyon, C | 37.34 | 321 | P | | P | 12 20 08.2 +1.0 |
| | baz=129 | | | | | | |
| PDRB | Porto dos Gac | 37.47 | 126 | eP | | P | 12 20 08.4 0.0 |
| ARVC | Arvin | 37.62 | 315 | P | | P | 12 20 10.9 +1.5 |
| | baz=122 | | | | | | |
| ISA | Isabella, Lake | 37.65 | 316 | P | | P | 12 20 11.2 +1.4 |
| | baz=123 | | | | | | |
| AGMN | Agassiz Nation | 37.79 | 350 | P | | P | 12 20 09.3 -1.4 |
| AGMN | | | | IAmb | | IAmb | 12 20 10.1 |
| | comp=Z,39nm,1.0s | | | | | | |
| CLDB | Colider | 37.80 | 124 | eP | | P | 12 20 11.2 +0.1 |
| AHID | Auburn Hatcher | 37.93 | 330 | P | | P | 12 20 11.7 -0.5 |
| AHID | | | | IAmb | | IAmb | 12 20 28.8 |
| | comp=Z,34nm,0.8s | | | | | | |
| HVU | Hansel Valley | 38.05 | 328 | P | | P | 12 20 14.7 +1.5 |
| HVU | | | | pmax | | pmax | |
| | comp=Z,47nm,1.1s | | | | | | |
| HVU | Hansel Valley | 38.05 | 328 | P | | P | 12 20 14.7 +1.5 |
| HVU | | | | IAmb | | IAmb | 12 20 38.0 |
| | comp=Z,48nm,1.1s | | | | | | |
| PTLB | Pontes e Lacer | 38.07 | 133 | eP | | P | 12 20 13.9 +0.5 |
| PTLB | Pontes e Lacer | 38.07 | 133 | P | | P | 12 20 13.4 0.0 |
| MDND | Maddock | 38.12 | 346 | P | | P | 12 20 12.8 -0.7 |
| | baz=159,SNR=7.9 | | | | | | |
| VES | Vestal, Richgr | 38.17 | 315 | P | | P | 12 20 17.3 +3.2 |
| | baz=122,SNR=6.8 | | | | | | |
| TPH | Tonopah | 38.19 | 320 | P | | P | 12 20 15.0 +0.5 |
| TPH | | | | pmax | | pmax | |
| | comp=Z,158nm,0.9s | | | | | | |
| TPH | Tonopah | 38.19 | 320 | P | | P | 12 20 15.0 +0.5 |
| REDW | Red Top Meadow | 38.27 | 331 | P | | P | 12 20 15.6 +0.6 |
| REDW | | | | IAmb | | IAmb | 12 20 26.9 |
| | comp=Z,42nm,1.1s | | | | | | |
| ECR | Eagle Creek | 38.28 | 331 | P | | P | 12 20 15.9 +0.7 |
| SNOW | Snow King Moun | 38.30 | 332 | P | | P | 12 20 15.2 -0.1 |
| SNOW | | | | IAmb | | IAmb | 12 20 27.1 |
| | comp=Z,47nm,1.2s | | | | | | |
| LOHW | Long Hollow | 38.34 | 332 | P | | P | 12 20 16.8 +1.2 |
| LOHW | | | | IAmb | | IAmb | 12 20 27.0 |
| | comp=Z,18nm,0.8s | | | | | | |
| TPAW | Teton Pass | 38.41 | 331 | P | | P | 12 20 16.4 +0.1 |
| MOOW | Moose Ponds | 38.51 | 332 | P | | P | 12 20 16.7 -0.4 |
| Q09A | Carvers | 38.62 | 321 | P | | P | 12 20 17.9 -0.1 |
| FLWY | Flagg Ranch | 38.75 | 332 | P | | P | 12 20 19.1 +0.1 |
| RLMT | Red Lodge | 38.94 | 335 | P | | P | 12 20 21.2 +0.6 |
| RLMT | | | | IAmb | | IAmb | 12 20 26.4 |
| | comp=Z,46nm,0.9s | | | | | | |
| LAO | LASA Array | 39.05 | 339 | IAmb | | IAmb | 12 20 47.6 |
| | comp=Z,23nm,0.9s | | | | | | |
| LAO | LASA Array | 39.05 | 339 | P | | P | 12 20 22.2 +0.8 |
| | baz=149 | | | | | | |
| NVAR | Mina Array Bea | 39.09 | 319 | PcP | | PcP | 12 22 33.5 +2.0 |
| | comp=Z,7.8nm,0.8s,baz=141,slow=3.0,SNR=8.3 | | | | | | |
| ULM | Lac du Bonnet | 39.69 | 351 | P | | P | 12 20 24.1 -2.5 |
| | comp=Z,25nm,0.9s,baz=169,slow=8.3,SNR=19 | | | | | | |
| ULM | Lac du Bonnet | 39.69 | 351 | P | | P | 12 20 24.5 -2.0 |
| ULM | | | | pmax | | pmax | |
| | comp=Z,28nm,0.9s | | | | | | |
| ULM | Lac du Bonnet | 39.69 | 351 | P | | P | 12 20 24.5 -2.0 |
| ULM | | | | IAmb | | IAmb | 12 20 25.3 |
| | comp=Z,28nm,0.9s | | | | | | |
| DGMT | Dagmar | 39.94 | 342 | P | | P | 12 20 29.4 +0.7 |
| DGMT | | | | IAmb | | IAmb | 12 20 47.5 |
| | comp=Z,33nm,1.1s | | | | | | |
| DGMT | Dagmar | 39.94 | 342 | P | | P | 12 20 28.9 +0.2 |
| | baz=304 | | | | | | |
| TMAB | Tom-Au,PA,Br | 40.78 | 107 | eP | | P | 12 20 36.2 +0.1 |
| SALV | Santo Antonio | 40.88 | 131 | eP | | P | 12 20 37.6 +0.8 |
| SNDB | Serra Nova Dou | 42.09 | 122 | eP | | P | 12 20 47.2 +0.4 |
| PP1B | Ponte de Pedra | 42.55 | 132 | eP | | P | 12 20 51.5 +1.0 |
| ARAG | Araguaiana, MT | 43.73 | 127 | eP | | P | 12 20 59.9 -0.1 |
| YBH | Yreka Blue Hor | 43.74 | 321 | PcP | | PcP | 12 22 46.7 +0.2 |
| | comp=Z,2.2nm,0.8s,baz=117,slow=4.0,SNR=2.5 | | | | | | |
| SMTB | Santa Maria do | 43.78 | 115 | eP | | P | 12 20 59.1 -1.5 |
| AQDB | Aquidauana | 43.87 | 136 | eP | | P | 12 21 01.7 +0.6 |
| AQDB | Aquidauana | 43.87 | 136 | P | | P | 12 21 01.0 -0.1 |
| RPN | Rapa Nui | 43.90 | 210 | LR | | LR | 12 34 26.1 |
| | comp=Z,338nm,20.5s,baz=44,slow=29 | | | | | | |
| PEXB | Peixe | 44.68 | 120 | eP | | P | 12 21 07.2 -0.6 |
| ROSB | Rosrio | 44.69 | 106 | eP | | P | 12 21 07.8 -0.1 |
| SCHQ | Schefferville | 46.33 | 16 | P | | P | 12 21 18.2 -2.1 |
| | comp=Z,12nm,0.9s,baz=211,slow=5.4,SNR=8.9 | | | | | | |
| C06D | Leavenworth | 46.45 | 329 | P | | P | 12 21 22.3 +1.0 |
| | baz=131 | | | | | | |
| BDFB | Brasilia | 46.73 | 124 | P | | P | 12 21 23.9 -0.1 |
| | comp=Z,8.9nm,0.9s,baz=288,slow=8.8,SNR=9.1 | | | | | | |
| BDFB | Brasilia | 46.73 | 124 | P | | P | 12 21 24.1 +0.1 |
| BDFB | | | | pmax | | pmax | |
| | comp=Z,23nm,1.2s | | | | | | |
| BDFB | Brasilia | 46.73 | 124 | P | | P | 12 21 24.1 +0.1 |
| BDFB | | | | IAmb | | IAmb | 12 21 27.5 |
| | comp=Z,23nm,1.2s | | | | | | |
| CPUP | Villa Florida | 47.01 | 143 | P | | P | 12 21 26.2 +0.4 |
| | comp=Z,2.3nm,0.7s,baz=333,slow=11,SNR=4.1 | | | | | | |
| CPUP | Villa Florida | 47.01 | 143 | P | | P | 12 21 26.3 +0.4 |
| CPUP | | | | pmax | | pmax | |
| | comp=Z,14nm,1.4s | | | | | | |
| CPUP | Villa Florida | 47.01 | 143 | eP | | P | 12 21 27.5 +1.6 |
| ITRB | Iturama | 47.21 | 130 | eP | | P | 12 21 27.7 +0.1 |
| NBPS | Pedro II - PI | 47.70 | 106 | eP | | P | 12 21 31.3 -0.3 |
| PCMB | Pacaembu | 47.73 | 133 | eP | | P | 12 21 32.0 +0.4 |
| SDBA | SAO DESIDERIO | 47.74 | 118 | eP | | P | 12 21 30.8 -1.0 |
| IPMB | Ipameri, GO | 47.85 | 127 | eP | | P | 12 21 32.5 -0.1 |
| BB19B | Bebedouro | 49.40 | 130 | eP | | P | 12 21 44.9 +0.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JANB | Januaria | 49.50 | 121 | eP | | P | 12 21 45.2 -0.2 |
| ITQB | Itaqui | 49.94 | 145 | eP | | P | 12 21 49.3 +0.9 |
| ITQB | Itaqui | 49.94 | 145 | P | | P | 12 21 48.7 +0.3 |
| FRTB | Fartura | 50.04 | 133 | eP | | P | 12 21 49.5 +0.1 |
| NBCL | Cascavel-CE | 50.63 | 105 | eP | | P | 12 21 55.5 +1.5 |
| ITAB | Concordia | 50.87 | 139 | eP | | P | 12 21 55.2 -0.3 |
| NBPN | Ponto Novo - B | 51.22 | 114 | eP | | P | 12 21 58.6 +0.3 |
| DIAM | Diamantina, MG | 51.65 | 124 | eP | | P | 12 22 01.9 +0.1 |
| TIJ01 | Guaruva-PR | 51.69 | 135 | eP | | P | 12 22 02.7 +0.9 |
| VAO | Valinhos | 51.71 | 131 | eP | | P | 12 22 02.5 +0.5 |
| BSCB | Bom Sucesso | 52.22 | 128 | eP | | P | 12 22 05.9 0.0 |
| CPSB | Cacapava Do Su | 52.32 | 143 | eP | | P | 12 22 06.4 +0.1 |
| NBIT | Itapeh - BA | 53.61 | 118 | eP | | P | 12 22 16.9 +0.8 |
| CMC01 | Camacan, BA | 53.73 | 118 | eP | | P | 12 22 17.5 +0.6 |
| PLCA | Paso Flores | 53.78 | 165 | P | | P | 12 22 17.1 +0.2 |
| | comp=Z,1.6nm,0.9s,baz=9.0,slow=11,SNR=3.3 | | | | | | |
| PLCA | Paso Flores | 53.78 | 165 | P | | P | 12 22 17.1 +0.2 |
| PLCA | | | | pmax | | pmax | |
| | comp=Z,26nm,1.6s | | | | | | |
| PLCA | Paso Flores | 53.78 | 165 | eP | | P | 12 22 18.4 +1.5 |
| PLCA | Paso Flores | 53.78 | 165 | IAmb | | IAmb | 12 22 23.7 |
| | comp=Z,26nm,1.6s | | | | | | |
| SJMB | Sao Joao De Ma | 53.89 | 123 | eP | | P | 12 22 18.4 +0.3 |
| GUA01 | Guaratinga, BA | 54.04 | 120 | eP | | P | 12 22 19.3 +0.1 |
| RIB01 | Linhares ES | 54.84 | 123 | eP | | P | 12 22 24.8 -0.2 |
| YKA | Yellowknife Ar | 55.02 | 345 | P | | P | 12 22 23.6 -2.0 |
| | comp=Z,6.8nm,0.9s,baz=137,slow=7.5,SNR=18 | | | | | | |
| YKA | | | | PcP | | PcP | 12 23 27.4 +0.4 |
| | comp=Z,0.9nm,0.6s,baz=141,slow=4.3,SNR=5.4 | | | | | | |
| NBRF | Rio Formoso - | 55.05 | 109 | eP | | P | 12 22 27.9 +1.2 |
| CAM01 | Campos-RJ | 55.11 | 127 | eP | | P | 12 22 27.3 +0.5 |
| ALF01 | Guarapari-ES | 55.22 | 125 | eP | | P | 12 22 28.3 +0.6 |
| MMPY | Sheldon Lake, | 60.37 | 338 | P | | P | 12 23 03.6 +0.3 |
| | baz=128 | | | | | | |
| FARO | Faro, Yukon | 60.92 | 337 | P | | P | 12 23 07.3 +0.3 |
| | baz=125 | | | | | | |
| M31M | Drury Creek, Y | 61.30 | 337 | P | | P | 12 23 09.7 +0.1 |
| | baz=124 | | | | | | |
| M30M | Minto, Yukon | 62.45 | 336 | P | | P | 12 23 17.7 +0.3 |
| | baz=122 | | | | | | |
| EPYK | Eagle Plains | 64.49 | 340 | P | | P | 12 23 31.0 +0.3 |
| | baz=124 | | | | | | |
| INK | Inuvik | 64.62 | 343 | P | | P | 12 23 30.4 -1.1 |
| | comp=Z,4.9nm,0.9s,baz=136,slow=8.8,SNR=4.7 | | | | | | |
| INK | Inuvik | 64.62 | 343 | P | | P | 12 23 30.4 -1.1 |
| INK | | | | pmax | | pmax | |
| | comp=Z,21nm,1.5s | | | | | | |
| INK | Inuvik | 64.62 | 343 | IAmb | | IAmb | 12 24 45.8 |
| | comp=Z,21nm,1.4s | | | | | | |
| INK | Inuvik | 64.62 | 343 | P | | P | 12 23 31.3 -0.2 |
| | baz=128 | | | | | | |
| BCAR | Beaver Creek A | 64.68 | 336 | P | | P | 12 23 32.1 0.0 |
| L27K | Beaver Creek, | 64.70 | 336 | P | | P | 12 23 32.2 +0.1 |
| | baz=117 | | | | | | |
| BMRM | Bremner River | 64.98 | 333 | P | | P | 12 23 35.7 +1.6 |
| | baz=114 | | | | | | |
| SCRK | Sand Creek | 65.97 | 336 | P | | P | 12 23 41.3 +0.7 |
| | baz=116 | | | | | | |
| J26L | Joseph Creek | 66.03 | 337 | P | | P | 12 23 41.8 +0.9 |
| | baz=116 | | | | | | |
| RIDG | Independent Ri | 66.22 | 336 | P | | P | 12 23 42.5 +0.4 |
| | baz=114 | | | | | | |
| SCM | Sheep Creek Mo | 66.52 | 333 | P | | P | 12 23 44.5 +0.5 |
| | baz=111 | | | | | | |
| J25K | Salcha River, | 66.79 | 336 | P | | P | 12 23 45.8 +0.1 |
| | baz=114 | | | | | | |
| KNK | Knik Glacier | 66.88 | 333 | P | | P | 12 23 46.7 +0.4 |
| | baz=110 | | | | | | |
| WAT6 | Susitna Watana | 66.97 | 334 | P | | P | 12 23 46.7 -0.3 |
| | baz=111 | | | | | | |
| PRP | Porcupine Dome | 67.22 | 337 | P | | P | 12 23 48.3 -0.2 |
| | baz=114 | | | | | | |
| PMR | Palmer | 67.24 | 333 | P | | P | 12 23 48.6 +0.1 |
| | baz=110 | | | | | | |
| HDA | Harding Lake | 67.33 | 336 | P | | P | 12 23 49.3 +0.2 |
| HDA | | | | IAmb | | IAmb | 12 23 49.5 |
| | comp=Z,22nm,1.2s | | | | | | |
| HDA | Harding Lake | 67.33 | 336 | P | | P | 12 23 49.0 -0.1 |
| | baz=113 | | | | | | |
| IL31 | | 67.45 | 336 | P | | P | 12 23 49.8 +0.1 |
| IL31 | | | | IAmb | | IAmb | 12 23 50.3 |
| | comp=Z,13nm,1.2s | | | | | | |
| ILAR | Eielson Array | 67.45 | 336 | P | | P | 12 23 48.6 -1.1 |
| | comp=Z,4.7nm,1.0s,baz=112,slow=4.5,SNR=12 | | | | | | |
| ILAR | | | | LR | | LR | 12 57 42.4 |
| | comp=Z,149nm,18.8s,baz=68,slow=40 | | | | | | |
| ILAR | Eielson Array | 67.45 | 336 | P | | P | 12 23 49.5 -0.3 |
| ILAR | Eielson Array | 67.45 | 336 | P | | P | 12 23 49.5 -0.3 |
| BMAR | Burnt Mountain | 67.70 | 339 | P | | P | 12 23 51.4 0.0 |
| RND | Reindeer | 67.75 | 335 | P | | P | 12 23 51.9 +0.1 |
| RND | | | | pmax | | pmax | |
| | comp=Z,30nm,1.2s | | | | | | |
| RND | Reindeer | 67.75 | 335 | P | | P | 12 23 51.9 +0.1 |
| KDAK | Kodiak Island | 67.79 | 328 | P | | P | 12 23 52.8 +0.8 |
| | baz=105 | | | | | | |
| MCK | McKinley | 67.89 | 335 | P | | P | 12 23 52.7 +0.1 |
| | baz=110 | | | | | | |
| H24K | Noodor Dome | 68.25 | 337 | P | | P | 12 23 54.8 0.0 |
| | baz=112 | | | | | | |
| NEA2 | Nenana | 68.25 | 336 | P | | P | 12 23 54.6 -0.2 |
| | baz=111 | | | | | | |
| I23K | Minto, Yukon-K | 68.57 | 336 | P | | P | 12 23 56.7 -0.1 |
| | baz=111 | | | | | | |
| BPAW | Bear Paw Mtn. | 68.87 | 335 | P | | P | 12 23 58.6 -0.2 |
| | baz=109 | | | | | | |
| MLY | Manley | 69.08 | 336 | P | | P | 12 23 59.8 -0.3 |
| MLY | Manley | 69.08 | 336 | P | | P | 12 23 59.5 -0.5 |
| | baz=109 | | | | | | |
| CAST | Castle Rocks | 69.12 | 334 | P | | P | 12 23 59.6 -0.8 |
| | baz=107 | | | | | | |
| I21K | Tanana | 69.62 | 336 | P | | P | 12 24 03.3 0.0 |
| | baz=108 | | | | | | |
| COLD | Coldfoot | 69.62 | 338 | P | | P | 12 24 04.2 +0.9 |
| COLD | Coldfoot | 69.62 | 338 | P | | P | 12 24 03.9 +0.6 |
| | baz=111 | | | | | | |
| L20K | Farewell, AK | 69.64 | 333 | P | | P | 12 24 03.5 -0.1 |
| | baz=105 | | | | | | |
| K20K | Telida | 69.96 | 334 | P | | P | 12 24 05.4 -0.1 |
| | baz=106 | | | | | | |
| H21K | Melozitna Rive | 70.10 | 336 | P | | P | 12 24 06.0 -0.3 |
| | baz=108 | | | | | | |
| J20K | Nowinta River | 70.22 | 335 | P | | P | 12 24 07.2 +0.2 |
| J20K | | | | IAmb | | IAmb | 12 24 07.6 |
| | comp=Z,26nm,1.6s | | | | | | |
| J20K | Nowinta River | 70.22 | 335 | P | | P | 12 24 06.6 -0.4 |
| | baz=106 | | | | | | |
| IMAR | Indian Mountai | 70.56 | 336 | P | | P | 12 24 08.5 -0.6 |
| CHGN | Chignik | 70.60 | 326 | P | | P | 12 24 09.5 +0.1 |
| | baz=99 | | | | | | |
| ESDC | Sonseca Array | 77.48 | 52 | P | | P | 12 24 48.0 -2.2 |
| | comp=Z,1.7nm,0.7s,baz=292,slow=5.6,SNR=4.7 | | | | | | |
| DBIC | Dimbokro | 80.86 | 85 | P | | P | 12 25 07.1 -1.9 |
| | comp=Z,3.5nm,0.8s,baz=309,slow=7.4,SNR=3.8 | | | | | | |
| DBIC | Dimbokro | 80.86 | 85 | P | | P | 12 25 07.1 -1.9 |
| DBIC | | | | pmax | | pmax | |
| | comp=Z,35nm,1.8s | | | | | | |
| DBIC | Dimbokro | 80.86 | 85 | IAmb | | IAmb | 12 27 14.1 |
| | comp=Z,35nm,1.8s | | | | | | |
| NOA | NORSAR Array B | 84.18 | 29 | P | | P | 12 25 23.4 -2.1 |
| | comp=Z,0.9nm,0.8s,baz=288,slow=4.4,SNR=1.9 | | | | | | |
| BILL | Bilibino | 85.94 | 339 | P | | P | 12 25 34.3 +0.2 |
| BILL | | | | pmax | | pmax | |
| | comp=Z,17nm,1.1s | | | | | | |
| BILL | Bilibino | 85.94 | 339 | P | | P | 12 25 34.4 +0.3 |
| BILL | | | | IAmb | | IAmb | 12 25 35.1 |
| | comp=Z,14nm,1.0s | | | | | | |
| CLL | Collm | 87.43 | 38 | eP | | P | 12 25 43.0 +1.3 |
| ZALV | Zalesovo Beam | 114.76 | 5 | PKP | | PKiKP | 12 31 34.3 -0.3 |
| | comp=Z,0.3nm,0.4s,baz=20,slow=4.6,SNR=2.0 | | | | | | |
| SONM | Songino Array | 120.11 | 350 | PKP | | PKPdf | 12 31 45.1 -0.3 |
| | comp=Z,1.7nm,0.8s,baz=333,slow=1.2,SNR=14 | | | | | | |
| GEYT | Alibeck | 121.15 | 32 | PKP | | PKiKP | 12 31 48.1 +0.4 |
| | comp=Z,2.2nm,0.6s,baz=56,slow=5.4,SNR=2.2 | | | | | | |
| KSRS | Korea Array | 121.70 | 328 | PKP | | PKiKP | 12 31 49.5 +0.8 |
| | comp=Z,5.9nm,0.8s,baz=16,slow=1.6,SNR=22 | | | | | | |
| KSAR | Wonju Array Be | 121.72 | 328 | PKIKP | | PKiKP | 12 31 49.2 +0.5 |
| KSAR | Wonju Array Be | 121.72 | 328 | PKPdf | | PKiKP | 12 31 49.2 +0.5 |
| BJI | Beijing | 124.78 | 339 | PKP | | PKiKP | 12 31 55.1 +0.4 |
| WMQ | Urumqi | 125.05 | 5 | ePKP | | PKiKP | 12 31 55.4 +0.1 |
| WMQ | | | | LR | | LR | |
| | comp=Z,370nm,29.3s | | | | | | |
| WMQ | | | | LR | | LR | |
| | comp=Z,130nm,26.7s | | | | | | |
| HHC | Hu-ho-hao-te | 125.54 | 343 | ePKP | | PKiKP | 12 31 56.8 +0.4 |
| CHGR | Chuyangaron | 125.59 | 23 | PKPdf | | PKiKP | 12 31 56.5 0.0 |
| HNS | HongShan | 127.65 | 338 | ⇑PKP | | PKiKP | 12 32 00.5 0.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GTA | Gaotai | 129.31 | 353 | ePKP | | PKiKP | 12 32 04.2 +0.2 |
| GTA | | | | LR | | LR | |
| | comp=Z,160nm,18.9s | | | | | | |
| GTA | | | | LR | | LR | |
| | comp=Z,160nm,19.3s | | | | | | |
| GTA | | | | LR | | LR | |
| | comp=Z,200nm,18.5s | | | | | | |
| NJ2 | Nanjing | 130.51 | 331 | ePKP | | PKiKP | 12 32 07.4 +1.0 |
| STKA | Stephens Creek | 130.95 | 237 | PKP | | PKiKP | 12 32 07.8 +0.6 |
| | comp=Z,1.3nm,0.9s,baz=14,slow=4.2,SNR=2.2 | | | | | | |
| LYN | LuoYang | 131.00 | 339 | ⇑PKP | | PKiKP | 12 32 08.2 +0.9 |
| LZH | Lanzhou | 131.94 | 348 | ePKP | | PKiKP | 12 32 09.7 +0.3 |
| LZH | | | | sPKP | | | 12 32 24.1 |
| LZH | | | | LR | | LR | |
| | comp=Z,250nm,17.8s | | | | | | |
| LZH | | | | LR | | LR | |
| | comp=Z,280nm,18.0s | | | | | | |
| LZH | | | | LR | | LR | |
| | comp=Z,340nm,20.1s | | | | | | |
| CD2 | Chengdu | 136.96 | 347 | PKP | | PKPdf | 12 32 16.7 -1.1 |
| ASAR | Alice Springs | 139.36 | 247 | PKhKP | | PKPpre | 12 32 17.1 |
| | comp=Z,0.4nm,0.7s,baz=93,slow=3.7,SNR=4.5 | | | | | | |
| ASAR | | | | PKP | | PKPdf | 12 32 22.8 +0.5 |
| | comp=Z,1.1nm,0.9s,baz=115,slow=1.8,SNR=6.3 | | | | | | |
| ASAR | Alice Springs | 139.36 | 247 | PKIKP | | PKPdf | 12 32 22.7 +0.4 |
| PZH | PanZhiHua | 141.65 | 348 | PKP | | PKPdf | 12 32 25.9 -0.6 |
| FITZ | Fitzroy Crossi | 147.90 | 254 | PKPbc | | PKPbc | 12 32 39.3 -1.0 |
| | comp=Z,4.4nm,0.6s,baz=111,slow=5.2,SNR=4.9 | | | | | | |
| CMAR | Chiang Mai Arr | 150.03 | 349 | PKP | | PKPdf | 12 32 41.7 +0.9 |
| | comp=Z,13nm,1.1s,baz=313,slow=2.2,SNR=20 | | | | | | |
| CMAR | | | | PKPbc | | PKiKP | 12 32 47.2 +0.6 |
| | comp=Z,22nm,1.1s,baz=314,slow=2.6,SNR=22 | | | | | | |
| CMAR | Chiang Mai Arr | 150.03 | 349 | PKP2 | | PKiKP | 12 32 46.7 +0.1 |
| CMAR | Chiang Mai Arr | 150.03 | 349 | PKPbc | | PKiKP | 12 32 46.7 +0.1 |

*IDC **09** 12:20:16.0±1.5, 35˚.66N×3˚.80W, h0km, mb3.3/2, mb1 3.4/4, mb1mx3.2/48, mbtmp3.1/4, ML2.9/2, Error ellipse: s-maj=43.5km s-min=13.1km az=93.0*

*CNRM **09** 12:20:16.3, 35˚.66N×3˚.51W, h22km, ml3.4*

*SFS **09** 12:20:16.0, 35˚.60N×3˚.62W, ML2.7, ALBORAN SUR*

*INMG **09** 12:20:17.2±0.9, 35˚.62N×3˚.64W, h0km, ML2.6, Error ellipse: s-maj=3.4km s-min=2.2km az=169.0*

*IGIL **09** 12:20:17.2, 35˚.60N×3˚.62W, h0km*

**ISC 09 12:20:15.2**±1.5, **35˚.64N**±0˚.03×**3˚.56W**±0˚.04, **h3**km±12km, **n39**,σ1°**30**/65, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.52 | 216 | P | | P | Pb | 12 20 27.7 | +0.8 |
| PALE | | | | S | | S | Sb | 12 20 35.5 | +0.7 |
| GOG | Mont Gurugu | 0.62 | 132 | P | | P | Pg | 12 20 27.8 | +0.7 |
| GOG | | | | S | | S | Sg | 12 20 35.3 | +0.2 |
| CHAS | Isla Isabel II | 1.03 | 116 | P | | P | Pg | 12 20 34.2 | -0.7 |
| CHAS | | | | S | | S | Sg | 12 20 46.9 | -1.4 |
| TAF | Taforalt | 1.25 | 131 | P | | P | Pn | 12 20 38.1 | -1.4 |
| TAF | | | | S | | S | Sb | 12 20 54.1 | -1.8 |
| EMAL | Malaga-Limoner | 1.32 | 328 | P | | P | Pn | 12 20 40.1 | -0.4 |
| EMAL | | | | S | | S | Sb | 12 20 55.5 | -2.4 |
| SMIR | Smir Dam | 1.48 | 272 | P | | P | Pn | 12 20 40.4 | -2.3 |
| SMIR | | | | S | | S | Sn | 12 20 59.4 | -3.1 |
| CHEFC | Chefchaouen | 1.54 | 250 | P | | P | Pb | 12 20 44.6 | +0.1 |
| CHEFC | | | | S | | S | Sn | 12 21 02.9 | -1.4 |
| SICH | Sidi Chahed | 2.10 | 224 | P | | P | Pb | 12 20 53.2 | -0.7 |
| SICH | | | | S | | S | Sb | 12 21 21.1 | +0.7 |
| LCRM | LCR | 2.22 | 209 | P | | P | Pb | 12 20 55.5 | -0.5 |
| LCRM | | | | S | | S | Sb | 12 21 22.3 | -1.6 |
| IFR | Ifrane | 2.48 | 212 | P | | P | Pn | 12 20 56.9 | +0.3 |
| IFR | | | | S | | S | Sn | 12 21 26.3 | -1.1 |
| TDRA | Tendrara | 2.88 | 153 | P | | P | Pn | 12 21 02.2 | 0.0 |
| MD31 | MD31 | 2.94 | 200 | P | | P | Pn | 12 21 03.3 | +0.6 |
| MD31 | | | | S | | S | Sn | 12 21 38.5 | -0.1 |
| MDT | Midelt | 2.95 | 197 | Pn | | Pn | Pn | 12 21 03.3 | +0.3 |
| | 0.5nm,0.3s,baz=64,slow=4.0,SNR=35 | | | | | | | | |
| MDT | | | | Sn | | Sn | Sn | 12 21 39.0 | +0.1 |
| | 6.5nm,0.3s,baz=18,slow=11,SNR=9.2 | | | | | | | | |
| MDT | | | | Lg | | Lg | Lg | 12 21 48.9 | |
| | 4.1nm,0.3s,baz=37,slow=15,SNR=6.9 | | | | | | | | |
| MDT | Midelt | 2.95 | 197 | P | | P | Pn | 12 21 03.6 | +0.7 |
| ZHG | ZHG | 3.35 | 230 | P | | P | Pn | 12 21 09.3 | +0.8 |
| PVAQ | Vaqueiros | 3.78 | 299 | ePn | | Pn | Pn | 12 21 14.7 | +0.4 |
| PVAQ | | | | eSn | | Sn | Sn | 12 21 57.6 | -1.7 |
| PVAQ | | | | A | | A | A | 12 22 03.6 | |
| | 10.0nm,0.7s | | | | | | | | |
| PVAQ | Vaqueiros | 3.78 | 299 | P | | P | Pn | 12 21 14.8 | +0.5 |
| PVAQ | | | | S | | S | Sn | 12 21 58.2 | -1.1 |
| PBDV | Barranco-do-Ve | 3.87 | 296 | ePn | | Pn | Pn | 12 21 16.0 | +0.4 |
| PBDV | | | | eSn | | Sn | Sn | 12 22 00.9 | -0.6 |
| PBDV | | | | A | | A | A | 12 22 06.5 | |
| | 11nm,0.6s | | | | | | | | |
| FIGM | Figuig | 3.98 | 151 | P | | P | Pn | 12 21 17.1 | -0.2 |
| ESDC | Sonseca Array | 4.04 | 356 | Pn | | Pn | Pn | 12 21 19.2 | +1.2 |
| | 0.7nm,0.3s,baz=178,slow=13,SNR=13 | | | | | | | | |
| ESDC | | | | Sn | | Sn | Sn | 12 22 06.8 | +0.9 |
| | 0.3nm,0.3s,baz=180,slow=15,SNR=2.0 | | | | | | | | |
| ESDC | | | | Lg | | Lg | Lg | 12 22 23.2 | |
| | 0.8nm,0.3s,baz=176,slow=28,SNR=5.4 | | | | | | | | |
| PCVE | Castro Verde | 4.11 | 300 | ePn | | Pn | Pn | 12 21 19.3 | +0.4 |
| PCVE | | | | eSn | | Sn | Sn | 12 22 06.5 | -1.0 |
| PCVE | | | | A | | A | A | 12 22 12.3 | |
| | 8.9nm,0.5s | | | | | | | | |
| PBEJ | Beja | 4.20 | 306 | ePn | | Pn | Pn | 12 21 22.0 | +2.0 |
| MESJ | Messejana | 4.34 | 302 | eP | | Pn | Pn | 12 21 22.1 | +0.2 |
| MESJ | Messejana | 4.34 | 302 | ePn | | Pn | Pn | 12 21 22.4 | +0.4 |
| MESJ | | | | eSn | | Sn | Sn | 12 22 11.7 | -1

*MOS **09** 12:28:47.0±1.4,57°.89S×25°.96W,h96km,mb5.2/9 Error ellipse: s-maj=19.9km s-min=10.7km az=112.9*
*NEIC **09** 12:28:48.3±2.2,57°.89S±0°.09×26°.1W±0°.2,h99km±4km, mb5.2/94,Error ellipse: s-maj=14.3km s-min=10.7km az=212.0*
**ISC 09 12:28:45.3**±0.4,**57°.92S**±0°.06×**25°.91W**±0°.06,**h78**km±3km, **h78**km:**pP-P,n578,**σ0:**89**/599,**mb5.2**/71,**13C-9D,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **6.95** | **297** | P | | **Pn** | | **12 30 27.1** | **+2.8** |
| **HOPE** | **Hope Point** | **6.95** | **297** | | | | | **12 30 27.1** | **+2.8** |
| **VNA1** | **Neumayer--Stat** | **14.80** | **157** | P | | **Pn** | | **12 32 09.9** | **-0.1** |
| **VNA3** | **Neumayer Olymp** | **14.99** | **160** | P | | **Pn** | | **12 32 12.0** | **-0.6** |
| **VNA2** | **Neumayer--Watz** | **15.20** | **157** | P | | **Pn** | | **12 32 14.0** | **-1.1** |
| | baz=324,slow=15 | | | | | | | | |
| **SNAA** | **Sanae** | **16.75** | **155** | P | | **P** | | **12 32 35.5** | **-0.2** |
| SNAA | | | | S | | Sn | | 12 35 25.5 | -14 |
| **SNAA** | **Sanae** | **16.75** | **155** | P | | **Pn** | | **12 32 34.5** | **-0.2** |
| | 8.8nm,0.3s,baz=322,slow=16,SNR=190 | | | | | | | | |
| SNAA | | | | S | | Sn | | 12 35 26.2 | -14 |
| | 0.3nm,0.3s,baz=332,slow=19,SNR=3.7 | | | | | | | | |
| SNAA | | | | LR | | LR | | 12 37 50.1 | |
| | comp=Z,775nm,20.3s,baz=333,slow=32 | | | | | | | | |
| SNAA | | | | ScP | | **ScP** | | **12 40 47.2** | **+1.5** |
| | 0.2nm,0.3s,baz=347,slow=1.6,SNR=5.8 | | | | | | | | |
| **SNAA** | **Sanae** | **16.75** | **155** | PKP2 | | **Pn** | | **12 32 34.5** | **-0.2** |
| **SNAA** | **Sanae** | **16.75** | **155** | Pn | | **P** | | **12 32 35.9** | **+0.3** |
| SNAA | | | | IAmb | | IAmb | | 12 32 38.1 | |
| | comp=Z,91nm,0.9s | | | | | | | | |
| **PMSA** | **Palmer Station** | **19.27** | **233** | P | | **Pn** | | **12 33 05.7** | **+0.7** |
| | comp=Z,2.6nm,0.3s,baz=69,slow=7.0,SNR=9.6 | | | | | | | | |
| PMSA | | | | LR | | LR | | 12 39 17.1 | |
| | comp=Z,692nm,21.9s,baz=110,slow=33 | | | | | | | | |
| **PMSA** | **Palmer Station** | **19.27** | **233** | P | | **Pn** | | **12 33 04.5** | **-0.5** |
| PMSA | | | | IAmb | | IAmb | | 12 33 12.6 | |
| | comp=Z,129nm,0.8s | | | | | | | | |
| **EFI** | **East Falkland** | **19.43** | **275** | *de*P | | **Pn** | | **12 33 07.2** | **+0.2** |
| EFI | | | | pmax | | pmax | | | |
| | comp=Z,167nm,1.0s | | | | | | | | |
| **EFI** | **East Falkland** | **19.43** | **275** | Pn | | **Pn** | | **12 33 06.8** | **-0.1** |
| EFI | | | | IAmb | | IAmb | | 12 33 09.1 | |
| | comp=Z,166nm,0.8s | | | | | | | | |
| **BELA** | **Belgrano 2** | **20.27** | **185** | P | | **P** | | **12 33 14.6** | **+0.5** |
| **NVL** | **N'lazarevskaya** | **20.32** | **144** | *e*P | | Pn | | 12 33 17.6 | +0.3 |
| **SMAI** | **San Martin Ant** | **20.85** | **224** | P | | **P** | | **12 33 20.3** | **0.0** |
| **H09N1** | **TRISTAN DA CUN** | **22.70** | **29** | T | | T | | 12 56 25.0 | |
| | SNR=36 | | | | | | | | |
| **USHA** | **Ushuaia** | **23.46** | **259** | P | | **P** | | **12 33 46.9** | **-0.7** |
| | comp=Z,15nm,0.7s,baz=105,slow=12,SNR=6.5 | | | | | | | | |
| USHA | | | | LR | | LR | | 12 40 53.2 | |
| | comp=Z,2μm,21.6s,baz=84,slow=31 | | | | | | | | |
| **DSPA** | **Despedida** | **23.76** | **261** | P | | **P** | | **12 33 48.4** | **-1.8** |
| **MG04** | **Isla Riesco** | **26.02** | **261** | P | | **P** | | **12 34 09.7** | **-1.0** |
| **MG05** | **Puerto Natales** | **27.12** | **263** | P | | **P** | | **12 34 19.0** | **-1.6** |
| **GO08** | **Villa O'Higgin** | **28.96** | **269** | P | | **P** | | **12 34 37.1** | **+0.1** |
| **SYO** | **Syowa Base** | **29.70** | **139** | *e*P | | **P** | | **12 34 42.6** | **-0.7** |
| **COYC** | **Coyhaique** | **30.51** | **274** | P | | **P** | | **12 34 52.1** | **+1.3** |
| COYC | | | | IAmb | | IAmb | | 12 35 15.4 | |
| | comp=Z,74nm,1.4s | | | | | | | | |
| **LL02** | **Futaleuf** | **31.99** | **277** | P | | **P** | | **12 35 04.5** | **+0.7** |
| LL02 | | | | IAmb | | IAmb | | 12 35 21.1 | |
| | comp=Z,147nm,1.9s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **32.27** | **312** | P | | **P** | | **12 35 06.0** | **-0.4** |
| PLTB | | | | IAmb | | IAmb | | 12 35 08.6 | |
| | comp=Z,35nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.33** | **180** | P | | **P** | | **12 35 08.2** | **+1.5** |
| | comp=Z,23nm,0.9s,baz=203,slow=4.7,SNR=40 | | | | | | | | |
| QSPA | | | | PcP | | **PcP** | | **12 37 52.6** | **+0.1** |
| | comp=Z,6.4nm,0.7s,baz=161,slow=3.0,SNR=1.4 | | | | | | | | |
| QSPA | | | | ScP | | **ScP** | | **12 41 30.9** | **+2.0** |
| | comp=Z,4.6nm,1.0s,baz=213,slow=3.9,SNR=3.8 | | | | | | | | |
| QSPA | | | | LR | | LR | | 12 48 13.4 | |
| | comp=Z,191nm,18.9s,baz=183,slow=36 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.33** | **180** | | | **P** | | **12 35 08.3** | **+1.5** |
| **PLCA** | **Paso Flores** | **33.04** | **282** | P | | **P** | | **12 35 13.3** | **+0.3** |
| | comp=Z,19nm,0.8s,baz=144,slow=8.6,SNR=22 | | | | | | | | |
| PLCA | | | | PcP | | **PcP** | | **12 37 54.6** | **-0.2** |
| | comp=Z,2.3nm,0.6s,baz=103,slow=3.4,SNR=3.3 | | | | | | | | |
| PLCA | | | | ScP | | **ScP** | | **12 41 31.0** | **-0.7** |
| | comp=Z,6.2nm,0.9s,baz=152,slow=2.1,SNR=6.9 | | | | | | | | |
| PLCA | | | | LR | | LR | | 12 48 07.6 | |
| | comp=Z,354nm,20.2s,baz=134,slow=35 | | | | | | | | |
| **PLCA** | **Paso Flores** | **33.04** | **282** | P | | **P** | | **12 35 13.4** | **+0.3** |
| PLCA | | | | IAmb | | IAmb | | 12 35 30.3 | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| **LL07** | **Hotel Espejo d** | **33.10** | **276** | P | | **P** | | **12 35 12.6** | **-0.9** |
| **CPSB** | **Cacapava Do Su** | **33.41** | **314** | *e*P | | **P** | | **12 35 15.5** | **-0.8** |
| **TER01** | **Tubaro-SC** | **33.55** | **321** | *e*P | | **P** | | **12 35 18.2** | **+0.7** |
| **LL03** | **Petrohue** | **33.72** | **279** | P | | **P** | | **12 35 18.8** | **-0.1** |
| LL03 | | | | IAmb | | IAmb | | 12 35 21.3 | |
| | comp=Z,56nm,0.8s | | | | | | | | |
| **LC01** | **Cunco** | **35.08** | **283** | P | | **P** | | **12 35 30.3** | **-0.4** |
| LC01 | | | | IAmb | | IAmb | | 12 35 34.4 | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **LR04** | **Corral** | **35.17** | **280** | P | | **P** | | **12 35 31.9** | **+0.5** |
| **ITQB** | **Itaqui** | **35.33** | **310** | *e*P | | **P** | | **12 35 31.3** | **-1.5** |
| **ITQB** | **Itaqui** | **35.33** | **310** | P | | **P** | | **12 35 32.0** | **-0.8** |
| **ITAB** | **Concordia** | **35.78** | **318** | *e*P | | **P** | | **12 35 37.3** | **+0.5** |
| **ITAB** | **Concordia** | **35.78** | **318** | P | | **P** | | **12 35 37.0** | **+0.3** |
| ITAB | | | | IAmb | | IAmb | | 12 35 39.5 | |
| | comp=Z,78nm,1.5s | | | | | | | | |
| **PET01** | **Itanhaem-SP** | **36.92** | **326** | *e*P | | **P** | | **12 35 46.2** | **-0.3** |
| **PARB** | **Paraibuna** | **37.35** | **329** | *e*P | | **P** | | **12 35 51.1** | **+0.9** |
| **MAN01** | **Angra dos Reis** | **37.37** | **332** | *e*P | | **P** | | **12 35 51.1** | **+0.8** |
| **BI05** | **Punta Hualpn** | **37.38** | **284** | P | | **P** | | **12 35 50.1** | **-0.2** |
| **BO02** | **Sierra Bellavi** | **37.66** | **288** | P | | **P** | | **12 35 54.1** | **+1.3** |
| **DUB01** | **Friburgo-RJ** | **37.74** | **335** | *e*P | | **P** | | **12 35 54.5** | **+1.0** |
| **CAM01** | **Campos-RJ** | **37.83** | **336** | *e*P | | **P** | | **12 35 55.3** | **+1.2** |
| **VAO** | **Valinhos** | **38.05** | **328** | *e*P | | **P** | | **12 35 56.9** | **+0.8** |
| **PTGB** | **Pitanga** | **38.06** | **319** | *e*P | | **P** | | **12 35 55.9** | **-0.4** |
| **GO05** | **Huala** | **38.08** | **287** | P | | **P** | | **12 35 55.2** | **-1.0** |
| GO05 | | | | IAmb | | IAmb | | 12 35 59.6 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **LMEL** | **Las Melosas** | **38.12** | **290** | P | | **P** | | **12 35 55.9** | **-0.8** |
| **MAW** | **Mawson** | **38.23** | **142** | P | | **P** | | **12 35 56.9** | **-0.2** |
| | comp=Z,28nm,0.9s,baz=211,slow=7.1,SNR=6.2 | | | | | | | | |
| MAW | | | | LR | | LR | | 12 49 22.1 | |
| | comp=Z,308nm,21.0s,baz=242,slow=32 | | | | | | | | |
| **MAW** | **Mawson** | **38.23** | **142** | IAmb | | IAmb | | 12 35 57.8 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **FRTB** | **Fartura** | **38.51** | **324** | *e*P | | **P** | | **12 36 00.4** | **+0.5** |
| **MT09** | **Talagante** | **38.57** | **289** | P | | **P** | | **12 36 00.1** | **-0.4** |
| MT09 | | | | IAmb | | IAmb | | 12 37 15.2 | |
| | comp=Z,62nm,1.4s | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.57** | **311** | P | | **P** | | **12 35 59.1** | **-1.2** |
| | comp=Z,19nm,0.8s,baz=155,slow=8.9,SNR=24 | | | | | | | | |
| CPUP | | | | PcP | | **PcP** | | **12 38 11.7** | **+0.4** |
| | comp=Z,5.4nm,0.8s,baz=96,slow=0.8,SNR=2.9 | | | | | | | | |
| CPUP | | | | S | | **S** | | **12 41 51.7** | **+1.1** |
| | comp=Z,6.9nm,0.9s,baz=195,slow=12,SNR=6.3 | | | | | | | | |
| CPUP | | | | LR | | LR | | 12 50 51.5 | |
| | comp=Z,349nm,18.7s,baz=155,slow=34 | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.57** | **311** | *e*P | | **P** | | **12 35 59.4** | **-0.9** |
| **CPUP** | **Villa Florida** | **38.57** | **311** | P | | **P** | | **12 35 59.4** | **-0.9** |
| CPUP | | | | IAmb | | IAmb | | 12 36 01.9 | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **MT01** | **Popeta** | **38.63** | **289** | P | | **P** | | **12 36 01.7** | **+0.9** |
| MT01 | | | | IAmb | | IAmb | | 12 36 23.9 | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **38.76** | **327** | *e*P | | **P** | | **12 36 03.4** | **+1.4** |
| **ALF01** | **Guarapari-ES** | **38.80** | **338** | *e*P | | **P** | | **12 36 03.2** | **+0.9** |
| **PEL** | **Peldehue** | **38.92** | **290** | P | | **P** | | **12 36 02.8** | **-0.5** |
| PEL | | | | pmax | | pmax | | | |
| | comp=Z,36nm,1.1s | | | | | | | | |
| **PEL** | **Peldehue** | **38.92** | **290** | P | | **P** | | **12 36 02.8** | **-0.5** |
| PEL | | | | IAmb | | IAmb | | 12 36 22.6 | |
| | comp=Z,36nm,1.1s | | | | | | | | |
| **VA05** | **Santo Domingo** | **38.98** | **288** | P | | **P** | | **12 36 03.0** | **-0.7** |
| **MT02** | **Curacav** | **39.05** | **289** | P | | **P** | | **12 36 03.6** | **-0.8** |
| MT02 | | | | IAmb | | IAmb | | 12 36 09.1 | |
| | comp=Z,47nm,1.1s | | | | | | | | |
| **VA03** | **San Esteban** | **39.16** | **290** | P | | **P** | | **12 36 04.8** | **-0.5** |
| VA03 | | | | IAmb | | IAmb | | 12 36 47.5 | |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **ROC1** | **El Roble** | **39.22** | **290** | P | | **P** | | **12 36 05.8** | **-0.2** |
| **BSCB** | **Bom Sucesso** | **39.36** | **332** | *e*P | | **P** | | **12 36 08.0** | **+0.9** |
| **MATJ** | **Matjiesfontein** | **39.69** | **72** | P | | **P** | | **12 36 09.4** | **-0.3** |
| MATJ | | | | IAmb | | IAmb | | 12 36 10.5 | |
| | comp=Z,72nm,1.2s | | | | | | | | |
| **RIB01** | **Linhares ES** | **40.00** | **338** | *e*P | | **P** | | **12 36 13.5** | **+1.2** |
| **BB19B** | **Bebedouro** | **40.33** | **326** | *e*P | | **P** | | **12 36 15.9** | **+0.8** |
| **SUR** | **Sutherland** | **40.51** | **71** | P | | **P** | | **12 36 16.5** | **-0.1** |
| | comp=Z,23nm,0.8s,baz=193,slow=10,SNR=13 | | | | | | | | |
| SUR | | | | LR | | LR | | 12 48 56.5 | |
| | comp=Z,629nm,20.6s,baz=226,slow=30 | | | | | | | | |
| **SUR** | **Sutherland** | **40.51** | **71** | P | | **P** | | **12 36 16.9** | **+0.2** |
| SUR | | | | IAmb | | IAmb | | 12 36 18.2 | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| **PCMB** | **Pacaembu** | **40.67** | **322** | *e*P | | **P** | | **12 36 17.1** | **-0.8** |
| **CVNA** | **Calvinia** | **40.70** | **70** | P | | **P** | | **12 36 18.7** | **+0.6** |
| CVNA | | | | IAmb | | IAmb | | 12 36 19.6 | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **SJMB** | **Sao Joao De Ma** | **40.75** | **338** | *e*P | | **P** | | **12 36 18.8** | **+0.3** |
| **GRAN** | **Grantham** | **41.26** | **73** | *e*P | | **P** | | **12 36 23.0** | **+0.3** |
| GRAN | | | | IAmb | | IAmb | | 12 36 23.3 | |
| | comp=Z,50nm,0.6s | | | | | | | | |
| **DIAM** | **Diamantina, MG** | **41.69** | **334** | *e*P | | **P** | | **12 36 26.8** | **+0.4** |
| **ITRB** | **Iturama** | **42.17** | **324** | *e*P | | **P** | | **12 36 30.5** | **+0.4** |
| **LCO** | **Las Campanas** | **42.29** | **293** | *e*P | | **P** | | **12 36 31.1** | **-0.2** |
| **LCO** | **Las Campanas** | **42.29** | **293** | P | | **P** | | **12 36 31.1** | **-0.2** |
| **GUA01** | **Guaratinga, BA** | **42.55** | **340** | *e*P | | **P** | | **12 36 33.9** | **+0.7** |
| **AC04** | **Llanos de Chal** | **43.14** | **294** | P | | **P** | | **12 36 37.1** | **-0.8** |
| AC04 | | | | IAmb | | IAmb | | 12 36 39.4 | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **IPMB** | **Ipameri, GO** | **43.16** | **328** | *e*P | | **P** | | **12 36 38.2** | **+0.1** |
| **AQDB** | **Aquidauana** | **43.25** | **317** | *e*P | | **P** | | **12 36 37.8** | **-1.0** |
| **AQDB** | **Aquidauana** | **43.25** | **317** | P | | **P** | | **12 36 37.7** | **-1.1** |
| AQDB | | | | IAmb | | IAmb | | 12 36 39.9 | |
| | comp=Z,22nm,0.6s | | | | | | | | |
| **AC02** | **Maricunga** | **43.35** | **297** | P | | **P** | | **12 36 39.1** | **-1.0** |
| **KEIM** | **Keimoes** | **43.57** | **68** | *e*P | | **P** | | **12 36 40.0** | **-1.4** |
| KEIM | | | | IAmb | | IAmb | | 12 36 42.4 | |
| | comp=Z,34nm,0.8s | | | | | | | | |
| **CMC01** | **Camacan, BA** | **43.69** | **341** | *e*P | | **P** | | **12 36 42.6** | **+0.2** |
| **UPI** | **Upington** | **43.99** | **68** | *e*P | | **P** | | **12 36 43.1** | **-1.7** |
| UPI | | | | IAmb | | IAmb | | 12 36 45.7 | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| **NBIT** | **Itapeh - BA** | **44.10** | **341** | *e*P | | **P** | | **12 36 46.1** | **+0.5** |
| **VNDA** | **Vanda** | **44.73** | **182** | P | | **P** | | **12 36 51.6** | **+1.5** |
| | comp=Z,13nm,0.7s,baz=184,slow=6.6,SNR=24 | | | | | | | | |
| VNDA | | | | LR | | LR | | 12 55 54.0 | |
| | comp=Z,28nm,19.7s,baz=164,slow=36 | | | | | | | | |
| **VNDA** | **Vanda** | **44.73** | **182** | P | | **P** | | **12 36 51.0** | **+0.9** |
| **JANB** | **Januaria** | **44.96** | **334** | *e*P | | **P** | | **12 36 52.9** | **+0.3** |
| **GDU01** | **Guandu, BA** | **45.31** | **341** | *e*P | | **P** | | **12 36 55.3** | **0.0** |
| **BDFB** | **Brasilia** | **45.33** | **329** | P | | **P** | | **12 36 56.4** | **+0.8** |
| | comp=Z,53nm,0.8s,baz=149,slow=3.9,SNR=69 | | | | | | | | |
| BDFB | | | | ScP | | **ScP** | | **12 42 19.7** | **+0.4** |
| | comp=Z,3.3nm,0.7s,baz=241,slow=10,SNR=2.9 | | | | | | | | |
| BDFB | | | | LR | | LR | | 12 52 53.1 | |
| | comp=Z,229nm,21.0s,baz=151,slow=32 | | | | | | | | |
| **BDFB** | **Brasilia** | **45.33** | **329** | P | | **P** | | **12 36 55.0** | **-0.6** |
| BDFB | | | | IAmb | | IAmb | | 12 36 57.4 | |
| | comp=Z,48nm,0.8s | | | | | | | | |
| **PP1B** | **Ponte de Pedra** | **45.61** | **320** | *e*P | | **P** | | **12 36 57.8** | **+0.1** |
| **BOSA** | **Boshof** | **45.80** | **73** | P | | **P** | | **12 36 58.6** | **-0.7** |
| | comp=Z,39nm,0.8s,baz=210,slow=7.5,SNR=45 | | | | | | | | |
| BOSA | | | | LR | | LR | | 12 52 03.6 | |
| | comp=Z,509nm,22.0s,baz=228,slow=31 | | | | | | | | |
| **BOSA** | **Boshof** | **45.80** | **73** | P | | **P** | | **12 36 58.5** | **-0.7** |
| BOSA | | | | IAmb | | IAmb | | 12 36 59.2 | |
| | comp=Z,49nm,0.9s | | | | | | | | |
| **BOSA** | **Boshof** | **45.80** | **73** | P | | **P** | | **12 36 58.8** | **-0.4** |
| BOSA | | | | pmax | | pmax | | | |
| | comp=Z,50nm,0.9s | | | | | | | | |
| **BOSA** | **Boshof** | **45.80** | **73** | *i* P | | **P** | | **12 36 58.8** | **-0.4** |
| **BOSA** | **Boshof** | **45.80** | **73** | *i* P | | **P** | | **12 36 58.8** | **-0.4** |
| **BOSA** | **Boshof** | **45.80** | **73** | P | | **P** | | **12 36 58.8** | **-0.4** |
| BOSA | | | | IAmb | | IAmb | | 12 36 59.6 | |
| | comp=Z,50nm,0.9s | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **46.38** | **324** | *e*P | | **P** | | **12 37 04.0** | **+0.3** |
| **LVC** | **Limon Verde** | **46.85** | **300** | LR | | LR | | 12 58 26.4 | |
| | comp=Z,266nm,19.4s,baz=188,slow=38 | | | | | | | | |
| **LVC** | **Limon Verde** | **46.85** | **300** | P | | **P** | | **12 37 06.9** | **-0.9** |
| LVC | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **LVC** | **Limon Verde** | **46.85** | **300** | *e*P | | **P** | | **12 37 07.5** | **-0.2** |
| **LVC** | **Limon Verde** | **46.85** | **300** | P | | **P** | | **12 37 06.9** | **-0.9** |
| **SWZ** | **Schweizer** | **47.01** | **72** | *e*P | | **P** | | **12 37 06.9** | **-1.8** |
| SWZ | | | | IAmb | | IAmb | | 12 37 08.7 | |
| | comp=Z,51nm,0.7s | | | | | | | | |
| **PB06** | **IPOC Station P** | **47.07** | **299** | P | | **P** | | **12 37 08.5** | **-0.8** |
| **SALV** | **Santo Antonio** | **47.47** | **320** | *e*P | | **P** | | **12 37 12.3** | **+0.1** |
| **SDBA** | **SAO DESIDERIO** | **47.66** | **335** | *e*P | | **P** | | **12 37 14.3** | **+0.6** |
| **PB04** | **IPOC Station P** | **47.66** | **299** | P | | **P** | | **12 37 12.8** | **-1.1** |
| PB04 | | | | IAmb | | IAmb | | 12 37 20.0 | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **NBLA** | **Lagarto - SE** | **47.70** | **344** | *e*P | | **P** | | **12 37 14.1** | **+0.1** |
| **PB09** | **IPOC Station P** | **47.70** | **300** | P | | **P** | | **12 37 14.1** | **-0.1** |
| PB09 | | | | IAmb | | IAmb | | 12 37 17.6 | |
| | comp=Z,77nm,1.6s | | | | | | | | |
| **PB03** | **IPOC Station P** | **47.72** | **300** | P | | **P** | | **12 37 12.8** | **-1.5** |
| **PB07** | **IPOC Station P** | **48.06** | **300** | P | | **P** | | **12 37 15.5** | **-1.5** |
| PB07 | | | | IAmb | | IAmb | | 12 37 19.6 | |
| | comp=Z,19nm,0.6s | | | | | | | | |
| **NBPN** | **Ponto Novo - B** | **48.23** | **341** | *e*P | | **P** | | **12 37 17.8** | **-0.2** |
| **PRYS** | **Parys** | **48.25** | **74** | *e*P | | **P** | | **12 37 16.5** | **-1.8** |
| PRYS | | | | IAmb | | IAmb | | 12 37 18.2 | |
| | comp=Z,92nm,1.4s | | | | | | | | |
| **PB02** | **IPOC Station P** | **48.42** | **300** | P | | **P** | | **12 37 19.1** | **-0.6** |
| PB02 | | | | IAmb | | IAmb | | 12 38 30.4 | |
| | comp=Z,39nm,1.3s | | | | | | | | |
| **PB01** | **IPOC Station P** | **48.47** | **301** | P | | **P** | | **12 37 19.6** | **-0.4** |
| **PEXB** | **Peixe** | **48.79** | **330** | *e*P | | **P** | | **12 37 23.2** | **+0.8** |
| **NBAN** | **Anadia - AL** | **48.80** | **346** | *e*P | | **P** | | **12 37 22.2** | **-0.2** |
| **NWCL** | **Newcastle** | **48.90** | **77** | P | | **P** | | **12 37 22.4** | **-0.8** |
| NWCL | | | | IAmb | | IAmb | | 12 37 23.2 | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| **LBTB** | **Lobatse** | **48.92** | **70** | P | | **P** | | **12 37 22.0** | **-1.5** |
| | comp=Z,40nm,0.8s,baz=209,slow=8.3,SNR=37 | | | | | | | | |
| LBTB | | | | LR | | LR | | 12 53 53.4 | |
| | comp=Z,394nm,20.9s,baz=220,slow=31 | | | | | | | | |
| **LBTB** | **Lobatse** | **48.92** | **70** | *i* P | | **P** | | **12 37 22.7** | **-0.7** |
| LBTB | | | | IAmb | | IAmb | | 12 37 23.8 | |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **LBTB** | **Lobatse** | **48.92** | **70** | P | | **P** | | **12 37 23.0** | **-0.5** |
| LBTB | | | | pmax | | pmax | | | |
| | comp=Z,49nm,0.9s | | | | | | | | |
| **LBTB** | **Lobatse** | **48.92** | **70** | *i* P | | **P** | | **12 37 22.2** | **-1.3** |
| **LBTB** | **Lobatse** | **48.92** | **70** | *i* P | | **P** | | **12 37 22.2** | **-1.3** |
| **LBTB** | **Lobatse** | **48.92** | **70** | P | | **P** | | **12 37 23.0** | **-0.5** |
| LBTB | | | | IAmb | | IAmb | | 12 37 24.0 | |
| | comp=Z,49nm,0.9s | | | | | | | | |
| **PB08** | **IPOC Station P** | **49.10** | **302** | P | | **P** | | **12 37 24.4** | **-0.8** |
| PB08 | | | | IAmb | | IAmb | | 12 37 31.1 | |
| | comp=Z,12nm,0.5s | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **49.13** | **316** | *e*P | | **P** | | **12 37 24.2** | **-0.8** |
| **PTLB** | **Pontes e Lacer** | **49.13** | **316** | P | | **P** | | **12 37 24.3** | **-0.6** |
| **SIV** | **San Ignacio** | **49.37** | **313** | LR | | LR | | 12 56 40.2 | |
| | comp=Z,233nm,21.9s,baz=138,slow=34 | | | | | | | | |
| **GO01** | **Chusmiza** | **49.53** | **302** | P | | **P** | | **12 37 28.1** | **-0.5** |
| GO01 | | | | IAmb | | IAmb | | 12 37 28.8 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **49.61** | **15** | T | | T | | 13 32 04.4 | |
| | baz=32,slow=74,SNR=93 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **49.62** | **15** | T | | T | | 13 32 03.6 | |
| | baz=188,slow=74,SNR=145 | | | | | | | | |
| **NBRF** | **Rio Formoso -** | **49.63** | **348** | *e*P | | **P** | | **12 37 29.1** | **+0.3** |
| **PB11** | **IPOC Station P** | **49.66** | **301** | P | | **P** | | **12 37 27.5** | **-1.7** |
| PB11 | | | | IAmb | | IAmb | | 12 37 31.7 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **SNDB** | **Serra Nova Dou** | **49.75** | **327** | *e*P | | **P** | | **12 37 30.7** | **+1.0** |
| **TSUM** | **Tsumeb** | **50.03** | **58** | LR | | LR | | 12 53 40.9 | |
| | comp=Z,225nm,21.7s,baz=225,slow=30 | | | | | | | | |
| **TSUM** | **Tsumeb** | **50.03** | **58** | P | | **P** | | **12 37 32.0** | **0.0** |
| TSUM | | | | IAmb | | IAmb | | 12 37 33.0 | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **MNMC** | **Minye Minye** | **50.18** | **302** | P | | **P** | | **12 37 32.6** | **-0.6** |
| **H10N1** | **ASCENSION HYDR** | **50.73** | **15** | T | | T | | 13 32 33.4 | |
| | baz=181,slow=72,SNR=45 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **50.73** | **15** | T | | T | | 13 32 35.7 | |
| | baz=181,slow=72,SNR=119 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **50.74** | **15** | T | | T | | 13 32 38.7 | |
| | baz=181,slow=72,SNR=4.5 | | | | | | | | |
| **PB16** | **IPOC Station P** | **50.84** | **302** | P | | **P** | | **12 37 37.9** | **-0.6** |
| **MAGG** | **Maguga Dam** | **50.95** | **77** | *e*P | | **P** | | **12 38 30.0** | **-0.8** |
| MAGG | | | | IAmb | | IAmb | | 12 37 39.0 | |
| | comp=Z,43nm,1.0s | | | | | | | | |
| **NBMA** | **Muriti-CE** | **51.41** | **344** | *e*P | | **P** | | **12 37 43.0** | **+0.8** |
| **SMTB** | **Santa Maria do** | **51.72** | **332** | *e*P | | **P** | | **12 37 45.5** | **+1.1** |
| **PDRB** | **Porto dos Gac** | **51.81** | **320** | *e*P | | **P** | | **12 37 44.4** | **-0.9** |
| **VILB** | **Vilhena** | **51.81** | **316** | *e*P | | **P** | | **12 37 44.8** | **-0.5** |
| **VILB** | **Vilhena** | **51.81** | **316** | P | | **P** | | **12 37 44.6** | **-0.6** |
| VILB | | | | IAmb | | IAmb | | 12 37 53.5 | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **52.03** | **305** | P | | **P** | | **12 37 46.9** | **-0.6** |
| | comp=Z,17nm,0.5s,baz=161,slow=6.6,SNR=75 | | | | | | | | |
| LPAZ | | | | ScP | | **ScP** | | **12 42 46.7** | **-1.6** |
| | comp=Z,2.1nm,0.9s,baz=215,slow=6.1,SNR=3.9 | | | | | | | | |
| **LPAZ** | **La Paz** | **52.03** | **305** | *e*P | | **P** | | **12 37 47.0** | **-0.5** |
| **LPAZ** | **La Paz** | **52.03** | **305** | *e*P | | **P** | | **12 37 46.9** | **-0.6** |
| **LPAZ** | **La Paz** | **52.03** | **305** | P | | **P** | | **12 37 46.8** | **-0.6** |
| LPAZ | | | | IAmb | | IAmb | | 12 37 50.2 | |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **CLDB** | **Colider** | **52.19** | **322** | *e*P | | **P** | | **12 37 47.0** | **-1.0** |
| **MOPA** | **Mopani** | **53.12** | **75** | P | | **P** | | **12 37 54.3** | **-0.5** |
| MOPA | | | | IAmb | | IAmb | | 12 37 55.2 | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **53.32** | **343** | *e*P | | **P** | | **12 37 57.1** | **+0.8** |
| **MATP** | **Matopo** | **54.22** | **70** | *i* P | | P | | 12 37 50.1 | -13 |
| **MATP** | **Matopo** | **54.22** | **70** | *i* P | | P | | 12 37 50.1 | -13 |
| **NBCL** | **Cascavel-CE** | **54.42** | **345** | *e*P | | **P** | | **12 38 05.0** | **+0.7** |
| **BLWY** | **Bulawayo** | **54.51** | **70** | P | | **P** | | **12 38 03.3** | **-1.9** |
| BLWY | | | | IAmb | | IAmb | | 12 38 04.6 | |
| | comp=Z,97nm,0.7s | | | | | | | | |
| **NBPS** | **Pedro II - PI** | **54.76** | **341** | *e*P | | **P** | | **12 38 07.0** | **+0.2** |
| **PRPB** | **Parauapebas** | **54.87** | **330** | *e*P | | **P** | | **12 38 08.4** | **+0.8** |
| **NBMO** | **Morrinhos-CE** | **55.58** | **343** | *e*P | | **P** | | **12 38 13.4** | **+0.7** |
| **NPGB** | **Novo Progresso** | **55.64** | **324** | *e*P | | **P** | | **12 38 12.9** | **-0.3** |
| **ROSB** | **Rosario** | **56.72** | **338** | *e*P | | **P** | | **12 38 21.3** | **+0.5** |
| **ETMB** | **Extrema** | **57.02** | **311** | *e*P | | **P** | | **12 38 22.0** | **-1.0** |
| **ETMB** | **Extrema** | **57.02** | **311** | P | | **P** | | **12 38 21.9** | **-1.0** |
| ETMB | | | | IAmb | | IAmb | | 12 38 24.2 | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | **58.09** | **334** | *e*P | | **P** | | **12 38 31.9** | **+1.4** |
| **ITTB** | **Itaituba** | **58.29** | **324** | *e*P | | **P** | | **12 38 31.8** | **0.0** |
| **LSZ** | **Lusaka** | **58.43** | **67** | P | | **P** | | **12 38 32.5** | **-0.5** |
| | comp=Z,38nm,0.7s,baz=206,slow=7.4,SNR=78 | | | | | | | | |
| LSZ | | | | LR | | LR | | 12 59 33.4 | |
| | comp=Z,292nm,21.2s,baz=196,slow=32 | | | | | | | | |
| **LSZ** | **Lusaka** | **58.43** | **67** | P | | **P** | | **12 38 32.8** | **-0.2** |
| LSZ | | | | pmax | | pmax | | | |
| | comp=Z,46nm,0.8s | | | | | | | | |
| **LSZ** | **Lusaka** | **58.43** | **67** | P | | **P** | | **12 38 32.8** | **-0.2** |
| **NNA** | **Nana** | **59.76** | **298** | LR | | LR | | 13 04 22.0 | |
| | comp=Z,214nm,21.5s,baz=202,slow=36 | | | | | | | | |
| **MALB** | **Monte Alegre** | **60.23** | **327** | *e*P | | **P** | | **12 38 45.7** | **+0.6** |
| **MCPB** | **Macapa, AP** | **61.03** | **330** | *e*P | | **P** | | **12 38 51.8** | **+1.1** |
| **MACA** | **Manacapuru-AM** | **61.05** | **319** | *e*P | | **P** | | **12 38 49.5** | **-1.3** |
| **MACA** | **Manacapuru-AM** | **61.05** | **319** | P | | **P** | | **12 38 49.5** | **-1.3** |
| **CZSB** | **Cruzeiro do Su** | **61.63** | **305** | *e*

BBOO **Buckleboo** 88.36 165 P P 12 41 28.2 0.0
BBOO IAmb IAmb 12 41 49.1
comp=Z,16nm,0.8s
**ATD** **Arta Tunnel** 88.76 66 LR LR 13 20 01.3
comp=Z,262nm,20.0s,baz=12,slow=35
**FORT** **Forrest** 88.98 158 P P 12 41 32.2 +1.0
**APG** **El Apazote** 89.77 299 LR LR 13 19 15.8
comp=Z,70nm,22.0s,baz=52,slow=34
**STKA** **Stephens Creek** 89.94 169 P P 12 41 35.9 +0.3
comp=Z,5.5nm,0.8s,baz=173,slow=6.7,SNR=10
STKA pP pP 12 41 55.9 0.0
comp=Z,5.3nm,0.7s,baz=167,slow=8.7,SNR=5.9
**STKA** **Stephens Creek** 89.94 169 P P 12 41 36.5 +0.8
**PPT** **Papeete** 91.64 233 LR LR 13 15 43.7
comp=Z,127nm,18.4s,baz=156,slow=31
**CMIG** **Matias Romero** 93.66 297 LR LR 13 18 38.5
comp=Z,81nm,19.7s,baz=114,slow=32
**ASAR** **Alice Springs** 96.99 161 P P 12 42 07.8 -0.4
comp=Z,5.2nm,0.6s,baz=181,slow=4.1,SNR=64
ASAR pP pP 12 42 27.8 -0.8
comp=Z,5.5nm,0.8s,baz=190,slow=3.8,SNR=10
ASAR PP PP 12 46 01.6 -2.2
comp=Z,0.9nm,0.7s,baz=190,slow=6.1,SNR=6.7
ASAR PKiKP PKiKP 12 46 43.6 -0.2
comp=Z,0.5nm,0.8s,baz=182,slow=1.2,SNR=5.6
ASAR PKKP PKKPdf 12 58 46.5 +0.5
comp=Z,0.6nm,0.7s,baz=7.9,slow=2.0,SNR=12
ASAR PKPPKP P'P'df 13 07 07.0 +1.7
comp=Z,0.4nm,0.7s,baz=58,slow=8.8,SNR=4.6
ASAR LR LR 13 23 07.4
comp=Z,143nm,20.2s,baz=196,slow=34
**ASAR** **Alice Springs** 96.99 161 P P 12 42 08.1 -0.1
**AS31** **Alice Springs** 96.99 161 P P 12 42 07.8 -0.4
**WRA** **Warramunga Arr** 100.71 161 P Pdif 12 42 24.1 -0.8
comp=Z,1.2nm,0.6s,baz=198,slow=4.3,SNR=11
WRA pP pPdif 12 42 44.2 -1.1
comp=Z,1.3nm,0.7s,baz=196,slow=4.0,SNR=5.4
WRA PKKP PKKPdf 12 58 38.2 -1.1
comp=Z,0.6nm,0.8s,baz=1.0,slow=3.1,SNR=5.9
**TXAR** **Lajitas Array** 108.26 296 PKiKP PKiKP 12 47 02.7 -1.3
comp=Z,0.6nm,0.8s,baz=181,slow=4.4,SNR=6.4
**AMTX** **Amarillo** 111.94 301 P PKiKP 12 47 10.7 -0.1
baz=146
**TUC** **Tucson** 114.17 292 P PKiKP 12 47 15.6 +0.5
baz=144
**ANMO** **Albuquerque** 114.22 297 P PKiKP 12 47 16.2 +0.9
baz=145
**T25A** **Trinidad** 115.05 300 P PKiKP 12 47 17.8 +0.9
baz=145
**SDCO** **Great Sand Dun** 116.05 300 PKiKP 12 47 19.1 +0.3
**SDCO** **Great Sand Dun** 116.05 300 P PKiKP 12 47 19.6 +0.7
baz=144
**KIV** **Kislovodsk** 116.37 49 *e*PKIKP PKPdf 12 47 18.8 -0.2
KIV pmax pmax
comp=Z,5.0nm,1.0s
**Y14A** **Wickenburg** 116.58 292 PKiKP 12 47 20.1 +0.4
**S22A** **4UR Ranch, Cre** 116.66 299 PKiKP 12 47 20.3 +0.3
**S22A** **4UR Ranch, Cre** 116.66 299 P PKiKP 12 47 21.0 +0.9
baz=144
**Q24A** **Divide** 116.87 301 P PKiKP 12 47 20.8 +0.4
baz=144
**MVCO** **Mesa Verde** 117.02 297 P PKiKP 12 47 21.2 +0.5
baz=144
**WUAZ** **Wupatki** 117.05 294 P PKiKP 12 47 21.2 +0.6
baz=143
**ECSD** **EROS Data Cent** 117.05 310 P PKiKP 12 47 20.6 +0.4
baz=146
**IKP** **In-Ko-Pah, Jac** 117.11 289 P PKiKP 12 47 21.7 +1.0
baz=143
**SCHQ** **Schefferville** 117.16 335 PKP PKPdf 12 47 19.4 -0.6
comp=Z,4.8nm,0.7s,baz=79,slow=1.3,SNR=8.0
**SWSC** **Sam W. Stewart** 117.19 289 P PKiKP 12 47 21.0 +0.2
baz=143
**AKASG** **Malin Array Be** 117.30 36 pPKP pPKPdf 12 47 40.1 -1.2
comp=Z,1.9nm,0.7s,baz=235,slow=1.4,SNR=4.2
**PDMCI** **Parker Dam,Lak** 117.44 291 P PKiKP 12 47 22.1 +0.8
baz=143
**MONP2** **Monument Peak** 117.46 289 P PKiKP 12 47 22.3 +0.7
baz=143
**BC3** **Big Chuckawall** 117.58 290 P PKiKP 12 47 22.2 +0.5
baz=143
**ISCO** **Idaho Springs** 117.75 301 P PKiKP 12 47 22.6 +0.5
baz=144
**IRM** **Iron Mountain** 117.82 290 P PKiKP 12 47 22.6 +0.5
baz=143
**PV15** **Paradox Valley** 117.92 298 PKiKP 12 47 23.4 +1.1
**BELC** **Belle Mtn. Jos** 118.13 290 P PKiKP 12 47 23.5 +0.7
baz=143
**GMRC** **Granite Mounta** 118.58 290 P PKiKP 12 47 24.5 +0.8
baz=143
**N23A** **Red Feather La** 118.78 302 P PKiKP 12 47 24.7 +0.7
baz=143
**BBRC** **Big Bear Solar** 118.80 289 P PKiKP 12 47 24.8 +0.6
baz=143
**CIS** **Catalina Islan** 118.88 287 P PKiKP 12 47 25.2 +1.1
baz=143
**PHWY** **Pilot Hill** 118.89 302 PKPdf 12 47 23.9 -0.2
**O20A** **White River Ci** 119.23 299 PKiKP 12 47 24.9 +0.1
**O20A** **White River Ci** 119.23 299 P PKiKP 12 47 25.1 +0.3
baz=143
**SRU** **San Rafael Swe** 119.50 297 PKiKP PKiKP 12 47 25.4 +0.1
**SRU** **San Rafael Swe** 119.50 297 PKPdf PKiKP 12 47 25.4 +0.1
**GSC** **Goldstone, Bar** 119.56 290 P PKiKP 12 47 26.2 +0.8
baz=142
**CCUT** **Cedar City** 119.63 294 PKPdf PKiKP 12 47 26.7 +1.0
**SHPR** **Sheep Range** 119.69 292 PKPdf PKiKP 12 47 26.7 +0.9
**P18A** **Preston Nutter** 119.77 298 PKiKP 12 47 26.7 +0.7
**EDW2** **Edwards Air Fo** 119.83 289 P PKiKP 12 47 26.6 +0.7
baz=142
**TCRU** **Three Creeks R** 120.02 295 PKiKP 12 47 27.3 +0.9
**LRMC** **Laurel Mtn Rad** 120.14 289 P PKiKP 12 47 27.3 +0.7
baz=142
**SBC** **Santa Barbara** 120.36 287 P PKiKP 12 47 27.7 +0.8
baz=142
**K22A** **Casper** 120.44 302 P PKiKP 12 47 27.3 +0.3
baz=142
**MPMC** **Manual Prospec** 120.50 290 P PKiKP 12 47 28.1 +0.6
baz=142,SNR=7.1
**FURC** **Furnace Creek,** 120.51 291 P PKiKP 12 47 28.0 +0.9
baz=142
**RSSD** **Black Hills** 120.51 305 PKiKP PKPdf 12 47 26.8 -0.3
**RSSD** **Black Hills** 120.51 305 PKPdf PKPdf 12 47 26.8 -0.3
**RSSD** **Black Hills** 120.51 305 P PKiKP 12 47 27.3 +0.1
baz=143
**TPNV** **Topopah Spring** 120.58 291 PKiKP PKiKP 12 47 28.6 +1.1
**TPNV** **Topopah Spring** 120.58 291 PKPdf PKiKP 12 47 28.6 +1.1
**TPNV** **Topopah Spring** 120.58 291 P PKiKP 12 47 28.1 +0.6
baz=142,SNR=8.0
**ISA** **Isabella, Lake** 120.69 289 P PKiKP 12 47 28.3 +0.6
baz=142,SNR=6.1
**PKM** **Mcpherson Peak** 120.76 287 P PKiKP 12 47 28.7 +0.8
baz=142
**E28A** **Huff** 121.04 309 PKPdf 12 47 27.8 0.0
**CWC** **Cottonwood Cre** 121.09 290 P PKiKP 12 47 29.4 +0.9
baz=142
**SMMC** **Simmler** 121.18 288 P PKiKP 12 47 29.3 +0.7
baz=142
**SPR3** **Spring Creek 3** 121.24 294 PKPdf PKiKP 12 47 29.6 +0.6
**R11A** **Troy Canyon, C** 121.34 293 PKiKP 12 47 29.9 +0.9
**R11A** **Troy Canyon, C** 121.34 293 P PKiKP 12 47 29.5 +0.6
baz=141
**DUG** **Dugway, Tooele** 121.44 296 P PKiKP 12 47 29.7 +0.7
baz=141,SNR=9.5
**LCH** **Last Change Ra** 121.50 291 PKiKP 12 47 30.3 +1.1
**MDND** **Maddock** 121.61 311 P PKPdf 12 47 28.8 0.0
baz=143
**BW06** **Boulder Array** 121.92 300 P PKPdf 12 47 29.6 -0.2
baz=141
**PD31** **Pinedale Array** 121.92 300 PKPdf 12 47 29.3 -0.5
**PDAR** **Pinedale Array** 121.92 300 PKP PKPdf 12 47 29.2 -0.7
comp=Z,2.5nm,0.7s,baz=138,slow=5.5,SNR=23
PDAR SKP SKPdf 12 50 57.9 -0.1
comp=Z,1.5nm,0.8s,baz=144,slow=5.1,SNR=6.7
**ULM** **Lac du Bonnet** 122.08 315 PKP PKPdf 12 47 28.4 -1.1
comp=Z,9.0nm,0.6s,baz=168,slow=1.8,SNR=12
**ULM** **Lac du Bonnet** 122.08 315 PKiKP PKPdf 12 47 29.0 -0.6
**ULM** **Lac du Bonnet** 122.08 315 PKPdf PKPdf 12 47 29.0 -0.6
**NOA** **NORSAR Array B** 122.11 20 PKKPbc PKKPbc 12 57 27.4 +1.5
comp=Z,0.9nm,0.8s,baz=25,slow=4.4,SNR=3.5
**HVU** **Hansel Valley** 122.65 298 PKiKP PKiKP 12 47 31.8 +0.4
**HVU** **Hansel Valley** 122.65 298 PKiKP 12 47 31.8 +0.4
**NV11** **Mina Array Sit** 122.68 291 PKiKP 12 47 32.6 +1.0
**NVAR** **Mina Array Bea** 122.75 291 PKP PKiKP 12 47 32.6 +0.8
comp=Z,3.2nm,0.7s,baz=138,slow=3.3,SNR=28
NVAR pPKP pPKPdf 12 47 51.8 -0.9
comp=Z,1.0nm,0.7s,baz=138,slow=2.2,SNR=2.8
NVAR SKP SKPdf 12 51 01.8 +2.2
comp=Z,1.7nm,1.0s,baz=160,slow=3.2,SNR=5.4
**ELK** **Elko** 123.03 295 PKiKP PKiKP 12 47 33.3 +1.0
**ELK** **Elko** 123.03 295 PKPdf PKiKP 12 47 33.3 +1.0
**PYUN** **Piuthan** 123.29 89 *e*P PKiKP 12 47 33.4 +0.2
comp=Z,23nm,0.9s
**KOLN** **Koldanda** 123.36 90 *e*P PKPdf 12 47 32.6 -0.5
comp=Z,26nm,0.8s
**OBN** **Obninsk** 123.40 38 ⇓*e*PKIKP PKiKP 12 47 33.4 +1.3
OBN pmax pmax
comp=Z,6.0nm,1.1s
**LAO** **LASA Array** 123.48 306 P PKiKP 12 47 33.3 +0.6
baz=141
**CMB** **Columbia Colle** 123.49 289 PKiKP PKiKP 12 47 33.8 +0.8
**CMB** **Columbia Colle** 123.49 289 PKPdf PKiKP 12 47 33.8 +0.8
**RLMT** **Red Lodge** 123.61 302 P PKiKP 12 47 33.6 +0.3
baz=141
**H17A** **Grant Village** 123.65 301 P PKiKP 12 47 34.4 +1.0
baz=140
**CMAR** **Chiang Mai Arr** 123.75 110 PKP PKiKP 12 47 34.0 0.0
comp=Z,2.7nm,0.8s,baz=236,slow=3.5,SNR=9.6
**CMAR** **Chiang Mai Arr** 123.75 110 PKPdf 12 47 33.2 -0.6
**DANN** **Dangsing** 123.90 90 *e*P PKiKP 12 47 34.7 +0.2
**DGMT** **Dagmar** 123.99 308 P PKiKP 12 47 34.3 +0.7
baz=141
**EMB** **Emerald Bay** 124.07 290 PKiKP 12 47 35.8 +1.4
**PKIN** **Phulchoki** 124.16 92 *e*P PKiKP 12 47 35.3 +0.3
comp=Z,7.3nm,0.6s
**PKI** **Pulchoki** 124.16 92 *e*P PKiKP 12 47 35.4 +0.3
comp=Z,5.6nm,0.5s
**RAMN** **Ramite** 124.30 93 *e*P PKiKP 12 47 35.2 -0.1
comp=Z,5.7nm,0.4s
**QLMT** **Earthquake Lak** 124.37 301 PKiKP 12 47 36.0 +1.3
**JIRN** **Jiri** 124.65 92 *e*P PKPdf 12 47 35.1 -0.7
comp=Z,9.0nm,0.6s
**GUN** **Gumba** 124.69 92 *e*P PKPdf 12 47 35.5 -0.3
comp=Z,13nm,0.8s
**HLID** **Hailey** 124.79 298 P PKiKP 12 47 36.1 +0.5
baz=140
**BOZ** **Bozeman (W)** 125.05 301 P PKiKP 12 47 36.5 +0.5
baz=140
**BELG** **Belogornoye** 125.14 46 *i* PKiKP PKiKP 12 47 37.5 +1.8
**MFID** **Camas Ranch** 125.35 297 PKPdf PKiKP 12 47 37.2 +0.5
**FINES** **FINESS Array B** 125.71 28 PKP PKPdf 12 47 35.7 -0.4
comp=Z,5.5nm,0.5s,baz=147,slow=2.3,SNR=30
FINES pPKP pPKPdf 12 47 56.8 -0.3
comp=Z,10nm,0.7s,baz=132,slow=2.8,SNR=6.4
**EGMT** **Eagleton** 126.04 304 P PKiKP 12 47 38.1 +0.2
baz=139,SNR=8.6
**WDC** **Whiskeytown Da** 126.51 290 PKiKP PKiKP 12 47 39.1 +0.2
**WDC** **Whiskeytown Da** 126.51 290 PKPdf PKiKP 12 47 39.1 +0.2
**N02D** **Trinity Center** 126.89 290 P PKiKP 12 47 40.0 +0.3
baz=139,SNR=11
**MSO** **Missoula** 127.03 301 PKPdf PKiKP 12 47 39.7 -0.2
**MSO** **Missoula** 127.03 301 P PKiKP 12 47 40.5 +0.6
baz=138
**M04C** **Macdoel** 127.06 291 P PKiKP 12 47 40.3 +0.2
baz=138,SNR=10
**M02C** **Callahan** 127.27 290 P PKiKP 12 47 41.1 +0.6
baz=138,SNR=6.1
**YBH** **Yreka Blue Hor** 127.45 291 PKiKP PKPdf 12 47 40.5 +0.2
**YBH** **Yreka Blue Hor** 127.45 291 PKPdf PKPdf 12 47 40.5 +0.2
**L04D** **Klamath Falls** 127.61 291 P PKiKP 12 47 41.4 +0.2
baz=138
**ABKAR** **Akbulak array** 127.85 56 PKPdf PKPdf 12 47 40.6 -0.1
**J05D** **Fort Rock, OR** 127.88 293 P PKiKP 12 47 42.3 +0.6
baz=138,SNR=7.8
**FCC** **Fort Churchill** 128.20 322 PKiKP PKPdf 12 47 40.3 -0.7
**FCC** **Fort Churchill** 128.20 322 PKPdf PKPdf 12 47 40.3 -0.7
**L02E** **Cave Junction** 128.22 290 P PKiKP 12 47 42.7 +0.4
baz=138
**J04D** **Umpqua Nationa** 128.27 292 P PKiKP 12 47 42.9 +0.3
baz=138
**KKAR** **Karatay Array** 128.28 68 PKiKP PKiKP 12 47 42.5 +0.1
**KKAR** **Karatay Array** 128.28 68 PKPdf PKiKP 12 47 42.5 +0.1
**KSH** **Kashi** 128.38 75 PKP PKiKP 12 47 42.9 +0.1
**K02D** **Willamette Mer** 128.64 291 P PKiKP 12 47 43.6 +0.4
baz=138
**I05D** **Terrebonne, OR** 128.70 294 P PKiKP 12 47 44.0 +0.7
baz=137,SNR=5.0
**E09A** **Wood Farm, Sta** 128.76 298 PKiKP 12 47 43.5 +0.4
**I04A** **Tendick Farm,** 128.83 293 P PKiKP 12 47 43.6 +0.1
baz=137
**KLMR** **Klimovskoe** 128.96 35 *e*PKIKP PKPdf 12 47 41.4 -0.9
KLMR pmax pmax
comp=Z,40nm,1.5s
**KLMR** **Klimovskoe** 128.96 35 *e*PKPdf PKPdf 12 47 41.5 -0.9
KLMR AMP 12 47 43.9
comp=Z,40nm,1.5s
KLMR *e*pPKPdf pPKPdf 12 48 01.8 -1.6
KLMR *ex* x 12 50 53.7
**J01E** **Myrtle Point** 129.12 291 P PKiKP 12 47 44.5 +0.5
baz=137
**G05D** **Wamic, OR** 129.35 295 P PKiKP 12 47 45.1 +0.6
baz=137
**H04D** **Lebanon** 129.52 293 P PKiKP 12 47 45.5 +0.7
baz=137
**NEW** **Newport** 129.55 300 P PKiKP 12 47 45.0 +0.2
baz=136
**C09A** **Chrisman Ranch** 129.75 299 PKPdf PKiKP 12 47 45.5 +0.4
**F05D** **White Salmon** 129.88 295 P PKiKP 12 47 46.0 +0.5
baz=136
**AAK** **Ala-Archa** 129.93 71 PKP PKPdf 12 47 45.2 +0.1
comp=Z,3.6nm,0.9s,baz=174,slow=9.2,SNR=2.5
**AAK** **Ala-Archa** 129.93 71 ⇑PKiKP PKiKP 12 47 47.9 +2.0
**AAK** **Ala-Archa** 129.93 71 PKPdf PKiKP 12 47 45.8 -0.1
**KIRV** **Kirov** 130.51 42 SKPbc SKPbc 12 50 60.0 -1.7
comp=Z,20nm,1.0s,baz=313,slow=2.9,SNR=9.1
**KIRV** **Kirov** 130.51 42 ⇑*i*PKIKP PKiKP 12 47 46.8 +0.6
**B08A** **Colville Reser** 130.65 299 PKPdf PKiKP 12 47 46.6 -0.4
**E04D** **Cinebar** 130.90 295 P PKiKP 12 47 48.7 +1.2
baz=136
**PRGR** **Permogore** 131.47 37 *e*PKIKP PKPdf 12 47 47.0 -0.1
PRGR pmax pmax
comp=Z,8.0nm,0.6s
**D03D** **Eldon** 131.85 296 P PKiKP 12 47 50.5 +1.1
baz=135
**PZH** **PanZhiHua** 131.87 108 PKP PKiKP 12 47 50.1 -0.2
**B05A** **Bryant** 131.88 297 P PKiKP 12 47 49.6 +0.2
baz=135
**ARCES** **ARCESS Array B** 132.42 22 PKP PKPdf 12 47 48.6 -0.2
comp=Z,3.9nm,0.7s,baz=211,slow=0.9,SNR=13
ARCES SKPbc SKPbc 12 51 06.2 -2.1
comp=Z,9.2nm,1.0s,baz=359,slow=7.2,SNR=3.2
**ARU** **Arti** 132.42 49 ⇑*i*PKIKP PKiKP 12 47 53.6 +3.4
**A04D** **Lummi Island** 132.49 297 P PKiKP 12 47 51.4 +0.9
baz=134
**BRVK** **Borovoye** 135.15 58 ⇑*i*PKIKP PKiKP 12 47 56.8 +0.9
**GOMU** **GeErMu** 135.87 93 PKP PKiKP 12 48 00.6 +2.2
GOMU sPKP 12 48 27.5
GOMU AMB AMB
comp=Z,200nm,8.7s
**CD2** **Chengdu** 136.47 106 PKP PKPdf 12 47 57.6 0.0
**MK31** **Makanchi Array** 136.80 72 ⇓*i*PKIKP PKiKP 12 47 58.6 -0.9
**MKAR** **Makanchi Array** 136.80 72 PKhKP PKPpre 12 47 48.7
comp=Z,0.4nm,0.5s,baz=240,slow=2.3,SNR=4.9
MKAR PKP PKPdf 12 47 56.7 -1.0
comp=Z,2.6nm,1.0s,baz=251,slow=2.7,SNR=9.3
MKAR pPKP pPKPdf 12 48 17.8 -0.9
comp=Z,5.4nm,0.9s,baz=218,slow=1.9,SNR=9.3
MKAR SKPbc SKPbc 12 51 21.1 -2.1
comp=Z,3.5nm,1.1s,baz=225,slow=0.9,SNR=7.1
**TULEG** **Thule** 136.93 346 PKPdf 12 47 57.7 +0.7
**KURK** **Kurchatov** 137.55 66 ⇑*i*PKIKP PKiKP 12 48 01.9 +1.1
**WMQ** **Urumqi** 137.57 79 *e*PKP PKiKP 12 48 01.1 -0.1
WMQ LR LR
comp=Z,220nm,29.0s
WMQ LR LR
comp=Z,280nm,29.2s
WMQ LR LR
comp=Z,140nm,25.3s
**YKA** **Yellowknife Ar** 138.02 316 PKhKP PKPpre 12 47 45.8
comp=Z,1.5nm,0.7s,baz=120,slow=4.0,SNR=17
YKA PKP PKPdf 12 47 59.6 +0.2
comp=Z,28nm,0.8s,baz=130,slow=2.2,SNR=119
YKA pPKP pPKPdf 12 48 19.9 -0.6
comp=Z,18nm,0.7s,baz=128,slow=2.3,SNR=8.6
YKA SKPbc SKPbc 12 51 25.5 -0.6
comp=Z,13nm,0.8s,baz=131,slow=3.1,SNR=22
**RES** **Resolute Bay** 139.85 337 PKhKP PKPpre 12 47 54.3
comp=Z,2.9nm,0.7s,baz=133,slow=3.6,SNR=8.3
RES PKP PKPdf 12 48 02.8 +0.4
comp=Z,7.3nm,0.8s,baz=137,slow=7.4,SNR=8.6
RES SKP SKPdf 12 51 30.1 +0.3
comp=Z,9.7nm,1.0s,baz=153,slow=3.2,SNR=11
**LZH** **Lanzhou** 140.57 101 *e*PKP PKiKP 12 48 08.3 +0.6
LZH LR LR
comp=Z,430nm,18.2s
LZH LR LR
comp=Z,490nm,18.1s
LZH LR LR
comp=Z,690nm,20.3s
**GTA** **Gaotai** 140.91 94 *e*PKP PKPdf 12 48 02.6 -3.0
GTA LR LR
comp=Z,120nm,17.8s
GTA LR LR
comp=Z,160nm,17.4s
GTA LR LR
comp=Z,180nm,18.2s
**DGZ** **Jazzator, Alta** 141.30 72 ⇓*e*PKIKP PKPdf 12 48 06.5 +0.5
**WRAK** **Wrangell Islan** 141.91 300 P PKiKP 12 48 08.3 -1.2
baz=124
**ZAA0** **Zalesovo Array** 142.54 65 PKPdf 12 48 08.5 +0.7
**ZALV** **Zalesovo Beam** 142.54 65 PKhKP PKPpre 12 48 02.1
comp=Z,1.1nm,0.4s,baz=241,slow=3.8,SNR=7.4
ZALV SKP SKPdf 12 51 35.5 +0.4
comp=Z,2.3nm,0.9s,baz=241,slow=3.1,SNR=5.2
**LYN** **LuoYang** 143.78 112 ⇓PKP PKPdf 12 48 12.1 +1.4
**P33M** **Teslin, Yukon** 144.12 305 PKPdf PKPbc 12 48 09.3 +0.4
**MMPY** **Sheldon Lake,** 144.61 310 P PKPdf 12 48 11.1 -0.2
baz=117
**NJ2** **Nanjing** 144.76 122 ⇓PKP PKPdf 12 48 12.3 -0.1
**C36M** **Paulatuk** 144.84 322 PKPab 12 48 10.4 -0.3
**C36M** **Paulatuk** 144.84 322 P PKPdf 12 48 12.2 +0.9
baz=114
**SKAG** **Skagway** 144.86 303 PKPdf 12 48 11.4 -0.3
**SKAG** **Skagway** 144.86 303 P PKPdf 12 48 12.0 +0.3
baz=119
**SSE** **Sheshan** 144.98 126 PKP PKPab 12 48 12.6 +0.2
SSE pPKP pPKPdf 12 48 34.2 +0.3
**WHY** **Whitehorse** 145.23 305 P PKPab 12 48 13.1 +0.5
baz=118
**FARO** **Faro, Yukon** 145.29 308 P PKPab 12 48 13.7 +1.0
baz=117,SNR=16
**M31M** **Drury Creek, Y** 145.72 308 PKPdf PKPbc 12 48 14.0 +0.2
**M31M** **Drury Creek, Y** 145.72 308 P PKPab 12 48 14.2 -0.1
baz=116,SNR=11
**N31M** **Braeburn, Yuko** 146.00 306 PKPdf PKPbc 12 48 14.7 +0.1
**N31M** **Braeburn, Yuko** 146.00 306 P PKPbc 12 48 14.8 +0.2
baz=116,SNR=5.4
**A36M** **Sachs Harbour** 146.16 327 PKPbc 12 48 14.9 +0.1
**A36M** **Sachs Harbour** 146.16 327 P PKPab 12 48 15.8 +0.1
baz=109
**MAYO** **Mayo, Yukon** 146.93 310 P PKPbc 12 48 17.4 +0.1
baz=113,SNR=21
**HNS** **HongShan** 147.14 111 ⇑PKPbc PKPbc 12 48 18.8 +0.2
**PINM** **Pinnacle** 147.36 302 P PKPbc 12 48 19.0 +0.3
baz=116,SNR=5.8
**PCA** **Pinnacle** 147.36 302 PKPbc 12 48 19.6 +1.0
**INK** **Inuvik** 147.68 318 PKPbc PKPbc 12 48 18.6 -0.5
comp=Z,67nm,0.8s,baz=93,slow=3.4,SNR=24
INK SKP SKPdf 12 51 42.9 +0.1
comp=Z,2.5nm,0.9s,baz=121,slow=5.9,SNR=2.2
INK SKPbc SKiKP 12 51 51.0 +1.1
comp=Z,4.3nm,0.8s,baz=138,slow=4.9,SNR=3.3
**INK** **Inuvik** 147.68 318 PKPbc PKPbc 12 48 19.0 -0.1
**INK** **Inuvik** 147.68 318 P PKPbc 12 48 19.2 0.0
baz=108,SNR=59
**HHC** **Hu-ho-hao-te** 148.14 104 *e*PKPbc PKPdf 12 48 15.1 -2.9
**YUK3** **Moose Creek** 148.15 305 P PKPbc 12 48 20.8 -0.1
baz=113,SNR=11
**MESA** **MESA** 148.17 302 P PKPbc 12 48 21.1 +0.1
baz=115,SNR=8.6
**J29M** **Klondike Camp** 148.20 310 P PKPbc 12 48 21.2 +0.5
baz=110,SNR=9.1
**EPYK** **Eagle Plains** 148.25 314 PKPbc PKPbc 12 48 20.8 0.0
**EPYK** **Eagle Plains** 148.25 314 P PKPbc 12 48 20.8 0.0
baz=109,SNR=22
**BARN** **Barnard Glacie** 148.40 303 PKPdf PKPdf 12 48 16.2 -1.6
BARN PKPbc PKiKP 12 48 22.4 -0.6
**I29M** **Ogilvie Camp,** 148.54 312 PKPbc 12 48 21.7 +0.1
**I29M** **Ogilvie Camp,** 148.54 312 P PKPbc 12 48 21.1 -0.5
baz=109,SNR=15
**DAWY** **Dawson** 148.54 309 P PKPbc 12 48 21.5 -0.2
baz=110,SNR=25
**BVCY** **Beaver Creek** 148.57 306 P PKiKP 12 48 23.1 -0.1
baz=112
**M27K** **Edge Creek, AK** 148.99 306 P PKPbc 12 48 23.2 +0.3
baz=111,SNR=8.8
**KAIM** **Kayak Island** 149.19 300 P PKiKP 12 48 24.2 -0.3
baz=114
**L27K** **Beaver Creek,** 149.22 307 P PKiKP 12 48 24.3 -0.1
baz=110
**HMT** **Hamilton** 149.28 301 PKiKP 12 48 24.8 +0.1
**M26K** **Nabesna, AK** 149.49 305 P PKPbc 12 48 24.4 +0.4
baz=111
**GLB** **Gilahina Butte** 149.50 303 PKiKP 12 48 24.7 -0.4
**EGAK** **Eagle** 149.50 310 PKPbc 12 48 23.9 0.0
**EGAK** **Eagle** 149.50 310 P PKPbc 12 48 23.6 -0.3
baz=108,SNR=9.9
**BMRM** **Bremner River** 149.68 302 PKPdf 12 48 19.3 -0.5
BMRM PKiKP 12 48 25.9 +0.3
**BMRM** **Bremner River** 149.68 302 P PKiKP 12 48 25.2 -0.3
baz=112,SNR=9.0
**L26K** **Log Cabin Wild** 149.86 306 PKPdf 12 48 18.7 -1.2
L26K PKPbc PKiKP 12 48 26.0 +0.2
**L26K** **Log Cabin Wild** 149.86 306 P PKiKP 12 48 25.5 -0.3
baz=109,SNR=17
**BJT** **Baijiatuau** 149.88 110 PKP2 PKiKP 12 48 26.2 -0.3
**BJT** **Baijiatuau** 149.88 110 PKiKP 12 48 26.2 -0.3
**BJI** **Beijing** 149.90 110 PKPbc PKPbc 12 48 25.5 -0.1
BJI pPKP pPKPbc 12 48 47.1 +0.6
BJI sPKP 12 48 53.0
**N25K** **Chitina, Valde** 149.91 303 PKPdf 12 48 18.8 -1.3
N25K PKiKP 12 48 26.5 +0.5
**N25K** **Chitina, Valde** 149.91 303 P PKPbc 12 48 25.5 +0.4
baz=111,SNR=9.4
**ZAK** **Zakamensk** 149.94 82 *e*PKP2 PKPbc 12 48 26.0 +0.4
ZAK pmax pmax
comp=Z,14nm,1.0s
**MENT** **Mentasta** 149.99 306 PKiKP 12 48 25.9 -0.1
**NRIK** **Noril'sk** 150.00 41 PKPbc PKPbc 12 48 25.3 +0.3
comp=Z,11nm,0.9s,baz=122,slow=3.0,SNR=12
NRIK pPKPbc pPKPbc 12 48 45.9 0.0
comp=Z,25nm,0.9s,baz=238,slow=4.7,SNR=10
**NRIK** **Noril'sk** 150.00 41 PKiKP 12 48 25.7 -0.2
**EYAK** **Cordova Ski Ar** 150.05 301 P PKiKP 12 48 26.2 +0.1
baz=112,SNR=9.2
**SONM** **Songino Array** 150.10 89 PKPbc PKPbc 12 48 26.1 0.0
comp=Z,5.5nm,0.5s,baz=221,slow=3.7,SNR=74
SONM pPKP pPKPdf 12 48 39.7 -2.3
comp=Z,6.5nm,0.8s,baz=217,slow=3.3,SNR=6.5
SONM pPKPbc pPKPbc 12 48 46.8 -0.1
comp=Z,23nm,1.0s,baz=220,slow=3.4,SNR=11
SONM SKP SKPdf 12 51 48.0 +0.8
comp=Z,0.6nm,0.9s,baz=275,slow=0.5,SNR=2.5
**DOT** **Dot Lake** 150.36 307 PKPbc PKiKP 12 48 26.9 +0.1
**J26L** **Joseph Creek** 150.41 309 P PKiKP 12 48 27.0 0.0
baz=107
**SCRK** **Sand Creek** 150.43 308 PKiKP 12 48 27.2 +0.1
**SCRK** **Sand Creek** 150.43 308 P PKiKP 12 48 27.1 +0.1
baz=107,SNR=55
**HARP** **HAARP** 150.44 305 P PKiKP 12 48 27.3 +0.3
baz=109
**KLU** **Klutina** 150.47 303 PKPbc PKiKP 12 48 27.5 +0.3
**KLU** **Klutina** 150.47 303 P PKiKP 12 48 27.6 +0.4
baz=110,SNR=16
**ULN** **Ulaanbaatar** 150.47 89 PKiKP PKPbc 12 48 27.0 0.0
**ULN** **Ulaanbaatar** 150.47 89 PKPbc 12 48 27.0 0.0
**RIDG** **Independent Ri** 150.72 307 PKPbc PKiKP 12 48 28.3 +0.7
**RIDG** **Independent Ri** 150.72 307 P PKiKP 12 48 28.0 +0.4
baz=107,SNR=86
**PAX** **Paxson** 150.76 306 P PKiKP 12 48 27.5 -0.2
baz=108,SNR=26
**GLI** **Glacier Island** 150.78 301 PKiKP 12 48 28.0 +0.3
**GLI** **Glacier Island** 150.78 301 P PKiKP 12 48 27.6 -0.1
baz=111,SNR=6.9
**M24K** **Tolsona, Glenn** 150.79 304 P PKiKP 12 48 28.5 +0.8
baz=109,SNR=17
**J25K** **Salcha River,** 151.19 309 P PKiKP 12 48 28.5 0.0
baz=105,SNR=28
**SCM** **Sheep Creek Mo** 151.21 303 PKiKP PKiKP 12 48 28.9 +0.2
**SCM** **Sheep Creek Mo** 151.21 303 PKiKP 12 48 28.9 +0.2
**SCM** **Sheep Creek Mo** 151.21 303 P PKiKP 12 48 29.1 +0.4
baz=109,SNR=17
**PWL** **Port Wells** 151.34 301 P PKiKP 12 48 29.1 +0.2
baz=110,SNR=22
**PRP** **Porcupine Dome** 151.48 311 P PKPbc 12 48 28.9 +0.1
baz=104,SNR=34
**BMAR** **Burnt Mountain** 151.52 315 PKiKP 12 48 29.7 +0.6
**KNK** **Knik Glacier** 151.59 302 P PKiKP 12 48 29.5 +0.1
baz=109,SNR=12
**SEW** **Seward** 151.60 299 P PKiKP 12 48 29.4 0.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=111,SNR=5.5 | | | | | | | |
| **SML** | **Sawmill** | **151.66** | **302** | P | | **PKiKP** | 12 48 29.6 | **+0.1** |
| | baz=108,SNR=24 | | | | | | | |
| **HDA** | **Harding Lake** | **151.80** | **308** | P | | **PKiKP** | 12 48 30.2 | **+0.5** |
| | baz=105 | | | | | | | |
| **O22K** | **Cooper Landing** | **151.86** | **299** | P | | **PKiKP** | 12 48 30.3 | **+0.4** |
| | baz=110 | | | | | | | |
| **ILAR** | **Eielson Array** | **151.86** | **309** | PKPbc | | **PKPbc** | 12 48 29.6 | **+0.2** |
| | comp=Z,74nm,0.9s,baz=143,slow=2.4,SNR=310 | | | | | | | |
| ILAR | | | | pPKPbc | | **pPKPbc** | 12 48 49.8 | **-0.7** |
| | comp=Z,23nm,0.9s,baz=184,slow=1.9,SNR=5.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **151.86** | **309** | | | **PKiKP** | 12 48 29.9 | **+0.1** |
| **GHO** | **Glory Hole Cre** | **151.91** | **302** | | | **PKiKP** | 12 48 30.7 | **+0.5** |
| **PMR** | **Palmer** | **151.95** | **302** | P | | **PKiKP** | 12 48 30.3 | **+0.3** |
| | baz=108,SNR=8.5 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **152.07** | **300** | P | | **PKiKP** | 12 48 30.8 | **+0.4** |
| | baz=109,SNR=8.4 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **152.08** | **297** | P | | **PKiKP** | 12 48 30.8 | **+0.4** |
| | baz=111,SNR=5.5 | | | | | | | |
| **BRLK** | **Bradley Lake** | **152.16** | **297** | | | **PKiKP** | 12 48 30.6 | **0.0** |
| **POKR** | **Poker Flat Res** | **152.17** | **309** | P | | **PKPbc** | 12 48 30.1 | **-0.1** |
| | baz=103,SNR=8.1 | | | | | | | |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | PKPbc | | **PKiKP** | 12 48 30.9 | **+0.2** |
| | comp=Z,34nm,0.7s,baz=197,slow=1.8,SNR=21 | | | | | | | |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | PKIKP | | **PKiKP** | 12 48 31.2 | **+0.5** |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | | | **PKiKP** | 12 48 31.2 | **+0.5** |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | P | | **PKiKP** | 12 48 31.0 | **+0.2** |
| | baz=113 | | | | | | | |
| **COLA** | **College** | **152.29** | **309** | PKIKP | | **PKPbc** | 12 48 30.3 | **-0.1** |
| **COLA** | **College** | **152.29** | **309** | | | **PKPbc** | 12 48 30.3 | **-0.1** |
| **COLA** | **College** | **152.29** | **309** | P | | **PKiKP** | 12 48 30.8 | **+0.2** |
| | baz=103 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **152.29** | **309** | P | | **PKPbc** | 12 48 30.3 | **-0.1** |
| | baz=103,SNR=23 | | | | | | | |
| **OHAK** | **Old Harbor** | **152.36** | **291** | P | | **PKiKP** | 12 48 31.4 | **+0.4** |
| | baz=114 | | | | | | | |
| **M22K** | **Willow** | **152.45** | **302** | P | | **PKiKP** | 12 48 31.3 | **+0.2** |
| | baz=107,SNR=18 | | | | | | | |
| **MCK** | **McKinley** | **152.47** | **306** | P | | **PKiKP** | 12 48 31.5 | **+0.3** |
| | baz=104,SNR=30 | | | | | | | |
| **H24K** | **Noodor Dome** | **152.50** | **311** | P | | **PKiKP** | 12 48 31.8 | **+0.6** |
| | baz=101 | | | | | | | |
| **SII** | **Sitkinak Islan** | **152.53** | **290** | P | | **PKiKP** | 12 48 32.2 | **+0.7** |
| | baz=115 | | | | | | | |
| **CAPN** | **Captain Cook N** | **152.62** | **299** | P | | **PKiKP** | 12 48 32.2 | **+0.8** |
| | baz=109 | | | | | | | |
| **XLT** | **XiLinHaoTe** | **152.66** | **104** | *e*P | | **PKPbc** | 12 48 31.7 | **-0.4** |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,420nm,7.5s | | | | | | | |
| **CUT** | **Chulitna** | **152.71** | **303** | PKPbc | | **PKiKP** | 12 48 32.0 | **+0.3** |
| **CUT** | **Chulitna** | **152.71** | **303** | P | | **PKiKP** | 12 48 31.9 | **+0.3** |
| | baz=106,SNR=16 | | | | | | | |
| **NEA2** | **Nenana** | **152.73** | **308** | P | | **PKPbc** | 12 48 31.2 | **-0.2** |
| | baz=103,SNR=31 | | | | | | | |
| **CHIR** | **Chirikof Islan** | **152.95** | **287** | P | | **PKiKP** | 12 48 32.7 | **+0.4** |
| | baz=116 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **152.97** | **309** | P | | **PKPbc** | 12 48 31.7 | **-0.2** |
| | baz=102,SNR=6.6 | | | | | | | |
| **TRF** | **Thorofare Moun** | **152.99** | **305** | P | | **PKiKP** | 12 48 32.6 | **+0.2** |
| | baz=104,SNR=11 | | | | | | | |
| **KTH** | **Kantishna Hill** | **153.29** | **305** | | | **PKiKP** | 12 48 33.0 | **+0.1** |
| **KSRS** | **Korea Array** | **153.29** | **129** | PKPbc | | **PKPbc** | 12 48 32.3 | **-1.2** |
| | comp=Z,2.0nm,1.0s,baz=156,slow=3.1,SNR=4.2 | | | | | | | |
| KSRS | | | | pPKP | | **PKPab** | 12 48 45.2 | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=230,slow=4.4,SNR=4.9 | | | | | | | |
| KSRS | | | | pPKPbc | | **pPKPbc** | 12 48 54.5 | **+0.1** |
| | comp=Z,2.4nm,0.7s,baz=207,slow=3.0,SNR=5.2 | | | | | | | |
| KSRS | | | | pPKPab | | **pPKPab** | 12 49 07.1 | **+1.1** |
| | comp=Z,6.5nm,1.0s,baz=206,slow=4.0,SNR=7.6 | | | | | | | |
| **ILSW** | **Iliamna Southw** | **153.30** | **297** | | | **PKiKP** | 12 48 33.3 | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **153.44** | **307** | | | **PKiKP** | 12 48 33.1 | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **153.44** | **307** | P | | **PKiKP** | 12 48 33.2 | **0.0** |
| | baz=102,SNR=46 | | | | | | | |
| **MLY** | **Manley** | **153.52** | **309** | | | **PKiKP** | 12 48 33.4 | **+0.1** |
| **MLY** | **Manley** | **153.52** | **309** | P | | **PKiKP** | 12 48 33.7 | **+0.4** |
| | baz=101,SNR=15 | | | | | | | |
| **COLD** | **Coldfoot** | **153.64** | **314** | P | | **PKiKP** | 12 48 34.4 | **+1.0** |
| | baz=97 | | | | | | | |
| **PPLA** | **Purkeypile** | **153.69** | **304** | | | **PKiKP** | 12 48 34.2 | **+0.3** |
| **PPLA** | **Purkeypile** | **153.69** | **304** | P | | **PKiKP** | 12 48 34.0 | **+0.2** |
| | baz=104,SNR=7.6 | | | | | | | |
| **CAST** | **Castle Rocks** | **153.76** | **305** | | | **PKPbc** | 12 48 33.7 | **-0.1** |
| **CAST** | **Castle Rocks** | **153.76** | **305** | P | | **PKPbc** | 12 48 33.7 | **-0.1** |
| | baz=103,SNR=14 | | | | | | | |
| **O19K** | **Port Alsworth** | **153.93** | **297** | | | **PKPbc** | 12 48 33.9 | **-0.2** |
| **O19K** | **Port Alsworth** | **153.93** | **297** | P | | **PKPbc** | 12 48 33.7 | **-0.5** |
| | baz=108 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **153.97** | **306** | P | | **PKiKP** | 12 48 34.3 | **+0.1** |
| | baz=102,SNR=10 | | | | | | | |
| **I21K** | **Tanana** | **154.06** | **309** | P | | **PKiKP** | 12 48 34.6 | **+0.3** |
| | baz=100 | | | | | | | |
| **N19K** | **Bonanza Creek** | **154.19** | **298** | | | **PKPbc** | 12 48 34.8 | **-0.1** |
| **N19K** | **Bonanza Creek** | **154.19** | **298** | P | | **PKPbc** | 12 48 34.4 | **-0.5** |
| | baz=107 | | | | | | | |
| **O18K** | **Koktuh Hills** | **154.25** | **296** | P | | **PKiKP** | 12 48 35.1 | **+0.2** |
| | baz=108 | | | | | | | |
| **L20K** | **Farewell, AK** | **154.35** | **302** | P | | **PKiKP** | 12 48 35.1 | **+0.1** |
| | baz=104 | | | | | | | |
| **M19K** | **Big River Lodg** | **154.44** | **301** | P | | **PKiKP** | 12 48 35.4 | **+0.1** |
| | baz=104 | | | | | | | |
| **K20K** | **Telida** | **154.62** | **304** | P | | **PKiKP** | 12 48 35.6 | **+0.1** |
| | baz=102 | | | | | | | |
| **J20K** | **Nowinta River** | **154.81** | **306** | P | | **PKiKP** | 12 48 36.2 | **+0.3** |
| | baz=100 | | | | | | | |
| **IMAR** | **Indian Mountai** | **154.90** | **310** | | | **PKiKP** | 12 48 36.7 | **+0.6** |
| **SDPT** | **Sand Point** | **155.24** | **284** | P | | PKPdf | 12 48 38.3 | +10 |
| | baz=115 | | | | | | | |
| **GCSA** | **Galena City Sc** | **156.07** | **307** | P | | **PKPab** | 12 48 57.5 | **+0.7** |
| | baz=97,SNR=24 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **158.49** | **316** | P | | **PKPab** | 12 49 08.3 | **+0.9** |
| | baz=83 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **160.59** | **125** | PKPab | | **PKPab** | 12 49 17.3 | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=163,slow=5.6,SNR=2.0 | | | | | | | |
| USRK | | | | pPKPab | | **pPKPab** | 12 49 37.8 | **+0.4** |
| | comp=Z,6.3nm,1.0s,baz=217,slow=4.8,SNR=4.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **160.59** | **125** | PKIKP | | **PKPdf** | 12 48 35.1 | **+0.1** |
| USRK | | | | | | | 12 49 17.0 | |
| **USRK** | **Ussuriysk Ar.** | **160.59** | **125** | PKPdf | | **PKPdf** | 12 48 35.1 | **+0.1** |
| USRK | | | | | | **PKPab** | 12 49 17.0 | **-0.1** |
| **TNA** | **Tin City** | **160.74** | **309** | P | | **PKPab** | 12 49 17.1 | **0.0** |
| | baz=85 | | | | | | | |
| **TIXI** | **Tiksi** | **162.75** | **27** | PKPab | | **PKPab** | 12 49 26.1 | **+0.3** |
| | comp=Z,0.9nm,0.6s,baz=293,slow=9.9,SNR=3.9 | | | | | | | |
| **TIXI** | **Tiksi** | **162.75** | **27** | PKIKP | | **PKPdf** | 12 48 35.8 | **-0.6** |
| TIXI | | | | | | | 12 49 26.1 | |
| **TIXI** | **Tiksi** | **162.75** | **27** | PKPdf | | **PKPdf** | 12 48 35.8 | **-0.6** |
| **KLR** | **Kul'dur** | **164.20** | **114** | PKPab | | **PKPab** | 12 49 31.9 | **-0.9** |
| | comp=Z,2.0nm,0.6s,baz=214,slow=1.5,SNR=4.8 | | | | | | | |
| **BILL** | **Bilibino** | **168.46** | **337** | *e*PKIKP | | **PKPdf** | 12 48 40.1 | **-1.1** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **174.76** | **205** | PKP | | **PKPdf** | 12 48 45.2 | **+0.5** |
| | comp=Z,1.9nm,0.7s,baz=110,slow=12,SNR=1.2 | | | | | | | |
| PETK | | | | PKPab | | **PKPab** | 12 50 18.1 | **-1.3** |
| | comp=Z,2.8nm,0.8s,baz=152,slow=6.5,SNR=5.5 | | | | | | | |

*IDC **09** 12:28:52.2±1.6,5°.83S×130°.29E,h162km±15km,mb3.5/6, mb1 3.8/11,mb1mx3.5/32,mbtmp4.2/11,Error ellipse: s-maj=28.2km s-min=13.1km az=100.0*
*NEIC **09** 12:28:54.9±2.2,5°.83S±0°.09×130°.22E±0°.06,h185km±12km, mb4.1/9,Error ellipse: s-maj=14.0km s-min=6.5km az=152.0*
*DJA **09** 12:28:55.0±0.3,6°S±2°×13°0E±°,h183km±7km,M4.5/13, mB5.0/7,mb4.6/7,MLv4.6/13,Mw(mB)4.3/7*

**ISC 09 12:28:54.7±0.5,5°.85S±0°.04×130°.20E±0°.06,h200km,n59, σ1°98/66,mb3.8/7,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.35** | **348** | P | **Pn** | **12 29 27.1** | **0.0** |
| **SAUI** | **Saumlaki** | **2.38** | **153** | P | **Pn** | **12 29 38.5** | **+1.2** |
| SAUI | | | | S | **Sn** | **12 30 10.8** | **+0.2** |
| **SAUI** | **Saumlaki** | **2.38** | **153** | Pn | **Pn** | **12 29 36.4** | **-0.9** |
| **MSAI** | **Masohi** | **2.79** | **333** | P | **Pn** | **12 29 41.0** | **-0.9** |
| MSAI | | | | S | **Sn** | **12 30 15.4** | **-3.5** |
| **FAKI** | **Fak Fak** | **3.56** | **35** | P | **Pn** | **12 29 50.1** | **-1.0** |
| FAKI | | | | S | **Sn** | **12 30 32.1** | **-3.3** |
| **FAKI** | **Fak Fak** | **3.56** | **35** | Pn | **Pn** | **12 29 50.4** | **-0.8** |
| **FAKI** | **Fak Fak** | **3.56** | **35** | P | **Pn** | **12 29 50.3** | **-0.8** |
| **SIJI** | **Sorong** | **5.07** | **12** | P | **Pn** | **12 30 07.8** | **-2.1** |
| | 14nm,0.3s,baz=228,slow=8.4,SNR=55 | | | | | | |
| SIJI | | | | S | **Sn** | **12 31 03.5** | **-5.9** |
| | 33nm,0.3s,baz=261,slow=23,SNR=6.8 | | | | | | |
| **SWI** | **Sorong** | **5.07** | **12** | P | **Pn** | **12 30 09.0** | **-1.0** |
| **SANI** | **Sanana** | **5.65** | **312** | P | **Pn** | **12 30 17.4** | **0.0** |
| | 0.4nm1μm121nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **5.65** | **312** | P | **Pn** | **12 30 17.5** | **0.0** |
| **LBMI** | **Labuha** | **5.84** | **332** | P | **Pn** | **12 30 20.0** | **+0.1** |
| | 0.5nm1μm114nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **6.57** | **174** | P | **Pn** | **12 30 29.0** | **-0.4** |
| **MTN** | **Manton Dam** | **7.01** | **172** | Pn | **Pn** | **12 30 34.8** | **-0.3** |
| **MTN** | **Manton Dam** | **7.01** | **172** | P | **Pn** | **12 30 34.8** | **-0.3** |
| **SOEI** | **Soe** | **7.04** | **236** | P | **Pn** | **12 30 36.8** | **+1.2** |
| | 0.6nm23nm,0.5s | | | | | | |
| **SOEI** | **Soe** | **7.04** | **236** | Pn | **Pn** | **12 30 36.3** | **+0.7** |
| **SOEI** | **Soe** | **7.04** | **236** | P | **Pn** | **12 30 35.7** | **+0.1** |
| **BAKI** | **Biak** | **7.50** | **52** | P | **Pn** | **12 30 42.7** | **+1.2** |
| **BATI** | **Baumata** | **7.78** | **236** | P | **Pn** | **12 30 43.9** | **-1.3** |
| | 11nm,0.3s,baz=63,slow=2.3,SNR=9.1 | | | | | | |
| BATI | | | | S | **Sn** | **12 32 07.3** | **-5.8** |
| | 5.8nm,0.3s,baz=58,slow=21,SNR=5.0 | | | | | | |
| **BATI** | **Baumata** | **7.78** | **236** | P | **Pn** | **12 30 45.7** | **+0.6** |
| | 0.1nm28nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **9.86** | **188** | | **Pn** | **12 31 11.2** | **-1.0** |
| **KNRA** | **Kununurra** | **9.86** | **188** | P | **Pn** | **12 31 11.2** | **-1.0** |
| **MRSI** | **Marisa** | **10.37** | **307** | P | **Pn** | **12 31 19.7** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **12.96** | **200** | P | **Pn** | **12 31 50.0** | **-1.7** |
| | 1.2nm,0.3s,baz=28,slow=10,SNR=40 | | | | | | |
| FITZ | | | | S | S | 12 34 04.0 | -12 |
| | 2.6nm,0.3s,baz=99,slow=20,SNR=10 | | | | | | |
| **WB0** | **Warramunga Arr** | **14.42** | **164** | Pn | **Pn** | **12 32 09.0** | **-0.9** |
| **WRAB** | **Tennant Creek** | **14.57** | **164** | | **Pn** | **12 32 11.1** | **-0.6** |
| **WRAB** | **Tennant Creek** | **14.57** | **164** | P | **Pn** | **12 32 10.7** | **-1.0** |
| **WRA** | **Warramunga Arr** | **14.57** | **164** | P | **Pn** | **12 32 09.2** | **-2.5** |
| | 0.6nm,0.3s,baz=346,slow=13,SNR=38 | | | | | | |
| WRA | | | | S | **S** | **12 34 45.8** | **-8.1** |
| | 1.3nm,0.3s,baz=332,slow=22,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.57** | **164** | Pn | **Pn** | **12 32 10.4** | **-1.4** |
| **WB2** | **Warramunga Arr** | **14.58** | **164** | Pn | **Pn** | **12 32 10.6** | **-1.2** |
| **WR0** | **Warramunga Arr** | **14.64** | **164** | Pn | **Pn** | **12 32 11.3** | **-1.3** |
| **COEN** | **Coen** | **15.10** | **123** | P | **P** | **12 32 19.8** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **16.13** | **260** | P | **P** | **12 32 29.9** | **-0.3** |
| **PMG** | **Port Moresby** | **17.18** | **103** | P | **P** | **12 32 41.6** | **0.0** |
| PMG | | | | IAmb | IAmb | 12 33 05.6 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **17.24** | **149** | P | **Pn** | **12 32 44.1** | **+0.2** |
| **AS31** | **Alice Springs** | **18.07** | **169** | P | **Pn** | **12 32 53.4** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 12 32 56.6 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **18.07** | **169** | P | **Pn** | **12 32 53.0** | **-0.6** |
| | comp=Z,1.7nm,0.3s,baz=344,slow=8.8,SNR=96 | | | | | | |
| ASAR | | | | S | **S** | **12 36 06.7** | **-1.4** |
| | comp=Z,0.6nm,0.3s,baz=350,slow=20,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **18.07** | **169** | P | **Pn** | **12 32 52.9** | **-0.6** |
| **MBWA** | **Marble Bar** | **18.29** | **213** | P | **P** | **12 32 54.9** | **+1.1** |
| MBWA | | | | IAmb | IAmb | 12 32 55.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **MBWA** | **Male Bar** | **18.29** | **213** | P | **P** | **12 32 54.8** | **+1.1** |
| **KKM** | **Kota Kinabalu** | **18.29** | **310** | P | **P** | **12 32 53.5** | **-0.3** |
| **KKM** | **Kota Kinabalu** | **18.29** | **310** | P | **P** | **12 32 54.3** | **+0.4** |
| **MTSU** | **Mount Surprise** | **18.41** | **133** | P | **Pn** | **12 32 57.3** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **18.56** | **212** | P | **P** | **12 32 56.3** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 12 32 58.8 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.56** | **212** | P | **P** | **12 32 58.3** | **+1.6** |
| **WRKA** | **Warakurna** | **19.16** | **185** | P | **P** | **12 33 05.3** | **+2.1** |
| **OOD** | **Oodnadatta** | **22.44** | **167** | P | **P** | **12 33 38.9** | **+1.9** |
| **MULG** | **Mulgathing** | **24.57** | **172** | P | **P** | **12 33 59.2** | **+2.9** |
| **CMAR** | **Chiang Mai Arr** | **39.16** | **309** | P | **P** | **12 36 05.1** | **+1.7** |
| | comp=Z,0.4nm,0.3s,baz=137,slow=8.0,SNR=0.8 | | | | | | |
| **SONM** | **Songino Array** | **57.42** | **341** | P | **P** | **12 38 24.4** | **+1.8** |
| | comp=Z,0.7nm,0.6s,baz=161,slow=6.7,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **57.42** | **341** | P | **P** | **12 38 24.9** | **+2.3** |
| **PETK** | **Petropavlovsk-** | **63.18** | **18** | P | **P** | **12 39 03.2** | **+1.9** |
| | comp=Z,1.6nm,0.6s,baz=117,slow=2.0,SNR=6.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **63.18** | **18** | P | **P** | **12 39 02.0** | **+0.8** |
| **MK31** | **Makanchi Array** | **67.38** | **326** | P | **P** | **12 39 30.6** | **+2.2** |
| **MKAR** | **Makanchi Array** | **67.38** | **326** | P | **P** | **12 39 30.2** | **+1.8** |
| | comp=Z,1.8nm,0.6s,baz=112,slow=8.2,SNR=26 | | | | | | |
| **MAKZ** | **Makanchi** | **67.56** | **326** | P | **P** | **12 39 31.7** | **+2.1** |
| MAKZ | | | | IAmb | IAmb | 12 39 32.0 | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.65** | **334** | P | **P** | **12 39 49.4** | **+1.1** |
| | comp=Z,1.0nm,0.5s,baz=128,slow=3.6,SNR=5.4 | | | | | | |
| **ILAR** | **Eielson Array** | **92.23** | **25** | P | **P** | **12 41 41.5** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=252,slow=5.1,SNR=4.9 | | | | | | |

**IDC 09 12:45:58.6±842.0,52°.88N×33°.58E,h0km,Error ellipse: s-maj=338.9km s-min=102.9km az=33.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.39** | **27** | *i* | | 13 13 40.0 | |
| | baz=211,slow=294,SNR=0.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.36** | **89** | *i* | | 14 20 16.3 | |
| | baz=291,slow=323,SNR=5.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **30.02** | **67** | *i* | | 15 50 10.0 | |
| | baz=284,slow=328,SNR=2.8 | | | | | | |

*IDC **09** 13:01:00.1±1.2,34°.81N×25°.99E,h0km,mb3.8/6, mb1 3.7/9,mb1mx3.5/49,mbtmp3.7/9,ML3.7/3,Error ellipse: s-maj=25.3km s-min=10.3km az=16.0*
*NEIC **09** 13:01:01.3±2.0,34°.91N±0°.06×25°.97E±0°.05,h8km±5km, mb4.1/8,Error ellipse: s-maj=9.1km s-min=6.1km az=183.0*
*ATH **09** 13:01:03.8,34°.95N×25°.94E,h31km±3km,ML3.3/9,Error ellipse: s-maj=3.5km s-min=1.3km az=130.0*
*THE **09** 13:01:03.3,34°.87N×25°.87E,h16km±1km,ML3.4/5,Error ellipse: s-maj=2.7km s-min=0.8km az=8.0*
*ISK **09** 13:01:04.0,34°.93N×25°.92E,h15km,ML3.2/16*

**ISC 09 13:01:02.5±1.1,34°.88N±0°.05×25°.83E±0°.02,h16km±7km, n70,σ1°32/86,mb3.8/9,Crete**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRMA** | **Ierapetra Chan** | **0.15** | **331** | P | **Pb** | **13 01 07.7** | **+0.7** |
| FRMA | | | | S | **Sb** | **13 01 10.8** | **+0.8** |
| | 36μm,0.4s | | | | | | |
| **STIA** | **Sitia Lasithi** | **0.39** | **34** | P | **Pg** | **13 01 10.7** | **+0.2** |
| STIA | | | | S | **Sb** | **13 01 17.6** | **+0.8** |
| **ZKR** | **Zakros** | **0.40** | **54** | P | **Pg** | **13 01 10.6** | **-0.1** |
| ZKR | | | | S | **Sg** | **13 01 16.9** | **+0.7** |
| | 5μm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.40** | **54** | P | **Pg** | **13 01 10.6** | **-0.1** |
| ZKR | | | | S | **Sg** | **13 01 16.7** | **+0.5** |
| ZKR | | | | AML | AML | 13 01 19.5 | |
| | comp=N,5136μm,0.3s | | | | | | |
| ZKR | | | | AML | AML | 13 01 21.2 | |
| | comp=E,13485μm,0.5s | | | | | | |
| **ZKR** | **Zakros** | **0.40** | **54** | PG | **Pg** | **13 01 10.7** | **-0.1** |
| ZKR | | | | SG | **Sg** | **13 01 16.3** | **+0.1** |
| **NPS** | **Neapolis** | **0.42** | **336** | P | **Pb** | **13 01 11.8** | **+0.2** |
| NPS | | | | S | **Sb** | **13 01 18.3** | **+0.6** |
| | comp=E,6μm,0.2s | | | | | | |
| **NPS** | **Neapolis** | **0.42** | **336** | P | **Pb** | **13 01 11.9** | **+0.2** |
| NPS | | | | S | **Sb** | **13 01 18.4** | **+0.7** |
| NPS | | | | AML | AML | 13 01 19.2 | |
| | comp=E,14564μm,0.2s | | | | | | |
| NPS | | | | AML | AML | 13 01 23.2 | |
| | comp=N,8102μm,0.3s | | | | | | |
| **HRKL** | **Herakleio** | **0.73** | **306** | P | **Pn** | **13 01 18.2** | **0.0** |
| HRKL | | | | S | **Sn** | **13 01 28.7** | **-0.3** |
| | comp=N,5μm,0.5s | | | | | | |
| **HRKL** | **Herakleio** | **0.73** | **306** | PG | **Pn** | **13 01 19.4** | **+1.2** |
| HRKL | | | | SG | **Sn** | **13 01 30.5** | **+1.5** |
| **KSTL** | **Kastelli Herak** | **0.75** | **305** | P | **Pg** | **13 01 13.7** | **-3.5** |
| KSTL | | | | S | **Sg** | **13 01 22.4** | **-4.7** |
| **IACM** | **Heraklion** | **0.75** | **305** | P | **Pn** | **13 01 18.8** | **+0.4** |
| IACM | | | | S | **Sn** | **13 01 30.2** | **+0.8** |
| **SIVA** | **Sivas** | **0.84** | **280** | P | **Pn** | **13 01 20.1** | **+0.4** |
| SIVA | | | | S | **Sn** | **13 01 34.4** | **+2.6** |
| SIVA | | | | AML | AML | 13 01 45.2 | |
| | comp=N,4532μm,0.7s | | | | | | |
| SIVA | | | | AML | AML | 13 01 49.2 | |
| | comp=E,8818μm,0.6s | | | | | | |
| **IDI** | **Anoyia** | **0.87** | **298** | Pg | **Pg** | **13 01 19.5** | **+0.1** |
| | comp=E,14nm,0.3s,baz=152,slow=11,SNR=124 | | | | | | |
| IDI | | | | Lg | Lg | 13 01 33.9 | |
| | comp=E,190nm,0.3s,baz=69,slow=8.6,SNR=38 | | | | | | |
| **IDI** | **Anoyia** | **0.87** | **298** | P | **Pg** | **13 01 19.6** | **+0.1** |
| IDI | | | | S | **Sn** | **13 01 32.9** | **+0.4** |
| | comp=E,2μm,0.3s | | | | | | |
| **IDI** | **Anoyia** | **0.87** | **298** | P | **Pn** | **13 01 20.4** | **+0.3** |
| IDI | | | | S | **Sn** | **13 01 33.8** | **+1.3** |
| IDI | | | | AML | AML | 13 01 34.8 | |
| | comp=N,3598μm,0.3s | | | | | | |
| IDI | | | | AML | AML | 13 01 38.1 | |
| | comp=E,2959μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **1.43** | **269** | P | **Pg** | **13 01 31.4** | **+1.4** |
| GVD | | | | AML | AML | 13 02 07.5 | |
| | comp=E,1736μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 13 02 07.7 | |
| | comp=N,1193μm,0.5s | | | | | | |
| **GVD** | **Gavdhos** | **1.43** | **269** | PN | **Pg** | **13 01 31.3** | **+1.2** |
| **VAM** | **Vamos** | **1.43** | **292** | P | **Pg** | **13 01 30.3** | **+0.2** |
| VAM | | | | S | **Sg** | **13 01 50.4** | **+1.6** |
| VAM | | | | AML | AML | 13 01 56.2 | |
| | comp=N,1863μm,0.4s | | | | | | |
| VAM | | | | AML | AML | 13 01 59.6 | |
| | comp=E,831μm,0.4s | | | | | | |
| **THR6** | **Thira Island,** | **1.51** | **347** | P | **Pb** | **13 01 30.2** | **0.0** |
| **SANT** | **Santorini** | **1.52** | **349** | P | **Pb** | **13 01 30.6** | **+0.2** |
| SANT | | | | S | **Sn** | **13 01 49.6** | **+1.1** |
| SANT | | | | AML | AML | 13 01 56.0 | |
| | comp=E,2182μm,0.2s | | | | | | |
| SANT | | | | AML | AML | 13 01 56.4 | |
| | comp=N,668μm,0.4s | | | | | | |
| **SANT** | **Santorini** | **1.52** | **349** | PN | **Pb** | **13 01 30.7** | **+0.4** |
| SANT | | | | SN | **Sb** | **13 01 50.6** | **+1.3** |
| **SANT** | **Santorini** | **1.52** | **349** | | **Pn** | **13 01 28.6** | **-0.5** |
| **THR9** | **Santorini-Faro** | **1.52** | **346** | P | **Pb** | **13 01 30.5** | **+0.1** |
| **THR8** | **Santorini-Mono** | **1.55** | **350** | P | **Pn** | **13 01 30.2** | **+0.8** |
| **SNT5** | **Nea Kammeni, S** | **1.56** | **347** | P | **Pb** | **13 01 30.8** | **-0.2** |
| **THR3** | **Thira Island,** | **1.56** | **347** | P | **Pn** | **13 01 30.7** | **+1.1** |
| **THR5** | **Thira Island,** | **1.58** | **346** | P | **Pb** | **13 01 31.1** | **-0.3** |
| **THR2** | **Thira island,** | **1.60** | **349** | P | **Pb** | **13 01 31.8** | **+0.2** |
| **IMMV** | **Iera Moni Meta** | **1.62** | **292** | P | **Pg** | **13 01 34.2** | **+0.6** |
| IMMV | | | | AML | AML | 13 02 06.2 | |
| | comp=E,1174μm,0.5s | | | | | | |
| IMMV | | | | AML | AML | 13 02 06.4 | |
| | comp=N,1244μm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.62** | **292** | PN | **Pg** | **13 01 34.3** | **+0.6** |
| **NISR** | **Nisiros** | **2.03** | **31** | P | **Pn** | **13 01 37.2** | **+1.2** |
| **KOSK** | **Kos Island** | **2.09** | **26** | PN | **Pn** | **13 01 38.4** | **+1.6** |
| **MHLO** | **Agia Marina, M** | **2.15** | **328** | P | **Pb** | **13 01 41.0** | **0.0** |
| MHLO | | | | S | **Sb** | **13 02 08.0** | **+0.7** |
| MHLO | | | | AML | AML | 13 02 14.9 | |
| | comp=E,1467μm,0.5s | | | | | | |
| MHLO | | | | AML | AML | 13 02 18.8 | |
| | comp=N,1239μm,0.5s | | | | | | |
| **ANKY** | **Antikythira Is** | **2.29** | **296** | P | **Pb** | **13 01 44.5** | **+1.1** |
| **ARG** | **Arkhangelos** | **2.30** | **54** | PN | **Pn** | **13 01 41.5** | **+1.7** |
| **BODT** | **Bodrum** | **2.49** | **29** | PN | **Pn** | **13 01 43.8** | **+1.4** |
| **TURN** | **Turunc** | **2.73** | **45** | PN | **Pn** | **13 01 46.9** | **+1.3** |
| **DALY** | **Dalyan (Mula)** | **3.00** | **49** | PN | **Pn** | **13 01 51.3** | **+1.9** |
| **YER** | **Yerkesik** | **3.01** | **41** | PN | **Pn** | **13 01 51.3** | **+1.8** |
| **GCAM** | **G?zelcaml?** | **3.04** | **22** | PN | **Pn** | **13 01 52.5** | **+2.6** |
| **FETY** | **Fethiye** | **3.18** | **56** | PN | **Pn** | **13 01 52.8** | **+1.0** |
| **AKAS** | **Kas** | **3.37** | **65** | PN | **Pn** | **13 01 55.7** | **+1.2** |
| **AKAS** | **Kas** | **3.37** | **65** | Pn | **Pn** | **13 01 51.5** | **-3.1** |
| **CAME** | **Cameli-Denizli** | **3.49** | **53** | PN | **Pn** | **13 01 57.6** | **+1.3** |
| **URLA** | **Izmir** | **3.53** | **10** | PN | **Pn** | **13 01 58.3** | **+1.6** |
| **ELL** | **Elmali** | **3.81** | **59** | PN | **Pn** | **13 02 08.8** | **+2.2** |
| **ELL** | **Elmali** | **3.81** | **59** | | **Pn** | **13 01 59.1** | **-1.4** |
| **ITM** | **Ithomi** | **3.91** | **307** | Pn | **Pn** | **13 02 02.9** | **+1.0** |
| **KULA** | **Kula-Manisa** | **4.28** | **31** | PN | **Pn** | **13 02 09.0** | **+1.9** |
| **AGG** | **Agios Georgios** | **4.99** | **327** | Pn | **Pn** | **13 02 18.0** | **+1.2** |
| **MMAI** | **Mount Meron Ar** | **8.17** | **100** | P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHMS** | **Chumysh** | **5.57** | **21** | P | | **Pn** | **13 10 30.8** | **-0.3** |
| | SNR=18 | | | | | | | |
| **USP** | **Ospenovka** | **5.75** | **18** | P | | **Pn** | **13 10 32.8** | **-0.7** |
| | SNR=11 | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.77** | **27** | P | | **Pn** | **13 10 33.7** | **-0.3** |
| | SNR=5.2 | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.77** | **27** | ⇓Pn | | **Pn** | **13 10 33.3** | **-0.6** |
| | 2.7nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | **13 11 41.8** | **+2.3** |
| | 2.8nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **11.74** | **37** | P | | **Pn** | **13 11 51.9** | **-1.0** |
| | 0.0nm,0.3s,baz=227,slow=14,SNR=2.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.61** | **18** | P | | **Pn** | **13 12 15.9** | **-1.0** |
| | 0.0nm,0.3s,baz=201,slow=12,SNR=4.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.24** | **356** | P | | **Pn** | **13 12 36.8** | **-0.5** |
| | 0.2nm,0.3s,baz=119,slow=12,SNR=1.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.37** | **25** | P | | **P** | **13 13 13.7** | **+0.5** |
| | 0.2nm,0.3s,baz=202,slow=11,SNR=4.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.42** | **122** | LR | | LR | 13 29 29.3 | |
| | comp=Z,58nm,19.0s,baz=215,slow=40 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.88** | **3** | P | | **P** | **13 21 02.5** | **+0.8** |
| | 0.2nm,0.5s,baz=350,slow=5.4,SNR=6.3 | | | | | | | |

*EAF **09** 13:14:42.6±2.7,25°.88S×30°.06E,h10km,MD3.6*
**BUL 09 13:14:42.5±1.2,25°.96S×30°.01E,h10km,MD3.8,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **1.99** | **100** | *eP* | Pn | 13 15 16.4 | +0.1 |
| CNG | | | | *eS* | Sn | 13 15 40.2 | -1.0 |
| **CNG** | **Changalane** | **1.99** | **100** | *eP* | Pn | 13 15 16.4 | +0.1 |
| CNG | | | | *eS* | Sn | 13 15 40.2 | -1.0 |
| **MOPA** | **Mopani** | **2.74** | **28** | *eP* | Pn | 13 15 22.2 | -4.4 |
| MOPA | | | | *eS* | Sn | 13 15 54.7 | -5.1 |
| **MOPA** | **Mopani** | **2.74** | **28** | *eP* | Pn | 13 15 22.2 | -4.4 |
| MOPA | | | | *eS* | Sn | 13 15 54.7 | -5.1 |
| **LBTB** | **Lobatse** | **4.09** | **282** | *eP* | Pn | 13 15 45.0 | -0.2 |
| LBTB | | | | *eS* | Sn | 13 16 29.9 | -3.4 |
| **LBTB** | **Lobatse** | **4.09** | **282** | *eP* | Pn | 13 15 45.0 | -0.2 |
| LBTB | | | | *eS* | Sn | 13 16 29.9 | -3.4 |
| **MATP** | **Matopo** | **5.68** | **346** | *eP* | Pn | 13 16 06.5 | -0.6 |
| MATP | | | | *eS* | Sn | 13 17 07.6 | -4.9 |
| **MATP** | **Matopo** | **5.68** | **346** | *eP* | Pn | 13 16 06.5 | -0.6 |
| MATP | | | | *eS* | Sn | 13 17 07.6 | -4.9 |
| **BLWY** | **Bulawayo** | **5.93** | **347** | *eP* | Pn | 13 16 09.9 | -0.7 |
| BLWY | | | | *eS* | Sn | 13 17 13.5 | -5.3 |
| **BLWY** | **Bulawayo** | **5.93** | **347** | *eP* | Pn | 13 16 09.9 | -0.7 |
| BLWY | | | | *eS* | Sn | 13 17 13.5 | -5.3 |

*TUL **09** 13:18:21.5±1.1,36°.12N±0°.01×96°.81W±0°.02,h6km±4km, ML2.9,mb_Lg2.6/7(NEIC),Error ellipse: s-maj=2.2km s-min=1.3km az=112.0*
**NEIC 09 13:18:21.4±0.8,36°.13N±0°.01×96°.80W±0°.02,h9km±3km, Error ellipse: s-maj=2.7km s-min=1.4km az=109.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **QUOK** | **Quay** | **0.08** | **58** | Pg | Pg | 13 18 24.0 | +0.3 |
| QUOK | | | | Sg | Sg | 13 18 25.6 | +0.2 |
| **OK034** | **N. Norfolk Rd.** | **0.14** | **150** | Pg | Pg | 13 18 24.6 | +0.2 |
| OK034 | | | | Sg | Sg | 13 18 26.4 | -0.1 |
| **OK033** | **Mehan** | **0.14** | **234** | Pg | Pg | 13 18 24.4 | -0.1 |
| **OK031** | **S. Brethren Rd** | **0.18** | **191** | Pg | Pg | 13 18 25.2 | 0.0 |
| OK031 | | | | Sg | Sg | 13 18 27.6 | -0.1 |
| **OK030** | **Cody Creek RV** | **0.20** | **177** | Pg | Pg | 13 18 25.6 | +0.1 |
| OK030 | | | | Sg | Sg | 13 18 28.4 | +0.1 |
| **OK025** | **Westminster Rd** | **0.70** | **219** | Pg | Pg | 13 18 34.5 | -0.4 |
| **BLOK** | **Blackwell** | **0.72** | **332** | Pg | Pg | 13 18 35.3 | +0.1 |
| **BCOK** | **Bluff Creek, N** | **0.81** | **235** | Pg | Pg | 13 18 36.7 | -0.4 |
| BCOK | | | | Sg | Sg | 13 18 47.4 | -0.2 |
| **T35A** | **Sooner Cattle** | **0.82** | **16** | Pg | Pg | 13 18 37.4 | +0.1 |
| T35A | | | | Sg | Sg | 13 18 47.5 | -0.4 |
| **TUL1** | **Leonard** | **0.84** | **105** | Pg | Pg | 13 18 37.5 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.89** | **217** | Pg | Pg | 13 18 37.8 | -0.7 |
| OKCFA | | | | Sg | Sg | 13 18 49.9 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.89** | **216** | Pg | Pg | 13 18 37.8 | -0.7 |
| **W35A** | **Tecumseh** | **0.97** | **184** | Pg | Pg | 13 18 39.3 | -0.8 |
| W35A | | | | Sg | Sg | 13 18 52.7 | -0.1 |
| **FNO** | **Franklin** | **1.00** | **210** | Pg | Pg | 13 18 39.6 | -1.0 |
| **CROK** | **Carrier** | **1.03** | **292** | Pg | Pg | 13 18 41.0 | -0.3 |
| **KAN13** | **South Haven SW** | **1.04** | **328** | Pg | Pg | 13 18 41.1 | -0.3 |
| **GC02** | **Grant County #** | **1.12** | **310** | Pg | Pg | 13 18 42.5 | -0.4 |
| **KAN17** | **Caldwell West** | **1.20** | **320** | Pg | Pb | 13 18 44.3 | -0.1 |
| **KAN14** | **Manchester OK** | **1.25** | **312** | Pg | Pn | 13 18 45.0 | -0.1 |
| **KAN01** | **Argonia South** | **1.28** | **323** | | Pn | 13 18 45.5 | -0.1 |
| **KAN06** | **Argonia West S** | **1.41** | **323** | | Pn | 13 18 47.9 | 0.0 |
| **KAN10** | **Anthony SW Sta** | **1.44** | **314** | | Pn | 13 18 48.5 | 0.0 |
| **KAN16** | **Harper SW Stat** | **1.50** | **317** | | Pn | 13 18 49.4 | 0.0 |
| **KAN12** | **Harper NE Stat** | **1.52** | **321** | | Pn | 13 18 49.8 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.74** | **209** | | | 13 18 53.1 | -0.5 |
| **U32A** | **Winter Ranch,** | **1.80** | **279** | Pn | Pn | 13 18 53.6 | +0.9 |
| **X37A** | **Clayton** | **1.93** | **142** | Pn | Pn | 13 18 55.4 | +1.0 |
| X37A | | | | lAmb_Lg | | 13 19 23.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.13** | **230** | | Pn | 13 18 58.2 | +0.9 |
| **LOOK** | **Love County** | **2.15** | **189** | lAmb_Lg | | 13 19 29.7 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **HHAR** | **Hobbs** | **2.31** | **85** | Pn | Pn | 13 19 00.0 | +0.3 |
| **U40A** | **Yellville** | **3.19** | **85** | lAmb_Lg | | 13 20 07.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **3.88** | **128** | lAmb_Lg | | 13 20 25.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **6.24** | **73** | lAmb_Lg | | 13 21 35.0 | |
| | comp=Z,9.2nm,0.8s | | | | | | |

*BJI **09** 13:50:39.8±0.0,2°.01N×66°.71E,h5km,mb4.4/50, mB5.0/31,Ms4.6/34,Ms7 4.5/36*
*IDC **09** 13:50:41.8±0.4,2°.28N×66°.88E,h0km,mb4.5/41, mb1 4.6/42,mb1mx4.4/75,mbtmp4.5/42,ML4.1/1,MS4.2/56, Ms1 4.2/56,ms1mx4.1/83,Error ellipse: s-maj=13.7km s-min=10.2km az=33.0*
*MOS **09** 13:50:41.1±1.1,2°.10N×66°.77E,h15km,mb5.1/38,Error ellipse: s-maj=8.2km s-min=4.6km az=101.4*
*NEIC **09** 13:50:43.0±2.5,2°.14N±0°.10×66°.83E±0°.09,h10km±1km, mb5.0/72,Error ellipse: s-maj=16.4km s-min=14.6km az=182.0*
*GCMT **09** 13:50:46.0±0.2,2°.19N±0°.02×66°.76E±0°.01,h12km, MW5.0/102,Moment Tensor Solution. s36,c43; s102,c161; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-4.10±.10; Mθθ0.25±.11; Mϕϕ3.85±.09; Mrθ0.96±.43; Mθϕ-1.43±.08; Mϕr0.65±.33; Best double couple: Mo4.38600×10¹⁶ NP1:ϕs326.00000°,δ45.00000°, λ-112.00000°. NP2:ϕs175.00000°,δ49.00000°, λ-70.00000°. Principal axes: T 4.3600, Plg2.0000°, Azm251.0000°; N 0.0550, Plg15.0000°, Azm342.0000°; P -4.4120, Plg75.0000°, Azm154.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 09 13:50:43.1±1.6,2°.10N±0°.06×66°.79E±0°.05,h12km±9km, n441,σ1§52/434,mb4.9/117,MS4.3/70,39C-26D, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAAM** | **Kaadhehdhoo** | **6.40** | **104** | P | **Pn** | **13 52 15.1** | **-2.2** |
| | SNR=11 | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **6.40** | **104** | Pn | **Pn** | **13 52 15.0** | **-2.3** |
| **HMDM** | **Hanimaadhoo** | **7.88** | **54** | Pn | **Pn** | **13 52 35.7** | **-2.0** |
| **DGAR** | **Diego Garcia** | **11.01** | **149** | ⇓*i*P | **Pn** | **13 53 19.2** | **-1.3** |
| **PALK** | **Pallekele** | **14.78** | **69** | Pn | **Pn** | **13 54 09.2** | **-3.0** |
| | 0.8nm,0.3s,baz=347,slow=13,SNR=7.6 | | | | | | |
| PALK | | | | LR | LR | 13 58 43.1 | |
| | comp=Z,3μm,20.1s,baz=4.2,slow=33 | | | | | | |
| **PALK** | **Pallekele** | **14.78** | **69** | P | **Pn** | **13 54 09.9** | **-2.3** |
| **PALK** | **Pallekele** | **14.78** | **69** | P | **Pn** | **13 54 11.9** | **-0.3** |
| PALK | | | | P | **Pn** | **13 54 11.9** | **-0.3** |
| **PALK** | **Pallekele** | **14.78** | **69** | Pn | **Pn** | **13 54 09.9** | **-2.3** |
| **SOCY** | **Socotra** | **16.17** | **309** | P | **P** | **13 54 34.5** | **+0.8** |
| **URV** | **Uravakonda** | **16.42** | **38** | *eP* | **Pn** | **13 54 34.1** | **+0.5** |
| **SKHT** | **Srikalahasti** | **17.23** | **47** | *eP* | **Pn** | **13 54 44.5** | **+0.6** |
| **POO** | **Poona** | **17.73** | **22** | *ex* | **P** | **13 54 51.0** | **0.0** |
| **RCLA** | **Racherla** | **17.89** | **41** | *eP* | **P** | **13 54 52.6** | **0.0** |
| **SRLM** | **Srisailam** | **18.32** | **40** | *eP* | **P** | **13 54 58.0** | **+0.6** |
| **KLRI** | **Killari** | **18.56** | **31** | *eP* | **P** | **13 54 58.7** | **-1.4** |
| **NJS** | **Nagarjunasagar** | **18.92** | **40** | *eP* | **P** | **13 55 02.3** | **-1.7** |
| **HYBB** | **Hyderabad (bro** | **19.11** | **36** | *eP* | **P** | **13 55 05.0** | **-1.2** |
| HYBB | | | | *e* | | 13 58 43.6 | |
| **CUPL** | **Choutuppal** | **19.24** | **38** | *eP* | **P** | **13 55 06.7** | **-0.8** |
| **SHAO** | **Shalim** | **19.25** | **326** | P | **Pn** | **13 55 11.3** | **+2.7** |
| SHAO | | | | P | **Pn** | **13 55 11.3** | **+2.7** |
| **DMTO** | **DMTO** | **19.39** | **324** | P | **Pn** | **13 55 12.3** | **+2.0** |
| **RBK** | **Rabkut** | **19.68** | **322** | P | **Pn** | **13 55 15.5** | **+1.7** |
| | SNR=7.2 | | | | | | |
| RBK | | | | P | **Pn** | **13 55 15.5** | **+1.7** |
| | SNR=7.2 | | | | | | |
| **DQM** | **DQM** | **19.90** | **334** | P | **Pn** | **13 55 17.3** | **+1.0** |
| **MYLAV** | **Mylavaram** | **19.93** | **42** | *eP* | **P** | **13 55 15.6** | **+0.5** |
| **ABTO** | **Aybut** | **20.14** | **320** | P | Pn | 13 55 19.7 | +0.4 |
| | SNR=14 | | | | | | |
| ABTO | | | | P | Pn | 13 55 19.7 | +0.4 |
| | SNR=14 | | | | | | |
| **SRSP** | **Sriramsagar** | **20.19** | **33** | *eP* | **P** | **13 55 18.2** | **+0.3** |
| **WHFO** | **Wadi Hawf** | **20.26** | **322** | P | Pn | 13 55 21.6 | +0.9 |
| **DOK** | **Doka** | **20.58** | **324** | P | Pn | 13 55 24.7 | +0.3 |
| | SNR=9.0 | | | | | | |
| **RPR** | **Rampur** | **20.67** | **35** | *eP* | Pn | 13 55 25.7 | +0.3 |
| **PVM** | **Polavaram** | **20.96** | **43** | *eP* | Pn | 13 55 27.9 | -0.9 |
| **JLN** | **Jalan Bani Buh** | **21.18** | **341** | P | **P** | **13 55 33.0** | **+4.4** |
| | SNR=8.1 | | | | | | |
| JLN | | | | P | **P** | **13 55 33.0** | **+4.4** |
| | SNR=8.1 | | | | | | |
| **WBK** | **Wadi Bani Khal** | **21.76** | **340** | P | **P** | **13 55 38.8** | **+3.9** |
| WBK | | | | P | **P** | **13 55 38.8** | **+3.9** |
| **JMDO** | **Jabal Madar** | **21.85** | **338** | P | **P** | **13 55 38.8** | **+3.0** |
| | SNR=11 | | | | | | |
| **WSAR** | **Wadi Sarin** | **22.46** | **340** | P | **P** | **13 55 42.4** | **+0.1** |
| | 23nm,1.3s,baz=180,slow=11,SNR=13 | | | | | | |
| WSAR | | | | LR | LR | 14 02 42.9 | |
| | comp=Z,201nm,20.2s,baz=194,slow=32 | | | | | | |
| **WSAR** | **Wadi Sarin** | **22.46** | **340** | P | **P** | **13 55 45.4** | **+3.1** |
| | SNR=8.3 | | | | | | |
| **SMDO** | **Samad** | **22.50** | **339** | P | **P** | **13 55 46.0** | **+3.2** |
| | SNR=8.5 | | | | | | |
| SMDO | | | | P | **P** | **13 55 46.0** | **+3.2** |
| | SNR=8.5 | | | | | | |
| **BSY** | **Bisya** | **22.54** | **336** | P | **P** | **13 55 46.0** | **+2.8** |
| | SNR=10 | | | | | | |
| BSY | | | | P | **P** | **13 55 46.0** | **+2.8** |
| | SNR=10 | | | | | | |
| **BIDO** | **Bidbid** | **22.89** | **339** | P | **P** | **13 55 51.0** | **+4.1** |
| | SNR=13 | | | | | | |
| **HOQ** | **Hoqain** | **23.25** | **337** | P | **P** | **13 55 54.0** | **+3.4** |
| | SNR=14 | | | | | | |
| HOQ | | | | P | **P** | **13 55 54.0** | **+3.4** |
| | SNR=14 | | | | | | |
| **ARQ** | **Araqi** | **23.34** | **336** | P | **P** | **13 55 56.0** | **+4.5** |
| | SNR=7.6 | | | | | | |
| ARQ | | | | P | **P** | **13 55 56.0** | **+4.5** |
| | SNR=7.6 | | | | | | |
| **CHLP** | **Challavanipeta** | **23.50** | **45** | *eP* | **P** | **13 55 55.3** | **+2.1** |
| **MZR** | **Muzera** | **24.47** | **329** | P | **P** | **13 56 05.3** | **+3.0** |
| **ASHO** | **Ashiyiah** | **24.73** | **336** | P | **P** | **13 56 07.4** | **+2.8** |
| **HATD** | **Hatta, Dubai** | **24.83** | **336** | P | **P** | **13 56 08.5** | **+3.1** |
| **UOSS** | **Minazif** | **24.91** | **337** | P | **P** | **13 56 08.9** | **+2.7** |
| **FAQ** | **Al Faqa, Dubai** | **24.98** | **335** | P | **P** | **13 56 09.5** | **+2.7** |
| **NAZ** | **Nazwa, Dubai** | **25.16** | **336** | P | **P** | **13 56 11.5** | **+3.0** |
| **MASF** | **Masafi** | **25.31** | **337** | P | **P** | **13 56 12.8** | **+3.0** |
| **ATD** | **Arta Tunnel** | **25.53** | **293** | P | **P** | **13 56 13.8** | **+1.7** |
| | 6.0nm,0.5s,baz=105,slow=12,SNR=5.5 | | | | | | |
| ATD | | | | LR | LR | 14 04 14.2 | |
| | comp=Z,514nm,20.4s,baz=133,slow=32 | | | | | | |
| **ATD** | **Arta Tunnel** | **25.53** | **293** | P | **P** | **13 56 09.7** | **-2.3** |
| ATD | | | | lAmb | lAmb | 13 56 34.3 | |
| | comp=Z,60nm,1.5s | | | | | | |
| **RAYN** | **Ar Rayn** | **29.64** | **318** | P | **P** | **13 56 49.4** | **+0.6** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **RAYN** | **Ar Rayn** | **29.64** | **318** | P | **P** | **13 56 49.4** | **+0.6** |
| **KMBO** | **Kilima Mbogo** | **29.71** | **264** | LR | LR | 14 08 15.6 | |
| | comp=Z,746nm,18.1s,baz=98,slow=35 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **29.71** | **264** | ⇓*eP* | **P** | **13 56 49.9** | **+0.2** |
| **LODK** | **Lodwar** | **31.42** | **273** | P | **P** | **13 57 02.2** | **-2.5** |
| **NIL** | **Nilore** | **31.97** | **10** | P | **P** | **13 57 08.6** | **-0.5** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **NIL** | **Nilore** | **31.97** | **10** | P | **P** | **13 57 08.6** | **-0.5** |
| NIL | | | | lAmb | lAmb | 13 57 17.3 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **PSI** | **Prapat** | **32.11** | **88** | P | **P** | **13 57 11.2** | **+0.4** |
| | comp=Z,4.2nm,0.3s,baz=255,slow=12,SNR=11 | | | | | | |
| PSI | | | | LR | LR | 14 08 22.1 | |
| | comp=Z,844nm,20.1s,baz=274,slow=33 | | | | | | |
| **KBL** | **Kabul** | **32.35** | **3** | P | **P** | **13 57 12.7** | **0.0** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **32.35** | **3** | P | **P** | **13 57 15.6** | **+2.9** |
| | SNR=6.0 | | | | | | |
| KBL | | | | P | **P** | **13 57 15.6** | **+2.9** |
| | SNR=6.0 | | | | | | |
| **KBL** | **Kabul** | **32.35** | **3** | P | **P** | **13 57 12.7** | **0.0** |
| KBL | | | | lAmb | lAmb | 13 57 15.7 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **HRA** | **Herat** | **32.40** | **353** | P | **P** | **13 57 13.5** | **+0.3** |
| **MNSI** | **Mandailing Nat** | **32.80** | **92** | P | **P** | **13 57 19.2** | **+2.5** |
| **SHL** | **Shillong** | **33.59** | **44** | P | **P** | **13 57 22.1** | **-1.6** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| **SHL** | **Shillong** | **33.59** | **44** | P | **P** | **13 57 25.3** | **+1.7** |
| | SNR=5.9 | | | | | | |
| **SHL** | **Shillong** | **33.59** | **44** | P | **P** | **13 57 22.1** | **-1.6** |
| SHL | | | | lAmb | lAmb | 13 57 31.4 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **BKNI** | **Bangkinang** | **34.28** | **92** | P | **P** | **13 57 27.4** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **35.46** | **61** | P | **P** | **13 57 39.4** | **-0.3** |
| | comp=Z,2.9nm,1.1s,baz=250,slow=11,SNR=12 | | | | | | |
| CMAR | | | | PcP | **PcP** | **14 00 10.3** | **+0.9** |
| | comp=Z,1.2nm,0.3s,baz=239,slow=2.8,SNR=5.0 | | | | | | |
| CMAR | | | | LR | LR | 14 11 42.8 | |
| | comp=Z,345nm,19.9s,baz=245,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **35.46** | **61** | *ceP* | **P** | **13 57 41.7** | **+2.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **35.46** | **61** | P | **P** | **13 57 39.3** | **-0.5** |
| **CHTO** | **Chiang Mai** | **35.60** | **60** | P | **P** | **13 57 41.6** | **+0.7** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **35.60** | **60** | P | **P** | **13 57 43.2** | **+2.2** |
| CHTO | | | | P | **P** | **13 57 43.2** | **+2.2** |
| **CHTO** | **Chiang Mai** | **35.60** | **60** | P | **P** | **13 57 41.6** | **+0.7** |
| CHTO | | | | lAmb | lAmb | 13 57 49.1 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **LSA** | **Lhasa** | **35.90** | **38** | P | **P** | **13 57 45.4** | **+1.5** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **MBAR** | **Mbarara** | **36.15** | **266** | LR | LR | 14 11 22.3 | |
| | comp=Z,1μm,19.5s,baz=96,slow=34 | | | | | | |
| **GEYT** | **Alibeck** | **36.54** | **348** | LR | LR | 14 12 09.4 | |
| | comp=Z,127nm,21.6s,baz=184,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **36.54** | **348** | P | **P** | **13 57 48.6** | **-0.1** |
| **GYA0B** | **ALIBECK ARRAY** | **36.54** | **348** | P | **P** | **13 57 48.5** | **-0.2** |
| **GAR** | **Garm** | **36.87** | **5** | P | **P** | **13 57 51.6** | **-0.1** |
| GAR | | | | lAmb | lAmb | 13 57 53.4 | |
| | comp=Z,66nm,1.2s | | | | | | |
| **KSH** | **Kashi** | **38.17** | **12** | P | **P** | **13 57 59.7** | **-3.0** |
| KSH | | | | pP | pP | 13 58 05.7 | +0.4 |
| KSH | | | | PP | **PnPn** | **13 59 31.8** | **+0.2** |
| KSH | | | | PcP | **PcP** | **14 00 17.8** | **+0.4** |
| KSH | | | | S | **S** | **14 03 50.3** | **-5.7** |
| KSH | | | | ScP | **ScP** | **14 04 03.0** | **-2.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.6s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,440nm,14.8s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,410nm,13.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,680nm,19.9s | | | | | | |
| **IUG** | **Iuzhnay** | **39.98** | **4** | *eP* | **P** | **13 58 17.6** | **-0.2** |
| **IUG** | **Iuzhnay** | **39.98** | **4** | *eP* | **P** | **13 58 17.6** | **-0.2** |
| | baz=3.8 | | | | | | |
| **XMIS** | **Christmas Isla** | **40.64** | **109** | P | **P** | **13 58 22.5** | **-1.1** |
| **EIL** | **Elat** | **40.82** | **315** | LR | LR | 14 12 54.2 | |
| | comp=Z,163nm,19.6s,baz=156,slow=33 | | | | | | |
| **AAK** | **Ala-Archa** | **40.95** | **9** | LR | LR | 14 15 18.9 | |
| | comp=Z,196nm,21.8s,baz=193,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **40.95** | **9** | ⇑*eP* | **P** | **13 58 27.0** | **+1.2** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.7s | | | | | | |
| **AAK** | **Ala-Archa** | **40.95** | **9** | P | **P** | **13 58 26.0** | **+0.1** |
| **KKAR** | **Karatay Array** | **40.96** | **4** | P | **P** | **13 58 24.2** | **-1.6** |
| **KKAR** | **Karatay Array** | **40.96** | **4** | P | **P** | **13 58 24.2** | **-1.6** |
| **ASF** | **Jabal al Asfar** | **41.06** | **320** | P | **P** | **13 58 27.2** | **+0.4** |
| | comp=Z,7.4nm,1.1s,baz=74,slow=15,SNR=7.1 | | | | | | |
| **PZH** | **PanZhiHua** | **41.40** | **51** | P | **P** | **13 58 31.0** | **+1.2** |
| PZH | | | | S | **S** | **14 04 49.4** | **+4.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,19.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,900nm,20.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,980nm,19.7s | | | | | | |
| **KMI** | **Kunming** | **41.52** | **53** | ⇑P | **P** | **13 58 32.0** | **+1.1** |
| KMI | | | | sP | sP | 13 58 37.4 | +2.8 |
| KMI | | | | PP | **PnPn** | **14 00 13.0** | **+1.3** |
| KMI | | | | S | **S** | **14 04 48.8** | **+2.0** |
| KMI | | | | SS | **SS** | **14 07 50.4** | **-1.2** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,290nm,22.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,350nm,20.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,390nm,17.7s | | | | | | |
| **LEM** | **Lembang** | **41.70** | **103** | LR | LR | 14 13 34.3 | |
| | comp=Z,760nm,19.4s,baz=252,slow=33 | | | | | | |
| **SGDS** | **Sogindy** | **41.76** | **9** | *eP* | **P** | **13 58 31.6** | **-0.8** |
| | baz=8.6 | | | | | | |
| **MDOK** | **Medeo** | **41.90** | **11** | *eP* | **P** | **13 58 33.3** | **-0.3** |
| **MDOK** | **Medeo** | **41.90** | **11** | *eP* | **P** | **13 58 33.3** | **-0.3** |
| | baz=11 | | | | | | |
| **LSZ** | **Lusaka** | **41.91** | **244** | P | **P** | **13 58 36.2** | **+2.1** |
| | comp=Z,2.3nm,0.5s,baz=59,slow=7.3,SNR=4.6 | | | | | | |
| LSZ | | | | LR | LR | 14 13 42.3 | |
| | comp=Z,1μm,19.3s,baz=101,slow=33 | | | | | | |
| **SATY** | **Saty** | **42.08** | **13** | *eP* | **P** | **13 58 34.5** | **-0.6** |
| **SATY** | **Saty** | **42.08** | **13** | *eP* | **P** | **13 58 34.5** | **-0.6** |
| | baz=13 | | | | | | |
| **UZB** | **Uzynbulak** | **42.30** | **13** | *eP* | **P** | **13 58 36.2** | **-0.7** |
| **UZB** | **Uzynbulak** | **42.30** | **13** | *eP* | **P** | **13 58 36.3** | **-0.7** |
| | baz=13 | | | | | | |
| **MARD** | **Mardin** | **42.44** | **329** | P | **P** | **13 58 38.7** | **+0.6** |
| MARD | | | | lAmb | lAmb | 13 58 40.7 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **KPKS** | **Kokpek** | **42.53** | **13** | *eP* | **P** | **13 58 37.9** | **-0.8** |
| **KPKS** | **Kokpek** | **42.53** | **13** | *eP* | **P** | **13 58 38.0** | **-0.8** |
| | baz=13 | | | | | | |
| **CHKK** | **Chushkaly** | **42.55** | **11** | *eP* | **P** | **13 58 38.2** | **-0.6** |
| | baz=11 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **42.57** | **320** | P | **P** | **13 58 39.9** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=109,slow=7.5,SNR=3.6 | | | | | | |
| MMAI | | | | LR | LR | 14 15 37.2 | |
| | comp=Z,378nm,18.3s,baz=305,slow=35 | | | | | | |
| **GOMU** | **GeErMu** | **42.70** | **34** | P | **P** | **13 58 41.1** | **+0.6** |
| GOMU | | | | sP | sP | 13 58 46.9 | +2.6 |
| GOMU | | | | S | **S** | **14 05 07.0** | **+2.8** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,390nm,14.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,230nm,14.9s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,350nm,17.2s | | | | | | |
| **GNI** | **Garni** | **42.84** | **335** | P | **P** | **13 58 42.3** | **+0.9** |
| | comp=Z,42nm,1.1s,baz=164,slow=3.4,SNR=23 | | | | | | |
| GNI | | | | LR | LR | 14 16 35.9 | |
| | comp=Z,170nm,20.1s,baz=188,slow=36 | | | | | | |
| **GNI** | **Garni** | **42.84** | **335** | P | **P** | **13 58 42.2** | **+0.9** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,72nm,1.2s | | | | | | |
| **GNI** | **Garni** | **42.84** | **335** | P | **P** | **13 58 43.4** | **+2.0** |
| **GNI** | **Garni** | **42.84** | **335** | P | **P** | **13 58 42.2** | **+0.9** |
| GNI | | | | lAmb | lAmb | 13 58 44.3 | |
| | comp=Z,72nm,1.2s | | | | | | |
| **BTLS** | **Baital** | **43.24** | **8** | *eP* | **P** | **13 58 43.8** | **-0.5** |
| **BTLS** | **Baital** | **43.24** | **8** | *eP* | **P** | **13 58 43.8** | **-0.5** |
| | baz=7.5 | | | | | | |
| **MATP** | **Matopo** | **43.70** | **237** | P | **P** | **13 58 50.9** | **+2.4** |
| | comp=Z,1.1nm,0.4s,baz=53,slow=11,SNR=2.8 | | | | | | |
| **TDK** | **Taldyqorghan** | **43.94** | **12** | *eP* | **P** | **13 58 49.8** | **-0.2** |
| **TDK** | **Taldyqorghan** | **43.94** | **12** | *eP* | **P** | **13 58 49.8** | **-0.2** |
| | baz=12 | | | | | | |
| **KOPT** | **Kop Dagi** | **44.66** | **331** | P | **P** | **13 58 56.6** | **+0.4** |
| KOPT | | | | lAmb | lAmb | 13 58 59.0 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **GROC** | **Groznyy** | **45.01** | **338** | *eP* | **P** | **13 58 58.7** | **+0.2** |
| GROC | | | | *e* | | 14 00 37.6 | |
| GROC | | | | pmax | pmax | | |
| | comp=Z,45nm,1.0s | | | | | | |
| **GYA** | **Guiyang** | **45.28** | **54** | ⇓P | **P** | **13 59 01.6** | **+0.5** |
| GYA | | | | sP | pP | 13 59 06.3 | +2.5 |
| GYA | | | | S | **S** | **14 05 37.8** | **-3.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,170nm,4.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,420nm,19.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **45.36** | **65** | P | **P** | **13 59 00.9** | **-0.8** |
| QIZ | | | | S | **S** | **14 05 43.6** | **+0.8** |
| QIZ | | | | LR | LR | | |
| | comp=Z,300nm,29.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,560nm,21.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,570nm,20.2s | | | | | | |
| **

GTA pP sP 13 59 26.4 +2.2
GTA sP pwP 13 59 31.2 +3.5
GTA PcP **PcP** **14 00 52.8 +3.3**
GTA sS sS 14 06 22.8 +1.4
GTA pmax pmax
comp=Z,51nm,5.1s
GTA LR LR
comp=Z,340nm,16.7s
GTA LR LR
comp=Z,300nm,18.5s
GTA LR LR
comp=Z,300nm,21.8s
**ZSN Zaisan 47.82 17** *e*P **P** **13 59 19.9 -0.6**
**ZSN Zaisan 47.82 17** *e*P **P** **13 59 20.0 -0.6**
baz=16
**BRZS Berezniki 47.97 5** *e*P **P** **13 59 20.7 -1.0**
**BRZS Berezniki 47.97 5** *e*P **P** **13 59 20.8 -1.0**
baz=5.1
**BRTR Keskin Array B 48.06 325** P **P** **13 59 22.8 0.0**
comp=Z,4.7nm,1.0s,baz=154,slow=8.9,SNR=8.2
BRTR PcP **PcP** **14 00 52.0 +1.4**
comp=Z,1.9nm,0.9s,baz=193,slow=5.9,SNR=2.5
BRTR LR LR 14 21 00.5
comp=Z,244nm,18.5s,baz=134,slow=38
**BRTR Keskin Array B 48.06 325***ce*P **P** **13 59 22.7 0.0**
BRTR pmax pmax
comp=Z,7.0nm,1.1s
**BRTR Keskin Array B 48.06 325** P **P** **13 59 22.1 -0.7**
**BR131 Keskin Array S 48.06 325**⇑*e*P **P** **13 59 23.1 +0.4**
**LZH Lanzhou 48.14 41** *e*P **P** **13 59 22.7 -0.7**
LZH sP pP 13 59 27.8 +1.7
LZH PP **PP** **14 01 18.0 +2.2**
LZH S **S** **14 06 24.3 +1.9**
LZH pmax pmax
comp=Z,25nm,1.3s
LZH pmax pmax
comp=Z,210nm,5.4s
LZH LR LR
comp=Z,370nm,14.3s
LZH LR LR
comp=Z,400nm,14.2s
LZH LR LR
comp=Z,690nm,16.5s
**LBTB Lobatse 48.17 233** P **P** **13 59 26.4 +2.6**
comp=Z,4.7nm,0.6s,baz=95,slow=8.2,SNR=4.8
LBTB LR LR 14 18 06.5
comp=Z,468nm,18.1s,baz=58,slow=34
**LBTB Lobatse 48.17 233** P **P** **13 59 23.9 +0.1**
LBTB pmax pmax
comp=Z,19nm,1.2s
**LBTB Lobatse 48.17 233** P **P** **13 59 23.9 +0.1**
LBTB IAmb IAmb 13 59 31.9
comp=Z,19nm,1.2s
**ELL Elmali 48.42 320** P **P** **13 59 24.5 -1.1**
ELL pmax pmax
comp=Z,87nm,1.1s
**ELL Elmali 48.42 320** P **P** **13 59 24.5 -1.1**
**AKTO Aktyubinsk 48.73 353** P **P** **13 59 27.0 -0.6**
comp=Z,13nm,1.0s,baz=165,slow=8.1,SNR=22
AKTO LR LR 14 20 02.3
comp=Z,70nm,19.1s,baz=293,slow=36
**ILGA Ilgaz 48.92 327** P **P** **13 59 27.5 -2.0**
**SRBI Singaraja 49.34 102** P **P** **13 59 35.7 +2.9**
comp=Z,34nm,1.4s
**KURBB Kurchatov Arra 49.36 10** LR LR 14 20 17.4
comp=Z,99nm,20.9s,baz=178,slow=36
**KURK Kurchatov 49.47 10**⇑*e*P **P** **13 59 32.9 -0.3**
KURK pmax pmax
comp=Z,6.0nm,1.7s
**KURK Kurchatov 49.47 10** P **P** **13 59 33.3 +0.2**
KURK P P **13 59 33.3 +0.2**
**KURK Kurchatov 49.47 10** P **P** **13 59 31.8 -1.4**
**SEM Semipalatinsk 49.47 11** *e*P **P** **13 59 32.2 -1.3**
**SEM Semipalatinsk 49.47 11** *e*P **P** **13 59 32.2 -1.3**
baz=11
**MDUB Mudurnu 49.95 325** P **P** **13 59 35.0 -2.2**
**BORA Eskisehir 50.01 323** P **P** **13 59 35.9 -1.8**
BORA IAmb IAmb 13 59 39.0
comp=Z,15nm,1.1s
**BOSA Boshof 50.18 229** LR LR 14 18 49.7
comp=Z,635nm,19.5s,baz=51,slow=34
**XAN Xi'an 50.53 46** P **P** **13 59 41.5 -0.1**
XAN pP pP 13 59 47.2 +2.9
XAN pmax pmax
comp=Z,14nm,1.3s
**DGZ Jazzator, Alta 50.59 17**⇓*e*P **P** **13 59 41.2 -0.7**
DGZ pmax pmax
comp=Z,8.0nm,1.2s
**BVAR Borovoye Array 50.84 3** P **P** **13 59 42.4 -1.2**
comp=Z,0.5nm,0.5s,baz=180,slow=3.9,SNR=4.7
BVAR PcP **PcP** **14 01 01.3 +1.0**
comp=Z,1.0nm,0.8s,baz=116,slow=6.6,SNR=4.9
**BRVK Borovoye 50.87 3**⇑*e*P **P** **13 59 43.6 -0.2**
BRVK pmax pmax
comp=Z,3.0nm,1.3s
**IDI Anoyia 50.99 315** P **P** **13 59 45.3 +0.1**
comp=Z,32nm,1.1s,baz=108,slow=7.3,SNR=21
**SANT Santorini 51.16 317**⇑P **P** **13 59 46.6 +0.2**
**SANT Santorini 51.16 317** P **P** **13 59 45.5 -0.9**
**BELG Belogornoye 52.61 345** P **P** **13 59 55.8 -0.9**
comp=Z,29nm,1.0s,baz=102,slow=2.0,SNR=7.1
**TSUM Tsumeb 52.76 244** P **P** **13 59 59.0 +0.3**
comp=Z,3.8nm,0.8s,baz=106,slow=9.1,SNR=3.4
TSUM LR LR 14 20 29.2
comp=Z,1μm,19.5s,baz=84,slow=34
**TSUM Tsumeb 52.76 244** P **P** **13 59 57.6 -1.1**
TSUM IAmb IAmb 14 00 07.6
comp=Z,17nm,1.1s
**WHN Wuhan 53.12 53**⇓P **P** **14 00 01.8 +0.9**
**MPSI Mapaga 53.12 91** P **P** **14 00 04.2 +3.0**
comp=Z,20nm,0.9s
**ALN Alexandroupoli 53.30 322** P **P** **14 00 01.8 -0.3**
ALN pmax pmax
comp=Z,65nm,1.2s
**ALN Alexandroupoli 53.30 322** P **P** **14 00 01.8 -0.3**
**LYN LuoYang 53.35 47** *e*P **P** **14 00 02.7 +0.1**
LYN sP sP 14 00 09.1 +2.7
LYN S **S** **14 07 34.9 +0.4**
LYN LR LR
comp=Z,270nm,14.4s
LYN LR LR
comp=Z,320nm,19.8s
**KAPI Kappang 53.38 98** LR LR 14 21 06.8
comp=Z,190nm,20.1s,baz=303,slow=34
**ZAA0 Zalesovo Array 53.77 13** P **P** **14 00 03.2 -2.1**
ZAA0 IAmb IAmb 14 00 12.6
comp=Z,8.6nm,1.0s
**ZALV Zalesovo Beam 53.77 13** P **P** **14 00 03.5 -1.8**
comp=Z,5.5nm,0.9s,baz=220,slow=6.7,SNR=17
ZALV LR LR 14 22 22.7
comp=Z,206nm,20.0s,baz=228,slow=36
**ZALV Zalesovo Beam 53.77 13** *i* P **P** **14 00 04.0 -1.3**
ZALV pmax pmax
comp=Z,5.0nm,0.9s
**ZALV Zalesovo Beam 53.77 13** P **P** **14 00 02.6 -2.6**
**TIRR Tirgusor 54.10 327**⇓P **P** **14 00 07.8 -0.1**
**TIRR Tirgusor 54.10 327** P **P** **14 00 06.9 -1.0**
TIRR pmax pmax
comp=Z,147nm,1.2s
**TIRR Tirgusor 54.10 327** P **P** **14 00 06.9 -1.0**
**HARR Harsova 54.51 327**⇑P **P** **14 00 10.7 -0.2**
**ARU Arti 54.57 354** P **P** **14 00 09.8 -1.3**
comp=Z,0.6nm,0.3s,baz=170,slow=7.3,SNR=9.0
**ARU Arti 54.57 354**⇓*e*P **P** **14 00 10.0 -1.1**
ARU pmax pmax
comp=Z,35nm,2.5s
**ARU Arti 54.57 354** P **P** **14 00 09.9 -1.2**
ARU IAmb IAmb 14 00 11.5
comp=Z,21nm,1.3s
**AGG Agios Georgios 54.66 318** P **P** **14 00 10.8 -1.4**
AGG pmax pmax
comp=Z,45nm,1.2s
**AGG Agios Georgios 54.66 318** P **P** **14 00 10.8 -1.4**
**CFR Carcaliu 54.71 327**⇓P **P** **14 00 12.0 -0.3**
**TGY Tagaytay City 54.78 74** LR LR 14 22 39.4
comp=Z,244nm,19.3s,baz=150,slow=35
**SVE Sverdlovsk 54.79 356** *e*P **P** **14 00 12.4 -0.3**
SVE pmax pmax
comp=Z,27nm,1.4s
**LIT Litokhoron 55.12 319** P **P** **14 00 13.8 -1.6**
LIT pmax pmax
comp=Z,15nm,1.2s
**LIT Litokhoron 55.12 319** P **P** **14 00 13.8 -1.6**
LIT IAmb IAmb 14 00 16.6
comp=Z,15nm,1.2s

**MRSI Marisa 55.16 91** P P 14 00 22.9 +6.8
**SUR Sutherland 55.38 228** LR LR 14 21 14.1
comp=Z,791nm,19.5s,baz=66,slow=33
**ISR Istrita 55.55 326**⇑P **P** **14 00 18.7 +0.2**
**BISRR Bisoca 55.73 327**⇑P **P** **14 00 19.5 -0.2**
**HHC Hu-ho-hao-te 55.81 40** *e*P **P** **14 00 20.9 +0.4**
HHC pmax pmax
comp=Z,6.0nm,1.1s
HHC pmax pmax
comp=Z,180nm,8.4s
**NEHR Nehoiu 55.88 326**⇓P **P** **14 00 20.9 +0.1**
**VRI Vrincioaia 55.91 327**⇓P **P** **14 00 21.1 +0.1**
**PLOR Plostina 55.95 327**⇑P **P** **14 00 22.4 +1.1**
**VTS Vitosha 56.01 322**⇑P **P** **14 00 22.1 +0.2**
**VTS Vitosha 56.01 322** P **P** **14 00 21.4 -0.5**
VTS pmax pmax
comp=Z,15nm,1.1s
**VTS Vitosha 56.01 322** P **P** **14 00 21.4 -0.5**
VTS IAmb IAmb 14 00 23.2
comp=Z,15nm,1.1s
**MLR Muntele Rosu 56.11 326**⇑P **P** **14 00 22.6 0.0**
**MLR Muntele Rosu 56.11 326** P **P** **14 00 23.1 +0.5**
comp=Z,16nm,1.1s,baz=87,slow=1.3,SNR=9.8
**MLR Muntele Rosu 56.11 326** P **P** **14 00 22.9 +0.3**
MLR pmax pmax
comp=Z,60nm,1.5s
**MLR Muntele Rosu 56.11 326** P **P** **14 00 22.9 +0.3**
**COVR Voineasa-Covas 56.19 327**⇑P **P** **14 00 23.3 +0.3**
**HNS HongShan 56.26 45**⇑P **P** **14 00 24.2 +0.6**
HNS pmax pmax
comp=Z,8.0nm,1.3s
**TESR Tescani 56.37 328**⇓P **P** **14 00 24.2 0.0**
**SORM Soroca 56.54 330**⇓P **P** **14 00 25.1 -0.3**
**VOIR 56.58 326**⇑P **P** **14 00 25.9 0.0**
**DOPR Dopca 56.71 327**⇓P **P** **14 00 26.3 -0.4**
**ARR Arges 56.77 326**⇓P **P** **14 00 27.0 -0.2**
**SONM Songino Array 56.93 31** P **P** **14 00 28.2 -0.2**
comp=Z,6.2nm,1.0s,baz=226,slow=5.7,SNR=28
SONM LR LR 14 24 49.9
comp=Z,443nm,20.5s,baz=230,slow=36
**SONM Songino Array 56.93 31** P **P** **14 00 27.9 -0.5**
SONM pmax pmax
comp=Z,10.0nm,1.2s
**SONM Songino Array 56.93 31** P **P** **14 00 27.9 -0.5**
SONM IAmb IAmb 14 00 36.3
comp=Z,10nm,1.2s
**PRAR RASCA 57.13 328**⇑P **P** **14 00 30.0 +0.4**
**ZAK Zakamensk 57.16 27** *e*P **P** **14 00 28.9 -1.0**
ZAK pmax pmax
comp=Z,4.0nm,1.5s
**NJ2 Nanjing 57.25 53** *e*P **P** **14 00 30.6 -0.2**
NJ2 pmax pmax
comp=Z,6.0nm,0.6s
**ULN Ulaanbaatar 57.29 31**⇑*e*P **P** **14 00 31.2 +0.2**
ULN pmax pmax
comp=Z,7.0nm,2.5s
**ULN Ulaanbaatar 57.29 31** P **P** **14 00 30.7 -0.3**
**HERR Herculane 57.77 324**⇑P **P** **14 00 33.8 -0.4**
**BURAR Bucovina Array 57.82 328**⇓P **P** **14 00 35.4 +0.7**
**BURAR Bucovina Array 57.82 328** P **P** **14 00 33.8 -0.8**
**GZR Gura Zlata 57.85 325**⇓P **P** **14 00 35.3 +0.5**
**BUR08 Bucovina Ar. S 57.85 328** P **P** **14 00 34.2 -0.6**
BUR08 IAmb IAmb 14 00 41.8
comp=Z,11nm,1.1s
**AKASG Malin Array Be 57.88 333** P **P** **14 00 33.3 -1.5**
comp=Z,6.9nm,1.1s,baz=134,slow=6.0,SNR=24
AKASG PP **PP** **14 02 41.5 -1.7**
comp=Z,0.1nm,0.3s,baz=135,slow=9.0,SNR=5.0
**AKASG Malin Array Be 57.88 333** P **P** **14 00 32.8 -2.0**
AKASG 14 02 41.5
AKASG pmax pmax
comp=Z,5.0nm,1.5s
**AKASG Malin Array Be 57.88 333** P **P** **14 00 32.8 -2.0**
**AKBB Malin Array Si 57.88 333**⇑*i*P **P** **14 00 33.7 -1.1**
**AKBB Malin Array Si 57.88 333** P **P** **14 00 32.2 -2.6**
AKBB IAmb IAmb 14 00 34.7
comp=Z,23nm,1.3s
**BATI Baumata 57.91 103** P **P** **14 00 34.2 -1.6**
comp=Z,8.6nm,0.6s,baz=222,slow=14,SNR=2.4
BATI LR LR 14 25 15.5
comp=Z,278nm,20.4s,baz=281,slow=36
**KIRV Kirov 57.96 349**⇑*e*P **P** **14 00 34.3 -0.9**
**MDVR Moldovita 58.12 324**⇑P **P** **14 00 36.7 -0.1**
**OBN Obninsk 58.27 340**⇓*e*P **P** **14 00 37.5 0.0**
OBN *e* 14 02 45.6
OBN pmax pmax
comp=Z,9.0nm,0.4s
OBN MLR MLR
comp=Z,150nm,18.0s
**PDG Podgorica 58.40 320**⇑P **P** **14 00 37.2 -1.5**
**MOS Moscow 58.43 341** *e*P **P** **14 00 36.7 -1.9**
MOS pmax pmax
comp=Z,69nm,1.5s
**BJT Baijiatuau 58.47 43** P **P** **14 00 38.3 -0.9**
BJT pmax pmax
comp=Z,8.0nm,1.2s
**BJT Baijiatuau 58.47 43** P **P** **14 00 38.3 -0.9**
**BJI Beijing 58.48 43** P **P** **14 00 39.1 -0.2**
BJI pmax pmax
comp=Z,4.0nm,1.2s
**BZS Buzias 58.65 324**⇑P **P** **14 00 39.6 -0.7**
**DRGR 58.69 326**⇑P **P** **14 00 40.8 +0.1**
**DAV Davao City (W) 58.77 83** LR LR 14 26 46.7
comp=Z,128nm,20.3s,baz=287,slow=37
**DIVS Divibare 58.80 322** P **P** **14 00 40.6 -0.9**
DIVS IAmb IAmb 14 00 42.8
comp=Z,19nm,1.2s
**SSE Sheshan 58.82 55** P **P** **14 00 41.6 -0.2**
SSE S **S** **14 08 54.0 +6.7**
SSE pmax pmax
comp=Z,6.0nm,1.9s
SSE pmax pmax
comp=Z,110nm,3.7s
SSE LR LR
comp=Z,62nm,18.1s
SSE LR LR
comp=Z,140nm,18.3s
**MATE Matera 59.24 317**⇑P **P** **14 00 42.7 -1.8**
**FRGS Fruska Gora 59.46 323**⇑P **P** **14 00 44.8 -1.2**
**VAE Valguarnera 59.51 313** LR LR 14 26 48.2
comp=Z,166nm,18.1s,baz=138,slow=36
**TRPA Tarpa 59.57 327**⇑P **P** **14 00 46.8 +0.1**
**LVV L'vov 59.80 329** *e*P **P** **14 00 46.4 -1.9**
LVV pmax pmax
comp=Z,50nm,1.4s
**UZH Uzhgorod 59.99 328** *e*P **P** **14 00 48.7 -0.9**
UZH *e* 14 00 50.9
UZH *i* 14 00 55.6
**KOLS Kolonicke sedl 60.18 328** *e*P **P** **14 00 51.5 +0.6**
**KOLS Kolonicke sedl 60.18 328** *e*P **P** **14 00 51.5 +0.6**
**XLT XiLinHaoTe 60.24 39** *e*P **P** **14 00 51.5 0.0**
XLT pP sP 14 00 57.5 +2.2
XLT sP pwP 14 01 01.5 +2.7
XLT S **S** **14 09 02.2 -3.3**
XLT pmax pmax
comp=Z,8.0nm,1.2s
XLT pmax pmax
comp=Z,270nm,6.2s
XLT LR LR
comp=Z,240nm,11.9s
XLT LR LR
comp=Z,580nm,7.3s
XLT LR LR
comp=Z,480nm,20.1s
**KWP Kalwaria Pacla 60.37 329** *e*P **P** **14 00 51.3 -0.9**
**KWP Kalwaria Pacla 60.37 329** P **P** **14 00 51.1 -1.1**
KWP pmax pmax
comp=Z,190nm,1.0s
**KWP Kalwaria Pacla 60.37 329** P **P** **14 00 51.0 -1.1**
**CRVS Cervenica-Dubn 60.60 327** *e*P **P** **14 00 53.3 -0.5**
**CRVS Cervenica-Dubn 60.60 327** *e*P **P** **14 00 53.3 -0.5**
**MORH Mrgy, Hungar 60.72 324**⇓P **P** **14 00 53.9 -0.7**
**PSZ Piszkesteto 60.91 326** P **P** **14 00 54.6 -1.4**
PSZ pmax pmax
comp=Z,15nm,1.4s
**PSZ Piszkesteto 60.91 326** P **P** **14 00 54.6 -1.4**
PSZ IAmb IAmb 14 00 56.4
comp=Z,15nm,1.4s
**FITZ Fitzroy Crossi 61.28 112** P **P** **14 00 58.9 -0.1**
comp=Z,7.0nm,0.8s,baz=258,slow=4.6,SNR=11
FITZ LR LR 14 25 37.0
comp=Z,149nm,18.1s,baz=290,slow=34
**NIE Niedzica 61.52 327** *e*P **P** **14 00 59.4 -0.6**
**LANS Liptovska Anna 61.82 327** *e*P **P** **14 01 01.7 -0.4**

**LANS Liptovska Anna 61.82 327** *e*P **P** **14 01 01.7 -0.4**
**NACGM Naroch 61.85 335** *i* P **P** **14 01 01.6 -0.4**
**KLMR Klimovskoe 62.19 345** *e*P **P** **14 01 01.7 -2.5**
KLMR pmax pmax
comp=Z,40nm,1.2s
**KLMR Klimovskoe 62.19 345** *e*P **P** **14 01 01.8 -2.5**
KLMR AMP 14 01 04.7
comp=Z,40nm,1.2s
**NRCA Norcia 62.61 318** P **P** **14 01 07.1 -0.4**
**SMOL Smolenice 62.62 325** *e*P **P** **14 01 06.8 -0.6**
**SMOL Smolenice 62.62 325** *e*P **P** **14 01 06.8 -0.6**
**MODS Modra-Piesok 62.63 325** *e*P **P** **14 01 08.7 +1.2**
**MODS Modra-Piesok 62.63 325** *e*P **P** **14 01 08.7 +1.2**
**JAVC Velka Javorina 62.66 326** *e*P **P** **14 01 07.8 +0.1**
**KEST Kesra 62.70 309** LR LR 14 26 19.3
comp=Z,232nm,20.7s,baz=262,slow=34
**SUW Suwalki 62.85 333** *e*P **P** **14 01 07.4 -1.3**
**MORC Moravsky Berou 63.22 327**⇓P **P** **14 01 10.6 -0.8**
**MORC Moravsky Berou 63.22 327** P **P** **14 01 10.3 -1.1**
MORC pmax pmax
comp=Z,17nm,1.2s
**MORC Moravsky Berou 63.22 327** *e*P **P** **14 01 10.4 -1.1**
**MORC Moravsky Berou 63.22 327** P **P** **14 01 10.3 -1.1**
MORC IAmb IAmb 14 01 11.5
comp=Z,17nm,1.2s
**PABE Paberze 63.45 334** P **P** **14 01 11.5 -1.2**
**KRUC Moravsky 63.49 326** *e*P **P** **14 01 12.4 -0.7**
**VRAC Vranov 63.50 326**⇓P **P** **14 01 12.4 -0.8**
**VRAC Vranov 63.50 326** P **P** **14 01 11.8 -1.4**
comp=Z,7.5nm,0.9s,baz=127,slow=4.8,SNR=6.1
VRAC LR LR 14 30 18.8
comp=Z,115nm,19.4s,baz=36,slow=38
**VRAC Vranov 63.50 326** *e*P **P** **14 01 12.4 -0.8**
**JOW Kunigami 63.73 61** LR LR 14 28 38.5
comp=Z,330nm,21.8s,baz=278,slow=36
**PUL Pulkovo 64.03 340**⇓*e*P **P** **14 01 17.8 +1.4**
PUL pmax pmax
comp=Z,78nm,0.7s
**DPC Dobruska-Polom 64.19 327** *e*P **P** **14 01 16.3 -1.5**
**DPC Dobruska-Polom 64.19 327** *e*P **P** **14 01 16.3 -1.5**
**UPC Upice 64.44 327** *e*P **P** **14 01 19.2 -0.2**
**UPC Upice 64.44 327** *e*P **P** **14 01 19.2 -0.2**
**KSP Ksiaz 64.46 327** *e*P **P** **14 01 19.0 -0.5**
**SIJI Sorong 64.53 92** LR LR 14 29 18.9
comp=Z,72nm,21.3s,baz=115,slow=36
**ZCCA Zocca 64.65 319** P **P** **14 01 21.8 +0.8**
**GERES GERESS Array B 64.93 324** P **P** **14 01 20.8 -1.9**
comp=Z,0.4nm,0.2s,baz=141,slow=5.1,SNR=4.6
**KHC Kasperske Hory 65.13 325**⇓*e*P **P** **14 01 22.6 -1.4**
KHC pmax pmax
comp=Z,22nm,1.2s
**KHC Kasperske Hory 65.13 325** *e*P **P** **14 01 22.0 -2.0**
**TORD Torodi Ar. Bea 65.28 283** P **P** **14 01 26.2 +0.7**
comp=Z,1.8nm,1.1s,baz=76,slow=5.2,SNR=6.7
**TORD Torodi Ar. Bea 65.28 283** P **P** **14 01 24.6 -0.9**
**BRG Berggiesshubel 65.76 326** *e*P **P** **14 01 27.6 -0.5**
BRG Amp 14 01 28.8
comp=Z,14nm,1.3s
**BRG Berggiesshubel 65.76 326** *e*P **P** **14 01 27.5 -0.5**
BRG pmax pmax
comp=Z,14nm,1.3s
**KSRS Korea Array 66.05 50** P **P** **14 01 29.9 -0.2**
comp=Z,1.1nm,0.9s,baz=251,slow=7.6,SNR=3.1
KSRS LR LR 14 32 38.8
comp=Z,191nm,19.8s,baz=230,slow=38
**NKC Novy Kostel 66.30 325** *e*P **P** **14 01 30.6 -0.9**
**NKC Novy Kostel 66.30 325** *e*P **P** **14 01 30.6 -0.9**
**DAVOX Davos/Dischmat 66.34 321** P **P** **14 01 31.6 -0.4**
comp=Z,12nm,1.1s,baz=194,slow=9.2,SNR=4.1
**CLL Collm 66.49 326** *i* P **P** **14 01 32.4 -0.2**
CLL pmax pmax
comp=Z,45nm,1.7s
**CLL Collm 66.49 326** *i* P **P** **14 01 32.4 -0.2**
comp=Z,45nm,1.7s
**CLL Collm 66.49 326** P **P** **14 01 31.2 -1.4**
CLL IAmb IAmb 14 01 33.2
comp=Z,26nm,1.4s
**TUE Stuetta 66.55 321** P **P** **14 01 31.7 -1.7**
**FINES FINESS Array B 66.68 340** P **P** **14 01 32.7 -1.0**
comp=Z,11nm,1.1s,baz=140,slow=6.2,SNR=6.5
**FINES FINESS Array B 66.68 340** P **P** **14 01 32.4 -1.2**
**FINES FINESS Array B 66.68 340** P **P** **14 01 32.4 -1.2**
**BFO Black Forest 67.92 322** P **P** **14 01 39.9 -1.9**
BFO pmax pmax
comp=Z,34nm,1.3s
**BFO Black Forest 67.92 322** P **P** **14 01 39.9 -1.9**
**NRIK Noril'sk 68.55 8** P **P** **14 01 45.1 -0.2**
comp=Z,1.0nm,0.2s,baz=292,slow=2.2,SNR=4.3
NRIK LR LR 14 34 28.5
comp=Z,120nm,19.2s,baz=304,slow=38
**NRIK Noril'sk 68.55 8***de*P **P** **14 01 44.8 -0.5**
**NRIK Noril'sk 68.55 8** P **P** **14 01 43.7 -1.6**
NRIK IAmb IAmb 14 01 46.5
comp=Z,15nm,1.5s
**ECH Echery 68.60 322** P **P** **14 01 44.7 -1.4**
ECH pmax pmax
comp=Z,27nm,1.4s
**ECH Echery 68.60 322** P **P** **14 01 44.7 -1.4**
ECH IAmb IAmb 14 01 50.6
comp=Z,27nm,1.4s
**APA Apatity 69.28 347**⇓*i* P P 14 01 43.0 -6.9
APA pmax pmax
comp=Z,10.0nm,0.6s
**MDJ Mudanjiang 69.41 43** P **P** **14 01 51.8 +0.6**
MDJ pmax pmax
comp=Z,12nm,1.7s
MDJ pmax pmax
comp=Z,200nm,3.8s
**MAW Mawson 69.61 182** LR LR 14 27 11.4
comp=Z,143nm,18.3s,baz=48,slow=31
**WRA Warramunga Arr 69.71 112** P **P** **14 01 53.8 +0.2**
comp=Z,12nm,0.9s,baz=289,slow=5.8,SNR=42
WRA LR LR 14 29 58.4
comp=Z,96nm,18.6s,baz=272,slow=34
**WRA Warramunga Arr 69.71 112** P **P** **14 01 52.8 -0.7**
WRA pmax pmax
comp=Z,1.0nm,1.0s
**WRA Warramunga Arr 69.71 112** P **P** **14 01 52.8 -0.7**
**WRAB Tennant Creek 69.72 112**⇓*e*P **P** **14 01 55.1 +1.5**
WRAB pmax pmax
comp=Z,48nm,2.5s
**WRAB Tennant Creek 69.72 112** P **P** **14 01 53.5 -0.1**
WRAB IAmb IAmb 14 01 56.8
comp=Z,19nm,1.0s
**WB2 Warramunga Arr 69.72 112** P **P** **14 01 53.0 -0.6**
WB2 IAmb IAmb 14 01 56.8
comp=Z,18nm,0.9s
**WB0 Warramunga Arr 69.73 112** P **P** **14 01 53.4 -0.2**
WB0 IAmb IAmb 14 01 56.7
comp=Z,16nm,1.0s
**WR0 Warramunga Arr 69.90 112** P **P** **14 01 54.1 -0.6**
WR0 IAmb IAmb 14 01 57.8
comp=Z,17nm,1.0s
**ASAR Alice Springs 70.01 116** P **P** **14 01 55.7 +0.4**
comp=Z,5.3nm,0.8s,baz=287,slow=5.8,SNR=45
ASAR LR LR 14 32 04.2
comp=Z,116nm,18.7s,baz=272,slow=36
**ASAR Alice Springs 70.01 116** P **P** **14 01 53.7 -1.6**
**ASAR Alice Springs 70.01 116** P **P** **14 01 53.7 -1.6**
**AS31 Alice Springs 70.01 116** P **P** **14 01 53.7 -1.6**
**HFS Hagfors 70.62 335** P **P** **14 01 56.7 -1.6**
comp=Z,19nm,1.0s,baz=133,slow=6.5,SNR=12
**USRK Ussuriysk Ar. 70.93 44** LR LR 14 35 24.6
comp=Z,181nm,19.4s,baz=291,slow=38
**ZEA Zeya 71.22 33** *e*P **P** **14 02 02.5 +0.5**
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=E,10.0nm,1.1s
ZEA pmax pmax
comp=Z,10.0nm,1.1s
ZEA MLR MLR
comp=E,100nm,19.0s
ZEA MLR MLR
comp=Z,200nm,20.0s
**DBIC Dimbokro 71.53 276** LR LR 14 32 17.6
comp=Z,252nm,20.2s,baz=112,slow=35
**NB2 NORSAR Subarra 72.14 335** P **P** **14 02 06.2 -1.3**
comp=Z,1.3nm,0.8s,baz=111,slow=6.5
**NOA NORSAR Array B 72.14 335** P **P** **14 02 05.9 -1.6**
comp=Z,4.9nm,1.1s,baz=112,slow=6.5,SNR=4.5
**KLR Kul'dur 72.26 39**⇑*e*P **P** **14 02 07.9 -0.5**
KLR pmax pmax
comp=Z,9.0nm,1.1s
**NBO00 NORSAR Array S 72.32 335** P **P** **14 02 06.5 -2.0**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MDT** | **Midelt** | **73.26** | **304** | LR | LR | 14 32 25.2 | | | |
| | comp=Z,282nm,20.4s,baz=34,slow=34 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **73.86** | **53** | LR | LR | 14 38 32.9 | | | |
| | comp=Z,139nm,18.2s,baz=274,slow=39 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **73.90** | **311** | P | **P** | **14 02 17.7** | **-0.7** | | |
| | comp=Z,10nm,1.1s,baz=88,slow=5.9,SNR=13 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **73.90** | **311** | P | **P** | **14 02 18.1** | **-0.3** | | |
| ESDC | | | | IAmb | IAmb | 14 02 19.3 | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **YAK** | **Yakutsk** | **75.71** | **26** | *c*eP | **P** | **14 02 27.6** | **-0.7** | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.96** | **327** | P | **P** | **14 02 34.4** | **-1.1** | | |
| | comp=Z,5.3nm,1.0s,baz=116,slow=9.4,SNR=4.6 | | | | | | | | |
| **GUMO** | **Guam** | **77.92** | **77** | LR | LR | 14 35 57.9 | | | |
| | comp=Z,78nm,19.1s,baz=272,slow=35 | | | | | | | | |
| **STKA** | **Stephens Creek** | **78.24** | **123** | P | **P** | **14 02 44.7** | **+1.5** | | |
| | comp=Z,5.4nm,1.1s,baz=234,slow=2.9,SNR=6.8 | | | | | | | | |
| STKA | | | | LR | LR | 14 33 26.0 | | | |
| | comp=Z,285nm,20.8s,baz=230,slow=33 | | | | | | | | |
| **STKA** | **Stephens Creek** | **78.24** | **123** | P | **P** | **14 02 43.3** | **+0.1** | | |
| STKA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **78.24** | **123** | P | **P** | **14 02 43.3** | **+0.1** | | |
| **ASAJ** | **Asahikawa** | **78.36** | **45** | LR | LR | 14 38 30.2 | | | |
| | comp=Z,118nm,19.7s,baz=312,slow=37 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **78.90** | **43** | *e*P | **P** | **14 02 47.2** | **+0.7** | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,42nm,1.7s | | | | | | | | |
| **TIXI** | **Tiksi** | **79.47** | **17** | *e*P | **P** | **14 02 48.9** | **-0.2** | | |
| TIXI | | | | pmax | pmax | | | | |
| | comp=Z,22nm,2.5s | | | | | | | | |
| **TIXI** | **Tiksi** | **79.47** | **17** | P | **P** | **14 02 47.7** | **-1.4** | | |
| TIXI | | | | IAmb | IAmb | 14 02 50.0 | | | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **80.39** | **351** | LR | LR | 14 42 50.1 | | | |
| | comp=Z,137nm,19.2s,baz=116,slow=39 | | | | | | | | |
| **CTA** | **Charters Tower** | **80.83** | **111** | LR | LR | 14 37 04.6 | | | |
| | comp=Z,178nm,18.4s,baz=262,slow=34 | | | | | | | | |
| **PMG** | **Port Moresby** | **80.84** | **100** | LR | LR | 14 39 21.4 | | | |
| | comp=Z,57nm,19.6s,baz=264,slow=36 | | | | | | | | |
| **MA2** | **Magadan** | **85.14** | **31** | *e*P | **P** | **14 03 18.7** | **-0.4** | | |
| MA2 | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **MA2** | **Magadan** | **85.14** | **31** | P | **P** | **14 03 17.5** | **-1.6** | | |
| MA2 | | | | IAmb | IAmb | 14 03 25.2 | | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **SNAA** | **Sanae** | **85.67** | **197** | LR | LR | 14 36 36.4 | | | |
| | comp=Z,133nm,18.5s,baz=1.0,slow=32 | | | | | | | | |
| **SEY** | **Seymchan** | **86.13** | **27** | LR | LR | 14 43 18.0 | | | |
| | comp=Z,339nm,19.7s,baz=306,slow=37 | | | | | | | | |
| **SEY** | **Seymchan** | **86.13** | **27** | *e*P | **P** | **14 03 24.1** | **+0.2** | | |
| **DAG** | **Danmarks Havn** | **86.92** | **347** | *i* P | **P** | **14 03 27.0** | **-0.6** | | |
| **PETK** | **Petropavlovsk-** | **88.88** | **37** | P | **P** | **14 03 38.0** | **+0.6** | | |
| | comp=Z,0.7nm,0.6s,baz=280,slow=8.5,SNR=1.2 | | | | | | | | |
| PETK | | | | LR | LR | 14 45 39.0 | | | |
| | comp=Z,135nm,18.2s,baz=283,slow=37 | | | | | | | | |
| **BILL** | **Bilibino** | **91.62** | **22** | *e*P | **P** | **14 03 50.5** | **+0.7** | | |
| BILL | | | | *i* | | 14 03 57.4 | | | |
| BILL | | | | *e* | | 14 07 30.4 | | | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,15nm,2.5s | | | | | | | | |
| BILL | | | | MLR | MLR | | | | |
| | comp=Z,74nm,13.0s | | | | | | | | |
| **BILL** | **Bilibino** | **91.62** | **22** | P | **P** | **14 03 49.9** | **+0.1** | | |
| BILL | | | | IAmb | IAmb | 14 03 57.8 | | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **92.07** | **180** | P | **P** | **14 03 54.2** | **+2.1** | | |
| | comp=Z,2.5nm,1.0s,baz=253,slow=2.8 | | | | | | | | |
| **VNDA** | **Vanda** | **93.13** | **167** | LR | LR | 14 40 58.0 | | | |
| | comp=Z,108nm,18.3s,baz=250,slow=32 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **98.48** | **339** | LR | LR | 14 52 15.2 | | | |
| | comp=Z,166nm,18.0s,baz=99,slow=38 | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **98.74** | **36** | LR | LR | 14 50 52.2 | | | |
| | comp=Z,89nm,19.0s,baz=304,slow=37 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **99.73** | **112** | LR | LR | 14 47 42.3 | | | |
| | comp=Z,156nm,19.3s,baz=214,slow=34 | | | | | | | | |
| **M22K** | **Willow** | **110.37** | **18** | P | **PKiKP** | **14 09 15.4** | **+0.4** | | |
| | baz=320 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **110.42** | **16** | P | **PKiKP** | **14 09 15.2** | **-0.2** | | |
| | baz=323 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **115.57** | **1** | PKP | **PKiKP** | **14 09 24.1** | **-0.8** | | |
| | comp=Z,0.9nm,0.8s,baz=0.2,slow=1.6,SNR=11 | | | | | | | | |
| YKA | | | | PP | **PP** | **14 10 25.9** | **-0.3** | | |
| | comp=Z,1.0nm,1.0s,baz=352,slow=7.2,SNR=5.7 | | | | | | | | |
| **EDM** | **Edmonton** | **124.88** | **0** | PKIKP | **PKiKP** | **14 09 43.7** | **+0.1** | | |
| **EDM** | **Edmonton** | **124.88** | **0** | PKPdf | **PKiKP** | **14 09 43.7** | **+0.1** | | |
| **N59A** | **State Game Lan** | **125.28** | **326** | P | **PKPdf** | **14 09 43.8** | **-0.6** | | |
| | baz=48 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **127.58** | **345** | P | **PKPdf** | **14 09 48.0** | **-0.4** | | |
| | baz=22 | | | | | | | | |
| **DGMT** | **Dagmar** | **129.03** | **352** | P | **PKiKP** | **14 09 52.0** | **0.0** | | |
| | baz=12 | | | | | | | | |
| **B05A** | **Bryant** | **129.25** | **8** | P | **PKiKP** | **14 09 52.0** | **-0.3** | | |
| | baz=348 | | | | | | | | |
| **P52A** | **Corning** | **129.63** | **329** | P | **PKPdf** | **14 09 52.9** | **+0.3** | | |
| | baz=42 | | | | | | | | |
| **NEW** | **Newport** | **129.73** | **3** | P | **PKPdf** | **14 09 53.0** | **+0.3** | | |
| | baz=355 | | | | | | | | |
| **EGMT** | **Eagleton** | **129.99** | **357** | PKPdf | **PKPdf** | **14 09 52.7** | **-0.5** | | |
| **EGMT** | **Eagleton** | **129.99** | **357** | P | **PKiKP** | **14 09 53.6** | **-0.4** | | |
| | baz=4.4 | | | | | | | | |
| **JFWS** | **Jewell Farm** | **130.64** | **338** | P | **PKiKP** | **14 09 55.2** | **-0.1** | | |
| | baz=31 | | | | | | | | |
| **LAO** | **LASA Array** | **131.03** | **354** | P | **PKiKP** | **14 09 56.2** | **+0.1** | | |
| | baz=9.2 | | | | | | | | |
| **MSO** | **Missoula** | **131.28** | **1** | P | **PKiKP** | **14 09 57.0** | **+0.4** | | |
| | baz=359 | | | | | | | | |
| **G05D** | **Wamic, OR** | **132.32** | **8** | P | **PKiKP** | **14 09 58.2** | **-0.5** | | |
| | baz=349 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **135.22** | **356** | PKhKP | PKPpre | 14 09 56.7 | | | |
| | comp=Z,0.7nm,0.9s,baz=326,slow=7.7,SNR=5.2 | | | | | | | | |
| PDAR | | | | PKP | **PKPdf** | **14 10 02.6** | **-0.8** | | |
| | comp=Z,1.2nm,0.9s,baz=38,slow=2.6,SNR=7.6 | | | | | | | | |
| **N02D** | **Trinity Center** | **136.27** | **10** | P | **PKiKP** | **14 10 06.6** | **-0.3** | | |
| | baz=346 | | | | | | | | |
| **N23A** | **Red Feather La** | **136.70** | **352** | P | **PKiKP** | **14 10 07.4** | **-0.6** | | |
| | baz=10 | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **137.17** | **327** | P | **PKiKP** | **14 10 08.6** | **-0.2** | | |
| | baz=40 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **139.40** | **6** | PKP | **PKPdf** | **14 10 09.2** | **-2.0** | | |
| | comp=Z,0.8nm,0.9s,baz=11,slow=0.9,SNR=6.6 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **139.72** | **351** | P | **PKPdf** | **14 10 10.3** | **-1.6** | | |
| | baz=12 | | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **142.38** | **6** | P | **PKPdf** | **14 10 14.0** | **-2.6** | | |
| | baz=353 | | | | | | | | |
| **WUAZ** | **Wupatki** | **142.54** | **358** | | **PKPdf** | **14 10 13.8** | **-3.1** | | |
| **WUAZ** | **Wupatki** | **142.54** | **358** | P | **PKPdf** | **14 10 14.8** | **-2.1** | | |
| | baz=2.9 | | | | | | | | |
| **ANMO** | **Albuquerque** | **142.61** | **351** | PKIKP | **PKPdf** | **14 10 14.0** | **-3.1** | | |
| **ANMO** | **Albuquerque** | **142.61** | **351** | | **PKPdf** | **14 10 14.0** | **-3.1** | | |
| **ANMO** | **Albuquerque** | **142.61** | **351** | P | **PKPdf** | **14 10 14.9** | **-2.2** | | |
| | baz=11 | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **142.64** | **5** | P | **PKPdf** | **14 10 14.6** | **-2.4** | | |
| | baz=354 | | | | | | | | |
| **W18A** | **Petrified Fore** | **142.84** | **355** | | **PKPdf** | **14 10 14.8** | **-2.7** | | |
| **W18A** | **Petrified Fore** | **142.84** | **355** | P | **PKPdf** | **14 10 15.1** | **-2.4** | | |
| | baz=5.7 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **142.94** | **7** | P | **PKPdf** | **14 10 15.5** | **-2.0** | | |
| | baz=352 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **143.15** | **4** | P | **PKPdf** | **14 10 16.7** | **-1.3** | | |
| | baz=355 | | | | | | | | |
| **BNM** | **Barren Site** | **143.42** | **351** | | PKPbc | 14 10 16.1 | +0.4 | | |
| **PDMCI** | **Parker Dam,Lak** | **143.78** | **1** | P | **PKPdf** | **14 10 17.8** | **-1.1** | | |
| | baz=358 | | | | | | | | |
| **IRM** | **Iron Mountain** | **143.89** | **3** | P | **PKPdf** | **14 10 18.4** | **-0.8** | | |
| | baz=357 | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **144.00** | **4** | P | PKPbc | 14 10 18.2 | +1.0 | | |
| | baz=355 | | | | | | | | |
| **PMD** | **Palm Desert** | **144.32** | **5** | PKPdf | PKPbc | 14 10 18.2 | +0.2 | | |
| **BLYC** | **Blythe** | **144.32** | **2** | PKPdf | **PKPdf** | **14 10 19.1** | **-0.8** | | |
| **PFO** | **Pinyon Flats O** | **144.35** | **5** | PKIKP | **PKPdf** | **14 10 19.3** | **-0.8** | | |
| **PFO** | **Pinyon Flats O** | **144.35** | **5** | PKPdf | **PKPdf** | **14 10 19.2** | **-0.8** | | |
| **PFO** | **Pinyon Flats O** | **144.35** | **5** | P | PKPbc | 14 10 18.3 | -0.1 | | |
| | baz=354,SNR=9.7 | | | | | | | | |
| **CIS** | **Catalina Islan** | **144.35** | **7** | P | **PKPdf** | **14 10 19.3** | **-0.7** | | |
| | baz=351 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **144.35** | **5** | P | PKPbc | 14 10 18.2 | -0.2 | | |
| | baz=354,SNR=10 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **144.38** | **3** | P | **PKPdf** | **14 10 19.4** | **-0.8** | | |
| | baz=356 | | | | | | | | |
| **SCI2** | **San Clemente I** | **144.75** | **8** | P | **PKPdf** | **14 10 20.5** | **-0.2** | | |
| | baz=351 | | | | | | | | |
| **GLA** | **Glamis** | **145.01** | **2** | P | **PKPab** | **14 10 19.8** | **-0.6** | | |
| | baz=357,SNR=7.2 | | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **145.06** | **4** | P | **PKPab** | **14 10 20.5** | **0.0** | | |
| | baz=355,SNR=6.5 | | | | | | | | |
| **MONP2** | **Monument Peak** | **145.07** | **5** | P | **PKPbc** | **14 10 20.4** | **-0.4** | | |
| | baz=354,SNR=12 | | | | | | | | |
| **JCT** | **Junction City** | **145.17** | **339** | P | **PKPab** | **14 10 21.0** | **0.0** | | |
| | baz=24 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **145.18** | **352** | P | **PKPbc** | **14 10 21.0** | **-0.1** | | |
| | baz=9.4,SNR=16 | | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **145.33** | **4** | P | **PKPbc** | **14 10 21.1** | **-0.4** | | |
| | baz=355,SNR=9.5 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **145.58** | **348** | P | **PKPab** | **14 10 22.4** | **-0.1** | | |
| | baz=14 | | | | | | | | |
| **TUC** | **Tucson** | **145.70** | **356** | P | **PKPab** | **14 10 23.1** | **+0.1** | | |
| | baz=4.2 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **146.13** | **359** | P | **PKPab** | **14 10 24.9** | **+0.3** | | |
| | baz=0.6,SNR=6.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **147.44** | **344** | PKPbc | **PKPbc** | **14 10 28.5** | **+0.7** | | |
| | comp=Z,30nm,1.0s,baz=132,slow=1.9,SNR=82 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **147.44** | **344** | PKP2 | **PKPdf** | **14 10 26.4** | **+0.9** | | |
| **TXAR** | **Lajitas Array** | **147.44** | **344** | | **PKPdf** | **14 10 26.4** | **+0.9** | | |

**PRU 09 14:10:18.1±0.0, 49°.80N×18°.54E, h0km, Mining Induced Event Csm, E=4.7e+04, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.26** | **279** | *e*SG | Sg | 14 10 27.0 | +0.7 |
| | comp=Z,11nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.65** | **268** | *e*PG | Pg | 14 10 30.2 | -0.3 |
| MORC | | | | *e*SG | Sg | 14 10 38.0 | -0.9 |
| **VRAC** | **Vranov** | **1.36** | **250** | *e*PG | Pg | 14 10 43.1 | -1.0 |
| VRAC | | | | *e*SG | Sg | 14 11 00.7 | -1.0 |
| **DPC** | **Dobruska-Polom** | **1.53** | **292** | *e*PG | Pn | 14 10 45.1 | -1.6 |
| DPC | | | | *e*SG | Sg | 14 11 06.4 | -0.9 |
| **DPC** | **Dobruska-Polom** | **1.53** | **292** | *e* | Sg | 14 11 06.4 | -0.9 |
| **KRUC** | **Moravsky** | **1.58** | **243** | *e*PG | Pn | 14 10 46.6 | -0.8 |

*JMA **09** 14:10:39.5±0.8, 47°.65N×154°.20E, h30km, M5.0*
*BJI **09** 14:10:40.0±0.0, 47°.99N×154°.28E, h75km, mb4.7/55, mB5.1/28, Ms4.4/11, Ms7 4.1/10*
*MOS **09** 14:10:40.4±1.1, 47°.74N×153°.93E, h61km, mb5.1/51, Error ellipse: s-maj=6.2km s-min=4.4km az=80.1*
*SKHL **09** 14:10:41.3±0.8, 47°.50N×154°.50E, h75km±5km, mb5.5/9*
*IDC **09** 14:10:43.8±2.4, 47°.80N×153°.93E, h74km±21km, mb4.3/28, mb1 4.4/34, mb1mx4.4/38, mbtmp4.6/34, MS3.7/21, Ms1 3.7/21, ms1mx3.4/97, Error ellipse: s-maj=13.9km s-min=10.5km az=146.0*
*NEIC **09** 14:10:44.6±1.3, 47°.85N±0°.10×153°.9E±0°.1, h76km±6km, mb4.8/211, Error ellipse: s-maj=16.0km s-min=10.8km az=145.0*
*BGR **09** 14:10:56.7±0.0, 50°.03N×151°.83E, h33km, mb5.2*

**ISC 09 14:10:40.9±0.4, 47°.65N±0°.05×154°.20E±0°.03, h50km, n815, σ1s36/798, mb4.9/229, MS4.1/16, 37C-51D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **3.28** | **22** | *e*PN | **Pn** | **14 11 30.8** | **+1.0** |
| SKR | | | | *e*S | **Sn** | **14 12 07.4** | **-0.1** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,5μm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,4μm,0.6s | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.28** | **22** | *i* P | **Pn** | **14 11 31.5** | **+1.7** |
| SKR | | | | AMB | AMB | 14 11 34.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| SKR | | | | *i* S | **Sn** | **14 12 08.7** | **+1.2** |
| SKR | | | | A | A | 14 12 19.9 | |
| | comp=E,5μm,0.7s | | | | | | |
| SKR | | | | A | A | 14 12 19.9 | |
| | comp=E,4μm,0.7s | | | | | | |
| **PAU** | **Pauzhetka** | **4.18** | **23** | *i* P | **Pn** | **14 11 43.3** | **+1.3** |
| PAU | | | | AMB | AMB | 14 11 46.9 | |
| | comp=E,460nm,0.3s | | | | | | |
| PAU | | | | *i* S | **Sn** | **14 12 30.4** | **+0.9** |
| PAU | | | | A | A | 14 12 37.6 | |
| | comp=E,950nm,0.3s | | | | | | |
| PAU | | | | A | A | 14 12 37.6 | |
| | comp=E,480nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **5.00** | **243** | *c* iPN | **Pn** | **14 11 55.9** | **+2.5** |
| KUR | | | | *e*S | **Sn** | **14 12 51.6** | **+1.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,1μm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,642nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,155nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,133nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,515nm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,243nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **5.00** | **243** | *i* P | **Pn** | **14 11 55.7** | **+2.3** |
| KUR | | | | AMB | AMB | 14 11 56.8 | |
| | comp=N,780nm,0.7s | | | | | | |
| KUR | | | | *e*S | **Sn** | **14 12 51.5** | **+1.7** |
| KUR | | | | A | A | 14 12 56.4 | |
| | comp=N,240nm,0.5s | | | | | | |
| KUR | | | | A | A | 14 12 56.4 | |
| | comp=N,520nm,0.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **5.90** | **21** | *c* iPN | **Pn** | **14 12 07.9** | **+2.2** |
| **PEA0B** | **Petropavlovsk-** | **5.90** | **21** | Pn | **Pn** | **14 12 07.7** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **5.90** | **21** | P | **Pn** | **14 12 07.0** | **+1.3** |
| | comp=N,40nm,0.3s,baz=186,slow=14,SNR=756 | | | | | | |
| PETK | | | | S | **Sn** | **14 13 19.2** | **+7.3** |
| | baz=181,slow=12,SNR=0.9 | | | | | | |
| PETK | | | | LR | LR | 14 14 49.0 | |
| | comp=N,183nm,19.9s,baz=192,slow=42 | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.90** | **21** | PN | **Pn** | **14 12 07.3** | **+1.6** |
| PETK | | | | | | 14 13 19.2 | |
| **PETK** | **Petropavlovsk-** | **5.90** | **21** | Pn | **Pn** | **14 12 07.3** | **+1.6** |
| **PET** | **Petropavlovsk** | **6.08** | **26** | *c* iPN | **Pn** | **14 12 08.7** | **+0.5** |
| **PET** | **Petropavlovsk** | **6.08** | **26** | Pn | **Pn** | **14 12 08.9** | **+0.8** |
| **PET** | **Petropavlovsk** | **6.08** | **26** | *i* P | **Pn** | **14 12 09.3** | **+1.1** |
| PET | | | | AMB | AMB | 14 12 16.3 | |
| | comp=N,60nm,0.3s | | | | | | |
| PET | | | | *e*S | **Sn** | **14 13 15.8** | **-0.6** |
| PET | | | | A | A | 14 13 20.8 | |
| | comp=N,340nm,0.4s | | | | | | |
| PET | | | | A | A | 14 13 20.8 | |
| | comp=N,730nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **6.39** | **236** | *d* iPN | **Pn** | **14 12 11.3** | **-1.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,103nm,0.5s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,36nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,32nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **6.39** | **236** | *i* P | **Pn** | **14 12 14.5** | **+2.1** |
| SHO | | | | AMB | AMB | 14 12 14.8 | |
| | comp=E,120nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **14 13 23.7** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **6.86** | **241** | *d* iPN | **Pn** | **14 12 20.0** | **+1.3** |
| YUK | | | | *e*S | **Sn** | **14 13 34.8** | **-0.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,229nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,100nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,207nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.86** | **241** | *i* P | **Pn** | **14 12 20.1** | **+1.3** |
| YUK | | | | AMB | AMB | 14 12 20.8 | |
| | comp=E,100nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 14 12 20.8 | |
| | comp=E,210nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 14 12 20.8 | |
| | comp=E,300nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **14 13 35.4** | **0.0** |
| **RUSJ** | **Misakicho** | **7.18** | **244** | *e*PN | **Pn** | **14 12 25.2** | **+1.9** |
| RUSJ | | | | S | **Sn** | **14 13 47.0** | **+3.5** |
| **GLVR** | **Golovnino** | **7.23** | **240** | *e*PN | **Pn** | **14 12 24.0** | **+0.1** |
| **GLVR** | **Golovnino** | **7.23** | **240** | *e*P | **Pn** | **14 12 24.0** | **+0.1** |
| **NEM2** | **Nemuro 2** | **7.33** | **237** | P | **Pn** | **14 12 23.6** | **-1.6** |
| NEM2 | | | | *e*S | Sn | 14 13 40.5 | -6.4 |
| **NMR** | **Nemuro--Hokkai** | **7.33** | **237** | ⇑*i*PN | **Pn** | **14 12 23.7** | **-1.6** |
| **JRA** | **Rausu** | **7.35** | **243** | P | **Pn** | **14 12 27.0** | **+1.4** |
| **JNK** | **Nakash** | **7.79** | **242** | P | **Pn** | **14 12 31.9** | **+0.3** |
| **YSS** | **Yuzh-Sakhalins** | **7.81** | **269** | *c* iPN | Pn | 14 12 37.1 | +5.2 |
| YSS | | | | *e*S | **Sn** | **14 14 05.3** | **+6.4** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,0.8s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,100nm,0.7s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,14.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.81** | **269** | Pn | **Pn** | **14 12 35.5** | **+3.6** |
| **YSS** | **Yuzh-Sakhalins** | **7.81** | **269** | *e*P | Pn | 14 12 36.5 | +4.6 |
| YSS | | | | AMB | AMB | 14 12 40.4 | |
| | comp=Z,100nm,0.8s | | | | | | |
| YSS | | | | *e*S | **Sn** | **14 14 01.4** | **+2.5** |
| **JTKR** | **Abashiri--Toko** | **8.08** | **247** | P | **Pn** | **14 12 37.2** | **+1.7** |
| **JAK** | **Akkeshi** | **8.15** | **239** | P | **Pn** | **14 12 35.1** | **-1.5** |
| **TYV** | **Tymovskoe** | **8.21** | **297** | *e*PN | Pn | 14 12 41.7 | +4.5 |
| TYV | | | | *e*S | Sn | 14 14 15.6 | +7.1 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,51nm,1.0s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,400nm,3.6s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,26nm,1.2s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,20nm,1.2s | | | | | | |
| **UGL** | **Uglegorsk** | **8.21** | **284** | *e*PN | Pn | 14 12 42.5 | +5.2 |
| UGL | | | | *e*S | **Sn** | **14 14 11.4** | **+2.9** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,198nm,1.0s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=E,101nm,0.8s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=N,74nm,0.7s | | | | | | |
| **JMP** | **Maruseppu** | **8.40** | **248** | P | **Pn** | **14 12 41.8** | **+1.8** |
| **JSE** | **Soyaes** | **8.48** | **256** | P | **Pn** | **14 12 44.6** | **+3.6** |
| **JAR** | **Ashorobuto** | **8.53** | **243** | P | **Pn** | **14 12 42.1** | **+0.5** |
| JAR | | | | *e*S | **Sn** | **14 14 14.1** | **-2.3** |
| **JWK2** | **Keihoku** | **8.81** | **259** | P | Pn | 14 12 51.0 | +5.5 |
| **JKA** | **Kamikawa-asahi** | **8.83** | **251** | Pn | **Pn** | **14 12 48.6** | **+2.8** |
| **JKA** | **Kamikawa-asahi** | **8.83** | **251** | *e*P | **Pn** | **14 12 48.6** | **+2.8** |
| **ASAJ** | **Asahikawa** | **8.83** | **251** | P | **Pn** | **14 12 48.2** | **+2.3** |
| | comp=N,3.5nm,0.3s,baz=80,slow=14,SNR=64 | | | | | | |
| ASAJ | | | | LR | LR | 14 16 45.7 | |
| | comp=N,126nm,18.1s,baz=20,slow=42 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.83** | **251** | P | **Pn** | **14 12 48.8** | **+2.9** |
| **ASAJ** | **Asahikawa** | **8.83** | **251** | PN | **Pn** | **14 12 48.6** | **+2.7** |
| **JKK2** | **Kamakawa 2** | **8.85** | **249** | P | **Pn** | **14 12 48.3** | **+2.2** |
| **JCH** | **Churui** | **9.17** | **241** | *e*S | Sn | 14 14 24.0 | -8.1 |
| **JFR** | **Furan** | **9.31** | **245** | P | **Pn** | **14 12 53.6** | **+1.1** |
| **JAB** | **Ashibetsu** | **9.37** | **248** | P | **Pn** | **14 12 55.5** | **+2.3** |
| **ERM** | **Erimo** | **9.66** | **238** | *i*ePN | **Pn** | **14 12 56.5** | **-0.6** |
| **ERM** | **Erimo** | **9.66** | **238** | Pn | **Pn** | **14 12 55.9** | **-1.2** |
| **JBT2** | **Biratori 2** | **9.67** | **244** | P | **Pn** | **14 12 56.8** | **-0.5** |
| **JNBK** | **Urakawa-nobuka** | **9.73** | **241** | P | **Pn** | **14 12 56.3** | **-1.8** |
| JNBK | | | | *e*S | Sn | 14 14 38.6 | -7.2 |
| **KBG** | **Krutoberegovo** | **10.08** | **28** | *e*P | **Pn** | **14 13 04.1** | **+1.3** |
| **JEW** | **Eniwo** | **10.20** | **247** | Pn | **Pn** | **14 13 02.8** | **-1.7** |
| **JNB** | **Noboribetsu** | **10.65** | **246** | P | **Pn** | **14 13 10.5** | **-0.2** |
| JNB | | | | *e*S | **Sn** | **14 15 03.4** | **-5.1** |
| **JKB** | **Kayabe** | **10.99** | **243** | P | Pn | 14 13 12.9 | -2.4 |
| JKB | | | | *e*S | Sn | 14 15 06.7 | -10 |
| **JSH** | **Shimam** | **11.18** | **249** | P | **Pn** | **14 13 18.5** | **+0.6** |
| **JTM** | **Tenmabayashi** | **11.65** | **239** | P | Pn | 14 13 21.0 | -3.4 |
| JTM | | | | *e*S | Sn | 14 15 19.9 | -13 |
| **JTM** | **Tenmabayashi** | **11.65** | **239** | Pn | Pn | 14 13 20.2 | -4.1 |
| **JANG** | **Nango** | **11.67** | **236** | P | Pn | 14 13 20.0 | -4.6 |
| **GRNR** | **Gornyy** | **12.04** | **292** | *e*P | **Pn** | **14 13 32.6** | **+3.0** |
| **MA2** | **Magadan** | **12.12** | **352** | *de*PN | **Pn** | **14 13 32.2** | **+1.6** |
| **MA2** | **Magadan** | **12.12** | **352** | Pn | **Pn** | **14 13 30.8** | **+0.1** |
| **MA2** | **Magadan** | **12.12** | **352** | *e*P | **Pn** | **14 13 32.2** | **+1.6** |
| **TEY** | **Ternei** | **12.44** | **264** | *e*P | **Pn** | **14 13 35.7** | **+0.6** |
| **OFUJ** | **Ofunato** | **12.50** | **231** | P | Pn | 14 13 31.4 | -4.6 |
| **JRG** | **Rokugo** | **12.83** | **235** | P | Pn | 14 13 37.3 | -3.2 |
| JRG | | | | *e*S | Sn | 14 15 51.0 | -11 |
| **JIO** | **Ouri** | **13.13** | **230** | P | Pn | 14 13 40.0 | -4.6 |
| JIO | | | | *e*S | Sn | 14 15 54.4 | -15 |
| **SHEM** | **Shemya Is, Ala** | **13.71** | **61** | P | **Pn** | **14 13 52.7** | **+0.3** |
| | comp=N,29nm,0.3s,baz=271,slow=2.4,SNR=25 | | | | | | |
| SHEM | | | | LR | LR | 14 18 25.8 | |
| | comp=N,114nm,21.8s,baz=302,slow=34 | | | | | | |
| **SMY** | **Shemya** | **13.71** | **61** | P | **Pn** | **14 13 52.9** | **+0.6** |
| **SMY** | **Shemya** | **13.71** | **61** | | **Pn** | **14 13 52.9** | **+0.6** |
| **KLR** | **Kul'dur** | **14.98** | **284** | P | **Pn** | **14 14 10.3** | **+1.1** |
| | comp=N,0.6nm,0.3s,baz=91,slow=8.7,SNR=17 | | | | | | |
| KLR | | | | LR | LR | 14 20 09.2 | |
| | comp=N,174nm,20.6s,baz=113,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **14.98** | **284** | *i*eP | **Pn** | **14 14 10.8** | **+1.5** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **KLR** | **Kul'dur** | **14.98** | **284** | *e*P | **Pn** | **14 14 11.1** | **+1.8** |
| **SEY** | **Seymchan** | **15.35** | **357** | P | **Pn** | **14 14 13.4**

**KSAR Wonju Array Be** 21.81 252 P **P** 14 15 27.6 -1.1
**TJN Taejon** 22.79 250 ⇓*e*P **P** 14 15 38.5 -0.6
**JNU Nakatsue** 22.82 239 P **P** 14 15 41.1 +1.6
comp=Z,13nm,1.1s,baz=41,slow=21,SNR=3.2
**GAMB Gambell** 24.65 37 P **P** 14 15 58.3 +1.8
GAMB IAmb IAmb 14 15 59.9
comp=Z,18nm,0.6s
**GAMB Gambell** 24.65 37 P **P** 14 15 57.7 +1.2
baz=246,SNR=10
**TIXI Tiksi** 26.82 343 P **P** 14 16 13.3 -2.6
comp=Z,4.6nm,0.5s,baz=92,slow=24,SNR=22
**TIXI Tiksi** 26.82 343 ⇓*e*P **P** 14 16 13.5 -2.5
TIXI pmax pmax
comp=Z,19nm,1.7s
**TIXI Tiksi** 26.82 343 P **P** 14 16 13.0 -2.9
**TNA Tin City** 26.87 34 P **P** 14 16 17.3 +0.8
TNA IAmb IAmb 14 16 22.9
comp=Z,30nm,0.8s
**TNA Tin City** 26.87 34 P **P** 14 16 18.6 +2.2
baz=247,SNR=23
**ANM Nome** 27.52 37 P **P** 14 16 23.6 +1.2
baz=252
**RDOG Red Dog Mine** 29.66 31 P **P** 14 16 41.9 +0.6
RDOG IAmb IAmb 14 16 50.1
comp=Z,17nm,1.1s
**RDOG Red Dog Mine** 29.66 31 P **P** 14 16 42.5 +1.1
baz=249
**H11N2 WAKE ISLAND Hy** 29.71 155 T T 14 48 47.3
baz=341,slow=76,SNR=827
**H11N1 WAKE ISLAND Hy** 29.72 155 T T 14 48 47.6
baz=341,slow=76,SNR=1069
**H11N3 WAKE ISLAND Hy** 29.72 155 T T 14 48 48.8
baz=341,slow=76,SNR=862
**HNS HongShan** 30.56 265 ⇑P **P** 14 16 48.8 -0.7
HNS pmax pmax
comp=Z,7.0nm,0.9s
**H11S1 WAKE ISLAND Hy** 30.81 156 T T 14 49 59.7
baz=344
**H11S3 WAKE ISLAND Hy** 30.82 156 T T 14 49 18.4
baz=344,slow=74
**H11S2 WAKE ISLAND Hy** 30.83 156 T T 14 49 16.6
baz=344,slow=74
**NJ2 Nanjing** 30.97 253 *e*P **P** 14 16 54.6 +1.3
NJ2 pmax pmax
comp=Z,3.0nm,0.5s
**HHC Hu-ho-hao-te** 30.98 273 *e*P **P** 14 16 54.7 +1.3
HHC pmax pmax
comp=Z,6.0nm,1.0s
HHC pmax pmax
comp=Z,190nm,9.2s
**TTA Tatalina** 31.25 42 P **P** 14 16 56.0 +0.4
TTA pmax pmax
comp=Z,7.0nm,0.9s
**TTA Tatalina** 31.25 42 P **P** 14 16 56.0 +0.4
**TTA Tatalina** 31.25 42 P **P** 14 16 56.5 +1.0
baz=265
**ULN Ulaanbaatar** 31.31 288 P **P** 14 16 53.7 -2.6
ULN pmax pmax
comp=Z,4.0nm,0.7s
**ULN Ulaanbaatar** 31.31 288 P **P** 14 16 53.7 -2.6
**CHIR Chirikof Islan** 31.50 56 P **P** 14 16 59.1 +1.4
baz=277
**L19K White Mountain** 31.73 44 P **P** 14 17 00.3 +0.7
**L19K White Mountain** 31.73 44 P **P** 14 17 00.6 +0.9
baz=267
**SONM Songino Array** 31.74 288 P **P** 14 16 58.3 -1.8
comp=Z,3.9nm,0.7s,baz=69,slow=8.9,SNR=38
**SONM Songino Array** 31.74 288 P **P** 14 16 57.4 -2.7
**M19K Big River Lodg** 31.93 44 P **P** 14 17 02.8 +1.4
baz=268
**O19K Port Alsworth** 31.94 48 P **P** 14 17 02.5 +1.1
baz=271
**K20K Telida** 32.17 42 P **P** 14 17 04.2 +0.7
baz=266
**L20K Farewell, AK** 32.20 43 P **P** 14 17 04.6 +0.8
baz=268
**J20K Nowinta River** 32.21 40 P **P** 14 17 05.1 +1.3
**J20K Nowinta River** 32.21 40 P **P** 14 17 04.1 +0.3
baz=265
**IMAR Indian Mountai** 32.60 37 P **P** 14 17 08.1 +0.8
**A21K Barrow** 32.87 27 P **P** 14 17 10.3 +0.8
**A21K Barrow** 32.87 27 P **P** 14 17 11.0 +1.5
baz=251
**ZAK Zakamensk** 32.98 294 *e*P **P** 14 17 07.7 -3.1
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**PPLA Purkeypile** 33.00 43 P **P** 14 17 12.4 +1.5
PPLA IAmb IAmb 14 17 31.8
comp=Z,29nm,1.4s
**PPLA Purkeypile** 33.00 43 P **P** 14 17 12.4 +1.5
baz=268
**CAST Castle Rocks** 33.06 42 P **P** 14 17 12.6 +1.2
**CAST Castle Rocks** 33.06 42 P **P** 14 17 12.4 +1.0
baz=268,SNR=5.1
**I21K Tanana** 33.23 38 P **P** 14 17 13.6 +0.9
I21K IAmb IAmb 14 17 16.6
comp=Z,12nm,0.8s
**I21K Tanana** 33.23 38 P **P** 14 17 13.7 +0.9
baz=265,SNR=9.2
**CNPM China Poot** 33.52 49 P **P** 14 17 16.3 +1.0
**BPAW Bear Paw Mtn.** 33.59 40 P **P** 14 17 16.9 +1.0
BPAW IAmb IAmb 14 17 18.1
comp=Z,8.2nm,0.8s
**BPAW Bear Paw Mtn.** 33.59 40 P **P** 14 17 17.0 +1.2
baz=268,SNR=6.7
**KTH Kantishna Hill** 33.59 41 P **P** 14 17 17.4 +1.4
KTH IAmb IAmb 14 17 18.6
comp=Z,20nm,1.0s
**LYN LuoYang** 33.65 263 ⇑P **P** 14 17 16.5 -0.2
LYN pmax pmax
comp=Z,10.0nm,0.6s
**BRLK Bradley Lake** 33.68 48 P **P** 14 17 16.9 +0.2
BRLK IAmb IAmb 14 17 20.6
comp=Z,37nm,1.4s
**MLY Manley** 33.75 39 P **P** 14 17 17.4 +0.1
**MLY Manley** 33.75 39 P **P** 14 17 18.8 +1.5
baz=267,SNR=7.4
**TRF Thorofare Moun** 33.87 42 P **P** 14 17 19.2 +0.7
TRF IAmb IAmb 14 17 22.0
comp=Z,9.0nm,0.8s
**TRF Thorofare Moun** 33.87 42 P **P** 14 17 19.7 +1.1
baz=269,SNR=5.5
**CUT Chulitna** 33.88 44 P **P** 14 17 19.2 +0.9
**CUT Chulitna** 33.88 44 P **P** 14 17 19.0 +0.6
baz=271
**M22K Willow** 33.96 45 P **P** 14 17 19.6 +0.6
baz=272
**COLD Coldfoot** 34.17 35 P **P** 14 17 21.7 +0.8
COLD IAmb IAmb 14 17 24.1
comp=Z,11nm,0.9s
**COLD Coldfoot** 34.17 35 P **P** 14 17 21.9 +1.0
baz=264,SNR=14
**BWN Browne** 34.26 40 P **P** 14 17 23.6 +2.0
**I23K Minto, Yukon-K** 34.34 39 P **P** 14 17 23.8 +1.5
I23K IAmb IAmb 14 17 25.4
comp=Z,5.5nm,0.7s
**I23K Minto, Yukon-K** 34.34 39 P **P** 14 17 22.5 +0.2
baz=268,SNR=5.3
**PMR Palmer** 34.44 45 P **P** 14 17 23.2 0.0
PMR pmax pmax
comp=Z,5.0nm,0.8s
**PMR Palmer** 34.44 45 P **P** 14 17 23.2 0.0
**PMR Palmer** 34.44 45 P **P** 14 17 23.5 +0.3
baz=273
**NEA2 Nenana** 34.44 40 P **P** 14 17 25.1 +1.9
NEA2 IAmb IAmb 14 17 26.0
comp=Z,14nm,0.6s
**NEA2 Nenana** 34.44 40 P **P** 14 17 24.1 +0.9
baz=269,SNR=5.0
**MCK McKinley** 34.48 41 P **P** 14 17 24.1 +0.4
MCK pmax pmax
comp=Z,11nm,0.9s
**MCK McKinley** 34.48 41 P **P** 14 17 24.1 +0.4
MCK IAmb IAmb 14 17 25.4
comp=Z,11nm,0.9s
**MCK McKinley** 34.48 41 P **P** 14 17 24.0 +0.4
baz=270,SNR=5.2
**RND Reindeer** 34.52 42 P **P** 14 17 24.3 +0.3
RND pmax pmax
comp=Z,16nm,0.9s
**RND Reindeer** 34.52 42 P **P** 14 17 24.3 +0.3
RND IAmb IAmb 14 17 25.3
comp=Z,16nm,0.9s
**KNK Knik Glacier** 34.77 45 P **P** 14 17 26.2 0.0
**KNK Knik Glacier** 34.77 45 P **P** 14 17 26.7 +0.6
baz=274

**SML Sawmill** 34.80 45 P **P** 14 17 27.3 +0.8
**SML Sawmill** 34.80 45 P **P** 14 17 27.3 +0.8
baz=274,SNR=12
**MDM Murphy Dome** 34.81 39 P **P** 14 17 27.4 +0.9
MDM IAmb IAmb 14 17 28.7
comp=Z,9.1nm,0.8s
**WRH Wood River Hil** 34.86 40 P **P** 14 17 27.7 +0.8
WRH IAmb IAmb 14 17 31.6
comp=Z,9.1nm,0.9s
**PWL Port Wells** 34.87 46 P **P** 14 17 26.9 -0.1
PWL IAmb IAmb 14 17 30.1
comp=Z,32nm,1.4s
**PWL Port Wells** 34.87 46 P **P** 14 17 27.4 +0.4
baz=275
**TCOL CIGO, UAF Yank** 34.96 39 P **P** 14 17 28.6 +0.9
**TCOL CIGO, UAF Yank** 34.96 39 P **P** 14 17 28.9 +1.2
baz=270,SNR=13
**COLA College** 34.97 39 P **P** 14 17 28.6 +0.8
COLA pmax pmax
comp=Z,26nm,0.7s
**COLA College** 34.97 39 P **P** 14 17 28.6 +0.8
**COLA College** 34.97 39 P **P** 14 17 29.2 +1.4
baz=270
**CCB Clear Creek Bu** 34.98 40 P **P** 14 17 28.1 +0.2
CCB IAmb IAmb 14 17 32.5
comp=Z,10nm,1.0s
**H24K Noodor Dome** 34.98 37 P **P** 14 17 29.1 +1.1
H24K IAmb IAmb 14 17 33.2
comp=Z,6.4nm,0.8s
**H24K Noodor Dome** 34.98 37 P **P** 14 17 29.1 +1.1
baz=268
**POKR Poker Plat Res** 35.15 39 P **P** 14 17 30.5 +1.1
**POKR Poker Plat Res** 35.15 39 P **P** 14 17 30.9 +1.6
baz=270,SNR=8.4
**SCM Sheep Creek Mo** 35.28 44 P **P** 14 17 31.5 +0.9
SCM pmax pmax
comp=Z,20nm,0.9s
**SCM Sheep Creek Mo** 35.28 44 P **P** 14 17 31.5 +0.9
SCM IAmb IAmb 14 17 56.4
comp=Z,20nm,0.9s
**SCM Sheep Creek Mo** 35.28 44 P **P** 14 17 31.1 +0.5
baz=274
**HDA Harding Lake** 35.35 40 P **P** 14 17 31.1 0.0
HDA IAmb IAmb 14 17 32.6
comp=Z,13nm,0.5s
**HDA Harding Lake** 35.35 40 P **P** 14 17 32.0 +0.9
baz=271
**IL31** 35.38 39 P **P** 14 17 31.8 +0.5
IL31 IAmb IAmb 14 17 37.5
comp=Z,7.9nm,0.8s
**ILAR Eielson Array** 35.38 39 P **P** 14 17 31.8 +0.5
comp=Z,4.2nm,0.7s,baz=255,slow=6.4,SNR=58
**ILAR Eielson Array** 35.38 39 P **P** 14 17 31.9 +0.6
**GLI Glacier Island** 35.47 46 P **P** 14 17 33.0 +0.9
GLI IAmb IAmb 14 17 33.7
comp=Z,17nm,0.8s
**GLI Glacier Island** 35.47 46 P **P** 14 17 32.9 +0.8
baz=276
**FID Port Fidalgo** 35.78 46 P **P** 14 17 35.0 +0.2
FID IAmb IAmb 14 17 59.6
comp=Z,20nm,1.1s
**M24K Tolsona, Glenn** 35.80 44 P **P** 14 17 36.5 +1.4
M24K IAmb IAmb 14 17 58.5
comp=Z,17nm,0.9s
**M24K Tolsona, Glenn** 35.80 44 P **P** 14 17 36.2 +1.2
baz=275
**PRP Porcupine Dome** 35.95 38 P **P** 14 17 37.0 +0.7
PRP IAmb IAmb 14 17 42.0
comp=Z,18nm,1.0s
**PRP Porcupine Dome** 35.95 38 P **P** 14 17 37.1 +0.7
baz=271,SNR=10
**KLU Klutina** 35.98 45 P **P** 14 17 37.4 +0.9
KLU IAmb IAmb 14 17 46.5
comp=Z,15nm,1.0s
**KLU Klutina** 35.98 45 P **P** 14 17 37.5 +0.9
baz=276
**J25K Salcha River,** 36.03 40 P **P** 14 17 36.6 -0.4
J25K IAmb IAmb 14 17 37.5
comp=Z,6.7nm,0.8s
**J25K Salcha River,** 36.03 40 P **P** 14 17 36.8 -0.2
baz=272,SNR=11
**PAX Paxson** 36.07 42 P **P** 14 17 38.7 +1.4
PAX pmax pmax
comp=Z,4.0nm,0.8s
**PAX Paxson** 36.07 42 P **P** 14 17 38.7 +1.4
**PAX Paxson** 36.07 42 P **P** 14 17 38.4 +1.0
baz=274
**DIV Divide** 36.08 46 P **P** 14 17 38.7 +1.2
DIV IAmb IAmb 14 17 39.4
comp=Z,12nm,0.7s
**HARP HAARP** 36.25 43 P **P** 14 17 39.7 +0.8
baz=275
**RIDG Independent Ri** 36.30 41 P **P** 14 17 39.5 +0.2
RIDG IAmb IAmb 14 17 40.9
comp=Z,24nm,1.2s
**RIDG Independent Ri** 36.30 41 P **P** 14 17 39.6 +0.3
baz=274,SNR=5.9
**XAN Xi'an** 36.33 265 P **P** 14 17 39.2 -0.7
XAN pmax pmax
comp=Z,11nm,0.8s
**BMAR Burnt Mountain** 36.35 35 P **P** 14 17 41.4 +1.7
**N25K Chitina, Valde** 36.59 45 P **P** 14 17 43.3 +1.4
N25K IAmb IAmb 14 17 44.1
comp=Z,8.1nm,0.8s
**N25K Chitina, Valde** 36.59 45 P **P** 14 17 42.8 +0.9
baz=277
**DOT Dot Lake** 36.65 41 P **P** 14 17 42.5 +0.2
DOT IAmb IAmb 14 17 47.0
comp=Z,8.3nm,0.7s
**SCRK Sand Creek** 36.67 41 P **P** 14 17 42.2 -0.2
SCRK IAmb IAmb 14 17 43.5
comp=Z,17nm,1.4s
**SCRK Sand Creek** 36.67 41 P **P** 14 17 42.8 +0.3
baz=274
**BMRM Bremner River** 36.67 46 P **P** 14 17 43.5 +1.0
BMRM IAmb IAmb 14 18 10.5
comp=Z,14nm,0.9s
**BMRM Bremner River** 36.67 46 P **P** 14 17 43.2 +0.7
baz=278
**J26L Joseph Creek** 36.82 40 P **P** 14 17 43.7 -0.1
**J26L Joseph Creek** 36.82 40 P **P** 14 17 44.0 +0.3
baz=274
**MENT Mentasta** 36.87 42 P **P** 14 17 45.3 +1.2
MENT IAmb IAmb 14 17 50.1
comp=Z,5.7nm,0.6s
**GLB Gilahina Butte** 36.99 45 P **P** 14 17 46.4 +1.3
**L26K Log Cabin Wild** 37.03 42 P **P** 14 17 46.8 +1.3
L26K IAmb IAmb 14 17 48.5
comp=Z,6.4nm,0.8s
**L26K Log Cabin Wild** 37.03 42 P **P** 14 17 46.5 +1.0
baz=276
**BERG Berg Lake** 37.19 47 P **P** 14 17 48.4 +1.6
BERG IAmb IAmb 14 18 04.6
comp=Z,32nm,1.2s
**VRDI Verde Repeater** 37.19 45 P **P** 14 17 48.0 +1.0
VRDI IAmb IAmb 14 18 04.9
comp=Z,22nm,1.5s
**M26K Nabesna, AK** 37.26 43 P **P** 14 17 49.4 +2.0
M26K IAmb IAmb 14 18 14.0
comp=Z,13nm,1.1s
**M26K Nabesna, AK** 37.26 43 P **P** 14 17 48.9 +1.5
baz=277
**BGLC Bering Glacier** 37.44 47 P **P** 14 17 50.2 +1.4
baz=280
**WAX Waxell Ridge** 37.59 46 P **P** 14 17 52.2 +1.9
**L27K Beaver Creek,** 37.71 42 P **P** 14 17 53.0 +1.8
L27K IAmb IAmb 14 17 58.0
comp=Z,12nm,0.8s
**L27K Beaver Creek,** 37.71 42 P **P** 14 17 53.0 +1.8
baz=277,SNR=12
**BCAR Beaver Creek A** 37.73 42 P **P** 14 17 53.1 +1.7
**M27K Edge Creek, AK** 37.78 43 P **P** 14 17 53.4 +1.5
M27K IAmb IAmb 14 18 18.6
comp=Z,9.2nm,0.9s
**M27K Edge Creek, AK** 37.78 43 P **P** 14 17 53.7 +1.7
baz=278
**ISLE Juniper Island** 37.82 46 P **P** 14 17 53.5 +1.2
ISLE IAmb IAmb 14 18 04.9
comp=Z,28nm,1.2s
**EGAK Eagle** 37.83 39 P **P** 14 17 52.5 +0.4
EGAK IAmb IAmb 14 17 53.6
comp=Z,15nm,0.8s
**EGAK Eagle** 37.83 39 P **P** 14 17 52.9 +0.7
baz=276,SNR=13
**BARN Barnard Glacie** 38.07 45 P **P** 14 17 56.3 +1.8
BARN IAmb IAmb 14 18 24.6
comp=Z,14nm,1.1s
**YAH Yahtse** 38.15 46 P **P** 14 17 56.7 +1.5
YAH IAmb IAmb 14 17 58.1
comp=Z,17nm,1.0s
**BVCY Beaver Creek** 38.24 43 P **P** 14 17 57.6 +1.9
baz=279
**ENH Enshi** 38.26 259 P **P** 14 17 55.3 -0.9
ENH IAmb IAmb 14 17 57.0
comp=Z,32nm,1.5s
**NRIK Noril'sk** 38.37 328 P **P** 14 17 54.0 -2.7
comp=Z,3.0nm,0.7s,baz=106,slow=11,SNR=4.8
**NRIK Noril'sk** 38.37 328 ⇓*e*P **P** 14 17 54.1 -2.6
NRIK pmax pmax
comp=Z,6.0nm,1.0s
**TABL Table Mountain** 38.43 46 P **P** 14 17 58.7 +1.2
TABL IAmb IAmb 14 18 18.2
comp=Z,18nm,0.9s
**YUK3 Moose Creek** 38.52 44 P **P** 14 17 59.4 +1.1
baz=280
**LZH Lanzhou** 38.60 271 *e*P **P** 14 17 58.7 -0.5
LZH pP sP 14 18 19.6 +2.4
LZH sP pwP 14 18 30.5 +16
LZH pmax pmax
comp=Z,20nm,1.3s
LZH LR LR
comp=Z,310nm,13.5s
LZH LR LR
comp=Z,250nm,13.6s
LZH LR LR
comp=Z,260nm,16.8s
**DAWY Dawson** 38.67 40 P **P** 14 18 00.1 +0.8
**DAWY Dawson** 38.67 40 P **P** 14 18 00.3 +1.0
baz=278
**PCA Pinnacle** 38.93 47 P **P** 14 18 02.3 +0.8
PCA IAmb IAmb 14 18 28.3
comp=Z,25nm,1.1s
**PINM Pinnacle** 38.93 47 P **P** 14 18 02.4 +0.8
baz=282
**I29M Ogilvie Camp,** 38.97 38 P **P** 14 18 03.3 +1.5
baz=277
**YUK4 Talbot Arm** 39.46 44 P **P** 14 18 07.1 +1.0
baz=282
**EPYK Eagle Plains** 39.50 36 P **P** 14 18 07.5 +1.4
EPYK IAmb IAmb 14 18 08.7
comp=Z,22nm,1.1s
**EPYK Eagle Plains** 39.50 36 P **P** 14 18 07.3 +1.1
baz=277,SNR=7.4
**GTA Gaotai** 39.56 279 ⇓P **P** 14 18 06.5 -0.7
GTA pP sP 14 18 28.6 +3.3
GTA pmax pmax
comp=Z,6.0nm,0.9s
GTA pmax pmax
comp=Z,150nm,4.7s
GTA LR LR
comp=Z,110nm,14.5s
GTA LR LR
comp=Z,160nm,14.9s
GTA LR LR
comp=Z,140nm,17.1s
**HYT Haines Junctio** 40.11 45 P **P** 14 18 13.1 +1.7
HYT IAmb IAmb 14 18 37.3
comp=Z,12nm,1.2s
**HYT Haines Junctio** 40.11 45 P **P** 14 18 12.5 +1.1
baz=283
**MAYO Mayo, Yukon** 40.28 41 P **P** 14 18 14.2 +1.5
baz=281,SNR=8.5
**INK Inuvik** 40.49 33 P **P** 14 18 15.6 +1.4
INK pmax pmax
comp=Z,10.0nm,0.9s
**INK Inuvik** 40.49 33 P **P** 14 18 15.6 +1.4
INK IAmb IAmb 14 18 16.6
comp=Z,10.0nm,0.9s
**INK Inuvik** 40.49 33 P **P** 14 18 15.7 +1.4
baz=278,SNR=12
**N31M Braeburn, Yuko** 40.77 44 P **P** 14 18 18.9 +2.1
N31M IAmb IAmb 14 18 20.1
comp=Z,25nm,1.1s
**N31M Braeburn, Yuko** 40.77 44 P **P** 14 18 18.9 +2.1
baz=284
**M31M Drury Creek, Y** 41.25 42 P **P** 14 18 22.5 +1.9
**M31M Drury Creek, Y** 41.25 42 P **P** 14 18 22.1 +1.4
baz=284
**WHY Whitehorse** 41.40 45 P **P** 14 18 23.5 +1.5
WHY IAmb IAmb 14 18 30.4
comp=Z,18nm,1.4s
**WHY Whitehorse** 41.40 45 P **P** 14 18 24.1 +2.1
baz=285
**FARO Faro, Yukon** 41.71 42 P **P** 14 18 26.1 +1.6
baz=285
**P33M Teslin, Yukon** 42.51 45 P **P** 14 18 30.9 -0.1
**P33M Teslin, Yukon** 42.51 45 P **P** 14 18 32.8 +1.7
baz=287
**MMPY Sheldon Lake,** 42.55 41 P **P** 14 18 33.2 +1.9
baz=286
**GYA Guiyang** 42.63 258 ⇓*i*P **P** 14 18 32.2 -0.3
GYA pmax pmax
comp=Z,11nm,0.9s
**ZAA0 Zalesovo Array** 42.69 305 P **P** 14 18 30.3 -2.2
ZAA0 IAmb IAmb 14 18 30.9
comp=Z,9.5nm,0.7s
**ZALV Zalesovo Beam** 42.69 305 P **P** 14 18 30.4 -2.1
comp=Z,15nm,0.8s,baz=64,slow=7.5,SNR=54
ZALV PcP **PcP** 14 20 23.2 -0.1
comp=Z,1.1nm,0.4s,baz=60,slow=1.9,SNR=4.2
ZALV LR LR 14 39 21.3
comp=Z,102nm,18.1s,baz=338,slow=40
**ZALV Zalesovo Beam** 42.69 305 P **P** 14 18 30.1 -2.4
**A36M Sachs Harbour** 42.71 27 P **P** 14 18 33.6 +1.2
**A36M Sachs Harbour** 42.71 27 P **P** 14 18 33.8 +1.5
baz=281,SNR=28
**DGZ Jazzator, Alta** 42.82 299 ⇑*i*P **P** 14 18 32.2 -1.6
DGZ pmax pmax
comp=Z,11nm,1.1s
**C36M Paulatuk** 43.66 31 P **P** 14 18 41.0 +0.9
C36M IAmb IAmb 14 18 44.0
comp=Z,11nm,0.7s
**C36M Paulatuk** 43.66 31 P **P** 14 18 41.2 +1.1
baz=285,SNR=9.8
**DLBC Dease Lake** 44.43 47 P **P** 14 18 49.0 +2.5
**GOMU GeErMu** 44.62 278 P **P** 14 18 47.2 -1.5
GOMU pmax pmax
comp=Z,7.0nm,0.8s
GOMU pmax pmax
comp=Z,200nm,5.5s
**WMQ Urumqi** 45.29 291 *e*P **P** 14 18 52.2 -1.4
WMQ pmax pmax
comp=Z,14nm,1.3s
WMQ pmax pmax
comp=Z,190nm,4.5s
WMQ LR LR
comp=Z,390nm,29.2s
WMQ LR LR
comp=Z,780nm,28.8s
**ZSN Zaisan** 45.33 297 *e*P **P** 14 18 51.4 -2.3
**ZSN Zaisan** 45.33 297 *e*P **P** 14 18 51.5 -2.3
baz=297
**PZH PanZhiHua** 45.88 262 P **P** 14 18 58.7 +0.3
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,130nm,5.2s
**KMI Kunming** 46.14 260 ⇑P **P** 14 19 01.6 +1.0
KMI pmax pmax
comp=Z,5.0nm,1.1s
**SEM Semipalatinsk** 46.70 302 *e*P **P** 14 19 01.7 -3.0
**SEM Semipalatinsk** 46.70 302 *e*P **P** 14 19 01.7 -3.0
baz=303
**MK31 Makanchi Array** 47.19 297 *c i*P **P** 14 19 06.1 -2.2
**MK31 Makanchi Array** 47.19 297 P **P** 14 19 06.1 -2.2
MK31 IAmb IAmb 14 19 07.7
comp=Z,14nm,0.8s
**MKAR Makanchi Array** 47.19 297 P **P** 14 19 06.3 -2.1
comp=Z,14nm,0.8s,baz=65,slow=7.9,SNR=137
MKAR LR LR 14 41 00.7
comp=Z,85nm,18.8s,baz=328,slow=39
**MKAR Makanchi Array** 47.19 297 P **P** 14 19 06.2 -2.2
**MAKZ Makanchi** 47.37 297 P **P** 14 19 07.6 -2.1
MAKZ pmax pmax
comp=Z,20nm,1.2s
**MAKZ Makanchi** 47.37 297 P **P** 14 19 07.6 -2.1
MAKZ IAmb IAmb 14 19 09.3
comp=Z,20nm,1.1s
**KURK Kurchatov** 47.48 303 P **P** 14 19 08.5 -2.1
KURK pmax pmax
comp=Z,37nm,0.9s
**KURK Kurchatov** 47.48 303 P **P** 14 19 08.4 -2.1

**EUNU Eureka** 48.09 12 P P 14 19 14.7 -0.2
**RES Resolute Bay** 49.74 19 P P 14 19 28.3 +0.7
RES pmax pmax
comp=Z,8.0nm,0.9s
**RES Resolute Bay** 49.74 19 P P 14 19 28.2 +0.7
RES IAmb IAmb 14 19 28.9
comp=Z,7.8nm,0.9s
**YKA Yellowknife Ar** 49.76 37 P P 14 19 28.8 +1.0
comp=Z,4.7nm,0.7s,baz=297,slow=7.3,SNR=60
**YKA Yellowknife Ar** 49.76 37 P P 14 19 27.8 0.0
**TDK Taldyqorghan** 50.43 297 eP P 14 19 31.7 -1.5
TDK pmax pmax
comp=Z,21nm,0.7s
**TDK Taldyqorghan** 50.43 297 eP P 14 19 31.7 -1.5
comp=Z,20nm,0.7s,baz=298
**BRVK Borovoye** 50.90 309 d iP P 14 19 34.9 -1.7
BRVK pmax pmax
comp=Z,17nm,0.8s
**BRVK Borovoye** 50.90 309 P P 14 19 34.7 -1.8
**NOR Nord** 50.90 358 i P P 14 19 34.7 -1.5
**LSA Lhasa** 50.96 273 P P 14 19 38.4 +0.4
LSA pmax pmax
comp=Z,33nm,0.7s
**KPKS Kokpek** 51.08 295 eP P 14 19 35.8 -2.4
**KPKS Kokpek** 51.08 295 eP P 14 19 35.9 -2.4
baz=296
**BRZS Berezniki** 51.17 305 eP P 14 19 36.2 -2.5
BRZS pmax pmax
comp=Z,5.0nm,0.5s
**BRZS Berezniki** 51.17 305 eP P 14 19 36.2 -2.5
comp=Z,4.9nm,0.5s,baz=306
**SATY Saty** 51.48 295 eP P 14 19 38.4 -2.8
**SATY Saty** 51.48 295 eP P 14 19 38.4 -2.8
baz=295
**SPA0 Spitsbergen Ar** 51.85 350 eP P 14 19 42.5 -0.9
**SPITS Spitsbergen Ar** 51.85 350 P P 14 19 42.0 -1.4
SPITS pmax pmax
comp=Z,110nm,1.5s
**SPB2 Spitsbergen Ar** 51.85 350 P P 14 19 41.9 -1.5
**CHKK Chushkaly** 51.91 296 eP P 14 19 41.6 -2.7
baz=297
**MDOK Medeo** 52.25 296 eP P 14 19 44.4 -2.6
**MDOK Medeo** 52.25 296 eP P 14 19 44.5 -2.6
baz=296
**KUU Kurty** 52.28 297 eP P 14 19 43.4 -3.7
KUU pmax pmax
comp=Z,9.0nm,1.2s
**KUU Kurty** 52.28 297 eP P 14 19 43.5 -3.6
comp=Z,9.1nm,1.2s,baz=297
**TULEG Thule** 53.09 12 P P 14 19 53.3 +0.8
**SHL Shillong** 53.13 269 P P 14 19 53.0 -0.8
SHL pmax pmax
comp=Z,14nm,0.7s
**SHL Shillong** 53.13 269 P P 14 19 53.0 -0.8
SHL IAmb IAmb 14 19 54.4
comp=Z,14nm,0.7s
**TKM2 Tokmak 2** 53.27 296 P P 14 19 53.4 -1.2
SNR=5.5
**CMAR Chiang Mai Arr** 53.30 257 P P 14 19 55.6 +0.8
comp=Z,1.5nm,0.3s,baz=33,slow=7.2,SNR=9.9
CMAR LR LR 14 44 24.7
comp=Z,46nm,18.9s,baz=65,slow=38
**SGDS Sogindy** 53.55 297 eP P 14 19 54.1 -2.4
baz=296
**SVE Sverdlovsk** 53.67 317 eP P 14 19 55.2 -1.9
SVE pmax pmax
comp=Z,16nm,0.8s
**USP Ospenovka** 53.74 297 P P 14 19 56.5 -1.3
SNR=16
**AAK Ala-Archa** 54.10 296 LR LR 14 42 16.3
comp=Z,104nm,19.1s,baz=344,slow=35
**AAK Ala-Archa** 54.10 296 P P 14 19 59.6 -1.0
SNR=8.3
**AAK Ala-Archa** 54.10 296 de P P 14 19 59.2 -1.4
AAK pmax pmax
comp=Z,7.0nm,1.2s
**AAK Ala-Archa** 54.10 296 P P 14 19 58.8 -1.8
AAK IAmb IAmb 14 20 00.0
comp=Z,6.2nm,0.6s
**NEEM North Greenlan** 54.18 7 i P P 14 19 59.5 -1.4
NEEM IAmb IAmb 14 20 01.1
comp=Z,72nm,0.8s
**G03D McMinnville, O** 54.32 60 P P 14 20 04.4 +2.5
**EKS2 Erkin-Say** 54.52 297 P P 14 20 02.4 -1.2
SNR=5.7
**TAPN Taplejung** 54.79 273 eP P 14 20 06.0 0.0
**ARU Arti** 54.85 317 d iP P 14 20 03.8 -1.8
ARU 14 22 11.8
ARU S S 14 27 45.0 +2.2
ARU SS SS 14 31 22.7 -3.2
ARU pmax pmax
comp=Z,21nm,0.7s
**ARU Arti** 54.85 317 P P 14 20 03.9 -1.7
**AML Almayashu** 54.87 296 P P 14 20 05.6 -1.0
SNR=5.6
**KSH Kashi** 54.99 292 P P 14 20 10.0 +2.9
KSH pmax pmax
comp=Z,4.0nm,0.7s
**J01E Myrtle Point** 55.10 62 P P 14 20 09.1 +1.5
baz=306
**I03D Drain, OR** 55.13 61 P P 14 20 09.3 +1.4
baz=306
**ODAN Odare** 55.32 273 eP P 14 20 09.4 -0.4
**G05D Wamic, OR** 55.43 59 P P 14 20 11.3 +1.3
baz=306
**K02D Willamette Mer** 55.52 62 P P 14 20 12.2 +1.4
baz=306
**JIRN Jiri** 55.61 275 eP P 14 20 11.8 -0.2
comp=Z,25nm,0.4s
**I04A Tendick Farm,** 55.63 61 P P 14 20 13.1 +1.6
baz=306
**GUN Gumba** 55.66 275 eP P 14 20 11.7 -0.6
comp=Z,28nm,0.5s
**DAG Danmarks Havn** 55.77 358 i P P 14 20 10.4 -1.6
DAG IAmb IAmb 14 20 11.8
comp=Z,7.6nm,0.7s
**RAMN Ramite** 55.80 274 eP P 14 20 12.7 -0.5
**L02E Cave Junction** 55.88 63 P P 14 20 14.9 +1.6
**L02E Cave Junction** 55.88 63 P P 14 20 14.7 +1.4
baz=306
**I05D Terrebonne, OR** 55.94 60 P P 14 20 15.1 +1.4
baz=306
**J04D Umpqua Nationa** 56.13 61 P P 14 20 16.0 +0.7
baz=306
**KKN Kakani** 56.14 275 eP P 14 20 15.7 +0.1
comp=Z,20nm,0.5s
**PKI Pulchoki** 56.20 275 eP P 14 20 15.6 -0.5
**PKIN Phulchoki** 56.20 275 eP P 14 20 15.5 -0.6
comp=Z,12nm,0.5s
**KKAR Karatay Array** 56.21 299 P P 14 20 13.8 -1.9
**KKAR Karatay Array** 56.21 299 P P 14 20 13.8 -1.9
**DMN Daman** 56.38 275 eP P 14 20 17.2 -0.1
comp=Z,32nm,0.5s
**GKN Gorkha** 56.44 276 eP P 14 20 17.3 -0.3
comp=Z,41nm,0.5s
**PINE Pine Mountain** 56.49 60 P P 14 20 19.1 +1.2
PINE IAmb IAmb 14 20 20.5
comp=Z,6.3nm,0.8s
**L04D Klamath Falls** 56.62 62 P P 14 20 19.8 +1.1
L04D IAmb IAmb 14 20 40.4
comp=Z,8.4nm,0.9s
**L04D Klamath Falls** 56.62 62 P P 14 20 19.4 +0.7
baz=307
**J05D Fort Rock, OR** 56.62 61 P P 14 20 20.0 +1.3
baz=307,SNR=6.1
**YBH Yreka Blue Hor** 56.67 63 P P 14 20 21.0 +2.0
YBH pmax pmax
comp=Z,7.0nm,1.3s
**YBH Yreka Blue Hor** 56.67 63 P P 14 20 21.0 +2.0
**M02C Callahan** 56.78 63 P P 14 20 21.7 +1.8
M02C IAmb IAmb 14 20 23.2
comp=Z,12nm,1.4s
**M02C Callahan** 56.78 63 P P 14 20 21.3 +1.4
baz=307
**DANN Dangsing** 56.80 277 eP P 14 20 20.3 -0.1
**PRGR Permogore** 57.01 327 eP P 14 20 18.2 -2.8
PRGR pmax pmax
comp=Z,27nm,0.8s
**IUG luzhnay** 57.07 298 eP P 14 20 19.9 -2.0
**IUG luzhnay** 57.07 298 eP P 14 20 19.9 -2.0
baz=299
**N02D Trinity Center** 57.12 64 P P 14 20 23.5 +1.2
baz=307
**M04C Macdoel** 57.16 62 P P 14 20 23.2 +0.7
baz=307
**ARCES ARCESS Array B** 57.24 341 P P 14 20 20.7 -1.9
comp=Z,1.0nm,0.5s,baz=34,slow=6.2,SNR=10
**ARCES ARCESS Array B** 57.24 341 P P 14 20 20.9 -1.7
ARCES pmax pmax
comp=Z,18nm,1.3s
**ARCES ARCESS Array B** 57.24 341 P P 14 20 20.9 -1.7
ARCES IAmb IAmb 14 20 43.2
comp=Z,18nm,1.2s
**KOLN Koldanda** 57.28 277 eP P 14 20 23.4 -0.3
**PYUN Piuthan** 57.48 277 eP P 14 20 24.8 -0.3
**KIRV Kirov** 57.50 323 P P 14 20 23.0 -1.4
comp=Z,12nm,0.6s,baz=42,slow=4.8,SNR=5.4
KIRV LR LR 14 48 32.8
comp=Z,154nm,18.1s,baz=317,slow=40
**BMO Blue Mountains** 57.96 57 P P 14 20 29.4 +1.3
BMO pmax pmax
comp=Z,6.0nm,1.2s
**BMO Blue Mountains** 57.96 57 P P 14 20 29.4 +1.3
**MOD Modoc Plateau** 58.00 61 P P 14 20 29.5 +1.0
MOD IAmb IAmb 14 20 50.4
comp=Z,8.7nm,1.2s
**KTK1 Kautokeino** 58.15 341 eP P 14 20 27.7 -1.2
**JETT Jettan, Norway** 58.30 343 eP P 14 20 30.0 0.0
**ABKAR Akbulak array** 58.42 310 P P 14 20 28.7 -2.4
ABKAR IAmb IAmb 14 20 30.2
comp=Z,15nm,0.9s
**PLID Pearl Lake** 58.55 56 P P 14 20 33.5 +1.1
PLID IAmb IAmb 14 20 42.8
comp=Z,8.8nm,0.9s
**WVOR Wild Horse Val** 58.66 60 P P 14 20 34.3 +1.3
WVOR pmax pmax
comp=Z,12nm,1.4s
**WVOR Wild Horse Val** 58.66 60 P P 14 20 34.3 +1.3
WVOR IAmb IAmb 14 20 35.6
comp=Z,12nm,1.4s
**AKTO Aktyubinsk** 58.67 312 LR LR 14 47 27.1
comp=Z,122nm,18.5s,baz=9.7,slow=38
**ORV Oroville** 58.72 64 P P 14 20 34.0 +0.7
ORV pmax pmax
comp=Z,3.0nm,0.9s
**ORV Oroville** 58.72 64 P P 14 20 34.0 +0.7
**GAR Garm** 58.81 295 P P 14 20 32.3 -1.8
**BEKR Beckworth** 59.22 63 P P 14 20 37.8 +0.8
**KLMR Klimovskoe** 59.72 329 eP P 14 20 37.6 -2.3
KLMR e 14 22 50.9
KLMR pmax pmax
comp=Z,14nm,0.7s
**KLMR Klimovskoe** 59.72 329 eP P 14 20 37.7 -2.2
KLMR AMP 14 20 39.1
comp=Z,14nm,0.7s
KLMR ePP PP 14 22 50.9 -0.6
**CHGR Chuyangaron** 59.73 295 P P 14 20 38.4 -2.0
**SUMG Summit** 59.74 4 P P 14 20 40.4 0.0
SUMG pmax pmax
comp=Z,73nm,0.9s
**SUMG Summit** 59.74 4 i P P 14 20 39.4 -1.0
SUMG IAmb IAmb 14 20 42.1
comp=Z,78nm,1.0s
**SUMG Summit** 59.74 4 P P 14 20 40.4 0.0
**MPK Martis Peak** 59.77 64 P P 14 20 41.0 +0.1
MPK IAmb IAmb 14 20 43.2
comp=Z,7.0nm,1.0s
**HRY Holter Researc** 59.84 53 P P 14 20 43.0 +1.9
**EMB Emerald Bay** 59.93 64 P P 14 20 42.9 +0.9
**VCNR Virginia City** 60.00 63 P P 14 20 43.5 +1.0
VCNR IAmb IAmb 14 20 44.8
comp=Z,5.6nm,1.0s
**LRM Limekiln Ridge** 60.06 54 P P 14 20 43.8 +1.0
**FCC Fort Churchill** 60.10 34 P P 14 20 42.7 +0.2
FCC pmax pmax
comp=Z,2.0nm,0.4s
**FCC Fort Churchill** 60.10 34 P P 14 20 42.7 +0.2
**PNTR Pine Nut** 60.16 64 P P 14 20 45.0 +1.4
PNTR IAmb IAmb 14 20 45.9
comp=Z,7.1nm,0.9s
**NIL Nilore** 60.32 289 P P 14 20 43.6 -0.9
NIL pmax pmax
comp=Z,24nm,0.7s
**NIL Nilore** 60.32 289 P P 14 20 43.6 -0.9
**HLID Hailey** 60.39 57 P P 14 20 45.6 +0.6
baz=309
**YERR Yerington** 60.44 63 P P 14 20 46.4 +0.9
YERR IAmb IAmb 14 20 47.4
comp=Z,4.9nm,0.9s
**BCYI Bear Canyon** 60.48 56 P P 14 20 46.0 +0.2
**BOZ Bozeman (W)** 60.65 53 P P 14 20 47.9 +1.2
BOZ pmax pmax
comp=Z,8.0nm,1.1s
**BOZ Bozeman (W)** 60.65 53 P P 14 20 47.9 +1.2
BOZ IAmb IAmb 14 21 05.9
comp=Z,8.2nm,1.1s
**BOZ Bozeman (W)** 60.65 53 P P 14 20 47.6 +0.8
baz=310
**STEI Steigen** 60.69 343 eP P 14 20 45.2 -1.2
**LOF Lofoten** 60.84 344 eP P 14 20 46.1 -1.3
**KVN Kaiserville** 61.09 63 P P 14 20 50.7 +0.9
KVN pmax pmax
comp=Z,7.0nm,1.0s
**KVN Kaiserville** 61.09 63 P P 14 20 50.7 +0.9
KVN IAmb IAmb 14 20 52.2
comp=Z,7.3nm,1.0s
**RYN Ryan** 61.10 63 P P 14 20 51.0 +1.1
RYN IAmb IAmb 14 20 52.1
comp=Z,5.4nm,0.9s
**FAUS Fauske** 61.16 343 eP P 14 20 49.0 -0.6
**LHV Little Huntoon** 61.35 64 P P 14 20 52.8 +1.4
LHV IAmb IAmb 14 20 54.4
comp=Z,12nm,1.1s
**NVAR Mina Array Bea** 61.36 63 P P 14 20 52.9 +1.2
comp=Z,2.8nm,0.8s,baz=287,slow=7.1,SNR=25
**NVAR Mina Array Bea** 61.36 63 P P 14 20 52.1 +0.4
**YHH Holmes Hill** 61.59 54 P P 14 20 54.2 +0.9
**PAGB Antelope Grade** 61.90 67 P P 14 20 56.3 +1.1
PAGB IAmb IAmb 14 20 57.4
comp=Z,9.3nm,1.0s
**SCO Scoresbysund** 62.14 359 P P 14 20 56.0 -0.2
SCO pmax pmax
comp=Z,21nm,1.0s
**SCO Scoresbysund** 62.14 359 P P 14 20 56.0 -0.2
**TPH Tonopah** 62.24 63 P P 14 20 58.4 +0.7
TPH pmax pmax
comp=Z,24nm,1.0s
**TPH Tonopah** 62.24 63 P P 14 20 58.4 +0.7
**SMMC Simmler** 62.32 67 P P 14 20 59.5 +1.5
baz=311
**KONS Konsvik** 62.35 343 eP P 14 20 55.3 -2.3
**TPAW Teton Pass** 62.37 55 P P 14 20 59.3 +0.8
TPAW IAmb IAmb 14 21 20.2
comp=Z,11nm,1.3s
**MOR8 Moi Rana** 62.38 343 eP P 14 20 55.7 -2.1
**KBL Kabul** 62.42 292 P P 14 20 56.4 -2.5
KBL pmax pmax
comp=Z,8.0nm,0.6s
**KBL Kabul** 62.42 292 P P 14 20 56.4 -2.5
KBL IAmb IAmb 14 20 57.4
comp=Z,7.6nm,0.6s
**LOHW Long Hollow** 62.48 55 P P 14 21 00.7 +1.5
LOHW IAmb IAmb 14 21 19.1
comp=Z,11nm,1.4s
**PKM Mcpherson Peak** 62.71 67 P P 14 21 01.9 +1.1
baz=311
**CWC Cottonwood Cre** 62.78 65 P P 14 21 01.8 +0.6
baz=311
**ISA Isabella, Lake** 63.04 66 P P 14 21 03.1 +0.3
baz=311
**R11A Troy Canyon, C** 63.05 62 P P 14 21 03.5 +0.6
**R11A Troy Canyon, C** 63.05 62 P P 14 21 03.3 +0.3
baz=311,SNR=8.8
**SPR3 Spring Creek 3** 63.37 61 P P 14 21 06.3 +1.1
**MPMC Manual Prospec** 63.39 65 P P 14 21 06.1 +0.8
baz=311,SNR=6.9
**DUG Dugway, Tooele** 63.47 59 P P 14 21 06.8 +1.1
DUG pmax pmax
comp=Z,10.0nm,1.3s
**DUG Dugway, Tooele** 63.47 59 P P 14 21 06.8 +1.1
DUG IAmb IAmb 14 21 08.2
comp=Z,10nm,1.3s
**DUG Dugway, Tooele** 63.47 59 P P 14 21 06.6 +1.0
baz=311
**FURC Furnace Creek,** 63.50 64 P P 14 21 06.7 +0.9
baz=311,SNR=5.7
**FIA1 FINESS Array S** 63.53 335 P P 14 21 04.0 -1.6
**FINES FINESS Array B** 63.54 335 P P 14 21 04.2 -1.4
comp=Z,12nm,0.4s,baz=35,slow=7.5,SNR=159
FINES LR LR 14 51 03.4
comp=Z,130nm,18.3s,baz=253,slow=38
**FINES FINESS Array B** 63.54 335 P P 14 21 03.9 -1.7
**TPNV Topopah Spring** 63.56 63 P P 14 21 07.0 +0.6
TPNV pmax pmax
comp=Z,4.0nm,1.1s
**TPNV Topopah Spring** 63.56 63 P P 14 21 07.0 +0.6
**TPNV Topopah Spring** 63.56 63 P P 14 21 07.3 +0.9
baz=311
**BW06 Boulder Array** 63.62 55 P P 14 21 07.4 +0.6
**BW06 Boulder Array** 63.62 55 P P 14 21 07.2 +0.4
baz=312
**PD31 Pinedale Array** 63.62 55 P P 14 21 07.0 +0.3
**PDAR Pinedale Array** 63.62 55 P P 14 21 07.9 +1.2
comp=Z,1.2nm,0.7s,baz=298,slow=1.5,SNR=14
**PDAR Pinedale Array** 63.62 55 P P 14 21 07.2 +0.4
**LRMC Laurel Mtn Rad** 63.65 66 P P 14 21 07.6 +0.7
baz=312
**GWY Greenwater Val** 63.80 64 P P 14 21 08.5 +0.5
**QSM Queen of Sheba** 63.83 65 P P 14 21 08.4 +0.4
**EDW2 Edwards Air Fo** 63.85 66 P P 14 21 09.0 +0.8
baz=312,SNR=9.9
**FRB Frobisher Bay** 63.95 20 P P 14 21 07.4 -0.8
comp=Z,4.1nm,0.7s,baz=353,slow=8.5,SNR=9.4
**SFJD Kangerlussuaq** 64.13 11 P P 14 21 09.1 -0.2
SFJD pmax pmax
comp=Z,20nm,1.1s
**SFJD Kangerlussuaq** 64.13 11 P P 14 21 09.1 -0.2
SFJD IAmb IAmb 14 21 11.0
comp=Z,20nm,1.1s
**GSC Goldstone, Bar** 64.30 65 P P 14 21 12.3 +1.1
baz=312
**NSS Namsos** 64.32 343 eP P 14 21 09.8 -0.9
**CIS Catalina Islan** 64.56 68 P P 14 21 13.4 +0.6
baz=312
**CCUT Cedar City** 64.89 61 P P 14 21 16.4 +1.2
**HEC Hector,Ludlow** 64.91 65 P P 14 21 15.8 +0.7
baz=312,SNR=8.6
**MSU Marysvale** 64.95 60 P P 14 21 16.9 +1.4
**MSU Marysvale** 64.95 60 P P 14 21 16.9 +1.4
**OBN Obninsk** 64.98 326 || eP P 14 21 13.0 -2.1
OBN pmax pmax
comp=Z,12nm,1.0s
**ELS Elsinore Mount** 65.02 67 P P 14 21 16.4 +0.6
**RDMU Red Mountain** 65.07 57 P P 14 21 17.3 +1.0
RDMU IAmb IAmb 14 21 26.9
comp=Z,10nm,1.0s
**MURC Murrieta** 65.19 67 P P 14 21 17.9 +0.9
baz=312
**LCMT Little Creek M** 65.32 62 P P 14 21 19.1 +1.3
**GMRC Granite Mounta** 65.35 65 P P 14 21 18.5 +0.4
baz=312
**SRU San Rafael Swe** 65.51 58 P P 14 21 19.6 +0.5
SRU pmax pmax
comp=Z,7.0nm,0.8s
**SRU San Rafael Swe** 65.51 58 P P 14 21 19.6 +0.5
SRU IAmb IAmb 14 21 39.1
comp=Z,6.7nm,0.8s
**KNB Kanab** 65.57 61 P P 14 21 20.8 +1.3
KNB pmax pmax
comp=Z,7.0nm,1.0s
**KNB Kanab** 65.57 61 P P 14 21 20.8 +1.3
**RGRI Rengat** 65.61 240 P P 14 21 21.3 +1.6
**PFO Pinyon Flats O** 65.64 66 P P 14 21 18.8 -1.1
baz=312
**TPFO Pinon Flats** 65.65 66 P P 14 21 18.7 -1.2
baz=312
**BELC Belle Mtn. Jos** 65.66 66 P P 14 21 20.4 +0.3
baz=312
**RSSD Black Hills** 65.67 51 P P 14 21 20.8 +0.7
RSSD pmax pmax
comp=Z,8.0nm,0.9s
**RSSD Black Hills** 65.67 51 P P 14 21 20.8 +0.7
RSSD IAmb IAmb 14 21 29.6
comp=Z,8.4nm,0.9s
**RSSD Black Hills** 65.67 51 P P 14 21 21.0 +0.9
baz=314
**VSU Vasula** 65.75 333 eP P 14 21 19.4 -0.7
**IRM Iron Mountain** 66.08 65 P P 14 21 23.4 +0.8
baz=313,SNR=6.5
**O20A White River Ci** 66.11 56 P P 14 21 23.4 +0.4
baz=313
**BAR Barrett** 66.13 67 P P 14 21 23.5 +0.5
**MONP2 Monument Peak** 66.14 67 P P 14 21 23.2 0.0
baz=313
**BC3 Big Chuckawall** 66.23 66 P P 14 21 24.3 +0.6
baz=313
**U15A North Rim** 66.28 62 P P 14 21 25.3 +1.1
**MTSE Matsula** 66.43 334 eP P 14 21 23.1 -1.2
**IKP In-Ko-Pah, Jac** 66.50 67 P P 14 21 25.9 +0.5
baz=313
**PDMCI Parker Dam,Lak** 66.60 64 P P 14 21 26.6 +0.7
baz=313
**YUH Yuha Desert** 66.62 67 P P 14 21 26.4 +0.3
**BLYC Blythe** 66.74 65 P P 14 21 27.7 +0.9
BLYC IAmb IAmb 14 21 28.7
comp=Z,16nm,1.2s
**GEYT Alibeck** 66.77 301 P P 14 21 25.9 -1.1
comp=Z,5.2nm,0.7s,baz=44,slow=7.0,SNR=6.8
**GEYT Alibeck** 66.77 301 P P 14 21 25.6 -1.4
**GYA0B ALIBECK ARRAY** 66.77 301 P P 14 21 25.6 -1.4
GYA0B IAmb IAmb 14 21 26.9
comp=Z,6.0nm,0.6s
**N23A Red Feather La** 66.87 54 P P 14 21 28.5 +0.6
baz=314
**PWJI Pagerwojo** 66.90 227 P P 14 21 27.4 -0.5
comp=Z,36nm,1.4s
**MOL Molde** 66.95 344 eP P 14 21 27.8 +0.1
**PV11 David Mesa, Pa** 67.01 58 P P 14 21 29.5 +0.8
PV11 IAmb IAmb 14 21 39.2
comp=Z,14nm,1.1s
**GLA Glamis** 67.03 66 P P 14 21 30.3 +1.6
baz=313
**DOMB Dombas** 67.14 343 eP P 14 21 27.9 -1.0
**UPP Uppsala** 67.15 338 eP P 14 21 28.5 -0.4
**NC303 NORSAR Array S** 67.41 342 P P 14 21 29.8 -0.8
**AKN Aaknes** 67.42 344 eP P 14 21 30.4 -0.3
**NC405 NORSAR Array S** 67.44 341 P P 14 21 29.1 -1.7
**WUAZ Wupatki** 67.44 62 P P 14 21 32.4 +0.9
baz=314
**NC204 NORSAR Array S** 67.49 342 P P 14 21 30.4 -0.8
**NB201 NORSAR Array S** 67.58 341 P P 14 21 31.1 -0.7
**NB2 NORSAR Subarra** 67.61 342 P P 14 21 31.3 -0.6
comp=Z,16nm,0.5s,baz=26,slow=6.5
**NB2 NORSAR Subarra** 67.61 342 P P 14 21 31.3 -0.6
baz=26,slow=6.5
**NOA NORSAR Array B** 67.61 342 P P 14 21 30.9 -1.1
comp=Z,21nm,0.6s,baz=26,slow=6.4,SNR=117
**NBO00 NORSAR Array S** 67.71 342 P P 14 21 30.7 -1.8
**ISCO Idaho Springs** 67.81 55 P P 14 21 35.2 +1.3
baz=314
**NC602 NORSAR Array S** 67.81 341 eP P 14 21 32.5 -0.7
**NC602 NORSAR Array S** 67.81 341 P P 14 21 31.9 -1.2
**NAO01 NORSAR Array S** 67.86 342 P P 14 21 32.4 -1.0
**MVCO Mesa Verde** 67.97 59 P P 14 21 35.6 +0.8
baz=314
**SUSD Miller** 68.05 48 P P 14 21 35.9 +1.0
baz=316
**ISAL Salakas** 68.31 331 eP P 14 21 35.5 -0.8
**IDID Didziasalis** 68.32 331 eP P 14 21 35.8 -0.6
**AFI Afiamalu** 68.40 144 LR LR 14 45 07.9
comp=Z,57nm,21.9s,baz=294,slow=30
**IIGN Ignalina** 68.46 331 eP P 14 21 36.8 -0.5
**SKAR Skarsla** 68.54 343 eP P 14 21 37.6 -0.2
**S22A 4UR Ranch, Cre** 68.56 57 P P 14 21 39.6 +1.0
baz=315
**VIKU Vikbolandet** 68.57 338 eP P 14 21 37.4 -0.5
**MNK Minsk** 68.59 330 i P P 14 21 33.0 -5.1
MNK i *PP pP 14 21 53.8 +2.1
MNK i 14 21 56.1
MNK i 14 24 12.7
MNK i S S 14 30 33.2 -3.4
MNK i *SS sS 14 31 09.3 +10
MNK i SS SS 14 35 02.0 +1.6
MNK pmax pmax
comp=N,21nm,0.8s
MNK pmax pmax
comp=E,1.0nm,0.8s
MNK pmax pmax
comp=Z,42nm,0.8s
**MNK Minsk** 68.59 330 i P P 14 21 33.1 -5.1
comp=E,1.0nm,0.8s
MNK i P P 14 21 33.1 -5.1
comp=N,21nm,0.8s
MNK i P P 14 21 33.1 -5.1
comp=Z,42nm,0.8s,baz=36
MNK i pP pP 14 21 53.9 +2.2

MNK *i* sP PcP 14 22 16.7 +14
MNK *i* PP **PP** **14 24 12.8 +3.4**
MNK *i* PPP PPP 14 26 14.6
MNK *i* S **S** **14 30 33.3 -3.3**
MNK *i* sS sS 14 31 09.3 +10
MNK *i* SS **SS** **14 35 02.0 +1.7**
MNK *i* SSS SSS 14 38 19.7
**NACGM Naroch 68.64 330** *i* P **P** **14 21 38.0 -0.4**
**Q24A Divide 68.65 55** P **P** **14 21 40.2 +1.0**
baz=315
**W18A Petrified Fore 68.69 61** P **P** **14 21 40.3 +1.0**
baz=314
**OSL Oslo 68.71 341** *e*P **P** **14 21 38.9 +0.1**
**SUE Sulen 68.86 345** *e*P **P** **14 21 43.4 +3.8**
**PABE Paberze 69.05 332** *e*P **P** **14 21 40.0 -0.9**
**KONO Kongsberg 69.21 342** *de*P **P** **14 21 41.6 -0.3**
KONO pmax pmax
comp=Z,32nm,0.9s
**KONO Kongsberg 69.21 342** *e*P **P** **14 21 41.9 0.0**
**KONO Kongsberg 69.21 342** P **P** **14 21 41.3 -0.6**
**ASK Askoy 69.32 344** *e*P **P** **14 21 42.7 +0.2**
**STRU Stroemstad 69.42 341** *i*P **P** **14 21 42.6 -0.5**
**WB0 Warramunga Arr 69.43 200** P P 14 21 42.6 -1.1
WB0 IAmb IAmb 14 21 43.8
comp=Z,11nm,1.3s
**ODD1 Odda 69.58 343** *e*P **P** **14 21 44.3 +0.1**
**WR0 Warramunga Arr 69.58 200** P P 14 21 42.7 -1.8
**WRAB Tennant Creek 69.60 200**⇓ *e*P P 14 21 37.9 -6.8
WRAB pmax pmax
comp=Z,3.0nm,1.2s
**WB2 Warramunga Arr 69.61 200** P P 14 21 43.0 -1.7
**WRA Warramunga Arr 69.61 200** P P 14 21 43.9 -0.8
comp=Z,3.0nm,0.8s,baz=19,slow=6.9,SNR=12
**WRA Warramunga Arr 69.61 200** P P 14 21 43.5 -1.3
**TUC Tucson 70.01 64** P **P** **14 21 48.5 +1.1**
baz=315
**BLS5 Blasjo 70.06 343** *e*P **P** **14 21 47.4 +0.2**
**BORU Borass 70.32 339** *i*P **P** **14 21 47.4 -1.3**
**SUW Suwalki 70.55 332** *e*P **P** **14 21 48.8 -1.4**
**SUW Suwalki 70.55 332** *e*P **P** **14 21 48.8 -1.4**
**KIV Kislovodsk 70.70 315** *e*P **P** **14 21 49.9 -1.5**
KIV pmax pmax
comp=Z,10.0nm,1.1s
**ANMO Albuquerque 70.73 59** P **P** **14 21 52.7 +0.8**
baz=316
**KBZ Khabaz 70.76 314** P **P** **14 21 51.0 -0.6**
comp=Z,4.6nm,0.7s,baz=79,slow=4.3,SNR=12
**KBZ Khabaz 70.76 314**⇑ *e*P **P** **14 21 51.2 -0.4**
KBZ pmax pmax
comp=Z,7.0nm,0.9s
**FABU Falkenberg 70.90 339** *i*P **P** **14 21 51.0 -1.2**
**SNART Snartemo 70.92 342** *i*P **P** **14 21 52.2 -0.1**
**SNART Snartemo 70.92 342** *e*P **P** **14 21 52.6 +0.3**
**DEL Delary 71.09 338** *i*P **P** **14 21 52.0 -1.4**
**DEL Delary 71.09 338** *e*P **P** **14 21 52.3 -1.1**
**AKASG Malin Array Be 71.20 327** P **P** **14 21 52.8 -1.5**
comp=Z,13nm,0.5s,baz=33,slow=6.2,SNR=80
AKASG LR LR 14 57 06.6
comp=Z,155nm,18.7s,baz=335,slow=39
**AKASG Malin Array Be 71.20 327** P **P** **14 21 52.6 -1.6**
**AKBB Malin Array Si 71.20 327** P **P** **14 21 52.5 -1.7**
AKBB pmax pmax
comp=Z,23nm,0.7s
**AKBB Malin Array Si 71.20 327** P **P** **14 21 52.5 -1.7**
**NEY Neytrino 71.21 314**⇑ *e*P P 14 21 51.5 -3.1
**319A Douglas 71.57 64** P **P** **14 21 58.0 +1.1**
319A IAmb IAmb 14 21 59.0
comp=Z,18nm,0.9s
**121A Cookes Peak, D 71.66 62** P **P** **14 21 58.7 +1.2**
baz=316
**CHVG Ch'k'valeri 71.91 314**⇑ P **P** **14 21 59.2 +0.5**
**BSD Bornholm Skovb 72.02 337** *i*P **P** **14 21 57.6 -1.4**
**BSD Bornholm Skovb 72.02 337** *e*P **P** **14 21 58.8 -0.2**
**SCHQ Schefferville 72.19 24** P **P** **14 22 01.4 +1.3**
comp=Z,4.3nm,0.9s,baz=324,slow=8.4,SNR=2.1
**SCHQ Schefferville 72.19 24** P **P** **14 22 00.8 +0.7**
**GNI Garni 72.51 311** LR LR 14 57 09.6
comp=Z,77nm,19.6s,baz=322,slow=38
**GKP Gorka Klasztor 73.00 335** *e*P **P** **14 22 04.3 -0.6**
**GKP Gorka Klasztor 73.00 335** *e*P P 14 21 58.6 -6.3
**BEL Belsk 73.17 332** *e*P **P** **14 22 06.0 0.0**
**AS31 Alice Springs 73.30 199** P **P** **14 22 06.7 -0.3**
**ASAR Alice Springs 73.30 199** P **P** **14 22 07.0 0.0**
comp=Z,5.2nm,1.0s,baz=12,slow=5.4,SNR=38
**ASAR Alice Springs 73.30 199** P **P** **14 22 07.0 0.0**
**ASAR Alice Springs 73.30 199** P **P** **14 22 06.6 -0.4**
**AMTX Amarillo 73.51 56** P **P** **14 22 09.5 +1.1**
baz=317
**SORM Soroca 73.63 326**⇓ P **P** **14 22 08.2 -0.5**
**MNTX Cornudas Mount 73.67 61** P **P** **14 22 09.9 +0.6**
**MNTX Cornudas Mount 73.67 61** P **P** **14 22 10.1 +0.8**
baz=317
**BSEG Bad Segeberg 74.26 339** *e*P **P** **14 22 12.7 +0.4**
comp=Z,22nm,1.0s,baz=25,slow=5.8
**PURM Purcari 74.35 324**⇓ P **P** **14 22 12.2 -0.7**
**KWP Kalwaria Pacla 74.42 330** *e*P **P** **14 22 13.1 -0.2**
**KWP Kalwaria Pacla 74.42 330** P P **P** **14 22 12.5 -0.9**
**KWP Kalwaria Pacla 74.42 330** P P **P** **14 22 12.4 -0.9**
**MILM Milestii Mici 74.45 325**⇑ *i*P **P** **14 22 12.0 -1.5**
comp=Z,60nm,0.6s
**MILM Milestii Mici 74.45 325**⇑ P **P** **14 22 12.7 -0.8**
**MILM Milestii Mici 74.45 325** *c*P **P** **14 22 12.0 -1.5**
MILM pmax pmax
comp=Z,60nm,0.6s
**RUE Ruedersdorf 74.68 336** *e*P **P** **14 22 14.9 +0.3**
comp=Z,48nm,0.9s,baz=25,slow=5.8
**OJC Ojcow 74.88 332** *e*P **P** **14 22 15.5 -0.5**
**OJC Ojcow 74.88 332** P **P** **14 22 15.2 -0.8**
OJC pmax pmax
comp=Z,35nm,0.6s
**OJC Ojcow 74.88 332** P **P** **14 22 15.2 -0.8**
**PRAR RASCA 75.07 326**⇑ P **P** **14 22 16.6 -0.6**
**VASR Vaslui 75.08 325**⇓ P **P** **14 22 16.9 -0.2**
**STHS Stebnicka Huta 75.10 330** *e*P **P** **14 22 17.0 -0.3**
**STHS Stebnicka Huta 75.10 330** *e*P **P** **14 22 17.0 -0.3**
**KOLS Kolonicke sedl 75.17 330** *e*P **P** **14 22 17.3 -0.4**
**KOLS Kolonicke sedl 75.17 330** *e*P **P** **14 22 17.3 -0.4**
**BUR08 Bucovina Ar. S 75.22 327** P **P** **14 22 17.1 -1.0**
**WMOK Wichita Mounta 75.23 55** P **P** **14 22 18.5 +0.2**
baz=318
**BURAR Bucovina Array 75.24 327**⇓ P **P** **14 22 17.8 -0.4**
**BURAR Bucovina Array 75.24 327** P P **P** **14 22 17.2 -1.0**
**NIE Niedzica 75.41 331** *e*P **P** **14 22 19.9 +0.8**
**UZH Uzhgorod 75.42 329** *e*P **P** **14 22 17.6 -1.5**
UZH *i* 14 22 31.8
**KSP Ksiaz 75.42 334** *e*P **P** **14 22 18.9 -0.2**
**CRVS Cervenica-Dubn 75.47 330** *e*P **P** **14 22 19.0 -0.4**
**CRVS Cervenica-Dubn 75.47 330** *e*P **P** **14 22 19.0 -0.4**
**FLTG Flechtingen 75.49 338** *e*P **P** **14 22 19.0 -0.3**
comp=Z,38nm,1.3s,baz=25,slow=5.8
**RETH Rethem/Aller, 75.59 339** *e*P **P** **14 22 20.2 +0.2**
comp=Z,56nm,1.4s,baz=25,slow=5.8
**VLDR Vladesti 75.62 324**⇓ P **P** **14 22 20.2 0.0**
**TESR Tescani 75.62 326**⇑ P **P** **14 22 19.8 -0.5**
**NRDL Niedersach Rie 75.63 338** *e*P **P** **14 22 20.1 +0.1**
comp=Z,44nm,1.3s,baz=25,slow=5.8
**ESK Eskdalemuir 75.65 347** P **P** **14 22 20.0 -0.3**
ESK pmax pmax
comp=Z,18nm,1.2s
**ESK Eskdalemuir 75.65 347** P **P** **14 22 20.0 -0.3**
ESK IAmb IAmb 14 22 35.9
comp=Z,18nm,1.1s
**VARL Varlezi 75.67 325**⇓ P **P** **14 22 20.8 +0.2**
**OSTC Ostas 75.70 334** *e*P **P** **14 22 20.2 -0.5**
**CHVC Chvalec 75.72 334** *e*P **P** **14 22 19.5 -1.3**
**TRPA Tarpa 75.76 329**⇑ P **P** **14 22 21.2 +0.2**
**UPC Upice 75.80 334** *e*P **P** **14 22 21.1 -0.1**
**UPC Upice 75.80 334** *e*P **P** **14 22 21.1 -0.1**
**ASSE Asse, Remlinge 75.82 338** *e*P **P** **14 22 21.6 +0.4**
comp=Z,8.6nm,0.9s,baz=25,slow=5.8
**DPC Dobruska-Polom 75.85 334** *e*P **P** **14 22 21.3 -0.3**
**DPC Dobruska-Polom 75.85 334** *e*P **P** **14 22 21.3 -0.3**
**TLCR 75.87 324**⇑ P **P** **14 22 21.1 -0.5**
**LANS Liptovska Anna 75.92 331** *e*P **P** **14 22 22.7 +0.7**
**LANS Liptovska Anna 75.92 331** *e*P **P** **14 22 22.7 +0.7**
**CLL Collm 75.94 336** *i*P **P** **14 22 21.3 -0.7**
CLL pmax pmax
comp=Z,53nm,1.1s
**CLL Collm 75.94 336** *i*P **P** **14 22 21.3 -0.7**
comp=Z,53nm,1.1s
**CLL Collm 75.94 336** *e*P **P** **14 22 21.7 -0.3**
comp=Z,53nm,1.1s,baz=25,slow=5.8
**CLL Collm 75.94 336** P **P** **14 22 20.3 -1.7**

**KRLC Kraliky 75.95 333** *e*P **P** **14 22 21.6 -0.6**
**KRLC Kraliky 75.95 333** *e*P **P** **14 22 21.6 -0.6**
**SLCR Slobozia Conac 75.95 324**⇑ P **P** **14 22 22.6 +0.4**
**MORC Moravsky Berou 75.98 333** P **P** **14 22 21.8 -0.5**
MORC pmax pmax
comp=Z,30nm,0.8s
**MORC Moravsky Berou 75.98 333** *e*P **P** **14 22 22.2 -0.1**
**MORC Moravsky Berou 75.98 333** P **P** **14 22 21.8 -0.5**
**IZVR Izvoarele 75.99 324**⇑ P **P** **14 22 22.7 +0.3**
**ARCR ARCALIA 76.00 327**⇓ P **P** **14 22 22.2 -0.3**
**BRG Berggiesshubel 76.07 335**⇓ *i*P **P** **14 22 22.5 -0.3**
BRG Amp 14 22 23.8
comp=Z,21nm,1.1s
**BRG Berggiesshubel 76.07 335**⇓ *i*P **P** **14 22 22.4 -0.3**
BRG pmax pmax
comp=Z,21nm,1.1s
**BRG Berggiesshubel 76.07 335** *e*P **P** **14 22 22.5 -0.3**
comp=Z,21nm,1.1s,baz=25,slow=5.8
**ODBI Odobesti 76.09 325**⇑ P **P** **14 22 23.3 +0.4**
**VRI Vrincioaia 76.13 325**⇑ P **P** **14 22 23.2 0.0**
**CFR Carcaliu 76.15 324**⇑ P **P** **14 22 22.6 -0.6**
**CLZ Clausthal 76.16 338** *e*P **P** **14 22 23.7 +0.5**
comp=Z,46nm,1.2s,baz=25,slow=5.8
**KECS Kecovo 76.16 330** *e*P **P** **14 22 23.1 -0.2**
**KECS Kecovo 76.16 330** *e*P **P** **14 22 23.1 -0.2**
**PLOR Plostina 76.17 325**⇑ P **P** **14 22 23.3 -0.2**
**FBE Freiberg 76.19 336** *e*P **P** **14 22 23.6 +0.2**
comp=Z,42nm,1.1s,baz=25,slow=5.8
**PVCC Panska Ves 76.20 335** *e*P **P** **14 22 23.4 -0.1**
**PVCC Panska Ves 76.20 335** *e*P **P** **14 22 23.4 -0.1**
**BZK Bozkurt 76.28 318**⇓ P **P** **14 22 24.2 +0.2**
**OZUR 76.30 326**⇑ P **P** **14 22 24.5 +0.3**
**TPGR Topolog 76.30 324**⇑ P **P** **14 22 24.0 -0.2**
**IZAB Izabela 76.34 331** *e*P **P** **14 22 24.6 +0.2**
**COVR Voineasa-Covas 76.35 325**⇓ P **P** **14 22 24.6 +0.2**
**NEUB Neuenburg 76.37 337** *e*P **P** **14 22 24.3 -0.1**
comp=Z,41nm,1.2s,baz=25,slow=5.8
**BISRR Bisoca 76.40 325**⇑ P **P** **14 22 25.6 +0.8**
**TX31 Lajitas Ar. Si 76.40 61** P **P** **14 22 25.6 +0.5**
**TX32 Lajitas Array 76.41 61** P **P** **14 22 25.5 +0.3**
TX32 IAmb IAmb 14 22 26.9
comp=Z,13nm,1.1s
**TXAR Lajitas Array 76.41 61** P **P** **14 22 25.8 +0.7**
comp=Z,9.9nm,0.9s,baz=297,slow=4.3,SNR=57
**TXAR Lajitas Array 76.41 61** P **P** **14 22 25.5 +0.3**
**GTTG Gottingen 76.53 338** *e*P **P** **14 22 25.8 +0.5**
comp=Z,42nm,1.5s,baz=25,slow=5.8
**DOPR Dopca 76.56 326**⇑ P **P** **14 22 25.9 +0.2**
**CBBR Cluj-Babes-Bol 76.56 328**⇑ P **P** **14 22 26.0 +0.4**
**CJR Cluj-Napoca 76.59 328**⇓ P **P** **14 22 26.2 +0.3**
**TIRR Tirgusor 76.63 323**⇓ P **P** **14 22 25.7 -0.3**
**TIRR Tirgusor 76.63 323** P **P** **14 22 25.0 -1.1**
TIRR pmax pmax
comp=Z,60nm,0.9s
**TIRR Tirgusor 76.63 323** P **P** **14 22 25.0 -1.1**
**HARR Harsova 76.64 324**⇓ P **P** **14 22 25.9 -0.1**
**MARD Mardin 76.67 311** P **P** **14 22 26.3 -0.3**
MARD IAmb IAmb 14 22 27.7
comp=Z,23nm,0.9s
**VRAC Vranov 76.69 333**⇓ P **P** **14 22 26.5 +0.2**
**VRAC Vranov 76.69 333** LR LR 15 02 26.2
comp=Z,140nm,19.1s,baz=1.5,slow=41
**VRAC Vranov 76.69 333** *e*P **P** **14 22 26.3 0.0**
**PRU Pruhonice 76.69 335** *e*P **P** **14 22 25.5 -0.8**
**PRU Pruhonice 76.69 335** *e*P **P** **14 22 25.5 -0.8**
**VYHS Vyhne 76.69 331** *e*P **P** **14 22 26.4 0.0**
**VYHS Vyhne 76.69 331** *e*P **P** **14 22 26.4 0.0**
**TLBR Topalu 76.71 324**⇓ P **P** **14 22 26.4 0.0**
**MLR Muntele Rosu 76.75 325**⇑ P **P** **14 22 26.9 0.0**
**MLR Muntele Rosu 76.75 325** P **P** **14 22 26.5 -0.4**
MLR pmax pmax
comp=Z,40nm,0.7s
**MLR Muntele Rosu 76.75 325** P **P** **14 22 26.4 -0.4**
**JAVC Velka Javorina 76.75 332** *e*P **P** **14 22 27.4 +0.7**
**KOLL Kolacno 76.76 332** *e*P **P** **14 22 27.3 +0.6**
**ISR Istrita 76.83 325**⇓ P **P** **14 22 27.3 0.0**
**DRGR 76.84 328**⇓ P **P** **14 22 26.9 -0.4**
**PSZ Piszkesteto 76.85 330**⇑ P **P** **14 22 27.1 -0.2**
**PSZ Piszkesteto 76.85 330** P **P** **14 22 26.7 -0.6**
PSZ pmax pmax
comp=Z,16nm,0.8s
**PSZ Piszkesteto 76.85 330** P **P** **14 22 26.7 -0.6**
PSZ IAmb IAmb 14 22 28.2
comp=Z,16nm,0.8s
**TANN Tannenbergstha 76.90 336** *e*P **P** **14 22 27.5 0.0**
comp=Z,20nm,1.5s,baz=25,slow=5.8
**WERD Werda 76.91 336** *e*P **P** **14 22 27.7 +0.1**
comp=Z,22nm,1.2s,baz=25,slow=5.8
**PLN Plauen 76.92 336** *e*P **P** **14 22 27.9 +0.3**
comp=Z,24nm,1.1s,baz=25,slow=5.8
**MOX Moxa 76.92 337** *e*P **P** **14 22 27.6 0.0**
comp=Z,44nm,1.4s,baz=25,slow=5.8
**KRUC Moravsky 76.97 333** *e*P **P** **14 22 27.6 -0.3**
**GUNZ Gunzen 76.98 336** *e*P **P** **14 22 28.1 +0.2**
comp=Z,24nm,1.2s,baz=25,slow=5.8
**WERN Wernitzgruen 77.04 336** *e*P **P** **14 22 28.6 +0.3**
comp=Z,18nm,1.0s,baz=25,slow=5.8
**NKC Novy Kostel 77.07 336** *e*P **P** **14 22 28.5 +0.1**
**NKC Novy Kostel 77.07 336** *e*P **P** **14 22 28.5 +0.1**
**SECR 77.08 325**⇓ P **P** **14 22 28.5 0.0**
**SMOL Smolenice 77.13 332** *e*P **P** **14 22 29.2 +0.4**
**SMOL Smolenice 77.13 332** *e*P **P** **14 22 29.2 +0.4**
**VOIR 77.13 326**⇓ P **P** **14 22 29.1 +0.2**
**ILGA Ilgaz 77.14 318** P **P** **14 22 29.3 +0.1**
**ICOR Ion Corvin 77.16 324**⇓ P **P** **14 22 29.6 +0.6**
**UBBA Unterbreizbach 77.19 338** *e*P **P** **14 22 29.1 +0.2**
comp=Z,54nm,1.7s,baz=25,slow=5.8
**KASTN Kahler Asten 77.23 339** *e*P **P** **14 22 29.6 +0.2**
comp=Z,25nm,1.1s,baz=25,slow=5.8
**BUG Bochum--Univer 77.29 340** *e*P **P** **14 22 29.6 0.0**
comp=Z,37nm,1.2s,baz=25,slow=5.8
**MODS Modra-Piesok 77.30 332** *e*P **P** **14 22 32.6 +2.8**
**MODS Modra-Piesok 77.30 332** *e*P **P** **14 22 32.6 +2.8**
**ARR Arges 77.35 326**⇓ P **P** **14 22 30.6 +0.4**
**MANZ Manzenberg 77.38 336** *e*P **P** **14 22 30.2 0.0**
comp=Z,5.6nm,1.2s,baz=25,slow=5.8
**SRO Srobarova 77.46 331** *e*P **P** **14 22 31.2 +0.6**
**SRO Srobarova 77.46 331** *e*P **P** **14 22 31.2 +0.6**
**ZST Bratislava 77.51 332** *e*P **P** **14 22 31.5 +0.6**
ZST pmax pmax
comp=Z,46nm,0.8s
**ZST Bratislava 77.51 332** *e*P **P** **14 22 31.5 +0.6**
**ROTZ Rotzenmuhle 77.56 336** *e*P **P** **14 22 31.6 +0.5**
comp=Z,7.9nm,1.3s,baz=25,slow=5.8
**SIRR Siria 77.67 328**⇑ P **P** **14 22 31.4 -0.5**
**KHC Kasperske Hory 77.74 335** *e*P **P** **14 22 32.1 -0.2**
**KHC Kasperske Hory 77.74 335** *e*P **P** **14 22 32.1 -0.2**
**KHC Kasperske Hory 77.74 335** P **P** **14 22 31.8 -0.4**
KHC IAmb IAmb 14 22 33.3
comp=Z,21nm,1.0s
**CKRC Cesky Krumlov 77.81 334** *e*P **P** **14 22 32.2 -0.4**
**JCT Junction City 77.82 58** P **P** **14 22 33.5 +0.5**
baz=319
**GRF Grafenberg Arr 77.89 336** *e*P **P** **14 22 33.7 +0.7**
comp=Z,32nm,1.1s,baz=25,slow=5.8
**BNN Bunyan 77.90 315** P **P** **14 22 33.1 -0.4**
**WET Wettzell 77.93 335** *e*P **P** **14 22 33.7 +0.5**
comp=Z,26nm,1.1s,baz=25,slow=5.8
**GEC2 GERESS Array S 77.96 335** P **P** **14 22 32.6 -0.9**
GEC2 IAmb IAmb 14 22 34.0
comp=Z,23nm,1.4s
**GERES GERESS Array B 77.96 335** P **P** **14 22 32.7 -0.9**
comp=Z,4.7nm,0.9s,baz=36,slow=5.3,SNR=17
**GZR Gura Zlata 78.02 327**⇓ P **P** **14 22 33.3 -0.5**
**TNS Taunus Mts 78.13 338** *e*P **P** **14 22 34.7 +0.3**
comp=Z,31nm,1.3s,baz=25,slow=5.8
**CONA Conrad Observa 78.14 333** *i*P **P** **14 22 35.2 +0.7**
comp=Z,15nm,0.8s,SNR=6.2
**COPA Copaceanca 78.17 325**⇑ P **P** **14 22 34.3 -0.3**
**BR131 Keskin Array S 78.23 317** P **P** **14 22 34.6 -0.7**
BR131 pmax pmax
comp=Z,24nm,1.0s
**BR131 Keskin Array S 78.23 317** P **P** **14 22 34.6 -0.7**
BR131 IAmb IAmb 14 22 35.9
comp=Z,24nm,1.0s
**BRTR Keskin Array B 78.23 317** P **P** **14 22 34.9 -0.3**
comp=Z,9.2nm,0.8s,baz=69,slow=4.1,SNR=23
**BRTR Keskin Array B 78.23 317** P **P** **14 22 34.7 -0.7**
**BZS Buzias 78.24 328**⇓ P **P** **14 22 34.6 -0.5**
**BTNL Ternell 78.35 340** *d*P **P** **14 22 35.7 +0.2**
comp=Z,19nm,0.8s
**MEM Membach 78.36 340** *d*P **P** **14 22 33.5 -2.1**
comp=Z,21nm,0.9s
**BSTI Sart Tilman 78.48 340** *d*P **P** **14 22 37.3 +1.1**

**HERR Herculane 78.59 327**⇑ P **P** **14 22 36.0 -0.9**
**MDUB Mudurnu 78.73 319** P **P** **14 22 37.4 -0.5**
**MORH Mrgy, Hungar 78.75 330**⇓ P **P** **14 22 37.3 -0.5**
**BGES Gesves 78.78 340** *d*P **P** **14 22 37.3 -0.6**
**ARSA Arzberg 78.84 333** *e*P **P** **14 22 39.3 +0.9**
comp=Z,13nm,1.1s
**BMRD Maredsous 78.93 341** *d*P **P** **14 22 39.2 +0.5**
**MDVR Moldovita 78.93 328**⇓ P **P** **14 22 38.3 -0.6**
**DOU Dourbes 79.16 341** *d*P **P** **14 22 39.3 -0.7**
**FRGS Fruska Gora 79.28 329**⇑ P **P** **14 22 40.0 -0.8**
**SOKA Soboth 79.51 333** *i*P **P** **14 22 42.8 +0.8**
comp=Z,26nm,1.5s,SNR=6.6
**GROS Grobnik 79.55 332** *i*P **P** **14 22 42.5 +0.1**
**KBA Koelnbreinsper 79.66 334** *i*P **P** **14 22 44.4 +1.4**
comp=Z,26nm,0.8s,SNR=9.2
**OBKA Obir 79.81 333** *e*P **P** **14 22 44.3 +0.6**
comp=Z,9.9nm,0.9s
**MYKA Terra Mystica 79.97 334** *e*P **P** **14 22 44.9 +0.4**
comp=Z,3.1nm,0.7s
**WTTA Wattenberg 79.99 335** *i*P **P** **14 22 44.9 +0.1**
comp=Z,36nm,1.3s,SNR=5.5
**RETA Reutte 80.03 336** P **P** **14 22 46.0 +1.1**
comp=Z,12nm,0.9s
**MOTA Moosalm 80.06 336** *e*P **P** **14 22 46.2 +1.1**
comp=Z,31nm,1.2s
**LEGS Legarje 80.07 332** *i*P **P** **14 22 45.0 0.0**
**DIVS Divibare 80.14 328** P **P** **14 22 44.7 -0.8**
DIVS IAmb IAmb 14 22 46.2
comp=Z,11nm,0.9s
**ABTA Abfaltersbach 80.20 334** *e*P **P** **14 22 46.3 +0.5**
comp=Z,5.6nm,0.7s
**VTS Vitosha 80.22 326** P **P** **14 22 45.6 -0.5**
VTS pmax pmax
comp=Z,24nm,0.8s
**VTS Vitosha 80.22 326** P **P** **14 22 45.6 -0.5**
**ECH Echery 80.31 338** P **P** **14 22 46.2 -0.1**
ECH pmax pmax
comp=Z,28nm,1.3s
**ECH Echery 80.31 338** P **P** **14 22 46.2 -0.1**
ECH IAmb IAmb 14 22 48.5
comp=Z,28nm,1.3s
**DAVA Damuels 80.45 336** *e*P **P** **14 22 47.8 +0.6**
comp=Z,13nm,0.8s
**FETA Feichten 80.46 336** *e*P **P** **14 22 48.7 +1.4**
comp=Z,16nm,1.3s
**RAO Raoul Island 80.56 156** LR LR 14 53 15.2
comp=Z,136nm,19.4s,baz=292,slow=32
**TUE Stuetta 81.35 336** P **P** **14 22 51.3 -0.8**
**RICI Ricice 81.66 330** P **P** **14 22 52.2 -1.3**
**DUGI Dugi Otok 81.90 332** P **P** **14 22 53.5 -1.3**
**ZIRJ Zirje 82.01 331** P **P** **14 22 53.4 -1.9**
**HVAR Hvar 82.17 330** P **P** **14 22 54.3 -1.9**
**ELL Elmali 82.36 318** P **P** **14 22 57.1 -0.4**
ELL pmax pmax
comp=Z,34nm,0.9s
**ELL Elmali 82.36 318** P **P** **14 22 57.1 -0.4**
**LSTV Lastovo 82.38 330** P **P** **14 22 55.5 -1.8**
**NRCA Norcia 83.56 332** P **P** **14 23 03.3 -0.2**
NRCA IAmb IAmb 14 23 06.4
comp=Z,18nm,0.8s
**RAYN Ar Rayn 84.64 299** P **P** **14 23 07.9 -1.4**
RAYN pmax pmax
comp=Z,8.0nm,1.2s
**RAYN Ar Rayn 84.64 299** P **P** **14 23 07.9 -1.4**
RAYN IAmb IAmb 14 23 10.4
comp=Z,8.2nm,1.1s
**ESDC Sonseca Array 90.91 343** P **P** **14 23 39.9 +0.8**
comp=Z,0.5nm,0.6s,baz=319,slow=15,SNR=1.4
**KEST Kesra 91.23 332** P **P** **14 23 41.4 +0.6**
comp=Z,6.3nm,0.7s,baz=285,slow=2.1,SNR=6.8
**KEST Kesra 91.23 332** IAmb IAmb 14 23 43.0
comp=Z,6.9nm,0.7s
**MDT Midelt 97.67 342** LR LR 15 16 35.8
comp=Z,157nm,18.2s,baz=348,slow=40
**SIV San Ignacio 137.10 55** PKP **PKPdf** **14 29 57.3 -1.2**
comp=Z,2.4nm,1.0s,baz=267,slow=5.7,SNR=5.0
**QSPA South Pole Qui 137.39 180** PKP **PKPdf** **14 29 57.1 -0.4**
comp=Z,1.2nm,0.9s,baz=289,slow=8.8,SNR=5.2
**H03N2 Juan Fernandez 138.01 90** T T 17 03 31.8
baz=309,slow=77,SNR=51
**H03N1 Juan Fernandez 138.03 90** T T 17 03 42.2
baz=309,slow=77,SNR=54
**H03N3 Juan Fernandez 138.03 90** T T 17 03 39.3
baz=309,slow=77,SNR=53
**PLCA Paso Flores 147.54 94** PKPbc **PKPdf** **14 30 18.9 +2.6**
comp=Z,6.0nm,0.9s,baz=237,slow=4.1,SNR=8.5
**PLCA Paso Flores 147.54 94** PKP2 **PKPdf** **14 30 19.0 +2.6**

**RSNC 09 14:13:47.0±1.1, 11°.11N×73°.63W, h32km±8km, ML3.0, Mw4.1, 1C-3D, Near north coast of Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMRC** | **Santa Marta, M** | **0.58** | **275**⇑ | *e*P | Pb | 14 13 58.2 | -0.7 |
| SMRC | | | | *e*S | Sb | 14 14 05.9 | -1.2 |
| SMRC | | | | *i* | | 14 14 08.5 | |
| | comp=Z,360nm,0.2s | | | | | | |
| **CVALL** | **Valledupar, Ce** | **0.70** | **148**⇓ | *e*P | Pn | 14 14 00.1 | -0.6 |
| CVALL | | | | *e*S | Sb | 14 14 08.6 | -1.7 |
| CVALL | | | | *i* | | 14 14 09.9 | |
| | comp=Z,556nm,0.1s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **0.74** | **97**⇓ | *i*P | Pn | 14 14 00.6 | -0.7 |
| CRJC | | | | *e*S | Sb | 14 14 10.2 | -1.3 |
| CRJC | | | | *i* | | 14 14 11.4 | |
| | comp=Z,713nm,0.2s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **1.41** | **165**⇓ | *i*P | Pn | 14 14 10.2 | -0.3 |
| LL6C | | | | *e*S | Sn | 14 14 25.2 | -2.8 |
| LL6C | | | | *i* | | 14 14 28.9 | |
| | comp=Z,85nm,0.2s | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **1.56** | **177** | *e*P | Pn | 14 14 11.6 | -0.9 |
| LL1C | | | | *e*S | Sn | 14 14 29.9 | -1.7 |
| LL1C | | | | *i* | | 14 14 34.9 | |
| | comp=Z,295nm,0.2s | | | | | | |
| **SJCC** | **San Jacinto, C** | **1.94** | **232** | *e*P | Pn | 14 14 18.7 | +0.9 |
| SJCC | | | | *e*S | Sn | 14 14 43.4 | +2.2 |
| SJCC | | | | *i* | | 14 14 50.8 | |
| | comp=Z,47nm,0.3s | | | | | | |
| **SMLC** | **San Martn de** | **2.33** | **191** | *e*P | Pn | 14 14 23.0 | -0.2 |
| SMLC | | | | *e*S | Sn | 14 14 49.7 | -1.1 |
| SMLC | | | | *i* | | 14 15 01.0 | |
| | comp=Z,166nm,0.1s | | | | | | |
| **OCAC** | **Ocana** | **2.87** | **174** | *e*P | Pn | 14 14 30.9 | +0.3 |
| OCAC | | | | *e*S | Sn | 14 15 02.9 | -1.3 |
| **MOTC** | **Monteria, Cord** | **3.06** | **221** | *e*P | Pn | 14 14 35.9 | +2.7 |
| MOTC | | | | *e*S | Sn | 14 15 08.8 | 0.0 |
| **SDV** | **Santo Domingo** | **3.69** | **127** | *e*P | Pn | 14 14 42.2 | +0.2 |
| SDV | | | | *e*S | Sn | 14 15 22.8 | -1.7 |
| SDV | | | | *i* | | 14 15 33.7 | |
| | comp=Z,33nm,0.5s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **3.79** | **199** | *e*P | Pn | 14 14 46.0 | +2.7 |
| ZARC | | | | *e*S | Sn | 14 15 28.4 | +1.6 |
| ZARC | | | | *i* | | 14 15 42.3 | |
| | comp=Z,40nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **3.83** | **210** | *e*P | Pn | 14 14 47.1 | +3.3 |
| UREC | | | | *e*S | Sn | 14 15 28.4 | +0.7 |
| UREC | | | | *i* | | 14 15 43.3 | |
| | comp=Z,18nm,0.3s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **3.86** | **166** | *e*P | Pn | 14 14 44.5 | 0.0 |
| PAMC | | | | *e*S | Sn | 14 15 27.4 | -1.7 |
| PAMC | | | | *i* | | 14 15 39.2 | |
| | comp=Z,31nm,0.2s | | | | | | |
| **SOCV** | **Socops** | **3.92** | **135** | *e*P | Pn | 14 14 45.2 | +0.2 |
| SOCV | | | | *e*S | Sn | 14 15 27.9 | -2.1 |
| **PTBC** | **PUERTO BERRIO,** | **4.61** | **190** | *e*P | Pn | 14 14 55.3 | +0.7 |
| PTBC | | | | *e*S | Sn | 14 15 47.5 | +0.4 |
| PTBC | | | | *i* | | 14 15 57.2 | |
| | comp=Z,20nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **5.44** | **185** | *e*P | Pn | 14 15 05.7 | -0.3 |
| SPBC | | | | *e*S | Sn | 14 16 08.5 | +0.9 |
| SPBC | | | | *i* | | 14 16 26.9 | |
| | comp=Z,21nm,0.1s | | | | | | |

*NEIC **09** 14:20:46.8±1.6, 37°.13S±0°.05×74°.01W±0°.06, h15km±5km, mb4.5/14, Mwr4.4/24, ML4.5(GUC), Error ellipse: s-maj=9.3km s-min=5.2km az=137.0*
*GUC **09** 14:20:46.7±0.7, 37°.13S×74°.16W, h34km±9km, ML4.6*
*NEIC **09** 14:20:47.5, 37°.15S×73°.90W, h17km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.50; $M_{\theta\theta}$-0.60; $M_{\phi\phi}$-1.91; $M_{r\theta}$-0.99; $M_{\theta\phi}$-0.71; $M_{\phi r}$-3.77; Fault plane solution: $M_{\phi\phi}$4.56000×$10^{15}$ NP1:$\phi_s$196.14000°, $\delta$74.46000°, $\lambda$86.66000°. NP2:$\phi_s$28.44000°, $\delta$15.89000°,*

λ101.84000°. Principal axes: T 4.7135, Plg60.0000°, Azm101.0000°; N -0.3198, Plg3.0000°, Azm197.0000°; P -4.3938, Plg29.0000°, Azm289.0000°;
IDC **09** 14:20:49.8±1.7, 37.00S×72.82W, h0km, mb4.0/4, mb1 4.0/7, mb1mx3.9/39, mbtmp3.9/7, ML3.6/3, MS3.7/6, Ms1 3.7/6, ms1mx3.3/49 Error ellipse: s-maj=46.7km s-min=17.7km az=82.0

VAO **09** 14:21:01.9±3.6, 35.90S×72.69W, h10km, mb4.5
**ISC 09 14:20:46.4**±0.6, **37.17S**±0.04×**73.99W**±0.07, **h10**km, **n87,** σ1**9**7/80, **mb4.3/8, MS3.9**/3, **2C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI05** | **Punta Hualpn** | **0.77** | **57** | ⇑*i*P | **Pb** | **14 21 02.0** | **+0.2** |
| BI05 | | | | *i* S | **Sb** | **14 21 13.4** | **+1.1** |
| BI05 | | | | IAML | | 14 21 17.4 | |
| | comp=N,20μm,0.2s | | | | | | |
| **BI05** | **Punta Hualpn** | **0.77** | **57** | Pg | **Pb** | **14 21 01.9** | **+0.1** |
| BI05 | | | | Sg | **Sg** | **14 21 10.8** | **-0.4** |
| **LC02** | **Puerto Saavedr** | **1.69** | **164** | *e*P | **Pn** | **14 21 15.6** | **-0.4** |
| LC02 | | | | IAML | | 14 21 53.9 | |
| | comp=E,13μm,0.6s | | | | | | |
| **LC02** | **Puerto Saavedr** | **1.69** | **164** | | **Pn** | **14 21 15.4** | **-0.6** |
| **LC01** | **Cunco** | **2.40** | **137** | ⇑*i*P | **Pn** | **14 21 25.8** | **+0.1** |
| LC01 | | | | IAML | | 14 22 10.7 | |
| | comp=E,940nm,0.6s | | | | | | |
| **LC01** | **Cunco** | **2.40** | **137** | Pn | **Pn** | **14 21 25.7** | **-0.1** |
| **ML02** | **Panimavida** | **2.50** | **57** | *e*P | **Pn** | **14 21 27.6** | **+0.5** |
| ML02 | | | | IAML | | 14 22 16.8 | |
| | comp=N,5μm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **2.50** | **57** | Pn | **Pn** | **14 21 25.5** | **-1.7** |
| **GO05** | **Huala** | **2.73** | **38** | *e*P | **Pn** | **14 21 29.2** | **-1.0** |
| GO05 | | | | IAML | | 14 22 23.9 | |
| | comp=E,796nm,0.5s | | | | | | |
| **GO05** | **Huala** | **2.73** | **38** | | **Pn** | **14 21 28.9** | **-1.3** |
| **LR04** | **Corral** | **2.74** | **171** | *e*P | **Pn** | **14 21 29.9** | **-0.6** |
| LR04 | | | | *i* S | **Sn** | **14 21 58.7** | **-4.9** |
| LR04 | | | | IAML | | 14 22 02.0 | |
| | comp=N,5μm,0.4s | | | | | | |
| **LR03** | **Panguipulli** | **2.78** | **153** | *e*P | **Pn** | **14 21 31.6** | **+0.7** |
| LR03 | | | | IAML | | 14 22 27.6 | |
| | comp=N,3μm,0.2s | | | | | | |
| **LR03** | **Panguipulli** | **2.78** | **153** | | **Pn** | **14 21 31.2** | **+0.3** |
| **BO02** | **Sierra Bellavi** | **3.52** | **49** | *e*P | **Pn** | **14 21 41.1** | **-0.1** |
| **BO02** | **Sierra Bellavi** | **3.52** | **49** | Pn | **Pn** | **14 21 40.3** | **-0.9** |
| **BO01** | **Tunca** | **3.64** | **41** | *e*P | **Pn** | **14 21 42.8** | **0.0** |
| **BO01** | **Tunca** | **3.64** | **41** | | **Pn** | **14 21 42.6** | **-0.1** |
| **LL04** | **Puerto Octay** | **3.93** | **162** | Pn | **Pn** | **14 21 46.9** | **+0.1** |
| **MT01** | **Popeta** | **3.98** | **35** | | **Pn** | **14 21 46.7** | **-0.8** |
| **VA05** | **Santo Domingo** | **4.01** | **30** | | **Pn** | **14 21 46.8** | **-1.0** |
| **MT09** | **Talagante** | **4.18** | **37** | | **Pn** | **14 21 49.9** | **-0.4** |
| **LL05** | **Los Muermos** | **4.25** | **175** | *e*P | **Pn** | **14 21 51.2** | **+0.1** |
| **LL05** | **Los Muermos** | **4.25** | **175** | | **Pn** | **14 21 50.9** | **-0.3** |
| **PLCA** | **Paso Flores** | **4.46** | **144** | Pn | **Pn** | **14 21 55.1** | **+1.0** |
| | comp=N,0.5nm,0.3s,baz=320,slow=9.9,SNR=24 | | | | | | |
| PLCA | | | | Sn | **Sn** | **14 22 44.4** | **-1.6** |
| | comp=N,3.3nm,0.3s,baz=323,slow=16,SNR=4.5 | | | | | | |
| PLCA | | | | Lg | Lg | 14 23 01.1 | |
| | comp=N,4.3nm,0.3s,baz=260,slow=7.9,SNR=3.7 | | | | | | |
| **PLCA** | **Paso Flores** | **4.46** | **144** | Pn | **Pn** | **14 21 55.0** | **+1.0** |
| **LMEL** | **Las Melosas** | **4.53** | **44** | | **Pn** | **14 21 55.5** | **+0.3** |
| **MT02** | **Curacav** | **4.55** | **32** | | **Pn** | **14 21 53.9** | **-1.3** |
| **VA01** | **Torpederas** | **4.56** | **26** | | **Pn** | **14 21 54.1** | **-1.3** |
| **MT05** | **Renca** | **4.61** | **36** | | **Pn** | **14 21 55.4** | **-0.9** |
| **ROC1** | **El Roble** | **4.84** | **31** | | **Pn** | **14 21 58.2** | **-1.4** |
| **PEL** | **Peldehue** | **4.84** | **35** | | **Pn** | **14 21 59.2** | **-0.2** |
| **LL06** | **Loncomilla** | **5.05** | **177** | Pn | **Pn** | **14 22 02.1** | **+0.1** |
| **H03S1** | **Juan Fernandez** baz=123 | **5.20** | **308** | T | T | 14 27 30.6 | |
| **H03S3** | **Juan Fernandez** baz=123 | **5.22** | **308** | T | T | 14 27 29.1 | |
| **H03S2** | **Juan Fernandez** baz=123 | **5.22** | **308** | T | T | 14 27 28.0 | |
| **VA03** | **San Esteban** | **5.22** | **34** | | **Pn** | **14 22 04.4** | **-0.2** |
| **H03N3** | **Juan Fernandez** baz=127,slow=76 | **5.48** | **311** | T | T | 14 27 53.5 | |
| **H03N1** | **Juan Fernandez** baz=127,slow=76 | **5.48** | **311** | T | T | 14 27 56.6 | |
| **H03N2** | **Juan Fernandez** baz=127,slow=76 | **5.49** | **311** | T | T | 14 27 58.0 | |
| **LL07** | **Hotel Espejo d** | **5.67** | **176** | Pn | **Pn** | **14 22 11.7** | **+1.1** |
| **GO07** | **Milladeo Hill,** | **5.94** | **178** | | **Pn** | **14 22 14.2** | **-0.2** |
| **LL02** | **Futaleuf** | **6.23** | **165** | | **Pn** | **14 22 19.2** | **+0.8** |
| **CO02** | **Combarbal** | **6.45** | **23** | | **Pn** | **14 22 20.4** | **-1.1** |
| **CO06** | **Fray Jorge** | **6.77** | **17** | | **Pn** | **14 22 23.7** | **-2.0** |
| **CO03** | **El Pedregal** | **6.88** | **24** | | **Pn** | **14 22 26.8** | **-0.6** |
| **ZON** | **Zonda** | **7.12** | **40** | Pn | **Pn** | **14 22 30.1** | **-0.6** |
| **GO04** | **Tololo Observa** | **7.47** | **22** | | **Pn** | **14 22 35.5** | **-0.1** |
| **LVC** | **Limon Verde** | **15.16** | **18** | Pn | **Pn** | **14 24 19.8** | **-1.1** |
| | comp=N,0.3nm,0.3s,baz=84,slow=20,SNR=1.2 | | | | | | |
| LVC | | | | LR | LR | 14 31 10.7 | |
| | comp=N,224nm,18.1s,baz=198,slow=42 | | | | | | |
| **PATCX** | **Punta Patache** | **16.63** | **13** | P | **P** | **14 24 41.6** | **-0.6** |
| PATCX | | | | IAmb | IAmb | 14 24 42.8 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **17.79** | **57** | Pn | **Pn** | **14 24 49.3** | **-4.8** |
| | comp=Z,0.1nm,0.3s,baz=175,slow=12,SNR=1.8 | | | | | | |
| CPUP | | | | LR | LR | 14 32 05.5 | |
| | comp=Z,135nm,20.9s,baz=234,slow=40 | | | | | | |
| **USHA** | **Ushuaia** | **18.07** | **170** | LR | LR | 14 33 02.0 | |
| | comp=Z,406nm,18.4s,baz=309,slow=40 | | | | | | |
| **EFI** | **East Falkland** | **18.37** | **147** | P | **Pn** | **14 25 02.2** | **+1.2** |
| EFI | | | | IAmb | IAmb | 14 25 25.6 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **ITAB** | **Concordia** | **20.94** | **68** | *e*P | **P** | **14 25 28.6** | **-0.7** |
| **ITAB** | **Concordia** | **20.94** | **68** | P | **P** | **14 25 28.9** | **-0.4** |
| ITAB | | | | IAmb | IAmb | 14 25 37.4 | |
| | comp=Z,37nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **21.44** | **16** | P | **P** | **14 25 37.5** | **+2.0** |
| | comp=Z,3.0nm,0.7s,baz=172,slow=7.8,SNR=8.8 | | | | | | |
| **LPAZ** | **La Paz** | **21.44** | **16** | P | **P** | **14 25 37.4** | **+2.0** |
| **PTGB** | **Pitanga** | **22.47** | **63** | *e*P | **P** | **14 25 45.9** | **0.0** |
| **SIV** | **San Ignacio** | **24.00** | **32** | P | **P** | **14 26 00.0** | **-1.3** |
| | comp=Z,2.8nm,0.8s,baz=218,slow=9.9,SNR=9.5 | | | | | | |
| SIV | | | | LR | LR | 14 37 16.8 | |
| | comp=Z,367nm,18.2s,baz=274,slow=42 | | | | | | |
| **NNA** | **Nana** | **25.20** | **353** | LR | LR | 14 32 42.0 | |
| | comp=Z,62nm,20.1s,baz=152,slow=28 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **25.34** | **35** | *e*P | **P** | **14 26 14.1** | **+0.7** |
| **PTLB** | **Pontes e Lacer** | **25.34** | **35** | P | **P** | **14 26 14.0** | **+0.6** |
| PTLB | | | | IAmb | IAmb | 14 26 23.1 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **SALV** | **Santo Antonio** | **26.68** | **42** | *e*P | **P** | **14 26 26.4** | **+0.7** |
| **ITRB** | **Iturama** | **26.99** | **56** | *e*P | **P** | **14 26 30.4** | **+1.9** |
| **VILB** | **Vilhena** | **27.09** | **31** | *e*P | **P** | **14 26 31.6** | **+2.2** |
| **RCLB** | **Rio Claro- Sao** | **27.15** | **65** | *e*P | **P** | **14 26 32.0** | **+2.1** |
| **VAO** | **Valinhos** | **27.20** | **66** | *e*P | **P** | **14 26 32.6** | **+2.2** |
| **ETMB** | **Extrema** | **28.12** | **16** | *e*P | **P** | **14 26 40.2** | **+1.6** |
| **ETMB** | **Extrema** | **28.12** | **16** | P | **P** | **14 26 38.6** | **0.0** |
| ETMB | | | | IAmb | IAmb | 14 26 47.4 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **PMSA** | **Palmer Station** | **28.27** | **171** | P | **P** | **14 26 38.1** | **-1.3** |
| **ORCD** | **Orcadas** | **29.96** | **151** | P | **P** | **14 26 53.8** | **-0.6** |
| **BDFB** | **Brasilia** | **31.46** | **54** | P | **P** | **14 27 06.5** | **-1.8** |
| | comp=Z,1.1nm,0.4s,baz=203,slow=7.0,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **31.46** | **54** | IAmb | IAmb | 14 27 16.3 | |
| | comp=Z,8.7nm,1.3s | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **35.87** | **54** | *e*P | **P** | **14 27 46.5** | **0.0** |
| **GUA01** | **Guaratinga, BA** | **36.46** | **65** | *e*P | **P** | **14 27 55.7** | **+4.1** |
| **SMTB** | **Santa Maria do** | **36.95** | **47** | *e*P | **P** | **14 27 56.2** | **+0.4** |
| **CMC01** | **Camacan, BA** | **37.47** | **64** | *e*P | **P** | **14 28 03.2** | **+3.0** |
| **SNAA** | **Sanae** | **49.28** | **157** | P | **P** | **14 29 35.4** | **+0.4** |
| SNAA | | | | IAmb | IAmb | 14 29 44.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **55.72** | **8** | P | **P** | **14 30 22.3** | **-0.7** |
| **MAW** | **Mawson** | **70.59** | **164** | LR | LR | 15 03 50.0 | |
| | comp=Z,60nm,19.0s,baz=232,slow=37 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **79.29** | **329** | P | **P** | **14 32 50.7** | **-1.4** |
| X16A | | | | IAmb | IAmb | 14 33 11.2 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.77** | **71** | P | **P** | **14 33 30.4** | **-0.7** |
| | comp=Z,1.0nm,0.9s,baz=299,slow=2.2,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.77** | **71** | IAmb | IAmb | 14 33 31.9 | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **117.23** | **210** | PKP | **PKiKP** | **14 39 39.5** | **+7.2** |
| | comp=Z,0.3nm,0.8s,baz=154,slow=1.7,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.74** | **34** | PKPab | **PKPab** | **14 41 15.5** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=325,slow=2.3,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.74** | **34** | | **PKPab** | **14 41 14.8** | **-0.1** |
| **MKAR** | **Makanchi Array** | **159.98** | **54** | PKPab | **PKPab** | **14 41 25.3** | **+0.3** |
| | comp=Z,0.5nm,0.9s,baz=292,slow=4.8,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **169.34** | **359** | PKPab | **PKPab** | **14 42 10.2** | **+4.1** |
| | comp=Z,0.2nm,0.5s,baz=336,slow=3.2,SNR=2.8 | | | | | | |

*ECX **09** 14:29:32.6±0.3, 26.97N×111.51W, h10km, MD3.8, ML4.0*
*MEX **09** 14:29:33.7±0.6, 28.01N×112.15W, h10km±11km, MD3.9*
*IDC **09** 14:29:35.2±1.8, 28.11N×111.85W, h0km, mb1 3.7/7, mb1mx3.3/45, mbtmp3.4/7, ML3.4/7, Error ellipse: s-maj=22.3km s-min=11.0km az=26.0*

**ISC 09 14:29:28.4**±1.7, **27.95N**±0.04×**112.22W**±0.05, **h1**km±12km, **n20,** σ2**9**07/30, **3C-6D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRIG** | **Santa Rosalia** | **0.63** | **182** | *e*P | **Pn** | **14 29 45.5** | **+1.0** |
| SRIG | | | | *e*S | **Sn** | **14 29 54.7** | **-0.5** |
| **SRIG** | **Santa Rosalia** | **0.63** | **182** | ⇓*i*P | **Pn** | **14 29 45.5** | **+1.0** |
| SRIG | | | | *e*S | **Sn** | **14 29 55.7** | **+0.5** |
| SRIG | | | | IAML | | 14 29 56.9 | |
| | comp=E,4μm,0.4s | | | | | | |
| SRIG | | | | ⇓*e* | | 14 29 56.9 | |
| **GUYB** | **Guaymas** | **1.19** | **92** | *e*P | **Pg** | **14 29 51.4** | **+0.2** |
| GUYB | | | | *e*S | **Sg** | **14 30 05.8** | **-0.8** |
| **GUYB** | **Guaymas** | **1.19** | **92** | ⇓*e*P | **Pg** | **14 29 51.4** | **+0.2** |
| GUYB | | | | *e*S | **Sg** | **14 30 06.0** | **-0.7** |
| GUYB | | | | IAML | | 14 30 08.2 | |
| | comp=N,3μm,0.8s | | | | | | |
| GUYB | | | | IAML | | 14 30 08.2 | |
| | comp=E,3μm,0.3s | | | | | | |
| GUYB | | | | ⇑*e* | | 14 30 08.2 | |
| **HSIG** | | **1.54** | **46** | *e*P | **Pn** | **14 29 56.8** | **-0.3** |
| HSIG | | | | *e*S | **Sn** | **14 30 14.8** | **-2.9** |
| **HSIG** | | **1.54** | **46** | ⇓*e*P | **Pn** | **14 29 56.7** | **-0.3** |
| HSIG | | | | *e*S | **Sn** | **14 30 17.2** | **-0.5** |
| HSIG | | | | IAML | | 14 30 18.0 | |
| | comp=E,781nm,0.6s | | | | | | |
| HSIG | | | | ⇑*e* | | 14 30 18.0 | |
| HSIG | | | | IAML | | 14 30 29.4 | |
| | comp=N,809nm,0.7s | | | | | | |
| **BAHB** | **Baha de los** | **1.54** | **310** | *e*P | **Pn** | **14 29 57.7** | **+0.6** |
| BAHB | | | | *i* S | **Sn** | **14 30 16.3** | **-1.5** |
| **BAHB** | **Baha de los** | **1.54** | **310** | ⇑*e*P | **Pn** | **14 29 57.5** | **+0.5** |
| BAHB | | | | IAML | | 14 30 23.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| BAHB | | | | ⇓*e* | | 14 30 23.2 | |
| BAHB | | | | IAML | | 14 30 25.2 | |
| | comp=E,943nm,0.6s | | | | | | |
| **LAPR** | **La Primavera** | **2.54** | **358** | *e*P | **Pn** | **14 30 12.4** | **+1.6** |
| LAPR | | | | *e*S | **Sn** | **14 30 41.7** | **-0.6** |
| **LAPR** | **La Primavera** | **2.54** | **358** | ⇓*e*P | **Pn** | **14 30 12.5** | **+1.7** |
| **NZIG** | **Nacozari, Sono** | **3.35** | **43** | *e*P | **Pn** | **14 30 20.8** | **-1.4** |
| NZIG | | | | *i* S | **Sn** | **14 31 02.1** | **-0.5** |
| **214A** | **Organ Pipe Nat** | **4.02** | **353** | *e*P | **Pn** | **14 30 32.9** | **+1.7** |
| 214A | | | | *i* S | **Sn** | **14 31 16.8** | **-2.3** |
| **LPIG** | **La Paz** | **4.20** | **155** | Pn | **Pb** | **14 30 41.8** | **-1.4** |
| | comp=E,5.9nm,0.3s,baz=6.9,slow=1.4,SNR=1.4 | | | | | | |
| **121A** | **Cookes Peak, D** | **5.96** | **39** | *e* | **Pn** | **14 31 01.5** | **+3.5** |
| 121A | | | | *e* | | 14 32 29.6 | |
| **PFO** | **Pinyon Flats O** | **6.72** | **328** | Pn | Pn | 14 31 15.4 | +7.1 |
| | comp=E,0.1nm,0.3s,baz=181,slow=6.2,SNR=1.7 | | | | | | |
| PFO | | | | Lg | Lg | 14 33 11.3 | |
| | comp=E,0.1nm,0.3s,baz=238,slow=10,SNR=9.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **7.64** | **78** | Pn | **Pn** | **14 31 23.9** | **+3.0** |
| | comp=E,0.7nm,0.3s,baz=251,slow=14,SNR=22 | | | | | | |
| TXAR | | | | Sn | **Sn** | **14 32 45.8** | **-2.4** |
| | baz=264,slow=11,SNR=1.3 | | | | | | |
| TXAR | | | | Lg | Lg | 14 33 22.6 | |
| | comp=E,0.3nm,0.3s,baz=251,slow=16,SNR=3.4 | | | | | | |
| **ANMO** | **Albuquerque** | **8.53** | **34** | Pn | **Pn** | **14 31 37.7** | **+4.4** |
| | comp=E,0.2nm,0.3s,baz=231,slow=12,SNR=2.6 | | | | | | |
| ANMO | | | | Sn | **Sn** | **14 33 09.4** | **-0.9** |
| | comp=E,0.1nm,0.3s,baz=170,slow=7.9,SNR=2.0 | | | | | | |
| ANMO | | | | Lg | Lg | 14 33 56.6 | |
| | comp=E,0.6nm,0.3s,baz=295,slow=19,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.62** | **336** | Pn | Pn | 14 32 23.8 | +8.2 |
| | comp=E,0.1nm,0.3s,baz=155,slow=16,SNR=3.4 | | | | | | |
| **ELK** | **Elko** | **13.00** | **350** | Pn | **P** | **14 32 41.6** | **-3.7** |
| | comp=E,0.1nm,0.3s,baz=192,slow=11,SNR=7.3 | | | | | | |
| ELK | | | | Lg | Lg | 14 36 24.2 | |
| | comp=E,0.1nm,0.3s,baz=189,slow=24,SNR=1.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **14.94** | **8** | Pn | **P** | **14 33 11.0** | **+4.2** |
| | comp=E,0.1nm,0.3s,baz=172,slow=7.1,SNR=6.0 | | | | | | |
| PDAR | | | | Lg | Lg | 14 37 20.1 | |
| | comp=E,0.1nm,0.3s,baz=181,slow=30,SNR=1.2 | | | | | | |

*IDC **09** 14:39:07.8±1.4, 16.42N×91.82W, h0km, mb3.3/3, mb1 3.6/5, mb1mx3.4/39, mbtmp3.2/5, ML3.5/2, Error ellipse: s-maj=45.4km s-min=18.5km az=43.0*
*MEX **09** 14:39:07.6±0.9, 14.65N×92.53W, h75km±16km, MD3.8*

**ISC 09 14:39:06.8**±1.2, **14.62N**±0.09×**92.67W**±0.05, **h59**km±10km, **n18,** σ2**9**10/29, **mb3.4**/3, **Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THIG** | | **0.48** | **54** | *e*P | **Pn** | **14 39 18.3** | **-0.2** |
| THIG | | | | *e*S | **Sn** | **14 39 27.3** | **+0.3** |
| **PATR** | **El Naranjo** | **0.65** | **40** | *e*P | **Pn** | **14 39 20.1** | **-0.5** |
| PATR | | | | *e*S | **Sn** | **14 39 29.8** | **-0.8** |
| **CHUJ** | **Union Juarez** | **0.71** | **49** | *e*P | **Pn** | **14 39 21.0** | **-0.4** |
| CHUJ | | | | *e*S | **Sn** | **14 39 32.1** | **0.0** |
| **PAVE** | **Pavencul** | **0.74** | **40** | *e*P | **Pn** | **14 39 21.7** | **0.0** |
| PAVE | | | | *e*S | **Sn** | **14 39 32.1** | **-0.6** |
| **PCIG** | | **1.20** | **334** | *e*P | **Pn** | **14 39 28.4** | **+0.9** |
| PCIG | | | | *e*S | **Sn** | **14 39 43.9** | **+1.1** |
| **CCIG** | **Comitan** | **1.73** | **17** | *e*P | **Pn** | **14 39 37.3** | **+2.5** |
| CCIG | | | | *i* S | **Sn** | **14 39 59.3** | **+3.4** |
| **APG** | **El Apazote** | **2.16** | **80** | Pn | **Pn** | **14 39 41.4** | **+0.7** |
| | 13nm,0.3s,baz=276,slow=9.0,SNR=79 | | | | | | |
| APG | | | | Sn | **Sn** | **14 40 09.8** | **+3.2** |
| | 17nm,0.3s,baz=240,slow=22,SNR=23 | | | | | | |
| **TGIG** | | **2.19** | **348** | *e*P | **Pn** | **14 39 41.1** | **+0.3** |
| TGIG | | | | *e*S | **Sn** | **14 40 06.8** | **-0.1** |
| **UXUV** | **UXUV** | **3.04** | **332** | *e*P | **Pn** | **14 39 54.9** | **+2.5** |
| UXUV | | | | *i* S | **Sn** | **14 40 30.9** | **+3.4** |
| **CMIG** | **Matias Romero** | **3.25** | **319** | Pn | **Pn** | **14 39 57.1** | **+1.8** |
| | 4.7nm,0.3s,baz=146,slow=12,SNR=21 | | | | | | |
| CMIG | | | | Sn | **Sn** | **14 40 35.8** | **+2.9** |
| | 9.1nm,0.3s,baz=100,slow=15,SNR=5.7 | | | | | | |
| **CMIG** | **Matias Romero** | **3.25** | **319** | *e*P | **Pn** | **14 39 57.2** | **+1.8** |
| CMIG | | | | *e*S | **Sn** | **14 40 36.4** | **+3.5** |
| **HUIG** | **Huatulco** | **3.51** | **289** | *e*P | **Pn** | **14 39 59.7** | **+0.8** |
| **PEIG** | **Puerto Escondi** | **4.54** | **288** | *e*P | **Pn** | **14 40 14.1** | **+1.1** |
| **JTS** | **Las Juntas de** | **6.68** | **119** | Pn | **Pn** | **14 41 14.0** | **+4.3** |
| | 1.4nm,0.3s,baz=33,slow=23,SNR=2.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **17.82** | **327** | Pn | **Pn** | **14 43 08.1** | **-2.8** |
| | 0.1nm,0.3s,baz=146,slow=6.6,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **32.78** | **321** | P | **P** | **14 45 34.3** | **-0.4** |
| | 0.1nm,0.4s,baz=124,slow=9.0,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.28** | **347** | P | **P** | **14 47 54.7** | **-2.3** |
| | 0.2nm,0.6s,baz=152,slow=7.4,SNR=5.5 | | | | | | |
| **ILAR** | **Eielson Array** | **62.02** | **337** | P | **P** | **14 49 20.4** | **-0.3** |
| | 0.3nm,0.7s,baz=111,slow=4.9,SNR=3.1 | | | | | | |

*PRU **09** 14:39:39.7±0.0, 50.11N×119.05E, h0km*
*IPEC **09** 14:39:40.0±0.1, 50.11N×119.08E, h1km±1km, ML1.5/3, Error ellipse: s-maj=1.3km s-min=0.7km az=175.0*

**ISC 09 14:39:39.6**±0.9, **50.10N**±0.05×**119.07E**±0.03, **h0**km, **n17,** σ0**5**57/27, **Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.48** | **76** | *e*Pg | **Pg** | **14 39 48.8** | **0.0** |
| OJC | | | | *e*Sg | **Sg** | **14 39 55.3** | **+0.3** |
| **OKC** | **Ostrava-Krasne** | **0.65** | **246** | *e*PG | **Pg** | **14 39 52.3** | **+0.2** |
| OKC | | | | *e*SG | **Sg** | **14 40 01.3** | **+0.8** |
| | comp=Z,18nm,0.7s | | | | | | |
| **LANS** | **Liptovska Anna** | **0.99** | **165** | *e*PG | **Pg** | **14 39 58.3** | **-0.1** |
| LANS | | | | *e*SG | **Sg** | **14 40 11.7** | **+0.5** |
| LANS | | | | *e*LG | Lg | 14 40 14.0 | |
| **MORC** | **Moravsky Berou** baz=71 | **1.04** | **252** | *e*Pg | **Pb** | **14 40 00.3** | **-0.2** |
| MORC | | | | *e*Sg | **Sg** | **14 40 13.8** | **+0.8** |
| | 8.4nm,0.2s,baz=71 | | | | | | |
| **NIE** | **Niedzica** | **1.05** | **130** | *e*Pg | **Pg** | **14 40 00.0** | **+0.4** |
| NIE | | | | *e*Sg | **Sb** | **14 40 15.4** | **+0.5** |
| **LOSC** | **Losov** baz=66 | **1.20** | **247** | *e*Pg | **Pg** | **14 40 02.8** | **+0.2** |
| **LIPC** | **Lipinka** baz=78 | **1.33** | **260** | *e*Pg | **Pg** | **14 40 05.1** | **0.0** |
| **LUKC** | **Luka** baz=71 | **1.43** | **253** | *e*Pg | **Pn** | **14 40 06.4** | **-0.4** |
| **VYHS** | **Vyhne** | **1.62** | **186** | *e*PN | **Pn** | **14 40 08.7** | **-0.6** |
| VYHS | | | | *e*SN | **Sn** | **14 40 30.2** | **-0.7** |
| VYHS | | | | *e*LG | Lg | 14 40 31.3 | |
| **DPC** | **Dobruska-Polom** | **1.78** | **279** | *e*PG | **Pn** | **14 40 11.4** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **14 40 36.6** | **-0.2** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.78** | **279** | *e* | **Pn** | **14 40 11.4** | **-0.3** |
| **VRAC** | **Vranov** baz=63 | **1.79** | **245** | *e*Pn | **Pn** | **14 40 12.3** | **+0.5** |
| VRAC | | | | *e*Sg | **Sn** | **14 40 35.6** | **+0.3** |
| | 3.0nm,0.2s,baz=63 | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **1.97** | **127** | *e*PN | **Pb** | **14 40 15.9** | **-0.3** |
| **CHVC** | **Chvalec** | **1.99** | **285** | *e*PG | **Pn** | **14 40 14.9** | **+0.4** |
| CHVC | | | | *e*SG | **Sg** | **14 40 43.6** | **0.0** |
| **UPC** | **Upice** | **2.00** | **283** | *e*SG | **Sg** | **14 40 44.3** | **+0.4** |
| **KRUC** | **Moravsky** baz=58 | **2.03** | **240** | *e*Pn | **Pn** | **14 40 15.9** | **+0.9** |
| KRUC | | | | *e*Sg | **Sb** | **14 40 42.9** | **-0.2** |
| | 2.5nm,0.3s,baz=58 | | | | | | |
| **KHC** | **Kasperske Hory** | **3.70** | **257** | *e*SG | **Sg** | **14 41 36.8** | **-1.6** |

*NEIC **09** 14:48:39.9±1.0, 18.1S±0.1×174.81W±0.04, h200km±8km, mb4.3/18, Error ellipse: s-maj=15.0km s-min=4.8km az=191.0*
*IDC **09** 14:48:40.0±1.9, 18.16S×174.85W, h198km±19km, mb3.7/7, mb1 3.8/10, mb1mx3.5/29, mbtmp4.3/10, Error ellipse: s-maj=23.2km s-min=17.3km az=146.0*

**ISC 09 14:48:39.2**±0.7, **18.02S**±0.09×**174.79W**±0.09, **h200**km, **n38,** σ1**9**25/33, **mb4.1**/15, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.73** | **104** | Pn | **Pn** | **14 49 51.1** | **+0.9** |
| **AFI** | **Afiamalu** | **5.01** | **36** | P | **Pn** | **14 49 55.1** | **+1.2** |
| | 8.6nm,0.3s,baz=226,slow=1.7,SNR=29 | | | | | | |
| AFI | | | | S | **Sn** | **14 50 49.2** | **-3.5** |
| | 35nm,0.3s,baz=32,slow=22,SNR=11 | | | | | | |
| **AFI** | **Afiamalu** | **5.01** | **36** | | **Pn** | **14 49 54.4** | **+0.5** |
| **MSVF** | **Nonsavu** | **6.83** | **271** | P | **Pn** | **14 50 19.3** | **+2.0** |
| | 2.0nm,0.3s,baz=140,slow=16,SNR=22 | | | | | | |
| **MSVF** | **Nonsavu** | **6.83** | **271** | | **Pn** | **14 50 17.5** | **+0.2** |
| **MARNC** | **Mare, Loyalty** | **16.54** | **255** | | **Pn** | **14 52 20.2** | **+0.1** |
| **PINNC** | **Pines Island,** | **17.27** | **252** | Pn | **Pn** | **14 52 28.9** | **+0.1** |
| **DZM** | **Mont Dzumac** | **18.09** | **254** | P | **Pn** | **14 52 38.0** | **-0.4** |
| | 0.2nm,0.3s,baz=88,slow=16,SNR=3.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.09** | **254** | IAmb | IAmb | 14 52 43.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **21.37** | **198** | P | **P** | **14 53 10.5** | **-0.5** |
| | comp=Z,3.9nm,0.3s,baz=298,slow=2.7,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **21.37** | **198** | P | **P** | **14 53 09.8** | **-1.3** |
| URZ | | | | IAmb | IAmb | 14 53 11.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.39** | **198** | P | **P** | **14 53 19.2** | **-1.9** |
| BKZ | | | | IAmb | IAmb | 14 53 39.1 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **CTA** | **Charters Tower** | **36.83** | **260** | P | **P** | **14 55 28.5** | **+0.1** |
| | comp=Z,1.8nm,0.6s,baz=42,slow=9.5,SNR=0.9 | | | | | | |
| **COEN** | **Coen** | **40.55** | **269** | P | **P** | **14 55 59.1** | **-0.3** |
| COEN | | | | IAmb | IAmb | 14 56 26.6 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **41.61** | **242** | P | **P** | **14 56 07.5** | **-0.4** |
| | comp=Z,0.8nm,0.4s,baz=79,slow=10,SNR=6.1 | | | | | | |
| **STKA** | **Stephens Creek** | **41.61** | **242** | IAmb | IAmb | 14 56 08.0 | |
| | comp=Z,0.8nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **46.38** | **242** | P | **P** | **14 56 45.2** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 14 57 14.3 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.81** | **259** | P | **P** | **14 56 56.0** | **-0.9** |
| **WB0** | **Warramunga Arr** | **47.97** | **259** | P | **P** | **14 56 57.3** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 14 56 58.4 | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **47.99** | **259** | P | **P** | **14 56 57.2** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 14 57 05.3 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **WRAB** | **Tenn

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ENTT** | **Nioudou** baz=301 | **1.01 305** | P | **Pn** | **15 08 42.3** | **+0.5** |
| **NDT** | **Datong Townshi** baz=288 | **1.03 302** | *e*P | **Pn** | **15 08 43.0** | **+1.0** |
| **NNSB** | **Datong** baz=286 | **1.07 291** | *e*P | **Pn** | **15 08 43.0** | **+0.5** |
| NNSB | baz=286 | | S | **Sn** | **15 08 56.4** | **-0.4** |
| **FUSB** | **Fushanzhiwuyua** baz=298 | **1.07 311** | P | **Pn** | **15 08 43.2** | **+0.5** |
| FUSB | baz=298 | | S | **Sn** | **15 08 57.0** | **+0.2** |
| **NNS** | **Nan Shan** baz=286 | **1.08 291** | S | **Sn** | **15 08 56.6** | **-0.5** |
| **TIPB** | **Shuangxi** baz=324 | **1.09 327** | *e*P | **Pn** | **15 08 42.8** | **0.0** |
| TIPB | baz=324 | | *e*S | **Sn** | **15 08 57.5** | **+0.3** |
| **WHF** | **Hehuan Shan** baz=259 | **1.11 275** | P | **Pn** | **15 08 43.5** | **0.0** |
| WHF | baz=259 | | *e*S | **Sn** | **15 08 58.1** | **-0.2** |
| **HGSD** | **Ruisui** baz=236 | **1.11 240** | *e*P | **Pn** | **15 08 42.9** | **-0.2** |
| HGSD | baz=236 | | *e*S | **Sb** | **15 08 56.7** | **-0.8** |
| **FUSS** | **Fushou** baz=265 | **1.14 280** | *e*P | **Pb** | **15 08 44.1** | **+0.1** |
| **NWLT** | **Wulai** baz=295 | **1.14 309** | *e*P | **Pb** | **15 08 44.2** | **+0.3** |
| NWLT | baz=295 | | S | **Sn** | **15 08 58.2** | **-0.4** |
| **SXI1** | **Grass Mountain** baz=339 | **1.17 332** | P | **Pb** | **15 08 43.8** | **-0.6** |
| SXI1 | baz=339 | | *e*S | **Sn** | **15 08 58.7** | **-0.7** |
| **YHNB** | **Yeheng** baz=297 | **1.18 302** | *e*P | **Pb** | **15 08 44.6** | **+0.1** |
| YHNB | baz=297 | | *e*S | **Sn** | **15 08 58.7** | **-0.7** |
| **IRIF** | **Iriomote-Funau** | **1.18 76** | P | **Pb** | **15 08 44.3** | **-0.1** |
| IRIF | | | *e*S | **Sn** | **15 08 59.2** | **-0.1** |
| **EHY** | **Hungye** baz=251 | **1.19 243** | *e*P | **Pn** | **15 08 44.1** | **-0.1** |
| **CHGB** | **Renai** baz=266 | **1.19 271** | P | **Pb** | **15 08 44.8** | **0.0** |
| CHGB | baz=266 | | *e*S | **Sb** | **15 08 59.7** | **-0.1** |
| **NSK** | **Sanguang** baz=297 | **1.19 301** | *e*P | **Pb** | **15 08 44.6** | **-0.2** |
| NSK | baz=297 | | *e*S | **Sb** | **15 08 59.0** | **-0.8** |
| **HATJ** | **Hateruma jima** | **1.21 90** | P | **Pb** | **15 08 44.9** | **-0.2** |
| HATJ | | | *e*S | **Sb** | **15 09 01.0** | **+0.7** |
| **TWA** | **Mucha** baz=329 | **1.23 319** | *e*P | **Pb** | **15 08 44.8** | **-0.5** |
| **WUSB** | **Renai** baz=263 | **1.25 267** | *e*P | **Pb** | **15 08 45.5** | **-0.2** |
| WUSB | baz=263 | | *e*S | **Sb** | **15 09 01.6** | **+0.3** |
| **VWDT** | **VWDT** baz=243 | **1.26 257** | *e*P | **Pn** | **15 08 45.7** | **+0.7** |
| VWDT | baz=243 | | *e*S | **Sn** | **15 09 01.2** | **-0.2** |
| **YULB** | **Yu-li** baz=248 | **1.27 239** | *e*P | **Pn** | **15 08 45.3** | **+0.1** |
| YULB | baz=248 | | *e*S | **Sn** | **15 09 00.5** | **-1.1** |
| **EYUL** | **Yuli** baz=225 | **1.27 237** | *e*P | **Pn** | **15 08 45.6** | **+0.3** |
| EYUL | baz=225 | | *e*S | **Sn** | **15 09 01.6** | **-0.1** |
| **NFF** | **Wufeng Townshi** baz=291 | **1.37 295** | *e*P | **Pb** | **15 08 48.2** | **+0.5** |
| NFF | baz=291 | | *e*S | **Sb** | **15 09 04.1** | **-0.7** |
| **JKRS** | **Kuro-shima** | **1.41 82** | P | **Pb** | **15 08 48.4** | **0.0** |
| JKRS | | | *e*S | **Sb** | **15 09 06.3** | **+0.3** |
| **WHP** | **Taichung City** baz=267 | **1.42 279** | *e*P | **Pb** | **15 08 49.9** | **+1.3** |
| **SSLB** | **Suanglung** baz=256 | **1.42 260** | *e*P | **Pn** | **15 08 48.0** | **+0.6** |
| **WCS** | **Beigang Elemen** baz=266 | **1.43 270** | *e*P | **Pn** | **15 08 47.4** | **-0.1** |
| **LIOB** | **Emei** baz=290 | **1.46 294** | *e*P | **Pb** | **15 08 49.4** | **+0.1** |
| LIOB | baz=290 | | *e*S | **Sb** | **15 09 07.5** | **+0.1** |
| **TYC** | **Yuchr** baz=261 | **1.49 265** | *e*P | **Pn** | **15 08 48.6** | **+0.4** |
| **YUS** | **Yu-Shan** baz=236 | **1.51 248** | *e*P | **Pn** | **15 08 50.0** | **+1.1** |
| **EDH** | **Donghe** baz=216 | **1.52 225** | *e*P | **Pn** | **15 08 48.7** | **0.0** |
| EDH | baz=216 | | *e*S | **Sn** | **15 09 06.0** | **-1.9** |
| **JIJ** | **Ishigaki jima** | **1.55 78** | P | **Pn** | **15 08 49.3** | **+0.2** |
| JIJ | | | *e*S | **Sn** | **15 09 08.7** | **+0.1** |
| **ELDTW** | **Lidau** baz=234 | **1.59 238** | *e*P | **Pn** | **15 08 49.9** | **+0.1** |
| **WJS** | **Zhushan** baz=258 | **1.62 262** | *e*P | **Pb** | **15 08 52.5** | **+0.6** |
| WJS | baz=258 | | *e*S | **Sb** | **15 09 12.6** | **+0.7** |
| **ALS** | **Alishan** baz=247 | **1.62 251** | *e*P | **Pb** | **15 08 51.9** | **-0.4** |
| **WNT** | **Mingjian** baz=260 | **1.65 264** | *e*P | **Pb** | **15 08 52.6** | **+0.1** |
| WNT | baz=260 | | *e*S | **Sb** | **15 09 13.3** | **+0.5** |
| **LDUT** | **Ludao** baz=212 | **1.66 214** | *e*P | **Pn** | **15 08 49.7** | **-0.8** |
| **LONT** | **Longtian** baz=236 | **1.68 228** | *e*P | **Pn** | **15 08 51.1** | **+0.1** |
| **CHN5** | **Tsauling** baz=252 | **1.71 255** | *e*P | **Pb** | **15 08 53.6** | **0.0** |
| CHN5 | baz=252 | | *e*S | **Sb** | **15 09 15.3** | **+0.6** |
| **JISG** | **Ishigakijimahi** | **1.75 72** | P | **Pn** | **15 08 52.1** | **+0.2** |
| JISG | | | *e*S | **Sn** | **15 09 13.6** | **0.0** |
| **TWGBT** | **Beinan** baz=235 | **1.78 226** | *e*P | **Pn** | **15 08 52.4** | **+0.1** |
| TWGBT | baz=235 | | *e*S | **Sn** | **15 09 13.2** | **-1.0** |
| **TWG** | **Pinlang** baz=235 | **1.78 227** | *e*P | **Pn** | **15 08 52.3** | **0.0** |
| TWG | baz=235 | | *e*S | **Sn** | **15 09 13.1** | **-1.2** |
| **STYH** | **Taoyuan** baz=230 | **1.79 241** | *e*P | **Pn** | **15 08 53.7** | **+1.3** |
| **WDLH** | **Douliu** baz=255 | **1.81 259** | *e*P | **Pb** | **15 08 54.8** | **-0.4** |
| WDLH | baz=255 | | *e*S | **Sb** | **15 09 19.3** | **+1.8** |
| **TPUB** | **Ta-pu** baz=244 | **1.85 246** | *e*P | **Pb** | **15 08 55.4** | **-0.5** |
| TPUB | baz=244 | | *e*S | **Sb** | **15 09 18.8** | **0.0** |
| **CHN4** | **Tsaushan** baz=246 | **1.86 248** | *e*P | **Pb** | **15 08 55.9** | **-0.3** |
| CHN4 | baz=246 | | *e*S | **Sb** | **15 09 19.2** | **+0.2** |
| **WTP** | **Ta-pu** baz=242 | **1.89 245** | *e*P | **Pb** | **15 08 56.3** | **-0.3** |
| WTP | baz=242 | | *e*S | **Sb** | **15 09 20.2** | **+0.4** |
| **SLGT** | **Liugui** baz=229 | **1.98 238** | *e*P | **Pb** | **15 08 57.9** | **-0.3** |
| SLGT | baz=229 | | *e*S | **Sb** | **15 09 22.6** | **+0.1** |
| **TWK** | **Hsinying** baz=244 | **1.98 247** | *e*P | **Pb** | **15 08 57.5** | **-0.7** |
| **CHN1** | **Nanshi** baz=242 | **1.99 245** | *e*P | **Pb** | **15 08 57.4** | **-0.9** |
| CHN1 | baz=242 | | *e*S | **Sb** | **15 09 22.5** | **0.0** |
| **SGST** | **Jiashian** baz=239 | **1.99 241** | *e*P | **Pn** | **15 08 57.1** | **+2.0** |
| SGST | baz=239 | | *e*S | **Sb** | **15 09 22.2** | **-0.5** |
| **JTJ** | **Tarama** | **2.11 73** | P | **Pn** | **15 08 58.2** | **+1.4** |
| JTJ | | | *e*S | **Sn** | **15 09 23.3** | **+0.9** |
| **WSL** | **Shuilin Townsh** baz=253 | **2.13 256** | *e*P | **Pn** | **15 08 59.1** | **+2.1** |
| WSL | baz=253 | | *e*S | **Sn** | **15 09 25.0** | **+2.2** |

*KRNET **09** 15:13:39.7±0.1,39.°72N×74.°63E,mb3.0*
*SOME **09** 15:13:40.3,39.°90N×74.°33E,h10km*
*NNC **09** 15:13:46.6±4.3,40.°01N×74.°97E,h0km,mb3.7,mpv3.4,*
*Error ellipse: s-maj=33.1km s-min=23.2km az=149.0*

**ISC 09 15:13:40.0±1.9,39.°84N±0.°07×74.°71E±0.°04,h1km±12km, n45,σ1ₜ46/71,19C-13D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SALK** | **Salom-Alik** baz=32 | **1.24** | **327** | ⇓*e*P | **Pb** | **15 14 04.2** | **-0.1** |
| SALK | baz=32 | | | ⇓*e*S | **Sn** | **15 14 22.8** | **+0.7** |
| **OHH** | **Osh** baz=0.0 | **1.62** | **295** | ⇑*i*P | **Pn** | **15 14 09.4** | **-0.4** |
| OHH | baz=0.0 | | | ⇑*i*S | **Sn** | **15 14 32.1** | **+0.7** |
| **ARLS** | **Aral** baz=54 | **2.04** | **352** | ⇑*i*P | **Pg** | **15 14 18.4** | **-0.6** |
| ARLS | baz=54 | | | ⇑*i*S | **Sg** | **15 14 46.4** | **+0.9** |
| **DRK** | **Karamyk** baz=65 | **2.27** | **262** | ⇑*i*P | **Pn** | **15 14 18.7** | **-0.3** |
| DRK | baz=65 | | | ⇑*i*S | **Sn** | **15 14 47.7** | **-0.1** |
| **UCH** | **Uchtor** SNR=18 | **2.39** | **357** | P | **Pg** | **15 14 24.7** | **-1.1** |
| **UCH** | **Uchtor** baz=58 | **2.39** | **357** | ⇓*i*P | **Pb** | **15 14 23.5** | **-0.6** |
| UCH | baz=58 | | | ⇓*i*S | **Sb** | **15 14 55.0** | **+0.8** |
| **AML** | **Almayashu** SNR=8.4 | **2.41** | **342** | P | **Pb** | **15 14 25.1** | **+0.6** |
| **ULHL** | **Ulahol** SNR=15 | **2.67** | **25** | P | **Pg** | **15 14 31.9** | **+0.8** |
| **ULHL** | **Ulahol** baz=25 | **2.67** | **25** | ⇑*e*P | **Pb** | **15 14 27.7** | **-1.0** |
| ULHL | baz=25 | | | ⇑*i*S | **Sb** | **15 15 02.1** | **+0.1** |
| **AAK** | **Ala-Archa** SNR=12 | **2.80** | **357** | P | **Pg** | **15 14 33.0** | **-0.6** |
| **AAK** | **Ala-Archa** 5.4nm,0.5s | **2.80** | **357** | ⇓Pg | **Pg** | **15 14 32.8** | **-0.8** |
| AAK | 17nm,0.8s | | | ⇑Lg | Lg | 15 15 11.7 | |
| **AAK** | **Ala-Archa** baz=58 | **2.80** | **357** | ⇓*i*P | **Pb** | **15 14 29.2** | **-1.7** |
| AAK | baz=58 | | | ⇓*i*S | **Sb** | **15 15 05.1** | **-0.6** |
| **BOOM** | **Boomskoye usch** baz=19 | **2.81** | **19** | ⇓*i*P | **Pb** | **15 14 29.5** | **-1.5** |
| BOOM | baz=19 | | | ⇓*i*S | **Sb** | **15 15 05.7** | **-0.3** |
| **KBK** | **Karagaybulak** SNR=6.9 | **2.82** | **4** | P | **Pb** | **15 14 31.3** | **+0.1** |
| **KBK** | **Karagaybulak** baz=5.0 | **2.82** | **4** | ⇑*i*P | **Pb** | **15 14 29.5** | **-1.7** |
| KBK | baz=5.0 | | | ⇑*i*S | **Sb** | **15 15 05.7** | **-0.6** |
| **EKS2** | **Erkin-Say** SNR=5.2 | **2.90** | **346** | P | **Pg** | **15 14 35.3** | **-0.3** |
| **EKS2** | **Erkin-Say** baz=48 | **2.90** | **346** | ⇑*e*P | **Pb** | **15 14 30.3** | **-2.3** |
| EKS2 | baz=48 | | | ⇑*e*S | **Sb** | **15 15 07.5** | **-1.2** |
| **KDJ** | **Kajisay** baz=38 | **2.96** | **39** | ⇑*i*P | **Pb** | **15 14 31.7** | **-1.9** |
| KDJ | baz=38 | | | ⇑*i*S | **Sb** | **15 15 09.3** | **-1.0** |
| **BTK** | **Batken** baz=78 | **3.00** | **275** | ⇑*i*P | **Pn** | **15 14 29.5** | **+0.8** |
| BTK | baz=78 | | | ⇑*i*S | **Sn** | **15 15 05.8** | **+0.5** |
| **MRKS** | **Merke** 3.3nm,0.4s | **3.11** | **339** | *e*P | **Pb** | **15 14 36.9** | **+0.8** |
| MRKS | 12nm,0.5s | | | *e*S | **Sg** | **15 15 17.6** | **-2.2** |
| **TKM2** | **Tokmak 2** 3.3nm,0.5s | **3.15** | **12** | ⇓Pg | **Pb** | **15 14 37.1** | **+0.2** |
| TKM2 | 5.4nm,0.5s | | | ⇓Lg | Lg | 15 15 18.5 | |
| **TRKS** | **Terek-Say** baz=5.0 | **3.19** | **303** | ⇑*i*P | **Pn** | **15 14 32.5** | **+1.0** |
| TRKS | baz=5.0 | | | ⇑*i*S | **Sn** | **15 15 11.2** | **+0.9** |
| **KST** | **Kastek** 3.5nm,0.3s | **3.33** | **16** | *e*P | **Pb** | **15 14 41.1** | **+1.0** |
| KST | 16nm,0.7s | | | *e*S | **Sg** | **15 15 24.2** | **-2.9** |
| **DGS** | **Degeres** 5.9nm,0.4s | **3.49** | **13** | *e*P | **Pg** | **15 14 46.2** | **-0.7** |
| DGS | 6.0nm,0.5s | | | *e*S | **Sg** | **15 15 33.5** | **+1.5** |
| **DGS** | **Degeres** 5.9nm,0.4s | **3.49** | **13** | Pg | **Pg** | **15 14 46.2** | **-0.7** |
| DGS | 6.0nm,0.5s | | | Lg | Lg | 15 15 33.6 | |
| **MTBS** | **Maitube** 13nm,0.5s | **3.53** | **21** | *e*P | **Pg** | **15 14 47.3** | **-0.4** |
| MTBS | 4.4nm,0.3s | | | *e*S | **Sg** | **15 15 35.5** | **+2.1** |
| **MTBS** | **Maitube** 13nm,0.5s | **3.53** | **21** | Pg | **Pg** | **15 14 47.3** | **-0.4** |
| MTBS | 4.4nm,0.3s | | | Lg | Lg | 15 15 35.5 | |
| **SGDS** | **Sogindy** 1.0nm,0.4s | **3.61** | **359** | *e*P | **Pg** | **15 14 47.8** | **-1.3** |
| SGDS | 1.4nm,0.7s | | | *e*S | **Sg** | **15 15 35.9** | **+0.1** |
| **TNSS** | **Tian-Shan** 7.5nm,0.5s | **3.61** | **27** | *e*P | **Pg** | **15 14 48.6** | **-0.5** |
| TNSS | 3.3nm,0.8s | | | *e*S | **Sg** | **15 15 37.9** | **+1.9** |
| **TNSS** | **Tian-Shan** 7.5nm,0.5s | **3.61** | **27** | Pg | **Pg** | **15 14 48.6** | **-0.5** |
| TNSS | 3.3nm,0.8s | | | Lg | Lg | 15 15 37.9 | |
| **MDOK** | **Medeo** 6.5nm,0.4s | **3.76** | **27** | *e*P | **Pg** | **15 14 51.1** | **-0.9** |
| MDOK | 5.1nm,0.7s | | | *e*S | **Sg** | **15 15 42.0** | **+1.3** |
| **MDOK** | **Medeo** 6.5nm,0.4s | **3.76** | **27** | Pg | **Pg** | **15 14 51.1** | **-0.9** |
| MDOK | 5.1nm,0.7s | | | Lg | Lg | 15 15 42.0 | |
| **KOTS** | **Kotyrbulak** 5.7nm,0.6s | **3.84** | **27** | *e*P | **Pg** | **15 14 53.1** | **-0.4** |
| KOTS | 10nm,0.6s | | | *e*S | **Sg** | **15 15 45.9** | **+2.5** |
| **KOTS** | **Kotyrbulak** 5.7nm,0.6s | **3.84** | **27** | Pg | **Pg** | **15 14 53.1** | **-0.4** |
| KOTS | 10nm,0.6s | | | Lg | Lg | 15 15 45.9 | |
| **KRBS** | **Karabastau** 4.0nm,0.5s | **3.92** | **10** | *e*P | **Pg** | **15 14 53.5** | **-1.6** |
| KRBS | 4.9nm,0.8s | | | *e*S | **Sg** | **15 15 46.1** | **+0.2** |
| **KRBS** | **Karabastau** 4.0nm,0.5s | **3.92** | **10** | Pg | **Pg** | **15 14 53.5** | **-1.6** |
| KRBS | 4.9nm,0.8s | | | Lg | Lg | 15 15 46.1 | |
| **KTBS** | **Karatobe** 4.8nm,0.8s | **4.14** | **20** | *e*P | **Pg** | **15 14 58.2** | **-1.1** |
| KTBS | 6.6nm,0.7s | | | *e*S | **Sg** | **15 15 54.0** | **+1.0** |
| **KTBS** | **Karatobe** 4.8nm,0.8s | **4.14** | **20** | Pg | **Pg** | **15 14 58.2** | **-1.1** |
| **IUG** | **Iuzhnay** 37nm,0.2s | **4.22** | **305** | *e*P | **Pb** | **15 14 52.2** | **-2.9** |
| IUG | 8.6nm,0.8s | | | *e*S | **Sb** | **15 15 43.8** | **-2.8** |
| **IUG** | **Iuzhnay** 21nm,0.3s | **4.22** | **305** | Pg | **Pn** | **15 14 47.5** | **+1.9** |
| IUG | 12nm,0.5s | | | Lg | Lg | 15 15 36.0 | |
| **KUU** | **Kurty** 1.0nm,0.3s | **4.23** | **16** | *e*P | **Pg** | **15 14 59.0** | **-2.0** |
| KUU | 7.2nm,0.7s | | | *e*S | **Sg** | **15 15 55.4** | **-0.4** |
| **KUU** | **Kurty** 1.0nm,0.3s | **4.23** | **16** | Pg | **Pg** | **15 14 59.0** | **-2.0** |
| **KK09** | **Karatay Array** 1.8nm,0.9s,baz=128,slow=17 | **4.55** | **317** | ⇓Pg | **Pg** | **15 15 11.8** | **+4.6** |
| KK09 | 1.8nm,0.5s,baz=124,slow=29 | | | ⇓Lg | Lg | 15 16 14.8 | |
| **BLB** | **Baldybastay** 2.9nm,0.4s | **5.10** | **32** | *e*P | **Pg** | **15 15 17.5** | **-0.1** |
| BLB | 8.2nm,1.0s | | | *e*S | **Sg** | **15 16 27.6** | **+3.9** |
| **BLB** | **Baldybastay** 2.9nm,0.4s | **5.10** | **32** | Pg | **Pg** | **15 15 17.5** | **-0.1** |

*IDC **09** 15:13:40.5±1.0,19.°34S×172.°64W,h0km,mb4.2/8, mb1 4.4/12,mb1mx4.1/41,mbtmp4.3/12,ML4.2/4,MS3.0/3, Ms1 3.0/3,ms1mx2.7/66,Error ellipse: s-maj=28.0km s-min=21.1km az=161.0*
*NEIC **09** 15:13:41.5±1.3,19.°10S±0.°08×172.°49W±0.°05,h10km±1km, mb4.6/23,Error ellipse: s-maj=14.2km s-min=6.3km az=156.0*

**ISC 09 15:13:41.9±0.5,19.°12S±0.°08×172.°55W±0.°06,h13km,n42, σ1ₜ12/44,mb4.6/17,Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **2.48** | **89** | Pn | **Pn** | **15 14 22.9** | **+1.0** |
| **AFI** | **Afiamalu** 1.1nm,0.3s,baz=214,slow=23,SNR=1.4 | **5.23** | **8** | Pn | **Pn** | **15 15 01.3** | **+1.4** |
| AFI | 3.0nm,0.3s,baz=217,slow=20,SNR=4.0 | | | Sn | **Sn** | **15 15 57.8** | **-2.3** |
| **MSVF** | **Nonsavu** 0.3nm,0.3s,baz=94,slow=7.5,SNR=2.2 | **9.03** | **277** | Pn | **Pn** | **15 15 52.7** | **+0.6** |
| MSVF | comp=Z,64nm,20.3s,baz=359,slow=33 | | | LR | LR | 15 18 35.2 | |
| **MSVF** | **Nonsavu** | **9.03** | **277** | Pn | **Pn** | **15 15 53.5** | **+1.4** |
| **RAR** | **Rarotonga** 5.5nm,0.3s,baz=245,slow=7.6,SNR=8.7 | **12.18** | **102** | Pn | **Pn** | **15 16 35.6** | **+0.5** |
| RAR | comp=Z,50nm,18.1s,baz=274,slow=34 | | | LR | LR | 15 20 32.4 | |
| **RAR** | **Rarotonga** | **12.18** | **102** | | **Pn** | **15 16 34.6** | **-0.5** |
| **MARNC** | **Mare, Loyalty** | **18.37** | **259** | P | **Pn** | **15 17 55.1** | **-1.3** |
| **PINNC** | **Pines Island,** | **19.01** | **256** | P | **Pn** | **15 18 03.9** | **-0.4** |
| PINNC | comp=Z,23nm,0.7s | | | IAmb | IAmb | 15 18 05.4 | |
| **OUENC** | **Ouen Island, N** | **19.55** | **257** | P | **P** | **15 18 09.3** | **-0.1** |
| **DZM** | **Mont Dzumac** comp=Z,34nm,0.9s | **19.88** | **258** | *e*P | **Pn** | **15 18 13.6** | **-1.2** |
| **DZM** | **Mont Dzumac** comp=Z,0.8nm,0.3s,baz=75,slow=18,SNR=10 | **19.88** | **258** | P | **P** | **15 18 13.0** | **-0.2** |
| DZM | comp=Z,94nm,18.9s,baz=17,slow=33 | | | LR | LR | 15 24 30.0 | |
| **DZM** | **Mont Dzumac** | **19.88** | **258** | P | **P** | **15 18 13.2** | **+0.1** |
| DZM | comp=Z,16nm,0.8s | | | IAmb | IAmb | 15 18 14.9 | |
| **URZ** | **Urewera** comp=Z,4.8nm,0.6s,baz=328,slow=2.6,SNR=7.8 | **21.09** | **203** | P | **P** | **15 18 25.8** | **-0.2** |
| **URZ** | **Urewera** comp=Z,29nm,1.4s | **21.09** | **203** | IAmb | IAmb | 15 18 46.2 | |
| **EIDS** | **Eidsvold** | **34.16** | **253** | P | **P** | **15 20 26.8** | **-0.2** |
| EIDS | comp=Z,18nm,1.4s | | | IAmb | IAmb | 15 20 55.7 | |
| **CAN** | **Canberra** | **37.54** | **237** | P | **P** | **15 20 55.9** | **-0.1** |
| CAN | comp=Z,12nm,1.0s | | | IAmb | IAmb | 15 20 57.5 | |
| **CTA** | **Charters Tower** comp=Z,4.5nm,0.5s,baz=85,slow=9.8,SNR=12 | **38.75** | **261** | P | **P** | **15 21 05.2** | **-1.1** |
| **CTAO** | **Charters Tower** | **38.75** | **261** | P | **P** | **15 21 05.3** | **-1.0** |
| CTAO | comp=Z,23nm,1.4s | | | IAmb | IAmb | 15 21 14.8 | |
| **TOO** | **Toolangi** | **40.86** | **234** | P | **P** | **15 21 23.4** | **-0.2** |
| TOO | comp=Z,15nm,1.4s | | | IAmb | IAmb | 15 21 35.7 | |
| **TAU** | **Tasmania Unive** | **41.24** | **226** | P | **P** | **15 21 27.9** | **+1.3** |
| **HPAH** | **Hawaii Prepara** | **42.27** | **24** | P | **P** | **15 21 34.6** | **-0.7** |
| **COEN** | **Coen** | **42.67** | **270** | P | **P** | **15 21 38.9** | **+0.2** |
| COEN | comp=Z,15nm,1.4s | | | IAmb | IAmb | 15 21 55.7 | |
| **STKA** | **Stephens Creek** comp=Z,2.0nm,0.7s,baz=94,slow=10,SNR=4.2 | **43.00** | **244** | P | **P** | **15 21 39.6** | **-1.6** |
| **STKA** | **Stephens Creek** | **43.00** | **244** | P | **P** | **15 21 40.3** | **-0.9** |
| **BBOO** | **Buckleboo** | **47.75** | **243** | P | **P** | **15 22 18.5** | **-0.3** |
| BBOO | comp=Z,17nm,1.3s | | | IAmb | IAmb | 15 22 23.3 | |
| **WR0** | **Warramunga Arr** | **49.70** | **260** | P | **P** | **15 22 33.4** | **-0.6** |
| WR0 | comp=Z,5.7nm,1.3s | | | IAmb | IAmb | 15 22 47.9 | |
| **AS31** | **Alice Springs** | **49.83** | **255** | P | **P** | **15 22 34.3** | **-0.7** |
| **ASAR** | **Alice Springs** comp=Z,8.0nm,0.9s,baz=94,slow=8.3,SNR=54 | **49.83** | **255** | P | **P** | **15 22 34.4** | **-0.7** |
| ASAR | comp=Z,0.4nm,0.6s,baz=101,slow=4.6,SNR=1.4 | | | PcP | **PcP** | **15 23 57.4** | **+1.7** |
| **ASAR** | **Alice Springs** | **49.83** | **255** | P | **P** | **15 22 34.1** | **-0.9** |
| **WB0** | **Warramunga Arr** | **49.86** | **260** | P | **P** | **15 22 34.5** | **-0.8** |
| WB0 | comp=Z,3.8nm,0.6s | | | IAmb | IAmb | 15 22 35.3 | |
| **WB2** | **Warramunga Arr** | **49.87** | **260** | P | **P** | **15 22 34.6** | **-0.8** |
| WB2 | comp=Z,4.7nm,0.8s | | | IAmb | IAmb | 15 22 35.4 | |
| **WRA** | **Warramunga Arr** comp=Z,3.3nm,0.8s,baz=97,slow=8.4,SNR=33 | **49.88** | **260** | P | **P** | **15 22 34.0** | **-1.5** |
| WRA | comp=Z,0.3nm,0.7s,baz=93,slow=3.6,SNR=1.4 | | | PcP | **PcP** | **15 23 57.6** | **+1.6** |
| **WRA** | **Warramunga Arr** | **49.88** | **260** | P | **P** | **15 22 34.7** | **-0.8** |
| **MTN** | **Manton Dam** | **54.31** | **268** | P | **P** | **15 23 08.3** | **-0.2** |
| **FORT** | **Forrest** | **54.54** | **245** | P | **P** | **15 23 10.0** | **+0.1** |
| **SIJI** | **Sorong** comp=Z,7.6nm,0.6s,baz=143,slow=15 | **57.92** | **281** | P | **P** | **15 23 35.6** | **+1.3** |
| **MBWA** | **Marble Bar** | **63.16** | **255** | P | **P** | **15 24 10.2** | **+0.2** |
| MBWA | comp=Z,7.7nm,1.1s | | | IAmb | IAmb | 15 24 13.7 | |
| **MORW** | **Morawa** | **65.09** | **246** | P | **P** | **15 24 23.1** | **+0.5** |
| **QSPA** | **South Pole Qui** comp=Z,0.8nm,0.7s,baz=287,slow=16,SNR=1.5 | **70.95** | **180** | P | **P** | **15 24 56.9** | **-2.0** |
| **NVAR** | **Mina Array Bea** comp=Z,0.5nm,0.7s,baz=223,slow=9.9,SNR=2.6 | **76.56** | **41** | P | **P** | **15 25 35.1** | **+2.8** |
| **HRY** | **Holter Researc** | **85.30** | **37** | P | **P** | **15 26 17.8** | **-0.8** |
| **ILAR** | **Eielson Array** | **85.92** | **11** | P | **P** | **15 26 19.6** | **-1.5** |

*IDC **09** 15:13:45.5±0.8,32.°68N×76.°04E,h0km,mb4.1/21, mb1 4.1/25,mb1mx4.0/61,mbtmp4.1/25,ML3.5/4,MS3.5/8, Ms1 3.5/8,ms1mx3.0/90,Error ellipse: s-maj=18.7km s-min=15.4km az=35.0*
*NDI **09** 15:13:47.7±3.6,32.°87N×76.°21E,h10km,ML4.1, mb4.2(NEIC)*
*MOS **09** 15:13:50.2±1.0,33.°01N×76.°09E,h22km,mb4.4/19,Error ellipse: s-maj=10.0km s-min=6.0km az=95.7*
*NEIC **09** 15:13:53.7±1.5,32.°99N±0.°03×76.°08E±0.°10,h40km±8km, mb4.2/29,Error ellipse: s-maj=12.4km s-min=2.2km az=73.0*
*BJI **09** 15:13:56.5±0.0,33.°21N×76.°89E,h30km,mb4.1/30, mB4.6/15,ML3.8/2,Ms4.0/7,Ms7 3.8/7*

**ISC 09 15:13:48.7±0.3,32.°69N±0.°03×76.°18E±0.°03,h20km,n162, σ2ₜ02/177,mb4.2/41,MS3.6/4,4C-14D,Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THN** | **Thein Dam** | **0.46** | **237** | *e*P | **Pn** | **15 13 58.3** | **-1.9** |
| **JMU** | **Jammu** | **1.08** | **272** | *e*PG | **Pn** | **15 14 07.5** | **-1.1** |
| JMU | | | | *e*P | **Pb** | **15 14 10.4** | **+1.8** |
| JMU | | | | *e*SG | **Sn** | **15 14 25.0** | **+2.0** |
| JMU | | | | *e*S | **Sb** | **15 14 25.1** | **+2.8** |
| **SMLA** | **Simla** | **1.77** | **151** | *e*P | **Pb** | **15 14 21.7** | **+1.4** |
| SMLA | | | | *e*S | **Sb** | **15 14 46.0** | **+3.9** |
| SMLA | comp=N,4μm,0.2s | | | IAML | | 15 14 48.8 | |
| **CHCP** | **Chirah Chowk** | **2.63** | **292** | P | **Pb** | **15 14 33.5** | **-1.6** |
| **NIL** | **Nilore** | **2.64** | **292** | P | **Pb** | **15 14 32.9** | **-2.4** |
| **NIL** | **Nilore** | **2.64** | **292** | Pn | **Pb** | **15 14 32.9** | **-2.4** |
| **DDI** | **Dehra Dun** | **2.85** | **145** | *e*P | **Pb** | **15 14 37.3** | **-1.7** |
| DDI | | | | *e*S | **Sb** | **15 15 11.5** | **-1.9** |
| DDI | comp=E,872nm,0.4s | | | IAML | | 15 15 23.5 | |
| **THW** | **Thamme Wali** | **3.74** | **273** | P | **Pn** | **15 14 46.1** | **+0.8** |
| **CEP** | **Cherat** | **3.75** | **289** | P | **Pn** | **15 14 47.3** | **+1.7** |
| CEP | | | | S | **Sn** | **15 15 31.0** | **+1.7** |
| **NDI** | **New Delhi** | **4.09** | **167** | *e*P | **Pn** | **15 14 52.9** | **+2.8** |
| NDI | | | | *e*S | **Sn** | **15 15 40.5** | **+3.2** |
| **AYAN** | **Aya Nagar** | **4.27** | **169** | *e*P | **Pn** | **15 14 54.7** | **+2.1** |
| **KUDL** | **Kundal** | **4.53** | **177** | *e*P | **Pn** | **15 14 59.0** | **+2.8** |
| KUDL | | | | *e*S | **Sn** | **15 15 51.3** | **+3.0** |
| **PTH** | **Pithoragarh** | **4.67** | **131** | *e*P | **Pn** | **15 14 59.5** | **+1.3** |
| **LGTI** | **Lohaghat** | **4.75** | **132** | *e*P | Pb | 15 15 16.2 | +4.9 |
| LGTI | | | | *e*S | **Sb** | **15 16 10.4** | **+2.3** |
| **KBL** | **Kabul** | **6.23** | **289** | P | **Pn** | **15 15 21.1** | **+1.4** |
| **KBL** | **Kabul** | **6.23** | **289** | Pn | **Pn** | **15 15 21.1** | **+1.4** |
| **AJM** | **Ajmer** | **6.33** | **193** | *e*P | **Pn** | **15 15 22.3** | **+1.4** |
| AJM | | | | *e*S | **Sn** | **15 16 33.8** | **+1.2** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **6.82** | **359** | Pn | **Pn** | **15 15 26.6** | **-1.1** |
| KSH | | | | Pg | Pb | 15 15 41.4 | -5.2 |
| KSH | | | | Sn | **Sn** | **15 16 39.1** | **-5.7** |
| KSH | | | | smax | smax | | |
| | comp=E,78nm,1.2s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,49nm,1.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,960nm,7.0s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,440nm,6.2s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,1µm,10.3s | | | | | | |
| **PYUN** | **Piuthan** | **7.45** | **126** | *e*Pn | **Pn** | **15 15 38.4** | **+1.9** |
| PYUN | | | | *e*Sn | **Sn** | **15 17 00.2** | **-0.3** |
| | comp=E,187nm,0.5s | | | | | | |
| **JHNI** | **Jhansi** | **7.48** | **163** | *e*P | **Pn** | **15 15 37.5** | **+0.7** |
| JHNI | | | | *e*S | **Sn** | **15 16 59.5** | **-1.6** |
| **DANN** | **Dangsing** | **7.84** | **121** | *e*Pn | **Pn** | **15 15 44.0** | **+2.1** |
| DANN | | | | *e*Sn | **Sn** | **15 17 08.2** | **-2.0** |
| | comp=E,169nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **8.07** | **125** | *e*Pn | **Pn** | **15 15 47.4** | **+2.4** |
| KOLN | | | | *e*Sn | **Sn** | **15 17 14.5** | **-1.4** |
| | comp=E,91nm,0.5s | | | | | | |
| **CHGR** | **Chuyangaron** | **8.25** | **318** | P | **Pn** | **15 15 47.1** | **-0.2** |
| **CHGR** | **Chuyangaron** | **8.25** | **318** | Pn | **Pn** | **15 15 47.1** | **-0.2** |
| **VLK** | **Valmikinagar** | **8.55** | **127** | *e*S | **Sn** | **15 17 23.7** | **-3.5** |
| **GKN** | **Gorkha** | **8.67** | **120** | *e*Pn | **Pn** | **15 15 54.7** | **+1.5** |
| GKN | | | | *e*Sn | **Sn** | **15 17 27.9** | **-2.6** |
| | comp=E,56nm,0.2s | | | | | | |
| **ALBI** | **Allahabad** | **8.85** | **145** | *e*P | **Pn** | **15 15 55.0** | **-0.5** |
| ALBI | | | | *e*S | **Sn** | **15 17 30.2** | **-4.3** |
| **DMN** | **Daman** | **9.24** | **121** | *e*Pn | **Pn** | **15 16 02.0** | **+1.0** |
| DMN | | | | *e*Sn | **Sn** | **15 17 42.0** | **-2.5** |
| | comp=E,118nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **9.26** | **119** | *e*Pn | **Pn** | **15 16 02.0** | **+0.7** |
| KKN | | | | *e*Sn | **Sn** | **15 17 40.8** | **-4.2** |
| | comp=E,34nm,0.2s | | | | | | |
| **PKIN** | **Phulchoki** | **9.46** | **120** | *e*Pn | **Pn** | **15 16 04.9** | **+0.7** |
| PKIN | | | | *e*Sn | **Sn** | **15 17 46.5** | **-3.6** |
| | comp=E,104nm,0.5s | | | | | | |
| **BHPL** | **Bhopal** | **9.47** | **173** | *e*P | **Pn** | **15 16 04.4** | **+0.3** |
| BHPL | | | | *e*S | **Sn** | **15 17 44.1** | **-5.9** |
| BHPL | | | | IAML | | 15 17 47.2 | |
| | comp=N,44nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **9.48** | **120** | *e*Pn | **Pn** | **15 16 05.1** | **+0.7** |
| **GUN** | **Gumba** | **9.64** | **117** | *e*Pn | **Pn** | **15 16 07.5** | **+0.9** |
| **JIRN** | **Jiri** | **10.01** | **117** | *e*Pn | **Pn** | **15 16 12.3** | **+0.6** |
| **AAK** | **Ala-Archa** | **10.02** | **353** | Pn | **Pn** | **15 16 12.9** | **+1.2** |
| | comp=N,0.8nm,0.3s,baz=156,slow=9.6,SNR=1.8 | | | | | | |
| AAK | | | | Sn | **Sn** | **15 17 59.2** | **-4.4** |
| | comp=N,0.1nm,0.3s,baz=41,slow=21,SNR=1.7 | | | | | | |
| AAK | | | | LR | LR | 15 20 31.4 | |
| | comp=N,190nm,21.7s,baz=172,slow=40 | | | | | | |
| **AAK** | **Ala-Archa** | **10.02** | **353**⇓ | *e*P | **Pn** | **15 16 13.8** | **+2.1** |
| **AAK** | **Ala-Archa** | **10.02** | **353** | Pn | **Pn** | **15 16 10.5** | **-1.1** |
| **JBP** | **Jabalpur** | **10.06** | **160** | *e*P | **Pn** | **15 16 11.9** | **-0.2** |
| JBP | | | ⇓ | *e*S | **Sn** | **15 17 58.7** | **-5.6** |
| **RAMN** | **Ramite** | **10.70** | **120** | *e*Pn | **Pn** | **15 16 21.1** | **0.0** |
| **TAPN** | **Taplejung** | **11.32** | **115** | *e*Pn | **Pn** | **15 16 29.3** | **-0.3** |
| **KKAR** | **Karatay Array** | **11.32** | **338** | P | **Pn** | **15 16 28.9** | **-0.3** |
| **KKAR** | **Karatay Array** | **11.32** | **338** | Pn | **Pn** | **15 16 28.9** | **-0.3** |
| **ODAN** | **Odare** | **11.34** | **118** | *e*Pn | **Pn** | **15 16 30.7** | **+0.9** |
| **AKL** | **Akola** | **11.96** | **176** | *e*P | **Pn** | **15 16 36.5** | **-1.6** |
| AKL | | | | IAML | | 15 19 08.0 | |
| **BOK** | **Bokaro** | **12.31** | **134** | *e*P | **Pn** | **15 16 42.5** | **-0.4** |
| BOK | | | | *e*S | **Sn** | **15 18 53.2** | **-6.4** |
| **SRSP** | **Sriramsagar** | **13.84** | **171** | *e*P | **P** | **15 17 12.1** | **+0.1** |
| **POO** | **Poona** | **14.25** | **189** | *e*P | **P** | **15 17 13.0** | **-3.6** |
| POO | | | | *e*P | Pn | 15 17 14.0 | +4.5 |
| POO | | | | *e*S | **Sn** | **15 19 41.0** | **-6.1** |
| **WMQ** | **Urumqi** | **14.32** | **36** | *e*P | **Pn** | **15 17 13.0** | **+2.7** |
| **KLRI** | **Killari** | **14.56** | **178** | *e*P | **Pn** | **15 17 12.2** | **-1.5** |
| KLRI | | | | *e* | | 15 19 43.3 | |
| KLRI | | | | *e*S | S | 15 20 03.4 | -10 |
| **MAKZ** | **Makanchi** | **14.79** | **16** | P | **Pn** | **15 17 16.1** | **-0.5** |
| **MAKZ** | **Makanchi** | **14.79** | **16** | Pn | **Pn** | **15 17 16.1** | **-0.5** |
| **MK31** | **Makanchi Array** | **14.85** | **17** | *c*eP | **Pn** | **15 17 18.5** | **+1.1** |
| **MK31** | **Makanchi Array** | **14.85** | **17** | Pn | **Pn** | **15 17 16.5** | **-0.9** |
| **MKAR** | **Makanchi Array** | **14.85** | **17** | Pn | **Pn** | **15 17 15.8** | **-1.6** |
| | comp=N,0.3nm,0.3s,baz=194,slow=14,SNR=20 | | | | | | |
| MKAR | | | | Sn | Sn | 15 19 53.1 | -8.2 |
| | comp=N,0.6nm,0.3s,baz=205,slow=27,SNR=9.7 | | | | | | |
| MKAR | | | | LR | LR | 15 23 24.7 | |
| | comp=N,63nm,18.3s,baz=240,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **14.85** | **17** | P | **Pn** | **15 17 16.6** | **-0.8** |
| MKAR | | | | | | 15 19 53.1 | |
| **MKAR** | **Makanchi Array** | **14.85** | **17** | Pn | **Pn** | **15 17 16.6** | **-0.8** |
| **HYBB** | **Hyderabad (bro** | **15.35** | **171** | *e*P | **P** | **15 17 29.9** | **+1.0** |
| HYBB | | | | *e*S | **S** | **15 20 20.7** | **-9.2** |
| **HYB** | **Hyderabad** | **15.35** | **171** | *e*P | **P** | **15 17 29.0** | **+0.1** |
| **SHL** | **Shillong** | **15.44** | **113** | P | **P** | **15 17 30.5** | **+0.5** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SHL** | **Shillong** | **15.44** | **113** | Pn | **P** | **15 17 30.5** | **+0.5** |
| **CUPL** | **Choutuppal** | **15.52** | **170** | *e*P | **P** | **15 17 30.4** | **-0.4** |
| **GEYT** | **Alibeck** | **15.64** | **295** | P | **P** | **15 17 33.4** | **+1.4** |
| **GOMU** | **GeErMu** | **15.77** | **72** | P | **Pn** | **15 17 29.9** | **-0.1** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **CHLP** | **Challavanipeta** | **15.80** | **151** | *e*P | **P** | **15 17 32.6** | **-1.1** |
| **PVM** | **Polavaram** | **16.14** | **161** | *e*P | **P** | **15 17 37.3** | **-0.2** |
| **NJS** | **Nagarjunasagar** | **16.31** | **169** | *e*P | **P** | **15 17 39.1** | **-0.4** |
| **MYLAV** | **Mylavaram** | **16.37** | **165** | *e*P | **P** | **15 17 41.8** | **+1.6** |
| **SRLM** | **Srisailam** | **16.70** | **171** | *e*P | **Pn** | **15 17 41.0** | **-0.6** |
| **ADKI** | **Addanki** | **17.12** | **168** | *e*P | **P** | **15 17 52.3** | **+3.9** |
| ADKI | | | | *e*S | **S** | **15 21 03.8** | **-2.1** |
| **RCLA** | **Racherla** | **17.34** | **171** | *e*P | **P** | **15 17 49.3** | **-1.5** |
| **URV** | **Uravakonda** | **17.69** | **177** | *e*P | **P** | **15 17 55.1** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **18.01** | **5** | P | **Pn** | **15 17 55.3** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=192,slow=11,SNR=46 | | | | | | |
| KURBB | | | | LR | LR | 15 25 39.0 | |
| | comp=Z,231nm,18.4s,baz=177,slow=40 | | | | | | |
| **KURK** | **Kurchatov** | **18.11** | **5** | *e*P | **Pn** | **15 17 56.9** | **-1.9** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **18.11** | **5** | Pn | **Pn** | **15 17 56.2** | **-2.7** |
| **WSAR** | **Wadi Sarin** | **18.11** | **243** | P | **Pn** | **15 17 56.3** | **-2.8** |
| | comp=Z,0.1nm,0.3s,baz=97,slow=14,SNR=2.8 | | | | | | |
| WSAR | | | | LR | LR | 15 26 37.6 | |
| | comp=Z,42nm,18.2s,baz=188,slow=43 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **18.95** | **23**⇓ | *e*P | **P** | **15 18 09.1** | **+0.5** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **SKHT** | **Srikalahasti** | **19.13** | **169** | *e*P | **Pn** | **15 18 11.4** | **-0.1** |
| **GTA** | **Gaotai** | **20.23** | **64** | ⇑P | **P** | **15 18 24.2** | **+1.6** |
| GTA | | | | pP | pP | 15 18 30.9 | +1.8 |
| GTA | | | | sP | sP | 15 18 36.1 | +4.0 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **20.53** | **329** | P | **P** | **15 18 25.0** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 15 18 30.9 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **20.53** | **329** | P | **P** | **15 18 25.2** | **-0.4** |
| **BVAR** | **Borovoye Array** | **20.75** | **350** | P | **P** | **15 18 27.9** | **-0.2** |
| | comp=Z,8.3nm,0.7s,baz=105,slow=11,SNR=38 | | | | | | |
| **BRVK** | **Borovoye** | **20.80** | **350**⇓ | *e*P | **P** | **15 18 29.2** | **+0.7** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,38nm,1.3s | | | | | | |
| **BRVK** | **Borovoye** | **20.80** | **350** | P | **P** | **15 18 28.4** | **-0.2** |
| **ZAA0** | **Zalesovo Array** | **22.13** | **14** | P | **P** | **15 18 41.1** | **-1.7** |
| ZAA0 | | | | IAmb | IAmb | 15 18 45.6 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.13** | **14** | P | **P** | **15 18 41.0** | **-1.8** |
| | comp=Z,6.7nm,0.8s,baz=208,slow=9.2,SNR=24 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.13** | **14** | *i* P | **P** | **15 18 44.9** | **+2.1** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.13** | **14** | P | **P** | **15 18 41.2** | **-1.6** |
| **AKTO** | **Aktyubinsk** | **22.24** | **328** | P | **P** | **15 18 44.1** | **0.0** |
| | comp=Z,5.7nm,0.6s,baz=126,slow=8.4,SNR=21 | | | | | | |
| **LZH** | **Lanzhou** | **23.05** | **74** | *e*P | **P** | **15 18 54.3** | **+1.3** |
| LZH | | | | pP | pP | 15 19 01.6 | +2.1 |
| LZH | | | | sP | sP | 15 19 05.5 | +3.1 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | |
| **KMI** | **Kunming** | **24.40** | **101** | ⇓P | **P** | **15 19 07.4** | **+1.3** |
| KMI | | | | pP | sP | 15 19 18.1 | +2.3 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.88** | **119** | P | **P** | **15 19 12.6** | **+2.4** |
| | comp=Z,0.7nm,0.3s,baz=227,slow=15,SNR=5.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.88** | **119** | *i* P | P | 15 19 17.2 | +7.0 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.88** | **119** | P | **P** | **15 19 12.2** | **+2.0** |
| **PALK** | **Pallekele** | **25.63** | **170** | LR | LR | 15 30 05.4 | |
| | comp=Z,167nm,18.3s,baz=94,slow=38 | | | | | | |
| **GNI** | **Garni** | **26.27** | **295** | P | **P** | **15 19 23.7** | **+0.8** |
| | comp=Z,1.3nm,0.3s,baz=180,slow=20,SNR=1.4 | | | | | | |
| **GNI** | **Garni** | **26.27** | **295** | P | **P** | **15 19 23.7** | **+0.8** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **GNI** | **Garni** | **26.27** | **295** | IAmb | IAmb | 15 19 36.2 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **26.69** | **40** | *e*P | **P** | **15 19 26.9** | **+0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **ARU** | **Arti** | **26.70** | **338** | P | **P** | **15 19 25.9** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=98,slow=3.9,SNR=4.3 | | | | | | |
| ARU | | | | LR | LR | 15 30 14.2 | |
| | comp=Z,136nm,21.5s,baz=335,slow=37 | | | | | | |
| **ARU** | **Arti** | **26.70** | **338** | *d iP* | **P** | **15 19 27.4** | **+1.1** |
| ARU | | | | | | 15 20 06.6 | |
| ARU | | | | S | **S** | **15 24 03.5** | **+3.0** |
| ARU | | | | SS | **SnSn** | **15 25 03.3** | **-0.9** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,14nm,2.4s | | | | | | |
| **ARU** | **Arti** | **26.70** | **338** | IAmb | IAmb | 15 19 33.7 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **XAN** | **Xi'an** | **27.32** | **78** | P | **P** | **15 19 32.5** | **+0.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **27.36** | **48** | P | **P** | **15 19 34.7** | **+2.2** |
| | comp=Z,2.9nm,0.9s,baz=242,slow=9.7,SNR=24 | | | | | | |
| **SONM** | **Songino Array** | **27.36** | **48** | P | **P** | **15 19 33.9** | **+1.4** |
| **ULN** | **Ulaanbaatar** | **27.78** | **48**⇓ | *e*P | **P** | **15 19 38.5** | **+2.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.78** | **48** | P | **P** | **15 19 35.7** | **-0.6** |
| ULN | | | | IAmb | IAmb | 15 19 39.3 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **BELG** | **Belogornoye** | **28.52** | **322**⇓ | *e*P | P | 15 19 48.1 | +5.5 |
| BELG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **29.34** | **64** | *e*P | **P** | **15 19 53.4** | **+3.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,6.8s | | | | | | |
| **KIRV** | **Kirov** | **31.55** | **333**⇓ | *e*P | **P** | **15 20 10.2** | **+0.9** |
| **OBN** | **Obninsk** | **35.59** | **321**⇓ | *e*P | P | 15 20 49.7 | +5.1 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **NRIK** | **Noril'sk** | **37.26** | **7** | P | **P** | **15 20 58.2** | **-0.4** |
| | comp=Z,1.0nm,0.2s,baz=173,slow=8.0,SNR=2.7 | | | | | | |
| **NRIK** | **Noril'sk** | **37.26** | **7**⇓ | *e*P | **P** | **15 20 59.5** | **+0.8** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **NRIK** | **Noril'sk** | **37.26** | **7** | IAmb | IAmb | 15 21 01.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **38.66** | **312** | P | **P** | **15 21 09.2** | **-1.5** |
| | comp=Z,0.5nm,0.5s,baz=81,slow=7.2,SNR=5.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **38.66** | **312** | P | **P** | **15 21 09.2** | **-1.5** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **38.66** | **312** | IAmb | IAmb | 15 21 15.3 | |
| | comp=Z,2.3nm,1.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **40.41** | **303** | P | **P** | **15 21 26.0** | **+0.4** |
| | comp=Z,1.2nm,0.4s,baz=87,slow=0.7,SNR=3.7 | | | | | | |
| **MLR** | **Muntele Rosu** | **40.41** | **303** | P | **P** | **15 21 26.0** | **+0.4** |
| MLR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **MLR** | **Muntele Rosu** | **40.41** | **303** | IAmb | IAmb | 15 21 53.4 | |
| | comp=Z,8.6nm,1.3s | | | | | | |
| **IDI** | **Anoyia** | **42.22** | **288** | P | **P** | **15 21 38.5** | **-1.9** |
| | comp=Z,1.6nm,0.3s,baz=63,slow=11,SNR=6.3 | | | | | | |
| **FINES** | **FINESS Array B** | **43.01** | **327** | P | **P** | **15 21 46.2** | **-0.2** |
| | comp=Z,4.1nm,1.1s,baz=116,slow=13,SNR=3.3 | | | | | | |
| **KLR** | **Kul'dur** | **44.08** | **51**⇑ | *e*P | **P** | **15 21 55.1** | **-0.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **44.73** | **33** | *d iP* | **P** | **15 22 01.2** | **+1.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **45.48** | **74** | LR | LR | 15 44 45.6 | |
| | comp=Z,85nm,18.1s,baz=302,slow=41 | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.28** | **338** | P | **P** | **15 22 12.8** | **+0.3** |
| | comp=Z,5.2nm,0.8s,baz=74,slow=4.3,SNR=7.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.28** | **338** | P | **P** | **15 22 13.2** | **+0.7** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,15nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.28** | **338** | P | **P** | **15 22 13.2** | **+0.7** |
| **TIXI** | **Tiksi** | **47.80** | **20** | P | **P** | **15 22 24.5** | **+0.3** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **TIXI** | **Tiksi** | **47.80** | **20** | P | **P** | **15 22 24.5** | **+0.3** |
| TIXI | | | | IAmb | IAmb | 15 22 38.1 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **HFS** | **Hagfors** | **48.68** | **324** | P | **P** | **15 22 31.0** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=142,slow=15,SNR=2.5 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.80** | **235** | LR | LR | 15 45 13.5 | |
| | comp=Z,68nm,18.1s,baz=252,slow=38 | | | | | | |
| **NB201** | **NORSAR Array S** | **49.93** | **325** | P | **P** | **15 22 40.8** | **0.0** |
| **NOA** | **NORSAR Array B** | **49.97** | **325** | P | **P** | **15 22 40.2** | **-0.9** |
| | comp=Z,1.5nm,0.3s,baz=93,slow=7.6,SNR=3.7 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **52.17** | **347** | P | **P** | **15 22 55.3** | **-2.1** |
| | comp=Z,20nm,1.0s,baz=21,slow=17,SNR=4.0 | | | | | | |
| **MA2** | **Magadan** | **54.78** | **37**⇓ | *e*P | **P** | **15 23 18.4** | **+1.6** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | |
| **SEY** | **Seymchan** | **55.26** | **33**⇓ | *e*P | **P** | **15 23 22.0** | **+1.9** |
| **BILL** | **Bilibino** | **60.17** | **26** | *e*P | **P** | **15 23 55.9** | **+1.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **60.17** | **26** | P | **P** | **15 23 56.2** | **+1.7** |
| **TORD** | **Tordi Ar. Bea** | **70.05** | **273** | P | **P** | **15 24 58.3** | **-1.3** |
| | comp=Z,0.5nm,0.6s,baz=61,slow=5.9,SNR=4.4 | | | | | | |
| **TORD** | **Tordi Ar. Bea** | **70.05** | **273** | IAmb | IAmb | 15 25 06.0 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **74.44** | **19** | P | **P** | **15 25 25.7** | **+0.7** |
| **BMAR** | **Burnt Mountain** | **75.57** | **15** | P | **P** | **15 25 33.0** | **+1.4** |
| **J20K** | **Nowinta River** | **75.68** | **20** | P | **P** | **15 25 33.5** | **+1.3** |
| J20K | | | | IAmb | IAmb | 15 25 33.5 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **MLY** | **Manley** | **75.99** | **19** | P | **P** | **15 25 34.5** | **+0.5** |
| MLY | | | | IAmb | IAmb | 15 25 43.1 | |
| | comp=Z,4.5nm,1.3s | | | | | | |
| **H24K** | **Noodor Dome** | **76.09** | **17** | P | **P** | **15 25 36.0** | **+1.4** |
| H24K | | | | IAmb | IAmb | 15 25 37.8 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **76.33** | **125** | P | **P** | **15 25 35.9** | **-0.7** |
| | comp=Z,0.6nm,0.8s,baz=328,slow=5.7,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.33** | **125** | *i* P | P | 15 25 42.2 | +5.7 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **76.78** | **18** | P | **P** | **15 25 39.4** | **+1.0** |
| **CAST** | **Castle Rocks** | **76.85** | **20** | P | **P** | **15 25 40.1** | **+1.2** |
| **INK** | **Inuvik** | **76.90** | **11** | P | **P** | **15 25 39.5** | **+0.5** |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **INK** | **Inuvik** | **76.90** | **11** | P | **P** | **15 25 39.5** | **+0.5** |
| INK | | | | IAmb | IAmb | 15 25 47.2 | |
| | comp=Z,3.9nm,1.3s | | | | | | |
| **IL31** | | **77.20** | **17** | P | **P** | **15 25 41.1** | **+0.4** |
| **ILAR** | **Eielson Array** | **77.20** | **17** | P | **P** | **15 25 41.0** | **+0.2** |
| | comp=Z,1.9nm,1.1s,baz=305,slow=4.8,SNR=9.4 | | | | | | |
| **ILAR** | **Eielson Array** | **77.20** | **17** | P | **P** | **15 25 41.3** | **+0.5** |
| **ILAR** | **Eielson Array** | **77.20** | **17** | P | **P** | **15 25 41.3** | **+0.5** |
| **J26L** | **Joseph Creek** | **78.24** | **16** | P | **P** | **15 25 47.0** | **+0.3** |
| J26L | | | | IAmb | IAmb | 15 25 48.2 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **78.56** | **128** | P | **P** | **15 25 49.1** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=303,slow=7.1,SNR=1.9 | | | | | | |
| **SCRK** | **Sand Creek** | **78.58** | **17** | P | **P** | **15 25 49.1** | **+0.5** |
| SCRK | | | | IAmb | IAmb | 15 26 09.9 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **DAWY** | **Dawson** | **79.57** | **15** | P | **P** | **15 25 54.6** | **+0.7** |
| DAWY | | | | IAmb | IAmb | 15 25 54.9 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **79.87** | **17** | P | **P** | **15 25 56.8** | **+1.1** |
| **BCAR** | **Beaver Creek A** | **79.88** | **17** | P | **P** | **15 25 56.6** | **+0.9** |
| **YKA** | **Yellowknife Ar** | **84.76** | **5** | P | **P** | **15 26 21.2** | **+0.1** |
| | comp=Z,1.6nm,0.9s,baz=344,slow=5.0,SNR=19 | | | | | | |

*IDC **09** 15:29:46.2±1.9, 12°.19N×86°.66W, h0km, mb3.3/4, mb1 3.8/6, mb1mx3.6/44, mbtmp3.4/6, ML3.1/2, Error ellipse: s-maj=92.1km s-min=26.8km az=47.0*

*INET **09** 15:29:54.1±0.3, 11°.77N×87°.14W, h15km, MW3.8*

**ISC 09 15:29:49.8±1.2, 11°.4N±0°.1×87°.2W±0°.1, h49km, n9, σ0s88/10, mb3.3/4, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNGN** | **Cerro Negro** | **1.18** | **26** | *e*P | **Pn** | **15 30 10.8** | **+0.8** |
| **CRIN** | **San Cristobal** | **1.27** | **8** | *e*P | **Pn** | **15 30 11.1** | **-0.1** |
| **CSGN** | **Cosiguina Volc** | **1.56** | **348** | *e*P | **Pn** | **15 30 15.0** | **-0.3** |
| **JTS** | **Las Juntas de** | **2.51** | **117** | Pn | **Pn** | **15 30 28.7** | **+0.5** |
| | 1.6nm,0.3s,baz=0.6,slow=19,SNR=2.0 | | | | | | |
| JTS | | | | Sn | **Sn** | **15 30 57.8** | **+0.1** |
| | 15nm,0.3s,baz=2.7,slow=22,SNR=5.1 | | | | | | |
| **CMIG** | **Matias Romero** | **9.30** | **308** | Pn | **Pn** | **15 32 02.1** | **+0.7** |
| | 0.5nm,0.3s,baz=120,slow=20,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.49** | **322** | P | **P** | **15 34 56.9** | **+1.4** |
| | 0.6nm,0.6s,baz=134,slow=10,SNR=8.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **36.76** | **332** | P | **P** | **15 36 51.9** | **-1.0** |
| | 0.3nm,0.6s,baz=120,slow=10,SNR=3.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.60** | **319** | P | **P** | **15 37 08.7** | **+0.2** |
| | 0.1nm,0.3s,baz=131,slow=7.5,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.64** | **345** | P | **P** | **15 39 12.4** | **-0.9** |
| | 0.5nm,0.7s,baz=144,slow=7.0,SNR=9.9 | | | | | | |

*IDC **09** 15:33:54.7±4.0, 37°.73N×71°.96E, h189km±36km, mb1 2.8/7, mb1mx2.6/66, mbtmp3.5/7, Error ellipse: s-maj=52.3km s-min=24.0km az=144.0*

**ISC 09 15:33:52.2±2.2, 37°.6N±0°.2×72°.0E±0°.1, h150km, n9, σ1s49/12, 1C-3D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.43** | **20** | P | **Pn** | **15 35 12.0** | **+0.6** |
| | 1.9nm,0.3s,baz=171,slow=6.4,SNR=37 | | | | | | |
| AAK | | | | S | **Sn** | **15 36 14.0** | **+0.6** |
| | 1.8nm,0.3s,baz=323,slow=22,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **5.43** | **20** | ⇑Pn | **Pn** | **15 35 12.4** | **+0.9** |
| | 3.9nm,0.5s | | | | | | |
| AAK | | | | ⇓Sn | **Sn** | **15 36 14.1** | **+0.8** |
| | 6.3nm,0.7s | | | | | | |
| **KK09** | **Karatay Array** | **5.68** | **349** | ⇓Pn | **Pn** | **15 35 15.6** | **+1.0** |
| | 2.4nm,0.5s,baz=151,slow=13 | | | | | | |
| KK09 | | | | ⇓Sn | **Sn** | **15 36 18.9** | **-0.1** |
| | 3.3nm,0.3s,baz=158,slow=23 | | | | | | |
| **GEYT** | **Alibeck** | **10.99** | **276** | P | **Pn** | **15 36 25.9** | **+0.7** |
| | 0.3nm,0.3s,baz=87,slow=26,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.98** | **36** | P | **Pn** | **15 36 39.7** | **+1.6** |
| | 0.0nm,0.3s,baz=212,slow=5.1,SNR=5.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.88** | **18** | P | **Pn** | **15 37 01.4** | **-1.0** |
| | baz=208,slow=11,SNR=1.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.52** | **356** | P | **Pn** | **15 37 22.0** | **-0.8** |
| | 0.2nm,0.3s,baz=176,slow=22,SNR=2.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.30** | **327** | P | **Pn** | **15 37 31.6** | **-0.9** |
| | 0.2nm,0.3s,baz=116,slow=13,SNR=6.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.63** | **24** | P | **P** | **15 37 54.8** | **-3.4** |
| | 0.3nm,0.3s,baz=215,slow=10,SNR=6.3 | | | | | | |

**IDC 09 15:36:02.2±819.0, 52°.98N×33°.71E, h0km, Error ellipse: s-maj=332.1km s-min=94.8km az=32.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.26** | **27** | *i* | | 16 03 10.0 | |
| | baz=210,slow=310,SNR=1.2 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.28** | **90** | *i* | | 17 09 00.0 | |
| | baz=291,slow=318,SNR=0.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.91** | **67** | *i* | | 18 39 30.0 | |
| | baz=285,slow=330,SNR=1.8 | | | | | | |

*IDC **09** 15:38:57.9±2.1, 36°.44N×96°.88W, h0km, mb3.2/2, mb1 3.4/5, mb1mx3.3/46, mbtmp3.1/5, ML3.5/3, Error ellipse: s-maj=27.8km s-min=13.7km az=105.0*

*NEIC **09** 15:38:58.3±1.5, 36°.26N±0°.02×96°.74W±0°.02, h13km±4km, Error ellipse: s-maj=3.0km s-min=2.7km az=190.0*

*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **237A** | **Washetta, Mont** | **4.32** | **169** | Pn | **Pn** | **15 40 04.7** | **+1.3** |
| 237A | | | | IAmb_Lg | | 15 41 15.5 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.34** | **214** | IAmb_Lg | | 15 41 20.6 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.51** | **353** | IAmb_Lg | | 15 41 29.7 | |
| | comp=Z,82nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **4.54** | **91** | Pn | **Pn** | **15 40 07.6** | **+1.2** |
| **T42A** | **Van Buren** | **4.62** | **79** | IAmb_Lg | | 15 41 31.1 | |
| | comp=Z,69nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **4.75** | **66** | IAmb_Lg | | 15 41 32.9 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **P40A** | **Paris** | **4.95** | **47** | IAmb_Lg | | 15 41 41.6 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.12** | **82** | Pn | **Pn** | **15 40 14.8** | **+0.3** |
| PBMO | | | | IAmb_Lg | | 15 41 43.4 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.26** | **348** | IAmb_Lg | | 15 41 58.0 | |
| | comp=Z,69nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.30** | **30** | IAmb_Lg | | 15 41 54.1 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.34** | **69** | Pn | **Pn** | **15 40 18.7** | **+1.2** |
| FVM | | | | IAmb_Lg | | 15 41 57.5 | |
| | comp=Z,45nm,0.7s | | | | | | |
| **SLM** | **Saint Louis** | **5.71** | **63** | IAmb_Lg | | 15 41 56.7 | |
| | comp=Z,54nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **6.24** | **320** | IAmb_Lg | | 15 42 32.9 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **OXF** | **Oxford** | **6.25** | **104** | IAmb_Lg | | 15 42 24.2 | |
| | comp=Z,40nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **6.28** | **25** | IAmb_Lg | | 15 42 20.6 | |
| | comp=Z,69nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.30** | **205** | IAmb_Lg | | 15 42 24.8 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **K31A** | **O'Neill** | **6.54** | **347** | IAmb_Lg | | 15 42 34.7 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **VBMS** | **Vicksburg** | **6.55** | **126** | IAmb_Lg | | 15 42 33.5 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **7.22** | **35** | IAmb_Lg | | 15 42 52.1 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **T47A** | **Sharon Grove** | **7.80** | **82** | IAmb_Lg | | 15 43 18.1 | |
| | comp=Z,53nm,1.0s | | | | | | |
| **ANMO** | **Albuquerque** | **8.01** | **263** | Pn | **Pn** | **15 40 55.6** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=40,slow=7.9,SNR=1.3 | | | | | | |
| ANMO | | | | Pg | Pb | 15 41 23.0 | +6.2 |
| | comp=Z,0.3nm,0.3s,baz=77,slow=17,SNR=3.6 | | | | | | |
| ANMO | | | | Lg | Lg | 15 43 08.9 | |
| | comp=Z,0.7nm,0.3s,baz=3.2,slow=14,SNR=5.0 | | | | | | |
| **JFWS** | **Jewell Farm** | **8.33** | **35** | IAmb_Lg | | 15 43 28.0 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.55** | **306** | IAmb_Lg | | 15 43 45.2 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **9.02** | **222** | Pn | **Pn** | **15 41 09.3** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=51,slow=13,SNR=6.2 | | | | | | |
| TXAR | | | | Sn | **Sn** | **15 42 46.4** | **-3.2** |
| | comp=Z,0.3nm,0.3s,baz=41,slow=14,SNR=1.9 | | | | | | |
| TXAR | | | | Lg | Lg | 15 43 38.5 | |
| | comp=Z,0.9nm,0.3s,baz=64,slow=15,SNR=6.0 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.58** | **2** | IAmb_Lg | | 15 44 18.1 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **TKL** | **Tuckaleechee C** | **10.54** | **89** | Lg | Lg | 15 44 22.8 | |
| | comp=Z,0.4nm,0.3s,baz=15,slow=20,SNR=4.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **11.83** | **307** | Pn | **Pn** | **15 41 45.8** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=119,slow=12,SNR=3.9 | | | | | | |
| PDAR | | | | Lg | Lg | 15 45 01.8 | |
| | comp=Z,0.1nm,0.3s,baz=112,slow=36,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.51** | **343** | P | **P** | **15 44 51.4** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=145,slow=8.9,SNR=1.8 | | | | | | |
| **ILAR** | **Eielson Array** | **41.06** | **330** | P | **P** | **15 46 42.1** | **+1.2** |
| | comp=Z,0.4nm,0.8s,baz=114,slow=6.3,SNR=3.4 | | | | | | |

**MAN 09 15:42:37.4, 15.08N×119.03E, h28km, mb4.1, ML2.9, MS2.5, 1C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCPH** | **Palayan** | **2.05** | **76** | *eP* | Pn | 15 43 11.9 | +1.8 |

*IDC **09** 15:42:45.9±1.1, 6.85S×152.80E, h0km, mb4.0/12, mb1 4.2/14, mb1mx4.1/40, mbtmp4.0/14, ML2.8/2, MS2.9/6, Ms1 2.9/6, ms1mx2.7/57, Error ellipse: s-maj=38.6km s-min=16.0km az=118.0*

*NEIC **09** 15:42:47.3±1.3, 6.72S±0.05×152.8E±0.1, h4km±3km, mb4.4/23, Error ellipse: s-maj=16.7km s-min=6.6km az=78.0*

**ISC 09 15:42:47.8±0.7, 6.73S±0.08×152.7E±0.1, h10km, n56, σ0.99/49, mb4.2/22, MS3.2/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.58** | **348** | Pn | **Pn** | **15 43 27.7** | **-2.0** |
| **PMG** | **Port Moresby** | **6.11** | **244** | Pn | **Pn** | **15 44 19.5** | **+1.3** |
| | 2.7nm,0.3s,baz=57,slow=13,SNR=11 | | | | | | |
| PMG | | | | Sn | **Sn** | **15 45 25.4** | **-2.8** |
| | 3.2nm,0.3s,baz=68,slow=19,SNR=3.9 | | | | | | |
| **PMG** | **Port Moresby** | **6.11** | **244** | | **Pn** | **15 44 19.2** | **+1.0** |
| **MANU** | **Manus Island** | **7.07** | **311** | Pn | **Pn** | **15 44 32.3** | **+0.7** |
| **HNR** | **Honiara** | **7.65** | **111** | LR | LR | 15 47 16.0 | |
| | comp=Z,72nm,22.0s,baz=308,slow=36 | | | | | | |
| **JAY** | **Jayapura** | **12.67** | **289** | LR | LR | 15 50 11.4 | |
| | comp=Z,22nm,18.6s,baz=173,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **14.68** | **205** | Pn | **Pn** | **15 46 15.1** | **-0.7** |
| | 0.1nm,0.3s,baz=36,slow=17,SNR=2.1 | | | | | | |
| CTA | | | | LR | LR | 15 50 17.7 | |
| | comp=Z,56nm,20.1s,baz=63,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.21** | **140** | P | Pn | 15 47 27.0 | +1.9 |
| | 7.5nm,1.0s,baz=271,slow=11,SNR=5.7 | | | | | | |
| DZM | | | | LR | LR | 15 52 57.3 | |
| | comp=Z,42nm,18.7s,baz=323,slow=30 | | | | | | |
| **FAKI** | **Fak Fak** | **20.73** | **280** | P | Pn | 15 47 30.2 | -1.0 |
| FAKI | | | | IAmb | IAmb | 15 47 50.0 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **GUMO** | **Guam** | **21.63** | **339** | LR | LR | 15 57 20.4 | |
| | comp=Z,14nm,18.3s,baz=205,slow=40 | | | | | | |
| **WR0** | **Warramunga Arr** | **22.00** | **232** | P | **P** | **15 47 42.5** | **0.0** |
| WR0 | | | | IAmb | IAmb | 15 48 02.0 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.01** | **232** | P | **P** | **15 47 42.6** | **0.0** |
| **MTN** | **Manton Dam** | **22.10** | **252** | P | **P** | **15 47 43.5** | **0.0** |
| MTN | | | | IAmb | IAmb | 15 48 01.1 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.13** | **232** | P | **P** | **15 47 43.8** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 15 47 49.6 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.14** | **232** | P | **P** | **15 47 43.9** | **0.0** |
| WB2 | | | | IAmb | IAmb | 15 47 50.3 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.15** | **232** | P | **P** | **15 47 43.4** | **-0.7** |
| | comp=Z,5.2nm,1.1s,baz=60,slow=9.7,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.15** | **232** | P | **P** | **15 47 43.6** | **-0.5** |
| **AS31** | **Alice Springs** | **24.70** | **225** | P | **P** | **15 48 09.7** | **+0.3** |
| **ASAR** | **Alice Springs** | **24.70** | **225** | P | **P** | **15 48 09.4** | **0.0** |
| | comp=Z,8.4nm,0.9s,baz=57,slow=9.2,SNR=78 | | | | | | |
| **ASAR** | **Alice Springs** | **24.70** | **225** | P | **P** | **15 48 08.8** | **-0.6** |
| **KNRA** | **Kununurra** | **25.09** | **247** | P | **P** | **15 48 12.5** | **-0.4** |
| **STKA** | **Stephens Creek** | **27.09** | **201** | P | **P** | **15 48 30.1** | **-0.8** |
| | comp=Z,1.3nm,0.5s,baz=9.7,slow=15,SNR=4.2 | | | | | | |
| **STKA** | **Stephens Creek** | **27.09** | **201** | P | **P** | **15 48 30.4** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **28.70** | **244** | P | **P** | **15 48 44.5** | **-1.0** |
| | comp=Z,2.7nm,0.5s,baz=51,slow=7.8,SNR=27 | | | | | | |
| **FORT** | **Forrest** | **33.26** | **221** | P | **P** | **15 49 25.8** | **+0.3** |
| **URZ** | **Urewera** | **38.39** | **148** | LR | LR | 16 04 58.2 | |
| | comp=Z,71nm,18.1s,baz=241,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **49.68** | **334** | P | **P** | **15 51 41.7** | **+1.8** |
| | comp=Z,0.6nm,0.9s,baz=142,slow=6.5,SNR=2.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.63** | **296** | P | **P** | **15 52 46.2** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=109,slow=4.6,SNR=4.4 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.76** | **3** | P | **P** | **15 52 53.4** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **59.76** | **3** | P | **P** | **15 52 53.0** | **+0.1** |
| | comp=Z,1.9nm,0.5s,baz=165,slow=6.8,SNR=12 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.76** | **3** | P | **P** | **15 52 53.5** | **+0.6** |
| **CASY** | **Casey** | **66.16** | **197** | P | **P** | **15 53 34.2** | **-1.1** |
| **SONM** | **Songino Array** | **67.90** | **328** | P | **P** | **15 53 47.8** | **+1.0** |
| | comp=Z,1.0nm,0.6s,baz=140,slow=4.9,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **67.90** | **328** | P | **P** | **15 53 45.8** | **-1.0** |
| SONM | | | | IAmb | IAmb | 15 53 51.1 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **77.93** | **27** | LR | LR | 16 24 11.5 | |
| | comp=Z,156nm,20.0s,baz=249,slow=32 | | | | | | |
| **MK31** | **Makanchi Array** | **81.71** | **319** | P | **P** | **15 55 06.8** | **+0.1** |
| **MKAR** | **Makanchi Array** | **81.71** | **319** | P | **P** | **15 55 06.4** | **-0.3** |
| | comp=Z,1.2nm,0.8s,baz=101,slow=5.3,SNR=11 | | | | | | |
| **SML** | **Sawmill** | **81.91** | **24** | P | **P** | **15 55 07.8** | **+0.3** |
| SML | | | | IAmb | IAmb | 15 55 16.8 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **82.22** | **19** | P | **P** | **15 55 10.7** | **+1.7** |
| **H21K** | **Melozitna Rive** | **82.34** | **20** | P | **P** | **15 55 10.0** | **+0.4** |
| H21K | | | | IAmb | IAmb | 15 55 14.5 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **82.53** | **23** | P | **P** | **15 55 09.5** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **82.70** | **326** | P | **P** | **15 55 12.9** | **+1.3** |
| | comp=Z,1.4nm,0.7s,baz=111,slow=6.7,SNR=6.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.70** | **326** | P | **P** | **15 55 13.3** | **+1.6** |
| **MLY** | **Manley** | **82.70** | **21** | P | **P** | **15 55 13.0** | **+1.4** |
| MLY | | | | IAmb | IAmb | 15 55 17.2 | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.25** | **180** | P | **P** | **15 55 15.6** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 15 55 18.4 | |
| | comp=Z,4.9nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.97** | **22** | P | **P** | **15 55 18.3** | **+0.3** |
| | comp=Z,1.4nm,0.9s,baz=271,slow=4.9,SNR=9.5 | | | | | | |
| **ILAR** | **Eielson Array** | **83.97** | **22** | P | **P** | **15 55 17.8** | **-0.2** |
| **H24K** | **Noodor Dome** | **84.15** | **21** | P | **P** | **15 55 19.6** | **+0.6** |
| H24K | | | | IAmb | IAmb | 15 55 32.8 | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **84.46** | **22** | P | **P** | **15 55 21.1** | **+0.5** |
| J25K | | | | IAmb | IAmb | 15 55 32.3 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **85.92** | **314** | P | **P** | **15 55 27.2** | **-1.3** |
| AAK | | | | IAmb | IAmb | 15 55 32.3 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.08** | **20** | P | **P** | **15 55 28.9** | **+0.3** |
| **KKAR** | **Karatay Array** | **88.88** | **313** | P | **P** | **15 55 42.8** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **97.16** | **28** | P | Pdif | 15 56 21.4 | +1.0 |
| | comp=Z,0.1nm,0.4s,baz=269,slow=5.4,SNR=1.3 | | | | | | |
| **GERES** | **GERESS Array B** | **125.63** | **328** | PKP | **PKPdf** | **16 01 49.2** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=104,slow=0.4,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.76** | **285** | PKPbc | **PKPbc** | **16 02 39.9** | **-1.7** |
| | comp=Z,1.1nm,0.6s,baz=53,slow=1.9,SNR=7.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.76** | **285** | | **PKPbc** | **16 02 41.1** | **-0.5** |

*IDC **09** 16:08:34.6±0.7, 51.37N×179.69E, h0km, mb4.1/18, mb1 4.3/21, mb1mx4.1/43, mbtmp4.1/21, ML4.0/2, MS3.5/19, Ms1 3.5/19, ms1mx3.3/100, Error ellipse: s-maj=25.3km s-min=12.1km az=170.0*

*MOS **09** 16:08:38.1±1.2, 51.23N×179.75E, h41km, mb4.6/18, Error ellipse: s-maj=10.0km s-min=7.6km az=94.6*

*AEIC **09** 16:08:38.2±2.2, 51.21N±0.1×179.67E±0.07, h24km±4km, Error ellipse: s-maj=15.2km s-min=6.3km az=169.0*

*NEIC **09** 16:08:40.2±2.2, 51.21N±0.10×179.72E±0.08, h35km±1km, mb4.3/113, ML4.3(AEIC), Error ellipse: s-maj=16.5km s-min=7.8km az=350.0*

**ISC 09 16:08:40.9±0.5, 51.20N±0.08×179.67E±0.04, h48km, n269, σ1.1/260, mb4.4/84, MS3.6/21, 10C-6D, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GASW** | **Gareloi Southw** | **1.09** | **57** | | **Pn** | **16 08 58.5** | **-1.3** |
| **GALAA** | **Gareloi Lava P** | **1.13** | **59** | | **Pn** | **16 08 59.3** | **-0.9** |
| **GANO** | **Gareloi North** | **1.14** | **56** | | **Pn** | **16 08 59.4** | **-1.1** |
| GANO | | | | | **Sn** | **16 09 15.2** | **+0.3** |
| **GAEA** | **Gareloi East** | **1.15** | **59** | | **Pn** | **16 08 59.7** | **-0.9** |
| **TASE** | **Tanaga Southea** | **1.57** | **65** | | **Pn** | **16 09 05.3** | **-1.1** |
| **TAFP** | **Tanaga Falls P** | **1.62** | **64** | | **Pn** | **16 09 06.2** | **-0.9** |
| TAFP | | | | | **Sn** | **16 09 27.9** | **+1.0** |
| **TAPA** | **Tanaga Point A** | **1.69** | **68** | | **Pn** | **16 09 07.0** | **-0.9** |
| **KIMD** | **Kanaga Island** | **2.02** | **73** | | **Pn** | **16 09 12.5** | **+0.1** |
| **KICM** | **Kanaga Island** | **2.09** | **69** | | **Pn** | **16 09 13.1** | **-0.2** |
| **KIKV** | **Kanaga Island** | **2.09** | **70** | | **Pn** | **16 09 13.0** | **-0.4** |
| **KIWB** | **Kanaga Island** | **2.09** | **71** | Pn | **Pn** | **16 09 12.2** | **-1.2** |
| **GSCK** | **Great Sitkin C** | **2.72** | **71** | | **Pn** | **16 09 22.3** | **+0.2** |
| **GSTD** | **Great Sitkin T** | **2.75** | **70** | | **Pn** | **16 09 21.9** | **-0.6** |
| GSTD | | | | | **Sn** | **16 09 56.8** | **+2.4** |
| **GSMY** | **Great Sitkin M** | **2.80** | **71** | | **Pn** | **16 09 23.0** | **-0.1** |
| **GSTR** | **Great Sitkin T** | **2.81** | **70** | | **Pn** | **16 09 22.1** | **-1.2** |
| **SHEM** | **Shemya Is, Ala** | **3.77** | **296** | LR | LR | 16 11 00.7 | |
| | comp=Z,763nm,20.4s,baz=132,slow=39 | | | | | | |
| **SMY** | **Shemya** | **3.77** | **296** | P | **Pn** | **16 09 36.6** | **+0.2** |
| **SMY** | **Shemya** | **3.77** | **296** | Pn | **Pn** | **16 09 36.6** | **+0.2** |
| **ATKA** | **Atka Island** | **3.95** | **73** | | **Pn** | **16 09 38.6** | **-0.2** |
| ATKA | | | | | **Sn** | **16 10 24.8** | **+1.0** |
| **KOFP** | **Korovin Flat P** | **4.02** | **72** | | **Pn** | **16 09 40.5** | **+0.6** |
| **NIKH** | **Nikolski High** | **7.29** | **71** | Pn | **Pn** | **16 10 26.0** | **+1.3** |
| **SPIA** | **Saint Paul Isl** | **8.41** | **41** | Pn | **Pn** | **16 10 40.3** | **+0.3** |
| **SPIA** | **Saint Paul Isl** | **8.41** | **41** | | **Sn** | **16 12 16.8** | **+3.4** |
| **MAPS** | **Pakushin South** | **8.58** | **67** | | **Pn** | **16 10 43.4** | **+1.0** |
| **UNV** | **Unalaska Valle** | **8.84** | **67** | Pn | **Pn** | **16 10 45.7** | **-0.1** |
| **AKUT** | **Akutan** | **9.32** | **66** | Pn | **Pn** | **16 10 53.9** | **+1.5** |
| **SDPT** | **Sand Point** | **12.58** | **63** | Pn | **Pn** | **16 11 35.8** | **-1.1** |
| **CNBA** | **Chernabura Isl** | **12.99** | **66** | Pn | **Pn** | **16 11 41.9** | **-0.7** |
| **GAMB** | **Gambell** | **13.42** | **17** | Pn | **Pn** | **16 11 49.9** | **+1.6** |
| **PETK** | **Petropavlovsk-** | **13.62** | **287** | Pn | **Pn** | **16 11 50.2** | **-0.9** |
| | baz=99,slow=16,SNR=2.2 | | | | | | |
| PETK | | | | LR | LR | 16 15 27.8 | |
| | comp=Z,46nm,21.4s,baz=96,slow=30 | | | | | | |
| **PETK** | **Petropavlovsk-** | **13.62** | **287** | | **Pn** | **16 11 49.3** | **-1.8** |
| **CHGN** | **Chignik** | **13.91** | **60** | Pn | **Pn** | **16 11 53.6** | **-1.5** |
| **CHIR** | **Chirikof Islan** | **15.37** | **63** | P | **P** | **16 12 18.0** | **-0.2** |
| **ANM** | **Nome** | **15.52** | **25** | P | **P** | **16 12 20.4** | **+0.6** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **ANM** | **Nome** | **15.52** | **25** | P | **P** | **16 12 20.4** | **+0.6** |
| **TNA** | **Tin City** | **15.75** | **19** | Pn | **Pn** | **16 12 20.2** | **+1.1** |
| TNA | | | | IAmb | IAmb | 16 12 25.3 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **SII** | **Sitkinak Islan** | **16.27** | **61** | | **Pn** | **16 12 26.5** | **+0.7** |
| **O18K** | **Koktuh Hills** | **16.56** | **49** | P | **P** | **16 12 32.4** | **+1.0** |
| O18K | | | | IAmb | IAmb | 16 12 33.6 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **SVW2** | **Sparrevohn** | **16.87** | **44** | P | **P** | **16 12 35.4** | **+0.5** |
| **Q19K** | **Cape Douglas,** | **17.04** | **53** | P | **P** | **16 12 37.8** | **+1.1** |
| **N19K** | **Bonanza Creek** | **17.25** | **46** | | **P** | **16 12 39.2** | **+0.1** |
| N19K | | | | IAmb | IAmb | 16 12 48.4 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **17.33** | **57** | P | **Pn** | **16 12 35.0** | **-4.0** |
| | comp=Z,0.8nm,0.3s,baz=264,slow=3.5,SNR=15 | | | | | | |
| **KDAK** | **Kodiak Island** | **17.33** | **57** | P | **Pn** | **16 12 35.5** | **-3.5** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,35nm,1.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **17.33** | **57** | Pn | **Pn** | **16 12 35.5** | **-3.5** |
| KDAK | | | | IAmb | IAmb | 16 13 01.5 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **TTA** | **Tatalina** | **17.55** | **39** | P | **Pn** | **16 12 42.1** | **+0.3** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **TTA** | **Tatalina** | **17.55** | **39** | | **Pn** | **16 12 42.1** | **+0.3** |
| **L19K** | **White Mountain** | **17.66** | **42** | P | **P** | **16 12 44.4** | **+0.8** |
| **M19K** | **Big River Lodg** | **17.73** | **43** | P | **P** | **16 12 44.9** | **+0.6** |
| **RSO** | **Redoubt South** | **17.92** | **48** | P | **P** | **16 12 47.1** | **+0.5** |
| **BILL** | **Bilibino** | **18.12** | **344** | *ceP* | **Pn** | **16 12 50.5** | **+1.9** |
| BILL | | | | *eS* | **Sn** | **16 16 09.9** | **+0.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,61nm,14.0s | | | | | | |
| **BILL** | **Bilibino** | **18.12** | **344** | | **Pn** | **16 12 49.5** | **+0.8** |
| **MA2** | **Magadan** | **18.30** | **308** | *eP* | **Pn** | **16 12 51.4** | **+0.5** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **18.39** | **52** | P | **P** | **16 12 50.6** | **-1.0** |
| CNPM | | | | IAmb | IAmb | 16 13 18.0 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **SPU** | **Mount Spurr** | **18.48** | **46** | P | **Pn** | **16 12 53.4** | **+0.2** |
| **K20K** | **Telida** | **18.53** | **39** | P | **Pn** | **16 12 53.6** | **0.0** |
| **BRLK** | **Bradley Lake** | **18.62** | **51** | P | **P** | **16 12 54.3** | **+0.2** |
| BRLK | | | | IAmb | IAmb | 16 13 11.2 | |
| | comp=Z,62nm,1.4s | | | | | | |
| **SEY** | **Seymchan** | **18.74** | **319** | P | **P** | **16 12 53.5** | **-1.9** |
| | comp=Z,0.4nm,0.3s,baz=122,slow=18,SNR=2.3 | | | | | | |
| **SEY** | **Seymchan** | **18.74** | **319** | *eP* | **Pn** | **16 12 57.0** | **+0.8** |
| **J20K** | **Nowinta River** | **18.91** | **37** | P | **Pn** | **16 12 57.8** | **-0.4** |
| **RDOG** | **Red Dog Mine** | **18.93** | **20** | P | **Pn** | **16 12 58.9** | **+0.4** |
| RDOG | | | | IAmb | IAmb | 16 13 05.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **PPLA** | **Purkeypile** | **19.08** | **41** | P | **Pn** | **16 13 00.7** | **+0.3** |
| **CAST** | **Castle Rocks** | **19.35** | **40** | P | **P** | **16 13 02.7** | **+0.7** |
| **O22K** | **Cooper Landing** | **19.36** | **50** | P | **Pn** | **16 13 04.3** | **+0.7** |
| **SEW** | **Seward** | **19.40** | **51** | P | **P** | **16 13 03.0** | **+0.4** |
| SEW | | | | IAmb | IAmb | 16 13 24.9 | |
| | comp=Z,49nm,1.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **19.52** | **48** | P | **P** | **16 13 04.0** | **0.0** |
| RC01 | | | | IAmb | IAmb | 16 13 24.9 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **M22K** | **Willow** | **19.55** | **46** | P | **P** | **16 13 03.5** | **-0.7** |
| M22K | | | | IAmb | IAmb | 16 13 21.7 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **CUT** | **Chulitna** | **19.71** | **44** | P | **P** | **16 13 06.4** | **+0.4** |
| CUT | | | | IAmb | IAmb | 16 13 29.4 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **KTH** | **Kantishna Hill** | **19.88** | **40** | P | **P** | **16 13 08.3** | **+0.4** |
| KTH | | | | IAmb | IAmb | 16 13 12.2 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **20.04** | **32** | P | **P** | **16 13 10.0** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **20.09** | **39** | P | **P** | **16 13 10.7** | **+0.6** |
| BPAW | | | | IAmb | IAmb | 16 13 14.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **TRF** | **Thorofare Moun** | **20.10** | **41** | P | **P** | **16 13 10.3** | **-0.1** |
| TRF | | | | IAmb | IAmb | 16 13 17.5 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **GHO** | **Glory Hole Cre** | **20.10** | **46** | P | **P** | **16 13 08.6** | **-1.7** |
| GHO | | | | IAmb | IAmb | 16 13 16.3 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **PWL** | **Port Wells** | **20.12** | **49** | P | **P** | **16 13 11.1** | **+0.6** |
| PWL | | | | IAmb | IAmb | 16 13 34.6 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **20.18** | **34** | P | **P** | **16 13 11.5** | **+0.5** |
| H21K | | | | IAmb | IAmb | 16 13 16.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **I21K** | **Tanana** | **20.22** | **35** | P | **P** | **16 13 12.1** | **+0.6** |
| I21K | | | | IAmb | IAmb | 16 13 13.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **SML** | **Sawmill** | **20.38** | **46** | P | **P** | **16 13 11.1** | **-2.2** |
| SML | | | | IAmb | IAmb | 16 13 27.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **MLY** | **Manley** | **20.61** | **37** | P | **P** | **16 13 16.4** | **+0.6** |
| MLY | | | | IAmb | IAmb | 16 13 17.2 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **20.68** | **42** | P | **P** | **16 13 16.3** | **-0.2** |
| RND | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **RND** | **Reindeer** | **20.68** | **42** | P | **P** | **16 13 16.3** | **-0.2** |
| **GLI** | **Glacier Island** | **20.71** | **49** | P | **P** | **16 13 16.4** | **-0.5** |
| GLI | | | | IAmb | IAmb | 16 13 27.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **BWN** | **Browne** | **20.72** | **39** | P | **P** | **16 13 18.2** | **+1.3** |
| BWN | | | | IAmb | IAmb | 16 13 25.4 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **20.76** | **41** | P | **P** | **16 13 17.8** | **+0.4** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **20.76** | **41** | P | **P** | **16 13 17.8** | **+0.4** |
| **SCM** | **Sheep Creek Mo** | **20.84** | **47** | P | **P** | **16 13 16.7** | **-1.6** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,32nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **20.84** | **47** | P | **P** | **16 13 16.7** | **-1.6** |
| SCM | | | | IAmb | IAmb | 16 13 36.5 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **FID** | **Port Fidalgo** | **20.98** | **50** | P | **P** | **16 13 17.3** | **-2.5** |
| FID | | | | IAmb | IAmb | 16 13 34.3 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **21.05** | **39** | P | **P** | **16 13 20.3** | **-0.2** |
| NEA2 | | | | IAmb | IAmb | 16 13 35.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **21.18** | **37** | P | **P** | **16 13 22.0** | **+0.2** |
| **EYAK** | **Cordova Ski Ar** | **21.30** | **51** | P | **P** | **16 13 24.2** | **+1.1** |
| EYAK | | | | IAmb | IAmb | 16 13 30.6 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **21.39** | **39** | P | **P** | **16 13 22.6** | **-1.5** |
| **DIV** | **Divide** | **21.40** | **49** | P | **P** | **16 13 24.1** | **-0.2** |
| DIV | | | | IAmb | IAmb | 16 13 48.7 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **KLU** | **Klutina** | **21.41** | **48** | P | **P** | **16 13 24.5** | **+0.1** |
| KLU | | | | IAmb | IAmb | 16 13 47.6 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.44** | **46** | P | **P** | **16 13 23.8** | **-0.9** |
| **MDM** | **Murphy Dome** | **21.53** | **38** | P | **P** | **16 13 24.6** | **-1.1** |
| **CCB** | **Clear Creek Bu** | **21.57** | **39** | P | **P** | **16 13 25.1** | **-0.9** |
| **COLA** | **College** | **21.65** | **38** | *eP* | **P** | **16 13 26.0** | **-0.8** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **HDA** | **Harding Lake** | **21.83** | **40** | P | **P** | **16 13 28.8** | **0.0** |
| **COLD** | **Co

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BBB** | **Bella Bella** | **31.81** | **67** | LR | LR | 16 27 04.0 | | |
| | comp=Z,90nm,18.1s,baz=306,slow=35 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.36** | **277** | P | **P** | **16 15 05.7** | **+0.2** | |
| USA0B | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.5s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.36** | **277** | P | **P** | **16 15 05.7** | **+0.2** | |
| **USRK** | **Ussuriysk Ar.** | **32.36** | **277** | P | **P** | **16 15 05.3** | **-0.2** | |
| | comp=Z,2.7nm,0.8s,baz=48,slow=11,SNR=6.3 | | | | | | | |
| USRK | | | | LR | LR | 16 31 17.0 | | |
| | comp=Z,58nm,18.3s,baz=34,slow=42 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.81** | **260** | LR | LR | 16 26 19.8 | | |
| | comp=Z,62nm,20.6s,baz=10,slow=32 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.98** | **202** | T | T | 16 50 12.1 | | |
| | baz=19,slow=75,SNR=19 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.99** | **202** | T | T | 16 50 17.7 | | |
| | baz=19,slow=75,SNR=27 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.00** | **202** | T | T | 16 50 19.0 | | |
| | baz=19,slow=75,SNR=20 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.20** | **202** | T | T | 16 51 44.2 | | |
| | baz=19,slow=76,SNR=19 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.22** | **202** | T | T | 16 51 48.7 | | |
| | baz=19,slow=76,SNR=15 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.22** | **202** | T | T | 16 51 48.8 | | |
| | baz=19,slow=76,SNR=9.8 | | | | | | | |
| **BNX** | **BinXian** | **34.46** | **282** ⇓ | P | **P** | **16 15 23.4** | **-0.4** | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,440nm,4.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.05** | **46** | P | **P** | **16 15 36.4** | **-0.8** | |
| | comp=Z,2.4nm,0.6s,baz=282,slow=8.2,SNR=36 | | | | | | | |
| YKA | | | | PcP | **PcP** | **16 18 02.9** | **+0.5** | |
| | comp=Z,0.8nm,0.7s,baz=286,slow=3.3,SNR=9.4 | | | | | | | |
| **HIA** | **Hailar** | **37.45** | **291** ⇓ | *eP* | **P** | **16 15 49.5** | **+0.1** | |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **38.68** | **270** | P | **P** | **16 16 00.2** | **+0.6** | |
| | comp=Z,2.2nm,0.8s,baz=60,slow=9.8,SNR=6.5 | | | | | | | |
| KSRS | | | | LR | LR | 16 30 58.1 | | |
| | comp=Z,34nm,21.4s,baz=60,slow=35 | | | | | | | |
| **NEW** | **Newport** | **39.85** | **69** | LR | LR | 16 32 37.8 | | |
| | comp=Z,82nm,18.1s,baz=18,slow=36 | | | | | | | |
| **NEW** | **Newport** | **39.85** | **69** | P | **P** | **16 16 09.3** | **-0.1** | |
| NEW | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| **NEW** | **Newport** | **39.85** | **69** | P | **P** | **16 16 09.3** | **-0.1** | |
| NEW | | | | IAmb | IAmb | 16 16 36.2 | | |
| | comp=Z,5.7nm,1.2s | | | | | | | |
| **RES** | **Resolute Bay** | **40.30** | **24** | P | **P** | **16 16 13.2** | **+0.4** | |
| RES | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.4s | | | | | | | |
| **RES** | **Resolute Bay** | **40.30** | **24** | P | **P** | **16 16 13.2** | **+0.4** | |
| **K05A** | **Summer Lake** | **40.43** | **78** | P | **P** | **16 16 16.0** | **+1.5** | |
| K05A | | | | IAmb | IAmb | 16 16 30.4 | | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| **I07A** | **Izee** | **40.55** | **75** | P | **P** | **16 16 15.8** | **+0.4** | |
| **EUNU** | **Eureka** | **40.71** | **15** | P | **P** | **16 16 16.7** | **+0.5** | |
| **XLT** | **XiLinHaoTe** | **42.32** | **286** | *eP* | **P** | **16 16 30.9** | **+1.0** | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,210nm,5.1s | | | | | | | |
| **HLID** | **Hailey** | **43.91** | **73** | P | **P** | **16 16 42.6** | **-0.2** | |
| HLID | | | | IAmb | IAmb | 16 16 59.1 | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **BCYI** | **Bear Canyon** | **44.10** | **72** | P | **P** | **16 16 44.1** | **-0.3** | |
| **MCMT** | **McKenzie Canyo** | **44.15** | **71** | P | **P** | **16 16 44.5** | **-0.3** | |
| **BOZ** | **Bozeman (W)** | **44.45** | **69** | P | **P** | **16 16 46.6** | **-0.5** | |
| BOZ | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **44.45** | **69** | P | **P** | **16 16 46.6** | **-0.5** | |
| BOZ | | | | IAmb | IAmb | 16 17 02.3 | | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.53** | **82** | P | **P** | **16 16 47.4** | **-0.5** | |
| | comp=Z,0.3nm,0.5s,baz=297,slow=6.0,SNR=1.8 | | | | | | | |
| **YHH** | **Holmes Hill** | **45.35** | **70** | P | **P** | **16 16 54.4** | **-0.1** | |
| **ULN** | **Ulaanbaatar** | **45.47** | **296** | *ce*P | **P** | **16 16 55.7** | **+0.5** | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **45.47** | **296** | P | **P** | **16 16 54.7** | **-0.5** | |
| ULN | | | | IAmb | IAmb | 16 16 56.9 | | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **H17A** | **Grant Village** | **45.73** | **70** | P | **P** | **16 16 58.0** | **+0.6** | |
| H17A | | | | IAmb | IAmb | 16 17 14.5 | | |
| | comp=Z,8.2nm,1.0s | | | | | | | |
| **LKWY** | **Lake** | **45.74** | **70** | P | **P** | **16 16 58.3** | **+0.8** | |
| LKWY | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **LKWY** | **Lake** | **45.74** | **70** | P | **P** | **16 16 58.3** | **+0.8** | |
| LKWY | | | | IAmb | IAmb | 16 17 14.0 | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **45.84** | **70** | P | **P** | **16 16 59.3** | **+1.1** | |
| **SONM** | **Songino Array** | **45.86** | **296** | P | **P** | **16 16 59.2** | **+0.9** | |
| | comp=Z,2.7nm,0.9s,baz=61,slow=8.2,SNR=21 | | | | | | | |
| SONM | | | | PcP | **PcP** | **16 18 35.1** | **+0.4** | |
| | comp=Z,1.0nm,0.7s,baz=89,slow=2.4,SNR=5.3 | | | | | | | |
| SONM | | | | LR | LR | 16 36 16.3 | | |
| | comp=Z,142nm,20.9s,baz=55,slow=36 | | | | | | | |
| **SONM** | **Songino Array** | **45.86** | **296** | P | **P** | **16 16 58.9** | **+0.6** | |
| SONM | | | | IAmb | IAmb | 16 16 59.7 | | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **RLMT** | **Red Lodge** | **46.09** | **68** | P | **P** | **16 17 01.3** | **+1.1** | |
| RLMT | | | | IAmb | IAmb | 16 17 01.4 | | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| **ZAK** | **Zakamensk** | **46.22** | **300** | *eP* | **P** | **16 17 01.3** | **+0.3** | |
| ZAK | | | | *e* | | 16 18 35.5 | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **TIA** | **Tai'an** | **46.23** | **276** ⇓ | P | **P** | **16 17 02.2** | **+1.1** | |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **46.27** | **80** | P | **P** | **16 17 01.8** | **+0.2** | |
| R11A | | | | IAmb | IAmb | 16 17 04.9 | | |
| | comp=Z,2.9nm,1.1s | | | | | | | |
| **FCC** | **Fort Churchill** | **46.78** | **46** | P | **P** | **16 17 03.6** | **-1.4** | |
| FCC | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **FCC** | **Fort Churchill** | **46.78** | **46** | P | **P** | **16 17 03.6** | **-1.4** | |
| FCC | | | | IAmb | IAmb | 16 17 09.5 | | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.81** | **285** | *eP* | **P** | **16 17 05.7** | **0.0** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,170nm,8.4s | | | | | | | |
| **HNS** | **HongShan** | **46.99** | **279** ⇑ | P | **P** | **16 17 08.4** | **+1.4** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **BW06** | **Boulder Array** | **47.28** | **71** | P | **P** | **16 17 09.1** | **-0.5** | |
| **PD31** | **Pinedale Array** | **47.28** | **71** | P | **P** | **16 17 09.3** | **-0.2** | |
| **PDAR** | **Pinedale Array** | **47.28** | **71** | P | **P** | **16 17 09.3** | **-0.2** | |
| | comp=Z,4.3nm,0.7s,baz=304,slow=3.9,SNR=44 | | | | | | | |
| PDAR | | | | LR | LR | 16 34 48.0 | | |
| | comp=Z,90nm,18.6s,baz=63,slow=33 | | | | | | | |
| **PDAR** | **Pinedale Array** | **47.28** | **71** | P | **P** | **16 17 09.0** | **-0.5** | |
| **LYN** | **LuoYang** | **50.20** | **278** ⇑ | P | **P** | **16 17 32.7** | **+1.0** | |
| LYN | | | | LR | LR | | | |
| | comp=E,180nm,14.7s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **50.42** | **75** | P | **P** | **16 17 33.5** | **-0.1** | |
| **SPITS** | **Spitsbergen Ar** | **50.48** | **356** | P | **P** | **16 17 32.5** | **-0.8** | |
| SPITS | | | | pmax | pmax | | | |
| | comp=Z,78nm,1.5s | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **50.48** | **356** | P | **P** | **16 17 32.2** | **-1.1** | |
| **PV13** | **Radium Mtn., P** | **50.54** | **76** | P | **P** | **16 17 34.7** | **+0.1** | |
| **XAN** | **Xi'an** | **52.74** | **280** | P | **P** | **16 17 51.0** | **+0.2** | |
| XAN | | | | pP | pP | 16 17 59.3 | -4.4 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.45** | **313** | P | **P** | **16 17 55.0** | **-0.7** | |
| **ZALV** | **Zalesovo Beam** | **53.45** | **313** | P | **P** | **16 17 54.3** | **-1.3** | |
| | comp=Z,1.1nm,0.6s,baz=53,slow=7.6,SNR=5.5 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **16 19 03.0** | **+0.9** | |
| | comp=Z,1.7nm,0.7s,baz=43,slow=4.6,SNR=5.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.45** | **313** | P | **P** | **16 17 55.0** | **-0.6** | |
| **ANMO** | **Albuquerque** | **54.07** | **77** | LR | LR | 16 41 49.5 | | |
| | comp=Z,49nm,18.4s,baz=50,slow=37 | | | | | | | |
| **LZH** | **Lanzhou** | **54.51** | **285** | *eP* | **P** | **16 18 04.5** | **+0.7** | |
| LZH | | | | pP | pP | 16 18 16.0 | -1.0 | |
| LZH | | | | sP | sP | 16 18 19.3 | -3.2 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,200nm,14.5s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,220nm,16.4s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,170nm,17.8s | | | | | | | |
| **GTA** | **Gaotai** | **54.73** | **291** | *e*P | **P** | **16 18 06.3** | **+0.9** | |
| GTA | | | | sP | sP | 16 18 24.0 | -0.1 | |
| GTA | | | | pmax | pmax | | | |
| | comp=E,6.0nm,1.0s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,52nm,5.8s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=N,190nm,14.5s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=E,130nm,16.4s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,110nm,17.8s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **54.89** | **308** ⇑ | *e*P | **P** | **16 18 06.6** | **+0.2** | |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.10** | **350** | P | **P** | **16 18 27.3** | **-1.4** | |
| | comp=Z,3.2nm,0.8s,baz=22,slow=8.1,SNR=7.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.10** | **350** | P | **P** | **16 18 27.3** | **-1.4** | |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **KURK** | **Kurchatov** | **58.44** | **313** | *ce*P | **P** | **16 18 31.5** | **+0.1** | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **58.44** | **313** | P | **P** | **16 18 31.2** | **-0.2** | |
| **WMQ** | **Urumqi** | **58.62** | **302** | *e*P | **P** | **16 18 33.3** | **+0.4** | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,180nm,4.9s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=N,420nm,29.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=E,470nm,28.9s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,140nm,26.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.38** | **308** | P | **P** | **16 18 37.4** | **-0.6** | |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.38** | **308** | P | **P** | **16 18 37.4** | **-0.6** | |
| MK31 | | | | IAmb | IAmb | 16 18 38.8 | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.38** | **308** | P | **P** | **16 18 37.6** | **-0.4** | |
| | comp=Z,1.3nm,0.5s,baz=48,slow=5.9,SNR=34 | | | | | | | |
| **MAKZ** | **Makanchi** | **59.53** | **308** | P | **P** | **16 18 38.4** | **-0.6** | |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **MAKZ** | **Makanchi** | **59.53** | **308** | P | **P** | **16 18 38.4** | **-0.6** | |
| **TXAR** | **Lajitas Array** | **59.63** | **80** | P | **P** | **16 18 42.0** | **+1.9** | |
| | comp=Z,0.6nm,0.6s,baz=298,slow=4.7,SNR=7.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **59.63** | **80** | P | **P** | **16 18 42.0** | **+1.9** | |
| **TXAR** | **Lajitas Array** | **59.63** | **80** | P | **P** | **16 18 40.8** | **+0.7** | |
| **GOMU** | **GeErMu** | **59.82** | **291** | P | **P** | **16 18 39.8** | **-1.8** | |
| GOMU | | | | pP | pP | 16 18 55.6 | +0.6 | |
| GOMU | | | | sP | sP | 16 19 02.7 | +2.3 | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **BRVK** | **Borovoye** | **60.42** | **319** ⇑ | *e*P | **P** | **16 18 46.3** | **+1.4** | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| **BRVK** | **Borovoye** | **60.42** | **319** | P | **P** | **16 18 45.4** | **+0.4** | |
| BRVK | | | | IAmb | IAmb | 16 18 46.4 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **62.42** | **279** | P | **P** | **16 18 59.3** | **+0.3** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.2s | | | | | | | |
| **SADO** | **Sadowa** | **62.70** | **52** | LR | LR | 16 45 48.5 | | |
| | comp=Z,100nm,19.0s,baz=48,slow=36 | | | | | | | |
| **HNR** | **Honiara** | **62.75** | **202** | LR | LR | 16 39 38.5 | | |
| | comp=Z,36nm,21.9s,baz=18,slow=30 | | | | | | | |
| **KIRV** | **Kirov** | **63.31** | **333** | LR | LR | 16 48 39.7 | | |
| | comp=Z,104nm,19.2s,baz=315,slow=38 | | | | | | | |
| **TKM2** | **Tokmak 2** | **65.48** | **308** | P | **P** | **16 19 20.3** | **+1.3** | |
| | SNR=6.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **65.74** | **346** | P | **P** | **16 19 18.3** | **-1.8** | |
| **FINES** | **FINESS Array B** | **65.74** | **346** | P | **P** | **16 19 18.3** | **-1.8** | |
| **USP** | **Ospenovka** | **65.76** | **309** | P | **P** | **16 19 22.0** | **+1.5** | |
| | SNR=16 | | | | | | | |
| **KBK** | **Karagaybulak** | **65.99** | **309** | P | **P** | **16 19 23.4** | **+1.1** | |
| | SNR=6.1 | | | | | | | |
| **AAK** | **Ala-Archa** | **66.23** | **309** | P | **P** | **16 19 25.1** | **+1.3** | |
| | SNR=7.6 | | | | | | | |
| **AAK** | **Ala-Archa** | **66.23** | **309** | *c* | *i*P | **P** | **16 19 24.5** | **+0.7** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **66.23** | **309** | P | **P** | **16 19 24.1** | **+0.3** | |
| **EKS2** | **Erkin-Say** | **66.56** | **309** | P | **P** | **16 19 27.4** | **+1.6** | |
| | SNR=9.4 | | | | | | | |
| **AML** | **Almayashu** | **67.00** | **309** | P | **P** | **16 19 30.1** | **+1.1** | |
| | SNR=11 | | | | | | | |
| **NC204** | **NORSAR Array S** | **67.52** | **354** | P | **P** | **16 19 30.7** | **-0.8** | |
| **NC405** | **NORSAR Array S** | **67.62** | **354** | P | **P** | **16 19 30.4** | **-1.7** | |
| **NB201** | **NORSAR Array S** | **67.71** | **354** | P | **P** | **16 19 31.8** | **-0.9** | |
| **NB2** | **NORSAR Subarra** | **67.73** | **354** | P | **P** | **16 19 31.9** | **-0.9** | |
| | comp=Z,1.7nm,0.6s,baz=6.9,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.73** | **354** | P | **P** | **16 19 32.1** | **-0.7** | |
| | comp=Z,3.6nm,0.7s,baz=7.7,slow=6.3,SNR=10.0 | | | | | | | |
| **KKAR** | **Karatay Array** | **67.79** | **312** | P | **P** | **16 19 33.7** | **+0.2** | |
| **KKAR** | **Karatay Array** | **67.79** | **312** | P | **P** | **16 19 33.7** | **+0.2** | |
| **KSH** | **Kashi** | **67.83** | **306** | P | **P** | **16 19 38.4** | **+4.5** | |
| KSH | | | | sP | sP | 16 19 52.8 | +0.1 | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **WSPT** | **Westport, CT** | **68.23** | **51** | P | **P** | **16 19 35.2** | **-1.0** | |
| **JSC** | **Jenkinsville** | **69.29** | **61** | P | **P** | **16 19 41.4** | **-1.5** | |
| JSC | | | | pmax | pmax | | | |
| | comp=Z,194nm,0.9s | | | | | | | |
| **JSC** | **Jenkinsville** | **69.29** | **61** | P | **P** | **16 19 41.4** | **-1.5** | |
| **CMAR** | **Chiang Mai Arr** | **70.07** | **275** | P | **P** | **16 19 48.5** | **+0.5** | |
| | comp=Z,2.2nm,0.8s,baz=25,slow=6.9,SNR=24 | | | | | | | |
| CMAR | | | | LR | LR | 16 53 47.4 | | |
| | comp=Z,13nm,18.8s,baz=70,slow=39 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.07** | **275** | P | **P** | **16 19 48.3** | **+0.3** | |
| **TAPN** | **Taplejung** | **70.36** | **289** | *e*P | **P** | **16 19 51.0** | **+1.0** | |
| **ODAN** | **Odare** | **70.92** | **289** | *e*P | **P** | **16 19 54.0** | **+0.7** | |
| **GUN** | **Gumba** | **71.03** | **291** | *e*P | **P** | **16 19 55.3** | **+1.2** | |
| | comp=Z,49nm,1.0s | | | | | | | |
| **JIRN** | **Jiri** | **71.03** | **291** | *e*P | **P** | **16 19 55.5** | **+1.4** | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **RAMN** | **Ramite** | **71.32** | **290** | *e*P | **P** | **16 19 56.4** | **+0.7** | |
| **KKN** | **Kakani** | **71.47** | **291** | *e*P | **P** | **16 19 57.7** | **+1.1** | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **71.56** | **291** | *e*P | **P** | **16 19 57.8** | **+0.5** | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **PKIN** | **Phulchoki** | **71.56** | **291** | *e*P | **P** | **16 19 57.7** | **+0.5** | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **GKN** | **Gorkha** | **71.68** | **292** | *e*P | **P** | **16 19 58.7** | **+0.9** | |
| | comp=Z,23nm,1.0s | | | | | | | |
| **DMN** | **Daman** | **71.70** | **291** | *e*P | **P** | **16 19 59.4** | **+1.3** | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **CHGR** | **Chuyangaron** | **71.88** | **310** | P | **P** | **16 19 58.9** | **+0.1** | |
| CHGR | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.0s | | | | | | | |
| **CHGR** | **Chuyangaron** | **71.88** | **310** | P | **P** | **16 19 58.9** | **+0.1** | |
| **DANN** | **Dangsing** | **71.94** | **293** | *e*P | **P** | **16 20 00.3** | **+0.8** | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **KOLN** | **Koldanda** | **72.46** | **292** | *e*P | **P** | **16 20 03.3** | **+0.7** | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **PYUN** | **Piuthan** | **72.57** | **293** | *e*P | **P** | **16 20 04.0** | **+0.8** | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.41** | **341** | P | **P** | **16 20 18.0** | **-1.1** | |
| | comp=Z,0.4nm,0.3s,baz=23,slow=6.0,SNR=5.3 | | | | | | | |
| AKASG | | | | LR | LR | 16 57 03.6 | | |
| | comp=Z,62nm,18.6s,baz=328,slow=39 | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.41** | **341** | P | **P** | **16 20 18.0** | **-1.1** | |
| **BUR08** | **Bucovina Ar. S** | **79.12** | **343** | P | **P** | **16 20 40.3** | **+0.2** | |
| BUR08 | | | | IAmb | IAmb | 16 20 41.0 | | |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| **BURAR** | **Bucovina Array** | **79.14** | **343** | P | **P** | **16 20 40.1** | **-0.2** | |
| BURAR | | | | IAmb | IAmb | 16 20 41.3 | | |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **84.71** | **221** | P | **P** | **16 21 09.2** | **-0.3** | |
| | comp=Z,0.8nm,0.7s,baz=33,slow=5.0,SNR=8.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **84.71** | **221** | P | **P** | **16 21 10.0** | **+0.5** | |
| **ASAR** | **Alice Springs** | **84.71** | **221** | P | **P** | **16 21 10.0** | **+0.5** | |
| **H03N2** | **Juan Fernandez** | **122.03** | **105** | T | T | 18 41 41.3 | | |
| | baz=301,slow=77,SNR=4.7 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **122.04** | **105** | T | T | 18 41 44.4 | | |
| | baz=301,slow=77,SNR=5.9 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **122.04** | **105** | T | T | 18 41 37.5 | | |
| | baz=301,slow=77,SNR=4.8 | | | | | | | |
| **BOSA** | **Boshof** | **150.37** | **310** | PKPbc | **PKiKP** | **16 28 27.6** | **0.0** | |
| | comp=Z,3.5nm,0.8s,baz=0.7,slow=2.6,SNR=7.4 | | | | | | | |

*IDC **09** 16:34:22.5±0.9,8.53N×71.45W, h0km, mb3.6/5, mb1 3.9/7, mb1mx3.6/35, mbtmp3.7/7, ML2.6/2, MS3.4/1, Ms1 3.4/1, ms1mx2.6/63, Error ellipse: s-maj=24.2km s-min=9.9km az=158.0*

*FUNV **09** 16:34:25.6, 8.49N×71.42W, h5km, MW3.8*

**ISC 09 16:34:24.1±1.4, 8.53N±0.03×71.41W±0.03, h8km±10km, n52, σ1°62/59, mb3.7/5, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SOCV** | **Socops** | **0.60** | **114** | *eP* | | **Pg** | **16 34 35.3** | **-0.4** |
| **SDV** | **Santo Domingo** | **0.84** | **65** | Pg | | **Pg** | **16 34 40.2** | **-0.1** |
| | 37nm,0.3s,baz=225,slow=6.6,SNR=88 | | | | | | | |
| SDV | | | | Lg | | Lg | 16 34 51.0 | |
| | 165nm,0.3s,baz=2.1,slow=6.1,SNR=36 | | | | | | | |
| **SDV** | **Santo Domingo** | **0.84** | **65** | *eP* | | **Pg** | **16 34 40.4** | **0.0** |
| **CAPV** | **Capacho** | **1.11** | **234** | *eP* | | **Pb** | **16 34 45.6** | **-0.2** |
| CAPV | | | | *eS* | | **Sb** | **16 35 00.4** | **-0.2** |
| **PAMC** | **Pamplona, Colo** | **1.74** | **227** | *eP* | | **Pg** | **16 34 57.1** | **-0.5** |
| **MCQV** | **Machiques** | **1.87** | **324** | *eP* | | **Pb** | **16 34 58.1** | **-0.5** |
| MCQV | | | | *eS* | | **Sb** | **16 35 22.6** | **+0.4** |
| **OCAC** | **Ocana** | **1.91** | **261** | *eP* | | **Pb** | **16 34 58.7** | **-0.6** |
| **CURV** | **Curarigua** | **2.05** | **44** | *eS* | | **Sn** | **16 35 26.6** | **+1.8** |
| **TAMC** | **Tame, Arauca** | **2.12** | **190** | *eP* | | **Pb** | **16 35 02.9** | **+0.1** |
| **LL6C** | **La Loma 6 Bece** | **2.19** | **303** | *eP* | | **Pn** | **16 35 02.2** | **+1.3** |
| **LL1C** | **La Loma 1 Cana** | **2.34** | **295** | *eP* | | **Pg** | **16 35 08.6** | **-0.5** |
| **ELOV** | **Elorza** | **2.44** | **128** | *eP* | | **Pn** | **16 35 05.5** | **+1.2** |
| ELOV | | | | *eS* | | **Sn** | **16 35 33.7** | **-0.7** |
| **DABV** | **Dabajuro** | **2.49** | **18** | *eP* | | **Pn** | **16 35 06.7** | **+1.7** |
| **DABV** | **Dabajuro** | **2.49** | **18** | *eP* | | **Pn** | **16 35 06.5** | **+1.5** |
| DABV | | | | *eS* | | **Sn** | **16 35 37.2** | **+1.5** |
| **BARC** | **Barichara** | **2.61** | **222** | *eP* | | **Pb** | **16 35 09.9** | **-1.4** |
| **SIQV** | **Siquisique** | **2.63** | **37** | *eP* | | **Pn** | **16 35 09.2** | **+2.3** |
| SIQV | | | | *eS* | | **Sn** | **16 35 39.8** | **+0.7** |
| **SMLC** | **San Martn de** | **2.65** | **276** | *eP* | | **Pn** | **16 35 08.2** | **+1.1** |
| **CRJC** | **Cerrejon, Guaj** | **2.87** | **330** | *eP* | | **Pn** | **16 35 10.7** | **+0.5** |
| **RUSC** | **La Rusia** | **3.11** | **212** | *eP* | | **Pn** | **16 35 16.6** | **+2.7** |
| **MAPV** | **Macapo** | **3.19** | **66** | *eP* | | **Pn** | **16 35 16.6** | **+2.0** |
| MAPV | | | | *eS* | | **Sn** | **16 35 52.2** | **-0.7** |
| **URIC** | **Uribia, Colomb** | **3.20** | **350** | *eP* | | **Pn** | **16 35 18.0** | **+3.3** |
| **BAUV** | **El Baul** | **3.35** | **83** | *eP* | | **Pn** | **16 35 18.1** | **+1.2** |
| BAUV | | | | *eS* | | **Sn** | **16 35 56.6** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **3.57** | **253** | *eP* | | **Pn** | **16 35 21.5** | **+1.6** |
| **PTBC** | **PUERTO BERRIO,** | **3.61** | **237** | *eP* | | **Pn** | **16 35 21.3** | **+0.9** |
| **MONV** | **Montecano** | **3.68** | **22** | *eP* | | **Pn** | **16 35 22.4** | **+1.0** |
| MONV | | | | *eS* | | **Sn** | **16 36 04.0** | **-1.0** |
| **SMRC** | **Santa Marta, M** | **3.81** | **314** | *eP* | | **Pn** | **16 35 22.6** | **-0.6** |
| **SPBC** | **San Pablo de B** | **3.90** | **223** | *eP* | | **Pn** | **16 35 27.4** | **+3.0** |
| **SJCC** | **San Jacinto, C** | **3.96** | **290** | *eP* | | **Pn** | **16 35 27.9** | **+2.6** |
| **BENV** | **Beln** | **4.02** | **69** | *eP* | | **Pn** | **16 35 27.2** | **+1.1** |
| BENV | | | | *eS* | | **Sn** | **16 36 13.3** | **-0.2** |
| **UREC** | **San Jos de Ur** | **4.16** | **260** | *eP* | | **Pn** | **16 35 30.4** | **+2.4** |
| **MOTC** | **Monteria, Cord** | **4.21** | **274** | *eP* | | **Pn** | **16 35 30.9** | **+2.2** |
| **CHIC** | **Chingaza** | **4.51** | **211** | *eP* | | **Pn** | **16 35 35.5** | **+2.3** |
| **NORC** | **Norcasia** | **4.53** | **230** | *eP* | | **Pn** | **16 35 34.8** | **+1.7** |
| **ROSC** | **El Rosal** | **4.67** | **218** | Pn | | **Pn** | **16 35 35.6** | **+0.3** |
| | 1.6nm,0.3s,baz=90,slow=20,SNR=1.5 | | | | | | | |
| **HELC** | **Santa Helena** | **4.70** | **241** | *eP* | | **Pn** | **16 35 38.0** | **+2.2** |
| **VILC** | **Villavicencio,** | **4.95** | **207** | *eP* | | **Pn** | **16 35 40.9** | **+2.0** |
| **DBBC** | **Dabeiba** | **4.99** | **253** | *eP* | | **Pn** | 16 35 31.5 | -7.9 |
| **GUY2C** | **Guyana, Caldas** | **5.12** | **230** | *eP* | | **Pn** | **16 35 44.3** | **+2.6** |
| **CBOC** | **Ciudad Bolivar** | **5.28** | **240** | *eP* | | **Pn** | **16 35 47.1** | **+3.6** |
| **ANIL** | **Santa Ana** | **5.65** | **225** | *eP* | | **Pn** | **16 35 51.4** | **+2.7** |
| **ORTC** | **Ortega, Tolima** | **5.97** | **220** | *eP* | | **Pn** | **16 35 55.2** | **+2.2** |
| **MACC** | **Macarena, Meta** | **6.79** | **201** | *eP* | | **Pn** | **16 36 03.5** | **-0.7** |
| **PCRV** | **Puerto La Cruz** | **6.88** | **76** | Pn | | **Pn** | **16 36 07.1** | **+1.6** |
| | 0.8nm,0.3s,baz=262,slow=18,SNR=1.9 | | | | | | | |
| **MARP** | **Paez Belalcaza** | **7.24** | **219** | *eP* | | **Pn** | **16 36 12.3** | **+1.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRG | | | | Amp | | | 16 50 27.7 | |
| | comp=Z,108nm,0.5s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **249** | *e*Pn | **Pg** | | **16 50 04.6** | **+1.1** |
| BRG | | | | *e*Pg | **Pb** | | **16 50 06.4** | **+2.9** |
| BRG | | | | *e*Sg | **Sn** | | **16 50 27.0** | **+3.9** |
| **PRU** | **Pruhonice** | **1.77** | **216** | *e*PG | **Pg** | | **16 50 09.4** | **+0.8** |
| PRU | | | | *e*SG | **Sg** | | **16 50 33.4** | **+1.9** |
| | comp=Z,107nm,0.5s | | | | | | | |
| **PRU** | **Pruhonice** | **1.77** | **216** | *e*Pn | **Pb** | | **16 50 08.5** | **+0.5** |
| PRU | | | | *e*Pg | **Pg** | | **16 50 10.7** | **+2.1** |
| PRU | | | | *e*Sg | **Sg** | | **16 50 33.4** | **+1.9** |
| **PRU** | **Pruhonice** | **1.77** | **216** | Pn | **Pg** | | **16 50 09.1** | **+0.5** |
| **RUE** | **Ruedersdorf** | **1.81** | **307** | *e*P | Pn | | 16 49 59.5 | -7.6 |
| RUE | | | | IAML | | | 16 50 39.6 | |
| | comp=Z,72nm,0.2s | | | | | | | |
| **RUE** | **Ruedersdorf** | **1.81** | **307** | *e*Pn | **Pb** | | **16 50 08.6** | **-0.1** |
| RUE | | | | *e*Pg | **Pg** | | **16 50 13.8** | **+4.4** |
| RUE | | | | *e*Sg | **Sg** | | **16 50 36.6** | **+3.8** |
| **FBE** | **Freiberg** | **1.84** | **255** | *e*Pn | **Pg** | | **16 50 10.1** | **+0.2** |
| FBE | | | | *e*Pg | **Pb** | | **16 50 12.7** | **+3.6** |
| FBE | | | | *e*Sg | **Sg** | | **16 50 37.0** | **+3.3** |
| **MORC** | **Moravsky Berou** | **1.87** | **151** | ⇓P | **Pb** | | **16 50 09.3** | **-0.4** |
| MORC | | | | ⇑S | **Sb** | | **16 50 34.2** | **+0.5** |
| **MORC** | **Moravsky Berou** | **1.87** | **151** | *e*Pn | **Pb** | | **16 50 09.4** | **-0.4** |
| | baz=336 | | | | | | | |
| MORC | | | | *e*Sg | **Sb** | | **16 50 34.7** | **+1.0** |
| | comp=Z,50nm,0.4s,baz=336 | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.87** | **151** | *e*PN | **Pb** | | **16 50 09.5** | **-0.3** |
| MORC | | | | *e*SG | **Sb** | | **16 50 34.8** | **+1.0** |
| **MORC** | **Moravsky Berou** | **1.87** | **151** | *e*Pn | **Pb** | | **16 50 09.9** | **+0.1** |
| MORC | | | | *e*Sg | **Sg** | | **16 50 35.6** | **+0.8** |
| **MORC** | **Moravsky Berou** | **1.87** | **151** | Pn | **Pb** | | **16 50 09.5** | **-0.3** |
| MORC | | | | Sn | **Sg** | | **16 50 35.8** | **+1.0** |
| **GKP** | **Gorka Klasztor** | **1.96** | **19** | *e*P | **Pg** | | **16 50 15.6** | **+3.4** |
| **GKP** | **Gorka Klasztor** | **1.96** | **19** | *e*Sg | **Sg** | | **16 50 40.9** | **+3.3** |
| **CLL** | **Collm** | **1.98** | **268** | *e*Pn | **Pb** | | **16 50 11.0** | **-0.6** |
| CLL | | | | *i* Pg | **Pg** | | **16 50 14.0** | **+1.3** |
| CLL | | | | *i* Sg | **Sg** | | **16 50 42.1** | **+3.8** |
| | comp=Z,63nm,0.7s | | | | | | | |
| **CLL** | **Collm** | **1.98** | **268** | *e*Pn | **Pb** | | **16 50 11.2** | **-0.4** |
| CLL | | | | *e*Pg | **Pg** | | **16 50 14.5** | **+1.8** |
| CLL | | | | *e*Sg | **Sg** | | **16 50 42.2** | **+3.9** |
| **OKC** | **Ostrava-Krasne** | **2.03** | **141** | *e*PG | **Pg** | | **16 50 14.3** | **+0.7** |
| OKC | | | | *e*SG | **Sg** | | **16 50 40.4** | **+0.4** |
| | comp=Z,99nm,0.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.03** | **141** | *e*Pn | **Pb** | | **16 50 11.8** | **-0.7** |
| OKC | | | | *e*Pg | **Pg** | | **16 50 15.5** | **+1.9** |
| OKC | | | | *e*Sg | **Sg** | | **16 50 40.9** | **+0.9** |
| **VRAC** | **Vranov** | **2.14** | **172** | ⇑P | **Pn** | | **16 50 12.9** | **+1.2** |
| VRAC | | | | ⇑S | **Sg** | | **16 50 44.5** | **+1.1** |
| **VRAC** | **Vranov** | **2.14** | **172** | Pn | **Pn** | | **16 50 13.3** | **+1.7** |
| | comp=Z,4.7nm,0.3s,baz=340,slow=13,SNR=23 | | | | | | | |
| VRAC | | | | Lg | Lg | | 16 50 44.9 | |
| | comp=Z,14nm,0.3s,baz=254,slow=23,SNR=12 | | | | | | | |
| **VRAC** | **Vranov** | **2.14** | **172** | *e*Pn | **Pb** | | **16 50 13.8** | **-0.5** |
| | baz=355 | | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | | **16 50 44.4** | **+1.0** |
| | comp=Z,36nm,0.4s,baz=355 | | | | | | | |
| **VRAC** | **Vranov** | **2.14** | **172** | *e*Sg | **Sg** | | **16 50 45.6** | **+2.2** |
| **TREC** | **Trest** | **2.18** | **192** | *e*PG | **Pg** | | **16 50 17.4** | **+1.0** |
| TREC | | | | *e*SG | **Sg** | | **16 50 46.0** | **+1.4** |
| | comp=Z,58nm,0.4s | | | | | | | |
| **TREC** | **Trest** | **2.18** | **192** | *e*Pn | **Pb** | | **16 50 14.8** | **-0.1** |
| TREC | | | | *e*Pg | **Pg** | | **16 50 18.0** | **+1.6** |
| TREC | | | | *e*Sg | **Sg** | | **16 50 47.2** | **+2.6** |
| **TREC** | **Trest** | **2.18** | **192** | Pn | **Pb** | | **16 50 14.7** | **-0.3** |
| **PBCC** | **Pribram** | **2.22** | **219** | *e*PG | **Pg** | | **16 50 19.0** | **+1.7** |
| PBCC | | | | *e*SG | **Sg** | | **16 50 47.8** | **+1.7** |
| | comp=Z,35nm,0.4s | | | | | | | |
| **KRUC** | **Moravsky** | **2.37** | **176** | *e*Pn | **Pn** | | **16 50 16.9** | **+2.0** |
| | baz=359 | | | | | | | |
| **KRUC** | **Moravsky** | **2.37** | **176** | *e*Pg | **Pg** | | **16 50 20.5** | **+0.3** |
| | baz=359 | | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | | **16 50 51.7** | **+0.8** |
| | comp=Z,40nm,0.6s,baz=359 | | | | | | | |
| **KRUC** | **Moravsky** | **2.37** | **176** | *e*Pn | **Pb** | | **16 50 17.2** | **-1.1** |
| KRUC | | | | *e*Pg | **Pg** | | **16 50 21.5** | **+1.3** |
| KRUC | | | | *e*Sg | **Sg** | | **16 50 52.6** | **+1.7** |
| **LNIZ** | **Loecknitz** | **2.39** | **331** | *e*Pn | **Pn** | | **16 50 16.1** | **+1.0** |
| **TANN** | **Tannenbergstha** | **2.55** | **248** | *e*Pn | **Pb** | | **16 50 20.1** | **-1.2** |
| TANN | | | | *e*Pg | **Pg** | | **16 50 26.3** | **+2.7** |
| TANN | | | | *e*Sg | **Sg** | | **16 50 58.7** | **+2.1** |
| **OJC** | **Ojcow** | **2.60** | **116** | *e*Pg | **Pg** | | **16 50 26.1** | **+1.5** |
| OJC | | | | *e*Sg | **Sg** | | **16 51 00.1** | **+1.7** |
| **OJC** | **Ojcow** | **2.60** | **116** | *e*Pg | **Pg** | | **16 50 27.0** | **+2.4** |
| OJC | | | | *e*Sg | **Sg** | | **16 51 00.3** | **+2.0** |
| **WERD** | **Werda** | **2.63** | **250** | *e*Pg | **Pg** | | **16 50 27.4** | **+2.4** |
| WERD | | | | *e*Sg | **Sg** | | **16 51 03.3** | **+4.2** |
| **NKC** | **Novy Kostel** | **2.64** | **245** | *e*PN | **Pb** | | **16 50 21.4** | **-1.4** |
| NKC | | | | *e*SG | **Sg** | | **16 51 03.0** | **+3.5** |
| | comp=Z,86nm,0.4s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.64** | **245** | Pn | **Pn** | | **16 50 21.1** | **+2.5** |
| **GUNZ** | **Gunzen** | **2.65** | **248** | *e*Pn | **Pb** | | **16 50 21.7** | **-1.3** |
| GUNZ | | | | *e*Pg | **Pg** | | **16 50 28.4** | **+3.0** |
| GUNZ | | | | *e*Sg | **Sg** | | **16 51 03.7** | **+4.0** |
| **WERN** | **Wernitzgruen** | **2.66** | **246** | *e*Pn | **Pb** | | **16 50 21.9** | **-1.2** |
| WERN | | | | *e*Pg | **Pg** | | **16 50 28.9** | **+3.4** |
| WERN | | | | *e*Sg | **Sg** | | **16 51 01.7** | **+1.7** |
| **PLN** | **Plauen** | **2.70** | **251** | *e*Pn | **Pn** | | **16 50 21.7** | **+2.4** |
| PLN | | | | *e*Pg | **Pg** | | **16 50 29.3** | **+2.8** |
| PLN | | | | *e*Sg | **Sg** | | **16 51 04.0** | **+2.5** |
| **JAVC** | **Velka Javorina** | **2.75** | **159** | *e*Pn | **Pb** | | **16 50 24.4** | **-0.3** |
| JAVC | | | | *e*Pg | **Pg** | | **16 50 31.6** | **+4.2** |
| JAVC | | | | *e*Sg | **Sg** | | **16 51 06.8** | **+3.8** |
| **NEUB** | **Neuenburg** | **2.76** | **267** | *e*Pg | **Pg** | | **16 50 29.8** | **+2.3** |
| NEUB | | | | *e*Sg | **Sg** | | **16 51 07.6** | **+4.3** |
| **KHC** | **Kasperske Hory** | **2.83** | **217** | *e*Pn | **Pn** | | **16 50 23.6** | **+2.4** |
| KHC | | | | *e*PG | **Pg** | | **16 50 29.7** | **+0.7** |
| KHC | | | | *e*SN | **Sn** | | **16 50 58.4** | **+2.3** |
| KHC | | | | *e*SG | **Sg** | | **16 51 07.1** | **+1.4** |
| | comp=Z,40nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.83** | **217** | *e*Pn | **Pn** | | **16 50 24.0** | **+2.8** |
| KHC | | | | *e*Pg | **Pg** | | **16 50 30.1** | **+1.1** |
| KHC | | | | *e*Sg | **Sg** | | **16 51 06.8** | **+1.1** |
| **CKRC** | **Cesky Krumlov** | **2.87** | **205** | *e*PN | **Pn** | | **16 50 24.7** | **+3.0** |
| CKRC | | | | *e*PG | **Pg** | | **16 50 29.5** | **-0.2** |
| CKRC | | | | *e*SG | **Sg** | | **16 51 08.7** | **+1.9** |
| **CKRC** | **Cesky Krumlov** | **2.87** | **205** | *e*Pn | **Pb** | | **16 50 25.0** | **-1.8** |
| CKRC | | | | *e*Pg | **Pg** | | **16 50 30.9** | **+1.3** |
| CKRC | | | | *e*Sg | **Sg** | | **16 51 09.0** | **+2.2** |
| **MOX** | **Moxa** | **2.97** | **256** | *e*Pn | **Pn** | | **16 50 25.3** | **+2.2** |
| MOX | | | | *e*Pg | **Pg** | | **16 50 34.3** | **+2.6** |
| MOX | | | | *e*Sg | **Sg** | | **16 51 13.2** | **+3.0** |
| **SMOL** | **Smolenice** | **3.03** | **164** | *e*PG | **Sg** | | **16 50 35.7** | **+3.0** |
| SMOL | | | | *e*SG | **Sg** | | **16 51 16.0** | **+4.0** |
| **GEC2** | **GERESS Array S** | **3.03** | **212** | *e*Pn | **Pn** | | **16 50 27.3** | **+3.3** |
| GEC2 | | | | *e*Pg | **Pg** | | **16 50 33.3** | **+0.6** |
| GEC2 | | | | *e*Sg | **Sg** | | **16 51 12.9** | **+0.9** |
| **GERES** | **GERESS Array B** | **3.03** | **212** | Pn | **Pn** | | **16 50 27.1** | **+3.1** |
| | comp=Z,1.6nm,0.3s,baz=35,slow=13,SNR=36 | | | | | | | |
| GERES | | | | Pg | **Pg** | | **16 50 32.9** | **+0.2** |
| | comp=Z,16nm,0.3s,baz=32,slow=18,SNR=69 | | | | | | | |
| GERES | | | | Lg | Lg | | 16 51 11.9 | |
| | comp=Z,15nm,0.3s,baz=32,slow=26,SNR=11 | | | | | | | |
| **WET** | **Wettzell** | **3.11** | **224** | *e*Pn | **Pn** | | **16 50 27.9** | **+2.9** |
| WET | | | | *e*Pg | **Pg** | | **16 50 33.9** | **-0.3** |
| WET | | | | *e*Sg | **Sg** | | **16 51 17.0** | **+2.5** |
| **LANS** | **Liptovska Anna** | **3.11** | **136** | *e*PN | **Pn** | | **16 50 27.3** | **+2.2** |
| LANS | | | | *e*PG | **Pg** | | **16 50 36.4** | **+2.1** |
| LANS | | | | *e*SG | **Sg** | | **16 51 19.5** | **+4.8** |
| **MODS** | **Modra-Piesok** | **3.14** | **166** | *e*PG | **Pg** | | **16 50 39.1** | **+4.2** |
| MODS | | | | *e*SG | **Sg** | | **16 51 20.7** | **+5.1** |
| **ZST** | **Bratislava** | **3.29** | **169** | *e*SG | **Sg** | | **16 51 22.3** | **+1.9** |
| **NIE** | **Niedzica** | **3.33** | **126** | *e*P | **Pg** | | **16 50 40.7** | **+2.3** |
| NIE | | | | *e*S | **Sg** | | **16 51 23.8** | **+2.3** |
| **VYHS** | **Vyhne** | **3.41** | **148** | *e*PG | **Pg** | | **16 50 42.0** | **+2.0** |
| VYHS | | | | *e*SG | **Sg** | | **16 51 27.3** | **+3.2** |
| **VYHS** | **Vyhne** | **3.41** | **148** | Pn | **Pn** | | **16 50 30.8** | **+1.7** |
| **CONA** | **Conrad Observa** | **3.51** | **183** | *e*Pn | **Pn** | | **16 50 33.7** | **+3.1** |
| | comp=Z,2.0nm,0.4s,SNR=5.6 | | | | | | | |
| CONA | | | | *e*Sg | **Sg** | | **16 51 29.6** | **+2.2** |
| | comp=Z,38nm,0.4s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **3.60** | **243** | *e*Pn | **Pn** | | **16 50 34.6** | **+2.9** |
| GRF | | | | *e*Sg | **Sg** | | **16 51 33.5** | **+3.3** |
| **BSD** | **Bornholm Skovb** | **3.77** | **349** | *i* P | **Pn** | | **16 50 34.6** | **+0.7** |
| BSD | | | | *e*S | **Sn** | | **16 51 17.3** | **-1.7** |
| **BSD** | **Bornholm Skovb** | **3.77** | **349** | *e*P | **Pn** | | **16 50 34.7** | **+0.7** |
| **MOA** | **Molln** | **3.79** | **200** | *e*Pn | **Pn** | | **16 50 37.3** | **+2.9** |
| | comp=Z,4.4nm,0.3s,SNR=10 | | | | | | | |
| MOA | | | | *e*Pg | **Pg** | | **16 50 49.3** | **+2.1** |
| | comp=Z,9.9nm,0.4s | | | | | | | |
| MOA | | | | *e*Sg | **Sg** | | **16 51 40.1** | **+3.8** |
| | comp=Z,22nm,0.3s | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **4.24** | **125** | *e*PG | **Pg** | | **16 50 58.4** | **+2.4** |
| **KOLS** | **Kolonicke sedl** | **4.65** | **120** | *e*PG | **Pg** | | **16 51 08.5** | **+4.7** |
| **KBA** | **Koelnbreinsper** | **4.73** | **204** | Pn | **Pn** | | **16 50 50.8** | **+3.4** |
| | comp=Z,2.8nm,0.5s,SNR=5.3 | | | | | | | |
| KBA | | | | *e*Sg | **Sg** | | **16 52 04.1** | **-2.4** |
| | comp=Z,12nm,0.5s | | | | | | | |
| **BLEU** | **Blekinge** | **4.89** | **358** | *i* P | **Pn** | | **16 50 50.1** | **+0.7** |
| BLEU | | | | *e*S | **Sn** | | **16 51 42.8** | **-3.9** |
| **WATA** | **Walderalm** | **5.07** | **218** | *e*Pn | **Pn** | | **16 50 55.9** | **+3.8** |
| | comp=Z,4.7nm,0.3s | | | | | | | |
| **WTTA** | **Wattenberg** | **5.11** | **217** | *e*Pn | **Pn** | | **16 50 56.8** | **+4.2** |
| | comp=Z,1.5nm,0.2s | | | | | | | |
| **DEL** | **Delary** | **5.23** | **346** | *i* P | **Pn** | | **16 50 54.0** | **-0.1** |
| DEL | | | | *e*S | **Sn** | | **16 51 51.7** | **-3.3** |
| **DEL** | **Delary** | **5.23** | **346** | *e*P | **Pn** | | **16 50 54.4** | **+0.3** |
| DEL | | | | *e*S | **Sn** | | **16 51 50.7** | **-4.3** |
| **RETA** | **Reutte** | **5.29** | **224** | P | **Pn** | | **16 50 57.4** | **+2.5** |
| | comp=Z,3.9nm,0.4s,SNR=4.1 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.31** | **219** | Pn | **Pn** | | **16 50 59.4** | **+4.0** |
| | comp=Z,2.8nm,0.2s,SNR=7.3 | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **5.47** | **162** | ⇑P | Pn | | 16 50 45.5 | -12 |
| **PABE** | **Paberze** | **6.20** | **46** | *e*P | **Pn** | | **16 51 08.7** | **+1.4** |
| **DAVOX** | **Davos/Dischmat** | **6.21** | **224** | Pn | **Pn** | | **16 51 08.6** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=0.0,slow=20,SNR=1.9 | | | | | | | |
| DAVOX | | | | Lg | Lg | | 16 52 53.1 | |
| | comp=Z,0.6nm,0.3s,baz=196,slow=23,SNR=3.6 | | | | | | | |
| **DRGR** | | **6.33** | **135** | ⇑P | **Pn** | | **16 51 10.1** | **+0.9** |
| **CDF** | **Champ du Feu** | **6.48** | **246** | *e*P | **Pn** | | **16 51 14.2** | **+2.8** |
| **CDF** | **Champ du Feu** | **6.48** | **246** | *e*Pg | **Pg** | | **16 51 35.6** | **-3.2** |
| CDF | | | | *e*Sn | **Sn** | | **16 52 22.2** | **-3.8** |
| CDF | | | | *e*Sg | **Sg** | | **16 53 00.0** | **-2.8** |
| | comp=Z,16nm,0.6s | | | | | | | |
| **BURAR** | **Bucovina Array** | **7.02** | **119** | ⇓P | **Pn** | | **16 51 20.5** | **+1.7** |
| **HINF** | **Hinteralfeld** | **7.04** | **243** | *e*Pn | **Pn** | | **16 51 19.5** | **+0.5** |
| **HINF** | **Hinteralfeld** | **7.04** | **243** | *e*Pg | Pg | | 16 51 44.3 | -5.2 |
| HINF | | | | *e*Sg | **Sg** | | **16 53 15.6** | **-5.1** |
| | comp=Z,5.4nm,0.4s | | | | | | | |
| **VIKU** | **Vikbolandet** | **7.10** | **2** | *e*P | **Pn** | | **16 51 20.8** | **+1.1** |
| VIKU | | | | *e*S | **Sn** | | **16 52 36.8** | **-4.1** |
| VIKU | | | | IAML | | | 16 52 57.1 | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **SLIT** | **Slitere, Latvi** | **7.16** | **27** | *e*P | **Pn** | | **16 51 21.0** | **+0.5** |
| **HAU** | **Haudompre** | **7.22** | **246** | *e*Pn | **Pn** | | **16 51 21.7** | **+0.2** |
| HAU | | | | *e*Sg | **Sg** | | **16 53 21.6** | **-4.9** |
| | comp=Z,4.9nm,0.4s | | | | | | | |
| **KMPD** | **K-Podol'skiy** | **7.23** | **109** | Pn | **Pn** | | **16 51 22.4** | **+0.8** |
| **PAGF** | **Fort de Pagny** | **7.32** | **251** | *e*Pn | **Pn** | | **16 51 23.2** | **+0.5** |
| PAGF | | | | *e*Sn | **Sn** | | **16 52 41.3** | **-5.1** |
| **LUBAR** | **Lubar, Ukraine** | **7.52** | **97** | Pn | **Pn** | | **16 51 26.7** | **+1.1** |
| **SFTF** | **Sexfontaines** | **7.88** | **250** | *e*Pn | **Pn** | | **16 51 29.2** | **-1.3** |
| **AKASG** | **Malin Array Be** | **8.27** | **90** | Pn | **Pn** | | **16 51 35.1** | **-0.6** |
| | comp=Z,1.1nm,0.3s,baz=280,slow=12,SNR=6.6 | | | | | | | |
| AKASG | | | | Sn | **Sn** | | **16 53 06.4** | **-3.3** |
| | comp=Z,0.7nm,0.3s,baz=275,slow=24,SNR=2.9 | | | | | | | |
| **AKBB** | **Malin Array Si** | **8.27** | **90** | Pn | **Pn** | | **16 51 36.4** | **+0.7** |
| AKBB | | | | pP | **Pn** | | **16 51 36.9** | **+1.2** |
| AKBB | | | | sP | **Pn** | | **16 51 37.8** | **+2.1** |
| **LPL** | **La Plagne** | **8.61** | **230** | *e*Pn | **Pn** | | **16 51 40.0** | **-0.7** |
| **LPG** | **La Plagne** | **8.62** | **230** | *e*Pn | **Pn** | | **16 51 41.1** | **+0.3** |
| **HFS** | **Hagfors** | **8.84** | **352** | Pn | **Pn** | | **16 51 42.8** | **-0.7** |
| | comp=Z,0.4nm,0.3s,baz=168,slow=15,SNR=12 | | | | | | | |
| HFS | | | | Sn | **Sn** | | **16 53 20.0** | **-3.6** |
| | comp=Z,0.2nm,0.3s,baz=182,slow=24,SNR=2.8 | | | | | | | |
| **MBDF** | **Montbardon** | **9.18** | **227** | *e*Pn | **Pn** | | **16 51 46.2** | **-2.3** |
| **NOA** | **NORSAR Array B** | **10.02** | **346** | Pn | **Pn** | | **16 51 58.4** | **-1.3** |
| | comp=Z,0.0nm,0.3s,baz=154,slow=18,SNR=5.7 | | | | | | | |
| **SMRF** | **Simiane la Rot** | **10.31** | **228** | *e*Pn | **Pn** | | **16 52 01.1** | **-2.7** |
| **LMR** | **La Mourre** | **10.40** | **223** | *e*Pn | **Pn** | | **16 52 01.1** | **-3.9** |
| **FINES** | **FINESS Array B** | **11.43** | **25** | Pn | **Pn** | | **16 52 17.2** | **-1.7** |
| | comp=Z,0.4nm,0.3s,baz=198,slow=12,SNR=14 | | | | | | | |
| FINES | | | | Sn | **Sn** | | **16 54 21.4** | **-5.8** |
| | comp=Z,0.5nm,0.3s,baz=211,slow=19,SNR=5.7 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.17** | **296** | Pn | **Pn** | | **16 52 26.9** | **-2.3** |
| | baz=103,slow=14,SNR=2.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.70** | **10** | Pn | **P** | | **16 53 51.8** | **-2.5** |
| | baz=194,slow=11,SNR=16 | | | | | | | |
| **GNI** | **Garni** | **22.75** | **109** | LR | LR | | 17 05 23.0 | |
| | comp=Z,53nm,18.3s,baz=309,slow=42 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.94** | **202** | P | **P** | | **16 57 11.9** | **+1.4** |
| | comp=Z,0.6nm,0.8s,baz=359,slow=8.3,SNR=4.0 | | | | | | | |
| **MBAR** | **Mbarara** | **53.29** | **162** | LR | LR | | 17 26 37.2 | |
| | comp=Z,50nm,18.3s,baz=314,slow=42 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.95** | **336** | P | **P** | | **16 59 43.8** | **+1.7** |
| | comp=Z,0.4nm,0.6s,baz=28,slow=7.1,SNR=5.1 | | | | | | | |

*ATH **09** 16:53:03.8, 38.46N×20.46E, h15km±1km, ML2.3/5, Error ellipse: s-maj=2.1km s-min=0.6km az=107.0*
*THE **09** 16:53:03.8, 38.45N×20.47E, h14km±1km, ML2.6/8, Error ellipse: s-maj=1.9km s-min=0.4km az=108.0*
**ISC 09 16:53:02.9±0.9, 38.47N±0.02×20.42E±0.05, h18km±3km, n30, σ95/57, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.12** | **94** | P | **Pg** | | **16 53 06.5** | **-0.2** |
| FSK | | | | S | **Sg** | | **16 53 08.4** | **-0.8** |
| | 3μm,0.2s | | | | | | | |
| **FSK** | **Fiskardo** | **0.12** | **94** | P | **Pg** | | **16 53 06.6** | **-0.1** |
| FSK | | | | S | **Sg** | | **16 53 08.5** | **-0.8** |
| FSK | | | | AML | AML | | 16 53 08.8 | |
| | comp=E,8959μm,0.2s | | | | | | | |
| FSK | | | | AML | AML | | 16 53 09.0 | |
| | comp=N,4642μm,0.3s | | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.21** | **178** | P | **Pg** | | **16 53 08.3** | **+0.3** |
| KEF4 | | | | S | **Sb** | | **16 53 12.2** | **+1.0** |
| **KEF4** | **Livadi, Kephal** | **0.21** | **178** | P | **Pg** | | **16 53 08.3** | **+0.3** |
| KEF4 | | | | S | **Sg** | | **16 53 11.6** | **+0.3** |
| **DMLN** | **Damoulianata-K** | **0.23** | **188** | P | **Pg** | | **16 53 08.8** | **+0.5** |
| DMLN | | | | S | **Sb** | | **16 53 13.0** | **+1.0** |
| | comp=N,3μm,0.3s | | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.23** | **188** | P | **Pg** | | **16 53 08.8** | **+0.5** |
| DMLN | | | | S | **Sg** | | **16 53 12.8** | **+0.8** |
| **EVGI** | **Lefkada island** | **0.24** | **51** | P | **Pg** | | **16 53 08.7** | **+0.3** |
| EVGI | | | | S | **Sg** | | **16 53 12.7** | **+0.4** |
| | comp=N,3μm,0.2s | | | | | | | |
| **EVGI** | **Lefkada island** | **0.24** | **51** | P | **Pg** | | **16 53 08.8** | **+0.3** |
| EVGI | | | | S | **Sg** | | **16 53 12.3** | **0.0** |
| **DRAG** | **Dragano-Lefkad** | **0.25** | **30** | P | **Pg** | | **16 53 08.7** | **+0.1** |
| DRAG | | | | S | **Sg** | | **16 53 13.2** | **+0.7** |
| | comp=N,5μm,0.3s | | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.25** | **30** | P | **Pg** | | **16 53 08.8** | **+0.1** |
| DRAG | | | | S | **Sg** | | **16 53 13.2** | **+0.7** |
| **LXRA** | **Lixouri, Kepha** | **0.27** | **177** | P | **Pg** | | **16 53 09.4** | **+0.6** |
| LXRA | | | | S | **Sg** | | **16 53 13.3** | **+0.3** |
| **KEF3** | **Kipouria, Keph** | **0.27** | **192** | P | **Pg** | | **16 53 08.9** | **0.0** |
| KEF3 | | | | S | **Sg** | | **16 53 13.2** | **+0.2** |
| | comp=N,4μm,0.1s | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.27** | **192** | P | **Pg** | | **16 53 09.0** | **0.0** |
| KEF3 | | | | S | **Sg** | | **16 53 13.2** | **+0.2** |
| **ARGA** | **Argostoli. Kep** | **0.29** | **170** | P | **Pg** | | **16 53 09.8** | **+0.5** |
| ARGA | | | | S | **Sg** | | **16 53 14.0** | **+0.3** |
| **VLS** | **Valsamata** | **0.32** | **155** | P | **Pg** | | **16 53 09.8** | **0.0** |
| VLS | | | | S | **Sg** | | **16 53 14.6** | **+0.2** |
| | comp=N,2μm,0.1s | | | | | | | |
| **VLS** | **Valsamata** | **0.32** | **155** | P | **Pg** | | **16 53 09.8** | **0.0** |
| VLS | | | | S | **Sg** | | **16 53 14.7** | **+0.2** |
| VLS | | | | AML | AML | | 16 53 15.3 | |
| | comp=E,2927μm,0.1s | | | | | | | |
| VLS | | | | AML | AML | | 16 53 17.7 | |
| | comp=N,2927μm,0.1s | | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.33** | **42** | P | **Pg** | | **16 53 10.1** | **+0.2** |
| NYDR | | | | S | **Sg** | | **16 53 14.7** | **0.0** |
| **NYDR** | **Nydri-Lefkada** | **0.33** | **42** | P | **Pg** | | **16 53 10.1** | **+0.2** |
| NYDR | | | | S | **Sg** | | **16 53 14.5** | **-0.2** |
| **LKD2** | **Lefkada island** | **0.37** | **30** | P | **Pg** | | **16 53 11.0** | **+0.3** |
| LKD2 | | | | S | **Sb** | | **16 53 17.2** | **+0.7** |
| | comp=N,858nm,0.2s | | | | | | | |
| **LKD2** | **Lefkada island** | **0.37** | **30** | P | **Pg** | | **16 53 11.2** | **+0.5** |
| LKD2 | | | | S | **Sg** | | **16 53 16.9** | **+0.9** |
| LKD2 | | | | AML | AML | | 16 53 17.8 | |
| | comp=E,2034μm,0.2s | | | | | | | |
| LKD2 | | | | AML | AML | | 16 53 17.8 | |
| | comp=N,1350μm,0.2s | | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.38** | **160** | P | **Pg** | | **16 53 10.8** | **+0.1** |
| PSDA | | | | S | **Sb** | | **16 53 16.6** | **0.0** |
| **PSDA** | **Pessada-Kefalo** | **0.38** | **160** | P | **Pg** | | **16 53 10.9** | **+0.1** |
| PSDA | | | | S | **Sb** | | **16 53 16.6** | **0.0** |
| **TSLK** | **Tsoukalades, L** | **0.40** | **28** | P | **Pg** | | **16 53 11.6** | **+0.4** |
| TSLK | | | | S | **Sb** | | **16 53 18.5** | **+1.1** |
| | comp=N,1μm,0.2s | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.40** | **28** | P | **Pg** | | **16 53 11.8** | **+0.6** |
| TSLK | | | | S | **Sg** | | **16 53 17.6** | **+0.8** |
| **LTHK** | **Lithakia** | **0.83** | **156** | P | **Pg** | | **16 53 18.6** | **-0.4** |
| **RLS** | **Riolos of Patr** | **0.92** | **116** | P | **Pb** | | **16 53 20.6** | **+0.3** |
| RLS | | | | AML | AML | | 16 53 41.4 | |
| | comp=N,161μm,0.4s | | | | | | | |
| RLS | | | | AML | AML | | 16 53 43.9 | |
| | comp=E,162μm,0.4s | | | | | | | |
| **IGT** | **Igoumenitsa** | **1.06** | **356** | P | **Pb** | | **16 53 23.2** | **+0.4** |
| IGT | | | | AML | AML | | 16 53 46.1 | |
| | comp=N,131μm,0.4s | | | | | | | |
| IGT | | | | AML | AML | | 16 53 46.8 | |
| | comp=E,155μm,0.4s | | | | | | | |
| **RICI** | **Ricice** | **5.60** | **335** | *e*Pn | **Pn** | | **16 54 25.1** | **-0.1** |
| RICI | | | | Sn | **Sn** | | **16 55 25.2** | **-3.9** |
| **KIJV** | **Kijevo** | **6.30** | **333** | *e*Pn | **Pn** | | **16 54 36.3** | **+1.4** |
| KIJV | | | | Sn | **Sn** | | **16 55 43.5** | **-2.9** |
| **MORI** | **Morici** | **6.46** | **328** | *e*Pn | **Pn** | | **16 54 38.6** | **+1.6** |
| MORI | | | | Sn | **Sn** | | **16 55 47.4** | **-2.8** |

*TUL **09** 17:04:56.6±1.1, 35.99N±0.01×96.75W±0.02, h4km±3km, ML2.5, ML2.3/34(NEIC), Error ellipse: s-maj=2.0km s-min=1.8km az=149.0*
**NEIC 09 17:04:56.3±0.8, 35.99N±0.01×96.74W±0.02, h8km±3km, Error ellipse: s-maj=2.1km s-min=2.0km az=150.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OK034** | **N. Norfolk Rd.** | **0.03** | **52** | Pg | Pg | | 17 04 57.9 | +0.1 |
| OK034 | | | | Sg | Sg | | 17 04 58.7 | -0.2 |
| **OK030** | **Cody Creek RV** | **0.07** | **209** | Pg | Pg | | 17 04 58.4 | +0.1 |
| OK030 | | | | Sg | Sg | | 17 04 59.8 | +0.1 |
| **OK031** | **S. Brethren Rd** | **0.09** | **244** | Pg | Pg | | 17 04 58.6 | +0.1 |
| OK031 | | | | IAML | | | 17 05 00.2 | |
| | 2μm,0.2s | | | | | | | |
| OK031 | | | | IAML | | | 17 05 00.3 | |
| | 1μm,0.2s | | | | | | | |
| **OK033** | **Mehan** | **0.17** | **288** | Pg | Pg | | 17 05 00.0 | +0.2 |
| OK033 | | | | Sg | Sg | | 17 05 02.6 | +0.4 |
| OK033 | | | | IAML | | | 17 05 02.8 | |
| | 888nm,0.1s | | | | | | | |
| OK033 | | | | IAML | | | 17 05 03.0 | |
| | 1μm,0.1s | | | | | | | |
| **QUOK** | **Quay** | **0.18** | **8** | Pg | Pg | | 17 05 00.6 | +0.5 |
| QUOK | | | | Sg | Sg | | 17 05 03.2 | +0.7 |
| QUOK | | | | IAML | | | 17 05 03.5 | |
| | comp=N,542nm,0.2s | | | | | | | |
| **OK011** | **Prague** | **0.51** | **175** | Pg | Pg | | 17 05 06.2 | +0.1 |
| **OK029** | **Liberty Lake** | **0.61** | **252** | Pg | Pg | | 17 05 08.4 | +0.2 |
| OK029 | | | | Sg | Sg | | 17 05 16.6 | +0.5 |
| **OK025** | **Westminster Rd** | **0.64** | **230** | Pg | Pg | | 17 05 08.6 | +0.1 |
| OK025 | | | | Sg | Sg | |

*IDC **09** 17:07:15.8±1.0, 43.55N×101.97E, h0km, mb3.6/7, mb1 3.8/11, mb1mx3.5/72, mbtmp3.6/11, ML3.0/4, Error ellipse: s-maj=22.7km s-min=17.4km az=108.0*

**ISC 09 17:07:17.3±1.0, 43.6N±0.1×102.0E±0.1, h10km, n11, σ1§60/12, mb3.7/7, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **5.20** | **35** | Pn | | **Pn** | | **17 08 37.9** | **+2.6** |
| | 2.6nm,0.3s,baz=216,slow=15,SNR=114 | | | | | | | | |
| SONM | | | | Pg | | **Pg** | | **17 08 54.3** | **-2.6** |
| | 9.2nm,0.3s,baz=219,slow=17,SNR=18 | | | | | | | | |
| SONM | | | | Lg | | Lg | | 17 10 03.9 | |
| | 17nm,0.3s,baz=216,slow=32,SNR=10 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **14.26** | **290** | Pn | | **Pn** | | **17 10 38.0** | **-1.3** |
| | 0.0nm,0.3s,baz=94,slow=14,SNR=4.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **15.29** | **318** | Pn | | **Pn** | | **17 10 53.7** | **+0.6** |
| | 0.1nm,0.3s,baz=128,slow=9.5,SNR=2.5 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.40** | **302** | P | | **P** | | **17 11 20.1** | **-1.2** |
| | 0.1nm,0.3s,baz=104,slow=12,SNR=10 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **22.87** | **305** | P | | **P** | | **17 12 20.5** | **-0.2** |
| | 2.8nm,0.6s,baz=82,slow=17,SNR=6.9 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.23** | **187** | P | | **P** | | **17 12 43.4** | **+0.1** |
| | 0.5nm,0.6s,baz=353,slow=9.5,SNR=8.4 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **53.44** | **323** | P | | **P** | | **17 16 39.3** | **+2.2** |
| | 1.0nm,0.8s,baz=63,slow=6.9,SNR=2.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **59.39** | **28** | P | | **P** | | **17 17 18.9** | **-0.5** |
| | 0.4nm,0.8s,baz=303,slow=6.0,SNR=3.0 | | | | | | | | |
| **INK** | **Inuvik** | **60.95** | **21** | P | | **P** | | **17 17 30.6** | **+0.6** |
| | 0.9nm,0.8s,baz=320,slow=5.9,SNR=2.3 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **70.22** | **17** | P | | **P** | | **17 18 29.6** | **-0.4** |
| | 0.2nm,0.5s,baz=331,slow=5.6,SNR=3.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **73.09** | **150** | P | | **P** | | **17 18 47.1** | **-0.5** |
| | 0.6nm,0.8s,baz=327,slow=6.5,SNR=5.1 | | | | | | | | |

*NEIC **09** 17:07:28.0±3.0, 15.57S±0.06×172.93W±0.04, h10km±1km, mb4.7/22, Error ellipse: s-maj=9.7km s-min=6.4km az=4.0*

*IDC **09** 17:07:36.5±1.3, 15.09S×172.66W, h126km±26km, mb3.9/5, mb1 4.0/6, mb1mx3.5/45, mbtmp4.3/6, MS3.2/4, Ms1 3.2/4, ms1mx2.8/69, Error ellipse: s-maj=39.9km s-min=30.4km az=140.0*

**ISC 09 17:07:29.6±0.6, 15.49S±0.06×172.80W±0.07, h29km, n37, σ1§70/37, mb4.6/12, MS3.0/3, 1C, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.86** | **32** | P | | **Pb** | | **17 08 03.4** | **+0.4** |
| | 89nm,0.3s,baz=125,slow=0.5,SNR=124 | | | | | | | | |
| AFI | | | | S | | **Sb** | | **17 08 24.6** | **-1.2** |
| | 102nm,0.3s,baz=27,slow=22,SNR=28 | | | | | | | | |
| **AFI** | **Afiamalu** | **1.86** | **32** | | | **Pb** | | **17 08 02.5** | **-0.5** |
| AFI | | | | Sn | | **Sb** | | **17 08 23.8** | **-2.0** |
| **NIUE** | **Niue** | **4.50** | **143** | | | **Pn** | | **17 08 37.8** | **+1.9** |
| NIUE | | | | Sn | | **Sn** | | **17 09 23.5** | **-3.8** |
| **MSVF** | **Nonsavu** | **9.05** | **254** | P | | Pn | | 17 09 46.5 | +8.0 |
| | 0.5nm,0.3s,baz=104,slow=10,SNR=8.6 | | | | | | | | |
| MSVF | | | | LR | | LR | | 17 12 32.1 | |
| | comp=Z,131nm,19.2s,baz=339,slow=32 | | | | | | | | |
| **MSVF** | **Nonsavu** | **9.05** | **254** | | | Pn | | 17 09 42.7 | +4.2 |
| **RAR** | **Rarotonga** | **13.61** | **117** | Pn | | **Pn** | | **17 10 40.2** | **-0.6** |
| **SANVU** | **Saraoutou** | **19.27** | **267** | | | **Pn** | | **17 11 54.6** | **+1.3** |
| SANVU | | | | IAmb | | IAmb | | 17 12 13.4 | |
| | comp=Z,88nm,1.6s | | | | | | | | |
| **PINNC** | **Pines Island,** | **19.96** | **246** | P | | **Pn** | | **17 11 59.9** | **-1.5** |
| **DZM** | **Mont Dzumac** | **20.70** | **248** | P | | Pn | | 17 12 11.7 | +1.4 |
| | comp=Z,6.1nm,0.9s,baz=90,slow=21,SNR=4.4 | | | | | | | | |
| DZM | | | | LR | | LR | | 17 18 43.2 | |
| | comp=Z,64nm,20.3s,baz=42,slow=32 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.70** | **248** | P | | **P** | | **17 12 06.9** | **-0.9** |
| DZM | | | | IAmb | | IAmb | | 17 12 50.7 | |
| | comp=Z,36nm,1.6s | | | | | | | | |
| **PPT** | **Papeete** | **22.36** | **99** | LR | | LR | | 17 18 11.5 | |
| | comp=Z,52nm,21.1s,baz=285,slow=28 | | | | | | | | |
| **OUZ** | **Omahuta** | **23.13** | **209** | P | | **P** | | **17 12 32.5** | **-1.0** |
| OUZ | | | | IAmb | | IAmb | | 17 13 02.7 | |
| | comp=Z,78nm,1.8s | | | | | | | | |
| **URZ** | **Urewera** | **24.37** | **200** | P | | **P** | | **17 12 46.8** | **+1.6** |
| | comp=Z,6.0nm,0.3s,baz=338,slow=1.8,SNR=13 | | | | | | | | |
| **URZ** | **Urewera** | **24.37** | **200** | P | | **P** | | **17 12 44.3** | **-0.9** |
| URZ | | | | IAmb | | IAmb | | 17 12 48.8 | |
| | comp=Z,60nm,1.6s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.39** | **200** | P | | **P** | | **17 12 54.0** | **-0.5** |
| BKZ | | | | IAmb | | IAmb | | 17 13 28.1 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **HNR** | **Honiara** | **27.27** | **280** | LR | | LR | | 17 22 34.8 | |
| | comp=Z,50nm,18.9s,baz=352,slow=33 | | | | | | | | |
| **QRZ** | **Quartz Range** | **28.28** | **204** | P | | **P** | | **17 13 21.1** | **+0.6** |
| **LTZ** | **Lake Taylor** | **30.06** | **202** | P | | **P** | | **17 13 36.6** | **+0.2** |
| **COEN** | **Coen** | **42.55** | **266** | P | | **P** | | **17 15 23.3** | **+0.1** |
| COEN | | | | IAmb | | IAmb | | 17 16 00.7 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **STKA** | **Stephens Creek** | **44.49** | **240** | P | | **P** | | **17 15 37.6** | **-1.0** |
| | comp=Z,3.4nm,0.7s,baz=61,slow=7.1,SNR=6.6 | | | | | | | | |
| **STKA** | **Stephens Creek** | **44.49** | **240** | P | | **P** | | **17 15 37.6** | **-1.0** |
| **BBOO** | **Buckleboo** | **49.27** | **240** | P | | **P** | | **17 16 13.8** | **-2.2** |
| **WR0** | **Warramunga Arr** | **50.20** | **257** | P | | **P** | | **17 16 22.2** | **-1.0** |
| WR0 | | | | PcP | | **PcP** | | **17 17 43.1** | **+0.8** |
| **WB0** | **Warramunga Arr** | **50.35** | **257** | P | | **P** | | **17 16 22.2** | **-2.2** |
| WB0 | | | | IAmb | | IAmb | | 17 16 54.2 | |
| | comp=Z,10nm,1.6s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **50.38** | **257** | P | | **P** | | **17 16 22.9** | **-1.7** |
| WB2 | | | | IAmb | | IAmb | | 17 16 41.4 | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **50.38** | **257** | P | | **P** | | **17 16 22.6** | **-2.0** |
| WRAB | | | | IAmb | | IAmb | | 17 16 33.6 | |
| | comp=Z,10nm,1.5s | | | | | | | | |
| WRAB | | | | PcP | | **PcP** | | **17 17 44.0** | **+1.0** |
| **WRA** | **Warramunga Arr** | **50.39** | **257** | P | | **P** | | **17 16 22.7** | **-2.0** |
| | comp=Z,0.4nm,0.4s,baz=93,slow=6.8,SNR=13 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.39** | **257** | IAmb | | IAmb | | 17 16 23.2 | |
| | comp=Z,0.5nm,1.4s | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **17 17 41.2** | **-1.8** |
| **AS31** | **Alice Springs** | **50.63** | **252** | P | | **P** | | **17 16 24.6** | **-2.0** |
| **ASAR** | **Alice Springs** | **50.63** | **252** | P | | **P** | | **17 16 24.8** | **-1.8** |
| | comp=Z,5.2nm,0.6s,baz=87,slow=7.9,SNR=153 | | | | | | | | |
| **ASAR** | **Alice Springs** | **50.63** | **252** | P | | **P** | | **17 16 24.6** | **-2.0** |
| **MTN** | **Manton Dam** | **54.30** | **265** | P | | **P** | | **17 16 52.4** | **-1.4** |
| **FORT** | **Forrest** | **55.89** | **243** | P | | **P** | | **17 17 03.4** | **-1.7** |
| **KNRA** | **Kununurra** | **56.12** | **261** | P | | **P** | | **17 17 07.0** | **+0.1** |
| **QSPA** | **South Pole Qui** | **74.56** | **180** | P | | **P** | | **17 19 07.8** | **+2.1** |
| QSPA | | | | IAmb | | IAmb | | 17 19 29.9 | |
| | comp=Z,10nm,1.6s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **80.61** | **10** | P | | **P** | | **17 19 41.7** | **+2.3** |
| TRF | | | | IAmb | | IAmb | | 17 19 45.4 | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **SYO** | **Syowa Base** | **92.62** | **191↑** | *eP* | | **P** | | **17 20 41.4** | **+3.1** |

*JMA **09** 17:09:08.0±0.1, 23.95N×121.93E, h17km±3km, M1.9*
*TAP **09** 17:09:08.4, 23.96N×121.89E, h26km, ML2.5, B*

**ISC 09 17:09:05.5±1.0, 23.86N±0.02×122.02E±0.02, h16km±8km, n86, σ0§78/156, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TEYL** | **Yanliau Villag** | **0.38** | **271** | *eP* | | **Pn** | | **17 09 15.4** | **-1.0** |
| | baz=252 | | | | | | | | |
| TEYL | | | | *eS* | | **Sb** | | **17 09 21.4** | **+1.8** |
| | baz=252 | | | | | | | | |
| **HWA** | **Hwalien** | **0.39** | **287** | *i* P | | **Pb** | | **17 09 15.2** | **+1.1** |
| | baz=273 | | | | | | | | |
| HWA | | | | *eS* | | **Sb** | | **17 09 20.2** | **+0.3** |
| | baz=273 | | | | | | | | |
| **TWD** | **Chiawan** | **0.44** | **299** | *i* P | | **Pb** | | **17 09 15.1** | **+0.2** |
| | baz=286 | | | | | | | | |
| TWD | | | | *i* S | | **Sg** | | **17 09 20.4** | **0.0** |
| | baz=286 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.46** | **251** | *eS* | | **Sn** | | **17 09 24.2** | **-1.2** |
| | baz=227 | | | | | | | | |
| **ETL** | **Fush Village** | **0.47** | **309** | *eP* | | **Pb** | | **17 09 15.5** | **+0.2** |
| | baz=300 | | | | | | | | |
| ETL | | | | *eS* | | **Sg** | | **17 09 21.2** | **0.0** |
| | baz=300 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.49** | **309** | *eP* | | **Pb** | | **17 09 15.8** | **0.0** |
| | baz=303 | | | | | | | | |
| NACB | | | | *eS* | | **Sg** | | **17 09 21.7** | **-0.3** |
| | baz=303 | | | | | | | | |
| **EHP** | **Heping Village** | **0.51** | **331** | *eS* | | **Sg** | | **17 09 23.2** | **+0.7** |
| | baz=332 | | | | | | | | |
| **ESL** | **Shilin** | **0.54** | **265** | *eP* | | **Pb** | | **17 09 17.2** | **+0.7** |
| | baz=250 | | | | | | | | |
| ESL | | | | *eS* | | **Sb** | | **17 09 24.4** | **+0.3** |
| | baz=250 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.60** | **305** | *eP* | | **Pg** | | **17 09 17.6** | **+0.3** |
| | baz=303 | | | | | | | | |
| ETLH | | | | *eS* | | **Sg** | | **17 09 24.2** | **-1.0** |
| | baz=303 | | | | | | | | |
| **ENA** | **Nanau** | **0.62** | **336** | *eP* | | **Pb** | | **17 09 18.4** | **+0.5** |
| | baz=334 | | | | | | | | |
| ENA | | | | *eS* | | **Sg** | | **17 09 26.0** | **+0.2** |
| | baz=334 | | | | | | | | |
| **EWUT** | **Wuta** | **0.62** | **339** | *eP* | | **Pb** | | **17 09 18.7** | **+0.7** |
| | baz=338 | | | | | | | | |
| EWUT | | | | *eS* | | **Sg** | | **17 09 26.5** | **+0.6** |
| | baz=338 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.66** | **236** | *eP* | | **Pn** | | **17 09 20.1** | **0.0** |
| | baz=215 | | | | | | | | |
| HGSD | | | | *eS* | | **Sn** | | **17 09 30.5** | **+0.3** |
| | baz=215 | | | | | | | | |
| **EHY** | **Hungye** | **0.73** | **241** | *eP* | | **Pn** | | **17 09 21.1** | **-0.1** |
| | baz=228 | | | | | | | | |
| EHY | | | | *eS* | | **Sb** | | **17 09 30.6** | **+1.0** |
| | baz=228 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.74** | **292** | *eP* | | **Pg** | | **17 09 20.3** | **+0.2** |
| | baz=288 | | | | | | | | |
| WHF | | | | *eS* | | **Sg** | | **17 09 28.9** | **-1.1** |
| | baz=288 | | | | | | | | |
| **ECBN** | **Changbin** | **0.75** | **224** | *eP* | | **Pn** | | **17 09 21.8** | **+0.4** |
| | baz=199 | | | | | | | | |
| ECBN | | | | *eS* | | **Sn** | | **17 09 32.1** | **-0.5** |
| | baz=199 | | | | | | | | |
| **TWC** | **Suao** | **0.76** | **348** | *eP* | | **Pn** | | **17 09 21.4** | **-0.1** |
| | baz=4.0 | | | | | | | | |
| TWC | | | | *eS* | | **Sb** | | **17 09 31.3** | **+0.9** |
| | baz=4.0 | | | | | | | | |
| **CHGB** | **Renai** | **0.80** | **285** | *eP* | | **Pb** | | **17 09 21.4** | **+0.3** |
| | baz=270 | | | | | | | | |
| CHGB | | | | *eS* | | **Sg** | | **17 09 31.0** | **-0.5** |
| | baz=270 | | | | | | | | |
| **FUSS** | **Fushou** | **0.80** | **299** | *eP* | | **Pb** | | **17 09 21.4** | **+0.2** |
| | baz=295 | | | | | | | | |
| FUSS | | | | *eS* | | **Sg** | | **17 09 30.8** | **-1.1** |
| | baz=295 | | | | | | | | |
| **LATG** | **Datong** | **0.81** | **326** | *eP* | | **Pg** | | **17 09 21.2** | **0.0** |
| | baz=329 | | | | | | | | |
| LATG | | | | *eS* | | **Sg** | | **17 09 30.8** | **-1.0** |
| | baz=329 | | | | | | | | |
| **NNSB** | **Datong** | **0.81** | **314** | *eP* | | **Pg** | | **17 09 21.2** | **0.0** |
| | baz=323 | | | | | | | | |
| NNSB | | | | *eS* | | **Sg** | | **17 09 30.3** | **-1.6** |
| | baz=323 | | | | | | | | |
| **VWDT** | **VWDT** | **0.81** | **263** | *eP* | | **Pn** | | **17 09 22.7** | **+0.4** |
| | baz=253 | | | | | | | | |
| VWDT | | | | *eS* | | **Sb** | | **17 09 32.3** | **+0.5** |
| | baz=253 | | | | | | | | |
| **YULB** | **Yu-li** | **0.81** | **235** | *eP* | | **Pn** | | **17 09 22.4** | **+0.1** |
| | baz=238 | | | | | | | | |
| YULB | | | | *eS* | | **Sb** | | **17 09 32.7** | **+0.8** |
| | baz=238 | | | | | | | | |
| **NDS** | **Dongshan** | **0.82** | **340** | *eP* | | **Pn** | | **17 09 22.0** | **-0.3** |
| | baz=338 | | | | | | | | |
| NDS | | | | *eS* | | **Sg** | | **17 09 32.1** | **-0.1** |
| | baz=338 | | | | | | | | |
| **EYUL** | **Yuli** | **0.82** | **231** | *eS* | | **Sn** | | **17 09 34.8** | **+0.6** |
| | baz=211 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.82** | **315** | *eP* | | **Pg** | | **17 09 21.5** | **0.0** |
| | baz=324 | | | | | | | | |
| NNS | | | | *eS* | | **Sg** | | **17 09 31.1** | **-1.2** |
| | baz=324 | | | | | | | | |
| **TWF1** | **Yuli** | **0.83** | **233** | *eP* | | **Pn** | | **17 09 23.1** | **+0.5** |
| | baz=236 | | | | | | | | |
| TWF1 | | | | *eS* | | **Sn** | | **17 09 34.2** | **-0.4** |
| | baz=236 | | | | | | | | |
| **WUSB** | **Renai** | **0.83** | **279** | *eP* | | **Pb** | | **17 09 22.3** | **+0.7** |
| | baz=272 | | | | | | | | |
| WUSB | | | | *eS* | | **Sg** | | **17 09 31.9** | **-0.8** |
| | baz=272 | | | | | | | | |
| **TWT** | **Tachien** | **0.86** | **297** | *eS* | | **Sg** | | **17 09 32.7** | **-0.9** |
| | baz=293 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.87** | **328** | *eP* | | **Pg** | | **17 09 22.6** | **+0.2** |
| | baz=331 | | | | | | | | |
| NDT | | | | *eS* | | **Sb** | | **17 09 33.1** | **-0.6** |
| | baz=331 | | | | | | | | |
| **TDCB** | **Techi** | **0.88** | **297** | *eS* | | **Sg** | | **17 09 32.8** | **-1.3** |
| | baz=293 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.88** | **332** | *eP* | | **Pg** | | **17 09 22.6** | **+0.1** |
| | baz=329 | | | | | | | | |
| ENTT | | | | *eS* | | **Sb** | | **17 09 32.6** | **-1.3** |
| | baz=329 | | | | | | | | |
| **TWE** | **Neicheng** | **0.91** | **340** | *eP* | | **Pg** | | **17 09 23.5** | **+0.3** |
| | baz=340 | | | | | | | | |
| TWE | | | | *eS* | | **Sb** | | **17 09 35.1** | **+0.2** |
| | baz=340 | | | | | | | | |
| **FULB** | **Fuli** | **0.94** | **225** | *eP* | | **Pn** | | **17 09 26.0** | **+1.9** |
| | baz=204 | | | | | | | | |
| FULB | | | | *eS* | | **Sn** | | **17 09 37.1** | **0.0** |
| | baz=204 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.97** | **218** | *eS* | | **Sb** | | **17 09 36.3** | **-0.1** |
| | baz=196 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.97** | **336** | *eP* | | **Pb** | | **17 09 24.2** | **+0.1** |
| | baz=333 | | | | | | | | |
| FUSB | | | | *eS* | | **Sb** | | **17 09 35.9** | **-0.9** |
| | baz=333 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.98** | **266** | *eP* | | **Pn** | | **17 09 24.9** | **+0.3** |
| | baz=258 | | | | | | | | |
| SSLB | | | | *eS* | | **Sb** | | **17 09 36.8** | **0.0** |
| | baz=258 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.99** | **324** | *eP* | | **Pb** | | **17 09 24.4** | **0.0** |
| | baz=326 | | | | | | | | |
| YHNB | | | | *eS* | | **Sb** | | **17 09 36.0** | **-1.3** |
| | baz=326 | | | | | | | | |
| **NTC** | **Toucheng** | **1.00** | **350** | *eP* | | **Pn** | | **17 09 25.6** | **+0.7** |
| | baz=356 | | | | | | | | |
| NTC | | | | *eS* | | **Sb** | | **17 09 38.1** | **+0.6** |
| | baz=356 | | | | | | | | |
| **NSK** | **Sanguang** | **1.01** | **324** | P | | **Pb** | | **17 09 24.6** | **0.0** |
| | baz=326 | | | | | | | | |
| NSK | | | | S | | **Sb** | | **17 09 36.5** | **-1.2** |
| | baz=326 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.02** | **271** | *eP* | | **Pn** | | **17 09 25.6** | **+0.3** |
| | baz=271 | | | | | | | | |
| SMLT | | | | *eS* | | **Sb** | | **17 09 37.4** | **-0.8** |
| | baz=271 | | | | | | | | |
| **NWLT** | **Wulai** | **1.02** | **333** | *eP* | | **Pg** | | **17 09 25.3** | **0.0** |
| | baz=328 | | | | | | | | |
| NWLT | | | | *eS* | | **Sb** | | **17 09 37.2** | **-0.9** |
| | baz=328 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.03** | **281** | *eP* | | **Pb** | | **17 09 25.3** | **+0.4** |
| | baz=275 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.03** | **55** | P | | **Pn** | | **17 09 27.4** | **+2.1** |
| JYNG | | | | *eS* | | **Sn** | | **17 09 39.8** | **+0.4** |
| **YUS** | **Yu-Shan** | **1.04** | **249** | *eP* | | **Pn** | | **17 09 26.6** | **+0.7** |
| | baz=241 | | | | | | | | |
| YUS | | | | *eS* | | **Sb** | | **17 09 39.5** | **+0.3** |
| | baz=241 | | | | | | | | |
| **TYC** | **Yuchr** | **1.06** | **272** | *eP* | | **Pn** | | **17 09 25.9** | **+0.2** |
| | baz=266 | | | | | | | | |
| TYC | | | | *eS* | | **Sb** | | **17 09 38.4** | **-0.8** |
| | baz=266 | | | | | | | | |
| **WHP** | **Taichung City** | **1.06** | **293** | *eP* | | **Pg** | | **17 09 26.3** | **+0.2** |
| | baz=290 | | | | | | | | |
| WHP | | | | *eS* | | **Sb** | | **17 09 38.8** | **-0.5** |
| | baz=290 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09** | **56** | P | | **Pg** | | **17 09 28.6** | **+2.1** |
| YOJ | | | | *eS* | | **Sn** | | **17 09 42.4** | **+1.6** |
| **YOJ** | **Yonaguni jima** | **1.09** | **56** | *eP* | | **Pg** | | **17 09 28.4** | **+1.9** |
| | baz=64 | | | | | | | | |
| YOJ | | | | *eS* | | **Sn** | | **17 09 42.6** | **+1.8** |
| | baz=64 | | | | | | | | |
| **EDH** | **Donghe** | **1.10** | **217** | *eP* | | **Pg** | | **17 09 26.6** | **-0.2** |
| | baz=197 | | | | | | | | |
| EDH | | | | *eS* | | **Sb** | | **17 09 40.0** | **-0.3** |
| | baz=197 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.12** | **351** | *eP* | | **Pg** | | **17 09 27.5** | **+0.4** |
| | baz=356 | | | | | | | | |
| TIPB | | | | *eS* | | **Sb** | | **17 09 41.5** | **+0.7** |
| | baz=356 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.12** | **313** | *eP* | | **Pn** | | **17 09 27.0** | **+0.4** |
| | baz=313 | | | | | | | | |
| NFF | | | | *eS* | | **Sb** | | **17 09 39.5** | **-1.5** |
| | baz=313 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.14** | **234** | *eP* | | **Pg** | | **17 09 27.4** | **-0.1** |
| | baz=226 | | | | | | | | |
| ELDTW | | | | *eS* | | **Sb** | | **17 09 41.4** | **0.0** |
| | baz=226 | | | | | | | | |
| **ALS** | **Alishan** | **1.17** | **253** | *eP* | | **Pg** | | **17 09 28.3** | **+0.3** |
| | baz=245 | | | | | | | | |
| ALS | | | | *eS* | | **Sb** | | **17 09 43.0** | **+0.6** |
| | baz=245 | | | | | | | | |
| **TWA** | **Mucha** | **1.18** | **341** | *eP* | | **Pg** | | **17 09 28.3** | **0.0** |
| | baz=336 | | | | | | | | |
| TWA | | | | *eS* | | **Sn** | | **17 09 43.4** | **+0.2** |
| | baz=336 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.18** | **338** | *eP* | | **Pg** | | **17 09 28.4** | **0.0** |
| | baz=329 | | | | | | | | |
| NHDH | | | | *eS* | | **Sb** | | **17 09 42.4** | **-0.3** |
| | baz=329 | | | | | | | | |
| **LIOB** | **Emei** | **1.20** | **311** | *eP* | | **Pb** | | **17 09 28.4** | **+0.6** |
| | baz=311 | | | | | | | | |
| LIOB | | | | *eS* | | **Sb** | | **17 09 42.0** | **-1.2** |
| | baz=311 | | | | | | | | |
| **TATO** | **Taipei** | **1.21** | **337** | *eP* | | **Pn** | | **17 09 28.0** | **+0.2** |
| | baz=340 | | | | | | | | |
| TATO | | | | *eS* | | **Sb** | | **17 09 42.4** | **-1.0** |
| | baz=340 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.22** | **350** | *eP* | | **Pg** | | **17 09 28.9** | **-0.2** |
| | baz=355 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.23** | **354** | *eP* | | **Pg** | | **17 09 29.6** | **+0.3** |
| | baz=14 | | | | | | | | |
| SXI1 | | | | *eS* | | **Sb** | | **17 09 43.8** | **-0.4** |
| | baz=14 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.23** | **293** | *eP* | | **Pg** | | **17 09 30.1** | **+0.8** |
| | baz=290 | | | | | | | | |
| TWQ1 | | | | *eS* | | **Sn** | | **17 09 45.3** | **+0.7** |
| | baz=290 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.25** | **258** | *eP* | | **Pg** | | **17 09 30.6** | **+0.9** |
| | baz=251 | | | | | | | | |
| CHN5 | | | | *eS* | | **Sn** | | **17 09 45.6** | **+0.5** |
| | baz=251 | | | | | | | | |
| **LDUT** | **Ludao** | **1.29** | **203** | *eS* | | **Sb** | | **17 09 44.5** | **-1.1** |
| | baz=197 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.33** | **239** | *eP* | | **Pg** | | **17 09 30.9** | **-0.2** |
| | baz=222 | | | | | | | | |
| STYH | | | | *eS* | | **Sb** | | **17 09 47.2** | **+0.3** |
| | baz=222 | | | | | | | | |
| **YM01** | **YM01** | **1.34** | **342** | *eS* | | **Sn** | | **17 09 46.2** | **-0.9** |
| | baz=333 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.35** | **220** | *eS* | | **Sn** | | **17 09 45.6** | **-1.7** |
| | baz=213 | | | | | | | | |
| **TWG** | **Pinlang** | **1.35** | **220** | *eS* | | **Sn** | | **17 09 46.4** | **-1.0** |
| | baz=213 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.39** | **247** | *eP* | | **Pg** | | **17 09 32.4** | **+0.1** |
| | baz=240 | | | | | | | | |
| TPUB | | | | *eS* | | **Sg** | | **17 09 50.2** | **-0.2** |
| | baz=240 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.43** | **245** | *eP* | | **Pg** | | **17 09 32.9** | **-0.1** |
| | baz=237 | | | | | | | | |
| WTP | | | | *eS* | | **Sg** | | **17 09 51.3** | **-0.2** |
| | baz=237 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.50** | **272** | *eS* | | **Sb** | | **17 09 52.1** | **+0.3** |
| | baz=266 | | | | | | | | |
| **WTK** | **Tuku** | **1.50** | **264** | *eS* | | **Sg** | | **17 09 53.7** | **-0.2** |
| | baz=257 | | | | | | | | |
| **TWK** | **Hsinying** | **1.52** | **247** | *eP* | | **Pg** | | **17 09 34.7** | **-0.1** |
| | baz=240 | | | | | | | | |
| TWK | | | | *eS* | | **Sb** | | **17 09 53.4** | **+0.9** |
| | baz=240 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.52** | **244** | *eP* | | **Pg** | | **17 09 35.1** | **+0.3** |
| | baz=237 | | | | | | | | |
| CHN1 | | | | *eS* | | **Sg** | | **17 09 54.4** | **-0.2** |
| | baz=237 | | | | | | | | |
| **SLGT** | **Liugui** | **1.53** | **236** | *eP* | | **Pb** | | **17 09 33.9** | **+0.5** |
| | baz=229 | | | | | | | | |
| SLGT | | | | *eS* | | **Sb** | | **17 09 53.2** | **+0.6** |
| | baz=229 | | | | | | | | |
| **SGST** | **Jiashian** | **1.53** | **240** | *eS* | | **Sb** | | **17 09 52.7** | **+0.1** |
| | baz=223 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.64** | **73** | P | | **Pg** | | **17 09 37.4** | **+0.5** |
| IRIF | | | | *eS* | | **Sg** | | **17 09 57.3** | **-0.9** |
| **HATJ** | **Hateruma jima** | **1.65** | **83** | P | | **Pg** | | **17 09 37.5** | **+0.3** |
| HATJ | | | | *eS* | | **Sg** | | **17 09 58.2** | **-0.4** |
| **SSD** | **Sandimen** | **1.69** | **229** | *eP* | | **Pg** | | **17 09 37.4** | **-0.5** |
| | baz=223 | | | | | | | | |
| SSD | | | | *eS* | | **Sb** | | **17 09 57.5** | **+0.2** |
| | baz=223 | | | | | | | | |
| **TSMG** | **Majia** | **1.71** | **228** | *eP* | | **Pg** | | **17 09 37.5** | **-0.8** |
| | baz=213 | | | | | | | | |
| TSMG | | | | *eS* | | **Sb** | | **17 09 58.0** | **+0.2** |
| | baz=213 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.78** | **226** | *eP* | | **Pb** | | **17 09 37.5** | **-0.2** |
| | baz=210 | | | | | | | | |
| MASBT | | | | *eS* | | **Sb** | | **17 09 59.8** | **-0.1** |
| | baz=210 | | | | | | | | |
| **TAWH** | **Dawu Township** | **1.84** | **215** | *eS* | | **Sn** | | **17 09 59.1** | **-0.3** |
| | baz=210 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.86** | **78** | P | | **Pg** | | **17 09 40.8** | **-0.4** |
| JKRS | | | | *eS* | | **Sg** | | **17 10 03.4** | **-2.0** |
| **SCZT** | **Fangliau** | **1.96** | **221** | *eP* | | **Pb** | | **17 09 41.8** | **+0.9** |
| | baz=208 | | | | | | | | |
| SCZT | | | | *eS* | | **Sb** | | **17 10 05.8** | **+0.7** |
| | baz=208 | | | | | | | | |
| **SLIU** | **Shizi** | **1.98** | **215** | *eP* | | **Pg** | | **17 09 43.2** | **-0.4** |
| | baz=200 | | | | | | | | |
| SLIU | | | | *eS* | | **Sb** | | **17 10 05.5** | **-0.3** |
| | baz=200 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.01** | **75** | P | | **Pb** | | **17 09 41.6** | **0.0** |
| JIJ | | | | *eS* | | **Sb** | | **17 10 05.7** | **-0.7** |
| **JISG** | **Ishigakijimahi** | **2.21** | **71** | P | | **Pb** | | **17 09 44.1** | **-1.1** |
| JISG | | | | *eS* | | **Sb** | | **17 10 10.4** | **-2.0** |
| **JTJ** | **Tarama** | **2.57** | **72** | P | | **Pb** | | **17 09 50.5** | **-0.7** |
| JTJ | | | | S | | **Sb** | | **17 10 20.8** | **-1.8** |

**IDC 09 17:59:31.9±1.1, 6.98S×129.13E, h0km, mb3.1/1, mb1 3.4/4, mb1mx2.8/35, mbtmp3.2/4, ML3.4/3, Error ellipse: s-maj=12.5km s-min=7.8km az=12.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.56** | **197** | | | Pn | Pn | 18 02 18.3 | 0.0 |
| | 0.1nm,0.3s,baz=16,slow=9.0,SNR=13 | | | | | | | | |
| FITZ | | | | | | Sn | Sn | 18 04 15.7 | -12 |
| | 0.3nm,0.3s,baz=203,slow=21,SNR=6.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.84** | **159** | | | Pn | Pn | 18 02 49.5 | 0.0 |
| | 0.3nm,0.3s,baz=344,slow=12,SNR=20 | | | | | | | | |
| WRA |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KNRA | | | | | IAmb | IAmb | 18 20 26.6 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.54** | **164** | P | **P** | **18 20 51.1** | **-0.3** | |
| WB0 | | | | | IAmb | IAmb | 18 21 31.0 | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.69** | **165** | P | **P** | **18 20 52.0** | **-0.7** | |
| WRAB | | | | | IAmb | IAmb | 18 21 01.3 | |
| | comp=Z,9.5nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.70** | **165** | P | **P** | **18 20 52.5** | **-0.3** | |
| | comp=Z,0.5nm,0.8s,baz=345,slow=9.3,SNR=2.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.70** | **165** | IAmb | IAmb | 18 21 00.5 | | |
| | comp=Z,0.7nm,1.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.70** | **165** | P | **P** | **18 20 52.8** | **0.0** | |
| WB2 | | | | | IAmb | IAmb | 18 21 01.4 | |
| | comp=Z,7.8nm,1.2s | | | | | | | |
| **WR0** | **Warramunga Arr** | **33.77** | **164** | P | **P** | **18 20 50.3** | **-3.1** | |
| WR0 | | | | | IAmb | IAmb | 18 20 51.0 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **AS31** | **Alice Springs** | **37.17** | **167** | P | **P** | **18 21 23.4** | **+0.7** | |
| **ASAR** | **Alice Springs** | **37.17** | **167** | P | **P** | **18 21 23.1** | **+0.5** | |
| | comp=Z,0.4nm,0.5s,baz=349,slow=6.9,SNR=20 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **38.17** | **340** | P | **P** | **18 21 26.4** | **-4.6** | |
| ULN | | | | | IAmb | IAmb | 18 21 47.4 | |
| | comp=Z,8.0nm,1.7s | | | | | | | |
| **SONM** | **Songino Array** | **38.37** | **339** | P | **P** | **18 21 33.7** | **+1.1** | |
| | comp=Z,1.1nm,0.9s,baz=162,slow=8.0,SNR=6.2 | | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **41.71** | **91** | P | **P** | **18 21 58.8** | **-1.9** | |
| **MORW** | **Morawa** | **42.54** | **192** | P | **P** | **18 22 03.4** | **-3.8** | |
| MORW | | | | | IAmb | IAmb | 18 22 07.4 | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **43.37** | **177** | P | **P** | **18 22 11.4** | **-2.4** | |
| FORT | | | | | IAmb | IAmb | 18 22 43.1 | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **EIDS** | **Eidsvold** | **45.47** | **147** | P | **P** | **18 22 31.0** | **+0.3** | |
| **NWAO** | **Narrogin (SRO)** | **46.08** | **189** | P | **P** | **18 22 33.2** | **-2.3** | |
| **BBOO** | **Buckleboo** | **46.47** | **167** | P | **P** | **18 22 39.4** | **+0.9** | |
| **STKA** | **Stephens Creek** | **47.05** | **161** | P | **P** | **18 22 44.9** | **+1.8** | |
| | comp=Z,2.0nm,0.5s,baz=324,slow=6.1,SNR=4.8 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **47.79** | **26** | P | **P** | **18 22 50.5** | **+1.8** | |
| | comp=Z,3.6nm,0.9s,baz=218,slow=16,SNR=3.7 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **47.79** | **26** | P | **P** | **18 22 48.3** | **-0.3** | |
| **MK31** | **Makanchi Array** | **49.49** | **322** | P | **P** | **18 23 01.9** | **+0.1** | |
| **MKAR** | **Makanchi Array** | **49.49** | **322** | P | **P** | **18 23 02.8** | **+1.0** | |
| | comp=Z,3.1nm,0.9s,baz=116,slow=8.1,SNR=23 | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.49** | **322** | P | **P** | **18 23 02.2** | **+0.4** | |
| MKAR | | | | PcP | **PcP** | **18 24 23.9** | **+0.3** | |
| **MAKZ** | **Makanchi** | **49.68** | **322** | P | **P** | **18 23 03.3** | **0.0** | |
| MAKZ | | | | | IAmb | IAmb | 18 23 06.7 | |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.00** | **331** | P | **P** | **18 23 20.1** | **-0.5** | |
| | comp=Z,0.9nm,0.6s,baz=98,slow=6.1,SNR=5.4 | | | | | | | |
| **DZM** | **Mont Dzumac** | **53.16** | **130** | P | **P** | **18 23 29.9** | **+0.2** | |
| DZM | | | | PcP | **PcP** | **18 24 37.0** | **-0.7** | |
| **KAAM** | **Kaadhehdhoo** | **53.25** | **261** | P | **P** | **18 23 27.8** | **-2.7** | |
| **ONTNC** | **Ouen Toro** | **53.31** | **131** | P | **P** | **18 23 30.2** | **-0.5** | |
| **KURK** | **Kurchatov** | **53.49** | **325** | P | **P** | **18 23 31.4** | **-0.2** | |
| KURK | | | | | IAmb | IAmb | 18 23 34.6 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.50** | **325** | P | **P** | **18 23 32.2** | **+0.5** | |
| | comp=Z,2.1nm,0.8s,baz=121,slow=8.1,SNR=19 | | | | | | | |
| **CHGR** | **Chuyangaron** | **55.80** | **308** | P | **P** | **18 23 48.6** | **-0.2** | |
| CHGR | | | | | IAmb | IAmb | 18 23 52.5 | |
| | comp=Z,5.9nm,1.0s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.85** | **314** | P | **P** | **18 23 49.1** | **+0.2** | |
| **DGAR** | **Diego Garcia** | **56.21** | **252** | P | **P** | **18 23 52.1** | **+0.2** | |
| **BVAR** | **Borovoye Array** | **59.09** | **325** | P | **P** | **18 24 12.5** | **+0.9** | |
| | comp=Z,0.7nm,0.7s,baz=96,slow=9.3,SNR=5.0 | | | | | | | |
| **ABKAR** | **Akbulak array** | **64.39** | **319** | P | **P** | **18 24 47.4** | **+0.1** | |
| **BKZ** | **Black Stump Fm** | **70.29** | **140** | P | **P** | **18 25 26.1** | **+1.2** | |
| **EKA** | **Eskdalemuir Ar** | **99.59** | **333** | LR | LR | 19 18 52.3 | | |
| | comp=Z,155nm,19.2s,baz=14,slow=39 | | | | | | | |

*CNRM **09** 18:16:07.2,35˚.50N×3˚.87W,h21km,ml2.9*
*INMG **09** 18:16:08.7±1.4,35˚.57N×3˚.77W,h2km±4km,ML2.1,Error ellipse: s-maj=3.2km s-min=3.2km az=63.0*
*SFS **09** 18:16:08.0,35˚.56N×3˚.76W,ML2.2,ALBORAN SUR*

**ISC 09 18:16:08.1±1.1,35˚.48N±0˚.03×3˚.82W±0˚.05,h16km±8km, n19,σ1°55/33,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.28** | **200** | P | | **Pg** | **18 16 14.2** | **+0.1** |
| PALE | | | | S | | **Sg** | **18 16 18.0** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.72** | **111** | P | | **Pg** | **18 16 21.1** | **-1.1** |
| GOG | | | | S | | **Sg** | **18 16 30.6** | **-1.2** |
| **SMIR** | **Smir Dam** | **1.29** | **279** | P | | **Pn** | **18 16 29.2** | **-2.1** |
| SMIR | | | | S | | **Sn** | **18 16 45.9** | **-2.3** |
| **CEU** | **Ceuta** | **1.33** | **289** | P | | **Pg** | **18 16 33.5** | **-0.2** |
| CEU | | | | S | | **Sn** | **18 16 44.7** | **-4.6** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **339** | P | | **Pg** | **18 16 36.9** | **+2.5** |
| EMAL | | | | S | | **Sg** | **18 16 51.3** | **-1.0** |
| **LCRM** | **LCR** | **1.98** | **206** | P | | **Pn** | **18 16 43.1** | **+2.1** |
| LCRM | | | | S | | **Sn** | **18 17 07.6** | **+2.0** |
| **IFR** | **Ifrane** | **2.23** | **209** | P | | **Pn** | **18 16 48.8** | **+0.7** |
| IFR | | | | S | | **Sn** | **18 17 10.7** | **-1.2** |
| **MD31** | **MD31** | **2.72** | **197** | P | | **Pn** | **18 16 51.7** | **+0.5** |
| MD31 | | | | S | | **Sn** | **18 17 22.8** | **-0.9** |
| **MDT** | **Midelt** | **2.74** | **194** | P | | **Pn** | **18 16 52.2** | **+0.8** |
| MDT | | | | S | | **Sn** | **18 17 25.1** | **+0.9** |
| **ZHG** | **ZHG** | **3.09** | **230** | P | | **Pn** | **18 16 55.8** | **-0.4** |
| ZHG | | | | S | | **Sn** | **18 17 31.5** | **-1.4** |
| **PVAQ** | **Vaqueiros** | **3.68** | **303** | *e*Pn | | **Pn** | **18 17 05.7** | **+1.4** |
| PVAQ | | | | *e*Sn | | **Sn** | **18 17 46.9** | **-0.4** |
| PVAQ | | | | A | | A | 18 17 48.9 | |
| | 3.9nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.68** | **303** | P | | **Pn** | **18 17 03.7** | **-0.5** |
| PVAQ | | | | S | | **Sn** | **18 17 45.5** | **-1.8** |
| **PBDV** | **Barranco-do-Ve** | **3.75** | **299** | *e*Pn | | **Pn** | **18 17 07.4** | **+2.1** |
| PBDV | | | | *e*Sn | | **Sn** | **18 17 49.0** | **-0.2** |
| PBDV | | | | A | | A | 18 17 54.0 | |
| | 4.6nm,0.6s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.02** | **304** | *e*Sn | | **Sn** | **18 17 55.9** | **+0.3** |
| **MESJ** | **Messejana** | **4.25** | **305** | *e*Sn | | **Sn** | **18 18 01.5** | **+0.2** |
| **MORF** | **Marmelete** | **4.30** | **296** | *e*Sn | | **Sn** | **18 18 03.5** | **+0.8** |
| MORF | | | | A | | A | 18 18 05.0 | |
| | 4.8nm,0.5s | | | | | | | |
| **PESTR** | **Estremoz** | **4.53** | **319** | *e*Sn | | **Sn** | **18 18 07.3** | **-0.9** |
| **PNCL** | **Nicolau / Gran** | **4.60** | **306** | *e*Pn | | **Pn** | **18 17 17.8** | **+0.9** |
| PNCL | | | | *e*Sn | | **Sn** | **18 18 08.6** | **-1.4** |
| PNCL | | | | A | | A | 18 18 14.6 | |
| | 1.9nm,0.4s | | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **317** | *e*Sn | | **Sn** | **18 18 19.9** | **-0.3** |

*THE **09** 18:31:28.8,35˚.38N×23˚.57E,h0km±1km,ML3.4/9,Error ellipse: s-maj=1.9km s-min=0.6km az=237.0*
*NEIC **09** 18:31:29.3±3.0,35˚.17N±0˚.09×23˚.64E±0˚.02,h10km±1km, mb4.0/6,Error ellipse: s-maj=14.6km s-min=3.1km az=176.0*
*ISK **09** 18:31:29.2,35˚.37N×23˚.63E,h5km,ML3.6/11*
*ATH **09** 18:31:29.2,35˚.37N×23˚.59E,h14km±2km,ML3.4/6,Error ellipse: s-maj=2.2km s-min=0.9km az=103.0*
*IDC **09** 18:31:33.2±2.0,35˚.29N×23˚.81E,h39km±20km,mb3.6/12, mb1 3.7/18,mb1mx3.5/53,mbtmp3.7/18,ML3.5/6,MS4.2/2, Ms1 4.1/2,ms1mx2.8/84,Error ellipse: s-maj=17.4km s-min=15.3km az=172.0*

**ISC 09 18:31:29.1±0.8,35˚.37N±0˚.02×23˚.61E±0˚.02,h10km±6km, n89,σ1°51/108,mb3.9/14,Crete**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.15** | **155** | P | | **Pg** | **18 31 32.1** | **-0.3** |
| KNDR | | | | S | | **Sg** | **18 31 34.7** | **0.0** |
| | 13μm,0.6s | | | | | | | |
| **KNDR** | **Palaiochora Ch** | **0.15** | **155** | PG | | **Pg** | **18 31 32.3** | **-0.1** |
| KNDR | | | | SG | | **Sg** | **18 31 34.9** | **+0.2** |
| **IMMV** | **Iera Moni Meta** | **0.32** | **74** | P | | **Pg** | **18 31 35.7** | **+0.3** |
| IMMV | | | | S | | **Sb** | **18 31 41.7** | **-0.5** |
| | 6μm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.32** | **74** | P | | **Pg** | **18 31 35.7** | **+0.3** |
| IMMV | | | | S | | **Sb** | **18 31 41.2** | **-0.9** |
| IMMV | | | | AML | | AML | 18 31 42.5 | |
| | comp=N,11332μm,0.2s | | | | | | | |
| IMMV | | | | AML | | AML | 18 31 42.5 | |
| | comp=E,8950μm,0.2s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.32** | **74** | PG | | **Pg** | **18 31 35.9** | **+0.4** |
| IMMV | | | | SG | | **Sb** | **18 31 41.6** | **-0.6** |
| **VAM** | **Vamos** | **0.48** | **86** | P | | **Pg** | **18 31 38.6** | **0.0** |
| VAM | | | | S | | **Sb** | **18 31 47.0** | **0.0** |
| | comp=E,15μm,0.2s | | | | | | | |
| **VAM** | **Vamos** | **0.48** | **86** | P | | **Pg** | **18 31 38.7** | **+0.2** |
| VAM | | | | S | | **Sb** | **18 31 45.9** | **-1.1** |
| VAM | | | | AML | | AML | 18 31 48.8 | |
| | comp=N,16157μm,0.2s | | | | | | | |
| VAM | | | | AML | | AML | 18 31 49.2 | |
| | comp=E,12838μm,0.2s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.56** | **333** | P | | **Pg** | **18 31 39.6** | **-0.3** |
| ANKY | | | | S | | **Sg** | **18 31 47.2** | **0.0** |
| | comp=E,4μm,0.4s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.56** | **333** | P | | **Pg** | **18 31 39.8** | **-0.1** |
| ANKY | | | | S | | **Sg** | **18 31 47.4** | **+0.2** |
| ANKY | | | | AML | | AML | 18 31 48.8 | |
| | comp=N,8942μm,0.5s | | | | | | | |
| ANKY | | | | AML | | AML | 18 31 51.2 | |
| | comp=E,7838μm,0.8s | | | | | | | |
| **GVDS** | **Gavdos** | **0.66** | **143** | P | | **Pg** | **18 31 41.6** | **-0.2** |
| GVDS | | | | S | | **Sb** | **18 31 52.1** | **+0.1** |
| | comp=E,6μm,0.3s | | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **143** | P | | **Pg** | **18 31 41.6** | **-0.3** |
| GVD | | | | S | | **Sb** | **18 31 52.6** | **+0.6** |
| | comp=E,6μm,0.6s | | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **143** | P | | **Pg** | **18 31 41.6** | **-0.3** |
| GVD | | | | S | | **Sb** | **18 31 51.5** | **-0.5** |
| GVD | | | | AML | | AML | 18 31 55.7 | |
| | comp=N,11665μm,0.6s | | | | | | | |
| GVD | | | | AML | | AML | 18 31 57.4 | |
| | comp=E,10608μm,0.7s | | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **143** | PG | | **Pb** | **18 31 42.9** | **+0.1** |
| GVD | | | | SG | | **Sn** | **18 31 53.6** | **-1.5** |
| **PRNS** | **Prines Rethymn** | **0.73** | **90** | P | | **Pg** | **18 31 41.8** | **-1.4** |
| PRNS | | | | S | | **Sg** | **18 31 52.4** | **-0.3** |
| | comp=E,902nm,0.3s | | | | | | | |
| **KTHA** | **Kythira Island** | **0.99** | **333** | P | | **Pg** | **18 31 47.6** | **-0.6** |
| KTHA | | | | S | | **Sg** | **18 32 01.3** | **+0.2** |
| | comp=E,3μm,0.4s | | | | | | | |
| **KTHA** | **Kythira Island** | **0.99** | **333** | P | | **Pg** | **18 31 47.5** | **-0.6** |
| KTHA | | | | S | | **Sg** | **18 32 00.7** | **-0.4** |
| KTHA | | | | AML | | AML | 18 32 05.0 | |
| | comp=N,3966μm,0.3s | | | | | | | |
| KTHA | | | | AML | | AML | 18 32 05.4 | |
| | comp=E,8764μm,0.4s | | | | | | | |
| **KTHR** | **Kythira** | **1.01** | **331** | P | | **Pg** | **18 31 47.8** | **-0.9** |
| KTHR | | | | S | | **Sg** | **18 32 01.2** | **-0.7** |
| | comp=E,2μm,0.3s | | | | | | | |
| **IDI** | **Anoyia** | **1.05** | **94** | Pn | | **Pg** | **18 31 48.6** | **-0.8** |
| | comp=E,14nm,0.3s,baz=281,slow=13,SNR=190 | | | | | | | |
| IDI | | | | Sn | | **Sg** | **18 32 02.6** | **-0.4** |
| | comp=E,54nm,0.3s,baz=292,slow=21,SNR=13 | | | | | | | |
| IDI | | | | LR | | LR | 18 32 25.7 | |
| | comp=E,196nm,20.8s,baz=236,slow=59 | | | | | | | |
| **IDI** | **Anoyia** | **1.05** | **94** | P | | **Pg** | **18 31 48.2** | **-1.1** |
| **IDI** | **Anoyia** | **1.05** | **94** | P | | **Pg** | **18 31 48.8** | **-0.5** |
| IDI | | | | AML | | AML | 18 32 09.2 | |
| | comp=E,1226μm,0.3s | | | | | | | |
| IDI | | | | AML | | AML | 18 32 09.5 | |
| | comp=N,1581μm,0.6s | | | | | | | |
| **HRKL** | **Herakleio** | **1.22** | **92** | PN | | **Pg** | **18 31 53.4** | **+0.8** |
| HRKL | | | | SN | | **Sn** | **18 32 11.3** | **+2.4** |
| **MNVA** | **Monemvasia** | **1.39** | **341** | P | | **Pn** | **18 31 54.5** | **-0.2** |
| **VLI** | **Veliai** | **1.45** | **338** | P | | **Pn** | **18 31 55.7** | **+0.2** |
| **VLI** | **Veliai** | **1.45** | **338** | P | | **Pn** | **18 31 55.6** | **+0.2** |
| **MHLO** | **Agia Marina, M** | **1.47** | **26** | P | | **Pb** | **18 31 56.1** | **-0.4** |
| **MHLO** | **Agia Marina, M** | **1.47** | **26** | P | | **Pb** | **18 31 56.1** | **-0.4** |
| **NPS** | **Neapolis** | **1.64** | **93** | P | | **Pb** | **18 31 59.4** | **-0.2** |
| **THR9** | **Santorini-Faro** | **1.73** | **55** | P | | **Pb** | **18 32 00.2** | **-0.8** |
| **THR6** | **Thira Island,** | **1.75** | **55** | P | | **Pb** | **18 32 00.6** | **-0.8** |
| **THR5** | **Thira Island,** | **1.76** | **53** | P | | **Pb** | **18 32 00.8** | **-0.7** |
| **SNT5** | **Nea Kammeni, S** | **1.78** | **54** | P | | **Pn** | **18 32 00.7** | **+0.7** |
| **THR3** | **Thira Island,** | **1.79** | **54** | P | | **Pn** | **18 32 00.6** | **+0.5** |
| **SANT** | **Santorini** | **1.80** | **56** | P | | **Pb** | **18 32 01.6** | **-0.7** |
| **SANT** | **Santorini** | **1.80** | **56** | PN | | **Pg** | **18 32 03.0** | **-0.7** |
| SANT | | | | SN | | **Sg** | **18 32 26.7** | **-0.4** |
| **SANT** | **Santorini** | **1.80** | **56** | | | **Pn** | **18 32 00.5** | **+0.2** |
| SANT | | | | Sn | | **Sg** | **18 32 27.5** | **+0.3** |
| **ZKR** | **Zakros** | **2.15** | **96** | PN | | **Pb** | **18 32 07.9** | **-0.3** |
| **ITM** | **Ithomi** | **2.26** | **324** | PN | | **Pb** | **18 32 09.9** | **-0.2** |
| **ITM** | **Ithomi** | **2.26** | **324** | | | **Pb** | **18 32 09.0** | **-1.0** |
| **KOSK** | **Kos Island** | **3.06** | **62** | PN | | **Pb** | **18 32 20.6** | **-3.1** |
| **BODT** | **Bodrum** | **3.44** | **60** | PN | | **Pn** | **18 32 25.4** | **+2.6** |
| **ARG** | **Arkhangelos** | **3.77** | **76** | PN | | **Pn** | **18 32 30.2** | **+2.9** |
| **AGG** | **Agios Georgios** | **3.79** | **345** | | | **Pn** | **18 32 30.0** | **+2.4** |
| **URLA** | **Izmir** | **3.83** | **38** | PN | | **Pn** | **18 32 31.2** | **+3.0** |
| **LIT** | **Litokhoron** | **4.80** | **350** | | | **Pn** | **18 32 44.3** | **+2.7** |
| **AKAS** | **Kas** | **4.95** | **78** | Pn | | **Pn** | **18 32 45.9** | **+2.2** |
| **ELL** | **Elmali** | **5.29** | **73** | | | **Pn** | **18 32 49.6** | **+1.3** |
| **FNA** | **Florina** | **5.68** | **343** | Pn | | **Pn** | **18 32 58.1** | **+4.3** |
| **ALN** | **Alexandroupoli** | **5.84** | **118** | Pn | | **Pn** | **18 33 00.4** | **+4.6** |
| **TIP** | **Timpagrande** | **6.65** | **307** | Pn | | **Pn** | **18 33 06.9** | **-0.2** |
| **VTS** | **Vitosha** | **7.24** | **358** | | | **Pn** | **18 33 18.9** | **+3.7** |
| **RAFF** | **Raffo Rosso** | **7.69** | **287** | Pn | | **Pn** | **18 33 20.4** | **-0.9** |
| **CSS** | **Mathiatis** | **7.97** | **90** | Pn | | **Pn** | **18 33 27.1** | **+2.0** |
| **STON** | **Ston** | **8.78** | **330** | *e*Pn | | **Pn** | **18 33 35.3** | **-0.8** |
| **SGRT** | **San Giovanni R** | **8.86** | **318** | Pn | | **Pn** | **18 33 41.8** | **+4.5** |
| **BRTR** | **Keskin Array B** | **9.07** | **58** | Pn | | **Pn** | **18 33 42.5** | **+2.1** |
| | comp=N,0.2nm,0.3s,baz=254,slow=10,SNR=2.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **9.07** | **58** | | | **Pn** | **18 33 41.4** | **+1.0** |
| **RICI** | **Ricice** | **9.53** | **330** | *e*Pn | | **Pn** | **18 33 46.0** | **-0.4** |
| **KIJV** | **Kijevo** | **10.25** | **329** | *e*Pn | | **Pn** | **18 33 55.5** | **-0.8** |
| KIJV | | | | Sn | | Sn | 18 35 42.2 | -9.1 |
| **MLR** | **Muntele Rosu** | **10.26** | **9** | Pn | | **Pn** | **18 33 59.4** | **+2.8** |
| | comp=N,0.1nm,0.3s,baz=115,slow=22,SNR=1.8 | | | | | | | |
| **MLR** | **Muntele Rosu** | **10.26** | **9** | Pn | | **Pn** | **18 34 01.1** | **+4.5** |
| **MORI** | **Morici** | **10.44** | **327** | *e*Pn | | **Pn** | **18 33 58.7** | **-0.2** |
| **GHAJ** | **Ghor Haditha** | **10.79** | **109** | Pn | | **Pn** | **18 34 03.1** | **-0.7** |
| **NRCA** | **Norcia** | **11.04** | **316** | Pn | | **Pn** | **18 34 08.6** | **+1.4** |
| **EIL** | **Elat** | **11.13** | **118** | Pn | | **Pn** | **18 34 08.0** | **-0.4** |
| | comp=N,0.3nm,0.3s,baz=277,slow=13,SNR=2.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **15.32** | **335** | Pn | | **P** | **18 35 08.6** | **-1.8** |
| | comp=N,0.2nm,0.3s,baz=148,slow=15,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **15.86** | **13** | Pn | | **Pn** | **18 35 12.6** | **+0.2** |
| | comp=N,0.5nm,0.3s,baz=204,slow=10,SNR=4.7 | | | | | | | |
| **KBZ** | **Khabaz** | **17.03** | **55** | Pn | | **P** | **18 35 29.1** | **-0.1** |
| | comp=N,0.1nm,0.3s,baz=242,slow=14,SNR=4.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **22.25** | **289** | P | | **P** | **18 36 28.9** | **+2.7** |
| | comp=N,0.6nm,0.8s,baz=90,slow=12,SNR=2.1 | | | | | | | |
| **HFS** | **Hagfors** | **25.60** | **348** | P | | **P** | **18 36 59.8** | **+1.4** |
| | comp=N,1.7nm,0.6s,baz=141,slow=9.6,SNR=8.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.14** | **3** | P | | **P** | **18 37 04.2** | **+0.9** |
| | comp=N,3.2nm,1.1s,baz=163,slow=14,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.14** | **3** | P | | **P** | **18 37 04.9** | **+1.7** |
| **NC602** | **NORSAR Array S** | **26.54** | **347** | P | | **P** | **18 37 08.9** | **+2.0** |
| **EKA** | **Eskdalemuir Ar** | **27.14** | **325** | P | | **P** | **18 37 14.8** | **+2.4** |
| | comp=Z,4nm,0.4s,baz=123,slow=9.0,SNR=4.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.68** | **227** | P | | **P** | **18 37 35.3** | **0.0** |
| | comp=N,0.9nm,0.5s,baz=42,slow=7.3,SNR=5.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.68** | **227** | P | | **P** | **18 37 34.5** | **-0.8** |
| TORD | | | | IAmb | | IAmb | 18 38 03.9 | |
| | comp=Z,4.4nm,1.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.23** | **1** | P | | **P** | **18 38 15.4** | **+0.6** |
| | comp=Z,7.1nm,1.1s,baz=122,slow=4.6,SNR=3.9 | | | | | | | |
| **DBIC** | **Dimbokro** | **38.73** | **229** | P | | **P** | **18 38 54.9** | **+1.2** |
| | comp=Z,3.3nm,0.6s,baz=32,slow=9.1,SNR=5.2 | | | | | | | |
| **DBIC** | **Dimbokro** | **38.73** | **229** | P | | **P** | **18 38 50.8** | **-2.8** |
| **KURK** | **Kurchatov** | **42.03** | **51** | P | | **P** | **18 39 18.9** | **-1.8** |
| KURK | | | | IAmb | | IAmb | 18 39 27.6 | |
| | comp=Z,4.5nm,1.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **44.50** | **57** | P | | **P** | **18 39 40.0** | **-0.7** |
| MAKZ | | | | IAmb | | IAmb | 18 40 03.9 | |
| | comp=Z,3.7nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.72** | **57** | P | | **P** | **18 39 42.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **44.72** | **57** | P | | **P** | **18 39 42.0** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=272,slow=7.8,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.72** | **57** | P | | **P** | **18 39 41.6** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **45.77** | **46** | P | | **P** | **18 39 49.2** | **-1.5** |
| | comp=Z,0.5nm,0.5s,baz=259,slow=8.3,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **60.33** | **50** | P | | **P** | **18 41 37.6** | **-0.7** |
| | comp=Z,0.4nm,1.0s,baz=281,slow=5.7,SNR=2.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.85** | **341** | P | | **P** | **18 43 20.8** | **-0.2** |
| | comp=Z,0.3nm,0.6s,baz=34,slow=5.7,SNR=6.2 | | | | | | | |
| **KSRS** | **Korea Array** | **79.15** | **52** | P | | **P** | **18 43 33.4** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=314,slow=4.2,SNR=2.2 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **79.42** | **325** | LR | | LR | 19 20 11.3 | |
| | comp=Z,156nm,18.6s,baz=97,slow=37 | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.25** | **328** | LR | | LR | 19 26 36.5 | |
| | comp=Z,74nm,18.3s,baz=59,slow=36 | | | | | | | |

**BUC 09 18:33:32.6±0.2,47˚.11N×23˚.20E,h5km±1km,ml1.9/6, 14C-1D,Error ellipse: s-maj=1.8km s-min=1.5km az=67.0,Romania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DRGR** | | **0.46** | **227** | ⇑P | | Pg | 18 33 41.7 | +0.2 |
| DRGR | | | | ⇑S | | Sg | 18 33 47.3 | -0.2 |
| **CJR** | **Cluj-Napoca** | **0.48** | **145** | ⇑P | | Pg | 18 33 41.9 | +0.2 |
| CJR | | | | ⇑S | | Sg | 18 33 48.4 | +0.5 |
| **TRPA** | **Tarpa** | **1.12** | **337** | ⇑P | | Pn | 18 33 54.7 | -0.2 |
| TRPA | | | | ⇓S | | Sb | 18 34 09.6 | +0.4 |
| **MDB** | **Medias** | **1.26** | **139** | ⇑S | | Sn | 18 34 14.3 | +0.1 |
| **BURAR** | **Bucovina Array** | **1.46** | **69** | ⇑P | | Pn | 18 33 59.6 | -0.2 |
| BURAR | | | | ⇑S | | Sg | 18 34 19.5 | +0.1 |
| **GZR** | **Gura Zlata** | **1.74** | **190** | ⇑S | | Sb | 18 34 27.4 | +0.3 |
| **BZS** | **Buzias** | **1.85** | **217** | ⇑P | | Pn | 18 34 04.2 | -0.8 |
| BZS | | | | ⇑S | | Sb | 18 34 29.8 | -0.5 |
| **DOPR** | **Dopca** | **1.89** | **126** | ⇑S | | Sb | 18 34 30.7 | -0.8 |
| **VOIR** | | **2.10** | **142** | ⇑P | | Pn | 18 34 08.6 | +0.1 |
| VOIR | | | | ⇑S | | Sn | 18 34 36.2 | +1.1 |

**DJA 09 18:34:09.5±0.4,1˚N±4˚×12˚2E±˚,h76km±9km,M3.6/11, mb3.8/4,MLv3.5/11,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.41** | **260** | P | | Pn | 18 34 24.0 | +1.9 |
| **GTOI** | **Gorontalo** | **0.68** | **83** | P | | Pn | 18 34 24.9 | +0.3 |
| **APSI** | **Ampana** | **1.61** | **205** | P | | Pn | 18 34 37.1 | +1.0 |
| **KMSI** | **Cibinong** | **1.64** | **89** | P | | Pn | 18 34 37.8 | +1.3 |
| **MPSI** | **Mapaga** | **2.45** | **265** | P | | Pn | 18 34 46.8 | -0.6 |
| **TTSI** | **Tana Toraja** | **4.37** | **215** | P | | Pn | 18 35 14.0 | +0.5 |
| **LBMI** | **Labuha** | **5.29** | **103** | P | | Pn | 18 35 25.1 | -1.0 |
| | 0.1nm15nm,1.0s | | | | | | | |
| **BNSI** | **Bone** | **5.40** | **204** | P | | Pn | 18 35 27.5 | -0.1 |
| | 0.1nm12nm,1.8s | | | | | | | |

*KNET **09** 18:39:04.7±0.3,42˚.62N×75˚.14E,h10km±4km,ml1.1,Error ellipse: s-maj=2.6km s-min=1.2km az=173.0*
*SOME **09** 18:39:05.2,42˚.60N×75˚.13E,h10km*
*NNC **09** 18:39:05.1±0.3,42˚.66N×75˚.12E,h0km,mb2.5,mpv2.5, Error ellipse: s-maj=4.9km s-min=0.9km az=161.0*

**ISC 09 18:39:05.4±1.1,42˚.63N±0˚.04×75˚.14E±0˚.02,h9km±10km, n35,σ0°57/68,15C-3D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **0.14** | **280** | ⇓P | | **Pg** | **18 39 08.6** | **-0.1** |
| | 42nm,0.1s,SNR=55 | | | | | | | |
| KBK | | | | ⇑S | | **Sg** | **18 39 11.2** | **+0.2** |
| | 99nm,0.2s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.44** | **49** | ⇑P | | **Pg** | **18 39 13.8** | **-0.3** |
| | 2.8nm,0.1s,SNR=30 | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **18 39 20.2** | **+0.2** |
| | 38nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.44** | **49** | ⇑P | | **Pg** | **18 39 13.4** | **-0.7** |
| | 0.7nm,0.2s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **18 39 19.6** | **-0.4** |
| | 4.5nm,0.2s | | | | | | | |
| **CHMS** | **Chumysh** | **0.47** | **322** | ⇓P | | **Pg** | **18 39 14.5** | **+0.1** |
| | 4.7nm,0.1s,SNR=18 | | | | | | | |
| CHMS | | | | ⇓S | | **Sg** | **18 39 21.4** | **+0.8** |
| | 10nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.48** | **271** | ⇑P | | **Pg** | **18 39 14.2** | **-0.6** |
| | 1.3nm,0.1s,SNR=8.6 | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **18 39 21.0** | **0.0** |
| | 6.1nm,0.1s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0.9nm,0.1s | | | | | | | |
| ARXS | | | | *e*S | **Sg** | **18 40 24.5** | **-1.7** | |
| | 3.6nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **2.52** | **50** | Pg | **Pb** | **18 39 51.4** | **+0.7** | |
| | 0.9nm,0.1s | | | | | | | |
| ARXS | | | | Lg | Lg | 18 40 24.5 | | |
| | 3.6nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **2.84** | **58** | *e*P | **Pb** | **18 39 57.1** | **+0.8** | |
| | 0.9nm,0.1s | | | | | | | |
| BLB | | | | *e*S | **Sb** | **18 40 33.7** | **+2.5** | |
| | 2.2nm,0.3s | | | | | | | |
| **BLB** | **Baldybastay** | **2.84** | **58** | Pg | **Pb** | **18 39 57.1** | **+0.8** | |
| | 0.9nm,0.1s | | | | | | | |
| BLB | | | | Lg | Lg | 18 40 33.7 | | |
| | 2.2nm,0.3s | | | | | | | |

*TUL **09** 18:43:37.8±1.0,36˚.26N±0˚.01×96˚.75W±0˚.02,h5$^{km}_{\pm 6}$km, ML2.3,ML2.4/45(NEIC),Error ellipse: s-maj=2.1km s-min=1.5km az=75.0*

**NEIC 09 18:43:38.0±0.8,36˚.26N±0˚.01×96˚.76W±0˚.01,h8$^{km}_{\pm 4}$km, Error ellipse: s-maj=2.0km s-min=1.2km az=218.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **QUOK** | **Quay** | **0.10** | **157** | Pg | Pg | 18 43 40.2 | 0.0 |
| QUOK | | | | Sg | Sg | 18 43 41.8 | -0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.25** | **172** | Pg | Pg | 18 43 43.1 | +0.1 |
| OK034 | | | | Sg | Sg | 18 43 46.7 | +0.3 |
| OK034 | | | | IAML | | 18 43 49.8 | |
| | 665nm,0.5s | | | | | | |
| **OK033** | **Mehan** | **0.26** | **214** | Pg | Pg | 18 43 43.1 | -0.1 |
| OK033 | | | | Sg | Sg | 18 43 47.1 | +0.4 |
| OK033 | | | | IAML | | 18 43 48.6 | |
| | 701nm,0.4s | | | | | | |
| OK033 | | | | IAML | | 18 43 51.5 | |
| | 636nm,0.3s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.32** | **192** | Pg | Pg | 18 43 44.2 | +0.1 |
| OK031 | | | | IAML | | 18 43 54.8 | |
| | 450nm,0.5s | | | | | | |
| OK031 | | | | IAML | | 18 43 54.9 | |
| | 364nm,0.5s | | | | | | |
| **OK030** | **Cody Creek RV** | **0.33** | **184** | Pg | Pg | 18 43 44.8 | +0.2 |
| OK030 | | | | Sg | Sg | 18 43 48.8 | -0.1 |
| OK030 | | | | IAML | | 18 43 52.6 | |
| | 344nm,0.5s | | | | | | |
| OK030 | | | | IAML | | 18 43 55.3 | |
| | 440nm,0.4s | | | | | | |
| **BLOK** | **Blackwell** | **0.62** | **324** | Pg | Pg | 18 43 49.3 | -0.7 |
| BLOK | | | | Sg | Sg | 18 43 57.6 | -0.5 |
| BLOK | | | | IAML | | 18 44 06.4 | |
| | comp=N,297nm,0.2s | | | | | | |
| BLOK | | | | IAML | | 18 44 08.1 | |
| | comp=E,259nm,0.2s | | | | | | |
| **T35A** | **Sooner Cattle** | **0.68** | **17** | Pg | Pg | 18 43 51.1 | 0.0 |
| T35A | | | | Sg | Sg | 18 44 00.1 | +0.1 |
| T35A | | | | IAML | | 18 44 07.8 | |
| | comp=N,145nm,0.6s | | | | | | |
| **OK029** | **Liberty Lake** | **0.73** | **231** | Pg | Pg | 18 43 52.0 | -0.1 |
| OK029 | | | | Sg | Sg | 18 44 02.1 | +0.5 |
| **OK025** | **Westminster Rd** | **0.83** | **215** | Pg | Pg | 18 43 53.8 | 0.0 |
| OK025 | | | | Sg | Sg | 18 44 05.0 | +0.4 |
| OK025 | | | | IAML | | 18 44 06.8 | |
| | comp=N,169nm,0.3s | | | | | | |
| OK025 | | | | IAML | | 18 44 08.9 | |
| | comp=N,102nm,0.5s | | | | | | |
| **TUL1** | **Leonard** | **0.85** | **114** | Pg | Pg | 18 43 54.2 | -0.2 |
| TUL1 | | | | Sg | Sg | 18 44 05.4 | -0.1 |
| **BCOK** | **Bluff Creek, N** | **0.92** | **229** | Pg | Pg | 18 43 55.4 | -0.2 |
| BCOK | | | | Sg | Sb | 18 44 08.1 | -0.5 |
| BCOK | | | | IAML | | 18 44 09.8 | |
| | comp=N,92nm,0.3s | | | | | | |
| **KAN13** | **South Haven SW** | **0.95** | **322** | Pg | Pg | 18 43 56.2 | 0.0 |
| KAN13 | | | | Sg | Sg | 18 44 08.7 | +0.1 |
| **OKCFA** | **Oklahoma City** | **1.02** | **214** | Pg | Pg | 18 43 56.3 | -1.2 |
| OKCFA | | | | IAML | | 18 44 16.4 | |
| | comp=E,78nm,1.4s | | | | | | |
| OKCFA | | | | IAML | | 18 44 18.1 | |
| | comp=N,73nm,0.4s | | | | | | |
| **CROK** | **Carrier** | **1.02** | **284** | | Pg | 18 43 57.4 | -0.2 |
| CROK | | | | IAML | | 18 44 19.2 | |
| | comp=N,101nm,0.3s | | | | | | |
| CROK | | | | IAML | | 18 44 24.9 | |
| | comp=E,106nm,0.2s | | | | | | |
| **W35A** | **Tecumseh** | **1.11** | **185** | Pg | Pg | 18 43 58.5 | -0.8 |
| W35A | | | | Sg | Sg | 18 44 13.8 | +0.1 |
| W35A | | | | IAML | | 18 44 16.3 | |
| | comp=N,98nm,0.5s | | | | | | |
| **KAN17** | **Caldwell West** | **1.13** | **314** | Pg | Pg | 18 43 59.5 | -0.1 |
| KAN17 | | | | Sg | Sg | 18 44 14.2 | 0.0 |
| **FNO** | **Franklin** | **1.13** | **208** | Pg | Pg | 18 43 58.9 | -0.8 |
| FNO | | | | Sg | Sb | 18 44 14.7 | 0.0 |
| FNO | | | | IAML | | 18 44 21.4 | |
| | comp=E,79nm,1.3s | | | | | | |
| FNO | | | | IAML | | 18 44 22.2 | |
| | comp=N,82nm,0.4s | | | | | | |
| **KAN14** | **Manchester OK** | **1.19** | **306** | Pg | Pb | 18 44 00.6 | -0.2 |
| KAN14 | | | | Sg | Sg | 18 44 16.3 | -0.1 |
| **KAN01** | **Argonia South** | **1.20** | **318** | Pg | Pb | 18 43 60.0 | -1.0 |
| KAN01 | | | | Sg | Sg | 18 44 15.9 | -0.7 |
| KAN01 | | | | IAML | | 18 44 22.6 | |
| | comp=N,107nm,0.6s | | | | | | |
| **OK032** | **Salt Plains WL** | **1.29** | **295** | Pn | Pn | 18 44 00.1 | -2.2 |
| **KAN06** | **Argonia West S** | **1.32** | **318** | Pn | Pn | 18 44 02.7 | -0.1 |
| KAN06 | | | | IAML | | 18 44 23.9 | |
| | comp=E,75nm,0.4s | | | | | | |
| KAN06 | | | | IAML | | 18 44 28.4 | |
| | comp=N,63nm,0.5s | | | | | | |
| **OK035** | **E0210 Rd and N** | **1.64** | **286** | Pn | Pb | 18 44 08.5 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.88** | **208** | | Pb | 18 44 11.9 | -0.6 |
| **U38A** | **Gravette** | **1.92** | **84** | Pn | Pb | 18 44 12.5 | -0.8 |
| **X37A** | **Clayton** | **2.02** | **145** | Pn | Pn | 18 44 11.2 | -1.0 |
| **WMOK** | **Wichita Mounta** | **2.25** | **228** | Pn | Pn | 18 44 16.4 | +0.9 |
| **HHAR** | **Hobbs** | **2.27** | **89** | Pn | Pn | 18 44 15.9 | +0.1 |
| **W39A** | **Magazine** | **2.64** | **113** | | Pn | 18 44 21.4 | +0.5 |
| **S39A** | **Bolivar** | **3.10** | **62** | Pn | Pn | 18 44 29.6 | +2.4 |
| **MIAR** | **Mount Ida** | **3.11** | **122** | Pn | Pn | 18 44 27.5 | +0.2 |
| **U40A** | **Yellville** | **3.15** | **87** | Pn | Pn | 18 44 27.5 | -0.5 |
| **CBKS** | **Cedar Bluff** | **3.48** | **318** | Pn | Pn | 18 44 33.0 | +0.5 |
| **X40A** | **Basin Creek Fa** | **3.66** | **118** | Pn | Pn | 18 44 35.3 | +0.4 |
| **WHAR** | **Wooly Hollow** | **3.76** | **104** | Pn | Pn | 18 44 35.5 | -0.7 |
| **FCAR** | **Ozark Folk Cen** | **3.77** | **94** | Pn | Pn | 18 44 36.1 | -0.2 |
| **W41B** | **Gary Mavity, V** | **3.83** | **105** | Pn | Pn | 18 44 36.4 | -0.7 |
| **R40A** | **Maddies Statio** | **4.11** | **59** | Pn | Pn | 18 44 40.8 | -0.3 |

*SNET **09** 19:00:36.2±0.9, 11˚.60N×86˚.25W, h5$^{km}$, ML3.8*
*UCR **09** 19:00:36.8±1.5, 12˚.35N×85˚.79W, h5$^{km}$, ML3.6, MW4.7, mb3.8(NEIC)*
*NEIC **09** 19:00:38.9±4.0, 12˚.02N±0˚.04×86˚.22W±0˚.01, h17$^{km}_{\pm 4}$km, ML3.8/36, Error ellipse: s-maj=5.6km s-min=1.4km az=191.0*
*INET **09** 19:00:38.1±0.5, 12˚.05N×86˚.20W, h9$^{km}_{\pm 2}$km, MW4.1*

**ISC 09 19:00:38.3±0.9,12˚.05N±0˚.03×86˚.16W±0˚.03,h17$^{km}_{\pm 6}$km, n43,σ1$^{2}$52/50,Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MASN** | **Masaya** | **0.06** | **173** | *e*P | **Pg** | **19 00 40.7** | **-0.9** |
| MASN | | | | *e*S | **Sg** | **19 00 42.5** | **-1.2** |
| **MGAN** | **Managua** | **0.13** | **318** | *e*P | **Pg** | **19 00 40.9** | **-1.2** |
| **TISN** | **Laguna Tiscapa** | **0.14** | **310** | *e*P | **Pg** | **19 00 45.0** | **+2.7** |
| **BOAB** | **BOACO BROADBAN** | **0.62** | **51** | Pg | **Pg** | **19 00 50.1** | **-0.6** |
| BOAB | | | | Sg | **Sg** | **19 00 59.6** | **+0.6** |
| BOAB | | | | IAML | | 19 01 04.1 | |
| | comp=E,7μm,0.5s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **0.62** | **51** | *e*P | **Pg** | **19 00 50.6** | **-0.1** |
| **BRAN** | **Las Pilas** | **0.69** | **344** | *e*P | Pg | 19 00 42.5 | -9.4 |
| **CNGN** | **Cerro Negro** | **0.69** | **310** | Pg | **Pg** | **19 00 50.9** | **-1.0** |
| CNGN | | | | Sg | **Sg** | **19 01 00.0** | **-1.1** |
| CNGN | | | | IAML | | 19 01 05.1 | |
| | comp=N,8μm,0.5s | | | | | | |
| **CNGN** | **Cerro Negro** | **0.69** | **310** | *e*P | **Pg** | **19 00 51.0** | **-1.0** |
| **MATN** | **Matagalpa** | **0.90** | **15** | | **Pg** | **19 00 54.8** | **-1.2** |
| MATN | | | | Sg | **Sg** | **19 01 07.1** | **-0.7** |
| MATN | | | | IAML | | 19 01 10.3 | |
| | comp=N,5μm,0.3s | | | | | | |
| **MATN** | **Matagalpa** | **0.90** | **15** | *e*P | **Pg** | **19 00 54.9** | **-1.0** |
| **ACON** | **Acoyapa** | **0.97** | **95** | | **Pg** | **19 00 56.2** | **-0.8** |
| ACON | | | | Sg | **Sg** | **19 01 10.1** | **+0.2** |
| ACON | | | | IAML | | 19 01 12.8 | |
| | comp=E,3μm,0.5s | | | | | | |
| ACON | | | | IAML | | 19 01 15.9 | |
| | comp=N,4μm,0.5s | | | | | | |
| **ACON** | **Acoyapa** | **0.97** | **95** | *e*P | **Pg** | **19 00 56.3** | **-0.8** |
| **CRIN** | **San Cristobal** | **1.08** | **307** | | **Pg** | **19 00 57.4** | **-1.9** |
| **CRIN** | **San Cristobal** | **1.08** | **307** | *e*P | **Pg** | **19 00 57.4** | **-1.9** |
| **HZTE** | **Horizontes, Gu** | **1.44** | **157** | | **Pn** | **19 01 04.1** | **+0.4** |
| HZTE | | | | IAML | | 19 01 35.0 | |
| | comp=N,841nm,0.8s | | | | | | |
| HZTE | | | | IAML | | 19 01 43.1 | |
| | comp=E,931nm,1.3s | | | | | | |
| **LAPC** | **Finca la Perla** | **1.46** | **151** | *i* P | **Pn** | **19 01 04.7** | **+0.7** |
| **ORTG** | **Ortega, Santa** | **1.81** | **158** | | **Pn** | **19 01 09.9** | **+1.0** |
| **ESPN** | **Las Esperanzas** | **1.82** | **85** | Pn | **Pn** | **19 01 09.4** | **+0.4** |
| ESPN | | | | IAML | | 19 01 38.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| **GUAI** | **GUAI** | **1.88** | **160** | *i* P | **Pb** | **19 01 11.9** | **-0.4** |
| GUAI | | | | *i* S | **Sg** | **19 01 39.6** | **+0.6** |
| **DUNO** | **Dulce Nombre,** | **2.07** | **161** | Pn | **Pn** | **19 01 14.3** | **+2.0** |
| **LCND** | **La Caada** | **2.10** | **307** | *e*P | **Pn** | **19 01 14.5** | **+1.7** |
| LCND | | | | *e*S | **Sg** | **19 01 45.5** | **-0.5** |
| LCND | | | | IAML | | 19 01 53.4 | |
| | comp=Z,698nm,0.5s | | | | | | |
| **LCND** | **La Caada** | **2.10** | **307** | *e*P | **Pn** | **19 01 14.5** | **+1.7** |
| LCND | | | | *e*S | **Sg** | **19 01 45.5** | **-0.5** |
| LCND | | | | IAML | | 19 01 53.4 | |
| | comp=Z,698nm,0.5s | | | | | | |
| **JTS** | **Las Juntas de** | **2.11** | **146** | Pn | **Pn** | **19 01 14.0** | **+1.0** |
| **COVE** | **Coope Vega, Sa** | **2.17** | **127** | Pn | **Pn** | **19 01 15.8** | **+2.0** |
| COVE | | | | IAML | | 19 01 55.9 | |
| | comp=E,398nm,0.8s | | | | | | |
| COVE | | | | IAML | | 19 02 09.9 | |
| | comp=N,434nm,0.4s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **2.27** | **332** | Pn | **Pn** | **19 01 16.9** | **+1.7** |
| TGUH | | | | IAML | | 19 01 54.7 | |
| | comp=N,1μm,0.9s | | | | | | |
| TGUH | | | | IAML | | 19 01 55.9 | |
| | comp=N,1μm,0.6s | | | | | | |
| **PACA** | **Pacayal** | **2.54** | **304** | *e*P | **Pn** | **19 01 20.8** | **+1.9** |
| **PACA** | **Pacayal** | **2.54** | **304** | *e*P | **Pn** | **19 01 20.8** | **+1.9** |
| **ALJI** | **Alcalda de J** | **2.67** | **299** | *e*S | **Sb** | **19 01 57.8** | **-0.5** |
| **ALJI** | **Alcalda de J** | **2.67** | **299** | *e*S | **Sb** | **19 01 57.8** | **-0.5** |
| **JACO** | **JACO, Garabito** | **2.79** | **148** | Pn | **Pn** | **19 01 24.5** | **+2.2** |
| **SCLA** | **Alcaldia de Sa** | **2.99** | **304** | *e*P | **Pn** | **19 01 27.8** | **+2.7** |
| SCLA | | | | *e*S | **Sb** | **19 02 06.8** | **-0.8** |
| **SCLA** | **Alcaldia de Sa** | **2.99** | **304** | *e*P | **Pn** | **19 01 27.8** | **+2.7** |
| SCLA | | | | *e*S | **Sb** | **19 02 06.8** | **-0.8** |
| **COEG** | **Centro de Oper** | **3.08** | **301** | *e*P | **Pn** | **19 01 28.6** | **+2.3** |
| COEG | | | | IAML | | 19 02 13.8 | |
| | comp=Z,135nm,0.5s | | | | | | |
| **COEG** | **Centro de Oper** | **3.08** | **301** | *e*P | **Pn** | **19 01 28.6** | **+2.3** |
| COEG | | | | IAML | | 19 02 13.8 | |
| | comp=Z,135nm,0.5s | | | | | | |
| **RIMA** | **Rio Macho** | **3.20** | **135** | Pn | **Pn** | **19 01 30.1** | **+2.0** |
| **LFRS** | **El Faro** | **3.23** | **299** | *e*P | **Pn** | **19 01 29.9** | **+1.5** |
| **LFRS** | **El Faro** | **3.23** | **299** | *e*P | **Pn** | **19 01 29.9** | **+1.5** |
| **CEVE** | **Cerro Verde** | **3.81** | **298** | IAML | | 19 02 34.6 | |
| | comp=Z,235nm,0.5s | | | | | | |
| **CEVE** | **Cerro Verde** | **3.81** | **298** | IAML | | 19 02 34.6 | |
| | comp=Z,235nm,0.5s | | | | | | |
| **MTO3** | **Montecristo** | **3.89** | **307** | Pn | **Pn** | **19 01 38.1** | **+0.5** |
| MTO3 | | | | IAML | | 19 02 48.2 | |
| | comp=E,57nm,1.1s | | | | | | |
| **SRBA** | **San Rafael, Bu** | **3.93** | **135** | Pn | **Pn** | **19 01 38.8** | **+0.8** |
| SRBA | | | | IAML | | 19 04 11.5 | |
| | comp=N,72nm,0.1s | | | | | | |
| SRBA | | | | IAML | | 19 04 13.1 | |
| | comp=E,63nm,0.2s | | | | | | |
| **ESQI** | **Esquipulas** | **3.98** | **309** | | **Pn** | **19 01 41.8** | **+3.1** |
| ESQI | | | | IAML | | 19 02 14.3 | |
| | comp=N,118nm,0.1s | | | | | | |
| ESQI | | | | IAML | | 19 03 12.0 | |
| | comp=E,168nm,1.8s | | | | | | |
| **DRK0** | **Durika** | **3.99** | **134** | Pn | **Pn** | **19 01 39.2** | **+0.3** |

*IDC **09** 19:01:42.3±1.4, 7˚.39S×146˚.40E, h0$^{km}$, mb3.5/4, mb1 3.7/6, mb1mx3.5/40, mbtmp3.5/6, ML2.6/2, Error ellipse: s-maj=38.6km s-min=26.4km az=99.0*

**ISC 09 19:01:42.8±1.2,7˚.41S±0˚.10×146˚.5E±0˚.2,h10$^{km}$,n7, σ1$^{9}$54/8,mb3.5/3,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **2.11** | **161** | Pn | **Pb** | **19 02 19.8** | **-1.4** |
| | 20nm,0.3s,baz=1.0,slow=7.3,SNR=40 | | | | | | |
| PMG | | | | Sn | **Sg** | **19 02 52.6** | **+1.8** |
| | 20nm,0.3s,baz=352,slow=20,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.12** | **222** | P | **Pn** | **19 05 42.2** | **-0.2** |
| | 0.1nm,0.3s,baz=46,slow=11,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **20.16** | **215** | P | **P** | **19 06 17.7** | **+0.2** |
| | 2.9nm,0.9s,baz=53,slow=9.5,SNR=13 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.88** | **240** | P | **P** | **19 06 46.7** | **-0.1** |
| | 1.4nm,0.8s,baz=51,slow=10,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.23** | **321** | P | **P** | **19 13 44.7** | **+1.8** |
| | 0.1nm,0.4s,baz=124,slow=7.7,SNR=1.8 | | | | | | |
| **ILAR** | **Eielson Array** | **86.98** | **23** | P | **P** | **19 14 27.9** | **-0.1** |
| | 0.4nm,0.7s,baz=260,slow=5.0,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.88** | **282** | PKP | **PKiKP** | **19 21 23.3** | **-1.8** |
| | 1.0nm,1.0s,baz=80,slow=3.3,SNR=3.5 | | | | | | |

*ANF **09** 19:04:54.8±0.2, 47˚.30N×122˚.25W, h25$^{km}$, ML2.6/8, Error ellipse: s-maj=3.2km s-min=1.6km az=88.0*
*SEA **09** 19:04:55.8±1.5, 47˚.29N±0˚.02×122˚.29W±0˚.02, h25$^{km}_{\pm 6}$km, ML2.5/95, ML2.4/40(NEIC), Error ellipse: s-maj=2.7km s-min=1.8km az=179.0*
*PNSN **09** 19:04:55.8, 47˚.29N×122˚.29W, h25$^{km}$, MD2.6, Fault plane solution: NP1:φ$_s$50.00000°, δ55.00000°, λ70.00000°.*
*IASPEI **09** 19:04:55.4±0.9, 47˚.29N±0˚.02×122˚.28W±0˚.02, h26$^{km}_{\pm 4}$km, Error ellipse: s-maj=2.3km s-min=2.3km az=98.5, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seismol. Res. Let., 80, 465-472, 2009*
*NEIC **09** 19:04:55.4±1.5, 47˚.28N±0˚.02×122˚.29W±0˚.02, h24$^{km}_{\pm 7}$km, Error ellipse: s-maj=2.8km s-min=1.6km az=223.0*
*PGC **09** 19:04:55.8, 47˚.29N×122˚.29W, h25$^{km}$, ML2.5, ML2.1/13, 35km south of Seattle, Wa Washington*

**ISC 09 19:04:55.7±0.8,47˚.29N±0˚.01×122˚.28W±0˚.01,h25$^{km}_{\pm 3}$km, n147,σ0$^{9}$76/217,Washington**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBPA** | **Tacoma Substat** | **0.07** | **246** | | **Pb** | **19 04 59.6** | **-0.5** |
| TBPA | | | | | **Sb** | **19 05 03.4** | **+0.3** |
| **SMNR** | **Sumner High Sc** | **0.09** | **158** | | **Pb** | **19 04 59.8** | **-0.6** |
| SMNR | | | | | **Sb** | **19 05 03.6** | **+0.1** |
| **PAYL** | **Puyallup Schoo** | **0.10** | **194** | | **Pb** | **19 04 59.7** | **-0.6** |
| PAYL | | | | | **Sb** | **19 05 03.5** | **+0.1** |
| **KNEL** | **Kent Elementar** | **0.10** | **11** | | **Sb** | **19 05 03.9** | **+0.4** |
| **HICC** | **Highline Commu** | **0.11** | **353** | | **Pb** | **19 04 59.9** | **-0.6** |
| HICC | | | | | **Sb** | **19 05 03.5** | **-0.1** |
| **UPS** | **University of** | **0.14** | **261** | | **Pb** | **19 05 00.3** | **-0.4** |
| **VVHS** | **Vashon High Sc** | **0.18** | **319** | | **Pb** | **19 05 00.7** | **-0.5** |
| VVHS | | | | | **Sb** | **19 05 05.3** | **+0.4** |
| **D05A** | **Enumclaw** | **0.22** | **116** | | **Pb** | **19 05 01.6** | **-0.1** |
| **D05A** | **Enumclaw** | **0.22** | **116** | Sg | **Sb** | **19 05 04.1** | **-1.6** |
| D05A | | | | IAML | | 19 05 06.3 | |
| | comp=E,430nm,0.6s | | | | | | |
| D05A | | | | IAML | | 19 05 06.5 | |
| | comp=N,350nm,0.4s | | | | | | |
| **D05A** | **Enumclaw** | **0.22** | **116** | P | **Pb** | **19 05 01.6** | **-0.1** |
| D05A | | | | S | **Sb** | **19 05 04.8** | **-0.9** |
| **GHW** | **Garrison Hill** | **0.24** | **179** | | **Pb** | **19 05 01.3** | **-0.6** |
| GHW | | | | | **Sb** | **19 05 05.6** | **-0.6** |
| **RAW** | **Raver** | **0.24** | **77** | | **Pb** | **19 05 01.7** | **-0.2** |
| RAW | | | | | **Sb** | **19 05 06.4** | **+0.2** |
| **TKCO** | **King County** | **0.25** | **357** | | **Pb** | **19 05 01.9** | **-0.2** |
| **SP2** | **Seward Park 2** | **0.27** | **4** | | **Pb** | **19 05 02.1** | **-0.2** |
| SP2 | | | | | **Sb** | **19 05 06.9** | **0.0** |
| **B941** | **Kapowsin** | **0.30** | **172** | | **Pb** | **19 05 02.0** | **-0.7** |
| B941 | | | | | **Sb** | **19 05 06.5** | **-0.9** |
| **ALKI** | **Alki Wastewate** | **0.30** | **342** | | **Pb** | **19 05 02.5** | **-0.2** |
| **PCFR** | **Pierce County** | **0.32** | **200** | | **Pb** | **19 05 02.4** | **-0.5** |
| PCFR | | | | | **Sb** | **19 05 07.7** | **-0.2** |
| **GSM** | **Grass Mountain** | **0.34** | **104** | | **Pb** | **19 05 03.1** | **-0.4** |
| **GSM** | **Grass Mountain** | **0.34** | **104** | | **Sb** | **19 05 08.7** | **-0.1** |
| **ELW** | **Echo Lake** | **0.35** | **53** | | **Pb** | **19 05 02.8** | **-0.6** |
| **D04E** | **Lakebay** | **0.35** | **253** | | **Pb** | **19 05 03.6** | **+0.2** |
| D04E | | | | | **Sn** | **19 05 10.6** | **-0.8** |
| **D04E** | **Lakebay** | **0.35** | **253** | P | **Pb** | **19 05 03.5** | **+0.1** |
| | baz=72,SNR=130 | | | | | | |
| D04E | | | | S | **Sb** | **19 05 08.7** | **-0.1** |
| | baz=72 | | | | | | |
| **RATT** | **Rattlesnake La** | **0.35** | **66** | | **Pb** | **19 05 03.1** | **-0.5** |
| RATT | | | | | **Sb** | **19 05 08.7** | **-0.2** |
| **KIMR** | **Kitsap County** | **0.40** | **304** | | **Pb** | **19 05 09.9** | **-0.1** |
| **RVC** | **Mount Rainier-** | **0.40** | **148** | | **Pb** | **19 05 04.0** | **-0.4** |
| **GMW** | **Gold Mountain** | **0.43** | **308** | | **Pb** | **19 05 04.0** | **-0.9** |
| **GNW** | **Green Mountain** | **0.46** | **307** | | **Pb** | **19 05 04.3** | **-1.0** |
| GNW | | | | | **Sb** | **19 05 11.1** | **-0.8** |
| **GNW** | **Green Mountain** | **0.46** | **307** | P | **Pb** | **19 05 04.3** | **-1.0** |
| GNW | | | | S | **Sb** | **19 05 10.8** | **-1.1** |
| **OBSR** | **Observation Ro** | **0.50** | **140** | | **Pb** | **19 05 05.5** | **-0.5** |
| OBSR | | | | | **Sb** | **19 05 12.8** | **-0.3** |
| **FMW** | **Mount Fremont** | **0.55** | **130** | | **Pb** | **19 05 06.2** | **-0.6** |
| **FMW** | **Mount Fremont** | **0.55** | **130** | P | **Pb** | **19 05 06.2** | **-0.6** |
| FMW | | | | S | **Sb** | **19 05 13.2** | **-1.2** |
| **REMR** | **Mount Rainier-** | **0.55** | **147** | | **Pb** | **19 05 06.2** | **-0.7** |
| REMR | | | | | **Sb** | **19 05 13.9** | **-0.7** |
| **RCS** | **Mount Rainier-** | **0.56** | **138** | | **Pb** | **19 05 06.4** | **-0.7** |
| **C05A** | **Tolt Reservoir** | **0.57** | **44** | | **Pb** | **19 05 06.3** | **-0.9** |
| **C05A** | **Tolt Reservoir** | **0.57** | **44** | P | **Pb** | **19 05 06.5** | **-0.7** |
| C05A | | | | S | **Sb** | **19 05 14.1** | **-0.9** |
| **TTW** | **Tolt Reservoir** | **0.57** | **44** | | **Pb** | **19 05 06.3** | **-0.8** |
| **D03D** | **Eldon** | **0.60** | **295** | | **Pb** | **19 05 06.8** | **-0.9** |
| D03D | | | | | **Sb** | **19 05 15.3** | **-0.5** |
| **D03D** | **Eldon** | **0.60** | **295** | P | **Pb** | **19 05 06.8** | **-0.9** |
| | baz=114,SNR=64 | | | | | | |
| D03D | | | | S | **Sb** | **19 05 15.3** | **-0.5** |
| | baz=114 | | | | | | |
| **PANH** | **Panhandle Gap,** | **0.61** | **134** | | **Pb** | **19 05 07.2** | **-0.7** |
| PANH | | | | | **Sb** | **19 05 15.8** | **-0.4** |
| **HTW** | **Haystack Looko** | **0.62** | **34** | | **Pb** | **19 05 07.0** | **-1.0** |
| **LON** | **Longmire** | **0.62** | **149** | | **Pb** | **19 05 07.2** | **-0.8** |
| **C04A** | **Brinnon** | **0.64** | **313** | | **Pb** | **19 05 07.2** | **-1.0** |
| C04A | | | | | **Sb** | **19 05 16.3** | **-0.5** |
| **HDW** | **Hoodsport** | **0.64** | **305** | | **Pb** | **19 05 07.3** | **-1.0** |
| HDW | | | | | **Sb** | **19 05 16.3** | **-0.6** |
| **HDW** | **Hoodsport** | **0.64** | **305** | P | **Pb** | **19 05 07.3** | **-1.0** |
| HDW | | | | S | **Sb** | **19 05 16.0** | **-0.9** |
| **CPW** | **Capitol Peak** | **0.66** | **242** | | **Pb** | **19 05 08.1** | **-0.6** |
| CPW | | | | | **Sb** | **19 05 17.6** | **+0.1** |
| **CPW** | **Capitol Peak** | **0.66** | **242** | P | **Pb** | **19 05 08.1** | **-0.6** |
| CPW | | | | S | **Sb** | **19 05 17.0** | **-0.5** |
| **SMW** | **South Mountain** | **0.72** | **273** | | **Pb** | **19 05 09.6** | **-0.1** |
| **SMW** | **South Mountain** | **0.72** | **273** | P | **Pb** | **19 05 09.6** | **-0.1** |
| **E04D** | **Cinebar** | **0.76** | **195** | | **Pb** | **19 05 09.6** | **-0.6** |
| **E04D** | **Cinebar** | **0.76** | **195** | Sn | **Sb** | **19 05 20.0** | **-0.1** |
| E04D | | | | IAML | | 19 05 20.8 | |
| | comp=E,181nm,0.5s | | | | | | |
| E04D | | | | IAML | | 19 05 22.0 | |
| | comp=N,123nm,0.1s | | | | | | |
| **E04D** | **Cinebar** | **0.76** | **195** | P | **Pb** | **19 05 09.6** | **-0.6** |
| | baz=15,SNR=110 | | | | | | |
| E04D | | | | S | **Sb** | **19 05 20.2** | **+0.1** |
| | baz=15 | | | | | | |
| **BLN** | **Blyn Mountain** | **0.86** | **327** | | **Pb** | **19 05 10.9** | **-1.1** |
| **B017** | **Montesano** | **0.92** | **252** | | **Pb** | **19 05 12.7** | **-0.2** |
| **TDL** | **Tradedollar La** | **0.94** | **177** | | **Pb** | **19 05 12.5** | **-0.8** |
| **JCW** | **Jim Creek** | **0.94** | **14** | | **Pb** | **19 05 12.5** | **-0.9** |
| **JCW** | **Jim Creek** | **0.94** | **14** | P | **Pb** | **19 05 12.4** | **-0.9** |
| **SQM** | **Sequim** | **0.94** | **327** | | **Pn** | **19 05 12.6** | **-0.7** |
| **ERK** | **Elk Rock** | **0.98** | **182** | | **Pn** | **19 05 13.0** | **-0.9** |
| **B201** | **Coldwater, Mou** | **0.98** | **179** | | **Pn** | **19 05 13.1** | **-0.8** |
| **B05A** | **Bryant** | **0.99** | **7** | | **Pn** | **19 05 13.2** | **-0.7** |
| **B05A** | **Bryant** | **0.99** | **7** | P | **Pn** | **19 05 12.9** | **-1.0** |
| B05A | baz=188,SNR=21 | | | S | **Sb** | **19 05 25.9** | **-0.8** |
| | baz=188 | | | | | | |
| **JRO** | **Jston Ridge Ob** | **1.01** | **178** | | **Pn** | **19 05 13.4** | **-0.9** |
| **WISH** | **Wishkah** | **1.03** | **261** | Pn | **Pn** | **19 05 14.5** | **0.0** |
| WISH | | | | Sn | **Sn** | **19 05 29.5** | **+1.4** |
| WISH | | | | IAML | | 19 05 33.8 | |
| | comp=E,76nm,3.4s | | | | | | |
| **WISH** | **Wishkah** | **1.03** | **261** | P | **Pb** | **19 05 14.8** | **0.0** |
| WISH | | | | S | **Sb** | **19 05 26.9** | **-1.0** |
| **BMW** | **Boistfort Moun** | **1.04** | **219** | | **Pn** | **19 05 14.2** | **-0.5** |
| **SOSW** | **Source of Smit** | **1.05** | **175** | | **Pn** | **19 05 14.4** | **-0.5** |
| **BOLM** | **Sugar Bowl** | **1.07** | **176** | | **Pn** | **19 05 15.2** | **-0.1** |
| **VALT** | **Mount Saint He** | **1.07** | **177** | | **Pn** | **19 05 14.9** | **-0.3** |
| **NLWA** | **Neilton Lookou** | **1.09** | **276** | | **Pn** | **19 05 15.2** | **-0.1** |
| NLWA | | | | Sn | **Sn** | **19 05 30.7** | **+1.2** |
| **SEPW** | **September Lobe** | **1.09** | **177** | | **Pn** | **19 05 15.3** | **-0.3** |
| **FL2** | **Flat Top 2** | **1.09** | **183** | | **Pn** | **19 05 14.9** | **-0.6** |
| **SHW** | **Mount Saint He** | **1.09** | **178** | | **Pn** | **19 05 15.3** | **-0.2** |
| **LTY** | **Liberty** | **1.10** | **91** | | **Pn** | **19 05 14.9** | **-0.6** |
| LTY | | | | Sn | **Sb** | **19 05 29.6** | **-0.4** |
| **LTY** | **Liberty** | **1.10** | **91** | P | **Pn** | **19 05 15.5** | **0.0** |
| LTY | | | | S | **Sb** | **19 05 29.7** | **-0.2** |
| **SWF2** | **Southwest Flan** | **1.11** | **178** | | **Pn** | **19 05 15.5** | **-0.2** |
| **B203** | **Quarry, Mount** | **1.12** | **182** | | **Pn** | **19 05 15.2** | **-0.5** |
| **B04A** | **Port Angeles** | **1.13** | **314** | | **Pn** | **19 05 15.2** | **-0.7** |
| B04A | | | | Sn |

| | | | | | | |
|---|---|---|---|---|---|---|
| **B010** | **North Saanich** | **1.58 330** | P | **Pn** | **19 05 21.8** | **-0.2** |
| B010 | | | S | **Sn** | **19 05 41.4** | **-0.2** |
| **PGC** | **Sidney** | **1.58 330** | | **Pn** | **19 05 21.9** | **-0.1** |
| PGC | | | Sn | **Sn** | **19 05 41.4** | **-0.1** |
| PGC | | | IAML | | 19 05 44.6 | |
| | comp=N,40nm,1.0s | | | | | |
| PGC | | | IAML | | 19 05 46.8 | |
| | comp=E,37nm,0.5s | | | | | |
| **PGC** | **Sidney** | **1.58 330** | P | **Pn** | **19 05 21.9** | **-0.1** |
| PGC | | | S | **Sn** | **19 05 41.6** | **0.0** |
| **CBSW** | **Chelan Butte S** | **1.60 70** | | **Pb** | **19 05 24.1** | **-0.6** |
| **SNB** | **Saturna Island** | **1.61 338** | P | **Pn** | **19 05 23.1** | **+0.6** |
| SNB | | | S | **Sb** | **19 05 43.8** | **-0.8** |
| **SHUK** | **Shuksan-Mt. Ba** | **1.62 14** | | **Pb** | **19 05 24.0** | **-1.0** |
| **WTV** | **Waterville** | **1.63 74** | | **Pb** | **19 05 25.4** | **+0.3** |
| **A05A** | **Maple Falls** | **1.72 4** | P | **Pn** | **19 05 25.2** | **+1.2** |
| A05A | | | S | **Sb** | **19 05 47.4** | **-0.3** |
| **VDB** | **Vedder Mountai** | **1.75 4** | | **Pn** | **19 05 25.6** | **+1.2** |
| **VDB** | **Vedder Mountai** | **1.75 4** | P | **Pn** | **19 05 25.6** | **+1.2** |
| VDB | | | S | **Sb** | **19 05 47.7** | **-0.8** |
| **E07A** | **Sunnyside** | **1.81 113** | | **Pn** | **19 05 25.4** | **+0.1** |
| E07A | | | IAML | | 19 05 53.7 | |
| | comp=E,36nm,0.4s | | | | | |
| E07A | | | IAML | | 19 05 53.8 | |
| | comp=N,47nm,0.4s | | | | | |
| **GOBB** | **Galiano Island** | **1.86 334** | P | **Pn** | **19 05 26.7** | **+0.8** |
| **HIYU** | **Hiyu Mountain** | **1.88 170** | | **Pb** | **19 05 28.8** | **-0.6** |
| **BENWA** | **Benson Ranch** | **1.92 113** | | **Pb** | **19 05 29.6** | **-0.3** |
| **B926** | **Mesachie Lake** | **1.98 322** | P | **Pn** | **19 05 28.9** | **+1.4** |
| B926 | | | S | **Sn** | **19 05 52.2** | **+0.8** |
| **CLRS** | **Cowichan Lake** | **1.98 322** | Pn | **Pn** | **19 05 27.8** | **+0.3** |
| CLRS | | | IAML | | 19 05 47.0 | |
| | comp=E,24nm,2.7s | | | | | |
| CLRS | | | Sn | **Sn** | **19 05 51.1** | **-0.4** |
| **CLRS** | **Cowichan Lake** | **1.98 322** | P | **Pn** | **19 05 28.2** | **+0.7** |
| CLRS | | | S | **Sn** | **19 05 52.1** | **+0.6** |
| **HOOD** | **Mount Hood Mea** | **2.01 167** | | **Pn** | **19 05 26.7** | **-1.4** |
| HOOD | | | IAML | | 19 05 58.8 | |
| | comp=E,25nm,1.0s | | | | | |
| HOOD | | | IAML | | 19 06 02.6 | |
| | comp=N,34nm,1.2s | | | | | |
| **HNBB** | **Haney** | **2.01 355** | P | **Pn** | **19 05 29.1** | **+1.1** |
| HNBB | | | S | **Sn** | **19 05 54.3** | **+1.9** |
| **HAWA** | **Hanford** | **2.09 114** | Pn | **Pn** | **19 05 28.2** | **-0.9** |
| HAWA | | | IAML | | 19 06 00.6 | |
| | comp=N,25nm,0.3s | | | | | |
| **F07A** | **Phinny Hill Vi** | **2.14 130** | Pn | **Pn** | **19 05 29.5** | **-0.2** |
| **G05D** | **Wamic, OR** | **2.15 162** | | **Pb** | **19 05 33.6** | **-0.3** |
| **G05D** | **Wamic, OR** | **2.15 162** | Pb | **Pb** | **19 05 33.2** | **-0.7** |
| | baz=342 | | | | | |
| G05D | | | Sb | **Sb** | **19 06 01.2** | **+1.0** |
| | baz=342 | | | | | |
| **HOPB** | **Hope** | **2.18 15** | P | **Pn** | **19 05 31.4** | **+1.1** |
| **G03D** | **McMinnville, O** | **2.18 199** | Pn | **Pn** | **19 05 29.3** | **-1.1** |
| G03D | | | IAML | | 19 06 08.2 | |
| | comp=N,30nm,0.9s | | | | | |
| G03D | | | IAML | | 19 06 14.1 | |
| | comp=E,34nm,2.5s | | | | | |
| **G03D** | **McMinnville, O** | **2.18 199** | Sb | **Sb** | **19 06 01.9** | **+0.8** |
| | baz=18 | | | | | |
| **BIB** | **Bowen Island** | **2.23 343** | P | **Pn** | **19 05 33.0** | **+2.0** |
| BIB | | | S | **Sb** | **19 06 00.1** | **-2.3** |
| **NLLB** | **Nanaimo Lost L** | **2.25 330** | S | **Sn** | **19 05 59.6** | **+1.3** |
| **B08A** | **Colville Reser** | **2.26 61** | | **Pn** | **19 05 30.7** | **-0.7** |
| B08A | | | IAML | | 19 06 05.2 | |
| | comp=N,29nm,1.2s | | | | | |
| B08A | | | IAML | | 19 06 05.6 | |
| | comp=E,20nm,0.7s | | | | | |
| **B08A** | **Colville Reser** | **2.26 61** | P | **Pb** | **19 05 35.6** | **-0.2** |
| B08A | | | S | **Sb** | **19 06 03.9** | **+0.6** |
| **MGB** | **Mount Grey** | **2.36 318** | P | **Pn** | **19 05 34.2** | **+1.4** |
| MGB | | | S | **Sn** | **19 06 02.6** | **+1.5** |
| **SHB** | **Sechelt** | **2.55 336** | P | **Pn** | **19 05 37.7** | **+2.2** |
| SHB | | | S | **Sn** | **19 06 06.3** | **+0.6** |
| **H04A** | **Detroit Lake** | **2.60 179** | Pn | **Pn** | **19 05 36.2** | **+0.1** |
| **PNT** | **Penticton** | **2.70 40** | P | **Pb** | **19 05 42.9** | **-0.4** |
| PNT | | | S | **Sb** | **19 06 17.5** | **+1.5** |
| **TXB** | **Texada** | **2.81 330** | P | **Pn** | **19 05 42.0** | **+3.0** |
| **E09A** | **Wood Farm, Sta** | **2.94 104** | Pn | **Pn** | **19 05 40.0** | **-0.8** |

**JMA 09 19:37:24.1±0.1, 36°42N×137°64E, h0km±1km, M2.8, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTT** | **Ttatey** | **0.31** | **307** | S | Sg | 19 37 35.6 | +1.6 |
| **JGN** | **Niukaw** | **0.33** | **233** | P | Pg | 19 37 30.9 | +0.5 |
| JGN | | | | S | Sg | 19 37 35.3 | +0.7 |
| **JNG** | **Nsakai** | **0.37** | **92** | S | Sg | 19 37 36.8 | +0.8 |
| **MAT** | **Matsushiro** | **0.47** | **75** | P | Pg | 19 37 33.4 | +0.2 |
| MAT | | | | S | Sg | 19 37 39.8 | +0.5 |

*GUC **09** 20:59:04.0±0.7, 24°.31S×67°.38W, h157km±11km, ML4.0*
*IDC **09** 20:59:05.4±1.3, 23°.79S×67°.12W, h179km±11km, mb3.0/2, mb1 3.5/7, mb1mx3.3/42, mbtmp3.9/7, Error ellipse: s-maj=27.3km s-min=16.4km az=18.0*

**ISC 09 20:59:03.0±0.8, 24°.16S±0°.06×67°.30W±0°.06, h172km±8km, n21, σ1=59/32, mb3.2/3, 6C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.73** | **109** | *eP* | **Pn** | **20 59 36.5** | **-0.4** |
| SLA | | | | *i* S | **Sn** | **21 00 01.9** | **-1.1** |
| **LVC** | **Limon Verde** | **2.13** | **316** | P | **Pn** | **20 59 42.4** | **+0.9** |
| | 9.8nm,0.3s,baz=150,slow=6.8,SNR=183 | | | | | | |
| LVC | | | | S | **Sn** | **21 00 12.3** | **+1.2** |
| | 34nm,0.3s,baz=23,slow=22,SNR=64 | | | | | | |
| **LVC** | **Limon Verde** | **2.13** | **316** | ⇓*iP* | **Pn** | **20 59 42.4** | **+0.9** |
| LVC | | | | *i* S | **Sn** | **21 00 12.2** | **+1.0** |
| **PB06** | **IPOC Station P** | **2.54** | **304** | ⇓*iP* | **Pn** | **20 59 46.7** | **+0.8** |
| PB06 | | | | *i* S | **Sn** | **21 00 18.8** | **-0.3** |
| PB06 | | | | IAML | | 21 00 22.0 | |
| | comp=N,671nm,0.3s | | | | | | |
| **PB14** | **IPOC Station P** | **2.87** | **260** | ⇑*iP* | **Pn** | **20 59 49.2** | **-0.8** |
| PB14 | | | | *i* S | **Sn** | **21 00 23.8** | **-2.6** |
| PB14 | | | | IAML | | 21 00 25.2 | |
| | comp=E,192nm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **2.95** | **322** | ⇑*iP* | **Pn** | **20 59 52.4** | **+1.5** |
| PB09 | | | | *i* S | **Sn** | **21 00 29.6** | **+1.4** |
| PB09 | | | | IAML | | 21 00 31.7 | |
| | comp=E,209nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **3.04** | **281** | ⇑*iP* | **Pn** | **20 59 52.0** | **+0.1** |
| PB10 | | | | *i* S | **Sn** | **21 00 29.0** | **-0.9** |
| PB10 | | | | IAML | | 21 00 37.2 | |
| | comp=N,262nm,0.3s | | | | | | |
| **PB03** | **IPOC Station P** | **3.08** | **312** | ⇑*iP* | **Pn** | **20 59 53.0** | **+0.4** |
| PB03 | | | | *i* S | **Sn** | **21 00 29.7** | **-1.3** |
| PB03 | | | | IAML | | 21 00 31.3 | |
| | comp=E,557nm,0.2s | | | | | | |
| **AC02** | **Maricunga** | **3.14** | **211** | ⇑*iP* | **Pn** | **20 59 52.5** | **-0.9** |
| **PB04** | **IPOC Station P** | **3.19** | **304** | *eP* | **Pn** | **20 59 54.0** | **+0.2** |
| **PB07** | **IPOC Station P** | **3.39** | **315** | *eP* | **Pn** | **20 59 56.8** | **+0.4** |
| PB07 | | | | *i* S | **Sn** | **21 00 36.5** | **-1.5** |
| **PB01** | **IPOC Station P** | **3.70** | **326** | ⇓*iP* | **Pn** | **21 00 00.1** | **-0.1** |
| PB01 | | | | *eS* | **Sn** | **21 00 43.7** | **-1.1** |
| **PB02** | **IPOC Station P** | **3.70** | **319** | ⇑*iP* | **Pn** | **21 00 00.2** | **-0.1** |
| PB02 | | | | *i* S | **Sn** | **21 00 43.6** | **-1.2** |
| **CPUP** | **Villa Florida** | **9.29** | **106** | P | **Pn** | **21 01 15.5** | **+2.2** |
| | comp=E,0.3nm,0.3s,baz=287,slow=11,SNR=2.9 | | | | | | |
| **SIV** | **San Ignacio** | **10.01** | **37** | P | **Pn** | **21 01 20.2** | **-2.8** |
| | comp=E,2.4nm,0.3s,baz=214,slow=12,SNR=24 | | | | | | |
| **PLCA** | **Paso Flores** | **16.75** | **189** | P | **Pn** | **21 02 53.2** | **+5.5** |
| | comp=E,0.4nm,0.3s,baz=359,slow=11,SNR=15 | | | | | | |
| **BDFB** | **Brasilia** | **20.00** | **69** | P | **P** | **21 03 21.3** | **-1.4** |
| | comp=E,0.5nm,0.3s,baz=252,slow=10,SNR=12 | | | | | | |
| **APG** | **El Apazote** | **45.02** | **327** | P | **P** | **21 07 01.9** | **0.0** |
| | comp=E,13nm,0.4s,baz=262,slow=3.9,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.88** | **69** | P | **P** | **21 10 36.0** | **-0.6** |
| | comp=E,0.3nm,0.6s,baz=268,slow=6.2,SNR=1.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.14** | **329** | P | **P** | **21 10 37.9** | **+0.1** |
| | comp=E,0.2nm,0.6s,baz=132,slow=3.9,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.82** | **39** | PKPbc | **PKPbc** | **21 18 25.2** | **+0.3** |
| | comp=E,0.3nm,0.6s,baz=321,slow=1.7,SNR=5.1 | | | | | | |

*IDC **09** 21:11:10.5±0.9, 35°.43N×23°.65E, h0km, mb4.0/9, mb1 3.9/15, mb1mx3.6/67, mbtmp3.8/15, ML3.5/6, Error ellipse: s-maj=18.4km s-min=14.3km az=10.0*
*ATH **09** 21:11:12.9, 35°.37N×23°.57E, h20km±1km, ML3.6/9, Error ellipse: s-maj=2.7km s-min=1.2km az=35.0*
*ISK **09** 21:11:13.6, 35°.36N×23°.64E, h5km, ML3.8/12*
*THE **09** 21:11:13.3, 35°.39N×23°.59E, h1km±2km, mb4.3/10, ML3.5/10, Error ellipse: s-maj=2.0km s-min=0.5km az=235.0*

**ISC 09 21:11:13.2±0.8, 35°.37N±0°.03×23°.62E±0°.03, h14km±5km, n61, σ1=58/80, mb3.9/9, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.15** | **159** | P | **Pg** | **21 11 16.6** | **-0.3** |
| KNDR | | | | S | **Sg** | **21 11 19.1** | **-0.3** |
| | 35μm,0.2s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **0.15** | **159** | PG | **Pg** | **21 11 16.6** | **-0.3** |
| KNDR | | | | SG | **Sg** | **21 11 18.7** | **-0.7** |
| **IMMV** | **Iera Moni Meta** | **0.31** | **73** | P | **Pb** | **21 11 20.0** | **-0.4** |
| IMMV | | | | S | **Sb** | **21 11 25.4** | **+0.1** |
| | 11μm,0.2s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.31** | **73** | P | **Pb** | **21 11 20.1** | **-0.3** |
| IMMV | | | | S | **Sb** | **21 11 26.2** | **+0.9** |
| IMMV | | | | AML | AML | 21 11 27.6 | |
| | comp=E,21898μm,0.2s | | | | | | |
| IMMV | | | | AML | AML | 21 11 29.2 | |
| | comp=N,20781μm,0.3s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.31** | **73** | PG | **Pb** | **21 11 20.4** | **0.0** |
| IMMV | | | | SG | **Sb** | **21 11 26.2** | **+0.9** |
| **VAM** | **Vamos** | **0.47** | **86** | P | **Pb** | **21 11 23.0** | **-0.2** |
| VAM | | | | S | **Sb** | **21 11 30.9** | **+0.8** |
| | comp=N,26μm,0.3s | | | | | | |
| **VAM** | **Vamos** | **0.47** | **86** | P | **Pb** | **21 11 23.1** | **-0.2** |
| VAM | | | | S | **Sb** | **21 11 31.3** | **+1.2** |
| VAM | | | | AML | AML | 21 11 32.2 | |
| | comp=E,23615μm,0.4s | | | | | | |
| VAM | | | | AML | AML | 21 11 36.5 | |
| | comp=N,27136μm,0.3s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.56** | **332** | P | **Pg** | **21 11 23.9** | **-0.3** |
| ANKY | | | | S | **Sg** | **21 11 31.4** | **-0.2** |
| | comp=N,5μm,0.4s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.56** | **332** | P | **Pg** | **21 11 23.9** | **-0.3** |
| ANKY | | | | S | **Sg** | **21 11 31.0** | **-0.5** |
| ANKY | | | | AML | AML | 21 11 32.8 | |
| | comp=N,12825μm,0.4s | | | | | | |
| ANKY | | | | AML | AML | 21 11 42.1 | |
| | comp=E,7992μm,0.6s | | | | | | |
| **GVDS** | **Gavdos** | **0.65** | **144** | P | **Pg** | **21 11 25.7** | **-0.2** |
| GVDS | | | | S | **Sb** | **21 11 36.4** | **+1.1** |
| | comp=E,12μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **144** | P | **Pg** | **21 11 26.0** | **+0.1** |
| GVD | | | | S | **Sb** | **21 11 36.8** | **+1.5** |
| | comp=E,12μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **144** | P | **Pg** | **21 11 26.1** | **+0.1** |
| GVD | | | | AML | AML | 21 11 40.0 | |
| | comp=N,26602μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 21 11 41.7 | |
| | comp=E,21435μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.66** | **144** | PG | **Pg** | **21 11 26.6** | **+0.6** |
| GVD | | | | SG | **Sb** | **21 11 37.2** | **+1.9** |
| **PRNS** | **Prines Rethymn** | **0.72** | **90** | P | **Pg** | **21 11 26.2** | **-1.0** |
| PRNS | | | | S | **Sg** | **21 11 36.6** | **-0.1** |
| | comp=E,2μm,0.4s | | | | | | |
| **KTHA** | **Kythira Island** | **0.99** | **333** | P | **Pg** | **21 11 31.8** | **-0.5** |
| KTHA | | | | S | **Sg** | **21 11 45.2** | **-0.1** |
| | comp=E,3μm,0.6s | | | | | | |
| **KTHA** | **Kythira Island** | **0.99** | **333** | P | **Pg** | **21 11 31.9** | **-0.5** |
| KTHA | | | | AML | AML | 21 11 49.0 | |
| | comp=E,8126μm,0.6s | | | | | | |
| KTHA | | | | AML | AML | 21 11 52.5 | |
| | comp=N,3000μm,0.6s | | | | | | |
| **KTHR** | **Kythira** | **1.02** | **331** | P | **Pg** | **21 11 31.9** | **-0.9** |
| KTHR | | | | S | **Sg** | **21 11 46.2** | **+0.1** |
| | comp=N,2μm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.04** | **94** | Pn | **Pg** | **21 11 32.6** | **-0.7** |
| | comp=N,42nm,0.3s,baz=271,slow=15,SNR=132 | | | | | | |
| IDI | | | | Sn | **Sb** | **21 11 47.3** | **+0.7** |
| | comp=N,151nm,0.3s,baz=169,slow=20,SNR=13 | | | | | | |
| **IDI** | **Anoyia** | **1.04** | **94** | P | **Pg** | **21 11 32.6** | **-0.7** |
| IDI | | | | S | **Sb** | **21 11 48.0** | **+1.5** |
| | comp=N,3μm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **1.04** | **94** | P | **Pg** | **21 11 32.6** | **-0.7** |
| IDI | | | | AML | AML | 21 11 58.7 | |
| | comp=E,4259μm,0.5s | | | | | | |
| IDI | | | | AML | AML | 21 12 00.9 | |
| | comp=N,5937μm,0.4s | | | | | | |
| **HRKL** | **Herakleio** | **1.21** | **92** | PN | **Pn** | **21 11 37.6** | **+1.9** |
| HRKL | | | | SN | **Sn** | **21 11 55.2** | **+3.3** |
| **VLI** | **Veliai** | **1.45** | **338** | P | **Pn** | **21 11 40.0** | **+1.0** |
| **VLI** | **Veliai** | **1.45** | **338** | P | **Pn** | **21 11 40.1** | **+1.1** |
| VLI | | | | AML | AML | 21 12 06.8 | |
| | comp=N,1922μm,0.9s | | | | | | |
| VLI | | | | AML | AML | 21 12 06.9 | |
| | comp=E,1520μm,0.6s | | | | | | |
| **MHLO** | **Agia Marina, M** | **1.46** | **25** | P | **Pn** | **21 11 40.1** | **+1.1** |
| MHLO | | | | AML | AML | 21 12 06.8 | |
| | comp=N,7784μm,0.6s | | | | | | |
| MHLO | | | | AML | AML | 21 12 08.4 | |
| | comp=E,8235μm,0.6s | | | | | | |
| **NPS** | **Neapolis** | **1.63** | **93** | P | **Pg** | **21 11 44.0** | **-0.5** |
| NPS | | | | AML | AML | 21 12 13.1 | |
| | comp=N,2725μm,0.8s | | | | | | |
| NPS | | | | AML | AML | 21 12 20.6 | |
| | comp=E,2674μm,0.6s | | | | | | |
| **THR9** | **Santorini-Faro** | **1.72** | **55** | P | **Pn** | **21 11 44.3** | **+1.7** |
| **THR6** | **Thira Island,** | **1.75** | **55** | P | **Pb** | **21 11 45.1** | **+0.2** |
| **THR5** | **Thira Island,** | **1.75** | **53** | P | **Pb** | **21 11 44.7** | **-0.2** |
| **SNT5** | **Nea Kammeni, S** | **1.77** | **54** | P | **Pn** | **21 11 45.1** | **+1.7** |
| **THR3** | **Thira Island,** | **1.78** | **54** | P | **Pn** | **21 11 44.8** | **+1.4** |
| **SANT** | **Santorini** | **1.79** | **56** | P | **Pn** | **21 11 45.3** | **+1.6** |
| **SANT** | **Santorini** | **1.79** | **56** | PN | **Pg** | **21 11 46.9** | **-0.7** |
| SANT | | | | SN | **Sg** | **21 12 12.1** | **+1.2** |
| **CMBO** | **Columbo, Santo** | **1.82** | **52** | P | **Pb** | **21 11 46.0** | **-0.2** |
| **THR2** | **Thira island,** | **1.82** | **53** | P | **Pb** | **21 11 46.7** | **+0.5** |
| **THR8** | **Santorini-Mono** | **1.83** | **55** | P | **Pn** | **21 11 45.4** | **+1.3** |
| **ZKR** | **Zakros** | **2.14** | **96** | PN | **Pb** | **21 11 51.8** | **+0.1** |
| **PYL** | **PYLOS** | **2.15** | **316** | P | **Pn** | **21 11 50.0** | **+1.5** |
| **ITM** | **Ithomi** | **2.26** | **323** | PN | **Pb** | **21 11 54.1** | **+0.3** |
| **KOSK** | **Kos Island** | **3.05** | **62** | PN | **Pn** | **21 12 04.4** | **+3.5** |
| **BODT** | **Bodrum** | **3.43** | **59** | PN | **Pn** | **21 12 10.2** | **+4.1** |
| **GCAM** | **G?zelcaml?** | **3.72** | **50** | PN | Pn | 21 12 15.0 | +4.8 |
| **ARG** | **Arkhangelos** | **3.76** | **76** | PN | **Pn** | **21 12 14.7** | **+4.0** |
| **URLA** | **Izmir** | **3.82** | **38** | PN | **Pn** | **21 12 15.6** | **+4.1** |
| **MLSB** | **Milas** | **3.87** | **59** | PN | **Pn** | **21 12 16.0** | **+3.8** |
| **BRTR** | **Keskin Array B** | **9.06** | **58** | Pn | **Pn** | **21 13 24.6** | **+1.0** |
| | comp=E,0.2nm,0.3s,baz=252,slow=12,SNR=1.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **10.04** | **100** | Pn | **Pn** | **21 13 35.5** | **-1.4** |
| | comp=E,0.6nm,0.3s,baz=270,slow=11,SNR=4.8 | | | | | | |
| **EIL** | **Elat** | **11.12** | **118** | Pn | **Pn** | **21 13 50.9** | **-0.9** |
| | comp=E,0.3nm,0.3s,baz=243,slow=4.5,SNR=1.8 | | | | | | |
| EIL | | | | Sn | **Sn** | **21 15 50.9** | **-5.1** |
| | comp=E,0.3nm,0.3s,baz=37,slow=9.2,SNR=2.2 | | | | | | |
| **GERES** | **GERESS Array B** | **15.32** | **334** | Pn | **Pn** | **21 14 49.2** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=144,slow=12,SNR=1.5 | | | | | | |
| **KHC** | **Kasperske Hory** | **15.61** | **335** | *eP* | **P** | **21 14 58.0** | **+1.2** |
| **AKASG** | **Malin Array Be** | **15.85** | **13** | Pn | **Pn** | **21 14 54.8** | **-0.9** |
| | comp=E,0.2nm,0.3s,baz=206,slow=11,SNR=2.7 | | | | | | |
| **DPC** | **Dobruska-Polom** | **15.88** | **343** | *eP* | **P** | **21 15 02.5** | **+2.6** |
| **KBZ** | **Khabaz** | **17.02** | **55** | Pn | **Pn** | **21 15 12.5** | **+1.8** |
| | comp=E,0.0nm,0.3s,baz=221,slow=19,SNR=2.2 | | | | | | |
| **HFS** | **Hagfors** | **25.60** | **348** | P | **P** | **21 16 40.5** | **-1.1** |
| | comp=E,2.5nm,1.0s,baz=155,slow=7.8,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **26.14** | **3** | P | **P** | **21 16 43.7** | **-2.8** |
| | comp=E,3.9nm,0.9s,baz=183,slow=14,SNR=3.0 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **27.15** | **326** | P | **P** | **21 16 55.8** | **+0.1** |
| | comp=E,0.4nm,0.4s,baz=120,slow=8.2,SNR=4.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.69** | **227** | P | **P** | **21 17 19.2** | **+0.5** |
| | comp=E,1.2nm,0.5s,baz=32,slow=8.4,SNR=8.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.23** | **1** | P | **P** | **21 17 56.2** | **-1.8** |
| | comp=E,1.3nm,0.5s,baz=224,slow=3.3,SNR=6.1 | | | | | | |
| **DBIC** | **Dimbokro** | **38.73** | **229** | P | **P** | **21 18 36.4** | **-0.7** |
| | comp=E,2.6nm,0.5s,baz=348,slow=9.4,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.71** | **57** | P | **P** | **21 19 25.0** | **-0.7** |
| | comp=E,0.8nm,0.5s,baz=272,slow=7.8,SNR=17 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.77** | **46** | P | **P** | **21 19 32.4** | **-1.5** |
| | comp=E,0.8nm,0.4s,baz=269,slow=9.2,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **60.32** | **50** | P | **P** | **21 21 20.5** | **-1.0** |
| | comp=E,0.4nm,0.6s,baz=288,slow=7.6,SNR=4.8 | | | | | | |

*NEIC **09** 21:11:20.2±1.7, 11°.0S±0°.1×163°.6E±0°.1, h10km±1km, mb4.5/17, Error ellipse: s-maj=23.0km s-min=17.8km az=57.0*
*IDC **09** 21:11:27.6±6.2, 11°.32S×163°.53E, h70km±58km, mb3.7/7, mb1 4.0/9, mb1mx3.5/51, mbtmp4.1/9, ML4.3/2, MS3.8/16, Ms1 3.8/16, ms1mx3.5/58, Error ellipse: s-maj=39.6km s-min=27.2km az=166.0*

*NOU **09** 21:12:07.1, 11°.49S×161°.41E, h313km, mb4.0/9, Solomon Islands*

**ISC 09 21:11:22.9±0.7, 11°.14S±0°.07×163°.59E±0°.09, h31km, n65, σ1=58/48, mb4.2/16, MS3.8/13, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **5.54** | **141** | Pn | **Pn** | **21 12 44.2** | **+0.9** |
| SANVU | | | | Sn | **Sn** | **21 13 43.9** | **-2.1** |
| **MARNC** | **Mare, Loyalty** | **11.13** | **158** | Pn | **Pn** | **21 14 00.3** | **+0.3** |
| **DZM** | **Mont Dzumac** | **11.21** | **166** | *e*Pn | **Pn** | **21 14 02.8** | **+1.7** |
| | 16nm,0.4s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **21 16 02.6** | **-2.9** |
| | 11nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 21 16 40.9 | |
| | comp=Z,481nm,27.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **11.21** | **166** | P | **Pn** | **21 14 02.9** | **+1.7** |
| | 2.7nm,0.3s,baz=44,slow=8.4,SNR=85 | | | | | | |
| DZM | | | | S | **Sn** | **21 16 04.7** | **-0.7** |
| | 0.6nm,0.3s,baz=78,slow=21,SNR=1.5 | | | | | | |
| DZM | | | | LR | LR | 21 17 46.4 | |
| | comp=Z,228nm,19.2s,baz=18,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.21** | **166** | Pn | **Pn** | **21 14 02.6** | **+1.5** |
| **ONTNC** | **Ouen Toro** | **11.44** | **166** | Pn | **Pn** | **21 14 07.0** | **+2.8** |
| **OUENC** | **Ouen Island, N** | **11.64** | **165** | Pn | **Pn** | **21 14 08.8** | **+1.9** |
| **MSVF** | **Nonsavu** | **15.46** | **117** | LR | LR | 21 20 02.9 | |
| | comp=Z,348nm,18.8s,baz=346,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **16.25** | **275** | LR | LR | 21 21 28.4 | |
| | comp=Z,504nm,19.6s,baz=126,slow=37 | | | | | | |
| **EIDS** | **Eidsvold** | **18.45** | **218** | P | **Pn** | **21 15 36.8** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 21 15 45.8 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **18.90** | **240** | P | **Pn** | **21 15 42.5** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=65,slow=13,SNR=4.6 | | | | | | |
| CTA | | | | LR | LR | 21 22 03.9 | |
| | comp=Z,262nm,19.6s,baz=59,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **18.90** | **240** | P | **Pn** | **21 15 43.9** | **+2.1** |
| **CTAO** | **Charters Tower** | **18.90** | **240** | P | **Pn** | **21 15 42.2** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 21 16 07.6 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **CTAO** | **Charters Tower** | **18.90** | **240** | P | **Pn** | **21 15 43.9** | **+2.1** |
| **MTSU** | **Mount Surprise** | **19.89** | **247** | P | **Pn** | **21 15 54.7** | **+1.0** |
| **COEN** | **Coen** | **20.12** | **260** | P | Pn | 21 15 55.0 | -1.4 |
| COEN | | | | IAmb | IAmb | 21 16 00.4 | |
| | comp=Z,39nm,1.2s | | | | | | |
| **COEN** | **Coen** | **20.12** | **260** | P | Pn | 21 15 56.0 | -0.4 |
| **RMQ** | **Roma** | **20.70** | **220** | P | Pn | 21 16 07.6 | +4.5 |
| **ARMA** | **Armidale** | **22.17** | **208** | P | **P** | **21 16 17.4** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 21 16 20.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **AFI** | **Afiamalu** | **24.20** | **99** | LR | LR | 21 24 19.9 | |
| | comp=Z,248nm,18.7s,baz=312,slow=32 | | | | | | |
| **QIS** | **Mount Isa** | **24.87** | **245** | P | **P** | **21 16 43.4** | **+0.4** |
| **INKA** | **Innaminka** | **27.06** | **229** | P | **P** | **21 17 06.7** | **+4.0** |
| **STKA** | **Stephens Creek** | **28.95** | **221** | P | **P** | **21 17 20.1** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=7.4,slow=20,SNR=3.4 | | | | | | |
| STKA | | | | LR | LR | 21 28 13.1 | |
| | comp=Z,281nm,18.1s,baz=28,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **28.95** | **221** | P | **P** | **21 17 19.9** | **+0.4** |
| **WR0** | **Warramunga Arr** | **29.28** | **249** | P | **P** | **21 17 21.8** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 21 17 26.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **29.45** | **249** | P | **P** | **21 17 23.7** | **-0.5** |
| **WB2** | **Warramunga Arr** | **29.45** | **249** | P | **P** | **21 17 23.2** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 21 17 27.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.46** | **249** | P | **P** | **21 17 23.4** | **-0.9** |
| | comp=Z,2.1nm,0.4s,baz=79,slow=9.0,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 20 27.9** | **-1.8** |
| | comp=Z,0.9nm,1.1s,baz=76,slow=3.4,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 21 28 57.7 | |
| | comp=Z,238nm,18.9s,baz=66,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.46** | **249** | P | **P** | **21 17 23.2** | **-1.1** |
| **H11S2** | **WAKE ISLAND Hy** | **29.60** | **6** | T | T | 21 48 28.7 | |
| | baz=188,slow=76,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.61** | **6** | T | T | 21 48 38.8 | |
| | baz=188,slow=76,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.62** | **6** | T | T | 21 48 27.8 | |
| | baz=188,slow=76,SNR=13 | | | | | | |
| **GUMO** | **Guam** | **30.80** | **322** | LR | LR | 21 28 58.9 | |
| | comp=Z,109nm,21.5s,baz=122,slow=34 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.83** | **6** | T | T | 21 49 55.6 | |
| | baz=188,slow=76,SNR=10 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.84** | **6** | T | T | 21 49 59.6 | |
| | baz=188,slow=76,SNR=6.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.85** | **6** | T | T | 21 49 58.5 | |
| | baz=188,slow=76,SNR=5.8 | | | | | | |
| **AS31** | **Alice Springs** | **30.86** | **242** | P | **P** | **21 17 35.8** | **-0.9** |
| **ASA

PRYS eS Sb 21 15 02.6 -0.4
PRYS lAML 21 15 08.5
comp=Z,15nm,0.3s
**SWZ Schweizer 1.53 302** eP Pb 21 14 52.7 -0.2
SWZ eS Sg 21 15 13.9 +1.1
SWZ lAML 21 15 19.0
comp=Z,6.5nm,1.6s

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**EAF 09 21:15:09.6±1.2,14°.59S×27°.24E,h0km±295km,MD3.7, Zambia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSZ** | **Lusaka** | **1.14** | **127** | *i* P | Pg | 21 15 30.6 | -0.9 |
| LSZ | | | | *i* S | Sg | 21 15 44.8 | -1.6 |
| **LSZ** | **Lusaka** | **1.14** | **127** | *i* P | Pg | 21 15 30.6 | -0.9 |
| LSZ | | | | *i* S | Sg | 21 15 44.8 | -1.6 |
| **BLWY** | **Bulawayo** | **5.67** | **167** | *e*P | Pn | 21 16 34.3 | -1.1 |
| BLWY | | | | *e*S | Sn | 21 17 37.4 | -3.9 |
| **BLWY** | **Bulawayo** | **5.67** | **167** | *e*P | Pn | 21 16 34.3 | -1.1 |
| BLWY | | | | *e*S | Sn | 21 17 37.4 | -3.9 |
| **MATP** | **Matopo** | **5.93** | **168** | *i* S | Sn | 21 17 41.8 | -5.7 |
| **MATP** | **Matopo** | **5.93** | **168** | *e*P | Pn | 21 16 37.4 | -1.5 |
| MATP | | | | *i* S | Sn | 21 17 41.8 | -5.7 |
| **MATP** | **Matopo** | **5.93** | **168** | *e*P | Pn | 21 16 37.4 | -1.5 |

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*IDC **09** 21:17:11.8±1.2,59°.78N×153°.02W,h103km±14km, mb4.0/12,mb1 4.1/17,mb1mx3.6/72,mbtmp4.4/17,Error ellipse: s-maj=15.0km s-min=11.6km az=133.0*
*NEIC **09** 21:17:12.4±1.2,59°.79N±0°.03×152°.96W±0°.05, h112km±3km,Error ellipse: s-maj=4.9km s-min=2.7km az=150.0*
*AEIC **09** 21:17:13±1.4,59°.79N±0°.03×152°.98W±0°.06,h108km±3km, ML4.1,mb4.5/21(NEIC),ML4.2/118(NEIC), Error ellipse: s-maj=4.9km s-min=3.8km az=147.0*

**ISC 09 21:17:12.8±0.5,59.79N±0°.03×152.96W±0°.03, h115km±4km,n333,σ0≥99/372,mb4.4/26,1D,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.20** | **225** | | **Pn** | **21 17 28.4** | **-0.4** |
| **ILSW** | **Iliamna Southw** | **0.21** | **334** | | **Pn** | **21 17 28.1** | **-0.8** |
| ILSW | | | | Sn | **Sn** | **21 17 39.7** | **-1.4** |
| **O20K** | **Slope Mountain** | **0.34** | **30** | | **Pn** | **21 17 28.9** | **-0.4** |
| O20K | | | | | **Sn** | **21 17 41.2** | **-0.5** |
| **O20K** | **Slope Mountain** baz=212,SNR=100 | **0.34** | **30** | P | **Pn** | **21 17 28.9** | **-0.4** |
| O20K | | | | S | **Sn** | **21 17 41.0** | **-0.8** |
| **AU22** | **Augustine Moun** baz=212 | **0.47** | **206** | | **Pn** | **21 17 29.5** | **-0.4** |
| AU22 | | | | | **Sn** | **21 17 42.2** | **-0.5** |
| **AUL** | **Augustine Lava** | **0.48** | **211** | | **Pn** | **21 17 29.7** | **-0.2** |
| AUL | | | | | **Sn** | **21 17 42.4** | **-0.5** |
| **AUH** | **Augustine H** | **0.50** | **210** | | **Pn** | **21 17 29.9** | **-0.3** |
| **AGU** | **Augustine-Summ** | **0.50** | **209** | | **Pn** | **21 17 29.9** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.50** | **208** | | **Pn** | **21 17 29.8** | **-0.3** |
| **RED** | **Redoubt Volcan** | **0.64** | **8** | | **Pn** | **21 17 30.6** | **-0.6** |
| RED | | | | | **Sn** | **21 17 43.6** | **-1.4** |
| **HOM** | **Homer** | **0.68** | **101** | | **Pn** | **21 17 31.2** | **-0.1** |
| HOM | | | | Sn | **Sn** | **21 17 45.2** | **-0.1** |
| HOM | comp=N,10μm,0.5s | | | lAML | | 21 17 46.7 | |
| HOM | comp=E,7μm,0.8s | | | lAML | | 21 17 48.7 | |
| **HOM** | **Homer** baz=282,SNR=85 | **0.68** | **101** | P | **Pn** | **21 17 31.3** | **-0.1** |
| HOM | baz=282 | | | S | **Sn** | **21 17 45.3** | **-0.1** |
| **RSO** | **Redoubt South** | **0.68** | **8** | | **Pn** | **21 17 31.3** | **-0.4** |
| **RDWB** | **Redoubt West** | **0.70** | **5** | | **Pn** | **21 17 31.1** | **-0.6** |
| RDWB | | | | | **Sn** | **21 17 44.6** | **-1.4** |
| **NCT** | **North Crescent** | **0.77** | **1** | | **Pn** | **21 17 31.7** | **-0.5** |
| NCT | | | | | **Sn** | **21 17 45.8** | **-1.2** |
| **O19K** | **Port Alsworth** | **0.80** | **301** | Pn | **Pn** | **21 17 31.8** | **-0.5** |
| O19K | | | | Sn | **Sn** | **21 17 46.1** | **-1.0** |
| O19K | comp=E,9μm,0.5s | | | lAML | | 21 17 46.7 | |
| O19K | comp=N,6μm,0.5s | | | lAML | | 21 17 46.8 | |
| **O19K** | **Port Alsworth** baz=121,SNR=59 | **0.80** | **301** | P | **Pn** | **21 17 31.9** | **-0.4** |
| O19K | baz=121 | | | S | **Sn** | **21 17 46.1** | **-1.0** |
| **RDJH** | **Redoubt Jeurge** | **0.81** | **5** | | **Pn** | **21 17 32.1** | **-0.5** |
| **DFR** | **Drift River** | **0.81** | **9** | | **Pn** | **21 17 32.2** | **-0.5** |
| DFR | | | | | **Sn** | **21 17 46.5** | **-1.1** |
| **RDT** | **Redoubt** | **0.83** | **19** | | **Pn** | **21 17 32.3** | **-0.5** |
| **CNPM** | **China Poot** | **0.91** | **106** | Pn | **Pn** | **21 17 33.1** | **-0.4** |
| CNPM | | | | Sn | **Sn** | **21 17 48.0** | **-1.1** |
| CNPM | comp=E,4μm,0.7s | | | lAML | | 21 17 49.5 | |
| CNPM | comp=N,5μm,0.5s | | | lAML | | 21 17 49.6 | |
| **Q19K** | **Cape Douglas,** | **0.94** | **202** | Pn | **Pn** | **21 17 33.1** | **-0.6** |
| Q19K | | | | Sn | **Sn** | **21 17 48.4** | **-1.1** |
| Q19K | comp=N,5μm,0.7s | | | lAML | | 21 17 54.0 | |
| Q19K | comp=E,4μm,0.7s | | | lAML | | 21 17 58.1 | |
| **Q19K** | **Cape Douglas,** baz=21,SNR=70 | **0.94** | **202** | P | **Pn** | **21 17 33.3** | **-0.4** |
| Q19K | baz=21 | | | S | **Sn** | **21 17 48.6** | **-0.9** |
| **BRLK** | **Bradley Lake** | **1.05** | **91** | | **Pn** | **21 17 34.3** | **-0.5** |
| BRLK | | | | Sn | **Sn** | **21 17 50.4** | **-1.1** |
| BRLK | comp=N,4μm,0.6s | | | lAML | | 21 17 51.0 | |
| BRLK | comp=E,3μm,0.6s | | | lAML | | 21 17 52.2 | |
| **BRSE** | **Bradley Lake S** | **1.12** | **92** | | **Pn** | **21 17 35.0** | **-0.5** |
| **BRSE** | **Bradley Lake S** baz=273,SNR=183 | **1.12** | **92** | P | **Pn** | **21 17 35.2** | **-0.4** |
| BRSE | baz=273 | | | S | **Sn** | **21 17 51.8** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.22** | **252** | Pn | **Pn** | **21 17 36.0** | **-0.7** |
| P18K | | | | Sn | **Sn** | **21 17 53.1** | **-1.7** |
| **P18K** | **Big Mountain,** baz=70,SNR=32 | **1.22** | **252** | P | **Pn** | **21 17 36.0** | **-0.7** |
| P18K | baz=70 | | | S | **Sn** | **21 17 53.2** | **-1.7** |
| **N19K** | **Bonanza Creek** | **1.28** | **324** | Pn | **Pn** | **21 17 36.9** | **-0.4** |
| N19K | | | | Sn | **Sn** | **21 17 55.0** | **-1.0** |
| **N19K** | **Bonanza Creek** baz=144 | **1.28** | **324** | P | **Pn** | **21 17 37.0** | **-0.4** |
| N19K | baz=144 | | | S | **Sn** | **21 17 54.6** | **-1.4** |
| **CAPN** | **Captain Cook N** | **1.33** | **42** | | **Pn** | **21 17 39.4** | **+1.6** |
| CAPN | | | | Sn | **Sn** | **21 17 59.0** | **+2.2** |
| **CAPN** | **Captain Cook N** baz=224,SNR=28 | **1.33** | **42** | P | **Pn** | **21 17 39.3** | **+1.6** |
| **SPU** | **Mount Spurr** | **1.46** | **17** | | **Pn** | **21 17 39.1** | **-0.3** |
| **SPCN** | **Chakachatna No** | **1.49** | **15** | | **Pn** | **21 17 39.6** | **0.0** |
| **SPBG** | **Spurr Blockage** | **1.50** | **11** | | **Pn** | **21 17 39.9** | **0.0** |
| **SLKM** | **Skilak Lake** | **1.54** | **61** | | **Pn** | **21 17 39.7** | **-0.7** |
| **SPCG** | **Spurr Capps Gl** | **1.57** | **17** | | **Pn** | **21 17 40.7** | **-0.1** |
| **SPNN** | **North Nagishla** | **1.58** | **4** | | **Pn** | **21 17 40.8** | **-0.1** |
| **O22K** | **Cooper Landing** | **1.76** | **65** | | **Pn** | **21 17 42.8** | **-0.1** |
| O22K | | | | Sn | **Sn** | **21 18 03.7** | **-2.2** |
| **O22K** | **Cooper Landing** baz=248,SNR=39 | **1.76** | **65** | P | **Pn** | **21 17 42.8** | **-0.1** |
| O22K | baz=248 | | | S | **Sn** | **21 18 03.8** | **-2.0** |
| **SEW** | **Seward** | **1.79** | **78** | Pn | **Pn** | **21 17 42.5** | **-0.7** |
| **SEW** | **Seward** baz=261,SNR=41 | **1.79** | **78** | P | **Pn** | **21 17 42.6** | **-0.7** |
| SEW | baz=261 | | | S | **Sn** | **21 18 04.3** | **-2.2** |
| **STLK** | **Strandline Lak** | **1.80** | **17** | | **Pn** | **21 17 43.3** | **-0.1** |
| **SVW2** | **Sparrevohn** | **1.85** | **316** | | **Pn** | **21 17 43.4** | **-0.6** |
| **FIS** | **Fire Island** | **1.92** | **44** | | **Pn** | **21 17 45.6** | **+0.8** |
| FIS | comp=N,3μm,0.7s | | | lAML | | 21 18 16.9 | |
| FIS | comp=E,2μm,0.7s | | | lAML | | 21 18 27.0 | |
| **KELA** | **Mount Kelaz** | **1.98** | **228** | | **Pn** | **21 17 45.5** | **-0.1** |
| **KDAK** | **Kodiak Island** comp=E,182nm,0.3s,baz=29,slow=7.8,SNR=1113 | **2.02** | **174** | P | **Pn** | **21 17 45.3** | **-1.0** |
| KDAK | comp=E,298nm,0.3s,baz=303,slow=22,SNR=48 | | | S | **Sn** | **21 18 10.0** | **-1.8** |
| **KDAK** | **Kodiak Island** | **2.02** | **174** | Pn | **Pn** | **21 17 45.2** | **-1.0** |
| KDAK | comp=E,4μm,0.6s | | | lAML | | 21 18 17.1 | |
| **KDAK** | **Kodiak Island** baz=354 | **2.02** | **174** | P | **Pn** | **21 17 45.3** | **-1.0** |
| KDAK | baz=354 | | | S | **Sn** | **21 18 10.0** | **-1.8** |
| **RC01** | **Rabbit Creek A** | **2.06** | **49** | | **Pn** | **21 17 46.2** | **-0.4** |
| RC01 | comp=E,2μm,0.6s | | | lAML | | 21 18 12.0 | |
| RC01 | comp=N,2μm,0.6s | | | lAML | | 21 18 12.5 | |
| **RC01** | **Rabbit Creek A** baz=232,SNR=34 | **2.06** | **49** | P | **Pn** | **21 17 46.3** | **-0.3** |
| RC01 | baz=232 | | | S | **Sn** | **21 18 10.6** | **-1.9** |
| **M19K** | **Big River Lodg** | **2.23** | **342** | | **Pn** | **21 17 48.4** | **-0.4** |
| **M22K** | **Willow** | **2.41** | **34** | | **Pn** | **21 17 50.9** | **-0.1** |
| **M22K** | **Willow** baz=217,SNR=79 | **2.41** | **34** | P | **Pn** | **21 17 50.9** | **-0.1** |
| M22K | baz=217 | | | S | **Sn** | **21 18 19.6** | **-0.8** |
| **PWL** | **Port Wells** | **2.54** | **63** | | **Pn** | **21 17 51.8** | **-1.0** |
| PWL | comp=E,2μm,0.7s | | | lAML | | 21 18 27.8 | |
| **PWL** | **Port Wells** baz=247,SNR=63 | **2.54** | **63** | P | **Pn** | **21 17 51.8** | **-1.0** |
| PWL | baz=247 | | | S | **Sn** | **21 18 20.7** | **-2.8** |
| **L19K** | **White Mountain** | **2.57** | **340** | Pn | **Pn** | **21 17 52.9** | **-0.3** |
| **L19K** | **White Mountain** baz=158,SNR=199 | **2.57** | **340** | P | **Pn** | **21 17 52.9** | **-0.3** |
| L19K | baz=158 | | | S | **Sn** | **21 18 23.1** | **-1.2** |
| **OHAK** | **Old Harbor** | **2.58** | **184** | Pn | **Pn** | **21 17 52.1** | **-1.2** |
| OHAK | comp=E,1μm,0.5s | | | lAML | | 21 18 23.7 | |
| OHAK | comp=N,1μm,0.5s | | | lAML | | 21 18 25.0 | |
| **OHAK** | **Old Harbor** baz=3.4,SNR=62 | **2.58** | **184** | P | **Pn** | **21 17 52.1** | **-1.2** |
| OHAK | baz=3.4 | | | S | **Sn** | **21 18 21.7** | **-2.8** |
| **PMR** | **Palmer** | **2.61** | **45** | | **Pn** | **21 17 52.4** | **-1.2** |
| PMR | comp=E,588nm,0.6s | | | lAML | | 21 18 24.3 | |
| PMR | comp=N,613nm,1.0s | | | lAML | | 21 18 31.0 | |
| **PMR** | **Palmer** baz=228,SNR=68 | **2.61** | **45** | P | **Pn** | **21 17 52.5** | **-1.2** |
| PMR | baz=228 | | | S | **Sn** | **21 18 21.8** | **-3.3** |
| **L20K** | **Farewell, AK** baz=170 | **2.73** | **351** | P | **Pn** | **21 17 55.4** | **+0.1** |
| **KNK** | **Knik Glacier** | **2.75** | **52** | | **Pn** | **21 17 54.6** | **-1.0** |
| **KNK** | **Knik Glacier** baz=236,SNR=54 | **2.75** | **52** | P | **Pn** | **21 17 54.5** | **-1.0** |
| KNK | baz=236 | | | S | **Sn** | **21 18 25.9** | **-2.5** |
| **GHO** | **Glory Hole Cre** | **2.80** | **43** | | **Pn** | **21 17 55.4** | **-0.8** |
| **GHO** | **Glory Hole Cre** comp=E,1μm,0.7s | **2.80** | **43** | lAML | | 21 18 35.7 | |
| GHO | comp=N,686nm,0.7s | | | lAML | | 21 18 38.6 | |
| **CUT** | **Chulitna** | **2.93** | **25** | | **Pn** | **21 17 57.4** | **-0.4** |
| CUT | comp=E,1μm,0.8s | | | lAML | | 21 18 49.5 | |
| CUT | comp=N,838nm,0.8s | | | lAML | | 21 19 03.9 | |
| **CUT** | **Chulitna** baz=208,SNR=75 | **2.93** | **25** | P | **Pn** | **21 17 57.2** | **-0.6** |
| CUT | baz=208 | | | S | **Sn** | **21 18 31.1** | **-1.5** |
| **SML** | **Sawmill** | **3.04** | **46** | | **Pn** | **21 17 58.3** | **-1.1** |
| SML | comp=E,761nm,0.8s | | | lAML | | 21 18 39.7 | |
| SML | comp=N,976nm,1.0s | | | lAML | | 21 19 01.1 | |
| **SML** | **Sawmill** baz=230,SNR=48 | **3.04** | **46** | P | **Pn** | **21 17 58.3** | **-1.1** |
| SML | baz=230 | | | S | **Sn** | **21 18 32.0** | **-3.2** |
| **GLI** | **Glacier Island** | **3.11** | **67** | | **Pn** | **21 17 58.6** | **-1.6** |
| GLI | comp=N,959nm,0.7s | | | lAML | | 21 18 35.9 | |
| **GLI** | **Glacier Island** baz=252,SNR=13 | **3.11** | **67** | P | **Pn** | **21 17 59.3** | **-1.0** |
| GLI | baz=252 | | | S | **Sn** | **21 18 33.3** | **-3.6** |
| **PPLA** | **Purkeypile** | **3.14** | **6** | Pn | **Pn** | **21 18 01.1** | **+0.4** |
| **PPLA** | **Purkeypile** baz=187,SNR=57 | **3.14** | **6** | P | **Pn** | **21 18 01.3** | **+0.5** |
| **SII** | **Sitkinak Islan** | **3.31** | **192** | Pn | **Pn** | **21 18 01.2** | **-1.7** |
| **SII** | **Sitkinak Islan** baz=11 | **3.31** | **192** | S | **Sn** | **21 18 37.9** | **-3.8** |
| **FID** | **Port Fidalgo** | **3.37** | **71** | | **Pn** | **21 18 01.9** | **-1.8** |
| FID | comp=E,857nm,0.4s | | | lAML | | 21 18 41.3 | |
| **Q23K** | **Middleton Isla** | **3.38** | **93** | | **Pn** | **21 18 03.5** | **-0.2** |
| **Q23K** | **Middleton Isla** | **3.38** | **93** | | **Sn** | **21 18 43.4** | **+0.3** |
| **Q23K** | **Middleton Isla** comp=E,394nm,1.1s | **3.38** | **93** | lAML | | 21 18 43.6 | |
| Q23K | comp=N,781nm,0.5s | | | lAML | | 21 18 44.1 | |
| **Q23K** | **Middleton Isla** baz=279 | **3.38** | **93** | P | **Pn** | **21 18 03.3** | **-0.4** |
| **MID** | **Middleton Isla** | **3.38** | **93** | | **Pn** | **21 18 03.4** | **-0.4** |
| MID | | | | | **Sn** | **21 18 43.4** | **+0.1** |
| **MID** | **Middleton Isla** comp=N,761nm,0.5s | **3.38** | **93** | lAML | | 21 18 44.1 | |
| MID | comp=E,320nm,0.7s | | | lAML | | 21 18 52.6 | |
| **JPK** | **Jack Peak** | **3.40** | **65** | | **Pn** | **21 18 03.5** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **3.43** | **51** | | **Pn** | **21 18 04.0** | **-0.6** |
| SCM | comp=E,841nm,0.9s | | | lAML | | 21 18 45.8 | |
| SCM | comp=N,906nm,0.9s | | | lAML | | 21 18 47.3 | |
| **SCM** | **Sheep Creek Mo** baz=236,SNR=40 | **3.43** | **51** | P | **Pn** | **21 18 03.7** | **-0.9** |
| SCM | baz=236 | | | S | **Sn** | **21 18 41.9** | **-2.8** |
| **TT01** | **Tatalina** | **3.46** | **336** | | **Pn** | **21 18 04.3** | **-0.5** |
| **TTA** | **Tatalina** | **3.48** | **336** | Pn | **Pn** | **21 18 04.4** | **-0.7** |
| **TTA** | **Tatalina** baz=154,SNR=90 | **3.48** | **336** | P | **Pn** | **21 18 04.5** | **-0.7** |
| **VMT** | **TAPS TI Valdez** | **3.51** | **66** | | **Sn** | **21 18 44.8** | **-1.6** |
| **K20K** | **Telida** | **3.62** | **352** | | **Pn** | **21 18 06.6** | **-0.4** |
| **K20K** | **Telida** baz=171 | **3.62** | **352** | P | **Pn** | **21 18 07.0** | **0.0** |
| **WAT7** | **Susitna Watana** | **3.64** | **31** | | **Pn** | **21 18 06.9** | **-0.4** |
| **CAST** | **Castle Rocks** | **3.66** | **6** | | **Pn** | **21 18 07.2** | **-0.4** |
| **CAST** | **Castle Rocks** baz=187,SNR=104 | **3.66** | **6** | P | **Pn** | **21 18 07.2** | **-0.4** |
| **EYAK** | **Cordova Ski Ar** | **3.68** | **75** | Pn | **Pn** | **21 18 06.8** | **-1.0** |
| **EYAK** | **Cordova Ski Ar** baz=261,SNR=7.8 | **3.68** | **75** | P | **Pn** | **21 18 06.9** | **-0.9** |
| **WAT6** | **Susitna Watana** | **3.77** | **40** | | **Pn** | **21 18 08.3** | **-0.8** |
| **DIV** | **Divide** | **3.80** | **66** | | **Pn** | **21 18 08.9** | **-0.6** |
| **KLU** | **Klutina** | **3.86** | **61** | | **Pn** | **21 18 09.3** | **-1.0** |
| KLU | comp=E,713nm,0.7s | | | lAML | | 21 18 55.8 | |
| **KLU** | **Klutina** baz=247,SNR=75 | **3.86** | **61** | P | **Pn** | **21 18 09.3** | **-1.0** |
| **TRF** | **Thorofare Moun** | **3.88** | **18** | Pn | **Pn** | **21 18 09.9** | **-0.8** |
| TRF | comp=E,178nm,0.8s | | | lAML | | 21 19 16.9 | |
| TRF | comp=N,228nm,0.8s | | | lAML | | 21 19 17.9 | |
| **TRF** | **Thorofare Moun** baz=200,SNR=92 | **3.88** | **18** | P | **Pn** | **21 18 09.6** | **-1.1** |
| **KTH** | **Kantishna Hill** | **3.90** | **14** | | **Pn** | **21 18 09.9** | **-0.9** |
| KTH | comp=N,269nm,1.1s | | | lAML | | 21 19 29.1 | |
| KTH | comp=E,188nm,0.9s | | | lAML | | 21 19 31.7 | |
| **M24K** | **Tolsona, Glenn** | **4.04** | **52** | Pn | **Pn** | **21 18 12.2** | **-0.4** |
| **M24K** | **Tolsona, Glenn** baz=238,SNR=46 | **4.04** | **52** | P | **Pn** | **21 18 12.2** | **-0.4** |
| **CHUM** | **Lake Minchumin** | **4.12** | **4** | | **Pn** | **21 18 13.3** | **-0.3** |
| **CHUM** | **Lake Minchumin** baz=185,SNR=37 | **4.12** | **4** | P | **Pn** | **21 18 13.3** | **-0.3** |
| **RND** | **Reindeer** | **4.12** | **27** | Pn | **Pn** | **21 18 13.2** | **-0.5** |
| RND | comp=N,165nm,0.7s | | | lAML | | 21 19 01.3 | |
| **GOAT** | **Goat Mountain** | **4.18** | **76** | | **Pn** | **21 18 14.0** | **-0.6** |
| **RAGM** | **Ragged Mountai** | **4.19** | **78** | | **Pn** | **21 18 14.2** | **-0.5** |
| **CHIR** | **Chirikof Islan** | **4.23** | **201** | Pn | **Pn** | **21 18 13.5** | **-1.7** |
| CHIR | comp=N,313nm,0.4s | | | lAML | | 21 19 01.5 | |
| CHIR | comp=E,244nm,1.0s | | | lAML | | 21 19 02.0 | |
| **CHIR** | **Chirikof Islan** baz=18 | **4.23** | **201** | P | **Pn** | **21 18 13.5** | **-1.7** |
| **DHY** | **Denali Highway** | **4.25** | **37** | | **Pn** | **21 18 14.7** | **-0.8** |
| **DHY** | **Denali Highway** comp=N,248nm,0.7s | **4.25** | **37** | lAML | | 21 19 04.9 | |
| DHY | comp=E,368nm,0.5s | | | lAML | | 21 19 05.9 | |
| **KAIM** | **Kayak Island** | **4.31** | **85** | Pn | **Pn** | **21 18 16.0** | **-0.2** |
| KAIM | comp=N,383nm,0.7s | | | lAML | | 21 19 08.6 | |
| KAIM | comp=E,450nm,0.5s | | | lAML | | 21 19 08.8 | |
| **KAIM** | **Kayak Island** baz=272,SNR=5.3 | **4.31** | **85** | P | **Pn** | **21 18 16.0** | **-0.2** |
| **BMRM** | **Bremner River** | **4.31** | **71** | Pn | **Pn** | **21 18 15.9** | **-0.4** |
| BMRM | comp=E,352nm,0.4s | | | lAML | | 21 19 04.3 | |
| BMRM | comp=N,413nm,0.5s | | | lAML | | 21 19 07.5 | |
| **BMRM** | **Bremner River** baz=258,SNR=18 | **4.31** | **71** | P | **Pn** | **21 18 15.7** | **-0.5** |
| **PS11** | **TAPS Pump St11** | **4.31** | **55** | | **Pn** | **21 18 15.7** | **-0.5** |
| **MCK** | **McKinley** | **4.39** | **24** | Pn | **Pn** | **21 18 17.1** | **-0.2** |
| MCK | comp=E,121nm,0.6s | | | lAML | | 21 19 26.2 | |
| MCK | comp=N,125nm,1.5s | | | lAML | | 21 19 54.4 | |
| **MCK** | **McKinley** baz=208,SNR=174 | **4.39** | **24** | P | **Pn** | **21 18 16.9** | **-0.5** |
| **HMT** | **Hamilton** | **4.39** | **79** | | **Pn** | **21 18 16.8** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **4.42** | **11** | Pn | **Pn** | **21 18 16.2** | **-1.5** |
| **BPAW** | **Bear Paw Mtn.** baz=193,SNR=60 | **4.42** | **11** | P | **Pn** | **21 18 16.5** | **-1.2** |
| **J20K** | **Nowinta River** | **4.44** | **353** | Pn | **Pn** | **21 18 17.9** | **0.0** |
| **J20K** | **Nowinta River** baz=172 | **4.44** | **353** | P | **Pn** | **21 18 17.9** | **0.0** |
| **N25K** | **Chitina, Valde** | **4.49** | **63** | | **Pn** | **21 18 18.0** | **-0.7** |
| N25K | comp=E,401nm,0.6s | | | lAML | | 21 19 11.9 | |
| N25K | comp=N,309nm,0.7s | | | lAML | | 21 19 13.9 | |
| **N25K** | **Chitina, Valde** baz=250,SNR=43 | **4.49** | **63** | P | **Pn** | **21 18 18.1** | **-0.7** |
| **NICHA** | **Nichawak Mount** | **4.53** | **80** | | **Pn** | **21 18 19.0** | **-0.2** |
| **CHGN** | **Chignik** | **4.54** | **222** | | **Pn** | **21 18 19.0** | **-0.4** |
| CHGN | comp=E,259nm,0.2s | | | lAML | | 21 19 11.5 | |
| CHGN | comp=N,253nm,0.5s | | | lAML | | 21 19 14.5 | |
| **CHGN** | **Chignik** baz=37,SNR=5.3 | **4.54** | **222** | P | **Pn** | **21 18 19.3** | **-0.1** |
| **HARP** | **HAARP** | **4.60** | **52** | | **Pn** | **21 18 19.6** | **-0.5** |
| **HARP** | **HAARP** baz=239,SNR=20 | **4.60** | **52** | P | **Pn** | **21 18 19.6** | **-0.5** |
| **BERG** | **Berg Lake** | **4.67** | **79** | | **Pn** | **21 18 20.6** | **-0.5** |
| **BWN** | **Browne** | **4.69** | **19** | | **Pn** | **21 18 21.2** | **-0.1** |
| BWN | comp=N,210nm,1.1s | | | lAML | | 21 19 30.8 | |
| BWN | comp=E,228nm,1.0s | | | lAML | | 21 20 12.4 | |
| **GLB** | **Gilahina Butte** | **4.80** | **66** | Pn | **Pn** | **21 18 22.2** | **-0.6** |
| GLB | comp=E,191nm,0.6s | | | lAML | | 21 19 18.1 | |
| **PAX** | **Paxson** | **4.81** | **45** | Pn | **Pn** | **21 18 22.3** | **-0.6** |
| **PAX** | **Paxson** baz=232,SNR=82 | **4.81** | **45** | P | **Pn** | **21 18 22.4** | **-0.6** |
| **GRIN** | **Grindle Hills** | **4.86** | **80** | | **Pn** | **21 18 23.6** | **0.0** |
| **VNHG** | **Veniaminof 1** | **4.87** | **225** | | **Pn** | **21 18 24.4** | **+0.6** |
| **KHIT** | **Khitrov Hills** | **4.90** | **78** | | **Pn** | **21 18 23.7** | **-0.5** |
| **VRDI** | **Verde Repeater** | **4.91** | **69** | | **Pn** | **21 18 23.3** | **-1.2** |
| VRDI | comp=E,183nm,0.6s | | | lAML | | 21 19 18.7 | |
| VRDI | comp=N,248nm,0.7s | | | lAML | | 21 19 19.2 | |
| **VNFG** | **Fog Glacier, M** | **4.96** | **228** | | **Pn** | **21 18 23.8** | **-1.3** |
| **SNH** | **Sunshine Point** | **5.10** | **81** | Pn | **Pn** | **21 18 26.7** | **-0.1** |
| SNH | comp=N,263nm,1.4s | | | lAML | | 21 19 26.4 | |
| **WAX** | **Waxell Ridge** | **5.10** | **78** | | **Pn** | **21 18 26.4** | **-0.4** |
| **NEA2** | **Nenana** | **5.15** | **19** | | **Pn** | **21 18 26.5** | **-1.1** |
| **NEA2** | **Nenana** baz=203,SNR=200 | **5.15** | **19** | P | **Pn** | **21 18 26.4** | **-1.1** |
| **WRH** | **Wood River Hil** | **5.22** | **24** | Pn | **Pn** | **21 18 27.4** | **-1.0** |
| **GCSA** | **Galena City Sc** | **5.30** | **341** | | **Pn** | **21 18 29.1** | **-0.4** |
| **GCSA** | **Galena City Sc** baz=158,SNR=7.3 | **5.30** | **341** | P | **Pn** | **21 18 29.0** | **-0.4** |
| **MLY** | **Manley** | **5.36** | **10** | | **Pn** | **21 18 29.0** | **-1.4** |
| **MLY** | **Manley** baz=192,SNR=154 | **5.36** | **10** | P | **Pn** | **21 18 29.5** | **-0.9** |
| **ISLE** | **Juniper Island** | **5.36** | **77** | | **Pn** | **21 18 29.4** | **-1.1** |
| **KIAG** | **Kiagna River** | **5.38** | **73** | | **Pn** | **21 18 30.9** | **+0.1** |
| **BALM** | **Baldy** | **5.41** | **72** | | **Pn** | **21 18 31.0** | **-0.1** |
| **HDA** | **Harding Lake** | **5.42** | **29** | | **Pn** | **21 18 30.0** | **-1.1** |
| **HDA** | **Harding Lake** baz=214,SNR=73 | **5.42** | **29** | P | **Pn** | **21 18 30.1** | **-1.1** |
| **I21K** | **Tanana** | **5.43** | **4** | | **Pn** | **21 18 30.5** | **-0.7** |
| **I21K** | **Tanana** baz=185,SNR=73 | **5.43** | **4** | P | **Pn** | **21 18 30.5** | **-0.7** |
| **CCB** | **Clear Creek Bu** | **5.43** | **24** | Pn | **Pn** | **21 18 30.1** | **-1.2** |
| **MENT** | **Mentasta** | **5.45** | **51** | | **Pn** | **21 18 30.9** | **-0.7** |
| **BAGL** | **Bagley Icefiel** | **5.48** | **78** | | **Pn** | **21 18 32.2** | **+0.4** |
| **M26K** | **Nabesna, AK** | **5.49** | **57** | | **Pn** | **21 18 31.7** | **-0.5** |
| **M26K** | **Nabesna, AK** baz=246 | **5.49** | **57** | P | **Pn** | **21 18 33.1** | **+0.9** |
| **RIDG** | **Independent Ri** | **5.52** | **41** | Pn | **Pn** | **21 18 32.4** | **-0.2** |
| **RIDG** | **Independent Ri** baz=228,SNR=58 | **5.52** | **41** | P | **Pn** | **21 18 32.0** | **-0.5** |
| **MESA** | **MESA** | **5.54** | **81** | | **Pn** | **21 18 33.2** | **+0.2** |
| **MESA** | **MESA** baz=271,SNR=9.9 | **5.54** | **81** | P | **Pn** | **21 18 32.8** | **-0.1** |
| **PS08** | **TAPS Pump Stn8** | **5.56** | **28** | | **Pn** | **21 18 32.2** | **-0.9** |
| **TCOL** | **CIGO, UAF Yank** | **5.62** | **23** | | **Pn** | **21 18 33.0** | **-0.8** |
| **TCOL** | **CIGO, UAF Yank** baz=207,SNR=48 | **5.62** | **23** | P | **Pn** | **21 18 32.7** | **-1.1** |
| **COLA** | **College** | **5.63** | **23** | | **Pn** | **21 18 33.1** | **-0.8** |
| **COLA** | **College** baz=207 | **5.63** | **23** | P | **Pn** | **21 18 33.0** | **-0.8** |
| **I23K** | **Minto, Yukon-K** | **5.63** | **16** | | **Pn** | **21 18 33.0** | **-0.9** |
| **I23K** | **Minto, Yukon-K** baz=199,SNR=171 | **5.63** | **16** | P | **Pn** | **21 18 33.3** | **-0.6** |
| **MDM** | **Murphy Dome** | **5.63** | **21** | | **Pn** | **21 18 32.9** | **-1.1** |
| **L26K** | **Log Cabin Wild** | **5.64** | **51** | | **Pn** | **21 18 33.5** | **-0.6** |
| **L26K** | **Log Cabin Wild** baz=239,SNR=35 | **5.64** | **51** | P | **Pn** | **21 18 33.5** | **-0.6** |
| **YAH** | **Yahtse** | **5.64** | **79** | | **Pn** | **21 18 34.3** | **0.0** |
| **DOT** | **Dot Lake** | **5.73** | **44** | | **Pn** | **21 18 34.9** | **-0.4** |
| **BARN** | **Barnard Glacie** | **5.74** | **72** | Pn | **Pn** | **21 18 35.9** | **+0.2** |
| **IL31** | | **5.74** | **27** | | **Pn** | **21 18 34.4** | **-1.0** |
| **ILAR** | **Eielson Array** comp=N,19nm,0.3s,baz=217,slow=14,SNR=167 | **5.74** | **27** | P | **Pn** | **21 18 34.1** | **-1.4** |
| ILAR | comp=N,8.0nm,0.3s,baz=218,slow=23,SNR=7.1 | | | S | **Sn** | **21 19 36.3** | **-3.7** |
| **ILAR** | **Eielson Array** | **5.74** | **27** | Pn | **Pn** | **21 18 33.9** | **-1.6** |
| **H21K** | **Melozitna Rive** | **5.89** | **1** | | **Pn** | **21 18 36.8** | **-0.7** |
| **H21K** | **Melozitna Rive** baz=181 | **5.89** | **1** | P | **Pn** | **21 18 36.5** | **-1.0** |
| **POKR** | **Poker Plat Res** | **5.92** | **23** | | **Pn** | **21 18 36.6** | **-1.3** |
| **POKR** | **Poker Plat Res** baz=208,SNR=55 | **5.92** | **23** | P | **Pn** | **21 18 36.8** | **-1.3** |
| **TABL** | **Table Mountain** | **5.94** | **79** | | **Pn** | **21 18 38.6** | **+0.2** |
| **PS07** | **TAPS Pump Stn7** | **5.94** | **19** | | **Pn** | **21 18 37.6** | **-0.6** |
| **M27K** | **Edge Creek, AK** | **5.96** | **60** | | **Pn** | **21 18 38.6** | **0.0** |
| **M27K** | **Edge Creek, AK** baz=249 | **5.96** | **60** | P | **Pn** | **21 18 39.1** | **+0.5** |
| **SCRK** | **Sand Creek** | **5.96** | **41** | Pn | **Pn** | **21 18 37.4** | **-1.3** |
| **SCRK** | **Sand Creek** baz=229,SNR=23 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **L27K** | **Beaver Creek,** baz=244,SNR=52 | **6.26** | **54** | P | | **Pn** | **21 18 42.0** | **-0.6** |
| **BC03** | | **6.28** | **54** | | | **Pn** | **21 18 42.2** | **-0.6** |
| **BCAR** | **Beaver Creek A** | **6.28** | **54** | Pn | | **Pn** | **21 18 42.0** | **-0.9** |
| **PCA** | **Pinnacle** | **6.39** | **82** | | | **Pn** | **21 18 44.5** | **+0.1** |
| **PINM** | **Pinnacle** baz=273,SNR=13 | **6.39** | **82** | P | | **Pn** | **21 18 44.1** | **-0.3** |
| **BVCY** | **Beaver Creek** | **6.42** | **61** | | | **Pn** | **21 18 45.7** | **+0.9** |
| **BVCY** | **Beaver Creek** baz=251,SNR=40 | **6.42** | **61** | P | | **Pn** | **21 18 44.9** | **+0.1** |
| **YUK3** | **Moose Creek** | **6.43** | **67** | | | **Pn** | **21 18 45.5** | **+0.5** |
| **YUK3** | **Moose Creek** baz=258,SNR=19 | **6.43** | **67** | P | | **Pn** | **21 18 44.9** | **-0.2** |
| **J26L** | **Joseph Creek** | **6.45** | **39** | | | **Pn** | **21 18 44.5** | **-0.7** |
| **J26L** | **Joseph Creek** baz=227 | **6.45** | **39** | P | | **Pn** | **21 18 44.0** | **-1.2** |
| **H24K** | **Noodor Dome** | **6.50** | **19** | | | **Pn** | **21 18 44.6** | **-1.1** |
| **H24K** | **Noodor Dome** baz=203 | **6.50** | **19** | P | | **Pn** | **21 18 44.3** | **-1.4** |
| **YUK8** | **Steele Glacier** | **6.68** | **71** | | | **Pn** | **21 18 49.9** | **+1.4** |
| **PRP** | **Porcupine Dome** | **6.68** | **28** | Pn | | **Pn** | **21 18 47.6** | **-0.7** |
| **PRP** | **Porcupine Dome** baz=214,SNR=101 | **6.68** | **28** | P | | **Pn** | **21 18 47.3** | **-1.1** |
| **BCPM** | **Bancas Point** | **6.71** | **83** | | | **Pn** | **21 18 48.5** | **-0.2** |
| **PNL** | **Peninsula** | **6.86** | **85** | | | **Pn** | **21 18 50.3** | **-0.4** |
| **PNL** | **Peninsula** baz=277,SNR=20 | **6.86** | **85** | P | | **Pn** | **21 18 50.1** | **-0.5** |
| **PS05** | **TAPS Pump Stn5** | **7.12** | **7** | | | **Pn** | **21 18 53.9** | **-0.2** |
| **YUK4** | **Talbot Arm** baz=263,SNR=8.2 | **7.22** | **71** | P | | **Pn** | **21 18 56.8** | **+1.1** |
| **EGAK** | **Eagle** | **7.43** | **43** | | | **Pn** | **21 18 57.1** | **-1.2** |
| **EGAK** | **Eagle** baz=233,SNR=19 | **7.43** | **43** | P | | **Pn** | **21 18 57.0** | **-1.2** |
| **YUK7** | **Dusty Glacier** | **7.43** | **78** | | | **Pn** | **21 18 58.5** | **-0.1** |
| **FALS** | **False Pass** | **7.51** | **233** | Pn | | **Pn** | **21 18 58.5** | **-1.0** |
| **FALS** | **False Pass** baz=44 | **7.51** | **233** | P | | **Pn** | **21 18 59.6** | **+0.1** |
| **ANM** | **Nome** | **7.52** | **315** | | | **Pn** | **21 19 00.0** | **+0.5** |
| **COLD** | **Coldfoot** | **7.56** | **8** | Pn | | **Pn** | **21 18 59.4** | **-0.7** |
| **COLD** | **Coldfoot** baz=191,SNR=53 | **7.56** | **8** | P | | **Pn** | **21 18 59.3** | **-0.8** |
| **FYU** | **Fort Yukon** | **7.64** | **24** | Pn | | **Pn** | **21 18 59.6** | **-1.4** |
| **DAWY** | **Dawson** | **7.69** | **50** | Pn | | **Pn** | **21 19 01.9** | **0.0** |
| **DAWY** | **Dawson** baz=242,SNR=18 | **7.69** | **50** | P | | **Pn** | **21 19 01.6** | **-0.3** |
| **ISLZ** | **Isanotski Laza** | **7.73** | **234** | | | **Pn** | **21 19 02.1** | **-0.3** |
| **HYT** | **Haines Junctio** | **7.74** | **76** | Pn | | **Pn** | **21 19 02.9** | **+0.2** |
| **HYT** | **Haines Junctio** baz=269,SNR=6.4 | **7.74** | **76** | P | | **Pn** | **21 19 02.6** | **-0.1** |
| **M30M** | **Minto, Yukon** | **8.29** | **63** | | | **Pn** | **21 19 09.6** | **-0.4** |
| **J29M** | **Klondike Camp** | **8.33** | **50** | | | **Pn** | **21 19 10.6** | **+0.1** |
| **J29M** | **Klondike Camp** baz=243,SNR=11 | **8.33** | **50** | P | | **Pn** | **21 19 10.9** | **+0.3** |
| **BM03** | **Burnt Mountain** | **8.50** | **22** | | | **Pn** | **21 19 11.3** | **-1.5** |
| **BMAR** | **Burnt Mountain** | **8.52** | **22** | Pn | | **Pn** | **21 19 11.5** | **-1.5** |
| **SKAG** | **Skagway** | **8.94** | **85** | | | **Pn** | **21 19 19.2** | **+0.5** |
| **SKAG** | **Skagway** baz=280,SNR=28 | **8.94** | **85** | P | | **Pn** | **21 19 19.5** | **+0.8** |
| **TNA** | **Tin City** | **8.97** | **316** | Pn | | **Pn** | **21 19 19.6** | **+0.4** |
| **AKUT** | **Akutan** | **9.00** | **237** | Pn | | **Pn** | **21 19 19.1** | **-0.4** |
| **TOLK** | **Toolik Lake Re** | **9.00** | **8** | Pn | | **Pn** | **21 19 19.7** | **+0.1** |
| **TOLK** | **Toolik Lake Re** baz=191,SNR=43 | **9.00** | **8** | P | | **Pn** | **21 19 19.6** | **+0.1** |
| **AHB** | **Akutan Harbor** | **9.03** | **237** | | | **Pn** | **21 19 19.9** | **-0.1** |
| **WHY** | **Whitehorse** | **9.03** | **77** | Pn | | **Pn** | **21 19 19.2** | **-0.9** |
| **WHY** | **Whitehorse** baz=272,SNR=18 | **9.03** | **77** | P | | **Pn** | **21 19 20.0** | **-0.2** |
| **M31M** | **Drury Creek, Y** | **9.33** | **67** | Pn | | **Pn** | **21 19 24.0** | **0.0** |
| **RDOG** | **Red Dog Mine** | **9.36** | **336** | | | **Pn** | **21 19 25.5** | **+1.1** |
| **RDOG** | **Red Dog Mine** baz=148,SNR=5.1 | **9.36** | **336** | P | | **Pn** | **21 19 24.5** | **+0.1** |
| **BESE** | **Bessie Mountai** | **9.37** | **90** | Pn | | **Pn** | **21 19 25.7** | **+1.1** |
| **UNV** | **Unalaska Valle** | **9.51** | **237** | Pn | | **Pn** | **21 19 25.6** | **-0.9** |
| **UNV** | **Unalaska Valle** baz=46 | **9.51** | **237** | P | | **Pn** | **21 19 25.9** | **-0.6** |
| **MSW** | **Makushin Switc** | **9.58** | **238** | | | **Pn** | **21 19 26.4** | **-1.1** |
| **SIT** | **Sitka** | **9.64** | **99** | Pn | | **Pn** | **21 19 26.6** | **-1.6** |
| **SIT** | **Sitka** baz=294 | **9.64** | **99** | P | | **Pn** | **21 19 27.1** | **-1.1** |
| **JIS** | **Juneau Island** | **9.69** | **91** | | | **Pn** | **21 19 30.1** | **+1.3** |
| **GAMB** | **Gambell** | **9.72** | **302** | Pn | | **Pn** | **21 19 30.1** | **+0.9** |
| **EPYK** | **Eagle Plains** | **9.86** | **41** | | | **Pn** | **21 19 31.8** | **+0.6** |
| **EPYK** | **Eagle Plains** baz=236,SNR=6.5 | **9.86** | **41** | P | | **Pn** | **21 19 31.1** | **0.0** |
| **P33M** | **Teslin, Yukon** | **10.09** | **79** | Pn | | **Pn** | **21 19 34.9** | **+0.6** |
| **P33M** | **Teslin, Yukon** baz=276,SNR=12 | **10.09** | **79** | P | | **Pn** | **21 19 34.5** | **+0.1** |
| **MMPY** | **Sheldon Lake,** baz=265 | **10.82** | **66** | P | | **Pn** | **21 19 44.8** | **+0.6** |
| **WRAK** | **Wrangell Islan** | **11.40** | **98** | Pn | | **Pn** | **21 19 51.7** | **-0.2** |
| **WRAK** | **Wrangell Islan** baz=296 | **11.40** | **98** | P | | **Pn** | **21 19 51.9** | **0.0** |
| **CRAG** | **Craig** | **11.46** | **104** | Pn | | **Pn** | **21 19 52.1** | **-0.6** |
| **CRAG** | **Craig** baz=300 | **11.46** | **104** | P | | **Pn** | **21 19 52.4** | **-0.3** |
| **A21K** | **Barrow** | **11.68** | **354** | Pn | | **Pn** | **21 19 53.1** | **-2.3** |
| **DLBC** | **Dease Lake** comp=N,3.0nm,0.3s,baz=283,slow=13,SNR=17 | **11.85** | **87** | P | | **Pn** | **21 19 58.9** | **+1.0** |
| **DLBC** | **Dease Lake** | **11.85** | **87** | Pn | | **Pn** | **21 19 59.2** | **+1.3** |
| **INK** | **Inuvik** comp=N,0.7nm,0.3s,baz=231,slow=17,SNR=26 | **11.99** | **37** | P | | **Pn** | **21 19 58.6** | **-0.9** |
| **INK** | **Inuvik** | **11.99** | **37** | Pn | | **Pn** | **21 19 58.0** | **-1.6** |
| **INK** | **Inuvik** baz=234,SNR=9.5 | **11.99** | **37** | P | | **Pn** | **21 19 58.2** | **-1.4** |
| **DIB** | **Dawson Inlet,** | **13.06** | **111** | Pn | | **Pn** | **21 20 13.8** | **+0.1** |
| **MOBC** | **Moresby Island** | **13.34** | **111** | Pn | | **Pn** | **21 20 17.9** | **+0.5** |
| **A36M** | **Sachs Harbour** | **16.42** | **31** | | | **Pn** | **21 20 56.0** | **-0.1** |
| A36M | comp=Z,42nm,0.8s | | | | IAmb | IAmb | 21 20 58.6 | |
| **A36M** | **Sachs Harbour** baz=236 | **16.42** | **31** | P | | **Pn** | **21 20 54.7** | **-1.3** |
| **YKA** | **Yellowknife Ar** comp=Z,1.9nm,0.3s,baz=276,slow=9.9,SNR=138 | **18.52** | **65** | P | | **Pn** | **21 21 20.8** | **-0.5** |
| YKA | | | | PcP | | **PcP** | **21 25 44.4** | **+0.3** |
| YKA | comp=Z,0.1nm,0.3s,baz=269,slow=1.4,SNR=4.2 | | | ScP | | **ScP** | **21 29 10.1** | **+1.4** |
| **YKA** | comp=Z,0.1nm,0.3s,baz=293,slow=2.3,SNR=4.7 **Yellowknife Ar** | **18.52** | **65** | P | | **P** | **21 21 20.5** | **+0.7** |
| **RES** | **Resolute Bay** comp=Z,1.0nm,0.4s,baz=213,slow=3.8,SNR=5.0 | **25.47** | **32** | P | | **P** | **21 22 29.6** | **+0.1** |
| **RES** | **Resolute Bay** | **25.47** | **32** | P | | **P** | **21 22 29.2** | **-0.3** |
| **SEY** | **Seymchan** comp=Z,0.9nm,0.6s,baz=68,slow=14,SNR=9.3 | **25.71** | **301** | P | | **P** | **21 22 30.8** | **-1.1** |
| **PEA0B** | **Petropavlovsk-** | **27.51** | **278** | P | | **P** | **21 22 47.9** | **-0.2** |
| PEA0B | comp=Z,15nm,1.3s | | | IAmb | IAmb | IAmb | 21 23 05.1 | |
| **PETK** | **Petropavlovsk-** comp=Z,3.2nm,0.6s,baz=78,slow=11,SNR=9.7 | **27.51** | **278** | P | | **P** | **21 22 48.2** | **+0.2** |
| **FCC** | **Fort Churchill** | **29.24** | **66** | P | | **P** | **21 23 04.6** | **+1.2** |
| **LAO** | **LASA Array** | **30.19** | **95** | P | | **P** | **21 23 13.7** | **+1.7** |
| LAO | comp=Z,7.7nm,0.8s | | | IAmb | | IAmb | 21 23 16.0 | |
| **EYMN** | **Ely** | **36.77** | **81** | P | | **P** | **21 24 10.0** | **+1.1** |
| **KLR** | **Kul'dur** comp=Z,3.0nm,0.7s,baz=50,slow=8.2,SNR=9.3 | **42.64** | **291** | P | | **P** | **21 24 57.3** | **0.0** |
| **SCHQ** | **Schefferville** comp=Z,2.5nm,0.5s,baz=316,slow=7.5,SNR=16 | **43.66** | **57** | P | | **P** | **21 25 06.0** | **+0.4** |
| **SCHQ** | **Schefferville** | **43.66** | **57** | P | | **P** | **21 25 06.1** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **46.12** | **285** | P | | **P** | **21 25 24.9** | **-0.2** |
| **MAJO** | **Matsushiro** | **48.82** | **274** | P | | **P** | **21 25 47.2** | **+1.1** |
| **MJAR** | **Matsushiro Arr** comp=Z,1.4nm,0.5s,baz=1.0,slow=8.9,SNR=5.5 | **48.82** | **274** | P | | **P** | **21 25 46.4** | **+0.3** |
| **CN2** | **Changchun** | **49.57** | **290** | *eP* | | **P** | **21 25 51.7** | **+0.1** |
| CN2 | comp=Z,30nm,0.6s | | | pmax | | pmax | | |
| **JGF** | **Kuroka** | **49.98** | **274** | P | | **P** | **21 25 55.4** | **+0.4** |
| JGF | comp=Z,9.7nm,1.1s | | | IAmb | | IAmb | 21 25 57.2 | |
| **JHS** | **Saijyo** | **52.59** | **277** | P | | **P** | **21 26 14.7** | **+0.3** |
| **KSRS** | **Korea Array** comp=Z,2.9nm,0.5s,baz=37,slow=7.1,SNR=17 | **53.25** | **283** | P | | **P** | **21 26 20.1** | **+1.0** |
| **KSAR** | **Wonju Array Be** | **53.27** | **283** | P | | **P** | **21 26 19.1** | **-0.2** |
| **ULN** | **Ulaanbaatar** | **54.64** | **306** | P | | **P** | **21 26 29.9** | **+0.6** |
| ULN | comp=Z,3.0nm,0.7s | | | IAmb | | IAmb | 21 26 30.5 | |
| **SONM** | **Songino Array** comp=Z,4.7nm,0.7s,baz=57,slow=5.3,SNR=41 | **54.93** | **306** | P | | **P** | **21 26 32.5** | **+1.1** |
| **SONM** | **Songino Array** | **54.93** | **306** | P | | **P** | **21 26 32.1** | **+0.7** |
| SONM | comp=Z,4.2nm,0.7s | | | IAmb | | IAmb | 21 26 33.0 | |
| **ZAA0** | **Zalesovo Array** | **57.55** | **324** | P | | **P** | **21 26 50.1** | **+0.3** |
| **ZALV** | **Zalesovo Beam** comp=Z,8.4nm,0.5s,baz=30,slow=7.0,SNR=51 | **57.55** | **324** | P | | **P** | **21 26 50.0** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **57.55** | **324** | P | | **P** | **21 26 50.1** | **+0.4** |
| **HHC** | **Hu-ho-hao-te** | **58.30** | **297** | *eP* | | **P** | **21 26 56.4** | **+1.1** |
| HHC | comp=Z,7.0nm,1.0s | | | pmax | | pmax | | |
| HHC | comp=Z,85nm,7.5s | | | pmax | | pmax | | |
| **FINES** | **FINESS Array B** comp=Z,3.6nm,0.9s,baz=354,slow=9.8,SNR=4.8 | **59.09** | **1** | P | | **P** | **21 27 01.7** | **+1.5** |
| **FINES** | **FINESS Array B** | **59.09** | **1** | P | | **P** | **21 27 01.2** | **+0.9** |
| **ARU** | **Arti** | **61.45** | **341** | P | | **P** | **21 27 16.2** | **-0.3** |
| ARU | comp=Z,4.1nm,0.5s | | | IAmb | | IAmb | 21 27 17.0 | |
| **KURK** | **Kurchatov** | **62.21** | **326** | P | | **P** | **21 27 21.5** | **-0.1** |
| KURK | comp=Z,4.0nm,0.7s | | | IAmb | | IAmb | 21 27 22.1 | |
| **BRVK** | **Borovoye** | **62.26** | **332** | P | | **P** | **21 27 21.4** | **-0.5** |
| BRVK | comp=Z,3.6nm,0.8s | | | IAmb | | IAmb | 21 27 22.4 | |
| **GTA** | **Gaotai** | **64.56** | **305** | *eP* | | **P** | **21 27 38.2** | **+0.7** |
| GTA | comp=Z,5.0nm,1.0s | | | pmax | | pmax | | |
| **MK31** | **Makanchi Array** | **64.61** | **321** | P | | **P** | **21 27 36.0** | **-1.5** |
| **MKAR** | **Makanchi Array** comp=Z,2.3nm,0.5s,baz=40,slow=7.1,SNR=59 | **64.61** | **321** | P | | **P** | **21 27 36.6** | **-0.9** |
| **MKAR** | **Makanchi Array** | **64.61** | **321** | P | | **P** | **21 27 36.4** | **-1.1** |
| **MAKZ** | **Makanchi** | **64.69** | **322** | P | | **P** | **21 27 36.7** | **-1.3** |
| MAKZ | comp=Z,6.7nm,1.4s | | | IAmb | | IAmb | 21 27 38.6 | |
| **XAN** | **Xi'an** | **65.08** | **295** | P | | **P** | **21 27 40.5** | **-0.3** |
| XAN | comp=Z,3.0nm,0.9s | | | pmax | | pmax | | |
| **LZH** | **Lanzhou** | **65.64** | **300** | ⇓P | | **P** | **21 27 44.8** | **+0.3** |
| LZH | comp=Z,20nm,1.3s | | | pmax | | pmax | | |
| **SSLB** | **Suanglung** | **67.81** | **279** | P | | **P** | **21 27 57.6** | **-0.7** |
| **ABKAR** | **Akbulak array** | **68.06** | **337** | P | | **P** | **21 27 59.0** | **-0.4** |
| **KKAR** | **Karatay Array** | **71.42** | **328** | P | | **P** | **21 28 20.5** | **+0.4** |
| **UBPT** | **Khong Chiam** | **82.64** | **288** | P | | **P** | **21 29 23.8** | **+0.6** |
| UBPT | comp=Z,12nm,1.3s | | | IAmb | | IAmb | 21 29 42.1 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.3nm,0.5s,baz=11,slow=5.2,SNR=9.1 | **82.97** | **295** | P | | **P** | **21 29 24.2** | **-0.7** |
| **BOSA** | **Boshof** comp=Z,1.9nm,0.7s,baz=55,slow=2.0,SNR=7.9 | **148.80** | **3** | PKPbc | | **PKPbc** | **21 36 45.1** | **-1.2** |
| **BOSA** | **Boshof** | **148.80** | **3** | | | **PKPbc** | **21 36 45.9** | **-0.5** |

*IDC **09** 21:17:42.1±0.8,20.32N×146.27E,h0km,mb3.8/13, mb1 4.0/13,mb1mx3.6/64,mbtmp3.8/13,Error ellipse: s-maj=25.2km s-min=19.1km az=103.0*

**ISC 09 21:17:47.4±0.9,20.3N±0.1×146.2E±0.2,h35km,n13, σ0.966/13,mb3.8/13,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KSRS** | **Korea Array** 1.6nm,0.5s,baz=147,slow=9.0,SNR=10 | **23.36** | **321** | P | | **P** | **21 22 53.0** | **+0.3** |
| **KLR** | **Kul'dur** 0.7nm,0.6s,baz=152,slow=5.8,SNR=4.4 | **31.10** | **341** | P | | **P** | **21 24 02.0** | **-0.3** |
| **WRA** | **Warramunga Arr** 0.4nm,0.4s,baz=24,slow=8.6,SNR=10 | **41.66** | **197** | P | | **P** | **21 25 32.2** | **-0.4** |
| **SONM** | **Songino Array** 0.3nm,0.4s,baz=128,slow=8.3,SNR=11 | **42.23** | **320** | P | | **P** | **21 25 37.1** | **-0.1** |
| **SEY** | **Seymchan** 0.5nm,0.6s,baz=84,slow=24,SNR=4.1 | **42.80** | **4** | P | | **P** | **21 25 41.9** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** 0.4nm,0.5s,baz=65,slow=6.4,SNR=4.5 | **44.53** | **276** | P | | **P** | **21 25 56.5** | **+0.5** |
| **ASAR** | **Alice Springs** 0.2nm,0.5s,baz=12,slow=6.1,SNR=1.4 | **45.33** | **196** | P | | **P** | **21 26 02.2** | **0.0** |
| **ILAR** | **Eielson Array** 1.5nm,0.8s,baz=260,slow=5.6,SNR=9.5 | **61.99** | **27** | P | | **P** | **21 28 02.8** | **-0.9** |
| **YKA** | **Yellowknife Ar** 1.4nm,0.7s,baz=289,slow=5.6,SNR=13 | **76.34** | **28** | P | | **P** | **21 29 32.1** | **-0.4** |
| **ARCES** | **ARCESS Array B** 1.6nm,0.6s,baz=43,slow=9.0,SNR=4.7 | **81.12** | **342** | P | | **P** | **21 29 58.9** | **+0.1** |
| **NVAR** | **Mina Array Bea** 1.2nm,0.6s,baz=268,slow=5.8,SNR=8.6 | **81.76** | **52** | P | | **P** | **21 30 04.3** | **+1.2** |
| **ELK** | **Elko** 0.7nm,0.6s,baz=324,slow=6.6,SNR=3.6 | **83.19** | **49** | P | | **P** | **21 30 11.2** | **+0.7** |
| **FINES** | **FINESS Array B** 0.9nm,0.4s,baz=189,slow=5.0,SNR=7.6 | **85.64** | **335** | P | | **P** | **21 30 21.4** | **-0.8** |

*JMA **09** 21:22:55.4±0.1,43.05N×145.09E,h85km±1km,M3.3*
*JMA Felt I J1.*
*SKHL **09** 21:22:56.4±0.4,43.00N×145.20E,h79km±1km,mb4.4/9*
*IDC **09** 21:22:57.4±0.6,45.36N×144.46E,h0km,mb3.7/5, mb1 3.8/5,mb1mx3.4/55,mbtmp3.7/5,Error ellipse: s-maj=14.2km s-min=3.7km az=122.0*

**ISC 09 21:22:54.9±0.9,43.02N±0.07×145.12E±0.04,h85km±6km, n23,σ0.971/39,mb3.6/5,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JKHN** | **Kushirohamanak** | **0.07** | **23** | P | | **Pn** | **21 23 07.7** | **+0.7** |
| JKHN | | | | *eS* | | **Sn** | **21 23 16.6** | **+0.7** |
| **AKK** | **Akkeshi** | **0.21** | **269** | *i* P | | **Pn** | **21 23 07.8** | **+0.5** |
| AKK | 270nm,0.3s | | | AMB | | AMB | 21 23 09.5 | |
| AKK | | | | *i* S | | **Sn** | **21 23 16.5** | **0.0** |
| AKK | 2μm,0.3s | | | A | | A | 21 23 17.0 | |
| AKK | 4μm,0.3s | | | A | | A | 21 23 17.0 | |
| **JAK** | **Akkeshi** | **0.31** | **266** | P | | **Pn** | **21 23 08.2** | **+0.4** |
| JAK | | | | *eS* | | **Sn** | **21 23 17.8** | **+0.4** |
| **NMR** | **Nemuro--Hokkai** | **0.56** | **51** | *i* P | | **Pn** | **21 23 10.1** | **+0.4** |
| NMR | 90nm,0.2s | | | AMB | | AMB | 21 23 10.2 | |
| NMR | | | | *i* S | | **Sn** | **21 23 20.4** | **-0.2** |
| NMR | 970nm,0.2s | | | A | | A | 21 23 21.0 | |
| NMR | 2μm,0.2s | | | A | | A | 21 23 21.0 | |
| **NEM2** | **Nemuro 2** | **0.57** | **52** | P | | **Pn** | **21 23 10.0** | **+0.3** |
| NEM2 | | | | *eS* | | **Sn** | **21 23 20.5** | **-0.2** |
| **JNK** | **Nakash** | **0.64** | **333** | P | | **Pn** | **21 23 10.0** | **-0.4** |
| JNK | | | | *eS* | | **Sn** | **21 23 21.2** | **-0.7** |
| **GLVR** | **Golovnino** | **0.78** | **22** | *eP* | | **Pn** | **21 23 12.1** | **+0.4** |
| GLVR | 430nm,0.4s | | | AMB | | AMB | 21 23 12.4 | |
| GLVR | | | | *eS* | | **Sn** | **21 23 23.5** | **-0.8** |
| GLVR | 2μm,0.4s | | | A | | A | 21 23 25.1 | |
| GLVR | 4μm,0.4s | | | A | | A | 21 23 25.1 | |
| **JRA** | **Rausu** | **0.92** | **360** | P | | **Pn** | **21 23 13.5** | **+0.2** |
| JRA | | | | *eS* | | **Sn** | **21 23 27.3** | **+0.2** |
| **JOB** | **Onbets** | **0.95** | **263** | P | | **Pn** | **21 23 14.2** | **+0.5** |
| JOB | | | | *eS* | | **Sn** | **21 23 28.2** | **+0.4** |
| **JAR** | **Ashorobuto** | **1.03** | **286** | P | | **Pn** | **21 23 14.8** | **+0.2** |
| JAR | | | | *eS* | | **Sn** | **21 23 29.0** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **1.15** | **28** | *i* P | | **Pn** | **21 23 16.5** | **+0.5** |
| YUK | 20nm,0.4s | | | AMB | | AMB | 21 23 16.9 | |
| YUK | 40nm,0.4s | | | AMB | | AMB | 21 23 16.9 | |
| YUK | 180nm,0.4s | | | AMB | | AMB | 21 23 16.9 | |
| YUK | | | | *eS* | | **Sn** | **21 23 32.0** | **+0.2** |
| YUK | | | | A | | A | 21 23 33.1 | |
| YUK | 610nm,0.4s | | | A | | A | 21 23 33.1 | |
| YUK | 1μm,0.4s | | | A | | A | 21 23 33.1 | |
| **JTKR** | **Abashiri--Toko** | **1.30** | **317** | P | | **Pn** | **21 23 18.1** | **+0.2** |
| JTKR | | | | *eS* | | **Sn** | **21 23 34.7** | **-0.5** |
| **JCH** | **Churui** | **1.36** | **253** | P | | **Pn** | **21 23 19.0** | **+0.4** |
| JCH | | | | *eS* | | **Sn** | **21 23 36.2** | **-0.3** |
| **SHO** | **Shikotan** | **1.51** | **55** | *eP* | | **Pn** | **21 23 20.8** | **+0.3** |
| SHO | 60nm,0.2s | | | AMB | | AMB | 21 23 21.3 | |
| SHO | | | | *eS* | | **Sn** | **21 23 38.8** | **-1.0** |
| SHO | 400nm,0.3s | | | A | | A | 21 23 40.8 | |
| SHO | 380nm,0.3s | | | A | | A | 21 23 40.8 | |
| **JMP** | **Maruseppu** | **1.62** | **308** | P | | **Pn** | **21 23 22.2** | **+0.2** |
| JMP | | | | *eS* | | **Sn** | **21 23 42.0** | **-0.5** |
| **ASAJ** | **Asahikawa** 23nm,0.3s,baz=144,slow=8.2,SNR=142 | **2.14** | **302** | Pn | | **Pn** | **21 23 29.9** | **+1.1** |
| ASAJ | | | | Sn | | **Sn** | **21 23 55.0** | **+0.4** |
| **KUR** | **Kuril'sk** 4.0nm,0.3s,baz=44,slow=31,SNR=14 | **2.97** | **41** | *eP* | | **Pn** | **21 23 41.2** | **+1.4** |
| KUR | 60nm,0.5s | | | AMB | | AMB | 21 23 42.4 | |
| **YSS** | **Yuzh-Sakhalins** | **4.28** | **338** | *eP* | | **Pn** | **21 23 59.7** | **+2.1** |
| YSS | 10.0nm,0.2s | | | AMB | | AMB | 21 24 00.3 | |
| **SONM** | **Songino Array** 1.5nm,0.5s,baz=85,slow=8.2,SNR=11 | **27.40** | **294** | P | | **P** | **21 28 32.6** | **+0.2** |
| **ILAR** | **Eielson Array** 0.2nm,0.6s,baz=256,slow=7.3,SNR=1.7 | **42.95** | **36** | P | | **P** | **21 30 45.8** | **+0.9** |
| **MKAR** | **Makanchi Array** 0.3nm,0.5s,baz=87,slow=13,SNR=2.4 | **43.61** | **298** | P | | **P** | **21 30 50.0** | **-0.6** |
| **FINES** | **FINESS Array B** 2.1nm,0.8s,baz=49,slow=8.2,SNR=7.7 | **64.84** | **332** | P | | **P** | **21 33 23.6** | **-0.8** |
| **NOA** | **NORSAR Array B** 0.6nm,0.7s,baz=32,slow=6.7,SNR=2.2 | **69.74** | **338** | P | | **P** | **21 33 54.0** | **-1.4** |

*IDC **09** 21:26:36.0±1.9,7.66S×127.18E,h168km±19km,mb3.4/5, mb1 3.8/10,mb1mx3.4/33,mbtmp4.1/10,Error ellipse: s-maj=20.7km s-min=15.4km az=70.0*
*DJA **09** 21:26:36.5±0.3,8°S±3'×12°7'E±', h142km±9km,M4.2/11, mb4.0/11,mB5.3/2,MLv4.3/11,Mw(mB)4.8/2*
*NEIC **09** 21:26:38.4±1.7,7.72S±0.09×127.13E±0.07,h182km±9km, mb4.1/13,Error ellipse: s-maj=12.9km s-min=9.8km az=169.0*

**ISC 09 21:26:38.5±0.5,7.80S±0.05×127.16E±0.06,h200km,n47, σ1.993/51,mb3.7/8,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **3.46** | **236** | P | | **Pn** | **21 27 32.5** | **-1.3** |
| SOEI | | | | S | | **Sn** | **21 28 15.2** | **-1.9** |
| **SOEI** | **Soe** | **3.46** | **236** | Pn | | **Pn** | **21 27 33.1** | **-0.7** |
| SOEI | | | | Sn | | **Sn** | **21 28 14.5** | **-2.5** |
| **SAUI** | **Saumlaki** | **4.10** | **93** | P | | **Pn** | **21 27 38.6** | **-3.0** |
| **SAUI** | **Saumlaki** | **4.10** | **93** | Pn | | **Pn** | **21 27 40.4** | **-1.3** |
| **BATI** | **Baumata** 44nm,0.3s,baz=102,slow=2.1,SNR=77 | **4.20** | **235** | P | | **Pn** | **21 27 42.3** | **-0.6** |
| BATI | | | | S | | **Sn** | **21 28 31.6** | **-1.8** |
| **BATI** | **Baumata** 50nm,0.3s,baz=24,slow=2.9,SNR=7.2 | **4.20** | **235** | P | | **Pn** | **21 27 42.0** | **-0.9** |
| **MMRI** | **Maumere** 0.2nm19nm,0.5s | **4.94** | **260** | P | | **Pn** | **21 27 51.7** | **-0.5** |
| **MMRI** | **Maumere** | **4.94** | **260** | Pn | | **Pn** | **21 27 51.8** | **-0.4** |
| **BBSI** | **Bau Bau** 0.0nm4.1nm,0.8s | **5.11** | **296** | P | | **Pn** | **21 27 52.9** | **-1.4** |
| **SANI** | **Sanana** 0.1nm12nm,1.0s | **5.83** | **348** | P | | **Pn** | **21 28 00.5** | **-3.2** |
| **MTN** | **Manton Dam** | **6.35** | **142** | | | **Pn** | **21 28 08.8** | **-1.6** |
| **FAKI** | **Fak Fak** 0.2nm31nm,1.1s | **7.01** | **47** | P | | Pn | 21 28 12.6 | -6.4 |
| **FAKI** | **Fak Fak** | **7.01** | **47** | Pn | | **Pn** | **21 28 15.1** | **-3.9** |
| **BNSI** | **Bone** 0.1nm14nm,0.9s | **7.79** | **295** | P | | **Pn** | **21 28 28.7** | **-0.3** |
| **WBSI** | **Waikabubak, Su** 20nm,0.7s | **7.90** | **256** | P | | **Pn** | **21 28 29.7** | **-0.8** |
| **KNRA** | **Kununurra** | **7.98** | **169** | | | **Pn** | **21 28 30.2** | **-1.4** |
| **SIJI** | **Sorong** 1.6nm,0.3s,baz=152,slow=22,SNR=4.3 | **8.01** | **31** | P | | **Pn** | **21 28 28.6** | **-3.3** |
| **FITZ** | **Fitzroy Crossi** 2.0nm,0.3s,baz=22,slow=10.0,SNR=47 | **10.34** | **188** | P | | **Pn** | **21 29 00.2** | **-2.0** |
| FITZ | 2.3nm,0.3s,baz=97,slow=20,SNR=6.2 | | | S | | **Sn** | **21 30 50.9** | **-6.9** |
| **WB0** | **Warramunga Arr** | **13.81** | **150** | | | **Pn** | **21 29 44.8** | **-1.4** |
| **WRA** | **Warramunga Arr** 2.8nm,0.3s,baz=340,slow=11,SNR=51 | **13.93** | **151** | P | | **Pn** | **21 29 46.3** | **-1.4** |
| WRA | 1.1nm,0.3s,baz=333,slow=22,SNR=5.3 | | | S | | S | 21 32 15.1 | -7.8 |
| **WRA** | **Warramunga Arr** | **13.93** | **151** | | | **Pn** | **21 29 45.3** | **-2.4** |
| **MBWA** | **Marble Bar** | **15.10** | **208** | P | | **P** | **21 30 03.2** | **+0.7** |
| MBWA | comp=Z,14nm,1.2s | | | IAmb | | IAmb | 21 30 04.0 | |
| **PSA00** | **Pilbara Seismi** | **15.40** | **206** | P | | **P** | **21 30 07.5** | **+1.5** |
| PSA00 | comp=Z,14nm,1.4s | | | IAmb | | IAmb | 21 30 28.6 | |
| **PSA00** | **Pilbara Seismi** | **15.40** | **206** | | | **P** | **21 30 07.0** | **+1.0** |
| PSA00 | comp=Z,4.2nm,1.3s | | | IAmb | | IAmb | 21 30 15.7 | |
| **COEN** | **Coen** | **16.87** | **113** | | | **Pn** | **21 30 23.6** | **+0.2** |
| COEN | comp=Z,12nm,1.1s | | | IAmb | | IAmb | 21 30 27.6 | |
| **AS31** | **Alice Springs** | **17.05** | **158** | P | | **Pn** | **21 30 26.0** | **+0.5** |
| AS31 | comp=Z,5.2nm,0.6s | | | IAmb | | IAmb | 21 30 29.7 | |
| **ASAR** | **Alice Springs** comp=Z,1.6nm,0.3s,baz=338,slow=11,SNR=71 | **17.05** | **158** | P | | **Pn** | **21 30 26.0** | **+0.5** |
| ASAR | | | | S | | **S** | **21 33 34.4** | **+2.8** |
| **ASAR** | **Alice Springs** comp=Z,0.5nm,0.3s,baz=328,slow=19,SNR=10 | **17.05** | **158** | P | | **P** | **21 30 25.6** | **+1.5** |
| **PMG** | **Port Moresby** | **19.84** | **96** | P | | **Pn** | **21 30 57.5** | **-1.0** |
| **BBOO** | **Bukebloo** | **26.22** | **163** | P | | **P** | **21 31 57.4** | **+2.4** |
| BBOO | comp=Z,9.2nm,1.1s | | | IAmb | | IAmb | 21 31 59.7 | |
| **STKA** | **Stephens Creek** comp=Z,1.0nm,0.5s,baz=324,slow=10,SNR=4.1 | **27.47** | **153** | P | | **P** | **21 32 07.5** | **+1.3** |
| **STKA** | **Stephens Creek** | **27.47** | **153** | P | | **

TGBT S 21 27 45.9 +0.1
**TGBT Tuxtla Gutierr 1.14 322** *e*P **Pn 21 27 21.8 +0.9**
TGBT *i* S **S 21 27 45.9 +0.1**
**TGIG 1.16 321 Pn 21 27 22.0 +0.9**
TGIG S 21 27 46.1 -0.1
**TGIG 1.16 321** *i* P **Pn 21 27 22.0 +0.9**
TGIG *i* S **S 21 27 46.1 -0.1**
**STG3 Santiaguito 3, 1.39 147** *e*P **Pn 21 27 24.1 +1.0**
STG3 *e*S **S 21 27 52.7 +3.2**
**RTAL Retalhuleu 1.49 154 Pn 21 27 24.2 +0.5**
RTAL Sn **S 21 27 51.3 +0.6**
**RTAL Retalhuleu 1.49 154** *e*P **Pn 21 27 24.2 +0.5**
RTAL *e*S **S 21 27 49.5 -1.2**
**APG El Apazote 2.02 115** P **Pn 21 27 28.6 -0.4**
590nm,0.3s,baz=315,slow=9.9,SNR=635
APG S **S 21 27 58.9 -0.8**
84nm,0.3s,baz=195,slow=23,SNR=5.7
**FUG Fuego 3 2.04 134** *e*P **Pn 21 27 30.5 +1.4**
**PCG Pacaya 2.25 131** *e*P **Pn 21 27 32.9 +1.6**
**NBG Las Nubes 2.33 123** *e*P **Pn 21 27 33.5 +1.4**
**PETF Flores 2.61 66 Pn 21 27 35.0 +0.2**
**MRL Marmol 2.70 107** *e*P **Pn 21 27 37.1 +0.9**
MRL *e*S **S 21 28 12.8 +0.3**
**CMIG Matias Romero 2.71 297** P **Pn 21 27 35.7 -0.2**
497nm,0.3s,baz=105,slow=9.1,SNR=3302
CMIG S **S 21 28 09.5 -2.8**
109nm,0.3s,baz=350,slow=20,SNR=12
**CMIG Matias Romero 2.71 297 Pn 21 27 35.4 -0.5**
**CMIG Matias Romero 2.71 297** *e*P **Pn 21 27 35.4 -0.5**
CMIG *i* S **S 21 28 09.2 -3.1**
**TUIG Tuzandepetl 2.92 318 Pn 21 27 38.8 +0.5**
**TUIG Tuzandepetl 2.92 318** *e*P **Pn 21 27 38.8 +0.5**
**SLOZ Alcaldia de Sa 3.10 126** *e*P **Pn 21 27 41.0 +0.5**
**LOAL Lomas de Alarc 3.12 126** *e*P **Pn 21 27 41.7 +1.0**
**LOAL Lomas de Alarc 3.12 126** *e*P **Pn 21 27 41.7 +1.0**
**NUBE Las Nubes 3.17 128‖** *e*P **Pn 21 27 42.2 +0.7**
NUBE *e*S **S 21 28 22.0 -0.2**
**NUBE Las Nubes 3.17 128‖** *e*P **Pn 21 27 42.2 +0.7**
NUBE *e*S **S 21 28 22.0 -0.2**
**ESQI Esquipulas 3.19 114 Pn 21 27 42.3 +0.6**
**ESQI Esquipulas 3.19 114** *e*P **Pn 21 27 42.4 +0.7**
ESQI *e*S **S 21 28 21.9 -0.7**
**MTO3 Montecristo 3.25 116** *e*P **Pn 21 27 43.0 +0.6**
**MTO3 Montecristo 3.25 116 Pn 21 27 43.0 +0.6**
**MTO3 Montecristo 3.25 116** *e*P **Pn 21 27 43.0 +0.6**
**RTR El Retiro 3.28 126** *e*P **Pn 21 27 43.6 +0.8**
**RTR El Retiro 3.28 126** *e*P **Pn 21 27 43.6 +0.8**
**SNJE San Jose 3.33 126** *e*P **Pn 21 27 44.4 +1.0**
**SNJE San Jose 3.33 126** *e*P **Pn 21 27 44.4 +1.0**
**SBLS San Blas 3.33 127** *e*P **Pn 21 27 44.4 +0.9**
**SBLS San Blas 3.33 127** *e*P **Pn 21 27 44.4 +0.9**
**CEVE Cerro Verde 3.34 127** *e*P **Pn 21 27 44.1 +0.6**
CEVE IAML 21 28 39.7
comp=Z,1µm,0.4s
**CEVE Cerro Verde 3.34 127** *e*P **Pn 21 27 44.1 +0.6**
CEVE IAML 21 28 39.7
comp=Z,1µm,0.4s
**HUIG Huatulco 3.61 269 Pn 21 27 44.8 -1.6**
**HUIG Huatulco 3.61 269** *i* P **Pn 21 27 44.9 -1.6**
HUIG *i* S **S 21 28 29.3 -2.0**
**PMON Piamonte 3.65 126** *e*P **Pn 21 27 48.2 +1.1**
**PMON Piamonte 3.65 126** *e*P **Pn 21 27 48.2 +1.1**
**BOQS Boqueron 3.66 125** *e*P **Pn 21 27 48.3 +1.0**
**BOQS Boqueron 3.66 125** *e*P **Pn 21 27 48.3 +1.0**
**SNET Serv Nac Est T 3.73 125** *e*P **Pn 21 27 48.7 +0.7**
**SNET Serv Nac Est T 3.73 125 Pn 21 27 48.8 +0.7**
**SNET Serv Nac Est T 3.73 125** *e*P **Pn 21 27 48.7 +0.7**
**OPAM Oficina de Pla 3.74 125** *e*P **Pn 21 27 49.3 +1.1**
**OPAM Oficina de Pla 3.74 125** *e*P **Pn 21 27 49.3 +1.1**
**NEUV Arroyo Zacate 3.77 299** *e*P **Pn 21 27 47.8 -0.6**
NEUV *i* S **S 21 28 30.2 -4.5**
**LFU La Fuente 3.79 124** *e*P **Pn 21 27 49.5 +0.8**
**LFU La Fuente 3.79 124** *e*P **Pn 21 27 49.5 +0.8**
**PAVA Las Pavas 3.95 123** *e*P **Pn 21 27 51.7 +1.0**
PAVA IAML 21 27 52.9
comp=Z,668nm,0.6s
**PAVA Las Pavas 3.95 123** *e*P **Pn 21 27 51.7 +1.0**
PAVA IAML 21 27 52.9
comp=Z,668nm,0.6s
**COEG Centro de Oper 4.05 123** *e*P **Pn 21 27 52.8 +0.9**
COEG IAML 21 27 54.6
comp=Z,470nm,0.6s
**COEG Centro de Oper 4.05 123** *e*P **Pn 21 27 52.8 +0.9**
COEG IAML 21 27 54.6
comp=Z,470nm,0.6s
**SCLA Alcaldia de Sa 4.12 121** *e*P **Pn 21 27 54.0 +1.1**
**SCLA Alcaldia de Sa 4.12 121** *e*P **Pn 21 27 54.0 +1.1**
**OXLC Oaxaca 4.33 286** *e*P **Pn 21 27 56.5 +0.9**
OXLC *e*S **S 21 28 46.9 -0.7**
**OXBJ Oaxaca 4.35 286 Pn 21 27 56.6 +0.8**
OXBJ S **S 21 28 48.6 +0.6**
**OXBJ Oaxaca 4.35 286** *e*P **Pn 21 27 56.6 +0.8**
OXBJ *e*S **S 21 28 48.6 +0.6**
**VHO Vista Hermosa 4.36 286** *i* P **Pn 21 27 56.7 +0.8**
VHO *i* S **S 21 28 47.6 -0.7**
**PEIG Puerto Escondi 4.61 272** *e*P **Pn 21 27 57.9 -0.9**
PEIG *e*S **S 21 28 48.6 -4.9**
**TOIG Toxpalan 5.01 297** *e*P **Pn 21 28 04.2 +0.2**
TOIG *e*S **S 21 28 58.7 -4.2**
**YOIG Yosondua 5.07 282** *e*P **Pn 21 28 05.4 +0.5**
YOIG *e*S **S 21 29 00.1 -4.5**
**TGUH Tegucigalpa,Un 5.24 110 Pn 21 28 07.7 +0.8**
**TXIG Tlaxiaco 5.36 286** *e*P **Pn 21 28 09.6 +1.0**
TXIG *e*S **S 21 29 08.0 -3.3**
**TPIG Tehuac#an 5.41 299 Pn 21 28 09.4 +0.4**
**TPIG Tehuac#an 5.41 299** *e*P **Pn 21 28 09.4 +0.4**
TPIG *e*S **S 21 29 08.1 -4.1**
**LVIG Laguna Verde 5.44 315 Pn 21 28 10.1 +0.8**
**LVIG Laguna Verde 5.44 315** *e*P **Pn 21 28 10.1 +0.8**
**JAUV Jalcomulco 5.48 310** *e*P **Pn 21 28 08.8 -1.0**
JAUV *e* 21 29 05.5
**HLIG Huajuapan de L 5.56 291** *i* P **Pn 21 28 12.2 +1.2**
HLIG *i* S **S 21 29 11.1 -4.7**
**PNIG Pinotepa 5.57 276 Pn 21 28 10.9 0.0**
**PNIG Pinotepa 5.57 276** *e*P **Pn 21 28 10.9 0.0**
PNIG *i* S **S 21 29 13.9 -1.7**
**FTIG Fresnillo de T 5.88 291** *e*P **Pn 21 28 16.5 +1.4**
FTIG *i* S **S 21 29 18.8 -4.3**
**CRIN San Cristobal 6.04 121** Pn **Pn 21 28 17.8 +0.7**
**MGIG Malinaltepec 6.17 284** *e*P **Pn 21 28 20.1 +1.3**
MGIG *i* S **S 21 29 27.0 -2.7**
**CNGN Cerro Negro 6.43 121** Pn **Pn 21 28 22.9 +0.8**
**CRIG Cruz Grande 6.56 278 Pn 21 28 24.0 +0.3**
**CRIG Cruz Grande 6.56 278** *e*P **Pn 21 28 24.0 +0.3**
CRIG *e*S **S 21 29 33.7 -5.0**
**MATN Matagalpa 6.89 114 Pn 21 28 28.2 +0.2**
**AMVM AMECAMECA 6.93 299 Pn 21 28 30.1 +1.4**
**AMVM AMECAMECA 6.93 299** *e*P **Pn 21 28 30.1 +1.4**
**YAIG Yautepec 7.06 296 Pn 21 28 32.3 +2.1**
**YAIG Yautepec 7.06 296** *e*P **Pn 21 28 32.3 +2.1**
YAIG *e*S **S 21 29 48.0 -2.7**
**DAIG Los Arroyos 7.09 280 Pn 21 28 31.4 +0.9**
**DAIG Los Arroyos 7.09 280** *e*P **Pn 21 28 31.4 +0.9**
DAIG *e*S **S 21 29 48.7 -2.5**
**VTVM Tizayuca 7.23 303 Pn 21 28 34.4 +1.8**
**VTVM Tizayuca 7.23 303** *e*P **Pn 21 28 34.4 +1.8**
**MEIG Mezcala 7.24 287 Pn 21 28 34.6 +2.0**
**MEIG Mezcala 7.24 287** *e*P **Pn 21 28 34.6 +2.0**
MEIG *e*S **S 21 29 52.6 -2.4**
**XCVM Xochimilco 7.27 299** *e*P **Pn 21 28 32.1 -0.9**
**PLIG Platanillo 7.27 291 Pn 21 28 35.1 +2.2**
**PLIG Platanillo 7.27 291** *e*P **Pn 21 28 35.1 +2.2**
**TLVM San Miguel Top 7.28 298** *e*P **Pn 21 28 35.6 +2.4**
**BOAB BOACO BROADBAN 7.33 117 Pn 21 28 34.2 +0.6**
**UNM Universidad Na 7.35 299** Pn **Pn 21 28 35.9 +1.8**
**MAVM Malinalco, Edo 7.47 295 Pn 21 28 37.9 +2.4**
**MAVM Malinalco, Edo 7.47 295** *e*P **Pn 21 28 37.9 +2.4**
**CAIG El Cayaco 7.67 280 Pn 21 28 39.2 +1.1**
**CAIG El Cayaco 7.67 280** *e*P **Pn 21 28 39.2 +1.1**
**ACON Acoyapa 7.99 118 Pn 21 28 41.6 -0.5**
**ARIG Puente Sto Nin 8.00 289 Pn 21 28 44.9 +2.6**
**ARIG Puente Sto Nin 8.00 289** *e*P **Pn 21 28 44.9 +2.6**
**HZTE Horizontes, Gu 8.35 127 Pn 21 28 48.2 +1.4**
**ESPN Las Esperanzas 8.63 114 Pn 21 28 50.2 +0.3**
**ORTG Ortega, Santa 8.67 128 Pn 21 28 52.0 +0.9**
**DUNO Dulce Nombre, 8.83 130 Pn 21 28 53.6 +0.5**
**JTS Las Juntas de 9.10 127 Pn 21 28 56.9 +0.3**
**MOIG Morelia 9.22 296** Pn **Pn 21 29 00.1 +1.8**
**COVE Coope Vega, Sa 9.29 123** Pn **Pn 21 28 59.6 +0.7**
**CAO2 Cobano, Puntar 9.37 130 Pn 21 29 00.2 +0.2**

**JACO JACO, Garabito 9.72 129** Pn **Pn 21 29 05.0 +0.4**
**HDC Heredia 9.93 125 Pn 21 29 07.5 +0.1**
**RIMA Rio Macho 10.27 125 Pn 21 29 12.4 +0.5**
**BATAN Batan 10.47 122** Pn **Pn 21 29 13.7 -0.5**
**PEZE Perez Zeledon, 10.65 126 Pn 21 29 17.1 +0.5**
**SRBA San Rafael, Bu 10.99 126 Pn 21 29 20.7 -0.2**
**SOR Soroa 11.19 51** Pn **Pn 21 29 23.1 -0.2**
**RIOS Rincon, Osa 11.20 129 Pn 21 29 23.4 -0.1**
**CDITO Canoas 11.77 127 Pn 21 29 30.7 0.0**
**BRU2 Volcan 11.78 126 Pn 21 29 31.3 +0.3**
**ZAIG Zacatecas 11.82 307** P **Pn 21 29 34.5 +2.9**
**735A Kenedy 13.86 340** Pn **Pn 21 29 57.7 +1.0**
**BCIP Isla Barro Col 13.92 117** Pn **Pn 21 29 57.2 -0.4**
**833A Chaparral WMA, 13.99 333** Pn **Pn 21 29 59.2 +0.9**
**833A Chaparral WMA, 13.99 333** P **Pn 21 29 59.2 +0.9**
baz=150,SNR=16
**HKT Hockley 14.37 348 Pn 21 30 04.0 +1.1**
**MTDJ Mount Denham 14.37 79** Pn **P 21 30 03.1 -1.2**
**061Z Ochoppi 14.60 45** P **Pn 21 30 04.7 -1.1**
**441A DeRidder 14.82 357** P **Pn 21 30 09.1 +0.6**
**344A Westbrook Farm 15.58 5** P **Pn 21 30 18.1 +0.5**
**435B Jarrell 15.59 343** P **P 21 30 18.3 +0.8**
435B IAmb IAmb 21 30 31.4
comp=Z,46nm,0.8s
**435B Jarrell 15.59 343** P **Pn 21 30 19.0 +1.2**
baz=161
**NATX Nacogdoches 15.95 353 Pn 21 30 23.1 +0.9**
NATX IAmb IAmb 21 30 32.2
comp=Z,44nm,0.7s
**NATX Nacogdoches 15.95 353** P **Pn 21 30 23.2 +1.1**
baz=172
**JCT Junction City 16.06 336 Pn 21 30 24.6 +1.2**
JCT IAmb IAmb 21 30 28.3
comp=Z,35nm,0.7s
**JCT Junction City 16.06 336** P **Pn 21 30 24.5 +1.0**
baz=153,SNR=19
**VBMS Vicksburg 16.36 6** P **P 21 30 26.5 +0.5**
**VBMS Vicksburg 16.36 6** P **Pn 21 30 27.7 +0.8**
baz=186
**HPIG 16.55 314** P **P 21 30 29.6 +1.1**
**WHTX Lake Whitney, 16.70 345** P **P 21 30 30.8 +1.0**
WHTX IAmb IAmb 21 30 34.4
comp=Z,64nm,0.9s
**WHTX Lake Whitney, 16.70 345** P **P 21 30 31.1 +1.3**
baz=162,SNR=5.7
**GTBY Guantanamo Bay 16.90 74** P **Pn 21 30 33.0 -0.5**
**352A Blakely 16.95 22** P **Pn 21 30 32.9 -1.1**
**146A Union 16.95 10** P **Pn 21 30 33.9 -0.1**
**TX31 Lajitas Ar. Si 16.96 324** P **P 21 30 33.9 +1.0**
**TXAR Lajitas Array 16.96 324** P **P 21 30 34.4 +1.6**
comp=Z,2.2nm,0.3s,baz=152,slow=12,SNR=349
TXAR ScP **ScP 21 38 24.7 +2.7**
comp=Z,0.1nm,0.3s,baz=152,slow=5.5,SNR=11
**TXAR Lajitas Array 16.96 324** P **Pn 21 30 35.5 +1.2**
**Z41A Richland Creek 17.31 359** P **P 21 30 36.8 +0.4**
**Z41A Richland Creek 17.31 359** P **P 21 30 37.1 +0.7**
baz=178,SNR=10
**TIGA Tifton 17.44 26** P **Pn 21 30 38.9 -0.9**
**TIGA Tifton 17.44 26** P **P 21 30 37.9 +0.1**
baz=209
**Z47A Carrollton 17.68 12** P **Pn 21 30 41.5 -1.0**
**WLAR White Oak Lake 17.75 358** P **P 21 30 42.3 +1.1**
**LRAL Lakeview Retre 17.76 15** P **P 21 30 41.9 +0.5**
LRAL IAmb IAmb 21 30 47.2
comp=Z,38nm,0.8s
**LRAL Lakeview Retre 17.76 15** P **Pn 21 30 42.3 -1.2**
baz=197,SNR=11
**MOTC Monteria, Cord 17.76 111** *e*P **P 21 30 40.2 -1.3**
**MOTC Monteria, Cord 17.76 111** P **P 21 30 40.3 -1.3**
MOTC IAmb IAmb 21 30 41.4
comp=Z,43nm,0.9s
**SJCC San Jacinto, C 17.77 107** *e*P **P 21 30 41.2 -0.5**
**SJCC San Jacinto, C 17.77 107** P **P 21 30 40.8 -0.8**
**Z35A Perchaven, San 17.93 347** P **P 21 30 44.6 +1.3**
**ABTX Abilene, Hawle 17.94 340** P **P 21 30 45.0 +1.7**
**ABTX Abilene, Hawle 17.94 340** P **P 21 30 44.8 +1.5**
baz=156,SNR=14
**152A Waverly Hall 18.10 21** P **Pn 21 30 46.3 -1.2**
**DBBC Dabeiba 18.10 117** *e*P **P 21 30 45.0 -0.3**
**SLBS Sierra La Lagu 18.27 298** P **P 21 30 49.6 +2.5**
SLBS IAmb IAmb 21 30 52.2
comp=Z,53nm,1.1s
**UREC San Jos de Ur 18.33 114** *e*P **P 21 30 45.0 -2.8**
**X40A Basin Creek Fa 18.54 359** P **P 21 30 48.9 -0.8**
**X40A Basin Creek Fa 18.54 359** P **P 21 30 50.2 +0.5**
baz=178
**Z51A Franklin 18.54 19** P **Pn 21 30 51.0 -1.7**
Z51A IAmb IAmb 21 30 52.4
comp=Z,37nm,0.8s
**LOOK Love County 18.55 347 P 21 30 50.4 +0.4**
**X43A Marvell 18.61 4** P **P 21 30 51.5 +1.0**
baz=184
**MIAR Mount Ida 18.62 357** P **P 21 30 50.9 +0.2**
MIAR IAmb IAmb 21 30 58.4
comp=Z,44nm,0.8s
**MIAR Mount Ida 18.62 357** P **P 21 30 51.1 +0.4**
baz=176,SNR=14
**Y49A Blount Mountai 18.69 16** P **P 21 30 51.7 +0.3**
Y49A IAmb IAmb 21 30 54.1
comp=Z,61nm,1.2s
**OXF Oxford 18.75 8** P **P 21 30 52.1 +0.1**
**OXF Oxford 18.75 8** P **P 21 30 52.3 +0.3**
baz=188,SNR=6.6
**X37A Clayton 18.83 352 P 21 30 53.3 +0.4**
**CBOC Ciudad Bolivar 18.87 120** *e*P **Pn 21 30 54.5 -2.4**
**ZARC Zaragoza, Cauc 19.04 114** *e*P **P 21 30 53.6 -1.9**
**ZARC Zaragoza, Cauc 19.04 114** P **P 21 30 52.9 -2.5**
**X48A Hartselle 19.11 14** P **P 21 30 55.4 -0.5**
X48A IAmb IAmb 21 31 03.5
comp=Z,33nm,1.0s
**PLMC San Jos del P 19.19 123** *e*P **P 21 30 56.5 -0.6**
**SMLC San Martn de 19.19 109** *e*P **P 21 30 54.5 -2.5**
**W41B Gary Mavity, V 19.22 0** P **P 21 30 57.0 0.0**
W41B IAmb IAmb 21 31 05.7
comp=Z,15nm,0.7s
**W41B Gary Mavity, V 19.22 0** P **P 21 30 57.7 +0.6**
baz=180
**GOGA Godfrey 19.22 23** P **P 21 30 56.8 -0.3**
GOGA IAmb IAmb 21 31 00.0
comp=Z,42nm,0.8s
**GOGA Godfrey 19.22 23** P **P 21 30 57.1 0.0**
baz=206,SNR=9.9
**W39A Magazine 19.28 356** P **P 21 30 57.5 -0.2**
**W39A Magazine 19.28 356** P **P 21 30 58.9 +1.1**
baz=176
**WHAR Wooly Hollow 19.33 0** P **P 21 30 58.0 -0.3**
WHAR IAmb IAmb 21 31 02.5
comp=Z,20nm,0.8s
**Y52A Lilburn 19.41 21** P **P 21 30 59.6 +0.5**
**CRJC Cerrejon, Guaj 19.55 102** *e*P **P 21 31 00.3 -0.7**
**FPAL Fort Paine 19.55 17** P **P 21 31 01.4 +0.7**
**WMOK Wichita Mounta 19.65 344** P **P 21 31 01.7 -0.1**
**WMOK Wichita Mounta 19.65 344** P **P 21 31 02.1 +0.4**
baz=161,SNR=57
**YOTC Yotoco, Valle 19.69 125** *e*P **P 21 31 02.2 -0.3**
**MNTX Cornudas Mount 19.72 325** P **P 21 31 03.9 +1.4**
**MNTX Cornudas Mount 19.72 325** P **P 21 31 04.0 +1.5**
baz=140,SNR=103
**GUY2C Guyana, Caldas 19.76 121** *e*P **P 21 31 03.9 +0.3**
**PTBC PUERTO BERRIO, 19.85 116‖** *e*P **P 21 31 02.2 -1.9**
**FCAR Ozark Folk Cen 19.93 1** P **P 21 31 06.0 +1.3**
**NORC Norcasia 19.99 119** *e*P **P 21 31 04.1 -1.6**
**OCAC Ocana 20.10 110** P **P 21 31 05.2 -1.6**
**SWET Sewanee 20.10 15** P **P 21 31 06.8 +0.2**
SWET IAmb IAmb 21 31 08.3
comp=Z,26nm,0.6s
**LCAR Lake Charles 20.14 3** P **P 21 31 06.7 -0.3**
**ANIL Santa Ana 20.14 122** *e*P **P 21 31 07.9 +0.4**
**TUL1 Leonard 20.19 352** P **P 21 31 07.3 -0.2**
baz=170,SNR=7.3
**URIC Uribia, Colomb 20.21 99** *e*P **P 21 31 08.8 +0.9**
**URIC Uribia, Colomb 20.21 99** P **P 21 31 08.0 +0.1**
URIC IAmb IAmb 21 31 10.9
comp=Z,40nm,0.8s
**MSTX Muleshoe 20.32 334** P **P 21 31 09.2 +0.2**
**MSTX Muleshoe 20.32 334** P **P 21 31 08.8 -0.1**
baz=150,SNR=28
**SDDR Presa de Saban 20.34 78** P **P 21 31 09.8 +0.5**
SDDR IAmb IAmb 21 31 14.2
comp=Z,28nm,0.7s
**POPC Popayan, Colom 20.35 129** *e*P **P 21 31 10.7 +1.0**
**HHAR Hobbs 20.37 356** P **P 21 31 09.4 -0.1**
HHAR IAmb IAmb 21 31 11.5
comp=Z,32nm,0.7s

**NHSC New Hope 20.39 31** P Pn 21 31 12.2 -2.7
baz=215
**U40A Yellville 20.40 359** P **P 21 31 09.6 -0.2**
baz=178,SNR=8.8
**HODGE Hodges 20.42 25** P **P 21 31 11.0 +1.1**
HODGE IAmb IAmb 21 31 11.9
comp=Z,28nm,0.8s
**U38A Gravette 20.56 355** P **P 21 31 11.7 +0.2**
U38A IAmb IAmb 21 31 13.4
comp=Z,50nm,1.0s
**WVT Waverly 20.57 10** P **P 21 31 11.4 -0.2**
**WVT Waverly 20.57 10** P **P 21 31 11.2 -0.3**
baz=192
**ORTC Ortega, Tolima 20.61 123** *e*P **P 21 31 12.6 +0.4**
**SPBC San Pablo de B 20.62 118** *e*P **P 21 31 08.8 -3.6**
**SOTA Rioblanco 20.67 130** *e*P Pn 21 31 15.5 -3.6
**AMTX Amarillo 20.69 338** P **P 21 31 13.4 +0.4**
**AMTX Amarillo 20.69 338** P **P 21 31 14.1 +1.1**
baz=154
**PCON Cinco Dias 20.70 129** *e*P **P 21 31 14.6 +0.8**
**CPCT Cooper Cave 20.72 18** P **P 21 31 13.4 +0.3**
CPCT IAmb IAmb 21 31 15.8
comp=Z,40nm,1.2s
**OTAV Otavalo 20.73 137** *e*P **P 21 31 15.5 +1.5**
**OTAV Otavalo 20.73 137** *e*P **P 21 31 14.1 +0.1**
**OTAV Otavalo 20.73 137** P **P 21 31 14.6 +0.6**
**BG3 Lake Jocassee 20.83 22** P **P 21 31 15.1 +0.8**
BG3 IAmb IAmb 21 31 17.1
comp=Z,38nm,1.0s
**ROSC El Rosal 20.84 120** P **P 21 31 14.1 -0.9**
comp=Z,15nm,0.3s,baz=170,slow=11,SNR=4.3
**ROSC El Rosal 20.84 120** P **P 21 31 14.6 -0.5**
ROSC IAmb IAmb 21 31 16.5
comp=Z,24nm,0.5s
**CLTN Cedars of Leba 20.84 14** P **P 21 31 14.4 0.0**
**BARC Barichara 20.93 114** *e*P **P 21 31 13.6 -2.3**
**PAMC Pamplona, Colo 21.03 112** *e*P **P 21 31 14.6 -2.6**
**PAULI Pauline 21.11 25** P **P 21 31 18.5 +1.3**
PAULI IAmb IAmb 21 31 19.9
comp=Z,35nm,0.8s
**TKL Tuckaleechee C 21.14 20** P **P 21 31 16.8 -0.7**
comp=Z,14nm,0.6s,baz=198,slow=9.1,SNR=10
**TKL Tuckaleechee C 21.14 20** P **P 21 31 18.0 +0.4**
TKL IAmb IAmb 21 31 20.4
comp=Z,25nm,0.8s
**T35A Sooner Cattle 21.28 351 P 21 31 18.6 -0.4**
T35A IAmb IAmb 21 31 20.4
comp=Z,55nm,0.9s
**RUSC La Rusia 21.35 116** *e*P **P 21 31 19.3 -1.2**
**V52A Sevierville 21.37 20** P **P 21 31 20.6 +0.7**
V52A IAmb IAmb 21 31 21.8
comp=Z,44nm,0.9s
**CHIC Chingaza 21.44 119** *e*P **P 21 31 21.2 -0.1**
**GARC Garzon, Huila 21.48 128** *e*P **P 21 31 22.2 +0.7**
**V53A Saluda 21.48 22** P **P 21 31 22.3 +1.2**
V53A IAmb IAmb 21 31 23.3
comp=Z,40nm,0.9s
**KAN14 Manchester OK 21.58 348 P 21 31 21.4 -0.5**
KAN14 IAmb IAmb 21 31 21.8
comp=Z,22nm,0.8s
**KMSC Kings Mountain 21.58 25** P **P 21 31 22.4 +0.4**
KMSC IAmb IAmb 21 31 25.0
comp=Z,64nm,1.1s
**KMSC Kings Mountain 21.58 25** P **P 21 31 22.3 +0.2**
baz=210,SNR=8.9
**121A Cookes Peak, D 21.70 323** P **P 21 31 24.6 +1.1**
**121A Cookes Peak, D 21.70 323** P **P 21 31 25.0 +1.6**
baz=136,SNR=48
**S39A Bolivar 21.75 358** P **P 21 31 23.1 -0.5**
S39A IAmb IAmb 21 31 24.3
comp=Z,50nm,1.1s
**FLOC Florencia 21.75 129** *e*P **P 21 31 24.1 +0.1**
**VILC Villavicencio, 21.76 121** *e*P **P 21 31 25.0 +0.9**
**319A Douglas 21.82 318** P **P 21 31 25.1 +0.4**
319A IAmb IAmb 21 31 55.1
comp=Z,21nm,0.9s
**S44A Carbondale 21.91 7** P **P 21 31 24.8 -0.4**
**TZTN Tazewell 22.03 19** P **P 21 31 26.6 +0.2**
**TZTN Tazewell 22.03 19** P **P 21 31 26.2 -0.2**
baz=203,SNR=9.6
**CCM Cathedral Cave 22.12 2** P **P 21 31 26.4 -0.7**
CCM IAmb IAmb 21 31 27.3
comp=Z,44nm,1.0s
**CCM Cathedral Cave 22.12 2** P **P 21 31 26.7 -0.5**
baz=183
**DR12 Loma Pena Alta 22.12 79** P **P 21 31 27.0 -0.5**
**SDV Santo Domingo 22.32 106** P **P 21 31 28.2 -1.3**
comp=Z,9.8nm,0.4s,baz=276,slow=5.1,SNR=15
**SDV Santo Domingo 22.32 106‖** *e*P **P 21 31 27.9 -1.6**
**SDV Santo Domingo 22.32 106** *e*P **P 21 31 28.1 -1.4**
**SDV Santo Domingo 22.32 106** P **P 21 31 28.2 -1.3**
SDV IAmb IAmb 21 31 35.8
comp=Z,24nm,0.7s
**SOCV Socops 22.33 107** *e*P **P 21 31 27.9 -1.5**
**USIN University of 22.39 10** P **P 21 31 29.2 -0.5**
**SLM Saint Louis 22.75 4** P **P 21 31 32.3 -0.6**
**MACC Macarena, Meta 22.78 125** *e*P **P 21 31 33.6 +0.1**
**ANMO Albuquerque 22.81 329** P **P 21 31 34.6 +0.8**
comp=Z,6.6nm,0.7s,baz=143,slow=11,SNR=15
**ANMO Albuquerque 22.81 329** P **P 21 31 34.9 +1.1**
**ANMO Albuquerque 22.81 329** P **P 21 31 35.8 +2.0**
baz=143
**WCI Wyandotte Cave 22.90 12** P **P 21 31 33.8 -0.5**
**WCI Wyandotte Cave 22.90 12** P **P 21 31 34.4 +0.1**
baz=195
**R32A Long Quarter, 23.15 347** P **P 21 31 36.2 -0.4**
**TUC Tucson 23.40 318** P **P 21 31 40.0 +1.0**
TUC IAmb IAmb 21 31 44.2
comp=Z,31nm,1.1s
**TUC Tucson 23.40 318** P **P 21 31 41.5 +2.5**
baz=130
**KSU1 Kansas State U 23.44 352** P **P 21 31 38.5 -0.6**
**KSU1 Kansas State U 23.44 352** P **P 21 31 38.8 -0.4**
baz=169,SNR=5.9
**T25A Trinidad 23.72 336** P **P 21 31 43.4 +1.3**
T25A IAmb IAmb 21 31 48.2
comp=Z,27nm,0.8s
**T25A Trinidad 23.72 336** P **P 21 31 43.5 +1.5**
baz=150,SNR=21
**BLA Blacksburg 23.74 24** P **P 21 31 43.7 +1.7**
baz=209
**CBKS Cedar Bluff 23.75 346** P **P 21 31 42.1 +0.1**
CBKS IAmb IAmb 21 31 44.8
comp=Z,22nm,0.8s
**CBKS Cedar Bluff 23.75 346** P **P 21 31 42.5 +0.4**
baz=162
**CRPR Cabo Rojo, PR 24.24 81** P **P 21 31 48.5 +1.8**
CRPR IAmb IAmb 21 31 50.3
comp=Z,34nm,0.8s
**P48A Milroy 24.27 13** P **P 21 31 45.8 -0.9**
P48A IAmb IAmb 21 31 46.6
comp=Z,21nm,0.8s
**Q51A Peebles 24.38 17** P **P 21 31 47.8 0.0**
**X18A Snowflake 24.39 323** P **P 21 31 48.7 +0.6**
**P49A Miami Univ. Ec 24.50 14** P **P 21 31 48.1 -0.7**
baz=198
**214A Organ Pipe Nat 24.54 314** P **P 21 31 50.8 +1.5**
baz=126,SNR=14
**SDCO Great Sand Dun 24.69 334** P **P 21 31 52.0 +1.1**
**SDCO Great Sand Dun 24.69 334** P **P 21 31 51.6 +0.8**
baz=148,SNR=7.4
**W18A Petrified Fore 24.69 324** P **P 21 31 53.1 +2.4**
baz=136,SNR=13
**BAUV El Baul 24.71 103** P **P 21 31 48.9 -2.1**
**OBIP Obispado Ponce 24.72 81** P **P 21 31 50.9 -0.2**
OBIP IAmb IAmb 21 31 54.4
comp=Z,25nm,0.7s
**KSCO Kaye Shedlock' 24.75 341** P **P 21 31 51.2 0.0**
**KSCO Kaye Shedlock' 24.75 341** P **P 21 31 52.2 +1.0**
baz=156,SNR=10
**CELP Cerrillos 24.75 81** P **P 21 31 51.0 -0.3**
CELP IAmb IAmb 21 31 55.3
comp=Z,30nm,0.8s
**N38A Joes South For 24.84 358** P **P 21 31 51.8 -0.1**
**SFIN Lafayette 24.84 10** P **P 21 31 51.2 -0.7**
baz=192
**O48B Farmland 25.09 13** P **P 21 31 53.7 -0.4**
baz=196
**SJG San Juan 25.16 81** P **P 21 31 53.8 -1.1**
comp=Z,13nm,0.5s,baz=267,slow=7.9,SNR=6.1
**SJG San Juan 25.16 81** P **P 21 31 54.1 -0.9**
SJG IAmb IAmb 21 32 07.3
comp=Z,16nm,0.8s
**X16A Lo Mia Camp, P 25.20 321** P **P 21 31 57.0 +1.5**
**S22A 4UR Ranch, Cre 25.26 332** P **P 21 31 57.5 +1.4**

**S22A 4UR Ranch, Cre 25.26 332 P P 21 31 57.1 +1.1**
baz=146,SNR=13
**P52A Corning 25.30 19 P P 21 31 56.4 +0.3**
baz=203
**Q24A Divide 25.59 336 P P 21 31 59.6 +0.5**
baz=150
**ACSO Alum Creek Sta 25.61 17 P P 21 31 58.7 -0.1**
ACSO IAmb IAmb 21 32 10.5
comp=Z,64nm,1.8s
**ACSO Alum Creek Sta 25.61 17 P P 21 31 58.7 -0.1**
baz=201
**MVCO Mesa Verde 25.61 329 P P 21 32 01.6 +2.4**
MVCO IAmb IAmb 21 32 02.4
comp=Z,20nm,1.1s
**MVCO Mesa Verde 25.61 329 P P 21 32 00.1 +0.9**
baz=142,SNR=7.7
**MTP Monte Pirata 25.73 81 P P 21 31 59.0 -1.2**
MTP IAmb IAmb 21 32 01.0
comp=Z,21nm,0.7s
**WUAZ Wupatki 25.91 323 P P 21 32 04.0 +2.2**
WUAZ IAmb IAmb 21 32 05.7
comp=Z,17nm,0.9s
**WUAZ Wupatki 25.91 323 P P 21 32 04.1 +2.2**
baz=134,SNR=11
**BGNE Belgrade 25.93 350 P P 21 32 01.8 +0.1**
baz=167
**BIRV Birongo 25.95 99 P P 21 32 00.9 -1.3**
BIRV IAmb IAmb 21 32 29.0
comp=Z,20nm,1.1s
**O53A New Philadelph 26.15 20 P P 21 32 03.2 -0.5**
baz=205
**ISCO Idaho Springs 26.50 337 P P 21 32 07.2 0.0**
**ISCO Idaho Springs 26.50 337 P P 21 32 08.2 +1.1**
baz=150
**SMCO Snowmass 26.51 334 P P 21 32 07.3 -0.1**
**PV13 Radium Mtn., P 26.52 330 P P 21 32 07.4 +0.1**
**GLA Glamis 26.56 314 P P 21 32 09.1 +1.6**
baz=124,SNR=7.8
**PV11 David Mesa, Pa 26.65 330 P P 21 32 09.1 +0.7**
PV11 IAmb IAmb 21 32 16.4
comp=Z,45nm,1.7s
**ATAH Atahualpa 26.72 148 P P 21 32 10.4 +0.9**
comp=Z,25nm,0.7s,baz=9.1,slow=5.3,SNR=26
ATAH ScP ScP 21 38 49.2 +1.9
comp=Z,4.5nm,0.7s,baz=25,slow=3.5,SNR=3.7
**BLYC Blythe 26.76 316 P P 21 32 11.3 +2.1**
**PDMCI Parker Dam,Lak 26.84 317 P P 21 32 12.2 +2.3**
baz=128
**JFWS Jewell Farm 27.01 3 P P 21 32 12.1 +0.8**
baz=184
**O56A Blue Knob Stat 27.11 24 P P 21 32 12.1 -0.2**
baz=210
**YUH Yuha Desert 27.11 312 P P 21 32 14.5 +2.1**
YUH IAmb IAmb 21 32 16.4
comp=Z,47nm,1.6s
**SWSC Sam W. Stewart 27.18 313 P P 21 32 15.2 +2.2**
baz=123,SNR=7.4
**N54A Moraine State 27.20 21 P P 21 32 13.0 0.0**
baz=207
**IKP In-Ko-Pah, Jac 27.24 312 P P 21 32 15.9 +2.3**
baz=122,SNR=12
**BC3 Big Chuckawall 27.34 315 P P 21 32 16.8 +2.3**
baz=125,SNR=24
**IRM Iron Mountain 27.42 316 P P 21 32 17.4 +2.3**
baz=126,SNR=12
**CBX Cerro Bola 27.47 311 P P 21 32 18.7 +3.0**
**N23A Red Feather La 27.57 337 P P 21 32 18.2 +1.6**
baz=151
**PCRV Puerto La Cruz 27.58 98 P P 21 32 16.0 -0.7**
comp=Z,9.9nm,0.5s,baz=244,slow=2.2,SNR=7.6
**MONP2 Monument Peak 27.59 312 P P 21 32 19.3 +2.4**
baz=122,SNR=18
**PLCV Puerto La Cruz 27.63 98 P P 21 32 16.0 -1.1**
**SSPA Standing Stone 27.69 24 P P 21 32 18.6 +1.2**
baz=211
**KNB Kanab 27.79 323 P P 21 32 20.7 +2.1**
KNB IAmb IAmb 21 32 22.6
comp=Z,21nm,0.8s
**O20A White River Ci 27.85 333 P P 21 32 19.9 +0.9**
baz=146
**BELC Belle Mtn. Jos 27.91 315 P P 21 32 21.9 +2.4**
baz=124,SNR=15
**PMD Palm Desert 27.97 314 P P 21 32 21.0 +1.0**
PMD IAmb IAmb 21 32 23.7
comp=Z,14nm,0.8s
**TPFO Pinon Flats 28.00 313 P P 21 32 22.8 +2.4**
baz=123,SNR=8.4
**ECSD EROS Data Cent 28.00 353 P P 21 32 19.7 -0.4**
ECSD IAmb IAmb 21 32 20.8
comp=Z,38nm,1.6s
**ECSD EROS Data Cent 28.00 353 P P 21 32 20.1 0.0**
baz=171,SNR=7.5
**PFO Pinyon Flats O 28.01 313 P P 21 32 21.3 +0.8**
comp=Z,10nm,0.9s,baz=115,slow=7.0,SNR=14
**PFO Pinyon Flats O 28.01 313 P P 21 32 22.3 +1.9**
**PFO Pinyon Flats O 28.01 313 P P 21 32 23.0 +2.6**
baz=123,SNR=7.8
**GMRC Granite Mounta 28.13 316 P P 21 32 24.3 +2.8**
baz=126,SNR=17
**MTPU Mount Pierson 28.16 325 P P 21 32 24.3 +2.3**
MTPU IAmb IAmb 21 32 26.7
comp=Z,12nm,0.8s
**Q16A Castle Valley 28.27 328 P P 21 32 24.5 +1.7**
**MURC Murrieta 28.52 313 P P 21 32 27.2 +2.4**
baz=122
**HEC Hector,Ludlow 28.61 316 P P 21 32 28.4 +2.8**
baz=125
**BBRC Big Bear Solar 28.68 314 P P 21 32 29.6 +3.0**
baz=123
**TUQ Turquoise Moun 28.69 317 P P 21 32 28.8 +2.4**
baz=127,SNR=6.1
**RWWY Rawlins 28.74 336 P P 21 32 28.6 +1.6**
RWWY IAmb IAmb 21 32 30.3
comp=Z,14nm,0.8s
**SHPR Sheep Range 28.86 320 P P 21 32 29.9 +1.9**
SHPR IAmb IAmb 21 32 32.0
comp=Z,18nm,1.3s
**GSC Goldstone, Bar 29.19 316 P P 21 32 33.1 +2.2**
baz=125,SNR=5.8
**CIS Catalina Islan 29.29 311 P P 21 32 33.7 +2.0**
baz=120,SNR=6.1
**K22A Casper 29.32 338 P P 21 32 32.8 +0.8**
K22A IAmb IAmb 21 32 34.0
comp=Z,14nm,0.8s
**K22A Casper 29.32 338 P P 21 32 33.1 +1.1**
baz=151,SNR=5.5
**GDHS Morne Mazeau, 29.39 85 P P 21 32 32.8 0.0**
**EDW2 Edwards Air Fo 29.76 314 P P 21 32 38.1 +2.2**
baz=123,SNR=9.0
**TPNV Topopah Spring 29.82 319 P P 21 32 39.5 +3.0**
baz=128,SNR=7.6
**RSSD Black Hills 29.85 343 P P 21 32 37.4 +0.7**
RSSD IAmb IAmb 21 32 38.4
comp=Z,15nm,0.6s
**RSSD Black Hills 29.85 343 P P 21 32 37.8 +1.2**
baz=157
**LRMC Laurel Mtn Rad 29.88 316 P P 21 32 39.5 +2.5**
baz=124,SNR=8.4
**FURC Furnace Creek, 29.92 318 P P 21 32 39.1 +2.0**
baz=127,SNR=6.2
**MPMC Manual Prospec 30.08 317 P P 21 32 41.1 +2.3**
baz=125,SNR=34
**R11A Troy Canyon, C 30.31 322 P P 21 32 43.5 +2.8**
baz=131,SNR=14
**ARVC Arvin 30.48 314 P P 21 32 43.4 +1.3**
baz=122
**CZSB Cruzeiro do Su 30.48 139 eP P 21 32 40.3 -2.0**
**CZSB Cruzeiro do Su 30.48 139 P P 21 32 43.4 +1.1**
**GRAC Grapevine Rang 30.56 318 P P 21 32 45.5 +2.7**
GRAC IAmb IAmb 21 32 47.3
comp=Z,52nm,1.3s
**GRAC Grapevine Rang 30.56 318 P P 21 32 45.7 +2.9**
baz=127,SNR=9.6
**BW06 Boulder Array 30.58 335 P P 21 32 44.2 +1.0**
baz=146
**PD31 Pinedale Array 30.58 335 P P 21 32 43.9 +0.8**
**PDAR Pinedale Array 30.58 335 P P 21 32 44.0 +0.8**
comp=Z,1.1nm,0.5s,baz=130,slow=11,SNR=16
PDAR ScP ScP 21 38 59.5 +0.8
comp=Z,0.4nm,0.6s,baz=145,slow=3.6,SNR=5.0
**PDAR Pinedale Array 30.58 335 P P 21 32 43.9 +0.8**
**CWC Cottonwood Cre 30.69 317 P P 21 32 46.6 +2.4**
baz=125
**LCH Last Change Ra 30.88 318 P P 21 32 48.3 +2.5**
**SADO Sadowa 30.89 18 P P 21 32 44.9 -0.7**
comp=Z,5.2nm,0.7s,baz=220,slow=5.6,SNR=3.6
**VES Vestal, Richgr 31.03 315 P P 21 32 49.3 +2.4**
baz=123
**PKM Mcpherson Peak 31.04 313 P P 21 32 49.7 +2.5**
baz=120,SNR=11
**TPH Tonopah 31.12 320 P P 21 32 50.3 +2.3**
**TIN Tinemaha, Big 31.15 318 P P 21 32 51.1 +3.0**
baz=126,SNR=6.1
**HVU Hansel Valley 31.24 330 P P 21 32 50.1 +1.2**
**ECR Eagle Creek 31.59 333 P P 21 32 53.4 +1.4**
**REDW Red Top Meadow 31.61 334 P P 21 32 53.2 +1.0**
REDW IAmb IAmb 21 32 54.7
comp=Z,38nm,1.2s
**NNA Nana 31.66 150 P P 21 32 53.4 +0.8**
comp=Z,4.9nm,0.4s,baz=343,slow=6.6,SNR=4.1
**ELK Elko 31.74 326 P P 21 32 54.8 +1.4**
comp=Z,4.8nm,0.7s,baz=136,slow=8.2,SNR=26
**ELK Elko 31.74 326 P P 21 32 55.5 +2.1**
**NV11 Mina Array Sit 31.92 320 P P 21 32 57.3 +2.5**
NV11 IAmb IAmb 21 32 59.3
comp=Z,35nm,1.1s
**NVAR Mina Array Bea 32.01 320 P P 21 32 57.5 +1.8**
comp=Z,26nm,0.6s,baz=132,slow=8.8,SNR=230
NVAR PcP PcP 21 35 41.9 +1.5
comp=Z,1.7nm,0.8s,baz=128,slow=2.2,SNR=4.8
NVAR ScP ScP 21 39 05.6 +1.9
comp=Z,2.5nm,0.7s,baz=135,slow=4.2,SNR=19
**NVAR Mina Array Bea 32.01 320 P P 21 32 58.7 +2.9**
**PMPB Monarch Peak 32.41 314 P P 21 33 01.7 +2.6**
PMPB IAmb IAmb 21 33 02.7
comp=Z,27nm,0.8s
**MDND Maddock 32.44 351 P P 21 32 59.0 0.0**
baz=167,SNR=15
**RLMT Red Lodge 32.45 337 P P 21 33 00.4 +0.9**
baz=148,SNR=7.2
**AGMN Agassiz Nation 32.46 356 P P 21 32 58.2 -1.0**
**AGMN Agassiz Nation 32.46 356 P P 21 32 58.7 -0.5**
baz=174,SNR=5.4
**BMN Battle Mountai 32.63 323 P P 21 33 03.2 +2.1**
BMN IAmb IAmb 21 33 04.9
comp=Z,22nm,0.8s
**LAO LAA Array 32.82 342 P P 21 33 03.4 +1.0**
baz=155
**YERR Yerington 32.93 320 P P 21 33 05.8 +2.1**
YERR IAmb IAmb 21 33 07.3
comp=Z,17nm,0.6s
**CMB Columbia Colle 33.11 317 P P 21 33 06.9 +1.8**
**HLID Hailey 33.38 330 P P 21 33 08.9 +1.4**
**HLID Hailey 33.38 330 P P 21 33 09.1 +1.6**
baz=139
**PAHR Pah Rah Range 33.46 321 P P 21 33 10.6 +2.4**
PAHR IAmb IAmb 21 33 12.1
comp=Z,16nm,1.0s
**BCYI Bear Canyon 33.48 332 P P 21 33 10.0 +1.6**
**MCMT McKenzie Canyo 33.65 333 P P 21 33 11.9 +2.0**
**BOZ Bozeman (W) 33.76 335 P P 21 33 11.9 +1.2**
**BOZ Bozeman (W) 33.76 335 P P 21 33 12.0 +1.3**
baz=145
**DGMT Dagmar 33.93 346 P P 21 33 12.7 +0.8**
DGMT IAmb IAmb 21 33 13.3
comp=Z,31nm,0.7s
**DGMT Dagmar 33.93 346 P P 21 33 12.4 +0.4**
baz=159,SNR=10
**BOAV Boa Vista 34.09 110 P P 21 33 11.3 -2.5**
**ULM Lac du Bonnet 34.40 356 P P 21 33 14.6 -1.4**
comp=Z,7.9nm,0.7s,baz=177,slow=8.5,SNR=7.4
**EGMT Eagleton 35.12 340 P P 21 33 23.4 +1.1**
EGMT IAmb IAmb 21 33 24.2
comp=Z,26nm,0.9s
**EGMT Eagleton 35.12 340 P P 21 33 23.1 +0.9**
baz=150,SNR=9.8
**J08A Circle Bar Ran 35.29 326 P P 21 33 26.1 +2.3**
**MSO Missoula 35.70 334 P P 21 33 28.5 +1.3**
baz=142
**M04C Macdoel 36.19 321 P P 21 33 33.2 +1.6**
baz=127,SNR=7.5
**I07A Izee 36.33 326 P P 21 33 34.0 +1.4**
**ETMB Extrema 36.36 133 P P 21 33 31.6 -1.4**
**M02C Callahan 36.58 320 P P 21 33 35.4 +0.7**
baz=125
**K04D Chiloquin, OR 36.65 323 P P 21 33 37.2 +1.8**
baz=128
**YBH Yreka Blue Hor 36.69 321 P P 21 33 36.2 +0.5**
comp=Z,2.5nm,0.6s,baz=71,slow=3.7,SNR=6.3
**YBH Yreka Blue Hor 36.69 321 P P 21 33 36.3 +0.6**
**L04D Klamath Falls 36.73 322 P P 21 33 37.5 +1.4**
baz=126,SNR=7.1
**J05D Fort Rock, OR 36.76 324 P P 21 33 37.2 +0.8**
baz=129
**J04D Umpqua Nationa 37.24 323 P P 21 33 41.7 +1.3**
baz=128,SNR=7.8
**I05D Terrebonne, OR 37.49 325 P P 21 33 44.0 +1.6**
baz=130
**I04A Tendick Farm, 37.75 324 P P 21 33 45.3 +0.8**
baz=128,SNR=6.6
**K02D Willamette Mer 37.83 321 P P 21 33 46.4 +1.2**
baz=125
**G05D Wamic, OR 38.07 326 P P 21 33 49.0 +1.9**
baz=131,SNR=5.3
**H04A Detroit Lake 38.18 325 P P 21 33 49.9 +1.8**
**I03D Drain, OR 38.23 323 P P 21 33 50.2 +1.8**
baz=127
**J01E Myrtle Point 38.26 322 P P 21 33 50.7 +2.0**
baz=126,SNR=7.4
**BUCK Buck Mountain 38.33 324 P P 21 33 50.5 +1.1**
BUCK IAmb IAmb 21 33 51.7
comp=Z,49nm,1.1s
**H04D Lebanon 38.39 324 P P 21 33 51.0 +1.2**
baz=128
**F05D White Salmon 38.56 327 P P 21 33 53.0 +1.8**
baz=131
**I02E Swisshome, OR 38.77 323 P P 21 33 54.6 +1.7**
baz=126
**GBN Guysborough 39.20 35 P P 21 33 56.9 +0.5**
**E04D Cinebar 39.59 327 P P 21 34 01.7 +2.0**
baz=130
**C06D Leavenworth 39.66 330 P P 21 34 01.1 +0.9**
baz=134
**LPAZ La Paz 39.91 142 P P 21 34 03.5 +0.2**
LPAZ IAmb IAmb 21 34 04.4
comp=Z,37nm,0.7s
**B05A Bryant 40.48 329 P P 21 34 07.4 +0.5**
baz=133
**D03D Eldon 40.49 328 P P 21 34 08.1 +1.0**
baz=131
**PB12 IPOC Station P 40.56 147 P P 21 34 08.5 +0.4**
PB12 IAmb IAmb 21 34 11.2
comp=Z,22nm,0.7s
**EDM Edmonton 40.76 341 P P 21 34 09.6 +0.4**
**PB16 IPOC Station P 40.77 146 P P 21 34 11.7 +1.4**
PB16 IAmb IAmb 21 34 12.9
comp=Z,34nm,0.7s
**A04D Lummi Island 41.09 329 P P 21 34 13.0 +1.2**
baz=132
**PB11 IPOC Station P 41.86 147 P P 21 34 19.6 +0.9**
**GO01 Chusmiza 42.03 146 P P 21 34 22.0 +1.6**
GO01 IAmb IAmb 21 34 23.1
comp=Z,45nm,0.8s
**PB08 IPOC Station P 42.44 147 P P 21 34 24.9 +1.3**
PB08 IAmb IAmb 21 34 26.1
comp=Z,24nm,0.8s
**VILB Vilhena 42.81 130 eP P 21 34 24.4 -1.8**
**VILB Vilhena 42.81 130 P P 21 34 24.6 -1.6**
VILB IAmb IAmb 21 34 25.2
comp=Z,33nm,0.6s
**PB02 IPOC Station P 43.04 149 P P 21 34 29.4 +1.3**
**PB07 IPOC Station P 43.38 149 P P 21 34 31.9 +1.0**
PB07 IAmb IAmb 21 34 33.0
comp=Z,44nm,0.8s
**SCHQ Schefferville 43.60 21 P P 21 34 30.8 -1.3**
comp=Z,1.9nm,0.7s,baz=233,slow=6.9,SNR=6.4
**PB03 IPOC Station P 43.72 149 P P 21 34 34.6 +1.0**
PB03 IAmb IAmb 21 34 35.7
comp=Z,29nm,0.9s
**PB04 IPOC Station P 43.77 150 P P 21 34 34.5 +0.5**
PB04 IAmb IAmb 21 35 09.4
comp=Z,112nm,1.8s
**PB09 IPOC Station P 43.77 148 P P 21 34 35.4 +1.4**
PB09 IAmb IAmb 21 34 36.6
comp=Z,55nm,1.1s
**SIV San Ignacio 44.23 134 P P 21 34 36.4 -1.2**
comp=Z,8.1nm,0.5s,baz=305,slow=7.4,SNR=74
SIV PcP PcP 21 36 18.6 +0.3
comp=Z,4.0nm,0.6s,baz=279,slow=4.5,SNR=6.5
SIV ScP ScP 21 39 50.6 +0.5
comp=Z,2.0nm,0.5s,baz=294,slow=5.5,SNR=7.3
**PDRB Porto dos Gac 44.60 126 eP P 21 34 37.5 -3.0**
**LVC Limon Verde 44.61 148 P P 21 34 40.8 -0.1**
comp=Z,9.8nm,0.5s,baz=330,slow=5.7,SNR=19
LVC PcP PcP 21 36 20.2 +0.3
comp=Z,6.0nm,0.7s,baz=254,slow=1.3,SNR=4.3
**LVC Limon Verde 44.61 148 eP P 21 34 42.7 +1.8**
**LVC Limon Verde 44.61 148 P P 21 34 42.5 +1.6**
**CLDB Colider 44.90 124 eP P 21 34 39.8 -3.2**
**PTLB Pontes e Lacer 45.22 132 eP P 21 34 43.7 -1.7**
**PTLB Pontes e Lacer 45.22 132 P P 21 34 43.8 -1.5**
**PB14 IPOC Station P 45.60 152 P P 21 34 49.5 +0.9**
PB14 IAmb IAmb 21 34 50.7
comp=Z,35nm,1.2s
**BBB Bella Bella 45.97 330 P P 21 34 50.7 0.0**
comp=Z,11nm,0.8s,baz=182,slow=6.4,SNR=12
**BBB Bella Bella 45.97 330 P P 21 34 51.5 +0.8**
BBB IAmb IAmb 21 35 27.5
comp=Z,96nm,1.6s
**YKA Yellowknife Ar 49.13 347 P P 21 35 15.1 +0.3**
comp=Z,27nm,0.7s,baz=151,slow=7.4,SNR=305
YKA pP pP 21 36 00.8 -0.9
comp=Z,2.0nm,0.7s,baz=149,slow=7.7,SNR=1.8
**YKA Yellowknife Ar 49.13 347 P P 21 35 15.3 +0.4**
**LCO Las Campanas 49.29 155 P P 21 35 18.2 +1.4**
**PP1B Ponte de Pedra 49.71 130 eP P 21 35 18.7 -1.2**
**SMTB Santa Maria do 50.69 116 eP P 21 35 25.0 -2.4**
**DLBC Dease Lake 50.81 336 P P 21 35 26.4 -1.3**
comp=Z,20nm,0.9s,baz=138,slow=4.8,SNR=19
**DLBC Dease Lake 50.81 336 P P 21 35 30.0 +2.3**
DLBC IAmb IAmb 21 35 30.8
comp=Z,17nm,0.8s
**ARAG Araguaiana, MT 50.87 126 eP P 21 35 26.4 -2.1**
**CO03 El Pedregal 50.91 156 P P 21 35 29.5 +0.8**
CO03 IAmb IAmb 21 35 30.7
comp=Z,26nm,0.9s
**AQDB Aquidauana 51.01 134 P P 21 35 28.5 -1.1**
**PEXB Peixe 51.70 120 eP P 21 35 32.6 -2.3**
**WRGLY Wrigley 52.01 343 P P 21 35 37.3 +1.0**
baz=141,SNR=5.5
**VA06 Catapilco 52.21 157 P P 21 35 39.0 +0.7**
VA06 IAmb IAmb 21 35 51.1
comp=Z,61nm,1.4s
**ZON Zonda 52.35 154 P P 21 35 40.7 +1.4**
**VA03 San Esteban 52.67 157 P P 21 35 42.9 +1.1**
VA03 IAmb IAmb 21 35 43.8
comp=Z,28nm,0.9s
**ROC1 El Roble 52.69 157 P P 21 35 41.3 -0.8**
**P33M Teslin, Yukon 53.05 336 P P 21 35 45.6 +1.4**
**P33M Teslin, Yukon 53.05 336 P P 21 35 45.8 +1.6**
baz=128,SNR=5.6
**MT01 Popeta 53.40 158 P P 21 35 47.3 +0.4**
MT01 IAmb IAmb 21 36 24.1
comp=Z,63nm,1.8s
**MT09 Talagante 53.42 158 P P 21 35 48.3 +1.1**
MT09 IAmb IAmb 21 35 49.0
comp=Z,40nm,1.1s
**LMEL Las Melosas 53.77 157 P P 21 35 50.5 +0.7**
LMEL IAmb IAmb 21 35 52.2
comp=Z,24nm,0.9s
**BDFB Brasilia 53.83 123 P P 21 35 48.9 -1.5**
comp=Z,8.7nm,0.4s,baz=292,slow=8.5,SNR=19
**BDFB Brasilia 53.83 123 P P 21 35 49.0 -1.5**
**BO01 Tunca 53.93 158 P P 21 35 51.6 +0.8**
BO01 IAmb IAmb 21 35 52.8
comp=Z,18nm,0.8s
**MMPY Sheldon Lake, 54.03 339 P P 21 35 52.9 +1.6**
baz=132,SNR=9.6
**CPUP Villa Florida 54.04 140 P P 21 35 50.4 -1.3**
comp=Z,11nm,0.8s,baz=328,slow=8.2,SNR=20
**CPUP Villa Florida 54.04 140 P P 21 35 50.6 -1.1**
**WHY Whitehorse 54.13 336 P P 21 35 52.4 +0.3**
baz=126
**GO05 Huala 54.20 159 P P 21 35 53.7 +1.0**
GO05 IAmb IAmb 21 35 54.5
comp=Z,30nm,0.8s
**FARO Faro, Yukon 54.52 338 P P 21 35 55.9 +1.2**
baz=129
**SDBA SAO DESIDERIO 54.72 118 eP P 21 35 54.4 -2.5**
**M31M Drury Creek, Y 54.88 337 P P 21 35 59.0 +1.7**
baz=128
**IPMB Ipameri, GO 54.99 126 eP P 21 35 57.0 -1.7**
**YUK6 Outpost Mounta 55.70 335 P P 21 36 04.8 +1.4**
baz=123
**M30M Minto, Yukon 56.00 337 P P 21 36 06.6 +1.3**
**M30M Minto, Yukon 56.00 337 P P 21 36 06.6 +1.3**
baz=126
**YUK4 Talbot Arm 56.03 335 P P 21 36 07.3 +1.6**
baz=123
**JANB Januaria 56.54 121 eP P 21 36 07.5 -2.3**
**ITQB Itaqui 56.91 143 eP P 21 36 11.4 -0.7**
**ITQB Itaqui 56.91 143 P P 21 36 11.6 -0.5**
**YUK3 Moose Creek 56.99 335 P P 21 36 13.0 +0.5**
baz=121
**BVCY Beaver Creek 57.49 336 P P 21 36 16.1 +0.3**
baz=121
**LC01 Cunco 57.76 161 P P 21 36 18.7 +0.8**
LC01 IAmb IAmb 21 36 19.0
comp=Z,18nm,0.6s
**DAWY Dawson 57.82 338 P P 21 36 18.6 +0.6**
baz=124
**ITAB Concordia 57.97 137 eP P 21 36 17.9 -1.5**
**ITAB Concordia 57.97 137 P P 21 36 18.2 -1.3**
**NBPN Ponto Novo - B 58.06 114 eP P 21 36 17.9 -2.5**
**I29M Ogilvie Camp, 58.17 339 P P 21 36 21.2 +0.8**
baz=125
**BCAR Beaver Creek A 58.19 336 P P 21 36 22.0 +1.3**
**L27K Beaver Creek, 58.21 336 P P 21 36 22.1 +1.4**
L27K IAmb IAmb 21 36 23.0
comp=Z,23nm,1.7s
**L27K Beaver Creek, 58.21 336 P P 21 36 21.9 +1.2**
baz=120
**EPYK Eagle Plains 58.26 341 P P 21 36 21.9 +0.9**
baz=128
**M26K Nabesna, AK 58.34 335 P P 21 36 23.0 +1.3**
baz=119
**BMRM Bremner River 58.35 333 P P 21 36 23.3 +1.5**
baz=116
**INK Inuvik 58.55 343 P P 21 36 23.2 +0.3**
comp=Z,11nm,0.7s,baz=119,slow=7.5,SNR=26
INK pP PcP 21 37 10.8 +0.1
comp=Z,4.1nm,0.9s,baz=117,slow=10,SNR=4.3
**INK Inuvik 58.55 343 P P 21 36 24.0 +1.1**
INK IAmb IAmb 21 36 24.6
comp=Z,12nm,0.7s
**INK Inuvik 58.55 343 P P 21 36 23.7 +0.8**
baz=132,SNR=12
**N25K Chitina, Valde 58.63 334 P P 21 36 25.5 +1.7**
baz=117
**EYAK Cordova Ski Ar 58.67 332 P P 21 36 25.7 +1.9**
baz=115
**DIAM Diamantina, MG 58.75 123 eP P 21 36 23.4 -1.9**
**L26K Log Cabin Wild 58.79 336 P P 21 36 26.3 +1.6**
baz=119
**RES Resolute Bay 58.83 359 P P 21 36 24.2 -0.6**
**EGAK Eagle 58.85 338 P P 21 36 25.7 +0.7**
**EGAK Eagle 58.85 338 P P 21 36 25.6 +0.5**
baz=122
**VAO Valinhos 58.87 130 eP P 21 36 24.6 -1.3**
**KLU Klutina 59.15 333 P P 21 36 28.8 +1.4**
KLU IAmb IAmb 21 36 29.5
comp=Z,10nm,0.6s
**KLU Klutina 59.15 333 P P 21 36 28.7 +1.4**
baz=116,SNR=6.4
**HARP HAARP 59.23 334 P P 21 36 28.5 +0.8**
baz=117
**A36M Sachs Harbour 59.35 349 P P 21 36 28.4 +0.1**
baz=142
**GLI Glacier Island 59.41 332 P P 21 36 30.1 +1.1**
baz=114
**PET01 Itanhaem-SP 59.42 131 eP P 21 36 28.4 -1.2**
**LL04 Puerto Octay 59.45 163 P P 21 36 30.1 +0.6**
LL04 IAmb IAmb 21 36 30.8
comp=Z,10nm,0.8s
**SCRK Sand Creek 59.50 336 P P 21 36 31.3 +1.6**
baz=119
**M24K Tolsona, Glenn 59.53 334 P P 21 36 31.1 +1.3**
baz=116
**J26L Joseph Creek 59.60 337 P P 21 36 31.5 +1.2**
baz=120
**PAX Paxson 59.62 335 P P 21 36 31.6 +1.1**
PAX IAmb IAmb 21 36 32.0
comp=Z,7.7nm,0.5s
**PAX Paxson 59.62 335 P P 21 36 31.3 +0.8**
baz=117,SNR=6.1
**RIDG Independent Ri 59.72 336 P P 21 36 32.4 +1.3**
**RIDG Independent Ri 59.72 336 P P 21 36 32.2 +1.1**
baz=118
**PLCA Paso Flores 59.85 161 P P 21 36 33.4 +1.1**

comp=Z,18nm,0.9s,baz=339,slow=7.9,SNR=34
**PLCA Paso Flores 59.85 161** P **P** **21 36 33.2 +0.9**
PLCA IAmb IAmb 21 36 34.4
comp=Z,23nm,0.9s
**RCBR Riachuelo 59.90 107** P **P** **21 36 31.3 -1.8**
RCBR IAmb IAmb 21 37 08.0
comp=Z,23nm,1.3s
**GDU01 Guandu, BA 59.90 117** *e*P **P** **21 36 30.9 -2.1**
**SCM Sheep Creek Mo 59.91 333** P **P** **21 36 33.5 +1.1**
SCM IAmb IAmb 21 36 34.4
comp=Z,22nm,1.2s
**SCM Sheep Creek Mo 59.91 333** P **P** **21 36 33.5 +1.1**
baz=114
**SEW Seward 60.19 331** P **P** **21 36 35.2 +0.9**
baz=111
**PLTB Pedras Altas 60.21 142** *e*P **P** **21 36 33.8 -1.0**
**PLTB Pedras Altas 60.21 142** P **P** **21 36 33.9 -1.0**
PLTB IAmb IAmb 21 36 35.1
comp=Z,34nm,1.1s
**KNK Knik Glacier 60.23 333** P **P** **21 36 36.1 +1.6**
baz=113
**SML Sawmill 60.33 333** P **P** **21 36 36.1 +0.8**
baz=113
**J25K Salcha River, 60.34 337** P **P** **21 36 36.2 +0.9**
**J25K Salcha River, 60.34 337** P **P** **21 36 36.0 +0.7**
baz=118
**WAT6 Susitna Watana 60.39 334** P **P** **21 36 36.9 +1.0**
baz=114
**DHY Denali Highway 60.45 335** P **P** **21 36 37.0 +0.8**
baz=115
**GHO Glory Hole Cre 60.58 333** P **P** **21 36 38.2 +1.2**
GHO IAmb IAmb 21 36 39.1
comp=Z,15nm,0.8s
**PMR Palmer 60.60 333** P **P** **21 36 37.9 +0.9**
baz=112
**BRSE Bradley Lake S 60.66 330** P **P** **21 36 38.8 +1.3**
baz=110
**RC01 Rabbit Creek A 60.68 332** P **P** **21 36 38.5 +0.9**
baz=112
**PRP Porcupine Dome 60.82 338** P **P** **21 36 39.4 +0.7**
**PRP Porcupine Dome 60.82 338** P **P** **21 36 39.1 +0.5**
baz=118
**HDA Harding Lake 60.85 336** P **P** **21 36 39.5 +0.8**
baz=116
**KDAK Kodiak Island 60.95 328** P **P** **21 36 41.0 +1.5**
KDAK IAmb IAmb 21 36 41.6
comp=Z,19nm,0.9s
**KDAK Kodiak Island 60.95 328** P **P** **21 36 40.3 +0.9**
baz=107
**IL31 60.99 336** P **P** **21 36 40.1 +0.5**
**ILAR Eielson Array 60.99 336** P **P** **21 36 40.2 +0.6**
comp=Z,1.7nm,0.5s,baz=118,slow=5.2,SNR=39
ILAR pP **pP** **21 37 28.4 -0.3**
comp=Z,1.4nm,0.9s,baz=110,slow=4.4,SNR=3.7
**ILAR Eielson Array 60.99 336** P **P** **21 36 40.4 +0.8**
**GO07 Milladeo Hill, 61.16 164** P **P** **21 36 42.3 +1.3**
**RND Reindeer 61.19 335** P **P** **21 36 42.0 +1.0**
RND IAmb IAmb 21 36 43.4
comp=Z,63nm,1.8s
**MCK McKinley 61.36 335** P **P** **21 36 42.8 +0.6**
baz=114
**CUT Chulitna 61.40 333** P **P** **21 36 43.4 +1.0**
baz=112
**COLA College 61.41 336** P **P** **21 36 42.9 +0.5**
baz=115
**TCOL CIGO, UAF Yank 61.41 336** P **P** **21 36 42.6 +0.3**
baz=115
**BMAR Burnt Mountain 61.42 340** P **P** **21 36 43.4 +0.9**
**O20K Slope Mountain 61.67 330** P **P** **21 36 44.9 +0.6**
baz=108
**LL02 Futaleuf 61.72 163** P **P** **21 36 45.5 +0.8**
LL02 IAmb IAmb 21 36 46.7
comp=Z,12nm,0.9s
**NEA2 Nenana 61.76 336** P **P** **21 36 45.4 +0.7**
baz=114
**TRF Thorofare Moun 61.80 334** P **P** **21 36 46.1 +0.9**
TRF IAmb IAmb 21 36 47.1
comp=Z,10.0nm,0.7s
**TRF Thorofare Moun 61.80 334** P **P** **21 36 46.3 +1.0**
baz=112
**H24K Noodor Dome 61.83 337** P **P** **21 36 46.5 +1.2**
**H24K Noodor Dome 61.83 337** P **P** **21 36 46.3 +0.9**
baz=116,SNR=6.3
**I23K Minto, Yukon-K 62.10 336** P **P** **21 36 47.7 +0.7**
baz=114,SNR=9.8
**BPAW Bear Paw Mtn. 62.34 335** P **P** **21 36 49.1 +0.5**
**BPAW Bear Paw Mtn. 62.34 335** P **P** **21 36 48.8 +0.2**
baz=112
**PPLA Purkeypile 62.41 333** P **P** **21 36 49.7 +0.5**
baz=110
**O19K Port Alsworth 62.52 330** P **P** **21 36 50.3 +0.4**
baz=107
**CAST Castle Rocks 62.54 334** P **P** **21 36 50.1 +0.1**
**CAST Castle Rocks 62.54 334** P **P** **21 36 50.1 +0.1**
baz=110,SNR=5.5
**MLY Manley 62.59 336** P **P** **21 36 51.1 +0.7**
baz=112,SNR=11
**P18K Big Mountain, 62.73 329** P **P** **21 36 51.6 +0.2**
baz=105
**N19K Bonanza Creek 62.77 331** P **P** **21 36 52.1 +0.4**
baz=107
**L20K Farewell, AK 63.00 333** P **P** **21 36 53.6 +0.5**
baz=108
**M19K Big River Lodg 63.05 332** P **P** **21 36 54.4 +0.9**
baz=107
**I21K Tanana 63.14 336** P **P** **21 36 54.4 +0.6**
baz=111
**L19K White Mountain 63.35 332** P **P** **21 36 56.1 +0.8**
baz=107
**K20K Telida 63.37 334** P **P** **21 36 55.9 +0.5**
K20K IAmb IAmb 21 36 56.3
comp=Z,8.9nm,0.7s
**K20K Telida 63.37 334** P **P** **21 36 56.1 +0.7**
baz=108
**H21K Melozitna Rive 63.63 336** P **P** **21 36 57.5 +0.4**
baz=111
**TOLK Toolik Lake Re 63.65 340** P **P** **21 36 57.9 +0.7**
baz=115
**J20K Nowinta River 63.66 334** P **P** **21 36 57.7 +0.4**
baz=109
**CHGN Chignik 63.68 325** P **P** **21 36 57.9 +0.4**
baz=101
**COYC Coyhaique 63.86 164** P **P** **21 36 59.2 +0.4**
COYC IAmb IAmb 21 37 01.1
comp=Z,19nm,0.9s
**TTA Tatalina 64.08 333** P **P** **21 37 00.2 +0.1**
baz=106
**IMAR Indian Mountai 64.11 336** P **P** **21 37 00.2 0.0**
**EUNU Eureka 64.27 1** P **P** **21 37 01.4 +0.2**
**SUMG Summit 64.53 16** P **P** **21 37 02.7 -0.7**
**FALS False Pass 66.27 323** P **P** **21 37 15.6 +1.4**
baz=96
**RDOG Red Dog Mine 68.14 338** P **P** **21 37 26.4 +0.7**
baz=102
**ANM Nome 68.49 334** P **P** **21 37 29.0 +1.0**
baz=98
**NIKH Nikolski High 69.36 321** P **P** **21 37 34.4 +0.8**
baz=91
**TNA Tin City 69.69 335** P **P** **21 37 36.7 +1.4**
baz=96
**GAMB Gambell 71.18 333** P **P** **21 37 46.1 +1.8**
baz=92
**ESDC Sonseca Array 78.83 52** P **P** **21 38 27.3 -1.5**
comp=Z,0.5nm,0.5s,baz=291,slow=6.1,SNR=5.4
ESDC pP **pP** **21 39 19.7 -0.5**
comp=Z,1.7nm,0.9s,baz=293,slow=5.5,SNR=4.0
**HOPE Hope Point 84.47 151** P **P** **21 38 58.5 +1.0**
**ARCES ARCESS Array B 84.47 18** P **P** **21 38 57.2 -0.3**
comp=Z,2.1nm,0.8s,baz=298,slow=5.1,SNR=5.2
**KOWA Kowa 84.57 77** P **P** **21 38 57.3 -1.8**
**CLL Collm 87.04 37** *e*P **P** **21 39 12.0 +1.5**
**FINES FINESS Array B 88.96 25** P **P** **21 39 17.4 -1.9**
comp=Z,2.4nm,0.8s,baz=270,slow=6.9,SNR=1.8
**TORD Torodi Ar. Bea 90.28 76** P **P** **21 39 24.1 -2.2**
comp=Z,0.6nm,0.7s,baz=290,slow=4.5,SNR=5.7
**TORD Torodi Ar. Bea 90.28 76** P **P** **21 39 23.5 -2.9**
**BOSA Boshof 121.45 114** PKP **PKPdf** **21 45 16.5 -1.3**
comp=Z,2.1nm,0.9s,baz=241,slow=5.7,SNR=3.1
**BOSA Boshof 121.45 114** **PKPdf** **21 45 16.3 -1.5**
**WRA Warramunga Arr 135.49 258** PKP **PKPdf** **21 45 45.7 +1.2**
comp=Z,1.0nm,0.6s,baz=51,slow=1.2,SNR=3.0
WRA SKPbc **SKPbc** **21 48 56.7 +1.0**
comp=Z,2.0nm,0.8s,baz=88,slow=3.0,SNR=9.5
**WRA Warramunga Arr 135.49 258** PKPdf **PKPdf** **21 45 45.0 +0.4**
**ASAR Alice Springs 135.93 252** PKP **PKPdf** **21 45 46.0 +0.7**
comp=Z,0.7nm,0.7s,baz=94,slow=2.4,SNR=5.4
ASAR SKPbc **SKPbc** **21 48 57.8 +0.7**
comp=Z,2.4nm,0.9s,baz=100,slow=3.1,SNR=10
**FITZ Fitzroy Crossi 143.63 261** PKP PKPbc 21 45 58.5 +1.1
comp=Z,3.6nm,0.6s,baz=98,slow=1.9,SNR=14
**CMAR Chiang Mai Arr 144.11 341** PKP **PKPab** **21 45 58.6 +0.4**
comp=Z,1.5nm,0.6s,baz=335,slow=3.2,SNR=8.2
CMAR SKPbc **SKPbc** **21 49 19.9 +0.8**
comp=Z,0.9nm,0.8s,baz=341,slow=3.0,SNR=6.9
**CMAR Chiang Mai Arr 144.11 341** **PKPab** **21 45 59.1 +0.9**
**BATI Baumata 144.49 275** PKP **PKPab** **21 46 00.8 +0.9**
comp=Z,6.3nm,0.3s,baz=272,slow=1.3,SNR=5.0

*NEIC **09** 21:35:02.1±1.2,5.°85S±0.°07×146.°76E±0.°09,h58km±6km, mb4.5/51,Error ellipse: s-maj=13.9km s-min=10.3km az=107.0*
*DJA **09** 21:35:02.7±0.5,6.°5S×4.°×14.°7E±.°,h52km±8km,M4.6/13, mB4.9/4,mb4.5/13,MLv4.8/3,Mw(mB)4.2/4*
*IDC **09** 21:35:03.7±2.5,5.°91S×146.°81E,h79km±22km,mb3.9/14, mb1 4.1/19,mb1mx4.0/35,mbtmp4.3/19,MS3.5/15, Ms1 3.5/15,ms1mx3.2/59,Error ellipse: s-maj=20.0km s-min=12.1km az=74.0*
**ISC 09 21:35:01.3±0.4,5.°83S±0.°05×146.°75E±0.°07,h52km,n146, σ1°12/133,mb4.5/36,MS3.4/11,3C-13D,Fault plane solution: NP1:**ϕ≈283.43591°,δ34.06165°,λ56.00031°. **NP2:**ϕ≈142.58792°,δ62.33295°,λ110.70927°. **Principal axes:** T Plg66.0818°, Azm90.6673°; N Plg18.2518°, Azm312.6315°; P Plg14.9194°, Azm217.5905°; **Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.58** | **174** | P | | **Pn** | **21 35 54.7** | **+0.3** |
| | 81nm,0.3s,baz=327,slow=6.3,SNR=60 | | | | | | | |
| PMG | | | | S | | **Sn** | **21 36 38.9** | **+3.4** |
| | 168nm,0.3s,baz=190,slow=19,SNR=16 | | | | | | | |
| PMG | | | | LR | | LR | 21 37 42.4 | |
| | comp=Z,1μm,18.5s,baz=346,slow=46 | | | | | | | |
| **PMG** | **Port Moresby** | **3.58** | **174** | Pn | | **Pn** | **21 35 54.6** | **+0.3** |
| PMG | | | | Sn | | **Sn** | **21 36 36.0** | **+0.5** |
| **PMG** | **Port Moresby** | **3.58** | **174** | P | | **Pn** | **21 35 54.9** | **+0.6** |
| **PMG** | **Port Moresby** | **3.58** | **174** | P | | **Pn** | **21 35 55.0** | **+0.6** |
| **RABL** | **Rabaul** | **5.63** | **73** | Pn | | **Pn** | **21 36 23.1** | **+0.4** |
| **RABL** | **Rabaul** | **5.63** | **73** | P | | **Pn** | **21 36 23.7** | **+1.1** |
| **JAY** | **Jayapura** | **6.87** | **298** | P | | **Pn** | **21 36 43.7** | **+4.2** |
| | 1.1nm,0.3s,baz=162,slow=6.0,SNR=4.7 | | | | | | | |
| **JAY** | **Jayapura** | **6.87** | **298** | P | | **Pn** | **21 36 42.4** | **+2.9** |
| | 0.1nm13nm,1.0s | | | | | | | |
| **COEN** | **Coen** | **8.81** | **203** | Pn | | **Pn** | **21 37 06.2** | **+0.1** |
| **COEN** | **Coen** | **8.81** | **203** | P | | **Pn** | **21 37 06.7** | **+0.5** |
| **MTSU** | **Mount Surprise** | **12.46** | **191** | P | | **Pn** | **21 37 56.4** | **+0.3** |
| **HNR** | **Honiara** | **13.56** | **106** | LR | | LR | 21 43 21.4 | |
| | comp=Z,113nm,18.6s,baz=332,slow=37 | | | | | | | |
| **CTA** | **Charters Tower** | **14.18** | **182** | P | | **Pn** | **21 38 20.7** | **+1.2** |
| | 1.8nm,0.3s,baz=359,slow=13,SNR=11 | | | | | | | |
| CTA | | | | LR | | LR | 21 43 52.3 | |
| | comp=Z,240nm,19.8s,baz=32,slow=38 | | | | | | | |
| **CTAO** | **Charters Tower** | **14.18** | **182** | Pn | | **Pn** | **21 38 21.1** | **+1.6** |
| **CTAO** | **Charters Tower** | **14.18** | **182** | P | | **Pn** | **21 38 21.7** | **+2.2** |
| **FAKI** | **Fak Fak** | **14.74** | **281** | | | **P** | **21 38 31.9** | **0.0** |
| **KDU** | **Kakadu** | **15.64** | **243** | P | | **P** | **21 38 39.6** | **-2.2** |
| **QIS** | **Mount Isa** | **16.20** | **205** | P | | **P** | **21 38 48.1** | **+0.1** |
| **SIJI** | **Sorong** | **16.22** | **287** | P | | **P** | **21 38 49.0** | **+0.8** |
| | 2.6nm,0.3s,baz=206,slow=18,SNR=7.2 | | | | | | | |
| **SWI** | **Sorong** | **16.23** | **287** | P | | **P** | **21 38 48.3** | **0.0** |
| | 39nm,1.0s | | | | | | | |
| **MTN** | **Manton Dam** | **16.91** | **245** | | | **P** | **21 38 55.5** | **-0.3** |
| MTN | | | | IAmb | | IAmb | 21 39 09.0 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **18.34** | **220** | P | | **P** | **21 39 10.5** | **-1.2** |
| WB0 | | | | IAmb | | IAmb | 21 39 33.8 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **WR0** | **Warramunga Arr** | **18.39** | **219** | P | | **P** | **21 39 10.9** | **-1.3** |
| WR0 | | | | IAmb | | IAmb | 21 39 37.3 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **18.49** | **220** | P | | **P** | **21 39 12.5** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | 21 39 36.4 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **18.49** | **220** | P | | **P** | **21 39 12.8** | **-0.5** |
| **WB2** | **Warramunga Arr** | **18.50** | **220** | | | **P** | **21 39 12.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **18.50** | **220** | P | | **P** | **21 39 12.8** | **-0.6** |
| | comp=Z,1.3nm,0.3s,baz=42,slow=12,SNR=52 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **21 43 41.5** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=31,slow=1.9,SNR=6.7 | | | | | | | |
| WRA | | | | LR | | LR | 21 47 59.8 | |
| | comp=Z,176nm,19.0s,baz=68,slow=42 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.50** | **220** | P | | **P** | **21 39 11.2** | **-2.3** |
| **GUMO** | **Guam** | **19.38** | **354** | LR | | LR | 21 45 47.6 | |
| | comp=Z,40nm,21.6s,baz=116,slow=33 | | | | | | | |
| **EIDS** | **Eidsvold** | **19.87** | **168** | P | | **P** | **21 39 28.0** | **-0.3** |
| EIDS | | | | IAmb | | IAmb | 21 39 48.8 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **EIDS** | **Eidsvold** | **19.87** | **168** | P | | **Pn** | **21 39 29.3** | **-1.0** |
| **LBMI** | **Labuha** | **19.89** | **284** | P | | Pn | 21 39 44.6 | +14 |
| **KNRA** | **Kununurra** | **20.18** | **240** | | | **P** | **21 39 31.0** | **-0.8** |
| KNRA | | | | IAmb | | IAmb | 21 39 51.3 | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **RMQ** | **Roma** | **20.63** | **175** | P | | Pn | 21 39 39.6 | +0.3 |
| **SANI** | **Sanana** | **21.05** | **279** | P | | **P** | **21 39 43.1** | **+1.9** |
| | comp=Z,20nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **21.62** | **214** | P | | **P** | **21 39 46.8** | **-0.5** |
| **ASAR** | **Alice Springs** | **21.62** | **214** | P | | **P** | **21 39 47.0** | **-0.2** |
| | comp=Z,3.6nm,0.4s,baz=55,slow=9.9,SNR=46 | | | | | | | |
| ASAR | | | | LR | | LR | 21 49 32.8 | |
| | comp=Z,324nm,18.4s,baz=42,slow=40 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.62** | **214** | P | | **P** | **21 39 46.5** | **-0.7** |
| **SOEI** | **Soe** | **22.61** | **259** | P | | P | 21 40 15.1 | +17 |
| **SOEI** | **Soe** | **22.61** | **259** | P | | **P** | **21 39 59.2** | **+1.1** |
| SOEI | | | | IAmb | | IAmb | 21 40 24.2 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **22.61** | **259** | P | | **P** | **21 39 58.2** | **+0.1** |
| **BATI** | **Baumata** | **23.26** | **258** | P | | **P** | **21 40 05.0** | **+0.4** |
| | comp=Z,14nm,0.6s,baz=200,slow=2.9,SNR=7.7 | | | | | | | |
| **BATI** | **Baumata** | **23.26** | **258** | P | | **P** | **21 40 05.8** | **+1.2** |
| | comp=Z,18nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.95** | **238** | P | | **P** | **21 40 10.9** | **0.0** |
| | comp=Z,13nm,0.5s,baz=48,slow=8.7,SNR=88 | | | | | | | |
| FITZ | | | | LR | | LR | 21 51 29.3 | |
| | comp=Z,90nm,18.2s,baz=57,slow=41 | | | | | | | |
| **OOD** | **Oodnadatta** | **24.24** | **204** | P | | **P** | **21 40 13.1** | **-0.4** |
| **MMRI** | **Maumere** | **24.47** | **262** | P | | **P** | **21 40 15.0** | **-0.8** |
| **MMRI** | **Maumere** | **24.47** | **262** | P | | **P** | **21 40 16.1** | **+0.3** |
| **LIFNC** | **LIFOU** | **24.82** | **129** | P | | **P** | **21 40 18.4** | **-0.4** |
| **ARMA** | **Armidale** | **24.89** | **170** | P | | **P** | **21 40 19.1** | **-0.4** |
| ARMA | | | | IAmb | | IAmb | 21 40 21.3 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **ARMA** | **Armidale** | **24.89** | **170** | P | | **P** | **21 40 19.9** | **+0.4** |
| **DZM** | **Mont Dzumac** | **24.97** | **132** | P | | **P** | **21 40 18.9** | **-1.4** |
| | comp=Z,3.0nm,0.5s,baz=192,slow=19,SNR=7.8 | | | | | | | |
| **DZM** | **Mont Dzumac** | **24.97** | **132** | P | | **P** | **21 40 18.4** | **-1.9** |
| DZM | | | | IAmb | | IAmb | 21 40 21.7 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **24.97** | **132** | P | | **P** | **21 40 20.2** | **-0.1** |
| **YATNC** | **Mamie plateau,** | **25.29** | **132** | P | | **P** | **21 40 23.5** | **+0.4** |
| **CMSA** | **Cobar Meteorol** | **25.60** | **182** | P | | **P** | **21 40 25.9** | **+0.1** |
| **LCRK** | **Leigh Creek** | **25.77** | **197** | P | | **P** | **21 40 27.6** | **+0.2** |
| **WRKA** | **Warakurna** | **26.03** | **221** | P | | **P** | **21 40 29.2** | **-0.7** |
| **STKA** | **Stephens Creek** | **26.36** | **190** | P | | **P** | **21 40 32.0** | **-0.7** |
| | comp=Z,1.7nm,0.3s,baz=354,slow=12,SNR=6.2 | | | | | | | |
| STKA | | | | LR | | LR | 21 51 08.7 | |
| | comp=Z,197nm,20.5s,baz=24,slow=37 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.36** | **190** | P | | **P** | **21 40 31.6** | **-1.1** |
| **STKA** | **Stephens Creek** | **26.36** | **190** | P | | **P** | **21 40 32.7** | **0.0** |
| **MULG** | **Mulgathing** | **27.10** | **205** | P | | **P** | **21 40 39.8** | **+0.4** |
| **HTT** | **Hallett** | **28.41** | **194** | P | | **P** | **21 40 54.3** | **+3.2** |
| **BBOO** | **Buckleboo** | **28.64** | **199** | P | | **P** | **21 40 51.4** | **-1.7** |
| BBOO | | | | IAmb | | IAmb | 21 41 18.3 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **28.64** | **199** | P | | **P** | **21 40 53.2** | **+0.1** |
| | comp=Z,8.3nm,2.2s | | | | | | | |
| **CAN** | **Canberra** | **29.42** | **176** | P | | **P** | **21 40 59.4** | **-0.7** |
| CAN | | | | IAmb | | IAmb | 21 41 02.3 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **MBWA** | **Marble Bar** | **30.29** | **237** | P | | **P** | **21 41 07.4** | **-0.5** |
| **MBWA** | **Marble Bar** | **30.29** | **237** | P | | **P** | **21 41 08.3** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **30.38** | **236** | P | | **P** | **21 41 08.4** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **30.38** | **236** | P | | **P** | **21 41 08.2** | **-0.5** |
| PSA00 | | | | IAmb | | IAmb | 21 41 14.9 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.38** | **236** | P | | **P** | **21 41 08.4** | **-0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **31.16** | **39** | T | | T | 22 14 07.9 | |
| | baz=220,slow=75,SNR=25 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.16** | **39** | T | | T | 22 14 06.1 | |
| | baz=220,slow=75,SNR=9.5 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.18** | **39** | T | | T | 22 14 09.1 | |
| | baz=220,slow=75,SNR=11 | | | | | | | |
| **TOO** | **Toolangi** | **31.62** | **182** | P | | **P** | **21 41 19.0** | **-0.4** |
| TOO | | | | IAmb | | IAmb | 21 41 46.2 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.20** | **37** | T | | T | 22 15 25.4 | |
| | baz=219,slow=76,SNR=18 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.22** | **38** | T | | T | 22 15 27.9 | |
| | baz=219,slow=76,SNR=18 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.22** | **37** | T | | T | 22 15 26.7 | |
| | baz=219,slow=76,SNR=26 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **32.44** | **263** | P | | **P** | **21 41 24.0** | **-2.9** |
| JAGI | | | | IAmb | | IAmb | 21 41 31.7 | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **32.44** | **263** | P | | **P** | **21 41 28.4** | **+1.5** |
| **MEEK** | **Meekatharra** | **33.88** | **229** | P | | **P** | **21 41 39.1** | **-0.2** |
| **SBUM** | **Sibu** | **35.45** | **282** | P | | **P** | **21 41 53.5** | **+0.4** |
| SBUM | | | | IAmb | | IAmb | 21 42 08.4 | |
| | comp=Z,8.3nm,1.4s | | | | | | | |
| **UGM** | **Wanagama** | **36.02** | **265** | P | | **P** | **21 41 56.6** | **-1.4** |
| **UGM** | **Wanagama** | **36.02** | **265** | P | | **P** | **21 41 57.8** | **-0.1** |
| **JOW** | **Kunigami** | **37.07** | **332** | LR | | LR | 21 53 43.6 | |
| | comp=Z,68nm,21.1s,baz=70,slow=30 | | | | | | | |
| **JOW** | **Kunigami** | **37.07** | **332** | P | | **P** | **21 42 07.3** | **+0.6** |
| **MORW** | **Morawa** | **37.10** | **228** | P | | **P** | **21 42 06.2** | **-0.7** |
| MORW | | | | IAmb | | IAmb | 21 42 25.4 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **BLDU** | **Ballidu** | **37.48** | **225** | P | | **P** | **21 42 09.6** | **-0.5** |
| **YULB** | **Yu-li** | **38.23** | **320** | P | | **P** | **21 42 15.9** | **-0.7** |
| YULB | | | | IAmb | | IAmb | 21 42 45.0 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.49** | **222** | P | | **P** | **21 42 17.7** | **-0.9** |
| **TPUB** | **Ta-pu** | **38.59** | **320** | P | | **P** | **21 42 18.5** | **-1.1** |
| **SSLB** | **Suanglung** | **38.73** | **320** | P | | **P** | **21 42 20.6** | **-0.2** |
| **LEM** | **Lembang** | **38.90** | **266** | LR | | LR | 22 02 45.3 | |
| | comp=Z,56nm,18.1s,baz=356,slow=43 | | | | | | | |
| **JSU** | **Suzuyama** | **40.25** | **338** | P | | **P** | **21 42 31.3** | **-2.0** |
| **KNMB** | **Chin-men Tao** | **40.86** | **319** | P | | **P** | **21 42 38.0** | **-0.4** |
| **QRZ** | **Quartz Range** | **41.80** | **150** | P | | **P** | **21 42 47.0** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **42.90** | **350** | LR | | LR | 22 01 11.8 | |
| | comp=Z,38nm,19.3s,baz=182,slow=36 | | | | | | | |
| **KHZ** | **Kahutara** | **43.49** | **151** | P | | **P** | **21 43 00.6** | **+1.0** |
| **BFZ** | **Birch Farm** | **43.61** | **147** | P | | **P** | **21 43 01.0** | **+0.4** |
| **KSRS** | **Korea Array** | **46.50** | **339** | P | | **P** | **21 43 24.4** | **+0.9** |
| | comp=Z,1.1nm,0.4s,baz=156,slow=8.7,SNR=9.8 | | | | | | | |
| KSRS | | | | LR | | LR | 22 00 27.6 | |
| | comp=Z,38nm,21.9s,baz=160,slow=33 | | | | | | | |
| **IPM** | **Ipoh** | **46.79** | **282** | P | | **P** | **21 43 26.4** | **+0.2** |
| IPM | | | | IAmb | | IAmb | 21 43 52.1 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **KULM** | **Kulim** | **47.33** | **283** | P | | **P** | **21 43 30.0** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **51.55** | **346** | P | | **P** | **21 44 02.6** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=150,slow=6.4,SNR=5.6 | | | | | | | |
| **HNS** | **HongShan** | **52.37** | **328** | P | | **P** | **21 44 07.8** | **-0.4** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.95** | **298** | P | | **P** | **21 44 13.4** | **+0.5** |
| | comp=Z,0.8nm,0.5s,baz=132,slow=4.9,SNR=6.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.95** | **298** | P | | **P** | **21 44 12.4** | **-0.6** |
| **XAN** | **Xi'an** | **53.39** | **321** | P | | **P** | **21 44 15.9** | **-0.1** |
| XAN | | | | pP | | pP | 21 44 32.0 | +2.3 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| **RAR** | **Rarotonga** | **53.93** | **112** | LR | | LR | 22 03 28.0 | |
| | comp=Z,29nm,21.7s,baz=300,slow=32 | | | | | | | |
| **PZH** | **PanZhiHua** | **54.16** | **309** | P | | **P** | **21 44 24.3** | **+2.5** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,110nm,5.2s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.44** | **8** | P | | **P** | **21 44 59.0** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **59.44** | **8** | P | | **P** | **21 44 59.6** | **+1.0** |
| | comp=Z,1.4nm,0.6s,baz=172,slow=6.4,SNR=8.3 | | | | | | | |
| PETK | | | | LR | | LR | 22 05 57.1 | |
| | comp=Z,61nm,21.6s,baz=161,slow=31 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.44** | **8** | P | | **P** | **21 44 58.8** | **+0.1** |
| **GTA** | **Gaotai** | **62.45** | **320** | PKP | | **P** | **21 45 19.5** | **0.0** |
| GTA | | | | sPKP | | | 21 47 00.0 | |
| GTA | | | | LR | | LR | | |
| | comp=N,120nm,16.4s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=E,100nm,18.2s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=Z,140nm,17.5s | | | | | | | |
| **SONM** | **Songino Array** | **64.13** | **331** | P | | **P** | **21 45 30.7** | **+0.3** |
| | comp=Z,0.7nm,0.4s,baz=150,slow=5.8,SNR=16 | | | | | | | |
| **SONM** | **Songino Array** | **64.13** | **331** | P | | **P** | **21 45 29.9** | **-0.6** |
| SONM | | | | IAmb | | IAmb | 21 45 31.3 | |
| | comp=Z,4.1nm,1.4s | | | | | | | |
| **VNDA** | **Vanda** | **72.10** | **177** | P | | **P** | **21 46 18.6** | **-1.2** |
| | comp=Z,2.6nm,0.5s,baz=337,slow=7.1,SNR=24 | | | | | | | |
| **VNDA** | **Vanda** | **72.10** | **177** | P | | **P** | **21 46 19.5** | **-0.3** |
| VNDA | | | | IAmb | | IAmb | 21 46 34.6 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **77.21** | **321** | P | | **P** | **21 46 48.7** | **-1.2** |
| **MKAR** | **Makanchi Array** | **77.21** | **321** | P | | **P** | **21 46 48.8** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=98,slow=8.4,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **77.21** | **321** | P | | **P** | **21 46 48.6** | **-1.3** |
| **MAKZ** | **Makanchi** | **77.41** | **320** | P | | **P** | **21 46 49.6** | **-1.4** |
| **TIXI** | **Tiksi** | **78.22** | **354** | P | | **P** | **21 46 54.8** | **-0.1** |
| **ZAA0** | **Zalesovo Array** | **78.73** | **328** | P | | **P** | **21 46 56.8** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **78.73** | **328** | P | | **P** | **21 46 56.0** | **-2.1** |
| | comp=Z,0.7nm,0.4s,baz=119,slow=6.5,SNR=4.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **78.73** | **328** | P | | **P** | **21 46 56.4** | **-1.7** |
| **L19K** | **White Mountain** | **81.05** | **24** | P | | **P** | **21 47 11.1** | **+0.5** |
| L19K | | | | IAmb | | IAmb | 21 47 11.7 | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **K20K** | **Telida** | **81.97** | **23** | P | | **P** | **21 47 15.7** | **+0.4** |
| K20K | | | | IAmb | | IAmb | 21 47 37.9 | |
| | comp=Z,3.5nm,1.3s | | | | | | | |
| **J20K** | **Nowinta River** | **82.35** | **22** | P | | **P** | **21 47 17.7** | **+0.4** |
| **PPLA** | **Purkeypile** | **82.48** | **24** | P | | **P** | **21 47 18.1** | **-0.1** |
| PPLA | | | | IAmb | | IAmb | 21 47 32.2 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **CAST** | **Castle Rocks** | **82.78** | **23** | P | | **P** | **21 47 19.7** | **+0.1** |
| CAST | | | | IAmb | | IAmb | 21 47 32.2 | |
| | comp=Z,3.1nm,1.3s | | | | | | | |
| **IMAR** | **Indian Mountai** | **83.42** | **21** | P | | **P** | **21 47 22.6** | **-0.3** |
| **MLY** | **Manley** | **84.05** | **22** | P | | **P** | **21 47 26.1** | **-0.1** |
| **QSPA** | **South Pole Qui** | **84.14** | **180** | P | | **P** | **21 47 25.9** | **-0.8** |
| QSPA | | | | IAmb | | IAmb | 21 47 26.8 | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **IL31** | | **85.42**

*NEIC **09** 21:54:59.2±1.6, 36°.82S±0°.06×73°.9W±0°.1, h20km±5km, mb4.2/3, ML4.3(GUC), Error ellipse: s-maj=13.1km s-min=7.8km az=103.0*
*GUC **09** 21:54:59.8±0.7, 36°.84S×73°.77W, h26km±4km, ML4.3*
**ISC 09 21:54:56.1±2.9, 36°.80S±0°.05×73°.95W±0°.10, h6km±17km, n43, σ1s07/48, 1C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI05** | **Punta Hualpn** | **0.61** | **85** | ⇓*iP* | **Pb** | **21 55 09.4** | **+0.1** |
| BI05 | | | | *i* S | **Sg** | **21 55 15.3** | **-0.7** |
| BI05 | | | | IAML | | 21 55 16.8 | |
| | comp=N,43μm,0.2s | | | | | | |
| **BI05** | **Punta Hualpn** | **0.61** | **85** | | **Pb** | **21 55 09.3** | **+0.1** |
| BI05 | | | | | **Sg** | **21 55 15.5** | **-0.5** |
| **LC02** | **Puerto Saavedr** | **2.04** | **167** | Pn | **Pn** | **21 55 31.6** | **+0.6** |
| **ML02** | **Panimavida** | **2.30** | **64** | *eP* | **Pn** | **21 55 35.0** | **+0.4** |
| ML02 | | | | *i* S | **Sn** | **21 56 02.3** | **-0.8** |
| ML02 | | | | IAML | | 21 56 21.9 | |
| | comp=N,3μm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **2.30** | **64** | Pn | **Pn** | **21 55 34.3** | **-0.2** |
| **GO05** | **Huala** | **2.43** | **43** | *eP* | **Pn** | **21 55 37.3** | **+0.9** |
| GO05 | | | | *i* S | **Sb** | **21 56 11.2** | **+0.7** |
| GO05 | | | | IAML | | 21 56 19.5 | |
| | comp=N,1μm,0.5s | | | | | | |
| **GO05** | **Huala** | **2.43** | **43** | Pn | **Pn** | **21 55 37.5** | **+1.1** |
| **LC01** | **Cunco** | **2.66** | **142** | *eP* | **Pn** | **21 55 40.4** | **+0.8** |
| LC01 | | | | *i* S | **Sn** | **21 56 10.9** | **-1.2** |
| **LC01** | **Cunco** | **2.66** | **142** | Pn | **Pn** | **21 55 40.4** | **+0.8** |
| **LR03** | **Panguipulli** | **3.10** | **156** | *eP* | **Pn** | **21 55 46.5** | **+0.9** |
| **LR03** | **Panguipulli** | **3.10** | **156** | Pn | **Pn** | **21 55 45.4** | **-0.2** |
| **LR04** | **Corral** | **3.10** | **172** | Pn | **Pn** | **21 55 46.5** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **3.27** | **53** | *eP* | **Pn** | **21 55 49.1** | **+1.1** |
| BO02 | | | | IAML | | 21 56 41.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| **BO02** | **Sierra Bellavi** | **3.27** | **53** | Pn | **Pn** | **21 55 49.0** | **+1.1** |
| **BO01** | **Tunca** | **3.35** | **45** | *eP* | **Pn** | **21 55 50.4** | **+1.3** |
| **BO01** | **Tunca** | **3.35** | **45** | Pn | **Pn** | **21 55 50.6** | **+1.6** |
| **MT01** | **Popeta** | **3.67** | **38** | | **Pn** | **21 55 53.8** | **+0.4** |
| **VA05** | **Santo Domingo** | **3.68** | **32** | | **Pn** | **21 55 54.2** | **+0.8** |
| **MT09** | **Talagante** | **3.87** | **40** | ⇑*iP* | **Pn** | **21 55 57.8** | **+1.4** |
| **MT09** | **Talagante** | **3.87** | **40** | Pn | **Pn** | **21 55 57.7** | **+1.4** |
| **BO04** | **La Punta** | **3.92** | **45** | *eP* | **Pn** | **21 55 57.9** | **+1.0** |
| **BO04** | **La Punta** | **3.92** | **45** | Pn | **Pn** | **21 55 57.8** | **+0.9** |
| **VA01** | **Torpederas** | **4.22** | **27** | Pn | **Pn** | **21 56 01.3** | **+0.3** |
| **MT02** | **Curacav** | **4.22** | **34** | | **Pn** | **21 56 01.8** | **+0.8** |
| **LMEL** | **Las Melosas** | **4.25** | **47** | Pn | **Pn** | **21 56 03.0** | **+1.5** |
| **LL04** | **Puerto Octay** | **4.28** | **164** | Pn | **Pn** | **21 56 03.0** | **+1.2** |
| **MT05** | **Renca** | **4.30** | **39** | | **Pn** | **21 56 03.1** | **+0.9** |
| **ROC1** | **El Roble** | **4.52** | **33** | Pn | **Pn** | **21 56 05.2** | **-0.1** |
| **PEL** | **Peldehue** | **4.53** | **37** | | **Pn** | **21 56 06.3** | **+1.0** |
| **LL05** | **Los Muermos** | **4.61** | **176** | Pn | **Pn** | **21 56 06.7** | **+0.4** |
| **PLCA** | **Paso Flores** | **4.74** | **147** | | **Pn** | **21 56 10.1** | **+1.9** |
| **VA06** | **Catapilco** | **4.76** | **28** | | **Pn** | **21 56 08.9** | **+0.5** |
| **VA03** | **San Esteban** | **4.91** | **36** | Pn | **Pn** | **21 56 11.6** | **+1.1** |
| **CO02** | **Combarbal** | **6.10** | **25** | Pn | **Pn** | **21 56 28.0** | **+1.1** |
| **CO06** | **Fray Jorge** | **6.41** | **18** | Pn | **Pn** | **21 56 31.3** | **+0.2** |
| **CO03** | **El Pedregal** | **6.54** | **25** | Pn | **Pn** | **21 56 34.2** | **+1.3** |
| **LL02** | **Futaleuf** | **6.58** | **166** | Pn | **Pn** | **21 56 35.4** | **+2.0** |
| **ZON** | **Zonda** | **6.83** | **41** | Pn | **Pn** | **21 56 38.4** | **+1.6** |
| **GO04** | **Tololo Observa** | **7.12** | **23** | Pn | **Pn** | **21 56 41.8** | **+0.8** |
| **AC02** | **Maricunga** | **10.75** | **24** | Pn | **Pn** | **21 57 32.7** | **+1.7** |
| **PB09** | **IPOC Station P** | **15.50** | **17** | Pn | **Pn** | **21 58 33.7** | **-1.9** |
| PB09 | | | | IAmb | IAmb | 21 59 01.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **PB01** | **IPOC Station P** | **16.18** | **15** | Pn | **Pn** | **21 58 44.3** | **+0.1** |
| PB01 | | | | IAmb | IAmb | 21 59 01.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **ITAB** | **Concordia** | **20.78** | **69** | P | **P** | **21 59 37.4** | **-0.5** |
| ITAB | | | | IAmb | IAmb | 21 59 52.5 | |
| | comp=Z,40nm,1.4s | | | | | | |

*IDC **09** 22:35:56.7±0.8, 15°.86S×173°.21W, h0km, mb4.3/11, mb1 4.5/12, mb1mx4.3/29, mbtmp4.3/12, ML4.1/1, MS4.0/33, Ms1 4.0/33, ms1mx3.8/69, Error ellipse: s-maj=44.3km s-min=15.3km az=139.0*
*NEIC **09** 22:35:57.0±1.6, 16°.03S±0°.06×172°.8W±0°.1, h10km±1km, mb4.7/30, Error ellipse: s-maj=19.2km s-min=10.2km az=277.0*
*NOU **09** 22:36:26.5, 14°.02S×172°.00W, h31km, MLv3.2/5, Samoa Islands*
**ISC 09 22:35:57.0±0.5, 16°.04S±0°.06×172°.78W±0°.09, h10km, n106, σ1s52/76, mb4.6/23, MS4.2/31, 7C-5D, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.32** | **25** | Pn | **Pn** | **22 36 35.7** | **+0.3** |
| | 49nm,0.3s,baz=73,slow=1.7,SNR=33 | | | | | | |
| AFI | | | | Sn | **Sn** | **22 37 03.1** | **-1.0** |
| | 144nm,0.3s,baz=216,slow=21,SNR=4.8 | | | | | | |
| AFI | | | | LR | LR | 22 37 34.9 | |
| | comp=Z,1μm,20.8s,baz=274,slow=41 | | | | | | |
| **AFI** | **Afiamalu** | **2.32** | **25** | Pn | **Pn** | **22 36 34.8** | **-0.6** |
| AFI | | | | Sn | **Sn** | **22 36 59.5** | **-4.6** |
| **AFI** | **Afiamalu** | **2.32** | **25** | P | **Pn** | **22 36 35.2** | **-0.2** |
| **NIUE** | **Niue** | **4.07** | **138** | | **Pn** | **22 36 58.6** | **-0.7** |
| **MSVF** | **Nonsavu** | **8.94** | **258** | Pn | **Pn** | **22 38 09.9** | **+3.5** |
| | 0.7nm,0.3s,baz=101,slow=11,SNR=23 | | | | | | |
| MSVF | | | | LR | LR | 22 40 58.5 | |
| | comp=Z,1μm,19.7s,baz=72,slow=35 | | | | | | |
| **RAR** | **Rarotonga** | **13.35** | **115** | LR | LR | 22 43 21.9 | |
| | comp=Z,321nm,20.3s,baz=278,slow=32 | | | | | | |
| **MARNC** | **Mare, Loyalty** | **18.96** | **250** | P | **P** | **22 40 17.1** | **-1.4** |
| **PINNC** | **Pines Island,** | **19.77** | **248** | | **P** | **22 40 27.4** | **+0.1** |
| PINNC | | | | IAmb | IAmb | 22 40 32.5 | |
| | comp=Z,68nm,1.5s | | | | | | |
| **OUENC** | **Ouen Island, N** | **20.26** | **249** | P | **P** | **22 40 32.2** | **-0.5** |
| OUENC | | | | IAmb | IAmb | 22 40 38.9 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.53** | **250** | *eP* | Pn | 22 40 39.5 | +1.5 |
| | comp=Z,55nm,1.1s | | | | | | |
| DZM | | | | *eLR* | LR | 22 45 29.5 | |
| | comp=Z,952nm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.53** | **250** | P | Pn | 22 40 37.8 | -0.2 |
| | comp=Z,19nm,0.8s,baz=85,slow=15,SNR=13 | | | | | | |
| DZM | | | | LR | LR | 22 47 08.0 | |
| | comp=Z,746nm,21.4s,baz=96,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.53** | **250** | | **P** | **22 40 34.9** | **-1.0** |
| DZM | | | | IAmb | IAmb | 22 40 42.8 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **ONTNC** | **Ouen Toro** | **20.58** | **249** | | **P** | **22 40 35.9** | **-0.3** |
| ONTNC | | | | IAmb | IAmb | 22 40 43.7 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **PAE** | **Paea** | **22.26** | **97** | *eT* | T | 23 03 45.9 | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **22.26** | **97** | LR | LR | 22 47 55.5 | |
| | comp=Z,231nm,18.3s,baz=260,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **22.26** | **97** | *eLR* | LR | 22 46 15.4 | |
| | comp=Z,354nm,23.0s | | | | | | |
| **URZ** | **Urewera** | **23.86** | **200** | P | **P** | **22 41 12.5** | **+1.9** |
| | comp=Z,5.8nm,0.6s,baz=35,slow=7.8,SNR=5.2 | | | | | | |
| **URZ** | **Urewera** | **23.86** | **200** | P | **P** | **22 41 10.4** | **-0.2** |
| URZ | | | | IAmb | IAmb | 22 41 27.5 | |
| | comp=Z,37nm,1.4s | | | | | | |
| **HNR** | **Honiara** | **27.39** | **281** | LR | LR | 22 50 56.1 | |
| | comp=Z,686nm,21.0s,baz=155,slow=33 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **32.62** | **81** | *eT* | T | 23 16 44.8 | |
| | comp=Z,40nm,0.3s | | | | | | |
| **DCZ** | **Deep Cove** | **33.84** | **206** | P | **P** | **22 42 39.8** | **+0.3** |
| **ARMA** | **Armidale** | **35.54** | **240** | P | **P** | **22 42 53.3** | **-1.3** |
| ARMA | | | | IAmb | IAmb | 22 43 03.0 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **39.09** | **258** | LR | LR | 22 57 35.4 | |
| | comp=Z,235nm,19.8s,baz=80,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **39.58** | **275** | LR | LR | 22 57 30.6 | |
| | comp=Z,149nm,20.4s,baz=138,slow=33 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.76** | **330** | T | T | 23 27 03.9 | |
| | baz=150,slow=76,SNR=5.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.76** | **330** | T | T | 23 26 58.7 | |
| | baz=150,slow=76,SNR=5.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.78** | **330** | T | T | 23 27 04.5 | |
| | baz=150,slow=76,SNR=5.1 | | | | | | |
| **TOO** | **Toolangi** | **42.54** | **231** | P | **P** | **22 43 51.6** | **-1.4** |
| **COEN** | **Coen** | **42.54** | **267** | P | **P** | **22 43 52.4** | **-0.9** |
| **STKA** | **Stephens Creek** | **44.25** | **241** | P | **P** | **22 44 04.5** | **-2.3** |
| | comp=Z,5.5nm,0.9s,baz=83,slow=7.3,SNR=11 | | | | | | |
| STKA | | | | LR | LR | 22 59 49.7 | |
| | comp=Z,108nm,20.7s,baz=33,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **44.25** | **241** | P | **P** | **22 44 05.2** | **-1.7** |
| **JAY** | **Jayapura** | **47.70** | **281** | LR | LR | 23 02 46.0 | |
| | comp=Z,101nm,21.3s,baz=306,slow=34 | | | | | | |
| **BBOO** | **Buckleboo** | **49.02** | **240** | P | **P** | **22 44 43.6** | **-0.7** |
| BBOO | | | | IAmb | IAmb | 22 44 52.8 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **50.28** | **257** | P | **P** | **22 44 52.2** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 22 45 00.2 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.29** | **257** | P | **P** | **22 44 52.3** | **-1.9** |
| | comp=Z,1.4nm,0.8s,baz=94,slow=6.7,SNR=13 | | | | | | |
| WRA | | | | LR | LR | 23 04 53.2 | |
| | comp=Z,265nm,19.2s,baz=104,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.29** | **257** | P | **P** | **22 44 52.3** | **-1.9** |
| **AS31** | **Alice Springs** | **50.49** | **252** | P | **P** | **22 44 54.2** | **-1.5** |
| **ASAR** | **Alice Springs** | **50.49** | **252** | P | **P** | **22 44 53.1** | **-2.5** |
| | comp=Z,9.4nm,0.8s,baz=84,slow=8.4,SNR=31 | | | | | | |
| ASAR | | | | LR | LR | 23 05 16.0 | |
| | comp=Z,282nm,18.6s,baz=100,slow=35 | | | | | | |
| **MTN** | **Manton Dam** | **54.28** | **266** | P | **P** | **22 45 22.9** | **-1.0** |
| **FORT** | **Forrest** | **55.67** | **243** | P | **P** | **22 45 31.5** | **-2.3** |
| **SIJI** | **Sorong** | **57.16** | **280** | LR | LR | 23 08 53.3 | |
| | comp=Z,124nm,20.9s,baz=274,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **58.67** | **258** | LR | LR | 23 09 33.9 | |
| | comp=Z,185nm,19.4s,baz=107,slow=35 | | | | | | |
| **SOEI** | **Soe** | **61.50** | **267** | P | **P** | **22 46 13.5** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **63.60** | **254** | P | **P** | **22 46 27.0** | **-1.6** |
| PSA00 | | | | IAmb | IAmb | 22 46 38.1 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **63.60** | **254** | P | **P** | **22 46 27.8** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 22 46 34.0 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **69.42** | **352** | LR | LR | 23 12 37.6 | |
| | comp=Z,86nm,20.1s,baz=7.5,slow=32 | | | | | | |
| **ISA** | **Isabella, Lake** | **72.69** | **44** | P | **P** | **22 47 24.3** | **-1.1** |
| ISA | | | | IAmb | IAmb | 22 47 29.1 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **LPIG** | **La Paz** | **72.86** | **58** | LR | LR | 23 11 05.2 | |
| | comp=Z,118nm,18.9s,baz=65,slow=29 | | | | | | |
| **PFO** | **Pinyon Flats O** | **72.91** | **47** | LR | LR | 23 13 50.5 | |
| | comp=Z,120nm,20.0s,baz=334,slow=31 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.74** | **37** | LR | LR | 23 13 26.6 | |
| | comp=Z,129nm,19.7s,baz=244,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **74.01** | **180** | P | **P** | **22 47 32.4** | **-0.5** |
| QSPA | | | | IAmb | IAmb | 22 47 35.5 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.40** | **42** | P | **P** | **22 47 38.7** | **+3.1** |
| | comp=Z,2.7nm,0.9s,baz=229,slow=10,SNR=15 | | | | | | |
| NVAR | | | | LR | LR | 23 14 00.1 | |
| | comp=Z,129nm,18.5s,baz=225,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.40** | **42** | P | **P** | **22 47 36.5** | **+0.9** |
| **NV11** | **Mina Array Sit** | **74.49** | **42** | P | **P** | **22 47 37.0** | **+0.9** |
| NV11 | | | | IAmb | IAmb | 22 47 40.2 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **77.03** | **315** | LR | LR | 23 16 01.9 | |
| | comp=Z,28nm,21.8s,baz=150,slow=31 | | | | | | |
| **U15A** | **North Rim** | **77.30** | **46** | P | **P** | **22 47 51.8** | **-0.5** |
| U15A | | | | IAmb | IAmb | 22 48 07.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **ELK** | **Elko** | **77.66** | **41** | LR | LR | 23 15 44.0 | |
| | comp=Z,136nm,20.1s,baz=248,slow=31 | | | | | | |
| **BBB** | **Bella Bella** | **78.18** | **26** | LR | LR | 23 17 39.5 | |
| | comp=Z,144nm,19.9s,baz=322,slow=32 | | | | | | |
| **LEM** | **Lembang** | **78.19** | **266** | LR | LR | 23 23 51.4 | |
| | comp=Z,58nm,18.0s,baz=188,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.25** | **323** | LR | LR | 23 14 35.4 | |
| | comp=Z,72nm,21.6s,baz=61,slow=30 | | | | | | |
| **E07A** | **Sunnyside** | **78.38** | **34** | P | **P** | **22 47 58.0** | **+0.2** |
| E07A | | | | IAmb | IAmb | 22 48 00.9 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **GHO** | **Glory Hole Cre** | **79.83** | **11** | P | **P** | **22 48 05.8** | **+0.4** |
| GHO | | | | IAmb | IAmb | 22 48 07.8 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **80.19** | **12** | P | **P** | **22 48 07.8** | **+0.4** |
| **TXAR** | **Lajitas Array** | **80.47** | **56** | P | **P** | **22 48 11.0** | **+1.4** |
| | comp=Z,0.8nm,0.8s,baz=238,slow=8.4,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.47** | **56** | P | **P** | **22 48 08.7** | **-0.9** |
| **ANMO** | **Albuquerque** | **80.75** | **50** | LR | LR | 23 16 50.5 | |
| | comp=Z,93nm,19.1s,baz=308,slow=30 | | | | | | |
| **NEW** | **Newport** | **80.89** | **34** | LR | LR | 23 18 33.6 | |
| | comp=Z,83nm,18.9s,baz=180,slow=32 | | | | | | |
| **J20K** | **Nowinta River** | **81.24** | **8** | P | **P** | **22 48 13.4** | **+0.6** |
| J20K | | | | IAmb | IAmb | 22 48 15.8 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **MCK** | **McKinley** | **81.63** | **10** | P | **P** | **22 48 15.7** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **81.84** | **14** | P | **P** | **22 48 16.7** | **+0.5** |
| **PDAR** | **Pinedale Array** | **82.34** | **42** | P | **P** | **22 48 21.6** | **+2.2** |
| | comp=Z,1.8nm,0.8s,baz=224,slow=4.3,SNR=14 | | | | | | |
| PDAR | | | | LR | LR | 23 19 02.1 | |
| | comp=Z,153nm,18.2s,baz=259,slow=31 | | | | | | |
| **PDAR** | **Pinedale Array** | **82.34** | **42** | P | **P** | **22 48 17.5** | **-1.9** |
| **IL31** | | **82.95** | **11** | P | **P** | **22 48 21.6** | **-0.1** |
| **ILAR** | **Eielson Array** | **82.95** | **11** | P | **P** | **22 48 23.1** | **+1.4** |
| | comp=Z,1.8nm,0.8s,baz=228,slow=6.4,SNR=27 | | | | | | |
| **ILAR** | **Eielson Array** | **82.95** | **11** | P | **P** | **22 48 22.3** | **+0.5** |
| **CMIG** | **Matias Romero** | **83.53** | **70** | LR | LR | 23 18 41.7 | |
| | comp=Z,96nm,18.1s,baz=201,slow=31 | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.76** | **11** | P | **P** | **22 48 36.7** | **+0.6** |
| **MAW** | **Mawson** | **87.39** | **198** | LR | LR | 23 28 08.1 | |
| | comp=Z,83nm,18.3s,baz=68,slow=36 | | | | | | |
| **INK** | **Inuvik** | **88.74** | **14** | P | **P** | **22 48 50.1** | **-0.2** |
| | comp=Z,1.9nm,1.0s,baz=226,slow=5.2,SNR=4.6 | | | | | | |
| INK | | | | LR | LR | 23 24 59.1 | |
| | comp=Z,105nm,18.2s,baz=184,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.44** | **23** | P | **P** | **22 48 59.6** | **+1.2** |
| | comp=Z,1.2nm,0.9s,baz=236,slow=4.5,SNR=13 | | | | | | |
| **ATAH** | **Atahualpa** | **92.24** | **98** | LR | LR | 23 20 57.3 | |
| | comp=Z,126nm,20.1s,baz=307,slow=29 | | | | | | |
| **PZH** | **PanZhiHua** | **93.09** | **297** | P | **P** | **22 49 12.7** | **+0.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.38** | **288** | P | **P** | **22 49 13.8** | **+0.7** |
| | comp=Z,1.2nm,0.9s,baz=99,slow=2.6,SNR=8.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.38** | **288** | P | **P** | **22 49 11.8** | **-1.3** |
| **LVC** | **Limon Verde** | **96.20** | **116** | LR | LR | 23 24 34.6 | |
| | comp=Z,98nm,18.3s,baz=336,slow=30 | | | | | | |
| **TKL** | **Tuckaleechee C** | **98.38** | **55** | LR | LR | 23 32 19.6 | |
| | comp=Z,114nm,18.7s,baz=64,slow=34 | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **145.21** | **343** | *e*PKP | **PKPdf** | **22 55 36.3** | **+1.3** |
| **MORC** | **Moravsky Berou** | **145.32** | **348** | ⇓P | **PKPdf** | **22 55 36.5** | **+1.3** |
| **MORC** | **Moravsky Berou** | **145.32** | **348** | *e*PKP | **PKPdf** | **22 55 36.4** | **+1.2** |
| **KMBO** | **Kilima Mbogo** | **145.79** | **243** | PKPbc | **PKPab** | **22 55 39.5** | **+1.3** |
| | comp=Z,2.0nm,0.8s,baz=203,slow=6.6,SNR=7.0 | | | | | | |
| **VRAC** | **Vranov** | **145.95** | **349** | *e*PKP | **PKPab** | **22 55 38.7** | **+1.3** |
| **VRI** | **Vrincioaia** | **146.07** | **335** | ⇑P | **PKiKP** | **22 55 47.0** | **+6.2** |
| **TPGR** | **Topolog** | **146.16** | **332** | ⇓P | **PKPab** | **22 55 39.1** | **+0.7** |
| **KRUC** | **Moravsky** | **146.22** | **349** | *e*PKP | **PKPab** | **22 55 39.1** | **+0.7** |
| **DOPR** | **Dopca** | **146.51** | **337** | ⇓P | **PKPab** | **22 55 40.1** | **+0.5** |
| **MLR** | **Muntele Rosu** | **146.69** | **336** | ⇑P | **PKPab** | **22 55 41.3** | **+0.8** |
| **DRGR** | | **146.74** | **340** | ⇑P | **PKPab** | **22 55 40.5** | **0.0** |
| **GERES** | **GERESS Array B** | **146.85** | **352** | PKPbc | **PKPbc** | **22 55 39.7** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=56,slow=3.4,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.03** | **321** | PKPbc | **PKPbc** | **22 55 40.5** | **-0.1** |
| | comp=Z,4.3nm,0.8s,baz=113,slow=2.8,SNR=11 | | | | | | |
| **VOIR** | | **147.08** | **337** | ⇓P | **PKPab** | **22 55 42.3** | **+0.3** |
| **ARR** | **Arges** | **147.30** | **337** | ⇑P | **PKiKP** | **22 55 43.8** | **+0.4** |
| **BZS** | **Buzias** | **148.13** | **341** | ⇑P | **PKiKP** | **22 55 44.5** | **-0.5** |
| **HERR** | **Herculane** | **148.52** | **339** | ⇑P | **PKPbc** | **22 55 44.4** | **+0.2** |
| **VTS** | **Vitosha** | **150.16** | **336** | ⇑P | **PKiKP** | **22 55 50.3** | **+0.8** |
| **LEF** | **Lefka** | **150.19** | **314** | ⇓P | **PKiKP** | **22 55 49.8** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **173.93** | **117** | PKP | **PKPdf** | **22 56 07.8** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=170,slow=0.7,SNR=5.8 | | | | | | |

*NEIC **09** 22:37:27.0±2.0, 22°.65S±0°.05×66°.73W±0°.08, h190km±5km, mb4.7/107, Md4.6(SJA), Error ellipse: s-maj=10.7km s-min=7.3km az=74.0*
*IDC **09** 22:37:27.1±0.7, 22°.53S×66°.72W, h194km±7km, mb4.1/15, mb1 4.2/22, mb1mx4.1/35, mbtmp4.6/22, Error ellipse: s-maj=13.9km s-min=10.1km az=19.0*
*VAO **09** 22:37:28.1±0.3, 22°.53S×66°.71W, h200km, mb4.6*
*SJA **09** 22:37:28.2±2.0, 22°.56S×66°.85W, h200km, ML4.6, MW4.3*
*GUC **09** 22:37:29.2±0.8, 22°.68S×67°.04W, h222km±9km, ML5.2*
**ISC 09 22:37:27.6±0.5, 22°.62S±0°.04×66°.84W±0°.04, h203km±5km, n430, σ1s23/477, mb4.7/66, 15C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **1.92** | **270** | P | **Pn** | **22 38 06.8** | **+1.0** |
| | 107nm,0.3s,baz=95,slow=5.5,SNR=747 | | | | | | |
| LVC | | | | S | **S** | **22 38 35.9** | **+0.9** |
| | 78nm,0.3s,baz=226,slow=22,SNR=41 | | | | | | |
| **LVC** | **Limon Verde** | **1.92** | **270** | ⇑*iP* | **Pn** | **22 38 06.8** | **+1.0** |
| LVC | | | | *eP* | **Pn** | **22 38 06.8** | **+1.0** |
| LVC | | | | *i* S | **S** | **22 38 35.3** | **+0.3** |
| **LVC** | **Limon Verde** | **1.92** | **270** | *eP* | **Pn** | **22 38 06.9** | **+1.0** |
| **LVC** | **Limon Verde** | **1.92** | **270** | | **Pn** | **22 38 06.8** | **+1.0** |
| LVC | | | | Sn | **S** | **22 38 35.4** | **+0.3** |
| **LVC** | **Limon Verde** | **1.92** | **270** | *eP* | **Pn** | **22 38 06.8** | **+1.0** |
| LVC | | | | *eS* | **S** | **22 38 37.4** | **+2.3** |
| LVC | | | | IAML | | 22 38 45.1 | |
| | comp=Z,180nm,0.9s | | | | | | |
| **PB09** | **IPOC Station P** | **2.38** | **290** | ⇑*iP* | **Pn** | **22 38 11.8** | **+1.3** |
| PB09 | | | | *i* S | **S** | **22 38 44.0** | **+0.7** |
| **PB09** | **IPOC Station P** | **2.38** | **290** | | **Pn** | **22 38 11.8** | **+1.3** |
| PB09 | | | | Sn | **S** | **22 38 43.8** | **+0.6** |
| **PB09** | **IPOC Station P** | **2.38** | **290** | *eP* | **Pn** | **22 38 11.4** | **+0.9** |
| PB09 | | | | *eS* | **S** | **22 38 44.7** | **+1.4** |
| PB09 | | | | IAML | | 22 38 46.0 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **SLA** | **San Lorenzo** | **2.42** | **150** | *eP* | **Pn** | **22 38 12.8** | **+1.8** |
| SLA | | | | *eS* | **S** | **22 38 47.5** | **+3.2** |
| SLA | | | | IAML | | 22 39 12.9 | |
| | comp=Z,103nm,0.8s | | | | | | |
| **PB15** | **IPOC Station P** | **2.50** | **256** | ⇑*iP* | **Pn** | **22 38 12.4** | **+0.6** |
| PB15 | | | | *i* S | **S** | **22 38 46.0** | **+0.3** |
| **PB15** | **IPOC Station P** | **2.50** | **256** | | **Pn** | **22 38 12.3** | **+0.6** |
| PB15 | | | | Sn | **S** | **22 38 45.7** | **0.0** |
| **PB15** | **IPOC Station P** | **2.50** | **256** | *eP* | **Pn** | **22 38 12.4** | **+0.6** |
| PB15 | | | | *eS* | **S** | **22 38 47.0** | **+1.3** |
| PB15 | | | | IAML | | 22 38 49.9 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **2.53** | **268** | ⇑*iP* | **Pn** | **22 38 12.5** | **+0.4** |
| PB06 | | | | *i* S | **S** | **22 38 45.9** | **-0.3** |
| **PB06** | **IPOC Station P** | **2.53** | **268** | | **Pn** | **22 38 12.7** | **+0.6** |
| PB06 | | | | Sn | **S** | **22 38 46.3** | **+0.1** |
| **PB06** | **IPOC Station P** | **2.53** | **268** | *eP* | **Pn** | **22 38 12.5** | **+0.4** |
| PB06 | | | | *eP* | **Pn** | **22 38 12.8** | **+0.6** |
| PB06 | | | | *eS* | **S** | **22 38 48.2** | **+2.0** |
| PB06 | | | | IAML | | 22 38 52.0 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **2.76** | **281** | ⇑*iP* | **Pn** | **22 38 15.1** | **+0.3** |
| PB03 | | | | *i* S | **S** | **22 38 50.2** | **-0.7** |
| PB03 | | | | IAML | | 22 38 51.6 | |
| | comp=N,5μm,0.6s | | | | | | |
| **PB03** | **IPOC Station P** | **2.76** | **281** | | **Pn** | **22 38 15.0** | **+0.3** |
| **PB03** | **IPOC Station P** | **2.76** | **281** | *eP* | **Pn** | **22 38 15.0** | **+0.3** |
| PB03 | | | | *eS* | **S** | **22 38 50.8** | **-0.1** |
| PB03 | | | | IAML | | 22 38 54.5 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **2.92** | **302** | ⇑*iP* | **Pn** | **22 38 17.0** | **+0.4** |
| PB01 | | | | *i* S | **S** | **22 38 53.9** | **-0.3** |
| PB01 | | | | IAML | | 22 38 55.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **2.92** | **302** | | **Pn** | **22 38 16.9** | **+0.4** |
| **PB01** | **IPOC Station P** | **2.92** | **302** | *eP* | **Pn** | **22 38 17.0** | **+0.4** |
| PB01 | | | | *eS* | **S** | **22 38 54.0** | **-0.2** |
| PB01 | | | | IAML | | 22 38 56.2 | |
| | comp=Z,928nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **2.96** | **287** | ⇑*iP* | **Pn** | **22 38 17.5** | **+0.3** |
| PB07 | | | | *i* S | **S** | **22 38 54.0** | **-1.2** |
| PB07 | | | | IAML | | 22 38 55.4 | |
| | comp=N,4μm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **2.96** | **287** | | **Pn** | **22 38 17.4** | **+0.3** |
| **PB07** | **IPOC Station P** | **2.96** | **287** | *eP* | **Pn** | **22 38 17.5** | **+0.3** |
| PB07 | | | | *eS* | **S** | **22 38 55.1** | **-0.1** |
| PB07 | | | | IAML | | 22 38 57.7 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **3.08** | **275** | ⇑*iP* | **Pn** | **22 38 18.5** | **+0.1** |
| PB04 | | | | *eS* | **S** | **22 38 56.0** | **-1.5** |
| PB04 | | | | IAML | | 22 38 58.2 | |
| | comp=N,3μm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **3.08** | **275** | | **Pn** | **22 38 18.6** | **+0.2** |
| **PB04

CPUP Villa Florida 9.41 115 P Pn 22 39 38.3 -0.9
comp=Z,0.2nm,0.3s,baz=290,slow=11,SNR=10
CPUP Villa Florida 9.41 115 eP Pn 22 39 38.8 -0.4
CPUP Villa Florida 9.41 115 Pn Pn 22 39 37.6 -1.6
PTLB Pontes e Lacer 10.19 47 eP Pn 22 39 47.6 -1.7
PTLB Pontes e Lacer 10.19 47 Pn Pn 22 39 47.9 -1.5
AQDB Aquidauana 10.58 80 eP Pn 22 39 54.1 -0.2
AQDB Aquidauana 10.58 80 Pn Pn 22 39 54.7 +0.3
VA03 San Esteban 10.62 197 Pn 22 39 55.1 +0.3
ROC1 El Roble 10.95 199 Pn Pn 22 39 58.3 -0.9
MT02 Curacav 11.26 199 Pn Pn 22 40 02.3 -0.6
VILB Vilhena 11.51 34 eP Pn 22 40 05.2 -0.9
VILB Vilhena 11.51 34 Pn Pn 22 40 05.8 -0.4
LMEL Las Melosas 11.57 194 Pn Pn 22 40 07.2 +0.2
MT09 Talagante 11.70 197 Pn Pn 22 40 06.6 -2.0
PP1B Ponte de Pedra 12.29 68 eP Pn 22 40 14.1 -2.1
SALV Santo Antonio 12.46 60 eP Pn 22 40 17.1 -1.2
ETMB Extrema 12.75 3 eP Pn 22 40 20.8 -1.1
ETMB Extrema 12.75 3 Pn Pn 22 40 20.1 -1.8
PTGB Pitanga 13.70 102 eP Pn 22 40 34.0 +0.2
ITAB Concordia 14.11 112 eP P 22 40 39.7 -0.7
ITAB Concordia 14.11 112 P 22 40 40.0 -0.4
NNA Nana 14.24 316 P P 22 40 41.8 -0.2
comp=Z,2.2nm,0.3s,baz=144,slow=11,SNR=10
NNA Nana 14.24 316 P 22 40 42.6 +0.6
CPSB Cacapava Do Su 14.27 126 eP Pn 22 40 40.4 -0.3
PCMB Pacaembu 14.47 89 eP Pn 22 40 43.2 -0.1
PDRB Porto dos Gac 14.59 43 eP Pn 22 40 43.8 -1.1
PLTB Pedras Altas 14.87 131 eP Pn 22 40 47.7 -0.4
PLTB Pedras Altas 14.87 131 Pn Pn 22 40 44.8 -3.3
ITRB Iturama 15.64 82 eP P 22 40 56.8 -0.7
CLDB Colider 15.75 44 eP P 22 40 58.1 -0.5
ARAG Araguaiana, MT 15.77 67 eP Pn 22 40 58.7 -0.4
CZSB Cruzeiro do Su 15.85 338 eP Pn 22 40 59.7 -0.4
CZSB Cruzeiro do Su 15.85 338 P P 22 40 58.5 -1.2
CZSB IAmb IAmb 22 41 01.4
comp=Z,23nm,0.6s
LC01 Cunco 16.79 194 P P 22 41 08.9 -0.9
RCLB Rio Claro- Sao 17.84 93 eP P 22 41 21.5 -0.1
PET01 Itanhaem-SP 18.03 99 eP P 22 41 23.3 -0.2
IPMB Ipameri, GO 18.07 79 eP P 22 41 24.4 +0.4
SNDB Serra Nova Dou 18.21 57 eP P 22 41 25.2 -0.4
PLCA Paso Flores 18.33 189 P P 22 41 27.6 +0.9
comp=Z,0.4nm,0.3s,baz=12,slow=12,SNR=26
PLCA Paso Flores 18.33 189 P P 22 41 26.5 -0.2
VAO Valinhos 18.33 95 eP P 22 41 27.0 +0.1
TBTG Tabatinga, AM 18.57 350 eP Pn 22 41 30.6 -1.6
TBTG Tabatinga, AM 18.57 350 P P 22 41 30.3 +0.8
ATAH Atahualpa 19.00 322 P P 22 41 35.8 +1.2
comp=Z,0.5nm,0.3s,baz=170,slow=8.2,SNR=5.2
NPGB Novo Progresso 19.03 37 eP P 22 41 32.7 -1.8
LL03 Petrohue 19.05 193 P P 22 41 33.7 -0.7
BDFB Brasilia 19.08 72 P P 22 41 35.3 +0.1
comp=Z,6.4nm,0.3s,baz=248,slow=10,SNR=68
BDFB Brasilia 19.08 72 P P 22 41 34.6 -0.6
PARB Paraibuna 19.55 96 eP P 22 41 39.4 -0.7
MACA Manacapuru-AM 20.25 18 eP P 22 41 46.6 -0.9
MACA Manacapuru-AM 20.25 18 P P 22 41 45.6 -1.9
PEXB Peixe 20.53 62 eP P 22 41 49.6 -0.9
BSCB Bom Sucesso 20.55 90 eP P 22 41 49.5 -1.3
LL02 Futaleuf 20.93 190 P P 22 41 54.2 -0.2
ITTB Itaituba 21.09 32 eP P 22 41 54.4 -2.0
DIAM Diamantina, MG 22.12 83 eP P 22 42 06.3 -0.7
JANB Januaria 22.59 74 eP P 22 42 10.2 -1.0
DUB01 Friburgo-RJ 22.63 93 eP P 22 42 11.4 -0.1
PTGA Pitinga 22.77 18 P P 22 42 11.4 -1.2
comp=Z,8.1nm,0.3s,baz=334,slow=23,SNR=21
SMTB Santa Maria do 22.99 57 eP P 22 42 13.6 -1.2
PRPB Paraiuapebas 23.18 48 eP P 22 42 15.3 -1.1
SDBA SAO DESIDERIO 23.22 68 eP P 22 42 15.8 -1.1
CAM01 Campos-RJ 23.32 93 eP P 22 42 17.6 0.0
MALB Monte Alegre 23.99 32 eP P 22 42 22.9 -0.9
SJMB Sao Joao De Ma 24.31 86 eP P 22 42 25.8 -0.8
RIB01 Linhares ES 24.90 87 eP P 22 42 31.1 -0.9
OTAV Otavalo 25.38 332 eP P 22 42 38.3 +1.4
OTAV Otavalo 25.38 332 eP P 22 42 39.1 +2.2
OTAV Otavalo 25.38 332 P P 22 42 37.1 +0.3
FLOC Florencia 25.55 339 eP P 22 42 36.4 -1.5
BOAV Boa Vista 25.62 15 eP P 22 42 38.2 -0.3
BOAV Boa Vista 25.62 15 P P 22 42 37.9 -0.6
BOAV IAmb IAmb 22 42 38.8
comp=Z,23nm,1.4s
GUA01 Guaratinga, BA 26.14 82 eP P 22 42 42.6 -0.6
SOTA Rioblanco 26.39 338 eP P 22 42 47.8 +1.8
MCPB Macapa, AP 26.39 35 eP P 22 42 44.4 -1.1
POPC Popayan, Colom 26.79 338 eP P 22 42 51.6 +2.3
CMC01 Camacan, BA 26.79 79 eP P 22 42 48.0 -1.0
NBIT Itapeh - BA 27.02 78 eP P 22 42 50.1 +1.0
TMAB Tom-Au,PA,Br 27.13 45 eP P 22 42 52.5 -0.5
GDU01 Guandu, BA 27.34 76 eP P 22 42 52.5 -1.4
ORTC Ortega, Tolima 27.62 342 eP P 22 42 57.3 +0.9
CHIC Chingaza 27.91 345 eP P 22 42 59.2 -0.2
NBPN Ponto Novo - B 28.01 70 eP P 22 42 58.5 -1.4
YOTC Yotoco, Valle 28.03 339 eP P 22 42 59.2 -0.9
PLMC San Jos del P 28.88 340 eP P 22 43 06.8 -0.8
GUY2C Guyana, Caldas 28.91 342 eP P 22 43 06.8 -1.5
SPBC San Pablo de B 28.98 345 eP P 22 43 07.8 -0.7
RUSC La Rusia 28.99 347 eP P 22 43 08.7 -0.3
NORC Norcasia 29.09 343 eP P 22 43 08.7 -0.8
ROSB Rosrio 29.49 52 eP P 22 43 13.1 +0.1
HELC Santa Helena 29.87 342 eP P 22 43 14.4 -2.3
PTBC PUERTO BERRIO, 29.93 345 eP P 22 43 14.4 -2.4
NBLA Lagarto - SE 30.05 72 eP P 22 43 16.2 -1.8
PAMC Pamplona, Colo 30.33 348 eP P 22 43 19.2 -1.6
NBPS Pedro II - PI 30.53 57 eP P 22 43 21.0 -1.2
MDP Montagnes des 30.86 28 P P 22 43 23.5 -1.5
comp=Z,19nm,0.6s,baz=202,slow=9.8,SNR=13
ZARC Zaragoza, Cauc 30.94 344 eP P 22 43 23.0 -2.7
ZARC Zaragoza, Cauc 30.94 344 P P 22 43 23.4 -2.3
ZARC IAmb IAmb 22 43 24.8
comp=Z,11nm,0.6s
SOCV Socops 30.97 352 eP P 22 43 23.9 -2.0
NBMA Muriti-CE 30.98 65 eP P 22 43 25.4 -0.8
NBPB Pedra_Branca-C 31.32 61 eP P 22 43 28.1 -1.0
UREC San Jos de Ur 31.36 343 eP P 22 43 27.8 -1.7
BAUV El Baul 31.39 358 P P 22 43 28.3 -1.4
BAUV IAmb IAmb 22 43 33.9
comp=Z,22nm,0.8s
SDV Santo Domingo 31.53 353 eP P 22 43 30.3 -0.8
SDV Santo Domingo 31.53 353 P P 22 43 29.6 -1.5
SDV IAmb IAmb 22 43 30.9
comp=Z,13nm,1.1s
NBAN Anadia - AL 31.98 71 eP P 22 43 33.2 -1.7
SMLC San Martn de 32.02 346 eP P 22 43 32.5 -2.6
MOTC Monteria, Cord 32.38 344 P P 22 43 36.3 -2.0
MOTC IAmb IAmb 22 43 48.7
comp=Z,24nm,1.2s
BIRV Birongo 32.90 1 P P 22 43 42.6 -0.1
BIRV IAmb IAmb 22 44 03.8
comp=Z,28nm,1.1s
NBCL Cascavel-CE 33.13 61 eP P 22 43 44.6 -0.2
SJCC San Jacinto, C 33.34 345 P P 22 43 45.0 -1.6
SJCC IAmb IAmb 22 43 53.8
comp=Z,20nm,1.1s
NBRF Rio Formoso - 33.44 71 eP P 22 43 46.3 -1.2
RCBR Riachuelo 34.20 65 eP P 22 43 54.3 +0.1
RCBR Riachuelo 34.20 65 P P 22 43 53.1 -1.0
RCBR IAmb IAmb 22 44 14.4
comp=Z,24nm,1.2s
TOSP Speyside 34.27 11 P P 22 43 54.3 -0.3
NBPV Pedro Velho 34.41 67 eP P 22 43 55.2 -0.6
SRBA San Rafael, Bu 35.56 331 P P 22 44 07.8 +2.1
SRBA IAmb IAmb 22 44 09.1
comp=Z,9.7nm,0.7s
FDF Fort de France 37.54 9 P P 22 44 21.3 -1.1
SVN Savane Anatole 37.65 9 P P 22 44 22.6 -0.6
CELP Cerrillos 40.45 0 P P 22 44 44.9 -1.5
CELP IAmb IAmb 22 44 45.9
comp=Z,35nm,1.1s
DR12 Loma Pena Alta 41.23 356 P P 22 44 53.6 +0.8
MTO3 Montecristo 42.90 327 P P 22 45 07.5 +0.9
MTO3 IAmb IAmb 22 45 09.9
comp=Z,17nm,1.0s
SOR Soroa 47.81 340 P P 22 45 45.2 +0.4
CMIG Matias Romero 48.07 323 P P 22 45 47.2 +0.3
comp=Z,10nm,0.6s,baz=136,slow=7.2,SNR=13
ZAIG Zacatecas 56.97 320 P P 22 46 53.6 +1.2
ZAIG IAmb IAmb 22 46 55.4
comp=Z,9.6nm,0.8s
BELA Belgrano 2 57.38 172 P P 22 46 55.3 +1.1
VNA3 Neumayer Olymp 58.40 161 P P 22 47 02.8 +1.4
VNA1 Neumayer--Stat 58.59 161 P P 22 47 04.5 +1.9
LRAL Lakeview Retre 58.60 340 P P 22 47 02.8 -0.3
LRAL IAmb IAmb 22 47 03.8
comp=Z,12nm,0.5s
LRAL Lakeview Retre 58.60 340 P P 22 47 02.8 -0.3
baz=158
PAULI Pauline 58.87 346 P P 22 47 05.3 +0.2
PAULI IAmb IAmb 22 47 05.9
comp=Z,15nm,0.7s
VNA2 Neumayer--Watz 58.96 161 P P 22 47 06.7 +1.5
baz=281,slow=11
KMSC Kings Mountain 59.07 346 P P 22 47 06.7 +0.3
baz=164
Y49A Blount Mountai 59.18 341 P P 22 47 06.7 -0.5
Y49A IAmb IAmb 22 47 07.8
comp=Z,10.0nm,0.8s
833A Chaparral WMA, 59.60 327 P P 22 47 10.9 +0.8
833A Chaparral WMA, 59.60 327 P P 22 47 10.8 +0.6
baz=145,SNR=12
X48A Hartselle 59.92 341 P P 22 47 11.8 -0.4
X48A IAmb IAmb 22 47 12.5
comp=Z,18nm,0.8s
TKL Tuckaleechee C 60.14 344 P P 22 47 12.9 -0.8
baz=107,slow=11
TKL Tuckaleechee C 60.14 344 P P 22 47 13.2 -0.5
TKL IAmb IAmb 22 47 14.0
comp=Z,15nm,0.9s
SWET Sewanee 60.31 342 P P 22 47 14.5 -0.4
SWET IAmb IAmb 22 47 15.0
comp=Z,17nm,0.6s
U54A Nelsons Funny 60.50 346 P P 22 47 16.4 +0.2
SNAA Sanae 60.59 161 P P 22 47 17.7 +1.3
SNAA Sanae 60.59 161 P P 22 47 16.4 -0.1
SNAA IAmb IAmb 22 47 18.5
comp=Z,9.0nm,0.9s
OXF Oxford 60.74 339 P P 22 47 17.3 -0.4
baz=156
435B Jarrell 60.75 330 P P 22 47 18.2 +0.3
baz=147
Z41A Richland Creek 60.84 335 P P 22 47 18.9 +0.4
baz=152
BLA Blacksburg 60.88 348 P P 22 47 18.8 +0.1
baz=166
V48A Smith Brothers 61.05 341 P P 22 47 19.4 -0.4
V48A IAmb IAmb 22 47 20.0
comp=Z,12nm,0.7s
CBN Corbin Frederi 61.31 351 P P 22 47 22.0 +0.6
baz=169
JCT Junction City 61.56 328 P P 22 47 23.5 0.0
JCT Junction City 61.56 328 P P 22 47 23.8 +0.4
baz=145,SNR=7.1
S54A Dingess, Beckl 61.62 347 P P 22 47 23.2 -0.4
WHTX Lake Whitney, 61.70 331 P P 22 47 25.0 +0.7
baz=148
WVT Waverly 61.72 341 P P 22 47 23.5 -0.8
WVT Waverly 61.72 341 P P 22 47 23.8 -0.5
baz=158
MIAR Mount Ida 62.27 335 P P 22 47 27.7 -0.4
MIAR IAmb IAmb 22 47 28.6
comp=Z,7.7nm,0.6s
MIAR Mount Ida 62.27 335 P P 22 47 28.0 0.0
baz=152
T47A Sharon Grove 62.30 342 P P 22 47 27.5 -0.6
T47A IAmb IAmb 22 47 28.4
comp=Z,14nm,0.9s
W41B Gary Mavity, V 62.33 337 P P 22 47 28.3 -0.1
baz=153
TXAR Lajitas Array 62.65 324 P P 22 47 31.4 +0.6
comp=Z,2.8nm,0.6s,baz=149,slow=7.4,SNR=34
TXAR Lajitas Array 62.65 324 P P 22 47 31.1 +0.3
TX32 Lajitas Array 62.66 324 P P 22 47 31.1 +0.3
W39A Magazine 62.93 335 P P 22 47 32.6 +0.3
W39A IAmb IAmb 22 47 33.5
comp=Z,14nm,0.9s
W39A Magazine 62.93 335 P P 22 47 33.2 +0.9
baz=152
MCWV Mont Chateau 63.14 349 P P 22 47 34.1 +0.4
baz=166
PBMO Poplar Bluff 63.14 339 P P 22 47 33.2 -0.5
WCI Wyandotte Cave 63.23 343 P P 22 47 33.6 -0.7
baz=160
ABTX Abilene, Hawle 63.25 329 P P 22 47 35.1 +0.5
baz=146
O56A Blue Knob Stat 63.51 350 P P 22 47 36.2 0.0
baz=168
P52A Corning 63.56 347 P P 22 47 35.4 -1.0
baz=164
U40A Yellville 63.61 337 P P 22 47 36.4 -0.4
U40A IAmb IAmb 22 47 37.4
comp=Z,6.6nm,0.7s
U40A Yellville 63.61 337 P P 22 47 36.7 -0.1
baz=153
SSPA Standing Stone 63.77 351 P P 22 47 37.3 -0.4
baz=169
O53A New Philadelph 63.97 348 P P 22 47 38.6 -0.4
baz=165
P49A Miami Univ. Ec 64.05 345 P P 22 47 38.7 -0.9
baz=162
X34A Smith Ranch, M 64.08 332 P P 22 47 40.6 +0.7
X34A IAmb IAmb 22 47 41.3
comp=Z,15nm,0.8s
MGMO Mountain Grove 64.11 338 P P 22 47 39.8 -0.3
MGMO IAmb IAmb 22 47 40.5
comp=Z,11nm,0.8s
FVM French Village 64.23 339 P P 22 47 40.2 -0.6
ACSO Alum Creek Sta 64.32 346 P P 22 47 40.9 -0.4
baz=163
TUL1 Leonard 64.34 334 P P 22 47 41.7 +0.1
baz=150
N54A Moraine State 64.43 349 P P 22 47 42.5 +0.4
baz=166
CCM Cathedral Cave 64.57 339 P P 22 47 42.5 -0.5
CCM Cathedral Cave 64.57 339 P P 22 47 43.0 0.0
baz=155
WMOK Wichita Mounta 64.61 331 P P 22 47 43.3 -0.1
baz=147
OK025 Westminster Rd 64.70 333 P P 22 47 43.8 -0.1
O48B Farmland 64.84 345 P P 22 47 44.4 -0.3
baz=161
M54A Oil Creek Stat 64.90 349 P P 22 47 45.4 +0.3
baz=167
HRV Adam Dziewonsk 64.95 356 P P 22 47 46.0 +0.7
baz=175
S39A Bolivar 64.96 337 P P 22 47 45.6 +0.1
L61B Northampton 64.97 355 P P 22 47 45.8 +0.4
baz=174
M53A WI Miller and 65.02 349 P P 22 47 46.0 +0.2
baz=166
BINY Binghamton 65.05 353 P P 22 47 46.1 0.0
baz=171
MNTX Cornudas Mount 65.42 324 P P 22 47 48.5 -0.1
MNTX Cornudas Mount 65.42 324 P P 22 47 49.0 +0.4
baz=141,SNR=12
SFIN Lafayette 65.46 343 P P 22 47 47.8 -0.9
baz=159
ERPA Erie 65.55 349 P P 22 47 49.7 +0.4
baz=167
MMNY Mt. Morris Dam 65.83 351 P P 22 47 51.3 +0.4
MSTX Muleshoe 65.86 328 P P 22 47 51.5 0.0
baz=144,SNR=12
AMTX Amarillo 66.07 329 P P 22 47 52.9 +0.1
AMTX IAmb IAmb 22 47 53.4
comp=Z,6.7nm,0.6s
AMTX Amarillo 66.07 329 P P 22 47 53.1 +0.2
baz=145
HDIL Hopedale 66.24 341 P P 22 47 54.1 +0.4
baz=157
LBNH Lisbon 66.70 356 P P 22 47 57.6 +1.1
baz=175
P38A Dawn 66.76 338 P P 22 47 56.9 0.0
DBIC Dimbokro 67.23 72 P P 22 48 00.2 -0.3
comp=Z,3.5nm,0.5s,baz=233,slow=6.8,SNR=6.6
DBIC Dimbokro 67.23 72 P P 22 48 00.2 -0.3
DBIC IAmb IAmb 22 48 24.6
comp=Z,18nm,1.4s
LONY Lake Ozonia 67.29 354 P P 22 48 00.9 +0.7
baz=172
121A Cookes Peak, D 67.37 323 P P 22 48 02.7 +1.5
121A IAmb IAmb 22 48 04.0
comp=Z,9.6nm,0.8s
121A Cookes Peak, D 67.37 323 P P 22 48 02.5 +1.3
baz=139,SNR=7.7
KSU1 Kansas State U 67.43 335 P P 22 48 01.3 0.0
baz=150
QSPA South Pole Qui 67.58 180 P P 22 48 03.5 +1.5
QSPA IAmb IAmb 22 48 04.5
comp=Z,16nm,1.0s
PKME Peaks-Kenny Pk 67.60 358 P P 22 48 02.7 +0.7
baz=177
SADO Sadowa 68.00 351 P P 22 48 03.9 -0.8
baz=188,slow=2.0
CBKS Cedar Bluff 68.45 333 P P 22 48 08.3 +0.7
CBKS Cedar Bluff 68.45 333 P P 22 48 08.5 +0.8
baz=147,SNR=8.3
ANMO Albuquerque 68.49 326 P P 22 48 09.4 +1.2
baz=141
JFWS Jewell Farm 68.69 342 P P 22 48 08.6 -0.3
JFWS Jewell Farm 68.69 342 P P 22 48 08.6 -0.3
baz=157,SNR=5.0
TUC Tucson 68.91 321 P P 22 48 11.6 +0.9
baz=137
GLMI Grayling 69.06 347 P P 22 48 11.7 +0.5
baz=162
T25A Trinidad 69.19 329 P P 22 48 13.7 +1.3
T25A IAmb IAmb 22 48 14.4
comp=Z,8.6nm,0.7s
T25A Trinidad 69.19 329 P P 22 48 13.8 +1.3
baz=143,SNR=7.2
BATG Bathurst New B 69.58 1 P P 22 48 14.6 +0.3
BATG IAmb IAmb 22 48 35.0
comp=Z,31nm,1.4s
214A Organ Pipe Nat 69.85 319 P P 22 48 17.7 +1.3
214A Organ Pipe Nat 69.85 319 P P 22 48 17.3 +0.9
baz=135
KSCO Kaye Shedlock' 69.87 331 P P 22 48 17.1 +0.6
baz=145
BGNE Belgrade 70.02 335 P P 22 48 17.5 +0.3
BGNE Belgrade 70.02 335 P P 22 48 17.3 +0.1
baz=149,SNR=5.6
SDCO Great Sand Dun 70.20 328 P P 22 48 20.2 +1.5
baz=142,SNR=22
W18A Petrified Fore 70.38 324 P P 22 48 20.6 +0.9
W18A IAmb IAmb 22 48 22.4
comp=Z,11nm,0.9s
W18A Petrified Fore 70.38 324 P P 22 48 21.0 +1.3
baz=136,SNR=6.9
X16A Lo Mia Camp, P 70.81 322 P P 22 48 23.3 +1.0
S22A 4UR Ranch, Cre 70.85 327 P P 22 48 23.5 +0.9
baz=141
Q24A Divide 70.99 329 P P 22 48 24.9 +1.4
baz=143,SNR=8.1
OGNE Ogallala 71.20 333 P P 22 48 25.5 +1.1
baz=146
MVCO Mesa Verde 71.29 326 P P 22 48 25.8 +0.5
MVCO IAmb IAmb 22 48 27.7
comp=Z,10nm,0.8s
MVCO Mesa Verde 71.29 326 P P 22 48 26.0 +0.8
baz=140,SNR=7.5
ECSD EROS Data Cent 71.47 338 P P 22 48 25.8 -0.1
ECSD IAmb IAmb 22 48 26.1
comp=Z,5.1nm,0.6s
ECSD EROS Data Cent 71.47 338 P P 22 48 25.6 -0.3
baz=151
SPMN Marine on St. 71.55 341 P P 22 48 26.3 +0.1
baz=155
WUAZ Wupatki 71.57 323 P P 22 48 28.6 +1.7
WUAZ IAmb IAmb 22 48 29.9
comp=Z,12nm,0.9s
WUAZ Wupatki 71.57 323 P P 22 48 28.4 +1.5
baz=137,SNR=5.9
KOWA Kowa 71.72 65 P P 22 48 27.9 0.0
GLA Glamis 71.84 319 P P 22 48 30.3 +2.0
baz=134
ISCO Idaho Springs 71.88 329 P P 22 48 29.7 +0.9
ISCO Idaho Springs 71.88 329 P P 22 48 29.4 +0.7
baz=142,SNR=5.6
F36A Milaca 72.34 341 P P 22 48 30.5 -0.5
F36A IAmb IAmb 22 48 31.4
comp=Z,11nm,0.8s
IKP In-Ko-Pah, Jac 72.35 318 P P 22 48 33.1 +1.7
baz=133
SWSC Sam W. Stewart 72.36 318 P P 22 48 33.1 +1.8
baz=133
BC3 Big Chuckawall 72.63 319 P P 22 48 35.0 +1.9
baz=134
W13A Hualapai Mount 72.70 321 P P 22 48 35.3 +1.6
MONP2 Monument Peak 72.71 318 P P 22 48 35.7 +2.0
baz=133
U15A North Rim 72.75 323 P P 22 48 35.9 +2.0
U15A IAmb IAmb 22 48 37.2
comp=Z,8.7nm,0.8s
IRM Iron Mountain 72.79 320 P P 22 48 36.1 +2.1
baz=134
N23A Red Feather La 72.90 330 P P 22 48 36.2 +1.5
baz=142
PHWY Pilot Hill 73.00 331 P P 22 48 36.2 +0.9
BELC Belle Mtn. Jos 73.20 319 P P 22 48 38.3 +1.9
baz=133
TPFO Pinon Flats 73.21 318 P P 22 48 38.2 +1.7
baz=133
PFO Pinyon Flats O 73.22 318 P P 22 48 38.3 +1.7
baz=133
O20A White River Ci 73.40 328 P P 22 48 38.7 +1.1
baz=140,SNR=5.2
KNB Kanab 73.47 323 P P 22 48 40.0 +1.9
KNB IAmb IAmb 22 48 41.4
comp=Z,22nm,0.9s
GMRC Granite Mounta 73.53 320 P P 22 48 40.3 +1.9
baz=134,SNR=7.5
SRU San Rafael Swe 73.77 326 P P 22 48 41.1 +1.3
HEC Hector,Ludlow 73.97 319 P P 22 48 43.0 +2.1
baz=133,SNR=6.1
P18A Preston Nutter 74.01 326 P P 22 48 43.0 +1.7
P18A IAmb IAmb 22 48 44.0
comp=Z,17nm,0.6s
CCUT Cedar City 74.15 323 P P 22 48 44.1 +2.1
CCUT IAmb IAmb 22 48 45.5
comp=Z,15nm,0.8s
CIS Catalina Islan 74.29 317 P P 22 48 44.1 +1.4
baz=131
SHPR Sheep Range 74.43 321 P P 22 48 44.9 +1.3
K22A Casper 74.55 331 P P 22 48 45.7 +1.5
baz=142
GSC Goldstone, Bar 74.57 319 P P 22 48 46.3 +2.0
baz=133
RSSD Black Hills 74.65 333 P P 22 48 45.6 +0.8
RSSD IAmb IAmb 22 48 46.7
comp=Z,9.7nm,0.9s
RSSD Black Hills 74.65 333 P P 22 48 45.9 +1.1
baz=145
SYO Syowa Base 74.78 159 eP cP P cP 22 48 56.0 -2.0
EDW2 Edwards Air Fo 75.01 318 P P 22 48 48.2 +1.4
baz=132
LRMC Laurel Mtn Rad 75.22 319 P P 22 48 50.0 +1.9
baz=132
AGMN Agassiz Nation 75.24 340 P P 22 48 47.7 0.0
baz=152
TPNV Topopah Spring 75.36 321 P P 22 48 51.1 +2.2
baz=134
FURC Furnace Creek, 75.39 320 P P 22 48 51.0 +2.1
baz=133
MPMC Manual Prospec 75.49 320 P P 22 48 50.7 +1.0
baz=132,SNR=5.5
SPR3 Spring Creek 3 75.71 324 P P 22 48 52.5 +1.4
DUG Dugway, Tooele 75.76 325 P P 22 48 52.5 +1.5
DUG Dugway, Tooele 75.76 325 P P 22 48 52.6 +1.5
baz=137,SNR=5.1
ISA Isabella, Lake 75.82 319 P P 22 48 53.2 +1.8
ISA Isabella, Lake 75.82 319 P P 22 48 52.9 +1.5
baz=132,SNR=6.8
TORD Torodi Ar. Bea 75.94 69 P P 22 48 52.0 -0.5
comp=Z,3.7nm,0.6s,baz=264,slow=5.8,SNR=39
TORD pP pP 22 49 42.5 +0.2
comp=Z,3.4nm,0.6s,baz=252,slow=5.5,SNR=6.8
TORD Torodi Ar. Bea 75.94 69 P P 22 48 51.4 -1.0
R11A Troy Canyon, C 75.95 322 P P 22 48 54.2 +1.9
baz=134,SNR=9.4
BW06 Boulder Array 76.05 329 P P 22 48 54.0 +1.2
baz=140
PD31 Pinedale Array 76.05 329 P P 22 48 53.6 +0.8
PDAR Pinedale Array 76.05 329 P P 22 48 53.6 +0.8
comp=Z,2.8nm,0.8s,baz=129,slow=8.0,SNR=22
GRAC Grapevine Rang 76.05 320 P P 22 48 54.9 +2.3
baz=133
MDND Maddock 76.08 338 P P 22 48 53.1 +0.6
baz=149,SNR=6.2
VNDA Vanda 76.08 190 P P 22 48 53.6 +1.4
CWC Cottonwood Cre 76.10 320 P P 22 48 55.1 +2.0
baz=132
PKM Mcpherson Peak 76.14 317 P P 22 48 54.9 +1.5
baz=131,SNR=12
VES Vestal, Richgr 76.31 319 P P 22 48 56.1 +2.0
baz=131

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SMMC | Simmler | 76.53 | 318 | P | P | 22 48 57.2 | +1.8 |
| | baz=131 | | | | | | |
| TIN | Tinemaha, Big | 76.60 | 320 | P | P | 22 48 58.0 | +2.1 |
| | baz=132 | | | | | | |
| AHID | Auburn Hatcher | 76.79 | 328 | P | P | 22 48 58.0 | +1.1 |
| AHID | | | | IAmb | IAmb | 22 48 59.1 | |
| | comp=Z,17nm,0.9s | | | | | | |
| ULM | Lac du Bonnet | 76.98 | 341 | P | P | 22 48 57.0 | -0.4 |
| | comp=Z,11nm,0.5s,baz=153,slow=7.3,SNR=13 | | | | | | |
| ULM | Lac du Bonnet | 76.98 | 341 | P | P | 22 48 57.5 | 0.0 |
| ULM | | | | IAmb | IAmb | 22 48 58.8 | |
| | comp=Z,32nm,1.4s | | | | | | |
| SCHQ | Schefferville | 77.14 | 0 | P | P | 22 48 58.4 | 0.0 |
| | comp=Z,4.0nm,0.7s,baz=185,slow=3.7,SNR=8.1 | | | | | | |
| SCHQ | Schefferville | 77.14 | 0 | P | P | 22 48 58.3 | 0.0 |
| LOHW | Long Hollow | 77.19 | 329 | P | P | 22 49 00.4 | +1.3 |
| ELK | Elko | 77.44 | 324 | P | P | 22 49 01.8 | +1.1 |
| NVAR | Mina Array Bea | 77.56 | 321 | P | P | 22 49 02.9 | +1.6 |
| | comp=Z,2.2nm,0.7s,baz=155,slow=5.6,SNR=12 | | | | | | |
| NVAR | Mina Array Bea | 77.56 | 321 | P | P | 22 49 02.4 | +1.1 |
| LAO | LASA Array | 77.63 | 333 | P | P | 22 49 02.2 | +0.8 |
| | baz=143 | | | | | | |
| RLMT | Red Lodge | 77.72 | 331 | P | P | 22 49 03.3 | +1.3 |
| RLMT | | | | IAmb | IAmb | 22 49 04.0 | |
| | comp=Z,10nm,0.6s | | | | | | |
| RLMT | Red Lodge | 77.72 | 331 | P | P | 22 49 03.5 | +1.5 |
| | baz=140,SNR=7.2 | | | | | | |
| H17A | Grant Village | 77.77 | 330 | P | P | 22 49 04.2 | +1.9 |
| | baz=139 | | | | | | |
| YHH | Holmes Hill | 78.19 | 330 | P | P | 22 49 06.6 | +1.9 |
| YHH | | | | IAmb | IAmb | 22 49 07.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| DGMT | Dagmar | 78.27 | 336 | P | P | 22 49 06.2 | +1.5 |
| DGMT | Dagmar | 78.27 | 336 | P | P | 22 49 06.2 | +1.5 |
| | baz=145,SNR=5.2 | | | | | | |
| HLID | Hailey | 79.02 | 327 | P | P | 22 49 10.8 | +1.6 |
| HLID | | | | IAmb | IAmb | 22 49 12.2 | |
| | comp=Z,14nm,0.7s | | | | | | |
| HLID | Hailey | 79.02 | 327 | P | P | 22 49 11.0 | +1.8 |
| | baz=136,SNR=16 | | | | | | |
| BCYI | Bear Canyon | 79.06 | 328 | P | P | 22 49 10.9 | +1.5 |
| BOZ | Bozeman (W) | 79.16 | 330 | P | P | 22 49 10.9 | +1.1 |
| | baz=138 | | | | | | |
| MCMT | McKenzie Canyo | 79.17 | 329 | P | P | 22 49 11.4 | +1.4 |
| EGMT | Eagleton | 80.17 | 332 | P | P | 22 49 15.9 | +0.8 |
| EGMT | | | | IAmb | IAmb | 22 49 16.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| EGMT | Eagleton | 80.17 | 332 | P | P | 22 49 15.7 | +0.6 |
| | baz=140,SNR=6.1 | | | | | | |
| J08A | Circle Bar Ran | 80.99 | 325 | P | P | 22 49 20.9 | +1.3 |
| J08A | | | | IAmb | IAmb | 22 49 23.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| MDT | Midelt | 81.01 | 49 | P | P | 22 49 20.3 | +0.3 |
| | comp=Z,2.5nm,0.8s,baz=223,slow=6.4,SNR=4.0 | | | | | | |
| MSO | Missoula | 81.15 | 329 | P | P | 22 49 21.2 | +0.8 |
| | baz=137 | | | | | | |
| BOSA | Boshof | 81.23 | 117 | P | P | 22 49 21.1 | -0.3 |
| | comp=Z,1.6nm,0.6s,baz=278,slow=2.9,SNR=9.5 | | | | | | |
| BOSA | Boshof | 81.23 | 117 | P | P | 22 49 21.3 | -0.1 |
| BMO | Blue Mountains | 81.40 | 326 | P | P | 22 49 23.1 | +1.4 |
| BMO | | | | IAmb | IAmb | 22 49 24.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| N02D | Trinity Center | 81.79 | 321 | P | P | 22 49 24.9 | +1.0 |
| | baz=129 | | | | | | |
| M04C | Macdoel | 81.81 | 322 | P | P | 22 49 24.8 | +0.9 |
| | baz=130 | | | | | | |
| JTMT | Jette | 81.98 | 330 | P | P | 22 49 25.8 | +1.1 |
| JTMT | | | | IAmb | IAmb | 22 49 26.8 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| M02C | Callahan | 82.15 | 321 | P | P | 22 49 26.6 | +0.9 |
| | baz=129 | | | | | | |
| YBH | Yreka Blue Hor | 82.28 | 321 | P | P | 22 49 25.7 | -0.7 |
| | comp=Z,2.5nm,0.8s,baz=73,slow=5.9,SNR=5.6 | | | | | | |
| J05D | Fort Rock, OR | 82.44 | 323 | P | P | 22 49 28.7 | +1.4 |
| | baz=131 | | | | | | |
| LBTB | Lobatse | 82.81 | 114 | P | P | 22 49 29.4 | -0.2 |
| J04D | Umpqua Nationa | 82.90 | 323 | P | P | 22 49 30.9 | +1.2 |
| | baz=130 | | | | | | |
| I05D | Terrebonne, OR | 83.19 | 324 | P | P | 22 49 32.3 | +1.3 |
| | baz=131 | | | | | | |
| K02D | Willamette Mer | 83.44 | 322 | P | P | 22 49 33.6 | +1.3 |
| | baz=129 | | | | | | |
| FCC | Fort Churchill | 84.17 | 346 | P | P | 22 49 35.9 | +0.5 |
| FCC | | | | IAmb | IAmb | 22 49 36.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| PAB | San Pablo | 84.98 | 44 | P | P | 22 49 40.7 | +0.5 |
| PAB | | | | IAmb | IAmb | 22 50 07.8 | |
| | comp=Z,22nm,1.5s | | | | | | |
| ESDC | Sonseca Array | 85.30 | 44 | P | P | 22 49 41.4 | -0.3 |
| | comp=Z,2.2nm,0.9s,baz=223,slow=4.6,SNR=6.6 | | | | | | |
| ESDC | Sonseca Array | 85.30 | 44 | P | P | 22 49 42.0 | +0.3 |
| B05A | Bryant | 86.14 | 327 | P | P | 22 49 45.7 | +0.2 |
| | baz=130 | | | | | | |
| D03D | Eldon | 86.18 | 326 | P | P | 22 49 47.0 | +1.3 |
| | baz=130 | | | | | | |
| A04D | Lummi Island | 86.75 | 327 | P | P | 22 49 49.6 | +1.2 |
| | baz=130 | | | | | | |
| YKA | Yellowknife Ar | 92.89 | 340 | P | P | 22 50 17.2 | +0.4 |
| | comp=Z,2.6nm,0.6s,baz=132,slow=4.5,SNR=42 | | | | | | |
| KBZ | Khabaz | 119.32 | 51 | PKP | PKiKP | 22 55 53.5 | +0.8 |
| | comp=Z,2.8nm,0.8s,baz=293,slow=1.2,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 129.76 | 205 | PKP | PKPdf | 22 56 13.7 | +0.3 |
| | comp=Z,2.5nm,0.5s,baz=148,slow=2.1,SNR=27 | | | | | | |
| ASAR | Alice Springs | 129.76 | 205 | PKPdf | PKPdf | 22 56 13.3 | -0.1 |
| WRA | Warramunga Arr | 132.91 | 208 | PKP | PKPdf | 22 56 20.1 | +0.7 |
| | comp=Z,1.8nm,0.5s,baz=150,slow=1.9,SNR=24 | | | | | | |
| WRA | Warramunga Arr | 132.91 | 208 | PKPdf | PKPdf | 22 56 19.5 | +0.2 |
| ZALV | Zalesovo Beam | 142.11 | 27 | PKP | PKPdf | 22 56 34.9 | -0.2 |
| | comp=Z,6.9nm,0.6s,baz=317,slow=4.5,SNR=22 | | | | | | |
| ZALV | Zalesovo Beam | 142.11 | 27 | | PKPdf | 22 56 34.7 | -0.4 |
| KSH | Kashi | 144.27 | 53 | PKP | PKPab | 22 56 38.1 | 0.0 |
| KSH | | | | SKKS | | 23 06 26.3 | |
| MKAR | Makanchi Array | 145.37 | 38 | PKPbc | PKPab | 22 56 42.0 | +0.1 |
| | comp=Z,5.2nm,0.7s,baz=335,slow=2.9,SNR=85 | | | | | | |
| MKAR | Makanchi Array | 145.37 | 38 | PKPdf | PKPab | 22 56 41.8 | -0.1 |
| SONM | Songino Array | 154.26 | 11 | PKP | PKPdf | 22 56 56.4 | +1.2 |
| | comp=Z,1.3nm,0.9s,baz=295,slow=1.0,SNR=9.4 | | | | | | |
| SONM | | | | PKPbc | PKiKP | 22 57 04.0 | +0.4 |
| | comp=Z,1.9nm,0.5s,baz=299,slow=1.3,SNR=30 | | | | | | |
| SONM | | | | PKPab | PKPab | 22 57 18.8 | +0.5 |
| | comp=Z,2.8nm,0.6s,baz=325,slow=4.2,SNR=16 | | | | | | |
| SONM | Songino Array | 154.26 | 11 | | PKPdf | 22 56 55.9 | +0.7 |
| SONM | | | | PKPbc | PKiKP | 22 57 04.0 | +0.4 |
| SONM | | | | PKPab | PKPab | 22 57 18.7 | +0.4 |
| KSRS | Korea Array | 160.50 | 323 | PKPab | PKPab | 22 57 46.6 | +1.2 |
| | comp=Z,1.0nm,0.6s,baz=48,slow=3.7,SNR=4.6 | | | | | | |
| HHC | Hu-ho-hao-te | 161.78 | 4 | *e*P | PKPdf | 22 57 00.6 | -3.9 |
| CMAR | Chiang Mai Arr | 166.05 | 105 | PKP | PKPdf | 22 57 09.3 | +0.4 |
| CMAR | | | | PKPab | PKPab | 22 58 09.8 | -0.6 |
| | comp=Z,0.7nm,0.6s,baz=248,slow=2.8,SNR=4.1 | | | | | | |
| | comp=Z,0.5nm,0.4s,baz=256,slow=6.2,SNR=5.6 | | | | | | |
| PZH | PanZhiHua | 168.91 | 67 | PKP | PKPdf | 22 57 09.4 | -1.5 |
| NJ2 | Nanjing | 169.34 | 333 | *e*P | PKPdf | 22 57 10.8 | 0.0 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |

*IDC **09** 22:43:13.3±2.7, 16°.00S×173°.18W, h0km, mb3.8/5, mb1 4.1/6, mb1mx3.8/38, mbtmp3.8/6, ML3.7/1, Error ellipse: s-maj=135.5km s-min=21.0km az=140.0*
*NEIC **09** 22:43:14.4±2.3, 15°.98S±0°.07×172°.73W±0°.09, h10km±1km, mb4.2/9, Error ellipse: s-maj=15.4km s-min=11.7km az=112.0*

**ISC 09 22:43:16.6±0.7, 16°.03S±0°.07×172°.8W±0°.1, h26km, n21, σ1°58/21, mb3.9/7, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| AFI | Afiamalu | 2.33 | 25 | Pn | | Pn | 22 43 53.0 | -0.3 |
| | 16nm,0.3s,baz=212,slow=2.3,SNR=12 | | | | | | | |
| AFI | | | | Sn | | Sn | 22 44 19.2 | -1.9 |
| | 34nm,0.3s,baz=116,slow=22,SNR=13 | | | | | | | |
| AFI | Afiamalu | 2.33 | 25 | | | Pn | 22 43 52.1 | -1.2 |
| NIUE | Niue | 4.08 | 138 | Pn | | Pn | 22 44 16.2 | -1.2 |
| MSVF | Nonsavu | 8.93 | 258 | Pn | | Pn | 22 45 24.1 | 0.0 |
| | 1.3nm,0.3s,baz=352,slow=22,SNR=4.6 | | | | | | | |
| MSVF | Nonsavu | 8.93 | 258 | | | Pn | 22 45 26.0 | +1.9 |
| PINNC | Pines Island, | 19.75 | 248 | P | | P | 22 47 44.1 | -0.6 |
| PINNC | | | | IAmb | | IAmb | 22 47 54.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| OUENC | Ouen Island, N | 20.24 | 249 | P | | P | 22 47 48.5 | -1.5 |
| OUENC | | | | IAmb | | IAmb | 22 47 56.5 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| DZM | Mont Dzumac | 20.52 | 250 | P | | Pn | 22 47 56.2 | +0.8 |
| | comp=Z,7.4nm,0.8s,baz=84,slow=17,SNR=5.9 | | | | | | | |
| DZM | Mont Dzumac | 20.52 | 250 | P | | P | 22 47 53.4 | +0.3 |
| DZM | | | | IAmb | | IAmb | 22 48 00.7 | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| THZ | Tophouse | 28.45 | 203 | P | | P | 22 49 10.4 | +0.9 |
| LTZ | Lake Taylor | 29.57 | 203 | P | | P | 22 49 20.9 | +1.6 |
| STKA | Stephens Creek | 44.23 | 241 | P | | P | 22 51 22.1 | -1.9 |
| | comp=Z,0.5nm,0.3s,baz=85,slow=12,SNR=1.4 | | | | | | | |
| STKA | Stephens Creek | 44.23 | 241 | P | | P | 22 51 23.1 | -0.8 |
| WB0 | Warramunga Arr | 50.23 | 257 | P | | P | 22 52 09.8 | -1.2 |
| WB0 | | | | IAmb | | IAmb | 22 52 14.4 | |
| | comp=Z,7.1nm,1.2s | | | | | | | |
| WRA | Warramunga Arr | 50.27 | 257 | P | | P | 22 52 08.6 | -2.7 |
| | comp=Z,0.4nm,0.6s,baz=91,slow=6.8,SNR=7.6 | | | | | | | |
| WRA | Warramunga Arr | 50.27 | 257 | P | | P | 22 52 10.5 | -0.8 |
| AS31 | Alice Springs | 50.47 | 252 | P | | P | 22 52 12.2 | -0.6 |
| AS31 | | | | IAmb | | IAmb | 22 52 15.1 | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| ASAR | Alice Springs | 50.47 | 252 | P | | P | 22 52 10.2 | -2.6 |
| | comp=Z,2.6nm,0.7s,baz=88,slow=7.8,SNR=19 | | | | | | | |
| PDAR | Pinedale Array | 82.34 | 42 | P | | P | 22 55 38.2 | +1.7 |
| | comp=Z,0.4nm,0.7s,baz=194,slow=3.1,SNR=4.0 | | | | | | | |
| ILAR | Eielson Array | 82.95 | 11 | P | | P | 22 55 40.9 | +2.0 |
| | comp=Z,1.1nm,0.6s,baz=230,slow=6.3,SNR=19 | | | | | | | |
| BRTR | Keskin Array B | 147.01 | 321 | PKPbc | | PKPbc | 23 02 58.5 | +1.0 |
| | comp=Z,1.9nm,0.7s,baz=222,slow=1.7,SNR=5.5 | | | | | | | |

**JMA 09 22:44:23.4±0.3, 31°.10N×139°.41E, h305km±4km, M3.6, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| BSO1 | Boso 1 | 3.78 | 20 | S | | S | 22 46 18.1 | +0.3 |
| BSO3 | Boso 3 | 3.81 | 14 | S | | S | 22 46 19.2 | +0.5 |
| BSO4 | Boso 4 | 3.96 | 11 | *e*S | | S | 22 46 22.2 | +0.2 |
| JKN2 | Miekihoku | 4.10 | 321 | P | | Pn | 22 45 31.8 | +0.9 |
| JTNC | Tanabenakahech | 4.20 | 311 | P | | Pn | 22 45 32.2 | +0.2 |
| JAG | Ashikaga | 5.31 | 0 | P | | Pn | 22 45 45.2 | +0.6 |
| JFK | Kawauchi | 6.37 | 11 | P | | Pn | 22 45 58.1 | +0.9 |
| JMK | Ichinoseki | 7.97 | 10 | P | | Pn | 22 46 17.6 | +1.1 |

**IDC 09 23:30:48.6±4.8, 6°.92S×148°.35E, h173km±34km, mb3.4/2, mb1 3.3/4, mb1mx3.0/38, mbtmp3.6/4, Error ellipse: s-maj=92.7km s-min=49.1km az=126.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| PMG | Port Moresby | 2.74 | 205 | P | | Pn | 23 31 33.8 | 0.0 |
| | 4.3nm,0.3s,baz=356,slow=9.5,SNR=6.9 | | | | | | | |
| PMG | | | | S | | Sn | 23 32 09.5 | +0.5 |
| | 7.2nm,0.3s,baz=191,slow=22,SNR=2.5 | | | | | | | |
| WRA | Warramunga Arr | 18.78 | 225 | P | | P | 23 34 54.2 | -0.6 |
| | 0.1nm,0.3s,baz=53,slow=10,SNR=7.5 | | | | | | | |
| ASAR | Alice Springs | 21.68 | 218 | P | | P | 23 35 26.7 | +0.9 |
| | 0.5nm,0.5s,baz=50,slow=8.8,SNR=11 | | | | | | | |
| FITZ | Fitzroy Crossi | 24.77 | 241 | P | | P | 23 35 53.9 | -0.6 |
| | 5.4nm,0.6s,baz=50,slow=8.4,SNR=33 | | | | | | | |
| TORD | Torodi Ar. Bea | 146.61 | 283 | PKPbc | | PKPbc | 23 50 10.5 | -0.4 |
| | 0.1nm,0.4s,baz=68,slow=3.9,SNR=1.4 | | | | | | | |

*IDC **09** 23:34:35.9±2.4, 16°.53S×172°.92W, h0km, mb3.7/7, mb1 4.0/7, mb1mx3.7/35, mbtmp3.7/7, MS2.9/1, Ms1 2.9/1, ms1mx2.5/62, Error ellipse: s-maj=140.2km s-min=22.1km az=145.0*

**ISC 09 23:34:38.9±2.0, 15°.7S±0°.6×173°.3W±0°.5, h10km, n9, σ2°05/9, mb3.6/7, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| AFI | Afiamalu | 2.32 | 41 | Pn | | Pn | 23 35 16.6 | -0.6 |
| | 12nm,0.3s,baz=268,slow=4.0,SNR=10 | | | | | | | |
| AFI | | | | Sn | | Sn | 23 35 43.2 | -2.7 |
| | 25nm,0.3s,baz=101,slow=22,SNR=8.2 | | | | | | | |
| MSVF | Nonsavu | 8.50 | 255 | LR | | LR | 23 39 05.5 | |
| | comp=Z,78nm,19.7s,baz=1.9,slow=31 | | | | | | | |
| STKA | Stephens Creek | 43.95 | 240 | P | | P | 23 42 44.0 | -2.5 |
| | 0.4nm,0.2s,baz=85,slow=11,SNR=1.8 | | | | | | | |
| WRA | Warramunga Arr | 49.84 | 257 | P | | P | 23 43 32.1 | -0.6 |
| | 0.4nm,0.7s,baz=91,slow=6.9,SNR=8.2 | | | | | | | |
| ASAR | Alice Springs | 50.08 | 252 | P | | P | 23 43 34.5 | 0.0 |
| | 2.0nm,0.8s,baz=86,slow=8.2,SNR=21 | | | | | | | |
| NVAR | Mina Array Bea | 74.50 | 42 | P | | P | 23 46 19.5 | +1.4 |
| | 0.3nm,0.7s,baz=224,slow=7.6,SNR=2.1 | | | | | | | |
| PDAR | Pinedale Array | 82.43 | 42 | P | | P | 23 47 01.4 | -0.4 |
| | 0.3nm,0.6s,baz=197,slow=1.5,SNR=3.6 | | | | | | | |
| ILAR | Eielson Array | 82.71 | 11 | P | | P | 23 47 04.8 | +2.3 |
| | 0.6nm,0.6s,baz=231,slow=6.3,SNR=13 | | | | | | | |
| YKA | Yellowknife Ar | 90.33 | 23 | P | | P | 23 47 41.7 | +1.8 |
| | 0.2nm,0.8s,baz=232,slow=4.7,SNR=3.3 | | | | | | | |

**KRSC 09 23:37:19.6±2.6, 49°.07N×156°.67E, h15km±36km, ML4.1, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| SKR | Severo-Kuril's | 1.66 | 348 | *e*P | | Pn | 23 37 47.0 | -1.1 |
| PAU | Pauzhetka | 2.40 | 2 | *e*P | | Pn | 23 37 59.5 | +1.2 |
| PAU | | | | *e*S | | Sn | 23 38 29.3 | +1.9 |
| KDTR | Khodutka, Kamc | 2.89 | 18 | *e*P | | Pb | 23 38 08.4 | -2.4 |
| KDTR | | | | *e*S | | Sb | 23 38 44.1 | -1.7 |
| MTVR | Mutnovka | 3.55 | 15 | *e*P | | Pn | 23 38 18.2 | +3.9 |
| MTVR | | | | *e*S | | Sb | 23 39 00.6 | -4.5 |
| RUS | Russkaya | 3.56 | 18 | *e*P | | Pn | 23 38 18.0 | +3.7 |
| GRL | Gorelyy | 3.60 | 14 | *e*P | | Pn | 23 38 18.2 | +3.3 |
| DALK | Dalny | 4.18 | 18 | *e*P | | Pn | 23 38 25.2 | +2.5 |
| UGLR | Uglovaya | 4.36 | 17 | *e*P | | Pn | 23 38 30.4 | +5.0 |
| AVH | Avacha | 4.40 | 16 | *e*P | | Pn | 23 38 31.1 | +5.3 |
| KOK | Koryaka | 4.41 | 16 | *e*P | | Pn | 23 38 31.1 | +5.1 |
| SMAR | Somma | 4.41 | 17 | *e*P | | Pn | 23 38 31.3 | +5.2 |
| KRER | Koryakskii | 4.44 | 16 | *e*P | | Pn | 23 38 31.6 | +5.1 |
| SDLR | Sedlovina | 4.44 | 17 | *e*P | | Pn | 23 38 30.7 | +4.3 |
| SPN | Mys Shipunski | 4.55 | 26 | *e*P | | Pn | 23 38 32.2 | +4.3 |
| SPN | | | | *e*S | | Sn | 23 39 26.9 | +6.4 |
| GNL | Ganaly | 4.70 | 9 | *e*P | | Pn | 23 38 34.3 | +4.3 |
| MKZ | Mys Kozlova | 6.33 | 28 | *e*P | | Pn | 23 38 55.1 | +2.9 |
| KBTR | Krutoberegovo | 8.07 | 25 | *e*P | | Pn | 23 39 19.4 | +3.3 |

**IDC 09 23:38:46.6±41.0, 17°.70S×179°.86W, h574km±149km, mb3.1/3, mb1 3.3/3, mb1mx2.6/31, mbtmp4.1/3, Error ellipse: s-maj=866.4km s-min=112.3km az=80.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| MSVF | Nonsavu | 2.00 | 269 | P | | P | 23 39 58.6 | 0.0 |
| | 2.2nm,0.3s,baz=251,slow=23,SNR=13 | | | | | | | |
| STKA | Stephens Creek | 37.53 | 241 | P | | P | 23 45 12.8 | +0.1 |
| | 1.2nm,0.5s,baz=102,slow=11,SNR=5.5 | | | | | | | |
| WRA | Warramunga Arr | 43.31 | 260 | P | | P | 23 45 58.5 | -0.4 |
| | 0.5nm,0.5s,baz=96,slow=7.3,SNR=14 | | | | | | | |
| ASAR | Alice Springs | 43.52 | 254 | P | | P | 23 46 00.5 | -0.1 |
| | 5.1nm,0.6s,baz=88,slow=8.4,SNR=42 | | | | | | | |

*IDC **09** 23:41:48.0±1.1, 6°.81S×155°.58E, h0km, mb4.2/13, mb1 4.3/14, mb1mx4.1/34, mbtmp4.2/14, ML2.4/1, MS3.1/7, Ms1 3.1/7, ms1mx2.8/61, Error ellipse: s-maj=32.9km s-min=16.5km az=125.0*
*NEIC **09** 23:41:53.2±1.6, 6°.7S±0°.1×155°.4E±0°.1, h21km±7km, mb4.6/27, Error ellipse: s-maj=18.2km s-min=15.2km az=120.0*

**ISC 09 23:41:54.1±0.7, 6°.70S±0°.09×155°.45E±0°.10, h35km, n56, σ0°86/50, mb4.3/26, MS3.1/3, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| RABL | Rabaul | 4.11 | 307 | Pn | | Pn | 23 42 59.1 | +4.6 |
| HNR | Honiara | 5.22 | 122 | LR | | LR | 23 45 22.4 | |
| | comp=Z,362nm,18.0s,baz=306,slow=42 | | | | | | | |
| PMG | Port Moresby | 8.64 | 251 | Pn | | Pn | 23 43 56.0 | -0.7 |
| | 2.4nm,0.3s,baz=289,slow=18,SNR=1.7 | | | | | | | |
| PMG | | | | Sn | | Sn | 23 45 35.4 | +2.4 |
| | 2.1nm,0.3s,baz=0.8,slow=13,SNR=2.9 | | | | | | | |
| PMG | | | | LR | | LR | 23 47 10.0 | |
| | comp=Z,86nm,18.9s,baz=9.5,slow=37 | | | | | | | |
| PMG | Port Moresby | 8.64 | 251 | Pn | | Pn | 23 43 55.6 | -1.1 |
| CTA | Charters Tower | 16.02 | 213 | LR | | LR | 23 51 09.9 | |
| | comp=Z,37nm,21.1s,baz=76,slow=35 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 18.61 | 146 | LR | | LR | 23 51 47.7 | |
| | comp=Z,101nm,20.1s,baz=354,slow=32 | | | | | | | |
| DZM | Mont Dzumac | 18.61 | 146 | P | | P | 23 46 09.8 | +1.1 |
| EIDS | Eidsvold | 19.03 | 192 | P | | P | 23 46 13.4 | +0.3 |
| EIDS | | | | IAmb | | IAmb | 23 46 34.9 | |
| | comp=Z,35nm,1.5s | | | | | | | |
| FAKI | Fak Fak | 23.42 | 278 | P | | P | 23 46 60.0 | -0.3 |
| WR0 | Warramunga Arr | 24.20 | 235 | P | | P | 23 47 08.2 | +0.6 |
| WB0 | Warramunga Arr | 24.22 | 236 | P | | P | 23 47 08.3 | +0.4 |
| WB2 | Warramunga Arr | 24.34 | 235 | P | | P | 23 47 09.1 | +0.1 |
| WB2 | | | | IAmb | | IAmb | 23 47 09.9 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| WRA | Warramunga Arr | 24.35 | 235 | P | | P | 23 47 09.2 | +0.1 |
| | comp=Z,2.2nm,0.5s,baz=60,slow=9.7,SNR=22 | | | | | | | |
| WRA | Warramunga Arr | 24.35 | 235 | P | | P | 23 47 08.9 | -0.2 |
| SIJI | Sorong | 24.80 | 282 | P | | P | 23 47 13.5 | +0.3 |
| | comp=Z,11nm,0.5s,baz=61,slow=12,SNR=5.1 | | | | | | | |
| ASAR | Alice Springs | 26.70 | 229 | P | | P | 23 47 29.8 | -0.6 |
| | comp=Z,0.8nm,0.7s,baz=60,slow=8.2,SNR=7.2 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 27.38 | 24 | T | | T | 00 15 57.0 | |
| | baz=204,slow=76,SNR=74 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 27.38 | 24 | T | | T | 00 15 58.3 | |
| | baz=204,slow=76,SNR=85 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 27.40 | 24 | T | | T | 00 15 58.4 | |
| | baz=204,slow=76,SNR=61 | | | | | | | |
| KNRA | Kununurra | 27.63 | 249 | P | | P | 23 47 38.4 | -0.2 |
| KNRA | | | | IAmb | | IAmb | 23 48 07.3 | |
| | comp=Z,27nm,1.3s | | | | | | | |
| STKA | Stephens Creek | 28.19 | 206 | P | | P | 23 47 43.4 | -0.1 |
| | comp=Z,3.1nm,0.8s,baz=22,slow=13,SNR=6.3 | | | | | | | |
| STKA | | | | LR | | LR | 23 58 21.4 | |
| | comp=Z,55nm,20.2s,baz=22,slow=35 | | | | | | | |
| FITZ | Fitzroy Crossi | 31.18 | 246 | P | | P | 23 48 09.3 | -0.9 |
| | comp=Z,4.6nm,0.8s,baz=114,slow=6.4,SNR=8.9 | | | | | | | |
| FITZ | | | | LR | | LR | 00 00 58.3 | |
| | comp=Z,44nm,18.1s,baz=56,slow=37 | | | | | | | |
| MMRI | Maumere | 32.96 | 264 | P | | P | 23 48 25.1 | -0.7 |
| MBWA | Marble Bar | 37.41 | 244 | P | | P | 23 49 04.5 | +0.4 |
| MBWA | | | | IAmb | | IAmb | 23 49 14.0 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| PSA00 | Pilbara Seismi | 37.43 | 243 | P | | P | 23 49 04.8 | +0.5 |
| KKM | Kota Kinabalu | 41.15 | 287 | P | | P | 23 49 35.7 | +0.2 |
| KKM | | | | IAmb | | IAmb | 23 49 44.3 | |
| | comp=Z,20nm,1.0s | | | | | | | |
| JMN | Monobe | 45.11 | 334 | P | | P | 23 50 06.7 | -0.5 |
| TPUB | Ta-pu | 45.24 | 312 | P | | P | 23 50 08.1 | -0.3 |
| SSLB | Suanglung | 45.30 | 313 | P | | P | 23 50 08.7 | -0.1 |
| SSLB | | | | IAmb | | IAmb | 23 50 37.8 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| KSM | Kuching | 45.78 | 279 | P | | P | 23 50 11.8 | -1.0 |
| KSM | | | | IAmb | | IAmb | 23 50 33.4 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| JNU | Nakatsue | 45.97 | 331 | P | | P | 23 50 14.7 | +0.7 |
| KSRS | Korea Array | 50.89 | 332 | P | | P | 23 50 51.7 | -0.1 |
| | comp=Z,0.7nm,0.4s,baz=147,slow=8.2,SNR=4.7 | | | | | | | |
| KSRS | | | | LR | | LR | 00 10 15.6 | |
| | comp=Z,8.5nm,21.2s,baz=95,slow=33 | | | | | | | |
| PEA0B | Petropavlovsk- | 59.61 | 2 | P | | P | 23 51 55.8 | +1.4 |
| PETK | Petropavlovsk- | 59.61 | 2 | P | | P | 23 51 55.0 | +0.6 |
| | comp=Z,3.5nm,0.5s,baz=168,slow=7.6,SNR=10 | | | | | | | |
| PETK | Petropavlovsk- | 59.61 | 2 | P | | P | 23 51 55.3 | +1.0 |
| CMAR | Chiang Mai Arr | 61.06 | 295 | P | | P | 23 52 06.3 | +1.3 |
| | comp=Z,3.9nm,0.7s,baz=117,slow=5.2,SNR=19 | | | | | | | |
| CMAR | Chiang Mai Arr | 61.06 | 295 | P | | P | 23 52 04.8 | -0.2 |
| CHTO | Chiang Mai | 61.18 | 296 | P | | P | 23 52 06.7 | +0.9 |
| CHTO | | | | IAmb | | IAmb | 23 52 08.0 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| MA2 | Magadan | 66.17 | 357 | P | | P | 23 52 37.8 | 0.0 |
| MA2 | | | | IAmb | | IAmb | 23 52 39.9 | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| ULN | Ulaanbaatar | 69.00 | 327 | P | | P | 23 52 57.6 | +1.4 |
| ULN | | | | IAmb | | IAmb | 23 52 57.8 | |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| SONM | Songino Array | 69.33 | 327 | P | | P | 23 52 58.5 | +0.3 |
| | comp=Z,1.7nm,0.8s,baz=136,slow=7.0,SNR=13 | | | | | | | |
| SONM | Songino Array | 69.33 | 327 | P | | P | 23 52 58.8 | +0.6 |
| SONM | | | | IAmb | | IAmb | 23 53 13.6 | |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| L19K | White Mountain | 78.52 | 21 | P | | P | 23 53 52.9 | +1.4 |
| L19K | | | | IAmb | | IAmb | 23 54 11.8 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| CAST | Castle Rocks | 80.29 | 21 | P | | P | 23 54 02.0 | +0.8 |
| CAST | | | | IAmb | | IAmb | 23 54 04.2 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| IMAR | Indian Mountai | 81.31 | 19 | P | | P | 23 54 07.4 | +0.9 |
| MLY | Manley | 81.72 | 20 | P | | P | 23 54 08.8 | 0.0 |
| ILAR | Eielson Array | 82.94 | 21 | P | | P | 23 54 14.9 | -0.2 |
| | comp=Z,0.5nm,0.7s,baz=245,slow=5.6,SNR=8.8 | | | | | | | |
| MK31 | Makanchi Array | 83.48 | 319 | P | | P | 23 54 17.9 | -0.5 |
| MK31 | | | | IAmb | | IAmb | 23 54 18.8 | |
| | comp=Z,2.2nm,1.1s | | | | | | | |
| MKAR | Makanchi Array | 83.48 | 319 | P | | P | 23 54 17.8 | -0.5 |
| | comp=Z,1.1nm,0.8s,baz=98,slow=6.4,SNR=15 | | | | | | | |
| MKAR | Makanchi Array | 83.48 | 319 | P | | P | 23 54 18.0 | -0.4 |
| ZALV | Zalesovo Beam | 84.19 | 326 | P | | P | 23 54 20.6 | -1.1 |
| | comp=Z,0.8nm,0.5s,baz=116,slow=5.1,SNR=5.9 | | | | | | | |
| TOLK | Toolik Lake Re | 84.20 | 18 | P | | P | 23 54 23.1 | +1.5 |
| TOLK | | | | IAmb | | IAmb

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **45.45** | **255** | P | **P** | **23 51 20.5** | **-0.3** |
| **FORT** | **Forrest** | **50.52** | **245** | P | **P** | **23 51 57.9** | **-0.1** |
| FORT | | | | IAmb | IAmb | 23 51 58.3 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **51.28** | **265** | P | **P** | **23 52 03.2** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 23 52 04.7 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.59** | **256** | P | **P** | **23 52 54.4** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 23 52 55.5 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **58.76** | **256** | P | **P** | **23 52 55.3** | **-0.1** |
| **USA0B** | **Ussuriysk Arra** | **77.61** | **325** | P | **P** | **23 54 48.2** | **+0.1** |
| USA0B | | | | IAmb | IAmb | 23 54 51.5 | |
| | comp=Z,3.4nm,0.7s | | | | | | |

*WEL* ***10*** *00:05:00,42.08S×173.06E,h51km,ML4.3,Mw4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵ Nm; Mrr-0.54; Mθθ 1.09; Mϕϕ-0.56; Mrθ 1.02; Mθϕ-0.73; Mϕr 0.63; Fault plane solution: M₀1.69000×10¹⁵ NP1: ϕs148.00000°,δ43.00000°,λ-19.00000°. NP2: ϕs252.00000°,δ77.00000°,λ-131.00000°. Principal axes: T 165.9800, Plg21.0000°, Azm12.0000°; N -172.0800, Plg40.0000°, Azm263.0000°; P 6.1000, Plg42.0000°, Azm123.0000°;*

*IDC* ***10*** *00:05:22.1±1.4,42.22S×173.32E,h0km,mb3.7/2, mb1 3.9/3,mb1mx3.7/22,mbtmp3.6/3,ML3.5/1,MS3.3/2, Ms1 3.3/2,ms1mx2.8/49 Error ellipse: s-maj=44.0km s-min=28.5km az=156.0*

*NOU* ***10*** *00:05:29.3,42.25S×173.32E,h79km,MLv4.6/10,South Island, New Zealand*

*WEL* ***10*** *00:05:30.2,42°S±4.″×17°3E±.″,h50km±8km,M4.3/15, ML4.5/15,MLv4.3/15,Error ellipse: s-maj=0.0km s-min=0.0km az=70.6*

**ISC 10 00:05:30.1±0.9, 42.16S±0.03×173.17E±0.04, h63km±7km, n143,σ1$15/149, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHZ** | **Kahutara** | **0.37** | **132** | P | **Pn** | **00 05 41.9** | **+0.8** |
| KHZ | | | | S | **Sn** | **00 05 50.2** | **+1.2** |
| **KHZ** | **Kahutara** | **0.37** | **132** | P | **Pn** | **00 05 42.1** | **+1.0** |
| **THZ** | **Tophouse** | **0.45** | **334** | P | **Pn** | **00 05 40.3** | **-1.5** |
| THZ | | | | S | **Sn** | **00 05 47.1** | **-3.2** |
| **BSWZ** | **Blackbirch Sta** | **0.69** | **50** | P | **Pn** | **00 05 45.1** | **+0.6** |
| **GVZ** | **Greta Valley S** | **0.81** | **187** | P | **Pn** | **00 05 46.9** | **+1.0** |
| **MRNZ** | **Matariki Terra** | **0.82** | **338** | P | **Pn** | **00 05 45.3** | **-0.7** |
| MRNZ | | | | S | **Sn** | **00 05 55.9** | **-1.9** |
| **CMWZ** | **Cape Campbell** | **0.89** | **62** | P | **Pn** | **00 05 48.5** | **+1.7** |
| **LTZ** | **Lake Taylor** | **0.91** | **227** | P | **Pn** | **00 05 47.6** | **+0.6** |
| LTZ | | | | S | **Sn** | **00 06 00.0** | **+0.4** |
| **TUWZ** | **Tuamarina** | **0.94** | **39** | P | **Pn** | **00 05 47.9** | **+0.5** |
| TUWZ | | | | S | **Sn** | **00 06 01.2** | **+1.0** |
| **NNZ** | **Nelson** | **0.96** | **10** | P | **Pn** | **00 05 47.6** | **-0.1** |
| NNZ | | | | S | **Sn** | **00 06 00.4** | **-0.4** |
| **AMCZ** | **Amberley** | **1.08** | **200** | P | **Pn** | **00 05 50.2** | **+0.9** |
| **DSZ** | **Denniston Nort** | **1.10** | **292** | P | **Pn** | **00 05 49.1** | **-0.5** |
| DSZ | | | | S | **Sn** | **00 06 03.1** | **-1.0** |
| **TKNZ** | **Takaka Hill** | **1.14** | **352** | P | **Pn** | **00 05 50.0** | **-0.1** |
| TKNZ | | | | S | **Sn** | **00 06 04.5** | **-0.5** |
| **TCW** | **Tory Channel** | **1.27** | **41** | P | **Pn** | **00 05 52.1** | **+0.4** |
| **INZ** | **Inchbonnie** | **1.39** | **246** | P | **Pn** | **00 05 53.9** | **+0.5** |
| **QRZ** | **Quartz Range** | **1.42** | **340** | P | **Pn** | **00 05 53.6** | **-0.2** |
| **QRZ** | **Quartz Range** | **1.42** | **340** | P | **Pn** | **00 05 54.3** | **+0.5** |
| **OXZ** | **Oxford** | **1.43** | **215** | P | **Pn** | **00 05 53.8** | **-0.1** |
| **SNZO** | **South Karori** | **1.43** | **54** | P | **Pn** | **00 05 54.7** | **+0.8** |
| **DUWZ** | **D'Urville Isla** | **1.48** | **23** | P | **Pn** | **00 05 55.0** | **+0.4** |
| **BHW** | **Baring Head** | **1.48** | **60** | P | **Pn** | **00 05 54.8** | **+0.2** |
| **WEL** | **Wellington** | **1.49** | **54** | P | **Pn** | **00 05 55.2** | **+0.5** |
| **OKCZ** | **Okains Bay** | **1.56** | **183** | P | **Pn** | **00 05 56.1** | **+0.4** |
| **MQZ** | **McQueen's Vall** | **1.59** | **194** | P | **Pn** | **00 05 55.5** | **-0.4** |
| **PLWZ** | **Palliser** | **1.67** | **70** | P | **Pn** | **00 05 56.9** | **-0.3** |
| **AKCZ** | **Akaroa Harbour** | **1.72** | **186** | P | **Pn** | **00 05 58.0** | **+0.2** |
| **MSWZ** | **Moikau Station** | **1.73** | **65** | P | **Pn** | **00 05 57.7** | **-0.2** |
| **RACZ** | **Rakaia** | **1.73** | **205** | P | **Pn** | **00 05 57.7** | **-0.3** |
| **CAW** | **Cannon Point** | **1.77** | **54** | P | **Pn** | **00 05 58.7** | **+0.1** |
| **MHCZ** | **Mount Hutt** | **1.80** | **220** | P | **Pn** | **00 05 58.7** | **-0.3** |
| **KIW** | **Kapiti Island** | **1.85** | **46** | P | **Pn** | **00 06 00.1** | **+0.6** |
| **PAWZ** | **Paruwai Farm** | **1.86** | **66** | P | **Pn** | **00 05 59.3** | **-0.4** |
| **WVZ** | **Waitaha Valley** | **2.01** | **242** | P | **Pn** | **00 06 02.1** | **+0.4** |
| **MTW** | **Mount Morrison** | **2.02** | **61** | P | **Pn** | **00 06 01.3** | **-0.5** |
| **OGWZ** | **Otaki Gorge** | **2.02** | **49** | P | **Pn** | **00 06 02.0** | **+0.1** |
| **WACZ** | **Wakanui South** | **2.03** | **208** | P | **Pn** | **00 06 01.5** | **-0.4** |
| **TRWZ** | **Traveller** | **2.04** | **69** | P | **Pn** | **00 06 01.5** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **2.17** | **55** | P | **Pn** | **00 06 03.4** | **-0.6** |
| **RPZ** | **Rata Peaks** | **2.19** | **224** | P | **Pn** | **00 06 04.0** | **-0.3** |
| **RPZ** | **Rata Peaks** | **2.19** | **224** | P | **Pn** | **00 06 04.6** | **+0.4** |
| **TMWZ** | **Te Maipa** | **2.30** | **64** | P | **Pn** | **00 06 04.9** | **-0.8** |
| **ARCZ** | **Arundel** | **2.30** | **219** | P | **Pn** | **00 06 05.4** | **-0.3** |
| **MRZ** | **Mangatainoka R** | **2.36** | **51** | P | **Pn** | **00 06 06.0** | **-0.4** |
| **GCSZ** | **Gaunt Creek Bo** | **2.39** | **240** | P | **Pn** | **00 06 07.2** | **+0.3** |
| **TIWZ** | **Tintock** | **2.47** | **57** | P | **Pn** | **00 06 07.4** | **-0.6** |
| **OHWZ** | **Ohakea** | **2.54** | **40** | P | **Pn** | **00 06 09.9** | **+1.0** |
| **CPWZ** | **Castlepoint** | **2.60** | **62** | P | **Pn** | **00 06 09.5** | **-0.2** |
| **POWZ** | **Post Office Ro** | **2.64** | **49** | P | **Pn** | **00 06 09.8** | **-0.5** |
| **PRWZ** | **Pori Road** | **2.65** | **54** | P | **Pn** | **00 06 09.9** | **-0.6** |
| **TMZ** | **Timaru** | **2.72** | **215** | P | **Pn** | **00 06 10.8** | **-0.6** |
| **BFZ** | **Birch Farm** | **2.75** | **58** | P | **Pn** | **00 06 10.4** | **-1.4** |
| **BFZ** | **Birch Farm** | **2.75** | **58** | P | **Pn** | **00 06 10.1** | **-1.7** |
| **WAZ** | **Wanganui** | **2.77** | **30** | P | **Pn** | **00 06 13.8** | **+1.7** |
| **NMEZ** | **Namu Road** | **2.80** | **11** | P | **Pn** | **00 06 14.3** | **+1.8** |
| **FOZ** | **Fox Glacier** | **2.82** | **240** | P | **Pn** | **00 06 12.7** | **0.0** |
| **LREZ** | **Lake Rotokare** | **2.86** | **20** | P | **Pn** | **00 06 15.9** | **+2.6** |
| **PREZ** | **Palmer Road** | **2.92** | **15** | P | **Pn** | **00 06 15.9** | **+1.7** |
| **DVHZ** | **Dannevirke** | **2.93** | **52** | P | **Pn** | **00 06 13.1** | **-1.2** |
| **KHEZ** | **Kahui Hut** | **2.94** | **13** | P | **Pn** | **00 06 16.0** | **+1.5** |
| **NBEZ** | **Newall Road No** | **2.94** | **11** | P | **Pn** | **00 06 16.3** | **+1.8** |
| **NEZ** | **North Egmont** | **2.98** | **14** | P | **Pn** | **00 06 16.9** | **+1.9** |
| **ANWZ** | **Angora Road** | **3.02** | **57** | P | **Pn** | **00 06 14.4** | **-1.1** |
| **PKE** | **Pukeiti** | **3.03** | **12** | P | **Pn** | **00 06 17.3** | **+1.6** |
| **DREZ** | **Durham Road** | **3.08** | **15** | P | **Pn** | **00 06 18.0** | **+1.7** |
| **LBZ** | **Lake Benmore** | **3.11** | **223** | P | **Pn** | **00 06 16.6** | **-0.1** |
| **PNHZ** | **Pukenui** | **3.21** | **47** | P | **Pn** | **00 06 17.1** | **-1.1** |
| **PRHZ** | **Porangahau** | **3.23** | **55** | P | **Pn** | **00 06 17.0** | **-1.4** |
| **VRZ** | **Vera Road** | **3.27** | **22** | P | **Pn** | **00 06 20.7** | **+1.7** |
| **MTVZ** | **Mangateitei** | **3.28** | **33** | P | **Pn** | **00 06 20.1** | **+1.0** |
| **PKVZ** | **Pokaka** | **3.32** | **31** | P | **Pn** | **00 06 20.3** | **+0.7** |
| **MOVZ** | **Moawhango** | **3.38** | **36** | P | **Pn** | **00 06 20.4** | **-0.2** |
| **WWVZ** | **Wahianoa** | **3.38** | **34** | P | **Pn** | **00 06 21.2** | **+0.6** |
| **TRVZ** | **Turoa** | **3.39** | **33** | P | **Pn** | **00 06 21.4** | **+0.6** |
| **ODZ** | **Otahua Downs** | **3.41** | **212** | P | **Pn** | **00 06 20.1** | **-0.7** |
| **ODZ** | **Otahua Downs** | **3.41** | **212** | P | **Pn** | **00 06 19.8** | **-1.0** |
| **DRZ** | **Dome Shelter** | **3.41** | **33** | P | **Pn** | **00 06 22.1** | **+0.9** |
| **WHVZ** | **Whangaehu Hut** | **3.42** | **33** | P | **Pn** | **00 06 21.8** | **+0.7** |
| **FWVZ** | **Far West T-bar** | **3.43** | **33** | P | **Pn** | **00 06 21.8** | **+0.5** |
| **TUVZ** | **Tukino** | **3.46** | **34** | P | **Pn** | **00 06 22.1** | **+0.5** |
| **BHHZ** | **Black Hill Sta** | **3.46** | **40** | P | **Pn** | **00 06 21.2** | **-0.4** |
| **KRHZ** | **Kereru** | **3.50** | **45** | P | **Pn** | **00 06 21.0** | **-1.1** |
| **NGZ** | **Ngauruhoe** | **3.51** | **33** | P | **Pn** | **00 06 23.1** | **+0.7** |
| **PXZ** | **Pawanui** | **3.51** | **54** | P | **Pn** | **00 06 20.7** | **-1.5** |
| **SNVZ** | **South Ngauruho** | **3.52** | **33** | P | **Pn** | **00 06 23.1** | **+0.6** |
| **TWVZ** | **Taurewa** | **3.54** | **30** | P | **Pn** | **00 06 23.2** | **+0.5** |
| **OTVZ** | **Oturere** | **3.55** | **33** | P | **Pn** | **00 06 23.3** | **+0.4** |
| **NNVZ** | **North Ngauruho** | **3.56** | **32** | P | **Pn** | **00 06 23.4** | **+0.4** |
| **WTVZ** | **West Tongariro** | **3.56** | **32** | P | **Pn** | **00 06 23.5** | **+0.5** |
| **ETVZ** | **East Tongariro** | **3.59** | **33** | P | **Pn** | **00 06 23.9** | **+0.5** |
| **KRVZ** | **Karewarewa** | **3.60** | **32** | P | **Pn** | **00 06 24.0** | **+0.5** |
| **TMVZ** | **Te Maari** | **3.61** | **33** | P | **Pn** | **00 06 24.1** | **+0.5** |
| **NTVZ** | **North Tongarir** | **3.61** | **33** | P | **Pn** | **00 06 24.3** | **+0.6** |
| **KAHZ** | **Kahuranaki** | **3.67** | **51** | P | **Pn** | **00 06 23.7** | **-0.8** |
| **KWHZ** | **Kaweka Forest** | **3.69** | **43** | P | **Pn** | **00 06 24.2** | **-0.5** |
| **KATZ** | **Kakaramea** | **3.72** | **32** | P | **Pn** | **00 06 26.2** | **+0.9** |
| **JCZ** | **Jackson Bay** | **3.73** | **238** | P | **Pn** | **00 06 24.4** | **-0.9** |
| **RITZ** | **Rihia Road** | **3.79** | **34** | P | **Pn** | **00 06 26.3** | **+0.3** |
| **RATZ** | **Rangitukua** | **3.85** | **32** | P | **Pn** | **00 06 30.1** | **+3.2** |
| **HIZ** | **Hauiti** | **3.87** | **20** | P | **Pn** | **00 06 28.0** | **+0.9** |
| **HIZ** | **Hauiti** | **3.87** | **20** | P | **Pn** | **00 06 28.0** | **+0.9** |
| **CKHZ** | **Cape Kidnapper** | **3.88** | **51** | P | **Pn** | **00 06 26.1** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **3.92** | **41** | P | **Pn** | **00 06 26.7** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **3.92** | **41** | P | **Pn** | **00 06 26.5** | **-1.4** |
| **WATZ** | **Wairara** | **3.97** | **30** | P | **Pn** | **00 06 29.7** | **+1.2** |
| **WKZ** | **Wanaka** | **4.02** | **227** | P | **Pn** | **00 06 28.8** | **-0.4** |
| **ARHZ** | **Aropaoanui** | **4.11** | **46** | P | **Pn** | **00 06 31.2** | **+0.8** |
| **NMHZ** | **Naumai** | **4.13** | **43** | P | **Pn** | **00 06 30.6** | **-0.2** |
| **EAZ** | **Earnscleugh** | **4.15** | **221** | P | **Pn** | **00 06 30.0** | **-0.9** |
| **KUTZ** | **Kaahu Road** | **4.20** | **30** | P | **Pn** | **00 06 34.8** | **+3.2** |
| **TLZ** | **Tolley Road** | **4.24** | **26** | P | **Pn** | **00 06 33.2** | **+1.0** |
| **MTHZ** | **Maungataniwha** | **4.33** | **41** | P | **Pn** | **00 06 32.0** | **-1.5** |
| **TUZ** | **Tuapeka** | **4.56** | **213** | P | **Pn** | **00 06 36.4** | **-0.2** |
| **RTZ** | **Ruatahuna** | **4.59** | **41** | P | **Pn** | **00 06 35.3** | **-1.8** |
| **SNGZ** | **Shannon Statio** | **4.64** | **45** | P | **Pn** | **00 06 37.9** | **+0.2** |
| **MHGZ** | **Mahia Peninsul** | **4.70** | **52** | P | **Pn** | **00 06 36.9** | **-1.5** |
| **OMRZ** | **Omania** | **4.74** | **32** | P | Pn | 00 06 45.3 | +6.2 |
| **PRGZ** | **Paritu Road** | **4.84** | **50** | P | **Pn** | **00 06 39.0** | **-1.4** |
| **MLZ** | **Mavora Lakes** | **4.86** | **227** | P | **Pn** | **00 06 39.6** | **-1.0** |
| **URZ** | **Urewera** | **4.93** | **39** | Pn | **Pn** | **00 06 38.9** | **-2.8** |
| | 1.7nm,0.3s,baz=250,slow=5.1,SNR=10.0 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 07 34.5** | **-2.8** |
| | 17nm,0.3s,baz=101,slow=17,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **4.93** | **39** | P | **Pn** | **00 06 39.8** | **-1.9** |
| **MWZ** | **Matawai** | **5.08** | **43** | P | **Pn** | **00 06 41.8** | **-1.9** |
| **AWAZ** | **Awhitu Peninsu** | **5.22** | **13** | P | **Pn** | **00 06 47.1** | **+1.5** |
| **SYZ** | **Scrubby Hill** | **5.24** | **212** | P | **Pn** | **00 06 46.1** | **+0.3** |
| **WHZ** | **Wether Hill Ro** | **5.29** | **224** | P | **Pn** | **00 06 45.7** | **-0.9** |
| **WTAZ** | **Waiatarua** | **5.34** | **12** | P | **Pn** | **00 06 49.6** | **+2.4** |
| **TWGZ** | **Tauwhareparae** | **5.43** | **44** | P | **Pn** | **00 06 47.9** | **-0.6** |
| **RUGZ** | **Raukumara Rang** | **5.44** | **41** | P | **Pn** | **00 06 47.4** | **-1.2** |
| **MBAZ** | **Motutapu North** | **5.55** | **15** | P | **Pn** | **00 06 51.4** | **+1.3** |
| **WIAZ** | **Waiheke Island** | **5.58** | **16** | P | **Pn** | **00 06 51.7** | **+1.2** |
| **ABAZ** | **Army Bay** | **5.70** | **14** | P | **Pn** | **00 06 53.6** | **+1.4** |
| **KUZ** | **Kuaotunu** | **5.76** | **21** | P | **Pn** | **00 06 53.3** | **+0.3** |
| **WMGZ** | **Waiomatatini S** | **5.92** | **45** | P | **Pn** | **00 06 53.2** | **-2.0** |
| **WCZ** | **Waipu Caves** | **6.28** | **9** | P | **Pn** | **00 07 01.5** | **+1.3** |
| **OUZ** | **Omahuta** | **6.94** | **3** | P | **Pn** | **00 07 10.5** | **+1.3** |
| **OUZ** | **Omahuta** | **6.94** | **3** | P | **Pn** | **00 07 09.7** | **+0.5** |
| **CTZ** | **Chatham Island** | **7.66** | **105** | P | **Pn** | **00 07 17.9** | **-1.0** |
| **DZM** | **Mont Dzumac** | **20.81** | **342** | LR | LR | 00 16 45.7 | |
| | comp=Z,95nm,18.0s,baz=276,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **31.63** | **306** | LR | LR | 00 23 49.3 | |
| | comp=Z,45nm,19.6s,baz=70,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **37.37** | **287** | P | **P** | **00 12 38.0** | **+1.1** |
| | 0.3nm,0.4s,baz=125,slow=6.7,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.50** | **292** | P | **P** | **00 12 55.6** | **+0.9** |
| | 0.8nm,0.6s,baz=128,slow=8.4,SNR=16 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **123.63** | **310** | PKP | **PKPdf** | **00 24 19.5** | **-0.3** |
| | 0.2nm,0.5s,baz=117,slow=1.8,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **147.88** | **339** | PKPbc | **PKPbc** | **00 25 06.5** | **-0.4** |
| | 4.4nm,1.1s,baz=46,slow=2.6,SNR=1.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.15** | **197** | PKPbc | **PKiKP** | **00 25 15.4** | **+0.4** |
| | 0.6nm,0.4s,baz=161,slow=2.1,SNR=23 | | | | | | |

**IDC 10 00:31:16.1±7.3, 17.19S×178.54W, h609km±22km, mb2.9/3,mb1 3.2/4,mb1mx2.5/61,mbtmp3.9/4, Error ellipse: s-maj=316.7km s-min=31.3km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.30** | **260** | P | P | 00 32 37.8 | 0.0 |
| | 3.8nm,0.3s,baz=126,slow=12,SNR=22 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **259** | P | P | 00 38 36.4 | 0.0 |
| | 0.4nm,0.5s,baz=93,slow=6.9,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **44.87** | **254** | P | P | 00 38 38.0 | -0.2 |
| | 1.2nm,0.6s,baz=87,slow=9.1,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **85.22** | **13** | P | P | 00 42 49.0 | 0.0 |
| | 0.3nm,0.4s,baz=218,slow=5.2,SNR=5.4 | | | | | | |

*EAF* ***10*** *00:32:24.1±0.4,25.35S×29.03E,h10km,MD3.4*

**BUL 10 00:32:24.1±0.4, 25.35S×29.02E, h10km, MD3.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **2.83** | **50** | *eP* | Pn | 00 33 09.0 | -0.4 |
| MOPA | | | | *eS* | Sn | 00 33 41.5 | -2.1 |
| **MOPA** | **Mopani** | **2.83** | **50** | *eP* | Pn | 00 33 09.0 | -0.4 |
| MOPA | | | | *eS* | Sn | 00 33 41.5 | -2.1 |
| **MSNA** | **Messina** | **3.13** | **17** | *eP* | Pn | 00 33 13.4 | -0.2 |
| MSNA | | | | *eS* | Sn | 00 33 49.3 | -1.8 |
| **MSNA** | **Messina** | **3.13** | **17** | *eP* | Pn | 00 33 13.4 | -0.2 |
| MSNA | | | | *eS* | Sn | 00 33 49.3 | -1.8 |
| **MATP** | **Matopo** | **4.93** | **354** | *eP* | Pn | 00 33 37.5 | -0.9 |
| MATP | | | | *eS* | Sn | 00 34 31.6 | -4.0 |
| **MATP** | **Matopo** | **4.93** | **354** | *eP* | Pn | 00 33 37.5 | -0.9 |
| MATP | | | | *eS* | Sn | 00 34 31.6 | -4.0 |
| **BLWY** | **Bulawayo** | **5.20** | **356** | *eP* | Pn | 00 33 41.4 | -0.8 |
| BLWY | | | | *eS* | Sn | 00 34 37.5 | -4.9 |
| **BLWY** | **Bulawayo** | **5.20** | **356** | *eP* | Pn | 00 33 41.4 | -0.8 |
| BLWY | | | | *eS* | Sn | 00 34 37.5 | -4.9 |

*IDC* ***10*** *00:33:00.8±0.3,30.60S×71.39W,h0km,mb5.5/39, mb1 5.5/45,mb1mx5.5/47,mbtmp5.4/45,ML5.1/6,MS6.2/44, Ms1 6.2/44,ms1mx6.2/51,Error ellipse: s-maj=13.0km s-min=8.8km az=83.0*

*SJA* ***10*** *00:33:00.8±0.7,30.58S×71.95W,h13km±6km,ML6.3, MW6.1*

*MOS* ***10*** *00:33:03.2±0.9,30.52S×71.42W,h21km,mb6.0/27, MS6.3/21,Error ellipse: s-maj=12.3km s-min=6.5km az=93.3*

*GUC* ***10*** *00:33:04.1±0.9,30.63S×71.65W,h37km±2km,ML6.4, MW6.4*

*UPA* ***10*** *00:33:04.9±3.4,30.07S×70.13W,h10km±396km,MW6.4*

*NEIC* ***10*** *00:33:05.5,30.64S×71.63W,h33km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr2.96; Mθθ-0.05; Mϕϕ-2.90; Mrθ 0.54; Mθϕ 0.36; Mϕr-1.25; Fault plane solution: M₀3.25000×10¹⁸ NP1:ϕs166.31000°, δ57.32000°,λ82.89000°. NP2:ϕs359.33000°,δ33.36000°, λ100.92000°. Principal axes: T 3.2780, Plg77.0000°, Azm54.0000°; N -0.0484, Plg6.0000°, Azm170.0000°; P -3.2296, Plg12.0000°, Azm261.0000°;*

*BJI* ***10*** *00:33:05.0±0.0,30.44S×71.49W,h30km,mB6.2/64, Ms6.5/90,Ms7 6.5/85*

*NEIC* ***10*** *00:33:05.3±1.6,30.57S±0.03×71.58W±0.06,h29km±1km, mb6.1/516,Ms_20 6.3/375,Mwb6.3/73,Mwc6.4/94,Mww6.3, Mwr6.3(GUC),Error ellipse: s-maj=8.9km s-min=5.2km az=262.0*

*VAO* ***10*** *00:33:06.5±0.3,30.25S×71.12W,h10km,mb5.9*

*GCMT* ***10*** *00:33:10.3±0.1,30.62S×71.90W,h36km,MW6.4/164, Moment Tensor Solution. s162,c390; s164,c614; Duration: 3ₒ7 Moment tensor: Scale 10¹⁸Nm; Mrr3.53±.02; Mθθ 0.16±.01; Mϕϕ-3.69±.02; Mrθ 0.39±.02; Mθϕ-0.24±.01; Mϕr-2.28±.03; Best double couple: M₀4.29500×10¹⁸ NP1:ϕs11.00000°,δ29.00000°, λ103.00000°. NP2:ϕs176.00000°,δ61.00000°,λ83.00000°. Principal axes: T 4.2370, Plg73.0000°, Azm69.0000°; N 0.1200, Plg6.0000°, Azm180.0000°; P -4.3530, Plg16.0000°, Azm272.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***10*** *00:33:13,30.53S×71.62W,h40km,Moment Tensor Solution. Duration: 16ₒ0 Moment tensor: Scale 10¹⁸Nm; Mrr3.44; Mθθ-0.12; Mϕϕ-3.32; Mrθ 0.28; Mθϕ-0.01; Mϕr-2.34; Fault plane solution: M₀4.12000×10¹⁸ NP1:ϕs4.00000°, δ28.00000°,λ96.00000°. NP2:ϕs176.00000°,δ62.00000°, λ87.00000°. Principal axes: T 4.1875, Plg72.0000°, Azm78.0000°; N -0.1369, Plg3.0000°, Azm178.0000°; P -4.0505, Plg17.0000°, Azm269.0000°;*

*NEIC* ***10*** *00:33:19.7,31.18S×71.73W,h39km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr3.95; Mθθ-0.44; Mϕϕ-3.51; Mrθ 0.94; Mθϕ-0.16; Mϕr-3.48; Fault plane solution: M₀5.18000×10¹⁸ NP1:ϕs171.09000°, δ67.11000°,λ81.94000°. NP2:ϕs11.10000°,δ24.19000°, λ108.37000°. Principal axes: T 5.4741, Plg67.0000°, Azm66.0000°; N -0.5841, Plg7.0000°, Azm174.0000°; P -4.8900, Plg22.0000°, Azm267.0000°;*

**ISC 10 00:33:04.1±0.3, 30.59S±0.02×71.55W±0.03, h23km±1km, h23km:pP-P,n1528,σ2ₒ18/1405, mb6.1/346, MS6.3/259, 191C-56D, Fault plane solution: NP1:ϕs181.40004°, δ53.31049°,λ98.87912°. NP2:ϕs346.74698°,δ37.60134°, λ78.29638°. Principal axes: T Plg79.3283°, Azm127.5130°; N Plg7.1098°, Azm356.0675°; P Plg7.9172°, Azm265.0736°; Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.11** | **222** | ⇑*iP* | **Pn** | **00 33 10.9** | **+0.4** |
| CO06 | | | | *eS* | **Sb** | **00 33 14.9** | **+3.4** |
| **CO06** | **Fray Jorge** | **0.11** | **222** | | **Pn** | **00 33 10.9** | **+0.4** |
| **CO05** | **La Serena** | **0.72** | **22** | ⇓*iP* | **Pn** | **00 33 19.5** | **+0.6** |
| CO05 | | | | IAML | | 00 33 37.2 | |
| | comp=E,1418μm,0.6s | | | | | | |
| **CO05** | **La Serena** | **0.72** | **22** | Pn | **Pn** | **00 33 19.6** | **+0.7** |
| CO05 | | | | Sn | **Sn** | **00 33 29.9** | **+0.8** |
| **GO04** | **Tololo Observa** | **0.77** | **57** | ⇓*iP* | **Pn** | **00 33 21.2** | **+1.4** |
| GO04 | | | | *eS* | **Sn** | **00 33 32.1** | **+1.3** |
| GO04 | | | | IAML | | 00 33 37.5 | |
| | comp=N,3782μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **0.77** | **57** | Pn | **Pn** | **00 33 21.1** | **+1.4** |
| GO04 | | | | Sn | **Sn** | **00 33 33.0** | **+2.2** |
| **GO04** | **Tololo Observa** | **0.77** | **57** | *eP* | **Pn** | **00 33 21.5** | **+1.8** |
| **CO02** | **Combarbal** | **0.77** | **143** | ⇓*iP* | **Pn** | **00 33 20.5** | **+0.8** |
| CO02 | | | | *eS* | **Sn** | **00 33 32.2** | **+1.5** |
| CO02 | | | | IAML | | 00 33 35.0 | |
| | comp=N,1853μm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **0.77** | **143** | Pn | **Pn** | **00 33 20.7** | **+1.0** |
| **CO02** | **Combarbal** | **0.77** | **143** | *eP* | **Pn** | **00 33 20.8** | **+1.0** |
| CO02 | | | | IAML | | 00 33 42.4 | |
| | comp=Z,465μm,1.0s | | | | | | |
| **CO03** | **El Pedregal** | **0.78** | **109** | ⇓*iP* | **Pn** | **00 33 21.2** | **+1.4** |
| CO03 | | | | *eS* | **Sn** | **00 33 33.4** | **+2.6** |
| **CO03** | **El Pedregal** | **0.78** | **109** | Pn | **Pn** | **00 33 21.2** | **+1.4** |
| CO03 | | | | Sn | **Sn** | **00 33 33.0** | **+2.2** |
| **CO03** | **El Pedregal** | **0.78** | **109** | *eP* | **Pn** | **00 33 21.4** | **+1.6** |
| **LCO** | **Las Campanas** | **1.74** | **25** | P | **Pb** | **00 33 35.0** | **-0.4** |
| **LCO** | **Las Campanas** | **1.74** | **25** | | **Pb** | **00 33 35.0** | **-0.4** |
| **AROD** | **Rodeo** | **1.84** | **77** | *eP* | **Pb** | **00 33 39.5** | **+2.2** |
| **VA06** | **Catapilco** | **1.98** | **174** | *eP* | **Pn** | **00 33 37.2** | **+1.1** |
| VA06 | | | | IAML | | 00 34 11.8 | |
| | comp=E,359μm,0.3s | | | | | | |
| **VA06** | **Catapilco** | **1.98** | **174** | | **Pn** | **00 33 37.0** | **+0.8** |
| **ACDV** | **Cuesta del Vie** | **2.14** | **79** | *eP* | **Pn** | **00 33 39.0** | **+0.4** |
| ACDV | | | | IAML | | 00 34 23.0 | |
| | comp=Z,97μm,1.0s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.14** | **91** | *eP* | **Pb** | **00 33 44.3** | **+2.0** |
| **VA03** | **San Esteban** | **2.33** | **159** | ⇑*iP* | **Pb** | **00 33 43.4** | **-2.0** |
| VA03 | | | | *eS* | **Sb** | **00 34 12.5** | **-1.3** |
| VA03 | | | | IAML | | 00 34 24.5 | |
| | comp=E,256μm,0.7s | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **159** | | **Pb** | **00 33 43.6** | **-1.9** |
| **AC04** | **Llanos de Chal** | **2.41** | **10** | *eP* | **Pn** | **00 33 42.7** | **+0.5** |
| AC04 | | | | IAML | | 00 34 28.3 | |
| | comp=E,77μm,0.8s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.41** | **10** | | **Pn** | **00 33 43.0** | **+0.9** |
| **AC04** | **Llanos de Chal** | **2.41** | **10** | *eS* | **Sb** | **00 34 15.0** | **-1.1** |
| AC04 | | | | IAML | | 00 34 29.4 | |
| | comp=Z,81μm,1.1s | | | | | | |
| **ROCH** | **El Roble** | **2.42** | **169** | *i P* | **Pb** | **00 33 43.8** | **-3.3** |
| ROCH | | | | *eP* | **Pn** | **00 33 42.5** | **+0.1** |
| ROCH | | | | *eS* | **Sb** | **00 34 14.5** | **-2.1** |
| ROCH | | | | *eS* | **Sn** | **00 34 15.2** | **+3.7** |
| ROCH | | | | IAML | | 00 34 23.4 | |
| | comp=N,264μm,0.6s | | | | | | |
| ROCH | | | | IAML | | 00 34 24.9 | |
| | comp=E,141μm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **2.42** | **169** | | **Pn** | **00 33 42.8** | **+0.3** |
| **ROC1** | **El Roble** | **2.42** | **169** | *eP* | **Pn** | **00 33 42.9** | **+0.3** |
| **VA01** | **Torpederas** | **2.43** | **182** | *eP* | **Pn** | **00 33 42.7** | **+0.4** |
| **VA01** | **Torpederas** | **2.43** | **182** | | **Pn** | **00 33 42.8** | **+0.4** |
| **VA01** | **Torpederas** | **2.43** | **182** | *eP* | **Pn** | **00 33 43.0** | **+0.7** |
| **AUSP** | **Uspallata** | **2.46** | **132** | *eP* | **Pn** | **00 33 40.0** | **-3.1** |
| **ZON** | **Zonda** |

**LVC Limon Verde 8.29 17** Pn **Pn 00 35 01.7 -1.6**
**LVC Limon Verde 8.29 17** *e*S **Pn 00 35 01.8 -1.6**
**LC01 Cunco 8.29 182** *e*P **Pn 00 35 02.4 -0.5**
**TA01 Diego Aracena 10.06 7** Pn **Pn 00 35 24.3 -2.9**
**PLCA Paso Flores 10.15 176** Pn **Pn 00 35 29.4 +0.9**
comp=Z,8.6nm,0.3s,baz=346,slow=12,SNR=71
PLCA LR LR 00 39 20.8
comp=Z,170µm,20.8s,baz=352,slow=38
**PLCA Paso Flores 10.15 176 Pn 00 35 29.1 +0.5**
**PB11 IPOC Station P 10.92 9** *e*S Pn 00 35 32.5 -6.6
PB11 IAML 00 36 20.5
comp=Z,1µm,0.8s
**LPA La Plata 12.24 114** *ce*P **Pn 00 35 57.7 +0.7**
LPA S **Sn 00 38 16.4 +3.6**
LPA SSS SSS 00 39 24.9
**LL07 Hotel Espejo d 12.32 187** Pn **Pn 00 35 56.9 -1.1**
**PB16 IPOC Station P 12.34 9 Pn 00 35 57.2 -1.8**
**ITQB Itaqui 12.95 90** *e*P **Pn 00 36 06.2 -0.5**
**ITQB Itaqui 12.95 90 Pn 00 36 06.8 +0.1**
**CPUP Villa Florida 13.21 75** Pn **Pn 00 36 09.9 -0.3**
comp=Z,3.4nm,0.3s,baz=264,slow=8.5,SNR=36
CPUP Sn **Sn 00 38 35.5 -1.0**
comp=Z,6.9nm,0.3s,baz=256,slow=17,SNR=2.3
CPUP Lg Lg 00 39 51.8
comp=Z,22nm,0.3s,baz=342,slow=12,SNR=3.7
CPUP LR LR 00 41 51.1
comp=Z,264µm,18.2s,baz=254,slow=40
**CPUP Villa Florida 13.21 75 Pn 00 36 09.0 -1.2**
**LPAZ La Paz 14.57 13** Pn **Pn 00 36 29.2 -0.4**
comp=Z,2.7nm,0.3s,baz=185,slow=8.0,SNR=73
**LPAZ La Paz 14.57 13 Pn 00 36 27.1 -2.4**
**PLTB Pedras Altas 15.41 99** *e*P **Pn 00 36 38.7 -1.4**
**CPSB Cacapava Do Su 15.61 94** *e*P **Pn 00 36 42.0 -0.8**
**ITAB Concordia 17.32 84** *e*P **P 00 37 05.9 +0.2**
**ITAB Concordia 17.32 84 Pn 00 37 04.8 +0.3**
ITAB IAmb IAmb 00 37 21.4
comp=Z,3µm,1.2s
**SIV San Ignacio 17.41 36** P **Pn 00 37 04.5 -1.1**
comp=Z,6.0nm,0.3s,baz=220,slow=12,SNR=215
**AQDB Aquidauana 17.47 59** *e*P **Pn 00 37 05.5 -0.8**
**GO08 Villa O'Higgin 17.87 182 P 00 37 13.1 +1.5**
GO08 IAmb IAmb 00 37 28.8
comp=Z,3µm,1.8s
**PTGB Pitanga 18.21 76** *e*P **P 00 37 15.7 0.0**
**PTLB Pontes e Lacer 18.88 40** *e*P **P 00 37 22.9 0.0**
**PTLB Pontes e Lacer 18.88 40** P **P 00 37 22.5 -0.5**
PTLB IAmb IAmb 00 37 38.5
comp=Z,2µm,1.4s
**NNA Nana 19.15 344** P **Pn 00 37 28.2 +1.3**
comp=Z,1.8nm,0.3s,baz=199,slow=17,SNR=11
NNA LR LR 00 43 11.9
comp=Z,60µm,21.7s,baz=168,slow=32
**NNA Nana 19.15 344 P P 00 37 26.1 +0.1**
**TER01 Tubaro-SC 19.61 90** *e*P **Pn 00 37 32.2 -0.1**
**PP1B Ponte de Pedra 19.93 53** *e*P **P 00 37 34.9 +0.4**
**PCMB Pacaembu 20.27 69** *e*P **P 00 37 38.9 +0.7**
**VILB Vilhena 20.44 33** *e*P **P 00 37 40.4 +0.3**
**VILB Vilhena 20.44 33** P **P 00 37 40.0 0.0**
**TJ01 Guaruva-PR 20.58 81** *e*P **P 00 37 39.6 -2.0**
**SALV Santo Antonio 20.60 48** *e*P **P 00 37 41.4 -0.3**
**FRTB Fartura 20.86 75** *e*P **P 00 37 45.1 +0.5**
**MG05 Puerto Natales 21.08 182** P **P 00 37 46.9 +0.3**
**ETMB Extrema 21.26 15** *e*P **P 00 37 49.5 +0.7**
**ETMB Extrema 21.26 15** P **P 00 37 48.8 -0.1**
ETMB IAmb IAmb 00 38 06.5
comp=Z,2µm,1.4s
**ITRB Iturama 21.99 65** *e*P **P 00 37 56.4 -0.3**
**PET01 Itanhaem-SP 22.41 80** *e*P **P 00 38 00.5 -0.7**
**BB19B Bebedouro 22.75 71** *e*P **P 00 38 03.3 -1.6**
**CZSB Cruzeiro do Su 22.77 357** *e*P **P 00 38 05.7 +0.7**
**CZSB Cruzeiro do Su 22.77 357** P **P 00 38 05.3 +0.3**
**RCLB Rio Claro- Sao 22.95 75** *e*P **P 00 38 06.3 -0.6**
**VAO Valinhos 23.18 77** *e*P **P 00 38 08.6 -0.7**
**MG03 Isla Dawson 23.26 178** P **P 00 38 10.3 +0.6**
**EFI East Falkland 23.31 158** P **P 00 38 10.2 -0.1**
EFI pmax pmax
comp=Z,2µm,1.8s
EFI MLR MLR
comp=Z,94µm,18.0s
**EFI East Falkland 23.31 158** P **P 00 38 10.2 -0.1**
**EFI East Falkland 23.31 158** IAMs_20 IAMs_20 00 48 06.1
comp=Z,94µm,18.0s
**PDRB Porto dos Gac 23.35 39** *e*P **P 00 38 09.6 -1.4**
**ARAG Araguaiana, MT 23.37 55** *e*P **P 00 38 09.6 -1.5**
**DSPA Despedida 23.47 175** P **P 00 38 12.5 +0.7**
**PARB Paraibuna 24.18 79** *e*P **P 00 38 18.0 -0.9**
**ATAH Atahualpa 24.20 343** P **P 00 38 21.9 +2.3**
comp=Z,20nm,0.7s,baz=162,slow=7.5,SNR=12
ATAH LR LR 00 46 54.8
comp=Z,34µm,18.6s,baz=174,slow=34
**USHA Ushuaia 24.33 176** P **P 00 38 21.0 +1.1**
comp=Z,322nm,0.7s,baz=1.8,slow=8.6,SNR=59
USHA LR LR 00 48 34.1
comp=Z,113µm,18.7s,baz=358,slow=38
**CLDB Colider 24.48 40** *e*P **P 00 38 20.5 -1.1**
**IPMB Ipameri, GO 24.64 65** *e*P **P 00 38 22.5 -0.6**
**MAN01 Angra dos Reis 25.76 79** *e*P **P 00 38 33.1 -0.2**
**BSCB Bom Sucesso 25.87 75** *e*P **P 00 38 34.5 +0.1**
**BDFB Brasilia 26.18 61** P **P 00 38 37.1 -0.1**
comp=Z,279nm,0.8s,baz=233,slow=8.3,SNR=229
BDFB LR LR 00 50 07.2
comp=Z,174µm,19.1s,baz=232,slow=39
**BDFB Brasilia 26.18 61 P P 00 38 36.7 -0.5**
BDFB IAmb IAmb 00 39 15.0
comp=Z,616nm,1.1s
**TBTG Tabatinga, AM 26.31 4** *e*P **P 00 38 36.9 -1.3**
**TBTG Tabatinga, AM 26.31 4** *e*P **P 00 38 38.7 +0.6**
**SNDB Serra Nova Dou 26.36 50** *e*P **P 00 38 38.7 0.0**
**DUB01 Friburgo-RJ 27.42 70** *e*P **P 00 38 48.3 0.0**
**NPGB Novo Progresso 27.91 36** *e*P **P 00 38 51.6 -1.0**
**DIAM Diamantina, MG 28.09 71** *e*P **P 00 38 54.5 +0.1**
**CAM01 Campos-RJ 28.14 79** *e*P **P 00 38 55.2 +0.7**
**PEXB Peixe 28.30 55** *e*P **P 00 38 56.8 +0.6**
**MACA Manacapuru-AM 29.15 23** *e*P **P 00 39 03.0 -0.7**
**MACA Manacapuru-AM 29.15 23** IAmb IAmb 00 39 34.4
comp=Z,314nm,1.0s
**JANB Januaria 29.37 64** *e*P **P 00 39 05.2 -0.5**
**ALF01 Guarapari-ES 29.43 78** *e*P **P 00 39 06.1 0.0**
**SJMB Sao Joao De Ma 29.93 74** *e*P **P 00 39 09.9 -0.6**
**ITTB Itaituba 30.05 33** *e*P **P 00 39 10.2 -1.3**
**RIB01 Linhares ES 30.30 76** *e*P **P 00 39 13.9 +0.1**
**SDBA SAO DESIDERIO 30.56 60** *e*P **P 00 39 15.7 -0.5**
**SMTB Santa Maria do 31.10 51** *e*P **P 00 39 21.3 +0.3**
**NAN01 Guarapari, ES 31.23 73** *e*P **P 00 39 21.6 -0.4**
**OTAV Otavalo 31.35 72** *e*P **P 00 39 27.8 +4.2**
**OTAV Otavalo 31.35 347** *e*P **P 00 39 26.4 +2.8**
**CUSE Cuicocha Este 31.41 347** *e*P **P 00 39 28.0 +3.9**
**PAC1 Pacto, Paraso 31.45 346** *e*P **P 00 39 27.1 +3.0**
**PTGA Pitinga 31.67 22** P **P 00 39 25.9 0.0**
comp=Z,138nm,0.9s,baz=203,slow=9.8,SNR=62
PTGA LR LR 00 54 29.9
comp=Z,83µm,19.4s,baz=192,slow=41
**TULM Tulcn-Chalpat 31.69 348** *e*P **P 00 39 26.1 -0.5**
**PRPB Parauapebas 31.73 44** *e*P **P 00 39 25.8 -0.6**
**CMBC Cumbal 31.92 348** *e*P **P 00 39 31.6 +3.1**
**GCUF Volcan Galeras 32.12 349** *e*P P 00 39 35.5 +5.1
**GUA01 Guaratinga, BA 32.13 72** *e*P **P 00 39 30.1 +0.1**
**FLOC Florencia 32.23 352** *e*P **P 00 39 32.9 +2.0**
**CFLOR Florencia 32.23 352** *e*P **P 00 39 33.7 +2.8**
**MACC Macarena, Meta 32.62 356** *e*P **P 00 39 35.0 +0.8**
**GARC Garzon, Huila 32.81 353** *e*P **P 00 39 39.2 +3.1**
**SOTA Rioblanco 32.90 351** *e*P **P 00 39 39.6 +2.4**
**MALB Monte Alegre 32.94 33** *e*P **P 00 39 36.1 -0.9**
**TUMC Tumaco 32.95 347** *e*P **P 00 39 37.7 +0.6**
**CMC01 Camacan, BA 33.01 70** *e*P **P 00 39 38.1 +0.4**
**PCON Cinco Dias 33.06 351** *e*P **P 00 39 42.5 +3.8**
**RPN Rapa Nui 33.17 266** P **P 00 39 42.0 +3.0**
comp=Z,51nm,0.9s,baz=225,slow=4.8,SNR=1.9
RPN LR LR 00 49 25.3
comp=Z,55µm,21.2s,baz=98,slow=30
**RPN Rapa Nui 33.17 266 P P 00 39 41.2 +2.2**
RPN IAmb IAmb 00 40 00.1
comp=Z,332nm,1.2s
**RPN Rapa Nui 33.17 266** IAMs_20 IAMs_20 00 49 12.1
comp=Z,47µm,20.0s
**BETC Betania 33.29 353** *e*P **P 00 39 42.8 +2.6**
**POPC Popayan, Colom 33.30 351** *e*P **P 00 39 42.5 +2.1**
**NBIT Itapeh - BA 33.31 69** *e*P **P 00 39 40.5 +0.2**
**GDU01 Guandu, BA 33.88 67** *e*P **P 00 39 44.9 -0.3**
**ESPZ Base Esperanza 34.12 168** IAmb IAmb 00 39 58.3
comp=Z,366nm,1.3s
**BOAV Boa Vista 34.45 20** *e*P **P 00 39 49.9 -0.2**
**BOAV Boa Vista 34.45 20** P **P 00 39 49.8 -0.3**

BOAV IAmb IAmb 00 40 05.4
comp=Z,316nm,1.0s
**ORTC Ortega, Tolima 34.48 353** *e*P **P 00 39 53.6 +3.0**
**HOPE Hope Point 34.51 144** *e*P **P 00 39 50.7 +0.4**
**HOPE Hope Point 34.51 144** P **P 00 39 50.7 +0.4**
**HOPE Hope Point 34.51 144** IAMs_20 IAMs_20 00 53 21.7
comp=Z,68µm,20.0s
**PMSA Palmer Station 34.53 174** P **P 00 39 52.0 +1.7**
comp=Z,70nm,0.9s,baz=352,slow=8.8,SNR=4.1
PMSA LR LR 00 53 41.5
comp=Z,73µm,20.3s,baz=345,slow=36
**PMSA Palmer Station 34.53 174** P **P 00 39 51.7 +1.4**
PMSA IAmb IAmb 00 40 02.5
comp=Z,527nm,1.5s
**PMSA Palmer Station 34.53 174** IAMs_20 IAMs_20 00 53 09.0
comp=Z,71µm,21.0s
**VILC Villavicencio, 34.57 356** *e*P **P 00 39 53.3 +2.0**
**PTGC Puerto Gaitan, 34.60 359** *e*P **P 00 39 51.4 -0.1**
**PAYG Puerto Ayora 34.67 326** IAMs_20 IAMs_20 00 51 11.0
comp=Z,56µm,18.0s
**YOTC Yotoa, Valle 34.68 352** *e*P **P 00 39 52.2 -0.1**
**ORCD Orcadas 35.00 157** P **P 00 39 53.9 -0.5**
**ANIL Santa Ana 35.08 353** *e*P **P 00 39 56.3 +0.4**
**CHIC Chingaza 35.08 356** *e*P **P 00 39 56.9 +0.9**
**NBPN Ponto Novo - B 35.10 63** *e*P **P 00 39 55.7 -0.2**
**MCPB Macapa, AP 35.31 35** *e*P **P 00 39 57.5 -0.1**
**ROSC El Rosal 35.33 355** P **P 00 39 59.9 +1.7**
comp=Z,39nm,0.7s,baz=13,slow=13,SNR=18
**ROSC El Rosal 35.33 355** *e*P P 00 40 04.3 +6.2
**ROSC El Rosal 35.33 355** IAmb IAmb 00 40 20.7
comp=Z,227nm,1.0s
**PLMC San Jos del P 35.58 352** *e*P **P 00 40 01.5 +1.5**
**TMAB Tom-Au,PA,Br 35.78 43** *e*P **P 00 40 01.9 +0.2**
**GUY2C Guyana, Caldas 35.80 353** *e*P **P 00 40 04.8 +2.5**
**NORC Norcasia 36.09 354** *e*P **P 00 40 06.1 +1.8**
**CNOCA NORCASIA, CALD 36.09 354** *e*P **P 00 40 06.9 +2.6**
**SPBC San Pablo de B 36.12 356** *e*P **P 00 40 01.9 -2.7**
**RUSC La Rusia 36.30 357** *e*P **P 00 40 08.8 +2.1**
**CBOC Ciudad Bolivar 36.50 353** *e*P **P 00 40 10.5 +2.5**
**HELC Santa Helena 36.77 353** *e*P **P 00 40 11.8 +1.4**
**HELC Santa Helena 36.77 353** *i*P **P 00 40 10.8 +0.3**
HELC *e*S **S 00 45 50.2 -3.4**
**TAMC Tame, Arauca 36.81 360** *e*P **P 00 40 10.5 0.0**
**TAMC Tame, Arauca 36.81 360** *e*P **P 00 40 09.6 -0.9**
**NBLA Lagarto - SE 36.88 65** *e*P **P 00 40 10.4 -0.8**
**BARC Barichara 37.00 357** *e*P **P 00 40 11.6 -0.7**
**PTBC PUERTO BERRIO, 37.02 355** *e*P **P 00 40 11.2 -1.1**
**ELOV Elorza 37.43 3** *e*P **P 00 40 16.2 +0.6**
**DBBC Dabeiba 37.66 352** *e*P **P 00 40 20.0 +2.3**
**PAMC Pamplona, Colo 37.73 358** *e*P **P 00 40 19.3 +0.6**
**ZARC Zaragoza, Cauc 38.00 355** *e*P **P 00 40 18.3 -2.2**
**ZARC Zaragoza, Cauc 38.00 355** IAmb IAmb 00 40 32.2
comp=Z,208nm,0.9s
**PTAC Punta Ardita, 38.00 350** *e*P **P 00 40 23.3 +2.8**
**UREC San Jos de Ur 38.31 354** *e*P **P 00 40 22.1 -1.0**
**UREC San Jos de Ur 38.31 354** *e*P **P 00 40 21.1 -2.0**
UREC *e*S **S 00 46 15.5 -0.8**
**NBMA Muriti-CE 38.41 60** *e*P **P 00 40 24.0 -0.1**
**NBPS Pedro II - PI 38.52 53** *e*P **P 00 40 24.6 -0.4**
**SOCV Socops 38.66 1** *e*P **P 00 40 24.1 -2.0**
**CACAO El Cacao, Vera 38.76 345** *i*P **P 00 40 28.1 +1.2**
**NBAN Anadia - AL 38.86 65** *e*P **P 00 40 28.2 +0.4**
**NBPB Pedra_Branca-C 39.03 57** *e*P **P 00 40 29.8 +0.5**
**AZU Azuero 39.07 346** *i*P **P 00 40 30.9 +1.4**
AZU *e*S **S 00 46 32.4 +4.7**
**SMLC San Martn de 39.24 356** *e*P **P 00 40 29.9 -1.0**
**GMAL Guarumal, Vera 39.25 345** *e*P **P 00 40 33.1 +2.1**
GMAL *e*S **S 00 46 34.5 +4.1**
**SDV Santo Domingo 39.26 1** P **P 00 40 31.0 -0.3**
comp=Z,75nm,0.8s,baz=184,slow=6.9,SNR=43
SDV LR LR 00 58 03.5
comp=Z,34µm,18.3s,baz=168,slow=38
**SDV Santo Domingo 39.26 1** *e*P **P 00 40 30.8 -0.5**
**SDV Santo Domingo 39.26 1** *e*P **P 00 40 31.6 +0.3**
**SDV Santo Domingo 39.26 1** P **P 00 40 30.7 -0.6**
**SDV Santo Domingo 39.26 1** IAMs_20 IAMs_20 00 58 51.8
comp=Z,47µm,18.0s
**MOTC Monteria, Cord 39.34 354** *e*P **P 00 40 32.1 +0.4**
**MOTC Monteria, Cord 39.34 354** P **P 00 40 31.7 0.0**
MOTC IAmb IAmb 00 41 26.6
comp=Z,425nm,1.6s
**UPD2 Meteti 39.40 350** *e*P **P 00 40 31.7 -0.6**
UPD2 *e*S **S 00 46 40.2 +7.4**
**BAUV El Baul 39.45 5** *e*P **P 00 40 27.9 -4.7**
**MDP Montagnes des 39.84 30** P **P 00 40 36.0 +0.1**
comp=Z,130nm,0.8s,baz=206,slow=8.1,SNR=23
MDP LR LR 00 58 18.4
comp=Z,34µm,20.0s,baz=202,slow=38
**PTPM Petroterminale 40.08 342** *e*P **P 00 40 40.9 +3.0**
PTPM *e*S **S 00 46 45.1 +2.3**
**UPA Univ. de Panam 40.08 348** *e*P **P 00 40 39.5 +1.6**
UPA *e*S **S 00 46 43.7 +0.8**
**LL6C La Loma 6 Bece 40.13 357** *e*P **P 00 40 38.3 0.0**
**NBMO Morrinhos-CE 40.27 54** *e*P **P 00 40 38.3 -1.3**
**BCIP Isla Barro Col 40.32 347** *e*P **P 00 40 41.0 +1.1**
**BCIP Isla Barro Col 40.32 347** *i*P **P 00 40 41.4 +1.5**
BCIP *e*S **S 00 46 49.3 +2.9**
**NBRF Rio Formoso - 40.36 65** *e*P **P 00 40 39.6 -0.7**
**PIRO Carate, Puerto 40.39 342** *e*P **P 00 40 40.9 +0.4**
**PIRO Carate, Puerto 40.39 342** *e*P **P 00 40 40.9 +0.4**
PIRO *e*S **S 00 46 45.8 -1.7**
**SJCC San Jacinto, C 40.40 354** *e*P **P 00 40 37.6 -3.1**
**SJCC San Jacinto, C 40.40 354** P **P 00 40 40.6 -0.1**
SJCC IAmb IAmb 00 40 55.6
comp=Z,456nm,1.2s
**SJCC San Jacinto, C 40.40 354** *i*P **P 00 40 40.4 -0.2**
SJCC *e*S **S 00 46 47.2 -0.6**
**CDITO Canoas 40.43 343** *e*P **P 00 40 42.9 +2.1**
**CDITO Canoas 40.43 343** *i*P P 00 40 34.5 -6.2
CDITO *e*S **S 00 46 51.5 +3.4**
**BRU2 Volcan 40.59 343** *e*P **P 00 40 44.3 +1.9**
**BRU2 Volcan 40.59 343** *i*P **P 00 40 44.4 +2.1**
BRU2 *e*S **S 00 46 52.1 +1.3**
**NBCL Cascavel-CE 40.87 57** *e*P **P 00 40 44.9 +0.4**
**PCRV Puerto La Cruz 41.07 10** P **P 00 40 46.6 +0.4**
comp=Z,48nm,0.8s,baz=143,slow=2.8,SNR=12
PCRV LR LR 00 59 34.5
comp=Z,60µm,20.4s,slow=39
**BIRV Birongo 41.14 8** IAmb IAmb 00 41 08.0
comp=Z,349nm,1.1s
**SRBA San Rafael, Bu 41.19 342** *e*P **P 00 40 48.3 +1.1**
**CRJC Cerrejon, Guaj 41.39 358** *e*P **P 00 40 46.6 -2.2**
**PEZE Perez Zeledon, 41.41 342** *e*P **P 00 40 50.9 +1.8**
**RCBR Riachuelo 41.56 61** *e*P **P 00 40 51.0 +0.7**
**SMRC Santa Marta, M 41.59 356** *e*P **P 00 40 50.1 -0.2**
**CDM Cerro de Muert 41.60 342** *e*P **P 00 40 52.7 +1.8**
**NBPV Pedro Velho 41.64 62** *e*P **P 00 40 51.6 +0.7**
**MRVA Moravia de Chi 41.77 342** *e*P **P 00 40 53.9 +1.9**
**RIMA Rio Macho 41.83 342** *e*P **P 00 40 52.9 +0.3**
**LCR2 La Lucha 2 41.85 341** *e*P **P 00 40 53.8 +1.1**
**JACO JACO, Garabito 41.96 340** *e*P **P 00 40 54.9 +1.5**
**OCM Ochomogo 41.98 342** *e*P **P 00 40 55.2 +1.4**
**RAFA San Farael, Vo 42.00 342** *e*P **P 00 40 55.9 +1.8**
**VTCV VTCV, Calle Va 42.00 342** *e*P **P 00 40 56.1 +2.2**
**CVTR Volcan Turrial 42.05 342** *e*P **P 00 40 57.1 +2.5**
**URIC Uribia, Colomb 42.05 359** *e*P P 00 40 48.2 -5.9
**VTUN Crater Central 42.05 342** *e*P **P 00 40 56.6 +2.0**
**VTUC Crater, Volcan 42.05 342** *e*P **P 00 40 56.9 +2.2**
**HDC Heredia 42.12 341** *e*P **P 00 40 57.1 +2.2**
**HDC Heredia 42.12 341** *e*P **P 00 40 55.0 +0.1**
HDC *e*S **S 00 47 18.2 +4.7**
**HDC3 Heredia 3 42.12 341** *e*P **P 00 40 57.2 +2.3**
**TRN Trinidad (W) 42.14 15** *e*P P 00 40 49.3 -5.5
**RIFO Rio Frio, Sara 42.37 342** *e*P **P 00 40 58.5 +1.7**
**INDI Punta indio, G 42.40 339** *e*P **P 00 40 58.3 +1.3**
**GRZA Playa Garza 42.49 339** *e*P **P 00 40 59.0 +1.3**
**HATO Hato, Curacao 42.59 4** IAMs_20 IAMs_20 01 00 44.3
comp=Z,35µm,20.0s
**JTS Las Juntas de 42.64 340** P **P 00 41 00.7 +1.8**
comp=Z,24nm,0.7s,baz=178,slow=5.9,SNR=7.4
**SAJU San Juanillo, 42.65 339** *e*P **P 00 40 59.7 +0.6**
**PLVR Palo Verde 42.81 340** *e*P **P 00 41 02.5 +2.0**
**ORTG Ortega, Santa 42.85 340** P **P 00 41 01.3 +0.5**
ORTG **sP 00 41 10.7 +0.2**
ORTG IAmb IAmb 00 41 14.2
comp=Z,406nm,1.2s
**COVE Coope Vega, Sa 42.89 341** *e*P **P 00 41 01.9 +1.0**
**TOSP Speyside 42.97 16** *e*P **P 00 41 01.3 -0.3**
**TOSP Speyside 42.97 16** P **P 00 40 59.9 -1.7**
**VMAR Armenia, Volca 43.18 340** *e*P **P 00 41 02.2 -1.1**
**HZTE Horizontes, Gu 43.23 340** *e*P **P 00 41 06.2 +2.5**
**GRGR Grenville 43.53 14** *e*P **P 00 41 03.5 -2.6**

**GRGR Grenville 43.53 14** P **P 00 41 05.5 -0.6**
GRGR IAmb IAmb 00 41 28.6
comp=Z,343nm,0.9s
GRGR IAMs_20 IAMs_20 01 02 42.4
comp=Z,32µm,20.0s
**GCMP Grenada, Carri 43.92 14** *e*P **P 00 41 05.0 -4.2**
**SVB Belmont 44.72 14** *e*P P 00 41 09.9 -5.8
**BBGH Gun Hill 44.98 17** *e*P **P 00 41 19.1 +1.3**
**BBGH Gun Hill 44.98 17** IAMs_20 IAMs_20 01 02 28.1
comp=Z,44µm,21.0s
**MCLT Moule a Chique 45.21 15** *e*P P 00 41 13.8 -5.7
**SLBI Saint Lucia, B 45.51 14** *e*P P 00 41 15.4 -6.4
**H05S1 Guadeloupe/Mar 45.93 15** P **P 00 41 24.3 -0.8**
SNR=23
**BIM Bigot 45.97 14** *e*P P 00 41 19.8 -5.7
**FDF Fort de France 46.16 14** *e*P P 00 41 16.8 -10
**FDF Fort de France 46.16 14** IAmb IAmb 00 41 41.1
comp=Z,248nm,0.7s
FDF IAMs_20 IAMs_20 01 04 24.1
comp=Z,38µm,21.0s
**ILAM Ilet Lapin Mar 46.26 14** *e*P **P 00 41 23.7 -4.1**
**ILAM Ilet Lapin Mar 46.26 14** IAmb IAmb 00 41 40.7
comp=Z,308nm,0.9s
**SVN Savane Anatole 46.26 14** IAMs_20 IAMs_20 01 04 26.8
comp=Z,40µm,20.0s
**DLPL La Plaine 46.72 14** *e*P **P 00 41 28.4 -3.1**
**DSLB Salisbury 46.79 13** *e*P P 00 41 23.7 -8.3
**TGUH Tegucigalpa,Un 46.90 339** *e*P **P 00 41 28.8 -4.2**
**MDVC Dominica, Viel 46.96 13** *e*P **P 00 41 32.3 -1.0**
**MAGL Barre de l'ile 47.31 13** *e*P **P 00 41 33.0 -3.0**
**H05N1 Guadeloupe/Mar 47.72 14** P **P 00 41 37.8 -1.4**
SNR=15
**MTO3 Montecristo 47.90 336** P **P 00 41 42.1 +1.2**
MTO3 **sP 00 41 51.0 +0.2**
MTO3 IAmb IAmb 00 41 53.0
comp=Z,192nm,1.2s
**ANBD Bethesda, Anti 48.29 13** *e*P P 00 41 37.7 -5.9
**SEUS St. Eustatius 48.51 11** *e*P P 00 41 35.1 -10
**SEUS St. Eustatius 48.51 11** IAMs_20 IAMs_20 01 03 42.3
comp=Z,33µm,22.0s
**SJG San Juan 48.70 7** P **P 00 41 46.2 -0.5**
comp=Z,226nm,0.8s,baz=153,slow=3.1,SNR=56
**SJG San Juan 48.70 7** *e*P **P 00 41 43.2 -3.5**
**SJG San Juan 48.70 7** *e*P P 00 41 33.0 -14
**SJG San Juan 48.70 7** P **P 00 41 45.3 -1.5**
SJG IAmb IAmb 00 41 48.7
comp=Z,300nm,1.0s
**MTP Monte Pirata 48.75 8** IAmb IAmb 00 41 59.2
comp=Z,292nm,1.4s
**HUMP Col San Antoni 48.76 7** IAmb IAmb 00 41 59.4
comp=Z,216nm,1.1s
**APG El Apazote 48.85 335** P **P 00 41 50.3 +2.1**
comp=Z,32nm,1.1s,baz=150,slow=9.8,SNR=5.7
APG LR LR 00 58 27.4
comp=Z,17µm,19.9s,baz=140,slow=31
**ANWB Willy Bob 48.89 12** P **P 00 41 45.5 -2.7**
ANWB IAMs_20 IAMs_20 01 04 14.4
comp=Z,30µm,20.0s
**GCPR Guaynabo City 48.90 7** IAmb IAmb 00 41 49.9
comp=Z,194nm,0.7s
**CUPR Culebra, Puert 48.99 8** IAmb IAmb 00 41 52.6
comp=Z,84nm,0.7s
**SMRT St. Maarten 49.04 11** *e*P P 00 41 39.0 -10
**SDDR Presa de Saban 49.28 0** IAMs_20 IAMs_20 01 04 25.5
comp=Z,35µm,20.0s
**GTBY Guantanamo Bay 50.34 356** P **P 00 41 59.1 -0.1**
GTBY IAmb IAmb 00 42 16.0
comp=Z,147nm,0.9s
**GRTK Grand Turk 51.80 0** IAMs_20 IAMs_20 01 05 54.2
comp=Z,27µm,21.0s
**VNA3 Neumayer Olymp 52.37 159** P **P 00 42 14.5 +0.5**
VNA3 S **S 00 49 37.3 -0.8**
**CMIG Matias Romero 52.46 331** P **P 00 42 16.2 +1.0**
comp=Z,11nm,0.9s,baz=183,slow=7.6,SNR=5.4
CMIG LR LR 00 59 27.9
comp=Z,16µm,21.6s,baz=154,slow=30
**VNA1 Neumayer--Stat 52.66 158** P **P 00 42 17.2 +1.1**
**VNA2 Neumayer--Watz 53.00 158** P **P 00 42 19.0 +0.3**
baz=280,slow=7.7
VNA2 S **S 00 49 41.0 -5.7**
baz=328,slow=1.6
**SOR Soroa 54.20 347** P **P 00 42 27.3 -0.6**
SOR pP **sP 00 42 37.7 -0.1**
**SNAA Sanae 54.59 159** P **P 00 42 30.6 +0.3**
SNAA S **S 00 50 06.5 -1.9**
**SNAA Sanae 54.59 159** P **P 00 42 30.6 +0.3**
comp=Z,99nm,0.7s,baz=275,slow=8.5,SNR=173
SNAA LR LR 01 03 41.5
comp=Z,29µm,21.6s,baz=297,slow=34
**SNAA Sanae 54.59 159** P **P 00 42 29.6 -0.7**
SNAA IAmb IAmb 00 43 07.4
comp=Z,289nm,1.1s
SNAA IAMs_20 IAMs_20 01 03 19.9
comp=Z,29µm,22.0s
**ASCN Ascension 57.84 80** P **P 00 42 53.8 -0.5**
**DWPF Disney Wildern 59.13 350** P **P 00 43 03.5 +0.7**
baz=170
DWPF S **S 00 51 08.3 -0.6**
baz=170
**NVL N'lazarevskaya 59.29 157** *i*P P 00 43 11.3 +7.8
NVL *i* 00 45 12.3
NVL *i*S **S 00 51 08.7 -1.5**
NVL pmax pmax
comp=Z,322nm,2.3s
**QSPA South Pole Qui 59.64 180** LR LR 01 08 07.8
comp=Z,10µm,21.7s,baz=169,slow=35
**SHEL Horse Pasture 61.42 92** IAMs_20 IAMs_20 01 06 25.2
comp=Z,15µm,20.0s
**H06E1 SOCORRO T-PHAS 62.00 317** T T 01 50 44.0
SNR=52
**TIGA Tifton 62.74 348** P **P 00 43 27.0 -0.3**
baz=168
TIGA S **S 00 51 55.0 +0.2**
baz=168
**BRAL Brewton 63.16 345** P **P 00 43 30.4 +0.3**
baz=165
BRAL S **S 00 52 01.4 +1.3**
baz=165
**NHSC New Hope 63.88 352** P **P 00 43 34.7 -0.1**
baz=172,SNR=7.7
**152A Waverly Hall 64.14 348** IAmb IAmb 00 43 47.3
comp=Z,312nm,1.4s
**833A Chaparral WMA, 64.33 333** P **P 00 43 39.1 +1.1**
baz=154,SNR=44
833A S **S 00 52 15.8 +1.0**
baz=154
**344A Westbrook Farm 64.33 342** P **P 00 43 38.6 +0.8**
344A pP **sP 00 43 48.5 +0.7**
**HKT Hockley 64.49 337** *ce*P **P 00 43 39.1 +0.2**
HKT pmax pmax
comp=Z,255nm,1.5s
HKT MLR MLR
comp=Z,6µm,18.0s
**HKT Hockley 64.49 337** P **P 00 43 39.0 +0.2**
HKT IAmb IAmb 00 43 54.6
comp=Z,300nm,1.4s
**SACV Santiago Islan 64.64 53** P **P 00 43 39.9 -0.3**
SACV IAmb IAmb 00 43 56.7
comp=Z,186nm,1.0s
SACV IAMs_20 IAMs_20 01 12 47.7
comp=Z,21µm,18.0s
**GOGA Godfrey 64.64 349** IAmb IAmb 00 43 51.5
comp=Z,156nm,1.1s
**GOGA Godfrey 64.64 349** P **P 00 43 39.4 -0.5**
baz=169,SNR=6.2
GOGA S **S 00 52 16.9 -1.6**
baz=169
**Y57A Sumter 64.80 352** IAmb IAmb 00 43 52.9
comp=Z,294nm,1.3s
**Z51A Franklin 64.85 347** IAmb IAmb 00 43 51.7
comp=Z,104nm,0.9s
**LRAL Lakeview Retre 64.95 346** IAmb IAmb 00 43 52.9
comp=Z,238nm,1.4s
**LRAL Lakeview Retre 64.95 346** P **P 00 43 42.0 +0.1**
baz=165,SNR=5.7
LRAL S **S 00 52 19.9 -2.3**
baz=165
**VBMS Vicksburg 65.00 342** P **P 00 43 42.9 +0.7**
baz=162,SNR=6.3
VBMS S **S 00 52 23.5 +0.6**
baz=162
**X58A Rowland 65.21 353** IAmb IAmb 00 43 55.7
comp=Z,188nm,1.1s
**HODGE Hodges 65.26 350** IAmb IAmb 00 43 55.8
comp=Z,154nm,1.3s
**SLBS Sierra La Lagu 65.34 321** P **P 00 43 44.8 +0.1**

**BIRD Birdtown, Kers** 65.43 352 IAmb IAmb 00 43 57.0
comp=Z,184nm,1.2s
**Y49A Blount Mountai** 65.62 346 IAmb IAmb 00 43 57.2
comp=Z,158nm,1.1s
**CNNC Cliffs of the** 65.75 354 P **P** **00 43 47.8 +0.8**
baz=174
**NATX Nacogdoches** 65.77 338 P **P** **00 43 48.1 +0.9**
baz=158,SNR=7.5
NATX S **S** **00 52 33.9 +1.5**
baz=158
**PAULI Pauline** 65.78 351 IAmb IAmb 00 43 59.3
comp=Z,296nm,1.2s
**435B Jarrell** 65.86 336 IAmb IAmb 00 44 03.2
comp=Z,214nm,1.1s
**435B Jarrell** 65.86 336 P **P** **00 43 48.9 +1.0**
baz=156
435B S **S** **00 52 34.2 +0.7**
baz=156
**LPIG La Paz** 65.87 321 P **P** **00 43 49.0 +1.1**
comp=Z,23nm,0.4s,baz=225,slow=2.1,SNR=1.7
LPIG LR LR 01 07 52.9
comp=Z,5µm,18.0s,baz=114,slow=32
**W57A Gilead** 65.88 352 IAmb IAmb 00 43 59.8
comp=Z,232nm,1.2s
**KMSC Kings Mountain** 66.03 351 IAmb IAmb 00 44 00.8
comp=Z,238nm,1.3s
**KMSC Kings Mountain** 66.03 351 P **P** **00 43 48.6 -0.2**
baz=171,SNR=5.3
KMSC S **S** **00 52 33.9 -1.5**
baz=171
**BG3 Lake Jocassee** 66.11 350 IAmb IAmb 00 44 01.5
comp=Z,239nm,1.2s
**FPAL Fort Paine** 66.13 347 P **P** **00 43 48.9 -0.6**
FPAL pP **sP** **00 43 59.0 -0.6**
FPAL IAmb IAmb 00 44 01.1
comp=Z,257nm,1.1s
**JCT Junction City** 66.41 334 P **P** **00 43 52.1 +0.7**
baz=154,SNR=29
JCT S **S** **00 52 42.0 +1.7**
baz=154
**Z41A Richland Creek** 66.61 341 P **P** **00 43 53.2 +0.7**
baz=160,SNR=5.8
Z41A S **S** **00 52 44.8 +2.4**
baz=160
**V55A Taylorsville** 66.71 351 IAmb IAmb 00 44 05.4
comp=Z,302nm,1.2s
**V53A Saluda** 66.75 350 IAmb IAmb 00 44 05.4
comp=Z,240nm,1.1s
**CPCT Cooper Cave** 66.81 348 P **P** **00 43 53.5 -0.3**
**U59A Littleton** 66.85 355 IAmb IAmb 00 44 06.7
comp=Z,271nm,1.3s
**TKL Tuckaleechee C** 66.89 349 P **P** **00 43 54.0 -0.3**
comp=Z,30nm,0.8s,baz=160,slow=6.8,SNR=22
**OXF Oxford** 66.91 344 P **P** **00 43 54.0 -0.5**
baz=163,SNR=27
OXF S **S** **00 52 45.0 -1.1**
baz=163
**WHTX Lake Whitney,** 66.91 336 P **P** **00 43 55.0 +0.5**
baz=156
WHTX S **S** **00 52 46.5 +0.3**
baz=156
**TX32 Lajitas Array** 66.99 330 P **P** **00 43 55.1 -0.1**
TX32 pP **sP** **00 44 05.9 +0.6**
TX32 IAmb IAmb 00 44 09.7
comp=Z,215nm,1.6s
**TXAR Lajitas Array** 66.99 330 P **P** **00 43 55.8 +0.6**
comp=Z,9.2nm,0.7s,baz=152,slow=7.9,SNR=52
TXAR LR LR 01 08 59.5
comp=Z,18µm,18.7s,baz=142,slow=32
TXAR PKP2bc 01 12 25.5
comp=Z,0.5nm,0.9s,baz=294,slow=6.8,SNR=4.2
**PLAL Pickwick Lake** 67.06 345 IAmb IAmb 00 44 07.0
comp=Z,231nm,1.1s
**U56A King** 67.10 352 IAmb IAmb 00 44 08.0
comp=Z,194nm,1.1s
**V51A Loudon** 67.13 349 IAmb IAmb 00 44 06.9
comp=Z,193nm,1.1s
**TAOE Nuku Hiva Isla** 67.15 273 *e*S S 00 52 38.0 -12
comp=Z,11µm,26.4s
TAOE *e*LQ LQ 01 01 10.7
comp=Z,7µm,23.5s
TAOE *e*LR LR 01 04 02.9
comp=Z,21µm,25.5s,baz=130
**T59A Double "B" Far** 67.44 355 IAmb IAmb 00 44 10.6
comp=Z,321nm,1.2s
**VNDA Vanda** 67.52 191 P **P** **00 43 59.0 +1.1**
comp=Z,12nm,0.8s,baz=133,slow=7.5,SNR=20
VNDA LR LR 01 10 31.0
comp=Z,6µm,20.1s,baz=147,slow=33
VNDA PKP2bc 01 12 23.9
comp=Z,5.7nm,0.9s,baz=294,slow=4.6,SNR=3.6
**VNDA Vanda** 67.52 191 P **P** **00 43 59.5 +1.6**
VNDA pmax pmax
comp=Z,88nm,1.3s
**VNDA Vanda** 67.52 191 P **P** **00 43 59.5 +1.6**
**V48A Smith Brothers** 67.52 347 P **P** **00 43 57.6 -0.7**
V48A pP **sP** **00 44 08.0 -0.4**
**TZTN Tazewell** 67.72 350 P **P** **00 43 59.2 -0.4**
TZTN IAmb IAmb 00 44 11.4
comp=Z,278nm,1.2s
**TZTN Tazewell** 67.72 350 P **P** **00 43 59.7 +0.1**
baz=169,SNR=5.4
TZTN S **S** **00 52 53.5 -2.4**
baz=169
**CLTN Cedars of Leba** 67.77 347 IAmb IAmb 00 44 11.9
comp=Z,238nm,1.1s
**X40A Basin Creek Fa** 67.77 341 P **P** **00 43 59.9 0.0**
baz=160
X40A S **S** **00 52 54.8 -1.6**
baz=160
**BLA Blacksburg** 67.96 352 P **P** **00 44 01.0 -0.1**
baz=172
BLA S **S** **00 52 58.8 +0.1**
baz=172
**MIAR Mount Ida** 68.04 340 IAmb IAmb 00 44 13.3
comp=Z,157nm,1.1s
**MIAR Mount Ida** 68.04 340 P **P** **00 44 00.9 -0.7**
baz=160,SNR=11
MIAR S **S** **00 52 58.6 -1.0**
baz=160
**U49A Red Boiling Sp** 68.07 348 IAmb IAmb 00 44 13.0
comp=Z,238nm,1.2s
**WVT Waverly** 68.11 346 P **P** **00 44 01.4 -0.6**
WVT pmax pmax
comp=Z,479nm,1.2s
**WVT Waverly** 68.11 346 P **P** **00 44 01.4 -0.6**
**WVT Waverly** 68.11 346 P **P** **00 44 01.6 -0.4**
baz=165
WVT S **S** **00 52 58.0 -2.4**
baz=165
**W41B Gary Mavity, V** 68.26 342 IAmb IAmb 00 44 17.9
comp=Z,366nm,1.7s
**W41B Gary Mavity, V** 68.26 342 P **P** **00 44 03.2 +0.3**
baz=161,SNR=8.1
W41B S **S** **00 53 01.9 -0.3**
baz=161
**ABTX Abilene, Hawle** 68.27 335 P **P** **00 44 03.3 +0.2**
baz=154,SNR=30
ABTX S **S** **00 53 02.8 +0.2**
baz=154
**S57A Dark Hollow, R** 68.35 354 IAmb IAmb 00 44 16.0
comp=Z,223nm,1.2s
**WHAR Wooly Hollow** 68.38 342 IAmb IAmb 00 44 19.5
comp=Z,283nm,1.4s
**T50A Nancy** 68.40 349 IAmb IAmb 00 44 15.6
comp=Z,217nm,1.6s
**GNAR Gosnell** 68.44 344 P **P** **00 44 04.5 +0.5**
**R58B Mineral** 68.45 355 IAmb IAmb 00 44 17.2
comp=Z,262nm,1.2s
**PEBM Pemiscott Bayo** 68.55 344 P **P** **00 44 04.6 -0.1**
PEBM pP **sP** **00 44 13.6 -1.2**
**X37A Clayton** 68.61 339 P **P** **00 44 04.8 -0.4**
**LOOK Love County** 68.64 337 IAmb IAmb 00 44 17.3
comp=Z,186nm,1.1s
**S54A Dingess, Beckl** 68.64 352 IAmb IAmb 00 44 17.1
comp=Z,178nm,1.1s
**CBN Corbin Frederi** 68.65 355 IAmb IAmb 00 44 18.2
comp=Z,154nm,1.2s
CBN IAMs_20 IAMs_20 01 15 06.3
comp=Z,13µm,21.0s
**CBN Corbin Frederi** 68.65 355 P **P** **00 44 06.2 +0.8**
baz=175
CBN S **S** **00 53 09.5 +2.7**
baz=175
**W39A Magazine** 68.70 341 P **P** **00 44 06.5 +0.8**
baz=160,SNR=32
W39A S **S** **00 53 09.4 +1.8**
baz=160
**S51A Beattyville** 68.80 350 IAmb IAmb 00 44 18.1
comp=Z,174nm,1.1s
**LCAR Lake Charles** 68.82 343 P **P** **00 44 05.1 -1.3**
**SYO Syowa Base** 68.88 159 *i*P **P** **00 44 06.4 -0.1**
**SYO Syowa Base** 68.88 159 *i*pP pP 00 44 13.4 -0.5
**SYO Syowa Base** 68.88 159 *i*sP sP 00 44 15.2 -1.4
**FCAR Ozark Folk Cen** 68.90 342 IAmb IAmb 00 44 21.5
comp=Z,201nm,1.3s
**R55A Marlinton** 68.98 353 IAmb IAmb 00 44 20.3
comp=Z,197nm,1.1s
**U40A Yellville** 69.53 342 IAmb IAmb 00 44 22.4
comp=Z,312nm,1.2s
**U40A Yellville** 69.53 342 P **P** **00 44 10.8 -0.1**
baz=161,SNR=30
U40A S **S** **00 53 16.7 -0.7**
baz=161
**W35A Tecumseh** 69.61 338 IAmb IAmb 00 44 23.0
comp=Z,212nm,1.3s
**Q56A Snyder Ridge,** 69.64 354 IAmb IAmb 00 44 49.1
comp=Z,134nm,1.1s
**R49A Shelbyville** 69.70 349 IAmb IAmb 00 44 23.6
comp=Z,312nm,1.7s
**MNTX Cornudas Mount** 69.77 330 P **P** **00 44 11.2 -1.3**
MNTX pP **sP** **00 44 21.3 -1.2**
**MNTX Cornudas Mount** 69.77 330 P **P** **00 44 11.9 -0.6**
baz=149,SNR=32
MNTX S **S** **00 53 21.0 +0.6**
baz=149
**WCI Wyandotte Cave** 69.83 348 P **P** **00 44 10.8 -1.9**
WCI pP **sP** **00 44 22.0 -0.7**
WCI IAmb IAmb 00 44 24.2
comp=Z,241nm,1.4s
**WCI Wyandotte Cave** 69.83 348 P **P** **00 44 11.2 -1.5**
baz=167
WCI S **S** **00 53 18.9 -1.8**
baz=167
**WMOK Wichita Mounta** 69.86 336 IAmb IAmb 00 44 27.4
comp=Z,211nm,1.4s
**WMOK Wichita Mounta** 69.86 336 P **P** **00 44 13.2 +0.2**
baz=155,SNR=16
WMOK S **S** **00 53 21.6 +0.3**
baz=155
**FNO Franklin** 69.87 338 IAmb IAmb 00 44 25.1
comp=Z,214nm,1.1s
**Q52A Bidwell** 69.91 351 IAmb IAmb 00 44 25.0
comp=Z,319nm,1.4s
**TUL1 Leonard** 69.96 339 P **P** **00 44 13.5 0.0**
baz=158,SNR=27
TUL1 S **S** **00 53 22.5 +0.1**
baz=158
**P57A Homestead Farm** 69.97 355 IAmb IAmb 00 44 26.8
comp=Z,231nm,1.2s
**OKCFA Oklahoma City** 70.03 338 P **P** **00 44 13.7 -0.3**
OKCFA pP **sP** **00 44 22.9 -1.2**
OKCFA IAmb IAmb 00 44 25.3
comp=Z,278nm,1.2s
**U38A Gravette** 70.04 341 IAmb IAmb 00 44 25.4
comp=Z,148nm,1.1s
**Q51A Peebles** 70.12 350 IAmb IAmb 00 44 26.2
comp=Z,244nm,1.2s
**MGMO Mountain Grove** 70.13 343 IAmb IAmb 00 44 28.5
comp=Z,366nm,1.5s
**BCOK Bluff Creek, N** 70.31 338 IAmb IAmb 00 44 27.1
comp=Z,237nm,1.2s
**MCWV Mont Chateau** 70.31 353 P **P** **00 44 16.0 +0.4**
baz=172
MCWV S **S** **00 53 26.9 +0.5**
baz=172
**P53A Whipple** 70.32 352 IAmb IAmb 00 44 27.7
comp=Z,210nm,1.2s
**MVL Millersville** 70.37 356 P **P** **00 44 15.4 -0.5**
MVL IAmb IAmb 00 44 29.1
comp=Z,165nm,1.2s
**QUOK Quay** 70.49 339 IAmb IAmb 00 44 28.3
comp=Z,314nm,1.2s
**P51A Williamsport** 70.53 351 IAmb IAmb 00 44 28.6
comp=Z,193nm,1.1s
**P52A Corning** 70.56 351 P **P** **00 44 16.7 -0.4**
baz=170,SNR=7.4
P52A S **S** **00 53 27.5 -1.6**
baz=170
**VAH Vaihoa** 70.58 263 *e*P P 00 44 09.3 -8.5
comp=Z,84nm,1.0s
**PAGS Pennsylvania G** 70.62 356 IAmb IAmb 00 44 34.8
comp=Z,146nm,0.9s
**MSTX Muleshoe** 70.66 333 IAmb IAmb 00 44 29.6
comp=Z,239nm,1.1s
**MSTX Muleshoe** 70.66 333 P **P** **00 44 18.1 +0.1**
baz=152,SNR=22
MSTX S **S** **00 53 30.0 -0.8**
baz=152
**CCM Cathedral Cave** 70.73 344 P **P** **00 44 18.0 -0.1**
CCM pP **pP** **00 44 26.2 +0.7**
**CCM Cathedral Cave** 70.73 344 P **P** **00 44 18.4 +0.2**
baz=162
CCM S **S** **00 53 30.7 -0.5**
baz=162
**BLO Bloomington** 70.79 348 IAmb IAmb 00 44 42.7
comp=Z,345nm,1.6s
**O56A Blue Knob Stat** 70.80 354 IAmb IAmb 00 44 31.4
comp=Z,152nm,1.2s
O56A IAMs_20 IAMs_20 01 16 27.1
comp=Z,11µm,21.0s
**O56A Blue Knob Stat** 70.80 354 P **P** **00 44 19.2 +0.6**
baz=174
O56A S **S** **00 53 33.4 +1.3**
baz=174
**P49A Miami Univ. Ec** 70.83 349 IAmb IAmb 00 44 30.2
comp=Z,213nm,1.2s
**P49A Miami Univ. Ec** 70.83 349 P **P** **00 44 18.5 -0.2**
baz=168,SNR=15
P49A S **S** **00 53 29.4 -3.1**
baz=168
**P48A Milroy** 70.88 349 IAmb IAmb 00 44 30.4
comp=Z,242nm,1.1s
**BRNJ Basking Ridge** 70.97 358 P **P** **00 44 20.2 +0.7**
BRNJ IAmb IAmb 00 44 37.3
comp=Z,137nm,1.0s
**O52A Adamsville** 70.99 352 IAmb IAmb 00 44 31.5
comp=Z,122nm,1.1s
**AMTX Amarillo** 71.04 334 P **P** **00 44 20.6 +0.3**
baz=153
AMTX S **S** **00 53 35.2 -0.1**
baz=153
**O53A New Philadelph** 71.05 352 IAmb IAmb 00 44 32.1
comp=Z,212nm,1.4s
**O53A New Philadelph** 71.05 352 P **P** **00 44 19.8 -0.3**
baz=171
O53A S **S** **00 53 33.8 -1.1**
baz=171
**SSPA Standing Stone** 71.11 355 P **P** **00 44 20.1 -0.3**
**SSPA Standing Stone** 71.11 355 IAMs_20 IAMs_20 01 16 30.3
comp=Z,12µm,21.0s
**SSPA Standing Stone** 71.11 355 P **P** **00 44 21.2 +0.8**
baz=174
SSPA S **S** **00 53 36.3 +0.7**
baz=174
**PAE Paea** 71.14 260 *e*P P 00 44 12.7 -8.5
comp=Z,30nm,1.1s
**PAE Paea** 71.14 260 *e*T T 02 01 49.3
comp=Z,5.0nm,0.2s
**PPTF Pamatai, Papee** 71.17 260 IAMs_20 IAMs_20 01 07 05.4
comp=Z,11µm,20.0s
**PPT2 Papeete2** 71.17 260 *e*P P 00 44 13.0 -8.5
comp=Z,160nm,1.2s
PPT2 *e*S S 00 53 26.0 -12
comp=Z,17µm,28.5s
**PPT2 Papeete2** 71.17 260 *e*LR LR 01 05 52.5
comp=Z,32µm,24.0s,baz=118
**PPT2 Papeete2** 71.17 260 *e*T T 02 01 45.2
comp=Z,14nm,0.2s
**PPT Papeete** 71.18 260 P **P** **00 44 23.0 +1.5**
comp=Z,41nm,0.8s,baz=127,slow=5.3,SNR=3.5
PPT LR LR 01 07 26.5
comp=Z,10µm,20.8s,baz=124,slow=29
**PPT Papeete** 71.18 260 P **P** **00 44 23.0 +1.5**
**BLOK Blackwell** 71.19 338 IAmb IAmb 00 44 32.8
comp=Z,303nm,1.2s
**N58A Sunbury** 71.23 356 IAmb IAmb 00 44 38.7
comp=Z,143nm,1.1s
**N59A State Game Lan** 71.25 357 IAmb IAmb 00 44 39.3
comp=Z,182nm,1.1s
**N59A State Game Lan** 71.25 357 P **P** **00 44 22.9 +1.6**
baz=176,SNR=20
N59A S **S** **00 53 39.2 +1.9**
baz=176
**ACSO Alum Creek Sta** 71.26 351 IAmb IAmb 00 44 33.2
comp=Z,302nm,1.1s
**ACSO Alum Creek Sta** 71.26 351 P **P** **00 44 20.7 -0.6**
baz=170,SNR=17
ACSO S **S** **00 53 34.9 -2.5**
baz=170
**PAL Palisades** 71.27 358 P **P** **00 44 21.3 0.0**
baz=178
PAL S **S** **00 53 39.8 +2.4**
baz=178
**P46A Rosedale** 71.35 347 IAmb IAmb 00 44 32.6
comp=Z,292nm,1.1s
**ODNJ Ogdensburg** 71.37 358 P **P** **00 44 21.9 -0.1**
ODNJ IAmb IAmb 00 44 39.5
comp=Z,163nm,1.1s
**O49A Covington** 71.41 350 IAmb IAmb 00 44 34.0
comp=Z,307nm,1.1s
**WSPT Westport, CT** 71.42 359 IAmb IAmb 00 44 39.9
comp=Z,180nm,1.1s
**121A Cookes Peak, D** 71.55 328 IAmb IAmb 00 44 38.7
comp=Z,197nm,1.2s
**121A Cookes Peak, D** 71.55 328 P **P** **00 44 24.4 +0.9**
baz=148,SNR=40
121A S **S** **00 53 44.5 +3.1**
baz=148
**OK032 Salt Plains WL** 71.55 338 IAmb IAmb 00 44 35.0
comp=Z,274nm,1.2s
**YLE Yale** 71.56 359 IAMs_20 IAMs_20 01 14 51.2
comp=Z,13µm,22.0s
**O48B Farmland** 71.61 349 P **P** **00 44 23.0 -0.4**
baz=168,SNR=12
O48B S **S** **00 53 37.6 -3.8**
baz=168
**N54A Moraine State** 71.62 353 IAmb IAmb 00 44 35.9
comp=Z,154nm,1.1s
**N54A Moraine State** 71.62 353 P **P** **00 44 23.0 -0.5**
baz=172,SNR=8.2
N54A S **S** **00 53 39.0 -2.5**
baz=172
**KAN17 Caldwell West** 71.62 338 IAmb IAmb 00 44 34.9
comp=Z,201nm,1.2s
**KAN01 Argonia South** 71.72 338 P **P** **00 44 24.1 -0.1**
**M65A Busby, Falmout** 71.80 1 IAMs_20 IAMs_20 01 21 39.7
comp=Z,12µm,19.0s
**M65A Busby, Falmout** 71.80 1 P **P** **00 44 25.7 +1.2**
baz=181
**KAN10 Anthony SW Sta** 71.80 338 IAmb IAmb 00 44 36.6
comp=Z,245nm,1.3s
**KAN06 Argonia West S** 71.84 338 IAmb IAmb 00 44 37.0
comp=Z,267nm,1.0s
**P43A Skaggs, Pawnee** 71.84 345 IAmb IAmb 00 44 36.1
comp=Z,384nm,1.3s
**N51A Ashland** 71.85 351 IAmb IAmb 00 44 36.6
comp=Z,187nm,1.1s
**M55A Ridgway** 72.01 354 P **P** **00 44 25.9 +0.1**
M55A IAmb IAmb 00 44 38.3
comp=Z,171nm,1.1s
**SFIN Lafayette** 72.07 348 IAmb IAmb 00 44 37.4
comp=Z,203nm,1.2s
**SFIN Lafayette** 72.07 348 P **P** **00 44 25.3 -0.9**
baz=166
SFIN S **S** **00 53 42.5 -4.1**
baz=166
**O44A Mansfield** 72.11 346 IAmb IAmb 00 44 37.2
comp=Z,331nm,1.4s
**M54A Oil Creek Stat** 72.13 354 IAMs_20 IAMs_20 01 17 12.2
comp=Z,11µm,21.0s
**M54A Oil Creek Stat** 72.13 354 P **P** **00 44 26.9 +0.3**
baz=173,SNR=5.9
M54A S **S** **00 53 45.8 -1.6**
baz=173
**M53A WI Miller and** 72.16 353 IAmb IAmb 00 44 38.8
comp=Z,224nm,1.1s
**M53A WI Miller and** 72.16 353 P **P** **00 44 27.1 +0.3**
baz=172
M53A S **S** **00 53 45.0 -2.7**
baz=172
**N47A Urbana** 72.31 349 IAmb IAmb 00 44 39.0
comp=Z,226nm,1.1s
**M52A Chesterland** 72.34 352 IAmb IAmb 00 44 39.9
comp=Z,230nm,1.1s
**BNM Barren Site** 72.40 330 P **P** **00 44 27.8 -0.9**
BNM pP **sP** **00 44 38.7 -0.1**
**M50A Fremont** 72.42 351 IAmb IAmb 00 44 40.1
comp=Z,237nm,1.1s
**Y22D IRIS PASSCAL I** 72.47 330 P **P** **00 44 29.8 +0.9**
baz=149
Y22D S **S** **00 53 57.2 +5.4**
baz=149
**L59A Walton** 72.49 357 IAmb IAmb 00 44 46.4
comp=Z,270nm,1.1s
**QUA2 Belchertown** 72.51 359 IAmb IAmb 00 44 41.9
comp=Z,185nm,1.3s
**BINY Binghamton** 72.54 357 IAMs_20 IAMs_20 01 19 04.3
comp=Z,11µm,20.0s
**BINY Binghamton** 72.54 357 P **P** **00 44 30.2 +1.1**
baz=176
BINY S **S** **00 53 53.9 +1.8**
baz=176
**BCX Boston College** 72.56 0 IAMs_20 IAMs_20 01 22 15.0
comp=Z,11µm,20.0s
**L56A Greenwood** 72.58 355 IAmb IAmb 00 44 46.5
comp=Z,162nm,0.9s
**WES Weston** 72.61 0 IAMs_20 IAMs_20 01 22 16.3
comp=Z,11µm,20.0s
**HDIL Hopedale** 72.67 346 IAmb IAmb 00 44 40.4
comp=Z,161nm,1.1s
**HDIL Hopedale** 72.67 346 P **P** **00 44 29.3 -0.5**
baz=164,SNR=5.5
HDIL S **S** **00 53 50.7 -2.8**
baz=164
**L61B Northampton** 72.69 359 IAmb IAmb 00 44 47.4
comp=Z,160nm,0.9s
**L61B Northampton** 72.69 359 P **P** **00 44 30.1 +0.3**
baz=179,SNR=8.5
L61B S **S** **00 53 56.9 +3.3**
baz=179
**HRV Adam Dziewonsk** 72.73 360 P **P** **00 44 29.3 -0.8**
HRV pmax pmax
comp=Z,146nm,1.2s
**HRV Adam Dziewonsk** 72.73 360 P **P** **00 44 29.3 -0.8**
**HRV Adam Dziewonsk** 72.73 360 P **P** **00 44 31.7 +1.5**
baz=180
HRV S **S** **00 53 56.9 +2.7**
baz=180
**ERPA Erie** 72.76 353 IAmb IAmb 00 44 42.4
comp=Z,205nm,1.1s
ERPA IAMs_20 IAMs_20 01 17 31.0
comp=Z,12µm,22.0s
**ERPA Erie** 72.76 353 P **P** **00 44 30.9 +0.5**
baz=172
ERPA S **S** **00 53 53.0 -1.6**
baz=172
**TUC Tucson** 72.77 326 P **P** **00 44 30.6 -0.1**
TUC pmax pmax
comp=Z,152nm,1.6s
**TUC Tucson** 72.77 326 P **P** **00 44 30.6 -0.1**
**TUC Tucson** 72.77 326 IAMs_20 IAMs_20 01 12 04.5
comp=Z,13µm,20.0s
**TUC Tucson** 72.77 326 P **P** **00 44 31.9 +1.2**
baz=145
TUC S **S** **00 53 56.4 +1.2**
baz=145
**P38A Dawn** 72.79 342 IAmb IAmb 00 44 42.4
comp=Z,304nm,1.2s
**K62A Royalston** 72.90 359 IAmb IAmb 00 44 49.1
comp=Z,233nm,1.4s
**WVNY West Valley, N** 72.92 355 IAmb IAmb 00 44 48.5
comp=Z,201nm,1.0s
**TRY Troy** 72.99 358 IAmb IAmb 00 44 49.5
comp=Z,277nm,1.1s
**ANMO Albuquerque** 73.01 331 P **P** **00 44 33.3 +1.1**
comp=Z,16nm,1.0s,baz=151,slow=8.1,SNR=22
ANMO LR LR 01 12 28.3
comp=Z,20µm,19.8s,baz=163,slow=32
**ANMO Albuquerque** 73.01 331 P **P** **00 44 32.9 +0.7**
ANMO *PP **sP** **00 44 43.4 +1.1**
**ANMO Albuquerque** 73.01 331 P **P** **00 44 32.9 +0.7**
ANMO pP **sP** **00 44 43.4 +1.1**
ANMO IAmb IAmb 00 44 48.2
comp=Z,288nm,1.6s
**ANMO Albuquerque** 73.01 331 IAMs_20 IAMs_20 01 12 07.0
comp=Z,20µm,20.0s
**ANMO Albuquerque** 73.01 331 P **P** **00 44 33.3 +1.1**
baz=149
ANMO S **S** **00 53 59.9 +1.8**
baz=149
**L48A N Adams** 73.15 350 IAmb IAmb 00 44 44.1
comp=Z,268nm,1.1s
**KSU1 Kansas State U** 73.16 340 P **P** **00 44 32.7 0.0**

baz=158
KSU1 S S 00 53 57.8 -1.3
baz=158
**R32A Long Quarter, 73.19 338** IAmb IAmb 00 44 45.1
comp=Z,311nm,1.3s
**MMNY Mt. Morris Dam 73.19 355** P P **00 44 32.6 -0.2**
MMNY IAmb IAmb 00 44 45.4
comp=Z,234nm,1.2s
**M44A Midewin, Midew 73.22 347** IAmb IAmb 00 44 44.6
comp=Z,255nm,1.1s
**LIC Lamto 73.32 72** *e*P P **00 44 33.7 -0.6**
comp=Z,299nm,0.6s
**AAM Ann Arbor 73.38 351** P P **00 44 33.3 -0.6**
baz=169
AAM S S **00 53 57.8 -3.7**
baz=169
**214A Organ Pipe Nat 73.48 324** IAmb IAmb 00 44 50.0
comp=Z,243nm,1.5s
**214A Organ Pipe Nat 73.48 324** P P **00 44 36.0 +1.1**
baz=144,SNR=22
214A S **SKiKP 00 54 06.8 +2.5**
baz=144
**TIC Toumodi 73.56 72** *e*P P **00 44 35.3 -0.4**
**HQIL Hanson Quary C 73.58 347** IAMs_20 IAMs_20 01 21 28.6
comp=Z,10µm,19.0s
**KIC Kosan Boka 73.63 72** *e*P P **00 44 35.5 -0.6**
comp=Z,242nm,0.7s
**FFD Franklin Falls 73.70 360** IAmb IAmb 00 44 49.5
comp=Z,200nm,1.1s
**DBIC Dimbokro 73.71 72** P P **00 44 36.8 +0.2**
comp=Z,163nm,0.6s,baz=231,slow=5.6,SNR=144
DBIC LR LR 01 14 42.6
comp=Z,43µm,19.5s,baz=243,slow=34
**DBIC Dimbokro 73.71 72** P P **00 44 36.2 -0.3**
**K50A Casco 73.71 352** IAmb IAmb 00 45 00.9
comp=Z,178nm,0.8s
**J59A Piesco 73.74 358** IAmb IAmb 00 44 53.4
comp=Z,171nm,1.2s
**J57A Williamstown 73.75 357** IAmb IAmb 00 44 53.2
comp=Z,160nm,1.1s
**CBKS Cedar Bluff 73.88 337** P P **00 44 37.9 +0.9**
baz=155,SNR=18
CBKS S S **00 54 07.3 -0.1**
baz=155
**L44A Lake County Fo 73.96 347** P P **00 44 35.9 -1.5**
baz=165
L44A S **SKiKP 00 54 05.2 +0.6**
baz=165
**T25A Trinidad 74.07 333** P P **00 44 39.4 +0.9**
baz=151,SNR=42
T25A S S **00 54 13.0 +3.0**
baz=151
**L42A Oliver, Polo 74.14 346** IAmb IAmb 00 44 50.2
comp=Z,211nm,1.1s
**X18A Snowflake 74.20 328** IAmb IAmb 00 44 54.3
comp=Z,211nm,1.5s
**I63A Otisfield 74.28 1** IAmb IAmb 00 44 57.5
comp=Z,266nm,1.2s
**ELIM Elim 74.33 121** *e*P P **00 44 40.5 +0.5**
ELIM IAmb IAmb 00 44 52.2
comp=Z,454nm,1.8s
**LBNH Lisbon 74.47 360** P P **00 44 41.1 +0.8**
LBNH pmax pmax
comp=Z,144nm,1.2s
**LBNH Lisbon 74.47 360** P P **00 44 41.1 +0.8**
**LBNH Lisbon 74.47 360** P P **00 44 41.8 +1.5**
baz=180,SNR=5.7
LBNH S S **00 54 17.4 +3.6**
baz=180
**J47A Sunmer 74.47 350** IAmb IAmb 00 44 51.9
comp=Z,473nm,1.7s
**K43A Burlington 74.55 347** IAmb IAmb 00 44 51.5
comp=Z,224nm,1.4s
**W18A Petrified Fore 74.59 328** IAmb IAmb 00 44 57.4
comp=Z,380nm,1.4s
**W18A Petrified Fore 74.59 328** P P **00 44 42.8 +1.3**
baz=147,SNR=15
W18A S S **00 54 19.3 +3.4**
baz=147
**KOMG Komaggas 74.75 116** *e*P P **00 44 43.6 +1.1**
KOMG IAmb IAmb 00 44 53.9
comp=Z,16nm,0.8s
**X16A Lo Mia Camp, P 74.81 327** IAmb IAmb 00 44 57.9
comp=Z,212nm,1.4s
**SCIA State Center 74.86 343** P P **00 44 43.1 +0.5**
baz=161
SCIA S S **00 54 16.6 -1.6**
baz=161
**LONY Lake Ozonia 74.90 358** IAmb IAmb 00 45 00.1
comp=Z,155nm,1.1s
**LONY Lake Ozonia 74.90 358** P P **00 44 43.7 +0.9**
baz=177,SNR=6.8
LONY S S **00 54 20.1 +1.6**
baz=177
**SDCO Great Sand Dun 75.03 333** IAMs_20 IAMs_20 01 14 27.4
comp=Z,12µm,19.0s
**SDCO Great Sand Dun 75.03 333** P P **00 44 45.2 +1.2**
baz=150,SNR=46
SDCO S S **00 54 23.5 +2.7**
baz=150
**KSCO Kaye Shedlock' 75.05 335** P P **00 44 45.3 +1.3**
baz=153
KSCO S S **00 54 22.2 +1.4**
baz=153
**FRNY Flat Rock 75.09 358** P P **00 44 44.0 +0.1**
**JFWS Jewell Farm 75.14 346** IAMs_20 IAMs_20 01 23 23.6
comp=Z,10µm,20.0s
**JFWS Jewell Farm 75.14 346** P P **00 44 44.3 +0.1**
baz=164,SNR=12
JFWS S S **00 54 21.0 -0.2**
baz=164
**HAL Halifax 75.22 6** IAmb IAmb 00 44 48.7
comp=Z,117nm,0.7s
**SADO Sadowa 75.32 354** P P **00 44 45.3 +0.1**
comp=Z,42nm,0.8s,baz=219,slow=2.2,SNR=27
SADO LR LR 01 19 54.6
comp=Z,10µm,20.8s,baz=178,slow=37
**GLA Glamis 75.38 323** P P **00 44 47.2 +1.3**
baz=142
GLA S S **00 54 28.7 +4.2**
baz=142
**K38A Parkersburg 75.45 344** IAmb IAmb 00 44 59.4
comp=Z,441nm,1.6s
**G62A West of Eustis 75.45 1** IAmb IAmb 00 45 03.9
comp=Z,149nm,0.9s
**GGN Saint George 75.47 3** IAmb IAmb 00 45 03.9
comp=Z,188nm,1.1s
**PKME Peaks-Kenny Pk 75.52 2** P P **00 44 45.3 -1.0**
**PKME Peaks-Kenny Pk 75.52 2** P P **00 44 47.8 +1.6**
baz=182
**MATJ Matjiesfontein 75.55 120**⇑*i*P P **00 44 48.1 +1.0**
MATJ IAmb IAmb 00 44 52.2
comp=Z,218nm,0.8s
**S22A 4UR Ranch, Cre 75.56 332** IAmb IAmb 00 45 03.2
comp=Z,305nm,1.9s
**S22A 4UR Ranch, Cre 75.56 332** P P **00 44 47.9 +0.8**
baz=149,SNR=31
S22A S S **00 54 28.8 +2.0**
baz=149
**YUH Yuha Desert 75.63 322** IAmb IAmb 00 45 04.7
comp=Z,315nm,1.9s
**WUAZ Wupatki 75.68 327** IAmb IAmb 00 45 03.0
comp=Z,195nm,1.2s
WUAZ IAMs_20 IAMs_20 01 12 49.5
comp=Z,17µm,22.0s
**WUAZ Wupatki 75.68 327** P P **00 44 49.2 +1.6**
baz=145,SNR=60
WUAZ S S **00 54 32.4 +4.5**
baz=145
**IKP In-Ko-Pah, Jac 75.73 322** P P **00 44 49.4 +1.4**
baz=142,SNR=18
IKP S S **00 54 32.3 +3.8**
baz=142
**BGNE Belgrade 75.74 340** P P **00 44 47.3 -0.4**
BGNE pP pP **00 44 56.4 +1.3**
**BGNE Belgrade 75.74 340** P P **00 44 48.0 +0.3**
baz=157,SNR=7.5
BGNE S S **00 54 26.8 -1.2**
baz=157
**L34A Svendsen Farm, 75.74 341** IAmb IAmb 00 44 58.3
comp=Z,180nm,0.9s
**CVNA Calvinia 75.74 118**⇑*i*P P **00 44 47.6 -0.7**
CVNA IAmb IAmb 00 44 51.3
comp=Z,168nm,1.1s
**BLYC Blythe 75.78 324** IAmb IAmb 00 45 03.3
comp=Z,317nm,1.9s
**SWSC Sam W. Stewart 75.80 323** P P **00 44 49.6 +1.3**
baz=142
SWSC S S **00 54 34.2 +5.2**
baz=142
**MVCO Mesa Verde 75.80 330** P P **00 44 48.8 +0.3**
MVCO IAmb IAmb 00 45 01.8
comp=Z,149nm,1.1s
MVCO IAMs_20 IAMs_20 01 14 06.9
comp=Z,15µm,20.0s
**MVCO Mesa Verde 75.80 330** P P **00 44 49.5 +1.0**
baz=148,SNR=45
MVCO S S **00 54 32.3 +2.9**
baz=148
**I42A Draeger Farm, 75.81 347** IAmb IAmb 00 45 00.2
comp=Z,281nm,1.4s
**Q24A Divide 75.95 334** IAmb IAmb 00 45 02.7
comp=Z,238nm,1.2s
**Q24A Divide 75.95 334** P P **00 44 50.5 +1.2**
baz=151
Q24A S S **00 54 33.2 +2.1**
baz=151
**GLMI Grayling 75.99 350** IAmb IAmb 00 45 24.9
comp=Z,156nm,0.9s
GLMI IAMs_20 IAMs_20 01 23 15.4
comp=Z,12µm,21.0s
**GLMI Grayling 75.99 350** P P **00 44 49.9 +0.8**
baz=168
**PDMCI Parker Dam,Lak 76.03 325** P P **00 44 50.8 +1.3**
baz=143,SNR=5.4
PDMCI S S **00 54 34.0 +2.6**
baz=143
**MONP2 Monument Peak 76.09 322** P P **00 44 51.6 +1.5**
baz=141,SNR=14
MONP2 S S **00 54 35.2 +2.6**
baz=141
**SUR Sutherland 76.12 119** LR LR 01 16 35.8
comp=Z,17µm,18.1s,baz=234,slow=34
**SUR Sutherland 76.12 119** P P **00 44 50.1 -0.5**
SUR IAmb IAmb 00 44 56.5
comp=Z,136nm,0.7s
**SUR Sutherland 76.12 119** IAMs_20 IAMs_20 01 16 35.1
comp=Z,19µm,19.0s
**F62A Pittston Farm, 76.14 1** IAmb IAmb 00 45 06.0
comp=Z,181nm,1.3s
**F64A Sherman 76.15 2** IAmb IAmb 00 45 02.2
comp=Z,209nm,1.3s
**I40A Norwalk 76.15 346** IAmb IAmb 00 45 02.0
comp=Z,287nm,1.4s
**H43A Windswept, Lux 76.15 348** IAmb IAmb 00 45 02.0
comp=Z,172nm,1.2s
**BC3 Big Chuckawall 76.18 323** P P **00 44 51.3 +0.8**
baz=142,SNR=31
BC3 S S **00 54 37.6 +4.2**
baz=142
**MAW Mawson 76.33 164** P P **00 44 51.2 +0.5**
comp=Z,108nm,0.7s,baz=217,slow=7.5,SNR=17
MAW LR LR 01 17 09.9
comp=Z,29µm,21.8s,baz=232,slow=35
**MAW Mawson 76.33 164** P P **00 44 51.3 +0.5**
MAW pmax pmax
comp=Z,75nm,1.2s
**MAW Mawson 76.33 164** P P **00 44 51.3 +0.6**
**LMN Caledonia Moun 76.33 5** IAmb IAmb 00 44 54.7
comp=Z,194nm,0.8s
**IRM Iron Mountain 76.42 324** P P **00 44 52.9 +1.1**
baz=142,SNR=31
IRM S S **00 54 39.3 +3.5**
baz=142
**109C Camp Elliot, M 76.44 322** P P **00 44 52.9 +1.0**
baz=141
109C S S **00 54 40.0 +3.9**
baz=141
**TRQ Mont Tremblant 76.50 358** IAmb IAmb 00 45 08.9
comp=Z,145nm,1.0s
**W13A Hualapai Mount 76.54 325** IAmb IAmb 00 45 07.8
comp=Z,220nm,1.7s
**OGNE Ogallala 76.56 337** P P **00 44 53.7 +1.2**
baz=153
OGNE S S **00 54 39.3 +2.0**
baz=153
**NEE2 Needles Airpor 76.63 325** P P **00 44 54.1 +1.2**
baz=143
NEE2 S S **00 54 41.8 +3.7**
baz=143
**TPFO Pinon Flats 76.66 323** P P **00 44 54.9 +1.6**
baz=141,SNR=28
TPFO S S **00 54 41.6 +2.9**
baz=141
**PFO Pinyon Flats O 76.67 323** P P **00 44 55.0 +1.7**
comp=Z,45nm,1.2s,baz=121,slow=4.9,SNR=19
**PFO Pinyon Flats O 76.67 323** P P **00 44 53.7 +0.4**
PFO IAmb IAmb 00 45 10.9
comp=Z,206nm,1.5s
**PFO Pinyon Flats O 76.67 323** IAMs_20 IAMs_20 01 12 00.6
comp=Z,14µm,20.0s
**PFO Pinyon Flats O 76.67 323** P P **00 44 54.8 +1.5**
baz=141,SNR=30
PFO S S **00 54 41.0 +2.2**
baz=141
**BELC Belle Mtn. Jos 76.73 323** P P **00 44 55.2 +1.5**
baz=142,SNR=12
BELC S S **00 54 42.3 +2.8**
baz=142
**U15A North Rim 76.85 327** IAmb IAmb 00 45 09.8
comp=Z,333nm,1.6s
**ISCO Idaho Springs 76.85 334** IAmb IAmb 00 45 10.4
comp=Z,209nm,1.3s
ISCO IAMs_20 IAMs_20 01 15 15.7
comp=Z,11µm,21.0s
**ISCO Idaho Springs 76.85 334** P P **00 44 55.5 +1.1**
baz=150,SNR=27
ISCO S S **00 54 43.3 +2.4**
baz=150
**PV11 David Mesa, Pa 76.88 331** IAmb IAmb 00 45 10.4
comp=Z,596nm,1.9s
**PQI Presque Isle 76.97 2** P P **00 44 54.3 -0.2**
**MURC Murrieta 77.04 322** P P **00 44 56.9 +1.6**
baz=141,SNR=12
MURC S S **00 54 46.8 +4.1**
baz=141
**GMRC Granite Mounta 77.17 324** P P **00 44 57.6 +1.4**
baz=142,SNR=36
GMRC S S **00 54 47.9 +3.7**
baz=142
**GRAN Grantham 77.18 120**⇑*i*P P **00 44 57.2 +0.8**
GRAN IAmb IAmb 00 45 01.8
comp=Z,206nm,0.7s
**SCI2 San Clemente I 77.29 321** P P **00 44 58.3 +1.6**
baz=140
SCI2 S S **00 54 50.4 +5.0**
baz=140
**D62A Allapoint, All 77.34 2** IAmb IAmb 00 45 09.8
comp=Z,225nm,1.1s
**G40A Rib Lake 77.38 347** IAmb IAmb 00 45 09.1
comp=Z,197nm,1.4s
**BBRC Big Bear Solar 77.41 323** P P **00 44 59.0 +1.4**
baz=141
BBRC S S **00 54 51.4 +4.3**
baz=141
**ECSD EROS Data Cent 77.44 342** IAmb IAmb 00 45 10.3
comp=Z,271nm,1.1s
**ECSD EROS Data Cent 77.44 342** P P **00 44 57.3 0.0**
baz=158,SNR=87
ECSD S S **00 54 45.9 -0.7**
baz=158
**E46A Sault Ste Mari 77.46 351** IAmb IAmb 00 45 09.3
comp=Z,297nm,1.3s
**F42A Maple Grove Fa 77.47 348** IAmb IAmb 00 45 11.5
comp=Z,390nm,1.8s
**AUGR Augrabies 77.52 116** *e*P P **00 44 59.1 +0.8**
**CIS Catalina Islan 77.54 321** P P **00 44 59.7 +1.6**
baz=140,SNR=13
CIS S S **00 54 52.4 +4.3**
baz=140
**HEC Hector,Ludlow 77.55 324** P P **00 44 59.8 +1.6**
baz=142,SNR=20
HEC S S **00 54 51.0 +2.7**
baz=142
**KNB Kanab 77.57 327** IAmb IAmb 00 45 13.8
comp=Z,274nm,1.3s
**BATG Bathurst New B 77.66 4** P P **00 44 58.3 -0.1**
BATG IAmb IAmb 00 45 14.5
comp=Z,153nm,1.1s
**PKCU Pink Cliffs 77.68 328** IAmb IAmb 00 45 14.3
comp=Z,302nm,1.7s
**FMP Fort Macarthur 77.71 322** P P **00 44 59.8 +0.8**
baz=140
FMP S S **00 54 53.7 +3.8**
baz=140
**LMQ La Malbaie 77.78 1** IAmb IAmb 00 45 16.4
comp=Z,186nm,1.2s
**TUQ Turquoise Moun 77.82 324** P P **00 45 01.2 +1.4**
baz=142,SNR=31
TUQ S S **00 54 54.0 +2.8**
baz=142
**E43A Lone Tree Farm 77.87 349** IAmb IAmb 00 45 11.9
comp=Z,508nm,1.8s
**SPMN Marine on St. 77.89 345** P P **00 44 59.4 -0.4**
baz=161,SNR=14
SPMN S S **00 54 50.0 -1.4**
baz=161
**N23A Red Feather La 77.92 334** IAmb IAmb 00 45 15.5
comp=Z,227nm,1.4s
**N23A Red Feather La 77.92 334** P P **00 45 01.6 +1.2**
baz=150,SNR=28
N23A S S **00 54 55.2 +2.8**
baz=150
**RRX Edison Barstow 77.93 323** P P **00 45 01.5 +1.3**
baz=141
RRX S S **00 54 56.2 +4.0**
baz=141
**KEIM Keimoes 77.95 116**⇑*i*P P **00 45 01.1 +0.3**
KEIM IAmb IAmb 00 45 04.5
comp=Z,65nm,0.8s
**SNCC San Nicolas Is 78.03 320** P P **00 45 02.0 +1.2**
baz=139
SNCC S S **00 54 57.0 +3.6**
baz=139
**RAR Rarotonga 78.05 252** P P **00 45 03.0 +1.7**
comp=Z,24nm,1.1s,baz=76,slow=4.2,SNR=1.7
RAR LR LR 01 10 50.7
comp=Z,14µm,20.9s,baz=162,slow=29
**RAR Rarotonga 78.05 252** P P **00 45 03.0 +1.7**
**RAR Rarotonga 78.05 252** IAMs_20 IAMs_20 01 10 29.5
comp=Z,14µm,21.0s
**ROSN Rosenhof 78.07 123** *e*P P **00 45 01.8 +0.5**
**MTPU Mount Pierson 78.11 328** P P **00 45 01.7 +0.1**
**DECC Green Verdugo 78.15 322** P P **00 45 02.6 +1.1**
baz=140
DECC S S **00 54 58.3 +3.6**
baz=140
**GSC Goldstone, Bar 78.16 324** IAmb IAmb 00 45 16.9
comp=Z,277nm,1.7s
**GSC Goldstone, Bar 78.16 324** P P **00 45 02.7 +1.1**
baz=141,SNR=28
GSC S S **00 54 57.2 +2.3**
baz=141
**O20A White River Ci 78.17 332** IAmb IAmb 00 45 15.1
comp=Z,165nm,1.1s
**O20A White River Ci 78.17 332** P P **00 45 02.9 +1.2**
baz=148,SNR=24
O20A S S **00 54 59.0 +4.0**
baz=148
**CCUT Cedar City 78.26 327** IAmb IAmb 00 45 17.9
comp=Z,288nm,1.5s
**SHPR Sheep Range 78.28 325** IAmb IAmb 00 45 17.7
comp=Z,246nm,1.4s
**UPI Upington 78.34 116**⇑*i*P P **00 45 01.8 -1.1**
UPI IAmb IAmb 00 45 05.3
comp=Z,94nm,1.1s
**Q16A Castle Valley 78.38 329** IAmb IAmb 00 45 18.8
comp=Z,185nm,1.2s
**EDW2 Edwards Air Fo 78.45 323** P P **00 45 04.0 +0.9**
baz=140,SNR=55
EDW2 S S **00 54 60.0 +2.0**
baz=140
**MSU Marysvale 78.50 329** P P **00 45 04.4 +0.8**
**MSU Marysvale 78.50 329** P P **00 45 04.4 +0.8**
**VLDQ Val d'Or 78.52 356** IAmb IAmb 00 45 20.3
comp=Z,154nm,1.0s
**P18A Preston Nutter 78.57 330** IAmb IAmb 00 45 17.5
comp=Z,293nm,1.1s
**OSI Osito Audit: C 78.63 322** P P **00 45 05.4 +1.2**
baz=140
OSI S S **00 55 02.2 +2.3**
baz=140
**P17A Butcher Ranch, 78.66 330** IAmb IAmb 00 45 17.4
comp=Z,176nm,1.2s
**TMUT Trail Mountain 78.71 330** P P **00 45 05.3 +0.5**
TMUT IAmb IAmb 00 45 20.8
comp=Z,397nm,1.9s
**LRMC Laurel Mtn Rad 78.75 323** P P **00 45 05.9 +1.0**
baz=141
LRMC S S **00 55 01.0 -0.2**
baz=141
**SUSD Miller 78.75 340** IAmb IAmb 00 45 16.7
comp=Z,169nm,1.1s
**SUSD Miller 78.75 340** P P **00 45 04.6 0.0**
baz=156,SNR=5.9
SUSD S S **00 55 00.2 -0.4**
baz=156
**D41A Chassel 78.80 348** IAmb IAmb 00 45 17.4
comp=Z,206nm,0.8s
**PRN Pahroc Range 78.94 326** IAmb IAmb 00 45 22.1
comp=Z,204nm,1.0s
**SBC Santa Barbara 79.03 321** P P **00 45 06.6 +0.4**
baz=139
SBC S S **00 55 04.4 +0.4**
baz=139
**ARVC Arvin 79.08 322** P P **00 45 07.9 +1.4**
baz=140
ARVC S S **00 55 08.4 +3.9**
baz=140
**H07S1 FLORES T-PHASE 79.08 31** *e*P P **00 45 09.5 +3.0**
comp=Z,338nm,1.9s
**RDMU Red Mountain 79.08 331** IAmb IAmb 00 45 19.7
comp=Z,148nm,1.0s
**RWWY Rawlins 79.09 334** P P **00 45 07.0 +0.2**
RWWY IAmb IAmb 00 45 21.6
comp=Z,452nm,1.4s
RWWY IAMs_20 IAMs_20 01 16 39.0
comp=Z,11µm,20.0s
**FURC Furnace Creek, 79.10 324** P P **00 45 07.9 +1.3**
baz=142,SNR=12
FURC S S **00 55 08.2 +3.7**
baz=142
**MPMC Manual Prospec 79.10 324** P P **00 45 07.7 +0.9**
baz=141
MPMC S S **00 55 08.2 +3.2**
baz=141
**TPNV Topopah Spring 79.17 325** P P **00 45 08.7 +1.5**
baz=142,SNR=44
TPNV S S **00 55 08.3 +2.6**
baz=142
**BCW Bitter Crk WRg 79.25 322** IAmb IAmb 00 45 25.2
comp=Z,243nm,1.1s
**ISA Isabella, Lake 79.30 323** P P **00 45 09.3 +1.4**
baz=140,SNR=46
ISA S S **00 55 09.9 +2.9**
baz=140
**PKM Mcpherson Peak 79.42 321** P P **00 45 10.2 +1.6**
baz=139,SNR=74
PKM S S **00 55 11.8 +3.2**
baz=139
**S11A Rachel 79.47 326** IAmb IAmb 00 45 27.8
comp=Z,452nm,1.6s
**SOE Somerset East 79.49 122** *e*P P **00 45 08.7 -0.5**
SOE IAmb IAmb 00 45 11.5
comp=Z,522nm,1.6s
**CALA Caldeira 79.57 33** *e*P P **00 45 11.9 +2.7**
comp=Z,244nm,1.0s
**PCAN Candelaria 79.58 33** *e*P P **00 45 11.2 +2.0**
comp=Z,239nm,1.3s
**PCED Cedros 79.61 33** *e*P P **00 45 12.1 +2.8**
comp=Z,257nm,1.7s
**PICO Pico 79.63 33** *e*P P **00 45 10.6 +1.0**
comp=Z,315nm,1.7s
**NLU North Lily Min 79.63 329** IAmb IAmb 00 45 25.6
comp=Z,198nm,1.4s
**K22A Casper 79.66 335** IAmb IAmb 00 45 22.5
comp=Z,380nm,1.2s
**K22A Casper 79.66 335** P P **00 45 10.5 +0.8**
baz=150,SNR=20
K22A S S **00 55 13.1 +2.4**
baz=150
**PPNO Prainha do Nor 79.69 33** *e*P P **00 45 11.7 +1.9**
comp=Z,302nm,2.0s
**CWC Cottonwood Cre 79.69 323** P P **00 45 11.1 +1.0**
baz=141
CWC S S **00 55 14.3 +2.9**
baz=141
**TSUM Tsumeb 79.75 106** LR LR 01 16 16.3
comp=Z,22µm,20.4s,baz=237,slow=33
**TSUM Tsumeb 79.75 106**⇑*i*P P **00 45 11.1 +0.2**
**TSUM Tsumeb 79.75 106** P P **00 45 11.3 +0.4**
TSUM IAmb IAmb 00 45 28.1
comp=Z,194nm,1.0s
**VES Vestal, Richgr 79.76 322** P P **00 45 11.5 +1.3**

baz=140
VES S **S** **00 55 15.8 +4.2**

baz=140
**GRAC Grapevine Rang 79.76 324** IAmb IAmb 00 45 41.0
comp=Z,193nm,1.2s
**GRAC Grapevine Rang 79.76 324** P **P** **00 45 11.4 +1.1**
baz=141,SNR=26
GRAC S **S** **00 55 15.9 +4.1**

baz=141
**SMMC Simmler 79.84 322** P **P** **00 45 12.4 +1.6**
baz=139
SMMC S **S** **00 55 16.3 +3.6**

baz=139
**SPR3 Spring Creek 3 79.88 327** IAmb IAmb 00 45 26.8
comp=Z,258nm,1.4s
**ROSA Rosais 79.89 33** *e*P **P** **00 45 12.9 +2.0**
comp=Z,148nm,1.0s
**PMAN Manadas 79.90 33** *e*P **P** **00 45 12.3 +1.4**
comp=Z,166nm,1.5s
**R11A Troy Canyon, C 79.95 326** P **P** **00 45 12.9 +1.4**
baz=143,SNR=52
R11A S **S** **00 55 17.6 +3.6**

baz=143
**PSMA Santa Maria 80.06 36** *e*P **P** **00 45 12.4 +0.6**
comp=Z,191nm,1.7s
**RSSD Black Hills 80.06 337** P **P** **00 45 12.3 +0.3**
RSSD pmax pmax

comp=Z,129nm,1.2s
**RSSD Black Hills 80.06 337** P **P** **00 45 12.3 +0.3**
**RSSD Black Hills 80.06 337** P **P** **00 45 12.7 +0.8**
baz=152
RSSD S **S** **00 55 15.4 +0.4**

baz=152
**PSMN Pico do Norte, 80.10 36** *e*P **P** **00 45 12.6 +0.5**
comp=Z,264nm,1.6s
**DUG Dugway, Tooele 80.16 329** P **P** **00 45 13.5 +1.0**
baz=145,SNR=49
DUG S **S** **00 55 18.8 +2.8**

baz=145
**EYMN Ely 80.20 347** P **P** **00 45 12.4 +0.1**
baz=163,SNR=9.3
**SRBC Serra Branca 80.24 33** *e*P **P** **00 45 14.8 +2.0**
comp=Z,937nm,1.1s
**TIN Tinemaha, Big 80.24 324** P **P** **00 45 14.2 +1.2**
baz=141,SNR=6.9
TIN S **S** **00 55 19.1 +2.1**

baz=141
**PGRA Graciosa 80.26 33** *e*P **P** **00 45 15.9 +3.0**
comp=Z,292nm,2.1s
**VOG Valley Oaks Go 80.28 323** P **P** **00 45 12.8 -0.2**
baz=140
**ADH Angra Heroismo 80.32 34** *e*P **P** **00 45 13.6 +0.4**
comp=Z,244nm,1.5s
**PSET Sete Cidades 80.41 35** *e*P **P** **00 45 16.2 +2.5**
comp=Z,185nm,1.8s
**PAGU Agualva, Azore 80.43 34** *e*P **P** **00 45 15.2 +1.4**
comp=Z,384nm,1.6s
**GRON Grota Negra 80.46 35** *e*P **P** **00 45 15.8 +1.8**
comp=Z,272nm,1.8s
**CMLA Cha da Macela 80.46 35** *e*P **P** **00 45 15.1 +1.1**
comp=Z,195nm,1.1s
**PCALD Caldeiras da R 80.50 35** *e*P **P** **00 45 14.2 0.0**
**TPH Tonopah 80.53 325** P **P** **00 45 14.9 +0.3**
TPH pmax pmax

comp=Z,749nm,1.3s
**TPH Tonopah 80.53 325** P **P** **00 45 14.9 +0.3**
**D32A Dogwood Acres, 80.70 343** IAmb IAmb 00 45 27.3
comp=Z,326nm,1.1s
**BW06 Boulder Array 80.92 333** IAMs_20 IAMs_20 01 17 37.5
comp=Z,15μm,22.0s
**BW06 Boulder Array 80.92 333** P **P** **00 45 16.8 +0.1**
baz=148,SNR=21
**PDAR Pinedale Array 80.92 333** P **P** **00 45 16.8 +0.2**
comp=Z,7.0nm,0.6s,baz=133,slow=7.8,SNR=47
PDAR PKKPbc **PKKPbc** **01 03 52.9 -3.4**

comp=Z,0.4nm,0.6s,baz=347,slow=3.7,SNR=2.9
**MLAC Mammoth, Mammo 80.99 324** P **P** **00 45 18.4 +1.3**
baz=140,SNR=8.9
MLAC S **S** **00 55 28.1 +3.0**

baz=140
**B35A Bob, Littlefor 81.07 345** IAmb IAmb 00 45 28.9
comp=Z,199nm,1.2s
**BOSA Boshof 81.29 118** P **P** **00 45 19.1 +0.1**
comp=Z,85nm,0.8s,baz=251,slow=3.9,SNR=73
BOSA LR LR 01 17 08.6

comp=Z,22μm,20.4s,baz=246,slow=33
**BOSA Boshof 81.29 118** *i* P **P** **00 45 19.9 +0.9**
**BOSA Boshof 81.29 118** *i* P **P** **00 45 19.9 +0.9**
**BOSA Boshof 81.29 118** P **P** **00 45 18.2 -0.8**
**LHV Little Huntoon 81.30 324** IAmb IAmb 00 45 33.8
comp=Z,243nm,1.4s
**NVAR Mina Array Bea 81.34 325** P **P** **00 45 19.7 +0.7**
comp=Z,16nm,0.7s,baz=153,slow=5.7,SNR=53
NVAR PKKPbc **PKKPbc** **01 03 53.5 -1.5**

comp=Z,0.9nm,0.8s,baz=48,slow=1.3,SNR=4.2
NVAR LR LR 01 15 05.7

comp=Z,8μm,21.6s,baz=136,slow=31
**NVAR Mina Array Bea 81.34 325** P **P** **00 45 19.3 +0.4**
**PMOZ Porto Moniz, M 81.37 44** *e*P **P** **00 45 21.4 +2.3**
comp=Z,273nm,1.3s
**PMOZ Porto Moniz, M 81.37 44** *e*S **SKKSac** **00 55 40.3 +0.3**
**PMOZ Porto Moniz, M 81.37 44** *e*LR LR 01 12 30.2
comp=Z,15μm,20.0s
**FUL Funchal 81.43 44** *e*P **P** **00 45 20.2 +1.0**
comp=Z,451nm,1.4s
**HVU Hansel Valley 81.43 330** IAmb IAmb 00 45 33.3
comp=Z,304nm,1.7s
**PMAR Madeira 81.47 44** *e*P **P** **00 45 20.4 +0.7**
comp=Z,458nm,1.6s
**AGMN Agassiz Nation 81.50 344** P **P** **00 45 19.2 0.0**
baz=159,SNR=60
**AHID Auburn Hatcher 81.54 332** IAmb IAmb 00 45 36.0
comp=Z,296nm,1.6s
AHID IAMs_20 IAMs_20 01 18 07.9

comp=Z,15μm,20.0s
**ELK Elko 81.69 328** P **P** **00 45 21.3 +0.5**
comp=Z,35nm,0.9s,baz=172,slow=2.7,SNR=35
ELK LR LR 01 16 57.9

comp=Z,13μm,21.6s,baz=141,slow=32
**ELK Elko 81.69 328** IAMs_20 IAMs_20 01 16 56.7
comp=Z,12μm,20.0s
**REDW Red Top Meadow 81.94 332** IAMs_20 IAMs_20 01 17 56.4
comp=Z,12μm,22.0s
**SNOW Snow King Moun 81.98 332** IAmb IAmb 00 45 36.8
comp=Z,275nm,1.8s
**MDND Maddock 82.05 341** P **P** **00 45 22.4 +0.2**
baz=156,SNR=38
**LOHW Long Hollow 82.05 332** P **P** **00 45 22.6 0.0**
LOHW IAMs_20 IAMs_20 01 18 13.3

comp=Z,17μm,21.0s
**PMPS Porto Santo 82.05 44** *e*P **P** **00 45 25.9 +3.4**
comp=Z,395nm,1.7s
**SWZ Schweizer 82.06 117** *e*P **P** **00 45 21.7 -1.5**
SWZ IAmb IAmb 00 45 25.1

comp=Z,1μm,2.4s
**PMPST Porto Santo, M 82.07 44** *e*P **P** **00 45 24.5 +1.9**
comp=Z,495nm,1.5s
**TPAW Teton Pass 82.08 332** IAMs_20 IAMs_20 01 18 00.3
comp=Z,10μm,21.0s
**MOOW Moose Ponds 82.22 332** IAMs_20 IAMs_20 01 18 19.8
comp=Z,16μm,21.0s
**YERR Yerington 82.23 324** IAmb IAmb 00 45 38.8
comp=Z,272nm,1.4s
**FLWY Flagg Ranch 82.48 333** IAMs_20 IAMs_20 01 18 38.7
comp=Z,16μm,20.0s
**PNTR Pine Nut 82.49 324** IAmb IAmb 00 45 39.0
comp=Z,141nm,0.9s
**TORD Torodi Ar. Bea 82.66 70** P **P** **00 45 26.1 0.0**
comp=Z,81nm,0.8s,baz=264,slow=3.5,SNR=222
TORD PKKPbc **PKKPbc** **01 03 52.3 +2.1**

comp=Z,1.0nm,0.9s,baz=34,slow=3.0,SNR=2.9
**EMB Emerald Bay 82.66 324** P **P** **00 45 26.4 +0.5**
**H17A Grant Village 82.69 333** P **P** **00 45 27.3 +1.3**
baz=147,SNR=9.4
H17A S **S** **00 55 45.0 +2.7**

baz=147
**RUBR Rubicon Trail 82.75 324** IAmb IAmb 00 45 43.3
comp=Z,140nm,1.0s
**LKWY Lake 82.77 333** IAMs_20 IAMs_20 01 21 27.3
comp=Z,11μm,20.0s
**RLMT Red Lodge 82.80 334** IAMs_20 IAMs_20 01 21 17.2
comp=Z,9μm,19.0s
**RLMT Red Lodge 82.80 334** P **P** **00 45 26.4 0.0**
baz=148,SNR=16
**PAHR Pah Rah Range 82.86 325** IAmb IAmb 00 45 40.2
comp=Z,149nm,1.1s
**MPK Martis Peak 82.87 324** IAmb IAmb 00 45 40.6
comp=Z,203nm,1.1s

**LAO LASA Array 83.06 337** IAmb IAmb 00 45 40.1
comp=Z,170nm,1.2s
**LAO LASA Array 83.06 337** P **P** **00 45 28.0 +0.5**
baz=150,SNR=14
**YHH Holmes Hill 83.13 333** P **P** **00 45 28.3 +0.1**
**ULM Lac du Bonnet 83.33 345** P **P** **00 45 28.8 +0.1**
comp=Z,56nm,0.8s,baz=163,slow=4.5,SNR=39
**ULM Lac du Bonnet 83.33 345** IAmb IAmb 00 45 40.6
comp=Z,166nm,1.1s
**LBTB Lobatse 83.36 115** LR LR 01 17 27.4
comp=Z,37μm,21.8s,baz=231,slow=32
**LBTB Lobatse 83.36 115** *i* P **P** **00 45 30.7 +0.8**
**LBTB Lobatse 83.36 115** *i* P **P** **00 45 30.7 +0.8**
**LBTB Lobatse 83.36 115** IAmb IAmb 00 45 36.9
comp=Z,158nm,0.9s
**SNKL Senekal, Frees 83.37 119**⇧ *i*P **P** **00 45 29.6 -0.4**
SNKL IAmb IAmb 00 45 32.5

comp=Z,1μm,2.1s
**CASY Casey 83.43 181** P **P** **00 45 29.1 -0.2**
CASY IAmb IAmb 00 45 41.5

comp=Z,261nm,1.2s
**CASY Casey 83.43 181** IAMs_20 IAMs_20 01 25 33.9
comp=Z,16μm,20.0s
**HLID Hailey 83.58 330** IAmb IAmb 00 45 43.7
comp=Z,112nm,1.1s
HLID IAMs_20 IAMs_20 01 18 03.9

comp=Z,12μm,21.0s
**HLID Hailey 83.58 330** P **P** **00 45 31.7 +1.2**
baz=144,SNR=60
HLID S **S** **00 55 54.2 +3.0**

baz=144
**PRYS Parys 83.75 117**⇧ *i*P **P** **00 45 30.2 -1.7**
PRYS IAmb IAmb 00 45 47.8

comp=Z,72nm,1.0s
**ORV Oroville 83.81 323** IAmb IAmb 00 45 46.5
comp=Z,330nm,1.5s
**KSR Koster 83.94 116**⇧ *i*P **P** **00 45 32.0 -0.9**
KSR IAmb IAmb 00 45 49.0

comp=Z,258nm,1.3s
**DGMT Dagmar 83.96 339** P **P** **00 45 32.7 +0.7**
baz=152,SNR=38
**WDLM Western Deep L 84.06 117** *e*P **P** **00 45 32.0 -1.5**
WDLM IAmb IAmb 00 45 35.7

comp=Z,749nm,2.4s
**MFID Camas Ranch 84.08 329** IAmb IAmb 00 45 48.7
comp=Z,215nm,1.7s
MFID IAMs_20 IAMs_20 01 18 58.1

comp=Z,17μm,20.0s
**BOZ Bozeman (W) 84.11 333** IAMs_20 IAMs_20 01 19 32.8
comp=Z,10μm,20.0s
**BOZ Bozeman (W) 84.11 333** P **P** **00 45 33.5 +0.4**
baz=146,SNR=16
BOZ S **S** **00 55 56.3 -0.1**

baz=146
**DLMT Dillon 84.30 332** P **P** **00 45 34.4 +0.3**
DLMT IAmb IAmb 00 45 47.1

comp=Z,117nm,1.3s
DLMT IAMs_20 IAMs_20 01 19 35.8

comp=Z,9μm,20.0s
**EKNA AfricaArray - 84.30 82**⇧ *e*P **P** **00 45 36.1 +1.4**
**HRAO HartRAO 84.53 117**⇧ *i*P **P** **00 45 33.5 -2.4**
HRAO IAmb IAmb 00 45 38.0

comp=Z,1μm,2.4s
**MOD Modoc Plateau 84.98 326** IAmb IAmb 00 45 50.6
comp=Z,89nm,1.1s
MOD IAMs_20 IAMs_20 01 18 10.8

comp=Z,8μm,20.0s
**SLR Silverton 85.07 117**⇧ *i*P **P** **00 45 36.7 -1.9**
SLR IAmb IAmb 00 45 40.5

comp=Z,919nm,2.7s
**SCHQ Schefferville 85.17 3** P **P** **00 45 37.9 -0.1**
comp=Z,113nm,1.2s,baz=175,slow=3.7,SNR=23
**J08A Circle Bar Ran 85.23 328** IAmb IAmb 00 45 51.9
comp=Z,194nm,1.1s
**NWCL Newcastle 85.25 119**⇧ *i*P **P** **00 45 37.8 -1.6**
NWCL IAmb IAmb 00 45 50.8

comp=Z,314nm,1.9s
**TTIG Tnine Tigouga, 85.39 51** P **P** **00 45 43.0 +3.2**
**TTIG Tnine Tigouga, 85.39 51** P **P** **00 45 43.0 +3.2**
**EGMT Eagleton 85.44 335** IAmb IAmb 00 45 54.3
comp=Z,158nm,1.4s
**EGMT Eagleton 85.44 335** P **P** **00 45 39.5 -0.1**
baz=148,SNR=14
**N02D Trinity Center 85.48 324** P **P** **00 45 39.9 -0.1**
baz=138,SNR=10
**PLID Pearl Lake 85.49 330** P **P** **00 45 39.4 -0.8**
PLID IAMs_20 IAMs_20 01 20 35.3

comp=Z,12μm,19.0s
**MQZ McQueen's Vall 85.61 221** IAMs_20 IAMs_20 01 16 12.1
comp=Z,9μm,20.0s
**M04C Macdoel 85.65 325** IAmb IAmb 00 45 53.8
comp=Z,148nm,1.1s
**M04C Macdoel 85.65 325** P **P** **00 45 41.4 +0.5**
baz=138,SNR=18
**M02C Callahan 85.87 324** P **P** **00 45 42.6 +0.7**
baz=138,SNR=10
M02C S **S** **00 56 13.9 +0.1**

baz=138
**BMO Blue Mountains 85.87 329** IAMs_20 IAMs_20 01 20 15.4
comp=Z,16μm,20.0s
**K05A Summer Lake 85.89 326** IAmb IAmb 00 45 58.1
comp=Z,168nm,1.2s
**SNZO South Karori 85.91 224** IAMs_20 IAMs_20 01 16 31.1
comp=Z,8μm,19.0s
**MXZ Matakaoa Point 85.91 228** IAMs_20 IAMs_20 01 13 55.3
comp=Z,14μm,22.0s
**MSO Missoula 86.03 332** IAmb IAmb 00 46 17.2
comp=Z,134nm,1.6s
MSO IAMs_20 IAMs_20 01 21 25.8

comp=Z,14μm,19.0s
**MSO Missoula 86.03 332** P **P** **00 45 43.6 +1.0**
baz=144,SNR=7.6
MSO S **S** **00 56 17.8 +2.4**

baz=144
**YBH Yreka Blue Hor 86.05 324** P **P** **00 45 42.8 -0.1**
comp=Z,15nm,0.9s,baz=88,slow=6.2,SNR=27
YBH LR LR 01 17 57.8

comp=Z,6μm,20.3s,baz=144,slow=31
**OUK Oukaimeden 86.19 50** P **P** **00 45 48.0 +3.9**
**OUK Oukaimeden 86.19 50** P **P** **00 45 48.0 +3.9**
**L04D Klamath Falls 86.20 325** IAmb IAmb 00 45 59.8
comp=Z,117nm,1.1s
**L04D Klamath Falls 86.20 325** P **P** **00 45 43.8 +0.2**
baz=138,SNR=8.4
L04D S **S** **00 56 17.8 +0.5**

baz=138
**OXZ Oxford 86.20 221** IAMs_20 IAMs_20 01 14 30.7
comp=Z,9μm,20.0s
**K04D Chiloquin, OR 86.23 325** P **P** **00 45 43.9 +0.1**
baz=138,SNR=6.5
**URZ Urewera 86.26 227** P **P** **00 45 45.1 +1.0**
comp=Z,8.5nm,0.8s,baz=236,slow=1.5,SNR=6.2
URZ LR LR 01 14 51.4

comp=Z,15μm,21.4s,baz=162,slow=29
**URZ Urewera 86.26 227** IAMs_20 IAMs_20 01 14 29.6
comp=Z,16μm,22.0s
**LTZ Lake Taylor 86.41 221** IAMs_20 IAMs_20 01 16 39.3
comp=Z,10μm,20.0s
**J05D Fort Rock, OR 86.48 326** P **P** **00 45 45.9 +0.9**
baz=139,SNR=23
J05D S **S** **00 56 20.4 +0.5**

baz=139
**RPZ Rata Peaks 86.51 220** P **P** **00 45 45.3 +0.1**
RPZ IAmb IAmb 00 46 09.4

comp=Z,157nm,1.1s
RPZ IAMs_20 IAMs_20 01 14 58.7

comp=Z,9μm,20.0s
**PINE Pine Mountain 86.72 327** IAmb IAmb 00 46 03.2
comp=Z,162nm,1.2s
**OUZM OUZ 86.74 51** P **P** **00 45 49.0 +2.4**
**OUZM OUZ 86.74 51** P **P** **00 45 49.0 +2.4**
**L02E Cave Junction 86.81 324** IAmb IAmb 00 46 01.4
comp=Z,211nm,1.5s
**L02E Cave Junction 86.81 324** P **P** **00 45 47.4 +1.0**
baz=137,SNR=8.6
L02E S **S** **00 56 25.1 +2.2**

baz=137
**POGA Pongola 86.82 120**⇧ *i*P **P** **00 45 46.6 -0.5**
POGA IAmb IAmb 00 45 49.6

comp=Z,342nm,2.1s
**J04D Umpqua Nationa 86.87 326** IAmb IAmb 00 46 02.3
comp=Z,156nm,1.1s
**J04D Umpqua Nationa 86.87 326** P **P** **00 45 47.3 +0.3**
baz=138,SNR=8.0
J04D S **S** **00 56 25.1 +1.3**

baz=138
**JTMT Jette 86.92 333** IAmb IAmb 00 46 10.0

comp=Z,123nm,1.4s
**G08A Pilot Rock 86.95 329** IAmb IAmb 00 46 02.6
comp=Z,216nm,1.8s
**SRHM Skhour des Reh 86.96 49** P **P** **00 45 51.0 +3.5**
**ZGR Zagora 87.02 52** P **P** **00 45 50.0 +2.1**
**ZGR Zagora 87.02 52** P **P** **00 45 50.0 +2.1**
**MAGG Maguga Dam 87.17 119** *e*P **P** **00 45 49.0 +0.1**
MAGG IAmb IAmb 00 46 00.8

comp=Z,2μm,3.8s
**PYZ Puysegur Point 87.22 216** IAMs_20 IAMs_20 01 14 30.3
comp=Z,11μm,22.0s
**K02D Willamette Mer 87.23 324** P **P** **00 45 49.6 +1.0**
baz=137,SNR=19
K02D S **S** **00 56 28.4 +1.3**

baz=137
**FOZ Fox Glacier 87.31 220** IAMs_20 IAMs_20 01 17 22.9
comp=Z,9μm,18.0s
**I05D Terrebonne, OR 87.32 327** P **P** **00 45 49.9 +1.0**
baz=139,SNR=11
I05D S **S** **00 56 29.8 +2.0**

baz=139
**DBO Dodson Butte 87.33 325** IAmb IAmb 00 46 02.3
comp=Z,87nm,1.1s
**I04A Tendick Farm, 87.42 326** P **P** **00 45 49.4 0.0**
baz=138,SNR=6.8
I04A S **S** **00 56 28.7 -0.1**

baz=138
**DCZ Deep Cove 87.45 217** IAMs_20 IAMs_20 01 15 12.6
comp=Z,15μm,21.0s
**KRP Karapiro 87.46 227** P **P** **00 45 45.8 -4.1**
KRP pmax pmax

comp=Z,116nm,1.1s
**TZRR Tazzarine 87.47 52** P **P** **00 45 53.0 +3.0**
**TZRR Tazzarine 87.47 52** P **P** **00 45 53.0 +3.0**
**J01E Myrtle Point 87.71 325** P **P** **00 45 51.6 +0.9**
baz=137
J01E S **S** **00 56 32.8 +1.4**

baz=137
**CNG Changalane 87.75 119**⇧ *i*P **P** **00 45 51.8 +0.3**
CNG IAmb IAmb 00 46 03.6

comp=Z,83nm,1.4s
**CNG Changalane 87.75 119** *i* P **P** **00 45 53.2 +1.6**
**CNG Changalane 87.75 119** *i* P **P** **00 45 53.2 +1.6**
**AVE Averroes 87.80 49** P **P** **00 45 50.0 -1.5**
AVE S **S** **00 56 34.8 +2.0**
**I03D Drain, OR 87.81 325** P **P** **00 45 51.8 +0.6**
baz=137
I03D S **S** **00 56 32.4 0.0**

baz=137
**WALA Waterton Lakes 87.84 334** IAmb IAmb 00 46 02.7
comp=Z,183nm,1.4s
**CRZF Crozet Islands 87.86 145** IAMs_20 IAMs_20 01 22 41.5
comp=Z,11μm,19.0s
**H04A Detroit Lake 87.98 327** P **P** **00 45 51.5 -0.5**
H04A IAmb IAmb 00 46 06.8

comp=Z,84nm,1.0s
**G05D Wamic, OR 87.99 327** P **P** **00 45 53.2 +1.2**
baz=139
G05D S **S** **00 56 37.0 +2.9**

baz=139
**BUCK Buck Mountain 88.00 326** IAmb IAmb 00 46 07.6
comp=Z,182nm,1.1s
**MATP Matopo 88.02 112** LR LR 01 23 05.7
comp=Z,17μm,18.5s,baz=236,slow=34
**MATP Matopo 88.02 112** *i* P **P** **00 45 56.1 +3.0**
**MATP Matopo 88.02 112** *i* P **P** **00 45 56.1 +3.0**
**RAO Raoul Island 88.06 237** LR LR 01 15 44.6
comp=Z,9μm,21.6s,baz=132,slow=29
**RAO Raoul Island 88.06 237** IAMs_20 IAMs_20 01 19 55.2
comp=Z,7μm,18.0s
**H04D Lebanon 88.12 326** P **P** **00 45 52.7 0.0**
baz=138
**HOOD Mount Hood Mea 88.20 327** IAmb IAmb 00 46 28.7
comp=Z,229nm,1.4s
**MSNA Messina 88.21 115** *i* P **P** **00 45 56.0 +2.2**
**MSNA Messina 88.21 115** *i* P **P** **00 45 56.0 +2.2**
**BLWY Bulawayo 88.26 112**⇧ *i*P **P** **00 45 53.5 -0.8**
BLWY IAmb IAmb 00 46 05.9

comp=Z,293nm,1.2s
**BLWY Bulawayo 88.26 112** *i* P **P** **00 45 56.8 +2.5**
**BLWY Bulawayo 88.26 112** *i* P **P** **00 45 56.8 +2.5**
**D08A Wollman Farm, 88.29 330** IAmb IAmb 00 46 08.8
comp=Z,212nm,1.8s
**E07A Sunnyside 88.32 329** IAmb IAmb 00 46 09.3
comp=Z,165nm,1.8s
**I02E Swisshome, OR 88.36 325** P **P** **00 45 54.8 +1.0**
baz=137
I02E S **S** **00 56 37.8 +0.2**

baz=137
**ZHG ZHG 88.39 49** P **P** **00 45 53.4 -0.9**
**GOLM Goulmima 88.44 51** P **P** **00 45 59.2 +4.5**
**GOLM Goulmima 88.44 51** P **P** **00 45 59.2 +4.5**
**NEW Newport 88.48 331** P **P** **00 45 54.5 +0.2**
comp=Z,7.2nm,0.8s,baz=34,slow=1.2,SNR=11
NEW LR LR 01 22 54.8

comp=Z,15μm,18.0s,baz=138,slow=34
**NEW Newport 88.48 331** IAMs_20 IAMs_20 01 22 16.3
comp=Z,15μm,20.0s
**NEW Newport 88.48 331** P **P** **00 45 53.8 -0.5**
baz=142,SNR=8.9
NEW S **S** **00 56 38.8 +0.1**

baz=142
**F05D White Salmon 88.54 328** P **P** **00 45 55.7 +1.1**
baz=139,SNR=5.6
F05D S **S** **00 56 42.1 +2.9**

baz=139
**C09A Chrisman Ranch 88.59 331** IAmb IAmb 00 46 07.3
comp=Z,90nm,1.2s
**MOPA Mopani 88.65 117** *e*P **P** **00 45 57.4 +1.5**
MOPA IAmb IAmb 00 46 19.5

comp=Z,5.3nm,0.9s
**MOPA Mopani 88.65 117** *i* P **P** **00 45 58.3 +2.4**
**MOPA Mopani 88.65 117** *i* P **P** **00 45 58.3 +2.4**
**G03D McMinnville, O 88.88 326** S **S** **00 56 44.6 +2.2**
baz=138
**F04A Amboy 89.02 327** P **P** **00 45 56.4 -0.4**
F04A IAmb IAmb 00 46 30.5

comp=Z,112nm,1.2s
**LTY Liberty 89.22 329** IAmb IAmb 00 46 31.9
comp=Z,133nm,1.6s
**MD31 MD31 89.28 51** P **P** **00 45 59.1 +0.6**
**PFVI Vila Bisbo 89.34 45** *e*P **P** **00 46 01.5 +2.9**
comp=Z,204nm,2.2s
**PFVI Vila Bisbo 89.34 45** *e*S **S** **00 56 48.3 +1.1**
**PFVI Vila Bisbo 89.34 45** P **P** **00 45 59.1 +0.5**
**MDT Midelt 89.35 51** LR LR 01 23 36.5
comp=Z,14μm,21.6s,baz=236,slow=34
**F04D Rainier, OR 89.41 327** P **P** **00 45 59.4 +0.7**
baz=138
**IFR Ifrane 89.43 50** P **P** **00 45 58.7 -0.7**
IFR S **S** **00 56 46.8 -1.8**
**E04D Cinebar 89.55 328** IAmb IAmb 00 46 14.6
comp=Z,345nm,1.9s
E04D IAMs_20 IAMs_20 01 20 40.7

comp=Z,14μm,22.0s
**E04D Cinebar 89.55 328** P **P** **00 45 60.0 +0.7**
baz=138
E04D S **S** **00 56 47.5 -1.2**

baz=138
**MORF Marmelete 89.56 45** *e*P **P** **00 45 60.0 +0.2**
MORF *e*SKSac **SKSac** **00 56 27.5 -1.2**
MORF IAMs_20 IAMs_20 01 22 52.1

comp=Z,24μm,19.1s
**MORF Marmelete 89.56 45** *e*P **P** **00 46 01.3 +1.6**
**MORF Marmelete 89.56 45** *e*S **S** **00 56 51.8 +2.5**
**MORF Marmelete 89.56 45** *e*P **P** **00 45 59.9 +0.2**
MORF *e* 00 56 27.5
**PTEO Sao Teotonio 89.67 45** *e*P **P** **00 46 02.9 +2.8**
**LCRM LCR 89.71 50** P **P** **00 46 00.4 -0.2**
**D05A Enumclaw 89.75 328** IAmb IAmb 00 46 15.3
comp=Z,175nm,1.2s
**C06D Leavenworth 89.82 329** P **P** **00 46 01.0 +0.4**
baz=139
**PBDV Barranco-do-Ve 89.96 46** *e*P **P** **00 46 03.5 +1.9**
comp=Z,160nm,1.4s
**PBDV Barranco-do-Ve 89.96 46** *e*S **S** **00 56 55.2 +2.2**
**E03A Lebam 90.00 327** IAmb IAmb 00 46 15.9
comp=Z,129nm,1.1s
**D04E Lakebay 90.11 328** P **P** **00 46 02.8 +0.9**
baz=138
**PCVE Castro Verde 90.14 45** *e*S **S** **00 56 57.1 +2.5**
**PNCL Nicolau / Gran 90.15 45** *e*P **P** **00 46 03.8 +1.4**
comp=Z,94nm,1.2s
**PNCL Nicolau / Gran 90.15 45** *e*S **S** **00 56 49.2 -5.4**
**LIS Lisbon 90.16 44** *e*P **P** **00 46 02.8 +0.3**
LIS *e*SKSac **SKSac** **00 56 31.1 -0.9**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LIS | | | | | IAMs_20 | IAMs_20 | 01 22 13.2 | | | |
| | comp=Z,27µm,26.3s | | | | | | | | | |
| **LIS** | **Lisbon** | **90.16** | **44** | *e*P | **P** | | **00 46 02.7** | **+0.3** | | |
| LIS | | | | *e* | | | 00 49 36.4 | | | |
| **MESJ** | **Messejana** | **90.16** | **45** | *e*P | **P** | | **00 46 02.9** | **+0.4** | | |
| MESJ | | | | *e*PP | **PP** | | **00 49 36.5** | **-0.1** | | |
| MESJ | | | | IAMs_20 | IAMs_20 | | 01 23 20.2 | | | |
| | comp=Z,22µm,21.3s | | | | | | | | | |
| **MESJ** | **Messejana** | **90.16** | **45** | *e*P | **P** | | **00 46 02.8** | **+0.4** | | |
| MESJ | | | | *e* | | | 00 56 31.1 | | | |
| **PVAQ** | **Vaqueiros** | **90.19** | **46** | *e*P | **P** | | **00 46 04.4** | **+1.8** | | |
| | comp=Z,133nm,1.8s | | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **90.19** | **46** | *e*S | **S** | | **00 56 49.8** | **-5.3** | | |
| **PVAQ** | **Vaqueiros** | **90.19** | **46** | *e*LR | LR | | 01 16 38.8 | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | |
| **PMAFR** | **Mafra** | **90.24** | **44** | *e*S | **S** | | **00 56 57.2** | **+1.8** | | |
| **CHEFC** | **Chefchaouen** | **90.27** | **49** | P | **P** | | **00 46 04.7** | **+1.6** | | |
| **CPS** | **Cap Spartel** | **90.32** | **48** | P | **P** | | **00 46 04.0** | **+0.7** | | |
| **OUZ** | **Omahuta** | **90.35** | **228** | IAMs_20 | IAMs_20 | | 01 17 22.8 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **LSZ** | **Lusaka** | **90.47** | **108** | LR | LR | | 01 24 01.2 | | | |
| | comp=Z,13µm,18.4s,baz=236,slow=34 | | | | | | | | | |
| **LSZ** | **Lusaka** | **90.47** | **108** | ⇑*i*P | **P** | | **00 46 05.9** | **+1.2** | | |
| LSZ | | | | IAmb | IAmb | | 00 46 21.1 | | | |
| | comp=Z,628nm,0.9s | | | | | | | | | |
| **LSZ** | **Lusaka** | **90.47** | **108** | *i* P | **P** | | **00 46 06.5** | **+1.9** | | |
| **LSZ** | **Lusaka** | **90.47** | **108** | *i* P | **P** | | **00 46 06.5** | **+1.9** | | |
| **PBEJ** | **Beja** | **90.50** | **45** | *e*P | **P** | | **00 46 05.5** | **+1.5** | | |
| | comp=Z,86nm,1.3s | | | | | | | | | |
| **D03D** | **Eldon** | **90.51** | **328** | P | **P** | | **00 46 04.4** | **+0.5** | | |
| | baz=138 | | | | | | | | | |
| D03D | | | | S | **S** | | **00 56 56.3** | **-1.2** | | |
| | baz=138 | | | | | | | | | |
| **B06A** | **Marblemount** | **90.53** | **329** | P | **P** | | **00 46 03.0** | **-0.8** | | |
| B06A | | | | pP | **sP** | | **00 46 13.2** | **-0.8** | | |
| **SFS** | **San Fernando** | **90.55** | **47** | P | **P** | | **00 46 04.9** | **+0.7** | | |
| SFS | | | | S | **S** | | **00 56 59.1** | **+0.8** | | |
| **B05A** | **Bryant** | **90.61** | **329** | P | **P** | | **00 46 04.0** | **-0.2** | | |
| | baz=138,SNR=7.9 | | | | | | | | | |
| B05A | | | | S | **S** | | **00 56 56.5** | **-1.9** | | |
| | baz=138 | | | | | | | | | |
| **ARNO** | **Arenosillo** | **90.61** | **46** | P | **P** | | **00 46 04.3** | **-0.3** | | |
| **EVO** | **Evora** | **90.73** | **45** | *e*P | **P** | | **00 46 06.3** | **+1.2** | | |
| | comp=Z,64nm,1.6s | | | | | | | | | |
| **CEU** | **Ceuta** | **90.73** | **48** | P | **P** | | **00 46 05.5** | **+0.4** | | |
| CEU | | | | S | **S** | | **00 56 57.7** | **-2.3** | | |
| **NLWA** | **Neilton Lookou** | **90.77** | **327** | IAMs_20 | IAMs_20 | | 01 26 12.0 | | | |
| | comp=Z,8µm,18.0s | | | | | | | | | |
| **PSBE** | **So Bento** | **90.89** | **43** | *e*P | **P** | | **00 46 07.7** | **+1.9** | | |
| **PSBE** | **So Bento** | **90.89** | **43** | *e*S | **S** | | **00 57 02.0** | **+0.6** | | |
| **PMTG** | **Montargil** | **90.94** | **44** | *e*P | **P** | | **00 46 07.0** | **+1.0** | | |
| | comp=Z,171nm,1.3s | | | | | | | | | |
| **PMTG** | **Montargil** | **90.94** | **44** | *e*S | **S** | | **00 56 54.3** | **-7.6** | | |
| **EDM** | **Edmonton** | **91.03** | **336** | IAmb | IAmb | | 00 46 20.0 | | | |
| | comp=Z,111nm,1.2s | | | | | | | | | |
| **PESTR** | **Estremoz** | **91.20** | **45** | *e*P | **P** | | **00 46 08.9** | **+1.6** | | |
| | comp=Z,93nm,1.3s | | | | | | | | | |
| **PESTR** | **Estremoz** | **91.20** | **45** | *e*S | **S** | | **00 57 04.8** | **+0.5** | | |
| **PESTR** | **Estremoz** | **91.20** | **45** | P | **P** | | **00 46 08.6** | **+1.3** | | |
| **FIGM** | **Figuig** | **91.22** | **53** | P | **P** | | **00 46 12.0** | **+4.3** | | |
| **FIGM** | **Figuig** | **91.22** | **53** | P | **P** | | **00 46 12.0** | **+4.3** | | |
| **A04D** | **Lummi Island** | **91.22** | **329** | P | **P** | | **00 46 07.3** | **+0.3** | | |
| | baz=138 | | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **91.41** | **43** | *e*S | **S** | | **00 57 03.0** | **-3.1** | | |
| **AFI** | **Afiamalu** | **91.59** | **253** | LR | LR | | 01 17 06.1 | | | |
| | comp=Z,17µm,21.4s,baz=119,slow=29 | | | | | | | | | |
| **PMRV** | **Marv??o** | **91.67** | **44** | *e*P | **P** | | **00 46 10.2** | **+0.8** | | |
| | comp=Z,75nm,1.7s | | | | | | | | | |
| **PMRV** | **Marv??o** | **91.67** | **44** | *e*S | **S** | | **00 57 07.2** | **-1.3** | | |
| **PMRV** | **Marv??o** | **91.67** | **44** | *e*LR | LR | | 01 17 38.6 | | | |
| | comp=Z,17µm,22.0s | | | | | | | | | |
| **EMAL** | **Malaga-Limoner** | **91.86** | **48** | P | **P** | | **00 46 11.6** | **+1.2** | | |
| EMAL | | | | S | **SKKSac** | | **00 56 58.5** | **+0.2** | | |
| **PCBR** | **Castelo Branco** | **91.88** | **44** | *e*P | **P** | | **00 46 11.5** | **+1.1** | | |
| | comp=Z,78nm,1.4s | | | | | | | | | |
| **MTE** | **Manteigas** | **92.19** | **43** | *e*P | **P** | | **00 46 12.8** | **+0.9** | | |
| | comp=Z,152nm,1.4s | | | | | | | | | |
| **MTE** | **Manteigas** | **92.19** | **43** | *e*S | **S** | | **00 57 09.0** | **-4.3** | | |
| **MTE** | **Manteigas** | **92.19** | **43** | *e*LR | LR | | 01 17 54.5 | | | |
| | comp=Z,28µm,20.0s | | | | | | | | | |
| **CHAS** | **Isla Isabel II** | **92.22** | **50** | P | **P** | | **00 46 13.5** | **+1.5** | | |
| CHAS | | | | S | **S** | | **00 57 06.8** | **-6.8** | | |
| **PVRL** | **Vila Real** | **92.64** | **43** | *e*P | **P** | | **00 46 18.1** | **+4.2** | | |
| | comp=Z,115nm,1.8s | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **92.66** | **43** | *e*S | **S** | | **00 57 18.6** | **+1.1** | | |
| **PGAV** | **Gavieira, Arco** | **92.76** | **42** | *e*S | **S** | | **00 57 14.0** | **-4.3** | | |
| **PGAV** | **Gavieira, Arco** | **92.76** | **42** | *e*LR | LR | | 01 17 44.2 | | | |
| | comp=Z,14µm,16.0s | | | | | | | | | |
| **MVO** | **Moncorvo** | **92.98** | **43** | *e*P | **P** | | **00 46 16.4** | **+0.9** | | |
| | comp=Z,103nm,1.3s | | | | | | | | | |
| **MVO** | **Moncorvo** | **92.98** | **43** | *e*S | **SKKSac** | | **00 57 09.6** | **+3.0** | | |
| **MVO** | **Moncorvo** | **92.98** | **43** | *e*LR | LR | | 01 17 56.7 | | | |
| | comp=Z,32µm,20.0s | | | | | | | | | |
| **PAF** | **Port-aux-Franc** | **93.43** | **156** | IAMs_20 | IAMs_20 | | 01 33 24.7 | | | |
| | comp=Z,10µm,18.0s | | | | | | | | | |
| **PAB** | **San Pablo** | **93.59** | **46** | P | **P** | | **00 46 18.9** | **+0.5** | | |
| PAB | | | | pP | **sP** | | **00 46 27.7** | **-1.0** | | |
| PAB | | | | IAmb | IAmb | | 00 46 32.7 | | | |
| | comp=Z,105nm,1.6s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.91** | **46** | P | **P** | | **00 46 19.8** | **-0.1** | | |
| | comp=Z,4.7nm,0.9s,baz=255,slow=3.1,SNR=9.8 | | | | | | | | | |
| ESDC | | | | LR | LR | | 01 28 46.0 | | | |
| | comp=Z,21µm,18.3s,baz=212,slow=36 | | | | | | | | | |
| **CART** | **Cartagena** | **94.55** | **49** | P | **P** | | **00 46 21.8** | **-1.0** | | |
| CART | | | | S | **SKKSac** | | **00 57 13.0** | **-5.3** | | |
| **CART** | **Cartagena** | **94.55** | **49** | IAMs_20 | IAMs_20 | | 01 26 47.0 | | | |
| | comp=Z,11µm,22.0s | | | | | | | | | |
| **UCM** | **Universidad Co** | **94.73** | **45** | P | **P** | | **00 46 23.1** | **-0.4** | | |
| UCM | | | | S | **SKKSac** | | **00 57 14.2** | **-5.4** | | |
| **BBB** | **Bella Bella** | **96.11** | **329** | LR | LR | | 01 24 50.6 | | | |
| | comp=Z,5µm,22.0s,baz=130,slow=32 | | | | | | | | | |
| **MSVF** | **Nonsavu** | **97.66** | **244** | LR | LR | | 01 23 15.7 | | | |
| | comp=Z,4µm,19.2s,baz=99,slow=31 | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **98.57** | **8** | P | **P** | | **00 46 40.2** | **0.0** | | |
| | comp=Z,5.0nm,0.9s,baz=198,slow=5.7,SNR=3.9 | | | | | | | | | |
| SFJD | | | | LR | LR | | 01 32 57.9 | | | |
| | comp=Z,4µm,18.9s,baz=194,slow=36 | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **98.57** | **8** | P | **P** | | **00 46 39.7** | **-0.5** | | |
| **TAU** | **Tasmania Unive** | **98.61** | **208** | IAMs_20 | IAMs_20 | | 01 22 47.6 | | | |
| | comp=Z,10µm,18.0s | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.97** | **341** | P | **P** | | **00 46 42.0** | **-0.1** | | |
| | comp=Z,6.5nm,0.6s,baz=142,slow=4.5,SNR=64 | | | | | | | | | |
| YKA | | | | PKKPbc | **PKKPdf** | | **01 03 18.5** | **+3.6** | | |
| | comp=Z,0.4nm,0.5s,baz=323,slow=3.7,SNR=4.5 | | | | | | | | | |
| **MAHO** | **Mahon** | **99.26** | **49** | P | **Pdif** | | **00 46 46.1** | **+2.1** | | |
| MAHO | | | | S | SKKSac | | 00 57 40.0 | -12 | | |
| **ILULI** | **Ilulissat** | **100.63** | **7** | IAMs_20 | IAMs_20 | | 01 31 21.5 | | | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **100.79** | **330** | IAMs_20 | IAMs_20 | | 01 28 40.0 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **VOI** | **Vohitsoka** | **101.09** | **124** | IAMs_20 | IAMs_20 | | 01 37 31.3 | | | |
| | comp=Z,9µm,18.0s | | | | | | | | | |
| **JIS** | **Juneau Island** | **102.82** | **331** | IAMs_20 | IAMs_20 | | 01 30 56.7 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **103.40** | **333** | IAMs_20 | IAMs_20 | | 01 32 03.0 | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **103.40** | **333** | Pdiff | **Pdif** | | **00 47 02.8** | **+0.8** | | |
| | baz=129 | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **103.58** | **234** | *e*PP | PKiKP | | 00 51 10.8 | -12 | | |
| | comp=Z,1µm,26.2s | | | | | | | | | |
| DZM | | | | *e*SKSac | SKSac | | 00 57 31.2 | -12 | | |
| | comp=Z,7µm,33.4s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **103.58** | **234** | *e*PS | PS | | 01 00 19.8 | -10 | | |
| | comp=Z,5µm,28.6s | | | | | | | | | |
| DZM | | | | *e*SS | SS | | 01 05 52.4 | -11 | | |
| | comp=Z,21µm,28.4s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **103.58** | **234** | *e*LQ | LQ | | 01 16 30.4 | | | |
| | comp=Z,10µm,38.5s | | | | | | | | | |
| DZM | | | | *e*LR | LR | | 01 20 56.9 | | | |
| | comp=Z,32µm,24.0s,baz=137 | | | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **104.35** | **336** | Pdiff | **Pdif** | | **00 47 07.2** | **+1.0** | | |
| | baz=130 | | | | | | | | | |
| **ECH** | **Echery** | **105.28** | **43** | IAMs_20 | IAMs_20 | | 01 34 31.4 | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| **VLC** | **Villacollemand** | **105.33** | **48** | IAMs_20 | IAMs_20 | | 01 39 28.2 | | | |
| | comp=Z,11µm,19.0s | | | | | | | | | |
| **SUMG** | **Summit** | **105.38** | **10** | *i* P | **Pdif** | | **00 47 11.0** | **0.0** | | |
| **SUMG** | **Summit** | **105.38** | **10** | IAMs_20 | IAMs_20 | | 01 36 31.9 | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **105.54** | **101** | *e*P | **Pdif** | | **00 47 19.4** | **+6.5** | | |
| KMBO | | | | IAmb | IAmb | | 00 47 36.3 | | | |
| | comp=Z,147nm,2.6s | | | | | | | | | |
| **BFO** | **Black Forest** | **106.02** | **43** | IAMs_20 | IAMs_20 | | 01 33 57.1 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **AIS** | **Amsterdam Isla** | **106.10** | **155** | IAMs_20 | IAMs_20 | | 01 36 55.0 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **RES** | **Resolute Bay** | **106.13** | **354** | Pdiff | **Pdif** | | **00 47 13.9** | **+0.2** | | |
| | comp=Z,1.8nm,0.9s,baz=28,slow=21,SNR=3.3 | | | | | | | | | |
| **M30M** | **Minto, Yukon** | **106.36** | **334** | IAMs_20 | IAMs_20 | | 01 34 21.2 | | | |
| | comp=Z,11µm,19.0s | | | | | | | | | |
| **DAVA** | **Damuels** | **106.46** | **45** | *e*P | **Pdif** | | **00 47 24.5** | **+8.4** | | |
| | comp=Z,13nm,1.3s | | | | | | | | | |
| DAVA | | | | *e*P | **PP** | | **00 51 46.5** | **+5.0** | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| **C36M** | **Paulatuk** | **106.69** | **343** | IAMs_20 | IAMs_20 | | 01 36 11.1 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **STU** | **Stuttgart** | **106.73** | **43** | IAMs_20 | IAMs_20 | | 01 36 09.0 | | | |
| | comp=Z,10µm,19.0s | | | | | | | | | |
| **SCO** | **Scoresbysund** | **106.80** | **16** | IAMs_20 | IAMs_20 | | 01 32 17.9 | | | |
| | comp=Z,11µm,22.0s | | | | | | | | | |
| **FETA** | **Feichten** | **106.86** | **45** | *e*P | **Pdif** | | **00 47 32.5** | **+15** | | |
| | comp=Z,16nm,1.2s | | | | | | | | | |
| **TULEG** | **Thule** | **106.88** | **1** | IAMs_20 | IAMs_20 | | 01 37 33.4 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **TABL** | **Table Mountain** | **106.90** | **331** | IAMs_20 | IAMs_20 | | 01 33 24.5 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **MESA** | **MESA** | **107.10** | **330** | IAMs_20 | IAMs_20 | | 01 31 06.8 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **YAH** | **Yahtse** | **107.11** | **331** | IAMs_20 | IAMs_20 | | 01 31 10.1 | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| **MOTA** | **Moosalm** | **107.23** | **45** | *e*P | **Pdif** | | **00 47 21.0** | **+1.6** | | |
| | comp=Z,9.4nm,1.2s | | | | | | | | | |
| MOTA | | | | *e*P | **sPdif** | | **00 47 34.8** | **+5.1** | | |
| | comp=Z,16nm,1.1s | | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **107.24** | **45** | *e*P | **Pdif** | | **00 47 31.1** | **+12** | | |
| | comp=Z,17nm,1.1s | | | | | | | | | |
| SQTA | | | | *e*P | **PP** | | **00 51 39.9** | **-7.3** | | |
| | comp=Z,26nm,1.4s | | | | | | | | | |
| **SANVU** | **Saraoutou** | **107.30** | **240** | IAMs_20 | IAMs_20 | | 01 26 07.6 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **SNH** | **Sunshine Point** | **107.48** | **330** | IAMs_20 | IAMs_20 | | 01 43 22.8 | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **ISLE** | **Juniper Island** | **107.48** | **331** | IAMs_20 | IAMs_20 | | 01 31 21.1 | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **WATA** | **Walderalm** | **107.52** | **45** | *e*P | **Pdif** | | **00 47 35.1** | **+14** | | |
| | comp=Z,19nm,1.3s | | | | | | | | | |
| **WTTA** | **Wattenberg** | **107.52** | **45** | *e*P | **Pdif** | | **00 47 34.9** | **+14** | | |
| | comp=Z,32nm,1.5s | | | | | | | | | |
| **WAX** | **Waxell Ridge** | **107.62** | **330** | IAMs_20 | IAMs_20 | | 01 31 22.7 | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **SUCK** | **Sucking Hills** | **107.83** | **330** | IAMs_20 | IAMs_20 | | 01 45 12.1 | | | |
| | comp=Z,8µm,18.0s | | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **107.83** | **46** | *e*P | **Pdif** | | **00 47 38.2** | **+16** | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| **J29M** | **Klondike Camp** | **107.95** | **335** | IAMs_20 | IAMs_20 | | 01 36 22.3 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **BERG** | **Berg Lake** | **107.96** | **330** | IAMs_20 | IAMs_20 | | 01 43 46.5 | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **HMT** | **Hamilton** | **108.17** | **330** | IAMs_20 | IAMs_20 | | 01 33 56.1 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **108.21** | **332** | IAMs_20 | IAMs_20 | | 01 46 01.2 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **VRDI** | **Verde Repeater** | **108.27** | **331** | IAMs_20 | IAMs_20 | | 01 31 46.9 | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **108.33** | **43** | *e*Pdiff | **Pdif** | | **00 47 25.3** | **+1.2** | | |
| GRF | | | | *e*PP | **PP** | | **00 51 50.0** | **-5.0** | | |
| GRF | | | | *e*L | L | | 01 34 14.1 | | | |
| | comp=Z,12µm,21.6s | | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **108.37** | **330** | IAMs_20 | IAMs_20 | | 01 35 01.5 | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **108.48** | **336** | IAMs_20 | IAMs_20 | | 01 42 10.4 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **NEEM** | **North Greenlan** | **108.50** | **5** | *i* P | **PKiKP** | | **00 51 34.2** | **+4.1** | | |
| **INK** | **Inuvik** | **108.63** | **340** | Pdiff | **Pdif** | | **00 47 25.1** | **+0.1** | | |
| | comp=Z,1.9nm,0.9s,baz=120,slow=6.2,SNR=5.6 | | | | | | | | | |
| **BMRM** | **Bremner River** | **108.63** | **330** | IAMs_20 | IAMs_20 | | 01 46 03.3 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **M26K** | **Nabesna, AK** | **108.68** | **332** | IAMs_20 | IAMs_20 | | 01 33 40.7 | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **A36M** | **Sucking Hills** | **108.81** | **345** | IAMs_20 | IAMs_20 | | 01 37 32.9 | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| **MOX** | **Moxa** | **108.97** | **42** | *e*L | L | | 01 36 49.3 | | | |
| | comp=Z,13µm,20.5s | | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **109.14** | **333** | IAMs_20 | IAMs_20 | | 01 35 50.7 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **EGAK** | **Eagle** | **109.19** | **335** | IAMs_20 | IAMs_20 | | 01 42 38.2 | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **EGAK** | **Eagle** | **109.19** | **335** | PKiKP | **PKiKP** | | **00 51 31.6** | **+0.3** | | |
| | baz=121 | | | | | | | | | |
| **NKC** | **Novy Kostel** | **109.28** | **43** | *e*P | **Pdif** | | **00 47 33.3** | **+4.9** | | |
| NKC | | | | MLR | MLR | | | | | |
| | comp=Z,17µm,21.7s | | | | | | | | | |
| **NKC** | **Novy Kostel** | **109.28** | **43** | *e*PDIFF | **Pdif** | | **00 47 33.3** | **+4.9** | | |
| NKC | | | | *e*PP | PP | | 00 51 48.9 | -13 | | |
| NKC | | | | AMS | AMS | | 01 34 10.0 | | | |
| | comp=Z,17µm,21.7s | | | | | | | | | |
| **FID** | **Port Fidalgo** | **109.33** | **330** | IAMs_20 | IAMs_20 | | 01 45 52.9 | | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **MOA** | **Molln** | **109.38** | **45** | *e*P | **Pdif** | | **00 47 44.0** | **+15** | | |
| | comp=Z,14nm,1.5s | | | | | | | | | |
| MOA | | | | *e*P | **PKiKP** | | **00 51 32.3** | **+0.1** | | |
| | comp=Z,13nm,1.3s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **109.45** | **44** | PKiKP | **PKiKP** | | **00 51 32.6** | **+0.2** | | |
| | comp=Z,3.3nm,0.8s,baz=265,slow=4.9,SNR=8.9 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **109.45** | **44** | | **PKiKP** | | **00 51 31.8** | **-0.6** | | |
| **KHC** | **Kasperske Hory** | **109.49** | **44** | *e*P | **Pdif** | | **00 47 27.5** | **-1.8** | | |
| KHC | | | | *e* | | | 00 52 10.0 | | | |
| KHC | | | | MLR | MLR | | | | | |
| | comp=Z,9µm,18.9s | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **109.49** | **44** | *e*PDIFF | **Pdif** | | **00 47 27.5** | **-1.8** | | |
| KHC | | | | *e*PKP | **PKiKP** | | **00 51 33.5** | **+1.1** | | |
| KHC | | | | *e*PP | PP | | 00 51 54.0 | -9.4 | | |
| KHC | | | | *ex* | x | | 00 52 10.0 | | | |
| KHC | | | | AMS | AMS | | 01 36 20.0 | | | |
| | comp=Z,9µm,18.9s | | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **109.80** | **44** | *e*PDIFF | **Pdif** | | **00 47 23.6** | **-7.1** | | |
| CKRC | | | | *e*PP | PP | | 00 51 52.7 | -13 | | |
| **M24K** | **Tolsona, Glenn** | **109.84** | **331** | IAMs_20 | IAMs_20 | | 01 46 34.2 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **109.84** | **331** | PKiKP | **PKiKP** | | **00 51 32.9** | **+0.3** | | |
| | baz=118 | | | | | | | | | |
| **SCRK** | **Sand Creek** | **109.86** | **333** | PKiKP | **PKiKP** | | **00 51 33.0** | **+0.3** | | |
| | baz=119 | | | | | | | | | |
| **CLL** | **Collm** | **110.05** | **42** | *e*P | **Pdif** | | **00 47 35.0** | **+3.3** | | |
| CLL | | | | *i* | | | 00 52 05.3 | | | |
| CLL | | | | MLR | MLR | | | | | |
| | comp=Z,18µm,18.1s | | | | | | | | | |
| **CLL** | **Collm** | **110.05** | **42** | *e*Pdif | **Pdif** | | **00 47 35.0** | **+3.3** | | |
| CLL | | | | *i* PKiKP | **PKiKP** | | **00 51 34.2** | **+0.9** | | |
| CLL | | | | *e*pPKiKP | **pPKiKP** | | **00 51 44.0** | **+3.0** | | |
| CLL | | | | *i* PP | **PP** | | **00 52 05.3** | **-2.0** | | |
| CLL | | | | *i* pPP | | | 00 52 14.8 | | | |
| CLL | | | | *e*PPP | PPP | | 00 54 24.0 | | | |
| CLL | | | | *es*SKSac | sSKSac | | 00 58 30.0 | +7.5 | | |
| CLL | | | | *es*Sdif | **sSdif** | | **00 59 54.0** | **-2.4** | | |
| CLL | | | | *e*PS | **PS** | | **01 01 37.0** | **+0.7** | | |
| CLL | | | | *e*PPS | PPS | | 01 02 48.0 | | | |
| CLL | | | | *e*(sSS) | | | 01 08 12.0 | | | |
| CLL | | | | *es*SS | SSS | | 01 11 42.0 | | | |
| CLL | | | | *ex* | x | | 01 16 00.0 | | | |
| CLL | | | | LmH | | | 01 37 00.0 | | | |
| | comp=N,6µm,20.5s | | | | | | | | | |
| CLL | | | | LmH | | | 01 37 00.0 | | | |
| | comp=E,15µm,19.4s | | | | | | | | | |
| CLL | | | | LmH | | | 01 37 00.0 | | | |
| | comp=Z,18µm,19.4s | | | | | | | | | |
| CLL | | | | LmV | | | 01 39 00.0 | | | |
| | comp=Z,18µm,18.1s | | | | | | | | | |
| **RIDG** | **Independent Ri** | **110.08** | **333** | IAMs_20 | IAMs_20 | | 01 35 53.5 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **DILA** | **Dilla** | **110.31** | **95** | *e*P | **PP** | | **00 52 10.4** | **+0.4** | | |
| **CONA** | **Conrad Observa** | **110.40** | **46** | *e*P | **Pdif** | | **00 47 48.3** | **+15** | | |
| | comp=Z,11nm,1.9s | | | | | | | | | |
| **PRU** | **Pruhonice** | **110.41** | **43** | *e*P | **Pdif** | | **00 47 29.6** | **-3.7** | | |
| PRU | | | | MLR | MLR | | | | | |
| | comp=Z,9µm,20.1s | | | | | | | | | |
| **PRU** | **Pruhonice** | **110.41** | **43** | *e*PDIFF | **Pdif** | | **00 47 29.6** | **-3.7** | | |
| PRU | | | | *e*PP | **PP** | | **00 52 05.0** | **-5.0** | | |
| PRU | | | | AMS | AMS | | 01 39 30.0 | | | |
| | comp=Z,9µm,20.1s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **110.41** | **42** | *e*Piff | | | 00 47 36.0 | | | |
| **BRG** | **Berggiesshubel** | **110.41** | **42** | *e*PKP | **PKiKP** | | **00 51 38.2** | **+4.1** | | |
| BRG | | | | Amp | | | 00 51 46.1 | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| BRG | | | | PP | **PP** | | **00 52 06.2** | **-3.8** | | |
| BRG | | | | Amp | | | 00 52 21.4 | | | |
| | comp=Z,8.5nm,1.0s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **110.41** | **42** | SKS | SKSdf | | 00 58 33.0 | -11 | | |
| **BRG** | **Berggiesshubel** | **110.41** | **42** | PS | PS | | 01 01 29.0 | -11 | | |
| BRG | | | | *ex* | x | | 01 02 57.1 | | | |
| BRG | | | | Amp | | | 01 02 59.2 | | | |
| | comp=Z,5.3nm,1.1s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **110.41** | **42** | *e*PKIKP | **PKiKP** | | **00 51 38.1** | **+4.1** | | |
| BRG | | | | | | | 00 52 06.1 | | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| **PDG** | **Podgorica** | **110.45** | **52** | IAMs_20 | IAMs_20 | | 01 38 08.9 | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| **KNK** | **Knik Glacier** | **110.49** | **330** | IAMs_20 | IAMs_20 | | 01 47 01.4 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **O22K** | **Cooper Landing** | **110.63** | **329** | IAMs_20 | IAMs_20 | | 01 37 28.3 | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **110.64** | **43** | *e*P | **Pdif** | | **00 47 37.1** | **+2.7** | | |
| PVCC | | | | *e* | | | 00 52 08.4 | | | |
| PVCC | | | | MLR | MLR | | | | | |
| | comp=Z,10µm,20.1s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **110.64** | **43** | *e*PDIFF | **Pdif** | | **00 47 37.1** | **+2.7** | | |
| PVCC | | | | *e*PP | **PP** | | **00 52 08.4** | **-3.2** | | |
| PVCC | | | | AMS | AMS | | 01 37 00.0 | | | |
| | comp=Z,10µm,20.1s | | | | | | | | | |
| **TREC** | **Trest** | **110.70** | **44** | *e*P | **Pdif** | | **00 47 35.1** | **+0.4** | | |
| TREC | | | | MLR | MLR | | | | | |
| | comp=Z,11µm,18.5s | | | | | | | | | |
| **TREC** | **Trest** | **110.70** | **44** | *e*PDIFF | **Pdif** | | **00 47 35.1** | **+0.4** | | |
| TREC | | | | *e*PP | PP | | 00 52 03.9 | -8.3 | | |
| TREC | | | | AMS | AMS | | 01 39 00.0 | | | |
| | comp=Z,11µm,18.5s | | | | | | | | | |
| **DHY** | **Denali Highway** | **110.78** | **332** | IAMs_20 | IAMs_20 | | 01 33 57.0 | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| **KDAK** | **Kodiak Island** | **110.83** | **326** | IAMs_20 | IAMs_20 | | 01 32 47.6 | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **110.85** | **330** | IAMs_20 | IAMs_20 | | 01 47 30.9 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **110.90** | **329** | IAMs_20 | IAMs_20 | | 01 48 38.4 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **OHAK** | **Old Harbor** | **110.95** | **325** | PKiKP | **PKiKP** | | **00 51 35.2** | **+0.4** | | |
| | baz=114 | | | | | | | | | |
| **KRUC** | **Moravsky** | **111.16** | **45** | *e*PKIKP | **PKiKP** | | **00 51 35.7** | **+0.2** | | |
| **PRP** | **Porcupine Dome** | **111.17** | **335** | IAMs_20 | IAMs_20 | | 01 35 54.3 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **HDA** | **Harding Lake** | **111.20** | **333** | IAMs_20 | IAMs_20 | | 01 36 38.3 | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **111.34** | **334** | PKiKP | **PKiKP** | | **00 51 35.2** | **-0.2** | | |
| | comp=Z,2.3nm,1.0s,baz=18,slow=0.6,SNR=5.5 | | | | | | | | | |
| ILAR | | | | PKKPab | **PKKPab** | | **01 02 39.5** | **+1.2** | | |
| | comp=Z,0.7nm,0.6s,baz=313,slow=4.0,SNR=4.7 | | | | | | | | | |
| **M22K** | **Willow** | **111.35** | **330** | IAMs_20 | IAMs_20 | | 01 47 34.3 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **VRAC** | **Vranov** | **111.38** | **45** | ⇑P | **PKiKP** | | **00 51 35.5** | **-0.5** | | |
| **VRAC** | **Vranov** | **111.38** | **45** | *e*PKIKP | **PKiKP** | | **00 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **113.64** | **45** | *e*PKiKP | **PKiKP** | **00 51 39.5** | **-0.7** |
| OJC | | | | *e*SP | SP | 01 02 04.4 | -1.8 |
| OJC | | | | *e*L | L | 01 37 22.3 | |
| | comp=Z,8μm,22.6s | | | | | | |
| **NIE** | **Niedzica** | **113.68** | **45** | *e*PKiKP | **PKiKP** | **00 51 41.7** | **+1.3** |
| NIE | | | | *e*SP | SP | 01 02 05.7 | -0.9 |
| NIE | | | | *e*L | L | 01 36 45.1 | |
| | comp=Z,13μm,23.9s | | | | | | |
| **PGB** | **Panagyurishte** | **113.87** | **54** | *e*P | **PP** | **00 52 34.0** | **-1.0** |
| **GZR** | **Gura Zlata** | **113.90** | **50** | ⇑P | **PKiKP** | **00 51 46.1** | **+5.2** |
| **TOLK** | **Toolik Lake Re** | **113.93** | **337** | IAMs_20 | IAMs_20 | 01 38 07.3 | |
| | comp=Z,7μm,22.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **113.93** | **337** | PKiKP | **PKiKP** | **00 51 41.3** | **+1.0** |
| | baz=113 | | | | | | |
| **RZN** | **Rozhen** | **113.95** | **55** | *e*P | **PP** | **00 52 34.0** | **-1.8** |
| **H21K** | **Melozitna Rive** | **113.98** | **333** | IAMs_20 | IAMs_20 | 01 38 14.8 | |
| | comp=Z,7μm,20.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **113.98** | **333** | PKiKP | **PKiKP** | **00 51 41.4** | **+1.0** |
| | baz=111 | | | | | | |
| **PLD** | **Plovdiv** | **114.09** | **54** | *e*P | **PP** | **00 52 35.0** | **-1.5** |
| **DRGR** | | **114.32** | **49** | ⇑P | **PKiKP** | **00 51 41.8** | **+0.1** |
| **TTA** | **Tatalina** | **114.34** | **330** | PKiKP | **PKiKP** | **00 51 42.2** | **+1.0** |
| | baz=110 | | | | | | |
| **KDZ** | **Kurdzhali** | **114.43** | **55** | *e*P | **PP** | **00 52 37.0** | **-2.0** |
| **TRPA** | **Tarpa** | **114.65** | **47** | ⇓P | **PKiKP** | **00 51 42.6** | **+0.5** |
| **UZH** | **Uzhgorod** | **114.66** | **47** | *e*PKiKP | **PKiKP** | **00 51 49.0** | **+6.8** |
| UZH | | | | *e* | | 00 51 52.4 | |
| UZH | | | | *i* | | 00 51 57.5 | |
| UZH | | | | *e* | | 00 52 42.5 | |
| UZH | | | | *e* | | 01 02 20.6 | |
| UZH | | | | *e*SS | SS | 01 08 50.3 | +17 |
| **HUMR** | **Humele** | **115.09** | **52** | ⇑P | **PKPdf** | **00 51 42.0** | **-1.1** |
| **BMR** | **Baia Mare** | **115.11** | **48** | ⇑P | **PKiKP** | **00 51 45.3** | **+2.2** |
| **COPA** | **Copaceanca** | **115.12** | **52** | ⇑P | PKiKP | 00 51 54.5 | +11 |
| **ARR** | **Arges** | **115.12** | **51** | ⇓P | **PKiKP** | **00 51 43.4** | **+0.1** |
| **KWP** | **Kalwaria Pacla** | **115.23** | **46** | *e*PKiKP | **PKiKP** | **00 51 43.8** | **+0.5** |
| KWP | | | | *e*PKiKP | **PKPdf** | **00 51 44.9** | **+1.7** |
| KWP | | | | *e*L | L | 01 38 00.1 | |
| | comp=Z,19μm,23.8s | | | | | | |
| **SZH** | **Strazhica** | **115.33** | **53** | *e*P | **PP** | **00 52 41.0** | **-4.2** |
| **MLR** | **Muntele Rosu** | **116.04** | **51** | ⇑P | **PKPdf** | **00 51 44.8** | **-0.4** |
| **MLR** | **Muntele Rosu** | **116.04** | **51** | PKiKP | **PKPdf** | **00 51 43.3** | **-1.8** |
| **MLR** | **Muntele Rosu** | **116.04** | **51** | | **PKPdf** | **00 51 43.3** | **-1.8** |
| **LVV** | **L'vov** | **116.11** | **46** | *i* PKiKP | **PKiKP** | **00 51 45.0** | **+0.1** |
| **BURAR** | **Bucovina Array** | **116.20** | **48** | ⇑P | **PKiKP** | **00 51 45.6** | **+0.3** |
| **NWAO** | **Narrogin (SRO)** | **116.28** | **188** | IAMs_20 | IAMs_20 | 01 37 27.8 | |
| | comp=Z,7μm,22.0s | | | | | | |
| **HNR** | **Honiara** | **116.57** | **240** | IAMs_20 | IAMs_20 | 01 33 54.2 | |
| | comp=Z,5μm,20.0s | | | | | | |
| **PLOR** | **Plostina** | **116.62** | **51** | ⇑P | **PKPdf** | **00 51 45.4** | **-0.7** |
| **VRI** | **Vrincioaia** | **116.68** | **51** | ⇑P | **PKPdf** | **00 51 45.7** | **-0.5** |
| **SUW** | **Suwalki** | **116.79** | **41** | *e*PKiKP | **PKPdf** | **00 51 45.9** | **-0.2** |
| SUW | | | | *e*L | L | 01 41 30.9 | |
| | comp=Z,17μm,20.5s | | | | | | |
| **SUW** | **Suwalki** | **116.79** | **41** | *e*P | **PKiKP** | **00 51 46.3** | **+0.2** |
| **TESR** | **Tescani** | **116.81** | **50** | ⇓P | **PKPdf** | **00 51 46.2** | **-0.2** |
| **A21K** | **Barrow** | **117.09** | **339** | IAMs_20 | IAMs_20 | 01 40 32.9 | |
| | comp=Z,6μm,22.0s | | | | | | |
| **A21K** | **Barrow** | **117.09** | **339** | PKiKP | **PKiKP** | **00 51 47.3** | **+1.2** |
| | baz=105 | | | | | | |
| **HARR** | **Harsova** | **117.14** | **52** | ⇑P | **PKPdf** | **00 51 46.9** | **-0.2** |
| **CFR** | **Carcaliu** | **117.42** | **52** | ⇑P | **PKPdf** | **00 51 47.6** | **0.0** |
| **IAS** | **Iasi** | **117.61** | **49** | ⇑P | **PKPdf** | **00 51 43.6** | **-4.3** |
| **PABE** | **Paberze** | **117.62** | **40** | *e*P | **PKPdf** | **00 51 47.0** | **-0.7** |
| **CTAO** | **Charters Tower** | **117.87** | **221** | IAMs_20 | IAMs_20 | 01 35 41.3 | |
| | comp=Z,6μm,19.0s | | | | | | |
| **MILM** | **Milestii Mici** | **118.36** | **50** | *e*P | **Pdif** | **00 48 03.0** | **-5.7** |
| **MILM** | **Milestii Mici** | **118.36** | **50** | *e*PP | PP | 00 53 12.0 | +5.8 |
| **MILM** | **Milestii Mici** | **118.36** | **50** | *e*PS | PS | 01 02 53.0 | +0.5 |
| MILM | | | | *e*L | L | 01 29 35.0 | |
| MILM | | | | LRM | MLR | 01 45 31.0 | |
| | comp=Z,4μm,18.0s | | | | | | |
| **MILM** | **Milestii Mici** | **118.36** | **50** | ⇑P | **PKPdf** | **00 51 48.9** | **-0.5** |
| **MILM** | **Milestii Mici** | **118.36** | **50** | *e*P | **Pdif** | **00 48 03.0** | **-5.7** |
| MILM | | | | *e* | | 00 53 12.0 | |
| MILM | | | | *e*PS | **PS** | **01 02 53.0** | **+0.5** |
| **SORM** | **Soroca** | **118.38** | **49** | ⇑P | **PKPdf** | **00 51 47.7** | **-1.6** |
| **KIS** | **Kishinev** | **118.38** | **50** | *e*P | **Pdif** | **00 48 05.0** | **-3.9** |
| **KIS** | **Kishinev** | **118.38** | **50** | *e*PS | PS | 01 02 52.0 | -0.8 |
| KIS | | | | *e*LR | LR | 01 43 18.0 | |
| | comp=Z,2μm,19.5s | | | | | | |
| **KIS** | **Kishinev** | **118.38** | **50** | *e*P | **Pdif** | **00 48 05.0** | **-3.9** |
| KIS | | | | *e*PS | **PS** | **01 02 52.0** | **-0.8** |
| **RDOG** | **Red Dog Mine** | **118.48** | **335** | IAMs_20 | IAMs_20 | 01 49 57.7 | |
| | comp=Z,5μm,21.0s | | | | | | |
| **KBS** | **Kingsbay** | **118.55** | **13** | IAMs_20 | IAMs_20 | 01 40 10.0 | |
| | comp=Z,5μm,21.0s | | | | | | |
| **ANM** | **Nome** | **118.79** | **331** | IAMs_20 | IAMs_20 | 01 40 22.8 | |
| | comp=Z,5μm,20.0s | | | | | | |
| **ANM** | **Nome** | **118.79** | **331** | PKiKP | **PKiKP** | **00 51 50.5** | **+0.8** |
| | baz=101 | | | | | | |
| **IIGN** | **Ignalina** | **118.83** | **40** | *e*P | **PKiKP** | **00 51 51.9** | **+1.8** |
| **PURM** | **Purcari** | **118.96** | **51** | ⇑P | **PKPdf** | **00 51 48.1** | **-2.4** |
| **NACGM** | **Naroch** | **119.05** | **41** | *i* PKP | **PKiKP** | **00 51 50.5** | **+0.1** |
| **IDID** | **Didziasalis** | **119.11** | **40** | *e*P | **PKiKP** | **00 51 51.0** | **+0.5** |
| **ANTO** | **Ankara** | **119.19** | **59** | IAMs_20 | IAMs_20 | 01 45 28.6 | |
| | comp=Z,9μm,20.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **119.56** | **46** | PKP | **PKPdf** | **00 51 50.6** | **-0.9** |
| | comp=Z,8.0nm,0.8s,baz=274,slow=2.3,SNR=17 | | | | | | |
| AKASG | | | | PKKPbc | **PKKPbc** | **01 02 04.0** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=62,slow=4.1,SNR=4.7 | | | | | | |
| **AKBB** | **Malin Array Si** | **119.56** | **46** | ⇓*i* PKiKP | **PKPdf** | **00 51 50.3** | **-1.2** |
| **AKBB** | **Malin Array Si** | **119.56** | **46** | PKPdf | **PKPdf** | **00 51 50.0** | **-1.5** |
| **MNK** | **Minsk** | **119.58** | **41** | *i* PKiKP | **PKPdf** | **00 51 51.0** | **-0.4** |
| MNK | | | | pmax | pmax | | |
| | comp=Z,87nm,1.2s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,22nm,1.0s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.5s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,1μm,18.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,7μm,18.0s | | | | | | |
| **MNK** | **Minsk** | **119.58** | **41** | *i* P | **PKPdf** | **00 51 51.1** | **-0.4** |
| | comp=E,4.0nm,1.5s | | | | | | |
| MNK | | | | *i* P | **PKPdf** | **00 51 51.1** | **-0.4** |
| | comp=N,22nm,1.0s | | | | | | |
| MNK | | | | *i* P | **PKPdf** | **00 51 51.1** | **-0.4** |
| | comp=Z,87nm,1.2s,baz=78 | | | | | | |
| MNK | | | | *i* PKP | PP | 00 52 50.4 | -24 |
| MNK | | | | *i* PPP | PPP | 00 56 45.9 | |
| MNK | | | | *i* SKKS | | 01 02 35.2 | |
| MNK | | | | *i* SSS | SSS | 01 15 03.1 | |
| MNK | | | | *i* LQ | LQ | 01 32 31.0 | |
| MNK | | | | *i* LR | LR | 01 38 42.9 | |
| MNK | | | | *i* LRM | MLR | 01 43 54.1 | |
| | comp=E,1μm,17.6s | | | | | | |
| MNK | | | | *i* LRM | MLR | 01 44 25.3 | |
| | comp=Z,9μm,17.7s | | | | | | |
| MNK | | | | *i* LRM | MLR | 01 44 44.5 | |
| | comp=N,7μm,17.5s | | | | | | |
| **VSU** | **Vasula** | **119.74** | **37** | ⇓*i* PKiKP | **PKiKP** | **00 51 51.9** | **+0.2** |
| VSU | | | | MLR | MLR | | |
| | comp=Z,42μm,19.0s | | | | | | |
| **VSU** | **Vasula** | **119.74** | **37** | *e*P | **PKPdf** | **00 51 49.3** | **-2.3** |
| **BRTR** | **Keskin Array B** | **119.77** | **59** | PKP | **PKPdf** | **00 51 52.5** | **0.0** |
| | comp=Z,4.5nm,0.8s,baz=224,slow=3.4,SNR=8.2 | | | | | | |
| **FINES** | **FINESS Array B** | **119.94** | **33** | PKP | **PKiKP** | **00 51 52.1** | **+0.1** |
| | comp=Z,6.1nm,1.0s,baz=66,slow=5.2,SNR=6.0 | | | | | | |
| FINES | | | | PKKPbc | **PKKPbc** | **01 02 02.0** | **-0.4** |
| | comp=Z,1.7nm,0.9s,baz=66,slow=9.2,SNR=5.6 | | | | | | |
| **TNA** | **Tin City** | **120.02** | **331** | PKiKP | **PKiKP** | **00 51 52.9** | **+0.9** |
| | baz=98 | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.75** | **24** | PKP | **PKPdf** | **00 51 52.9** | **-0.4** |
| | comp=Z,2.0nm,0.7s,baz=235,slow=3.2,SNR=5.5 | | | | | | |
| ARCES | | | | PKKPbc | **PKKPbc** | **01 01 58.3** | **-1.2** |
| | comp=Z,4.0nm,0.9s,baz=76,slow=3.8,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **120.78** | **207** | PKP | **PKPdf** | **00 51 53.5** | **-1.5** |
| | comp=Z,3.9nm,0.7s,baz=135,slow=1.9,SNR=26 | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **01 01 58.5** | **-0.2** |
| | comp=Z,3.6nm,0.8s,baz=340,slow=3.1,SNR=16 | | | | | | |
| **GAMB** | **Gambell** | **121.41** | **329** | IAMs_20 | IAMs_20 | 01 53 29.2 | |
| | comp=Z,5μm,19.0s | | | | | | |
| **GAMB** | **Gambell** | **121.41** | **329** | PKiKP | **PKiKP** | **00 51 55.6** | **+0.8** |
| | baz=96 | | | | | | |
| **PUL** | **Pulkovo** | **121.77** | **36** | ⇑*i* PKiKP | **PKPdf** | **00 51 55.2** | **-0.3** |
| PUL | | | | MLR | MLR | | |
| | comp=Z,12μm,19.0s | | | | | | |
| **APA** | **Apatity** | **123.57** | **26** | ⇓*i* PKiKP | **PKiKP** | **00 52 00.5** | **+1.5** |
| APA | | | | *i* PS | **PS** | **01 03 35.0** | **-3.4** |
| APA | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **123.92** | **210** | PKPdf | **PKPdf** | **00 51 59.6** | **-1.4** |
| **WRA** | **Warramunga Arr** | **123.93** | **210** | PKP | **PKPdf** | **00 51 59.8** | **-1.3** |
| | comp=Z,9.7nm,0.6s,baz=160,slow=1.6,SNR=76 | | | | | | |
| WRA | | | | PKKPbc | **PKKPbc** | **01 01 46.6** | **+0.1** |
| | comp=Z,2.1nm,0.6s,baz=340,slow=4.4,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.93** | **210** | PKPdf | **PKPdf** | **00 51 59.0** | **-2.1** |
| **WRAB** | **Tennant Creek** | **123.93** | **210** | ⇓*i* PKiKP | **PKPdf** | **00 52 00.0** | **-1.0** |
| **WRAB** | **Tennant Creek** | **123.93** | **210** | PKPdf | **PKPdf** | **00 51 58.8** | **-2.2** |
| **WRAB** | **Tennant Creek** | **123.93** | **210** | IAMs_20 | IAMs_20 | 01 41 20.0 | |
| | comp=Z,8μm,18.0s | | | | | | |
| **LVZ** | **Lovozero** | **124.04** | **26** | ⇑*i* PKiKP | **PKPdf** | **00 51 58.1** | **-1.6** |
| LVZ | | | | MLR | MLR | | |
| | comp=Z,9μm,20.0s | | | | | | |
| **RAYN** | **Ar Rayn** | **124.12** | **81** | PKiKP | **PKPdf** | **00 52 01.2** | **0.0** |
| RAYN | | | | MLR | MLR | | |
| | comp=Z,8μm,20.0s | | | | | | |
| **RAYN** | **Ar Rayn** | **124.12** | **81** | PKPdf | **PKPdf** | **00 52 01.2** | **0.0** |
| **RAYN** | **Ar Rayn** | **124.12** | **81** | IAMs_20 | IAMs_20 | 01 46 12.0 | |
| | comp=Z,8μm,20.0s | | | | | | |
| **OBN** | **Obninsk** | **124.64** | **42** | ⇑P | **PKPdf** | **00 52 01.3** | **+0.2** |
| **OBN** | **Obninsk** | **124.64** | **42** | *i* PKiKP | **PKPdf** | **00 52 01.3** | **+0.2** |
| OBN | | | | *i* | | 00 52 11.0 | |
| OBN | | | | *i* SS | SS | 01 10 38.2 | -3.1 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,45nm,1.2s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,9μm,19.0s | | | | | | |
| **OBN** | **Obninsk** | **124.64** | **42** | PKPdf | **PKPdf** | **00 51 60.0** | **-1.1** |
| **SOC** | **Sochi** | **125.11** | **56** | *i* P | **Pdif** | **00 48 36.9** | **-2.0** |
| SOC | | | | *i* | | 00 52 01.6 | |
| SOC | | | | *e* | | 00 53 49.8 | |
| SOC | | | | *e*PPP | PPP | 00 56 30.5 | |
| SOC | | | | *e* | | 00 58 56.8 | |
| SOC | | | | *e*PS | **PS** | **01 03 52.6** | **-0.2** |
| SOC | | | | *e*SS | SS | 01 10 49.5 | +1.6 |
| SOC | | | | *e*SSS | SSS | 01 15 24.2 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,72nm,1.0s | | | | | | |
| **MOS** | **Moscow** | **125.29** | **41** | *i* PKiKP | **PKPdf** | **00 52 02.1** | **-0.3** |
| MOS | | | | *e* | | 00 53 51.9 | |
| MOS | | | | *e* | | 00 59 02.4 | |
| MOS | | | | *e*SS | SS | 01 10 50.6 | +1.2 |
| MOS | | | | pmax | pmax | | |
| | comp=Z,58nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **125.58** | **229** | PKP | **PKPdf** | **00 52 04.2** | **-0.1** |
| | comp=Z,20nm,0.7s,baz=154,slow=12,SNR=3.5 | | | | | | |
| **PMG** | **Port Moresby** | **125.58** | **229** | | **PKPdf** | **00 52 03.4** | **-0.9** |
| **LPSR** | **Galich'ya Gora** | **125.82** | **45** | *i* PKiKP | **PKPdf** | **00 52 02.7** | **-0.8** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | |
| LPSR | | | | MLR | MLR | | |
| | comp=Z,7μm,21.0s | | | | | | |
| **VSR** | **Storozhevoye** | **125.84** | **47** | *i* PKiKP | **PKPdf** | **00 52 02.8** | **-0.8** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| VSR | | | | MLR | MLR | | |
| | comp=Z,9μm,20.0s | | | | | | |
| **VORR** | **Voronezh** | **125.91** | **46** | *e*PKiKP | **PKPdf** | **00 52 03.4** | **-0.3** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,60nm,1.2s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **126.17** | **271** | T | T | 03 10 59.4 | |
| | baz=115,slow=75,SNR=5929 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **126.18** | **271** | T | T | 03 10 49.1 | |
| | baz=115,slow=75,SNR=3988 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **126.19** | **271** | T | T | 03 10 52.8 | |
| | baz=115,slow=75,SNR=5184 | | | | | | |
| **KLMR** | **Klimovskoe** | **126.39** | **35** | *e*PKiKP | **PKPdf** | **00 52 03.0** | **-1.3** |
| KLMR | | | | *e* | | 00 54 03.6 | |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,97nm,1.0s | | | | | | |
| **KLMR** | **Klimovskoe** | **126.39** | **35** | *e*PKPdf | **PKPdf** | **00 52 03.0** | **-1.3** |
| KLMR | | | | AMP | | 00 52 16.2 | |
| | comp=Z,97nm,1.0s | | | | | | |
| KLMR | | | | *e*PP | **PP** | **00 54 03.7** | **+3.5** |
| KLMR | | | | *e*SKKP | | 01 05 50.0 | |
| KLMR | | | | *e*PKKS | | 01 05 52.1 | |
| KLMR | | | | *e*PKKS | | 01 05 52.1 | |
| KLMR | | | | LQ | LQ | 01 38 07.8 | |
| KLMR | | | | LQ | LQ | 01 38 07.8 | |
| KLMR | | | | LR | LR | 01 44 04.6 | |
| KLMR | | | | AMP | | 01 51 23.9 | |
| | comp=Z,9μm,18.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **127.00** | **193** | PKPdf | **PKPdf** | **00 52 05.4** | **-1.5** |
| **KIV** | **Kislovodsk** | **127.29** | **56** | ⇓P | **PKiKP** | **00 52 07.1** | **-0.1** |
| **KIV** | **Kislovodsk** | **127.29** | **56** | *e*P | **Pdif** | **00 48 48.8** | **+0.1** |
| KIV | | | | *i* | | 00 52 07.2 | |
| KIV | | | | *e* | | 00 54 06.3 | |
| KIV | | | | *e*PPP | PPP | 00 56 49.7 | |
| KIV | | | | *e*SS | SS | 01 11 16.2 | +0.8 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **127.29** | **56** | PKPdf | **PKPdf** | **00 52 06.2** | **-0.6** |
| **KBZ** | **Khabaz** | **127.41** | **56** | PKP | **PKPdf** | **00 52 06.6** | **-0.2** |
| | comp=Z,9.6nm,1.0s,baz=7.0,slow=3.9,SNR=7.5 | | | | | | |
| **KBZ** | **Khabaz** | **127.41** | **56** | ⇓*i* PKiKP | **PKPdf** | **00 52 06.9** | **+0.1** |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,6μm,22.0s | | | | | | |
| **VRH** | **Novokhopyorsk** | **127.44** | **47** | *i* PKiKP | **PKPdf** | **00 52 05.8** | **-0.8** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| VRH | | | | MLR | MLR | | |
| | comp=Z,7μm,19.0s | | | | | | |
| **AKH** | **Akhalkalaki** | **127.46** | **59** | ⇑P | **PKPdf** | **00 52 06.8** | **-0.5** |
| **GOF** | **Gofitskoye** | **127.70** | **55** | ⇑*e*PKHKP | PKPpre | 00 51 44.8 | |
| GOF | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ZEI** | **Tsey** | **127.99** | **57** | *i* PKiKP | **PKPdf** | **00 52 07.2** | **-1.1** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **GNI** | **Garni** | **128.17** | **61** | ⇓*i* PKiKP | **PKiKP** | **00 52 09.2** | **0.0** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| **GNI** | **Garni** | **128.17** | **61** | IAMs_20 | IAMs_20 | 01 51 55.4 | |
| | comp=Z,6μm,21.0s | | | | | | |
| **DGAR** | **Diego Garcia** | **128.83** | **132** | IAMs_20 | IAMs_20 | 01 41 36.0 | |
| | comp=Z,7μm,20.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **128.85** | **201** | PKP | **PKPdf** | **00 52 09.5** | **-0.9** |
| | comp=Z,11nm,0.8s,baz=196,slow=6.1,SNR=16 | | | | | | |
| **PRGR** | **Permogore** | **129.27** | **33** | *e*PKiKP | **PKiKP** | **00 52 10.3** | **-0.2** |
| PRGR | | | | *e* | | 00 52 20.9 | |
| PRGR | | | | pmax | pmax | | |
| | comp=Z,97nm,1.0s | | | | | | |
| **GROC** | **Groznyy** | **129.42** | **57** | *i* PKiKP | **PKPdf** | **00 52 10.6** | **-0.1** |
| GROC | | | | *e*PS | **PS** | **01 04 24.8** | **-5.8** |
| GROC | | | | pmax | pmax | | |
| | comp=Z,32nm,1.2s | | | | | | |
| **BILL** | **Bilibino** | **129.94** | **335** | *i* PKiKP | **PKPdf** | **00 52 09.2** | **-1.7** |
| BILL | | | | *i* | | 00 54 31.4 | |
| BILL | | | | *i* PS | **PS** | **01 04 31.5** | **-2.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,86nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,4μm,18.0s | | | | | | |
| **BILL** | **Bilibino** | **129.94** | **335** | IAMs_20 | IAMs_20 | 01 50 54.4 | |
| | comp=Z,5μm,19.0s | | | | | | |
| **MAK** | **Makhachkala** | **130.63** | **58** | *i* P | **Pdif** | **00 49 01.4** | **-2.0** |
| MAK | | | | *i* | | 00 52 13.2 | |
| MAK | | | | *e* | | 00 54 27.2 | |
| MAK | | | | *e*PPP | PPP | 00 57 13.9 | |
| MAK | | | | *e* | | 00 59 14.6 | |
| MAK | | | | *e*PS | **PS** | **01 04 31.8** | **-9.3** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,204nm,1.4s | | | | | | |
| **BELG** | **Belogornoye** | **131.12** | **45** | PKP | **PKiKP** | **00 52 14.4** | **-0.1** |
| | comp=Z,58nm,0.9s,baz=109,slow=4.0,SNR=12 | | | | | | |
| **KIRV** | **Kirov** | **131.58** | **37** | PKP | **PKPdf** | **00 52 14.5** | **+0.3** |
| | comp=Z,15nm,0.8s,baz=268,slow=6.1,SNR=10.0 | | | | | | |
| **ARU** | **Arti** | **136.86** | **38** | PKP | **PKPdf** | **00 52 25.0** | **+0.8** |
| | comp=Z,6.0nm,0.7s,baz=276,slow=3.3,SNR=14 | | | | | | |
| **ARU** | **Arti** | **136.86** | **38** | *i* PKiKP | **PKPdf** | **00 52 24.6** | **+0.4** |
| ARU | | | | | | 00 55 03.7 | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,14μm,20.0s | | | | | | |
| **ARU** | **Arti** | **136.86** | **38** | | **PKPdf** | **00 52 24.1** | **-0.1** |
| **BATI** | **Baumata** | **136.88** | **202** | PKP | **PKPdf** | **00 52 26.5** | **+0.8** |
| | comp=Z,16nm,0.5s,baz=251,slow=6.3,SNR=2.4 | | | | | | |
| **SEY** | **Seymchan** | **137.25** | **332** | PKP | **PKiKP** | **00 52 26.2** | **-0.4** |
| | comp=Z,32nm,0.8s,baz=178,slow=23,SNR=13 | | | | | | |
| **TIXI** | **Tiksi** | **137.41** | **351** | PKP | **PKPdf** | **00 52 24.8** | **0.0** |
| | comp=Z,17nm,1.0s,baz=271,slow=23,SNR=14 | | | | | | |
| **TIXI** | **Tiksi** | **137.41** | **351** | ⇓*i* PKiKP | **PKiKP** | **00 52 25.9** | **-0.8** |
| TIXI | | | | MLR | MLR | | |
| | comp=Z,3μm,21.0s | | | | | | |
| **TIXI** | **Tiksi** | **137.41** | **351** | | **PKPdf** | **00 52 23.4** | **-1.4** |
| **PET** | **Petropavlovsk** | **137.47** | **317** | *e*P | **Pdif** | **00 49 49.5** | **+16** |
| PET | | | | *e* | | 00 55 13.1 | |
| PET | | | | *e*PS | **PS** | **01 05 31.7** | **-7.4** |
| PET | | | | *e*PPS | PPS | 01 07 23.0 | |
| PET | | | | *e*SS | SS | 01 13 15.1 | -3.1 |
| PET | | | | pmax | pmax | | |
| | comp=Z,2μm,9.6s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,2μm,9.1s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,57nm,0.9s | | | | | | |
| **PET** | **Petropavlovsk** | **137.47** | **317** | IAMs_20 | IAMs_20 | 01 43 27.5 | |
| | comp=Z,5μm,21.0s | | | | | | |
| **AKTO** | **Aktyubinsk** | **137.78** | **47** | PKP | **PKPdf** | **00 52 24.5** | **-1.6** |
| | comp=Z,14nm,1.1s,baz=290,slow=3.8,SNR=8.3 | | | | | | |
| **SVE** | **Sverdlovsk** | **137.84** | **37** | *i* PKiKP | **PKiKP** | **00 52 27.3** | **-0.7** |
| SVE | | | | *e* | | 00 55 14.2 | |
| SVE | | | | pmax | pmax | | |
| | comp=Z,42nm,1.3s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=E,9μm,22.0s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=N,4μm,19.0s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,11μm,19.0s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **138.02** | **317** | *c i* PKiKP | **PKiKP** | **00 52 27.8** | **-0.7** |
| **PETK** | **Petropavlovsk-** | **138.02** | **317** | PKhKP | PKPpre | 00 52 16.7 | |
| | comp=Z,0.9nm,0.5s,baz=79,slow=7.7,SNR=4.8 | | | | | | |
| PETK | | | | PKP | **PKPdf** | **00 52 24.8** | **-1.8** |
| | comp=Z,24nm,1.1s,baz=160,slow=4.7,SNR=8.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **138.02** | **317** | PKiKP | **PKPdf** | **00 52 26.2** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **138.02** | **317** | PKPdf | **PKPdf** | **00 52 26.1** | **-0.3** |
| **GEYT** | **Alibeck** | **138.18** | **66** | PKP | **PKPdf** | **00 52 27.5** | **+0.1** |
| | comp=Z,5.6nm,0.9s,baz=34,slow=14,SNR=5.6 | | | | | | |
| **MMRI** | **Maumere** | **138.81** | **201** | IAMs_20 | IAMs_20 | 01 50 55.0 | |
| | comp=Z,4μm,21.0s | | | | | | |
| **AB31** | **Akbulak array** | **139.19** | **49** | *i* PKHKP | PKPpre | 00 52 20.3 | |
| **ABKAR** | **Akbulak array** | **139.19** | **49** | | PKPpre | 00 52 18.2 | |
| ABKAR | | | | PKPdf | **PKPdf** | **00 52 29.4** | **+0.6** |
| **NRIK** | **Noril'sk** | **139.40** | **11** | PKhKP | PKPpre | 00 52 19.8 | |
| | comp=Z,2.2nm,0.8s,baz=11,slow=1.8,SNR=4.5 | | | | | | |
| NRIK | | | | PKP | **PKPdf** | **00 52 29.0** | **+0.4** |
| | comp=Z,10nm,1.1s,baz=61,slow=2.6,SNR=9.1 | | | | | | |
| **NRIK** | **Noril'sk** | **139.40** | **11** | ⇑*i* PKiKP | **PKiKP** | **00 52 30.0** | **-0.9** |
| NRIK | | | | MLR | MLR | | |
| | comp=Z,8μm,24.0s | | | | | | |
| **NRIK** | **Noril'sk** | **139.40** | **11** | | PKPpre | 00 52 21.9 | |
| NRIK | | | | PKPdf | **PKPdf** | **00 52 29.6** | **+1.0** |
| **SKR** | **Severo-Kuril's** | **139.47** | **314** | *i* PKiKP | **PKPdf** | **00 52 30.1** | **+0.9** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,1μm,4.9s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,700nm,16.0s | | | | | | |
| **MA2** | **Magadan** | **139.50** | **328** | PKHKP | PKPpre | 00 52 20.9 | |
| MA2 | | | | | | 00 52 28.5 | |
| **MA2** | **Magadan** | **139.50** | **328** | PKPpre | PKPpre | 00 52 20.9 | |
| MA2 | | | | PKPdf | **PKPdf** | **00 52 28.5** | **-0.5** |
| MA2 | | | | IAMs_20 | IAMs_20 | 01 58 00.4 | |
| | comp=Z,6μm,22.0s | | | | | | |
| **FAKI** | **Fak Fak** | **139.68** | **219** | IAMs_20 | IAMs_20 | 01 45 48.9 | |
| | comp=Z,7μm,22.0s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **140.78** | **189** | IAMs_20 | IAMs_20 | 01 58 50.9 | |
| | comp=Z,4μm,19.0s | | | | | | |
| **UGM** | **Wanagama** | **141.67** | **183** | IAMs_20 | IAMs_20 | 01 50 37.4 | |
| | comp=Z,6μm,22.0s | | | | | | |
| **SIJI** | **Sorong** | **141.92** | **219** | PKhKP | PKPpre | 00 52 32.0 | |
| | comp=Z,12nm,0.5s,baz=345,slow=13,SNR=4.5 | | | | | | |
| **SMRI** | **Semarang** | **142.53** | **183** | IAMs_20 | IAMs_20 | 01 54 08.2 | |
| | comp=Z,6μm,20.0s | | | | | | |
| **LEM** | **Lembang** | **142.79** | **179** | PKhKP | PKPpre | 00 52 32.6 | |
| | comp=Z,64nm,0.7s,baz=15,slow=2.4,SNR=6.9 | | | | | | |
| **KAPI** | **Kappang** | **142.98** | **199** | PKP | **PKPdf** | **00 52 34.7** | **-2.0** |
| | comp=Z,11nm,0.5s,baz=180,slow=3.8,SNR=7.8 | | | | | | |
| **KAPI** | **Kappang** | **142.98** | **199** | PKPpre | PKPpre | 00 52 30.3 | |
| **KAPI** | **Kappang** | **142.98** | **199** | IAMs_20 | IAMs_20 | 01 54 43.4 | |
| | comp=Z,7μm,22.0s | | | | | | |
| **BRVK** | **Borovoye** | **144.38** | **40** | ⇓*e*PKiKP | **PKPdf** | **00 52 37.6** | **-0.3** |
| BRVK | | | | MLR | MLR | | |
| | comp=Z,15μm,20.0s | | | | | | |
| **BRVK** | **Borovoye** | **144.38** | **40** | PKPdf | PKPbc | 00 52 36.6 | +0.2 |
| **BVAR** | **Borovoye Array** | **144.45** | **40

SKHT IVMs_BB IVMs_BB 01 50 35.8
comp=Z,2µm,20.6s
**MDRS Chennai 148.68 118** *e*P **PKPdf 00 52 47.4 +1.1**
**YSS Yuzh-Sakhalins 148.97 312** *c i*PKIKP **PKPdf 00 52 45.9 +0.1**
YSS *e* 00 52 57.3
YSS *e* 00 56 20.0
YSS *e*SS SS 01 15 26.2 -4.8
YSS pmax pmax
comp=Z,340nm,1.1s
**YSS Yuzh-Sakhalins 148.97 312** PKPbc **PKPbc 00 52 49.7 -0.1**
YSS IAMs_20 IAMs_20 02 13 48.7
comp=Z,6µm,20.0s
**RCLA Racherla 149.08 112** *e*PKPbc **PKPdf 00 52 46.7 -0.3**
RCLA IVMs_BB IVMs_BB 01 52 15.2
comp=Z,4µm,21.3s
**BKNI Bangkinang 149.09 165** IAMs_20 IAMs_20 01 54 10.0
comp=Z,7µm,22.0s
**SRLM Srisailam 149.38 111** *e*PKPbc **PKPdf 00 52 47.2 -0.3**
SRLM IVMs_BB IVMs_BB 01 49 56.9
comp=Z,2µm,23.8s
**BTLS Baital 149.49 52** *e*PKIKP **PKPdf 00 52 45.8 -0.9**
BTLS *e* 00 56 24.0
**BTLS Baital 149.49 52** *e*PKP **PKPdf 00 52 45.9 -0.9**
baz=52
BTLS *e*PP **PP 00 56 24.1 -0.2**
baz=52
**HYB Hyderabad 149.81 109** *e*P **PKPdf 00 52 49.3 +1.2**
HYB IAmb IAmb 00 52 58.3
comp=Z,48nm,0.9s
**HYBB Hyderabad (bro 149.81 109** *e*PKPbc **PKPdf 00 52 47.4 -0.8**
HYBB IVMs_BB IVMs_BB 01 49 03.2
comp=Z,1µm,24.6s
**EKS2 Erkin-Say 149.88 57** P **PKiKP 00 52 53.0 -0.4**
SNR=19
**ASAJ Asahikawa 149.92 306** PKPbc **PKPbc 00 52 52.5 +0.2**
comp=Z,87nm,1.0s,baz=258,slow=7.8,SNR=10
**AML Almayashu 149.93 58** P **PKiKP 00 52 53.6 -0.3**
SNR=17
**NJS Nagarjunasagar 149.96 111** *e*PKPbc **PKPdf 00 52 47.9 -0.4**
NJS IVMs_BB IVMs_BB 01 50 13.6
comp=Z,2µm,21.8s
**KURBB Kurchatov Arra 150.04 40** PKPbc **PKPbc 00 52 52.6 +0.2**
comp=Z,54nm,0.9s,baz=301,slow=3.0,SNR=41
**KURBB Kurchatov Arra 150.04 40** PKHKP PKPpre 00 52 51.7
**CUPL Choutuppal 150.04 109** *e*PKPbc **PKPdf 00 52 48.0 -0.5**
CUPL IVMs_BB IVMs_BB 01 55 34.5
comp=Z,1µm,20.5s
**KURK Kurchatov 150.04 39** PKP2 **PKPbc 00 52 52.6 +0.2**
**KURK Kurchatov 150.04 39** PKPdf **PKPdf 00 52 46.6 -0.8**
KURK **PKPbc 00 52 52.3 -0.1**
**ADKI Addanki 150.10 113** *e*PKPbc **PKPdf 00 52 48.4 -0.2**
ADKI IVMs_BB IVMs_BB 01 57 21.4
comp=Z,1µm,20.0s
**NIL Nilore 150.12 75** PKIKP **PKPdf 00 52 47.3 -0.9**
**NIL Nilore 150.12 75** PKPdf **PKPdf 00 52 47.3 -0.9**
**USP Ospenovka 150.26 55** P **PKiKP 00 52 53.8 -0.3**
SNR=22
**SGDS Sogindy 150.31 55** *e*PKP **PKPdf 00 52 48.3 0.0**
baz=55
SGDS *e*PP **PP 00 56 28.6 -0.6**
baz=55
**SRSP Sriramsagar 150.39 106** *e*PKPbc **PKPdf 00 52 49.5 +0.5**
**AAK Ala-Archa 150.40 57** PKPbc **PKiKP 00 52 54.6 +0.1**
comp=Z,77nm,0.8s,baz=224,slow=2.7,SNR=72
**AAK Ala-Archa 150.40 57** P **PKiKP 00 52 54.7 +0.1**
SNR=40
**AAK Ala-Archa 150.40 57** PKIKP **PKPbc 00 52 53.5 -0.3**
**AAK Ala-Archa 150.40 57** **PKiKP 00 52 54.3 -0.2**
**CHMS Chumysh 150.50 56** P **PKiKP 00 52 54.4 -0.2**
SNR=32
**UCH Uchtor 150.51 57** P **PKiKP 00 52 55.4 +0.2**
SNR=30
**KBK Karagaybulak 150.72 56** P **PKiKP 00 52 55.4 +0.1**
SNR=16
**PSI Prapat 150.93 160** PKPbc **PKPbc 00 52 54.7 -1.1**
comp=Z,20nm,1.0s,baz=218,slow=5.0,SNR=16
**GRNR Gornyy 151.02 322** ⇑ *i*PKIKP **PKiKP 00 52 55.2 -0.1**
GRNR pmax pmax
comp=E,6.0nm,0.8s
GRNR pmax pmax
comp=Z,60nm,1.2s
**SEM Semipalatinsk 151.09 39** *e*PKIKP **PKPdf 00 52 48.9 -0.5**
**SEM Semipalatinsk 151.09 39** *e*PKP **PKPdf 00 52 49.0 -0.5**
baz=39
**ZALV Zalesovo Beam 151.09 29** PKP **PKPdf 00 52 48.9 0.0**
comp=Z,24nm,1.0s,baz=279,slow=2.9,SNR=31
ZALV PKPbc **PKPbc 00 52 55.0 +0.2**
comp=Z,225nm,0.9s,baz=295,slow=3.4,SNR=133
**ZALV Zalesovo Beam 151.09 29** PKPdf **PKPdf 00 52 47.4 -1.6**
ZALV PKPbc **PKPbc 00 52 54.4 -0.4**
**TKM2 Tokmak 2 151.13 56** P **PKPbc 00 52 55.8 +0.2**
SNR=18
**TKM2 Tokmak 2 151.13 56** PKIKP **PKPbc 00 52 55.1 -0.5**
**MYLAV Mylavaram 151.13 112** *e*PKPbc **PKPdf 00 52 50.5 +0.3**
MYLAV IVMs_BB IVMs_BB 01 52 43.8
comp=Z,2µm,21.0s
**RPR Rampur 151.14 107** *e*PKPbc **PKPdf 00 52 50.0 -0.1**
RPR IVMs_BB IVMs_BB 01 53 40.3
comp=Z,1µm,20.0s
**KUU Kurty 151.39 53** *e*PKIKP **PKPdf 00 52 49.4 -0.4**
**KUU Kurty 151.39 53** *e*PKP **PKPdf 00 52 49.5 -0.4**
baz=53
**BHPL Bhopal 151.44 97** *e*P **PKPdf 00 52 52.1 +1.6**
BHPL IAmb IAmb 00 52 58.8
comp=Z,23nm,0.8s
**DAV Davao City (W) 151.62 218** IAMs_20 IAMs_20 02 01 40.4
comp=Z,5µm,21.0s
**CHKK Chushkaly 151.85 53** *e*PKP **PKPdf 00 52 49.8 -0.7**
baz=53
**AAA Alma-Ata 151.98 55** *e*PKIKP **PKPbc 00 52 57.4 +0.1**
**AAA Alma-Ata 151.98 55** *e*PKPbc **PKPbc 00 52 57.5 +0.1**
baz=54
**TNSS Tian-Shan 152.05 55** *e*PKPbc **PKPbc 00 52 57.6 -0.3**
baz=55
**KSH Kashi 152.08 63** PKPbc **PKPdf 00 52 49.4 -1.7**
KSH pPKP sPKPdf 00 53 00.9 -0.6
KSH sPKP 00 53 04.9
KSH PP **PP 00 56 35.3 -4.3**
KSH SKKS 01 03 27.4
KSH SS **SS 01 16 02.7 -4.0**
KSH AMB AMB
comp=Z,6µm,9.3s
KSH LR LR
comp=Z,3µm,19.2s
KSH LR LR
comp=Z,14µm,21.0s
KSH LR LR
comp=Z,15µm,22.0s
**MDOK Medeo 152.09 55** *e*PKIKP **PKPdf 00 52 50.6 -0.4**
MDOK *e* 00 56 39.4
**MDOK Medeo 152.09 55** *e*PKP **PKPdf 00 52 50.6 -0.4**
baz=55
MDOK *e*PP **PP 00 56 39.4 -0.1**
baz=55
**PVM Polavaram 152.20 112** *e*PKPdf **PKPdf 00 52 51.5 -0.2**
PVM IVMs_BB IVMs_BB 01 51 33.6
comp=Z,2µm,23.2s
**ARXS Arharly 152.31 52** *e*PKIKP **PKPbc 00 52 57.4 -0.6**
**TDK Taldyqorghan 152.43 50** *e*PKIKP **PKPdf 00 52 51.5 +0.2**
**TDK Taldyqorghan 152.43 50** *e*PKP **PKPdf 00 52 51.5 +0.2**
baz=50
TDK *e*PKPbc **PKPbc 00 52 57.6 -0.6**
baz=50
**BOD Bodaibo 152.51 354** *e*PKIKP **PKPdf 00 52 50.1 -0.9**
BOD pmax pmax
comp=Z,255nm,1.4s
**MYLDM Lahad Datu 153.01 203** PKPdf **PKPdf 00 52 50.8 -2.3**
MYLDM IAMs_20 IAMs_20 01 59 38.3
comp=Z,6µm,20.0s
**SATY Saty 153.07 54** *e*PKIKP **PKPdf 00 52 52.0 -0.5**
**SATY Saty 153.07 54** *e*PKP **PKPdf 00 52 52.0 -0.5**
baz=54
SATY *e*PKPab **sPKPbc 00 53 10.6 +0.3**
baz=54
**IPM Ipoh 153.10 163** PKPdf **PKPdf 00 52 52.0 -1.3**
**KPKS Kokpek 153.14 53** *e*PKIKP **PKPdf 00 52 52.1 -0.4**
**KPKS Kokpek 153.14 53** *e*PKP **PKPdf 00 52 52.2 -0.4**
baz=53
KPKS *e*PKPab **PKPab 00 53 11.4 -0.2**
baz=53
**ZEA Zeya 153.16 335** *i* PKIKP **PKPdf 00 52 51.3 -0.8**
ZEA *e* 00 53 00.7
ZEA *e* 00 56 45.4
ZEA *e* 01 16 12.4
ZEA pmax pmax
comp=Z,20nm,2.3s
ZEA pmax pmax
comp=Z,90nm,1.1s
**SMLA Simla 153.18 81** IAmb IAmb 00 53 17.0
comp=Z,111nm,0.6s
**UZB Uzynbulak 153.47 54** *e*PKIKP **PKPdf 00 52 52.8 -0.3**
**UZB Uzynbulak 153.47 54** *e*PKP **PKPdf 00 52 52.9 -0.3**
baz=54
**TEY Ternei 153.66 311** ⇓ *e*PKIKP **PKiKP 00 53 01.2 +0.3**
TEY *e* 01 17 14.8
TEY pmax pmax
comp=N,10.0nm,1.2s
TEY pmax pmax
comp=E,10.0nm,1.2s
TEY pmax pmax
comp=Z,20nm,1.2s
**SHLS Shalkode 153.77 53** *e*PKIKP **PKPdf 00 52 53.7 +0.2**
**SHLS Shalkode 153.77 53** *e*PKP **PKPdf 00 52 53.7 +0.2**
baz=53
SHLS *e*PKPbc **PKiKP 00 53 02.2 +0.8**
baz=53
**KULM Kulim 153.78 162** PKPbc **PKPbc 00 53 01.1 -1.0**
**DDI Dehra Dun 153.83 83** *e*P **PKPdf 00 52 53.8 -0.1**
**MAKZ Makanchi 153.92 44** PKIKP **PKPdf 00 52 52.5 -0.9**
**MAKZ Makanchi 153.92 44** PKPdf **PKPdf 00 52 52.0 -1.4**
**MK31 Makanchi Array 154.12 44** *i* PKIKP **PKPdf 00 52 52.9 -0.8**
**MKAR Makanchi Array 154.12 44** PKP **PKPdf 00 52 53.3 -0.4**
comp=Z,4.6nm,1.0s,baz=304,slow=2.2,SNR=22
MKAR PKPbc **PKPbc 00 53 01.7 -0.1**
comp=Z,28nm,1.1s,baz=8.4,slow=1.1,SNR=42
**MKAR Makanchi Array 154.12 44** PKPdf **PKPdf 00 52 52.0 -1.7**
**KLR Kul'dur 154.37 323** PKP **PKPdf 00 52 53.2 -0.7**
comp=Z,11nm,1.1s,baz=9.1,slow=2.9,SNR=18
KLR PKPbc **PKiKP 00 53 03.1 +0.8**
comp=Z,19nm,1.1s,baz=354,slow=2.1,SNR=10
**KKM Kota Kinabalu 154.52 198** IAMs_20 IAMs_20 02 04 22.0
comp=Z,6µm,20.0s
**MJAR Matsushiro Arr 154.56 291** PKP **PKPdf 00 52 53.3 -1.4**
comp=Z,7.4nm,0.9s,baz=12,slow=0.3,SNR=10
**MAJO Matsushiro 154.57 291** IAMs_20 IAMs_20 02 16 35.4
comp=Z,4µm,21.0s
**MAT Matsushiro 154.57 291** PKP **PKPdf 00 52 53.3 -1.4**
**CHLP Challavanipeta 154.82 113** *e*PKPdf **PKPdf 00 52 54.9 -0.6**
CHLP IVMs_BB IVMs_BB 01 52 00.6
comp=Z,2µm,26.6s
**ZSN Zaisan 155.26 40** *e*PKIKP **PKPdf 00 52 54.7 -0.6**
**ZSN Zaisan 155.26 40** *e*PKP **PKPdf 00 52 54.7 -0.6**
baz=40
ZSN *e*PKPab **PKPab 00 53 20.2 -0.1**
baz=40
**INU Inuyama 155.61 289** IAMs_20 IAMs_20 02 17 20.9
comp=Z,4µm,20.0s
**USRK Ussuriysk Ar. 156.99 313** PKP **PKPdf 00 52 59.2 +1.6**
comp=Z,2.7nm,0.8s,baz=66,slow=4.6,SNR=7.3
**PYUN Piuthan 157.68 90** *e*P **PKPdf 00 53 00.5 +1.2**
comp=Z,50nm,1.1s
**KOLN Koldanda 158.13 91** *e*P **PKPdf 00 53 01.1 +1.3**
comp=Z,51nm,0.8s
**IRK Irkutsk 158.15 7** *e*PKIKP **PKPdf 00 53 00.6 +1.8**
IRK *e* 00 53 33.6
IRK *e* 00 57 14.0
IRK pmax pmax
comp=Z,241nm,0.3s
**MOY Mondy 158.23 13** *e*PKIKP **PKPdf 00 52 59.7 +0.6**
MOY pmax pmax
comp=Z,266nm,3.4s
**MDJ Mudanjiang 158.25 316** PKP **PKPdf 00 52 59.7 +0.5**
MDJ PP **PP 00 57 21.1 +7.7**
MDJ SS SS 01 17 14.3 +2.1
MDJ LR LR
comp=Z,5µm,19.5s
MDJ LR LR
comp=Z,720nm,13.4s
MDJ LR LR
comp=Z,8µm,17.5s
**MDJ Mudanjiang 158.25 316** IAMs_20 IAMs_20 02 00 11.2
comp=Z,6µm,22.0s
**CIT Chita 158.26 351** *e*PKIKP **PKPdf 00 52 58.2 -0.8**
CIT *e* 00 53 09.5
CIT *e* 00 53 32.7
CIT *e* 00 57 13.3
CIT pmax pmax
comp=Z,404nm,2.8s
**DANN Dangsing 158.40 90** *e*P **PKPdf 00 53 00.6 +0.3**
comp=Z,85nm,1.0s
**BNX BinXian 158.85 321** ⇓ PKP **PKPdf 00 52 59.6 -0.2**
BNX pPKP **sPKPdf 00 53 10.6 +0.4**
BNX sPKP 00 53 14.1
BNX PP **PP 00 57 14.9 -1.5**
BNX AMB AMB
comp=Z,2µm,8.0s
BNX LR LR
comp=Z,4µm,20.3s
BNX LR LR
comp=Z,9µm,22.9s
BNX LR LR
comp=Z,12µm,21.3s
**WMQ Urumqi 158.91 45** PKP **PKPdf 00 52 59.7 -0.4**
WMQ pPKP sPKPdf 00 53 09.4 -1.1
WMQ PKPab **PKPab 00 53 37.0 +0.7**
WMQ PP **PP 00 57 17.8 +0.7**
WMQ SKS **SKSdf 00 59 57.5 -6.8**
WMQ AMB AMB
comp=Z,2µm,11.7s
WMQ LR LR
comp=Z,7µm,26.7s
WMQ LR LR
comp=Z,9µm,23.1s
WMQ LR LR
comp=Z,7µm,23.1s
**GKN Gorkha 159.08 91** *e*P **PKPdf 00 53 01.1 +0.2**
comp=Z,88nm,1.4s
**DMN Daman 159.39 92** *e*P **PKPdf 00 53 02.6 +1.2**
**KKN Kakani 159.58 92** *e*P **PKPdf 00 53 02.8 +1.2**
**PKIN Phulchoki 159.63 93** *e*P **PKPdf 00 53 02.7 +1.0**
**PKI Pulchoki 159.64 93** *e*P **PKPdf 00 53 02.7 +0.9**
**ZAK Zakamensk 159.85 10** *e*PKIKP **PKPdf 00 53 01.0 0.0**
ZAK pmax pmax
comp=Z,84nm,1.5s
**GUN Gumba 160.13 92** *e*P **PKPdf 00 53 03.6 +1.3**
comp=Z,148nm,1.6s
**JIRN Jiri 160.34 93** *e*P **PKPdf 00 53 03.8 +1.2**
comp=Z,41nm,1.1s
**RAMN Ramite 160.51 95** *e*P **PKPdf 00 53 04.2 +1.5**
comp=Z,8.9nm,0.6s
**JNU Nakatsue 160.79 283** PKPab **PKPab 00 53 47.5 +2.6**
comp=Z,8.4nm,0.9s,baz=49,slow=9.2,SNR=2.2
**CN2 Changchun 161.15 319** *e*PKP **PKPdf 00 52 59.0 -3.5**
CN2 SKS **SKSdf 00 59 59.0 -7.1**
CN2 SKKS **SKKSac 01 04 11.6 -4.5**
CN2 AMB AMB
comp=Z,490nm,10.0s
CN2 LR LR
comp=Z,5µm,20.0s
CN2 LR LR
comp=Z,2µm,20.0s
CN2 LR LR
comp=Z,5µm,20.0s
**ODAN Odare 161.16 96** *e*P **PKPdf 00 53 03.6 +0.2**
comp=Z,24nm,0.8s
**TAPN Taplejung 161.57 95** *e*P **PKPdf 00 53 03.6 -0.3**
comp=Z,106nm,1.4s
**HHU Hamhung 161.88 306** PKPbc **PKPdf 00 53 01.8 -1.6**
HHU PP **PP 00 57 32.7 -0.5**
HHU AmB
comp=Z,0.2nm,0.1s
HHU AMS AMS
comp=N,419nm,5.2s
HHU AMS AMS
comp=E,359nm,4.5s
HHU AMS AMS
comp=Z,203nm,2.5s
**GTK Tadong 162.32 96** *e*P **PKPdf 00 53 03.9 -0.6**
**KSRS Korea Array 162.48 298** PKP **PKPdf 00 53 03.7 -0.3**
comp=Z,2.7nm,0.8s,baz=79,slow=0.5,SNR=10
KSRS PKPab **PKPab 00 53 54.2 +2.2**
comp=Z,4.8nm,0.9s,baz=101,slow=3.5,SNR=4.9
**SONM Songino Array 162.71 5** PKP **PKPdf 00 53 03.6 -0.5**
comp=Z,3.3nm,0.9s,baz=71,slow=0.1,SNR=18
SONM PKPab **PKPab 00 53 53.7 +1.0**
comp=Z,15nm,0.9s,baz=341,slow=3.5,SNR=9.3
SONM PP **PP 00 57 37.4 +0.8**
comp=Z,12nm,1.1s,baz=298,slow=3.1,SNR=3.8
**SONM Songino Array 162.71 5** PKPdf **PKPdf 00 53 01.8 -2.3**
**ULN Ulaanbaatar 162.71 3** PKIKP **PKPdf 00 53 03.4 -0.8**
**ULN Ulaanbaatar 162.71 3** PKPdf **PKPdf 00 53 03.4 -0.8**
**AGT Agartala 163.32 109** *e*P **PKPdf 00 53 05.9 +0.7**
**SNY Shenyang 163.45 317** ⇑ PKP **PKPdf 00 53 03.7 -1.1**
SNY PP **PP 00 57 41.9 +0.7**
SNY SKKS 01 04 29.8
SNY LR LR
comp=Z,5µm,20.4s
SNY LR LR
comp=Z,2µm,20.1s
SNY LR LR
comp=Z,8µm,22.3s
**PYAG Pyongyang 163.49 305** PKPbc **PKPdf 00 53 03.9 -1.1**
PYAG PP **PP 00 57 44.1 +2.2**
PYAG AmB
comp=Z,1.0nm,0.3s
PYAG AMS AMS
comp=N,170nm,1.9s
PYAG AMS AMS
comp=E,746nm,8.1s
PYAG AMS AMS
comp=Z,169nm,1.8s
**SUJ Sinuiju 163.85 310** PKPbc **PKPdf 00 53 03.8 -1.5**
SUJ PP **PP 00 57 47.4 +3.9**
SUJ AmB
comp=Z,0.1nm,0.1s
SUJ AMS AMS
comp=N,822nm,3.9s
SUJ AMS AMS
comp=E,952nm,4.5s
SUJ AMS AMS
comp=Z,868nm,4.1s
**HJU Haeju 163.92 302** PKPbc **PKPdf 00 53 03.7 -1.7**
**GUWA GUWAHATI 164.62 102** *e*P **PKPdf 00 53 04.5 -1.9**
GUWA *e*P **pPKPdf 00 53 07.0 -7.1**
**LSA Lhasa 165.00 89** Pg **PKPdf 00 53 07.0 -0.3**
LSA smax smax
comp=N,26nm,1.2s
LSA smax smax
comp=E,35nm,0.8s
**LSA Lhasa 165.00 89** PKP **PKPdf 00 53 07.5 +0.2**
LSA LR LR
comp=E,5µm,19.9s
LSA LR LR
comp=E,6µm,22.8s
LSA LR LR
comp=E,4µm,22.8s
**CMAR Chiang Mai Arr 165.15 142** PKP **PKPdf 00 53 06.5 -0.6**
comp=E,1.0nm,0.3s,baz=246,slow=1.9,SNR=14
CMAR PKPab **PKPab 00 54 03.2 -0.9**
comp=E,17nm,0.9s,baz=226,slow=5.2,SNR=14
**XLT XiLinHaoTe 165.40 338** *i* PKP **PKPdf 00 53 05.0 -1.7**
XLT PKPab **PKPab 00 54 03.4 -1.2**
XLT PP **PP 00 57 48.5 -2.5**
XLT SS SS 01 18 23.6 -2.2
XLT AMB AMB
comp=E,4µm,10.8s
XLT LR LR
comp=E,10µm,20.2s
XLT LR LR
comp=E,7µm,18.9s
XLT LR LR
comp=E,13µm,20.4s
**DL2 Dalian 166.37 311** PKP **PKPdf 00 53 05.4 -2.0**
DL2 PP **PP 00 57 56.2 -0.5**
DL2 SS SS 01 18 33.0 -3.8
DL2 AMB AMB
comp=E,2µm,8.2s
DL2 LR LR
comp=E,3µm,24.5s
DL2 LR LR
comp=E,4µm,19.6s
DL2 LR LR
comp=E,7µm,21.0s
**KOHI KOHIMA 166.45 107** *e*P **PKPdf 00 53 08.0 -0.2**
KOHI *e*P **pPKPdf 00 53 08.9 -7.0**
**MOKO MOKOCHONG 167.02 106** *e*P **PKPdf 00 53 08.0 -0.6**
**GOMU GeErMu 167.31 60** PKP **PKPdf 00 53 08.9 +0.1**
GOMU SKKS 01 04 44.2
GOMU SS **SS 01 18 48.1 +0.2**
GOMU AMB AMB
comp=E,2µm,8.0s
GOMU LR LR
comp=E,4µm,25.3s
GOMU LR LR
comp=E,3µm,23.4s
GOMU LR LR
comp=E,8µm,25.1s
**QIZ Qiongzhong 168.42 187** PKP **PKPdf 00 53 10.0 +0.5**
QIZ SS SS 01 18 57.0 +1.4
QIZ LR LR
comp=E,4µm,19.6s
QIZ LR LR
comp=E,4µm,19.6s
QIZ LR LR
comp=E,7µm,20.6s
**BJI Beijing 168.66 328** PKP **PKPdf 00 53 08.2 -0.8**
BJI pPKP **pPKPdf 00 53 17.8 +1.0**
BJI sPKP 00 53 22.6
**GTA Gaotai 168.71 36** *e*PKP **PKPdf 00 53 08.9 -0.4**
GTA pPKP sPKPdf 00 53 20.0 +0.3
GTA sPKP 00 53 24.2
GTA PKPab **PKPab 00 54 21.0 +1.5**
GTA PP **PP 00 58 05.1 -3.3**
GTA SS SS 01 18 58.5 -1.5
GTA AMB AMB
comp=E,3µm,6.9s
GTA LR LR
comp=E,6µm,20.4s
GTA LR LR
comp=E,4µm,21.4s
GTA LR LR
comp=E,9µm,23.3s
**SSE Sheshan 169.04 276** PKP **PKPdf 00 53 08.7 -0.9**
SSE PP **PP 00 58 11.9 +0.7**
SSE SS SS 01 19 01.8 -3.5
SSE AMB AMB
comp=E,430nm,5.7s
SSE LR LR
comp=E,2µm,21.6s
SSE LR LR
comp=E,2µm,20.1s
**QZH Quanzhou 169.41 240** *i* PKP **PKPdf 00 53 09.8 -0.2**
QZH PKPab **PKPab 00 54 24.9 +2.1**
QZH PP **PP 00 58 12.8 +0.2**
QZH SKKS 01 04 59.9
QZH SS **SS 01 19 08.7 +0.6**
QZH AMB AMB
comp=E,2µm,7.3s
QZH LR LR
comp=E,3µm,18.5s
QZH LR LR
comp=E,3µm,19.4s
QZH LR LR
comp=E,4µm,19.4s
**HHC Hu-ho-hao-te 169.46 347** *e*PKP **PKPdf 00 53 09.7 0.0**
HHC PP **PP 00 58 12.1 +0.5**
HHC SS SS 01 19 00.3 -6.0
HHC AMB AMB
comp=E,4µm,9.8s
HHC LR LR
comp=E,8µm,19.6s
HHC LR LR
comp=E,6µm,19.2s
HHC LR LR
comp=E,13µm,20.8s
**BTO Baotou 169.92 353** *e*PKP **PKPdf 00 53 09.3 -0.7**
BTO LR LR
comp=E,13µm,21.2s
BTO LR LR
comp=E,7µm,21.6s
**TIA Tai'an 170.84 310** PKP **PKPdf 00 53 09.5 -1.0**
TIA pPKP **sPKPdf 00 53 21.6 +0.7**
TIA PP **PP 00 58 17.4 -2.0**
TIA AMB AMB
comp=E,1µm,6.5s
TIA LR LR
comp=E,4µm,18.5s
TIA LR LR
comp=E,5µm,20.7s
TIA LR LR
comp=E,12µm,19.2s
**NJ2 Nanjing 170.98 282** *i* PKP **PKPdf 00 53 10.2 -0.5**
NJ2 pPKP **sPKPdf 00 53 20.0 -1.0**
NJ2 sPKP 00 53 24.0
NJ2 PKPab **PKPab 00 54 31.3 +1.5**
NJ2 PP **PP 00 58 19.1 -1.8**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NJ2 | | | | SKKS | | | 01 05 02.8 | |
| NJ2 | | | | AMB | AMB | | | |
| | comp=E,3μm,11.9s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,4μm,20.6s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,5μm,20.6s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,10μm,19.6s | | | | | | | |
| **GZH** | **Guangzhou** | **171.35 211** | | PKP | **PKPdf** | **00 53 10.8** | **-0.3** | |
| GZH | | | | LR | LR | | | |
| | comp=E,5μm,18.8s | | | | | | | |
| GZH | | | | LR | LR | | | |
| | comp=E,7μm,19.4s | | | | | | | |
| **HNS** | **HongShan** | **171.45 324** | ⇑ | PKP | **PKPdf** | **00 53 10.5** | **-0.2** | |
| HNS | | | | PKPab | **PKPab** | **00 54 30.5** | **-1.0** | |
| HNS | | | | PP | **PP** | **00 58 21.3** | **-0.6** | |
| HNS | | | | SKKS | | 01 05 03.2 | | |
| HNS | | | | SS | **SS** | **01 19 22.7** | **-4.1** | |
| HNS | | | | AMB | AMB | | | |
| | comp=E,3μm,8.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,6μm,22.0s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,4μm,19.2s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,10μm,19.8s | | | | | | | |
| **TIY** | **Taiyuan** | **172.17 336** | ⇑ | PKP | **PKPdf** | **00 53 11.3** | **+0.1** | |
| TIY | | | | PP | **PP** | **00 58 24.6** | **-0.7** | |
| TIY | | | | SKKS | | 01 05 09.8 | | |
| TIY | | | | LR | LR | | | |
| | comp=E,7μm,22.1s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=E,3μm,18.6s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=E,11μm,19.6s | | | | | | | |
| **KMI** | **Kunming** | **172.57 136** | ⇑ | PKP | **PKPdf** | **00 53 11.4** | **-0.5** | |
| KMI | | | | pPKP | sPKPdf | 00 53 21.5 | -0.8 | |
| KMI | | | | sPKP | | 00 53 26.0 | | |
| **PZH** | **PanZhiHua** | **172.83 123** | | PKP | **PKPdf** | **00 53 12.5** | **+0.6** | |
| PZH | | | | pPKP | **sPKPdf** | **00 53 22.5** | **+0.2** | |
| PZH | | | | PKPab | **PKPab** | **00 54 38.5** | **+0.3** | |
| PZH | | | | PP | **PP** | **00 58 30.2** | **+0.5** | |
| PZH | | | | SKKS | | 01 05 13.7 | | |
| PZH | | | | SS | **SS** | **01 19 42.2** | **+0.3** | |
| PZH | | | | AMB | AMB | | | |
| | comp=E,4μm,10.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,4μm,21.6s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,6μm,21.8s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,5μm,21.4s | | | | | | | |
| **LZH** | **Lanzhou** | **173.30 34** | | PKP | **PKPdf** | **00 53 12.2** | **+0.4** | |
| LZH | | | | pPKP | sPKPdf | 00 53 23.0 | +0.8 | |
| LZH | | | | sPKP | | 00 53 27.3 | | |
| LZH | | | | PKPab | **PKPab** | **00 54 40.0** | **+0.1** | |
| LZH | | | | SKKS | | 01 05 17.7 | | |
| LZH | | | | SS | **SS** | **01 19 44.9** | **-0.2** | |
| LZH | | | | AMB | AMB | | | |
| | comp=E,5μm,9.3s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,8μm,18.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,7μm,17.8s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,11μm,20.1s | | | | | | | |
| **GULI** | **GuiLin** | **174.46 198** | ⇑ | PKP | **PKPdf** | **00 53 13.1** | **+0.8** | |
| GULI | | | | sPKP | | 00 53 28.2 | | |
| GULI | | | | PKPab | **PKPab** | **00 54 47.5** | **+2.5** | |
| GULI | | | | LR | LR | | | |
| | comp=E,6μm,18.6s | | | | | | | |
| **LYN** | **LuoYang** | **174.79 320** | ⇑ | PKP | **PKPdf** | **00 53 11.7** | **-0.5** | |
| LYN | | | | PKPab | **PKPab** | **00 54 45.3** | **-1.1** | |
| LYN | | | | SKKS | | 01 05 19.0 | | |
| LYN | | | | SS | **SS** | **01 19 58.9** | **-0.7** | |
| LYN | | | | LR | LR | | | |
| | comp=E,4μm,19.1s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=E,9μm,18.1s | | | | | | | |
| **WHN** | **Wuhan** | **174.91 271** | ⇑ | PKP | **PKPdf** | **00 53 11.9** | **-0.4** | |
| WHN | | | | PKPab | **pPKPab** | **00 54 53.4** | **-1.5** | |
| WHN | | | | PP | **PP** | **00 58 40.1** | **-0.2** | |
| WHN | | | | SKKS | | 01 05 24.9 | | |
| WHN | | | | SS | **SS** | **01 19 58.1** | **-4.8** | |
| WHN | | | | LR | LR | | | |
| | comp=E,11μm,17.1s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=E,12μm,21.2s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=E,22μm,22.4s | | | | | | | |
| **CNSH** | **ChangSha** | **175.41 240** | ⇑ | PKP | **PKPdf** | **00 53 07.9** | **-4.6** | |
| CNSH | | | | LR | LR | | | |
| | comp=E,2μm,24.9s | | | | | | | |
| CNSH | | | | LR | LR | | | |
| | comp=E,4μm,33.5s | | | | | | | |
| CNSH | | | | LR | LR | | | |
| | comp=E,2μm,24.5s | | | | | | | |
| **GYA** | **Guiyang** | **175.59 159** | ⇓ | *i* PKP | **PKPdf** | **00 53 13.6** | **+0.8** | |
| GYA | | | | pPKP | sPKPdf | 00 53 22.7 | -0.5 | |
| GYA | | | | PKPab | **PKPab** | **00 54 50.7** | **+0.5** | |
| GYA | | | | PP | **PP** | **00 58 40.7** | **-1.2** | |
| GYA | | | | LR | LR | | | |
| | comp=E,2μm,17.2s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=E,1μm,19.2s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=E,5μm,18.9s | | | | | | | |
| **CD2** | **Chengdu** | **175.95 84** | | PKP | **PKPdf** | **00 53 12.2** | **-0.5** | |
| CD2 | | | | pPKP | sPKPdf | 00 53 22.9 | -0.2 | |
| CD2 | | | | SKKS | | 01 05 32.8 | | |
| CD2 | | | | SS | **SS** | **01 20 10.7** | **-2.2** | |
| CD2 | | | | AMB | AMB | | | |
| | comp=E,6μm,9.4s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=E,310nm,24.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=E,3μm,21.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=E,4μm,37.9s | | | | | | | |
| **XAN** | **Xi'an** | **176.54 354** | | PKP | **PKPdf** | **00 53 12.3** | **-0.4** | |
| XAN | | | | pPKP | sPKPdf | 00 53 22.3 | -0.8 | |
| XAN | | | | PKPab | **PKPab** | **00 54 55.3** | **+1.2** | |
| XAN | | | | PP | **PP** | **00 58 45.7** | **-0.4** | |
| XAN | | | | SKKS | | 01 05 31.6 | | |
| XAN | | | | AMB | AMB | | | |
| | comp=E,7μm,12.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,7μm,24.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,6μm,20.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,9μm,25.0s | | | | | | | |

*IDC **10** 00:34:00.8±1.2, 19°.24S×173°.64W, h0km, mb4.5/10, mb1 4.6/12, mb1mx4.1/65, mbtmp4.5/12, ML4.2/2, MS5.9/1, Ms1 5.8/1, ms1mx3.8/65 Error ellipse: s-maj=35.1km s-min=21.4km az=135.0*

*NEIC **10** 00:34:01.4±1.6, 19°.62S±0°.09×172°.91W±0°.09, h28km±5km, mb5.0/34, Error ellipse: s-maj=14.2km s-min=11.4km az=136.0*

**ISC 10 00:34:02.8**±0.7, **19°.44S**±0°.10×**173°.3W**±0°.1, **h25**km, **n63, σ1°60/57, mb4.9/29, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.23** | **84** | Pn | Pn | 00 34 45.1 | -6.9 |
| **AFI** | **Afiamalu** | **5.70** | **15** | Pn | **Pn** | **00 35 24.2** | **-1.8** |
| | 5.5nm,0.3s,baz=145,slow=22,SNR=4.5 | | | | | | |
| AFI | | | | Sn | Sn | 00 36 19.5 | -11 |
| | 10nm,0.3s,baz=201,slow=22,SNR=2.5 | | | | | | |
| **AFI** | **Afiamalu** | **5.70** | **15** | Pn | **Pn** | **00 35 24.9** | **-1.1** |
| **MSVF** | **Nonsavu** | **8.36** | **280** | Pn | Pn | 00 36 10.9 | +8.3 |
| | 1.1nm,0.3s,baz=138,slow=15,SNR=6.1 | | | | | | |
| MSVF | | | | LR | LR | 00 37 47.6 | |
| | comp=Z,52nm,20.4s,baz=74,slow=28 | | | | | | |
| **MSVF** | **Nonsavu** | **8.36** | **280** | Pn | **Pn** | **00 36 00.8** | **-1.7** |
| **RAO** | **Raoul Island** | **10.62** | **202** | Pn | **Pn** | **00 36 31.3** | **-2.2** |
| **RAR** | **Rarotonga** | **12.83** | **100** | Pn | Pn | 00 36 57.0 | -6.7 |
| | 3.7nm,0.3s,baz=321,slow=7.0,SNR=5.9 | | | | | | |
| **RAR** | **Rarotonga** | **12.83** | **100** | Pn | Pn | 00 36 56.3 | -7.4 |
| **MARNC** | **Mare, Loyalty** | **17.59** | **260** | | **P** | **00 38 07.6** | **+0.3** |
| **PINNC** | **Pines Island,** | **18.23** | **257** | | **P** | **00 38 16.4** | **+2.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **19.10** | **259** | | P | **P** | **00 38 24.1** | **+0.1** |
| | 0.9nm,0.3s,baz=77,slow=18,SNR=16 | | | | | | | |
| **DZM** | **Mont Dzumac** | **19.10** | **259** | | P | **Pn** | **00 38 25.4** | **+0.5** |
| **URZ** | **Urewera** | **20.51** | **202** | | P | Pn | 00 38 40.2 | -1.2 |
| | 9.2nm,0.7s,baz=357,slow=20,SNR=4.3 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.54** | **202** | | P | **P** | **00 38 49.3** | **-0.9** |
| BKZ | | | | | IAmb | IAmb | 00 39 44.0 | |
| | comp=Z,53nm,1.7s | | | | | | | |
| **EIDS** | **Eidsvold** | **33.37** | **253** | | P | **P** | **00 40 39.4** | **0.0** |
| EIDS | | | | | IAmb | IAmb | 00 41 53.3 | |
| | comp=Z,36nm,1.5s | | | | | | | |
| **ARMA** | **Armidale** | **33.48** | **244** | | P | **P** | **00 40 41.0** | **+0.6** |
| ARMA | | | | | IAmb | IAmb | 00 41 02.8 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **CAN** | **Canberra** | **36.75** | **237** | | P | **P** | **00 41 08.5** | **0.0** |
| CAN | | | | | IAmb | IAmb | 00 41 58.5 | |
| | comp=Z,40nm,1.7s | | | | | | | |
| **CTA** | **Charters Tower** | **37.98** | **262** | | P | **P** | **00 41 18.6** | **-0.4** |
| | comp=Z,11nm,0.8s,baz=100,slow=10.0,SNR=13 | | | | | | | |
| **CTAO** | **Charters Tower** | **37.98** | **262** | | P | **P** | **00 41 18.5** | **-0.6** |
| CTAO | | | | | IAmb | IAmb | 00 41 44.7 | |
| | comp=Z,28nm,1.3s | | | | | | | |
| **TOO** | **Toolangi** | **40.08** | **234** | | P | **P** | **00 41 36.5** | **+0.2** |
| **COEN** | **Coen** | **41.94** | **271** | | P | **P** | **00 41 51.9** | **-0.1** |
| **STKA** | **Stephens Creek** | **42.20** | **244** | | P | **P** | **00 41 53.8** | **-0.2** |
| | comp=Z,2.9nm,0.7s,baz=90,slow=12,SNR=7.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **42.20** | **244** | | P | **P** | **00 41 53.3** | **-0.6** |
| **BBOO** | **Buckleboo** | **46.95** | **243** | | P | **P** | **00 42 31.1** | **-0.7** |
| BBOO | | | | | IAmb | IAmb | 00 43 37.0 | |
| | comp=Z,24nm,1.5s | | | | | | | |
| **AS31** | **Alice Springs** | **49.04** | **255** | | P | **P** | **00 42 48.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **49.04** | **255** | | P | **P** | **00 42 47.9** | **-0.3** |
| | comp=Z,8.5nm,0.7s,baz=89,slow=8.4,SNR=65 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **00 44 13.6** | **+1.8** |
| | comp=Z,0.9nm,0.6s,baz=92,slow=5.5,SNR=1.9 | | | | | | | |
| **WB0** | **Warramunga Arr** | **49.09** | **260** | | P | **P** | **00 42 47.5** | **-1.0** |
| WB0 | | | | | IAmb | IAmb | 00 42 48.6 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **49.10** | **260** | | P | **P** | **00 42 47.5** | **-1.1** |
| WB2 | | | | | IAmb | IAmb | 00 42 49.1 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.11** | **260** | | P | **P** | **00 42 47.6** | **-1.1** |
| | comp=Z,3.2nm,0.5s,baz=97,slow=8.7,SNR=40 | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.11** | **260** | | P | **P** | **00 42 47.9** | **-0.8** |
| **MTN** | **Manton Dam** | **53.57** | **268** | | P | **P** | **00 43 22.0** | **-0.2** |
| MTN | | | | | IAmb | IAmb | 00 45 11.3 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **53.74** | **246** | | P | **P** | **00 43 22.8** | **-0.4** |
| FORT | | | | | IAmb | IAmb | 00 43 39.0 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **55.13** | **264** | | P | **P** | **00 43 32.7** | **-0.8** |
| KNRA | | | | | IAmb | IAmb | 00 44 05.4 | |
| | comp=Z,52nm,1.6s | | | | | | | |
| **SIJI** | **Sorong** | **57.27** | **282** | | P | **P** | **00 43 47.3** | **-1.6** |
| | comp=Z,16nm,0.6s,baz=90,slow=7.3,SNR=4.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.53** | **261** | | P | **P** | **00 43 50.7** | **0.0** |
| | comp=Z,4.1nm,0.5s,baz=153,slow=6.2,SNR=46 | | | | | | | |
| **SOEI** | **Soe** | **60.89** | **269** | | P | **P** | **00 44 13.2** | **-0.9** |
| SOEI | | | | | IAmb | IAmb | 00 44 21.2 | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **62.19** | **255** | | P | **P** | **00 44 22.8** | **+0.2** |
| PSA00 | | | | | IAmb | IAmb | 00 44 23.5 | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **MBWA** | **Marble Bar** | **62.38** | **256** | | P | **P** | **00 44 23.4** | **-0.5** |
| **MORW** | **Morawa** | **64.29** | **246** | | P | **P** | **00 44 37.3** | **+0.8** |
| MORW | | | | | IAmb | IAmb | 00 44 42.2 | |
| | comp=Z,61nm,2.0s | | | | | | | |
| **KCPM** | **Cahto Peak** | **74.92** | **38** | | P | **P** | **00 45 38.8** | **-3.1** |
| **KMPM** | **Mount Pierce** | **75.11** | **37** | | P | **P** | **00 45 41.9** | **-1.0** |
| **KMRM** | **Mail Ridge** | **75.21** | **37** | | P | **P** | **00 45 40.1** | **-3.4** |
| **JCC** | **Jacoby Creek,** | **75.42** | **36** | | P | **P** | **00 45 41.7** | **-2.8** |
| **KHMM** | **Horse Mountain** | **75.63** | **37** | | P | **P** | **00 45 43.3** | **-2.6** |
| **KRPM** | **Rodgers** | **75.66** | **36** | | P | **P** | **00 45 45.8** | **-0.2** |
| **KSXB** | **Camp Six Broad** | **76.19** | **36** | | P | **P** | **00 45 47.1** | **-1.9** |
| **PETK** | **Petropavlovsk-** | **76.48** | **343** | | P | **P** | **00 45 49.5** | **-0.9** |
| **KSRS** | **Korea Array** | **79.09** | **316** | | P | **P** | **00 46 05.5** | **+0.3** |
| | comp=Z,1.9nm,1.0s,baz=116,slow=5.5,SNR=2.9 | | | | | | | |
| **RADR** | **Rader Ridge** | **79.35** | **32** | | P | **P** | **00 46 02.8** | **-3.7** |
| **NJ2** | **Nanjing** | **82.66** | **308** | | *e*P | **P** | **00 46 25.5** | **+1.1** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **TRF** | **Thorofare Moun** | **84.57** | **10** | | P | **P** | **00 46 35.3** | **+1.7** |
| TRF | | | | | IAmb | IAmb | 00 46 45.3 | |
| | comp=Z,39nm,1.8s | | | | | | | |
| **MCK** | **McKinley** | **85.06** | **11** | | P | **P** | **00 46 37.2** | **+1.2** |
| MCK | | | | | IAmb | IAmb | 00 47 14.6 | |
| | comp=Z,30nm,1.7s | | | | | | | |
| **WRH** | **Wood River Hil** | **85.89** | **11** | | P | **P** | **00 46 41.4** | **+1.3** |
| WRH | | | | | IAmb | IAmb | 00 46 43.1 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.38** | **11** | | P | **P** | **00 46 43.5** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=226,slow=5.8,SNR=20 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.81** | **313** | | *e*P | **P** | **00 47 12.2** | **+3.3** |
| HHC | | | | | pP | sP | 00 47 19.0 | +1.1 |
| **HHC** | **Hu-ho-hao-te** | **91.81** | **313** | | S | **S** | **00 58 08.5** | **-0.1** |
| **HHC** | **Hu-ho-hao-te** | **91.81** | **313** | | sS | sS | 00 58 21.1 | +1.5 |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,83nm,5.7s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=N,2μm,19.2s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=E,960nm,17.7s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,3μm,21.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.94** | **288** | | P | **P** | **00 47 21.3** | **+2.2** |
| | comp=Z,0.9nm,0.3s,baz=89,slow=2.7,SNR=5.3 | | | | | | | |
| **PZH** | **PanZhiHua** | **94.14** | **296** | | P | **P** | **00 47 21.7** | **+1.7** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,100nm,4.2s | | | | | | | |
| **LZH** | **Lanzhou** | **95.66** | **306** | | *e*P | **P** | **00 47 29.8** | **+3.0** |
| LZH | | | | | pP | sP | 00 47 34.8 | -1.0 |
| LZH | | | | | sP | pwP | 00 47 37.2 | -2.4 |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.5s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.01** | **39** | | LR | LR | 01 28 09.0 | |
| | comp=Z,5μm,18.8s,baz=144,slow=34 | | | | | | | |
| **WMQ** | **Urumqi** | **109.57** | **311** | | *e*P | **PKiKP** | **00 52 30.6** | **-0.9** |
| **TORD** | **Torodi Ar. Bea** | **172.12** | **142** | | PKPab | **PKPab** | **00 55 37.4** | **+3.7** |
| | comp=Z,2.3nm,1.0s,baz=228,slow=6.7,SNR=3.6 | | | | | | | |

*HEL **10** 00:34:03.5±0.0, 67°.84N×20°.21E, h0km, ML1.4, ML2.2(UPP), Explosion*

**UPP 10 00:34:03.0**±0.0, **67°.84N**×**20°.19E**, **h0**km, **ML2.2, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.13** | **25** | P | Pg | 00 34 05.7 | +0.3 |
| KUA | | | | S | Sg | 00 34 07.6 | +0.5 |
| **KUA** | **Kurravaara** | **0.13** | **25** | *i* P | Pg | 00 34 05.7 | +0.3 |
| KUA | | | | *i* S | Sg | 00 34 07.6 | +0.5 |
| **KOVU** | **Salmi** | **0.39** | **358** | P | Pg | 00 34 10.5 | +0.1 |
| **KOVU** | **Salmi** | **0.39** | **358** | *i* P | Pg | 00 34 10.5 | +0.1 |
| **NIKU** | **Nikkaluokta** | **0.44** | **274** | P | Pg | 00 34 11.4 | 0.0 |
| **NIKU** | **Nikkaluokta** | **0.44** | **274** | *i* P | Pg | 00 34 11.4 | 0.0 |
| **LANU** | **Lannavaara** | **0.71** | **72** | P | Pg | 00 34 16.5 | -0.1 |
| **LANU** | **Lannavaara** | **0.71** | **72** | *e*P | Pg | 00 34 16.2 | -0.4 |
| LANU | | | | *e*S | Sg | 00 34 25.9 | +0.2 |
| **DUNU** | **Dundret** | **0.73** | **168** | P | Pg | 00 34 16.9 | -0.1 |
| **DUNU** | **Dundret** | **0.73** | **168** | *i* P | Pg | 00 34 16.9 | -0.1 |
| **MASU** | **Masugnsbyn** | **0.79** | **118** | P | Pg | 00 34 17.8 | -0.3 |
| **MASU** | **Masugnsbyn** | **0.79** | **118** | *i* P | Pg | 00 34 17.8 | -0.3 |
| **SALU** | **Saltoluokta** | **0.79** | **235** | P | Pg | 00 34 17.9 | -0.3 |
| **SALU** | **Saltoluokta** | **0.79** | **235** | *i* P | Pg | 00 34 17.9 | -0.3 |
| **KIF** | **Kilpisjarvi** | **1.19** | **11** | *e*PB | Pg | 00 34 26.1 | +0.2 |
| KIF | | | | MSG | | 00 34 41.2 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| KIF | | | | *e*S | Sg | 00 34 41.6 | +0.3 |
| **PAJU** | **Pajala** | **1.39** | **125** | P | Pg | 00 34 28.4 | -1.2 |
| **PAJU** | **Pajala** | **1.39** | **125** | *e*P | Pg | 00 34 28.3 | -1.4 |
| **ERTU** | **Ertsjaerv** | **1.51** | **148** | P | Pn | 00 34 30.7 | -0.5 |
| **ERTU** | **Ertsjaerv** | **1.51** | **148** | *e*P | Pn | 00 34 30.3 | -0.9 |
| **KLF** | **Kolari** | **1.57** | **111** | *e*PG | Pn | 00 34 31.7 | -0.4 |
| KLF | | | | *e*S | Sn | 00 34 49.1 | -4.0 |
| **HARU** | **Harads** | **1.71** | **169** | P | Pn | 00 34 34.2 | +0.3 |
| **HARU** | **Harads** | **1.71** | **169** | *e*P | Pn | 00 34 34.2 | +0.3 |
| **KALU** | **Kalix** | **2.35** | **146** | *e*PB | Pn | 00 34 43.8 | +1.1 |
| | baz=324 | | | | | | |
| **TOF** | **Tornio** | **2.40** | **135** | *e*PB | Pn | 00 34 44.8 | +1.3 |
| TOF | | | | MSG | | 00 35 13.5 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| **RNF** | **Rovaniemi** | **2.58** | **116** | *e*PB | Pn | 00 34 47.7 | +1.8 |
| | baz=305 | | | | | | |
| RNF | | | | *e*SG | Sb | 00 35 22.4 | +0.2 |
| **ARA0** | **ARCESS Array S** | **2.58** | **46** | *e*PB | Pn | 00 34 48.0 | +2.0 |
| | baz=226 | | | | | | |
| ARA0 | | | | *e*SB | Sb | 00 35 21.3 | -1.1 |

**UPP 10 00:34:20.6**±0.1, **67°.85N**×**20°.20E**, **h0**km, **ML2.3, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.12** | **26** | P | Pg | 00 34 23.0 | +0.2 |
| KUA | | | | S | Sg | 00 34 24.8 | +0.6 |
| **KOVU** | **Salmi** | **0.37** | **358** | P | Pg | 00 34 27.9 | +0.2 |
| KOVU | | | | S | Sg | 00 34 33.1 | +0.5 |
| **NIKU** | **Nikkaluokta** | **0.44** | **273** | P | Pg | 00 34 29.0 | -0.1 |
| NIKU | | | | S | Sg | 00 34 35.1 | +0.3 |
| **LANU** | **Lannavaara** | **0.70** | **73** | P | Pg | 00 34 33.8 | -0.2 |
| LANU | | | | S | Sg | 00 34 43.0 | -0.1 |
| **DUNU** | **Dundret** | **0.75** | **169** | P | Pg | 00 34 34.8 | -0.1 |
| **PAJU** | **Pajala** | **1.40** | **125** | P | Pn | 00 34 45.8 | -1.6 |
| **PAJU** | **Pajala** | **1.40** | **125** | *e*S | Pg | 00 34 45.6 | -1.7 |
| **ERTU** | **Ertsjaerv** | **1.52** | **148** | P | Pn | 00 34 48.2 | -0.7 |
| **ERTU** | **Ertsjaerv** | **1.52** | **148** | *e*S | Pn | 00 34 47.9 | -1.0 |

*IDC **10** 00:39:13.4±1.1, 8°.25N×127°.15E, h0km, mb3.7/8, mb1 3.7/8, mb1mx3.3/55, mbtmp3.7/8, MS4.5/1, Ms1 4.4/1, ms1mx3.1/78, Error ellipse: s-maj=32.9km s-min=18.5km az=91.0*

*MAN **10** 00:39:20.0, 8°.09N×127°.03E, h30km, mb4.7, ML3.6, MS3.5*

*NEIC **10** 00:39:20.4±2.0, 8°.2N±0°.1×126°.9E±0°.1, h37km±9km, mb4.2/10, Error ellipse: s-maj=21.4km s-min=15.6km az=100.0*

**ISC 10 00:39:20.0**±0.7, **8°.09N**±0°.05×**127°.16E**±0°.08, **h46**km, **n38, σ1°70/41, mb3.9/14, 6C-3D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **0.80** | **277** ⇓ | *e*P | **Pn** | **00 39 35.5** | **+0.6** |
| BIPH | | | | *e*S | **Sn** | **00 39 44.6** | **-1.2** |
| **MATI** | **Mati** | **1.45** | **218** ⇑ | *e*P | **Pn** | **00 39 41.7** | **-2.2** |
| **BUTP** | **Butuan** | **1.76** | **300** ⇑ | *e*P | **Pn** | **00 39 47.4** | **-0.7** |
| **DAV** | **Davao City (W)** | **1.87** | **237** | Pn | **Pn** | **00 39 49.2** | **-0.4** |
| | 77nm,0.3s,baz=264,slow=12,SNR=2.3 | | | | | | |
| DAV | | | | LR | LR | 00 40 08.7 | |
| | comp=Z,124nm,20.8s,baz=327,slow=28 | | | | | | |
| DAV | | | | Sn | **Sn** | **00 40 14.0** | **+2.0** |
| | 74nm,0.3s,baz=252,slow=21,SNR=25 | | | | | | |
| **DAV** | **Davao City (W)** | **1.87** | **237** | Pn | **Pn** | **00 39 47.5** | **-2.1** |
| **GLSP** | **General Luna,** | **1.97** | **329** ⇑ | *e*P | **Pn** | **00 39 49.6** | **-1.4** |
| **KCP** | **Kidapawan** | **2.32** | **243** ⇑ | *e*P | **Pn** | **00 39 54.6** | **-1.2** |
| KCP | | | | *i* S | **Sn** | **00 40 23.6** | **+0.4** |
| **DDMP** | **Don Marcelino,** | **2.44** | **216** ⇑ | *e*P | **Pn** | **00 39 57.3** | **-0.2** |
| **GSPH** | **General Santos** | **2.96** | **228** | *e*P | Pn | 00 40 15.8 | +11 |
| **CTBH** | **Cotabato--PC H** | **3.02** | **254** ⇓ | *e*P | **Pn** | **00 40 04.7** | **-0.6** |
| CTBH | | | | *i* S | **Sn** | **00 40 39.3** | **-1.0** |
| **MSLP** | **Maasin** | **3.05** | **312** ⇑ | *e*P | **Pn** | **00 40 05.7** | **-0.1** |
| **TBP** | **Tagbilaran** | **3.63** | **296** | *e*P | **Pn** | **00 40 13.7** | **-0.1** |
| TBP | | | | *i* S | **Sn** | **00 40 58.9** | **+3.5** |
| **PAGZ** | **Pagadian** | **3.75** | **267** ⇓ | *e*P | **Pn** | **00 40 15.8** | **+0.4** |
| **LLP** | **Lapu-Lapu** | **3.85** | **305** | *e*P | **Pn** | **00 40 19.9** | **+3.0** |
| LLP | | | | *e*S | Sn | 00 40 34.9 | -26 |
| **KNRA** | **Kununurra** | **23.67** | **176** | P | **P** | **00 44 30.3** | **+2.8** |
| **COEN** | **Coen** | **27.06** | **144** | P | **P** | **00 44 59.8** | **+1.3** |
| COEN | | | | IAmb | IAmb | 00 45 10.7 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **28.58** | **166** | P | **P** | **00 45 15.5** | **+3.5** |
| WB0 | | | | IAmb | IAmb | 00 45 20.9 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.74** | **166** | P | **P** | **00 45 13.3** | **-0.1** |
| | comp=Z,0.8nm,1.0s,baz=343,slow=9.8,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.24** | **168** | P | **P** | **00 45 45.2** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=6.6,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **32.24** | **168** | P | **P** | **00 45 43.0** | **-1.3** |
| **FORT** | **Forrest** | **38.66** | **179** | P | **P** | **00 46 40.7** | **+1.5** |
| **KLR** | **Kul'dur** | **41.18** | **5** | P | **P** | **00 47 00.1** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=182,slow=4.7,SNR=6.6 | | | | | | |
| **BBOO** | **Buckleboo** | **41.55** | **169** | P | **P** | **00 47 06.6** | **+3.4** |
| BBOO | | | | IAmb | IAmb | 00 47 21.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **42.07** | **162** | LR | LR | 01 10 26.0 | |
| | comp=Z,545nm,18.1s,baz=6.2,slow=44 | | | | | | |
| **STKA** | **Stephens Creek** | **42.07** | **162** | P | **P** | **00 47 08.0** | **+0.5** |
| **ULN** | **Ulaanbaatar** | **43.16** | **340** | P | **P** | **00 47 16.1** | **-0.3** |
| ULN | | | | IAmb | IAmb | 00 47 31.2 | |
| | comp=Z,4.6nm,1.5s | | | | | | |
| **SONM** | **Songino Array** | **43.36** | **340** | P | **P** | **00 47 14.4** | **-3.5** |
| | comp=Z,0.2nm,0.4s,baz=130,slow=4.5,SNR=2.0 | | | | | | |
| **MK31** | **Makanchi Array** | **54.29** | **323** | P | **P** | **00 48 40.9** | **-0.8** |
| **MKAR** | **Makanchi Array** | **54.29** | **323** | P | **P** | **00 48 39.8** | **-1.9** |
| | comp=Z,0.6nm,0.5s,baz=116,slow=7.0,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.29** | **323** | P | **P** | **00 48 41.3** | **-0.4** |
| **MAKZ** | **Makanchi** | **54.48** | **323** | P | **P** | **00 48 41.9** | **-1.1** |
| MAKZ | | | | IAmb | IAmb | 00 48 48.5 | |
| | comp=Z,4.8nm,1.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.95** | **332** | P | **P** | **00 48 58.7** | **-1.9** |
| | comp=Z,0.8nm,0.7s,baz=111,slow=8.2,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.95** | **332** | P | **P** | **00 48 59.2** | **-1.4** |
| **KURK** | **Kurchatov** | **58.35** | **326** | P | **P** | **00 49 09.9** | **-0.6** |
| KURK | | | | IAmb | IAmb | 00 49 23.9 | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.36** | **326** | P | **P** | **00 49 09.7** | **-0.8** |
| | comp=Z,1.0nm,0.6s,baz=125,slow=7.3,SNR=7.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **63.95** | **326** | P | **P** | **00 49 47.8**

74nm,0.3s,baz=235,slow=21,SNR=4.1
**SMY Shemya 1.70 86 Pn Pn 00 42 46.8 -1.3**
**PEA0B Petropavlovsk- 8.26 279 Pn Pn 00 44 18.2 0.0**
**PETK Petropavlovsk- 8.26 279 Pn Pn 00 44 19.4 +1.2**
0.4nm,0.3s,baz=85,slow=20,SNR=17
PETK Sn **Sn 00 45 46.8 -3.3**
0.4nm,0.3s,baz=90,slow=17,SNR=1.4
**PETK Petropavlovsk- 8.26 279 Pn Pn 00 44 17.9 -0.2**
**TTA Tatalina 20.00 46 Pn Pn 00 46 52.1 -0.1**
**L19K White Mountain 20.33 49 Pn Pn** 00 46 55.7 -0.4
L19K IAmb IAmb 00 47 01.0
comp=E,14nm,1.5s
**OHAK Old Harbor 20.69 63 P P 00 46 55.5 -2.3**
**K20K Telida 20.96 46 P P 00 46 59.7 -0.9**
**KDAK Kodiak Island 21.05 62 P P 00 46 59.4 -2.2**
comp=Z,13nm,1.1s,baz=67,slow=8.8,SNR=1.7
**KDAK Kodiak Island 21.05 62 P P 00 47 00.5 -1.1**
**PPLA Purkeypile 21.69 47 P P 00 47 10.5 +1.9**
PPLA IAmb IAmb 00 47 34.1
comp=Z,22nm,1.4s
**H21K Melozitna Rive 22.15 40 P P 00 47 16.0 +2.6**
**TRF Thorofare Moun 22.64 46 P P 00 47 16.9 -1.9**
TRF IAmb IAmb 00 47 43.1
comp=Z,12nm,1.4s
**BWN Browne 23.14 45 P P 00 47 23.5 -0.3**
**KNK Knik Glacier 23.23 52 P P 00 47 24.0 -0.8**
KNK IAmb IAmb 00 47 47.2
comp=Z,15nm,1.4s
**RND Reindeer 23.27 47 P P 00 47 25.9 +0.7**
RND IAmb IAmb 00 47 50.3
comp=Z,9.9nm,1.2s
**SML Sawmill 23.32 51 P P 00 47 25.8 +0.1**
SML IAmb IAmb 00 47 48.9
comp=Z,18nm,1.4s
**SCM Sheep Creek Mo 23.80 51 P P 00 47 29.6 -0.7**
SCM IAmb IAmb 00 47 51.0
comp=Z,20nm,1.3s
**MDM Murphy Dome 23.82 43 P P 00 47 28.1 -2.3**
MDM IAmb IAmb 00 47 51.8
comp=Z,11nm,1.0s
**DHY Denali Highway 23.89 48 P P 00 47 32.8 +1.6**
DHY IAmb IAmb 00 47 36.6
comp=Z,8.7nm,0.9s
**CCB Clear Creek Bu 23.93 44 P P 00 47 30.9 -0.6**
**H24K Noodor Dome 24.15 41 P P 00 47 31.5 -2.1**
H24K IAmb IAmb 00 47 52.5
comp=Z,15nm,1.4s
**IL31 24.34 44 P P 00 47 34.5 -0.7**
**ILAR Eielson Array 24.34 44 P P 00 47 33.5 -1.7**
comp=Z,0.7nm,0.6s,baz=252,slow=6.7,SNR=7.2
**ILAR Eielson Array 24.34 44 P P 00 47 32.9 -2.3**
**M24K Tolsona, Glenn 24.36 50 P P 00 47 34.4 -1.0**
**TOLK Toolik Lake Re 24.36 34 P P 00 47 33.5 -1.9**
TOLK IAmb IAmb 00 47 48.1
comp=Z,8.5nm,1.5s
**KLR Kul'dur 24.95 278 P P 00 47 42.4 +1.6**
comp=Z,1.1nm,0.6s,baz=58,slow=13,SNR=2.6
**GLB Gilahina Butte 25.46 52 P P 00 47 43.7 -1.8**
GLB IAmb IAmb 00 48 09.5
comp=Z,14nm,1.4s
**J26L Joseph Creek 25.73 45 P P 00 47 47.3 -0.5**
J26L IAmb IAmb 00 47 54.5
comp=Z,14nm,1.5s
**EGAK Eagle 26.78 45 P P 00 47 56.7 -0.6**
EGAK IAmb IAmb 00 48 00.3
comp=Z,9.7nm,1.2s
**H11N2 WAKE ISLAND Hy 33.03 188 T T** 01 24 16.0
baz=5.0,slow=76,SNR=136
**H11N3 WAKE ISLAND Hy 33.04 188 T T** 01 24 13.6
baz=5.0,slow=76,SNR=159
**H11N1 WAKE ISLAND Hy 33.05 188 T T** 01 24 14.0
baz=5.0,slow=76,SNR=165
**H11S1 WAKE ISLAND Hy 34.26 188 T T** 01 25 56.3
baz=5.0,slow=76,SNR=177
**H11S3 WAKE ISLAND Hy 34.27 188 T T** 01 25 57.5
baz=5.0,slow=76,SNR=131
**H11S2 WAKE ISLAND Hy 34.27 188 T T** 01 25 57.7
baz=5.0,slow=76,SNR=136
**YKA Yellowknife Ar 38.75 46 P P 00 49 41.1 -0.4**
comp=Z,0.2nm,0.4s,baz=289,slow=7.6,SNR=1.8
**SONM Songino Array 40.54 290 P P 00 49 57.7 +1.0**
comp=Z,0.2nm,0.6s,baz=53,slow=4.3,SNR=4.9
**SONM Songino Array 40.54 290 P P 00 49 57.6 +0.8**
**MKAR Makanchi Array 54.32 302 P P 00 51 42.6 -1.1**
comp=Z,0.1nm,0.4s,baz=58,slow=5.5,SNR=1.9
**BVAR Borovoye Array 55.80 314 P P 00 51 54.2 0.0**
comp=Z,0.3nm,0.5s,baz=49,slow=18,SNR=3.1
**ABKAR Akbulak array 63.03 317 P P 00 52 47.5 +3.4**
**TX31 Lajitas Ar. Si 64.36 75 P P 00 52 54.2 +0.8**
**TX32 Lajitas Array 64.36 75 P P 00 52 54.3 +1.0**
**TXAR Lajitas Array 64.36 75 P P 00 52 54.3 +1.0**
comp=Z,0.5nm,0.5s,baz=308,slow=4.7,SNR=7.7
**TXAR Lajitas Array 64.36 75 P P 00 52 54.1 +0.7**
**NOA NORSAR Array B 65.56 350 P P 00 53 00.3 -0.3**
comp=Z,0.7nm,0.9s,baz=358,slow=5.7,SNR=1.2

*KRNET **10** 00:44:58.9±0.1,40.°10N×78.°31E,mb3.3*
*SOME **10** 00:45:01.6,40.°20N×77.°82E,h5km*
*NNC **10** 00:45:03.1±0.8,40.°23N×77.°77E,h0km,mb3.8,mpv3.5,*
*Error ellipse: s-maj=5.0km s-min=4.2km az=167.0*
**ISC 10 00:45:03.3±2.3,40°23N±0.°10×78°10E±0.°06,h10km,n47,**
**σ2s 21/72,7C-14D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TARG** | **Taragay, Kyrgy** | **1.52** | **352** | ⇓*i*P | **Pb** | **00 45 29.7** | **-2.1** |
| | baz=47 | | | | | | |
| TARG | | | | ⇓*i*S | **Sg** | **00 45 52.3** | **+0.2** |
| | baz=47 | | | | | | |
| **KDJ** | **Kajisay** | **2.02** | **340** | ⇓*i*P | **Pb** | **00 45 37.8** | **-2.4** |
| | baz=38 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sb** | **00 46 06.0** | **+0.5** |
| | baz=38 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.27** | **6** | ⇓*i*P | **Pb** | **00 45 40.7** | **-3.7** |
| | baz=2.0 | | | | | | |
| PRZ | | | | ⇓*i*S | **Sb** | **00 46 11.1** | **-1.4** |
| | baz=2.0 | | | | | | |
| **ULHL** | **Ulahol** | **2.45** | **326** | ⇑*i*P | **Pn** | **00 45 44.0** | **+0.4** |
| | baz=25 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **00 46 17.1** | **-0.9** |
| | baz=25 | | | | | | |
| **ANVS** | **Anan'yevo** | **2.57** | **353** | ⇓*i*P | **Pn** | **00 45 45.2** | **0.0** |
| | baz=50 | | | | | | |
| ANVS | | | | ⇓*i*S | **Sb** | **00 46 18.9** | **-2.5** |
| | baz=50 | | | | | | |
| **SATY** | **Saty** | **2.84** | **5** | *e*P | **Pg** | **00 45 56.3** | **-1.3** |
| | 14nm,0.5s | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 46 35.6** | **+1.2** |
| | 24nm,0.8s | | | | | | |
| **SATY** | **Saty** | **2.84** | **5** | Pg | **Pg** | **00 45 56.3** | **-1.3** |
| | 14nm,0.5s | | | | | | |
| SATY | | | | Lg | Lg | 00 46 35.6 | |
| | 24nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.94** | **343** | *e*P | **Pb** | **00 45 56.0** | **+0.1** |
| | 19nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **00 46 35.2** | **+3.2** |
| | 8.4nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.94** | **343** | Pg | **Pb** | **00 45 56.0** | **+0.1** |
| | 19nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 00 46 35.2 | |
| | 8.4nm,0.6s | | | | | | |
| **ZHN** | **Zhinishke** | **2.95** | **5** | *e*P | **Pg** | **00 45 56.8** | **-2.9** |
| | 4.9nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **00 46 36.5** | **-1.4** |
| | 18nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.95** | **5** | Pg | **Pg** | **00 45 56.8** | **-2.9** |
| | 4.9nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 00 46 36.5 | |
| | 18nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **3.00** | **13** | *e*P | **Pg** | **00 45 58.7** | **-2.0** |
| | 4.9nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 46 39.7** | **+0.2** |
| | 10nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **3.00** | **13** | Pg | **Pg** | **00 45 58.7** | **-2.0** |
| | 4.9nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 00 46 39.7 | |
| | 10nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.04** | **345** | *e*P | **Pb** | **00 45 57.0** | **-0.5** |
| | 12nm,0.7s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **00 46 36.8** | **+2.1** |
| | 26nm,2.1s | | | | | | |
| **MDOK** | **Medeo** | **3.04** | **345** | Pg | **Pb** | **00 45 57.0** | **-0.5** |
| | 12nm,0.7s | | | | | | |
| MDOK | | | | Lg | Lg | 00 46 36.8 | |
| | 26nm,2.1s | | | | | | |
| **MDOK** | **Medeo** | **3.04** | **345** | Pg | **Pb** | **00 45 57.3** | **-0.2** |
| | 14nm,0.6s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 00 46 39.3 | |
| | 24nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.09** | **347** | *e*P | **Pg** | **00 45 59.7** | **-2.9** |
| | 11nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **00 46 41.4** | **-1.2** |
| | 24nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.09** | **347** | Pg | **Pg** | **00 45 59.7** | **-2.9** |
| | 11nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 00 46 41.4 | |
| | 24nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **3.10** | **19** | *e*P | **Pg** | **00 46 03.5** | **+0.9** |
| | 6.8nm,0.5s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **00 46 48.1** | **+5.3** |
| | 7.7nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **3.10** | **19** | Pg | **Pg** | **00 46 03.5** | **+0.9** |
| | 6.8nm,0.5s | | | | | | |
| SHLS | | | | Lg | Lg | 00 46 48.1 | |
| | 7.7nm,0.6s | | | | | | |
| **KNDC** | **Almaty** | **3.10** | **345** | ⇓Pg | **Pb** | **00 45 59.3** | **+0.7** |
| | 36nm,0.7s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 00 46 39.9 | |
| | 63nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **3.16** | **337** | *e*P | **Pb** | **00 45 59.9** | **+0.3** |
| | 19nm,0.9s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **00 46 41.7** | **+3.6** |
| | 14nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **3.16** | **337** | Pg | **Pb** | **00 45 59.9** | **+0.3** |
| | 19nm,0.9s | | | | | | |
| MTBS | | | | Lg | Lg | 00 46 41.7 | |
| | 14nm,0.3s | | | | | | |
| **KST** | **Kastek** | **3.23** | **331** | *e*P | **Pb** | **00 46 00.8** | **-0.1** |
| | 8.8nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sb** | **00 46 43.3** | **+2.9** |
| | 27nm,0.6s | | | | | | |
| **KST** | **Kastek** | **3.23** | **331** | Pg | **Pb** | **00 46 00.8** | **-0.1** |
| | 8.8nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 00 46 43.3 | |
| | 27nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.28** | **326** | ⇓Pg | **Pb** | **00 45 59.8** | **-1.9** |
| | 3.5nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 00 46 43.4 | |
| | 12nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.28** | **326** | ⇓*i*P | **Pn** | **00 45 55.5** | **+0.6** |
| | baz=25 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sn** | **00 46 36.9** | **+2.8** |
| | baz=25 | | | | | | |
| **DGS** | **Degeres** | **3.48** | **331** | *e*P | **Pb** | **00 46 04.4** | **-0.6** |
| | 4.4nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sb** | **00 46 49.5** | **+2.2** |
| | 16nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **3.48** | **331** | Pg | **Pb** | **00 46 04.4** | **-0.6** |
| | 4.4nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 00 46 49.5 | |
| | 16nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **3.62** | **313** | ⇑Pg | **Pb** | **00 46 05.5** | **-2.0** |
| | 7.1nm,1.1s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 00 46 51.3 | |
| | 10nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.62** | **313** | ⇓*i*P | **Pn** | **00 46 00.3** | **+0.7** |
| | baz=13 | | | | | | |
| AAK | | | | ⇓*i*S | **Sn** | **00 46 45.3** | **+2.8** |
| | baz=13 | | | | | | |
| **KTBS** | **Karatobe** | **3.64** | **344** | *e*P | **Pb** | **00 46 08.2** | **+0.5** |
| | 5.0nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **00 46 56.1** | **+4.2** |
| | 22nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **3.64** | **344** | Pg | **Pb** | **00 46 08.2** | **+0.5** |
| | 5.0nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 00 46 56.1 | |
| | 22nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **3.72** | **348** | *e*P | **Pg** | **00 46 10.4** | **-4.1** |
| | 5.2nm,0.4s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **00 46 59.9** | **-2.7** |
| | 14nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **3.72** | **348** | Pg | **Pg** | **00 46 10.4** | **-4.1** |
| | 5.2nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 00 46 59.9 | |
| | 14nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **3.88** | **4** | *e*P | **Pg** | **00 46 14.8** | **-2.8** |
| | 8.1nm,0.2s | | | | | | |
| BLB | | | | *e*S | **Sg** | **00 47 07.3** | **-0.4** |
| | 7.6nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **3.88** | **4** | Pg | **Pg** | **00 46 14.8** | **-2.8** |
| | 8.1nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 00 47 07.3 | |
| | 7.6nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **3.89** | **341** | *e*P | **Pb** | **00 46 12.6** | **+0.6** |
| | 5.8nm,0.9s | | | | | | |
| KUU | | | | *e*S | **Sb** | **00 47 03.6** | **+4.6** |
| | 8.1nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **3.89** | **341** | Pg | **Pb** | **00 46 12.6** | **+0.6** |
| | 5.8nm,0.9s | | | | | | |
| KUU | | | | Lg | Lg | 00 47 03.7 | |
| | 8.1nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.91** | **333** | *e*P | **Pb** | **00 46 12.2** | **0.0** |
| | 2.5nm,0.3s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **00 47 03.0** | **+3.4** |
| | 6.4nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.91** | **333** | Pg | **Pb** | **00 46 12.3** | **0.0** |
| | 2.5nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 00 47 03.0 | |
| | 6.4nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.99** | **357** | *e*P | **Pg** | **00 46 16.1** | **-3.6** |
| | 4.0nm,0.7s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **00 47 09.6** | **-1.7** |
| | 7.5nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **3.99** | **357** | Pg | **Pg** | **00 46 16.1** | **-3.6** |
| | 4.0nm,0.7s | | | | | | |
| ARXS | | | | Lg | Lg | 00 47 09.6 | |
| | 7.5nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **4.29** | **16** | *e*P | **Pg** | **00 46 22.8** | **-2.6** |
| | 1.7nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **00 47 21.2** | **+0.2** |
| | 4.0nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **4.29** | **16** | Pg | **Pg** | **00 46 22.8** | **-2.6** |
| | 1.7nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 00 47 21.2 | |
| | 4.0nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **4.44** | **306** | *e*P | **Pb** | **00 46 20.8** | **-0.5** |
| | 2.0nm,0.5s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **00 47 17.8** | **+2.8** |
| | 3.9nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **4.44** | **306** | Pg | **Pb** | **00 46 20.8** | **-0.5** |
| | 2.0nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 00 47 17.8 | |
| | 3.9nm,0.2s | | | | | | |

*IDC **10** 00:47:04.3±0.8,30.°60S×71.°65W,h0km,mb4.1/7,*
*mb1 4.3/11,mb1mx4.1/34,mbtmp4.1/11,ML3.7/3,Error*
*ellipse: s-maj=32.7km s-min=21.6km az=77.0*
*SJA **10** 00:47:04.6±0.6,30.°51S×71.°94W,h8km,ML4.5,MW4.1*
*GUC **10** 00:47:09.5±0.9,30.°65S×71.°50W,h30km±3km,ML4.7*
*NEIC **10** 00:47:09.3±2.0,30.°58S±0.°03×71.°67W±0.°06,h29km±5km,*
*mb5.0/12,ML4.7(GUC),Error ellipse: s-maj=7.8km*
*s-min=4.3km az=78.0*
**ISC 10 00:47:08.7±0.7,30.°58S±0.°02×71.°71W±0.°04,h32km±4km,**
**n109,σ2s 09/137,mb4.4/9,5C-1D,Near coast of central**
**Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.11** | **144** | *e*P | **Pn** | **00 47 14.2** | **-0.1** |
| CO06 | | | | *e*S | **Sn** | **00 47 17.9** | **+0.3** |
| CO06 | | | | IAML | | 00 47 18.8 | |
| | comp=E,175μm,0.2s | | | | | | |
| **CO06** | **Fray Jorge** | **0.11** | **144** | | **Pb** | **00 47 14.4** | **0.0** |
| **CO05** | **La Serena** | **0.78** | **32** | ⇑*e*P | **Pb** | **00 47 23.6** | **-0.2** |
| CO05 | | | | *i* S | **Sn** | **00 47 34.2** | **+0.2** |
| **CO05** | **La Serena** | **0.78** | **32** | Pn | **Pn** | **00 47 23.3** | **-0.1** |
| CO05 | | | | Sn | **Sb** | **00 47 33.9** | **-0.2** |
| **CO02** | **Combarbal** | **0.87** | **136** | *e*P | **Pn** | **00 47 22.1** | **-2.7** |
| CO02 | | | | *e*S | **Sn** | **00 47 32.6** | **-3.9** |
| CO02 | | | | IAML | | 00 47 44.4 | |
| | comp=N,94μm,0.1s | | | | | | |
| **CO02** | **Combarbal** | **0.87** | **136** | Pn | **Pn** | **00 47 24.6** | **-0.2** |
| CO02 | | | | Sn | **Sn** | **00 47 35.9** | **-0.5** |
| **GO04** | **Tololo Observa** | **0.89** | **63** | ⇑*e*P | **Pn** | **00 47 24.0** | **-1.2** |
| GO04 | | | | *e*S | **Sn** | **00 47 34.3** | **-2.8** |
| GO04 | | | | IAML | | 00 47 47.8 | |
| | comp=N,49μm,0.2s | | | | | | |
| **GO04** | **Tololo Observa** | **0.89** | **63** | Pn | **Pn** | **00 47 24.9** | **-0.2** |
| **GO04** | **Tololo Observa** | **0.89** | **63** | *e*P | **Pn** | **00 47 23.8** | **-1.4** |
| GO04 | | | | *e*P | **Pn** | **00 47 25.0** | **-0.2** |
| **CO03** | **El Pedregal** | **0.92** | **106** | *e*P | **Pn** | **00 47 23.3** | **-2.1** |
| CO03 | | | | *i* S | **Sn** | **00 47 33.2** | **-4.4** |
| **CO03** | **El Pedregal** | **0.92** | **106** | Pn | **Pn** | **00 47 25.5** | **0.0** |
| **CO03** | **El Pedregal** | **0.92** | **106** | *e*P | **Pn** | **00 47 25.6** | **+0.2** |
| CO03 | | | | IAML | | 00 47 47.3 | |
| | comp=Z,11μm,0.5s | | | | | | |
| **AROD** | **Rodeo** | **1.98** | **78** | *e*P | Pn | 00 47 30.1 | -10 |
| AROD | | | | *e*P | **Pb** | **00 47 43.9** | **-0.3** |
| AROD | | | | *e*S | **Sb** | **00 48 10.3** | **+1.7** |
| **VA06** | **Catapilco** | **2.00** | **170** | *e*P | **Pn** | **00 47 41.7** | **+1.4** |
| VA06 | | | | *e*S | **Sb** | **00 48 06.7** | **-2.3** |
| VA06 | | | | IAML | | 00 48 27.7 | |
| | comp=E,11μm,0.5s | | | | | | |
| **VA06** | **Catapilco** | **2.00** | **170** | Pn | **Pn** | **00 47 40.6** | **+0.3** |
| **ACDV** | **Cuesta del Vie** | **2.28** | **80** | *e*P | **Pn** | **00 47 43.8** | **-0.4** |
| ACDV | | | | *e*P | **Pb** | **00 47 49.2** | **0.0** |
| ACDV | | | | *e*P | **Pb** | **00 47 49.3** | **+0.1** |
| ACDV | | | | *e*S | Sb | 00 48 26.2 | +9.2 |
| ACDV | | | | IAML | | 00 48 28.1 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.28** | **91** | *e*P | **Pb** | **00 47 49.2** | **-0.2** |
| **VA03** | **San Esteban** | **2.39** | **156** | ⇓*e*P | **Pn** | **00 47 48.2** | **+2.6** |
| VA03 | | | | *e*S | **Sn** | **00 48 15.4** | **+1.4** |
| VA03 | | | | IAML | | 00 48 32.2 | |
| | comp=N,8μm,0.2s | | | | | | |
| **VA03** | **San Esteban** | **2.39** | **156** | *e*P | **Pb** | **00 47 48.4** | **-2.6** |
| VA03 | | | | *e*S | **Sn** | **00 48 15.3** | **+1.4** |
| VA03 | | | | IAML | | 00 48 34.7 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **2.43** | **179** | Pn | **Pn** | **00 47 46.2** | **0.0** |
| **AC04** | **Llanos de Chal** | **2.44** | **13** | IAML | | 00 48 40.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.44** | **13** | Pn | **Pn** | **00 47 46.5** | **+0.3** |
| **AC04** | **Llanos de Chal** | **2.44** | **13** | *e*P | **Pn** | **00 47 47.0** | **+0.7** |
| AC04 | | | | *e*P | **Pb** | **00 47 49.3** | **-2.5** |
| AC04 | | | | *e*S | **Sb** | **00 48 19.8** | **-1.6** |
| AC04 | | | | IAML | | 00 48 36.5 | |
| | comp=Z,1μm,1.1s | | | | | | |
| **ROCH** | **El Roble** | **2.45** | **166** | *e*P | **Pb** | **00 47 48.4** | **-3.9** |
| ROCH | | | | ⇑*e*P | **Pn** | **00 47 47.6** | **+0.9** |
| ROCH | | | | *e*S | **Sn** | **00 48 17.0** | **+1.3** |
| ROCH | | | | *e*S | **Sn** | **00 48 17.1** | **+1.3** |
| ROCH | | | | IAML | | 00 48 31.5 | |
| | comp=N,4μm,0.4s | | | | | | |
| ROCH | | | | IAML | | 00 48 35.6 | |
| | comp=N,7μm,0.7s | | | | | | |
| **ROC1** | **El Roble** | **2.46** | **166** | Pn | **Pn** | **00 47 46.3** | **-0.4** |
| **ROC1** | **El Roble** | **2.46** | **166** | *e*P | Pn | 00 47 35.2 | -12 |
| ROC1 | | | | *e*S | **Sb** | **00 48 23.3** | **+1.0** |
| **AUSP** | **Uspallata** | **2.57** | **130** | *e*P | **Pb** | **00 47 52.5** | **-1.8** |
| AUSP | | | | *e*S | **Sb** | **00 48 30.0** | **+4.4** |
| **PEL** | **Peldehue** | **2.70** | **161** | | **Pn** | **00 47 50.3** | **+0.4** |
| **PEL** | **Peldehue** | **2.70** | **161** | *e*P | **Pn** | **00 47 53.0** | **+3.1** |
| PEL | | | | *e*S | **Sb** | **00 48 28.8** | **-0.2** |
| **MT02** | **Curacav** | **2.71** | **170** | *e*P | **Pn** | **00 47 52.2** | **+2.2** |
| MT02 | | | | *e*S | **Sn** | **00 48 23.7** | **+1.9** |
| **MT02** | **Curacav** | **2.71** | **170** | Pn | **Pn** | **00 47 51.5** | **+1.5** |
| **MT02** | **Curacav** | **2.71** | **170** | *e*P | **Pn** | **00 47 52.5** | **+2.5** |
| MT02 | | | | *e*S | **Sn** | **00 48 17.8** | **-4.0** |
| MT02 | | | | IAML | | 00 48 42.8 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **ZON** | **Zonda** | **2.77** | **111** | *e*P | **Pn** | **00 47 54.0** | **+3.1** |
| ZON | | | | *e*S | Sb | 00 48 45.9 | +15 |
| ZON | | | | IAML | | 00 48 50.3 | |
| | comp=Z,724nm,0.6s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.88** | **106** | *e*P | **Pb** | **00 47 56.0** | **-3.4** |
| RTLL | | | | *e*S | **Sb** | **00 48 34.8** | **+0.6** |
| **MT05** | **Renca** | **2.92** | **164** | ⇑*e*P | **Pn** | **00 47 54.7** | **+1.8** |
| MT05 | | | | *e*S | **Sn** | **00 48 28.4** | **+1.5** |
| **MT05** | **Renca** | **2.92** | **164** | Pn | **Pn** | **00 47 54.0** | **+1.1** |
| **MT05** | **Renca** | **2.92** | **164** | *e*P | **Pn** | **00 47 55.2** | **+2.3** |
| MT05 | | | | *e*S | **Sb** | **00 48 35.3** | **-0.1** |
| MT05 | | | | IAML | | 00 48 51.1 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.00** | **116** | *e*P | **Pb** | **00 47 59.2** | **-2.2** |
| RTCV | | | | *e*S | Sb | 00 48 51.3 | +14 |
| **VA05** | **Santo Domingo** | **3.06** | **179** | IAML | | 00 48 55.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **3.06** | **179** | Pn | **Pn** | **00 47 55.0** | **+0.1** |
| **ASAL** | **Salagasta** | **3.17** | **130** | *e*P | Pn | 00 47 48.8 | -7.6 |
| ASAL | | | | *e*P | Pb | 00 47 49.4 | -15 |
| ASAL | | | | *e*S | **Sb** | **00 48 43.3** | **+0.8** |
| **MT09** | **Talagante** | **3.24** | **169** | Pn | **Pn** | **00 47 58.4** | **+0.9** |
| **GO03** | **Copiap** | **3.25** | **24** | Pn | **Pn** | **00 47 58.5** | **+1.0** |
| **GO03** | **Copiap** | **3.25** | **24** | *e*P | **Pn** | **00 47 59.1** | **+1.6** |
| GO03 | | | | *e*S | **Sb** | **00 48 43.8** | **-1.0** |
| **ARCO** | **CERRO ARCO** | **3.27** | **134** | *e*P | Pn | 00 47 51.0 | -6.8 |
| ARCO | | | | *e*S | **Sb** | **00 48 48.8** | **+3.3** |
| ARCO | | | | IAML | | 00 49 02.3 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **MT01** | **Popeta** | **3.29** | **173** | Pn | **Pn** | **00 47 59.6** | **+1.6** |
| **MT01** | **Popeta** | **3.29** | **173** | *e*P | **Pn** | **00 48 00.8** | **+2.7** |
| MT01 | | | | *e*S | **Sb** | **00 48 44.8** | **-1.3** |
| MT01 | | | | IAML | | 00 48 55.5 | |
| | comp=Z,922nm,0.8s | | | | | | |
| **LMEL** | **Las Melosas** | **3.50** | **159** | | **Pn** | **00 48 02.0** | **+1.1** |
| **AAGR** | **Agrelo** | **3.50** | **136** | *e*P | **Pb** | **00 48 06.2** | **-3.7** |
| **BO04** | **La Punta** | **3.52** | **165** | Pn | **Pn** | **00 48 01.9** | **+0.7** |
| **VCA** | **Vinchina** | **3.56** | **60** | *e*P | **Pb** | **00 48 07.5** | **-3.6** |
| VCA | | | | *e*S | **Sb** | **00 49 01.8** | **+7.8** |
| VCA | | | | IAML | | 00 49 11.7 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **BO01** | **Tunca** | **3.83** | **172** | *e*P | **Pn** | **00 48 08.5** | **+3.1** |
| BO01 | | | | *e*S | **Sb** | **00 49 00.3** | **-1.3** |
| BO01 | | | | IAML | | 00 49 16.5 | |
| | comp=Z,564nm,0.6s | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.27** | **170** | Pn | **Pn** | **00 48 12.4** | **+0.9** |
| **BO02** | **Sierra Bellavi** | **4.27** | **170** | *e*P | **Pn** | **00 48 15.3** | **+3.8** |
| BO02 | | | | *e*S | **Sb** | **00 49 12.3** | **-1.9** |
| BO02 | | | | IAML | | 00 49 24.9 | |
| | comp=Z,936nm,0.5s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.29** | **76** | *e*P | **Pn** | **00 48 15.7** | **+3.8** |
| ACLC | | | | *e*S | **Sb** | **00 49 09.3** | **-5.5** |
| ACLC | | | | IAML | | 00 49 24.9 | |
| | comp=Z,893nm,0.9s | | | | | | |
| **AC02** | **Maricunga** | **4.37** | **32** | Pn | **Pn** | **00 48 14.9** | **+1.6** |
| **GO05** | **Huala** | **4.42** | **182** | Pn | **Pn** | **00 48 12.5** | **-1.0** |
| **APLL** | **PUNTA DE LOS L** | **4.48** | **89** | *e*P | **Pn** | **00 48 18.0** | **+3.7** |
| APLL | | | | *e*S | Sb | 00 49 32.7 | +13 |
| **RFA** | **San Rafael** | **4.99** | **148** | *e*P | **Pn** | **00 48 19.8** | **-1.6** |
| RFA | | | | *e*P | Pb | 00 48 25.0 | -10 |
| **MRA** | **San Martin** | **5.43** | **111** | *e*P | **Pn** | **00 48 30.1** | **+2.5** |
| MRA | | | | *e*S | **Sn** | **00 49 30.3** | **+1.2** |
| **FSA** | **Cafayete** | **6.73** | **50** | *e*P | **Pn** | **00 48 48.9** | **+3.4** |
| FSA | | | | *e*S | **Sb** | **00 50 26.4** | **+1.2** |
| **H03N1** | **Juan Fernandez** | **6.75** | **243** | T | T | 00 55 42.5 | |
| | baz=73,slow=72,SNR=241 | | | | | | |
| **AHML** | **Horco Molle** | **6.76** | **58** | *e*P | **Pn** | **00 48 49.3** | **+3.6** |
| AHML | | | | *e*S | **Sb** | **00 50 17.1** | **-8.6** |
| **H03N3** | **Juan Fernandez** | **6.76** | **243** | T | T | 00 55 39.7 | |
| | baz=73,slow=72,SNR=265 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.76** | **243** | T | T | 00 55 41.0 | |
| | baz=73,slow=72,SNR=310 | | | | | | |
| **LC01** | **Cunco** | **8.29** | **181** | Pn | **Pn** | **00 49 06.6** | **-0.1** |
| **LVC** | **Limon Verde** | **8.33** | **18** | Pn | **Pn** | **00 49 05.6** | **-1.9**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| QSPA | **South Pole Qui** | **59.64** | **180** | P | | **P** | | **00 57 11.3** | **+1.8** |
| QSPA | | | | IAmb | | IAmb | | 00 57 19.1 | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.91** | **330** | P | | **P** | | **00 57 59.7** | **+1.8** |
| | comp=Z,0.7nm,0.8s,baz=157,slow=3.5,SNR=4.5 | | | | | | | | |
| **SYO** | **Syowa Base** | **68.94** | **159** | ⇓ | *eP* | **P** | | **00 58 09.2** | **-0.9** |
| **DBIC** | **Dimbokro** | **73.84** | **72** | P | | **P** | | **00 58 41.2** | **+0.6** |
| | comp=Z,4.6nm,0.8s,baz=229,slow=5.1,SNR=4.8 | | | | | | | | |
| **DBIC** | **Dimbokro** | **73.84** | **72** | P | | **P** | | **00 58 41.1** | **+0.5** |
| DBIC | | | | IAmb | | IAmb | | 00 59 02.2 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **SUR** | **Sutherland** | **76.25** | **120** | P | | **P** | | **00 58 55.6** | **+1.1** |
| **PDAR** | **Pinedale Array** | **80.85** | **333** | P | | **P** | | **00 59 19.7** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=127,slow=11,SNR=1.7 | | | | | | | | |
| **BOSA** | **Boshof** | **81.42** | **118** | P | | **P** | | **00 59 23.2** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=211,slow=5.6,SNR=3.2 | | | | | | | | |
| **BOSA** | **Boshof** | **81.42** | **118** | P | | **P** | | **00 59 23.4** | **+0.5** |
| **TORD** | **Torodi Ar. Bea** | **82.79** | **70** | P | | **P** | | **00 59 30.1** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=280,slow=5.2,SNR=10.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.79** | **70** | P | | **P** | | **00 59 29.6** | **-0.4** |
| TORD | | | | IAmb | | IAmb | | 00 59 51.9 | |
| | comp=Z,7.1nm,1.1s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.92** | **341** | P | | Pdif | | 01 00 45.4 | +0.3 |
| | comp=Z,0.2nm,0.6s,baz=141,slow=4.3,SNR=1.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.86** | **210** | PKP | | **PKPdf** | | **01 06 03.6** | **-0.5** |
| | comp=Z,2.6nm,1.2s,baz=144,slow=1.5,SNR=6.1 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.03** | **271** | T | | T | | 03 24 56.6 | |
| | baz=115,slow=75,SNR=31 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.04** | **271** | T | | T | | 03 24 57.4 | |
| | baz=115,slow=75,SNR=33 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.05** | **271** | T | | T | | 03 24 58.6 | |
| | baz=115,slow=75,SNR=36 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.13** | **39** | PKPbc | | **PKiKP** | | **01 06 56.5** | **-0.1** |
| | comp=Z,2.1nm,0.8s,baz=299,slow=3.2,SNR=14 | | | | | | | | |
| **KURK** | **Kurchatov** | **150.13** | **39** | | | **PKPbc** | | **01 06 53.6** | **-2.2** |
| **AAK** | **Ala-Archa** | **150.52** | **57** | PKPbc | | **PKPbc** | | **01 06 54.9** | **-2.4** |
| **ZAA0** | **Zalesovo Array** | **151.16** | **29** | | | **PKiKP** | | **01 06 58.8** | **+0.1** |
| ZAA0 | | | | PKPab | | **sPKPdf** | | **01 07 06.2** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **151.16** | **29** | PKPbc | | **PKiKP** | | **01 06 59.0** | **+0.3** |
| | comp=Z,11nm,0.9s,baz=304,slow=3.1,SNR=31 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.16** | **29** | | | **PKiKP** | | **01 06 58.9** | **+0.3** |
| ZALV | | | | PKPab | | **sPKPdf** | | **01 07 06.2** | **-0.2** |
| **MKAR** | **Makanchi Array** | **154.21** | **44** | PKPbc | | **PKiKP** | | **01 07 05.9** | **+0.6** |
| | comp=Z,0.8nm,0.9s,baz=322,slow=2.4,SNR=4.6 | | | | | | | | |
| **SONM** | **Songino Array** | **162.71** | **4** | PKPab | | **PKPab** | | **01 07 57.0** | **+1.1** |
| | comp=Z,0.7nm,0.9s,baz=333,slow=3.3,SNR=2.9 | | | | | | | | |
| **PZH** | **PanZhiHua** | **172.95** | **124** | PKP | | **PKPdf** | | **01 07 14.8** | **-0.3** |
| **CD2** | **Chengdu** | **176.09** | **84** | PKP | | **PKPdf** | | **01 07 15.4** | **-0.5** |

*IDC **10** 00:49:16.8±2.0,8°.95S×112°.96E, h0km, mb4.0/7, mb1 4.1/8, mb1mx3.6/52, mbtmp4.0/8, ML3.7/1, MS4.3/2, Ms1 4.3/2, ms1mx3.8/75, Error ellipse: s-maj=123.7km s-min=17.5km az=52.0*
*DJA **10** 00:49:24.9±1.4, 9°.5S×3°.3×11°.3E±°, h22km±14km, M4.3/18, mb4.6/2, MLv4.2/18*
*NEIC **10** 00:49:25.3±2.4, 9°.09S±0°.06×113°.09E±0°.06, h69km±9km, mb4.3/6, Error ellipse: s-maj=10.3km s-min=6.7km az=214.0*
**ISC 10 00:49:24.8**±0.6,**9°.13S**±0°.06×**113°.03E**±0°.05,**h63**km,**n47,** σ1**844/47**,**mb4.2/9**,**South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GMJI** | **Gumukmas** | **0.94** | **26** | P | | **Pn** | **00 49 42.4** | **+0.1** |
| GMJI | | | | S | | **Sn** | **00 49 54.8** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.29** | **60** | P | | **Pn** | **00 49 47.3** | **+0.5** |
| JAGI | | | | S | | **Sn** | **00 50 03.1** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.29** | **60** | Pn | | **Pn** | **00 49 47.4** | **+0.6** |
| JAGI | | | | Sn | | **Sn** | **00 50 02.6** | **-0.6** |
| **BLJI** | **Banyuglugur** | **1.48** | **22** | P | | **Pn** | **00 49 50.9** | **+1.5** |
| BLJI | | | | S | | **Sn** | **00 50 09.5** | **+1.7** |
| **PWJI** | **Pagerwojo** | **1.64** | **312** | P | | **Pn** | **00 49 52.1** | **+0.7** |
| **ABJI** | **Asem Bagus** | **1.78** | **42** | P | | **Pn** | **00 49 55.6** | **+2.2** |
| **PCJI** | **Pacitan** | **2.05** | **297** | P | | **Pn** | **00 49 58.5** | **+1.4** |
| **IGBI** | **Denpasar** | **2.11** | **82** | P | | **Pn** | **00 49 58.7** | **+0.8** |
| **KMMI** | **Kalianget** | **2.26** | **24** | P | | **Pn** | **00 50 00.6** | **+0.7** |
| **GRJI** | **Gresik** | **2.27** | **346** | P | | **Pn** | **00 50 01.4** | **+1.4** |
| **SRBI** | **Singaraja** | **2.39** | **65** | P | | **Pn** | **00 50 03.1** | **+1.4** |
| **TBJI** | **Tambak Boyo** | **2.58** | **333** | P | | **Pn** | **00 50 05.5** | **+1.3** |
| **UGM** | **Wanagama** | **2.76** | **296** | P | | **Pn** | **00 50 08.6** | **+1.9** |
| **UGM** | **Wanagama** | **2.76** | **296** | Pn | | **Pn** | **00 50 08.4** | **+1.7** |
| **SMRI** | **Semarang** | **3.29** | **309** | P | | **Pn** | **00 50 15.5** | **+1.5** |
| **SMRI** | **Semarang** | **3.29** | **309** | Pn | | **Pn** | **00 50 16.6** | **+2.6** |
| **KPJI** | **Karang Pucung** | **4.43** | **293** | P | | **Pn** | **00 50 31.2** | **+1.6** |
| **CMJI** | **Cimerak** | **4.73** | **286** | P | | **Pn** | **00 50 35.1** | **+1.5** |
| **LEM** | **Lembang** | **5.83** | **293** | LR | | LR | 00 52 57.6 | |
| | comp=Z,3μm,18.7s,baz=309,slow=39 | | | | | | | |
| **CNJI** | **Cibinong** | **6.11** | **287** | P | | **Pn** | **00 50 54.9** | **+2.3** |
| | 0.4nm63nm,1.3s | | | | | | | |
| **XMIS** | **Christmas Isla** | **7.40** | **259** | Pn | | **Pn** | **00 51 09.7** | **-0.5** |
| **PMBI** | **Palembang** | **10.26** | **306** | Pn | | **Pn** | **00 51 50.3** | **+0.8** |
| **BATI** | **Baumata** | **10.54** | **97** | LR | | LR | 00 56 38.4 | |
| | comp=Z,2μm,21.8s,baz=256,slow=42 | | | | | | | |
| **SOEI** | **Soe** | **11.10** | **94** | Pn | | **Pn** | **00 52 03.4** | **+2.4** |
| **GIRL** | **Giralia** | **13.49** | **175** | Pn | | **Pn** | **00 52 32.1** | **-1.3** |
| **MBWA** | **Marble Bar** | **13.59** | **152** | Pn | | **Pn** | **00 52 32.5** | **-2.3** |
| **PSA00** | **Pilbara Seismi** | **14.01** | **153** | Pn | | **Pn** | **00 52 39.4** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **15.15** | **127** | Pn | | **Pn** | **00 52 54.7** | **-0.4** |
| | 0.2nm,0.3s,baz=300,slow=9.0,SNR=2.2 | | | | | | | |
| **KNRA** | **Kununurra** | **16.68** | **115** | | | **P** | **00 53 14.8** | **-1.2** |
| KNRA | | | | IAmb | | IAmb | 00 53 39.6 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.23** | **120** | P | | **P** | **00 54 26.4** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=296,slow=11,SNR=2.8 | | | | | | | |
| **AS31** | **Alice Springs** | **24.64** | **128** | P | | **P** | **00 54 40.9** | **+1.2** |
| **ASAR** | **Alice Springs** | **24.64** | **128** | P | | **P** | **00 54 40.9** | **+1.1** |
| | comp=Z,1.0nm,0.4s,baz=304,slow=9.0,SNR=10 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **00 58 17.4** | **+1.3** |
| | comp=Z,0.7nm,0.5s,baz=310,slow=1.8,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.64** | **128** | P | | **P** | **00 54 41.5** | **+1.7** |
| **STKA** | **Stephens Creek** | **34.84** | **135** | P | | **P** | **00 56 11.6** | **+1.6** |
| | comp=Z,1.3nm,0.3s,baz=315,slow=9.8,SNR=4.3 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.84** | **135** | P | | **P** | **00 56 11.5** | **+1.4** |
| STKA | | | | IAmb | | IAmb | 00 56 32.8 | |
| | comp=Z,1.6nm,1.2s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **40.12** | **269** | T | | T | 01 39 44.6 | |
| | baz=96 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **40.13** | **269** | T | | T | 01 39 47.5 | |
| | baz=96 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **40.14** | **269** | T | | T | 01 39 46.0 | |
| | baz=96 | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **51.22** | **26** | P | | **P** | **00 58 19.1** | **-3.1** |
| MJB9 | | | | IAmb | | IAmb | 00 58 27.3 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **57.02** | **355** | P | | **P** | **00 59 03.9** | **-0.4** |
| | comp=Z,1.8nm,0.8s,baz=178,slow=8.3,SNR=5.1 | | | | | | | |
| **MK31** | **Makanchi Array** | **62.05** | **337** | P | | **P** | **00 59 37.4** | **-1.4** |
| **MKAR** | **Makanchi Array** | **62.05** | **337** | P | | **P** | **00 59 37.9** | **-0.9** |
| | comp=Z,1.0nm,0.5s,baz=146,slow=7.5,SNR=12 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.62** | **337** | P | | **P** | **01 00 07.4** | **-1.1** |
| | comp=Z,1.0nm,0.9s,baz=152,slow=6.1,SNR=1.7 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.22** | **342** | P | | **P** | **01 00 12.0** | **-0.2** |
| ZAA0 | | | | IAmb | | IAmb | 01 00 39.3 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.22** | **342** | P | | **P** | **01 00 11.1** | **-1.2** |
| | comp=Z,1.2nm,0.5s,baz=140,slow=5.2,SNR=6.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.22** | **342** | P | | **P** | **01 00 10.9** | **-1.4** |
| **ABKAR** | **Akbulak array** | **74.36** | **327** | P | | **P** | **01 00 55.0** | **-0.8** |

*IDC **10** 00:52:52.2±0.7, 30°.67S×71°.70W, h0km, mb4.3/7, mb1 4.4/12, mb1mx4.2/27, mbtmp4.2/12, ML4.0/5, Error ellipse: s-maj=23.5km s-min=19.6km az=124.0*
*SJA **10** 00:52:54.8±0.9, 30°.64S×71°.76W, h18km±3km, ML4.5, MW4.3*
*GUC **10** 00:52:57.4±0.9, 30°.66S×71°.55W, h30km±5km, ML4.8*
*NEIC **10** 00:52:58.2±1.8, 30°.66S±0°.03×71°.58W±0°.08, h30km±4km, mb4.8/20, ML4.7(GUC), Error ellipse: s-maj=10.4km s-min=4.0km az=84.0*
**ISC 10 00:52:56.5**±1.0,**30°.64S**±0°.02×**71°.80W**±0°.04,**h27**km±6km, **n139,** σ1**988**/174,**mb4.7**/11,**2C-5D**,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.15** | **103** | ⇑ | *iP* | **Pn** | **00 53 03.2** | **+0.2** |
| CO06 | | | | *eS* | | **Sb** | **00 53 06.7** | **+1.2** |
| CO06 | | | | IAML | | | 00 53 07.4 | |
| | comp=N,196μm,0.1s | | | | | | | |
| **CO06** | **Fray Jorge** | **0.15** | **103** | | | **Pn** | **00 53 03.3** | **+0.2** |
| CO06 | | | | Sg | | **Sb** | **00 53 07.0** | **+1.6** |
| **CO05** | **La Serena** | **0.87** | **34** | *eP* | | **Pn** | **00 53 12.6** | **-0.4** |
| CO05 | | | | *eS* | | **Sb** | **00 53 24.0** | **-0.2** |
| **CO05** | **La Serena** | **0.87** | **34** | | | **Pn** | **00 53 12.6** | **-0.4** |
| CO05 | | | | | | **Sn** | **00 53 24.4** | **-0.4** |
| **CO02** | **Combarbal** | **0.89** | **129** | *eP* | | **Pn** | **00 53 12.2** | **-1.3** |
| CO02 | | | | *eS* | | **Sb** | **00 53 22.7** | **-2.3** |
| CO02 | | | | IAML | | | 00 53 24.8 | |
| | comp=N,54μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **0.89** | **129** | | | **Pn** | **00 53 12.1** | **-1.3** |
| CO02 | | | | | | **Sb** | **00 53 23.1** | **-1.9** |
| **CO02** | **Combarbal** | **0.89** | **129** | *eP* | | **Pn** | **00 53 12.0** | **-1.4** |
| CO02 | | | | *eS* | | **Sb** | **00 53 23.7** | **-1.3** |
| CO02 | | | | IAML | | | 00 53 27.1 | |
| | comp=Z,15μm,0.5s | | | | | | | |
| **CO03** | **El Pedregal** | **0.98** | **102** | ⇓ | *iP* | **Pn** | **00 53 13.1** | **-1.5** |
| **CO03** | **El Pedregal** | **0.98** | **102** | | | **Pn** | **00 53 13.1** | **-1.5** |
| CO03 | | | | | Sn | **Sn** | **00 53 24.4** | **-3.2** |
| **CO03** | **El Pedregal** | **0.98** | **102** | *eP* | | **Pn** | **00 53 13.1** | **-1.5** |
| CO03 | | | | *eS* | | **Sn** | **00 53 25.2** | **-2.4** |
| CO03 | | | | IAML | | | 00 53 27.7 | |
| | comp=Z,8μm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.99** | **62** | ⇓ | *iP* | **Pn** | **00 53 14.1** | **-0.8** |
| GO04 | | | | *eS* | | **Sb** | **00 53 26.4** | **-1.4** |
| **GO04** | **Tololo Observa** | **0.99** | **62** | | | **Pn** | **00 53 14.1** | **-0.8** |
| **GO04** | **Tololo Observa** | **0.99** | **62** | *eP* | | **Pn** | **00 53 14.0** | **-0.8** |
| GO04 | | | | *eS* | | **Sb** | **00 53 26.9** | **-0.9** |
| **LCO** | **Las Campanas** | **1.89** | **31** | | | **Pn** | **00 53 27.9** | **+0.7** |
| **VA06** | **Catapilco** | **1.96** | **167** | *eP* | | **Pn** | **00 53 28.6** | **+0.6** |
| VA06 | | | | *eS* | | **Sn** | **00 53 52.3** | **+0.6** |
| VA06 | | | | IAML | | | 00 54 01.2 | |
| | comp=N,11μm,0.5s | | | | | | | |
| **VA06** | **Catapilco** | **1.96** | **167** | | | **Pn** | **00 53 28.3** | **+0.3** |
| **AROD** | **Rodeo** | **2.07** | **77** | *eP* | | **Pn** | **00 53 31.0** | **+1.2** |
| AROD | | | | *eS* | | **Sb** | **00 53 57.9** | **-1.1** |
| **ACCO** | **Cerro Coronel** | **2.36** | **89** | *eP* | | **Pn** | **00 53 36.0** | **+2.2** |
| ACCO | | | | *eS* | | **Sb** | **00 54 06.9** | **-0.5** |
| **ACDV** | **Cuesta del Vie** | **2.37** | **79** | *eP* | | **Pn** | **00 53 35.3** | **+1.6** |
| ACDV | | | | *eP* | | **Pb** | **00 53 37.0** | **-1.5** |
| ACDV | | | | *eS* | | **Sn** | **00 54 04.3** | **+2.4** |
| ACDV | | | | IAML | | | 00 54 10.0 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **VA03** | **San Esteban** | **2.37** | **154** | *eP* | | **Pn** | **00 53 35.1** | **+1.4** |
| VA03 | | | | IAML | | | 00 54 17.0 | |
| | comp=E,7μm,0.6s | | | | | | | |
| **VA03** | **San Esteban** | **2.37** | **154** | | | **Pn** | **00 53 35.1** | **+1.4** |
| **VA03** | **San Esteban** | **2.37** | **154** | *eP* | | **Pn** | **00 53 35.6** | **+1.9** |
| VA03 | | | | *eP* | | **Pn** | **00 53 36.0** | **+2.3** |
| VA03 | | | | *eS* | | **Sb** | **00 54 07.2** | **-0.2** |
| VA03 | | | | IAML | | | 00 54 12.4 | |
| | comp=Z,3μm,0.8s | | | | | | | |
| **VA01** | **Torpederas** | **2.38** | **177** | | | **Pn** | **00 53 33.8** | **+0.1** |
| **VA01** | **Torpederas** | **2.38** | **177** | *eP* | | **Pn** | **00 53 35.0** | **+1.3** |
| VA01 | | | | *eS* | | **Sb** | **00 54 11.5** | **+4.0** |
| **ROCH** | **El Roble** | **2.42** | **164** | ⇓ | *eP* | **Pn** | **00 53 35.4** | **+0.8** |
| ROCH | | | | *eP* | | **Pn** | **00 53 34.1** | **-0.5** |
| ROCH | | | | IAML | | | 00 54 13.0 | |
| | comp=N,5μm,0.5s | | | | | | | |
| ROCH | | | | IAML | | | 00 54 13.9 | |
| | comp=E,6μm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **2.42** | **164** | Pn | | **Pn** | **00 53 34.2** | **-0.4** |
| **ROC1** | **El Roble** | **2.42** | **164** | *eP* | | **Pn** | **00 53 34.0** | **-0.6** |
| ROC1 | | | | *eS* | | **Sb** | **00 54 08.0** | **-1.1** |
| **AC04** | **Llanos de Chal** | **2.51** | **15** | *eP* | | **Pn** | **00 53 36.1** | **+0.6** |
| **AC04** | **Llanos de Chal** | **2.51** | **15** | Pn | | **Pn** | **00 53 35.9** | **+0.3** |
| **AC04** | **Llanos de Chal** | **2.51** | **15** | *eP* | | **Pn** | **00 53 36.0** | **+0.4** |
| AC04 | | | | *eS* | | **Sn** | **00 54 07.3** | **+2.0** |
| AC04 | | | | IAML | | | 00 54 20.7 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **AUSP** | **Uspallata** | **2.60** | **128** | *eP* | | **Pn** | **00 53 34.3** | **-2.7** |
| AUSP | | | | *eP* | | **Pn** | **00 53 39.9** | **+2.9** |
| AUSP | | | | *eS* | | **Sn** | **00 54 06.8** | **-1.1** |
| **PEL** | **Peldehue** | **2.67** | **159** | | | **Pn** | **00 53 39.2** | **+1.4** |
| **MT02** | **Curacav** | **2.67** | **168** | *eP* | | **Pn** | **00 53 38.4** | **+0.7** |
| **MT02** | **Curacav** | **2.67** | **168** | Pn | | **Pn** | **00 53 37.9** | **+0.1** |
| **MT02** | **Curacav** | **2.67** | **168** | *eP* | | **Pn** | **00 53 35.3** | **-2.4** |
| MT02 | | | | *eP* | | **Pn** | **00 53 38.6** | **+0.8** |
| MT02 | | | | *eS* | | **Sn** | **00 54 10.8** | **+1.6** |
| MT02 | | | | IAML | | | 00 54 21.5 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **ZON** | **Zonda** | **2.83** | **109** | *eP* | | **Pn** | **00 53 42.0** | **+2.0** |
| ZON | | | | *eS* | | **Sb** | **00 54 22.3** | **+1.8** |
| ZON | | | | IAML | | | 00 54 32.1 | |
| | comp=Z,872nm,0.6s | | | | | | | |
| **MT05** | **Renca** | **2.89** | **162** | ⇓ | *eP* | **Pn** | **00 53 41.9** | **+1.0** |
| MT05 | | | | IAML | | | 00 54 32.5 | |
| | comp=E,5μm,0.1s | | | | | | | |
| **MT05** | **Renca** | **2.89** | **162** | Pn | | **Pn** | **00 53 41.2** | **+0.4** |
| **MT05** | **Renca** | **2.89** | **162** | *eP* | | **Pn** | **00 53 42.3** | **+1.5** |
| MT05 | | | | *eS* | | **Sn** | **00 54 17.3** | **+2.6** |
| MT05 | | | | IAML | | | 00 54 29.5 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.94** | **104** | *eP* | | **Pn** | **00 53 43.3** | **+1.8** |
| RTLL | | | | *eS* | | **Sn** | **00 54 16.8** | **+0.9** |
| **VA05** | **Santo Domingo** | **3.01** | **177** | *eP* | | **Pn** | **00 53 42.1** | **-0.3** |
| VA05 | | | | IAML | | | 00 54 37.0 | |
| | comp=E,4μm,0.4s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.01** | **177** | Pn | | **Pn** | **00 53 42.3** | **-0.1** |
| **RTCV** | **Cerro Valdivia** | **3.05** | **114** | *eP* | | **Pn** | **00 53 46.0** | **+3.0** |
| RTCV | | | | *eS* | | **Sb** | **00 54 33.8** | **+6.9** |
| **ASAL** | **Salagasta** | **3.19** | **128** | *eP* | | **Pn** | **00 53 48.0** | **+3.0** |
| ASAL | | | | *eS* | | **Sn** | **00 54 25.3** | **+3.1** |
| **MT09** | **Talagante** | **3.20** | **168** | *eP* | | **Pn** | **00 53 46.3** | **+1.1** |
| MT09 | | | | IAML | | | 00 54 37.5 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **MT09** | **Talagante** | **3.20** | **168** | | | **Pn** | **00 53 45.9** | **+0.7** |
| **MT01** | **Popeta** | **3.25** | **172** | ⇑ | *eP* | **Pn** | **00 53 46.0** | **+0.3** |
| **MT01** | **Popeta** | **3.25** | **172** | Pn | | **Pn** | **00 53 45.6** | **0.0** |
| **MT01** | **Popeta** | **3.25** | **172** | *eP* | | **Pn** | **00 53 47.3** | **+1.3** |
| MT01 | | | | *eS* | | **Sn** | **00 54 27.3** | **+3.8** |
| MT01 | | | | IAML | | | 00 54 36.4 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.29** | **133** | *eP* | | **Pn** | **00 53 50.0** | **+3.6** |
| ARCO | | | | *eS* | | **Sb** | **00 54 34.3** | **+0.5** |
| ARCO | | | | *eS* | | Sn | 00 54 41.5 | +17 |
| ARCO | | | | IAML | | | 00 54 44.0 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **GO03** | **Copiap** | **3.33** | **25** | *eP* | | **Pn** | **00 53 47.5** | **+0.6** |
| GO03 | | | | IAML | | | 00 54 41.3 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **GO03** | **Copiap** | **3.33** | **25** | Pn | | **Pn** | **00 53 48.0** | **+1.0** |
| **GO03** | **Copiap** | **3.33** | **25** | *eP* | | **Pn** | **00 53 47.8** | **+0.9** |
| GO03 | | | | *eP* | | **Pn** | **00 53 48.0** | **+1.0** |
| GO03 | | | | *eS* | | **Sb** | **00 54 34.3** | **-0.8** |
| GO03 | | | | *eS* | | Sn | 00 54 38.6 | +13 |
| **LMEL** | **Las Melosas** | **3.47** | **157** | *eP* | | **Pn** | **00 53 50.9** | **+2.0** |
| LMEL | | | | IAML | | | 00 54 42.7 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.47** | **157** | Pn | | **Pn** | **00 53 50.7** | **+1.7** |
| **BO04** | **La Punta** | **3.49** | **163** | *eP* | | **Pn** | **00 53 50.4** | **+1.3** |
| BO04 | | | | IAML | | | 00 54 46.0 | |
| | comp=N,2μm,0.3s | | | | | | | |
| **BO04** | **La Punta** | **3.49** | **163** | Pn | | **Pn** | **00 53 49.8** | **+0.8** |
| **AAGR** | **Agrelo** | **3.51** | **135** | *eP* | | **Pn** | **00 53 53.0** | **+3.5** |
| AAGR | | | | *eS* | | **Sb** | **00 54 47.5** | **+7.2** |
| **VCA** | **Vinchina** | **3.66** | **60** | *eP* | | **Pn** | **00 53 55.8** | **+4.3** |
| VCA | | | | *eS* | | **Sn** | **00 54 34.3** | **+0.4** |
| VCA | | | | IAML | | | 00 54 51.6 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **BO01** | **Tunca** | **3.79** | **171** | *eP* | | **Pn** | **00 53 54.0** | **+0.8** |
| **BO01** | **Tunca** | **3.79** | **171** | Pn | | **Pn** | **00 53 52.7** | **-0.4** |
| **BO01** | **Tunca** | **3.79** | **171** | *eP* | | **Pn** | **00 53 55.0** | **+1.9** |
| BO01 | | | | *eS* | | **Sb** | **00 54 44.3** | **-3.8** |
| BO01 | | | | IAML | | | 00 55 00.3 | |
| | comp=Z,670nm,0.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.23** | **169** | *eP* | | **Pn** | **00 54 00.4** | **+1.1** |
| **BO02** | **Sierra Bellavi** | **4.23** | **169** | Pn | | **Pn** | **00 54 00.6** | **+1.4** |
| **BO02** | **Sierra Bellavi** | **4.23** | **169** | *eP* | | **Pn** | **00 54 01.3** | **+2.1** |
| BO02 | | | | *eS* | | **Sb** | **00 54 55.6** | **-6.0** |
| BO02 | | | | *eS* | | **Sn** | **00 54 55.8** | **+8.1** |
| **GO05** | **Huala** | **4.36** | **181** | *eP* | | **Pn** | **00 54 00.5** | **-0.5** |
| GO05 | | | | IAML | | | 00 55 17.2 | |
| | comp=N,525nm,0.5s | | | | | | | |
| **GO05** | **Huala** | **4.36** | **181** | Pn | | **Pn** | **00 54 00.1** | **-0.9** |
| **ACLC** | **CERRO LA CRUZ** | **4.38** | **75** | *eP* | | **Pn** | **00 54 03.5** | **+2.0** |
| ACLC | | | | *eS* | | **Sn** | **00 54 54.9** | **+3.3** |
| **AC02** | **Maricunga** | **4.46** | **32** | *eP* | | **Pn** | **00 54 03.7** | **+0.8** |
| **AC02** | **Maricunga** | **4.46** | **32** | Pn | | **Pn** | **00 54 03.9** | **+1.0** |
| **AC02** | **Maricunga** | **4.46** | **32** | *eP* | | **Pn** | **00 54 04.1** | **+1.3** |
| AC02 | | | | *eS* | | **Sb** | **00 55 09.8** | **+1.9** |
| **RFA** | **San Rafael** | **4.99** | **147** | *eP* | | **Pn** | **00 54 12.5** | **+2.8** |
| **ML02** | **Panimavida** | **5.12** | **176** | | | **Pn** | **00 54 11.4** | **0.0** |
| **H03N1** | **Juan Fernandez** | **6.65** | **243** | T | | T | 01 01 27.5 | |
| | baz=72,slow=72,SNR=514 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.66** | **243** | T | | T | 01 01 27.7 | |
| | baz=72,slow=72,SNR=408 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.66** | **243** | T | | T | 01 01 28.3 | |
| | baz=72,slow=72,SNR=501 | | | | | | | |
| **LVC** | **Limon Verde** | **8.41** | **19** | Pn | | **Pn** | **00 54 54.5** | **-2.4** |
| | comp=N,0.8nm,0.3s,baz=141,slow=5.9,SNR=6.5 | | | | | | | |
| **PLCA** | **Paso Flores** | **10.12** | **175** | Pn | | **Pn** | **00 55 20.5** | **+0.3** |
| | comp=N,0.4nm,0.3s,baz=112,slow=15,SNR=1.3 | | | | | | | |
| **PLCA** | **Paso Flores** | **10.12** | **175** | Pn | | **Pn** | **00 55 20.1** | **0.0** |
| **ITQB** | **Itaqui** | **13.17** | **90** | Pn | | **Pn** | **00 55 59.1** | **-2.7** |
| **CPUP** | **Villa Florida** | **13.43** | **75** | Pn | | **Pn** | **00 56 02.6** | **-2.8** |
| | comp=N,0.6nm,0.3s,baz=288,slow=7.8,SNR=1.8 | | | | | | | |
| CPUP | | | | | | **Sn** | **00 58 34.2** | **+0.4** |
| | comp=N,0.5nm,0.3s,baz=161,slow=9.8,SNR=2.2 | | | | | | | |
| CPUP | | | | Lg | | Lg | 00 59 54.6 | |
| | comp=N,0.9nm,0.3s,baz=331,slow=14,SNR=3.0 | | | | | | | |
| **CPUP** | **Villa Florida** | **13.43** | **75** | Pn | | **Pn** | **00 56 03.0** | **-2.4** |
| **LPAZ** | **La Paz** | **14.68** | **14** | Pn | | **Pn** | **00 56 23.8** | **+0.9** |
| | comp=N,0.1nm,0.3s,baz=96,slow=19,SNR=2.1 | | | | | | | |
| **LPAZ** | **La Paz** | **14.68** | **14** | | | **Pn** | **00 56 24.1** | **+1.1** |
| **ITAB** | **Concordia** | **17.55** | **84** | Pn | | **Pn** | **00 56 56.3** | **-3.0** |
| ITAB | | | | IAmb | | IAmb | 00 57 21.8 | |
| | comp=Z,56nm,1.3s | | | | | | | |
| **SIV** | **San Ignacio** | **17.58** | **36** | P | | **Pn** | **00 56 59.8** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=204,slow=6.8,SNR=8.2 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **19.07** | **40** | P | | **P** | **00 57 16.1** | **-0.9** |
| **VILB** | **Vilhena** | **20.61** | **34** | P | | **P** | **00 57 33.6** | **-0.2** |
| VILB | | | | IAmb | | IAmb | 00 58 02.2 | |
| | comp=Z,122nm,1.5s | | | | | | | |
| **USHA** | **Ushuaia** | **24.30** | **175** | P | | **P** | **00 58 11.3** | **-0.2** |
| | comp=Z,8.2nm,0.6s,baz=186,slow=3.3,SNR=1.7 | | | | | | | |
| **BDFB** | **Brasilia** | **26.40** | **61** | P | | **P** | **00 58 29.5** | **-1.6** |
| | comp=Z,8.6nm,0.7s,baz=234,slow=9.0,SNR=6.4 | | | | | | | |
| **BDFB** | **Brasilia** | **26.40** | **61** | P | | **P** | **00 58 29.3** | **-1.7** |
| BDFB | | | | IAmb | | IAmb | 00 58 45.0 | |
| | comp=Z,58nm,1.5s | | | | | | | |
| **BOAV** | **Boa Vista** | **34.57** | **20** | P | | **P** | **00 59 42.7** | **-0.4** |
| BOAV | | | | IAmb | | IAmb | 00 59 58.5 | |
| | comp=Z,34nm,1.5s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **38.03** | **355** | P | | **P** | **01 00 14.1** | **+1.5** |
| **BAUV** | **El Baul** | **39.52** | **6** | P | | **P** | **01 00 25.7** | **+0.6** |
| **CELP** | **Cerrillos** | **48.70** | **7** | P | | **P** | **01 01 39.4** | **+0.8** |
| **VNA3** | **Neumayer Olymp** | **52.40** | **159** | P | | **P** | **01 02 05.1** | **-0.9** |
| **VNA1** | **Neumayer--Stat** | **52.69** | **158** | P | | **P** | **01 02 07.5** | **-0.6** |
| **VNA2** | **Neumayer--Watz** | **53.03** | **158** | P | | **P** | **01 02 10.8** | **+0.1** |
| | baz=287,slow=7.8 | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GO04** | **Tololo Observa** | **0.91** | **60** | *eP* | | **Pn** | **01 00 12.2** | **-0.4** |
| GO04 | | | | *eS* | | **Sn** | **01 00 24.0** | **-1.1** |
| **GO04** | **Tololo Observa** | **0.91** | **60** | | | **Pn** | **01 00 12.8** | **+0.2** |
| GO04 | | | | | | **Sn** | **01 00 23.6** | **-1.5** |
| **GO04** | **Tololo Observa** | **0.91** | **60** | *eP* | | **Pb** | **01 00 07.9** | **-4.7** |
| GO04 | | | | *eP* | | **Pn** | **01 00 12.9** | **+0.2** |
| GO04 | | | | *eS* | | **Sn** | **01 00 26.7** | **+1.6** |
| **LCO** | **Las Campanas** | **1.84** | **29** | Pn | | **Pb** | **01 00 26.6** | **-1.8** |
| **VA06** | **Catapilco** | **1.95** | **170** | *eP* | | **Pn** | **01 00 27.7** | **+0.9** |
| VA06 | | | | *eS* | | **Sn** | **01 00 52.2** | **+1.7** |
| VA06 | | | | IAML | | | 01 01 05.3 | |
| | comp=N,5µm,0.5s | | | | | | | |
| **VA06** | **Catapilco** | **1.95** | **170** | Pn | | **Pn** | **01 00 27.3** | **+0.5** |
| **AROD** | **Rodeo** | **1.99** | **77** | *eP* | | **Pb** | **01 00 31.1** | **+0.2** |
| AROD | | | | *eS* | | **Sb** | **01 00 57.7** | **+2.3** |
| **ACCO** | **Cerro Coronel** | **2.28** | **90** | *eP* | | **Pb** | **01 00 35.5** | **-0.4** |
| ACCO | | | | *eS* | | **Sb** | **01 01 08.3** | **+4.5** |
| ACCO | | | | IAML | | | 01 01 22.2 | |
| | comp=Z,2µm,1.5s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.28** | **79** | *eP* | | **Pn** | **01 00 30.9** | **-0.6** |
| ACDV | | | | *eP* | | **Pb** | **01 00 36.0** | **+0.1** |
| ACDV | | | | *eS* | | **Sb** | **01 01 06.3** | **+2.6** |
| ACDV | | | | IAML | | | 01 01 08.3 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **VA03** | **San Esteban** | **2.34** | **155** | *eP* | | **Pn** | **01 00 33.7** | **+1.5** |
| VA03 | | | | *eS* | | **Sn** | **01 01 01.9** | **+1.7** |
| VA03 | | | | IAML | | | 01 01 12.5 | |
| | comp=N,4µm,0.7s | | | | | | | |
| **VA03** | **San Esteban** | **2.34** | **155** | | | **Pn** | **01 00 34.0** | **+1.8** |
| **VA03** | **San Esteban** | **2.34** | **155** | *eP* | | **Pn** | **01 00 34.0** | **+1.8** |
| VA03 | | | | *eS* | | **Sb** | **01 01 07.9** | **+2.5** |
| VA03 | | | | IAML | | | 01 01 14.2 | |
| | comp=Z,4µm,0.7s | | | | | | | |
| **ROCH** | **El Roble** | **2.41** | **166** | ⇑*iP* | | **Pb** | **01 00 34.0** | **-4.0** |
| ROCH | | | | *eP* | | **Pn** | **01 00 32.9** | **-0.3** |
| ROCH | | | | *eS* | | **Sn** | **01 01 03.8** | **+1.8** |
| ROCH | | | | *eS* | | **Sb** | **01 01 05.0** | **-2.3** |
| ROCH | | | | IAML | | | 01 01 15.5 | |
| | comp=N,5µm,0.7s | | | | | | | |
| ROCH | | | | IAML | | | 01 01 16.2 | |
| | comp=N,5µm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **2.41** | **166** | Pn | | **Pn** | **01 00 34.1** | **+0.9** |
| **ROC1** | **El Roble** | **2.41** | **166** | *eP* | | **Pn** | **01 00 33.0** | **-0.3** |
| ROC1 | | | | *eS* | | **Sb** | **01 01 08.0** | **+0.5** |
| **AC04** | **Llanos de Chal** | **2.48** | **13** | *eP* | | **Pn** | **01 00 34.5** | **+0.5** |
| AC04 | | | | *eS* | | **Sb** | **01 01 06.1** | **-3.2** |
| **AC04** | **Llanos de Chal** | **2.48** | **13** | Pn | | **Pn** | **01 00 34.5** | **+0.5** |
| **AC04** | **Llanos de Chal** | **2.48** | **13** | *eP* | | **Pn** | **01 00 34.5** | **+0.5** |
| AC04 | | | | *eS* | | **Sn** | **01 01 05.4** | **+1.8** |
| AC04 | | | | IAML | | | 01 01 17.9 | |
| | comp=Z,3µm,0.7s | | | | | | | |
| **AUSP** | **Uspallata** | **2.54** | **129** | *eP* | | **Pb** | **01 00 38.6** | **-1.7** |
| AUSP | | | | *eS* | | **Sb** | **01 01 14.8** | **+3.5** |
| **PEL** | **Peldehue** | **2.65** | **161** | Pn | | **Pn** | **01 00 37.2** | **+0.8** |
| **MT02** | **Curacav** | **2.66** | **170** | Pn | | **Pn** | **01 00 38.2** | **+1.7** |
| **MT02** | **Curacav** | **2.66** | **170** | *eP* | | **Pn** | **01 00 37.8** | **+1.2** |
| MT02 | | | | IAML | | | 01 01 22.5 | |
| | comp=Z,2µm,0.8s | | | | | | | |
| **ZON** | **Zonda** | **2.75** | **110** | *eP* | | **Pb** | **01 00 42.0** | **-1.8** |
| ZON | | | | *eS* | | **Sb** | **01 01 23.4** | **+6.2** |
| ZON | | | | IAML | | | 01 01 30.1 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.86** | **105** | *eP* | | **Pb** | **01 00 42.9** | **-2.8** |
| RTLL | | | | *eS* | | **Sb** | **01 01 23.8** | **+3.5** |
| **MT05** | **Renca** | **2.87** | **164** | *eP* | | **Pn** | **01 00 40.5** | **+1.1** |
| MT05 | | | | *eS* | | **Sn** | **01 01 14.4** | **+1.2** |
| MT05 | | | | IAML | | | 01 01 27.3 | |
| | comp=E,3µm,0.3s | | | | | | | |
| **MT05** | **Renca** | **2.87** | **164** | Pn | | **Pn** | **01 00 41.0** | **+1.5** |
| **MT05** | **Renca** | **2.87** | **164** | *eP* | | **Pn** | **01 00 40.9** | **+1.5** |
| MT05 | | | | *eS* | | **Sn** | **01 01 16.4** | **+3.1** |
| MT05 | | | | IAML | | | 01 01 29.0 | |
| | comp=Z,2µm,1.1s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.98** | **115** | *eP* | | **Pb** | **01 00 45.7** | **-1.9** |
| RTCV | | | | *eS* | | Sb | 01 01 33.2 | +10 |
| RTCV | | | | IAML | | | 01 01 40.5 | |
| | comp=Z,45nm,1.0s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.02** | **179** | IAML | | | 01 01 41.3 | |
| | comp=E,2µm,0.5s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.02** | **179** | Pn | | **Pn** | **01 00 41.3** | **0.0** |
| **ASAL** | **Salagasta** | **3.13** | **129** | *eP* | | **Pn** | **01 00 45.7** | **+2.6** |
| ASAL | | | | *eP* | | **Pb** | **01 00 46.5** | **-3.8** |
| ASAL | | | | *eS* | | **Sb** | **01 01 28.4** | **+0.2** |
| ASAL | | | | IAML | | | 01 01 40.2 | |
| | comp=Z,1µm,1.2s | | | | | | | |
| **MT09** | **Talagante** | **3.19** | **169** | IAML | | | 01 01 40.0 | |
| | comp=E,1µm,0.4s | | | | | | | |
| **MT09** | **Talagante** | **3.19** | **169** | | | **Pn** | **01 00 45.4** | **+1.4** |
| **ARCO** | **CERRO ARCO** | **3.23** | **134** | *eP* | | **Pb** | **01 00 49.1** | **-2.9** |
| ARCO | | | | *eS* | | **Sb** | **01 01 30.9** | **-0.2** |
| ARCO | | | | IAML | | | 01 01 40.6 | |
| | comp=Z,1µm,0.6s | | | | | | | |
| **MT01** | **Popeta** | **3.25** | **173** | Pn | | **Pn** | **01 00 45.5** | **+0.9** |
| **MT01** | **Popeta** | **3.25** | **173** | *eP* | | **Pn** | **01 00 45.7** | **+1.1** |
| MT01 | | | | *eS* | | **Sn** | **01 01 26.9** | **+4.5** |
| MT01 | | | | IAML | | | 01 01 42.2 | |
| | comp=Z,907nm,0.7s | | | | | | | |
| **GO03** | **Copiap** | **3.29** | **23** | *eP* | | **Pn** | **01 00 46.2** | **+1.0** |
| **GO03** | **Copiap** | **3.29** | **23** | Pn | | **Pn** | **01 00 46.3** | **+1.0** |
| **GO03** | **Copiap** | **3.29** | **23** | *eP* | | **Pn** | **01 00 46.6** | **+1.4** |
| GO03 | | | | *eS* | | **Sb** | **01 01 30.9** | **-1.8** |
| GO03 | | | | *eS* | | Sn | 01 01 37.9 | +14 |
| **LMEL** | **Las Melosas** | **3.45** | **159** | IAML | | | 01 01 46.8 | |
| | comp=N,900nm,0.1s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.45** | **159** | | | **Pn** | **01 00 49.9** | **+2.4** |
| **AAGR** | **Agrelo** | **3.46** | **136** | *eP* | | **Pb** | **01 00 52.2** | **-3.7** |
| AAGR | | | | *eS* | | **Sb** | **01 01 44.8** | **+7.2** |
| AAGR | | | | IAML | | | 01 02 06.4 | |
| | comp=Z,779nm,1.7s | | | | | | | |
| **BO04** | **La Punta** | **3.47** | **165** | | | **Pn** | **01 00 49.1** | **+1.4** |
| **VCA** | **Vinchina** | **3.59** | **59** | *eP* | | **Pn** | **01 00 49.9** | **+0.5** |
| VCA | | | | *eS* | | **Sb** | **01 01 40.1** | **-1.1** |
| VCA | | | | IAML | | | 01 01 53.6 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **BO01** | **Tunca** | **3.79** | **172** | *eP* | | **Pn** | **01 00 52.9** | **+0.9** |
| **BO01** | **Tunca** | **3.79** | **172** | Pn | | **Pn** | **01 00 52.7** | **+0.8** |
| **BO01** | **Tunca** | **3.79** | **172** | *eP* | | **Pn** | **01 00 53.4** | **+1.2** |
| BO01 | | | | *eS* | | **Sb** | **01 01 43.4** | **-3.4** |
| BO01 | | | | IAML | | | 01 01 59.0 | |
| | comp=Z,592nm,0.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.22** | **170** | *eP* | | **Pn** | **01 00 58.8** | **+0.8** |
| **BO02** | **Sierra Bellavi** | **4.22** | **170** | Pn | | **Pn** | **01 01 00.6** | **+2.6** |
| **BO02** | **Sierra Bellavi** | **4.22** | **170** | *eP* | | **Pn** | **01 01 01.0** | **+3.0** |
| BO02 | | | | *eS* | | **Sb** | **01 01 54.4** | **-5.0** |
| BO02 | | | | IAML | | | 01 02 15.9 | |
| | comp=Z,697nm,0.8s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.30** | **75** | *eS* | | **Sb** | **01 01 56.1** | **-5.6** |
| ACLC | | | | IAML | | | 01 02 05.0 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **GO05** | **Hualа** | **4.37** | **182** | Pn | | **Pn** | **01 00 59.2** | **-0.8** |
| **AC02** | **Maricunga** | **4.41** | **32** | *eP* | | **Pn** | **01 01 02.5** | **+1.5** |
| **AC02** | **Maricunga** | **4.41** | **32** | Pn | | **Pn** | **01 01 03.0** | **+2.0** |
| **AC02** | **Maricunga** | **4.41** | **32** | *eP* | | **Pn** | **01 01 02.7** | **+1.7** |
| AC02 | | | | *eS* | | Sb | 01 02 12.6 | +7.4 |
| AC02 | | | | IAML | | | 01 02 16.7 | |
| | comp=Z,965nm,0.9s | | | | | | | |
| **ML02** | **Panimavida** | **5.12** | **177** | Pn | | **Pn** | **01 01 10.9** | **+0.6** |
| **MRA** | **San Martin** | **5.42** | **111** | *eS* | | **Sb** | **01 02 25.9** | **-7.9** |
| MRA | | | | IAML | | | 01 02 28.3 | |
| | comp=Z,610nm,0.6s | | | | | | | |
| **BI05** | **Punta Hualpn** | **6.22** | **191** | Pn | | **Pn** | **01 01 26.4** | **+1.0** |
| **H03N1** | **Juan Fernandez** | **6.73** | **244** | T | | T | 01 08 22.1 | |
| | baz=71,slow=72,SNR=278 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.74** | **244** | T | | T | 01 08 27.2 | |
| | baz=71,slow=72,SNR=258 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.74** | **243** | T | | T | 01 08 24.4 | |
| | baz=71,slow=72,SNR=260 | | | | | | | |
| **FSA** | **Cafayete** | **6.76** | **50** | *eP* | | **Pn** | **01 01 30.9** | **-2.2** |
| **AHML** | **Horco Molle** | **6.78** | **57** | *eP* | | Pn | 01 01 36.0 | +2.7 |
| **LC01** | **Cunco** | **8.25** | **181** | Pn | | **Pn** | **01 01 53.1** | **-0.1** |
| **LVC** | **Limon Verde** | **8.37** | **18** | Pn | | **Pn** | **01 01 52.5** | **-2.8** |
| | comp=Z,7nm,0.3s,baz=194,slow=10,SNR=7.2 | | | | | | | |
| **LVC** | **Limon Verde** | **8.37** | **18** | | | **Pn** | **01 01 53.1** | **-2.2** |
| **PB04** | **IPOC Station P** | **8.38** | **10** | Pn | | **Pn** | **01 01 54.5** | **-0.7** |
| **PLCA** | **Paso Flores** | **10.12** | **175** | Pn | | **Pn** | **01 02 19.3** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=161,slow=22,SNR=1.7 | | | | | | | |
| **PLCA** | **Paso Flores** | **10.12** | **175** | Pn | | **Pn** | **01 02 20.3** | **+1.3** |
| **ITQB** | **Itaqui** | **13.09** | **90** | Pn | | **Pn** | **01 02 58.3** | **-1.2** |
| **CPUP** | **Villa Florida** | **13.35** | **75** | Pn | | **Pn** | **01 03 00.7** | **-2.5** |
| | comp=Z,0.3nm,0.3s,baz=324,slow=7.4,SNR=1.6 | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **01 05 31.3** | **+0.5** |
| | comp=Z,0.6nm,0.3s,baz=156,slow=16,SNR=1.7 | | | | | | | |
| **CPUP** | **Villa Florida** | **13.35** | **75** | Pn | | **Pn** | **01 03 01.4** | **-1.7** |
| **LPAZ** | **La Paz** | **14.65** | **14** | Pn | | **Pn** | **01 03 23.8** | **+2.3** |
| | comp=Z,0.9nm,0.3s,baz=186,slow=9.0,SNR=9.7 | | | | | | | |
| **LPAZ** | **La Paz** | **14.65** | **14** | | | **Pn** | **01 03 23.0** | **+1.5** |
| **ITAB** | **Concordia** | **17.47** | **84** | Pn | | **P** | **01 04 00.5** | **+2.3** |
| ITAB | | | | IAmb | | IAmb | 01 04 14.5 | |
| | comp=Z,78nm,1.4s | | | | | | | |
| **SIV** | **San Ignacio** | **17.53** | **36** | P | | **Pn** | **01 03 57.8** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=220,slow=12,SNR=13 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **19.01** | **40** | P | | **P** | **01 04 14.6** | **-0.6** |
| **VILB** | **Vilhena** | **20.56** | **34** | P | | **P** | **01 04 31.5** | **-0.6** |
| VILB | | | | IAmb | | IAmb | 01 04 47.5 | |
| | comp=Z,32nm,0.8s | | | | | | | |
| **ETMB** | **Extrema** | **21.34** | **15** | P | | **P** | **01 04 41.7** | **+1.2** |
| **BDFB** | **Brasilia** | **26.33** | **61** | P | | **P** | **01 05 28.7** | **-0.6** |
| | comp=Z,10.0nm,0.7s,baz=231,slow=9.0,SNR=14 | | | | | | | |
| **BDFB** | **Brasilia** | **26.33** | **61** | P | | **P** | **01 05 28.4** | **-0.9** |
| BDFB | | | | IAmb | | IAmb | 01 05 41.8 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **29.24** | **23** | P | | **P** | **01 05 55.0** | **-0.2** |
| MACA | | | | IAmb | | IAmb | 01 05 56.6 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **BOAV** | **Boa Vista** | **34.53** | **20** | P | | **P** | **01 06 41.6** | **-0.1** |
| BOAV | | | | IAmb | | IAmb | 01 06 42.5 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **38.03** | **355** | P | | **P** | **01 07 12.2** | **+0.7** |
| **BAUV** | **El Baul** | **39.51** | **6** | P | | **P** | **01 07 23.9** | **0.0** |
| BAUV | | | | IAmb | | IAmb | 01 07 51.3 | |
| | comp=Z,39nm,1.5s | | | | | | | |
| **BIRV** | **Birongo** | **41.20** | **8** | P | | **P** | **01 07 38.4** | **+0.4** |
| BIRV | | | | IAmb | | IAmb | 01 07 38.7 | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **OBIP** | **Obispado Ponce** | **48.64** | **6** | P | | **P** | **01 08 38.0** | **+0.9** |
| **CELP** | **Cerrillos** | **48.68** | **7** | P | | **P** | **01 08 37.3** | **-0.1** |
| **SNAA** | **Sanae** | **54.60** | **159** | P | | **P** | **01 09 20.9** | **-0.3** |
| SNAA | | | | IAmb | | IAmb | 01 09 30.5 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.95** | **330** | P | | **P** | **01 10 47.0** | **+1.3** |
| | comp=Z,0.7nm,0.7s,baz=153,slow=8.0,SNR=9.4 | | | | | | | |
| **W41B** | **Gary Mavity, V** | **68.25** | **342** | P | | **P** | **01 10 55.6** | **+1.9** |
| **M55A** | **Ridgway** | **72.04** | **354** | P | | **P** | **01 11 16.7** | **-0.1** |
| **DBIC** | **Dimbokro** | **73.86** | **72** | P | | **P** | **01 11 28.3** | **+0.1** |
| | comp=Z,8.0nm,0.6s,baz=230,slow=5.8,SNR=14 | | | | | | | |
| **DBIC** | **Dimbokro** | **73.86** | **72** | P | | **P** | **01 11 27.6** | **-0.5** |
| **SDCO** | **Great Sand Dun** | **75.00** | **333** | P | | **P** | **01 11 36.3** | **+1.7** |
| **SUR** | **Sutherland** | **76.22** | **120** | P | | **P** | **01 11 42.7** | **+0.8** |
| **K31A** | **O'Neill** | **77.02** | **340** | P | | **P** | **01 11 46.3** | **+0.6** |
| **ECSD** | **EROS Data Cent** | **77.44** | **342** | P | | **P** | **01 11 48.1** | **0.0** |
| ECSD | | | | IAmb | | IAmb | 01 11 49.4 | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **BATG** | **Bathurst New B** | **77.72** | **4** | P | | **P** | **01 11 50.8** | **+1.3** |
| **CCUT** | **Cedar City** | **78.22** | **327** | P | | **P** | **01 11 55.3** | **+2.5** |
| CCUT | | | | IAmb | | IAmb | 01 12 05.3 | |
| | comp=Z,7.1nm,1.3s | | | | | | | |
| **SRU** | **San Rafael Swe** | **78.23** | **330** | P | | **P** | **01 11 54.5** | **+1.7** |
| **P18A** | **Preston Nutter** | **78.54** | **331** | P | | **P** | **01 11 56.0** | **+1.4** |
| P18A | | | | IAmb | | IAmb | 01 12 20.9 | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **RDMU** | **Red Mountain** | **79.05** | **332** | P | | **P** | **01 11 58.7** | **+1.4** |
| RDMU | | | | IAmb | | IAmb | 01 12 00.1 | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.90** | **333** | P | | **P** | **01 12 07.6** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=128,slow=7.7,SNR=4.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.90** | **333** | P | | **P** | **01 12 07.8** | **+0.6** |
| **B35A** | **Bob, Littlefor** | **81.07** | **345** | P | | **P** | **01 12 07.5** | **-0.3** |
| B35A | | | | IAmb | | IAmb | 01 12 08.8 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.30** | **325** | P | | **P** | **01 12 10.5** | **+1.0** |
| | comp=Z,1.2nm,0.8s,baz=158,slow=5.8,SNR=6.1 | | | | | | | |
| **BOSA** | **Boshof** | **81.39** | **118** | P | | **P** | **01 12 10.2** | **-0.1** |
| | comp=Z,4.3nm,0.7s,baz=269,slow=3.0,SNR=12 | | | | | | | |
| **BOSA** | **Boshof** | **81.39** | **118** | P | | **P** | **01 12 10.2** | **-0.1** |
| BOSA | | | | IAmb | | IAmb | 01 12 10.9 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **HVU** | **Hansel Valley** | **81.40** | **330** | P | | **P** | **01 12 10.4** | **+0.5** |
| **AGMN** | **Agassiz Nation** | **81.50** | **344** | P | | **P** | **01 12 10.6** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **82.81** | **70** | P | | **P** | **01 12 17.5** | **-0.1** |
| | comp=Z,3.6nm,0.5s,baz=282,slow=6.1,SNR=90 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.81** | **70** | P | | **P** | **01 12 17.6** | **0.0** |
| TORD | | | | IAmb | | IAmb | 01 12 31.7 | |
| | comp=Z,9.7nm,1.0s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **83.33** | **345** | P | | **P** | **01 12 18.8** | **-0.7** |
| | comp=Z,3.6nm,0.7s,baz=172,slow=4.1,SNR=3.7 | | | | | | | |
| **LBTB** | **Lobatse** | **83.47** | **115** | P | | **P** | **01 12 20.0** | **-1.1** |
| LBTB | | | | IAmb | | IAmb | 01 12 21.8 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.97** | **341** | P | | **P** | **01 13 32.0** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=143,slow=4.3,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **120.68** | **207** | PKP | | **PKPdf** | **01 18 44.1** | **-1.4** |
| | comp=Z,0.5nm,0.6s,baz=135,slow=2.0,SNR=4.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.82** | **210** | PKP | | **PKPdf** | **01 18 50.5** | **-1.1** |
| | comp=Z,0.9nm,0.6s,baz=161,slow=1.7,SNR=14 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.03** | **271** | T | | T | 03 37 40.3 | |
| | baz=115,slow=75,SNR=53 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.05** | **271** | T | | T | 03 37 45.2 | |
| | baz=115,slow=75,SNR=45 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.05** | **271** | T | | T | 03 37 41.6 | |
| | baz=115,slow=75,SNR=41 | | | | | | | |
| **BRVK** | **Boryo** | **144.50** | **40** | PKPdf | | PKPbc | 01 19 28.1 | +0.6 |
| **BVAR** | **Borovoye Array** | **144.57** | **40** | PKP | | PKPbc | 01 19 28.6 | +0.8 |
| | comp=Z,3.2nm,0.6s,baz=48,slow=4.6,SNR=13 | | | | | | | |
| **YAK** | **Yakutsk** | **145.64** | **342** | PKPbc | | **PKPbc** | **01 19 31.3** | **+0.5** |
| | comp=Z,5.4nm,0.3s,baz=50,slow=1.1,SNR=5.4 | | | | | | | |
| **YAK** | **Yakutsk** | **145.64** | **342** | | | **PKPdf** | **01 19 30.4** | **-0.1** |
| **CHGR** | **Chuyangaron** | **147.02** | **65** | | | **PKPbc** | **01 19 35.4** | **-0.5** |
| **KKAR** | **Karatay Array** | **147.58** | **57** | PKPbc | | **PKPbc** | **01 19 36.4** | **-0.8** |
| **GAR** | **Garm** | **147.91** | **64** | | | **PKPdf** | **01 19 35.8** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **150.16** | **39** | PKPbc | | **PKPbc** | **01 19 43.4** | **-0.1** |
| | comp=Z,2.7nm,0.8s,baz=299,slow=3.1,SNR=22 | | | | | | | |
| **KURK** | **Kurchatov** | **150.17** | **39** | PKPbc | | **PKPbc** | **01 19 43.6** | **+0.2** |
| **AAK** | **Ala-Archa** | **150.54** | **57** | PKPbc | | **PKPbc** | **01 19 44.3** | **-0.6** |
| | comp=Z,3.9nm,0.8s,baz=2.7,slow=1.4,SNR=8.3 | | | | | | | |
| **AAK** | **Ala-Archa** | **150.54** | **57** | PKPbc | | **PKiKP** | **01 19 45.9** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **151.20** | **29** | PKPbc | | **PKPbc** | **01 19 45.5** | **-0.3** |
| | comp=Z,12nm,0.8s,baz=296,slow=3.4,SNR=19 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.20** | **29** | | | **PKPbc** | **01 19 45.8** | **0.0** |
| **MAKZ** | **Makanchi** | **154.05** | **44** | | | **PKPbc** | **01 19 51.9** | **-0.5** |
| **SONM** | **Songino Array** | **162.76** | **4** | PKPab | | **PKPab** | **01 20 44.5** | **+0.8** |
| | comp=Z,1.0nm,1.0s,baz=330,slow=4.7,SNR=6.1 | | | | | | | |
| **SONM** | **Songino Array** | **162.76** | **4** | | | **PKPab** | **01 20 44.1** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **165.20** | **143** | PKPab | | **PKPab** | **01 20 54.4** | **-0.7** |
| | comp=Z,1.3nm,0.3s,baz=218,slow=5.5,SNR=4.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **165.20** | **143** | PKPab | | **PKPab** | **01 20 53.8** | **-1.2** |
| **PZH** | **PanZhiHua** | **172.92** | **124** | PKP | | **PKPdf** | **01 20 02.3** | **-0.4** |

*IDC **10** 01:04:30.8±0.9,30.°80S×71.°59W, h0km, mb4.2/8, mb1 4.4/12,mb1mx4.2/31, mbtmp4.2/12, ML3.8/3, Error ellipse: s-maj=28.3km s-min=25.0km az=28.0*
*SJA **10** 01:04:32.7±0.8, 30.°64S×71.°81W, h9km±4km, ML4.3, MW3.9*
*GUC **10** 01:04:36.4±0.7, 30.°67S×71.°62W, h40km±2km, ML4.3*
*NEIC **10** 01:04:37.0±1.4, 30.°63S±0.°04×71.°57W±0.°08, h30km±4km, mb4.8/13, ML4.3(GUC), Error ellipse: s-maj=10.3km s-min=6.2km az=92.0*
**ISC 10 01:04:36.3±0.8, 30.°59S±0.°02×71.°66W±0.°04, h33km±4km, n112, σ1s96/142, mb4.6/11, 4C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **CO06** | **Fray Jorge** | **0.09** | **163** | ⇑*iP* | | **Pb** | **01 04 42.3** | | | **+0.3** |
| CO06 | | | | *eS* | | **Sb** | **01 04 46.0** | | | **+0.1** |
| CO06 | | | | IAML | | | 01 04 47.0 | | | |
| | comp=E,124µm,0.4s | | | | | | | | | |
| **CO06** | **Fray Jorge** | **0.09** | **163** | Pg | | **Pb** | **01 04 42.2** | | | **+0.2** |
| CO06 | | | | Sg | | **Sb** | **01 04 46.2** | | | **+0.3** |
| **CO05** | **La Serena** | **0.77** | **29** | *eP* | | **Pb** | **01 04 51.3** | | | **+0.1** |
| CO05 | | | | *eS* | | **Sb** | **01 05 02.0** | | | **+0.6** |
| CO05 | | | | IAML | | | 01 05 06.2 | | | |
| | comp=N,12µm,0.6s | | | | | | | | | |
| **CO05** | **La Serena** | **0.77** | **29** | | | **Pb** | **01 04 51.3** | | | **+0.1** |
| **CO02** | **Combarbal** | **0.84** | **137** | ⇓*iP* | | **Pn** | **01 04 50.8** | | | **-1.1** |
| CO02 | | | | *eS* | | **Sn** | **01 05 01.4** | | | **-1.7** |
| CO02 | | | | IAML | | | 01 05 05.1 | | | |
| | comp=N,23µm,0.2s | | | | | | | | | |
| **CO02** | **Combarbal** | **0.84** | **137** | | | **Pn** | **01 04 50.8** | | | **-1.1** |
| **CO02** | **Combarbal** | **0.84** | **137** | *eP* | | **Pn** | **01 04 50.8** | | | **-1.1** |
| CO02 | | | | *eS* | | **Sn** | **01 05 02.6** | | | **-0.5** |
| CO02 | | | | IAML | | | 01 05 05.6 | | | |
| | comp=Z,7µm,0.7s | | | | | | | | | |
| **GO04** | **Tololo Observa** | **0.86** | **61** | ⇓*iP* | | **Pn** | **01 04 52.5** | | | **+0.2** |
| GO04 | | | | *eS* | | **Sb** | **01 05 04.6** | | | **+0.4** |
| **GO04** | **Tololo Observa** | **0.86** | **61** | | | **Pn** | **01 04 52.5** | | | **+0.2** |
| **GO04** | **Tololo Observa** | **0.86** | **61** | *eP* | | **Pb** | **01 04 52.7** | | | **-0.2** |
| GO04 | | | | *eS* | | **Sb** | **01 05 05.8** | | | **+1.6** |
| **CO03** | **El Pedregal** | **0.88** | **107** | ⇓*iP* | | **Pn** | **01 04 51.7** | | | **-0.7** |
| CO03 | | | | *eS* | | **Sn** | **01 05 02.9** | | | **-1.2** |
| CO03 | | | | IAML | | | 01 05 03.8 | | | |
| | comp=E,15µm,0.3s | | | | | | | | | |
| **CO03** | **El Pedregal** | **0.88** | **107** | Pn | | **Pn** | **01 04 51.7** | | | **-0.7** |
| **CO03** | **El Pedregal** | **0.88** | **107** | *eP* | | **Pn** | **01 04 51.7** | | | **-0.7** |
| CO03 | | | | *eS* | | **Sn** | **01 05 03.9** | | | **-0.2** |
| **LCO** | **Las Campanas** | **1.78** | **28** | Pn | | **Pn** | **01 05 06.5** | | | **+1.4** |
| **AROD** | **Rodeo** | **1.94** | **78** | *eP* | | **Pb** | **01 05 10.5** | | | **-0.8** |
| AROD | | | | *eS* | | **Sb** | **01 05 38.3** | | | **+3.4** |
| **VA06** | **Catapilco** | **1.99** | **171** | ⇑*iP* | | **Pn** | **01 05 07.5** | | | **-0.1** |
| VA06 | | | | IAML | | | 01 05 40.0 | | | |
| | comp=N,5µm,0.4s | | | | | | | | | |
| **VA06** | **Catapilco** | **1.99** | **171** | Pn | | **Pn** | **01 05 07.8** | | | **+0.2** |
| **ACDV** | **Cuesta del Vie** | **2.24** | **80** | *eP* | | **Pn** | **01 05 09.8** | | | **-1.5** |
| ACDV | | | | *eP* | | **Pb** | **01 05 15.2** | | | **-1.0** |
| ACDV | | | | *eS* | | **Sb** | **01 05 47.7** | | | **+4.1** |
| ACDV | | | | IAML | | | 01 05 48.7 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.24** | **91** | *eP* | | **Pb** | **01 05 14.9** | | | **-1.5** |
| ACCO | | | | *eS* | | **Sb** | **01 05 46.1** | | | **+2.3** |
| **VA03** | **San Esteban** | **2.36** | **157** | *eP* | | **Pn** | **01 05 13.8** | | | **+0.9** |
| VA03 | | | | IAML | | | 01 05 54.0 | | | |
| | comp=E,4µm,0.5s | | | | | | | | | |
| **VA03** | **San Esteban** | **2.36** | **157** | *eP* | | **Pn** | **01 05 14.0** | | | **+1.1** |
| VA03 | | | | *eS* | | **Sb** | **01 05 46.2** | | | **-0.9** |
| VA03 | | | | IAML | | | 01 05 50.1 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | | |
| **VA01** | **Torpederas** | **2.42** | **180** | Pn | | **Pn** | **01 05 13.7** | | | **+0.1** |
| **AC04** | **Llanos de Chal** | **2.43** | **12** | Pn | | **Pn** | **01 05 14.7** | | | **+0.9** |
| **AC04** | **Llanos de Chal** | **2.43** | **12** | *eP* | | **Pn** | **01 05 14.7** | | | **+0.9** |
| AC04 | | | | *eS* | | **Sb** | **01 05 46.8** | | | **-2.2** |
| AC04 | | | | IAML | | | 01 06 03.2 | | | |
| | comp=Z,859nm,1.5s | | | | | | | | | |
| **ROCH** | **El Roble** | **2.44** | **167** | ⇑*iP* | | **Pn** | **01 05 14.2** | | | **+0.2** |
| ROCH | | | | *eP* | | **Pn** | **01 05 13.0** | | | **-1.1** |
| ROCH | | | | *eS* | | **Sn** | **01 05 43.4** | | | **+0.5** |
| ROCH | | | | IAML | | | 01 05 53.9 | | | |
| | comp=E,2µm,0.7s | | | | | | | | | |
| **ROC1** | **El Roble** | **2.44** | **167** | Pn | | **Pn** | **01 05 14.6** | | | **+0.5** |
| **ROC1** | **El Roble** | **2.44** | **167** | *eP* | | **Pn** | **01 05 13.8** | | | **-0.3** |
| ROC1 | | | | *eS* | | **Sb** | **01 05 47.4** | | | **-2.1** |
| **AUSP** | **Uspallata** | **2.54** | **130** | *eP* | | **Pb** | **01 05 18.4** | | | **-2.9** |
| AUSP | | | | *eS* | | **Sb** | **01 05 53.2** | | | **+1.0** |
| **PEL** |

comp=Z,15nm,1.2s
**SMCO Snowmass 76.80 333** P **P** 01 16 26.2 +1.2
SMCO IAmb IAmb 01 16 41.1
comp=Z,12nm,1.4s
**D62A Allapoint, All 77.35 2** P **P** 01 16 28.2 +0.8
**ECSD EROS Data Cent 77.42 342** P **P** 01 16 28.6 +0.7
ECSD IAmb IAmb 01 16 29.6
comp=Z,5.1nm,0.8s
**RDMU Red Mountain 79.03 332** P **P** 01 16 38.9 +1.7
**PDAR Pinedale Array 80.88 333** P **P** 01 16 48.0 +0.9
comp=Z,0.2nm,0.6s,baz=140,slow=10,SNR=2.1
**NVAR Mina Array Bea 81.28 325** P **P** 01 16 50.6 +1.2
comp=Z,1.1nm,1.0s,baz=179,slow=5.0,SNR=3.6
**BOSA Boshof 81.38 118** P **P** 01 16 49.8 -0.4
comp=Z,4.6nm,0.9s,baz=278,slow=4.4,SNR=6.5
**BOSA Boshof 81.38 118** P **P** 01 16 49.5 -0.7
BOSA IAmb IAmb 01 17 00.9
comp=Z,14nm,1.4s
**TORD Torodi Ar. Bea 82.76 70** P **P** 01 16 56.8 -0.6
comp=Z,2.6nm,1.0s,baz=277,slow=5.9,SNR=9.7
**TORD Torodi Ar. Bea 82.76 70** P **P** 01 16 56.7 -0.7
TORD IAmb IAmb 01 17 25.0
comp=Z,14nm,1.1s
**YKA Yellowknife Ar 98.94 341** P Pdif 01 18 12.7 0.0
comp=Z,0.2nm,0.6s,baz=148,slow=4.7,SNR=2.4
**WRA Warramunga Arr 123.88 210** PKP **PKPdf** 01 23 30.2 -1.4
comp=Z,0.3nm,0.5s,baz=157,slow=1.4,SNR=5.2
**H11S2 WAKE ISLAND Hyl 26.07 271** T T 03 42 22.0
baz=115,slow=74,SNR=68
**H11S1 WAKE ISLAND Hyl 26.08 271** T T 03 42 17.8
baz=115,slow=74,SNR=63
**H11S3 WAKE ISLAND Hyl 26.09 271** T T 03 42 18.0
baz=115,slow=74,SNR=52
**BRVK Borovoye 144.45 40** PKPdf **PKPdf** 01 24 07.9 -0.8
**BVAR Borovoye Array 144.52 40** PKP **PKPdf** 01 24 08.2 -0.6
comp=Z,2.2nm,0.7s,baz=27,slow=9.7,SNR=9.0
**KKAR Karatay Array 147.53 57** **PKPdf** 01 24 14.3 -0.1
**KURBB Kurchatov Arra 150.11 39** PKPbc **PKPbc** 01 24 23.0 -0.2
comp=Z,2.4nm,0.8s,baz=299,slow=3.1,SNR=11
**KURK Kurchatov 150.11 39** PKPbc **PKPbc** 01 24 21.6 -1.7
**AAK Ala-Archa 150.49 57** PKPbc **PKPbc** 01 24 24.5 -0.2
**ZAA0 Zalesovo Array 151.14 29** **PKPbc** 01 24 25.2 -0.4
**ZALV Zalesovo Beam 151.14 29** PKPbc **PKPbc** 01 24 25.4 -0.2
**CMAR Chiang Mai Arr 165.21 143** PKPab **PKPab** 01 25 33.5 -1.6
comp=Z,1.8nm,0.3s,baz=235,slow=4.3,SNR=4.1
**PZH PanZhiHua 172.91 123** PKP **PKPdf** 01 24 42.3 -0.3

*IDC* ***10*** *01:10:35.5±2.8, 35°.47N×71°.11E, h0km, mb3.9/8, mb1 3.9/12, mb1mx3.6/62, mbtmp4.0/12, ML3.9/4, Error ellipse: s-maj=53.0km s-min=26.5km az=138.0*

*NNC* ***10*** *01:10:54.8±8.1, 36°.60N×70°.66E, h103km±150km, mb3.6, mpv4.0, Error ellipse: s-maj=93.1km s-min=72.0km az=134.0*

**ISC 10 01:10:53.2±1.6, 36°.4N±0°.1×70°.7E±0°.1, h100km, n26, σ1°9**60/26**, mb3.9/7, 5C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSH** | **Kashi** | **5.20** | **52** | Pn | Pn | 01 12 03.7 | -5.0 |
| KSH | | | | Sn | Sn | 01 12 55.9 | -12 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,84nm,0.7s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,61nm,0.8s | | | | | | |
| **AML** | **Almayashu** | **6.15** | **22** | P | **Pn** | **01 12 21.8** | **-0.1** |
| | SNR=10 | | | | | | |
| **UCH** | **Uchtor** | **6.51** | **26** | P | **Pn** | **01 12 26.5** | **-0.3** |
| | SNR=5.1 | | | | | | |
| **KK02** | **Karatay Array** | **6.66** | **359** | ⇓P | **Pn** | **01 12 27.9** | **-0.5** |
| | comp=E,4.0nm,0.5s | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **01 13 41.9** | **-0.9** |
| | comp=E,34nm,1.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **6.67** | **20** | P | **Pn** | **01 12 29.6** | **+1.1** |
| | SNR=9.6 | | | | | | |
| **AAK** | **Ala-Archa** | **6.86** | **24** | Pn | **Pn** | **01 12 31.4** | **+0.1** |
| | comp=E,3.7nm,0.3s,baz=190,slow=5.9,SNR=64 | | | | | | |
| AAK | | | | Sn | **Sn** | **01 13 46.5** | **-1.4** |
| | comp=E,0.7nm,0.3s,baz=161,slow=22,SNR=9.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.86** | **24** | P | **Pn** | **01 12 31.3** | **0.0** |
| | SNR=9.2 | | | | | | |
| **AAK** | **Ala-Archa** | **6.86** | **24** | ⇑P | **Pn** | **01 12 31.3** | **0.0** |
| | comp=E,9.5nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 13 46.1** | **-1.8** |
| | comp=E,13nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **7.27** | **24** | P | **Pn** | **01 12 36.6** | **-0.1** |
| | SNR=7.5 | | | | | | |
| **USP** | **Ospenovka** | **7.43** | **22** | P | **Pn** | **01 12 38.4** | **-0.5** |
| | SNR=6.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.51** | **29** | ⇓P | **Pn** | **01 12 39.5** | **-0.6** |
| | comp=E,12nm,1.2s | | | | | | |
| **GEYT** | **Ailbeck** | **10.12** | **282** | Pn | Pn | 01 13 11.3 | -4.2 |
| | comp=E,0.4nm,0.3s,baz=102,slow=13,SNR=3.4 | | | | | | |
| GEYT | | | | Sn | Sn | 01 14 58.7 | -8.5 |
| | comp=E,0.6nm,0.3s,baz=73,slow=26,SNR=2.5 | | | | | | |
| **AB31** | **Akbulak array** | **15.01** | **332** | ⇑P | **Pn** | **01 14 17.7** | **-2.1** |
| | comp=E,2.2nm,0.6s,baz=160,slow=12,SNR=41 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.27** | **19** | Pn | **P** | **01 14 26.9** | **+1.2** |
| | comp=E,0.0nm,0.3s,baz=212,slow=10,SNR=6.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.59** | **359** | P | **P** | **01 14 43.5** | **+3.2** |
| | comp=E,0.2nm,0.3s,baz=166,slow=13,SNR=3.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.70** | **331** | P | **P** | **01 14 42.7** | **+1.1** |
| | comp=E,0.8nm,0.3s,baz=130,slow=11,SNR=16 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.70** | **331** | ⇑P | **P** | **01 14 42.3** | **+0.8** |
| | comp=E,4.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.09** | **25** | P | **P** | **01 15 18.1** | **-0.4** |
| | comp=E,3.0nm,0.5s,baz=218,slow=9.9,SNR=11 | | | | | | |
| **GNI** | **Garni** | **20.66** | **288** | P | Pn | 01 15 27.8 | -0.3 |
| | comp=E,8.7nm,0.8s,baz=78,slow=4.4,SNR=6.3 | | | | | | |
| **ARU** | **Arti** | **21.61** | **342** | P | **P** | **01 15 38.4** | **+3.6** |
| | comp=E,0.6nm,0.2s,baz=206,slow=1.1,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **37.38** | **326** | P | **P** | **01 17 57.8** | **+1.8** |
| | comp=E,1.8nm,0.8s,baz=134,slow=11,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.10** | **338** | P | **P** | **01 18 28.9** | **+2.2** |
| | comp=E,3.5nm,1.0s,baz=107,slow=8.6,SNR=4.4 | | | | | | |
| **HFS** | **Hagfors** | **42.95** | **322** | P | **P** | **01 18 43.6** | **+1.7** |
| | comp=E,1.1nm,0.5s,baz=92,slow=12,SNR=1.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.27** | **323** | P | **P** | **01 18 53.4** | **+0.9** |
| | comp=E,0.4nm,0.6s,baz=96,slow=7.9,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.44** | **268** | P | **P** | **01 21 22.9** | **-2.8** |
| | comp=E,11nm,1.0s,baz=45,slow=6.0,SNR=4.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.32** | **2** | P | **P** | **01 22 58.6** | **+0.5** |
| | comp=E,0.1nm,0.5s,baz=348,slow=5.5,SNR=1.7 | | | | | | |

*CRAAG* ***10*** *01:12:13.9, 36°.50N×3°.08E, Ml4.7*

*IDC* ***10*** *01:12:14.2±0.5, 36°.57N×3°.07E, h0km, mb4.3/28, mb1 4.4/36, mb1mx4.2/75, mbtmp4.3/36, ML4.1/8, Error ellipse: s-maj=12.2km s-min=11.0km az=157.0*

*MOS* ***10*** *01:12:15.7±1.1, 36°.60N×3°.16E, h18km, mb4.9/32, Error ellipse: s-maj=10.2km s-min=4.5km az=66.3*

*NEIC* ***10*** *01:12:16.4±2.0, 36°.53N±0°.08×3°.09E±0°.02, h11km±4km, mb4.7/69, ML4.7(ALG), Error ellipse: s-maj=11.5km s-min=2.0km az=182.0*

*LDG* ***10*** *01:12:16.5±0.2, 36°.39N×3°.13E, h10km, Ml4.1/31, Error ellipse: s-maj=5.8km s-min=4.0km az=2.0*

*IGIL* ***10*** *01:12:17.8, 35°.36N×2°.63E, h0km*

*INMG* ***10*** *01:12:18.1±2.0, 36°.44N×3°.09E, h34km±10km, ML3.2, Error ellipse: s-maj=7.4km s-min=5.1km az=129.0*

*CNRM* ***10*** *01:12:38.4, 36°.14N×1°.25E, h30km, ml4.9*

**ISC 10 01:12:16.7±0.3, 36°.57N±0°.03×3°.08E±0°.03, h18km, n394, σ2°13/437, mb4.6/76, 24C-33D, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ABA** | **Alger-Bouzarea** | **0.24** | **351** | P | **Pg** | **01 12 21.4** | **-0.8** |
| **ABMS** | **Boumerdes** | **0.37** | **60** | P | **Pg** | **01 12 23.8** | **-0.6** |
| **ADJB** | **Djebel Djouab** | **0.50** | **145** | P | **Pg** | **01 12 23.9** | **-2.9** |
| **AKET** | **Djebel Ketaf** | **0.83** | **129** | P | **Pb** | **01 12 31.0** | **-1.6** |
| **ATAF** | **Djebel Tarf** | **1.19** | **125** | P | **Pn** | **01 12 37.2** | **-1.3** |
| **ECHA** | **Ech Chlef** | **1.45** | **254** | P | **Pg** | **01 12 48.2** | **+3.6** |
| **EANR** | **'Ain N'Sour** | **1.72** | **250** | P | Pn | 01 12 40.2 | -5.6 |
| **SET** | **Setif** | **1.91** | **100** | P | **Pn** | **01 12 49.0** | **+0.6** |
| **OKGL** | **Djebel Kef Gue** | **2.04** | **256** | P | **Pn** | **01 12 50.0** | **-0.2** |
| **OJGS** | **Djebel Guires** | **2.17** | **241** | P | **Pn** | **01 12 51.0** | **-1.0** |
| **DFRA** | **Djebel Bou Aff** | **2.25** | **90** | P | **Pn** | **01 12 52.5** | **-0.6** |
| **OJBR** | **Djebel Berber** | **2.42** | **247** | P | Pn | 01 12 49.0 | -6.5 |
| **CASM** | **Ain Smara** | **2.77** | **95** | P | **Pn** | **01 13 00.9** | **+0.7** |
| **ODJA** | **Bouhanifia** | **2.90** | **246** | P | **Pn** | **01 13 01.0** | **-1.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **CKFL** | **Kef-Lekhel** | **2.94** | **92** | P | **Pn** | **01 13 01.9 -0.7** |
| **CART** | **Cartagena** | **3.42** | **289** | P | **Pn** | **01 13 08.2 -0.9** |
| CART | | | | S | **Sn** | **01 13 45.4 -3.8** |
| **CART** | **Cartagena** | **3.42** | **289** | | **Pn** | **01 13 08.8 -0.3** |
| **CART** | **Cartagena** | **3.42** | **289** | P | **Pn** | **01 13 08.0 -1.1** |
| CART | | | | S | **Sn** | **01 13 45.8 -3.4** |
| **MAHO** | **Mahon** | **3.45** | **15** | P | **Pn** | **01 13 09.0 -0.5** |
| MAHO | | | | S | **Sn** | **01 13 47.1 -2.9** |
| **CMAH** | **Djebel Manchou** | **3.49** | **88** | P | **Pn** | **01 13 09.4 -0.7** |
| **JBK** | **JBK** | **5.12** | **246** | P | **Pn** | **01 13 32.1 -0.5** |
| JBK | | | | S | **Sn** | **01 14 29.2 -2.3** |
| **KEST** | **Kesra** | **5.14** | **97** | Pn | **Pn** | **01 13 33.3 +0.5** |
| | 16nm,0.3s,baz=226,slow=5.8,SNR=48 | | | | | |
| KEST | | | | Sn | **Sn** | **01 14 32.1 +0.5** |
| | 12nm,0.3s,baz=27,slow=6.3,SNR=5.1 | | | | | |
| **KEST** | **Kesra** | **5.14** | **97** | Pn | **Pn** | **01 13 32.5 -0.3** |
| KEST | | | | Sn | **Sn** | **01 14 32.3 +0.7** |
| **TDRA** | **Tendrara** | **5.48** | **232** | P | **Pn** | **01 13 37.1 -0.6** |
| **FIGM** | **Figuig** | **5.70** | **220** | P | **Pn** | **01 13 45.0 +4.4** |
| FIGM | | | | S | **Sn** | **01 14 44.6 -1.0** |
| **VSL** | **Villasalto** | **5.76** | **58** | Pn | **Pn** | **01 13 40.6 -0.8** |
| **PALE** | **Palemas** | **5.86** | **259** | P | **Pn** | **01 13 42.5 -0.1** |
| **AKLM** | **AKL** | **6.02** | **252** | P | **Pn** | **01 13 44.7 -0.3** |
| AKLM | | | | S | **Sn** | **01 14 51.4 -2.1** |
| **EMAL** | **Malaga-Limoner** | **6.04** | **274** | P | **Pn** | **01 13 46.9 +1.8** |
| EMAL | | | | S | **Sn** | **01 14 47.2 -6.6** |
| **UCM** | **Universidad Co** | **6.21** | **309** | P | **Pn** | **01 13 49.3 +1.7** |
| UCM | | | | S | **Sn** | **01 14 49.8 -8.3** |
| **ESBB** | **Sonseca Array** | **6.36** | **301** | | **Pn** | **01 13 50.1 +0.6** |
| **ESDC** | **Sonseca Array** | **6.36** | **301** | Pn | **Pn** | **01 13 49.8 +0.2** |
| | 2.0nm,0.3s,baz=116,slow=13,SNR=32 | | | | | |
| ESDC | | | | Sn | **Sn** | **01 14 57.7 -4.1** |
| | 1.8nm,0.3s,baz=116,slow=25,SNR=5.0 | | | | | |
| **PAB** | **San Pablo** | **6.57** | **299** | P | **Pn** | **01 13 52.8 +0.3** |
| **PAB** | **San Pablo** | **6.57** | **299** | Pn | **Pn** | **01 13 52.8 +0.3** |
| **PAB** | **San Pablo** | **6.57** | **299** | P | Pn | 01 13 59.1 +6.6 |
| **EPF** | **Esparros** | **6.79** | **343** | *e*Pn | **Pn** | **01 13 57.3 +1.8** |
| EPF | | | | *e*Sn | **Sn** | **01 15 10.1 -2.3** |
| | 62nm,0.5s | | | | | |
| **MTLF** | **Montolieu** | **6.80** | **355** | *e*Pn | **Pn** | **01 13 57.4 +1.9** |
| MTLF | | | | *e*Sn | **Sn** | **01 15 07.3 -5.2** |
| | 33nm,0.5s | | | | | |
| **ETSF** | **Etsaut** | **6.92** | **337** | *e*Pn | **Pn** | **01 13 59.0 +1.8** |
| ETSF | | | | *e*Sn | **Sn** | **01 15 12.2 -3.3** |
| | 48nm,0.5s | | | | | |
| **CHEFC** | **Chefchaouen** | **7.00** | **260** | P | **Pn** | **01 13 57.9 -0.4** |
| CHEFC | | | | S | **Sn** | **01 15 11.6 -5.8** |
| **LCRM** | **LCR** | **7.11** | **248** | P | **Pn** | **01 14 01.0 +1.0** |
| LCRM | | | | S | **Sn** | **01 15 18.8 -1.6** |
| **LMR** | **La Mourre** | **7.25** | **20** | *e*Pn | **Pn** | **01 14 00.9 -0.8** |
| LMR | | | | *e*Sn | **Sn** | **01 15 18.8 -4.8** |
| | 27nm,0.3s | | | | | |
| LMR | | | | *e*T | T | 01 20 19.0 |
| **SJPF** | **Ste Jean** | **7.33** | **334** | *e*Pn | **Pn** | **01 14 04.7 +1.9** |
| SJPF | | | | *e*Sn | **Sn** | **01 15 22.1 -3.4** |
| | 98nm,0.6s | | | | | |
| **MDT** | **Midelt** | **7.36** | **242** | Pn | **Pn** | **01 14 03.7 +0.4** |
| | 2.0nm,0.3s,baz=229,slow=7.5,SNR=52 | | | | | |
| MDT | | | | Lg | Lg | 01 16 06.8 |
| | 1.5nm,0.3s,baz=271,slow=21,SNR=2.9 | | | | | |
| **MDT** | **Midelt** | **7.36** | **242** | P | **Pn** | **01 14 03.0 -0.4** |
| **IFR** | **Ifrane** | **7.39** | **248** | P | **Pn** | **01 14 04.3 +0.5** |
| IFR | | | | S | **Sb** | **01 15 44.3 -8.0** |
| **MD31** | **MD31** | **7.44** | **243** | P | **Pn** | **01 14 04.1 -0.3** |
| **PGF** | **Pioggiola** | **7.52** | **36** | *e*Pn | **Pn** | **01 14 05.0 -0.5** |
| PGF | | | | *e*Sn | **Sn** | **01 15 25.2 -5.1** |
| | 26nm,0.3s | | | | | |
| PGF | | | | *e*T | T | 01 20 17.6 |
| **LASF** | **Ste Croix** | **7.52** | **4** | *e*Pn | **Pn** | **01 14 06.5 +1.0** |
| LASF | | | | *e*Sn | **Sn** | **01 15 26.1 -4.2** |
| | 55nm,0.6s | | | | | |
| **SMRF** | **Simiane la Rot** | **7.64** | **14** | *e*Pn | **Pn** | **01 14 08.5 +1.4** |
| SMRF | | | | *e*Sn | **Sn** | **01 15 31.7 -1.5** |
| | 36nm,0.7s | | | | | |
| SMRF | | | | *e*T | T | 01 20 28.5 |
| **SBF** | **Sospel** | **8.01** | **23** | *e*Pn | **Pn** | **01 14 11.9 -0.3** |
| SBF | | | | *e*Sn | **Sn** | **01 15 37.8 -4.6** |
| | 78nm,0.4s | | | | | |
| **CLTB** | **Caltabellotta** | **8.16** | **80** | Pn | **Pn** | **01 14 14.0 -0.3** |
| **VIVF** | **Saint-Julien-l** | **8.37** | **8** | *e*Pn | **Pn** | **01 14 18.3 +1.2** |
| VIVF | | | | *e*Sn | **Sn** | **01 15 45.8 -5.3** |
| | 45nm,0.5s | | | | | |
| **CAF** | **Calviac** | **8.39** | **355** | *e*Pn | **Pn** | **01 14 19.3 +2.0** |
| CAF | | | | *e*Sn | **Sn** | **01 15 45.1 -6.4** |
| | 21nm,0.7s | | | | | |
| **LFF** | **La Frestale** | **8.55** | **349** | *e*Pn | **Pn** | **01 14 20.6 +1.1** |
| LFF | | | | *e*Sn | **Sn** | **01 15 53.6 -1.9** |
| | 45nm,0.6s | | | | | |
| **ZHG** | **ZHG** | **8.56** | **252** | P | **Pn** | **01 14 21.0 +1.1** |
| **ORIF** | **Oris-en-Rattie** | **8.61** | **13** | *e*Pn | **Pn** | **01 14 22.4 +2.0** |
| ORIF | | | | *e*Sn | **Sn** | **01 15 52.9 -4.2** |
| | 19nm,0.7s | | | | | |
| **MBDF** | **Montbardon** | **8.62** | **18** | *e*Pn | **Pn** | **01 14 21.8 +1.2** |
| MBDF | | | | *e*Sn | **Sn** | **01 15 54.3 -3.1** |
| | 33nm,0.7s | | | | | |
| MBDF | | | | *e*T | T | 01 21 17.3 |
| **CASP** | **Castiglione de** | **8.64** | **42** | Pn | **Pn** | **01 14 20.0 -0.8** |
| **PVAQ** | **Vaqueiros** | **8.68** | **279** | *e*P | **Pn** | **01 14 19.8 -1.6** |
| PVAQ | | | | *e*S | **Sn** | **01 15 54.6 -4.2** |
| PVAQ | | | | A | A | 01 16 02.5 |
| | 5.5nm,0.4s | | | | | |
| **PVAQ** | **Vaqueiros** | **8.68** | **279** | Pn | **Pn** | **01 14 20.8 -0.6** |
| **PVAQ** | **Vaqueiros** | **8.68** | **279** | P | **Pn** | **01 14 19.2 -2.2** |
| PVAQ | | | | S | **Sn** | **01 15 55.0 -3.9** |
| **PMRV** | **Marv??o** | **8.75** | **292** | *e*P | **Pn** | **01 14 23.4 +1.1** |
| **PESTR** | **Estremoz** | **8.76** | **288** | *e*P | **Pn** | **01 14 21.8 -0.7** |
| PESTR | | | | *e*S | **Sn** | **01 15 58.0 -2.8** |
| **PESTR** | **Estremoz** | **8.76** | **288** | Pn | **Pn** | **01 14 22.3 -0.3** |
| **PESTR** | **Estremoz** | **8.76** | **288** | P | **Pn** | **01 14 21.6 -1.0** |
| PESTR | | | | S | **Sn** | **01 15 55.9 -5.0** |
| **SSB** | **Saint Sauveur** | **8.77** | **7** | P | **Pn** | **01 14 24.1 +1.4** |
| **SSB** | **Saint Sauveur** | **8.77** | **7** | Pn | **Pn** | **01 14 24.1 +1.4** |
| **RJF** | **Les Rejaudoux** | **8.81** | **353** | *e*Pn | **Pn** | **01 14 24.5 +1.4** |
| RJF | | | | *e*Sn | **Sn** | **01 15 53.5 -8.4** |
| | 19nm,0.6s | | | | | |
| **BNI** | **Bardonecchia** | **8.90** | **17** | P | **Pn** | **01 14 26.7 +2.2** |
| **BNI** | **Bardonecchia** | **8.90** | **17** | Pn | **Pn** | **01 14 26.7 +2.2** |
| **EVO** | **Evora** | **9.03** | **286** | P | **Pn** | **01 14 26.5 +0.4** |
| EVO | | | | S | Sn | 01 15 56.2 -11 |
| **RAFF** | **Raffo Rosso** | **9.06** | **82** | Pn | **Pn** | **01 14 27.8 +1.2** |
| **VAE** | **Valguarnera** | **9.11** | **81** | Pn | **Pn** | **01 14 30.2 +3.0** |
| | 1.0nm,0.3s,baz=311,slow=24,SNR=1.7 | | | | | |
| **MESJ** | **Messejana** | **9.11** | **281** | *e*P | **Pn** | **01 14 25.7 -1.5** |
| **MESJ** | **Messejana** | **9.11** | **281** | *e*P | **Pn** | **01 14 28.9 +1.7** |
| **MVO** | **Moncorvo** | **9.12** | **303** | *e*P | **Pn** | **01 14 28.7 +1.2** |
| MVO | | | | *e*S | **Sn** | **01 16 09.6 -0.1** |
| **MTE** | **Manteigas** | **9.17** | **298** | Pn | **Pn** | **01 14 28.8 +0.7** |
| **AVE** | **Averroes** | **9.21** | **252** | P | **Pn** | **01 14 28.9 +0.2** |
| AVE | | | | S | **Sn** | **01 16 13.5 +1.6** |
| **TZRR** | **Tazzarine** | **9.23** | **234** | P | **Pn** | **01 14 29.8 +0.8** |
| **PBRG** | **Braganca** | **9.25** | **307** | *e*P | **Pn** | **01 14 30.4 +1.3** |
| **LPG** | **La Plagne** | **9.34** | **16** | *e*Pn | **Pn** | **01 14 33.6 +2.9** |
| LPG | | | | *e*Sn | **Sn** | **01 16 10.0 -5.4** |
| | 19nm,0.8s | | | | | |
| **OSSC** | **Osservatorio P** | **9.35** | **39** | Pn | **Pn** | **01 14 30.9 +0.5** |
| **LPL** | **La Plagne** | **9.36** | **16** | *e*Pn | **Pn** | **01 14 33.1 +2.3** |
| LPL | | | | *e*Sn | **Sn** | **01 16 09.8 -5.8** |
| | 24nm,0.7s | | | | | |
| LPL | | | | *e*T | T | 01 21 30.0 |
| **PNCL** | **Nicolau / Gran** | **9.38** | **283** | *e*P | **Pn** | **01 14 31.1 +0.2** |
| **PVIS** | **Viseu** | **9.53** | **299** | *e*P | **Pn** | **01 14 33.9 +0.8** |
| **PVRL** | **Vila Real** | **9.64** | **302** | *e*P | **Pn** | **01 14 35.8 +1.3** |
| **ZGR** | **Zagora** | **9.71** | **231** | P | **Pn** | **01 14 37.0 +1.4** |
| **POLO** | **Lamas de Olo** | **9.73** | **303** | *e*P | **Pn** | **01 14 38.1 +2.2** |
| **TCF** | **Toulx Ste Croi** | **9.73** | **356** | *e*Pn | **Pn** | **01 14 36.4 +0.6** |
| TCF | | | | *e*Sn | **Sn** | **01 16 18.8 -5.8** |
| | 7.8nm,0.5s | | | | | |
| **PCAS** | **Casmilo, Conde** | **9.74** | **294** | *e*P | **Pn** | **01 14 37.3 +1.4** |
| **BGF** | **Bois d'Agland** | **9.98** | **359** | *e*Pn | **Pn** | **01 14 39.8 +0.6** |
| BGF | | | | *e*Sn | **Sn** | **01 16 26.5 -4.2** |
| | 6.2nm,0.4s | | | | | |
| **SMF** | **Signal de Mont** | **10.09** | **3** | *e*Pn | **Pn** | **01 14 41.7 +1.1** |
| **AVF** | **Avril sur Loir** | **10.22** | **1** | *e*Pn | **Pn** | **01 14 43.9 +1.5** |
| **CABF** | **La Chapelle** | **10.28** | **12** | *e*Pn | **Pn** | **01 14 45.2 +1.8** |
| CABF | | | | *e*Sn | **Sn** | **01 16 35.5 -2.7** |
| **SENIN** | **Lac Senin/Sane** | **10.28** | **17** | Pn | **Pn** | **01 14 44.5 +0.9** |
| **MFF** | **Saint Martin d** | **10.31** | **347** | *e*Pn | **Pn** | **01 14 44.1 +0.4** |
| MFF | | | | *e*Sn | **Sn** | **01 16 31.7 -7.1** |
| | 16nm,0.6s | | | | | |
| **PGAV** | **Gavieira, Arco** | **10.32** | **305** | *e*P | **Pn** | **01 14 46.6 +2.7** |
| **SSF** | **Saint Saulge** | **10.49** | **2** | *e*Pn | **Pn** | **01 14 47.7 +1.6** |
| **OUK** | **Oukaimeden** | **10.55** | **243** | P | **Pn** | **01 14 47.7 +0.4** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **LOR** | **Lormes** | **10.71** | **3** | *e*Pn | **Pn** | **01 14 50.0 +0.9** |
| | baz=179 | | | | | |
| LOR | | | | *e*Sn | **Sn** | **01 16 42.3 -6.2** |
| | 5.1nm,0.5s | | | | | |
| **TUE** | **Stuetta** | **10.95** | **23** | Pn | **Pn** | **01 14 53.9 +1.3** |
| **DAVOX** | **Davos/Dischmat** | **11.39** | **24** | Pn | **Pn** | **01 15 01.7 +3.0** |
| | 0.7nm,0.3s,baz=174,slow=18,SNR=3.7 | | | | | |
| **HINF** | **Hinteralfeld** | **11.58** | **13** | *e*Pn | **Pn** | **01 15 01.5 +0.4** |
| HINF | | | | *e*Sn | **Sn** | **01 17 04.5 -5.4** |
| **HAU** | **Haudompre** | **11.68** | **11** | *e*Pn | **Pn** | **01 15 02.9 +0.5** |
| **HAU** | **Haudompre** | **11.68** | **11** | *e*P | Pn | 01 15 08.5 +6.1 |
| HAU | | | | *e*Sn | Sn | 01 17 01.9 -10 |
| | 9.8nm,0.5s | | | | | |
| **SFTF** | **Sexfontaines** | **11.72** | **6** | *e*Pn | **Pn** | **01 15 04.2 +1.3** |
| SFTF | | | | *e*Sn | **Sn** | **01 17 07.8 -5.4** |
| | 5.0nm,0.4s | | | | | |
| **DAVA** | **Damuels** | **11.84** | **23** | *e*Pn | Pn | 01 15 12.1 +7.4 |
| | 20nm,1.5s | | | | | |
| **MEZF** | **Maizieres J'vi** | **12.02** | **6** | *e*Pn | **Pn** | **01 15 08.0 +1.0** |
| | baz=188 | | | | | |
| **MEZF** | **Maizieres J'vi** | **12.02** | **6** | *e*P | **Pn** | **01 15 11.3 +4.3** |
| **ECH** | **Echery** | **12.02** | **13** | P | **Pn** | **01 15 07.7 +0.6** |
| **ECH** | **Echery** | **12.02** | **13** | Pn | **Pn** | **01 15 07.7 +0.6** |
| **SAVF** | **Savonnieres en** | **12.13** | **6** | *e*Pn | **Pn** | **01 15 10.1 +1.5** |
| | baz=187 | | | | | |
| **SAVF** | **Savonnieres en** | **12.13** | **6** | *e*P | Pn | 01 15 13.6 +5.0 |
| **GRR** | **Gorron** | **12.16** | **347** | *e*Pn | **Pn** | **01 15 09.0 0.0** |
| **CDF** | **Champ du Feu** | **12.23** | **13** | *e*Pn | **Pn** | **01 15 10.4 +0.4** |
| **CDF** | **Champ du Feu** | **12.23** | **13** | *e*P | **Pn** | **01 15 14.7 +4.7** |
| CDF | | | | *e*Sn | Sn | 01 17 16.5 -9.4 |
| | 3.4nm,0.5s | | | | | |
| **SQTA** | **Sankt Quirin** | **12.24** | **27** | *e*Pn | **Pn** | **01 15 11.0 +0.9** |
| | 8.5nm,0.8s | | | | | |
| **QUIF** | **Quistinic** | **12.24** | **340** | *e*Pn | **Pn** | **01 15 10.7 +0.6** |
| QUIF | | | | *e*Sn | **Sn** | **01 17 18.9 -7.1** |
| **LDF** | **La Druitiere** | **12.25** | **350** | *e*Pn | **Pn** | **01 15 10.5 +0.4** |
| LDF | | | | *e*Sn | **Sn** | **01 17 19.2 -6.9** |
| | 15nm,0.8s | | | | | |
| **MOTA** | **Moosalm** | **12.30** | **26** | *e*Pn | **Pn** | **01 15 15.6 +4.5** |
| | 8.0nm,1.0s | | | | | |
| **RETA** | **Reutte** | **12.31** | **25** | *e*Pn | Pn | 01 15 16.1 +5.0 |
| | 8.8nm,0.9s | | | | | |
| **BFO** | **Black Forest** | **12.37** | **17** | P | **Pn** | **01 15 11.4 -0.5** |
| **BFO** | **Black Forest** | **12.37** | **17** | Pn | **Pn** | **01 15 11.4 -0.5** |
| **SGMF** | **Saint Gilles** | **12.40** | **342** | *e*Pn | **Pn** | **01 15 13.6 +1.4** |
| SGMF | | | | *e*Sn | **Sn** | **01 17 22.0 -7.7** |
| **WTTA** | **Wattenberg** | **12.43** | **28** | *e*Pn | **Pn** | **01 15 13.7 +0.9** |
| | 9.7nm,1.6s | | | | | |
| **FLN** | **La Foliniere** | **12.46** | **349** | *e*Pn | **Pn** | **01 15 13.0 -0.1** |
| | baz=171 | | | | | |
| **ROSF** | **Rostrenen** | **12.66** | **340** | *e*Pn | **Pn** | **01 15 16.2 +0.5** |
| ROSF | | | | *e*Sn | **Sn** | **01 17 30.2 -5.9** |
| **KBA** | **Koelnbreinsper** | **12.98** | **33** | *e*Pn | **Pn** | **01 15 22.3 +1.9** |
| | 15nm,1.1s | | | | | |
| **SOKA** | **Soboth** | **13.47** | **38** | *e*Pn | **Pn** | **01 15 28.5 +1.6** |
| | 10nm,1.0s | | | | | |
| **BAIF** | **Baives** | **13.51** | **3** | *e*Pn | **Pn** | **01 15 29.8 +2.4** |
| **DOU** | **Dourbes** | **13.57** | **4** | *d*P | **Pn** | **01 15 31.0 +2.9** |
| **GIVF** | **Givet** | **13.59** | **5** | *e*Pn | **Pn** | **01 15 30.4 +2.0** |
| **RCHB** | **Rochefort** | **13.67** | **6** | *d*P | **Pn** | **01 15 31.7 +2.1** |
| **BMRD** | **Maredsous** | **13.78** | **5** | *d*P | **Pn** | **01 15 33.7 +2.6** |
| **BGES** | **Gesves** | **13.89** | **5** | *d*P | **Pn** | **01 15 34.8 +2.3** |
| **SNF** | **Seneffe** | **13.96** | **3** | *d*P | **Pn** | **01 15 36.8 +3.3** |
| **MOA** | **Molln** | **13.97** | **33** | *e*Pn | **Pn** | **01 15 36.7 +2.9** |
| | 8.6nm,1.2s | | | | | |
| **ARSA** | **Arzberg** | **14.11** | **37** | *e*Pn | **Pn** | **01 15 37.4 +1.8** |
| | 37nm,1.4s | | | | | |
| **BSTI** | **Sart Tilman** | **14.12** | **6** | *d*P | **Pn** | **01 15 37.2 +1.4** |
| **BTNL** | **Ternell** | **14.19** | **8** | *d*P | **Pn** | **01 15 38.4 +1.8** |
| **MEM** | **Membach** | **14.19** | **8** | *d*P | **Pn** | **01 15 39.4 +2.7** |
| **GEC2** | **GERESS Array S** | **14.52** | **29** | Pn | **Pn** | **01 15 42.1 +0.8** |
| **GERES** | **GERESS Array B** | **14.52** | **29** | Pn | **Pn** | **01 15

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **18.21** | **36** | P | | **P** | | **01 16 30.4** | **+1.8** |
| **CRVS** | **Cervenica-Dubn** | **18.22** | **42** | *e*P | | **P** | | **01 16 32.2** | **+3.5** |
| **CRVS** | **Cervenica-Dubn** | **18.22** | **42** | *e*P | | **P** | | **01 16 32.2** | **+3.5** |
| **TRPA** | **Tarpa** | **18.39** | **45** | PN | | **Pn** | | **01 16 33.7** | **+3.2** |
| **HUMR** | **Humele** | **18.41** | **58** | ⇓P | | **Pn** | | **01 16 32.1** | **+1.3** |
| **COPA** | **Copaceanca** | **18.45** | **59** | ⇑P | | **Pn** | | **01 16 32.8** | **+1.4** |
| **ARR** | **Arges** | **18.45** | **55** | ⇓P | | **Pn** | | **01 16 31.9** | **+0.4** |
| **KOLS** | **Kolonicke sedl** | **18.68** | **43** | *e*P | | **Pn** | | **01 16 37.2** | **+3.1** |
| **KOLS** | **Kolonicke sedl** | **18.68** | **43** | *e*P | | **Pn** | | **01 16 37.2** | **+3.1** |
| **BMR** | **Baia Mare** | **18.71** | **47** | ⇑P | | **Pn** | | **01 16 36.4** | **+1.9** |
| **VOIR** | | **18.75** | **55** | ⇓P | | **Pn** | | **01 16 36.5** | **+1.3** |
| **DOPR** | **Dopca** | **19.16** | **54** | ⇓P | | **Pn** | | **01 16 40.4** | **+0.4** |
| **EKA** | **Eskdalemuir Ar** | **19.25** | **349** | P | | **Pn** | | **01 16 41.7** | **+0.7** |
| | baz=164,slow=16,SNR=3.0 | | | | | | | | |
| **SECR** | | **19.30** | **57** | ⇑P | | **Pn** | | **01 16 42.8** | **+1.1** |
| **KWP** | **Kalwaria Pacla** | **19.31** | **41** | *e*P | | **Pn** | | **01 16 43.9** | **+2.2** |
| **KWP** | **Kalwaria Pacla** | **19.31** | **41** | P | | **Pn** | | **01 16 42.9** | **+1.2** |
| KWP | | | | pmax | pmax | | | | |
| | comp=Z,762nm,1.3s | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **19.31** | **41** | P | | **Pn** | | **01 16 42.9** | **+1.2** |
| **MLR** | **Muntele Rosu** | **19.36** | **56** | ⇓P | | **Pn** | | **01 16 42.9** | **+0.4** |
| **MLR** | **Muntele Rosu** | **19.36** | **56** | P | | **Pn** | | **01 16 43.3** | **+0.8** |
| | comp=Z,0.5nm,0.3s,baz=269,slow=7.7,SNR=8.9 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **19.36** | **56** | P | | **Pn** | | **01 16 42.0** | **-0.5** |
| MLR | | | | IAmb | IAmb | | | 01 16 44.3 | |
| | comp=Z,52nm,1.5s | | | | | | | | |
| **OZUR** | | **19.47** | **54** | ⇓P | | **Pn** | | **01 16 44.0** | **+0.3** |
| **NEHR** | **Nehoiu** | **19.58** | **56** | ⇓P | | **Pn** | | **01 16 45.9** | **+0.9** |
| **ISR** | **Istrita** | **19.65** | **57** | ⇓P | | **Pn** | | **01 16 46.7** | **+0.9** |
| **COVR** | **Voineasa-Covas** | **19.66** | **55** | ⇑P | | **Pn** | | **01 16 45.6** | **-0.3** |
| **BURAR** | **Bucovina Array** | **19.72** | **49** | ⇑P | | **Pn** | | **01 16 47.5** | **+0.8** |
| **BURAR** | **Bucovina Array** | **19.72** | **49** | | | **Pn** | | **01 16 47.3** | **+0.5** |
| **BUR08** | **Bucovina Ar. S** | **19.72** | **49** | P | | **Pn** | | **01 16 47.4** | **+0.6** |
| BUR08 | | | | IAmb | IAmb | | | 01 16 49.9 | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| **PLOR** | **Plostina** | **19.95** | **55** | ⇑P | | **Pn** | | **01 16 49.2** | **-0.2** |
| **VRI** | **Vrincioaia** | **20.01** | **55** | ⇑P | | **P** | | **01 16 48.6** | **+0.3** |
| **LVV** | **L'vov** | **20.13** | **42** | *e*P | | **P** | | **01 16 50.1** | **+0.5** |
| **TESR** | **Tescani** | **20.18** | **53** | ⇑P | | Pn | | 01 16 52.0 | 0.0 |
| **ODBI** | **Odobesti** | **20.19** | **55** | ⇓P | | Pn | | 01 16 52.5 | +0.3 |
| **PRAR** | **RASCA** | **20.23** | **51** | ⇓P | | Pn | | 01 16 53.3 | +0.5 |
| **ICOR** | **Ion Corvin** | **20.25** | **61** | ⇓P | | Pn | | 01 16 51.9 | -1.0 |
| **HARR** | **Harsova** | **20.47** | **59** | ⇑P | | **P** | | **01 16 53.9** | **+0.6** |
| **CFR** | **Carcaliu** | **20.74** | **58** | ⇑P | | **P** | | **01 16 56.1** | **-0.1** |
| **TPGR** | **Topolog** | **20.85** | **59** | ⇑P | | **P** | | **01 16 57.8** | **+0.3** |
| **VLDR** | **Vladesti** | **20.90** | **56** | ⇑P | | **P** | | **01 16 58.0** | **0.0** |
| **ELL** | **Elmali** | **21.50** | **81** | P | | **P** | | **01 17 06.2** | **+1.5** |
| ELL | | | | pmax | pmax | | | | |
| | comp=Z,55nm,1.2s | | | | | | | | |
| **ELL** | **Elmali** | **21.50** | **81** | P | | **P** | | **01 17 06.2** | **+1.5** |
| ELL | | | | IAmb | IAmb | | | 01 17 11.5 | |
| | comp=Z,55nm,1.2s | | | | | | | | |
| **KLNR** | **Kaliningrad** | **21.55** | **28** | ⇓*e*P | | **P** | | **01 17 03.6** | **-1.3** |
| KLNR | | | | pmax | pmax | | | | |
| | comp=Z,116nm,1.2s | | | | | | | | |
| **MILM** | **Milestii Mici** | **21.71** | **54** | *e*P | | **P** | | **01 17 06.8** | **+0.1** |
| | comp=Z,130nm,1.5s | | | | | | | | |
| **MILM** | **Milestii Mici** | **21.71** | **54** | ⇑P | | **P** | | **01 17 07.4** | **+0.7** |
| **MILM** | **Milestii Mici** | **21.71** | **54** | *e*P | | **P** | | **01 17 07.0** | **+0.3** |
| MILM | | | | pmax | pmax | | | | |
| | comp=Z,130nm,1.5s | | | | | | | | |
| **KIS** | **Kishinev** | **21.75** | **53** | *e*P | | **P** | | **01 17 07.0** | **0.0** |
| | comp=Z,40nm,1.6s | | | | | | | | |
| **KIS** | **Kishinev** | **21.75** | **53** | *e*P | | **P** | | **01 17 07.0** | **0.0** |
| KIS | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.6s | | | | | | | | |
| **SUW** | **Suwalki** | **22.32** | **32** | *e*P | | **P** | | **01 17 15.1** | **+1.9** |
| **SUW** | **Suwalki** | **22.32** | **32** | P | | **P** | | **01 17 12.6** | **-0.5** |
| SUW | | | | pmax | pmax | | | | |
| | comp=Z,99nm,1.2s | | | | | | | | |
| **SUW** | **Suwalki** | **22.32** | **32** | *e*P | | **P** | | **01 17 13.4** | **+0.3** |
| **SUW** | **Suwalki** | **22.32** | **32** | P | | **P** | | **01 17 12.6** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** | **23.35** | **183** | P | | **P** | | **01 17 23.2** | **-1.0** |
| | comp=Z,10.0nm,0.8s,baz=358,slow=7.4,SNR=33 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **23.35** | **183** | P | | **P** | | **01 17 23.2** | **-1.0** |
| **AKASG** | **Malin Array Be** | **23.45** | **45** | P | | **P** | | **01 17 23.2** | **-1.7** |
| | comp=Z,7.1nm,0.5s,baz=242,slow=11,SNR=27 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **23.45** | **45** | P | | **P** | | **01 17 22.4** | **-2.5** |
| **AKBB** | **Malin Array Si** | **23.45** | **45** | *ce*P | | **P** | | **01 17 23.1** | **-1.8** |
| **AKBB** | **Malin Array Si** | **23.45** | **45** | P | | **P** | | **01 17 22.9** | **-2.0** |
| AKBB | | | | IAmb | IAmb | | | 01 17 25.6 | |
| | comp=Z,51nm,1.4s | | | | | | | | |
| **PABE** | **Paberze** | **23.69** | **30** | *e*P | | **P** | | **01 17 28.3** | **+1.2** |
| **PABE** | **Paberze** | **23.69** | **30** | P | | **P** | | **01 17 27.8** | **+0.7** |
| **NACGM** | **Naroch** | **24.50** | **34** | *i* P | | **P** | | **01 17 35.6** | **+0.9** |
| **IIGN** | **Ignalina** | **24.53** | **33** | *e*P | | **P** | | **01 17 36.1** | **+1.1** |
| **HFS** | **Hagfors** | **24.55** | **13** | P | | **P** | | **01 17 34.8** | **-0.4** |
| | comp=Z,3.7nm,0.6s,baz=203,slow=10,SNR=16 | | | | | | | | |
| **IDID** | **Didziasalis** | **24.70** | **33** | *e*P | | **P** | | **01 17 38.0** | **+1.1** |
| **NB2** | **NORSAR Subarra** | **25.03** | **9** | P | | **P** | | **01 17 39.3** | **-0.2** |
| | comp=Z,2.0nm,1.0s,baz=195,slow=9.3 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **25.03** | **9** | P | | **P** | | **01 17 41.2** | **+1.6** |
| | comp=Z,0.6nm,0.6s,baz=181,slow=8.6,SNR=6.3 | | | | | | | | |
| **BNN** | **Bunyan** | **25.95** | **75** | P | | **P** | | **01 17 48.0** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **26.71** | **88** | P | | **P** | | **01 17 56.4** | **+1.3** |
| | comp=Z,5.1nm,0.7s,baz=294,slow=8.1,SNR=9.4 | | | | | | | | |
| **VSU** | **Vasula** | **26.84** | **28** | ⇑*e*P | | **P** | | **01 17 56.5** | **+0.6** |
| VSU | | | | pmax | pmax | | | | |
| | comp=Z,67nm,1.5s | | | | | | | | |
| **GAZ** | **Gaziantep** | **27.23** | **78** | P | | **P** | | **01 17 59.4** | **-0.2** |
| GAZ | | | | IAmb | IAmb | | | 01 18 07.9 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **28.17** | **89** | P | | **P** | | **01 18 10.2** | **+2.1** |
| | comp=Z,1.7nm,0.6s,baz=82,slow=22,SNR=5.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **28.80** | **23** | P | | **P** | | **01 18 13.0** | **-0.3** |
| | comp=Z,2.4nm,0.8s,baz=241,slow=10,SNR=5.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **28.80** | **23** | P | | **P** | | **01 18 12.9** | **-0.5** |
| **OBN** | **Obninsk** | **29.39** | **40** | *i* P | | **P** | | **01 18 16.7** | **-1.9** |
| OBN | | | | *i* | | | | 01 19 08.4 | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **29.76** | **46** | *e*P | | **P** | | **01 18 20.0** | **-1.9** |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.6s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **31.05** | **50** | *e*P | | **P** | | **01 18 30.9** | **-2.5** |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **33.45** | **32** | *e*P | | **P** | | **01 18 51.9** | **-2.4** |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,52nm,1.4s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **33.45** | **32** | *e*P | | **P** | | **01 18 51.9** | **-2.4** |
| KLMR | | | | AMP | | | | 01 18 57.2 | |
| | comp=Z,52nm,1.4s | | | | | | | | |
| **BELG** | **Belogornoye** | **34.88** | **49** | P | | **P** | | **01 19 06.9** | **+0.2** |
| | comp=Z,14nm,0.9s,baz=70,slow=14,SNR=5.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **35.21** | **13** | P | | **P** | | **01 19 09.3** | **-0.2** |
| | comp=Z,2.4nm,0.6s,baz=209,slow=7.2,SNR=17 | | | | | | | | |
| **PRGR** | **Permogore** | **36.45** | **33** | *e*P | | **P** | | **01 19 17.9** | **-2.2** |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **KIRV** | **Kirov** | **37.21** | **39** | ⇑*e*P | | **P** | | **01 19 26.1** | **-0.5** |
| **RAYN** | **Ar Rayn** | **38.66** | **98** | P | | **P** | | **01 19 39.3** | **-0.1** |
| RAYN | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **38.66** | **98** | P | | **P** | | **01 19 39.2** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **41.25** | **53** | P | | **P** | | **01 19 59.4** | **-1.1** |
| | comp=Z,3.3nm,1.0s,baz=270,slow=11,SNR=5.8 | | | | | | | | |
| **SUMG** | **Summit** | **41.65** | **343** | P | | **P** | | **01 20 04.9** | **+0.9** |
| SUMG | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **SUMG** | **Summit** | **41.65** | **343** | *i* P | | **P** | | **01 20 05.0** | **+0.9** |
| **SUMG** | **Summit** | **41.65** | **343** | P | | **P** | | **01 20 04.9** | **+0.9** |
| SUMG | | | | IAmb | IAmb | | | 01 20 07.7 | |
| | comp=Z,7.8nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **41.70** | **43** | P | | **P** | | **01 20 04.2** | **+0.2** |
| | comp=Z,4.0nm,0.5s,baz=255,slow=6.5,SNR=18 | | | | | | | | |
| **ARU** | **Arti** | **41.70** | **43** | *c i*P | | **P** | | **01 20 03.8** | **-0.3** |
| ARU | | | | | | | | 01 21 39.0 | |
| ARU | | | | S | | **S** | | **01 26 21.9** | **+2.0** |
| ARU | | | | SS | | **SS** | | **01 29 25.0** | **-0.2** |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,46nm,1.8s | | | | | | | | |
| **ARU** | **Arti** | **41.70** | **43** | P | | **P** | | **01 20 03.2** | **-0.9** |
| ARU | | | | IAmb | IAmb | | | 01 20 05.8 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **42.57** | **54** | P | | **P** | | **01 20 09.9** | **-1.4** |
| **SVE** | **Sverdlovsk** | **42.87** | **43** | *e*P | | **P** | | **01 20 14.1** | **+0.5** |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.3s | | | | | | | | |
| **LODK** | **Lodwar** | **44.39** | **130** | P | | **P** | | **01 20 26.6** | **+0.1** |
| **MBAR** | **Mbarara** | **45.02** | **139** | P | | **P** | | **01 20 31.8** | **+0.2** |
| | comp=Z,5.2nm,0.9s,baz=330,slow=6.8,SNR=6.2 | | | | | | | | |
| **MBAR** | **Mbarara** | **45.02** | **139** | P | | **P** | | **01 20 31.1** | **-0.5** |
| MBAR | | | | IAmb | IAmb | | | 01 20 33.2 | |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| **BRVK** | **Borovoye** | **48.60** | **48** | *de*P | | **P** | | **01 21 00.0** | **+0.9** |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **48.60** | **48** | P | | **P** | | **01 20 59.9** | **+0.9** |
| **BVAR** | **Borovoye Array** | **48.67** | **48** | P | | **P** | | **01 20 60.0** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=358,slow=7.9,SNR=5.3 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.67** | **48** | P | | **P** | | **01 21 00.0** | **+0.4** |
| **KMBO** | **Kilima Mbogo** | **49.13** | **132** | P | | **P** | | **01 21 04.5** | **+0.8** |
| | comp=Z,4.0nm,1.0s,baz=332,slow=10.0,SNR=8.3 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.13** | **132** | P | | **P** | | **01 21 04.8** | **+1.0** |
| KMBO | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.13** | **132** | P | | **P** | | **01 21 04.8** | **+1.0** |
| KMBO | | | | IAmb | IAmb | | | 01 21 06.8 | |
| | comp=Z,9.4nm,1.2s | | | | | | | | |
| **SCHQ** | **Schefferville** | **49.93** | **315** | P | | **P** | | **01 21 08.5** | **-0.6** |
| | comp=Z,3.3nm,0.6s,baz=89,slow=5.9,SNR=14 | | | | | | | | |
| **SCHQ** | **Schefferville** | **49.93** | **315** | P | | **P** | | **01 21 08.3** | **-0.8** |
| SCHQ | | | | IAmb | IAmb | | | 01 21 26.2 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.12** | **50** | P | | **P** | | **01 21 40.3** | **-0.1** |
| | comp=Z,4.5nm,0.7s,baz=290,slow=8.3,SNR=14 | | | | | | | | |
| **KURK** | **Kurchatov** | **54.15** | **49** | ⇓*e*P | | **P** | | **01 21 40.8** | **+0.2** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **54.15** | **49** | P | | **P** | | **01 21 39.9** | **-0.6** |
| KURK | | | | IAmb | IAmb | | | 01 21 41.6 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **KSH** | **Kashi** | **56.00** | **63** | P | | **P** | | **01 21 54.2** | **-0.1** |
| KSH | | | | pP | | **pP** | | **01 21 59.2** | **-0.9** |
| **ZAA0** | **Zalesovo Array** | **56.85** | **44** | P | | **P** | | **01 21 58.0** | **-2.0** |
| ZAA0 | | | | IAmb | IAmb | | | 01 22 01.2 | |
| | comp=Z,6.4nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.85** | **44** | P | | **P** | | **01 22 00.1** | **+0.1** |
| | comp=Z,8.3nm,0.8s,baz=287,slow=7.8,SNR=8.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.85** | **44** | P | | **P** | | **01 21 58.7** | **-1.3** |
| **TSUM** | **Tsumeb** | **57.13** | **164** | P | | **P** | | **01 22 03.3** | **+0.9** |
| TSUM | | | | IAmb | IAmb | | | 01 22 05.6 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **57.69** | **53** | *c i*P | | **P** | | **01 22 05.7** | **-0.3** |
| **MK31** | **Makanchi Array** | **57.69** | **53** | P | | **P** | | **01 22 05.0** | **-1.0** |
| **MKAR** | **Makanchi Array** | **57.69** | **53** | P | | **P** | | **01 22 05.9** | **-0.1** |
| | comp=Z,3.1nm,0.8s,baz=287,slow=5.4,SNR=12 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.69** | **53** | P | | **P** | | **01 22 04.7** | **-1.3** |
| **DGZ** | **Jazzator, Alta** | **59.83** | **48** | ⇓*e*P | | **P** | | **01 22 20.5** | **-0.5** |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **LBTB** | **Lobatse** | **64.83** | **157** | P | | **P** | | **01 22 54.9** | **+0.3** |
| LBTB | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **LBTB** | **Lobatse** | **64.83** | **157** | P | | **P** | | **01 22 54.9** | **+0.3** |
| **TIXI** | **Tiksi** | **65.57** | **16** | ⇓*e*P | | **P** | | **01 23 00.2** | **+1.5** |
| TIXI | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.7s | | | | | | | | |
| **TIXI** | **Tiksi** | **65.57** | **16** | P | | **P** | | **01 22 59.5** | **+0.8** |
| TIXI | | | | IAmb | IAmb | | | 01 23 00.9 | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **68.02** | **317** | P | | **P** | | **01 23 14.2** | **-0.5** |
| | comp=Z,3.9nm,0.6s,baz=60,slow=6.5,SNR=4.2 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **68.02** | **317** | P | | **P** | | **01 23 14.7** | **0.0** |
| ULM | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **68.02** | **317** | P | | **P** | | **01 23 14.7** | **0.0** |
| **BOSA** | **Boshof** | **68.11** | **159** | P | | **P** | | **01 23 15.4** | **-0.1** |
| | comp=Z,17nm,1.2s,baz=20,slow=5.6,SNR=6.8 | | | | | | | | |
| **BOSA** | **Boshof** | **68.11** | **159** | P | | **P** | | **01 23 15.8** | **+0.3** |
| BOSA | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.3s | | | | | | | | |
| **BOSA** | **Boshof** | **68.11** | **159** | P | | **P** | | **01 23 15.8** | **+0.3** |
| **PTGA** | **Pitinga** | **69.06** | **253** | P | | **P** | | **01 23 22.9** | **+1.2** |
| | comp=Z,1.4nm,0.3s,baz=339,slow=22,SNR=2.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.41** | **334** | P | | **P** | | **01 23 23.8** | **+0.6** |
| | comp=Z,1.7nm,0.7s,baz=53,slow=6.0,SNR=31 | | | | | | | | |
| **SONM** | **Songino Array** | **71.73** | **44** | P | | **P** | | **01 23 38.6** | **+0.8** |
| | comp=Z,1.1nm,0.5s,baz=270,slow=5.8,SNR=6.7 | | | | | | | | |
| **SONM** | **Songino Array** | **71.73** | **44** | P | | **P** | | **01 23 38.1** | **+0.3** |
| **GTA** | **Gaotai** | **72.42** | **54** | *e*P | | **P** | | **01 23 42.0** | **-0.1** |
| GTA | | | | pP | | **sP** | | **01 23 52.1** | **+1.8** |
| GTA | | | | sP | | **PcP** | | **01 23 56.9** | **-3.0** |
| **YAK** | **Yakutsk** | **72.73** | **23** | ⇓*e*P | | **P** | | **01 23 44.1** | **+0.8** |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **YAK** | **Yakutsk** | **72.73** | **23** | P | | **P** | | **01 23 43.6** | **+0.3** |
| **BGNE** | **Belgrade** | **74.16** | **310** | P | | **P** | | **01 23 52.4** | **+0.2** |
| **COLD** | **Coldfoot** | **74.55** | **350** | P | | **P** | | **01 23 55.3** | **+1.4** |
| COLD | | | | IAmb | IAmb | | | 01 23 57.1 | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **BILL** | **Bilibino** | **74.94** | **6** | *e*P | | **P** | | **01 23 56.4** | **+0.2** |
| BILL | | | | *i* | | | | 01 24 10.4 | |
| BILL | | | | *i* | | | | 01 26 44.1 | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.7s | | | | | | | | |
| **EDM** | **Edmonton** | **75.02** | **326** | P | | **P** | | **01 23 57.6** | **+0.6** |
| EDM | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| **EDM** | **Edmonton** | **75.02** | **326** | P | | **P** | | **01 23 57.6** | **+0.6** |
| EDM | | | | IAmb | IAmb | | | 01 24 00.4 | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| **DAWY** | **Dawson** | **75.40** | **344** | P | | **P** | | **01 23 58.5** | **-0.5** |
| DAWY | | | | IAmb | IAmb | | | 01 24 04.9 | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **H23K** | **Yukon River** | **75.75** | **349** | P | | **P** | | **01 24 02.4** | **+1.5** |
| H23K | | | | IAmb | IAmb | | | 01 24 04.7 | |
| | comp=Z,4.7nm,0.7s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **76.21** | **350** | P | | **P** | | **01 24 05.2** | **+1.7** |
| **ILAR** | **Eielson Array** | **76.28** | **347** | P | | **P** | | **01 24 05.2** | **+1.4** |
| | comp=Z,1.4nm,0.7s,baz=9.2,slow=4.5,SNR=24 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **76.39** | **350** | P | | **P** | | **01 24 05.9** | **+1.4** |
| H21K | | | | IAmb | IAmb | | | 01 24 20.9 | |
| | comp=Z,6.8nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **76.62** | **347** | P | | **P** | | **01 24 07.1** | **+1.2** |
| HDA | | | | IAmb | IAmb | | | 01 24 08.9 | |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| **MLY** | **Manley** | **76.68** | **349** | P | | **P** | | **01 24 08.0** | **+1.7** |
| **DOT** | **Dot Lake** | **76.76** | **346** | P | | **P** | | **01 24 08.5** | **+1.8** |
| DOT | | | | IAmb | IAmb | | | 01 24 11.6 | |
| | comp=Z,5.9nm,1.0s | | | | | | | | |
| **WRH** | **Wood River Hil** | **76.76** | **348** | P | | **P** | | **01 24 07.9** | **+1.2** |
| WRH | | | | IAmb | IAmb | | | 01 24 20.3 | |
| | comp=Z,4.8nm,1.1s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **76.81** | **344** | P | | **P** | | **01 24 08.0** | **+1.0** |
| **RIDG** | **Independent Ri** | **76.83** | **346** | P | | **P** | | **01 24 09.2** | **+2.1** |
| **LZH** | **Lanzhou** | **76.93** | **55** | *e*P | | **P** | | **01 24 09.4** | **+1.1** |
| LZH | | | | pP | | **pP** | | **01 24 14.5** | **+0.2** |
| LZH | | | | sP | | **sP** | | **01 24 17.6** | **+1.1** |
| **BPAW** | **Bear Paw Mtn.** | **77.59** | **349** | P | | **P** | | **01 24 12.1** | **+0.8** |
| **M26K** | **Nabesna, AK** | **77.66** | **345** | P | | **P** | | **01 24 13.7** | **+2.0** |
| M26K | | | | IAmb | IAmb | | | 01 24 34.8 | |
| | comp=Z,6.1nm,1.3s | | | | | | | | |
| **DHY** | **Denali Highway** | **77.92** | **347** | P | | **P** | | **01 24 15.0** | **+1.7** |
| **TRF** | **Thorofare Moun** | **78.08** | **348** | P | | **P** | | **01 24 15.4** | **+1.1** |
| TRF | | | | IAmb | IAmb | | | 01 24 16.9 | |
| | comp=Z,4.8nm,0.7s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **78.09** | **348** | P | | **P** | | **01 24 15.0** | **+0.9** |
| KTH | | | | IAmb | IAmb | | | 01 24 16.1 | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| **PHWY** | **Pilot Hill** | **78.63** | **313** | P | | **P** | | **01 24 19.5** | **+1.6** |
| PHWY | | | | IAmb | IAmb | | | 01 24 29.9 | |
| | comp=Z,8.7nm,1.2s | | | | | | | | |
| **K20K** | **Telida** | **78.76** | **350** | P | | **P** | | **01 24 19.0** | **+1.2** |
| **PPLA** | **Purkeypile** | **78.91** | **349** | P | | **P** | | **01 24 19.1** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **79.05** | **346** | P | | **P** | | **01 24 22.0** | **+2.5** |
| SCM | | | | pmax | pmax | | | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **79.05** | **346** | P | | **P** | | **01 24 22.0** | **+2.5** |
| **SML** | **Sawmill** | **79.26** | **347** | P | | **P** | | **01 24 22.0** | **+1.4** |
| SML | | | | IAmb | IAmb | | | 01 24 40.0 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **79.28** | **320** | P | | **P** | | **01 24 22.6** | **+1.5** |
| BOZ | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.5s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **79.28** | **320** | P | | **P** | | **01 24 22.6** | **+1.5** |
| **TTA** | **Tatalina** | **79.43** | **350** | P | | **P** | | **01 24 23.7** | **+2.1** |
| TTA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **TTA** | **Tatalina** | **79.43** | **350** | P | | **P** | | **01 24 23.6** | **+2.1** |
| **SIV** | **San Ignacio** | **79.91** | **242** | P | | **P** | | **01 24 25.9** | **+1.1** |
| | comp=Z,1.2nm,0.8s,baz=81,slow=8.6,SNR=5.1 | | | | | | | | |
| **BW06** | **Boulder Array** | **80.03** | **316** | P | | **P** | | **01 24 24.8** | **-0.6** |
| BW06 | | | | IAmb | IAmb | | | 01 24 37.3 | |
| | comp=Z,7.4nm,1.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.03** | **316** | P | | **P** | | **01 24 25.6** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=57,slow=5.0,SNR=8.2 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.03** | **316** | P | | **P** | | **01 24 25.7** | **+0.3** |
| **MOOW** | **Moose Ponds** | **80.04** | **318** | P | | **P** | | **01 24 26.4** | **+1.1** |
| **MA2** | **Magadan** | **80.54** | **16** | *de*P | | **P** | | **01 24 29.4** | **+1.9** |
| MA2 | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.7s | | | | | | | | |
| **BMO** | **Blue Mountains** | **82.69** | **322** | P | | **P** | | **01 24 39.7** | **+0.4** |
| BMO | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **BMO** | **Blue Mountains** | **82.69** | **322** | P | | **P** | | **01 24 39.7** | **+0.4** |
| BMO | | | | IAmb | IAmb | | | 01 24 42.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | | | |
| **KLR** | **Kul'dur** | **83.21** | **31** | ⇓*e*P | | **P** | | **01 24 43.4** | **+1.6** |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **ANMO** | **Albuquerque** | **83.28** | **309** | ⇓*e*P | | **P** | | **01 24 42.3** | **-0.3** |
| ANMO | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.8s | | | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **83.30** | **255** | P | | **P** | | **01 24 42.5** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **83.76** | **72** | P | | **P** | | **01 24 45.6** | **+0.5** |
| | comp=Z,0.9nm,0.4s,baz=315,slow=8.9,SNR=5.5 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.76** | **72** | *ce*P | | **P** | | **01 24 46.5** | **+1.4** |
| CMAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **ELK** | **Elko** | **84.52** | **318** | P | | **P** | | **01 24 49.2** | **+0.3** |
| ELK | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.5s | | | | | | | | |
| **ELK** | **Elko** | **84.52** | **318** | P | | **P** | | **01 24 49.2** | **+0.3** |
| ELK | | | | IAmb | IAmb | | | 01 24 53.7 | |
| | comp=Z,9.3nm,1.5s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.04** | **303** | P | | **P** | | **01 24 52.7** | **+1.1** |
| | comp=Z,0.6nm,0.8s,baz=101,slow=3.9,SNR=3.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.04** | **303** | P | | **P** | | **01 24 52.6** | **+1.1** |
| **SPR3** | **Spring Creek 3** | **85.24** | **316** | P | | **P** | | **01 24 53.4** | **+0.7** |
| SPR3 | | | | IAmb | IAmb | | | 01 24 56.7 | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **86.40** | **316** | P | | **P** | | **01 24 59.0** | **+0.7** |
| R11A | | | | IAmb | IAmb | | | 01 25 01.8 | |
| | comp=Z,6.4nm,1.4s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **89.33** | **26** | *e*P | | **P** | | **01 25 08.5** | **-3.4** |
| **ASAR** | **Alice Springs** | **136.00** | **87** | PKP | | **PKPdf** | | **01 31 37.6** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=354,slow=2.8,SNR=4.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **136.00** | **87** | | | **PKPdf** | | **01 31 36.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **145.57** | **95** | PKPbc | | **PKPab** | | **01 31 54.4** | **0.0** |
| | comp=Z,5.6nm,0.8s,baz=295,slow=5.6,SNR=10

comp=Z,5.1nm,1.1s
**TORD Torodi Ar. Bea 82.79 70 P P 01 26 27.0 +0.2**
comp=Z,12nm,1.0s,baz=256,slow=6.1,SNR=5.6
**TORD Torodi Ar. Bea 82.79 70 P P 01 26 26.0 -0.7**
TORD IAmb IAmb 01 26 38.0
comp=Z,5.4nm,1.1s
**RLMT Red Lodge 82.88 334 P P 01 26 27.6 +0.9**
**WRA Warramunga Arr 123.77 210 PKP PKPdf 01 32 58.6 -1.9**
comp=Z,0.3nm,0.8s,baz=169,slow=1.6,SNR=1.7
**H11S2 WAKE ISLAND Hyl 26.08 271 T T** 03 51 50.4
baz=116,slow=75,SNR=40
**H11S1 WAKE ISLAND Hyl 26.10 271 T T** 03 51 51.6
baz=116,slow=75,SNR=46
**H11S3 WAKE ISLAND Hyl 26.10 271 T T** 03 51 51.7
baz=116,slow=75,SNR=44
**ZALV Zalesovo Beam 151.25 29 PKPbc PKiKP 01 33 55.5 0.0**
comp=Z,4.2nm,0.8s,baz=298,slow=3.2,SNR=17
**ZALV Zalesovo Beam 151.25 29 PKPbc PKiKP 01 33 55.7 +0.2**
**MKAR Makanchi Array 154.27 44 PKPbc PKPbc 01 34 01.8 -0.3**
comp=Z,0.5nm,0.9s,baz=348,slow=3.5,SNR=3.6
**MKAR Makanchi Array 154.27 44 PKPbc 01 34 02.1 0.0**

*NNC **10** 01:21:54.6±1.9, 41.°94N×84.°64E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=13.7km s-min=7.5km az=151.0*
*SOME **10** 01:22:08.8, 42.°30N×84.°15E, h5km*
**ISC 10 01:22:04.7±2.5, 42.°2N±0.°1×84.°29E±0.°08, h10km, n18, σ1§27/26, 3D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **3.15** | **294** | *eP* | **Pg** | **01 23 05.5** | **+0.5** |
| KTMS | 1.4nm,0.6s | | | *eS* | **Sg** | **01 23 46.4** | **+0.6** |
| | 16nm,0.5s | | | | | | |
| **KTMS** | **Ketmen** | **3.15** | **294** | Pg | **Pn** | **01 22 58.4** | **+3.9** |
| KTMS | 2.3nm,0.2s | | | Lg | Lg | 01 23 45.7 | |
| | 16nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **3.68** | **286** | *eP* | **Pb** | **01 23 10.0** | **+0.1** |
| SHLS | 1.8nm,0.3s | | | *eS* | **Sb** | **01 23 53.7** | **-1.0** |
| | 20nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **3.68** | **286** | Pg | **Pn** | **01 23 02.8** | **+1.0** |
| SHLS | 5.5nm,0.4s | | | Lg | Lg | 01 23 53.1 | |
| | 20nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **3.91** | **304** | *eP* | **Pg** | **01 23 19.6** | **0.0** |
| DJR | 1.2nm,0.4s | | | *eS* | **Sg** | **01 24 10.4** | **+0.3** |
| | 11nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **3.91** | **304** | Pg | **Pb** | **01 23 11.9** | **-1.8** |
| DJR | 3.1nm,0.5s | | | Lg | Lg | 01 24 08.9 | |
| | 11nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **3.99** | **285** | *eP* | **Pg** | **01 23 20.7** | **-0.6** |
| UZB | 1.0nm,0.3s | | | *eS* | **Sg** | **01 24 12.7** | **-0.3** |
| | 9.4nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **3.99** | **285** | Pg | **Pb** | **01 23 14.1** | **-1.2** |
| UZB | 6.5nm,0.2s | | | Lg | Lg | 01 24 12.7 | |
| | 9.4nm,0.3s | | | | | | |
| **SATY** | **Saty** | **4.42** | **283** | *eP* | **Pg** | **01 23 27.9** | **-1.5** |
| SATY | 4.3nm,0.6s | | | *eS* | **Sg** | **01 24 24.6** | **-2.1** |
| | 32nm,1.1s | | | | | | |
| **SATY** | **Saty** | **4.42** | **283** | Pg | **Pb** | **01 23 21.1** | **-1.5** |
| SATY | 24nm,1.1s | | | Lg | Lg | 01 24 24.6 | |
| | 32nm,1.1s | | | | | | |
| **BLB** | **Baldybastay** | **4.65** | **296** | *eP* | **Pg** | **01 23 33.0** | **-0.8** |
| BLB | 3.8nm,0.6s | | | *eS* | **Sg** | **01 24 33.9** | **0.0** |
| | 5.7nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **4.65** | **296** | Pg | **Pb** | **01 23 26.5** | **+0.1** |
| BLB | 2.5nm,0.2s | | | Lg | Lg | 01 24 33.9 | |
| | 5.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **4.79** | **343** | Pg | **Pb** | **01 23 29.0** | **+0.2** |
| MK31 | 0.3nm,0.3s,baz=156,slow=16,SNR=17 | | | ⇓Lg | Lg | 01 24 39.4 | |
| | 6.0nm,0.7s,baz=159,slow=28,SNR=7.2 | | | | | | |
| **MAKZ** | **Makanchi** | **4.88** | **341** | ⇓Pg | **Pb** | **01 23 30.2** | **-0.1** |
| MAKZ | 1.0nm,0.5s | | | ⇓Lg | Lg | 01 24 42.0 | |
| | 2.6nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **5.13** | **295** | *eP* | **Pg** | **01 23 42.0** | **-0.9** |
| ARXS | 1.9nm,0.4s | | | *eS* | **Sg** | **01 24 48.8** | **-0.5** |
| | 4.9nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **5.13** | **295** | Pg | **Pb** | **01 23 35.1** | **+0.5** |
| ARXS | 1.9nm,0.3s | | | Lg | Lg | 01 24 48.8 | |
| | 4.9nm,0.5s | | | | | | |
| **ZSN** | **Zaisan** | **5.25** | **4** | *eP* | **Pg** | **01 23 43.8** | **-1.4** |
| ZSN | 0.8nm,0.5s | | | *eS* | **Sg** | **01 24 52.3** | **-0.8** |
| | 8.7nm,0.5s | | | | | | |
| **ZSN** | **Zaisan** | **5.25** | **4** | Pg | **Pb** | **01 23 35.9** | **-0.6** |
| ZSN | 4.5nm,0.9s | | | Lg | Lg | 01 24 50.1 | |
| | 8.7nm,0.5s | | | | | | |

*INET **10** 01:22:30.7±0.4, 11.°10N×87.°39W, h15km±7km, MW3.7*
*IDC **10** 01:22:32.9±1.2, 12.°01N×86.°74W, h0km, mb3.9/7, mb1 4.1/9, mb1mx3.9/35, mbtmp3.8/9, ML3.3/2, MS4.4/1, Ms1 4.4/1, ms1mx3.8/70, Error ellipse: s-maj=54.3km s-min=16.6km az=47.0*
*UCR **10** 01:22:32.2±0.8, 12.°53N×85.°87W, h199km±67km, MW4.8, mb4.4(NEIC)*
*NEIC **10** 01:22:37.7±1.9, 11.°57N±0.°04×87.°13W±0.°07, h38km±8km, mb4.4/66, Error ellipse: s-maj=9.7km s-min=5.2km az=88.0*
**ISC 10 01:22:37.0±0.6, 11.°61N±0.°06×87.°16W±0.°07, h35km, n111, σ1§14/111, mb4.4/38, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNGN** | **Cerro Negro** | **0.99** | **27** | Pn | **Pn** | **01 22 55.9** | **+1.4** |
| **TISN** | **Laguna Tiscapa** | **1.02** | **59** | *eP* | **Pn** | **01 22 56.4** | **+1.5** |
| **CRIN** | **San Cristobal** | **1.08** | **6** | Pn | **Pn** | **01 22 57.3** | **+1.5** |
| **CRIN** | **San Cristobal** | **1.08** | **6** | *eP* | **Pn** | **01 22 57.4** | **+1.5** |
| **BOAB** | **BOACO BROADBAN** | **1.68** | **60** | Pn | **Pn** | **01 23 04.0** | **0.0** |
| **HZTE** | **Horizontes, Gu** | **1.78** | **120** | Pn | **Pn** | **01 23 04.3** | **-1.1** |
| **MATN** | **Matagalpa** | **1.78** | **43** | Pn | **Pn** | **01 23 07.0** | **+1.6** |
| **MATN** | **Matagalpa** | **1.78** | **43** | *eP* | **Pn** | **01 23 07.0** | **+1.6** |
| **ACON** | **Acoyapa** | **1.98** | **80** | Pn | **Pn** | **01 23 07.5** | **-0.6** |
| **ACON** | **Acoyapa** | **1.98** | **80** | *eP* | **Pn** | **01 23 07.2** | **-0.9** |
| **GUAI** | **GUAI** | **2.10** | **129** | *i* P | **Pn** | **01 23 13.9** | **+4.2** |
| **HORNC** | **Hornillas** | **2.14** | **115** | *i* P | **Pn** | **01 23 10.3** | **-0.1** |
| HORNC | | | | *i* S | **Sn** | **01 23 41.1** | **+5.2** |
| **TGUH** | **Tegucigalpa,Un** | **2.43** | **357** | Pn | **Pn** | **01 23 15.7** | **+1.2** |
| **JTS** | **Las Juntas de** | **2.54** | **121** | Pn | **Pn** | **01 23 16.2** | **+0.4** |
| | 2.8nm,0.3s,baz=328,slow=9.5,SNR=3.1 | | | | | | |
| JTS | | | | Sn | **Sn** | **01 23 45.4** | **-0.1** |
| | 18nm,0.3s,baz=329,slow=19,SNR=7.9 | | | | | | |
| **JTS** | **Las Juntas de** | **2.54** | **121** | Pn | **Pn** | **01 23 16.9** | **+1.1** |
| **JACO** | **JACO, Garabito** | **3.13** | **128** | Pn | **Pn** | **01 23 23.6** | **-0.3** |
| **MTO3** | **Montecristo** | **3.50** | **323** | Pn | **Pn** | **01 23 30.8** | **+1.6** |
| **RIMA** | **Rio Macho** | **3.73** | **119** | Pn | **Pn** | **01 23 33.2** | **+0.9** |
| **PEZE** | **Perez Zeledon,** | **4.08** | **123** | Pn | **Pn** | **01 23 37.9** | **+0.8** |
| **SRBA** | **San Rafael, Bu** | **4.43** | **122** | Pn | **Pn** | **01 23 41.3** | **-0.5** |
| **APG** | **El Apazote** | **4.66** | **317** | LR | LR | 01 25 49.9 | |
| | comp=Z,4µm,18.4s,baz=120,slow=42 | | | | | | |
| **CMIG** | **Matias Romero** | **9.25** | **307** | Pn | **Pn** | **01 24 48.9** | **+0.9** |
| | 0.8nm,0.3s,baz=110,slow=9.3,SNR=7.4 | | | | | | |
| **SDV** | **Santo Domingo** | **16.49** | **98** | Pn | **Pn** | **01 26 27.0** | **+1.0** |
| | 0.2nm,0.3s,baz=292,slow=7.4,SNR=5.1 | | | | | | |
| **833A** | **Chaparral WMA,** | **20.18** | **327** | P | **P** | **01 27 08.4** | **-0.3** |
| 833A | | | | IAmb | IAmb | 01 27 10.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **GOGA** | **Godfrey** | **21.96** | **8** | P | **P** | **01 27 27.3** | **-0.5** |
| GOGA | | | | IAmb | IAmb | 01 27 31.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **Y49A** | **Blount Mountai** | **22.15** | **2** | P | **P** | **01 27 29.9** | **+0.1** |
| Y49A | | | | IAmb | IAmb | 01 27 31.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **X48A** | **Hartselle** | **22.73** | **0** | P | **P** | **01 27 35.7** | **-0.3** |
| **OXF** | **Oxford** | **22.89** | **355** | P | **P** | **01 27 38.3** | **+0.7** |
| OXF | | | | IAmb | IAmb | 01 27 38.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **23.40** | **321** | P | **P** | **01 27 43.4** | **+0.4** |
| | comp=Z,1.6nm,0.6s,baz=134,slow=10,SNR=22 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.40** | **321** | P | **P** | **01 27 43.5** | **+0.5** |
| **TX31** | **Lajitas Ar. Si** | **23.40** | **321** | P | **P** | **01 27 43.3** | **+0.3** |
| TX31 | | | | IAmb | IAmb | 01 27 50.6 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **TX32** | **Lajitas Array** | **23.40** | **321** | P | **P** | **01 27 43.7** | **+0.8** |
| **W50A** | **Signal Mountai** | **23.54** | **4** | P | **P** | **01 27 45.5** | **+1.3** |
| W50A | | | | IAmb | IAmb | 01 27 46.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **23.56** | **347** | P | **P** | **01 27 44.3** | **-0.1** |
| **BG3** | **Lake Jocassee** | **23.59** | **9** | P | **P** | **01 27 46.2** | **+1.6** |
| BG3 | | | | IAmb | IAmb | 01 28 07.0 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **CPCT** | **Cooper Cave** | **23.85** | **5** | P | **P** | **01 27 48.1** | **+1.0** |
| CPCT | | | | IAmb | IAmb | 01 27 50.1 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **24.03** | **350** | P | **P** | **01 27 48.8** | **0.0** |
| WHAR | | | | IAmb | IAmb | 01 28 13.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **X37A** | **Clayton** | **24.06** | **343** | P | **P** | **01 27 49.7** | **+0.6** |
| **LOOK** | **Love County** | **24.08** | **339** | P | **P** | **01 27 49.7** | **+0.4** |
| LOOK | | | | IAmb | IAmb | 01 27 53.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.13** | **7** | P | **P** | **01 27 50.6** | **+0.8** |
| | comp=Z,6.3nm,0.9s,baz=185,slow=10,SNR=8.3 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.13** | **7** | P | **P** | **01 27 50.1** | **+0.4** |
| TKL | | | | IAmb | IAmb | 01 27 59.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **W39A** | **Magazine** | **24.23** | **347** | P | **P** | **01 27 50.7** | **0.0** |
| W39A | | | | IAmb | IAmb | 01 27 52.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **V53A** | **Saluda** | **24.27** | **9** | P | **P** | **01 27 52.4** | **+1.3** |
| V53A | | | | IAmb | IAmb | 01 27 54.7 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **CLTN** | **Cedars of Leba** | **24.38** | **2** | P | **P** | **01 27 53.0** | **+1.0** |
| **FCAR** | **Ozark Folk Cen** | **24.58** | **350** | P | **P** | **01 27 53.7** | **-0.1** |
| **U49A** | **Red Boiling Sp** | **24.82** | **3** | P | **P** | **01 27 56.4** | **+0.4** |
| U49A | | | | IAmb | IAmb | 01 28 04.6 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **TZTN** | **Tazewell** | **25.04** | **7** | P | **P** | **01 27 59.0** | **+1.0** |
| **U40A** | **Yellville** | **25.16** | **349** | P | **P** | **01 27 59.1** | **0.0** |
| U40A | | | | IAmb | IAmb | 01 27 59.5 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **25.23** | **354** | P | **P** | **01 28 00.7** | **+1.1** |
| PBMO | | | | IAmb | IAmb | 01 28 02.1 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **T47A** | **Sharon Grove** | **25.27** | **0** | P | **P** | **01 27 59.3** | **-0.7** |
| T47A | | | | IAmb | IAmb | 01 28 00.6 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **FNO** | **Franklin** | **25.31** | **340** | P | **P** | **01 28 00.6** | **+0.2** |
| FNO | | | | IAmb | IAmb | 01 28 02.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TUL1** | **Leonard** | **25.42** | **344** | P | **P** | **01 28 03.3** | **+1.9** |
| **T42A** | **Van Buren** | **25.55** | **353** | P | **P** | **01 28 01.9** | **-0.7** |
| **MNTX** | **Cornudas Mount** | **26.12** | **323** | P | **P** | **01 28 10.4** | **+2.6** |
| **MSTX** | **Muleshoe** | **26.43** | **330** | P | **P** | **01 28 10.5** | **-0.3** |
| MSTX | | | | IAmb | IAmb | 01 28 11.3 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **26.55** | **349** | P | **P** | **01 28 10.8** | **-0.9** |
| S39A | | | | IAmb | IAmb | 01 28 11.6 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **BLO** | **Bloomington** | **27.45** | **1** | P | **P** | **01 28 18.3** | **-1.4** |
| **P38A** | **Dawn** | **28.46** | **350** | P | **P** | **01 28 27.9** | **-0.9** |
| P38A | | | | IAmb | IAmb | 01 28 28.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ETMB** | **Extrema** | **29.78** | **135** | P | **P** | **01 28 41.1** | **+0.4** |
| ETMB | | | | IAmb | IAmb | 01 28 43.0 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **SSPA** | **Standing Stone** | **30.04** | **14** | P | **P** | **01 28 43.4** | **+0.7** |
| SSPA | | | | IAmb | IAmb | 01 28 44.9 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **M54A** | **Oil Creek Stat** | **30.50** | **11** | P | **P** | **01 28 47.6** | **+0.8** |
| **N59A** | **State Game Lan** | **30.86** | **17** | P | **P** | **01 28 51.0** | **+1.0** |
| **L59A** | **Walton** | **32.25** | **17** | P | **P** | **01 29 03.0** | **+0.8** |
| **PV11** | **David Mesa, Pa** | **32.89** | **328** | P | **P** | **01 29 08.9** | **+0.8** |
| PV11 | | | | IAmb | IAmb | 01 29 10.4 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **33.03** | **347** | P | **P** | **01 29 07.7** | **-1.3** |
| ECSD | | | | IAmb | IAmb | 01 29 08.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **J58A** | **Remsen** | **33.26** | **16** | P | **P** | **01 29 11.5** | **+0.4** |
| **G40A** | **Sadowa** | **33.64** | **356** | P | **P** | **01 29 13.6** | **-0.7** |
| **SADO** | **Sadowa** | **33.75** | **10** | P | **P** | **01 29 14.8** | **-0.4** |
| **SRU** | **San Rafael Swe** | **34.37** | **327** | P | **P** | **01 29 21.8** | **+0.9** |
| SRU | | | | IAmb | IAmb | 01 29 22.4 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **LONY** | **Lake Ozonia** | **34.62** | **16** | P | **P** | **01 29 22.8** | **-0.1** |
| **I62A** | **Tamworth** | **34.93** | **20** | P | **P** | **01 29 26.9** | **+1.4** |
| **F33A** | **5 Mile Ranch,** | **34.99** | **349** | P | **P** | **01 29 24.2** | **-1.7** |
| **G62A** | **West of Eustis** | **36.39** | **20** | P | **P** | **01 29 39.2** | **+1.2** |
| **PD31** | **Pinedale Array** | **36.64** | **332** | P | **P** | **01 29 41.3** | **+0.8** |
| **PDAR** | **Pinedale Array** | **36.64** | **332** | P | **P** | **01 29 40.4** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=130,slow=9.8,SNR=10 | | | | | | |
| **PDAR** | **Pinedale Array** | **36.64** | **332** | P | **P** | **01 29 39.8** | **-0.7** |
| **AGMN** | **Agassiz Nation** | **37.29** | **350** | P | **P** | **01 29 43.9** | **-1.8** |
| AGMN | | | | IAmb | IAmb | 01 29 45.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **REDW** | **Red Top Meadow** | **37.70** | **331** | P | **P** | **01 29 49.8** | **+0.3** |
| REDW | | | | IAmb | IAmb | 01 29 51.6 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **LOHW** | **Long Hollow** | **37.78** | **332** | P | **P** | **01 29 50.3** | **+0.2** |
| **TPAW** | **Teton Pass** | **37.84** | **331** | P | **P** | **01 29 50.8** | **+0.1** |
| TPAW | | | | IAmb | IAmb | 01 29 52.4 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **MOOW** | **Moose Ponds** | **37.95** | **332** | P | **P** | **01 29 51.7** | **+0.1** |
| **RLMT** | **Red Lodge** | **38.38** | **335** | P | **P** | **01 29 55.1** | **0.0** |
| **NVAR** | **Mina Array Bea** | **38.52** | **319** | P | **P** | **01 29 57.3** | **+0.9** |
| | comp=Z,0.5nm,0.8s,baz=122,slow=7.2,SNR=4.0 | | | | | | |
| **HLID** | **Hailey** | **39.60** | **329** | P | **P** | **01 30 05.6** | **+0.3** |
| **BCYI** | **Bear Canyon** | **39.63** | **330** | P | **P** | **01 30 06.5** | **+0.8** |
| **MCMT** | **McKenzie Canyo** | **39.75** | **331** | P | **P** | **01 30 08.1** | **+1.4** |
| **BOZ** | **Bozeman (W)** | **39.77** | **333** | P | **P** | **01 30 07.0** | **+0.3** |
| **LRM** | **Limekiln Ridge** | **40.32** | **333** | P | **P** | **01 30 12.0** | **+0.6** |
| **EGMT** | **Eagleton** | **40.93** | **337** | P | **P** | **01 30 16.1** | **-0.1** |
| **PLID** | **Pearl Lake** | **41.48** | **329** | P | **P** | **01 30 20.6** | **-0.3** |
| **D08A** | **Wollman Farm,** | **44.31** | **329** | P | **P** | **01 30 44.3** | **+0.7** |
| **SCHQ** | **Schefferville** | **46.00** | **16** | P | **P** | **01 30 54.4** | **-2.4** |
| | comp=Z,2.1nm,0.7s,baz=223,slow=5.5,SNR=5.2 | | | | | | |
| **SCHQ** | **Schefferville** | **46.00** | **16** | P | **P** | **01 30 54.9** | **-1.9** |
| SCHQ | | | | IAmb | IAmb | 01 31 14.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **BDFB** | **Brasilia** | **47.28** | **124** | P | **P** | **01 31 06.5** | **-1.0** |
| | comp=Z,2.0nm,0.5s,baz=273,slow=8.0,SNR=5.9 | | | | | | |
| **BDFB** | **Brasilia** | **47.28** | **124** | P | **P** | **01 31 05.9** | **-1.6** |
| BDFB | | | | IAmb | IAmb | 01 31 31.5 | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **FCC** | **Fort Churchill** | **47.34** | **355** | P | **P** | **01 31 05.6** | **-1.7** |
| **YKA** | **Yellowknife Ar** | **54.49** | **345** | P | **P** | **01 31 59.6** | **-1.3** |
| | comp=Z,1.2nm,0.7s,baz=140,slow=7.4,SNR=24 | | | | | | |
| **WAX** | **Waxell Ridge** | **63.42** | **333** | P | **P** | **01 33 03.4** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **64.12** | **336** | P | **P** | **01 33 07.5** | **-0.2** |
| **ILAR** | **Eielson Array** | **66.89** | **336** | P | **P** | **01 33 25.3** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=156,slow=4.5,SNR=7.8 | | | | | | |
| **BMAR** | **Burnt Mountain** | **67.16** | **339** | P | **P** | **01 33 27.1** | **-0.1** |
| **RND** | **Reindeer** | **67.19** | **335** | P | **P** | **01 33 27.2** | **-0.2** |
| RND | | | | IAmb | IAmb | 01 33 28.2 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **68.31** | **335** | P | **P** | **01 33 34.4** | **-0.1** |
| BPAW | | | | IAmb | IAmb | 01 33 47.5 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **MLY** | **Manley** | **68.52** | **336** | P | **P** | **01 33 35.4** | **-0.4** |
| **IMAR** | **Indian Mountai** | **70.01** | **336** | P | **P** | **01 33 44.4** | **-0.5** |
| **TTA** | **Tatalina** | **70.15** | **333** | P | **P** | **01 33 45.4** | **-0.5** |
| TTA | | | | IAmb | IAmb | 01 34 04.9 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **139.21** | **247** | PKP | **PKiKP** | **01 42 03.9** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=116,slow=2.2,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **139.30** | **253** | PKP | **PKiKP** | **01 42 04.4** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=87,slow=1.8,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **139.30** | **253** | PKPpre | PKPpre | 01 41 53.9 | |
| **CMAR** | **Chiang Mai Arr** | **149.52** | **349** | PKPbc | **PKPbc** | **01 42 24.1** | **+0.4** |
| | comp=Z,1.1nm,0.3s,baz=348,slow=4.7,SNR=6.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.52** | **349** | | **PKPbc** | **01 42 23.4** | **-0.3** |

**NNC 10 01:33:48.5±3.1, 37.°63N×71.°55E, h0km, mb3.7, mpv3.5, 4C-1D, Error ellipse: s-maj=25.0km s-min=18.6km az=163.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **5.49** | **23** | ⇑P | Pn | 01 35 11.4 | -0.3 |
| AAK | 3.9nm,0.6s | | | ⇑S | Sn | 01 36 16.2 | +0.7 |
| | 5.9nm,1.1s | | | | | | |

**KK02 Karatay Array 5.52 352 ⇑P Pn 01 35 12.8 +0.8**
1.5nm,0.3s,baz=173,slow=13
KK02 ⇑S Sn 01 36 17.7 +1.4
2.8nm,0.4s,baz=172,slow=22
**AB31 Akbulak array 14.34 328 ⇑P Pn 01 37 11.8 -0.9**
0.4nm,0.6s,baz=172,slow=11,SNR=3.5

*IDC **10** 01:40:29.4±1.3, 36.°83N×144.°80E, h0km, mb3.5/5, mb1 3.8/7, mb1mx3.5/35, mbtmp3.6/7, ML3.6/2, Error ellipse: s-maj=40.1km s-min=22.5km az=136.0*
*JMA **10** 01:40:35.0±0.2, 37.°14N×144.°36E, h58km, M3.7*
**ISC 10 01:40:35.9±5.7, 37.°01N±0.°06×144.°57E±0.°08, h37km±42km, n26, σ3§07/27, mb3.5/5, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **2.78** | **299** | P | **Pn** | **01 41 15.4** | **-2.5** |
| JIKH | | | | *eS* | **Sn** | **01 41 45.4** | **-4.8** |
| **JIO** | **Ouri** | **2.93** | **300** | P | **Pn** | **01 41 17.5** | **-2.4** |
| JIO | | | | S | **Sn** | **01 41 49.4** | **-4.4** |
| **JFK** | **Kawauchi** | **2.97** | **278** | P | **Pn** | **01 41 18.4** | **-2.1** |
| JFK | | | | S | **Sn** | **01 41 50.7** | **-4.2** |
| **JMST** | **Minamisoumatoc** | **3.02** | **285** | P | **Pn** | **01 41 18.7** | **-2.4** |
| JMST | | | | S | **Sn** | **01 41 52.1** | **-3.9** |
| **ONAJ** | **Iwakimizuishiy** | **3.02** | **273** | P | **Pn** | **01 41 19.3** | **-1.9** |
| ONAJ | | | | S | **Sn** | **01 41 52.5** | **-3.6** |
| **JKMT** | **Kesennumamotoy** | **3.04** | **307** | P | **Pn** | **01 41 18.5** | **-2.8** |
| **JMK** | **Ichinoseki** | **3.28** | **307** | P | **Pn** | **01 41 22.5** | **-2.2** |
| JMK | | | | *eS* | **Sn** | **01 41 58.2** | **-4.2** |
| **JFT** | **Otama** | **3.42** | **280** | *eS* | **Sn** | **01 42 01.7** | **-4.1** |
| **JRY** | **Ryogami san** | **4.67** | **259** | P | **Pn** | **01 41 42.3** | **-1.6** |
| **JOD2** | **Odawara 2** | **4.77** | **250** | P | **Pn** | **01 41 44.2** | **-1.0** |
| **MJAR** | **Matsushiro Arr** | **5.13** | **267** | Pn | **Pn** | **01 41 49.8** | **-0.4** |
| | 0.8nm,0.3s,baz=74,slow=10,SNR=14 | | | | | | |
| **MAT** | **Matsushiro** | **5.13** | **267** | P | **Pn** | **01 41 50.0** | **-0.2** |
| MAT | | | | *eS* | **Sn** | **01 42 43.8** | **-4.3** |
| **JOT** | **Ohata** | **5.15** | **329** | P | **Pn** | **01 41 49.2** | **-1.2** |
| **JHJ** | **Hachijo jima 2** | **5.52** | **227** | Pn | **Pn** | **01 41 53.3** | **-2.3** |
| | 16nm,0.3s,baz=244,slow=21,SNR=1.4 | | | | | | |
| JHJ | | | | Sn | **Sn** | **01 42 53.5** | **-4.2** |
| | 26nm,0.3s,baz=76,slow=22,SNR=1.9 | | | | | | |
| **JCH** | **Churui** | **5.67** | **351** | P | Pn | 01 41 53.4 | -4.1 |
| **H11N2** | **WAKE ISLAND Hy** | **26.02** | **125** | T | T | 02 12 54.8 | |
| | baz=317,slow=75,SNR=57 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.03** | **125** | T | T | 02 12 57.9 | |
| | baz=317,slow=75,SNR=22 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.04** | **125** | T | T | 02 12 56.2 | |
| | baz=317,slow=75,SNR=20 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.78** | **128** | T | T | 02 13 54.0 | |
| | baz=318,slow=75,SNR=8.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.78** | **128** | T | T | 02 14 20.8 | |
| | baz=318,slow=75,SNR=7.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.80** | **128** | T | T | 02 13 53.9 | |
| | baz=318,slow=75,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.26** | **303** | P | **P** | **01 48 58.2** | **+0.6** |
| | 0.4nm,0.7s,baz=97,slow=8.0,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **48.16** | **32** | P | **P** | **01 49 11.3** | **-0.8** |
| | 0.3nm,0.7s,baz=262,slow=7.5,SNR=2.0 | | | | | | |
| **INK** | **Inuvik** | **53.25** | **27** | P | **P** | **01 49 50.4** | **+0.1** |
| | 0.9nm,0.6s,baz=320,slow=4.0,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.47** | **191** | P | **P** | **01 50 19.0** | **-2.2** |
| | 0.4nm,0.8s,baz=11,slow=7.3,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.54** | **31** | P | **P** | **01 50 54.1** | **-1.4** |
| | 0.1nm,0.3s,baz=299,slow=6.6,SNR=3.9 | | | | | | |

**IDC 10 01:46:10.2±0.8, 45.°12N×141.°70E, h0km, mb3.7/10, mb1 3.9/10, mb1mx3.7/32, mbtmp3.7/10, Error ellipse: s-maj=25.1km s-min=14.1km az=62.0, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAJ** | **Asahikawa** | **1.19** | **147** | Pg | Pn | 01 46 34.1 | 0.0 |
| | 44nm,0.3s,baz=220,slow=11,SNR=52 | | | | | | |
| ASAJ | | | | Lg | Lg | 01 46 53.9 | |
| | 15nm,0.3s,baz=76,slow=33,SNR=25 | | | | | | |
| **SONM** | **Songino Array** | **24.33** | **289** | P | P | 01 51 29.5 | -0.2 |
| | 0.3nm,0.5s,baz=85,slow=9.2,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **37.03** | **305** | P | P | 01 53 22.9 | +1.4 |
| | 1.1nm,0.6s,baz=71,slow=9.7,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.47** | **294** | P | P | 01 53 49.5 | -1.0 |
| | 0.8nm,0.6s,baz=82,slow=9.5,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **42.71** | **37** | P | P | 01 54 07.7 | -0.9 |
| | 0.2nm,0.3s,baz=271,slow=6.7,SNR=1.6 | | | | | | |
| **INK** | **Inuvik** | **47.19** | **30** | P | P | 01 54 43.6 | -0.5 |
| | 0.5nm,0.3s,baz=244,slow=6.2,SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.55** | **338** | P | P | 01 55 55.5 | +1.6 |
| | 5.4nm,1.0s,baz=56,slow=9.9,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **61.82** | **331** | P | P | 01 56 30.9 | +0.4 |
| | 1.6nm,0.5s,baz=47,slow=5.1,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.09** | **188** | P | P | 01 56 51.6 | -0.9 |
| | 0.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **VWDT** | **VWDT** | **0.65** | **341** | *e*P | Pn | 01 56 13.8 | +0.2 |
| | baz=340 | | | | | | |
| VWDT | | | | *e*S | Sn | 01 56 22.3 | -0.4 |
| | baz=340 | | | | | | |
| **SGST** | **Jiashian** | **0.73** | **266** | *e*P | Pn | 01 56 15.0 | +0.3 |
| | baz=265 | | | | | | |
| **WUSB** | **Renai** | **0.88** | **345** | *e*S | Sn | 01 56 27.6 | -1.0 |
| | baz=344 | | | | | | |

**TAP 10 01:56:18.0, 23°.16N × 120°.44E, h18 km, ML1.6, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SNST** | **Tainan City** | **0.08** | **41** | *e*P | Pg | 01 56 21.9 | +0.4 |
| | baz=40 | | | | | | |
| SNST | | | | S | Sg | 01 56 24.7 | +0.8 |
| | baz=40 | | | | | | |
| **CHN1** | **Nanshi** | **0.09** | **71** | P | Pg | 01 56 22.0 | +0.4 |
| | baz=70 | | | | | | |
| CHN1 | | | | *e*S | Sg | 01 56 24.7 | +0.7 |
| | baz=70 | | | | | | |
| **TWK** | **Hsinying** | **0.12** | **23** | P | Pg | 01 56 22.5 | +0.5 |
| | baz=27 | | | | | | |
| TWK | | | | S | Sg | 01 56 25.5 | +0.9 |
| | baz=27 | | | | | | |
| **SGST** | **Jiashian** | **0.15** | **119** | P | Pg | 01 56 22.9 | +0.6 |
| | baz=118 | | | | | | |
| SGST | | | | *e*S | Sg | 01 56 26.2 | +1.0 |
| | baz=118 | | | | | | |
| **SGST** | **Jiashian** | **0.15** | **119** | *e*S | Sg | 01 56 25.8 | +0.6 |
| | baz=265 | | | | | | |
| **SHHT** | **Tainan City** | **0.16** | **212** | *e*P | Pg | 01 56 22.7 | +0.4 |
| | baz=211 | | | | | | |
| SHHT | | | | *e*S | Sg | 01 56 27.0 | +1.7 |
| | baz=211 | | | | | | |
| **WTP** | **Ta-pu** | **0.18** | **61** | P | Pg | 01 56 23.2 | +0.5 |
| | baz=62 | | | | | | |
| WTP | | | | S | Sg | 01 56 27.4 | +1.4 |
| | baz=62 | | | | | | |
| **SCLT** | **Jiali** | **0.23** | **275** | *e*P | Pb | 01 56 23.7 | +0.4 |
| | baz=274 | | | | | | |
| SCLT | | | | *e*S | Sg | 01 56 27.9 | +1.0 |
| | baz=274 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.23** | **239** | *e*P | Pb | 01 56 23.9 | +0.6 |
| | baz=237 | | | | | | |
| TAI1 | | | | *e*S | Sg | 01 56 27.8 | +0.9 |
| | baz=237 | | | | | | |
| **TPUB** | **Ta-pu** | **0.23** | **51** | *e*S | Pb | 01 56 23.8 | +0.3 |
| | baz=283 | | | | | | |
| **TPUB** | **Ta-pu** | **0.23** | **51** | *e*P | Pb | 01 56 23.8 | +0.4 |
| | baz=50 | | | | | | |
| TPUB | | | | *e*S | Sg | 01 56 28.2 | +1.1 |
| | baz=50 | | | | | | |
| **ICHU** | **Yijhu** | **0.25** | **324** | *e*P | Pb | 01 56 24.4 | +0.5 |
| | baz=324 | | | | | | |
| ICHU | | | | *e*S | Sb | 01 56 28.9 | +1.1 |
| | baz=324 | | | | | | |
| **SLGT** | **Liugui** | **0.25** | **130** | *e*P | Pb | 01 56 24.3 | +0.4 |
| | baz=130 | | | | | | |
| **ALS** | **Alishan** | **0.49** | **44** | *e*P | Pb | 01 56 28.5 | +0.2 |
| | baz=44 | | | | | | |
| ALS | | | | *e*S | Sb | 01 56 36.1 | +0.9 |
| | baz=44 | | | | | | |

*BEO **10** 02:05:23.7±0.3, 43°.58N × 20°.55E, h5 km±3 km, ML2.5/16*
*RHSSO **10** 02:05:24.0±0.7, 43°.59N × 20°.46E, h5 km±2 km, ML2.7/11*
**ISC 10 02:05:22.3±1.1, 43°.58N±0°.02 × 20°.60E±0°.02, h3 km±9 km, n48, σ1§01/84, 15C-7D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GRUS** | **Gruza** | **0.32** | **15** | *e*Pg | **Pb** | **02 05 30.5** | **-0.2** |
| GRUS | | | | *e*Sg | **Sb** | **02 05 35.9** | **-0.5** |
| **IVAS** | **Ivanjica** | **0.33** | **270** | *e*Pg | **Pg** | **02 05 29.1** | **+0.5** |
| IVAS | | | | *e*Sg | **Sg** | **02 05 32.8** | **0.0** |
| **SELS** | **Selova** | **0.52** | **133** | *e*Pg | **Pb** | **02 05 33.2** | **-0.9** |
| SELS | | | | *e*Sg | **Sb** | **02 05 41.6** | **-0.4** |
| **TRUS** | **Trudelj** | **0.66** | **348** | *e*Pg | **Pg** | **02 05 36.0** | **+1.0** |
| TRUS | | | | *e*Sg | **Sg** | **02 05 45.2** | **+1.6** |
| **DIVS** | **Divibare** | **0.68** | **320** | *e*Pg | **Pg** | **02 05 36.0** | **+0.5** |
| DIVS | | | | *e*Sg | **Sg** | **02 05 45.9** | **+1.6** |
| **DIVS** | **Divibare** | **0.68** | **320** | ↑*i*Pn | **Pg** | **02 05 35.9** | **+0.5** |
| DIVS | | | | *e*Sg | **Sg** | **02 05 43.4** | **-0.9** |
| **BOVS** | **Bovan** | **0.81** | **85** | ↑P | **Pn** | **02 05 40.0** | **-0.5** |
| BOVS | | | | ↑S | **Sn** | **02 05 52.2** | **-0.8** |
| **BOVS** | **Bovan** | **0.81** | **85** | *e*Pg | **Pb** | **02 05 39.1** | **+0.2** |
| BOVS | | | | *e*Sg | **Sn** | **02 05 51.3** | **-1.7** |
| **SVIS** | **Svilajnac** | **0.82** | **33** | *e*Pg | **Pb** | **02 05 39.4** | **+0.2** |
| SVIS | | | | *e*Sg | **Sb** | **02 05 50.3** | **-0.3** |
| **RUDO** | **Rudo** | **0.89** | **273** | ↑*i*Pg | **Pg** | **02 05 38.7** | **-0.7** |
| RUDO | | | | *e*Sg | **Sg** | **02 05 48.9** | **-2.1** |
| **KUBS** | **Kucevo** | **1.14** | **42** | *e*Pg | **Pg** | **02 05 43.9** | **-0.3** |
| KUBS | | | | *e*Sg | **Sb** | **02 05 59.6** | **-0.3** |
| **BARS** | **Barje** | **1.17** | **130** | *e*Pg | **Pb** | **02 05 44.3** | **-0.8** |
| **BARS** | **Barje** | **1.17** | **130** | *e*Pg | **Pn** | **02 05 45.5** | **0.0** |
| BARS | | | | *e*Sg | **Sn** | **02 06 00.5** | **-1.5** |
| BARS | | | | *e*Sg | **Sb** | **02 06 02.3** | **+1.7** |
| **ZAGS** | **Zajecar** | **1.21** | **78** | *e*Pg | **Pn** | **02 05 46.2** | **+0.1** |
| ZAGS | | | | *e*Sg | **Sn** | **02 06 02.9** | **0.0** |
| **TEKS** | **Tekeris** | **1.24** | **322** | *e*Pg | **Pg** | **02 05 45.8** | **-0.3** |
| TEKS | | | | *e*Sg | **Sg** | **02 06 01.7** | **-0.5** |
| **TEKS** | **Tekeris** | **1.24** | **322** | *e*Pg | **Pg** | **02 05 45.3** | **-0.8** |
| TEKS | | | | *e*Sg | **Sg** | **02 06 01.5** | **-0.7** |
| **MDVR** | **Moldovita** | **1.45** | **33** | ↓P | **Pn** | **02 05 48.6** | **-0.8** |
| MDVR | | | | ↓S | **Sg** | **02 06 08.1** | **-0.7** |
| **BLKB** | **Belogradchik** | **1.51** | **87** | ↑S | **Sn** | **02 06 12.4** | **+2.0** |
| **PDG** | **Podgorica** | **1.51** | **221** | ↓P | **Pb** | **02 05 50.6** | **-0.3** |
| PDG | | | | ↑S | **Sg** | **02 06 10.8** | **0.0** |
| **PDG** | **Podgorica** | **1.51** | **221** | *e*Pg | **Pn** | **02 05 50.2** | **0.0** |
| PDG | | | | *e*Sg | **Sb** | **02 06 10.1** | **-0.3** |
| **ZAPS** | **Zavoj** | **1.51** | **101** | *e*Pg | **Pg** | **02 05 52.1** | **+0.8** |
| ZAPS | | | | *e*Sg | **Sn** | **02 06 12.4** | **+1.9** |
| **PRVS** | **Prvonek** | **1.52** | **134** | *e*Pg | **Pg** | **02 05 50.9** | **-0.5** |
| PRVS | | | | *e*Sg | **Sn** | **02 06 13.0** | **+2.3** |
| **BLJ** | **Bijeljina** | **1.54** | **322** | *e*Pg | **Pn** | **02 05 50.4** | **-0.2** |
| BLJ | | | | *e*Sg | **Sn** | **02 06 11.3** | **+0.2** |
| **FRGS** | **Fruska Gora** | **1.68** | **341** | ↓P | **Pn** | **02 05 51.3** | **-1.3** |
| **FRGS** | **Fruska Gora** | **1.68** | **341** | *e*Pg | **Pn** | **02 05 53.2** | **+0.6** |
| FRGS | | | | *e*Sg | **Sb** | **02 06 16.8** | **+1.4** |
| **FRGS** | **Fruska Gora** | **1.68** | **341** | *e*Pn | **Pn** | **02 05 53.2** | **+0.6** |
| FRGS | | | | *e*Sn | **Sn** | **02 06 15.2** | **+0.6** |
| **DRME** | **Dracevica, Mon** | **1.73** | **217** | *e*Pn | **Pb** | **02 05 54.3** | **-0.4** |
| DRME | | | | *e*Sn | **Sb** | **02 06 16.6** | **-0.3** |
| **BOSS** | **Bosilegrad** | **1.75** | **127** | *e*Pg | **Pg** | **02 05 55.0** | **-0.8** |
| BOSS | | | | *e*Sg | **Sg** | **02 06 20.8** | **+2.3** |
| **DJES** | **Djerdap** | **1.76** | **51** | ↑S | **Sg** | **02 06 18.5** | **-0.3** |
| **PUNG** | **Punghina** | **1.83** | **67** | ↑S | **Sg** | **02 06 21.9** | **+0.9** |
| **HERR** | **Herculane** | **1.85** | **44** | ↑P | **Pn** | **02 05 55.5** | **+0.6** |
| HERR | | | | ↓S | **Sn** | **02 06 17.9** | **-0.8** |
| **TREB** | **Trebinje** | **1.86** | **243** | *e*Pn | **Pn** | **02 05 55.6** | **+0.6** |
| TREB | | | | *e*Sn | **Sn** | **02 06 18.2** | **-0.7** |
| **BAIL** | **Bailesti** | **2.04** | **76** | ↑S | **Sg** | **02 06 27.1** | **-0.6** |
| **VTS** | **Vitosha** | **2.15** | **115** | ↓P | **Pb** | **02 06 00.1** | **-1.9** |
| VTS | | | | ↑S | **Sg** | **02 06 31.5** | **0.0** |
| **BZS** | **Buzias** | **2.17** | **19** | ↑P | **Pn** | **02 05 59.2** | **0.0** |
| BZS | | | | ↓S | **Sn** | **02 06 24.5** | **-2.1** |
| **STON** | **Ston** | **2.23** | **253** | *e*Pn | **Pn** | **02 05 59.8** | **-0.3** |
| STON | | | | *e*Sn | **Sn** | **02 06 27.4** | **-0.8** |
| **GZR** | **Gura Zlata** | **2.39** | **40** | ↑P | **Pn** | **02 06 02.3** | **-0.1** |
| **RICI** | **Ricice** | **2.52** | **269** | *e*Pn | **Pn** | **02 06 05.2** | **+1.0** |
| RICI | | | | Sn | **Sn** | **02 06 36.1** | **+0.7** |
| **MAKA** | **Makarska** | **2.62** | **265** | *e*Pn | **Pn** | **02 06 07.5** | **+2.0** |
| MAKA | | | | Sn | **Sn** | **02 06 39.0** | **+1.2** |
| **BLY** | **Banja Luka** | **2.72** | **297** | *e*Pn | **Pn** | **02 06 06.5** | **-0.4** |
| BLY | | | | *e*Sn | **Sn** | **02 06 39.5** | **-0.8** |
| **MORH** | **Mrgy, Hungar** | **2.98** | **333** | *e*Pn | **Pn** | **02 06 10.3** | **-0.1** |
| MORH | | | | *e*Sn | **Sn** | **02 06 46.3** | **-0.4** |
| **KIJV** | **Kijevo** | **3.07** | **279** | *e*Pn | **Pn** | **02 06 13.1** | **+1.5** |
| KIJV | | | | Sn | **Sn** | **02 06 48.8** | **0.0** |
| **ARR** | **Arges** | **3.40** | **57** | ↑P | **Pn** | **02 06 16.8** | **+0.6** |
| **MOSL** | **Moslavina** | **3.42** | **308** | *e*Pn | **Pn** | **02 06 16.6** | **+0.1** |
| **MORI** | **Morici** | **3.56** | **276** | *e*Pn | **Pn** | **02 06 20.9** | **+2.6** |
| **VOIR** | | **3.69** | **58** | ↑P | **Pn** | **02 06 21.6** | **+1.4** |
| **LOBO** | **Lobor** | **4.13** | **310** | *e*Pn | **Pn** | **02 06 26.0** | **-0.2** |
| **OZLJ** | **Ozalj** | **4.19** | **301** | *e*Pn | **Pn** | **02 06 27.6** | **+0.5** |

*SFS **10** 02:15:58.0, 35°.68N × 2°.28W, ML1.9, ALBORAN S.*
*CNRM **10** 02:15:59.1, 35°.41N × 2°.39W, h0 km, ml2.8*
**ISC 10 02:15:59.6±3.1, 35°.5N±0°.1 × 2°.3W±0°.1, h16 km, n8, σ1§32/13, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHAS** | **Isla Isabel II** | **0.35** | **193** | P | **Pg** | **02 16 05.5** | **-1.3** |
| CHAS | | | | S | **Sg** | **02 16 10.9** | **-0.8** |
| **JBK** | **JBK** | **1.20** | **189** | P | **Pn** | **02 16 22.0** | **0.0** |
| JBK | | | | S | **Sb** | **02 16 36.6** | **-0.9** |
| **PALE** | **Palemas** | **1.34** | **257** | P | **Pn** | **02 16 23.7** | **-0.1** |
| **AKLM** | **AKL** | **1.61** | **231** | P | **Pn** | **02 16 28.3** | **+0.8** |
| AKLM | | | | S | **Sn** | **02 16 48.9** | **+0.9** |
| **TDRA** | **Tendrara** | **2.49** | **174** | P | **Pn** | **02 16 39.9** | **+0.2** |
| TDRA | | | | S | **Sn** | **02 17 12.8** | **+2.9** |
| **LCRM** | **LCR** | **2.77** | **229** | P | **Pn** | **02 16 43.6** | **0.0** |
| **MDT** | **Midelt** | **3.29** | **215** | P | **Pn** | **02 16 50.6** | **-0.1** |
| MDT | | | | S | **Sn** | **02 17 31.7** | **+2.1** |
| **MD31** | **MD31** | **3.33** | **218** | P | **Pn** | **02 16 51.3** | **+0.2** |

*DJA **10** 03:04:19.7±0.9, 1°.5S±5°.1 × 13°.4E±°, h23 km±8 km, M4.8/12, mb5.0/9, mB5.2/5, MLv4.8/12, Mw(mB)4.6/5*
*NEIC **10** 03:04:20.5±0.8, 1°.22S±0°.08 × 134°.42E±0°.06, h36 km±9 km, mb4.3/10, Error ellipse: s-maj=12.9km s-min=7.7km az=206.0*
*IDC **10** 03:04:22.9±2.2, 1°.25S × 134°.19E, h53 km±21 km, mb3.8/9, mb1 4.1/14, mb1mx3.7/36, mbtmp4.2/14, ML4.3/6, MS3.7/1, Ms1 3.7/1, ms1mx3.0/68, Error ellipse: s-maj=21.9km s-min=11.5km az=75.0*
**ISC 10 03:04:20.1±0.6, 1°.31S±0°.06 × 134°.36E±0°.04, h29 km, n55, σ1§60/64, mb4.1/11, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BAKI** | **Biak** | **1.75** | **86** | P | **Pn** | **03 04 48.7** | **+0.1** |
| **SRPI** | **Serui, Papua** | **1.96** | **107** | P | **Pn** | **03 04 52.7** | **+1.2** |
| SRPI | | | | S | **Sb** | **03 05 18.9** | **-0.4** |
| **FAKI** | **Fak Fak** | **2.64** | **233** | P | **Pn** | **03 05 02.0** | **+1.1** |
| **FAKI** | **Fak Fak** | **2.64** | **233** | Pn | **Pn** | **03 05 01.9** | **+1.1** |
| FAKI | | | | Sn | **Sn** | **03 05 32.6** | **+0.7** |
| **FAKI** | **Fak Fak** | **2.64** | **233** | P | **Pn** | **03 05 02.2** | **+1.4** |
| **SIJI** | **Sorong** | **3.12** | **278** | P | **Pn** | **03 05 07.8** | **+0.4** |
| | 119nm,0.3s,baz=69,slow=13,SNR=87 | | | | | | |
| SIJI | | | | S | **Sn** | **03 05 45.4** | **+1.7** |
| | 14nm,0.3s,baz=137,slow=23,SNR=1.4 | | | | | | |
| SIJI | | | | LR | LR | 03 06 44.0 | |
| | comp=Z,1μm,18.7s,baz=146,slow=48 | | | | | | |
| **SWI** | **Sorong** | **3.13** | **278** | P | **Pn** | **03 05 07.5** | **+0.1** |
| SWI | | | | S | **Sn** | **03 05 44.2** | **+0.4** |
| **SMPI** | **Sarmi** | **4.41** | **99** | P | **Pn** | **03 05 27.9** | **+2.8** |
| **BNDI** | **Bandanaira** | **5.47** | **234** | P | **Pn** | **03 05 40.9** | **+1.2** |
| **MSAI** | **Masohi** | **5.79** | **249** | P | **Pn** | **03 05 46.5** | **+2.4** |
| | 0.3nm2μm56nm,0.6s | | | | | | |
| MSAI | | | | S | **Sn** | **03 06 51.9** | **+2.4** |
| | 0.3nm2μm56nm,0.6s | | | | | | |
| **JAY** | **Jayapura** | **6.46** | **101** | P | Pn | 03 05 58.2 | +4.9 |
| | 1.0nm,0.3s,baz=353,slow=8.4,SNR=2.7 | | | | | | |
| JAY | | | | S | **Sn** | **03 07 04.3** | **-1.9** |
| | 0.2nm,0.3s,baz=329,slow=15,SNR=1.3 | | | | | | |
| **JAY** | **Jayapura** | **6.46** | **101** | P | **Pn** | **03 05 54.2** | **+0.9** |
| | 0.1nm16nm,1.5s | | | | | | |
| **AAI** | **Ambon** | **6.59** | **249** | P | **Pn** | **03 05 55.8** | **+0.7** |
| | 0.9nm3μm275nm,0.6s | | | | | | |
| **LBMI** | **Labuha** | **6.88** | **275** | P | **Pn** | **03 05 59.3** | **+0.1** |
| | 0.2nm46nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **8.40** | **265** | P | **Pn** | **03 06 19.4** | **-0.5** |
| | 728nm34nm,1.2s | | | | | | |
| **KDU** | **Kakadu** | **11.46** | **189** | P | **Pn** | **03 07 03.4** | **+1.5** |
| **DRS** | **Darwin Rock St** | **11.57** | **197** | P | **Pn** | **03 07 03.6** | **+0.2** |
| **MTN** | **Manton Dam** | **11.90** | **195** | Pn | **Pn** | **03 07 08.8** | **+0.9** |
| **SOEI** | **Soe** | **13.08** | **230** | P | **Pn** | **03 07 25.7** | **+1.5** |
| **SOEI** | **Soe** | **13.08** | **230** | | **Pn** | **03 07 25.1** | **+0.9** |
| **SOEI** | **Soe** | **13.08** | **230** | P | **Pn** | **03 07 25.0** | **+0.9** |
| **BATI** | **Baumata** | **13.82** | **230** | P | **Pn** | **03 07 34.2** | **0.0** |
| | 4.7nm,0.3s,baz=238,slow=3.4,SNR=2.2 | | | | | | |
| BATI | | | | S | **Sn** | **03 10 06.7** | **-0.3** |
| | 5.9nm,0.3s,baz=102,slow=21,SNR=1.7 | | | | | | |
| **KAPI** | **Kappang** | **15.04** | **256** | P | **Pn** | **03 07 51.7** | **+1.0** |
| | 0.6nm,0.3s,baz=106,slow=8.2,SNR=2.8 | | | | | | |
| **COEN** | **Coen** | **15.30** | **146** | Pn | **Pn** | **03 07 52.5** | **-1.7** |
| COEN | | | | IAmb | IAmb | 03 08 03.6 | |
| | comp=Z,26nm,1.6s | | | | | | |
| **COEN** | **Coen** | **15.30** | **146** | P | **Pn** | **03 07 55.8** | **+1.6** |
| **KNRA** | **Kununurra** | **15.31** | **201** | P | **Pn** | **03 07 53.2** | **-1.1** |
| **KNRA** | **Kununurra** | **15.31** | **201** | P | **Pn** | **03 07 54.8** | **+0.5** |
| **WB0** | **Warramunga Arr** | **18.35** | **180** | P | **P** | **03 08 32.2** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 03 09 09.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.51** | **180** | P | **Pn** | **03 08 35.4** | **+0.8** |
| **WB2** | **Warramunga Arr** | **18.52** | **180** | P | **P** | **03 08 34.2** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 03 08 43.1 | |
| | comp=Z,15nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.52** | **180** | P | **Pn** | **03 08 35.2** | **+0.6** |
| | comp=Z,0.9nm,0.3s,baz=0.9,slow=12,SNR=33 | | | | | | |
| WRA | | | | S | **Sn** | **03 11 53.7** | **-7.3** |
| | comp=Z,0.3nm,0.3s,baz=4.8,slow=23,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.52** | **180** | | **P** | **03 08 34.2** | **-0.1** |
| **WR0** | **Warramunga Arr** | **18.54** | **179** | P | **P** | **03 08 34.1** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 03 08 43.3 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossing** | **18.75** | **207** | P | **Pn** | **03 08 37.1** | **-0.3** |
| | comp=Z,1.2nm,0.3s,baz=34,slow=11,SNR=41 | | | | | | |
| FITZ | | | | S | Sn | 03 11 50.1 | -16 |
| | comp=Z,0.3nm,0.3s,baz=50,slow=16,SNR=3.4 | | | | | | |
| **QIS** | **Mount Isa** | **19.81** | **165** | P | **P** | **03 08 49.2** | **+0.7** |
| **CTA** | **Charters Tower** | **22.00** | **149** | P | **P** | **03 09 14.7** | **+2.6** |
| | comp=Z,5.4nm,0.8s,baz=342,slow=11,SNR=5.9 | | | | | | |
| **AS31** | **Alice Springs** | **22.23** | **181** | P | **P** | **03 09 15.5** | **+0.8** |
| AS31 | | | | IAmb | IAmb | 03 09 25.6 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.23** | **181** | P | **P** | **03 09 15.7** | **+1.0** |
| | comp=Z,11nm,0.7s,baz=6.2,slow=12,SNR=52 | | | | | | |
| ASAR | | | | S | **S** | **03 13 19.5** | **+1.6** |
| | comp=Z,2.1nm,0.9s,baz=8.6,slow=21,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **22.23** | **181** | P | **P** | **03 09 15.8** | **+1.2** |
| ASAR | | | | | **S** | **03 13 17.3** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **24.61** | **214** | P | **P** | **03 09 40.7** | **+2.6** |
| **OOD** | **Oodnadatta** | **26.37** | **177** | P | **P** | **03 09 56.2** | **+2.3** |
| **STKA** | **Stephens Creek** | **31.16** | **168** | P | **P** | **03 10 36.6** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=325,slow=8.8,SNR=6.8 | | | | | | |
| **STKA** | **Stephens Creek** | **31.16** | **168** | P | **P** | **03 10 36.2** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **39.98** | **301** | P | **P** | **03 11 52.1** | **-0.4** |
| | comp=Z,1.5nm,0.4s,baz=121,slow=7.1,SNR=9.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.98** | **301** | P | **P** | **03 11 50.5** | **-2.0** |
| **SONM** | **Songino Array** | **54.68** | **337** | P | **P** | **03 13 45.5** | **-1.1** |
| | comp=Z,0.3nm,0.5s,baz=151,slow=8.3,SNR=3.2 | | | | | | |
| **SEY** | **Seymchan** | **65.50** | **9** | P | **P** | **03 15 02.0** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=232,slow=11,SNR=1.7 | | | | | | |
| **MK31** | **Makanchi Array** | **66.06** | **324** | P | **P** | **03 15 03.4** | **-1.0** |
| MK31 | | | | IAmb | IAmb | 03 15 04.0 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.06** | **324** | P | **P** | **03 15 03.2** | **-1.2** |
| | comp=Z,2.3nm,0.5s,baz=108,slow=8.5,SNR=46 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.06** | **324** | P | **P** | **03 15 03.4** | **-1.0** |
| **MAKZ** | **Makanchi** | **66.25** | **324** | P | **P** | **03 15 04.2** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **68.58** | **331** | P | **P** | **03 15 17.6** | **-2.5** |
| | comp=Z,0.9nm,0.6s,baz=98,slow=5.0,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.58** | **331** | P | **P** | **03 15 18.0** | **-2.1** |
| **ILAR** | **Eielson Array** | **86.39** | **25** | P | **P** | **03 16 59.0** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=253,slow=4.7,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **86.39** | **25** | P | **P** | **03 16 58.0** | **-1.4** |

*NIC **10** 03:13:58.9±0.0, 33°.89N × 32°.55E, h22 km±3 km, MI2.5/4*
*GII **10** 03:13:58.1±0.0, 33°.86N × 32°.63E, h30 km, Mm2.5/3*
**ISC 10 03:13:57.9±1.3, 33°.81N±0°.03 × 32°.64E±0°.04, h22 km±15 km, n22, σ0§63/41, 1C-1D, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SZAC** | **Souni** | **0.96** | **12** | ↑*i*P | **Pb** | **03 14 15.9** | **0.0** |
| SZAC | | | | S | **Sn** | **03 14 29.9** | **+0.9** |
| SZAC | | | | AMI | | 03 14 31.4 | |
| | 0.9nm,0.2s | | | | | | |
| SZAC | | | | AMI | | 03 14 31.4 | |
| | 0.9nm,0.2s | | | | | | |
| SZAC | | | | AMI | | 03 14 31.5 | |
| | 0.8nm,0.2s | | | | | | |
| SZAC | | | | AMI | | 03 14 31.5 | |
| | 0.8nm,0.2s | | | | | | |
| **NATA** | **Nata** | **0.96** | **357** | P | **Pn** | **03 14 16.5** | **+0.4** |
| NATA | | | | S | **Sn** | **03 14 30.1** | **+1.0** |
| **ASGA** | **Asgata** | **1.09** | **27** | ↓*e*P | **Pn** | **03 14 17.8** | **-0.1** |
| ASGA | | | | S | **Sn** | **03 14 33.6** | **+1.3** |
| ASGA | | | | AMI | | 03 14 33.9 | |
| | 0.5nm,0.2s | | | | | | |
| ASGA | | | | AMI | | 03 14 33.9 | |
| | 0.6nm,0.2s | | | | | | |
| ASGA | | | | AMI | | 03 14 34.7 | |
| | 0.6nm,0.2s | | | | | | |
| **OSC1** | **CSNet OBS 1** | **1.18** | **255** | P | **Pn** | **03 14 17.7** | **-1.3** |
| OSC1 | | | | S | **Sb** | **03 14 34.9** | **+0.7** |
| **AKMS** | **Akamas** | **1.23** | **348** | P | **Pn** | **03 14 18.9** | **-0.8** |
| AKMS | | | | S | **Sn** | **03 14 34.7** | **-0.9** |
| AKMS | | | | AMI | | 03 14 38.5 | |
| | 0.2nm,0.2s | | | | | | |
| AKMS | | | | AMI | | 03 14 38.5 | |
| | 0.2nm,0.2s | | | | | | |
| AKMS | | | | AMI | | 03 14 38.5 | |
| | 0.2nm,0.3s | | | | | | |
| AKMS | | | | AMI | | 03 14 38.5 | |
| | 0.2nm,0.3s | | | | | | |
| **CSS** | **Mathiatis** | **1.28** | **26** | P | **Pn** | **03 14 20.4** | **-0.1** |
| CSS | | | | S | **Sb** | **03 14 37.5** | **+0.1** |
| **ALFC** | **Alefka** | **1.34** | **359** | P | **Pn** | **03 14 21.1** | **-0.1** |
| ALFC | | | | S | **Sn** | **03 14 38.3** | **-0.1** |
| ALFC | | | | AMI | | 03 14 40.3 | |
| | 0.2nm,0.2s | | | | | | |
| ALFC | | | | AMI | | 03 14 40.3 | |
| | 0.2nm,0.2s | | | | | | |
| ALFC | | | | AMI | | 03 14 44.8 | |
| | 0.2nm,0.3s | | | | | | |
| ALFC | | | | AMI | | 03 14 44.8 | |
| | 0.2nm,0.3s | | | | | | |
| **MVOU** | **Mavrovouni** | **1.46** | **34** | P | **Pb** | **03 14 23.9** | **-0.4** |
| **HNTI** | **Hanita** | **2.24** | **108** | Sn | **Sn** | **03 15 00.1** | **-0.6** |
| **MMA0B** | **Mount Meron ar** | **2.45** | **108** | Pn | **Pn** | **03 14 35.5** | **-1.1** |
| MMA0B | | | | Sn | **Sn** | **03 15 04.3** | **-1.5** |
| **GEM** | **Giv'at Ha'Em** | **2.60** | **103** | Pn | **Pn** | **03 14 37.7** | **-0.9** |
| GEM | | | | Sn | **Sn** | **03 15 10.1** | **+0.6** |
| **NATI** | **Neve Ativ** | **2.65** | **101** | Pn | **Pn** | **03 14 38.6** | **-0.6** |
| NATI | | | | Sn | **Sn** | **03 15 10.3** | **-0.3** |
| **MMLI** | **Mount Malkishu** | **2.71** | **120** | Pn | **Pn** | **03 14 40.4** | **+0.3** |
| MMLI | | | | Sn | **Sn** | **03 15 12.3** | **0.0** |
| **HMDT** | **Nahal Hemdat** | **2.88** | **122** | Sn | **Sn** | **03 15 16.6** | **+0.1** |
| **AMAZ** | **Amatzia** | **2.98** | **139** | Pn | **Pn** | **03 14 43.3** | **-0.5** |
| AMAZ | | | | Sn | **Sn** | **03 15 19.1** | **+0.2** |
| **YTIR** | **Yattir** | **3.22** | **139** | Pn | **Pn** | **03 14 47.0** | **-0.2** |
| YTIR | | | | Sn | **Sn** | **03 15 25.6** | **+0.7** |
| **DSI** | **Dead Sea** | **3.22** | **133** | Pn | **Pn** | **03 14 47.1** | **0.0** |
| DSI | | | | Sn | **Sn** | **03 15 24.9** | **+0.2** |
| **KZIT** | **Kziot** | **3.26** | **152** | Pn | **Pn** | **03 14 47.8** | **+0.1** |
| KZIT | | | | Sn | **Sn** | **03 15 26.1** | **+0.3** |
| **PRNI** | **Paran** | **4.00** | **149** | Pn | **Pn** | **03 14 58.2** | **+0.4** |
| PRNI | | | | Sn | **Sn** | **03 15 43.9** | **0.0** |
| **KRMI** | **Paran Flat** | **4.09** | **154** | Pn | **Pn** | **03 14 59.3** | **+0.2** |
| KRMI | | | | Sn | **Sn** | **03 15 46.4** | **+0.1** |
| **HRFI** | **Mount Harif** | **4.28** | **151** | Pn | **Pn** | **03 15 02.3** | **+0.5** |
| HRFI | | | | Sn | **Sn** | **03 15 51.6** | **+0.5** |
| **EIL** | **Elat** | **4.58** | **154** | Pn | **Pn** | **03 15 06.3** | **+0.5** |
| EIL | | | | Sn | **Sn** | **03 15 58.6** | **+0.3** |

*GUC **10** 03:15:02.9±0.7, 36°.85S × 74°.14W, h30 km±14 km, ML4.4*
*IDC **10** 03:15:04.5±2.0, 36°.93S × 73°.74W, h0 km, mb3.6/4, mb1 3.8/5, mb1mx3.7/22, mbtmp3.6/5, ML3.8/1, Error ellipse: s-maj=56.6km s-min=17.9km az=67.0*
*NEIC **10** 03:15:05.5±0.9, 36°.83S±0°.05 × 73°.8W±0°.1, h20 km±5 km, mb4.3/5, ML4.4(GUC), Error ellipse: s-maj=15.1km s-min=6.0km az=105.0*
**ISC 10 03:15:07.3±0.8, 36°.85S±0°.04 × 73°.94W±0°.09, h35 km, n60, σ1§65/66, mb3.8/6, 1C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LC02** | **Puerto Saavedr** | **1.99** | **167** | *e*P | **Pn** | **03 15 35.1** | **-3.4** |
| LC02 | | | | *e*S | **Sn** | **03 16 00.9** | **-1.3** |
| **LC02** | **Puerto Saavedr** | **1.99** | **167** | Pn | **Pn** | **03 15 37.7** | **-0.8** |
| LC02 | | | | | **Sn** | **03 15 59.9** | **-2.3** |
| **ML02** | **Panimavida** | **2.30** | **63** | *e*P | **Pn** | **03 15 41.6** | **-1.2** |
| ML02 | | | | *i* S | **Sn** | **03 16 10.8** | **+0.8** |
| ML02 | | | | IAML | | 03 16 16.4 | |
| | comp=E,4μm,0.7s | | | | | | |
| **ML02** | **Panimavida** | **2.30** | **63** | | **Pn** | **03 15 40.5** | **-2.3** |
| ML02 | | | | Sn | **Sn** | **03 16 07.1** | **-2.8** |
| **GO05** | **Huala** | **2.45** | **42** | *e*P | **Pn** | **03 15 43.3** | **-1.5** |
| GO05 | | | | *e*S | **Sn** | **03 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **31.23** | **54** | P | | **P** | **03 21 26.3** | **+2.5** |
| | comp=Z,1.6nm,0.8s,baz=174,slow=9.2,SNR=1.3 | | | | | | | |
| **BOAV** | **Boa Vista** | **40.99** | **21** | P | | **P** | **03 22 46.1** | **-0.9** |
| BOAV | | | | IAmb | | IAmb | 03 23 01.9 | |
| | comp=Z,7.2nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **53.40** | **180** | P | | **P** | **03 24 23.9** | **+0.6** |
| **TXAR** | **Lajitas Array** | **71.50** | **333** | P | | P | 03 26 28.5 | +4.0 |
| | comp=Z,0.2nm,0.5s,baz=145,slow=8.4,SNR=2.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.50** | **333** | P | | **P** | **03 26 25.6** | **+1.1** |
| **TORD** | **Torodi Ar. Bea** | **86.62** | **71** | P | | **P** | **03 27 47.9** | **+0.5** |
| | comp=Z,0.4nm,0.8s,baz=244,slow=3.3,SNR=2.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.62** | **71** | P | | **P** | **03 27 46.9** | **-0.5** |
| **MKAR** | **Makanchi Array** | **159.75** | **53** | PKPab | | **PKPab** | **03 35 42.4** | **+1.2** |
| | comp=Z,0.5nm,0.8s,baz=286,slow=4.5,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **159.75** | **53** | | | **PKPab** | **03 35 41.8** | **+0.7** |

*IDC **10** 03:24:21.3±0.5, 29.32S×178.55W, h202km±6km, mb3.2/4, mb1 3.4/6, mb1mx3.1/48, mbtmp3.8/6, Error ellipse: s-maj=24.8km s-min=18.6km az=128.0*

**ISC 10 03:24:21.4±0.8, 29.38S±0.09×178.5W±0.2, h204km, n14, σ0.84/17, mb3.4/4, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.56** | **77** | P | | | **Pn** | **03 24 49.1** | **0.0** |
| | 362nm,0.3s,baz=137,slow=3.6,SNR=18 | | | | | | | | |
| RAO | | | | S | | | **S** | **03 25 11.1** | **+0.5** |
| | 331nm,0.3s,baz=84,slow=16,SNR=6.0 | | | | | | | | |
| **URZ** | **Urewera** | **9.57** | **201** | P | | | **Pn** | **03 26 34.9** | **+0.1** |
| | 0.2nm,0.3s,baz=49,slow=14,SNR=1.6 | | | | | | | | |
| URZ | | | | S | | | **S** | **03 28 20.6** | **-1.4** |
| | 1.2nm,0.3s,baz=32,slow=23,SNR=6.9 | | | | | | | | |
| **MSVF** | **Nonsavu** | **12.01** | **344** | P | | | **Pn** | **03 27 06.0** | **-0.4** |
| | 0.2nm,0.3s,baz=118,slow=23,SNR=1.8 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.36** | **295** | P | | | P | 03 27 57.9 | +10 |
| | 0.8nm,0.3s,baz=117,slow=13,SNR=16 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.27** | **256** | P | | | **P** | **03 30 49.8** | **+1.6** |
| | 0.7nm,0.5s,baz=115,slow=12,SNR=3.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.70** | **266** | P | | | **P** | **03 31 58.6** | **+0.1** |
| | 0.8nm,0.5s,baz=101,slow=6.6,SNR=13 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **03 33 46.0** | **-0.4** |
| | 0.4nm,0.6s,baz=118,slow=5.3,SNR=2.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.60** | **271** | P | | | **P** | **03 32 05.2** | **-0.4** |
| | 0.6nm,0.5s,baz=110,slow=7.5,SNR=9.3 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **03 33 48.8** | **-0.6** |
| | 0.6nm,0.8s,baz=129,slow=3.8,SNR=3.6 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.90** | **269** | P | | | **P** | **03 33 09.3** | **0.0** |
| | 0.4nm,0.5s,baz=48,slow=24,SNR=1.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **116.76** | **311** | PKP | | | **PKPdf** | **03 42 40.2** | **-0.9** |
| | 0.1nm,0.4s,baz=290,slow=1.7,SNR=6.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **144.03** | **340** | PKP | | | **PKPab** | **03 43 29.6** | **-0.1** |
| | 2.5nm,0.4s,baz=64,slow=4.3,SNR=39 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **147.68** | **351** | PKP | | | **PKPbc** | **03 43 41.0** | **-0.1** |
| | comp=Z,0.8nm,0.5s,baz=9.8,slow=2.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **147.68** | **351** | PKPbc | | | **PKPbc** | **03 43 40.5** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=15,slow=4.3,SNR=6.6 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **150.21** | **323** | PKPbc | | | **PKPbc** | **03 43 47.5** | **-0.3** |
| | comp=Z,3.9nm,0.6s,baz=48,slow=2.7,SNR=7.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.85** | **181** | PKPab | | | **PKPab** | **03 44 55.7** | **+1.7** |
| | comp=Z,1.1nm,0.6s,baz=173,slow=4.3,SNR=9.9 | | | | | | | | |

*CNRM **10** 03:42:09.7, 35.58N×3.80W, h14km, ml2.9*
*INMG **10** 03:42:10.3±1.4, 35.55N×3.78W, h2km±3km, ML2.2, Error ellipse: s-maj=2.8km s-min=2.5km az=146.0*
*SFS **10** 03:42:10.0, 35.52N×3.81W, ML2.3, ALBORAN SUR*
*IGIL **10** 03:42:12.0, 35.52N×3.81W, h0km, ML2.5*

**ISC 10 03:42:08.7±1.2, 35.53N±0.03×3.78W±0.04, h5km±10km, n28, σ1.49/47, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **203** | P | | | **Pb** | **03 42 16.7** | **-0.5** |
| PALE | | | | S | | | **Sg** | **03 42 19.9** | **+0.3** |
| **AKLM** | **AKL** | **1.01** | **184** | P | | | **Pn** | **03 42 29.7** | **0.0** |
| AKLM | | | | S | | | **Sn** | **03 42 44.4** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.16** | **107** | P | | | **Pg** | **03 42 30.6** | **-0.3** |
| CHAS | | | | S | | | **Sg** | **03 42 44.6** | **-1.4** |
| **CHEFC** | **Chefchaouen** | **1.34** | **252** | P | | | **Pb** | **03 42 34.8** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **337** | P | | | **Pg** | **03 42 35.2** | **+0.8** |
| EMAL | | | | S | | | **Sn** | **03 42 53.5** | **+1.2** |
| **CEU** | **Ceuta** | **1.35** | **287** | P | | | **Pn** | **03 42 34.5** | **+0.3** |
| CEU | | | | S | | | **Sg** | **03 42 47.9** | **-4.1** |
| **JBK** | **JBK** | **1.55** | **140** | P | | | **Pn** | **03 42 37.7** | **+0.5** |
| JBK | | | | S | | | **Sn** | **03 42 56.9** | **-0.8** |
| **SICH** | **Sidi Chahed** | **1.90** | **222** | P | | | **Pb** | **03 42 44.4** | **+0.5** |
| SICH | | | | S | | | **Sg** | **03 43 10.9** | **+1.2** |
| **LCRM** | **LCR** | **2.04** | **206** | P | | | **Pb** | **03 42 46.5** | **+0.2** |
| LCRM | | | | S | | | **Sb** | **03 43 11.1** | **-0.9** |
| **IFR** | **Ifrane** | **2.29** | **209** | P | | | **Pn** | **03 42 48.4** | **+1.0** |
| IFR | | | | S | | | **Sn** | **03 43 14.2** | **-1.8** |
| **MD31** | **MD31** | **2.77** | **197** | P | | | **Pn** | **03 42 54.5** | **+0.6** |
| MD31 | | | | S | | | **Sn** | **03 43 28.5** | **+0.8** |
| **MDT** | **Midelt** | **2.79** | **194** | P | | | **Pn** | **03 42 55.5** | **+1.4** |
| MDT | | | | S | | | **Sn** | **03 43 27.4** | **-0.8** |
| **TDRA** | **Tendrara** | **2.87** | **149** | P | | | **Pn** | **03 42 57.4** | **+2.1** |
| **PVAQ** | **Vaqueiros** | **3.68** | **302** | *e*Pn | | | **Pn** | **03 43 08.1** | **+1.8** |
| PVAQ | | | | *e*Sn | | | **Sn** | **03 43 49.9** | **-0.2** |
| PVAQ | | | | A | | | A | 03 43 52.1 | |
| | 3.7nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.68** | **302** | P | | | **Pn** | **03 43 05.8** | **-0.5** |
| PVAQ | | | | S | | | **Sn** | **03 43 48.7** | **-1.4** |
| **PBDV** | **Barranco-do-Ve** | **3.76** | **298** | *e*Pn | | | **Pn** | **03 43 08.2** | **+0.8** |
| PBDV | | | | *e*Sn | | | **Sn** | **03 43 51.7** | **-0.3** |
| PBDV | | | | A | | | A | 03 43 52.7 | |
| | 4.9nm,0.7s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.02** | **303** | *e*Sn | | | **Sn** | **03 43 57.7** | **-0.7** |
| PCVE | | | | A | | | A | 03 44 01.1 | |
| | 2.8nm,0.7s | | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **304** | *e*P | | | **Pn** | **03 43 15.9** | **+1.9** |
| **MESJ** | **Messejana** | **4.25** | **304** | *e*Pn | | | **Pn** | **03 43 16.4** | **+2.3** |
| MESJ | | | | *e*Sn | | | **Sn** | **03 44 04.3** | **+0.3** |
| MESJ | | | | A | | | A | 03 44 09.5 | |
| | 3.9nm,0.8s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*S | | | **Sn** | **03 44 03.7** | **-1.9** |
| MORF | | | | IAML | | | | 03 44 07.4 | |
| | comp=E,9.2nm,0.2s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*Sn | | | **Sn** | **03 44 04.7** | **-0.9** |
| MORF | | | | A | | | A | 03 44 08.0 | |
| | comp=E,4.7nm,0.2s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.46** | **298** | *e*Sn | | | **Sn** | **03 44 08.0** | **-1.2** |
| **PESTR** | **Estremoz** | **4.51** | **319** | *e*Sn | | | **Sn** | **03 44 10.8** | **+0.2** |
| **PESTR** | **Estremoz** | **4.51** | **319** | P | | | **Pn** | **03 43 17.2** | **-0.5** |
| PESTR | | | | S | | | **Sn** | **03 44 07.6** | **-3.0** |
| **EVO** | **Evora** | **4.52** | **313** | *e*Pn | | | **Pn** | **03 43 20.1** | **+2.3** |
| EVO | | | | *e*Sn | | | **Sn** | **03 44 09.9** | **-0.9** |
| EVO | | | | A | | | A | 03 44 16.4 | |
| | comp=E,2.9nm,0.5s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **306** | *e*Pn | | | **Pn** | **03 43 20.0** | **+1.1** |
| PNCL | | | | *e*Sn | | | **Sn** | **03 44 11.2** | **-1.5** |
| PNCL | | | | A | | | A | 03 44 17.4 | |
| | comp=E,2.5nm,0.4s | | | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **316** | *e*Pn | | | **Pn** | **03 43 27.4** | **+2.9** |
| PMTG | | | | *e*Sn | | | **Sn** | **03 44 21.6** | **-1.1** |
| **MVO** | **Moncorvo** | **6.18** | **337** | *e*Pn | | | **Pn** | **03 43 43.5** | **+2.8** |

**IDC 10 03:49:43.5±2.5, 16.98S×178.40W, h0km, mb3.9/4, mb1 4.1/4, mb1mx3.7/28, mbtmp3.9/4, Error ellipse: s-maj=168.5km s-min=31.4km az=150.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **39.09** | **240** | P | | P | P | 03 57 13.6 | +0.9 |
| | 1.6nm,0.7s,baz=69,slow=11,SNR=5.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.81** | **259** | P | | P | P | 03 57 59.0 | -0.6 |
| | 0.3nm,0.4s,baz=98,slow=7.4,SNR=9.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **253** | P | | P | P | 03 58 01.1 | -0.5 |
| | 5.1nm,0.5s,baz=89,slow=8.2,SNR=77 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.75** | **44** | P | | P | P | 04 01 48.5 | +0.1 |
| | 0.1nm,0.5s,baz=244,slow=7.7,SNR=2.1 | | | | | | | | |

*IDC **10** 04:01:10.2±2.3, 17.87N×83.50W, h0km, mb3.2/3, mb1 3.9/5, mb1mx3.5/40, mbtmp3.6/5, ML3.5/2, MS3.7/1, Ms1 3.7/1, ms1mx2.9/33, Error ellipse: s-maj=46.8km s-min=39.4km az=20.0*
*SSNC **10** 04:01:15.6±3.5, 17.37N×84.01W, h0km±133km, MD4.0, ML3.9*

**ISC 10 04:01:15.0±1.2, 17.52N±0.10×83.83W±0.10, h10km, n10, σ2.51/7, mb3.3/3, 1C, North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOR** | **Soroa** | **5.30** | **8** | *e*P | | | **Pn** | **04 02 35.9** | **+1.6** |
| SOR | | | | *e*S | | | **Sn** | **04 03 33.5** | **-1.9** |
| SOR | | | | IAML | | | | 04 03 40.4 | |
| | comp=E,23nm,0.3s | | | | | | | | |
| SOR | | | | IAML | | | | 04 03 42.3 | |
| | comp=N,26nm,0.3s | | | | | | | | |
| **MGV** | **Manicaragua** | **5.83** | **38** | *e*P | | | **Pn** | **04 02 43.1** | **+1.5** |
| MGV | | | | *e*S | | | Sn | 04 03 39.6 | -8.9 |
| MGV | | | | IAML | | | | 04 03 57.6 | |
| | comp=N,12nm,0.3s | | | | | | | | |
| MGV | | | | IAML | | | | 04 03 58.4 | |
| | comp=E,14nm,0.3s | | | | | | | | |
| **CCCC** | **Cccc** | **6.79** | **56** | *e*P | | | Pn | 04 03 04.5 | +10 |
| **APG** | **El Apazote** | **6.84** | **249** | Pn | | | **Pn** | **04 02 56.5** | **+0.8** |
| | comp=E,2.1nm,0.3s,baz=83,slow=8.1,SNR=3.8 | | | | | | | | |
| **RCC** | **Rio Carpintero** | **8.09** | **71** | *e*S | | | | 04 03 14.8 | |
| RCC | | | | *e*P | | | **Pn** | **04 03 15.1** | **+2.5** |
| **SDV** | **Santo Domingo** | **15.45** | **122** | Pn | | | **Pn** | **04 04 50.4** | **-2.9** |
| | comp=E,0.9nm,0.3s,baz=328,slow=10,SNR=4.9 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **21.63** | **307** | P | | | **P** | **04 06 04.6** | **-1.0** |
| | comp=E,0.7nm,0.6s,baz=121,slow=12,SNR=16 | | | | | | | | |
| **SADO** | **Sadowa** | **27.45** | **7** | LR | | | LR | 04 18 33.0 | |
| | comp=E,149nm,18.2s,baz=60,slow=38 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.78** | **342** | P | | | P | 04 10 02.1 | -5.4 |
| | comp=E,0.1nm,0.5s,baz=132,slow=7.1,SNR=3.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **62.89** | **335** | P | | | P | 04 11 35.9 | -5.2 |
| | comp=E,0.3nm,0.9s,baz=116,slow=4.2,SNR=3.2 | | | | | | | | |

*SVSA **10** 04:10:03.2±1.0, 39.45N×29.81W, h10km, ML3.6(INMG), Error ellipse: s-maj=9.8km s-min=5.9km az=57.0*
*IDC **10** 04:10:08.4±19.0, 41.21N×29.90W, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.0/49, mbtmp3.5/3, Error ellipse: s-maj=828.7km s-min=42.1km az=165.0*

**ISC 10 04:10:05.6±3.0, 39.29N±0.10×29.47W±0.10, h26km±20km, n16, σ0.99/25, mb3.7/3, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **0.89** | **137** | *e*S | | | **Sn** | **04 10 34.4** | **0.0** |
| PCED | | | | A | | | A | 04 10 37.1 | |
| | 548nm,0.3s | | | | | | | | |
| **CALA** | **Caldeira** | **0.92** | **139** | *e*P | | | **Pn** | **04 10 21.9** | **-1.1** |
| CALA | | | | *e*S | | | **Sb** | **04 10 35.9** | **+0.9** |
| CALA | | | | A | | | A | 04 10 37.1 | |
| | 779nm,0.3s | | | | | | | | |
| **PFCBR** | **Castelo Branco** | **0.96** | **142** | *e*P | | | **Pn** | **04 10 21.8** | **-1.6** |
| PFCBR | | | | *e*S | | | **Sn** | **04 10 36.4** | **+0.2** |
| PFCBR | | | | A | | | A | 04 10 37.2 | |
| | 164nm,0.3s | | | | | | | | |
| **HOR** | **Horta** | **1.00** | **139** | *e*P | | | **Pn** | **04 10 22.8** | **-1.2** |
| HOR | | | | *e*S | | | **Sn** | **04 10 37.4** | **+0.2** |
| HOR | | | | A | | | A | 04 10 38.5 | |
| | 589nm,0.2s | | | | | | | | |
| **ROSA** | **Rosais** | **1.11** | **120** | *e*P | | | **Pn** | **04 10 24.5** | **-1.0** |
| ROSA | | | | *e*S | | | **Sb** | **04 10 40.1** | **-0.2** |
| ROSA | | | | A | | | A | 04 10 45.6 | |
| | 253nm,0.4s | | | | | | | | |
| **PCAN** | **Candelaria** | **1.12** | **137** | *e*P | | | **Pn** | **04 10 24.5** | **-1.2** |
| PCAN | | | | *e*S | | | **Sn** | **04 10 40.7** | **+0.4** |
| PCAN | | | | A | | | A | 04 10 48.3 | |
| | 449nm,0.4s | | | | | | | | |
| **PICO** | **Pico** | **1.13** | **134** | *e*P | | | **Pn** | **04 10 24.7** | **-1.1** |
| PICO | | | | *e*S | | | **Sn** | **04 10 40.8** | **+0.3** |
| PICO | | | | A | | | A | 04 10 42.7 | |
| | 914nm,0.3s | | | | | | | | |
| **PGRA** | **Graciosa** | **1.19** | **102** | *e*S | | | **Sn** | **04 10 40.8** | **-1.0** |
| PGRA | | | | A | | | A | 04 10 41.3 | |
| | 312nm,0.3s | | | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.24** | **130** | *e*S | | | **Sb** | **04 10 44.2** | **+0.1** |
| PPNO | | | | A | | | A | 04 10 51.1 | |
| | 161nm,0.2s | | | | | | | | |
| **PMAN** | **Manadas** | **1.26** | **121** | *e*S | | | **Sn** | **04 10 43.6** | **0.0** |
| PMAN | | | | A | | | A | 04 10 46.1 | |
| | 219nm,0.3s | | | | | | | | |
| **PAGU** | **Agualva, Azore** | **1.85** | **105** | *e*P | | | **Pn** | **04 10 34.8** | **-0.9** |
| PAGU | | | | *e*S | | | **Sn** | **04 10 58.2** | **-0.1** |
| PAGU | | | | A | | | A | 04 11 01.1 | |
| | 146nm,0.2s | | | | | | | | |
| **PDA** | **Ponta Delgada** | **3.36** | **116** | *e*P | | | **Pn** | **04 10 56.5** | **+0.1** |
| PDA | | | | *e*S | | | **Sn** | **04 11 37.6** | **+2.2** |
| PDA | | | | A | | | A | 04 11 40.6 | |
| | 25nm,0.4s | | | | | | | | |
| **CMLA** | **Cha da Macela** | **3.45** | **115** | *e*P | | | **Pn** | **04 10 57.9** | **+0.3** |
| CMLA | | | | *e*S | | | **Sn** | **04 11 38.8** | **+1.2** |
| CMLA | | | | A | | | A | 04 11 44.6 | |
| | 51nm,0.2s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.53** | **285** | P | | | **P** | **04 20 15.1** | **+1.3** |
| | 0.2nm,0.6s,baz=68,slow=8.0,SNR=1.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **74.90** | **41** | P | | | **P** | **04 21 43.8** | **-0.2** |
| | 0.8nm,0.9s,baz=321,slow=5.7,SNR=8.0 | | | | | | | | |
| **SONM** | **Songino Array** | **84.79** | **28** | P | | | **P** | **04 22 37.0** | **-0.7** |
| | 0.4nm,0.8s,baz=316,slow=4.0,SNR=3.8 | | | | | | | | |

*IDC **10** 04:14:13.4±2.5, 11.84N×87.17W, h0km, mb3.5/4, mb1 3.9/5, mb1mx3.6/35, mbtmp3.6/5, ML3.4/1, Error ellipse: s-maj=83.0km s-min=15.9km az=42.0*
*INET **10** 04:14:13.1±0.4, 11.24N×87.35W, h15km, MW3.2*

**ISC 10 04:14:11.5±1.7, 11.3N±0.2×87.4W±0.1, h10km, n9, σ0.83/10, mb3.5/4, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNGN** | **Cerro Negro** | **1.35** | **28** | *e*P | | | **Pn** | **04 14 36.8** | **+0.2** |
| **TISN** | **Laguna Tiscapa** | **1.35** | **52** | *e*P | | | **Pn** | **04 14 36.6** | **+0.1** |
| **MATN** | **Matagalpa** | **2.14** | **41** | *e*P | | | **Pn** | **04 14 47.6** | **+0.2** |
| **ACON** | **Acoyapa** | **2.24** | **73** | *e*P | | | **Pn** | **04 14 48.3** | **-0.4** |
| **JTS** | **Las Juntas de** | **2.57** | **113** | Pn | | | **Pb** | **04 14 57.7** | **0.0** |
| | 6.2nm,0.3s,baz=2.0,slow=22,SNR=6.3 | | | | | | | | |
| JTS | | | | Sn | | | **Sn** | **04 15 25.3** | **+0.7** |
| | 11nm,0.3s,baz=328,slow=16,SNR=3.6 | | | | | | | | |
| JTS | | | | Lg | | | Lg | 04 15 38.2 | |
| | 6.4nm,0.3s,baz=337,slow=22,SNR=4.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.52** | **322** | P | | | **P** | **04 19 23.3** | **+1.2** |
| | 0.6nm,0.5s,baz=131,slow=9.7,SNR=12 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.46** | **7** | P | | | **P** | **04 19 30.4** | **-0.4** |
| | 3.1nm,0.7s,baz=207,slow=9.1,SNR=4.3 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **36.82** | **332** | P | | | **P** | **04 21 20.6** | **+0.5** |
| | 0.3nm,0.6s,baz=129,slow=12,SNR=4.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.74** | **345** | P | | | **P** | **04 23 39.5** | **-1.5** |
| | 0.4nm,0.7s,baz=139,slow=7.5,SNR=10 | | | | | | | | |

**SVSA 10 04:21:13.2±0.9, 39.42N×29.79W, h10km, ML3.8**(INMG), **Error ellipse: s-maj=6.5km s-min=3.0km az=41.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H07N1** | **FLORES T-PHASE** | **1.06** | **285** | *e*P | | | Pg | 04 21 29.4 | -4.2 |
| **H07S1** | **FLORES T-PHASE** | **1.10** | **268** | *e*P | | | Pn | 04 21 39.3 | +4.7 |
| **PCAPE** | **Capelo, Faial** | **1.12** | **137** | *e*S | | | Sb | 04 21 42.5 | -6.7 |
| PCAPE | | | | A | | | A | 04 21 44.2 | |
| | 893nm,0.2s | | | | | | | | |
| **PCED** | **Cedros** | **1.16** | **133** | *e*S | | | Sb | 04 21 43.9 | -6.6 |
| PCED | | | | A | | | A | 04 21 46.5 | |
| | 997nm,0.4s | | | | | | | | |
| **CALA** | **Caldeira** | **1.20** | **134** | *e*P | | | Pb | 04 21 31.5 | -4.5 |
| CALA | | | | *e*S | | | Sb | 04 21 45.0 | -6.5 |
| CALA | | | | A | | | A | 04 21 48.2 | |
| | 1µm,0.3s | | | | | | | | |
| **PFCBR** | **Castelo Branco** | **1.23** | **137** | *e*P | | | Pn | 04 21 31.3 | -5.1 |
| PFCBR | | | | *e*S | | | Sb | 04 21 45.6 | -6.8 |
| PFCBR | | | | A | | | A | 04 21 46.7 | |
| | 292nm,0.3s | | | | | | | | |
| **HOR** | **Horta** | **1.27** | **134** | *e*P | | | Pn | 04 21 32.3 | -4.7 |
| HOR | | | | *e*S | | | Sb | 04 21 46.7 | -7.0 |
| HOR | | | | A | | | A | 04 21 48.8 | |
| | 1µm,0.3s | | | | | | | | |
| **ROSA** | **Rosais** | **1.40** | **120** | *e*P | | | Pn | 04 21 34.1 | -4.7 |
| ROSA | | | | *e*S | | | Sn | 04 21 49.6 | -7.7 |
| ROSA | | | | A | | | A | 04 21 53.0 | |
| | 285nm,0.3s | | | | | | | | |
| **PCAN** | **Candelaria** | **1.40** | **133** | *e*P | | | Pn | 04 21 34.1 | -4.7 |
| PCAN | | | | *e*S | | | Sn | 04 21 50.2 | -7.1 |
| PCAN | | | | A | | | A | 04 21 57.9 | |
| | 778nm,0.4s | | | | | | | | |
| **PICO** | **Pico** | **1.41** | **130** | *e*P | | | Pn | 04 21 34.1 | -4.9 |
| PICO | | | | *e*S | | | Sn | 04 21 50.5 | -7.1 |
| PICO | | | | A | | | A | 04 21 53.1 | |
| | 2µm,0.3s | | | | | | | | |
| **SRBC** | **Serra Branca** | **1.41** | **105** | *e*S | | | Sn | 04 21 49.9 | -7.8 |
| SRBC | | | | A | | | A | 04 21 53.5 | |
| | 285nm,0.2s | | | | | | | | |
| **PGRA** | **Graciosa** | **1.46** | **105** | *e*S | | | Sn | 04 21 50.7 | -8.1 |
| PGRA | | | | A | | | A | 04 21 51.4 | |
| | 261nm,0.2s | | | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.52** | **128** | *e*P | | | Pn | 04 21 35.9 | -4.7 |
| PPNO | | | | *e*S | | | Sn | 04 21 53.1 | -7.4 |
| PPNO | | | | A | | | A | 04 21 59.2 | |
| | 278nm,0.3s | | | | | | | | |
| **PMAN** | **Manadas** | **1.54** | **120** | *e*P | | | Pn | 04 21 36.1 | -4.7 |
| PMAN | | | | *e*S | | | Sn | 04 21 53.3 | -7.6 |
| PMAN | | | | A | | | A | 04 21 55.7 | |
| | 279nm,0.3s | | | | | | | | |
| **PAGU** | **Agualva, Azore** | **2.13** | **107** | *e*P | | | Pn | 04 21 44.7 | -4.2 |
| PAGU | | | | *e*S | | | Sn | 04 22 07.5 | -7.9 |
| PAGU | | | | A | | | A | 04 22 11.4 | |
| | 143nm,0.2s | | | | | | | | |
| **PSET** | **Sete Cidades** | **3.57** | **115** | *e*S | | | Sn | 04 22 43.6 | -7.2 |
| PSET | | | | A | | | A | 04 22 47.2 | |
| | 58nm,0.2s | | | | | | | | |
| **PDA** | **Ponta Delgada** | **3.64** | **116** | *e*P | | | Pn | 04 22 06.2 | -3.4 |
| PDA | | | | *e*S | | | Sn | 04 22 46.7 | -5.9 |
| PDA | | | | A | | | A | 04 22 48.8 | |
| | 29nm,0.1s | | | | | | | | |
| **CMLA** | **Cha da Macela** | **3.73** | **115** | *e*P | | | Pn | 04 22 07.5 | -3.4 |
| CMLA | | | | *e*S | | | Sn | 04 22 49.0 | -5.9 |
| CMLA | | | | A | | | A | 04 22 54.5 | |
| | 66nm,0.2s | | | | | | | | |
| **PSMA** | **Santa Maria** | **4.40** | **122** | *e*P | | | Pn | 04 22 15.9 | -4.1 |
| **PSMN** | **Pico do Norte,** | **4.44** | **122** | *e*P | | | Pn | 04 22 16.2 | -4.4 |

**IDC 10 04:28:04.2±1.8, 0.51S×124.35E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/33, mbtmp3.5/3, Error ellipse: s-maj=199.2km s-min=26.0km az=63.0, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.65** | **154** | P | | P | P | 04 32 55.2 | -1.2 |
| | 0.5nm,0.3s,baz=331,slow=11,SNR=7.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.82** | **159** | P | | P | P | 04 33 29.0 | +0.8 |
| | 0.7nm,0.3s,baz=342,slow=10,SNR=15 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.76** | **328** | P | | P | P | 04 38 10.9 | -0.1 |
| | 0.1nm,0.3s,baz=118,slow=7.9,SNR=5.3 | | | | | | | | |

*IDC **10** 04:40:32.1±1.2, 39.51N×29.47W, h0km, mb3.9/11, mb1 4.1/12, mb1mx3.8/43, mbtmp3.9/12, ML3.5/1, MS3.8/33, Ms1 3.8/33, ms1mx3.5/94, Error ellipse: s-maj=37.0km s-min=19.1km az=0.0*
*SVSA **10** 04:40:33.1±0.9, 39.41N×29.86W, h10km, ML4.0(INMG), Error ellipse: s-maj=6.0km s-min=1.8km az=32.0*
*NEIC **10** 04:40:35.4±1.6, 39.61N±0.04×28.6W±0.1, h10km±1km, mb4.1/4, Error ellipse: s-maj=15.0km s-min=7.0km az=256.0*

**ISC 10 04:40:31.4±2.0, 39.34N±0.07×29.40W±0.07, h1km±11km, n76, σ1.51/56, mb4.0/12, MS3.9/32, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCAPE** | **Capelo, Faial** | **0.87** | **149** | *e*S | | | **Sn** | **04 41 03.5** | **-0.5** |
| PCAPE | | | | A | | | A | 04 41 04.8 | |
| | 1µm,0.3s | | | | | | | | |
| **PCED** | **Cedros** | **0.90** | **143** | *e*P | | | **Pn** | **04 40 51.3** | **+0.2** |
| PCED | | | | *e*S | | | **Sn** | **04 41 04.5** | **-0.2** |
| PCED | | | | A | | | A | 04 41 05.7 | |
| | 933nm,0.3s | | | | | | | | |
| **CALA** | **Caldeira** | **0.93** | **144** | *e*P | | | **Pn** | **04 40 51.7** | **0.0** |
| CALA | | | | *e*S | | | **Sn** | **04 41 05.8** | **0.0** |
| CALA | | | | A | | | A | 04 41 07.7 | |
| | 2µm,0.2s | | | | | | | | |
| **PFCBR** | **Castelo Branco** | **0.98** | **147** | *e*P | | | **Pn** | **04 40 51.8** | **-0.4** |
| PFCBR | | | | *e*S | | | **Sn** | **04 41 05.9** | **-0.8** |
| PFCBR | | | | A | | | A | 04 41 08.4 | |
| | 496nm,0.3s | | | | | | | | |
| **HOR** | **Horta** | **1.01** | **143** | *e*P | | | **Pn** | **04 40 52.6** | **-0.1** |
| HOR | | | | *e*S | | | **Sn** | **04 41 07.3** | **-0.2** |
| HOR | | | | A | | | A | 04 41 09.0 | |
| | 2µm,0.3s | | | | | | | | |
| **ROSA** | **Rosais** | **1.09** | **124** | *e*P | | | **Pn** | **04 40 54.2** | **+0.3** |
| ROSA | | | | *e*S | | | **Sn** | **04 41 10.4** | **+0.8** |
| ROSA | | | | A | | | A | 04 41 13.1 | |
| | 517nm,0.3s | | | | | | | | |
| **ROSA** | **Rosais** | **1.09** | **124** | Pg | | | **Pb** | **04 40 53.0** | **-0.1** |
| ROSA | | | | Sg | | | **Sg** | **04 41 06.3** | **-0.2** |
| **SRBC** | **Serra Branca** | **1.10** | **106** | *e*S | | | **Sn** | **04 41 10.9** | **+1.2** |
| SRBC | | | | A | | | A | 04 41 13.1 | |
| | 349nm,0.2s | | | | | | | | |
| **PCAN** | **Candelaria** | **1.13** | **141** | *e*P | | | **Pn** | **04 40 54.4** | **0.0** |
| PCAN | | | | *e*S | | | **Sn** | **04 41 10.8** | **+0.3** |
| PCAN | | | | A | | | A | 04 41 13.8 | |
| | 1µm,0.3s | | | | | | | | |
| **PICO** | **Pico** | **1.13** | **138** | *e*P | | | **Pn** | **04 40 54.8** | **+0.4** |
| PICO | | | | *e*S | | | **Sn** | **04 41 11.0** | **+0.4** |
| PICO | | | | A | | | A | 04 41 13.0 | |
| | 3µm,0.2s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GERES | **GERESS Array B** | **32.00** | **58** | P | | **P** | **04 46 55.4** | **-3.7** |
| **NOA** | **NORSAR Array B** | **33.06** | **36** | P | | **P** | **04 47 07.9** | **-0.4** |
| | comp=Z,2.0nm,0.9s,baz=249,slow=8.9,SNR=4.1 | | | | | | | |
| **FRB** | **Frobisher Bay** | **33.59** | **330** | LR | | LR | 04 57 11.4 | |
| | comp=Z,181nm,18.5s,baz=188,slow=30 | | | | | | | |
| **SADO** | **Sadowa** | **36.86** | **295** | LR | | LR | 05 01 56.6 | |
| | comp=Z,202nm,18.8s,baz=113,slow=35 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **37.85** | **125** | P | | **P** | **04 47 51.8** | **+2.0** |
| | comp=Z,1.6nm,1.2s,baz=311,slow=7.6,SNR=2.3 | | | | | | | |
| **DBIC** | **Dimbokro** | **39.33** | **139** | LR | | LR | 05 03 02.8 | |
| | comp=Z,179nm,18.6s,baz=350,slow=34 | | | | | | | |
| **FINES** | **FINESS Array B** | **40.10** | **38** | P | | **P** | **04 48 06.8** | **-1.4** |
| | comp=Z,2.4nm,0.8s,baz=256,slow=5.6,SNR=4.3 | | | | | | | |
| FINES | | | | LR | | LR | 05 04 16.8 | |
| | comp=Z,142nm,18.1s,baz=236,slow=36 | | | | | | | |
| **FINES** | **FINESS Array B** | **40.10** | **38** | P | | **P** | **04 48 05.7** | **-2.5** |
| **MLR** | **Muntele Rosu** | **40.62** | **63** | LR | | LR | 05 04 17.2 | |
| | comp=Z,139nm,18.6s,baz=170,slow=35 | | | | | | | |
| **AKASG** | **Malin Array Be** | **41.92** | **54** | P | | **P** | **04 48 23.9** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=274,slow=8.5,SNR=6.7 | | | | | | | |
| AKASG | | | | LR | | LR | 05 04 04.6 | |
| | comp=Z,77nm,21.0s,baz=252,slow=34 | | | | | | | |
| **AKASG** | **Malin Array Be** | **41.92** | **54** | P | | **P** | **04 48 20.2** | **-3.1** |
| **TKL** | **Tuckaleechee C** | **42.76** | **283** | LR | | LR | 05 04 32.9 | |
| | comp=Z,150nm,18.8s,baz=52,slow=34 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **46.94** | **306** | LR | | LR | 05 08 41.9 | |
| | comp=Z,125nm,19.0s,baz=110,slow=36 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **48.93** | **160** | T | | T | 05 40 43.4 | |
| | baz=347,slow=76 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **48.94** | **160** | T | | T | 05 40 43.6 | |
| | baz=347 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **48.95** | **160** | T | | T | 05 40 44.6 | |
| | baz=347,slow=76 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.89** | **325** | P | | **P** | **04 49 57.0** | **+1.2** |
| | comp=Z,0.2nm,0.6s,baz=67,slow=7.5,SNR=4.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **58.35** | **302** | P | | **P** | **04 50 28.4** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=69,slow=10.0,SNR=4.1 | | | | | | | |
| PDAR | | | | LR | | LR | 05 14 39.0 | |
| | comp=Z,103nm,18.7s,baz=84,slow=35 | | | | | | | |
| **INK** | **Inuvik** | **58.95** | **335** | LR | | LR | 05 13 35.7 | |
| | comp=Z,60nm,18.4s,baz=122,slow=34 | | | | | | | |
| **ANMO** | **Albuquerque** | **59.82** | **292** | LR | | LR | 05 14 48.4 | |
| | comp=Z,82nm,20.8s,baz=64,slow=34 | | | | | | | |
| **CMIG** | **Matias Romero** | **60.52** | **268** | LR | | LR | 05 13 52.6 | |
| | comp=Z,54nm,21.1s,baz=42,slow=33 | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.57** | **285** | P | | **P** | **04 50 43.3** | **-0.5** |
| | comp=Z,1.1nm,0.8s,baz=68,slow=7.3,SNR=12 | | | | | | | |
| TXAR | | | | LR | | LR | 05 16 19.8 | |
| | comp=Z,52nm,19.2s,baz=48,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.57** | **285** | P | | **P** | **04 50 46.8** | **+3.0** |
| **NEW** | **Newport** | **60.64** | **310** | LR | | LR | 05 15 35.2 | |
| | comp=Z,210nm,18.6s,baz=70,slow=35 | | | | | | | |
| **ELK** | **Elko** | **63.05** | **302** | LR | | LR | 05 18 32.4 | |
| | comp=Z,50nm,18.6s,baz=52,slow=36 | | | | | | | |
| **BBB** | **Bella Bella** | **64.84** | **318** | LR | | LR | 05 16 05.3 | |
| | comp=Z,94nm,21.8s,baz=53,slow=33 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **67.35** | **306** | LR | | LR | 05 19 38.7 | |
| | comp=Z,127nm,18.7s,baz=55,slow=35 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **67.60** | **296** | LR | | LR | 05 21 17.7 | |
| | comp=Z,79nm,18.1s,baz=40,slow=36 | | | | | | | |
| **MBAR** | **Mbarara** | **67.69** | **110** | LR | | LR | 05 20 14.0 | |
| | comp=Z,120nm,18.4s,baz=301,slow=35 | | | | | | | |
| **LPIG** | **La Paz** | **68.39** | **284** | LR | | LR | 05 20 56.1 | |
| | comp=Z,75nm,19.6s,baz=26,slow=36 | | | | | | | |
| **CPUP** | **Villa Florida** | **70.35** | **207** | LR | | LR | 05 21 12.6 | |
| | comp=Z,43nm,19.0s,baz=350,slow=35 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.26** | **35** | P | | **P** | **04 51 52.0** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=303,slow=7.9,SNR=4.8 | | | | | | | |
| **TSUM** | **Tsumeb** | **72.93** | **134** | LR | | LR | 05 22 20.3 | |
| | comp=Z,73nm,18.8s,baz=332,slow=34 | | | | | | | |
| **MKAR** | **Makanchi Array** | **74.82** | **41** | P | | **P** | **04 52 13.7** | **+0.4** |
| | comp=Z,2.7nm,0.9s,baz=316,slow=5.1,SNR=19 | | | | | | | |
| **MKAR** | **Makanchi Array** | **74.82** | **41** | P | | **P** | **04 52 13.3** | **0.0** |
| **KSH** | **Kashi** | **76.04** | **50** | P | | **P** | **04 52 22.8** | **+2.2** |
| KSH | | | | pP | | | 04 52 25.3 | |
| KSH | | | | sP | | | 04 52 27.3 | |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **LSZ** | **Lusaka** | **76.36** | **123** | LR | | LR | 05 26 19.7 | |
| | comp=Z,108nm,19.5s,baz=333,slow=36 | | | | | | | |
| **LBTB** | **Lobatse** | **82.06** | **131** | LR | | LR | 05 26 56.8 | |
| | comp=Z,69nm,20.6s,baz=330,slow=34 | | | | | | | |
| **BOSA** | **Boshof** | **84.63** | **134** | LR | | LR | 05 26 55.6 | |
| | comp=Z,102nm,21.8s,baz=350,slow=33 | | | | | | | |
| **SONM** | **Songino Array** | **84.72** | **28** | P | | **P** | **04 53 07.2** | **+0.1** |
| | comp=Z,1.4nm,1.0s,baz=328,slow=5.1,SNR=7.9 | | | | | | | |
| **SONM** | **Songino Array** | **84.72** | **28** | P | | **P** | **04 53 05.5** | **-1.6** |
| SONM | | | | IAmb | | IAmb | 04 53 08.5 | |
| | comp=Z,2.6nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **84.93** | **28** | P | | **P** | **04 53 08.5** | **+0.2** |
| **SUR** | **Sutherland** | **85.22** | **139** | LR | | LR | 05 26 39.4 | |
| | comp=Z,33nm,20.9s,baz=335,slow=32 | | | | | | | |
| **ASAR** | **Alice Springs** | **158.91** | **47** | PKPab | | **PKPab** | **05 01 08.2** | **+0.7** |
| | comp=Z,0.5nm,0.5s,baz=314,slow=5.6,SNR=6.1 | | | | | | | |

*MAN **10** 04:46:05.9, 8.°08N× 127.°03E, h31km, mb4.7, ML3.6, MS3.6*
*NEIC **10** 04:46:08.2±0.8, 8.°3N±0.°1× 126.°7E±0.°2, h53km±7km, mb3.9/8, Error ellipse: s-maj=23.6km s-min=13.7km az=112.0*
*IDC **10** 04:46:13.3±2.9, 8.°27N× 126.°65E, h94km±28km, mb3.5/12, mb1 3.7/12, mb1mx3.5/43, mbtmp3.8/12, Error ellipse: s-maj=37.5km s-min=18.0km az=76.0*

**ISC 10 04:46:07.1±0.6, 8.°12N±0.°05× 127.°12E±0.°08, h50km, n35, σ2s16/42, mb3.9/15, 7C-2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **0.75** | **275** | *e*P | **Pn** | **04 46 21.3** | **-0.3** |
| BIPH | | | | *e*S | **Sn** | **04 46 31.8** | **-0.2** |
| **MATI** | **Mati** | **1.45** | **216** | *e*P | **Pn** | **04 46 27.6** | **-3.4** |
| **BUTP** | **Butuan** | **1.70** | **300** | *e*P | **Pn** | **04 46 33.3** | **-1.1** |
| **DAV** | **Davao City (W)** | **1.85** | **236** | P | **Pn** | **04 46 40.4** | **+4.0** |
| | 101nm,0.3s,baz=79,slow=16,SNR=3.7 | | | | | | |
| DAV | | | | S | **Sn** | **04 47 01.2** | **+2.5** |
| | 92nm,0.3s,baz=254,slow=22,SNR=19 | | | | | | |
| **DAV** | **Davao City (W)** | **1.85** | **236** | Pn | **Pn** | **04 46 34.2** | **-2.2** |
| DAV | | | | Sn | **Sn** | **04 46 54.5** | **-4.2** |
| **GLSP** | **General Luna,** | **1.92** | **329** | *e*P | **Pn** | **04 46 35.4** | **-1.9** |
| **BUKP** | **Musuan** | **2.05** | **263** | *e*P | Pn | 04 46 29.1 | -10 |
| **KCP** | **Kidapawan** | **2.29** | **241** | *i*P | **Pn** | **04 46 42.9** | **+0.3** |
| KCP | | | | *i* S | **Sn** | **04 47 09.7** | **0.0** |
| **DDMP** | **Don Marcelino,** | **2.44** | **215** | *e*P | **Pn** | **04 46 43.4** | **-1.1** |
| **CTBH** | **Cotabato--PC H** | **2.98** | **253** | *i*P | **Pn** | **04 46 51.0** | **-0.9** |
| CTBH | | | | *i* S | **Sn** | **04 47 25.4** | **-1.2** |
| **MSLP** | **Maasin** | **2.99** | **312** | *e*P | **Pn** | **04 46 52.0** | **-0.2** |
| **TBP** | **Tagbilaran** | **3.57** | **296** | *e*P | **Pn** | **04 46 59.5** | **-0.6** |
| TBP | | | | *i* S | **Sn** | **04 47 46.6** | **+5.5** |
| **LLP** | **Lapu-Lapu** | **3.80** | **305** | *e*P | **Pn** | **04 46 59.5** | **-3.7** |
| LLP | | | | *e*S | **Sn** | **04 47 49.7** | **+3.1** |
| **SOEI** | **Soe** | **17.99** | **189** | | **P** | **04 50 15.3** | **+1.5** |
| SOEI | | | | IAmb | IAmb | 04 50 30.1 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **28.63** | **166** | P | **P** | **04 52 01.0** | **+1.9** |
| WB0 | | | | IAmb | IAmb | 04 52 06.9 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.78** | **166** | P | P | 04 52 06.4 | +5.9 |
| | comp=Z,0.6nm,0.7s,baz=349,slow=10,SNR=5.3 | | | | | | |
| **WB2** | **Warramunga Arr** | **28.78** | **166** | P | **P** | **04 52 02.9** | **+2.4** |
| WB2 | | | | IAmb | IAmb | 04 52 10.9 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **29.21** | **1** | P | **P** | **04 52 05.2** | **+1.2** |
| | comp=Z,0.3nm,0.3s,baz=182,slow=9.8,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **32.28** | **168** | P | **P** | **04 52 33.6** | **+2.2** |
| | comp=Z,0.2nm,0.3s,baz=352,slow=6.9,SNR=2.1 | | | | | | |
| **KLR** | **Kul'dur** | **41.16** | **5** | P | **P** | **04 53 47.6** | **+1.1** |
| | comp=Z,1.2nm,0.6s,baz=193,slow=6.5,SNR=6.6 | | | | | | |
| **BBOO** | **Buckleboo** | **41.59** | **169** | P | **P** | **04 53 50.6** | **+0.4** |
| **ULN** | **Ulaanbaatar** | **43.11** | **340** | P | **P** | **04 54 00.6** | **-2.1** |
| ULN | | | | IAmb | IAmb | 04 54 17.8 | |
| | comp=Z,4.6nm,1.5s | | | | | | |
| **SONM** | **Songino Array** | **43.31** | **340** | P | **P** | **04 54 02.7** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=155,slow=8.6,SNR=1.5 | | | | | | |
| SONM | | | | PcP | **PcP** | **04 55 52.1** | **-0.3** |
| | comp=Z,0.2nm,0.7s,baz=151,slow=3.3,SNR=2.3 | | | | | | |
| **SONM** | **Songino Array** | **43.31** | **340** | P | **P** | **04 54 00.7** | **-3.6** |
| **MK31** | **Makanchi Array** | **54.23** | **323** | P | **P** | **04 55 25.3** | **-2.7** |
| **MKAR** | **Makanchi Array** | **54.23** | **323** | P | **P** | **04 55 26.9** | **-1.1** |
| | comp=Z,0.6nm,0.5s,baz=122,slow=7.5,SNR=12 | | | | | | |
| MKAR | | | | PcP | **PcP** | **04 56 31.4** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=125,slow=5.0,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.23** | **323** | P | **P** | **04 55 25.9** | **-2.0** |
| **ZALV** | **Zalesovo Beam** | **56.90** | **332** | P | **P** | **04 55 45.6** | **-1.3** |
| | comp=Z,0.4nm,0.3s,baz=118,slow=8.3,SNR=2.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.90** | **332** | P | **P** | **04 55 44.8** | **-2.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NRIK** | **Noril'sk** | **66.29** | **346** | P | | **P** | **04 56 50.0** | **+0.1** |
| | comp=Z,1.3nm,0.5s,baz=124,slow=11,SNR=3.9 | | | | | | | |
| **NRIK** | **Noril'sk** | **66.29** | **346** | P | | **P** | **04 56 48.6** | **-1.3** |
| **ILAR** | **Eielson Array** | **81.00** | **26** | P | | **P** | **04 58 16.9** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=264,slow=5.3,SNR=5.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.48** | **340** | P | | **P** | **04 58 44.0** | **-0.2** |
| | comp=Z,2.7nm,0.9s,baz=75,slow=6.9,SNR=3.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **88.17** | **332** | P | | **P** | **04 58 51.2** | **-1.2** |
| | comp=Z,4.2nm,1.0s,baz=82,slow=2.9,SNR=7.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.36** | **24** | P | | **P** | **04 59 27.2** | **+1.4** |
| | comp=Z,0.2nm,0.7s,baz=297,slow=4.5,SNR=3.2 | | | | | | | |

*CNRM **10** 04:55:29.5, 35.°44N× 3.°71W, h17km, ml2.8*
*SFS **10** 04:55:30.0, 35.°71N× 3.°66W, ML2.1, ALBORAN SUR*

**ISC 10 04:55:27.2±1.2, 35.°52N±0.°03× 3.°65W±0.°04, h14km±9km, n13, σ1s59/23, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.39** | **218** | P | **Pg** | **04 55 35.2** | **+0.2** |
| PALE | | | | S | **Sg** | **04 55 40.9** | **+0.6** |
| **CHAS** | **Isla Isabel II** | **1.05** | **109** | P | **Pb** | **04 55 44.9** | **-2.2** |
| CHAS | | | | S | **Sn** | **04 56 01.6** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **333** | P | **Pg** | **04 55 55.4** | **+1.5** |
| EMAL | | | | S | **Sg** | **04 56 09.8** | **-2.1** |
| **CHEFC** | **Chefchaouen** | **1.45** | **254** | P | **Pb** | **04 55 53.1** | **-0.7** |
| **CEU** | **Ceuta** | **1.45** | **285** | P | **Pb** | **04 55 52.1** | **-1.8** |
| **SICH** | **Sidi Chahed** | **1.97** | **225** | P | **Pb** | **04 56 01.4** | **-1.4** |
| SICH | | | | S | **Sb** | **04 56 27.5** | **+0.2** |
| **LCRM** | **LCR** | **2.09** | **209** | P | **Pb** | **04 56 04.4** | **-0.5** |
| LCRM | | | | S | **Sn** | **04 56 28.0** | **+0.3** |
| **IFR** | **Ifrane** | **2.34** | **212** | P | **Pn** | **04 56 05.4** | **0.0** |
| IFR | | | | S | **Sn** | **04 56 31.1** | **-3.0** |
| **MD31** | **MD31** | **2.81** | **199** | P | **Pn** | **04 56 12.4** | **+0.7** |
| MD31 | | | | S | **Sn** | **04 56 45.3** | **-0.1** |
| **MDT** | **Midelt** | **2.82** | **197** | P | **Pn** | **04 56 13.0** | **+1.2** |
| MDT | | | | S | **Sn** | **04 56 45.9** | **+0.3** |
| **TDRA** | **Tendrara** | **2.82** | **151** | P | **Pn** | **04 56 12.5** | **+0.6** |
| TDRA | | | | S | **Sn** | **04 56 48.4** | **+2.6** |
| **PVAQ** | **Vaqueiros** | **3.78** | **301** | *e*Pn | **Pn** | **04 56 26.5** | **+1.6** |
| PVAQ | | | | *e*Sn | **Sn** | **04 57 07.5** | **-1.7** |
| **EVO** | **Evora** | **4.60** | **312** | *e*Pn | **Pn** | **04 56 38.8** | **+2.5** |

*AUST **10** 05:03:28.5±1.5, 35.°03S× 148.°77E, h0km±11km, Error ellipse: s-maj=9.1km s-min=7.6km az=137.0*
*NOU **10** 05:03:28.6, 34.°94S× 148.°82E, h0km, MLv3.8/8, New South Wales, Australia*

**ISC 10 05:03:27.3±1.6, 34.°99S±0.°04× 148.°76E±0.°04, h1km±17km, n25, σ1s45/31, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMTS** | **Mt Stromlo** | **0.39** | **150** | P | **Pg** | **05 03 35.8** | **+1.0** |
| | baz=0.3 | | | | | | |
| AUMTS | | | | S | **Sg** | **05 03 40.0** | **+0.3** |
| | baz=0.3 | | | | | | |
| **CAN** | **Canberra** | **0.39** | **150** | P | **Pg** | **05 03 35.6** | **+0.9** |
| **AUDAR** | **Daramalan Coll** | **0.41** | **130** | P | **Pg** | **05 03 36.0** | **+0.8** |
| | baz=0.4 | | | | | | |
| **AUSIS** | **Research Schoo** | **0.41** | **136** | P | **Pg** | **05 03 35.4** | **+0.3** |
| | baz=0.4 | | | | | | |
| **AUMHS** | **Melrose High S** | **0.46** | **144** | P | **Pg** | **05 03 37.0** | **+0.9** |
| | baz=0.4 | | | | | | |
| **CNB** | **Canberra Magne** | **0.59** | **124** | P | **Pg** | **05 03 39.3** | **+0.6** |
| | baz=0.6,SNR=1000 | | | | | | |
| CNB | | | | S | **Sg** | **05 03 46.0** | **-0.4** |
| | baz=0.6 | | | | | | |
| **CNB** | **Canberra Magne** | **0.59** | **124** | P | **Pg** | **05 03 39.2** | **+0.6** |
| **AUSMG** | **Snowy Mountain** | **1.44** | **185** | P | **Pb** | **05 03 54.9** | **-0.1** |
| | baz=1.4 | | | | | | |
| **AUUHS** | **Ulladulla High** | **1.45** | **105** | P | **Pn** | **05 03 54.1** | **-0.6** |
| | baz=1.4 | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **2.04** | **54** | P | **Pb** | **05 04 04.6** | **-0.6** |
| **MILA** | **Mila** | **2.09** | **171** | P | **Pb** | **05 04 04.9** | **-1.2** |
| | baz=2.0,SNR=31 | | | | | | |
| **AUTKS** | **The King's Sch** | **2.23** | **58** | P | **Pn** | **05 04 07.3** | **+1.9** |
| | baz=2.2 | | | | | | |
| AUTKS | | | | S | **Sb** | **05 04 35.5** | **-1.0** |
| | baz=2.2 | | | | | | |
| **RIV** | **Riverview** | **2.29** | **60** | P | **Pn** | **05 04 08.3** | **+2.1** |
| | baz=2.3,SNR=6.7 | | | | | | |
| RIV | | | | S | **Sb** | **05 04 37.6** | **-0.7** |
| | baz=2.3,SNR=6.5 | | | | | | |
| **MGCD** | **Mangrove Creek** | **2.63** | **48** | P | **Pn** | **05 04 11.3** | **+0.3** |
| | baz=2.7,SNR=39 | | | | | | |
| MGCD | | | | S | **Sb** | **05 04 47.8** | **-0.3** |
| | baz=2.7,SNR=9.4 | | | | | | |
| **MGCD** | **Mangrove Creek** | **2.63** | **48** | P | **Pn** | **05 04 11.2** | **+0.3** |
| **AUKHS** | **Kincumber High** | **2.65** | **56** | P | **Pb** | **05 04 14.1** | **-1.4** |
| | baz=2.7 | | | | | | |
| **AUDCS** | **Dubbo College** | **2.75** | **358** | P | **Pb** | **05 04 17.7** | **+0.5** |
| | baz=2.8 | | | | | | |
| **TOO** | **Toolangi** | **3.69** | **225** | P | **Pb** | **05 04 29.7** | **-3.7** |
| | baz=3.7,SNR=7.2 | | | | | | |
| TOO | | | | S | **Sg** | **05 05 24.4** | **-1.6** |
| | baz=3.7,SNR=6.7 | | | | | | |
| **TOO** | **Toolangi** | **3.69** | **225** | P | **Pn** | **05 04 29.1** | **+3.5** |
| **CMSA** | **Cobar Meteorol** | **4.29** | **322** | P | **Pn** | **05 04 34.2** | **+0.4** |
| | baz=4.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **4.29** | **322** | P | **Pn** | **05 04 33.8** | **0.0** |
| **ARPS** | **Mount Arapiles** | **5.90** | **250** | P | **Pn** | **05 04 56.5** | **+0.7** |
| | baz=5.9 | | | | | | |
| **ARPS** | **Mount Arapiles** | **5.90** | **250** | P | **Pn** | **05 04 58.5** | **+2.7** |
| **STKA** | **Stephens Creek** | **6.75** | **295** | P | **Pn** | **05 05 08.4** | **+1.0** |
| | baz=6.8,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **6.75** | **295** | P | **Pn** | **05 05 08.5** | **+1.0** |

**AUST 10 05:04:24.3±0.0, 35.°01S× 148.°85E, h8km, Error ellipse: s-maj=0.3km s-min=0.1km az=282.0, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMTS** | **Mt Stromlo** | **0.33** | **159** | P | Pg | 05 04 30.8 | 0.0 |
| | baz=0.3 | | | | | | |
| AUMTS | | | | S | Sg | 05 04 35.0 | -0.3 |
| | baz=0.3 | | | | | | |
| **AUSIS** | **Research Schoo** | **0.34** | **142** | P | Pg | 05 04 30.4 | -0.6 |
| | baz=0.4 | | | | | | |
| **CNB** | **Canberra Magne** | **0.52** | **126** | P | Pg | 05 04 34.3 | 0.0 |
| | baz=0.5 | | | | | | |
| CNB | | | | S | Sg | 05 04 41.0 | -0.1 |
| | baz=0.5 | | | | | | |
| **AUUHS** | **Ulladulla High** | **1.37** | **105** | P | Pb | 05 04 49.9 | -0.2 |
| | baz=1.4 | | | | | | |
| AUUHS | | | | S | Sb | 05 05 07.0 | -0.9 |
| | baz=1.4 | | | | | | |
| **AUSMG** | **Snowy Mountain** | **1.42** | **188** | P | Pn | 05 04 50.3 | -0.2 |
| | baz=1.4 | | | | | | |
| AUSMG | | | | S | Sb | 05 05 08.2 | -1.2 |
| | baz=1.4 | | | | | | |

*IDC **10** 05:07:01.6±1.4, 60.°31N× 150.°02W, h69km±22km, mb3.0/2, mb1 3.4/6, mb1mx2.9/59, mbtmp3.5/6, Error ellipse: s-maj=40.7km s-min=10.3km az=116.0*
*NEIC **10** 05:07:02.1±1.4, 60.°43N±0.°01× 150.°20W±0.°08, h49km±8km, Error ellipse: s-maj=5.9km s-min=1.2km az=103.0*
*ANF **10** 05:07:02.2±0.1, 60.°39N× 150.°24W, h41km±4km, ML3.6/59, Error ellipse: s-maj=1.9km s-min=1.3km az=143.0*
*AEIC **10** 05:07:02.1±1.4, 60.°42N±0.°01× 150.°24W±0.°09, h42km±8km, ML3.4, ML3.5/138(NEIC), Error ellipse: s-maj=6.3km s-min=1.1km az=107.0*

**ISC 10 05:07:01.4±0.9, 60.°41N±0.°03× 150.°25W±0.°03, h47km±6km, n228, σ1s03/213, Kenai Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLKM** | **Skilak Lake** | **0.10** | **8** | | **Pn** | **05 07 09.0** | **+0.1** |
| SLKM | | | | | **Sn** | **05 07 13.9** | **-0.3** |
| **O22K** | **Cooper Landing** | **0.27** | **74** | | **Pn** | **05 07 10.2** | **+0.3** |
| O22K | | | | | **Sn** | **05 07 16.3** | **+0.4** |
| **O22K** | **Cooper Landing** | **0.27** | **74** | IAML | | 05 07 16.7 | |
| | comp=E,3μm,0.3s | | | | | | |
| **O22K** | **Cooper Landing** | **0.27** | **74** | P | **Pn** | **05 07 10.4** | **+0.5** |
| | baz=255,SNR=177 | | | | | | |
| O22K | | | | S | **Sn** | **05 07 16.3** | **+0.4** |
| | baz=255 | | | | | | |
| **SEW** | **Seward** | **0.50** | **127** | | **Pn** | **05 07 12.9** | **+0.6** |
| SEW | | | | | **Sn** | **05 07 21.1** | **+0.9** |
| **SEW** | **Seward** | **0.50** | **127** | P | **Pn** | **05 07 13.0** | **+0.6** |
| | baz=309,SNR=60 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAPN** | **Captain Cook N** | **0.57** | **309** | | | **Pn** | **05 07 14.5** | **+1.2** |
| **CAPN** | **Captain Cook N** | **0.57** | **309** | P | | **Pn** | **05 07 14.5** | **+1.2** |
| | baz=128,SNR=18 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **0.71** | **200** | | | **Pn** | **05 07 15.9** | **+0.7** |
| BRSE | | | | | | **Sn** | **05 07 26.2** | **+1.1** |
| **BRSE** | **Bradley Lake S** | **0.71** | **200** | P | | **Pn** | **05 07 15.9** | **+0.7** |
| | baz=20,SNR=60 | | | | | | | |
| **BRLK** | **Bradley Lake** | **0.72** | **207** | | | **Pn** | **05 07 16.3** | **+1.0** |
| **RC01** | **Rabbit Creek A** | **0.73** | **20** | | | **Pn** | **05 07 15.6** | **+0.2** |
| RC01 | | | | | | **Sn** | **05 07 25.4** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **0.73** | **20** | IAML | | | 05 07 26.7 | |
| | comp=E,3μm,0.4s | | | | | | | |
| RC01 | | | | IAML | | | 05 07 28.8 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **0.73** | **20** | P | | **Pn** | **05 07 15.7** | **+0.2** |
| | baz=200,SNR=385 | | | | | | | |
| RC01 | | | | S | | **Sn** | **05 07 25.5** | **-0.1** |
| | baz=200 | | | | | | | |
| **FIS** | **Fire Island** | **0.74** | **1** | | | **Pn** | **05 07 16.4** | **+0.9** |
| **CNPM** | **China Poot** | **1.01** | **210** | | | **Pn** | **05 07 20.3** | **+1.1** |
| **CNPM** | **China Poot** | **1.01** | **210** | IAML | | | 05 07 36.3 | |
| | comp=E,1μm,0.4s | | | | | | | |
| CNPM | | | | IAML | | | 05 07 38.5 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **HOM** | **Homer** | **1.03** | **224** | | | **Pn** | **05 07 20.7** | **+1.4** |
| **HOM** | **Homer** | **1.03** | **224** | P | | **Pn** | **05 07 20.5** | **+1.1** |
| | baz=42,SNR=5.5 | | | | | | | |
| **PWL** | **Port Wells** | **1.05** | **64** | | | **Pn** | **05 07 20.2** | **+0.5** |
| PWL | | | | | | **Sn** | **05 07 33.9** | **+0.8** |
| **PWL** | **Port Wells** | **1.05** | **64** | IAML | | | 05 07 35.8 | |
| | comp=N,1μm,0.5s | | | | | | | |
| PWL | | | | IAML | | | 05 07 40.0 | |
| | comp=E,916nm,0.8s | | | | | | | |
| **PWL** | **Port Wells** | **1.05** | **64** | P | | **Pn** | **05 07 20.2** | **+0.5** |
| | baz=245,SNR=63 | | | | | | | |
| PWL | | | | S | | **Sn** | **05 07 34.1** | **+0.9** |
| | baz=245 | | | | | | | |
| **SPU** | **Mount Spurr** | **1.18** | **312** | | | **Pn** | **05 07 21.6** | **+0.1** |
| **REF** | **Redoubt East F** | **1.22** | **275** | | | **Pn** | **05 07 22.5** | **+0.3** |
| **DFR** | **Drift River** | **1.22** | **280** | | | **Pn** | **05 07 22.3** | **+0.2** |
| **O20K** | **Slope Mountain** | **1.23** | **256** | | | **Pn** | **05 07 23.4** | **+1.2** |
| O20K | | | | | | **Sn** | **05 07 39.5** | **+1.9** |
| **O20K** | **Slope Mountain** | **1.23** | **256** | P | | **Pn** | **05 07 23.4** | **+1.2** |
| | baz=73,SNR=12 | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.24** | **316** | | | **Pn** | **05 07 22.7** | **+0.3** |
| **RSO** | **Redoubt South** | **1.24** | **274** | | | **Pn** | **05 07 23.0** | **+0.5** |
| **RED** | **Redoubt Volcan** | **1.25** | **272** | | | **Pn** | **05 07 22.9** | **+0.3** |
| RED | | | | | | **Sn** | **05 07 38.9** | **+0.7** |
| **SPCN** | **Chakachatna No** | **1.25** | **312** | | | **Pn** | **05 07 22.9** | **+0.4** |
| **RDJH** | **Redoubt Jeurge** | **1.28** | **279** | | | **Pn** | **05 07 23.2** | **+0.3** |
| **RDWB** | **Redoubt West** | **1.29** | **275** | | | **Pn** | **05 07 23.3** | **+0.3** |
| RDWB | | | | | | **Sn** | **05 07 39.7** | **+0.5** |
| **PMR** | **Palmer** | **1.31** | **24** | | | **Pn** | **05 07 23.5** | **+0.4** |
| **PMR** | **Palmer** | **1.31** | **24** | IAML | | | 05 07 44.2 | |
| | comp=E,886nm,0.4s | | | | | | | |
| PMR | | | | IAML | | | 05 07 44.9 | |
| | comp=N,685nm,0.2s | | | | | | | |
| **PMR** | **Palmer** | **1.31** | **24** | P | | **Pn** | **05 07 23.6** | **+0.4** |
| | baz=205,SNR=86 | | | | | | | |
| **KNK** | **Knik Glacier** | **1.34** | **40** | | | **Pn** | **05 07 24.1** | **+0.5** |
| **KNK** | **Knik Glacier** | **1.34** | **40** | IAML | | | 05 07 49.1 | |
| | comp=N,774nm,0.5s | | | | | | | |
| KNK | | | | IAML | | | 05 07 49.1 | |
| | comp=E,732nm,0.5s | | | | | | | |
| **KNK** | **Knik Glacier** | **1.34** | **40** | P | | **Pn** | **05 07 24.2** | **+0.5** |
| | baz=222,SNR=62 | | | | | | | |
| **NCT** | **North Crescent** | **1.34** | **278** | | | **Pn** | **05 07 24.0** | **+0.3** |
| NCT | | | | | | **Sn** | **05 07 40.7** | **+0.4** |
| **STLK** | **Strandline Lak** | **1.34** | **325** | | | **Pn** | **05 07 24.2** | **+0.5** |
| **SPBG** | **Spurr Blockage** | **1.35** | **310** | | | **Pn** | **05 07 24.1** | **+0.4** |
| **M22K** | **Willow** | **1.35** | **3** | | | **Pn** | **05 07 24.1** | **+0.3** |
| M22K | | | | | | **Sn** | **05 07 41.3** | **+0.8** |
| **M22K** | **Willow** | **1.35** | **3** | P | | **Pn** | **05 07 24.1** | **+0.3** |
| | baz=182,SNR=60 | | | | | | | |
| M22K | | | | S | | **Sn** | **05 07 41.5** | **+1.0** |
| | baz=182 | | | | | | | |
| **ILSW** | **Iliamna Southw** | **1.51** | **255** | | | **Pn** | **05 07 26.4** | **+0.4** |
| **ILSW** | **Iliamna Southw** | **1.51** | **255** | IAML | | | 05 07 46.7 | |
| | comp=N,570nm,0.3s | | | | | | | |
| ILSW | | | | IAML | | | 05 07 48.3 | |
| | comp=E,556nm,0.5s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.51** | **25**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L19K | White Mountain | 2.85 | 311 | P | | Pn | 05 07 45.4 | +1.1 |
| | baz=126,SNR=28 | | | | | | | |
| PS11 | TAPS Pump St11 | 2.85 | 52 | | | Pn | 05 07 46.0 | +1.7 |
| KDAK | Kodiak Island | 2.90 | 206 | P | | Pn | 05 07 45.5 | +0.6 |
| | comp=E,7.2nm,0.3s,baz=42,slow=15,SNR=67 | | | | | | | |
| KDAK | | | | S | | Sn | 05 08 18.4 | 0.0 |
| | comp=E,5.6nm,0.3s,baz=140,slow=23,SNR=3.5 | | | | | | | |
| KDAK | Kodiak Island | 2.90 | 206 | | | Pn | 05 07 45.3 | +0.4 |
| KDAK | Kodiak Island | 2.90 | 206 | P | | Pn | 05 07 45.2 | +0.4 |
| | baz=24 | | | | | | | |
| N25K | Chitina, Valde | 3.00 | 64 | | | Pn | 05 07 47.3 | +0.8 |
| N25K | Chitina, Valde | 3.00 | 64 | IAML | | | 05 08 33.3 | |
| | comp=N,191nm,0.6s | | | | | | | |
| N25K | | | | IAML | | | 05 08 33.8 | |
| | comp=E,141nm,0.6s | | | | | | | |
| N25K | Chitina, Valde | 3.00 | 64 | P | | Pn | 05 07 47.1 | +0.6 |
| | baz=249,SNR=11 | | | | | | | |
| N25K | | | | S | | Sn | 05 08 21.8 | +0.6 |
| | baz=249 | | | | | | | |
| DHY | Denali Highway | 3.01 | 26 | | | Pn | 05 07 47.5 | +0.9 |
| DHY | Denali Highway | 3.01 | 26 | IAML | | | 05 08 30.9 | |
| | comp=E,127nm,0.8s | | | | | | | |
| DHY | Denali Highway | 3.01 | 26 | P | | Pn | 05 07 47.7 | +1.1 |
| | baz=208,SNR=24 | | | | | | | |
| TRF | Thorofare Moun | 3.05 | 360 | | | Pn | 05 07 48.2 | +0.9 |
| TRF | Thorofare Moun | 3.05 | 360 | IAML | | | 05 08 32.2 | |
| | comp=N,190nm,0.6s | | | | | | | |
| TRF | | | | IAML | | | 05 08 34.6 | |
| | comp=E,140nm,0.6s | | | | | | | |
| TRF | Thorofare Moun | 3.05 | 360 | P | | Pn | 05 07 48.1 | +0.9 |
| | baz=180,SNR=17 | | | | | | | |
| RND | Reindeer | 3.08 | 12 | | | Pn | 05 07 48.9 | +1.3 |
| RND | Reindeer | 3.08 | 12 | IAML | | | 05 08 33.2 | |
| | comp=N,109nm,0.5s | | | | | | | |
| CAST | Castle Rocks | 3.15 | 345 | | | Pn | 05 07 49.4 | +1.1 |
| CAST | | | | IAML | | | 05 08 34.1 | |
| | comp=N,98nm,0.6s | | | | | | | |
| CAST | | | | IAML | | | 05 08 34.3 | |
| | comp=E,94nm,0.6s | | | | | | | |
| CAST | Castle Rocks | 3.15 | 345 | P | | Pn | 05 07 49.3 | +0.9 |
| | baz=163,SNR=18 | | | | | | | |
| HARP | HAARP | 3.16 | 49 | | | Pn | 05 07 50.0 | +1.5 |
| HARP | HAARP | 3.16 | 49 | P | | Pn | 05 07 49.6 | +1.1 |
| | baz=233,SNR=36 | | | | | | | |
| KTH | Kantishna Hill | 3.17 | 355 | | | Pn | 05 07 50.0 | +1.2 |
| SUCK | Suckling Hills | 3.25 | 93 | Pn | | Pn | 05 07 53.3 | +3.6 |
| SUCK | | | | IAML | | | 05 09 13.2 | |
| | comp=E,103nm,3.2s | | | | | | | |
| SUCK | | | | IAML | | | 05 09 23.1 | |
| | comp=N,86nm,2.9s | | | | | | | |
| GLB | Gilahina Butte | 3.31 | 69 | | | Pn | 05 07 51.0 | +0.3 |
| GLB | Gilahina Butte | 3.31 | 69 | IAML | | | 05 08 40.1 | |
| | comp=E,130nm,0.7s | | | | | | | |
| MCK | McKinley | 3.39 | 10 | | | Pn | 05 07 52.5 | +0.8 |
| MCK | McKinley | 3.39 | 10 | IAML | | | 05 08 51.9 | |
| | comp=E,77nm,0.6s | | | | | | | |
| MCK | | | | IAML | | | 05 08 58.0 | |
| | comp=N,103nm,1.1s | | | | | | | |
| MCK | McKinley | 3.39 | 10 | P | | Pn | 05 07 53.4 | +1.6 |
| | baz=191 | | | | | | | |
| VRDI | Verde Repeater | 3.43 | 73 | | | Pn | 05 07 52.4 | 0.0 |
| VRDI | Verde Repeater | 3.43 | 73 | IAML | | | 05 08 43.4 | |
| | comp=N,82nm,0.5s | | | | | | | |
| PAX | Paxson | 3.43 | 39 | | | Pn | 05 07 53.6 | +1.2 |
| PAX | Paxson | 3.43 | 39 | P | | Pn | 05 07 53.8 | +1.4 |
| | baz=224,SNR=66 | | | | | | | |
| K20K | Telida | 3.47 | 330 | | | Pn | 05 07 53.4 | +0.6 |
| K20K | Telida | 3.47 | 330 | P | | Pn | 05 07 53.2 | +0.4 |
| | baz=147 | | | | | | | |
| OHAK | Old Harbor | 3.56 | 208 | Pn | | Pn | 05 07 52.9 | -1.2 |
| OHAK | | | | IAML | | | 05 08 49.4 | |
| | comp=N,78nm,3.2s | | | | | | | |
| OHAK | | | | IAML | | | 05 08 54.6 | |
| | comp=E,80nm,3.0s | | | | | | | |
| OHAK | Old Harbor | 3.56 | 208 | P | | Pn | 05 07 54.0 | -0.1 |
| | baz=25 | | | | | | | |
| CHUM | Lake Minchumin | 3.62 | 345 | | | Pn | 05 07 55.9 | +1.1 |
| CHUM | Lake Minchumin | 3.62 | 345 | P | | Pn | 05 07 55.8 | +0.9 |
| | baz=163,SNR=70 | | | | | | | |
| PS10 | TAPS Pump St10 | 3.69 | 33 | | | Pn | 05 07 58.0 | +2.0 |
| BPAW | Bear Paw Mtn. | 3.72 | 355 | | | Pn | 05 07 56.7 | +0.4 |
| BPAW | Bear Paw Mtn. | 3.72 | 355 | IAML | | | 05 08 45.6 | |
| | comp=N,59nm,0.9s | | | | | | | |
| BPAW | | | | IAML | | | 05 09 03.4 | |
| | comp=E,70nm,0.7s | | | | | | | |
| BPAW | Bear Paw Mtn. | 3.72 | 355 | P | | Pn | 05 07 57.1 | +0.8 |
| | baz=174 | | | | | | | |
| TT01 | Tatalina | 3.72 | 315 | | | Pn | 05 07 57.0 | +0.7 |
| TTA | Tatalina | 3.73 | 315 | | | Pn | 05 07 57.0 | +0.5 |
| TTA | Tatalina | 3.73 | 315 | P | | Pn | 05 07 57.0 | +0.5 |
| | baz=130 | | | | | | | |
| ISLE | Juniper Island | 3.92 | 84 | | | Pn | 05 07 58.4 | -0.6 |
| ISLE | Juniper Island | 3.92 | 84 | IAML | | | 05 09 13.4 | |
| | comp=E,74nm,0.8s | | | | | | | |
| KIAG | Kiagna River | 3.92 | 79 | | | Pn | 05 07 58.6 | -0.5 |
| BALM | Baldy | 3.93 | 77 | | | Pn | 05 07 59.1 | -0.1 |
| MENT | Mentasta | 4.02 | 48 | | | Pn | 05 08 01.6 | +1.3 |
| MENT | | | | IAML | | | 05 09 15.8 | |
| | comp=N,85nm,0.7s | | | | | | | |
| MENT | | | | IAML | | | 05 09 17.1 | |
| | comp=E,100nm,0.6s | | | | | | | |
| M26K | Nabesna, AK | 4.02 | 57 | | | Pn | 05 08 01.8 | +1.4 |
| M26K | Nabesna, AK | 4.02 | 57 | IAML | | | 05 09 09.6 | |
| | comp=N,45nm,0.6s | | | | | | | |
| M26K | Nabesna, AK | 4.02 | 57 | P | | Pn | 05 08 01.6 | +1.2 |
| | baz=243 | | | | | | | |
| MESA | MESA | 4.14 | 90 | Pn | | Pn | 05 08 04.8 | +2.6 |
| MESA | | | | IAML | | | 05 09 22.3 | |
| | comp=E,72nm,2.0s | | | | | | | |
| J20K | Nowinta River | 4.20 | 336 | | | Pn | 05 08 03.7 | +0.9 |
| J20K | Nowinta River | 4.20 | 336 | IAML | | | 05 09 14.8 | |
| | comp=E,58nm,0.6s | | | | | | | |
| J20K | | | | IAML | | | 05 09 29.1 | |
| | comp=N,42nm,0.7s | | | | | | | |
| J20K | Nowinta River | 4.20 | 336 | P | | Pn | 05 08 03.7 | +0.9 |
| | baz=152,SNR=18 | | | | | | | |
| RIDG | Independent Ri | 4.20 | 35 | | | Pn | 05 08 04.1 | +1.2 |
| RIDG | Independent Ri | 4.20 | 35 | IAML | | | 05 09 10.2 | |
| | comp=N,56nm,0.8s | | | | | | | |
| RIDG | | | | IAML | | | 05 09 13.9 | |
| | comp=E,57nm,0.6s | | | | | | | |
| RIDG | Independent Ri | 4.20 | 35 | P | | Pn | 05 08 04.3 | +1.5 |
| | baz=220,SNR=34 | | | | | | | |
| WRH | Wood River Hil | 4.20 | 13 | | | Pn | 05 08 03.9 | +1.1 |
| L26K | Log Cabin Wild | 4.20 | 48 | | | Pn | 05 08 03.9 | +1.0 |
| L26K | | | | IAML | | | 05 09 17.9 | |
| | comp=E,46nm,0.8s | | | | | | | |
| L26K | | | | IAML | | | 05 09 32.6 | |
| | comp=N,38nm,0.8s | | | | | | | |
| L26K | Log Cabin Wild | 4.20 | 48 | P | | Pn | 05 08 04.5 | +1.6 |
| | baz=234,SNR=6.3 | | | | | | | |
| YAH | Yahtse | 4.22 | 87 | Pn | | Pn | 05 08 05.6 | +2.3 |
| YAH | | | | IAML | | | 05 09 06.0 | |
| | comp=E,47nm,4.1s | | | | | | | |
| YAH | | | | IAML | | | 05 09 25.4 | |
| | comp=N,47nm,0.9s | | | | | | | |
| NEA2 | Nenana | 4.24 | 7 | | | Pn | 05 08 04.5 | +1.2 |
| NEA2 | Nenana | 4.24 | 7 | P | | Pn | 05 08 04.5 | +1.2 |
| | baz=188 | | | | | | | |
| BARN | Barnard Glacie | 4.27 | 77 | | | Pn | 05 08 04.0 | 0.0 |
| BARN | Barnard Glacie | 4.27 | 77 | IAML | | | 05 09 11.9 | |
| | comp=N,60nm,0.9s | | | | | | | |
| BARN | | | | IAML | | | 05 09 15.5 | |
| | comp=E,45nm,0.7s | | | | | | | |
| HDA | Harding Lake | 4.30 | 19 | | | Pn | 05 08 05.7 | +1.6 |
| HDA | Harding Lake | 4.30 | 19 | IAML | | | 05 09 10.0 | |
| | comp=N,52nm,0.7s | | | | | | | |
| HDA | | | | IAML | | | 05 09 11.1 | |
| | comp=E,52nm,0.5s | | | | | | | |
| HDA | Harding Lake | 4.30 | 19 | P | | Pn | 05 08 06.0 | +1.8 |
| | baz=202,SNR=57 | | | | | | | |
| DOT | Dot Lake | 4.37 | 39 | | | Pn | 05 08 06.5 | +1.4 |
| CCB | Clear Creek Bu | 4.40 | 14 | | | Pn | 05 08 06.6 | +1.0 |
| PS08 | TAPS Pump Stn8 | 4.45 | 19 | | | Pn | 05 08 07.9 | +1.7 |
| M27K | Edge Creek, AK | 4.48 | 60 | | | Pn | 05 08 08.0 | +1.3 |
| M27K | Edge Creek, AK | 4.48 | 60 | P | | Pn | 05 08 08.0 | +1.3 |
| | baz=248 | | | | | | | |
| TCOL | CIGO, UAF Yank | 4.62 | 13 | | | Pn | 05 08 10.1 | +1.7 |
| TCOL | CIGO, UAF Yank | 4.62 | 13 | P | | Pn | 05 08 10.0 | +1.5 |
| | baz=195,SNR=14 | | | | | | | |
| COLA | College | 4.62 | 13 | | | Pn | 05 08 09.1 | +0.6 |
| COLA | College | 4.62 | 13 | P | | Pn | 05 08 10.1 | +1.6 |
| | baz=195 | | | | | | | |
| SCRK | Sand Creek | 4.63 | 37 | | | Pn | 05 08 09.3 | +0.5 |
| SCRK | Sand Creek | 4.63 | 37 | P | | Pn | 05 08 09.3 | +0.5 |
| | baz=222,SNR=6.6 | | | | | | | |
| IL31 | | 4.65 | 18 | | | Pn | 05 08 10.4 | +1.5 |
| ILAR | Eielson Array | 4.65 | 18 | P | | Pn | 05 08 10.3 | +1.4 |
| | comp=E,5.5nm,0.3s,baz=199,slow=13,SNR=213 | | | | | | | |
| ILAR | | | | | S | Sn | 05 09 03.3 | +1.8 |
| | comp=E,1.6nm,0.3s,baz=197,slow=24,SNR=4.8 | | | | | | | |
| ILAR | Eielson Array | 4.65 | 18 | Pn | | Pn | 05 08 10.0 | +1.1 |
| MLY | Manley | 4.65 | 357 | | | Pn | 05 08 10.0 | +1.0 |
| MLY | Manley | 4.65 | 357 | P | | Pn | 05 08 10.4 | +1.4 |
| | baz=177,SNR=9.5 | | | | | | | |
| MDM | Murphy Dome | 4.66 | 11 | | | Pn | 05 08 10.3 | +1.2 |
| MDM | Murphy Dome | 4.66 | 11 | IAML | | | 05 09 30.1 | |
| | comp=E,28nm,1.1s | | | | | | | |
| MDM | | | | IAML | | | 05 09 38.4 | |
| | comp=N,27nm,1.4s | | | | | | | |
| YUK2 | White River | 4.77 | 69 | | | Pn | 05 08 11.6 | +0.8 |
| I23K | Minto, Yukon-K | 4.78 | 5 | | | Pn | 05 08 12.0 | +1.3 |
| I23K | Minto, Yukon-K | 4.78 | 5 | IAML | | | 05 09 27.9 | |
| | comp=N,30nm,1.4s | | | | | | | |
| I23K | | | | IAML | | | 05 09 34.5 | |
| | comp=E,35nm,1.3s | | | | | | | |
| I23K | Minto, Yukon-K | 4.78 | 5 | P | | Pn | 05 08 11.9 | +1.3 |
| | baz=185,SNR=13 | | | | | | | |
| J25K | Salcha River, | 4.79 | 26 | | | Pn | 05 08 12.1 | +1.2 |
| J25K | Salcha River, | 4.79 | 26 | IAML | | | 05 09 22.7 | |
| | comp=E,38nm,0.6s | | | | | | | |
| J25K | | | | IAML | | | 05 09 24.8 | |
| | comp=N,28nm,0.7s | | | | | | | |
| J25K | Salcha River, | 4.79 | 26 | P | | Pn | 05 08 12.2 | +1.2 |
| | baz=210,SNR=30 | | | | | | | |
| L27K | Beaver Creek, | 4.81 | 53 | | | Pn | 05 08 12.0 | +0.8 |
| L27K | Beaver Creek, | 4.81 | 53 | P | | Pn | 05 08 12.1 | +0.9 |
| | baz=240 | | | | | | | |
| BC03 | | 4.83 | 53 | | | Pn | 05 08 12.6 | +1.2 |
| I21K | Tanana | 4.86 | 351 | IAML | | | 05 09 30.0 | |
| | comp=N,27nm,3.5s | | | | | | | |
| I21K | | | | IAML | | | 05 09 32.9 | |
| | comp=E,28nm,0.9s | | | | | | | |
| I21K | Tanana | 4.86 | 351 | P | | Pn | 05 08 13.4 | +1.6 |
| | baz=170,SNR=7.8 | | | | | | | |
| POKR | Poker Flat Res | 4.90 | 14 | | | Pn | 05 08 13.5 | +1.1 |
| POKR | Poker Flat Res | 4.90 | 14 | IAML | | | 05 09 37.9 | |
| | comp=E,24nm,1.2s | | | | | | | |
| POKR | | | | IAML | | | 05 10 04.4 | |
| | comp=N,24nm,4.5s | | | | | | | |
| POKR | Poker Flat Res | 4.90 | 14 | P | | Pn | 05 08 13.9 | +1.5 |
| | baz=196 | | | | | | | |
| BVCY | Beaver Creek | 4.94 | 62 | | | Pn | 05 08 14.1 | +1.2 |
| BVCY | Beaver Creek | 4.94 | 62 | P | | Pn | 05 08 14.1 | +1.2 |
| | baz=250 | | | | | | | |
| YUK3 | Moose Creek | 4.95 | 70 | P | | Pn | 05 08 13.9 | +0.7 |
| | baz=258 | | | | | | | |
| J26L | Joseph Creek | 5.15 | 34 | | | Pn | 05 08 16.6 | +0.8 |
| J26L | Joseph Creek | 5.15 | 34 | IAML | | | 05 09 37.1 | |
| | comp=E,20nm,0.7s | | | | | | | |
| J26L | | | | IAML | | | 05 09 47.2 | |
| | comp=N,26nm,0.7s | | | | | | | |
| J26L | Joseph Creek | 5.15 | 34 | P | | Pn | 05 08 16.8 | +0.9 |
| | baz=220 | | | | | | | |
| H21K | Melozitna Rive | 5.40 | 349 | P | | Pn | 05 08 20.3 | +1.1 |
| | baz=166 | | | | | | | |
| H23K | Yukon River | 5.45 | 3 | | | Pn | 05 08 21.0 | +1.1 |
| H23K | Yukon River | 5.45 | 3 | P | | Pn | 05 08 21.0 | +1.1 |
| | baz=184 | | | | | | | |
| H24K | Noodor Dome | 5.56 | 10 | | | Pn | 05 08 22.8 | +1.4 |
| H24K | Noodor Dome | 5.56 | 10 | P | | Pn | 05 08 22.8 | +1.4 |
| | baz=192 | | | | | | | |
| PRP | Porcupine Dome | 5.56 | 21 | | | Pn | 05 08 22.9 | +1.4 |
| PRP | Porcupine Dome | 5.56 | 21 | P | | Pn | 05 08 23.1 | +1.5 |
| | baz=205,SNR=18 | | | | | | | |
| YUK4 | Talbot Arm | 5.75 | 76 | P | | Pn | 05 08 25.4 | +1.2 |
| | baz=265 | | | | | | | |
| IM03 | | 5.82 | 346 | | | Pn | 05 08 25.5 | +0.6 |
| IMAR | Indian Mountai | 5.82 | 346 | | | Pn | 05 08 26.7 | +1.8 |
| EGAK | Eagle | 6.07 | 40 | | | Pn | 05 08 29.3 | +1.0 |
| EGAK | Eagle | 6.07 | 40 | P | | Pn | 05 08 29.4 | +1.0 |
| | baz=228,SNR=7.0 | | | | | | | |
| DAWY | Dawson | 6.26 | 49 | | | Pn | 05 08 32.1 | +1.0 |
| DAWY | Dawson | 6.26 | 49 | P | | Pn | 05 08 32.1 | +1.0 |
| | baz=239 | | | | | | | |
| COLD | Coldfoot | 6.85 | 0 | Pn | | Pn | 05 08 40.0 | +1.0 |
| COLD | Coldfoot | 6.85 | 0 | P | | Pn | 05 08 40.2 | +1.1 |
| | baz=160 | | | | | | | |
| J29M | Klondike Camp | 6.90 | 49 | | | Pn | 05 08 41.2 | +1.4 |
| ANM | Nome | 8.14 | 307 | P | | Pn | 05 08 57.9 | +1.2 |
| | baz=114 | | | | | | | |
| TOLK | Toolik Lake Re | 8.27 | 2 | P | | Pn | 05 09 00.2 | +1.6 |
| | baz=182 | | | | | | | |
| MMPY | Sheldon Lake, | 9.33 | 68 | P | | Pn | 05 09 13.7 | +0.6 |
| | baz=265 | | | | | | | |
| INK | Inuvik | 10.70 | 35 | P | | Pn | 05 09 31.9 | +0.2 |
| | comp=N,0.1nm,0.3s,baz=218,slow=5.0,SNR=6.3 | | | | | | | |
| YKA | Yellowknife Ar | 17.03 | 68 | P | | Pn | 05 10 55.0 | -0.8 |
| | comp=N,0.1nm,0.3s,baz=278,slow=12,SNR=9.0 | | | | | | | |
| SONM | Songino Array | 55.65 | 307 | P | | P | 05 16 31.4 | -0.9 |
| | comp=N,0.6nm,0.9s,baz=54,slow=7.3,SNR=3.4 | | | | | | | |
| MKAR | Makanchi Array | 64.95 | 323 | P | | P | 05 17 34.2 | -1.5 |
| | comp=N,0.1nm,0.5s,baz=11,slow=4.9,SNR=1.6 | | | | | | | |

*IDC **10** 05:07:26.2±0.8, 42°.22N×139°.12E, h0km, mb3.7/9, mb1 3.8/12, mb1mx3.6/52, mbtmp3.6/12, ML2.8/3, MS3.6/2, Ms1 3.7/2, ms1mx2.7/89, Error ellipse: s-maj=25.9km s-min=17.4km az=121.0*
*JMA **10** 05:07:28.1±0.1, 42°.25N×139°.13E, h18km±1km, M3.7*
*JMA Felt I J1.*

**ISC 10 05:07:27.4±1.5, 42°.22N±0°.04×139°.15E±0°.04, h10km±10km, n24, σ1§17/33, mb3.8/9, 1C-4D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JOSM | Okushiri--Mats | 0.28 | 119 | ⇓P | Pb | 05 07 34.7 | +0.2 |
| JOSM | | | | eS | Sb | 05 07 38.9 | -0.4 |
| JHST | Hiyamasetana | 0.58 | 69 | P | Pb | 05 07 39.4 | -0.2 |
| JHST | | | | eS | Sb | 05 07 47.6 | -0.3 |
| JSH | Shimam | 0.79 | 57 | ⇓P | Pg | 05 07 42.7 | +0.1 |
| JSH | | | | eS | Sg | 05 07 52.6 | -0.3 |
| JYM2 | Yakumo 2 | 0.92 | 96 | ⇓P | Pb | 05 07 45.6 | +0.2 |
| JYM2 | | | | eS | Sb | 05 07 58.6 | +1.0 |
| JOMM | Oshimamatsumae | 0.95 | 137 | P | Pg | 05 07 45.2 | -0.4 |
| JSR | Shiriuchi | 1.18 | 126 | ⇑P | Pb | 05 07 49.4 | -0.4 |
| JSR | | | | eS | Sb | 05 08 05.1 | 0.0 |
| JNB | Noboribetsu | 1.43 | 79 | P | Pn | 05 07 52.3 | -1.0 |
| JNB | | | | eS | Sn | 05 08 10.1 | -2.1 |
| JKB | Kayabe | 1.45 | 103 | P | Pn | 05 07 53.5 | -0.1 |
| JKB | | | | eS | Sn | 05 08 12.4 | -0.2 |
| JSK | Shakotan | 1.50 | 40 | ⇓P | Pn | 05 07 53.1 | -1.2 |
| JSK | | | | eS | Sn | 05 08 10.4 | -3.5 |
| JSI2 | Shiura 2 | 1.50 | 140 | P | Pn | 05 07 53.8 | -0.6 |
| JSI2 | | | | eS | Sn | 05 08 12.4 | -1.6 |
| ASAJ | Asahikawa | 3.16 | 52 | Pn | Pn | 05 08 18.6 | +1.4 |
| | 1.0nm,0.3s,baz=273,slow=19,SNR=1.8 | | | | | | |
| ASAJ | | | | Sn | Sn | 05 08 55.9 | +1.0 |
| | 1.3nm,0.3s,baz=313,slow=28,SNR=2.2 | | | | | | |
| USRK | Ussuriysk Ar. | 5.59 | 293 | Pn | Pn | 05 08 50.2 | -0.4 |
| | baz=96,slow=12,SNR=8.7 | | | | | | |
| USRK | | | | Sn | Sn | 05 09 52.1 | -2.8 |
| | baz=103,slow=23,SNR=5.4 | | | | | | |
| KSRS | Korea Array | 9.85 | 245 | Pn | Pn | 05 09 50.7 | +1.6 |
| | 0.2nm,0.3s,baz=60,slow=15,SNR=1.6 | | | | | | |
| KSRS | | | | LR | LR | 05 12 39.1 | |
| | comp=Z,14nm,21.2s,baz=335,slow=32 | | | | | | |
| SEY | Seymchan | 22.16 | 16 | P | P | 05 12 23.2 | +0.1 |
| | 0.4nm,0.4s,baz=202,slow=23,SNR=1.7 | | | | | | |
| ILAR | Eielson Array | 46.15 | 35 | LR | | 05 37 11.9 | |
| | comp=Z,48nm,18.7s,baz=201,slow=39 | | | | | | |
| INK | Inuvik | 50.63 | 29 | P | P | 05 16 26.5 | +0.4 |
| | 0.7nm,0.7s,baz=288,slow=6.3,SNR=3.1 | | | | | | |
| YKA | Yellowknife Ar | 60.23 | 31 | P | P | 05 17 35.4 | +0.1 |
| | 0.3nm,0.6s,baz=306,slow=6.4,SNR=6.4 | | | | | | |
| WRA | Warramunga Arr | 62.01 | 185 | P | P | 05 17 47.6 | -0.2 |
| | 1.0nm,0.8s,baz=3.5,slow=7.4,SNR=8.3 | | | | | | |
| FINES | FINESS Array B | 63.43 | 330 | P | P | 05 17 57.0 | +0.2 |
| | 2.2nm,0.8s,baz=45,slow=8.4,SNR=7.0 | | | | | | |
| ASAR | Alice Springs | 65.73 | 185 | P | P | 05 18 12.8 | +0.5 |
| | 0.7nm,0.8s,baz=8.6,slow=6.5,SNR=5.7 | | | | | | |
| NOA | NORSAR Array B | 68.74 | 336 | P | P | 05 18 31.3 | +0.3 |
| | 0.8nm,0.8s,baz=39,slow=6.2,SNR=1.8 | | | | | | |
| NVAR | Mina Array Bea | 73.28 | 53 | P | P | 05 19 00.4 | +1.1 |
| | 0.3nm,0.6s,baz=281,slow=3.9,SNR=4.3 | | | | | | |
| PDAR | Pinedale Array | 75.27 | 45 | P | P | 05 19 11.2 | +0.4 |
| | 0.6nm,0.7s,baz=312,slow=3.9,SNR=6.9 | | | | | | |
| ATD | Arta Tunnel | 86.96 | 283 | LR | LR | 06 04 57.5 | |
| | comp=Z,40nm,18.1s,baz=50,slow=40 | | | | | | |

*IDC **10** 05:08:19.9±1.0, 29°.81S×71°.63W, h0km, mb3.9/7, mb1 4.1/11, mb1mx3.9/27, mbtmp3.8/11, ML3.8/4, Error ellipse: s-maj=30.4km s-min=22.5km az=105.0*
*GUC **10** 05:08:21.7±0.6, 29°.89S×72°.00W, h42km±3km, ML3.7*

**ISC 10 05:08:23.4±1.1, 29.79S±0°.03×71.92W±0°.07, h29km±7km, n28, σ1§89/36, mb3.9/7, 3C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CO05 | La Serena | 0.60 | 102⇑ | eP | Pn | 05 08 35.4 | -0.7 |
| CO05 | | | | eS | Sn | 05 08 45.8 | +0.9 |
| CO05 | | | | IAML | | 05 08 49.9 | |
| | comp=E,7μm,0.3s | | | | | | |
| CO06 | Fray Jorge | 0.91 | 164 | eP | Pn | 05 08 37.9 | -2.4 |
| CO06 | | | | eS | Sn | 05 08 50.9 | -1.6 |
| CO06 | | | | IAML | | 05 08 52.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| GO04 | Tololo Observa | 1.04 | 112 | eP | Pb | 05 08 42.4 | -0.6 |
| GO04 | | | | eS | Sb | 05 08 58.6 | +2.2 |
| LCO | Las Campanas | 1.32 | 54⇑ | eP | Pb | 05 08 46.8 | -0.9 |
| LCO | | | | i S | Sb | 05 09 05.2 | +0.8 |
| CO03 | El Pedregal | 1.49 | 135 | eP | Pn | 05 08 48.4 | 0.0 |
| CO03 | | | | eS | Sb | 05 09 08.1 | -1.0 |
| CO03 | | | | IAML | | 05 09 15.5 | |
| | comp=E,1μm,0.4s | | | | | | |
| CO02 | Combarbal | 1.61 | 151 | eP | Pn | 05 08 49.9 | -0.3 |
| CO02 | | | | eS | Sn | 05 09 10.7 | +0.7 |
| CO02 | | | | IAML | | 05 09 22.3 | |
| | comp=N,5μm,0.5s | | | | | | |
| AC04 | Llanos de Chal | 1.75 | 25 | eP | Pn | 05 08 51.2 | -0.7 |
| AC04 | | | | i S | Sb | 05 09 14.8 | -1.5 |
| AC04 | | | | IAML | | 05 09 33.6 | |
| | comp=E,628nm,0.5s | | | | | | |
| GO03 | Copiap | 2.64 | 34 | eP | Pn | 05 09 04.6 | +0.4 |
| GO03 | | | | eS | Sb | 05 09 40.4 | -1.8 |
| GO03 | | | | IAML | | 05 09 58.9 | |
| | comp=E,416nm,0.6s | | | | | | |
| VA06 | Catapilco | 2.81 | 169⇓ | iP | Pn | 05 09 04.6 | -1.8 |
| ROCH | El Roble | 3.26 | 166⇑ | iP | Pn | 05 09 11.6 | -1.3 |
| AC02 | Maricunga | 3.84 | 41 | eP | Pn | 05 09 22.5 | +1.5 |
| AC02 | | | | eS | Sb | 05 10 11.2 | -5.8 |
| H03N1 | Juan Fernandez | 6.98 | 237 | T | T | 05 17 58.8 | |
| | baz=65,slow=72,SNR=144 | | | | | | |
| H03N2 | Juan Fernandez | 7.00 | 237 | T | T | 05 17 54.7 | |
| | baz=65,slow=72,SNR=142 | | | | | | |
| H03N3 | Juan Fernandez | 7.00 | 237 | T | T | 05 17 52.4 | |
| | baz=65,slow=72,SNR=136 | | | | | | |
| LVC | Limon Verde | 7.65 | 21 | Pn | Pn | 05 10 11.3 | -1.9 |
| | comp=E,0.6nm,0.3s,baz=170,slow=6.3,SNR=2.4 | | | | | | |
| LVC | | | | Sn | Sn | 05 11 37.1 | -2.1 |
| | comp=E,0.8nm,0.3s,baz=257,slow=12,SNR=1.8 | | | | | | |
| LVC | | | | Lg | Lg | 05 12 18.1 | |
| | comp=E,1.9nm,0.3s,baz=352,slow=11,SNR=6.6 | | | | | | |
| PLCA | Paso Flores | 10.97 | 175 | Pn | Pn | 05 10 55.9 | -2.6 |
| | comp=E,0.3nm,0.3s,baz=336,slow=12,SNR=14 | | | | | | |
| CPUP | Villa Florida | 13.34 | 79 | Pn | Pn | 05 11 32.7 | +1.8 |
| | comp=E,0.1nm,0.3s,baz=274,slow=14,SNR=3.3 | | | | | | |
| CPUP | | | | Lg | Lg | 05 15 15.4 | |
| | comp=E,0.1nm,0.3s,baz=182,slow=14,SNR=2.3 | | | | | | |
| LPAZ | La Paz | 13.88 | 15 | Pn | Pn | 05 11 39.8 | +0.9 |
| | comp=E,0.3nm,0.3s,baz=161,slow=4.2,SNR=2.8 | | | | | | |
| SIV | San Ignacio | 16.97 | 38 | Pn | Pn | 05 12 17.1 | -1.7 |
| | comp=E,0.1nm,0.3s,baz=227,slow=13,SNR=2.8 | | | | | | |
| BDFB | Brasilia | 26.09 | 63 | P | P | 05 13 54.5 | -0.5 |
| | comp=E,3.3nm,1.0s,baz=229,slow=8.9,SNR=4.4 | | | | | | |
| TXAR | Lajitas Array | 66.14 | 330 | P | P | 05 19 09.4 | +1.2 |
| | comp=E,0.1nm,0.6s,baz=156,slow=9.6,SNR=4.1 | | | | | | |
| PDAR | Pinedale Array | 80.07 | 333 | P | P | 05 20 33.7 | +3.2 |
| | comp=E,0.3nm,0.7s,baz=138,slow=4.5,SNR=2.0 | | | | | | |
| NVAR | Mina Array Bea | 80.50 | 325 | P | P | 05 20 35.9 | +2.9 |
| | comp=E,0.3nm,0.6s,baz=140,slow=7.1,SNR=3.4 | | | | | | |
| ULM | Lac du Bonnet | 82.48 | 345 | P | P | 05 20 43.2 | +0.4 |
| | comp=E,2.5nm,0.7s,baz=173,slow=8.1,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 82.70 | 70 | P | P | 05 20 44.0 | -0.8 |
| | comp=E,1.7nm,1.0s,baz=253,slow=5.2,SNR=6.6 | | | | | | |
| YKA | Yellowknife Ar | 98.11 | 341 | P | P | 05 21 56.5 | -0.2 |
| | comp=E,0.2nm,0.5s,baz=142,slow=4.2,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 150.55 | 28 | PKPbc | PKiKP | 05 28 13.2 | +0.5 |
| | comp=E,3.9nm,0.7s,baz=297,slow=3.6,SNR=18 | | | | | | |
| MKAR | Makanchi Array | 153.76 | 43 | PKPbc | PKiKP | 05 28 19.9 | +0.2 |
| | comp=E,0.4nm,0.8s,baz=47,slow=2.4,SNR=4.1 | | | | | | |
| MKAR | | | | PKPab | sPKPbc | 05 28 33.6 | +2.6 |
| | comp=E,0.5nm,0.7s,baz=315,slow=3.4,SNR=4.6 | | | | | | |

**IDC 10 05:44:47.0±2.4, 54°.24N×86°.09E, h0km, mb1 2.9/2, mb1mx2.8/51, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=18.6km s-min=11.0km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 0.80 | 249 | i | | 05 49 44.2 | |
| | baz=67,slow=350,SNR=3.3 | | | | | | |
| ZALV | Zalesovo Beam | 0.80 | 249 | Pg | Pg | 05 45 01.4 | -1.0 |
| | 0.6nm,0.3s,baz=67,slow=17,SNR=8.6 | | | | | | |
| ZALV | | | | Lg | Lg | 05 45 13.9 | |
| | 4.9nm,0.3s,baz=71,slow=33,SNR=22 | | | | | | |
| KURBB | Kurchatov Arra | 5.87 | 235 | Pn | Pn | 05 46 16.4 | +1.2 |
| | 0.1nm,0.3s,baz=52,slow=14,SNR=5.6 | | | | | | |
| MKAR | Makanchi Array | 7.83 | 200 | Pn | Pn | 05 46 43.0 | +0.8 |
| | 0.2nm,0.3s,baz=25,slow=13,SNR=13 | | | | | | |

**NOU 10 05:53:34.6, 16°.09S×168°.02E, h143km, MLv4.4/8, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SANVU | Saraoutou | 1.01 | 309 | P | Pn | 05 53 58.7 | -0.1 |
| DVP | Devils Point | 1.63 | 174 | P | Pn | 05 54 05.5 | +0.4 |
| RTV | Rentapao | 1.74 | 167 | P | Pn | 05 54 06.2 | 0.0 |
| YATNC | Mamie plateau, | 6.03 | 190 | P | Pn | 05 55 01.5 | -0.2 |
| DZM | Mont Dzumac | 6.13 | 194 | P | Pn | 05 55 03.3 | +0.2 |

**NO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GLKZ | | | | S | **S** | **06 04 18.6** | **+1.7** |
| **MSVF** | **Nonsavu** | **7.29** | **347** | P | **P** | **06 03 31.0** | **-0.3** |
| | 4.8nm,0.3s,baz=210,slow=9.8,SNR=22 | | | | | | |
| **MSVF** | **Nonsavu** | **7.29** | **347** | P | **P** | 06 03 30.6 | -0.6 |
| **PINNC** | **Pines Island,** | **11.54** | **279** | P | **P** | 06 04 18.8 | +3.3 |
| **DZM** | **Mont Dzumac** | **12.57** | **280** | P | **P** | 06 04 28.3 | +1.7 |
| | 0.3nm,0.3s,baz=86,slow=16,SNR=3.9 | | | | | | |
| **MXZ** | **Matakaoa Point** | **12.71** | **185** | P | **P** | **06 04 28.1** | **+0.4** |
| **HAZ** | **Te Kaha** | **12.95** | **187** | P | **P** | 06 04 31.6 | +1.3 |
| HAZ | | | | S | **S** | **06 06 46.6** | **-2.6** |
| **PKGZ** | **Pakihiroa** | **13.05** | **186** | P | **P** | **06 04 33.6** | **+2.1** |
| PKGZ | | | | S | **S** | 06 06 51.9 | +0.6 |
| **RUGZ** | **Raukumara Rang** | **13.17** | **187** | P | **P** | 06 04 34.6 | +1.8 |
| RUGZ | | | | S | **S** | 06 06 52.1 | -1.6 |
| **URZ** | **Urewera** | **13.54** | **189** | P | **P** | **06 04 36.1** | **-0.3** |
| | 2.8nm,0.3s,baz=301,slow=3.8,SNR=12 | | | | | | |
| URZ | | | | S | **S** | **06 06 59.6** | **-0.8** |
| | 0.6nm,0.3s,baz=95,slow=21,SNR=8.4 | | | | | | |
| **URZ** | **Urewera** | **13.54** | **189** | P | **P** | 06 04 35.8 | -0.6 |
| **MWZ** | **Matawai** | **13.55** | **188** | P | **P** | 06 04 38.9 | +2.2 |
| MWZ | | | | S | **S** | 06 06 58.1 | -2.8 |
| **RIGZ** | **Rimuhau** | **13.89** | **187** | P | **P** | 06 04 41.6 | +1.3 |
| RIGZ | | | | S | **S** | 06 07 06.6 | -0.9 |
| **BKZ** | **Black Stump Fm** | **14.52** | **190** | P | **P** | **06 04 46.9** | **0.0** |
| BKZ | | | | S | **S** | 06 07 16.9 | -2.6 |
| **BKZ** | **Black Stump Fm** | **14.52** | **190** | P | **P** | 06 04 46.1 | -0.8 |
| **NTVZ** | **North Tongariro** | **14.60** | **193** | P | **P** | 06 04 49.3 | +1.5 |
| **TMVZ** | **Te Maari** | **14.61** | **193** | P | **P** | 06 04 48.3 | +0.3 |
| **ETVZ** | **East Tongariro** | **14.63** | **193** | P | **P** | 06 04 47.8 | -0.3 |
| **OTVZ** | **Oturere** | **14.67** | **193** | P | **P** | 06 04 47.9 | -0.6 |
| OTVZ | | | | S | **S** | 06 07 22.8 | +0.3 |
| **SNVZ** | **South Ngauruho** | **14.69** | **193** | P | **P** | 06 04 49.1 | +0.2 |
| **WNVZ** | **Wahianoa** | **14.84** | **193** | P | **P** | 06 04 49.8 | -0.6 |
| **QRZ** | **Quartz Range** | **17.02** | **199** | P | **P** | 06 05 12.2 | -0.7 |
| **TUWZ** | **Tuamarina** | **17.21** | **195** | P | **P** | 06 05 13.9 | -0.8 |
| **THZ** | **Tophouse** | **17.79** | **197** | P | **P** | 06 05 19.7 | -0.4 |
| **LTZ** | **Lake Taylor** | **18.91** | **197** | P | **P** | 06 05 30.2 | -0.1 |
| **CTA** | **Charters Tower** | **31.31** | **272** | P | **P** | **06 07 21.4** | **+0.8** |
| | 12nm,0.5s,baz=94,slow=9.8,SNR=20 | | | | | | |
| **CTAO** | **Charters Tower** | **31.31** | **272** | P | **P** | 06 07 21.8 | +1.2 |
| **STKA** | **Stephens Creek** | **34.20** | **249** | P | **P** | 06 07 45.8 | +0.7 |
| | 1.5nm,0.4s,baz=88,slow=12,SNR=5.8 | | | | | | |
| **BBOO** | **Buckleboo** | **38.90** | **248** | P | **P** | **06 08 24.0** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 06 08 49.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **41.70** | **262** | P | **P** | 06 08 43.5 | -3.0 |
| **ASAR** | **Alice Springs** | **41.70** | **262** | P | **P** | **06 08 46.6** | **+0.1** |
| | comp=Z,1.3nm,0.4s,baz=94,slow=6.8,SNR=16 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 13 34.2** | **+0.3** |
| | comp=Z,0.4nm,0.9s,baz=97,slow=4.8,SNR=2.7 | | | | | | |
| ASAR | | | | S | **S** | **06 14 28.0** | **+1.1** |
| | comp=Z,0.3nm,0.7s,baz=93,slow=16,SNR=3.0 | | | | | | |
| **WB2** | **Warramunga Arr** | **42.15** | **267** | P | **P** | 06 08 49.7 | -0.4 |
| **WB0** | **Warramunga Arr** | **42.16** | **268** | P | **P** | **06 08 49.6** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 06 08 50.2 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.16** | **267** | P | **P** | **06 08 49.8** | **-0.4** |
| | comp=Z,5.5nm,0.5s,baz=98,slow=7.1,SNR=50 | | | | | | |
| WRA | | | | ScP | **ScP** | **06 13 36.6** | **+0.8** |
| | comp=Z,0.9nm,1.0s,baz=98,slow=4.1,SNR=5.1 | | | | | | |
| WRA | | | | S | **S** | **06 14 32.1** | **-1.5** |
| | comp=Z,1.3nm,0.8s,baz=100,slow=14,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.16** | **267** | P | **P** | **06 08 49.3** | **-0.8** |
| **JAY** | **Jayapura** | **43.74** | **294** | P | **P** | **06 09 02.1** | **-0.4** |
| | comp=Z,20nm,0.8s,baz=171,slow=7.8,SNR=3.0 | | | | | | |
| **FORT** | **Forrest** | **45.80** | **250** | P | **P** | 06 09 17.3 | -0.9 |
| **KNRA** | **Kununurra** | **48.51** | **271** | P | **P** | **06 09 38.6** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 06 09 39.7 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.58** | **266** | P | **P** | **06 09 54.4** | **+0.3** |
| | comp=Z,4.6nm,0.7s,baz=103,slow=8.2,SNR=10 | | | | | | |
| **SIJI** | **Sorong** | **52.58** | **289** | P | **P** | **06 10 08.3** | **-0.3** |
| | comp=Z,8.5nm,0.4s,baz=68,slow=5.8,SNR=4.5 | | | | | | |
| **MORW** | **Morawa** | **56.37** | **251** | P | **P** | **06 10 34.6** | **-0.6** |
| MORW | | | | IAmb | IAmb | 06 11 01.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.21** | **180** | P | **P** | **06 11 33.8** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 06 11 41.8 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **BELA** | **Belgrano 2** | **75.49** | **173** | P | **P** | **06 12 33.1** | **-0.6** |
| BELA | | | | IAmb | IAmb | 06 15 16.9 | |
| | comp=Z,6.1nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **78.88** | **320** | P | **P** | **06 12 52.0** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=130,slow=5.4,SNR=4.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.00** | **347** | P | **P** | **06 12 57.4** | **-0.9** |
| | comp=Z,1.1nm,0.6s,baz=124,slow=7.4,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.58** | **44** | P | **P** | **06 13 27.1** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=224,slow=8.3,SNR=3.7 | | | | | | |
| **SEY** | **Seymchan** | **90.18** | **348** | P | **P** | **06 13 47.8** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=174,slow=9.4,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.10** | **58** | P | **P** | **06 13 53.6** | **+0.6** |
| | comp=Z,0.7nm,0.8s,baz=216,slow=7.0,SNR=8.9 | | | | | | |
| **HFS** | **Hagfors** | **143.46** | **348** | PKP | PKPab | 06 20 15.7 | -1.0 |
| | comp=Z,1.3nm,0.3s,baz=49,slow=4.4,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.68** | **326** | PKPbc | **PKPbc** | **06 20 22.8** | **-1.2** |
| | comp=Z,0.5nm,0.3s,baz=42,slow=4.3,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.20** | **189** | PKPab | **PKPab** | **06 22 02.2** | **-0.6** |
| | comp=Z,0.9nm,1.0s,baz=170,slow=4.6,SNR=2.9 | | | | | | |

*IDC **10** 06:03:36.4±2.8,53.64N×87.96E, h0km, mb1 3.2/2, mb1mx3.0/69, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=23.4km s-min=15.1km az=57.0*
*NNC **10** 06:03:37.6±3.0,53.53N×87.87E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=25.7km s-min=15.1km az=62.0, Suspected Mining explosion.*
**ISC 10 06:03:38.6±3.6, 53.6N±0.1×87.8E±0.2, h0km, n7, σ0s61/11, 4C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.77** | **282** | *i* | | 06 16 10.3 | |
| | baz=94,slow=345,SNR=2.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.77** | **282** | ⇓Pn | **Pn** | **06 04 10.2** | **-0.2** |
| | 0.5nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑Sn | **Sg** | **06 04 36.4** | **+1.0** |
| | 1.8nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.77** | **282** | Pg | **Pn** | **06 04 10.4** | **-0.1** |
| | 3.5nm,0.3s,baz=98,slow=17,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 06 04 37.2 | |
| | 5.3nm,0.3s,baz=101,slow=26,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **246** | Pn | **Pn** | **06 05 14.4** | **+0.1** |
| | 0.2nm,0.3s,baz=66,slow=15,SNR=4.2 | | | | | | |
| KURBB | | | | Sn | **Sn** | **06 06 27.7** | **-0.6** |
| | 0.1nm,0.3s,baz=156,slow=29,SNR=1.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 07 02.4 | |
| | 0.1nm,0.3s,baz=62,slow=30,SNR=1.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **246** | ⇑Pn | **Pn** | **06 05 14.2** | **-0.1** |
| | 2.1nm,0.4s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **06 06 27.2** | **-1.1** |
| | 5.6nm,0.5s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 06 07 04.7 | |
| | 5.1nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.68** | **209** | Pn | **Pn** | **06 05 31.6** | **0.0** |
| | 0.2nm,0.4s,baz=32,slow=11,SNR=13 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 06 59.1** | **-0.2** |
| | 0.3nm,0.5s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 07 38.2 | |
| | 4.0nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.68** | **209** | Pn | **Pn** | **06 05 31.6** | **0.0** |
| | 0.2nm,0.3s,baz=30,slow=14,SNR=13 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 06 59.8** | **+0.5** |
| | 0.1nm,0.3s,baz=22,slow=27,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 06 07 40.0 | |
| | 0.1nm,0.3s,baz=24,slow=29,SNR=4.2 | | | | | | |

**IDC 10 06:03:55.2±2.4, 2.30S×134.51E, h0km, mb3.7/2, mb1 3.9/5, mb1mx3.5/52, mbtmp3.7/5, ML3.4/3, Error ellipse: s-maj=66.0km s-min=25.1km az=74.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **3.54** | **294** | Pn | Pn | 06 04 51.4 | -0.2 |
| | 3.2nm,0.3s,baz=151,slow=19,SNR=1.8 | | | | | | |
| SIJI | | | | Sn | Sb | 06 05 43.8 | +1.4 |
| | 3.5nm,0.3s,baz=1.0,slow=19,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.54** | **181** | P | P | 06 08 02.0 | -0.5 |
| | 0.1nm,0.3s,baz=0.6,slow=12,SNR=15 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.95** | **208** | P | Pn | 06 08 04.6 | -1.9 |
| | 0.1nm,0.3s,baz=39,slow=12,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **21.25** | **182** | P | P | 06 08 43.1 | 0.0 |
| | 4.5nm,0.9s,baz=6.2,slow=12,SNR=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.94** | **324** | P | P | 06 14 50.0 | +0.3 |
| | 0.3nm,0.6s,baz=114,slow=8.1,SNR=5.6 | | | | | | |

**IDC 10 06:07:08.8±5.1, 32.23N×76.46E, h0km, mb3.5/2, mb1 3.5/4, mb1mx3.2/62, mbtmp3.4/4, ML2.9/2, MS3.3/2, Ms1 3.3/2, ms1mx2.6/72, Error ellipse: s-maj=314.9km s-min=75.3km az=106.0, Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **15.22** | **15** | Pn | Pn | 06 10 44.3 | -0.7 |
| | 0.1nm,0.3s,baz=201,slow=14,SNR=4.1 | | | | | | |
| MKAR | | | | LR | LR | 06 16 24.5 | |
| | comp=Z,22nm,18.9s,baz=38,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **18.45** | **4** | P | Pn | 06 11 24.9 | -0.8 |
| | 0.0nm,0.3s,baz=189,slow=11,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.52** | **13** | P | P | 06 12 10.4 | +0.4 |
| | 0.4nm,0.4s,baz=213,slow=10,SNR=2.8 | | | | | | |
| **SIJI** | **Sorong** | **61.29** | **111** | LR | LR | 06 46 08.8 | |
| | comp=Z,110nm,21.0s,baz=24,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.19** | **5** | P | P | 06 19 46.6 | -0.1 |
| | 0.3nm,0.5s,baz=341,slow=5.1,SNR=3.7 | | | | | | |

**IDC 10 06:15:27.8±2.9, 54.19N×86.71E, h0km, mb1 2.8/2, mb1mx2.7/39, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=23.8km s-min=14.9km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.14** | **258** | *i* | | 06 23 00.0 | |
| | baz=77,slow=314,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.14** | **258** | Pg | Pg | 06 15 49.1 | -0.5 |
| | 0.8nm,0.3s,baz=74,slow=16,SNR=6.3 | | | | | | |
| ZALV | | | | Lg | Lg | 06 16 04.7 | |
| | 1.3nm,0.3s,baz=77,slow=29,SNR=9.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.15** | **238** | Pn | Pn | 06 17 01.3 | +1.5 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=4.6 | | | | | | |
| KURBB | | | | Lg | Lg | 06 18 45.1 | |
| | 0.0nm,0.3s,baz=56,slow=32,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.92** | **203** | Pn | Pn | 06 17 24.8 | +0.6 |
| | 0.1nm,0.3s,baz=24,slow=14,SNR=8.5 | | | | | | |
| MKAR | | | | Lg | Lg | 06 19 38.8 | |
| | 0.0nm,0.3s,baz=16,slow=35,SNR=5.1 | | | | | | |

*TUL **10** 06:15:55.4±1.1, 36.28N±0.01×96.65W±0.02, h5km±5km, ML2.7, ML2.6/44(NEIC), Error ellipse: s-maj=2.2km s-min=1.7km az=97.0*
**NEIC 10 06:15:55.2±0.9, 36.30N±0.01×96.65W±0.02, h12km±5km, Error ellipse: s-maj=2.6km s-min=1.9km az=98.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **QUOK** | **Quay** | **0.13** | **203** | Pg | Pg | 06 15 58.3 | -0.2 |
| QUOK | | | | Sg | Sg | 06 16 00.1 | -0.7 |
| **OK034** | **N. Norfolk Rd.** | **0.29** | **191** | Pg | Pg | 06 16 01.2 | 0.0 |
| OK034 | | | | Sg | Sg | 06 16 05.0 | -0.2 |
| OK034 | | | | IAML | | 06 16 05.5 | |
| | 729nm,0.1s | | | | | | |
| **OK033** | **Mehan** | **0.34** | **224** | Pg | Pg | 06 16 02.1 | -0.1 |
| OK033 | | | | Sg | Sg | 06 16 06.7 | -0.1 |
| OK033 | | | | IAML | | 06 16 08.5 | |
| | 495nm,0.3s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.38** | **205** | Pg | Pg | 06 16 02.7 | 0.0 |
| OK031 | | | | Sg | Sg | 06 16 07.8 | +0.1 |
| OK031 | | | | IAML | | 06 16 08.1 | |
| | 1μm,0.1s | | | | | | |
| OK031 | | | | IAML | | 06 16 08.0 | |
| | 833nm,0.2s | | | | | | |
| **OK030** | **Cody Creek RV** | **0.38** | **197** | Pg | Pg | 06 16 02.7 | -0.1 |
| OK030 | | | | Sg | Sg | 06 16 08.1 | +0.1 |
| OK030 | | | | IAML | | 06 16 08.4 | |
| | 813nm,0.2s | | | | | | |
| **T35A** | **Sooner Cattle** | **0.63** | **10** | Pg | Pb | 06 16 07.9 | -0.3 |
| T35A | | | | Sg | Sg | 06 16 15.6 | -0.3 |
| **BLOK** | **Blackwell** | **0.65** | **316** | Pg | Pg | 06 16 08.2 | +0.2 |
| **TUL1** | **Leonard** | **0.79** | **119** | | Pb | 06 16 10.8 | -0.2 |
| TUL1 | | | | Sg | Sg | 06 16 20.4 | -0.4 |
| **OK029** | **Liberty Lake** | **0.82** | **233** | Sg | Sg | 06 16 21.6 | -0.3 |
| **OK025** | **Westminster Rd** | **0.91** | **219** | | Pg | 06 16 12.3 | -0.5 |
| OK025 | | | | Sg | Sg | 06 16 24.6 | 0.0 |
| OK025 | | | | IAML | | 06 16 25.5 | |
| | 146nm,0.1s | | | | | | |
| **KAN13** | **South Haven SW** | **0.98** | **317** | | Pg | 06 16 14.1 | -0.1 |
| KAN13 | | | | IAML | | 06 16 33.6 | |
| | comp=N,165nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 06 16 34.6 | |
| | comp=E,148nm,0.2s | | | | | | |
| **BCOK** | **Bluff Creek, N** | **1.01** | **231** | | Pb | 06 16 14.5 | -0.1 |
| BCOK | | | | Sg | Sg | 06 16 27.7 | -0.1 |
| BCOK | | | | IAML | | 06 16 28.2 | |
| | comp=E,181nm,0.1s | | | | | | |
| BCOK | | | | IAML | | 06 16 28.3 | |
| | comp=N,128nm,0.1s | | | | | | |
| **OKCFA** | **Oklahoma City** | **1.09** | **217** | Pg | Pb | 06 16 15.5 | -0.7 |
| OKCFA | | | | IAML | | 06 16 33.1 | |
| | comp=E,100nm,0.1s | | | | | | |
| OKCFA | | | | IAML | | 06 16 35.5 | |
| | comp=N,95nm,0.2s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.10** | **216** | Pg | Pb | 06 16 15.8 | -0.3 |
| **CROK** | **Carrier** | **1.10** | **281** | Pg | Pn | 06 16 16.8 | +0.2 |
| CROK | | | | IAML | | 06 16 37.5 | |
| | comp=N,178nm,0.4s | | | | | | |
| CROK | | | | IAML | | 06 16 40.8 | |
| | comp=E,180nm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **1.12** | **300** | | Pb | 06 16 16.4 | -0.2 |
| GC02 | | | | Sg | Sn | 06 16 32.1 | -0.2 |
| **W35A** | **Tecumseh** | **1.16** | **189** | | Pb | 06 16 16.5 | -0.7 |
| W35A | | | | Sg | Sg | 06 16 32.4 | -0.1 |
| W35A | | | | IAML | | 06 16 37.1 | |
| | comp=E,102nm,0.4s | | | | | | |
| **KAN17** | **Caldwell West** | **1.17** | **310** | | Pn | 06 16 17.6 | +0.1 |
| KAN17 | | | | IAML | | 06 16 37.5 | |
| | comp=E,172nm,0.3s | | | | | | |
| **FNO** | **Franklin** | **1.20** | **211** | | Pn | 06 16 17.7 | -0.2 |
| FNO | | | | IAML | | 06 16 35.9 | |
| | comp=E,181nm,0.1s | | | | | | |
| FNO | | | | IAML | | 06 16 36.6 | |
| | comp=N,140nm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **1.24** | **314** | Pn | Pg | 06 16 18.9 | -0.2 |
| **KAN14** | **Manchester OK** | **1.25** | **302** | | Pb | 06 16 18.9 | +0.1 |
| KAN14 | | | | Sn | Sg | 06 16 35.5 | 0.0 |
| **OK032** | **Salt Plains WL** | **1.36** | **292** | | Pg | 06 16 21.3 | 0.0 |
| **KAN08** | **Anthony NE Sta** | **1.41** | **312** | Pn | Pb | 06 16 21.8 | +0.2 |
| **KAN16** | **Harper SW Stat** | **1.47** | **310** | Pn | Pb | 06 16 23.0 | +0.5 |
| **KAN12** | **Harper NE Stat** | **1.48** | **313** | Pn | Pb | 06 16 22.8 | +0.1 |
| **U38A** | **Gravette** | **1.83** | **85** | Pn | Pb | 06 16 28.8 | +0.1 |
| **X37A** | **Clayton** | **1.99** | **148** | | Pb | 06 16 30.6 | -0.9 |
| **WMOK** | **Wichita Mounta** | **2.33** | **229** | | Pn | 06 16 35.1 | +1.6 |
| **LOOK** | **Love County** | **2.34** | **191** | Pn | Pn | 06 16 35.0 | +1.4 |
| **S39A** | **Bolivar** | **3.00** | **61** | Pn | Pn | 06 16 43.2 | +0.6 |
| **U40A** | **Yellville** | **3.06** | **88** | Pn | Pn | 06 16 45.3 | +1.8 |

**IDC 10 06:16:56.9±3.1, 54.23N×87.41E, h0km, mb1 3.0/2, mb1mx2.9/35, mbtmp3.0/2, ML2.4/2, Error ellipse: s-maj=25.8km s-min=17.2km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.55** | **261** | *i* | | 06 26 20.0 | |
| | baz=76,slow=332,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.55** | **261** | Pg | Pn | 06 17 23.5 | -2.2 |
| | 1.1nm,0.3s,baz=79,slow=16,SNR=9.4 | | | | | | |
| ZALV | | | | Lg | Lg | 06 17 47.7 | |
| | 1.4nm,0.3s,baz=81,slow=27,SNR=6.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.52** | **240** | Pn | Pn | 06 18 34.6 | +0.7 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=10 | | | | | | |
| KURBB | | | | Lg | Lg | 06 20 19.8 | |
| | 0.0nm,0.3s,baz=63,slow=36,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.13** | **206** | Pn | Pn | 06 18 57.5 | +1.5 |
| | 0.1nm,0.3s,baz=28,slow=12,SNR=5.1 | | | | | | |
| MKAR | | | | Sn | Sn | 06 20 28.4 | -0.2 |
| | 0.1nm,0.3s,baz=23,slow=27,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 06 21 11.4 | |
| | 0.0nm,0.3s,baz=28,slow=26,SNR=1.8 | | | | | | |

**IDC 10 06:30:23.2±4.0, 54.18N×86.24E, h0km, mb1 2.9/2, mb1mx2.4/55, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=41.6km s-min=15.6km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.87** | **255** | *i* | | 06 35 50.0 | |
| | baz=74,slow=340,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.87** | **255** | Pg | Pg | 06 30 38.8 | -1.0 |
| | 1.6nm,0.3s,baz=71,slow=17,SNR=6.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.91** | **236** | Pn | Pn | 06 31 53.1 | +1.1 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.81** | **200** | Pn | Pn | 06 32 18.6 | +0.5 |
| | 0.1nm,0.3s,baz=24,slow=14,SNR=5.3 | | | | | | |

**IDC 10 06:32:10.2±7.8, 18.77S×177.12W, h0km, mb3.5/2, mb1 3.7/2, mb1mx2.9/25, mbtmp3.5/2, 1C, Error ellipse: s-maj=347.1km s-min=121.6km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.69** | **260** | P | P | 06 40 33.2 | 0.0 |
| | 0.2nm,0.3s,baz=97,slow=7.4,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **45.74** | **255** | P | P | 06 40 33.4 | -0.3 |
| | 0.4nm,0.6s,baz=89,slow=7.9,SNR=5.9 | | | | | | |
| **SYO** | **Syowa Base** | **88.59** | **192** | ⇑*i*P | P | 06 45 08.6 | +3.9 |
| **AKASG** | **Malin Array Be** | **141.88** | **333** | PKP | PKPdf | 06 51 43.3 | -0.5 |
| | 0.4nm,0.4s,baz=46,slow=3.6,SNR=4.2 | | | | | | |

*OTT **10** 06:33:23.0±1.0, 78.31N×21.18W, h18km, ML4.7/2, Eastern Greenland. 871km east from Alert, Nu*
*NAO **10** 06:33:22.5±3.0, 78.60N×19.15W, ML3.3*
*DNK **10** 06:33:23.5±3.6, 78.66N×20.33W, h0km±38km, ML2.7*
**ISC 10 06:33:19.6±0.7, 78.80N±0.05×20.62W±0.05, h10km, n18, σ3s24/27, Eastern Kalaallit Nunaat**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAG** | **Danmarks Havn** | **2.08** | **167** | *i* P | **Pn** | **06 33 55.0** | **+0.6** |
| DAG | | | | *i* P | **Pn** | **06 33 55.0** | **+0.6** |
| DAG | | | | IAML | | 06 34 32.4 | |
| | comp=Z,113nm,0.2s | | | | | | |
| **NOR** | **Nord** | **2.90** | **11** | Pn | **Pb** | **06 34 11.9** | **+0.6** |
| NOR | | | | Sn | **Sb** | **06 34 46.9** | **+0.1** |
| **NOR** | **Nord** | **2.90** | **11** | *i* P | **Pb** | **06 34 12.1** | **+0.7** |
| NOR | | | | *i* S | **Sb** | **06 34 48.9** | **+2.1** |
| NOR | | | | IAML | | 06 34 56.0 | |
| | comp=Z,101nm,0.5s | | | | | | |
| **DBG** | **Daneborg** | **4.51** | **179** | Pn | **Pn** | **06 34 29.2** | **+1.3** |
| DBG | | | | Sn | **Sn** | **06 35 19.1** | **-1.2** |
| **DBG** | **Daneborg** | **4.51** | **179** | *i* P | **Pn** | **06 34 30.5** | **+2.6** |
| DBG | | | | IAML | | 06 35 45.9 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **KBS** | **Kingsbay** | **6.25** | **73** | Pn | **Pn** | **06 34 52.5** | **+0.9** |
| KBS | | | | Sn | **Sn** | **06 35 56.6** | **-6.4** |
| **KBS** | **Kingsbay** | **6.25** | **73** | *e*P | **Pn** | **06 34 55.0** | **+3.3** |
| **NEEM** | **North Greenlan** | **6.38** | **273** | *i* P | Pn | 06 34 58.5 | +4.8 |
| NEEM | | | | *i* S | **Sn** | **06 36 08.3** | **+1.7** |
| **SPA0** | **Spitsbergen Ar** | **7.33** | **76** | Pn | **Pn** | **06 35 07.4** | **+0.9** |
| | baz=294,slow=10 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **06 36 23.6** | **-6.0** |
| | baz=270,slow=22 | | | | | | |
| **SUMG** | **Summit** | **7.60** | **224** | *i* P | **Pn** | **06 35 13.5** | **+2.9** |
| **SCO** | **Scoresbysund** | **8.37** | **183** | *i* P | **Pn** | **06 35 25.0** | **+4.3** |
| **TULEG** | **Thule** | **10.29** | **282** | *i* P | **Pn** | **06 35 48.0** | **+1.1** |
| TULEG | | | | *e*S | **Sn** | **06 37 39.2** | **-2.8** |
| TULEG | | | | IAML | | 06 37 46.9 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **UPNV** | **Upernavik** | **10.39** | **254** | *i* P | **Pn** | **06 35 48.9** | **+0.5** |
| UPNV | | | | *e*S | **Sn** | **06 37 39.2** | **-5.5** |
| UPNV | | | | IAML | | 06 37 43.5 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **EUNU** | **Eureka** | **11.57** | **308** | PN | **Pn** | **06 36 08.6** | **+4.1** |
| EUNU | | | | SN | **Sn** | **06 38 11.1** | **-2.4** |
| EUNU | | | | Trac | | 06 38 21.9 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **ILULI** | **Ilulissat** | **12.52** | **237** | SN | Sn | 06 38 21.2 | -15 |
| **CLRN** | **Clyde River** | **14.62** | **262** | PN | **Pn** | **06 36 44.1** | **-2.0** |
| CLRN | | | | SN | Sn | 06 39 13.4 | -14 |
| **RES** | **Resolute Bay** | **16.36** | **295** | PN | **P** | **06 37 10.9** | **-0.9** |
| RES | | | | SN | **Sn** | **06 40 03.0** | **-7.1** |
| RES | | | | Trac | | 06 40 03.6 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **22.40** | **113** | P | **P** | **06 38 18.6** | **+0.8** |
| | baz=345,slow=11 | | | | | | |

*NNC **10** 06:39:59.6±0.8, 42.10N×79.44E, h18km±4km, mb3.8, mpv3.1, Error ellipse: s-maj=6.2km s-min=3.5km az=172.0*
*SOME **10** 06:39:59.0, 42.10N×79.42E, h5km*
**ISC 10 06:39:58.9±3.9, 42.1N±0.1×79.4E±0.1, h8km±16km, n14, σ0s80/23, 1C-1D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHLS** | **Shalkode** | **1.06** | **1** | *e*P | **Pn** | **06 40 20.0** | **-0.3** |
| | 10.0nm,0.6s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **06 40 35.0** | **-0.4** |
| | 8.5nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **1.06** | **1** | P | **Pn** | **06 40 20.0** | **-0.3** |
| | 10.0nm,0.6s | | | | | | |
| SHLS | | | | S | **Sn** | **06 40 35.0** | **-0.4** |
| | 8.5nm,0.4s | | | | | | |
| **SATY** | **Saty** | **1.23** | **322** | *e*P | **Pn** | **06 40 22.0** | **-0.6** |
| | 24nm,0.8s | | | | | | |
| SATY | | | | *e*S | **Sg** | **06 40 38.5** | **+0.2** |
| | 4.5nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.23** | **322**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.47** | **278** | *i* | | 07 09 35.0 | |
| | baz=86,slow=347,SNR=9.6 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.47** | **278** | ⇑Pg | **Pb** | **06 46 46.1** | **-0.5** |
| | 0.6nm,0.8s | | | | | | |
| ZAA0 | | | | ⇑Lg | Lg | 06 47 33.9 | |
| | 4.8nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.47** | **278** | Pn | **Pn** | **06 46 40.4** | **+0.9** |
| | 0.6nm,0.3s,baz=97,slow=16,SNR=8.9 | | | | | | |
| ZALV | | | | Lg | Lg | 06 47 33.1 | |
| | 1.1nm,0.3s,baz=90,slow=28,SNR=7.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.03** | **253** | Pn | **Pn** | **06 47 41.7** | **-0.5** |
| | 0.1nm,0.3s,baz=68,slow=15,SNR=4.9 | | | | | | |
| KURBB | | | | Sn | **Sn** | **06 49 12.7** | **-0.9** |
| | 0.0nm,0.3s,baz=67,slow=26,SNR=2.1 | | | | | | |
| KURBB | | | | Lg | Lg | 06 50 00.5 | |
| | 0.0nm,0.3s,baz=65,slow=32,SNR=1.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.03** | **253** | ⇓Pn | **Pn** | **06 47 41.3** | **-0.8** |
| | 2.0nm,0.8s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **06 49 15.1** | **+1.5** |
| | 9.4nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 06 49 59.6 | |
| | 13nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **8.67** | **221** | Pn | **Pn** | **06 47 51.0** | **+0.1** |
| | 0.2nm,0.5s,baz=32,slow=12,SNR=7.7 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 49 31.6** | **+2.3** |
| | 2.7nm,1.2s,baz=38,slow=28,SNR=3.7 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 50 23.7 | |
| | 3.7nm,0.9s,baz=56,slow=36,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.67** | **221** | Pn | **Pn** | **06 47 51.0** | **+0.1** |
| | 0.1nm,0.3s,baz=32,slow=12,SNR=8.0 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 49 27.8** | **-1.5** |
| | 0.1nm,0.3s,baz=40,slow=23,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 06 50 18.9 | |
| | 0.0nm,0.3s,baz=37,slow=24,SNR=1.8 | | | | | | |

*UCR* ***10*** *06:46:15.9±2.8, 10°.23N×86°.42W, h15km±18km, MW4.3*
*IDC* ***10*** *06:46:21.1±24.0, 11°.86N×85°.20W, h0km, mb3.2/4, mb1 3.6/4, mb1mx3.5/27, mbtmp3.2/4, Error ellipse: s-maj=469.0km s-min=121.2km az=172.0*

**ISC 10 06:46:16.3±1.1, 10°.29N±0°.08×86°.38W±0°.06, h10km, n20, σ1°31/23, mb3.1/4, 6C, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAJU** | **San Juanillo,** | **0.69** | **109** | ⇑*eP* | **Pb** | **06 46 30.4** | **-0.1** |
| SAJU | | | | *eS* | **Sg** | **06 46 39.0** | **+0.2** |
| **GUAI** | **GUAI** | **0.85** | **91** | ⇑*iP* | **Pg** | **06 46 32.8** | **0.0** |
| GUAI | | | | *iS* | **Sb** | **06 46 46.1** | **+1.3** |
| **HZTE** | **Horizontes, Gu** | **0.88** | **61** | ⇑*iP* | **Pg** | **06 46 33.5** | **+0.3** |
| HZTE | | | | *eS* | **Sg** | **06 46 45.8** | **+1.1** |
| **GBS3** | **Finca Las Img** | **1.03** | **62** | *iP* | **Pb** | **06 46 35.3** | **-1.0** |
| **LAPC** | **Finca la Perla** | **1.04** | **63** | ⇑*iP* | **Pb** | **06 46 35.5** | **-1.0** |
| **GB1A** | **Borinquen Arri** | **1.10** | **61** | *iP* | **Pb** | **06 46 36.5** | **-1.0** |
| **GPS2** | **Hotel Rincn d** | **1.11** | **65** | *iP* | **Pb** | **06 46 36.9** | **-0.8** |
| **BUAI** | **Buenos Aires** | **1.18** | **60** | *iP* | **Pn** | **06 46 38.0** | **-1.0** |
| **GUAB** | **Guayabo de Bag** | **1.20** | **70** | *iP* | **Pn** | **06 46 38.1** | **-1.2** |
| **COLC** | **Colonia** | **1.21** | **72** | *iP* | Pn | 06 46 34.1 | -5.3 |
| **CUI** | **Cuipilapa** | **1.25** | **73** | *iP* | **Pn** | **06 46 38.6** | **-1.3** |
| **HORNC** | **Hornillas** | **1.25** | **70** | *iP* | **Pn** | **06 46 39.1** | **-0.9** |
| **VMAR** | **Armenia, Volca** | **1.34** | **67** | ⇑*iP* | **Pn** | **06 46 40.4** | **-0.8** |
| **ACAL** | **Aguas Claras** | **1.36** | **75** | *iP* | **Pn** | **06 46 40.9** | **-0.7** |
| ACAL | | | | *iS* | **Sb** | **06 47 00.8** | **+1.2** |
| **LAFE** | **Finca La Fe, P** | **1.52** | **108** | ⇑*eP* | **Pn** | **06 46 42.0** | **-1.7** |
| **CEDE** | **Laguna Cedeo** | **1.66** | **83** | *iP* | **Pn** | **06 46 45.8** | **+0.3** |
| **TXAR** | **Lajitas Array** | **24.91** | **322** | P | **P** | **06 51 41.7** | **+1.9** |
| | 0.4nm,0.6s,baz=134,slow=9.2,SNR=5.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **38.16** | **332** | P | **P** | **06 53 35.3** | **-1.0** |
| | 0.1nm,0.5s,baz=136,slow=7.1,SNR=3.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.02** | **320** | P | **P** | **06 53 54.8** | **+2.9** |
| | 0.2nm,0.5s,baz=136,slow=7.1,SNR=3.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **55.96** | **345** | P | **P** | **06 55 52.6** | **-2.0** |
| | 0.3nm,0.9s,baz=138,slow=7.1,SNR=2.6 | | | | | | |

*IDC* ***10*** *07:25:34.3±0.8, 30°.75S×71°.62W, h0km, mb4.0/8, mb1 4.1/12, mb1mx4.1/24, mbtmp3.9/12, ML3.7/4, MS3.1/3, Ms1 3.1/3, ms1mx2.8/50, Error ellipse: s-maj=25.7km s-min=23.2km az=17.0*
*SJA* ***10*** *07:25:35.1±0.8, 30°.57S×71°.96W, h15km±3km, ML4.2, MW4.1*
*NEIC* ***10*** *07:25:39.8±2.4, 30°.58S±0°.01×71°.7W±0°.1, h29km±5km, mb4.4/6, ML4.3(GUC), Error ellipse: s-maj=13.9km s-min=1.4km az=86.0*
*GUC* ***10*** *07:25:39.1±0.8, 30°.62S×71°.59W, h34km±3km, ML4.3*

**ISC 10 07:25:37.5±1.0, 30°.63S±0°.02×71°.84W±0°.04, h24km±6km, n113, σ2°.09/142, mb4.2/8, 4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.18** | **105** | *eP* | **Pn** | **07 25 45.4** | **+0.6** |
| CO06 | | | | *eS* | **Sb** | **07 25 49.3** | **+2.8** |
| CO06 | | | | IAML | | 07 25 50.1 | |
| | comp=N,67µm,0.2s | | | | | | |
| **CO06** | **Fray Jorge** | **0.18** | **105** | | **Pn** | **07 25 45.6** | **+0.8** |
| **CO05** | **La Serena** | **0.88** | **36** | *eP* | **Pb** | **07 25 54.0** | **0.0** |
| CO05 | | | | *eS* | **Sb** | **07 26 05.1** | **-0.2** |
| CO05 | | | | IAML | | 07 26 08.9 | |
| | comp=E,18µm,0.3s | | | | | | |
| **CO05** | **La Serena** | **0.88** | **36** | | **Pn** | **07 25 54.6** | **+0.2** |
| **CO02** | **Combarbal** | **0.92** | **129** | ⇓*iP* | **Pn** | **07 25 54.7** | **-0.4** |
| CO02 | | | | *eS* | **Sb** | **07 26 05.5** | **-1.3** |
| CO02 | | | | IAML | | 07 26 08.8 | |
| | comp=E,14µm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **0.92** | **129** | | **Pn** | **07 25 54.7** | **-0.4** |
| **CO02** | **Combarbal** | **0.92** | **129** | *eP* | **Pn** | **07 25 55.1** | **0.0** |
| CO02 | | | | *eS* | **Sb** | **07 26 06.9** | **+0.1** |
| CO02 | | | | IAML | | 07 26 09.4 | |
| | comp=Z,4µm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **1.00** | **63** | ⇓*iP* | **Pn** | **07 25 56.1** | **-0.3** |
| GO04 | | | | *eS* | **Sb** | **07 26 08.3** | **-0.9** |
| **GO04** | **Tololo Observa** | **1.00** | **63** | | **Pn** | **07 25 56.2** | **-0.2** |
| **GO04** | **Tololo Observa** | **1.00** | **63** | *eP* | **Pn** | **07 25 55.9** | **-0.4** |
| GO04 | | | | *eS* | **Sb** | **07 26 08.4** | **-0.9** |
| **CO03** | **El Pedregal** | **1.01** | **102** | ⇓*iP* | **Pn** | **07 25 55.5** | **-0.8** |
| CO03 | | | | *eS* | **Sb** | **07 26 07.0** | **-2.4** |
| CO03 | | | | IAML | | 07 26 08.7 | |
| | comp=N,13µm,0.5s | | | | | | |
| **CO03** | **El Pedregal** | **1.01** | **102** | | **Pn** | **07 25 55.5** | **-0.8** |
| **CO03** | **El Pedregal** | **1.01** | **102** | *eP* | **Pn** | **07 25 55.5** | **-0.8** |
| CO03 | | | | *eS* | **Sb** | **07 26 08.3** | **-1.0** |
| CO03 | | | | IAML | | 07 26 09.8 | |
| | comp=Z,4µm,0.6s | | | | | | |
| **LCO** | **Las Campanas** | **1.89** | **32** | *eP* | **Pn** | **07 26 09.7** | **+1.2** |
| **LCO** | **Las Campanas** | **1.89** | **32** | Pn | **Pn** | **07 26 09.9** | **+1.4** |
| **LCO** | **Las Campanas** | **1.89** | **32** | *eP* | **Pn** | **07 26 10.0** | **+1.4** |
| LCO | | | | *eS* | **Sb** | **07 26 34.6** | **-0.1** |
| **VA06** | **Catapilco** | **1.98** | **167** | *eP* | **Pn** | **07 26 11.2** | **+1.7** |
| VA06 | | | | IAML | | 07 26 48.0 | |
| | comp=N,4µm,0.2s | | | | | | |
| **VA06** | **Catapilco** | **1.98** | **167** | | **Pn** | **07 26 11.3** | **+1.7** |
| **AROD** | **Rodeo** | **2.09** | **78** | *eP* | **Pb** | **07 26 14.1** | **-0.9** |
| AROD | | | | *eS* | **Sb** | **07 26 41.0** | **+0.3** |
| **ACCO** | **Cerro Coronel** | **2.39** | **90** | *eP* | **Pb** | **07 26 18.8** | **-1.3** |
| ACCO | | | | *eS* | **Sb** | **07 26 50.2** | **+0.9** |
| **ACDV** | **Cuesta del Vie** | **2.39** | **80** | *eP* | **Pn** | **07 26 13.4** | **-1.9** |
| ACDV | | | | *eP* | **Pb** | **07 26 18.9** | **-1.0** |
| ACDV | | | | *eP* | **Pb** | **07 26 19.0** | **-1.0** |
| ACDV | | | | *eS* | **Sb** | **07 26 48.8** | **-0.3** |
| ACDV | | | | IAML | | 07 26 52.2 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **VA01** | **Torpederas** | **2.39** | **176** | Pn | **Pn** | **07 26 16.4** | **+1.2** |
| **VA03** | **San Esteban** | **2.40** | **153** | *eP* | **Pn** | **07 26 17.4** | **+2.1** |
| VA03 | | | | IAML | | 07 26 54.9 | |
| | comp=N,2µm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **2.40** | **153** | | **Pn** | **07 26 17.9** | **+2.5** |
| **VA03** | **San Esteban** | **2.40** | **153** | *eP* | **Pn** | **07 26 17.7** | **+2.4** |
| VA03 | | | | *eS* | **Sb** | **07 26 51.1** | **+1.9** |
| VA03 | | | | IAML | | 07 26 57.4 | |
| | comp=Z,1µm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **2.44** | **163** | *eP* | **Pn** | **07 26 17.9** | **+1.8** |
| ROCH | | | | *eP* | **Pn** | **07 26 16.7** | **+0.7** |
| ROCH | | | | IAML | | 07 26 55.9 | |
| | comp=N,2µm,0.3s | | | | | | |
| ROCH | | | | IAML | | 07 26 59.7 | |
| | comp=N,1µm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **2.44** | **164** | | **Pn** | **07 26 16.8** | **+0.7** |
| **ROC1** | **El Roble** | **2.44** | **164** | *eP* | **Pn** | **07 26 17.0** | **+0.9** |
| ROC1 | | | | *eS* | **Sb** | **07 26 50.7** | **0.0** |
| **AC04** | **Llanos de Chal** | **2.50** | **16** | *eP* | **Pn** | **07 26 17.9** | **+1.2** |
| AC04 | | | | IAML | | 07 27 02.8 | |
| | comp=E,1µm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.50** | **16** | Pn | **Pn** | **07 26 18.0** | **+1.2** |
| **AC04** | **Llanos de Chal** | **2.50** | **16** | *eP* | **Pn** | **07 26 17.9** | **+1.2** |
| AC04 | | | | *eS* | **Sn** | **07 26 48.5** | **+1.9** |
| AC04 | | | | IAML | | 07 27 04.5 | |
| | comp=Z,675nm,0.8s | | | | | | |
| **AUSP** | **Uspallata** | **2.63** | **128** | *eP* | **Pn** | **07 26 22.0** | **+3.3** |
| AUSP | | | | *eS* | **Sn** | **07 26 50.9** | **+0.9** |
| **MT02** | **Curacav** | **2.69** | **167** | *eP* | **Pn** | **07 26 22.4** | **+3.1** |
| **MT02** | **Curacav** | **2.69** | **167** | | **Pn** | **07 26 22.6** | **+3.3** |
| **MT02** | **Curacav** | **2.69** | **167** | *eP* | **Pn** | **07 26 21.0** | **+1.7** |
| MT02 | | | | *eS* | **Sn** | **07 26 54.4** | **+3.3** |
| MT02 | | | | IAML | | 07 27 03.3 | |
| | comp=Z,785nm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **2.69** | **159** | | **Pn** | **07 26 21.7** | **+2.3** |
| **ZON** | **Zonda** | **2.86** | **109** | Pn | **Pn** | **07 26 24.7** | **+3.1** |
| **ZON** | **Zonda** | **2.86** | **109** | *eP* | **Pn** | **07 26 24.7** | **+3.1** |
| ZON | | | | *eS* | **Sn** | **07 26 55.9** | **+0.5** |
| ZON | | | | *eS* | **Sb** | **07 27 05.4** | **+2.9** |
| ZON | | | | IAML | | 07 27 06.6 | |
| | comp=Z,484nm,0.5s | | | | | | |
| **MT05** | **Renca** | **2.91** | **162** | *eP* | **Pn** | **07 26 24.4** | **+2.0** |
| MT05 | | | | IAML | | 07 27 13.9 | |
| | comp=N,2µm,0.3s | | | | | | |
| **MT05** | **Renca** | **2.91** | **162** | | **Pn** | **07 26 24.7** | **+2.3** |
| **MT05** | **Renca** | **2.91** | **162** | *eP* | **Pn** | **07 26 24.7** | **+2.3** |
| MT05 | | | | *eS* | **Sn** | **07 27 00.9** | **+4.3** |
| MT05 | | | | IAML | | 07 27 13.4 | |
| | comp=Z,653nm,0.5s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.97** | **104** | *eP* | **Pn** | **07 26 25.8** | **+2.6** |
| RTLL | | | | *eS* | **Sb** | **07 27 04.8** | **-0.9** |
| **VA05** | **Santo Domingo** | **3.03** | **176** | *eP* | **Pn** | **07 26 25.2** | **+1.4** |
| VA05 | | | | IAML | | 07 27 27.7 | |
| | comp=N,1µm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **3.03** | **176** | Pn | **Pn** | **07 26 25.6** | **+1.7** |
| **RTCV** | **Cerro Valdivia** | **3.08** | **114** | *eP* | **Pb** | **07 26 28.8** | **-2.9** |
| RTCV | | | | *eS* | **Sb** | **07 27 14.4** | **+5.6** |
| **MT09** | **Talagante** | **3.22** | **167** | *eP* | **Pn** | **07 26 28.8** | **+2.2** |
| MT09 | | | | IAML | | 07 27 28.4 | |
| | comp=E,633nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **3.22** | **167** | | **Pn** | **07 26 28.9** | **+2.2** |
| **ASAL** | **Salagasta** | **3.22** | **128** | *eP* | **Pn** | **07 26 30.8** | **+4.1** |
| ASAL | | | | *eS* | **Sb** | **07 27 10.9** | **-2.1** |
| **MT01** | **Popeta** | **3.27** | **171** | ⇓*eP* | **Pn** | **07 26 30.4** | **+3.2** |
| **MT01** | **Popeta** | **3.27** | **171** | | **Pn** | **07 26 29.3** | **+2.1** |
| **MT01** | **Popeta** | **3.27** | **171** | *eP* | **Pn** | **07 26 29.0** | **+1.8** |
| MT01 | | | | *eP* | **Pn** | **07 26 29.0** | **+1.8** |
| MT01 | | | | *eS* | **Sn** | **07 27 10.4** | **+5.1** |
| MT01 | | | | IAML | | 07 27 18.5 | |
| | comp=Z,498nm,0.7s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.32** | **132** | *eP* | **Pb** | **07 26 33.0** | **-2.7** |
| ARCO | | | | *eS* | **Sb** | **07 27 13.4** | **-2.3** |
| ARCO | | | | *eS* | **Sb** | **07 27 17.9** | **+2.2** |
| ARCO | | | | IAML | | 07 27 22.9 | |
| | comp=Z,957nm,0.7s | | | | | | |
| **GO03** | **Copiap** | **3.33** | **25** | *eP* | **Pn** | **07 26 29.5** | **+1.3** |
| GO03 | | | | IAML | | 07 27 22.1 | |
| | comp=E,969nm,0.6s | | | | | | |
| **GO03** | **Copiap** | **3.33** | **25** | Pn | **Pn** | **07 26 29.6** | **+1.4** |
| **GO03** | **Copiap** | **3.33** | **25** | *eP* | **Pn** | **07 26 29.5** | **+1.3** |
| GO03 | | | | *eS* | **Sn** | **07 27 10.4** | **+3.3** |
| **LMEL** | **Las Melosas** | **3.50** | **157** | *eP* | **Pn** | **07 26 33.5** | **+3.0** |
| LMEL | | | | IAML | | 07 27 31.3 | |
| | comp=E,435nm,0.3s | | | | | | |
| **LMEL** | **Las Melosas** | **3.50** | **157** | | **Pn** | **07 26 33.6** | **+3.0** |
| **BO04** | **La Punta** | **3.51** | **163** | *eP* | **Pn** | **07 26 32.6** | **+2.0** |
| BO04 | | | | IAML | | 07 27 29.1 | |
| | comp=N,536nm,0.5s | | | | | | |
| **BO04** | **La Punta** | **3.51** | **163** | | **Pn** | **07 26 32.9** | **+2.3** |
| **AAGR** | **Agrelo** | **3.54** | **135** | *eP* | **Pn** | **07 26 35.7** | **+4.6** |
| AAGR | | | | *eS* | **Sb** | **07 27 22.4** | **+0.2** |
| **VCA** | **Vinchina** | **3.68** | **60** | *eP* | **Pn** | **07 26 37.4** | **+4.4** |
| VCA | | | | *eS* | **Sb** | **07 27 22.4** | **-3.8** |
| VCA | | | | IAML | | 07 27 35.8 | |
| | comp=Z,1µm,0.7s | | | | | | |
| **AVFE** | **Valle Fertil** | **3.78** | **92** | *eP* | **Pn** | **07 26 36.3** | **+2.0** |
| AVFE | | | | *eS* | **Sb** | **07 27 25.1** | **-3.8** |
| AVFE | | | | IAML | | 07 27 35.3 | |
| | comp=Z,398nm,0.6s | | | | | | |
| **BO01** | **Tunca** | **3.81** | **171** | *eP* | **Pn** | **07 26 36.0** | **+1.4** |
| **BO01** | **Tunca** | **3.81** | **171** | | **Pn** | **07 26 35.9** | **+1.3** |
| **BO01** | **Tunca** | **3.81** | **171** | *eP* | **Pn** | **07 26 37.0** | **+2.4** |
| BO01 | | | | *eS* | **Sn** | **07 27 20.1** | **+1.5** |
| BO01 | | | | IAML | | 07 27 37.8 | |
| | comp=Z,234nm,0.5s | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.25** | **168** | *eP* | **Pn** | **07 26 42.8** | **+2.0** |
| **BO02** | **Sierra Bellavi** | **4.25** | **168** | Pn | **Pn** | **07 26 43.2** | **+2.4** |
| **BO02** | **Sierra Bellavi** | **4.25** | **168** | *eP* | **Pn** | **07 26 43.2** | **+2.4** |
| BO02 | | | | *eS* | **Sb** | **07 27 37.4** | **-5.0** |
| BO02 | | | | IAML | | 07 27 53.9 | |
| | comp=Z,291nm,0.8s | | | | | | |
| **GO05** | **Huala** | **4.37** | **181** | | **Pn** | **07 26 43.5** | **+1.0** |
| **GO05** | **Huala** | **4.37** | **181** | *eP* | **Pn** | **07 26 43.4** | **+1.0** |
| **AC02** | **Maricunga** | **4.46** | **33** | *eP* | **Pn** | **07 26 45.7** | **+1.5** |
| **AC02** | **Maricunga** | **4.46** | **33** | Pn | **Pn** | **07 26 45.8** | **+1.6** |
| **RFA** | **San Rafael** | **5.01** | **146** | *eP* | **Pn** | **07 26 54.4** | **+3.1** |
| **ML02** | **Panimavida** | **5.13** | **176** | Pn | **Pn** | **07 26 53.4** | **+0.5** |
| **MRA** | **San Martin** | **5.52** | **110** | *eP* | **Pn** | **07 26 59.7** | **+1.4** |
| **H03N1** | **Juan Fernandez** | **6.63** | **243** | T | T | 07 34 12.1 | |
| | baz=72,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.64** | **243** | T | T | 07 34 12.5 | |
| | baz=72,slow=72 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.64** | **243** | T | T | 07 34 10.4 | |
| | baz=72,slow=72 | | | | | | |
| **AHML** | **Horco Molle** | **6.88** | **58** | *eS* | **Sn** | **07 28 37.4** | **+3.0** |
| **PB15** | **IPOC Station P** | **7.69** | **17** | | **Pn** | **07 27 27.8** | **-0.4** |
| **PB15** | **IPOC Station P** | **7.69** | **17** | *eP* | **Pn** | **07 27 29.0** | **+0.8** |
| PB15 | | | | *eP* | **Pn** | **07 27 29.0** | **+0.8** |
| **PB06** | **IPOC Station P** | **8.15** | **15** | Pn | **Pn** | **07 27 32.8** | **-1.7** |
| **LVC** | **Limon Verde** | **8.40** | **19** | Pn | **Pn** | **07 27 36.3** | **-1.8** |
| | comp=Z,0.4nm,0.3s,baz=214,slow=7.3,SNR=2.1 | | | | | | |
| LVC | | | | Sn | **Sn** | **07 29 09.2** | **-3.2** |
| | comp=Z,0.9nm,0.3s,baz=139,slow=20,SNR=1.6 | | | | | | |
| LVC | | | | LR | LR | 07 31 14.5 | |
| | comp=Z,113nm,18.2s,baz=208,slow=40 | | | | | | |
| **PB03** | **IPOC Station P** | **8.75** | **13** | Pn | **Pn** | **07 27 40.8** | **-1.9** |
| **PB01** | **IPOC Station P** | **9.78** | **13** | Pn | **Pn** | **07 27 53.9** | **-2.8** |
| **PLCA** | **Paso Flores** | **10.14** | **174** | Pn | **Pn** | **07 27 59.7** | **-1.9** |
| | comp=Z,0.1nm,0.3s,baz=338,slow=11,SNR=7.5 | | | | | | |
| PLCA | | | | LR | LR | 07 31 52.3 | |
| | comp=Z,108nm,18.1s,baz=358,slow=38 | | | | | | |
| **ITQB** | **Itaqui** | **13.20** | **90** | | **Pn** | **07 28 40.4** | **-3.1** |
| **CPUP** | **Villa Florida** | **13.46** | **75** | Pn | **Pn** | **07 28 45.8** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=246,slow=11,SNR=3.8 | | | | | | |
| CPUP | | | | Sn | **Sn** | **07 31 14.7** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=270,slow=11,SNR=2.7 | | | | | | |
| CPUP | | | | Lg | Lg | 07 32 32.2 | |
| | comp=Z,0.3nm,0.3s,baz=184,slow=20,SNR=3.2 | | | | | | |
| CPUP | | | | LR | LR | 07 34 21.0 | |
| | comp=Z,71nm,18.9s,baz=259,slow=40 | | | | | | |
| **PLTB** | **Pedras Altas** | **15.65** | **99** | Pn | **Pn** | **07 29 14.1** | **-2.4** |
| **SIV** | **San Ignacio** | **17.59** | **36** | P | **Pn** | **07 29 41.6** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=211,slow=12,SNR=15 | | | | | | |
| **BDFB** | **Brasilia** | **26.42** | **61** | P | **P** | **07 31 11.5** | **-1.1** |
| | comp=Z,3.2nm,0.6s,baz=238,slow=9.8,SNR=6.9 | | | | | | |
| **BDFB** | **Brasilia** | **26.42** | **61** | IAmb | IAmb | 07 31 22.6 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **BAUV** | **El Baul** | **39.51** | **6** | P | **P** | **07 33 06.6** | **+0.2** |
| BAUV | | | | IAmb | IAmb | 07 33 07.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **66.89** | **330** | P | **P** | **07 36 30.7** | **+2.8** |
| | comp=Z,0.5nm,0.6s,baz=151,slow=8.6,SNR=8.6 | | | | | | |
| **DBIC** | **Dimbokro** | **73.96** | **72** | P | **P** | **07 37 11.2** | **0.0** |
| | comp=Z,4.6nm,0.7s,baz=231,slow=5.9,SNR=6.0 | | | | | | |
| **DBIC** | **Dimbokro** | **73.96** | **72** | IAmb | IAmb | 07 37 11.8 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **80.84** | **333** | P | **P** | **07 37 50.8** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=150,slow=8.1,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.23** | **325** | P | **P** | **07 37 53.5** | **+1.9** |
| | comp=Z,0.5nm,0.7s,baz=164,slow=8.0,SNR=5.0 | | | | | | |
| **BOSA** | **Boshof** | **81.49** | **118** | P | **P** | **07 37 53.5** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=303,slow=8.8,SNR=4.2 | | | | | | |
| **BOSA** | **Boshof** | **81.49** | **118** | IAmb | IAmb | 07 38 08.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.91** | **70** | P | **P** | **07 38 00.6** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=273,slow=7.2,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.91** | **70** | P | **P** | **07 37 59.7** | **-1.0** |
| TORD | | | | IAmb | IAmb | 07 38 12.1 | |
| | comp=Z,5.7nm,1.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.93** | **341** | P | Pdif | 07 39 16.5 | +1.3 |
| | comp=Z,0.2nm,0.7s,baz=141,slow=5.3,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.77** | **210** | PKP | **PKPdf** | **07 44 33.7** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=160,slow=1.7,SNR=7.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.92** | **271** | T | T | 10 03 25.2 | |
| | baz=114,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.94** | **271** | T | T | 10 03 27.4 | |
| | baz=114,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.94** | **271** | T | T | 10 03 24.8 | |
| | baz=114,slow=75 | | | | | | |
| **BVAR** | **Borovoye Array** | **144.64** | **40** | PKP | PKPbc | 07 45 11.1 | +0.7 |
| | comp=Z,1.2nm,0.6s,baz=46,slow=6.4,SNR=8.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.23** | **39** | PKPbc | **PKPbc** | **07 45 26.2** | **+0.1** |
| | comp=Z,1.5nm,0.7s,baz=302,slow=3.3,SNR=12 | | | | | | |
| **KURK** | **Kurchatov** | **150.23** | **39** | | **PKPbc** | **07 45 26.2** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **151.25** | **29** | PKPbc | **PKiKP** | **07 45 29.2** | **+0.3** |
| | comp=Z,4.5nm,0.7s,baz=295,slow=3.2,SNR=20 | | | | | | |
| ZALV | | | | PKPab | **pPKPbc** | **07 45 37.8** | **+1.4** |
| | comp=Z,4.6nm,0.7s,baz=296,slow=3.1,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.25** | **29** | | **PKiKP** | **07 45 29.0** | **+0.2** |
| **MKAR** | **Makanchi Array** | **154.32** | **44** | PKPbc | **PKPbc** | **07 45 35.5** | **0.0** |
| | comp=Z,0.3nm,0.8s,baz=278,slow=1.7,SNR=4.1 | | | | | | |

*ASRS* ***10*** *07:29:20.8±0.2, 54°N±1°×9°4E±°, h5km, MLh5.1/12, Error ellipse: s-maj=2.7km s-min=2.3km az=57.0, confirmed*
*BJI* ***10*** *07:29:22.5±0.0, 54°.73N×94°.18E, h10km, mb4.0/26, mB4.5/14, Ms4.2/12, Ms7 3.8/11*
*IDC* ***10*** *07:29:23.4±0.6, 54°.52N×94°.42E, h0km, mb4.0/22, mb1 4.1/28, mb1mx4.0/56, mbtmp3.9/28, ML3.1/5, MS3.4/10, Ms1 3.4/10, ms1mx3.0/98, Error ellipse: s-maj=15.3km s-min=9.4km az=162.0*
*MOS* ***10*** *07:29:23.7±1.3, 54°.56N×94°.31E, h12km, mb4.3/7, Error ellipse: s-maj=10.2km s-min=7.7km az=64.3*
*MOS Felt (IV) at Chibizhek.*
*NNC* ***10*** *07:29:25.4±2.6, 54°.61N×94°.23E, h0km, mb4.2, mpv3.2, Error ellipse: s-maj=34.2km s-min=25.6km az=156.0*
*NEIC* ***10*** *07:29:26.6±1.9, 54°.71N±0°.08×94°.2E±0°.1, h16km±4km, mb4.4/10, Error ellipse: s-maj=12.1km s-min=10.5km az=148.0*

**ISC 10 07:29:26.0±0.3, 54°.59N±0°.03×94°.20E±0°.02, h10km, n129, σ2°.35/158, mb4.0/28, MS3.5/9, 17C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MINR** | **Mina** | **0.31** | **0** | Pg | **Pg** | **07 29 35.0** | **+2.8** |
| MINR | | | | Sg | **Sg** | **07 29 42.4** | **+5.9** |
| **KRAR** | **Krasnoyarsk** | **1.61** | **333** | *i* PN | **Pn** | **07 29 54.0** | **-0.5** |
| **GZL** | **Zheleznogorsk** | **1.72** | **348** | Pg | **Pg** | **07 29 59.2** | **+0.3** |
| GZL | | | | Sg | **Sg** | **07 30 24.7** | **+3.5** |
| **ABNR** | **Abakan** | **1.84** | **243** | *i* PN | **Pn** | **07 29 57.6** | **0.0** |
| **ABNR** | **Abakan** | **1.84** | **243** | Sg | **Sn** | **07 30 22.6** | **+1.7** |
| **ABNR** | **Abakan** | **1.84** | **243** | Pg | **Pn** | **07 29 57.6** | **0.0** |
| **SHRR** | **Shira** | **2.35** | **269** | Pg | **Pn** | **07 30 06.5** | **+1.8** |
| **SHRR** | **Shira** | **2.35** | **269** | Sg | **Sb** | **07 30 40.3** | **+2.7** |
| **CERR** | **Cheremushki** | **2.40** | **225** | Pg | **Pn** | **07 30 06.2** | **+0.8** |
| CERR | | | | Sg | **Sn** | **07 30 37.1** | **+2.3** |
| **DJOS** | **Djoyskaya Sosn** | **2.45** | **224** | Pg | **Pn** | **07 30 07.2** | **+1.1** |
| DJOS | | | | Sg | **Sn** | **07 30 39.0** | **+2.9** |
| **DJO** | **Djoy, Khakassi** | **2.53** | **226** | Pg | **Pn** | **07 30 07.3** | **+0.3** |
| DJO | | | | Sg | **Sn** | **07 30 40.4** | **+2.3** |
| **KZLR** | **Kyzyl** | **2.90** | **177** | Pg | **Pn** | **07 30 14.5** | **+2.4** |
| KZLR | | | | Sg | **Sn** | **07 30 49.8** | **+2.8** |
| **LUZB** | **Luzhba, Kemero** | **3.25** | **256** | Pg | **Pb** | **07 30 22.4** | **-1.4** |
| LUZB | | | | Sg | **Sb** | **07 31 07.3** | **+3.8** |
| **BRCR** | **Berchikul'** | **3.54** | **290** | Pn | **Pn** | **07 30 22.4** | **+1.5** |
| BRCR | | | | Pg | **Pb** | **07 30 31.0** | **+2.4** |
| BRCR | | | | Sg | **Sg** | **07

KURBB Lg Lg 07 34 50.0
comp=N,0.5nm,0.3s,baz=70,slow=33,SNR=9.7
KURBB LR LR 07 35 56.6
comp=N,178nm,18.1s,baz=286,slow=38
**ULN Ulaanbaatar 10.49 125** *i* P **Pn 07 31 57.2 +0.7**
**ULN Ulaanbaatar 10.49 125** Pn **Pn 07 31 56.6 0.0**
**MK31 Makanchi Array 10.85 229** *i* P **Pn 07 32 02.2 +0.9**
**MK31 Makanchi Array 10.85 229** Pn **Pn 07 32 02.4 +1.1**
comp=N,11nm,0.7s,baz=35,slow=12,SNR=28
MK31 ⇑Lg Lg 07 35 14.2
comp=N,36nm,0.8s,baz=231,slow=14,SNR=6.3
**MK31 Makanchi Array 10.85 229** Pn **Pn 07 32 02.2 +0.9**
**MKAR Makanchi Array 10.85 229** Pn **Pn 07 32 01.6 +0.3**
comp=N,0.2nm,0.3s,baz=31,slow=13,SNR=10
MKAR Sn **Sn 07 34 04.1 +1.5**
comp=N,0.5nm,0.3s,baz=42,slow=22,SNR=2.0
MKAR Lg Lg 07 35 05.2
comp=N,0.7nm,0.3s,baz=51,slow=30,SNR=1.9
**MKAR Makanchi Array 10.85 229** P **Pn 07 32 03.2 +1.9**
MKAR 07 34 04.1
**MKAR Makanchi Array 10.85 229** Pn **Pn 07 32 03.2 +1.9**
**MAKZ Makanchi 10.98 230** P **Pn 07 32 04.5 +1.5**
**MAKZ Makanchi 10.98 230** ⇑Pn **Pn 07 32 03.3 +0.3**
comp=N,6.0nm,0.8s
**MAKZ Makanchi 10.98 230** Pn **Pn 07 32 04.5 +1.5**
**BOD Bodaibo 11.48 66** *e*P **Pn 07 32 07.6 -2.3**
BOD pmax pmax
comp=Z,40nm,1.1s
**BVAR Borovoye Array 14.14 273** Pn **Pn 07 32 45.5 -0.7**
comp=Z,0.2nm,0.3s,baz=59,slow=23,SNR=5.7
**BRVK Borovoye 14.19 274** *ce*P **Pn 07 32 48.1 +1.3**
BRVK pmax pmax
comp=Z,4.0nm,0.8s
**BRVK Borovoye 14.19 274** ⇑P **Pn 07 32 47.3 +0.4**
comp=Z,3.9nm,0.6s
**BRVK Borovoye 14.19 274** Pn **Pn 07 32 47.3 +0.4**
**NRIK Noril'sk 15.11 351** Pn **Pn 07 32 56.4 -2.8**
comp=Z,0.3nm,0.3s,baz=155,slow=17,SNR=3.0
NRIK Sn **Sn 07 35 38.2 -8.2**
comp=Z,0.6nm,0.3s,baz=202,slow=19,SNR=1.9
NRIK Lg Lg 07 37 26.1
baz=253,slow=19,SNR=1.6
**NRIK Noril'sk 15.11 351** P **Pn 07 32 56.1 -3.2**
NRIK 07 35 38.2
NRIK pmax pmax
comp=Z,11nm,0.8s
**NRIK Noril'sk 15.11 351** Pn **Pn 07 32 56.1 -3.2**
NRIK IAmb IAmb 07 33 17.0
comp=Z,11nm,0.8s
**GTA Gaotai 15.65 164** *e*P **Pn 07 33 07.2 +0.5**
GTA pP pP 07 33 15.3 +1.4
GTA sP sP 07 33 20.2 +4.8
GTA pmax pmax
comp=Z,9.0nm,1.0s
**AAK Ala-Archa 17.61 235** P **P 07 33 34.6 +2.1**
comp=Z,0.2nm,0.3s,baz=34,slow=12,SNR=4.5
AAK Lg Lg 07 38 42.6
comp=Z,0.1nm,0.3s,baz=145,slow=17,SNR=3.6
**AAK Ala-Archa 17.61 235** *ce*P **Pn 07 33 30.7 -0.8**
AAK pmax pmax
comp=Z,13nm,1.7s
**GOMU GeErMu 18.40 178** P **P 07 33 38.0 -3.4**
GOMU pmax pmax
comp=Z,2.0nm,1.1s
**KKAR Karatay Array 19.26 243** P **P 07 33 51.0 +0.5**
**KKAR Karatay Array 19.26 243** P **P 07 33 51.0 +0.5**
**LZH Lanzhou 19.67 156** *e*P **Pn 07 33 59.5 +2.9**
LZH pP sP 07 34 04.4 +4.6
LZH sP pP 07 34 07.1 +8.7
LZH pmax pmax
comp=Z,19nm,1.4s
**YAK Yakutsk 19.85 54** P **P 07 33 56.2 -0.5**
comp=Z,0.1nm,0.3s,baz=162,slow=0.7,SNR=1.7
YAK S S 07 37 21.7 -18
comp=Z,0.1nm,0.3s,baz=333,slow=2.3,SNR=1.2
**YAK Yakutsk 19.85 54** *ce*P **P 07 33 56.7 -0.1**
YAK pmax pmax
comp=Z,39nm,0.7s
**YAK Yakutsk 19.85 54** **P 07 33 56.0 -0.8**
YAK IAmb IAmb 07 34 03.2
comp=Z,43nm,0.8s
**ARU Arti 20.13 290** P Pn 07 34 01.5 -0.2
comp=Z,2.3nm,0.2s,baz=88,slow=6.8,SNR=4.6
ARU S **S 07 37 46.0 +0.4**
comp=Z,2.0nm,0.2s,baz=156,slow=20,SNR=1.7
ARU LR LR 07 41 32.1
comp=Z,81nm,19.9s,baz=198,slow=36
**ARU Arti 20.13 290** P Pn 07 34 02.5 +0.9
ARU 07 34 16.6
ARU SS Sn 07 38 12.8 +25
**AB31 Akbulak array 21.64 270** ⇑P **P 07 34 17.6 +1.4**
comp=Z,2.5nm,0.8s
**ABKAR Akbulak array 21.64 270** P **P 07 34 15.6 -0.6**
**ABKAR Akbulak array 21.64 270** P **P 07 34 15.0 -1.2**
ABKAR IAmb IAmb 07 34 30.5
comp=Z,3.2nm,0.8s
**AKTO Aktyubinsk 22.24 274** P **P 07 34 21.6 -1.0**
comp=Z,2.9nm,0.8s,baz=116,slow=6.3,SNR=8.0
AKTO LR LR 07 43 31.6
comp=Z,82nm,21.1s,baz=355,slow=38
**AKTO Aktyubinsk 22.24 274** ⇑P **P 07 34 24.3 +1.6**
comp=Z,8.1nm,0.8s
**TIXI Tiksi 22.64 28** P **P 07 34 27.0 +0.3**
comp=Z,7.1nm,0.6s,baz=268,slow=22,SNR=29
TIXI S **S 07 38 34.2 -0.1**
comp=Z,4.0nm,0.8s,baz=90,slow=20,SNR=2.5
**TIXI Tiksi 22.64 28** P **P 07 34 27.0 +0.3**
**TIXI Tiksi 22.64 28** P **P 07 34 26.2 -0.5**
**BNX BinXian 22.85 99** ⇓P **P 07 34 28.8 -0.4**
BNX pmax pmax
comp=Z,18nm,0.9s
BNX pmax pmax
comp=Z,320nm,4.5s
**XAN Xi'an 23.00 147** P **P 07 34 29.7 -1.1**
XAN pP pP 07 34 35.2 +1.1
XAN pmax pmax
comp=Z,5.0nm,1.0s
**KLR Kul'dur 23.57 88** P **P 07 34 34.4 -2.1**
comp=Z,0.4nm,0.3s,baz=334,slow=10.0,SNR=4.2
KLR Lg Lg 07 41 49.5
comp=Z,1.0nm,0.8s,baz=20,slow=17,SNR=2.8
**KLR Kul'dur 23.57 88** *i* P **P 07 34 34.4 -2.1**
KLR pmax pmax
comp=Z,28nm,4.1s
**USRK Ussuriysk Ar. 26.39 97** P **P 07 35 01.3 -1.1**
comp=Z,4.5nm,0.9s,baz=299,slow=11,SNR=4.9
**BELG Belogornoye 27.40 285** P **P 07 35 10.6 -0.8**
comp=Z,8.6nm,0.8s,baz=228,slow=1.8,SNR=5.1
**SEY Seymchan 30.29 50** *i* P **P 07 35 37.0 +0.1**
**MA2 Magadan 30.32 57** *ce*P **P 07 35 36.7 -0.6**
MA2 pmax pmax
comp=Z,2.0nm,0.8s
**OBN Obninsk 32.37 295** *i* P **P 07 35 58.1 +2.8**
OBN *i* 07 37 00.3
OBN pmax pmax
comp=Z,6.0nm,1.2s
OBN MLR MLR
comp=Z,65nm,14.0s
**FINES FINESS Array B 35.18 309** P **P 07 36 20.5 +0.9**
comp=Z,3.6nm,0.9s,baz=69,slow=7.9,SNR=3.6
**CMAR Chiang Mai Arr 36.25 172** LR LR 07 52 37.6
comp=Z,17nm,18.7s,baz=300,slow=39
**SOC Sochi 36.45 275** *e*P **P 07 36 28.5 -2.2**
SOC *e* 07 37 51.4
SOC *e*S **S 07 42 11.5 -0.7**
SOC *e*SS **SnSn 07 44 39.7 -0.4**
SOC *e*SSS SSS 07 45 01.4
SOC pmax pmax
comp=Z,31nm,0.8s
SOC MLR MLR
comp=Z,91nm,18.0s
**JOW Kunigami 37.27 124** LR LR 07 53 06.7
comp=Z,89nm,18.3s,baz=135,slow=38
NACGM **Naroch 37.54 299** *i* P P 07 36 33.2 -6.6
AKASG **Malin Array Be 38.36 292** P **P 07 36 46.4 -0.4**
comp=Z,0.9nm,0.5s,baz=52,slow=9.2,SNR=6.0
AKASG **Malin Array Be 38.36 292** IAmb IAmb 07 36 48.0
comp=Z,2.1nm,1.4s
**HFS Hagfors 41.23 311** LR LR 07 54 19.6
comp=Z,137nm,18.4s,baz=8.0,slow=36
**NOA NORSAR Array B 41.84 314** P **P 07 37 15.3 -0.4**
comp=Z,1.1nm,0.7s,baz=60,slow=8.2,SNR=2.1
NOA LR LR 07 56 35.1
comp=Z,50nm,20.1s,baz=280,slow=39
**BRTR Keskin Array B 42.41 275** *ce*P **P 07 37 21.4 +0.7**
comp=Z,2.1nm,0.8s,baz=101,slow=4.0,SNR=4.3
**BRTR Keskin Array B 42.41 275** *ce*P **P 07 37 24.5 +3.8**
BRTR pmax pmax
comp=Z,2.0nm,0.8s
**EUNU Eureka 45.60 0** P **P 07 37 46.4 +0.6**
EUNU IAmb IAmb 07 38 08.4
comp=Z,8.8nm,1.4s
**CLL Collm 46.45 301** *e*P **P 07 37 53.0 +0.4**
**CLL Collm 46.45 301** *e*P **P 07 37 53.0 +0.4**
**GERES GERESS Array B 47.62 298** P **P 07 38 02.2 +0.3**
comp=Z,0.8nm,0.7s,baz=46,slow=9.5,SNR=5.3
**SUMG Summit 48.96 343** *i* P **P 07 38 16.0 +3.7**
**ILAR Eielson Array 52.11 28** P **P 07 38 34.5 -1.2**
comp=Z,1.2nm,0.8s,baz=322,slow=4.6,SNR=15
**INK Inuvik 52.46 20** P **P 07 38 37.8 -0.5**
comp=Z,0.8nm,0.5s,baz=344,slow=9.7,SNR=7.9
**INK Inuvik 52.46 20** IAmb IAmb 07 38 51.0
comp=Z,2.9nm,1.2s
**YKA Yellowknife Ar 61.09 15** P **P 07 39 38.4 -1.2**
comp=Z,1.2nm,0.8s,baz=340,slow=7.4,SNR=20
**YKA Yellowknife Ar 61.09 15** *ce*P **P 07 39 42.7 +3.1**
YKA pmax pmax
comp=Z,1.0nm,0.9s
**ESDC Sonseca Array 63.04 301** P **P 07 39 52.3 -0.8**
comp=Z,0.6nm,0.6s,baz=45,slow=6.5,SNR=2.1
**SCHQ Schefferville 69.83 348** P **P 07 40 34.9 -1.3**
comp=Z,2.4nm,0.7s,baz=335,slow=5.5,SNR=4.2
**DGMT Dagmar 76.15 12** P **P 07 41 13.0 -0.8**
**TORD Torodi Ar. Bea 80.85 280** P **P 07 41 39.1 -1.0**
comp=Z,1.1nm,0.8s,baz=43,slow=4.7,SNR=6.2
**TORD Torodi Ar. Bea 80.85 280** IAmb IAmb 07 41 48.6
comp=Z,1.5nm,1.1s
**PDAR Pinedale Array 80.92 17** P **P 07 41 37.9 -2.5**
comp=Z,0.2nm,0.6s,baz=340,slow=4.3,SNR=2.6
**WRA Warramunga Arr 81.79 142** P **P 07 41 42.2 -2.7**
comp=Z,1.5nm,1.0s,baz=350,slow=5.8,SNR=6.9
WRA LR LR 08 21 06.4
comp=Z,79nm,20.1s,baz=157,slow=38
**NVAR Mina Array Bea 83.23 25** P **P 07 41 52.1 -0.5**
comp=Z,0.9nm,0.8s,baz=320,slow=5.0,SNR=7.0
**ASAR Alice Springs 85.07 144** P **P 07 41 59.2 -2.5**
comp=Z,1.6nm,0.9s,baz=328,slow=4.2,SNR=12
**ANMO Albuquerque 89.07 17** *ce*P **P 07 42 22.2 +0.8**
ANMO pmax pmax
comp=Z,7.0nm,2.5s
**TXAR Lajitas Array 95.01 16** P **P 07 42 48.6 -0.3**
comp=Z,0.3nm,0.9s,baz=4.6,slow=4.5,SNR=2.0
**CPUP Villa Florida 144.87 312** PKPbc **PKPab 07 48 59.5 -2.4**
comp=Z,3.2nm,0.8s,baz=24,slow=6.8,SNR=6.2

**IDC 10 07:46:01.3±2.5, 54°30N×85°98E, h0km, mb1 2.9/2, mb1mx2.8/45, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=18.8km s-min=10.3km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.77** | **243** | *i* | | 07 50 48.8 | |
| | baz=62,slow=350,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.77** | **243** | Pg | Pg | 07 46 16.0 | 0.0 |
| | 0.4nm,0.3s,baz=60,slow=18,SNR=3.1 | | | | | | |
| ZALV | | | | | Lg Lg | 07 46 26.8 | |
| | 2.0nm,0.3s,baz=64,slow=30,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.85** | **234** | Pn | Pn | 07 47 29.9 | +0.6 |
| | 0.1nm,0.3s,baz=52,slow=14,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **199** | Pn | Pn | 07 47 57.7 | +0.7 |
| | 0.1nm,0.3s,baz=22,slow=11,SNR=10.0 | | | | | | |

**IDC 10 07:47:07.1±2.3, 54°30N×85°96E, h0km, mb1 3.4/2, mb1mx3.1/49, mbtmp3.4/2, ML3.1/2, Error ellipse: s-maj=17.8km s-min=9.7km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.76** | **243** | *i* | | 07 51 55.8 | |
| | baz=62,slow=349 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.76** | **243** | Pg | Pg | 07 47 20.3 | -1.2 |
| | 2.5nm,0.3s,baz=60,slow=17,SNR=15 | | | | | | |
| ZALV | | | | | Lg Lg | 07 47 32.6 | |
| | 13nm,0.3s,baz=63,slow=30,SNR=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.84** | **234** | Pn | Pn | 07 48 36.3 | +1.4 |
| | 0.3nm,0.3s,baz=50,slow=13,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **199** | Pn | Pn | 07 49 03.3 | +0.6 |
| | 0.5nm,0.3s,baz=24,slow=13,SNR=28 | | | | | | |
| MKAR | | | | | Sn Sn | 07 50 31.4 | -0.9 |
| | 0.1nm,0.3s,baz=267,slow=23,SNR=1.9 | | | | | | |
| MKAR | | | | | Lg Lg | 07 51 17.6 | |
| | 0.0nm,0.3s,baz=28,slow=35,SNR=3.2 | | | | | | |

*SSNC **10** 08:00:00.4±1.3, 21°07N×71°12W, h48km±342km, MD3.5, ML2.2*
*OSPL **10** 08:00:03.5±0.6, 20°65N×71°29W, h0km±5km, ML2.3*
**ISC 10 08:00:02.0±1.0, 20°67N±0°05×71°43W±0°05, h10km, n11, σ0s99/18, 1D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **GRTK** | **Grand Turk** | **0.88** | **18** | *i* Pg | **Pg** | **08 00 19.0** | **0.0** |
| GRTK | | | | *e*S | **Sg** | **08 00 30.9** | **+0.4** |
| GRTK | | | | IAML | | 08 00 37.9 | |
| | comp=Z,104nm,2.0s | | | | | | |
| **LODA1** | **ITESIL, Dajabo** | **1.15** | **193** | *e*S | **Sb** | **08 00 40.0** | **+1.0** |
| **SC01** | **Santiago de lo** | **1.40** | **152** | *i* P | **Pn** | **08 00 27.3** | **-0.4** |
| **SDDR** | **Presa de Saban** | **1.69** | **175** | *i* P | **Pn** | **08 00 31.5** | **-0.2** |
| SDDR | | | | *e*S | **Sn** | **08 00 53.1** | **-0.2** |
| SDDR | | | | IAML | | 08 00 59.4 | |
| | comp=Z,40nm,2.1s | | | | | | |
| **MASC** | **Masc** | **2.67** | **260** | *e*P | **Pn** | **08 00 45.4** | **+0.2** |
| MASC | | | | *e*S | **Sn** | **08 01 18.6** | **+0.9** |
| MASC | | | | IAML | | 08 01 19.0 | |
| | comp=E,3.1nm,0.1s | | | | | | |
| MASC | | | | IAML | | 08 01 20.4 | |
| | comp=N,3.7nm,0.1s | | | | | | |
| **MOAC** | **Moa** | **3.31** | **270** | *e*P | **Pn** | **08 00 53.8** | **-0.1** |
| MOAC | | | | IAML | | 08 01 33.8 | |
| | comp=E,2.5nm,0.1s | | | | | | |
| MOAC | | | | *e*S | **Sn** | **08 01 34.1** | **+0.8** |
| MOAC | | | | IAML | | 08 01 34.4 | |
| | comp=N,2.0nm,0.1s | | | | | | |
| **MOAC** | **Moa** | **3.31** | **270** | *e*P | **Pn** | **08 00 53.5** | **-0.4** |
| MOAC | | | | *e*S | **Sn** | **08 01 32.5** | **-0.8** |
| MOAC | | | | IAML | | 08 01 33.8 | |
| | comp=E,2.5nm,0.1s | | | | | | |
| MOAC | | | | IAML | | 08 01 34.4 | |
| | comp=N,2.0nm,0.1s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **3.54** | **259** | *e*P | **Pn** | **08 00 57.4** | **+0.4** |
| GTBY | | | | *e*S | **Sn** | **08 01 38.6** | **-0.3** |
| **RCC** | **Rio Carpintero** | **4.06** | **261** | *e*P | **Pn** | **08 01 04.2** | **-0.1** |
| RCC | | | | *e*S | **Sn** | **08 01 51.7** | **-0.2** |
| RCC | | | | IAML | | 08 01 53.1 | |
| | comp=N,1.6nm,0.2s | | | | | | |
| RCC | | | | IAML | | 08 01 55.1 | |
| | comp=E,1.7nm,0.2s | | | | | | |
| **RCC** | **Rio Carpintero** | **4.06** | **261** | *e*P | **Pn** | **08 01 04.4** | **+0.1** |
| RCC | | | | ⇓*e*S | **Sn** | **08 01 48.6** | **-3.3** |
| **CCCC** | **Cccc** | **5.95** | **276** | *e*P | Pn | 08 01 23.8 | -6.4 |
| CCCC | | | | *e*S | Sn | 08 02 27.0 | -11 |
| CCCC | | | | IAML | | 08 02 30.4 | |
| | comp=N,0.5nm,0.2s | | | | | | |
| CCCC | | | | IAML | | 08 02 31.5 | |
| | comp=E,0.5nm,0.2s | | | | | | |

*IDC **10** 08:02:50.7±1.5, 25°69N×109°92W, h0km, mb1 3.5/4, mb1mx3.3/49, mbtmp3.1/4, ML3.2/4, Error ellipse: s-maj=27.1km s-min=11.3km az=112.0*
*MEX **10** 08:02:52.8±0.4, 25°96N×110°42W, h15km, MD3.9*
**ISC 10 08:02:52.1±1.4, 25°84N±0°08×110°23W±0°09, h19km, n9, σ0s85/12, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **TSIG** | **Topolobambo** | **1.10** | **103** | *i* P | **Pb** | **08 03 12.1** | **-0.3** |
| TSIG | | | | *i* S | **Sg** | **08 03 28.0** | **+0.2** |
| **LPIG** | **La Paz** | **1.74** | **182** | Pg | **Pn** | **08 03 21.7** | **+0.4** |
| | 3.5nm,0.3s,baz=13,slow=5.2,SNR=5.6 | | | | | | |
| LPIG | | | | | Lg Lg | 08 03 40.4 | |
| | 16nm,0.3s,baz=331,slow=6.5,SNR=7.2 | | | | | | |
| **LPIG** | **La Paz** | **1.74** | **182** | *e*P | **Pn** | **08 03 21.6** | **+0.4** |
| **CSIG** | **Choix** | **1.93** | **59** | *e*P | **Pn** | **08 03 23.2** | **-0.8** |
| CSIG | | | | *e*S | **Sn** | **08 03 47.9** | **+0.1** |
| **HPIG** | | **4.23** | **74** | *e*P | **Pn** | **08 03 55.9** | **+0.1** |
| **TXAR** | **Lajitas Array** | **6.78** | **58** | Pn | **Pn** | **08 04 29.8** | **-0.9** |
| | 0.1nm,0.3s,baz=234,slow=13,SNR=12 | | | | | | |
| TXAR | | | | | Sn | **08 05 46.8** | **-0.6** |
| | 0.3nm,0.3s,baz=305,slow=22,SNR=7.0 | | | | | | |
| TXAR | | | | | Lg | 08 06 19.1 | |
| | 0.2nm,0.3s,baz=247,slow=27,SNR=1.5 | | | | | | |
| **ANMO** | **Albuquerque** | **9.64** | **19** | Pn | **Pn** | **08 05 10.6** | **+0.6** |
| | 0.0nm,0.3s,baz=194,slow=12,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **14.28** | **333** | Pn | **P** | **08 06 20.4** | **-0.3** |
| | 0.0nm,0.3s,baz=141,slow=10,SNR=5.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **16.89** | **2** | P | **P** | **08 06 51.6** | **+1.9** |
| | 0.1nm,0.3s,baz=186,slow=7.2,SNR=3.8 | | | | | | |

*IDC **10** 08:06:58.8±2.7, 54°36N×87°10E, h0km, mb1 3.0/2, mb1mx2.9/44, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=22.7km s-min=16.3km az=61.0*
**NNC 10 08:06:57.8±0.9, 54°75N×86°74E, h0km, mb3.1, mpv2.9, 7C-2D, Error ellipse: s-maj=20.4km s-min=6.0km az=149.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.38** | **235** | *i* | | 08 14 30.0 | |
| | baz=73,slow=341,SNR=4.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.38** | **235** | ⇑P | Pg | 08 07 23.3 | -1.0 |
| | 0.3nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | Sb | 08 07 42.5 | -0.2 |
| | 7.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.38** | **235** | Pg | Pg | 08 07 23.4 | -0.9 |
| | 1.8nm,0.3s,baz=71,slow=17,SNR=30 | | | | | | |
| ZALV | | | | | Lg Lg | 08 07 43.1 | |
| | 2.6nm,0.3s,baz=75,slow=30,SNR=11 | | | | | | |
| **KURK** | **Kurchatov** | **6.38** | **234** | ⇑Pn | Pn | 08 08 33.5 | +0.6 |
| | 5.8nm,1.1s | | | | | | |
| KURK | | | | ⇓Sn | Sn | 08 09 47.9 | +1.6 |
| | 1.2nm,0.6s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 10 20.6 | |
| | 9.6nm,1.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.48** | **234** | Pn | Pn | 08 08 35.6 | +1.3 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=14 | | | | | | |
| KURBB | | | | | Sn | 08 09 47.9 | -1.0 |
| | 0.0nm,0.3s,baz=73,slow=33,SNR=2.3 | | | | | | |
| KURBB | | | | | Lg | 08 10 23.3 | |
| | 0.1nm,0.3s,baz=53,slow=32,SNR=4.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.48** | **234** | ⇓Pn | Pn | 08 08 35.0 | +0.7 |
| | 3.5nm,0.7s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 08 09 49.7 | +0.8 |
| | 5.4nm,0.9s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 10 23.5 | |
| | 8.8nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **8.45** | **201** | Pn | Pn | 08 09 01.3 | -0.1 |
| | 0.1nm,0.5s,baz=24,slow=13,SNR=11 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 11 27.4 | |
| | 2.0nm,0.9s,baz=22,slow=28,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.45** | **201** | Pn | Pn | 08 08 59.5 | -1.9 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=5.9 | | | | | | |
| MKAR | | | | | Sn | 08 10 32.6 | -4.8 |
| | 0.1nm,0.3s,baz=24,slow=28,SNR=3.0 | | | | | | |
| MKAR | | | | | Lg | 08 11 18.6 | |
| | 0.1nm,0.3s,baz=26,slow=30,SNR=5.4 | | | | | | |

**IDC 10 08:10:40.6±4.5, 17°66S×178°21W, h621km±22km, mb3.3/3, mb1 3.4/4, mb1mx2.9/29, mbtmp4.2/4, Error ellipse: s-maj=112.9km s-min=72.7km az=146.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.56** | **268** | P | P | 08 12 04.8 | -0.1 |
| | 2.7nm,0.3s,baz=131,slow=2.6,SNR=22 | | | | | | |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | P | 08 17 15.2 | +0.1 |
| | 0.9nm,0.7s,baz=95,slow=9.9,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.86** | **259** | P | P | 08 18 01.6 | -0.2 |
| | 1.4nm,0.4s,baz=95,slow=7.0,SNR=36 | | | | | | |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | P | 08 18 03.2 | 0.0 |
| | 3.6nm,0.4s,baz=90,slow=7.8,SNR=74 | | | | | | |
| ASAR | | | | PcP | PcP | 08 19 30.1 | -0.2 |
| | 0.5nm,0.5s,baz=101,slow=4.2,SNR=5.1 | | | | | | |

*NNC **10** 08:23:30.1±2.5, 53°68N×88°11E, h0km, mb3.2, mpv2.9, Error ellipse: s-maj=29.2km s-min=12.9km az=32.0, Suspected Mining explosion.*
*IDC **10** 08:23:31.7±3.0, 53°61N×87°84E, h0km, mb1 3.0/2, mb1mx2.9/45, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=24.6km s-min=15.5km az=59.0*
**ISC 10 08:23:31.5±3.4, 53.7°N±0.1×87.9°E±0.2, h0km, n7, σ1s10/9, 5C-1D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.83** | **281** | *i* | | 08 34 20.0 | |
| | baz=96,slow=346,SNR=3.6 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.83** | **281** | ⇓P | **Pn** | **08 24 04.4** | **+0.3** |
| | 0.5nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑S | **Sg** | **08 24 31.1** | **+0.9** |
| | 1.5nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.83** | **281** | Pg | **Pb** | **08 24 05.0** | **-0.8** |
| | 1.6nm,0.3s,baz=101,slow=15,SNR=16 | | | | | | |
| ZALV | | | | | Lg Lg | 08 24 29.4 | |
| | 2.9nm,0.3s,baz=110,slow=25,SNR=4.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **246** | Pn | **Pn** | **08 25 08.4** | **+0.2** |
| | 0.1nm,0.3s,baz=60,slow=13,SNR=7.3 | | | | | | |
| KURBB | | | | | Sn | **08 26 22.7** | **-0.1** |
| | 0.0nm,0.3s,baz=37,slow=48,SNR=1.6 | | | | | | |
| KURBB | | | | | Lg | 08 26 55.6 | |
| | 0.0nm,0.3s,baz=43,slow=53,SNR=1.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **246** | ⇑Pn | **Pn** | **08 25 09.2** | **+1.0** |
| | 1.7nm,0.4s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 27 00.1 | |
| | 5.1nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **7.73** | **210** | ⇑Pn | **Pn** | **08 25 26.1** | **+0.8** |
| | 0.9nm,0.8s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 27 35.7 | |
| | 1.2nm,0.7s,baz=35,slow=31,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.73** | **210** | Pn | **Pn** | **08 25 26.4** | **+1.1** |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=6.7 | | | | | | |
| MKAR | | | | | Sn | **08 26 51.9** | **-1.6** |
| | 0.0nm,0.3s,baz=26,slow=28,SNR=4.9 | | | | | | |
| MKAR | | | | | Lg | 08 27 32.9 | |
| | 0.1nm,0.3s,baz=28,slow=28,SNR=7.3 | | | | | | |

*IDC **10** 08:35:31.4±0.6, 16°49S×66°90E, h0km, mb4.4/30, mb1 4.5/30, mb1mx4.4/51, mbtmp4.4/30, MS4.1/52, Ms1 4.1/52, ms1mx3.9/78, Error ellipse: s-maj=17.9km s-min=13.9km az=10.0*
*BJI **10** 08:35:33.5±0.0, 16°40S×67°00E, h10km, mb4.6/41, mB5.0/20, Ms4.7/8, Ms7 4.4/8*
*NEIC **10** 08:35:34.4±1.8, 16°4S±0°1×66°9E±0°1, h10km±1km, mb4.8/44, Error ellipse: s-maj=20.4km s-min=17.1km az=206.0*
*GCMT **10** 08:35:36.4±0.3, 16°37S±0°02×66°81E±0°02, h17km±1km, MW4.9/96, Moment Tensor Solution. s19,c21; s96,c132; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~0.26±.12; Mθθ~2.27±.11; Mϕϕ 2.52±.11; Mrθ~0.74±.29; Mθϕ 1.32±.10; Mϕr~0.62±.27; Best double couple: M◎ 2.89700×10^16 NP1: ϕs 149.00000°, δ 71.00000°, λ 180.00000°. NP2: ϕs 239.00000°, δ 90.00000°, λ 19.00000°. Principal axes: T 3.0490, Plg 14.0000°, Azm 106.0000°; N -0.3100, Plg 71.0000°, Azm 240.0000°; P -2.7440, Plg 13.0000°, Azm 13.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 10 08:35:34.1±0.4, 16°48S±0°08×66°83E±0°07, h13km, n170, σ1s22/132, mb4.8/69, MS4.1/55, 10C-2D, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **H08S1** | **Diego Carcia H** | **10.37** | **33** | T | T | 08 48 34.3 | |
| | baz=212,slow=75 | | | | | | |
| **H08S2** | **Diego Garcia H** | **10.38** | **33** | T | T | 08 48 38.9 | |
| | baz=212,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **10.39** | **33** | T | T | 08 48 36.4 | |
| | baz=212,slow=75 | | | | | | |
| **MSEY** | **Mahe Island** | **16.17** | **315** | Pn | **Pn** | **08 39 21.7** | **+0.3** |
| **PALK** | **Pallekele** | **27.30** | **31** | LR | LR | 08 50 08.9 | |
| | comp=Z,309nm,18.5s,baz=315,slow=32 | | | | | | |
| **SKHT** | **Srikalahasti** | **32.61** | **24** | *e*P | **P** | **08 42 05.4** | **-0.3** |
| **URV** | **Uravakonda** | **32.88** | **19** | *e*P | **P** | **08 42 08.0** | **-0.2** |

**KMBO Kilima Mbogo 32.88 295** P **P** **08 42 08.4 -0.1**
1.0nm,0.5s,baz=66,slow=12,SNR=2.4
KMBO LR LR 08 52 27.1
comp=Z,407nm,21.7s,baz=94,slow=31
**RCLA Racherla 33.91 21** *eP* **P** **08 42 17.4 +0.3**
**SRLM Srisailam 34.49 21** *eP* **P** **08 42 23.4 +1.3**
**NJS Nagarjunasagar 35.05 21** *eP* **P** **08 42 27.5 +0.6**
**HYBB Hyderabad (bro 35.61 19** *eP* **P** **08 42 33.6 +1.8**
**CUPL Choutuppal 35.61 20** *eP* **P** **08 42 32.4 +0.6**
**KLRI Killari 35.65 10** *eP* **P** **08 42 32.0 -0.2**
**MYLAV Mylavaram 35.71 23** *eP* **P** **08 42 34.6 +2.0**
**MATP Matopo 36.51 258** LR LR 08 55 51.4
comp=Z,123nm,19.3s,baz=94,slow=33
**ATD Arta Tunnel 36.56 318** LR LR 08 56 15.7
comp=Z,262nm,18.1s,baz=159,slow=34
**PPI Padang Panjang 36.72 68** P **P** **08 42 43.2 +1.9**
**SRSP Sriramsagar 36.96 18** *eP* **P** **08 42 44.8 +1.5**
**PSI Prapat 37.05 62** LR LR 08 54 30.5
comp=Z,172nm,20.8s,baz=210,slow=31
**LSZ Lusaka 37.15 266** P **P** **08 42 45.2 +0.1**
1.2nm,0.3s,baz=78,slow=13,SNR=3.0
LSZ LR LR 08 56 05.7
comp=Z,424nm,20.8s,baz=120,slow=33
**LSZ Lusaka 37.15 266** IAmb IAmb 08 42 59.2
comp=Z,14nm,1.4s
**RPR Rampur 37.20 20** *eP* **P** **08 42 45.1 -0.2**
**MBAR Mbarara 38.90 290** LR LR 08 56 32.2
comp=Z,594nm,19.6s,baz=102,slow=32
**LBTB Lobatse 39.36 251** P **P** **08 43 03.2 -0.5**
comp=Z,7.1nm,1.0s,baz=98,slow=10,SNR=6.0
LBTB LR LR 08 57 09.7
comp=Z,309nm,18.1s,baz=90,slow=33
**KULM Kulim 39.84 60** P **P** **08 43 07.7 +0.1**
KULM IAmb IAmb 08 43 08.7
comp=Z,17nm,1.0s
**BOSA Boshof 40.06 245** P **P** **08 43 09.1 -0.4**
comp=Z,4.1nm,0.9s,baz=220,slow=20,SNR=1.7
BOSA LR LR 08 56 01.2
comp=Z,138nm,19.5s,baz=96,slow=31
**WSAR Wadi Sarin 40.28 348** P **P** **08 43 10.5 -0.6**
comp=Z,12nm,0.9s,baz=195,slow=13,SNR=4.0
WSAR LR LR 08 55 37.3
comp=Z,177nm,19.6s,baz=180,slow=30
**LEM Lembang 41.01 81** LR LR 08 56 49.3
comp=Z,283nm,20.9s,baz=178,slow=31
**KPJI Karang Pucung 42.11 83** P **P** **08 43 27.2 +0.8**
comp=Z,23nm,1.5s
**PCJI Pacitan 44.02 85** P **P** **08 43 42.5 +0.6**
comp=Z,55nm,1.5s
**SUR Sutherland 44.44 240** LR LR 08 58 03.4
comp=Z,106nm,19.7s,baz=86,slow=30
**RAYN Ar Rayn 44.89 332** P **P** **08 43 48.4 -0.3**
**PBKI Pangkalan Bun 46.15 78** P **P** **08 44 00.0 +1.1**
comp=Z,5µmcomp=Z,100nm,0.6s
**TSUM Tsumeb 46.83 259** LR LR 09 01 53.3
comp=Z,189nm,20.4s,baz=146,slow=34
**KOLN Koldanda 46.89 21** *eP* **P** **08 44 06.5 +1.9**
comp=Z,22nm,0.8s
**CMAR Chiang Mai Arr 46.95 44** P **P** **08 44 04.6 -0.4**
comp=Z,1.3nm,0.3s,baz=236,slow=8.1,SNR=15
CMAR LR LR 09 01 54.8
comp=Z,164nm,19.2s,baz=225,slow=34
**PYUN Piuthan 47.00 20** *eP* **P** **08 44 07.3 +1.8**
comp=Z,65nm,1.1s
**ABJI Asem Bagus 47.05 85** P **P** **08 44 06.8 +0.9**
comp=Z,50nm,0.9s
**CHTO Chiang Mai 47.21 43** P **P** **08 44 07.5 +0.5**
CHTO IAmb IAmb 08 44 08.3
comp=Z,6.9nm,1.2s
**RAMN Ramite 47.25 24** *eP* **P** **08 44 08.6 +1.1**
comp=Z,20nm,0.6s
**DMN Daman 47.27 22** *eP* **P** **08 44 09.5 +1.8**
comp=Z,28nm,0.8s
**PKI Pulchoki 47.35 23** *eP* **P** **08 44 09.8 +1.4**
comp=Z,17nm,0.8s
**PKIN Phulchoki 47.35 23** *eP* **P** **08 44 09.8 +1.5**
comp=Z,6.2nm,0.5s
**GKN Gorkha 47.47 22** *eP* **P** **08 44 10.7 +1.7**
**DANN Dangsing 47.48 20** *eP* **P** **08 44 10.9 +1.6**
comp=Z,60nm,1.1s
**KKN Kakani 47.50 22** *eP* **P** **08 44 11.2 +1.8**
**JIRN Jiri 47.72 23** *eP* **P** **08 44 12.8 +1.5**
comp=Z,16nm,0.6s
**GUN Gumba 47.83 23** *eP* **P** **08 44 13.0 +0.9**
comp=Z,21nm,0.6s
**SHL Shillong 48.39 31** P **P** **08 44 15.9 -0.4**
**SBUM Sibu 48.61 71** P **P** **08 44 18.2 +0.2**
SBUM IAmb IAmb 08 44 20.1
comp=Z,11nm,1.0s
**UBPT Khong Chiam 49.51 52** P **P** **08 44 24.4 -0.4**
**MTKI Muara Teweh, K 49.79 77** P **P** **08 44 27.9 +0.9**
**MBWA Marble Bar 50.11 104** P **P** **08 44 29.1 -0.3**
**PSA00 Pilbara Seismi 50.19 105** P **P** **08 44 28.5 -1.5**
PSA00 IAmb IAmb 08 44 31.6
comp=Z,14nm,0.9s
**PSA00 Pilbara Seismi 50.19 105** P **P** **08 44 29.0 -1.0**
PSA00 IAmb IAmb 08 44 31.6
comp=Z,8.2nm,1.0s
**MAW Mawson 51.16 182** LR LR 09 00 51.7
comp=Z,155nm,22.0s,baz=52,slow=30
**LSA Lhasa 51.56 27** P **P** **08 44 41.9 +1.3**
LSA pmax pmax
comp=Z,2.0nm,0.3s
**KAPI Kappang 53.08 84** LR LR 09 03 48.8
comp=Z,176nm,21.9s,baz=263,slow=32
**KKM Kota Kinabalu 53.73 69** P **P** **08 44 56.1 -0.5**
**PZH PanZhiHua 54.56 39** P **P** **08 45 05.7 +3.3**
PZH pmax pmax
comp=Z,8.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,5.2s
**GEYT Alibeck 54.73 352** LR LR 09 05 46.7
comp=Z,135nm,21.9s,baz=160,slow=33
**SYO Syowa Base 55.23 192** ‖ *iP* **P** **08 45 08.0 +1.5**
**EIL Elat 55.23 326** LR LR 09 05 05.9
comp=Z,164nm,21.7s,baz=96,slow=32
**GAR Garm 55.28 3** P **P** **08 45 07.1 -0.3**
GAR IAmb IAmb 08 45 08.3
comp=Z,15nm,1.0s
**BATI Baumata 55.51 91** LR LR 09 04 23.4
comp=Z,136nm,21.4s,baz=264,slow=31
**FITZ Fitzroy Crossi 55.97 101** LR LR 09 05 15.7
comp=Z,383nm,21.1s,baz=272,slow=32
**SOEI Soe 56.19 91** P **P** **08 45 14.3 -0.1**
**KSH Kashi 56.35 8** P **P** **08 45 13.1 -2.0**
KSH pP pP 08 45 18.2 -0.2
KSH sP sP 08 45 19.7 +0.1
KSH pmax pmax
comp=Z,19nm,1.3s
**MMAI Mount Meron Ar 57.66 329** LR LR 09 07 10.2
comp=Z,92nm,21.3s,baz=344,slow=33
**GOMU GeErMu 58.70 26** P **P** **08 45 33.0 +1.0**
GOMU sP pwP 08 45 38.9 -0.2
GOMU PcP **PcP** **08 46 23.9 +2.0**
GOMU pmax pmax
comp=Z,4.0nm,1.3s
**AAK Ala-Archa 59.24 7** P **P** **08 45 35.1 -0.3**
comp=Z,6.2nm,1.1s,baz=175,slow=8.7,SNR=7.2
AAK LR LR 09 09 49.3
comp=Z,168nm,21.0s,baz=204,slow=35
**AAK Ala-Archa 59.24 7** IAmb IAmb 08 45 37.9
comp=Z,10nm,1.1s
**KKAR Karatay Array 59.38 3** P **P** **08 45 37.2 +1.0**
**GNI Garni 59.97 341** P **P** **08 45 41.5 +1.0**
comp=Z,12nm,0.8s,baz=286,slow=5.6,SNR=7.2
GNI LR LR 09 09 44.7
comp=Z,66nm,19.7s,baz=175,slow=34
**GNI Garni 59.97 341** IAmb IAmb 08 45 43.9
comp=Z,20nm,0.9s
**ENH Enshi 62.03 42** P **P** **08 45 52.8 -1.8**
**DAV Davao City (W) 62.65 73** LR LR 09 11 19.9
comp=Z,88nm,20.8s,baz=1.5,slow=34
**LZH Lanzhou 62.92 33** *eP* **P** **08 46 02.7 +2.2**
LZH sP pwP 08 46 11.1 +3.4
LZH pmax pmax
comp=Z,19nm,1.3s
LZH LR LR
comp=Z,180nm,16.3s
LZH LR LR
comp=Z,200nm,15.7s
LZH LR LR
comp=Z,260nm,18.5s
**ASAR Alice Springs 62.92 108** P **P** **08 46 00.5 -0.3**
comp=Z,4.1nm,0.7s,baz=273,slow=5.9,SNR=52
ASAR LR LR 09 10 08.0
comp=Z,630nm,19.6s,baz=271,slow=33
**ASAR Alice Springs 62.92 108** P **P** **08 46 00.3 -0.5**
**AS31 Alice Springs 62.93 108** P **P** **08 46 00.3 -0.5**
AS31 IAmb IAmb 08 46 09.4
comp=Z,2.1nm,0.7s
**WMQ Urumqi 62.97 17** *eP* **P** **08 46 02.6 +2.0**
WMQ pP pwP 08 46 07.7 0.0
WMQ sP sP 08 46 13.8 +8.8
WMQ pmax pmax
comp=Z,22nm,1.5s
WMQ pmax pmax
comp=Z,170nm,3.7s
WMQ LR LR
comp=Z,430nm,26.5s
WMQ LR LR
comp=Z,550nm,29.0s
WMQ LR LR
comp=Z,97nm,22.1s
**GTA Gaotai 63.56 28** ⇓P **P** **08 46 04.9 +0.2**
GTA pP pwP 08 46 11.1 -0.7
GTA sP sP 08 46 15.2 +6.0
GTA pmax pmax
comp=Z,8.0nm,1.3s
GTA pmax pmax
comp=Z,93nm,4.4s
GTA LR LR
comp=Z,98nm,16.4s
GTA LR LR
comp=Z,170nm,17.1s
GTA LR LR
comp=Z,110nm,17.1s
**WRA Warramunga Arr 63.84 104** P **P** **08 46 07.1 +0.2**
comp=Z,8.8nm,0.7s,baz=269,slow=5.8,SNR=58
WRA LR LR 09 11 25.4
comp=Z,151nm,19.7s,baz=243,slow=34
**WRA Warramunga Arr 63.84 104** P **P** **08 46 06.9 0.0**
**WB2 Warramunga Arr 63.86 104** P **P** **08 46 07.3 +0.3**
**WRAB Tennant Creek 63.86 104** P **P** **08 46 06.5 -0.4**
**BR131 Keskin Array S 63.91 332** P **P** **08 46 08.2 +1.2**
BR131 IAmb IAmb 08 46 08.9
comp=Z,14nm,1.2s
**BRTR Keskin Array B 63.91 332** P **P** **08 46 07.5 +0.5**
comp=Z,1.7nm,0.6s,baz=72,slow=12,SNR=6.1
BRTR LR LR 09 12 44.1
comp=Z,122nm,19.4s,baz=169,slow=35
**BRTR Keskin Array B 63.91 332** P **P** **08 46 07.2 +0.2**
**WB0 Warramunga Arr 63.92 104** P **P** **08 46 07.4 0.0**
**WR0 Warramunga Arr 64.03 104** P **P** **08 46 07.9 -0.2**
**XAN Xi'an 64.27 38** P **P** **08 46 08.6 -0.7**
XAN pP sP 08 46 14.9 +1.1
XAN pmax pmax
comp=Z,7.0nm,1.0s
**MAKZ Makanchi 64.45 11** P **P** **08 46 10.0 -0.2**
MAKZ IAmb IAmb 08 46 11.3
comp=Z,12nm,1.4s
**MK31 Makanchi Array 64.50 12** P **P** **08 46 08.8 -1.7**
MK31 IAmb IAmb 08 46 12.4
comp=Z,6.5nm,1.1s
**MKAR Makanchi Array 64.50 12** P **P** **08 46 09.8 -0.7**
comp=Z,6.9nm,1.1s,baz=191,slow=5.6,SNR=24
MKAR LR LR 09 14 06.0
comp=Z,97nm,18.4s,baz=206,slow=36
**ABKAR Akbulak array 65.72 355** P **P** **08 46 17.7 -0.7**
**ABKAR Akbulak array 65.72 355** IAmb IAmb 08 46 20.2
comp=Z,10nm,0.9s
**AKTO Aktyubinsk 67.07 354** P **P** **08 46 25.8 -1.2**
comp=Z,6.5nm,0.9s,baz=171,slow=4.0,SNR=11
AKTO LR LR 09 14 41.3
comp=Z,103nm,19.5s,baz=167,slow=35
**KURBB Kurchatov Arra 67.60 8** LR LR 09 13 30.6
comp=Z,209nm,20.7s,baz=168,slow=34
**KURK Kurchatov 67.70 8** P **P** **08 46 29.5 -1.4**
KURK IAmb IAmb 08 46 35.2
comp=Z,8.7nm,0.8s
**SNAA Sanae 68.11 199** P **P** **08 46 36.1 +2.7**
**STKA Stephens Creek 68.74 118** P **P** **08 46 36.0 -2.0**
comp=Z,2.5nm,0.7s,baz=268,slow=5.9,SNR=7.3
STKA LR LR 09 12 10.3
comp=Z,225nm,21.7s,baz=214,slow=32
**NJ2 Nanjing 69.36 46** *eP* **P** **08 46 43.5 +1.7**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**VNA2 Neumayer--Watz 69.39 200** P **P** **08 46 42.4 +1.0**
baz=67,slow=6.1
**HNS HongShan 70.00 39** ⇑P **P** **08 46 45.9 +0.3**
HNS pmax pmax
comp=Z,6.0nm,1.1s
**VNA3 Neumayer Olymp 70.17 200** P **P** **08 46 47.2 +0.9**
**HHC Hu-ho-hao-te 70.53 34** *eP* **P** **08 46 49.9 +1.0**
HHC pmax pmax
comp=Z,13nm,1.2s
HHC pmax pmax
comp=Z,210nm,5.2s
**BELG Belogornoye 70.58 348** P **P** **08 46 48.9 +0.1**
comp=Z,26nm,1.0s,baz=184,slow=2.5,SNR=11
BELG LR LR 09 17 31.1
comp=Z,85nm,19.8s,baz=150,slow=36
**TORD Torodi Ar. Bea 70.77 291** P **P** **08 46 51.5 +0.7**
comp=Z,0.6nm,0.7s,baz=315,slow=2.2,SNR=3.9
**TORD Torodi Ar. Bea 70.77 291** P **P** **08 46 49.9 -0.9**
**ZAA0 Zalesovo Array 71.82 11** P **P** **08 46 55.3 -1.0**
ZAA0 IAmb IAmb 08 46 58.0
comp=Z,16nm,1.3s
**ZALV Zalesovo Beam 71.82 11** P **P** **08 46 55.5 -0.8**
comp=Z,5.6nm,0.7s,baz=206,slow=6.1,SNR=17
ZALV LR LR 09 18 32.9
comp=Z,82nm,18.0s,baz=192,slow=36
**ZALV Zalesovo Beam 71.82 11** P **P** **08 46 55.7 -0.6**
**VRI Vrincioaia 71.87 332** ⇑P **P** **08 46 59.1 +2.2**
**PLOR Plostina 71.89 332** ⇑P **P** **08 46 59.1 +2.1**
**MLR Muntele Rosu 71.95 331** ⇑P P 08 47 09.9 +12
**MLR Muntele Rosu 71.95 331** P **P** **08 46 56.7 -0.8**
comp=Z,2.2nm,0.6s,baz=233,slow=15,SNR=2.3
**MLR Muntele Rosu 71.95 331** IAmb IAmb 08 47 20.9
comp=Z,15nm,1.4s
**VOIR 72.33 331** ⇑P **P** **08 47 00.1 +0.5**
**ARR Arges 72.47 330** ⇑P **P** **08 47 01.6 +1.1**
**ARU Arti 72.96 355** P **P** **08 47 02.5 -0.5**
comp=Z,1.9nm,0.2s,baz=167,slow=3.6,SNR=7.9
ARU LR LR 09 16 47.1
comp=Z,66nm,21.5s,baz=176,slow=34
**ARU Arti 72.96 355** P **P** **08 47 03.1 +0.1**
ARU IAmb IAmb 08 47 04.3
comp=Z,20nm,1.3s
**SONM Songino Array 73.14 27** P **P** **08 47 04.0 -0.5**
comp=Z,2.9nm,0.8s,baz=214,slow=6.1,SNR=24
SONM LR LR 09 18 00.6
comp=Z,164nm,20.1s,baz=190,slow=35
**SONM Songino Array 73.14 27** P **P** **08 47 03.8 -0.7**
SONM IAmb IAmb 08 47 13.5
comp=Z,4.0nm,0.8s
**GZR Gura Zlata 73.39 329** ⇑P **P** **08 47 07.1 +1.2**
**ULN Ulaanbaatar 73.45 27** P **P** **08 47 06.3 -0.1**
**QSPA South Pole Qui 73.61 180** LR LR 09 17 11.4
comp=Z,79nm,18.1s,baz=282,slow=34
**QSPA South Pole Qui 73.61 180** P **P** **08 47 07.8 +0.7**
**BURAR Bucovina Array 73.87 332** ⇑P **P** **08 47 11.1 +2.3**
**KIC Kosan Boka 74.31 282** *e*PKP2 **P** **08 47 11.6 -0.3**
comp=Z,11nm,0.9s
**DRGR 74.43 330** ⇑P **P** **08 47 13.8 +1.9**
**DBIC Dimbokro 74.52 282** P **P** **08 47 13.2 +0.1**
comp=Z,4.6nm,0.8s,baz=147,slow=7.1,SNR=3.2
DBIC LR LR 09 18 54.4
comp=Z,130nm,18.0s,baz=124,slow=35
**DBIC Dimbokro 74.52 282** IAmb IAmb 08 47 26.0
comp=Z,25nm,1.4s
**LIC Lamto 74.53 281** *e*PKP2 **P** **08 47 12.8 -0.4**
comp=Z,25nm,0.8s
**AKASG Malin Array Be 74.58 336** P **P** **08 47 11.7 -1.0**
comp=Z,4.0nm,0.7s,baz=136,slow=5.0,SNR=24
**AKBB Malin Array Si 74.58 336** P **P** **08 47 12.3 -0.3**
AKBB IAmb IAmb 08 47 14.5
comp=Z,6.4nm,0.7s
**TIC Toumodi 74.66 282** *e*PKP2 **P** **08 47 12.6 -1.4**
**CTA Charters Tower 74.83 107** LR LR 09 17 24.9
comp=Z,313nm,20.4s,baz=260,slow=34
**VNDA Vanda 75.12 167** LR LR 09 18 42.6
comp=Z,51nm,18.0s,baz=266,slow=34
**KEST Kesra 75.18 315** LR LR 09 19 46.2
comp=Z,142nm,18.9s,baz=237,slow=35
**KIRV Kirov 76.15 351** LR LR 09 19 54.1
comp=Z,104nm,19.2s,baz=147,slow=35
**CRVS Cervenica-Dubn 76.53 331** *eP* **P** **08 47 25.8 +1.9**
**VYHS Vyhne 77.49 330** *eP* **P** **08 47 31.1 +1.8**
**PMG Port Moresby 78.19 96** LR LR 09 20 41.1
comp=Z,128nm,19.7s,baz=209,slow=35
**KSRS Korea Array 78.56 45** P **P** **08 47 32.9 -2.6**
comp=Z,1.4nm,0.8s,baz=234,slow=5.1,SNR=5.0
KSRS LR LR 09 20 41.3
comp=Z,48nm,21.3s,baz=245,slow=34
**NACGM Naroch 78.81 338** *i* P **P** **08 47 38.1 +1.6**
**MORC Moravsky Berou 78.98 330** ⇑P **P** **08 47 39.2 +1.5**
**MORC Moravsky Berou 78.98 330** IAmb IAmb 08 47 40.1
comp=Z,4.4nm,0.8s
**KLMR Klimovskoe 80.12 347** *eP* **P** **08 47 41.5 -2.0**
KLMR AMP 08 47 45.7
comp=Z,29nm,1.3s
**GERES GERESS Array B 80.29 328** P **P** **08 47 43.4 -1.5**
comp=Z,0.9nm,0.8s,baz=106,slow=2.9,SNR=4.3
**MDT Midelt 83.96 307** LR LR 09 23 39.0
comp=Z,117nm,21.7s,baz=118,slow=34
**FINES FINESS Array B 84.14 342** P **P** **08 48 05.6 +1.0**
comp=Z,6.4nm,1.0s,baz=197,slow=5.8,SNR=4.4
FINES LR LR 09 26 45.6
comp=Z,59nm,18.5s,baz=58,slow=36
**USRK Ussuriysk Ar. 84.61 41** P **P** **08 48 05.9 -1.5**
comp=Z,1.7nm,0.6s,baz=321,slow=2.0,SNR=3.1
**MJAR Matsushiro Arr 85.44 50** P **P** **08 48 10.9 -0.8**
comp=Z,6.3nm,1.1s,baz=242,slow=5.6,SNR=6.0
**ESDC Sonseca Array 86.31 313** P **P** **08 48 15.0 -1.1**
comp=Z,0.7nm,0.6s,baz=91,slow=3.3,SNR=2.7
ESDC LR LR 09 25 09.9
comp=Z,52nm,21.9s,baz=138,slow=34
**KLR Kul'dur 86.92 36** P **P** **08 48 16.8 -2.0**
comp=Z,0.9nm,0.5s,baz=222,slow=3.9,SNR=6.6
**ARCES ARCESS Array B 90.60 347** P **P** **08 48 36.6 +0.9**
comp=Z,2.3nm,0.8s,baz=168,slow=4.6,SNR=4.7
ARCES LR LR 09 29 08.4
comp=Z,96nm,18.2s,baz=107,slow=36
**PMSA Palmer Station 90.82 199** LR LR 09 19 37.7
comp=Z,90nm,20.3s,baz=120,slow=29
**ASAJ Asahikawa 91.47 44** LR LR 09 29 39.2
comp=Z,29nm,19.2s,baz=146,slow=36
**YAK Yakutsk 92.42 25** LR LR 09 30 11.3
comp=Z,106nm,19.8s,baz=268,slow=36
**URZ Urewera 95.05 132** LR LR 09 25 14.1
comp=Z,84nm,18.8s,baz=234,slow=31
**TIXI Tiksi 97.17 16** LR LR 09 33 47.8
comp=Z,119nm,19.2s,baz=190,slow=36
**INK Inuvik 126.59 9** PKP **PKPdf** **08 54 35.0 -1.6**
comp=Z,2.3nm,1.0s,baz=344,slow=4.6,SNR=4.6
**ILAR Eielson Array 126.64 17** PKP **PKPdf** **08 54 35.5 -1.4**
comp=Z,1.2nm,0.9s,baz=290,slow=2.5,SNR=6.9
**YKA Yellowknife Ar 134.03 1** PKP **PKPdf** **08 54 49.7 -1.2**
comp=Z,0.8nm,0.8s,baz=351,slow=2.2,SNR=13
**PDAR Pinedale Array 153.62 354** PKPbc **PKPbc** **08 55 32.7 -0.5**
comp=Z,1.2nm,0.6s,baz=88,slow=2.9,SNR=12
PDAR PKPab **PKPab** **08 55 45.9 +0.3**
comp=Z,1.3nm,0.7s,baz=37,slow=0.8,SNR=6.4
**NVAR Mina Array Bea 157.67 11** PKPab **PKPab** **08 56 01.9 -1.1**
comp=Z,1.2nm,0.7s,baz=0.0,slow=4.9,SNR=6.7
**TXAR Lajitas Array 164.51 327** PKPab **PKPab** **08 56 31.6 -1.4**
comp=Z,0.9nm,1.0s,baz=101,slow=1.9,SNR=4.2

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*IDC **10** 08:41:57.1±1.0,41.°26N×127.°28W,h0km,mb4.1/13, mb1 4.1/18,mb1mx3.9/62,mbtmp4.0/18,ML3.2/5,MS3.7/18, Ms1 3.7/18,ms1mx3.3/89,Error ellipse: s-maj=25.6km s-min=10.2km az=18.0*
*NEIC **10** 08:41:57.6±1.9,41.°09N±0.°08×127.°3W±0.°1,h8km±5km, ML3.4/54,Error ellipse: s-maj=14.1km s-min=10.0km az=62.0*
*ANF **10** 08:41:59.9±0.2,41.°38N×127.°14W,h5km,ML3.5/13,Error ellipse: s-maj=4.6km s-min=1.9km az=39.0*
**ISC 10 08:41:58.4**±0.7,**41.°16N**±0.°09×**127.°33W**±0.°07,**h10**km, **n181**,σ1**§22**/164,**mb4.1**/13,**MS3.6**/12,**Off coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KRPM** | **Rodgers** | **2.49** | **89** | | **Pn** | | **08 42 37.4** | **-1.7** |
| KRPM | | | | | IAML | | 08 43 30.9 | |
| | comp=N,231nm,1.2s | | | | | | | |
| KRPM | | | | | IAML | | 08 43 46.4 | |
| | comp=E,224nm,1.6s | | | | | | | |
| **JCC** | **Jacoby Creek,** | **2.52** | **97** | | **Pn** | | **08 42 37.2** | **-2.1** |
| JCC | | | | | IAML | | 08 43 09.7 | |
| | comp=E,213nm,1.3s | | | | | | | |
| **KMPM** | **Mount Pierce** | **2.54** | **106** | | **Pn** | | **08 42 37.5** | **-2.3** |
| **KSXB** | **Camp Six Broad** | **2.68** | **74** | | **Pn** | | **08 42 40.1** | **-1.5** |
| **KHMM** | **Horse Mountain** | **2.73** | **95** | | **Pn** | | **08 42 40.9** | **-1.6** |
| KHMM | | | | | IAML | | 08 43 46.2 | |
| | comp=N,102nm,1.4s | | | | | | | |
| KHMM | | | | | IAML | | 08 44 02.4 | |
| | comp=E,134nm,1.7s | | | | | | | |
| **KEBM** | **Edson Butte** | **2.81** | **52** | | **Pn** | | **08 42 42.3** | **-1.2** |
| KEBM | | | | | IAML | | 08 43 18.7 | |
| | comp=N,149nm,1.7s | | | | | | | |
| KEBM | | | | | IAML | | 08 43 35.5 | |
| | comp=E,137nm,1.8s | | | | | | | |
| **KMRM** | **Mail Ridge** | **2.91** | **108** | | **Pn** | | **08 42 43.3** | **-1.5** |
| **L02E** | **Cave Junction** | **2.96** | **69** | | **Pn** | | **08 42 43.9** | **-1.6** |
| L02E | | | | | IAML | | 08 43 04.6 | |
| | comp=E,77nm,1.5s | | | | | | | |
| **L02E** | **Cave Junction** | **2.96** | **69** | P | **Pn** | | **08 42 44.0** | **-1.5** |
| | baz=255,SNR=26 | | | | | | | |
| **K02D** | **Willamette Mer** | **3.13** | **59** | P | **Pn** | | **08 42 45.9** | **-2.0** |
| | baz=244,SNR=11 | | | | | | | |
| **KCPM** | **Cahto Peak** | **3.21** | **116** | | **Pn** | | **08 42 47.0** | **-2.1** |
| **J01E** | **Myrtle Point** | **3.22** | **50** | | **Pn** | | **08 42 47.3** | **-1.7** |
| J01E | | | | | IAML | | 08 44 10.0 | |
| | comp=E,60nm,1.9s | | | | | | | |
| **J01E** | **Myrtle Point** | **3.22** | **50** | P | **Pn** | | **08 42 47.0** | **-2.0** |
| | baz=234 | | | | | | | |
| **M02C** | **Callahan** | **3.38** | **85** | | **Pn** | | **08 42 50.1** | **-1.1** |
| M02C | | | | | IAML | | 08 43 35.7 | |
| | comp=E,54nm,1.4s | | | | | | | |
| **M02C** | **Callahan** | **3.38** | **85** | P | **Pn** | | **08 42 50.4** | **-0.9** |
| | baz=271,SNR=32 | | | | | | | |
| **N02D** | **Trinity Center** | **3.50** | **92** | | **Pn** | | **08 42 51.7** | **-1.2** |
| N02D | | | | | IAML | | 08 43 38.3 | |
| | comp=E,60nm,1.1s | | | | | | | |
| N02D | | | | | IAML | | 08 43 40.3 | |
| | comp=N,60nm,0.9s | | | | | | | |
| **N02D** | **Trinity Center** | **3.50** | **92** | P | **Pn** | | **08 42 52.8** | **-0.1** |
| | baz=278,SNR=24 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **3.52** | **79** | Pn | **Pn** | | **08 42 53.2** | **0.0** |
| | comp=N,13nm,0.3s,baz=274,slow=11,SNR=123 | | | | | | | |
| YBH | | | | | Sn | **Sn** | 08 43 33.3 | **-1.6** |
| | baz=280,slow=17,SNR=1.0 | | | | | | | |
| YBH | | | | | LR | LR | 08 43 48.2 | |
| | comp=N,370nm,18.1s,baz=258,slow=32 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **3.52** | **79** | | **Pn** | | **08 42 53.2** | **0.0** |
| **YBH** | **Yreka Blue Hor** | **3.52** | **79** | | IAML | | 08 43 15.8 | |
| | comp=E,55nm,1.3s | | | | | | | |
| **HUMO** | **Hull Mountain** | **3.57** | **65** | Pn | **Pn** | | **08 42 52.3** | **-1.6** |
| **WDC** | **Whiskeytown Da** | **3.67** | **98** | Pn | **Pn** | | **08 42 54.6** | **-0.7** |
| WDC | | | | | IAML | | 08 43 47.8 | |
| | comp=N,44nm,1.1s | | | | | | | |
| **I03D** | **Drain, OR** | **3.88** | **48** | P | **Pn** | | **08 42 55.9** | **-2.3** |
| | baz=232 | | | | | | | |
| **I02E** | **Swisshome, OR** | **3.91** | **40** | Pn | **Pn** | | **08 42 58.1** | **-0.3** |
| I02E | | | | | IAML | | 08 44 26.8 | |
| | comp=E,51nm,2.9s | | | | | | | |
| I02E | | | | | IAML | | 08 44 35.4 | |
| | comp=N,50nm,2.3s | | | | | | | |
| **I02E** | **Swisshome, OR** | **3.91** | **40** | P | **Pn** | | **08 42 56.3** | **-2.2** |
| | baz=223 | | | | | | | |
| **L04D** | **Klamath Falls** | **3.91** | **73** | Pn | **Pn** | | **08 42 59.1** | **+0.6** |
| **L04D** | **Klamath Falls** | **3.91** | **73** | P | **Pn** | | **08 42 58.0** | **-0.6** |
| | baz=258,SNR=22 | | | | | | | |
| **HOPS** | **Hopland Field** | **3.92** | **122** | Pn | **Pn** | | **08 42 57.0** | **-1.6** |
| HOPS | | | | | IAML | | 08 43 51.0 | |
| | comp=N,39nm,3.5s | | | | | | | |
| **M04C** | **Macdoel** | **4.17** | **80** | Pn | **Pn** | | **08 43 02.6** | **+0.4** |
| **M04C** | **Macdoel** | **4.17** | **80** | P | **Pn** | | **08 43 01.8** | **-0.4** |
| | baz=266,SNR=27 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **4.40** | **60** | P | **Pn** | | **08 43 04.5** | **-0.9** |
| | baz=245 | | | | | | | |
| **BUCK** | **Buck Mountain** | **4.41** | **45** | | **Pn** | | **08 43 05.3** | **-0.1** |
| BUCK | | | | | IAML | | 08 44 05.2 | |
| | comp=N,45nm,3.4s | | | | | | | |
| BUCK | | | | | IAML | | 08 44 45.0 | |
| | comp=E,46nm,3.1s | | | | | | | |
| **K04D** | **Chiloquin, OR** | **4.41** | **69** | P | **Pn** | | **08 43 04.4** | **-1.1** |
| | baz=255,SNR=12 | | | | | | | |
| **I04A** | **Tendick Farm,** | **4.49** | **52** | P | **Pn** | | **08 43 05.4** | **-1.1** |
| | baz=237,SNR=13 | | | | | | | |
| **MCCM** | **Marconi Confer** | **4.57** | **130** | | **Pn** | | **08 43 05.2** | **-2.3** |
| MCCM | | | | | IAML | | 08 44 04.8 | |
| | comp=E,40nm,1.9s | | | | | | | |
| MCCM | | | | | IAML | | 08 44 07.8 | |
| | comp=N,34nm,1.7s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ORV | Oroville | 4.73 | 108 | Pn | | Pn | 08 43 08.2 | -1.6 |
| H04D | Lebanon | 4.76 | 44 | | | Pn | 08 43 09.2 | -1.0 |
| H04D | | | | IAML | | | 08 44 32.6 | |
| | comp=N,34nm,2.1s | | | | | | | |
| H04D | Lebanon | 4.76 | 44 | P | | Pn | 08 43 08.2 | -2.0 |
| | baz=227,SNR=8.1 | | | | | | | |
| J05D | Fort Rock, OR | 5.00 | 63 | P | | Pn | 08 43 12.3 | -1.3 |
| | baz=248,SNR=10 | | | | | | | |
| K05A | Summer Lake | 5.05 | 70 | | | Pn | 08 43 13.7 | -0.6 |
| H04A | Detroit Lake | 5.16 | 45 | | | Pn | 08 43 15.5 | -0.2 |
| H04A | | | | IAML | | | 08 44 25.1 | |
| | comp=N,16nm,4.7s | | | | | | | |
| H04A | | | | IAML | | | 08 45 24.6 | |
| | comp=E,18nm,4.8s | | | | | | | |
| MOD | Modoc Plateau | 5.32 | 80 | Pn | | Pn | 08 43 17.3 | -0.8 |
| MOD | | | | IAML | | | 08 43 55.7 | |
| | comp=N,23nm,1.6s | | | | | | | |
| MOD | | | | IAML | | | 08 44 42.5 | |
| | comp=E,27nm,4.2s | | | | | | | |
| I05D | Terrebonne, OR | 5.43 | 52 | P | | Pn | 08 43 18.3 | -1.2 |
| | baz=237 | | | | | | | |
| BEKR | Beckworth | 5.46 | 101 | | | Pn | 08 43 20.9 | +0.9 |
| MPK | Martis Peak | 5.89 | 106 | | | Pn | 08 43 27.4 | +1.4 |
| RUBR | Rubicon Trail | 5.89 | 109 | | | Pn | 08 43 28.2 | +2.3 |
| EMB | Emerald Bay | 5.96 | 109 | | | Pn | 08 43 27.6 | +0.8 |
| E03A | Lebam | 6.03 | 26 | | | Pn | 08 43 27.7 | +0.1 |
| VCNR | Virginia City | 6.16 | 105 | | | Pn | 08 43 31.8 | +2.1 |
| CMB | Columbia Colle | 6.20 | 118 | | | Pn | 08 43 30.1 | 0.0 |
| PNTR | Pine Nut | 6.27 | 107 | | | Pn | 08 43 32.4 | +1.2 |
| SAO | San Andreas Ge | 6.34 | 132 | Pn | | Pn | 08 43 29.7 | -2.3 |
| E04D | Cinebar | 6.40 | 31 | Pn | | Pn | 08 43 33.7 | +1.1 |
| E04D | Cinebar | 6.40 | 31 | P | | Pn | 08 43 31.4 | -1.2 |
| | baz=214 | | | | | | | |
| YERR | Yerington | 6.57 | 107 | | | Pn | 08 43 36.7 | +1.4 |
| WVOR | Wild Horse Val | 6.62 | 76 | | | Pn | 08 43 34.5 | -1.3 |
| BBGB | Big Mountain B | 6.71 | 131 | | | Pn | 08 43 35.1 | -2.0 |
| D03D | Eldon | 7.06 | 24 | P | | Pn | 08 43 40.1 | -1.6 |
| | baz=207 | | | | | | | |
| PMPB | Monarch Peak | 7.10 | 132 | Pn | | Pn | 08 43 40.6 | -1.8 |
| D05A | Enumclaw | 7.14 | 31 | Pn | | Pn | 08 43 44.5 | +1.6 |
| KVN | Kaiserville | 7.38 | 104 | Pn | | Pn | 08 43 44.7 | -1.6 |
| NVAR | Mina Array Bea | 7.46 | 109 | Pn | | Pn | 08 43 48.2 | +0.7 |
| | comp=E,0.2nm,0.3s,baz=283,slow=15,SNR=20 | | | | | | | |
| NVAR | | | | LR | | LR | 08 46 54.2 | |
| | comp=E,752nm,18.4s,baz=286,slow=39 | | | | | | | |
| LTY | Liberty | 7.74 | 36 | | | Pn | 08 43 51.7 | +0.5 |
| PAGB | Antelope Grade | 7.76 | 132 | Pn | | Pn | 08 43 49.0 | -2.4 |
| PGC | Sidney | 7.98 | 19 | Pn | | Pn | 08 43 55.3 | +1.0 |
| CLRS | Cowichan Lake | 7.99 | 15 | Pn | | Pn | 08 43 54.3 | -0.2 |
| E08A | Dider Farm, El | 8.00 | 46 | Pn | | Pn | 08 43 55.1 | +0.4 |
| BMO | Blue Mountains | 8.22 | 60 | Pn | | Pn | 08 43 57.7 | -0.1 |
| ISA | Isabella, Lake | 8.85 | 125 | P | | Pn | 08 44 07.5 | +1.0 |
| | baz=313,SNR=9.9 | | | | | | | |
| ELK | Elko | 9.16 | 89 | Pn | | Pn | 08 44 12.9 | +2.1 |
| | comp=E,0.1nm,0.3s,baz=292,slow=15,SNR=5.3 | | | | | | | |
| ELK | | | | LR | | LR | 08 48 06.0 | |
| | comp=E,357nm,18.0s,baz=269,slow=40 | | | | | | | |
| FURC | Furnace Creek, | 9.41 | 116 | P | | Pn | 08 44 15.8 | +1.7 |
| | baz=305,SNR=8.4 | | | | | | | |
| LRMC | Laurel Mtn Rad | 9.46 | 124 | P | | Pn | 08 44 16.5 | +1.6 |
| | baz=311 | | | | | | | |
| TPNV | Topopah Spring | 9.59 | 112 | P | | Pn | 08 44 18.4 | +1.8 |
| | baz=301 | | | | | | | |
| EDW2 | Edwards Air Fo | 9.67 | 127 | P | | Pn | 08 44 18.7 | +1.0 |
| | baz=315 | | | | | | | |
| HLID | Hailey | 9.86 | 72 | P | | Pn | 08 44 20.9 | +0.6 |
| | baz=261,SNR=5.8 | | | | | | | |
| GSC | Goldstone, Bar | 10.13 | 122 | P | | Pn | 08 44 24.5 | +0.5 |
| | baz=310 | | | | | | | |
| NEW | Newport | 10.15 | 42 | Pn | | Pn | 08 44 25.5 | +1.4 |
| | comp=E,0.1nm,0.3s,baz=211,slow=12,SNR=3.9 | | | | | | | |
| NEW | | | | LR | | LR | 08 48 07.4 | |
| | comp=E,381nm,19.1s,baz=227,slow=37 | | | | | | | |
| TUQ | Turquoise Moun | 10.62 | 119 | P | | Pn | 08 44 32.7 | +1.9 |
| | baz=308 | | | | | | | |
| HEC | Hector,Ludlow | 10.73 | 123 | P | | Pn | 08 44 33.6 | +1.4 |
| | baz=311 | | | | | | | |
| BBRC | Big Bear Solar | 10.73 | 127 | P | | Pn | 08 44 33.8 | +1.4 |
| | baz=314 | | | | | | | |
| DUG | Dugway, Tooele | 11.07 | 90 | P | | Pn | 08 44 37.1 | +0.2 |
| | baz=281,SNR=11 | | | | | | | |
| PFO | Pinyon Flats O | 11.46 | 128 | LR | | LR | 08 49 00.8 | |
| | comp=E,320nm,19.2s,baz=323,slow=37 | | | | | | | |
| MONP2 | Monument Peak | 11.99 | 130 | P | | Pn | 08 44 52.0 | +2.4 |
| | baz=318 | | | | | | | |
| BOZ | Bozeman (W) | 12.25 | 64 | P | | Pn | 08 44 50.5 | -2.5 |
| | baz=255,SNR=6.7 | | | | | | | |
| PDAR | Pinedale Array | 13.32 | 77 | Pn | | Pn | 08 45 09.9 | +2.1 |
| | comp=E,0.0nm,0.3s,baz=269,slow=8.9,SNR=8.2 | | | | | | | |
| WUAZ | Wupatki | 13.72 | 109 | P | | Pn | 08 45 14.8 | +1.6 |
| | baz=300,SNR=6.8 | | | | | | | |
| MVCO | Mesa Verde | 15.12 | 99 | P | | Pn | 08 45 33.2 | +0.9 |
| | baz=292,SNR=7.9 | | | | | | | |
| K22A | Casper | 15.56 | 78 | P | | Pn | 08 45 37.5 | -0.4 |
| | baz=272 | | | | | | | |
| TUC | Tucson | 15.91 | 118 | P | | P | 08 45 45.3 | -0.9 |
| | baz=310 | | | | | | | |
| N23A | Red Feather La | 16.14 | 84 | P | | Pn | 08 45 45.7 | +0.2 |
| | baz=279 | | | | | | | |
| S22A | 4UR Ranch, Cre | 16.19 | 95 | P | | P | 08 45 48.1 | -1.4 |
| | baz=289,SNR=14 | | | | | | | |
| ISCO | Idaho Springs | 16.57 | 88 | P | | Pn | 08 45 51.1 | 0.0 |
| | baz=282 | | | | | | | |
| SDCO | Great Sand Dun | 17.19 | 94 | P | | P | 08 46 00.2 | -0.3 |
| | baz=289,SNR=17 | | | | | | | |
| DLBC | Dease Lake | 17.38 | 355 | P | | P | 08 46 02.9 | +0.6 |
| | comp=E,0.0nm,0.3s,baz=177,slow=15,SNR=3.6 | | | | | | | |
| ANMO | Albuquerque | 17.55 | 104 | P | | P | 08 46 05.8 | +1.4 |
| | comp=E,0.0nm,0.3s,baz=300,slow=11,SNR=5.7 | | | | | | | |
| ANMO | | | | LR | | LR | 08 53 28.0 | |
| | comp=E,307nm,18.3s,baz=291,slow=39 | | | | | | | |
| ANMO | Albuquerque | 17.55 | 104 | P | | P | 08 46 04.6 | +0.2 |
| | baz=298 | | | | | | | |
| 121A | Cookes Peak, D | 17.83 | 113 | P | | P | 08 46 07.5 | 0.0 |
| | baz=305,SNR=7.0 | | | | | | | |
| T25A | Trinidad | 18.21 | 95 | P | | P | 08 46 11.1 | -0.6 |
| | baz=291,SNR=13 | | | | | | | |
| KSCO | Kaye Shedlock' | 19.01 | 88 | P | | Pn | 08 46 21.0 | -0.1 |
| | baz=285 | | | | | | | |
| MNTX | Cornudas Mount | 19.98 | 111 | P | | Pn | 08 46 34.3 | +1.7 |
| | baz=305 | | | | | | | |
| MSTX | Muleshoe | 20.70 | 102 | P | | Pn | 08 46 39.9 | -1.3 |
| | baz=298 | | | | | | | |
| MESA | MESA | 21.08 | 339 | P | | P | 08 46 42.8 | -0.1 |
| | baz=147 | | | | | | | |
| AMTX | Amarillo | 21.11 | 99 | P | | P | 08 46 44.4 | +1.1 |
| | baz=296 | | | | | | | |
| FARO | Faro, Yukon | 21.41 | 352 | P | | P | 08 46 46.4 | +0.3 |
| | baz=167 | | | | | | | |
| M31M | Drury Creek, Y | 21.50 | 351 | P | | P | 08 46 47.4 | +0.3 |
| | baz=165 | | | | | | | |
| MMPY | Sheldon Lake, | 21.62 | 355 | P | | P | 08 46 48.8 | +0.4 |
| | baz=172 | | | | | | | |
| YUK3 | Moose Creek | 22.12 | 343 | P | | P | 08 46 55.7 | +1.7 |
| | baz=152,SNR=5.8 | | | | | | | |
| LPIG | La Paz | 22.18 | 135 | LR | | LR | 08 54 20.9 | |
| | comp=E,104nm,19.1s,baz=12,slow=34 | | | | | | | |
| TXAR | Lajitas Array | 22.56 | 114 | P | | P | 08 47 00.8 | +1.9 |
| | comp=E,1.1nm,0.9s,baz=299,slow=7.8,SNR=6.9 | | | | | | | |
| YKA | Yellowknife Ar | 22.68 | 15 | P | | P | 08 46 59.1 | -0.6 |
| | comp=E,9.7nm,1.1s,baz=203,slow=10,SNR=45 | | | | | | | |
| M27K | Edge Creek, AK | 22.95 | 343 | P | | P | 08 47 03.8 | +1.1 |
| | baz=150 | | | | | | | |
| N25K | Chitina, Valde | 22.99 | 339 | P | | P | 08 47 03.2 | +0.1 |
| | baz=144 | | | | | | | |
| KDAK | Kodiak Island | 23.15 | 324 | LR | | LR | 08 53 50.7 | |
| | comp=E,184nm,18.1s,baz=224,slow=31 | | | | | | | |
| M26K | Nabesna, AK | 23.25 | 341 | P | | P | 08 47 07.0 | +1.3 |
| | baz=148 | | | | | | | |
| WMOK | Wichita Mounta | 23.34 | 97 | P | | P | 08 47 08.2 | +1.3 |
| | baz=295 | | | | | | | |
| KSU1 | Kansas State U | 23.52 | 85 | P | | P | 08 47 08.7 | +0.1 |
| | baz=286 | | | | | | | |
| L27K | Beaver Creek, | 23.56 | 343 | P | | P | 08 47 09.9 | +1.1 |
| | baz=151 | | | | | | | |
| ABTX | Abilene, Hawle | 23.65 | 102 | P | | P | 08 47 10.1 | +0.2 |
| | baz=300 | | | | | | | |
| L26K | Log Cabin Wild | 23.87 | 342 | P | | P | 08 47 11.6 | -0.2 |
| | baz=148 | | | | | | | |
| SCM | Sheep Creek Mo | 23.96 | 336 | P | | P | 08 47 14.1 | +1.4 |
| | baz=140 | | | | | | | |
| DAWY | Dawson | 24.00 | 347 | P | | P | 08 47 13.9 | +0.9 |
| | baz=157 | | | | | | | |
| PMR | Palmer | 24.34 | 334 | P | | P | 08 47 16.8 | +0.7 |
| | baz=137 | | | | | | | |
| PAX | Paxson | 24.35 | 340 | P | | P | 08 47 15.8 | -0.5 |
| | baz=145 | | | | | | | |
| JCT | Junction City | 24.64 | 107 | P | | P | 08 47 20.9 | +1.8 |
| | baz=304 | | | | | | | |
| WAT6 | Susitna Watana | 24.66 | 337 | P | | P | 08 47 21.0 | +1.7 |
| | baz=140 | | | | | | | |
| M22K | Willow | 24.79 | 334 | P | | P | 08 47 21.0 | +0.9 |
| | baz=135 | | | | | | | |
| RIDG | Independent Ri | 24.84 | 341 | P | | P | 08 47 20.3 | -0.3 |
| | baz=147 | | | | | | | |
| SCRK | Sand Creek | 24.84 | 342 | P | | P | 08 47 20.8 | 0.0 |
| | baz=148 | | | | | | | |
| DHY | Denali Highway | 24.95 | 338 | P | | P | 08 47 23.6 | +1.8 |
| | baz=142,SNR=11 | | | | | | | |
| EGAK | Eagle | 24.96 | 346 | P | | P | 08 47 22.3 | +0.6 |
| | baz=154 | | | | | | | |
| I29M | Ogilvie Camp, | 25.04 | 349 | P | | P | 08 47 22.0 | -0.4 |
| | baz=160 | | | | | | | |
| TUL1 | Leonard | 25.14 | 92 | P | | P | 08 47 24.9 | +1.3 |
| | baz=292 | | | | | | | |
| J26L | Joseph Creek | 25.20 | 343 | P | | P | 08 47 25.2 | +1.3 |
| | baz=150 | | | | | | | |
| O19K | Port Alsworth | 25.30 | 328 | P | | P | 08 47 26.1 | +1.4 |
| | baz=126 | | | | | | | |
| WHTX | Lake Whitney, | 25.57 | 101 | P | | P | 08 47 29.3 | +1.7 |
| | baz=300 | | | | | | | |
| J25K | Salcha River, | 25.70 | 342 | P | | P | 08 47 28.8 | +0.4 |
| | baz=147 | | | | | | | |
| EPYK | Eagle Plains | 25.80 | 351 | P | | P | 08 47 29.4 | 0.0 |
| | baz=163 | | | | | | | |
| MCK | McKinley | 25.90 | 338 | P | | P | 08 47 30.9 | +0.6 |
| | baz=140 | | | | | | | |
| TRF | Thorofare Moun | 26.08 | 336 | P | | P | 08 47 32.8 | +0.7 |
| | baz=138 | | | | | | | |
| ILAR | Eielson Array | 26.19 | 341 | P | | P | 08 47 33.2 | +0.3 |
| | comp=E,4.8nm,1.1s,baz=158,slow=8.1,SNR=18 | | | | | | | |
| ILAR | | | | LR | | LR | 08 56 10.8 | |
| | comp=E,94nm,18.2s,baz=166,slow=33 | | | | | | | |
| PPLA | Purkeypile | 26.28 | 334 | P | | P | 08 47 35.0 | +1.1 |
| | baz=134 | | | | | | | |
| NEA2 | Nenana | 26.61 | 339 | P | | P | 08 47 37.1 | +0.5 |
| | baz=141 | | | | | | | |
| CAST | Castle Rocks | 26.62 | 335 | P | | P | 08 47 37.3 | +0.6 |
| | baz=135 | | | | | | | |
| L19K | White Mountain | 26.73 | 331 | P | | P | 08 47 38.7 | +0.9 |
| | baz=129,SNR=5.2 | | | | | | | |
| CHUM | Lake Minchumin | 27.02 | 336 | P | | P | 08 47 39.7 | -0.6 |
| | baz=135 | | | | | | | |
| I23K | Minto, Yukon-K | 27.12 | 340 | P | | P | 08 47 43.0 | +1.7 |
| | baz=141,SNR=6.0 | | | | | | | |
| K20K | Telida | 27.22 | 334 | P | | P | 08 47 42.5 | +0.3 |
| | baz=132 | | | | | | | |
| H24K | Noodor Dome | 27.31 | 342 | P | | P | 08 47 44.1 | +1.1 |
| | baz=144 | | | | | | | |
| MLY | Manley | 27.41 | 339 | P | | P | 08 47 45.1 | +1.2 |
| | baz=139,SNR=7.3 | | | | | | | |
| H23K | Yukon River | 27.71 | 340 | P | | P | 08 47 46.7 | +0.2 |
| | baz=142 | | | | | | | |
| J20K | Nowinta River | 27.80 | 335 | P | | P | 08 47 47.6 | +0.3 |
| | baz=133 | | | | | | | |
| CCM | Cathedral Cave | 27.85 | 84 | P | | P | 08 47 47.9 | -0.1 |
| | baz=288 | | | | | | | |
| C36M | Paulatuk | 28.30 | 2 | P | | P | 08 47 51.8 | +0.1 |
| | baz=185 | | | | | | | |
| TOLK | Toolik Lake Re | 29.99 | 344 | P | | P | 08 48 07.7 | +0.9 |
| | baz=145,SNR=6.3 | | | | | | | |
| A36M | Sachs Harbour | 30.92 | 1 | P | | P | 08 48 15.0 | +0.1 |
| | baz=183 | | | | | | | |
| ANM | Nome | 31.99 | 330 | P | | P | 08 48 24.8 | +0.4 |
| | baz=118 | | | | | | | |
| A21K | Barrow | 33.60 | 343 | P | | P | 08 48 39.4 | +1.0 |
| | baz=138,SNR=5.8 | | | | | | | |
| TKL | Tuckaleechee C | 34.29 | 85 | LR | | LR | 09 02 35.8 | |
| | comp=E,148nm,19.8s,baz=312,slow=36 | | | | | | | |
| CMIG | Matas Romero | 36.78 | 121 | LR | | LR | 09 04 07.3 | |
| | comp=E,78nm,18.8s,baz=358,slow=36 | | | | | | | |
| FRB | Frobisher Bay | 40.42 | 36 | LR | | LR | 09 05 27.9 | |
| | comp=E,120nm,19.1s,baz=202,slow=35 | | | | | | | |
| SCHQ | Schefferville | 41.41 | 50 | P | | P | 08 49 44.8 | 0.0 |
| | comp=E,11nm,1.1s,baz=263,slow=5.3,SNR=5.4 | | | | | | | |
| SCHQ | | | | LR | | LR | 09 08 45.2 | |
| | comp=E,115nm,18.1s,baz=140,slow=39 | | | | | | | |
| SFJD | Kangerlussuaq | 47.84 | 31 | LR | | LR | 09 10 27.7 | |
| | comp=E,59nm,18.6s,baz=235,slow=36 | | | | | | | |
| SEY | Seymchan | 50.11 | 324 | P | | P | 08 50 53.4 | +0.1 |
| | comp=E,0.5nm,0.4s,baz=88,slow=7.7,SNR=6.2 | | | | | | | |
| PETK | Petropavlovsk- | 50.12 | 311 | P | | P | 08 50 53.4 | -0.1 |
| | comp=E,1.6nm,0.9s,baz=63,slow=9.9,SNR=2.9 | | | | | | | |
| PETK | | | | LR | | LR | 09 09 41.2 | |
| | comp=E,30nm,19.1s,baz=59,slow=33 | | | | | | | |
| SUMG | Summit | 50.97 | 23 | *i* P | | P | 08 51 01.0 | +0.8 |
| SJG | San Juan | 56.72 | 95 | LR | | LR | 09 17 53.0 | |
| | comp=E,97nm,18.7s,baz=286,slow=38 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 59.21 | 270 | T | | T | 09 56 07.5 | |
| | baz=53,slow=75 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 59.21 | 270 | T | | T | 09 56 11.5 | |
| | baz=53,slow=75 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 59.23 | 270 | T | | T | 09 56 12.5 | |
| | baz=53,slow=75 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 60.09 | 269 | T | | T | 09 57 06.6 | |
| | baz=52,slow=75 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 60.10 | 269 | T | | T | 09 57 11.3 | |
| | baz=52,slow=75 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 60.11 | 269 | T | | T | 09 57 15.9 | |
| | baz=52,slow=75 | | | | | | | |
| USRK | Ussuriysk Ar. | 69.22 | 311 | P | | P | 08 53 04.2 | -1.0 |
| | comp=E,4.6nm,0.9s,baz=46,slow=5.5,SNR=4.9 | | | | | | | |
| SONM | Songino Array | 79.43 | 326 | P | | P | 08 54 05.1 | +0.3 |
| | comp=E,3.4nm,1.1s,baz=46,slow=4.2,SNR=6.4 | | | | | | | |
| ZALV | Zalesovo Beam | 81.32 | 341 | P | | P | 08 54 14.2 | -0.5 |
| | comp=E,0.7nm,0.7s,baz=33,slow=3.4,SNR=4.1 | | | | | | | |
| ESDC | Sonseca Array | 84.47 | 40 | P | | P | 08 54 31.3 | -0.1 |
| | comp=E,0.5nm,0.4s,baz=310,slow=9.9,SNR=2.5 | | | | | | | |
| DAVOX | Davos/Dischmat | 84.52 | 28 | LR | | LR | 09 34 30.6 | |
| | comp=E,66nm,20.0s,baz=263,slow=37 | | | | | | | |
| AKASG | Malin Array Be | 86.24 | 15 | P | | P | 08 54 39.0 | -0.9 |
| | comp=E,2.0nm,0.9s,baz=343,slow=4.1,SNR=9.0 | | | | | | | |
| MKAR | Makanchi Array | 88.54 | 340 | P | | P | 08 54 50.5 | -0.7 |
| | comp=E,0.8nm,1.0s,baz=22,slow=5.1,SNR=4.9 | | | | | | | |
| AKTO | Aktyubinsk | 88.66 | 357 | P | | P | 08 54 51.5 | -0.2 |
| | comp=E,3.9nm,1.1s,baz=13,slow=3.0,SNR=4.6 | | | | | | | |
| PLCA | Paso Flores | 96.42 | 140 | LR | | LR | 09 31 49.4 | |
| | comp=E,90nm,18.2s,baz=138,slow=31 | | | | | | | |

**IDC 10 08:55:00.2±2.7, 19.99S×174.70E, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.7/25, mbtmp3.7/4, ML5.8/1, MS3.2/1, Ms1 3.2/1, ms1mx2.5/58, Error ellipse: s-maj=164.2km s-min=23.0km az=154.0, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.88 | 55 | Pn | Pn | 08 55 59.7 | -1.6 |
| | 27nm,0.3s,baz=235,slow=18,SNR=73 | | | | | | |
| MSVF | | | | Sn | Sn | 08 56 50.0 | +2.4 |
| | 11nm,0.3s,baz=105,slow=24,SNR=6.5 | | | | | | |
| MSVF | | | | LR | LR | 08 57 20.9 | |
| | comp=E,278nm,19.1s,baz=220,slow=36 | | | | | | |
| DZM | Mont Dzumac | 7.99 | 253 | Pn | Pn | 08 57 07.7 | +10 |
| | 0.4nm,0.3s,baz=169,slow=15,SNR=5.9 | | | | | | |
| WRA | Warramunga Arr | 37.87 | 263 | P | P | 09 02 18.3 | -1.0 |
| | 1.0nm,1.2s,baz=102,slow=9.1,SNR=1.8 | | | | | | |
| ASAR | Alice Springs | 37.96 | 257 | P | P | 09 02 20.4 | +0.4 |
| | 0.4nm,0.7s,baz=81,slow=8.7,SNR=6.5 | | | | | | |
| PDAR | Pinedale Array | 93.40 | 46 | P | P | 09 08 18.4 | +0.6 |
| | 0.7nm,1.0s,baz=235,slow=4.3,SNR=4.1 | | | | | | |

**IDC 10 09:00:08.1±2.7, 54.24N×87.11E, h0km, mb1 2.8/2, mb1mx2.8/56, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=22.8km s-min=16.0km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.38 | 259 | *i* | | 09 09 40.0 | |
| | baz=77,slow=347,SNR=0.7 | | | | | | |
| ZALV | Zalesovo Beam | 1.38 | 259 | Pg | Pg | 09 00 33.1 | -1.5 |
| | 1.9nm,0.3s,baz=75,slow=16,SNR=23 | | | | | | |
| ZALV | | | | Lg | Lg | 09 00 52.5 | |
| | 1.7nm,0.3s,baz=78,slow=23,SNR=6.3 | | | | | | |
| KURBB | Kurchatov Arra | 6.38 | 239 | Pn | Pn | 09 01 44.0 | +0.8 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=6.2 | | | | | | |
| KURBB | | | | Sn | Sn | 09 02 55.5 | -1.2 |
| | 0.0nm,0.3s,baz=54,slow=17,SNR=1.4 | | | | | | |
| KURBB | | | | Lg | Lg | 09 03 30.8 | |
| | 0.0nm,0.3s,baz=32,slow=40,SNR=2.2 | | | | | | |
| MKAR | Makanchi Array | 8.06 | 204 | Pn | Pn | 09 02 07.7 | +1.3 |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=7.8 | | | | | | |
| MKAR | | | | Sn | Sn | 09 03 38.0 | -0.2 |
| | 0.1nm,0.3s,baz=48,slow=28,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 04 22.0 | |
| | 0.0nm,0.3s,baz=41,slow=38,SNR=1.9 | | | | | | |

*IDC* ***10*** *09:04:41.2±1.0, 21.06S×67.29W, h181km±10km, mb3.7/6, mb1 3.9/10, mb1mx3.7/33, mbtmp4.1/10, MS3.5/1, Ms1 3.5/1, ms1mx2.4/61, Error ellipse: s-maj=19.1km s-min=15.6km az=141.0*

*SJA* ***10*** *09:04:41.3±0.6, 21.02S×67.67W, h229km±4km, ML4.1, MW3.8*

*NEIC* ***10*** *09:04:42.0±2.1, 21.01S±0.06×67.3W±0.1, h183km±7km, mb4.0/8, Error ellipse: s-maj=14.6km s-min=8.1km az=98.0*

*VAO* ***10*** *09:04:42.5±0.5, 21.11S×67.16W, h186km±9km, mb3.8*

*SCB* ***10*** *09:04:44.5±4.5, 21.02S×67.52W, h41km±30km, ML3.6/7, Error ellipse: s-maj=12.3km s-min=9.7km az=0.0*

**ISC 10 09:04:41.9±0.6, 21.03S±0.03×67.44W±0.04, h192km±6km, n127, σ1?55/187, mb3.9/8, 5C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MOCB | Mochara | 1.70 | 98 | P | Pn | 09 05 18.3 | +1.1 |
| MOCB | | | | S | Sn | 09 05 43.6 | -1.0 |
| MOCB | | | | IAML | | 09 05 46.0 | |
| | 208nm,0.4s | | | | | | |
| PB08 | IPOC Station P | 1.83 | 298 | ⇑*i*P | Pn | 09 05 19.4 | +0.9 |
| PB08 | | | | *e*S | Sn | 09 05 47.0 | +0.1 |
| PB08 | IPOC Station P | 1.83 | 298 | | Pn | 09 05 19.5 | +0.9 |
| PB08 | | | | Sn | Sn | 09 05 47.2 | +0.4 |
| PB08 | IPOC Station P | 1.83 | 298 | P | Pn | 09 05 19.8 | +1.3 |
| PB08 | IPOC Station P | 1.83 | 298 | *e*P | Pn | 09 05 19.6 | +1.1 |
| PB08 | | | | *e*P | Pn | 09 05 19.8 | +1.3 |
| PB08 | | | | *e*S | Sn | 09 05 47.9 | +1.0 |
| PB09 | IPOC Station P | 1.85 | 245 | *e*P | Pn | 09 05 19.8 | +1.4 |
| PB09 | | | | *e*S | Sn | 09 05 46.8 | 0.0 |
| PB09 | IPOC Station P | 1.85 | 245 | | Pn | 09 05 19.6 | +1.2 |
| PB09 | | | | Sn | Sn | 09 05 47.0 | +0.2 |
| PB09 | IPOC Station P | 1.85 | 245 | P | Pn | 09 05 20.1 | +1.7 |
| PB09 | | | | S | Sn | 09 05 45.3 | -1.5 |
| PB09 | | | | IAML | | 09 05 51.3 | |
| | 263nm,0.3s | | | | | | |
| PB09 | IPOC Station P | 1.85 | 245 | *e*P | Pn | 09 05 19.6 | +1.2 |
| PB09 | | | | *e*P | Pn | 09 05 19.8 | +1.4 |
| PB09 | | | | *e*S | Sn | 09 05 47.9 | +1.2 |
| PB09 | | | | IAML | | 09 05 50.0 | |
| | comp=Z,387nm,0.4s | | | | | | |
| PB01 | IPOC Station P | 1.91 | 269 | *e*P | Pn | 09 05 19.2 | +0.2 |
| PB01 | | | | *e*S | Sn | 09 05 46.7 | -1.1 |
| PB01 | IPOC Station P | 1.91 | 269 | | Pn | 09 05 20.1 | +1.0 |
| PB01 | | | | Sn | Sn | 09 05 47.1 | -0.7 |
| PB01 | IPOC Station P | 1.91 | 269 | P | Pn | 09 05 20.7 | +1.7 |
| PB01 | IPOC Station P | 1.91 | 269 | *e*P | Pn | 09 05 19.6 | +0.6 |
| PB01 | | | | *e*P | Pn | 09 05 19.8 | +0.8 |
| PB01 | | | | *e*S | Sn | 09 05 47.5 | -0.3 |
| LVC | Limon Verde | 2.09 | 221 | P | Pn | 09 05 21.9 | +0.9 |
| | comp=Z,15nm,0.3s,baz=359,slow=7.4,SNR=198 | | | | | | |
| LVC | | | | S | Sn | 09 05 50.5 | -1.1 |
| | comp=Z,35nm,0.3s,baz=51,slow=5.3,SNR=6.7 | | | | | | |
| LVC | Limon Verde | 2.09 | 221 | *e*P | Pn | 09 05 21.8 | +0.7 |
| LVC | | | | *e*S | Sn | 09 05 51.2 | -0.5 |
| LVC | Limon Verde | 2.09 | 221 | *e*P | Pn | 09 05 22.0 | +0.9 |
| LVC | Limon Verde | 2.09 | 221 | Pn | Pn | 09 05 21.8 | +0.7 |
| LVC | Limon Verde | 2.09 | 221 | P | Pn | 09 05 22.1 | +1.0 |
| LVC | Limon Verde | 2.09 | 221 | *e*P | Pn | 09 05 22.0 | +0.9 |
| LVC | | | | *e*S | Sn | 09 05 52.9 | +1.3 |
| GO01 | Chusmiza | 2.13 | 309 | ⇑*i*P | Pn | 09 05 22.4 | +0.6 |
| GO01 | | | | *e*S | Sn | 09 05 52.0 | -0.6 |
| GO01 | | | | IAML | | 09 06 02.1 | |
| | comp=E,738nm,0.1s | | | | | | |
| GO01 | Chusmiza | 2.13 | 309 | | Pn | 09 05 22.4 | +0.6 |
| GO01 | Chusmiza | 2.13 | 309 | *e*P | Pn | 09 05 22.6 | +0.9 |
| GO01 | | | | *e*S | Sn | 09 05 57.6 | +5.0 |
| PB02 | IPOC Station P | 2.31 | 262 | *e*P | Pn | 09 05 23.6 | +0.4 |
| PB02 | | | | *e*S | Sn | 09 05 54.1 | -1.4 |
| PB02 | | | | IAML | | 09 05 56.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| PB02 | IPOC Station P | 2.31 | 262 | | Pn | 09 05 24.2 | +0.8 |
| PB02 | IPOC Station P | 2.31 | 262 | P | Pn | 09 05 24.1 | +0.8 |
| PB02 | | | | S | Sn | 09 05 53.3 | -2.2 |
| PB02 | | | | IAML | | 09 05 54.8 | |
| | comp=E,226nm,0.3s | | | | | | |
| PB02 | IPOC Station P | 2.31 | 262 | *e*P | Pn | 09 05 23.7 | +0.4 |
| PB02 | | | | *e*S | Sn | 09 05 54.7 | -0.7 |
| PB02 | | | | IAML | | 09 05 56.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| PB03 | IPOC Station P | 2.38 | 244 | *e*P | Pn | 09 05 24.8 | +0.6 |
| PB03 | | | | *e*S | Sn | 09 05 55.4 | -1.6 |
| PB03 | | | | IAML | | 09 05 56.7 | |
| | comp=N,813nm,0.3s | | | | | | |
| PB03 | IPOC Station P | 2.38 | 244 | | Pn | 09 05 25.0 | +0.8 |
| PB03 | IPOC Station P | 2.38 | 244 | P | Pn | 09 05 25.0 | +0.8 |
| PB03 | IPOC Station P | 2.38 | 244 | *e*P | Pn | 09 05 24.7 | +0.6 |
| PB03 | | | | *e*S | Sn | 09 05 56.3 | -0.7 |
| PB03 | | | | IAML | | 09 05 58.8 | |
| | comp=Z,691nm,0.4s | | | | | | |
| PB07 | IPOC Station P | 2.38 | 253 | *e*P | Pn | 09 05 24.4 | +0.2 |
| PB07 | | | | *e*S | Sn | 09 05 55.4 | -1.7 |
| PB07 | | | | IAML | | 09 05 56.3 | |
| | comp=N,2μm,0.3s | | | | | | |
| PB07 | IPOC Station P | 2.38 | 253 | | Pn | 09 05 24.6 | +0.4 |
| PB07 | IPOC Station P | 2.38 | 253 | P | Pn | 09 05 24.7 | +0.5 |
| PB07 | | | | S | Sn | 09 05 54.8 | -2.3 |
| PB07 | | | | IAML | | 09 05 56.4 | |
| | comp=N,350nm,0.3s | | | | | | |
| PB07 | IPOC Station P | 2.38 | 253 | *e*P | Pn | 09 05 24.5 | +0.4 |
| PB07 | | | | *e*S | Sn | 09 05 56.1 | -0.9 |
| PB07 | | | | IAML | | 09 05 57.1 | |
| | comp=Z,1μm,0.3s | | | | | | |
| HMBC | Humberstone | 2.41 | 288 | ⇑*i*P | Pn | 09 05 24.2 | -0.3 |
| HMBC | | | | *e*S | Sn | 09 05 55.3 | -2.2 |
| HMBC | | | | IAML | | 09 05 59.4 | |
| | comp=N,798nm,0.4s | | | | | | |
| HMBC | Humberstone | 2.41 | 288 | P | Pn | 09 05 24.9 | +0.5 |
| PB11 | IPOC Station P | 2.43 | 301 | ⇑*i*P | Pn | 09 05 24.8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TA02 | | | | | *e*S | **Sn** | 09 05 59.2 | **-2.6** |
| **TA02** | **Huaiquique** | **2.63** | **286** | | | **Pn** | 09 05 26.8 | **0.0** |
| **TA02** | **Huaiquique** | **2.63** | **286** | | *e*P | **Pn** | 09 05 27.0 | **+0.2** |
| TA02 | | | | | *e*S | **Sn** | 09 06 00.2 | **-1.5** |
| TA02 | | | | | IAML | | 09 06 01.9 | |
| | comp=Z,772nm,0.1s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.84** | **242** | | *e*P | **Pn** | 09 05 29.6 | **+0.2** |
| PB04 | | | | | *e*S | **Sn** | 09 06 04.2 | **-2.2** |
| PB04 | | | | | IAML | | 09 06 08.1 | |
| | comp=N,442nm,0.1s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.84** | **242** | | | **Pn** | 09 05 29.6 | **+0.2** |
| **PB04** | **IPOC Station P** | **2.84** | **242** | P | | **Pn** | 09 05 29.9 | **+0.5** |
| **PB04** | **IPOC Station P** | **2.84** | **242** | *e*P | | **Pn** | 09 05 29.5 | **+0.1** |
| PB04 | | | | | *e*S | **Sn** | 09 06 05.0 | **-1.4** |
| PB04 | | | | | IAML | | 09 06 09.1 | |
| | comp=Z,357nm,0.2s | | | | | | | |
| **PB15** | **IPOC Station P** | **2.88** | **221** | *e*P | | **Pn** | 09 05 30.4 | **+0.5** |
| PB15 | | | | | *e*S | **Sn** | 09 06 06.5 | **-0.8** |
| **PB15** | **IPOC Station P** | **2.88** | **221** | | | **Pn** | 09 05 30.5 | **+0.6** |
| **PB15** | **IPOC Station P** | **2.88** | **221** | P | | **Pn** | 09 05 30.7 | **+0.8** |
| PB15 | | | | | S | **Sn** | 09 06 04.7 | **-2.6** |
| PB15 | | | | | IAML | | 09 06 11.8 | |
| | comp=Z,528nm,0.2s | | | | | | | |
| **PB15** | **IPOC Station P** | **2.88** | **221** | *e*P | | **Pn** | 09 05 30.6 | **+0.8** |
| PB15 | | | | | *e*S | **Sn** | 09 06 06.9 | **-0.4** |
| PB15 | | | | | IAML | | 09 06 13.4 | |
| | comp=Z,2μm,0.1s | | | | | | | |
| **PB16** | **IPOC Station P** | **3.31** | **324** | ⇑*i* P | | **Pn** | 09 05 36.8 | **+1.3** |
| PB16 | | | | | *e*S | **Sn** | 09 06 18.2 | **+0.8** |
| **PB16** | **IPOC Station P** | **3.31** | **324** | Pn | | **Pn** | 09 05 36.9 | **+1.3** |
| **PB16** | **IPOC Station P** | **3.31** | **324** | P | | **Pn** | 09 05 37.0 | **+1.5** |
| **PB16** | **IPOC Station P** | **3.31** | **324** | *e*P | | **Pn** | 09 05 36.9 | **+1.3** |
| PB16 | | | | | *e*S | **Sn** | 09 06 18.7 | **+1.4** |
| **PB12** | **IPOC Station P** | **3.63** | **311** | *e*P | | **Pn** | 09 05 37.7 | **-1.2** |
| PB12 | | | | | *e*S | **Sn** | 09 06 19.1 | **-4.4** |
| **PB12** | **IPOC Station P** | **3.63** | **311** | Pn | | **Pn** | 09 05 37.7 | **-1.2** |
| **PB12** | **IPOC Station P** | **3.63** | **311** | *e*P | | **Pn** | 09 05 38.0 | **-0.9** |
| PB12 | | | | | *e*S | **Sn** | 09 06 20.9 | **-2.6** |
| **PB10** | **IPOC Station P** | **3.80** | **229** | *e*P | | **Pn** | 09 05 40.5 | **-0.5** |
| PB10 | | | | | *e*S | **Sn** | 09 06 22.2 | **-5.0** |
| **PB10** | **IPOC Station P** | **3.80** | **229** | Pn | | **Pn** | 09 05 40.6 | **-0.4** |
| **PB10** | **IPOC Station P** | **3.80** | **229** | P | | **Pn** | 09 05 40.8 | **-0.1** |
| **PB10** | **IPOC Station P** | **3.80** | **229** | *e*P | | **Pn** | 09 05 40.7 | **-0.1** |
| PB10 | | | | | *e*P | **Pn** | 09 05 40.8 | **-0.1** |
| PB10 | | | | | *e*S | **Sn** | 09 06 24.0 | **-3.3** |
| **SLA** | **San Lorenzo** | **4.09** | **154** | *e*P | | **Pn** | 09 05 40.8 | **-3.8** |
| SLA | | | | | *e*P | **Pn** | 09 05 48.4 | **+3.7** |
| SLA | | | | | *e*S | **Sn** | 09 06 36.6 | **+2.6** |
| **BBOE** | **La Paz, Chanca** | **4.22** | **353** | P | | **Pn** | 09 05 48.5 | **+1.7** |
| **BBOD** | **La Paz, Gloria** | **4.50** | **346** | P | | **Pn** | 09 05 52.1 | **+1.8** |
| **PB14** | **IPOC Station P** | **4.51** | **217** | *e*P | | **Pn** | 09 05 49.8 | **-0.3** |
| **PB14** | **IPOC Station P** | **4.51** | **217** | Pn | | **Pn** | 09 05 50.0 | **-0.1** |
| **PB14** | **IPOC Station P** | **4.51** | **217** | *e*P | | **Pn** | 09 05 49.9 | **-0.1** |
| PB14 | | | | | *e*S | **Sn** | 09 06 40.8 | **-2.9** |
| PB14 | | | | | IAML | | 09 06 42.7 | |
| | comp=Z,138nm,0.2s | | | | | | | |
| **LPAZ** | **La Paz** | **4.76** | **352** | P | | **Pn** | 09 05 54.8 | **+1.1** |
| | comp=Z,12nm,0.3s,baz=175,slow=9.4,SNR=59 | | | | | | | |
| **AC02** | **Maricunga** | **5.99** | **195** | Pn | | **Pn** | 09 06 08.8 | **-0.5** |
| **AC02** | **Maricunga** | **5.99** | **195** | *e*P | | **Pn** | 09 06 09.4 | **+0.1** |
| **GO03** | **Copiap** | **7.02** | **201** | | | **Pn** | 09 06 20.1 | **-2.3** |
| **GO03** | **Copiap** | **7.02** | **201** | *e*P | | **Pn** | 09 06 20.5 | **-1.8** |
| GO03 | | | | | *e*S | **Sn** | 09 07 37.5 | **-4.4** |
| **SIV** | **San Ignacio** | **7.84** | **51** | P | | **Pn** | 09 06 31.0 | **-2.3** |
| | comp=Z,10nm,0.3s,baz=245,slow=10,SNR=203 | | | | | | | |
| SIV | | | | | S | **Sn** | 09 07 55.6 | **-6.1** |
| | comp=Z,0.3nm,0.3s,baz=294,slow=19,SNR=5.6 | | | | | | | |
| **AC04** | **Llanos de Chal** | **7.87** | **204** | | | **Pn** | 09 06 29.9 | **-3.6** |
| **PTLB** | **Pontes e Lacer** | **9.64** | **56** | *e*P | | **Pn** | 09 06 54.7 | **-2.0** |
| **PTLB** | **Pontes e Lacer** | **9.64** | **56** | | | **Pn** | 09 06 55.7 | **-1.0** |
| **CO03** | **El Pedregal** | **10.20** | **196** | | | **Pn** | 09 07 01.4 | **-2.5** |
| **VILB** | **Vilhena** | **10.60** | **42** | *e*P | | **Pn** | 09 07 09.2 | **0.0** |
| **VILB** | **Vilhena** | **10.60** | **42** | | | **Pn** | 09 07 08.3 | **-0.9** |
| **CO02** | **Combarbal** | **10.63** | **197** | Pn | | **Pn** | 09 07 06.3 | **-3.2** |
| **CPUP** | **Villa Florida** | **10.66** | **122** | P | | **Pn** | 09 07 08.7 | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=281,slow=16,SNR=2.2 | | | | | | | |
| **ETMB** | **Extrema** | **11.21** | **6** | | | **Pn** | 09 07 15.2 | **-1.7** |
| **PTGB** | **Pitanga** | **14.64** | **107** | *e*P | | **Pn** | 09 07 59.0 | **-1.2** |
| **ARAG** | **Araguaiana, MT** | **15.74** | **73** | *e*P | | **Pn** | 09 08 12.1 | **-1.6** |
| **TBTG** | **Tabatinga, AM** | **16.91** | **352** | *e*P | | **Pn** | 09 08 29.9 | **+2.2** |
| **SNDB** | **Serra Nova Dou** | **17.89** | **62** | *e*P | | **P** | 09 08 37.2 | **-0.1** |
| **NPGB** | **Novo Progresso** | **18.16** | **42** | *e*P | | **P** | 09 08 39.3 | **-0.9** |
| **MACA** | **Manacapuru-AM** | **18.94** | **21** | P | | **P** | 09 08 47.6 | **-1.0** |
| **PLCA** | **Paso Flores** | **19.82** | **187** | P | | **P** | 09 08 59.4 | **+1.4** |
| **ITTB** | **Itaituba** | **20.09** | **36** | *e*P | | **P** | 09 09 00.4 | **-0.6** |
| **LL04** | **Puerto Octay** | **20.27** | **191** | P | | **P** | 09 09 03.7 | **+1.1** |
| LL04 | | | | | IAmb | IAmb | 09 09 04.0 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **PEXB** | **Peixe** | **20.36** | **67** | *e*P | | **P** | 09 09 01.9 | **-1.9** |
| **PTGA** | **Pitinga** | **21.45** | **21** | P | | **P** | 09 09 12.7 | **-2.7** |
| | comp=Z,2.1nm,0.3s,baz=319,slow=19,SNR=2.3 | | | | | | | |
| **JANB** | **Januaria** | **22.77** | **79** | *e*P | | **P** | 09 09 26.9 | **-1.2** |
| **MALB** | **Monte Alegre** | **22.98** | **36** | *e*P | | **P** | 09 09 29.2 | **-0.8** |
| **BOAV** | **Boa Vista** | **24.24** | **17** | *e*P | | **P** | 09 09 43.4 | **+1.9** |
| **MDP** | **Montagnes des** | **29.75** | **31** | LR | | LR | 09 24 47.8 | |
| | comp=Z,90nm,18.4s,baz=121,slow=41 | | | | | | | |
| **TXAR** | **Lajitas Array** | **61.04** | **324** | P | | **P** | 09 14 36.1 | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=144,slow=7.8,SNR=7.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **61.04** | **324** | P | | **P** | 09 14 36.7 | **+1.1** |
| **TX31** | **Lajitas Ar. Si** | **61.04** | **324** | P | | **P** | 09 14 36.5 | **+0.8** |
| TX31 | | | | | IAmb | IAmb | 09 14 42.4 | |
| | comp=Z,2.9nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **62.28** | **161** | P | | **P** | 09 14 45.4 | **+2.1** |
| **PD31** | **Pinedale Array** | **74.40** | **329** | P | | **P** | 09 16 00.9 | **+1.9** |
| **PDAR** | **Pinedale Array** | **74.40** | **329** | P | | **P** | 09 16 00.4 | **+1.4** |
| | comp=Z,0.4nm,0.4s,baz=122,slow=8.8,SNR=9.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.40** | **329** | P | | **P** | 09 16 00.9 | **+1.9** |
| **ULM** | **Lac du Bonnet** | **75.29** | **342** | P | | **P** | 09 16 03.5 | **-0.1** |
| | comp=Z,3.2nm,0.5s,baz=177,slow=3.2,SNR=3.8 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **75.29** | **342** | IAmb | | IAmb | 09 16 23.3 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.91** | **70** | P | | **P** | 09 16 07.0 | **-0.9** |
| | comp=Z,2.0nm,0.5s,baz=253,slow=5.5,SNR=21 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.91** | **70** | P | | **P** | 09 16 07.1 | **-0.9** |
| TORD | | | | | IAmb | IAmb | 09 16 08.6 | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.98** | **321** | P | | **P** | 09 16 09.6 | **+1.5** |
| | comp=Z,0.4nm,0.7s,baz=155,slow=6.7,SNR=2.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.20** | **340** | P | | **P** | 09 17 25.7 | **+1.0** |
| | comp=Z,1.7nm,0.5s,baz=133,slow=4.6,SNR=49 | | | | | | | |
| **ASAR** | **Alice Springs** | **130.95** | **206** | PKP | | **PKiKP** | 09 23 32.5 | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=131,slow=1.7,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **134.04** | **209** | PKP | | **PKiKP** | 09 23 38.4 | **-0.2** |
| | comp=Z,0.8nm,0.9s,baz=146,slow=1.6,SNR=6.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **140.94** | **26** | PKP | | **PKPdf** | 09 23 48.9 | **+0.1** |
| | comp=Z,1.0nm,0.4s,baz=320,slow=2.9,SNR=4.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.44** | **37** | PKP | | **PKPdf** | 09 23 55.6 | **+0.3** |
| | comp=Z,2.2nm,0.4s,baz=341,slow=2.7,SNR=40 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.44** | **37** | | | **PKPdf** | 09 23 55.9 | **+0.6** |
| **SONM** | **Songino Array** | **152.79** | **9** | PKPbc | | **PKiKP** | 09 24 17.2 | **+0.8** |
| | comp=Z,0.5nm,0.4s,baz=116,slow=0.2,SNR=3.1 | | | | | | | |

**IDC 10 09:22:19.6±23.0, 4°.41N×126°.72E, h334km±279km, mb2.9/5, mb1 3.1/5, mb1mx2.6/44, mbtmp3.6/5, MS2.3/1, Ms1 2.3/1, ms1mx2.0/20, Error ellipse: s-maj=93.2km s-min=22.6km az=88.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **11.66** | **217** | LR | | LR | 09 29 43.9 | |
| | comp=Z,15nm,21.3s,baz=15,slow=38 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.39** | **183** | P | | P | 09 26 50.6 | -0.1 |
| | 5.9nm,1.3s,baz=356,slow=13,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.33** | **163** | P | | P | 09 27 17.5 | +0.3 |
| | 1.3nm,1.0s,baz=344,slow=9.6,SNR=8.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **28.77** | **166** | P | | P | 09 27 47.3 | -0.4 |
| | 0.3nm,0.6s,baz=344,slow=7.0,SNR=7.5 | | | | | | | |
| **KSRS** | **Korea Array** | **32.91** | **2** | P | | P | 09 28 23.4 | -0.2 |
| | 0.6nm,0.5s,baz=186,slow=9.3,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.00** | **325** | P | | P | 09 31 31.3 | -0.1 |
| | 0.2nm,0.4s,baz=116,slow=8.4,SNR=4.1 | | | | | | | |

**TAP 10 09:27:13.3, 23°.05N×120°.51E, h5km±1km, ML1.6, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGST** | **Jiashian** | **0.07** | **60** | *i* P | | Pg | 09 27 15.7 | +0.7 |
| | baz=63 | | | | | | | |
| SGST | | | | *i* S | | Sg | 09 27 17.4 | +1.3 |
| | baz=63 | | | | | | | |
| **CHN1** | **Nanshi** | **0.14** | **5** | *e*P | | Pg | 09 27 17.1 | +1.0 |
| | baz=5.0 | | | | | | | |
| CHN1 | | | | *e*S | | Sg | 09 27 19.7 | +1.6 |
| | baz=5.0 | | | | | | | |
| **SNST** | **Tainan City** | **0.17** | **355** | *e*S | | Sg | 09 27 21.2 | +2.1 |
| | baz=354 | | | | | | | |
| **WTP** | **Ta-pu** | **0.22** | **25** | *i* P | | Pg | 09 27 18.6 | +1.0 |
| | baz=26 | | | | | | | |
| **TWK** | **Hsinying** | **0.22** | **354** | *e*S | | Sg | 09 27 22.7 | +2.1 |
| | baz=356 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.28** | **23** | *e*P | | Pb | 09 27 19.8 | -0.9 |
| | baz=22 | | | | | | | |

**TAP 10 09:27:17.4, 23°.13N×120°.82E, h6km±1km, ML1.5, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.05** | **317** | P | | Pg | 09 27 19.5 | +0.6 |
| | baz=326 | | | | | | | |
| STYH | | | | S | | Sg | 09 27 20.4 | +0.5 |
| | baz=326 | | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **73** | *i* S | | Sg | 09 27 25.8 | +1.9 |
| | baz=73 | | | | | | | |
| **WTP** | **Ta-pu** | **0.22** | **302** | *i* P | | Pg | 09 27 22.9 | +1.1 |
| | baz=302 | | | | | | | |
| WTP | | | | *i* S | | Sg | 09 27 26.5 | +1.8 |
| | baz=302 | | | | | | | |
| **WTP** | **Ta-pu** | **0.22** | **302** | S | | Pg | 09 27 22.9 | +1.2 |
| | baz=26 | | | | | | | |
| **SGST** | **Jiashian** | **0.22** | **257** | *e*S | | Sg | 09 27 25.7 | +1.0 |
| | baz=256 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.24** | **315** | P | | Pg | 09 27 23.4 | +1.2 |
| | baz=314 | | | | | | | |
| TPUB | | | | S | | Sg | 09 27 27.1 | +1.8 |
| | baz=314 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.24** | **315** | *e*S | | Pg | 09 27 23.4 | +1.2 |
| | baz=22 | | | | | | | |
| **CHN1** | **Nanshi** | **0.27** | **282** | S | | Sb | 09 27 28.8 | -0.8 |
| | baz=281 | | | | | | | |
| **SNST** | **Tainan City** | **0.30** | **287** | *e*S | | Sb | 09 27 30.7 | +0.1 |
| | baz=286 | | | | | | | |
| **TWK** | **Hsinying** | **0.33** | **294** | *e*S | | Sb | 09 27 31.1 | -0.3 |
| | baz=294 | | | | | | | |
| **LONT** | **Longtian** | **0.37** | **128** | *e*P | | Pb | 09 27 26.2 | -0.2 |
| | baz=103 | | | | | | | |
| **LONT** | **Longtian** | **0.37** | **128** | P | | Pb | 09 27 26.1 | -0.2 |
| | baz=127 | | | | | | | |
| LONT | | | | *e*S | | Sb | 09 27 31.7 | -0.7 |
| | baz=127 | | | | | | | |
| **ALS** | **Alishan** | **0.38** | **359** | *e*P | | Pb | 09 27 26.0 | -0.8 |
| | baz=30 | | | | | | | |
| ALS | | | | *e*S | | Sb | 09 27 32.1 | -0.9 |
| | baz=30 | | | | | | | |
| **ALS** | **Alishan** | **0.38** | **359** | *i* P | | Pb | 09 27 26.0 | -0.7 |
| | baz=359 | | | | | | | |
| ALS | | | | *i* S | | Sb | 09 27 32.2 | -0.8 |
| | baz=359 | | | | | | | |
| **TWG** | **Pinlang** | **0.39** | **142** | *e*P | | Pb | 09 27 26.7 | 0.0 |
| | baz=142 | | | | | | | |
| TWG | | | | *e*S | | Sb | 09 27 33.0 | -0.1 |
| | baz=142 | | | | | | | |
| **TWGBT** | **Beinan** | **0.40** | **142** | *e*P | | Pb | 09 27 26.7 | -0.2 |
| | baz=142 | | | | | | | |
| TWGBT | | | | *e*S | | Sb | 09 27 33.0 | -0.3 |
| | baz=142 | | | | | | | |
| **SSD** | **Sandimen** | **0.42** | **204** | *e*S | | Sg | 09 27 32.2 | +1.1 |
| | baz=202 | | | | | | | |
| **FULB** | **Fuli** | **0.45** | **81** | *e*P | | Pb | 09 27 28.2 | +0.5 |
| | baz=77 | | | | | | | |
| **FULB** | **Fuli** | **0.45** | **81** | *i* P | | Pb | 09 27 28.2 | +0.5 |
| | baz=81 | | | | | | | |
| FULB | | | | *i* S | | Sb | 09 27 35.4 | +0.7 |
| | baz=81 | | | | | | | |
| **YULB** | **Yu-li** | **0.51** | **60** | P | | Pb | 09 27 28.4 | -0.5 |
| | baz=59 | | | | | | | |
| YULB | | | | *e*S | | Sg | 09 27 35.1 | +1.0 |
| | baz=59 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.54** | **198** | P | | Pb | 09 27 28.8 | -0.6 |
| | baz=198 | | | | | | | |
| MASBT | | | | S | | Sg | 09 27 35.7 | +0.7 |
| | baz=198 | | | | | | | |
| **SSLB** | **Suanglung** | **0.67** | **11** | P | | Pb | 09 27 31.4 | -0.2 |
| | baz=11 | | | | | | | |
| SSLB | | | | S | | Sb | 09 27 40.8 | -0.3 |
| | baz=11 | | | | | | | |
| **WTK** | **Tuku** | **0.68** | **325** | *e*S | | Sb | 09 27 42.3 | +0.9 |
| | baz=324 | | | | | | | |
| **VWDT** | **VWDT** | **0.69** | **26** | P | | Pb | 09 27 31.5 | -0.4 |
| | baz=25 | | | | | | | |
| VWDT | | | | *e*S | | Sn | 09 27 44.9 | +0.1 |
| | baz=25 | | | | | | | |
| **WUSB** | **Renai** | **0.90** | **18** | *e*P | | Pb | 09 27 35.7 | +0.1 |
| | baz=17 | | | | | | | |
| WUSB | | | | *e*S | | Sn | 09 27 52.5 | +2.2 |
| | baz=17 | | | | | | | |

*IDC **10** 09:41:11.2±3.3, 53°.87N×90°.96E, h0km, mb1 3.5/3, mb1mx2.8/63, mbtmp3.5/3, ML3.0/3, Error ellipse: s-maj=28.5km s-min=22.8km az=43.0*
*NNC **10** 09:41:16.1±3.9, 53°.15N×91°.11E, h0km, mb3.9, mpv3.6, Error ellipse: s-maj=30.0km s-min=19.9km az=73.0, Suspected Mining explosion.*

**ISC 10 09:41:10.5±3.6, 53°.7N±0°.1×91°.1E±0°.2, h0km, n9, σ1s 72/16, 8C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.74** | **276** | *i* | | | 10 05 13.8 | |
| | baz=88,slow=346,SNR=14 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.74** | **276** | ⇑P | | **Pb** | **09 42 15.7** | **-1.7** |
| | 2.4nm,0.6s | | | | | | | |
| ZAA0 | | | | ⇑S | | **Sb** | **09 43 05.1** | **+1.8** |
| | 38nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.74** | **276** | Pn | | **Pn** | **09 42 10.0** | **+0.5** |
| | 1.0nm,0.3s,baz=95,slow=14,SNR=14 | | | | | | | |
| ZALV | | | | Pg | | **Pb** | **09 42 16.0** | **-1.4** |
| | 2.7nm,0.3s,baz=91,slow=16,SNR=20 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 43 04.4 | |
| | 1.7nm,0.3s,baz=35,slow=45,SNR=1.8 | | | | | | | |
| **KURK** | **Kurchatov** | **8.25** | **254** | ⇑Pn | | **Pn** | **09 43 14.6** | **+3.3** |
| | 8.6nm,1.3s | | | | | | | |
| KURK | | | | ⇑Sn | | **Sn** | **09 44 45.5** | **+0.4** |
| | 20nm,0.8s | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | 09 45 32.0 | |
| | 52nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.34** | **253** | Pn | | **Pn** | **09 43 12.9** | **+0.4** |
| | 0.4nm,0.3s,baz=65,slow=14,SNR=6.9 | | | | | | | |
| KURBB | | | | Sn | | **Sn** | **09 44 45.5** | **-1.9** |
| | 0.1nm,0.3s,baz=66,slow=25,SNR=15 | | | | | | | |
| KURBB | | | | Lg | | Lg | 09 45 32.5 | |
| | baz=70,slow=31,SNR=5.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.34** | **253** | ⇑Pn | | **Pn** | **09 43 13.4** | **+0.8** |
| | 17nm,1.4s | | | | | | | |
| KURBB | | | | ⇑Sn | | **Sn** | **09 44 46.4** | **-1.0** |
| | 82nm,1.0s | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | 09 45 35.9 | |
| | 171nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.95** | **223** | Pn | | **Pn** | **09 43 21.5** | **+0.5** |
| | 0.7nm,0.5s,baz=34,slow=12,SNR=18 | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sn** | **09 44 59.5** | **-3.0** |
| | 5.1nm,0.8s,baz=46,slow=26,SNR=4.7 | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 09 45 46.3 | |
| | 24nm,1.0s,baz=34,slow=26,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.95** | **223** | Pn | | **Pn** | **09 43 22.2** | **+1.2** |
| | 0.6nm,0.3s,baz=31,slow=12,SNR=20 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **09 45 03.8** | **+1.4** |
| | 0.3nm,0.3s,baz=49,slow=24,SNR=7.0 | | | | | | | |
| MKAR | | | | Lg | | Lg | 09 45 49.8 | |
| | 0.1nm,0.3s,baz=39,slow=31,SNR=1.6 | | | | | | | |
| **MAKZ** | **Makanchi** | **9.07** | **224** | ⇓Pn | | **Pn** | **09 43 23.6** | **+1.1** |
| | 1.2nm,0.6s | | | | | | | |
| MAKZ | | | | ⇑Sn | | **Sn** | **09 45 04.9** | **-0.4** |
| | 12nm,1.2s | | | | | | | |
| MAKZ | | | | ⇓Lg | | Lg | 09 45 50.2 | |
| | 21nm,1.2s | | | | | | | |

**TAP 10 09:48:39.1, 23°.41N×120°.44E, h11km, ML2.2, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHY** | **Chiayi** | **0.09** | **352** | P | | Pg | 09 48 42.1 | +0.4 |
| | baz=356 | | | | | | | |
| CHY | | | | S | | Sg | 09 48 44.8 | +1.2 |
| | baz=356 | | | | | | | |
| **CHN2** | **Minshiung** | **0.13** | **16** | P | | Pg | 09 48 42.9 | +0.6 |
| | baz=15 | | | | | | | |
| CHN2 | | | | S | | Sg | 09 48 46.5 | +2.0 |
| | baz=15 | | | | | | | |
| **TWK** | **Hsinying** | **0.15** | **161** | *i* P | | Pg | 09 48 43.2 | +0.6 |
| | baz=150 | | | | | | | |
| TWK | | | | S | | Sg | 09 48 46.3 | +1.3 |
| | baz=150 | | | | | | | |
| **ICHU** | **Yijhu** | **0.15** | **252** | *e*P | | Pb | 09 48 43.3 | -0.6 |
| | baz=252 | | | | | | | |
| ICHU | | | | S | | Sg | 09 48 47.2 | +2.1 |
| | baz=252 | | | | | | | |
| **SNST** | **Tainan City** | **0.19** | **163** | *i* P | | Pb | 09 48 44.1 | -0.5 |
| | baz=157 | | | | | | | |
| SNST | | | | S | | Sg | 09 48 48.2 | +2.0 |
| | baz=157 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.21** | **121** | *i* P | | Pg | 09 48 44.1 | +0.6 |
| | baz=121 | | | | | | | |
| TPUB | | | | S | | Sg | 09 48 47.9 | +1.4 |
| | baz=121 | | | | | | | |
| **CHN8** | **Yiju** | **0.22** | **254** | *e*P | | Pb | 09 48 44.4 | -0.6 |
| | baz=253 | | | | | | | |
| CHN8 | | | | *e*S | | Sg | 09 48 48.5 | +1.8 |
| | baz=253 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.22** | **301** | *e*P | | Pb | 09 48 44.5 | -0.7 |
| | baz=301 | | | | | | | |
| WSL | | | | *e*S | | Sg | 09 48 48.6 | +1.6 |
| | baz=301 | | | | | | | |
| **WTP** | **Ta-pu** | **0.23** | **135** | *i* P | | Pb | 09 48 44.8 | -0.5 |
| | baz=134 | | | | | | | |
| WTP | | | | S | | Sg | 09 48 49.1 | +2.0 |
| | baz=134 | | | | | | | |
| **CHN1** | **Nanshi** | **0.24** | **159** | *i* P | | Pb | 09 48 45.0 | -0.4 |
| | baz=154 | | | | | | | |
| CHN1 | | | | S | | Sg | 09 48 49.5 | +2.1 |
| | baz=154 | | | | | | | |
| **WTK** | **Tuku** | **0.28** | **351** | *e*P | | Pb | 09 48 45.6 | -0.6 |
| | baz=351 | | | | | | | |
| WTK | | | | *e*S | | Sb | 09 48 50.0 | -1.0 |
| | baz=351 | | | | | | | |
| **CHN5** | **Tsauling** | **0.29** | **49** | P | | Pb | 09 48 45.9 | -0.5 |
| | baz=49 | | | | | | | |
| CHN5 | | | | *e*S | | Sb | 09 48 51.3 | +0.1 |
| | baz=49 | | | | | | | |
| **WDLH** | **Douliu** | **0.29** | **18** | *e*P | | Pb | 09 48 46.2 | -0.2 |
| | baz=18 | | | | | | | |
| WDLH | | | | *e*S | | Sb | 09 48 51.1 | -0.2 |
| | baz=18 | | | | | | | |
| **WSF** | **Szhu** | **0.30** | **319** | *e*P | | Pb | 09 48 46.8 | +0.3 |
| | baz=320 | | | | | | | |
| WSF | | | | *e*S | | Sb | 09 48 52.1 | +0.6 |
| | baz=320 | | | | | | | |
| **SGST** | **Jiashian** | **0.35** | **157** | *e*P | | Pg | 09 48 46.6 | +0.4 |
| | baz=157 | | | | | | | |
| SGST | | | | *e*S | | Sb | 09 48 52.8 | -0.1 |
| | baz=157 | | | | | | | |
| **ALS** | **Alishan** | **0.35** | **73** | P | | Pb | 09 48 47.5 | -0.1 |
| | baz=85 | | | | | | | |
| ALS | | | | *e*S | | Sb | 09 48 53.3 | 0.0 |
| | baz=85 | | | | | | | |
| **STYH** | **Taoyuan** | **0.39** | **127** | P | | Pb | 09 48 47.7 | -0.3 |
| | baz=127 | | | | | | | |
| STYH | | | | *e*S | | Sb | 09 48 54.1 | +0.1 |
| | baz=127 | | | | | | | |
| **SHHT** | **Tainan City** | **0.39** | **192** | *e*P | | Pb | 09 48 47.9 | -0.2 |
| | baz=192 | | | | | | | |
| SHHT | | | | *e*S | | Sb | 09 48 55.4 | +1.3 |
| | baz=192 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.49** | **354** | *e*P | | Pb | 09 48 49.8 | 0.0 |
| | baz=345 | | | | | | | |
| WRL | | | | *e*S | | Sb | 09 48 57.5 | +0.4 |
| | baz=345 | | | | | | | |
| **WNT** | **Mingjian** | **0.52** | **26** | *e*P | | Pb | 09 48 50.5 | +0.3 |
| | baz=26 | | | | | | | |
| **ELDTW** | **Lidau** | **0.58** | **112** | *e*P | | Pb | 09 48 51.5 | +0.3 |
| | baz=112 | | | | | | | |
| ELDTW | | | | *e*S | | Sb | 09 49 00.2 | +0.7 |
| | baz=112 | | | | | | | |
| **TWM1** | **Shoushan** | **0.58** | **181** | *e*P | | Pn | 09 48 53.1 | -0.3 |
| | baz=181 | | | | | | | |
| **SSLB** | **Suanglung** | **0.61** | **51** | *e*P | | Pb | 09 48 51.7 | -0.1 |
| | baz=51 | | | | | | | |
| SSLB | | | | *e*S | | Sb | 09 49 01.3 | +1.0 |
| | baz=51 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.64** | **42** | *e*P | | Pb | 09 48 52.7 | +0.4 |
| | baz=43 | | | | | | | |
| SMLT | | | | *e*S | | Sb | 09 49 02.0 | +0.8 |
| | baz=43 | | | | | | | |
| **SSD** | **Sandimen** | **0.68** | **165** | *e*P | | Pb | 09 48 53.7 | +0.7 |
| | baz=152 | | | | | | | |
| **TSMG** | **Majia** | **0.72** | **165** | *e*P | | Pb | 09 48 53.6 | -0.1 |
| | baz=153 | | | | | | | |
| TSMG | | | | *e*S | | Sb | 09 49 04.3 | +0.6 |
| | baz=153 | | | | | | | |
| **WDGT** | **Dungji** | **0.73** | **259** | *e*P | | Pg | 09 48 53.4 | +0.2 |
| | baz=258 | | | | | | | |
| WDGT | | | | *e*S | | Sb | 09 49 03.8 | 0.0 |
| | baz=258 | | | | | | | |
| **VWDT** | **VWDT** | **0.73** | **62** | *e*P | | Pn | 09 48 54.8 | -0.6 |
| | baz=62 | | | | | | | |
| VWDT | | | | *e*S | | Sb | 09 49 04.5 | +0.6 |
| | baz=62 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.78** | **34** | *e*P | | Pb | 09 48 55.0 | +0.3 |
| | baz=34 | | | | | | | |
| **PHUB** | **P'eng-hu** | **0.80** | **278** | *e*P | | Pg | 09 48 54.0 | -0.5 |
| | baz=277 | | | | | | | |
| PHUB | | | | *e*S | | Sb | 09 49 06.4 | +0.5 |
| | baz=277 | | | | | | | |
| **LONT** | **Longtian** | **0.81** | **128** | *e*P | | Pn | 09 48 56.2 | -0.3 |
| | baz=129 | | | | | | | |
| LONT | | | | *e*S | | Sn | 09 49 07.9 | -0.6 |
| | baz=129 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.81** | **167** | *e*P | | Pb | 09 48 55.8 | +0.5 |
| | baz=156 | | | | | | | |
| **PNG** | **Penghu

0.1nm,0.3s,baz=311,slow=11,SNR=5.5
WRA S S 10 19 24.1 -11
0.1nm,0.3s,baz=322,slow=26,SNR=2.1
**ASAR Alice Springs 17.73 147** P P 10 17 15.3 +0.7
0.1nm,0.3s,baz=320,slow=11,SNR=7.2
**MKAR Makanchi Array 66.49 330** P P 10 23 50.0 0.0
0.1nm,0.5s,baz=129,slow=8.0,SNR=4.4

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*IDC **10** 10:15:55.1±1.5, 17°59.N×106°12.W, h0km, mb3.9/6, mb1 4.3/10,mb1mx4.0/42,mbtmp4.0/10,ML3.7/4,MS3.6/34, Ms1 3.7/34,ms1mx3.5/70,Error ellipse: s-maj=33.7km s-min=27.7km az=60.0*
*NEIC **10** 10:15:59.0±1.7, 17°.76N±0°.09×105°.72W±0°.08, h10km±2km, mb4.3/126,Md4.5/15(MEX), Error ellipse: s-maj=16.0km s-min=12.9km az=189.0*
*MEX **10** 10:16:01.1±1.2, 17°.90N×105°.72W, h6km, MD4.4*
**ISC 10 10:16:00.1±0.8, 17.76N±0°.08×105.73W±0°.07, h26km, n300, σ1$18/267, mb4.3/40, MS3.7/32, Off coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CJM** | **Chamela** | **1.85** | **21** | *i* P | | Pn | 10 16 21.6 | -8.6 |
| CJM | | | | *e*S | | Sn | 10 16 42.4 | -10 |
| **CDAR** | **Ciudad de Arme** | **2.01** | **54** | *i* P | | **Pn** | **10 16 30.5** | **-1.9** |
| **R15V** | | **2.17** | **50** | | | **Pn** | **10 16 32.9** | **-1.8** |
| **R15V** | | **2.17** | **50** | *i* P | | **Pn** | **10 16 32.9** | **-1.8** |
| **MMIG** | **Aquila** | **2.33** | **77** | | | **Pn** | **10 16 35.7** | **-1.1** |
| **MMIG** | **Aquila** | **2.33** | **77** | *i* P | | **Pn** | **10 16 35.7** | **-1.1** |
| **COIG** | **Colima** | **2.40** | **54** | *i* P | | **Pn** | **10 16 36.5** | **-1.3** |
| **MNGA** | **Volcan de Coli** | **2.62** | **49** | *i* P | | **Pn** | **10 16 40.8** | **-0.3** |
| **EZ5V** | | **2.65** | **49** | | | **Sn** | **10 17 05.8** | **-7.0** |
| **EZ5V** | | **2.65** | **49** | *i* P | | **Pn** | **10 16 41.6** | **+0.2** |
| EZ5V | | | | *i* P | | Pb | 10 16 41.8 | -5.1 |
| EZ5V | | | | *e*S | | **Sn** | **10 17 11.4** | **-1.3** |
| **INCO** | **Volcan de Coli** | **2.67** | **49** | *e*P | | **Pn** | **10 16 41.9** | **0.0** |
| **JUBC** | **Volcan de Coli** | **2.69** | **49** | *i* P | | **Pn** | **10 16 42.2** | **+0.2** |
| **ANIG** | **Ahuacatlan** | **3.47** | **19** | | | **Pn** | **10 16 51.8** | **-0.8** |
| **ANIG** | **Ahuacatlan** | **3.47** | **19** | *e*P | | **Pn** | **10 16 51.2** | **-1.4** |
| ANIG | | | | *i* S | | **Sn** | **10 17 30.0** | **-2.8** |
| **MOIG** | **Morelia** | **4.71** | **65** | Pn | | **Pn** | **10 17 09.5** | **-0.2** |
| **ZAIG** | **Zacatecas** | **5.80** | **30** | | | **Pn** | **10 17 24.9** | **+0.1** |
| **UNM** | **Universidad Na** | **6.41** | **75** | Pn | | **Pn** | **10 17 34.1** | **+1.0** |
| **SLBS** | **Sierra La Lagu** | **7.09** | **327** | Pn | | **Pn** | **10 17 42.2** | **-0.1** |
| **LPIG** | **La Paz** | **7.62** | **327** | LR | | LR | 10 19 59.8 | |
| | comp=Z,479nm,19.6s,baz=154,slow=32 | | | | | | | |
| **HPIG** | | **9.13** | **0** | Pn | | **Pn** | **10 18 12.2** | **+1.8** |
| **CMIG** | **Matias Romero** | **10.38** | **92** | Pn | | **Pn** | **10 18 31.6** | **+4.2** |
| | 0.7nm,0.3s,baz=311,slow=9.6,SNR=8.3 | | | | | | | |
| CMIG | | | | LR | | LR | 10 22 29.0 | |
| | comp=Z,470nm,20.6s,baz=281,slow=37 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **11.67** | **9** | | | **Pn** | **10 18 46.2** | **+1.1** |
| **TX32** | **Lajitas Array** | **11.67** | **9** | | | **Pn** | **10 18 45.8** | **+0.7** |
| **TXAR** | **Lajitas Array** | **11.67** | **9** | Pn | | **Pn** | **10 18 48.5** | **+3.3** |
| | 0.3nm,0.3s,baz=185,slow=13,SNR=35 | | | | | | | |
| **TXAR** | **Lajitas Array** | **11.67** | **9** | Pn | | **Pn** | **10 18 46.1** | **+0.9** |
| **833A** | **Chaparral WMA,** | **12.02** | **28** | | | **Pn** | **10 18 50.2** | **+0.4** |
| **KVTX** | **Kingsville** | **12.13** | **35** | Pn | | **Pn** | **10 18 51.8** | **+0.6** |
| **735A** | **Kenedy** | **13.22** | **32** | Pn | | **Pn** | **10 19 06.2** | **0.0** |
| **JCT** | **Junction City** | **13.76** | **22** | Pn | | **Pn** | **10 19 10.9** | **-2.8** |
| **JCT** | **Junction City** | **13.76** | **22** | P | | **Pn** | **10 19 16.9** | **+3.2** |
| | baz=205 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **13.88** | **1** | | | **Pn** | **10 19 14.8** | **-0.5** |
| **MNTX** | **Cornudas Mount** | **13.88** | **1** | P | | **Pn** | **10 19 18.8** | **+3.6** |
| | baz=182 | | | | | | | |
| **319A** | **Douglas** | **13.93** | **347** | Pn | | **Pn** | **10 19 16.3** | **+0.3** |
| **121A** | **Cookes Peak, D** | **14.82** | **353** | | | **Pn** | **10 19 29.3** | **+1.0** |
| **121A** | **Cookes Peak, D** | **14.82** | **353** | P | | **Pn** | **10 19 30.8** | **+2.6** |
| | baz=173 | | | | | | | |
| **APG** | **El Apazote** | **14.91** | **98** | LR | | LR | 10 24 43.4 | |
| | comp=Z,223nm,21.0s,baz=300,slow=35 | | | | | | | |
| **435B** | **Jarrell** | **14.93** | **28** | Pn | | **Pn** | **10 19 29.8** | **+0.3** |
| **HKT** | **Hockley** | **15.13** | **35** | Pn | | **Pn** | **10 19 31.7** | **-0.4** |
| **TUC** | **Tucson** | **15.19** | **343** | | | **Pn** | **10 19 34.0** | **+1.0** |
| **TUC** | **Tucson** | **15.19** | **343** | P | | **Pn** | **10 19 34.6** | **+1.6** |
| | baz=162 | | | | | | | |
| **214A** | **Organ Pipe Nat** | **15.52** | **337** | | | **Pn** | **10 19 37.2** | **-0.1** |
| 214A | | | | | IAmb | IAmb | 10 19 43.9 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **214A** | **Organ Pipe Nat** | **15.52** | **337** | P | | **P** | **10 19 42.4** | **+1.0** |
| | baz=155,SNR=1.1 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **15.78** | **19** | P | | **P** | **10 19 45.1** | **+0.7** |
| | baz=202 | | | | | | | |
| **WHTX** | **Lake Whitney,** | **16.02** | **26** | Pn | | **Pn** | **10 19 45.0** | **+1.2** |
| **WHTX** | **Lake Whitney,** | **16.02** | **26** | P | | **Pn** | **10 19 45.8** | **+2.0** |
| | baz=210 | | | | | | | |
| **BNM** | **Barren Site** | **16.34** | **357** | | | **Pn** | **10 19 49.5** | **+1.4** |
| **MSTX** | **Muleshoe** | **16.36** | **9** | P | | **Pn** | **10 19 49.8** | **+1.7** |
| MSTX | | | | | IAmb | IAmb | 10 19 59.0 | |
| | comp=Z,47nm,1.5s | | | | | | | |
| **MSTX** | **Muleshoe** | **16.36** | **9** | P | | **P** | **10 19 50.5** | **-0.3** |
| | baz=190 | | | | | | | |
| **LENM** | **Lemitar** | **16.37** | **356** | | | **Pn** | **10 19 49.5** | **+1.1** |
| **ANMO** | **Albuquerque** | **17.13** | **358** | P | | **Pn** | **10 19 58.0** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=180,slow=12,SNR=7.8 | | | | | | | |
| **ANMO** | **Albuquerque** | **17.13** | **358** | P | | **P** | **10 20 00.5** | **+1.1** |
| | baz=178 | | | | | | | |
| **NATX** | **Nacogdoches** | **17.17** | **34** | P | | **Pn** | **10 19 59.0** | **+0.8** |
| NATX | | | | | IAmb | IAmb | 10 20 04.2 | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **Z35A** | **Perchaven, San** | **17.27** | **25** | P | | **Pn** | **10 20 00.4** | **+0.8** |
| Z35A | | | | | IAmb | IAmb | 10 20 12.5 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **GLA** | **Glamis** | **17.28** | **333** | P | | **P** | **10 20 01.6** | **+0.6** |
| | baz=150 | | | | | | | |
| **AMTX** | **Amarillo** | **17.43** | **11** | P | | **P** | **10 20 03.6** | **+0.9** |
| **AMTX** | **Amarillo** | **17.43** | **11** | P | | **P** | **10 20 04.8** | **+2.1** |
| | baz=193 | | | | | | | |
| **YUH** | **Yuha Desert** | **17.44** | **330** | P | | **Pn** | **10 20 02.4** | **+0.8** |
| **RMX** | **La Rumorosa** | **17.48** | **330** | P | | **Pn** | **10 20 01.2** | **-1.0** |
| **IKP** | **In-Ko-Pah, Jac** | **17.53** | **330** | P | | **P** | **10 20 04.6** | **+0.8** |
| | baz=146 | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **17.63** | **331** | P | | **P** | **10 20 05.4** | **+0.7** |
| | baz=147 | | | | | | | |
| **W18A** | **Petrified Fore** | **17.65** | **349** | P | | **Pn** | **10 20 04.8** | **+0.4** |
| **W18A** | **Petrified Fore** | **17.65** | **349** | P | | **P** | **10 20 06.5** | **+1.3** |
| | baz=168 | | | | | | | |
| **TKX** | **Tecate** | **17.71** | **328** | P | | **Pn** | **10 20 05.5** | **+0.5** |
| **BLYC** | **Blythe** | **17.77** | **335** | P | | **P** | **10 20 07.1** | **+0.9** |
| **BAR** | **Barrett** | **17.83** | **328** | P | | **Pn** | **10 20 06.5** | **0.0** |
| **MONP2** | **Monument Peak** | **17.88** | **329** | P | | **Pn** | **10 20 08.2** | **+1.0** |
| | baz=145 | | | | | | | |
| **LOOK** | **Love County** | **17.89** | **24** | P | | **Pn** | **10 20 08.1** | **+1.0** |
| LOOK | | | | | IAmb | IAmb | 10 20 13.6 | |
| | comp=Z,31nm,1.4s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **18.01** | **19** | P | | **P** | **10 20 11.0** | **+2.0** |
| | baz=202 | | | | | | | |
| **BC3** | **Big Chuckawall** | **18.07** | **333** | P | | **P** | **10 20 11.2** | **+1.4** |
| | baz=149,SNR=11 | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **18.11** | **337** | P | | **P** | **10 20 11.3** | **+1.3** |
| | baz=154 | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **18.13** | **99** | P | | **Pn** | **10 20 11.0** | **+0.6** |
| **X34A** | **Smith Ranch, M** | **18.19** | **21** | P | | **Pn** | **10 20 10.7** | **-0.2** |
| X34A | | | | | IAmb | IAmb | 10 20 30.4 | |
| | comp=Z,30nm,1.2s | | | | | | | |
| **342A** | **Flagon Creek P** | **18.21** | **39** | P | | **Pn** | **10 20 11.7** | **+0.6** |
| 342A | | | | | IAmb | IAmb | 10 20 11.8 | |
| | comp=Z,33nm,1.4s | | | | | | | |
| **IRM** | **Iron Mountain** | **18.37** | **335** | P | | **Pn** | **10 20 14.5** | **+1.4** |
| | baz=151,SNR=7.3 | | | | | | | |
| **WUAZ** | **Wupatki** | **18.38** | **345** | | | **P** | **10 20 14.0** | **+0.7** |
| **WUAZ** | **Wupatki** | **18.38** | **345** | P | | **Pn** | **10 20 15.1** | **+1.7** |
| | baz=163,SNR=7.1 | | | | | | | |
| **PMD** | **Palm Desert** | **18.48** | **331** | | | **P** | **10 20 13.5** | **-0.7** |
| **TPFO** | **Pinon Flats** | **18.48** | **331** | P | | **Pn** | **10 20 15.8** | **+1.2** |
| | baz=147 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **18.49** | **331** | P | | **P** | **10 20 12.7** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=157,slow=7.7,SNR=3.9 | | | | | | | |
| PFO | | | | LR | | LR | 10 26 15.3 | |
| | comp=Z,173nm,20.2s,baz=164,slow=34 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **18.49** | **331** | | | **P** | **10 20 13.5** | **-0.8** |
| **PFO** | **Pinyon Flats O** | **18.49** | **331** | P | | **P** | **10 20 15.5** | **+1.1** |
| | baz=147 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **18.60** | **332** | P | | **P** | **10 20 16.6** | **+1.0** |
| | baz=148,SNR=8.0 | | | | | | | |
| **MURC** | **Murrieta** | **18.83** | **329** | P | | **P** | **10 20 18.6** | **+0.6** |
| | baz=145 | | | | | | | |
| **ELS** | **Elsinore Mount** | **18.98** | **329** | P | | **P** | **10 20 19.3** | **-0.4** |
| **W35A** | **Tecumseh** | **19.03** | **23** | P | | **Pn** | **10 20 22.4** | **+1.4** |
| W35A | | | | | IAmb | IAmb | 10 20 23.9 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **GMRC** | **Granite Mounta** | **19.13** | **334** | P | | **P** | **10 20 22.6** | **+1.2** |
| | baz=150 | | | | | | | |
| **X37A** | **Clayton** | **19.14** | **27** | P | | **P** | **10 20 22.6** | **+1.2** |
| X37A | | | | | IAmb | IAmb | 10 20 35.4 | |
| | comp=Z,43nm,1.4s | | | | | | | |
| **OK025** | **Westminster Rd** | **19.25** | **21** | P | | **Pn** | **10 20 24.6** | **+0.9** |
| OK025 | | | | | IAmb | IAmb | 10 20 40.1 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| **Z41A** | **Richland Creek** | **19.32** | **35** | P | | **P** | **10 20 24.5** | **+1.2** |
| Z41A | | | | | IAmb | IAmb | 10 20 29.4 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **T25A** | **Trinidad** | **19.34** | **3** | P | | **Pn** | **10 20 26.1** | **+1.1** |
| | baz=184 | | | | | | | |
| **OK031** | **S. Brethren Rd** | **19.76** | **22** | P | | **Pn** | **10 20 30.2** | **+0.4** |
| OK031 | | | | | IAmb | IAmb | 10 20 43.0 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **OK033** | **Mehan** | **19.81** | **21** | P | | **Pn** | **10 20 30.9** | **+0.6** |
| OK033 | | | | | IAmb | IAmb | 10 20 37.2 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **19.91** | **1** | P | | **P** | **10 20 31.6** | **+1.5** |
| **SDCO** | **Great Sand Dun** | **19.91** | **1** | P | | **Pn** | **10 20 32.1** | **+0.2** |
| | baz=181 | | | | | | | |
| **MIAR** | **Mount Ida** | **19.93** | **31** | P | | **Pn** | **10 20 31.9** | **+0.2** |
| **MIAR** | **Mount Ida** | **19.93** | **31** | P | | **Pn** | **10 20 32.5** | **+0.7** |
| | baz=216 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **19.93** | **357** | | | **P** | **10 20 30.6** | **+0.3** |
| **S22A** | **4UR Ranch, Cre** | **19.93** | **357** | P | | **Pn** | **10 20 32.3** | **+0.2** |
| | baz=177 | | | | | | | |
| **GSC** | **Goldstone, Bar** | **20.05** | **333** | | | **P** | **10 20 31.8** | **+0.3** |
| GSC | | | | | IAmb | IAmb | 10 20 40.0 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **20.05** | **333** | P | | **P** | **10 20 32.7** | **+1.2** |
| | baz=148 | | | | | | | |
| **TUL1** | **Leonard** | **20.11** | **24** | P | | **P** | **10 20 33.0** | **+1.0** |
| TUL1 | | | | | IAmb | IAmb | 10 20 39.9 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **KNB** | **Kanab** | **20.17** | **343** | P | | **P** | **10 20 34.3** | **+1.5** |
| KNB | | | | | IAmb | IAmb | 10 20 40.4 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **LCMT** | **Little Creek M** | **20.29** | **342** | P | | **P** | **10 20 35.5** | **+1.5** |
| LCMT | | | | | IAmb | IAmb | 10 20 39.9 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **W39A** | **Magazine** | **20.36** | **29** | P | | **P** | **10 20 36.4** | **+1.7** |
| | baz=215 | | | | | | | |
| **BLOK** | **Blackwell** | **20.36** | **20** | P | | **P** | **10 20 36.1** | **+1.3** |
| BLOK | | | | | IAmb | IAmb | 10 20 38.9 | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **PKCU** | **Pink Cliffs** | **20.44** | **345** | P | | **P** | **10 20 37.3** | **+1.4** |
| PKCU | | | | | IAmb | IAmb | 10 20 42.4 | |
| | comp=Z,34nm,1.4s | | | | | | | |
| **SHPR** | **Sheep Range** | **20.45** | **338** | P | | **P** | **10 20 36.4** | **+0.6** |
| SHPR | | | | | IAmb | IAmb | 10 20 38.1 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **CCAC** | **Calif City Air** | **20.48** | **330** | P | | **P** | **10 20 36.2** | **+0.1** |
| CCAC | | | | | IAmb | IAmb | 10 20 41.6 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **PV13** | **Radium Mtn., P** | **20.50** | **353** | P | | **P** | **10 20 36.3** | **-0.2** |
| **LRMC** | **Laurel Mtn Rad** | **20.59** | **331** | P | | **P** | **10 20 38.0** | **+0.6** |
| | baz=146 | | | | | | | |
| **QSM** | **Queen of Sheba** | **20.64** | **334** | P | | **P** | **10 20 38.0** | **+0.3** |
| QSM | | | | | IAmb | IAmb | 10 20 39.9 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **PV15** | **Paradox Valley** | **20.64** | **354** | P | | **P** | **10 20 38.8** | **+0.8** |
| PV15 | | | | | IAmb | IAmb | 10 20 52.6 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **20.64** | **353** | P | | **P** | **10 20 38.8** | **+0.8** |
| PV11 | | | | | IAmb | IAmb | 10 20 44.0 | |
| | comp=Z,24nm,1.5s | | | | | | | |
| **T35A** | **Sooner Cattle** | **20.74** | **21** | P | | **P** | **10 20 40.0** | **+1.2** |
| T35A | | | | | IAmb | IAmb | 10 20 45.9 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **GWY** | **Greenwater Val** | **20.75** | **334** | P | | **P** | **10 20 39.6** | **+0.5** |
| GWY | | | | | IAmb | IAmb | 10 20 43.9 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **MPMC** | **Manual Prospec** | **20.99** | **333** | P | | **P** | **10 20 42.1** | **+0.4** |
| | baz=154,SNR=12 | | | | | | | |
| **FURC** | **Furnace Creek,** | **21.07** | **334** | P | | **P** | **10 20 43.3** | **+1.0** |
| | baz=150 | | | | | | | |
| **ISA** | **Isabella, Lake** | **21.11** | **330** | P | | **P** | **10 20 42.7** | **-0.2** |
| ISA | | | | | IAmb | IAmb | 10 20 47.0 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **ISA** | **Isabella, Lake** | **21.11** | **330** | P | | **P** | **10 20 43.9** | **+1.0** |
| | baz=145,SNR=8.3 | | | | | | | |
| **U38A** | **Gravette** | **21.14** | **26** | P | | **P** | **10 20 44.0** | **+0.9** |
| **PKM** | **Mcpherson Peak** | **21.18** | **326** | P | | **P** | **10 20 43.9** | **+0.2** |
| | baz=141 | | | | | | | |
| **HHAR** | **Hobbs** | **21.19** | **27** | P | | **P** | **10 20 44.8** | **+1.0** |
| **PRN** | **Pahroc Range** | **21.22** | **339** | P | | **P** | **10 20 44.1** | **0.0** |
| PRN | | | | | IAmb | IAmb | 10 20 46.3 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **TPNV** | **Topopah Spring** | **21.24** | **336** | P | | **P** | **10 20 44.2** | **-0.2** |
| **TPNV** | **Topopah Spring** | **21.24** | **336** | P | | **P** | **10 20 45.2** | **+0.8** |
| | baz=152,SNR=12 | | | | | | | |
| **SMCO** | **Snowmass** | **21.37** | **357** | P | | **P** | **10 20 46.9** | **+0.9** |
| **MSU** | **Marysvale** | **21.43** | **346** | P | | **P** | **10 20 47.7** | **+1.3** |
| **R32A** | **Long Quarter,** | **21.48** | **15** | P | | **P** | **10 20 48.3** | **+1.5** |
| **VES** | **Vestal, Richgr** | **21.55** | **329** | P | | **P** | **10 20 48.5** | **+0.9** |
| | baz=144 | | | | | | | |
| **CWC** | **Cottonwood Cre** | **21.57** | **332** | P | | **P** | **10 20 49.0** | **+1.1** |
| | baz=147 | | | | | | | |
| **SMMC** | **Simmler** | **21.60** | **327** | P | | **P** | **10 20 49.0** | **+0.9** |
| | baz=141 | | | | | | | |
| **Q16A** | **Castle Valley** | **21.61** | **348** | P | | **P** | **10 20 49.0** | **+0.7** |
| Q16A | | | | | IAmb | IAmb | 10 21 11.5 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **21.62** | **13** | P | | **P** | **10 20 48.9** | **+0.6** |
| **CBKS** | **Cedar Bluff** | **21.62** | **13** | P | | **P** | **10 20 50.3** | **+2.0** |
| | baz=196 | | | | | | | |
| **S11A** | **Rachel** | **21.67** | **338** | P | | **P** | **10 20 50.0** | **+1.0** |
| **SRU** | **San Rafael Swe** | **21.68** | **350** | P | | **P** | **10 20 49.9** | **+0.8** |
| **FCAR** | **Ozark Folk Cen** | **21.72** | **31** | P | | **P** | **10 20 51.1** | **+1.8** |
| FCAR | | | | | IAmb | IAmb | 10 21 05.8 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **GRAC** | **Grapevine Rang** | **21.73** | **334** | P | | **P** | **10 20 50.5** | **+1.0** |
| GRAC | | | | | IAmb | IAmb | 10 20 53.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **U40A** | **Yellville** | **21.74** | **29** | P | | **P** | **10 20 51.5** | **+1.9** |
| | baz=215 | | | | | | | |
| **TMUT** | **Trail Mountain** | **21.98** | **349** | P | | **P** | **10 20 53.2** | **+0.8** |
| **JACO** | **JACO, Garabito** | **21.98** | **109** | P | | **P** | **10 20 52.3** | **-0.1** |
| **LCH** | **Last Change Ra** | **22.05** | **334** | P | | **P** | **10 20 53.7** | **+0.7** |
| LCH | | | | | IAmb | IAmb | 10 20 56.4 | |
| | comp=Z,9.5nm,1.2s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **22.07** | **350** | P | | **P** | **10 20 53.8** | **+0.6** |
| P17A | | | | | IAmb | IAmb | 10 20 58.2 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **P18A** | **Preston Nutter** | **22.14** | **351** | P | | **P** | **10 20 54.9** | **+0.8** |
| P18A | | | | | IAmb | IAmb | 10 21 01.2 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **22.25** | **339** | P | | **P** | **10 20 56.0** | **+0.8** |
| **R11A** | **Troy Canyon, C** | **22.25** | **339** | P | | **P** | **10 20 56.2** | **+1.0** |
| | baz=155,SNR=8.5 | | | | | | | |
| **O20A** | **White River Ci** | **22.40** | **355** | P | | **P** | **10 20 57.1** | **+0.3** |
| O20A | | | | | IAmb | IAmb | 10 21 23.9 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **O20A** | **White River Ci** | **22.40** | **355** | P | | **P** | **10 20 58.3** | **+1.4** |
| | baz=174 | | | | | | | |
| **SPR3** | **Spring Creek 3** | **22.45** | **342** | P | | **P** | **10 20 57.4** | **-0.1** |
| SPR3 | | | | | IAmb | IAmb | 10 20 59.6 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **TPH** | **Tonopah** | **22.60** | **336** | P | | **P** | **10 20 59.7** | **+0.6** |
| **MGMO** | **Mountain Grove** | **22.66** | **29** | P | | **P** | **10 21 00.7** | **+1.2** |
| MGMO | | | | | IAmb | IAmb | 10 21 06.9 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **22.70** | **44** | P | | **P** | **10 21 01.4** | **+1.6** |
| | baz=233 | | | | | | | |
| **KSU1** | **Kansas State U** | **22.70** | **19** | P | | **P** | **10 21 02.1** | **+2.3** |
| | baz=203 | | | | | | | |
| **NLU** | **North Lily Min** | **22.79** | **347** | P | | **P** | **10 21 01.7** | **+0.7** |
| **RDMU** | **Red Mountain** | **22.97** | **352** | P | | **P** | **10 21 03.3** | **+0.4** |
| **DUG** | **Dugway, Tooele** | **23.18** | **346** | P | | **P** | **10 21 04.9** | **-0.1** |
| DUG | | | | | IAmb | IAmb | 10 21 07.6 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **23.18** | **346** | P | | **P** | **10 21 05.5** | **+0.5** |
| | baz=163,SNR=10 | | | | | | | |
| **NV11** | **Mina Array Sit** | **23.28** | **335** | P | | **P** | **10 21 06.7** | **+0.7** |
| NV11 | | | | | IAmb | IAmb | 10 21 08.2 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **JLU** | **Jordanelle** | **23.29** | **349** | P | | **P** | **10 21 07.4** | **+1.3** |
| **NVAR** | **Mina Array Bea** | **23.34** | **334** | P | | **P** | **10 21 05.6** | **-1.1** |
| | comp=Z,2.8nm,0.9s,baz=156,slow=8.4,SNR=19 | | | | | | | |
| NVAR | | | | | LR | LR | 10 29 27.4 | |
| | comp=Z,148nm,19.6s,baz=176,slow=35 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **23.34** | **334** | P | | **P** | **10 21 06.9** | **+0.2** |
| **RYN** | **Ryan** | **23.60** | **334** | P | | **P** | **10 21 09.9** | **+0.8** |
| **R40A** | **Maddies Statio** | **23.60** | **27** | P | | **P** | **10 21 11.2** | **+2.2** |
| R40A | | | | | IAmb | IAmb | 10 21 18.0 | |
| | comp=Z,9.8nm,1.1s | | | | | | | |
| **KVN** | **Kaiserville** | **23.79** | **336** | P | | **P** | **10 21 11.5** | **+0.6** |
| KVN | | | | | IAmb | IAmb | 10 21 14.8 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **CCM** | **Cathedral Cave** | **23.87** | **29** | P | | **P** | **10 21 12.7** | **+1.2** |
| **BGU** | **Big Grassy Mou** | **23.92** | **346** | P | | **P** | **10 21 13.0** | **+0.8** |
| BGU | | | | | IAmb | IAmb | 10 21 14.0 | |
| | comp=Z,7.5nm,1.3s | | | | | | | |
| **CMB** | **Columbia Colle** | **23.93** | **330** | P | | **P** | **10 21 11.6** | **-0.6** |
| CMB | | | | | IAmb | IAmb | 10 21 21.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | | |
| **YERR** | **Yerington** | **24.20** | **334** | P | | **P** | **10 21 15.0** | **+0.2** |
| YERR | | | | | IAmb | IAmb | 10 21 17.4 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **ELK** | **Elko** | **24.33** | **342** | P | | **P** | **10 21 15.8** | **-0.2** |
| | comp=Z,3.4nm,1.0s,baz=187,slow=6.4,SNR=7.9 | | | | | | | |
| ELK | | | | | LR | LR | 10 29 43.5 | |
| | comp=Z,60nm,20.7s,baz=200,slow=34 | | | | | | | |
| **ELK** | **Elko** | **24.33** | **342** | P | | **P** | **10 21 16.1** | **+0.1** |
| ELK | | | | | IAmb | IAmb | 10 21 18.6 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **PNTR** | **Pine Nut** | **24.44** | **333** | P | | **P** | **10 21 17.1** | **+0.1** |
| PNTR | | | | | IAmb | IAmb | 10 21 20.0 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **EMB** | **Emerald Bay** | **24.57** | **332** | P | | **P** | **10 21 18.7** | **+0.5** |
| **VCNR** | **Virginia City** | **24.63** | **333** | P | | **P** | **10 21 19.3** | **+0.6** |
| **BMN** | **Battle Mountai** | **24.67** | **339** | P | | **P** | **10 21 19.7** | **+0.6** |
| **HVU** | **Hansel Valley** | **24.69** | **347** | P | | **P** | **10 21 19.8** | **+0.6** |
| HVU | | | | | IAmb | IAmb | 10 21 20.8 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **MPK** | **Martis Peak** | **24.80** | **333** | P | | **P** | **10 21 20.9** | **+0.6** |
| **PAHR** | **Pah Rah Range** | **24.87** | **334** | P | | **P** | **10 21 21.6** | **+0.8** |
| PAHR | | | | | IAmb | IAmb | 10 21 24.0 | |
| | comp=Z,8.8nm,1.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **25.14** | **353** | P | | **P** | **10 21 23.7** | **+0.4** |
| | comp=Z,1.0nm,0.9s,baz=165,slow=6.2,SNR=5.5 | | | | | | | |
| **PDAR** | **Pinedale Array** | **25.14** | **353** | P | | **P** | **10 21 23.3** | **0.0** |
| **GOGA** | **Godfrey** | **25.34** | **48** | P | | **P** | **10 21 27.9** | **+2.9** |
| **GOGA** | **Godfrey** | **25.34** | **48** | P | | **P** | **10 21 28.0** | **+3.1** |
| | baz=238 | | | | | | | |
| **BEKR** | **Beckworth** | **25.41** | **333** | P | | **P** | **10 21 25.6** | **-0.2** |
| BEKR | | | | | IAmb | IAmb | 10 21 30.1 | |
| | comp=Z,5.5nm,1.2s | | | | | | | |
| **ECR** | **Eagle Creek** | **25.66** | **350** | P | | **P** | **10 21 29.0** | **+0.9** |
| **ORV** | **Oroville** | **25.67** | **331** | P | | **P** | **10 21 28.7** | **+0.8** |
| ORV | | | | | IAmb | IAmb | 10 21 31.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| **REDW** | **Red Top Meadow** | **25.89** | **351** | P | | **P** | **10 21 30.2** | **+0.1** |
| REDW | | | | | IAmb | IAmb | 10 21 31.8 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SNOW** | **Snow King Moun** | **25.97** | **352** | P | | **P** | **10 21 31.9** | **+1.1** |
| **TPAW** | **Teton Pass** | **26.02** | **351** | P | | **P** | **10 21 31.3** | **-0.1** |
| TPAW | | | | | IAmb | IAmb | 10 21 40.1 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **LOHW** | **Long Hollow** | **26.10** | **352** | P | | **P** | **10 21 32.8** | **+0.8** |
| LOHW | | | | | IAmb | IAmb | 10 21 36.4 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **26.40** | **43** | P | | **P** | **10 21 36.3** | **+1.6** |
| | comp=Z,6.2nm,0.9s,baz=172,slow=8.2,SNR=3.9 | | | | | | | |
| TKL | | | | | LR | LR | 10 34 46.8 | |
| | comp=Z,178nm,18.9s,baz=220,slow=42 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **26.40** | **43** | P | | **P** | **10 21 36.2** | **+1.6** |
| **HLID** | **Hailey** | **26.75** | **346** | P | | **P** | **10 21 38.5** | **+0.8** |
| HLID | | | | | IAmb | IAmb | 10 21 39.9 | |
| | comp=Z,6.7nm,1.2s | | | | | | | |
| **HLID** | **Hailey** | **26.75** | **346** | P | | **P** | **10 21 38.6** | **+0.8** |
| | baz=162,SNR=5.9 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **26.94** | **339** | P | | **P** | **10 21 39.3** | **-0.3** |
| WVOR | | | | | IAmb | IAmb | 10 21 41.4 | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **MFID** | **Camas Ranch** | **26.96** | **344** | P | | **P** | **10 21 40.3** | **+0.6** |
| **MOD** | **Modoc Plateau** | **27.10** | **336** | P | | **P** | **10 21 41.7** | **+0.7** |
| MOD | | | | | IAmb | IAmb | 10 21 46.8 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **QLMT** | **Earthquake Lak** | **27.41** | **351** | P | | **P** | **10 21 44.3** | **+0.5** |
| **M04C**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RIDG** | **Independent Ri** | **53.10 339** | P | | **P** | **10 25 15.4** | **+0.2** |
| | baz=132 | | | | | | |
| **J26L** | **Joseph Creek** | **53.19 341** | P | | **P** | **10 25 16.8** | **+0.9** |
| J26L | | | IAmb | | IAmb | 10 25 17.4 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **53.19 341** | P | | **P** | **10 25 16.4** | **+0.5** |
| | baz=133 | | | | | | |
| **RC01** | **Rabbit Creek A** | **53.27 335** | P | | **P** | **10 25 16.5** | **+0.1** |
| | baz=124 | | | | | | |
| **MDP** | **Montagnes des** | **53.36 97** | LR | | LR | 10 50 17.6 | |
| | comp=Z,68nm,19.0s,baz=164,slow=38 | | | | | | |
| **INK** | **Inuvik** | **53.49 348** | P | | **P** | **10 25 18.3** | **+0.4** |
| **INK** | **Inuvik** | **53.49 348** | P | | **P** | **10 25 18.0** | **+0.1** |
| | baz=147,SNR=6.5 | | | | | | |
| **LVC** | **Limon Verde** | **53.92 137** | LR | | LR | 10 42 54.5 | |
| | comp=Z,76nm,21.4s,baz=324,slow=30 | | | | | | |
| **IL31** | | **54.45 340** | P | | **P** | **10 25 24.7** | **-0.2** |
| **ILAR** | **Eielson Array** | **54.45 340** | P | | **P** | **10 25 24.1** | **-0.9** |
| | comp=Z,2.2nm,0.9s,baz=147,slow=5.1,SNR=15 | | | | | | |
| **PRP** | **Porcupine Dome** | **54.50 341** | P | | **P** | **10 25 25.8** | **+0.3** |
| **PRP** | **Porcupine Dome** | **54.50 341** | P | | **P** | **10 25 25.6** | **+0.2** |
| | baz=132 | | | | | | |
| **MCK** | **McKinley** | **54.51 338** | P | | **P** | **10 25 25.3** | **-0.1** |
| | baz=127 | | | | | | |
| **TRF** | **Thorofare Moun** | **54.83 337** | P | | **P** | **10 25 27.7** | **-0.3** |
| **TRF** | **Thorofare Moun** | **54.83 337** | P | | **P** | **10 25 27.6** | **-0.3** |
| | baz=125 | | | | | | |
| **NEA2** | **Nenana** | **55.07 339** | P | | **P** | **10 25 28.7** | **-0.8** |
| | baz=127,SNR=5.3 | | | | | | |
| **PPLA** | **Purkeypile** | **55.23 336** | P | | **P** | **10 25 30.6** | **-0.3** |
| | baz=123 | | | | | | |
| **SIV** | **San Ignacio** | **55.33 125** | LR | | LR | 10 46 10.9 | |
| | comp=Z,71nm,21.4s,baz=2.0,slow=33 | | | | | | |
| **A36M** | **Sachs Harbour** | **55.42 353** | P | | **P** | **10 25 31.0** | **-0.8** |
| **A36M** | **Sachs Harbour** | **55.42 353** | P | | **P** | **10 25 31.1** | **-0.8** |
| | baz=157,SNR=5.8 | | | | | | |
| **H24K** | **Noodor Dome** | **55.45 340** | P | | **P** | **10 25 32.4** | **+0.1** |
| | baz=129 | | | | | | |
| **CAST** | **Castle Rocks** | **55.48 337** | P | | **P** | **10 25 31.9** | **-0.6** |
| | baz=123 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **55.51 339** | P | | **P** | **10 25 32.2** | **-0.4** |
| | baz=127 | | | | | | |
| **BMAR** | **Burnt Mountain** | **55.51 343** | P | | **P** | **10 25 32.9** | **+0.2** |
| **PPT** | **Papeete** | **55.62 233** | LR | | LR | 10 44 04.5 | |
| | comp=Z,27nm,19.1s,baz=52,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **55.63 233** | *e*S | | **S** | **10 33 15.2** | **-3.9** |
| | comp=Z,68nm,26.5s | | | | | | |
| PPT2 | | | *e*LR | | LR | 10 41 31.5 | |
| | comp=Z,202nm,25.2s | | | | | | |
| **MLY** | **Manley** | **55.91 339** | P | | **P** | **10 25 35.4** | **-0.2** |
| | baz=126 | | | | | | |
| **H23K** | **Yukon River** | **55.98 340** | P | | **P** | **10 25 36.0** | **0.0** |
| | baz=128 | | | | | | |
| **K20K** | **Telida** | **56.20 336** | P | | **P** | **10 25 37.1** | **-0.6** |
| | baz=121 | | | | | | |
| **I21K** | **Tanana** | **56.42 339** | P | | **P** | **10 25 39.1** | **-0.1** |
| | baz=124 | | | | | | |
| **J20K** | **Nowinta River** | **56.66 337** | P | | **P** | **10 25 40.1** | **-0.8** |
| | baz=122 | | | | | | |
| **TTA** | **Tatalina** | **56.75 335** | P | | **P** | **10 25 40.7** | **-0.9** |
| | baz=119 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **57.73 343** | P | | **P** | **10 25 48.5** | **0.0** |
| | baz=129 | | | | | | |
| **TNA** | **Tin City** | **62.57 336** | P | | **P** | **10 26 20.6** | **-0.9** |
| | baz=108 | | | | | | |
| **CPUP** | **Villa Florida** | **64.28 132** | LR | | LR | 10 52 10.2 | |
| | comp=Z,57nm,18.7s,baz=352,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **65.60 236** | LR | | LR | 10 46 44.8 | |
| | comp=Z,124nm,21.9s,baz=4.0,slow=28 | | | | | | |
| **BORG** | **Borgarnes** | **71.72 27** | LR | | LR | 10 57 21.2 | |
| | comp=Z,74nm,18.7s,baz=301,slow=34 | | | | | | |
| **AFI** | **Afiamalu** | **72.34 249** | LR | | LR | 10 50 12.0 | |
| | comp=Z,108nm,18.6s,baz=64,slow=29 | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.85 323** | LR | | LR | 10 58 06.0 | |
| | comp=Z,21nm,19.5s,baz=61,slow=32 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **82.30 287** | T | | T | 11 58 50.5 | |
| | baz=78 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **82.30 287** | T | | T | 11 58 55.0 | |
| | baz=78 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **82.31 287** | T | | T | 11 58 54.7 | |
| | baz=78 | | | | | | |
| **MSVF** | **Nonsavu** | **82.84 249** | LR | | LR | 10 58 19.5 | |
| | comp=Z,68nm,18.8s,baz=79,slow=31 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.86 26** | LR | | LR | 11 06 19.3 | |
| | comp=Z,26nm,21.7s,baz=310,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **87.55 49** | LR | | LR | 11 06 26.7 | |
| | comp=Z,49nm,20.8s,baz=296,slow=34 | | | | | | |
| **URZ** | **Urewera** | **91.16 230** | LR | | LR | 11 00 39.5 | |
| | comp=Z,32nm,19.4s,baz=32,slow=30 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **93.60 38** | LR | | LR | 11 11 35.3 | |
| | comp=Z,75nm,18.9s,baz=262,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **94.57 248** | *e*LR | | LR | 10 59 49.7 | |
| | comp=Z,187nm,22.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **94.57 248** | LR | | LR | 11 01 58.9 | |
| | comp=Z,104nm,21.2s,baz=204,slow=29 | | | | | | |
| **VRAC** | **Vranov** | **95.98 34** | LR | | LR | 11 12 22.7 | |
| | comp=Z,49nm,19.0s,baz=332,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **96.13 326** | LR | | LR | 11 12 03.3 | |
| | comp=Z,27nm,18.0s,baz=13,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **99.05 313** | LR | | LR | 11 08 58.6 | |
| | comp=Z,28nm,18.8s,baz=57,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.37 257** | PKP | | **PKPdf** | **10 34 53.2** | **-2.5** |
| | comp=Z,0.6nm,0.8s,baz=80,slow=1.5,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **124.24 253** | PKP | | **PKPdf** | **10 34 56.2** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=193,slow=1.4,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **124.24 253** | | | **PKPdf** | **10 34 56.8** | **-0.6** |

*CNRM **10** 10:44:08.7, 35˚.67N×3˚.73W, h18km, ml2.6*
*SFS **10** 10:44:09.0, 35˚.58N×3˚.82W, ML2.5, ALBORAN SUR*
**ISC 10 10:44:08.5±1.3, 35˚.68N±0˚.04×3˚.71W±0˚.04, h16km±9km, n15, σ1s53/26, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.50** | **202** | P | **Pg** | **10 44 18.0** | **-0.5** |
| PALE | | | | S | **Sg** | **10 44 25.1** | **-0.1** |
| **GOG** | **Mont Gurugu** | **0.74** | **128** | P | **Pg** | **10 44 23.2** | **+0.2** |
| GOG | | | | S | **Sg** | **10 44 33.4** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.16** | **115** | P | Pn | 10 44 25.1 | -4.9 |
| CHAS | | | | S | **Sb** | **10 44 41.7** | **-3.1** |
| **EMAL** | **Malaga-Limoner** | **1.23** | **332** | P | **Pn** | **10 44 31.4** | **+0.5** |
| EMAL | | | | S | **Sb** | **10 44 46.9** | **+0.1** |
| **SMIR** | **Smir Dam** | **1.36** | **271** | P | **Pn** | **10 44 33.3** | **+0.5** |
| SMIR | | | | S | **Sb** | **10 44 51.4** | **+0.7** |
| **CEU** | **Ceuta** | **1.37** | **280** | P | **Pn** | **10 44 31.4** | **-1.5** |
| CEU | | | | S | **Sn** | **10 44 47.3** | **-3.3** |
| **TAF** | **Taforalt** | **1.37** | **129** | S | **Sn** | **10 44 50.3** | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.45** | **247** | P | **Pn** | **10 44 34.8** | **+0.7** |
| CHEFC | | | | S | **Sn** | **10 44 49.9** | **-2.9** |
| **IFR** | **Ifrane** | **2.46** | **209** | P | **Pg** | **10 44 55.1** | **-0.5** |
| IFR | | | | S | **Sn** | **10 45 17.7** | **-0.1** |
| **MD31** | **MD31** | **2.94** | **197** | P | **Pn** | **10 44 55.8** | **+1.2** |
| MD31 | | | | S | **Sn** | **10 45 30.9** | **+1.4** |
| **MDT** | **Midelt** | **2.96** | **195** | P | **Pn** | **10 44 55.6** | **+0.8** |
| MDT | | | | S | **Sn** | **10 45 32.0** | **+2.1** |
| **PVAQ** | **Vaqueiros** | **3.66** | **299** | *e*Pn | **Pn** | **10 45 06.1** | **+1.7** |
| PVAQ | | | | *e*Sn | **Sn** | **10 45 47.7** | **+0.6** |
| PVAQ | | | | A | A | 10 45 54.6 | |
| | 3.5nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.66** | **299** | P | **Pn** | **10 45 04.6** | **+0.3** |
| PVAQ | | | | S | **Sn** | **10 45 47.9** | **+0.8** |
| **PBDV** | **Barranco-do-Ve** | **3.74** | **296** | *e*Pn | **Pn** | **10 45 07.1** | **+1.5** |
| **PNCL** | **Nicolau / Gran** | **4.56** | **304** | *e*Pn | **Pn** | **10 45 18.4** | **+1.6** |

**IDC 10 10:53:33.3±2.3, 7˚.13S×130˚.47E, h0km, mb3.4/1, mb1 3.3/3, mb1mx3.1/26, mbtmp3.2/3, ML3.1/2, MS3.5/1, Ms1 3.5/1, ms1mx2.3/36, Error ellipse: s-maj=109.2km s-min=27.0km az=71.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.28** | **164** | Pn | Pn | 10 56 45.2 | +2.0 |
| | 0.1nm,0.3s,baz=343,slow=14,SNR=6.0 | | | | | | |
| WRA | | | | Sn | Sn | 10 59 10.9 | -0.8 |
| | 0.3nm,0.3s,baz=349,slow=24,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **16.77** | **169** | Pn | Pn | 10 57 29.6 | -0.1 |
| | 0.1nm,0.3s,baz=354,slow=12,SNR=7.2 | | | | | | |
| ASAR | | | | Sn | Sn | 11 00 35.7 | -1.1 |
| | 0.1nm,0.3s,baz=359,slow=28,SNR=6.4 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **41.00** | **12** | LR | LR | 11 15 06.0 | |
| | comp=Z,60nm,20.4s,baz=168,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.59** | **327** | P | P | 11 04 38.0 | -0.1 |
| | 0.3nm,0.6s,baz=131,slow=6.3,SNR=3.3 | | | | | | |

*IDC **10** 11:10:57.3±0.6, 36˚.74S×73˚.23W, h0km, mb4.3/11, mb1 4.4/14, mb1mx4.3/28, mbtmp4.2/14, ML4.0/3, MS4.0/19, Ms1 4.0/19, ms1mx3.8/48, Error ellipse: s-maj=25.2km s-min=17.1km az=86.0*
*GUC **10** 11:10:59.5±0.6, 37˚.00S×73˚.61W, h16km±3km, ML4.6*
*NEIC **10** 11:10:59.0±1.0, 36˚.82S±0˚.05×73˚.76W±0˚.09, h21km±4km, mb4.8/42, Mwr4.7/47, ML4.6(GUC), Error ellipse: s-maj=10.2km s-min=7.1km az=107.0*
*NEIC **10** 11:10:59, 36˚.81S×73˚.76W, h25km, Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr0.47; Mθθ0.09; Mφφ-0.56; Mrθ-0.14; Mrφ0.21; Mθφ-1.05; Fault plane solution: M0 1.20000×10^16^ NP1:φs318.54000°, δ17.78000°, λ44.62000°. NP2:φs185.32000°, δ77.62000°, λ102.86000°. Principal axes: T 1.1762, Plg56.0000°, Azm111.0000°; N 0.0457, Plg13.0000°, Azm3.0000°; P -1.2219, Plg31.0000°, Azm265.0000°;*
*VAO **10** 11:11:38.0±2.0, 35˚.00S×71˚.63W, h202km±14km, mb4.5*
**ISC 10 11:10:58.3±0.4, 36˚.78S±0˚.04×73˚.74W±0˚.04, h14km, n192, σ1s24/180, mb4.8/28, MS4.1/19, 2C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BI05** | **Punta Hualpn** | **0.44** | **87** | ↓*i*P | **Pb** | **11 11 08.2** | **+0.5** |
| BI05 | | | | *e*S | **Sb** | **11 11 14.3** | **0.0** |
| BI05 | | | | IAML | | 11 11 16.3 | |
| | comp=N,63μm,0.2s | | | | | | |
| **BI05** | **Punta Hualpn** | **0.44** | **87** | | **Pb** | **11 11 08.5** | **+0.7** |
| BI05 | | | | Sg | **Sb** | **11 11 14.8** | **+0.5** |
| **LC02** | **Puerto Saavedr** | **2.03** | **172** | | **Pn** | **11 11 31.3** | **-0.8** |
| **ML02** | **Panimavida** | **2.13** | **62** | *e*P | **Pn** | **11 11 33.7** | **+0.3** |
| ML02 | | | | *e*S | **Sb** | **11 12 04.4** | **+1.6** |
| ML02 | | | | IAML | | 11 12 16.4 | |
| | comp=E,8μm,0.7s | | | | | | |
| **ML02** | **Panimavida** | **2.13** | **62** | | **Pn** | **11 11 34.0** | **+0.6** |
| **GO05** | **Huala** | **2.29** | **40** | ↓*e*P | **Pn** | **11 11 35.0** | **-0.6** |
| GO05 | | | | *e*S | **Sg** | **11 12 10.8** | **-1.2** |
| GO05 | | | | IAML | | 11 12 26.1 | |
| | comp=E,3μm,0.6s | | | | | | |
| **GO05** | **Huala** | **2.29** | **40** | | **Pn** | **11 11 36.2** | **+0.5** |
| **LC01** | **Cunco** | **2.58** | **146** | *i* P | **Pn** | **11 11 38.8** | **-0.9** |
| LC01 | | | | IAML | | 11 12 21.0 | |
| | comp=E,3μm,0.6s | | | | | | |
| **LC01** | **Cunco** | **2.58** | **146** | Pn | **Pn** | **11 11 39.2** | **-0.4** |
| **LR03** | **Panguipulli** | **3.06** | **159** | *e*P | **Pn** | **11 11 46.1** | **-0.1** |
| **LR03** | **Panguipulli** | **3.06** | **159** | | **Pn** | **11 11 46.3** | **+0.1** |
| **LR04** | **Corral** | **3.11** | **176** | *e*P | **Pn** | **11 11 45.9** | **-1.0** |
| LR04 | | | | IAML | | 11 12 46.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| **LR04** | **Corral** | **3.11** | **176** | | **Pn** | **11 11 46.0** | **-0.8** |
| **BO02** | **Sierra Bellavi** | **3.11** | **51** | Pn | **Pn** | **11 11 47.6** | **+0.6** |
| **BO01** | **Tunca** | **3.21** | **43** | *i* P | **Pn** | **11 11 49.4** | **+1.1** |
| BO01 | | | | IAML | | 11 12 47.7 | |
| | comp=N,1μm,0.6s | | | | | | |
| **BO01** | **Tunca** | **3.21** | **43** | | **Pn** | **11 11 49.0** | **+0.7** |
| **MT01** | **Popeta** | **3.54** | **36** | *e*P | **Pn** | **11 11 53.2** | **+0.4** |
| **MT01** | **Popeta** | **3.54** | **36** | | **Pn** | **11 11 53.3** | **+0.4** |
| **VA05** | **Santo Domingo** | **3.56** | **30** | *e*P | **Pn** | **11 11 53.0** | **-0.2** |
| **VA05** | **Santo Domingo** | **3.56** | **30** | Pn | **Pn** | **11 11 53.2** | **0.0** |
| **MT09** | **Talagante** | **3.74** | **38** | ↑*i*P | **Pn** | **11 11 56.5** | **+0.8** |
| **MT09** | **Talagante** | **3.74** | **38** | | **Pn** | **11 11 56.1** | **+0.3** |
| **BO04** | **La Punta** | **3.77** | **43** | *e*P | **Pn** | **11 11 56.6** | **+0.5** |
| **BO04** | **La Punta** | **3.77** | **43** | | **Pn** | **11 11 56.6** | **+0.5** |
| **MT02** | **Curacav** | **4.11** | **32** | | **Pn** | **11 12 00.9** | **+0.3** |
| **LMEL** | **Las Melosas** | **4.11** | **46** | *e*P | **Pn** | **11 12 02.2** | **+1.4** |
| **LMEL** | **Las Melosas** | **4.11** | **46** | | **Pn** | **11 12 02.5** | **+1.7** |
| **VA01** | **Torpederas** | **4.12** | **25** | Pn | **Pn** | **11 12 00.8** | **+0.1** |
| **MT05** | **Renca** | **4.17** | **37** | *e*P | **Pn** | **11 12 01.5** | **-0.1** |
| **MT05** | **Renca** | **4.17** | **37** | | **Pn** | **11 12 02.2** | **+0.6** |
| **LL04** | **Puerto Octay** | **4.26** | **166** | *e*P | **Pn** | **11 12 01.6** | **-1.0** |
| **LL04** | **Puerto Octay** | **4.26** | **166** | Pn | **Pn** | **11 12 01.9** | **-0.7** |
| **ROC1** | **El Roble** | **4.40** | **31** | | **Pn** | **11 12 04.6** | **-0.3** |
| **PEL** | **Peldehue** | **4.40** | **36** | | **Pn** | **11 12 05.7** | **+1.0** |
| **ROCH** | **El Roble** | **4.41** | **31** | ↑*i* P | **Pn** | **11 12 04.9** | **0.0** |
| ROCH | | | | *e*P | **Pn** | **11 12 04.0** | **-1.0** |
| **LL03** | **Petrohue** | **4.48** | **167** | *e*P | **Pn** | **11 12 05.3** | **-0.4** |
| **LL03** | **Petrohue** | **4.48** | **167** | | **Pn** | **11 12 06.0** | **+0.3** |
| **LL05** | **Los Muermos** | **4.63** | **178** | *e*P | **Pn** | **11 12 06.9** | **-0.8** |
| **LL05** | **Los Muermos** | **4.63** | **178** | | **Pn** | **11 12 07.2** | **-0.5** |
| **VA06** | **Catapilco** | **4.66** | **26** | | **Pn** | **11 12 08.0** | **-0.2** |
| **PLCA** | **Paso Flores** | **4.67** | **149** | Pn | **Pn** | **11 12 09.0** | **+0.6** |
| | comp=N,2.2nm,0.3s,baz=319,slow=11,SNR=76 | | | | | | |
| PLCA | | | | Lg | Lg | 11 13 15.7 | |
| | comp=N,8.8nm,0.3s,baz=302,slow=10,SNR=4.1 | | | | | | |
| **PLCA** | **Paso Flores** | **4.67** | **149** | Pn | **Pn** | **11 12 08.4** | **0.0** |
| **VA03** | **San Esteban** | **4.78** | **34** | | **Pn** | **11 12 10.6** | **+0.6** |
| **H03S1** | **Juan Fernandez** | **5.14** | **303** | Pn | **Pn** | **11 12 15.1** | **+0.5** |
| | baz=117 | | | | | | |
| H03S1 | | | | Sn | **Sn** | **11 13 11.7** | **-1.8** |
| | baz=118 | | | | | | |
| H03S1 | | | | T | T | 11 17 37.3 | |
| | baz=124 | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.15** | **303** | Pn | **Pn** | **11 12 16.0** | **+1.3** |
| | baz=117 | | | | | | |
| H03S3 | | | | Sn | **Sn** | **11 13 13.2** | **-0.7** |
| | baz=118 | | | | | | |
| H03S3 | | | | T | T | 11 17 38.4 | |
| | baz=124 | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.16** | **303** | Pn | **Pn** | **11 12 15.1** | **+0.3** |
| | baz=117 | | | | | | |
| H03S2 | | | | Sn | **Sn** | **11 13 11.7** | **-2.3** |
| | baz=118 | | | | | | |
| H03S2 | | | | T | T | 11 17 36.1 | |
| | baz=124 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.39** | **306** | Pn | **Pn** | **11 12 19.0** | **+0.9** |
| | baz=61,slow=74 | | | | | | |
| H03N3 | | | | Sn | **Sn** | **11 13 17.6** | **-2.2** |
| | baz=262,slow=73,SNR=3.8 | | | | | | |
| **H03N1** | **Juan Fernandez** | **5.39** | **307** | Pn | **Pn** | **11 12 18.6** | **+0.6** |
| | baz=61,slow=74 | | | | | | |
| H03N1 | | | | Sn | **Sn** | **11 13 17.0** | **-2.7** |
| | baz=262,slow=73,SNR=22 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.41** | **306** | Pn | **Pn** | **11 12 19.1** | **+0.9** |
| | baz=61 | | | | | | |
| H03N2 | | | | Sn | **Sn** | **11 13 17.7** | **-2.4** |
| | baz=262,slow=73,SNR=42 | | | | | | |
| **CO05** | **La Serena** | **7.15** | **18** | Pn | **Pn** | **11 12 42.7** | **+0.3** |
| **COYC** | **Coyhaique** | **8.88** | **172** | Pn | **Pn** | **11 13 04.3** | **-1.7** |
| **GO03** | **Copiap** | **9.62** | **19** | | **Pn** | **11 13 16.3** | **-0.1** |
| **AC02** | **Maricunga** | **10.65** | **23** | Pn | **Pn** | **11 13 29.9** | **-1.1** |
| **PB15** | **IPOC Station P** | **14.01** | **16** | | **Pn** | **11 14 16.1** | **-0.5** |
| **LVC** | **Limon Verde** | **14.72** | **18** | Pn | **Pn** | **11 14 24.8** | **-1.6** |
| | comp=N,0.1nm,0.3s,baz=247,slow=11,SNR=1.5 | | | | | | |
| LVC | | | | LR | LR | 11 20 10.1 | |
| | comp=N,275nm,18.6s,baz=195,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **14.72** | **18** | *e*P | **P** | **11 14 31.0** | **-1.6** |
| **LVC** | **Limon Verde** | **14.72** | **18** | | **Pn** | **11 14 26.4** | **-0.1** |
| **PB04** | **IPOC Station P** | **14.72** | **13** | Pn | **Pn** | **11 14 26.1** | **-0.2** |
| **PB09** | **IPOC Station P** | **15.43** | **16** | | **Pn** | **11 14 36.1** | **+0.3** |
| **ITQU** | **Iquiqui** | **15.96** | **69** | | **Pn** | **11 14 41.4** | **-1.1** |
| **PB01** | **IPOC Station P** | **16.11** | **14** | | **Pn** | **11 14 44.1** | **-0.3** |
| **TA01** | **Diego Aracena** | **16.45** | **12** | | **Pn** | **11 14 48.8** | **+0.1** |
| TA01 | | | | IAmb | IAmb | 11 14 55.4 | |
| | comp=Z,47nm,1.2s | | | | | | |
| **PB08** | **IPOC Station P** | **17.05** | **15** | P | **Pn** | **11 14 56.4** | **-0.3** |
| **PB11** | **IPOC Station P** | **17.32** | **13** | P | **P** | **11 15 00.5** | **-0.7** |
| **CPUP** | **Villa Florida** | **17.41** | **58** | P | **Pn** | **11 14 56.8** | **-3.9** |
| | comp=Z,0.2nm,0.3s,baz=228,slow=14,SNR=1.5 | | | | | | |
| CPUP | | | | LR | LR | 11 22 17.7 | |
| | comp=Z,866nm,18.2s,baz=236,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **17.41** | **58** | P | **Pn** | **11 15 00.0** | **-0.7** |
| **GO01** | **Chusmiza** | **17.50** | **14** | P | **P** | **11 15 03.2** | **-0.4** |
| **PB16** | **IPOC Station P** | **18.74** | **13** | | **P** | **11 15 47.1** | **-0.2** |
| **ITAB** | **Concordia** | **20.61** | **69** | *e*P | **P** | **11 15 35.5** | **-1.5** |
| **ITAB** | **Concordia** | **20.61** | **69** | | **P** | **11 15 36.8** | **-0.2** |
| ITAB | | | | IAmb | IAmb | 11 15 38.0 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **21.00** | **15** | P | **P** | **11 15 41.8** | **-0.3** |
| | comp=Z,4.4nm,0.7s,baz=186,slow=13,SNR=3.8 | | | | | | |
| **LPAZ** | **La Paz** | **21.00** | **15** | P | **P** | **11 15 41.3** | **-0.8** |
| **PTGB** | **Pitanga** | **22.11** | **63** | *e*P | **P** | **11 15 52.7** | **-0.7** |
| **AQDB** | **Aquidauana** | **22.62** | **49** | *e*P | **P** | **11 15 56.5** | **-2.2** |
| **AQDB** | **Aquidauana** | **22.62** | **49** | P | **P** | **11 15 57.6** | **-1.0** |
| AQDB | | | | IAmb | IAmb | 11 16 06.5 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **SIV** | **San Ignacio** | **23.56** | **32** | P | **P** | **11 16 07.5** | **-0.9** |
| | comp=Z,3.4nm,0.8s,baz=211,slow=10,SNR=15 | | | | | | |
| SIV | | | | LR | LR | 11 27 07.9 | |
| | comp=Z,550nm,19.3s,baz=236,slow=42 | | | | | | |
| **PCMB** | **Pacaembu** | **24.68** | **58** | *e*P | **P** | **11 16 17.8** | **-1.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NNA** | **Nana** | **24.84** | **353** | LR | LR | 11 24 09.7 | |
| | comp=Z,157nm,18.9s,baz=166,slow=32 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **24.90** | **35** | *e*P | **P** | **11 16 20.4** | **-0.4** |
| **PTLB** | **Pontes e Lacer** | **24.90** | **35** | P | **P** | **11 16 19.9** | **-0.8** |
| **PP1B** | **Ponte de Pedra** | **25.33** | **46** | *e*P | **P** | **11 16 25.2** | **+0.5** |
| **SALV** | **Santo Antonio** | **26.25** | **42** | *e*P | **P** | **11 16 33.7** | **+0.6** |
| **ITRB** | **Iturama** | **26.60** | **57** | *e*P | **P** | **11 16 37.5** | **+1.3** |
| **VILB** | **Vilhena** | **26.65** | **31** | *e*P | **P** | **11 16 36.6** | **-0.2** |
| **VILB** | **Vilhena** | **26.65** | **31** | P | **P** | **11 16 36.5** | **-0.2** |
| VILB | | | | IAmb | IAmb | 11 17 15.1 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **26.80** | **65** | *e*P | **P** | **11 16 40.0** | **+2.0** |
| **VAO** | **Valinhos** | **26.86** | **67** | *e*P | **P** | **11 16 40.6** | **+2.0** |
| **PARB** | **Paraibuna** | **27.66** | **69** | *e*P | **P** | **11 16 48.3** | **+2.5** |
| **ETMB** | **Extrema** | **27.69** | **16** | *e*P | **P** | **11 16 47.8** | **+1.8** |
| **ETMB** | **Extrema** | **27.69** | **16** | P | **P** | **11 16 46.3** | **+0.3** |
| ETMB | | | | IAmb | IAmb | 11 16 49.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **28.93** | **2** | *e*P | P | 11 17 03.0 | +5.9 |
| **PDRB** | **Porto dos Gac** | **29.36** | **36** | *e*P | **P** | **11 17 00.9** | **-0.1** |
| **BDFB** | **Brasilia** | **31.06** | **54** | P | **P** | **11 17 14.2** | **-1.9** |
| | comp=Z,2.6nm,0.6s,baz=108,slow=13,SNR=4.0 | | | | | | |
| BDFB | | | | LR | LR | 11 31 09.8 | |
| | comp=Z,606nm,18.6s,baz=194,slow=40 | | | | | | |
| **BDFB** | **Brasilia** | **31.06** | **54** | P | **P** | **11 17 14.7** | **-1.3** |
| **RPN** | **Rapa Nui** | **31.55** | **277** | LR | LR | 11 26 31.1 | |
| | comp=Z,406nm,19.2s,baz=133,slow=29 | | | | | | |
| **VA02** | **Isla de Pascua** | **31.61** | **277** | P | **P** | **11 17 19.9** | **-0.8** |
| **SNDB** | **Serra Nova Dou** | **31.89** | **45** | *e*P | **P** | **11 17 23.2** | **-0.1** |
| **TBTG** | **Tabatinga, AM** | **32.62** | **7** | P | **P** | **11 17 31.0** | **+1.3** |
| **JANB** | **Januaria** | **33.95** | **58** | *e*P | **P** | **11 17 40.9** | **-0.5** |
| **SDBA** | **SAO DESIDERIO** | **35.47** | **54** | *e*P | **P** | **11 17 54.5** | **+0.1** |
| **MACA** | **Manacapuru-AM** | **35.55** | **23** | *e*P | **P** | **11 17 55.4** | **+0.3** |
| **SMTB** | **Santa Maria do** | **36.54** | **47** | *e*P | **P** | **11 18 03.8** | **+0.2** |
| **PTGA** | **Pitinga** | **38.06** | **23** | LR | LR | 11 35 26.7 | |
| | comp=Z,200nm,18.2s,baz=174,slow=39 | | | | | | |
| **NBPN** | **Ponto Novo - B** | **39.74** | **58** | *e*P | **P** | **11 18 30.2** | **-0.4** |
| **BOAV** | **Boa Vista** | **40.87** | **20** | *e*P | **P** | **11 18 41.0** | **+1.1** |
| **NBMA** | **Muriti-CE** | **43.24** | **56** | *e*P | **P** | **11 18 59.6** | **+0.3** |
| **NBPS** | **Pedro II - PI** | **43.77** | **50** | *e*P | **P** | **11 19 04.2** | **+0.6** |
| **ZARC** | **Zaragoza, Cauc** | **44.05** | **358** | P | **P** | **11 19 04.6** | **-1.1** |
| ZARC | | | | IAmb | IAmb | 11 19 08.2 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **44.06** | **53** | *e*P | **P** | **11 19 05.7** | **-0.2** |
| **BELA** | **Belgrano 2** | **44.41** | **169** | P | **P** | **11 19 06.6** | **-1.4** |
| BELA | | | | IAmb | IAmb | 11 19 10.6 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **SDV** | **Santo Domingo** | **45.51** | **4** | *e*P | **P** | **11 19 21.4** | **+3.7** |
| **SDV** | **Santo Domingo** | **45.51** | **4** | P | **P** | **11 19 16.8** | **-0.8** |
| SDV | | | | IAmb | IAmb | 11 19 26.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **BAUV** | **El Baul** | **45.79** | **8** | P | **P** | **11 19 19.1** | **-0.5** |
| **NBCL** | **Cascavel-CE** | **45.90** | **54** | *e*P | **P** | **11 19 20.2** | **-0.3** |
| **MDP** | **Montagnes des** | **46.09** | **30** | LR | LR | 11 40 31.8 | |
| | comp=Z,202nm,19.1s,baz=204,slow=39 | | | | | | |
| **PEZE** | **Perez Zeledon,** | **46.85** | **346** | P | **P** | **11 19 26.7** | **-1.3** |
| **SNAA** | **Sanae** | **49.56** | **157** | P | **P** | **11 19 49.0** | **+0.6** |
| | comp=Z,12nm,1.1s,baz=271,slow=4.9,SNR=7.4 | | | | | | |
| **SNAA** | **Sanae** | **49.56** | **157** | P | **P** | **11 19 47.9** | **-0.4** |
| SNAA | | | | IAmb | IAmb | 11 19 50.5 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **53.47** | **180** | P | **P** | **11 20 18.8** | **+1.0** |
| | comp=Z,9.3nm,0.9s,baz=231,slow=3.2,SNR=3.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **53.47** | **180** | P | **P** | **11 20 18.0** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 11 20 20.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **CMIG** | **Matias Romero** | **57.18** | **336** | LR | LR | 11 39 02.6 | |
| | comp=Z,62nm,20.9s,baz=169,slow=29 | | | | | | |
| **ZAIG** | **Zacatecas** | **65.18** | **331** | P | **P** | **11 21 39.8** | **+0.5** |
| **PPT2** | **Papeete2** | **68.51** | **264** | *

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **URV** | **Uravakonda** | **146.26** | **122** | *e*PKPab | **PKPbc** | **11 30 38.5** | **-0.4** |
| **SKHT** | **Srikalahasti** | **146.99** | **127** | *e*PKiKP | **PKPab** | **11 30 42.6** | **+0.2** |
| **RCLA** | **Racherla** | **147.76** | **124** | *e*PKPab | **PKPbc** | **11 30 43.5** | **+0.5** |
| **KLRI** | **Killari** | **147.94** | **118** | *e*PKPbc | **PKPbc** | **11 30 42.4** | **-1.2** |
| **SRLM** | **Srisailam** | **148.18** | **123** | *ep*PKPdf | **PKPbc** | **11 30 44.7** | **+0.4** |
| **ADKI** | **Addanki** | **148.71** | **125** | *e*PKPbc | **PKPbc** | **11 30 44.5** | **-1.0** |
| **NJS** | **Nagarjunasagar** | **148.78** | **123** | *ep*PKPdf | **PKPbc** | **11 30 46.1** | **+0.4** |
| **HYBB** | **Hyderabad (bro** | **148.87** | **121** | *e*PKiKP | **PKiKP** | **11 30 47.0** | **-0.4** |
| **CUPL** | **Choutuppal** | **149.03** | **121** | *e*PKiKP | **PKiKP** | **11 30 47.2** | **-0.5** |
| **SRSP** | **Sriramsagar** | **149.74** | **118** | *e*PKiKP | **PKPbc** | **11 30 48.5** | **+0.3** |
| **MYLAV** | **Mylavaram** | **149.80** | **125** | *e*PKiKP | **PKPbc** | **11 30 48.8** | **+0.5** |
| **BVAR** | **Borovoye Array** | **150.23** | **45** | PKPbc | **PKiKP** | **11 30 49.2** | **+0.1** |
| **AAK** | **Ala-Archa** baz=228,slow=15 | **154.96** | **67** | PKPbc | **PKiKP** | **11 31 00.8** | **+1.4** |
| AAK | | | | PKPab | **PKPab** | **11 31 15.9** | **+1.0** |
| | comp=Z,3.2nm,0.6s,baz=300,slow=6.9,SNR=3.2 | | | | | | |
| **AAK** | **Ala-Archa** | **154.96** | **67** | | **PKPab** | **11 31 16.3** | **+1.4** |
| **KURBB** | **Kurchatov Arra** | **155.81** | **46** | PKPbc | PKPbc | 11 31 02.2 | |
| | comp=Z,1.3nm,0.8s,baz=290,slow=2.8,SNR=2.4 | | | | | | |
| KURBB | | | | PKPab | **PKPab** | **11 31 17.2** | **-0.8** |
| | comp=Z,2.0nm,0.9s,baz=286,slow=4.7,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.30** | **34** | PKP | **PKPdf** | **11 30 53.3** | **+0.2** |
| | comp=Z,2.3nm,0.8s,baz=323,slow=2.2,SNR=7.3 | | | | | | |
| ZALV | | | | PKPbc | PKPbc | 11 31 06.4 | |
| | comp=Z,0.6nm,0.4s,baz=325,slow=4.0,SNR=2.0 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **11 31 24.2** | **-0.1** |
| | comp=Z,2.1nm,0.6s,baz=305,slow=5.2,SNR=6.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.30** | **34** | | **PKPab** | **11 31 24.6** | **+0.3** |
| **MKAR** | **Makanchi Array** | **159.58** | **53** | PKP | **PKPdf** | **11 30 57.2** | **+1.0** |
| | comp=Z,1.2nm,1.0s,baz=270,slow=2.1,SNR=6.3 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **11 31 34.6** | **0.0** |
| | comp=Z,2.8nm,0.8s,baz=289,slow=3.7,SNR=13 | | | | | | |
| MKAR | | | | PP | **PP** | **11 35 16.9** | **+0.5** |
| | comp=Z,1.1nm,0.9s,baz=293,slow=6.3,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **159.58** | **53** | | **PKPab** | **11 31 35.2** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** | **160.65** | **159** | PKP | **PKPdf** | **11 30 59.3** | **+1.1** |
| | comp=Z,0.2nm,0.4s,baz=193,slow=3.7,SNR=4.0 | | | | | | |
| **WMQ** | **Urumqi** | **164.20** | **58** | *e*P | **PKPdf** | **11 31 00.4** | **-0.6** |
| **SONM** | **Songino Array** | **168.95** | **360** | PKPab | **PKPab** | **11 32 16.6** | **+0.9** |
| | comp=Z,0.7nm,0.9s,baz=316,slow=3.8,SNR=4.1 | | | | | | |
| **PZH** | **PanZhiHua** | **169.06** | **158** | PKP | **PKPdf** | **11 31 04.2** | **-1.2** |
| **GTA** | **Gaotai** | **174.27** | **61** | ⇓PKP | **PKPdf** | **11 31 08.8** | **+1.3** |
| GTA | | | | sPKP | | 11 31 36.8 | |
| GTA | | | | LR | LR | | |
| | comp=N,100nm,18.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,100nm,18.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,100nm,18.5s | | | | | | |
| **LZH** | **Lanzhou** | **177.93** | **109** | *e*PKP | **PKPdf** | **11 31 09.2** | **+0.7** |
| LZH | | | | pPKP | pPKPdf | 11 31 13.2 | +0.1 |
| LZH | | | | sPKP | | 11 31 16.0 | |

**IDC 10 11:11:12.2±3.0, 30°18S×177°92W, h0km, mb3.6/2, mb1 3.9/3, mb1mx3.3/28, mbtmp3.8/3, ML3.1/1, Error ellipse: s-maj=69.4km s-min=19.0km az=109.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.92** | **0** | Pn | Pn | 11 11 32.4 | 0.0 |
| | 188nm,0.3s,baz=254,slow=22,SNR=8.1 | | | | | | |
| RAO | | | | Sn | Sn | 11 11 46.9 | +0.5 |
| | 732nm,0.3s,baz=88,slow=21,SNR=13 | | | | | | |
| RAO | | | | LR | LR | 11 12 00.1 | |
| | comp=Z,102nm,21.9s,baz=74,slow=52 | | | | | | |
| **URZ** | **Urewera** | **9.05** | **206** | Pn | Pn | 11 13 22.6 | -1.5 |
| | 0.2nm,0.3s,baz=119,slow=4.3,SNR=2.6 | | | | | | |
| URZ | | | | Sn | Sn | 11 14 59.9 | -6.7 |
| | 0.6nm,0.3s,baz=46,slow=22,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **43.19** | **267** | P | P | 11 19 15.1 | 0.0 |
| | 0.2nm,0.4s,baz=105,slow=7.6,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.16** | **272** | P | P | 11 19 22.9 | 0.0 |
| | 0.5nm,0.3s,baz=107,slow=8.0,SNR=7.9 | | | | | | |
| **FINES** | **FINESS Array B** | **144.96** | **340** | PKP | PKPdf | 11 30 50.4 | -0.2 |
| | 0.9nm,0.6s,baz=69,slow=4.8,SNR=3.7 | | | | | | |

*EAF **10** 11:12:32.3±2.9, 25°.85S×29°.94E, h13km±28km, MD3.7*
**BUL 10 11:12:32.3±1.5, 25°.88S×29°.90E, h12km±12km, MD3.9, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.10** | **102** | *i* P | Pn | 11 13 06.5 | -0.8 |
| CNG | | | | *i* S | Sn | 11 13 32.8 | -0.5 |
| **CNG** | **Changalane** | **2.10** | **102** | *i* P | Pn | 11 13 06.5 | -0.8 |
| CNG | | | | *i* S | Sn | 11 13 32.8 | -0.5 |
| **MOPA** | **Mopani** | **2.72** | **30** | *i* P | Pn | 11 13 12.6 | -3.3 |
| MOPA | | | | *i* S | Sn | 11 13 43.5 | -5.2 |
| **MOPA** | **Mopani** | **2.72** | **30** | *i* P | Pn | 11 13 12.6 | -3.3 |
| MOPA | | | | *i* S | Sn | 11 13 43.5 | -5.2 |
| **MSNA** | **Messina** | **3.52** | **2** | *i* P | Pn | 11 13 27.2 | +0.3 |
| MSNA | | | | *i* S | Sn | 11 14 06.0 | -2.6 |
| **MSNA** | **Messina** | **3.52** | **2** | *i* P | Pn | 11 13 27.2 | +0.3 |
| MSNA | | | | *i* S | Sn | 11 14 06.0 | -2.6 |
| **LBTB** | **Lobatse** | **3.99** | **282** | *i* P | Pn | 11 13 33.6 | +0.2 |
| LBTB | | | | *i* S | Sn | 11 14 16.5 | -3.7 |
| **LBTB** | **Lobatse** | **3.99** | **282** | *i* P | Pn | 11 13 33.6 | +0.2 |
| LBTB | | | | *i* S | Sn | 11 14 16.5 | -3.7 |
| **BOSA** | **Boshof** | **4.95** | **236** | *i* P | Pn | 11 13 45.6 | -1.1 |
| BOSA | | | | *i* S | Sn | 11 14 40.5 | -3.5 |
| **BOSA** | **Boshof** | **4.95** | **236** | *i* P | Pn | 11 13 45.6 | -1.1 |
| BOSA | | | | *i* S | Sn | 11 14 40.5 | -3.5 |
| **MATP** | **Matopo** | **5.58** | **346** | *i* P | Pn | 11 13 55.5 | +0.1 |
| MATP | | | | *i* S | Sn | 11 14 55.7 | -3.8 |
| **MATP** | **Matopo** | **5.58** | **346** | *i* P | Pn | 11 13 55.5 | +0.1 |
| MATP | | | | *i* S | Sn | 11 14 55.7 | -3.8 |
| **BLWY** | **Bulawayo** | **5.83** | **348** | *i* P | Pn | 11 13 58.3 | -0.6 |
| BLWY | | | | *i* S | Sn | 11 14 59.9 | -6.0 |
| **BLWY** | **Bulawayo** | **5.83** | **348** | *i* P | Pn | 11 13 58.3 | -0.6 |
| BLWY | | | | *i* S | Sn | 11 14 59.9 | -6.0 |

*FUNV **10** 11:22:52.8, 8°.38N×71°.40W, h5km, MW3.5*
**ISC 10 11:22:51.5±0.8, 8°.48N±0°.05×71°.36W±0°.03, h8km, n32, σ1s66/40, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.54** | **111** | *e*P | **Pg** | **11 23 02.1** | **+0.2** |
| **SOCV** | **Socops** | **0.54** | **111** | *e*S | **Sg** | **11 23 10.3** | **+1.3** |
| **SDV** | **Santo Domingo** | **0.83** | **61** | *e*P | **Pg** | **11 23 07.1** | **-0.3** |
| **CAPV** | **Capacho** | **1.12** | **237** | *e*P | **Pg** | **11 23 11.8** | **-1.2** |
| CAPV | | | | *e*S | **Sg** | **11 23 26.8** | **-0.8** |
| **PAMC** | **Pamplona, Colo** | **1.74** | **230** | *e*P | **Pb** | **11 23 24.3** | **+0.3** |
| **OCAC** | **Ocana** | **1.95** | **263** | *e*P | **Pn** | **11 23 25.7** | **+0.6** |
| **CURV** | **Curarigua** | **2.06** | **42** | *e*S | **Sb** | **11 23 55.7** | **+0.7** |
| **TAMC** | **Tame, Arauca** | **2.07** | **192** | *e*P | **Pb** | **11 23 29.2** | **-0.1** |
| **LL6C** | **La Loma 6 Bece** | **2.26** | **304** | *e*P | **Pn** | **11 23 29.1** | **-0.1** |
| **BARC** | **Barichara** | **2.60** | **224** | *e*P | **Pb** | **11 23 38.8** | **+0.2** |
| **SIQV** | **Siquisique** | **2.65** | **35** | *e*P | **Pn** | **11 23 36.3** | **+1.8** |
| SIQV | | | | *e*S | **Sn** | **11 24 09.4** | **+2.6** |
| **SMLC** | **San Martn de** | **2.70** | **277** | *e*P | **Pn** | **11 23 35.1** | **-0.1** |
| **RUSC** | **La Rusia** | **3.08** | **214** | *e*P | **Pn** | **11 23 43.5** | **+2.5** |
| **MAPV** | **Macapo** | **3.17** | **65** | *e*P | **Pn** | **11 23 43.5** | **+1.8** |
| MAPV | | | | *e*S | **Sn** | **11 24 20.8** | **+1.1** |
| **BAUV** | **El Baul** | **3.31** | **82** | *e*P | **Pn** | **11 23 45.0** | **+1.3** |
| BAUV | | | | *e*S | **Sn** | **11 24 23.9** | **+0.6** |
| **ZARC** | **Zaragoza, Cauc** | **3.60** | **254** | *e*P | **Pn** | **11 23 48.1** | **+0.5** |
| **PTBC** | **PUERTO BERRIO,** | **3.62** | **238** | *e*P | **Pn** | **11 23 47.9** | **0.0** |
| **MONV** | **Montecano** | **3.72** | **21** | *e*S | **Sn** | **11 24 34.0** | **+0.7** |
| **SPBC** | **San Pablo de B** | **3.89** | **224** | *e*P | **Pn** | **11 23 53.5** | **+1.9** |
| **TURV** | **Turiamo** | **3.99** | **60** | *e*P | **Pn** | **11 23 55.1** | **+2.2** |
| TURV | | | | *e*S | **Sn** | **11 24 40.0** | **0.0** |
| **BENV** | **Beln** | **4.00** | **68** | *e*P | **Pn** | **11 23 54.3** | **+1.2** |
| BENV | | | | *e*S | **Sn** | **11 24 39.8** | **-0.4** |
| **SJCC** | **San Jacinto, C** | **4.02** | **291** | *e*P | **Pn** | **11 23 54.0** | **+0.5** |
| **UREC** | **San Jos de Ur** | **4.19** | **260** | *e*P | **Pn** | **11 23 55.4** | **-0.4** |
| **MOTC** | **Monteria, Cord** | **4.26** | **274** | *e*P | **Pn** | **11 23 57.6** | **+0.9** |
| **CHIC** | **Chingaza** | **4.49** | **212** | *e*P | **Pn** | **11 24 02.4** | **+2.2** |
| **NORC** | **Norcasia** | **4.53** | **230** | *e*P | **Pn** | **11 24 01.2** | **+0.8** |
| **CACV** | **CAICARA DEL OR** | **4.86** | **100** | *e*P | **Pb** | **11 24 13.2** | **-3.8** |
| CACV | | | | *e*S | **Sb** | **11 25 12.2** | **-3.4** |
| **GUY2C** | **Guyana, Caldas** | **5.12** | **231** | *e*P | **Pn** | **11 24 12.8** | **+3.8** |
| **CBOC** | **Ciudad Bolivar** | **5.29** | **241** | *e*P | **Pn** | **11 24 14.2** | **+3.2** |
| **BIRV** | **Birongo** | **5.40** | **68** | *e*P | **Pn** | **11 24 13.6** | **+1.2** |
| BIRV | | | | *e*S | **Sn** | **11 25 13.4** | **-1.5** |
| **ANIL** | **Santa Ana** | **5.64** | **226** | *e*P | **Pn** | **11 24 16.9** | **+1.0** |
| **ORTC** | **Ortega, Tolima** | **5.96** | **221** | *e*P | **Pn** | **11 24 21.2** | **+1.1** |

*IDC **10** 11:29:06.2±1.0, 8°.48N×71°.43W, h0km, mb3.5/3, mb1 3.8/5, mb1mx3.5/44, mbtmp3.6/5, ML2.7/2, Error ellipse: s-maj=29.6km s-min=10.2km az=153.0*
*FUNV **10** 11:29:08.7, 8°.50N×71°.38W, h5km, MW3.8*
**ISC 10 11:29:06.6±1.4, 8°.54N±0°.03×71°.33W±0°.03, h3km±10km, n41, σ1s62/55, mb3.6/3, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.54** | **118** | *e*P | **Pb** | **11 29 19.3** | **+0.6** |
| **SOCV** | **Socops** | **0.54** | **118** | *e*P | **Pb** | **11 29 19.2** | **+0.4** |
| SOCV | | | | *e*S | **Sb** | **11 29 27.2** | **+0.3** |
| **SDV** | **Santo Domingo** | **0.77** | **64** | Pg | **Pn** | **11 29 24.3** | **-0.3** |
| | 22nm,0.3s,baz=245,slow=6.6,SNR=32 | | | | | | |
| SDV | | | | Lg | Lg | 11 29 34.7 | |
| | 61nm,0.3s,baz=309,slow=13,SNR=20 | | | | | | |
| **SDV** | **Santo Domingo** | **0.77** | **64** | *e*P | **Pg** | **11 29 21.5** | **+0.1** |
| **CAPV** | **Capacho** | **1.18** | **235** | *e*P | **Pg** | **11 29 29.6** | **+0.4** |
| CAPV | | | | *e*S | **Sg** | **11 29 45.4** | **+0.8** |
| **PAMC** | **Pamplona, Colo** | **1.80** | **229** | *e*P | **Pn** | **11 29 38.8** | **-0.3** |
| **MCQV** | **Machiques** | **1.91** | **322** | *e*P | **Pn** | **11 29 41.7** | **+1.5** |
| MCQV | | | | *e*S | **Sn** | **11 30 05.6** | **+0.8** |
| **OCAC** | **Ocana** | **1.99** | **261** | *e*P | **Pn** | **11 29 40.1** | **-1.2** |
| **CURV** | **Curarigua** | **1.99** | **43** | *e*S | **Sb** | **11 30 08.8** | **-0.1** |
| **SANV** | **Sanarito** | **2.02** | **62** | *e*P | **Pb** | **11 29 43.5** | **-0.5** |
| SANV | | | | *e*S | **Sb** | **11 30 10.9** | **+1.3** |
| **TAMC** | **Tame, Arauca** | **2.14** | **192** | *e*P | **Pb** | **11 29 46.2** | **+0.2** |
| **LL6C** | **La Loma 6 Bece** | **2.25** | **302** | *e*P | **Pn** | **11 29 43.3** | **-1.5** |
| **DABV** | **Dabajuro** | **2.46** | **16** | *e*P | **Pb** | **11 29 50.6** | **-1.0** |
| **DABV** | **Dabajuro** | **2.46** | **16** | *e*P | **Pn** | **11 29 49.2** | **+1.5** |
| DABV | | | | *e*S | **Sn** | **11 30 19.1** | **+0.7** |
| **SIQV** | **Siquisique** | **2.58** | **36** | *e*P | **Pn** | **11 29 51.4** | **+2.1** |
| SIQV | | | | *e*S | **Sb** | **11 30 24.3** | **-1.4** |
| **BARC** | **Barichara** | **2.67** | **224** | *e*P | **Pb** | **11 29 53.9** | **-1.3** |
| **SMLC** | **San Martn de** | **2.72** | **276** | *e*P | **Pn** | **11 29 51.8** | **+0.6** |
| **CRJC** | **Cerrejon, Guaj** | **2.90** | **328** | *e*P | **Pn** | **11 29 54.9** | **+1.1** |
| **MAPV** | **Macapo** | **3.12** | **65** | *e*P | **Pn** | **11 29 58.6** | **+1.9** |
| MAPV | | | | *e*S | **Sn** | **11 30 35.6** | **+1.1** |
| **RUSC** | **La Rusia** | **3.15** | **214** | *e*P | **Pn** | **11 29 59.9** | **+2.3** |
| **BAUV** | **El Baul** | **3.28** | **83** | *e*P | **Pn** | **11 30 00.0** | **+1.1** |
| BAUV | | | | *e*S | **Sn** | **11 30 38.9** | **+0.4** |
| **ZARC** | **Zaragoza, Cauc** | **3.64** | **254** | *e*P | **Pn** | **11 30 05.8** | **+1.9** |
| **MONV** | **Montecano** | **3.65** | **21** | *e*P | **Pn** | **11 30 05.3** | **+1.2** |
| MONV | | | | *e*S | **Sn** | **11 30 46.9** | **-0.7** |
| **PTBC** | **PUERTO BERRIO,** | **3.68** | **237** | *e*P | **Pn** | **11 30 02.6** | **-1.8** |
| **BENV** | **Beln** | **3.95** | **69** | *e*P | **Pn** | **11 30 10.1** | **+1.9** |
| BENV | | | | *e*S | **Sn** | **11 30 54.7** | **-0.4** |
| **SPBC** | **San Pablo de B** | **3.95** | **224** | *e*P | **Pn** | **11 30 10.9** | **+2.6** |
| **SJCC** | **San Jacinto, C** | **4.03** | **290** | *e*P | **Pn** | **11 30 11.7** | **+2.4** |
| **UREC** | **San Jos de Ur** | **4.23** | **260** | *e*P | **Pn** | **11 30 14.4** | **+2.3** |
| **MOTC** | **Monteria, Cord** | **4.29** | **273** | *e*P | **Pn** | **11 30 12.9** | **+0.1** |
| **CHIC** | **Chingaza** | **4.56** | **212** | *e*P | **Pn** | **11 30 18.6** | **+1.6** |
| **NORC** | **Norcasia** | **4.59** | **230** | *e*P | **Pn** | **11 30 19.3** | **+2.2** |
| **ROSC** | **El Rosal** | **4.72** | **219** | Pn | **Pn** | **11 30 17.7** | **-1.5** |
| | 2.8nm,0.3s,baz=76,slow=19,SNR=1.9 | | | | | | |
| ROSC | | | | Sn | **Sn** | **11 31 17.7** | **+2.9** |
| | 0.9nm,0.3s,baz=39,slow=21,SNR=1.2 | | | | | | |
| **CACV** | **CAICARA DEL OR** | **4.84** | **101** | *e*P | **Pb** | **11 30 28.1** | **-4.1** |
| CACV | | | | *e*S | **Sb** | **11 31 28.1** | **-2.9** |
| **GUY2C** | **Guyana, Caldas** | **5.18** | **231** | *e*P | **Pn** | **11 30 27.1** | **+1.5** |
| **BIRV** | **Birongo** | **5.35** | **69** | *e*P | **Pn** | **11 30 27.9** | **+0.4** |
| BIRV | | | | *e*S | **Sn** | **11 31 27.1** | **-2.6** |
| **PCRV** | **Puerto La Cruz** | **6.81** | **76** | Pn | **Pn** | **11 30 50.2** | **+2.7** |
| | 0.5nm,0.3s,baz=238,slow=21,SNR=1.7 | | | | | | |
| PCRV | | | | Sn | **Sn** | **11 32 08.3** | **+2.7** |
| | 1.1nm,0.3s,baz=282,slow=22,SNR=1.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **47.78** | **322** | P | **P** | **11 37 46.0** | **+0.4** |
| | 0.2nm,0.4s,baz=128,slow=12,SNR=4.2 | | | | | | |
| **PLCA** | **Paso Flores** | **49.03** | **179** | P | **P** | **11 37 54.4** | **-0.6** |
| | 1.3nm,0.8s,baz=9.2,slow=7.4,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.29** | **339** | P | **P** | **11 39 29.5** | **-0.4** |
| | 0.3nm,0.8s,baz=123,slow=5.1,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **151.54** | **235** | PKPbc | **PKPbc** | **11 49 02.2** | **-1.0** |
| | 0.4nm,0.7s,baz=124,slow=3.3,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **152.70** | **243** | PKPbc | **PKPbc** | **11 49 05.4** | **-0.5** |
| | 0.3nm,0.4s,baz=103,slow=3.2,SNR=7.7 | | | | | | |

*IDC **10** 11:45:06.5±0.7, 40°.89S×44°.70E, h0km, mb3.9/12, mb1 4.0/12, mb1mx3.8/44, mbtmp3.9/12, MS3.6/6, Ms1 3.5/6, ms1mx3.1/66, Error ellipse: s-maj=28.9km s-min=17.1km az=36.0*
**ISC 10 11:45:08.3±0.8, 40°.9S±0°.2×44°.7E±0°.2, h12km, n17, σ0s75/14, mb4.1/10, MS3.6/6, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BOSA** | **Boshof** | **20.09** | **302** | P | **P** | **11 49 42.0** | **+0.2** |
| | 3.5nm,0.8s,baz=146,slow=15,SNR=1.8 | | | | | | |
| BOSA | | | | LR | LR | 11 56 10.7 | |
| | comp=Z,88nm,19.7s,baz=174,slow=33 | | | | | | |
| **SUR** | **Sutherland** | **20.93** | **286** | P | **P** | **11 49 51.4** | **+0.5** |
| | 3.7nm,0.8s,baz=118,slow=14,SNR=1.5 | | | | | | |
| **OPO** | **Ambohidratompo** | **22.36** | **6** | P | **P** | **11 50 06.5** | **0.0** |
| | 2.5nm,0.8s,baz=90,slow=12,SNR=2.0 | | | | | | |
| **LBTB** | **Lobatse** | **22.46** | **309** | P | **P** | **11 50 06.4** | **-1.1** |
| | 2.4nm,0.8s,baz=81,slow=14,SNR=1.9 | | | | | | |
| LBTB | | | | LR | LR | 11 57 12.7 | |
| | comp=Z,126nm,21.1s,baz=182,slow=32 | | | | | | |
| **MATP** | **Matopo** | **24.64** | **321** | P | **P** | **11 50 27.6** | **-1.3** |
| | 3.3nm,0.5s,baz=157,slow=13,SNR=11 | | | | | | |
| **TSUM** | **Tsumeb** | **31.70** | **305** | LR | LR | 12 03 01.1 | |
| | comp=Z,93nm,18.5s,baz=148,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **49.30** | **180** | P | **P** | **11 53 56.6** | **-0.2** |
| | 2.7nm,1.1s,baz=198,slow=2.9,SNR=4.6 | | | | | | |
| QSPA | | | | LR | LR | 12 12 25.5 | |
| | comp=Z,77nm,21.1s,baz=292,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.89** | **314** | P | **P** | **11 56 01.3** | **+0.8** |
| | 1.4nm,0.9s,baz=108,slow=4.5,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **74.33** | **108** | P | **P** | **11 56 46.2** | **+0.2** |
| | 0.7nm,1.0s,baz=247,slow=5.6,SNR=4.6 | | | | | | |
| **STKA** | **Stephens Creek** | **74.61** | **119** | P | **P** | **11 56 46.8** | **-0.7** |
| | 1.5nm,0.7s,baz=231,slow=5.8,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.96** | **105** | P | **P** | **11 57 01.4** | **+0.4** |
| | 1.1nm,0.8s,baz=222,slow=5.7,SNR=9.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **77.58** | **52** | P | **P** | **11 57 05.2** | **+0.9** |
| | 0.8nm,0.3s,baz=242,slow=6.3,SNR=7.2 | | | | | | |
| **GNI** | **Garni** | **80.68** | **0** | LR | LR | 12 32 48.7 | |
| | comp=Z,34nm,18.2s,baz=284,slow=36 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **92.65** | **337** | LR | LR | 12 43 07.0 | |
| | comp=Z,33nm,18.3s,baz=262,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **93.52** | **25** | P | **P** | **11 58 22.8** | **-0.7** |
| | 0.3nm,0.7s,baz=219,slow=8.5,SNR=2.4 | | | | | | |
| **ULM** | **Lac du Bonnet** | **151.17** | **302** | PKPbc | **PKiKP** | **12 05 00.9** | **-0.4** |
| | 6.5nm,0.6s,baz=66,slow=5.1,SNR=6.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **151.81** | **256** | PKPbc | **PKiKP** | **12 05 04.0** | **+0.5** |
| | 1.9nm,0.7s,baz=130,slow=5.2,SNR=21 | | | | | | |

**TAP 10 11:49:08.8, 23°.02N×120°.43E, h13km, ML1.2, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHHT** | **Tainan City** | **0.07** | **274** | *i* P | Pg | 11 49 12.4 | +0.9 |
| | baz=276 | | | | | | |
| SHHT | | | | S | Sg | 11 49 15.9 | +2.6 |
| | baz=276 | | | | | | |
| **SGST** | **Jiashian** | **0.16** | **65** | *e*P | Pb | 11 49 13.7 | 0.0 |
| | baz=246 | | | | | | |
| SGST | | | | *e*S | Sb | 11 49 18.0 | +1.1 |
| | baz=246 | | | | | | |
| **SGST** | **Jiashian** | **0.16** | **65** | P | Pb | 11 49 13.3 | -0.5 |
| | baz=65 | | | | | | |
| SGST | | | | *e*S | Sb | 11 49 18.0 | +1.0 |
| | baz=65 | | | | | | |
| **CHN1** | **Nanshi** | **0.19** | **29** | *e*P | Pb | 11 49 14.5 | +0.2 |
| | baz=264 | | | | | | |
| CHN1 | | | | *e*S | Sb | 11 49 19.1 | +1.2 |
| | baz=264 | | | | | | |
| **CHN1** | **Nanshi** | **0.19** | **29** | P | Pb | 11 49 14.6 | +0.2 |
| | baz=28 | | | | | | |
| CHN1 | | | | *e*S | Sb | 11 49 19.2 | +1.3 |
| | baz=28 | | | | | | |
| **TWM1** | **Shoushan** | **0.19** | **181** | P | Pb | 11 49 15.2 | +0.9 |
| | baz=174 | | | | | | |
| TWM1 | | | | *e*S | Sb | 11 49 19.9 | +1.9 |
| | baz=174 | | | | | | |
| **SNST** | **Tainan City** | **0.21** | **17** | *e*P | Pb | 11 49 14.8 | +0.1 |
| | baz=277 | | | | | | |
| SNST | | | | *e*S | Sb | 11 49 19.8 | +1.2 |
| | baz=277 | | | | | | |
| **TWK** | **Hsinying** | **0.26** | **12** | *e*P | Pb | 11 49 15.5 | +0.1 |
| | baz=286 | | | | | | |
| TWK | | | | *e*S | Sb | 11 49 20.6 | +0.7 |
| | baz=286 | | | | | | |
| **TWK** | **Hsinying** | **0.26** | **12** | P | Pb | 11 49 15.8 | +0.4 |
| | baz=15 | | | | | | |
| **TPUB** | **Ta-pu** | **0.34** | **33** | *e*P | Pg | 11 49 13.2 | -2.6 |
| | baz=308 | | | | | | |
| **TPUB** | **Ta-pu** | **0.34** | **33** | *e*P | Pb | 11 49 16.7 | -0.1 |
| | baz=21 | | | | | | |
| TPUB | | | | *e*S | Sb | 11 49 23.0 | +0.8 |
| | baz=21 | | | | | | |
| **STYH** | **Taoyuan** | **0.35** | **64** | *i* P | Pg | 11 49 10.4 | -5.6 |
| | baz=210 | | | | | | |
| STYH | | | | *i* S | Sg | 11 49 11.3 | -9.5 |
| | baz=210 | | | | | | |
| **CHN4** | **Tsaushan** | **0.37** | **24** | *e*P | Pb | 11 49 17.3 | 0.0 |
| | baz=24 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.44** | **155** | *e*P | Pb | 11 49 19.7 | +1.1 |
| | baz=145 | | | | | | |
| **ALS** | **Alishan** | **0.60** | **35** | *e*P | Pb | 11 49 21.6 | +0.1 |
| | baz=34 | | | | | | |
| ALS | | | | *e*S | Sb | 11 49 31.3 | +1.2 |
| | baz=34 | | | | | | |
| **CHN5** | **Tsauling** | **0.62** | **22** | *e*P | Pb | 11 49 21.8 | 0.0 |
| | baz=22 | | | | | | |

*PGC **10** 12:01:08.6±0.6, 58°.10N×139°.46W, h10km, mb4.0, ML3.4/11, 132km south of Yakutat, Ak Off Coast Of Southeastern Alaska*
*IDC **10** 12:01:08.3±0.8, 58°.18N×139°.21W, h0km, mb3.5/10, mb1 3.9/17, mb1mx3.7/67, mbtmp3.7/17, ML3.8/7, MS3.1/5, Ms1 3.2/5, ms1mx2.7/81, Error ellipse: s-maj=16.4km s-min=9.6km az=48.0*
*ANF **10** 12:01:09.0±0.6, 58°.14N×139°.27W, h10km, ML4.2/19, Error ellipse: s-maj=8.5km s-min=4.4km az=32.0*
*AEIC **10** 12:01:09±1.6, 58°.17N±0°.05×139°.3W±0°.1, h4km±5km, ML3.9, mb3.9/8(NEIC), ML3.4(OTT), ML4.0/68(NEIC), Mwr3.8/37(NEIC), Error ellipse: s-maj=9.0km s-min=5.4km az=54.0*
*NEIC **10** 12:01:09.4±1.6, 58°.17N±0°.05×139°.22W±0°.03, h10km±1km, Error ellipse: s-maj=8.1km s-min=3.0km az=171.0*
*NEIC **10** 12:01:10.7, 58°.23N×139°.29W, h13km, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.26; $M_{\theta\theta}$1.81; $M_{\phi\phi}$-0.56; $M_{r\theta}$-6.62; $M_{\theta\phi}$2.19; $M_{\phi r}$-0.17; Fault plane solution: $M_0$7.16000×$10^{14}$ NP1:$\phi_s$89.11000°, $\delta$83.54000°, $\lambda$-72.64000°. NP2:$\phi_s$198.92000°, $\delta$18.49000°, $\lambda$-159.21000°. Principal axes: T 7.4888, Plg36.0000°, Azm164.0000°; N -0.7183, Plg17.0000°, Azm267.0000°; P -6.7705, Plg49.0000°, Azm18.0000°;*
**ISC 10 12:01:08.5±2.8, 58°.12N±0°.04×139°.28W±0°.04, h8km±18km, n236, σ1s49/262, mb3.8/13, Off coast of southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YKU2** | **Yakutat** | **1.41** | **352** | | **Pn** | **12 01 33.4** | **-1.0** |
| YKU2 | | | | Sn | **Sb** | **12 01 51.7** | **-1.4** |
| **PNL** | **Peninsula** | **1.56** | **358** | | **Pn** | **12 01 34.4** | **-2.0** |
| PNL | | | | | **Sn** | **12 01 54.0** | **-2.8** |
| **PNL** | **Peninsula** | **1.56** | **358** | Pn | **Pn** | **12 01 34.5** | **-2.0** |
| PNL | | | | Sn | **Sn** | **12 01 53.9** | **-2.8** |
| **PNL** | **Peninsula** | **1.56** | **358** | P | **Pn** | **12 01 34.4** | **-2.0** |
| | baz=178,SNR=72 | | | | | | |
| PNL | | | | S | **Sn** | **12 01 53.6** | **-3.2** |
| | baz=178 | | | | | | |
| **BCPM** | **Bancas Point** | **1.85** | **354** | | **Pn** | **12 01 39.0** | **-1.5** |
| BCPM | | | | Sn | **Sn** | **12 02 02.7** | **-1.2** |
| **PINM** | **Pinnacle** | **2.04** | **346** | P | **Pn** | **12 01 41.7** | **-1.5** |
| | baz=165,SNR=72 | | | | | | |
| PINM | | | | S | **Sn** | **12 02 08.8** | **-0.1** |
| | baz=165 | | | | | | |
| **PCA** | **Pinnacle** | **2.05** | **346** | | **Pn** | **12 01 43.5** | **+0.3** |
| **PCA** | **Pinnacle** | **2.05** | **346** | | **Sn** | **12 02 08.5** |

comp=E,327nm,0.8s
WHY IAML 12 03 04.8

comp=N,268nm,0.8s
**WHY Whitehorse 3.40 40 Pn Pn 12 02 01.7 -0.1**
WHY Sn **Sn 12 02 40.8 -1.5**
**WHY Whitehorse 3.40 40 P Pn 12 02 01.8 -0.1**
baz=224,SNR=156
**RAGM Ragged Mountai 3.58 312 Pn 12 02 04.0 -0.3**
**YUK3 Moose Creek 3.71 351 Pn 12 02 06.4 +0.1**
**YUK3 Moose Creek 3.71 351 Pn Pn 12 02 06.2 -0.1**
**YUK3 Moose Creek 3.71 351 P Pn 12 02 06.2 -0.1**
baz=170,SNR=12
**YUK2 White River 3.76 349 Pn 12 02 07.4 +0.6**
**YUK2 White River 3.76 349 Pn Pn 12 02 06.1 -0.7**
**VRDI Verde Repeater 3.77 328 Pn 12 02 06.0 -0.9**
VRDI IAML 12 03 13.1

comp=N,203nm,0.7s
**P33M Teslin, Yukon 3.93 55 Pn 12 02 08.9 -0.2**
P33M IAML 12 03 09.3

comp=N,170nm,0.7s
**P33M Teslin, Yukon 3.93 55 P Pn 12 02 08.6 -0.6**
baz=241,SNR=22
**BMRM Bremner River 3.94 319 Pn Pn 12 02 10.0 +0.8**
BMRM IAML 12 03 17.1

comp=E,424nm,0.6s
BMRM IAML 12 03 21.5

comp=N,432nm,0.7s
**BMRM Bremner River 3.94 319 P Pn 12 02 08.8 -0.4**
baz=134,SNR=8.9
**GLB Gilahina Butte 4.04 327 Pn 12 02 10.0 -0.6**
GLB IAML 12 03 16.3

comp=N,179nm,1.1s
GLB IAML 12 03 27.9

comp=E,147nm,0.7s
**WRAK Wrangell Islan 4.13 111 Pn 12 02 12.8 +1.0**
WRAK IAML 12 03 21.5

comp=E,229nm,1.1s
WRAK IAML 12 03 23.3

comp=E,205nm,0.8s
**WRAK Wrangell Islan 4.13 111 P Pn 12 02 11.6 -0.2**
baz=298
**CRAG Craig 4.30 126 Pn 12 02 12.9 -1.2**
**CRAG Craig 4.30 126 P Pn 12 02 13.5 -0.6**
baz=311
**BVCY Beaver Creek 4.38 350 Pn 12 02 15.7 +0.4**
**BVCY Beaver Creek 4.38 350 Pn Pn 12 02 15.6 +0.4**
**BVCY Beaver Creek 4.38 350 P Pn 12 02 14.9 -0.3**
baz=169
**N25K Chitina, Valde 4.41 325 Pn 12 02 16.1 +0.5**
N25K IAML 12 03 22.3

comp=N,146nm,0.6s
**N25K Chitina, Valde 4.41 325 P Pn 12 02 15.7 +0.1**
baz=140
**M27K Edge Creek, AK 4.45 344 Pn 12 02 17.1 +0.9**
M27K IAML 12 03 42.0

comp=E,122nm,1.1s
M27K IAML 12 03 47.7

comp=N,144nm,1.0s
**M27K Edge Creek, AK 4.45 344 P Pn 12 02 16.6 +0.4**
baz=162
**DIV Divide 4.47 315 Pn Pn 12 02 16.5 0.0**
DIV Sn **Sn 12 03 05.8 -2.8**
**FID Port Fidalgo 4.52 309 Pn Pn 12 02 18.2 +1.0**
**M26K Nabesna, AK 4.68 338 Pn 12 02 19.6 +0.3**
M26K IAML 12 03 44.1

comp=N,93nm,0.8s
**M26K Nabesna, AK 4.68 338 P Pn 12 02 19.4 +0.1**
baz=155
**KLU Klutina 4.76 318 Pn 12 02 20.4 -0.1**
KLU IAML 12 03 42.9

comp=N,125nm,0.7s
KLU IAML 12 03 47.1

comp=E,110nm,1.2s
**KLU Klutina 4.76 318 P Pn 12 02 20.0 -0.5**
baz=132
KLU S **Sn 12 03 15.1 -0.8**
baz=132
**M31M Drury Creek, Y 4.77 29 Pn 12 02 20.9 +0.3**
M31M IAML 12 03 49.0

comp=N,130nm,1.0s
M31M IAML 12 03 49.4

comp=E,150nm,0.7s
**M31M Drury Creek, Y 4.77 29 P Pn 12 02 21.2 +0.7**
baz=213,SNR=121
**GLI Glacier Island 4.85 308 Pn Pn 12 02 22.4 +0.8**
**DLBC Dease Lake 4.90 82 Pn Pn 12 02 22.8 +0.4**
comp=E,5.6nm,0.3s,baz=270,slow=8.0,SNR=158
DLBC Sn **Sn 12 03 16.4 -2.8**
comp=E,16nm,0.3s,baz=230,slow=21,SNR=13
DLBC Lg Lg 12 03 34.8
comp=E,14nm,0.3s,baz=243,slow=20,SNR=6.8
**DLBC Dease Lake 4.90 82 Pn 12 02 22.6 +0.3**
DLBC IAML 12 03 46.3

comp=N,163nm,0.6s
DLBC IAML 12 03 52.2

comp=E,133nm,1.1s
**DLBC Dease Lake 4.90 82 Pn Pn 12 02 22.6 +0.3**
DLBC Sn **Sn 12 03 17.5 -1.6**
**FARO Faro, Yukon 5.08 33 Pn Pn 12 02 25.3 +0.5**
**FARO Faro, Yukon 5.08 33 P Pn 12 02 25.6 +0.8**
baz=219,SNR=81
**BC03 5.11 347 Pn 12 02 25.2 0.0**
**BCAR Beaver Creek A 5.11 347 Pn 12 02 25.1 -0.2**
**L27K Beaver Creek, 5.12 347 Pn 12 02 25.2 -0.1**
**L27K Beaver Creek, 5.12 347 P Pn 12 02 25.2 -0.1**
baz=165
**HARP HAARP 5.19 328 Pn 12 02 27.6 +1.2**
**HARP HAARP 5.19 328 P Pn 12 02 28.1 +1.7**
baz=143
**LIB Langara Island 5.20 135 Pn Pn 12 02 25.8 -0.7**
**L26K Log Cabin Wild 5.31 340 Pn Pn 12 02 29.3 +1.3**
**L26K Log Cabin Wild 5.31 340 P Pn 12 02 29.2 +1.2**
baz=156,SNR=18
**PWL Port Wells 5.37 305 Pn Pn 12 02 27.7 -1.1**
**PWL Port Wells 5.37 305 P Pn 12 02 28.5 -0.3**
baz=116
**NDB Naden 5.48 137 Pn Pn 12 02 29.5 -0.8**
**SCM Sheep Creek Mo 5.49 316 Pn 12 02 31.4 +0.9**
**SCM Sheep Creek Mo 5.49 316 P Pn 12 02 31.4 +0.9**
baz=129
**SEW Seward 5.61 295 Pn Pn 12 02 31.6 -0.4**
**KNK Knik Glacier 5.69 309 Pn Pn 12 02 33.0 -0.2**
**MAYO Mayo, Yukon 5.74 15 Pn Pn 12 02 34.5 +0.7**
MAYO Sg **Sb 12 04 01.9 +4.4**
**MAYO Mayo, Yukon 5.74 15 P Pn 12 02 34.5 +0.7**
baz=198,SNR=54
**PAX Paxson 5.74 331 Pn 12 02 34.7 +0.7**
**PAX Paxson 5.74 331 P Pn 12 02 35.3 +1.3**
baz=145,SNR=12
**MASB Masset 5.78 132 Pn Pn 12 02 34.2 -0.2**
**SML Sawmill 5.86 313 Pn Pn 12 02 36.2 +0.6**
**DAWY Dawson 5.97 360 Pn 12 02 37.4 +0.3**
**DAWY Dawson 5.97 360 Pn Pn 12 02 37.1 +0.1**
**DAWY Dawson 5.97 360 P Pn 12 02 37.3 +0.3**
baz=180,SNR=25
**MMPY Sheldon Lake, 6.01 38 Pn Pn 12 02 37.8 +0.1**
MMPY Sn **Sn 12 03 42.2 -4.4**
MMPY Sg **Sb 12 04 12.0 +6.5**
**MMPY Sheldon Lake, 6.01 38 P Pn 12 02 38.2 +0.5**
baz=225,SNR=34
**DOT Dot Lake 6.02 339 Pn 12 02 38.6 +0.9**
**DOT Dot Lake 6.02 339 Pn Pn 12 02 38.3 +0.6**
**PMR Palmer 6.06 309 Pn Pn 12 02 38.6 +0.4**
**RC01 Rabbit Creek A 6.08 304 Pn Pn 12 02 36.6 -2.0**
**BRLK Bradley Lake 6.23 290 Pn Pn 12 02 40.8 +0.1**
**DIB Dawson Inlet, 6.25 139 Pn 12 02 40.9 0.0**
**DIB Dawson Inlet, 6.25 139 Pn Pn 12 02 40.7 -0.2**
DIB Sn **Sn 12 03 49.4 -2.9**
**H02S1 DAWSON INLET T 6.25 139 Pn Pn 12 02 39.8 -1.0**
SNR=1103
H02S1 Sn **Sn 12 03 47.7 -4.7**
**RIDG Independent Ri 6.25 337 Pn Pn 12 02 41.7 +0.8**
**SCRK Sand Creek 6.30 341 Pn Pn 12 02 42.0 +0.3**
**SCRK Sand Creek 6.30 341 P Pn 12 02 42.0 +0.3**
baz=156,SNR=8.0
**RUBB Prince Rupert 6.31 123 Pn Pn 12 02 42.4 +0.8**
**RUBB Prince Rupert 6.31 123 Pn Pn 12 02 41.5 -0.1**
**CNPM China Poot 6.37 288 Pn Pn 12 02 42.0 -0.5**
**DHY Denali Highway 6.37 325 Pn 12 02 43.6 +1.0**
**DHY Denali Highway 6.37 325 P Pn 12 02 43.7 +1.0**
baz=137
**J29M Klondike Camp 6.38 4 Pn 12 02 43.5 +0.9**
**J29M Klondike Camp 6.38 4 P Pn 12 02 43.3 +0.7**
baz=185,SNR=47
**MOBC Moresby Island 6.48 137 Pn Pn 12 02 44.2 +0.1**

**HG1B Mitchell Dam 6.59 139 Pn Pn 12 02 45.5 0.0**
**J26L Joseph Creek 6.73 344 Pn 12 02 47.9 +0.4**
**EGAK Eagle 6.74 353 Pn Pn 12 02 48.1 +0.6**
**GRNB Grenville Isla 6.76 125 Pn Pn 12 02 47.9 0.0**
**GRNB Grenville Isla 6.76 125 Pn Pn 12 02 47.7 -0.2**
**BNB Barry Inlet 7.02 139 Pn Pn 12 02 50.8 -0.7**
**RND Reindeer 7.07 323 Pn Pn 12 02 53.9 +1.7**
**KDAK Kodiak Island 7.09 273 Pn Pn 12 02 53.3 +1.0**
comp=E,1.5nm,0.3s,baz=85,slow=8.0,SNR=15
KDAK Sn **Sn 12 04 07.8 -5.1**
baz=264,slow=7.6,SNR=2.2
**KDAK Kodiak Island 7.09 273 Pn 12 02 53.1 +0.8**
**J25K Salcha River, 7.14 338 Pn 12 02 53.2 +0.1**
**J25K Salcha River, 7.14 338 P Pn 12 02 53.3 +0.1**
baz=153
**BNKB Banks Island 7.14 128 Pn Pn 12 02 53.0 -0.1**
**KITB Kitimat 7.20 120 Pn Pn 12 02 54.2 +0.4**
**I29M Ogilvie Camp, 7.28 3 Pn 12 02 55.5 +0.5**
**HDA Harding Lake 7.31 333 Pn 12 02 55.5 +0.1**
**MCK McKinley 7.33 324 Pn Pn 12 02 57.1 +1.4**
**ILSW Iliamna Southw 7.39 290 Pn Pn 12 02 56.8 +0.2**
**HG4B Hotspring 7.45 138 Pn Pn 12 02 57.7 +0.4**
**HG4B Hotspring 7.45 138 Pn Pn 12 02 58.5 +1.3**
**OHAK Old Harbor 7.57 269 Pn Pn 12 03 00.1 +1.2**
**TRF Thorofare Moun 7.58 319 Pn Pn 12 02 58.2 -1.0**
**TRF Thorofare Moun 7.58 319 P Pn 12 02 57.8 -1.4**
baz=130
**IL31 7.60 335 Pn 12 02 59.5 +0.2**
**ILAR Eielson Array 7.60 335 Pn Pn 12 02 59.5 +0.2**
comp=E,1.1nm,0.3s,baz=152,slow=13,SNR=44
ILAR Lg Lg 12 05 00.1
comp=E,0.2nm,0.3s,baz=137,slow=25,SNR=4.1
ILAR LR LR 12 06 21.0
comp=E,306nm,18.2s,baz=143,slow=41
**ILAR Eielson Array 7.60 335 12 02 59.2 -0.1**
**WRH Wood River Hil 7.65 330 Pn Pn 12 03 00.9 +0.9**
**CCB Clear Creek Bu 7.71 332 Pn Pn 12 03 01.0 +0.1**
**KTH Kantishna Hill 7.87 319 Pn 12 03 04.2 +1.1**
**COLA College 7.91 332 P Pn 12 03 04.1 +0.5**
baz=145
**TCOL CIGO, UAF Yank 7.92 332 P Pn 12 03 04.5 +0.9**
baz=145
**BUTB Butedale 7.95 125 Pn Pn 12 03 04.7 +0.5**
**PRP Porcupine Dome 7.99 341 Pn Pn 12 03 04.0 -0.8**
**NEA2 Nenana 8.01 328 Pn 12 03 04.6 -0.4**
**MDM Murphy Dome 8.08 332 Pn 12 03 06.5 +0.6**
**CAST Castle Rocks 8.21 316 Pn Pn 12 03 08.7 +1.0**
**BPAW Bear Paw Mtn. 8.24 322 Pn Pn 12 03 08.5 +0.3**
**O18K Koktuh Hills 8.41 289 Pn Pn 12 03 11.2 +0.8**
**I23K Minto, Yukon-K 8.52 330 Pn 12 03 12.3 +0.4**
**FNBB Fort Nelson 8.56 78 Pn Pn 12 03 12.8 +0.4**
FNBB Sn **Sn 12 04 43.9 -5.1**
**BBB Bella Bella 8.72 128 Pn Pn 12 03 14.9 +0.2**
comp=E,1.6nm,0.3s,baz=330,slow=5.1,SNR=66
BBB Sn **Sn 12 04 48.9 -4.3**
comp=E,0.2nm,0.3s,baz=56,slow=18,SNR=1.4
BBB LR LR 12 06 36.0
comp=E,111nm,18.5s,baz=310,slow=38
**BBB Bella Bella 8.72 128 Pn Pn 12 03 15.1 +0.3**
**BBB Bella Bella 8.72 128 Pn Pn 12 03 15.2 +0.4**
**H24K Noodor Dome 8.73 336 Pn 12 03 14.8 0.0**
**L19K White Mountain 8.76 304 Pn Pn 12 03 15.8 +0.5**
**SVW2 Sparrevohn 8.78 297 Pn Pn 12 03 15.6 +1.0**
**MLY Manley 8.81 327 Pn Pn 12 03 15.9 -0.1**
**NBC2 NorthernBC 2 8.84 72 Sn Sn 12 04 49.0 -7.0**
**NBC5 NorthernBC 5 8.88 87 Pn Pn 12 03 17.5 +0.5**
**K20K Telida 8.93 312 Pn 12 03 18.3 +0.7**
**FSB Fort Saint Jam 9.08 107 Pn Pn 12 03 19.9 +0.3**
**FSJB Fort St James 9.10 107 Pn Pn 12 03 20.6 +0.6**
**H23K Yukon River 9.10 332 Pn 12 03 18.9 -1.1**
**I21K Tanana 9.29 325 Pn 12 03 23.4 +0.9**
**J20K Nowinta River 9.39 316 Pn 12 03 24.0 +0.2**
**NBC6 NorthernBC 6 9.45 80 Pn Pn 12 03 24.9 +0.2**
NBC6 Sn **Sn 12 05 03.9 -7.0**
**TTA Tatalina 9.54 307 Pn Pn 12 03 25.9 0.0**
**BMAR Burnt Mountain 9.65 348 Pn Pn 12 03 28.3 +0.8**
**H21K Melozitna Rive 9.87 326 Pn 12 03 30.8 +0.4**
**IMAR Indian Mountai 10.38 325 Pn Pn 12 03 38.2 +0.8**
**COLD Coldfoot 10.40 336 Pn Pn 12 03 38.0 +0.3**
**INK Inuvik 10.54 12 Pn Pn 12 03 39.2 -0.4**
comp=E,0.3nm,0.3s,baz=200,slow=11,SNR=13
INK Sn **Sn 12 05 36.0 -1.7**
comp=E,0.1nm,0.3s,baz=202,slow=11,SNR=1.3
INK Lg Lg 12 06 32.3
comp=E,0.1nm,0.3s,baz=60,slow=13,SNR=2.2
INK LR LR 12 07 06.8
comp=E,42nm,18.4s,baz=267,slow=34
**INK Inuvik 10.54 12 Pn 12 03 39.5 -0.1**
**INK Inuvik 10.54 12 P Pn 12 03 39.2 -0.4**
**INK Inuvik 10.54 12 P Pn 12 03 39.2 -0.4**
baz=197,SNR=6.7
**YKA Yellowknife Ar 12.95 60 Pn Pn 12 04 10.5 -2.0**
comp=E,0.3nm,0.3s,baz=261,slow=13,SNR=21
YKA Sn Sn 12 06 26.0 -11
comp=E,0.1nm,0.3s,baz=258,slow=23,SNR=2.7
YKA Lg Lg 12 07 54.2
baz=262,slow=28,SNR=4.2
**BLBC Blue River 12.96 109 P Pn 12 04 16.5 +3.5**
**KUKN Kugluktuk,NWT 14.56 38 P Pn 12 04 34.8 +0.3**
**A36M Sachs Harbour 15.05 17 P Pn 12 04 37.7 -3.4**
**A36M Sachs Harbour 15.05 17 P Pn 12 04 38.1 -3.0**
baz=210,SNR=13
**NEW Newport 16.46 117 LR LR 12 11 38.2**
comp=E,81nm,21.7s,baz=338,slow=38
**H04A Detroit Lake 17.09 134 P P 12 05 10.3 +0.9**
**YBH Yreka Blue Hor 19.48 140 P P 12 05 36.7 +1.1**
comp=E,0.0nm,0.3s,baz=112,slow=14,SNR=3.6
YBH LR LR 12 11 40.0
comp=E,67nm,19.2s,baz=331,slow=32
**HRY Holter Researc 20.11 113 P Pn 12 05 44.4 +0.1**
**MOD Modoc Plateau 20.18 135 P P 12 05 45.0 +1.6**
**EGMT Eagleton 20.25 107 P 12 05 44.9 +0.9**
**WDC Whiskeytown Da 20.56 141 P 12 05 49.1 +1.8**
WDC IAmb IAmb 12 05 56.5
comp=E,6.6nm,1.1s
**BEKR Beckworth 21.95 138 P P 12 06 03.5 +1.0**
BEKR IAmb IAmb 12 06 08.6
comp=E,6.7nm,1.3s
**ELK Elko 23.18 128 P P 12 06 17.6 +2.0**
comp=E,1.6nm,0.9s,baz=359,slow=11,SNR=5.3
**RES Resolute Bay 23.38 28 P P 12 06 16.8 -0.2**
comp=E,2.5nm,0.5s,baz=248,slow=11,SNR=16
**RES Resolute Bay 23.38 28 P P 12 06 17.9 +0.8**
**RES Resolute Bay 23.38 28 P P 12 06 16.9 -0.1**
**NVAR Mina Array Bea 23.96 136 P P 12 06 24.3 +1.1**
comp=E,0.6nm,0.8s,baz=324,slow=9.4,SNR=6.9
**PDAR Pinedale Array 24.10 117 P P 12 06 25.6 +1.1**
comp=E,0.2nm,0.6s,baz=324,slow=8.9,SNR=2.2
**R11A Troy Canyon, C 25.07 132 P P 12 06 34.8 +1.5**
R11A IAmb IAmb 12 06 37.7
comp=E,4.5nm,1.3s
**EUNU Eureka 27.08 18 P P 12 06 52.5 +1.5**
**TXAR Lajitas Array 37.83 124 P P 12 08 27.9 +2.5**
comp=E,0.4nm,0.7s,baz=333,slow=6.6,SNR=5.7
**H11N2 WAKE ISLAND Hy 54.58 249 T T 13 09 53.0**
baz=31,slow=76,SNR=1441
**H11N3 WAKE ISLAND Hy 54.59 249 T T 13 09 53.3**
baz=31,slow=76,SNR=1937
**H11N1 WAKE ISLAND Hy 54.60 249 T T 13 09 50.6**
baz=31,slow=76,SNR=1141
**H11S1 WAKE ISLAND Hy 55.72 248 T T 13 11 16.5**
baz=31,slow=76,SNR=358
**H11S2 WAKE ISLAND Hy 55.73 248 T T 13 11 14.1**
baz=31,slow=76,SNR=146
**H11S3 WAKE ISLAND Hy 55.73 248 T T 13 11 23.5**
baz=31,slow=76,SNR=153
**NOA NORSAR Array B 58.96 16 P P 12 11 08.0 +0.3**
comp=E,1.1nm,0.8s,baz=341,slow=7.3,SNR=3.6
**FINES FINESS Array B 60.23 8 P P 12 11 16.4 +0.1**
comp=E,3.2nm,0.9s,baz=29,slow=4.4,SNR=3.6
**FINES FINESS Array B 60.23 8 P P 12 11 16.9 +0.6**
**SONM Songino Array 61.38 316 P P 12 11 26.1 +1.5**
comp=E,2.0nm,0.5s,baz=36,slow=7.0,SNR=2.3
**HHC Hu-ho-hao-te 65.16 308 eP P 12 11 50.7 +1.0**
HHC pmax pmax 12 05 10.1
comp=E,5.0nm,1.1s
HHC pmax pmax
comp=Z,84nm,4.9s
**MKAR Makanchi Array 69.94 331 P P 12 12 19.5 -0.2**
comp=Z,0.2nm,0.6s,baz=35,slow=5.3,SNR=2.0
**AKASG Malin Array Be 71.13 8 P P 12 12 27.5 +0.6**
comp=Z,0.2nm,0.3s,baz=357,slow=5.6,SNR=1.5
**WMQ Urumqi 71.17 326** *eP* **P 12 12 31.5 +4.1**

*IDC **10** 12:01:32.6±1.8,36.82S×73.89W,h0km,mb3.5/2, mb1 3.7/3,mb1mx3.6/32,mbtmp3.5/3,ML3.4/1,MS3.1/3, Ms1 3.1/3,ms1mx2.8/35,Error ellipse: s-maj=61.1km s-min=29.2km az=66.0*
*GUC **10** 12:01:36.5±0.5,36.81S×73.69W,h30km±5km,ML4.3*
**ISC 10 12:01:35.3±1.2,36.77S±0.05×73.74W±0.09,h14km,n19,**
**σ0.75/19,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BI05** | **Punta Hualpn** | **0.44** | **87** | *eP* | **Pb** | **12 01 44.9** | **0.0** |
| BI05 | | | | *eS* | **Sb** | **12 01 51.0** | **-0.4** |
| BI05 | | | | IAML | | 12 01 52.1 | |
| | comp=E,32μm,0.2s | | | | | | |
| **ML02** | **Panimavida** | **2.13** | **62** | *eP* | **Pn** | **12 02 10.4** | **0.0** |
| ML02 | | | | *eS* | **Sn** | **12 02 37.4** | **+0.6** |
| ML02 | | | | IAML | | 12 02 50.9 | |
| | comp=E,3μm,0.7s | | | | | | |
| **GO05** | **Huala** | **2.29** | **40** | *eP* | **Pn** | **12 02 13.1** | **+0.4** |
| GO05 | | | | *eS* | **Sg** | **12 02 48.0** | **-1.1** |
| **LC01** | **Cunco** | **2.58** | **146** | *eP* | **Pn** | **12 02 16.3** | **-0.4** |
| **LR03** | **Panguipulli** | **3.06** | **159** | *eP* | **Pn** | **12 02 22.9** | **-0.3** |
| **BO02** | **Sierra Bellavi** | **3.12** | **51** | *eP* | **Pn** | **12 02 24.7** | **+0.7** |
| BO02 | | | | IAML | | 12 03 17.3 | |
| | comp=N,755nm,0.7s | | | | | | |
| **BO01** | **Tunca** | **3.22** | **43** | *eP* | **Pn** | **12 02 26.1** | **+0.7** |
| BO01 | | | | IAML | | 12 03 26.4 | |
| | comp=N,1μm,1.0s | | | | | | |
| **MT01** | **Popeta** | **3.55** | **36** | *eP* | **Pn** | **12 02 29.9** | **-0.1** |
| MT01 | | | | IAML | | 12 03 34.6 | |
| | comp=E,245nm,0.4s | | | | | | |
| **MT09** | **Talagante** | **3.74** | **38** | *eP* | **Pn** | **12 02 33.1** | **+0.3** |
| **BO04** | **La Punta** | **3.78** | **44** | *eP* | **Pn** | **12 02 33.3** | **+0.2** |
| **PLCA** | **Paso Flores** | **4.67** | **149** | Pn | **Pn** | **12 02 46.0** | **+0.5** |
| | comp=E,0.4nm,0.3s,baz=321,slow=13,SNR=2.2 | | | | | | |
| PLCA | | | | Sn | **Sn** | **12 03 40.9** | **+1.4** |
| | comp=E,0.4nm,0.3s,baz=324,slow=20,SNR=1.8 | | | | | | |
| PLCA | | | | Lg | Lg | 12 03 56.2 | |
| | comp=E,0.9nm,0.3s,baz=45,slow=22,SNR=3.5 | | | | | | |
| PLCA | | | | LR | LR | 12 04 54.1 | |
| | comp=E,138nm,20.8s,baz=295,slow=43 | | | | | | |
| **H03S1** | **Juan Fernandez** | **5.13** | **303** | T | T | 12 08 15.7 | |
| | baz=124 | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.15** | **303** | T | T | 12 08 16.6 | |
| | baz=124 | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.15** | **303** | T | T | 12 08 16.4 | |
| | baz=124 | | | | | | |
| **LVC** | **Limon Verde** | **14.72** | **18** | LR | LR | 12 10 57.7 | |
| | comp=E,69nm,18.8s,baz=194,slow=38 | | | | | | |
| **SIV** | **San Ignacio** | **23.56** | **32** | P | **P** | **12 06 46.2** | **+0.7** |
| | comp=E,1.0nm,0.5s,baz=226,slow=12,SNR=2.7 | | | | | | |
| SIV | | | | LR | LR | 12 17 53.6 | |
| | comp=E,94nm,18.4s,baz=280,slow=42 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.51** | **333** | P | **P** | **12 12 55.9** | **+0.2** |
| | comp=E,0.3nm,0.8s,baz=146,slow=6.9,SNR=3.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **150.24** | **45** | PKPbc | **PKPbc** | **12 21 23.6** | **-1.7** |
| | comp=E,0.9nm,0.8s,baz=288,slow=6.4,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **159.59** | **53** | PKPab | **PKPab** | **12 22 11.6** | **0.0** |
| | comp=E,0.5nm,0.9s,baz=292,slow=6.3,SNR=4.5 | | | | | | |

*IDC **10** 12:03:31.2±1.7,31.12S×71.20W,h0km,mb3.8/1, mb1 3.8/4,mb1mx3.6/31,mbtmp3.8/4,ML3.7/3,Error ellipse: s-maj=53.9km s-min=38.1km az=122.0*
*GUC **10** 12:03:35.1±0.8,30.70S×71.59W,h34km±2km,ML3.9*
**ISC 10 12:03:35.8±0.9,30.70S±0.04×71.58W±0.07,h33km±4km, n27,σ1.973/33,2C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.05** | **294** | *eP* | **Pb** | **12 03 41.4** | **0.0** |
| CO06 | | | | *eS* | **Sb** | **12 03 45.3** | **+0.2** |
| CO06 | | | | IAML | | 12 03 46.0 | |
| | comp=E,31μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **0.71** | **136** | *eP* | **Pn** | **12 03 50.3** | **+0.6** |
| CO02 | | | | *eS* | **Sn** | **12 04 00.9** | **+1.3** |
| CO02 | | | | IAML | | 12 04 05.3 | |
| | comp=E,11μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **0.78** | **101** | *eP* | **Pn** | **12 03 51.1** | **+0.5** |
| CO03 | | | | *eS* | **Sn** | **12 04 02.5** | **+1.3** |
| CO03 | | | | IAML | | 12 04 03.8 | |
| | comp=E,5μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **0.83** | **21** | *eP* | **Pn** | **12 03 51.2** | **0.0** |
| CO05 | | | | *eS* | **Sb** | **12 04 03.6** | **+0.9** |
| CO05 | | | | IAML | | 12 04 06.0 | |
| | comp=E,7μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **0.85** | **52** | *eP* | **Pb** | **12 03 52.4** | **0.0** |
| GO04 | | | | *eS* | **Sb** | **12 04 05.1** | **+1.5** |
| **LCO** | **Las Campanas** | **1.84** | **25** | *eP* | **Pn** | **12 04 06.4** | **+1.0** |
| LCO | | | | *eS* | **Sn** | **12 04 29.6** | **+1.8** |
| **VA06** | **Catapilco** | **1.88** | **173** | *eP* | **Pn** | **12 04 06.8** | **+1.2** |
| VA06 | | | | *eS* | **Sb** | **12 04 31.6** | **-0.9** |
| VA06 | | | | IAML | | 12 04 39.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.24** | **157** | *eP* | **Pn** | **12 04 13.4** | **+2.6** |
| VA03 | | | | IAML | | 12 04 50.7 | |
| | comp=E,877nm,0.4s | | | | | | |
| **ROCH** | **El Roble** | **2.32** | **168** | *eP* | **Pn** | **12 04 14.1** | **+2.1** |
| ROCH | | | | IAML | | 12 04 51.3 | |
| | comp=N,823nm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **2.32** | **181** | *eP* | **Pn** | **12 04 13.8** | **+2.1** |
| VA01 | | | | IAML | | 12 04 53.0 | |
| | comp=E,614nm,0.9s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.52** | **10** | *eP* | **Pn** | **12 04 14.6** | **+0.1** |
| AC04 | | | | IAML | | 12 05 00.6 | |
| | comp=E,518nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **2.58** | **172** | *eP* | **Pn** | **12 04 17.0** | **+1.7** |
| **MT05** | **Renca** | **2.78** | **165** | *eP* | **Pn** | **12 04 20.8** | **+2.7** |
| MT05 | | | | IAML | | 12 05 01.8 | |
| | comp=E,707nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **3.11** | **171** | *eP* | **Pn** | **12 04 24.9** | **+2.1** |
| MT09 | | | | IAML | | 12 05 15.8 | |
| | comp=N,408nm,0.6s | | | | | | |
| **MT01** | **Popeta** | **3.17** | **175** | *eP* | **Pn** | **12 04 25.2** | **+1.7** |
| MT01 | | | | IAML | | 12 05 17.3 | |
| | comp=E,259nm,0.5s | | | | | | |
| **LMEL** | **Las Melosas** | **3.35** | **160** | *eP* | **Pn** | **12 04 29.3** | **+3.2** |
| **BO04** | **La Punta** | **3.38** | **166** | *eP* | **Pn** | **12 04 28.6** | **+2.2** |
| BO04 | | | | IAML | | 12 05 23.5 | |
| | comp=N,257nm,0.3s | | | | | | |
| **AC02** | **Maricunga** | **4.41** | **30** | *eP* | **Pn** | **12 04 42.4** | **+1.5** |
| **H03N1** | **Juan Fernandez** | **6.80** | **244** | T | T | 12 12 00.8 | |
| | baz=72,slow=72,SNR=258 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.81** | **244** | T | T | 12 12 02.7 | |
| | baz=72,slow=72,SNR=167 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.81** | **244** | T | T | 12 12 03.0 | |
| | baz=72,slow=72,SNR=239 | | | | | | |
| **LVC** | **Limon Verde** | **8.40** | **17** | Pn | **Pn** | **12 05 37.6** | **+2.0** |
| | comp=N,0.3nm,0.3s,baz=187,slow=8.1,SNR=1.3 | | | | | | |
| LVC | | | | Sn | Sn | 12 07 20.7 | +11 |
| | comp=N,0.7nm,0.3s,baz=163,slow=13,SNR=3.3 | | | | | | |
| **CPUP** | **Villa Florida** | **13.26** | **74** | Pn | **Pn** | **12 06 38.0** | **-3.8** |
| | comp=N,0.2nm,0.3s,baz=77,slow=16,SNR=1.9 | | | | | | |
| CPUP | | | | Sn | **Sn** | **12 09 06.4** | **-1.7** |
| | comp=N,0.1nm,0.3s,baz=178,slow=20,SNR=1.2 | | | | | | |
| CPUP | | | | Lg | Lg | 12 10 15.9 | |
| | comp=N,0.2nm,0.3s,baz=345,slow=19,SNR=1.4 | | | | | | |
| **SIV** | **San Ignacio** | **17.51** | **36** | P | **P** | **12 07 38.4** | **-0.1** |
| | comp=N,0.2nm,0.3s,baz=221,slow=13,SNR=1.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.72** | **70** | P | **P** | **12 15 56.2** | **-0.5** |
| | comp=N,0.9nm,0.9s,baz=250,slow=4.2,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.14** | **40** | PKPbc | **PKPbc** | **12 23 23.4** | **+0.5** |
| | comp=N,0.2nm,0.3s,baz=296,slow=2.9,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.20** | **29** | PKPbc | **PKPbc** | **12 23 25.4** | **+0.2** |
| | comp=N,1.6nm,0.7s,baz=321,slow=2.1,SNR=8.6 | | | | | | |
| ZALV | | | | PKPab | **pPKPbc** | **12 23 36.1** | **0.0** |
| | comp=N,1.8nm,0.8s,baz=317,slow=5.9,SNR=6.8 | | | | | | |

*IDC **10** 12:21:21.5±2.2,7.18S×129.73E,h134km±26km,mb3.1/1, mb1 3.3/6,mb1mx3.0/36,mbtmp3.7/6,Error ellipse: s-maj=37.9km s-min=20.7km az=93.0*
**ISC 10 12:21:20.3±0.9,7.24S±0.06×129.8E±0.1,h150km,n6,**
**σ3.51/10,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.49** | **13** | P | **Pn** | **12 22 54.4** | **+0.8** |
| | 1.9nm,0.3s,baz=223,slow=23,SNR=6.8 | | | | | | |
| SIJI | | | | S | **Sn** | **12 24 01.5** | **-5.1** |
| | 1.2nm,0.3s,baz=224,slow=23,SNR=1.9 | | | | | | |
| **BATI** | **Baumata** | **6.77** | **244** | P | **Pn** | **12 22 58.2** | **+0.9** |
| | 4.7nm,0.3s,baz=84,slow=6.7,SNR=2.2 | | | | | | |
| BATI | | | | S | **Sn** | **12 24 10.0** | **-3.3** |

7.1nm,0.3s,baz=56,slow=19,SNR=5.7
**FITZ Fitzroy Crossi 11.54 200** P **Pn 12 24 01.2 +0.6**
0.3nm,0.3s,baz=23,slow=12,SNR=27
**WRA Warramunga Arr 13.37 161** P **Pn 12 24 26.4 +2.2**
0.4nm,0.3s,baz=348,slow=14,SNR=20
WRA S **Sn 12 26 49.7 -2.6**
1.0nm,0.3s,baz=144,slow=17,SNR=9.7
**ASAR Alice Springs 16.80 167** P **Pn 12 25 10.9 +4.1**
0.3nm,0.3s,baz=338,slow=11,SNR=25
ASAR S **S 12 28 09.9 -3.8**
0.2nm,0.3s,baz=352,slow=28,SNR=5.9
**MKAR Makanchi Array 68.33 327** P **P 12 32 07.6 +2.3**
0.2nm,0.4s,baz=115,slow=7.7,SNR=9.0

*NIED **10** 12:25:12.8, 31°.37N×128°.79E, h8km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=0.98; Mθθ1.71; Mϕϕ-0.73; Mrθ-0.51; Mθϕ3.62; Mϕr1.84; Fault plane solution: M₀4.35000×10¹⁴ NP1: ϕs193.00000°, δ76.00000°, λ-153.00000°. NP2: ϕs96.00000°, δ64.00000°, λ-16.00000°.*
*JMA **10** 12:25:12.8±0.2, 31°.37N×128°.79E, h8km±2km, M3.6*
*IDC **10** 12:25:13.6±1.3, 31°.38N×128°.58E, h0km, mb3.2/3, mb1 3.5/5, mb1mx3.3/42, mbtmp3.3/5, ML3.1/2, MS2.1/2, Ms1 2.1/2, ms1mx2.0/33, Error ellipse: s-maj=32.2km s-min=17.3km az=90.0*
**ISC 10 12:25:12.7±2.3, 31°.35N±0°.05×128°.80E±0°.07, h2km±14km, n16, σ0°89/23, mb3.3/3, Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSJ** | **Shimokoshiki** | **0.85** | **67** | P | **Pg** | **12 25 28.7** | **-0.2** |
| JSJ | | | | *eS* | **Sg** | **12 25 39.8** | **-0.1** |
| **JFU** | **Fukue jima 2** | **1.31** | **358** | P | **Pn** | **12 25 36.8** | **-1.2** |
| JFU | | | | *eS* | **Sb** | **12 25 53.7** | **-1.5** |
| **JSU** | **Suzuyama** | **1.42** | **83** | P | **Pn** | **12 25 39.1** | **-0.5** |
| JSU | | | | *eS* | **Sb** | **12 25 58.4** | **-0.1** |
| **JNN** | **Nakanoshima** | **1.76** | **148** | P | **Pn** | **12 25 43.2** | **-1.0** |
| **JYAK** | **Yakushimahirau** | **1.84** | **126** | P | **Pn** | **12 25 44.1** | **-1.1** |
| JYAK | | | | *eS* | **Sn** | **12 26 08.5** | **-0.6** |
| **JTN** | **Tanegashima 3** | **1.99** | **110** | P | **Pn** | **12 25 46.8** | **-0.6** |
| JTN | | | | *eS* | **Sn** | **12 26 11.9** | **-1.0** |
| **JTZ** | **Takazaki** | **2.03** | **74** | P | **Pn** | **12 25 47.6** | **-0.3** |
| **JMTN** | **Minamitane** | **2.04** | **117** | P | **Pn** | **12 25 47.4** | **-0.6** |
| JMTN | | | | *eS* | **Sn** | **12 26 13.5** | **-0.5** |
| **JIU3** | **Izumi3** | **2.09** | **54** | P | **Pn** | **12 25 48.5** | **-0.2** |
| **JNU** | **Nakatsue** | **2.50** | **44** | Pn | **Pb** | **12 25 59.0** | **+0.8** |
| | 8.7nm,0.3s,baz=227,slow=6.1,SNR=72 | | | | | | |
| JNU | | | | Sn | **Sb** | **12 26 29.6** | **+0.1** |
| | 3.9nm,0.3s,baz=246,slow=22,SNR=3.7 | | | | | | |
| **JII** | **Iki** | **2.57** | **18** | P | **Pn** | **12 25 55.3** | **0.0** |
| **KSRS** | **Korea Array** | **6.14** | **353** | Pn | **Pn** | **12 26 44.4** | **0.0** |
| | 0.2nm,0.3s,baz=176,slow=14,SNR=6.4 | | | | | | |
| KSRS | | | | Sn | **Sn** | **12 27 53.8** | **-1.4** |
| | 0.6nm,0.3s,baz=175,slow=22,SNR=5.1 | | | | | | |
| KSRS | | | | LR | LR | 12 28 19.2 | |
| | comp=Z,15nm,21.9s,baz=110,slow=31 | | | | | | |
| KSRS | | | | Lg | Lg | 12 28 22.4 | |
| | 1.3nm,0.3s,baz=174,slow=29,SNR=9.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **9.37** | **54** | LR | LR | 12 31 30.1 | |
| | comp=Z,13nm,20.2s,baz=201,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **23.73** | **320** | P | **P** | **12 30 27.4** | **+1.1** |
| | 0.5nm,0.8s,baz=142,slow=11,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.27** | **173** | P | **P** | **12 34 18.2** | **+0.1** |
| | 0.4nm,1.0s,baz=359,slow=8.4,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **54.92** | **174** | P | **P** | **12 34 46.6** | **+1.6** |
| | 0.5nm,1.0s,baz=2.2,slow=15,SNR=5.7 | | | | | | |

*IDC **10** 12:29:44.1±0.8, 8°.58N×71°.46W, h0km, mb3.5/5, mb1 3.8/7, mb1mx3.6/32, mbtmp3.6/7, ML2.7/2, MS3.2/2, Ms1 3.2/2, ms1mx2.7/54, Error ellipse: s-maj=21.9km s-min=9.1km az=158.0*
*FUNV **10** 12:29:47.4, 8°.50N×71°.48W, h5km, MW3.9*
**ISC 10 12:29:45.5±1.3, 8°.53N±0°.03×71°.41W±0°.03, h5km±9km, n54, σ1§85/64, mb3.7/5, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.60** | **114** | *eP* | **Pg** | **12 29 57.2** | **0.0** |
| **SDV** | **Santo Domingo** | **0.84** | **65** | Pg | **Pg** | **12 30 02.0** | **+0.2** |
| | 27nm,0.3s,baz=231,slow=7.0,SNR=69 | | | | | | |
| SDV | | | | Lg | Lg | 12 30 12.7 | |
| | 66nm,0.3s,baz=328,slow=14,SNR=16 | | | | | | |
| **SDV** | **Santo Domingo** | **0.84** | **65** | *eP* | **Pg** | **12 30 02.0** | **+0.2** |
| **CAPV** | **Capacho** | **1.11** | **233** | *eP* | **Pg** | **12 30 06.8** | **-0.2** |
| CAPV | | | | *eS* | **Sg** | **12 30 21.2** | **-0.2** |
| **PAMC** | **Pamplona, Colo** | **1.74** | **227** | *eP* | **Pn** | **12 30 19.5** | **+2.6** |
| **MCQV** | **Machiques** | **1.87** | **324** | *eP* | **Pn** | **12 30 19.3** | **+1.1** |
| MCQV | | | | *eS* | **Sn** | **12 30 43.4** | **+1.2** |
| **OCAC** | **Ocana** | **1.91** | **261** | *eP* | **Pn** | **12 30 20.6** | **+1.7** |
| **CURV** | **Curarigua** | **2.05** | **44** | *eS* | **Sb** | **12 30 49.4** | **+0.2** |
| **SANV** | **Sanarito** | **2.09** | **62** | *eP* | **Pn** | **12 30 24.2** | **+2.9** |
| SANV | | | | *eS* | **Sn** | **12 30 50.1** | **+2.4** |
| **TAMC** | **Tame, Arauca** | **2.12** | **190** | *eP* | **Pn** | **12 30 23.9** | **+2.2** |
| **LLLC** | **La Loma 6 Bece** | **2.19** | **303** | *eP* | **Pn** | **12 30 29.6** | **+1.2** |
| **ELOV** | **Elorza** | **2.44** | **128** | *eP* | **Pn** | **12 30 29.0** | **+2.9** |
| **ELOV** | **Elorza** | **2.44** | **128** | *eP* | **Pn** | **12 30 27.8** | **+1.7** |
| ELOV | | | | *eS* | **Sn** | **12 30 57.1** | **+0.8** |
| **DABV** | **Dabajuro** | **2.49** | **18** | *eP* | **Pn** | **12 30 28.6** | **+1.8** |
| **DABV** | **Dabajuro** | **2.49** | **18** | *eP* | **Pn** | **12 30 28.6** | **+1.8** |
| DABV | | | | *eS* | **Sn** | **12 30 59.1** | **+1.4** |
| **BARC** | **Barichara** | **2.61** | **222** | *eP* | **Pb** | **12 30 33.2** | **+0.2** |
| **SIQV** | **Siquisique** | **2.63** | **37** | *eP* | **Pn** | **12 30 30.7** | **+2.0** |
| SIQV | | | | *eS* | **Sn** | **12 31 02.6** | **+1.6** |
| **SMLC** | **San Martn de** | **2.65** | **276** | *eP* | **Pn** | **12 30 29.9** | **+1.0** |
| **CRJC** | **Cerrejon, Guaj** | **2.87** | **330** | *eP* | **Pn** | **12 30 32.6** | **+0.6** |
| **RUSC** | **La Rusia** | **3.10** | **212** | *eP* | **Pn** | **12 30 38.2** | **+2.6** |
| **MAPV** | **Macapo** | **3.19** | **66** | *eP* | **Pn** | **12 30 38.0** | **+1.6** |
| MAPV | | | | *eS* | **Sn** | **12 31 16.1** | **+1.2** |
| **URIC** | **Uribia, Colomb** | **3.20** | **350** | *eP* | **Pb** | **12 30 41.5** | **-1.4** |
| **BAUV** | **El Baul** | **3.35** | **83** | *eP* | **Pn** | **12 30 40.0** | **+1.3** |
| BAUV | | | | *eS* | **Sn** | **12 31 19.3** | **+0.4** |
| **ZARC** | **Zaragoza, Cauc** | **3.57** | **253** | *eP* | **Pn** | **12 30 43.1** | **+1.5** |
| **PTBC** | **PUERTO BERRIO,** | **3.61** | **237** | *eP* | **Pn** | **12 30 43.0** | **+0.8** |
| **MONV** | **Montecano** | **3.68** | **22** | *eP* | **Pn** | **12 30 44.4** | **+1.2** |
| MONV | | | | *eS* | **Sn** | **12 31 26.7** | **-0.3** |
| **SMRC** | **Santa Marta, M** | **3.81** | **314** | *eP* | Pn | 12 30 41.5 | -3.4 |
| **SPBC** | **San Pablo de B** | **3.90** | **223** | *eP* | **Pn** | **12 30 48.7** | **+2.5** |
| **SJCC** | **San Jacinto, C** | **3.96** | **290** | *eP* | **Pn** | **12 30 49.4** | **+2.3** |
| **BENV** | **Beln** | **4.02** | **69** | *eP* | **Pn** | **12 30 49.2** | **+1.3** |
| BENV | | | | *eS* | **Sn** | **12 31 35.0** | **-0.4** |
| **URCC** | **San Jos de Ur** | **4.16** | **260** | *eP* | **Pn** | **12 30 52.2** | **+2.5** |
| **MOTC** | **Monteria, Cord** | **4.21** | **274** | *eP* | **Pn** | **12 30 52.5** | **+2.1** |
| **CHIC** | **Chingaza** | **4.51** | **211** | *eP* | **Pn** | **12 30 57.5** | **+2.6** |
| **NORC** | **Norcasia** | **4.53** | **230** | *eP* | **Pn** | **12 30 56.9** | **+2.0** |
| **ROSC** | **El Rosal** | **4.67** | **218** | Pn | **Pn** | **12 30 56.3** | **-0.8** |
| | 2.0nm,0.3s,baz=349,slow=12,SNR=2.7 | | | | | | |
| ROSC | | | | Sn | **Sn** | **12 31 52.7** | **+0.8** |
| | 1.7nm,0.3s,baz=123,slow=22,SNR=2.3 | | | | | | |
| ROSC | | | | Lg | Lg | 12 32 15.3 | |
| | 2.8nm,0.3s,baz=161,slow=22,SNR=4.8 | | | | | | |
| **HELC** | **Santa Helena** | **4.70** | **241** | *eP* | **Pn** | **12 30 59.9** | **+2.4** |
| **PAYV** | **Puerto Ayacuch** | **4.84** | **129** | *eP* | **Pn** | **12 30 59.8** | **+0.7** |
| PAYV | | | | *eS* | **Sn** | **12 31 51.7** | **-3.9** |
| **CACV** | **CAICARA DEL OR** | **4.92** | **101** | *eP* | Pb | 12 31 09.2 | -3.0 |
| CACV | | | | *eS* | **Sb** | **12 32 10.7** | **-1.0** |
| **VILC** | **Villavicencio,** | **4.94** | **207** | *eP* | **Pn** | **12 31 02.3** | **+1.6** |
| **GUY2C** | **Guyana, Caldas** | **5.12** | **230** | *eP* | **Pn** | **12 31 07.5** | **+4.1** |
| **CBOC** | **Ciudad Bolivar** | **5.28** | **240** | *eP* | Pn | 12 30 56.1 | -9.2 |
| **BIRV** | **Birongo** | **5.43** | **69** | *eP* | **Pn** | **12 31 08.3** | **+1.2** |
| BIRV | | | | *eS* | **Sn** | **12 32 07.3** | **-2.8** |
| **ANIL** | **Santa Ana** | **5.64** | **225** | *eP* | **Pn** | **12 31 09.6** | **-0.8** |
| **ORTC** | **Ortega, Tolima** | **5.97** | **220** | *eP* | **Pn** | **12 31 15.4** | **+0.7** |
| **PCRV** | **Puerto La Cruz** | **5.88** | **76** | Pn | **Pn** | **12 31 28.8** | **+1.6** |
| | 0.9nm,0.3s,baz=153,slow=7.9,SNR=1.7 | | | | | | |
| PCRV | | | | Sn | **Sn** | **12 32 47.9** | **+1.9** |
| | 1.9nm,0.3s,baz=289,slow=22,SNR=6.0 | | | | | | |
| **SJG** | **San Juan** | **10.81** | **28** | LR | LR | 12 36 46.2 | |
| | comp=Z,94nm,18.5s,baz=212,slow=39 | | | | | | |
| **ATAH** | **Atahualpa** | **17.05** | **204** | LR | LR | 12 41 47.7 | |
| | comp=Z,104nm,18.4s,baz=45,slow=42 | | | | | | |
| **TXAR** | **Lajitas Array** | **36.66** | **309** | P | **P** | **12 36 51.6** | **-1.9** |
| | 0.3nm,0.8s,baz=124,slow=8.0,SNR=3.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **47.74** | **322** | P | **P** | **12 38 23.1** | **-0.7** |
| | 0.4nm,0.6s,baz=127,slow=10,SNR=3.4 | | | | | | |
| **PLCA** | **Paso Flores** | **49.03** | **179** | P | **P** | **12 38 32.9** | **-0.6** |
| | 1.6nm,0.8s,baz=21,slow=9.4,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.27** | **339** | P | **P** | **12 40 07.7** | **-0.6** |
| | 0.4nm,0.7s,baz=127,slow=7.2,SNR=8.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.74** | **79** | P | **P** | **12 41 08.4** | **-1.0** |
| | 0.6nm,0.7s,baz=286,slow=5.0,SNR=2.1 | | | | | | |

**ASAR Alice Springs 151.48 235** PKPbc **PKPdf 12 49 40.3 +4.8**
0.6nm,0.7s,baz=96,slow=2.3,SNR=5.9
**WRA Warramunga Arr 152.63 243** PKPbc **PKPbc 12 49 43.1 -1.2**
0.7nm,0.6s,baz=109,slow=2.2,SNR=8.4

*SFS **10** 12:32:12.0, 35°.71N×3°.70W, ML2.0, ALBORAN SUR*
*CNRM **10** 12:32:13.3, 35°.76N×3°.54W, h21km, ml2.8*
**ISC 10 12:32:11.5±1.0, 35°.73N±0°.04×3°.62W±0°.07, h10km, n13, σ1§44/21, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.57** | **207** | P | **Pn** | **12 32 25.3** | **-0.5** |
| PALE | | | | S | **Sn** | **12 32 35.0** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.72** | **135** | P | **Pb** | **12 32 25.9** | **-0.3** |
| GOG | | | | S | **Sn** | **12 32 38.3** | **-0.7** |
| **EMAL** | **Malaga-Limoner** | **1.22** | **328** | P | **Pg** | **12 32 34.8** | **-0.1** |
| EMAL | | | | S | **Sg** | **12 32 50.5** | **-0.3** |
| **CEU** | **Ceuta** | **1.43** | **277** | P | **Pg** | **12 32 39.0** | **0.0** |
| CEU | | | | S | **Sn** | **12 32 54.5** | **-1.9** |
| **IFR** | **Ifrane** | **2.53** | **210** | P | Pn | 12 32 46.0 | -6.9 |
| IFR | | | | S | **Sn** | **12 33 21.0** | **-2.9** |
| **MD31** | **MD31** | **3.01** | **199** | P | **Pn** | **12 32 59.2** | **-0.2** |
| MD31 | | | | S | **Sn** | **12 33 38.2** | **+2.7** |
| **MDT** | **Midelt** | **3.02** | **196** | P | **Pn** | **12 33 01.1** | **+1.6** |
| MDT | | | | S | **Sn** | **12 33 36.9** | **+1.1** |
| **PVAQ** | **Vaqueiros** | **3.69** | **298** | *e*Sn | **Sn** | **12 33 51.7** | **-0.6** |
| PVAQ | | | | A | A | 12 33 57.9 | |
| | 3.0nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **298** | P | **Pn** | **12 33 08.9** | **+0.3** |
| PVAQ | | | | S | **Sn** | **12 33 55.2** | **+2.9** |
| **PCVE** | **Castro Verde** | **4.02** | **299** | *e*Pn | **Pn** | **12 33 14.1** | **+0.9** |
| **PESTR** | **Estremoz** | **4.45** | **316** | *e*Sn | **Sn** | **12 34 09.8** | **-1.1** |
| **PNCL** | **Nicolau / Gran** | **4.59** | **303** | *e*Pn | **Pn** | **12 33 22.2** | **+1.2** |
| PNCL | | | | *e*Sn | **Sn** | **12 34 13.6** | **-0.8** |
| PNCL | | | | A | A | 12 34 26.1 | |
| | 2.8nm,0.8s | | | | | | |
| **PMTG** | **Montargil** | **4.95** | **314** | *e*Sn | **Sn** | **12 34 22.9** | **-0.4** |

*IDC **10** 12:32:21.7±2.2, 10°.30S×160°.86E, h39km±16km, mb4.0/15, mb1 4.2/17, mb1mx4.1/35, mbtmp4.3/17, ML4.4/2, MS3.7/37, Ms1 3.7/37, ms1mx3.6/62, Error ellipse: s-maj=19.7km s-min=14.2km az=97.0*
*NEIC **10** 12:32:23.1±1.5, 10°.25S±0°.05×160°.83E±0°.07, h41km±5km, mb4.8/43, Error ellipse: s-maj=9.6km s-min=6.9km az=87.0*
**ISC 10 12:32:24.4±0.4, 10°.28S±0°.05×160°.83E±0°.07, h62km, n192, σ1§52/160, mb4.6/49, 1C-2D, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.21** | **314** | Pn | **Pn** | **12 32 43.0** | **-2.3** |
| | 582nm,0.3s,baz=179,slow=9.2,SNR=87 | | | | | | |
| HNR | | | | Sn | **Sn** | **12 32 57.6** | **-3.3** |
| | 3µm,0.3s,baz=112,slow=15,SNR=19 | | | | | | |
| **HNR** | **Honiara** | **1.21** | **314** | Pn | **Pn** | **12 32 42.6** | **-2.7** |
| HNR | | | | Sn | **Sn** | **12 32 57.9** | **-2.9** |
| **HNR** | **Honiara** | **1.21** | **314** | P | **Pn** | **12 32 42.9** | **-2.3** |
| **SANVU** | **Saraoutou** | **8.06** | **130** | Pn | **Pn** | **12 34 17.2** | **-1.7** |
| **SANVU** | **Saraoutou** | **8.06** | **130** | P | **Pn** | **12 34 17.7** | **-1.2** |
| **DVP** | **Devils Point** | **10.28** | **137** | P | **Pn** | **12 34 49.4** | **+0.2** |
| | 94µm,0.8s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **10.74** | **162** | P | **Pn** | **12 34 53.6** | **-1.9** |
| **LIFNC** | **LIFOU** | **12.12** | **150** | Pn | **Pn** | **12 35 11.9** | **-2.5** |
| **LIFNC** | **LIFOU** | **12.12** | **150** | P | **Pn** | **12 35 12.5** | **-1.9** |
| **NOUC** | **Port Laguerre** | **12.87** | **157** | P | **Pn** | **12 35 24.7** | **+0.1** |
| **DZM** | **Mont Dzumac** | **12.90** | **156** | *e*Pn | **Pn** | **12 35 24.8** | **-0.3** |
| | 7.8nm,0.2s | | | | | | |
| DZM | | | | *e*Sn | Sn | 12 37 32.3 | -15 |
| | 2.9nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 12 38 13.1 | |
| | comp=Z,608nm,24.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **12.90** | **156** | Pn | **Pn** | **12 35 23.1** | **-1.9** |
| | 1.4nm,0.3s,baz=73,slow=6.3,SNR=63 | | | | | | |
| DZM | | | | Sn | **Sn** | **12 37 38.4** | **-8.6** |
| | 0.4nm,0.3s,baz=67,slow=19,SNR=1.4 | | | | | | |
| DZM | | | | LR | LR | 12 39 48.4 | |
| | comp=Z,460nm,18.1s,baz=22,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **12.90** | **156** | Pn | **Pn** | **12 35 24.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **12.90** | **156** | P | **Pn** | **12 35 27.2** | **+2.1** |
| **YATNC** | **Mamie plateau,** | **13.07** | **154** | P | **Pn** | **12 35 28.9** | **+1.5** |
| **MARNC** | **Mare, Loyalty** | **13.11** | **149** | Pn | **Pn** | **12 35 26.9** | **-1.0** |
| **MARNC** | **Mare, Loyalty** | **13.11** | **149** | P | **Pn** | **12 35 27.9** | **+0.1** |
| **ONTNC** | **Ouen Toro** | **13.12** | **156** | Pn | **Pn** | **12 35 27.4** | **-0.5** |
| **ONTNC** | **Ouen Toro** | **13.12** | **156** | P | **Pn** | **12 35 27.1** | **-0.8** |
| **OUENC** | **Ouen Island, N** | **13.37** | **155** | Pn | **Pn** | **12 35 31.0** | **-0.4** |
| **OUENC** | **Ouen Island, N** | **13.37** | **155** | P | **Pn** | **12 35 30.8** | **-0.6** |
| **PMG** | **Port Moresby** | **13.49** | **273** | LR | LR | 12 40 18.0 | |
| | comp=Z,460nm,21.2s,baz=110,slow=35 | | | | | | |
| **RK1H** | **Rockhampton Ha** | **16.34** | **216** | P | **Pn** | **12 36 09.2** | **-0.8** |
| **CTA** | **Charters Tower** | **17.10** | **234** | P | **Pn** | **12 36 18.1** | **-1.3** |
| | 1.3nm,0.3s,baz=57,slow=12,SNR=14 | | | | | | |
| CTA | | | | LR | LR | 12 42 28.8 | |
| | comp=Z,341nm,18.5s,baz=70,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **17.10** | **234** | P | **Pn** | **12 36 19.0** | **-0.4** |
| **CTAO** | **Charters Tower** | **17.10** | **234** | P | **Pn** | **12 36 18.5** | **-0.9** |
| **CTAO** | **Charters Tower** | **17.10** | **234** | P | **Pn** | **12 36 19.4** | **0.0** |
| **PATS** | **Pohnpei** | **17.19** | **352** | P | **Pn** | **12 36 19.8** | **-0.7** |
| **PATS** | **Pohnpei** | **17.19** | **352** | P | **Pn** | **12 36 19.6** | **-0.9** |
| **EIDS** | **Eidsvold** | **17.62** | **210** | | **Pn** | **12 36 25.4** | **-0.3** |
| **EIDS** | **Eidsvold** | **17.62** | **210** | P | **Pn** | **12 36 25.5** | **-0.3** |
| **COEN** | **Coen** | **17.64** | **256** | P | **P** | **12 36 26.4** | **+0.2** |
| **COEN** | **Coen** | **17.64** | **256** | P | **Pn** | **12 36 25.7** | **-0.4** |
| **MTSU** | **Mount Surprise** | **17.80** | **242** | P | **P** | **12 36 30.1** | **+2.1** |
| **MSVF** | **Nonsavu** | **18.27** | **116** | LR | LR | 12 42 10.6 | |
| | comp=Z,156nm,21.7s,baz=317,slow=32 | | | | | | |
| **RMQ** | **Roma** | **19.75** | **214** | P | **Pn** | **12 36 51.5** | **+0.2** |
| **ARMA** | **Armidale** | **21.79** | **202** | P | **P** | **12 37 11.4** | **0.0** |
| ARMA | | | | IAmb | IAmb | 12 37 14.7 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **21.79** | **202** | P | **P** | **12 37 13.9** | **+2.5** |
| **QLP** | **Quilpie** | **22.55** | **222** | P | **P** | **12 37 22.3** | **+2.8** |
| **QIS** | **Mount Isa** | **22.84** | **241** | P | **P** | **12 37 22.9** | **+0.3** |
| **SMPI** | **Sarmi** | **23.46** | **289** | P | **P** | **12 37 28.6** | **-0.1** |
| | comp=Z,47nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.38** | **211** | P | **P** | **12 37 46.2** | **+0.2** |
| **CNB** | **Canberra Magne** | **27.02** | **201** | P | **P** | **12 38 01.7** | **+0.9** |
| **AFI** | **Afiamalu** | **27.02** | **100** | LR | LR | 12 46 58.9 | |
| | comp=Z,148nm,19.0s,baz=306,slow=32 | | | | | | |
| **WR0** | **Warramunga Arr** | **27.10** | **246** | P | **P** | **12 38 01.8** | **+0.1** |
| **CAN** | **Canberra** | **27.15** | **202** | P | **P** | **12 38 02.7** | **+0.7** |
| CAN | | | | IAmb | IAmb | 12 38 14.1 | |
| | comp=Z,52nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.26** | **246** | P | **P** | **12 38 02.6** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 12 38 39.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.26** | **246** | P | **P** | **12 38 04.3** | **+1.2** |
| **WB2** | **Warramunga Arr** | **27.27** | **246** | P | **P** | **12 38 02.7** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 12 38 21.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.28** | **246** | P | **P** | **12 38 02.8** | **-0.5** |
| | comp=Z,2.9nm,0.5s,baz=74,slow=9.1,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 41 22.5** | **+0.7** |
| | comp=Z,1.7nm,0.6s,baz=70,slow=3.4,SNR=5.7 | | | | | | |
| WRA | | | | ScP | **ScP** | **12 44 59.4** | **+2.2** |
| | comp=Z,1.1nm,0.9s,baz=77,slow=3.1,SNR=4.6 | | | | | | |
| WRA | | | | LR | LR | 12 48 23.8 | |
| | comp=Z,134nm,19.2s,baz=50,slow=35 | | | | | | |
| **OUZ** | **Omahuta** | **27.42** | **157** | P | **P** | **12 38 05.8** | **+1.5** |
| OUZ | | | | IAmb | IAmb | 12 38 11.8 | |
| | comp=Z,87nm,1.9s | | | | | | |
| **OUZ** | **Omahuta** | **27.42** | **157** | P | **P** | **12 38 06.0** | **+1.7** |
| **STKA** | **Stephens Creek** | **27.90** | **217** | P | **P** | **12 38 08.5** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=32,slow=13,SNR=18 | | | | | | |
| STKA | | | | PcP | **PcP** | **12 41 22.6** | **-0.6** |
| | comp=Z,4.5nm,0.9s,baz=329,slow=5.0,SNR=3.2 | | | | | | |
| STKA | | | | LR | LR | 12 48 52.2 | |
| | comp=Z,121nm,18.8s,baz=70,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **27.90** | **217** | P | **P** | **12 38 09.1** | **+0.4** |
| **STKA** | **Stephens Creek** | **27.90** | **217** | P | **P** | **12 38 11.4** | **+2.7** |
| **GUMO** | **Guam** | **28.52** | **326** | LR | LR | 12 48 43.3 | |
| | comp=Z,147nm,21.8s,baz=125,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **28.91** | **239** | P | **P** | **12 38 17.8** | **0.0** |
| **ASAR** | **Alice Springs** | **28.91** | **239** | P | **P** | **12 38 16.4** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=63,slow=10,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 41 26.1** | **+0.2** |
| | comp=Z,1.9nm,0.8s,baz=85,slow=2.1,SNR=6.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 45 04.3** | **+2.1** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=3.7,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 12 49 38.3 | |
| | comp=Z,354nm,18.4s,baz=71,slow=36 | | | | | | |
| **LCRK** | **Leigh Creek** | **29.07** | **223** | P | **P** | **12 38 18.7** | **-0.4** |
| **MTN** | **Manton Dam** | **29.19** | **262** | P | **P** | **12 38 20.1** | **-0.3** |
| MTN | | | | IAmb | IAmb | 12 39 13.2 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **OOD** | **Oodnadatta** | **29.36** | **230** | P | **P** | **12 38 23.5** | **+1.8** |
| **TOO** | **Toolangi** | **30.48** | **204** | P | **P** | **12 38 32.5** | **+1.0** |
| TOO | | | | IAmb | IAmb | 12 38 58.0 | |
| | comp=Z,52nm,1.9s | | | | | | |
| **TOO** | **Toolangi** | **30.48** | **204** | P | **P** | **12 38 33.1** | **+1.6** |
| **HTT** | **Hallett** | **30.59** | **218** | P | **P** | **12 38 34.0** | **+1.4** |
| **SIJI** | **Sorong** | **30.84** | **286** | LR | LR | 12 52 28.2 | |
| | comp=Z,80nm,20.4s,baz=26,slow=39 | | | | | | |
| **GRRZ** | **Galatos Road** | **31.13** | **156** | P | **P** | **12 38 40.0** | **+2.8** |
| **MXZ** | **Matakaoa Point** | **31.39** | **153** | P | **P** | **12 38 38.1** | **-1.4** |
| **URZ** | **Urewera** | **31.46** | **155** | LR | LR | 12 50 48.6 | |
| | comp=Z,70nm,18.1s,baz=339,slow=35 | | | | | | |
| **URZ** | **Urewera** | **31.46** | **155** | P | **P** | **12 38 41.0** | **+1.0** |
| **URZ** | **Urewera** | **31.46** | **155** | P | **P** | **12 38 40.5** | **+0.4** |
| **URZ** | **Urewera** | **31.46** | **155** | P | **P** | **12 38 41.2** | **+1.2** |
| **MUGZ** | **Murupara** | **31.50** | **156** | P | **P** | **12 38 41.7** | **+1.2** |
| **GEXS** | **Deakin Univers** | **31.51** | **205** | P | **P** | **12 38 42.3** | **+1.8** |
| **ETVZ** | **East Tongariro** | **31.66** | **158** | P | **P** | **12 38 51.2** | **+9.2** |
| **OTVZ** | **Oturere** | **31.67** | **158** | P | **P** | **12 38 47.7** | **+5.6** |
| **KNRA** | **Kununurra** | **31.68** | **257** | P | **P** | **12 38 42.0** | **-0.3** |
| **KNRA** | **Kununurra** | **31.68** | **257** | P | **P** | **12 38 41.9** | **-0.3** |
| **MWZ** | **Matawai** | **31.70** | **155** | P | **P** | **12 38 43.2** | **+1.0** |
| **TUVZ** | **Tukino** | **31.75** | **158** | P | **P** | 12 38 52.6 | +10 |
| **TWGZ** | **Tauwhareparae** | **31.76** | **154** | P | **P** | **12 38 43.8** | **+1.1** |
| **WNVZ** | **Wahianoa** | **31.78** | **158** | P | **P** | 12 38 51.2 | +8.0 |
| **RAGZ** | **Rawiri** | **31.79** | **155** | P | **P** | **12 38 44.8** | **+1.8** |
| **MTHZ** | **Maungataniwha** | **31.85** | **156** | P | **P** | 12 38 51.7 | +8.1 |
| **MULG** | **Mulgathing** | **31.89** | **228** | P | **P** | **12 38 42.9** | **-1.1** |
| **MOVZ** | **Moawhango** | **31.91** | **158** | P | **P** | 12 38 52.9 | +8.8 |
| **BKZ** | **Black Stump Fm** | **31.98** | **157** | P | **P** | **12 38 45.9** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **31.98** | **157** | P | **P** | **12 38 44.8** | **+0.1** |
| BKZ | | | | IAmb | IAmb | 12 38 46.8 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **BKZ** | **Black Stump Fm** | **31.98** | **157** | P | **P** | **12 38 45.0** | **+0.2** |
| **BBOO** | **Buckleboo** | **31.98** | **222** | P | **P** | **12 38 42.4** | **-2.4** |
| BBOO | | | | IAmb | IAmb | 12 38 53.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **31.98** | **222** | P | **P** | **12 38 44.4** | **-0.4** |
| **SNGZ** | **Shannon Statio** | **32.00** | **155** | P | **P** | **12 38 46.5** | **+1.7** |
| **NMHZ** | **Naumai** | **32.05** | **156** | P | **P** | **12 38 47.7** | **+2.3** |
| **BHHZ** | **Black Hill Sta** | **32.10** | **157** | P | **P** | **12 38 47.7** | **+1.9** |
| **RIGZ** | **Rimuhau** | **32.11** | **155** | P | **P** | **12 38 46.7** | **+0.9** |
| **KWHZ** | **Kaweka Forest** | **32.18** | **157** | P | **P** | **12 38 48.2** | **+1.8** |
| **MCHZ** | **McNeill Hill** | **32.30** | **157** | P | P | 12 38 54.2 | +6.7 |
| **PNHZ** | **Pukenui** | **32.52** | **158** | P | P | 12 38 57.6 | +8.2 |
| **MHGZ** | **Mahia Peninsul** | **32.54** | **155** | P | **P** | **12 38 50.2** | **+0.6** |
| **TSZ** | **Takapari Road** | **32.56** | **158** | P | **P** | **12 38 52.2** | **+2.4** |
| **KAHZ** | **Kahuranaki** | **32.68** | **157** | P | P | 12 38 58.6 | +7.9 |
| **WPHZ** | **Waipukurau**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LZH | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **GTA** | **Gaotai** | **75.09** | **315** | *eP* | **P** | | **12 44 02.1** | **+2.1** |
| GTA | | | | pP | PcP | | 12 44 10.7 | -2.7 |
| GTA | | | | sP | pP | | 12 44 14.9 | -1.8 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,62nm,5.5s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,66nm,13.5s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,160nm,14.9s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,130nm,14.5s | | | | | | | |
| **SONM** | **Songino Array** | **75.25** | **325** | P | **P** | | **12 44 01.9** | **+1.1** |
| | comp=Z,2.0nm,0.5s,baz=142,slow=5.7,SNR=22 | | | | | | | |
| SONM | | | | LR | LR | | 13 18 57.8 | |
| | comp=Z,32nm,18.1s,baz=116,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **75.25** | **325** | P | **P** | | **12 44 01.9** | **+1.1** |
| SONM | | | | IAmb | IAmb | | 12 44 24.8 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **SHL** | **Shillong** | **75.92** | **300** | P | **P** | | **12 44 01.4** | **-3.8** |
| SHL | | | | IAmb | IAmb | | 12 44 06.5 | |
| | comp=Z,28nm,1.5s | | | | | | | |
| **YAK** | **Yakutsk** | **76.07** | **345** | LR | LR | | 13 15 19.9 | |
| | comp=Z,79nm,21.0s,baz=120,slow=34 | | | | | | | |
| **GAMB** | **Gambell** | **76.76** | **12** | P | **P** | | **12 44 08.1** | **-0.7** |
| GAMB | | | | IAmb | IAmb | | 12 45 55.5 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **BILL** | **Bilibino** | **78.22** | **2** | P | **P** | | **12 44 17.5** | **+0.6** |
| BILL | | | | IAmb | IAmb | | 12 44 29.2 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **TNA** | **Tin City** | **79.12** | **13** | P | **P** | | **12 44 23.1** | **+1.2** |
| **QSPA** | **South Pole Qui** | **79.72** | **180** | P | **P** | | **12 44 25.9** | **+0.5** |
| QSPA | | | | IAmb | IAmb | | 12 44 29.2 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **81.65** | **279** | P | **P** | | **12 44 36.4** | **-0.3** |
| | comp=Z,6.5nm,0.6s,baz=191,slow=5.9,SNR=7.3 | | | | | | | |
| **PALK** | **Pallekele** | **81.65** | **279** | P | **P** | | **12 44 36.2** | **-0.5** |
| PALK | | | | IAmb | IAmb | | 12 47 03.2 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **TRF** | **Thorofare Moun** | **82.39** | **20** | P | **P** | | **12 44 40.3** | **+0.6** |
| **RND** | **Reindeer** | **82.85** | **20** | P | **P** | | **12 44 43.3** | **+1.4** |
| RND | | | | IAmb | IAmb | | 12 45 05.2 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **MCK** | **McKinley** | **83.04** | **20** | IAmb | IAmb | | 12 44 55.5 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **IMAR** | **Indian Mountai** | **83.06** | **17** | P | **P** | | **12 44 44.1** | **+1.3** |
| **MAW** | **Mawson** | **83.59** | **202** | LR | LR | | 13 16 41.0 | |
| | comp=Z,85nm,21.4s,baz=221,slow=32 | | | | | | | |
| **IL31** | | **84.39** | **20** | P | **P** | | **12 44 50.7** | **+1.1** |
| IL31 | | | | IAmb | IAmb | | 12 45 15.1 | |
| | comp=Z,18nm,1.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.39** | **20** | P | **P** | | **12 44 49.0** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=257,slow=5.3,SNR=20 | | | | | | | |
| **TIXI** | **Tiksi** | **84.48** | **350** | LR | LR | | 13 25 11.5 | |
| | comp=Z,34nm,18.7s,baz=355,slow=38 | | | | | | | |
| **WMQ** | **Urumqi** | **85.16** | **316** | *eP* | **P** | | **12 44 56.2** | **+2.1** |
| **YBH** | **Yreka Blue Hor** | **86.86** | **47** | LR | LR | | 13 23 35.2 | |
| | comp=Z,30nm,18.1s,baz=329,slow=35 | | | | | | | |
| **DLBC** | **Dease Lake** | **88.08** | **29** | LR | LR | | 13 16 27.6 | |
| | comp=Z,85nm,21.0s,baz=276,slow=30 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.26** | **51** | P | **P** | | **12 45 14.9** | **+0.6** |
| | comp=Z,0.5nm,0.7s,baz=241,slow=5.0,SNR=1.8 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.63** | **56** | LR | LR | | 13 16 22.7 | |
| | comp=Z,110nm,21.5s,baz=332,slow=30 | | | | | | | |
| **MKAR** | **Makanchi Array** | **89.68** | **318** | P | **P** | | **12 45 16.2** | **+0.4** |
| | comp=Z,0.7nm,0.4s,baz=94,slow=5.8,SNR=4.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **90.14** | **325** | LR | LR | | 13 27 06.7 | |
| | comp=Z,26nm,19.1s,baz=221,slow=36 | | | | | | | |
| **INK** | **Inuvik** | **90.79** | **20** | LR | LR | | 13 22 52.7 | |
| | comp=Z,86nm,20.9s,baz=208,slow=33 | | | | | | | |
| **SYO** | **Syowa Base** | **91.06** | **198** | *eP* | **P** | | **12 45 23.0** | **+1.3** |
| **BELA** | **Belgrano 2** | **91.56** | **177** | P | **P** | | **12 45 24.7** | **+0.7** |
| **ELK** | **Elko** | **92.08** | **49** | LR | LR | | 13 19 39.0 | |
| | comp=Z,63nm,20.9s,baz=321,slow=31 | | | | | | | |
| **NEW** | **Newport** | **92.35** | **41** | LR | LR | | 13 21 02.8 | |
| | comp=Z,66nm,20.2s,baz=335,slow=32 | | | | | | | |
| **NRIK** | **Noril'sk** | **92.74** | **340** | LR | LR | | 13 27 51.7 | |
| | comp=Z,65nm,20.3s,baz=50,slow=36 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.54** | **28** | P | **P** | | **12 45 46.8** | **-0.1** |
| | comp=Z,0.4nm,0.6s,baz=259,slow=4.8,SNR=10 | | | | | | | |
| **PDAR** | **Pinedale Array** | **96.61** | **48** | P | **P** | | **12 45 47.6** | **-0.4** |
| | comp=Z,0.1nm,0.5s,baz=226,slow=4.8,SNR=1.9 | | | | | | | |
| **ANMO** | **Albuquerque** | **98.02** | **56** | LR | LR | | 13 21 18.0 | |
| | comp=Z,46nm,21.7s,baz=278,slow=30 | | | | | | | |
| **TXAR** | **Lajitas Array** | **99.72** | **62** | LR | LR | | 13 23 32.0 | |
| | comp=Z,63nm,20.4s,baz=282,slow=31 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **114.34** | **344** | PKP | PKPdf | | 12 50 56.1 | -0.5 |
| | comp=Z,4.3nm,0.9s,baz=67,slow=1.5,SNR=18 | | | | | | | |
| **FINES** | **FINESS Array B** | **119.24** | **337** | PKP | **PKPdf** | | **12 51 05.4** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=81,slow=3.8,SNR=3.9 | | | | | | | |
| **BOSA** | **Boshof** | **122.23** | **227** | PKP | **PKPdf** | | **12 51 12.7** | **-0.6** |
| | comp=Z,1.3nm,0.5s,baz=252,slow=1.3,SNR=5.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **123.53** | **325** | PKP | **PKPdf** | | **12 51 14.3** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=45,slow=2.3,SNR=7.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **124.62** | **343** | PKP | **PKPdf** | | **12 51 16.3** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=0.6,slow=1.7,SNR=1.9 | | | | | | | |
| **CPUP** | **Villa Florida** | **128.04** | **135** | PKP | **PKPdf** | | **12 51 24.1** | **-0.1** |
| | comp=Z,0.9nm,0.4s,baz=286,slow=7.2,SNR=3.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **159.37** | **280** | PKPab | **PKPab** | | **12 52 54.8** | **0.0** |
| | comp=Z,2.2nm,0.6s,baz=86,slow=4.4,SNR=18 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **159.37** | **280** | PKPdf | **PKPdf** | | **12 52 16.9** | **0.0** |
| TORD | | | | | **PKPab** | | **12 52 54.4** | **-0.4** |

*IDC **10** 12:39:28.1±1.6,37.67N×20.50E,h0km,mb3.8/6, mb1 3.8/6,mb1mx3.5/42,mbtmp3.8/6, Error ellipse: s-maj=47.9km s-min=28.0km az=119.0*
*ATH **10** 12:39:30.0,37.42N×20.85E,h15km±2km,ML3.3/14, Error ellipse: s-maj=2.9km s-min=1.1km az=19.0*
*THE **10** 12:39:30.1,37.37N×20.81E,h16km±1km,ML3.3/5, Error ellipse: s-maj=1.2km s-min=0.7km az=266.0*

**ISC 10 12:39:29.9±1.2, 37.42N±0.04×20.78E±0.04, h20km±9km, n52,σ1s27/61, mb3.7/6, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LTHK** | **Lithakia** | **0.29** | **9** | P | **Pb** | **12 39 36.7** | **+0.2** |
| **LTHK** | **Lithakia** | **0.29** | **9** | P | **Pb** | **12 39 36.6** | **+0.2** |
| **ZAK2** | **Zakynthos** | **0.38** | **14** | P | **Pb** | **12 39 38.3** | **+0.4** |
| ZAK2 | | | | S | **Sn** | **12 39 45.5** | **-1.5** |
| | 411μm,0.3s | | | | | | |
| **VTN** | **Vitineika** | **0.59** | **33** | P | **Pb** | **12 39 41.3** | **-0.3** |
| **PSDA** | **Pessada-Kefalo** | **0.71** | **347** | P | **Pb** | **12 39 44.2** | **+0.6** |
| PSDA | | | | S | **Sn** | **12 39 56.0** | **+0.9** |
| | 882nm,0.3s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.71** | **347** | P | **Pb** | **12 39 43.9** | **+0.3** |
| **VLS** | **Valsamata** | **0.77** | **349** | P | **Pb** | **12 39 45.0** | **+0.3** |
| **VLS** | **Valsamata** | **0.77** | **349** | P | **Pb** | **12 39 44.8** | **+0.1** |
| VLS | | | | S | **Sn** | **12 39 56.2** | **-0.5** |
| VLS | | | | AML | AML | 12 39 58.5 | |
| | comp=N,7770μm,0.5s | | | | | | |
| VLS | | | | AML | AML | 12 40 01.0 | |
| | comp=E,5780μm,0.5s | | | | | | |
| **LXRA** | **Lixouri, Kepha** | **0.83** | **341** | P | **Pn** | **12 39 46.7** | **+0.3** |
| **RLS** | **Riolos of Patr** | **0.84** | **40** | P | **Pb** | **12 39 45.6** | **-0.2** |
| RLS | | | | S | **Sn** | **12 39 58.2** | **-0.1** |
| | comp=E,1μm,0.4s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.84** | **40** | P | **Pb** | **12 39 45.4** | **-0.3** |
| RLS | | | | S | **Sb** | **12 39 56.6** | **0.0** |
| RLS | | | | AML | AML | 12 40 02.2 | |
| | comp=N,4311μm,0.4s | | | | | | |
| RLS | | | | AML | AML | 12 40 05.3 | |
| | comp=E,3919μm,0.7s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.85** | **337** | P | **Pn** | **12 39 47.0** | **+0.2** |
| **KEF3** | **Kipouria, Keph** | **0.85** | **337** | P | **Pb** | **12 39 46.5** | **+0.5** |
| **DMLN** | **Damoulianata-K** | **0.88** | **339** | P | **Pn** | **12 39 47.3** | **+0.1** |
| **DMLN** | **Damoulianata-K** | **0.88** | **339** | P | **Pn** | **12 39 47.4** | **+0.3** |
| **KEF4** | **Livadi, Kephal** | **0.88** | **342** | P | **Pn** | **12 39 47.4** | **+0.2** |
| **KEF4** | **Livadi, Kephal** | **0.88** | **342** | P | **Pn** | **12 39 47.3** | **+0.1** |
| **DRO** | **Drossia** | **0.91** | **54** | P | **Pb** | **12 39 46.8** | **-0.2** |
| DRO | | | | S | **Sn** | **12 40 00.3** | **+0.2** |
| | comp=E,5μm,0.2s | | | | | | |
| **DRO** | **Drossia** | **0.91** | **54** | P | **Pb** | **12 39 46.6** | **-0.4** |
| DRO | | | | AML | AML | 12 40 01.9 | |
| | comp=E,12579μm,0.3s | | | | | | |
| DRO | | | | AML | AML | 12 40 02.0 | |
| | comp=N,8695μm,0.2s | | | | | | |
| **PYL** | **PYLOS** | **0.93** | **124** | P | **Pb** | **12 39 46.8** | **-0.5** |
| **PYL** | **PYLOS** | **0.93** | **124** | P | **Pb** | **12 39 46.7** | **-0.6** |
| **ITM** | **Ithomi** | **0.94** | **104** | P | **Pb** | **12 39 47.0** | **-0.6** |
| **ITM** | **Ithomi** | **0.94** | **104** | P | **Pb** | **12 39 47.3** | **-0.3** |
| ITM | | | | AML | AML | 12 40 07.7 | |
| | comp=E,2854μm,0.4s | | | | | | |
| ITM | | | | AML | AML | 12 40 08.5 | |
| | comp=N,3146μm,0.3s | | | | | | |
| **FSK** | **Fiskardo** | **1.05** | **351** | P | **Pn** | **12 39 50.3** | **+0.8** |
| **FSK** | **Fiskardo** | **1.05** | **351** | P | **Pn** | **12 39 50.2** | **+0.8** |
| FSK | | | | AML | AML | 12 40 11.4 | |
| | comp=N,4026μm,0.7s | | | | | | |
| FSK | | | | AML | AML | 12 40 17.9 | |
| | comp=E,3654μm,1.0s | | | | | | |
| **EVGI** | **Lefkada island** | **1.20** | **355** | P | **Pb** | **12 39 52.1** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.25** | **60** | P | **Pn** | **12 39 52.2** | **-0.1** |
| KLV | | | | S | **Sn** | **12 40 09.4** | **+0.8** |
| | comp=E,690nm,0.5s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **1.25** | **60** | P | **Pn** | **12 39 52.3** | **-0.1** |
| KLV | | | | AML | AML | 12 40 15.6 | |
| | comp=N,1807μm,0.6s | | | | | | |
| KLV | | | | AML | AML | 12 40 19.3 | |
| | comp=E,1216μm,0.4s | | | | | | |
| **LAKA** | **Lakka** | **1.25** | **49** | P | **Pb** | **12 39 52.7** | **-0.2** |
| LAKA | | | | AML | AML | 12 40 19.3 | |
| | comp=E,7386μm,0.8s | | | | | | |
| LAKA | | | | AML | AML | 12 40 20.7 | |
| | comp=N,6414μm,0.8s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **1.27** | **353** | P | **Pb** | **12 39 53.3** | **+0.1** |
| **NYDR** | **Nydri-Lefkada** | **1.29** | **357** | P | **Pb** | **12 39 53.9** | **+0.4** |
| **EFP** | **Efpalio** | **1.34** | **41** | P | **Pb** | **12 39 53.8** | **-0.6** |
| EFP | | | | AML | AML | 12 40 19.9 | |
| | comp=N,2387μm,0.6s | | | | | | |
| EFP | | | | AML | AML | 12 40 20.6 | |
| | comp=E,1380μm,0.3s | | | | | | |
| **TRIZ** | **Trizonia** | **1.39** | **47** | P | **Pb** | **12 39 55.6** | **+0.4** |
| **THAL** | **Thalero** | **1.61** | **67** | P | **Pb** | **12 39 59.9** | **+0.9** |
| THAL | | | | AML | AML | 12 40 29.6 | |
| | comp=N,3846μm,0.6s | | | | | | |
| THAL | | | | AML | AML | 12 40 37.2 | |
| | comp=E,3714μm,0.6s | | | | | | |
| **LTK** | **Loutraki** | **1.84** | **70** | P | **Pb** | **12 40 02.5** | **-0.3** |
| **KRND** | **KRANIDI** | **1.89** | **90** | P | **Pb** | **12 40 03.5** | **-0.1** |
| KRND | | | | AML | AML | 12 40 36.1 | |
| | comp=N,860μm,0.7s | | | | | | |
| KRND | | | | AML | AML | 12 40 41.3 | |
| | comp=E,609μm,0.8s | | | | | | |
| **VIL2** | **Platees** | **2.12** | **67** | P | **Pb** | **12 40 06.2** | **-1.5** |
| VIL2 | | | | AML | AML | 12 40 43.8 | |
| | comp=E,1113μm,0.7s | | | | | | |
| VIL2 | | | | AML | AML | 12 40 54.0 | |
| | comp=N,639μm,0.9s | | | | | | |
| **LKR** | **Lokris** | **2.14** | **54** | P | **Pb** | **12 40 06.9** | **-1.1** |
| LKR | | | | AML | AML | 12 40 40.3 | |
| | comp=E,614μm,0.3s | | | | | | |
| LKR | | | | AML | AML | 12 40 40.9 | |
| | comp=N,590μm,0.3s | | | | | | |
| **KTHA** | **Kythira Island** | **2.17** | **122** | P | **Pb** | **12 40 07.4** | **-1.0** |
| **ATAL** | **Atalanti** | **2.18** | **54** | P | **Pb** | **12 40 07.8** | **-0.8** |
| ATAL | | | | AML | AML | 12 40 50.6 | |
| | comp=E,398μm,0.4s | | | | | | |
| ATAL | | | | AML | AML | 12 40 54.8 | |
| | comp=N,548μm,1.0s | | | | | | |
| **THL** | **Klokotos Trika** | **2.35** | **24** | P | **Pb** | **12 40 10.8** | **-0.8** |
| THL | | | | AML | AML | 12 40 58.7 | |
| | comp=E,477μm,0.8s | | | | | | |
| THL | | | | AML | AML | 12 41 06.3 | |
| | comp=N,299μm,0.8s | | | | | | |
| **STON** | **Ston** | **5.94** | **338** | *e*Pn | **Pn** | **12 40 56.5** | **-0.1** |
| **HVAR** | **Hvar** | **6.64** | **331** | *e*Pn | **Pn** | **12 41 06.6** | **+0.4** |
| **RICI** | **Ricice** | **6.67** | **337** | Sn | **Sn** | **12 42 17.9** | **-4.3** |
| **KIJV** | **Kijevo** | **7.37** | **335** | *e*Pn | **Pn** | **12 41 17.0** | **+0.7** |
| KIJV | | | | Sn | **Sn** | **12 42 35.1** | **-4.2** |
| **MORI** | **Morici** | **7.50** | **331** | *e*Pn | **Pn** | **12 41 19.9** | **+1.8** |
| MORI | | | | Sn | **Sn** | **12 42 37.6** | **-5.0** |
| **FINES** | **FINESS Array B** | **24.28** | **6** | P | **P** | **12 44 44.4** | **-1.1** |
| | comp=N,2.6nm,0.9s,baz=171,slow=9.8,SNR=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **24.40** | **349** | P | **P** | **12 44 45.6** | **-1.1** |
| | comp=N,0.8nm,0.8s,baz=163,slow=8.8,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.58** | **220** | P | **P** | **12 45 35.2** | **+1.7** |
| | comp=N,0.5nm,0.6s,baz=26,slow=8.7,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.28** | **3** | P | **P** | **12 45 56.3** | **-0.5** |
| | comp=N,1.9nm,0.8s,baz=189,slow=10.0,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.53** | **58** | P | **P** | **12 47 50.4** | **+2.4** |
| | comp=N,0.4nm,0.5s,baz=284,slow=6.9,SNR=0.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.05** | **48** | P | **P** | **12 47 52.4** | **+0.5** |
| | comp=N,0.5nm,0.3s,baz=269,slow=9.4,SNR=1.8 | | | | | | |

**NOU 10 12:41:25.6,18.77S×169.13E,h137km, MLv4.2/15, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTV** | **Rentapao** | **1.18** | **325** | P | Pn | 12 41 51.4 | +0.5 |
| **DVP** | **Devils Point** | **1.37** | **319** | P | Pn | 12 41 53.2 | +0.4 |
| **MARNC** | **Mare, Loyalty** | **2.89** | **201** | P | Pn | 12 42 09.9 | -1.1 |
| **SANVU** | **Saraoutou** | **3.78** | **331** | P | Pn | 12 42 22.5 | -0.2 |
| **YATNC** | **Mamie plateau,** | **3.89** | **212** | P | Pn | 12 42 24.0 | -0.1 |
| **YATNC** | **Mamie plateau,** | **3.89** | **212** | P | Pn | 12 42 22.1 | -2.0 |
| **PINNC** | **Pines Island,** | **4.14** | **202** | P | Pn | 12 42 28.0 | +0.7 |
| **PINNC** | **Pines Island,** | **4.14** | **202** | P | Pn | 12 42 27.1 | -0.2 |
| **DZM** | **Mont Dzumac** | **4.14** | **217** | P | Pn | 12 42 27.3 | -0.1 |
| **OUENC** | **Ouen Island, N** | **4.21** | **210** | P | Pn | 12 42 28.9 | +0.5 |
| **NOUC** | **Port Laguerre** | **4.24** | **218** | P | Pn | 12 42 28.8 | +0.1 |
| **NOUC** | **Port Laguerre** | **4.24** | **218** | P | Pn | 12 42 28.9 | +0.2 |
| **ONTNC** | **Ouen Toro** | **4.32** | **215** | P | Pn | 12 42 30.2 | +0.4 |
| **ONTNC** | **Ouen Toro** | **4.32** | **215** | P | Pn | 12 42 29.8 | 0.0 |
| **KOUNC** | **Koumac, New Ca** | **4.90** | **248** | P | Pn | 12 42 37.3 | -0.1 |

*KNET **10** 12:43:00.4±0.4, 42.59N×75.13E, h15km±2km, ml3.0, Error ellipse: s-maj=3.4km s-min=2.3km az=148.0*
*KRNET **10** 12:43:01.0±0.1, 42.58N×75.14E, h19km, mb3.9*
*NNC **10** 12:43:01.5±0.2, 42.66N×75.11E, h0km, mb4.0, mpv3.9, Error ellipse: s-maj=3.3km s-min=0.6km az=162.0*
*SOME **10** 12:43:01.7, 42.63N×75.10E, h15km*

**ISC 10 12:43:01.4±0.8, 42.61N±0.02×75.11E±0.01, h15km±5km, n91,σ1s40/164, 43C-21D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBK** | **Karagaybulak** | **0.13** | **293** | P | **Pg** | **12 43 04.8** | **-0.4** |
| | 353nm,0.1s,SNR=655 | | | | | | |
| KBK | | | | ⇓S | **Sg** | **12 43 07.6** | **-0.1** |
| | 6μm,0.1s | | | | | | |
| **KBK** | **Karagaybulak** | **0.13** | **293** | ⇓*i*P | **Pg** | **12 43 04.8** | **-0.4** |
| | baz=98 | | | | | | |
| KBK | | | | ⇓*i*S | **Sg** | **12 43 07.7** | **0.0** |
| | baz=98 | | | | | | |
| **FRU1** | **Bishkek** | **0.41** | **300** | ⇑*i*P | **Pb** | **12 43 10.1** | **-0.3** |
| | baz=3.0 | | | | | | |
| FRU1 | | | | ⇑*i*S | **Sb** | **12 43 16.6** | **+0.2** |
| | baz=3.0 | | | | | | |
| **AAK** | **Ala-Archa** | **0.45** | **274** | P | **Pb** | **12 43 10.5** | **-0.8** |
| | 88nm,0.1s,SNR=380 | | | | | | |
| AAK | | | | ⇑S | **Sb** | **12 43 17.1** | **-0.8** |
| | 899nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **0.45** | **274** | ⇑P | **Pb** | **12 43 10.4** | **-0.8** |
| | 33nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sb** | **12 43 17.0** | **-0.8** |
| | 509nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **0.45** | **274** | ⇑*i*P | **Pb** | **12 43 10.5** | **-0.8** |
| | baz=77 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **12 43 17.3** | **-0.6** |
| | baz=77 | | | | | | |
| **CHMS** | **Chumysh** | **0.47** | **326** | ⇑P | **Pb** | **12 43 10.8** | **-0.7** |
| | 627nm,0.2s,SNR=151 | | | | | | |
| CHMS | | | | ⇑S | **Sb** | **12 43 17.8** | **-0.5** |
| | 615nm,0.1s | | | | | | |
| **CHMS** | **Chumysh** | **0.47** | **326** | ⇓*i*P | **Pb** | **12 43 10.9** | **-0.6** |
| | baz=25 | | | | | | |
| CHMS | | | | ⇓*i*S | **Sb** | **12 43 17.9** | **-0.4** |
| | baz=25 | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **49** | ⇓P | **Pg** | **12 43 10.2** | **-0.7** |
| | 78nm,0.1s,SNR=485 | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **12 43 16.7** | **-0.8** |
| | 720nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **49** | ⇑P | **Pg** | **12 43 10.1** | **-0.8** |
| | 84nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **12 43 16.5** | **-0.9** |
| | 500nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **49** | ⇓*i*P | **Pg** | **12 43 10.3** | **-0.7** |
| | baz=44 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sg** | **12 43 17.1** | **-0.3** |
| | baz=44 | | | | | | |
| **UCH** | **Uchtor** | **0.58** | **230** | ⇑P | **Pg** | **12 43 12.4** | **-0.5** |
| | 81nm,0.2s,SNR=318 | | | | | | |
| UCH | | | | ⇑S | **Sg** | **12 43 20.2** | **-0.5** |
| | 480nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **0.58** | **230** | ⇑*i*P | **Pg** | **12 43 12.4** | **-0.5** |
| | baz=33 | | | | | | |
| UCH | | | | ⇑*i*S | **Sg** | **12 43 20.4** | **-0.3** |
| | baz=33 | | | | | | |
| **KST** | **Kastek** | **0.77** | **55** | *e*P | **Pb** | **12 43 15.8** | **-0.7** |
| | 43nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sb** | **12 43 25.9** | **-0.9** |
| | 154nm,0.4s | | | | | | |
| **KST** | **Kastek** | **0.77** | **55** | P | **Pb** | **12 43 15.8** | **-0.7** |
| | 43nm,0.2s | | | | | | |
| KST | | | | S | **Sb** | **12 43 25.9** | **-0.9** |
| | 154nm,0.4s | | | | | | |
| **KST** | **Kastek** | **0.77** | **55** | *e*P | **Pb** | **12 43 15.8** | **-0.7** |
| | baz=52 | | | | | | |
| KST | | | | *e*S | **Sb** | **12 43 25.9** | **-0.9** |
| | baz=52 | | | | | | |
| **USP** | **Ospenovka** | **0.80** | **326** | ⇓P | **Pb** | **12 43 16.6** | **-0.4** |
| | 233nm,0.1s,SNR=113 | | | | | | |
| USP | | | | ⇑S | **Sb** | **12 43 27.9** | **+0.2** |
| | 220nm,0.1s | | | | | | |
| **USP** | **Ospenovka** | **0.80** | **326** | ⇓*i*P | **Pb** | **12 43 16.6** | **-0.4** |
| | baz=26 | | | | | | |
| USP | | | | ⇓*i*S | **Sb** | **12 43 27.9** | **+0.2** |
| | baz=26 | | | | | | |
| **DGS** | **Degeres** | **0.80** | **37** | *e*P | **Pb** | **12 43 16.4** | **-0.7** |
| | 35nm,0.1s | | | | | | |
| DGS | | | | *e*S | **Sb** | **12 43 27.1** | **-0.7** |
| | 111nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.80** | **37** | P | **Pb** | **12 43 16.4** | **-0.7** |
| | 35nm,0.1s | | | | | | |
| DGS | | | | S | **Sb** | **12 43 27.1** | **-0.7** |
| | 111nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.80** | **37** | *e*P | **Pb** | **12 43 16.4** | **-0.7** |
| | baz=35 | | | | | | |
| DGS | | | | *e*S | **Sb** | **12 43 27.1** | **-0.7** |
| | baz=35 | | | | | | |
| **ULHL** | **Ulahol** | **0.91** | **113** | ⇑P | **Pg** | **12 43 17.5** | **-1.6** |
| | 31nm,0.2s,SNR=40 | | | | | | |
| **ULHL** | **Ulahol** | **0.91** | **113** | ⇑*i*P | **Pg** | **12 43 17.3** | **-1.8** |
| | baz=12 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sg** | **12 43 29.1** | **-2.0** |
| | baz=12 | | | | | | |
| **ARLS** | **Aral** | **0.95** | **218** | ⇑*i*P | **Pg** | **12 43 18.8** | **-0.9** |
| | baz=20 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sg** | **12 43 31.5** | **-0.6** |
| | baz=20 | | | | | | |
| **EKS2** | **Erkin-Say** | **0.98** | **274** | ⇑P | **Pn** | **12 43 20.5** | **-0.3** |
| | 33nm,0.2s,SNR=174 | | | | | | |
| EKS2 | | | | ⇓S | **Sn** | **12 43 34.7** | **+0.1** |
| | 121nm,0.1s | | | | | | |
| **EKS2** | **Erkin-Say** | **0.98** | **274** | ⇓*i*P | **Pb** | **12 43 20.0** | **-0.2** |
| | baz=75 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sb** | **12 43 33.8** | **+0.7** |
| | baz=75 | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | *e*P | **Pb** | **12 43 21.8** | **-0.5** |
| | 22nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **12 43 36.3** | **-0.2** |
| | 205nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | P | **Pb** | **12 43 21.8** | **-0.5** |
| | 22nm,0.2s | | | | | | |
| MTBS | | | | S | **Sb** | **12 43 36.3** | **-0.2** |
| | 205nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **1.10** | **61** | *e*P | **Pb** | **12 43 21.8** | **-0.5** |
| | baz=59 | | | | | | |
| MTBS | | | | *e*S | **Sb** | **12 43 36.3** | **-0.2** |
| | baz=59 | | | | | | |
| **AML** | **Almayashu** | **1.15** | **246** | ⇑P | **Pb** | **12 43 23.1** | **-0.1** |
| | 43nm,0.2s,SNR=143 | | | | | | |
| AML | | | | ⇑S | **Sb** | **12 43 38.7** | **+0.6** |
| | 249nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **1.17** | **21** | *e*P | **Pb** | **12 43 23.0** | **-0.3** |
| | 57nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **12 43 38.2** | **-0.1** |
| | 119nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **1.17** | **21** | P | **Pb** | **12 43 23.0** | **-0.3** |
| | 57nm,0.2s | | | | | | |
| KRBS | | | | S | **Sb** | **12 43 38.2** | **-0.1** |
| | 119nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.40** | **276** | *e*P | **Pg** | **12 43 28.6** | **+0.3** |
| | 76nm,0.2s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **12 43 47.5** | **+1.1** |
| | 462nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **1.40** | **276** | P | **Pg** | **12 43 28.6** | **+0.3** |
| | 76nm,0.2s | | | | | | |
| MRKS | | | | S | **Sg** | **12 43 47.5** | **+1.1** |
| | 462nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **72** | *e*P | **Pg** | **12 43 27.6** | **-1.1** |
| | 16nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **12 43 46.1** | **-1.2** |
| | 38nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **72** | P | **Pg** | **12 43 27.6** | **-1.1** |
| | 16nm,0.3s | | | | | | |
| TNSS | | | | S | **Sg** | **12 43 46.1** | **-1.2** |
| | 38nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **72** | *e*P | **Pg** | **12 43 27.6** | **-1.1** |
| | baz=70 | | | | | | |
| TNSS | | | | *e*S | **Sg** | **12 43 46.0** | **-1.2** |
| | baz=70 | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **65** | *e*P | **Pg** | **12 43 28.6** | **-0.8** |
| | 44nm,0.1s | | | | | | |
| AAA | | | | *e*S | **Sg** | **12 43 48.0** | **-0.5** |
| | 195nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **1.46** | **65** | P | **Pg** | **12 43 28.7** | **-0.8** |
| | 44nm,0.1s | | | | | | |
| AAA | | | | S | **Sg** | **12 43 47.9** | **-0.5** |
| | 195nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **1.50** | **65** | ⇑P | **Pg** | **12 43 29.4** | **-0.8** |
| | 116nm,0.6s | | | | | | |
| KNDC |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CHKK | | | | | *e*S | | **Sg** | **12 43 59.2** | **-1.9** |
| | baz=46 | | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.90** | **84** | ⇑ | *i*P | | **Pb** | **12 43 34.9** | **-0.9** |
| | baz=83 | | | | | | | | |
| ANVS | | | | ⇑ | *i*S | | **Sb** | **12 43 59.6** | **+0.2** |
| | baz=83 | | | | | | | | |
| **MNAS** | **Manas** | **1.93** | **267** | ⇑ | *i*P | | **Pb** | **12 43 36.0** | **-0.3** |
| | baz=68 | | | | | | | | |
| MNAS | | | | ⇑ | *i*S | | **Sb** | **12 44 01.6** | **+1.3** |
| | baz=68 | | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **68** | | *e*P | | **Pb** | **12 43 44.8** | **+0.2** |
| | 10nm,0.6s | | | | | | | | |
| KURS | | | | | *e*S | | **Sg** | **12 44 15.9** | **-3.0** |
| | 58nm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **2.41** | **68** | | Pg | | **Pb** | **12 43 44.8** | **+0.2** |
| | 10nm,0.6s | | | | | | | | |
| KURS | | | | | Lg | | Lg | 12 44 15.9 | |
| | 58nm,0.5s | | | | | | | | |
| **SATY** | **Saty** | **2.47** | **78** | | *e*P | | **Pg** | **12 43 46.6** | **-2.0** |
| | 41nm,0.2s | | | | | | | | |
| SATY | | | | | *e*S | | **Sg** | **12 44 19.5** | **-1.2** |
| | 130nm,0.5s | | | | | | | | |
| **SATY** | **Saty** | **2.47** | **78** | | Pg | | **Pg** | **12 43 46.7** | **-2.0** |
| | 41nm,0.2s | | | | | | | | |
| SATY | | | | | Lg | | Lg | 12 44 19.5 | |
| | 130nm,0.5s | | | | | | | | |
| **ARK** | **Arkit** | **2.47** | **252** | ⇓ | *i*P | | **Pb** | **12 43 43.4** | **-2.2** |
| | baz=53 | | | | | | | | |
| ARK | | | | ⇓ | *i*S | | **Sb** | **12 44 14.5** | **-1.4** |
| | baz=53 | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.51** | **76** | | *e*P | | **Pb** | **12 43 47.0** | **+0.7** |
| | 38nm,0.1s | | | | | | | | |
| ZHN | | | | | *e*S | | **Sg** | **12 44 19.8** | **-2.2** |
| | 51nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.51** | **76** | | Pg | | **Pb** | **12 43 47.0** | **+0.7** |
| | 38nm,0.1s | | | | | | | | |
| ZHN | | | | | Lg | | Lg | 12 44 19.8 | |
| | 51nm,0.3s | | | | | | | | |
| **ARXS** | **Arharly** | **2.55** | **50** | | *e*P | | **Pb** | **12 43 47.6** | **+0.7** |
| | 45nm,0.6s | | | | | | | | |
| ARXS | | | | | *e*S | | **Sg** | **12 44 20.4** | **-3.0** |
| | 212nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.55** | **50** | | Pg | | **Pb** | **12 43 47.6** | **+0.7** |
| | 45nm,0.6s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 12 44 20.4 | |
| | 212nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **2.55** | **343** | | *e*P | | **Pb** | **12 43 47.4** | **+0.5** |
| | 62nm,0.3s | | | | | | | | |
| BTLS | | | | | *e*S | | **Sb** | **12 44 20.2** | **+2.2** |
| | 92nm,0.5s | | | | | | | | |
| **BTLS** | **Baital** | **2.55** | **343** | | Pg | | **Pb** | **12 43 47.4** | **+0.5** |
| | 62nm,0.3s | | | | | | | | |
| BTLS | | | | | Lg | | Lg | 12 44 20.2 | |
| | 92nm,0.5s | | | | | | | | |
| **DZA** | **Taraz** | **2.80** | **277** | | *e*P | | **Pg** | **12 43 52.7** | **-2.2** |
| | 75nm,0.1s | | | | | | | | |
| DZA | | | | | *e*S | | **Sg** | **12 44 29.1** | **-2.1** |
| | 524nm,0.4s | | | | | | | | |
| **DZA** | **Taraz** | **2.80** | **277** | | Pg | | **Pg** | **12 43 52.7** | **-2.2** |
| | 75nm,0.1s | | | | | | | | |
| DZA | | | | | Lg | | Lg | 12 44 29.1 | |
| | 524nm,0.4s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **58** | | *e*P | | **Pb** | **12 43 53.0** | **+0.5** |
| | 67nm,0.3s | | | | | | | | |
| BLB | | | | | *e*S | | **Sb** | **12 44 29.7** | **+2.2** |
| | 168nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.88** | **58** | | Pg | | **Pb** | **12 43 53.0** | **+0.5** |
| | 67nm,0.3s | | | | | | | | |
| BLB | | | | | Lg | | Lg | 12 44 29.7 | |
| | 168nm,0.3s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.93** | **78** | | *e*P | | **Pb** | **12 43 54.1** | **+0.7** |
| | 26nm,0.3s | | | | | | | | |
| UZB | | | | | *e*S | | **Sg** | **12 44 32.1** | **-3.3** |
| | 58nm,0.3s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.93** | **78** | | Pg | | **Pb** | **12 43 54.1** | **+0.7** |
| | 26nm,0.3s | | | | | | | | |
| UZB | | | | | Lg | | Lg | 12 44 32.1 | |
| | 58nm,0.3s | | | | | | | | |
| **KSH** | **Kashi** | **3.15** | **168** | | Pn | | **Pg** | **12 44 00.3** | **-1.5** |
| KSH | | | | | Sn | | **Sg** | **12 44 45.7** | **+3.0** |
| KSH | | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| KSH | | | | | smax | | smax | | |
| | comp=N,63nm,0.6s | | | | | | | | |
| KSH | | | | | smax | | smax | | |
| | comp=E,100nm,0.5s | | | | | | | | |
| **SHLS** | **Shalkode** | **3.25** | **79** | | *e*P | | **Pg** | **12 44 06.1** | **+2.5** |
| | comp=E,13nm,0.5s | | | | | | | | |
| SHLS | | | | | *e*S | | **Sg** | **12 44 51.7** | **+6.0** |
| | comp=E,30nm,0.5s | | | | | | | | |
| **SHLS** | **Shalkode** | **3.25** | **79** | | Pg | | **Pg** | **12 44 06.1** | **+2.5** |
| | comp=E,13nm,0.5s | | | | | | | | |
| SHLS | | | | | Lg | | Lg | 12 44 51.7 | |
| | comp=E,30nm,0.5s | | | | | | | | |
| **KK02** | **Karatay Array** | **3.42** | **280** | ⇑ | Pg | | **Pg** | **12 44 04.5** | **-2.3** |
| | comp=E,6.5nm,0.3s | | | | | | | | |
| KK02 | | | | ⇑ | Lg | | Lg | 12 44 48.0 | |
| | comp=E,40nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **62** | | *e*P | | **Pb** | **12 44 09.4** | **+0.8** |
| | comp=E,9.3nm,0.3s | | | | | | | | |
| DJR | | | | | *e*S | | **Sb** | **12 44 57.6** | **+3.0** |
| | comp=E,21nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **3.82** | **62** | | Pg | | **Pb** | **12 44 09.4** | **+0.8** |
| | comp=E,9.3nm,0.3s | | | | | | | | |
| DJR | | | | | Lg | | Lg | 12 44 57.6 | |
| | comp=E,21nm,0.4s | | | | | | | | |
| **BRLS** | **Borolday** | **3.90** | **278** | | *e*P | | **Pg** | **12 44 13.6** | **-2.4** |
| | comp=E,3.7nm,0.6s | | | | | | | | |
| BRLS | | | | | *e*S | | **Sg** | **12 45 05.0** | **-1.6** |
| | comp=E,49nm,0.5s | | | | | | | | |
| **BRLS** | **Borolday** | **3.90** | **278** | | Pg | | **Pg** | **12 44 13.6** | **-2.4** |
| | comp=E,3.7nm,0.6s | | | | | | | | |
| BRLS | | | | | Lg | | Lg | 12 45 05.0 | |
| | comp=E,49nm,0.5s | | | | | | | | |
| **KTMS** | **Ketmen** | **3.94** | **76** | | *e*P | | **Pb** | **12 44 12.7** | **+2.1** |
| | comp=E,5.5nm,0.5s | | | | | | | | |
| KTMS | | | | | *e*S | | **Sg** | **12 45 03.2** | **-4.5** |
| | comp=E,15nm,0.5s | | | | | | | | |
| **KTMS** | **Ketmen** | **3.94** | **76** | | Pg | | **Pb** | **12 44 12.7** | **+2.1** |
| | comp=E,5.5nm,0.5s | | | | | | | | |
| KTMS | | | | | Lg | | Lg | 12 45 03.2 | |
| | comp=E,15nm,0.5s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.07** | **47** | | *e*P | | **Pg** | **12 44 16.9** | **-2.4** |
| | comp=E,8.5nm,0.4s | | | | | | | | |
| KAPS | | | | | *e*S | | **Sg** | **12 45 10.3** | **-1.8** |
| | comp=E,30nm,0.6s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.07** | **47** | | Pg | | **Pg** | **12 44 16.9** | **-2.4** |
| | comp=E,8.5nm,0.4s | | | | | | | | |
| KAPS | | | | | Lg | | Lg | 12 45 10.3 | |
| | comp=E,30nm,0.6s | | | | | | | | |
| **OTUK** | **Ortayu** | **5.97** | **342** | ⇑ | Pn | | **Pn** | **12 44 28.9** | **-0.3** |
| | comp=E,6.0nm,1.1s | | | | | | | | |
| OTUK | | | | ⇑ | Pg | | **Pb** | **12 44 49.0** | **+3.9** |
| | comp=E,2.3nm,0.4s | | | | | | | | |
| OTUK | | | | ⇑ | Lg | | Lg | 12 46 08.2 | |
| | comp=E,32nm,0.7s | | | | | | | | |
| **MAKZ** | **Makanchi** | **6.45** | **47** | ⇑ | Pn | | **Pn** | **12 44 37.0** | **+1.2** |
| | comp=E,4.0nm,1.0s | | | | | | | | |
| MAKZ | | | | ⇑ | Lg | | Lg | 12 46 24.5 | |
| | comp=E,7.3nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **6.61** | **48** | | Pn | | **Pn** | **12 44 39.5** | **+1.5** |
| | comp=E,5.7nm,0.6s,baz=228,slow=15,SNR=43 | | | | | | | | |
| MK31 | | | | ⇑ | Sn | | **Sn** | **12 45 54.9** | **+1.8** |
| | comp=E,1.4nm,0.5s,baz=230,slow=24,SNR=6.6 | | | | | | | | |
| MK31 | | | | ⇑ | Lg | | Lg | 12 46 29.1 | |
| | comp=E,3.0nm,0.6s,baz=260,slow=24,SNR=3.9 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.36** | **15** | ⇓ | Pn | | **Pn** | **12 45 03.2** | **+1.3** |
| | comp=E,2.0nm,0.3s | | | | | | | | |
| KURBB | | | | ⇓ | Lg | | Lg | 12 47 24.2 | |
| | comp=E,54nm,1.4s | | | | | | | | |
| **AB31** | **Akbulak array** | **12.46** | **307** | ⇓ | Pn | | **Pn** | **12 45 59.2** | **+1.1** |
| | comp=E,0.4nm,0.5s,baz=263,slow=8.3,SNR=18 | | | | | | | | |
| AB31 | | | | ⇑ | Sn | | **Sn** | **12 48 17.2** | **+0.6** |
| | comp=E,0.8nm,0.6s,baz=110,slow=22,SNR=5.0 | | | | | | | | |

*IDC **10** 13:01:33.8±2.4,22°.45S×179°.33W,h495km±25km, mb2.8/6, mb1 3.3/8, mb1mx3.1/40, mbtmp3.8/8, Error ellipse: s-maj=40.0km s-min=21.9km az=144.0*

**ISC 10 13:01:33.5±0.7,22°.50S±0°.08×179°.2W±0°.1, h500km, n31, σ1♀77/32, mb3.4/6, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.42** | **331** | P | | P | **P** | **13 03 03.3** | **-1.2** |
| | 32nm,0.3s,baz=115,slow=14,SNR=111 | | | | | | | | |
| **GLKZ** | **Green Lake** | **6.83** | **171** | P | | P | P | 13 03 13.1 | -4.7 |
| GLKZ | | | | S | | | **S** | **13 04 43.6** | **+0.3** |
| **AFI** | **Afiamalu** | **11.05** | **41** | P | | | **P** | **13 03 59.6** | **-2.6** |
| | 1.1nm,0.3s,baz=197,slow=11,SNR=1.3 | | | | | | | | |
| AFI | | | | S | | | S | 13 05 53.5 | -11 |
| | 1.4nm,0.3s,baz=283,slow=22,SNR=1.8 | | | | | | | | |
| **URZ** | **Urewera** | **16.03** | **191** | P | | | **P** | **13 04 54.2** | **-0.1** |
| | 0.5nm,0.3s,baz=36,slow=18,SNR=1.3 | | | | | | | | |
| URZ | | | | S | | | **S** | **13 07 36.0** | **-3.8** |
| | 0.1nm,0.3s,baz=20,slow=15,SNR=1.2 | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.02** | **192** | P | | | **P** | **13 05 02.2** | **-2.4** |
| BKZ | | | | S | | | **S** | **13 07 57.3** | **-0.1** |
| **OTVZ** | **Oturere** | **17.19** | **194** | P | | | **P** | **13 05 05.2** | **-1.1** |
| **KWHZ** | **Kaweka Forest** | **17.29** | **192** | P | | | **P** | **13 05 06.4** | **-0.7** |
| **BHHZ** | **Black Hill Sta** | **17.42** | **192** | P | | | **P** | **13 05 07.3** | **-1.1** |
| **NEZ** | **North Egmont** | **17.68** | **197** | P | | | **P** | **13 05 14.5** | **+3.6** |
| **MRZ** | **Mangatainoka R** | **18.65** | **193** | P | | | **P** | **13 05 18.3** | **-1.3** |
| **OGWZ** | **Otaki Gorge** | **18.88** | **193** | P | | | **P** | **13 05 22.5** | **+0.8** |
| **DUWZ** | **D'Urville Isla** | **19.16** | **196** | P | | | **P** | **13 05 24.6** | **+0.3** |
| **QRZ** | **Quartz Range** | **19.57** | **199** | P | | | **P** | **13 05 30.3** | **+2.3** |
| **TKNZ** | **Takaka Hill** | **19.64** | **198** | P | | | **P** | **13 05 30.5** | **+1.9** |
| **NNZ** | **Nelson** | **19.69** | **197** | P | | | **P** | **13 05 30.5** | **+1.4** |
| **THZ** | **Tophouse** | **20.33** | **197** | P | | | **P** | **13 05 36.7** | **+1.8** |
| **DSZ** | **Denniston Nort** | **20.64** | **199** | P | | | **P** | **13 05 39.0** | **+1.3** |
| **KHZ** | **Kahutara** | **20.78** | **195** | P | | | **P** | **13 05 39.8** | **+0.8** |
| **GVZ** | **Greta Valley S** | **21.42** | **196** | P | | | **P** | **13 05 45.1** | **+0.3** |
| **LTZ** | **Lake Taylor** | **21.45** | **197** | P | | | **P** | **13 05 45.9** | **+0.8** |
| **INZ** | **Inchbonnie** | **21.64** | **199** | P | | | **P** | **13 05 47.6** | **+0.8** |
| **OXZ** | **Oxford** | **22.02** | **197** | P | | | **P** | **13 05 51.3** | **+1.1** |
| **WVZ** | **Waitaha Valley** | **22.17** | **200** | P | | | **P** | **13 05 53.1** | **+1.6** |
| **MQZ** | **McQueen's Vall** | **22.21** | **196** | P | | | **P** | **13 05 55.7** | **+3.8** |
| **ASAR** | **Alice Springs** | **43.05** | **259** | P | | | **P** | **13 08 49.1** | **+0.3** |
| | 0.3nm,0.8s,baz=91,slow=8.4,SNR=1.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.30** | **264** | P | | | **P** | **13 08 50.0** | **-0.8** |
| | 0.3nm,0.7s,baz=95,slow=8.3,SNR=5.6 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.21** | **44** | P | | | **P** | **13 13 08.5** | **+1.3** |
| | 1.0nm,0.9s,baz=225,slow=8.9,SNR=5.0 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.03** | **58** | P | | | **P** | **13 13 37.3** | **+2.2** |
| | 0.7nm,1.0s,baz=221,slow=6.8,SNR=4.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **90.50** | **13** | P | | | **P** | **13 13 41.0** | **+0.1** |
| | 0.5nm,1.0s,baz=217,slow=4.9,SNR=4.3 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.15** | **44** | P | | | **P** | **13 13 45.8** | **+1.0** |
| | 0.4nm,0.6s,baz=194,slow=1.9,SNR=4.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.20** | **329** | PKP | | | PKPbc | 13 20 10.7 | -0.6 |
| | 0.4nm,0.4s,baz=44,slow=3.8,SNR=4.9 | | | | | | | | |

*IDC **10** 13:01:46.9±1.0, 13°.70N×122°.50E, h0km, mb3.6/7, mb1 3.8/7, mb1mx3.5/52, mbtmp3.6/7, Error ellipse: s-maj=27.9km s-min=14.0km az=30.0*
*MAN **10** 13:01:49.5, 13°.76N×122°.26E, h1km, mb4.5, ML3.4, MS3.2 MAN INTENSITY II - GENERAL LUNA, QUEZON.*

**ISC 10 13:01:49.3±0.7, 13°.78N±0°.04×122°.31E±0°.04, h10km, n23, σ1♀39/26, mb3.5/7, 7C-8D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BOAC** | **Boac** | **0.55** | **235** | ⇑ | *e*P | | **Pg** | **13 02 00.0** | **-0.1** |
| **AUQP** | **San Andres** | **0.57** | **142** | ⇓ | *e*P | | **Pb** | **13 02 01.8** | **+0.2** |
| **JCNP** | **Jose Panganiba** | **0.63** | **36** | ⇑ | *e*P | | **Pg** | **13 02 01.1** | **-0.5** |
| **LQP** | **Lukban** | **0.82** | **294** | ⇓ | *e*P | | **Pg** | **13 02 04.9** | **-0.3** |
| LQP | | | | | *e*S | | **Sg** | **13 02 13.2** | **-2.7** |
| **PGP** | **Puerto Galera** | **1.35** | **258** | ⇑ | *e*P | | **Pn** | **13 02 13.6** | **-0.7** |
| PGP | | | | | *i* S | | **Sg** | **13 02 34.5** | **+1.7** |
| **TGY** | **Tagaytay City** | **1.37** | **284** | | Pg | | **Pn** | **13 02 15.2** | **+0.5** |
| | 286nm,0.3s,baz=133,slow=16,SNR=9.9 | | | | | | | | |
| TGY | | | | | Lg | | Lg | 13 02 36.5 | |
| | 212nm,0.3s,baz=142,slow=19,SNR=7.5 | | | | | | | | |
| **QVP** | **Quezon City--P** | **1.52** | **304** | ⇓ | *e*P | | **Pn** | **13 02 16.7** | **0.0** |
| **MACP** | **Maragondon, Ca** | **1.62** | **288** | ⇓ | *e*P | | **Pn** | **13 02 18.5** | **+0.5** |
| **SJMP** | **San Jose** | **1.75** | **222** | ⇓ | *e*P | | **Pb** | **13 02 21.0** | **-0.6** |
| **PVCP** | **Virac** | **1.80** | **95** | ⇓ | *e*P | | **Pg** | **13 02 23.3** | **-0.6** |
| **LUBP** | **Lubang** | **2.01** | **269** | ⇑ | *e*P | | **Pn** | **13 02 23.6** | **+0.3** |
| **BALP** | **Baler** | **2.08** | **340** | ⇑ | *e*P | | **Pn** | **13 02 26.0** | **+1.7** |
| **PCPH** | **Palayan** | **2.13** | **327** | ⇓ | *e*P | | **Pn** | **13 02 25.8** | **+0.8** |
| PCPH | | | | | *e*S | | **Sb** | **13 02 56.9** | **+2.4** |
| **RCP** | **Roxas** | **2.24** | **169** | ⇓ | *e*P | | **Pg** | **13 02 34.3** | **+1.9** |
| **SMPP** | **San Manuel, Pa** | **2.84** | **326** | ⇓ | *e*P | | **Pn** | **13 02 35.3** | **+0.5** |
| **SAMP** | **Sagada Mountai** | **3.55** | **338** | ⇓ | *e*P | | **Pn** | **13 02 46.4** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **22.92** | **285** | | P | | **P** | **13 06 55.1** | **+1.4** |
| | 1.1nm,0.7s,baz=97,slow=7.4,SNR=8.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.54** | **160** | P | | | **P** | **13 08 44.1** | **-2.7** |
| | 0.6nm,1.0s,baz=337,slow=9.7,SNR=4.9 | | | | | | | | |
| **SONM** | **Songino Array** | **36.45** | **342** | P | | | **P** | **13 08 55.2** | **+0.7** |
| | 0.3nm,0.7s,baz=155,slow=9.3,SNR=3.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.90** | **163** | P | | | **P** | **13 09 14.0** | **-1.4** |
| | 0.2nm,0.4s,baz=349,slow=7.5,SNR=6.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.91** | **323** | P | | | **P** | **13 10 20.9** | **+0.8** |
| | 0.6nm,0.8s,baz=129,slow=7.7,SNR=7.4 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.57** | **339** | P | | | **P** | **13 13 56.5** | **+0.2** |
| | 3.2nm,1.0s,baz=73,slow=6.7,SNR=5.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **87.91** | **333** | P | | | **P** | **13 14 37.5** | **-1.7** |
| | 0.5nm,0.6s,baz=69,slow=4.7,SNR=3.3 | | | | | | | | |

*IDC **10** 13:14:56.8±1.7, 30°.54S×71°.51W, h0km, mb4.0/4, mb1 3.9/5, mb1mx3.7/24, mbtmp3.9/5, ML3.6/1, Error ellipse: s-maj=72.0km s-min=29.1km az=108.0*
*NEIC **10** 13:15:01.2±1.5, 30°.60S±0°.03×71°.8W±0°.1, h28km±6km, mb4.4/3, ML4.1(GUC), Error ellipse: s-maj=13.5km s-min=1.5km az=107.0*
*GUC **10** 13:15:01.1±0.7, 30°.64S×71°.69W, h42km±2km, ML4.0*

**ISC 10 13:15:01.9±1.0, 30°.63S±0°.04×71°.70W±0°.08, h33km±4km, n54, σ0♀95/54, mb4.2/4, 1C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.07** | **126** | ⇑ | *i*P | | **Pb** | **13 15 07.5** | **0.0** |
| CO06 | | | | | *i* S | | **Sb** | **13 15 11.2** | **-0.1** |
| CO06 | | | | | IAML | | | 13 15 11.7 | |
| | comp=N,38μm,0.2s | | | | | | | | |
| **CO06** | **Fray Jorge** | **0.07** | **126** | | | | **Pb** | **13 15 07.5** | **0.0** |
| **CO05** | **La Serena** | **0.82** | **29** | | *e*P | | **Pn** | **13 15 17.3** | **+0.3** |
| CO05 | | | | | *i* S | | **Sn** | **13 15 27.2** | **-0.8** |
| CO05 | | | | | IAML | | | 13 15 33.0 | |
| | comp=E,13μm,0.9s | | | | | | | | |
| **CO05** | **La Serena** | **0.82** | **29** | | | | **Pn** | **13 15 17.1** | **+0.1** |
| **CO02** | **Combarbal** | **0.83** | **134** | ⇓ | *i*P | | **Pn** | **13 15 16.9** | **-0.5** |
| CO02 | | | | | *i* S | | **Sn** | **13 15 27.8** | **-0.7** |
| CO02 | | | | | IAML | | | 13 15 30.0 | |
| | comp=N,16μm,0.2s | | | | | | | | |
| **CO02** | **Combarbal** | **0.83** | **134** | | | | **Pn** | **13 15 16.4** | **-1.0** |
| **CO03** | **El Pedregal** | **0.89** | **104** | ⇓ | *i*P | | **Pn** | **13 15 17.9** | **-0.4** |
| CO03 | | | | | *i* S | | **Sn** | **13 15 29.0** | **-1.1** |
| CO03 | | | | | IAML | | | 13 15 30.5 | |
| | comp=E,7μm,0.4s | | | | | | | | |
| **CO03** | **El Pedregal** | **0.89** | **104** | | | | **Pn** | **13 15 17.4** | **-0.8** |
| **GO04** | **Tololo Observa** | **0.90** | **60** | | *e*P | | **Pn** | **13 15 18.5** | **0.0** |
| GO04 | | | | | *i* S | | **Sn** | **13 15 31.1** | **+0.5** |
| **GO04** | **Tololo Observa** | **0.90** | **60** | | | | **Pn** | **13 15 18.3** | **-0.2** |
| **LCO** | **Las Campanas** | **1.83** | **28** | | *e*P | | **Pn** | **13 15 32.3** | **+1.0** |
| LCO | | | | | *i* S | | **Sn** | **13 15 55.1** | **+1.5** |
| **LCO** | **Las Campanas** | **1.83** | **28** | | | | **Pn** | **13 15 32.6** | **+1.2** |
| **VA06** | **Catapilco** | **1.95** | **170** | | *e*P | | **Pn** | **13 15 33.1** | **+0.4** |
| VA06 | | | | | *i* S | | **Sn** | **13 15 57.4** | **+1.3** |
| VA06 | | | | | IAML | | | 13 16 06.2 | |
| | comp=N,2μm,0.5s | | | | | | | | |
| **VA06** | **Catapilco** | **1.95** | **170** | | | | **Pn** | **13 15 33.1** | **+0.4** |
| **VA03** | **San Esteban** | **2.34** | **156** | ⇓ | *e*P | | **Pn** | **13 15 39.9** | **+1.7** |
| VA03 | | | | | IAML | | | 13 16 20.8 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| **VA03** | **San Esteban** | **2.34** | **156** | | | | **Pn** | **13 15 39.6** | **+1.4** |
| **VA01** | **Torpederas** | **2.38** | **179** | | *e*P | | **Pn** | **13 15 38.9** | **+0.3** |
| VA01 | | | | | IAML | | | 13 16 20.0 | |
| | comp=N,370nm,0.8s | | | | | | | | |
| **VA01** | **Torpederas** | **2.38** | **179** | | | | **Pn** | **13 15 38.3** | **-0.3** |
| **ROCH** | **El Roble** | **2.40** | **166** | | *e*P | | **Pn** | **13 15 39.9** | **+0.8** |
| ROCH | | | | | *e*P | | **Pn** | **13 15 38.9** | **-0.3** |
| ROCH | | | | | IAML | | | 13 16 20.0 | |
| | comp=N,760nm,0.3s | | | | | | | | |
| ROCH | | | | | IAML | | | 13 16 21.2 | |
| | comp=N,1μm,0.4s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.48** | **13** | | *e*P | | **Pn** | **13 15 40.5** | **+0.5** |
| AC04 | | | | | IAML | | | 13 16 24.6 | |
| | comp=N,962nm,0.9s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.48** | **13** | | | | **Pn** | **13 15 39.8** | **-0.2** |
| **PEL** | **Peldehue** | **2.65** | **161** | | | | **Pn** | **13 15 42.9** | **+0.6** |
| **MT02** | **Curacav** | **2.66** | **170** | | *e*P | | **Pn** | **13 15 42.9** | **+0.4** |
| MT02 | | | | | IAML | | | 13 16 29.4 | |
| | comp=E,265nm,0.1s | | | | | | | | |
| **MT02** | **Curacav** | **2.66** | **170** | | | | **Pn** | **13 15 44.0** | **+1.6** |
| **ZON** | **Zonda** | **2.75** | **110** | | | | **Pn** | **13 15 47.2** | **+3.5** |
| **MT05** | **Renca** | **2.87** | **164** | | *e*P | | **Pn** | **13 15 46.6** | **+1.2** |
| MT05 | | | | | IAML | | | 13 16 28.7 | |
| | comp=N,679nm,0.4s | | | | | | | | |
| **MT05** | **Renca** | **2.87** | **164** | | | | **Pn** | **13 15 45.9** | **+0.5** |
| **VA05** | **Santo Domingo** | **3.02** | **179** | | *e*P | | **Pn** | **13 15 47.4** | **+0.1** |
| **VA05** | **Santo Domingo** | **3.02** | **179** | | | | **Pn** | **13 15 48.0** | **+0.6** |
| **MT09** | **Talagante** | **3.19** | **169** | ⇓ | *e*P | | **Pn** | **13 15 51.1** | **+1.2** |
| MT09 | | | | | IAML | | | 13 16 44.0 | |
| | comp=E,462nm,0.3s | | | | | | | | |
| **MT09** | **Talagante** | **3.19** | **169** | | | | **Pn** | **13 15 50.6** | **+0.7** |
| **MT01** | **Popeta** | **3.24** | **173** | | *e*P | | **Pn** | **13 15 50.9** | **+0.4** |
| MT01 | | | | | IAML | | | 13 16 43.9 | |
| | comp=E,290nm,0.5s | | | | | | | | |
| **MT01** | **Popeta** | **3.24** | **173** | | | | **Pn** | **13 15 50.4** | **-0.1** |
| **LMEL** | **Las Melosas** | **3.45** | **159** | | | | **Pn** | **13 15 54.8** | **+1.4** |
| **BO04** | **La Punta** | **3.47** | **165** | | *e*P | | **Pn** | **13 15 54.8** | **+1.2** |
| BO04 | | | | | IAML | | | 13 16 54.5 | |
| | comp=E,286nm,0.5s | | | | | | | | |
| **BO04** | **La Punta** | **3.47** | **165** | | | | **Pn** | **13 15 54.7** | **+1.0** |
| **BO01** | **Tunca** | **3.78** | **172** | | | | **Pn** | **13 15 58.0** | **+0.1** |
| **BO02** | **Sierra Bellavi** | **4.22** | **170** | | *e*P | | **Pn** | **13 16 04.2** | **+0.2** |
| **H03N1** | **Juan Fernandez** | **6.73** | **244** | | T | T | T | 13 23 33.2 | |
| | baz=72,slow=72,SNR=1377 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.75** | **243** | | T | T | T | 13 23 32.0 | |
| | baz=72,slow=72,SNR=1326 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.75** | **244** | | T | T | T | 13 23 35.2 | |
| | baz=72,slow=72,SNR=1130 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.12** | **175** | | Pn | | **Pn** | **13 17 25.1** | **+0.2** |
| | comp=E,0.1nm,0.3s,baz=352,slow=12,SNR=5.7 | | | | | | | | |
| **SNAA** | **Sanae** | **54.60** | **159** | | P | | **P** | **13 24 26.6** | **-0.1** |
| | comp=E,2.4nm,1.0s,baz=299,slow=10,SNR=1.9 | | | | | | | | |
| **SNAA** | **Sanae** | **54.60** | **159** | | P | | **P** | **13 24 26.9** | **+0.1** |
| SNAA | | | | | IAmb | | IAmb | 13 24 45.8 | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.59** | **180** | | P | | **P** | **13 25 03.1** | **+0.8** |
| | comp=Z,1.1nm,0.7s,baz=171,slow=1.5,SNR=9.8 | | | | | | | | |
| **DBIC** | **Dimbokro** | **73.85** | **72** | | P | | **P** | **13 26 32.1** | **-1.6** |
| | comp=Z,3.4nm,0.9s,baz=243,slow=4.5,SNR=3.9 | | | | | | | | |
| **DBIC** | **Dimbokro** | **73.85** | **72** | | IAmb | | IAmb | 13 26 51.6 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.80** | **70** | | P | | **P** | **13 27 22.8** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=240,slow=4.9,SNR=4.4 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.80** | **70** | | IAmb | | IAmb | 13 27 24.3 | |
| | comp=Z,1.6nm,1.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.83** | **210** | | PKP | | **PKPdf** | **13 33 56.5** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=166,slow=1.4,SNR=1.9 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.04** | **271** | | T | | T | 15 52 47.1 | |
| | baz=116,slow=75,SNR=15 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.05** | **271** | | T | | T | 15 52 41.8 | |
| | baz=116,slow=75,SNR=15 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.06** | **271** | | T | | T | 15 52 42.3 | |
| | baz=116,slow=75,SNR=12 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.19** | **29** | | PKPbc | | **PKPbc** | **13 34 51.6** | **+0.4** |
| | comp=Z,0.6nm,0.4s,baz=322,slow=4.0,SNR=5.5 | | | | | | | | |

**ASRS 10 13:22:34.9±0.3, 54°N±1°, 9°4E±°, h5km, MLh3.1/11, Error ellipse: s-maj=2.8km s-min=2.7km az=79.2, confirmed, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MINR** | **Mina** | **0.57** | **357** | Pg | | Pn | Pn | 13 22 49.2 | -0.6 |
| MINR | | | | Sg | | Sg | Sb | 13 22 56.6 | +0.7 |
| **ABNR** | **Abakan** | **1.77** | **251** | Sg | | Sg | Sg | 13 23 35.1 | +3.3 |
| **ABNR** | **Abakan** | **1.77** | **251** | Pg | | Pg | Pg | 13 23 10.0 | +1.2 |
| **GZL** | **Zheleznogorsk** | **1.98** | **348** | Sg | | Sg | Sg | 13 23 38.9 | +0.4 |
| **SHTK** | **Zheleznogorsk-** | **2.04** | **350** | Pg | | Pn | Pn | 13 23 05.0 | -4.9 |
| SHTK | | | | Sg | | Sg | Sn | 13 23 30.1 | -5.7 |
| **CERR** | **Cheremushki** | **2.25** | **230** | Pg | | Pg | Pg | 13 23 19.1 | +1.1 |
| CERR | | | | Sg | | Sg | Sg | 13 23 51.0 | +3.9 |
| **

| | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **EAST** | **Anshuo** | **0.59** | **150** | *i* P | **Pb** | **13 37 50.6** | **+0.1** |
| | baz=151 | | | | | | | | |
| EAST | | | | S | **Sn** | **13 38 00.6** | **-1.2** |
| | baz=151 | | | | | | | | |
| **CHY** | **Chiayi** | **0.60** | **351** | *i* P | **Pb** | **13 37 51.2** | **+0.5** |
| | baz=350 | | | | | | | | |
| CHY | | | | *i* S | **Sn** | **13 38 01.3** | **-0.7** |
| | baz=350 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.63** | **355** | *i* P | **Pb** | **13 37 51.8** | **+0.6** |
| | baz=354 | | | | | | | | |
| CHN2 | | | | *i* S | **Sn** | **13 38 02.2** | **-0.6** |
| | baz=354 | | | | | | | | |
| **TAW** | **Tawu** | **0.64** | **148** | *i* P | **Pb** | **13 37 51.3** | **0.0** |
| | baz=149 | | | | | | | | |
| TAW | | | | *i* S | **Sn** | **13 38 01.8** | **-1.0** |
| | baz=149 | | | | | | | | |
| **TAWH** | **Dawu Township** | **0.65** | **149** | P | **Pb** | **13 37 51.6** | **+0.1** |
| | baz=151 | | | | | | | | |
| TAWH | | | | *e*S | **Sn** | **13 38 01.6** | **-1.5** |
| | baz=151 | | | | | | | | |
| **ALS** | **Alishan** | **0.66** | **23** | *i* P | **Pb** | **13 37 51.7** | **-0.1** |
| | baz=23 | | | | | | | | |
| ALS | | | | *i* S | **Sb** | **13 38 01.7** | **+0.8** |
| | baz=23 | | | | | | | | |
| **ECS** | **Chishang** | **0.66** | **73** | P | **Pb** | **13 37 52.2** | **+0.4** |
| | baz=74 | | | | | | | | |
| ECS | | | | S | **Sn** | **13 38 01.9** | **-1.7** |
| | baz=74 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.68** | **336** | P | **Pb** | **13 37 52.4** | **+0.3** |
| | baz=334 | | | | | | | | |
| WSL | | | | S | **Sb** | **13 38 02.2** | **+1.0** |
| | baz=334 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.70** | **33** | *i* P | **Pb** | **13 37 52.6** | **-0.1** |
| | baz=34 | | | | | | | | |
| YUS | | | | *i* S | **Sb** | **13 38 02.7** | **+0.2** |
| | baz=34 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.71** | **11** | *i* P | **Pb** | **13 37 52.5** | **0.0** |
| | baz=10.0 | | | | | | | | |
| CHN5 | | | | *i* S | **Sn** | **13 38 03.6** | **-1.2** |
| | baz=10.0 | | | | | | | | |
| **EDH** | **Donghe** | **0.72** | **84** | *i* P | **Pn** | **13 37 53.4** | **-0.6** |
| | baz=85 | | | | | | | | |
| EDH | | | | S | **Sb** | **13 38 02.7** | **+0.4** |
| | baz=85 | | | | | | | | |
| **SLIU** | **Shizi** | **0.72** | **160** | *i* P | **Pb** | **13 37 53.1** | **+0.3** |
| | baz=161 | | | | | | | | |
| SLIU | | | | S | **Sn** | **13 38 03.9** | **-1.1** |
| | baz=161 | | | | | | | | |
| **FULB** | **Fuli** | **0.76** | **67** | *i* P | **Pb** | **13 37 54.0** | **+0.6** |
| | baz=68 | | | | | | | | |
| FULB | | | | S | **Sn** | **13 38 05.0** | **-1.1** |
| | baz=68 | | | | | | | | |
| **WGK** | **Gukeng** | **0.78** | **2** | *i* P | **Pb** | **13 37 54.3** | **+0.5** |
| | baz=2.0 | | | | | | | | |
| WGK | | | | *i* S | **Sn** | **13 38 06.6** | **+0.2** |
| | baz=2.0 | | | | | | | | |
| **WDLH** | **Douliu** | **0.78** | **0** | *i* P | **Pb** | **13 37 54.1** | **+0.3** |
| | baz=360 | | | | | | | | |
| WDLH | | | | *i* S | **Sn** | **13 38 06.1** | **-0.4** |
| | baz=360 | | | | | | | | |
| **WSF** | **Szhu** | **0.79** | **339** | *i* P | **Pb** | **13 37 53.8** | **-0.1** |
| | baz=338 | | | | | | | | |
| WSF | | | | *i* S | **Sn** | **13 38 06.2** | **-0.4** |
| | baz=338 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.79** | **75** | *i* P | **Pb** | **13 37 54.5** | **+0.5** |
| | baz=77 | | | | | | | | |
| CHKT | | | | S | **Sn** | **13 38 06.1** | **-0.7** |
| | baz=77 | | | | | | | | |
| **WTK** | **Tuku** | **0.79** | **351** | *i* P | **Pb** | **13 37 54.1** | **+0.1** |
| | baz=350 | | | | | | | | |
| WTK | | | | *i* S | **Sn** | **13 38 05.9** | **-0.9** |
| | baz=350 | | | | | | | | |
| **TWF1** | **Yuli** | **0.84** | **57**⇑ | *i* P | **Pb** | **13 37 54.7** | **0.0** |
| | baz=58 | | | | | | | | |
| TWF1 | | | | *i* S | **Sn** | **13 38 06.9** | **-0.9** |
| | baz=58 | | | | | | | | |
| **EYUL** | **Yuli** | **0.85** | **58** | *i* P | **Pb** | **13 37 55.0** | **0.0** |
| | baz=59 | | | | | | | | |
| EYUL | | | | *i* S | **Sn** | **13 38 07.2** | **-1.0** |
| | baz=59 | | | | | | | | |
| **YULB** | **Yu-li** | **0.86** | **55** | P | **Pb** | **13 37 54.9** | **-0.2** |
| | baz=56 | | | | | | | | |
| YULB | | | | S | **Sb** | **13 38 06.9** | **+0.4** |
| | baz=56 | | | | | | | | |
| **WDGT** | **Dungji** | **0.88** | **294** | *e*P | **Pb** | **13 37 54.7** | **-0.7** |
| | baz=293 | | | | | | | | |
| WDGT | | | | *e*S | **Sb** | **13 38 07.0** | **0.0** |
| | baz=293 | | | | | | | | |
| **LDUT** | **Ludao** | **0.90** | **104** | *i* P | **Pb** | **13 37 55.7** | **0.0** |
| | baz=106 | | | | | | | | |
| LDUT | | | | *e*S | **Sn** | **13 38 08.4** | **-0.8** |
| | baz=106 | | | | | | | | |
| **HEN** | **Hengchun** | **0.91** | **168** | *i* P | **Pn** | **13 37 57.0** | **+0.2** |
| | baz=168 | | | | | | | | |
| HEN | | | | S | **Sn** | **13 38 10.5** | **+0.9** |
| | baz=168 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.92** | **162** | P | **Pn** | **13 37 56.8** | **0.0** |
| | baz=163 | | | | | | | | |
| SMST | | | | *e*S | **Sn** | **13 38 09.8** | **-0.1** |
| | baz=163 | | | | | | | | |
| **WJS** | **Zhushan** | **0.94** | **11** | *i* P | **Pb** | **13 37 56.6** | **+0.3** |
| | baz=11 | | | | | | | | |
| WJS | | | | *i* S | **Sn** | **13 38 10.4** | **+0.2** |
| | baz=11 | | | | | | | | |
| **ECBN** | **Changbin** | **0.94** | **64** | P | **Pn** | **13 37 57.4** | **+0.3** |
| | baz=64 | | | | | | | | |
| ECBN | | | | *e*S | **Sn** | **13 38 10.4** | **0.0** |
| | baz=64 | | | | | | | | |
| **WMLT** | **Mailiao** | **0.94** | **343** | S | **Sn** | **13 38 09.9** | **-0.6** |
| | baz=342 | | | | | | | | |
| **EHY** | **Hungye** | **0.94** | **50** | *i* P | **Pb** | **13 37 56.6** | **0.0** |
| | baz=51 | | | | | | | | |
| EHY | | | | S | **Sn** | **13 38 10.4** | **-0.1** |
| | baz=51 | | | | | | | | |
| **SNW** | **Nanwan** | **0.96** | **168** | *e*S | **Sn** | **13 38 13.1** | **+2.3** |
| | baz=169 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.96** | **24** | P | **Pb** | **13 37 56.7** | **-0.3** |
| | baz=24 | | | | | | | | |
| SSLB | | | | S | **Sn** | **13 38 11.6** | **+0.5** |
| | baz=24 | | | | | | | | |
| **WNT** | **Mingjian** | **0.98** | **8** | *i* P | **Pn** | **13 37 57.6** | **-0.2** |
| | baz=8.0 | | | | | | | | |
| WNT | | | | *i* S | **Sn** | **13 38 11.9** | **+0.4** |
| | baz=8.0 | | | | | | | | |
| **TWK1** | **Hengchun** | **0.99** | **165** | *i* P | **Pn** | **13 37 57.8** | **0.0** |
| | baz=165 | | | | | | | | |
| TWK1 | | | | S | **Sn** | **13 38 12.6** | **+1.1** |
| | baz=165 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.99** | **347** | *i* P | **Pb** | **13 37 56.7** | **-0.5** |
| | baz=346 | | | | | | | | |
| WTCT | | | | *i* S | **Sn** | **13 38 11.5** | **0.0** |
| | baz=346 | | | | | | | | |
| **TWKBT** | **Hengchun** | **0.99** | **165** | P | **Pb** | **13 37 57.0** | **-0.3** |
| | baz=166 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.01** | **352** | P | **Pb** | **13 37 57.1** | **-0.5** |
| | baz=351 | | | | | | | | |
| WRL | | | | S | **Sn** | **13 38 11.4** | **-0.6** |
| | baz=351 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.01** | **54** | P | **Pn** | **13 37 58.5** | **+0.3** |
| | baz=55 | | | | | | | | |
| HGSD | | | | S | **Sn** | **13 38 12.0** | **-0.1** |
| | baz=55 | | | | | | | | |
| **WNT1** | **Nantou City** | **1.01** | **8** | P | **Pn** | **13 37 58.2** | **+0.1** |
| | baz=7.0 | | | | | | | | |
| WNT1 | | | | S | **Sn** | **13 38 12.6** | **+0.4** |
| | baz=7.0 | | | | | | | | |
| **VWDT** | **VWDT** | **1.02** | **33** | P | **Pb** | **13 37 57.9** | **+0.1** |
| | baz=33 | | | | | | | | |
| VWDT | | | | S | **Sn** | **13 38 12.7** | **+0.4** |
| | baz=33 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.03** | **19** | *i* P | **Pn** | **13 37 58.7** | **+0.1** |
| | baz=19 | | | | | | | | |
| SMLT | | | | S | **Sn** | **13 38 14.2** | **+1.3** |
| | baz=19 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.05** | **161** | P | **Pn** | **13 37 59.5** | **+0.8** |
| | baz=164 | | | | | | | | |
| TSEB | | | | S | **Sn** | **13 38 14.3** | **+1.2** |
| | baz=164 | | | | | | | | |
| **VCHM** | **Qimei** | **1.06** | **287** | *e*P | **Pb** | **13 37 57.2** | **-1.3** |
| | baz=286 | | | | | | | | |
| VCHM | | | | *e*S | **Sb** | **13 38 12.1** | **-0.1** |
| | baz=286 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.07** | **305** | *e*P | **Pn** | **13 37 57.4** | **-1.6** |
| | baz=304 | | | | | | | | |
| PHUB | | | | *e*S | **Sb** | **13 38 11.8** | **-0.8** |
| | baz=304 | | | | | | | | |
| **PNG** | **Penghu** | **1.12** | **307** | *e*P | **Pn** | **13 37 58.1** | **-1.5** |
| | baz=306 | | | | | | | | |
| PNG | | | | *e*S | **Sb** | **13 38 13.1** | **-0.8** |
| | baz=306 | | | | | | | | |
| **WWF** | **Wufeng** | **1.15** | **8** | P | **Pn** | **13 37 59.7** | **-0.3** |
| | baz=7.0 | | | | | | | | |
| WWF | | | | S | **Sn** | **13 38 16.6** | **+1.1** |
| | baz=7.0 | | | | | | | | |
| **WPL** | **Puli Township** | **1.17** | **19** | P | **Pn** | **13 38 00.3** | **-0.1** |
| | baz=19 | | | | | | | | |
| WPL | | | | S | **Sn** | **13 38 16.9** | **+0.7** |
| | baz=19 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.17** | **1** | *i* P | **Pn** | **13 37 59.6** | **-0.7** |
| | baz=1.0 | | | | | | | | |
| WCHH | | | | *i* S | **Sn** | **13 38 16.5** | **+0.4** |
| | baz=1.0 | | | | | | | | |
| **DPDB** | **Guoxing** | **1.19** | **18** | P | **Pn** | **13 38 00.5** | **-0.1** |
| | baz=18 | | | | | | | | |
| DPDB | | | | S | **Sn** | **13 38 17.6** | **+1.1** |
| | baz=18 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.20** | **17** | P | **Pn** | **13 38 00.4** | **-0.4** |
| | baz=17 | | | | | | | | |
| WCS | | | | S | **Sn** | **13 38 17.7** | **+0.9** |
| | baz=17 | | | | | | | | |
| **WUSB** | **Renai** | **1.21** | **26** | P | **Pn** | **13 38 01.1** | **+0.1** |
| | baz=26 | | | | | | | | |
| WUSB | | | | S | **Sn** | **13 38 18.2** | **+0.9** |
| | baz=26 | | | | | | | | |
| **TEGC** | **Jichi Village** | **1.23** | **49** | P | **Pb** | **13 38 02.5** | **+1.2** |
| | baz=49 | | | | | | | | |
| TEGC | | | | *e*S | **Sn** | **13 38 19.4** | **+1.9** |
| | baz=49 | | | | | | | | |
| **ESL** | **Shilin** | **1.23** | **42** | *i* P | **Pb** | **13 38 01.7** | **+0.2** |
| | baz=43 | | | | | | | | |
| ESL | | | | *i* S | **Sn** | **13 38 19.6** | **+2.0** |
| | baz=43 | | | | | | | | |
| **TCU** | **Taichung** | **1.25** | **6** | *i* P | **Pn** | **13 38 01.6** | **+0.2** |
| | baz=6.0 | | | | | | | | |
| TCU | | | | *i* S | **Sn** | **13 38 18.8** | **+0.8** |
| | baz=6.0 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.27** | **132** | *i* P | **Pn** | **13 38 01.4** | **-0.4** |
| | baz=133 | | | | | | | | |
| LAY | | | | *i* S | **Sb** | **13 38 19.3** | **+0.9** |
| | baz=133 | | | | | | | | |
| **CHGB** | **Renai** | **1.30** | **27** | P | **Pb** | **13 38 02.9** | **+0.2** |
| | baz=27 | | | | | | | | |
| CHGB | | | | S | **Sb** | **13 38 21.0** | **+1.7** |
| | baz=27 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.32** | **132** | *e*P | **Pn** | **13 38 00.7** | **-1.7** |
| | baz=133 | | | | | | | | |
| LYUB | | | | *e*S | **Sn** | **13 38 18.9** | **-0.9** |
| | baz=133 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.37** | **45** | P | **Pb** | **13 38 04.5** | **+0.7** |
| | baz=45 | | | | | | | | |
| TEYL | | | | S | **Sb** | **13 38 25.0** | **+3.8** |
| | baz=45 | | | | | | | | |
| **ETM** | **Tongmen** | **1.38** | **40** | P | **Pb** | **13 38 04.2** | **+0.3** |
| | baz=40 | | | | | | | | |
| ETM | | | | S | **Sb** | **13 38 24.3** | **+2.9** |
| | baz=40 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.41** | **28** | *i* P | **Pb** | **13 38 04.8** | **+0.1** |
| | baz=29 | | | | | | | | |
| WHF | | | | *i* S | **Sb** | **13 38 25.0** | **+2.3** |
| | baz=29 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.44** | **4** | *i* P | **Pn** | **13 38 03.9** | **-0.2** |
| | baz=4.0 | | | | | | | | |
| WDJ | | | | *i* S | **Sb** | **13 38 24.8** | **+1.5** |
| | baz=4.0 | | | | | | | | |
| **HWA** | **Hwalien** | **1.46** | **42** | *i* P | **Pb** | **13 38 06.0** | **+0.7** |
| | baz=43 | | | | | | | | |
| HWA | | | | S | **Sb** | **13 38 24.5** | **+0.9** |
| | baz=43 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.46** | **9** | *i* P | **Pn** | **13 38 04.5** | **+0.2** |
| | baz=8.0 | | | | | | | | |
| TWQ1 | | | | *i* S | **Sb** | **13 38 25.0** | **+1.3** |
| | baz=8.0 | | | | | | | | |
| **TDCB** | **Techi** | **1.46** | **23** | P | **Pn** | **13 38 05.0** | **+0.4** |
| | baz=23 | | | | | | | | |
| TDCB | | | | S | **Sb** | **13 38 25.7** | **+1.7** |
| | baz=23 | | | | | | | | |
| **TWT** | **Tachien** | **1.47** | **24** | *i* P | **Pb** | **13 38 05.2** | **-0.4** |
| | baz=23 | | | | | | | | |
| TWT | | | | *i* S | **Sb** | **13 38 26.1** | **+1.9** |
| | baz=23 | | | | | | | | |
| **FUSS** | **Fushou** | **1.49** | **26** | *i* P | **Pn** | **13 38 05.3** | **+0.4** |
| | baz=26 | | | | | | | | |
| FUSS | | | | *e*S | **Sb** | **13 38 25.7** | **+0.7** |
| | baz=26 | | | | | | | | |
| **NSY** | **Sanyi** | **1.52** | **8** | *i* P | **Pn** | **13 38 05.6** | **+0.4** |
| | baz=8.0 | | | | | | | | |
| NSY | | | | *i* S | **Sb** | **13 38 27.1** | **+1.5** |
| | baz=8.0 | | | | | | | | |
| **TWD** | **Chiawan** | **1.53** | **40** | *i* P | **Pn** | **13 38 05.8** | **+0.6** |
| | baz=40 | | | | | | | | |
| TWD | | | | *i* S | **Sb** | **13 38 27.0** | **+1.3** |
| | baz=40 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.57** | **34** | P | **Pb** | **13 38 07.1** | **-0.1** |
| | baz=34 | | | | | | | | |
| ETLH | | | | S | **Sb** | **13 38 29.1** | **+2.2** |
| | baz=34 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.60** | **37** | P | **Pn** | **13 38 06.8** | **+0.6** |
| | baz=38 | | | | | | | | |
| NACB | | | | S | **Sb** | **13 38 28.5** | **+0.7** |
| | baz=38 | | | | | | | | |
| **ETL** | **Fush Village** | **1.60** | **38** | P | **Pb** | **13 38 07.4** | **-0.5** |
| | baz=39 | | | | | | | | |
| ETL | | | | S | **Sb** | **13 38 29.0** | **+1.1** |
| | baz=39 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.65** | **8** | *i* P | **Pn** | **13 38 07.5** | **+0.6** |
| | baz=8.0 | | | | | | | | |
| NMLH | | | | S | **Sb** | **13 38 29.9** | **+0.8** |
| | baz=8.0 | | | | | | | | |
| **NNSB** | **Datong** | **1.71** | **27** | P | **Pn** | **13 38 08.4** | **+0.6** |
| | baz=27 | | | | | | | | |
| NNSB | | | | S | **Sb** | **13 38 31.3** | **+0.3** |
| | baz=27 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.72** | **27** | *i* P | **Pn** | **13 38 08.9** | **+0.9** |
| | baz=27 | | | | | | | | |
| NNS | | | | *i* S | **Sb** | **13 38 32.2** | **+0.9** |
| | baz=27 | | | | | | | | |
| **LIOB** | **Emei** | **1.79** | **14** | *i* P | **Pn** | **13 38 08.9** | **0.0** |
| | baz=14 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.81** | **17** | P | **Pn** | **13 38 09.2** | **+0.1** |
| | baz=17 | | | | | | | | |
| NFF | | | | S | **Sb** | **13 38 34.9** | **+1.1** |
| | baz=17 | | | | | | | | |
| **LATG** | **Datong** | **1.87** | **29** | P | **Pn** | **13 38 11.0** | **+1.0** |
| | baz=29 | | | | | | | | |
| LATG | | | | S | **Sb** | **13 38 36.2** | **+0.6** |
| | baz=29 | | | | | | | | |
| **ENA** | **Nanau** | **1.88** | **36** | *i* P | **Pn** | **13 38 11.0** | **+0.9** |
| | baz=36 | | | | | | | | |
| ENA | | | | S | **Sb** | **13 38 36.1** | **+0.2** |
| | baz=36 | | | | | | | | |
| **EWUT** | **Wuta** | **1.92** | **36** | P | **Pn** | **13 38 11.3** | **+0.7** |
| | baz=37 | | | | | | | | |
| EWUT | | | | S | **Sb** | **13 38 36.7** | **-0.2** |
| | baz=37 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.92** | **28** | *i* P | **Pb** | **13 38 12.1** | **-1.1** |
| | baz=28 | | | | | | | | |
| NDT | | | | S | **Sb** | **13 38 36.5** | **-0.4** |
| | baz=28 | | | | | | | | |
| **NSK** | **Sanguang** | **1.92** | **23** | *i* P | **Pn** | **13 38 11.3** | **+0.6** |
| | baz=23 | | | | | | | | |
| NSK | | | | *i* S | **Sb** | **13 38 38.0** | **+0.9** |
| | baz=23 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.92** | **24** | P | **Pn** | **13 38 11.3** | **+0.6** |
| | baz=24 | | | | | | | | |
| YHNB | | | | S | **Sb** | **13 38 38.1** | **+0.9** |
| | baz=24 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.93** | **12** | *e*P | **Pb** | **13 38 12.5** | **-0.9** |
| | baz=12 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.97** | **29** | *i* P | **Pb** | **13 38 13.4** | **-0.7** |
| | baz=29 | | | | | | | | |
| ENTT | | | | S | **Sb** | **13 38 38.4** | **-0.2** |
| | baz=29 | | | | | | | | |
| **NDS** | **Dongshan** | **2.04** | **32** | P | **Pb** | **13 38 14.1** | **-1.1** |
| | baz=32 | | | | | | | | |
| NDS | | | | S | **Sb** | **13 38 39.4** | **-1.1** |
| | baz=32 | | | | | | | | |
| **NWLT** | **Wulai** | **2.07** | **25** | *i* P | **Pn** | **13 38 13.5** | **+0.7** |
| | baz=25 | | | | | | | | |
| NWLT | | | | S | **Sn** | **13 38 39.1** | **+0.8** |
| | baz=25 | | | | | | | | |
| **TWC** | **Suao** | **2.09** | **35** | *i* P | **Pn** | **13 38 14.5** | **+1.5** |
| | baz=36 | | | | | | | | |
| TWC | | | | S | **Sb** | **13 38 40.3** | **-1.5** |
| | baz=36 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.09** | **27** | P | **Pn** | **13 38 14.3** | **+1.3** |
| | baz=28 | | | | | | | | |
| FUSB | | | | S | **Sb** | **13 38 41.2** | **-0.7** |
| | baz=28 | | | | | | | | |
| **TWE** | **Neicheng** | **2.09** | **30** | *i* P | **Pb** | **13 38 14.7** | **-1.4** |
| | baz=30 | | | | | | | | |
| TWE | | | | S | **Sb** | **13 38 41.1** | **-0.8** |
| | baz=30 | | | | | | | | |
| **NCUH** | **Zhongli** | **2.14** | **16** | *e*P | **Pb** | **13 38 15.6** | **-1.4** |
| | baz=16 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.25** | **24** | P | **Pb** | **13 38 17.2** | **-1.6** |
| | baz=24 | | | | | | | | |
| NHDH | | | | S | **Sb** | **13 38 45.2** | **-1.2** |
| | baz=24 | | | | | | | | |
| **NTC** | **Toucheng** | **2.28** | **31** | P | **Pn** | **13 38 17.1** | **+1.5** |
| | baz=31 | | | | | | | | |
| NTC | | | | *e*S | **Sb** | **13 38 45.1** | **-2.2** |
| | baz=31 | | | | | | | | |
| **TWA** | **Mucha** | **2.28** | **25** | P | **Pb** | **13 38 17.7** | **-1.7** |
| | baz=25 | | | | | | | | |
| **EGS** | | **2.32** | **33** | P | **Pb** | **13 38 18.3** | **-1.7** |
| | baz=34 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.34** | **20** | P | **Pn** | **13 38 17.2** | **+0.9** |
| | baz=20 | | | | | | | | |
| TWS1 | | | | S | **Sn** | **13 38 46.4** | **+1.6** |
| | baz=20 | | | | | | | | |
| **TIPB** | **Shuangxi** | **2.38** | **30** | *i* P | **Pn** | **13 38 18.5** | **+1.5** |
| | baz=30 | | | | | | | | |
| TIPB | | | | S | **Sb** | **13 38 48.0** | **-2.2** |
| | baz=30 | | | | | | | | |
| **NTST** | **Danshui** | **2.41** | **20** | *e*P | **Pb** | **13 38 20.4** | **-1.0** |
| | baz=20 | | | | | | | | |
| **YM01** | **YM01** | **2.43** | **23** | P | **Pn** | **13 38 18.6** | **+1.0** |
| | baz=23 | | | | | | | | |
| **KNM** | **Kinmen** | **2.44** | **309** | *e*P | **Pn** | **13 38 18.7** | **+0.9** |
| | baz=306 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.44** | **28** | P | **Pb** | **13 38 20.1** | **-2.0** |
| | baz=28 | | | | | | | | |
| NWF | | | | *e*S | **Sn** | **13 38 49.2** | **+1.6** |
| | baz=28 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.49** | **32** | P | **Pn** | **13 38 20.6** | **+2.1** |
| | baz=33 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.49** | **329** | *e*P | **Pn** | **13 38 17.4** | **-1.1** |
| | baz=328 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.51** | **309** | *e*P | **Pn** | **13 38 17.8** | **-0.9** |
| | baz=308 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.51** | **29** | P | **Pb** | **13 38 21.6** | **-1.7** |
| | baz=29 | | | | | | | | |
| **TWY** | **Chenhua** | **2.56** | **22** | P | **Pn** | **13 38 21.7** | **+2.3** |
| | baz=23 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.70** | **55** | P | **Pn** | **13 38 22.9** | **+1.6** |
| JYNG | | | | *e*S | **Sn** | **13 38 56.1** | **+2.3** |
| **ZPLA** | **Ao Xicun** | **2.75** | **292** | *e*P | **Pn** | **13 38 20.9** | **-1.2** |
| | baz=292 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.75** | **55** | P | **Pn** | **13 38 23.5** | **+1.4** |
| YOJ | | | | *e*S | **Sb** | **13 38 58.5** | **-2.5** |
| **YOJ** | **Yonaguni jima** | **2.75** | **55** | P | **Pn** | **13 38 23.6** | **+1.5** |
| | baz=56 | | | | | | | | |
| **DSXP** | **Dongshan** | **2.96** | **286** | *e*P | **Pn** | **13 38 24.2** | **-0.8** |
| | baz=285 | | | | | | | | |
| **AXDP** | **Jialang** | **3.08** | **311** | *e*P | **Pn** | **13 38 25.6** | **-0.9** |
| | baz=310 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **3.22** | **68** | *e*S | **Sn** | **13 39 08.5** | **+1.9** |
| **IRIF** | **Iriomote-Funau** | **3.26** | **63** | P | **Pn** | **13 38 30.5** | **+1.4** |
| IRIF | | | | *e*S | **Sn** | **13 39 11.2** | **+3.5** |
| **MATB** | **Ma-tsu** | **3.28** | **351** | *e*P | **Pn** | **13 38 28.5** | **-0.8** |
| | baz=350 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **3.46** | **67** | P | **Pn** | **13 38 33.5** | **+1.7** |
| **MHZQ** | **Yeshan** | **3.47** | **337** | *e*P | **Pn** | **13 38 31.5** | **-0.4** |
| | baz=337 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.62** | **66** | P | **Pn** | **13 38 34.8** | **+0.8** |
| JIJ | | | | S | **Sn** | **13 39 17.5** | **+1.0** |
| **LYJJ** | **Jianjiangzhen** | **3.70** | **349** | *e*P | **Pn** | **13 38 34.8** | **-0.3** |
| | baz=349 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.85** | **63** | P | **Pn** | **13 38 38.3** | **+1.1** |
| JISG | | | | S | **Sn** | **13 39 23.3** | **+1.1** |
| **XPSS** | **Dashiqiu** | **4.02** | **356** | *e*P | **Pn** | **13 38 38.8** | **-0.8** |
| | baz=355 | | | | | | | | |
| **JTJ** | **Tarama** | **4.20** | **65** | P | **Pn** | **13 38 43.9** | **+2.0** |
| **MKAR** | **Makanchi Array** | **38.85** | **317** | P | **P** | **13 45 05.7** | **+2.6** |
| | 0.2nm,0.7s,baz=110,slow=8.7,SNR=1.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.66** | **161** | P | **P** | **13 45 48.5** | **-2.3** |
| | 0.9nm,0.7s,baz=344,slow=8.7,SNR=5.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.08** | **163** | P | **P** | **13 46 16.4** | **-1.2** |
| | 0.2nm,0.6s,baz=340,slow=6.4,SNR=6.3 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **56.54** | **283** | LR | LR | 14 14 14.6 | |
| | comp=Z,28nm,18.4s,baz=320,slow=38 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.38** | **23** | P | **P** | **13 50 08.7** | **-1.3** |
| | 0.2nm,0.5s,baz=318,slow=4.4,SNR=3.6 | | | | | | | | |

**MAN 10 13:47:45.6,13°.58N×120°.32E,h32km,mb4.5,ML3.3, MS3.1,3C-1D,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.17** | **337**⇑ | *e*P | Pn | 13 47 53.1 | +1.0 |
| **PGP** | **Puerto Galera** | **0.62** | **97** | *i* S | Sn | 13 48 08.4 | +1.1 |
| **PGP** | **Puerto Galera** | **0.62** | **97**⇑ | *e*P | Pn | 13 47 58.4 | +0.1 |
| **MACP** | **Maragondon, Ca** | **0.79** | **30**⇑ | *e*P | Pb | 13 48 04.1 | +3.2 |
| **SJMP** | **San Jose** | **1.36** | **145**⇓ | *e*P | Pn | 13 48 08.8 | +0.4 |

**IDC 10 13:49:14.6±2.4,3°.68N×126°.32E,h0km,mb3.2/4, mb1 3.4/4,mb1mx2.9/56,mbtmp3.2/4,Error ellipse: s-maj=249.0km s-min=25.0km az=66.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.76** | **162** | P | P | 13 54 38.2 | +0.1 |
| | 0.5nm,0.8s,baz=341,slow=9.9,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **28.16** | **165** | P | P | 13 55 08.8 | -0.1 |
| | 0.3nm,0.8s,baz=343,slow=7.0,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.37** | **325** | P | P | 13 59 05.3 | +0.5 |
| | 0.1nm,0.4s,baz=111,slow=7.1,SNR=4.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.56** | **328** | P | P | 13 59 32.9 | -0.7 |
| | 0.2nm,0.4s,baz=126,slow=6.3,SNR=2.0 | | | | | | |

*IDC **10** 13:49:29.7±6.4,36°.57N×70°.24E,h76km±74km,mb3.2/2, mb1 3.3/4,mb1mx2.7/63,mbtmp3.6/4,ML3.4/2,Error ellipse: s-maj=86.8km s-min=34.7km az=143.0*
*NNC **10** 13:49:35.5±5.5,37°.00N×70°.36E,h145km±114km,mb2.9, mpv3.8,Error ellipse: s-maj=56.1km s-min=39.3km az=35.0*

**ISC 10 13:49:31.6±1.4,36°.8N±0°.1×70°.17E±0°.08,h100km,n7, σ1§12/11,1C-3D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK02** | **Karatay Array** | **6.30** | **2** | ⇓P | **Pn** | **13 51 03.5** | **+1.5** |
| | 2.6nm,0.3s,baz=164,slow=11 | | | | | | |
| KK02 | | | | ⇓S | **Sn** | **13 52 12.8** | **+0.3** |
| | 1.6nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **28** | P | **Pn** | **13 51 08.2** | **+0.4** |
| | 0.8nm,0.3s,baz=183,slow=6.6,SNR=12 | | | | | | |
| AAK | | | | S | **Sn** | **13 52 21.3** | **-1.5** |
| | 0.3nm,0.3s,baz=353,slow=21,SNR=5.9 | | | | | | |
| **AAK** | **Ala-Archa** | **6.72** | **28** | ⇓P | **Pn** | **13 51 08.1** | **+0.4** |
| | 8.4nm,0.9s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **13 52 21.7** | **-1.1** |
| | 5.4nm,0.8s | | | | | | |
| **GEYT** | **Alibeck** | **9.66** | **280** | P | **Pn** | **13 51 47.2** | **-0.4** |
| | 0.3nm,0.3s,baz=116,slow=6.6,SNR=1.4 | | | | | | |
| GEYT | | | | S | **Sn** | **13 53 33.4** | **-0.9** |
| | 0.3nm,0.3s,baz=44,slow=30,SNR=1.5 | | | | | | |
| **AB31** | **Akbulak array** | **14.51** | **332** | P | **Pn** | **13 52 53.0** | **+1.2** |
| | 0.2nm,0.2s,baz=170,slow=11,SNR=23 | | | | | | |
| AB31 | | | | S | **Sn** | **13 55 30.4** | **-1.2** |
| | 0.2nm,0.3s,baz=152,slow=23,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.93** | **26** | P | Pn | 13 53 57.1 | -0.7 |
| | 0.7nm,0.4s,baz=221,slow=11,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **84.97** | **124** | P | **P** | **14 01 55.8** | **-0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **21.51** | **194** | P | P | 14 02 02.1 | -0.1 |
| | 0.3nm,0.5s,baz=19,slow=11,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.10** | **322** | P | P | 14 08 25.6 | 0.0 |
| | 0.1nm,0.5s,baz=108,slow=6.4,SNR=2.2 | | | | | | |

*IDC* ***10*** *14:00:54.5±3.8, 8.76S×110.57E, h0km, mb3.2/3, mb1 3.4/3, mb1mx2.8/36, mbtmp3.2/3, MS2.5/1, Ms1 2.5/1, ms1mx2.2/19, Error ellipse: s-maj=211.2km s-min=29.9km az=48.0*

*DJA* ***10*** *14:00:58.8±0.6, 9˚S±5˚×11˚0E±˚, h10km, M3.7/13, mb3.8/1, MLv3.6/13*

**ISC 10 14:01:01.3±1.3, 9.1S±0.1×110.46E±0.06, h51km, n14, σ1§16/14, mb3.1/3, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCJI** | **Pacitan** | **1.11** | **40** | P | **Pn** | **14 01 19.1** | **-1.4** |
| **UGM** | **Wanagama** | **1.14** | **3** | P | **Pn** | **14 01 20.4** | **-0.6** |
| **YOGI** | **Yogyakarta** | **1.24** | **352** | P | **Pn** | **14 01 21.7** | **-0.7** |
| **PWJI** | **Pagerwojo** | **1.68** | **52** | P | **Pn** | **14 01 28.5** | **+0.3** |
| PWJI | | | | S | **Sn** | **14 01 49.9** | **+1.3** |
| **SMRI** | **Semarang** | **2.00** | **359** | P | **Pn** | **14 01 34.0** | **+1.4** |
| **KPJI** | **Karang Pucung** | **2.29** | **318** | P | **Pn** | **14 01 38.3** | **+1.7** |
| **CMJI** | **Cimerak** | **2.36** | **302** | P | **Pn** | **14 01 37.0** | **-0.6** |
| **GRJI** | **Gresik** | **2.92** | **43** | P | **Pn** | **14 01 45.4** | **+0.2** |
| **GMJI** | **Gumukmas** | **3.05** | **75** | P | **Pn** | **14 01 47.5** | **+0.5** |
| **LEM** | **Lembang** | **3.59** | **308** | LR | LR | 14 03 01.5 | |
| | comp=Z,61nm,19.2s,baz=9.5,slow=36 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **3.69** | **81** | P | **Pn** | **14 01 56.0** | **+0.1** |
| **WRA** | **Warramunga Arr** | **25.48** | **118** | P | **P** | **14 06 24.1** | **-0.8** |
| | 0.4nm,0.9s,baz=289,slow=11,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **26.71** | **126** | P | **P** | **14 06 37.6** | **+1.6** |
| | 0.2nm,0.4s,baz=308,slow=9.4,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.02** | **338** | P | **P** | **14 11 08.2** | **-1.3** |
| | 0.1nm,0.5s,baz=140,slow=8.7,SNR=4.2 | | | | | | |

*UPP* ***10*** *14:06:12.7±0.3, 59.16N×15.96E, h0km±5km, ML1.8, Explosion*

*DNK* ***10*** *14:06:13.0±0.4, 59.16N×15.97E, h0km, ML1.8(UPP), Explosion*

*IDC* ***10*** *14:06:14.6±1.9, 59.22N×15.95E, h0km, mb1 3.5/2, mb1mx2.7/31, mbtmp3.4/2, ML1.8/3, Error ellipse: s-maj=22.1km s-min=7.3km az=13.0*

**ISC 10 14:06:12.2±0.9, 59.16N±0.03×15.97E±0.03, h0km, n40, σ0§55/44, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ESKU** | **Eskilstuna** | **0.23** | **71** | P | **Pg** | **14 06 17.2** | **+0.6** |
| ESKU | | | | S | **Sg** | **14 06 20.4** | **+0.9** |
| **ESKU** | **Eskilstuna** | **0.23** | **71** | P | **Pg** | **14 06 17.2** | **+0.6** |
| ESKU | | | | S | **Sg** | **14 06 20.4** | **+0.9** |
| **NRAU** | **Nora** | **0.63** | **311** | P | **Pg** | **14 06 24.4** | **+0.1** |
| **NRAU** | **Nora** | **0.63** | **311** | P | **Pg** | **14 06 24.4** | **+0.1** |
| **ASKU** | **Askersund** | **0.65** | **246** | P | **Pg** | **14 06 24.7** | **+0.1** |
| **ASKU** | **Askersund** | **0.65** | **246** | P | **Pg** | **14 06 24.7** | **+0.1** |
| **VIKU** | **Vikbolandet** | **0.76** | **150** | P | **Pg** | **14 06 27.0** | **+0.3** |
| **VIKU** | **Vikbolandet** | **0.76** | **150** | P | **Pg** | **14 06 27.0** | **+0.3** |
| **BACU** | **Backbrunna** | **0.91** | **39** | P | **Pg** | **14 06 29.7** | **+0.1** |
| **BACU** | **Backbrunna** | **0.91** | **39** | P | **Pg** | **14 06 29.7** | **+0.1** |
| **LNKU** | **Linkoeping** | **0.97** | **195** | P | **Pg** | **14 06 30.7** | **0.0** |
| **LNKU** | **Linkoeping** | **0.97** | **195** | P | **Pg** | **14 06 30.7** | **0.0** |
| **FIBU** | **Brunna** | **1.02** | **43** | P | **Pg** | **14 06 31.9** | **0.0** |
| **FIBU** | **Brunna** | **1.02** | **43** | P | **Pg** | **14 06 31.9** | **0.0** |
| **NYNU** | **Nynaeshamn** | **1.06** | **97** | P | **Pg** | **14 06 32.3** | **-0.2** |
| **NYNU** | **Nynaeshamn** | **1.06** | **97** | P | **Pg** | **14 06 32.3** | **-0.2** |
| **UPP** | **Uppsala** | **1.10** | **50** | P | **Pg** | **14 06 33.1** | **-0.1** |
| **OSTU** | **Oestervaala** | **1.23** | **28** | P | **Pg** | **14 06 35.5** | **-0.2** |
| **OSTU** | **Oestervaala** | **1.23** | **28** | P | **Pg** | **14 06 35.5** | **-0.2** |
| **FALU** | **Falun** | **1.34** | **357** | P | **Pg** | **14 06 37.4** | **-0.5** |
| **FALU** | **Falun** | **1.34** | **357** | P | **Pg** | **14 06 37.4** | **-0.5** |
| **FLYU** | **Flymyra** | **1.38** | **44** | P | **Pg** | **14 06 38.2** | **-0.3** |
| **FLYU** | **Flymyra** | **1.38** | **44** | P | **Pg** | **14 06 38.2** | **-0.3** |
| **NRTU** | **Norrtaelje** | **1.46** | **68** | P | **Pn** | **14 06 39.6** | **-0.1** |
| **NRTU** | **Norrtaelje** | **1.46** | **68** | P | **Pn** | **14 06 39.6** | **-0.1** |
| **NASU** | **Vaermlandsnaes** | **1.46** | **262** | P | **Pn** | **14 06 39.3** | **-0.4** |
| **NASU** | **Vaermlandsnaes** | **1.46** | **262** | P | **Pn** | **14 06 39.3** | **-0.4** |
| **HFS** | **Hagfors** | **1.51** | **310** | Pg | **Pn** | **14 06 40.6** | **0.0** |
| | 0.5nm,0.3s,baz=125,slow=17,SNR=19 | | | | | | |
| HFS | | | | Lg | Lg | 14 07 00.5 | |
| | 1.2nm,0.3s,baz=128,slow=33,SNR=11 | | | | | | |
| **UDD** | **Uddeholm** | **1.52** | **309** | P | **Pn** | **14 06 40.9** | **+0.3** |
| **VSTU** | **Vaestervik** | **1.53** | **169** | P | **Pn** | **14 06 40.7** | **0.0** |
| **VSTU** | **Vaestervik** | **1.53** | **169** | P | **Pn** | **14 06 40.7** | **0.0** |
| **FKPU** | **Falk** | **1.54** | **230** | P | **Pn** | **14 06 40.9** | **-0.1** |
| **FKPU** | **Falk** | **1.54** | **230** | P | **Pn** | **14 06 40.9** | **-0.1** |
| **EKSU** | **Eksjoe** | **1.63** | **193** | P | **Pn** | **14 06 42.1** | **0.0** |
| **EKSU** | **Eksjoe** | **1.63** | **193** | P | **Pn** | **14 06 42.1** | **0.0** |
| **GRAU** | **Graesoe** | **1.76** | **47** | P | **Pb** | **14 06 44.8** | **-0.5** |
| **GRAU** | **Graesoe** | **1.76** | **47** | P | **Pb** | **14 06 44.8** | **-0.5** |
| **NOA** | **NORSAR Array B** | **3.04** | **310** | Pn | **Pn** | **14 07 02.9** | **+1.4** |
| | 0.0nm,0.3s,baz=141,slow=13,SNR=3.4 | | | | | | |
| NOA | | | | Sn | **Sn** | **14 07 39.5** | **+0.9** |
| | 0.1nm,0.3s,baz=117,slow=20,SNR=2.9 | | | | | | |
| NOA | | | | Lg | Lg | 14 07 47.9 | |
| | 0.1nm,0.3s,baz=138,slow=26,SNR=8.4 | | | | | | |
| **FINES** | **FINESS Array B** | **5.52** | **61** | Pn | **Pn** | **14 07 37.0** | **+1.5** |
| | 0.3nm,0.3s,baz=250,slow=12,SNR=8.7 | | | | | | |
| FINES | | | | Sn | **Sn** | **14 08 38.8** | **-0.9** |
| | 0.4nm,0.3s,baz=246,slow=21,SNR=8.4 | | | | | | |
| FINES | | | | Lg | Lg | 14 08 57.6 | |
| | 0.1nm,0.3s,baz=252,slow=28,SNR=1.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **11.19** | **17** | Pn | **Pn** | **14 08 51.6** | **-1.5** |
| | baz=200,slow=14,SNR=2.2 | | | | | | |

*JMA* ***10*** *14:07:12.8±0.2, 32.28N×138.01E, h440km, M3.5*

*IDC* ***10*** *14:07:17.2±0.7, 32.30N×137.66E, h400km±8km, mb3.0/10, mb1 3.2/14, mb1mx2.9/35, mbtmp3.8/14, Error ellipse: s-maj=18.2km s-min=11.3km az=84.0*

**ISC 10 14:07:16.9±0.9, 32.36N±0.09×137.80E±0.10, h400km, n25, σ0§94/27, mb3.2/10, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TTO2** | **TONANKAI O.B.S** | **1.52** | **335** | P | **Pn** | **14 08 11.6** | **+1.9** |
| **JHJ** | **Hachijo jima 2** | **1.83** | **65** | P | Pn | 14 08 13.4 | +1.6 |
| | 23nm,0.3s,baz=221,slow=20,SNR=26 | | | | | | |
| JHJ | | | | S | **S** | **14 08 58.8** | **+2.6** |
| | 16nm,0.3s,baz=49,slow=22,SNR=1.5 | | | | | | |
| **JHJ2** | **Mitsune** | **1.85** | **66** | P | **Pn** | **14 08 11.5** | **-0.4** |
| **JTNC** | **Tanabenakahech** | **2.34** | **309** | P | **Pn** | **14 08 15.5** | **+0.4** |
| **JWY** | **Kouya** | **2.62** | **316** | P | **Pn** | **14 08 18.1** | **+1.0** |
| **JOD2** | **Odawara 2** | **3.09** | **20** | P | **Pn** | **14 08 20.4** | **-0.3** |
| JOD2 | | | | eS | **S** | **14 09 12.9** | **+0.4** |
| **JAI** | **Aioi** | **3.15** | **298** | P | **Pn** | **14 08 21.8** | **+0.5** |
| **JYTA** | **Yamagatataniaei** | **3.34** | **345** | P | **Pn** | **14 08 23.4** | **+0.5** |
| **BSO1** | **Boso 1** | **3.50** | **48** | P | **Pn** | **14 08 22.9** | **-0.8** |
| BSO1 | | | | eS | **S** | **14 09 17.5** | **-0.4** |
| **JRY** | **Ryogami san** | **3.76** | **14** | P | **Pn** | **14 08 26.6** | **0.0** |
| JRY | | | | eS | **S** | **14 09 24.5** | **+1.2** |
| **MAT** | **Matsushiro** | **4.18** | **4** | P | **Pn** | **14 08 30.9** | **+0.2** |
| MAT | | | | S | **S** | **14 09 28.9** | **-1.7** |
| **MJAR** | **Matsushiro Arr** | **4.18** | **4** | P | **Pn** | **14 08 31.0** | **+0.4** |
| | 1.0nm,0.3s,baz=178,slow=10,SNR=53 | | | | | | |
| MJAR | | | | S | **S** | **14 09 31.1** | **+0.5** |
| | 0.1nm,0.3s,baz=191,slow=20,SNR=1.9 | | | | | | |
| **KSRS** | **Korea Array** | **9.57** | **305** | P | **Pn** | **14 09 30.9** | **+1.1** |
| | 0.2nm,0.3s,baz=118,slow=10,SNR=4.9 | | | | | | |
| **ASAJ** | **Asahikawa** | **12.32** | **16** | P | **Pn** | **14 10 02.5** | **+0.8** |
| | 0.9nm,0.3s,baz=230,slow=13,SNR=9.9 | | | | | | |
| **KLR** | **Kul'dur** | **17.45** | **347** | P | **P** | **14 10 55.1** | **-0.3** |
| | 0.5nm,0.3s,baz=167,slow=9.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **28.32** | **312** | P | **P** | **14 12 35.6** | **-0.3** |
| | 0.2nm,0.4s,baz=112,slow=7.2,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.52** | **258** | P | **P** | **14 13 54.5** | **-0.2** |
| | 0.4nm,0.3s,baz=42,slow=8.6,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.25** | **306** | P | **P** | **14 14 48.3** | **-0.3** |
| | 0.3nm,0.6s,baz=90,slow=9.8,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.11** | **184** | P | **P** | **14 15 47.4** | **-0.7** |
| | 0.5nm,0.3s,baz=360,slow=7.6,SNR=21 | | | | | | |
| **ILAR** | **Eielson Array** | **55.02** | **30** | P | P | 14 16 09.6 | +1.2 |
| | 0.3nm,0.6s,baz=283,slow=7.2,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **55.84** | **184** | P | **P** | **14 16 14.1** | **-0.5** |
| | 0.5nm,0.6s,baz=13,slow=10.0,SNR=9.3 | | | | | | |
| **INK** | **Inuvik** | **59.88** | **25** | P | P | 14 16 43.1 | +1.4 |
| | 0.8nm,0.8s,baz=293,slow=3.4,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **67.31** | **339** | P | **P** | **14 17 30.1** | **+0.4** |
| | 5.1nm,1.0s,baz=56,slow=8.0,SNR=4.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.33** | **28** | P | P | 14 17 43.4 | +1.2 |
| | 0.3nm,0.4s,baz=299,slow=6.5,SNR=5.0 | | | | | | |
| **FINES** | **FINESS Array B** | **71.54** | **332** | P | **P** | **14 17 55.4** | **0.0** |
| | 3.7nm,1.0s,baz=79,slow=7.2,SNR=7.4 | | | | | | |

**GUC 10 14:22:00.2±0.6, 23.13S×67.30W, h242km±10km, ML3.5, 12C-2D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB15** | **IPOC Station P** | **2.00** | **267** | ⇑*i*P | Pn | 14 22 43.9 | +1.7 |
| PB15 | | | | *i* S | S | 14 23 16.9 | +1.7 |
| **PB06** | **IPOC Station P** | **2.14** | **281** | ⇑*i*P | Pn | 14 22 45.3 | +1.8 |
| PB06 | | | | *i* S | S | 14 23 19.1 | +1.8 |
| PB06 | | | | IAML | | 14 23 21.4 | |
| | comp=N,115nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **2.23** | **306** | ⇑*i*P | Pn | 14 22 46.5 | +2.1 |
| PB09 | | | | *i* S | S | 14 23 22.3 | +3.2 |
| **PB03** | **IPOC Station P** | **2.51** | **295** | ⇑*i*P | Pn | 14 22 49.1 | +1.9 |
| PB03 | | | | *i* S | S | 14 23 26.2 | +2.2 |
| PB03 | | | | IAML | | 14 23 28.4 | |
| | comp=E,68nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.75** | **286** | ⇑*i*P | Pn | 14 22 51.9 | +2.2 |
| PB04 | | | | *i* S | S | 14 23 31.3 | +2.8 |
| PB04 | | | | IAML | | 14 23 34.6 | |
| | comp=N,67nm,0.1s | | | | | | |
| **PB07** | **IPOC Station P** | **2.77** | **300** | ⇑*i*P | Pn | 14 22 52.0 | +2.1 |
| PB07 | | | | *i* S | S | 14 23 31.1 | +2.1 |
| PB07 | | | | IAML | | 14 23 32.2 | |
| | comp=N,74nm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **2.90** | **315** | ⇓*i*P | Pn | 14 22 53.1 | +1.8 |
| PB01 | | | | *i* S | S | 14 23 33.9 | +2.4 |
| PB01 | | | | IAML | | 14 23 37.6 | |
| | comp=E,56nm,0.1s | | | | | | |
| **PB02** | **IPOC Station P** | **3.00** | **306** | ⇑*i*P | Pn | 14 22 54.3 | +1.9 |
| PB02 | | | | *i* S | S | 14 23 35.5 | +2.1 |
| PB02 | | | | IAML | | 14 23 41.0 | |
| | comp=E,52nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **3.02** | **262** | ⇑*i*P | Pn | 14 22 54.6 | +2.2 |
| PB10 | | | | *e*S | S | 14 23 35.3 | +1.9 |
| PB10 | | | | IAML | | 14 23 39.5 | |
| | comp=N,31nm,0.2s | | | | | | |
| **PB14** | **IPOC Station P** | **3.21** | **242** | ⇑*i*P | Pn | 14 22 55.9 | +1.1 |
| **PB08** | **IPOC Station P** | **3.44** | **330** | ⇑*i*P | Pn | 14 23 00.0 | +2.5 |
| PB08 | | | | *i* S | S | 14 23 46.1 | +3.3 |
| PB08 | | | | IAML | | 14 23 48.7 | |
| | comp=N,21nm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **3.70** | **313** | *e*P | Pn | 14 23 01.6 | +1.5 |
| **GO01** | **Chusmiza** | **3.87** | **333** | ⇑*i*P | Pn | 14 23 04.4 | +1.8 |
| GO01 | | | | *e*S | S | 14 23 55.0 | +3.0 |
| **PB11** | **IPOC Station P** | **4.01** | **326** | ⇓*i*P | Pn | 14 23 04.9 | +1.0 |
| PB11 | | | | *i* S | S | 14 23 55.5 | +1.2 |
| **PB16** | **IPOC Station P** | **5.20** | **336** | ⇑*e*P | Pn | 14 23 20.9 | +2.1 |

*IDC* ***10*** *14:30:56.1±17.0, 35.93N×70.32E, h117km±110km, mb3.2/2, mb1 3.1/4, mb1mx2.6/39, mbtmp3.5/4, ML2.9/2, Error ellipse: s-maj=237.4km s-min=27.8km az=150.0*

*NNC* ***10*** *14:31:01.4±3.9, 36.50N×70.04E, h95km±78km, mb3.4, mpv3.8, Error ellipse: s-maj=32.7km s-min=26.7km az=47.0*

**ISC 10 14:31:00.4±2.1, 36.5N±0.1×70.03E±0.09, h100km, n9, σ1§26/12, 3C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK02** | **Karatay Array** | **6.65** | **3** | ⇓P | **Pn** | **14 32 36.8** | **+1.3** |
| | 3.4nm,0.4s | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **14 33 50.9** | **+1.2** |
| | 1.8nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **7.07** | **28** | ⇑P | **Pn** | **14 32 41.5** | **+0.2** |
| | 5.1nm,0.8s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **14 34 00.2** | **0.0** |
| | 10nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.75** | **32** | ⇑P | **Pn** | **14 32 50.0** | **-0.7** |
| **GEYT** | **Alibeck** | **9.62** | **282** | P | **Pn** | **14 33 16.2** | **+0.3** |
| | 0.3nm,0.3s,baz=74,slow=16,SNR=1.7 | | | | | | |
| GEYT | | | | S | **Sn** | **14 35 01.8** | **-0.3** |
| | 0.2nm,0.3s,baz=105,slow=23,SNR=1.6 | | | | | | |
| **MK31** | **Makanchi Array** | **13.79** | **38** | P | **Pn** | **14 34 13.7** | **+2.1** |
| | 1.4nm,0.9s,baz=216,slow=8.0,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.79** | **38** | P | **Pn** | **14 34 10.8** | **-0.8** |
| | 0.0nm,0.3s,baz=216,slow=14,SNR=1.8 | | | | | | |
| **AB31** | **Akbulak array** | **14.75** | **333** | P | **Pn** | **14 34 24.4** | **+0.6** |
| | 0.5nm,0.3s,baz=148,slow=11,SNR=55 | | | | | | |
| AB31 | | | | S | **Sn** | **14 37 04.9** | **-1.5** |
| | 1.0nm,0.6s,baz=154,slow=23,SNR=9.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.29** | **26** | P | **P** | **14 35 26.2** | **-1.7** |
| | 0.7nm,0.4s,baz=210,slow=10.0,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.93** | **268** | P | P | 14 41 25.0 | -4.6 |
| | 0.4nm,0.6s,baz=43,slow=5.0,SNR=1.9 | | | | | | |

*NEIC* ***10*** *14:36:17.5±1.8, 59.77N±0.02×152.88W±0.05, h18km±6km, Error ellipse: s-maj=3.8km s-min=3.2km az=214.0*

*AEIC* ***10*** *14:36:17±2.0, 59.77N±0.01×152.91W±0.04, h19km±5km, ML3.4, ML3.6/44(NEIC), Error ellipse: s-maj=3.4km s-min=1.7km az=70.0*

*IDC* ***10*** *14:36:20.8±3.7, 59.79N×153.04W, h52km±35km, mb2.9/1, mb1 3.7/6, mb1mx3.1/48, mbtmp3.6/6, ML3.7/5, Error ellipse: s-maj=71.1km s-min=13.3km az=98.0*

**ISC 10 14:36:17.5±0.9, 59.77N±0.02×152.89W±0.02, h18km±4km, n86, σ0§87/88, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.21** | **237** | | **Pg** | **14 36 22.7** | **+0.2** |
| **OPT** | **Oil Point** | **0.21** | **237** | P | **Pg** | **14 36 22.7** | **+0.2** |
| | baz=56 | | | | | | |
| **ILSW** | **Illianna Southw** | **0.25** | **330** | | **Pg** | **14 36 23.0** | **-0.3** |
| ILSW | | | | | **Sg** | **14 36 27.0** | **-0.3** |
| **ILSW** | **Illianna Southw** | **0.25** | **330** | IAML | | 14 36 27.6 | |
| | comp=E,8µm,0.6s | | | | | | |
| ILSW | | | | IAML | | 14 36 27.9 | |
| | comp=N,12µm,0.5s | | | | | | |
| **O20K** | **Slope Mountain** | **0.34** | **23** | | **Pb** | **14 36 25.1** | **-0.1** |
| O20K | | | | | **Sb** | **14 36 30.9** | **+0.6** |
| **O20K** | **Slope Mountain** | **0.34** | **23** | P | **Pb** | **14 36 25.1** | **-0.1** |
| | baz=203 | | | | | | |
| O20K | | | | S | **Sb** | **14 36 30.9** | **+0.6** |
| | baz=203 | | | | | | |
| **AU22** | **Augustine Moun** | **0.46** | **211** | | **Pb** | **14 36 26.9** | **-0.2** |
| AU22 | | | | | **Sb** | **14 36 33.7** | **+0.2** |
| **AUL** | **Augustine Lava** | **0.47** | **216** | | **Pb** | **14 36 27.1** | **-0.2** |
| AUL | | | | | **Sb** | **14 36 34.2** | **+0.2** |
| **AGU** | **Augustine-Summ** | **0.49** | **214** | | **Pb** | **14 36 27.5** | **-0.1** |
| **AUQ** | **Augustine Qik'** | **0.49** | **213** | | **Pb** | **14 36 27.4** | **-0.2** |
| **AUH** | **Augustine H** | **0.49** | **215** | | **Pb** | **14 36 27.6** | **0.0** |
| **HOM** | **Homer** | **0.64** | **99** | | **Pg** | **14 36 29.9** | **-0.2** |
| HOM | | | | | **Sg** | **14 36 39.4** | **+0.8** |
| **HOM** | **Homer** | **0.64** | **99** | P | **Pg** | **14 36 29.9** | **-0.2** |
| | baz=280 | | | | | | |
| HOM | | | | S | **Sg** | **14 36 39.4** | **+0.8** |
| | baz=280 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.66** | **5** | | **Pb** | **14 36 29.8** | **-0.7** |
| RED | | | | | **Sg** | **14 36 38.8** | **-0.5** |
| **RSO** | **Redoubt South** | **0.70** | **5** | | **Pb** | **14 36 30.2** | **-1.1** |
| **RDWB** | **Redoubt West** | **0.73** | **2** | | **Pb** | **14 36 30.8** | **-0.9** |
| RDWB | | | | | **Sb** | **14 36 40.4** | **-0.9** |
| **NCT** | **North Crescent** | **0.80** | **359** | | **Pb** | **14 36 32.0** | **-0.8** |
| **RDJH** | **Redoubt Jeurge** | **0.83** | **3** | | **Pb** | **14 36 32.6** | **-0.8** |
| **DFR** | **Drift River** | **0.84** | **7** | | **Pb** | **14 36 32.7** | **-0.8** |
| DFR | | | | | **Sb** | **14 36 43.6** | **-0.8** |
| **O19K** | **Port Alsworth** | **0.84** | **302** | | **Pb** | **14 36 32.8** | **-0.7** |
| O19K | | | | | **Sb** | **14 36 43.9** | **-0.5** |
| **O19K** | **Port Alsworth** | **0.84** | **302** | P | **Pb** | **14 36 32.8** | **-0.7** |
| | baz=120 | | | | | | |
| O19K | | | | S | **Sb** | **14 36 43.9** | **-0.5** |
| | baz=120 | | | | | | |
| **RDT** | **Redoubt** | **0.85** | **16** | | **Pb** | **14 36 32.8** | **-0.9** |
| **CNPM** | **China Poot** | **0.87** | **105** | | **Pb** | **14 36 32.9** | **-1.2** |
| CNPM | | | | | **Sb** | **14 36 44.6** | **-0.8** |
| **CNPM** | **China Poot** | **0.87** | **105** | IAML | | 14 36 46.1 | |
| | comp=E,2µm,1.0s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.92** | **205** | | **Pb** | **14 36 34.2** | **-0.8** |
| **Q19K** | **Cape Douglas,** | **0.92** | **205** | P | **Pb** | **14 36 34.2** | **-0.8** |
| | baz=24 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.01** | **89** | | **Pb** | **14 36 35.1** | **-1.4** |
| BRLK | | | | | **Sb** | **14 36 48.4** | **-1.1** |
| **BRLK** | **Bradley Lake** | **1.01** | **89** | IAML | | 14 36 49.9 | |
| | comp=N,1µm,0.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.09** | **90** | | **Pb** | **14 36 36.7** | **-1.0** |
| **BRSE** | **Bradley Lake S** | **1.09** | **90** | P | **Pb** | **14 36 36.7** | **-1.0** |
| | baz=272 | | | | | | |
| **O18K** | **Koktuh Hills** | **1.18** | **275** | | **Pn** | **14 36 38.4** | **-0.6** |
| **O18K** | **Koktuh Hills** | **1.18** | **275** | IAML | | 14 36 54.2 | |
| | comp=N,2µm,0.5s | | | | | | |
| O18K | | | | IAML | | 14 36 54.3 | |
| | comp=E,1µm,0.2s | | | | | | |
| **O18K** | **Koktuh Hills** | **1.18** | **275** | P | **Pn** | **14 36 38.4** | **-0.6** |
| | baz=93 | | | | | | |
| **P18K** | **Big Mountain,** | **1.25** | **254** | | **Pn** | **14 36 39.1** | **-0.9** |
| **P18K** | **Big Mountain,** | **1.25** | **254** | P | **Pn** | **14 36 39.1** | **-0.9** |
| | baz=72 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.32** | **324** | | **Pb** | **14 36 41.2** | **-0.5** |
| **N19K** | **Bonanza Creek** | **1.32** | **324** | IAML | | 14 37 01.3 | |
| | comp=N,922nm,0.6s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.32** | **324** | P | **Pb** | **14 36 41.2** | **-0.5** |
| | baz=142 | | | | | | |
| **SPU** | **Mount Spurr** | **1.48** | **16** | | **Pn** | **14 36 42.6** | **-0.6** |
| **SPCN** | **Chakachatna No** | **1.51** | **13** | | **Pn** | **14 36 43.6** | **+0.1** |
| **SLKM** | **Skilak Lake** | **1.53** | **60** | | **Pn** | **14 36 43.0** | **-0.9** |
| **SPCG** | **Spurr Capps Gl** | **1.59** | **15** | | **Pn** | **14 36 44.9** | **+0.1** |
| **SPNN** | **North Nagishla** | **1.61** | **3** | | **Pb** | **14 36 45.9** | **-0.9** |
| **O22K** | **Cooper Landing** | **1.74** | **64** | | **Pn** | **14 36 46.7** | **0.0** |
| **O22K** | **Cooper Landing** | **1.74** | **64** | P | **Pn** | **14 36 46.7** | **0.0** |
| | baz=247 | | | | | | |
| **SEW** | **Seward** | **1.76** | **77** | | **Pn** | **14 36 47.1** | **+0.1** |
| **SEW** | **Seward** | **1.76** | **77** | P | **Pn** | **14 36 47.1** | **+0.1** |
| | baz=260 | | | | | | |
| **STLK** | **Strandline Lak** | **1.82** | **16** | | **Pb** | **14 36 48.6** | **-1.6** |
| **SVW2** | **Sparrevohn** | **1.89** | **316** | | **Pn** | **14 36 48.9** | **0.0** |
| **SVW2** | **Sparrevohn** | **1.89** | **316** | IAML | | 14 37 17.8 | |
| | comp=E,550nm,0.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.00** | **175** | P | **Pb** | **14 36 51.5** | **-1.7** |
| | comp=E,41nm,0.3s,baz=21,slow=14,SNR=123 | | | | | | |
| KDAK | | | | S | **Sb** | **14 37 17.1** | **-0.5** |
| | comp=E,38nm,0.3s,baz=264,slow=19,SNR=12 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.00** | **175** | IAML | | 14 37 20.9 | |
| | comp=E,390nm,0.6s | | | | | | |
| KDAK | | | | IAML | | 14 37 27.0 | |
| | comp=E,449nm,0.8s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.05** | **48** | | **Pn** | **14 36 50.9** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **2.05** | **48** | IAML | | 14 37 19.8 | |
| | comp=N,321nm,0.3s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.05** | **48** | P | **Pn** | **14 36 50.9** | **-0.1** |
| | baz=231 | | | | | | |
| **PWL** | **Port Wells** | **2.52** | **62** | | **Pn** | **14 36 58.3** | **+0.8** |
| **PWL** | **Port Wells** | **2.52** | **62** | IAML | | 14 37 36.9 | |
| | comp=N,254nm,0.7s | | | | | | |
| PWL | | | | IAML | | 14 37 45.8 | |
| | comp=E,244nm,0.6s | | | | | | |
| **PMR** | **Palmer** | **2.60** | **44** | | **Pn** | **14 36 60.0** | **+1.4** |
| **L19K** | **White Mountain** | **2.61** | **339** | | **Pn** | **14 36 59.2** | **+0.5** |
| **L19K** | **White Mountain** | **2.61** | **339** | IAML | | 14 37 43.9 | |
| | comp=E,190nm,0.7s | | | | | | |
| **L19K** | **White Mountain** | **2.61** | **339** | P | **Pn** | **14 36 59.2** | **+0.5** |
| | baz=158 | | | | | | |
| **KNK** | **Knik Glacier** | **2.74** | **51** | | **Pn** | **14 37 01.8** | **+1.3** |
| **KNK** | **Knik Glacier** | **2.74** | **51** | IAML | | 14 37 53.4 | |
| | comp=E,306nm,0.7s | | | | | | |
| KNK | | | | IAML | | 14 37 53.6 | |
| | comp=N,236nm,0.7s | | | | | | |
| **KNK** | **Knik Glacier** | **2.74** | **51** | P | **Pn** | **14 37 01.8** | **+1.3** |
| | baz=235 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.80** | **42** | | **Pn** | **14 37 01.7** | **+0.3** |
| GHO | | | | IAML | | 14 37 53.0 | |
| | comp=E,227nm,0.9s | | | | | | |
| GHO | | | | IAML | | 14 37 55.3 | |
| | comp=N,286nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **3.03** | **46** | | **Pn** | **14 37 06.0** | **+1.5** |
| **SML** | **Sawmill** | **3.03** | **46** | IAML | | 14 38 05.6 | |
| | comp=E,193nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **3.03** | **46** | P | **Pn** | **14 37 06.1** | **+1.5** |
| | baz=230 | | | | | | |
| **FID** | **Port Fidalgo** | **3.34** | **70** | | **Pn** | **14 37 07.9** | **-0.9** |
| **TT01** | **Tatalina** | **3.49** | **336** | | **Pn** | **14 37 11.5** | **+0.7** |
| **TTA** | **Tatalina** | **3.51** | **336** | | **Pn** | **14 37 11.8** | **+0.6** |
| **TTA** | **Tatalina** | **3.51** | **336** | IAML | | 14 38 14.4 | |
| | comp=N,114nm,0.8s | | | | | | |
| TTA | | | | IAML | | 14 38 17.9 | |
| | comp=E,89nm,0.9s | | | | | | |
| **TTA** | **Tatalina** | **3.51** | **336** | P | **Pn** | **14 37 11.8** | **+0.6** |
| | baz=153 | | | | | | |
| **KLU** | **Klutina** | **3.84** | **60** | | **Pn** | **14 37 16.4** | **+0.6** |
| **KLU** | **Klutina** | **3.84** | **60** | IAML | | 14 38 03.6 | |
| | comp=N,73nm,0.7s | | | | | | |
| **KLU** | **Klutina

*cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*Triangular moment-tuple function*
*NOU **10** 15:10:39.1,20°.17S×174°.25W,h129km,mb5.5/74, Tonga Islands*
**ISC 10 15:10:35.4±0.3,20°42S±0°.04×174°74W±0°.05,h56**km±2km, **h56**km:**pP-P,n1076,s1940/996,mb5.4**/265,**MS4.2**/47,
**220C-80D,Fault plane solution: NP1:**ϕ=175.21881°, δ77.33703°,λ91.84798°. **NP2:**ϕ=346.84601°,δ12.79493°, λ81.83226°. **Principal axes:** T Plg57.6246°, Azm87.6595°; N Plg1.8030°, Azm354.8136°; P Plg32.3127°, Azm263.6727°; **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.72** | **74** | Pn | **Pn** | **15 11 40.5** | **-3.7** |
| **NIUE** | **Niue** | **4.72** | **74** | P | **Pn** | **15 11 41.0** | **-3.2** |
| **TAVE** | **Taveuni** | **6.14** | **306** | P | Pn | 15 12 11.0 | +7.5 |
| **DGTI** | **Dogotuki** | **6.66** | **307** | P | Pn | 15 12 17.6 | +6.9 |
| **AFI** | **Afiamalu** | **7.07** | **24** | P | Pn | 15 12 10.9 | -5.5 |
| | 56nm,0.3s,baz=199,slow=4.4,SNR=129 | | | | | | |
| AFI | | | | S | Sn | 15 13 21.1 | -14 |
| | 282nm,0.3s,baz=58,slow=21,SNR=9.2 | | | | | | |
| AFI | | | | LR | LR | 15 14 58.3 | |
| | comp=Z,721nm,18.8s,baz=206,slow=38 | | | | | | |
| **AFI** | **Afiamalu** | **7.07** | **24** | P | **Pn** | **15 12 13.5** | **-2.9** |
| **MSVF** | **Nonsavu** | **7.32** | **290** | P | Pn | 15 12 28.3 | +8.4 |
| | 30nm,0.3s,baz=117,slow=12,SNR=199 | | | | | | |
| **MSVF** | **Nonsavu** | **7.32** | **290** | | Pn | 15 12 27.3 | +7.4 |
| **MSVF** | **Nonsavu** | **7.32** | **290** | P | Pn | 15 12 28.7 | +8.8 |
| **RIZ** | **Raoul Island** | **9.25** | **198** | P | **Pn** | **15 12 46.0** | **-0.1** |
| RIZ | | | | S | **Sn** | **15 14 29.9** | **+1.2** |
| **RAO** | **Raoul Island** | **9.25** | **198** | P | **Pn** | **15 12 46.9** | **+0.7** |
| | 56nm,0.3s,baz=1.1,slow=22,SNR=1.9 | | | | | | |
| RAO | | | | S | **Sn** | **15 14 24.5** | **-4.3** |
| | 73nm,0.3s,baz=99,slow=24,SNR=2.0 | | | | | | |
| **RAO** | **Raoul Island** | **9.25** | **198** | | **Pn** | **15 12 46.4** | **+0.2** |
| **RAO** | **Raoul Island** | **9.25** | **198** | P | Pn | 15 12 54.0 | +7.8 |
| **GLKZ** | **Green Lake** | **9.26** | **198** | P | **Pn** | **15 12 47.9** | **+1.6** |
| GLKZ | | | | S | **Sn** | **15 14 26.7** | **-2.4** |
| **RAR** | **Rarotonga** | **14.02** | **96** | P | Pn | 15 13 46.2 | -5.0 |
| | 24nm,0.3s,baz=257,slow=9.6,SNR=90 | | | | | | |
| RAR | | | | S | Sn | 15 16 09.2 | -16 |
| | 8.2nm,0.3s,baz=121,slow=22,SNR=2.1 | | | | | | |
| RAR | | | | LR | LR | 15 17 52.7 | |
| | comp=Z,1μm,21.7s,baz=276,slow=31 | | | | | | |
| **RAR** | **Rarotonga** | **14.02** | **96** | P | **Pn** | **15 13 47.7** | **-3.5** |
| **RAR** | **Rarotonga** | **14.02** | **96** | Pn | **Pn** | **15 13 47.7** | **-3.5** |
| **RAR** | **Rarotonga** | **14.02** | **96** | P | **Pn** | **15 13 47.8** | **-3.5** |
| **MARNC** | **Mare, Loyalty** | **16.13** | **263** | | **P** | **15 14 22.0** | **+1.1** |
| **MARNC** | **Mare, Loyalty** | **16.13** | **263** | P | **P** | **15 14 23.2** | **+2.2** |
| **PINNC** | **Pines Island,** | **16.72** | **259** | | **P** | **15 14 31.0** | **+3.5** |
| PINNC | | | | IAmb | IAmb | 15 14 55.9 | |
| | comp=Z,422nm,1.4s | | | | | | |
| **PINNC** | **Pines Island,** | **16.72** | **259** | P | **P** | **15 14 31.9** | **+4.4** |
| **LIFNC** | **LIFOU** | **16.88** | **266** | | **P** | **15 14 31.8** | **+2.6** |
| **LIFNC** | **LIFOU** | **16.88** | **266** | P | **P** | **15 14 32.4** | **+3.2** |
| **YATNC** | **Mamie plateau,** | **17.20** | **261** | P | **P** | **15 14 37.7** | **+4.8** |
| **OUENC** | **Ouen Island, N** | **17.27** | **260** | P | **P** | **15 14 37.2** | **+3.6** |
| **OUENC** | **Ouen Island, N** | **17.27** | **260** | P | **P** | **15 14 38.1** | **+4.6** |
| **DZM** | **Mont Dzumac** | **17.62** | **261** | *e*P | **P** | **15 14 41.5** | **+4.0** |
| | comp=Z,518nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **17.62** | **261** | P | **P** | **15 14 41.1** | **+3.6** |
| | comp=Z,7.8nm,0.3s,baz=94,slow=12,SNR=75 | | | | | | |
| DZM | | | | LR | LR | 15 20 34.3 | |
| | comp=Z,1μm,20.2s,baz=84,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **17.62** | **261** | P | **P** | **15 14 41.6** | **+4.0** |
| DZM | | | | IAmb | IAmb | 15 14 49.4 | |
| | comp=Z,210nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **17.62** | **261** | P | **P** | **15 14 41.4** | **+4.0** |
| **ONTNC** | **Ouen Toro** | **17.62** | **261** | P | **P** | **15 14 38.6** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **17.62** | **261** | P | **P** | **15 14 41.8** | **+4.4** |
| **NOUC** | **Port Laguerre** | **17.75** | **261** | P | **P** | **15 14 43.2** | **+4.3** |
| **SANVU** | **Saraoutou** | **17.88** | **283** | P | **P** | **15 14 42.4** | **+2.1** |
| SANVU | | | | IAmb | IAmb | 15 15 11.2 | |
| | comp=Z,482nm,1.3s | | | | | | |
| **SANVU** | **Saraoutou** | **17.88** | **283** | P | **P** | **15 14 44.3** | **+4.0** |
| **OUZ** | **Omahuta** | **17.97** | **212** | P | **Pn** | **15 14 43.9** | **+2.6** |
| **OUZ** | **Omahuta** | **17.97** | **212** | P | **Pn** | **15 14 44.1** | **+2.8** |
| **MXZ** | **Matakaoa Point** | **18.12** | **198** | P | **Pn** | **15 14 45.2** | **+2.1** |
| **MXZ** | **Matakaoa Point** | **18.12** | **198** | P | **Pn** | **15 14 44.1** | **+1.0** |
| **WCZ** | **Waipu Caves** | **18.19** | **209** | P | **Pn** | **15 14 45.8** | **+1.9** |
| **URZ** | **Urewera** | **19.13** | **200** | P | **P** | **15 14 54.1** | **+0.3** |
| | comp=Z,25nm,0.3s,baz=343,slow=2.4,SNR=128 | | | | | | |
| URZ | | | | S | S | 15 18 13.4 | -14 |
| | comp=Z,2.8nm,0.3s,baz=197,slow=14,SNR=8.0 | | | | | | |
| **URZ** | **Urewera** | **19.13** | **200** | P | **P** | **15 14 53.4** | **-0.4** |
| URZ | | | | IAmb | IAmb | 15 14 57.5 | |
| | comp=Z,251nm,1.2s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **19.65** | **266** | P | **Pn** | **15 15 03.4** | **+1.8** |
| **NMHZ** | **Naumai** | **19.99** | **200** | P | **Pn** | **15 15 05.3** | **-0.2** |
| NMHZ | | | | S | S | 15 18 32.4 | -13 |
| **ARHZ** | **Aropaoanui** | **20.08** | **199** | P | Pn | 15 15 06.9 | +0.4 |
| ARHZ | | | | S | S | 15 18 29.6 | -17 |
| **BKZ** | **Black Stump Fm** | **20.15** | **200** | P | Pn | 15 15 06.9 | -0.5 |
| BKZ | | | | S | S | 15 18 34.0 | -14 |
| **BKZ** | **Black Stump Fm** | **20.15** | **200** | P | **P** | **15 15 04.5** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **20.15** | **200** | P | **P** | **15 15 06.1** | **+1.0** |
| **HIZ** | **Hauiti** | **20.15** | **204** | P | **P** | **15 15 05.9** | **+0.9** |
| HIZ | | | | IAmb | IAmb | 15 15 10.5 | |
| | comp=Z,214nm,1.0s | | | | | | |
| **HIZ** | **Hauiti** | **20.15** | **204** | P | Pn | 15 15 08.9 | +1.6 |
| **MCHZ** | **McNeill Hill** | **20.34** | **199** | P | **P** | **15 15 06.0** | **-1.0** |
| MCHZ | | | | S | S | 15 18 39.5 | -12 |
| **KWHZ** | **Kaweka Forest** | **20.41** | **200** | P | **P** | **15 15 06.9** | **-1.0** |
| KWHZ | | | | S | S | 15 18 42.3 | -11 |
| **BHHZ** | **Black Hill Sta** | **20.58** | **201** | P | **P** | **15 15 09.4** | **-0.4** |
| BHHZ | | | | S | S | 15 18 44.1 | -13 |
| **KAHZ** | **Kahuranaki** | **20.61** | **199** | P | **P** | **15 15 11.1** | **+1.1** |
| KAHZ | | | | S | S | 15 18 44.6 | -13 |
| **PXZ** | **Pawanui** | **20.83** | **198** | P | Pn | 15 15 14.4 | -0.8 |
| PXZ | | | | S | S | 15 18 47.9 | -14 |
| **PNHZ** | **Pukenui** | **20.92** | **200** | P | **P** | **15 15 12.8** | **-0.7** |
| PNHZ | | | | S | S | 15 18 49.7 | -14 |
| **WPHZ** | **Waipukurau** | **20.99** | **199** | P | Pn | 15 15 16.1 | -1.1 |
| WPHZ | | | | S | **S** | **15 18 54.7** | **-10** |
| **PRHZ** | **Porangahau** | **21.11** | **199** | P | **P** | **15 15 15.4** | **0.0** |
| PRHZ | | | | S | S | 15 18 54.6 | -13 |
| **TSZ** | **Takapari Road** | **21.13** | **200** | P | **P** | **15 15 15.5** | **-0.1** |
| TSZ | | | | S | S | 15 18 53.5 | -14 |
| **DVHZ** | **Dannevirke** | **21.29** | **199** | P | **P** | **15 15 16.5** | **-0.7** |
| DVHZ | | | | S | S | 15 18 57.7 | -13 |
| **ANWZ** | **Angora Road** | **21.34** | **199** | P | **P** | **15 15 17.5** | **-0.2** |
| ANWZ | | | | S | **S** | **15 19 01.2** | **-10** |
| **PRWZ** | **Pori Road** | **21.58** | **200** | P | **P** | **15 15 20.4** | **0.0** |
| PRWZ | | | | S | S | 15 19 04.7 | -12 |
| **BFZ** | **Birch Farm** | **21.61** | **199** | P | **P** | **15 15 21.5** | **+0.8** |
| BFZ | | | | IAmb | IAmb | 15 15 26.8 | |
| | comp=Z,122nm,0.7s | | | | | | |
| **BFZ** | **Birch Farm** | **21.61** | **199** | P | **P** | **15 15 23.2** | **+2.5** |
| **MRZ** | **Mangatainoka R** | **21.80** | **200** | P | **P** | **15 15 21.3** | **-1.4** |
| MRZ | | | | S | S | 15 19 07.6 | -13 |
| **MSWZ** | **Moikau Station** | **22.59** | **200** | P | **P** | **15 15 30.8** | **-0.4** |
| **SNZO** | **South Karori** | **22.67** | **201** | P | **P** | **15 15 32.8** | **+0.7** |
| **BHW** | **Baring Head** | **22.70** | **201** | P | **P** | **15 15 31.2** | **-1.2** |
| **PLWZ** | **Palliser** | **22.73** | **200** | P | **P** | **15 15 32.9** | **+0.2** |
| **QRZ** | **Quartz Range** | **23.05** | **205** | P | **P** | **15 15 38.0** | **+2.0** |
| **NNZ** | **Nelson** | **23.06** | **203** | IAmb | IAmb | 15 15 42.9 | |
| | comp=Z,69nm,0.6s | | | | | | |
| **THZ** | **Tophouse** | **23.71** | **203** | IAmb | IAmb | 15 15 49.6 | |
| | comp=Z,131nm,0.6s | | | | | | |
| **PAE** | **Paea** | **23.93** | **88** | *e*P | **P** | **15 15 44.2** | **-0.3** |
| | comp=Z,34nm,1.2s | | | | | | |
| **PAE** | **Paea** | **23.93** | **88** | *e*T | T | 15 40 04.2 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **23.95** | **87** | *e*P | **P** | **15 15 44.6** | **-0.1** |
| | comp=Z,181nm,1.2s | | | | | | |
| **PPT2** | **Papeete2** | **23.95** | **87** | *e*T | T | 15 40 05.5 | |
| | comp=Z,20nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **23.95** | **87** | P | **P** | **15 15 44.5** | **-0.2** |
| | comp=Z,115nm,0.8s,baz=341,slow=4.3,SNR=11 | | | | | | |
| PPT | | | | LR | LR | 15 24 44.6 | |
| | comp=Z,347nm,18.1s,baz=258,slow=35 | | | | | | |
| **PPTF** | **Pamatai, Papee** | **23.96** | **87** | P | **P** | **15 15 43.2** | **-1.7** |
| PPTF | | | | IAmb | IAmb | 15 15 48.1 | |
| | comp=Z,240nm,1.2s | | | | | | |
| **KHZ** | **Kahutara** | **24.05** | **202** | IAmb | IAmb | 15 15 51.9 | |
| | comp=Z,80nm,0.7s | | | | | | |
| **RPZ** | **Rata Peaks** | **26.08** | **204** | IAmb | IAmb | 15 16 10.1 | |
| | comp=Z,109nm,0.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **26.08** | **204** | P | **P** | **15 16 05.6** | **+1.8** |
| **PMOR** | **Pomariorio Ree** | **26.12** | **82** | *e*T | T | 15 42 45.3 | |
| | comp=Z,8.7nm,0.3s | | | | | | |
| **VAH** | **Vaihoa** | **26.30** | **83** | *e*T | T | 15 42 59.0 | |
| | comp=Z,6.8nm,0.2s | | | | | | |
| **HNR** | **Honiara** | **26.75** | **290** | LR | LR | 15 25 18.2 | |
| | comp=Z,234nm,21.9s,baz=136,slow=33 | | | | | | |
| **LBZ** | **Lake Benmore** | **26.98** | **204** | IAmb | IAmb | 15 16 20.4 | |
| | comp=Z,73nm,0.8s | | | | | | |
| **ODZ** | **Otahua Downs** | **27.37** | **203** | P | **P** | **15 16 17.2** | **+1.9** |
| **WKZ** | **Wanaka** | **27.81** | **205** | IAmb | IAmb | 15 16 44.0 | |
| | comp=Z,99nm,0.8s | | | | | | |
| **MLZ** | **Mavora Lakes** | **28.62** | **206** | IAmb | IAmb | 15 16 32.2 | |
| | comp=Z,51nm,0.7s | | | | | | |
| **DCZ** | **Deep Cove** | **29.10** | **207** | IAmb | IAmb | 15 16 53.0 | |
| | comp=Z,77nm,1.3s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.12** | **205** | IAmb | IAmb | 15 16 38.5 | |
| | comp=Z,101nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **31.82** | **255** | P | **P** | **15 16 54.6** | **-0.3** |
| **EIDS** | **Eidsvold** | **31.82** | **255** | P | **P** | **15 16 54.8** | **-0.2** |
| **ARMA** | **Armidale** | **31.86** | **245** | P | **P** | **15 16 56.2** | **+0.8** |
| **ARMA** | **Armidale** | **31.86** | **245** | P | **P** | **15 16 56.2** | **+0.8** |
| **MGCD** | **Mangrove Creek** | **32.88** | **240** | P | **P** | **15 17 04.2** | **0.0** |
| **SYDH** | **Sydney Hard Ro** | **33.32** | **239** | P | **P** | **15 17 09.0** | **+1.0** |
| **RMQ** | **Roma** | **33.95** | **253** | P | **P** | **15 17 14.6** | **+1.0** |
| **CNB** | **Canberra Magne** | **34.82** | **237** | P | **P** | **15 17 22.3** | **+1.2** |
| **CAN** | **Canberra** | **35.11** | **237** | IAmb | IAmb | 15 17 25.3 | |
| | comp=Z,51nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **35.11** | **237** | P | **P** | **15 17 24.3** | **+0.7** |
| **TAOE** | **Nuku Hiva Isla** | **35.31** | **76** | *e*T | T | 15 54 00.2 | |
| | comp=Z,97nm,0.3s | | | | | | |
| **CTA** | **Charters Tower** | **36.54** | **264** | LR | LR | 15 31 10.0 | |
| | comp=Z,729nm,19.6s,baz=91,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **36.54** | **264** | P | **P** | **15 17 36.3** | **+0.4** |
| **CTAO** | **Charters Tower** | **36.54** | **264** | P | **P** | **15 17 35.5** | **-0.4** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,57nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **36.54** | **264** | P | **P** | **15 17 35.5** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 15 17 36.9 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **36.54** | **264** | P | **P** | **15 17 36.5** | **+0.6** |
| **CMSA** | **Cobar Meteorol** | **37.07** | **244** | P | **P** | **15 17 40.2** | **-0.1** |
| **QLP** | **Quilpie** | **38.00** | **253** | P | **P** | **15 17 47.8** | **-0.4** |
| **PMG** | **Port Moresby** | **38.32** | **281** | LR | LR | 15 31 28.2 | |
| | comp=Z,281nm,18.3s,baz=126,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **38.32** | **281** | *i* P | **P** | **15 17 50.5** | **-0.5** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,83nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **38.32** | **281** | P | **P** | **15 17 50.2** | **-0.9** |
| PMG | | | | IAmb | IAmb | 15 17 52.2 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **38.32** | **281** | P | **P** | **15 17 51.2** | **+0.2** |
| **PMG** | **Port Moresby** | **38.32** | **281** | P | **P** | **15 17 51.0** | **0.0** |
| **CORO** | **Coronation Par** | **38.42** | **228** | P | **P** | **15 17 52.9** | **+1.3** |
| **TOO** | **Toolangi** | **38.43** | **235** | P | **P** | **15 17 51.5** | **-0.2** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,58nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **38.43** | **235** | P | **P** | **15 17 51.5** | **-0.2** |
| TOO | | | | IAmb | IAmb | 15 17 52.8 | |
| | comp=Z,58nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **38.43** | **235** | P | **P** | **15 17 52.0** | **+0.3** |
| **MTSU** | **Mount Surprise** | **38.65** | **266** | P | **P** | **15 17 53.7** | **-0.1** |
| **TAU** | **Tasmania Unive** | **38.85** | **226** | P | **P** | **15 17 55.9** | **+0.7** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,51nm,1.2s | | | | | | |
| **TAU** | **Tasmania Unive** | **38.85** | **226** | P | **P** | **15 17 55.9** | **+0.7** |
| **GEXS** | **Deakin Univers** | **39.51** | **234** | P | **P** | **15 18 01.4** | **+0.7** |
| **BRAT** | **Ballarat** | **39.62** | **235** | P | **P** | **15 18 02.7** | **+1.1** |
| **STKA** | **Stephens Creek** | **40.58** | **245** | P | **P** | **15 18 09.6** | **0.0** |
| | comp=Z,40nm,0.8s,baz=88,slow=9.5,SNR=83 | | | | | | |
| STKA | | | | LR | LR | 15 33 05.6 | |
| | comp=Z,427nm,19.2s,baz=70,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **40.58** | **245** | P | **P** | **15 18 09.7** | **0.0** |
| **COEN** | **Coen** | **40.63** | **272** | IAmb | IAmb | 15 18 12.1 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **COEN** | **Coen** | **40.63** | **272** | P | **P** | **15 18 10.5** | **+0.2** |
| **ARPS** | **Mount Arapiles** | **41.09** | **237** | P | **P** | **15 18 13.8** | **0.0** |
| **INKA** | **Innaminka** | **41.12** | **251** | P | **P** | **15 18 15.0** | **+0.9** |
| **QIS** | **Mount Isa** | **42.66** | **261** | P | **P** | **15 18 26.5** | **-0.4** |
| **HTT** | **Hallett** | **42.97** | **243** | P | **P** | **15 18 29.0** | **-0.3** |
| **LCRK** | **Leigh Creek** | **43.38** | **247** | P | **P** | **15 18 32.2** | **-0.3** |
| **NAPP** | **Napperby** | **43.59** | **243** | P | **P** | **15 18 34.3** | **+0.1** |
| **KHLU** | **Kahalu`u** | **43.84** | **26** | P | **P** | **15 18 34.6** | **-1.8** |
| KHLU | | | | IAmb | IAmb | 15 18 37.0 | |
| | comp=Z,84nm,0.8s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **44.02** | **27** | P | **P** | **15 18 36.0** | **-2.0** |
| **WHYH** | **Whyalla** | **44.06** | **243** | P | **P** | **15 18 37.7** | **-0.3** |
| **HPAH** | **Hawaii Prepara** | **44.31** | **26** | P | **P** | **15 18 38.2** | **-2.0** |
| **KIP** | **Kipapa** | **44.69** | **22** | *ce*P | **P** | **15 18 42.4** | **-0.6** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,248nm,2.5s | | | | | | |
| **KIP** | **Kipapa** | **44.69** | **22** | P | **P** | **15 18 40.9** | **-2.0** |
| **BBOO** | **Buckleboo** | **45.32** | **244** | P | **P** | **15 18 47.3** | **-0.7** |
| **BBOO** | **Buckleboo** | **45.32** | **244** | P | **P** | **15 18 47.4** | **-0.7** |
| **OOD** | **Oodnadatta** | **45.59** | **251** | P | **P** | **15 18 50.4** | **+0.1** |
| **JAY** | **Jayapura** | **46.94** | **286** | LR | LR | 15 37 16.1 | |
| | comp=Z,196nm,19.9s,baz=140,slow=34 | | | | | | |
| **MULG** | **Mulgathing** | **46.97** | **247** | P | **P** | **15 19 00.2** | **-0.8** |
| **GENI** | **Genyem** | **47.39** | **286** | P | **P** | **15 19 01.6** | **-2.9** |
| | comp=Z,3μmcomp=Z,221nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **47.39** | **286** | P | **P** | **15 19 04.9** | **+0.5** |
| **WR0** | **Warramunga Arr** | **47.45** | **261** | P | **P** | **15 19 03.5** | **-1.4** |
| **ASAR** | **Alice Springs** | **47.51** | **256** | P | **P** | **15 19 04.2** | **-1.1** |
| | comp=Z,28nm,0.8s,baz=97,slow=8.7,SNR=262 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 20 35.7** | **+0.8** |
| | comp=Z,8.4nm,0.7s,baz=102,slow=4.4,SNR=8.2 | | | | | | |
| ASAR | | | | ScP | **ScP** | **15 24 26.7** | **+2.3** |
| | comp=Z,5.9nm,1.0s,baz=102,slow=4.2,SNR=9.8 | | | | | | |
| ASAR | | | | S | **S** | **15 25 50.3** | **-6.2** |
| | comp=Z,3.5nm,0.9s,baz=98,slow=16,SNR=9.2 | | | | | | |
| ASAR | | | | ScS | **ScS** | **15 28 54.9** | **+0.3** |
| | comp=Z,2.6nm,0.8s,baz=90,slow=6.5,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 15 38 09.1 | |
| | comp=Z,381nm,19.9s,baz=106,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **47.51** | **256** | P | **P** | **15 19 04.5** | **-0.9** |
| **WB0** | **Warramunga Arr** | **47.62** | **262** | IAmb | IAmb | 15 19 11.8 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **47.63** | **261** | IAmb | IAmb | 15 19 06.5 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **47.63** | **261** | *ce*P | **P** | **15 19 04.8** | **-1.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **47.63** | **261** | P | **P** | **15 19 04.7** | **-1.7** |
| WRAB | | | | IAmb | IAmb | 15 19 06.4 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **47.63** | **261** | P | **P** | **15 19 05.1** | **-1.2** |
| **WRA** | **Warramunga Arr** | **47.64** | **261** | P | **P** | **15 19 04.8** | **-1.6** |
| | comp=Z,8.2nm,0.3s,baz=96,slow=7.5,SNR=250 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 20 36.0** | **+0.7** |
| | comp=Z,7.4nm,0.9s,baz=94,slow=4.0,SNR=1.8 | | | | | | |
| WRA | | | | ScP | **ScP** | **15 24 26.3** | **+1.4** |
| | comp=Z,4.5nm,1.1s,baz=90,slow=5.0,SNR=6.7 | | | | | | |
| WRA | | | | S | **S** | **15 25 50.8** | **-7.6** |
| | comp=Z,1.1nm,0.7s,baz=97,slow=15,SNR=4.3 | | | | | | |
| WRA | | | | ScS | **ScS** | **15 28 56.0** | **+0.5** |
| | comp=Z,0.6nm,0.8s,baz=106,slow=5.3,SNR=2.6 | | | | | | |
| WRA | | | | LR | LR | 15 38 07.1 | |
| | comp=Z,423nm,20.4s,baz=114,slow=35 | | | | | | |
| **SMPI** | **Sarmi** | **48.96** | **286** | P | **P** | **15 19 16.2** | **-0.4** |
| | comp=Z,50nm,1.1s | | | | | | |
| **KDU** | **Kakadu** | **51.01** | **270** | P | **P** | **15 19 31.0** | **-1.1** |
| **SRPI** | **Serui, Papua** | **51.24** | **285** | P | **P** | **15 19 33.0** | **-0.9** |
| | comp=Z,66nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **52.13** | **246** | P | **P** | **15 19 38.8** | **-1.5** |
| FORT | | | | IAmb | IAmb | 15 19 51.3 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **52.13** | **246** | P | **P** | **15 19 39.1** | **-1.2** |
| **GUMO** | **Guam** | **52.15** | **307** | LR | LR | 15 40 32.4 | |
| | comp=Z,74nm,20.0s,baz=114,slow=35 | | | | | | |
| **MTN** | **Manton Dam** | **52.22** | **269** | IAmb | IAmb | 15 19 41.3 | |
| | comp=Z,48nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **52.22** | **269** | P | **P** | **15 19 40.5** | **-0.7** |
| **WRKA** | **Warakurna** | **52.42** | **254** | P | **P** | **15 19 41.5** | **-1.2** |
| **KNRA** | **Kununurra** | **53.71** | **265** | P | **P** | **15 19 52.2** | **0.0** |
| **FAKI** | **Fak Fak** | **54.47** | **281** | P | **P** | **15 19 57.0** | **-0.7** |
| FAKI | | | | IAmb | IAmb | 15 20 21.5 | |
| | comp=Z,49nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.06** | **261** | LR | LR | 15 43 38.6 | |
| | comp=Z,274nm,18.2s,baz=89,slow=35 | | | | | | |
| **SIJI** | **Sorong** | **56.18** | **283** | LR | LR | 15 43 33.8 | |
| | comp=Z,191nm,20.4s,baz=345,slow=35 | | | | | | |
| **SWI** | **Sorong** | **56.19** | **283** | P | **P** | **15 20 10.2** | **+0.1** |
| | comp=Z,1μmcomp=Z,176nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **58.28** | **186** | P | **P** | **15 20 27.5** | **+3.6** |
| | comp=Z,20nm,1.0s,baz=357,slow=7.0,SNR=14 | | | | | | |
| VNDA | | | | LR | LR | 15 41 05.3 | |
| | comp=Z,46nm,21.8s,baz=25,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **58.28** | **186** | P | **P** | **15 20 27.9** | **+4.0** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,50nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **58.28** | **186** | P | **P** | **15 20 27.9** | **+4.0** |
| VNDA | | | | IAmb | IAmb | 15 20 31.8 | |
| | comp=Z,50nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **59.56** | **271** | P | **P** | **15 20 33.0** | **-0.8** |
| | comp=Z,1μmcomp=Z,171nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **59.56** | **271** | P | **P** | **15 20 34.5** | **+0.6** |
| **SOEI** | **Soe** | **59.56** | **271** | P | **P** | **15 20 33.8** | **0.0** |
| **RPN** | **Rapa Nui** | **59.65** | **110** | LR | LR | 15 39 33.4 | |
| | comp=Z,234nm,19.1s,baz=266,slow=29 | | | | | | |
| **LBMI** | **Labuha** | **59.73** | **282** | P | **P** | **15 20 32.8** | **-2.1** |
| | comp=Z,33nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **59.98** | **270** | LR | LR | 15 47 28.1 | |
| | comp=Z,209nm,18.2s,baz=108,slow=37 | | | | | | |
| **BATI** | **Baumata** | **59.98** | **270** | P | **P** | **15 20 36.7** | **0.0** |
| | comp=Z,33nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **60.58** | **280** | P | **P** | **15 20 38.3** | **-2.4** |
| | comp=Z,54nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **60.58** | **280** | P | **P** | **15 20 39.6** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **60.66** | **256** | P | **P** | **15 20 40.0** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 15 20 40.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **60.66** | **256** | P | **P** | **15 20 40.0** | **-1.2** |
| **MEEK** | **Meekatharra** | **60.83** | **250** | P | **P** | **15 20 40.9** | **-1.4** |
| **MBWA** | **Marble Bar** | **60.85** | **257** | P | **P** | **15 20 41.3** | **-1.2** |
| **MBWA** | **Marble Bar** | **60.85** | **257** | P | **P** | **15 20 41.3** | **-1.2** |
| **KLBR** | **Kellerberrin** | **60.85** | **245** | P | **P** | **15 20 42.1** | **-0.3** |
| **NWAO** | **Narrogin (SRO)** | **61.13** | **243** | P | **P** | **15 20 42.9** | **-1.3** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.13** | **243** | P | **P** | **15 20 42.9** | **-1.3** |
| NWAO | | | | IAmb | IAmb | 15 20 45.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **BLDU** | **Ballidu** | **61.87** | **245** | P | **P** | **15 20 48.9** | **-0.4** |
| **MUN** | **Mundaring** | **62.11** | **244** | P | **P** | **15 20 49.9** | **-0.9** |
| **MORW** | **Morawa** | **62.68** | **247** | P | **P** | **15 20 53.9** | **-0.7** |
| MORW | | | | IAmb | IAmb | 15 20 54.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **62.68** | **247** | P | **P** | **15 20 54.0** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **64.16** | **269** | P | **P** | **15 21 04.3** | **-0.4** |
| | comp=Z,58nm,1.3s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **64.25** | **273** | P | **P** | **15 21 04.4** | **-0.9** |
| | comp=Z,28nm,1.7s | | | | | | |
| **DAV** | **Davao City (W)** | **64.69** | **289** | LR | LR | 15 45 29.4 | |
| | comp=Z,100nm,21.8s,baz=126,slow=32 | | | | | | |
| **APSI** | **Ampana** | **65.02** | **279** | P | **P** | **15 21 10.1** | **-0.2** |
| | comp=Z,330nmcomp=Z,27nm,1.4s | | | | | | |
| **BNSI** | **Bone** | **65.20** | **275** | P | **P** | **15 21 11.3** | **-0.2** |
| | comp=Z,41nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **65.33** | **274** | LR | LR | 15 50 35.9 | |
| | comp=Z,68nm,18.5s,baz=128,slow=37 | | | | | | |
| **GIRL** | **Giralia** | **65.51** | **254** | P | **P** | **15 21 13.8** | **+0.4** |
| **TOLI2** | **Tolitoli** | **66.59** | **281** | IAmb | IAmb | 15 21 21.0 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **66.59** | **281** | P | **P** | **15 21 19.9** | **-0.5** |
| **MPSI** | **Mapaga** | **67.11** | **279** | P | **P** | **15 21 23.1** | **-0.6** |
| **JHJ** | **Hachijo jima 2** | **68.70** | **320** | LR | LR | 15 45 51.4 | |
| | comp=Z,66nm,20.6s,baz=94,slow=31 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **69.44** | **268** | IAmb | IAmb | 15 21 37.3 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **69.44** | **268** | P | **P** | **15 21 36.8** | **-1.5** |
| **QSPA** | **South Pole Qui** | **69.65** | **180** | LR | LR | 15 47 56.2 | |
| | comp=Z,71nm,21.2s,baz=44,slow=32 | | | | | | |
| **QSPA** | **South Pole Q

comp=Z,22nm,0.7s,baz=137,slow=5.5,SNR=52
PETK LR LR 15 49 34.5

comp=Z,133nm,21.1s,baz=133,slow=30
**PETK Petropavlovsk- 77.02 343 P P 15 22 21.0 -1.1**
**YUH Yuha Desert 77.09 48** IAmb IAmb 15 22 25.0
comp=Z,29nm,1.1s
**CCAC Calif City Air 77.12 45** IAmb IAmb 15 22 25.4
comp=Z,26nm,0.9s
**ISA Isabella, Lake 77.12 44** IAmb IAmb 15 22 25.5
comp=Z,43nm,0.9s
**ISA Isabella, Lake 77.12 44 P P 15 22 24.3 +1.1**
baz=233,SNR=30
**YSS Yuzh-Sakhalins 77.23 332** *e*P **P 15 22 23.6 +0.2**
YSS pmax pmax
comp=Z,40nm,0.7s
**PFO Pinyon Flats O 77.27 47** P P **15 22 25.0 +0.9**
comp=Z,21nm,1.0s,baz=269,slow=4.0,SNR=27
**PFO Pinyon Flats O 77.27 47 P P 15 22 25.0 +0.9**
**PFO Pinyon Flats O 77.27 47 P P 15 22 23.9 -0.1**
PFO IAmb IAmb 15 22 26.1
comp=Z,35nm,1.1s
**PFO Pinyon Flats O 77.27 47 P P 15 22 25.0 +0.9**
baz=235,SNR=22
**TPFO Pinon Flats 77.27 47 P P 15 22 25.1 +1.1**
baz=235,SNR=19
**BBRC Big Bear Solar 77.33 46 P P 15 22 25.3 +0.8**
baz=234
**SWSC Sam W. Stewart 77.34 48 P P 15 22 25.3 +1.0**
baz=235,SNR=8.0
**LRMC Laurel Mtn Rad 77.53 45 P P 15 22 26.4 +0.9**
baz=234,SNR=35
**SMAI San Martin Ant 77.58 159** IAmb IAmb 15 22 28.7
comp=Z,46nm,0.9s
**KSXB Camp Six Broad 77.76 36 P P 15 22 27.0 +0.4**
KSXB IAmb IAmb 15 22 29.1
comp=Z,34nm,1.1s
**BELC Belle Mtn. Jos 77.80 47 P P 15 22 28.1 +1.1**
baz=235,SNR=37
**CWC Cottonwood Cre 77.84 44 P P 15 22 28.3 +1.0**
baz=233
**N02D Trinity Center 77.86 38 P P 15 22 28.4 +1.2**
baz=229,SNR=9.8
**BC3 Big Chuckawall 77.98 47 P P 15 22 29.1 +1.1**
baz=236,SNR=17
**MPMC Manual Prospec 78.00 44 P P 15 22 29.4 +1.2**
baz=234,SNR=57
**GSC Goldstone, Bar 78.01 45** IAmb IAmb 15 22 30.2
comp=Z,27nm,0.9s
**GSC Goldstone, Bar 78.01 45 P P 15 22 29.1 +1.0**
baz=234,SNR=19
**M02C Callahan 78.05 37** IAmb IAmb 15 22 30.9
comp=Z,35nm,1.3s
**M02C Callahan 78.05 37 P P 15 22 29.5 +1.3**
baz=229,SNR=12
**HEC Hector,Ludlow 78.05 46 P P 15 22 29.1 +0.7**
baz=235,SNR=20
**GLA Glamis 78.08 48 P P 15 22 29.6 +1.1**
baz=236
**MLAC Mammoth, Mammo 78.08 42 P P 15 22 29.7 +1.1**
baz=232
**TIN Tinemaha, Big 78.12 43 P P 15 22 29.9 +1.2**
baz=233,SNR=5.9
**L02E Cave Junction 78.13 36 P P 15 22 30.8 +2.3**
baz=228
**YBH Yreka Blue Hor 78.35 37 P P 15 22 30.9 +1.0**
comp=Z,18nm,1.0s,baz=166,slow=2.3,SNR=28
**YBH Yreka Blue Hor 78.35 37** IAmb IAmb 15 22 32.3
comp=Z,34nm,1.2s
**QSM Queen of Sheba 78.36 45** IAmb IAmb 15 22 32.0
comp=Z,46nm,1.2s
**MPK Martis Peak 78.36 40 P P 15 22 31.0 +0.7**
MPK IAmb IAmb 15 22 32.4
comp=Z,65nm,1.2s
**K02D Willamette Mer 78.46 36 P P 15 22 31.6 +1.2**
baz=228
**IRM Iron Mountain 78.48 47 P P 15 22 32.0 +1.3**
baz=236,SNR=41
**GMRC Granite Mounta 78.48 46 P P 15 22 31.8 +1.0**
baz=235,SNR=20
**PNTR Pine Nut 78.50 41** IAmb IAmb 15 22 33.1
comp=Z,56nm,1.0s
**VCNR Virginia City 78.60 40** IAmb IAmb 15 22 33.6
comp=Z,46nm,1.4s
**LCH Last Chance Ra 78.60 43** IAmb IAmb 15 22 33.4
comp=Z,28nm,0.8s
**J01E Myrtle Point 78.62 35 P P 15 22 31.8 +0.6**
baz=228
**GRAC Grapevine Rang 78.64 43 P P 15 22 32.6 +1.1**
baz=234
**FURC Furnace Creek, 78.65 44 P P 15 22 32.3 +0.9**
baz=234,SNR=10.0
**YERR Yerington 78.66 41** IAmb IAmb 15 22 33.8
comp=Z,47nm,1.1s
**113A Mohawk Valley, 78.66 49** IAmb IAmb 15 22 33.9
comp=Z,30nm,0.9s
**LHV Little Huntoon 78.66 42 P P 15 22 31.9 +0.4**
LHV IAmb IAmb 15 22 34.2
comp=Z,47nm,1.0s
**BLYC Blythe 78.67 48** IAmb IAmb 15 22 34.1
comp=Z,39nm,0.9s
**TUQ Turquoise Moun 78.67 45 P P 15 22 33.0 +1.1**
baz=235,SNR=17
**M04C Macdoel 78.88 37 P P 15 22 33.7 +0.8**
baz=230,SNR=5.8
**KSRS Korea Array 78.89 317 P P 15 22 34.0 +1.3**
comp=Z,11nm,1.0s,baz=137,slow=6.3,SNR=26
KSRS LR LR 15 51 56.6
comp=Z,65nm,21.8s,baz=130,slow=32
**NVAR Mina Array Bea 78.90 42 P P 15 22 34.1 +0.9**
comp=Z,33nm,0.8s,baz=225,slow=9.4,SNR=213
NVAR pP **pP 15 22 51.6 +2.7**
comp=Z,8.5nm,0.8s,baz=236,slow=8.3,SNR=4.5
**L04D Klamath Falls 78.90 37** IAmb IAmb 15 22 35.0
comp=Z,75nm,1.4s
**L04D Klamath Falls 78.90 37 P P 15 22 33.7 +0.8**
baz=229,SNR=8.0
**214A Organ Pipe Nat 78.90 50** IAmb IAmb 15 22 35.5
comp=Z,35nm,1.1s
**214A Organ Pipe Nat 78.90 50 P P 15 22 34.1 +1.1**
baz=238,SNR=16
**NV11 Mina Array Sit 78.99 42 P P 15 22 34.6 +1.0**
NV11 IAmb IAmb 15 22 35.7
comp=Z,46nm,0.9s
**UGL Uglegorsk 79.15 333** *e*P **P 15 22 34.1 +0.2**
UGL pmax pmax
comp=Z,50nm,0.9s
**NEE2 Needles Airpor 79.18 47 P P 15 22 35.4 +1.0**
baz=236
**BELA Belgrano 2 79.23 172 P P 15 22 36.3 +2.2**
BELA IAmb IAmb 15 22 37.0
comp=Z,36nm,0.9s
**PDMCI Parker Dam,Lak 79.25 47 P P 15 22 36.0 +1.2**
baz=236,SNR=17
**I03D Drain, OR 79.30 35 P P 15 22 35.5 +0.7**
baz=228
**TPNV Topopah Spring 79.33 44 P P 15 22 36.6 +1.1**
baz=234,SNR=41
**K04D Chiloquin, OR 79.47 37 P P 15 22 36.8 +0.7**
baz=230
**J04D Umpqua Nationa 79.67 36** IAmb IAmb 15 22 39.3
comp=Z,37nm,0.7s
**J04D Umpqua Nationa 79.67 36 P P 15 22 38.1 +0.9**
baz=229
**MOD Modoc Plateau 79.84 38 P P 15 22 38.5 +0.4**
**I04A Tendick Farm, 79.87 36 P P 15 22 38.5 +0.4**
baz=229
**K05A Summer Lake 80.02 37** IAmb IAmb 15 22 41.4
comp=Z,85nm,1.3s
**S11A Rachel 80.06 44** IAmb IAmb 15 22 41.6
comp=Z,33nm,1.0s
**KDAK Kodiak Island 80.07 12 P P 15 22 38.7 +0.1**
comp=Z,23nm,0.8s,baz=208,slow=2.0,SNR=6.8
KDAK LR LR 15 48 49.1
comp=Z,251nm,21.5s,baz=203,slow=29
**KDAK Kodiak Island 80.07 12 P P 15 22 38.8 +0.1**
KDAK pmax pmax
comp=Z,40nm,1.1s
**KDAK Kodiak Island 80.07 12 P P 15 22 38.8 +0.1**
KDAK IAmb IAmb 15 22 44.6
comp=Z,40nm,1.1s
**KDAK Kodiak Island 80.07 12 P P 15 22 39.0 +0.3**
baz=201
**PMSA Palmer Station 80.13 156** LR LR 15 49 09.7
comp=Z,110nm,20.0s,baz=259,slow=29
**H04D Lebanon 80.17 35** IAmb IAmb 15 22 41.8
comp=Z,47nm,1.3s
**H04D Lebanon 80.17 35 P P 15 22 40.5 +0.9**
baz=229

**J05D Fort Rock, OR 80.19 37 P P 15 22 41.1 +1.2**
baz=230,SNR=22
**TYV Tymovskoe 80.26 334** *e*P **P 15 22 40.1 +0.2**
TYV *e*S **S 15 32 44.4 +3.6**
TYV pmax pmax
comp=Z,18nm,0.7s
TYV pmax pmax
comp=Z,300nm,5.0s
TYV smax smax
comp=N,5.0nm,1.2s
TYV smax smax
comp=N,500nm,6.7s
TYV smax smax
comp=E,500nm,6.7s
**PRN Pahroc Range 80.38 44** IAmb IAmb 15 22 43.9
comp=Z,57nm,1.2s
**TUC Tucson 80.55 50 P P 15 22 42.2 +0.2**
TUC pmax pmax
comp=Z,34nm,1.0s
**TUC Tucson 80.55 50 P P 15 22 42.2 +0.2**
TUC IAmb IAmb 15 22 44.9
comp=Z,34nm,1.0s
**TUC Tucson 80.55 50 P P 15 22 43.3 +1.3**
baz=239
**R11A Troy Canyon, C 80.57 43 P P 15 22 42.8 +0.6**
baz=235,SNR=15
**USRK Ussuriysk Ar. 80.65 324 P P 15 22 42.8 +0.6**
comp=Z,4.1nm,0.7s,baz=134,slow=5.1,SNR=6.2
USRK LR LR 15 53 47.1
comp=Z,184nm,20.8s,baz=115,slow=32
**PINE Pine Mountain 80.68 36** IAmb IAmb 15 22 45.0
comp=Z,83nm,1.3s
**I05D Terrebonne, OR 80.81 36 P P 15 22 43.7 +0.5**
baz=230
**E03A Lebam 81.09 33** IAmb IAmb 15 22 46.6
comp=Z,39nm,0.9s
**P18K Big Mountain, 81.12 10 P P 15 22 43.9 -0.4**
P18K IAmb IAmb 15 22 45.0
comp=Z,44nm,0.8s
**P18K Big Mountain, 81.12 10 P P 15 22 43.9 -0.4**
baz=198,SNR=7.1
**WVOR Wild Horse Val 81.14 38** IAmb IAmb 15 22 47.0
comp=Z,39nm,1.2s
**319A Douglas 81.17 52** IAmb IAmb 15 22 48.2
comp=Z,39nm,1.0s
**X16A Lo Mia Camp, P 81.18 48** IAmb IAmb 15 22 48.5
comp=Z,55nm,1.3s
**F04A Ajo 81.28 34** IAmb IAmb 15 22 47.3
comp=Z,58nm,1.4s
**LCMT Little Creek M 81.35 45 P P 15 22 46.1 -0.2**
**G05D Wamic, OR 81.41 35 P P 15 22 47.0 +0.7**
baz=230,SNR=6.2
**O18K Koktuh Hills 81.56 10** IAmb IAmb 15 22 47.7
comp=Z,32nm,0.9s
**O18K Koktuh Hills 81.56 10 P P 15 22 46.3 -0.4**
baz=198
**E04D Cinebar 81.61 33** IAmb IAmb 15 22 49.6
comp=Z,54nm,1.1s
**E04D Cinebar 81.61 33 P P 15 22 48.2 +0.9**
baz=228,SNR=8.4
**KNB Kanab 81.64 46** IAmb IAmb 15 22 51.9
comp=Z,55nm,1.4s
**I07A Izee 81.67 37 P P 15 22 48.2 +0.5**
**U15A North Rim 81.67 46** IAmb IAmb 15 22 50.6
comp=Z,30nm,0.9s
**F05D White Salmon 81.75 34 P P 15 22 48.4 +0.4**
baz=229
**WUAZ Wupatki 81.81 47 P P 15 22 49.8 +1.0**
WUAZ IAmb IAmb 15 22 51.7
comp=Z,41nm,1.2s
**WUAZ Wupatki 81.81 47 P P 15 22 50.1 +1.3**
baz=238,SNR=15
**MG03 Isla Dawson 81.81 145 P P 15 22 50.1 +1.8**
**D04E Lakebay 81.92 33 P P 15 22 50.5 +1.7**
baz=228
**CNPM China Poot 81.95 12** IAmb IAmb 15 22 49.9
comp=Z,35nm,0.8s
**D03D Eldon 82.00 32 P P 15 22 50.3 +1.1**
baz=228,SNR=6.7
**ILSW Iliamna Southw 82.03 11** IAmb IAmb 15 22 49.9
comp=Z,50nm,0.9s
**O19K Port Alsworth 82.03 10** IAmb IAmb 15 22 49.9
comp=Z,48nm,0.9s
**O19K Port Alsworth 82.03 10 P P 15 22 48.8 -0.3**
baz=199,SNR=7.2
**ELK Elko 82.17 41 P P 15 22 50.8 +0.1**
comp=Z,7.1nm,1.0s,baz=249,slow=5.0,SNR=20
**NJ2 Nanjing 82.21 308** *e*P **P 15 22 51.8 +1.1**
NJ2 pmax pmax
comp=Z,15nm,1.0s
**PKCU Pink Cliffs 82.21 45** IAmb IAmb 15 22 55.5
comp=Z,60nm,1.1s
**MDJ Mudanjiang 82.24 323 P P 15 22 51.8 +1.2**
MDJ pP pP 15 23 01.8 -4.7
MDJ sP sP 15 23 06.2 -6.5
MDJ pmax pmax
comp=Z,12nm,1.1s
**BRLK Bradley Lake 82.24 12 P P 15 22 50.4 +0.1**
BRLK IAmb IAmb 15 22 51.3
comp=Z,52nm,0.9s
**BRSE Bradley Lake S 82.25 12 P P 15 22 50.5 +0.2**
baz=203,SNR=5.4
**D05A Enumclaw 82.33 33** IAmb IAmb 15 22 53.6
comp=Z,70nm,1.2s
**CLRS Cowichan Lake 82.35 31** IAmb IAmb 15 22 53.0
comp=Z,24nm,0.9s
**USHA Ushuala 82.50 146** LR LR 15 52 14.7
comp=Z,46nm,19.9s,baz=234,slow=30
**PGC Sidney 82.57 31 P P 15 22 52.4 +0.3**
PGC IAmb IAmb 15 22 54.0
comp=Z,34nm,0.8s
**MYKOM Kota Tinggi 82.57 275** IAmb IAmb 15 22 54.3
comp=Z,32nm,1.0s
**CBB Campbell River 82.60 30** IAmb IAmb 15 22 54.5
comp=Z,45nm,1.1s
**MTPU Mount Pierson 82.62 45** IAmb IAmb 15 22 56.8
comp=Z,48nm,1.0s
**MAW Mawson 82.65 199 P P 15 22 54.2 +1.7**
comp=Z,34nm,0.9s,baz=126,slow=9.0,SNR=6.4
**MAW Mawson 82.65 199 P P 15 22 54.1 +1.7**
**GO08 Villa O'Higgin 82.69 139** IAmb IAmb 15 22 57.5
comp=Z,55nm,1.1s
**G08A Pilot Rock 82.72 36** IAmb IAmb 15 22 55.4
comp=Z,61nm,1.2s
**W18A Petrified Fore 82.75 49 P P 15 22 54.6 +0.9**
baz=239
**SEW Seward 82.84 12 P P 15 22 53.8 +0.5**
baz=204
**121A Cookes Peak, D 82.85 52 P P 15 22 56.0 +1.7**
baz=240,SNR=16
**GRNR Gornyy 82.88 331** ⇑ *i*P **P 15 22 54.7 +0.9**
GRNR pmax pmax
comp=E,3.0nm,1.1s
GRNR pmax pmax
comp=Z,10.0nm,1.2s
**BBB Bella Bella 82.92 27 P P 15 22 54.4 +0.5**
comp=Z,37nm,1.0s,baz=270,slow=4.4,SNR=9.4
**BBB Bella Bella 82.92 27 P P 15 22 54.8 +0.9**
BBB IAmb IAmb 15 22 55.8
comp=Z,34nm,0.8s
**A04D Lummi Island 82.98 32 P P 15 22 55.2 +0.9**
baz=228,SNR=5.9
**B05A Bryant 82.98 32 P P 15 22 55.1 +0.8**
baz=229,SNR=11
**E07A Sunnyside 83.04 35** IAmb IAmb 15 22 56.9
comp=Z,64nm,1.2s
**LTY Liberty 83.05 34** IAmb IAmb 15 22 56.6
comp=Z,36nm,1.2s
**HAWA Hanford 83.10 35** IAmb IAmb 15 22 57.2
comp=Z,54nm,1.2s
**CAPN Captain Cook N 83.12 11 P P 15 22 55.6 +0.9**
baz=202
**C06D Leavenworth 83.37 33 P P 15 22 56.8 +0.4**
baz=230
**BMO Blue Mountains 83.38 37** IAmb IAmb 15 22 58.5
comp=Z,34nm,1.2s
**DUG Dugway, Tooele 83.39 43 P P 15 22 57.5 +0.6**
baz=236,SNR=12
**GRNB Grenville Isla 83.39 25 P P 15 22 57.1 +0.7**
GRNB IAmb IAmb 15 22 58.5
comp=Z,45nm,0.8s
**E08A Dider Farm, El 83.42 35** IAmb IAmb 15 22 58.7
comp=Z,56nm,1.3s
**CRAG Craig 83.44 22 P P 15 22 57.4 +0.9**
baz=219
**H03S2 Juan Fernandez 83.50 124** T T 16 55 13.0
baz=248

**H03S1 Juan Fernandez 83.52 124** T T 16 55 25.3
baz=248
**H03S3 Juan Fernandez 83.52 124** T T 16 55 20.0
baz=248
**M19K Big River Lodg 83.64 10 P P 15 22 56.9 -0.5**
**M19K Big River Lodg 83.64 10 P P 15 22 57.0 -0.5**
baz=199
**RC01 Rabbit Creek A 83.69 12 P P 15 22 57.6 -0.1**
baz=204
**PWL Port Wells 83.76 13** IAmb IAmb 15 22 58.9
comp=Z,44nm,0.9s
**PWL Port Wells 83.76 13 P P 15 22 57.8 -0.3**
baz=205,SNR=9.4
**Q16A Castle Valley 83.76 45** IAmb IAmb 15 23 01.2
comp=Z,22nm,1.0s
**L19K White Mountain 83.83 9 P P 15 22 58.2 -0.2**
baz=199
**D08A Wollman Farm, 83.85 35 P P 15 22 59.3 +0.5**
**E09A Wood Farm, Sta 83.93 35** IAmb IAmb 15 23 01.0
comp=Z,38nm,1.1s
**SIT Sitka 83.95 20 P P 15 22 59.6 +0.5**
baz=217
**GAMB Gambell 83.95 1 P P 15 22 59.7 +0.8**
baz=183,SNR=5.2
**EYAK Cordova Ski Ar 84.04 14 P P 15 22 59.9 +0.4**
baz=207
**GLI Glacier Island 84.04 13 P P 15 22 59.2 -0.2**
**GLI Glacier Island 84.04 13 P P 15 22 59.4 -0.1**
baz=206,SNR=5.3
**KLR Kul'dur 84.05 328** LR LR 15 54 10.8
comp=Z,134nm,21.0s,baz=127,slow=31
**KLR Kul'dur 84.05 328** *ce*P **P 15 22 59.9 +0.1**
KLR pmax pmax
comp=Z,8.0nm,1.3s
**CN2 Changchun 84.13 321** *e*P **P 15 23 00.9 +0.5**
CN2 pmax pmax
comp=Z,20nm,1.2s
**BNX BinXian 84.15 323** ⇓P **P 15 23 01.1 +0.7**
BNX pmax pmax
comp=Z,28nm,0.8s
BNX pmax pmax
comp=Z,410nm,4.4s
**M22K Willow 84.23 11 P P 15 22 60.0 -0.4**
baz=203
**MNTX Cornudas Mount 84.23 53** IAmb IAmb 15 23 03.8
comp=Z,30nm,1.0s
**MNTX Cornudas Mount 84.23 53 P P 15 23 02.6 +1.4**
baz=242
**KNK Knik Glacier 84.24 12** IAmb IAmb 15 23 01.5
comp=Z,35nm,0.8s
**KNK Knik Glacier 84.24 12 P P 15 23 00.7 +0.1**
baz=205,SNR=8.4
**L20K Farewell, AK 84.26 10 P P 15 23 00.2 -0.5**
baz=200
**PLID Pearl Lake 84.26 37** IAmb IAmb 15 23 03.1
comp=Z,61nm,1.5s
**PMR Palmer 84.27 12** IAmb IAmb 15 23 01.0
comp=Z,16nm,0.8s
**PMR Palmer 84.27 12 P P 15 23 00.5 -0.1**
baz=204,SNR=5.0
**HVU Hansel Valley 84.29 42 P P 15 23 02.2 +0.8**
HVU pmax pmax
comp=Z,76nm,1.5s
**HVU Hansel Valley 84.29 42 P P 15 23 02.2 +0.8**
**HLID Hailey 84.30 39 P P 15 23 02.6 +1.1**
baz=235,SNR=57
**P17A Butcher Ranch, 84.34 44** IAmb IAmb 15 23 04.5
comp=Z,48nm,1.0s
**CTU Camp Tracy 84.34 43** IAmb IAmb 15 23 03.7
comp=Z,30nm,1.1s
**TTA Tatalina 84.38 8** IAmb IAmb 15 23 02.9
comp=Z,23nm,1.0s
**TTA Tatalina 84.38 8 P P 15 23 01.6 +0.4**
baz=198,SNR=9.2
**B08A Colville Reser 84.45 33** IAmb IAmb 15 23 03.2
comp=Z,30nm,0.9s
**TX31 Lajitas Ar. Si 84.46 56 P P 15 23 03.3 +0.8**
**TX32 Lajitas Array 84.46 56** IAmb IAmb 15 23 05.2
comp=Z,36nm,1.2s
**TXAR Lajitas Array 84.46 56 P P 15 23 03.6 +1.2**
comp=Z,17nm,1.0s,baz=216,slow=6.2,SNR=74
**WRAK Wrangell Islan 84.46 22 P P 15 23 02.8 +1.1**
**WRAK Wrangell Islan 84.46 22 P P 15 23 02.6 +0.9**
baz=219
**DIV Divide 84.55 14 P P 15 23 02.3 +0.1**
**MA2 Magadan 84.56 343** *ce*P **P 15 23 01.6 -0.5**
MA2 pmax pmax
comp=Z,12nm,0.7s
**MA2 Magadan 84.56 343 P P 15 23 01.3 -0.8**
**MESA MESA 84.63 16 P P 15 23 03.4 +0.7**
baz=211
**C09A Chrisman Ranch 84.66 34** IAmb IAmb 15 23 04.8
comp=Z,37nm,1.1s
**BMRM Bremner River 84.67 14 P P 15 23 03.0 +0.3**
baz=208,SNR=8.2
**MVCO Mesa Verde 84.67 47 P P 15 23 04.5 +0.9**
baz=240
**P18A Preston Nutter 84.75 44** IAmb IAmb 15 23 06.4
comp=Z,52nm,1.2s
**CUT Chulitna 84.80 11 P P 15 23 03.1 -0.1**
baz=203,SNR=7.7
**KLU Klutina 84.84 13** IAmb IAmb 15 23 04.2
comp=Z,33nm,1.2s
**KLU Klutina 84.84 13 P P 15 23 03.7 +0.1**
baz=207
**SCM Sheep Creek Mo 84.85 13 P P 15 23 03.9 +0.2**
SCM pmax pmax
comp=Z,56nm,0.8s
**SCM Sheep Creek Mo 84.85 13 P P 15 23 03.9 +0.2**
**SCM Sheep Creek Mo 84.85 13 P P 15 23 03.9 +0.2**
baz=206,SNR=12
**PNL Peninsula 84.87 17 P P 15 23 03.8 0.0**
baz=213
**WHN Wuhan 84.88 305** ⇓P **P 15 23 01.6 -2.8**
**ISLE Juniper Island 84.89 15** IAmb IAmb 15 23 05.4
comp=Z,37nm,0.8s
**PV10 Paradox Valley 84.90 46** IAmb IAmb 15 23 06.1
comp=Z,26nm,0.9s
**PV23 Carpenter Ridg 84.96 46 P P 15 23 06.1 +1.1**
**ANMO Albuquerque 84.99 50 P P 15 23 06.5 +1.3**
comp=Z,42nm,0.9s,baz=218,slow=6.0,SNR=63
**ANMO Albuquerque 84.99 50** *ce*P **P 15 23 06.5 +1.3**
ANMO pmax pmax
comp=Z,72nm,1.1s
**ANMO Albuquerque 84.99 50 P P 15 23 05.2 0.0**
**ANMO Albuquerque 84.99 50 P P 15 23 06.2 +1.1**
baz=241
**ANM Nome 85.02 4 P P 15 23 04.8 +0.5**
baz=189
**TABL Table Mountain 85.06 16** IAmb IAmb 15 23 06.4
comp=Z,34nm,0.8s
**K20K Telida 85.06 9** IAmb IAmb 15 23 05.9
comp=Z,24nm,0.8s
**K20K Telida 85.06 9 P P 15 23 04.8 +0.1**
baz=199
**VRDI Verde Repeater 85.17 15** IAmb IAmb 15 23 06.8
comp=Z,41nm,1.1s
**PV07 Paradox Valley 85.20 46** IAmb IAmb 15 23 08.3
comp=Z,43nm,1.4s
**N25K Chitina, Valde 85.24 14 P P 15 23 05.9 +0.3**
baz=208,SNR=16
**PV15 Paradox Valley 85.26 46** IAmb IAmb 15 23 08.6
comp=Z,26nm,1.0s
**GLB Gilahina Butte 85.27 14** IAmb IAmb 15 23 07.0
comp=Z,30nm,0.8s
**M24K Tolsona, Glenn 85.34 13 P P 15 23 06.8 +0.8**
baz=207,SNR=7.7
**CAST Castle Rocks 85.43 10 P P 15 23 05.2 -1.3**
baz=201,SNR=9.5
**WAT6 Susitna Watana 85.44 12 P P 15 23 06.9 +0.2**
baz=205
**TIA Tai'an 85.50 311** ⇓P **P 15 23 08.7 +1.3**
TIA pmax pmax
comp=Z,17nm,1.0s
**NEW Newport 85.55 34 P P 15 23 07.2 -0.3**
comp=Z,9.5nm,0.8s,baz=237,slow=5.4,SNR=21
**NEW Newport 85.55 34 P P 15 23 07.7 +0.2**
NEW pmax pmax
comp=Z,14nm,1.0s
**NEW Newport 85.55 34 P P 15 23 07.7 +0.2**
**NEW Newport 85.55 34 P P 15 23 07.5 +0.1**
baz=233,SNR=11
**RDMU Red Mountain 85.68 44** IAmb IAmb 15 23 09.8
comp=Z,21nm,0.8s
**KTH Kantishna Hill 85.75 10** IAmb IAmb 15 23 08.2
comp=Z,25nm,1.0s
**TRF Thorofare Moun 85.77 11 P P 15 23 07.8 -0.5**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TRF | **Thorofare Moun** | **85.77** | **11** | P | **P** | **15 23 07.9** | **-0.5** | |
| | baz=203,SNR=36 | | | | | | | |
| HARP | **HAARP** | **85.82** | **13** | P | **P** | **15 23 08.8** | **+0.4** | |
| | baz=208,SNR=8.2 | | | | | | | |
| J20K | **Nowinta River** | **85.83** | **9** | IAmb | IAmb | 15 23 09.3 | | |
| | comp=Z,28nm,0.8s | | | | | | | |
| J20K | **Nowinta River** | **85.83** | **9** | P | **P** | **15 23 08.6** | **+0.2** | |
| | baz=199 | | | | | | | |
| CHUM | **Lake Minchumin** | **85.83** | **10** | P | **P** | **15 23 07.6** | **-0.7** | |
| | baz=201,SNR=13 | | | | | | | |
| AHID | **Auburn Hatcher** | **85.87** | **41** | IAmb | IAmb | 15 23 11.4 | | |
| | comp=Z,36nm,1.1s | | | | | | | |
| TNA | **Tin City** | **85.87** | **3** | IAmb | IAmb | 15 23 09.9 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| TNA | **Tin City** | **85.87** | **3** | P | **P** | **15 23 08.9** | **+0.4** | |
| | baz=186,SNR=14 | | | | | | | |
| SKAG | **Skagway** | **85.88** | **19** | P | **P** | **15 23 10.0** | **+1.3** | |
| | baz=217,SNR=10 | | | | | | | |
| DHY | **Denali Highway** | **85.97** | **12** | IAmb | IAmb | 15 23 14.1 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| DHY | **Denali Highway** | **85.97** | **12** | P | **P** | **15 23 09.2** | **-0.1** | |
| | baz=206,SNR=8.0 | | | | | | | |
| GCSA | **Galena City Sc** | **86.01** | **8** | P | **P** | **15 23 09.6** | **+0.3** | |
| | baz=197,SNR=7.0 | | | | | | | |
| UBPT | **Khong Chiam** | **86.01** | **288** | P | **P** | **15 23 10.6** | **+0.3** | |
| S22A | **4UR Ranch, Cre** | **86.09** | **47** | IAmb | IAmb | 15 23 12.7 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| S22A | **4UR Ranch, Cre** | **86.09** | **47** | P | **P** | **15 23 12.0** | **+1.3** | |
| | baz=241 | | | | | | | |
| IPM | **Ipoh** | **86.16** | **276** | IAmb | IAmb | 15 23 12.6 | | |
| | comp=Z,22nm,0.7s | | | | | | | |
| YUK6 | **Outpost Mounta** | **86.22** | **17** | P | **P** | **15 23 11.2** | **+0.4** | |
| | baz=214 | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **86.25** | **10** | P | **P** | **15 23 13.0** | **+2.5** | |
| | baz=202 | | | | | | | |
| PAX | **Paxson** | **86.26** | **13** | IAmb | IAmb | 15 23 11.4 | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| PAX | **Paxson** | **86.26** | **13** | P | **P** | **15 23 10.1** | **-0.5** | |
| | baz=207,SNR=11 | | | | | | | |
| MCK | **McKinley** | **86.27** | **11** | P | **P** | **15 23 10.4** | **-0.2** | |
| MCK | | | | pmax | pmax | | | |
| | comp=Z,83nm,1.0s | | | | | | | |
| MCK | **McKinley** | **86.27** | **11** | P | **P** | **15 23 10.4** | **-0.2** | |
| MCK | **McKinley** | **86.27** | **11** | P | **P** | **15 23 10.5** | **-0.1** | |
| | baz=204,SNR=30 | | | | | | | |
| M26K | **Nabesna, AK** | **86.30** | **14** | IAmb | IAmb | 15 23 12.5 | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| M26K | **Nabesna, AK** | **86.30** | **14** | P | **P** | **15 23 11.3** | **+0.5** | |
| | baz=210,SNR=16 | | | | | | | |
| O20A | **White River Ci** | **86.33** | **45** | P | **P** | **15 23 12.4** | **+0.7** | |
| | baz=240 | | | | | | | |
| REDW | **Red Top Meadow** | **86.34** | **41** | IAmb | IAmb | 15 23 13.8 | | |
| | comp=Z,33nm,1.2s | | | | | | | |
| HYT | **Haines Junctio** | **86.36** | **17** | P | **P** | **15 23 11.9** | **+0.7** | |
| | baz=215,SNR=5.8 | | | | | | | |
| YUK3 | **Moose Creek** | **86.37** | **16** | P | **P** | **15 23 12.0** | **+0.6** | |
| | baz=212 | | | | | | | |
| DLMT | **Dillon** | **86.39** | **39** | IAmb | IAmb | 15 23 14.1 | | |
| | comp=Z,38nm,1.4s | | | | | | | |
| MSO | **Missoula** | **86.44** | **37** | P | **P** | **15 23 11.7** | **-0.3** | |
| | baz=235 | | | | | | | |
| SNOW | **Snow King Moun** | **86.46** | **41** | IAmb | IAmb | 15 23 14.4 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| YUK4 | **Talbot Arm** | **86.48** | **17** | P | **P** | **15 23 12.9** | **+1.0** | |
| | baz=214,SNR=5.7 | | | | | | | |
| M27K | **Edge Creek, AK** | **86.53** | **15** | P | **P** | **15 23 12.9** | **+0.8** | |
| | baz=211 | | | | | | | |
| MENT | **Mentasta** | **86.61** | **14** | P | **P** | **15 23 12.1** | **-0.2** | |
| SMCO | **Snowmass** | **86.70** | **46** | IAmb | IAmb | 15 23 17.5 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| L26K | **Log Cabin Wild** | **86.77** | **14** | IAmb | IAmb | 15 23 14.7 | | |
| | comp=Z,25nm,0.8s | | | | | | | |
| L26K | **Log Cabin Wild** | **86.77** | **14** | P | **P** | **15 23 13.7** | **+0.7** | |
| | baz=209,SNR=15 | | | | | | | |
| DLBC | **Dease Lake** | **86.81** | **22** | P | **P** | **15 23 14.1** | **+0.6** | |
| | comp=Z,23nm,0.9s,baz=226,slow=4.4,SNR=32 | | | | | | | |
| DLBC | **Dease Lake** | **86.81** | **22** | IAmb | IAmb | 15 23 15.6 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| BVCY | **Beaver Creek** | **86.82** | **15** | P | **P** | **15 23 13.9** | **+0.5** | |
| | baz=212 | | | | | | | |
| FLWY | **Flagg Ranch** | **86.82** | **40** | IAmb | IAmb | 15 23 16.5 | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| BW06 | **Boulder Array** | **86.83** | **42** | IAmb | IAmb | 15 23 15.6 | | |
| | comp=Z,21nm,1.2s | | | | | | | |
| BW06 | **Boulder Array** | **86.83** | **42** | P | **P** | **15 23 14.2** | **+0.1** | |
| | baz=238,SNR=16 | | | | | | | |
| PD31 | **Pinedale Array** | **86.83** | **42** | P | **P** | **15 23 14.5** | **+0.3** | |
| PDAR | **Pinedale Array** | **86.83** | **42** | P | **P** | **15 23 14.2** | **0.0** | |
| | comp=Z,6.5nm,0.7s,baz=202,slow=3.6,SNR=58 | | | | | | | |
| LC01 | **Cunco** | **86.91** | **130** | P | **P** | **15 23 15.9** | **+1.4** | |
| YMR | **Madison River** | **86.98** | **40** | IAmb | IAmb | 15 23 16.8 | | |
| | comp=Z,21nm,1.2s | | | | | | | |
| WHY | **Whitehorse** | **86.98** | **18** | P | **P** | **15 23 15.2** | **+0.9** | |
| | baz=217,SNR=5.5 | | | | | | | |
| SDCO | **Great Sand Dun** | **87.01** | **48** | P | **P** | **15 23 16.0** | **+0.7** | |
| | baz=241,SNR=11 | | | | | | | |
| SEY | **Seymchan** | **87.03** | **346** | P | **P** | **15 23 14.0** | **-0.2** | |
| | comp=Z,26nm,0.8s,baz=146,slow=5.6,SNR=145 | | | | | | | |
| SEY | | | | LR | LR | 15 54 20.9 | | |
| | comp=Z,137nm,21.2s,baz=350,slow=30 | | | | | | | |
| SEY | **Seymchan** | **87.03** | **346** | *i* P | **P** | **15 23 14.5** | **+0.2** | |
| NEA2 | **Nenana** | **87.03** | **11** | P | **P** | **15 23 13.7** | **-0.7** | |
| | baz=204,SNR=6.6 | | | | | | | |
| H17A | **Grant Village** | **87.07** | **40** | P | **P** | **15 23 17.1** | **+1.9** | |
| | baz=238,SNR=6.4 | | | | | | | |
| RIDG | **Independent Ri** | **87.07** | **13** | IAmb | IAmb | 15 23 15.9 | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| RIDG | **Independent Ri** | **87.07** | **13** | P | **P** | **15 23 14.8** | **+0.3** | |
| | baz=208,SNR=10 | | | | | | | |
| BOZ | **Bozeman (W)** | **87.09** | **39** | IAmb | IAmb | 15 23 17.5 | | |
| | comp=Z,37nm,1.4s | | | | | | | |
| BOZ | **Bozeman (W)** | **87.09** | **39** | P | **P** | **15 23 16.0** | **+0.8** | |
| | baz=237,SNR=15 | | | | | | | |
| PLCA | **Paso Flores** | **87.09** | **132** | P | **P** | **15 23 17.2** | **+1.8** | |
| | comp=Z,20nm,1.1s,baz=239,slow=5.5,SNR=20 | | | | | | | |
| PLCA | | | | PKKPbc | **PKKPbc** | **15 41 07.8** | **+0.1** | |
| | comp=Z,1.4nm,0.8s,baz=225,slow=3.9,SNR=4.2 | | | | | | | |
| PLCA | | | | LR | LR | 15 53 05.4 | | |
| | comp=Z,80nm,21.5s,baz=251,slow=29 | | | | | | | |
| PLCA | **Paso Flores** | **87.09** | **132** | P | **P** | **15 23 17.5** | **+2.1** | |
| PLCA | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.3s | | | | | | | |
| PLCA | **Paso Flores** | **87.09** | **132** | P | **P** | **15 23 17.5** | **+2.1** | |
| PLCA | | | | IAmb | IAmb | 15 23 19.2 | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| WRH | **Wood River Hil** | **87.10** | **11** | P | **P** | **15 23 14.3** | **-0.3** | |
| I21K | **Tanana** | **87.10** | **9** | P | **P** | **15 23 14.6** | **0.0** | |
| | baz=201 | | | | | | | |
| YHH | **Holmes Hill** | **87.11** | **40** | IAmb | IAmb | 15 23 18.4 | | |
| | comp=Z,27nm,1.5s | | | | | | | |
| L27K | **Beaver Creek,** | **87.14** | **14** | P | **P** | **15 23 15.3** | **+0.4** | |
| | baz=211,SNR=14 | | | | | | | |
| MLY | **Manley** | **87.16** | **10** | IAmb | IAmb | 15 23 38.4 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| MLY | **Manley** | **87.16** | **10** | P | **P** | **15 23 14.2** | **-0.8** | |
| | baz=202 | | | | | | | |
| MSTX | **Muleshoe** | **87.23** | **52** | IAmb | IAmb | 15 23 17.6 | | |
| | comp=Z,28nm,0.8s | | | | | | | |
| MSTX | **Muleshoe** | **87.23** | **52** | P | **P** | **15 23 16.9** | **+0.7** | |
| | baz=243 | | | | | | | |
| P33M | **Teslin, Yukon** | **87.25** | **20** | P | **P** | **15 23 16.2** | **+0.6** | |
| | baz=219,SNR=7.1 | | | | | | | |
| HDA | **Harding Lake** | **87.25** | **12** | IAmb | IAmb | 15 23 39.8 | | |
| | comp=Z,28nm,0.7s | | | | | | | |
| HDA | **Harding Lake** | **87.25** | **12** | P | **P** | **15 23 15.1** | **-0.2** | |
| | baz=206,SNR=18 | | | | | | | |
| 833A | **Chaparral WMA,** | **87.39** | **59** | IAmb | IAmb | 15 23 18.6 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| 833A | **Chaparral WMA,** | **87.39** | **59** | P | **P** | **15 23 16.9** | **0.0** | |
| | baz=245 | | | | | | | |
| H21K | **Melozitna Rive** | **87.42** | **9** | P | **P** | **15 23 16.7** | **+0.6** | |
| | baz=200 | | | | | | | |
| SYO | **Syowa Base** | **87.45** | **192** | ⇑*e*P | **P** | **15 23 18.6** | **+2.2** | |
| SCRK | **Sand Creek** | **87.46** | **13** | IAmb | IAmb | 15 23 17.9 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| SCRK | **Sand Creek** | **87.46** | **13** | P | **P** | **15 23 16.9** | **+0.3** | |
| | baz=209,SNR=14 | | | | | | | |
| T25A | **Trinidad** | **87.49** | **49** | P | **P** | **15 23 17.7** | **+0.3** | |
| | baz=242 | | | | | | | |
| I23K | **Minto, Yukon-K** | **87.49** | **10** | IAmb | IAmb | 15 23 17.3 | | |
| | comp=Z,44nm,1.4s | | | | | | | |
| I23K | **Minto, Yukon-K** | **87.49** | **10** | P | **P** | **15 23 15.7** | **-0.7** | |
| | baz=204,SNR=7.8 | | | | | | | |
| TCOL | **CIGO, UAF Yank** | **87.50** | **11** | P | **P** | **15 23 16.1** | **-0.5** | |
| | baz=205,SNR=7.1 | | | | | | | |
| COLA | **College** | **87.51** | **11** | ⇑*i*P | **P** | **15 23 16.2** | **-0.3** | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,62nm,1.4s | | | | | | | |
| COLA | **College** | **87.51** | **11** | P | **P** | **15 23 16.4** | **-0.1** | |
| | baz=205 | | | | | | | |
| MDM | **Murphy Dome** | **87.52** | **11** | P | **P** | **15 23 16.0** | **-0.7** | |
| PSI | **Prapat** | **87.53** | **274** | LR | LR | 16 04 57.1 | | |
| | comp=Z,60nm,18.1s,baz=120,slow=37 | | | | | | | |
| IL31 | | **87.59** | **12** | IAmb | IAmb | 15 23 17.9 | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| ILAR | **Eielson Array** | **87.59** | **12** | P | **P** | **15 23 16.5** | **-0.5** | |
| | comp=Z,9.2nm,0.8s,baz=224,slow=5.7,SNR=61 | | | | | | | |
| ILAR | | | | pP | **pP** | **15 23 34.9** | **+1.8** | |
| | comp=Z,3.4nm,0.7s,baz=241,slow=4.4,SNR=3.7 | | | | | | | |
| WALA | **Waterton Lakes** | **87.74** | **35** | IAmb | IAmb | 15 23 20.0 | | |
| | comp=Z,38nm,1.1s | | | | | | | |
| J25K | **Salcha River,** | **87.74** | **12** | P | **P** | **15 23 18.2** | **+0.4** | |
| J25K | | | | IAmb | IAmb | 15 23 19.1 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| J25K | **Salcha River,** | **87.74** | **12** | P | **P** | **15 23 18.0** | **+0.2** | |
| | baz=207,SNR=14 | | | | | | | |
| HNS | **HongShan** | **87.77** | **311** | ⇑P | **P** | **15 23 19.8** | **+1.3** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| POKR | **Poker Plat Res** | **87.80** | **11** | IAmb | IAmb | 15 23 19.0 | | |
| | comp=Z,33nm,1.2s | | | | | | | |
| POKR | **Poker Plat Res** | **87.80** | **11** | P | **P** | **15 23 17.5** | **-0.5** | |
| | baz=206,SNR=8.3 | | | | | | | |
| Q24A | **Divide** | **87.84** | **47** | IAmb | IAmb | 15 23 21.1 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| Q24A | **Divide** | **87.84** | **47** | P | **P** | **15 23 19.8** | **+0.6** | |
| | baz=242,SNR=6.0 | | | | | | | |
| ISCO | **Idaho Springs** | **87.92** | **46** | P | **P** | **15 23 20.1** | **+0.5** | |
| | baz=241,SNR=6.8 | | | | | | | |
| JCT | **Junction City** | **87.97** | **57** | P | **P** | **15 23 19.6** | **-0.1** | |
| | baz=245 | | | | | | | |
| SNAA | **Sanae** | **87.98** | **177** | P | **P** | **15 23 20.8** | **+1.7** | |
| SNAA | **Sanae** | **87.98** | **177** | LR | LR | 15 58 49.9 | | |
| | comp=Z,78nm,21.9s,baz=168,slow=33 | | | | | | | |
| SNAA | **Sanae** | **87.98** | **177** | *ce*P | **P** | **15 23 20.8** | **+1.7** | |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.0s | | | | | | | |
| SNAA | **Sanae** | **87.98** | **177** | P | **P** | **15 23 20.7** | **+1.6** | |
| SNAA | | | | IAmb | IAmb | 15 23 21.7 | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| VNA3 | **Neumayer Olymp** | **87.99** | **175** | P | **P** | **15 23 20.8** | **+1.7** | |
| BJI | **Beijing** | **88.01** | **314** | P | **P** | **15 23 20.8** | **+1.3** | |
| BJI | | | | pP | **pP** | **15 23 31.9** | **-3.7** | |
| BJI | | | | sP | **sP** | **15 23 36.2** | **-5.5** | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.6s | | | | | | | |
| J26L | **Joseph Creek** | **88.01** | **13** | P | **P** | **15 23 20.1** | **+1.0** | |
| J26L | **Joseph Creek** | **88.01** | **13** | P | **P** | **15 23 20.2** | **+1.0** | |
| | baz=209 | | | | | | | |
| LYN | **LuoYang** | **88.10** | **308** | ⇓*i*P | **P** | **15 23 21.3** | **+1.2** | |
| LYN | | | | S | **S** | **15 34 05.8** | **+5.9** | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| N23A | **Red Feather La** | **88.22** | **45** | IAmb | IAmb | 15 23 22.8 | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| N23A | **Red Feather La** | **88.22** | **45** | P | **P** | **15 23 21.6** | **+0.6** | |
| | baz=241,SNR=12 | | | | | | | |
| RLMT | **Red Lodge** | **88.24** | **40** | P | **P** | **15 23 21.5** | **+0.7** | |
| | baz=239 | | | | | | | |
| M31M | **Drury Creek, Y** | **88.36** | **18** | P | **P** | **15 23 20.7** | **0.0** | |
| | baz=217 | | | | | | | |
| AMTX | **Amarillo** | **88.44** | **52** | IAmb | IAmb | 15 23 23.0 | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| AMTX | **Amarillo** | **88.44** | **52** | P | **P** | **15 23 22.6** | **+0.8** | |
| | baz=244 | | | | | | | |
| VNA2 | **Neumayer--Watz** | **88.47** | **176** | P | **P** | **15 23 23.5** | **+2.2** | |
| | baz=182,slow=3.2 | | | | | | | |
| PRP | **Porcupine Dome** | **88.52** | **12** | IAmb | IAmb | 15 23 22.9 | | |
| | comp=Z,30nm,1.3s | | | | | | | |
| PRP | **Porcupine Dome** | **88.52** | **12** | P | **P** | **15 23 21.6** | **+0.1** | |
| | baz=207,SNR=6.1 | | | | | | | |
| ENH | **Enshi** | **88.54** | **303** | IAmb | IAmb | 15 23 24.3 | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| DAWY | **Dawson** | **88.58** | **15** | P | **P** | **15 23 22.0** | **+0.2** | |
| | baz=213,SNR=32 | | | | | | | |
| RDOG | **Red Dog Mine** | **88.65** | **4** | P | **P** | **15 23 22.3** | **+0.4** | |
| | baz=191 | | | | | | | |
| FARO | **Faro, Yukon** | **88.68** | **18** | P | **P** | **15 23 22.4** | **+0.2** | |
| | baz=218 | | | | | | | |
| VNA1 | **Neumayer--Stat** | **88.68** | **176** | P | **P** | **15 23 24.5** | **+2.3** | |
| K22A | **Casper** | **88.70** | **43** | IAmb | IAmb | 15 23 24.5 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| K22A | **Casper** | **88.70** | **43** | P | **P** | **15 23 23.1** | **+0.1** | |
| | baz=241 | | | | | | | |
| ABTX | **Abilene, Hawle** | **89.00** | **55** | P | **P** | **15 23 24.9** | **+0.4** | |
| | baz=245 | | | | | | | |
| MAYO | **Mayo, Yukon** | **89.06** | **16** | P | **P** | **15 23 24.8** | **+0.8** | |
| | baz=216 | | | | | | | |
| ZEA | **Zeya** | **89.08** | **330** | *e*P | **P** | **15 23 25.0** | **+0.8** | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,20nm,0.9s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| J29M | **Klondike Camp** | **89.18** | **15** | P | **P** | **15 23 25.4** | **+0.8** | |
| | baz=214,SNR=21 | | | | | | | |
| COLD | **Coldfoot** | **89.28** | **9** | P | **P** | **15 23 25.6** | **+0.8** | |
| COLD | | | | IAmb | IAmb | 15 23 26.6 | | |
| | comp=Z,9.8nm,0.7s | | | | | | | |
| COLD | **Coldfoot** | **89.28** | **9** | P | **P** | **15 23 25.7** | **+0.8** | |
| | baz=203,SNR=7.7 | | | | | | | |
| BILL | **Bilibino** | **89.30** | **353** | *i* P | **P** | **15 23 24.8** | **-0.2** | |
| BILL | | | | *i* | | 15 26 53.1 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| BO01 | **Tunca** | **89.32** | **127** | IAmb | IAmb | 15 23 29.0 | | |
| | comp=Z,30nm,1.1s | | | | | | | |
| BO02 | **Sierra Bellavi** | **89.38** | **127** | IAmb | IAmb | 15 23 29.5 | | |
| | comp=Z,34nm,1.1s | | | | | | | |
| EFI | **East Falkland** | **89.47** | **146** | *ce*P | **P** | **15 23 28.6** | **+2.3** | |
| EFI | | | | pmax | pmax | | | |
| | comp=Z,107nm,1.7s | | | | | | | |
| EGMT | **Eagleton** | **89.48** | **37** | IAmb | IAmb | 15 23 28.4 | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| EGMT | **Eagleton** | **89.48** | **37** | P | **P** | **15 23 27.2** | **+0.8** | |
| | baz=238,SNR=6.7 | | | | | | | |
| TIY | **Taiyuan** | **89.52** | **311** | ⇑P | **P** | **15 23 28.2** | **+1.4** | |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| MMPY | **Sheldon Lake,** | **89.59** | **19** | P | **P** | **15 23 27.6** | **+1.0** | |
| | baz=220,SNR=10 | | | | | | | |
| KSCO | **Kaye Shedlock'** | **89.60** | **48** | P | **P** | **15 23 27.7** | **+0.4** | |
| | baz=243 | | | | | | | |
| BO04 | **La Punta** | **89.84** | **126** | P | **P** | **15 23 28.8** | **+0.2** | |
| BO04 | | | | IAmb | IAmb | 15 23 31.6 | | |
| | comp=Z,35nm,1.3s | | | | | | | |
| I29M | **Ogilvie Camp,** | **89.92** | **14** | P | **P** | **15 23 28.1** | **+0.1** | |
| | baz=214,SNR=12 | | | | | | | |
| XLT | **XiLinHaoTe** | **89.93** | **317** | *e*P | **P** | **15 23 29.8** | **+1.2** | |
| XLT | | | | pP | pP | 15 23 39.7 | -5.0 | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,130nm,3.7s | | | | | | | |
| APG | **El Apazote** | **89.93** | **74** | LR | LR | 15 56 29.2 | | |
| | comp=Z,360nm,21.9s,baz=282,slow=31 | | | | | | | |
| ROC1 | **El Roble** | **89.95** | **125** | IAmb | IAmb | 15 23 35.9 | | |
| | comp=Z,48nm,1.4s | | | | | | | |
| LMEL | **Las Melosas** | **90.21** | **126** | IAmb | IAmb | 15 23 34.8 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| WMOK | **Wichita Mounta** | **90.53** | **53** | P | **P** | **15 23 31.6** | **0.0** | |
| | baz=246 | | | | | | | |
| XAN | **Xi'an** | **90.53** | **306** | P | **P** | **15 23 33.2** | **+1.6** | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.0s | | | | | | | |
| TOLK | **Toolik Lake Re** | **90.67** | **9** | P | **P** | **15 23 31.9** | **+0.5** | |
| | baz=204,SNR=6.2 | | | | | | | |
| LAO | **LASA Array** | **90.87** | **40** | P | **P** | **15 23 33.8** | **+1.0** | |
| LAO | **LASA Array** | **90.87** | **40** | P | **P** | **15 23 34.5** | **+1.6** | |
| | baz=241 | | | | | | | |
| RSSD | **Black Hills** | **91.00** | **43** | P | **P** | **15 23 33.4** | **-0.4** | |
| RSSD | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| RSSD | **Black Hills** | **91.00** | **43** | P | **P** | **15 23 33.4** | **-0.4** | |
| RSSD | | | | IAmb | IAmb | 15 23 35.2 | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| RSSD | **Black Hills** | **91.00** | **43** | P | **P** | **15 23 33.8** | **0.0** | |
| | baz=242 | | | | | | | |
| HHC | **Hu-ho-hao-te** | **91.51** | **313** | *e*P | **P** | **15 23 37.9** | **+1.8** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,100nm,6.2s | | | | | | | |
| CBKS | **Cedar Bluff** | **91.54** | **49** | P | **P** | **15 23 36.2** | **0.0** | |
| | baz=245 | | | | | | | |
| KMI | **Kunming** | **92.05** | **296** | ⇑P | **P** | **15 23 41.0** | **+1.9** | |
| KMI | | | | sP | pP | 15 23 57.7 | +2.5 | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,130nm,24.5s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,140nm,34.9s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,250nm,34.9s | | | | | | | |
| W35A | **Tecumseh** | **92.13** | **53** | P | **P** | **15 23 39.7** | **+0.7** | |
| KAN06 | **Argonia West S** | **92.25** | **51** | IAmb | IAmb | 15 23 41.2 | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| ZON | **Zonda** | **92.35** | **125** | P | **P** | **15 23 42.0** | **+1.8** | |
| ZON | | | | pmax | pmax | | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| ZON | **Zonda** | **92.35** | **125** | P | **P** | **15 23 42.0** | **+1.8** | |
| A21K | **Barrow** | **92.36** | **6** | P | **P** | **15 23 39.0** | **-0.1** | |
| | baz=197 | | | | | | | |
| OK033 | **Mehan** | **92.44** | **52** | IAmb | IAmb | 15 23 41.9 | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| WRGLY | **Wrigley** | **92.50** | **21** | P | **P** | **15 23 40.6** | **+0.7** | |
| | baz=227 | | | | | | | |
| QUOK | **Quay** | **92.66** | **52** | IAmb | IAmb | 15 23 43.5 | | |
| | comp=Z,29nm,1.1s | | | | | | | |
| GO03 | **Copiap** | **92.79** | **121** | IAmb | IAmb | 15 23 45.8 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| DGMT | **Dagmar** | **92.92** | **39** | P | **P** | **15 23 43.6** | **+1.3** | |
| | baz=242 | | | | | | | |
| CMAR | **Chiang Mai Arr** | **92.98** | **288** | P | **P** | **15 23 44.8** | **+1.5** | |
| | comp=Z,5.4nm,0.9s,baz=117,slow=2.6,SNR=36 | | | | | | | |
| CMAR | | | | PKKPbc | **PKKPbc** | **15 40 54.2** | **+1.5** | |
| | comp=Z,2.3nm,0.8s,baz=286,slow=4.7,SNR=27 | | | | | | | |
| CMAR | | | | LR | LR | 16 04 39.1 | | |
| | comp=Z,32nm,20.6s,baz=105,slow=35 | | | | | | | |
| X37A | **Clayton** | **93.05** | **54** | IAmb | IAmb | 15 23 44.1 | | |
| | comp=Z,9.6nm,0.8s | | | | | | | |
| CHTO | **Chiang Mai** | **93.10** | **289** | P | **P** | **15 23 43.9** | **+0.1** | |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| CHTO | **Chiang Mai** | **93.10** | **289** | P | **P** | **15 23 43.9** | **+0.1** | |
| CHTO | | | | IAmb | IAmb | 15 23 45.7 | | |
| | comp=Z,8.4nm,0.7s | | | | | | | |
| NNA | **Nana** | **93.12** | **104** | LR | LR | 15 55 59.1 | | |
| | comp=Z,60nm,22.0s,baz=250,slow=29 | | | | | | | |
| YAK | **Yakutsk** | **93.21** | **337** | P | **P** | **15 23 42.3** | **-0.9** | |
| | comp=Z,8.2nm,0.5s,baz=132,slow=2.8,SNR=14 | | | | | | | |
| YAK | | | | LR | LR | 16 03 11.5 | | |
| | comp=Z,21nm,19.0s,baz=84,slow=34 | | | | | | | |
| YAK | **Yakutsk** | **93.21** | **337** | *e*P | **P** | **15 23 41.7** | **-1.5** | |
| YAK | | | | *e*PPP | PPP | 15 29 24.6 | | |
| YAK | | | | *e*S | **SKSac** | **15 34 15.5** | **+3.4** | |
| YAK | | | | *e*SS | **SS** | **15 41 04.5** | **+2.0** | |
| YAK | | | | *e*SSS | SSS | 15 44 43.7 | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,201nm,4.5s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,129nm,5.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,179nm,4.8s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,261nm,5.8s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,153nm,4.7s | | | | | | | |
| YAK | **Yakutsk** | **93.21** | **337** | P | **P** | **15 23 42.0** | **-1.2** | |
| TUL1 | **Leonard** | **93.24** | **53** | P | **P** | **15 23 42.5** | **-1.5** | |
| TUL1 | **Leonard** | **93.24** | **53** | P | **P** | **15 23 44.3** | **+0.3** | |
| | baz=247 | | | | | | | |
| PZH | **PanZhiHua** | **93.39** | **297** | P | **P** | **15 23 46.2** | **+1.1** | |
| PZH | | | | sP | **pP** | **15 24 02.7** | **+1.5** | |
| PZH | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.9s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=N,100nm,6.3s | | | | | | | |
| INK | **Inuvik** | **93.42** | **14** | P | **P** | **15 23 44.0** | **-0.1** | |
| | comp=N,12nm,0.9s,baz=210,slow=4.4,SNR=37 | | | | | | | |
| INK | **Inuvik** | **93.42** | **14** | P | **P** | **15 23 43.6** | **-0.4** | |
| INK | | | | IAmb | IAmb | 15 23 45.1 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| INK | **Inuvik** | **93.42** | **14** | P | **P** | **15 23 44.1** | **+0.1** | |
| | baz=218 | | | | | | | |
| ATAH | **Atahualpa** | **93.44** | **99** | LR | LR | 15 55 06.6 | | |
| | comp=Z,102nm,20.0s,baz=289,slow=28 | | | | | | | |
| AC02 | **Maricunga** | **94.00** | **120** | P | **P** | **15 23 50.0** | **+1.5** | |
| AC02 | | | | IAmb | IAmb | 15 23 52.5 | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| W39A | **Magazine** | **94.49** | **54** | P | **P** | **15 23 50.1** | **+0.3** | |
| | baz=248 | | | | | | | |
| LZH | **Lanzhou** | **95.17** | **306** | *e*P | **P** | **15 23 54.4** | **+1.3** | |
| LZH | | | | pP | pP | 15 24 06.2 | -3.0 | |
| LZH | | | | sP | sP | 15 24 12.2 | -3.2 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,220nm,17.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,200nm,17.3s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,340nm,19.6s | | | | | | | |
| YKA | **Yellowknife Ar** | **95.18** | **24** | P | **P** | **15 23 52.5** | **+0.2** | |
| | comp=Z,9.0nm,0.7s,baz=239,slow=4.5,SNR=160 | | | | | | | |
| YKA | | | | PP | **PP** | **15 27 39.5** | **-3.6** | |
| | comp=Z,0.6nm,0.8s,baz=241,slow=7.7,SNR=3.5 | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **15 40 45.6** | **-3.1** | |
| | comp=Z,0.4nm,0.8s,baz=46,slow=2.3,SNR=5.0 | | | | | | | |
| PB15 | **IPOC Station P** | **95.24** | **117** | P | **P** | **15 23 54.1** | **+0.2** | |
| PB15 | | | | IAmb | IAmb | 15 23 57.9 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| MDND | **Maddock** | **95.41** | **41** | P | **P** | **15 23 54.1** | **+0.4** | |
| | baz=246 | | | | | | | |
| U40A | **Yellville** | **95.62** | **53** | P | **P** | **15 23 55.2** | **+0.3** | |
| | baz=249 | | | | | | | |
| PB02 | **IPOC Station P** | **95.66** | **115** | P | **P** | **15 23 57.5** | **+1.8** | |
| ECSD | **EROS Data Cent** | **95.68** | **45** | P | **P** | **15 23 55.0** | **-0.1** | |
| ECSD | **EROS Data Cent** | **95.68** | **45** | P | **P** | **15 23 55.3** | **+0.2** | |
| | baz=247

**TIXI Tiksi** 99.47 344 P **Pdif** 15 24 09.5 -1.9
comp=Z,0.9nm,0.5s,baz=89,slow=23,SNR=6.5
TIXI LR LR 16 05 21.6
comp=Z,100nm,21.1s,baz=5.0,slow=33
**TIXI Tiksi** 99.47 344 P **Pdif** 15 24 10.5 -0.9
TIXI pmax pmax
comp=Z,4.0nm,1.1s
**TIXI Tiksi** 99.47 344 P **Pdif** 15 24 10.5 -0.9
**JFWS Jewell Farm** 99.74 48 P **Pdif** 15 24 14.0 +0.7
baz=251
**CPUP Villa Florida** 103.56 125 Pdiff **Pdif** 15 24 34.2 +3.4
comp=Z,1.4nm,0.8s,baz=210,slow=8.1,SNR=3.9
**ZSN Zaisan** 111.69 314 *i* PKIKP **PKiKP** 15 29 02.9 -0.8
**ZSN Zaisan** 111.69 314 *e*PKiKP **PKiKP** 15 29 03.0 -0.8
baz=314
**ZALV Zalesovo Beam** 112.35 321 PKiKP **PKiKP** 15 29 04.0 -0.7
comp=Z,6.2nm,0.6s,baz=146,slow=0.9,SNR=38
ZALV PKKPbc **PKKPbc** 15 39 56.1 -0.5
comp=Z,0.9nm,0.6s,baz=267,slow=3.0,SNR=5.1
**MK31 Makanchi Array** 113.37 313 *i* PKIKP **PKiKP** 15 29 06.2 -0.8
**MKAR Makanchi Array** 113.37 313 Pdiff **Pdif** 15 25 14.8 +0.9
comp=Z,0.4nm,0.9s,baz=90,slow=4.1,SNR=2.8
MKAR PKiKP **PKiKP** 15 29 06.3 -0.7
comp=Z,5.0nm,0.7s,baz=191,slow=0.7,SNR=62
MKAR PKKPbc **PKKPbc** 15 39 53.5 +0.5
comp=Z,1.2nm,0.8s,baz=270,slow=4.8,SNR=8.1
**MKAR Makanchi Array** 113.37 313 PKiKP **PKiKP** 15 29 05.8 -1.2
**MAKZ Makanchi** 113.59 313 PKiKP **PKiKP** 15 29 06.0 -1.4
**SEM Semipalatinsk** 114.96 317 *e*PKiKP **PKiKP** 15 29 08.3 -1.9
**SEM Semipalatinsk** 114.96 317 *e*PKP **PKiKP** 15 29 08.3 -1.9
baz=317
**KPKS Kokpek** 115.63 309 *e*PKiKP **PKPdf** 15 29 10.7 -0.8
**KPKS Kokpek** 115.63 309 *e*PKP **PKPdf** 15 29 10.8 -0.8
baz=309
**TDK Taldyqorghan** 115.94 311 *e*PKiKP **PKPdf** 15 29 11.0 -1.0
**TDK Taldyqorghan** 115.94 311 *e*PKP **PKPdf** 15 29 11.0 -1.0
baz=311
**KURK Kurchatov** 116.01 317 *c i*PKiKP **PKPdf** 15 29 11.4 -0.4
KURK pmax pmax
comp=Z,10.0nm,1.0s
**KURK Kurchatov** 116.01 317 PKPdf 15 29 10.2 -1.6
**KURBB Kurchatov Arra** 116.06 317 PKiKP **PKPdf** 15 29 07.4 -4.6
**BDFB Brasilia** 116.58 120 PKP **PKPdf** 15 29 14.3 +0.1
comp=Z,1.8nm,0.4s,baz=182,slow=6.3,SNR=3.8
**CHKK Chushkaly** 116.89 310 *e*PKP **PKPdf** 15 29 12.8 -1.0
baz=310
**KSH Kashi** 117.35 305 PKP **PKiKP** 15 29 16.6 +1.6
**KUU Kurty** 117.36 310 *e*PKiKP **PKPdf** 15 29 13.3 -1.4
**KUU Kurty** 117.36 310 *e*PKP **PKPdf** 15 29 13.3 -1.4
baz=310
**SGDS Segindy** 118.58 309 *e*PKP **PKPdf** 15 29 16.3 -0.9
baz=309
**BTLS Baital** 119.03 311 *e*PKiKP **PKPdf** 15 29 17.2 -0.7
**BTLS Baital** 119.03 311 *e*PKP **PKPdf** 15 29 17.2 -0.7
baz=311
**BRZS Berezniki** 119.83 317 *e*PKiKP **PKPdf** 15 29 18.1 -1.1
**BRZS Berezniki** 119.83 317 *e*PKP **PKPdf** 15 29 18.2 -1.1
baz=317
**OTUK Ortayu** 120.14 315 PKiKP **PKPdf** 15 29 17.9 -2.1
**DZA Taraz** 120.98 308 *e*PKiKP **PKPdf** 15 29 21.2 -0.5
**DZA Taraz** 120.98 308 *e*PKP **PKPdf** 15 29 21.2 -0.5
baz=308
**BRVK Borovoye** 121.04 320 *c i*PKiKP **PKPdf** 15 29 20.7 -0.8
BRVK pmax pmax
comp=Z,16nm,1.0s
**BRVK Borovoye** 121.04 320 PKPdf **PKPdf** 15 29 20.2 -1.3
**GAR Garm** 121.71 304 PKPdf **PKiKP** 15 29 23.9 +0.4
**SFJD Kangerlussuaq** 121.72 22 PKP **PKPdf** 15 29 20.9 -1.5
comp=Z,4.1nm,0.5s,baz=264,slow=3.6,SNR=4.5
**SPA0 Spitsbergen Ar** 121.95 357 *e*PKPdf **PKiKP** 15 29 22.8 +0.1
**BRLS Borolday** 122.08 309 *e*PKiKP **PKPdf** 15 29 23.6 -0.2
**BRLS Borolday** 122.08 309 *e*PKP **PKPdf** 15 29 23.6 -0.2
baz=308
**SUMG Summit** 122.34 14 PKiKP **PKPdf** 15 29 23.5 -0.5
**SUMG Summit** 122.34 14 *i* P **PKPdf** 15 29 23.0 -1.0
**SUMG Summit** 122.34 14 PKPdf **PKPdf** 15 29 23.5 -0.5
**DAG Danmarks Havn** 122.34 6 *i* P **PKPdf** 15 29 21.0 -2.3
**KBL Kabul** 122.54 299 PKiKP **PKPdf** 15 29 25.3 0.0
**KBL Kabul** 122.54 299 PKPdf **PKPdf** 15 29 25.3 0.0
**DY2G Dye2** 123.50 22 *i* P **PKPdf** 15 29 25.0 -1.2
**ICESG Greenland Ices** 124.21 18 *i* P **PKPdf** 15 29 26.9 -0.7
**DBG Daneborg** 124.35 8 *i* P **PKPdf** 15 29 26.4 -0.9
**SVE Sverdlovsk** 125.64 326 *e*PKiKP **PKPdf** 15 29 29.9 -0.3
SVE pmax pmax
comp=Z,22nm,0.9s
**ARU Arti** 126.86 326 *i* PKiKP **PKPdf** 15 29 32.7 +0.2
ARU 15 31 30.7
ARU 15 36 41.1
ARU SS SS 15 48 31.7 -1.4
**ARU Arti** 126.86 326 PKPdf **PKPdf** 15 29 32.1 -0.4
**SCO Scoresbysund** 127.37 11 PKiKP **PKPdf** 15 29 33.1 0.0
**SCO Scoresbysund** 127.37 11 PKPdf **PKPdf** 15 29 33.1 0.0
**BOSA Boshof** 127.56 202 PKP **PKiKP** 15 29 36.0 +0.4
comp=Z,3.5nm,0.8s,baz=172,slow=3.5,SNR=3.6
**BOSA Boshof** 127.56 202 PKiKP **PKiKP** 15 29 36.0 +0.4
**AB31 Akbulak array** 128.12 317 *i* PKiKP **PKPdf** 15 29 35.0 -0.2
**ABKAR Akbulak array** 128.12 317 PKPdf **PKPdf** 15 29 34.3 -0.8
**HAMF Hammerfest** 128.59 352 *e*PKPdf **PKPdf** 15 29 35.2 -0.2
**AKTO Aktyubinsk** 129.03 319 PKiKP **PKPdf** 15 29 37.0 +0.1
**ARA0 ARCESS Array S** 129.36 351 *e*PKPdf **PKPdf** 15 29 37.0 0.0
**ARCES ARCESS Array B** 129.36 351 PKP **PKPdf** 15 29 36.9 0.0
comp=Z,14nm,0.7s,baz=7.7,slow=0.9,SNR=62
**ARCES ARCESS Array B** 129.36 351 PKPdf **PKPdf** 15 29 35.6 -1.4
**APA Apatity** 129.62 346 ⇓ *i*PKiKP **PKiKP** 15 29 38.6 +0.4
APA pmax pmax
comp=Z,7.0nm,0.6s
**TRO Tromso** 130.09 354 *e*PKPdf **PKPdf** 15 29 38.4 +0.1
**KTK1 Kautokeino** 130.16 352 *e*PKPdf **PKPdf** 15 29 37.6 -0.8
**KIRV Kirov** 130.39 331 *c i*PKiKP **PKiKP** 15 29 40.1 +0.1
**GEYT Alibeck** 131.31 303 PKP **PKiKP** 15 29 42.4 -0.2
comp=Z,7.4nm,0.8s,baz=229,slow=11,SNR=9.1
GEYT SKPbc **SKPab** 15 33 02.1 -0.3
comp=Z,13nm,1.1s,baz=56,slow=5.4,SNR=10
**STEI Steigen** 132.09 355 *e*PKPdf **PKPdf** 15 29 42.6 +0.5
**KLMR Klimovskoe** 133.00 338 *e*PKiKP **PKPdf** 15 29 42.0 -2.0
KLMR pmax pmax
comp=Z,18nm,1.3s
**KLMR Klimovskoe** 133.00 338 *e*PKPdf **PKPdf** 15 29 42.0 -2.0
KLMR AMP 15 29 46.6
comp=Z,18nm,1.3s
KLMR *e*SKPbc **SKPab** 15 33 07.7 -1.1
**BELG Belogornoye** 134.33 325 *i* PKiKP **PKPdf** 15 29 46.3 -0.5
**NSS Namsos** 135.69 356 *e*PKPdf **PKPdf** 15 29 45.3 -3.7
**FINES FINESS Array B** 136.51 346 PKhKP PKPpre 15 29 39.9
comp=Z,1.1nm,0.5s,baz=27,slow=2.1,SNR=7.5
FINES PKP **PKiKP** 15 29 52.0 -0.3
comp=Z,8.1nm,0.6s,baz=18,slow=3.7,SNR=22
**OBN Obninsk** 138.10 333 *i* PKiKP **PKPdf** 15 29 54.7 +1.0
OBN pmax pmax
comp=Z,13nm,1.0s
**VORR Voronezh** 139.10 328 *e*PKiKP **PKPdf** 15 29 55.0 -0.7
VORR pmax pmax
comp=Z,50nm,0.4s
**NB2 NORSAR Subarra** 139.20 356 PKP PKPdf 15 29 47.5 -8.2
comp=Z,1.7nm,0.6s,baz=17,slow=2.6
**NOA NORSAR Array B** 139.20 356 PKhKP PKPpre 15 29 48.3
comp=Z,1.1nm,0.8s,baz=42,slow=1.2,SNR=2.0
NOA PKP **PKiKP** 15 29 57.6 -0.3
comp=Z,5.1nm,0.8s,baz=14,slow=4.0,SNR=6.2
**NC602 NORSAR Array S** 139.48 355 *e*PKPdf **PKPdf** 15 29 56.4 +0.3
**SKAR Skarslia** 139.72 358 *e*PKPdf **PKPdf** 15 29 56.1 -0.5
**ZEI Tsey** 140.72 313 *i* PKiKP **PKPdf** 15 29 58.7 -0.5
ZEI pmax pmax
comp=Z,8.0nm,1.0s
**KBZ Khabaz** 141.02 315 PKhKP PKPpre 15 29 53.3
comp=Z,1.3nm,0.7s,baz=0.0,slow=0.0,SNR=2.1
**GNI Garni** 141.05 309 *c i*PKiKP **PKPdf** 15 30 00.7 +0.9
GNI pmax pmax
comp=Z,22nm,1.7s
**KIV Kislovodsk** 141.06 316 *i* PKiKP **PKiKP** 15 30 01.2 -1.1
KIV pmax pmax
comp=Z,7.0nm,1.0s
KIV MLR MLR
comp=Z,70nm,24.0s
**IDID Didziasalis** 141.59 340 *e*P **PKPdf** 15 29 55.1 -4.9
**IIGN Ignalina** 141.72 341 *e*P **PKPdf** 15 29 55.8 -4.5
**MNK Minsk** 141.88 339 *i* PKiKP **PKPdf** 15 29 56.5 -4.0
MNK *i* 15 33 01.0
MNK *i* 15 37 03.8
MNK *i* SS SS 15 51 32.5 -0.6
MNK pmax pmax
comp=N,41nm,1.3s
MNK pmax pmax
comp=Z,21nm,0.8s
MNK pmax pmax
comp=E,5.0nm,1.0s
MNK MLR MLR
comp=Z,205nm,19.0s
**MNK Minsk** 141.88 339 *i* PKP **PKPdf** 15 29 56.6 -4.0
comp=E,5.0nm,1.0s
MNK *i* PKP **PKPdf** 15 29 56.6 -4.0
comp=N,41nm,1.3s
MNK *i* PKP **PKPdf** 15 29 56.6 -4.0
comp=Z,21nm,0.8s,baz=36
MNK *i* PP **PP** 15 33 01.1 -4.3
MNK *i* SKP 15 34 17.7
MNK *i* PKS 15 34 44.6
MNK *i* PPP PPP 15 36 08.7
MNK *i* SKS **SKSdf** 15 37 03.8 -1.8
MNK *i* SKKS **SKKSdf** 15 46 24.3 -3.8
MNK *i* SS **SS** 15 51 32.5 -0.6
MNK *i* SSS SSS 15 56 08.1
MNK *i* LR LR 16 30 19.5
MNK *i* LRM MLR 16 34 37.6
comp=Z,205nm,19.5s
MNK *i* LRM MLR 16 35 32.5
comp=E,234nm,20.8s
MNK *i* LRM MLR 16 36 08.3
comp=N,2μm,20.8s
**NACGM Naroch** 141.91 340 *i* PKP **PKPdf** 15 29 56.1 -4.5
**KMBO Kilima Mbogo** 142.05 239 PKhKP PKPpre 15 29 59.1
comp=N,2.2nm,0.7s,baz=64,slow=2.7,SNR=6.3
**KMBO Kilima Mbogo** 142.05 239 PKiKP **PKPdf** 15 30 00.3 -2.2
**KMBO Kilima Mbogo** 142.05 239 **PKPdf** 15 30 00.3 -2.2
**KAC Achnashellach** 142.16 9⇑ *e*P **PKPdf** 15 29 55.7 -5.4
**PABE Paberze** 142.25 343 *e*P **PKPdf** 15 29 55.8 -5.4
**RAYN Ar Rayn** 142.64 282 PKiKP **PKPdf** 15 29 59.8 -3.2
**RAYN Ar Rayn** 142.64 282 PKPpre 15 29 59.8
**LAWE Loch Awe, Argy** 143.34 10⇑ *e*P PKPbc 15 29 59.9 -0.4
**SUW Suwalki** 143.78 342 *e*PKPdf PKPbc 15 30 01.8 +0.1
**SUW Suwalki** 143.78 342 *e*P PKPbc 15 30 01.7 0.0
**EBL Broad Law** 144.15 8 *e*P **PKPab** 15 30 02.5 +0.1
**AKASG Malin Array Be** 144.36 334 PKP **PKPab** 15 30 03.0 -0.3
comp=N,48nm,0.8s,baz=40,slow=4.6,SNR=158
AKASG pPKP **pPKPdf** 15 30 22.8 +1.0
comp=N,5.7nm,0.6s,baz=39,slow=4.2,SNR=3.2
AKASG SKPbc **SKiKP** 15 33 40.4 +0.2
comp=N,1.2nm,0.7s,baz=41,slow=3.5,SNR=4.7
**AKBB Malin Array Si** 144.36 334 PKiKP **PKPab** 15 30 02.8 -0.5
**AKBB Malin Array Si** 144.36 334 PKPdf **PKPab** 15 30 02.8 -0.5
**NEWG New Galloway** 144.62 9 *e*P **PKPab** 15 30 02.8 -1.3
NEWG IAmb IAmb 15 30 04.7
comp=Z,70nm,1.3s
**GAL1 Galloway** 144.79 10 *e*P **PKPab** 15 30 03.5 -1.2
**IGLA Glengowla, Co** 145.19 15 *e*P **PKPbc** 15 30 06.0 -0.1
**EDMD Edmundbyers** 145.21 7⇑ *e*P **PKPbc** 15 30 05.8 -0.4
**ILTH Belurgan, Co L** 145.30 12 *e*P **PKPbc** 15 30 05.9 -0.5
**KESW Keswick, Cumbr** 145.30 9⇑ *e*P **PKPbc** 15 30 06.3 -0.1
KESW IAmb IAmb 15 30 06.9
comp=Z,66nm,0.9s
**WIM Isle of Man** 145.49 10 *e*P **PKPdf** 15 30 07.0 0.0
**GDLE Glaisdale, N Y** 145.74 6 *e*P **PKPdf** 15 30 07.5 +0.2
**SIM Simferopol'** 145.85 322 *e*PKP2 **PKPbc** 15 30 08.5 0.0
SIM pmax pmax
comp=Z,189nm,0.6s
**GKP Gorka Klasztor** 145.94 347 *e*PKPbc **PKPab** 15 30 09.0 0.0
**GKP Gorka Klasztor** 145.94 347 *e*P **PKPab** 15 30 09.4 +0.4
**HPK Haverah Park** 146.11 7 *e*P **PKPbc** 15 30 09.1 +0.1
**WPS Cemaes, Angles** 146.23 11 *e*P **PKPbc** 15 30 09.0 -0.3
**WME Myndd Eilian** 146.27 10 *e*P **PKPbc** 15 30 09.5 +0.1
**BSEG Bad Segeberg** 146.32 355 *e*PKPbc **PKPab** 15 30 10.3 -0.2
baz=8.9,slow=2.5
BSEG *ep*PKPbc **sPKPdf** 15 30 30.2 -0.8
baz=8.9,slow=2.5
BSEG *es*PKPbc sPKPab 15 30 38.9 +6.0
baz=8.7,slow=2.5
**WLF1 Llynfaes** 146.36 10 *e*P **PKPbc** 15 30 09.8 +0.1
**YRC Rhoscolyn** 146.36 11 *e*P **PKPdf** 15 30 09.0 +0.6
**BEL Belsk** 146.38 343 *e*PKPbc **PKPab** 15 30 10.8 0.0
**LBWR Ladybower, Pea** 146.64 8 *e*P **PKPbc** 15 30 10.2 -0.4
**SORM Soroca** 146.67 331 ⇑P **PKPbc** 15 30 10.7 -0.1
**SORM Soroca** 146.67 331 ⇑PKP2 **PKPbc** 15 30 10.7 -0.1
**IWEX Carrickbyrne,** 146.76 13 *e*P **PKPbc** 15 30 11.1 +0.2
**LLW Llanuwychllyn** 146.90 10 *e*P **PKPbc** 15 30 11.1 -0.2
**FOEL Foel Wylfa** 146.94 9⇑ *e*P **PKPbc** 15 30 11.5 0.0
**LVV L'vov** 147.09 337 *e*PKP2 **PKPbc** 15 30 12.0 0.0
**PURM Purcari** 147.10 328 ⇑P **PKPbc** 15 30 12.5 +0.4
**RUE Ruedersdorf** 147.32 350 *e*P **PKPbc** 15 30 13.2 +0.7
**RUE Ruedersdorf** 147.32 350 *e*PKPbc **PKPbc** 15 30 13.1 +0.7
baz=8.9,slow=2.5
**MILM Milestii Mici** 147.34 329 ⇑P **PKPbc** 15 30 13.1 +0.3
**MILM Milestii Mici** 147.34 329 ⇑PKP2 **PKPbc** 15 30 13.1 +0.3
**HLM1 Long Mynd** 147.34 9⇑ *e*P **PKPbc** 15 30 12.7 +0.1
**MBAR Mbarara** 147.46 233 PKiKP **PKPbc** 15 30 13.1 -1.2
**MBAR Mbarara** 147.46 233 **PKPbc** 15 30 13.1 -1.2
**RETH Rethem/Aller,** 147.59 355 *e*PKPbc **PKPbc** 15 30 13.8 +0.6
baz=8.9,slow=2.5
**BZK Bozkurt** 147.61 318 ⇑P **PKPbc** 15 30 14.2 +0.6
**KWP Kalwaria Pacla** 147.71 339 *e*PKPbc **PKPbc** 15 30 14.2 +0.5
**NRDL Niedersach Rie** 147.77 354 *e*PKPbc **PKPbc** 15 30 14.3 +0.7
baz=8.9,slow=2.5
NRDL *ep*PKPbc **sPKPdf** 15 30 34.8 +1.3
baz=8.9,slow=2.5
NRDL *es*PKPbc **sPKPab** 15 30 42.8 +4.3
baz=8.7,slow=2.5
**FLTG Flechtingen** 147.81 353 *e*PKPbc **PKPbc** 15 30 14.2 +0.4
baz=8.9,slow=2.5
FLTG *ep*PKPbc **sPKPdf** 15 30 34.6 +0.9
baz=8.9,slow=2.5
FLTG *es*PKPbc **sPKPab** 15 30 42.5 +3.8
baz=8.7,slow=2.5
**MCH1 Michaelchurch** 147.83 10⇑ *e*P **PKPbc** 15 30 13.7 -0.2
MCH1 IAmb IAmb 15 30 14.6
comp=Z,53nm,0.7s
**LEOM Leova** 147.93 329 ⇑P **PKiKP** 15 30 15.4 -0.8
**LEOM Leova** 147.93 329 ⇑PKP2 **PKiKP** 15 30 15.4 -0.8
**MONM Monmouth** 148.01 9⇑ *e*P **PKPbc** 15 30 14.5 +0.1
MONM IAmb IAmb 15 30 15.2
comp=Z,132nm,0.9s
**VASR Vaslui** 148.03 330 ⇑P **PKPbc** 15 30 15.3 +0.7
**ASSE Asse, Remlinge** 148.07 354 *e*PKPbc **PKPbc** 15 30 15.2 +0.8
baz=8.9,slow=2.5
ASSE *ep*PKPbc **sPKPdf** 15 30 35.8 +1.8
baz=8.9,slow=2.5
ASSE *es*PKPbc **sPKPab** 15 30 43.7 +4.0
baz=8.7,slow=2.5
**OJC Ojcow** 148.11 342 *e*PKPbc **PKPbc** 15 30 15.2 +0.5
**IBBN Ibbenburen** 148.12 357 *e*PKPbc **PKPbc** 15 30 15.3 +0.7
baz=8.9,slow=2.5
IBBN *ep*PKPbc **sPKPdf** 15 30 36.0 +1.8
baz=8.9,slow=2.5
IBBN *es*PKPbc **sPKPab** 15 30 43.9 +3.9
baz=8.7,slow=2.5
**CLZ Clausthal** 148.39 354 *e*PKPbc **PKPbc** 15 30 16.2 +0.8
baz=8.9,slow=2.5
CLZ *e*PKPab **PKPab** 15 30 19.3 +0.5
baz=12,slow=4.1
CLZ *ep*PKPbc **pPKPab** 15 30 36.7 +1.6
baz=8.9,slow=2.5
**BURAR Bucovina Array** 148.42 334 ⇓P **PKPbc** 15 30 16.5 +0.7
**BURAR Bucovina Array** 148.42 334 ⇓PKP2 **PKPbc** 15 30 16.5 +0.7
**BURAR Bucovina Array** 148.42 334 PKPdf **PKPdf** 15 30 13.3 +1.1
**KSP Ksiaz** 148.42 347 *e*PKPdf **PKPdf** 15 30 13.0 +1.0
KSP *e*PKPbc **PKiKP** 15 30 16.5 -0.6
**KOLS Kolonicke sedl** 148.45 338 *e*PKP2 **PKiKP** 15 30 17.3 0.0
**KOLS Kolonicke sedl** 148.45 338 *e*PKP **PKiKP** 15 30 17.3 0.0
**VLDR Vladesti** 148.47 329 ⇓P **PKiKP** 15 30 16.9 -0.4
**VARL Varlezi** 148.54 329 ⇑P **PKPbc** 15 30 16.7 +0.7
**TLCR** 148.57 327 ⇑P **PKPbc** 15 30 16.7 +0.7
**CLL Collm** 148.58 351 ⇑ *i*PKP2 **PKPbc** 15 30 16.4 +0.5
CLL pmax pmax
comp=Z,94nm,1.0s
CLL pmax pmax
comp=Z,29nm,0.8s
**CLL Collm** 148.58 351 ⇑ *i*PKPbc **PKPbc** 15 30 16.4 +0.5
comp=Z,94nm,1.0s
CLL *i* PKPab **PKPab** 15 30 19.1 -0.4
comp=Z,29nm,0.8s
**CLL Collm** 148.58 351 *e*PKPbc **PKPbc** 15 30 16.5 +0.6
baz=8.9,slow=2.5
CLL *ep*PKPbc **pPKPab** 15 30 37.0 +1.2
baz=8.9,slow=2.5
**SCTR Scanteiesti** 148.63 329 ⇑P **PKiKP** 15 30 17.0 -0.7
**GHRR** 148.63 330 ⇑P **PKiKP** 15 30 17.7 0.0
**TESR Tescani** 148.65 331 ⇓P **PKPbc** 15 30 16.6 +0.4
**TATR Tatarca** 148.66 328 ⇑P **PKPbc** 15 30 16.9 +0.6
**NIE Niedzica** 148.67 341 *e*PKPbc **PKiKP** 15 30 18.2 +0.4
**OSTC Ostas** 148.70 347 *e*PKPDF **PKPdf** 15 30 13.6 +1.1
OSTC ⇑ *e*PKP **PKPbc** 15 30 16.6 +0.3
**CHVC Chvalec** 148.71 347⇑ *e*PKP **PKPbc** 15 30 16.8 +0.5
**GTTG Gottingen** 148.72 354 *e*PKPbc **PKiKP** 15 30 17.1 -0.6
baz=8.9,slow=2.5
GTTG *e*PKPab **PKPab** 15 30 20.5 +0.5
baz=12,slow=4.1
GTTG *ep*PKPbc **pPKPab** 15 30 37.5 +1.2
baz=8.9,slow=2.5
GTTG *es*PKPbc **sPKPab** 15 30 45.4 +3.0
baz=8.7,slow=2.5
**CRVS Cervenica-Dubn** 148.75 339 *e*PKP2 **PKiKP** 15 30 17.6 -0.3
**CRVS Cervenica-Dubn** 148.75 339 *e*PKP **PKiKP** 15 30 17.6 -0.3
**UPC Upice** 148.79 347 *e*PKP2 **PKPbc** 15 30 16.9 +0.4
**UPC Upice** 148.79 347⇑ *e*PKP **PKPbc** 15 30 16.9 +0.4
UPC *ex* x 15 30 39.5
**BRG Berggiesshubel** 148.85 349⇓ *e*PKPf 15 30 13.2
BRG Amp 15 30 14.5
comp=Z,7.7nm,1.1s
BRG ⇑ *i*PKP **PKiKP** 15 30 17.4 -0.6
BRG Amp 15 30 18.4
comp=Z,48nm,0.8s
BRG *e*PKPab **PKPab** 15 30 20.7 +0.1
BRG Amp 15 30 21.4
comp=Z,46nm,1.0s
BRG *ex* x 15 30 35.0
BRG Amp 15 30 38.5
comp=Z,56nm,1.5s
**BRG Berggiesshubel** 148.85 349 *e*PKP2 **PKPab** 15 30 20.7 +0.1
BRG pmax pmax
comp=Z,46nm,1.0s
BRG pmax pmax
comp=Z,56nm,1.5s
**BRG Berggiesshubel** 148.85 349 *e*PKPdf **PKPdf** 15 30 13.7 +1.0
baz=12,slow=1.5
BRG *e*PKPbc **PKiKP** 15 30 17.4 -0.6
baz=8.9,slow=2.5
BRG *e*PKPab **PKPab** 15 30 20.9 +0.3
baz=12,slow=4.1
BRG *ep*PKPbc **pPKPab** 15 30 37.8 +0.9
baz=8.9,slow=2.5
**NEUB Neuenburg** 148.85 352 *e*PKPbc **PKPbc** 15 30 17.3 +0.7
baz=8.9,slow=2.5
NEUB *ep*PKPbc **pPKPab** 15 30 37.8 +0.9
baz=8.9,slow=2.5
NEUB *es*PKPbc **sPKPab** 15 30 45.7 +2.8
baz=8.7,slow=2.5
**DPC Dobruska-Polom** 148.88 346 *e*PKIKP **PKPdf** 15 30 13.3 +0.5
DPC *e* 15 30 17.4
**DPC Dobruska-Polom** 148.88 346 *e*PKPDF **PKPdf** 15 30 13.3 +0.5
DPC ⇑ *e*PKP **PKPbc** 15 30 17.4 +0.6
**FBE Freiberg** 148.90 350 *e*PKPdf **PKPdf** 15 30 14.0 +1.3
baz=12,slow=1.5
FBE *e*PKPbc **PKiKP** 15 30 17.9 -0.2
baz=8.9,slow=2.5
FBE *e*PKPab **PKPab** 15 30 21.4 +0.6
baz=12,slow=4.1
FBE *ep*PKPbc **pPKPab** 15 30 38.3 +1.2
baz=8.9,slow=2.5
FBE *es*PKPbc **sPKPab** 15 30 46.3 +3.1
baz=8.7,slow=2.5
**CFR Carcaliu** 148.92 328 ⇓P **PKPbc** 15 30 17.4 +0.5
**CFR Carcaliu** 148.92 328 ⇓PKP2 **PKPbc** 15 30 17.4 +0.5
**TPGR Topolog** 149.00 327 ⇑P **PKiKP** 15 30 18.1 -0.4
**BUG Bochum--Univer** 149.00 358 *e*PKPbc **PKPbc** 15 30 17.5 +0.5
baz=8.9,slow=2.5
BUG *ep*PKPbc **pPKPab** 15 30 38.0 +0.6
baz=8.9,slow=2.5
**BRTR Keskin Array B** 149.01 315 PKP **PKPdf** 15 30 13.5 +0.1
comp=Z,23nm,0.7s,baz=123,slow=3.0,SNR=8.2
BRTR PKPbc **PKPbc** 15 30 17.8 +0.2
comp=Z,21nm,0.7s,baz=211,slow=1.4,SNR=39
**BRTR Keskin Array B** 149.01 315 **PKPdf** 15 30 12.6 -0.9
BRTR PKPbc **PKPbc** 15 30 18.0 +0.4
**ODBI Odobesti** 149.02 330 ⇑P **PKiKP** 15 30 18.9 +0.4
**KRLC Kraliky** 149.03 346 *e*PKIKP **PKPdf** 15 30 14.1 +1.0
KRLC *e* 15 30 17.1
**KRLC Kraliky** 149.03 346 *e*PKPDF **PKPdf** 15 30 14.1 +1.0
KRLC ⇑ *e*PKP **PKPbc** 15 30 17.1 -0.1
**TRPA Tarpa** 149.04 337 ⇑P **PKiKP** 15 30 17.9 -0.5
**BMR Baia Mare** 149.06 336 ⇑P **PKiKP** 15 30 18.0 -0.5
**BMR Baia Mare** 149.06 336 ⇑PKP2 **PKiKP** 15 30 18.0 -0.5
**PVCC Panska Ves** 149.07 348 *e*PKP2 **PKiKP** 15 30 18.2 -0.2
**PVCC Panska Ves** 149.07 348⇑ *e*PKP **PKiKP** 15 30 18.2 -0.2
**VRI Vrincioaia** 149.10 330 ⇑P **PKiKP** 15 30 17.9 +0.4
**VRI Vrincioaia** 149.10 330 ⇑PKP2 **PKPbc** 15 30 17.9 +0.4
**MORC Moravsky Berou** 149.12 344 ⇑P **PKiKP** 15 30 18.4 -0.3
**MORC Moravsky Berou** 149.12 344 ⇑PKP2 **PKiKP** 15 30 18.4 -0.3
**MORC Moravsky Berou** 149.12 344 *e*PKP **PKiKP** 15 30 18.1 -0.6
**PLOR Plostina** 149.15 330 ⇑P **PKPbc** 15 30 16.9 -0.7
**PLOR Plostina** 149.15 330 ⇑PKP2 **PKiKP** 15 30 16.9 -0.7
**LANS Liptovska Anna** 149.16 342 *e*PKP2 **PKiKP** 15 30 19.1 +0.3
**LANS Liptovska Anna** 149.16 342 *e*PKP **PKiKP** 15 30 19.1 +0.3
**KASTN Kahler Asten** 149.18 356 *e*PKPbc **PKPbc** 15 30 18.2 +0.7
baz=8.9,slow=2.5
KASTN *ep*PKPbc **pPKPab** 15 30 38.4 +0.1
baz=8.9,slow=2.5
**ARCR ARCALIA** 149.19 334 ⇑P **PKiKP** 15 30 18.8 -0.1
**TIRR Tirgusor** 149.28 327 ⇑P **PKiKP** 15 30 18.6 -0.5
**TIRR Tirgusor** 149.28 327 ⇑PKP2 **PKiKP** 15 30 18.6 -0.5
**GRER** 149.34 329 ⇑P **PKiKP** 15 30 20.3 +1.1
**BISRR Bisoca** 149.34 330 ⇑P **PKiKP** 15 30 19.6 +0.3
**COVR Voineasa-Covas** 149.35 331 ⇓P **PKPbc** 15 30 18.5 +0.3
**OZUR** 149.35 331 ⇑P **PKiKP** 15 30 19.1 -0.2
**HARR Harsova** 149.36 327 ⇓P **PKiKP** 15 30 19.0 -0.2
**HARR Harsova** 149.36 327 ⇓PKP2 **PKiKP** 15 30 19.0 -0.2
**TLBR Topalu** 149.41 327 ⇓P **PKiKP** 15 30 19.4 0.0
**MOX Moxa** 149.42 352 *e*PKPbc **PKPbc** 15 30 18.7 +0.6
baz=8.9,slow=2.5
MOX *ep*PKPbc **pPKPab** 15 30 39.2 0.0
baz=8.9,slow=2.5
MOX *es*PKPbc **sPKPab** 15 30 47.2 +1.9
baz=8.7,slow=2.5
**UBBA Unterbreizbach** 149.44 354 *e*PKPbc **PKPbc** 15 30 18.4 +0.5
baz=8.9,slow=2.5
UBBA *e*PKPab **PKPab** 15 30 23.3 +0.4
baz=12,slow=4.1
**KECS Kecovo** 149.44 340 *e*PKP2 **PKiKP** 15 30 19.3 0.0
**KECS Kecovo** 149.44 340 *e*PKP **PKiKP** 15 30 19.3 0.0
**PLN Plauen** 149.51 351 *e*PKPdf **PKPdf** 15 30 14.7 +0.9
baz=12,slow=1.5
PLN *e*PKPbc **PKiKP** 15 30 19.1 -0.3
baz=8.9,slow=2.5
PLN *ep*PKPbc **pPKPab** 15 30 39.5 0.0
baz=8.9,slow=2.5
PLN *es*PKPbc **sPKPab** 15 30 47.5 +1.8
baz=8.7,slow=2.5
**WERD Werda** 149.52 351 *e*PKPbc **PKiKP** 15 30 19.2 -0.2
baz=8.9,slow=2.5
WERD *ep*PKPbc **pPKPab** 15 30 39.7 +0.1
baz=8.9,slow=2.5
WERD *es*PKPbc **sPKPab** 15 30 47.5 +1.8
baz=8.7,slow=2.5
**TANN Tannenbergstha** 149.53 351 *e*PKPbc **PKiKP** 15 30 19.3 -0.2
baz=8.9,slow=2.5
TANN *ep*PKPbc **pPKPab** 15 30 39.5 -0.2
baz=8.9,slow=2.5
**PRU Pruhonice** 149.59 348 *e*PKP2 **PKPbc** 15 30 18.6 +0.1
**PRU Pruhonice** 149.59 348⇑ *e*PKP **PKPbc** 15 30 18.6 +0.1
PRU *ep*PKP **sPKPdf** 15 30 37.5 +0.9
**GUNZ Gunzen** 149.60 351 *e*PKPdf **PKPdf** 15 30 14.9 +1.0
baz=12,slow=1.5
GUNZ *e*PKPbc **PKiKP** 15 30 19.5 -0.1
baz=8.9,slow=2.5
GUNZ *e*PKPab **PKPab** 15 30 24.1 +0.4
baz=12,slow=4.1
GUNZ *ep*PKPbc **pPKPab** 15 30 40.0 0.0
baz=8.9,slow=2.5
GUNZ *es*PKPbc **sPKPab** 15 30 47.9 +1.8
baz=8.7,slow=2.5
**IZAB Izabela** 149.61 341 *e*PKP2 **PKiKP** 15 30 19.8 +0.2
**NEHR Nehoiu** 149.63 330 ⇑P **PKPbc** 15 30 19.1 +0.4
**MANR Mangalia** 149.63 325 ⇓P **PKiKP** 15 30 20.0 +0.2
**DOPR Dopca** 149.63 332 ⇓P **PKiKP** 15 30 19.8 0.0
**WERN Wernitzgruen** 149.67 351 *e*PKPbc **PKiKP** 15 30 19.8 0.0
baz=8.9,slow=2.5
WERN *e*PKPab **PKPab** 15 30 24.5 +0.5
baz=12,slow=4.1
WERN *ep*PKPbc **pPKPab** 15 30 40.3 0.0
baz=8.9,slow=2.5
WERN *es*PKPbc **sPKPab** 15 30 48.2 +1.8
baz=8.7,slow=2.5
**PGOR Pogoanele** 149.68 329 ⇑P **PKiKP** 15 30 20.2 +0.4
**NKC Novy Kostel** 149.71 351 *e*PKP2 **PKiKP** 15 30 19.4 -0.4
**NKC Novy Kostel** 149.71 351⇑ *e*PKP **PKiKP** 15 30 19.4 -0.4
**ISR Istr

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ISR** | **Istrita** | **149.74** | **329** | ⇑PKP2 | **PKPbc** | **15 30 19.6** | **+0.5** |
| **MLR** | **Muntele Rosu** | **149.74** | **330** | ⇑P | **PKiKP** | **15 30 20.4** | **+0.2** |
| **MLR** | **Muntele Rosu** | **149.74** | **330** | ⇑PKP2 | **PKiKP** | **15 30 20.4** | **+0.2** |
| **MLR** | **Muntele Rosu** | **149.74** | **330** | | **PKPbc** | **15 30 18.7** | **-0.5** |
| **VRAC** | **Vranov** | **149.79** | **345** | ⇑P | **PKiKP** | **15 30 19.8** | **-0.2** |
| **VRAC** | **Vranov** | **149.79** | **345** | ⇑PKP2 | **PKiKP** | **15 30 19.8** | **-0.2** |
| **VRAC** | **Vranov** | **149.79** | **345** | *e*PKP | **PKiKP** | **15 30 19.6** | **-0.4** |
| **CJR** | **Cluj-Napoca** | **149.80** | **335** | ⇑P | **PKiKP** | **15 30 20.1** | **-0.1** |
| **CJR** | **Cluj-Napoca** | **149.80** | **335** | ⇑PKP2 | **PKiKP** | **15 30 20.1** | **-0.1** |
| **SHAB** | **Shabla** | **149.81** | **325** | ⇑P | **PKiKP** | **15 30 20.5** | **+0.3** |
| **MEM** | **Membach** | **149.87** | **359** | *d*PKiKP | **PKiKP** | **15 30 19.5** | **+0.4** |
| **BTNL** | **Ternell** | **149.89** | **359** | *d*PKiKP | **PKiKP** | **15 30 19.8** | **-0.4** |
| **LTVH** | **Ltavrtes, Hu** | **149.90** | **337** | ⇓P | **PKiKP** | **15 30 21.0** | **+0.7** |
| **LTVH** | **Ltavrtes, Hu** | **149.90** | **337** | ⇑PKP | **PKiKP** | **15 30 18.0** | **-0.5** |
| LTVH | | | | PKIKP | **PKiKP** | **15 30 21.7** | **+1.5** |
| **BSTI** | **Sart Tilman** | **149.90** | **360** | *d*PKiKP | **PKiKP** | **15 30 20.0** | **-0.2** |
| **AHRW** | **Bad Neuenahr-A** | **149.91** | **358** | *e*PKPbc | **PKiKP** | **15 30 19.8** | **-0.4** |
| | baz=8.9,slow=2.5 | | | | | | |
| AHRW | | | | *ep*PKPbc | **pPKPab** | **15 30 40.7** | **-0.5** |
| | baz=8.9,slow=2.5 | | | | | | |
| **JAVC** | **Velka Javorina** | **149.93** | **344** | *e*PKP | **PKiKP** | **15 30 21.2** | **+0.8** |
| **BHL** | **Bhannes** | **149.93** | **303** | *e*P | **PKiKP** | **15 30 20.8** | **-0.1** |
| **MDB** | **Medias** | **149.94** | **333** | ⇑P | **PKPbc** | **15 30 19.7** | **+0.2** |
| **MDB** | **Medias** | **149.94** | **333** | ⇑PKP2 | **PKPbc** | **15 30 19.7** | **+0.2** |
| **VYHS** | **Vyhne** | **149.94** | **342** | *e*PKP2 | **PKiKP** | **15 30 20.3** | **-0.1** |
| **VYHS** | **Vyhne** | **149.94** | **342** | *e*PKP | **PKiKP** | **15 30 20.2** | **-0.1** |
| **SNF** | **Seneffe** | **149.97** | **1** | *d*PKiKP | **PKiKP** | **15 30 20.2** | **-0.1** |
| **PBCC** | **Pribram** | **149.98** | **349** | ⇑*e*PKP | **PKPbc** | **15 30 19.9** | **+0.4** |
| **MANZ** | **Manzenberg** | **150.00** | **351** | *e*PKPdf | **PKPdf** | **15 30 15.5** | **+0.9** |
| | baz=12,slow=1.5 | | | | | | |
| MANZ | | | | *e*PKPbc | **PKiKP** | **15 30 20.4** | **-0.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| MANZ | | | | *ep*PKPbc | **pPKPab** | **15 30 40.9** | **-0.8** |
| | baz=8.9,slow=2.5 | | | | | | |
| MANZ | | | | *es*PKPbc | **sPKPab** | **15 30 48.9** | **+1.1** |
| | baz=8.7,slow=2.5 | | | | | | |
| **SECR** | | **150.03** | **330** | ⇑P | **PKiKP** | **15 30 20.3** | **-0.3** |
| **SHBL** | **Chebaa** | **150.04** | **302** | *e*P | **PKiKP** | **15 30 21.5** | **+0.3** |
| **TREC** | **Trest** | **150.05** | **347** | *e*PKP2 | **PKiKP** | **15 30 20.5** | **-0.1** |
| **TREC** | **Trest** | **150.05** | **347** | ⇑*e*PKP | **PKiKP** | **15 30 20.5** | **-0.1** |
| **DQRL** | **Deir Qamar** | **150.06** | **303** | *e*P | **PKiKP** | **15 30 21.2** | **0.0** |
| **LEHL** | **Lehliu** | **150.07** | **328** | ⇑P | **PKPbc** | **15 30 20.2** | **+0.3** |
| **DRGR** | | **150.09** | **336** | ⇑P | **PKPbc** | **15 30 19.8** | **-0.1** |
| **DRGR** | | **150.09** | **336** | ⇑PKP2 | **PKPbc** | **15 30 19.8** | **-0.1** |
| **BGES** | **Gesves** | **150.10** | **0** | *d*PKiKP | **PKPbc** | **15 30 19.8** | **+0.1** |
| **PSZ** | **Piszkesteto** | **150.12** | **340** | ⇑P | **PKiKP** | **15 30 20.6** | **-0.2** |
| **PSZ** | **Piszkesteto** | **150.12** | **340** | ⇑PKP2 | **PKiKP** | **15 30 20.6** | **-0.2** |
| **PSZ** | **Piszkesteto** | **150.12** | **340** | ⇑PKP | **PKPbc** | **15 30 18.8** | **-1.2** |
| PSZ | | | | PKIKP | **PKiKP** | **15 30 20.5** | **-0.3** |
| **BHOU** | **Houvegnez** | **150.13** | **359** | *d*PKiKP | **PKiKP** | **15 30 20.6** | **0.0** |
| **TNS** | **Taunus Mts** | **150.16** | **356** | *e*PKPbc | **PKiKP** | **15 30 20.7** | **-0.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| TNS | | | | *ep*PKPbc | **pPKPab** | **15 30 41.3** | **-1.0** |
| | baz=8.9,slow=2.5 | | | | | | |
| TNS | | | | *es*PKPbc | **sPKPab** | **15 30 49.0** | **+0.6** |
| | baz=8.7,slow=2.5 | | | | | | |
| **BMRD** | **Maredsous** | **150.18** | **1** | *d*PKiKP | **PKPbc** | **15 30 20.1** | **+0.2** |
| **VOIR** | | **150.19** | **331** | ⇓P | **PKiKP** | **15 30 20.9** | **-0.1** |
| **VOIR** | | **150.19** | **331** | ⇓PKP2 | **PKiKP** | **15 30 20.9** | **-0.1** |
| **ROTZ** | **Rotzenmuhle** | **150.20** | **351** | *e*PKPbc | **PKiKP** | **15 30 20.8** | **0.0** |
| | baz=8.9,slow=2.5 | | | | | | |
| ROTZ | | | | *ep*PKPbc | **pPKPab** | **15 30 41.3** | **-1.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| ROTZ | | | | *es*PKPbc | **sPKPab** | **15 30 49.3** | **+0.7** |
| | baz=8.7,slow=2.5 | | | | | | |
| **SULR** | | **150.20** | **329** | ⇓P | **PKiKP** | **15 30 21.1** | **+0.2** |
| **SMOL** | **Smolenice** | **150.31** | **344** | *e*PKIKP | **PKiKP** | **15 30 21.7** | **+0.6** |
| **SMOL** | **Smolenice** | **150.31** | **344** | *e*PKP | **PKiKP** | **15 30 21.7** | **+0.6** |
| **RCHB** | **Rochefort** | **150.33** | **0** | *d*PKiKP | **PKiKP** | **15 30 20.8** | **-0.3** |
| **DOU** | **Dourbes** | **150.38** | **1** | *d*PKdf | **PKPdf** | **15 30 14.3** | **-0.8** |
| DOU | | | | *d*PKiKP | **PKPbc** | **15 30 20.5** | **+0.1** |
| **GRF** | **Grafenberg Arr** | **150.41** | **352** | *e*PKPbc | **PKiKP** | **15 30 21.4** | **+0.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| GRF | | | | *e*PKPab | **PKPab** | **15 30 27.6** | **+0.6** |
| | baz=12,slow=4.1 | | | | | | |
| GRF | | | | *ep*PKPbc | **pPKPab** | **15 30 42.0** | **-1.3** |
| | baz=8.9,slow=2.5 | | | | | | |
| **ARR** | **Arges** | **150.43** | **332** | ⇓P | **PKiKP** | **15 30 22.1** | **+0.6** |
| **MODS** | **Modra-Piesok** | **150.48** | **344** | *e*PKIKP | **PKiKP** | **15 30 24.0** | **+2.5** |
| **MODS** | **Modra-Piesok** | **150.48** | **344** | *e*PKP | **PKiKP** | **15 30 24.0** | **+2.5** |
| **KHC** | **Kasperske Hory** | **150.59** | **349** | *e*PKIKP | **PKPdf** | **15 30 16.4** | **+0.8** |
| **KHC** | **Kasperske Hory** | **150.59** | **349** | *e*PKPDF | **PKPdf** | **15 30 16.4** | **+0.8** |
| KHC | | | | ⇑*e*PKP | **PKiKP** | **15 30 21.5** | **-0.2** |
| KHC | | | | *ex* | x | 15 30 41.9 | |
| **JVM** | **Valle D.L. Mar** | **150.65** | **10** | *e*P | **PKPbc** | **15 30 21.4** | **+0.3** |
| **SGRR** | **Singureni** | **150.67** | **329** | ⇓P | **PKPbc** | **15 30 21.6** | **+0.3** |
| **JSA** | **Saint Aubin** | **150.69** | **10** | ⇑*e*P | **PKPbc** | **15 30 21.5** | **+0.4** |
| **ZST** | **Bratislava** | **150.69** | **344** | *e*PKIKP | **PKiKP** | **15 30 22.5** | **+0.6** |
| **ZST** | **Bratislava** | **150.69** | **344** | *e*PKP | **PKiKP** | **15 30 22.5** | **+0.6** |
| **WET** | **Wettzell** | **150.70** | **350** | *e*PKPbc | **PKiKP** | **15 30 21.9** | **0.0** |
| | baz=8.9,slow=2.5 | | | | | | |
| WET | | | | *e*PKPab | **PKPab** | **15 30 28.6** | **+0.3** |
| | baz=12,slow=4.1 | | | | | | |
| WET | | | | *es*PKPbc | **sPKPab** | **15 30 50.2** | **-0.4** |
| | baz=8.7,slow=2.5 | | | | | | |
| **LOT** | **Lotru** | **150.75** | **333** | ⇑P | **PKPbc** | **15 30 21.4** | **-0.2** |
| **CKRC** | **Cesky Krumlov** | **150.75** | **348** | *e*PKPDF | **PKPdf** | **15 30 15.8** | **0.0** |
| CKRC | | | | ⇑*e*PKP | **PKiKP** | **15 30 21.8** | **-0.2** |
| CKRC | | | | *ex* | x | 15 30 42.1 | |
| **WLF** | **Walferdange** | **150.81** | **359** | *e*PKPdf | **PKPdf** | **15 30 17.0** | **+1.2** |
| | baz=12,slow=1.5 | | | | | | |
| WLF | | | | *e*PKPbc | **PKiKP** | **15 30 22.7** | **+0.6** |
| | baz=8.9,slow=2.5 | | | | | | |
| WLF | | | | *ep*PKPbc | **sPKPbc** | **15 30 43.2** | **-0.9** |
| | baz=8.9,slow=2.5 | | | | | | |
| **WLF** | **Walferdange** | **150.81** | **359** | *d*PKiKP | **PKiKP** | **15 30 22.8** | **+0.7** |
| **GEC2** | **GERESS Array S** | **150.84** | **349** | *e*PKPbc | **PKiKP** | **15 30 22.3** | **0.0** |
| | baz=8.9,slow=2.5 | | | | | | |
| GEC2 | | | | *ep*PKPbc | **sPKPbc** | **15 30 42.8** | **-1.6** |
| | baz=8.9,slow=2.5 | | | | | | |
| GEC2 | | | | *es*PKPbc | **sPKPab** | **15 30 50.3** | **-1.0** |
| | baz=8.7,slow=2.5 | | | | | | |
| **GERES** | **GERESS Array B** | **150.84** | **349** | PKP | **PKPdf** | **15 30 16.4** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=45,slow=0.8,SNR=10.0 | | | | | | |
| GERES | | | | PKPbc | **PKiKP** | **15 30 22.2** | **-0.1** |
| | comp=Z,38nm,0.9s,baz=40,slow=2.3,SNR=124 | | | | | | |
| **RAZG** | **Razgrad** | **150.88** | **327** | ⇑P | **PKiKP** | **15 30 22.3** | **-0.2** |
| **SIRR** | **Siria** | **150.93** | **336** | ⇑P | **PKiKP** | **15 30 22.5** | **0.0** |
| **COPA** | **Copaceanca** | **151.10** | **329** | ⇓P | **PKPbc** | **15 30 22.3** | **+0.1** |
| **CSKK** | **Cskako** | **151.12** | **342** | ⇑PKP | **PKPbc** | **15 30 21.6** | **-0.6** |
| **GZR** | **Gura Zlata** | **151.21** | **334** | ⇓P | **PKPbc** | **15 30 22.5** | **-0.1** |
| **GZR** | **Gura Zlata** | **151.21** | **334** | ⇓PKIKP | **PKPbc** | **15 30 22.5** | **-0.1** |
| **CONA** | **Conrad Observa** | **151.25** | **345** | *i* P | **PKiKP** | **15 30 23.5** | **+0.4** |
| | comp=Z,50nm,0.7s,SNR=14 | | | | | | |
| **SOP** | **Sopron** | **151.30** | **344** | ⇑PKP | **PKPbc** | **15 30 22.1** | **-0.6** |
| SOP | | | | PKIKP | **PKiKP** | **15 30 23.5** | **+0.4** |
| **EGYH** | **Egyhazaskeszo** | **151.34** | **343** | ⇑PKP | **PKiKP** | **15 30 23.8** | **+0.6** |
| **BZS** | **Buzias** | **151.49** | **336** | ⇑P | **PKiKP** | **15 30 23.4** | **-0.2** |
| **BZS** | **Buzias** | **151.49** | **336** | ⇑PKIKP | **PKiKP** | **15 30 23.4** | **-0.2** |
| **STU** | **Stuttgart** | **151.54** | **355** | *e*PKPbc | **PKiKP** | **15 30 23.9** | **+0.3** |
| | baz=8.9,slow=2.5 | | | | | | |
| STU | | | | *ep*PKPbc | **sPKPbc** | **15 30 44.5** | **-1.3** |
| | baz=8.9,slow=2.5 | | | | | | |
| **VLAD** | **Vladila** | **151.59** | **330** | ⇑P | **PKiKP** | **15 30 24.8** | **+0.9** |
| **SRE** | **Strehaia** | **151.61** | **332** | ⇑P | **PKiKP** | **15 30 24.1** | **+0.2** |
| **SRE** | **Strehaia** | **151.61** | **332** | ⇑PKIKP | **PKiKP** | **15 30 24.1** | **+0.2** |
| **LEF** | **Lefka** | **151.62** | **307** | ⇑P | **PKPbc** | **15 30 24.0** | **+0.2** |
| **MOA** | **Molln** | **151.68** | **347** | *e*P | **PKiKP** | **15 30 24.0** | **0.0** |
| | comp=Z,21nm,0.6s | | | | | | |
| **HERR** | **Herculane** | **151.77** | **334** | ⇑P | **PKiKP** | **15 30 24.2** | **0.0** |
| **BANR** | **Banloc** | **151.87** | **336** | ⇑P | **PKiKP** | **15 30 25.8** | **+1.4** |
| **FUR** | **Furstenfeldbru** | **151.90** | **351** | *e*PKPbc | **PKiKP** | **15 30 24.6** | **+0.2** |
| | baz=8.9,slow=2.5 | | | | | | |
| **ARSA** | **Arzberg** | **151.97** | **345** | *e*P | **PKPbc** | **15 30 24.3** | **0.0** |
| | comp=Z,13nm,0.7s | | | | | | |
| **MORH** | **Mrgy, Hungar** | **152.03** | **340** | ⇓P | **PKiKP** | **15 30 24.8** | **+0.1** |
| **MORH** | **Mrgy, Hungar** | **152.03** | **340** | ⇑PKP | **PKPbc** | **15 30 23.7** | **-0.6** |
| MORH | | | | PKIKP | **PKiKP** | **15 30 24.4** | **-0.3** |
| **BFO** | **Black Forest** | **152.05** | **356** | PKIKP | **PKPbc** | **15 30 24.4** | **0.0** |
| **BFO** | **Black Forest** | **152.05** | **356** | *e*PKPbc | **PKiKP** | **15 30 24.8** | **+0.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| BFO | | | | *ep*PKPbc | **sPKPbc** | **15 30 45.3** | **-1.8** |
| | baz=8.9,slow=2.5 | | | | | | |
| **BFO** | **Black Forest** | **152.05** | **356** | | **PKPbc** | **15 30 24.4** | **0.0** |
| **ISP** | **Isparta** | **152.07** | **314** | PKIKP | **PKPbc** | **15 30 24.1** | **-0.8** |
| **ISP** | **Isparta** | **152.07** | **314** | | **PKPbc** | **15 30 24.1** | **-0.8** |
| **MDVR** | **Moldovita** | **152.14** | **334** | ⇑P | **PKiKP** | **15 30 25.2** | **+0.2** |
| **KOVH** | **Kovagotottos** | **152.31** | **341** | ⇑PKP | **PKPbc** | **15 30 24.5** | **-0.5** |
| KOVH | | | | PKIKP | **PKiKP** | **15 30 25.2** | **-0.1** |
| **UBR** | **Ueberruh** | **152.52** | **353** | *e*PKPbc | **PKiKP** | **15 30 25.9** | **+0.1** |
| | baz=8.9,slow=2.5 | | | | | | |
| UBR | | | | *ep*PKPbc | **sPKPbc** | **15 30 46.4** | **-1.8** |
| | baz=8.9,slow=2.5 | | | | | | |
| UBR | | | | *es*PKPbc | **pPKPab** | **15 30 54.5** | **+2.3** |
| | baz=8.7,slow=2.5 | | | | | | |
| **FRGS** | **Fruska Gora** | **152.56** | **337** | ⇓P | **PKPbc** | **15 30 24.5** | **-1.1** |
| **KBA** | **Koelnbreinsper** | **152.60** | **348** | *e*P | **PKPbc** | **15 30 25.6** | **-0.2** |
| | comp=Z,23nm,0.7s | | | | | | |
| **SOKA** | **Soboth** | **152.62** | **345** | *i* P | **PKPbc** | **15 30 25.7** | **-0.1** |
| | comp=Z,38nm,1.0s,SNR=5.3 | | | | | | |
| SOKA | | | | *e*P | **pPKPbc** | **15 30 46.1** | **+3.7** |
| | comp=Z,20nm,0.9s | | | | | | |
| **RETA** | **Reutte** | **152.63** | **352** | *i* P | **PKiKP** | **15 30 26.1** | **+0.1** |
| | comp=Z,23nm,0.9s,SNR=5.8 | | | | | | |
| **PERS** | **Pernice** | **152.64** | **345** | *i* PKPbc | **PKPbc** | **15 30 25.6** | **-0.2** |
| **WATA** | **Walderalm** | **152.66** | **351** | *i* P | **PKPbc** | **15 30 26.1** | **+0.1** |
| | comp=Z,28nm,0.5s,SNR=7.1 | | | | | | |
| **MOTA** | **Moosalm** | **152.73** | **351** | *i* P | **PKPbc** | **15 30 26.2** | **+0.1** |
| | comp=Z,41nm,0.9s,SNR=8.4 | | | | | | |
| **WTTA** | **Wattenberg** | **152.73** | **351** | *i* P | **PKiKP** | **15 30 26.5** | **+0.2** |
| | comp=Z,66nm,0.5s,SNR=18 | | | | | | |
| WTTA | | | | *e*P | **sPKPbc** | **15 30 47.1** | **-1.7** |
| | comp=Z,27nm,0.6s | | | | | | |
| **SQTA** | **Sankt Quirin** | **152.83** | **351** | *i* P | **PKiKP** | **15 30 26.7** | **+0.2** |
| | comp=Z,28nm,0.6s,SNR=5.9 | | | | | | |
| **OBKA** | **Obir** | **152.89** | **346** | *e*P | **PKPbc** | **15 30 26.1** | **-0.3** |
| | comp=Z,16nm,0.7s | | | | | | |
| **DAVA** | **Damuels** | **152.94** | **353** | *e*P | **PKiKP** | **15 30 26.9** | **+0.1** |
| | comp=Z,38nm,0.8s,SNR=6.4 | | | | | | |
| DAVA | | | | *e*P | **sPKPbc** | **15 30 48.4** | **-0.9** |
| | comp=Z,24nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **152.97** | **347** | *e*P | **PKPbc** | **15 30 26.2** | **-0.4** |
| | comp=Z,19nm,0.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.08** | **349** | *i* P | **PKPbc** | **15 30 26.6** | **-0.3** |
| | comp=Z,43nm,0.6s,SNR=9.8 | | | | | | |
| **BOVS** | **Bovan** | **153.08** | **333** | ⇑P | **PKPbc** | **15 30 26.4** | **-0.4** |
| **FETA** | **Feichten** | **153.09** | **352** | *i* P | **PKiKP** | **15 30 27.3** | **+0.2** |
| | comp=Z,26nm,0.7s,SNR=7.8 | | | | | | |
| **VTS** | **Vitosha** | **153.19** | **330** | ⇑P | **PKiKP** | **15 30 28.0** | **+0.6** |
| **VTS** | **Vitosha** | **153.19** | **330** | ⇑PKIKP | **PKiKP** | **15 30 28.0** | **+0.6** |
| **GCIS** | **Gornji Cirnik** | **153.23** | **344** | *i* PKPbc | **PKiKP** | **15 30 27.4** | **+0.2** |
| **LJU** | **Ljubljana** | **153.34** | **346** | *i* PKPbc | **PKiKP** | **15 30 27.5** | **+0.1** |
| **CRNS** | **Crni Vrh** | **153.36** | **346** | *i* PKPbc | **PKPbc** | **15 30 27.4** | **0.0** |
| **CTI** | **Castel Tesino** | **153.91** | **350** | PKIKP | **PKPbc** | **15 30 28.4** | **-0.3** |
| **CTI** | **Castel Tesino** | **153.91** | **350** | | **PKPbc** | **15 30 28.4** | **-0.3** |
| **POLO** | **Lamas de Olo** | **156.35** | **25** | *e*PKPab | **PKPab** | **15 30 53.0** | **+0.5** |
| **MVO** | **Moncorvo** | **156.83** | **24** | *e*PKPab | **PKPab** | **15 30 55.3** | **+0.8** |
| **PVIS** | **Viseu** | **156.87** | **26** | *e*PKPab | **PKPab** | **15 30 55.5** | **+0.8** |
| **PSBE** | **So Bento** | **157.46** | **29** | *e*PKPab | **PKPab** | **15 30 57.8** | **+0.5** |
| **PMTG** | **Montargil** | **158.08** | **29** | *e*PKPab | **PKPab** | **15 31 00.5** | **+0.6** |
| **PMRV** | **Marv??o** | **158.16** | **27** | *e*PKPab | **PKPab** | **15 31 00.6** | **+0.4** |
| **PESTR** | **Estremoz** | **158.53** | **28** | *e*PKPab | **PKPab** | **15 31 02.2** | **+0.3** |
| **EVO** | **Evora** | **158.61** | **30** | *e*PKPab | **PKPab** | **15 31 03.1** | **+0.9** |
| **PNCL** | **Nicolau / Gran** | **158.70** | **31** | *e*PKPdf | **PKPdf** | **15 30 28.6** | **+1.6** |
| **PNCL** | **Nicolau / Gran** | **158.70** | **31** | *e*PKPab | **PKPab** | **15 31 03.5** | **+0.9** |
| **PTEO** | **Sao Teotonio** | **159.05** | **32** | *e*PKPab | **PKPab** | **15 31 05.5** | **+1.4** |
| **MESJ** | **Messejana** | **159.07** | **31** | *e*PKPab | **PKPab** | **15 31 04.5** | **+0.3** |
| **PBEJ** | **Beja** | **159.09** | **30** | *e*PKPab | **PKPab** | **15 31 04.8** | **+0.5** |
| **ESDC** | **Sonseca Array** | **159.24** | **20** | PKPab | **PKPab** | **15 31 06.0** | **+1.1** |
| | comp=Z,4.5nm,0.8s,baz=326,slow=4.0,SNR=11 | | | | | | |
| **MORF** | **Marmelete** | **159.27** | **33** | *e*PKPab | **PKPab** | **15 31 06.2** | **+1.0** |
| **PCVE** | **Castro Verde** | **159.32** | **31** | *e*PKPab | **PKPab** | **15 31 06.5** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **159.66** | **31** | *e*PKPab | **PKPab** | **15 31 07.9** | **+1.1** |
| **LIC** | **Lamto** | **162.71** | **143** | *e*PKIKP | **PKPdf** | **15 30 32.0** | **-0.1** |
| | comp=Z,38nm,1.1s | | | | | | |
| **LIC** | **Lamto** | **162.71** | **143** | *e*PKP2 | **PKPab** | **15 31 21.6** | **+0.9** |
| | comp=Z,87nm,0.9s | | | | | | |
| **KIC** | **Kosan Boka** | **162.98** | **144** | *e*PKIKP | **PKPdf** | **15 30 32.3** | **-0.1** |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **KIC** | **Kosan Boka** | **162.98** | **144** | *e*PKP2 | **PKPab** | **15 31 22.7** | **+0.8** |
| | comp=Z,25nm,0.8s | | | | | | |
| **TIC** | **Toumodi** | **163.06** | **143** | *e*PKIKP | **PKPdf** | **15 30 32.5** | **0.0** |
| **TIC** | **Toumodi** | **163.06** | **143** | *e*PKP2 | **PKPab** | **15 31 22.8** | **+0.5** |
| **DBIC** | **Dimbokro** | **163.17** | **143** | PKP | **PKPdf** | **15 30 32.1** | **-0.4** |
| | comp=Z,7.4nm,1.0s,baz=74,slow=2.9,SNR=5.6 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **15 31 24.1** | **+1.4** |
| | comp=Z,25nm,0.9s,baz=215,slow=5.2,SNR=16 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.00** | **154** | PKP | **PKPdf** | **15 30 38.3** | **-0.5** |
| | comp=Z,7.1nm,1.1s,baz=318,slow=0.7,SNR=21 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **15 32 03.1** | **+1.6** |
| | comp=Z,7.1nm,0.8s,baz=234,slow=3.8,SNR=20 | | | | | | |
| TORD | | | | PP | **PP** | **15 35 56.0** | **+4.5** |
| | comp=Z,3.3nm,1.0s,baz=188,slow=4.3,SNR=6.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.00** | **154** | | **PKPdf** | **15 30 37.9** | **-0.9** |
| TORD | | | | PKPab | **PKPab** | **15 32 03.1** | **+1.6** |

*EAF **10** 15:18:46.3±1.9,25.°81S×29.°66E,h10km,MD3.4*
**BUL 10 15:18:46.5±1.3,25.°83S×29.°63E,h10km,MD3.6,2D, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.34** | **102** | *i* P | | Pn | | 15 19 23.2 | -1.8 |
| CNG | | | | *e*S | | Sn | | 15 19 53.6 | -0.4 |
| **CNG** | **Changalane** | **2.34** | **102** | *i* P | | Pn | | 15 19 23.2 | -1.8 |
| CNG | | | | *e*S | | Sn | | 15 19 53.6 | -0.4 |
| **MOPA** | **Mopani** | **2.81** | **35** | *i* P | | Pn | | 15 19 29.2 | -2.3 |
| MOPA | | | | *i* S | | Sn | | 15 20 01.3 | -4.1 |
| **MOPA** | **Mopani** | **2.81** | **35** | *i* P | | Pn | | 15 19 29.2 | -2.3 |
| MOPA | | | | *i* S | | Sn | | 15 20 01.3 | -4.1 |
| **MSNA** | **Messina** | **3.49** | **6** | *i* P | | Pn | | 15 19 41.2 | +0.3 |
| MSNA | | | | *e*S | | Sn | | 15 20 20.0 | -2.3 |
| **MSNA** | **Messina** | **3.49** | **6** | *i* P | | Pn | | 15 19 41.2 | +0.3 |
| MSNA | | | | *e*S | | Sn | | 15 20 20.0 | -2.3 |
| **LBTB** | **Lobatse** | **3.74** | **282** | *i* P | | Pn | | 15 19 43.4 | -1.0 |
| LBTB | | | | *e*S | | Sn | | 15 20 26.0 | -2.6 |
| **LBTB** | **Lobatse** | **3.74** | **282** | *i* P | | Pn | | 15 19 43.4 | -1.0 |
| LBTB | | | | *e*S | | Sn | | 15 20 26.0 | -2.6 |
| **BOSA** | **Boshof** | **4.78** | **234** | *e*P | | Pn | | 15 19 58.3 | -0.5 |
| BOSA | | | | *e*S | | Sn | | 15 20 51.2 | -3.1 |
| **BOSA** | **Boshof** | **4.78** | **234** | *e*P | | Pn | | 15 19 58.3 | -0.5 |
| BOSA | | | | *e*S | | Sn | | 15 20 51.2 | -3.1 |
| **MATP** | **Matopo** | **5.48** | **349** | ⇓*e*P | | Pn | | 15 20 07.5 | -0.9 |
| MATP | | | | *e*S | | Sn | | 15 21 07.1 | -4.4 |
| **MATP** | **Matopo** | **5.48** | **349** | ⇓*e*P | | Pn | | 15 20 07.5 | -0.9 |
| MATP | | | | *e*S | | Sn | | 15 21 07.1 | -4.4 |
| **BLWY** | **Bulawayo** | **5.74** | **350** | *e*P | | Pn | | 15 20 11.6 | -0.4 |
| BLWY | | | | *e*S | | Sn | | 15 21 12.5 | -5.5 |
| **BLWY** | **Bulawayo** | **5.74** | **350** | *e*P | | Pn | | 15 20 11.6 | -0.4 |
| BLWY | | | | *e*S | | Sn | | 15 21 12.5 | -5.5 |

**IDC 10 15:38:37.5±2.2,6.°82S×129.°41E,h0km,mb3.2/1, mb1 3.6/4,mb1mx3.4/24,mbtmp3.4/4,ML3.5/3,Error ellipse: s-maj=56.0km s-min=32.7km az=74.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **6.60** | **239** | Pn | | Pn | | 15 40 16.6 | +0.6 |
| | 1.4nm,0.3s,baz=69,slow=9.8,SNR=1.9 | | | | | | | | |
| BATI | | | | Sn | | Sn | | 15 41 19.6 | -12 |
| | 2.1nm,0.3s,baz=269,slow=24,SNR=2.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.90** | **160** | Pn | | Pn | | 15 41 55.1 | -0.8 |
| | 0.2nm,0.3s,baz=341,slow=13,SNR=12 | | | | | | | | |
| WRA | | | | Sn | | Sn | | 15 44 17.2 | -14 |
| | 0.2nm,0.3s,baz=337,slow=22,SNR=4.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.30** | **166** | Pn | | Pn | | 15 42 41.0 | +0.3 |
| | 0.1nm,0.3s,baz=338,slow=10,SNR=18 | | | | | | | | |
| ASAR | | | | Sn | | Sn | | 15 45 40.2 | -14 |
| | 0.1nm,0.3s,baz=350,slow=27,SNR=1.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.75** | **327** | P | | P | | 15 49 36.9 | -0.1 |
| | 0.1nm,0.5s,baz=124,slow=7.2,SNR=4.1 | | | | | | | | |

*IDC **10** 15:43:22.6±0.9,25.°70N×109.°85W,h0km,mb3.7/6, mb1 3.8/11,mb1mx3.7/41,mbtmp3.6/11,ML3.6/5,MS4.1/43, Ms1 4.2/43,ms1mx4.0/78,Error ellipse: s-maj=19.1km s-min=13.3km az=99.0*
*MEX **10** 15:43:23.7±0.6,25.°81N×110.°18W,h16km±14km,MD4.3*
*NEIC **10** 15:43:24.2±2.1,25.°58N±0.°03×109.°88W±0.°07,h10km±1km, mb4.1/27,Md4.5/26(MEX),Error ellipse: s-maj=10.4km s-min=5.1km az=268.0*
*GCMT **10** 15:43:24.2±0.4,25.°76N±0.°02×110.°15W±0.°02,h18km±1km, MW4.9/84,Moment Tension Solution. s15,c16; s84,c115; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.25±. 12; $M_{\theta\theta}$-2.21±.10; $M_{\phi\phi}$2.46±.11; $M_{r\theta}$0.13±.23; $M_{\theta\phi}$-0.67±.09; $M_{r\phi}$0.21±.23; Best double couple: $M_o$2.44300×$10^{16}$ NP1:$\phi_s$307.00000°,δ84.00000°,λ-180.00000°. NP2: $\phi_s$217.00000°,δ90.00000°,λ-6.00000°. Principal axes: T 2.5680, Plg4.0000°, Azm262.0000°; N -0.2470, Plg84.0000°, Azm32.0000°; P -2.3180, Plg4.0000°, Azm172.0000°; nsta1 refers to body waves, cutoff=40s.*

*nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 10 15:43:23.9±0.6,25.°59N±0.°04×109.°81W±0.°05,h10km, n137,σ1♀33/96,mb3.9/8,MS4.2/43,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TSIG** | **Topolobambo** | **0.69** | **89** | *e*P | | **Pn** | | **15 43 39.8** | **0.0** |
| TSIG | | | | *e*S | | **Sn** | | **15 43 52.4** | **+1.8** |
| **LPIG** | **La Paz** | **1.55** | **197** | Pg | | **Pn** | | **15 43 51.6** | **0.0** |
| | 46nm,0.3s,baz=345,slow=4.7,SNR=23 | | | | | | | | |
| LPIG | | | | Lg | | Lg | | 15 44 11.0 | |
| | 80nm,0.3s,baz=323,slow=20,SNR=5.9 | | | | | | | | |
| **CSIG** | **Choix** | **1.79** | **46** | *i* P | | **Pn** | | **15 43 52.8** | **-2.0** |
| CSIG | | | | *i* S | | **Sn** | | **15 44 14.6** | **-3.0** |
| **SLBS** | **Sierra La Lagu** | **1.90** | **184** | | | **Pn** | | **15 43 56.5** | **0.0** |
| **GUYB** | **Guaymas** | **2.49** | **338** | *e*P | | Pn | | 15 43 55.5 | -9.0 |
| GUYB | | | | *i* S | | Sn | | 15 44 21.3 | -14 |
| **SSIG** | **Sanalona** | **2.54** | **107** | *e*P | | **Pb** | | **15 44 07.5** | **-2.1** |
| SSIG | | | | *e*S | | **Sb** | | **15 44 39.7** | **-1.1** |
| **SRIG** | **Santa Rosalia** | **2.78** | **309** | Pn | | Pn | | **15 44 07.8** | **-0.6** |
| **SRIG** | **Santa Rosalia** | **2.78** | **309** | *i* P | | Pn | | 15 44 00.1 | -8.3 |
| SRIG | | | | *i* S | | Sn | | 15 44 26.2 | -16 |
| **HSIG** | | **3.56** | **344** | | | **Pn** | | **15 44 19.3** | **0.0** |
| HSIG | | | | | | **Sn** | | **15 45 00.4** | **-1.1** |
| **HSIG** | | **3.56** | **344** | *e* | | **Pn** | | **15 44 19.3** | **0.0** |
| HSIG | | | | *i* | | | | 15 45 00.4 | |
| **MAIG** | **Mazatlaan** | **3

comp=Z,436nm,18.6s,baz=155,slow=39
**YKA Yellowknife Ar 37.03 356** P **P** **15 50 32.6 -1.1**
comp=Z,0.1nm,0.4s,baz=253,slow=6.9,SNR=3.2
**ROSC El Rosal 39.76 115** LR LR 16 09 43.3
comp=Z,279nm,18.0s,baz=317,slow=40
**SDV Santo Domingo 40.74 107** P **P** **15 51 05.4 -0.1**
comp=Z,1.4nm,0.3s,baz=320,slow=9.0,SNR=1.4
SDV LR LR 16 09 41.0
comp=Z,207nm,20.3s,baz=282,slow=39
**SJG San Juan 41.05 91** LR LR 16 09 37.7
comp=Z,193nm,20.1s,baz=271,slow=38
**SCHQ Schefferville 42.89 35** LR LR 16 08 13.0
comp=Z,518nm,19.3s,baz=256,slow=35
**DOT Dot Lake 44.15 339** P **P** **15 51 31.9 -0.5**
DOT IAmb IAmb 15 51 49.6
comp=Z,3.4nm,1.1s
**ATAH Atahualpa 44.62 133** LR LR 16 06 11.8
comp=Z,127nm,20.2s,baz=331,slow=31
**INK Inuvik 45.08 348** LR LR 16 10 33.5
comp=Z,347nm,18.4s,baz=162,slow=36
**TAOE Nuku Hiva Isla 45.21 225** eLR LR 16 04 12.6
comp=Z,286nm,27.0s
**ILAR Eielson Array 45.82 339** P **P** **15 51 44.4 -1.3**
comp=Z,0.5nm,0.8s,baz=136,slow=7.1,SNR=4.0
ILAR LR LR 16 13 26.9
comp=Z,168nm,19.1s,baz=140,slow=40
**FRB Frobisher Bay 46.63 24** LR LR 16 11 08.2
comp=Z,335nm,20.2s,baz=220,slow=36
**IMAR Indian Mountai 48.85 338** P **P** **15 52 09.2 -0.1**
**NNA Nana 49.26 135** LR LR 16 10 56.4
comp=Z,69nm,18.5s,baz=340,slow=34
**PPT Papeete 57.77 226** LR LR 16 11 42.8
comp=Z,123nm,21.5s,baz=24,slow=29
**PPT2 Papeete2 57.79 226** eLR LR 16 10 02.0
comp=Z,298nm,24.6s,baz=28
**LVC Limon Verde 62.19 137** LR LR 16 17 22.3
comp=Z,79nm,18.9s,baz=348,slow=33
**SIV San Ignacio 62.92 126** P **P** **15 53 51.2 +0.3**
comp=Z,0.3nm,0.4s,baz=297,slow=6.8,SNR=1.4
**H03N2 Juan Fernandez 65.64 152** T T 17 05 52.3
baz=331,slow=78,SNR=64
**H03N1 Juan Fernandez 65.65 152** T T 17 05 54.1
baz=331,slow=78,SNR=97
**H03N3 Juan Fernandez 65.66 152** T T 17 05 53.3
baz=331,slow=78,SNR=70
**RAR Rarotonga 67.20 231** LR LR 16 16 18.0
comp=Z,144nm,21.0s,baz=76,slow=29
**PETK Petropavlovsk- 71.39 321** LR LR 16 22 51.5
comp=Z,37nm,20.4s,baz=82,slow=33
**SPITS Spitsbergen Ar 71.91 10** LR LR 16 27 16.8
comp=Z,444nm,18.3s,baz=348,slow=37
**AFI Afiamalu 71.97 244** LR LR 16 18 16.8
comp=Z,192nm,19.2s,baz=56,slow=29
**TIXI Tiksi 75.00 344** LR LR 16 29 59.5
comp=Z,97nm,19.3s,baz=2.0,slow=37
**PLCA Paso Flores 75.40 150** P **P** **15 55 10.6 +2.7**
comp=Z,2.1nm,0.8s,baz=299,slow=10,SNR=2.6
PLCA LR LR 16 21 40.6
comp=Z,123nm,20.2s,baz=341,slow=30
**EKA Eskdalemuir Ar 78.19 34** LR LR 16 26 58.9
comp=Z,162nm,19.6s,baz=304,slow=34
**ARCES ARCESS Array B 79.84 15** LR LR 16 32 44.6
comp=Z,117nm,18.1s,baz=340,slow=37
**YAK Yakutsk 80.64 336** LR LR 16 34 14.2
comp=Z,49nm,19.3s,baz=76,slow=38
**MSVF Nonsavu 82.31 246** LR LR 16 23 53.5
comp=Z,219nm,19.7s,baz=20,slow=30
**NRIK Noril'sk 84.51 354** LR LR 16 33 54.1
comp=Z,102nm,21.5s,baz=12,slow=36
**ESDC Sonseca Array 85.25 48** LR LR 16 33 14.7
comp=Z,215nm,18.4s,baz=309,slow=35
**MDT Midelt 88.15 54** LR LR 16 32 40.2
comp=Z,111nm,21.2s,baz=321,slow=34
**GERES GERESS Array B 90.39 33** LR LR 16 36 50.0
comp=Z,179nm,20.1s,baz=290,slow=36
**MJAR Matsushiro Arr 91.01 312** LR LR 16 30 56.2
comp=Z,61nm,20.2s,baz=42,slow=31
**JHJ Hachijo jima 2 91.76 308** LR LR 16 29 26.4
comp=Z,52nm,20.9s,baz=56,slow=30
**URZ Urewera 93.33 229** LR LR 16 29 47.7
comp=Z,129nm,20.5s,baz=58,slow=30
**DZM Mont Dzumac 93.97 248** eLR LR 16 26 47.2
comp=Z,227nm,24.9s
**DZM Mont Dzumac 93.97 248** LR LR 16 30 45.7
comp=Z,125nm,20.0s,baz=33,slow=30
**HNR Honiara 94.23 262** LR LR 16 30 06.4
comp=Z,211nm,21.0s,baz=40,slow=30
**KIRV Kirov 94.38 11** LR LR 16 41 23.0
comp=Z,125nm,19.9s,baz=7.4,slow=37
**GUMO Guam 97.57 289** LR LR 16 30 55.1
comp=Z,119nm,20.3s,baz=98,slow=29
**ARU Arti 97.71 6** LR LR 16 44 40.1
comp=Z,194nm,19.3s,baz=360,slow=38
**ZALV Zalesovo Beam 99.79 351** LR LR 16 44 05.7
comp=Z,50nm,21.8s,baz=349,slow=37
**BELG Belogornoye 99.88 14** LR LR 16 43 47.2
comp=Z,83nm,18.2s,baz=350,slow=36
**SONM Songino Array 99.99 336** LR LR 16 43 41.7
comp=Z,88nm,19.2s,baz=346,slow=36
**ASAR Alice Springs 122.56 257** PKP **PKiKP** **16 02 21.9 +1.4**
comp=Z,0.2nm,0.8s,baz=108,slow=1.6,SNR=1.4

**IDC 10 15:44:38.8±2.4, 4.77N×124.72E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/29, mbtmp3.3/3, Error ellipse: s-maj=229.9km s-min=29.1km az=64.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **26.32** | **159** | P | P | | 15 50 17.2 | +0.7 |
| | 0.2nm,0.3s,baz=339,slow=9.7,SNR=6.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **29.65** | **163** | P | P | | 15 50 45.6 | -0.7 |
| | 0.1nm,0.5s,baz=338,slow=7.8,SNR=7.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.57** | **326** | P | P | | 15 54 16.1 | -0.1 |
| | 0.2nm,0.6s,baz=128,slow=8.0,SNR=2.4 | | | | | | | |

**TAP 10 16:07:18.0, 23.77N×120.95E, h14km±1km, ML1.1, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **SSLB** | **Suanglung** | **0.01** | **4** | *i* P | | Pg | 16 07 20.7 | +0.1 |
| | baz=5.0 | | | | | | | |
| SSLB | | | | S | | Sg | 16 07 22.3 | 0.0 |
| | baz=5.0 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.12** | **336** | *i* P | | Pb | 16 07 22.0 | -0.1 |
| | baz=339 | | | | | | | |
| SMLT | | | | *i* S | | Sb | 16 07 24.8 | -0.1 |
| | baz=339 | | | | | | | |
| **TYC** | **Yuchr** | **0.16** | **326** | *i* P | | Pb | 16 07 22.5 | -0.3 |
| | baz=329 | | | | | | | |
| TYC | | | | *i* S | | Sb | 16 07 25.7 | -0.2 |
| | baz=329 | | | | | | | |
| **VWDT** | **VWDT** | **0.17** | **97** | *i* P | | Pb | 16 07 23.3 | +0.3 |
| | baz=96 | | | | | | | |
| VWDT | | | | S | | Sb | 16 07 26.7 | +0.4 |
| | baz=96 | | | | | | | |
| **WJS** | **Zhushan** | **0.21** | **283** | *e*S | | Sb | 16 07 28.1 | +0.6 |
| | baz=283 | | | | | | | |
| **WUSB** | **Renai** | **0.26** | **35** | P | | Pb | 16 07 24.4 | -0.3 |
| | baz=34 | | | | | | | |
| WUSB | | | | S | | Sg | 16 07 28.2 | +0.6 |
| | baz=34 | | | | | | | |
| **WNT** | **Mingjian** | **0.27** | **293** | *e*P | | Pb | 16 07 24.9 | +0.2 |
| | baz=293 | | | | | | | |
| WNT | | | | *e*S | | Sb | 16 07 30.1 | +1.1 |
| | baz=293 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.28** | **352** | P | | Pb | 16 07 24.7 | -0.2 |
| | baz=352 | | | | | | | |
| WCS | | | | S | | Sb | 16 07 29.1 | -0.5 |
| | baz=352 | | | | | | | |
| **ALS** | **Alishan** | **0.29** | **207** | *i* P | | Pg | 16 07 24.7 | +0.4 |
| | baz=205 | | | | | | | |
| ALS | | | | S | | Sb | 16 07 29.8 | -0.4 |
| | baz=205 | | | | | | | |
| **CHN5** | **Tsauling** | **0.31** | **235** | *i* P | | Pb | 16 07 25.2 | -0.1 |
| | baz=235 | | | | | | | |
| CHN5 | | | | S | | Sb | 16 07 30.9 | +0.6 |
| | baz=235 | | | | | | | |
| **YULB** | **Yu-li** | **0.49** | **140** | *e*S | | Sb | 16 07 35.4 | -0.2 |
| | baz=140 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.56** | **212** | *e*P | | Pg | 16 07 29.2 | +0.2 |
| | baz=212 | | | | | | | |
| TPUB | | | | *e*S | | Sb | 16 07 38.2 | +0.8 |
| | baz=212 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.56** | **212** | P | | Pg | 16 07 29.3 | +0.3 |
| | baz=346 | | | | | | | |
| **CHN1** | **Nanshi** | **0.70** | **214** | *e*P | | Pn | 16 07 32.9 | -0.7 |
| | baz=213 | | | | | | | |
| CHN1 | | | | *e*S | | Sb | 16 07 42.4 | +0.8 |
| | baz=213 | | | | | | | |

**TAP 10 16:07:19.9, 22.91N×120.73E, h20km, ML0.8, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **SLGT** | **Liugui** | **0.11** | **317** | *i* P | | Pb | 16 07 24.3 | -0.4 |
| | baz=317 | | | | | | | |
| SLGT | | | | *i* S | | Sb | 16 07 27.9 | -0.1 |
| | baz=317 | | | | | | | |
| **SSD** | **Sandimen** | **0.19** | **209** | *i* P | | Pb | 16 07 25.2 | +0.1 |
| | baz=206 | | | | | | | |
| SSD | | | | *i* S | | Sb | 16 07 28.9 | +0.2 |
| | baz=206 | | | | | | | |
| **TSMG** | **Majia** | **0.22** | **201** | *i* S | | Sb | 16 07 29.9 | +0.6 |
| | baz=201 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.31** | **197** | P | | Pb | 16 07 27.2 | +0.4 |
| | baz=201 | | | | | | | |
| MASBT | | | | S | | Sb | 16 07 32.3 | +0.9 |
| | baz=201 | | | | | | | |
| **CHN1** | **Nanshi** | **0.33** | **326** | *e*P | | Pb | 16 07 27.1 | 0.0 |
| | baz=333 | | | | | | | |
| CHN1 | | | | S | | Sn | 16 07 34.2 | -1.7 |
| | baz=333 | | | | | | | |
| **WTP** | **Ta-pu** | **0.35** | **342** | *i* P | | Pb | 16 07 28.5 | +1.0 |
| | baz=343 | | | | | | | |
| WTP | | | | S | | Sn | 16 07 34.6 | -1.8 |
| | baz=343 | | | | | | | |

*IDC* ***10*** *16:27:37.8±0.6, 27.64N×85.58E, h0km, mb4.0/19, mb1 4.1/21, mb1mx3.9/44, mbtmp4.0/21, ML4.0/2, Error ellipse: s-maj=19.4km s-min=14.4km az=55.0*
*DMN* ***10*** *16:27:39.6±0.1, 27.82N×85.72E, h20km, Ml4.6/4, Error ellipse: s-maj=4.3km s-min=1.7km az=10.0*
*NEIC* ***10*** *16:27:41.9±1.0, 27.71N±0.10×85.63E±0.06, h21km±4km, mb4.1/30, Error ellipse: s-maj=14.5km s-min=8.2km az=179.0*
*NDI* ***10*** *16:27:43.4±4.0, 27.62N×85.64E, h20km, ML3.7, mb4.1(NEIC)*
**ISC 10 16:27:39.4±1.0, 27.71N±0.03×85.64E±0.02, h13km±6km, n106, σ1s99/144, mb4.1/28, Nepal**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **PKI** | **Pulchoki** | **0.25** | **236** | *e*Pg | | **Pb** | **16 27 48.0** | **+2.0** |
| PKI | | | | *e*Sg | | **Sb** | **16 27 52.1** | **+1.8** |
| **PKIN** | **Phulchoki** | **0.25** | **239** | *e*Pg | | **Pb** | **16 27 48.0** | **+2.0** |
| **GUN** | **Gumba** | **0.29** | **46** | *e*Pg | | **Pg** | **16 27 44.8** | **-0.9** |
| GUN | | | | *e*Sg | | **Sg** | **16 27 47.8** | **-2.1** |
| **KKN** | **Kakani** | **0.33** | **284** | *e*Pg | | **Pb** | **16 27 48.4** | **+1.1** |
| KKN | | | | *e*Sg | | **Sb** | **16 27 53.7** | **+1.1** |
| **DMN** | **Daman** | **0.48** | **258** | *e*Pg | | **Pn** | **16 27 51.8** | **-0.5** |
| DMN | | | | *e*Sg | | **Sn** | **16 28 00.1** | **-0.7** |
| **JIRN** | **Jiri** | **0.49** | **96** | *e*Pg | | **Pg** | **16 27 49.2** | **0.0** |
| JIRN | | | | *e*Sg | | **Sg** | **16 27 55.0** | **-0.8** |
| **GKN** | **Gorkha** | **0.94** | **289** | *e*Pg | | **Pn** | **16 27 59.2** | **+0.7** |
| GKN | | | | *e*Sg | | **Sn** | **16 28 12.5** | **+0.7** |
| | 2μm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **1.14** | **131** | *e*Pg | | **Pn** | **16 28 01.3** | **0.0** |
| RAMN | | | | *e*Sg | | **Sn** | **16 28 17.2** | **+0.3** |
| **ODAN** | **Odare** | **1.77** | **118** | *e*Pg | | **Pg** | **16 28 12.8** | **-0.7** |
| ODAN | | | | *e*Sg | | **Sg** | **16 28 36.6** | **+0.1** |
| **DANN** | **Dangsing** | **1.78** | **291** | *e*Pg | | **Pb** | **16 28 13.1** | **+1.0** |
| DANN | | | | *e*Sg | | **Sg** | **16 28 37.1** | **+0.3** |
| | 554nm,0.2s | | | | | | | |
| **KOLN** | **Koldanda** | **1.81** | **272** | *e*Pg | | **Pg** | **16 28 14.0** | **-0.2** |
| **TAPN** | **Taplejung** | **1.87** | **101** | *e*Pg | | **Pb** | **16 28 14.1** | **+0.4** |
| TAPN | | | | *e*Sg | | **Sb** | **16 28 38.1** | **+1.0** |
| | 1μm,0.6s | | | | | | | |
| **PYUN** | **Piuthan** | **2.38** | **280** | *e*Pg | | **Pg** | **16 28 24.7** | **-0.4** |
| PYUN | | | | *e*Sg | | **Sg** | **16 28 56.9** | **+1.0** |
| | 840nm,0.3s | | | | | | | |
| **BRCI** | **Bahraich** | **3.60** | **269** | *e*P | | **Pb** | **16 28 40.4** | **-2.6** |
| BRCI | | | | *e*S | | **Sn** | **16 29 22.0** | **+4.6** |
| **BOK** | **Bokaro** | **3.90** | **177** | *e*P | | **Pn** | **16 28 40.0** | **+0.9** |
| BOK | | | | *e*P | | Pb | 16 28 42.1 | -6.1 |
| **TURI** | **Tura** | **4.72** | **116** | *e*P | | **Pn** | **16 28 53.8** | **+3.5** |
| TURI | | | | *e*S | | **Sn** | **16 29 43.3** | **-1.6** |
| TURI | | | | IAML | | | 16 29 48.6 | |
| | comp=N,171nm,0.4s | | | | | | | |
| **LGTI** | **Lohaghat** | **5.05** | **291** | *e*P | | **Pg** | **16 29 14.8** | **-1.4** |
| LGTI | | | | *e*S | | **Sb** | **16 30 12.2** | **+3.9** |
| **PTH** | **Pithoragarh** | **5.11** | **292** | *e*P | | **Pn** | **16 28 59.4** | **+3.5** |
| PTH | | | | *e*S | | **Sn** | **16 29 55.9** | **+1.1** |
| **SHL** | **Shillong** | **5.98** | **109** | Pn | | **Pn** | **16 29 08.1** | **+0.2** |
| **JHNI** | **Jhansi** | **6.74** | **252** | *e*P | | **Pn** | **16 29 18.4** | **+0.3** |
| JHNI | | | | *e*S | | **Sn** | **16 30 32.5** | **-2.3** |
| **NDI** | **New Delhi** | **7.50** | **279** | *e*P | | **Pn** | **16 29 30.4** | **+1.9** |
| NDI | | | | *e*P | | **Pn** | **16 29 31.5** | **+3.0** |
| NDI | | | | *e*S | | **Sn** | **16 30 48.7** | **-4.7** |
| NDI | | | | *e*S | | **Sn** | **16 30 51.0** | **-2.4** |
| **KOHI** | **KOHIMA** | **7.83** | **103** | *e*P | | **Pn** | **16 29 35.9** | **+2.8** |
| KOHI | | | | *e*S | | **Sn** | **16 30 58.8** | **-3.0** |
| KOHI | | | | IAML | | | 16 31 03.8 | |
| | comp=N,31nm,0.6s | | | | | | | |
| KOHI | | | | IAML | | | 16 31 05.9 | |
| | comp=E,54nm,0.7s | | | | | | | |
| **IMP** | **Imphal** | **7.99** | **109** | *e*P | | **Pn** | **16 29 36.8** | **+1.5** |
| IMP | | | | IAML | | | 16 31 11.5 | |
| | comp=E,18nm,0.7s | | | | | | | |
| IMP | | | | IAML | | | 16 31 12.1 | |
| | comp=N,16nm,0.8s | | | | | | | |
| **MOKO** | **MOKOCHONG** | **8.04** | **98** | *e*P | | **Pn** | **16 29 36.5** | **+0.4** |
| MOKO | | | | *e*S | | **Sn** | **16 31 03.2** | **-3.7** |
| MOKO | | | | IAML | | | 16 31 08.2 | |
| | comp=N,45nm,0.7s | | | | | | | |
| MOKO | | | | IAML | | | 16 31 11.8 | |
| | comp=E,46nm,0.7s | | | | | | | |
| **KUDL** | **Kundal** | **8.11** | **275** | *e*P | | **Pn** | **16 29 38.2** | **+1.4** |
| KUDL | | | | *e*S | | **Sn** | **16 31 04.8** | **-3.6** |
| **SMLA** | **Simla** | **8.14** | **297** | *e*P | | **Pn** | **16 29 38.8** | **+1.5** |
| SMLA | | | | *e*S | | **Sn** | **16 31 07.4** | **-1.7** |
| SMLA | | | | IAML | | | 16 31 11.2 | |
| | comp=N,116nm,0.4s | | | | | | | |
| SMLA | | | | IAML | | | 16 31 12.4 | |
| | comp=E,146nm,0.4s | | | | | | | |
| **BHPL** | **Bhopal** | **8.65** | **241** | *e*P | | **Pn** | **16 29 43.7** | **-0.7** |
| BHPL | | | | *e*S | | **Sn** | **16 31 18.4** | **-3.6** |
| BHPL | | | | IAML | | | 16 31 21.1 | |
| | comp=E,48nm,0.1s | | | | | | | |
| BHPL | | | | IAML | | | 16 31 22.4 | |
| | comp=N,52nm,0.1s | | | | | | | |
| **BHK** | **Bhakra** | **8.84** | **297** | *e*P | | **Pn** | **16 29 49.5** | **+2.6** |
| **CHLP** | **Challavanipeta** | **9.28** | **189** | *e*P | | **Pn** | **16 29 54.9** | **+1.9** |
| CHLP | | | | *e*S | | **Sn** | **16 31 37.5** | **+0.4** |
| **THN** | **Thein Dam** | **9.80** | **301** | *e*P | | **Pn** | **16 30 00.7** | **+0.6** |
| THN | | | | *e*S | | **Sn** | **16 31 46.3** | **-3.7** |
| **AJM** | **Ajmer** | **9.88** | **265** | *e*P | | **Pn** | **16 30 01.4** | **+0.2** |
| AJM | | | | *e*S | | **Sn** | **16 31 46.3** | **-5.7** |
| **AKL** | **Akola** | **10.51** | **230** | *e*P | | **Pn** | **16 30 09.2** | **-0.8** |
| **RPR** | **Rampur** | **10.56** | **215** | *e*P | | **Pn** | **16 30 10.5** | **-0.1** |
| RPR | | | | *e*S | | **Sn** | **16 32 04.6** | **-4.2** |
| **SRSP** | **Sriramsagar** | **11.01** | **219** | *e*P | | **Pn** | **16 30 16.2** | **-0.5** |
| SRSP | | | | *e*S | | **Sn** | **16 32 15.4** | **-4.4** |
| **PVM** | **Polavaram** | **11.05** | **200** | *e*P | | **Pn** | **16 30 18.2** | **+1.0** |
| PVM | | | | *e*S | | **Sn** | **16 32 17.4** | **-3.3** |
| **GOMU** | **GeErMu** | **11.50** | **40** | P | | **Pn** | **16 30 24.7** | **+1.0** |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,97nm,4.4s | | | | | | | |
| **MYLAV** | **Mylavaram** | **11.85** | **204** | *e*P | | **Pn** | **16 30 28.0** | **-0.2** |
| MYLAV | | | | *e*S | | **Sn** | **16 32 40.5** | **+0.2** |
| **CUPL** | **Choutuppal** | **12.08** | **212** | *e*P | | **Pn** | **16 30 30.9** | **-0.4** |
| CUPL | | | | *e*S | | **Sn** | **16 32 44.1** | **-1.9** |
| **HYBB** | **Hyderabad (bro** | **12.15** | **214** | *e*P | | **Pn** | **16 30 28.9** | **-3.5** |
| HYBB | | | | *e*S | | **Sn** | **16 32 46.0** | **-1.8** |
| **HYB** | **Hyderabad** | **12.15** | **214** | *e*P | | **Pn** | **16 30 31.5** | **-0.9** |
| **NIL** | **Nellore** | **12.19** | **302** | Pn | | **Pn** | **16 30 31.6** | **-1.2** |
| **NJS** | **Nagarjunasagar** | **12.55** | **209** | *e*P | | **Pn** | **16 30 36.6** | **-1.2** |
| NJS | | | | *e*S | | **Sn** | **16 32 58.9** | **+1.3** |
| **KLRI** | **Killari** | **12.70** | **223** | *e*P | | **Pn** | **16 30 38.5** | **-1.5** |
| KLRI | | | | *e*S | | **Sn** | **16 32 53.5** | **-7.8** |
| **SRLM** | **Srisailam** | **13.13** | **210** | *e*P | | **Pn** | **16 30 44.5** | **-1.3** |
| SRLM | | | | *e*S | | **Sn** | **16 33 11.3** | **-0.6** |
| **CEP** | **Cherat** | **13.28** | **301** | P | | **Pn** | **16 30 45.1** | **-2.8** |
| **RCLA** | **Racherla** | **13.68** | **208** | *e*P | | **Pn** | **16 30 51.7** | **-1.5** |
| RCLA | | | | *e*S | | **Sn** | **16 33 22.3** | **-2.9** |
| **KSH** | **Kashi** | **14.26** | **328** | P | | **P** | **16 31 05.1** | **-3.3** |
| KSH | | | | pP | | Pn | 16 31 11.7 | +11 |
| KSH | | | | S | | Sn | 16 33 30.3 | -8.9 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **URV** | **Uravakonda** | **14.90** | **213** | *e*P | | **Pn** | **16 31 07.0** | **-2.9** |
| URV | | | | *e*S | | **Sn** | **16 33 48.2** | **-6.7** |
| **SKHT** | **Srikalahasti** | **14.96** | **203** | *e*P | | **Pn** | **16 31 12.4** | **+1.7** |
| SKHT | | | | *e*S | | **Sn** | **16 33 59.2** | **+2.9** |
| **CHTO** | **Chiang Mai** | **15.08** | **123** | | | **P** | **16 31 17.8** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **15.30** | **124** | Pn | | **Pn** | **16 31 13.6** | **-1.7** |
| | comp=Z,0.3nm,0.3s,baz=315,slow=11,SNR=1.2 | | | | | | | |
| **KBL** | **Kabul** | **15.75** | **300** | Pn | | **Pn** | **16 31 20.2** | **-1.1** |
| KBL | | | | IAmb | | IAmb | 16 31 38.8 | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **WMQ** | **Urumqi** | **16.16** | **5** | *e*P | | **P** | **16 31 29.8** | **+0.3** |
| **GTA** | **Gaotai** | **16.58** | **42** | *e*P | | **P** | **16 31 34.2** | **-0.1** |
| GTA | | | | pP | | pP | 16 31 38.9 | +0.6 |
| GTA | | | | sP | | sP | 16 31 42.5 | +2.4 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,95nm,4.4s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=N,110nm,12.4s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=E,120nm,14.9s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=Z,110nm,16.4s | | | | | | | |
| **GAR** | **Garm** | **17.02** | **315** | Pn | | **Pn** | **16 31 34.5** | **-2.8** |
| GAR | | | | IAmb | | IAmb | 16 31 54.0 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **LZH** | **Lanzhou** | **17.55** | **57** | *e*P | | **P** | **16 31 45.3** | **+0.2** |
| LZH | | | | pP | | pP | 16 31 50.0 | +0.8 |
| LZH | | | | sP | | sP | 16 31 53.9 | +3.0 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=N,190nm,8.5s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=E,190nm,9.1s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=Z,210nm,11.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **19.23** | **353** | P | | **Pn** | **16 32 04.2** | **-0.1** |
| **MKAR** | **Makanchi Array** | **19.23** | **353** | P | | **P** | **16 32 03.9** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=177,slow=11,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **19.23** | **353** | | | **P** | **16 32 04.0** | **+0.7** |
| **MAKZ** | **Makanchi** | **19.28** | **352** | P | | **Pn** | **16 32 05.0** | **+0.1** |
| **XAN** | **Xi'an** | **20.93** | **67** | P | | Pn | 16 32 28.8 | +4.3 |
| XAN | | | | pP | | sP | 16 32 35.0 | +7.1 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **ENH** | **Enshi** | **21.01** | **77** | P | | **P** | **16 32 23.8** | **+1.0** |
| ENH | | | | IAmb | | IAmb | 16 32 30.5 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **UBPT** | **Khong Chiam** | **22.17** | **120** | P | | **P** | **16 32 35.7** | **+0.3** |
| UBPT | | | | IAmb | | IAmb | 16 32 41.9 | |
| | comp=Z,7.8nm,1.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.52** | **349** | P | | **P** | **16 32 50.1** | **+1.1** |
| | comp=Z,1.7nm,0.6s,baz=170,slow=9.8,SNR=11 | | | | | | | |
| **KURK** | **Kurchatov** | **23.59** | **349** | P | | **P** | **16 32 50.0** | **+0.3** |
| KURK | | | | IAmb | | IAmb | 16 32 56.5 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **WSAR** | **Wadi Sarin** | **24.77** | **266** | P | | **P** | **16 33 02.1** | **+1.1** |
| | comp=Z,34nm,1.4s,baz=111,slow=5.4,SNR=4.1 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **25.01** | **52** | *e*P | | **P** | **16 33 04.9** | **+1.8** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,140nm,4.7s | | | | | | | |
| **SONM** | **Songino Array** | **25.79** | **33** | P | | **P** | **16 33 11.6** | **+1.4** |
| | comp=Z,2.0nm,0.6s,baz=218,slow=9.8,SNR=21 | | | | | | | |
| **SONM** | **Songino Array** | **25.79** | **33** | P | | **P** | **16 33 11.8** | **+1.6** |
| SONM | | | | IAmb | | IAmb | 16 33 18.1 | |
| | comp=Z,4.4nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.14** | **34** | P | | **P** | **16 33 13.7** | **+0.3** |
| ULN | | | | IAmb | | IAmb | 16 33 17.1 | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **26.22** | **359** | P | | **P** | **16 33 14.7** | **+0.8** |
| ZAA0 | | | | IAmb | | IAmb | 16 33 22.0 | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.22** | **359** | P | | **P** | **16 33 15.6** | **+1.7** |
| | comp=Z,2.3nm,0.6s,baz=181,slow=9.3,SNR=5.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.22** | **359** | P | | **P** | **16 33 15.2** | **+1.4** |
| **ABKAR** | **Akbulak array** | **29.21** | **324** | P | | **P** | **16 33 42.2** | **+1.6** |
| **KSRS** | **Korea Array** | **36.67** | **64** | P | | **P** | **16 34 46.2** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=261,slow=7.9,SNR=1.5 | | | | | | | |
| **NRIK** | **Noril'sk** | **41.68** | **1** | P | | **P** | **16 35 28.6** | **+1.2** |
| | comp=Z,1.8nm,0.6s,baz=197,slow=2.3,SNR=4.4 | | | | | | | |
| **NRIK** | **Noril'sk** | **41.68** | **1** | P | | **P** | **16 35 28.3** | **+0.9** |
| NRIK | | | | IAmb | | IAmb | 16 35 34.4 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **48.02** | **315** | P | | **P** | **16 36 18.2** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=85,slow=7.0,SNR=5.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **48.02** | **315** | P | | **P** | **16 36 18.0** | **-0.2** |
| AKASG | | | | IAmb | | IAmb | 16 36 20.0 | |
| | comp=Z,2.4nm,1.4s | | | | | | | |
| **BURAR** | **Bucovina Array** | **50.46** | **310** | P | | **P** | **16 36 38.0** | **+1.0** |
| BURAR | | | | IAmb | | IAmb | 16 36 38.6 | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **50.47** | **310** | P | | **P** | **16 36 38.3** | **+1.2** |
| **FIA1** | **FINESS Array S** | **51.58** | **328** | P | | **P** | **16 36 45.7** | **+0.6** |
| **FINES** | **FINESS Array B** | **51.58** | **328** | P | | **P** | **16 36 45.6** | **+0.6** |
| | comp=Z,2.4nm,0.6s,baz=99,slow=8.6,SNR=8.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.97** | **338** | P | | **P** | **16 37 03.2** | **+0.6** |
| | comp=Z,3.1nm,0.7s,baz=100,slow=7.1,SNR=7.3 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.97** | **338** | P | | **P** | **16 37 03.5** | **+0.9** |
| **GERES** | **GERESS Array B** | **58.08** | **312** | P | | **P** | **16 37 33.1** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=64,slow=9.0,SNR=1.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **58.67** | **327** | P | | **P** | **16 37 35.7** | **-0.6** |
| | comp=Z,0.7nm,0.7s,baz=87,slow=7.4,SNR=2.7 | | | | | | | |
| **WB0** | **Warramunga Arr** | **66.73** | **130** | P | | **P** | **16 38 31.1** | **+0.5** |
| **WRA** | **Warramunga Arr** | **66.81** | **130** | P | | **P** | **16 38 32.0** | **+0.8** |
| | comp=Z,1.4nm,0.6s,baz=323,slow=6.4,SNR=17 | | | | | | | |
| **WRA** | **Warramunga Arr** | **66.81** | **130** | P | | **P** | **16 38 31.2** | **+0.1** |
| **WRAB** | **Tennant Creek** | **66.82** | **130** | P | | **P** | **16 38 32.0** | **+0.9** |
| **WB2** | **Warramunga Arr** | **66.82** | **130** | P | | **P** | **16 38 32.0** | **+0.8** |
| **WR0** | **Warramunga Arr** | **66.96** | **130** | P | | **P** | **16 38 32.3** | **+0.2** |
| WR0 | | | | IAmb | | IAmb | 16 38 45.7 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **69.11** | **133** | P | | **P** | **16 38 46.4** | **+0.8** |
| AS31 | | | | IAmb | | IAmb | 16 38 47.0 | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **69.11** | **133** | P | | **P** | **16 38 46.4** | **+0.8** |
| | comp=Z,1.2nm,0.6s,baz=315,slow=6.2,SNR=35 | | | | | | | |
| **BM

RAO **Raoul Island** **3.38 37** P **Pn** **16 55 49.9 +1.4**
154nm,0.3s,baz=270,slow=20,SNR=8.0
RAO S **S** **16 56 43.4 +1.2**
460nm,0.3s,baz=271,slow=22,SNR=6.1
RAO **Raoul Island** **3.38 37** P **Pn** **16 55 51.2 +2.7**
GRZ **Great Barrier** **5.55 219** P Pn 16 56 15.5 +5.8
MXZ **Matakaoa Point** **5.71 192** P **Pn** **16 56 14.3 +3.1**
MXZ S **S** **16 57 24.4 +0.3**
MXZ **Matakaoa Point** **5.71 192** Pn **Pn** **16 56 12.9 +1.6**
KUZ **Kuaotunu** **5.81 214** P Pn 16 56 17.9 +5.5
WSRZ **White Island S** **5.92 200** P **Pn** **16 56 17.4 +3.7**
WMGZ **Waiomatatini S** **5.94 190** P Pn 16 56 18.4 +4.6
WMGZ S **S** **16 57 26.3 -2.4**
HAZ **Te Kaha** **6.00 195** P **Pn** **16 56 18.6 +4.2**
HAZ S **S** **16 57 30.8 +1.0**
PKGZ **Pakihiroa** **6.06 193** P Pn 16 56 20.8 +5.5
OUZ **Omahuta** **6.07 236** Pn **Pn** **16 56 19.6 +4.3**
OUZ **Omahuta** **6.07 236** P Pn 16 56 20.4 +5.2
PUZ **Puketiti** **6.21 191** P **Pn** **16 56 21.0 +4.2**
PUZ S **S** **16 57 33.0 -1.2**
RUGZ **Raukumara Rang** **6.22 195** P **Pn** **16 56 20.5 +3.5**
URZ **Urewera** **6.64 198** P **Pn** **16 56 23.1 +1.7**
88nm,0.3s,baz=13,slow=2.5,SNR=179
URZ S **S** **16 57 41.8 -0.9**
219nm,0.3s,baz=300,slow=17,SNR=5.9
URZ **Urewera** **6.64 198** Pn **Pn** **16 56 22.5 +1.0**
URZ **Urewera** **6.64 198** P **Pn** **16 56 24.3 +2.8**
MKRZ **Makatiti** **6.72 203** P **P** **16 56 27.3 +4.2**
TARZ **Mount Tarawera** **6.79 202** P **P** **16 56 27.6 +3.7**
RRRZ **Republican Roa** **6.88 202** P **P** **16 56 28.3 +3.4**
BKZ **Black Stump Fm** **7.65 199** **Pn** **16 56 32.5 -0.4**
BKZ **Black Stump Fm** **7.65 199** P **Pn** **16 56 33.5 +0.5**
HIZ **Hauiti** **7.65 210** P **P** **16 56 36.9 +3.5**
HIZ **Hauiti** **7.65 210** P **P** **16 56 37.1 +3.7**
TMVZ **Te Maari** **7.85 204** P **Pn** **16 56 36.2 +0.8**
ETVZ **East Tongariro** **7.87 204** P **Pn** **16 56 36.1 +0.6**
WTVZ **West Tongariro** **7.89 204** P **Pn** **16 56 36.8 +1.0**
TWVZ **Taurewa** **7.91 205** P **Pn** **16 56 37.1 +1.2**
OTVZ **Oturere** **7.91 204** P **Pn** **16 56 36.5 +0.6**
SNVZ **South Ngauruho** **7.94 204** P **Pn** **16 56 37.0 +0.7**
SNVZ S **S** **16 58 09.9 -0.1**
FWVZ **Far West T-bar** **8.03 204** P **Pn** **16 56 38.3 +0.9**
FWVZ S **S** **16 58 10.6 -1.4**
WNVZ **Wahianoa** **8.08 203** P **Pn** **16 56 38.2 +0.3**
WNVZ S **S** **16 58 09.9 -3.0**
MOVZ **Moawhango** **8.10 202** P **Pn** **16 56 38.4 +0.3**
MOVZ S **S** **16 58 09.9 -3.3**
PKVZ **Pokaka** **8.13 205** P **Pn** **16 56 39.5 +1.0**
VRZ **Vera Road** **8.21 208** P **Pn** **16 56 41.8 +2.5**
MHEZ **Mangahewa** **8.35 210** P P 16 56 46.8 +5.6
PNHZ **Pukenui** **8.43 199** P **Pn** **16 56 40.7 -1.1**
PNHZ S **S** **16 58 15.8 -4.3**
DREZ **Durham Road** **8.50 210** P P 16 56 48.0 +5.2
PKE **Pukeiti** **8.60 211** P **P** **16 56 48.2 +4.3**
NEZ **North Egmont** **8.61 211** P **P** **16 56 48.5 +4.4**
TSZ **Takapari Road** **8.63 200** P **Pn** **16 56 43.5 -0.6**
TSZ S **S** **16 58 20.1 -4.2**
LREZ **Lake Rotokare** **8.64 209** P **S** **16 56 47.2 +2.9**
LREZ S **S** **16 58 25.9 +1.4**
PREZ **Palmer Road** **8.64 210** P P 16 56 49.0 +4.5
KHEZ **Kahui Hut** **8.67 211** P **P** **16 56 49.2 +4.4**
WAZ **Wanganui** **8.67 205** P **Pn** **16 56 45.4 +0.8**
WAZ S **S** **16 58 24.2 -1.0**
NBEZ **Newall Road No** **8.71 212** P P 16 56 50.3 +5.2
DVHZ **Dannevirke** **8.80 198** P **Pn** **16 56 45.2 -0.8**
NMEZ **Namu Road** **8.82 211** P **Pn** **16 56 50.7 +4.3**
OHWZ **Ohakea** **8.96 202** P **Pn** **16 56 49.5 +1.6**
OHWZ S **S** **16 58 27.8 -3.5**
POWZ **Post Office Ro** **9.00 200** P **P** **16 56 48.0 -0.3**
PRWZ **Pori Road** **9.09 198** P **P** **16 56 49.5 +0.1**
BFZ **Birch Farm** **9.14 197** P **P** **16 56 49.4 -0.5**
BFZ **Birch Farm** **9.14 197** **P** **16 56 48.9 -1.0**
BFZ **Birch Farm** **9.14 197** P **P** **16 56 49.9 0.0**
MRZ **Mangatainoka R** **9.30 200** P **P** **16 56 50.2 -1.4**
TIWZ **Tintock** **9.32 198** P **P** **16 56 52.5 +0.5**
CPWZ **Castlepoint** **9.37 197** P **P** **16 56 54.9 +2.5**
HOWZ **Holdsworth Sta** **9.54 200** P **P** **16 56 53.2 -1.1**
OGWZ **Otaki Gorge** **9.57 201** P **P** **16 56 53.6 -1.0**
TMWZ **Te Maipa** **9.63 198** P **P** **16 56 54.9 -0.5**
KIW **Kapiti Island** **9.69 202** P **P** **16 56 55.6 -0.4**
MTW **Mount Morrison** **9.78 199** P **P** **16 56 56.6 -0.5**
CAW **Cannon Point** **9.86 201** P **P** **16 56 57.5 -0.4**
TRWZ **Traveller** **9.96 198** P **P** **16 56 59.6 +0.7**
DUWZ **D'Urville Isla** **9.98 206** P **P** **16 56 58.4 -0.9**
PAWZ **Paruwai Farm** **10.01 199** P **P** **16 56 59.8 +0.2**
MSWZ **Moikau Station** **10.09 200** P **P** **16 57 00.1 -0.4**
MSWZ **Moikau Station** **10.09 200** **P** **16 56 59.7 -0.7**
WEL **Wellington** **10.12 202** P **P** **16 57 02.0 +1.2**
SNZO **South Karori** **10.16 202** **P** **16 57 00.2 -1.0**
BHW **Baring Head** **10.20 201** P **P** **16 57 01.1 -0.5**
BHW **Baring Head** **10.20 201** P **P** **16 57 00.4 -1.2**
PLWZ **Palliser** **10.23 199** P **P** **16 57 02.4 +0.3**
PLWZ **Palliser** **10.23 199** P **P** **16 57 01.5 -0.6**
TUWZ **Tuamarina** **10.52 205** P **P** **16 57 04.7 -0.5**
TUWZ **Tuamarina** **10.52 205** P **P** **16 57 04.1 -1.1**
NNZ **Nelson** **10.55 207** P **P** **16 57 04.9 -0.6**
NNZ **Nelson** **10.55 207** P **P** **16 57 04.5 -1.0**
TKNZ **Takaka Hill** **10.56 209** P **P** **16 57 05.2 -0.5**
QRZ **Quartz Range** **10.57 211** P **P** **16 57 05.4 -0.4**
QRZ **Quartz Range** **10.57 211** **P** **16 57 05.9 +0.1**
QRZ **Quartz Range** **10.57 211** P **P** **16 57 07.5 +1.7**
CMWZ **Cape Campbell** **10.72 203** P **P** **16 57 07.6 +0.3**
BSWZ **Blackbirch Sta** **10.80 204** P **P** **16 57 09.0 +0.7**
BSWZ **Blackbirch Sta** **10.80 204** **P** **16 57 07.7 -0.6**
MRNZ **Matariki Terra** **10.95 209** P **P** **16 57 09.9 -0.1**
THZ **Tophouse** **11.20 207** P **P** **16 57 12.6 -0.2**
THZ **Tophouse** **11.20 207** **P** **16 57 12.5 -0.3**
DSZ **Denniston Nort** **11.64 211** P **P** **16 57 17.7 0.0**
LTZ **Lake Taylor** **12.31 207** P **P** **16 57 25.2 +0.1**
INZ **Inchbonnie** **12.60 209** P **P** **16 57 28.4 +0.4**
OXZ **Oxford** **12.87 206** P **P** **16 57 31.2 +0.2**
MQZ **McQueen's Vall** **12.98 203** P **P** **16 57 33.0 +0.7**
RACZ **Rakaia** **13.18 205** P **P** **16 57 34.5 +1.5**
WVZ **Waitaha Valley** **13.18 210** P **P** **16 57 35.0 +0.5**
MHCZ **Mount Hutt** **13.22 207** P **P** **16 57 36.0 +1.0**
GCSZ **Gaunt Creek Bo** **13.55 211** P **P** **16 57 39.7 +1.1**
RPZ **Rata Peaks** **13.58 208** P **P** **16 57 39.2 +0.4**
MSVF **Nonsavu** **14.26 353** P **P** **16 57 45.5 -1.1**
3.6nm,0.3s,baz=262,slow=22,SNR=8.2
MSVF **Nonsavu** **14.26 353** P **P** **16 57 47.0 +0.4**
MSVF **Nonsavu** **14.26 353** P **P** **16 57 47.6 +1.0**
PINNC **Pines Island,** **14.35 307** P **P** **16 57 49.7 +2.2**
PINNC **Pines Island,** **14.35 307** P **P** **16 57 50.2 +2.7**
MARNC **Mare, Loyalty** **14.77 312** P **P** **16 57 54.8 +2.7**
ODZ **Otahua Downs** **14.86 206** P **P** **16 57 54.4 +1.7**
OUENC **Ouen Island, N** **14.89 307** P **P** **16 57 55.9 +2.4**
OUENC **Ouen Island, N** **14.89 307** P **P** **16 57 56.1 +2.7**
YATNC **Mamie plateau,** **15.10 308** P **P** **16 57 58.0 +2.9**
TAVE **Taveuni** **15.20 1** P **P** **16 57 59.0 +2.3**
ONTNC **Ouen Toro** **15.23 306** P **P** **16 57 59.2 +2.1**
ONTNC **Ouen Toro** **15.23 306** P **P** **16 58 00.0 +2.9**
DZM **Mont Dzumac** **15.40 307** P **P** **16 58 00.8 +1.8**
2.1nm,0.3s,baz=124,slow=9.6,SNR=25
DZM **Mont Dzumac** **15.40 307** P **P** **16 58 01.1 +2.1**
DZM IAmb IAmb 16 58 02.3
comp=Z,41nm,0.8s
DZM **Mont Dzumac** **15.40 307** P **P** **16 58 01.4 +2.4**
NOUC **Port Laguerre** **15.47 306** P **P** **16 58 01.8 +2.1**
DGTI **Dogotuki** **15.60 360** P **P** **16 58 01.3 +0.2**
DVP **Devils Point** **17.61 321** P **P** **16 58 23.8 +1.3**
KOUNC **Koumac, New Ca** **17.90 306** P **P** **16 58 27.5 +1.9**
AFI **Afiamalu** **19.58 25** P **P** **16 58 44.2 +1.4**
comp=Z,8.8nm,0.3s,baz=248,slow=19,SNR=9.1
AFI S **S** **17 02 03.1 +3.3**
comp=Z,1.5nm,0.3s,baz=74,slow=23,SNR=2.5
AFI **Afiamalu** **19.58 25** P **P** **16 58 43.3 +0.5**
AFI **Afiamalu** **19.58 25** P **P** **16 58 44.0 +1.2**
SANVU **Saraoutou** **20.02 322** P **P** **16 58 45.7 -1.1**
SANVU IAmb IAmb 16 59 00.0
comp=Z,30nm,0.6s
SANVU **Saraoutou** **20.02 322** P **P** **16 58 46.4 -0.4**
ARMA **Armidale** **24.07 266** P **P** **16 59 25.9 +2.3**
ARMA IAmb IAmb 16 59 28.1
comp=Z,7.6nm,0.6s
ARMA **Armidale** **24.07 266** P **P** **16 59 23.5 0.0**
MGCD **Mangrove Creek** **24.13 259** P **P** **16 59 26.1 +2.3**
EIDS **Eidsvold** **25.94 277** P **P** **16 59 41.2 +1.0**
EIDS IAmb IAmb 16 59 42.1
comp=Z,20nm,0.6s
EIDS **Eidsvold** **25.94 277** P **P** **16 59 41.1 +1.0**

MCQ **Macquarie Isla** **26.94 207** P **P** **16 59 46.7 -1.8**
RK1H **Rockhampton Ha** **27.21 281** P **P** **16 59 53.0 +1.7**
RMQ **Roma** **27.53 273** P **P** **16 59 56.1 +2.0**
TOO **Toolangi** **28.58 249** P **P** **17 00 05.7 +2.4**
TOO **Toolangi** **28.58 249** P **P** **17 00 05.0 +1.7**
CMSA **Cobar Meteorol** **28.89 262** P **P** **17 00 08.2 +2.2**
PPT **Papeete** **31.20 70** P **P** **17 00 27.3 +1.0**
comp=Z,27nm,0.7s,baz=217,slow=10.0,SNR=2.5
QLP **Quilpie** **31.34 271** P **P** **17 00 28.4 +0.9**
CTA **Charters Tower** **32.20 283** P **P** **17 00 36.1 +1.2**
comp=Z,27nm,0.5s,baz=110,slow=9.7,SNR=51
CTA **Charters Tower** **32.20 283** P **P** **17 00 36.0 +1.0**
CTAO **Charters Tower** **32.20 283** P **P** **17 00 35.8 +0.8**
CTAO IAmb IAmb 17 00 36.7
comp=Z,27nm,0.6s
CTAO **Charters Tower** **32.20 283** P **P** **17 00 35.8 +0.8**
STKA **Stephens Creek** **32.27 260** P **P** **17 00 36.7 +1.3**
comp=Z,2.3nm,0.4s,baz=106,slow=10.0,SNR=6.6
STKA **Stephens Creek** **32.27 260** P **P** **17 00 37.2 +1.8**
INKA **Innaminka** **33.96 267** P **P** **17 00 51.0 +1.1**
HTT **Hallett** **34.23 256** P **P** **17 00 53.3 +1.1**
MTSU **Mount Surprise** **34.75 285** P **P** **17 00 58.1 +1.3**
LCRK **Leigh Creek** **35.39 261** P **P** **17 01 03.0 +1.0**
BBOO **Buckleboo** **36.70 257** P **P** **17 01 13.2 +0.3**
BBOO **Buckleboo** **36.70 257** P **P** **17 01 13.2 +0.3**
QIS **Mount Isa** **37.55 278** P **P** **17 01 20.6 +0.5**
COEN **Coen** **37.90 290** P **P** **17 01 23.7 +0.6**
COEN IAmb IAmb 17 01 25.2
comp=Z,10nm,0.8s
COEN **Coen** **37.90 290** P **P** **17 01 23.2 +0.1**
OOD **Oodnadatta** **38.23 265** P **P** **17 01 26.5 +0.9**
MULG **Mulgathing** **38.92 260** P **P** **17 01 31.5 +0.2**
AS31 **Alice Springs** **41.13 270** P **P** **17 01 48.7 -0.6**
ASAR **Alice Springs** **41.13 270** P **P** **17 01 49.0 -0.3**
comp=Z,16nm,0.6s,baz=108,slow=7.3,SNR=309
ASAR pP **pP** **17 03 08.3 +3.3**
comp=Z,2.1nm,0.8s,baz=109,slow=7.7,SNR=2.6
ASAR PcP **PcP** **17 03 38.9 -1.0**
comp=Z,1.3nm,0.5s,baz=120,slow=3.6,SNR=5.7
ASAR S **S** **17 07 29.1 -3.1**
comp=Z,1.8nm,1.0s,baz=108,slow=17,SNR=8.8
ASAR **Alice Springs** **41.13 270** P **P** **17 01 49.0 -0.3**
WR0 **Warramunga Arr** **42.08 275** IAmb IAmb 17 01 57.4
comp=Z,24nm,0.5s
WRAB **Tennant Creek** **42.26 275** P **P** **17 01 57.4 -1.0**
WRAB **Tennant Creek** **42.26 275** P **P** **17 01 57.7 -0.6**
WRA **Warramunga Arr** **42.26 275** P **P** **17 01 57.9 -0.5**
comp=Z,33nm,0.5s,baz=113,slow=7.7,SNR=435
WRA S **S** **17 07 40.2 -8.6**
comp=Z,0.8nm,0.9s,baz=115,slow=14,SNR=2.0
WB0 **Warramunga Arr** **42.29 275** P **P** **17 01 58.2 -0.4**
FORT **Forrest** **43.79 257** P **P** **17 02 10.2 -0.1**
FORT IAmb IAmb 17 02 16.9
comp=Z,13nm,0.8s
FORT **Forrest** **43.79 257** P **P** **17 02 09.5 -0.8**
comp=Z,17nm,0.6s
WRKA **Warakurna** **45.39 265** P **P** **17 02 22.0 -0.9**
JAY **Jayapura** **46.96 301** P **P** **17 02 32.4 -2.7**
comp=Z,22nm,0.8s,baz=200,slow=8.1,SNR=11
KDU **Kakadu** **47.33 283** P **P** **17 02 37.1 -0.7**
MTN **Manton Dam** **48.36 282** P **P** **17 02 44.9 -0.7**
MTN IAmb IAmb 17 02 45.4
comp=Z,31nm,0.5s
MTN **Manton Dam** **48.36 282** P **P** **17 02 44.5 -1.1**
DRS **Darwin Rock St** **48.77 282** P **P** **17 02 48.5 -0.1**
KNRA **Kununurra** **48.93 277** P **P** **17 02 49.7 -0.1**
KNRA IAmb IAmb 17 02 50.2
comp=Z,26nm,0.9s
KNRA **Kununurra** **48.93 277** P **P** **17 02 49.9 0.0**
FITZ **Fitzroy Crossi** **50.45 272** P **P** **17 03 00.8 -0.4**
comp=Z,11nm,0.7s,baz=150,slow=6.4,SNR=26
MEEK **Meekatharra** **52.96 259** P **P** **17 03 19.2 -0.3**
FAKI **Fak Fak** **53.11 293** P **P** **17 03 19.7 -1.0**
FAKI IAmb IAmb 17 03 25.3
comp=Z,29nm,1.1s
FAKI **Fak Fak** **53.11 293** P **P** **17 03 19.8 -0.8**
comp=Z,25nm,1.0s
PSA00 **Pilbara Seismi** **53.88 265** P **P** **17 03 24.0 -2.1**
PSA00 **Pilbara Seismi** **53.88 265** P **P** **17 03 25.1 -1.0**
comp=Z,9.4nm,0.7s
MBWA **Marble Bar** **54.15 266** P **P** **17 03 26.0 -2.0**
MBWA IAmb IAmb 17 03 27.6
comp=Z,12nm,0.9s
MBWA **Marble Bar** **54.15 266** P **P** **17 03 27.2 -0.8**
MORW **Morawa** **54.24 255** P **P** **17 03 28.7 +0.1**
SIJI **Sorong** **55.16 294** P **P** **17 03 34.5 -0.7**
comp=Z,11nm,0.7s,baz=100,slow=11,SNR=6.1
SOEI **Soe** **55.70 281** P **P** **17 03 38.8 -0.3**
comp=Z,34nm,1.1s
SOEI **Soe** **55.70 281** P **P** **17 03 39.7 +0.5**
SOEI IAmb IAmb 17 03 41.3
comp=Z,25nm,0.8s
SOEI **Soe** **55.70 281** P **P** **17 03 40.1 +1.0**
BATI **Baumata** **55.97 280** P **P** **17 03 40.9 0.0**
comp=Z,25nm,0.6s,baz=171,slow=4.3,SNR=9.2
QSPA **South Pole Qui** **58.15 180** P **P** **17 03 57.9 +2.5**
comp=Z,3.1nm,0.5s,baz=355,slow=5.6,SNR=6.5
QSPA **South Pole Qui** **58.15 180** P **P** **17 03 57.8 +2.5**
GIRL **Giralia** **58.18 262** P **P** **17 03 56.3 +0.2**
comp=Z,81nm,2.0s
SANI **Sanana** **58.60 289** P **P** **17 03 58.2 -0.9**
TOLI2 **Tolitoli** **64.66 289** P **P** **17 04 37.4 -1.6**
JAGI **Jajag, Banyuwa** **64.88 276** P **P** **17 04 39.7 -0.7**
JAGI IAmb IAmb 17 04 40.0
comp=Z,12nm,0.7s
JAGI **Jajag, Banyuwa** **64.88 276** P **P** **17 04 40.1 -0.3**
MPSI **Mapaga** **64.92 287** P **P** **17 04 39.5 -1.2**
comp=Z,2μmcomp=Z,12nm,0.8s
BELA **Belgrano 2** **68.49 173** P **P** **17 05 03.3 +1.4**
KSM **Kuching** **73.44 282** P **P** **17 05 31.7 -0.6**
KSM IAmb IAmb 17 05 55.8
comp=Z,7.4nm,1.1s
MDSI **Maura Dua** **75.39 274** P **P** **17 05 41.0 -2.5**
SNAA **Sanae** **76.63 179** P **P** **17 05 50.3 +0.8**
SNAA **Sanae** **76.63 179** P **P** **17 05 50.5 +1.0**
VNA3 **Neumayer Olymp** **76.86 177** P **P** **17 05 51.8 +1.1**
VNA2 **Neumayer--Watz** **77.27 178** P **P** **17 05 54.3 +1.4**
baz=181,slow=5.3
MJAR **Matsushiro Arr** **78.46 327** P **P** **17 05 57.5 -2.4**
comp=Z,5.6nm,0.9s,baz=162,slow=4.9,SNR=6.3
MJAR **Matsushiro Arr** **78.46 327** IAmb IAmb 17 05 59.4
comp=Z,6.2nm,1.0s
MAT **Matsushiro** **78.46 327** P **P** **17 05 58.4 -1.4**
JNU **Nakatsue** **79.47 320** P **P** **17 06 03.8 -1.6**
comp=Z,4.9nm,0.8s,baz=128,slow=3.0,SNR=4.2
JNU **Nakatsue** **79.47 320** P **P** **17 06 04.3 -1.1**
JNU IAmb IAmb 17 06 04.8
comp=Z,10nm,1.0s
JHS **Saijyo** **79.72 323** P **P** **17 06 06.4 -0.2**
JHS IAmb IAmb 17 06 14.1
comp=Z,7.1nm,0.9s
JKA **Kamikawa-asahi** **82.96 334** IAmb IAmb 17 06 28.2
comp=Z,9.1nm,0.9s
ASAJ **Asahikawa** **82.96 334** P **P** **17 06 24.1 +0.9**
comp=Z,5.5nm,0.6s,baz=80,slow=6.1,SNR=7.0
GSI **Gununguitoli** **84.03 275** P **P** **17 06 29.0 -0.3**
KSRS **Korea Array** **84.31 321** P **P** **17 06 30.2 +0.2**
comp=Z,4.4nm,0.7s,baz=139,slow=5.4,SNR=18
KSAR **Wonju Array Be** **84.33 321** P **P** **17 06 30.7 +0.5**
KS19 **Wonju Array Si** **84.38 321** P **P** **17 06 30.6 +0.2**
KS19 IAmb IAmb 17 06 45.5
comp=Z,8.8nm,0.9s
YSS **Yuzh-Sakhalins** **85.34 336** P **P** **17 06 34.4 -0.5**
NJ2 **Nanjing** **85.82 312** *eP* **P** **17 06 37.9 +0.3**
NJ2 pmax pmax
comp=Z,5.0nm,0.7s
PET **Petropavlovsk** **86.61 347** P **P** **17 06 40.9 0.0**
PEA0B **Petropavlovsk-** **86.87 347** P **P** **17 06 42.9 +0.7**
PETK **Petropavlovsk-** **86.87 347** P **P** **17 06 41.9 -0.3**
comp=Z,25nm,0.6s,baz=119,slow=7.5,SNR=60
PETK **Petropavlovsk-** **86.87 347** P **P** **17 06 42.0 -0.2**
USRK **Ussuriysk Ar.** **87.42 328** P **P** **17 06 44.7 -0.3**
comp=Z,3.0nm,0.6s,baz=100,slow=5.2,SNR=6.5
CN2 **Changchun** **90.24 324** *eP* **P** **17 06 57.6 -0.5**
CN2 *eP* pwP 17 08 39.3 +5.7
CN2 **Changchun** **90.24 324** *eS* **S** **17 17 12.7 -4.2**
CN2 pmax pmax
comp=Z,10.0nm,0.9s
NVAR **Mina Array Bea** **90.70 44** P **P** **17 07 02.4 +1.6**
comp=Z,1.1nm,0.7s,baz=225,slow=7.5,SNR=9.1
BNX **BinXian** **90.71 326** ||P **P** **17 07 00.0 -0.3**
BNX pmax pmax
comp=Z,9.0nm,0.9s
BNX pmax pmax

comp=Z,150nm,5.6s
ENH **Enshi** **90.91 305** P **P** **17 07 00.7 -1.0**
ENH IAmb IAmb 17 07 02.4
comp=Z,6.3nm,0.9s
KLR **Kul'dur** **91.43 331** P **P** **17 07 03.6 +0.1**
comp=Z,1.9nm,0.8s,baz=68,slow=2.9,SNR=7.2
CMAR **Chiang Mai Arr** **92.11 290** P **P** **17 07 05.1 -2.3**
comp=Z,0.7nm,0.8s,baz=121,slow=4.5,SNR=7.8
PZH **PanZhiHua** **94.33 298** P **P** **17 07 17.7 +0.1**
PZH pmax pmax
comp=Z,8.0nm,0.7s
PZH pmax pmax
comp=Z,100nm,6.6s
HHC **Hu-ho-hao-te** **95.95 315** *eP* **P** **17 07 28.8 +4.3**
HHC pmax pmax
comp=Z,3.0nm,1.0s
HHC pmax pmax
comp=Z,140nm,4.4s
SONM **Songino Array** **103.02 319** P **Pdif** **17 07 54.8 -1.2**
comp=Z,0.4nm,0.7s,baz=137,slow=5.3,SNR=4.0
YKA **Yellowknife Ar** **107.70 26** PKiKP **PKiKP** **17 12 20.6 -0.9**
comp=Z,0.2nm,0.4s,baz=252,slow=1.4,SNR=6.9
YKA PKKPbc **PKKPbc** **17 23 35.4 -2.7**
comp=Z,0.3nm,0.6s,baz=48,slow=3.0,SNR=4.0
YKA **Yellowknife Ar** **107.70 26** **PKiKP** **17 12 20.9 -0.6**
WMQ **Urumqi** **112.67 308** *eP* **PKiKP** **17 12 30.4 -1.2**
WMQ LR LR
comp=N,580nm,28.3s
WMQ LR LR
comp=E,24nm,21.3s
WMQ LR LR
comp=Z,16nm,21.3s
MK31 **Makanchi Array** **117.29 310** **PKPdf** **17 12 39.2 -1.1**
MKAR **Makanchi Array** **117.29 310** PKP **PKPdf** **17 12 39.1 -1.2**
comp=Z,1.7nm,0.6s,baz=187,slow=1.4,SNR=27
MAKZ **Makanchi** **117.50 310** PKPdf **PKPdf** **17 12 39.2 -1.5**
ZALV **Zalesovo Beam** **117.91 318** PKP **PKPdf** **17 12 39.6 -1.6**
comp=Z,1.5nm,0.5s,baz=126,slow=1.9,SNR=9.4
UZB **Yunbulak** **118.34 305** *e*PKP **PKPdf** **17 12 41.0 -1.6**
baz=305
KPKS **Kokpek** **118.67 305** *e*PKP **PKPdf** **17 12 41.3 -1.8**
baz=305
TDK **Taldyqorghan** **119.33 307** *e*PKP **PKPdf** **17 12 42.7 -1.6**
baz=307
SEM **Semipalatinsk** **119.64 313** *e*PKP **PKPdf** **17 12 42.8 -2.2**
baz=313
NRIK **Noril'sk** **120.27 336** PKP **PKPdf** **17 12 44.5 -0.8**
comp=Z,2.6nm,0.5s,baz=139,slow=2.8,SNR=4.9
KUU **Kurty** **120.43 305** *e*PKP **PKPdf** **17 12 44.3 -2.1**
baz=305
KURK **Kurchatov** **120.72 313** **PKPdf** **17 12 45.4 -1.3**
KURBB **Kurchatov Arra** **120.76 313** PKP **PKPdf** **17 12 45.6 -1.2**
comp=Z,5.1nm,0.6s,baz=116,slow=2.0,SNR=58
AAK **Ala-Archa** **121.37 304** PKP **PKPdf** **17 12 47.6 -0.9**
comp=Z,2.2nm,0.6s,baz=183,slow=5.3,SNR=8.5
BTLS **Baital** **122.31 306** *e*PKP **PKPdf** **17 12 48.7 -1.2**
baz=306
GAR **Garm** **123.40 298** **PKPdf** **17 12 52.1 -0.3**
BRZS **Berezniki** **124.29 312** *e*PKP **PKPdf** **17 12 51.8 -1.8**
baz=312
KKAR **Karatay Array** **124.31 303** **PKPdf** **17 12 53.4 -0.5**
IUG **Iuzhnay** **124.43 302** *e*PKP **PKPdf** **17 12 53.0 -1.3**
baz=302
BRLS **Borolday** **124.78 303** *e*PKP **PKPdf** **17 12 53.8 -1.1**
baz=302
BVAR **Borovoye Array** **126.16 315** PKP **PKPdf** **17 12 56.8 -0.3**
comp=Z,4.0nm,0.5s,baz=60,slow=8.8,SNR=27
BVAR SKPbc SKiKP 17 15 34.3 -20
comp=Z,0.6nm,0.6s,baz=79,slow=7.7,SNR=4.4
BRVK **Borovoye** **126.22 315** PKPdf **PKPdf** **17 12 56.5 -0.7**
SCHQ **Schefferville** **128.70 43** PKP **PKPdf** **17 13 01.6 -0.3**
comp=Z,1.2nm,0.7s,baz=220,slow=12,SNR=1.0
SCHQ SKPbc SKPbc 17 15 41.9
comp=Z,5.4nm,0.9s,baz=270,slow=4.1,SNR=8.2
SCHQ **Schefferville** **128.70 43** **PKPdf** **17 13 00.2 -1.7**
KMBO **Kilima Mbogo** **131.59 234** SKPbc **SKPbc** **17 15 53.6 -2.7**
comp=Z,1.2nm,0.4s,baz=92,slow=3.0,SNR=5.3
ARU **Arti** **133.04 319** PKP **PKPdf** **17 13 09.7 -0.3**
comp=Z,2.8nm,0.5s,baz=61,slow=2.2,SNR=16
ARU SKPbc **SKPbc** **17 15 56.7 -2.8**
comp=Z,2.6nm,0.7s,baz=158,slow=0.9,SNR=12
SPA0 **Spitsbergen Ar** **133.12 355** *e*PKPdf **PKPdf** **17 13 10.3 +0.7**
SPITS **Spitsbergen Ar** **133.12 355** SKPab **SKPbc** **17 15 57.8 -1.4**
comp=Z,6.7nm,0.9s,baz=106,slow=4.8,SNR=1.2
AKTO **Aktyubinsk** **133.70 311** PKP **PKPdf** **17 13 11.3 -0.2**
comp=Z,3.7nm,0.6s,baz=121,slow=3.4,SNR=11
AKTO SKPbc **SKPbc** **17 15 59.0 -2.9**
comp=Z,2.1nm,0.7s,baz=84,slow=3.5,SNR=3.9
ARA0 **ARCESS Array S** **139.68 346** *e* PKPdf 17 13 15.6 -6.4
ARCES **ARCESS Array B** **139.68 346** PKhKP PKPpre 17 13 15.6
comp=Z,1.4nm,0.5s,baz=38,slow=1.5,SNR=18
ARCES SKPbc **SKPbc** **17 16 16.6 -2.5**
comp=Z,4.9nm,1.1s,baz=90,slow=2.7,SNR=4.1
ARCES **ARCESS Array B** **139.68 346** PKPpre 17 13 15.2
KTK1 **Kautokeino** **140.56 347** *e* PKPdf 17 13 17.0 -6.5
KLMR **Klimovskoe** **141.19 330** *e*PKPdf PKPdf 17 13 18.1 -6.8
KLMR AMP 17 13 20.3
comp=Z,23nm,1.5s
STEI **Steigen** **142.88 350** *e*PKPdf **PKPdf** **17 13 24.2 -3.4**
GNI **Garni** **143.04 296** PKP **PKPdf** **17 13 27.3 -1.8**
comp=Z,3.4nm,0.7s,baz=102,slow=20,SNR=3.4
FAUS **Fauske** **143.38 350** *e*PKPdf PKPab 17 13 26.2 -0.1
KBZ **Khabaz** **144.33 302** PKP PKPbc 17 13 29.8 -0.6
comp=Z,12nm,0.9s,baz=178,slow=1.8,SNR=19
KVAR **Kislovodsk Ar** **144.46 302** PKP PKPbc 17 13 31.0 0.0
comp=Z,4.8nm,0.7s,baz=16,slow=18,SNR=2.8
KIV **Kislovodsk** **144.46 302** PKPbc 17 13 30.6 -0.4
KONS **Konsvik** **144.51 351** *e*PKPab PKPbc 17 13 29.5 -0.8
MORB **Moi Rana** **144.63 350** *e*PKPab PKPbc 17 13 28.7 -2.0
STOK **Stokkvaagen** **144.68 351** *e*PKPdf PKPbc 17 13 28.3 -2.5
BORG **Borgarnes** **144.70 15** PKP PKPbc 17 13 30.9 0.0
comp=Z,8.4nm,0.9s,baz=328,slow=6.1,SNR=7.2
BORG **Borgarnes** **144.70 15** PKPbc 17 13 31.5 +0.6
SIRT **Sirnak** **144.70 291** PKPbc 17 13 31.4 -0.5
GURO **Guroymak-BITLI** **145.08 293** **PKPdf** **17 13 32.7 0.0**
OBN **Obninsk** **145.30 323** PKPbc **PKPdf** **17 13 32.0 -0.2**
comp=Z,6.5nm,0.4s,baz=345,slow=4.4,SNR=7.6
FIA1 **FINESS Array S** **145.90 338** **PKPdf** **17 13 33.9 +0.8**
FINES **FINESS Array B** **145.90 338** PKPbc **PKPdf** **17 13 33.9 +0.8**
comp=Z,55nm,0.5s,baz=46,slow=4.2,SNR=306
NSS **Namsos** **146.54 350** *e*PKPab **PKPbc** **17 13 37.9 +1.6**
VSU **Vasula** **147.81 333** *e*P **PKPdf** **17 13 39.6 +3.3**
GAZ **Gaziantep** **148.85 290** **PKPdf** **17 13 41.7 +2.8**
DOMB **Dombas** **149.31 351** *e*PKPbc **PKPbc** **17 13 43.1 -0.5**
UPP **Uppsala** **149.66 342** *e*P **PKiKP** **17 13 49.5 +4.3**
NC303 **NORSAR Array S** **149.76 349** **PKPbc** **17 13 44.3 -0.3**
NC303 PKPab **PKPab** **17 13 51.7 +0.1**
MNK **Minsk** **149.89 327** *i* PKP **PKPdf** **17 13 37.6 -2.2**
MNK *i* PKP **PKPdf** **17 13 37.6 -2.2**
MNK *i* PKP **PKPdf** **17 13 37.6 -2.2**
baz=52
MNK *i* pPKP **pPKPbc** **17 15 23.7 +2.1**
MNK *i* PP **PP** **17 17 28.6 +5.3**
MNK *i* SKS **SKSdf** **17 20 14.7 +5.9**
MNK *i* PPP PPP 17 20 56.1
MNK *i* SKKS SKKSdf 17 28 47.7 -16
MNK *i* SS **SS** **17 36 15.8 +10**
MNK *i* SSS SSS 17 41 34.6
IDID **Didziasalis** **149.91 329** *eP* **PKPbc** **17 13 45.0 -0.2**
NB2 **NORSAR Subarra** **149.96 349** PKP **PKPbc** **17 13 44.5 -0.7**
comp=Z,7.6nm,0.6s,baz=21,slow=4.3
NOA **NORSAR Array B** **149.96 349** PKPbc **PKPbc** **17 13 44.5 -0.7**
comp=Z,3.8nm,0.5s,baz=17,slow=4.1,SNR=25
NOA PKPab **PKPab** **17 13 51.9 -0.6**
comp=Z,6.6nm,0.6s,baz=24,slow=3.3,SNR=20
ISAL **Salakas** **150.01 330** *eP* **PKPbc** **17 13 45.8 +0.4**
NBO00 **NORSAR Array S** **150.04 349** PKPbc **PKPdf** **17 13 43.8 +3.9**
IGN **Ignalina** **150.11 329** *eP* **PKPbc** **17 13 46.0 +0.3**
NAGGM **Naroch** **150.15 328** *i* PKP **PKPdf** **17 13 39.8 -0.4**
FOO **Floro** **150.16 355

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BER** | **Bergen** | **151.34** | **354** | *e*PKPbc | **PKPbc** | **17 13 47.2** | **-1.1** |
| **KONO** | **Kongsberg** | **151.54** | **349** | *e*PKPbc | **PKPbc** | **17 13 48.5** | **-0.3** |
| **BR131** | **Keskin Array S** | **151.58** | **295** | PKPbc | **PKPbc** | **17 13 48.7** | **-1.0** |
| **BRTR** | **Keskin Array B** | **151.58** | **295** | PKPbc | **PKPbc** | **17 13 48.8** | **-1.0** |
| | comp=Z,6.5nm,0.5s,baz=155,slow=3.9,SNR=19 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **17 13 59.4** | **-0.7** |
| | comp=Z,1.5nm,0.8s,baz=116,slow=3.4,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.58** | **295** | PKPbc | **PKPbc** | **17 13 48.5** | **-1.3** |
| **ODD1** | **Odda** | **151.67** | **353** | *e*PKPbc | **PKPbc** | **17 13 48.6** | **-0.6** |
| **CSS** | **Mathiatis** | **151.89** | **285** | PKPbc | **PKPbc** | **17 13 49.5** | **-1.0** |
| **BLSS** | **Blasjo** | **152.17** | **353** | *e*PKPbc | **PKPbc** | **17 13 49.6** | **-0.7** |
| **KMY** | **Karmoy** | **152.50** | **354** | *e*PKPbc | **PKPbc** | **17 13 50.7** | **-0.2** |
| **HOMB** | **Homborsund** | **153.03** | **350** | *e*PKPbc | **PKPbc** | **17 13 51.7** | **-0.4** |
| **DEL** | **Delary** | **153.60** | **342** | *e*P | **PKPbc** | **17 13 53.0** | **-0.4** |
| **DBIC** | **Dimbokro** | **154.47** | **169** | PKPbc | **PKiKP** | **17 13 56.8** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=190,slow=5.9,SNR=4.1 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **17 14 13.8** | **+1.2** |
| | comp=Z,0.9nm,0.4s,baz=242,slow=6.4,SNR=3.2 | | | | | | |
| **BSEG** | **Bad Segeberg** | **156.77** | **344** | *e*PKPab | **PKPab** | **17 14 21.4** | **-0.2** |
| | baz=28,slow=4.4 | | | | | | |
| **DPC** | **Dobruska-Polom** | **157.88** | **331** | *e*PKPAB | **PKPab** | **17 14 26.0** | **-0.6** |
| **UPC** | **Upice** | **157.89** | **332** | *e*PKPAB | **PKPab** | **17 14 26.0** | **-0.6** |
| **FLTG** | **Flechtingen** | **157.99** | **341** | *e*PKPab | **PKPab** | **17 14 26.3** | **-0.6** |
| | baz=28,slow=4.4 | | | | | | |
| **CLL** | **Collm** | **158.34** | **337** | *i* PKPab | **PKPab** | **17 14 28.0** | **-0.5** |
| | comp=Z,14nm,0.6s | | | | | | |
| **CLL** | **Collm** | **158.34** | **337** | *e*PKPab | **PKPab** | **17 14 28.1** | **-0.4** |
| | baz=28,slow=4.4 | | | | | | |
| **CLL** | **Collm** | **158.34** | **337** | | **PKPab** | **17 14 27.9** | **-0.5** |
| **BRG** | **Berggiesshubel** | **158.38** | **335** | *e*PKPab | **PKPab** | **17 14 28.4** | **-0.3** |
| | baz=28,slow=4.4 | | | | | | |
| **FBE** | **Freiberg** | **158.55** | **336** | *e*PKPab | **PKPab** | **17 14 29.5** | **+0.1** |
| | baz=28,slow=4.4 | | | | | | |
| **CLZ** | **Clausthal** | **158.66** | **342** | *e*PKPab | **PKPab** | **17 14 30.0** | **+0.1** |
| | baz=28,slow=4.4 | | | | | | |
| **IBBN** | **Ibbenburen** | **158.85** | **346** | *e*PKPab | **PKPab** | **17 14 30.4** | **-0.2** |
| | baz=28,slow=4.4 | | | | | | |
| **PRU** | **Pruhonice** | **158.88** | **333** | *e*PKPAB | **PKPab** | **17 14 30.8** | **-0.1** |
| **GTTG** | **Gottingen** | **159.04** | **342** | *e*PKPab | **PKPab** | **17 14 31.5** | **0.0** |
| | baz=28,slow=4.4 | | | | | | |
| **WERD** | **Werda** | **159.31** | **337** | *e*PKPab | **PKPab** | **17 14 32.6** | **-0.2** |
| | baz=28,slow=4.4 | | | | | | |
| **MOX** | **Moxa** | **159.37** | **338** | *e*PKPab | **PKPab** | **17 14 32.8** | **-0.2** |
| | baz=28,slow=4.4 | | | | | | |
| **GUNZ** | **Gunzen** | **159.37** | **337** | *e*PKPab | **PKPab** | **17 14 33.2** | **+0.1** |
| | baz=28,slow=4.4 | | | | | | |
| **WERN** | **Wernitzgruen** | **159.42** | **336** | *e*PKPab | **PKPab** | **17 14 33.4** | **+0.1** |
| | baz=28,slow=4.4 | | | | | | |
| **NKC** | **Novy Kostel** | **159.44** | **336** | *e*PKPAB | **PKPab** | **17 14 33.0** | **-0.4** |
| **CONA** | **Conrad Observa** | **159.89** | **327** | *e*P | **PKPab** | **17 14 35.3** | **-0.3** |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **159.90** | **331** | *e*PKPAB | **PKPab** | **17 14 34.3** | **-1.1** |
| **ROTZ** | **Rotzenmuhle** | **159.92** | **336** | *e*PKPab | **PKPab** | **17 14 35.6** | **+0.1** |
| | baz=28,slow=4.4 | | | | | | |
| **KHC** | **Kasperske Hory** | **159.94** | **333** | *e*PKPAB | **PKPab** | **17 14 31.8** | **-3.8** |
| **GEC2** | **GERESS Array S** | **160.12** | **332** | *e*PKPab | **PKPab** | **17 14 35.8** | **-0.7** |
| | baz=28,slow=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **160.12** | **332** | PKPab | **PKPab** | **17 14 35.4** | **-1.1** |
| | comp=Z,1.4nm,0.7s,baz=56,slow=5.0,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.18** | **186** | PKP | **PKPdf** | **17 13 54.9** | **-1.1** |
| | comp=Z,1.1nm,0.9s,baz=292,slow=1.8,SNR=4.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **17 14 41.4** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=169,slow=4.1,SNR=8.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.18** | **186** | | **PKPdf** | **17 13 54.1** | **-1.8** |
| TORD | | | | PKPab | **PKPab** | **17 14 41.6** | **-0.1** |
| **WATA** | **Walderalm** | **162.18** | **333** | *e*P | **PKPab** | **17 14 44.6** | **-1.0** |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **162.36** | **334** | *e*P | **PKPab** | **17 14 46.3** | **-0.1** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **162.36** | **335** | *e*P | **PKPab** | **17 14 46.0** | **-0.3** |
| | comp=Z,2.1nm,0.4s | | | | | | |
| **BFO** | **Black Forest** | **162.41** | **341** | *e*PKPab | **PKPab** | **17 14 46.1** | **-0.3** |
| | baz=28,slow=4.4 | | | | | | |
| **SQTA** | **Sankt Quirin** | **162.42** | **333** | *e*P | **PKPab** | **17 14 45.8** | **-0.8** |
| | comp=Z,1.1nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **162.77** | **334** | *e*P | **PKPab** | **17 14 47.4** | **-0.8** |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **DAVA** | **Damuels** | **162.85** | **336** | *e*P | **PKPab** | **17 14 48.1** | **-0.5** |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **163.28** | **335** | PKPab | **PKPab** | **17 14 50.2** | **-0.3** |
| | comp=Z,4.3nm,0.5s,baz=318,slow=4.2,SNR=9.3 | | | | | | |

*IDC **10** 17:01:42.8±0.8,4°.50S×151°.36E,h124km±20km,mb3.4/4, mb1 3.6/5,mb1mx2.9/58,mbtmp3.8/5,MS2.9/1,Ms1 2.9/1, ms1mx2.3/34,Error ellipse: s-maj=70.4km s-min=17.0km az=124.0*

**ISC 10 17:01:42.4**±1.2,**4°.2S**±0°.2×**151°.0E**±0°.1,**h100**km,**n7,** σ1**92**/8,**mb3.6**/4,**New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **0.99** | **97** | P | **Pn** | **17 02 03.8** | **+1.1** |
| | baz=218,slow=19 | | | | | | |
| KRVT | | | | S | **Sn** | **17 02 18.1** | **+0.1** |
| | baz=233,slow=20 | | | | | | |
| **PMG** | **Port Moresby** | **6.46** | **216** | P | **Pn** | **17 03 16.9** | **+2.0** |
| | 0.8nm,0.3s,baz=29,slow=13,SNR=2.7 | | | | | | |
| PMG | | | | S | **Sn** | **17 04 28.1** | **+0.8** |
| | 0.8nm,0.3s,baz=309,slow=20,SNR=2.2 | | | | | | |
| **HNR** | **Honiara** | **10.26** | **121** | LR | LR | 17 07 22.8 | |
| | comp=Z,71nm,19.9s,baz=16,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.59** | **225** | P | **P** | **17 06 32.5** | **-2.2** |
| | 2.2nm,0.3s,baz=50,slow=9.5,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **25.47** | **219** | P | **P** | **17 06 59.0** | **-2.4** |
| | 0.4nm,0.3s,baz=48,slow=8.5,SNR=10.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.44** | **239** | P | **P** | **17 07 27.0** | **-1.0** |
| | 1.0nm,0.3s,baz=53,slow=6.8,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **64.88** | **328** | P | **P** | **17 12 12.2** | **+1.0** |
| | 0.2nm,0.5s,baz=145,slow=6.7,SNR=4.4 | | | | | | |

*SFS **10** 17:15:20.0,35°.44N×3°.80W,h1km,ML2.0,ALBORAN SUR*
*CNRM **10** 17:15:22.5,35°.41N×3°.76W,h23km,ml2.5*

**ISC 10 17:15:21.6**±1.3,**35°.48N**±0°.04×**3°.71W**±0°.03,**h18**km±3km, **n13,** σ0**99**/26,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.33** | **216** | P | **Pg** | **17 15 27.9** | **-0.7** |
| PALE | | | | S | **Sg** | **17 15 32.9** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.64** | **114** | P | **Pg** | **17 15 34.7** | **+0.5** |
| GOG | | | | S | **Sn** | **17 15 44.7** | **-0.7** |
| **CHAS** | **Isla Isabel II** | **1.08** | **106** | P | **Pg** | **17 15 43.8** | **+1.2** |
| CHAS | | | | S | **Sb** | **17 15 54.5** | **-1.1** |
| **SMIR** | **Smir Dam** | **1.38** | **279** | P | **Pg** | **17 15 48.0** | **-0.2** |
| SMIR | | | | S | **Sb** | **17 16 05.0** | **+1.0** |
| **CHEFC** | **Chefchaouen** | **1.39** | **255** | P | **Pn** | **17 15 45.4** | **-0.6** |
| CHEFC | | | | S | **Sb** | **17 16 04.8** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **336** | P | **Pb** | **17 15 47.6** | **+0.4** |
| EMAL | | | | S | **Sn** | **17 16 03.0** | **-1.3** |
| **JBK** | **JBK** | **1.48** | **140** | P | **Pn** | **17 15 46.7** | **-0.7** |
| JBK | | | | S | **Sn** | **17 16 05.3** | **-1.0** |
| **LCRM** | **LCR** | **2.03** | **208** | P | **Pn** | **17 15 56.1** | **+1.2** |
| LCRM | | | | S | **Sn** | **17 16 20.3** | **+0.5** |
| **IFR** | **Ifrane** | **2.28** | **211** | P | **Pb** | **17 16 01.8** | **-0.5** |
| IFR | | | | S | **Sn** | **17 16 24.3** | **-1.9** |
| **MD31** | **MD31** | **2.75** | **199** | P | **Pn** | **17 16 05.0** | **+0.2** |
| MD31 | | | | S | **Sn** | **17 16 37.4** | **-0.2** |
| **MDT** | **Midelt** | **2.76** | **196** | P | **Pn** | **17 16 06.6** | **+1.6** |
| MDT | | | | S | **Sn** | **17 16 38.2** | **+0.2** |
| **ZHG** | **ZHG** | **3.16** | **231** | P | **Pn** | **17 16 12.2** | **+1.7** |
| ZHG | | | | S | **Sn** | **17 16 48.6** | **+0.8** |
| **PVAQ** | **Vaqueiros** | **3.76** | **302** | P | **Pn** | **17 16 18.8** | **+0.2** |
| PVAQ | | | | S | **Sn** | **17 17 01.9** | **-0.5** |

*IDC **10** 17:17:20.9±1.3,12°.60N×144°.38E,h94km±19km,mb3.0/6, mb1 3.2/6,mb1mx3.0/46,mbtmp3.3/6,Error ellipse: s-maj=44.9km s-min=19.3km az=90.0*

**ISC 10 17:17:21.0**±1.1,**12°.6N**±0°.1×**144°.5E**±0°.2,**h100**km,**n13,** σ1**17**/8,**mb3.2**/6,**South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.02** | **21** | P | **Pn** | **17 17 40.1** | **-1.5** |
| | 96nm,0.3s,baz=186,slow=10,SNR=62 | | | | | | |
| GUMO | | | | LR | LR | 17 17 54.4 | |
| | comp=Z,86nm,20.2s,baz=250,slow=31 | | | | | | |
| GUMO | | | | S | **Sn** | **17 17 58.4** | **+1.3** |
| | 60nm,0.3s,baz=179,slow=20,SNR=8.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.15** | **72** | T | T | 17 46 06.8 | |
| | baz=258 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.16** | **72** | T | T | 17 46 03.0 | |
| | baz=258 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.16** | **72** | T | T | 17 46 01.4 | |
| | baz=258 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.62** | **69** | T | T | 17 46 34.3 | |
| | baz=255,slow=75,SNR=6.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.63** | **69** | T | T | 17 46 34.2 | |
| | baz=255,slow=75,SNR=7.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.64** | **69** | T | T | 17 46 35.9 | |
| | baz=255,slow=75,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.88** | **197** | P | **P** | **17 23 54.3** | **-0.1** |
| | 1.1nm,0.6s,baz=20,slow=9.9,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **37.54** | **196** | P | **P** | **17 24 25.9** | **+0.2** |
| | 0.4nm,0.6s,baz=16,slow=9.4,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.17** | **284** | P | **P** | **17 25 19.7** | **-0.6** |
| | 0.2nm,0.4s,baz=81,slow=6.5,SNR=2.2 | | | | | | |
| **SONM** | **Songino Array** | **47.30** | **326** | P | **P** | **17 25 44.0** | **-0.6** |
| | 0.1nm,0.7s,baz=135,slow=6.2,SNR=1.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.92** | **316** | P | **P** | **17 27 31.6** | **+1.4** |
| | 0.1nm,0.4s,baz=107,slow=5.2,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.87** | **27** | P | **P** | **17 29 39.8** | **+0.5** |
| | 0.1nm,0.3s,baz=280,slow=4.9,SNR=1.3 | | | | | | |

*IDC **10** 17:35:31.3±1.4,56°.74S×141°.41W,h0km,mb4.2/5, mb1 4.3/5,mb1mx4.0/23,mbtmp4.2/5,MS3.8/25, Ms1 3.8/25,ms1mx3.6/50,Error ellipse: s-maj=50.2km s-min=26.5km az=40.0*
*NEIC **10** 17:35:33.8±1.6,56°.9S±0°.2×141°.4W±0°.3,h12km±5km, mb4.3/7,Error ellipse: s-maj=31.8km s-min=22.0km az=192.0*

**ISC 10 17:35:32.9**±1.0,**56°.8S**±0°.2×**141°.4W**±0°.2,**h10**km,**n45,** σ0**83**/15,**mb4.3**/8,**MS3.9**/25,**Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNDA** | **Vanda** | **28.32** | **203** | LR | LR | 17 49 13.7 | |
| | comp=Z,132nm,21.1s,baz=81,slow=29 | | | | | | |
| **URZ** | **Urewera** | **32.94** | **286** | LR | LR | 17 52 15.1 | |
| | comp=Z,103nm,21.9s,baz=126,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.40** | **180** | P | **P** | **17 42 12.3** | **+1.0** |
| | 4.7nm,0.9s,baz=63,slow=5.3,SNR=9.0 | | | | | | |
| QSPA | | | | LR | LR | 17 53 06.0 | |
| | comp=Z,237nm,21.8s,baz=72,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.40** | **180** | P | **P** | **17 42 11.7** | **+0.4** |
| **BELA** | **Belgrano 2** | **38.53** | **161** | P | **P** | **17 42 54.8** | **-0.1** |
| BELA | | | | IAmb | IAmb | 17 42 56.4 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **PPT** | **Papeete** | **39.61** | **348** | LR | LR | 17 54 48.2 | |
| | comp=Z,164nm,18.1s,baz=182,slow=29 | | | | | | |
| **H03S2** | **Juan Fernandez** | **47.56** | **89** | T | T | 18 35 31.0 | |
| | baz=220,SNR=6.1 | | | | | | |
| **H03S1** | **Juan Fernandez** | **47.57** | **89** | T | T | 18 35 32.3 | |
| | baz=220,SNR=7.2 | | | | | | |
| **H03S3** | **Juan Fernandez** | **47.58** | **89** | T | T | 18 35 31.5 | |
| | baz=220,SNR=6.6 | | | | | | |
| **H03N3** | **Juan Fernandez** | **47.85** | **88** | T | T | 18 35 34.9 | |
| | baz=222,slow=72,SNR=109 | | | | | | |
| **H03N2** | **Juan Fernandez** | **47.86** | **88** | T | T | 18 35 44.2 | |
| | baz=222,slow=72,SNR=198 | | | | | | |
| **H03N1** | **Juan Fernandez** | **47.87** | **88** | T | T | 18 35 44.5 | |
| | baz=222,slow=72,SNR=217 | | | | | | |
| **SNAA** | **Sanae** | **48.61** | **164** | P | **P** | **17 44 15.2** | **-0.9** |
| | comp=Z,5.5nm,0.9s,baz=231,slow=5.1,SNR=9.5 | | | | | | |
| **SNAA** | **Sanae** | **48.61** | **164** | P | **P** | **17 44 15.6** | **-0.5** |
| SNAA | | | | IAmb | IAmb | 17 44 16.6 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **AFI** | **Afiamalu** | **48.66** | **319** | LR | LR | 17 59 15.5 | |
| | comp=Z,58nm,21.1s,baz=102,slow=29 | | | | | | |
| **MSVF** | **Nonsavu** | **49.36** | **305** | LR | LR | 18 00 35.3 | |
| | comp=Z,40nm,21.3s,baz=48,slow=30 | | | | | | |
| **MAW** | **Mawson** | **54.66** | **191** | LR | LR | 18 05 37.4 | |
| | comp=Z,93nm,20.9s,baz=237,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **57.07** | **261** | P | **P** | **17 45 20.1** | **+1.1** |
| | comp=Z,2.7nm,0.9s,baz=107,slow=7.8,SNR=5.5 | | | | | | |
| STKA | | | | LR | LR | 18 06 56.4 | |
| | comp=Z,65nm,18.1s,baz=199,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **57.07** | **261** | IAmb | IAmb | 17 45 21.8 | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **LVC** | **Limon Verde** | **61.80** | **89** | P | **P** | **17 45 52.6** | **+0.4** |
| LVC | | | | IAmb | IAmb | 17 45 53.5 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **63.79** | **273** | LR | LR | 18 10 12.6 | |
| | comp=Z,42nm,19.5s,baz=99,slow=33 | | | | | | |
| **NNA** | **Nana** | **66.16** | **75** | LR | LR | 18 07 24.2 | |
| | comp=Z,86nm,21.7s,baz=212,slow=29 | | | | | | |
| **LPAZ** | **La Paz** | **67.34** | **85** | LR | LR | 18 10 06.0 | |
| | comp=Z,55nm,19.7s,baz=46,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **67.70** | **261** | P | **P** | **17 46 29.6** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=141,slow=6.6,SNR=20 | | | | | | |
| ASAR | | | | LR | LR | 18 11 14.4 | |
| | comp=Z,42nm,21.8s,baz=120,slow=32 | | | | | | |
| **AS31** | **Alice Springs** | **67.70** | **261** | P | **P** | **17 46 30.2** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 17 46 30.9 | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **70.46** | **263** | P | **P** | **17 46 47.4** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=148,slow=5.4,SNR=8.4 | | | | | | |
| WRA | | | | LR | LR | 18 14 22.0 | |
| | comp=Z,69nm,19.3s,baz=196,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **72.05** | **280** | LR | LR | 18 17 53.9 | |
| | comp=Z,34nm,18.8s,baz=15,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **76.69** | **257** | LR | LR | 18 16 42.8 | |
| | comp=Z,65nm,21.2s,baz=145,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **89.93** | **165** | LR | LR | 18 26 31.3 | |
| | comp=Z,46nm,18.3s,baz=180,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **90.71** | **260** | LR | LR | 18 25 41.0 | |
| | comp=Z,43nm,21.2s,baz=190,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.50** | **32** | LR | LR | 18 20 45.9 | |
| | comp=Z,52nm,18.3s,baz=1.0,slow=30 | | | | | | |
| **PFO** | **Pinyon Flats O** | **92.46** | **21** | LR | LR | 18 21 46.1 | |
| | comp=Z,44nm,18.3s,baz=326,slow=30 | | | | | | |
| **BOSA** | **Boshof** | **94.21** | **168** | LR | LR | 18 29 02.7 | |
| | comp=Z,60nm,18.1s,baz=194,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **96.02** | **28** | LR | LR | 18 23 26.3 | |
| | comp=Z,50nm,19.1s,baz=226,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **96.81** | **18** | LR | LR | 18 23 23.5 | |
| | comp=Z,64nm,20.1s,baz=292,slow=30 | | | | | | |
| **LBTB** | **Lobatse** | **97.81** | **168** | LR | LR | 18 26 02.8 | |
| | comp=Z,53nm,21.2s,baz=198,slow=31 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **99.37** | **14** | LR | LR | 18 25 21.4 | |
| | comp=Z,53nm,18.5s,baz=332,slow=30 | | | | | | |
| **ELK** | **Elko** | **99.61** | **20** | LR | LR | 18 24 27.9 | |
| | comp=Z,44nm,21.4s,baz=322,slow=30 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **102.37** | **126** | T | T | 19 44 19.6 | |
| | baz=206,slow=75,SNR=9.4 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **102.37** | **126** | T | T | 19 44 28.2 | |
| | baz=206,slow=75,SNR=9.7 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **102.39** | **126** | T | T | 19 44 26.7 | |
| | baz=206,slow=75,SNR=8.7 | | | | | | |
| **CMAR** | **Liang Mai Arr** | **121.44** | **255** | PKP | **PKiKP** | **17 54 26.3** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=180,slow=2.7,SNR=2.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **147.52** | **103** | PKPbc | **PKPbc** | **17 55 16.7** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=253,slow=2.4,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.68** | **268** | PKPbc | **PKPbc** | **17 55 26.2** | **-0.3** |
| | comp=Z,0.8nm,0.8s,baz=131,slow=4.0,SNR=8.0 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **17 55 33.5** | **-1.9** |
| | comp=Z,1.1nm,0.7s,baz=106,slow=4.7,SNR=7.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **153.98** | **284** | PKPab | **PKPab** | **17 55 45.3** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=104,slow=6.1,SNR=4.7 | | | | | | |

*IDC **10** 17:39:54.0±1.1,59°.71N×153°.30W,h97km±13km,mb3.9/15, mb1 4.0/19,mb1mx3.6/52,mbtmp4.3/19,Error ellipse: s-maj=12.9km s-min=11.7km az=130.0*
*NEIC **10** 17:39:54.8±1.0,59°.73N±0°.03×153°.17W±0°.06, h111km±4km,Error ellipse: s-maj=5.0km s-min=4.6km az=137.0*
*ANF **10** 17:39:54.8±0.3,59°.71N×153°.18W,h109km±3km,ML4.4/49, Error ellipse: s-maj=2.7km s-min=2.2km az=36.0*
*AEIC **10** 17:39:55±1.3,59°.71N±0°.03×153°.15W±0°.06,h106km±3km, ML4.0,mb4.6/17(NEIC),ML4.2/118(NEIC),Error ellipse: s-maj=4.9km s-min=4.2km az=130.0*

**ISC 10 17:39:54.9**±0.5,**59°.72N**±0°.03×**153°.12W**±0°.03, **h111**km±4km,**n323,** σ0**70**/324,**mb4.4**/22,**Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.09** | **222** | | **Pn** | **17 40 10.3** | **+0.1** |
| **ILSW** | **Iliamna Southw** | **0.27** | **357** | | **Pn** | **17 40 10.5** | **-0.2** |
| ILSW | | | | | **Sn** | **17 40 22.0** | **-0.6** |
| **AU22** | **Augustine Moun** | **0.37** | **199** | | **Pn** | **17 40 11.0** | **0.0** |
| AU22 | | | | | **Sn** | **17 40 22.1** | **-0.9** |
| **AUL** | **Augustine Lava** | **0.37** | **206** | | **Pn** | **17 40 11.4** | **+0.3** |
| AUL | | | | | **Sn** | **17 40 23.2** | **0.0** |
| **AUH** | **Augustine H** | **0.39** | **205** | | **Pn** | **17 40 11.7** | **+0.5** |
| **AUQ** | **Augustine Qik'** | **0.40** | **203** | | **Pn** | **17 40 11.4** | **+0.2** |
| **O20K** | **Slope Mountain** | **0.44** | **34** | | **Pn** | **17 40 11.7** | **+0.2** |
| O20K | | | | | **Sn** | **17 40 24.3** | **+0.3** |
| **O20K** | **Slope Mountain** | **0.44** | **34** | P | **Pn** | **17 40 11.7** | **+0.2** |
| | baz=216,SNR=87 | | | | | | |
| O20K | | | | S | **Sn** | **17 40 24.3** | **+0.3** |
| | baz=216 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.72** | **14** | | **Pn** | **17 40 13.6** | **0.0** |
| RED | | | | | **Sn** | **17 40 27.0** | **-0.7** |
| **HOM** | **Homer** | **0.75** | **94** | | **Pn** | **17 40 14.2** | **+0.6** |
| HOM | | | | | **Sn** | **17 40 28.9** | **+1.1** |
| **HOM** | **Homer** | **0.75** | **94** | IAML | | 17 40 30.1 | |
| | comp=N,13μm,0.7s | | | | | | |
| HOM | | | | IAML | | 17 40 31.7 | |
| | comp=E,8μm,0.4s | | | | | | |
| **HOM** | **Homer** | **0.75** | **94** | P | **Pn** | **17 40 14.3** | **+0.6** |
| | baz=274,SNR=36 | | | | | | |
| **RSO** | **Redoubt South** | **0.77** | **14** | | **Pn** | **17 40 14.2** | **+0.1** |
| **O19K** | **Port Alsworth** | **0.77** | **309** | | **Pn** | **17 40 13.7** | **-0.1** |
| O19K | | | | | **Sn** | **17 40 27.4** | **-0.8** |
| **O19K** | **Port Alsworth** | **0.77** | **309** | IAML | | 17 40 28.1 | |
| | comp=N,15μm,0.5s | | | | | | |
| O19K | | | | IAML | | 17 40 29.1 | |
| | comp=E,13μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **309** | P | **Pn** | **17 40 13.8** | **-0.1** |
| | baz=130,SNR=217 | | | | | | |
| O19K | | | | S | **Sn** | **17 40 27.4** | **-0.8** |
| | baz=130 | | | | | | |
| **RDWB** | **Redoubt West** | **0.79** | **10** | | **Pn** | **17 40 14.2** | **0.0** |
| RDWB | | | | | **Sn** | **17 40 28.1** | **-0.6** |
| **Q19K** | **Cape Douglas,** | **0.84** | **199** | | **Pn** | **17 40 14.6** | **+0.1** |
| Q19K | | | | | **Sn** | **17 40 29.3** | **-0.1** |
| **Q19K** | **Cape Douglas,** | **0.84** | **199** | IAML | | 17 40 33.2 | |
| | comp=E,5μm,0.8s | | | | | | |
| Q19K | | | | IAML | | 17 40 34.5 | |
| | comp=N,7μm,0.7s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.84** | **199** | P | **Pn** | **17 40 14.7** | **+0.1** |
| | baz=17,SNR=107 | | | | | | |
| Q19K | | | | S | **Sn** | **17 40 29.0** | **-0.4** |
| | baz=17 | | | | | | |
| **NCT** | **North Crescent** | **0.85** | **6** | | **Pn** | **17 40 14.8** | **+0.1** |
| NCT | | | | | **Sn** | **17 40 29.1** | **-0.6** |
| **RDJH** | **Redoubt Jeurge** | **0.89** | **10** | | **Pn** | **17 40 15.2** | **+0.1** |
| RDJH | | | | | **Sn** | **17 40 30.2** | **-0.3** |
| **DFR** | **Drift River** | **0.90** | **14** | | **Pn** | **17 40 15.4** | **+0.1** |
| DFR | | | | | **Sn** | **17 40 30.2** | **-0.4** |
| **RDT** | **Redoubt** | **0.93** | **22** | | **Pn** | **17 40 15.6** | **+0.1** |
| **CNPM** | **China Poot** | **0.97** | **101** | | **Pn** | **17 40 15.9** | **+0.1** |
| **CNPM** | **China Poot** | **0.97** | **101** | IAML | | 17 40 32.5 | |
| | comp=N,7μm,0.4s | | | | | | |
| CNPM | | | | IAML | | 17 40 32.9 | |
| | comp=E,4μm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **1.07** | **278** | | **Pn** | **17 40 16.4** | **-0.4** |
| **O18K** | **Koktuh Hills** | **1.07** | **278** | P | **Pn** | **17 40 16.5** | **-0.3** |
| | baz=97,SNR=67 | | | | | | |
| O18K | | | | S | **Sn** | **17 40 32.3** | **-1.1** |
| | baz=97 | | | | | | |
| **P18K** | **Big Mountain,** | **1.12** | **254** | | **Pn** | **17 40 16.9** | **-0.5** |
| P18K | | | | | **Sn** | **17 40 33.4** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.12** | **254** | P | **Pn** | **17 40 17.0** | **-0.5** |
| | baz=72,SNR=16 | | | | | | |
| P18K | | | | S | **Sn** | **17 40 33.1** | **-1.4** |
| | baz=72 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.13** | **87** | | **Pn** | **17 40 17.4** | **-0.1** |
| **BRLK** | **Bradley Lake** | **1.13** | **87** | IAML | | 17 40 40.9 | |
| | comp=E,2μm,0.3s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.20** | **88** | | **Pn** | **17 40 18.1** | **-0.1** |
| BRSE | | | | | **Sn** | **17 40 35.7** | **-0.3** |
| **BRSE** | **Bradley Lake S** | **1.20** | **88** | P | **Pn** | **17 40 18.2** | **0.0** |
| | baz=270,SNR=50 | | | | | | |
| BRSE | | | | S | **Sn** | **17 40 35.2** | **-0.8** |
| | baz=270 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.29** | **329** | | **Pn** | **17 40 19.3** | **-0.1** |
| **N19K** | **Bonanza Creek** | **1.29** | **329** | P | **Pn** | **17 40 19.3** | **-0.1** |
| | baz=149 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.44** | **42** | | **Pn** | **17 40 22.9** | **+2.0** |
| **CAPN** | **Captain Cook N** | **1.44** | **42** | P | **Pn** | **17 40 22.8** | **+2.0** |
| | baz=224 | | | | | | |
| **SPCN** | **Chakachatna No** | **1.58** | **17** | | **Pn** | **17 40 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SII | **Sitkinak Islan** | **3.22** | **191** | P | | **Pn** | **17 40 42.7** | **-1.0** | |
| | baz=9.3,SNR=6.1 | | | | | | | | |
| PPLA | **Purkeypile** | **3.22** | **8** | | | **Pn** | **17 40 44.8** | **+1.0** | |
| PPLA | **Purkeypile** | **3.22** | **8** | P | | **Pn** | **17 40 44.9** | **+1.0** | |
| | baz=189,SNR=114 | | | | | | | | |
| Q23K | **Middleton Isla** | **3.45** | **92** | Pn | | **Pn** | **17 40 46.8** | **0.0** | |
| Q23K | | | | IAML | | | 17 41 33.6 | | |
| | comp=N,465nm,0.5s | | | | | | | | |
| Q23K | | | | IAML | | | 17 42 22.7 | | |
| | comp=E,444nm,1.9s | | | | | | | | |
| Q23K | **Middleton Isla** | **3.45** | **92** | P | | **Pn** | **17 40 47.1** | **+0.3** | |
| | baz=278 | | | | | | | | |
| MID | **Middleton Isla** | **3.46** | **92** | Pn | | **Pn** | **17 40 46.7** | **-0.2** | |
| MID | | | | IAML | | | 17 41 34.7 | | |
| | comp=E,433nm,0.9s | | | | | | | | |
| MID | | | | IAML | | | 17 41 54.1 | | |
| | comp=N,444nm,2.2s | | | | | | | | |
| FID | **Port Fidalgo** | **3.47** | **70** | | | **Pn** | **17 40 45.6** | **-1.4** | |
| FID | **Port Fidalgo** | **3.47** | **70** | IAML | | | 17 41 26.7 | | |
| | comp=E,773nm,0.4s | | | | | | | | |
| TT01 | **Tatalina** | **3.49** | **338** | | | **Pn** | **17 40 47.1** | **-0.2** | |
| JPK | **Jack Peak** | **3.50** | **65** | | | **Pn** | **17 40 47.5** | **0.0** | |
| TTA | **Tatalina** | **3.51** | **338** | | | **Pn** | **17 40 47.3** | **-0.4** | |
| TTA | **Tatalina** | **3.51** | **338** | P | | **Pn** | **17 40 47.3** | **-0.4** | |
| | baz=156,SNR=191 | | | | | | | | |
| SCM | **Sheep Creek Mo** | **3.54** | **51** | | | **Pn** | **17 40 47.8** | **-0.3** | |
| SCM | **Sheep Creek Mo** | **3.54** | **51** | P | | **Pn** | **17 40 47.9** | **-0.2** | |
| | baz=236,SNR=16 | | | | | | | | |
| K20K | **Telida** | **3.68** | **353** | | | **Pn** | **17 40 50.0** | **+0.1** | |
| K20K | **Telida** | **3.68** | **353** | P | | **Pn** | **17 40 50.0** | **+0.1** | |
| | baz=173,SNR=124 | | | | | | | | |
| WAT7 | **Susitna Watana** | **3.74** | **32** | | | **Pn** | **17 40 50.6** | **-0.1** | |
| CAST | **Castle Rocks** | **3.75** | **7** | Pn | | **Pn** | **17 40 50.6** | **-0.1** | |
| CAST | **Castle Rocks** | **3.75** | **7** | P | | **Pn** | **17 40 51.1** | **+0.3** | |
| | baz=188,SNR=199 | | | | | | | | |
| EYAK | **Cordova Ski Ar** | **3.78** | **74** | | | **Pn** | **17 40 50.3** | **-0.8** | |
| EYAK | **Cordova Ski Ar** | **3.78** | **74** | P | | **Pn** | **17 40 50.5** | **-0.6** | |
| | baz=260,SNR=19 | | | | | | | | |
| DIV | **Divide** | **3.91** | **66** | | | **Pn** | **17 40 52.3** | **-0.6** | |
| KLU | **Klutina** | **3.97** | **60** | | | **Pn** | **17 40 53.3** | **-0.5** | |
| KLU | **Klutina** | **3.97** | **60** | IAML | | | 17 41 41.8 | | |
| | comp=E,465nm,0.5s | | | | | | | | |
| KLU | **Klutina** | **3.97** | **60** | P | | **Pn** | **17 40 53.3** | **-0.5** | |
| | baz=246,SNR=71 | | | | | | | | |
| TRF | **Thorofare Moun** | **3.98** | **19** | | | **Pn** | **17 40 53.6** | **-0.4** | |
| TRF | **Thorofare Moun** | **3.98** | **19** | IAML | | | 17 42 01.6 | | |
| | comp=N,280nm,0.6s | | | | | | | | |
| TRF | | | | IAML | | | 17 42 04.5 | | |
| | comp=E,215nm,0.8s | | | | | | | | |
| TRF | **Thorofare Moun** | **3.98** | **19** | P | | **Pn** | **17 40 53.7** | **-0.3** | |
| | baz=201,SNR=90 | | | | | | | | |
| KTH | **Kantishna Hill** | **3.99** | **14** | | | **Pn** | **17 40 53.9** | **-0.1** | |
| KTH | **Kantishna Hill** | **3.99** | **14** | IAML | | | 17 42 04.5 | | |
| | comp=N,176nm,0.8s | | | | | | | | |
| KTH | | | | IAML | | | 17 42 15.4 | | |
| | comp=E,196nm,0.9s | | | | | | | | |
| CHIR | **Chirikof Islan** | **4.13** | **200** | Pn | | **Pn** | **17 40 54.9** | **-1.1** | |
| CHIR | | | | IAML | | | 17 41 50.0 | | |
| | comp=N,452nm,2.7s | | | | | | | | |
| CHIR | **Chirikof Islan** | **4.13** | **200** | P | | **Pn** | **17 40 54.8** | **-1.1** | |
| | baz=18 | | | | | | | | |
| M24K | **Tolsona, Glenn** | **4.15** | **52** | | | **Pn** | **17 40 56.5** | **+0.3** | |
| M24K | **Tolsona, Glenn** | **4.15** | **52** | P | | **Pn** | **17 40 56.0** | **-0.1** | |
| | baz=238,SNR=22 | | | | | | | | |
| M24K | | | | S | | **Sn** | **17 41 43.8** | **0.0** | |
| | baz=238 | | | | | | | | |
| CHUM | **Lake Minchumin** | **4.20** | **5** | P | | **Pn** | **17 40 57.0** | **+0.3** | |
| | baz=186,SNR=53 | | | | | | | | |
| RND | **Reindeer** | **4.22** | **27** | | | **Pn** | **17 40 56.7** | **-0.4** | |
| RND | **Reindeer** | **4.22** | **27** | IAML | | | 17 41 45.9 | | |
| | comp=E,174nm,0.5s | | | | | | | | |
| RND | | | | IAML | | | 17 41 46.5 | | |
| | comp=N,132nm,0.8s | | | | | | | | |
| GOAT | **Goat Mountain** | **4.28** | **75** | | | **Pn** | **17 40 57.3** | **-0.6** | |
| RAGM | **Ragged Mountai** | **4.29** | **77** | | | **Pn** | **17 40 57.5** | **-0.5** | |
| RAGM | | | | IAML | | | 17 41 53.7 | | |
| | comp=E,400nm,0.4s | | | | | | | | |
| DHY | **Denali Highway** | **4.35** | **37** | | | **Pn** | **17 40 58.6** | **-0.3** | |
| DHY | **Denali Highway** | **4.35** | **37** | IAML | | | 17 41 49.9 | | |
| | comp=N,314nm,0.5s | | | | | | | | |
| DHY | | | | IAML | | | 17 41 50.3 | | |
| | comp=E,398nm,0.6s | | | | | | | | |
| DHY | **Denali Highway** | **4.35** | **37** | P | | **Pn** | **17 40 58.8** | **-0.2** | |
| | baz=222,SNR=47 | | | | | | | | |
| KAIM | **Kayak Island** | **4.40** | **84** | | | **Pn** | **17 40 59.8** | **+0.4** | |
| KAIM | **Kayak Island** | **4.40** | **84** | P | | **Pn** | **17 40 60.0** | **+0.5** | |
| | baz=271 | | | | | | | | |
| BMRM | **Bremner River** | **4.41** | **70** | | | **Pn** | **17 40 58.7** | **-0.9** | |
| BMRM | **Bremner River** | **4.41** | **70** | IAML | | | 17 41 49.6 | | |
| | comp=E,342nm,0.4s | | | | | | | | |
| BMRM | | | | IAML | | | 17 42 10.7 | | |
| | comp=N,274nm,0.8s | | | | | | | | |
| BMRM | **Bremner River** | **4.41** | **70** | P | | **Pn** | **17 40 59.0** | **-0.7** | |
| | baz=257,SNR=55 | | | | | | | | |
| PS11 | **TAPS Pump St11** | **4.42** | **54** | | | | **17 40 59.8** | **+0.1** | |
| CHGN | **Chignik** | **4.43** | **222** | Pn | | **Pn** | **17 40 59.9** | **0.0** | |
| CHGN | | | | IAML | | | 17 41 50.1 | | |
| | comp=N,241nm,0.2s | | | | | | | | |
| CHGN | | | | IAML | | | 17 41 51.3 | | |
| | comp=E,316nm,0.2s | | | | | | | | |
| CHGN | **Chignik** | **4.43** | **222** | P | | **Pn** | **17 40 59.8** | **-0.2** | |
| | baz=37 | | | | | | | | |
| HMT | **Hamilton** | **4.49** | **78** | | | **Pn** | **17 41 00.8** | **+0.2** | |
| MCK | **McKinley** | **4.49** | **24** | | | **Pn** | **17 41 01.0** | **+0.3** | |
| MCK | **McKinley** | **4.49** | **24** | IAML | | | 17 41 55.2 | | |
| | comp=N,147nm,1.0s | | | | | | | | |
| MCK | | | | IAML | | | 17 41 55.6 | | |
| | comp=E,152nm,0.4s | | | | | | | | |
| MCK | **McKinley** | **4.49** | **24** | P | | **Pn** | **17 41 00.8** | **0.0** | |
| | baz=208,SNR=72 | | | | | | | | |
| J20K | **Nowinta River** | **4.50** | **354** | Pn | | **Pn** | **17 41 00.8** | **0.0** | |
| J20K | **Nowinta River** | **4.50** | **354** | P | | **Pn** | **17 41 00.9** | **+0.1** | |
| | baz=174 | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **4.51** | **12** | | | **Pn** | **17 41 00.2** | **-0.8** | |
| BPAW | **Bear Paw Mtn.** | **4.51** | **12** | P | | **Pn** | **17 41 00.2** | **-0.8** | |
| | baz=194,SNR=10 | | | | | | | | |
| N25K | **Chitina, Valde** | **4.60** | **62** | | | **Pn** | **17 41 01.9** | **-0.4** | |
| N25K | **Chitina, Valde** | **4.60** | **62** | IAML | | | 17 42 04.7 | | |
| | comp=N,222nm,0.4s | | | | | | | | |
| N25K | **Chitina, Valde** | **4.60** | **62** | P | | **Pn** | **17 41 01.8** | **-0.4** | |
| | baz=249,SNR=114 | | | | | | | | |
| NICHA | **Nichawak Mount** | **4.63** | **80** | | | **Pn** | **17 41 02.5** | **-0.1** | |
| HARP | **HAARP** | **4.71** | **52** | | | **Pn** | **17 41 03.7** | **+0.1** | |
| HARP | **HAARP** | **4.71** | **52** | P | | **Pn** | **17 41 03.6** | **-0.1** | |
| | baz=239 | | | | | | | | |
| SUCK | **Suckling Hills** | **4.72** | **82** | Pn | | **Pn** | **17 41 04.1** | **+0.3** | |
| SUCK | | | | IAML | | | 17 41 59.0 | | |
| | comp=N,205nm,0.7s | | | | | | | | |
| SUCK | | | | IAML | | | 17 42 08.8 | | |
| | comp=E,191nm,1.6s | | | | | | | | |
| BERG | **Berg Lake** | **4.77** | **78** | | | **Pn** | **17 41 04.8** | **+0.4** | |
| BERG | **Berg Lake** | **4.77** | **78** | IAML | | | 17 42 00.3 | | |
| | comp=N,299nm,0.5s | | | | | | | | |
| BWN | **Browne** | **4.79** | **20** | | | **Pn** | **17 41 05.3** | **+0.6** | |
| BWN | **Browne** | **4.79** | **20** | IAML | | | 17 42 34.6 | | |
| | comp=E,196nm,0.9s | | | | | | | | |
| BWN | | | | IAML | | | 17 42 38.6 | | |
| | comp=N,240nm,0.8s | | | | | | | | |
| GLB | **Gilahina Butte** | **4.90** | **65** | | | **Pn** | **17 41 05.8** | **-0.5** | |
| GLB | **Gilahina Butte** | **4.90** | **65** | IAML | | | 17 42 02.6 | | |
| | comp=N,264nm,0.9s | | | | | | | | |
| GLB | | | | IAML | | | 17 42 03.0 | | |
| | comp=E,208nm,0.7s | | | | | | | | |
| PAX | **Paxson** | **4.92** | **45** | | | **Pn** | **17 41 06.3** | **-0.2** | |
| PAX | **Paxson** | **4.92** | **45** | P | | **Pn** | **17 41 06.5** | **0.0** | |
| | baz=232,SNR=40 | | | | | | | | |
| GRIN | **Grindle Hills** | **4.95** | **79** | | | **Pn** | **17 41 07.1** | **+0.1** | |
| BGLC | **Bering Glacier** | **4.96** | **81** | P | | **Pn** | **17 41 07.7** | **+0.6** | |
| | baz=270 | | | | | | | | |
| KHIT | **Khitrov Hills** | **5.00** | **77** | | | **Pn** | **17 41 06.8** | **-0.7** | |
| VRDI | **Verde Repeater** | **5.02** | **68** | | | **Pn** | **17 41 07.2** | **-0.8** | |
| VRDI | **Verde Repeater** | **5.02** | **68** | IAML | | | 17 42 05.3 | | |
| | comp=N,221nm,0.6s | | | | | | | | |
| VRDI | | | | IAML | | | 17 42 05.8 | | |
| | comp=E,134nm,0.5s | | | | | | | | |
| PS10 | **TAPS Pump St10** | **5.11** | **40** | | | **Pn** | **17 41 09.8** | **+0.7** | |
| SNH | **Sunshine Point** | **5.19** | **80** | Pn | | **Pn** | **17 41 10.6** | **+0.5** | |
| SNH | | | | IAML | | | 17 42 11.5 | | |
| | comp=N,159nm,0.8s | | | | | | | | |
| SNH | | | | IAML | | | 17 42 18.2 | | |
| | comp=E,174nm,0.6s | | | | | | | | |
| WAX | **Waxell Ridge** | **5.19** | **77** | | | **Pn** | **17 41 10.7** | **+0.5** | |
| NEA2 | **Nenana** | **5.25** | **19** | | | **Pn** | **17 41 10.0** | **-0.9** | |
| NEA2 | **Nenana** | **5.25** | **19** | P | | **Pn** | **17 41 10.4** | **-0.5** | |
| | baz=203,SNR=93 | | | | | | | | |
| WRH | **Wood River Hil** | **5.32** | **24** | | | **Pn** | **17 41 11.1** | **-0.7** | |
| WRH | **Wood River Hil** | **5.32** | **24** | IAML | | | 17 42 10.9 | | |
| | comp=E,68nm,0.5s | | | | | | | | |
| WRH | | | | IAML | | | 17 42 14.1 | | |
| | comp=N,59nm,1.0s | | | | | | | | |
| GCSA | **Galena City Sc** | **5.34** | **342** | | | **Pn** | **17 41 11.9** | **-0.2** | |
| GCSA | **Galena City Sc** | **5.34** | **342** | P | | **Pn** | **17 41 11.9** | **-0.2** | |
| | baz=159,SNR=20 | | | | | | | | |
| CYK | **Cape Yakataga** | **5.37** | **82** | | | **Pn** | **17 41 12.8** | **+0.4** | |
| MLY | **Manley** | **5.45** | **11** | | | **Pn** | **17 41 12.9** | **-0.6** | |
| MLY | **Manley** | **5.45** | **11** | P | | **Pn** | **17 41 13.2** | **-0.4** | |
| | baz=193 | | | | | | | | |
| ISLE | **Juniper Island** | **5.46** | **76** | | | **Pn** | **17 41 13.2** | **-0.6** | |
| KIAG | **Kiagna River** | **5.48** | **73** | | | **Pn** | **17 41 14.6** | **+0.3** | |
| BALM | **Baldy** | **5.50** | **71** | | | **Pn** | **17 41 14.0** | **-0.5** | |
| I21K | **Tanana** | **5.51** | **5** | | | **Pn** | **17 41 14.2** | **-0.2** | |
| I21K | **Tanana** | **5.51** | **5** | P | | **Pn** | **17 41 14.3** | **-0.1** | |
| | baz=186 | | | | | | | | |
| HDA | **Harding Lake** | **5.53** | **29** | | | **Pn** | **17 41 14.2** | **-0.5** | |
| HDA | **Harding Lake** | **5.53** | **29** | P | | **Pn** | **17 41 14.4** | **-0.3** | |
| | baz=215,SNR=63 | | | | | | | | |
| CCB | **Clear Creek Bu** | **5.54** | **24** | | | **Pn** | **17 41 13.5** | **-1.2** | |
| MENT | **Mentasta** | **5.56** | **50** | | | **Pn** | **17 41 15.2** | **+0.1** | |
| BAGL | **Bagley Icefiel** | **5.57** | **77** | | | **Pn** | **17 41 15.5** | **+0.3** | |
| M26K | **Nabesna, AK** | **5.60** | **57** | Pn | | **Pn** | **17 41 15.5** | **-0.2** | |
| M26K | **Nabesna, AK** | **5.60** | **57** | P | | **Pn** | **17 41 16.6** | **+0.9** | |
| | baz=246 | | | | | | | | |
| RIDG | **Independent Ri** | **5.63** | **41** | | | **Pn** | **17 41 16.3** | **+0.2** | |
| RIDG | **Independent Ri** | **5.63** | **41** | P | | **Pn** | **17 41 16.2** | **+0.1** | |
| | baz=228,SNR=25 | | | | | | | | |
| MESA | **MESA** | **5.63** | **80** | | | **Pn** | **17 41 16.6** | **+0.3** | |
| MESA | **MESA** | **5.63** | **80** | P | | **Pn** | **17 41 16.8** | **+0.5** | |
| | baz=270,SNR=20 | | | | | | | | |
| PS08 | **TAPS Pump Stn8** | **5.67** | **29** | | | **Pn** | **17 41 16.2** | **-0.3** | |
| I23K | **Minto, Yukon-K** | **5.72** | **16** | | | **Pn** | **17 41 16.9** | **-0.4** | |
| I23K | **Minto, Yukon-K** | **5.72** | **16** | P | | **Pn** | **17 41 17.0** | **-0.3** | |
| | baz=200,SNR=130 | | | | | | | | |
| TCOL | **CIGO, UAF Yank** | **5.72** | **23** | | | **Pn** | **17 41 17.2** | **-0.1** | |
| TCOL | **CIGO, UAF Yank** | **5.72** | **23** | P | | **Pn** | **17 41 16.9** | **-0.4** | |
| | baz=208,SNR=23 | | | | | | | | |
| COLA | **College** | **5.73** | **23** | Pn | | **Pn** | **17 41 16.7** | **-0.6** | |
| COLA | **College** | **5.73** | **23** | P | | **Pn** | **17 41 17.3** | **0.0** | |
| | baz=208 | | | | | | | | |
| MDM | **Murphy Dome** | **5.73** | **21** | | | **Pn** | **17 41 17.1** | **-0.3** | |
| YAH | **Yahtse** | **5.74** | **79** | | | **Pn** | **17 41 18.1** | **+0.4** | |
| L26K | **Log Cabin Wild** | **5.75** | **51** | | | **Pn** | **17 41 17.8** | **+0.1** | |
| L26K | **Log Cabin Wild** | **5.75** | **51** | P | | **Pn** | **17 41 18.3** | **+0.6** | |
| | baz=239 | | | | | | | | |
| BARN | **Barnard Glacie** | **5.84** | **72** | | | **Pn** | **17 41 19.3** | **+0.2** | |
| DOT | **Dot Lake** | **5.84** | **44** | | | **Pn** | **17 41 18.7** | **-0.2** | |
| IL31 | | **5.84** | **27** | | | **Pn** | **17 41 18.1** | **-0.8** | |
| ILAR | **Eielson Array** | **5.84** | **27** | P | | **Pn** | **17 41 18.1** | **-0.8** | |
| | comp=N,23nm,0.3s,baz=214,slow=13,SNR=585 | | | | | | | | |
| ILAR | | | | S | | **Sn** | **17 42 19.2** | **-5.3** | |
| | comp=N,5.2nm,0.3s,baz=197,slow=15,SNR=5.2 | | | | | | | | |
| ILAR | **Eielson Array** | **5.84** | **27** | Pn | | **Pn** | **17 41 18.0** | **-1.0** | |
| H21K | **Melozitna Rive** | **5.96** | **1** | | | **Pn** | **17 41 20.4** | **-0.2** | |
| H21K | **Melozitna Rive** | **5.96** | **1** | P | | **Pn** | **17 41 20.7** | **+0.1** | |
| | baz=182 | | | | | | | | |
| POKR | **Poker Plat Res** | **6.03** | **24** | | | **Pn** | **17 41 21.1** | **-0.3** | |
| POKR | **Poker Plat Res** | **6.03** | **24** | P | | **Pn** | **17 41 21.2** | **-0.2** | |
| | baz=209,SNR=31 | | | | | | | | |
| TABL | **Table Mountain** | **6.04** | **78** | | | **Pn** | **17 41 21.8** | **0.0** | |
| M27K | **Edge Creek, AK** | **6.07** | **59** | | | **Pn** | **17 41 23.3** | **+1.2** | |
| M27K | **Edge Creek, AK** | **6.07** | **59** | P | | **Pn** | **17 41 23.5** | **+1.4** | |
| | baz=249 | | | | | | | | |
| SCRK | **Sand Creek** | **6.07** | **41** | | | **Pn** | **17 41 21.1** | **-1.1** | |
| SCRK | **Sand Creek** | **6.07** | **41** | P | | **Pn** | **17 41 21.5** | **-0.7** | |
| | baz=230,SNR=21 | | | | | | | | |
| J25K | **Salcha River,** | **6.10** | **33** | | | **Pn** | **17 41 22.1** | **-0.4** | |
| J25K | **Salcha River,** | **6.10** | **33** | P | | **Pn** | **17 41 22.1** | **-0.4** | |
| | baz=220,SNR=95 | | | | | | | | |
| IM03 | | **6.30** | **358** | | | **Pn** | **17 41 25.3** | **+0.3** | |
| IMAR | **Indian Mountai** | **6.30** | **358** | | | **Pn** | **17 41 25.0** | **0.0** | |
| YUK2 | **White River** | **6.36** | **66** | | | **Pn** | **17 41 26.3** | **+0.2** | |
| L27K | **Beaver Creek,** | **6.37** | **53** | | | **Pn** | **17 41 26.6** | **+0.5** | |
| L27K | **Beaver Creek,** | **6.37** | **53** | P | | **Pn** | **17 41 27.3** | **+1.2** | |
| | baz=243 | | | | | | | | |
| BC03 | | **6.39** | **53** | | | **Pn** | **17 41 25.7** | **-0.6** | |
| BCAR | **Beaver Creek A** | **6.39** | **53** | Pn | | **Pn** | **17 41 26.7** | **+0.3** | |
| PCA | **Pinnacle** | **6.48** | **81** | | | **Pn** | **17 41 28.4** | **+0.8** | |
| PINM | **Pinnacle** | **6.48** | **81** | P | | **Pn** | **17 41 27.7** | **0.0** | |
| | baz=273,SNR=23 | | | | | | | | |
| BVCY | **Beaver Creek** | **6.53** | **60** | | | **Pn** | **17 41 29.2** | **+0.9** | |
| BVCY | **Beaver Creek** | **6.53** | **60** | P | | **Pn** | **17 41 28.2** | **0.0** | |
| | baz=251,SNR=36 | | | | | | | | |
| YUK3 | **Moose Creek** | **6.54** | **66** | | | **Pn** | **17 41 28.9** | **+0.4** | |
| YUK3 | **Moose Creek** | **6.54** | **66** | P | | **Pn** | **17 41 28.7** | **+0.2** | |
| | baz=257,SNR=40 | | | | | | | | |
| J26L | **Joseph Creek** | **6.56** | **39** | | | **Pn** | **17 41 28.0** | **-0.7** | |
| J26L | **Joseph Creek** | **6.56** | **39** | P | | **Pn** | **17 41 28.4** | **-0.3** | |
| | baz=228 | | | | | | | | |
| H24K | **Noodor Dome** | **6.59** | **19** | | | **Pn** | **17 41 28.4** | **-0.7** | |
| H24K | **Noodor Dome** | **6.59** | **19** | P | | **Pn** | **17 41 28.3** | **-0.8** | |
| | baz=204 | | | | | | | | |
| PRP | **Porcupine Dome** | **6.79** | **28** | | | **Pn** | **17 41 31.2** | **-0.6** | |
| PRP | **Porcupine Dome** | **6.79** | **28** | P | | **Pn** | **17 41 31.2** | **-0.6** | |
| | baz=215,SNR=174 | | | | | | | | |
| BCPM | **Bancas Point** | **6.80** | **82** | | | **Pn** | **17 41 32.6** | **+0.7** | |
| PNL | **Peninsula** | **6.95** | **84** | | | **Pn** | **17 41 34.1** | **+0.2** | |
| PNL | **Peninsula** | **6.95** | **84** | P | | **Pn** | **17 41 34.0** | **+0.1** | |
| | baz=276,SNR=50 | | | | | | | | |
| PS05 | **TAPS Pump Stn5** | **7.21** | **8** | | | **Pn** | **17 41 37.1** | **-0.2** | |
| YUK6 | **Outpost Mounta** | **7.43** | **74** | | | **Pn** | **17 41 41.1** | **+0.5** | |
| YUK6 | **Outpost Mounta** | **7.43** | **74** | P | | **Pn** | **17 41 40.4** | **-0.2** | |
| | baz=267,SNR=22 | | | | | | | | |
| ANM | **Nome** | **7.52** | **316** | | | **Pn** | **17 41 41.5** | **-0.1** | |
| ANM | **Nome** | **7.52** | **316** | P | | **Pn** | **17 41 41.6** | **0.0** | |
| | baz=125,SNR=11 | | | | | | | | |
| YUK7 | **Dusty Glacier** | **7.53** | **77** | | | **Pn** | **17 41 42.6** | **+0.7** | |
| EGAK | **Eagle** | **7.54** | **43** | | | **Pn** | **17 41 41.0** | **-0.9** | |
| EGAK | **Eagle** | **7.54** | **43** | P | | **Pn** | **17 41 41.3** | **-0.5** | |
| | baz=233 | | | | | | | | |
| ISLZ | **Isanotski Laza** | **7.62** | **234** | | | **Pn** | **17 41 42.8** | **-0.2** | |
| COLD | **Coldfoot** | **7.65** | **9** | | | **Pn** | **17 41 43.3** | **-0.1** | |
| COLD | **Coldfoot** | **7.65** | **9** | P | | **Pn** | **17 41 43.2** | **-0.1** | |
| | baz=191,SNR=32 | | | | | | | | |
| YUK5 | **Granite Creek** | **7.68** | **73** | | | **Pn** | **17 41 43.8** | **-0.1** | |
| FYU | **Fort Yukon** | **7.74** | **24** | | | **Pn** | **17 41 44.0** | **-0.6** | |
| DAWY | **Dawson** | **7.80** | **50** | | | **Pn** | **17 41 45.9** | **+0.4** | |
| DAWY | **Dawson** | **7.80** | **50** | P | | **Pn** | **17 41 46.0** | **+0.4** | |
| | baz=242,SNR=9.0 | | | | | | | | |
| HYT | **Haines Junctio** | **7.84** | **75** | Pn | | **Pn** | **17 41 47.4** | **+1.2** | |
| HYT | **Haines Junctio** | **7.84** | **75** | P | | **Pn** | **17 41 46.5** | **+0.4** | |
| | baz=269,SNR=16 | | | | | | | | |
| J29M | **Klondike Camp** | **8.44** | **49** | Pn | | **Pn** | **17 41 54.7** | **+0.6** | |
| J29M | **Klondike Camp** | **8.44** | **49** | P | | **Pn** | **17 41 55.4** | **+1.2** | |
| | baz=243 | | | | | | | | |
| BMAR | **Burnt Mountain** | **8.62** | **22** | Pn | | **Pn** | **17 41 54.7** | **-1.8** | |
| SKAG | **Skagway** | **9.03** | **84** | Pn | | **Pn** | **17 42 02.7** | **+0.7** | |
| SKAG | **Skagway** | **9.03** | **84** | P | | **Pn** | **17 42 01.9** | **-0.1** | |
| | baz=279,SNR=24 | | | | | | | | |
| TOLK | **Toolik Lake Re** | **9.09** | **8** | | | **Pn** | **17 42 03.2** | **+0.3** | |
| TOLK | **Toolik Lake Re** | **9.09** | **8** | P | | **Pn** | **17 42 03.1** | **+0.3** | |
| | baz=192,SNR=30 | | | | | | | | |
| WHY | **Whitehorse** | **9.13** | **76** | | | **Pn** | **17 42 03.8** | **+0.2** | |
| WHY | **Whitehorse** | **9.13** | **76** | P | | **Pn** | **17 42 03.5** | **-0.1** | |
| | baz=272,SNR=34 | | | | | | | | |
| UNV | **Unalaska Valle** | **9.40** | **237** | Pn | | **Pn** | **17 42 06.7** | **-0.5** | |
| UNV | **Unalaska Valle** | **9.40** | **237** | P | | **Pn** | **17 42 06.6** | **-0.5** | |
| | baz=46 | | | | | | | | |
| M31M | **Drury Creek, Y** | **9.43** | **67** | Pn | | **Pn** | **17 42 08.0** | **+0.4** | |
| M31M | **Drury Creek, Y** | **9.43** | **67** | P | | **Pn** | **17 42 08.1** | **+0.6** | |
| | baz=263,SNR=19 | | | | | | | | |
| BESE | **Bessie Mountai** | **9.45** | **89** | Pn | | **Pn** | **17 42 08.0** | **+0.1** | |
| SIT | **Sitka** | **9.71** | **98** | Pn | | **Pn** | **17 42 10.8** | **-0.5** | |
| SIT | **Sitka** | **9.71** | **98** | P | | **Pn** | **17 42 10.4** | **-0.9** | |
| | baz=293 | | | | | | | | |
| JIS | **Juneau Island** | **9.77** | **90** | | | **Pn** | **17 42 13.3** | **+1.3** | |
| FARO | **Faro, Yukon** | **9.92** | **67** | P | | **Pn** | **17 42 14.5** | **+0.3** | |
| | baz=264,SNR=21 | | | | | | | | |
| P33M | **Teslin, Yukon** | **10.18** | **78** | Pn | | **Pn** | **17 42 18.8** | **+1.0** | |
| P33M | **Teslin, Yukon** | **10.18** | **78** | P | | **Pn** | **17 42 17.6** | **-0.2** | |
| | baz=276,SNR=18 | | | | | | | | |
| MMPY | **Sheldon Lake,** | **10.93** | **65** | P | | **Pn** | **17 42 28.4** | **+0.7** | |
| | baz=264,SNR=16 | | | | | | | | |
| WRAK | **Wrangell Islan** | **11.47** | **98** | Pn | | **Pn** | **17 42 35.4** | **+0.4** | |
| CRAG | **Craig** | **11.52** | **103** | Pn | | **Pn** | **17 42 35.1** | **-0.6** | |
| CRAG | **Craig** | **11.52** | **103** | P | | **Pn** | **17 42 35.2** | **-0.5** | |
| | baz=300 | | | | | | | | |
| DLBC | **Dease Lake** | **11.93** | **86** | P | | **Pn** | **17 42 42.5** | **+1.3** | |
| | comp=N,5.7nm,0.3s,baz=264,slow=6.0,SNR=38 | | | | | | | | |
| INK | **Inuvik** | **12.10** | **36** | P | | **Pn** | **17 42 43.6** | **+0.4** | |
| | comp=N,0.6nm,0.3s,baz=233,slow=17,SNR=19 | | | | | | | | |
| INK | **Inuvik** | **12.10** | **36** | P | | **Pn** | **17 42 42.4** | **-0.8** | |
| | baz=234,SNR=6.8 | | | | | | | | |
| DIB | **Dawson Inlet,** | **13.11** | **111** | P | | **P** | **17 43 01.5** | **-1.0** | |
| MOBC | **Moresby Island** | **13.39** | **110** | P | | **P** | **17 43 03.3** | **-2.4** | |
| A36M | **Sachs Harbour** | **16.53** | **31** | Pn | | **Pn** | **17 43 37.7** | **-1.9** | |
| A36M | | | | IAmb | | IAmb | 17 43 42.6 | | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| A36M | **Sachs Harbour** | **16.53** | **31** | P | | **Pn** | **17 43 38.3** | **-1.4** | |
| | baz=236,SNR=12 | | | | | | | | |
| HOLB | **Holberg** | **16.82** | **112** | Pn | | **Pn** | **17 43 41.6** | **-1.8** | |
| YKA | **Yellowknife Ar** | **18.62** | **65** | P | | **Pn** | **17 44 04.7** | **-0.2** | |
| | comp=Z,0.8nm,0.3s,baz=277,slow=9.9,SNR=56 | | | | | | | | |
| YKA | | | | PcP | | **PcP** | **17 48 27.6** | **+0.7** | |
| | comp=Z,0.1nm,0.3s,baz=294,slow=1.8,SNR=5.4 | | | | | | | | |
| YKA | | | | ScP | | **ScP** | **17 51 53.0** | **+1.1** | |
| | comp=Z,0.1nm,0.3s,baz=285,slow=2.5,SNR=9.6 | | | | | | | | |
| YKA | **Yellowknife Ar** | **18.62** | **65** | P | | **P** | **17 44 03.6** | **+0.3** | |
| YKA | | | | | | **ScP** | **17 51 52.7** | **+0.8** | |
| RES | **Resolute Bay** | **25.58** | **32** | P | | **P** | **17 45 12.8** | **-0.1** | |
| | comp=Z,1.0nm,0.7s,baz=274,slow=6.1,SNR=3.7 | | | | | | | | |
| SEY | **Seymchan** | **25.68** | **301** | P | | **P** | **17 45 13.1** | **-0.9** | |
| | comp=Z,1.2nm,0.6s,baz=80,slow=23,SNR=12 | | | | | | | | |
| PETK | **Petropavlovsk-** | **27.44** | **278** | P | | **P** | **17 45 29.4** | **-0.5** | |
| | comp=Z,3.9nm,0.6s,baz=74,slow=13,SNR=28 | | | | | | | | |
| NVAR | **Mina Array Bea** | **30.64** | **118** | P | | **P** | **17 46 01.4** | **+2.8** | |
| | comp=Z,0.3nm,0.6s,baz=358,slow=6.3,SNR=2.1 | | | | | | | | |
| TIXI | **Tiksi** | **31.68** | **324** | P | | **P** | **17 46 07.3** | **+0.2** | |
| | comp=Z,0.5nm,0.3s,baz=91,slow=23,SNR=3.0 | | | | | | | | |
| JKA | **Kamikawa-asahi** | **40.85** | **277** | P | | **P** | **17 47 25.3** | **-0.1** | |
| ASAJ | **Asahikawa** | **40.85** | **277** | P | | **P** | **17 47 25.3** | **-0.1** | |
| | comp=Z,6.2nm,0.7s,baz=54,slow=3.8,SNR=5.0 | | | | | | | | |
| SPITS | **Spitsbergen Ar** | **42.20** | **3** | P | | **P** | **17 47 36.4** | **+0.4** | |
| | comp=Z,5.5nm,0.8s,baz=20,slow=5.4,SNR=10 | | | | | | | | |
| KLR | **Kulʾdur** | **42.59** | **291** | P | | **P** | **17 47 38.8** | **-0.6** | |
| | comp=Z,1.0nm,0.6s,baz=30,slow=9.0,SNR=5.2 | | | | | | | | |
| SCHQ | **Schefferville** | **43.77** | **57** | P | | **P** | **17 47 49.8** | **+1.0** | |
| | comp=Z,1.6nm,0.5s,baz=309,slow=6.6,SNR=12 | | | | | | | | |
| ARCES | **ARCESS Array B** | **51.04** | **1** | P | | **P** | **17 48 45.9** | **+1.0** | |
| | comp=Z,2.7nm,0.9s,baz=354,slow=8.2,SNR=1.4 | | | | | | | | |
| KSRS | **Korea Array** | **53.18** | **283** | P | | **P** | **17 49 02.2** | **+1.0** | |
| | comp=Z,4.3nm,0.5s,baz=38,slow=7.0,SNR=20 | | | | | | | | |
| KSAR | **Wonju Array Be** | **53.21** | **283** | P | | **P** | **17 49 01.4** | **0.0** | |
| ULN | **Ulaanbaatar** | **54.61** | **306** | P | | **P** | **17 49 12.4** | **+0.7** | |
| ULN | | | | IAmb | | IAmb | 17 49 12.9 | | |
| | comp=Z,4.5nm,0.6s | | | | | | | | |
| SONM | **Songino Array** | **54.91** | **306** | P | | **P** | **17 49 14.9** | **+1.2** | |
| | comp=Z,5.5nm,0.5s,baz=46,slow=5.6,SNR=88 | | | | | | | | |
| SONM | **Songino Array** | **54.91** | **306** | P | | **P** | **17 49 14.5** | **+0.7** | |
| SONM | | | | IAmb | | IAmb | 17 49 15.5 | | |
| | comp=Z,7.3nm,0.7s | | | | | | | | |
| BJT | **Baijiatuau** | **56.82** | **293** | P | | **P** | **17 49 26.8** | **-0.5** | |
| BJT | | | | IAmb | | IAmb | 17 49 28.0 | | |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| ZAA0 | **Zalesovo Array** | **57.57** | **324** | P | | **P** | **17 49 32.6** | **+0.3** | |
| ZALV | **Zalesovo Beam**

P18K **Big Mountain,** 1.13 252 Pn 17 52 33.0 -0.4
baz=97
P18K Sn 17 52 49.4 -0.9
P18K **Big Mountain,** 1.13 252 P Pn 17 52 33.0 -0.4
baz=72,SNR=14
P18K S Sn 17 52 49.1 -1.3
baz=72
BRLK **Bradley Lake** 1.14 89 Pn 17 52 33.6 0.0
BRLK **Bradley Lake** 1.14 89 IAML 17 52 51.7
comp=N,5µm,0.1s
BRSE **Bradley Lake S** 1.21 90 Pn 17 52 34.3 -0.1
BRSE **Bradley Lake S** 1.21 90 P Pn 17 52 34.3 -0.1
baz=270,SNR=149
BRSE S Sn 17 52 51.5 -0.5
baz=270
N19K **Bonanza Creek** 1.25 328 Pn 17 52 35.4 +0.5
N19K **Bonanza Creek** 1.25 328 IAML 17 52 54.1
comp=N,4µm,0.8s
N19K **Bonanza Creek** 1.25 328 P Pn 17 52 35.5 +0.5
baz=149
N19K S Sn 17 52 53.0 +0.1
baz=149
CAPN **Captain Cook N** 1.41 43 Pn 17 52 39.1 +2.5
CAPN **Captain Cook N** 1.41 43 IAML 17 53 05.4
comp=E,10µm,0.8s
CAPN **Captain Cook N** 1.41 43 P Pn 17 52 38.7 +2.0
baz=224
CAPN S Sn 17 53 00.0 +4.0
baz=224
SPU **Mount Spurr** 1.52 20 Pn 17 52 38.5 +0.5
SPCN **Chakachatna No** 1.54 17 Pn 17 52 39.2 +1.0
SPNN **North Nagishla** 1.63 7 Pn 17 52 40.3 +0.9
SPCG **Spurr Capps Gl** 1.63 19 Pn 17 52 40.3 +0.9
SLKM **Skilak Lake** 1.64 62 Pn 17 52 39.7 +0.2
SVW2 **Sparrevohn** 1.81 319 Pn 17 52 41.7 +0.2
O22K **Cooper Landing** 1.85 66 Pn 17 52 42.7 +0.7
O22K **Cooper Landing** 1.85 66 P Pn 17 52 42.6 +0.5
baz=248,SNR=122
STLK **Strandline Lak** 1.86 20 Pn 17 52 43.1 +0.9
SEW **Seward** 1.89 78 Pn 17 52 42.2 -0.2
SEW **Seward** 1.89 78 P Pn 17 52 42.8 +0.3
baz=260,SNR=64
SEW S Sn 17 53 06.2 -0.1
baz=260
FIS **Fire Island** 2.00 45 Pn 17 52 46.0 +2.1
FIS **Fire Island** 2.00 45 IAML 17 53 15.2
comp=E,5µm,0.9s
FIS IAML 17 53 16.4
comp=N,5µm,0.8s
KDAK **Kodiak Island** 2.00 172 P Pn 17 52 42.9 -1.0
comp=N,178nm,0.3s,baz=33,slow=8.7,SNR=644
KDAK S Sn 17 53 08.5 -0.5
comp=N,200nm,0.3s,baz=310,slow=22,SNR=23
KDAK **Kodiak Island** 2.00 172 IAML 17 53 18.5
comp=N,2µm,0.8s
KDAK **Kodiak Island** 2.00 172 P Pn 17 52 43.0 -1.0
baz=351
KDAK S Sn 17 53 08.3 -0.7
baz=351
KJL **Kejulik** 2.13 218 Pn 17 52 46.0 +0.4
RC01 **Rabbit Creek A** 2.15 50 Pn 17 52 46.3 +0.5
RC01 **Rabbit Creek A** 2.15 50 IAML 17 53 13.9
comp=N,4µm,0.3s
RC01 IAML 17 53 15.2
comp=E,4µm,0.4s
RC01 **Rabbit Creek A** 2.15 50 P Pn 17 52 46.4 +0.5
baz=232,SNR=221
RC01 S Sn 17 53 12.4 0.0
baz=232
M19K **Big River Lodg** 2.24 345 Pn 17 52 47.4 +0.4
M19K **Big River Lodg** 2.24 345 P Pn 17 52 47.6 +0.7
baz=164
M22K **Willow** 2.49 35 Pn 17 52 51.4 +1.2
M22K **Willow** 2.49 35 P Pn 17 52 50.9 +0.7
baz=218,SNR=31
M22K S Sn 17 53 20.8 +0.7
baz=218
OHAK **Old Harbor** 2.55 182 Pn 17 52 49.5 -1.5
OHAK **Old Harbor** 2.55 182 P Pn 17 52 49.5 -1.5
baz=1.4
L19K **White Mountain** 2.57 342 Pn 17 52 51.8 +0.5
L19K **White Mountain** 2.57 342 P Pn 17 52 51.9 +0.5
baz=161,SNR=448
PWL **Port Wells** 2.63 63 Pn 17 52 51.8 -0.3
PWL **Port Wells** 2.63 63 P Pn 17 52 51.8 -0.3
baz=247,SNR=77
PWL S Sn 17 53 22.1 -1.5
baz=247
PMR **Palmer** 2.69 45 Pn 17 52 52.8 -0.1
PMR **Palmer** 2.69 45 IAML 17 53 25.5
comp=N,1µm,0.5s
PMR IAML 17 53 31.0
comp=E,1µm,0.9s
PMR **Palmer** 2.69 45 P Pn 17 52 52.9 0.0
baz=228
PMR S Sn 17 53 23.3 -1.7
baz=228
L20K **Farewell, AK** 2.75 353 P Pn 17 52 54.7 +1.0
baz=173
KNK **Knik Glacier** 2.84 52 Pn 17 52 54.7 -0.2
KNK **Knik Glacier** 2.84 52 P Pn 17 52 54.7 -0.2
baz=236
KNK S Sn 17 53 26.8 -1.8
baz=236
GHO **Glory Hole Cre** 2.89 44 Pn 17 52 55.4 -0.2
GHO IAML 17 53 33.0
comp=N,2µm,0.7s
CUT **Chulitna** 3.00 26 Pn 17 52 58.0 +1.1
CUT **Chulitna** 3.00 26 IAML 17 53 38.8
comp=E,1µm,0.5s
CUT **Chulitna** 3.00 26 P Pn 17 52 58.7 +1.9
baz=209
SML **Sawmill** 3.12 47 Pn 17 52 58.5 -0.2
SML **Sawmill** 3.12 47 IAML 17 53 36.4
comp=E,1µm,1.0s
SML **Sawmill** 3.12 47 P Pn 17 52 58.5 -0.2
baz=231,SNR=34
SML S Sn 17 53 33.7 -1.6
baz=231
PPLA **Purkeypile** 3.18 8 Pn 17 53 01.0 +1.5
PPLA **Purkeypile** 3.18 8 P Pn 17 53 01.1 +1.6
baz=189
GLI **Glacier Island** 3.21 67 Pn 17 52 58.2 -1.5
GLI **Glacier Island** 3.21 67 IAML 17 53 35.9
comp=E,1µm,0.4s
GLI IAML 17 53 36.2
comp=N,1µm,0.6s
GLI **Glacier Island** 3.21 67 P Pn 17 52 58.6 -1.1
baz=252
GLI S Sn 17 53 34.4 -2.8
baz=252
SII **Sitkinak Islan** 3.26 190 Pn Pn 17 52 58.7 -1.7
SII IAML 17 53 38.4
comp=N,866nm,0.7s
SII IAML 17 53 41.1
comp=E,1µm,0.7s
SII **Sitkinak Islan** 3.26 190 P Pn 17 52 58.7 -1.7
baz=9.2
TT01 **Tatalina** 3.45 337 Pn 17 53 03.2 +0.3
FID **Port Fidalgo** 3.46 70 Pn 17 53 01.7 -1.4
FID **Port Fidalgo** 3.46 70 IAML 17 53 42.2
comp=E,1µm,0.5s
Q23K **Middleton Isla** 3.47 93 Pn 17 53 03.0 -0.2
Q23K **Middleton Isla** 3.47 93 IAML 17 53 47.1
comp=N,496nm,1.0s
Q23K IAML 17 53 50.5
comp=E,472nm,0.5s
Q23K **Middleton Isla** 3.47 93 P Pn 17 53 02.7 -0.4
baz=278
TTA **Tatalina** 3.47 338 Pn 17 53 03.4 +0.2
TTA **Tatalina** 3.47 338 P Pn 17 53 03.4 +0.2
baz=156,SNR=304
MID **Middleton Isla** 3.47 93 Pn 17 53 03.0 -0.2
MID **Middleton Isla** 3.47 93 IAML 17 53 47.1
comp=N,494nm,1.0s
MID IAML 17 53 50.4
comp=E,470nm,0.4s
JPK **Jack Peak** 3.49 65 Pn 17 53 03.1 -0.5
SCM **Sheep Creek Mo** 3.52 51 Pn 17 53 03.9 -0.1
SCM **Sheep Creek Mo** 3.52 51 P Pn 17 53 03.9 -0.1
baz=236
VMT **TAPS TI Valdez** 3.61 66 Pn 17 53 04.9 -0.2
K20K **Telida** 3.64 353 Pn 17 53 06.0 +0.6
K20K **Telida** 3.64 353 P Pn 17 53 06.1 +0.6
baz=173
CAST **Castle Rocks** 3.71 7 Pn Pn 17 53 07.1 +0.7
baz=188
CAST **Castle Rocks** 3.71 7 P Pn 17 53 07.3 +0.9
baz=188
WAT7 **Susitna Watana** 3.71 32 Pn 17 53 07.0 +0.5
EYAK **Cordova Ski Ar** 3.78 75 Pn 17 53 06.4 -0.9
EYAK **Cordova Ski Ar** 3.78 75 P Pn 17 53 06.6 -0.7
baz=261
DIV **Divide** 3.90 66 Pn 17 53 08.4 -0.6
TRF **Thorofare Moun** 3.94 19 Pn 17 53 09.7 0.0
TRF **Thorofare Moun** 3.94 19 IAML 17 54 17.8
comp=N,490nm,0.6s
TRF IAML 17 54 20.7
comp=E,438nm,0.7s
TRF **Thorofare Moun** 3.94 19 P Pn 17 53 09.8 +0.1
baz=201
KTH **Kantishna Hill** 3.95 15 Pn 17 53 10.0 +0.3
KTH **Kantishna Hill** 3.95 15 IAML 17 54 20.7
comp=N,349nm,0.8s
KTH IAML 17 54 31.7
comp=E,340nm,0.9s
KLU **Klutina** 3.96 61 Pn 17 53 09.4 -0.4
KLU **Klutina** 3.96 61 IAML 17 53 57.8
comp=E,906nm,0.5s
KLU **Klutina** 3.96 61 P Pn 17 53 09.4 -0.4
baz=247
M24K **Tolsona, Glenn** 4.13 52 Pn 17 53 12.2 +0.1
M24K **Tolsona, Glenn** 4.13 52 P Pn 17 53 12.4 +0.2
baz=238
CHUM **Lake Minchumin** 4.16 5 Pn 17 53 13.3 +1.0
CHUM **Lake Minchumin** 4.16 5 P Pn 17 53 13.3 +1.0
baz=186
CHIR **Chirikof Islan** 4.17 200 Pn Pn 17 53 10.8 -1.8
CHIR IAML 17 54 58.1
comp=E,510nm,4.7s
CHIR IAML 17 55 12.2
comp=N,528nm,3.6s
CHIR **Chirikof Islan** 4.17 200 P Pn 17 53 10.8 -1.8
baz=18
RND **Reindeer** 4.19 27 Pn 17 53 13.2 +0.3
RND **Reindeer** 4.19 27 IAML 17 54 19.2
comp=N,247nm,1.1s
RND IAML 17 54 21.5
comp=E,271nm,1.1s
RAGM **Ragged Mountai** 4.29 78 Pn 17 53 13.9 -0.3
RAGM IAML 17 54 06.3
comp=E,546nm,0.5s
DHY **Denali Highway** 4.33 37 Pn 17 53 14.8 0.0
DHY **Denali Highway** 4.33 37 IAML 17 54 06.5
comp=E,615nm,0.7s
DHY IAML 17 54 06.6
comp=N,468nm,0.7s
DHY **Denali Highway** 4.33 37 P Pn 17 53 14.9 +0.1
baz=222
KAIM **Kayak Island** 4.40 84 Pn 17 53 16.4 +0.6
KAIM **Kayak Island** 4.40 84 P Pn 17 53 16.2 +0.5
baz=271
PS11 **TAPS Pump St11** 4.40 55 Pn 17 53 16.1 +0.4
BMRM **Bremner River** 4.41 70 Pn 17 53 14.9 -0.9
BMRM **Bremner River** 4.41 70 IAML 17 54 21.6
comp=E,452nm,0.7s
BMRM IAML 17 54 27.0
comp=N,530nm,0.8s
BMRM **Bremner River** 4.41 70 P Pn 17 53 15.2 -0.6
baz=257
MCK **McKinley** 4.46 25 Pn 17 53 16.7 +0.2
MCK **McKinley** 4.46 25 IAML 17 54 09.8
comp=E,175nm,0.7s
MCK IAML 17 54 11.5
comp=N,256nm,1.1s
MCK **McKinley** 4.46 25 P Pn 17 53 17.2 +0.7
baz=208
J20K **Nowinta River** 4.46 354 Pn Pn 17 53 17.0 +0.6
J20K **Nowinta River** 4.46 354 P Pn 17 53 17.2 +0.8
baz=174
CHGN **Chignik** 4.46 221 Pn 17 53 16.3 -0.2
CHGN **Chignik** 4.46 221 IAML 17 54 07.2
comp=E,233nm,0.3s
CHGN IAML 17 54 08.1
comp=N,200nm,0.6s
CHGN **Chignik** 4.46 221 P Pn 17 53 16.1 -0.4
baz=37
BPAW **Bear Paw Mtn.** 4.47 12 Pn 17 53 16.6 0.0
BPAW **Bear Paw Mtn.** 4.47 12 P Pn 17 53 17.0 +0.4
baz=194
HMT **Hamilton** 4.49 79 Pn 17 53 16.7 -0.2
N25K **Chitina, Valde** 4.59 63 Pn 17 53 17.9 -0.3
N25K **Chitina, Valde** 4.59 63 IAML 17 54 11.2
comp=N,310nm,0.7s
N25K **Chitina, Valde** 4.59 63 P Pn 17 53 18.3 0.0
baz=250
NICHA **Nichawak Mount** 4.63 80 Pn 17 53 18.8 0.0
HARP **HAARP** 4.69 52 Pn 17 53 19.7 +0.1
HARP **HAARP** 4.69 52 P Pn 17 53 20.0 +0.3
baz=239
SUCK **Suckling Hills** 4.72 82 Pn Pn 17 53 20.3 +0.3
SUCK IAML 17 54 15.3
comp=N,308nm,0.9s
SUCK IAML 17 54 16.5
comp=E,259nm,1.1s
BWN **Browne** 4.75 20 Pn 17 53 21.2 +0.8
BWN **Browne** 4.75 20 IAML 17 54 50.8
comp=E,469nm,1.2s
BWN IAML 17 54 54.8
comp=N,432nm,0.8s
BERG **Berg Lake** 4.77 78 Pn 17 53 20.9 +0.3
BERG **Berg Lake** 4.77 78 IAML 17 54 16.9
comp=N,429nm,1.0s
BERG IAML 17 54 17.2
comp=E,470nm,0.5s
PAX **Paxson** 4.89 46 Pn 17 53 22.5 +0.1
PAX **Paxson** 4.89 46 P Pn 17 53 22.9 +0.4
baz=232
GLB **Gilahina Butte** 4.90 66 Pn 17 53 21.9 -0.6
GLB **Gilahina Butte** 4.90 66 IAML 17 54 18.1
comp=E,221nm,0.7s
GLB IAML 17 54 21.1
comp=N,369nm,0.8s
GRIN **Grindle Hills** 4.95 80 Pn 17 53 23.1 0.0
BGLC **Bering Glacier** 4.97 82 P Pn 17 53 24.1 +0.8
baz=270
KHIT **Khitrov Hills** 5.00 78 Pn 17 53 22.6 -1.2
VRDI **Verde Repeater** 5.01 69 Pn 17 53 23.4 -0.7
VRDI **Verde Repeater** 5.01 69 IAML 17 54 21.2
comp=N,293nm,0.9s
VRDI IAML 17 54 22.4
comp=E,150nm,0.6s
PS10 **TAPS Pump St10** 5.09 41 Pn 17 53 26.1 +1.1
SNH **Sunshine Point** 5.19 81 Pn Pn 17 53 26.9 +0.5
SNH IAML 17 54 25.6
comp=N,248nm,2.0s
SNH IAML 17 54 27.1
comp=E,276nm,0.9s
WAX **Waxell Ridge** 5.19 78 Pn 17 53 26.5 0.0
NEA2 **Nenana** 5.21 20 Pn 17 53 26.3 -0.3
NEA2 **Nenana** 5.21 20 P Pn 17 53 26.6 0.0
baz=203
WRH **Wood River Hil** 5.29 24 Pn 17 53 27.0 -0.6
WRH **Wood River Hil** 5.29 24 IAML 17 54 28.5
comp=N,128nm,1.0s
WRH IAML 17 54 29.8
comp=E,123nm,0.7s
GCSA **Galena City Sc** 5.30 342 Pn 17 53 28.1 +0.4
GCSA **Galena City Sc** 5.30 342 P Pn 17 53 28.0 +0.3
baz=159
CYK **Cape Yakataga** 5.37 82 Pn 17 53 29.4 +0.7
MLY **Manley** 5.41 11 Pn 17 53 29.2 0.0
MLY **Manley** 5.41 11 P Pn 17 53 29.3 0.0
baz=193
ISLE **Juniper Island** 5.46 76 Pn 17 53 29.3 -0.8
I21K **Tanana** 5.47 5 Pn 17 53 30.2 +0.2
I21K **Tanana** 5.47 5 P Pn 17 53 30.4 +0.4
baz=186
KIAG **Kiagna River** 5.48 73 Pn 17 53 30.4 -0.1
HDA **Harding Lake** 5.50 29 Pn 17 53 30.3 -0.1
HDA **Harding Lake** 5.50 29 P Pn 17 53 30.5 +0.1
baz=215
CCB **Clear Creek Bu** 5.50 25 Pn 17 53 29.7 -0.8
BALM **Baldy** 5.50 72 Pn 17 53 30.1 -0.6
BAGL **Bagley Icefiel** 5.57 78 Pn 17 53 31.6 +0.2
M26K **Nabesna, AK** 5.59 57 Pn 17 53 32.4 +0.6
M26K **Nabesna, AK** 5.59 57 P Pn 17 53 32.3 +0.6
baz=246
RIDG **Independent Ri** 5.61 41 Pn 17 53 33.0 +1.0
RIDG **Independent Ri** 5.61 41 P Pn 17 53 33.1 +1.1
baz=228
MESA **MESA** 5.63 81 Pn 17 53 32.2 -0.3
MESA **MESA** 5.63 81 P Pn 17 53 33.0 +0.4
baz=270
PS08 **TAPS Pump Stn8** 5.64 29 Pn 17 53 32.1 -0.2
I23K **Minto, Yukon-K** 5.68 16 Pn 17 53 32.8 -0.1
I23K **Minto, Yukon-K** 5.68 16 P Pn 17 53 33.3 +0.3
baz=200
TCOL **CIGO, UAF Yank** 5.69 23 Pn 17 53 33.3 +0.3
TCOL **CIGO, UAF Yank** 5.69 23 P Pn 17 53 33.1 +0.1
baz=208
COLA **College** 5.69 23 Pn 17 53 33.0 -0.1
COLA **College** 5.69 23 P Pn 17 53 33.2 +0.2
baz=208
MDM **Murphy Dome** 5.69 22 Pn 17 53 32.9 -0.3
L26K **Log Cabin Wild** 5.73 51 P Pn 17 53 33.7 0.0
baz=239
YAH **Yahtse** 5.74 79 Pn 17 53 34.3 +0.3
IL31 5.81 27 Pn 17 53 34.1 -0.6
ILAR **Eielson Array** 5.81 27 P Pn 17 53 34.3 -0.4
comp=E,18nm,0.3s,baz=217,slow=13,SNR=646
ILAR S Sn 17 54 36.5 -3.4
comp=E,5.0nm,0.3s,baz=191,slow=16,SNR=6.2
ILAR **Eielson Array** 5.81 27 Pn Pn 17 53 33.9 -0.8
DOT **Dot Lake** 5.81 44 Pn 17 53 35.4 +0.6
BARN **Barnard Glacie** 5.83 72 Pn 17 53 35.4 +0.1
H21K **Melozitna Rive** 5.92 1 Pn 17 53 36.8 +0.6
POKR **Poker Plat Res** 5.99 24 Pn 17 53 37.1 -0.1
POKR **Poker Plat Res** 5.99 24 P Pn 17 53 37.2 +0.1
baz=209
TABL **Table Mountain** 6.04 78 Pn 17 53 37.8 -0.3
SCRK **Sand Creek** 6.05 42 Pn 17 53 37.4 -0.6
SCRK **Sand Creek** 6.05 42 P Pn 17 53 38.3 +0.3
baz=230
M27K **Edge Creek, AK** 6.05 60 Pn 17 53 38.5 +0.3
M27K **Edge Creek, AK** 6.05 60 P Pn 17 53 38.9 +0.8
baz=249
J25K **Salcha River,** 6.07 33 Pn 17 53 37.8 -0.5
J25K **Salcha River,** 6.07 33 P Pn 17 53 38.6 +0.2
baz=220
SAMH **Samovar Hills** 6.22 81 Pn 17 53 41.0 +0.6
IM03 6.25 358 Pn 17 53 41.4 +0.7
IMAR **Indian Mountai** 6.25 358 Pn 17 53 41.6 +0.9
PS06 **TAPS Pump Stn6** 6.31 13 Pn 17 53 42.0 +0.5
L27K **Beaver Creek,** 6.36 54 Pn 17 53 42.1 0.0
L27K **Beaver Creek,** 6.36 54 P Pn 17 53 43.2 +1.0
baz=243
BC03 6.38 54 Pn 17 53 42.4 +0.1
BCAR **Beaver Creek A** 6.38 54 Pn Pn 17 53 42.1 -0.3
PCA **Pinnacle** 6.48 81 Pn 17 53 43.8 -0.2
PINM **Pinnacle** 6.49 81 P Pn 17 53 44.4 +0.5
baz=272
BVCY **Beaver Creek** 6.52 61 Pn 17 53 45.0 +0.6
BVCY **Beaver Creek** 6.52 61 P Pn 17 53 45.3 +0.9
baz=251
YUK3 **Moose Creek** 6.53 67 Pn 17 53 45.2 +0.5
YUK3 **Moose Creek** 6.53 67 P Pn 17 53 45.4 +0.7
baz=257
J26L **Joseph Creek** 6.54 39 Pn 17 53 44.3 -0.3
J26L **Joseph Creek** 6.54 39 P Pn 17 53 44.8 +0.2
baz=228
H24K **Noodor Dome** 6.56 19 Pn 17 53 44.7 -0.2
H24K **Noodor Dome** 6.56 19 P Pn 17 53 45.1 +0.3
baz=204
PRP **Porcupine Dome** 6.75 28 Pn 17 53 47.5 -0.1
PRP **Porcupine Dome** 6.75 28 P Pn 17 53 47.9 +0.3
baz=215
BCPM **Bancas Point** 6.80 83 Pn 17 53 49.0 +0.8
YKU2 **Yakutat** 6.83 86 Pn Pn 17 53 49.5 +1.0
PNL **Peninsula** 6.95 85 Pn 17 53 50.2 -0.1
PNL **Peninsula** 6.95 85 P Pn 17 53 50.3 +0.1
baz=276
PS05 **TAPS Pump Stn5** 7.17 8 Pn 17 53 53.1 +0.1
YUK4 **Talbot Arm** 7.32 71 P Pn 17 53 56.7 +1.4
baz=263
YUK6 **Outpost Mounta** 7.42 74 Pn 17 53 57.3 +0.5
YUK6 **Outpost Mounta** 7.42 74 P Pn 17 53 57.1 +0.3
baz=267
ANM **Nome** 7.48 315 Pn 17 53 57.1 -0.2
ANM **Nome** 7.48 315 P Pn 17 53 58.5 +1.2
baz=125
EGAK **Eagle** 7.51 43 Pn 17 53 57.2 -0.6
EGAK **Eagle** 7.51 43 P Pn 17 53 58.3 +0.5
baz=233
YUK7 **Dusty Glacier** 7.53 78 Pn 17 53 58.8 +0.6
COLD **Coldfoot** 7.61 9 Pn 17 53 58.9 -0.1
COLD **Coldfoot** 7.61 9 P Pn 17 53 59.6 +0.5
baz=191
FYU **Fort Yukon** 7.70 24 Pn 17 54 00.1 -0.3
DAWY **Dawson** 7.79 50 Pn 17 54 01.7 +0.2
DAWY **Dawson** 7.79 50 P Pn 17 54 01.9 +0.4
baz=242
HYT **Haines Junctio** 7.84 75 Pn 17 54 02.9 +0.5
HYT **Haines Junctio** 7.84 75 P Pn 17 54 03.1 +0.7
baz=269
J29M **Klondike Camp** 8.42 50 Pn 17 54 11.3 +1.1
J29M **Klondike Camp** 8.42 50 P Pn 17 54 11.0 +0.8
baz=243
BMAR **Burnt Mountain** 8.58 23 Pn Pn 17 54 10.9 -1.4
I29M **Ogilvie Camp,** 8.84 44 Pn 17 54 16.8 +1.1
I29M **Ogilvie Camp,** 8.84 44 P Pn 17 54 16.9 +1.1
baz=237
TNA **Tin City** 8.94 317 Pn 17 54 18.6 +1.5
TNA **Tin City** 8.94 317 P Pn 17 54 18.5 +1.5
baz=124
SKAG **Skagway** 9.03 84 Pn Pn 17 54 18.6 +0.2
SKAG **Skagway** 9.03 84 P Pn 17 54 18.9 +0.6
baz=279
MAYO **Mayo, Yukon** 9.04 57 P Pn 17 54 18.9 +0.3
baz=252
TOLK **Toolik Lake Re** 9.05 8 Pn 17 54 18.7 +0.1
TOLK **Toolik Lake Re** 9.05 8 P Pn 17 54 19.4 +0.8
baz=192
WHY **Whitehorse** 9.13 76 Pn 17 54 19.5 -0.3
WHY **Whitehorse** 9.13 76 P Pn 17 54 20.2 +0.3
baz=272
RDOG **Red Dog Mine** 9.36 337 Pn 17 54 23.6 +0.9
RDOG **Red Dog Mine** 9.36 337 P Pn 17 54 23.9 +1.2
baz=148
UNV **Unalaska Valle** 9.42 237 P Pn 17 54 22.7 -1.0
baz=46
M31M **Drury Creek, Y** 9.43 67 Pn 17 54 24.3 +0.6
M31M **Drury Creek, Y** 9.43 67 P Pn 17 54 24.6 +0.8
baz=263
BESE **Bessie Mountai** 9.46 89 Pn 17 54 24.4 +0.1
SIT **Sitka** 9.73 98 P Pn 17 54 27.2 -0.6
baz=293
JIS **Juneau Island** 9.78 91 Pn 17 54 29.7 +1.2
FARO **Faro, Yukon** 9.91 67 P Pn 17 54 30.7 +0.3
baz=264
P33M **Teslin, Yukon** 10.18 79 Pn Pn 17 54 34.9 +0.8
P33M **Teslin, Yukon** 10.18 79 P Pn 17 54 33.9 -0.2
baz=276
MMPY **Sheldon Lake,** 10.92 65 P Pn 17 54 44.5 +0.5
baz=264
A21K **Barrow** 11.70 354 Pn 17 54 53.4 -0.8
DLBC **Dease Lake** 11.94 86 P Pn 17 54 58.6 +1.0
comp=E,1.9nm,0.3s,baz=284,slow=12,SNR=16
DLBC S Sn 17 57 08.3 -0.5
comp=E,1.0nm,0.3s,baz=209,slow=26,SNR=3.3
INK **Inuvik** 12.07 37 P Pn 17 54 58.5 -0.7
comp=E,0.3nm,0.3s,baz=236,slow=18,SNR=20
INK S Sn 17 57 05.6 -6.1
baz=58,slow=27,SNR=1.5
INK LR LR 18 00 14.4
comp=E,124nm,18.1s,baz=84,slow=40
INK **Inuvik** 12.07 37 Pn Pn 17 54 58.8 -0.4
INK **Inuvik** 12.07 37 P Pn 17 54 59.4 +0.2
baz=234
C36M **Paulatuk** 15.57 40 Pn Pn 17 55 42.6 -1.6
C36M **Paulatuk** 15.57 40 P Pn 17 55 42.5 -1.7
baz=246
BBB **Bella Bella** 15.85 108 P P 17 55 52.6 +3.2
comp=E,0.2nm,0.3s,baz=284,slow=18,SNR=1.5
BBB S Sn 17 58 39.9 -3.2
comp=E,0.3nm,0.3s,baz=134,slow=5.4,SNR=1.6
A36M **Sachs Harbour** 16.50 31 Pn 17 55 54.7 -1.0
A36M IAmb IAmb 17 55 58.5
comp=Z,36nm,0.9s
A36M **Sachs Harbour** 16.50 31 P Pn 17 55 54.6 -1.0
baz=236
YKA **Yellowknife Ar** 18.61 65 P Pn 17 56 21.1 -0.2
comp=Z,1.1nm,0.3s,baz=277,slow=9.9,SNR=44
YKA PcP PcP 18 00 43.7 +0.1
comp=Z,0.1nm,0.3s,baz=280,slow=1.4,SNR=4.2
YKA ScP ScP 18 04 09.3 +0.4
comp=Z,0.1nm,0.3s,baz=282,slow=2.6,SNR=12
YKA LR LR 18 05 06.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,109nm,20.2s,baz=176,slow=41 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.61** | **65** | P | | **P** | **17 56 20.2** | **+0.4** |
| **BILL** | **Bilibino** | **19.32** | **312** | P | | **P** | **17 56 28.2** | **+0.8** |
| **RES** | **Resolute Bay** | **25.55** | **32** | P | | **P** | **17 57 28.9** | **-0.4** |
| | comp=Z,1.9nm,0.9s,baz=260,slow=6.1,SNR=4.2 | | | | | | | |
| **SEY** | **Seymchan** | **25.65** | **301** | P | | **P** | **17 57 30.1** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=78,slow=22,SNR=5.4 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **27.43** | **278** | P | | **P** | **17 57 45.6** | **-0.8** |
| | comp=Z,4.3nm,0.7s,baz=74,slow=14,SNR=33 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **30.67** | **118** | P | | **P** | **17 58 18.6** | **+3.2** |
| | comp=Z,0.3nm,0.6s,baz=308,slow=9.0,SNR=2.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **31.41** | **103** | P | | **P** | **17 58 24.5** | **+2.5** |
| | comp=Z,0.1nm,0.5s,baz=328,slow=4.7,SNR=2.2 | | | | | | | |
| **TIXI** | **Tiksi** | **31.64** | **324** | P | | **P** | **17 58 23.6** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=20,SNR=1.8 | | | | | | | |
| **ASAJ** | **Asahikawa** | **40.84** | **277** | P | | **P** | **17 59 41.3** | **-0.5** |
| | comp=Z,5.0nm,0.7s,baz=80,slow=11,SNR=1.6 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **42.16** | **3** | P | | **P** | **17 59 52.4** | **+0.1** |
| | comp=Z,17nm,1.1s,baz=42,slow=2.6,SNR=15 | | | | | | | |
| **KLR** | **Kul'dur** | **42.56** | **291** | LR | LR | | 18 20 57.2 | |
| **SCHQ** | **Schefferville** | **43.75** | **57** | P | | **P** | **18 00 05.8** | **+0.4** |
| | comp=Z,1.7nm,0.4s,baz=303,slow=7.6,SNR=13 | | | | | | | |
| **NRIK** | **Noril'sk** | **44.08** | **334** | P | | **P** | **18 00 06.7** | **-1.1** |
| | comp=Z,2.3nm,0.4s,baz=53,slow=10.0,SNR=3.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **44.96** | **110** | P | | **P** | **18 00 17.9** | **+2.5** |
| | comp=Z,0.2nm,0.7s,baz=310,slow=4.5,SNR=2.2 | | | | | | | |
| TXAR | | | | pP | | **pP** | **18 00 38.9** | **-1.4** |
| | comp=Z,0.1nm,0.5s,baz=336,slow=4.2,SNR=3.7 | | | | | | | |
| **MJAR** | **Matsushiro Ar** | **48.73** | **274** | P | | **P** | **18 00 44.0** | **-0.5** |
| | comp=Z,3.2nm,1.0s,baz=357,slow=6.8,SNR=4.8 | | | | | | | |
| **MJAR** | **Matsushiro Ar** | **48.73** | **274** | IAmb | | IAmb | 18 02 36.3 | |
| | comp=Z,21nm,1.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.99** | **1** | P | | **P** | **18 01 01.8** | **+0.6** |
| | comp=Z,4.1nm,1.0s,baz=355,slow=9.2,SNR=1.8 | | | | | | | |
| **KSRS** | **Korea Array** | **53.16** | **283** | P | | **P** | **18 01 18.4** | **+0.7** |
| | comp=Z,4.2nm,0.5s,baz=36,slow=7.0,SNR=22 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.58** | **305** | P | | **P** | **18 01 28.2** | **+0.1** |
| ULN | | | | IAmb | | IAmb | 18 01 29.2 | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **54.88** | **306** | P | | **P** | **18 01 31.1** | **+0.9** |
| | comp=Z,5.7nm,0.4s,baz=44,slow=5.8,SNR=99 | | | | | | | |
| **SONM** | **Songino Array** | **54.88** | **306** | P | | **P** | **18 01 30.3** | **+0.1** |
| **BJT** | **Baijiatuau** | **56.79** | **293** | P | | **P** | **18 01 43.2** | **-0.5** |
| BJT | | | | IAmb | | IAmb | 18 01 44.3 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.53** | **324** | P | | **P** | **18 01 48.6** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **57.53** | **324** | P | | **P** | **18 01 48.8** | **+0.1** |
| | comp=Z,7.7nm,0.4s,baz=32,slow=6.9,SNR=39 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.53** | **324** | P | | **P** | **18 01 48.3** | **-0.4** |
| **FINES** | **FINESS Array B** | **59.12** | **0** | P | | **P** | **18 02 00.8** | **+1.1** |
| | comp=Z,3.9nm,1.0s,baz=12,slow=7.1,SNR=2.5 | | | | | | | |
| **KURK** | **Kurchatov** | **62.19** | **326** | P | | **P** | **18 02 20.5** | **-0.1** |
| KURK | | | | IAmb | | IAmb | 18 02 21.0 | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **64.58** | **321** | P | | **P** | **18 02 35.7** | **-0.8** |
| MK31 | | | | IAmb | | IAmb | 18 04 43.4 | |
| | comp=Z,5.4nm,1.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.58** | **321** | P | | **P** | **18 02 35.9** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=39,slow=6.8,SNR=34 | | | | | | | |
| **MAKZ** | **Makanchi** | **64.66** | **321** | P | | **P** | **18 02 36.4** | **-0.7** |
| MAKZ | | | | IAmb | | IAmb | 18 02 54.9 | |
| | comp=Z,11nm,1.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.29** | **339** | P | | **P** | **18 02 54.1** | **+0.3** |
| | comp=Z,0.5nm,0.4s,baz=8.1,slow=7.1,SNR=2.4 | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.06** | **337** | P | | **P** | **18 02 57.6** | **-1.0** |
| ABKAR | | | | IAmb | | IAmb | 18 04 57.5 | |
| | comp=Z,12nm,1.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.88** | **358** | P | | **P** | **18 03 10.4** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=2.5,slow=5.3,SNR=2.3 | | | | | | | |
| AKASG | | | | pP | | **pP** | **18 03 35.0** | **-1.8** |
| | comp=Z,0.5nm,0.5s,baz=7.6,slow=6.9,SNR=2.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **82.90** | **294** | P | | **P** | **18 04 22.9** | **-1.0** |
| | comp=Z,1.5nm,0.9s,baz=15,slow=5.7,SNR=13 | | | | | | | |
| **BOSA** | **Boshof** | **148.84** | **3** | PKPbc | | **PKPbc** | **18 11 45.4** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=18,slow=2.5,SNR=5.8 | | | | | | | |

*NNC **10** 18:12:06.3±3.1,36°.80N×70°.71E,h224km±33km, mb2.9, mpv4.1, Error ellipse: s-maj=29.4km s-min=18.3km az=15.0*

**ISC 10 18:12:03.6**±3.1,**36°.6N**±0°.2×**70°.7E**±0°.2,**h200**km,**n16,**
σ0**9**94/17,**7C-4D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.99** | **22** | P | | **Pn** | **18 13 31.6** | **+0.6** |
| | SNR=45 | | | | | | | |
| **UCH** | **Uchtor** | **6.35** | **26** | P | | **Pn** | **18 13 36.3** | **+0.6** |
| | SNR=44 | | | | | | | |
| **KK02** | **Karatay Array** | **6.50** | **359** | ⇓P | | **Pn** | **18 13 38.0** | **+0.7** |
| | 2.3nm,0.3s | | | | | | | |
| KK02 | | | | ⇑S | | **Sn** | **18 14 50.0** | **-1.6** |
| | 13nm,0.6s | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.51** | **20** | P | | **Pn** | **18 13 38.6** | **+1.2** |
| | SNR=18 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.71** | **25** | P | | **Pn** | **18 13 40.9** | **+0.8** |
| | SNR=16 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.71** | **25** | ⇓P | | **Pn** | **18 13 40.8** | **+0.7** |
| | 9.1nm,0.6s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **18 14 57.3** | **+0.7** |
| | 13nm,1.1s | | | | | | | |
| **KBK** | **Karagaybulak** | **6.88** | **27** | P | | **Pn** | **18 13 43.3** | **+1.0** |
| | SNR=7.5 | | | | | | | |
| **USP** | **Ospenovka** | **7.27** | **22** | P | | **Pn** | **18 13 48.0** | **+0.7** |
| | SNR=11 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.35** | **29** | P | | **Pn** | **18 13 49.1** | **+0.5** |
| | SNR=7.3 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.35** | **29** | ⇑P | | **Pn** | **18 13 48.7** | **+0.1** |
| | 21nm,0.9s | | | | | | | |
| **MAKZ** | **Makanchi** | **13.21** | **36** | ⇑P | | **Pn** | **18 15 02.2** | **-1.5** |
| | 3.0nm,0.9s | | | | | | | |
| **MK31** | **Makanchi Array** | **13.35** | **37** | ⇑P | | **Pn** | **18 15 04.9** | **-0.4** |
| | 3.6nm,1.3s,baz=222,slow=16,SNR=7.9 | | | | | | | |
| **AB31** | **Akbulak array** | **14.89** | **332** | ⇑P | | **Pn** | **18 15 24.1** | **-0.2** |
| | 0.8nm,0.6s,baz=145,slow=13,SNR=20 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.11** | **19** | ⇑P | | **Pn** | **18 15 25.9** | **-1.1** |
| | 1.9nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **16.47** | **359** | ⇑P | | P | 18 15 33.9 | -8.5 |
| | 5.5nm,1.2s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.58** | **331** | ⇓P | | **P** | **18 15 44.4** | **+0.6** |
| | 2.0nm,0.5s | | | | | | | |

**KRSC 10 18:16:44.0**±1.5,**55°.03N**×**165°.53E,h40**km±14km,**ML3.9,**
**Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **0.31** | **56** | *i* P | | Pn | 18 16 52.8 | +0.5 |
| BKI | | | | *eS* | | Sn | 18 16 57.4 | -0.8 |
| **KBTR** | **Krutoberegovo** | **1.94** | **309** | *e*P | | Pn | 18 17 16.1 | +1.8 |
| KBTR | | | | *eS* | | Sn | 18 17 38.6 | +1.2 |
| **KBG** | **Krutoberegovo** | **2.02** | **309** | *e*P | | Pn | 18 17 17.2 | +1.8 |
| KBG | | | | *eS* | | Sn | 18 17 41.1 | +1.8 |
| **MKZ** | **Mys Kozlova** | **2.25** | **259** | *e*P | | Pn | 18 17 22.1 | +3.5 |
| MKZ | | | | *eS* | | Sn | 18 17 48.5 | +3.4 |
| **SMKR** | **Semkarok** | **2.77** | **306** | *e*P | | Pn | 18 17 27.3 | +1.5 |
| **BDR** | **Baidarnaya** | **2.88** | **304** | *e*P | | Pn | 18 17 31.1 | +3.7 |
| **BZGR** | **Bezymyannyi-Gr** | **2.90** | **290** | *e*P | | Pn | 18 17 32.4 | +4.8 |
| **TUMD** | **Tumrok D** | **2.95** | **275** | *e*P | | Pn | 18 17 32.8 | +4.5 |
| **BZWR** | **Bezymyannyi-We** | **3.01** | **290** | *e*P | | Pn | 18 17 34.4 | +5.1 |
| **KLY** | **Klyuchi** | **3.04** | **297** | *e*P | | Pn | 18 17 32.6 | +3.1 |
| KLY | | | | *eS* | | Sn | 18 18 07.2 | +2.5 |
| **KRSR** | **Krestovskiy** | **3.06** | **295** | *e*P | | Pn | 18 17 33.3 | +3.5 |
| **KIRR** | **Kirishev** | **3.09** | **289** | *e*P | | Pn | 18 17 35.5 | +5.2 |
| **TUMR** | **Tumrok** | **3.10** | **277** | *e*P | | Pn | 18 17 35.2 | +4.8 |
| **KMNR** | **Kamenistaya** | **3.10** | **286** | *e*P | | Pn | 18 17 35.5 | +5.0 |
| **KPT** | **Kopyto** | **3.16** | **289** | *e*P | | Pn | 18 17 36.5 | +5.3 |
| **KOZ** | **Kozyrevsk** | **3.37** | **290** | *e*P | | Pn | 18 17 38.2 | +4.1 |
| **KII** | **Karymskiy** | **3.68** | **257** | *e*P | | Pn | 18 17 43.2 | +4.8 |
| **SPN** | **Mys Shipunski** | **3.78** | **241** | *e*P | | Pn | 18 17 43.1 | +3.5 |
| SPN | | | | *eS* | | Sn | 18 18 24.1 | +1.3 |
| **NLC** | **Nalytchevo** | **4.09** | **245** | *e*S | | Sn | 18 18 32.8 | +2.4 |
| **SDLR** | **Sedlovina** | **4.28** | **248** | *e*P | | Pn | 18 17 51.3 | +4.6 |
| **SMAR** | **Somma** | **4.33** | **249** | *e*P | | Pn | 18 17 52.1 | +4.6 |
| **KRER** | **Koryakskii** | **4.34** | **249** | *e*P | | Pn | 18 17 53.0 | +5.4 |
| **UGLR** | **Uglovaya** | **4.35** | **248** | *e*P | | Pn | 18 17 52.2 | +4.7 |
| **AVH** | **Avacha** | **4.37** | **249** | *e*P | | Pn | 18 17 53.0 | +5.2 |
| AVH | | | | *eS* | | Sn | 18 18 41.2 | +3.8 |
| **KOK** | **Koryaka** | **4.41** | **250** | *e*P | | Pn | 18 17 53.7 | +5.3 |
| **OSSR** | **Ossora** | **4.44** | **343** | *e*P | | Pn | 18 17 52.0 | +3.4 |
| **DALK** | **Dalny** | **4.47** | **246** | *e*P | | Pn | 18 17 53.6 | +4.5 |
| **PET** | **Petropavlovsk** | **4.53** | **246** | *e*P | | Pn | 18 17 54.6 | +4.7 |
| PET | | | | *eS* | | Sn | 18 18 43.9 | +2.7 |
| **GNL** | **Ganaly** | **4.63** | **256** | *e*P | | Pn | 18 17 56.6 | +5.1 |
| **KRMR** | **Karymshinskiy** | **4.90** | **246** | *e*P | | Pn | 18 18 00.1 | +5.1 |
| KRMR | | | | *eS* | | Sn | 18 18 54.0 | +3.7 |
| **RUS** | **Russkaya** | **4.91** | **241** | *e*P | | Pn | 18 17 58.6 | +3.4 |
| **MTVR** | **Mutnovka** | **5.05** | **243** | *e*P | | Pn | 18 18 02.1 | +4.9 |
| MTVR | | | | *eS* | | Sn | 18 18 57.1 | +2.8 |
| **GRL** | **Gorelyy** | **5.07** | **244** | *e*P | | Pn | 18 18 02.9 | +5.4 |
| **APC** | **Apacha** | **5.37** | **250** | P | | Pn | 18 18 07.9 | +6.4 |
| **TILK** | **Tilichiki** | **5.44** | **3** | *e*P | | Pn | 18 18 07.0 | +4.6 |
| **KDTR** | **Khodutka, Kamc** | **5.50** | **237** | *e*P | | Pn | 18 18 07.2 | +3.9 |

*NEIC **10** 18:32:08.5±1.5,7°.67S±0°.08×128°.07E±0°.07,h158km±4km, mb4.2/21, Error ellipse: s-maj=11.8km s-min=9.7km az=145.0*
*IDC **10** 18:32:09.9±1.5,7°.57S×127°.81E,h160km±14km,mb3.7/8, mb1 3.8/11,mb1mx3.5/35,mbtmp4.3/11,MS2.6/2, Ms1 2.6/2,ms1mx2.3/69,Error ellipse: s-maj=14.6km s-min=11.6km az=109.0*
*DJA **10** 18:32:09.7±0.4,8°.5S±3°×12°.8E±°,h214km±13km,M4.5/12, mB4.9/7,mb4.5/7,MLv4.7/12,Mw(mB)4.2/7*

**ISC 10 18:32:07.3**±0.4,**7°.73S**±0°.04×**128°.00E**±0°.05,**h142**km,**n94,**
σ2**8**19/97,**mb4.2**/28,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **3.28** | **95** | P | | Pn | 18 33 04.9 | +6.9 |
| **SAUI** | **Saumlaki** | **3.28** | **95** | | | **Pn** | **18 32 58.6** | **+0.6** |
| SAUI | | | | | | Sn | **18 33 37.1** | **-0.1** |
| **BNDI** | **Bandanaira** | **3.71** | **31** | P | | Pn | 18 33 08.3 | +4.7 |
| **AAI** | **Ambon** | **4.02** | **3** | P | | **Pn** | **18 33 11.6** | **+3.9** |
| **SOEI** | **Soe** | **4.20** | **241** | P | | **Pn** | **18 33 14.0** | **+3.8** |
| **SOEI** | **Soe** | **4.20** | **241** | Pn | | **Pn** | **18 33 13.3** | **+3.1** |
| **MSAI** | **Masohi** | **4.45** | **12** | P | | **Pn** | **18 33 17.3** | **+3.9** |
| **BATI** | **Baumata** | **4.94** | **240** | P | | **Pn** | **18 33 23.4** | **+3.5** |
| | 164nm,0.3s,baz=147,slow=2.4,SNR=124 | | | | | | | |
| BATI | | | | S | | **Sn** | **18 34 17.3** | **+0.9** |
| | 137nm,0.3s,baz=121,slow=5.8,SNR=10 | | | | | | | |
| **BATI** | **Baumata** | **4.94** | **240** | P | | **Pn** | **18 33 23.4** | **+3.5** |
| **MMRI** | **Maumere** | **5.78** | **261** | P | | **Pn** | **18 33 33.1** | **+2.1** |
| **MMRI** | **Maumere** | **5.78** | **261** | Pn | | **Pn** | **18 33 32.5** | **+1.5** |
| **MMRI** | **Maumere** | **5.78** | **261** | P | | **Pn** | **18 33 33.9** | **+2.9** |
| | 69nm,0.4s | | | | | | | |
| **MTN** | **Manton Dam** | **5.94** | **149** | Pn | | **Pn** | **18 33 32.0** | **-1.2** |
| **SANI** | **Sanana** | **5.99** | **340** | P | | **Pn** | **18 33 37.2** | **+3.3** |
| | 0.1nm24nm,0.7s | | | | | | | |
| **SANI** | **Sanana** | **5.99** | **340** | P | | **Pn** | **18 33 37.5** | **+3.6** |
| **FAKI** | **Fak Fak** | **6.38** | **42** | P | | **Pn** | **18 33 40.9** | **+1.8** |
| | 0.3nm41nm,0.7s | | | | | | | |
| **FAKI** | **Fak Fak** | **6.38** | **42** | Pn | | **Pn** | **18 33 39.9** | **+0.7** |
| **SIJI** | **Sorong** | **7.55** | **26** | P | | **Pn** | **18 33 57.4** | **+2.6** |
| | 27nm,0.3s,baz=211,slow=10,SNR=123 | | | | | | | |
| SIJI | | | | S | | **Sn** | **18 35 19.2** | **+0.1** |
| | 1.3nm,0.3s,baz=69,slow=23,SNR=1.3 | | | | | | | |
| **SWI** | **Sorong** | **7.55** | **26** | P | | **Pn** | **18 33 57.3** | **+2.4** |
| | 0.5nm2µm109nm,0.6s | | | | | | | |
| **BASI** | **Baing, Sumba** | **7.74** | **251** | P | | **Pn** | **18 33 58.3** | **+1.0** |
| | 0.4nm1µm65nm,0.4s | | | | | | | |
| **KNRA** | **Kununurra** | **7.93** | **175** | Pn | | **Pn** | **18 34 02.3** | **+2.4** |
| **WBSI** | **Waikabubak, Su** | **8.72** | **257** | P | | **Pn** | **18 34 09.9** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **10.56** | **192** | P | | **Pn** | **18 34 35.6** | **+0.7** |
| | 4.6nm,0.3s,baz=26,slow=10,SNR=42 | | | | | | | |
| FITZ | | | | S | | **Sn** | **18 36 28.8** | **-2.8** |
| | 6.9nm,0.3s,baz=167,slow=21,SNR=6.1 | | | | | | | |
| FITZ | | | | LR | | LR | 18 39 48.7 | |
| | comp=Z,32nm,19.0s,baz=354,slow=43 | | | | | | | |
| **WB0** | **Warramunga Arr** | **13.48** | **153** | Pn | | **Pn** | **18 35 13.8** | **+0.8** |
| **WRAB** | **Tennant Creek** | **13.60** | **154** | P | | **Pn** | **18 35 15.0** | **+0.4** |
| **WRA** | **Warramunga Arr** | **13.61** | **154** | P | | **Pn** | **18 35 15.8** | **+1.1** |
| | 1.7nm,0.3s,baz=324,slow=14,SNR=42 | | | | | | | |
| WRA | | | | S | | **Sn** | **18 37 41.1** | **-4.2** |
| | 4.1nm,0.3s,baz=330,slow=22,SNR=6.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.61** | **154** | P | | **Pn** | **18 35 15.1** | **+0.4** |
| **WB2** | **Warramunga Arr** | **13.61** | **154** | Pn | | **Pn** | **18 35 15.3** | **+0.6** |
| **WR0** | **Warramunga Arr** | **13.71** | **153** | | | **Pn** | **18 35 15.9** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **13.73** | **266** | P | | **P** | **18 35 19.7** | **-0.4** |
| **MBWA** | **Marble Bar** | **15.56** | **210** | | | **Pn** | **18 35 39.7** | **+0.6** |
| MBWA | | | | IAmb | | IAmb | 18 35 56.9 | |
| | comp=Z,7.6nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **15.56** | **210** | P | | **P** | **18 35 42.0** | **+1.6** |
| **PSA00** | **Pilbara Seismi** | **15.85** | **209** | P | | **Pn** | **18 35 44.0** | **+1.3** |
| PSA00 | | | | IAmb | | IAmb | 18 35 46.2 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **15.85** | **209** | P | | **Pn** | **18 35 43.5** | **+0.8** |
| PSA00 | | | | IAmb | | IAmb | 18 35 46.2 | |
| | comp=Z,36nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **15.85** | **209** | P | | **P** | **18 35 45.6** | **+2.0** |
| **COEN** | **Coen** | **16.13** | **114** | | | **Pn** | **18 35 46.0** | **-0.3** |
| COEN | | | | IAmb | | IAmb | 18 35 55.5 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **16.13** | **114** | P | | **P** | **18 35 51.4** | **+4.6** |
| **AS31** | **Alice Springs** | **16.83** | **161** | | | **P** | **18 35 54.9** | **+0.5** |
| AS31 | | | | IAmb | | IAmb | 18 36 01.4 | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **16.83** | **161** | P | | **Pn** | **18 35 58.0** | **+3.3** |
| | comp=Z,1.7nm,0.3s,baz=339,slow=12,SNR=99 | | | | | | | |
| ASAR | | | | S | | **S** | **18 38 57.1** | **-5.4** |
| | comp=Z,1.7nm,0.3s,baz=321,slow=17,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.83** | **161** | P | | **P** | **18 35 54.3** | **-0.2** |
| **QIS** | **Mount Isa** | **16.99** | **140** | P | | **Pn** | **18 36 00.7** | **+4.0** |
| **WRKA** | **Warakurna** | **17.21** | **179** | P | | **Pn** | **18 36 03.0** | **+3.7** |
| **KKM** | **Kota Kinabalu** | **18.04** | **319** | P | | **P** | **18 36 07.2** | **-0.7** |
| **SBUM** | **Sibu** | **18.71** | **302** | P | | **P** | **18 36 14.7** | **-0.4** |
| **MTSU** | **Mount Surprise** | **18.95** | **125** | P | | **Pn** | **18 36 22.5** | **+2.6** |
| **PMG** | **Port Moresby** | **19.02** | **96** | P | | **P** | **18 36 22.4** | **+4.0** |
| | comp=Z,0.2nm,0.3s,baz=231,slow=14,SNR=2.3 | | | | | | | |
| PMG | | | | LR | | LR | 18 44 15.4 | |
| | comp=Z,22nm,20.7s,baz=186,slow=38 | | | | | | | |
| **KSM** | **Kuching** | **19.87** | **297** | P | | **P** | **18 36 28.2** | **+0.5** |
| **KSM** | **Kuching** | **19.87** | **297** | P | | **Pn** | **18 36 30.1** | **-0.7** |
| **MEEK** | **Meekatharra** | **20.81** | **204** | P | | Pn | 18 36 41.5 | -0.3 |
| **OOD** | **Oodnadatta** | **21.24** | **161** | P | | **P** | **18 36 46.9** | **+4.7** |
| **FORT** | **Forrest** | **22.93** | **180** | P | | **P** | **18 36 57.1** | **-2.1** |
| FORT | | | | IAmb | | IAmb | 18 37 16.5 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **22.93** | **180** | P | | **P** | **18 37 03.2** | **+4.0** |
| | comp=Z,22nm,0.9s | | | | | | | |
| **MULG** | **Mulgathing** | **23.14** | **167** | P | | **P** | **18 37 05.0** | **+3.8** |
| **BBOO** | **Buckleboo** | **26.05** | **164** | P | | **P** | **18 37 26.8** | **-0.8** |
| BBOO | | | | IAmb | | IAmb | 18 37 55.0 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **26.05** | **164** | P | | **P** | **18 37 31.2** | **+3.7** |
| **STKA** | **Stephens Creek** | **27.16** | **154** | P | | **P** | **18 37 39.9** | **+2.4** |
| | comp=Z,0.8nm,0.5s,baz=106,slow=21,SNR=1.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.16** | **154** | P | | **P** | **18 37 39.6** | **+2.1** |
| **IPM** | **Ipoh** | **29.52** | **293** | P | | **P** | **18 37 58.1** | **-0.6** |
| IPM | | | | IAmb | | IAmb | 18 38 17.5 | |
| | comp=Z,8.9nm,1.0s | | | | | | | |
| **KULM** | **Kulim** | **30.20** | **295** | P | | **P** | **18 38 03.8** | **-0.8** |
| **RPSI** | **Rantau Prapat** | **30.80** | **289** | P | | **P** | **18 38 08.8** | **-1.1** |
| **PSI** | **Prapat** | **30.84** | **289** | P | | **P** | **18 38 08.8** | **-1.6** |
| | comp=Z,7.8nm,0.8s,baz=128,slow=6.7,SNR=16 | | | | | | | |
| **TPUB** | **Ta-pu** | **31.67** | **347** | P | | **P** | **18 38 14.0** | **-3.4** |
| **UBPT** | **Khong Chiam** | **31.96** | **316** | P | | **P** | **18 38 17.8** | **-2.2** |
| UBPT | | | | IAmb | | IAmb | 18 38 39.7 | |
| | comp=Z,6.8nm,1.3s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.72** | **313** | P | | **P** | **18 39 17.1** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=140,slow=6.7,SNR=12 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **18 41 27.4** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=164,slow=2.9,SNR=7.7 | | | | | | | |
| **PZH** | **PanZhiHua** | **42.51** | **324** | P | | **P** | **18 39 50.6** | **+1.6** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | | |
| **KSRS** | **Korea Array** | **44.95** | **360** | P | | **P** | **18 40 07.4** | **-0.7** |
| | comp=Z,1.4nm,0.6s,baz=176,slow=9.4,SNR=11 | | | | | | | |
| **XAN** | **Xi'an** | **45.31** | **338** | P | | **P** | **18 40 09.8** | **-1.3** |
| XAN | | | | pP | | pP | 18 40 14.7 | -27 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **LZH** | **Lanzhou** | **49.15** | **334** | *e*P | | **P** | **18 40 40.3** | **-0.7** |
| LZH | | | | pP | | pP | 18 40 46.5 | -26 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.65** | **344** | *e*P | | **P** | **18 40 53.8** | **+1.6** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,5.3s | | | | | | | |
| **ODAN** | **Odare** | **52.26** | **313** | *e*P | | **P** | **18 41 03.9** | **-0.7** |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **52.31** | **313** | *e*P | | **P** | **18 41 03.5** | **-1.6** |
| | comp=Z,4.1nm,0.5s | | | | | | | |
| **RAMN** | **Ramite** | **52.89** | **312** | *e*P | | **P** | **18 41 08.2** | **-1.0** |
| | comp=Z,8.5nm,0.6s | | | | | | | |
| **GTA** | **Gaotai** | **53.69** | **333** | *e*P | | **P** | **18 41 13.6** | **-1.1** |
| GTA | | | | pP | | pwP | 18 41 52.2 | -0.4 |
| GTA | | | | sP | | sP | 18 42 10.7 | +9.5 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **GUN** | **Gumba** | **53.96** | **313** | *e*P | | **P** | **18 41 15.6** | **-1.6** |
| | comp=Z,10nm,0.6s | | | | | | | |
| **PKI** | **Pulchoki** | **54.12** | **312** | *e*P | | **P** | **18 41 16.9** | **-1.4** |
| | comp=Z,3.5nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **54.13** | **312** | *e*P | | **P** | **18 41 16.9** | **-1.4** |
| | comp=Z,2.5nm,0.4s | | | | | | | |
| **GKN** | **Gorkha** | **54.92** | **312** | *e*P | | **P** | **18 41 22.3** | **-1.6** |
| | comp=Z,5.9nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **55.56** | **311** | *e*P | | **P** | **18 41 27.2** | **-1.3** |
| **PYUN** | **Piuthan** | **56.20** | **311** | *e*P | | **P** | **18 41 31.7** | **-1.3** |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **58.53** | **343** | P | | **P** | **18 41 48.9** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=142,slow=7.5,SNR=6.9 | | | | | | | |
| **SONM** | **Songino Array** | **58.53** | **343** | IAmb | | IAmb | 18 41 50.6 | |
| | comp=Z,1.7nm,1.2s | | | | | | | |
| **WMQ** | **Urumqi** | **62.94** | **328** | *e*P | | **P** | **18 42 19.6** | **+0.8** |
| **MK31** | **Makanchi Array** | **67.77** | **328** | P | | **P** | **18 42 48.6** | **-1.1** |
| MK31 | | | | IAmb | | IAmb | 18 43 07.5 | |
| | comp=Z,3.5nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.77** | **328** | P | | **P** | **18 42 48.9** | **-0.9** |
| | comp=Z,1.0nm,0.5s,baz=121,slow=8.1,SNR=30 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.77** | **328** | P | | **P** | **18 42 48.7** | **-1.1** |
| **MAKZ** | **Makanchi** | **67.94** | **328** | P | | **P** | **18 42 49.2** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **71.37** | **335** | P | | **P** | **18 43 10.0** | **-1.6** |
| | comp=Z,0.9nm,0.3s,baz=149,slow=5.6,SNR=9.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.37** | **335** | P | | **P** | **18 43 10.6** | **-1.1** |
| **KURK** | **Kurchatov** | **72.12** | **330** | P | | **P** | **18 43 15.2** | **-1.0** |
| KURK | | | | IAmb | | IAmb | 18 43 17.2 | |
| | comp=Z,9.7nm,1.5s | | | | | | | |
| **TIXI** | **Tiksi** | **79.21** | **0** | P | | **P** | **18 43 54.8** | **-1.3** |
| TIXI | | | | IAmb | | IAmb | 18 44 04.9 | |
| | comp=Z,4.9nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **82.25** | **180** | P | | **P** | **18 44 14.1** | **+1.4** |
| | comp=Z,3.8nm,0.8s,baz=282,slow=1.1,SNR=17 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.00** | **281** | PKP | | **PKPdf** | **18 50 53.7** | **-1.9** |
| | comp=Z,0.6nm,0.8s,baz=65,slow=1.8,SNR=4.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **127.00** | **59** | PKP | | **PKPdf** | **18 50 54.4** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=270,slow=1.8,SNR=1.9 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.75** | **171** | PKPbc | | **PKPdf** | **18 51 31.8** | **+2.0** |
| | comp=Z,1.5nm,0.3s,baz=178,slow=6.1,SNR=4.9 | | | | | | | |

*IDC **10** 18:46:15.3±8.9,32°.76N×137°.42E,h115km±69km, mb2.9/4, mb1 3.1/5, mb1mx2.7/38, mbtmp3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KBAM** | **BAM** | **6.24** | **86** | *e*Pn | | **Pn** | **18 54 39.4** | **+1.6** |
| **UMZA** | **Um Al Zommool** | **7.01** | **150** | *e*Pn | | **Pn** | **18 54 50.0** | **+1.6** |
| **ARQ** | **Araqi** | **7.20** | **139** | P | | **Pn** | **18 54 50.6** | **-0.4** |
| **HOQ** | **Hoqain** | **7.50** | **133** | P | | **Pn** | **18 54 54.5** | **-0.6** |
| **WSAR** | **Wadi Sarin** | **8.61** | **129** | P | | **Pn** | **18 55 09.2** | **-1.2** |
| **DOK** | **Doka** | **10.50** | **165** | P | | **Pn** | **18 55 36.3** | **+0.1** |
| **WHFO** | **Wadi Hawf** | **11.11** | **168** | P | | **Pn** | **18 55 44.4** | **-0.3** |
| **SHAO** | **Shalim** | **11.47** | **159** | P | | **Pn** | **18 55 48.7** | **-0.9** |
| **DMTO** | **DMTO** | **11.56** | **163** | P | | **Pn** | **18 55 48.6** | **-2.3** |
| | SNR=7.2 | | | | | | | |
| **ABTO** | **Aybut** | **11.58** | **171** | P | | **Pn** | **18 55 50.4** | **-0.8** |

*NIC* ***10*** *19:03:11.5±0.0, 35°.24N×27°.85E, h2km±1km, Ml3.7/4*
*DDA* ***10*** *19:03:12.9±0.0, 35°.38N×27°.83E, h21km±2km, ML3.5*
*ISK* ***10*** *19:03:12.5, 35°.33N×27°.79E, h8km, ML3.5/21*
*ATH* ***10*** *19:03:13.6, 35°.41N×27°.83E, h31km±4km, ML3.3/5, Error ellipse: s-maj=5.9km s-min=1.5km az=349.0*
*IDC* ***10*** *19:03:14.2±4.4, 35°.44N×27°.84E, h33km±42km, mb3.6/5, mb1 3.6/10, mb1mx3.2/51, mbtmp3.7/10, ML3.4/5, MS2.9/1, Ms1 2.9/1, ms1mx2.3/78, Error ellipse: s-maj=25.8km s-min=17.6km az=168.0*
*THE* ***10*** *19:03:14.8, 35°.39N×27°.82E, h6km±3km, ML3.2/2, Error ellipse: s-maj=4.0km s-min=0.7km az=131.0*
*GII* ***10*** *19:03:16.5±0.0, 35°.13N×28°.02E, h20km±2km, Mm3.5/4*

**ISC 10 19:03:12.6±1.5, 35°.30N±0°.03×27°.86E±0°.03, h18km±6km, n101, σ1°95/145, mb3.8/5, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ARG** | **Arkhangelos** | **0.94** | **13** | P | | **Pb** | **19 03 31.0** | **+0.6** |
| ARG | | | | S | | **Sn** | **19 03 44.2** | **+0.2** |
| | 2μm,0.7s | | | | | | | |
| **ARG** | **Arkhangelos** | **0.94** | **13** | P | | **Pb** | **19 03 29.9** | **-0.5** |
| ARG | | | | S | | **Sb** | **19 03 42.5** | **-0.1** |
| ARG | | | | AML | | AML | 19 03 45.7 | |
| | comp=N,3578μm,0.8s | | | | | | | |
| ARG | | | | AML | | AML | 19 03 48.0 | |
| | comp=E,5591μm,0.5s | | | | | | | |
| **ARG** | **Arkhangelos** | **0.94** | **13** | PG | | **Pb** | **19 03 30.8** | **+0.4** |
| ARG | | | | SG | | **Sn** | **19 03 43.9** | **-0.1** |
| **ARG** | **Arkhangelos** | **0.94** | **13** | P | | **Pb** | **19 03 30.6** | **+0.1** |
| **ZKR** | **Zakros** | **1.36** | **263** | P | | **Pn** | **19 03 37.9** | **+1.2** |
| ZKR | | | | S | | **Sn** | **19 03 56.1** | **+1.9** |
| | comp=E,685nm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **1.36** | **263** | P | | **Pn** | **19 03 37.5** | **+0.8** |
| ZKR | | | | AML | | AML | 19 04 07.5 | |
| | comp=N,1313μm,0.6s | | | | | | | |
| ZKR | | | | AML | | AML | 19 04 07.7 | |
| | comp=E,1967μm,0.7s | | | | | | | |
| **ZKR** | **Zakros** | **1.36** | **263** | PN | | **Pn** | **19 03 37.2** | **+0.5** |
| **ZKR** | **Zakros** | **1.36** | **263** | P | | **Pn** | **19 03 37.4** | **+0.8** |
| ZKR | | | | S | | **Sb** | **19 03 56.7** | **+2.2** |
| ZKR | | | | AMI | | | 19 04 06.0 | |
| | comp=E,1.2nm,0.7s | | | | | | | |
| ZKR | | | | AMI | | | 19 04 06.0 | |
| | comp=E,1.2nm,0.7s | | | | | | | |
| ZKR | | | | AMI | | | 19 04 06.5 | |
| | comp=E,1.9nm,0.7s | | | | | | | |
| ZKR | | | | AMI | | | 19 04 06.5 | |
| | comp=E,1.9nm,0.7s | | | | | | | |
| **NISR** | **Nisiros** | **1.44** | **336** | P | | **Pn** | **19 03 38.4** | **+0.6** |
| **NISR** | **Nisiros** | **1.44** | **336** | P | | **Pn** | **19 03 37.9** | **+0.1** |
| **MRSB** | **Marmaris-Mugla** | **1.44** | **11** | PN | | **Pb** | **19 03 39.3** | **+0.3** |
| MRSB | | | | SN | | **Sg** | **19 03 58.8** | **-0.5** |
| **STIA** | **Sitia Lasithi** | **1.45** | **267** | P | | **Pn** | **19 03 39.4** | **+1.5** |
| STIA | | | | S | | **Sb** | **19 03 58.9** | **+1.7** |
| **TURN** | **Turunc** | **1.51** | **12** | PN | | **Pb** | **19 03 40.4** | **+0.3** |
| TURN | | | | SN | | **Sg** | **19 04 00.6** | **-0.8** |
| **TURN** | **Turunc** | **1.51** | **12** | P | | **Pb** | **19 03 40.6** | **+0.6** |
| TURN | | | | S | | **Sb** | **19 03 58.9** | **0.0** |
| TURN | | | | *i* AML | | AML | 19 04 07.0 | |
| | comp=E,582nm,0.6s | | | | | | | |
| **KSL** | **Kastellorizon** | **1.64** | **58** | P | | **Pn** | **19 03 42.1** | **+1.5** |
| **KSL** | **Kastellorizon** | **1.64** | **58** | P | | **Pn** | **19 03 41.9** | **+1.4** |
| **KSL** | **Kastellorizon** | **1.64** | **58** | P | | **Pn** | **19 03 42.1** | **+1.5** |
| KSL | | | | S | | **Sg** | **19 04 05.7** | **+0.2** |
| **DALY** | **Dalyan (Mula)** | **1.65** | **23** | PN | | **Pn** | **19 03 41.9** | **+1.3** |
| **FETY** | **Fethiye** | **1.67** | **36** | P | | **Pb** | **19 03 42.4** | **-0.3** |
| **FETY** | **Fethiye** | **1.67** | **36** | PN | | **Pb** | **19 03 42.5** | **-0.3** |
| **FETY** | **Fethiye** | **1.67** | **36** | P | | **Pb** | **19 03 42.6** | **-0.2** |
| FETY | | | | S | | **Sg** | **19 04 10.7** | **+4.4** |
| **AKAS** | **Kas** | **1.70** | **56** | PN | | **Pn** | **19 03 43.1** | **+1.6** |
| **AKAS** | **Kas** | **1.70** | **56** | P | | **Pn** | **19 03 43.1** | **+1.6** |
| AKAS | | | | S | | **Sg** | **19 04 06.5** | **-1.0** |
| **FRMA** | **Ierapetra Chan** | **1.77** | **261** | P | | **Pn** | **19 03 43.0** | **+0.8** |
| **BODT** | **Bodrum** | **1.82** | **346** | PN | | **Pn** | **19 03 43.7** | **+0.7** |
| **NPS** | **Neapolis** | **1.84** | **270** | P | | **Pn** | **19 03 45.7** | **+2.5** |
| NPS | | | | AML | | AML | 19 04 22.5 | |
| | comp=N,1169μm,0.6s | | | | | | | |
| NPS | | | | AML | | AML | 19 04 22.8 | |
| | comp=E,1589μm,0.6s | | | | | | | |
| **YER** | **Yerkesik** | **1.87** | **10** | PN | | **Pb** | **19 03 45.6** | **-0.6** |
| **MULA** | **Mugla, Merkez-** | **1.99** | **11** | P | | **Pb** | **19 03 48.2** | **-0.2** |
| MULA | | | | S | | **Sb** | **19 04 13.5** | **+0.6** |
| **MLSB** | **Milas** | **2.00** | **358** | PN | | **Pn** | **19 03 46.7** | **+1.2** |
| **CAME** | **Cameli-Denizli** | **2.02** | **35** | PN | | **Pn** | **19 03 47.4** | **+1.5** |
| **CAEL** | **Denizli, Camel** | **2.17** | **32** | P | | **Pn** | **19 03 50.1** | **+2.1** |
| CAEL | | | | S | | **Sg** | **19 04 29.4** | **+6.8** |
| CAEL | | | | *i* AML | | AML | 19 04 36.0 | |
| | comp=E,362nm,0.7s | | | | | | | |
| CAEL | | | | *i* AML | | AML | 19 04 42.0 | |
| | comp=E,478nm,0.7s | | | | | | | |
| **ELL** | **Elmali** | **2.20** | **48** | PN | | **Pn** | **19 03 50.9** | **+2.5** |
| **ELL** | **Elmali** | **2.20** | **48** | P | | **Pn** | **19 03 50.8** | **+2.5** |
| **DDIM** | **Aydin, Didim** | **2.21** | **347** | P | | **Pb** | **19 03 51.0** | **-1.1** |
| DDIM | | | | S | | **Sb** | **19 04 17.5** | **-1.6** |
| DDIM | | | | *i* AML | | AML | 19 04 30.0 | |
| | comp=E,305nm,1.9s | | | | | | | |
| DDIM | | | | *i* AML | | AML | 19 04 49.0 | |
| | comp=E,355nm,2.2s | | | | | | | |
| **SANT** | **Santorini** | **2.23** | **300** | P | | **Pn** | **19 03 49.6** | **+0.9** |
| **SANT** | **Santorini** | **2.23** | **300** | PN | | **Pn** | **19 03 49.6** | **+0.9** |
| **HRKL** | **Herakleio** | **2.26** | **271** | PN | | **Pn** | **19 03 50.7** | **+1.7** |
| **AKUM** | **Antalya-Kumluc** | **2.26** | **62** | P | | **Pn** | **19 03 51.0** | **+1.9** |
| AKUM | | | | S | | **Sb** | **19 04 20.9** | **+0.4** |
| **THR6** | **Thira Island,** | **2.27** | **299** | P | | **Pn** | **19 03 50.0** | **+0.9** |
| **THR3** | **Thira Island,** | **2.29** | **300** | P | | **Pn** | **19 03 49.8** | **+0.4** |
| **TAVA** | **DENIZLI_Tavas** | **2.33** | **21** | P | | **Pn** | **19 03 51.5** | **+1.5** |
| TAVA | | | | S | | **Sb** | **19 04 23.8** | **+1.2** |
| TAVA | | | | *i* AML | | AML | 19 04 37.0 | |
| | comp=E,230nm,0.6s | | | | | | | |
| **GOLH** | **Golhisar** | **2.38** | **35** | P | | **Pn** | **19 03 53.3** | **+2.5** |
| GOLH | | | | S | | **Sb** | **19 04 21.8** | **-2.2** |
| **IDI** | **Anoyia** | **2.43** | **271** | Pn | | **Pn** | **19 03 53.2** | **+1.8** |
| | comp=E,8.0nm,0.3s,baz=91,slow=16,SNR=49 | | | | | | | |
| IDI | | | | Sn | | **Sn** | **19 04 23.2** | **+2.4** |
| | comp=E,13nm,0.3s,baz=300,slow=9.7,SNR=3.9 | | | | | | | |
| IDI | | | | LR | | LR | 19 05 12.7 | |
| | comp=E,51nm,19.4s,baz=358,slow=49 | | | | | | | |
| **IDI** | **Anoyia** | **2.43** | **271** | P | | **Pn** | **19 03 53.4** | **+2.0** |
| IDI | | | | AML | | AML | 19 04 33.7 | |
| | comp=E,477μm,0.9s | | | | | | | |
| IDI | | | | AML | | AML | 19 04 36.5 | |
| | comp=N,336μm,0.6s | | | | | | | |
| **IDI** | **Anoyia** | **2.43** | **271** | PN | | **Pn** | **19 03 52.9** | **+1.4** |
| **GCAM** | **G?zelcaml?** | **2.45** | **348** | PN | | **Pn** | **19 03 52.5** | **+0.8** |
| **GCAM** | **G?zelcaml?** | **2.45** | **348** | P | | **Pn** | **19 03 51.4** | **-0.3** |
| GCAM | | | | S | | **Sg** | **19 04 29.1** | **-2.4** |
| **SIVA** | **Sivas** | **2.52** | **265** | P | | **Pn** | **19 03 54.7** | **+2.2** |
| SIVA | | | | AML | | AML | 19 04 42.2 | |
| | comp=N,788μm,0.8s | | | | | | | |
| SIVA | | | | AML | | AML | 19 04 46.7 | |
| | comp=E,853μm,0.6s | | | | | | | |
| **SMG** | **Samos** | **2.55** | **341** | P | | **Pn** | **19 03 53.5** | **+0.5** |
| **KORT** | **Korkueli** | **2.64** | **49** | PN | | **Pn** | **19 03 57.3** | **+2.9** |
| **BUCA** | **Burdur, Bucak-** | **2.98** | **46** | P | | **Pn** | **19 04 02.5** | **+3.5** |
| BUCA | | | | S | | **Sb** | **19 04 40.7** | **-0.5** |
| **BRDR** | **BURDUR-Merkez** | **2.98** | **36** | P | | **Pn** | **19 04 01.6** | **+2.5** |
| BRDR | | | | S | | **Sg** | **19 04 45.2** | **-3.2** |
| **VAM** | **Vamos** | **3.00** | **273** | P | | **Pn** | **19 04 01.7** | **+2.6** |
| **GVD** | **Gavdhos** | **3.13** | **263** | PN | | **Pn** | **19 04 03.1** | **+2.1** |
| **BASM** | **Basmaki-Afyon** | **3.16** | **33** | PN | | **Pn** | **19 04 04.2** | **+2.7** |
| **IMMV** | **Iera Moni Meta** | **3.17** | **274** | PN | | **Pn** | **19 04 03.7** | **+2.1** |
| **KULA** | **Kula-Manisa** | **3.28** | **11** | PN | | **Pn** | **19 04 05.8** | **+2.7** |
| **PASA** | **Karahalli, USA** | **3.31** | **23** | P | | **Pn** | **19 04 03.6** | **0.0** |
| PASA | | | | S | | **Sn** | **19 04 44.8** | **+2.2** |
| **SUTC** | **Sutluce-Ispart** | **3.34** | **48** | PN | | **Pn** | **19 04 07.5** | **+3.5** |
| **OSC1** | **CSNet OBS 1** | **3.34** | **121** | P | | **Pn** | **19 04 05.1** | **+1.1** |
| **KEPZ** | **Antalya-Kepez** | **3.43** | **61** | P | | **Pn** | **19 04 07.4** | **+2.2** |
| KEPZ | | | | S | | **Sn** | **19 04 44.8** | **-0.5** |
| **KZIL** | **AFYON_Kizioren** | **3.48** | **31** | P | | **Pb** | **19 04 16.6** | **+2.9** |
| KZIL | | | | S | | **Sg** | **19 05 00.5** | **-3.8** |
| **USAK** | **Uak-Merkez** | **3.54** | **15** | P | | **Pn** | **19 04 06.9** | **+0.2** |
| **AKMS** | **Akamas** | **3.68** | **93** | P | | **Pn** | **19 04 09.7** | **+1.2** |
| AKMS | | | | AMI | | | 19 04 54.5 | |
| | comp=E,0.3nm,0.2s | | | | | | | |
| AKMS | | | | AMI | | | 19 04 54.7 | |
| | comp=E,0.4nm,0.2s | | | | | | | |
| **GAZI** | **Gazipasa** | **3.74** | **74** | P | | **Pn** | **19 04 10.5** | **+1.0** |
| GAZI | | | | S | | **Sn** | **19 04 50.2** | **-2.9** |
| **SEDI** | **Konya, Seydise** | **3.81** | **54** | P | | **Pn** | **19 04 13.3** | **+3.6** |
| SEDI | | | | S | | **Sn** | **19 04 59.5** | **+4.6** |
| **SEYD** | **Seydisehir-KON** | **3.84** | **56** | PN | | **Pn** | **19 04 14.7** | **+3.8** |
| **ALFC** | **Alefka** | **3.88** | **91** | P | | **Pn** | **19 04 12.5** | **+1.1** |
| ALFC | | | | AMI | | | 19 04 59.5 | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| ALFC | | | | AMI | | | 19 04 59.7 | |
| | comp=E,0.4nm,0.7s | | | | | | | |
| **NATA** | **Nata** | **3.90** | **96** | P | | **Pn** | **19 04 13.0** | **+1.4** |
| **YVAC** | **Isparta, Yalva** | **4.02** | **41** | P | | **Pn** | **19 04 17.5** | **+4.1** |
| YVAC | | | | S | | **Sn** | **19 05 03.0** | **+2.9** |
| **HDMB** | **Hadim** | **4.10** | **65** | PN | | **Pn** | **19 04 18.4** | **+3.9** |
| **SZAC** | **Souni** | **4.16** | **96** | P | | **Pn** | **19 04 16.6** | **+1.4** |
| SZAC | | | | AMI | | | 19 05 06.2 | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| SZAC | | | | AMI | | | 19 05 06.2 | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| SZAC | | | | S | | **Sn** | **19 05 06.8** | **+3.5** |
| **OSC2** | **CSNet OBS 4** | **4.27** | **120** | P | | **Pn** | **19 04 18.2** | **+1.5** |
| **ERMK** | **Ermenek** | **4.31** | **70** | P | | **Pn** | **19 04 20.4** | **+2.9** |
| ERMK | | | | S | | **Sn** | **19 05 09.2** | **+1.8** |
| ERMK | | | | *i* AML | | AML | 19 05 21.0 | |
| | comp=E,88nm,0.6s | | | | | | | |
| ERMK | | | | *i* AML | | AML | 19 05 28.0 | |
| | comp=E,63nm,0.6s | | | | | | | |
| **ASGA** | **Asgata** | **4.45** | **95** | P | | **Pn** | **19 04 20.3** | **+1.1** |
| ASGA | | | | S | | **Sn** | **19 05 13.0** | **+2.6** |
| **CSS** | **Mathiatis** | **4.50** | **93** | P | | **Pn** | **19 04 20.6** | **+0.8** |
| **KKBE** | **Karaman, Kazim** | **4.53** | **63** | P | | **Pn** | **19 04 23.3** | **+2.9** |
| KKBE | | | | S | | **Sn** | **19 05 10.5** | **-2.2** |
| **MVOU** | **Mavrovouni** | **4.74** | **92** | P | | **Pn** | **19 04 24.4** | **+1.4** |
| **KERG** | **Konya-Eregli** | **5.48** | **65** | P | | **Pn** | **19 04 36.1** | **+2.7** |
| KERG | | | | S | | **Sn** | **19 05 33.6** | **-2.5** |
| **BRTR** | **Keskin Array B** | **6.38** | **44** | Pn | | **Pn** | **19 04 46.7** | **+1.0** |
| | comp=E,0.1nm,0.3s,baz=186,slow=12,SNR=1.5 | | | | | | | |
| MMA0B | **Mount Meron ar** | **6.65** | **108** | Pn | | **Pn** | **19 04 52.1** | **+2.6** |
| MMA0B | | | | Sn | | **Sn** | **19 06 04.1** | **-0.8** |
| **MMAI** | **Mount Meron Ar** | **6.65** | **108** | Pn | | **Pn** | **19 04 49.9** | **+0.3** |
| | comp=E,5.5nm,0.3s,baz=287,slow=13,SNR=37 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **19 06 02.9** | **-2.0** |
| | comp=E,1.4nm,0.3s,baz=295,slow=12,SNR=1.5 | | | | | | | |
| **GEM** | **Giv'at Ha'Em** | **6.79** | **106** | Pn | | **Pn** | **19 04 52.3** | **+1.0** |
| **NATI** | **Neve Ativ** | **6.83** | **105** | Pn | | **Pn** | **19 04 52.3** | **+0.5** |
| NATI | | | | Sn | | **Sn** | **19 06 09.9** | **+0.9** |
| **MMLI** | **Mount Malkishu** | **6.90** | **112** | Pn | | **Pn** | **19 04 54.1** | **+1.2** |
| MMLI | | | | Sn | | **Sn** | **19 06 10.9** | **-0.1** |
| **AMAZ** | **Amatzia** | **6.99** | **120** | Pn | | **Pn** | **19 04 55.4** | **+1.3** |
| AMAZ | | | | Sn | | **Sn** | **19 06 13.1** | **0.0** |
| **HMDT** | **Nahal Hemdat** | **7.07** | **113** | Pn | | **Pn** | **19 04 56.3** | **+1.2** |
| HMDT | | | | Sn | | **Sn** | **19 06 15.1** | **+0.1** |
| **YTIR** | **Yattir** | **7.23** | **121** | Pn | | **Pn** | **19 04 59.0** | **+1.6** |
| YTIR | | | | Sn | | **Sn** | **19 06 18.4** | **-0.7** |
| **DSI** | **Dead Sea** | **7.30** | **118** | Pn | | **Pn** | **19 04 59.7** | **+1.4** |
| **GHAJ** | **Ghor Haditha** | **7.58** | **120** | Pn | | **Pn** | **19 05 04.9** | **+2.8** |
| **PRNI** | **Paran** | **7.77** | **127** | Pn | | **Pn** | **19 05 06.3** | **+1.5** |
| PRNI | | | | Sn | | **Sn** | **19 06 31.2** | **-1.2** |
| **MBRI** | **Mt Berech** | **8.09** | **131** | Pn | | **Pn** | **19 05 10.7** | **+1.4** |
| MBRI | | | | Sn | | **Sn** | **19 06 39.9** | **-0.5** |
| **ASF** | **Jabal al Asfar** | **8.14** | **110** | Pn | | **Pn** | **19 05 09.8** | **-0.2** |
| | comp=E,0.4nm,0.3s,baz=310,slow=17,SNR=1.8 | | | | | | | |
| ASF | | | | Sn | | **Sn** | **19 06 40.5** | **-1.2** |
| | comp=E,0.1nm,0.3s,baz=162,slow=14,SNR=1.6 | | | | | | | |
| **EIL** | **Elat** | **8.20** | **131** | Pn | | **Pn** | **19 05 11.7** | **+0.9** |
| | comp=E,0.6nm,0.3s,baz=291,slow=2.1,SNR=13 | | | | | | | |
| EIL | | | | Sn | | **Sn** | **19 06 39.4** | **-3.6** |
| | comp=E,1.3nm,0.3s,baz=56,slow=12,SNR=9.8 | | | | | | | |
| **EIL** | **Elat** | **8.20** | **131** | Pn | | **Pn** | **19 05 12.2** | **+1.5** |
| EIL | | | | Sn | | **Sn** | **19 06 41.4** | **-1.6** |
| **MLR** | **Muntele Rosu** | **10.29** | **352** | LR | | LR | 19 10 07.0 | |
| | comp=E,64nm,18.6s,baz=216,slow=41 | | | | | | | |
| **ESDC** | **Sonseca Array** | **25.55** | **289** | P | | **P** | **19 08 38.5** | **-1.9** |
| | comp=E,1.2nm,0.6s,baz=79,slow=9.5,SNR=12 | | | | | | | |
| **HFS** | **Hagfors** | **26.50** | **344** | P | | **P** | **19 08 46.3** | **-2.4** |
| | comp=E,1.7nm,0.8s,baz=161,slow=11,SNR=1.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.31** | **233** | P | | **P** | **19 09 40.9** | **+0.2** |
| | comp=E,1.0nm,0.5s,baz=36,slow=8.4,SNR=8.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.32** | **359** | P | | **P** | **19 09 55.3** | **-2.4** |
| | comp=E,1.8nm,0.8s,baz=173,slow=8.2,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.85** | **57** | P | | **P** | **19 11 01.9** | **+0.4** |
| | comp=E,0.2nm,0.5s,baz=278,slow=7.7,SNR=5.7 | | | | | | | |

**JMA 10 19:11:08.1±0.1, 35°.35N×140°.12E, h17km±2km, M2.6, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JCN** | **Nagara** | **0.10** | **44** | P | | Pg | 19 11 12.1 | +0.5 |
| JCN | | | | S | | Sg | 19 11 16.0 | +2.1 |
| **JKUC** | **kamogawauchiur** | **0.20** | **161** | P | | Pg | 19 11 12.6 | -0.3 |
| **KTR** | **Katsuura** | **0.26** | **142** | P | | Pg | 19 11 13.5 | -0.3 |
| KTR | | | | S | | Sg | 19 11 17.7 | 0.0 |
| **TATJ** | **Tateyama 2** | **0.37** | **211** | P | | Pb | 19 11 16.5 | +0.3 |
| **JSMT** | **Sammumatsuo** | **0.40** | **42** | P | | Pb | 19 11 16.7 | 0.0 |
| JSMT | | | | S | | Sb | 19 11 23.6 | +1.1 |
| **BSO4** | **Boso 4** | **0.40** | **153** | P | | Pg | 19 11 16.3 | 0.0 |
| **BSO3** | **Boso 3** | **0.63** | **150** | P | | Pg | 19 11 20.3 | -0.2 |
| **JHU** | **Hanno** | **0.85** | **306** | P | | Pb | 19 11 23.5 | -0.9 |
| JHU | | | | S | | Sb | 19 11 35.2 | -0.3 |
| **JOD2** | **Odawara 2** | **0.85** | **264** | P | | Pb | 19 11 23.2 | -1.2 |
| **BSO1** | **Boso 1** | **0.99** | **134** | P | | Pb | 19 11 24.4 | -2.1 |
| **MAT** | **Matsushiro** | **1.96** | **308** | P | | Pn | 19 11 41.9 | +1.4 |
| MAT | | | | *e*S | | Sn | 19 12 03.3 | -1.4 |

*MOS* ***10*** *19:11:45.3±1.2, 10°.23S×161°.72E, h65km, mb4.8/9, Error ellipse: s-maj=10.5km s-min=8.7km az=92.5*
*BJI* ***10*** *19:11:47.7±0.0, 9°.86S×161°.89E, h75km, mb4.5/37, mB5.2/24, Ms4.9/5, Ms7 4.3/5*
*NEIC* ***10*** *19:11:48.4±1.6, 10°.20S±0°.09×161°.64E±0°.08, h70km±6km, mb5.0/59, Error ellipse: s-maj=14.7km s-min=9.6km az=219.0*
*IDC* ***10*** *19:11:50.2±1.6, 10°.24S×161°.51E, h90km±12km, mb4.1/21, mb1 4.3/23, mb1mx4.0/42, mbtmp4.4/23, MS3.5/36, Ms1 3.5/36, ms1mx3.4/56, Error ellipse: s-maj=16.1km s-min=12.1km az=80.0*

**ISC 10 19:11:49.5±0.3, 10°.23S±0°.05×161°.62E±0°.05, h85km, n238, σ1°32/223, mb4.8/78, 9C-1D, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HNR** | **Honiara** | **1.83** | **296** | P | | **Pn** | **19 12 18.5** | **-0.8** |
| | 2μm,0.3s,baz=149,slow=6.8,SNR=749 | | | | | | | |
| HNR | | | | S | | **Sn** | **19 12 41.0** | **-0.9** |
| | 853nm,0.3s,baz=77,slow=19,SNR=3.6 | | | | | | | |
| **HNR** | **Honiara** | **1.83** | **296** | P | | **Pn** | **19 12 18.3** | **-1.0** |
| **HNR** | **Honiara** | **1.83** | **296** | Pn | | **Pn** | **19 12 18.2** | **-1.0** |
| **HNR** | **Honiara** | **1.83** | **296** | P | | **Pn** | **19 12 18.9** | **-0.4** |
| **SANVU** | **Saraoutou** | **7.52** | **134** | Pn | | **Pn** | **19 13 35.7** | **-0.7** |
| **SANVU** | **Saraoutou** | **7.52** | **134** | P | | **Pn** | **19 13 36.4** | **0.0** |
| **DVP** | **Devils Point** | **9.80** | **140** | P | | **Pn** | **19 14 08.2** | **+0.6** |
| **RTV** | **Rentapao** | **10.00** | **139** | P | | **Pn** | **19 14 12.1** | **+1.8** |
| **KOUNC** | **Koumac, New Ca** | **10.58** | **166** | P | | **Pn** | **19 14 18.6** | **+0.4** |
| **RABL** | **Rabaul** | **11.13** | **302** | Pn | | **Pn** | **19 14 23.9** | **-1.9** |
| **RABL** | **Rabaul** | **11.13** | **302** | P | | **Pn** | **19 14 28.3** | **+2.5** |
| **KRVT** | **Keravat (AS076** | **11.19** | **301** | P | | **Pn** | **19 14 27.4** | **+0.8** |
| KRVT | | | | S | | **Sn** | **19 16 29.9** | **+0.2** |
| **LIFNC** | **LIFOU** | **11.80** | **153** | Pn | | **Pn** | **19 14 33.7** | **-1.0** |
| **NOUC** | **Port Laguerre** | **12.63** | **160** | P | | **Pn** | **19 14 47.5** | **+1.6** |
| **DZM** | **Mont Dzumac** | **12.65** | **159** | *e*Pn | | **Pn** | **19 14 47.8** | **+1.5** |
| | 13nm,0.3s | | | | | | | |
| DZM | | | | *e*Sn | | **Sn** | **19 17 01.9** | **-3.5** |
| | 3.8nm,0.3s | | | | | | | |
| DZM | | | | *e*LR | | LR | 19 17 47.2 | |
| | comp=Z,1μm,24.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.65** | **159** | P | | **Pn** | **19 14 47.3** | **+1.0** |
| | 1.8nm,0.3s,baz=360,slow=19,SNR=21 | | | | | | | |
| DZM | | | | S | | **Sn** | **19 17 02.6** | **-2.9** |
| | 0.4nm,0.3s,baz=263,slow=22,SNR=2.4 | | | | | | | |
| DZM | | | | LR | | LR | 19 18 54.3 | |
| | comp=Z,479nm,21.6s,baz=358,slow=33 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **12.65** | **159** | Pn | | **Pn** | **19 14 45.3** | **-1.0** |
| **DZM** | **Mont Dzumac** | **12.65** | **159** | P | | **Pn** | **19 14 49.4** | **+3.1** |
| **MARNC** | **Mare, Loyalty** | **12.77** | **152** | Pn | | **Pn** | **19 14 46.8** | **-1.0** |
| **MARNC** | **Mare, Loyalty** | **12.77** | **152** | P | | **Pn** | **19 14 49.4** | **+1.6** |
| **YATNC** | **Mamie plateau,** | **12.80** | **157** | P | | **Pn** | **19 14 49.6** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **12.87** | **159** | Pn | | **Pn** | **19 14 48.2** | **-1.0** |
| **ONTNC** | **Ouen Toro** | **12.87** | **159** | P | | **Pn** | **19 14 52.2** | **+3.0** |
| **OUENC** | **Ouen Island, N** | **13.11** | **158** | Pn | | **Pn** | **19 14 51.6** | **-0.8** |
| **OUENC** | **Ouen Island, N** | **13.11** | **158** | P | | **Pn** | **19 14 55.2** | **+2.8** |
| **PINNC** | **Pines Island,** | **13.52** | **156** | | | **Pn** | **19 14 57.9** | **+0.2** |
| **PMG** | **Port Moresby** | **14.28** | **272** | P | | **Pn** | **19 15 08.1** | **+0.5** |
| | 0.4nm,0.3s,baz=269,slow=14,SNR=1.3 | | | | | | | |
| PMG | | | | LR | | LR | 19 20 00.0 | |
| | comp=Z,353nm,21.1s,baz=114,slow=35 | | | | | | | |
| **PMG** | **Port Moresby** | **14.28** | **272** | P | | **Pn** | **19 15 11.1** | **+3.5** |
| **PMG** | **Port Moresby** | **14.28** | **272** | P | | **Pn** | **19 15 11.1** | **+3.5** |
| **TARA** | **Tarawa** | **16.09** | **45** | P | | **P** | **19 15 32.4** | **-0.2** |
| **MANU** | **Manus Island** | **16.33** | **299** | | | **Pn** | **19 15 31.6** | **-2.2** |
| **RK1H** | **Rockhampton Ha** | **16.86** | **218** | P | | **Pn** | **19 15 41.6** | **+1.4** |
| **PATS** | **Pohnpei** | **17.27** | **349** | | | **Pn** | **19 15 43.2** | **-2.1** |
| PATS | | | | IAmb | | IAmb | 19 15 48.3 | |
| | comp=Z,148nm,1.0s | | | | | | | |
| **PATS** | **Pohnpei** | **17.27** | **349** | P | | **Pn** | **19 15 45.6** | **+0.3** |
| **MSVF** | **Nonsavu** | **17.59** | **117** | LR | | LR | 19 21 16.4 | |
| | comp=Z,242nm,21.1s,baz=294,slow=32 | | | | | | | |
| **CTA** | **Charters Tower** | **17.76** | **235** | P | | **Pn** | **19 15 53.3** | **+2.0** |
| | comp=Z,5.7nm,0.3s,baz=62,slow=11,SNR=102 | | | | | | | |
| CTA | | | | S | | Sn | 19 19 00.8 | -8.3 |
| | comp=Z,0.1nm,0.3s,baz=54,slow=18,SNR=1.1 | | | | | | | |
| CTA | | | | LR | | LR | 19 21 40.8 | |
| | comp=Z,171nm,20.4s,baz=53,slow=33 | | | | | | | |
| **CTA** | **Charters Tower** | **17.76** | **235** | P | | **Pn** | **19 15 53.6** | **+2.3** |
| **CTAO** | **Charters Tower** | **17.76** | **235** | P | | **P** | **19 15 51.0** | **0.0** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,85nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **17.76** | **235** | | | **P** | **19 15 51.0** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 19 15 55.5 | |
| | comp=Z,85nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **17.76** | **235** | P | | **Pn** | **19 15 53.6** | **+2.3** |
| **EIDS** | **Eidsvold** | **18.08** | **212** | | | **P** | **19 15 55.4** | **+1.0** |
| **EIDS** | **Eidsvold** | **18.08** | **212** | P | | **P** | **19 15 56.5** | **+2.1** |
| **COEN** | **Coen** | **18.41** | **257** | P | | **P** | **19 15 58.1** | **0.0** |
| COEN | | | | IAmb | | IAmb | 19 16 04.0 | |
| | comp=Z,58nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **18.41** | **257** | P | | **Pn** | **19 16 00.7** | **+1.5** |
| **MTSU** | **Mount Surprise** | **18.51** | **243** | P | | **Pn** | **19 16 02.0** | **+1.6** |
| **KWAJ** | **Kwajalein Atol** | **19.83** | **18** | P | | **P** | **19 16 14.0** | **+0.5** |
| **RMQ** | **Roma** | **20.23** | **215** | P | | **P** | **19 16 19.6** | **+1.7** |
| **ARMA** | **Armidale** | **22.14** | **203** | P | | **P** | **19 16 38.9** | **+0.5** |
| ARMA | | | | IAmb | | IAmb | 19 16 41.2 | |
| | comp=Z,41nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **22.14** | **203** | P | | **P** | **19 16 38.8** | **+0.5** |
| **JAY** | **Jayapura** | **22.14** | **289** | P | | **P** | **19 16 36.1** | **-2.4** |
| | comp=Z,16nm,0.7s,baz=82,slow=5.0,SNR=6.5 | | | | | | | |
| JAY | | | | LR | | LR | 19 26 14.4 | |
| | comp=Z,84nm,18.4s,baz=42,slow=39 | | | | | | | |
| **JAY** | **Jayapura** | **22.14** | **

**MQZ McQueen's Vall 34.70 166** P **P** **19 18 31.8 +0.7**
**TAU Tasmania Unive 34.87 199** P **P** **19 18 33.5 +0.9**
TAU pmax pmax
comp=Z,62nm,1.3s
**TAU Tasmania Unive 34.87 199** P **P** **19 18 33.5 +0.9**
**WRKA Warakurna 34.88 241** P **P** **19 18 31.9 -1.1**
**DCZ Deep Cove 35.43 173** P **P** **19 18 37.8 +0.4**
DCZ IAmb IAmb 19 19 06.7
comp=Z,52nm,1.5s
**FITZ Fitzroy Crossi 35.70 253** LR LR 19 32 29.5
comp=Z,56nm,21.2s,baz=76,slow=35
**SOEI Soe 36.78 267** P **P** **19 18 48.4 -1.0**
SOEI IAmb IAmb 19 19 08.7
comp=Z,16nm,1.0s
**FORT Forrest 37.27 232** P **P** **19 18 52.7 -0.6**
**FORT Forrest 37.27 232** P **P** **19 18 54.3 +1.0**
**BATI Baumata 37.34 267** LR LR 19 35 26.8
comp=Z,165nm,18.2s,baz=131,slow=38
**BATI Baumata 37.34 267** P **P** **19 18 54.3 +0.2**
comp=Z,12nm,0.7s
**RAR Rarotonga 38.63 111** LR LR 19 34 28.4
comp=Z,28nm,18.5s,baz=288,slow=35
**BBSI Bau Bau 38.95 274** P P 19 19 04.0 -3.6
comp=Z,3.3nm,0.9s
**DAV Davao City (W) 39.79 294** LR LR 19 36 08.4
comp=Z,31nm,18.3s,baz=300,slow=37
**BNSI Bone 41.55 275** P **P** **19 19 32.8 +3.7**
comp=Z,24nm,1.1s
**PSA00 Pilbara Seismi 41.60 249** P **P** **19 19 28.8 -0.7**
**PSA00 Pilbara Seismi 41.60 249** P **P** **19 19 28.4 -1.1**
PSA00 IAmb IAmb 19 19 54.4
comp=Z,4.6nm,0.8s
**PSA00 Pilbara Seismi 41.60 249** P **P** **19 19 29.1 -0.3**
**MBWA Marble Bar 41.65 250** P **P** **19 19 29.0 -0.8**
**MBWA Marble Bar 41.65 250** P **P** **19 19 29.2 -0.6**
**KAPI Kappang 41.79 274** LR LR 19 37 27.5
comp=Z,32nm,21.1s,baz=124,slow=37
**MEEK Meekatharra 43.70 242** P **P** **19 19 46.5 +0.1**
**KLBR Kellerberrin 45.77 236** P **P** **19 20 02.1 -0.6**
**BLDU Ballidu 46.34 237** P **P** **19 20 07.1 -0.1**
**MORW Morawa 46.50 240** P **P** **19 20 08.5 -0.1**
MORW IAmb IAmb 19 20 10.1
comp=Z,30nm,1.4s
**MORW Morawa 46.50 240** P **P** **19 20 08.4 -0.1**
**NWAO Narrogin (SRO) 46.60 234** P **P** **19 20 09.0 -0.3**
NWAO pmax pmax
comp=Z,21nm,1.0s
**NWAO Narrogin (SRO) 46.60 234** P **P** **19 20 09.0 -0.3**
NWAO IAmb IAmb 19 20 10.6
comp=Z,21nm,0.9s
**NWAO Narrogin (SRO) 46.60 234** P **P** **19 20 10.1 +0.8**
**JAGI Jajag, Banyuwa 46.84 268** P **P** **19 20 08.9 -2.5**
comp=Z,25nm,1.1s
**JAGI Jajag, Banyuwa 46.84 268** P **P** **19 20 08.8 -2.5**
JAGI IAmb IAmb 19 20 34.9
comp=Z,24nm,1.0s
**JAGI Jajag, Banyuwa 46.84 268** P **P** **19 20 10.2 -1.2**
**MUN Mundaring 47.14 236** P **P** **19 20 13.6 +0.1**
comp=Z,20nm,1.0s
**PPT2 Papeete2 47.83 104** *e*LR LR 19 33 45.6
comp=Z,117nm,27.8s
**JHJ Hachijo jima 2 47.87 335** LR LR 19 39 44.9
comp=Z,32nm,21.5s,baz=145,slow=35
**KKM Kota Kinabalu 48.02 288** P **P** **19 20 19.4 -1.2**
KKM IAmb IAmb 19 20 27.7
comp=Z,36nm,1.1s
**KKM Kota Kinabalu 48.02 288** P **P** **19 20 21.5 +0.8**
**PWJI Pagerwojo 49.20 268** P **P** **19 20 27.3 -2.2**
comp=Z,21nm,0.7s
**PCJI Pacitan 49.80 268** P **P** **19 20 33.6 -0.5**
**UGM Wanagama 50.47 268** P **P** **19 20 38.3 -1.0**
**UGM Wanagama 50.47 268** P **P** **19 20 39.5 +0.2**
comp=Z,60nm,1.8s
**INU Inuyama 50.95 334** P **P** **19 20 41.8 -0.6**
INU IAmb IAmb 19 20 44.1
comp=Z,28nm,1.0s
**JMN Monobe 51.06 330** P **P** **19 20 44.0 +0.7**
**JSU Suzuyama 51.12 325** P **P** **19 20 43.4 -0.4**
JSU IAmb IAmb 19 20 44.9
comp=Z,18nm,0.7s
**MJAR Matsushiro Arr 51.48 336** P **P** **19 20 45.0 -1.3**
comp=Z,9.0nm,0.6s,baz=169,slow=8.3,SNR=23
MJAR LR LR 19 41 14.4
comp=Z,44nm,21.7s,baz=120,slow=34
**MJAR Matsushiro Arr 51.48 336** P **P** **19 20 45.2 -1.2**
MJAR pmax pmax
comp=Z,6.0nm,0.7s
**MJAR Matsushiro Arr 51.48 336** P **P** **19 20 45.2 -1.2**
MJAR IAmb IAmb 19 20 46.4
comp=Z,5.7nm,0.7s
**MAJO Matsushiro 51.48 336** P **P** **19 20 45.1 -1.3**
MAJO pmax pmax
comp=Z,12nm,0.6s
**MAJO Matsushiro 51.48 336** P **P** **19 20 45.1 -1.3**
MAJO IAmb IAmb 19 20 46.2
comp=Z,12nm,0.6s
**MAJO Matsushiro 51.48 336** P **P** **19 20 46.1 -0.3**
**MAT Matsushiro 51.48 336** P **P** **19 20 45.4 -1.0**
**MJB9 Matsu-Tunnel 51.48 336** P **P** **19 20 45.2 -1.2**
MJB9 IAmb IAmb 19 20 46.2
comp=Z,12nm,0.6s
**JMM Marumori 51.66 339** P **P** **19 20 47.7 +0.1**
**YULB Yu-li 51.70 311** P **P** **19 20 47.1 -1.1**
YULB IAmb IAmb 19 21 06.1
comp=Z,12nm,1.0s
**NACB Ninganchiao 51.94 312** P **P** **19 20 49.3 -0.6**
NACB IAmb IAmb 19 21 18.0
comp=Z,20nm,1.0s
**JNU Nakatsue 52.12 327** P **P** **19 20 51.0 -0.3**
JNU IAmb IAmb 19 20 52.3
comp=Z,24nm,1.0s
**JNU Nakatsue 52.12 327** P **P** **19 20 51.4 +0.2**
**TPUB Ta-pu 52.14 310** P **P** **19 20 50.8 -0.8**
**SSLB Suanglung 52.18 311** P **P** **19 20 50.7 -1.1**
SSLB IAmb IAmb 19 20 51.6
comp=Z,10nm,0.7s
**SSLB Suanglung 52.18 311** P **P** **19 20 51.6 -0.2**
**YHNB Yeheng 52.39 312** P **P** **19 20 49.9 -3.5**
YHNB IAmb IAmb 19 21 14.7
comp=Z,26nm,1.2s
**JHS Saijyo 52.45 330** P **P** **19 20 53.5 -0.2**
JHS IAmb IAmb 19 20 58.5
comp=Z,35nm,1.5s
**JSD Sado 52.75 337** P **P** **19 20 55.5 -0.2**
**JTM Tenmabayashi 54.20 341** P **P** **19 21 06.4 +0.2**
**TJN Taejon 56.47 327** *ce*P **P** **19 21 22.9 +0.2**
**ASAJ Asahikawa 56.78 344** LR LR 19 42 41.2
comp=Z,43nm,21.9s,baz=181,slow=33
**KSRS Korea Array 56.98 328** P **P** **19 21 26.5 +0.2**
comp=Z,5.0nm,0.8s,baz=142,slow=7.2,SNR=15
KSRS LR LR 19 43 45.4
comp=Z,28nm,20.4s,baz=130,slow=34
**KSAR Wonju Array Be 57.00 328** P **P** **19 21 26.5 +0.1**
**KSAR Wonju Array Be 57.00 328** P **P** **19 21 26.5 +0.1**
**INCN Inchon 57.68 327** P **P** **19 21 29.6 -1.7**
INCN pmax pmax
comp=Z,31nm,1.1s
**INCN Inchon 57.68 327** P **P** **19 21 29.6 -1.7**
**NJ2 Nanjing 58.64 318** *e*P **P** **19 21 38.6 +0.6**
NJ2 pmax pmax
comp=Z,2.0nm,0.5s
**YSS Yuzh-Sakhalins 59.37 345** *e*P P 19 21 51.4 +8.7
**USA0B Ussuriysk Arra 60.48 336** P **P** **19 21 51.0 +0.6**
USA0B pmax pmax
comp=Z,20nm,0.8s
**USA0B Ussuriysk Arra 60.48 336** P **P** **19 21 51.0 +0.6**
**USRK Ussuriysk Ar. 60.48 336** P **P** **19 21 51.2 +0.8**
comp=Z,17nm,0.8s,baz=146,slow=6.0,SNR=21
USRK LR LR 19 46 12.1
comp=Z,28nm,21.1s,baz=147,slow=34
**USRK Ussuriysk Ar. 60.48 336** P **P** **19 21 50.8 +0.4**
**USRK Ussuriysk Ar. 60.48 336** P **P** **19 21 50.8 +0.4**
**CN2 Changchun 63.02 331** *e*P **P** **19 22 06.7 -0.8**
CN2 *ep*P pP 19 22 26.2 -2.5
CN2 pmax pmax
comp=Z,10.0nm,0.7s
**PETK Petropavlovsk- 63.18 357** P **P** **19 22 08.9 +0.5**
comp=Z,3.0nm,0.9s,baz=202,slow=7.5,SNR=3.5
PETK LR LR 19 45 48.8
comp=Z,29nm,19.9s,baz=126,slow=32
**BNX BinXian 63.64 334** ⇑P **P** **19 22 11.3 -0.2**
BNX pmax pmax
comp=Z,20nm,0.5s
BNX pmax pmax
comp=Z,510nm,4.3s

**HNS HongShan 64.61 320** ⇑P **P** **19 22 18.1 0.0**
HNS pmax pmax
comp=Z,6.0nm,1.3s
**KLR Kul'dur 64.77 339** *ce*P **P** **19 22 19.2 +0.3**
KLR pmax pmax
comp=Z,10.0nm,1.3s
**XAN Xi'an 66.61 314** P **P** **19 22 34.9 +3.8**
XAN pmax pmax
comp=Z,4.0nm,1.0s
**KMI Kunming 67.25 303** ⇓P **P** **19 22 36.7 +1.1**
KMI pmax pmax
comp=Z,5.0nm,1.1s
**VNDA Vanda 67.27 180** P **P** **19 22 35.1 +0.6**
comp=Z,7.2nm,0.9s,baz=320,slow=7.1,SNR=8.2
VNDA LR LR 19 49 21.3
comp=Z,47nm,18.1s,baz=346,slow=34
**XLT XiLinHaoTe 67.89 326** *e*P **P** **19 22 40.2 +1.2**
XLT pP pP 19 22 57.0 -3.3
XLT pmax pmax
comp=Z,23nm,1.1s
XLT pmax pmax
comp=Z,88nm,6.0s
**CMAR Chiang Mai Arr 68.08 295** P **P** **19 22 40.6 0.0**
comp=Z,0.9nm,0.6s,baz=126,slow=5.0,SNR=11
CMAR LR LR 19 53 11.3
comp=Z,9.3nm,20.0s,baz=110,slow=36
**CMAR Chiang Mai Arr 68.08 295** P **P** **19 22 39.8 -0.8**
**HHC Hu-ho-hao-te 68.63 321** *e*P **P** **19 22 47.2 +3.4**
HHC pmax pmax
comp=Z,6.0nm,1.0s
HHC pmax pmax
comp=Z,180nm,4.7s
**PZH PanZhiHua 68.63 304** P **P** **19 22 46.7 +2.6**
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,110nm,5.6s
**ZEA Zeya 70.08 339** *e*P **P** **19 22 53.2 +0.9**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**LZH Lanzhou 71.24 314** ⇑P P 19 23 06.1 +6.2
LZH pP pP 19 23 22.8 +1.5
LZH sP sP 19 23 32.1 +1.7
LZH pmax pmax
comp=Z,23nm,1.4s
LZH LR LR
comp=Z,150nm,16.2s
LZH LR LR
comp=Z,240nm,16.5s
LZH LR LR
comp=Z,160nm,18.3s
**SEY Seymchan 73.29 356** P **P** **19 23 11.8 +0.5**
comp=Z,1.0nm,0.6s,baz=82,slow=20,SNR=7.1
**ULN Ulaanbaatar 75.30 325** P **P** **19 23 24.3 +0.8**
ULN pmax pmax
comp=Z,9.0nm,1.0s
**ULN Ulaanbaatar 75.30 325** P **P** **19 23 24.3 +0.8**
**GTA Gaotai 75.60 315** *e*P **P** **19 23 26.4 +1.0**
GTA pP pP 19 23 48.4 +1.2
GTA sP sP 19 23 57.2 +0.9
GTA pmax pmax
comp=Z,1.0nm,1.1s
GTA pmax pmax
comp=Z,110nm,6.2s
GTA LR LR
comp=Z,110nm,14.5s
GTA LR LR
comp=Z,100nm,15.6s
GTA LR LR
comp=Z,110nm,15.6s
**SONM Songino Array 75.65 325** P **P** **19 23 26.1 +0.5**
comp=Z,3.0nm,0.7s,baz=142,slow=5.6,SNR=13
SONM LR LR 19 55 27.6
comp=Z,38nm,21.8s,baz=172,slow=35
**SONM Songino Array 75.65 325** P **P** **19 23 25.4 -0.2**
SONM pmax pmax
comp=Z,7.0nm,0.9s
**SONM Songino Array 75.65 325** P **P** **19 23 25.4 -0.2**
**YAK Yakutsk 76.22 345** LR LR 19 52 37.6
comp=Z,29nm,21.8s,baz=236,slow=32
**YAK Yakutsk 76.22 345** *ce*P **P** **19 23 28.4 +0.2**
YAK pmax pmax
comp=Z,7.0nm,0.7s
**BILL Bilibino 78.14 2** *i* P **P** **19 23 39.9 +1.0**
BILL *i* 19 23 48.6
BILL *i* *PP **pP** **19 23 58.4 -2.5**
BILL pmax pmax
comp=Z,3.0nm,0.9s
**BILL Bilibino 78.14 2** P **P** **19 23 40.0 +1.0**
**ZAK Zakamensk 78.74 326** *e*P **P** **19 23 42.8 0.0**
ZAK pmax pmax
comp=Z,3.0nm,1.0s
**PALK Pallekele 82.42 279** LR LR 20 02 28.7
comp=Z,15nm,20.6s,baz=195,slow=37
**MAW Mawson 83.94 202** LR LR 19 59 28.6
comp=Z,47nm,18.1s,baz=56,slow=34
**ILAR Eielson Array 84.08 20** P **P** **19 24 10.7 +0.2**
comp=Z,0.6nm,0.5s,baz=245,slow=5.3,SNR=7.7
**RPN Rapa Nui 84.57 116** LR LR 19 54 57.2
comp=Z,38nm,20.8s,baz=110,slow=31
**WMQ Urumqi 85.67 316** *e*P **P** **19 24 20.2 +1.2**
WMQ pmax pmax
comp=Z,6.0nm,0.7s
WMQ pmax pmax
comp=Z,120nm,3.7s
WMQ LR LR
comp=Z,160nm,28.7s
WMQ LR LR
comp=Z,390nm,28.9s
WMQ LR LR
comp=Z,64nm,29.0s
**DGZ Jazzator, Alta 87.71 321** *i* P **P** **19 24 28.8 -0.2**
DGZ pmax pmax
comp=Z,2.0nm,0.9s
**NVAR Mina Array Bea 88.62 51** P **P** **19 24 35.8 +2.1**
comp=Z,1.3nm,0.8s,baz=238,slow=6.4,SNR=6.0
NVAR LR LR 19 58 05.5
comp=Z,28nm,21.1s,baz=320,slow=31
**NVAR Mina Array Bea 88.62 51** P **P** **19 24 33.3 -0.4**
**PFO Pinyon Flats O 88.96 56** LR LR 19 56 54.6
comp=Z,29nm,19.7s,baz=350,slow=30
**MKAR Makanchi Array 90.17 318** P **P** **19 24 40.0 -0.4**
comp=Z,0.9nm,0.4s,baz=93,slow=6.2,SNR=9.9
**MKAR Makanchi Array 90.17 318** *ce*P **P** **19 24 40.2 -0.2**
MKAR pmax pmax
comp=Z,1.0nm,0.4s
**MKAR Makanchi Array 90.17 318** P **P** **19 24 39.6 -0.8**
**ZALV Zalesovo Beam 90.54 325** P **P** **19 24 40.6 -1.3**
comp=Z,0.8nm,0.7s,baz=122,slow=4.0,SNR=2.6
ZALV LR LR 20 04 27.6
comp=Z,38nm,21.6s,baz=64,slow=35
**SYO Syowa Base 91.35 198** ⅱ P **P** **19 24 45.8 +0.4**
**BELA Belgrano 2 91.56 177** P P **19 24 45.8 -0.6**
BELA IAmb IAmb 19 24 46.7
comp=Z,8.6nm,0.9s
**NEW Newport 91.79 41** P **P** **19 24 47.2 -0.7**
comp=Z,1.9nm,0.8s,baz=296,slow=22,SNR=3.2
**NEW Newport 91.79 41** P **P** **19 24 47.2 -0.7**
NEW pmax pmax
comp=Z,7.0nm,1.4s
**NEW Newport 91.79 41** IAmb IAmb 19 24 54.3
comp=Z,6.6nm,1.4s
**KURBB Kurchatov Arra 93.47 321** P **P** **19 24 54.3 -1.3**
comp=Z,1.4nm,0.9s,baz=101,slow=3.9,SNR=2.6
**PDAR Pinedale Array 96.00 48** P **P** **19 25 08.0 +0.3**
comp=Z,0.1nm,0.3s,baz=252,slow=4.4,SNR=0.9
**YKA Yellowknife Ar 96.13 28** P **P** **19 25 06.7 -0.7**
comp=Z,0.4nm,0.7s,baz=260,slow=4.7,SNR=5.9
**ANMO Albuquerque 97.34 56** LR LR 20 02 38.4
comp=Z,29nm,20.4s,baz=325,slow=31
**SNAA Sanae 97.62 185** LR LR 20 05 06.6
comp=Z,52nm,20.9s,baz=331,slow=33
**ARCES ARCESS Array B 114.50 344** PKP **PKiKP** **19 30 18.8 -0.4**
comp=Z,1.9nm,0.8s,baz=90,slow=1.2,SNR=6.6
**BOSA Boshof 122.84 226** PKP **PKPdf** **19 30 35.7 -0.9**
comp=Z,1.0nm,0.5s,baz=143,slow=5.1,SNR=4.3
**AKASG Malin Array Be 123.93 326** PKP **PKPdf** **19 30 36.6 -1.1**
comp=Z,0.2nm,0.4s,baz=48,slow=2.6,SNR=2.1
**KEST Kesra 144.24 320** PKP **PKPab** **19 31 14.8 +0.6**
comp=Z,3.5nm,0.8s,baz=63,slow=5.4,SNR=4.9
**ESDC Sonseca Array 147.99 339** PKPbc **PKPdf** **19 31 24.6 +2.2**
comp=Z,0.5nm,0.7s,baz=18,slow=3.8,SNR=1.8
**TORD Torodi Ar. Bea 160.13 280** PKPab **PKPab** **19 32 20.3 -0.1**
comp=Z,2.4nm,1.2s,baz=78,slow=2.1,SNR=2.3

*MOS **10** 19:15:17.6±1.0,36°.55N×71°.01E,h185km,mb4.3/6,Error ellipse: s-maj=7.5km s-min=4.4km az=80.9*
*NEIC **10** 19:15:18.9±1.6,36°.56N±0°.05×70°.81E±0°.07,h187km±7km, mb4.2/16,Error ellipse: s-maj=9.9km s-min=5.4km az=52.0*
*BJI **10** 19:15:19.6±0.0,36°.70N×70°.99E,h195km,mb4.2/15, mB4.7/8*
*IDC **10** 19:15:19.1±0.7,36°.47N×70°.93E,h192km±6km,mb3.7/20, mb1 3.8/24,mb1mx3.5/53,mbtmp4.3/24,Error ellipse: s-maj=12.2km s-min=9.1km az=59.0*
*NNC **10** 19:15:20.7±1.8,36°.87N×70°.68E,h178km±19km,mb3.8, mpv4.7,Error ellipse: s-maj=18.2km s-min=9.9km az=163.0*

**ISC 10 19:15:18.0±0.3,36°.55N±0°.04×70°.90E±0°.04,h188km,n198, σ1ŝ75/223,mb4.1/32,9C-16D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GAR** | **Garm** | **2.49** | **349** | | **Pn** | **Pn** | **19 16 01.6** | **+0.5** |
| GAR | | | | | Sn | **Sn** | **19 16 33.0** | **-1.9** |
| **KBL** | **Kabul** | **2.51** | **218** | | PN | **Pn** | **19 16 01.5** | **-0.1** |
| **KBL** | **Kabul** | **2.51** | **218** | | P | **Pn** | **19 16 01.8** | **+0.2** |
| | SNR=765 | | | | | | | |
| KBL | | | | | S | **Sn** | **19 16 33.8** | **-1.7** |
| **KBL** | **Kabul** | **2.51** | **218** | | Pn | **Pn** | **19 16 01.5** | **-0.1** |
| **CEP** | **Cherat** | **2.84** | **163** | | P | **Pn** | **19 16 06.1** | **+0.7** |
| CEP | | | | | S | **Sn** | **19 16 41.0** | **-1.3** |
| **NIL** | **Nilore** | **3.48** | **146** | | PN | **Pn** | **19 16 14.0** | **+1.1** |
| **NIL** | **Nilore** | **3.48** | **146** | | P | **Pn** | **19 16 14.1** | **+1.1** |
| **NIL** | **Nilore** | **3.48** | **146** | | | **Pn** | **19 16 14.0** | **+1.1** |
| **THW** | **Thamme Wali** | **3.81** | **169** | | P | **Pn** | **19 16 17.5** | **+0.4** |
| **SARP** | **Sargodha** | **4.84** | **162** | | P | **Pn** | **19 16 29.9** | **-0.3** |
| **TAS** | **Tashkent** | **4.93** | **346** | | PN | **Pn** | **19 16 31.4** | **+0.2** |
| **TAS** | **Tashkent** | **4.93** | **346** | | Pn | **Pn** | **19 16 31.4** | **+0.2** |
| **KSH** | **Kashi** | **4.98** | **52** | | P | **Pn** | **19 16 28.7** | **-3.2** |
| KSH | | | | | S | Sn | 19 17 20.6 | -10 |
| KSH | | | | | smax | smax | | |
| | comp=N,490nm,0.6s | | | | | | | |
| KSH | | | | | smax | smax | | |
| | comp=E,370nm,0.7s | | | | | | | |
| **JMU** | **Jammu** | **5.05** | **138** | *e*P | | **Pn** | **19 16 32.1** | **-0.7** |
| JMU | | | | | *e*S | **Sn** | **19 17 27.9** | **-3.7** |
| **IUG** | **Iuzhnay** | **5.63** | **353** | *e*PN | | **Pn** | **19 16 40.6** | **+0.3** |
| **IUG** | **Iuzhnay** | **5.63** | **353** | *e*P | | **Pn** | **19 16 40.6** | **+0.3** |
| | baz=352 | | | | | | | |
| **THN** | **Thein Dam** | **5.71** | **135** | *e*P | | **Pn** | **19 16 41.6** | **+0.2** |
| **AML** | **Almayashu** | **5.98** | **20** | P | | **Pn** | **19 16 45.1** | **0.0** |
| | SNR=80 | | | | | | | |
| **AML** | **Almayashu** | **5.98** | **20** | P | | **Pn** | **19 16 45.4** | **+0.2** |
| AML | | | | | S | **Sn** | **19 17 51.0** | **-2.8** |
| **UCH** | **Uchtor** | **6.32** | **25** | P | | **Pn** | **19 16 50.0** | **+0.4** |
| | SNR=20 | | | | | | | |
| **DZA** | **Taraz** | **6.34** | **3** | *e*PN | | **Pn** | **19 16 49.7** | **+0.2** |
| **DZA** | **Taraz** | **6.34** | **3** | *e*P | | **Pn** | **19 16 49.7** | **+0.2** |
| | baz=1.7 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.49** | **19** | P | | **Pn** | **19 16 52.2** | **+0.6** |
| | SNR=18 | | | | | | | |
| **BRLS** | **Borolday** | **6.52** | **353** | *e*PN | | **Pn** | **19 16 48.6** | **-3.2** |
| BRLS | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.2s | | | | | | | |
| **BRLS** | **Borolday** | **6.52** | **353** | *e*P | | **Pn** | **19 16 48.7** | **-3.2** |
| | comp=Z,4.6nm,0.2s,baz=351 | | | | | | | |
| **KK02** | **Karatay Array** | **6.55** | **357** | ⇓P | | **Pn** | **19 16 52.4** | **+0.1** |
| | comp=Z,24nm,0.3s | | | | | | | |
| KK02 | | | | ⇓S | | **Sn** | **19 18 00.9** | **-5.8** |
| | comp=Z,192nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **6.55** | **357** | PN | | **Pn** | **19 16 52.4** | **+0.1** |
| **KKAR** | **Karatay Array** | **6.55** | **357** | | | **Pn** | **19 16 52.4** | **+0.1** |
| **AAK** | **Ala-Archa** | **6.68** | **23** | P | | **Pn** | **19 16 54.7** | **+0.7** |
| | comp=Z,14nm,0.3s,baz=163,slow=2.5,SNR=188 | | | | | | | |
| AAK | | | | | S | **Sn** | **19 18 07.3** | **-2.7** |
| | comp=Z,4.4nm,0.3s,baz=3.8,slow=19,SNR=4.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.68** | **23** | P | | **Pn** | **19 16 54.8** | **+0.7** |
| | SNR=28 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.68** | **23** | P | | **Pn** | **19 16 54.8** | **+0.7** |
| AAK | | | | | S | **Sn** | **19 18 07.8** | **-2.2** |
| **AAK** | **Ala-Archa** | **6.68** | **23** | ⇓P | | **Pn** | **19 16 54.4** | **+0.3** |
| | comp=Z,13nm,0.3s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **19 18 08.2** | **-1.8** |
| | comp=Z,108nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **6.68** | **23** | Pn | | **Pn** | **19 16 54.5** | **+0.5** |
| **KBK** | **Karagaybulak** | **6.85** | **26** | P | | **Pn** | **19 16 57.3** | **+0.9** |
| | SNR=15 | | | | | | | |
| **BHK** | **Bhakra** | **6.87** | **137** | *e*P | | **Pn** | **19 16 56.4** | **-0.2** |
| **FRU1** | **Bishkek** | **6.88** | **24** | PN | | **Pn** | **19 16 57.5** | **+0.9** |
| **FRU1** | **Bishkek** | **6.88** | **24** | | | **Pn** | **19 16 57.5** | **+0.9** |
| **CHMS** | **Chumysh** | **7.09** | **24** | P | | **Pn** | **19 16 59.5** | **+0.2** |
| | SNR=20 | | | | | | | |
| **USP** | **Ospenovka** | **7.25** | **21** | P | | **Pn** | **19 17 01.2** | **-0.3** |
| | SNR=83 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.32** | **28** | P | | **Pn** | **19 17 03.0** | **+0.6** |
| | SNR=15 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.32** | **28** | ⇑P | | **Pn** | **19 17 02.7** | **+0.3** |
| | comp=Z,46nm,0.7s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | **19 18 22.6** | **-2.5** |
| | comp=Z,44nm,0.8s | | | | | | | |
| **SGDS** | **Sogindy** | **7.46** | **21** | *e*P | | **Pn** | **19 17 03.8** | **-0.4** |
| | comp=Z,4.5nm,0.2s,baz=21 | | | | | | | |
| **SMLA** | **Simla** | **7.51** | **134** | *e*P | | **Pn** | **19 17 04.1** | **-0.8** |
| SMLA | | | | | *e*S | **Sn** | **19 18 25.0** | **-4.5** |
| SMLA | | | | | IAML | | 19 18 26.5 | |
| | comp=N,301nm,0.5s | | | | | | | |
| **AAA** | **Alma-Ata** | **8.10** | **33** | *e*PN | | **Pn** | **19 17 12.9** | **+0.4** |
| **AAA** | **Alma-Ata** | **8.10** | **33** | *e*P | | **Pn** | **19 17 12.9** | **+0.4** |
| | baz=32 | | | | | | | |
| **MDOK** | **Medeo** | **8.12** | **34** | *e*PN | | **Pn** | **19 17 12.6** | **-0.3** |
| **MDOK** | **Medeo** | **8.12** | **34** | *e*P | | **Pn** | **19 17 12.7** | **-0.2** |
| | baz=33 | | | | | | | |
| **MDOK** | **Medeo** | **8.12** | **34** | P | | **Pn** | **19 17 14.0** | **+1.1** |
| | comp=N,16nm,0.8s | | | | | | | |
| **KNDC** | **Almaty** | **8.12** | **33** | ⇑P | | **Pn** | **19 17 14.8** | **+1.9** |
| | comp=N,135nm,1.1s | | | | | | | |
| **KUU** | **Kurty** | **8.43** | **28** | *e*PN | | **Pn** | **19 17 15.9** | **-0.9** |
| KUU | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **KUU** | **Kurty** | **8.43** | **28** | *e*P | | **Pn** | **19 17 16.0** | **-0.9** |
| | comp=Z,5.3nm,0.6s,baz=27 | | | | | | | |
| **DDI** | **Dehra Dun** | **8.62** | **134** | *e*S | | **Sn** | **19 18 51.1** | **-5.0** |
| DDI | | | | | IAML | | 19 18 54.5 | |
| | comp=N,249nm,0.4s | | | | | | | |
| **CHKK** | **Chushkaly** | **8.65** | **31** | *e*P | | **Pn** | **19 17 18.8** | **-1.0** |
| | baz=30 | | | | | | | |
| **SATY** | **Saty** | **8.69** | **39** | *e*PN | | **Pn** | **19 17 19.8** | **-0.6** |
| **SATY** | **Saty** | **8.69** | **39** | *e*P | | **Pn** | **19 17 19.9** | **-0.5** |
| | baz=39 | | | | | | | |
| **ZHN** | **Zhinishke** | **8.78** | **39** | *e*PN | | **Pn** | **19 17 21.4** | **-0.2** |
| **ZHN** | **Zhinishke** | **8.78** | **39** | *e*P | | **Pn** | **19 17 21.4** | **-0.2** |
| | baz=38 | | | | | | | |
| **BTLS** | **Baital** | **8.81** | **15** | *e*PN | | **Pn** | **19 17 21.6** | **-0.1** |
| **BTLS** | **Baital** | **8.81** | **15** | *e*P | | **Pn** | **19 17 21.6** | **-0.1** |
| | baz=14 | | | | | | | |
| **UZB** | **Uzynbulak** | **9.07** | **41** | *e*P | | **Pn** | **19 17 24.5** | **-0.9** |
| **UZB** | **Uzynbulak** | **9.07** | **41** | *e*P | | **Pn** | **19 17 24.6** | **-0.9** |
| | baz=40 | | | | | | | |
| **KPKS** | **Kokpek** | **9.12** | **38** | *e*P | | **Pn** | **19 17 25.6** | **-0.4** |
| KPKS | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **KPKS** | **Kokpek** | **9.12** | **38** | *e*P | | **Pn** | **19 17 25.7** | **-0.4** |
| | comp=Z,3.6nm,0.6s,baz=38 | | | | | | | |
| **NDI** | **New Delhi** | **9.48** | **144** | *e*P | | **Pn** | **19 17 31.8** | **+1.1** |
| NDI | | | | | *e*P | **Pn** | **19 17 32.0** | **+1.3** |
| NDI | | | | | *e*S | Sn | 19 19 06.0 | -11 |
| NDI | | | | | *e*S | **Sn** | **19 19 08.0** | **-8.5** |
| **AYAN** | **Aya Nagar** | **9.61** | **145** | *e*P | | **Pn** | **19 17 30.3** | **-2.0** |
| **KUDL** | **Kundal** | **9.62** | **149** | *e*P | | **Pn** | **19 17 29.6** | **-2.9** |
| KUDL | | | | | *e*S | Sn | 19 19 10.3 | -10 |
| **TDK** | **Taldyqorghan** | **10.18** | **32** | *e*P | | **Pn** | **19 17 38.4** | **-1.2** |
| TDK | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **TDK** | **Taldyqorghan** | **10.18** | **32** | *e*P | | **Pn** | **19 17 38.5** | **-1.2** |
| | comp=Z,4.2nm,0.7s,baz=31 | | | | | | | |
| **GEYT** | **Alibeck** | **10.29** | **282** | P | | **Pn** | **19 17 38.6** | **-2.5** |
| | comp=Z,0.8nm,0.3s,baz=141,slow=9.6,SNR=9.9 | | | | | | | |
| GEYT | | | | | S | **Sn** | **19 19 30.9** | **-4.9** |
| | comp=Z,0.9nm,0.3s,baz=90,slow=16,SNR=1.7 | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **10.29** | **282** | ⇑P | | **Pn** | **19 17 39.5** | **-1.6** |
| GYA0B | | | | ⇓S | | **Sn** | **19 19 32.6** | **-3.2** |
| **GYA0B** | **ALIBECK ARRAY** | **10.29** | **282** | Pn | | **Pn** | **19 17 38.5** | **-2.7** |
| **PTH** | **Pithoragarh** | **10.47** | **129** | *e*P | | **Pn** | **19 17 41.1** | **-2.7** |
| **AJM** | **Ajmer** | **10.53** | **161** | *e*P | | **Pn** | **19 17 43.6** | **-0.8** |
| **OTUK** | **Ortayu** | **11.73** | **5** | ⇓P | | **Pn** | **19 17 58.9** | **-0.8** |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **JHNI** | **Jhansi** | **12.84** | **147** | *e*P | | **Pn** | **19 18 11.9** | **-2.0** |

**MAKZ Makanchi** 13.16 35 P Pn 19 18 17.4 -0.4
**MAKZ Makanchi** 13.16 35 ⇓P Pn 19 18 17.2 -0.6
comp=Z,18nm,0.6s
**MAKZ Makanchi** 13.16 35 Pn Pn 19 18 17.4 -0.4
**PYUN Piuthan** 13.24 126 *eP* Pn 19 18 17.7 -1.4
comp=Z,6.4nm,0.3s
**MK31 Makanchi Array** 13.30 36 P Pn 19 18 19.8 +0.3
**MK31 Makanchi Array** 13.30 36 P Pn 19 18 19.2 -0.3
comp=Z,6.1nm,0.6s,baz=215,slow=11,SNR=56
**MK31 Makanchi Array** 13.30 36 Pn Pn 19 18 19.8 +0.3
**MKAR Makanchi Array** 13.30 36 P Pn 19 18 19.3 -0.2
comp=Z,0.5nm,0.3s,baz=216,slow=12,SNR=39
**MKAR Makanchi Array** 13.30 36 *i* P Pn 19 18 20.1 +0.6
MKAR pmax pmax
comp=Z,7.0nm,0.7s
**MKAR Makanchi Array** 13.30 36 Pn Pn 19 18 19.5 0.0
**DANN Dangsing** 13.58 123 *eP* Pn 19 18 22.5 -1.0
comp=Z,7.1nm,0.3s
**KOLN Koldanda** 13.86 126 *eP* Pn 19 18 26.0 -0.9
comp=Z,18nm,0.3s
**GKN Gorkha** 14.40 122 *eP* Pn 19 18 33.5 0.0
comp=Z,56nm,0.4s
**BHPL Bhopal** 14.41 155 *eP* P 19 18 37.1 +1.8
BHPL IAmb IAmb 19 18 37.9
comp=Z,47nm,0.8s
BHPL *eS* Sn 19 21 03.9 -11
**WMQ Urumqi** 14.73 55 *eP* P 19 18 38.2 -0.5
WMQ LR LR
comp=Z,300nm,25.7s
WMQ LR LR
comp=Z,1μm,29.2s
WMQ LR LR
comp=Z,69nm,20.7s
**DMN Daman** 14.97 123 *eP* Pn 19 18 40.5 -0.1
comp=Z,26nm,0.3s
**KKN Kakani** 14.97 122 *eP* Pn 19 18 40.6 0.0
comp=Z,35nm,0.5s
**AB31 Akbulak array** 15.00 331 ⇓P Pn 19 18 40.0 -0.6
comp=Z,6.2nm,0.5s,baz=145,slow=12,SNR=126
AB31 ⇓S Sn 19 21 20.4 -7.7
comp=Z,6.1nm,0.5s,baz=145,slow=24,SNR=10
**ABKAR Akbulak array** 15.00 331 Pn 19 18 40.3 -0.2
**ABKAR Akbulak array** 15.00 331 Pn 19 18 40.4 -0.2
**ZSN Zaisan** 15.02 39 *eP* P 19 18 41.4 -0.3
**ZSN Zaisan** 15.02 39 *eP* P 19 18 41.5 -0.3
baz=39
**KURBB Kurchatov Arra** 15.10 19 P Pn 19 18 40.2 -1.6
comp=Z,0.7nm,0.3s,baz=213,slow=8.4,SNR=86
**KURBB Kurchatov Arra** 15.10 19 ⇓P Pn 19 18 40.2 -1.6
comp=Z,12nm,0.5s
**PKIN Phulchoki** 15.19 122 *eP* Pn 19 18 43.1 -0.2
comp=Z,67nm,0.5s
**PKI Pulchoki** 15.20 122 *eP* Pn 19 18 43.8 +0.3
comp=Z,6.0nm,0.2s
**KURK Kurchatov** 15.21 19 *i* P P 19 18 44.5 +0.8
**KURK Kurchatov** 15.21 19 P P 19 18 45.1 +1.3
**KURK Kurchatov** 15.21 19 ⇓P Pn 19 18 40.9 -2.1
comp=Z,13nm,1.1s
**KURK Kurchatov** 15.21 19 Pn Pn 19 18 42.3 -0.8
KURK IAmb IAmb 19 18 46.6
comp=Z,10nm,0.8s
**GUN Gumba** 15.31 120 *eP* Pn 19 18 45.1 +0.2
comp=Z,23nm,0.4s
**SEM Semipalatinsk** 15.40 23 *eP* Pn 19 18 45.8 +0.1
SEM pmax pmax
comp=Z,3.0nm,0.7s
**SEM Semipalatinsk** 15.40 23 *eP* Pn 19 18 45.8 +0.1
comp=Z,2.6nm,0.7s,baz=23
**JIRN Jiri** 15.68 120 *eP* P 19 18 50.5 +0.9
comp=Z,65nm,0.4s
**BANOM Banah** 16.36 234 P P 19 18 57.0 +0.3
**RAMN Ramite** 16.41 121 *eP* Pn 19 18 59.2 +1.1
comp=Z,24nm,0.3s
**BVAR Borovoye Array** 16.48 359 P P 19 18 55.9 -1.9
comp=Z,2.4nm,0.3s,baz=122,slow=11,SNR=52
BVAR S S 19 21 57.9 -2.1
comp=Z,0.5nm,0.3s,baz=149,slow=24,SNR=5.3
**BRVK Borovoye** 16.51 359 *i* P Pn 19 18 58.7 -0.1
**BRVK Borovoye** 16.51 359 ⇓P Pn 19 18 59.0 +0.1
comp=Z,28nm,1.2s
**BRVK Borovoye** 16.51 359 Pn 19 18 58.5 -0.3
**AKL Akola** 16.67 160 *eS* S 19 21 57.1 -7.5
**AKTO Aktyubinsk** 16.70 330 P Pn 19 19 02.2 +1.1
comp=Z,3.6nm,0.3s,baz=142,slow=11,SNR=80
AKTO S S 19 22 00.6 -4.0
comp=Z,0.2nm,0.3s,baz=32,slow=23,SNR=2.7
**AKTO Aktyubinsk** 16.70 330 ⇓P Pn 19 19 01.8 +0.7
comp=Z,27nm,0.7s
AKTO ⇓S S 19 22 04.1 -0.6
comp=Z,12nm,0.8s
**ODAN Odare** 17.01 120 *eP* Pn 19 19 06.3 +1.0
comp=Z,27nm,0.6s
**UOSS Minazif** 17.11 232 P P 19 19 05.6 +0.7
UOSS IAmb IAmb 19 19 09.1
comp=Z,6.0nm,0.7s
**ASHO Ashiyiah** 17.39 231 P Pn 19 19 09.4 -0.1
SNR=7.1
**DGZ Jazzator, Alta** 17.79 37⇑ *i* P Pn 19 19 14.7 +0.5
**ARQ Araqi** 18.10 227 P P 19 19 14.0 -1.8
**SEKA Sheki** 19.01 291 P Pn 19 19 28.9 +0.4
**MNGR Mingechevir, A** 19.05 290 P Pn 19 19 29.2 +0.3
**GOMU GeErMu** 19.25 84 P Pn 19 19 32.7 +1.0
**UMZA Um Al Zommool** 19.39 229 P P 19 19 30.2 +0.5
**ZKTA Zakatala** 19.49 293 P Pn 19 19 33.9 -0.3
**GANJ Ganja** 19.62 290 P Pn 19 19 35.2 -0.6
**KHOR Al-Khor Airpor** 19.82 242 P P 19 19 34.3 0.0
**TURI Tura** 19.90 118⇑ *eP* P 19 19 36.8 +1.6
TURI IAmb IAmb 19 19 38.6
comp=N,5.5nm,0.9s
TURI ⇑*eS* S 19 23 07.7 -1.1
**ZAA0 Zalesovo Array** 19.90 25 ⇑P P 19 19 35.8 +0.9
comp=N,3.2nm,0.6s
**ZAA0 Zalesovo Array** 19.90 25 P P 19 19 35.8 +0.9
**ZALV Zalesovo Beam** 19.90 25 P P 19 19 36.2 +1.3
comp=N,5.3nm,0.3s,baz=221,slow=11,SNR=126
ZALV S S 19 23 05.7 -2.6
comp=N,0.1nm,0.3s,baz=208,slow=18,SNR=3.7
**ZALV Zalesovo Beam** 19.90 25 *i* P P 19 19 36.2 +1.3
ZALV pmax pmax
comp=Z,22nm,0.4s
**ZALV Zalesovo Beam** 19.90 25 P P 19 19 35.5 +0.5
**SHMA Al-Shehemyia** 20.07 244 P P 19 19 36.9 -0.1
**NAX Nakhchivan** 20.21 285 P Pn 19 19 41.9 -1.1
**MZR Muzera** 20.23 233 P P 19 19 37.8 -0.9
**GNI Garni** 20.80 288 P P 19 19 45.0 +0.2
comp=Z,3.1nm,0.5s,baz=181,slow=12,SNR=3.3
**GNI Garni** 20.80 288 *i* P Pn 19 19 48.1 -2.4
GNI pmax pmax
comp=Z,10.0nm,1.2s
**GNI Garni** 20.80 288 IAmb IAmb 19 19 49.8
comp=Z,14nm,1.2s
**SHL Shillong** 21.00 116 P P 19 19 47.6 +0.5
SHL pmax pmax
comp=Z,34nm,1.4s
**SHL Shillong** 21.00 116 P P 19 19 47.6 +0.5
**ARU Arti** 21.56 341 P P 19 19 53.7 +1.3
comp=Z,1.2nm,0.3s,baz=148,slow=6.3,SNR=13
**ARU Arti** 21.56 341 *d* *i* P P 19 19 53.6 +1.1
ARU 19 20 31.7
ARU S S 19 23 41.4 +2.7
ARU pmax pmax
comp=Z,18nm,1.3s
**ARU Arti** 21.56 341 P P 19 19 51.2 -1.3
**ONI Oni** 21.95 294 P P 19 19 57.2 +0.6
ONI pmax pmax
comp=Z,5.0nm,1.0s
**ONI Oni** 21.95 294 P P 19 19 57.2 +0.6
**KBZ Khabaz** 22.51 297 P P 19 20 02.6 +0.8
comp=Z,1.7nm,0.9s,baz=341,slow=6.4,SNR=1.8
**MOKO MOKOCHONG** 22.53 110 *eP* P 19 20 03.9 +1.5
MOKO IAML 19 20 05.4
comp=Z,8.5nm,0.4s
**KOHI KOHIMA** 22.55 112⇑ *eP* P 19 20 04.5 +1.9
KOHI IAmb IAmb 19 20 10.3
comp=Z,4.0nm,0.7s
**NEY Neytrino** 22.57 296 *i* P P 19 20 05.2 +2.6
NEY pmax pmax
comp=Z,1.0nm,1.0s
**KIV Kislovodsk** 22.70 298 *eP* P 19 20 06.7 +3.1
KIV pmax pmax
comp=Z,5.0nm,1.1s
**BELG Belogornoye** 22.80 321 P P 19 20 06.0 +1.7
comp=Z,18nm,0.8s,baz=329,slow=1.5,SNR=6.0
BELG pP pP 19 20 39.9 +1.3
comp=Z,22nm,0.9s,baz=129,slow=9.9,SNR=4.7

**SHAO Shalim** 22.86 220 P P 19 20 03.2 -2.0
**GTA Gaotai** 22.93 74 *eP* P 19 20 09.0 +3.2
GTA pmax pmax
comp=Z,1.0nm,0.7s
GTA pmax pmax
comp=Z,95nm,5.5s
GTA LR LR
comp=Z,98nm,14.5s
GTA LR LR
comp=Z,85nm,17.1s
GTA LR LR
comp=Z,120nm,15.6s
**IMP Imphal** 22.94 114 *eP* P 19 20 08.4 +2.5
IMP IAmb IAmb 19 20 09.3
comp=Z,5.6nm,0.9s
**DOK Doka** 23.18 224 P P 19 20 08.9 +0.9
**DMTO DMTO** 23.47 221 P P 19 20 10.9 +0.2
**WHFO Wadi Hawf** 23.94 224 P P 19 20 15.5 +0.5
WHFO P P 19 20 17.1 +2.0
SNR=7.0
**ABTO Aybut** 24.66 224 P P 19 20 23.8 +2.2
SNR=8.5
**RAYN Ar Rayn** 25.45 246 P P 19 20 28.5 -0.2
RAYN pmax pmax
comp=Z,4.0nm,0.8s
**RAYN Ar Rayn** 25.45 246 P P 19 20 28.5 -0.2
RAYN IAmb IAmb 19 20 30.4
comp=Z,4.5nm,0.8s
**LZH Lanzhou** 26.48 81 ⇑P P 19 20 39.6 +1.6
LZH pP pP 19 21 17.8 +0.2
LZH pmax pmax
comp=Z,16nm,1.2s
**ULN Ulaanbaatar** 28.81 56 *i* P P 19 20 58.1 -0.5
ULN pmax pmax
comp=Z,12nm,3.7s
**OBN Obninsk** 29.85 319 *i* P P 19 21 08.9 +1.5
OBN pmax pmax
comp=Z,6.0nm,1.0s
**CHTO Chiang Mai** 30.31 118 P P 19 21 13.9 +2.0
CHTO pmax pmax
comp=Z,2.0nm,1.1s
**CHTO Chiang Mai** 30.31 118 P P 19 21 13.9 +2.0
**PALK Pallekele** 30.48 161 P P 19 21 13.7 +0.2
comp=Z,3.3nm,0.7s,baz=86,slow=9.5,SNR=4.6
**CMAR Chiang Mai Arr** 30.55 119 P P 19 21 15.1 +1.1
comp=Z,1.7nm,0.8s,baz=299,slow=8.5,SNR=18
CMAR pP pP 19 21 53.9 -0.1
comp=Z,0.4nm,0.8s,baz=302,slow=10,SNR=1.3
**HHC Hu-ho-hao-te** 31.82 70 *eP* P 19 21 26.0 +0.9
HHC pmax pmax
comp=Z,4.0nm,1.0s
HHC pmax pmax
comp=Z,140nm,5.0s
**AKASG Malin Array Be** 32.85 309 P P 19 21 35.1 +1.3
comp=Z,1.8nm,0.5s,baz=83,slow=6.8,SNR=12
**AKASG Malin Array Si** 32.85 309 P P 19 21 33.6 -0.1
**AKBB Malin Array Si** 32.85 309 P P 19 21 34.5 +0.7
AKBB pmax pmax
comp=Z,3.0nm,0.6s
**AKBB Malin Array Si** 32.85 309 P P 19 21 34.5 +0.7
AKBB IAmb IAmb 19 21 35.9
comp=Z,2.7nm,0.6s
**NRIK Noril'sk** 34.09 10 P P 19 21 45.9 +1.7
comp=Z,2.5nm,0.4s,baz=205,slow=5.6,SNR=5.5
NRIK pP pP 19 22 24.3 0.0
comp=Z,3.6nm,0.8s,baz=211,slow=12,SNR=3.0
**NRIK Noril'sk** 34.09 10 P P 19 21 46.3 +2.1
NRIK *PP pP 19 22 24.3 0.0
NRIK pmax pmax
comp=Z,9.0nm,1.2s
**NRIK Noril'sk** 34.09 10 P P 19 21 46.3 +2.1
NRIK IAmb IAmb 19 21 47.6
comp=Z,8.7nm,1.2s
**BURAR Bucovina Array** 35.19 303 P P 19 21 56.3 +2.2
**FINES FINESS Array B** 37.40 326 P P 19 22 13.9 +1.6
comp=Z,3.5nm,0.8s,baz=123,slow=8.5,SNR=17
**FINES FINESS Array B** 37.40 326 P P 19 22 14.0 +1.6
**ARCES ARCESS Array B** 41.07 338 P P 19 22 44.6 +1.9
comp=Z,1.5nm,0.5s,baz=117,slow=7.5,SNR=20
**NB2 NORSAR Subarra** 44.29 323 P P 19 23 10.2 +1.4
comp=Z,1.3nm,0.5s,baz=95,slow=7.9
**NOA NORSAR Array B** 44.29 323 P P 19 23 10.2 +1.4
comp=Z,1.5nm,0.5s,baz=96,slow=7.7,SNR=9.7
NOA pP pP 19 23 51.2 +1.3
comp=Z,1.7nm,0.8s,baz=96,slow=8.1,SNR=3.2
**KMBO Kilima Mbogo** 48.81 227 P P 19 23 46.0 +1.4
comp=Z,1.3nm,0.5s,baz=39,slow=15,SNR=5.1
**KMBO Kilima Mbogo** 48.81 227 *i* P P 19 23 48.0 +3.3
KMBO pmax pmax
comp=Z,1.0nm,0.4s
**MBAR Mbarara** 52.47 234 P P 19 24 12.8 +0.8
comp=Z,2.5nm,0.4s,baz=26,slow=11,SNR=5.5
**TORD Torodi Ar. Bea** 65.64 269 P P 19 25 41.0 -1.3
comp=Z,0.7nm,0.5s,baz=58,slow=6.3,SNR=6.8
**INK Inuvik** 73.87 9 P P 19 26 33.4 +1.7
comp=Z,1.7nm,0.7s,baz=1.3,slow=7.7,SNR=6.1
**INK Inuvik** 73.87 9 IAmb IAmb 19 26 34.2
comp=Z,2.1nm,0.8s
**ILAR Eielson Array** 74.75 16 P P 19 26 37.2 +0.4
comp=Z,0.7nm,1.0s,baz=324,slow=4.5,SNR=2.8
**BOSA Boshof** 77.73 220 P P 19 26 54.5 +0.3
comp=Z,1.5nm,0.5s,baz=38,slow=3.8,SNR=8.1
**BOSA Boshof** 77.73 220 IAmb IAmb 19 26 55.6
comp=Z,7.4nm,1.1s
**YKA Yellowknife Ar** 81.20 3 P P 19 27 13.8 +1.5
comp=Z,0.9nm,0.4s,baz=351,slow=5.4,SNR=26
YKA pP pP 19 27 59.9 +0.8
comp=Z,1.1nm,0.7s,baz=350,slow=5.5,SNR=7.9
**WRA Warramunga Arr** 82.08 122 P P 19 27 16.9 -0.8
comp=Z,3.2nm,0.8s,baz=326,slow=5.0,SNR=23
**WRA Warramunga Arr** 82.08 122 *i* P P 19 27 17.3 -0.3
WRA pmax pmax
comp=Z,3.0nm,0.7s
**ASAR Alice Springs** 84.35 125 P P 19 27 28.7 -0.5
comp=Z,3.3nm,0.6s,baz=310,slow=5.0,SNR=69
ASAR pP pP 19 28 18.1 +1.4
comp=Z,0.3nm,0.5s,baz=313,slow=4.8,SNR=2.1

**JMA 10 20:12:00.2±0.1, 24.90N×123.44E, h27km±5km, M2.5, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YOJ** | **Yonaguni jima** | **0.59** | **222** | P | Pb | 20 12 11.6 | -0.3 |
| YOJ | | | | *e*S | Sb | 20 12 19.3 | -0.6 |
| **IRIF** | **Iriomote-Funau** | **0.62** | **155** | P | Pb | 20 12 12.1 | -0.4 |
| IRIF | | | | *e*S | Sb | 20 12 21.0 | +0.1 |
| **JYNG** | **Yonagunijimaku** | **0.63** | **225** | P | Pb | 20 12 12.4 | -0.3 |
| JYNG | | | | S | Sb | 20 12 20.8 | -0.4 |
| **JIJ** | **Ishigaki jima** | **0.83** | **130** | P | Pb | 20 12 15.4 | -0.7 |
| JIJ | | | | S | Sb | 20 12 25.6 | -1.3 |
| **JKRS** | **Kuro-shima** | **0.84** | **142** | P | Pb | 20 12 15.9 | -0.3 |
| JKRS | | | | S | Sb | 20 12 26.8 | -0.3 |
| **JISG** | **Ishigakijimahi** | **0.85** | **111** | P | Pb | 20 12 16.0 | -0.4 |
| JISG | | | | *e*S | Sb | 20 12 26.8 | -0.6 |
| **HATJ** | **Hateruma jima** | **0.90** | **158** | P | Pn | 20 12 16.8 | -0.3 |
| HATJ | | | | S | Sb | 20 12 28.6 | -0.3 |

**TAP 10 20:12:43.2, 23.95N×121.62E, h5km, ML2.9, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HWA** | **Hwalien** | **0.03** | **339** | *i* P | Pg | 20 12 45.1 | +0.8 |
| baz=354 | | | | | | | |
| HWA | | | | *i* S | Sg | 20 12 47.2 | +2.0 |
| baz=354 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.08** | **192** | *i* P | Pg | 20 12 44.9 | -0.1 |
| baz=196 | | | | | | | |
| TEYL | | | | S | Sg | 20 12 46.5 | +0.2 |
| baz=196 | | | | | | | |
| **ETM** | **Tongmen** | **0.12** | **279** | *i* P | Pg | 20 12 46.5 | +0.8 |
| baz=278 | | | | | | | |
| ETM | | | | *i* S | Sg | 20 12 48.9 | +1.6 |
| baz=278 | | | | | | | |
| **TWD** | **Chiawan** | **0.13** | **352** | *i* P | Pg | 20 12 46.9 | +0.9 |
| baz=355 | | | | | | | |
| TWD | | | | S | Sg | 20 12 49.7 | +1.9 |
| baz=355 | | | | | | | |
| **ETL** | **Fush Village** | **0.21** | **1** | *i* P | Pg | 20 12 48.2 | +0.8 |
| baz=1.0 | | | | | | | |
| ETL | | | | *e*S | Sg | 20 12 52.0 | +1.8 |
| baz=1.0 | | | | | | | |
| **ESL** | **Shilin** | **0.21** | **232** | P | Pg | 20 12 47.8 | +0.3 |
| baz=229 | | | | | | | |
| ESL | | | | S | Sg | 20 12 51.7 | +1.4 |
| baz=229 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.23** | **355** | *i* P | Pg | 20 12 48.4 | +0.7 |
| baz=354 | | | | | | | |
| NACB | | | | S | Sg | 20 12 52.3 | +1.6 |
| baz=354 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.25** | **197** | P | Pg | 20 12 48.9 | +0.8 |
| baz=194 | | | | | | | |
| TEGC | | | | *e*S | Sg | 20 12 54.1 | +2.8 |
| baz=194 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.29** | **334** | *i* P | Pg | 20 12 49.7 | +0.8 |
| baz=334 | | | | | | | |
| ETLH | | | | S | Sb | 20 12 54.4 | -1.6 |
| baz=334 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.38** | **301** | P | Pg | 20 12 51.4 | +0.8 |
| baz=301 | | | | | | | |
| WHF | | | | *e*S | Sb | 20 12 57.8 | -1.2 |
| baz=301 | | | | | | | |
| **CHGB** | **Renai** | **0.42** | **286** | *i* P | Pb | 20 12 52.5 | -0.7 |
| baz=285 | | | | | | | |
| CHGB | | | | S | Sb | 20 12 59.8 | -0.2 |
| baz=285 | | | | | | | |
| **FUSS** | **Fushou** | **0.45** | **311** | P | Pb | 20 12 53.2 | -0.7 |
| baz=311 | | | | | | | |
| FUSS | | | | *e*S | Sb | 20 13 00.7 | -0.3 |
| baz=311 | | | | | | | |
| **WUSB** | **Renai** | **0.46** | **276** | *i* P | Pb | 20 12 53.3 | -0.6 |
| baz=275 | | | | | | | |
| WUSB | | | | S | Sb | 20 13 00.6 | -0.5 |
| baz=275 | | | | | | | |
| **VWDT** | **VWDT** | **0.48** | **246** | P | Pb | 20 12 53.3 | -0.8 |
| baz=246 | | | | | | | |
| VWDT | | | | S | Sb | 20 13 00.6 | -0.8 |
| baz=246 | | | | | | | |
| **HGSD** | **Ruisui** | **0.49** | **201** | *e*P | Pb | 20 12 54.4 | +0.1 |
| baz=201 | | | | | | | |
| HGSD | | | | *e*S | Sb | 20 13 02.8 | +1.1 |
| baz=201 | | | | | | | |
| **ENA** | **Nanau** | **0.49** | **13** | P | Pg | 20 12 53.5 | +0.8 |
| baz=14 | | | | | | | |
| ENA | | | | S | Sb | 20 13 02.4 | +0.5 |
| baz=14 | | | | | | | |
| **TWT** | **Tachien** | **0.51** | **307** | P | Pb | 20 12 54.5 | -0.2 |
| baz=305 | | | | | | | |
| TWT | | | | S | Sb | 20 13 03.5 | +1.1 |
| baz=305 | | | | | | | |
| **EHY** | **Hungye** | **0.52** | **212** | P | Pg | 20 12 53.7 | +0.5 |
| baz=210 | | | | | | | |
| EHY | | | | *e*S | Sb | 20 13 02.3 | -0.3 |
| baz=210 | | | | | | | |
| **EWUT** | **Wuta** | **0.52** | **17** | *e*P | Pg | 20 12 54.0 | +0.8 |
| baz=16 | | | | | | | |
| EWUT | | | | *e*S | Sb | 20 13 03.2 | +0.6 |
| baz=16 | | | | | | | |
| **TDCB** | **Techi** | **0.52** | **306** | *i* P | Pb | 20 12 54.6 | -0.3 |
| baz=305 | | | | | | | |
| TDCB | | | | *e*S | Sb | 20 13 03.4 | +0.6 |
| baz=305 | | | | | | | |
| **NNSB** | **Datong** | **0.52** | **336** | P | Pb | 20 12 54.5 | -0.5 |
| baz=335 | | | | | | | |
| NNSB | | | | *e*S | Sb | 20 13 02.2 | -0.7 |
| baz=335 | | | | | | | |
| **NNS** | **Nan Shan** | **0.54** | **336** | P | Pb | 20 12 54.9 | -0.4 |
| baz=336 | | | | | | | |
| NNS | | | | *e*S | Sb | 20 13 02.9 | -0.4 |
| baz=336 | | | | | | | |
| **LATG** | **Datong** | **0.59** | **352** | *i* P | Pb | 20 12 56.0 | -0.1 |
| baz=351 | | | | | | | |
| LATG | | | | *e*S | Sb | 20 13 06.5 | +1.6 |
| baz=351 | | | | | | | |
| **WPL** | **Puli Township** | **0.61** | **276** | P | Pb | 20 12 56.2 | -0.1 |
| baz=276 | | | | | | | |
| WPL | | | | *e*S | Sb | 20 13 05.4 | +0.2 |
| baz=276 | | | | | | | |
| **YULB** | **Yu-li** | **0.63** | **208** | *e*P | Pb | 20 12 57.0 | +0.3 |
| baz=207 | | | | | | | |
| YULB | | | | *e*S | Sb | 20 13 06.1 | +0.3 |
| baz=207 | | | | | | | |
| **SSLB** | **Suanglung** | **0.63** | **255** | *e*P | Pb | 20 12 56.2 | -0.5 |
| baz=255 | | | | | | | |
| SSLB | | | | *e*S | Sb | 20 13 04.8 | -0.9 |
| baz=255 | | | | | | | |
| **DPDB** | **Guoxing** | **0.64** | **278** | P | Pb | 20 12 57.0 | +0.1 |
| baz=277 | | | | | | | |
| DPDB | | | | S | Sb | 20 13 07.3 | +1.2 |
| baz=277 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.65** | **280** | P | Pb | 20 12 57.2 | 0.0 |
| baz=279 | | | | | | | |
| WCS | | | | *e*S | Sb | 20 13 07.6 | +1.1 |
| baz=279 | | | | | | | |
| **EYUL** | **Yuli** | **0.66** | **205** | *e*P | Pb | 20 12 57.6 | +0.4 |
| baz=204 | | | | | | | |
| EYUL | | | | *e*S | Sn | 20 13 08.3 | -1.6 |
| baz=204 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.66** | **352** | *e*P | Pb | 20 12 57.0 | -0.2 |
| baz=351 | | | | | | | |
| NDT | | | | *e*S | Sb | 20 13 07.9 | +1.2 |
| baz=351 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.66** | **265** | P | Pb | 20 12 57.1 | -0.2 |
| baz=264 | | | | | | | |
| SMLT | | | | *e*S | Sb | 20 13 07.6 | +0.8 |
| baz=264 | | | | | | | |
| **TWF1** | **Yuli** | **0.66** | **206** | P | Pb | 20 12 56.9 | -0.4 |
| baz=205 | | | | | | | |
| TWF1 | | | | *e*S | Sb | 20 13 08.3 | +1.6 |
| baz=205 | | | | | | | |
| **NDS** | **Dongshan** | **0.69** | **8** | *e*P | Pb | 20 12 57.2 | -0.5 |
| baz=7.0 | | | | | | | |
| NDS | | | | S | Sb | 20 13 08.1 | +0.5 |
| baz=7.0 | | | | | | | |
| **ENTT** | **Nioudou** | **0.69** | **356** | P | Pb | 20 12 57.6 | -0.1 |
| baz=356 | | | | | | | |
| ENTT | | | | *e*S | Sn | 20 13 10.1 | -0.7 |
| baz=356 | | | | | | | |
| **TWC** | **Suao** | **0.69** | **18** | P | Pb | 20 12 57.7 | -0.1 |
| baz=18 | | | | | | | |
| TWC | | | | *e*S | Sb | 20 13 08.9 | +1.3 |
| baz=18 | | | | | | | |
| **WHP** | **Taichung City** | **0.70** | **298** | P | Pb | 20 12 58.2 | +0.3 |
| baz=298 | | | | | | | |
| WHP | | | | *e*S | Sb | 20 13 08.6 | +0.7 |
| baz=298 | | | | | | | |
| **YHNB** | **Yeheng** | **0.75** | **343** | P | Pb | 20 12 59.0 | +0.2 |
| baz=342 | | | | | | | |
| YHNB | | | | *e*S | Sb | 20 13 10.9 | +1.4 |
| baz=342 | | | | | | | |
| **NSK** | **Sanguang** | **0.76** | **342** | P | Pb | 20 12 59.2 | +0.2 |
| baz=342 | | | | | | | |
| NSK | | | | *e*S | Sb | 20 13 10.8 | +1.0 |
| baz=342 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.76** | **233** | *e*P | Pg | 20 12 58.1 | +0.2 |
| baz=232 | | | | | | | |
| YUS | | | | *e*S | Sb | 20 13 11.3 | +1.2 |
| baz=232 | | | | | | | |
| **TWE** | **Neicheng** | **0.77** | **3** | P | Pb | 20 12 59.1 | 0.0 |
| baz=4.0 | | | | | | | |
| TWE | | | | *e*S | Sb | 20 13 10.5 | +0.6 |
| baz=4.0 | | | | | | | |
| **FULB** | **Fuli** | **0.80** | **202** | P | Pb | 20 13 00.3 | +0.7 |
| baz=201 | | | | | | | |
| FULB | | | | *e*S | Sn | 20 13 14.6 | +1.0 |
| baz=201 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.81** | **358** | P | Pb | 20 12 59.9 | 0.0 |
| baz=358 | | | | | | | |
| FUSB | | | | *e*S | Sb | 20 13 11.8 | +0.8 |
| baz=358 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.82** | **326** | *e*P | Pb | 20 13 00.7 | +0.7 |
| baz=326 | | | | | | | |
| NFF | | | | *e*S | Sb | 20 13 12.0 | +0.7 |
| baz=326 | | | | | | | |
| **WJS** | **Zhushan** | **0.82** | **261** | *e*P | Pb | 20 13 00.3 | +0.3 |
| baz=261 | | | | | | | |
| WJS | | | | *e*S | Sn | 20 13 13.0 | -1.0 |
| baz=261 | | | | | | | |
| **NWLT** | **Wulai** | **0.83** | **353** | P | Pb | 20 13 00.5 | +0.3 |
| baz=352 | | | | | | | |
| NWLT | | | | *e*S | Sb | 20 13 12.1 | +0.3 |
| baz=352 | | | | | | | |
| **WWF** | **Wufeng** | **0.85** | **277** | *e*P | Pb | 20 13 00.6 | +0.2 |
| baz=276 | | | | | | | |
| WWF | | | | *e*S | Sn | 20 13 13.6 | -1.0 |
| baz=276 | | | | | | | |
| **WNT** | **Mingjian** | **0.86** | **266** | *e*P | Pn | 20 13 01.7 | -0.2 |
| baz=265 | | | | | | | |
| WNT | | | | *e*S | Sn | 20 13 15.7 | +0.9 |
| baz=265 | | | | | | | |
| **ALS** | **Alishan** | **0.86** | **240** | P | Pb | 20 13 00.9 | 0.0 |
| baz=239 | | | | | | | |
| ALS | | | | *e*S | Sn | 20 13 14.2 | -1.2 |
| baz=239 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWQ1** | **Liyutan** | **0.87** | **297** | *eP* | Pb | 20 13 00.9 | +0.2 |
| | baz=297 | | | | | | | |
| TWQ1 | | | | *eS* | Sn | 20 13 14.1 | -1.0 |
| | baz=297 | | | | | | | |
| **TCU** | **Taichung** | **0.88** | **283** | *eP* | Pb | 20 13 01.1 | +0.1 |
| | baz=282 | | | | | | | |
| TCU | | | | *eS* | Sn | 20 13 14.4 | -1.0 |
| | baz=282 | | | | | | | |
| **LIOB** | **Emei** | **0.89** | **322** | *eP* | Pn | 20 13 02.5 | +0.1 |
| | baz=321 | | | | | | | |
| **NSY** | **Sanyi** | **0.91** | **301** | *eP* | Pb | 20 13 01.6 | +0.1 |
| | baz=300 | | | | | | | |
| NSY | | | | *eS* | Sn | 20 13 15.2 | -1.0 |
| | baz=300 | | | | | | | |
| **NTC** | **Toucheng** | **0.92** | **12** | *eP* | Pb | 20 13 02.1 | +0.4 |
| | baz=12 | | | | | | | |
| NTC | | | | *eS* | Sn | 20 13 15.8 | -0.6 |
| | baz=12 | | | | | | | |
| **CHN5** | **Tsauling** | **0.93** | **248** | *eP* | Pn | 20 13 02.7 | -0.3 |
| | baz=247 | | | | | | | |
| CHN5 | | | | *eS* | Sn | 20 13 16.3 | -0.4 |
| | baz=247 | | | | | | | |
| **ELDTW** | **Lidau** | **0.94** | **216** | *eP* | Pg | 20 13 00.7 | -0.5 |
| | baz=215 | | | | | | | |
| ELDTW | | | | *eS* | Sn | 20 13 16.4 | -0.5 |
| | baz=215 | | | | | | | |
| **NMLH** | **Miaoli** | **0.95** | **308** | *eP* | Pb | 20 13 02.5 | +0.2 |
| | baz=307 | | | | | | | |
| NMLH | | | | *eS* | Sb | 20 13 15.7 | +0.5 |
| | baz=307 | | | | | | | |
| **WCHH** | **Zhanghua** | **0.98** | **278** | *eP* | Pb | 20 13 03.0 | +0.3 |
| | baz=277 | | | | | | | |
| WCHH | | | | *eS* | Sn | 20 13 17.6 | -0.2 |
| | baz=277 | | | | | | | |
| **EDH** | **Donghe** | **1.01** | **197** | *eP* | Pg | 20 13 01.8 | -0.8 |
| | baz=196 | | | | | | | |
| EDH | | | | *eS* | Sn | 20 13 18.3 | -0.4 |
| | baz=196 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.01** | **355** | *eP* | Pn | 20 13 03.9 | -0.2 |
| | baz=355 | | | | | | | |
| **WDLH** | **Douliu** | **1.02** | **256** | *eP* | Pn | 20 13 04.7 | +0.5 |
| | baz=255 | | | | | | | |
| WDLH | | | | *eS* | Sn | 20 13 20.9 | +2.0 |
| | baz=255 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.04** | **11** | P | Pn | 20 13 04.5 | 0.0 |
| | baz=10.0 | | | | | | | |
| TIPB | | | | *eS* | Sn | 20 13 19.5 | +0.1 |
| | baz=10.0 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.11** | **238** | *eP* | Pn | 20 13 06.0 | +0.5 |
| | baz=237 | | | | | | | |
| CHN4 | | | | *eS* | Sn | 20 13 21.9 | +0.8 |
| | baz=237 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.11** | **235** | P | Pn | 20 13 06.2 | +0.8 |
| | baz=234 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.14** | **268** | *eP* | Pn | 20 13 05.7 | 0.0 |
| | baz=267 | | | | | | | |
| WRL | | | | *eS* | Sn | 20 13 22.4 | +0.7 |
| | baz=267 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.16** | **351** | *eP* | Pn | 20 13 06.1 | 0.0 |
| | baz=351 | | | | | | | |
| TWS1 | | | | *eS* | Sn | 20 13 23.1 | +0.7 |
| | baz=351 | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.17** | **12** | *eP* | Pn | 20 13 06.2 | 0.0 |
| | baz=11 | | | | | | | |
| SXI1 | | | | *eS* | Sn | 20 13 23.3 | +0.7 |
| | baz=11 | | | | | | | |
| **SGST** | **Jiashian** | **1.28** | **228** | *eP* | Pb | 20 13 08.0 | +0.2 |
| | baz=227 | | | | | | | |
| SGST | | | | *eS* | Sn | 20 13 27.4 | +2.0 |
| | baz=227 | | | | | | | |
| **SLGT** | **Liugui** | **1.30** | **223** | *eP* | Pg | 20 13 09.2 | +0.9 |
| | baz=223 | | | | | | | |
| SLGT | | | | *eS* | Sn | 20 13 28.0 | +2.2 |
| | baz=223 | | | | | | | |
| **WSF** | **Szhu** | **1.31** | **257** | *eS* | Sn | 20 13 29.4 | +3.3 |
| | baz=256 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.34** | **252** | *eP* | Pg | 20 13 09.6 | +0.6 |
| | baz=251 | | | | | | | |
| WSL | | | | *eS* | Sn | 20 13 29.1 | +2.3 |
| | baz=251 | | | | | | | |
| **ECL** | **Taimali** | **1.48** | **205** | *eP* | Pb | 20 13 11.3 | +0.1 |
| | baz=204 | | | | | | | |
| ECL | | | | *eS* | Sg | 20 13 32.2 | +1.5 |
| | baz=204 | | | | | | | |
| **SHHT** | **Tainan City** | **1.49** | **232** | *eP* | Pg | 20 13 12.4 | +0.7 |
| | baz=231 | | | | | | | |
| SHHT | | | | *eS* | Sg | 20 13 31.7 | +0.7 |
| | baz=231 | | | | | | | |
| **SSD** | **Sandimen** | **1.50** | **217** | *eP* | Pb | 20 13 11.8 | +0.2 |
| | baz=216 | | | | | | | |
| SSD | | | | *eS* | Sg | 20 13 33.8 | +2.3 |
| | baz=216 | | | | | | | |
| **TSMG** | **Majia** | **1.53** | **216** | *eP* | Pb | 20 13 12.6 | 0.0 |
| | baz=215 | | | | | | | |
| TSMG | | | | *eS* | Sg | 20 13 34.0 | +1.7 |
| | baz=215 | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.61** | **214** | *eP* | Pb | 20 13 12.8 | -0.6 |
| | baz=214 | | | | | | | |
| MASBT | | | | *eS* | Sg | 20 13 34.7 | -0.3 |
| | baz=214 | | | | | | | |
| **EAST** | **Anshuo** | **1.71** | **205** | *eP* | Pg | 20 13 16.2 | +0.2 |
| | baz=204 | | | | | | | |
| EAST | | | | *eS* | Sg | 20 13 38.6 | +0.3 |
| | baz=204 | | | | | | | |

*IDC **10** 20:18:56.9±2.2, 43.˚46N× 105.˚44W, h0km, mb1 3.3/3, mb1mx3.2/33, mbtmp3.1/3, ML2.8/2, Error ellipse: s-maj=42.9km s-min=8.7km az=150.0*

*NEIC **10** 20:18:56.9±1.5, 43.˚64N±0.˚02× 105.˚24W±0.˚07, h0km±2km, ML3.2/38, Error ellipse: s-maj=9.1km s-min=3.1km az=100.0*

**ISC 10 20:18:55.4**±1.0, **43.˚55N**±0.˚05× **105.˚19W**±0.˚07, **h0**km, **n32, σ1°31/30, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **RSSD** | **Black Hills** | **1.01** | **55** | Pg | **Pn** | | **20 19 16.1** | **-0.9** |
| **K22A** | **Casper** | **1.33** | **228** | Pn | **Pn** | | **20 19 21.6** | **+0.2** |
| K22A | | | | IAML | | | 20 19 48.6 | |
| | comp=N,247nm,0.3s | | | | | | | |
| **PHWY** | **Pilot Hill** | **2.26** | **185** | Pn | **Pb** | | **20 19 36.2** | **-1.0** |
| PHWY | | | | IAML | | | 20 20 18.0 | |
| | comp=N,90nm,1.1s | | | | | | | |
| **RWWY** | **Rawlins** | **2.38** | **219** | Pn | **Pb** | | **20 19 39.3** | **0.0** |
| RWWY | | | | IAML | | | 20 20 20.4 | |
| | comp=N,191nm,1.2s | | | | | | | |
| **N23A** | **Red Feather La** | **2.71** | **192** | Pn | **Pb** | | **20 19 43.8** | **-1.2** |
| N23A | | | | IAML | | | 20 20 29.9 | |
| | comp=E,87nm,1.0s | | | | | | | |
| N23A | | | | IAML | | | 20 20 36.4 | |
| | comp=N,100nm,0.8s | | | | | | | |
| **LAO** | **LASA Array** | **3.22** | **347** | Pn | **Pn** | | **20 19 47.3** | **0.0** |
| LAO | | | | IAML | | | 20 20 59.7 | |
| | comp=N,98nm,1.1s | | | | | | | |
| LAO | | | | IAML | | | 20 20 60.0 | |
| | comp=N,108nm,1.2s | | | | | | | |
| **BW06** | **Boulder Array** | **3.29** | **258** | | **Pn** | | **20 19 50.0** | **+1.6** |
| **PD31** | **Pinedale Array** | **3.29** | **258** | Pn | **Pn** | | **20 19 49.4** | **+1.0** |
| **PDAR** | **Pinedale Array** | **3.29** | **258** | Pn | **Pn** | | **20 19 49.8** | **+1.4** |
| | comp=N,4.2nm,0.3s,baz=86,slow=15,SNR=41 | | | | | | | |
| PDAR | | | | Lg | Lg | | 20 20 34.2 | |
| | comp=N,11nm,0.3s,baz=75,slow=32,SNR=8.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **3.29** | **258** | | **Pn** | | **20 19 49.4** | **+1.0** |
| **RLMT** | **Red Lodge** | **3.32** | **300** | Pn | **Pn** | | **20 19 49.3** | **+0.5** |
| RLMT | | | | IAML | | | 20 21 29.6 | |
| | comp=N,42nm,1.4s | | | | | | | |
| RLMT | | | | IAML | | | 20 21 30.3 | |
| | comp=N,55nm,1.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **3.76** | **185** | Pn | **Pn** | | **20 19 56.8** | **+1.8** |
| ISCO | | | | IAML | | | 20 21 18.0 | |
| | comp=N,26nm,0.9s | | | | | | | |
| **YMP** | **Mirror Lake Pl** | **3.77** | **290** | | **Pn** | | **20 19 54.9** | **-0.2** |
| YMP | | | | IAML | | | 20 21 29.2 | |
| | comp=E,61nm,1.1s | | | | | | | |
| **LKWY** | **Lake** | **3.89** | **287** | | **Pn** | | **20 19 57.0** | **+0.3** |
| LKWY | | | | IAML | | | 20 20 22.5 | |
| | comp=E,51nm,1.1s | | | | | | | |
| **MOOW** | **Moose Ponds** | **4.04** | **275** | | **Pn** | | **20 20 00.2** | **+1.6** |
| **O20A** | **White River Ci** | **4.11** | **215** | | **Pn** | | **20 19 57.3** | **-2.2** |
| **TPAW** | **Teton Pass** | **4.19** | **271** | | **Pn** | | **20 19 60.0** | **-0.8** |
| TPAW | | | | IAML | | | 20 21 05.6 | |
| | comp=E,28nm,0.6s | | | | | | | |
| TPAW | | | | IAML | | | 20 21 23.0 | |
| | comp=E,44nm,1.1s | | | | | | | |
| **YHH** | **Holmes Hill** | **4.25** | **289** | | **Pn** | | **20 20 00.6** | **-1.2** |
| YHH | | | | IAML | | | 20 21 25.8 | |
| | comp=N,19nm,1.7s | | | | | | | |
| YHH | | | | IAML | | | 20 21 39.9 | |
| | comp=E,18nm,2.2s | | | | | | | |
| **YMR** | **Madison River** | **4.30** | **287** | | **Pn** | | **20 20 02.0** | **-0.4** |
| **AHID** | **Auburn Hatcher** | **4.39** | **262** | | **Pn** | | **20 20 03.9** | **+0.4** |
| AHID | | | | IAML | | | 20 21 24.8 | |
| | comp=E,38nm,1.3s | | | | | | | |
| **RDMU** | **Red Mountain** | **4.42** | **229** | | **Pn** | | **20 20 05.7** | **+1.9** |
| RDMU | | | | IAML | | | 20 21 24.5 | |
| | comp=N,32nm,1.4s | | | | | | | |
| RDMU | | | | IAML | | | 20 21 32.3 | |
| | comp=E,29nm,0.9s | | | | | | | |
| **QLMT** | **Earthquake Lak** | **4.67** | **288** | Pn | **Pn** | | **20 20 06.1** | **-1.2** |
| **DGMT** | **Dagmar** | **4.97** | **8** | | **Pn** | | **20 20 10.1** | **-1.1** |
| **P18A** | **Preston Nutter** | **5.45** | **226** | | **Pn** | | **20 20 17.8** | **-0.3** |
| **PV23** | **Carpenter Ridg** | **5.86** | **211** | | **Pn** | | **20 20 24.1** | **+0.4** |
| **SRU** | **San Rafael Swe** | **5.98** | **224** | | **Pn** | | **20 20 26.9** | **+1.6** |
| **TMUT** | **Trail Mountain** | **6.21** | **229** | | **Pn** | | **20 20 27.6** | **-0.9** |
| **I10CA** | **LAC DU BONNET** | **9.14** | **40** | *i* | | | 21 19 40.0 | |
| | baz=223,slow=329,SNR=1.7 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.24** | **40** | Pn | **Pn** | | **20 21 13.2** | **+3.3** |
| | comp=E,0.7nm,0.3s,baz=226,slow=13,SNR=2.4 | | | | | | | |
| ULM | | | | Sn | **Sn** | | **20 22 53.3** | **-1.3** |
| | comp=E,0.4nm,0.3s,baz=324,slow=15,SNR=1.8 | | | | | | | |
| ULM | | | | Lg | Lg | | 20 23 46.5 | |
| | comp=E,0.5nm,0.3s,baz=332,slow=16,SNR=2.2 | | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.56** | **304** | *i* | | | 21 19 50.0 | |
| | baz=119,slow=331,SNR=3.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.15** | **247** | Lg | Lg | | 20 24 34.8 | |
| | comp=E,0.2nm,0.3s,baz=318,slow=20,SNR=4.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.76** | **347** | P | **Pn** | | **20 23 28.6** | **+0.5** |
| | comp=E,0.1nm,0.3s,baz=159,slow=11,SNR=2.3 | | | | | | | |

*IDC **10** 20:42:27.9±5.3, 13.˚60N× 91.˚94W, h49km±33km, mb3.8/2, mb1 3.7/4, mb1mx3.4/48, mbtmp3.7/4, ML3.2/2, MS3.7/1, Ms1 3.7/1, ms1mx2.5/69, Error ellipse: s-maj=52.1km s-min=14.1km az=4.0*

**ISC 10 20:42:24.7**±2.3, **13.˚4N**±0.˚2× **92.˚01W**±0.˚08, **h37**km, **n7, σ1°13/8, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **APG** | **El Apazote** | **2.20** | **43** | P | **Pn** | | **20 43 00.1** | **+1.2** |
| | 21nm,0.3s,baz=222,slow=12,SNR=94 | | | | | | | |
| APG | | | | S | **Sn** | | **20 43 24.0** | **-0.9** |
| | 7.4nm,0.3s,baz=216,slow=13,SNR=4.4 | | | | | | | |
| APG | | | | LR | LR | | 20 43 44.3 | |
| | comp=Z,51nm,18.2s,baz=252,slow=38 | | | | | | | |
| **CMIG** | **Matias Romero** | **4.61** | **323** | P | **Pn** | | **20 43 31.6** | **-0.3** |
| | 0.3nm,0.3s,baz=149,slow=5.9,SNR=2.3 | | | | | | | |
| CMIG | | | | S | **Sn** | | **20 44 25.1** | **+0.8** |
| | 2.3nm,0.3s,baz=241,slow=19,SNR=4.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **19.21** | **328** | P | **Pn** | | **20 46 46.9** | **+0.1** |
| | 0.0nm,0.3s,baz=150,slow=10,SNR=5.1 | | | | | | | |
| **SCHQ** | **Schefferville** | **45.80** | **20** | P | **P** | | **20 50 41.1** | **-1.6** |
| | 3.6nm,1.0s,baz=218,slow=9.7,SNR=4.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.62** | **347** | P | **P** | | **20 51 27.9** | **+0.6** |
| | 0.9nm,0.6s,baz=147,slow=7.7,SNR=16 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.10** | **17** | LR | LR | | 21 19 56.7 | |
| | comp=Z,54nm,19.0s,baz=314,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.57** | **341** | PKPbc | | **PKPab** | **21 02 04.6** | **+0.5** |
| | 0.4nm,0.8s,baz=29,slow=4.1,SNR=2.9 | | | | | | | |

*NEIC **10** 20:43:21.5±1.6, 5.˚8S±0.˚1× 154.˚85E±0.˚09, h120km±6km, mb4.5/29, Error ellipse: s-maj=16.0km s-min=12.4km az=165.0*

*IDC **10** 20:43:25.5±1.8, 5.˚84S× 154.˚77E, h164km±13km, mb3.8/14, mb1 3.9/16, mb1mx3.7/40, mbtmp4.2/16, Error ellipse: s-maj=18.2km s-min=12.7km az=83.0*

**ISC 10 20:43:23.6**±0.5, **5.˚82S**±0.˚07× **154.˚80E**±0.˚07, **h150**km, **n77, σ1°44/74, mb4.3/34, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **RABL** | **Rabaul** | **3.08** | **301** | Pn | **Pn** | | **20 44 07.4** | **-4.6** |
| **KRVT** | **Keravat (AS076** | **3.14** | **298** | P | Pn | | 20 44 15.9 | +3.1 |
| KRVT | | | | S | **Sn** | | **20 44 53.4** | **+2.5** |
| **PMG** | **Port Moresby** | **8.37** | **244** | P | Pn | | 20 45 28.4 | +6.4 |
| | 4.3nm,0.3s,baz=42,slow=7.4,SNR=6.8 | | | | | | | |
| PMG | | | | S | Sn | | 20 47 03.4 | +8.3 |
| | 1.2nm,0.3s,baz=16,slow=18,SNR=2.3 | | | | | | | |
| **PMG** | **Port Moresby** | **8.37** | **244** | | **Pn** | | **20 45 20.5** | **-1.5** |
| **PMG** | **Port Moresby** | **8.37** | **244** | P | Pn | | 20 45 34.5 | +13 |
| **COEN** | **Coen** | **14.01** | **234** | Pn | **Pn** | | **20 46 35.9** | **+0.1** |
| **COEN** | **Coen** | **14.01** | **234** | P | P | | 20 46 42.7 | +3.7 |
| **CTA** | **Charters Tower** | **16.44** | **210** | P | **Pn** | | **20 47 08.3** | **+2.5** |
| | 0.2nm,0.3s,baz=30,slow=13,SNR=1.8 | | | | | | | |
| **DZM** | **Mont Dzumac** | **19.70** | **146** | P | **Pn** | | **20 47 42.7** | **-1.8** |
| | 2.1nm,0.3s,baz=265,slow=8.6,SNR=20 | | | | | | | |
| **DZM** | **Mont Dzumac** | **19.70** | **146** | P | **Pn** | | **20 47 41.4** | **-3.1** |
| DZM | | | | IAmb | IAmb | | 20 47 42.9 | |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| **EIDS** | **Eidsvold** | **19.77** | **190** | P | **P** | | **20 47 41.0** | **-1.1** |
| EIDS | | | | IAmb | IAmb | | 20 47 59.8 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **OUENC** | **Ouen Island, N** | **20.19** | **146** | P | **P** | | **20 47 45.8** | **-0.9** |
| OUENC | | | | IAmb | IAmb | | 20 47 56.2 | |
| | comp=Z,35nm,1.5s | | | | | | | |
| **FAKI** | **Fak Fak** | **22.67** | **276** | P | **P** | | **20 48 12.8** | **+0.4** |
| **FAKI** | **Fak Fak** | **22.67** | **276** | P | **P** | | **20 48 14.7** | **+2.2** |
| **QLP** | **Quilpie** | **22.98** | **205** | P | **P** | | **20 48 18.0** | **+2.8** |
| **KDU** | **Kakadu** | **23.06** | **251** | P | **P** | | **20 48 16.9** | **+0.8** |
| **SIJI** | **Sorong** | **23.99** | **281** | P | **P** | | **20 48 25.9** | **+1.2** |
| | comp=Z,5.8nm,0.3s,baz=35,slow=17,SNR=10 | | | | | | | |
| SIJI | | | | S | **S** | | **20 52 25.8** | **-5.1** |
| | comp=Z,9.8nm,0.9s,baz=55,slow=24,SNR=2.0 | | | | | | | |
| **WR0** | **Warramunga Arr** | **24.20** | **233** | P | **P** | | **20 48 27.0** | **+0.6** |
| WR0 | | | | IAmb | IAmb | | 20 48 29.2 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **WB0** | **Warramunga Arr** | **24.21** | **233** | P | **P** | | **20 48 27.3** | **+0.7** |
| **WRAB** | **Tennant Creek** | **24.33** | **233** | P | **P** | | **20 48 28.3** | **+0.7** |
| WRAB | | | | IAmb | IAmb | | 20 48 28.7 | |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.33** | **233** | P | **P** | | **20 48 28.7** | **+1.0** |
| **WB2** | **Warramunga Arr** | **24.34** | **233** | P | **P** | | **20 48 28.4** | **+0.6** |
| WB2 | | | | IAmb | IAmb | | 20 48 30.6 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.35** | **233** | P | **P** | | **20 48 28.4** | **+0.6** |
| | comp=Z,4.5nm,0.4s,baz=58,slow=9.6,SNR=88 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **20 52 03.1** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=60,slow=3.3,SNR=1.6 | | | | | | | |
| WRA | | | | ScP | **ScP** | | **20 55 27.6** | **-0.8** |
| | comp=Z,0.7nm,0.8s,baz=54,slow=3.3,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.35** | **233** | P | **P** | | **20 48 27.0** | **-0.8** |
| **MTN** | **Manton Dam** | **24.36** | **252** | P | **P** | | **20 48 27.7** | **-0.3** |
| MTN | | | | IAmb | IAmb | | 20 48 47.0 | |
| | comp=Z,30nm,1.2s | | | | | | | |
| **MTN** | **Manton Dam** | **24.36** | **252** | P | **P** | | **20 48 29.6** | **+1.7** |
| **ARMA** | **Armidale** | **24.65** | **187** | P | **P** | | **20 48 31.4** | **+0.8** |
| ARMA | | | | IAmb | IAmb | | 20 48 32.2 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **26.82** | **226** | P | **P** | | **20 48 50.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **26.82** | **226** | P | **P** | | **20 48 50.1** | **0.0** |
| | comp=Z,3.2nm,0.5s,baz=57,slow=9.2,SNR=55 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **20 52 08.8** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=60,slow=2.5,SNR=4.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.82** | **226** | P | **P** | | **20 48 49.9** | **-0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **26.85** | **26** | T | T | | 21 17 02.7 | |
| | baz=205 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.86** | **26** | T | T | | 21 17 03.5 | |
| | baz=205,slow=74 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.87** | **26** | T | T | | 21 17 06.1 | |
| | baz=205,slow=74 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.97** | **197** | P | **P** | | **20 48 54.7** | **+3.4** |
| | comp=Z,9.6nm,2.0s | | | | | | | |
| **KNRA** | **Kununurra** | **27.36** | **247** | P | **P** | | **20 48 55.1** | **+0.1** |
| KNRA | | | | IAmb | IAmb | | 20 49 20.4 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **27.36** | **247** | P | **P** | | **20 48 56.0** | **+1.1** |
| | comp=Z,21nm,1.6s | | | | | | | |
| **OOD** | **Oodnadatta** | **28.41** | **218** | P | **P** | | **20 49 03.7** | **-0.5** |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.72** | **204** | P | **P** | | **20 49 06.7** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=21,slow=12,SNR=5.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **28.72** | **204** | P | **P** | | **20 49 06.8** | **0.0** |
| **LCRK** | **Leigh Creek** | **29.05** | **211** | P | **P** | | **20 49 09.4** | **-0.4** |
| | comp=Z,11nm,1.2s | | | | | | | |
| **HTT** | **Hallett** | **31.19** | **206** | P | **P** | | **20 49 28.7** | **0.0** |
| | comp=Z,7.5nm,1.3s | | | | | | | |
| **MULG** | **Mulgathing** | **31.20** | **216** | P | **P** | | **20 49 27.6** | **-1.2** |
| | comp=Z,8.7nm,1.8s | | | | | | | |
| **WRKA** | **Warakurna** | **31.78** | **230** | P | **P** | | **20 49 32.8** | **-1.2** |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **32.04** | **211** | P | **P** | | **20 49 35.4** | **-0.7** |
| BBOO | | | | IAmb | IAmb | | 20 49 56.8 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **32.04** | **211** | P | **P** | | **20 49 35.3** | **-0.8** |
| | comp=Z,12nm,1.5s | | | | | | | |
| **TOLI2** | **Tolitoli** | **34.66** | **280** | P | **P** | | **20 49 58.1** | **-1.0** |
| TOLI2 | | | | IAmb | IAmb | | 20 50 01.3 | |
| | comp=Z,7.5nm,0.7s | | | | | | | |
| **TOLI2** | **Tolitoli** | **34.66** | **280** | P | **P** | | **20 50 00.4** | **+1.3** |
| | comp=Z,11nm,0.7s | | | | | | | |
| **RAO** | **Raoul Island** | **34.75** | **135** | P | P | | 20 50 10.9 | +11 |
| | comp=Z,369nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **35.32** | **222** | P | **P** | | **20 50 04.4** | **-0.1** |
| **FORT** | **Forrest** | **35.32** | **222** | P | **P** | | **20 50 04.9** | **+0.4** |
| | comp=Z,14nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **37.23** | **242** | P | **P** | | **20 50 19.8** | **-1.1** |
| MBWA | | | | IAmb | IAmb | | 20 50 44.3 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **37.27** | **242** | P | **P** | | **20 50 21.0** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | | 20 50 40.8 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **TUWZ** | **Tuamarina** | **39.36** | **157** | P | **P** | | **20 50 39.1** | **+0.7** |
| **BHW** | **Baring Head** | **39.71** | **156** | P | **P** | | **20 50 42.2** | **+0.9** |
| **LTZ** | **Lake Taylor** | **39.93** | **160** | P | **P** | | **20 50 43.0** | **-0.1** |
| **MORW** | **Morawa** | **43.29** | **233** | P | **P** | | **20 51 10.1** | **-0.6** |
| MORW | | | | IAmb | IAmb | | 20 51 12.4 | |
| | comp=Z,7.1nm,0.9s | | | | | | | |
| **TPUB** | **Ta-pu** | **44.17** | **312** | P | **P** | | **20 51 18.5** | **+0.7** |
| **SSLB** | **Suanglung** | **44.23** | **313** | P | **P** | | **20 51 18.6** | **+0.4** |
| SSLB | | | | IAmb | IAmb | | 20 51 39.5 | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **HLK** | **Haleakala** | **54.83** | **60** | P | **P** | | **20 52 37.9** | **-1.1** |
| **KULM** | **Kulim** | **55.18** | **281** | P | **P** | | **20 52 40.7** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **58.75** | **2** | P | **P** | | **20 53 07.0** | **+1.4** |
| | comp=Z,1.8nm,0.8s,baz=165,slow=7.8,SNR=4.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.11** | **295** | P | **P** | | **20 53 17.2** | **+1.6** |
| | comp=Z,0.9nm,0.7s,baz=122,slow=5.7,SNR=12 | | | | | | | |
| **CASY** | **Casey** | **67.65** | **198** | P | **P** | | **20 54 05.5** | **+1.4** |
| **ULN** | **Ulaanbaatar** | **67.91** | **327** | P | **P** | | **20 54 07.5** | **+1.2** |
| **SONM** | **Songino Array** | **68.25** | **327** | P | **P** | | **20 54 09.9** | **+1.6** |
| | comp=Z,0.8nm,0.5s,baz=148,slow=5.1,SNR=8.7 | | | | | | | |
| **SONM** | **Songino Array** | **68.25** | **327** | P | **P** | | **20 54 09.8** | **+1.6** |
| **ILAR** | **Eielson Array** | **82.36** | **22** | P | **P** | | **20 55 28.6** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=236,slow=5.6,SNR=9.7 | | | | | | | |
| **MK31** | **Makanchi Array** | **82.40** | **319** | P | **P** | | **20 55 29.7** | **+0.7** |
| **MKAR** | **Makanchi Array** | **82.40** | **319** | P | **P** | | **20 55 29.6** | **+0.6** |
| | comp=Z,2.7nm,0.6s,baz=100,slow=5.6,SNR=33 | | | | | | | |
| **MKAR** | **Makanchi Array** | **82.40** | **319** | P | **P** | | **20 55 29.4** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **83.10** | **326** | P | **P** | | **20 55 31.6** | **-0.9** |
| | comp=Z,2.1nm,0.7s,baz=110,slow=6.0,SNR=9.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **85.82** | **322** | P | **P** | | **20 55 45.6** | **-0.6** |
| | comp=Z,2.1nm,0.5s,baz=103,slow=4.5,SNR=6.4 | | | | | | | |
| **AAK** | **Ala-Archa** | **86.81** | **313** | P | **P** | | **20 55 51.3** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=226,slow=5.5,SNR=2.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.15** | **52** | P | **P** | | **20 56 13.7** | **+1.6** |
| | comp=Z,0.6nm,0.6s,baz=243,slow=4.0,SNR=4.8 | | | | | | | |
| **BVAR** | **Borovoye Array** | **91.24** | **323** | P | **P** | | **20 56 10.6** | **-1.3** |
| | comp=Z,0.9nm,0.6s,baz=91,slow=9.5,SNR=6.1 | | | | | | | |
| **PTGA** | **Pitinga** | **144.68** | **99** | PKP | | **PKPdf** | **21 02 42.5** | **-1.2** |
| | comp=Z,2.2nm,0.3s,baz=161,slow=19,SNR=5.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.51** | **287** | PKPbc | | **PKiKP** | **21 03 01.9** | **-1.5** |
| | comp=Z,0.9nm,0.7s,baz=81,slow=2.2,SNR=5.6 | | | | | | | |

*NEIC **10** 20:57:35.5±0.8, 37.˚06N±0.˚04× 97.˚89W±0.˚06, h7km±6km, mb_Lg3.0/55, ML3.1/21, Error ellipse: s-maj=7.3km s-min=5.5km az=78.0*

**NEIC 10 20:57:35.6**±0.9, **37.˚05N**±0.˚04× **97.˚88W**±0.˚06, **h5**km±2km, **Error ellipse: s-maj=8.7km s-min=4.5km az=58.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **KAN17** | **Caldwell West** | **0.09** | **94** | Pg | Pg | | 20 57 38.1 | +0.5 |
| KAN17 | | | | Sg | Sg | | 20 57 39.6 | +0.6 |
| **KAN14** | **Manchester OK** | **0.12** | **216** | Pg | Pg | | 20 57 38.2 | +0.2 |
| KAN14 | | | | Sg | Sg | | 20 57 40.1 | +0.5 |
| **KAN10** | **Anthony SW Sta** | **0.19** | **293** | Pg | Pg | | 20 57 39.4 | 0.0 |
| KAN10 | | | | Sg | Sg | | 20 57 42.0 | +0.1 |
| **GC02** | **Grant County #** | **0.20** | **176** | Pg | Pg | | 20 57 39.9 | +0.3 |
| **OK032** | **Salt Plains WL** | **0.36** | **227** | Pg | Pg | | 20 57 42.7 | 0.0 |
| OK032 | | | | | Sg | | 20 57 47.8 | +0.4 |
| **CROK** | **Carrier** | **0.55** | **189** | Pg | Pg | | 20 57 46.2 | 0.0 |
| **BLOK** | **Blackwell** | **0.60** | **118** | Pg | Pg | | 20 57 47.4 | +0.2 |
| **OK035** | **E0210 Rd and N** | **0.75** | **243** | | Pg | | 20 57 49.6 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.10** | **97** | | Pg | | 20 57 56.5 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.12** | **234** | | Pg | | 20 57 55.2 | -2.0 |
| **OK033** | **Mehan** | **1.26** | **143** | | Pg | | 20 57 59.2 | -0.5 |
| **QUOK** | **Quay** | **1.29** | **133** | | Pn | | 20 57 59.5 | -0.7 |
| **OK029** | **Liberty Lake** | **1.30** | **165** | | Pn | | 20 57 59.8 | -0.7 |
| **OK031** | **S. Brethren Rd** | **1.38** | **142** | | Pn | | 20 58 01.0 | -0.5 |
| **OK034** | **N. Norfolk Rd.** | **1.40** | **138** | | Pn | | 20 58 01.5 | -0.3 |
| **BCOK

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Z41A** | **Richland Creek** | **5.62** | **131** | IAmb_Lg | | 21 00 46.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.97** | **90** | IAmb_Lg | | 21 00 46.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.11** | **279** | Pn | Pn | 20 59 06.2 | -0.7 |
| **ECSD** | **EROS Data Cent** | **6.75** | **8** | Pn | Pn | 20 59 14.1 | -1.2 |
| **JCT** | **Junction City** | **6.75** | **194** | IAmb_Lg | | 21 01 27.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **6.90** | **82** | IAmb_Lg | | 21 01 12.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **L40A** | **Anamosa** | **7.17** | **44** | IAmb_Lg | | 21 01 24.3 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.24** | **73** | IAmb_Lg | | 21 01 30.7 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.26** | **308** | IAmb_Lg | | 21 01 24.7 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **7.36** | **304** | IAmb_Lg | | 21 01 32.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.18** | **231** | Pn | Pn | 20 59 34.5 | -0.6 |
| **JFWS** | **Jewell Farm** | **8.28** | **43** | IAmb_Lg | | 21 01 56.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **K22A** | **Casper** | **8.69** | **313** | IAmb_Lg | | 21 02 21.7 | |
| | comp=Z,9.9nm,0.7s | | | | | | |

*KEA* ***10*** *20:57:45.7, 36°.32N×127°.30E, h18km, ML3.5/3*
*KMA* ***10*** *20:57:48.0±99.0, 35°.96N×127°.84E, h22km±99km, Error ellipse: s-maj=24.7km s-min=1.1km az=305.0*

**ISC 10 20:57:44.7±1.3, 36°.13N±0°.05×127°.53E±0°.06, h10km, n10, σ1§27/13, South Korea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UJN** | **ULJIN** | **1.75** | **60** | P | **Pn** | **20 58 14.7** | **-0.3** |
| | SNR=13 | | | | | | |
| **HANB** | **Haenam** | **1.75** | **207** | P | **Pb** | **20 58 17.0** | **+0.1** |
| | SNR=26 | | | | | | |
| **OKEB** | **Okgye-meyeon** | **1.89** | **38** | P | **Pb** | **20 58 19.0** | **-0.3** |
| | SNR=8.2 | | | | | | |
| **HUK2** | **Heuksan-myeon** | **2.22** | **230** | P | **Pb** | **20 58 24.8** | **-0.1** |
| | SNR=19 | | | | | | |
| **DACB** | **Daecheong-do R** | **2.83** | **308** | P | **Pb** | **20 58 35.1** | **-0.2** |
| | SNR=18 | | | | | | |
| **KSBAR** | **Backryungdo** | **2.91** | **310** | P | **Pb** | **20 58 36.8** | **+0.1** |
| | SNR=16 | | | | | | |
| **PYAG** | **Pyongyang** | **3.24** | **335** | Sg | **Sb** | **20 59 21.1** | **-0.7** |
| **PYS** | **Pyongsong** | **3.39** | **337** | Pg | **Pb** | **20 58 42.6** | **-2.2** |
| PYS | | | | Sg | **Sb** | **20 59 24.6** | **-1.5** |
| PYS | | | | AML | AML | | |
| | comp=N,147nm,0.3s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=E,379nm,1.0s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=Z,372nm,0.7s | | | | | | |
| **HHU** | **Hamhung** | **3.80** | **360** | Pg | **Pb** | **20 58 52.5** | **+0.8** |
| HHU | | | | Sg | **Sb** | **20 59 39.6** | **+1.9** |
| HHU | | | | AML | AML | | |
| | comp=N,156nm,0.4s | | | | | | |
| HHU | | | | AML | AML | | |
| | comp=E,260nm,0.6s | | | | | | |
| HHU | | | | AML | AML | | |
| | comp=Z,288nm,0.4s | | | | | | |
| **SUJ** | **Sinuiju** | **4.64** | **330** | Pg | **Pb** | **20 59 07.2** | **+1.1** |
| SUJ | | | | Sg | **Sb** | **21 00 03.6** | **+1.6** |
| SUJ | | | | AML | AML | | |
| | comp=N,51nm,0.6s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=E,70nm,0.7s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=Z,65nm,0.3s | | | | | | |

**DJA 10 21:02:44.9±0.5, 4°S±6°×10°5E±°, h176km±4km, M3.6/13, mb3.7/2, MLv3.6/13, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLSI** | | **0.24** | **168** | P | Pn | 21 03 10.5 | +2.1 |
| **KLI** | **Kotabumi** | **0.45** | **157** | P | Pn | 21 03 11.0 | +2.0 |
| KLI | | | | S | Sn | 21 03 28.2 | +0.5 |
| **MDSI** | **Maura Dua** | **0.50** | **266** | P | Pn | 21 03 10.8 | +1.6 |
| MDSI | | | | S | Sn | 21 03 28.8 | +1.0 |
| **LWLI** | **Liwa** | **0.84** | **228** | P | Pn | 21 03 12.5 | +1.3 |
| **KASI** | **Kota Agung** | **1.08** | **190** | P | Pn | 21 03 13.5 | +0.7 |
| KASI | | | | S | Sn | 21 03 34.9 | +0.4 |
| **LHSI** | **Lahat** | **1.31** | **298** | P | Pn | 21 03 14.7 | -0.1 |
| **KSI** | **Kapahiang** | **2.23** | **291** | P | Pn | 21 03 24.1 | -0.2 |
| **CGJI** | **Cibinong** | **2.37** | **155** | P | Pn | 21 03 25.8 | -0.1 |
| **CNJI** | **Cibinong** | **3.74** | **139** | P | Pn | 21 03 41.8 | -0.8 |
| **PPSI** | **Pulau Pagai** | **4.95** | **290** | P | Pn | 21 03 57.8 | -0.4 |
| **CMJI** | **Cimerak** | **5.00** | **132** | P | Pn | 21 03 58.3 | -0.5 |
| | 0.1nm20nm,1.2s | | | | | | |
| **SISI** | **Saibi** | **6.39** | **299** | P | Pn | 21 04 15.7 | -1.3 |

*IDC* ***10*** *21:22:15.7±1.8, 33°.03S×179°.74W, h151km±14km, mb3.8/6, mb1 4.1/8, mb1mx3.8/31, mbtmp4.4/8, Error ellipse: s-maj=24.5km s-min=14.4km az=130.0*
*NEIC* ***10*** *21:22:15.5±2.5, 33°.00S±0°.07×179°.8W±0°.2, h133km±7km, mb4.5/15, Error ellipse: s-maj=22.9km s-min=5.3km az=112.0*
*WEL* ***10*** *21:22:16.2±0.5, 33°S±9°×18°0W±2°.0, h33km, M4.7/22, mB5.2/17, ML5.0/24, MLv5.0/22, Mw(mB)4.6/17, Error ellipse: s-maj=0.0km s-min=0.0km az=112.1*
*NOU* ***10*** *21:22:29.0, 34°.25S×179°.61E, h260km, mb4.3/9, South of Kermadec Islands*

**ISC 10 21:22:15.0±0.6, 33°.17S±0°.05×179°.53W±0°.09, h150km, n132, σ2§07/147, mb4.4/13, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **4.13** | **20** | P | **Pn** | **21 23 16.6** | **-0.4** |
| GLKZ | | | | S | **Sn** | **21 24 06.3** | **+1.2** |
| **RAO** | **Raoul Island** | **4.14** | **20** | P | **Pn** | **21 23 16.0** | **-1.1** |
| | 120nm,0.3s,baz=217,slow=20,SNR=4.4 | | | | | | |
| RAO | | | | S | **Sn** | **21 24 05.4** | **+0.1** |
| | 192nm,0.3s,baz=159,slow=19,SNR=4.6 | | | | | | |
| **RAO** | **Raoul Island** | **4.14** | **20** | Pn | **Pn** | **21 23 15.7** | **-1.3** |
| RAO | | | | Sn | **Sn** | **21 24 07.0** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **4.73** | **201** | P | **Pn** | **21 23 25.2** | **+0.5** |
| MXZ | | | | S | **Sn** | **21 24 19.2** | **+0.1** |
| **WMGZ** | **Waiomatatini S** | **4.94** | **199** | P | **Pn** | **21 23 29.5** | **+2.0** |
| WMGZ | | | | S | **Sn** | **21 24 27.9** | **+3.8** |
| **HAZ** | **Te Kaha** | **5.08** | **205** | P | **Pn** | **21 23 32.1** | **+2.8** |
| HAZ | | | | S | **Sn** | **21 24 30.5** | **+3.0** |
| **PUZ** | **Puketiti** | **5.22** | **200** | P | **Pn** | **21 23 32.6** | **+1.3** |
| PUZ | | | | S | **Sn** | **21 24 31.8** | **+1.0** |
| **TWGZ** | **Tauwhareparae** | **5.39** | **201** | P | **Pn** | **21 23 37.9** | **+4.2** |
| TWGZ | | | | S | **Sn** | **21 24 38.8** | **+3.7** |
| **TKGZ** | **Te Karaka** | **5.68** | **201** | P | **Pn** | **21 23 38.3** | **+1.0** |
| TKGZ | | | | S | **Sn** | **21 24 43.6** | **+1.9** |
| **MWZ** | **Matawai** | **5.69** | **204** | P | **Pn** | **21 23 38.2** | **+0.7** |
| MWZ | | | | S | **Sn** | **21 24 43.4** | **+1.5** |
| **URZ** | **Urewera** | **5.77** | **207** | P | **Pn** | **21 23 38.9** | **+0.3** |
| | 13nm,0.3s,baz=119,slow=8.5,SNR=82 | | | | | | |
| URZ | | | | S | **Sn** | **21 24 42.7** | **-1.2** |
| | 31nm,0.3s,baz=30,slow=20,SNR=16 | | | | | | |
| **URZ** | **Urewera** | **5.77** | **207** | P | **Pn** | **21 23 38.9** | **+0.3** |
| URZ | | | | S | **Sn** | **21 24 44.2** | **+0.3** |
| **URZ** | **Urewera** | **5.77** | **207** | P | **Pn** | **21 23 39.4** | **+0.9** |
| **RAGZ** | **Rawiri** | **5.87** | **204** | P | **Pn** | **21 23 40.4** | **+0.4** |
| RAGZ | | | | S | **Sn** | **21 24 47.8** | **+1.4** |
| **MKRZ** | **Makatiti** | **5.94** | **212** | P | Pn | 21 23 45.5 | +4.7 |
| **RIGZ** | **Rimuhau** | **5.95** | **201** | P | **Pn** | **21 23 41.2** | **+0.3** |
| RIGZ | | | | S | **Sn** | **21 24 50.0** | **+1.7** |
| **TARZ** | **Mount Tarawera** | **6.00** | **211** | P | **Pn** | **21 23 43.6** | **+1.9** |
| **OUZ** | **Omahuta** | **6.05** | **248** | P | **Pn** | **21 23 45.5** | **+3.1** |
| **MUGZ** | **Murupara** | **6.09** | **209** | P | **Pn** | **21 23 43.7** | **+0.9** |
| MUGZ | | | | S | **Sn** | **21 24 52.5** | **+0.8** |
| **PRGZ** | **Paritu Road** | **6.12** | **199** | P | **Pn** | **21 23 43.5** | **+0.3** |
| PRGZ | | | | S | **Sn** | **21 24 50.1** | **-2.2** |
| **RTZ** | **Ruatahuna** | **6.13** | **207** | P | **Pn** | **21 23 43.1** | **-0.4** |
| **SNGZ** | **Shannon Statio** | **6.15** | **203** | P | **Pn** | **21 23 43.8** | **+0.1** |
| SNGZ | | | | S | **Sn** | **21 24 53.4** | **+0.3** |
| **KNZ** | **Kokohu** | **6.27** | **200** | P | **Pn** | **21 23 44.4** | **-0.7** |
| KNZ | | | | S | **Sn** | **21 24 56.6** | **+0.9** |
| **MHGZ** | **Mahia Peninsul** | **6.32** | **198** | P | **Pn** | **21 23 46.0** | **+0.1** |
| **ALRZ** | **Allen Road** | **6.34** | **211** | P | **Pn** | **21 23 46.5** | **+0.3** |
| ALRZ | | | | S | **Sn** | **21 25 00.0** | **+2.4** |
| **MTHZ** | **Maungataniwha** | **6.39** | **206** | P | **Pn** | **21 23 46.4** | **-0.5** |
| MTHZ | | | | S | **Sn** | **21 24 59.0** | **+0.1** |
| **KUTZ** | **Kaahu Road** | **6.52** | **214** | P | **Pn** | **21 23 49.7** | **+1.2** |
| **NMHZ** | **Naumai** | **6.62** | **206** | P | **Pn** | **21 23 49.5** | **-0.4** |
| NMHZ | | | | S | **Sn** | **21 25 05.2** | **+0.8** |
| **ARHZ** | **Aropaoanui** | **6.70** | **204** | P | **Pn** | **21 23 50.2** | **-0.8** |
| ARHZ | | | | S | **Sn** | **21 25 06.2** | **0.0** |
| **WATZ** | **Wairara** | **6.73** | **213** | P | **Pn** | **21 23 52.3** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **6.80** | **207** | P | **Pn** | **21 23 51.7** | **-0.6** |
| BKZ | | | | S | **Sn** | **21 25 07.7** | **-0.8** |
| **BKZ** | **Black Stump Fm** | **6.80** | **207** | P | **Pn** | **21 23 51.9** | **-0.4** |
| **RATZ** | **Rangitukua** | **6.84** | **212** | P | **Pn** | **21 23 54.0** | **+1.1** |
| **RITZ** | **Rihia Road** | **6.90** | **211** | P | **Pn** | **21 23 53.9** | **+0.3** |
| **KATZ** | **Kakaramea** | **6.97** | **212** | P | **Pn** | **21 23 55.0** | **+0.4** |
| **HIZ** | **Hauiti** | **7.02** | **219** | P | **Pn** | **21 23 57.8** | **+2.6** |
| **CKHZ** | **Cape Kidnapper** | **7.03** | **202** | P | **Pn** | **21 23 53.9** | **-1.4** |
| CKHZ | | | | S | **Sn** | **21 25 13.9** | **-0.2** |
| **KWHZ** | **Kaweka Forest** | **7.05** | **206** | P | **Pn** | **21 23 54.1** | **-1.6** |
| KWHZ | | | | S | **Sn** | **21 25 14.0** | **-0.6** |
| **NTVZ** | **North Tongarir** | **7.08** | **212** | P | **Pn** | **21 23 55.5** | **-0.6** |
| **TMVZ** | **Te Maari** | **7.08** | **212** | P | **Pn** | **21 23 55.3** | **-0.8** |
| **KRVZ** | **Karewarewa** | **7.09** | **212** | P | **Pn** | **21 23 55.9** | **-0.4** |
| **ETVZ** | **East Tongariro** | **7.09** | **212** | P | **Pn** | **21 23 55.3** | **-1.0** |
| **WTVZ** | **West Tongariro** | **7.13** | **212** | P | **Pn** | **21 23 56.0** | **-0.8** |
| **OTVZ** | **Oturere** | **7.13** | **212** | P | **Pn** | **21 23 55.9** | **-1.0** |
| **TWVZ** | **Taurewa** | **7.16** | **213** | P | **Pn** | **21 23 56.6** | **-0.6** |
| **SNVZ** | **South Ngauruho** | **7.17** | **212** | P | **Pn** | **21 23 56.4** | **-1.0** |
| **NGZ** | **Ngauruhoe** | **7.17** | **212** | P | **Pn** | **21 23 56.7** | **-0.7** |
| **KAHZ** | **Kahuranaki** | **7.22** | **203** | P | **Pn** | **21 23 56.3** | **-1.6** |
| **TUVZ** | **Tukino** | **7.23** | **211** | P | **Pn** | **21 23 57.1** | **-1.0** |
| **BHHZ** | **Black Hill Sta** | **7.24** | **208** | P | **Pn** | **21 23 56.5** | **-1.8** |
| **FWVZ** | **Far West T-bar** | **7.26** | **212** | P | **Pn** | **21 23 57.6** | **-1.0** |
| **KRHZ** | **Kereru** | **7.26** | **206** | P | **Pn** | **21 23 56.4** | **-2.0** |
| **WHVZ** | **Whangaehu Hut** | **7.27** | **211** | P | **Pn** | **21 23 58.0** | **-0.7** |
| **TRVZ** | **Turoa** | **7.30** | **212** | P | **Pn** | **21 23 58.4** | **-0.8** |
| **MOVZ** | **Moawhango** | **7.30** | **210** | P | **Pn** | **21 23 57.0** | **-2.0** |
| **WNVZ** | **Wahianoa** | **7.30** | **211** | P | **Pn** | **21 23 57.4** | **-1.7** |
| **PKVZ** | **Pokaka** | **7.38** | **213** | P | **Pn** | **21 23 58.8** | **-1.2** |
| **MTVZ** | **Mangateitei** | **7.40** | **212** | P | **Pn** | **21 23 59.4** | **-1.0** |
| **PXZ** | **Pawanui** | **7.44** | **202** | P | **Pn** | **21 23 58.3** | **-2.5** |
| **PNHZ** | **Pukenui** | **7.56** | **206** | P | **Pn** | **21 24 00.0** | **-2.5** |
| **PRHZ** | **Porangahau** | **7.73** | **202** | P | Pn | 21 23 54.6 | -10 |
| **DVHZ** | **Dannevirke** | **7.91** | **205** | P | **Pn** | **21 24 04.0** | **-3.1** |
| **WAZ** | **Wanganui** | **7.92** | **212** | P | **Pn** | **21 24 06.0** | **-1.3** |
| **ANWZ** | **Angora Road** | **7.95** | **203** | P | **Pn** | **21 24 05.1** | **-2.5** |
| **POWZ** | **Post Office Ro** | **8.14** | **206** | P | **Pn** | **21 24 07.8** | **-2.3** |
| **PRWZ** | **Pori Road** | **8.21** | **205** | P | **Pn** | **21 24 08.7** | **-2.4** |
| **BFZ** | **Birch Farm** | **8.23** | **203** | P | **Pn** | **21 24 07.7** | **-3.6** |
| **BFZ** | **Birch Farm** | **8.23** | **203** | P | **Pn** | **21 24 08.4** | **-2.9** |
| **TIWZ** | **Tintock** | **8.43** | **204** | P | **Pn** | **21 24 11.2** | **-3.0** |
| **MRZ** | **Mangatainoka R** | **8.44** | **206** | P | **Pn** | **21 24 10.0** | **-4.2** |
| **CPWZ** | **Castlepoint** | **8.45** | **203** | P | **Pn** | **21 24 11.5** | **-2.7** |
| **HOWZ** | **Holdsworth Sta** | **8.67** | **206** | P | **Pn** | **21 24 13.0** | **-4.3** |
| **TMWZ** | **Te Maipa** | **8.73** | **203** | P | **Pn** | **21 24 13.7** | **-4.4** |
| **OGWZ** | **Otaki Gorge** | **8.73** | **208** | P | **Pn** | **21 24 14.1** | **-4.0** |
| **KIW** | **Kapiti Island** | **8.87** | **208** | P | **Pn** | **21 24 15.3** | **-4.6** |
| **MTW** | **Mount Morrison** | **8.91** | **205** | P | **Pn** | **21 24 16.2** | **-4.2** |
| **CAW** | **Cannon Point** | **9.02** | **207** | P | **Pn** | **21 24 17.6** | **-4.3** |
| **TRWZ** | **Traveller** | **9.06** | **203** | P | **Pn** | **21 24 18.4** | **-4.0** |
| **PAWZ** | **Paruwai Farm** | **9.13** | **205** | P | **Pn** | **21 24 19.0** | **-4.4** |
| **MSWZ** | **Moikau Station** | **9.22** | **205** | P | Pn | 21 24 19.9 | -4.7 |
| **SNZO** | **South Karori** | **9.34** | **208** | P | **Pn** | **21 24 22.3** | **-3.8** |
| **BHW** | **Baring Head** | **9.36** | **207** | P | **Pn** | **21 24 21.8** | **-4.6** |
| **PLWZ** | **Palliser** | **9.36** | **205** | P | Pn | 21 24 21.6 | -4.8 |
| **QRZ** | **Quartz Range** | **9.94** | **217** | P | **Pn** | **21 24 30.5** | **-3.5** |
| **BSWZ** | **Blackbirch Sta** | **10.01** | **210** | P | **Pn** | **21 24 30.9** | **-4.2** |
| **KHZ** | **Kahutara** | **10.73** | **209** | P | Pn | 21 24 39.5 | -5.1 |
| **RPZ** | **Rata Peaks** | **12.85** | **212** | P | **Pn** | **21 25 07.6** | **-4.5** |
| **ODZ** | **Otahua Downs** | **14.09** | **210** | P | Pn | 21 25 22.5 | -5.4 |
| **OUENC** | **Ouen Island, N** | **16.11** | **308** | | **Pn** | **21 25 53.6** | **+0.5** |
| OUENC | | | | IAmb | IAmb | 21 25 57.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.61** | **308** | P | **Pn** | **21 26 01.0** | **+1.7** |
| | comp=Z,0.4nm,0.3s,baz=140,slow=13,SNR=5.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.61** | **308** | | **P** | **21 25 58.1** | **-1.0** |
| **SANVU** | **Saraoutou** | **21.35** | **323** | P | **P** | **21 26 50.3** | **-0.1** |
| **EIDS** | **Eidsvold** | **26.73** | **279** | P | **P** | **21 27 42.2** | **+1.7** |
| EIDS | | | | IAmb | IAmb | 21 27 54.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **33.09** | **285** | P | **P** | **21 28 37.0** | **+0.3** |
| | comp=Z,5.3nm,0.6s,baz=120,slow=13,SNR=6.3 | | | | | | |
| **CTAO** | **Charters Tower** | **33.09** | **285** | P | **P** | **21 28 36.4** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 21 29 03.5 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **COEN** | **Coen** | **38.89** | **290** | P | **P** | **21 29 25.2** | **-0.9** |
| COEN | | | | IAmb | IAmb | 21 29 47.9 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **41.75** | **271** | P | **P** | **21 29 48.3** | **-1.3** |
| **ASAR** | **Alice Springs** | **41.75** | **271** | P | **P** | **21 29 48.9** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=110,slow=7.4,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 31 42.1** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=110,slow=4.1,SNR=4.9 | | | | | | |
| ASAR | | | | S | **S** | **21 35 48.6** | **-7.1** |
| | comp=Z,0.3nm,0.5s,baz=114,slow=17,SNR=5.0 | | | | | | |
| **WR0** | **Warramunga Arr** | **42.82** | **276** | P | **P** | **21 29 56.8** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 21 29 59.3 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.99** | **276** | P | **P** | **21 29 58.3** | **-1.3** |
| | comp=Z,1.9nm,0.3s,baz=114,slow=7.8,SNR=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.99** | **276** | P | **P** | **21 29 58.7** | **-1.0** |
| **WB0** | **Warramunga Arr** | **43.03** | **276** | P | **P** | **21 29 58.7** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 21 29 59.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **49.69** | **278** | P | **P** | **21 30 52.3** | **+0.4** |
| KNRA | | | | IAmb | IAmb | 21 30 59.6 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **56.95** | **180** | P | P | 21 31 49.0 | +4.6 |
| QSPA | | | | IAmb | IAmb | 21 31 49.7 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **75.43** | **179** | P | **P** | **21 33 45.3** | **+3.4** |
| SNAA | | | | IAmb | IAmb | 21 34 05.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TWG** | **Pinlang** | **79.40** | **306** | P | **P** | **21 34 04.8** | **+0.3** |
| **H03S2** | **Juan Fernandez** | **80.02** | **124** | T | T | 23 03 16.0 | |
| | baz=235 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.03** | **124** | T | T | 23 03 18.1 | |
| | baz=235 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.04** | **124** | T | T | 23 03 19.1 | |
| | baz=235 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.23** | **124** | T | T | 23 03 20.7 | |
| | baz=244,slow=74 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.23** | **123** | T | T | 23 03 23.2 | |
| | baz=244 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.25** | **123** | T | T | 23 03 38.2 | |
| | baz=244,slow=74 | | | | | | |
| **KSRS** | **Korea Array** | **85.63** | **321** | P | **P** | **21 34 36.3** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=141,slow=5.6,SNR=3.6 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **88.17** | **346** | P | **P** | **21 34 48.5** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **88.17** | **346** | P | **P** | **21 34 48.7** | **+0.3** |
| | comp=Z,2.1nm,0.5s,baz=118,slow=7.7,SNR=8.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **88.17** | **346** | P | **P** | **21 34 48.4** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **91.14** | **44** | P | **P** | **21 35 04.5** | **+1.6** |
| | comp=Z,0.3nm,0.7s,baz=199,slow=2.5,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **119.21** | **318** | PKP | **PKPdf** | **21 40 43.5** | **-2.0** |
| | comp=Z,0.4nm,0.3s,baz=191,slow=1.5,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **122.02** | **313** | PKP | **PKPdf** | **21 40 49.9** | **-1.2** |
| | comp=Z,1.2nm,0.7s,baz=109,slow=1.7,SNR=8.7 | | | | | | |
| **FINES** | **FINESS Array B** | **147.24** | **337** | PKPbc | **PKPbc** | **21 41 39.2** | **-0.6** |
| | comp=Z,5.9nm,0.6s,baz=37,slow=5.2,SNR=19 | | | | | | |
| **FINES** | **FINESS Array B** | **147.24** | **337** | | **PKPbc** | **21 41 39.1** | **-0.7** |
| **MMAI** | **Mount Meron Ar** | **150.81** | **279** | PKPbc | **PKPbc** | **21 41 49.7** | **-0.2** |
| | comp=Z,4.2nm,0.5s,baz=76,slow=7.0,SNR=21 | | | | | | |
| **NB2** | **NORSAR Subarra** | **151.25** | **349** | PKP | **PKPbc** | **21 41 49.9** | **0.0** |
| | comp=Z,4.4nm,0.8s,baz=28,slow=2.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **151.25** | **349** | PKPbc | **PKPbc** | **21 41 49.7** | **-0.2** |
| | comp=Z,2.0nm,0.6s,baz=14,slow=4.1,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **152.60** | **318** | PKPbc | **PKPbc** | **21 41 51.9** | **-1.3** |
| | comp=Z,1.1nm,0.6s,baz=68,slow=2.4,SNR=6.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **152.60** | **318** | | **PKPbc** | **21 41 53.2** | **0.0** |
| **BRTR** | **Keskin Array B** | **152.63** | **293** | PKPbc | **PKPbc** | **21 41 52.9** | **-1.0** |
| | comp=Z,2.1nm,0.8s,baz=135,slow=4.6,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **152.63** | **293** | | **PKPbc** | **21 41 53.0** | **-0.8** |
| **DBIC** | **Dimbokro** | **153.18** | **168** | PKPbc | **PKiKP** | **21 41 58.1** | **+2.4** |
| | comp=Z,1.5nm,0.4s,baz=131,slow=1.5,SNR=5.9 | | | | | | |
| **DBIC** | **Dimbokro** | **153.18** | **168** | PKPbc | **PKiKP** | **21 41 57.7** | **+2.0** |
| **TORD** | **Torodi Ar. Bea** | **160.04** | **183** | PKPab | **PKPab** | **21 42 39.0** | **+1.9** |
| | comp=Z,0.5nm,0.5s,baz=171,slow=3.9,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.04** | **183** | PKPdf | **PKPdf** | **21 42 00.1** | **+3.2** |
| TORD | | | | PKPab | **PKPab** | **21 42 39.4** | **+2.3** |

**ZUR 10 21:29:49.9, 46°.59N×10°.57E, h9km±1km, MLh0.9/7, 1C-2D, Error ellipse: s-maj=1.9km s-min=0.8km az=77.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MOSI** | **Grossmontoni** | **0.03** | **328** | ⇓Pg | Pg | 21 29 52.3 | +0.4 |
| MOSI | | | | Sg | Sg | 21 29 53.6 | +0.3 |
| **STSP** | **Tschierv** | **0.17** | **282** | Pg | Pg | 21 29 54.1 | +0.5 |
| STSP | | | | Sg | Sg | 21 29 56.2 | +0.1 |
| **BRMO** | **Bormio** | **0.18** | **229** | ⇑Pg | Pg | 21 29 54.1 | +0.3 |
| BRMO | | | | Sg | Sg | 21 29 56.6 | +0.3 |
| **BERNI** | **Berninapass** | **0.42** | **245** | ⇓Pg | Pg | 21 29 58.4 | +0.2 |
| **FETA** | **Feichten** | **0.44** | **14** | Pg | Pg | 21 29 58.8 | +0.2 |
| **DAVOX** | **Davos/Dischmat** | **0.51** | **292** | Pg | Pg | 21 30 00.1 | +0.2 |
| DAVOX | | | | Sg | Sg | 21 30 06.9 | +0.2 |
| **ABSI** | **Aberstueckl** | **0.53** | **75** | Pg | Pg | 21 30 00.9 | +0.6 |
| **MABI** | **Malga Bissina** | **0.54** | **184** | Pg | Pg | 21 30 00.8 | +0.4 |

*MOS* ***10*** *21:30:18.1±1.0, 20°.47S×174°.76W, h32km, mb4.9/10, Error ellipse: s-maj=11.0km s-min=10.2km az=55.6*
*IDC* ***10*** *21:30:19.4±4.9, 20°.45S×174°.74W, h33km±36km, mb4.4/22, mb1 4.6/25, mb1mx4.5/35, mbtmp4.6/25, ML4.5/3, MS3.4/10, Ms1 3.5/10, ms1mx3.1/64, Error ellipse: s-maj=16.9km s-min=13.2km az=161.0*
*NEIC* ***10*** *21:30:20.5±1.8, 20°.41S±0°.10×174°.62W±0°.09, h41km±6km, mb5.0/76, Error ellipse: s-maj=14.4km s-min=11.3km az=163.0*
*NOU* ***10*** *21:30:26.2, 20°.26S×174°.19W, h133km, mb4.9/60, Tonga Islands*

**ISC 10 21:30:21.6±0.3, 20°.47S±0°.06×174°.61W±0°.06, h56km, n391, σ1§20/373, mb4.9/88, MS3.7/11, 33C-13D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.62** | **73** | P | **Pn** | **21 31 27.4** | **-1.6** |
| | baz=4.2,SNR=330 | | | | | | |
| **NIUE** | **Niue** | **4.62** | **73** | Pn | **Pn** | **21 31 27.3** | **-1.7** |
| **NIUE** | **Niue** | **4.62** | **73** | P | **Pn** | **21 31 27.6** | **-1.4** |
| **TAVE** | **Taveuni** | **6.26** | **306** | P | Pn | 21 32 00.0 | +8.5 |
| **DGTI** | **Dogotuki** | **6.78** | **307** | P | Pn | 21 32 06.6 | +7.9 |
| **AFI** | **Afiamalu** | **7.06** | **23** | Pn | **Pn** | **21 32 01.5** | **-1.0** |
| AFI | 31nm,0.3s,baz=358,slow=3.0,SNR=16 | | | Sn | Sn | 21 33 11.4 | -10 |
| | 31nm,0.3s,baz=45,slow=23,SNR=2.3 | | | | | | |
| **AFI** | **Afiamalu** | **7.06** | **23** | Pn | **Pn** | **21 32 01.1** | **-1.4** |
| **AFI** | **Afiamalu** | **7.06** | **23** | P | **Pn** | **21 32 02.5** | **0.0** |
| **MSVF** | **Nonsavu** | **7.46** | **290** | Pn | Pn | 21 32 16.4 | +8.4 |
| | 16nm,0.3s,baz=126,slow=12,SNR=37 | | | | | | |
| **MSVF** | **Nonsavu** | **7.46** | **290** | P | Pn | 21 32 17.7 | +10 |
| **RAO** | **Raoul Island** | **9.24** | **198** | Sn | **Sn** | **21 34 11.2** | **-3.7** |
| | 171nm,0.3s,baz=81,slow=22,SNR=11 | | | | | | |
| **RAR** | **Rarotonga** | **13.89** | **96** | Pn | **Pn** | **21 33 33.7** | **-2.1** |
| | 3.6nm,0.3s,baz=270,slow=8.5,SNR=13 | | | | | | |
| RAR | | | | Sn | Sn | 21 35 52.5 | -16 |
| | 4.6nm,0.3s,baz=76,slow=11,SNR=2.3 | | | | | | |
| RAR | | | | LR | LR | 21 39 34.1 | |
| | comp=Z,72nm,18.0s,baz=301,slow=40 | | | | | | |
| **RAR** | **Rarotonga** | **13.89** | **96** | Pn | **Pn** | **21 33 33.5** | **-2.2** |
| **RAR** | **Rarotonga** | **13.89** | **96** | P | **Pn** | **21 33 33.6** | **-2.1** |
| **MARNC** | **Mare, Loyalty** | **16.25** | **263** | | **Pn** | **21 34 06.5** | **+0.2** |
| **MARNC** | **Mare, Loyalty** | **16.25** | **263** | P | **P** | **21 34 10.9** | **+2.4** |
| **PINNC** | **Pines Island,** | **16.83** | **259** | P | **P** | **21 34 15.7** | **+0.8** |
| **LIFNC** | **LIFOU** | **17.00** | **266** | | **P** | **21 34 16.7** | **-0.1** |
| LIFNC | | | | IAmb | IAmb | 21 34 19.6 | |
| | comp=Z,130nm,0.9s | | | | | | |
| **LIFN

TOO **Toolangi** 38.50 235 P **P** 21 37 38.4 -0.2
TOO **Toolangi** 38.50 235 P **P** 21 37 39.7 +1.1
MTSU **Mount Surprise** 38.77 266 P **P** 21 37 40.5 -0.5
baz=39,SNR=59
MTSU **Mount Surprise** 38.77 266 P **P** 21 37 41.3 +0.3
STKA **Stephens Creek** 40.67 245 P **P** 21 37 55.4 -1.2
comp=Z,8.4nm,0.7s,baz=96,slow=10,SNR=18
STKA **Stephens Creek** 40.67 245 P **P** 21 37 55.7 -0.9
baz=41,SNR=5.9
STKA **Stephens Creek** 40.67 245 P **P** 21 37 55.9 -0.8
STKA pmax pmax
comp=Z,2.0nm,0.6s
STKA **Stephens Creek** 40.67 245 P **P** 21 37 55.9 -0.8
STKA **Stephens Creek** 40.67 245 P **P** 21 37 56.7 0.0
COEN **Coen** 40.76 272 P **P** 21 37 56.6 -1.0
COEN IAmb IAmb 21 38 07.4
comp=Z,16nm,0.8s
COEN **Coen** 40.76 272 P **P** 21 37 57.0 -0.6
INKA **Innaminka** 41.22 251 P **P** 21 37 59.6 -1.6
HTT **Hallett** 43.06 243 P **P** 21 38 15.5 -0.7
baz=43,SNR=5.2
HTT **Hallett** 43.06 243 P **P** 21 38 15.3 -0.9
comp=Z,12nm,1.1s
LCRK **Leigh Creek** 43.47 247 P **P** 21 38 19.8 +0.3
BBOO **Buckleboo** 45.41 244 P **P** 21 38 34.0 -1.0
baz=46,SNR=14
BBOO **Buckleboo** 45.41 244 P **P** 21 38 33.2 -1.8
BBOO **Buckleboo** 45.41 244 P **P** 21 38 34.5 -0.5
OOD **Oodnadatta** 45.70 251 P **P** 21 38 38.3 +1.0
MULG **Mulgathing** 47.06 247 P **P** 21 38 46.8 -1.2
JAY **Jayapura** 47.07 286 P **P** 21 38 48.0 -0.2
comp=Z,50nm,0.6s,baz=122,slow=4.5,SNR=27
JAY **Jayapura** 47.07 286 P **P** 21 38 46.9 -1.4
comp=Z,36nm,0.8s
GENI **Genyem** 47.52 286 P **P** 21 38 50.8 -0.9
comp=Z,75nm,0.7s
WR0 **Warramunga Arr** 47.56 261 P **P** 21 38 49.9 -2.1
AS31 **Alice Springs** 47.62 256 P **P** 21 38 51.2 -1.3
ASAR **Alice Springs** 47.62 256 P **P** 21 38 50.8 -1.7
comp=Z,7.1nm,0.6s,baz=97,slow=7.6,SNR=93
ASAR PcP **PcP** 21 40 21.8 +0.3
comp=Z,6.1nm,0.6s,baz=107,slow=4.0,SNR=14
WRAB **Tennant Creek** 47.74 261 P **P** 21 38 51.6 -1.8
WRAB pmax pmax
comp=Z,7.0nm,0.8s
WRAB **Tennant Creek** 47.74 261 P **P** 21 38 51.6 -1.8
WRAB **Tennant Creek** 47.74 261 P **P** 21 38 52.2 -1.2
WRA **Warramunga Arr** 47.75 261 P **P** 21 38 51.1 -2.4
comp=Z,2.5nm,0.3s,baz=96,slow=7.9,SNR=76
WRA PcP **PcP** 21 40 22.1 +0.1
comp=Z,2.5nm,0.6s,baz=92,slow=3.1,SNR=5.7
WRA **Warramunga Arr** 47.75 261 P **P** 21 38 51.5 -2.0
SMPI **Sarmi** 49.09 286 P **P** 21 39 02.0 -1.8
KDU **Kakadu** 51.13 270 P **P** 21 39 17.6 -1.6
baz=52,SNR=19
KDU **Kakadu** 51.13 270 P **P** 21 39 18.6 -0.7
FORT **Forrest** 52.22 246 P **P** 21 39 27.1 -0.2
baz=53,SNR=8.4
FORT **Forrest** 52.22 246 P **P** 21 39 25.9 -1.3
FORT IAmb IAmb 21 39 28.9
comp=Z,19nm,0.8s
FORT **Forrest** 52.22 246 P **P** 21 39 26.7 -0.5
MTN **Manton Dam** 52.34 269 P **P** 21 39 26.7 -1.6
MTN IAmb IAmb 21 39 30.2
comp=Z,32nm,1.1s
WRKA **Warakurna** 52.53 254 P **P** 21 39 27.8 -1.8
baz=53,SNR=52
WRKA **Warakurna** 52.53 254 P **P** 21 39 28.2 -1.5
KNRA **Kununurra** 53.83 265 P **P** 21 39 37.9 -1.3
baz=54,SNR=15
KNRA **Kununurra** 53.83 265 P **P** 21 39 37.7 -1.5
KNRA **Kununurra** 53.83 265 P **P** 21 39 38.6 -0.7
FAKI **Fak Fak** 54.60 281 P **P** 21 39 42.7 -2.2
FAKI **Fak Fak** 54.60 281 P **P** 21 39 44.8 -0.1
FITZ **Fitzroy Crossi** 56.18 261 P **P** 21 39 55.1 -1.1
baz=56,SNR=21
SIJI **Sorong** 56.31 283 P **P** 21 39 56.1 -1.1
comp=Z,17nm,0.5s,baz=106,slow=4.7,SNR=11
SWI **Sorong** 56.32 283 P **P** 21 39 55.4 -1.9
comp=Z,41nm,0.7s
SBA **Scott Base** 58.13 185 P **P** 21 40 10.7 +1.6
SBA pmax pmax
comp=Z,384nm,1.7s
SBA **Scott Base** 58.13 185 P **P** 21 40 10.7 +1.6
RPN **Rapa Nui** 59.52 110 LR LR 21 58 00.1
comp=Z,47nm,20.6s,baz=106,slow=28
SOEI **Soe** 59.68 271 P **P** 21 40 19.6 -1.3
PSA00 **Pilbara Seismi** 60.77 256 P **P** 21 40 25.7 -2.4
PSA00 **Pilbara Seismi** 60.77 256 P **P** 21 40 26.4 -1.7
PSA00 IAmb IAmb 21 40 34.7
comp=Z,7.3nm,0.6s
PSA00 **Pilbara Seismi** 60.77 256 P **P** 21 40 26.6 -1.5
MEEK **Meekatharra** 60.93 250 P **P** 21 40 27.2 -2.0
baz=61,SNR=6.4
MEEK **Meekatharra** 60.93 250 P **P** 21 40 27.2 -2.0
comp=Z,11nm,1.2s
KLBR **Kellerberrin** 60.94 245 P **P** 21 40 29.3 +0.1
baz=61,SNR=8.1
KLBR **Kellerberrin** 60.94 245 P **P** 21 40 29.0 -0.2
comp=Z,22nm,0.5s
MBWA **Marble Bar** 60.96 257 P **P** 21 40 27.4 -2.0
MBWA **Marble Bar** 60.96 257 P **P** 21 40 27.9 -1.5
NWAO **Narrogin (SRO)** 61.22 243 P **P** 21 40 30.8 -0.2
comp=Z,19nm,2.2s
BLDU **Ballidu** 61.96 245 P **P** 21 40 34.8 -1.3
baz=62,SNR=20
BLDU **Ballidu** 61.96 245 P **P** 21 40 36.4 +0.3
MUN **Mundaring** 62.20 244 P **P** 21 40 37.1 -0.6
baz=62,SNR=4.4
MUN **Mundaring** 62.20 244 P **P** 21 40 37.7 0.0
comp=Z,12nm,2.4s
MORW **Morawa** 62.77 247 P **P** 21 40 40.4 -1.2
baz=63,SNR=10
MORW **Morawa** 62.77 247 P **P** 21 40 40.3 -1.2
MORW IAmb IAmb 21 40 43.9
comp=Z,21nm,1.4s
MORW **Morawa** 62.77 247 P **P** 21 40 42.5 +0.9
GTOI **Gorontalo** 64.48 281 P **P** 21 40 51.1 -1.9
GIRL **Giralia** 65.62 254 P **P** 21 41 00.2 -0.1
baz=66,SNR=3.5
GIRL **Giralia** 65.62 254 P **P** 21 40 59.6 -0.7
GIRL **Giralia** 65.62 254 P **P** 21 40 59.7 -0.6
comp=Z,78nm,1.4s
TOLI2 **Tolitoli** 66.72 280 P **P** 21 41 06.0 -1.4
TOLI2 IAmb IAmb 21 41 07.2
comp=Z,11nm,0.9s
QSPA **South Pole Qui** 69.60 180 P **P** 21 41 26.2 +1.4
comp=Z,7.2nm,0.9s,baz=21,slow=1.8,SNR=8.1
QSPA **South Pole Qui** 69.60 180 P **P** 21 41 25.6 +0.9
QSPA IAmb IAmb 21 41 38.2
comp=Z,39nm,1.8s
MYLDM **Lahad Datu** 70.41 284 P **P** 21 41 31.4 +1.0
MYLDM IAmb IAmb 21 41 46.8
comp=Z,32nm,1.3s
JYT **Yasato** 70.75 323 P **P** 21 41 32.4 +0.4
JGF **Kuroka** 71.97 320 P **P** 21 41 38.9 -0.6
JGF IAmb IAmb 21 41 50.0
comp=Z,50nm,1.8s
MJAR **Matsushiro Arr** 72.11 322 P **P** 21 41 40.2 0.0
comp=Z,16nm,0.6s,baz=150,slow=5.5,SNR=31
MJAR **Matsushiro Arr** 72.11 322 P **P** 21 41 40.0 -0.3
MJAR IAmb IAmb 21 41 41.2
comp=Z,9.2nm,0.7s
MAJO **Matsushiro** 72.12 322 *i* P **P** 21 41 40.4 +0.1
MAJO pmax pmax
comp=Z,19nm,0.7s
MAJO **Matsushiro** 72.12 322 P **P** 21 41 39.9 -0.4
MAJO IAmb IAmb 21 41 41.3
comp=Z,20nm,0.7s
MAT **Matsushiro** 72.12 322 P **P** 21 41 39.6 -0.7
MJB9 **Matsu-Tunnel** 72.12 322 P **P** 21 41 39.6 -0.7
MJB9 IAmb IAmb 21 41 41.3
comp=Z,19nm,0.7s
KKM **Kota Kinabalu** 72.83 283 P **P** 21 41 44.2 -0.9
KKM IAmb IAmb 21 41 47.0
comp=Z,17nm,0.7s
JSD **Sado** 73.12 323 P **P** 21 41 46.7 +0.5
UGM **Wanagama** 73.14 268 P **P** 21 41 45.6 -1.4
H06S1 **SOCORRO T** 73.54 62 T T 23 02 35.2
SNR=7.2
JTM **Tenmabayashi** 73.56 326 P **P** 21 41 49.5 +0.9
JHS **Saijyo** 74.19 318 P **P** 21 41 53.1 +0.5
JNU **Nakatsue** 74.47 315 P **P** 21 41 54.2 0.0
comp=Z,3.6nm,0.6s,baz=149,slow=5.9,SNR=2.9
JNU **Nakatsue** 74.47 315 P **P** 21 41 53.7 -0.5
comp=Z,13nm,1.1s
JNU IAmb IAmb 21 41 55.5
ASAJ **Asahikawa** 75.26 330 LR LR 22 08 46.4
comp=Z,30nm,21.8s,baz=172,slow=31
NACB **Ninganchiao** 76.32 302 P **P** 21 42 03.8 -1.2
KSM **Kuching** 76.56 277 P **P** 21 42 06.0 -0.6
KSM IAmb IAmb 21 42 12.3
comp=Z,26nm,1.3s
TATO **Taipei** 76.80 303 P **P** 21 42 07.3 -0.4
MONP2 **Monument Peak** 76.82 47 P **P** 21 42 09.2 +1.3
baz=235
IKP **In-Ko-Pah, Jac** 76.90 48 P **P** 21 42 09.4 +1.2
baz=235
EDW2 **Edwards Air Fo** 76.92 45 P **P** 21 42 09.2 +0.9
baz=233
ISA **Isabella, Lake** 77.08 44 P **P** 21 42 10.4 +1.3
baz=233
PEA0B **Petropavlovsk-** 77.11 343 P **P** 21 42 08.8 0.0
PEA0B pmax pmax
comp=Z,28nm,1.3s
PEA0B **Petropavlovsk-** 77.11 343 P **P** 21 42 08.8 0.0
PEA0B IAmb IAmb 21 42 43.6
comp=Z,28nm,1.3s
PETK **Petropavlovsk-** 77.11 343 P **P** 21 42 08.8 0.0
comp=Z,4.9nm,0.7s,baz=110,slow=8.1,SNR=12
PETK **Petropavlovsk-** 77.11 343 P **P** 21 42 08.4 -0.4
PFO **Pinyon Flats O** 77.21 47 P **P** 21 42 11.0 +1.0
baz=235
YSS **Yuzh-Sakhalins** 77.34 332 *ce*P **P** 21 42 11.6 +1.4
YSS pmax pmax
comp=Z,33nm,0.9s
LRMC **Laurel Mtn Rad** 77.48 44 P **P** 21 42 12.5 +1.0
baz=234
BELC **Belle Mtn. Jos** 77.75 47 P **P** 21 42 13.5 +0.5
baz=235
CWC **Cottonwood Cre** 77.80 43 P **P** 21 42 14.1 +0.8
baz=233
BC3 **Big Chuckawall** 77.92 47 P **P** 21 42 15.0 +1.0
baz=235
MPMC **Manual Prospec** 77.95 44 P **P** 21 42 15.3 +1.1
baz=234
HEC **Hector,Ludlow** 78.00 46 P **P** 21 42 15.3 +1.0
baz=235
IRM **Iron Mountain** 78.42 47 P **P** 21 42 18.1 +1.5
baz=235
GMRC **Granite Mounta** 78.43 46 P **P** 21 42 18.1 +1.4
baz=235
LCH **Last Change Ra** 78.55 43 P **P** 21 42 18.5 +1.1
TUQ **Turquoise Moun** 78.62 45 P **P** 21 42 19.4 +1.5
baz=235
214A **Organ Pipe Nat** 78.84 50 P **P** 21 42 20.3 +1.4
baz=237
NVAR **Mina Array Bea** 78.85 42 P **P** 21 42 20.5 +1.4
comp=Z,3.1nm,0.7s,baz=223,slow=8.6,SNR=28
NVAR **Mina Array Bea** 78.85 42 P **P** 21 42 20.0 +0.9
NV11 **Mina Array Sit** 78.95 42 P **P** 21 42 20.7 +1.1
KSRS **Korea Array** 79.00 317 P **P** 21 42 20.9 +1.3
comp=Z,6.8nm,1.0s,baz=129,slow=6.3,SNR=14
KSAR **Wonju Array Be** 79.02 317 P **P** 21 42 19.9 +0.1
KSAR **Wonju Array Be** 79.02 317 P **P** 21 42 19.9 +0.1
PDMCI **Parker Dam,Lak** 79.19 47 P **P** 21 42 21.9 +1.2
baz=236
TPH **Tonopah** 79.32 43 P **P** 21 42 22.6 +0.9
TPH pmax pmax
comp=Z,12nm,0.7s
TPH **Tonopah** 79.32 43 P **P** 21 42 22.6 +0.9
TPH IAmb IAmb 21 42 24.1
comp=Z,12nm,0.7s
KVN **Kaiserville** 79.36 41 P **P** 21 42 22.3 +0.5
KVN pmax pmax
comp=Z,2.0nm,0.8s
KVN **Kaiserville** 79.36 41 P **P** 21 42 22.3 +0.5
J05D **Fort Rock, OR** 80.16 36 P **P** 21 42 27.3 +1.3
baz=230
G03D **McMinnville, O** 80.32 34 P **P** 21 42 28.8 +2.1
baz=228
R11A **Troy Canyon, C** 80.53 43 P **P** 21 42 29.6 +1.4
baz=234
USRK **Ussuriysk Ar.** 80.76 324 P **P** 21 42 30.7 +1.7
comp=Z,3.2nm,0.8s,baz=115,slow=3.9,SNR=4.8
P18K **Big Mountain,** 81.15 10 P **P** 21 42 30.5 -0.3
U15A **North Rim** 81.62 46 P **P** 21 42 34.0 -0.1
ILSW **Iliamna Southw** 82.06 11 P **P** 21 42 34.1 -1.5
NJ2 **Nanjing** 82.33 308 *e*P **P** 21 42 39.0 +1.4
NJ2 pmax pmax
comp=Z,6.0nm,0.6s
GRNR **Gornyy** 82.98 331⇑ *i*P **P** 21 42 41.6 +1.1
GRNR pmax pmax
comp=Z,7.0nm,1.1s
GRNR MLR MLR
comp=E,70nm,13.0s
GRNR MLR MLR
comp=N,70nm,14.0s
GRNR MLR MLR
comp=Z,80nm,15.0s
H03S2 **Juan Fernandez** 83.37 124 T T 23 15 10.8
baz=249
H03S1 **Juan Fernandez** 83.39 124 T T 23 15 11.9
baz=249
H03S3 **Juan Fernandez** 83.39 124 T T 23 15 10.7
baz=249
H03N2 **Juan Fernandez** 83.50 123 T T 23 15 10.1
baz=257,slow=72,SNR=493
H03N3 **Juan Fernandez** 83.50 123 T T 23 15 17.3
baz=257,slow=72,SNR=318
H03N1 **Juan Fernandez** 83.52 123 T T 23 15 16.2
baz=257,slow=72,SNR=315
M19K **Big River Lodg** 83.67 9 P **P** 21 42 43.8 -0.1
M19K IAmb IAmb 21 42 45.8
comp=Z,14nm,1.4s
M19K **Big River Lodg** 83.67 9 P **P** 21 42 44.4 +0.6
baz=199
F10A **Beach Ranch, E** 84.07 36 P **P** 21 42 46.4 0.0
F10A IAmb IAmb 21 42 48.5
comp=Z,8.9nm,1.0s
KLR **Kul'dur** 84.16 328 P **P** 21 42 46.2 -0.4
comp=Z,1.3nm,0.6s,baz=149,slow=3.8,SNR=3.7
KLR LR LR 22 14 02.7
comp=Z,32nm,21.5s,baz=110,slow=31
KLR **Kul'dur** 84.16 328 *ce*P **P** 21 42 47.4 +0.8
PLID **Pearl Lake** 84.23 37 P **P** 21 42 47.8 +0.4
PLID IAmb IAmb 21 42 49.6
comp=Z,16nm,1.8s
CN2 **Changchun** 84.25 321 *e*P **P** 21 42 47.5 +0.3
CN2 SKS **S** 21 53 03.8 -4.4
CN2 pmax pmax
comp=Z,10.0nm,1.7s
KNK **Knik Glacier** 84.26 12 P **P** 21 42 47.6 +0.7
baz=204
BNX **BinXian** 84.27 323 ⇑P **P** 21 42 47.6 +0.4
BNX pmax pmax
comp=Z,20nm,0.8s
BNX pmax pmax
comp=Z,470nm,4.6s
TXAR **Lajitas Array** 84.38 56 P **P** 21 42 49.7 +1.4
comp=Z,0.8nm,0.9s,baz=218,slow=7.9,SNR=6.3
TTA **Tatalina** 84.41 8 P **P** 21 42 48.5 +0.8
TTA pmax pmax
comp=Z,9.0nm,1.1s
TTA **Tatalina** 84.41 8 P **P** 21 42 48.5 +0.8
TTA IAmb IAmb 21 42 49.6
comp=Z,9.1nm,1.1s
TTA **Tatalina** 84.41 8 P **P** 21 42 49.0 +1.3
baz=198
MA2 **Magadan** 84.64 343 *i* P **P** 21 42 48.1 -0.7
MA2 pmax pmax
comp=Z,2.0nm,0.4s
CUT **Chulitna** 84.83 11 P **P** 21 42 50.2 +0.6
baz=203
SCM **Sheep Creek Mo** 84.87 13 P **P** 21 42 50.9 +0.9
baz=206
ANMO **Albuquerque** 84.93 50 *ce*P **P** 21 42 52.5 +1.4
ANMO pmax pmax
comp=Z,6.0nm,1.3s
PPLA **Purkeypile** 84.95 10 P **P** 21 42 50.3 -0.1
PPLA IAmb IAmb 21 43 17.4
comp=Z,23nm,1.4s
K20K **Telida** 85.09 9 P **P** 21 42 52.0 +1.0
baz=199
N25K **Chitina, Valde** 85.25 14 P **P** 21 42 52.8 +0.9
baz=208
GLB **Gilahina Butte** 85.29 14 P **P** 21 42 51.8 -0.3
GLB IAmb IAmb 21 43 15.5
comp=Z,15nm,1.3s
CAST **Castle Rocks** 85.46 10 P **P** 21 42 52.2 -0.6
baz=201
WAT6 **Susitna Watana** 85.47 12 P **P** 21 42 53.7 +0.7
baz=205
TIA **Tai'an** 85.62 311 ⇓P **P** 21 42 55.4 +1.1
TIA pmax pmax
comp=Z,11nm,1.0s
TRF **Thorofare Moun** 85.79 11 P **P** 21 42 55.2 +0.5
baz=203
CHUM **Lake Minchumin** 85.86 10 P **P** 21 42 54.9 +0.2
baz=201
J20K **Nowinta River** 85.86 9 P **P** 21 42 55.3 +0.6
J20K IAmb IAmb 21 43 19.4
comp=Z,17nm,1.6s
J20K **Nowinta River** 85.86 9 P **P** 21 42 55.9 +1.2
baz=199
TNA **Tin City** 85.91 3 P **P** 21 42 55.5 +0.5
TNA IAmb IAmb 21 42 57.1
comp=Z,5.3nm,0.8s
TNA **Tin City** 85.91 3 P **P** 21 42 56.1 +1.1
baz=186
DHY **Denali Highway** 85.99 12 P **P** 21 42 55.8 +0.2
baz=206
RND **Reindeer** 86.01 11 P **P** 21 42 55.9 +0.3
RND pmax pmax
comp=Z,20nm,1.1s
RND **Reindeer** 86.01 11 P **P** 21 42 55.9 +0.3
RND IAmb IAmb 21 43 34.5
comp=Z,20nm,1.1s
PAX **Paxson** 86.28 13 P **P** 21 42 57.7 +0.7
baz=207
IPM **Ipoh** 86.28 276 P **P** 21 42 58.0 -0.1
MCK **McKinley** 86.29 11 P **P** 21 42 56.9 -0.1
MCK pmax pmax
comp=Z,11nm,0.8s
MCK **McKinley** 86.29 11 P **P** 21 42 56.9 -0.1
MCK IAmb IAmb 21 42 58.7
comp=Z,11nm,0.8s
MCK **McKinley** 86.29 11 P **P** 21 42 57.8 +0.8
baz=204
M26K **Nabesna, AK** 86.32 14 P **P** 21 42 58.7 +1.5
baz=210
M27K **Edge Creek, AK** 86.54 15 P **P** 21 42 59.5 +1.1
M27K **Edge Creek, AK** 86.54 15 P **P** 21 42 59.5 +1.1
baz=210
L26K **Log Cabin Wild** 86.78 14 P **P** 21 43 00.7 +1.3
baz=209
PDAR **Pinedale Array** 86.79 42 P **P** 21 43 00.9 +0.7
comp=Z,0.9nm,0.8s,baz=210,slow=4.5,SNR=4.5
KULM **Kulim** 86.92 277 P **P** 21 43 00.9 -0.3
PLCA **Paso Flores** 86.97 132 P **P** 21 43 02.2 +1.1
comp=Z,3.6nm,1.1s,baz=235,slow=10,SNR=6.5
PLCA LR LR 22 13 28.1
comp=Z,40nm,21.1s,baz=334,slow=30
PLCA **Paso Flores** 86.97 132 P **P** 21 43 02.1 +1.1
PLCA IAmb IAmb 21 43 02.8
comp=Z,21nm,1.6s
SEY **Seymchan** 87.10 346 *i* P **P** 21 43 01.5 +0.6
WRH **Wood River Hil** 87.12 11 P **P** 21 43 00.8 -0.2
WRH IAmb IAmb 21 43 11.8
comp=Z,10nm,1.1s
I21K **Tanana** 87.13 9 P **P** 21 43 01.1 +0.1
baz=201
L27K **Beaver Creek,** 87.16 14 P **P** 21 43 02.6 +1.4
baz=210
BCAR **Beaver Creek A** 87.17 14 P **P** 21 43 02.2 +0.9
MLY **Manley** 87.18 10 P **P** 21 43 01.1 -0.2
baz=202
P33M **Teslin, Yukon** 87.26 19 P **P** 21 43 02.7 +0.8
baz=219
HDA **Harding Lake** 87.28 12 P **P** 21 43 02.3 +0.6
baz=206
SYO **Syowa Base** 87.43 192⇑ *es*P sP 21 43 20.4 -4.2
H21K **Melozitna Rive** 87.45 9 P **P** 21 43 03.4 +0.8
baz=200
SCRK **Sand Creek** 87.48 13 P **P** 21 43 04.0 +1.1
baz=209
IL31 **** 87.62 12 P **P** 21 43 03.8 +0.5
IL31 IAmb IAmb 21 43 15.1
comp=Z,7.8nm,1.2s
ILAR **Eielson Array** 87.62 12 P **P** 21 43 03.5 +0.2
comp=Z,0.7nm,0.5s,baz=216,slow=5.0,SNR=14
ILAR **Eielson Array** 87.62 12 P **P** 21 43 04.2 +0.8
ILAR **Eielson Array** 87.62 12 P **P** 21 43 04.2 +0.8
IMAR **Indian Mountai** 87.63 8 P **P** 21 43 03.9 +0.5
J25K **Salcha River,** 87.77 12 P **P** 21 43 05.5 +1.3
baz=207
HNS **HongShan** 87.89 311 ⇑P **P** 21 43 06.3 +1.0
HNS pmax pmax
comp=Z,9.0nm,1.0s
SNAA **Sanae** 87.92 177 *ce*P **P** 21 43 04.0 -1.1
SNAA pmax pmax
comp=Z,16nm,1.4s
J26L **Joseph Creek** 88.03 13 P **P** 21 43 07.0 +1.5
baz=209
BJI **Beijing** 88.13 314 P **P** 21 43 07.2 +0.9
BJI pmax pmax
comp=Z,5.0nm,0.9s
LYN **LuoYang** 88.22 308⇑ *i*P **P** 21 43 08.2 +1.3
LYN pmax pmax
comp=Z,10.0nm,1.1s
DAWY **Dawson** 88.59 15 P **P** 21 43 09.6 +1.6
baz=213
ENH **Enshi** 88.67 303 P **P** 21 43 08.8 -0.4
ENH IAmb IAmb 21 43 11.2
comp=Z,18nm,1.1s
EGAK **Eagle** 88.79 14 P **P** 21 43 09.7 +0.8
EGAK IAmb IAmb 21 43 32.9
comp=Z,9.8nm,1.4s
ZEA **Zeya** 89.18 330 *e*P **P** 21 43 12.1 +1.1
ZEA pmax pmax
comp=Z,10.0nm,1.3s
COLD **Coldfoot** 89.30 9 P **P** 21 43 13.1 +1.8
baz=203
BILL **Bilibino** 89.36 353 *i* P **P** 21 43 08.9 -2.6
BILL *i* 21 43 15.9
BILL pmax pmax
comp=Z,2.0nm,1.0s
XLT **XiLinHaoTe** 90.04 317 *e*P **P** 21 43 15.6 +0.2
XLT pP pP 21 43 29.0 -2.4
XLT sP sP 21 43 34.1 -3.5
XLT pmax pmax
comp=Z,8.0nm,0.7s
XLT pmax pmax
comp=Z,190nm,5.2s
XAN **Xi'an** 90.66 306 P **P** 21 43 19.6 +1.1
XAN pmax pmax
comp=Z,15nm,1.0s
HHC **Hu-ho-hao-te** 91.63 313 *e*P **P** 21 43 24.5 +1.6
HHC pP pP 21 43 39.8 +0.9
HHC pmax pmax
comp=Z,4.0nm,0.9s
HHC pmax pmax
comp=Z,180nm,5.4s
KMI **Kunming** 92.18 296 ⇑P **P** 21 43 27.4 +1.5
KMI pP pP 21 43 39.2 -2.8
KMI pmax pmax
comp=Z,8.0nm,0.9s
CMAR **Chiang Mai Arr** 93.11 288 P **P** 21 43 31.1 +1.0
comp=Z,3.3nm,0.9s,baz=111,slow=2.5,SNR=13
CMAR LR LR 22 22 25.8
comp=Z,9.5nm,21.9s,baz=130,slow=34
CMAR **Chiang Mai Arr** 93.11 288 *ce*P **P** 21 43 32.2 +2.1
CMAR pmax pmax
comp=Z,3.0nm,0.9s
CMAR **Chiang Mai Arr** 93.11 288 P **P** 21 43 29.9 -0.2
CHTO **Chiang Mai** 93.23 289 P **P** 21 43 30.8 +0.1
CHTO pmax pmax
comp=Z,14nm,1.6s
CHTO **Chiang Mai** 93.23 289 P **P** 21 43 30.8 +0.1
CHTO IAmb IAmb 21 43 32.7
comp=Z,14nm,1.6s
ATAH **Atahualpa** 93.31 99 LR LR 22 18 01.3
comp=Z,45nm,20.0s,baz=29,slow=31
INK **Inuvik** 93.44 14 P **P** 21 43 30.8 +0.4
comp=Z,2.0nm,0.9s,baz=206,slow=4.4,SNR=6.6
INK **Inuvik** 93.44 14 P **P** 21 43 30.9 +0.6
baz=218
PZH **PanZhiHua** 93.52 297 P **P** 21 43 33.8 +1.9
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,5.3s
YKA **Yellowknife Ar** 95.18 24 P **P** 21 43 38.4 -0.2
comp=Z,0.5nm,0.7s,baz=235,slow=4.5,SNR=7.5
LZH **Lanzhou** 95.29 306 *e*P **P** 21 43 41.0 +1.1
LZH pP pP 21 43 55.0 -1.0
LZH sP sP 21 44 00.5 -1.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.5s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.44** | **318** | *i* P | Pdif | 21 43 51.1 | +1.7 | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **TIXI** | **Tiksi** | **99.55** | **344** | *i* P | **Pdif** | **21 43 59.0** | **+1.0** | |
| **NRIK** | **Noril'sk** | **111.74** | **338** | *i* PKIKP | **PKiKP** | **21 48 51.1** | **+1.7** | |
| **ZALV** | **Zalesovo Beam** | **112.47** | **321** | PKiKP | **PKiKP** | **21 48 50.3** | **-0.9** | |
| | comp=Z,0.2nm,0.4s,baz=108,slow=9.1,SNR=2.1 | | | | | | | |
| **MK31** | **Makanchi Array** | **113.49** | **313** | *i* PKiKP | **PKiKP** | **21 48 54.3** | **+0.8** | |
| **MKAR** | **Makanchi Array** | **113.49** | **313** | PKiKP | **PKiKP** | **21 48 52.4** | **-1.1** | |
| | comp=Z,0.5nm,0.6s,baz=161,slow=0.6,SNR=8.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **113.49** | **313***c* | *i* PKIKP | **PKiKP** | **21 48 52.5** | **-1.0** | |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **116.13** | **317** | *i* PKIKP | **PKiKP** | **21 48 59.6** | **+1.3** | |
| **ARCES** | **ARCESS Array B** | **129.43** | **351** | PKP | **PKPdf** | **21 49 22.7** | **-0.7** | |
| | comp=Z,1.4nm,0.5s,baz=11,slow=1.4,SNR=14 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.58** | **346** | PKP | **PKPdf** | **21 49 36.1** | **-0.9** | |
| | comp=Z,1.6nm,0.6s,baz=87,slow=4.0,SNR=5.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.58** | **346***c* | *i* PKIKP | **PKiKP** | **21 49 39.4** | **+0.7** | |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.46** | **334** | PKP | **PKPab** | **21 49 49.5** | **-0.4** | |
| | comp=Z,2.5nm,0.7s,baz=41,slow=4.6,SNR=31 | | | | | | | |
| **AKBB** | **Malin Array Si** | **144.46** | **334** | PKIKP | **PKPab** | **21 49 49.9** | **0.0** | |
| **AKBB** | **Malin Array Si** | **144.46** | **334** | | **PKPab** | **21 49 49.9** | **0.0** | |
| **SORM** | **Soroca** | **146.77** | **332** | ⇑P | **PKPbc** | **21 49 56.7** | **-0.6** | |
| **SORM** | **Soroca** | **146.77** | **332** | ⇑PKP2 | **PKPbc** | **21 49 56.7** | **-0.6** | |
| **LVV** | **L'vov** | **147.18** | **338** | *e*PKP2 | **PKPbc** | **21 49 58.6** | **+0.1** | |
| **MILM** | **Milestii Mici** | **147.45** | **330** | ⇑P | **PKPdf** | **21 49 56.6** | **-0.1** | |
| **MILM** | **Milestii Mici** | **147.45** | **330** | ⇑PKIKP | **PKPdf** | **21 49 56.6** | **-0.1** | |
| **MBAR** | **Mbarara** | **147.53** | **233***c* | *i* PKP2 | **PKiKP** | **21 50 03.1** | **+0.2** | |
| MBAR | | | | pmax | pmax | | | |
| | comp=Z,16nm,2.5s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **147.80** | **339** | *e*PKPab | **PKPab** | **21 50 03.6** | **+1.0** | |
| **BNN** | **Bunyan** | **148.03** | **312** | | **PKPbc** | **21 50 01.6** | **+0.3** | |
| **OJC** | **Ojcow** | **148.19** | **342** | *e*PKPab | **PKPab** | **21 50 08.7** | **+4.5** | |
| OJC | | | | *ep*PKPab | **pPKPbc** | **21 50 18.2** | **+0.5** | |
| **KSP** | **Ksiaz** | **148.49** | **347** | *e*PKPab | **PKPab** | **21 50 05.0** | **-0.4** | |
| **BUR08** | **Bucovina Ar. S** | **148.50** | **334** | | **PKPbc** | **21 50 03.1** | **+0.9** | |
| **BURAR** | **Bucovina Array** | **148.52** | **334** | ⇓P | **PKiKP** | **21 50 04.3** | **+0.5** | |
| **BURAR** | **Bucovina Array** | **148.52** | **334** | ⇓PKP2 | **PKiKP** | **21 50 04.3** | **+0.5** | |
| **BURAR** | **Bucovina Array** | **148.52** | **334** | | **PKPbc** | **21 50 02.8** | **+0.5** | |
| **KOLS** | **Kolonicke sedl** | **148.54** | **338** | *e*PKP2 | **PKiKP** | **21 50 03.6** | **-0.1** | |
| **KOLS** | **Kolonicke sedl** | **148.54** | **338** | *e*PKP | **PKiKP** | **21 50 03.6** | **-0.1** | |
| KOLS | | | | *e* | | 21 50 06.8 | | |
| **CLL** | **Collm** | **148.65** | **351** | *e*PKP2 | **PKPbc** | **21 50 03.0** | **+0.7** | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **CLL** | **Collm** | **148.65** | **351** | *e*PKPbc | **PKPbc** | **21 50 03.0** | **+0.7** | |
| CLL | | | | *i* PKPab | **PKPab** | **21 50 06.0** | **0.0** | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **TESR** | **Tescani** | **148.75** | **331** | ⇑P | **PKPbc** | **21 50 03.1** | **+0.3** | |
| **OSTC** | **Ostas** | **148.78** | **347** | *e*PKP | **PKPbc** | **21 50 03.4** | **+0.7** | |
| **CHVC** | **Chvalec** | **148.78** | **347** | *e*PKP | **PKPbc** | **21 50 03.0** | **+0.2** | |
| **CRVS** | **Cervenica-Dubn** | **148.84** | **339** | *e*PKP2 | **PKPab** | **21 50 08.1** | **+1.2** | |
| **CRVS** | **Cervenica-Dubn** | **148.84** | **339** | *e*PKP | **PKPab** | **21 50 08.1** | **+1.2** | |
| **UPC** | **Upice** | **148.87** | **347** | *e*PKP2 | **PKPab** | **21 50 07.8** | **+0.9** | |
| **UPC** | **Upice** | **148.87** | **347** | *e*PKP | **PKPab** | **21 50 07.8** | **+0.9** | |
| **BRG** | **Berggiesshubel** | **148.92** | **349** | *e*PKP | **PKiKP** | **21 50 03.9** | **-0.5** | |
| BRG | | | | Amp | | 21 50 08.0 | | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| BRG | | | | *ex* | x | 21 50 18.3 | | |
| BRG | | | | Amp | | 21 50 19.8 | | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.92** | **349** | *e*PKP2 | **PKiKP** | **21 50 03.9** | **-0.5** | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **148.95** | **346** | *e*PKP2 | **PKPbc** | **21 50 02.2** | **-1.0** | |
| **DPC** | **Dobruska-Polom** | **148.95** | **346** | *e*PKP | **PKPbc** | **21 50 02.2** | **-1.0** | |
| **TPGR** | **Topolog** | **149.11** | **327** | ⇓P | **PKPab** | **21 50 08.9** | **+0.8** | |
| **BRTR** | **Keskin Array B** | **149.13** | **315** | PKPbc | **PKPbc** | **21 50 03.6** | **-0.6** | |
| | comp=Z,1.4nm,0.5s,baz=324,slow=9.0,SNR=4.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **149.13** | **315***c* | *i* PKP2 | **PKPbc** | **21 50 04.0** | **-0.1** | |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **BMR** | **Baia Mare** | **149.15** | **336** | ⇑P | **PKPab** | **21 50 07.2** | **-1.0** | |
| **BMR** | **Baia Mare** | **149.15** | **336** | ⇑PKP2 | **PKPab** | **21 50 07.2** | **-1.0** | |
| **MORC** | **Moravsky Berou** | **149.20** | **345** | ⇑P | **PKPbc** | **21 50 02.7** | **-1.1** | |
| **MORC** | **Moravsky Berou** | **149.20** | **345** | ⇑PKIKP | **PKPbc** | **21 50 02.7** | **-1.1** | |
| **LANS** | **Liptovska Anna** | **149.25** | **342** | *e*PKP2 | **PKiKP** | **21 50 05.0** | **-0.2** | |
| **LANS** | **Liptovska Anna** | **149.25** | **342** | *e*PKP | **PKiKP** | **21 50 05.0** | **-0.2** | |
| **ARCR** | **ARCALIA** | **149.29** | **334** | ⇓P | **PKPab** | **21 50 09.3** | **+0.5** | |
| **PRU** | **Pruhonice** | **149.66** | **348** | *e*PKP2 | **PKPbc** | **21 50 04.5** | **-0.4** | |
| **PRU** | **Pruhonice** | **149.66** | **348** | *e*PKP | **PKPbc** | **21 50 04.5** | **-0.4** | |
| **NEHR** | **Nehoiu** | **149.73** | **330** | ⇑P | **PKPbc** | **21 50 03.6** | **-1.7** | |
| **DOPR** | **Dopca** | **149.73** | **332** | ⇑P | **PKPbc** | **21 50 06.4** | **+0.1** | |
| **NKC** | **Novy Kostel** | **149.78** | **351** | *e*PKP2 | **PKPab** | **21 50 10.7** | **0.0** | |
| **NKC** | **Novy Kostel** | **149.78** | **351** | *e*PKP | **PKPab** | **21 50 10.7** | **0.0** | |
| **MLR** | **Muntele Rosu** | **149.84** | **331** | ⇑P | **PKPbc** | **21 50 04.3** | **-1.4** | |
| **MLR** | **Muntele Rosu** | **149.84** | **331** | ⇑PKHKP | PKPpre | 21 50 04.3 | | |
| **CBBR** | **Cluj-Babes-Bol** | **149.87** | **335** | ⇑P | **PKPdf** | **21 50 00.8** | **+0.1** | |
| **VYHS** | **Vyhne** | **150.02** | **342** | *e*PKP2 | **PKiKP** | **21 50 07.0** | **+0.2** | |
| **VYHS** | **Vyhne** | **150.02** | **342** | *e*PKP | **PKiKP** | **21 50 07.0** | **+0.2** | |
| **SECR** | | **150.13** | **330** | ⇓P | **PKPbc** | **21 50 05.3** | **-0.9** | |
| **DRGR** | | **150.18** | **336** | ⇓P | **PKiKP** | **21 50 07.9** | **+0.7** | |
| **DRGR** | | **150.18** | **336** | ⇓PKIKP | **PKiKP** | **21 50 07.9** | **+0.7** | |
| **VOIR** | | **150.29** | **331** | ⇑P | **PKiKP** | **21 50 07.5** | **0.0** | |
| **VOIR** | | **150.29** | **331** | ⇑PKIKP | **PKiKP** | **21 50 07.5** | **0.0** | |
| **ARR** | **Arges** | **150.53** | **332** | ⇓P | **PKiKP** | **21 50 08.5** | **+0.6** | |
| **KHC** | **Kasperske Hory** | **150.66** | **349** | *e*PKIKP | **PKiKP** | **21 50 08.4** | **+0.3** | |
| KHC | | | | *e* | | 21 50 13.3 | | |
| **KHC** | **Kasperske Hory** | **150.66** | **349** | *e*PKP | **PKiKP** | **21 50 08.4** | **+0.3** | |
| KHC | | | | *ex* | x | 21 50 13.3 | | |
| KHC | | | | *ep*PKP | **sPKPbc** | **21 50 28.5** | **-1.5** | |
| **CKRC** | **Cesky Krumlov** | **150.82** | **348** | *e*PKP | **PKPbc** | **21 50 07.4** | **-0.4** | |
| **GERES** | **GERESS Array B** | **150.91** | **349** | PKPbc | **PKPbc** | **21 50 07.9** | **-0.2** | |
| | comp=Z,1.9nm,0.7s,baz=98,slow=2.8,SNR=4.5 | | | | | | | |
| **HUMR** | **Humele** | **151.02** | **330** | ⇑P | **PKPab** | **21 50 13.5** | **-2.5** | |
| **GZR** | **Gura Zlata** | **151.30** | **334** | ⇓P | **PKPbc** | **21 50 08.2** | **-0.9** | |
| **GZR** | **Gura Zlata** | **151.30** | **334** | ⇓PKIKP | **PKPbc** | **21 50 08.2** | **-0.9** | |
| **HERR** | **Herculane** | **151.87** | **334** | ⇓P | **PKPbc** | **21 50 09.1** | **-1.2** | |
| **MORH** | **Mrgy, Hungar** | **152.12** | **340** | ⇑P | **PKPbc** | **21 50 10.5** | **-0.3** | |
| **FRGS** | **Fruska Gora** | **152.65** | **337** | ⇓P | **PKPab** | **21 50 20.6** | **-2.2** | |
| **RETA** | **Reutte** | **152.70** | **352** | *e*P | **PKiKP** | **21 50 17.5** | **+5.1** | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **WATA** | **Waldzeralm** | **152.73** | **351** | *e*P | **PKPbc** | **21 50 12.4** | **0.0** | |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.79** | **351** | *i* P | **PKPbc** | **21 50 12.7** | **+0.1** | |
| | comp=Z,4.5nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **152.90** | **351** | *e*P | **PKPbc** | **21 50 12.8** | **+0.2** | |
| | comp=Z,0.9nm,0.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.15** | **349** | *e*P | **PKPbc** | **21 50 13.1** | **-0.1** | |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **153.16** | **352** | *e*P | **PKiKP** | **21 50 13.6** | **+0.1** | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.90** | **154** | PKPab | **PKPab** | **21 51 47.8** | **+0.4** | |
| | comp=Z,0.4nm,0.6s,baz=221,slow=4.6,SNR=5.0 | | | | | | | |

**LJU 10 21:30:57.8, 46°39N×15°07E, h0km, ML0.4, Confirmed Rockburst, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PERS** | **Pernice** | **0.25** | **7** | *e*Pg | Pg | 21 31 03.1 | +0.5 |
| **GROS** | **Grobnik** | **0.31** | **76** | *i* Pg | Pg | 21 31 03.6 | -0.1 |
| **PDKS** | **Podkum** | **0.33** | **189** | *e*Pg | Pg | 21 31 04.2 | +0.1 |
| **DOBS** | **Dobrina** | **0.37** | **131** | *e*Pg | Pg | 21 31 04.7 | -0.2 |
| DOBS | | | | IAML | | 21 31 06.5 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.39** | **222** | *i* Pg | Pg | 21 31 05.5 | +0.3 |

*IDC **10** 21:33:13.4±2.3, 36.05N×71.25E, h95km±20km, mb3.5/16, mb1 3.6/22, mb1mx3.5/52, mbtmp3.9/22, Error ellipse: s-maj=15.4km s-min=15.0km az=102.0*
*NEIC **10** 21:33:14.3±1.6, 36.12N±0.05×71.20E±0.07, h98km±6km, mb4.2/22, Error ellipse: s-maj=8.5km s-min=6.7km az=96.0*
*NNC **10** 21:33:18.8±2.3, 36.47N×70.71E, h142km±25km, mb3.5, mpv4.4, Error ellipse: s-maj=21.3km s-min=12.2km az=164.0*
**ISC 10 21:33:13.4±0.4, 36.11N±0.04×71.22E±0.05, h102km, n93, σ2s44/104, mb4.0/19, 9C-7D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CEP** | **Cherat** | **2.35** | **166** | ⇓P | | **Pn** | **21 33 52.1** | **+1.3** |
| CEP | | | | S | | **Sn** | **21 34 22.0** | **+2.6** |
| **KBL** | **Kabul** | **2.37** | **229** | Pn | | **Pn** | **21 33 52.1** | **+1.0** |
| KBL | | | | Sn | | **Sn** | **21 34 21.2** | **+1.4** |
| **NIL** | **Nilore** | **2.97** | **145** | | | **Pn** | **21 33 59.6** | **+0.8** |
| NIL | | | | Sn | | **Sn** | **21 34 35.0** | **+1.2** |
| **GAR** | **Garm** | **2.97** | **346** | | | **Pn** | **21 33 59.5** | **+0.6** |
| **THW** | **Thamme Wali** | **3.33** | **172** | P | | **Pn** | **21 34 04.4** | **+0.6** |
| **JMU** | **Jammu** | **4.55** | **137** | *e*P | | **Pn** | **21 34 20.1** | **+0.1** |
| JMU | | | | *e*S | | **Sn** | **21 35 09.4** | **-2.5** |
| **THN** | **Thein Dam** | **5.23** | **133** | *e*P | | **Pn** | **21 34 29.5** | **+0.3** |
| THN | | | | *e*S | | **Sn** | **21 35 26.9** | **-1.3** |
| **TAS** | **Tashkent** | **5.42** | **344** | Pn | | **Pn** | **21 34 31.7** | **-0.1** |
| **AML** | **Almayashu** | **6.32** | **17** | P | | **Pn** | **21 34 45.4** | **+1.1** |
| | SNR=86 | | | | | | | |
| **BHK** | **Bhakra** | **6.38** | **136** | *e*P | | **Pn** | **21 34 44.6** | **-0.3** |
| **UCH** | **Uchtor** | **6.62** | **22** | P | | **Pn** | **21 34 50.1** | **+1.6** |
| | SNR=12 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.84** | **16** | P | | **Pn** | **21 34 52.9** | **+1.7** |
| | SNR=35 | | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **20** | P | | **Pn** | **21 34 54.6** | **+1.2** |
| | 3.1nm,0.3s,baz=192,slow=6.1,SNR=49 | | | | | | | |
| AAK | | | | S | | **Sn** | **21 36 11.0** | **-0.4** |
| | 1.1nm,0.3s,baz=143,slow=23,SNR=1.4 | | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **20** | P | | **Pn** | **21 34 54.9** | **+1.5** |
| | SNR=13 | | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **20** | ⇑P | | **Pn** | **21 34 54.6** | **+1.2** |
| | 12nm,0.3s | | | | | | | |
| AAK | | | | ⇑S | | **Sn** | **21 36 13.6** | **+2.2** |
| | 14nm,0.9s | | | | | | | |
| **AAK** | **Ala-Archa** | **7.00** | **20** | Pn | | **Pn** | **21 34 54.5** | **+1.2** |
| **KK02** | **Karatay Array** | **7.01** | **356** | ⇑P | | **Pn** | **21 34 53.5** | **+0.1** |
| | 42nm,0.5s | | | | | | | |
| KK02 | | | | ⇑S | | **Sn** | **21 36 09.6** | **-1.9** |
| | 39nm,0.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **7.01** | **356** | Pn | | **Pn** | **21 34 53.6** | **+0.3** |
| **SMLA** | **Simla** | **7.02** | **133** | *e*P | | **Pn** | **21 34 51.6** | **-2.0** |
| SMLA | | | | IAML | | | 21 36 11.4 | |
| | comp=E,142nm,0.3s | | | | | | | |
| **FRU1** | **Bishkek** | **7.19** | **20** | | | **Pn** | **21 34 58.8** | **+2.9** |
| **CHMS** | **Chumysh** | **7.40** | **21** | P | | Pn | 21 35 04.6 | +5.9 |
| | SNR=7.6 | | | | | | | |
| **USP** | **Ospenovka** | **7.58** | **18** | P | | **Pn** | **21 35 02.3** | **+1.1** |
| | SNR=11 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.60** | **25** | ⇑P | | **Pn** | **21 35 03.6** | **+2.0** |
| | comp=E,14nm,0.8s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **7.61** | **40** | Pn | | **Pn** | **21 35 04.3** | **+2.5** |
| **DDI** | **Dehra Dun** | **8.13** | **133** | *e*P | | **Pn** | **21 35 07.6** | **-1.1** |
| DDI | | | | *e*S | | **Sn** | **21 36 33.9** | **-5.1** |
| DDI | | | | IAML | | | 21 36 40.7 | |
| | comp=N,135nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **8.36** | **31** | P | | Pn | 21 35 18.0 | +6.2 |
| | comp=N,6.0nm,1.1s | | | | | | | |
| **NDI** | **New Delhi** | **8.97** | **144** | *e*S | | **Sn** | **21 36 51.9** | **-7.6** |
| **KUDL** | **Kundal** | **9.11** | **149** | *e*P | | **Pn** | **21 35 18.7** | **-3.3** |
| KUDL | | | | *e*S | | **Sn** | **21 36 54.5** | **-8.2** |
| **PTH** | **Pithoragarh** | **10.00** | **128** | *e*P | | Pn | 21 35 28.8 | -5.5 |
| PTH | | | | *e*S | | Sn | 21 37 12.7 | -12 |
| **AJM** | **Ajmer** | **10.04** | **162** | *e*P | | **Pn** | **21 35 33.0** | **-1.6** |
| **LGTI** | **Lohaghat** | **10.09** | **129** | *e*P | | **Pn** | **21 35 31.5** | **-3.8** |
| LGTI | | | | *e*S | | Sn | 21 37 15.6 | -11 |
| **GEYT** | **Alibeck** | **10.63** | **284** | P | | **Pn** | **21 35 41.4** | **-1.3** |
| | comp=N,1.5nm,0.3s,baz=116,slow=13,SNR=13 | | | | | | | |
| GEYT | | | | S | | **Sn** | **21 37 32.6** | **-7.1** |
| | comp=N,3.3nm,0.3s,baz=4.2,slow=28,SNR=5.8 | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **10.63** | **284** | ⇑P | | **Pn** | **21 35 41.8** | **-0.9** |
| GYA0B | | | | ⇓S | | **Sn** | **21 37 33.5** | **-6.2** |
| **GYA0B** | **ALIBECK ARRAY** | **10.63** | **284** | Pn | | **Pn** | **21 35 41.0** | **-1.6** |
| **OTUK** | **Ortayu** | **12.16** | **4** | ⇓P | | **Pn** | **21 36 01.3** | **-1.7** |
| | comp=N,2.6nm,0.6s | | | | | | | |
| **JHNI** | **Jhansi** | **12.33** | **147** | *e*P | | Pn | 21 36 00.5 | -4.9 |
| JHNI | | | | *e*S | | Sn | 21 38 10.6 | -10 |
| **MAKZ** | **Makanchi** | **13.38** | **34** | ⇑P | | **P** | **21 36 23.0** | **-1.9** |
| | comp=N,3.6nm,1.0s | | | | | | | |
| **MAKZ** | **Makanchi** | **13.38** | **34** | Pn | | **Pn** | **21 36 18.1** | **-0.9** |
| **MK31** | **Makanchi Array** | **13.51** | **34** | P | | **P** | **21 36 26.2** | **-0.2** |
| | comp=N,1.4nm,0.7s,baz=221,slow=13,SNR=24 | | | | | | | |
| **MK31** | **Makanchi Array** | **13.51** | **34** | | | **Pn** | **21 36 20.8** | **0.0** |
| **MKAR** | **Makanchi Array** | **13.51** | **34** | P | | **Pn** | **21 36 20.3** | **-0.5** |
| | comp=N,0.0nm,0.3s,baz=218,slow=12,SNR=3.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.51** | **34** | | | **Pn** | **21 36 20.2** | **-0.6** |
| **BHPL** | **Bhopal** | **13.91** | **156** | *e*P | | **Pn** | **21 36 22.6** | **-3.5** |
| BHPL | | | | IAmb | | IAmb | 21 36 23.3 | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.44** | **18** | P | | **P** | **21 36 47.8** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=207,slow=11,SNR=6.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.44** | **18** | ⇓P | | **P** | **21 36 48.4** | **+0.8** |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **AB31** | **Akbulak array** | **15.51** | **331** | ⇑P | | **Pn** | **21 36 45.0** | **-1.3** |
| | comp=Z,2.2nm,0.2s,baz=138,slow=12,SNR=380 | | | | | | | |
| AB31 | | | | ⇑S | | **Sn** | **21 39 30.4** | **-7.3** |
| | comp=Z,2.5nm,0.4s,baz=152,slow=22,SNR=11 | | | | | | | |
| **ABKAR** | **Akbulak array** | **15.51** | **331** | Pn | | **Pn** | **21 36 44.6** | **-1.7** |
| **ABKAR** | **Akbulak array** | **15.51** | **331** | Pn | | **Pn** | **21 36 45.1** | **-1.2** |
| ABKAR | | | | IAmb | | IAmb | 21 36 47.6 | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **15.55** | **18** | | | **Pn** | **21 36 47.9** | **+1.2** |
| **AKL** | **Akola** | **16.17** | **160** | *e*P | | **Pn** | **21 36 53.5** | **-1.2** |
| **BVAR** | **Borovoye Array** | **16.92** | **358** | P | | **P** | **21 37 04.3** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=119,slow=11,SNR=13 | | | | | | | |
| **BRVK** | **Borovoye** | **16.96** | **358** | | | **P** | **21 37 04.8** | **+0.4** |
| **UOSS** | **Minazif** | **17.04** | **233** | | | **P** | **21 37 06.3** | **+0.7** |
| **AKTO** | **Aktyubinsk** | **17.21** | **330** | P | | **P** | **21 37 07.5** | **+0.2** |
| | comp=Z,1.2nm,0.3s,baz=150,slow=11,SNR=22 | | | | | | | |
| AKTO | | | | S | | Sn | 21 40 07.1 | -11 |
| | comp=Z,0.4nm,0.3s,baz=162,slow=21,SNR=5.7 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.21** | **330** | ⇓P | | **Pn** | **21 37 03.3** | **-3.9** |
| | comp=Z,1.1nm,1.1s | | | | | | | |
| AKTO | | | | ⇓S | | **Sn** | **21 40 09.1** | **-9.4** |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **20.20** | **24** | ⇓P | | **P** | **21 37 40.1** | **+0.3** |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **20.20** | **24** | P | | **P** | **21 37 40.2** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **20.20** | **24** | P | | **P** | **21 37 40.2** | **+0.4** |
| | comp=Z,4.1nm,0.3s,baz=205,slow=10.0,SNR=43 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.20** | **24** | P | | **P** | **21 37 40.0** | **+0.2** |
| **GNI** | **Garni** | **21.18** | **289** | P | | **P** | **21 37 53.3** | **+2.6** |
| | comp=Z,9.0nm,0.9s,baz=22,slow=22,SNR=4.4 | | | | | | | |
| **GNI** | **Garni** | **21.18** | **289** | P | | **P** | **21 37 52.1** | **+1.3** |
| GNI | | | | IAmb | | IAmb | 21 37 57.9 | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **ARU** | **Arti** | **22.06** | **341** | P | | **P** | **21 38 02.2** | **+2.5** |
| | comp=Z,0.5nm,0.4s,baz=95,slow=4.5,SNR=3.9 | | | | | | | |
| ARU | | | | S | | **S** | **21 41 59.2** | **+2.8** |
| | comp=Z,0.4nm,0.4s,baz=314,slow=23,SNR=1.8 | | | | | | | |
| **ARU** | **Arti** | **22.06** | **341** | P | | **P** | **21 38 00.7** | **+1.1** |
| ARU | | | | IAmb | | IAmb | 21 38 11.3 | |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **KBZ** | **Khabaz** | **22.94** | **298** | P | | **P** | **21 38 10.4** | **+1.7** |
| | comp=Z,1.2nm,0.8s,baz=124,slow=18,SNR=1.4 | | | | | | | |
| **RAYN** | **Ar Rayn** | **25.51** | **248** | P | | **P** | **21 38 32.8** | **+0.3** |
| **SONM** | **Songino Array** | **28.42** | **55** | P | | **P** | **21 38 59.4** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=316,slow=4.0,SNR=2.1 | | | | | | | |
| **ELL** | **Elmali** | **33.06** | **284** | P | | **P** | **21 39 41.1** | **+1.7** |
| **AKASG** | **Malin Array Be** | **33.33** | **309** | P | | **P** | **21 39 41.9** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=100,slow=9.5,SNR=2.4 | | | | | | | |
| **FIA1** | **FINESS Array S** | **37.91** | **326** | P | | **P** | **21 40 21.6** | **+1.3** |
| **FINES** | **FINESS Array B** | **37.91** | **326** | P | | **P** | **21 40 22.2** | **+1.8** |
| | comp=Z,0.8nm,0.5s,baz=126,slow=9.8,SNR=9.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.91** | **326** | P | | **P** | **21 40 21.8** | **+1.5** |
| **ARCES** | **ARCESS Array B** | **41.57** | **338** | P | | **P** | **21 40 52.3** | **+1.6** |
| | comp=Z,0.8nm,0.4s,baz=106,slow=7.1,SNR=12 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.57** | **338** | P | | **P** | **21 40 51.8** | **+1.2** |
| ARCES | | | | IAmb | | IAmb | 21 41 16.5 | |
| | comp=Z,8.5nm,1.3s | | | | | | | |
| **NC303** | **NORSAR Array S** | **44.74** | **324** | P | | **P** | **21 41 18.3** | **+2.0** |
| **NB2** | **NORSAR Subarra** | **44.80** | **323** | P | | **P** | **21 41 18.0** | **+1.3** |
| | comp=Z,0.7nm,0.5s,baz=98,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.80** | **323** | P | | **P** | **21 41 18.1** | **+1.4** |
| | comp=Z,1.5nm,0.7s,baz=97,slow=7.9,SNR=6.6 | | | | | | | |
| **TIXI** | **Tiksi** | **46.07** | **22** | P | | **P** | **21 41 27.2** | **+0.7** |
| TIXI | | | | IAmb | | IAmb | 21 41 28.1 | |
| | comp=Z,6.6nm,1.5s | | | | | | | |
| **KEST** | **Kesra** | **49.33** | **289** | P | | **P** | **21 41 53.5** | **+1.1** |
| **ESDC** | **Sonseca Array** | **57.80** | **298** | P | | **P** | **21 42 55.2** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=51,slow=7.3,SNR=1.9 | | | | | | | |
| **LSZ** | **Lusaka** | **65.31** | **226** | P | | **P** | **21 43 46.2** | **+1.3** |
| LSZ | | | | IAmb | | IAmb | 21 43 49.8 | |
| | comp=Z,3.1nm,1.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.88** | **269** | P | | **P** | **21 43 48.2** | **-0.4** |
| | comp=Z,1.6nm,0.6s,baz=50,slow=5.8,SNR=19 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.88** | **269** | P | | **P** | **21 43 48.3** | **-0.3** |
| TORD | | | | IAmb | | IAmb | 21 43 49.0 | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **KOWA** | **Kowa** | **69.77** | **273** | P | | **P** | **21 44 13.0** | **+0.1** |
| KOWA | | | | IAmb | | IAmb | 21 44 13.7 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **INK** | **Inuvik** | **74.26** | **9** | P | | **P** | **21 44 39.9** | **+1.0** |
| | comp=Z,0.9nm,0.5s,baz=338,slow=5.8,SNR=6.2 | | | | | | | |
| **INK** | **Inuvik** | **74.26** | **9** | P | | **P** | **21 44 40.3** | **+1.4** |
| INK | | | | IAmb | | IAmb | 21 45 09.5 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **LBTB** | **Lobatse** | **74.51** | **222** | P | | **P** | **21 44 43.0** | **+2.0** |
| **BOSA** | **Boshof** | **77.56** | **220** | P | | **P** | **21 45 00.1** | **+1.8** |
| | comp=Z,0.8nm,0.3s,baz=37,slow=6.1,SNR=10 | | | | | | | |
| **BOSA** | **Boshof** | **77.56** | **220** | P | | **P** | **21 44 59.9** | **+1.7** |
| BOSA | | | | IAmb | | IAmb | 21 45 28.7 | |
| | comp=Z,8.6nm,1.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.63** | **3** | P | | **P** | **21 45 20.5** | **+0.8** |
| | comp=Z,1.1nm,0.5s,baz=349,slow=5.3,SNR=20 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.63** | **3** | P | | **P** | **21 45 21.0** | **+1.3** |
| **WRA** | **Warramunga Arr** | **81.64** | **122** | P | | **P** | **21 45 20.7** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=325,slow=4.9,SNR=4.7 | | | | | | | |
| **WB2** | **Warramunga Arr** | **81.64** | **122** | P | | **P** | **21 45 20.9** | **+0.5** |
| WB2 | | | | IAmb | | IAmb | 21 45 38.7 | |
| | comp=Z,6.5nm,1.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **83.89** | **125** | P | | **P** | **21 45 32.4** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=322,slow=7.1,SNR=1.9 | | | | | | | |

*IDC **10** 21:33:23.8±0.9, 12.85N×145.49E, h0km, mb4.1/16, mb1 4.3/16, mb1mx4.1/42, mbtmp4.1/16, MS3.7/19, Ms1 3.7/19, ms1mx3.3/82, Error ellipse: s-maj=24.5km s-min=18.6km az=48.0*
*NEIC **10** 21:33:23.5±1.8, 12.71N±0.09×145.45E±0.10, h10km±1km, mb4.6/20, Error ellipse: s-

comp=Z,1.8nm,0.7s,baz=286,slow=5.2,SNR=14
**YKA Yellowknife Ar 83.34 27** P **P 21 45 48.5 -2.7**
**NVAR Mina Array Bea 87.05 51** P **P 21 46 12.0 +1.5**
comp=Z,0.2nm,0.4s,baz=267,slow=6.0,SNR=2.9
**ARCES ARCESS Array B 87.98 342** P **P 21 46 15.3 +1.3**
comp=Z,3.4nm,0.9s,baz=57,slow=4.5,SNR=3.8
**ARCES ARCESS Array B 87.98 342** P **P 21 46 14.1 0.0**
**PFO Pinyon Flats O 89.70 56** LR LR 22 24 40.2
comp=Z,46nm,18.4s,baz=2.0,slow=34
**FINES FINESS Array B 92.07 335** P **P 21 46 33.3 0.0**
comp=Z,1.9nm,0.7s,baz=56,slow=5.2,SNR=7.5
**NOA NORSAR Array B 97.95 339** LR LR 22 34 09.0
comp=Z,21nm,18.1s,baz=0.0,slow=37
**TORD Torodi Ar. Bea 135.69 304** PKP **PKiKP 21 52 48.6 +1.2**
comp=Z,0.6nm,0.7s,baz=80,slow=2.8,SNR=1.9
**DBIC Dimbokro 144.63 301** PKP **PKPdf 21 53 02.6 +0.6**
comp=Z,5.5nm,0.7s,baz=89,slow=4.9,SNR=5.4
**DBIC Dimbokro 144.63 301 PKPab 21 52 58.1 -2.5**

**TAP 10 21:41:34.9, 22°.91N × 120°.55E, h17km, ML2.2, 2C, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SCST** | **Cishan** | **0.05** | **247** | *eP* | | Pg | 21 41 38.4 | +0.4 |
| SCST | baz=248 | | | *eS* | | Sg | 21 41 41.1 | +1.2 |
| **SLGT** | **Liugui** | **0.13** | **47** | *eP* | | Pb | 21 41 39.4 | +0.4 |
| SLGT | baz=55 | | | *eS* | | Sb | 21 41 42.8 | +1.2 |
| **TWM1** | **Shoushan** | **0.14** | **234** | *i* P | | Pb | 21 41 40.0 | +0.8 |
| TWM1 | baz=233 | | | *eS* | | Sb | 21 41 44.3 | +2.3 |
| **SGST** | **Jiashian** | **0.18** | **11** | P | | Pg | 21 41 39.4 | 0.0 |
| SGST | baz=13 | | | *eS* | | Sb | 21 41 43.5 | +0.4 |
| **SSD** | **Sandimen** | **0.18** | **153** | P | | Pb | 21 41 40.2 | +0.5 |
| SSD | baz=144 | | | *eS* | | Sb | 21 41 43.8 | +0.8 |
| **SGLT** | **Jiouru** | **0.19** | **196** | *eP* | | Pb | 21 41 40.7 | +0.7 |
| SGLT | baz=188 | | | *eS* | | Sb | 21 41 46.5 | +3.3 |
| **SHHT** | **Tainan City** | **0.22** | **302** | P | | Pb | 21 41 41.8 | +1.4 |
| SHHT | baz=309 | | | *eS* | | Sb | 21 41 47.5 | +3.4 |
| **TSMG** | **Majia** | **0.22** | **155** | *i* P | | Pb | 21 41 40.8 | +0.3 |
| TSMG | baz=154 | | | *eS* | | Sb | 21 41 44.8 | +0.6 |
| **CHN3** | **Shinhua** | **0.24** | **315** | *eP* | | Pb | 21 41 42.2 | +1.4 |
| CHN3 | baz=321 | | | *eS* | | Sb | 21 41 48.3 | +3.6 |
| **CHN1** | **Nanshi** | **0.28** | **357** | P | | Pb | 21 41 42.1 | +0.6 |
| CHN1 | baz=357 | | | *eS* | | Sb | 21 41 47.4 | +1.4 |
| **MASBT** | **Mashibuluo** | **0.30** | **165** | ⇑P | | Pb | 21 41 42.3 | +0.3 |
| MASBT | baz=153 | | | S | | Sb | 21 41 47.4 | +0.8 |
| **SNST** | **Tainan City** | **0.32** | **352** | *eP* | | Pb | 21 41 43.0 | +0.8 |
| SNST | baz=352 | | | *eS* | | Sb | 21 41 48.9 | +1.9 |
| **SSHA** | **Shanhua** | **0.33** | **314** | *eS* | | Sn | 21 41 51.3 | -0.1 |
| **STYH** | **Taoyuan** | **0.34** | **39** | P | | Pb | 21 41 43.2 | +0.7 |
| STYH | baz=46 | | | *eS* | | Sb | 21 41 48.8 | +1.2 |
| **WTP** | **Ta-pu** | **0.34** | **10** | P | | Pb | 21 41 43.2 | +0.6 |
| WTP | baz=12 | | | *eS* | | Sb | 21 41 49.4 | +1.5 |
| **TWK** | **Hsinying** | **0.36** | **352** | *eP* | | Pb | 21 41 43.6 | +0.7 |
| TWK | baz=354 | | | *eS* | | Sb | 21 41 50.1 | +1.6 |
| **TPUB** | **Ta-pu** | **0.40** | **11** | *eP* | | Pb | 21 41 44.1 | +0.5 |
| TPUB | baz=11 | | | *eS* | | Sb | 21 41 50.6 | +1.1 |
| **SSPT** | **Xinbi** | **0.42** | **177** | P | | Pn | 21 41 45.1 | -1.1 |
| SSPT | baz=165 | | | *eS* | | Sn | 21 41 52.9 | -0.7 |
| **CHN4** | **Tsaushan** | **0.45** | **6** | *eP* | | Pb | 21 41 45.1 | +0.8 |
| CHN4 | baz=6.0 | | | *eS* | | Sb | 21 41 52.1 | +1.3 |
| **ECL** | **Taimali** | **0.49** | **129** | ⇑*i*P | | Pb | 21 41 45.4 | +0.4 |
| ECL | baz=133 | | | *eS* | | Sb | 21 41 52.1 | +0.2 |
| **TWGBT** | **Beinan** | **0.50** | **100** | *eP* | | Pb | 21 41 45.9 | +0.7 |
| TWGBT | baz=101 | | | *eS* | | Sb | 21 41 53.9 | +1.5 |
| **ICHU** | **Yijhu** | **0.52** | **332** | *eP* | | Pb | 21 41 46.3 | +0.8 |
| ICHU | baz=333 | | | *eS* | | Sn | 21 41 54.5 | -1.5 |
| **ELDTW** | **Lidau** | **0.52** | **57** | *eP* | | Pb | 21 41 46.5 | +0.8 |
| ELDTW | baz=46 | | | *eS* | | Sb | 21 41 53.9 | +0.9 |
| **SCZT** | **Fangliau** | **0.54** | **173** | P | | Pb | 21 41 46.4 | +0.5 |
| SCZT | baz=163 | | | *eS* | | Sn | 21 41 55.7 | -0.8 |
| **LONT** | **Longtian** | **0.54** | **90** | *eP* | | Pb | 21 41 46.9 | +0.9 |
| LONT | baz=89 | | | *eS* | | Sn | 21 41 55.5 | -1.1 |
| **WLCH** | **Liuqiu** | **0.57** | **196** | *eP* | | Pn | 21 41 49.7 | +1.4 |
| WLCH | baz=196 | | | *eS* | | Sn | 21 42 00.8 | +3.4 |
| **EAST** | **Anshuo** | **0.59** | **152** | *eP* | | Pb | 21 41 47.5 | +0.6 |
| EAST | baz=145 | | | *eS* | | Sn | 21 41 56.6 | -1.3 |
| **CHY** | **Chiayi** | **0.60** | **349** | *eP* | | Pn | 21 41 47.9 | -0.8 |
| CHY | baz=350 | | | *eS* | | Sb | 21 41 56.3 | +1.1 |
| **TAWH** | **Dawu Township** | **0.65** | **151** | *eP* | | Pb | 21 41 48.4 | +0.7 |
| TAWH | baz=145 | | | *eS* | | Sb | 21 41 57.2 | +0.7 |
| **ALS** | **Alishan** | **0.65** | **22** | *eP* | | Pb | 21 41 48.5 | +0.5 |
| ALS | baz=22 | | | *eS* | | Sn | 21 41 58.5 | -1.2 |
| **WSL** | **Shuilin Townsh** | **0.68** | **335** | *eS* | | Sn | 21 41 59.5 | -0.5 |
| **YUS** | **Yu-Shan** | **0.69** | **33** | *eP* | | Pb | 21 41 49.6 | +0.7 |
| YUS | baz=32 | | | *eS* | | Sb | 21 41 58.9 | +0.6 |
| **CHN5** | **Tsauling** | **0.70** | **10** | *eP* | | Pn | 21 41 49.5 | -0.7 |
| CHN5 | baz=10.0 | | | *eS* | | Sn | 21 42 00.4 | -0.2 |
| **EDH** | **Donghe** | **0.70** | **84** | *eP* | | Pn | 21 41 50.3 | +0.2 |
| EDH | baz=75 | | | *eS* | | Sn | 21 42 01.5 | +0.9 |
| **SLIU** | **Shizi** | **0.72** | **161** | *eP* | | Pn | 21 41 49.8 | -0.6 |
| SLIU | baz=161 | | | *eS* | | Sn | 21 42 01.6 | +0.4 |
| **FULB** | **Fuli** | **0.75** | **67** | *eP* | | Pn | 21 41 51.3 | +0.5 |
| FULB | baz=66 | | | *eS* | | Sn | 21 42 03.1 | +1.4 |
| **WDLH** | **Douliu** | **0.78** | **359** | *eP* | | Pn | 21 41 51.8 | +0.6 |
| WDLH | baz=359 | | | *eS* | | Sn | 21 42 03.1 | +0.6 |
| **WSF** | **Szhu** | **0.79** | **338** | *eS* | | Sn | 21 42 02.9 | +0.2 |
| **WTK** | **Tuku** | **0.79** | **349** | *eP* | | Pg | 21 41 50.7 | +0.4 |
| WTK | baz=350 | | | *eS* | | Sn | 21 42 02.6 | -0.2 |
| **TWF1** | **Yuli** | **0.82** | **57** | *eP* | | Pn | 21 41 51.5 | -0.3 |
| TWF1 | baz=64 | | | *eS* | | Sn | 21 42 03.4 | -0.2 |
| **EYUL** | **Yuli** | **0.84** | **58** | *eP* | | Pg | 21 41 51.5 | +0.3 |
| EYUL | baz=64 | | | *eS* | | Sn | 21 42 03.6 | -0.4 |
| **YULB** | **Yu-li** | **0.84** | **55** | *eP* | | Pg | 21 41 51.5 | +0.2 |
| YULB | baz=63 | | | *eS* | | Sn | 21 42 03.6 | -0.6 |
| **WDGT** | **Dungji** | **0.89** | **294** | *eP* | | Pb | 21 41 51.6 | -0.3 |
| WDGT | baz=295 | | | *eS* | | Sb | 21 42 03.5 | 0.0 |
| **HEN** | **Hengchun** | **0.91** | **169** | *eS* | | Sn | 21 42 08.5 | +2.7 |
| **WJS** | **Zhushan** | **0.93** | **10** | *eS* | | Sn | 21 42 06.3 | +0.2 |
| **SSLB** | **Suanglung** | **0.95** | **23** | *eP* | | Pb | 21 41 53.2 | +0.2 |
| SSLB | baz=22 | | | *eS* | | Sg | 21 42 06.1 | +0.1 |
| **WNT** | **Mingjian** | **0.98** | **7** | *eS* | | Sn | 21 42 08.4 | +1.1 |
| **HGSD** | **Ruisui** | **1.00** | **54** | *eP* | | Pg | 21 41 55.2 | +1.0 |
| HGSD | baz=48 | | | *eS* | | Sn | 21 42 10.8 | +2.9 |
| **WRL** | **Guolierlin Hig** | **1.00** | **351** | *eS* | | Sn | 21 42 08.3 | +0.3 |
| **VWDT** | **VWDT** | **1.01** | **33** | *eP* | | Pg | 21 41 54.7 | +0.3 |
| VWDT | baz=24 | | | *eS* | | Sn | 21 42 08.7 | +0.7 |
| **SMLT** | **Sun Moon Lake** | **1.02** | **18** | *eP* | | Pg | 21 41 55.4 | +0.6 |
| SMLT | baz=18 | | | *eS* | | Sn | 21 42 11.9 | +3.2 |
| **TYC** | **Yuchr** | **1.03** | **16** | *eP* | | Pg | 21 41 56.3 | +1.3 |
| TYC | baz=16 | | | *eS* | | Sn | 21 42 10.7 | +1.9 |
| **PHUB** | **P'eng-hu** | **1.08** | **304** | *eS* | | Sb | 21 42 08.4 | -0.6 |
| **WCS** | **Beigang Elemen** | **1.19** | **16** | *eP* | | Pg | 21 41 59.0 | +1.0 |
| WCS | baz=15 | | | *eS* | | Sg | 21 42 14.6 | +1.0 |
| **WUSB** | **Renai** | **1.20** | **26** | *eP* | | Pg | 21 41 58.3 | +0.2 |
| WUSB | baz=25 | | | *eS* | | Sg | 21 42 14.7 | +0.8 |
| **CHGB** | **Renai** | **1.28** | **27** | *eP* | | Pg | 21 41 59.8 | +0.1 |
| **WHP** | **Taichung City** | **1.41** | **15** | *eP* | | Pb | 21 42 00.9 | 0.0 |
| WHP | baz=14 | | | *eS* | | Sg | 21 42 20.4 | -0.2 |
| **FUSS** | **Fushou** | **1.48** | **25** | *eP* | | Pb | 21 42 02.7 | +0.5 |
| **LATG** | **Datong** | **1.85** | **29** | *eP* | | Pn | 21 42 05.9 | -0.1 |
| LATG | baz=27 | | | *eS* | | Sb | 21 42 32.8 | +1.4 |
| **YHNB** | **Yeheng** | **1.91** | **23** | *eP* | | Pn | 21 42 07.2 | +0.3 |
| **YHNB** | **Yeheng** | **1.91** | **23** | P | | Pn | 21 42 06.7 | -0.1 |

*CNRM **10** 21:48:39.2, 35°.50N × 3°.78W, h22km, ml2.6*
*INMG **10** 21:48:39.7 ± 1.1, 35°.59N × 3°.76W, h0km, ML2.0, Error ellipse: s-maj=3.3km s-min=2.8km az=15.0*
*SFS **10** 21:48:40.0, 35°.60N × 3°.72W, ML2.1, ALBORAN S.*
**ISC 10 21:48:38.9** ± 1.1, **35°.51N** ± 0°.03 × **3°.75W** ± 0°.03, **h16**km ± 8km, **n21**, σ 1°.**20**/38, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **208** | P | | Pg | **21 48 45.6** | **-0.2** |
| PALE | | | | S | | Sg | **21 48 50.4** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.68** | **114** | P | | Pb | **21 48 52.0** | **-0.3** |
| GOG | | | | S | | Sb | **21 49 02.1** | **+0.5** |
| **SMIR** | **Smir Dam** | **1.34** | **278** | P | | Pb | **21 49 02.9** | **-0.7** |
| SMIR | | | | S | | Sb | **21 49 19.6** | **-1.0** |
| **CHEFC** | **Chefchaouen** | **1.36** | **253** | P | | Pg | **21 49 04.3** | **-0.8** |
| CHEFC | | | | S | | Sn | **21 49 18.6** | **-2.4** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **337** | P | | Pg | **21 49 06.6** | **+1.4** |
| EMAL | | | | S | | Sg | **21 49 21.8** | **-1.3** |
| **JBK** | **JBK** | **1.52** | **140** | P | | Pn | **21 49 05.4** | **-0.2** |
| JBK | | | | S | | Sn | **21 49 22.6** | **-2.6** |
| **SICH** | **Sidi Chahed** | **1.90** | **223** | P | | Pn | **21 49 10.6** | **-0.1** |
| SICH | | | | S | | Sn | **21 49 33.9** | **-0.4** |
| **LCRM** | **LCR** | **2.03** | **207** | P | | Pb | **21 49 14.8** | **-0.7** |
| LCRM | | | | S | | Sb | **21 49 42.5** | **+1.9** |
| **IFR** | **Ifrane** | **2.29** | **210** | P | | Pb | **21 49 20.4** | **+0.6** |
| IFR | | | | S | | Sn | **21 49 42.3** | **-1.7** |
| **MD31** | **MD31** | **2.76** | **198** | P | | Pn | **21 49 22.9** | **+0.3** |
| MD31 | | | | S | | Sn | **21 49 56.9** | **+1.3** |
| **MDT** | **Midelt** | **2.78** | **195** | P | | Pn | **21 49 23.5** | **+0.7** |
| MDT | | | | S | | Sn | **21 49 56.9** | **+0.8** |
| **TDRA** | **Tendrara** | **2.84** | **149** | P | | Pn | **21 49 25.1** | **+1.3** |
| TDRA | | | | S | | Sn | **21 49 56.2** | **-1.5** |
| **ZHG** | **ZHG** | **3.15** | **230** | P | | Pn | **21 49 29.5** | **+1.6** |
| ZHG | | | | S | | Sn | **21 50 05.8** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.72** | **302** | *e*Pn | | Pn | **21 49 36.1** | **+0.5** |
| PVAQ | | | | *e*Sn | | Sn | **21 50 17.9** | **-1.1** |
| PVAQ | | | | A | | A | 21 50 18.8 | |
| | 4.2nm,0.6s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **302** | P | | Pn | **21 49 36.2** | **+0.7** |
| PVAQ | | | | S | | Sn | **21 50 18.1** | **-0.9** |
| **PCVE** | **Castro Verde** | **4.05** | **303** | *e*Pn | | Pn | **21 49 42.4** | **+2.2** |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Sn | | Sn | **21 50 33.3** | **+0.3** |
| MESJ | | | | A | | A | 21 50 36.4 | |
| | 2.8nm,0.8s | | | | | | | |
| **MORF** | **Marmelete** | **4.34** | **296** | *e*Sn | | Sn | **21 50 33.5** | **-1.0** |
| MORF | | | | A | | A | 21 50 36.3 | |
| | 1.9nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.49** | **298** | *e*Sn | | Sn | **21 50 37.8** | **-0.4** |
| **EVO** | **Evora** | **4.56** | **313** | *e*Pn | | Pn | **21 49 48.3** | **+1.2** |
| EVO | | | | *e*Sn | | Sn | **21 50 38.3** | **-1.4** |
| EVO | | | | A | | A | 21 50 40.5 | |
| | 1.7nm,0.6s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | | Pn | **21 49 49.0** | **+0.8** |
| PNCL | | | | *e*Sn | | Sn | **21 50 40.9** | **-0.7** |
| PNCL | | | | A | | A | 21 50 46.5 | |
| | 2.5nm,0.9s | | | | | | | |

*IDC **10** 21:53:20.7 ± 0.8, 12°.83N × 145°.50E, h0km, mb3.8/10, mb1 4.0/10, mb1mx3.8/49, mbtmp3.8/10, MS3.3/3, Ms1 3.3/3, ms1mx2.7/81, Error ellipse: s-maj=24.4km s-min=17.3km az=72.0*
*NEIC **10** 21:53:22.5 ± 2.0, 12°.84N ± 0°.04 × 145°.5E ± 0°.1, h10km ± 1km, mb4.3/7, Error ellipse: s-maj=18.2km s-min=7.5km az=269.0*
**ISC 10 21:53:26.9** ± 0.8, **12°.8N** ± 0°.1 × **145°.4E** ± 0°.2, **h43**km, **n30**, σ 0°.**86**/**27**, **mb3.8**/14, **MS3.2**/3, **South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.91** | **329** | Pn | | Pn | **21 53 42.6** | **-0.7** |
| GUMO | 71nm,0.3s,baz=154,slow=11,SNR=18 | | | Sn | | Sn | **21 53 56.5** | **+1.3** |
| | 205nm,0.3s,baz=11,slow=21,SNR=7.0 | | | | | | | |
| **GUMO** | **Guam** | **0.91** | **329** | | | Pn | **21 53 42.3** | **-1.0** |
| **PATS** | **Pohnpei** | **14.08** | **114** | Pn | | Pn | 21 56 37.6 | -6.2 |
| **DAV** | **Davao City (W)** | **20.28** | **256** | LR | | LR | 22 06 17.7 | |
| | comp=Z,41nm,20.6s,baz=332,slow=38 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **20.85** | **347** | LR | | LR | 22 04 21.5 | |
| | comp=Z,90nm,18.7s,baz=12,slow=32 | | | | | | | |
| **SSLB** | **Suanglung** | **25.56** | **299** | P | | P | **21 58 50.0** | **-2.1** |
| SSLB | | | | IAmb | | IAmb | 21 59 11.3 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **KSRS** | **Korea Array** | **29.07** | **331** | P | | P | **21 59 24.2** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=144,slow=12,SNR=2.2 | | | | | | | |
| **WB0** | **Warramunga Arr** | **34.12** | **199** | P | | P | **22 00 08.2** | **+0.4** |
| **WB2** | **Warramunga Arr** | **34.30** | **199** | P | | P | **22 00 09.5** | **+0.2** |
| WB2 | | | | IAmb | | IAmb | 22 00 35.7 | |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.30** | **199** | P | | P | **22 00 09.5** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=22,slow=10,SNR=5.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.30** | **199** | P | | P | **22 00 08.4** | **-1.0** |
| **ASAR** | **Alice Springs** | **37.94** | **197** | P | | P | **22 00 40.9** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=20,slow=8.6,SNR=5.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.95** | **283** | P | | P | **22 01 39.1** | **+1.0** |
| | comp=Z,0.9nm,0.3s,baz=88,slow=6.2,SNR=2.3 | | | | | | | |
| **SONM** | **Songino Array** | **47.64** | **325** | P | | P | **22 01 58.6** | **-0.4** |
| SONM | | | | IAmb | | IAmb | 22 02 06.2 | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.38** | **316** | P | | P | **22 03 45.9** | **+0.6** |
| MK31 | | | | IAmb | | IAmb | 22 04 12.0 | |
| | comp=Z,1.4nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.38** | **316** | P | | P | **22 03 45.0** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=91,slow=8.8,SNR=5.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.38** | **316** | P | | P | **22 03 45.0** | **-0.3** |
| **IMAR** | **Indian Mountai** | **66.73** | **23** | P | | P | **22 04 12.7** | **-0.6** |
| **ILAR** | **Eielson Array** | **69.07** | **25** | P | | P | **22 04 27.1** | **-1.0** |
| | comp=Z,0.8nm,0.8s,baz=251,slow=5.5,SNR=8.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **69.07** | **25** | P | | P | **22 04 26.8** | **-1.3** |
| **BMAR** | **Burnt Mountain** | **70.64** | **23** | P | | P | **22 04 38.5** | **+0.8** |
| **INK** | **Inuvik** | **74.91** | **22** | P | | P | **22 05 03.2** | **+0.3** |
| | comp=Z,1.6nm,0.8s,baz=253,slow=6.9,SNR=5.7 | | | | | | | |
| **INK** | **Inuvik** | **74.91** | **22** | P | | P | **22 05 02.8** | **-0.2** |
| INK | | | | IAmb | | IAmb | 22 05 03.9 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.33** | **27** | P | | P | **22 05 49.1** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=285,slow=5.1,SNR=5.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.04** | **51** | P | | P | **22 06 09.2** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=263,slow=4.3,SNR=1.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **92.06** | **335** | P | | P | **22 06 30.3** | **-1.0** |
| | comp=Z,1.4nm,0.8s,baz=68,slow=5.4,SNR=4.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **92.06** | **335** | P | | P | **22 06 32.2** | **+0.9** |
| **MMAI** | **Mount Meron Ar** | **99.22** | **307** | LR | | LR | 22 57 52.5 | |
| | comp=Z,17nm,19.3s,baz=46,slow=39 | | | | | | | |
| **DBIC** | **Dimbokro** | **144.63** | **301** | PKP | | **PKPdf** | **22 12 59.8** | **-0.2** |
| | comp=Z,1.8nm,0.6s,baz=40,slow=5.6,SNR=4.4 | | | | | | | |
| **DBIC** | **Dimbokro** | **144.63** | **301** | | | **PKPab** | **22 12 59.1** | **+0.5** |

*IDC **10** 22:41:42.5 ± 1.0, 41°.35N × 117°.17W, h0km, mb2.5/1, mb1 3.1/4, mb1mx3.1/34, mbtmp2.8/4, ML2.8/3, Error ellipse: s-maj=10.7km s-min=5.9km az=179.0*
*NEIC **10** 22:41:43.4 ± 1.5, 41°.20N ± 0°.03 × 117°.25W ± 0°.06, h0km ± 2km, ML2.5/52, ML2.7(REN), Error ellipse: s-maj=7.9km s-min=5.7km az=82.0*
**ISC 10 22:41:42.7** ± 0.9, **41°.25N** ± 0°.04 × **117°.27W** ± 0°.04, **h0**km, **n33**, σ 1°.**23**/34, **Nevada**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BMN** | **Battle Mountai** | **0.81** | **177** | | | Pg | **22 41 59.0** | **+0.8** |
| **WVOR** | **Wild Horse Val** | **1.56** | **320** | | | Pg | **22 42 12.9** | **+0.3** |
| **ELK** | **Elko** | **1.62** | **107** | Pg | | Pn | **22 42 11.6** | **-1.1** |
| | 2.1nm,0.3s,baz=292,slow=11,SNR=38 | | | | | | | |
| ELK | | | | Lg | | Lg | 22 42 32.2 | |
| | 5.5nm,0.3s,baz=69,slow=17,SNR=15 | | | | | | | |
| **ELK** | **Elko** | **1.62** | **107** | Pn | | Pn | **22 42 11.5** | **-1.2** |
| **PAHR** | **Pah Rah Range** | **2.23** | **227** | Pn | | Pn | **22 42 18.7** | **-2.3** |
| PAHR | | | | IAML | | | 22 43 07.2 | |
| | comp=E,21nm,1.9s | | | | | | | |
| **KVN** | **Kaiserville** | **2.28** | **196** | | | Pn | **22 42 22.1** | **+0.3** |
| **J08A** | **Circle Bar Ran** | **2.29** | **338** | | | Pb | **22 42 24.2** | **-0.7** |
| **WVA** | **Winnemucca Val** | **2.34** | **237** | | | Pn | **22 42 23.3** | **+0.8** |
| **MOD** | **Modoc Plateau** | **2.37** | **287** | | | Pn | **22 42 23.8** | **+0.9** |
| MOD | | | | IAML | | | 22 43 06.0 | |
| | comp=E,27nm,0.8s | | | | | | | |
| MOD | | | | IAML | | | 22 43 16.1 | |
| | comp=N,22nm,2.6s | | | | | | | |
| **MFID** | **Camas Ranch** | **2.42** | **26** | Pn | | Pn | **22 42 24.8** | **+1.2** |
| MFID | | | | IAML | | | 22 43 07.8 | |
| | comp=N,22nm,0.7s | | | | | | | |
| MFID | | | | IAML | | | 22 43 07.9 | |
| | comp=N,30nm,0.7s | | | | | | | |
| **BMRR** | **Black Mountain** | **2.56** | **245** | | | Pn | **22 42 26.4** | **+0.8** |
| **YERR** | **Yerington** | **2.71** | **214** | | | Pn | **22 42 27.7** | **0.0** |
| YERR | | | | IAML | | | 22 43 18.1 | |
| | comp=N,15nm,0.9s | | | | | | | |
| **BEKR** | **Beckworth** | **2.73** | **241** | | | Pn | **22 42 28.0** | **+0.2** |
| BEKR | | | | IAML | | | 22 43 15.6 | |
| | comp=N,16nm,1.6s | | | | | | | |
| BEKR | | | | IAML | | | 22 43 17.6 | |
| | comp=E,15nm,3.2s | | | | | | | |
| **RYN** | **Ryan** | **2.79** | **201** | | | Pn | **22 42 25.3** | **-3.3** |
| RYN | | | | IAML | | | 22 43 18.0 | |
| | comp=E,18nm,1.4s | | | | | | | |
| RYN | | | | IAML | | | 22 43 21.7 | |
| | comp=N,14nm,1.9s | | | | | | | |
| **PNTR** | **Pine Nut** | **2.80** | **220** | | | Pn | **22 42 28.1** | **-0.8** |
| PNTR | | | | IAML | | | 22 43 23.7 | |
| | comp=N,19nm,0.8s | | | | | | | |
| PNTR | | | | IAML | | | 22 43 26.2 | |
| | comp=E,21nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **2.92** | **196** | Pn | | Pn | **22 42 31.1** | **+0.5** |
| | comp=E,0.4nm,0.3s,baz=20,slow=13,SNR=6.3 | | | | | | | |
| NVAR | | | | Pg | | Pg | **22 42 38.3** | **-0.4** |
| | comp=E,2.2nm,0.3s,baz=16,slow=13,SNR=13 | | | | | | | |
| NVAR | | | | Lg | | Lg | 22 43 18.7 | |
| | baz=4.0,slow=27,SNR=1.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **2.92** | **196** | Pn | | Pn | **22 42 30.7** | **+0.1** |
| **HLID** | **Hailey** | **3.14** | **41** | Pn | | Pn | **22 42 33.7** | **+0.2** |
| HLID | | | | IAML | | | 22 43 27.1 | |
| | comp=E,11nm,0.8s | | | | | | | |
| HLID | | | | IAML | | | 22 43 35.8 | |
| | comp=E,9.8nm,1.8s | | | | | | | |
| **EMB** | **Emerald Bay** | **3.14** | **225** | | | Pn | **22 42 33.4** | **-0.2** |
| EMB | | | | IAML | | | 22 43 24.1 | |
| | comp=E,11nm,4.8s | | | | | | | |
| **TPH** | **Tonopah** | **3.17** | **179** | | | Pn | **22 42 35.4** | **+1.5** |
| **R11A** | **Troy Canyon, C** | **3.17** | **155** | | | Pn | **22 42 34.6** | **+0.6** |
| **BGU** | **Big Grassy Mou** | **3.22** | **94** | | | Pn | **22 42 34.9** | **+0.2** |
| BGU | | | | IAML | | | 22 43 38.8 | |
| | comp=E,13nm,4.5s | | | | | | | |
| **I07A** | **Izee** | **3.28** | **331** | Pn | | Pn | **22 42 37.3** | **+1.9** |
| I07A | | | | IAML | | | 22 43 40.9 | |
| | comp=N,13nm,3.2s | | | | | | | |
| **HVU** | **Hansel Valley** | **3.42** | **80** | Pn | | Pn | **22 42 37.2** | **-0.2** |
| **DUG** | **Dugway, Tooele** | **3.55** | **106** | | | Pn | **22 42 40.2** | **+1.1** |
| DUG | | | | IAML | | | 22 43 40.6 | |
| | comp=N,12nm,1.3s | | | | | | | |
| DUG | | | | IAML | | | 22 43 45.5 | |
| | comp=N,11nm,0.9s | | | | | | | |
| **PINE** | **Pine Mountain** | **3.72** | **314** | | | Pn | **22 42 40.8** | **-0.7** |
| **S11A** | **Rachel** | **3.79** | **161** | | | Pn | **22 42 43.4** | **+1.0** |
| **PLID** | **Pearl Lake** | **3.95** | **13** | Pn | | Pn | **22 42 45.5** | **+0.8** |
| PLID | | | | IAML | | | 22 43 14.3 | |
| | comp=N,7.6nm,4.5s | | | | | | | |
| **LCH** | **Last Change Ra** | **4.02** | **184** | | | Pn | **22 42 46.0** | **+0.4** |
| LCH | | | | IAML | | | 22 43 14.0 | |
| | comp=E,6.6nm,4.7s | | | | | | | |
| LCH | | | | IAML | | | 22 43 56.7 | |
| | comp=N,5.9nm,3.0s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **4.11** | **279** | Pn | | Pn | **22 42 47.8** | **+0.9** |
| | comp=N,0.1nm,0.3s,baz=98,slow=14,SNR=1.5 | | | | | | | |
| YBH | | | | Lg | | Lg | 22 43 55.7 | |
| | comp=N,0.0nm,0.3s,baz=149,slow=12,SNR=1.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **5.95** | **73** | Pg | | Pb | **22 43 26.4** | **-0.8** |
| | comp=N,0.0nm,0.3s,baz=257,slow=12,SNR=4.1 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **7.65** | **175** | Pn | | Pn | **22 43 38.7** | **+3.3** |
| | comp=N,0.3nm,0.3s,baz=357,slow=19,SNR=3.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **21.34** | **3** | P | | P | **22 46 30.8** | **-0.2** |
| | comp=N,0.1nm,0.4s,baz=182,slow=10,SNR=5.3 | | | | | | | |

*EAF **10** 22:46:53.2 ± 2.3, 30°.30S × 27°.99E, h10km, MD3.9*
*PRE **10** 22:46:57.1 ± 1.9, 30°.02S × 27°.46E, h5km, ML2.7*
**ISC 10 22:46:53.4** ± 0.9, **30°.00S** ± 0°.04 × **27°.85E** ± 0°.03, **h14**km, **n36**, σ 3°.**03**/64, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SNKL** | **Senekal, Frees** | **1.72** | **358** | *eP* | | **Pg** | **22 47 30.2** | **+3.8** |
| SNKL | | | | *eS* | | **Sg** | **22 47 52.9** | **+4.0** |
| SNKL | | | | IAML | | | 22 47 56.2 | |
| | comp=Z,152nm,0.2s | | | | | | | |
| **BOSA** | **Boshof** | **2.65** | **301** | *eP* | | Pn | **22 47 38.5** | **+2.6** |
| BOSA | | | | *eS* | | Sn | **22 48 07.3** | **-0.6** |
| BOSA | | | | IAML | | | 22 48 23.1 | |
| | comp=Z,48nm,0.3s | | | | | | | |
| **BOSA** | **Boshof** | **2.65** | **301** | *i* P | | Pb | **22 47 39.0** | **-1.7** |
| BOSA | | | | *eS* | | Sb | **22 48 12.9** | **-0.3** |
| **BOSA** | **Boshof** | **2.65** | **301** | *i* P | | Pb | **22 47 39.0** | **-1.7** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BOSA | | | | | *e*S | | **Sb** | **22 48 12.9** | **-0.3** |
| **NWCL** | **Newcastle** | **2.88** | **39** | | *e*P | | **Pg** | **22 47 49.1** | **+0.5** |
| NWCL | | | | | *e*S | | **Sg** | **22 48 25.8** | **-0.2** |
| NWCL | | | | | IAML | | | 22 48 33.7 | |
| | comp=Z,72nm,0.5s | | | | | | | | |
| **PRYS** | **Parys** | **3.10** | **352** | | *e*P | | **Pb** | **22 47 48.3** | **0.0** |
| PRYS | | | | | *e*S | | **Sb** | **22 48 24.5** | **-1.5** |
| PRYS | | | | | IAML | | | 22 48 38.6 | |
| | comp=Z,39nm,0.4s | | | | | | | | |
| **SOE** | **Somerset East** | **3.34** | **215** | | *e*P | | **Pn** | **22 47 47.8** | **+2.6** |
| SOE | | | | | *e*S | | **Sn** | **22 48 24.7** | **0.0** |
| SOE | | | | | IAML | | | 22 48 42.5 | |
| | comp=Z,33nm,0.6s | | | | | | | | |
| **SWZ** | **Schweizer** | **3.58** | **321** | | *e*P | | **Pn** | **22 47 52.7** | **+4.2** |
| SWZ | | | | | *e*S | | **Sn** | **22 48 31.6** | **+0.9** |
| SWZ | | | | | IAML | | | 22 48 50.2 | |
| | comp=Z,22nm,0.2s | | | | | | | | |
| **KSR** | **Koster** | **4.22** | **348** | | *e*P | | Pb | 22 48 03.0 | -4.5 |
| KSR | | | | | *e*S | | **Sn** | **22 48 49.6** | **+2.9** |
| KSR | | | | | IAML | | | 22 49 09.8 | |
| | comp=Z,116nm,0.5s | | | | | | | | |
| **SLR** | **Silverton** | **4.27** | **5** | | *e*P | | **Pb** | **22 48 05.1** | **-3.2** |
| SLR | | | | | *e*S | | **Sn** | **22 48 53.1** | **+5.3** |
| SLR | | | | | IAML | | | 22 49 19.7 | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| **POGA** | **Pongola** | **4.30** | **53** | | *e*P | | **Pb** | **22 48 08.7** | **-0.1** |
| POGA | | | | | *e*S | | **Sb** | **22 48 59.9** | **-0.6** |
| POGA | | | | | IAML | | | 22 49 27.2 | |
| | comp=Z,15nm,0.4s | | | | | | | | |
| **CRLN** | **Carolina, Mapu** | **4.43** | **26** | | *e*P | | **Pb** | **22 48 08.9** | **-2.2** |
| CRLN | | | | | *e*S | | **Sb** | **22 49 00.8** | **-3.6** |
| **MAGG** | **Maguga Dam** | **4.94** | **38** | | *e*P | | Pb | 22 48 15.4 | -4.3 |
| MAGG | | | | | *e*S | | **Sb** | **22 49 13.9** | **-5.1** |
| MAGG | | | | | IAML | | | 22 49 46.9 | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **ROSN** | **Rosenhof** | **4.96** | **214** | | *e*P | | **Pn** | **22 48 09.7** | **+2.3** |
| ROSN | | | | | *e*S | | **Sn** | **22 49 02.8** | **-1.8** |
| ROSN | | | | | IAML | | | 22 49 25.0 | |
| | comp=Z,984nm,0.4s | | | | | | | | |
| **CNG** | **Changalane** | **5.32** | **47** | | *e*P | | **Pb** | **22 48 22.4** | **-3.8** |
| CNG | | | | | *e*S | | **Sn** | **22 49 21.3** | **+7.8** |
| CNG | | | | | IAML | | | 22 49 53.2 | |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **CNG** | **Changalane** | **5.32** | **47** | | *i* P | | **Pn** | **22 48 14.2** | **+1.8** |
| CNG | | | | | *i* S | | **Sn** | **22 49 14.2** | **+0.7** |
| **CNG** | **Changalane** | **5.32** | **47** | | *i* P | | **Pn** | **22 48 14.2** | **+1.8** |
| CNG | | | | | *i* S | | **Sn** | **22 49 14.2** | **+0.7** |
| **LBTB** | **Lobatse** | **5.36** | **338** | | *e*P | | Pn | 22 48 18.7 | +5.7 |
| LBTB | | | | | *e*S | | **Sn** | **22 49 14.4** | **-0.1** |
| LBTB | | | | | IAML | | | 22 49 47.9 | |
| | comp=Z,24nm,0.6s | | | | | | | | |
| **LBTB** | **Lobatse** | **5.36** | **338** | | *i* P | | Pn | 22 48 18.3 | +5.3 |
| LBTB | | | | | *e*S | | **Sn** | **22 49 18.1** | **+3.6** |
| **LBTB** | **Lobatse** | **5.36** | **338** | | *i* P | | Pn | 22 48 18.3 | +5.3 |
| LBTB | | | | | *e*S | | **Sn** | **22 49 18.1** | **+3.6** |
| **GRAN** | **Grantham** | **5.38** | **243** | | *e*P | | **Pn** | **22 48 15.4** | **+2.1** |
| GRAN | | | | | *e*S | | **Sn** | **22 49 12.2** | **-2.9** |
| GRAN | | | | | IAML | | | 22 49 37.9 | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| **UPI** | **Upington** | **5.99** | **284** | | *e*P | | **Pn** | **22 48 23.8** | **+2.0** |
| UPI | | | | | *e*S | | **Sn** | **22 49 24.1** | **-6.1** |
| UPI | | | | | IAML | | | 22 49 59.0 | |
| | comp=Z,4.7nm,0.5s | | | | | | | | |
| **KEIM** | **Keimoes** | **6.14** | **280** | | *e*P | | **Pn** | **22 48 24.6** | **+0.8** |
| KEIM | | | | | *e*S | | **Sn** | **22 49 28.9** | **-5.0** |
| KEIM | | | | | IAML | | | 22 50 07.4 | |
| | comp=Z,4.4nm,0.3s | | | | | | | | |
| **MATJ** | **Matjiesfontein** | **7.00** | **240** | | *e*P | | **Pn** | **22 48 36.2** | **+0.6** |
| MATJ | | | | | *e*S | | **Sn** | **22 49 50.8** | **-4.2** |
| MATJ | | | | | IAML | | | 22 50 29.7 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **CVNA** | **Calvinia** | **7.12** | **256** | | *e*P | | **Pn** | **22 48 38.6** | **+1.5** |
| CVNA | | | | | *e*S | | **Sn** | **22 49 52.7** | **-5.2** |
| CVNA | | | | | IAML | | | 22 50 33.4 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **MOPA** | **Mopani** | **7.19** | **27** | | *e*P | | Pn | 22 48 46.1 | +7.9 |
| MOPA | | | | | *e*S | | **Sn** | **22 50 04.7** | **+4.9** |
| MOPA | | | | | IAML | | | 22 51 11.4 | |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| **MOPA** | **Mopani** | **7.19** | **27** | | *i* P | | **Pn** | **22 48 38.4** | **+0.2** |
| MOPA | | | | | *e*S | | **Sn** | **22 49 54.4** | **-5.3** |
| **MOPA** | **Mopani** | **7.19** | **27** | | *i* P | | **Pn** | **22 48 38.4** | **+0.2** |
| MOPA | | | | | *e*S | | **Sn** | **22 49 54.4** | **-5.3** |
| **MSNA** | **Messina** | **7.87** | **15** | | *e*P | | Pn | 22 48 53.9 | +6.3 |
| MSNA | | | | | *e*S | | **Sn** | **22 50 17.8** | **+1.4** |
| MSNA | | | | | IAML | | | 22 51 16.3 | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **MSNA** | **Messina** | **7.87** | **15** | | *e*P | | **Pn** | **22 48 49.4** | **+1.9** |
| MSNA | | | | | *e*S | | **Sn** | **22 50 15.2** | **-1.2** |
| **MSNA** | **Messina** | **7.87** | **15** | | *e*P | | **Pn** | **22 48 49.4** | **+1.9** |
| MSNA | | | | | *e*S | | **Sn** | **22 50 15.2** | **-1.2** |
| **MATP** | **Matopo** | **9.55** | **4** | | *e*P | | **Pn** | **22 49 13.1** | **+2.4** |
| MATP | | | | | *e*S | | **Sn** | **22 50 55.2** | **-2.7** |
| **MATP** | **Matopo** | **9.55** | **4** | | *e*P | | **Pn** | **22 49 13.1** | **+2.4** |
| MATP | | | | | *e*S | | **Sn** | **22 50 55.2** | **-2.7** |
| **BLWY** | **Bulawayo** | **9.84** | **4** | | *e*P | | Pn | 22 49 19.8 | +5.2 |
| BLWY | | | | | *e*S | | **Sn** | **22 51 05.0** | **-0.1** |
| BLWY | | | | | IAML | | | 22 52 16.8 | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| **BLWY** | **Bulawayo** | **9.84** | **4** | | *e*P | | **Pn** | **22 49 15.7** | **+1.1** |
| BLWY | | | | | *e*S | | **Sn** | **22 51 01.1** | **-4.0** |
| **BLWY** | **Bulawayo** | **9.84** | **4** | | *e*P | | **Pn** | **22 49 15.7** | **+1.1** |
| BLWY | | | | | *e*S | | **Sn** | **22 51 01.1** | **-4.0** |

*THE **10** 23:02:31.6,38˚.54N×20˚.52E,h6km±3km,ML2.9/8,Error ellipse: s-maj=3.5km s-min=0.3km az=94.0*
*ATH **10** 23:02:31.5,38˚.55N×20˚.51E,h8km±3km,ML2.8/6,Error ellipse: s-maj=3.3km s-min=0.5km az=87.0*
**ISC 10 23:02:31.0±0.9,38˚.56N±0˚.02×20˚.50E±0˚.04,h13km±5km, n33,σ0s87/59,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.11** | **153** | P | | **Pg** | **23 02 33.9** | **-0.2** |
| FSK | | | | S | | **Sg** | **23 02 35.8** | **-0.5** |
| FSK | | | | AML | | AML | 23 02 36.1 | |
| | comp=N,74350μm,0.4s | | | | | | | |
| FSK | | | | AML | | AML | 23 02 36.2 | |
| **DRAG** | **Dragano-Lefkad** | **0.14** | **26** | P | | **Pg** | **23 02 34.7** | **+0.2** |
| DRAG | | | | S | | **Sg** | **23 02 36.6** | **-0.4** |
| | comp=N,11μm,0.2s | | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.14** | **26** | P | | **Pg** | **23 02 34.6** | **+0.1** |
| DRAG | | | | S | | **Sg** | **23 02 36.7** | **-0.4** |
| **EVGI** | **Lefkada island** | **0.14** | **63** | P | | **Pg** | **23 02 34.4** | **-0.1** |
| EVGI | | | | S | | **Sg** | **23 02 36.8** | **-0.2** |
| | comp=N,23μm,0.1s | | | | | | | |
| **EVGI** | **Lefkada island** | **0.14** | **63** | P | | **Pg** | **23 02 34.3** | **-0.2** |
| EVGI | | | | S | | **Sg** | **23 02 37.0** | **0.0** |
| **NYDR** | **Nydri-Lefkada** | **0.22** | **45** | P | | **Pg** | **23 02 35.9** | **+0.1** |
| NYDR | | | | S | | **Sg** | **23 02 39.3** | **+0.2** |
| | comp=N,11μm,0.7s | | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.22** | **45** | P | | **Pg** | **23 02 35.8** | **0.0** |
| NYDR | | | | S | | **Sg** | **23 02 39.5** | **+0.4** |
| **LKD2** | **Lefkada island** | **0.26** | **29** | P | | **Pg** | **23 02 36.8** | **+0.3** |
| LKD2 | | | | S | | **Sg** | **23 02 41.0** | **+0.7** |
| | comp=N,1μm,0.2s | | | | | | | |
| **LKD2** | **Lefkada island** | **0.26** | **29** | P | | **Pg** | **23 02 36.8** | **+0.3** |
| LKD2 | | | | S | | **Sg** | **23 02 41.0** | **+0.7** |
| LKD2 | | | | AML | | AML | 23 02 42.0 | |
| | comp=E,3241μm,0.2s | | | | | | | |
| LKD2 | | | | AML | | AML | 23 02 48.9 | |
| | comp=N,3860μm,0.7s | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.29** | **25** | P | | **Pg** | **23 02 37.6** | **+0.6** |
| TSLK | | | | S | | **Sg** | **23 02 41.9** | **+0.7** |
| | comp=N,1μm,0.3s | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.29** | **25** | P | | **Pg** | **23 02 37.7** | **+0.6** |
| TSLK | | | | S | | **Sg** | **23 02 42.1** | **+0.9** |
| **DMLN** | **Damoulianata-K** | **0.33** | **197** | P | | **Pg** | **23 02 38.0** | **+0.2** |
| DMLN | | | | S | | **Sg** | **23 02 42.5** | **+0.2** |
| | comp=N,4μm,0.3s | | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.33** | **197** | P | | **Pg** | **23 02 38.0** | **+0.2** |
| DMLN | | | | S | | **Sg** | **23 02 42.7** | **+0.4** |
| **LXRA** | **Lixouri, Kepha** | **0.36** | **188** | P | | **Pg** | **23 02 38.5** | **+0.3** |
| LXRA | | | | S | | **Sg** | **23 02 43.6** | **+0.5** |
| **KEF3** | **Kipouria, Keph** | **0.37** | **198** | P | | **Pg** | **23 02 38.2** | **-0.3** |
| KEF3 | | | | S | | **Sg** | **23 02 44.5** | **+1.0** |
| | comp=N,6μm,0.2s | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.37** | **198** | P | | **Pg** | **23 02 38.3** | **-0.2** |
| KEF3 | | | | S | | **Sg** | **23 02 43.6** | **+0.1** |
| **ARGA** | **Argostoli. Kep** | **0.38** | **182** | P | | **Pg** | **23 02 39.2** | **+0.6** |
| ARGA | | | | S | | **Sg** | **23 02 44.8** | **+1.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **VLS** | **Valsamata** | **0.39** | **169** | | P | | **Pg** | **23 02 38.4** | **-0.3** |
| VLS | | | | | S | | **Sg** | **23 02 44.1** | **+0.1** |
| | comp=N,5μm,0.3s | | | | | | | | |
| **VLS** | **Valsamata** | **0.39** | **169** | | P | | **Pg** | **23 02 38.6** | **-0.2** |
| VLS | | | | | S | | **Sg** | **23 02 44.9** | **+0.9** |
| VLS | | | | | AML | | AML | 23 02 45.2 | |
| | comp=N,7434μm,0.3s | | | | | | | | |
| VLS | | | | | AML | | AML | 23 02 45.4 | |
| | comp=E,11765μm,0.3s | | | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.45** | **171** | | P | | **Pg** | **23 02 39.8** | **-0.1** |
| PSDA | | | | | S | | **Sg** | **23 02 46.6** | **+0.8** |
| **VTN** | **Vitineika** | **0.84** | **140** | | P | | **Pg** | **23 02 47.6** | **+0.4** |
| VTN | | | | | S | | **Sb** | **23 02 58.9** | **+0.3** |
| **LTHK** | **Lithakia** | **0.89** | **162** | | P | | **Pg** | **23 02 47.6** | **-0.6** |
| **RLS** | **Riolos of Patr** | **0.91** | **123** | | P | | **Pg** | **23 02 48.4** | **-0.2** |
| RLS | | | | | S | | **Sb** | **23 03 01.3** | **+0.6** |
| RLS | | | | | AML | | AML | 23 03 05.0 | |
| | comp=N,1040μm,0.3s | | | | | | | | |
| RLS | | | | | AML | | AML | 23 03 05.2 | |
| | comp=E,890μm,0.2s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.98** | **353** | | P | | **Pg** | **23 02 50.4** | **+0.5** |
| **IGT** | **Igoumenitsa** | **0.98** | **353** | | P | | **Pg** | **23 02 50.3** | **+0.3** |
| IGT | | | | | AML | | AML | 23 03 09.5 | |
| | comp=E,1152μm,0.8s | | | | | | | | |
| IGT | | | | | AML | | AML | 23 03 10.4 | |
| | comp=N,858μm,0.6s | | | | | | | | |
| **JAN** | **Janina** | **1.13** | **14** | | P | | **Pg** | **23 02 52.9** | **+0.2** |
| JAN | | | | | AML | | AML | 23 03 12.0 | |
| | comp=E,536μm,1.0s | | | | | | | | |
| JAN | | | | | AML | | AML | 23 03 16.5 | |
| | comp=N,475μm,0.7s | | | | | | | | |
| **STON** | **Ston** | **4.80** | **335** | *e* | Pn | | **Pn** | **23 03 43.6** | **+0.7** |
| STON | | | | | Sn | | **Sn** | **23 04 35.9** | **-2.6** |
| **RICI** | **Ricice** | **5.55** | **334** | *e* | Pn | | **Pn** | **23 03 53.6** | **+0.4** |
| RICI | | | | | Sn | | **Sn** | **23 04 53.9** | **-2.9** |
| **KIJV** | **Kijevo** | **6.25** | **332** | *e* | Pn | | **Pn** | **23 04 04.0** | **+1.1** |
| KIJV | | | | | Sn | | **Sn** | **23 05 12.3** | **-1.9** |
| **ZIRJ** | **Zirje** | **6.27** | **326** | *e* | Pn | | **Pn** | **23 04 03.3** | **+0.2** |
| **MORI** | **Morici** | **6.42** | **327** | *i* | Pn | | **Pn** | **23 04 06.2** | **+1.1** |
| MORI | | | | | Sn | | **Sn** | **23 05 16.1** | **-2.0** |
| **UDBI** | **Udbina** | **6.94** | **331** | *e* | Pn | | **Pn** | **23 04 14.4** | **+2.0** |
| **NVLJ** | **Novalja** | **7.33** | **327** | *e* | Pn | | **Pn** | **23 04 18.9** | **+1.3** |

*NEIC **10** 23:10:16.2±1.0,0˚.2N±0˚.1×122˚.1E±0˚.1,h172km±8km, mb4.1/17,Error ellipse: s-maj=22.5km s-min=12.6km az=67.0*
*DJA **10** 23:10:18.1±0.5,0˚.N±5˚×122˚.2E±˚,h155km±6km,M3.9/12, mb3.8/3,MLv3.9/12*
*IDC **10** 23:10:21.1±6.8,0˚.36N×122˚.56E,h230km±68km,mb3.2/5, mb1 3.3/5,mb1mx2.8/36,mbtmp3.8/5,Error ellipse: s-maj=127.2km s-min=15.9km az=64.0*
**ISC 10 23:10:17.2±0.6,0˚.31N±0˚.06×122˚.19E±0˚.05,h200km,n42, σ2s62/49,mb4.1/21,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.30** | **304** | P | | **Pn** | **23 10 39.5** | **-4.2** |
| MRSI | | | | S | | **Sn** | **23 10 56.8** | **-7.4** |
| **GTOI** | **Gorontalo** | **0.88** | **68** | P | | **Pn** | **23 10 42.6** | **-3.6** |
| GTOI | | | | S | | **Sn** | **23 11 02.5** | **-6.0** |
| **APSI** | **Ampana** | **1.33** | **204** | P | | **Pn** | **23 10 46.3** | **-3.1** |
| **TOLI2** | **Tolitoli** | **1.62** | **299** | Pn | | **Pn** | **23 10 49.4** | **-2.6** |
| TOLI2 | | | | | | **Sn** | **23 11 12.4** | **-6.6** |
| **KMSI** | **Cibinong** | **1.81** | **82** | P | | **Pn** | **23 10 51.8** | **-1.9** |
| **MPSI** | **Mapaga** | **2.30** | **271** | P | | **Pn** | **23 10 57.6** | **-1.2** |
| MPSI | | | | S | | **Sn** | **23 11 27.3** | **-3.9** |
| **TTSI** | **Tana Toraja** | **4.09** | **215** | P | | **Pn** | **23 11 19.5** | **-0.6** |
| **SPSI** | **Sidrap Palu** | **4.89** | **210** | P | | **Pn** | **23 11 29.2** | **-1.0** |
| **BNSI** | **Bone** | **5.12** | **204** | P | | **Pn** | **23 11 33.3** | **+0.1** |
| | 0.2nm47nm,0.8s | | | | | | | |
| **LBMI** | **Labuha** | **5.39** | **100** | P | | **Pn** | **23 11 37.5** | **+0.9** |
| | 0.1nm14nm,1.3s | | | | | | | |
| **UGM** | **Wanagama** | **14.21** | **235** | | | **P** | **23 13 31.9** | **+0.4** |
| **MTN** | **Manton Dam** | **15.79** | **146** | P | | **Pn** | **23 13 48.9** | **-0.2** |
| **KNRA** | **Kununurra** | **17.16** | **158** | P | | **Pn** | **23 14 03.0** | **-2.4** |
| **MBWA** | **Marble Bar** | **21.47** | **186** | P | | **P** | **23 14 48.5** | **-1.7** |
| MBWA | | | | IAmb | | IAmb | 23 14 49.9 | |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.87** | **186** | P | | **P** | **23 14 52.3** | **-1.9** |
| PSA00 | | | | IAmb | | IAmb | 23 15 06.0 | |
| | comp=Z,6.7nm,1.2s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.87** | **186** | P | | **P** | **23 14 51.7** | **-2.5** |
| PSA00 | | | | IAmb | | IAmb | 23 15 07.6 | |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.26** | **150** | P | | **P** | **23 15 06.5** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 23 15 22.4 | |
| | comp=Z,5.8nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.38** | **150** | P | | **P** | **23 15 07.6** | **-0.5** |
| WRAB | | | | IAmb | | IAmb | 23 15 08.7 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.38** | **150** | P | | **P** | **23 15 08.3** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=330,slow=11,SNR=15 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **23 18 47.6** | **-1.4** |
| | comp=Z,0.3nm,0.7s,baz=337,slow=2.6,SNR=2.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.38** | **150** | P | | **P** | **23 15 07.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **26.41** | **155** | P | | **P** | **23 15 35.6** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=332,slow=7.3,SNR=16 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **23 18 57.1** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=351,slow=1.6,SNR=2.0 | | | | | | | |
| **MORW** | **Morawa** | **29.80** | **191** | P | | **P** | **23 16 04.8** | **-0.7** |
| MORW | | | | IAmb | | IAmb | 23 16 14.3 | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.39** | **188** | P | | **P** | **23 16 37.1** | **+0.3** |
| **STKA** | **Stephens Creek** | **36.90** | **152** | P | | **P** | **23 17 07.4** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=328,slow=9.5,SNR=3.7 | | | | | | | |
| **TAPN** | **Taplejung** | **42.64** | **312** | *e*P | | **P** | **23 17 57.3** | **+2.7** |
| | comp=Z,5.7nm,0.5s | | | | | | | |
| **RAMN** | **Ramite** | **43.26** | **311** | *e*P | | **P** | **23 18 02.7** | **+3.2** |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **CAN** | **Canberra** | **43.38** | **148** | P | | **P** | **23 18 01.2** | **+1.1** |
| **JIRN** | **Jiri** | **43.95** | **311** | *e*P | | **P** | **23 18 07.7** | **+2.6** |
| | comp=Z,8.0nm,0.4s | | | | | | | |
| **GUN** | **Gumba** | **44.31** | **311** | *e*P | | **P** | **23 18 10.0** | **+2.1** |
| | comp=Z,5.5nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **45.30** | **311** | *e*P | | **P** | **23 18 17.7** | **+2.2** |
| | comp=Z,4.8nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **45.97** | **310** | *e*P | | **P** | **23 18 22.6** | **+1.8** |
| **DANN** | **Dangsing** | **46.14** | **311** | *e*P | | **P** | **23 18 23.5** | **+1.3** |
| | comp=Z,20nm,0.6s | | | | | | | |
| **PYUN** | **Piuthan** | **46.60** | **310** | *e*P | | **P** | **23 18 27.7** | **+1.9** |
| | comp=Z,18nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **49.29** | **346** | P | | **P** | **23 18 47.7** | **+1.8** |
| | comp=Z,0.5nm,0.6s,baz=165,slow=7.4,SNR=2.3 | | | | | | | |
| **MK31** | **Makanchi Array** | **57.93** | **329** | P | | **P** | **23 19 50.9** | **+2.3** |
| **MKAR** | **Makanchi Array** | **57.93** | **329** | P | | **P** | **23 19 50.2** | **+1.7** |
| | comp=Z,0.6nm,0.3s,baz=126,slow=8.5,SNR=38 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **23 20 39.0** | **+0.5** |
| | comp=Z,0.4nm,0.5s,baz=135,slow=5.7,SNR=5.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.93** | **329** | P | | **P** | **23 19 50.6** | **+2.1** |
| **MAKZ** | **Makanchi** | **58.10** | **329** | P | | **P** | **23 19 51.8** | **+2.0** |
| **AAK** | **Ala-Archa** | **59.99** | **321** | P | | **P** | **23 20 06.5** | **+3.6** |
| AAK | | | | IAmb | | IAmb | 23 20 21.4 | |
| | comp=Z,9.3nm,1.5s | | | | | | | |
| **KBL** | **Kabul** | **60.13** | **310** | P | | **P** | **23 20 05.3** | **+1.2** |
| KBL | | | | IAmb | | IAmb | 23 20 07.8 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **61.03** | **316** | P | | **P** | **23 20 12.0** | **+2.0** |
| GAR | | | | IAmb | | IAmb | 23 20 14.7 | |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **KURK** | **Kurchatov** | **62.31** | **330** | P | | **P** | **23 20 20.3** | **+2.2** |
| KURK | | | | IAmb | | IAmb | 23 20 24.5 | |
| | comp=Z,2.2nm,1.0s | | | | | | | |

**IDC 10 23:36:46.7±1.6,3.72N×126.63E,h0km,mb3.6/4, mb1 3.7/4,mb1mx3.5/41,mbtmp3.6/4,Error ellipse: s-maj=166.8km s-min=22.9km az=68.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.70** | **162** | P | | P | 23 42 08.7 | -1.1 |
| | 1.1nm,0.7s,baz=344,slow=9.9,SNR=4.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **28.13** | **166** | P | | P | 23 42 42.0 | +1.4 |
| | 0.1nm,0.3s,baz=335,slow=11,SNR=2.5 | | | | | | | |
| **SONM** | **Songino Array** | **47.28** | **342** | P | | P | 23 45 22.5 | +0.5 |
| | 0.2nm,0.3s,baz=141,slow=9.3,SNR=1.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.51** | **325** | P | | P | 23 46 37.5 | -0.4 |
| | 0.7nm,0.5s,baz=119,slow=7.8,SNR=25 | | | | | | | |

*IDC **10** 23:41:41.5±0.6,6˚.74N×72˚.95W,h164km±5km,mb3.6/13, mb1 3.8/17,mb1mx3.7/33,mbtmp4.1/17,Error ellipse:*
*s-maj=11.7km s-min=7.7km az=129.0*
*VAO **10** 23:41:42.2±0.6,6˚.84N×73˚.12W,h145km±6km,mb4.0*
*NEIC **10** 23:41:42.0±2.0,6˚.80N±0˚.06×73˚.03W±0˚.07,h154km±7km, mb4.4/32,Error ellipse: s-maj=9.7km s-min=8.4km az=98.0*
*RSNC **10** 23:41:42.5±0.9,6˚.81N×73˚.11W,h154km±3km,ML4.0, Mw4.2,Fault plane solution: NP1:φs6.00000°,δ48.00000°, λ-26.00000°.*
**ISC 10 23:41:41.7±0.5,6˚.84N±0˚.02×73˚.11W±0˚.03,h159km±4km, n133,σ1s59/177,mb4.2/29,5C-6D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.26** | **196** | *i* | P | **Pn** | **23 42 03.0** | **-0.5** |
| BARC | | | | *e*S | | **Sn** | **23 42 18.6** | **-1.5** |
| BARC | | | | *i* | | | 23 42 20.8 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.64** | **40** | *i* | P | **Pn** | **23 42 05.8** | **+0.4** |
| PAMC | | | | *e*S | | **Sn** | **23 42 23.3** | **-0.2** |
| PAMC | | | | *i* | | | 23 42 25.2 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **178** | *e* | P | **Pn** | **23 42 06.9** | **-0.6** |
| RUSC | | | | *e*S | | **Sn** | **23 42 25.8** | **-1.3** |
| RUSC | | | | *i* | | | 23 42 26.6 | |
| | comp=Z,835nm,0.5s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **257** | *e*P | | **Pn** | **23 42 09.7** | **-1.0** |
| PTBC | | | | *e*S | | **Sn** | **23 42 31.5** | **-1.3** |
| PTBC | | | | *i* | | | 23 42 38.5 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **107** | *i* | P | **Pn** | **23 42 11.3** | **+0.5** |
| TAMC | | | | *i* | | | 23 42 32.1 | |
| | comp=Z,1μm,0.4s | | | | | | | |
| TAMC | | | | *e*S | | **Sn** | **23 42 33.1** | **+0.2** |
| **OCAC** | **Ocana** | **1.40** | **352** | *e*P | | **Pn** | **23 42 11.1** | **-0.1** |
| OCAC | | | | *e*S | | **Sn** | **23 42 34.4** | **+0.5** |
| **OCAC** | **Ocana** | **1.40** | **352** | | | **Pn** | **23 42 10.8** | **-0.4** |
| OCAC | | | | Sn | | **Sn** | **23 42 34.1** | **+0.3** |
| **SPBC** | **San Pablo de B** | **1.52** | **219** | *e*P | | **Pn** | **23 42 12.0** | **-0.3** |
| SPBC | | | | *e*S | | **Sn** | **23 42 35.2** | **-0.5** |
| SPBC | | | | *i* | | | 23 42 41.2 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | *e*P | | **Pn** | **23 42 15.8** | **+0.1** |
| ZARC | | | | *e*S | | **Sn** | **23 42 41.8** | **0.0** |
| ZARC | | | | *i* | | | 23 42 47.5 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | | | **Pn** | **23 42 15.4** | **-0.3** |
| ZARC | | | | Sn | | **Sn** | **23 42 43.1** | **+1.2** |
| **NORC** | **Norcasia** | **2.16** | **234** | *e*P | | **Pn** | **23 42 18.9** | **-0.4** |
| NORC | | | | *e*S | | **Sn** | **23 42 47.4** | **-0.9** |
| NORC | | | | *i* | | | 23 42 50.8 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **SMLC** | **San Martn de** | **2.17** | **334** | *e*P | | **Pn** | **23 42 19.3** | **0.0** |
| SMLC | | | | *e*S | | **Sn** | **23 42 48.0** | **-0.3** |
| SMLC | | | | *i* | | | 23 42 50.1 | |
| | comp=Z,1μm,0.1s | | | | | | | |
| **CHIC** | **Chingaza** | **2.28** | **196** | *e*P | | **Pn** | **23 42 20.7** | **-0.4** |
| CHIC | | | | *e*S | | **Sn** | **23 42 50.9** | **-0.6** |
| CHIC | | | | *i* | | | 23 42 59.2 | |
| | comp=Z,330nm,0.5s | | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **211** | P | | **Pn** | **23 42 22.6** | **+1.1** |
| | comp=Z,276nm,0.3s,baz=85,slow=10,SNR=206 | | | | | | | |
| ROSC | | | | S | | **Sn** | **23 42 52.8** | **+0.5** |
| | comp=Z,147nm,0.3s,baz=42,slow=16,SNR=5.8 | | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **211** | | | **Pn** | **23 42 22.5** | **+1.0** |
| **HELC** | **Santa Helena** | **2.48** | **255** | *e*P | | **Pn** | **23 42 25.2** | **+1.7** |
| HELC | | | | *e*S | | **Sn** | **23 42 55.5** | **-0.1** |
| HELC | | | | *i* | | | 23 43 02.3 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.56** | **291** | *e*P | | **Pn** | **23 42 23.0** | **-1.1** |
| UREC | | | | *e*S | | **Sn** | **23 42 54.8** | **-2.0** |
| UREC | | | | *i* | | | 23 43 03.9 | |
| | comp=Z,644nm,0.2s | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.72** | **351** | *e*P | | **Pn** | **23 42 27.6** | **+1.6** |
| LL1C | | | | *e*S | | **Sn** | **23 43 03.6** | **+3.4** |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **234** | *e*P | | **Pn** | **23 42 28.1** | **+1.2** |
| GUY2C | | | | *e*S | | **Sn** | **23 43 02.5** | **+0.7** |
| GUY2C | | | | *i* | | | 23 43 10.0 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **VILC** | **Villavicencio,** | **2.77** | **192** | *e*P | | **Pn** | **23 42 26.0** | **-0.7** |
| VILC | | | | *e*S | | **Sn** | **23 43 02.5** | **+0.9** |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **160** | *e*P | | **Pn** | **23 42 25.9** | **-1.1** |
| PTGC | | | | *e*S | | **Sn** | **23 42 59.4** | **-2.6** |
| PTGC | | | | *i* | | | 23 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **POPC** | **Popayan, Colom** | **5.55** | **220** | ⇑*i*P | | **Pn** | | **23 43 03.0** | **+0.1** |
| POPC | | | | *e*S | | **Sn** | | **23 44 04.8** | **-1.6** |
| **FLOC** | **Florencia** | **5.80** | **206** | ⇑*e*P | | **Pn** | | **23 43 05.3** | **-0.7** |
| FLOC | | | | *e*S | | **Sn** | | **23 44 11.6** | **-0.4** |
| FLOC | | | | *i* | | | | 23 44 21.1 | |
| | comp=Z,36nm,0.5s | | | | | | | | |
| **SOTA** | **Rioblanco** | **5.83** | **217** | *e*P | | **Pn** | | **23 43 07.6** | **+0.8** |
| **AUA1** | **Aruba** | **6.41** | **28** | Pn | | **Pn** | | **23 43 14.4** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **7.05** | **290** | Pn | | **Pn** | | **23 43 20.7** | **-1.8** |
| **BIRV** | **Birongo** | **7.67** | **61** | Pn | | **Pn** | | **23 43 28.5** | **-2.3** |
| **OTAV** | **Otavalo** | **8.45** | **219** | *e*P | | **Pn** | | **23 43 41.4** | **-0.1** |
| **OTAV** | **Otavalo** | **8.45** | **219** | Pn | | **Pn** | | **23 43 41.7** | **+0.1** |
| **PCRV** | **Puerto La Cruz** | **17.02** | **68** | P | | **Pn** | | **23 43 48.5** | **-0.2** |
| | comp=Z,1.8nm,0.3s,baz=267,slow=15,SNR=2.7 | | | | | | | | |
| **SRBA** | **San Rafael, Bu** | **10.42** | **284** | Pn | | **Pn** | | **23 44 08.4** | **+1.0** |
| **TBTG** | **Tabatinga, AM** | **11.41** | **164** | *e*P | | **Pn** | | **23 44 20.6** | **+0.4** |
| **TBTG** | **Tabatinga, AM** | **11.41** | **164** | Pn | | **Pn** | | **23 44 18.8** | **-1.4** |
| **MTDJ** | **Mount Denham** | **12.11** | **340** | Pn | | **Pn** | | **23 44 32.0** | **+2.7** |
| **SDDR** | **Presa de Saban** | **12.20** | **8** | Pn | | **Pn** | | **23 44 32.8** | **+2.3** |
| **DR12** | **Loma Pena Alta** | **12.42** | **17** | Pn | | **Pn** | | **23 44 34.3** | **+1.0** |
| **PDPR** | **Patillas Dam,** | **13.09** | **31** | Pn | | **Pn** | | **23 44 40.6** | **-1.2** |
| **GTBY** | **Guantanamo Bay** | **13.15** | **352** | | | **P** | | **23 44 45.5** | **-1.3** |
| **GCPR** | **Guaynabo City** | **13.30** | **30** | Pn | | **Pn** | | **23 44 43.5** | **-1.0** |
| **BOAV** | **Boa Vista** | **13.30** | **109** | Pn | | **Pn** | | **23 44 42.0** | **-2.6** |
| **CZSB** | **Cruzeiro do Su** | **14.48** | **178** | *e*P | | **P** | | **23 45 00.6** | **-1.1** |
| **PTGA** | **Pitinga** | **15.12** | **119** | P | | **Pn** | | **23 45 05.7** | **-1.7** |
| | comp=Z,0.9nm,0.3s,baz=336,slow=19,SNR=2.1 | | | | | | | | |
| **ETMB** | **Extrema** | **17.92** | **157** | | | **P** | | **23 45 38.7** | **-0.9** |
| **ITTB** | **Itaituba** | **20.61** | **122** | *e*P | | **P** | | **23 46 08.6** | **-0.2** |
| **MALB** | **Monte Alegre** | **20.70** | **114** | *e*P | | Pn | | 23 46 12.4 | -1.8 |
| **MCPB** | **Macapa, AP** | **22.19** | **108** | *e*P | | **P** | | **23 46 25.7** | **+0.3** |
| **VILB** | **Vilhena** | **23.48** | **147** | *e*P | | **P** | | **23 46 38.3** | **+1.0** |
| **VILB** | **Vilhena** | **23.48** | **147** | P | | **P** | | **23 46 37.6** | **+0.3** |
| VILB | | | | IAmb | | IAmb | | 23 46 38.6 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **23.50** | **168** | pP | | pP | | 23 47 09.5 | +0.6 |
| | comp=Z,2.9nm,0.7s,baz=338,slow=16,SNR=5.1 | | | | | | | | |
| **LPAZ** | **La Paz** | **23.50** | **168** | *e*P | | **P** | | **23 46 39.2** | **+1.1** |
| **SIV** | **San Ignacio** | **25.63** | **152** | P | | **P** | | **23 46 54.3** | **-2.4** |
| | comp=Z,0.4nm,0.2s,baz=43,slow=12,SNR=4.4 | | | | | | | | |
| SIV | | | | pP | | **pP** | | **23 47 28.5** | **-1.9** |
| | comp=Z,1.6nm,0.6s,baz=314,slow=7.1,SNR=3.1 | | | | | | | | |
| **PRPB** | **Parauapebas** | **26.60** | **119** | *e*P | | **P** | | **23 47 08.0** | **+2.4** |
| **GO01** | **Chusmiza** | **26.62** | **172** | P | | **P** | | **23 47 04.5** | **-1.6** |
| **PB11** | **IPOC Station P** | **26.65** | **173** | P | | **P** | | **23 47 05.7** | **-0.4** |
| PB11 | | | | IAmb | | IAmb | | 23 47 19.1 | |
| | comp=Z,15nm,1.3s | | | | | | | | |
| **GOGA** | **Godfrey** | **28.13** | **341** | P | | **P** | | **23 47 20.6** | **+1.7** |
| GOGA | | | | IAmb | | IAmb | | 23 47 21.8 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **Y49A** | **Blount Mountai** | **29.57** | **337** | P | | **P** | | **23 47 33.3** | **+1.6** |
| **X48A** | **Hartselle** | **30.34** | **337** | P | | **P** | | **23 47 39.4** | **+0.9** |
| X48A | | | | IAmb | | IAmb | | 23 47 40.7 | |
| | comp=Z,5.2nm,0.7s | | | | | | | | |
| **CPCT** | **Cooper Cave** | **30.34** | **341** | P | | **P** | | **23 47 40.2** | **+1.7** |
| **V48A** | **Smith Brothers** | **31.39** | **338** | P | | **P** | | **23 47 49.4** | **+1.7** |
| **WVT** | **Waverly** | **32.12** | **337** | P | | **P** | | **23 47 55.2** | **+1.2** |
| WVT | | | | IAmb | | IAmb | | 23 47 55.6 | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **BDFB** | **Brasilia** | **33.42** | **132** | P | | **P** | | **23 48 03.1** | **-2.6** |
| | comp=Z,0.9nm,0.3s,baz=269,slow=6.3,SNR=4.3 | | | | | | | | |
| **BDFB** | **Brasilia** | **33.42** | **132** | P | | **P** | | **23 48 04.3** | **-1.5** |
| BDFB | | | | IAmb | | IAmb | | 23 48 13.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **33.76** | **332** | P | | **P** | | **23 48 08.6** | **+0.2** |
| FCAR | | | | IAmb | | IAmb | | 23 48 09.6 | |
| | comp=Z,7.1nm,1.0s | | | | | | | | |
| **U40A** | **Yellville** | **34.48** | **331** | P | | **P** | | **23 48 15.5** | **+0.9** |
| **IPMB** | **Ipameri, GO** | **34.83** | **135** | *e*P | | **P** | | **23 48 19.5** | **+1.7** |
| **CCM** | **Cathedral Cave** | **35.16** | **335** | P | | **P** | | **23 48 21.2** | **+0.9** |
| **NBPB** | **Pedra_Branca-C** | **35.65** | **109** | *e*P | | **P** | | **23 48 27.2** | **+2.3** |
| **CPUP** | **Villa Florida** | **36.36** | **156** | *e*P | | **P** | | **23 48 32.9** | **+2.2** |
| **TXAR** | **Lajitas Array** | **36.45** | **312** | P | | **P** | | **23 48 32.0** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=124,slow=9.3,SNR=20 | | | | | | | | |
| TXAR | | | | pP | | **pP** | | **23 49 07.8** | **+2.1** |
| | comp=Z,0.2nm,0.6s,baz=120,slow=8.4,SNR=1.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.45** | **312** | P | | **P** | | **23 48 32.4** | **+0.8** |
| **TX32** | **Lajitas Array** | **36.45** | **312** | P | | **P** | | **23 48 32.4** | **+0.7** |
| **G62A** | **West of Eustis** | **38.30** | **3** | P | | **P** | | **23 48 48.7** | **+1.9** |
| **G65A** | **Princeton** | **38.52** | **6** | P | | **P** | | **23 48 50.0** | **+1.5** |
| G65A | | | | IAmb | | IAmb | | 23 49 05.3 | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **GGN** | **Saint George** | **38.52** | **7** | P | | **P** | | **23 48 49.7** | **+1.2** |
| GGN | | | | IAmb | | IAmb | | 23 48 50.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **38.96** | **314** | P | | **P** | | **23 48 53.2** | **+0.6** |
| MNTX | | | | IAmb | | IAmb | | 23 48 54.6 | |
| | comp=Z,7.7nm,1.4s | | | | | | | | |
| **LMN** | **Caledonia Moun** | **39.52** | **9** | P | | **P** | | **23 48 57.8** | **+0.8** |
| **E46A** | **Sault Ste Mari** | **40.55** | **348** | P | | **P** | | **23 49 06.5** | **+1.2** |
| **BATG** | **Bathurst New B** | **40.74** | **7** | P | | **P** | | **23 49 07.8** | **+0.8** |
| BATG | | | | IAmb | | IAmb | | 23 49 20.0 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **CPSB** | **Cacapava Do Su** | **41.56** | **154** | *e*P | | **P** | | **23 49 16.2** | **+2.3** |
| **SDCO** | **Great Sand Dun** | **42.54** | **321** | P | | **P** | | **23 49 23.5** | **+1.4** |
| **SUSD** | **Miller** | **43.72** | **333** | P | | **P** | | **23 49 31.0** | **-0.2** |
| **PV13** | **Radium Mtn., P** | **44.89** | **319** | P | | **P** | | **23 49 41.9** | **+1.1** |
| **ULM** | **Lac du Bonnet** | **47.27** | **340** | P | | **P** | | **23 49 58.7** | **-0.2** |
| | comp=Z,3.4nm,0.4s,baz=139,slow=8.4,SNR=4.9 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.07** | **324** | P | | **P** | | **23 50 06.2** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=126,slow=8.7,SNR=9.5 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.07** | **324** | P | | **P** | | **23 50 05.9** | **+0.4** |
| **SCHQ** | **Schefferville** | **48.12** | **5** | P | | **P** | | **23 50 05.4** | **0.0** |
| | comp=Z,2.3nm,0.5s,baz=172,slow=4.7,SNR=6.9 | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **49.13** | **320** | P | | **P** | | **23 50 14.4** | **+0.8** |
| **REDW** | **Red Top Meadow** | **49.18** | **324** | P | | **P** | | **23 50 15.0** | **+1.0** |
| REDW | | | | IAmb | | IAmb | | 23 50 15.3 | |
| | comp=Z,5.2nm,1.0s | | | | | | | | |
| **LOHW** | **Long Hollow** | **49.19** | **324** | P | | **P** | | **23 50 14.9** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **51.47** | **315** | P | | **P** | | **23 50 31.9** | **+0.6** |
| | comp=Z,0.2nm,0.5s,baz=120,slow=6.3,SNR=4.0 | | | | | | | | |
| **PINE** | **Pine Mountain** | **55.64** | **319** | P | | **P** | | **23 51 02.9** | **+1.4** |
| PINE | | | | IAmb | | IAmb | | 23 51 04.8 | |
| | comp=Z,4.7nm,1.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.25** | **340** | P | | **P** | | **23 51 53.1** | **+0.1** |
| | comp=Z,3.2nm,0.6s,baz=132,slow=6.7,SNR=66 | | | | | | | | |
| YKA | | | | pP | | **pP** | | **23 52 32.4** | **+1.7** |
| | comp=Z,0.3nm,0.4s,baz=134,slow=6.6,SNR=2.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **67.73** | **86** | P | | **P** | | **23 52 21.1** | **-1.6** |
| | comp=Z,3.3nm,0.7s,baz=335,slow=2.9,SNR=3.0 | | | | | | | | |
| **SUMG** | **Summit** | **68.97** | **11** | *i* P | | **P** | | **23 52 29.0** | **-0.8** |
| **SUMG** | **Summit** | **68.97** | **11** | P | | **P** | | **23 52 30.1** | **+0.2** |
| SUMG | | | | IAmb | | IAmb | | 23 52 30.8 | |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **72.42** | **345** | P | | **P** | | **23 52 50.1** | **-0.1** |
| A36M | | | | IAmb | | IAmb | | 23 52 51.1 | |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.73** | **78** | P | | **P** | | **23 52 56.7** | **-2.3** |
| | comp=Z,0.3nm,0.4s,baz=283,slow=6.6,SNR=7.4 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **74.35** | **334** | P | | **P** | | **23 53 02.8** | **+1.0** |
| **BMAR** | **Burnt Mountain** | **76.64** | **338** | P | | **P** | | **23 53 15.5** | **+0.7** |
| **ILAR** | **Eielson Array** | **76.95** | **335** | P | | **P** | | **23 53 16.1** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=99,slow=4.3,SNR=2.4 | | | | | | | | |
| **J20K** | **Nowinta River** | **79.97** | **334** | P | | **P** | | **23 53 33.4** | **+0.4** |
| J20K | | | | IAmb | | IAmb | | 23 53 36.2 | |
| | comp=Z,7.1nm,1.4s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **81.31** | **29** | P | | **P** | | **23 53 40.5** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=270,slow=5.4,SNR=1.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.65** | **20** | P | | **P** | | **23 54 07.1** | **0.0** |
| | comp=Z,3.9nm,1.1s,baz=282,slow=4.3,SNR=1.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.13** | **234** | PKP | | **PKPdf** | | **00 01 06.0** | **-1.9** |
| | comp=Z,0.5nm,1.0s,baz=116,slow=2.2,SNR=2.7 | | | | | | | | |
| ASAR | | | | PKPbc | | **PKPbc** | | **00 01 10.2** | **-2.0** |
| | comp=Z,0.2nm,0.4s,baz=122,slow=3.6,SNR=5.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35** | **241** | PKP | | **PKPdf** | | **00 01 09.7** | **-0.2** |
| | comp=Z,0.7nm,0.9s,baz=106,slow=2.9,SNR=2.5 | | | | | | | | |
| WRA | | | | PKPbc | | **PKPbc** | | **00 01 14.4** | **-0.9** |
| | comp=Z,0.5nm,0.4s,baz=105,slow=2.9,SNR=16 | | | | | | | | |
| **LEM** | **Lembang** | **179.27** | **271** | PKP | | **PKPdf** | | **00 01 34.5** | **-0.2** |
| | comp=Z,35nm,0.4s,baz=76,slow=9.0,SNR=6.3 | | | | | | | | |

*BJI **10** 23:52:36.0±0.0, 41˚.24N×72˚.90E, h10km, mb3.8/15, mb4.4/8, ML4.0/3, Ms3.8/2, Ms7 3.5/2*
*KRNET **10** 23:52:38.8±0.1, 41˚.06N×73˚.01E, h14km, mb4.5*
*IDC **10** 23:52:38.5±0.6, 40˚.98N×72˚.97E, h22km±4km, mb3.9/20, mb1 4.0/27, mb1mx3.8/59, mbtmp4.0/27, ML3.7/6, MS3.2/11, Ms1 3.2/11, ms1mx2.9/93, Error ellipse: s-maj=9.7km s-min=9.0km az=142.0*
*MOS **10** 23:52:39.9±2.0, 41˚.05N×72˚.91E, h31km, mb4.3/12, Error ellipse: s-maj=6.9km s-min=4.3km az=73.1*
*MOS Felt (III) at Octyabrskoye, Bagysh, Tash-Bulak,*

*Kok-Yangak, Dzhalal-Abad, Bazar-Korgon, Sovetskoye, Sary-Bulak, Uzgen, Kara-Suu; (II-III) at Kochkor-Ata, Arslanbob.*
*SOME **10** 23:52:39.6, 41˚.15N×73˚.05E, h10km, MS3.4*
*NNC **10** 23:52:39.4±0.8, 41˚.12N×72˚.98E, h0km, mb4.8, mpv4.6, Error ellipse: s-maj=7.7km s-min=3.8km az=177.0*
*ISU **10** 23:52:39, 41˚.10N×73˚.00E, h15km*
*KNET **10** 23:52:40.1±0.5, 41˚.16N×73˚.08E, h8km±1km, ml4.2, Error ellipse: s-maj=4.7km s-min=2.4km az=115.0*
*NEIC **10** 23:52:41.9±1.7, 41˚.05N±0˚.06×72˚.89E±0˚.08, h42km±7km, mb4.4/30, Error ellipse: s-maj=9.5km s-min=7.6km az=136.0*

**ISC 10 23:52:38.1±0.6, 41˚.06N±0˚.02×72˚.99E±0˚.02, h19km±2km, n277,σ2§14/339, mb4.2/36, MS3.4/8, 49C-20D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **0.56** | **196** | *e*PG | | **Pg** | **23 52 49.0** | **-0.3** |
| OHH | | | | *e*S | | **Sg** | **23 52 56.5** | **-0.4** |
| **OHH** | **Osh** | **0.56** | **196** | ⇑*i*P | | **Pg** | **23 52 49.4** | **+0.1** |
| | baz=98 | | | | | | | |
| OHH | | | | ⇑*i*S | | **Sg** | **23 52 57.2** | **+0.3** |
| | baz=98 | | | | | | | |
| **ANR** | **Andizhan** | **0.56** | **237** | *i* P | | **Pn** | **23 52 52.0** | **+0.8** |
| ANR | | | | *e*S | | **Sn** | **23 53 00.0** | **-0.1** |
| **SALK** | **Salom-Alik** | **0.66** | **106** | *i* PG | | Pn | 23 52 59.5 | +6.9 |
| **ARK** | **Arkit** | **1.06** | **314** | *e*PG | | **Pg** | **23 52 59.0** | **+0.2** |
| **ARK** | **Arkit** | **1.06** | **314** | *e*P | | **Pg** | **23 52 59.0** | **+0.2** |
| ARK | | | | *e*S | | **Sn** | **23 53 13.0** | **+0.4** |
| **ARK** | **Arkit** | **1.06** | **314** | ⇑*i*P | | **Pg** | **23 52 58.8** | **0.0** |
| | baz=14 | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sn** | **23 53 13.8** | **+1.2** |
| | baz=14 | | | | | | | |
| **FRG** | **Fergana** | **1.14** | **233** | *i* P | | **Pg** | **23 53 01.0** | **+0.8** |
| FRG | | | | *e*S | | **Sg** | **23 53 15.0** | **-0.2** |
| **AML** | **Almayashu** | **1.19** | **26** | ⇓P | | **Pg** | **23 53 01.3** | **+0.1** |
| | 506nm,0.2s,SNR=208 | | | | | | | |
| AML | | | | ⇑S | | **Sg** | **23 53 17.3** | **+0.3** |
| | 2µm,0.2s | | | | | | | |
| **AML** | **Almayashu** | **1.19** | **26** | *i* PG | | **Pg** | **23 53 01.4** | **+0.1** |
| AML | | | | *e*S | | **Sg** | **23 53 17.4** | **+0.3** |
| **ARLS** | **Aral** | **1.28** | **51** | *e*PG | | Pg | 23 53 12.5 | +10 |
| ARLS | | | | *e*S | | **Sg** | **23 53 19.7** | **-0.1** |
| **ARLS** | **Aral** | **1.28** | **51** | ⇓*e*P | | **Pg** | **23 53 02.6** | **-0.4** |
| | baz=51 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sg** | **23 53 19.5** | **-0.3** |
| | baz=51 | | | | | | | |
| **TRKS** | **Terek-Say** | **1.47** | **289** | *e*PG | | Pg | 23 53 15.3 | +8.9 |
| TRKS | | | | *e*S | | **Sg** | **23 53 25.0** | **-0.6** |
| **TRKS** | **Terek-Say** | **1.47** | **289** | ⇓*i*P | | **Pg** | **23 53 05.7** | **-0.7** |
| | baz=87 | | | | | | | |
| TRKS | | | | ⇓*i*S | | **Sg** | **23 53 24.9** | **-0.6** |
| | baz=87 | | | | | | | |
| **UCH** | **Uchtor** | **1.63** | **44** | ⇑P | | **Pg** | **23 53 09.1** | **-0.5** |
| | 2µm,0.2s,SNR=4120 | | | | | | | |
| UCH | | | | ⇓S | | **Sg** | **23 53 30.8** | **-0.2** |
| | 2µm,0.3s | | | | | | | |
| **UCH** | **Uchtor** | **1.63** | **44** | *i* PN | | Pg | 23 53 19.2 | +10 |
| **UCH** | **Uchtor** | **1.63** | **44** | ⇑*i*P | | **Pg** | **23 53 09.2** | **-0.5** |
| | baz=44 | | | | | | | |
| UCH | | | | ⇑*i*S | | **Sg** | **23 53 30.1** | **-0.9** |
| | baz=44 | | | | | | | |
| **MRKS** | **Merke** | **1.69** | **6** | *e*P | | **Pg** | **23 53 11.2** | **+0.5** |
| | 515nm,0.2s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **23 53 33.9** | **+1.1** |
| | 2µm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **1.69** | **6** | P | | **Pg** | **23 53 11.2** | **+0.5** |
| | 515nm,0.2s | | | | | | | |
| MRKS | | | | S | | **Sg** | **23 53 33.9** | **+1.1** |
| | 2µm,0.3s | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.71** | **20** | ⇓P | | **Pg** | **23 53 10.2** | **-0.7** |
| | 277nm,0.3s,SNR=470 | | | | | | | |
| EKS2 | | | | ⇓S | | **Sg** | **23 53 33.4** | **+0.3** |
| | 950nm,0.3s | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.71** | **20** | *i* PN | | **Pg** | **23 53 10.2** | **-0.7** |
| EKS2 | | | | *i* S | | **Sg** | **23 53 33.2** | **0.0** |
| **EKS2** | **Erkin-Say** | **1.71** | **20** | ⇑*i*P | | **Pg** | **23 53 10.2** | **-0.7** |
| | baz=19 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sg** | **23 53 32.3** | **-0.9** |
| | baz=19 | | | | | | | |
| **DRK** | **Karamyk** | **1.82** | **210** | ⇑*i*P | | **Pg** | **23 53 12.5** | **-0.7** |
| | baz=11 | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sg** | **23 53 36.8** | **-0.1** |
| | baz=11 | | | | | | | |
| **BTK** | **Batken** | **1.93** | **239** | *e*PN | | **Pb** | **23 53 13.4** | **+0.6** |
| BTK | | | | *e*S | | **Sg** | **23 53 38.9** | **-1.5** |
| **BTK** | **Batken** | **1.93** | **239** | P | | **Pb** | **23 53 12.0** | **-0.8** |
| BTK | | | | S | | **Sb** | **23 53 37.0** | **+0.4** |
| **AAK** | **Ala-Archa** | **1.94** | **35** | Pn | | **Pg** | **23 53 14.5** | **-0.8** |
| | 522nm,0.3s,baz=185,slow=5.3,SNR=8390 | | | | | | | |
| AAK | | | | Lg | | Lg | 23 53 40.1 | |
| | 126nm,0.3s,baz=135,slow=20,SNR=4.9 | | | | | | | |
| AAK | | | | LR | | LR | 23 54 16.1 | |
| | comp=Z,342nm,19.9s,baz=246,slow=49 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.94** | **35** | ⇑P | | **Pg** | **23 53 14.5** | **-0.8** |
| | 1µm,0.3s,SNR=2113 | | | | | | | |
| AAK | | | | ⇓S | | **Sg** | **23 53 39.9** | **-0.7** |
| | 2µm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.94** | **35** | ⇑Pn | | **Pb** | **23 53 13.4** | **+0.4** |
| | 660nm,0.3s | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 23 53 39.7 | |
| | 1µm,0.5s | | | | | | | |
| **FRU1** | **Bishkek** | **2.13** | **35** | PN | | **Pg** | **23 53 17.7** | **-1.5** |
| **FRU1** | **Bishkek** | **2.13** | **35** | ⇓*i*P | | **Pb** | **23 53 16.8** | **+0.5** |
| | baz=34 | | | | | | | |
| FRU1 | | | | ⇓*i*S | | **Sb** | **23 53 44.0** | **+1.6** |
| | baz=34 | | | | | | | |
| **FRU1** | **Bishkek** | **2.13** | **35** | | | **Pg** | **23 53 17.6** | **-1.5** |
| **PSK** | **Pskem** | **2.14** | **295** | *e*P | | **Pb** | **23 53 16.0** | **-0.4** |
| PSK | | | | *i* S | | **Sg** | **23 53 47.0** | **-0.2** |
| **KBK** | **Karagaybulak** | **2.17** | **42** | ⇑P | | **Pb** | **23 53 18.2** | **+1.3** |
| | 561nm,0.3s,SNR=412 | | | | | | | |
| KBK | | | | ⇑S | | **Sg** | **23 53 47.4** | **-0.4** |
| | 4µm,0.4s | | | | | | | |
| **KBK** | **Karagaybulak** | **2.17** | **42** | *i* PN | | **Pb** | **23 53 17.2** | **+0.4** |
| KBK | | | | *i* S | | **Sb** | **23 53 44.6** | **+1.2** |
| **KBK** | **Karagaybulak** | **2.17** | **42** | ⇑*i*P | | **Pb** | **23 53 17.2** | **+0.4** |
| | baz=42 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sb** | **23 53 44.6** | **+1.2** |
| | baz=42 | | | | | | | |
| **DZA** | **Taraz** | **2.21** | **327** | *e*PN | | **Pb** | **23 53 16.5** | **-0.9** |
| **DZA** | **Taraz** | **2.21** | **327** | *e*P | | **Pg** | **23 53 19.9** | **-0.6** |
| | 1µm,0.4s | | | | | | | |
| DZA | | | | *e*S | | **Sg** | **23 53 48.4** | **-0.7** |
| | 8µm,0.4s | | | | | | | |
| **DZA** | **Taraz** | **2.21** | **327** | *e*Pg | | **Pb** | **23 53 16.5** | **-0.9** |
| | baz=328 | | | | | | | |
| **DZA** | **Taraz** | **2.21** | **327** | Pg | | **Pg** | **23 53 19.9** | **-0.6** |
| | 1µm,0.4s | | | | | | | |
| DZA | | | | Lg | | Lg | 23 53 48.4 | |
| | 8µm,0.4s | | | | | | | |
| **CHMS** | **Chumysh** | **2.34** | **34** | ⇑P | | **Pb** | **23 53 20.1** | **+0.4** |
| | 165nm,0.3s,SNR=61 | | | | | | | |
| CHMS | | | | ⇓S | | **Sg** | **23 53 51.8** | **-1.7** |
| | 1µm,0.5s | | | | | | | |
| **CHMS** | **Chumysh** | **2.34** | **34** | *i* PN | | **Pb** | **23 53 20.1** | **+0.4** |
| CHMS | | | | *i* S | | **Sb** | **23 53 49.5** | **+1.2** |
| **CHMS** | **Chumysh** | **2.34** | **34** | ⇑*i*P | | **Pb** | **23 53 20.1** | **+0.4** |
| | baz=33 | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sb** | **23 53 49.5** | **+1.2** |
| | baz=33 | | | | | | | |
| **CHRV** | **Charvak** | **2.36** | **285** | *e*P | | **Pg** | **23 53 22.0** | **-1.3** |
| CHRV | | | | *e*S | | **Sg** | **23 53 54.0** | **+0.1** |
| **IUG** | **Iuzhnay** | **2.47** | **297** | *e*PN | | **Pb** | **23 53 20.6** | **-1.3** |
| **IUG** | **Iuzhnay** | **2.47** | **297** | *e*Pg | | **Pb** | **23 53 20.6** | **-1.3** |
| | baz=298 | | | | | | | |
| **USP** | **Ospenovka** | **2.48** | **27** | ⇑P | | **Pb** | **23 53 21.6** | **-0.5** |
| | 200nm,0.3s,SNR=96 | | | | | | | |
| USP | | | | ⇓S | | **Sb** | **23 53 54.5** | **+2.3** |
| | 1µm,0.4s | | | | | | | |
| **USP** | **Ospenovka** | **2.48** | **27** | *i* PN | | **Pb** | **23 53 21.5** | **-0.5** |
| USP | | | | *i* S | | **Sb** | **23 53 52.7** | **+0.5** |
| **USP** | **Ospenovka** | **2.48** | **27** | ⇑*i*P | | **Pb** | **23 53 21.5** | **-0.5** |
| | baz=26 | | | | | | | |
| USP | | | | ⇑*i*S | | **Sb** | **23 53 52.7** | **+0.5** |
| | baz=26 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.63** | **56** | ⇑*i*P | | **Pb** | **23 53 23.6** | **-1.2** |
| | baz=56 | | | | | | | |
| BOOM | | | | ⇑*i*S | | **Sb** | **23 53 55.2** | **-1.6** |
| | baz=56 | | | | | | | |
| **SGDS** | **Sogindy** | **2.68** | **27** | *e*Pg | | **Pb** | **23 53 24.0** | **-1.6** |
| | baz=28 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.69** | **45** | ⇑P | | **Pb** | **23 53 25.0** | **-0.8** |
| | 168nm,0.2s,SNR=83 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.69** | **45** | *i* PN | | **Pb** | **23 53 24.9** | **-0.9** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,253nm,0.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.69** | **45** | ⇑Pn | | **Pb** | **23 53 24.4** | **-1.5** |
| | comp=Z,253nm,0.5s | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 23 54 02.6 | |
| | comp=Z,992nm,0.6s | | | | | | | |
| **ULHL** | **Ulahol** | **2.71** | **63** | *i* PN | | **Pb** | **23 53 25.0** | **-1.2** |
| ULHL | | | | *i* S | | **Sb** | **23 53 58.0** | **-1.1** |
| **ULHL** | **Ulahol** | **2.71** | **63** | ⇑*i*P | | **Pb** | **23 53 25.0** | **-1.2** |
| | baz=63 | | | | | | | |
| ULHL | | | | ⇑*i*S | | **Sb** | **23 53 58.0** | **-1.1** |
| | baz=63 | | | | | | | |
| **KK02** | **Karatay Array** | **2.75** | **319** | ⇑Pn | | **Pn** | **23 53 23.7** | **+2.4** |
| | comp=Z,131nm,0.5s | | | | | | | |
| KK02 | | | | ⇑Lg | | Lg | 23 54 04.5 | |
| | comp=Z,421nm,0.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **2.75** | **319** | PN | | **Pb** | **23 53 23.9** | **-2.8** |
| **KKAR** | **Karatay Array** | **2.75** | **319** | | | **Pb** | **23 53 23.9** | **-2.8** |
| **KSH** | **Kashi** | **2.76** | **123** | Pn | | **Pb** | **23 53 24.6** | **-2.3** |
| KSH | | | | Sn | | **Sb** | **23 54 00.6** | **+0.2** |
| KSH | | | | smax | | smax | | |
| | comp=Z,1µm,0.8s | | | | | | | |
| KSH | | | | smax | | smax | | |
| | comp=Z,1µm,0.8s | | | | | | | |
| **TAS** | **Tashkent** | **2.80** | **277** | PN | | **Pn** | **23 53 23.7** | **+1.8** |
| **TAS** | **Tashkent** | **2.80** | **277** | | | **Pn** | **23 53 23.7** | **+1.8** |
| **CHM** | **Chimkent** | **2.83** | **297** | *e*P | | **Pg** | **23 53 31.6** | **-0.7** |
| | comp=Z,2.6nm,0.2s | | | | | | | |
| CHM | | | | *e*S | | **Sg** | **23 54 08.6** | **-0.4** |
| | comp=Z,3µm,0.6s | | | | | | | |
| **GAR** | **Garm** | **2.91** | **226** | | | **Pb** | **23 53 26.7** | **-2.7** |
| **KST** | **Kastek** | **2.97** | **47** | *e*P | | **Pb** | **23 53 32.6** | **+2.1** |
| | comp=Z,68nm,0.3s | | | | | | | |
| KST | | | | *e*S | | **Sg** | **23 54 10.5** | **-3.2** |
| | comp=Z,627nm,0.5s | | | | | | | |
| **KST** | **Kastek** | **2.97** | **47** | Pg | | **Pb** | **23 53 32.6** | **+2.1** |
| | comp=Z,68nm,0.3s | | | | | | | |
| KST | | | | Lg | | Lg | 23 54 10.5 | |
| | comp=Z,627nm,0.5s | | | | | | | |
| **DGS** | **Degeres** | **3.01** | **43** | *e*P | | **Pb** | **23 53 33.2** | **+2.1** |
| | comp=Z,157nm,0.5s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **23 54 11.3** | **-3.4** |
| | comp=Z,756nm,0.7s | | | | | | | |
| **DGS** | **Degeres** | **3.01** | **43** | Pg | | **Pb** | **23 53 33.2** | **+2.1** |
| | comp=Z,157nm,0.5s | | | | | | | |
| DGS | | | | Lg | | Lg | 23 54 11.3 | |
| | comp=Z,756nm,0.7s | | | | | | | |
| **BRLS** | **Boroldav** | **3.06** | **311** | *e*PN | | **Pb** | **23 53 30.3** | **-1.7** |
| **BRLS** | **Boroldav** | **3.06** | **311** | *e*P | | **Pb** | **23 53 33.8** | **+1.8** |
| | comp=Z,555nm,0.5s | | | | | | | |
| BRLS | | | | *e*S | | **Sb** | **23 54 12.0** | **+2.9** |
| | comp=Z,780nm,0.6s | | | | | | | |
| **BRLS** | **Boroldav** | **3.06** | **311** | *e*Pg | | **Pb** | **23 53 30.4** | **-1.7** |
| | baz=307 | | | | | | | |
| **BRLS** | **Boroldav** | **3.06** | **311** | Pg | | **Pb** | **23 53 33.8** | **+1.8** |
| | comp=Z,555nm,0.5s | | | | | | | |
| BRLS | | | | Lg | | Lg | 23 54 12.0 | |
| | comp=Z,780nm,0.6s | | | | | | | |
| **MTBS** | **Maitube** | **3.29** | **50** | *e*P | | **Pg** | **23 53 39.5** | **-1.7** |
| | comp=Z,41nm,0.2s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** |

SATY *eS* **Sg** **23 54 59.4 -3.2**
comp=Z,229nm,0.4s
**SATY** **Saty** **4.50 62** *e*Pg **Pg** **23 54 00.8 -3.5**
baz=63
**SATY** **Saty** **4.50 62** Pg **Pg** **23 54 01.4 -3.0**
comp=Z,46nm,0.4s
SATY Lg Lg 23 54 59.4
comp=Z,229nm,0.4s
**KURS** **Kuram** **4.55 56** *e*P **Pg** **23 54 02.4 -2.8**
comp=Z,36nm,0.7s
KURS *eS* **Sg** **23 55 01.3 -2.7**
comp=Z,90nm,0.8s
**KURS** **Kuram** **4.55 56** Pg **Pg** **23 54 02.4 -2.8**
comp=Z,36nm,0.7s
KURS Lg Lg 23 55 01.3
comp=Z,90nm,0.8s
**ZHN** **Zhinishke** **4.57 61** *e*P **Pg** **23 54 02.5 -3.1**
comp=Z,36nm,0.2s
ZHN *eS* **Sg** **23 55 01.2 -3.5**
comp=Z,114nm,0.5s
**ZHN** **Zhinishke** **4.57 61** Pg **Pg** **23 54 02.5 -3.1**
comp=Z,36nm,0.2s
ZHN Lg Lg 23 55 01.2
comp=Z,114nm,0.5s
**ARXS** **Arharly** **4.76 47** *e*PN **Pn** **23 53 51.8 +2.8**
**ARXS** **Arharly** **4.76 47** *e*P **Pg** **23 54 05.9 -3.4**
comp=Z,50nm,0.7s
ARXS *eS* **Sg** **23 55 07.1 -3.8**
comp=Z,180nm,0.5s
**ARXS** **Arharly** **4.76 47** Pg **Pg** **23 54 05.9 -3.4**
comp=Z,50nm,0.7s
ARXS Lg Lg 23 55 07.1
comp=Z,180nm,0.5s
**SAM** **Samarkand** **4.79 255** *e*P **Pn** **23 53 52.0 +2.7**
SAM *eS* **Sg** **23 55 06.0 -5.7**
**KPKS** **Kokpek** **4.86 59** *e*PN **Pg** **23 54 07.4 -3.8**
**KPKS** **Kokpek** **4.86 59** *e*Pg **Pg** **23 54 07.5 -3.8**
baz=59
**UZB** **Uzynbulak** **4.95 63** *e*PN **Pg** **23 54 09.3 -3.6**
**UZB** **Uzynbulak** **4.95 63** *e*P **Pb** **23 54 08.4 +4.1**
comp=Z,50nm,0.9s
UZB *eS* **Sg** **23 55 11.3 -5.7**
comp=Z,87nm,0.4s
**UZB** **Uzynbulak** **4.95 63** *e*Pg **Pg** **23 54 09.4 -3.6**
baz=64
**UZB** **Uzynbulak** **4.95 63** Pg **Pb** **23 54 08.4 +4.1**
comp=Z,50nm,0.9s
UZB Lg Lg 23 55 11.3
comp=Z,87nm,0.4s
**BLB** **Baldybastay** **5.06 51** *e*P **Pb** **23 54 10.7 +4.5**
comp=Z,63nm,0.7s
BLB *eS* **Sg** **23 55 15.2 -5.4**
comp=Z,146nm,0.4s
**BLB** **Baldybastay** **5.06 51** Pg **Pb** **23 54 10.7 +4.5**
comp=Z,63nm,0.7s
BLB Lg Lg 23 55 15.2
comp=Z,146nm,0.4s
**SHLS** **Shalkode** **5.25 64** *e*PN **Pg** **23 54 20.0 +1.3**
**SHLS** **Shalkode** **5.25 64** *e*P **Pg** **23 54 21.6 +3.0**
comp=Z,36nm,0.4s
SHLS *eS* **Sg** **23 55 34.1 +7.5**
comp=Z,148nm,0.6s
**SHLS** **Shalkode** **5.25 64** *e*Pg **Pg** **23 54 20.0 +1.3**
baz=66
**SHLS** **Shalkode** **5.25 64** Pg **Pg** **23 54 21.6 +3.0**
comp=Z,36nm,0.4s
SHLS Lg Lg 23 55 34.1
comp=Z,148nm,0.6s
**NUT** **Nurota** **5.57 267** *e*P **Pn** **23 54 00.0 0.0**
NUT *eS* **Sg** **23 55 34.0 -2.8**
**TDK** **Taldyqorghan** **5.59 43** *e*PN **Pn** **23 54 02.0 +1.7**
TDK *e* 23 54 20.3
**TDK** **Taldyqorghan** **5.59 43** *e*P **Pg** **23 54 21.1 -4.1**
comp=Z,101nm,0.6s
TDK *eS* **Sg** **23 55 33.2 -4.4**
comp=Z,184nm,0.7s
**TDK** **Taldyqorghan** **5.59 43** *e*Pn **Pn** **23 54 02.1 +1.7**
baz=44
TDK *e*Pg Pg 23 54 20.4 -4.8
baz=44
**TDK** **Taldyqorghan** **5.59 43** Pg **Pg** **23 54 21.1 -4.1**
comp=Z,101nm,0.6s
TDK Lg Lg 23 55 33.2
comp=Z,184nm,0.7s
**DJR** **Jarkent** **5.98 55** *e*P **Pg** **23 54 29.4 -3.3**
comp=Z,30nm,0.5s
DJR *eS* **Sg** **23 55 47.6 -2.5**
comp=Z,65nm,0.7s
**DJR** **Jarkent** **5.98 55** Pg **Pg** **23 54 29.4 -3.3**
comp=Z,30nm,0.5s
DJR Lg Lg 23 55 47.6
comp=Z,65nm,0.7s
**OTUK** **Ortayu** **7.20 357** ⇑Pn **Pn** **23 54 24.4 +2.1**
comp=Z,4.2nm,0.6s
OTUK ⇓Pg Pg 23 54 49.3 -6.4
comp=Z,13nm,0.6s
OTUK ⇑Lg Lg 23 56 24.5
comp=Z,285nm,0.8s
**KBL** **Kabul** **7.22 207** PN **Pn** **23 54 25.7 +2.9**
**KBL** **Kabul** **7.22 207** Pn **Pn** **23 54 25.7 +2.9**
**CEP** **Cherat** **7.28 187** P **Pn** **23 54 27.2 +3.6**
**NIL** **Nilore** **7.40 178** P **Pn** **23 54 28.1 +2.9**
**NIL** **Nilore** **7.40 178** **Pn** **23 54 28.1 +2.9**
**THW** **Thamme Wali** **8.31 187** P **Pn** **23 54 40.3 +2.6**
**MAKZ** **Makanchi** **8.66 45** P **Pn** **23 54 44.2 +1.8**
**MAKZ** **Makanchi** **8.66 45** ⇓Pn **Pn** **23 54 44.2 +1.8**
comp=Z,4.6nm,0.8s
MAKZ ⇑Lg Lg 23 57 12.9
comp=Z,21nm,1.1s
**MAKZ** **Makanchi** **8.66 45** Pn **Pn** **23 54 44.2 +1.8**
**MK31** **Makanchi Array** **8.82 46** P **Pn** **23 54 47.5 +2.9**
**MK31** **Makanchi Array** **8.82 46** ⇓Pn **Pn** **23 54 47.3 +2.6**
comp=Z,6.7nm,0.7s
MK31 ⇑Lg Lg 23 57 17.5
comp=Z,14nm,0.7s
**MK31** **Makanchi Array** **8.82 46** **Pn** **23 54 47.5 +2.9**
**MKAR** **Makanchi Array** **8.82 46** Pn **Pn** **23 54 47.3 +2.6**
comp=Z,0.6nm,0.3s,baz=222,slow=14,SNR=46
**MKAR** **Makanchi Array** **8.82 46** P **Pn** **23 54 47.5 +2.8**
**MKAR** **Makanchi Array** **8.82 46** Pn **Pn** **23 54 47.5 +2.8**
**BRZS** **Berezniki** **8.92 359** *e*P **Pn** **23 54 46.6 +0.6**
**BRZS** **Berezniki** **8.92 359** *e*Pn **Pn** **23 54 46.7 +0.6**
baz=359
**KURBB** **Kurchatov Arra** **10.31 20** Pn **Pn** **23 55 05.0 +0.1**
comp=Z,0.4nm,0.3s,baz=208,slow=13,SNR=39
KURBB Lg Lg 23 58 03.9
comp=Z,0.6nm,0.3s,baz=220,slow=30,SNR=5.5
KURBB LR LR 23 59 24.5
comp=Z,121nm,19.0s,baz=174,slow=39
**KURBB** **Kurchatov Arra** **10.31 20** ⇑Pn **Pn** **23 55 05.0 +0.1**
comp=Z,7.7nm,0.8s
KURBB ⇑Lg Lg 23 58 01.4
comp=Z,22nm,0.7s
**KURK** **Kurchatov** **10.42 20***ce*P **Pn** **23 55 07.5 +1.1**
KURK pmax pmax
comp=Z,14nm,2.5s
**KURK** **Kurchatov** **10.42 20** Pn **Pn** **23 55 07.2 +0.7**
**SEM** **Semipalatinsk** **10.63 26** *e*P **Pn** **23 55 10.7 +1.1**
**SEM** **Semipalatinsk** **10.63 26** *e*Pn **Pn** **23 55 10.7 +1.1**
baz=26
**HRA** **Herat** **10.80 235** Pn **Pn** **23 55 11.2 -0.8**
**WMQ** **Urumqi** **11.22 71** *e*P Pn 23 55 23.7 +6.2
**GEYT** **Alibeck** **11.90 260** Pn **Pn** **23 55 25.5 -1.4**
comp=Z,0.4nm,0.3s,baz=71,slow=19,SNR=3.2
**BVAR** **Borovoye Array** **12.10 352** Pn **Pn** **23 55 29.7 +0.3**
comp=Z,0.9nm,0.3s,baz=116,slow=13,SNR=15
BVAR Sn **Sn** **23 57 38.4 -5.3**
comp=Z,0.5nm,0.3s,baz=146,slow=20,SNR=2.2
BVAR Lg Lg 23 59 01.6
comp=Z,1.7nm,0.3s,baz=120,slow=24,SNR=5.6
**BRVK** **Borovoye** **12.14 352***ce*P **Pn** **23 55 30.2 +0.2**
BRVK pmax pmax
comp=Z,8.0nm,2.5s
**BRVK** **Borovoye** **12.14 352** ⇓Pn **Pn** **23 55 29.7 -0.3**
comp=Z,5.0nm,0.9s
BRVK ⇑Lg Lg 23 59 03.9
comp=Z,108nm,1.3s
**BRVK** **Borovoye** **12.14 352** **Pn** **23 55 29.5 -0.5**
**AB31** **Akbulak array** **12.31 316** Pn **Pn** **23 55 32.2 -0.1**
comp=Z,7.7nm,0.3s,baz=126,slow=13,SNR=100
**ABKAR** **Akbulak array** **12.31 316** Pn **Pn** **23 55 32.1 -0.2**
**ABKAR** **Akbulak array** **12.31 316** **Pn** **23 55 31.9 -0.4**
**DGZ** **Jazzator, Alta** **13.31 45** *i* P **Pn** **23 55 49.5 +3.3**
**AKTO** **Aktyubinsk** **14.02 317** Pn **Pn** **23 55 55.8 +0.2**
comp=Z,0.3nm,0.3s,baz=113,slow=13,SNR=8.5
AKTO Sn **Sn** **23 58 22.4 -8.1**
baz=162,slow=19,SNR=1.3
AKTO Lg Lg 00 00 05.8
baz=45,slow=23,SNR=0.9
AKTO LR LR 00 01 41.7
comp=Z,123nm,20.0s,baz=101,slow=39
**AKTO** **Aktyubinsk** **14.02 317** Pn **Pn** **23 55 55.3 -0.3**
**ZAA0** **Zalesovo Array** **15.14 28** ⇑Pn **Pn** **23 56 12.0 +1.2**
comp=Z,1.6nm,0.6s
**ZAA0** **Zalesovo Array** **15.14 28** **Pn** **23 56 12.4 +1.6**
ZAA0 IAmb IAmb 23 56 18.3
comp=Z,12nm,0.6s
**ZALV** **Zalesovo Beam** **15.14 28** Pn **Pn** **23 56 12.1 +1.3**
comp=Z,2.9nm,0.3s,baz=219,slow=12,SNR=28
ZALV Sn **Sn** **23 58 57.0 -0.9**
comp=Z,0.1nm,0.3s,baz=222,slow=25,SNR=2.0
ZALV Lg Lg 00 00 42.0
comp=Z,0.2nm,0.3s,baz=216,slow=29,SNR=2.4
**ZALV** **Zalesovo Beam** **15.14 28** *i* P **P** **23 56 15.6 -0.3**
ZALV pmax pmax
comp=Z,11nm,0.5s
**ZALV** **Zalesovo Beam** **15.14 28** **Pn** **23 56 12.8 +2.0**
**PYUN** **Piuthan** **15.32 144** *e*P **Pn** **23 56 09.8 -3.7**
comp=Z,18nm,0.6s
**DANN** **Dangsing** **15.45 142** *e*P **Pn** **23 56 10.4 -5.0**
comp=Z,5.9nm,0.3s
**KOLN** **Koldanda** **15.87 143** *e*P **Pn** **23 56 17.0 -3.7**
comp=Z,4.8nm,0.3s
**GKN** **Gorkha** **16.16 140** *e*P **Pn** **23 56 20.5 -3.9**
comp=Z,2.9nm,0.3s
**GUN** **Gumba** **16.86 137** *e*P **Pn** **23 56 31.1 -2.3**
comp=Z,7.4nm,0.5s
**PKIN** **Phulchoki** **16.89 139** *e*P **Pn** **23 56 30.8 -2.9**
comp=Z,3.5nm,0.3s
**PKI** **Pulchoki** **16.90 139** *e*P **Pn** **23 56 30.7 -3.2**
comp=Z,2.5nm,0.3s
**JIRN** **Jiri** **17.22 137** *e*P **Pn** **23 56 35.9 -2.1**
comp=Z,9.9nm,0.4s
**GOMU** **GeErMu** **17.72 99** P **Pn** **23 56 44.4 +0.2**
GOMU pmax pmax
comp=Z,1.0nm,0.9s
**RAMN** **Ramite** **18.01 137** *e*P **Pn** **23 56 46.9 -0.7**
comp=Z,5.2nm,0.4s
**ARU** **Arti** **18.02 333** P **Pn** **23 56 46.9 -0.4**
comp=Z,0.0nm,0.3s,baz=155,slow=11,SNR=5.2
ARU LR LR 00 03 05.2
comp=Z,37nm,19.0s,baz=250,slow=35
**ARU** **Arti** **18.02 333***c i* P **Pn** **23 56 47.4 +0.1**
ARU S **Sn** **00 00 08.2 +0.5**
ARU pmax pmax
comp=Z,7.0nm,1.0s
**ARU** **Arti** **18.02 333** P **P** **23 56 47.7 0.0**
**TAPN** **Taplejung** **18.28 134** *e*P **P** **23 56 52.9 +1.8**
comp=Z,4.0nm,0.4s
**ODAN** **Odare** **18.49 136** *e*P **Pn** **23 56 54.6 +1.0**
comp=Z,12nm,0.6s
**GTA** **Gaotai** **20.52 86** *e*P Pn 23 57 17.0 -0.6
GTA pP sP 23 57 23.1 -0.3
GTA sP pP 23 57 26.1 +5.1
GTA pmax pmax
comp=Z,4.0nm,0.9s
GTA pmax pmax
comp=Z,110nm,5.8s
GTA LR LR
comp=Z,100nm,16.0s
GTA LR LR
comp=Z,120nm,16.7s
GTA LR LR
comp=Z,97nm,15.3s
**BELG** **Belogornoye** **20.64 312** P **P** **23 57 15.1 -1.2**
comp=Z,6.7nm,0.8s,baz=130,slow=16,SNR=1.6
**GNI** **Garni** **21.43 277** P **P** **23 57 23.8 -1.4**
comp=Z,5.2nm,0.7s,baz=30,slow=23,SNR=4.1
GNI LR LR 00 07 30.4
comp=Z,22nm,19.1s,baz=5.0,slow=42
**GNI** **Garni** **21.43 277***ce*P **P** **23 57 27.5 +2.3**
GNI pmax pmax
comp=Z,11nm,0.9s
**GNI** **Garni** **21.43 277** P **P** **23 57 25.8 +0.6**
GNI IAmb IAmb 23 57 37.2
comp=Z,19nm,0.9s
**ZEI** **Tsey** **21.66 284** *e*P **P** **23 57 21.3 -6.5**
ZEI pmax pmax
comp=Z,5.0nm,1.2s
**MOY** **Mondy** **21.91 52** *e*P **P** **23 57 35.2 +5.0**
MOY pmax pmax
comp=Z,13nm,2.2s
**ONI** **Oni** **22.01 284** P **P** **23 57 32.1 +0.7**
ONI pmax pmax
comp=Z,9.0nm,0.8s
**ONI** **Oni** **22.01 284** P **P** **23 57 32.1 +0.7**
ONI IAmb IAmb 23 57 45.5
comp=Z,8.6nm,0.8s
**SHL** **Shillong** **22.02 129** P **P** **23 57 32.5 +0.8**
SHL pmax pmax
comp=Z,13nm,0.4s
**SHL** **Shillong** **22.02 129** P **P** **23 57 32.5 +0.8**
SHL IAmb IAmb 23 57 55.6
comp=Z,13nm,0.4s
**KBZ** **Khabaz** **22.32 287** P **P** **23 57 35.6 +1.1**
comp=Z,0.8nm,0.6s,baz=89,slow=12,SNR=0.9
**KBZ** **Khabaz** **22.32 287** *i* P **P** **23 57 38.3 +3.8**
KBZ pmax pmax
comp=Z,3.0nm,0.8s
**KIV** **Kislovodsk** **22.46 288** *e*P **P** **23 57 38.6 +2.4**
KIV pmax pmax
comp=Z,7.0nm,1.0s
**KIV** **Kislovodsk** **22.46 288** P **P** **23 57 35.8 -0.4**
KIV IAmb IAmb 23 57 57.4
comp=Z,12nm,1.2s
**KARS** **Kars** **22.58 279** P **P** **23 57 37.3 -0.2**
KARS pmax pmax
comp=Z,32nm,0.9s
**KARS** **Kars** **22.58 279** P **P** **23 57 37.3 -0.2**
**ZAK** **Zakamensk** **22.97 56** *e*P **P** **23 57 43.0 +1.5**
ZAK pmax pmax
comp=Z,15nm,1.1s
**KIRV** **Kirov** **23.01 328** LR LR 00 07 16.6
comp=Z,151nm,19.1s,baz=127,slow=38
**KIRV** **Kirov** **23.01 328***ce*P **P** **23 57 42.6 +1.0**
**SIRT** **Sirnak** **23.85 271** P **P** **23 57 50.0 -0.3**
**GURO** **Guroymak-BITLI** **23.85 274** P **P** **23 57 49.9 -0.4**
**SONM** **Songino Array** **24.66 63** P **P** **23 57 58.9 +1.2**
comp=Z,2.9nm,0.9s,baz=271,slow=9.8,SNR=13
**SONM** **Songino Array** **24.66 63** P **P** **23 57 59.2 +1.5**
SONM pmax pmax
comp=Z,3.0nm,1.0s
**SONM** **Songino Array** **24.66 63** P **P** **23 57 59.2 +1.5**
**ULN** **Ulaanbaatar** **25.10 63***ce*P **P** **23 58 03.4 +1.7**
ULN pmax pmax
comp=Z,8.0nm,1.0s
**ULN** **Ulaanbaatar** **25.10 63** P **P** **23 58 03.2 +1.5**
ULN IAmb IAmb 23 58 04.4
comp=Z,5.9nm,0.9s
**RAYN** **Ar Rayn** **28.90 241** P **P** **23 58 36.2 +0.2**
RAYN pmax pmax
comp=Z,6.0nm,1.1s
**RAYN** **Ar Rayn** **28.90 241** P **P** **23 58 36.2 +0.2**
RAYN IAmb IAmb 23 58 44.3
comp=Z,5.5nm,1.1s
**NRIK** **Noril'sk** **29.37 10** P **P** **23 58 40.6 +1.1**
comp=Z,1.0nm,0.4s,baz=201,slow=12,SNR=3.4
**NRIK** **Noril'sk** **29.37 10** *i* P **P** **23 58 41.1 +1.5**
NRIK pmax pmax
comp=Z,7.0nm,1.8s
**BR131** **Keskin Array S** **29.83 281** P **P** **23 58 44.2 0.0**
BR131 pmax pmax
comp=Z,6.0nm,0.8s
**BR131** **Keskin Array S** **29.83 281** P **P** **23 58 44.2 0.0**
BR131 IAmb IAmb 23 58 57.8
comp=Z,6.4nm,0.8s
**BRTR** **Keskin Array B** **29.83 281** P **P** **23 58 45.0 +0.8**
comp=Z,2.1nm,0.7s,baz=80,slow=10,SNR=5.5
**BRTR** **Keskin Array B** **29.83 281** *i* P **P** **23 58 45.2 +1.0**
BRTR pmax pmax
comp=Z,2.0nm,0.7s
**BRTR** **Keskin Array B** **29.83 281** P **P** **23 58 44.4 +0.2**
**AKASG** **Malin Array Be** **31.54 303** LR LR 00 14 43.8
comp=Z,70nm,18.4s,baz=356,slow=42
**CMAR** **Chiang Mai Arr** **31.65 128** P **P** **23 59 00.3 +0.1**
comp=Z,0.6nm,0.3s,baz=310,slow=7.6,SNR=4.7
**MLR** **Muntele Rosu** **34.15 293** P **P** **23 59 22.8 +0.8**
MLR pmax pmax
comp=Z,11nm,1.1s
**MLR** **Muntele Rosu** **34.15 293** P **P** **23 59 22.8 +0.8**
**BURAR** **Bucovina Array** **34.34 297** P **P** **23 59 24.0 +0.4**
**BUR08** **Bucovina Ar. S** **34.35 297** P **P** **23 59 24.0 +0.3**
BUR08 IAmb IAmb 23 59 32.2
comp=Z,3.6nm,1.1s
**FINES** **FINESS Array B** **34.70 322** P **P** **23 59 27.1 +0.6**
comp=Z,0.9nm,0.4s,baz=118,slow=9.8,SNR=9.1
**FINES** **FINESS Array B** **34.70 322** P **P** **23 59 26.8 +0.3**
**VTS** **Vitosha** **36.67 289** P **P** **23 59 44.9 +1.1**
VTS pmax pmax
comp=Z,15nm,1.5s
**VTS** **Vitosha** **36.67 289** P **P** **23 59 44.9 +1.1**
**ARCES** **ARCESS Array B** **37.60 335** P **P** **23 59 51.9 +0.8**
comp=Z,1.3nm,0.5s,baz=110,slow=8.5,SNR=24
**ARCES** **ARCESS Array B** **37.60 335** P **P** **23 59 50.9 -0.3**
ARCES IAmb IAmb 00 00 14.2
comp=Z,4.2nm,1.1s
**IDI** **Anoyia** **37.86 277** LR LR 00 16 21.7
comp=Z,39nm,19.2s,baz=349,slow=38
**YAK** **Yakutsk** **39.39 38** P **P** **00 00 07.0 +0.8**
comp=Z,5.4nm,0.3s,baz=202,slow=1.0,SNR=4.5
**YAK** **Yakutsk** **39.39 38** P **P** **00 00 07.0 +0.8**
**PDG** **Podgorica** **39.55 290** P **P** **00 00 08.5 +0.7**
**TIXI** **Tiksi** **40.97 24** P **P** **00 00 19.7 +0.5**
TIXI pmax pmax
comp=Z,3.0nm,0.8s
**TIXI** **Tiksi** **40.97 24** P **P** **00 00 19.7 +0.5**
**KLR** **Kul'dur** **41.31 58** P **P** **00 00 22.9 +0.6**
comp=Z,1.8nm,0.7s,baz=290,slow=11,SNR=7.2
**NC303** **NORSAR Array S** **41.70 320** P **P** **00 00 25.8 +0.4**
**GEC2** **GERESS Array S** **41.72 301** P **P** **00 00 25.7 -0.1**
**GERES** **GERESS Array B** **41.72 301** P **P** **00 00 27.0 +1.2**
comp=Z,1.2nm,0.7s,baz=72,slow=8.6,SNR=6.4
**GERES** **GERESS Array B** **41.72 301** P **P** **00 00 27.0 +1.2**
**GERES** **GERESS Array B** **41.72 301** P **P** **00 00 26.2 +0.4**
**NB2** **NORSAR Subarra** **41.78 320** P **P** **00 00 26.0 -0.1**
comp=Z,5.4nm,0.9s,baz=91,slow=8.6
**NOA** **NORSAR Array B** **41.78 320** P **P** **00 00 26.0 -0.1**
comp=Z,1.0nm,0.6s,baz=91,slow=7.9,SNR=4.3
NOA LR LR 00 18 29.6
comp=Z,44nm,19.3s,baz=355,slow=37
**NOA** **NORSAR Array B** **41.78 320** P **P** **00 00 26.0 -0.1**
**KSRS** **Korea Array** **42.10 76** LR LR 00 21 07.0
comp=Z,19nm,20.1s,baz=315,slow=41
**ESDC** **Sonseca Array** **56.78 296** P **P** **00 02 20.9 -0.1**
comp=Z,0.7nm,0.9s,baz=55,slow=7.4,SNR=4.2
**MDT** **Midelt** **60.68 289** LR LR 00 32 51.3
comp=Z,58nm,18.9s,baz=256,slow=40
**IMAR** **Indian Mountai** **67.36 19** P **P** **00 03 31.4 -0.2**
**TORD** **Torodi Ar. Bea** **67.41 268** P **P** **00 03 32.0 -0.6**
comp=Z,1.2nm,0.7s,baz=48,slow=5.9,SNR=9.5
**TORD** **Torodi Ar. Bea** **67.41 268** P **P** **00 03 31.6 -1.0**
**H21K** **Melozitna Rive** **67.86 19** P **P** **00 03 35.2 +0.5**
H21K IAmb IAmb 00 03 37.0
comp=Z,3.5nm,1.2s
**BMAR** **Burnt Mountain** **68.14 15** P **P** **00 03 37.0 +0.5**
**INK** **Inuvik** **69.15 10** P **P** **00 03 43.4 +0.7**
INK pmax pmax
comp=Z,4.0nm,1.5s
**INK** **Inuvik** **69.15 10** P **P** **00 03 43.4 +0.7**
INK IAmb IAmb 00 04 02.2
comp=Z,4.3nm,1.4s
**ILAR** **Eielson Array** **69.97 17** P **P** **00 03 46.6 -1.3**
comp=Z,0.4nm,0.9s,baz=320,slow=5.5,SNR=4.9
ILAR pP **pP** **00 03 54.9 +0.6**
comp=Z,0.5nm,0.7s,baz=320,slow=5.4,SNR=4.0
**KOWA** **Kowa** **70.88 273** P **P** **00 03 53.3 -0.9**
KOWA IAmb IAmb 00 04 04.7
comp=Z,5.8nm,1.2s
**MBWA** **Marble Bar** **75.59 135** P **P** **00 04 21.0 -0.7**
MBWA IAmb IAmb 00 04 34.3
comp=Z,12nm,1.4s
**FITZ** **Fitzroy Crossi** **76.45 129** P **P** **00 04 25.2 -1.5**
comp=Z,2.1nm,0.8s,baz=280,slow=6.1,SNR=2.2
**YKA** **Yellowknife Ar** **76.61 4** P **P** **00 04 26.0 -1.0**
comp=Z,0.6nm,0.5s,baz=350,slow=5.7,SNR=12
YKA pP **sP** **00 04 35.1 -0.7**
comp=Z,0.5nm,0.6s,baz=349,slow=5.5,SNR=5.9
**YKA** **Yellowknife Ar** **76.61 4** P **P** **00 04 27.6 +0.5**
**WRA** **Warramunga Arr** **83.16 124** P **P** **00 05 02.2 -0.9**
comp=Z,1.0nm,0.8s,baz=324,slow=4.8,SNR=6.4
WRA pP **pP** **00 05 09.8 +0.2**
comp=Z,1.6nm,0.8s,baz=331,slow=5.1,SNR=6.4
**WB2** **Warramunga Arr** **83.16 124** P **P** **00 05 02.8 -0.2**
WB2 IAmb IAmb 00 05 08.3
comp=Z,8.5nm,1.4s
**ASAR** **Alice Springs** **85.65 127** P **P** **00 05 14.7 -0.9**
comp=Z,1.2nm,0.7s,baz=316,slow=4.8,SNR=12
ASAR pP **pP** **00 05 22.4 +0.2**
comp=Z,1.6nm,0.7s,baz=319,slow=5.4,SNR=7.6
**ASAR** **Alice Springs** **85.65 127** P **P** **00 05 15.3 -0.4**
**ASAR** **Alice Springs** **85.65 127** P **P** **00 05 15.3 -0.4**

*IDC* ***11*** *00:05:39.1±1.1, 10.08S×119.26E, h0km, mb4.4/9, mb1 4.5/12, mb1mx4.1/30, mbtmp4.4/12, ML4.2/3, MS3.6/17, Ms1 3.6/17, ms1mx3.3/74, Error ellipse: s-maj=34.1km s-min=20.6km az=52.0*
*DJA* ***11*** *00:05:42.8±0.2, 10.5S±2.2×11.9E±.1, h10km, M4.7/26, mb4.8/26, mB5.2/9, MLv4.8/23, Mw(mB)4.5/9*
*NEIC* ***11*** *00:05:43.6±1.7, 10.24S±0.07×119.16E±0.07, h36km±7km, mb4.6/34, Error ellipse: s-maj=10.8km s-min=9.1km az=45.0*

**ISC 11 00:05:43.0±0.4, 10.31S±0.05×119.27E±0.04, h35km, n140, s205/141, mb4.7/46, MS3.7/15, 3C, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.68** | **10** | P | **Pn** | **00 05 54.4** | **-1.8** |
| **BASI** | **Baing, Sumba** | **1.29** | **86** | P | **Pn** | **00 06 07.6** | **+3.1** |
| **MMRI** | **Maumere** | **3.36** | **61** | P | **Pn** | **00 06 35.5** | **+2.4** |
| **MMRI** | **Maumere** | **3.36** | **61** | Pn | **Pn** | **00 06 34.6** | **+1.5** |
| **MMRI** | **Maumere** | **3.36** | **61** | P | **Pn** | **00 06 35.8** | **+2.7** |
| **BSSI** | **Bau Bau, Buton** | **4.31** | **16** | P | **Pn** | **00 06 47.9** | **+1.7** |
| **BATI** | **Baumata** | **4.32** | **89** | Pn | **Pn** | **00 06 50.0** | **+3.7** |
| | 62nm,0.3s,baz=308,slow=5.4,SNR=19 | | | | | | |
| BATI | | | | Sn | **Sn** | **00 07 39.2** | **+3.7** |
| | 36nm,0.3s,baz=224,slow=23,SNR=4.0 | | | | | | |
| **BATI** | **Baumata** | **4.32** | **89** | P | **Pn** | **00 06 50.0** | **+3.7** |
| **IGBI** | **Denpasar** | **4.33** | **290** | P | **Pn** | **00 06 45.8** | **-0.6** |
| **SRBI** | **Singaraja** | **4.58** | **299** | P | **Pn** | **00 06 50.5** | **+0.7** |
| **SOEI** | **Soe** | **4.95** | **84** | P | **Pn** | **00 06 58.9** | **+3.9** |
| **SOEI** | **Soe** | **4.95** | **84** | Pn | **Pn** | **00 06 57.4** | **+2.4** |
| **SOEI** | **Soe** | **4.95** | **84** | P | **Pn** | **00 06 59.1** | **+4.1** |
| **BKSI** | **Bulukumba** | **5.03** | **10** | P | **Pn** | **00 06 57.5** | **+1.5** |
| | 2.4nm6µm542nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **5.28** | **5** | Pn | **Pn** | **00 07 00.0** | **+0.5** |
| | 17nm,0.3s,baz=198,slow=4.4,SNR=28 | | | | | | |
| KAPI | | | | Sn | **Sn** | **00 08 01.2** | **+2.0** |
| | 31nm,0.3s,baz=195,slow=21,SNR=9.9 | | | | | | |
| KAPI | | | | LR | LR | 00 09 13.4 | |
| | comp=Z,783nm,19.6s,baz=200,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **5.28** | **5** | | **Pn** | **00 07 00.4** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **5.37** | **289** | P | **Pn** | **00 06 59.9** | **-0.9** |
| | 1.1nm3µm183nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.37** | **289** | | **Pn** | **00 06 59.3** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **5.37** | **289** | P | **Pn** | **00 06 59.9** | **-0.9** |
| **ABJI** | **Asem Bagus** | **5.57** | **296** | P | **Pn** | **00 07 03.9** | **+0.5** |
| | 1.0nm2µm214nm,0.7s | | | | | | |
| **BBSI** | **Bau Bau** | **5.80** | **35** | P | **Pn** | **00 07 08.7** | **+2.1** |
| | 0.1nm26nm,0.7s | | | | | | |
| **BNSI** | **Bone** | **5.93** | **8** | P | **Pn** | **00 07 11.8** | **+3.4** |
| | 0.4nm2µm199nm,0.8s | | | | | | |
| **GMJI** | **Gumukmas** | **6.10** | **289** | P | **Pn** | **00 07 12.9** | **+2.2** |
| | 0.4nm83nm,0.9s | | | | | | |
| **BLJI** | **Banyuglugur** | **6.16** | **294** | P | **Pn** | **00 07 14.2** | **+2.6** |
| | 0.4nm1µm107nm,0.6s | | | | | | |
| **KMMI** | **Kalianget** | **6.17** | **301** | P | **Pn** | **00 07 14.4** | **+2.8** |
| | 0.5nm73nm,1.6s | | | | | | |
| KMMI | | | | S | **Sn** | **00 08 27.9** | **+6.9** |
| | 0.5nm73nm,1.6s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.32** | **4** | P | **Pn** | **00 07 16.6** | **+2.8** |
| | 0.3nm930nm106nm,0.7s | | | | | | |
| SPSI | | | | S | **Sn** | **00 08 29.3** | **+4.4** |
| | 0.3nm930nm106nm,0.7s | | | | | | |
| **TTSI** | **Tana Toraja** | **7.24** | **4** | P | **Pn** | **00 07 29.5** | **+3.1** |
| | 0.3nm914nm108nm,0.8s | | | | | | |
| **GRJI** | **Gresik** | **7.52** | **296** | P | Pn | 00 07 35.3 | +5.1 |
| | 0.3nm81nm,0.8s | | | | | | |
| GRJI | | | | S | **Sn** | **00 09 00.2** | **+5.9** |
| | 0.3nm81nm,0.8s | | | | | | |
| **PWJI** | **Pagerwojo** | **7.72** | **287** | P | **Pn** | **00 07 33.9** | **+0.9** |
| | 0.3nm57nm,0.8s | | | | | | |
| **BBKI** | **Banjar Baru** | **8.10** | **327** | P | **Pn** | **00 07 42.0** | **+3.8** |
| | 0.3nm50nm,1.2s | | | | | | |
| **PCJI** | **Pacitan** | **8.26** | **284** | P | **Pn** | **00 07 40.8** | **+0.3** |
| | 80nm,1.4s | | | | | | |
| **UGM** | **Wanagama** | **8.96** | **285** | P | **Pn** | **00 07 53.5** | **+3.4** |
| | 85nm,1.1s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **8.96** | **285** | Pn | **Pn** | **00 07 48.2** | **-1.9** |
| **UGM** | **Wanagama** | **8.96** | **285** | P | **Pn** | **00 07 51.5** | **+1.4** |
| **FITZ** | **Fitzroy Crossi** | **9.90** | **142** | Pn | **Pn** | **00 08 04.8** | **+1.9** |
| | 1.2nm,0.3s,baz=343,slow=6.4,SNR=38 | | | | | | |
| FITZ | | | | Sn | **Sn** | **00 09 49.2** | **-3.6** |
| | 3.0nm,0.3s,baz=188,slow=21,SNR=16 | | | | | | |
| FITZ | | | | LR | LR | 00 12 30.9 | |
| | comp=Z,292nm,18.4s,baz=310,slow=41 | | | | | | |
| **MPSI** | **Mapaga** | **10.60** | **3** | P | **Pn** | **00 08 15.4** | **+2.9** |
| | 10nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **10.67** | **121** | Pn | **Pn** | **00 08 16.1** | **+2.6** |
| **KNRA** | **Kununurra** | **10.67** | **121** | P | **Pn** | **00 08 16.5** | **+3.0** |
| **MBWA** | **Marble Bar** | **10.80** | **178** | Pn | **Pn** | **00 08 16.0** | **+0.9** |
| **MBWA** | **Marble Bar** | **10.80** | **178** | P | **Pn** | **00 08 16.1** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **11.21** | **177** | | **Pn** | **00 08 20.6** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **11.21** | **177** | Pn | **Pn** | **00 08 19.5** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **11.21** | **177** | P | **Pn** | **00 08 21.5** | **+0.6** |
| **MTN** | **Manton Dam** | **11.89** | **103** | Pn | **Pn** | **00 08 30.5** | **+0.4** |
| **MTN** | **Manton Dam** | **11.89** | **103** | P | **Pn** | **00 08 31.1** | **+0.9** |
| **GIRL** | **Giralia** | **13.18** | **201** | Pn | **Pn** | **00 08 48.7** | **+1.0** |
| **GIRL** | **Giralia** | **13.18** | **201** | P | **Pn** | **00 08 48.2** | **+0.5** |
| **FAKI** | **Fak Fak** | **14.83** | **61** | Pn | **Pn** | **00 09 08.8** | **-1.5** |
| **SWI** | **Sorong** | **15.17** | **53** | P | **P** | **00 09 18.7** | **-0.8** |
| | 116nm,0.8s | | | | | | |
| **SIJI** | **Sorong** | **15.17** | **53** | Pn | **Pn** | **00 09 12.7** | **-2.2** |
| | 1.8nm,0.3s,baz=208,slow=8.4,SNR=4.3 | | | | | | |
| **PMBI** | **Palembang** | **16.16** | **296** | P | **P** | **00 09 30.5** | **0.0** |
| **MEEK** | **Meekatharra** | **16.25** | **182** | P | **Pn** | **00 09 29.6** | **+0.8** |
| **KKM** | **Kota Kinabalu** | **16.53** | **349** | | **P** | **00 09 33.5** | **-1.2** |
| **WRKA** | **Warakurna** | **16.97** | **151** | P | **P** | **00 09 39.2** | **-0.3** |
| **WB0** | **Warramunga Arr** | **17.35** | **125** | | **Pn** | **00 09 42.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **17.40** | **125** | P | **Pn** | **00 09 43.0** | **-0.2** |
| | 0.6nm,0.3s,baz=299,slow=13,SNR=31 | | | | | | |
| WRA | | | | S | Sn | 00 12 44.3 | -12 |
| | 0.6nm,0.3s,baz=293,slow=20,SNR=4.8 | | | | | | |
| WRA | | | | LR | LR | 00 17 03.9 | |
| | comp=Z,250nm,18.9s,baz=288,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.40** | **125** | Pn | **P** | **00 09 43.9** | **-0.3** |
| **WRAB** | **Tennant Creek** | **17.40** | **125** | P | **P** | **00 09 44.4** | **+0.1** |
| **WRAB** | **Tennant Creek** | **17.40** | **125** | P | **P** | **00 09 44.0** | **-0.3** |
| **MORW** | **Morawa** | **18.91** | **189** | | **Pn** | **00 10 02.1** | **+0.6** |
| **MORW** | **Morawa** | **18.91** | **189** | P | **Pn** | **00 10 04.0** | **+2.5** |
| **AS31** | **Alice Springs** | **19.27** | **135** | | **Pn** | **00 10 07.7** | **+1.7** |
| **ASAR** | **Alice Springs** | **19.27** | **135** | P | **Pn** | **00 10 08.4** | **+2.5** |
| | 0.9nm,0.3s,baz=323,slow=15,SNR=36 | | | | | | |
| ASAR | | | | S | **Sn** | **00 13 35.2** | **-5.9** |
| | 0.6nm,0.3s,baz=314,slow=24,SNR=6.1 | | | | | | |
| ASAR | | | | LR | LR | 00 17 31.7 | |
| | comp=Z,200nm,21.0s,baz=312,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **19.27** | **135** | P | **Pn** | **00 10 06.1** | **+0.1** |
| **BKNI** | **Bangkinang** | **20.99** | **299** | P | **P** | **00 10 20.9** | **-2.7** |
| **NWAO** | **Narrogin (SRO)** | **22.59** | **184** | P | **P** | **00 10 41.5** | **+1.0** |
| NWAO | | | | IAmb | IAmb | 00 10 58.6 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **COEN** | **Coen** | **23.64** | **101** | P | **P** | **00 10 52.0** | **+0.6** |
| COEN | | | | IAmb | IAmb | 00 11 06.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **RPSI** | **Rantau Prapat** | **24.03** | **301** | P | **P** | **00 10 55.6** | **+0.7** |
| **PSI** | **Prapat** | **24.09** | **302** | P | **P** | **00 10 55.6** | **0.0** |
| | comp=Z,3.7nm,0.4s,baz=190,slow=4.9,SNR=5.4 | | | | | | |
| **TGY** | **Tagaytay City** | **24.31** | **4** | P | **P** | **00 10 58.2** | **+0.7** |
| | comp=Z,167nm,0.3s,baz=194,slow=4.5,SNR=6.8 | | | | | | |
| **CTA** | **Charters Tower** | **27.75** | **114** | LR | LR | 00 23 50.1 | |
| | comp=Z,116nm,20.1s,baz=267,slow=39 | | | | | | |
| **UBPT** | **Khong Chiam** | **28.87** | **332** | P | **P** | **00 11 38.6** | **0.0** |
| UBPT | | | | IAmb | IAmb | 00 11 40.0 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **29.78** | **139** | LR | LR | 00 26 04.1 | |
| | comp=Z,118nm,18.6s,baz=317,slow=41 | | | | | | |
| **YULB** | **Yu-li** | **33.55** | **3** | P | **P** | **00 12 18.1** | **-1.6** |
| **CMAR** | **Chiang Mai Arr** | **34.92** | **325** | P | **P** | **00 12 31.9** | **+0.1** |
| | comp=Z,3.8nm,0.7s,baz=153,slow=6.7,SNR=14 | | | | | | |
| CMAR | | | | LR | LR | 00 28 09.6 | |
| | comp=Z,135nm,18.9s,baz=175,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **34.92** | **325** | P | **P** | **00 12 30.7** | **-1.0** |
| **CHTO** | **Chiang Mai** | **35.21** | **325** | P | **P** | **00 12 33.3** | **-0.9** |
| CHTO | | | | IAmb | IAmb | 00 12 36.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **38.73** | **336** | ⇑P | **P** | **00 13 05.2** | **+0.9** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **40.37** | **335** | P | **P** | **00 13 17.7** | **-0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,70nm,5.1s | | | | | | |
| **ENH** | **Enshi** | **41.43** | **347** | P | **P** | **00 13 26.2** | **-0.1** |
| ENH | | | | IAmb | IAmb | 00 13 28.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **42.12** | **359** | *e*P | **P** | **00 13 33.8** | **+1.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **PALK** | **Pallekele** | **42.19** | **293** | LR | LR | 00 32 16.6 | |
| | comp=Z,63nm,19.9s,baz=226,slow=38 | | | | | | |
| **SHL** | **Shillong** | **44.53** | **324** | P | **P** | **00 13 50.1** | **-1.7** |
| **XAN** | **Xi'an** | **45.19** | **348** | ⇑P | **P** | **00 13 55.6** | **-1.1** |
| XAN | | | | sP | sP | 00 14 13.5 | +3.1 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **46.61** | **111** | LR | LR | 00 35 19.0 | |
| | comp=Z,87nm,18.6s,baz=68,slow=38 | | | | | | |
| **LSA** | **Lhasa** | **48.13** | **327** | P | **P** | **00 14 20.1** | **-0.2** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **48.20** | **9** | P | **P** | **00 14 20.1** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=29,slow=33,SNR=2.4 | | | | | | |
| KSRS | | | | LR | LR | 00 34 57.1 | |
| | comp=Z,34nm,20.9s,baz=310,slow=37 | | | | | | |
| **ODAN** | **Odare** | **48.20** | **321** | *e*P | **P** | **00 14 19.8** | **-0.8** |
| | comp=Z,14nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **48.35** | **321** | *e*P | **P** | **00 14 21.2** | **-0.7** |
| | comp=Z,23nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **48.39** | **343** | *e*P | **P** | **00 14 23.1** | **+1.3** |
| LZH | | | | pP | pP | 00 14 30.0 | -1.7 |
| LZH | | | | sP | pwP | 00 14 34.2 | +0.1 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **RAMN** | **Ramite** | **48.76** | **320** | *e*P | **P** | **00 14 24.5** | **-0.5** |
| | comp=Z,7.9nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **49.52** | **320** | *e*P | **P** | **00 14 29.8** | **-1.1** |
| | comp=Z,20nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **49.89** | **320** | *e*P | **P** | **00 14 32.1** | **-1.6** |
| | comp=Z,19nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **49.95** | **320** | *e*P | **P** | **00 14 32.4** | **-1.7** |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **49.96** | **320** | *e*P | **P** | **00 14 32.8** | **-1.3** |
| | comp=Z,7.5nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **50.74** | **320** | *e*P | **P** | **00 14 38.1** | **-1.8** |
| | comp=Z,5.8nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **51.25** | **318** | *e*P | **P** | **00 14 42.0** | **-1.8** |
| | comp=Z,11nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **51.40** | **353** | *e*P | **P** | **00 14 49.0** | **+4.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **DANN** | **Dangsing** | **51.54** | **319** | *e*P | **P** | **00 14 44.1** | **-2.0** |
| | comp=Z,26nm,0.6s | | | | | | |
| **PYUN** | **Piuthan** | **51.87** | **318** | *e*P | **P** | **00 14 45.9** | **-2.5** |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **GTA** | **Gaotai** | **52.67** | **341** | ⇑P | **P** | **00 14 54.1** | **0.0** |
| GTA | | | | pP | pP | 00 15 04.2 | +0.4 |
| GTA | | | | sP | sP | 00 15 09.9 | +2.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,86nm,5.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,100nm,19.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,91nm,17.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,140nm,18.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.47** | **11** | P | **P** | **00 15 13.6** | **-0.7** |
| | comp=Z,1.9nm,0.6s,baz=192,slow=6.1,SNR=4.4 | | | | | | |
| **URZ** | **Urewera** | **58.53** | **129** | LR | LR | 00 41 04.0 | |
| | comp=Z,76nm,18.7s,baz=316,slow=36 | | | | | | |
| **ULN** | **Ulaanbaatar** | **58.93** | **350** | P | **P** | **00 15 37.8** | **-1.0** |
| ULN | | | | IAmb | IAmb | 00 15 44.7 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **59.01** | **350** | P | **P** | **00 15 39.2** | **-0.1** |
| | comp=Z,4.1nm,0.9s,baz=164,slow=8.5,SNR=18 | | | | | | |
| **SONM** | **Songino Array** | **59.01** | **350** | P | **P** | **00 15 38.7** | **-0.6** |
| SONM | | | | IAmb | IAmb | 00 15 45.3 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **60.29** | **9** | LR | LR | 00 41 56.4 | |
| | comp=Z,33nm,19.9s,baz=42,slow=36 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WMQ** | **Urumqi** | **61.05** | **334** | *e*P | **P** | **00 15 53.5** | **+0.2** |
| WMQ | | | | pP | pP | 00 16 02.5 | -0.7 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **KSH** | **Kashi** | **63.81** | **324** | P | **P** | **00 16 11.5** | **-0.5** |
| KSH | | | | sP | pwP | 00 16 24.6 | -0.7 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **64.28** | **327** | P | **P** | **00 16 15.2** | **-0.2** |
| **KBL** | **Kabul** | **65.21** | **316** | P | **P** | **00 16 19.9** | **-1.5** |
| KBL | | | | IAmb | IAmb | 00 16 21.2 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **65.74** | **333** | P | **P** | **00 16 23.4** | **-0.8** |
| MK31 | | | | IAmb | IAmb | 00 16 24.8 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.74** | **333** | P | **P** | **00 16 23.9** | **-0.4** |
| | comp=Z,11nm,0.7s,baz=142,slow=7.7,SNR=119 | | | | | | |
| MKAR | | | | LR | LR | 00 48 41.5 | |
| | comp=Z,51nm,19.2s,baz=344,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.74** | **333** | P | **P** | **00 16 23.6** | **-0.7** |
| **MAKZ** | **Makanchi** | **65.89** | **333** | P | **P** | **00 16 24.4** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 00 16 25.6 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **66.71** | **326** | LR | LR | 00 50 01.9 | |
| | comp=Z,70nm,19.7s,baz=58,slow=40 | | | | | | |
| **AAK** | **Ala-Archa** | **66.71** | **326** | P | **P** | **00 16 30.2** | **-0.6** |
| **GAR** | **Garm** | **66.92** | **320** | P | **P** | **00 16 31.7** | **-0.4** |
| **CHGR** | **Chuyangaron** | **67.45** | **319** | P | **P** | **00 16 34.4** | **-1.1** |
| **KKAR** | **Karatay Array** | **69.27** | **324** | P | **P** | **00 16 45.7** | **-0.9** |
| **KURK** | **Kurchatov** | **70.28** | **334** | P | **P** | **00 16 52.1** | **-0.6** |
| KURK | | | | IAmb | IAmb | 00 16 52.7 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **70.35** | **339** | P | **P** | **00 16 51.8** | **-1.3** |
| ZAA0 | | | | IAmb | IAmb | 00 16 52.6 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.35** | **339** | P | **P** | **00 16 51.9** | **-1.2** |
| | comp=Z,8.4nm,0.6s,baz=141,slow=4.9,SNR=42 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.35** | **339** | P | **P** | **00 16 51.7** | **-1.4** |
| **PETK** | **Petropavlovsk-** | **71.16** | **23** | P | **P** | **00 16 57.6** | **-0.4** |
| | comp=Z,3.1nm,0.7s,baz=215,slow=9.3,SNR=4.0 | | | | | | |
| **MA2** | **Magadan** | **74.10** | **16** | P | **P** | **00 17 15.4** | **+0.1** |
| MA2 | | | | IAmb | IAmb | 00 17 16.9 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **75.64** | **332** | P | **P** | **00 17 23.9** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 00 17 25.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **RAR** | **Rarotonga** | **77.97** | **110** | LR | LR | 00 54 21.3 | |
| | comp=Z,30nm,18.1s,baz=150,slow=37 | | | | | | |
| **ABKAR** | **Akbulak array** | **78.78** | **325** | P | **P** | **00 17 40.8** | **-1.3** |
| **ABKAR** | **Akbulak array** | **78.78** | **325** | P | **P** | **00 17 41.5** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 00 17 43.7 | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **RAYN** | **Ar Rayn** | **79.52** | **296** | P | **P** | **00 17 45.7** | **-1.1** |
| **TIXI** | **Tiksi** | **82.03** | **3** | P | **P** | **00 17 58.5** | **-0.6** |
| TIXI | | | | IAmb | IAmb | 00 18 08.3 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **NRIK** | **Noril'sk** | **82.48** | **349** | P | **P** | **00 18 01.7** | **+0.2** |
| | comp=Z,1.7nm,0.6s,baz=64,slow=4.8,SNR=3.8 | | | | | | |
| **ARU** | **Arti** | **83.13** | **331** | LR | LR | 01 01 43.5 | |
| | comp=Z,39nm,18.7s,baz=221,slow=41 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **86.56** | **310** | | **P** | **00 18 24.0** | **+1.0** |
| GURO | | | | IAmb | IAmb | 00 18 26.2 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **LBTB** | **Lobatse** | **89.00** | **245** | LR | LR | 00 54 45.6 | |
| | comp=Z,29nm,20.2s,baz=172,slow=33 | | | | | | |
| **MNK** | **Minsk** | **99.11** | **324** | *i* P | **Pdif** | **00 19 17.1** | **-3.3** |
| | comp=E,2.0nm,1.2s | | | | | | |
| MNK | | | | *i* P | **Pdif** | **00 19 17.1** | **-3.3** |
| | comp=N,23nm,1.0s | | | | | | |
| MNK | | | | *i* P | **Pdif** | **00 19 17.1** | **-3.3** |
| | comp=Z,4.0nm,1.0s,baz=94 | | | | | | |
| MNK | | | | *i* PP | **PP** | **00 23 19.4** | **-3.8** |
| MNK | | | | *i* PPP | PPP | 00 25 24.5 | |
| MNK | | | | *i* S | **SKSac** | **00 29 52.7** | **-3.4** |
| MNK | | | | *i* SS | **SS** | **00 37 35.0** | **-2.7** |
| MNK | | | | *i* SSS | SSS | 00 41 25.5 | |
| MNK | | | | *i* LQ | LQ | 00 58 06.0 | |
| MNK | | | | *i* LR | LR | 01 00 51.4 | |
| MNK | | | | *i* LRM | MLR | 01 02 39.5 | |
| | comp=Z,133nm,14.6s | | | | | | |
| MNK | | | | *i* LRM | MLR | 01 02 44.3 | |
| | comp=N,836nm,13.4s | | | | | | |
| MNK | | | | *i* LRM | MLR | 01 02 46.9 | |
| | comp=E,208nm,19.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **115.27** | **25** | PKP | **PKPdf** | **00 24 22.1** | **+1.6** |
| | comp=E,0.4nm,0.7s,baz=304,slow=1.9,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.95** | **279** | PKP | **PKiKP** | **00 24 30.6** | **+1.6** |
| | comp=E,0.5nm,0.6s,baz=67,slow=1.4,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.95** | **279** | | **PKiKP** | **00 24 30.1** | **+1.1** |

**MEX 11 00:08:42.5±1.1, 15°.64N×93°.67W, h83km±13km, MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.44** | **82** | *e*P | | Pn | | 00 08 54.4 | -1.7 |
| PCIG | | | | *e*S | | Sn | | 00 09 04.7 | -1.4 |
| **PCIG** | | **0.44** | **82** | *e*P | | Pn | | 00 08 54.4 | -1.6 |
| PCIG | | | | *e*S | | Sn | | 00 09 04.9 | -1.2 |
| **TGIG** | | **1.25** | **25** | *i* P | | Pn | | 00 09 03.2 | -1.6 |
| TGIG | | | | *i* S | | Sn | | 00 09 19.3 | -2.3 |
| **TGIG** | | **1.25** | **25** | *i* P | | Pn | | 00 09 03.2 | -1.6 |
| TGIG | | | | *i* S | | Sn | | 00 09 19.3 | -2.3 |
| **PATR** | **El Naranjo** | **1.48** | **110** | *e*P | | Pn | | 00 09 05.7 | -2.3 |
| PATR | | | | *i* S | | Sn | | 00 09 25.8 | -1.4 |
| **PATR** | **El Naranjo** | **1.48** | **110** | *e*P | | Pn | | 00 09 05.8 | -2.2 |
| PATR | | | | *e*S | | Sn | | 00 09 25.6 | -1.5 |
| **PAVE** | **Pavencul** | **1.51** | **107** | *e*P | | Pn | | 00 09 06.8 | -1.5 |
| PAVE | | | | *i* S | | Sn | | 00 09 26.9 | -0.9 |
| **PAVE** | **Pavencul** | **1.51** | **107** | *e*P | | Pn | | 00 09 06.8 | -1.5 |
| PAVE | | | | *e*S | | Sn | | 00 09 26.8 | -0.9 |
| **THIG** | | **1.54** | **118** | *i* P | | Pn | | 00 09 07.3 | -1.1 |
| THIG | | | | *i* S | | Sn | | 00 09 26.5 | -1.6 |
| **THIG** | | **1.54** | **118** | *e*P | | Pn | | 00 09 07.5 | -0.9 |
| THIG | | | | *i* S | | Sn | | 00 09 26.6 | -1.5 |
| **CHUJ** | **Union Juarez** | **1.60** | **110** | *i* P | | Pn | | 00 09 07.7 | -1.8 |
| CHUJ | | | | *i* S | | Sn | | 00 09 28.4 | -1.5 |
| **CHUJ** | **Union Juarez** | **1.60** | **110** | *e*P | | Pn | | 00 09 07.7 | -1.8 |
| CHUJ | | | | *e*S | | Sn | | 00 09 28.6 | -1.3 |
| **CCIG** | **Comitan** | **1.61** | **66** | *e*P | | Pn | | 00 09 09.3 | -0.3 |
| CCIG | | | | *i* S | | Sn | | 00 09 28.5 | -1.5 |
| **CCIG** | **Comitan** | **1.61** | **66** | *i* P | | Pn | | 00 09 09.3 | -0.2 |
| CCIG | | | | *e*S | | Sn | | 00 09 28.0 | -2.0 |
| **CMIG** | **Matias Romero** | **1.85** | **321** | *e*P | | Pn | | 00 09 11.5 | -1.1 |
| CMIG | | | | *i* S | | Sn | | 00 09 34.3 | -1.1 |
| **CMIG** | **Matias Romero** | **1.85** | **321** | *e*P | | Pn | | 00 09 11.4 | -1.1 |
| CMIG | | | | *e*S | | Sn | | 00 09 34.7 | -0.7 |
| **HUIG** | **Huatulco** | **2.35** | **273** | *e*P | | Pn | | 00 09 16.2 | -2.9 |
| **NEUV** | **Arroyo Zacate** | **2.90** | **316** | *e*P | | Pn | | 00 09 26.6 | 0.0 |
| NEUV | | | | *e*S | | Sn | | 00 09 52.7 | -7.8 |
| **JAUV** | **Jalcomulco** | **4.76** | **322** | *e*P | | Pn | | 00 09 50.1 | -1.8 |
| JAUV | | | | *e*S | | Sn | | 00 10 40.2 | -5.6 |

**RSNC 11 00:23:19.8±1.3, 6°.83N×73°.10W, h152km±5km, ML3.3, Mw3.6, 1C-5D, Fault plane solution: NP1:ϕ=38.00000°, δ68.00000°, λ-82.00000°, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.25** | **200** | ⇓*e*P | | Pn | | 00 23 40.5 | -0.2 |
| BARC | | | | *e*S | | Sn | | 00 23 55.9 | -0.8 |
| BARC | | | | *i* | | | | 00 23 58.3 | |
| | comp=Z,320nm,0.2s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.64** | **38** | *e*P | | Pn | | 00 23 43.4 | +0.7 |
| PAMC | | | | *e*S | | Sn | | 00 24 00.3 | +0.2 |
| PAMC | | | | *i* | | | | 00 24 02.6 | |
| | comp=Z,218nm,0.5s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.93** | **179** | ⇓*e*P | | Pn | | 00 23 44.4 | -0.4 |
| RUSC | | | | *e*S | | Sn | | 00 24 02.6 | -1.2 |
| RUSC | | | | *i* | | | | 00 24 06.2 | |
| | comp=Z,101nm,0.3s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.35** | **107** | ⇓*i*P | | Pn | | 00 23 48.7 | +0.6 |
| TAMC | | | | *e*S | | Sn | | 00 24 09.0 | -0.7 |
| TAMC | | | | *i* | | | | 00 24 09.6 | |
| | comp=Z,179nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.38** | **258** | *e*P | | Pn | | 00 23 47.2 | -1.1 |
| PTBC | | | | *e*S | | Sn | | 00 24 08.9 | -1.2 |
| PTBC | | | | *i* | | | | 00 24 16.0 | |
| | comp=Z,351nm,0.5s | | | | | | | | |
| **OCAC** | **Ocana** | **1.42** | **351** | *e*P | | Pn | | 00 23 48.6 | -0.2 |
| OCAC | | | | *e*S | | Sn | | 00 24 11.2 | +0.1 |
| OCAC | | | | *i* | | | | 00 24 16.3 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,545nm,0.2s | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.52** | **220** | ⇓*e*P | | Pn | | 00 23 49.3 | -0.5 |
| SPBC | | | | *e*S | | Sn | | 00 24 11.5 | -1.3 |
| SPBC | | | | *i* | | | | 00 24 18.8 | |
| | comp=Z,337nm,0.3s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **291** | *e*P | | Pn | | 00 23 53.1 | -0.5 |
| ZARC | | | | *e*S | | Sn | | 00 24 19.6 | +0.2 |
| ZARC | | | | *i* | | | | 00 24 25.1 | |
| | comp=Z,198nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.17** | **235** | *e*P | | Pn | | 00 23 56.3 | -0.7 |
| NORC | | | | *e*S | | Sn | | 00 24 24.4 | -1.3 |
| NORC | | | | *i* | | | | 00 24 28.2 | |
| | comp=Z,183nm,0.2s | | | | | | | | |
| **SMLC** | **San Martn de** | **2.18** | **334** | *e*P | | Pn | | 00 23 57.0 | -0.2 |
| SMLC | | | | *e*S | | Sn | | 00 24 25.6 | -0.5 |
| SMLC | | | | *i* | | | | 00 24 29.2 | |
| | comp=Z,213nm,0.1s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.28** | **196** | *e*P | | Pn | | 00 23 58.3 | -0.4 |
| CHIC | | | | *e*S | | Sn | | 00 24 29.3 | +0.6 |
| CHIC | | | | *i* | | | | 00 24 37.8 | |
| | comp=Z,44nm,0.3s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **212** | *e*P | | Pn | | 00 24 00.2 | +0.9 |
| ROSC | | | | *e*S | | Sn | | 00 24 32.2 | +2.6 |
| ROSC | | | | *i* | | | | 00 24 38.4 | |
| | comp=Z,218nm,0.4s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.50** | **255** | *e*P | | Pn | | 00 24 01.1 | -0.3 |
| HELC | | | | *e*S | | Sn | | 00 24 33.5 | +0.1 |
| HELC | | | | *i* | | | | 00 24 39.6 | |
| | comp=Z,164nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | *e*P | | Pn | | 00 24 00.5 | -1.5 |
| UREC | | | | *e*S | | Sn | | 00 24 32.4 | -2.3 |
| UREC | | | | *i* | | | | 00 24 45.6 | |
| | comp=Z,103nm,0.2s | | | | | | | | |
| **SOCV** | **Socops** | **2.65** | **57** | *e*P | | Pn | | 00 24 02.0 | -0.9 |
| SOCV | | | | *e*S | | Sn | | 00 24 33.2 | -3.0 |
| **LL1C** | **La Loma 1 Cana** | **2.73** | **350** | *e*P | | Pn | | 00 24 06.0 | +2.1 |
| LL1C | | | | *e*S | | Sn | | 00 24 40.5 | +2.5 |
| LL1C | | | | *i* | | | | 00 24 47.9 | |
| | comp=Z,314nm,0.4s | | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **235** | *e*P | | Pn | | 00 24 05.1 | +0.4 |
| GUY2C | | | | *e*S | | Sn | | 00 24 39.0 | -0.4 |
| GUY2C | | | | *i* | | | | 00 24 47.4 | |
| | comp=Z,179nm,0.8s | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.77** | **192** | *e*P | | Pn | | 00 24 03.7 | -0.8 |
| VILC | | | | *e*S | | Sn | | 00 24 39.6 | +0.6 |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **160** | ⇓*e*P | | Pn | | 00 24 03.5 | -1.1 |
| PTGC | | | | *e*S | | Sn | | 00 24 36.5 | -2.7 |
| PTGC | | | | *i* | | | | 00 24 39.4 | |
| | comp=Z,74nm,0.4s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.89** | **357** | *e*P | | Pn | | 00 24 05.2 | -0.7 |
| LL6C | | | | *e*S | | Sn | | 00 24 39.8 | -1.8 |
| LL6C | | | | *i* | | | | 00 24 44.4 | |
| | comp=Z,32nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **252** | *e*P | | Pn | | 00 24 08.0 | -0.1 |
| CBOC | | | | *e*S | | Sn | | 00 24 45.2 | -0.1 |
| CBOC | | | | *i* | | | | 00 24 49.1 | |
| | comp=Z,35nm,0.3s | | | | | | | | |
| **DBBC** | **Dabeiba** | **3.10** | **274** | ⇑*e*P | | Pn | | 00 24 08.0 | -0.5 |
| DBBC | | | | *e*S | | Sn | | 00 24 44.5 | -1.8 |
| DBBC | | | | *i* | | | | 00 25 09.4 | |
| | comp=Z,232nm,0.6s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.18** | **50** | *e*P | | Pn | | 00 24 09.7 | 0.0 |
| SDV | | | | *e*S | | Sn | | 00 24 46.9 | -1.5 |
| **MOTC** | **Monteria, Cord** | **3.20** | **307** | *e*P | | Pn | | 00 24 07.4 | -2.4 |
| MOTC | | | | *e*S | | Sn | | 00 24 45.5 | -2.9 |
| MOTC | | | | *i* | | | | 00 24 48.9 | |
| | comp=Z,42nm,0.7s | | | | | | | | |
| **ANIL** | **Santa Ana** | **3.27** | **225** | *e*P | | Pn | | 00 24 11.4 | +0.5 |
| ANIL | | | | *e*S | | Sn | | 00 24 50.0 | -0.5 |
| ANIL | | | | *i* | | | | 00 25 00.4 | |
| | comp=Z,228nm,0.4s | | | | | | | | |
| **ELOV** | **Elorza** | **3.59** | **87** | *e*P | | Pn | | 00 24 14.3 | -0.6 |
| ELOV | | | | *e*S | | Sn | | 00 24 55.5 | -2.0 |
| **ORTC** | **Ortega, Tolima** | **3.61** | **217** | *e*P | | Pn | | 00 24 14.6 | -0.5 |
| ORTC | | | | *e*S | | Sn | | 00 24 58.4 | +0.4 |
| ORTC | | | | *i* | | | | 00 25 04.4 | |
| | comp=Z,50nm,0.5s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.68** | **326** | *e*P | | Pn | | 00 24 14.5 | -1.5 |
| SJCC | | | | *e*S | | Sn | | 00 24 56.1 | -3.5 |
| SJCC | | | | *i* | | | | 00 25 00.2 | |
| | comp=Z,42nm,0.5s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.70** | **239** | *e*P | | Pn | | 00 24 16.1 | -0.2 |
| PLMC | | | | *e*S | | Sn | | 00 24 59.6 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **W39A** | **Magazine** | **2.98** | **98** | Pn | Pn | 00 25 06.3 | -0.9 |
| **MIAR** | **Mount Ida** | **3.32** | **109** | Pn | Pn | 00 25 12.0 | +0.2 |
| **KSU1** | **Kansas State U** | **3.49** | **10** | IAmb_Lg | | 00 26 11.4 | |
| | comp=Z,111nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.66** | **330** | Pn | Pn | 00 25 16.6 | 0.0 |
| **WHTX** | **Lake Whitney,** | **3.66** | **181** | Pn | Pn | 00 25 15.7 | -0.9 |
| **U40A** | **Yellville** | **3.74** | **78** | | Pn | 00 25 16.9 | -0.7 |
| U40A | | | | IAmb_Lg | | 00 26 23.0 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.84** | **57** | Pn | Pn | 00 25 16.9 | -2.1 |
| **X40A** | **Basin Creek Fa** | **3.91** | **106** | Pn | Pn | 00 25 20.5 | +0.5 |
| **WHAR** | **Wooly Hollow** | **4.18** | **94** | Pn | Pn | 00 25 22.7 | -0.9 |
| **W41B** | **Gary Mavity, V** | **4.22** | **95** | Pn | Pn | 00 25 23.5 | -0.8 |
| **FCAR** | **Ozark Folk Cen** | **4.28** | **85** | Pn | Pn | 00 25 23.9 | -1.2 |
| FCAR | | | | IAmb_Lg | | 00 26 37.0 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.00** | **37** | IAmb_Lg | | 00 26 58.4 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **5.37** | **14** | IAmb_Lg | | 00 27 17.7 | |
| | comp=Z,21nm,0.8s | | | | | | |

*SFS* ***11*** *00:30:54.0,35˚.57N×3˚.72W,ML1.9,ALBORAN SUR*
*CNRM* ***11*** *00:30:54.4,35˚.47N×3˚.70W,h18km,ml2.5*
**ISC 11 00:30:52.2±1.7,35˚.54N±0˚.04×3˚.60W±0˚.05,h10km±10km, n14,σ1§35/28,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.42** | **220** | P | **Pg** | **00 31 00.9** | **+0.4** |
| PALE | | | | S | **Sg** | **00 31 05.4** | **-0.7** |
| **AKLM** | **AKL** | **1.05** | **192** | P | **Pb** | **00 31 12.8** | **+0.4** |
| AKLM | | | | S | **Sb** | **00 31 23.7** | **-2.6** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **332** | P | **Pn** | **00 31 16.7** | **-0.9** |
| EMAL | | | | S | **Sn** | **00 31 36.2** | **+0.2** |
| **SMIR** | **Smir Dam** | **1.45** | **276** | P | **Pb** | **00 31 19.5** | **+0.1** |
| SMIR | | | | S | **Sn** | **00 31 35.1** | **-2.6** |
| **JBK** | **JBK** | **1.47** | **144** | P | **Pn** | **00 31 20.8** | **+1.8** |
| JBK | | | | S | **Sn** | **00 31 38.3** | **-0.1** |
| **CHEFC** | **Chefchaouen** | **1.48** | **254** | P | **Pg** | **00 31 20.5** | **-0.1** |
| CHEFC | | | | S | **Sb** | **00 31 38.3** | **-0.5** |
| **SICH** | **Sidi Chahed** | **2.01** | **225** | P | **Pn** | **00 31 27.2** | **+1.0** |
| SICH | | | | S | **Sn** | **00 31 51.1** | **-0.3** |
| **LCRM** | **LCR** | **2.12** | **210** | P | **Pb** | **00 31 30.4** | **-0.4** |
| LCRM | | | | S | **Sb** | **00 31 57.3** | **+0.1** |
| **IFR** | **Ifrane** | **2.38** | **212** | P | **Pn** | **00 31 32.5** | **+1.1** |
| IFR | | | | S | **Sn** | **00 31 57.6** | **-3.1** |
| **TDRA** | **Tendrara** | **2.81** | **152** | P | **Pn** | **00 31 36.8** | **-0.6** |
| TDRA | | | | S | **Sn** | **00 32 11.2** | **-0.3** |
| **MD31** | **MD31** | **2.83** | **200** | P | **Pn** | **00 31 38.7** | **+1.1** |
| MD31 | | | | S | **Sn** | **00 32 12.6** | **+0.9** |
| **MDT** | **Midelt** | **2.84** | **197** | P | **Pn** | **00 31 38.9** | **+1.2** |
| MDT | | | | S | **Sn** | **00 32 12.2** | **+0.2** |
| **ZHG** | **ZHG** | **3.27** | **231** | P | **Pn** | **00 31 44.2** | **+0.8** |
| ZHG | | | | S | **Sn** | **00 32 24.4** | **+2.0** |
| **PVAQ** | **Vaqueiros** | **3.80** | **300** | P | **Pn** | **00 31 52.6** | **+1.8** |
| PVAQ | | | | S | **Sn** | **00 32 36.8** | **+1.3** |

*IDC* ***11*** *00:35:07.6±1.0,62˚.94N×17˚.92E,h0km,mb1 2.9/3, mb1mx2.8/41,mbtmp2.8/3,ML1.7/3,Error ellipse: s-maj=13.6km s-min=9.2km az=146.0*
*UPP* ***11*** *00:35:08.6±0.1,62˚.86N×18˚.35E,h5km±3km,ML2.5, Confirmed Earthquake*
*DNK* ***11*** *00:35:08.8±0.6,62˚.85N×18˚.32E,h0km±4km,ML2.5(UPP), Probable volcanic*
*HEL* ***11*** *00:35:09.5±0.1,62˚.86N×18˚.29E,h5km,ML2.0, ML2.5(UPP),Confirmed Earthquake*
*NAO* ***11*** *00:35:09.0±0.7,62˚.86N×18˚.33E,ML2.1*
*BER* ***11*** *00:35:10.3±3.5,62˚.88N×18˚.20E,h0km±8km,ML1.8, ML2.5(UPP),Confirmed Earthquake*
**ISC 11 00:35:08.5±0.9,62˚.88N±0˚.02×18˚.29E±0˚.02,h8km±7km, n72,σ1§88/148,4C-12D,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HEMU** | **Hemsoen** | **0.23** | **210** | P | **Pg** | **00 35 13.0** | **0.0** |
| HEMU | | | | S | **Sg** | **00 35 16.2** | **0.0** |
| **HEMU** | **Hemsoen** | **0.23** | **210** | P | **Pg** | **00 35 13.0** | **0.0** |
| HEMU | | | | S | **Sg** | **00 35 16.2** | **0.0** |
| **HEMU** | **Hemsoen** | **0.23** | **210** | P | **Pg** | **00 35 13.0** | **0.0** |
| HEMU | | | | S | **Sg** | **00 35 16.2** | **0.0** |
| **HEMU** | **Hemsoen** | **0.23** | **210** | *e*P | **Pg** | **00 35 13.0** | **0.0** |
| HEMU | | | | *e*S | **Sg** | **00 35 16.0** | **-0.2** |
| **SOLU** | **Sollefteaa** | **0.60** | **309** | ||P | **Pg** | **00 35 20.4** | **+0.4** |
| SOLU | | | | S | **Sg** | **00 35 28.5** | **+0.6** |
| **SOLU** | **Sollefteaa** | **0.60** | **309** | ||P | **Pg** | **00 35 20.4** | **+0.4** |
| SOLU | | | | S | **Sg** | **00 35 28.5** | **+0.6** |
| **SOLU** | **Sollefteaa** | **0.60** | **309** | ||P | **Pg** | **00 35 20.4** | **+0.4** |
| SOLU | | | | S | **Sg** | **00 35 28.5** | **+0.6** |
| **SOLU** | **Sollefteaa** | **0.60** | **309** | ||*i*P | **Pg** | **00 35 20.4** | **+0.4** |
| SOLU | | | | *i*S | **Sg** | **00 35 28.5** | **+0.6** |
| **HUSU** | **Husum** | **0.63** | **42** | P | **Pg** | **00 35 20.3** | **-0.3** |
| HUSU | | | | S | **Sg** | **00 35 28.8** | **0.0** |
| **HUSU** | **Husum** | **0.63** | **42** | P | **Pg** | **00 35 20.3** | **-0.3** |
| HUSU | | | | S | **Sg** | **00 35 28.8** | **0.0** |
| **HUSU** | **Husum** | **0.63** | **42** | P | **Pg** | **00 35 20.3** | **-0.3** |
| HUSU | | | | S | **Sg** | **00 35 28.8** | **0.0** |
| **HUSU** | **Husum** | **0.63** | **42** | *e*P | **Pg** | **00 35 20.3** | **-0.3** |
| HUSU | | | | *e*S | **Sg** | **00 35 28.2** | **-0.5** |
| **BREU** | **Bredtraesk** | **1.03** | **7** | ||P | **Pg** | **00 35 28.1** | **0.0** |
| BREU | | | | S | **Sb** | **00 35 41.8** | **-0.2** |
| **BREU** | **Bredtraesk** | **1.03** | **7** | ||P | **Pg** | **00 35 28.1** | **0.0** |
| BREU | | | | S | **Sb** | **00 35 41.8** | **-0.2** |
| **BREU** | **Bredtraesk** | **1.03** | **7** | ||P | **Pg** | **00 35 28.1** | **0.0** |
| BREU | | | | S | **Sb** | **00 35 41.8** | **-0.2** |
| **BREU** | **Bredtraesk** | **1.03** | **7** | ||*e*P | **Pg** | **00 35 28.1** | **0.0** |
| BREU | | | | *e*S | **Sb** | **00 35 41.8** | **-0.2** |
| **HASU** | **Hassela** | **1.06** | **228** | ||P | **Pg** | **00 35 28.3** | **-0.5** |
| HASU | | | | S | **Sg** | **00 35 42.1** | **-0.6** |
| **HASU** | **Hassela** | **1.06** | **228** | ||P | **Pg** | **00 35 28.3** | **-0.5** |
| HASU | | | | S | **Sg** | **00 35 42.1** | **-0.6** |
| **HASU** | **Hassela** | **1.06** | **228** | ||P | **Pg** | **00 35 28.3** | **-0.5** |
| HASU | | | | S | **Sg** | **00 35 42.1** | **-0.6** |
| **HASU** | **Hassela** | **1.06** | **228** | ||*e*P | **Pg** | **00 35 28.3** | **-0.5** |
| HASU | | | | *e*S | **Sg** | **00 35 42.1** | **-0.6** |
| **ARNU** | **Arnoeviken** | **1.26** | **200** | ↑↑P | **Pn** | **00 35 31.7** | **-0.6** |
| ARNU | | | | S | **Sb** | **00 35 47.6** | **-1.2** |
| **ARNU** | **Arnoeviken** | **1.26** | **200** | ↑↑P | **Pn** | **00 35 31.7** | **-0.6** |
| ARNU | | | | S | **Sb** | **00 35 47.6** | **-1.2** |
| **ARNU** | **Arnoeviken** | **1.26** | **200** | ↑↑P | **Pn** | **00 35 31.7** | **-0.6** |
| ARNU | | | | S | **Sb** | **00 35 47.6** | **-1.2** |
| **ARNU** | **Arnoeviken** | **1.26** | **200** | ↑↑*e*P | **Pn** | **00 35 31.7** | **-0.6** |
| ARNU | | | | *e*S | **Sb** | **00 35 47.6** | **-1.2** |
| **HUDU** | **Hudiksvall** | **1.27** | **206** | P | **Pn** | **00 35 31.8** | **-0.6** |
| HUDU | | | | S | **Sb** | **00 35 48.5** | **-0.4** |
| **HUDU** | **Hudiksvall** | **1.27** | **206** | P | **Pn** | **00 35 31.8** | **-0.6** |
| HUDU | | | | S | **Sb** | **00 35 48.5** | **-0.4** |
| **HUDU** | **Hudiksvall** | **1.27** | **206** | P | **Pn** | **00 35 31.8** | **-0.6** |
| HUDU | | | | S | **Sb** | **00 35 48.5** | **-0.4** |
| **HUDU** | **Hudiksvall** | **1.27** | **206** | *e*P | **Pn** | **00 35 31.8** | **-0.6** |
| HUDU | | | | *e*S | **Sb** | **00 35 48.5** | **-0.4** |
| **NOD** | **Norderasen** | **1.66** | **292** | P | **Pb** | **00 35 38.8** | **-0.4** |
| NOD | | | | S | **Sb** | **00 36 01.0** | **+0.7** |
| **NOD** | **Norderasen** | **1.66** | **292** | *e*P | **Pb** | **00 35 38.8** | **-0.4** |
| NOD | | | | *e*S | **Sb** | **00 36 01.0** | **+0.7** |
| **SVAU** | **Svanoeiden** | **1.72** | **19** | P | **Pb** | **00 35 40.1** | **-0.2** |
| SVAU | | | | S | **Sg** | **00 36 02.9** | **-0.8** |
| **SVAU** | **Svanoeiden** | **1.72** | **19** | P | **Pb** | **00 35 40.1** | **-0.2** |
| SVAU | | | | S | **Sg** | **00 36 02.9** | **-0.8** |
| **SVAU** | **Svanoeiden** | **1.72** | **19** | P | **Pb** | **00 35 40.1** | **-0.2** |
| SVAU | | | | S | **Sg** | **00 36 02.9** | **-0.8** |
| **SVAU** | **Svanoeiden** | **1.72** | **19** | *e*P | **Pb** | **00 35 40.1** | **-0.2** |
| SVAU | | | | *e*S | **Sg** | **00 36 02.9** | **-0.8** |
| **VAF** | **Ylistaro** | **2.01** | **83** | *e*P | **Pb** | **00 35 44.2** | **-1.0** |
| VAF | | | | *e*SB | **Sb** | **00 36 10.4** | **+0.1** |
| VAF | | | | MSG | | 00 36 11.4 | |
| | comp=Z,16nm,0.2s | | | | | | |
| **RAF** | **Rauma** | **2.48** | **137** | *e*P | **Pn** | **00 35 50.7** | **+1.6** |
| RAF | | | | *e*SB | **Sb** | **00 36 23.2** | **-0.7** |
| RAF | | | | MSG | | 00 36 25.2 | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| **AAL** | **Aland** | **2.83** | **162** | *e*P | **Pn** | **00 35 55.1** | **+1.3** |
| AAL | | | | *e*SB | **Sb** | **00 36 31.1** | **-2.7** |
| **OBF0** | **Syolatti, Pyha** | **3.11** | **56** | *e*P | **Pn** | **00 35 58.4** | **+0.7** |
| OBF0 | | | | *e*S | **Sn** | **00 36 35.8** | **+0.8** |
| **KEF** | **Keuruu** | **3.13** | **100** | *e*P | **Pn** | **00 35 59.8** | **+1.8** |
| KEF | | | | *e*S | **Sb** | **00 36 38.6** | **-4.0** |
| **KEF** | **Keuruu** | **3.13** | **100** | *e*P | **Pn** | **00 35 59.8** | **+1.8** |
| KEF | | | | *e*SB | **Sb** | **00 36 43.0** | **+0.4** |
| KEF | | | | MSG | | 00 36 48.2 | |
| | comp=Z,4.1nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** | **3.24** | **60** | *e*P | **Pn** | **00 36 00.5** | **+1.0** |
| OUF | | | | *e*S | **Sn** | **00 36 39.7** | **+1.4** |
| OUF | | | | MSG | | 00 36 57.3 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| **NSS** | **Namsos** | **3.27** | **303** | *e*P | **Pn** | **00 36 00.9** | **+1.0** |
| NSS | | | | *e*Pg | **Pb** | **00 36 08.7** | **+2.1** |
| NSS | | | | *e*Sg | **Sg** | **00 36 50.7** | **-2.5** |
| NSS | | | | IAML | | 00 36 53.5 | |
| | comp=Z,5.5nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **3.52** | **221** | Pn | **Pn** | **00 36 05.3** | **+1.9** |
| | baz=38,slow=14 | | | | | | |
| HFS | | | | Sn | **Sn** | **00 36 47.8** | **+2.5** |
| | baz=44,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 00 36 58.5 | |
| | baz=36,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **3.52** | **221** | Pn | **Pn** | **00 36 05.3** | **+1.9** |
| | baz=38,slow=14 | | | | | | |
| HFS | | | | Sn | **Sn** | **00 36 47.8** | **+2.5** |
| | baz=44,slow=28 | | | | | | |
| HFS | | | | Sg | **Sg** | **00 36 58.5** | **-3.0** |
| | baz=36,slow=28 | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **3.59** | **54** | *e*P | **Pn** | **00 36 05.0** | **+0.7** |
| OBF4 | | | | *e*S | **Sn** | **00 36 47.4** | **+0.6** |
| OBF4 | | | | MSG | | 00 37 04.6 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **3.61** | **89** | *e*P | **Pn** | **00 36 05.8** | **+1.2** |
| SUF | | | | *e*S | **Sn** | **00 36 49.1** | **+1.7** |
| **TBLU** | **Trondheim** | **3.67** | **279** | *e*S | **Sn** | **00 36 43.6** | **-5.3** |
| **MOR8** | **Moi Rana** | **3.70** | **335** | Pn | **Pn** | **00 36 08.8** | **+2.8** |
| MOR8 | | | | Sn | **Sn** | **00 36 53.6** | **+3.9** |
| MOR8 | | | | Lg | Lg | 00 37 05.8 | |
| **MOR8** | **Moi Rana** | **3.70** | **335** | *e*P | **Pn** | **00 36 08.7** | **+2.8** |
| MOR8 | | | | *e*S | **Sn** | **00 36 46.8** | **-2.8** |
| MOR8 | | | | IAML | | 00 37 11.1 | |
| | comp=Z,3.2nm,0.3s | | | | | | |
| **KAF** | **Kangasniemi** | **3.80** | **98** | *e*P | **Pn** | **00 36 08.2** | **+1.0** |
| KAF | | | | *e*SG | **Sg** | **00 37 07.5** | **-2.8** |
| **NB2** | **NORSAR Subarra** | **3.82** | **244** | Pn | **Pn** | **00 36 09.0** | **+1.5** |
| | baz=61,slow=16 | | | | | | |
| NB2 | | | | Sn | **Sn** | **00 36 55.8** | **+3.2** |
| NB2 | | | | Lg | Lg | 00 37 06.1 | |
| | baz=64,slow=37 | | | | | | |
| **NB2** | **NORSAR Subarra** | **3.82** | **244** | Pn | **Pn** | **00 36 09.0** | **+1.5** |
| | baz=61,slow=16 | | | | | | |
| NB2 | | | | Sn | **Sn** | **00 36 55.8** | **+3.2** |
| NB2 | | | | Sg | **Sb** | **00 37 06.1** | **+3.8** |
| | baz=64,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **3.82** | **244** | Pn | **Pn** | **00 36 07.2** | **-0.3** |
| | comp=Z,0.0nm,0.3s,baz=52,slow=13,SNR=1.3 | | | | | | |
| NOA | | | | Lg | Lg | 00 37 00.9 | |
| | comp=Z,0.1nm,0.3s,baz=154,slow=10,SNR=5.4 | | | | | | |
| **NUR** | **Nurmijrvi** | **3.85** | **125** | *e*P | **Pn** | **00 36 09.8** | **+1.9** |
| NUR | | | | *e*S | **Sn** | **00 36 56.3** | **+3.1** |
| **NC602** | **NORSAR Array S** | **3.86** | **239** | *e*P | **Pn** | **00 36 09.2** | **+1.1** |
| NC602 | | | | *e*S | **Sn** | **00 36 56.5** | **+3.1** |
| NC602 | | | | *e*Sg | **Sg** | **00 37 08.4** | **-3.7** |
| NC602 | | | | IAML | | 00 37 11.7 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **NRA0** | **NORESS Array S** | **3.86** | **239** | Pn | **Pn** | **00 36 09.5** | **+1.5** |
| | baz=40,slow=14 | | | | | | |
| NRA0 | | | | Sn | **Sn** | **00 36 55.8** | **+2.4** |
| | baz=46,slow=22 | | | | | | |
| NRA0 | | | | Lg | Lg | 00 37 08.9 | |
| | baz=48,slow=28 | | | | | | |
| **NRA0** | **NORESS Array S** | **3.86** | **239** | Pn | **Pn** | **00 36 09.5** | **+1.5** |
| | baz=40,slow=14 | | | | | | |
| NRA0 | | | | Sn | **Sn** | **00 36 55.8** | **+2.4** |
| | baz=46,slow=22 | | | | | | |
| NRA0 | | | | Sg | **Sg** | **00 37 08.9** | **-3.3** |
| | baz=48,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **3.92** | **108** | Pn | **Pn** | **00 36 11.6** | **+2.6** |
| | baz=293,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **00 36 57.2** | **+2.1** |
| | baz=284,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 00 37 08.6 | |
| | baz=295,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **3.92** | **108** | Pn | **Pn** | **00 36 11.6** | **+2.6** |
| | baz=293,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **00 36 57.2** | **+2.1** |
| | baz=284,slow=18 | | | | | | |
| FIA0 | | | | Sg | **Sb** | **00 37 08.6** | **+3.2** |
| | baz=295,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **3.92** | **108** | *e*P | **Pn** | **00 36 10.5** | **+1.6** |
| FIA0 | | | | *e*S | **Sn** | **00 36 57.2** | **+2.1** |
| **FINES** | **FINESS Array B** | **3.92** | **108** | Pn | **Pn** | **00 36 11.3** | **+2.4** |
| | comp=Z,0.1nm,0.3s,baz=298,slow=12,SNR=6.7 | | | | | | |
| FINES | | | | Pg | **Pb** | **00 36 18.4** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=298,slow=15,SNR=6.2 | | | | | | |
| FINES | | | | Lg | Lg | 00 37 07.2 | |
| | comp=Z,0.4nm,0.3s,baz=297,slow=22,SNR=7.5 | | | | | | |
| **MEF** | **Metsahovi** | **3.96** | **130** | *e*P | **Pn** | **00 36 11.0** | **+1.6** |
| MEF | | | | *e*S | **Sn** | **00 36 58.3** | **+2.4** |
| **OUL** | **Oulu** | **4.02** | **53** | *e*P | **Pn** | **00 36 09.5** | **-0.7** |
| OUL | | | | *e*S | **Sn** | **00 36 58.0** | **+0.6** |
| **STOK** | **Stokkvaagen** | **4.15** | **329** | *e*Sg | **Sg** | **00 37 19.4** | **-2.0** |
| **KONS** | **Konsvik** | **4.26** | **331** | *e*P | **Pn** | **00 36 15.8** | **+2.3** |
| KONS | | | | *e*S | **Sn** | **00 37 02.9** | **-0.4** |
| KONS | | | | IAML | | 00 37 25.7 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **PVF** | **Pernaja** | **4.29** | **120** | *e*P | **Pn** | **00 36 15.9** | **+1.9** |
| PVF | | | | *e*S | **Sn** | **00 37 06.5** | **+2.3** |
| **DOMB** | **Dombas** | **4.37** | **263** | *e*P | **Pn** | **00 36 16.9** | **+1.8** |
| DOMB | | | | *e*S | **Sn** | **00 37 06.6** | **+0.5** |
| DOMB | | | | *e*Sg | **Sg** | **00 37 24.1** | **-4.4** |
| DOMB | | | | IAML | | 00 37 36.8 | |
| | comp=Z,4.7nm,0.1s | | | | | | |
| **FAUS** | **Fauske** | **4.70** | **346** | *e*P | **Pn** | **00 36 21.2** | **+1.6** |
| FAUS | | | | IAML | | 00 37 09.7 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| FAUS | | | | *e*Sg | **Sg** | **00 37 35.6** | **-3.5** |
| **AKN** | **Aaknes** | **5.28** | **267** | *e*P | **Pn** | **00 36 28.9** | **+1.4** |
| **ARA0** | **ARCESS Array S** | **7.29** | **20** | Pn | **Pn** | **00 36 55.6** | **+0.5** |
| | baz=203,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **00 38 12.4** | **-5.5** |
| | baz=207,slow=18 | | | | | | |
| ARA0 | | | | Lg | Lg | 00 38 57.3 | |
| | baz=212,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.29** | **20** | Pn | **Pn** | **00 36 55.6** | **+0.5** |
| | baz=203,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **00 38 12.4** | **-5.5** |
| | baz=207,slow=18 | | | | | | |
| ARA0 | | | | Sg | **Sg** | **00 38 57.3** | **-4.8** |
| | baz=212,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.29** | **20** | Pn | **Pn** | **00 36 54.9** | **-0.2** |
| | baz=204,slow=14,SNR=5.7 | | | | | | |
| ARCES | | | | Sn | **Sn** | **00 38 12.7** | **-5.2** |
| | baz=208,slow=23,SNR=5.2 | | | | | | |
| ARCES | | | | Lg | Lg | 00 38 52.7 | |
| | baz=187,slow=29,SNR=2.5 | | | | | | |

*IDC* ***11*** *00:42:32.8±1.0,31˚.06N×130˚.22E,h156km±8km,mb3.4/9, mb1 3.5/11,mb1mx3.3/35,mbtmp3.8/11,Error ellipse: s-maj=26.6km s-min=10.2km az=106.0*
*NIED* ***11*** *00:42:34.8,31˚.11N×130˚.33E,h159km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr6.02; Mθθ-1.46; Mφφ-4.56; Mrθ2.16; Mrφ-2.04; Mθφ2.52; Fault plane solution: M₀6.67000×10¹⁴ NP1:φs33.00000°, δ60.00000°, λ96.00000°. NP2:φs201.00000°, δ31.00000°, λ79.00000°.*
*JMA* ***11*** *00:42:34.7±0.1,31˚.11N×130˚.33E,h159km±1km,M3.6*
*JMA Felt I J1.*
**ISC 11 00:42:33.9±0.7,31˚.08N±0˚.05×130˚.24E±0˚.09,h164km±6km, n22,σ1§08/32,mb3.6/9,Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSU** | **Suzuyama** | **0.47** | **23** | P | **Pn** | **00 42 57.0** | **+0.3** |
| **JTSR** | **Tashiro 2** | **0.59** | **81** | P | **Pn** | **00 42 57.2** | **-0.1** |
| JTSR | | | | *e*S | **Sn** | **00 43 13.9** | **-1.4** |
| **JSJ** | **Shimokoshiki** | **0.75** | **323** | P | **Pn** | **00 42 58.2** | **0.0** |
| JSJ | | | | S | **Sn** | **00 43 16.6** | **-0.4** |
| **JTN** | **Tanegashima 3** | **0.76** | **123** | P | **Pn** | **00 42 58.5** | **+0.2** |
| JTN | | | | S | **Sn** | **00 43 16.6** | **-0.4** |
| **JYAK** | **Yakushimahirau** | **0.87** | **165** | P | **Pn** | **00 42 59.4** | **+0.4** |
| **JMTN** | **Minamitane** | **0.88** | **140** | P | **Pn** | **00 42 59.4** | **+0.2** |
| JMTN | | | | *e*S | **Sn** | **00 43 18.3** | **-0.2** |
| **JTZ** | **Takazaki** | **1.09** | **41** | P | **Pn** | **00 43 00.9** | **+0.1** |
| JTZ | | | | S | **Sn** | **00 43 19.8** | **-1.7** |
| **JNN** | **Nakanoshima** | **1.27** | **195** | P | **Pn** | **00 43 03.0** | **+0.6** |
| JNN | | | | *e*S | **Sn** | **00 43 25.3** | **+1.0** |
| **JIU3** | **Izumi3** | **1.55** | **18** | P | **Pn** | **00 43 05.4** | **+0.4** |
| JIU3 | | | | S | **Sn** | **00 43 28.0** | **-1.1** |
| **JNU** | **Nakatsue** | **2.11** | **15** | P | **Pn** | **00 43 10.8** | **-0.4** |
| | 3.4nm,0.3s,baz=180,slow=23,SNR=17 | | | | | | |
| JNU | | | | S | **Sn** | **00 43 38.8** | **-1.3** |
| | 4.4nm,0.3s,baz=190,slow=11,SNR=7.1 | | | | | | |
| **JOW** | **Kunigami** | **4.57** | **203** | P | **Pn** | **00 43 41.9** | **0.0** |
| | 0.9nm,0.3s,baz=65,slow=26,SNR=1.1 | | | | | | |
| JOW | | | | S | **Sn** | **00 44 32.2** | **-2.8** |
| | 5.2nm,0.3s,baz=248,slow=29,SNR=2.5 | | | | | | |
| **KLR** | **Kul'dur** | **18.17** | **3** | P | **Pn** | **00 46 38.9** | **+3.2** |
| | 0.1nm,0.3s,baz=290,slow=4.7,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **24.73** | **319** | P | **P** | **00 47 40.4** | **+0.3** |
| | 1.0nm,0.5s,baz=139,slow=9.2,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.82** | **307** | P | **P** | **00 49 51.0** | **0.0** |
| | 0.2nm,0.4s,baz=83,slow=9.5,SNR=7.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **00 51 53.5** | **-0.2** |
| | 0.1nm,0.3s,baz=77,slow=3.3,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.88** | **175** | P | **P** | **00 51 17.8** | **-0.3** |
| | 0.3nm,0.9s,baz=357,slow=8.3,SNR=1.3 | | | | | | |
| **INK** | **Inuvik** | **63.76** | **24** | P | **P** | **00 52 47.8** | **+0.1** |
| | 0.4nm,0.4s,baz=252,slow=3.2,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **69.54** | **330** | P | **P** | **00 53 23.9** | **-0.5** |
| | 3.1nm,0.5s,baz=74,slow=5.5,SNR=29 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.02** | **319** | P | **P** | **00 53 45.2** | **-0.3** |
| | 0.7nm,0.3s,baz=57,slow=6.5,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **73.41** | **26** | P | **P** | **00 53 47.8** | **+0.3** |
| | 0.3nm,0.6s,baz=303,slow=5.5,SNR=7.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.47** | **308** | P | **P** | **00 54 00.6** | **+0.5** |
| | 2.9nm,0.9s,baz=132,slow=3.5,SNR=5.7 | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.76** | **334** | P | **P** | **00 53 59.9** | **-1.3** |
| | comp=Z,0.6nm,0.6s,baz=48,slow=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.76** | **334** | P | **P** | **00 54 00.0** | **-1.2** |
| | comp=Z,1.1nm,0.8s,baz=48,slow=5.8,SNR=4.5 | | | | | | |

*IDC* ***11*** *00:43:22.8±2.4,30˚.77N×56˚.55E,h0km,mb3.8/4, mb1 3.8/5,mb1mx3.4/37,mbtmp3.8/5,ML2.9/1,MS3.5/3, Ms1 3.5/3,ms1mx2.6/89,Error ellipse: s-maj=81.0km s-min=24.3km az=147.0*
*TEH* ***11*** *00:43:22.0,30˚.79N×56˚.55E,h9km,ML3.8*
**ISC 11 00:43:23.6±0.8,30˚.76N±0˚.04×56˚.55E±0˚.04,h11km,n59, σ0§88/59,mb3.8/4,MS3.3/3,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHGB** | **Koh Gabri** | **0.39** | **189** | *e*Pg | **Pg** | **00 43 31.0** | **-0.4** |
| KHGB | | | | *e*Sg | **Sg** | **00 43 37.2** | **+0.6** |
| **TVBK** | **TV Kerman** | **0.79** | **167** | *e*Pg | **Pg** | **00 43 38.7** | **-0.3** |
| TVBK | | | | *e* | | 00 43 55.9 | |
| | comp=Z,33μm,0.4s | | | | | | |
| **KRBR** | **Kerman** | **0.80** | **167** | *e*Pg | **Pg** | **00 43 38.8** | **-0.3** |
| **NGRK** | **Negar Kerman** | **1.12** | **172** | *e*Pg | **Pb** | **00 43 44.9** | **-0.4** |
| NGRK | | | | *e*Sg | **Sn** | **00 44 01.1** | **-0.2** |
| NGRK | | | | *e* | | 00 44 06.1 | |
| | comp=Z,27μm,0.3s | | | | | | |
| **IBAF** | **Bafgh** | **1.18** | **315** | *e*Pg | **Pb** | **00 43 43.6** | **-2.5** |
| IBAF | | | | *e* | | 00 44 01.0 | |
| | comp=Z,35μm,0.2s | | | | | | |
| **CHMN** | **Cheshme madani** | **1.24** | **136** | *e*Pg | **Pn** | **00 43 46.0** | **-1.2** |
| CHMN | | | | *e*Sg | **Sn** | **00 44 04.4** | **+0.3** |
| CHMN | | | | *e* | | 00 44 11.4 | |
| | comp=Z,14μm,0.4s | | | | | | |
| **IMEH** | **Mehriz** | **1.77** | **291** | *e*Pn | **Pn** | **00 43 54.6** | **+0.1** |
| IMEH | | | | *e* | | 00 44 23.9 | |
| | comp=Z,12μm,0.5s | | | | | | |
| **TPRV** | **Parvadeh(Tabas** | **2.26** | **3** | *e*Pn | **Pn** | **00 44 01.6** | **+0.5** |
| **KBAM** | **BAM** | **2.31** | **134** | *e*Pn | **Pb** | **00 44 03.5** | **-1.9** |
| KBAM | | | | *e* | | 00 44 45.8 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **YZKH** | **Yazd** | **2.33** | **315** | *e*Pn | **Pn** | **00 44 01.7** | **-0.3** |
| **ICHK** | **Chekchek** | **2.35** | **310** | *e*Pn | **Pn** | **00 44 02.9** | **+0.5** |
| ICHK | | | | *e* | | 00 44 38.3 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **BSRN** | **Basiran** | **2.51** | **61** | *e*Pn | **Pn** | **00 44 04.5** | **0.0** |
| **IKOO** | **Kooshah** | **2.67** | **51** | *e* | | 00 44 55.9 | |
| | comp=Z,3μm,0.4s | | | | | | |
| IKOO | | | | *e*Pn | **Pn** | **00 44 06.9** | **0.0** |
| **ISAD** | **Sadrabad** | **2.71** | **296** | *e* | | 00 44 51.6 | |
| | comp=Z,5μm,0.7s | | | | | | |
| ISAD | | | | *e*Pn | **Pn** | **00 44 08.3** | **+0.9** |
| **ITEG** | **Tejag** | **2.84** | **41** | *e*Pn | **Pn** | **00 44 08.9** | **-0.2** |
| ITEG | | | | *e* | | 00 45 08.9 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **TKDS** | **Koohdasht(Taba** | **2.89** | **10** | *e*Pn | **Pn** | **00 44 10.2** | **+0.5** |
| TKDS | | | | *e* | | 00 45 04.8 | |
| | comp=Z,5μm,0

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ALJI** | **Alcalda de J** | **0.39** | **46** | **↓*i*P** | **Pn** | **01 04 53.8** | **0.0** |
| **ALJI** | **Alcalda de J** | **0.39** | **46** | **↓*i*P** | **Pn** | **01 04 53.8** | **0.0** |
| **TECO** | **Alcaldia de Te** | **0.48** | **9** | **↓*i*P** | **Pn** | **01 04 54.5** | **-0.3** |
| **TECO** | **Alcaldia de Te** | **0.48** | **9** | **↓*i*P** | **Pn** | **01 04 54.5** | **-0.3** |
| **COEB** | **Comit de Eme** | **0.54** | **36** | **↓*e*P** | **Pn** | **01 04 55.7** | **+0.3** |
| COEB | | | | IAML | | 01 05 09.1 | |
| | comp=Z,32µm,0.3s | | | | | | |
| **COEB** | **Comit de Eme** | **0.54** | **36** | ***e*P** | **Pn** | **01 04 55.7** | **+0.3** |
| **COEB** | **Comit de Eme** | **0.54** | **36** | **↓*e*P** | **Pn** | **01 04 55.7** | **+0.3** |
| COEB | | | | IAML | | 01 05 09.1 | |
| | comp=Z,32µm,0.3s | | | | | | |
| **SNVI** | **San Vicente** | **0.55** | **2** | ***e*P** | **Pn** | **01 04 55.4** | **-0.3** |
| **SNVI** | **San Vicente** | **0.55** | **2** | ***e*P** | **Pn** | **01 04 55.4** | **-0.3** |
| **COEG** | **Centro de Oper** | **0.56** | **358** | **↓*i*P** | **Pn** | **01 04 55.2** | **-0.4** |
| COEG | | | | IAML | | 01 05 09.4 | |
| | comp=Z,72µm,0.4s | | | | | | |
| **COEG** | **Centro de Oper** | **0.56** | **358** | **↓*i*P** | **Pn** | **01 04 55.2** | **-0.4** |
| COEG | | | | IAML | | 01 05 09.4 | |
| | comp=Z,72µm,0.4s | | | | | | |
| **SJTE** | **Alcalda de S** | **0.57** | **345** | **↓*i*P** | **Pn** | **01 04 55.2** | **-0.5** |
| SJTE | | | | IAML | | 01 05 06.5 | |
| | comp=Z,29µm,0.3s | | | | | | |
| **SJTE** | **Alcalda de S** | **0.57** | **345** | **↓*i*P** | **Pn** | **01 04 55.2** | **-0.5** |
| SJTE | | | | IAML | | 01 05 06.5 | |
| | comp=Z,29µm,0.3s | | | | | | |
| **UESV** | **Universidad de** | **0.58** | **7** | **↓*i*P** | **Pn** | **01 04 55.8** | **0.0** |
| UESV | | | | IAML | | 01 05 09.2 | |
| | comp=Z,29µm,0.3s | | | | | | |
| **UESV** | **Universidad de** | **0.58** | **7** | **↓*i*P** | **Pn** | **01 04 55.8** | **0.0** |
| UESV | | | | IAML | | 01 05 09.2 | |
| | comp=Z,29µm,0.3s | | | | | | |
| **LFRS** | **El Faro** | **0.60** | **341** | ***e*P** | **Pn** | **01 04 55.3** | **-0.7** |
| **LFRS** | **El Faro** | **0.60** | **341** | ***e*P** | **Pn** | **01 04 55.3** | **-0.7** |
| **PQSS** | **Presa 15 de Se** | **0.64** | **27** | **↑*e*P** | **Pn** | **01 04 56.9** | **+0.6** |
| PQSS | | | | IAML | | 01 05 09.9 | |
| | comp=Z,76µm,0.2s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.64** | **27** | **↑*e*P** | **Pn** | **01 04 56.9** | **+0.6** |
| PQSS | | | | IAML | | 01 05 09.9 | |
| | comp=Z,76µm,0.2s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.66** | **11** | ***e*P** | **Pn** | **01 04 57.1** | **+0.5** |
| **SCLA** | **Alcaldia de Sa** | **0.66** | **11** | ***e*P** | **Pn** | **01 04 57.1** | **+0.5** |
| **PAVA** | **Las Pavas** | **0.66** | **353** | **↓*e*P** | **Pn** | **01 04 56.8** | **+0.1** |
| PAVA | | | | IAML | | 01 05 10.1 | |
| | comp=Z,48µm,0.3s | | | | | | |
| **PAVA** | **Las Pavas** | **0.66** | **353** | ***e*P** | **Pn** | **01 04 56.8** | **+0.1** |
| **PAVA** | **Las Pavas** | **0.66** | **353** | **↓*e*P** | **Pn** | **01 04 56.8** | **+0.1** |
| PAVA | | | | IAML | | 01 05 10.1 | |
| | comp=Z,48µm,0.3s | | | | | | |
| **LCY** | **Lacayo** | **0.66** | **56** | ***e*P** | **Pn** | **01 04 57.2** | **+0.4** |
| **LCY** | **Lacayo** | **0.66** | **56** | ***e*P** | **Pn** | **01 04 57.2** | **+0.4** |
| **PACA** | **Pacayal** | **0.66** | **52** | ***e*P** | **Pn** | **01 04 57.4** | **+0.7** |
| **PACA** | **Pacayal** | **0.66** | **52** | ***e*P** | **Pn** | **01 04 57.5** | **+0.7** |
| **PACA** | **Pacayal** | **0.66** | **52** | ***e*P** | **Pn** | **01 04 57.4** | **+0.7** |
| **VSM** | **San Miguel** | **0.68** | **57** | ***e*P** | **Pn** | **01 04 57.7** | **+0.6** |
| **VSM** | **San Miguel** | **0.68** | **57** | ***e*P** | **Pn** | **01 04 57.7** | **+0.6** |
| **LBRS** | **Las Brisas** | **0.70** | **345** | **↓*e*P** | **Pn** | **01 04 57.3** | **+0.1** |
| **LBRS** | **Las Brisas** | **0.70** | **345** | **↓*e*P** | **Pn** | **01 04 57.3** | **+0.1** |
| **IGN** | **Direccin Gen** | **0.72** | **335** | ***e*P** | **Pn** | **01 04 57.0** | **-0.5** |
| **IGN** | **Direccin Gen** | **0.72** | **335** | ***e*P** | **Pn** | **01 04 57.0** | **-0.5** |
| **SNET** | **Serv Nac Est T** | **0.72** | **330** | ***e*P** | **Pn** | **01 04 56.7** | **-0.8** |
| SNET | | | | IAML | | 01 05 09.7 | |
| | comp=Z,16µm,0.2s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.72** | **330** | | **Pn** | **01 04 56.7** | **-0.8** |
| SNET | | | | Sn | **Sn** | **01 05 08.1** | **-0.3** |
| **SNET** | **Serv Nac Est T** | **0.72** | **330** | ***e*P** | **Pn** | **01 04 56.7** | **-0.8** |
| **SNET** | **Serv Nac Est T** | **0.72** | **330** | ***e*P** | **Pn** | **01 04 56.7** | **-0.8** |
| SNET | | | | IAML | | 01 05 09.7 | |
| | comp=Z,16µm,0.2s | | | | | | |
| **OPAM** | **Oficina de Pla** | **0.73** | **333** | ***e*P** | **Pn** | **01 04 56.9** | **-0.7** |
| **OPAM** | **Oficina de Pla** | **0.73** | **333** | ***e*P** | **Pn** | **01 04 56.9** | **-0.7** |
| **LFU** | **La Fuente** | **0.73** | **340** | ***e*P** | **Pn** | **01 04 57.3** | **-0.2** |
| LFU | | | | *e*S | **Sn** | **01 05 08.9** | **+0.3** |
| **LFU** | **La Fuente** | **0.73** | **340** | ***e*P** | **Pn** | **01 04 57.3** | **-0.2** |
| LFU | | | | *e*S | **Sn** | **01 05 08.9** | **+0.3** |
| **SEMO** | **Seminario San** | **0.74** | **331** | ***e*P** | **Pn** | **01 04 56.7** | **-0.9** |
| **ITCA** | **Escuela Especi** | **0.74** | **326** | ***e*P** | **Pn** | **01 04 56.8** | **-0.8** |
| **ITCA** | **Escuela Especi** | **0.74** | **326** | ***e*P** | **Pn** | **01 04 56.8** | **-0.8** |
| **UESS** | **Universidad de** | **0.74** | **333** | ***e*P** | **Pn** | **01 04 57.2** | **-0.4** |
| **UESS** | **Universidad de** | **0.74** | **333** | ***e*P** | **Pn** | **01 04 57.2** | **-0.4** |
| **MAGS** | **Ministerio de** | **0.75** | **326** | ***e*P** | **Pn** | **01 04 57.0** | **-0.8** |
| MAGS | | | | IAML | | 01 05 12.9 | |
| | comp=Z,28µm,0.3s | | | | | | |
| **UEES** | **Universidad Ev** | **0.75** | **331** | ***e*P** | **Pn** | **01 04 57.2** | **-0.6** |
| UEES | | | | IAML | | 01 05 12.6 | |
| | comp=Z,14µm,0.3s | | | | | | |
| **UEES** | **Universidad Ev** | **0.75** | **331** | ***e*P** | **Pn** | **01 04 57.2** | **-0.6** |
| UEES | | | | IAML | | 01 05 12.6 | |
| | comp=Z,14µm,0.3s | | | | | | |
| **CNRM** | **Centro Naciona** | **0.79** | **58** | ***e*P** | **Pn** | **01 04 58.6** | **+0.5** |
| **CNRM** | **Centro Naciona** | **0.79** | **58** | ***e*P** | **Pn** | **01 04 58.6** | **+0.5** |
| **PMON** | **Piamonte** | **0.79** | **326** | ***e*P** | **Pn** | **01 04 57.6** | **-0.7** |
| **PMON** | **Piamonte** | **0.79** | **326** | ***e*P** | **Pn** | **01 04 57.6** | **-0.7** |
| **BOQS** | **Boqueron** | **0.79** | **329** | **↓*e*P** | **Pn** | **01 04 57.9** | **-0.5** |
| **BOQS** | **Boqueron** | **0.79** | **329** | **↓*e*P** | **Pn** | **01 04 57.9** | **-0.5** |
| **JAYA** | **Jayaque - finc** | **0.83** | **316** | ***e*P** | **Pn** | **01 04 57.6** | **-1.2** |
| JAYA | | | | IAML | | 01 05 11.3 | |
| | comp=Z,19µm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.83** | **316** | ***e*P** | **Pn** | **01 04 57.6** | **-1.2** |
| JAYA | | | | IAML | | 01 05 11.3 | |
| | comp=Z,19µm,0.2s | | | | | | |
| **CEDA** | **San Andres** | **0.91** | **325** | ***e*P** | **Pn** | **01 04 59.1** | **-0.6** |
| CEDA | | | | IAML | | 01 05 15.8 | |
| | comp=Z,25µm,0.4s | | | | | | |
| **CEDA** | **San Andres** | **0.91** | **325** | ***e*P** | **Pn** | **01 04 59.1** | **-0.6** |
| **CEDA** | **San Andres** | **0.91** | **325** | ***e*P** | **Pn** | **01 04 59.1** | **-0.6** |
| CEDA | | | | IAML | | 01 05 15.8 | |
| | comp=Z,25µm,0.4s | | | | | | |
| **LCND** | **La Caada** | **0.98** | **75** | ***e*P** | **Pn** | **01 05 01.2** | **+0.7** |
| LCND | | | | IAML | | 01 05 17.7 | |
| | comp=Z,49µm,0.4s | | | | | | |
| **CNCH** | **Conchagua** | **1.02** | **77** | ***e*P** | **Pn** | **01 05 01.9** | **+0.7** |
| **CNCH** | **Conchagua** | **1.02** | **77** | ***e*P** | **Pn** | **01 05 01.9** | **+0.7** |
| **TACO** | **Tacachico** | **1.03** | **332** | **↓*e*P** | **Pn** | **01 05 00.8** | **-0.3** |
| **TACO** | **Tacachico** | **1.03** | **332** | **↓*e*P** | **Pn** | **01 05 00.8** | **-0.3** |
| **CEVE** | **Cerro Verde** | **1.07** | **316** | ***e*P** | **Pn** | **01 05 01.4** | **-0.5** |
| CEVE | | | | IAML | | 01 05 18.1 | |
| | comp=Z,21µm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.07** | **316** | ***e*P** | **Pn** | **01 05 01.4** | **-0.5** |
| CEVE | | | | IAML | | 01 05 18.1 | |
| | comp=Z,21µm,0.3s | | | | | | |
| **SBLS** | **San Blas** | **1.08** | **316** | **↓*e*P** | **Pn** | **01 05 01.6** | **-0.4** |
| **SBLS** | **San Blas** | **1.08** | **316** | **↓*e*P** | **Pn** | **01 05 01.6** | **-0.4** |
| **SNJE** | **San Jose** | **1.09** | **318** | ***e*P** | **Pn** | **01 05 01.6** | **-0.5** |
| **SNJE** | **San Jose** | **1.09** | **318** | ***e*P** | **Pn** | **01 05 01.6** | **-0.5** |
| **LLGN** | **La Laguna** | **1.10** | **356** | **↓*e*P** | **Pn** | **01 05 02.7** | **+0.4** |
| **LLGN** | **La Laguna** | **1.10** | **356** | **↓*e*P** | **Pn** | **01 05 02.7** | **+0.4** |
| **RTR** | **El Retiro** | **1.13** | **318** | **↓*e*P** | **Pn** | **01 05 02.6** | **-0.1** |
| **RTR** | **El Retiro** | **1.13** | **318** | **↓*e*P** | **Pn** | **01 05 02.6** | **-0.1** |
| **UNIC** | **Universidad Ca** | **1.14** | **324** | ***e*P** | **Pn** | **01 05 02.5** | **-0.2** |
| **UNIC** | **Universidad Ca** | **1.14** | **324** | ***e*P** | **Pn** | **01 05 02.5** | **-0.2** |
| **NUBE** | **Las Nubes** | **1.23** | **313** | ***e*P** | **Pn** | **01 05 03.3** | **-0.6** |
| **NUBE** | **Las Nubes** | **1.23** | **313** | ***e*P** | **Pn** | **01 05 03.3** | **-0.6** |
| **LOAL** | **Lomas de Alarc** | **1.30** | **316** | ***e*P** | **Pn** | **01 05 04.5** | **-0.2** |
| **LOAL** | **Lomas de Alarc** | **1.30** | **316** | ***e*P** | **Pn** | **01 05 04.5** | **-0.2** |
| **SLOZ** | **Alcaldia de Sa** | **1.32** | **317** | ***e*P** | **Pn** | **01 05 04.6** | **-0.4** |
| **MTO3** | **Montecristo** | **1.42** | **340** | ***e*P** | **Pn** | **01 05 06.7** | **+0.2** |
| **MTO3** | **Montecristo** | **1.42** | **340** | | **Pn** | **01 05 06.8** | **+0.2** |
| MTO3 | | | | Sn | **Sn** | **01 05 25.1** | **+0.6** |
| **MTO3** | **Montecristo** | **1.42** | **340** | ***e*P** | **Pn** | **01 05 06.7** | **+0.2** |
| **MTO3** | **Montecristo** | **1.42** | **340** | ***e*P** | **Pn** | **01 05 06.7** | **+0.2** |
| **ESQI** | **Esquipulas** | **1.57** | **343** | | **Pn** | **01 05 09.2** | **+0.8** |
| ESQI | | | | Sn | **Sn** | **01 05 29.0** | **+1.2** |
| **ESQI** | **Esquipulas** | **1.57** | **343** | ***e*P** | **Pn** | **01 05 09.1** | **+0.8** |
| **CRIN** | **San Cristobal** | **1.80** | **101** | | **Pn** | **01 05 12.3** | **+0.9** |
| **CRIN** | **San Cristobal** | **1.80** | **101** | ***e*P** | **Pn** | **01 05 12.2** | **+0.8** |
| **TGUH** | **Tegucigalpa,Un** | **1.83** | **57** | ***e*P** | **Pn** | **01 05 13.2** | **+1.2** |
| **TGUH** | **Tegucigalpa,Un** | **1.83** | **57** | Pn | **Pn** | **01 05 13.1** | **+1.2** |
| **TGUH** | **Tegucigalpa,Un** | **1.83** | **57** | ***e*P** | **Pn** | **01 05 13.1** | **+1.2** |
| **TGUH** | **Tegucigalpa,Un** | **1.83** | **57** | ***e*P** | **Pn** | **01 05 13.2** | **+1.2** |
| **NBG** | **Las Nubes** | **2.10** | **317** | ***e*P** | **Pn** | **01 05 17.1** | **+1.4** |
| NBG | | | | *e*S | **Sn** | **01 05 47.2** | **+6.3** |
| **PCG** | **Pacaya** | **2.16** | **308** | ***e*P** | **Pn** | **01 05 16.6** | **+0.2** |
| PCG | | | | *e*S | **Sn** | **01 05 47.9** | **+5.6** |
| **MRL** | **Marmol** | **2.17** | **338** | ***e*P** | **Pn** | **01 05 18.4** | **+1.8** |
| **CNGN** | **Cerro Negro** | **2.18** | **104** | | **Pn** | **01 05 16.8** | **+0.2** |
| **FUG** | **Fuego 3** | **2.37** | **306** | ***e*P** | **Pn** | **01 05 21.0** | **+1.7** |
| FUG | | | | *e*S | **Sn** | **01 05 53.1** | **+5.7** |
| **APG** | **El Apazote** | **2.49** | **321** | P | **Pn** | **01 05 21.4** | **+0.5** |
| | comp=Z,14nm,0.3s,baz=147,slow=11,SNR=29 | | | | | | |
| APG | | | | S | **Sn** | **01 05 53.2** | **+2.9** |
| | comp=Z,21nm,0.3s,baz=189,slow=11,SNR=3.7 | | | | | | |
| **RCON** | **San Juan de Ri** | **2.67** | **80** | ***e*P** | **Pn** | 01 05 27.7 | +4.4 |
| **MATN** | **Matagalpa** | **2.86** | **92** | | **Pn** | **01 05 26.4** | **+0.5** |
| **MATN** | **Matagalpa** | **2.86** | **92** | ***e*P** | **Pn** | **01 05 26.4** | **+0.5** |
| **BOAB** | **BOACO BROADBAN** | **3.17** | **101** | | **Pn** | **01 05 30.1** | **+0.1** |
| **BOAB** | **BOACO BROADBAN** | **3.17** | **101** | ***e*P** | **Pn** | **01 05 30.0** | **0.0** |
| **ACON** | **Acoyapa** | **3.76** | **106** | | **Pn** | **01 05 38.1** | **+0.1** |
| **HZTE** | **Horizontes, Gu** | **3.95** | **126** | Pn | **Pn** | **01 05 42.5** | **+1.8** |
| **HZTE** | **Horizontes, Gu** | **3.95** | **126** | ***e*P** | **Pn** | **01 05 42.5** | **+1.8** |
| **PETF** | **Flores** | **3.96** | **346** | | **Pn** | **01 05 42.7** | **+1.9** |
| **ORTG** | **Ortega, Santa** | **4.27** | **128** | | **Pn** | **01 05 46.1** | **+0.9** |
| **ORTG** | **Ortega, Santa** | **4.27** | **128** | ***e*P** | **Pn** | **01 05 46.4** | **+1.3** |
| **DUNO** | **Dulce Nombre,** | **4.43** | **132** | | **Pn** | **01 05 48.6** | **+1.3** |
| **CCIG** | **Comitan** | **4.51** | **316** | | **Pn** | **01 05 50.4** | **+1.9** |
| **JTS** | **Las Juntas de** | **4.71** | **125** | P | **Pn** | **01 05 52.6** | **+1.5** |
| | comp=Z,11nm,0.3s,baz=11,slow=22,SNR=14 | | | | | | |
| JTS | | | | S | **Sn** | **01 06 43.2** | **-1.3** |
| | comp=Z,8.2nm,0.3s,baz=356,slow=20,SNR=1.1 | | | | | | |
| **JTS** | **Las Juntas de** | **4.71** | **125** | | **Pn** | **01 05 52.3** | **+1.2** |
| **CAO2** | **Cobano, Puntar** | **4.97** | **132** | | **Pn** | **01 05 56.1** | **+1.4** |
| **JACO** | **JACO, Garabito** | **5.32** | **129** | ***e*P** | Pn | 01 06 04.7 | +5.2 |
| **JACO** | **JACO, Garabito** | **5.32** | **129** | | **Pn** | **01 06 01.3** | **+1.8** |
| **OCM** | **Ochomogo** | **5.74** | **123** | ***e*P** | **Pn** | **01 06 08.0** | **+2.6** |
| **LCR2** | **La Lucha 2** | **5.79** | **124** | ***e*P** | **Pn** | **01 06 08.5** | **+2.4** |
| **RIMA** | **Rio Macho** | **5.89** | **123** | ***e*P** | **Pn** | **01 06 10.7** | **+3.2** |
| **RIMA** | **Rio Macho** | **5.89** | **123** | | **Pn** | **01 06 08.4** | **+1.0** |
| **RIMA** | **Rio Macho** | **5.89** | **123** | ***e*P** | **Pn** | **01 06 09.2** | **+1.8** |
| **CDM** | **Cerro de Muert** | **6.09** | **124** | ***e*P** | **Pn** | **01 06 12.6** | **+2.2** |
| **EDDO** | **Dominical** | **6.19** | **127** | ***e*P** | **Pn** | **01 06 14.0** | **+2.6** |
| **MRVA** | **Moravia de Chi** | **6.21** | **121** | ***e*P** | **Pn** | **01 06 15.5** | **+3.8** |
| **PEZE** | **Perez Zeledon,** | **6.26** | **125** | | **Pn** | **01 06 11.2** | **-1.2** |
| **SRBA** | **San Rafael, Bu** | **6.60** | **125** | ***e*P** | **Pn** | **01 06 19.6** | **+2.5** |
| **SRBA** | **San Rafael, Bu** | **6.60** | **125** | Pn | **Pn** | **01 06 19.4** | **+2.3** |
| **CMIG** | **Matias Romero** | **7.07** | **305** | P | **Pn** | **01 06 24.9** | **+1.5** |
| | comp=Z,1.4nm,0.3s,baz=162,slow=9.8,SNR=14 | | | | | | |
| CMIG | | | | S | **Sn** | **01 07 42.3** | **-0.1** |
| | comp=Z,1.7nm,0.3s,baz=131,slow=20,SNR=2.3 | | | | | | |
| CMIG | | | | LR | LR | 01 09 23.1 | |
| | comp=Z,261nm,20.8s,baz=114,slow=39 | | | | | | |
| **PIRO** | **Carate, Puerto** | **7.13** | **130** | ***e*P** | **Pn** | **01 06 27.2** | **+3.0** |
| **CCOL** | **Caracol de Cor** | **7.40** | **128** | ***e*P** | **Pn** | **01 06 31.1** | **+3.2** |
| **SOR** | **Soroa** | **11.17** | **29** | Pn | **Pn** | **01 07 20.4** | **+1.0** |
| **SJCC** | **San Jacinto, C** | **13.77** | **102** | ***e*P** | **P** | **01 08 01.0** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **14.84** | **111** | ***e*P** | **P** | **01 08 12.8** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **14.84** | **111** | P | **P** | **01 08 13.0** | **-0.2** |
| **SMLC** | **San Martn de** | **15.12** | **105** | ***e*P** | **P** | **01 08 15.4** | **-0.9** |
| **YOTC** | **Yotoco, Valle** | **15.30** | **125** | ***e*P** | **Pn** | **01 08 16.6** | **+1.7** |
| **GUY2C** | **Guyana, Caldas** | **15.42** | **119** | ***e*P** | **P** | **01 08 20.2** | **+0.1** |
| **POPC** | **Popayan, Colom** | **15.95** | **130** | ***e*P** | **Pn** | **01 08 24.7** | **+1.4** |
| **OCAC** | **Ocana** | **16.00** | **106** | ***e*P** | **Pn** | **01 08 25.1** | **+1.3** |
| **ORTC** | **Ortega, Tolima** | **16.23** | **123** | ***e*P** | **Pn** | **01 08 27.6** | **+0.9** |
| **PCON** | **Cinco Dias** | **16.30** | **130** | ***e*P** | **P** | **01 08 31.8** | **+1.9** |
| **OTAV** | **Otavalo** | **16.39** | **140** | ***e*P** | **P** | **01 08 31.8** | **+1.0** |
| **OTAV** | **Otavalo** | **16.39** | **140** | Pn | **Pn** | **01 08 28.2** | **-0.8** |
| **TULM** | **Tulcn-Chalpat** | **16.45** | **137** | ***e*P** | **P** | **01 08 32.5** | **+0.9** |
| **833A** | **Chaparral WMA,** | **18.09** | **329** | | **Pn** | **01 08 50.4** | **+0.9** |
| **SOCV** | **Socops** | **18.31** | **103** | ***e*P** | **P** | **01 08 48.8** | **-2.8** |
| **SDV** | **Santo Domingo** | **18.36** | **101** | P | **P** | **01 08 52.2** | **-0.2** |
| | comp=Z,1.6nm,0.3s,baz=278,slow=6.1,SNR=10 | | | | | | |
| **SDV** | **Santo Domingo** | **18.36** | **101** | ***e*P** | **P** | **01 08 51.6** | **-0.7** |
| **SDV** | **Santo Domingo** | **18.36** | **101** | P | **P** | **01 08 52.5** | **+0.1** |
| **435B** | **Jarrell** | **19.39** | **337** | P | **P** | **01 09 04.7** | **+1.4** |
| **Z47A** | **Carrollton** | **20.07** | **2** | P | **P** | **01 09 12.0** | **+1.4** |
| Z47A | | | | IAmb | IAmb | 01 09 14.5 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **20.07** | **331** | P | **P** | **01 09 11.9** | **+1.1** |
| **WHTX** | **Lake Whitney,** | **20.43** | **339** | P | **P** | **01 09 15.7** | **+1.0** |
| **BAUV** | **El Baul** | **20.84** | **99** | P | **P** | **01 09 17.0** | **-2.1** |
| BAUV | | | | IAmb | IAmb | 01 09 22.5 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **GOGA** | **Godfrey** | **20.85** | **13** | P | **P** | **01 09 21.1** | **+2.0** |
| **Y52A** | **Lilburn** | **21.17** | **11** | P | **P** | **01 09 23.6** | **+1.1** |
| Y52A | | | | IAmb | IAmb | 01 09 41.1 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **21.25** | **322** | P | **P** | **01 09 25.0** | **+1.5** |
| | comp=Z,4.2nm,0.6s,baz=141,slow=10,SNR=54 | | | | | | |
| TXAR | | | | PcP | **PcP** | **01 13 27.1** | **+0.6** |
| | comp=Z,0.7nm,0.8s,baz=146,slow=5.0,SNR=4.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **21.25** | **322** | P | **P** | **01 09 24.4** | **+0.9** |
| **TX31** | **Lajitas Ar. Si** | **21.25** | **322** | P | **P** | **01 09 24.7** | **+1.2** |
| TX31 | | | | IAmb | IAmb | 01 09 26.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **TX32** | **Lajitas Array** | **21.25** | **322** | P | **P** | **01 09 24.8** | **+1.3** |
| **MIAR** | **Mount Ida** | **21.82** | **349** | P | **P** | **01 09 30.9** | **+1.4** |
| **HODGE** | **Hodges** | **21.92** | **15** | P | **P** | **01 09 30.4** | **-0.1** |
| HODGE | | | | IAmb | IAmb | 01 09 34.1 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **X37A** | **Clayton** | **22.24** | **346** | P | **P** | **01 09 35.4** | **+1.5** |
| X37A | | | | IAmb | IAmb | 01 09 56.0 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **Y57A** | **Sumter** | **22.24** | **19** | P | **P** | **01 09 35.2** | **+1.2** |
| **W39A** | **Magazine** | **22.49** | **349** | P | **P** | **01 09 37.8** | **+1.2** |
| **ATAH** | **Atahualpa** | **22.59** | **152** | LR | LR | 01 17 13.4 | |
| | comp=Z,87nm,19.6s,baz=4.6,slow=33 | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **22.93** | **353** | P | **P** | **01 09 42.2** | **+1.0** |
| FCAR | | | | IAmb | IAmb | 01 09 43.3 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **22.94** | **341** | P | **P** | **01 09 42.4** | **+1.0** |
| **TKL** | **Tuckaleechee C** | **22.97** | **11** | P | **P** | **01 09 42.3** | **+0.7** |
| | comp=Z,2.7nm,0.5s,baz=176,slow=13,SNR=5.6 | | | | | | |
| TKL | | | | LR | LR | 01 18 52.8 | |
| | comp=Z,69nm,18.0s,baz=94,slow=38 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.97** | **11** | P | **P** | **01 09 42.1** | **+0.4** |
| TKL | | | | IAmb | IAmb | 01 09 47.9 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **LCAR** | **Lake Charles** | **23.01** | **355** | P | **P** | **01 09 42.4** | **+0.3** |
| LCAR | | | | IAmb | IAmb | 01 09 59.2 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **W35A** | **Tecumseh** | **23.16** | **343** | | **P** | **01 09 43.5** | **-0.1** |
| W35A | | | | IAmb | IAmb | 01 09 46.8 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **23.39** | **339** | | **P** | **01 09 46.5** | **+0.8** |
| **FNO** | **Franklin** | **23.41** | **342** | | **P** | **01 09 46.7** | **+0.7** |
| **U40A** | **Yellville** | **23.48** | **352** | P | **P** | **01 09 48.2** | **+1.7** |
| **HHAR** | **Hobbs** | **23.57** | **350** | P | **P** | **01 09 48.2** | **+0.8** |
| HHAR | | | | IAmb | IAmb | 01 10 06.5 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **PBMO** | **Poplar Bluff** | **23.66** | **357** | P | **P** | **01 09 47.8** | **-0.4** |
| PBMO | | | | IAmb | IAmb | 01 10 05.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **OK030** | **Cody Creek RV** | **23.87** | **344** | | **P** | **01 09 50.0** | **-0.1** |
| OK030 | | | | IAmb | IAmb | 01 09 52.3 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **T47A** | **Sharon Grove** | **23.88** | **3** | P | **P** | **01 09 50.3** | **+0.1** |
| T47A | | | | IAmb | IAmb | 01 10 07.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **T42A** | **Van Buren** | **23.96** | **356** | P | **P** | **01 09 51.3** | **+0.5** |
| **MNTX** | **Cornudas Mount** | **23.98** | **323** | P | **P** | **01 09 51.6** | **+0.5** |
| **QUOK** | **Quay** | **24.08** | **344** | | **P** | **01 09 52.2** | **+0.2** |
| QUOK | | | | IAmb | IAmb | 01 09 53.0 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **MGMO** | **Mountain Grove** | **24.19** | **353** | P | **P** | **01 09 53.9** | **+0.9** |
| MGMO | | | | IAmb | IAmb | 01 09 56.5 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **AMTX** | **Amarillo** | **24.64** | **334** | P | **P** | **01 09 58.0** | **+0.8** |
| AMTX | | | | IAmb | IAmb | 01 10 01.6 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **24.86** | **352** | P | **P** | **01 09 59.4** | **+0.4** |
| S39A | | | | IAmb | IAmb | 01 10 02.9 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **24.99** | **356** | P | **P** | **01 10 00.7** | **+0.4** |
| CCM | | | | IAmb | IAmb | 01 10 02.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **25.32** | **354** | P | **P** | **01 10 03.6** | **+0.4** |
| R40A | | | | IAmb | IAmb | 01 10 07.6 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **27.73** | **333** | P | **P** | **01 10 26.0** | **+0.8** |
| **S22A** | **4UR Ranch, Cre** | **29.35** | **330** | P | **P** | **01 10 40.9** | **+1.1** |
| **ISCO** | **Idaho Springs** | **30.46** | **334** | P | **P** | **01 10 54.4** | **+0.8** |
| **PV11** | **David Mesa, Pa** | **30.80** | **328** | P | **P** | **01 10 53.6** | **+1.2** |
| PV11 | | | | IAmb | IAmb | 01 10 55.6 | |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **O20A** | **White River Ci** | **31.91** | **331** | P | **P** | **01 11 03.4** | **+1.2** |
| O20A | | | | IAmb | IAmb | 01 11 05.5 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **ETMB** | **Extrema** | **31.97** | **134** | P | **P** | **01 11 02.9** | **+0.2** |
| **SPMN** | **Marine on St.** | **32.24** | **355** | P | **P** | **01 11 04.5** | **-0.2** |
| **SRU** | **San Rafael Swe** | **32.26** | **327** | P | **P** | **01 11 06.2** | **+1.0** |
| **PFO** | **Pinyon Flats O** | **32.40** | **314** | LR | LR | 01 26 10.3 | |
| | comp=Z,74nm,20.4s,baz=360,slow=40 | | | | | | |
| **MTPU** | **Mount Pierson** | **32.41** | **324** | P | **P** | **01 11 07.8** | **+1.1** |
| **P17A** | **Butcher Ranch,** | **32.64** | **328** | P | **P** | **01 11 09.8** | **+1.2** |
| P17A | | | | IAmb | IAmb | 01 11 11.9 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **RSSD** | **Black Hills** | **33.59** | **340** | P | **P** | **01 11 17.4** | **+0.7** |
| **PD31** | **Pinedale Array** | **34.60** | **333** | P | **P** | **01 11 26.0** | **+0.4** |
| **PDAR** | **Pinedale Array** | **34.60** | **333** | P | **P** | **01 11 26.4** | **+0.8** |
| | comp=Z,16nm,0.3s,baz=130,slow=12,SNR=14 | | | | | | |
| PDAR | | | | PcP | **PcP** | **01 13 58.3** | **-0.6** |
| | comp=Z,1.0nm,0.5s,baz=143,slow=5.4,SNR=11 | | | | | | |
| **GRAC** | **Grapevine Rang** | **34.91** | **318** | P | **P** | **01 11 28.5** | **+0.3** |
| **AHID** | **Auburn Hatcher** | **35.31** | **331** | P | **P** | **01 11 32.8** | **+1.1** |
| AHID | | | | IAmb | IAmb | 01 11 52.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **AGMN** | **Agassiz Nation** | **35.62** | **352** | P | **P** | **01 11 33.9** | **-0.1** |
| **LPAZ** | **La Paz** | **35.64** | **144** | P | **P** | **01 11 36.2** | **+1.1** |
| | comp=Z,1.8nm,0.5s,baz=263,slow=6.6,SNR=3.7 | | | | | | |
| **REDW** | **Red Top Meadow** | **35.65** | **332** | P | **P** | **01 11 35.3** | **+0.6** |
| **SNOW** | **Snow King Moun** | **35.69** | **332** | P | **P** | **01 11 35.6** | **+0.6** |
| **LOHW** | **Long Hollow** | **35.74** | **333** | P | **P** | **01 11 35.9** | **+0.6** |
| LOHW | | | | IAmb | IAmb | 01 11 38.0 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **TPAW** | **Teton Pass** | **35.80** | **332** | P | **P** | **01 11 36.1** | **+0.2** |
| TPAW | | | | IAmb | IAmb | 01 11 36.7 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **MOOW** | **Moose Ponds** | **35.91** | **333** | P | **P** | **01 11 37.4** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **36.35** | **319** | P | **P** | **01 11 41.8** | **+1.1** |
| | comp=Z,1.3nm,0.7s,baz=131,slow=7.2,SNR=9.5 | | | | | | |
| NVAR | | | | PcP | **PcP** | **01 14 04.9** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **1.66** | **277** | | Pg | | **Pg** | **01 17 23.3** | **+0.2** |
| | 1.8nm,0.2s,baz=96,slow=15,SNR=310 | | | | | | | | |
| MK31 | | | | | Lg | | Lg | 01 17 46.7 | |
| | 12nm,0.2s,baz=102,slow=26,SNR=14 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **1.66** | **277** | | Pg | | **Pg** | **01 17 23.6** | **+0.5** |
| MKAR | | | | | Sg | | **Sg** | **01 17 46.9** | **+2.2** |
| **MAKZ** | **Makanchi** | **1.88** | **277** | ⇓ | Pg | | **Pg** | **01 17 26.9** | **-0.4** |
| | 4.1nm,0.2s | | | | | | | | |
| MAKZ | | | | ⇑ | Lg | | Lg | 01 17 53.6 | |
| | 17nm,0.3s | | | | | | | | |
| **MAKZ** | **Makanchi** | **1.88** | **277** | | Pg | | **Pg** | **01 17 27.1** | **-0.1** |
| MAKZ | | | | | Sg | | **Sg** | **01 17 53.3** | **+1.7** |
| **DGZ** | **Jazzator, Alta** | **3.59** | **30** | | Pn | | **Pb** | **01 17 52.9** | **-2.0** |
| DGZ | | | | | Pg | | **Pg** | **01 18 02.3** | **+2.3** |
| DGZ | | | | | S | | **Sn** | **01 18 30.4** | **+0.8** |
| DGZ | | | | | Sg | | **Sb** | **01 18 41.7** | **+3.1** |
| **KAPS** | **Kapalarasan** | **3.95** | **252** | *eP* | | | **Pg** | **01 18 03.4** | **-3.5** |
| | 4.7nm,0.3s | | | | | | | | |
| KAPS | | | | *eS* | | | **Sg** | **01 18 55.9** | **-2.2** |
| | 16nm,0.5s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.95** | **252** | | Pg | | **Pg** | **01 18 03.4** | **-3.5** |
| | 4.7nm,0.3s | | | | | | | | |
| KAPS | | | | | Lg | | Lg | 01 18 55.9 | |
| | 16nm,0.5s | | | | | | | | |
| **DJR** | **Jarkent** | **4.14** | **238** | *eP* | | | **Pg** | **01 18 08.3** | **-2.2** |
| | 3.2nm,0.3s | | | | | | | | |
| DJR | | | | *eS* | | | **Sg** | **01 19 03.4** | **-0.6** |
| | 6.1nm,0.6s | | | | | | | | |
| **DJR** | **Jarkent** | **4.14** | **238** | | Pg | | **Pg** | **01 18 08.3** | **-2.2** |
| | 3.2nm,0.3s | | | | | | | | |
| DJR | | | | | Lg | | Lg | 01 19 03.4 | |
| | 6.1nm,0.6s | | | | | | | | |
| **CHBI** | **Chibit, Altay** | **4.15** | **26** | | Pn | | **Pn** | **01 17 59.2** | **+4.6** |
| CHBI | | | | | Sg | | **Sg** | **01 19 00.5** | **-3.8** |
| **AKAR** | **Aktash** | **4.19** | **27** | | Pn | | **Pn** | **01 17 59.3** | **+4.1** |
| AKAR | | | | | Pg | | **Pg** | **01 18 14.0** | **+2.6** |
| AKAR | | | | | S | | **Sn** | **01 18 45.3** | **+1.1** |
| AKAR | | | | | Sg | | **Sg** | **01 19 02.5** | **-3.1** |
| **CUR** | **Chagan-Uzun** | **4.25** | **34** | | Pn | | **Pn** | **01 17 60.0** | **+3.8** |
| **UKR** | **Ust'-Kan** | **4.33** | **1** | | Pn | | Pb | 01 18 02.2 | -5.2 |
| UKR | | | | | Pg | | **Pg** | **01 18 12.1** | **-2.0** |
| UKR | | | | | S | | **Sn** | **01 18 44.7** | **-2.9** |
| UKR | | | | | Sg | | **Sg** | **01 19 07.7** | **-2.4** |
| **ULGR** | **Ulagan, Altay** | **4.56** | **27** | | Pn | | Pn | 01 18 05.5 | +5.2 |
| **SEM** | **Semipalatinsk** | **4.81** | **324** | *eP* | | | **Pb** | **01 18 18.1** | **+2.5** |
| | 2.7nm,0.1s | | | | | | | | |
| SEM | | | | *eS* | | | **Sg** | **01 19 20.1** | **-5.4** |
| | 9.9nm,0.1s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **4.81** | **324** | | Pg | | **Pb** | **01 18 18.1** | **+2.5** |
| | 2.7nm,0.1s | | | | | | | | |
| SEM | | | | | Lg | | Lg | 01 19 20.1 | |
| | 9.9nm,0.1s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.94** | **230** | | Pg | | **Pg** | **01 18 22.4** | **-3.4** |
| | 0.6nm,0.2s | | | | | | | | |
| PDGK | | | | | Lg | | Lg | 01 19 27.7 | |
| | 6.7nm,0.7s | | | | | | | | |
| **BLB** | **Baldybastay** | **5.05** | **242** | *eP* | | | **Pg** | **01 18 25.6** | **-2.3** |
| | 9.7nm,0.5s | | | | | | | | |
| BLB | | | | *eS* | | | **Sg** | **01 19 33.3** | **-0.1** |
| | 9.5nm,0.5s | | | | | | | | |
| **BLB** | **Baldybastay** | **5.05** | **242** | | Pg | | **Pg** | **01 18 25.6** | **-2.3** |
| | 9.7nm,0.5s | | | | | | | | |
| BLB | | | | | Lg | | Lg | 01 19 33.3 | |
| | 9.5nm,0.5s | | | | | | | | |
| **SHLS** | **Shalkode** | **5.08** | **229** | *eP* | | | **Pb** | **01 18 20.6** | **+0.4** |
| | 4.9nm,0.6s | | | | | | | | |
| SHLS | | | | *eS* | | | **Sb** | **01 19 24.3** | **+3.0** |
| | 12nm,0.7s | | | | | | | | |
| **ARXS** | **Arharly** | **5.40** | **246** | *eP* | | | **Pg** | **01 18 30.5** | **-4.1** |
| | 2.1nm,0.4s | | | | | | | | |
| ARXS | | | | *eS* | | | **Sg** | **01 19 42.2** | **-2.3** |
| | 8.1nm,0.7s | | | | | | | | |
| **ARXS** | **Arharly** | **5.40** | **246** | | Pg | | **Pg** | **01 18 30.5** | **-4.1** |
| | 2.1nm,0.4s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 01 19 42.2 | |
| | 8.1nm,0.7s | | | | | | | | |
| **ARTR** | **Artybash** | **5.46** | **17** | | Pn | | **Pn** | **01 18 08.7** | **-3.9** |
| ARTR | | | | | Sg | | **Sg** | **01 19 42.9** | **-3.4** |
| **KURBB** | **Kurchatov Arra** | **5.72** | **317** | ⇑ | Lg | | Lg | 01 19 55.4 | |
| | 25nm,0.6s | | | | | | | | |
| **KURK** | **Kurchatov** | **5.75** | **318** | ⇓ | Lg | | Lg | 01 19 54.5 | |
| | 5.8nm,0.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **5.75** | **318** | | Pn | | **Pn** | **01 18 19.1** | **+2.7** |
| KURK | | | | | S | | **Sn** | **01 19 22.6** | **+0.2** |
| KURK | | | | | Sg | | **Sg** | **01 19 53.5** | **-2.1** |
| **KTBS** | **Karatobe** | **6.36** | **246** | | Pg | | Pg | 01 18 47.0 | -6.1 |
| | 0.7nm,0.3s | | | | | | | | |
| KTBS | | | | | Lg | | Lg | 01 20 09.7 | |
| | 5.7nm,0.4s | | | | | | | | |
| **ELT** | **Eltsovka** | **6.73** | **8** | | Pn | | **Pn** | **01 18 32.0** | **+2.0** |
| ELT | | | | | S | | **Sn** | **01 19 44.8** | **-1.8** |
| ELT | | | | | Sg | | **Sg** | **01 20 23.4** | **-3.6** |

*WEL **11** 01:17:22.9±0.3,41°S±2°×17°5E±°, h5km,M3.8/21, ML4.1/21,MLv3.8/21,Error ellipse: s-maj=0.0km s-min=0.0km az=129.2*
*NOU **11** 01:17:23.5,40°.63S×175°.13E,h6km,MLv3.9/6,North Island, New Zealand*
**ISC 11 01:17:23.1±1.0,40°58S±0°.02×175°12E±0°.02,h7km±9km, n137,σ0s99/151,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OGWZ** | **Otaki Gorge** | **0.24** | **171** | P | **Pg** | **01 17 28.2** | **+0.4** |
| **KIW** | **Kapiti Island** | **0.32** | **210** | P | **Pg** | **01 17 29.4** | **0.0** |
| **MRZ** | **Mangatainoka R** | **0.36** | **103** | P | **Pg** | **01 17 30.2** | **+0.1** |
| MRZ | | | | S | **Sg** | **01 17 35.5** | **+0.7** |
| **OHWZ** | **Ohakea** | **0.40** | **22** | P | **Pg** | **01 17 30.9** | **0.0** |
| **HOWZ** | **Holdsworth Sta** | **0.44** | **137** | P | **Pg** | **01 17 31.9** | **+0.3** |
| **CAW** | **Cannon Point** | **0.53** | **184** | P | **Pg** | **01 17 33.5** | **+0.2** |
| **POWZ** | **Post Office Ro** | **0.53** | **69** | P | **Pg** | **01 17 33.2** | **-0.1** |
| POWZ | | | | S | **Sg** | **01 17 40.4** | **+0.2** |
| **TIWZ** | **Tintock** | **0.61** | **109** | P | **Pg** | **01 17 35.4** | **+0.5** |
| TIWZ | | | | S | **Sg** | **01 17 43.8** | **+0.9** |
| **MTW** | **Mount Morrison** | **0.65** | **154** | P | **Pb** | **01 17 36.2** | **-0.4** |
| **PRWZ** | **Pori Road** | **0.65** | **88** | P | **Pg** | **01 17 35.9** | **+0.4** |
| PRWZ | | | | S | **Sb** | **01 17 45.4** | **-0.5** |
| **WEL** | **Wellington** | **0.75** | **201** | P | **Pg** | **01 17 37.3** | **-0.2** |
| **TMWZ** | **Te Maipa** | **0.79** | **132** | P | **Pb** | **01 17 38.9** | **-0.1** |
| **SNZO** | **South Karori** | **0.79** | **203** | P | **Pg** | **01 17 38.0** | **-0.3** |
| **TSZ** | **Takapari Road** | **0.83** | **51** | P | **Pg** | **01 17 38.4** | **-0.5** |
| TSZ | | | | S | **Sg** | **01 17 49.9** | **+0.2** |
| **WAZ** | **Wanganui** | **0.83** | **353** | P | **Pg** | **01 17 38.9** | **-0.2** |
| WAZ | | | | S | **Sg** | **01 17 49.9** | **0.0** |
| **PAWZ** | **Paruwai Farm** | **0.83** | **164** | P | **Pb** | **01 17 39.8** | **-0.1** |
| PAWZ | | | | S | **Sg** | **01 17 49.8** | **-0.2** |
| **MSWZ** | **Moikau Station** | **0.84** | **173** | P | **Pb** | **01 17 39.8** | **-0.1** |
| MSWZ | | | | S | **Sb** | **01 17 52.1** | **+0.6** |
| **DVHZ** | **Dannevirke** | **0.85** | **71** | P | **Pg** | **01 17 39.1** | **-0.2** |
| DVHZ | | | | S | **Sg** | **01 17 50.3** | **0.0** |
| **BHW** | **Baring Head** | **0.85** | **193** | P | **Pg** | **01 17 39.0** | **-0.4** |
| **BFZ** | **Birch Farm** | **0.86** | **97** | P | **Pg** | **01 17 40.1** | **+0.5** |
| **BFZ** | **Birch Farm** | **0.86** | **97** | P | **Pg** | **01 17 40.1** | **+0.5** |
| **CPWZ** | **Castlepoint** | **0.89** | **112** | P | **Pn** | **01 17 41.6** | **-0.3** |
| **TCW** | **Tory Channel** | **0.90** | **225** | P | **Pg** | **01 17 39.0** | **-1.3** |
| **TRWZ** | **Traveller** | **0.92** | **152** | P | **Pb** | **01 17 41.8** | **+0.4** |
| TRWZ | | | | S | **Sn** | **01 17 56.9** | **+1.0** |
| **DUWZ** | **D'Urville Isla** | **0.94** | **256** | P | **Pg** | **01 17 40.2** | **-0.8** |
| DUWZ | | | | S | **Sb** | **01 17 55.0** | **+0.7** |
| **PLWZ** | **Palliser** | **0.99** | **174** | P | **Pb** | **01 17 42.6** | **0.0** |
| PLWZ | | | | S | **Sn** | **01 17 58.3** | **+0.6** |
| **ANWZ** | **Angora Road** | **1.04** | **84** | P | **Pb** | **01 17 43.5** | **+0.2** |
| ANWZ | | | | S | **Sn** | **01 17 59.8** | **+1.1** |
| **PNHZ** | **Pukenui** | **1.06** | **51** | P | **Pg** | **01 17 42.5** | **-1.0** |
| **WPHZ** | **Waipukurau** | **1.13** | **63** | P | **Pg** | **01 17 44.8** | **0.0** |
| **PRHZ** | **Porangahau** | **1.20** | **75** | P | **Pg** | **01 17 46.1** | **+0.1** |
| **MTVZ** | **Mangateitei** | **1.23** | **13** | P | **Pg** | **01 17 45.1** | **-1.4** |
| **TUWZ** | **Tuamarina** | **1.23** | **226** | P | **Pg** | **01 17 44.7** | **-2.0** |
| **LREZ** | **Lake Rotokare** | **1.25** | **334** | P | **Pg** | **01 17 46.8** | **-0.2** |
| LREZ | | | | S | **Sn** | **01 18 05.0** | **+1.2** |
| **MOVZ** | **Moawhango** | **1.27** | **23** | P | **Pg** | **01 17 45.2** | **-2.2** |
| MOVZ | | | | S | **Sg** | **01 18 01.2** | **-2.7** |
| **PKVZ** | **Pokaka** | **1.30** | **8** | P | **Pn** | **01 17 46.4** | **-1.2** |
| **WNVZ** | **Wahianoa** | **1.30** | **16** | P | **Pn** | **01 17 46.2** | **-1.6** |
| **BHHZ** | **Black Hill Sta** | **1.31** | **34** | P | **Pn** | **01 17 46.1** | **-1.7** |
| **TRVZ** | **Turoa** | **1.32** | **15** | P | **Pn** | **01 17 46.8** | **-1.3** |
| **KRHZ** | **Kereru** | **1.34** | **46** | P | **Pn** | **01 17 47.3** | **-0.9** |
| **WHVZ** | **Whangaehu Hut** | **1.35** | **16** | P | **Pn** | **01 17 47.1** | **-1.4** |
| **DRZ** | **Dome Shelter** | **1.35** | **15** | P | **Pn** | **01 17 48.2** | **-0.3** |
| **CMWZ** | **Cape Campbell** | **1.35** | **210** | P | **Pg** | **01 17 49.1** | **+0.1** |
| **FWVZ** | **Far West T-bar** | **1.36** | **14** | P | **Pn** | **01 17 47.5** | **-1.2** |
| **TUVZ** | **Tukino** | **1.37** | **18** | P | **Pn** | **01 17 47.5** | **-1.3** |
| **PREZ** | **Palmer Road** | **1.44** | **329** | P | **Pn** | **01 17 50.3** | **+0.8** |
| **PXZ** | **Pawanui** | **1.44** | **68** | P | **Pn** | **01 17 49.2** | **-0.3** |
| **SNVZ** | **South Ngauruho** | **1.45** | **16** | P | **Pn** | **01 17 48.8** | **-1.0** |
| **NGZ** | **Ngauruhoe** | **1.45** | **15** | P | **Pn** | **01 17 49.0** | **-0.8** |
| **NNZ** | **Nelson** | **1.47** | **244** | P | **Pn** | **01 17 49.2** | **-0.6** |
| **BSWZ** | **Blackbirch Sta** | **1.47** | **219** | P | **Pn** | **01 17 49.6** | **-0.4** |
| **OTVZ** | **Oturere** | **1.48** | **17** | P | **Pn** | **01 17 49.2** | **-1.0** |
| **VRZ** | **Vera Road** | **1.48** | **349** | P | **Pn** | **01 17 50.3** | **+0.2** |
| **NNVZ** | **North Ngauruho** | **1.50** | **15** | P | **Pn** | **01 17 49.7** | **-0.7** |
| **NMEZ** | **Namu Road** | **1.51** | **320** | P | **Pn** | **01 17 51.1** | **+0.7** |
| **WTVZ** | **West Tongariro** | **1.51** | **14** | P | **Pn** | **01 17 49.8** | **-0.7** |
| **ETVZ** | **East Tongariro** | **1.51** | **18** | P | **Pn** | **01 17 49.8** | **-0.9** |
| **KWHZ** | **Kaweka Forest** | **1.53** | **41** | P | **Pn** | **01 17 50.6** | **-0.2** |
| **NEZ** | **North Egmont** | **1.53** | **329** | P | **Pn** | **01 17 51.5** | **+0.7** |
| **TWVZ** | **Taurewa** | **1.53** | **9** | P | **Pn** | **01 17 50.0** | **-0.9** |
| **TMVZ** | **Te Maari** | **1.53** | **17** | P | **Pn** | **01 17 50.0** | **-0.8** |
| **KRVZ** | **Karewarewa** | **1.54** | **15** | P | **Pn** | **01 17 50.4** | **-0.5** |
| **KHEZ** | **Kahui Hut** | **1.54** | **326** | P | **Pn** | **01 17 51.8** | **+0.9** |
| **NTVZ** | **North Tongarir** | **1.54** | **16** | P | **Pn** | **01 17 50.3** | **-0.7** |
| **KAHZ** | **Kahuranaki** | **1.56** | **60** | P | **Pn** | **01 17 51.2** | **+0.1** |
| **DREZ** | **Durham Road** | **1.56** | **333** | P | **Pn** | **01 17 52.1** | **+0.9** |
| **MHEZ** | **Mangahewa** | **1.62** | **338** | P | **Pb** | **01 17 53.5** | **+0.2** |
| **NBEZ** | **Newall Road No** | **1.63** | **323** | P | **Pb** | **01 17 53.3** | **0.0** |
| **PKE** | **Pukeiti** | **1.64** | **327** | P | **Pn** | **01 17 53.3** | **+1.1** |
| **MCHZ** | **McNeill Hill** | **1.66** | **47** | P | **Pn** | **01 17 53.3** | **+0.8** |
| **KATZ** | **Kakaramea** | **1.66** | **16** | P | **Pn** | **01 17 52.7** | **0.0** |
| **RITZ** | **Rihia Road** | **1.70** | **20** | P | **Pn** | **01 17 53.2** | **+0.1** |
| **TKNZ** | **Takaka Hill** | **1.70** | **254** | P | **Pn** | **01 17 53.9** | **+0.7** |
| **CKHZ** | **Cape Kidnapper** | **1.76** | **59** | P | **Pn** | **01 17 54.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **1.76** | **37** | P | **Pn** | **01 17 54.4** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **1.76** | **37** | P | **Pn** | **01 17 54.7** | **+0.7** |
| **RATZ** | **Rangitukua** | **1.78** | **17** | P | **Pn** | **01 17 55.1** | **+0.8** |
| **HATZ** | **Hinemaiaia** | **1.85** | **24** | P | **Pn** | **01 17 56.0** | **+0.9** |
| **WATZ** | **Wairara** | **1.93** | **14** | P | **Pn** | **01 17 57.4** | **+1.1** |
| **ARHZ** | **Aropaoanui** | **1.95** | **48** | P | **Pn** | **01 17 57.0** | **+0.5** |
| **MRNZ** | **Matariki Terra** | **1.97** | **245** | P | **Pn** | **01 17 58.1** | **+1.4** |
| **NMHZ** | **Naumai** | **1.97** | **42** | P | **Pn** | **01 17 57.2** | **+0.3** |
| **QRZ** | **Quartz Range** | **1.98** | **262** | P | **Pn** | **01 17 57.3** | **+0.3** |
| **QRZ** | **Quartz Range** | **1.98** | **262** | P | **Pn** | **01 17 57.7** | **+0.7** |
| **MRHZ** | **Matea Rd** | **2.01** | **30** | P | **Pn** | **01 17 57.8** | **+0.4** |
| **WHTZ** | **Whakaora** | **2.02** | **19** | P | **Pb** | **01 17 59.9** | **-0.2** |
| **THZ** | **Tophouse** | **2.05** | **234** | P | **Pn** | **01 17 58.6** | **+0.6** |
| **HIZ** | **Hauiti** | **2.08** | **354** | P | **Pn** | **01 17 58.5** | **+0.2** |
| **HIZ** | **Hauiti** | **2.08** | **354** | P | **Pn** | **01 17 59.6** | **+1.4** |
| **KUTZ** | **Kaahu Road** | **2.16** | **15** | P | **Pb** | **01 18 02.0** | **-0.4** |
| **MTHZ** | **Maungataniwha** | **2.18** | **38** | P | **Pn** | **01 17 59.6** | **-0.1** |
| **KHZ** | **Kahutara** | **2.19** | **212** | P | **Pn** | **01 17 59.5** | **-0.2** |
| **KHZ** | **Kahutara** | **2.19** | **212** | P | **Pn** | **01 17 59.8** | **+0.1** |
| **WPRZ** | **Whakapapatarin** | **2.21** | **22** | P | **Pn** | **01 18 01.0** | **+0.9** |
| **ALRZ** | **Allen Road** | **2.23** | **26** | P | **Pn** | **01 18 02.1** | **+1.8** |
| **TLZ** | **Tolley Road** | **2.27** | **8** | P | **Pn** | **01 18 03.0** | **+2.0** |
| **PRRZ** | **Plateau Road** | **2.30** | **26** | P | **Pn** | **01 18 02.6** | **+1.2** |
| **HRRZ** | **Handcock Road** | **2.37** | **23** | P | **Pb** | **01 18 05.5** | **-0.5** |
| **RTZ** | **Ruatahuna** | **2.43** | **37** | P | **Pn** | **01 18 03.0** | **-0.2** |
| **SNGZ** | **Shannon Statio** | **2.48** | **44** | P | **Pn** | **01 18 03.2** | **-0.7** |
| **KNZ** | **Kokohu** | **2.51** | **52** | P | **Pn** | **01 18 02.8** | **-1.4** |
| **TARZ** | **Mount Tarawera** | **2.58** | **25** | P | **Pn** | **01 18 05.9** | **+0.6** |
| **MKRZ** | **Makatiti** | **2.65** | **24** | P | **Pb** | **01 18 11.2** | **+0.3** |
| **OMRZ** | **Omania** | **2.66** | **22** | P | **Pg** | **01 18 13.2** | **-0.7** |
| **PRGZ** | **Paritu Road** | **2.70** | **53** | P | **Pn** | **01 18 05.5** | **-1.4** |
| **RAGZ** | **Rawiri** | **2.74** | **41** | P | **Pn** | **01 18 06.3** | **-1.1** |
| **DSZ** | **Denniston Nort** | **2.76** | **244** | P | **Pn** | **01 18 08.6** | **+0.9** |
| **URZ** | **Urewera** | **2.78** | **34** | P | **Pn** | **01 18 06.9** | **-1.0** |
| **KMRZ** | **Kaimai** | **2.81** | **13** | P | **Pb** | **01 18 14.2** | **+0.8** |
| **GVZ** | **Greta Valley S** | **2.85** | **213** | P | **Pn** | **01 18 08.1** | **-0.8** |
| **TOZ** | **Tahuroa Road** | **2.86** | **6** | P | **Pn** | **01 18 10.8** | **+1.8** |
| **MWZ** | **Matawai** | **2.92** | **48** | P | **Pn** | **01 18 08.4** | **-1.4** |
| **LTZ** | **Lake Taylor** | **3.06** | **223** | P | **Pn** | **01 18 11.5** | **-0.4** |
| **AMCZ** | **Amberley** | **3.18** | **215** | P | **Pn** | **01 18 13.6** | **+0.1** |
| **TWGZ** | **Tauwhareparae** | **3.27** | **44** | P | **Pn** | **01 18 14.0** | **-0.7** |
| **RUGZ** | **Raukumara Rang** | **3.28** | **38** | P | **Pn** | **01 18 13.7** | **-1.2** |
| **INZ** | **Inchbonnie** | **3.49** | **231** | P | **Pn** | **01 18 18.2** | **+0.5** |
| **OKCZ** | **Okains Bay** | **3.49** | **205** | P | **Pn** | **01 18 15.9** | **-1.9** |
| **HAZ** | **Te Kaha** | **3.50** | **37** | P | **Pn** | **01 18 16.2** | **-1.6** |
| **AWAZ** | **Awhitu Peninsu** | **3.53** | **354** | P | **Pn** | **01 18 20.5** | **+2.3** |
| **PKGZ** | **Pakihiroa** | **3.54** | **41** | P | **Pn** | **01 18 17.8** | **-0.6** |
| **OXZ** | **Oxford** | **3.58** | **219** | P | **Pn** | **01 18 17.3** | **-1.6** |
| **MQZ** | **McQueen's Vall** | **3.62** | **210** | P | **Pn** | **01 18 17.0** | **-2.4** |
| **WTAZ** | **Waiatarua** | **3.67** | **353** | P | **Pn** | **01 18 23.3** | **+3.1** |
| **AKCZ** | **Akaroa Harbour** | **3.68** | **206** | P | **Pn** | **01 18 18.9** | **-1.4** |
| **WIAZ** | **Waiheke Island** | **3.78** | **0** | P | **Pn** | **01 18 23.3** | **+1.6** |
| **MHCZ** | **Mount Hutt** | **3.96** | **221** | P | **Pn** | **01 18 23.8** | **-0.4** |
| **WVZ** | **Waitaha Valley** | **4.12** | **231** | P | **Pn** | **01 18 26.3** | **0.0** |
| **RPZ** | **Rata Peaks** | **4.35** | **223** | P | Pn | 01 18 34.7 | +5.1 |
| **ARCZ** | **Arundel** | **4.46** | **220** | P | **Pn** | **01 18 30.1** | **-0.9** |
| **GCSZ** | **Gaunt Creek Bo** | **4.50** | **231** | P | **Pn** | **01 18 31.6** | **0.0** |
| **WCZ** | **Waipu Caves** | **4.67** | **352** | P | **Pn** | **01 18 36.3** | **+2.3** |
| **TMZ** | **Timaru** | **4.87** | **217** | P | **Pn** | **01 18 35.8** | **-0.8** |
| **FOZ** | **Fox Glacier** | **4.93** | **232** | P | **Pn** | **01 18 37.0** | **-0.5** |
| **LBZ** | **Lake Benmore** | **5.27** | **222** | P | **Pn** | **01 18 41.2** | **-1.0** |
| **ODZ** | **Otahua Downs** | **5.54** | **215** | P | **Pn** | **01 18 43.8** | **-2.1** |
| **JCZ** | **Jackson Bay** | **5.85** | **231** | P | **Pn** | **01 18 48.7** | **-1.5** |
| **CTZ** | **Chatham Island** | **6.90** | **120** | P | **Pn** | **01 19 02.9** | **-1.7** |

*IDC **11** 01:17:37.4±2.5,5°.37S×145°.72E,h95km±22km,mb3.4/4, mb1 3.7/8,mb1mx3.5/34,mbtmp4.0/8,MS2.8/1,Ms1 2.8/1, ms1mx2.3/36,Error ellipse: s-maj=30.1km s-min=16.9km az=58.0*
**ISC 11 01:17:37.4±1.2,5°.4S±0°.1×145°.8E±0°.2,h100km,n9, σ0s75/10,mb3.6/4,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.25** | **161** | P | **Pn** | **01 18 39.5** | **-0.5** |
| | 23nm,0.3s,baz=43,slow=6.1,SNR=15 | | | | | | |
| PMG | | | | S | **Sn** | **01 19 28.6** | **+0.1** |
| | 20nm,0.3s,baz=137,slow=14,SNR=6.9 | | | | | | |
| **JAY** | **Jayapura** | **5.80** | **299** | P | **Pn** | **01 19 01.8** | **+0.7** |
| | 3.1nm,0.3s,baz=154,slow=5.8,SNR=10 | | | | | | |
| JAY | | | | LR | LR | 01 21 05.9 | |
| | comp=Z,93nm,19.3s,baz=259,slow=36 | | | | | | |
| **SIJI** | **Sorong** | **15.16** | **287** | P | **P** | **01 21 07.8** | **-1.2** |
| | 3.4nm,0.3s,baz=119,slow=11,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.27** | **217** | P | **P** | **01 21 43.3** | **-0.2** |
| | 0.4nm,0.3s,baz=31,slow=11,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **21.50** | **211** | P | **P** | **01 22 18.4** | **0.0** |
| | 1.5nm,0.7s,baz=42,slow=7.7,SNR=7.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.39** | **236** | P | **P** | **01 22 37.2** | **-0.4** |
| | 2.8nm,0.5s,baz=46,slow=9.2,SNR=21 | | | | | | |
| **STKA** | **Stephens Creek** | **26.67** | **188** | P | **P** | **01 23 08.3** | **+1.2** |
| | 2.2nm,0.6s,baz=11,slow=11,SNR=6.6 | | | | | | |
| **ILAR** | **Eielson Array** | **85.38** | **23** | P | **P** | **01 30 03.2** | **-0.1** |
| | 0.4nm,0.8s,baz=241,slow=6.2,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **143.75** | **285** | PKP | **PKPdf** | **01 37 02.1** | **+0.2** |
| | 0.4nm,0.7s,baz=80,slow=2.9,SNR=2.0 | | | | | | |

**IDC 11 01:20:16.6±1.3,12°.75N×145°.31E,h0km,mb3.5/4, mb1 3.8/4,mb1mx3.5/41,mbtmp3.5/4,Error ellipse: s-maj=41.0km s-min=20.5km az=74.0,South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.94** | **333** | Pn | Pn | 01 20 37.5 | +0.4 |
| | 33nm,0.3s,baz=145,slow=8.0,SNR=11 | | | | | | |
| GUMO | | | | Sn | Sn | 01 20 51.6 | +0.4 |
| | 121nm,0.3s,baz=168,slow=20,SNR=5.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.24** | **199** | P | P | 01 27 04.5 | 0.0 |
| | 0.3nm,0.5s,baz=22,slow=10,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.39** | **316** | P | P | 01 30 41.1 | -0.3 |
| | 0.2nm,0.5s,baz=93,slow=8.5,SNR=1.9 | | | | | | |
| **ILAR** | **Eielson Array** | **69.14** | **25** | P | P | 01 31 25.1 | +0.6 |
| | 0.9nm,1.0s,baz=251,slow=5.4,SNR=4.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.40** | **27** | P | P | 01 32 45.0 | -0.7 |
| | 0.2nm,0.5s,baz=287,slow=5.0,SNR=4.7 | | | | | | |

*IDC **11** 01:37:30.9±3.4,4°.49S×153°.66E,h93km±24km,mb3.9/10, mb1 4.1/11,mb1mx3.9/35,mbtmp4.3/11,MS3.4/15, Ms1 3.4/15,ms1mx3.2/57,Error ellipse: s-maj=33.6km s-min=15.9km az=105.0*
*DJA **11** 01:37:31.5±1.5,4°S±9°×15°4E±1°3,h101km±8km,M4.9/13, mB5.3/2,mb4.5/13,MLv5.1/1,Mw(mB)4.8/2*
*NEIC **11** 01:37:32.7±1.0,4°.4S±0°.1×153°.58E±0°.05,h96km±8km, mb4.5/12,Error ellipse: s-maj=16.1km s-min=4.5km az=162.0*
**ISC 11 01:37:30.4±0.7,4°42S±0°.07×153°72E±0°.09,h85km,n66, σ1s07/56,mb4.3/18,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.57** | **278** | Pn | **Pn** | **01 37 57.5** | **+0.7** |
| RABL | | | | Sn | **Sn** | **01 38 16.9** | **0.0** |
| **RABL** | **Rabaul** | **1.57** | **278** | P | **Pn** | **01 37 57.6** | **+0.7** |
| **KRVT** | **Keravat (AS076** | **1.70** | **274** | P | **Pn** | **01 37 59.5** | **+1.0** |
| KRVT | | | | S | **Sn** | **01 38 19.2** | **-0.6** |
| **PMG** | **Port Moresby** | **8.19** | **232** | P | **Pn** | **01 39 27.5** | **+1.0** |
| | 6.0nm,0.3s,baz=41,slow=7.0,SNR=11 | | | | | | |
| PMG | | | | S | **Sn** | **01 40 56.6** | **-0.8** |
| | 5.6nm,0.3s,baz=136,slow=20,SNR=18 | | | | | | |
| PMG | | | | LR | LR | 01 42 49.1 | |
| | comp=Z,234nm,21.5s,baz=352,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **8.19** | **232** | Pn | **Pn** | **01 39 27.2** | **+0.7** |
| PMG | | | | | **Sn** | **01 40 56.7** | **-0.7** |
| **PMG** | **Port Moresby** | **8.19** | **232** | P | **Pn** | **01 39 28.7** | **+2.2** |
| **COEN** | **Coen** | **14.07** | **227** | Pn | **Pn** | **01 40 47.6** | **+1.6** |
| **MTSU** | **Mount Surprise** | **16.45** | **213** | P | **P** | **01 41 19.7** | **+2.3** |
| **CTA** | **Charters Tower** | **17.19** | **204** | LR | LR | 01 47 48.7 | |
| | comp=Z,133nm,18.0s,baz=39,slow=36 | | | | | | |
| **RK1H** | **Rockhampton Ha** | **19.11** | **189** | P | **Pn** | **01 41 47.8** | **-0.6** |
| **EIDS** | **Eidsvold** | **20.98** | **187** | P | **P** | **01 42 07.5** | **+0.6** |
| **QIS** | **Mount Isa** | **21.12** | **219** | P | **P** | **01 42 09.7** | **+1.3** |
| **DZM** | **Mont Dzumac** | **21.45** | **146** | LR | LR | 01 49 25.5 | |
| | comp=Z,105nm,21.3s,baz=54,slow=33 | | | | | | |
| **RMQ** | **Roma** | **22.45** | **192** | P | **P** | **01 42 22.9** | **+0.3** |
| **KDU** | **Kakadu** | **22.55** | **247** | P | **P** | **01 42 23.2** | **-0.5** |
| **MTN** | **Manton Dam** | **23.83** | **248** | P | **P** | **01 42 35.3** | **-0.7** |
| MTN | | | | IAmb | IAmb | 01 42 35.9 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **QLP** | **Quilpie** | **23.84** | **201** | P | **P** | **01 42 36.4** | **+0.6** |
| **WB0** | **Warramunga Arr** | **24.24** | **229** | P | **P** | **01 42 39.2** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 01 42 40.6 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.25** | **229** | P | **P** | **01 42 37.5** | **-2.2** |
| WR0 | | | | IAmb | IAmb | 01 42 40.7 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.37** | **229** | P | **P** | **01 42 40.7** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 01 42 41.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.37** | **229** | P | **P** | **01 42 40.6** | **-0.2** |
| **WB2** | **Warramunga Arr** | **24.38** | **229** | P | **P** | **01 42 40.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 01 42 41.9 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.39** | **229** | P | **P** | **01 42 40.3** | **-0.7** |
| | comp=Z,13nm,0.6s,baz=54,slow=10.0,SNR=94 | | | | | | |
| WRA | | | | LR | LR | 01 52 43.2 |

baz=198,slow=75,SNR=57
**H11S1 WAKE ISLAND Hy 28.56 18** T T 02 39 50.7
baz=198,slow=75,SNR=24
**H11N1 WAKE ISLAND Hy 29.76 17** T T 02 41 21.8
baz=196,slow=76,SNR=5.2
**H11N3 WAKE ISLAND Hy 29.77 17** T T 02 41 16.5
baz=196,slow=76,SNR=11
**H11N2 WAKE ISLAND Hy 29.78 17** T T 02 41 20.9
baz=196,slow=76,SNR=13
**AFI Afiamalu 30.10 102** LR LR 02 21 16.7
comp=Z,52nm,18.9s,baz=55,slow=32
**FITZ Fitzroy Crossi 32.66 250** LR LR 02 22 58.3
comp=Z,71nm,19.7s,baz=84,slow=33
**BATI Baumata 33.81 265** LR LR 02 26 38.6
comp=Z,122nm,18.5s,baz=70,slow=38
**PETK Petropavlovsk- 61.75 360** P **P** **02 15 14.9 -0.1**
5.6nm,1.0s,baz=158,slow=5.9,SNR=5.2
**CMAR Chiang Mai Arr 64.21 295** P **P** **02 15 32.4 +0.2**
0.9nm,0.3s,baz=116,slow=6.3,SNR=1.4
**ILAR Eielson Array 84.08 21** P **P** **02 17 27.1 -0.1**
1.2nm,0.9s,baz=256,slow=5.2,SNR=9.4
**MKAR Makanchi Array 86.74 318** P **P** **02 17 40.8 -0.1**
0.1nm,0.4s,baz=91,slow=6.0,SNR=5.6
**NVAR Mina Array Bea 90.62 51** P **P** **02 18 01.4 +1.6**
2.4nm,0.9s,baz=243,slow=6.5,SNR=13
**PFO Pinyon Flats O 91.23 56** LR LR 02 51 18.4
comp=Z,85nm,21.3s,baz=340,slow=30
**YKA Yellowknife Ar 96.64 28** P **P** **02 18 26.4 -0.1**
0.3nm,0.8s,baz=253,slow=4.2,SNR=3.9
**BDFB Brasilia 144.59 133** PKP **PKPdf** **02 24 32.8 -1.7**
4.2nm,0.9s,baz=256,slow=2.6,SNR=5.8

*THE **11** 02:26:02.2, 38°.50N × 20°.52E, h10km, ML3.3/12, Error ellipse: s-maj=0.8km s-min=0.3km az=279.0*
*ATH **11** 02:26:02.0, 38°.50N × 20°.55E, h14km ± 1km, ML3.1/5, Error ellipse: s-maj=2.0km s-min=0.6km az=285.0*
**ISC 11 02:26:01.4**±0.8, **38°.51N**±0°.02 × **20°.49E**±0°.03, **h18**km±4km, **n48**, σ1°**30**/75, **Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.07** | **130** | P | **Pg** | **02 26 04.5** | **-0.3** |
| FSK | | | | S | **Sg** | **02 26 05.9** | **-1.1** |
| | 81μm,0.2s | | | | | | |
| **FSK** | **Fiskardo** | **0.07** | **130** | P | **Pg** | **02 26 04.5** | **-0.3** |
| FSK | | | | S | **Sg** | **02 26 05.9** | **-1.1** |
| FSK | | | | AML | AML | 02 26 06.1 | |
| FSK | | | | AML | AML | 02 26 06.3 | |
| **EVGI** | **Lefkada island** | **0.17** | **49** | P | **Pg** | **02 26 06.0** | **+0.1** |
| EVGI | | | | S | **Sg** | **02 26 09.0** | **0.0** |
| | 26μm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.17** | **49** | P | **Pg** | **02 26 06.0** | **+0.1** |
| EVGI | | | | S | **Sg** | **02 26 09.0** | **0.0** |
| **DRAG** | **Dragano-Lefkad** | **0.19** | **21** | P | **Pg** | **02 26 06.3** | **+0.1** |
| DRAG | | | | S | **Sg** | **02 26 09.7** | **+0.3** |
| | 16μm,0.3s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.19** | **21** | P | **Pg** | **02 26 06.3** | **+0.1** |
| DRAG | | | | S | **Sg** | **02 26 09.7** | **+0.3** |
| **KEF4** | **Livadi, Kephal** | **0.25** | **192** | P | **Pb** | **02 26 08.0** | **+0.6** |
| KEF4 | | | | S | **Sb** | **02 26 12.1** | **+0.7** |
| **NYDR** | **Nydri-Lefkada** | **0.26** | **39** | P | **Pg** | **02 26 07.3** | **0.0** |
| NYDR | | | | S | **Sg** | **02 26 10.9** | **-0.4** |
| | 10μm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.28** | **199** | P | **Pg** | **02 26 08.0** | **+0.4** |
| DMLN | | | | S | **Sg** | **02 26 12.1** | **+0.3** |
| | 9μm,0.3s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.28** | **199** | P | **Pg** | **02 26 08.0** | **+0.4** |
| DMLN | | | | S | **Sg** | **02 26 12.1** | **+0.3** |
| **LKD2** | **Lefkada island** | **0.31** | **25** | P | **Pg** | **02 26 08.3** | **+0.2** |
| LKD2 | | | | S | **Sg** | **02 26 12.9** | **+0.2** |
| | 3μm,0.3s | | | | | | |
| **LKD2** | **Lefkada island** | **0.31** | **25** | P | **Pg** | **02 26 08.3** | **+0.2** |
| LKD2 | | | | S | **Sg** | **02 26 12.9** | **+0.2** |
| LKD2 | | | | AML | AML | 02 26 15.5 | |
| | comp=N,4875μm,0.3s | | | | | | |
| LKD2 | | | | AML | AML | 02 26 15.6 | |
| | comp=E,5341μm,0.2s | | | | | | |
| **LXRA** | **Lixouri, Kepha** | **0.31** | **188** | P | **Pg** | **02 26 08.5** | **+0.4** |
| LXRA | | | | S | **Sg** | **02 26 13.1** | **+0.5** |
| **KEF3** | **Kipouria, Keph** | **0.32** | **200** | P | **Pg** | **02 26 08.1** | **-0.2** |
| KEF3 | | | | S | **Sg** | **02 26 13.3** | **+0.4** |
| | comp=E,15μm,0.3s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.32** | **200** | P | **Pg** | **02 26 08.1** | **-0.2** |
| KEF3 | | | | S | **Sg** | **02 26 13.3** | **+0.4** |
| **VLS** | **Valsamata** | **0.34** | **166** | P | **Pg** | **02 26 08.6** | **+0.1** |
| VLS | | | | S | **Sb** | **02 26 14.0** | **0.0** |
| | comp=E,11μm,0.4s | | | | | | |
| **VLS** | **Valsamata** | **0.34** | **166** | P | **Pg** | **02 26 08.6** | **+0.1** |
| VLS | | | | S | **Sb** | **02 26 14.0** | **0.0** |
| VLS | | | | AML | AML | 02 26 14.6 | |
| | comp=E,24431μm,0.4s | | | | | | |
| VLS | | | | AML | AML | 02 26 16.3 | |
| | comp=N,17852μm,0.4s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.34** | **22** | P | **Pg** | **02 26 09.1** | **+0.5** |
| TSLK | | | | S | **Sg** | **02 26 13.9** | **+0.3** |
| | comp=N,3μm,0.2s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.34** | **22** | P | **Pg** | **02 26 09.1** | **+0.5** |
| TSLK | | | | S | **Sg** | **02 26 13.9** | **+0.3** |
| **PSDA** | **Pessada-Kefalo** | **0.40** | **169** | P | **Pg** | **02 26 09.7** | **+0.1** |
| PSDA | | | | S | **Sg** | **02 26 15.1** | **-0.1** |
| | comp=N,2μm,0.3s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.40** | **169** | P | **Pg** | **02 26 09.8** | **+0.2** |
| PSDA | | | | S | **Sg** | **02 26 15.1** | **-0.1** |
| **VTN** | **Vitineika** | **0.81** | **137** | P | **Pg** | **02 26 16.8** | **-0.3** |
| **VTN** | **Vitineika** | **0.81** | **137** | P | **Pg** | **02 26 16.8** | **-0.3** |
| **LTHK** | **Lithakia** | **0.84** | **161** | P | **Pg** | **02 26 17.5** | **-0.3** |
| **LTHK** | **Lithakia** | **0.84** | **161** | P | **Pg** | **02 26 17.5** | **-0.3** |
| **RLS** | **Riolos of Patr** | **0.89** | **120** | P | **Pg** | **02 26 18.4** | **-0.3** |
| **RLS** | **Riolos of Patr** | **0.89** | **120** | P | **Pg** | **02 26 18.4** | **-0.3** |
| RLS | | | | AML | AML | 02 26 34.0 | |
| | comp=N,1068μm,0.2s | | | | | | |
| RLS | | | | AML | AML | 02 26 34.3 | |
| | comp=E,730μm,0.2s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.03** | **353** | P | **Pb** | **02 26 21.9** | **+1.2** |
| IGT | | | | S | **Sn** | **02 26 37.5** | **+2.5** |
| | comp=E,988nm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.03** | **353** | P | **Pb** | **02 26 21.9** | **+1.2** |
| IGT | | | | AML | AML | 02 26 40.4 | |
| | comp=E,1612μm,0.6s | | | | | | |
| IGT | | | | AML | AML | 02 26 41.1 | |
| | comp=N,2370μm,0.3s | | | | | | |
| **DRO** | **Drossia** | **1.11** | **120** | P | **Pb** | **02 26 22.4** | **+0.4** |
| DRO | | | | S | **Sn** | **02 26 38.7** | **+1.8** |
| | comp=N,1μm,0.5s | | | | | | |
| **DRO** | **Drossia** | **1.11** | **120** | P | **Pb** | **02 26 22.4** | **+0.4** |
| **EFP** | **Efpalio** | **1.11** | **94** | P | **Pb** | **02 26 21.8** | **-0.3** |
| **EFP** | **Efpalio** | **1.11** | **94** | P | **Pb** | **02 26 21.8** | **-0.3** |
| **JAN** | **Janina** | **1.18** | **14** | P | **Pn** | **02 26 24.2** | **+1.1** |
| **JAN** | **Janina** | **1.18** | **14** | P | **Pn** | **02 26 24.2** | **+1.1** |
| **LAKA** | **Lakka** | **1.20** | **102** | P | **Pb** | **02 26 23.5** | **-0.1** |
| **LAKA** | **Lakka** | **1.20** | **102** | P | **Pb** | **02 26 23.5** | **-0.1** |
| **TRIZ** | **Trizonia** | **1.25** | **96** | P | **Pn** | **02 26 24.3** | **+0.4** |
| **TRIZ** | **Trizonia** | **1.25** | **96** | P | **Pn** | **02 26 24.3** | **+0.4** |
| **KLV** | **Kalavryta, Ach** | **1.39** | **109** | P | **Pn** | **02 26 26.9** | **+1.0** |
| **KLV** | **Kalavryta, Ach** | **1.39** | **109** | P | **Pn** | **02 26 26.9** | **+1.0** |
| **LSTV** | **Lastovo** | **5.06** | **328** | *e*Pn | **Pn** | **02 27 17.1** | **+0.8** |
| **HVAR** | **Hvar** | **5.58** | **328** | *e*Pn | **Pn** | **02 27 24.6** | **+1.1** |
| HVAR | | | | *e*Pn | **Sn** | **02 28 23.3** | **-3.8** |
| **RICI** | **Ricice** | **5.59** | **334** | *e*Pn | **Pn** | **02 27 24.6** | **+1.0** |
| RICI | | | | *e*Pn | **Sn** | **02 28 22.8** | **-4.7** |
| **KIJV** | **Kijevo** | **6.29** | **332** | *e*Pn | **Pn** | **02 27 34.8** | **+1.5** |
| KIJV | | | | *e*Pn | **Sn** | **02 28 39.6** | **-5.1** |
| **ZIRJ** | **Zirje** | **6.31** | **326** | *e*Pn | **Pn** | **02 27 34.4** | **+1.0** |
| ZIRJ | | | | *e*Pn | **Sn** | **02 28 40.4** | **-4.6** |
| **MORI** | **Morici** | **6.45** | **328** | *e*Pn | **Pn** | **02 27 37.1** | **+1.7** |
| **NVLJ** | **Novalja** | **7.37** | **327** | *e*Pn | **Pn** | **02 27 49.4** | **+1.4** |

*AEIC **11** 02:35:40.1, 7.5, 53°.51N × 0°.05 × 165°.16W ± 0°.07, h51km ± 7km, ML3.8, mb4.1/11(NEIC), Error ellipse: s-maj=7.7km s-min=5.6km az=167.0*
*NEIC **11** 02:35:41.4, 1.8, 53°.49N × 0°.05 × 165°.15W ± 0°.06, h44km ± 6km, Error ellipse: s-maj=7.4km s-min=4.8km az=174.0*
*IDC **11** 02:35:42.3, 5.2, 53°.57N × 165°.40W, h47km ± 51km, mb3.5/12, mb1 3.7/13, mb1mx3.4/56, mbtmp3.7/13, ML2.9/1, MS3.6/2, Ms1 3.5/2, ms1mx2.7/65, Error ellipse: s-maj=32.3km s-min=16.6km az=11.0*
**ISC 11 02:35:41.5**±1.3, **53°.51N**±0°.09 × **165°.14W**±0°.05, **h44**km±13km, **n72**, σ1°**06**/68, **mb3.9**/15, **Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKSA** | **Akutan Strait** | **0.71** | **332** | | **Pn** | **02 35 54.8** | **-0.5** |
| **AKSA** | **Akutan Strait** | **0.71** | **332** | | **Pn** | **02 35 54.7** | **-0.5** |
| AKSA | | | | | **Sn** | **02 36 05.3** | **+0.1** |
| **AKUT** | **Akutan** | **0.73** | **329** | | **Pn** | **02 35 55.4** | **-0.1** |
| AKUT | | | | | **Sn** | **02 36 06.1** | **+0.5** |
| **AKMO** | **Akutan Morgan** | **0.78** | **319** | | **Pn** | **02 35 55.9** | **-0.3** |
| AKMO | | | | | **Sn** | **02 36 06.7** | **-0.1** |
| **AKGG** | **Akutan Green G** | **0.86** | **324** | | **Pn** | **02 35 57.0** | **-0.2** |
| AKGG | | | | | **Sn** | **02 36 09.0** | **+0.3** |
| **UNV** | **Unalaska Valle** | **0.88** | **293** | | **Pn** | **02 35 56.6** | **-0.8** |
| UNV | | | | | **Sn** | **02 36 08.6** | **-0.6** |
| **MREP** | **Makushin Rep't** | **1.01** | **288** | | **Pn** | **02 35 58.6** | **-0.6** |
| **WESE** | **West Dahl East** | **1.02** | **18** | | **Pn** | **02 35 59.5** | **0.0** |
| **MTBL** | **Makushin Table** | **1.03** | **297** | | **Pn** | **02 35 59.2** | **-0.3** |
| **WECS** | **Westdahl Cape** | **1.05** | **11** | | **Pn** | **02 36 00.1** | **+0.3** |
| **MSW** | **Makushin Switc** | **1.06** | **293** | | **Pn** | **02 35 59.6** | **-0.4** |
| MSW | | | | | **Sn** | **02 36 13.7** | **+0.1** |
| **SSLS** | **Shishaldin Sou** | **1.38** | **28** | | **Pn** | **02 36 04.1** | **-0.3** |
| **BRPK** | **Brown Peak** | **1.41** | **35** | | **Pn** | **02 36 04.0** | **-0.7** |
| **SSLN** | **Shishaldin Nor** | **1.47** | **27** | | **Pn** | **02 36 05.7** | **+0.2** |
| **ISLZ** | **Isanotski Laza** | **1.48** | **34** | | **Pn** | **02 36 05.0** | **-0.7** |
| **ISNN** | **Isanotski Nort** | **1.55** | **30** | | **Pn** | **02 36 06.7** | **0.0** |
| **FALS** | **False Pass** | **1.69** | **36** | | **Pn** | **02 36 08.3** | **-0.2** |
| **NIKH** | **Nikolski High** | **2.30** | **258** | | **Sn** | **02 36 44.6** | **+0.7** |
| **NIKH** | **Nikolski High** | **2.30** | **258** | | **Pn** | **02 36 17.2** | **+0.4** |
| **KDAK** | **Kodiak Island** | **8.29** | **54** | P | **Pn** | **02 37 37.0** | **-2.0** |
| | 0.3nm,0.3s,baz=152,slow=16,SNR=1.3 | | | | | | |
| KDAK | | | | S | **Sn** | **02 39 08.0** | **-3.1** |
| | 0.2nm,0.3s,baz=252,slow=7.7,SNR=1.4 | | | | | | |
| **KDAK** | **Kodiak Island** | **8.29** | **54** | | **Pn** | **02 37 40.4** | **+1.5** |
| **N19K** | **Bonanza Creek** | **9.32** | **34** | | **Pn** | **02 37 56.5** | **+3.3** |
| **CNPM** | **China Poot** | **9.76** | **46** | Pn | **Pn** | **02 38 00.1** | **+1.0** |
| **O22K** | **Cooper Landing** | **10.91** | **44** | | **Pn** | **02 38 15.8** | **+0.9** |
| **ANM** | **Nome** | **11.09** | **359** | | **Pn** | **02 38 17.6** | **+0.3** |
| **K20K** | **Telida** | **11.43** | **26** | | **Pn** | **02 38 22.6** | **+0.7** |
| **PWL** | **Port Wells** | **11.69** | **44** | Pn | **Pn** | **02 38 24.8** | **-0.7** |
| **J20K** | **Nowinta River** | **12.10** | **23** | | **Pn** | **02 38 32.1** | **+1.1** |
| **TNA** | **Tin City** | **12.17** | **354** | | **Pn** | **02 38 31.8** | **-0.2** |
| **KLU** | **Klutina** | **13.02** | **44** | | **Pn** | **02 38 42.6** | **-1.1** |
| **M24K** | **Tolsona, Glenn** | **13.23** | **42** | Pn | **Pn** | **02 38 44.6** | **-1.9** |
| **N25K** | **Chitina, Valde** | **13.63** | **45** | Pn | **Pn** | **02 38 50.6** | **-1.4** |
| **CCB** | **Clear Creek Bu** | **14.22** | **31** | Pn | **Pn** | **02 38 59.4** | **-0.5** |
| **ILAR** | **Eielson Array** | **14.59** | **32** | P | **Pn** | **02 39 04.5** | **-0.4** |
| | 0.1nm,0.3s,baz=228,slow=12,SNR=2.2 | | | | | | |
| **M26K** | **Nabesna, AK** | **14.67** | **44** | | **Pn** | **02 39 04.3** | **-1.6** |
| **M27K** | **Edge Creek, AK** | **15.12** | **45** | Pn | **Pn** | **02 39 10.9** | **-1.1** |
| **J29M** | **Klondike Camp** | **17.52** | **41** | P | **Pn** | **02 39 41.5** | **-0.7** |
| J29M | | | | IAmb | IAmb | 02 39 45.6 | |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **P33M** | **Teslin, Yukon** | **18.75** | **56** | P | **Pn** | **02 39 57.6** | **+0.3** |
| P33M | | | | IAmb | IAmb | 02 40 01.1 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **20.99** | **33** | P | Pn | 02 40 22.6 | -1.1 |
| | comp=Z,1.0nm,0.4s,baz=238,slow=11,SNR=11 | | | | | | |
| **INK** | **Inuvik** | **20.99** | **33** | P | **P** | **02 40 19.7** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **22.05** | **284** | P | **P** | **02 40 30.6** | **-1.6** |
| | comp=Z,0.7nm,0.5s,baz=81,slow=9.5,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **22.05** | **284** | P | **P** | **02 40 31.6** | **-0.6** |
| **C36M** | **Paulatuk** | **24.55** | **34** | P | **P** | **02 40 55.2** | **-1.4** |
| C36M | | | | IAmb | IAmb | 02 40 58.7 | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.55** | **51** | P | **P** | **02 41 25.1** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=276,slow=10.0,SNR=6.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.55** | **51** | P | **P** | **02 41 24.4** | **+0.7** |
| **K05A** | **Summer Lake** | **30.96** | **92** | P | **P** | **02 41 55.6** | **+1.2** |
| K05A | | | | IAmb | IAmb | 02 41 58.8 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **PAHR** | **Pah Rah Range** | **33.71** | **95** | P | **P** | **02 42 20.1** | **+1.6** |
| PAHR | | | | IAmb | IAmb | 02 42 23.1 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **YERR** | **Yerington** | **34.26** | **96** | P | **P** | **02 42 23.1** | **-0.2** |
| YERR | | | | IAmb | IAmb | 02 42 28.1 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.18** | **96** | P | **P** | **02 42 32.7** | **+1.5** |
| | comp=Z,1.5nm,0.9s,baz=306,slow=9.6,SNR=8.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.18** | **96** | P | **P** | **02 42 30.6** | **-0.6** |
| **PDAR** | **Pinedale Array** | **37.70** | **83** | P | **P** | **02 42 54.1** | **+1.4** |
| | comp=Z,0.4nm,0.8s,baz=324,slow=4.0,SNR=3.8 | | | | | | |
| PDAR | | | | LR | LR | 02 56 49.0 | |
| | comp=Z,68nm,19.5s,baz=321,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **37.70** | **83** | P | **P** | **02 42 51.7** | **-1.0** |
| **H11N2** | **WAKE ISLAND Hy** | **39.99** | **223** | T | T | 03 25 55.8 | |
| | baz=25,slow=76,SNR=46 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.00** | **223** | T | T | 03 25 56.3 | |
| | baz=25,slow=76,SNR=52 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.01** | **223** | T | T | 03 25 59.1 | |
| | baz=25,slow=76,SNR=30 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.17** | **223** | T | T | 03 27 25.5 | |
| | baz=25,slow=76,SNR=107 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.19** | **223** | T | T | 03 27 23.4 | |
| | baz=25,slow=76,SNR=89 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.19** | **223** | T | T | 03 27 28.7 | |
| | baz=25,slow=76,SNR=44 | | | | | | |
| **FRB** | **Frobisher Bay** | **46.54** | **37** | LR | LR | 03 04 37.5 | |
| | comp=Z,70nm,20.2s,baz=279,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **47.79** | **279** | P | **P** | **02 44 13.9** | **-0.3** |
| | comp=Z,1.6nm,0.4s,baz=19,slow=20,SNR=5.0 | | | | | | |
| **P40A** | **Paris** | **50.00** | **75** | P | **P** | **02 44 30.9** | **-0.2** |
| **TXAR** | **Lajitas Array** | **50.21** | **93** | P | **P** | **02 44 34.8** | **+1.9** |
| | comp=Z,0.7nm,0.5s,baz=300,slow=5.5,SNR=17 | | | | | | |
| **TXAR** | **Lajitas Array** | **50.21** | **93** | P | **P** | **02 44 34.0** | **+1.2** |
| **ARCES** | **ARCESS Array B** | **57.02** | **356** | P | **P** | **02 45 23.1** | **+1.0** |
| | comp=Z,7.1nm,1.2s,baz=26,slow=5.8,SNR=1.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.02** | **356** | P | **P** | **02 45 22.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **64.84** | **315** | P | **P** | **02 46 15.5** | **0.0** |
| | comp=Z,0.4nm,1.0s,baz=44,slow=11,SNR=1.7 | | | | | | |
| **FINES** | **FINESS Array B** | **65.05** | **354** | P | **P** | **02 46 16.0** | **-0.6** |
| | comp=Z,2.3nm,0.9s,baz=346,slow=10.0,SNR=5.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.77** | **2** | P | **P** | **02 46 20.7** | **-0.6** |
| | comp=Z,0.7nm,0.7s,baz=1.2,slow=7.1,SNR=1.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.47** | **351** | P | **P** | **02 47 19.7** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=13,slow=5.2,SNR=3.2 | | | | | | |
| **H03N2** | **Juan Fernandez** | **114.00** | **114** | T | T | 04 59 03.3 | |
| | baz=322,slow=77,SNR=10 | | | | | | |
| **H03N1** | **Juan Fernandez** | **114.02** | **114** | T | T | 04 58 56.1 | |
| | baz=322,slow=77,SNR=9.3 | | | | | | |
| **H03N3** | **Juan Fernandez** | **114.02** | **114** | T | T | 04 58 53.0 | |
| | baz=322,slow=77,SNR=15 | | | | | | |

*TUL **11** 02:46:37.6, 0.8, 36°.76N × 0°.02 × 97°.53W ± 0°.01, h6km ± 7km, ML2.8, mb_Lg2.6/12(NEIC), Error ellipse: s-maj=2.7km s-min=1.0km az=207.0*
**NEIC 11 02:46:37.7**±0.5, **36°.74N**±0°.02 × **97°.53W**±0°.01, **h5**km±7km, **Error ellipse: s-maj=2.7km s-min=1.1km az=189.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLOK** | **Blackwell** | **0.25** | **84** | Pg | Pg | 02 46 43.0 | +0.3 |
| BLOK | | | | Sg | Sg | 02 46 46.5 | +0.5 |
| **KAN13** | **South Haven SW** | **0.28** | **8** | Pg | Pg | 02 46 43.3 | +0.1 |
| KAN13 | | | | Sg | Sg | 02 46 47.0 | +0.1 |
| **GC02** | **Grant County #** | **0.29** | **294** | Pg | Pg | 02 46 43.5 | +0.1 |
| GC02 | | | | Sg | Sg | 02 46 47.5 | +0.3 |
| **KAN17** | **Caldwell West** | **0.36** | **329** | Pg | Pg | 02 46 44.8 | 0.0 |
| KAN17 | | | | Sg | Sg | 02 46 49.7 | +0.1 |
| **KAN14** | **Manchester OK** | **0.41** | **303** | Pg | Pg | 02 46 45.8 | 0.0 |
| KAN14 | | | | Sg | Sg | 02 46 51.2 | 0.0 |
| **CROK** | **Carrier** | **0.43** | **238** | Pg | Pg | 02 46 46.4 | +0.4 |
| **KAN01** | **Argonia South** | **0.46** | **336** | | Pg | 02 46 46.5 | -0.1 |
| **OK032** | **Salt Plains WL** | **0.55** | **277** | Pg | Pg | 02 46 48.3 | 0.0 |
| **KAN06** | **Argonia West S** | **0.58** | **333** | | Pg | 02 46 48.7 | -0.2 |
| **KAN10** | **Anthony SW Sta** | **0.60** | **311** | Pg | Pg | 02 46 49.1 | -0.1 |
| **KAN08** | **Anthony NE Sta** | **0.60** | **324** | | Pg | 02 46 49.1 | -0.3 |
| **T35A** | **Sooner Cattle** | **0.83** | **77** | Pg | Pg | 02 46 53.6 | -0.1 |
| **OK033** | **Mehan** | **0.84** | **145** | Pg | Pg | 02 46 54.0 | +0.2 |
| **QUOK** | **Quay** | **0.87** | **130** | Pg | Pg | 02 46 54.5 | +0.1 |
| **OK029** | **Liberty Lake** | **0.94** | **176** | Pg | Pg | 02 46 55.7 | -0.1 |
| **OK031** | **S. Brethren Rd** | **0.96** | **144** | Pg | Pg | 02 46 56.2 | +0.1 |
| **OK034** | **N. Norfolk Rd.** | **0.98** | **137** | Pg | Pg | 02 46 56.5 | 0.0 |
| **OK030** | **Cody Creek RV** | **1.00** | **143** | Pg | Pg | 02 46 57.0 | 0.0 |
| **BCOK** | **Bluff Creek, N** | **1.08** | **183** | Pg | Pg | 02 46 58.2 | -0.2 |
| **OK025** | **Westminster Rd** | **1.16** | **172** | Pg | Pg | 02 46 59.9 | -0.1 |
| **OKCFA** | **Oklahoma City** | **1.32** | **177** | | Pn | 02 47 02.6 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.33** | **177** | | Pn | 02 47 02.8 | -0.2 |
| **FNO** | **Franklin** | **1.48** | **176** | Pn | Pn | 02 47 05.2 | +0.2 |
| **TUL1** | **Leonard** | **1.63** | **120** | Pn | Pn | 02 47 07.5 | +0.4 |
| TUL1 | | | | IAmb_Lg | | 02 47 30.2 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **W35A** | **Tecumseh** | **1.67** | **161** | Pn | Pn | 02 47 08.0 | +0.3 |
| **R32A** | **Long Quarter,** | **1.93** | **331** | Pn | Pn | 02 47 10.7 | -0.6 |
| **X34A** | **Smith Ranch, M** | **2.14** | **187** | | Pn | 02 47 14.4 | +0.2 |
| X34A | | | | IAmb_Lg | | 02 47 51.5 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.24** | **207** | Pn | Pn | 02 47 15.4 | -0.1 |
| **KSU1** | **Kansas State U** | **2.47** | **17** | Pn | Pn | 02 47 17.9 | -0.8 |
| **U38A** | **Gravette** | **2.55** | **96** | Pn | Pn | 02 47 19.8 | +0.1 |
| **X37A** | **Clayton** | **2.77** | **140** | Pn | Pn | 02 47 22.7 | 0.0 |
| **HHAR** | **Hobbs** | **2.93** | **98** | | Pn | 02 47 24.6 | -0.3 |
| **W39A** | **Magazine** | **3.40** | **116** | Pn | Pn | 02 47 31.3 | -0.2 |
| **S39A** | **Bolivar** | **3.49** | **73** | Pn | Pn | 02 47 32.6 | -0.1 |
| **U40A** | **Yellville** | **3.78** | **94** | Pn | Pn | 02 47 37.3 | +0.5 |
| U40A | | | | IAmb_Lg | | 02 48 36.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.85** | **243** | IAmb_Lg | | 02 48 41.4 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.23** | **83** | Pn | Pn | 02 47 42.0 | -0.9 |
| **X40A** | **Basin Creek Fa** | **4.43** | **119** | Pn | Pn | 02 47 45.4 | -0.3 |
| **WHAR** | **Wooly Hollow** | **4.49** | **107** | Pn | Pn | 02 47 45.9 | -0.5 |
| **KSCO** | **Kaye Shedlock'** | **4.63** | **301** | IAmb_Lg | | 02 49 15.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.30** | **9** | IAmb_Lg | | 02 49 33.3 | |
| | comp=Z,13nm,0.9s | | | | | | |

*NEIC **11** 02:56:14.1, 0.3, 53°.46N × 0°.05 × 165°.13W ± 0°.06, h24km ± 8km, ML3.6/19(AEIC), Error ellipse: s-maj=7.7km s-min=5.1km az=192.0*
*AEIC **11** 02:56:15, 0.7, 53°.54N × 0°.03 × 165°.19W ± 0°.08, h55km ± 7km, Error ellipse: s-maj=6.8km s-min=3.7km az=109.0*
*IDC **11** 02:56:21.8, 8.7, 53°.86N × 164°.82W, h65km ± 71km, mb3.0/5, mb1 3.5/6, mb1mx3.0/49, mbtmp3.4/6, ML2.9/1, Error ellipse: s-maj=64.0km s-min=30.1km az=24.0*
**ISC 11 02:56:16.1**±2.3, **53°.6N**±0°.1 × **165°.15W**±0°.08, **h32**km±16km, **n32**, σ1°**02**/29, **mb3.3**/5, **Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKSA** | **Akutan Strait** | **0.67** | **331** | | **Pb** | **02 56 29.0** | **-0.4** |
| AKSA | | | | | **Sb** | **02 56 39.4** | **+1.0** |
| **AKUT** | **Akutan** | **0.69** | **328** | | **Pn** | **02 56 29.4** | **-0.2** |
| **AKMO** | **Akutan Morgan** | **0.74** | **317** | | **Pn** | **02 56 29.9** | **-0.4** |
| AKMO | | | | | **Sb** | **02 56 40.3** | **-0.1** |
| **AKGG** | **Akutan Green G** | **0.82** | **323** | | **Pn** | **02 56 31.1** | **-0.2** |
| AKGG | | | | | **Sb** | **02 56 42.7** | **+0.1** |
| **UNV** | **Unalaska Valle** | **0.86** | **290** | | **Pn** | **02 56 30.7** | **-1.1** |
| **WESE** | **West Dahl East** | **0.98** | **20** | | **Pn** | **02 56 33.5** | **-0.1** |
| **MREP** | **Makushin Rep't** | **0.98** | **286** | | **Pn** | **02 56 32.7** | **-1.0** |
| **MTBL** | **Makushin Table** | **1.00** | **295** | | **Pn** | **02 56 33.3** | **-0.6** |
| **WECS** | **Westdahl Cape** | **1.00** | **12** | | **Pn** | **02 56 34.2** | **+0.3** |
| **MSW** | **Makushin Switc** | **1.04** | **291** | | **Pn** | **02 56 33.8** | **-0.6** |
| **SSLS** | **Shishaldin Sou** | **1.34** | **30** | | **Pn** | **02 56 38.2** | **-0.4** |
| **SSLN** | **Shishaldin Nor** | **1.43** | **28** | | **Pn** | **02 56 39.9** | **+0.1** |
| **ISLZ** | **Isanotski Laza** | **1.45** | **35** | | **Pn** | **02 56 39.1** | **-0.9** |
| ISLZ | | | | | **Sn** | **02 56 57.8** | **0.0** |
| **FALS** | **False Pass** | **1.65** | **37** | | **Pn** | **02 56 42.4** | **-0.4** |
| FALS | | | | | **Sn** | **02 57 02.9** | **0.0** |
| **KDAK** | **Kodiak Island** | **8.27** | **54** | P | **Pn** | **02 58 14.6** | **+1.1** |
| | 0.2nm,0.3s,baz=225,slow=2.9,SNR=2.1 | | | | | | |
| KDAK | | | | S | **Sn** | **02 59 41.8** | **-3.8** |
| | 0.2nm,0.3s,baz=274,slow=19,SNR=1.2 | | | | | | |
| **RSO** | **Redoubt South** | **9.66** | **39** | | **Pn** | **02 58 33.1** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **27.52** | **51** | P | **P** | **03 01 59.2** | **0.0** |
| | 0.3nm,0.7s,baz=270,slow=8.0,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.19** | **96** | P | **P** | **03 03 08.7** | **+1.6** |
| | 0.9nm,1.0s,baz=288,slow=9.5,SNR=5.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **37.70** | **83** | P | **P** | **03 03 29.2** | **+0.6** |
| | 0.2nm,0.5s,baz=319,slow=4.0,SNR=3.0 | | | | | | |
| **H

AHWZ ePg Pg 03 15 04.0 +0.7
**RAFI Al-Rafai 1.31 289** ePg Pn **03 15 11.0 +1.2**
RAFI eSg Sb **03 15 27.3 +0.3**
RAFI AML AML 03 15 55.2
comp=E,2µm,0.8s
**AMIS Naft Sefid 1.52 76** ePg Pn **03 15 14.3 +1.5**
AMIS eSg Sn **03 15 34.0 +1.4**
AMIS e 03 15 43.4
comp=Z,19µm,0.4s
**IKFM Kafar-mosalman 2.23 6** ePn Pn **03 15 23.8 +1.2**
IKFM e 03 16 06.9
comp=Z,9µm,0.6s
**IBDR Badra 2.28 323** ePn Pn **03 15 25.0 +1.9**
IBDR eSn Sn **03 15 54.0 +2.7**
IBDR AML AML 03 16 21.1
comp=E,422nm,0.3s
IBDR AML AML 03 16 22.7
comp=N,496nm,0.7s
**IDOB Doab 2.54 12** ePn Pn **03 15 27.9 +0.9**
**BMDN Meydan 2.60 24** ePn Pn **03 15 28.6 +0.9**
BMDN e 03 15 43.6
comp=Z,3µm,0.5s
**KCHF Cheshme Sefid, 3.00 352** ePn Pn **03 15 34.1 +0.8**
KCHF e 03 16 30.6
comp=Z,2µm,0.5s
**SHK1 Shahrekord 3.01 69** ePn Pn **03 15 35.0 +1.5**
**HSAM Samen 3.04 17** ePn Pn **03 15 34.9 +1.0**
**KER Kermanshah 3.10 353** ePn Pn **03 15 35.6 +1.0**
**IGHG Ghaleghazi 3.14 345** ePn Pn **03 15 36.6 +1.4**
IGHG e 03 16 56.2
comp=Z,3µm,0.9s
**IPIR Pirpir 3.15 63** ePn Pn **03 15 36.9 +1.5**
IPIR e 03 15 46.5
comp=Z,5µm,0.4s
**KHMZ Khomeyn 3.17 39** ePn Pn **03 15 36.9 +1.3**
**IBZA Bozab 3.17 4** ePn Pn **03 15 36.6 +0.8**
IBZA e 03 15 50.6
comp=Z,3µm,0.5s
**IBRJ Brojen 3.21 78** ePn Pn **03 15 37.7 +1.4**
IBRJ e 03 15 51.1
comp=Z,2µm,0.4s
**BHD Baghdad 3.34 307** ePn Pn **03 15 39.0 +1.3**
BHD eSn Sn **03 16 20.0 +2.6**
BHD AML AML 03 16 53.2
comp=E,376nm,0.9s
**KLNJ Kolanjah 3.47 94** ePn Pn **03 15 41.8 +1.9**
KLNJ e 03 16 52.9
comp=Z,2µm,0.8s
**IDHR Dehrash 3.53 344** ePn Pn **03 15 41.6 +0.9**
IDHR e 03 16 25.1
comp=Z,3µm,0.3s
**IALM Almabolaq 3.59 8** ePn Pn **03 15 42.6 +1.1**
**HAGD Aghdareh 3.75 20** ePn Pn **03 15 44.6 +0.9**
HAGD e 03 15 48.2
comp=Z,3µm,0.3s
**SNGE Sanandaj 3.79 357** ePn Pn **03 15 43.0 -1.2**
**ASAO Ashtian 3.85 32** ePn Pn **03 15 47.0 +2.0**
**IKLH Kolahrood 3.95 58** ePn Pn **03 15 47.9 +1.4**
IKLH e 03 16 02.8
comp=Z,2µm,0.4s
**IGAR Gharneh 3.97 73** ePn Pn **03 15 47.7 +1.1**
**QAMS Qamsar 4.05 52** ePn Pn **03 15 48.8 +1.0**
QAMS e 03 16 01.6
comp=Z,2µm,0.4s
**IRAM Rameshеh 4.14 82** ePn Pn **03 15 50.6 +1.5**
IRAM e 03 16 42.0
comp=Z,981nm,0.5s
**QJF1 Jafarie 4.26 35** ePn Pn **03 15 51.1 +0.6**
**IZEF Zefreh 4.35 67** ePn Pn **03 15 53.1 +1.2**
IZEF e 03 16 08.0
comp=Z,1µm,0.5s
**GHVR GHOM 4.46 44** ePn Pn **03 15 54.0 +0.7**
**IRAZ Razeghan 4.55 25** ePn Pn **03 15 55.8 +1.2**
**IQOM Qom 4.60 39** ePn Pn **03 15 55.9 +0.5**
IQOM e 03 16 12.3
comp=Z,1µm,0.6s
**KRSH Karshahi 4.69 54** ePn Pn **03 15 57.5 +1.0**
**NASN Na'in 4.70 70** ePn Pn **03 15 58.2 +1.4**
**QABG Abgarm-Qazvin 4.71 20** ePn Pn **03 15 56.3 -0.6**
**IKRK Kirkuk 4.90 327** ePn Pn **03 16 02.0 +2.8**
IKRK eSn Sn **03 16 58.0 +2.0**
IKRK AML AML 03 17 38.2
comp=N,128nm,0.4s
IKRK AML AML 03 17 49.4
comp=E,102nm,0.7s
**ISFB Sefidab 4.98 51** ePn Pn **03 16 01.2 +0.8**
**IVRN Varamin 5.08 42** ePn Pn **03 16 02.6 +0.8**
**IMHD Mahdasht 5.09 30** ePn Pn **03 16 03.0 +1.1**
**IHSB Hasanabad 5.17 36** ePn Pn **03 16 03.8 +0.8**
**ISAD Sadrabad 5.26 82** ePn Pn **03 16 05.8 +1.3**
**THKV Tehran--Karaj 5.37 30** ePn Pn **03 16 04.7 -1.2**
**QCNT Qazvin 5.38 22** ePn Pn **03 16 05.7 -0.3**
**ZNJK Zanjan 5.44 10** ePn Pn **03 16 07.5 +0.6**
**CHTH Charan 5.47 32** ePn Pn **03 16 08.0 +0.6**
**IGZV Ghazvin 5.54 23** ePn Pn **03 16 09.0 +0.8**
**ANAR Anarak 5.55 69** ePn Pn **03 16 09.2 +0.8**
**GHIR Ghir-Karzin 5.59 121** ePn Pn **03 16 10.6 +1.8**
**MAHB Mahabad 5.67 345** ePn Pn **03 16 11.5 +1.6**
**DAMV Damavand 5.68 39** ePn Pn **03 16 10.4 +0.2**
**JIR1 Jirandeh 5.71 18** ePn Pn **03 16 11.1 +0.6**
**QALM Alamut, Qazvin 5.73 26** ePn Pn **03 16 11.1 +0.3**
**ICHK Chekchek 5.91 79** ePn Pn **03 16 13.9 +0.6**
**IMEH Mehriz 6.03 87** ePn Pn **03 16 16.4 +1.4**
**YZKH Yazd 6.08 78** ePn Pn **03 16 16.8 +1.3**
**ILAS Lasjerd 6.08 47** ePn Pn **03 16 15.8 +0.1**
**LHJ2 Lahijan - Gila 6.21 19** ePn Pn **03 16 18.1 +0.9**
**ISHM Shahmirzad 6.56 45** ePn Pn **03 16 23.1 +0.7**
**IANJ Anjilo 6.75 50** ePn Pn **03 16 25.2 +0.4**
**GRMI Germi 7.50 2** ePn Pn **03 16 35.9 +0.9**
**TPRV Parvadeh(Tabas 7.92 75** ePn Pn **03 16 42.4 +1.5**
**KRBR Kerman 8.03 97** ePn Pn **03 16 44.3 +1.7**
**TNSJ Nastanj 8.08 68** ePn Pn **03 16 44.1 +1.1**
**NGRK Negar Kerman 8.08 99** ePn Pn **03 16 45.1 +1.8**
**TKDS Koohdasht(Taba 8.40 72** ePn Pn **03 16 48.4 +0.9**
**TABS Tabas 8.41 71** ePn Pn **03 16 48.9 +1.4**
**SHRO Shahrood 8.45 54** ePn Pn **03 16 50.0 +1.8**
**BNDS Bandar-Abbas 8.46 115** ePn Pn **03 16 50.0 +1.7**
**GENO Geno 8.46 115** ePn Pn **03 16 50.0 +1.7**
**BANOM Banah 9.36 123** ePn Pn **03 17 01.1 +0.6**
**MSFE Esma-Masafi 9.61 126** ePn Pn **03 17 04.4 +0.4**
**IKOO Kooshah 9.80 80** ePn Pn **03 17 08.1 +1.4**
**BSRN Basiran 9.88 83** ePn Pn **03 17 10.0 +2.2**
**UOSS Minazif 9.91 128** ePn Pn **03 17 09.2 +1.2**
**HATD Hatta, Dubai 9.94 128** ePn Pn **03 17 10.0 +1.5**
**ASHO Ashiyiah 9.99 129** ePn Pn **03 17 11.2 +2.1**
**ISFR Sfrayin 10.38 54** ePn Pn **03 17 16.0 +1.4**
**TBJM Torbat-e-JAM 11.39 66** ePn Pn **03 17 30.4 +1.9**
**AKTO Aktyubinsk 20.65 19** P P **03 19 23.6 -1.6**
comp=E,2.4nm,0.5s,baz=198,slow=11,SNR=12
**BELG Belogornoye 21.08 0** P P **03 19 27.8 -2.0**
comp=E,7.3nm,0.7s,baz=225,slow=2.9,SNR=8.3
**AKASG Malin Array Be 23.70 330** P P **03 19 58.0 +0.6**
comp=E,0.6nm,0.4s,baz=137,slow=10,SNR=7.2
**AAK Ala-Archa 24.21 55** P P **03 20 01.0 -1.5**
comp=E,0.8nm,0.3s,baz=193,slow=14,SNR=7.6
**ARU Arti 26.28 14** P P **03 20 19.9 -0.9**
comp=E,0.6nm,0.4s,baz=171,slow=6.7,SNR=5.1
**BVAR Borovoye Array 27.31 31** P P **03 20 29.6 -0.6**
comp=E,0.6nm,0.6s,baz=196,slow=2.6,SNR=3.3
**MKAR Makanchi Array 30.80 50** P P **03 21 00.5 -0.8**
comp=E,1.0nm,0.6s,baz=245,slow=9.1,SNR=15
**GERES GERESS Array B 30.94 314** P P **03 21 04.0 +1.3**
comp=E,0.3nm,0.5s,baz=109,slow=14,SNR=1.7
**FINES FINESS Array B 33.27 341** P P **03 21 21.9 -0.9**
comp=E,1.8nm,0.5s,baz=149,slow=9.1,SNR=12
**ZALV Zalesovo Beam 34.95 39** P P **03 21 36.1 -1.3**
comp=E,0.7nm,0.3s,baz=243,slow=6.5,SNR=5.0
**NOA NORSAR Array B 38.08 332** P P **03 22 03.0 -1.1**
comp=E,0.6nm,0.8s,baz=132,slow=7.9,SNR=2.0
**ARCES ARCESS Array B 40.27 348** P P 03 22 20.6 -1.8
comp=E,2.1nm,0.8s,baz=157,slow=7.8,SNR=1.6
**TORD Torodi Ar. Bea 45.77 257** P P **03 23 07.9 +0.4**
comp=E,0.9nm,0.5s,baz=46,slow=9.1,SNR=9.1
**CMAR Chiang Mai Arr 47.95 93** P P **03 23 22.8 -1.7**
comp=E,0.7nm,0.3s,baz=300,slow=7.2,SNR=0.8
**KSRS Korea Array 64.72 60** P P **03 25 23.7 -0.2**
comp=E,0.9nm,0.5s,baz=287,slow=6.9,SNR=4.1
**ILAR Eielson Array 83.58 6** P P **03 27 12.1 -1.5**
comp=E,0.4nm,0.8s,baz=327,slow=3.4,SNR=5.2
**YKA Yellowknife Ar 85.44 352** P P **03 27 22.2 -0.8**
comp=E,0.5nm,0.7s,baz=17,slow=5.3,SNR=7.8

*TUL **11** 03:20:51.9±1.0, 36°.74N±0°.02×98°.03W±0°.06, h7km±6km, ML2.6, ML2.4/44(NEIC), Error ellipse: s-maj=6.4km s-min=2.5km az=76.0*

**NEIC 11 03:20:51.9±0.7, 36°.72N±0°.01×98°.02W±0°.05, h10km±6km, Error ellipse: s-maj=5.7km s-min=1.0km az=70.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK032** | **Salt Plains WL** | **0.17** | **298** | Pg | Pg | 03 20 55.5 | -0.1 |
| OK032 | | | | Sg | Sg | 03 20 58.2 | +0.1 |
| OK032 | | | | IAML | | 03 20 58.5 | |
| | 1µm,0.1s | | | | | | |
| **GC02** | **Grant County #** | **0.18** | **45** | Pg | Pg | 03 20 55.8 | 0.0 |
| GC02 | | | | Sg | Sg | 03 20 58.6 | +0.1 |
| **CROK** | **Carrier** | **0.22** | **172** | | Pg | 03 20 57.0 | +0.6 |
| CROK | | | | IAML | | 03 21 00.8 | |
| | comp=E,1µm,0.3s | | | | | | |
| CROK | | | | IAML | | 03 21 04.0 | |
| | comp=N,528nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.24** | **11** | Pg | Pg | 03 20 56.7 | -0.1 |
| KAN14 | | | | Sg | Sg | 03 21 00.1 | 0.0 |
| **KAN17** | **Caldwell West** | **0.38** | **33** | Pg | Pg | 03 20 59.4 | 0.0 |
| KAN17 | | | | IAML | | 03 21 04.8 | |
| | comp=E,662nm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 03 21 05.5 | |
| | comp=N,408nm,0.3s | | | | | | |
| **KAN10** | **Anthony SW Sta** | **0.41** | **352** | Pg | Pg | 03 20 59.7 | -0.2 |
| **KAN01** | **Argonia South** | **0.48** | **26** | Pg | Pg | 03 21 01.0 | -0.2 |
| **KAN16** | **Harper SW Stat** | **0.50** | **356** | Pg | Pg | 03 21 01.4 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **0.51** | **5** | Pg | Pg | 03 21 01.4 | -0.3 |
| KAN08 | | | | IAML | | 03 21 08.6 | |
| | comp=E,347nm,0.3s | | | | | | |
| **KAN13** | **South Haven SW** | **0.52** | **56** | Pg | Pg | 03 21 01.5 | -0.5 |
| KAN13 | | | | IAML | | 03 21 13.0 | |
| | comp=N,175nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 03 21 14.3 | |
| | comp=E,225nm,0.3s | | | | | | |
| **KAN06** | **Argonia West S** | **0.54** | **14** | Pg | Pg | 03 21 02.0 | -0.4 |
| KAN06 | | | | IAML | | 03 21 09.7 | |
| | comp=E,292nm,0.9s | | | | | | |
| KAN06 | | | | IAML | | 03 21 12.6 | |
| | comp=N,200nm,0.2s | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.55** | **269** | Pg | Pg | 03 21 02.5 | -0.1 |
| OK035 | | | | IAML | | 03 21 12.7 | |
| | comp=N,242nm,0.4s | | | | | | |
| OK035 | | | | IAML | | 03 21 17.5 | |
| | comp=N,180nm,0.3s | | | | | | |
| **KAN12** | **Harper NE Stat** | **0.57** | **2** | Pg | Pg | 03 21 02.9 | -0.1 |
| **BLOK** | **Blackwell** | **0.65** | **86** | Pg | Pg | 03 21 04.3 | -0.1 |
| BLOK | | | | IAML | | 03 21 15.1 | |
| | comp=N,296nm,0.2s | | | | | | |
| BLOK | | | | IAML | | 03 21 23.6 | |
| | comp=E,174nm,0.2s | | | | | | |
| **OK029** | **Liberty Lake** | **1.03** | **153** | | Pg | 03 21 11.6 | 0.0 |
| **OK033** | **Mehan** | **1.10** | **127** | | Pb | 03 21 13.0 | -0.1 |
| OK033 | | | | IAML | | 03 21 29.4 | |
| | comp=E,109nm,0.3s | | | | | | |
| OK033 | | | | IAML | | 03 21 30.1 | |
| | comp=E,105nm,0.2s | | | | | | |
| **BCOK** | **Bluff Creek, N** | **1.11** | **162** | Pn | Pb | 03 21 13.0 | -0.2 |
| BCOK | | | | IAML | | 03 21 33.4 | |
| | comp=E,58nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.19** | **117** | Pg | Pb | 03 21 14.5 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.22** | **128** | | Pn | 03 21 15.0 | -0.1 |
| OK031 | | | | IAML | | 03 21 33.2 | |
| | comp=E,89nm,0.1s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.23** | **80** | | Pn | 03 21 14.9 | -0.2 |
| T35A | | | | IAML | | 03 21 35.4 | |
| | comp=E,76nm,0.3s | | | | | | |
| T35A | | | | IAML | | 03 21 35.8 | |
| | comp=N,88nm,0.3s | | | | | | |
| **OK025** | **Westminster Rd** | **1.27** | **154** | | Pb | 03 21 15.9 | +0.1 |
| OK025 | | | | IAML | | 03 21 40.2 | |
| | comp=N,62nm,0.1s | | | | | | |
| **OK030** | **Cody Creek RV** | **1.27** | **128** | | Pn | 03 21 15.6 | -0.2 |
| **R32A** | **Long Quarter,** | **1.78** | **342** | | Pn | 03 21 22.8 | 0.0 |
| **W35A** | **Tecumseh** | **1.82** | **149** | Pn | Pb | 03 21 24.3 | -1.0 |
| **TUL1** | **Leonard** | **1.97** | **114** | Pn | Pn | 03 21 26.6 | +1.2 |
| **WMOK** | **Wichita Mounta** | **2.07** | **198** | Pn | Pb | 03 21 28.3 | -1.2 |
| **X34A** | **Smith Ranch, M** | **2.12** | **176** | Pn | Pn | 03 21 28.5 | +1.1 |
| **CBKS** | **Cedar Bluff** | **2.49** | **327** | Pn | Pn | 03 21 32.4 | -0.1 |
| **U38A** | **Gravette** | **2.94** | **94** | Pn | Pn | 03 21 40.0 | +1.4 |
| **X37A** | **Clayton** | **3.03** | **134** | Pn | Pn | 03 21 39.2 | -0.7 |
| **S39A** | **Bolivar** | **3.87** | **74** | Pn | Pn | 03 21 52.1 | +0.7 |

**NOU 11 03:25:27.3, 15°.35S×167°.58E, h134km, MLv4.4/9, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **0.38** | **255** | P | Pn | 03 25 47.9 | +1.7 |
| **DVP** | **Devils Point** | **2.43** | **166** | P | Pn | 03 26 07.4 | +0.6 |
| **LIFNC** | **LIFOU** | **5.41** | **183** | P | Pn | 03 26 45.0 | -0.9 |
| | 101nm,1.2s | | | | | | |
| **YATNC** | **Mamie plateau,** | **6.71** | **185** | P | Pn | 03 27 03.1 | -0.2 |
| **OUENC** | **Ouen Island, N** | **7.07** | **186** | P | Pn | 03 27 09.1 | +0.9 |

**JMA 11 03:31:28.2±0.1, 24°.54N×123°.60E, h0km±2km, M1.6, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.24** | **150** | P | Pg | 03 31 33.1 | +0.4 |
| IRIF | | | | S | Sg | 03 31 36.7 | +0.9 |
| **JKRS** | **Kuro-shima** | **0.48** | **129** | P | Pg | 03 31 37.9 | +0.5 |
| JKRS | | | | S | Sg | 03 31 44.8 | +1.2 |
| **HATJ** | **Hateruma jima** | **0.52** | **159** | S | Sg | 03 31 45.7 | +0.9 |
| **JIJ** | **Ishigaki jima** | **0.53** | **109** | P | Pg | 03 31 38.9 | +0.6 |
| JIJ | | | | eS | Sg | 03 31 45.8 | +0.7 |
| **YOJ** | **Yonaguni jima** | **0.54** | **262** | P | Pg | 03 31 39.3 | +0.7 |
| YOJ | | | | S | Sg | 03 31 46.5 | +0.9 |
| **JYNG** | **Yonagunijimaku** | **0.60** | **262** | P | Pg | 03 31 40.1 | +0.3 |
| JYNG | | | | S | Sg | 03 31 48.3 | +0.7 |
| **JISG** | **Ishigakijimahi** | **0.65** | **86** | P | Pg | 03 31 41.3 | +0.7 |
| JISG | | | | S | Sg | 03 31 50.3 | +1.2 |
| **JTJ** | **Tarama** | **1.01** | **84** | P | Pg | 03 31 47.7 | +0.2 |
| JTJ | | | | eS | Sb | 03 32 01.8 | -0.6 |

**TAP 11 03:32:18.0, 24°.20N×121°.68E, h10km, ML2.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ETL** | **Fush Village** | **0.06** | **235** | *i* P | Pg | 03 32 20.8 | +0.7 |
| | baz=234 | | | | | | |
| ETL | | | | *i* S | Sg | 03 32 22.6 | +0.9 |
| | baz=234 | | | | | | |
| **NACB** | **Ninganchiao** | **0.08** | **254** | *i* P | Pg | 03 32 21.0 | +0.7 |
| | baz=254 | | | | | | |
| NACB | | | | *i* S | Sg | 03 32 22.9 | +1.0 |
| | baz=254 | | | | | | |
| **TWD** | **Chiawan** | **0.14** | **214** | *i* P | Pg | 03 32 21.5 | +0.4 |
| | baz=211 | | | | | | |
| TWD | | | | S | Sg | 03 32 23.8 | +0.5 |
| | baz=211 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.18** | **273** | *i* P | Pg | 03 32 22.8 | +0.9 |
| | baz=273 | | | | | | |
| ETLH | | | | S | Sg | 03 32 26.1 | +1.5 |
| | baz=273 | | | | | | |
| **HWA** | **Hwalien** | **0.23** | **197** | P | Pg | 03 32 23.7 | +1.1 |
| | baz=195 | | | | | | |
| HWA | | | | eS | Sg | 03 32 27.6 | +1.8 |
| | baz=195 | | | | | | |
| **ENA** | **Nanau** | **0.24** | **14** | P | Pg | 03 32 23.7 | +0.9 |
| | baz=15 | | | | | | |
| ENA | | | | S | Sg | 03 32 27.6 | +1.5 |
| | baz=15 | | | | | | |
| **EWUT** | **Wuta** | **0.26** | **20** | *i* P | Pg | 03 32 24.1 | +0.8 |
| | baz=19 | | | | | | |
| EWUT | | | | eS | Sg | 03 32 28.2 | +1.3 |
| | baz=19 | | | | | | |
| **NNSB** | **Datong** | **0.36** | **311** | P | Pb | 03 32 26.3 | -0.2 |
| | baz=310 | | | | | | |
| NNSB | | | | S | Sb | 03 32 31.7 | -0.6 |
| | baz=310 | | | | | | |
| **LATG** | **Datong** | **0.37** | **338** | P | Pb | 03 32 26.4 | -0.3 |
| | baz=337 | | | | | | |
| LATG | | | | S | Sb | 03 32 32.3 | -0.2 |
| | baz=337 | | | | | | |
| **NNS** | **Nan Shan** | **0.37** | **311** | eP | Pb | 03 32 26.6 | -0.2 |
| | baz=311 | | | | | | |
| NNS | | | | S | Sb | 03 32 31.6 | -1.0 |
| | baz=311 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.38** | **262** | *i* P | Pg | 03 32 26.4 | +0.7 |
| | baz=262 | | | | | | |
| WHF | | | | S | Sb | 03 32 32.1 | -1.2 |
| | baz=262 | | | | | | |
| **FUSS** | **Fushou** | **0.40** | **277** | *i* P | Pb | 03 32 27.1 | -0.3 |
| | baz=277 | | | | | | |
| FUSS | | | | eS | Sb | 03 32 33.2 | -0.5 |
| | baz=277 | | | | | | |
| **NDT** | **Datong Townshi** | **0.43** | **339** | P | Pb | 03 32 27.9 | +0.1 |
| | baz=339 | | | | | | |
| NDT | | | | S | Sb | 03 32 34.7 | +0.3 |
| | baz=339 | | | | | | |
| **NDS** | **Dongshan** | **0.44** | **4** | P | Pb | 03 32 27.6 | -0.3 |
| | baz=4.0 | | | | | | |
| NDS | | | | eS | Sb | 03 32 33.8 | -0.7 |
| | baz=4.0 | | | | | | |
| **TWC** | **Suao** | **0.44** | **20** | eP | Pb | 03 32 27.4 | -0.5 |
| | baz=21 | | | | | | |
| TWC | | | | eS | Sg | 03 32 33.4 | +1.0 |
| | baz=21 | | | | | | |
| **ENTT** | **Nioudou** | **0.45** | **347** | P | Pb | 03 32 28.2 | +0.1 |
| | baz=347 | | | | | | |
| ENTT | | | | eS | Sb | 03 32 35.1 | +0.1 |
| | baz=347 | | | | | | |
| **TWT** | **Tachien** | **0.46** | **277** | eS | Sb | 03 32 35.6 | +0.2 |
| | baz=276 | | | | | | |
| **CHGB** | **Renai** | **0.48** | **254** | P | Pb | 03 32 28.5 | -0.2 |
| | baz=253 | | | | | | |
| CHGB | | | | eS | Sg | 03 32 34.8 | +1.0 |
| | baz=253 | | | | | | |
| **YHNB** | **Yeheng** | **0.55** | **330** | P | Pb | 03 32 30.1 | +0.4 |
| | baz=329 | | | | | | |
| YHNB | | | | eS | Sb | 03 32 37.2 | -0.5 |
| | baz=329 | | | | | | |
| **WUSB** | **Renai** | **0.55** | **249** | P | Pb | 03 32 29.9 | 0.0 |
| | baz=248 | | | | | | |
| WUSB | | | | eS | Sb | 03 32 37.5 | -0.4 |
| | baz=248 | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **329** | P | Pb | 03 32 30.7 | +0.7 |
| | baz=328 | | | | | | |
| NSK | | | | eS | Sb | 03 32 38.3 | +0.2 |
| | baz=328 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.57** | **351** | eP | Pg | 03 32 29.5 | +0.5 |
| | baz=351 | | | | | | |
| FUSB | | | | eS | Sb | 03 32 38.4 | +0.1 |
| | baz=351 | | | | | | |
| **NWLT** | **Wulai** | **0.60** | **344** | eP | Pb | 03 32 31.1 | +0.4 |
| | baz=344 | | | | | | |
| NWLT | | | | eS | Sb | 03 32 39.1 | -0.1 |
| | baz=344 | | | | | | |
| **VWDT** | **VWDT** | **0.66** | **228** | eP | Pb | 03 32 31.8 | +0.2 |
| | baz=228 | | | | | | |
| VWDT | | | | S | Sb | 03 32 41.4 | +0.6 |
| | baz=228 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.72** | **259** | eP | Pb | 03 32 32.6 | +0.1 |
| | baz=258 | | | | | | |
| **SSLB** | **Suanglung** | **0.78** | **239** | eP | Pb | 03 32 33.5 | -0.2 |
| | baz=238 | | | | | | |
| **TIPB** | **Shuangxi** | **0.78** | **10** | P | Pb | 03 32 34.1 | +0.4 |
| | baz=9.0 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.88** | **6** | P | Pg | 03 32 34.1 | -0.7 |
| | baz=6.0 | | | | | | |

**JMA 11 03:34:11.4±0.1, 24°.54N×123°.59E, h1km±1km, M2.0, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.24** | **148** | P | Pg | 03 34 16.5 | +0.5 |
| IRIF | | | | S | Sg | 03 34 20.1 | +1.0 |
| **JKRS** | **Kuro-shima** | **0.49** | **128** | P | Pg | 03 34 21.2 | +0.5 |
| JKRS | | | | S | Sg | 03 34 28.3 | +1.3 |
| **HATJ** | **Hateruma jima** | **0.52** | **158** | P | Pg | 03 34 21.8 | +0.4 |
| HATJ | | | | S | Sg | 03 34 29.0 | +0.9 |
| **YOJ** | **Yonaguni jima** | **0.53** | **262** | P | Pg | 03 34 22.2 | +0.6 |
| YOJ | | | | S | Sg | 03 34 29.9 | +1.3 |
| **JIJ** | **Ishigaki jima** | **0.53** | **109** | P | Pg | 03 34 21.9 | +0.3 |
| JIJ | | | | S | Sg | 03 34 29.2 | +0.6 |
| **JYNG** | **Yonagunijimaku** | **0.59** | **262** | P | Pg | 03 34 23.2 | +0.4 |
| JYNG | | | | S | Sg | 03 34 31.5 | +1.0 |
| **JISG** | **Ishigakijimahi** | **0.66** | **86** | P | Pg | 03 34 24.6 | +0.6 |
| JISG | | | | S | Sg | 03 34 33.5 | +0.9 |
| **JTJ** | **Tarama** | **1.02** | **84** | P | Pg | 03 34 31.1 | +0.2 |
| JTJ | | | | S | Sb | 03 34 45.5 | -0.2 |

**TAP 11 03:34:55.2, 24°.23N×121°.73E, h8km, ML1.8, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ETL** | **Fush Village** | **0.12** | **235** | P | Pg | 03 34 57.6 | -0.3 |
| | baz=234 | | | | | | |
| **NACB** | **Ninganchiao** | **0.14** | **246** | P | Pg | 03 34 58.0 | -0.1 |
| | baz=246 | | | | | | |
| NACB | | | | S | Sg | 03 35 00.5 | +0.3 |
| | baz=246 | | | | | | |
| **TWD** | **Chiawan** | **0.19** | **220** | P | Pg | 03 34 59.2 | +0.1 |
| | baz=218 | | | | | | |
| TWD | | | | S | Sg | 03 35 01.8 | +0.1 |
| | baz=218 | | | | | | |
| **ENA** | **Nanau** | **0.20** | **2** | *i* P | Pg | 03 34 59.1 | -0.1 |
| | baz=4.0 | | | | | | |
| ENA | | | | *i* S | Sg | 03 35 02.0 | +0.1 |
| | baz=4.0 | | | | | | |
| **EWUT** | **Wuta** | **0.22** | **11** | *i* P | Pg | 03 34 59.5 | -0.1 |
| | baz=11 | | | | | | |
| EWUT | | | | *i* S | Sg | 03 35 02.8 | +0.2 |
| | baz=11 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.23** | **264** | P | Pg | 03 34 59.7 | -0.1 |
| | baz=264 | | | | | | |
| **LATG** | **Datong** | **0.36** | **328** | P | Pg | 03 35 02.2 | 0.0 |
| | baz=328 | | | | | | |
| LATG | | | | S | Sg | 03 35 07.4 | +0.5 |
| | baz=328 | | | | | | |
| **NNSB** | **Datong** | **0.38** | **302** | P | Pg | 03 35 02.8 | +0.2 |
| | baz=301 | | | | | | |
| NNSB | | | | S | Sg | 03 35 07.6 | +0.1 |
| | baz=301 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **303** | P | Pg | 03 35 03.0 | +0.1 |
| | baz=302 | | | | | | |
| NNS | | | | S | Sg | 03 35 08.2 | +0.2 |
| | baz=302 | | | | | | |
| **NDS** | **Dongshan** | **0.40** | **358** | P | Pg | 03 35 03.1 | +0.1 |
| | baz=357 | | | | | | |
| NDS | | | | S | Sg | 03 35 08.6 | +0.2 |
| | baz=357 | | | | | | |
| **ENTT** | **Nioudou** | **0.43** | **340** | P | Pg | 03 35 03.8 | +0.1 |
| | baz=340 | | | | | | |
| ENTT | | | | S | Sg | 03 35 09.7 | +0.3 |
| | baz=340 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.43** | **259** | eP | Pg | 03 35 03.5 | -0.3 |
| | baz=258 | | | | | | |
| WHF | | | | S | Sg | 03 35 09.4 | -0.1 |
| | baz=258 | | | | | | |
| **FUSS** | **Fushou** | **0.45** | **272** | eS | Sg | 03 35 10.1 | +0.3 |
| | baz=272 | | | | | | |
| **TWE** | **Neicheng** | **0.49** | **353** | eP | Pg | 03 35 04.8 | 0.0 |
| | baz=354 | | | | | | |
| TWE | | | | eS | Sg | 03 35 11.7 | +0.5 |
| | baz=354 | | | | | | |
| **ESL** | **Shilin** | **0.50** | **213** | eP | Pg | 03 35 04.6 | -0.2 |
| | baz=212 | | | | | | |
| **CHGB** | **Renai** | **0.54** | **252** | P | Pg | 03 35 05.7 | +0.1 |
| | baz=251 | | | | | | |
| CHGB | | | | S | Sg | 03 35 13.0 | +0.4 |
| | baz=251 | | | | | | |
| **YHNB** | **Yeheng** | **0.55** | **324** | S | Sg | 03 35 13.2 | +0.3 |
| | baz=323 | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **323** | S | Sg | 03 35 14.0 | +0.6 |
| | baz=322 | | | | | | |
| **NWLT** | **Wulai** | **0.58** | **339** | eP | Pg | 03 35 06.7 | +0.2 |
| | baz=338 | | | | | | |
| NWLT | | | | S | Sg | 03 35 14.2 | +0.1 |
| | baz=338 | | | | | | |
| **WUSB** | **Renai** | **0.61** | **247** | S | Sg | 03 35 15.0 | +0.1 |
| | baz=247 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.69** | **306** | S | Sg | 03 35 17.6 | +0.1 |
| | baz=305 | | | | | | |
| **VWDT** | **VWDT** | **0.72** | **229** | eS | Sg | 03 35 19.1 | +0.7 |
| | baz=228 | | | | | | |

*IDC **11** 03:40:18.6±1.6, 59°.68N×153°.39W, h104km±21km, mb3.7/5, mb1 3.7/9, mb1mx3.4/39, mbtmp4.0/9, Error ellipse: s-maj=20.7km s-min=14.8km az=130.0*
*ANF **11** 03:40:19.5±0.2, 59°.69N×153°.26W, h105km±3km, ML3.9/43,*

*Error ellipse: s-maj=2.1km s-min=1.9km az=153.0*
*NEIC **11** 03:40:19.2±1.2,59°.68N±0°.04×153°.31W±0°.07, h114km±1km, Error ellipse: s-maj=5.5km s-min=5.1km az=174.0*
*AEIC **11** 03:40:20±1.2,59°.68N±0°.04×153°.28W±0°.06,h110km±4km, ML3.6,mb4.1/3(NEIC),ML3.7/100(NEIC), Error ellipse: s-maj=5.4km s-min=4.4km az=190.0*

**ISC 11 03:40:19.7±0.6,59.71N±0°.04×153°.25W±0°.03, h114km±5km,n270,σ0.79/268,mb4.1/6,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.05** | **171** | | **Pn** | **03 40 35.1** | **-0.3** |
| **ILSW** | **Iliamna Southw** | **0.28** | **11** | | **Pn** | **03 40 35.5** | **-0.5** |
| **ILSW** | **Iliamna Southw** | **0.28** | **11** | | **Sn** | **03 40 47.2** | **-1.1** |
| **ILSW** | **Iliamna Southw** | **0.28** | **11** | IAML | | 03 40 37.0 | |
| | comp=N,278nm,0.4s | | | | | | |
| **AUL** | **Augustine Lava** | **0.34** | **196** | | **Pn** | **03 40 36.0** | **-0.1** |
| AUL | | | | | **Sn** | **03 40 48.0** | **-0.4** |
| **AU22** | **Augustine Moun** | **0.34** | **189** | | **Pn** | **03 40 35.9** | **-0.2** |
| AU22 | | | | | **Sn** | **03 40 47.7** | **-0.6** |
| **AUH** | **Augustine H** | **0.36** | **196** | | **Pn** | **03 40 36.1** | **-0.2** |
| **AGU** | **Augustine-Summ** | **0.36** | **195** | | **Pn** | **03 40 36.1** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.36** | **194** | | **Pn** | **03 40 36.1** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.49** | **40** | | **Pn** | **03 40 36.9** | **-0.1** |
| O20K | | | | | **Sn** | **03 40 49.9** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.49** | **40** | P | **Pn** | **03 40 37.0** | **-0.1** |
| | baz=219,SNR=32 | | | | | | |
| O20K | | | | S | **Sn** | **03 40 49.7** | **-0.4** |
| | baz=219 | | | | | | |
| **O19K** | **Port Alsworth** | **0.73** | **313** | | **Pn** | **03 40 38.3** | **-0.3** |
| O19K | | | | | **Sn** | **03 40 52.0** | **-1.0** |
| **O19K** | **Port Alsworth** | **0.73** | **313** | IAML | | 03 40 52.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.73** | **313** | P | **Pn** | **03 40 38.3** | **-0.3** |
| | baz=134,SNR=87 | | | | | | |
| O19K | | | | S | **Sn** | **03 40 51.8** | **-1.2** |
| | baz=134 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.76** | **18** | | **Pn** | **03 40 38.9** | **-0.1** |
| RED | | | | | **Sn** | **03 40 53.0** | **-0.5** |
| **RSO** | **Redoubt South** | **0.80** | **18** | | **Pn** | **03 40 39.5** | **0.0** |
| **Q19K** | **Cape Douglas,** | **0.81** | **195** | | **Pn** | **03 40 39.0** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.81** | **195** | IAML | | 03 40 44.7 | |
| | comp=N,1μm,0.7s | | | | | | |
| Q19K | | | | IAML | | 03 40 55.1 | |
| | comp=E,2μm,0.7s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.81** | **195** | P | **Pn** | **03 40 39.0** | **-0.4** |
| | baz=14,SNR=82 | | | | | | |
| **HOM** | **Homer** | **0.82** | **93** | | **Pn** | **03 40 39.6** | **+0.2** |
| HOM | | | | | **Sn** | **03 40 54.7** | **+0.3** |
| **HOM** | **Homer** | **0.82** | **93** | P | **Pn** | **03 40 39.6** | **+0.2** |
| | baz=272,SNR=11 | | | | | | |
| HOM | | | | S | **Sn** | **03 40 54.6** | **+0.3** |
| | baz=272 | | | | | | |
| **NCT** | **North Crescent** | **0.87** | **10** | | **Pn** | **03 40 39.9** | **-0.2** |
| NCT | | | | | **Sn** | **03 40 54.7** | **-0.8** |
| **DFR** | **Drift River** | **0.93** | **17** | | **Pn** | **03 40 40.5** | **-0.1** |
| DFR | | | | | **Sn** | **03 40 56.3** | **-0.2** |
| **RDT** | **Redoubt** | **0.97** | **25** | | **Pn** | **03 40 40.9** | **-0.1** |
| **O18K** | **Koktuh Hills** | **1.00** | **279** | | **Pn** | **03 40 40.7** | **-0.6** |
| O18K | | | | | **Sn** | **03 40 56.2** | **-1.4** |
| **O18K** | **Koktuh Hills** | **1.00** | **279** | P | **Pn** | **03 40 40.7** | **-0.6** |
| | baz=100,SNR=46 | | | | | | |
| O18K | | | | S | **Sn** | **03 40 55.6** | **-1.9** |
| | baz=100 | | | | | | |
| **CNPM** | **China Poot** | **1.04** | **99** | | **Pn** | **03 40 41.3** | **-0.3** |
| CNPM | | | | | **Sn** | **03 40 57.4** | **-0.8** |
| **CNPM** | **China Poot** | **1.04** | **99** | IAML | | 03 40 58.3 | |
| | comp=N,4μm,0.4s | | | | | | |
| CNPM | | | | IAML | | 03 40 58.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| **P18K** | **Big Mountain,** | **1.06** | **254** | | **Pn** | **03 40 41.0** | **-0.9** |
| P18K | | | | | **Sn** | **03 40 56.9** | **-1.7** |
| **P18K** | **Big Mountain,** | **1.06** | **254** | P | **Pn** | **03 40 40.9** | **-0.9** |
| | baz=73,SNR=6.9 | | | | | | |
| P18K | | | | S | **Sn** | **03 40 56.3** | **-2.2** |
| | baz=73 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.20** | **86** | | **Pn** | **03 40 42.8** | **-0.5** |
| BRLK | | | | | **Sn** | **03 41 00.0** | **-1.2** |
| **BRLK** | **Bradley Lake** | **1.20** | **86** | IAML | | 03 41 01.4 | |
| | comp=E,2μm,0.2s | | | | | | |
| BRLK | | | | IAML | | 03 41 02.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.27** | **87** | | **Pn** | **03 40 43.5** | **-0.6** |
| BRSE | | | | | **Sn** | **03 41 01.5** | **-1.2** |
| **BRSE** | **Bradley Lake S** | **1.27** | **87** | P | **Pn** | **03 40 43.5** | **-0.6** |
| | baz=266,SNR=24 | | | | | | |
| BRSE | | | | S | **Sn** | **03 41 01.4** | **-1.2** |
| | baz=268 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.27** | **332** | | **Pn** | **03 40 44.0** | **-0.2** |
| **N19K** | **Bonanza Creek** | **1.27** | **332** | P | **Pn** | **03 40 44.0** | **-0.2** |
| | baz=152 | | | | | | |
| N19K | | | | S | **Sn** | **03 41 01.4** | **-1.3** |
| | baz=152 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.49** | **44** | | **Pn** | **03 40 48.3** | **+1.7** |
| **CAPN** | **Captain Cook N** | **1.49** | **44** | IAML | | 03 41 12.4 | |
| | comp=E,2μm,0.3s | | | | | | |
| CAPN | | | | IAML | | 03 41 13.8 | |
| | comp=N,2μm,0.6s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.49** | **44** | P | **Pn** | **03 40 48.2** | **+1.6** |
| | baz=225 | | | | | | |
| **SPNN** | **North Nagishla** | **1.69** | **9** | | **Pn** | **03 40 49.6** | **+0.4** |
| **SPCG** | **Spurr Capps Gl** | **1.70** | **20** | | **Pn** | **03 40 49.7** | **+0.4** |
| **SLKM** | **Skilak Lake** | **1.72** | **61** | | **Pn** | **03 40 49.0** | **-0.4** |
| **SVW2** | **Sparrevohn** | **1.81** | **321** | | **Pn** | **03 40 50.1** | **-0.4** |
| **O22K** | **Cooper Landing** | **1.93** | **65** | | **Pn** | **03 40 52.1** | **+0.2** |
| **O22K** | **Cooper Landing** | **1.93** | **65** | P | **Pn** | **03 40 52.0** | **+0.1** |
| | baz=247,SNR=62 | | | | | | |
| **STLK** | **Strandline Lak** | **1.93** | **21** | | **Pn** | **03 40 52.4** | **+0.4** |
| **SEW** | **Seward** | **1.95** | **77** | | **Pn** | **03 40 52.0** | **-0.2** |
| **SEW** | **Seward** | **1.95** | **77** | P | **Pn** | **03 40 51.9** | **-0.2** |
| | baz=259,SNR=12 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.96** | **170** | P | **Pn** | **03 40 50.4** | **-1.9** |
| | comp=N,66nm,0.3s,baz=30,slow=7.9,SNR=768 | | | | | | |
| KDAK | | | | S | **Sn** | **03 41 15.5** | **-1.6** |
| | comp=N,57nm,0.3s,baz=342,slow=20,SNR=17 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.96** | **170** | | **Pn** | **03 40 51.2** | **-1.1** |
| **KDAK** | **Kodiak Island** | **1.96** | **170** | IAML | | 03 41 17.1 | |
| | comp=N,470nm,0.4s | | | | | | |
| KDAK | | | | IAML | | 03 41 23.6 | |
| | comp=N,420nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.96** | **170** | P | **Pn** | **03 40 51.2** | **-1.1** |
| | baz=349 | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.23** | **50** | | **Pn** | **03 40 55.6** | **0.0** |
| **RC01** | **Rabbit Creek A** | **2.23** | **50** | P | **Pn** | **03 40 55.7** | **0.0** |
| | baz=233,SNR=95 | | | | | | |
| RC01 | | | | S | **Sn** | **03 41 22.1** | **-1.2** |
| | baz=233 | | | | | | |
| **M19K** | **Big River Lodg** | **2.28** | **346** | Pn | **Pn** | **03 40 56.3** | **0.0** |
| **M19K** | **Big River Lodg** | **2.28** | **346** | P | **Pn** | **03 40 56.3** | **0.0** |
| | baz=166 | | | | | | |
| **OHAK** | **Old Harbor** | **2.49** | **180** | | **Pn** | **03 40 57.6** | **-1.4** |
| **OHAK** | **Old Harbor** | **2.49** | **180** | IAML | | 03 41 29.1 | |
| | comp=E,244nm,0.5s | | | | | | |
| OHAK | | | | IAML | | 03 41 29.1 | |
| | comp=N,321nm,0.5s | | | | | | |
| **OHAK** | **Old Harbor** | **2.49** | **180** | P | **Pn** | **03 40 57.6** | **-1.4** |
| | baz=0.1,SNR=12 | | | | | | |
| **M22K** | **Willow** | **2.57** | **35** | | **Pn** | **03 41 00.7** | **+0.7** |
| **M22K** | **Willow** | **2.57** | **35** | P | **Pn** | **03 41 00.4** | **+0.4** |
| | baz=218,SNR=11 | | | | | | |
| **L19K** | **White Mountain** | **2.61** | **343** | | **Pn** | **03 41 00.4** | **-0.1** |
| **L19K** | **White Mountain** | **2.61** | **343** | P | **Pn** | **03 41 00.5** | **-0.1** |
| | baz=162,SNR=42 | | | | | | |
| **PWL** | **Port Wells** | **2.71** | **63** | | **Pn** | **03 41 01.1** | **-0.8** |
| **PWL** | **Port Wells** | **2.71** | **63** | IAML | | 03 41 33.9 | |
| | comp=N,553nm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **2.71** | **63** | P | **Pn** | **03 41 01.1** | **-0.8** |
| | baz=246,SNR=36 | | | | | | |
| **PMR** | **Palmer** | **2.77** | **45** | | **Pn** | **03 41 02.1** | **-0.6** |
| **PMR** | **Palmer** | **2.77** | **45** | IAML | | 03 41 34.4 | |
| | comp=E,257nm,0.3s | | | | | | |
| PMR | | | | IAML | | 03 41 35.7 | |
| | comp=N,307nm,0.3s | | | | | | |
| **PMR** | **Palmer** | **2.77** | **45** | P | **Pn** | **03 41 01.9** | **-0.8** |
| | baz=229,SNR=39 | | | | | | |
| **L20K** | **Farewell, AK** | **2.80** | **354** | | **Pn** | **03 41 03.4** | **+0.3** |
| **L20K** | **Farewell, AK** | **2.80** | **354** | P | **Pn** | **03 41 03.5** | **+0.3** |
| | baz=174,SNR=47 | | | | | | |
| **KNK** | **Knik Glacier** | **2.92** | **52** | | **Pn** | **03 41 04.0** | **-0.7** |
| **KNK** | **Knik Glacier** | **2.92** | **52** | P | **Pn** | **03 41 03.9** | **-0.7** |
| | baz=236,SNR=41 | | | | | | |
| KNK | | | | S | **Sn** | **03 41 37.0** | **-2.4** |
| | baz=236 | | | | | | |
| **CUT** | **Chulitna** | **3.07** | **27** | | **Pn** | **03 41 07.2** | **+0.5** |
| | baz=210,SNR=26 | | | | | | |
| **CUT** | **Chulitna** | **3.07** | **27** | P | **Pn** | **03 41 07.7** | **+1.0** |
| **SII** | **Sitkinak Islan** | **3.19** | **189** | | **Pn** | **03 41 06.8** | **-1.4** |
| **SII** | **Sitkinak Islan** | **3.19** | **189** | P | **Pn** | **03 41 06.9** | **-1.4** |
| | baz=8.3 | | | | | | |
| **SML** | **Sawmill** | **3.21** | **47** | | **Pn** | **03 41 07.8** | **-0.8** |
| **SML** | **Sawmill** | **3.21** | **47** | IAML | | 03 41 46.0 | |
| | comp=N,343nm,0.7s | | | | | | |
| SML | | | | IAML | | 03 41 46.8 | |
| | comp=E,225nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **3.21** | **47** | P | **Pn** | **03 41 07.7** | **-0.8** |
| | baz=231,SNR=16 | | | | | | |
| **PPLA** | **Purkeypile** | **3.24** | **9** | | **Pn** | **03 41 10.2** | **+1.2** |
| **PPLA** | **Purkeypile** | **3.24** | **9** | P | **Pn** | **03 41 10.4** | **+1.4** |
| | baz=190,SNR=7.8 | | | | | | |
| **GLI** | **Glacier Island** | **3.28** | **66** | | **Pn** | **03 41 07.8** | **-1.7** |
| **GLI** | **Glacier Island** | **3.28** | **66** | IAML | | 03 41 48.1 | |
| | comp=E,305nm,0.4s | | | | | | |
| GLI | | | | IAML | | 03 41 48.5 | |
| | comp=N,186nm,0.4s | | | | | | |
| **GLI** | **Glacier Island** | **3.28** | **66** | P | **Pn** | **03 41 07.8** | **-1.7** |
| | baz=251 | | | | | | |
| **TT01** | **Tatalina** | **3.48** | **339** | | **Pn** | **03 41 11.8** | **-0.3** |
| **TTA** | **Tatalina** | **3.50** | **339** | | **Pn** | **03 41 12.0** | **-0.4** |
| **TTA** | **Tatalina** | **3.50** | **339** | P | **Pn** | **03 41 12.0** | **-0.4** |
| | baz=157,SNR=39 | | | | | | |
| **Q23K** | **Middleton Isla** | **3.52** | **92** | | **Pn** | **03 41 12.5** | **-0.1** |
| **Q23K** | **Middleton Isla** | **3.52** | **92** | P | **Pn** | **03 41 12.5** | **-0.1** |
| | baz=277 | | | | | | |
| **FID** | **Port Fidalgo** | **3.54** | **70** | | **Pn** | **03 41 11.1** | **-1.8** |
| **FID** | **Port Fidalgo** | **3.54** | **70** | IAML | | 03 41 51.6 | |
| | comp=E,293nm,0.3s | | | | | | |
| FID | | | | IAML | | 03 41 53.6 | |
| | comp=N,260nm,0.5s | | | | | | |
| **JPK** | **Jack Peak** | **3.57** | **65** | | **Pn** | **03 41 12.2** | **-1.1** |
| **SCM** | **Sheep Creek Mo** | **3.60** | **51** | | **Pn** | **03 41 13.0** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **3.60** | **51** | IAML | | 03 41 57.0 | |
| | comp=E,196nm,0.5s | | | | | | |
| SCM | | | | IAML | | 03 41 58.5 | |
| | comp=N,230nm,0.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.60** | **51** | P | **Pn** | **03 41 13.1** | **-0.7** |
| | baz=236,SNR=12 | | | | | | |
| **K20K** | **Telida** | **3.69** | **354** | | **Pn** | **03 41 14.9** | **+0.1** |
| **K20K** | **Telida** | **3.69** | **354** | P | **Pn** | **03 41 14.9** | **+0.1** |
| | baz=174 | | | | | | |
| **CAST** | **Castle Rocks** | **3.77** | **8** | Pn | **Pn** | **03 41 16.4** | **+0.5** |
| **CAST** | **Castle Rocks** | **3.77** | **8** | P | **Pn** | **03 41 14.4** | **-1.5** |
| | baz=189,SNR=32 | | | | | | |
| **WAT7** | **Susitna Watana** | **3.79** | **32** | | **Pn** | **03 41 16.3** | **0.0** |
| **EYAK** | **Cordova Ski Ar** | **3.85** | **74** | | **Pn** | **03 41 15.7** | **-1.2** |
| **EYAK** | **Cordova Ski Ar** | **3.85** | **74** | P | **Pn** | **03 41 15.9** | **-1.0** |
| | baz=260,SNR=11 | | | | | | |
| **WAT6** | **Susitna Watana** | **3.93** | **40** | | **Pn** | **03 41 17.6** | **-0.7** |
| **WAT6** | **Susitna Watana** | **3.93** | **40** | P | **Pn** | **03 41 17.5** | **-0.7** |
| | baz=225,SNR=28 | | | | | | |
| **DIV** | **Divide** | **3.97** | **66** | | **Pn** | **03 41 17.8** | **-0.9** |
| **TRF** | **Thorofare Moun** | **4.02** | **19** | | **Pn** | **03 41 19.2** | **-0.2** |
| **TRF** | **Thorofare Moun** | **4.02** | **19** | IAML | | 03 42 05.4 | |
| | comp=N,111nm,0.6s | | | | | | |
| TRF | | | | IAML | | 03 42 06.7 | |
| | comp=E,78nm,0.5s | | | | | | |
| **TRF** | **Thorofare Moun** | **4.02** | **19** | P | **Pn** | **03 41 19.4** | **0.0** |
| | baz=202,SNR=10 | | | | | | |
| **KTH** | **Kantishna Hill** | **4.02** | **15** | | **Pn** | **03 41 18.6** | **-0.7** |
| **KTH** | **Kantishna Hill** | **4.02** | **15** | IAML | | 03 42 07.4 | |
| | comp=N,82nm,0.6s | | | | | | |
| KTH | | | | IAML | | 03 42 33.6 | |
| | comp=E,59nm,0.8s | | | | | | |
| **KLU** | **Klutina** | **4.03** | **60** | | **Pn** | **03 41 18.8** | **-0.7** |
| **KLU** | **Klutina** | **4.03** | **60** | IAML | | 03 42 08.2 | |
| | comp=E,160nm,0.3s | | | | | | |
| **KLU** | **Klutina** | **4.03** | **60** | P | **Pn** | **03 41 18.8** | **-0.7** |
| | baz=247,SNR=111 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.21** | **52** | | **Pn** | **03 41 21.9** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **4.21** | **52** | IAML | | 03 42 13.1 | |
| | comp=N,162nm,1.4s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.21** | **52** | P | **Pn** | **03 41 21.7** | **-0.2** |
| | baz=238,SNR=18 | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.22** | **6** | | **Pn** | **03 41 22.1** | **+0.3** |
| **CHUM** | **Lake Minchumin** | **4.22** | **6** | P | **Pn** | **03 41 22.3** | **+0.4** |
| | baz=187,SNR=21 | | | | | | |
| **RND** | **Reindeer** | **4.27** | **28** | | **Pn** | **03 41 22.1** | **-0.5** |
| **RND** | **Reindeer** | **4.27** | **28** | IAML | | 03 42 12.4 | |
| | comp=N,60nm,0.8s | | | | | | |
| RND | | | | IAML | | 03 42 31.7 | |
| | comp=E,69nm,0.8s | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.35** | **77** | | **Pn** | **03 41 23.8** | **0.0** |
| RAGM | | | | IAML | | 03 42 19.9 | |
| | comp=E,116nm,0.5s | | | | | | |
| **CHGN** | **Chignik** | **4.38** | **221** | P | **Pn** | **03 41 23.9** | **-0.2** |
| | baz=37 | | | | | | |
| **DHY** | **Denali Highway** | **4.41** | **37** | | **Pn** | **03 41 24.3** | **-0.3** |
| **DHY** | **Denali Highway** | **4.41** | **37** | IAML | | 03 42 16.2 | |
| | comp=N,110nm,0.5s | | | | | | |
| **DHY** | **Denali Highway** | **4.41** | **37** | P | **Pn** | **03 41 24.1** | **-0.5** |
| | baz=222,SNR=13 | | | | | | |
| **BMRM** | **Bremner River** | **4.48** | **70** | | **Pn** | **03 41 24.2** | **-1.2** |
| **BMRM** | **Bremner River** | **4.48** | **70** | IAML | | 03 42 19.5 | |
| | comp=N,56nm,0.7s | | | | | | |
| BMRM | | | | IAML | | 03 42 20.3 | |
| | comp=E,62nm,0.9s | | | | | | |
| **BMRM** | **Bremner River** | **4.48** | **70** | P | **Pn** | **03 41 24.3** | **-1.1** |
| | baz=257,SNR=35 | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.48** | **55** | | **Pn** | **03 41 25.3** | **-0.1** |
| **J20K** | **Nowinta River** | **4.51** | **355** | | **Pn** | **03 41 26.1** | **+0.3** |
| **J20K** | **Nowinta River** | **4.51** | **355** | P | **Pn** | **03 41 25.9** | **+0.1** |
| | baz=174,SNR=20 | | | | | | |
| **MCK** | **McKinley** | **4.53** | **25** | | **Pn** | **03 41 26.6** | **+0.5** |
| **MCK** | **McKinley** | **4.53** | **25** | IAML | | 03 42 20.4 | |
| | comp=N,67nm,0.5s | | | | | | |
| MCK | | | | IAML | | 03 42 21.2 | |
| | comp=E,54nm,0.4s | | | | | | |
| **MCK** | **McKinley** | **4.53** | **25** | P | **Pn** | **03 41 26.4** | **+0.3** |
| | baz=209,SNR=9.5 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.54** | **13** | | **Pn** | **03 41 26.5** | **+0.3** |
| **BPAW** | **Bear Paw Mtn.** | **4.54** | **13** | IAML | | 03 42 17.3 | |
| | comp=E,32nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.54** | **13** | P | **Pn** | **03 41 26.3** | **+0.1** |
| | baz=195,SNR=5.4 | | | | | | |
| **HMT** | **Hamilton** | **4.55** | **78** | | **Pn** | **03 41 26.4** | **0.0** |
| **N25K** | **Chitina, Valde** | **4.66** | **62** | | **Pn** | **03 41 27.3** | **-0.7** |
| **N25K** | **Chitina, Valde** | **4.66** | **62** | IAML | | 03 42 21.7 | |
| | comp=N,90nm,0.3s | | | | | | |
| N25K | | | | IAML | | 03 42 22.2 | |
| | comp=E,82nm,0.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.66** | **62** | P | **Pn** | **03 41 27.4** | **-0.7** |
| | baz=249,SNR=108 | | | | | | |
| **HARP** | **HAARP** | **4.77** | **52** | | **Pn** | **03 41 29.1** | **-0.3** |
| **HARP** | **HAARP** | **4.77** | **52** | P | **Pn** | **03 41 29.0** | **-0.3** |
| | baz=239,SNR=12 | | | | | | |
| **BWN** | **Browne** | **4.83** | **20** | | **Pn** | **03 41 30.3** | **+0.3** |
| BWN | | | | IAML | | 03 43 05.5 | |
| | comp=N,61nm,0.7s | | | | | | |
| BWN | | | | IAML | | 03 43 07.3 | |
| | comp=E,81nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **4.97** | **65** | | **Pn** | **03 41 31.2** | **-0.9** |
| **GLB** | **Gilahina Butte** | **4.97** | **65** | IAML | | 03 42 29.2 | |
| | comp=E,48nm,0.6s | | | | | | |
| GLB | | | | IAML | | 03 42 29.3 | |
| | comp=N,85nm,0.8s | | | | | | |
| **PAX** | **Paxson** | **4.97** | **45** | | **Pn** | **03 41 31.8** | **-0.4** |
| **PAX** | **Paxson** | **4.97** | **45** | P | **Pn** | **03 41 31.7** | **-0.4** |
| | baz=232,SNR=17 | | | | | | |
| **GRIN** | **Grindle Hills** | **5.02** | **79** | | **Pn** | **03 41 33.0** | **+0.3** |
| **KHIT** | **Khitrov Hills** | **5.06** | **77** | | **Pn** | **03 41 33.1** | **-0.3** |
| **VRDI** | **Verde Repeater** | **5.08** | **68** | | **Pn** | **03 41 33.9** | **+0.2** |
| **VRDI** | **Verde Repeater** | **5.08** | **68** | IAML | | 03 42 32.3 | |
| | comp=E,32nm,0.7s | | | | | | |
| VRDI | | | | IAML | | 03 42 32.5 | |
| | comp=N,42nm,0.6s | | | | | | |
| **WAX** | **Waxell Ridge** | **5.26** | **77** | | **Pn** | **03 41 36.1** | **+0.1** |
| **NEA2** | **Nenana** | **5.28** | **20** | | **Pn** | **03 41 35.8** | **-0.4** |
| **NEA2** | **Nenana** | **5.28** | **20** | IAML | | 03 42 34.6 | |
| | comp=N,19nm,0.8s | | | | | | |
| NEA2 | | | | IAML | | 03 42 41.6 | |
| | comp=E,23nm,2.9s | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **20** | P | **Pn** | **03 41 35.7** | **-0.5** |
| | baz=204,SNR=23 | | | | | | |
| **GCSA** | **Galena City Sc** | **5.34** | **343** | P | **Pn** | **03 41 36.1** | **-0.8** |
| | baz=160 | | | | | | |
| **WRH** | **Wood River Hil** | **5.36** | **25** | | **Pn** | **03 41 36.7** | **-0.6** |
| **WRH** | **Wood River Hil** | **5.36** | **25** | IAML | | 03 42 37.5 | |
| | comp=E,32nm,2.9s | | | | | | |
| WRH | | | | IAML | | 03 42 38.4 | |
| | comp=N,25nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.47** | **11** | | **Pn** | **03 41 38.4** | **-0.5** |
| | baz=194 | | | | | | |
| **MLY** | **Manley** | **5.47** | **11** | P | **Pn** | **03 41 38.2** | **-0.6** |
| **ISLE** | **Juniper Island** | **5.52** | **76** | | **Pn** | **03 41 39.7** | **+0.1** |
| **I21K** | **Tanana** | **5.53** | **6** | | **Pn** | **03 41 39.9** | **+0.4** |
| **I21K** | **Tanana** | **5.53** | **6** | P | **Pn** | **03 41 39.3** | **-0.2** |
| | baz=187 | | | | | | |
| **KIAG** | **Kiagna River** | **5.55** | **73** | | **Pn** | **03 41 40.0** | **0.0** |
| **HDA** | **Harding Lake** | **5.57** | **29** | | **Pn** | **03 41 39.8** | **-0.3** |
| **HDA** | **Harding Lake** | **5.57** | **29** | P | **Pn** | **03 41 39.5** | **-0.6** |
| | baz=215,SNR=14 | | | | | | |
| **BALM** | **Baldy** | **5.57** | **71** | | **Pn** | **03 41 39.5** | **-0.7** |
| **CCB** | **Clear Creek Bu** | **5.58** | **25** | | **Pn** | **03 41 39.2** | **-0.9** |
| **MENT** | **Mentasta** | **5.62** | **51** | | **Pn** | **03 41 41.2** | **+0.4** |
| **BAGL** | **Bagley Icefiel** | **5.64** | **77** | | **Pn** | **03 41 41.4** | **+0.3** |
| **M26K** | **Nabesna, AK** | **5.67** | **57** | | **Pn** | **03 41 41.5** | **0.0** |
| **M26K** | **Nabesna, AK** | **5.67** | **57** | P | **Pn** | **03 41 40.9** | **-0.6** |
| | baz=246 | | | | | | |
| **RIDG** | **Independent Ri** | **5.69** | **41** | | **Pn** | **03 41 41.6** | **-0.1** |
| **RIDG** | **Independent Ri** | **5.69** | **41** | P | **Pn** | **03 41 41.7** | **-0.1** |
| | baz=228,SNR=12 | | | | | | |
| **MESA** | **MESA** | **5.70** | **80** | | **Pn** | **03 41 42.1** | **+0.1** |
| **MESA** | **MESA** | **5.70** | **80** | P | **Pn** | **03 41 42.3** | **+0.2** |
| | baz=270,SNR=8.8 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.71** | **29** | | **Pn** | **03 41 41.3** | **-0.7** |
| **I23K** | **Minto, Yukon-K** | **5.75** | **17** | | **Pn** | **03 41 42.8** | **+0.2** |
| **I23K** | **Minto, Yukon-K** | **5.75** | **17** | P | **Pn** | **03 41 42.1** | **-0.4** |
| | baz=200,SNR=10 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.76** | **24** | | **Pn** | **03 41 42.8** | **+0.2** |
| **TCOL** | **CIGO, UAF Yank** | **5.76** | **24** | P | **Pn** | **03 41 42.4** | **-0.3** |
| | baz=208 | | | | | | |
| **COLA** | **College** | **5.76** | **24** | | **Pn** | **03 41 42.5** | **-0.2** |
| **COLA** | **College** | **5.76** | **24** | P | **Pn** | **03 41 42.4** | **-0.2** |
| | baz=208 | | | | | | |
| **MDM** | **Murphy Dome** | **5.77** | **22** | | **Pn** | **03 41 42.2** | **-0.5** |
| **YAH** | **Yahtse** | **5.80** | **79** | | **Pn** | **03 41 43.7** | **+0.2** |
| **L26K** | **Log Cabin Wild** | **5.81** | **51** | | **Pn** | **03 41 43.5** | **+0.2** |
| **L26K** | **Log Cabin Wild** | **5.81** | **51** | P | **Pn** | **03 41 43.2** | **-0.2** |
| | baz=239,SNR=12 | | | | | | |
| **IL31** | | **5.89** | **28** | | **Pn** | **03 41 43.9** | **-0.4** |
| **ILAR** | **Eielson Array** | **5.89** | **28** | P | **Pn** | **03 41 43.2** | **-1.2** |
| | comp=N,4.3nm,0.3s,baz=215,slow=14,SNR=201 | | | | | | |
| ILAR | | | | S | **Sn** | **03 42 44.8** | **-5.7** |
| | comp=N,3.4nm,0.3s,baz=193,slow=16,SNR=8.2 | | | | | | |
| **ILAR** | **Eielson Array** | **5.89** | **28** | Pn | **Pn** | **03 41 44.0** | **-0.3** |
| **DOT** | **Dot Lake** | **5.89** | **44** | | **Pn** | **03 41 45.1** | **+0.5** |
| **BARN** | **Barnard Glacie** | **5.91** | **72** | | **Pn** | **03 41 45.0** | **+0.2** |
| **H21K** | **Melozitna Rive** | **5.98** | **2** | | **Pn** | **03 41 46.0** | **+0.3** |
| **H21K** | **Melozitna Rive** | **5.98** | **2** | P | **Pn** | **03 41 45.7** | **+0.1** |
| | baz=182 | | | | | | |
| **POKR** | **Poker Plat Res** | **6.06** | **24** | | **Pn** | **03 41 46.2** | **-0.5** |
| **POKR** | **Poker Plat Res** | **6.06** | **24** | P | **Pn** | **03 41 46.3** | **-0.5** |
| | baz=209,SNR=5.1 | | | | | | |
| **TABL** | **Table Mountain** | **6.11** | **78** | | **Pn** | **03 41 47.7** | **+0.2** |
| **SCRK** | **Sand Creek** | **6.13** | **42** | | **Pn** | **03 41 46.6** | **-1.1** |
| **SCRK** | **Sand Creek** | **6.13** | **42** | P | **Pn** | **03 41 46.6** | **-1.1** |
| | baz=230,SNR=6.4 | | | | | | |
| **M27K** | **Edge Creek, AK** | **6.13** | **59** | | **Pn** | **03 41 48.5** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **6.13** | **59** | P | **Pn** | **03 41 47.6** | **-0.2** |
| | baz=249 | | | | | | |
| **J25K** | **Salcha River,** | **6.15** | **33** | | **Pn** | **03 41 47.5** | **-0.5** |
| **J25K** | **Salcha River,** | **6.15** | **33** | P | **Pn** | **03 41 47.5** | **-0.5** |
| | baz=220,SNR=12 | | | | | | |
| **SAMH** | **Samovar Hills** | **6.29** | **81** | | **Pn** | **03 41 50.5** | **+0.6** |
| **IMAR** | **Indian Mountai** | **6.31** | **358** | | **Pn** | **03 41 50.8** | **+0.7** |
| **YUK2** | **White River** | **6.43** | **66** | | **Pn** | **03 41 52.0** | **+0.1** |
| **L27K** | **Beaver Creek,** | **6.43** | **54** | | **Pn** | **03 41 51.5** | **-0.3** |
| **L27K** | **Beaver Creek,** | **6.43** | **54** | P | **Pn** | **03 41 51.4** | **-0.5** |
| | baz=243 | | | | | | |
| **BC03** | | **6.45** | **54** | | **Pn** | **03 41 51.7** | **-0.3** |
| **PCA** | **Pinnacle** | **6.55** | **81** | | **Pn** | **03 41 53.9** | **+0.4** |
| **PINM** | **Pinnacle** | **6.55** | **81** | P | **Pn** | **03 41 53.4** | **-0.1** |
| | baz=272,SNR=7.9 | | | | | | |
| **BVCY** | **Beaver Creek** | **6.60** | **60** | P | **Pn** | **03 41 54.5** | **+0.4** |
| | baz=251,SNR=22 | | | | | | |
| **YUK3** | **Moose Creek** | **6.61** | **66** | | **Pn** | **03 41 54.4** | **+0.1** |
| **YUK3** | **Moose Creek** | **6.61** | **66** | P | **Pn** | **03 41 54.3** | **0.0** |
| | baz=257,SNR=26 | | | | | | |
| **J26L** | **Joseph Creek** | **6.61** | **39** | | **Pn** | **03 41 53.9** | **-0.4** |
| **J26L** | **Joseph Creek** | **6.61** | **39** | P | **Pn** | **03 41 53.5** | **-0.8** |
| | baz=228 | | | | | | |
| **H24K** | **Noodor Dome** | **6.63** | **20** | | **Pn** | **03 41 54.3** | **-0.1** |
| **H24K** | **Noodor Dome** | **6.63** | **20** | P | **Pn** | **03 41 53.9** | **-0.5** |
| | baz=204,SNR=11 | | | | | | |
| **K27K** | **Chicken** | **6.83** | **46** | | **Pn** | **03 41 56.9** | **-0.2** |
| **K27K** | **Chicken** | **6.83** | **46** | P | **Pn** | **03 41 

| | | | | | | |
|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **57.54 324** | P | **P** | **03 49 57.0** | **+0.4** |
| | comp=Z,2.0nm,0.5s,baz=33,slow=7.0,SNR=10 | | | | | |
| **MKAR** | **Makanchi Array** | **64.58 321** | P | **P** | **03 50 42.5** | **-1.9** |
| | comp=Z,0.2nm,0.5s,baz=31,slow=7.2,SNR=5.5 | | | | | |
| **MKAR** | **Makanchi Array** | **64.58 321** | P | **P** | **03 50 44.1** | **-0.2** |

*JMA* ***11*** *04:07:17.9±0.4,23.°00N×121.°52E,h8km,M3.8*
*TAP* ***11*** *04:07:19.9,22.°94N×121.°43E,h36km,ML3.8,C*
**ISC 11 04:07:19.9±0.9,22.°91N±0.°02×121.°48E±0.°02,h30km±6km,**
**n150,σ1s05/267,1C-8D,Taiwan region**

| Code | Station Name | Δ° AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | Op | ISC | h m s | ISC |
| **EDH** | **Donghe** | **0.18 291** | *i* P | **Pn** | **04 07 26.3** | **-0.3** |
| | baz=286 | | | | | |
| EDH | | | *i* S | **Sb** | **04 07 30.8** | **+0.9** |
| | baz=286 | | | | | |
| **CHKT** | **Chengkung** | **0.22 330** | ⇓*i* P | **Pn** | **04 07 26.4** | **-0.7** |
| | baz=340 | | | | | |
| CHKT | | | *i* S | **Sn** | **04 07 31.5** | **+0.8** |
| | baz=340 | | | | | |
| **LDUT** | **Ludao** | **0.23 183** | ⇑*i* P | **Pn** | **04 07 27.4** | **-0.1** |
| | baz=168 | | | | | |
| LDUT | | | S | **Sb** | **04 07 32.9** | **+1.9** |
| | baz=168 | | | | | |
| **ECS** | **Chishang** | **0.30 308** | P | **Pb** | **04 07 27.6** | **+0.2** |
| | baz=308 | | | | | |
| ECS | | | S | **Sn** | **04 07 33.9** | **0.0** |
| | baz=308 | | | | | |
| **LONT** | **Longtian** | **0.33 270** | *i* P | **Pb** | **04 07 27.6** | **-0.1** |
| | baz=264 | | | | | |
| LONT | | | *i* S | **Sb** | **04 07 33.1** | **+0.1** |
| | baz=264 | | | | | |
| **FULB** | **Fuli** | **0.34 329** | *i* P | **Pb** | **04 07 27.8** | **-0.2** |
| | baz=338 | | | | | |
| FULB | | | *i* S | **Sb** | **04 07 34.2** | **+0.9** |
| | baz=338 | | | | | |
| **TTN** | **Taitung** | **0.34 244** | *i* P | **Pb** | **04 07 28.5** | **+0.5** |
| | baz=246 | | | | | |
| TTN | | | *i* S | **Sn** | **04 07 35.8** | **+0.9** |
| | baz=246 | | | | | |
| **TWGBT** | **Beinan** | **0.38 256** | P | **Pb** | **04 07 28.1** | **-0.5** |
| | baz=261 | | | | | |
| TWGBT | | | S | **Sb** | **04 07 33.8** | **-0.6** |
| | baz=261 | | | | | |
| **TWG** | **Pinlang** | **0.39 257** | ⇓*i* P | **Pb** | **04 07 28.1** | **-0.6** |
| | baz=261 | | | | | |
| TWG | | | *i* S | **Sb** | **04 07 34.1** | **-0.4** |
| | baz=261 | | | | | |
| **ECBN** | **Changbin** | **0.41 356** | P | **Pb** | **04 07 28.8** | **-0.1** |
| | baz=9.0 | | | | | |
| ECBN | | | S | **Sb** | **04 07 35.6** | **+0.7** |
| | baz=9.0 | | | | | |
| **EYUL** | **Yuli** | **0.46 341** | *i* P | **Pb** | **04 07 29.9** | **+0.2** |
| | baz=333 | | | | | |
| EYUL | | | S | **Sb** | **04 07 37.4** | **+0.9** |
| | baz=333 | | | | | |
| **TWF1** | **Yuli** | **0.47 339** | *i* P | **Pb** | **04 07 29.6** | **-0.3** |
| | baz=332 | | | | | |
| TWF1 | | | S | **Sb** | **04 07 37.2** | **+0.4** |
| | baz=332 | | | | | |
| **YULB** | **Yu-li** | **0.51 341** | P | **Pb** | **04 07 29.2** | **-1.3** |
| | baz=333 | | | | | |
| YULB | | | S | **Sb** | **04 07 37.7** | **-0.1** |
| | baz=333 | | | | | |
| **ELDTW** | **Lidau** | **0.51 303** | ⇓*i* P | **Pb** | **04 07 29.2** | **-1.4** |
| | baz=301 | | | | | |
| ELDTW | | | *e*S | **Sb** | **04 07 35.7** | **-2.2** |
| | baz=301 | | | | | |
| **ECL** | **Taimali** | **0.58 238** | *i* P | **Pb** | **04 07 30.3** | **-1.3** |
| | baz=240 | | | | | |
| **HGSD** | **Ruisui** | **0.58 355** | P | **Pn** | **04 07 30.7** | **-1.5** |
| | baz=8.0 | | | | | |
| **EHY** | **Hungye** | **0.61 346** | *i* P | **Pn** | **04 07 30.6** | **-2.0** |
| | baz=339 | | | | | |
| EHY | | | S | **Sb** | **04 07 40.9** | **+0.3** |
| | baz=339 | | | | | |
| **STYH** | **Taoyuan** | **0.70 292** | P | **Pn** | **04 07 32.6** | **-1.2** |
| | baz=291 | | | | | |
| STYH | | | *e*S | **Sn** | **04 07 41.4** | **-2.2** |
| | baz=291 | | | | | |
| **TAW** | **Tawu** | **0.77 225** | *i* P | **Pn** | **04 07 33.5** | **-1.3** |
| | baz=227 | | | | | |
| TAW | | | *i* S | **Sn** | **04 07 43.5** | **-1.8** |
| | baz=227 | | | | | |
| **SLGT** | **Liugui** | **0.78 276** | *i* P | **Pn** | **04 07 33.4** | **-1.4** |
| | baz=275 | | | | | |
| **EAST** | **Anshuo** | **0.79 228** | *i* P | **Pn** | **04 07 33.6** | **-1.4** |
| | baz=229 | | | | | |
| EAST | | | *i* S | **Sn** | **04 07 43.7** | **-2.1** |
| | baz=229 | | | | | |
| **TAWH** | **Dawu Township** | **0.79 224** | P | **Pn** | **04 07 33.8** | **-1.2** |
| | baz=227 | | | | | |
| TAWH | | | S | **Sn** | **04 07 44.7** | **-1.1** |
| | baz=227 | | | | | |
| **TSMG** | **Majia** | **0.80 255** | *i* P | **Pn** | **04 07 34.0** | **-1.2** |
| | baz=258 | | | | | |
| **SSD** | **Sandimen** | **0.80 258** | ⇓*i* P | **Pn** | **04 07 34.0** | **-1.2** |
| | baz=257 | | | | | |
| SSD | | | *e*S | **Sn** | **04 07 43.2** | **-2.9** |
| | baz=257 | | | | | |
| **MASBT** | **Mashibuluo** | **0.84 249** | P | **Pn** | **04 07 34.8** | **-1.0** |
| | baz=248 | | | | | |
| MASBT | | | *e*S | **Sn** | **04 07 46.7** | **-0.3** |
| | baz=248 | | | | | |
| **SGST** | **Jiashian** | **0.85 282** | ⇓*i* P | **Pn** | **04 07 34.7** | **-1.1** |
| | baz=288 | | | | | |
| SGST | | | *i* S | **Sn** | **04 07 46.9** | **-0.4** |
| | baz=288 | | | | | |
| **ALS** | **Alishan** | **0.86 314** | *i* P | **Pn** | **04 07 35.8** | **-0.6** |
| | baz=320 | | | | | |
| ALS | | | *i* S | **Sn** | **04 07 47.2** | **-0.9** |
| | baz=320 | | | | | |
| **WTP** | **Ta-pu** | **0.87 293** | ⇓*i* P | **Pn** | **04 07 35.9** | **-0.3** |
| | baz=293 | | | | | |
| WTP | | | *i* S | **Sn** | **04 07 48.0** | **+0.2** |
| | baz=293 | | | | | |
| **LAY** | **Lan-yu** | **0.87 176** | *i* P | **Pn** | **04 07 35.6** | **-0.6** |
| | baz=165 | | | | | |
| LAY | | | S | **Sn** | **04 07 47.1** | **-0.7** |
| | baz=165 | | | | | |
| **TPUB** | **Ta-pu** | **0.88 297** | P | **Pn** | **04 07 35.8** | **-0.5** |
| | baz=302 | | | | | |
| TPUB | | | S | **Sn** | **04 07 48.1** | **+0.1** |
| | baz=302 | | | | | |
| **VWDT** | **VWDT** | **0.90 340** | P | **Pn** | **04 07 35.3** | **-1.2** |
| | baz=349 | | | | | |
| VWDT | | | *e*S | **Sn** | **04 07 47.0** | **-1.5** |
| | baz=349 | | | | | |
| **ESL** | **Shilin** | **0.90 357** | *i* P | **Pn** | **04 07 34.6** | **-2.0** |
| | baz=350 | | | | | |
| ESL | | | S | **Sn** | **04 07 47.8** | **-0.9** |
| | baz=350 | | | | | |
| **LYUB** | **Lan-yu** | **0.91 174** | *i* P | **Pn** | **04 07 35.0** | **-1.6** |
| | baz=164 | | | | | |
| LYUB | | | S | **Sn** | **04 07 47.5** | **-1.2** |
| | baz=164 | | | | | |
| **SCST** | **Cishan** | **0.91 269** | *i* P | **Pn** | **04 07 37.2** | **+0.5** |
| | baz=268 | | | | | |
| **CHN1** | **Nanshi** | **0.92 288** | ⇓*i* P | **Pn** | **04 07 37.0** | **+0.1** |
| | baz=287 | | | | | |
| CHN1 | | | *i* S | **Sn** | **04 07 49.2** | **+0.1** |
| | baz=287 | | | | | |
| **CHN4** | **Tsaushan** | **0.93 298** | ⇓*i* P | **Pn** | **04 07 36.9** | **0.0** |
| | baz=304 | | | | | |
| CHN4 | | | *i* S | **Sn** | **04 07 49.6** | **+0.3** |
| | baz=304 | | | | | |
| **SGLT** | **Jiouru** | **0.93 259** | P | **Pn** | **04 07 36.9** | **-0.1** |
| | baz=258 | | | | | |
| SGLT | | | S | **Sn** | **04 07 49.5** | **+0.2** |
| | baz=258 | | | | | |
| **SLIU** | **Shizi** | **0.94 223** | *i* P | **Pn** | **04 07 35.8** | **-1.2** |
| | baz=221 | | | | | |
| SLIU | | | S | **Sn** | **04 07 47.7** | **-1.7** |
| | baz=221 | | | | | |
| **TSPT** | **Pingtung City** | **0.94 256** | *e*P | **Pn** | **04 07 38.1** | **+1.0** |
| | baz=247 | | | | | |
| TSPT | | | *e*S | **Sn** | **04 07 50.1** | **+0.6** |
| | baz=247 | | | | | |
| **SNST** | **Tainan City** | **0.96 289** | *i* P | **Pn** | **04 07 37.5** | **+0.2** |
| | baz=289 | | | | | |
| SNST | | | *i* S | **Sn** | **04 07 51.2** | **+1.2** |
| | baz=289 | | | | | |
| **SCZT** | **Fangliau** | **0.96 236** | *i* P | **Pn** | **04 07 36.8** | **-0.6** |
| | baz=235 | | | | | |
| SCZT | | | *i* S | **Sn** | **04 07 50.0** | **0.0** |
| | baz=235 | | | | | |
| **TEYL** | **Yanliau Villag** | **0.96 6** | P | **Pn** | **04 07 37.3** | **-0.1** |
| | baz=19 | | | | | |
| TEYL | | | S | **Sn** | **04 07 51.0** | **+1.0** |
| | baz=19 | | | | | |
| **TWM1** | **Shoushan** | **0.98 265** | *i* P | **Pb** | **04 07 39.0** | **+0.6** |
| | baz=265 | | | | | |
| TWM1 | | | S | **Sn** | **04 07 50.6** | **0.0** |
| | baz=265 | | | | | |
| **TWK** | **Hsinying** | **0.98 291** | *i* P | **Pn** | **04 07 37.9** | **+0.2** |
| | baz=300 | | | | | |
| TWK | | | *i* S | **Sn** | **04 07 51.4** | **+0.7** |
| | baz=300 | | | | | |
| **SSLB** | **Suanglung** | **1.00 331** | P | **Pn** | **04 07 37.0** | **-1.0** |
| | baz=338 | | | | | |
| SSLB | | | *e*S | **Sn** | **04 07 50.3** | **-0.8** |
| | baz=338 | | | | | |
| **CHN5** | **Tsauling** | **1.01 313** | *i* P | **Pn** | **04 07 38.5** | **+0.3** |
| | baz=314 | | | | | |
| CHN5 | | | *i* S | **Sn** | **04 07 52.0** | **+0.6** |
| | baz=314 | | | | | |
| **CHN3** | **Shinhua** | **1.04 279** | S | **Sn** | **04 07 52.4** | **+0.3** |
| | baz=279 | | | | | |
| **SHHT** | **Tainan City** | **1.05 276** | *e*P | **Pb** | **04 07 40.4** | **+0.9** |
| | baz=276 | | | | | |
| SHHT | | | S | **Sn** | **04 07 52.7** | **+0.4** |
| | baz=276 | | | | | |
| **SMST** | **Manzhou Townsh** | **1.07 214** | P | **Pn** | **04 07 38.2** | **-0.7** |
| | baz=203 | | | | | |
| SMST | | | S | **Sn** | **04 07 51.4** | **-1.3** |
| | baz=203 | | | | | |
| **HWA** | **Hwalien** | **1.07 6** | *i* P | **Pn** | **04 07 38.5** | **-0.4** |
| | baz=19 | | | | | |
| HWA | | | S | **Sb** | **04 07 54.4** | **+0.9** |
| | baz=19 | | | | | |
| **SNJT** | **Kaohsiung City** | **1.07 262** | *e*P | **Pb** | **04 07 40.8** | **+1.0** |
| | baz=262 | | | | | |
| SNJT | | | S | **Sn** | **04 07 52.8** | **0.0** |
| | baz=262 | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.11 331** | *i* P | **Pn** | **04 07 39.3** | **-0.2** |
| | baz=341 | | | | | |
| SMLT | | | *i* S | **Sn** | **04 07 53.2** | **-0.7** |
| | baz=341 | | | | | |
| **CHN2** | **Minshiung** | **1.11 304** | *i* P | **Pn** | **04 07 40.4** | **+0.9** |
| | baz=304 | | | | | |
| CHN2 | | | S | **Sn** | **04 07 54.8** | **+0.9** |
| | baz=304 | | | | | |
| **SSHA** | **Shanhua** | **1.12 282** | P | **Pn** | **04 07 38.1** | **-1.5** |
| | baz=281 | | | | | |
| **WUSB** | **Renai** | **1.13 343** | P | **Pn** | **04 07 38.9** | **-1.0** |
| | baz=352 | | | | | |
| WUSB | | | *e*S | **Sn** | **04 07 51.7** | **-2.8** |
| | baz=352 | | | | | |
| **HEN** | **Hengchun** | **1.13 218** | *i* P | **Pn** | **04 07 39.8** | **0.0** |
| | baz=205 | | | | | |
| HEN | | | *i* S | **Sn** | **04 07 54.4** | **+0.1** |
| | baz=205 | | | | | |
| **CHY** | **Chiayi** | **1.14 301** | *i* P | **Pn** | **04 07 40.2** | **+0.4** |
| | baz=302 | | | | | |
| CHY | | | *i* S | **Sn** | **04 07 54.9** | **+0.5** |
| | baz=302 | | | | | |
| **KAU** | **Kaohsiung** | **1.14 253** | *e*P | **Pn** | **04 07 40.9** | **+1.1** |
| | baz=253 | | | | | |
| KAU | | | S | **Sb** | **04 07 55.9** | **+0.5** |
| | baz=253 | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.14 208** | *i* P | **Pn** | **04 07 39.7** | **-0.2** |
| | baz=210 | | | | | |
| TSEB | | | *i* S | **Sn** | **04 07 55.0** | **+0.6** |
| | baz=210 | | | | | |
| **WJS** | **Zhushan** | **1.14 323** | *i* P | **Pn** | **04 07 40.3** | **+0.4** |
| | baz=324 | | | | | |
| WJS | | | *i* S | **Sn** | **04 07 55.6** | **+1.0** |
| | baz=324 | | | | | |
| **TYC** | **Yuchr** | **1.15 330** | *i* P | **Pn** | **04 07 40.1** | **+0.1** |
| | baz=339 | | | | | |
| TYC | | | *i* S | **Sn** | **04 07 55.0** | **+0.4** |
| | baz=339 | | | | | |
| **WGK** | **Gukeng** | **1.15 313** | *i* P | **Pn** | **04 07 41.0** | **+1.1** |
| | baz=313 | | | | | |
| WGK | | | *i* S | **Sb** | **04 07 56.6** | **+0.9** |
| | baz=313 | | | | | |
| **WLCH** | **Liuqiu** | **1.16 242** | P | **Pn** | **04 07 41.2** | **+1.1** |
| | baz=242 | | | | | |
| **WDLH** | **Douliu** | **1.16 312** | *i* P | **Pn** | **04 07 40.9** | **+0.7** |
| | baz=312 | | | | | |
| WDLH | | | *i* S | **Sn** | **04 07 56.3** | **+1.2** |
| | baz=312 | | | | | |
| **TWD** | **Chiawan** | **1.17 5** | *i* P | **Pn** | **04 07 39.1** | **-1.2** |
| | baz=355 | | | | | |
| TWD | | | S | **Sn** | **04 07 55.3** | **0.0** |
| | baz=355 | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.18 242** | *e*P | **Pb** | **04 07 44.5** | **+2.8** |
| | baz=242 | | | | | |
| TWP | | | *e*S | **Sb** | **04 08 01.4** | **+4.9** |
| | baz=242 | | | | | |
| **CHGB** | **Renai** | **1.18 346** | P | **Pn** | **04 07 39.8** | **-0.8** |
| | baz=356 | | | | | |
| CHGB | | | S | **Sn** | **04 07 54.8** | **-1.0** |
| | baz=356 | | | | | |
| **ICHU** | **Yijhu** | **1.20 292** | *i* P | **Pn** | **04 07 40.9** | **+0.3** |
| | baz=292 | | | | | |
| ICHU | | | *i* S | **Sn** | **04 07 57.1** | **+1.3** |
| | baz=292 | | | | | |
| **WPL** | **Puli Township** | **1.20 336** | P | **Pn** | **04 07 40.7** | **0.0** |
| | baz=344 | | | | | |
| WPL | | | *e*S | **Sn** | **04 07 54.7** | **-1.3** |
| | baz=344 | | | | | |
| **WNT** | **Mingjian** | **1.21 323** | *i* P | **Pn** | **04 07 41.5** | **+0.6** |
| | baz=324 | | | | | |
| WNT | | | *i* S | **Sn** | **04 07 57.1** | **+0.8** |
| | baz=324 | | | | | |
| **SCLT** | **Jiali** | **1.22 283** | S | **Sn** | **04 07 57.8** | **+1.4** |
| | baz=283 | | | | | |
| **DPDB** | **Guoxing** | **1.23 336** | P | **Pn** | **04 07 41.1** | **-0.1** |
| | baz=343 | | | | | |
| DPDB | | | S | **Sn** | **04 07 56.4** | **-0.5** |
| | baz=343 | | | | | |
| **WNT1** | **Nantou City** | **1.24 324** | P | **Pn** | **04 07 42.0** | **+0.7** |
| | baz=324 | | | | | |
| WNT1 | | | S | **Sn** | **04 07 58.1** | **+1.2** |
| | baz=324 | | | | | |
| **WHF** | **Hehuan Shan** | **1.25 351** | *i* P | **Pn** | **04 07 40.5** | **-1.3** |
| | baz=1.0 | | | | | |
| WHF | | | S | **Sn** | **04 07 56.5** | **-1.2** |
| | baz=1.0 | | | | | |
| **CHN8** | **Yiju** | **1.25 291** | *i* S | **Sn** | **04 07 58.5** | **+1.3** |
| | baz=291 | | | | | |
| **ETL** | **Fush Village** | **1.25 6** | P | **Pn** | **04 07 40.3** | **-1.1** |
| | baz=357 | | | | | |
| **WCS** | **Beigang Elemen** | **1.26 335** | P | **Pn** | **04 07 41.3** | **-0.2** |
| | baz=336 | | | | | |
| WCS | | | S | **Sn** | **04 07 57.1** | **-0.3** |
| | baz=336 | | | | | |
| **NACB** | **Ninganchiao** | **1.26 5** | P | **Pn** | **04 07 40.1** | **-1.5** |
| | baz=356 | | | | | |
| NACB | | | S | **Sn** | **04 07 57.2** | **-0.4** |
| | baz=356 | | | | | |
| **WTK** | **Tuku** | **1.27 308** | *i* P | **Pn** | **04 07 41.7** | **+0.1** |
| | baz=308 | | | | | |
| WTK | | | *i* S | **Sn** | **04 07 57.7** | **0.0** |
| | baz=308 | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.29 360** | P | **Pn** | **04 07 40.8** | **-1.2** |
| | baz=2.0 | | | | | |
| **WSL** | **Shuilin Townsh** | **1.30 298** | P | **Pn** | **04 07 42.2** | **+0.1** |
| | baz=298 | | | | | |
| WSL | | | S | **Sn** | **04 07 58.5** | **0.0** |
| | baz=298 | | | | | |
| **WWF** | **Wufeng** | **1.34 328** | P | **Pn** | **04 07 43.5** | **+0.9** |
| | baz=328 | | | | | |
| WWF | | | S | **Sn** | **04 08 00.8** | **+1.4** |
| | baz=328 | | | | | |
| **FUSS** | **Fushou** | **1.35 351** | *i* P | **Pn** | **04 07 42.2** | **-0.8** |
| | baz=359 | | | | | |
| **TWT** | **Tachien** | **1.37 348** | *i* P | **Pn** | **04 07 42.8** | **-0.4** |
| | baz=356 | | | | | |
| TWT | | | S | **Sn** | **04 08 01.6** | **+1.2** |
| | baz=356 | | | | | |
| **TDCB** | **Techi** | **1.37 348** | *e*P | **Pn** | **04 07 43.1** | **0.0** |
| | baz=349 | | | | | |
| **WRL** | **Guolierlin Hig** | **1.42 314** | P | **Pn** | **04 07 43.7** | **0.0** |
| | baz=315 | | | | | |
| WRL | | | S | **Sn** | **04 08 01.4** | **+0.1** |
| | baz=315 | | | | | |
| **TCU** | **Taichung** | **1.44 329** | *i* P | **Pn** | **04 07 45.3** | **+1.4** |
| | baz=330 | | | | | |
| TCU | | | *i* S | **Sn** | **04 08 03.5** | **+1.7** |
| | baz=330 | | | | | |
| **WCHH** | **Zhanghua** | **1.44 324** | *i* P | **Pn** | **04 07 44.6** | **+0.6** |
| | baz=324 | | | | | |
| WCHH | | | *i* S | **Sn** | **04 08 03.1** | **+1.2** |
| | baz=324 | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.46 311** | *i* S | **Sn** | **04 08 02.5** | **+0.2** |
| | baz=311 | | | | | |
| **NNSB** | **Datong** | **1.52 357** | P | **Pn** | **04 07 44.2** | **-1.0** |
| | baz=9.0 | | | | | |
| NNSB | | | S | **Sn** | **04 08 04.8** | **+0.8** |
| | baz=9.0 | | | | | |
| **NNS** | **Nan Shan** | **1.53 356** | *i* P | **Pn** | **04 07 44.6** | **-0.7** |
| | baz=9.0 | | | | | |
| NNS | | | S | **Sn** | **04 08 04.1** | **-0.2** |
| | baz=9.0 | | | | | |
| **ENA** | **Nanau** | **1.53 9** | *i* P | **Pn** | **04 07 44.6** | **-0.7** |
| | baz=359 | | | | | |
| ENA | | | S | **Sn** | **04 08 04.6** | **+0.4** |
| | baz=359 | | | | | |
| **EWUT** | **Wuta** | **1.55 10** | P | **Pn** | **04 07 45.0** | **-0.6** |
| | baz=359 | | | | | |
| EWUT | | | S | **Sn** | **04 08 03.6** | **-1.1** |
| | baz=359 | | | | | |
| **TWQ1** | **Liyutan** | **1.57 336** | *i* P | **Pn** | **04 07 46.8** | **+1.0** |
| | baz=337 | | | | | |
| TWQ1 | | | *i* S | **Sn** | **04 08 06.7** | **+1.5** |
| | baz=337 | | | | | |
| **LATG** | **Datong** | **1.62 1** | P | **Pn** | **04 07 45.5** | **-1.0** |
| | baz=3.0 | | | | | |
| **WDJ** | **Dajia District** | **1.63 332** | *i* P | **Pn** | **04 07 47.4** | **+0.8** |
| | baz=332 | | | | | |
| WDJ | | | S | **Sn** | **04 08 07.2** | **+0.7** |
| | baz=332 | | | | | |
| **NSY** | **Sanyi** | **1.64 336** | *i* P | **Pn** | **04 07 47.6** | **+0.9** |
| | baz=337 | | | | | |
| NSY | | | S | **Sn** | **04 08 07.3** | **+0.5** |
| | baz=337 | | | | | |
| **NDT** | **Datong Townshi** | **1.69 1** | *i* P | **Pn** | **04 07 47.6** | **+0.2** |
| | baz=2.0 | | | | | |
| NDT | | | S | **Sn** | **04 08 08.6** | **+0.6** |
| | baz=2.0 | | | | | |
| **WDGT** | **Dungji** | **1.71 282** | *i* P | **Pn** | **04 07 47.5** | **-0.2** |
| | baz=282 | | | | | |
| WDGT | | | S | **Sn** | **04 08 08.2** | **-0.4** |
| | baz=282 | | | | | |
| **ENTT** | **Nioudou** | **1.73 3** | *i* P | **Pn** | **04 07 47.7** | **-0.2** |
| | baz=3.0 | | | | | |
| ENTT | | | S | **Sn** | **04 08 09.3** | **+0.3** |
| | baz=3.0 | | | | | |
| **TWC** | **Suao** | **1.73 11** | *i* P | **Pn** | **04 07 47.9** | **0.0** |
| | baz=24 | | | | | |
| TWC | | | *i* S | **Sn** | **04 08 09.4** | **+0.4** |
| | baz=24 | | | | | |
| **NDS** | **Dongshan** | **1.73 7** | P | **Pn** | **04 07 48.1** | **+0.1** |
| | baz=359 | | | | | |
| NDS | | | *e*S | **Sn** | **04 08 09.0** | **-0.1** |
| | baz=359 | | | | | |
| **NMLH** | **Miaoli** | **1.74 339** | *i* P | **Pn** | **04 07 48.6** | **+0.5** |
| | baz=339 | | | | | |
| NMLH | | | S | **Sn** | **04 08 09.9** | **+0.5** |
| | baz=339 | | | | | |
| **NFF** | **Wufeng Townshi** | **1.75 349** | P | **Pn** | **04 07 48.7** | **+0.4** |
| | baz=335 | | | | | |
| NFF | | | S | **Sn** | **04 08 10.1** | **+0.5** |
| | baz=335 | | | | | |
| **YHNB** | **Yeheng** | **1.75 357** | P | **Pn** | **04 07 48.2** | **-0.2** |
| | baz=9.0 | | | | | |
| YHNB | | | S | **Sn** | **04 08 09.2** | **-0.6** |
| | baz=9.0 | | | | | |
| **NSK** | **Sanguang** | **1.76 356** | *i* P | **Pn** | **04 07 48.5** | **0.0** |
| | baz=8.0 | | | | | |
| NSK | | | S | **Sn** | **04 08 09.3** | **-0.7** |
| | baz=8.0 | | | | | |
| **LIOB** | **Emei** | **1.78 346** | *i* P | **Pn** | **04 07 49.4** | **+0.7** |
| | baz=347 | | | | | |
| LIOB | | | S | **Sn** | **04 08 11.2** | **+0.8** |
| | baz=347 | | | | | |
| **TWE** | **Neicheng** | **1.81 5** | *i* P | **Pn** | **04 07 49.4** | **+0.2** |
| | baz=7.0 | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.84 3** | P | **Pn** | **04 07 49.4** | **-0.3** |
| | baz=4.0 | | | | | |
| **NJD** | **Zhudong** | **1.85 349** | *e*P | **Pn** | **04 07 51.3** | **+1.6** |
| | baz=336 | | | | | |
| **PHUB** | **P'eng-hu** | **1.86 289** | P | **Pn** | **04 07 49.1** | **-0.6** |
| | baz=290 | | | | | |
| PHUB | | | S | **Sn** | **04 08 10.7** | **-1.5** |
| | baz=290 | | | | | |
| **NWLT** | **Wulai** | **1.86 1** | *i* P | **Pn** | **04 07 49.5** | **-0.3** |
| | baz=1.0 | | | | | |
| NWLT | | | S | **Sn** | **04 08 11.6** | **-0.8** |
| | baz=1.0 | | | | | |
| **PNG** | **Penghu** | **1.89 291** | *i* P | **Pn** | **04 07 49.7** | **-0.5** |
| | baz=279 | | | | | |
| PNG | | | *i* S | **Sn** | **04 08 11.4** | **-1.6** |
| | baz=279 | | | | | |
| **VCHM** | **Qimei** | **1.91 279** | P | **Pn** | **04 07 50.0** | **-0.5** |
| | baz=280 | | | | | |
| VCHM | | | S | **Sn** | **04 08 12.5** | **-1.1** |
| | baz=280 | | | | | |
| **SBCB** | **Hsinchu** | **1.93 346** | *e*P | **Pn** | **04 07 51.4** | **+0.7** |
| | baz=347 | | | | | |
| SBCB | | | *e*S | **Sn** | **04 08 14.2** | **+0.2** |
| | baz=347 | | | | | |
| **HSN** | **Hsinchu** | **1.94 346** | *e*S | **Sn** | **04 08 14.8** | **+0.5** |
| | baz=334 | | | | | |
| **NTC** | **Toucheng** | **1.96 9** | *i* P | **Pn** | **04 07 52.1** | **+0.9** |
| | baz=360 | | | | | |
| NTC | | | S | **Sn** | **04 08 15.4** | **+0.6** |
| | baz=360 | | | | | |
| **EGS** | | **1.97 12** | *i* P | **Pn** | **04 07 53.2** | **+1.9** |
| | baz=2.0 | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.04 41** | P | **Pn** | **04 07 53.1** | **+0.9** |
| JYNG | | | S | **Sn** | **04 08 16.6** | **-0.1** |
| **NHDH** | **Xindian Distri** | **2.04 1** | *i* P | **Pn** | **04 07 52.3** | **-0.1** |
| | baz=11 | | | | | |
| NHDH | | | *e*S | **Sn** | **04 08 16.5** | **-0.4** |
| | baz=11 | | | | | |
| **TWA** | **Mucha** | **2.06 3** | P | **Pn** | **04 07 52.4** | **-0.2** |
| | baz=3.0 | | | | | |
| TWA | | | S | **Sn** | **04 08 17.6** | **+0.2** |
| | baz=3.0 | | | | | |
| **NCUH** | **Zhongli** | **2.07 353** | *e*P | **Pn** | **04 07 53.5** | **+0.9** |
| | baz=338 | | | | | |
| NCUH | | | S | **Sn** | **04 08 18.2** | **+0.8** |
| | baz=338 | | | | | |
| **NCU** | **National Centr** | **2.07 353** | *e*P | **Pn** | **04 07 54.1** | **+1.4** |
| | baz=339 | | | | | |
| **TIPB** | **Shuangxi** | **2.08 9** | *i* P | **Pn** | **04 07 53.4** | **+0.6** |
| TIPB | | | S | **Sn** | **04 08 19.2** | **+1.5** |
| **YOJ** | **Yonaguni jima** | **2.09 42** | P | **Pn** | **04 07 53.2** | **+0.3** |
| YOJ | | | S | **Sn** | **04 08 17.9** | **0.0** |
| **YOJ** | **Yonaguni jima** | **2.09 42** | P | **Pn** | **04 07 53.1** | **+0.3** |
| | baz=40 | | | | | |
| **NTY** | **Taoyuan** | **2.09 355** | *e*P | **Pn** | **04 07 54.8** | **+1.9** |
| | baz=340 | | | | | |
| NTY | | | *e*S | **Sn** | **04 08 21.2** | **+3.3** |
| | baz=340 | | | | | |
| **TWB1** | **Santiao Chiao** | **2.14 12** | P | **Pn** | **04 07 54.8** | **+1.2** |
| | baz=3.0 | | | | | |
| **NWF** | **Wu-fen Shan** | **2.17 7** | *i* P | **Pn** | **04 07 54.2** | **+0.1** |
| | baz=7.0 | | | | | |
| NWF | | | S | **Sn** | **04 08 20.2** | **+0.1** |
| | baz=7.0 | | | | | |
| **WFSB** | **Wu-fen Shan** | **2.17 7** | P | **Pn** | **04 07 54.1** | **+0.1** |
| | baz=9.0 | | | | | |
| **TWS1** | **Kuangyinshan** | **2.18 358** | P | **Pn** | **04 07 55.3** | **+1.1** |
| | baz=12 | | | | | |
| **YM01** | **YM01** | **2.23 2** | P | **Pn** | **04 07 55.3** | **+0.4** |
| | baz=3.0 | | | | | |
| **NTST** | **Danshui** | **2.25 359** | *e*P | **Pn** | **04 07 55.9** | **+0.9** |
| | baz=10.0 | | | | | |
| NTST | | | S | **Sn** | **04 08 22.8** | **+1.0** |
| | baz=10.0 | | | | | |
| **TNOU** | **National Taiwa** | **2.25 7** | *e*S | **Sn** | **04 08 22.0** | **+0.1** |
| | baz=7.0 | | | | | |
| **TWY** | **Chenhua** | **2.36 3** | *e*P | **Pn** | **04 07 58.3** | **+1.7** |
| | baz=4.0 | | | | | |
| **HATJ** | **Hateruma jima** | **2.42 61** | P | **Pn** | **04 07 57.8** | **+0.3** |
| HATJ | | | S | **Sn** | **04 08 25.5** | **-0.6** |
| **IRIF** | **Iriomote-Funau** | **2.50 55** | P | **Pn** | **04 07 58.5** | **-0.1** |
| IRIF | | | S | **Sn** | **04 08 27.8** | **-0.3** |
| **JKRS** | **Kuro-shima** | **2.67 60** | P | **Pn** | **04 08 00.5** | **-0.4** |
| JKRS | | | S | **Sn** | **04 08 32.1** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **2.84 59** | P | **Pn** | **04 08 03.3** | **+0.1** |
| JIJ | | | S | **Sn** | **04 08 35.4** | **-1.0** |
| **PTMZ** | **Houxiangcun** | **3.03 315** | *e*P | **Pn** | **04 08 05.2** | **-0.6** |
| | baz=314 | | | | | |
| **JISG** | **Ishigakijimahi** | **3.08 57** | P | **Pn** | **04 08 06.5** | **-0.1** |
| JISG | | | *e*S | **Sn** | **04 08 40.8** | **-1.7** |
| **KNM** | **Kinmen** | **3.17 299** | *e*P | **Pn** | **04 08 08.8** | **+0.9** |
| | baz=297 | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **KNMB** | **Chin-men Tao** | **3.23 299** | *e*P | **Pn** | **04 08 07.6** | **-1.0** |
| | baz=299 | | | | | |
| **JTJ** | **Tarama** | **3.42 59** | P | **Pn** | **04 08 11.4** | **+0.2** |
| JTJ | | | S | **Sn** | **04 08 50.6** | **-0.1** |
| **ZPLA** | **Ao Xicun** | **3.58 287** | *e*P | **Pn** | **04 08 13.0** | **-0.3** |
| | baz=288 | | | | | |
| ZPLA | | | *e*S | **Sn** | **04 08 52.2** | **-2.4** |
| | baz=288 | | | | | |
| **MHZQ** | **Yeshan** | **3.88 325** | P | **Pn** | **04 08 17.5** | **-0.1** |
| | baz=326 | | | | | |
| MHZQ | | | *e*S | **Sn** | **04 08 58.8** | **-3.4** |
| | baz=326 | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.95 337** | P | **Pn** | **04 08 17.6** | **-0.9** |
| | baz=337 | | | | | |
| LYJJ | | | S | **Sn** | **04 09 02.0** | **-1.8** |
| | baz=337 | | | | | |
| **JMJ2** | **Miyako jima3** | **3.97 62** | *e*S | **Sn** | **04 09 04.1** | **-0.2** |
| **XPSS** | **Dashiqiu** | **4.17 344** | *e*P | **Pn** | **04 08 20.3** | **-1.3** |
| | baz=344 | | | | | |
| XPSS | | | *e*S | **Sn** | **04 09 06.4** | **-2.9** |
| | baz=344 | | | | | |
| **SXFK** | **Yanhouchang** | **4.92 316** | *e*P | **Pn** | **04 08 31.6** | **-0.3** |
| | baz=317 | | | | | |
| SXFK | | | *e*S | **Sn** | **04 09 24.7** | **-3.3** |
| | baz=317 | | | | | |

*FUNV **11** 04:11:40.9, 7.°42N×72.°08W, h5km, MW3.8*
*RSNC **11** 04:11:42.7±1.3, 7.°43N×72.°11W, h4km±4km, ML3.1, Mw3.6*
**ISC 11 04:11:40.0**±1.1,**7.°48N**±0.°02×**72.°05W**±0.°02,**h6**km±9km,**n47,**
**σ2s03/98,1C-1D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPV** | **Capacho** | **0.46** | **325** | *e*P | **Pb** | **04 11 50.2** | **-0.5** |
| CAPV | | | | *e*S | **Sb** | **04 11 57.7** | **-0.2** |
| **PAMC** | **Pamplona, Colo** | **0.66** | **258** | ⫴*i*Pg | **Pg** | **04 11 52.3** | **-0.5** |
| PAMC | | | | *e*P | **Pb** | **04 11 54.2** | **0.0** |
| PAMC | | | | *e*S | **Sg** | **04 12 01.1** | **-0.4** |
| PAMC | | | | *i* | | 04 12 02.9 | |
| | comp=Z,380nm,0.5s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.07** | **166** | *e*Pg | **Pg** | **04 12 00.4** | **-0.1** |
| TAMC | | | | *e*P | **Pb** | **04 12 01.8** | **+0.9** |
| TAMC | | | | *e*Sg | **Sg** | **04 12 14.8** | **+0.4** |
| TAMC | | | | *e*S | **Sn** | **04 12 17.3** | **+0.6** |
| TAMC | | | | *i* | | 04 12 20.0 | |
| | comp=Z,360nm,0.2s | | | | | | |
| **SOCV** | **Socops** | **1.43** | **56** | *e*P | **Pn** | **04 12 06.1** | **-0.4** |
| SOCV | | | | *e*S | **Sg** | **04 12 27.1** | **+1.3** |
| **SOCV** | **Socops** | **1.43** | **56** | *e*P | **Pn** | **04 12 06.6** | **+0.2** |
| SOCV | | | | *e*S | **Sg** | **04 12 27.3** | **+1.4** |
| **BARC** | **Barichara** | **1.43** | **232** | *e*P | **Pn** | **04 12 06.0** | **-0.7** |
| BARC | | | | *e*S | **Sb** | **04 12 24.8** | **-1.0** |
| **OCAC** | **Ocana** | **1.47** | **301** | *e*P | **Pb** | **04 12 08.0** | **+0.2** |
| OCAC | | | | *e*Pg | **Pg** | **04 12 09.3** | **+1.2** |
| OCAC | | | | *e*S | **Sg** | **04 12 27.0** | **-0.2** |
| **RUSC** | **La Rusia** | **1.88** | **213** | *e*P | **Pn** | **04 12 13.9** | **+0.7** |
| RUSC | | | | *e*S | **Sn** | **04 12 38.4** | **+0.9** |
| RUSC | | | | *i* | | 04 12 41.9 | |
| | comp=Z,263nm,0.5s | | | | | | |
| **SDV** | **Santo Domingo** | **1.98** | **45** | *e*P | **Pb** | **04 12 16.8** | **+0.3** |
| SDV | | | | *e*S | **Sb** | **04 12 42.3** | **+0.8** |
| **SMLC** | **San Martn de** | **2.40** | **303** | *e*P | **Pn** | **04 12 21.2** | **+1.4** |
| SMLC | | | | *e*Pg | **Pb** | **04 12 23.2** | **-0.3** |
| SMLC | | | | *e*S | **Sn** | **04 12 51.0** | **+1.6** |
| SMLC | | | | *e*Sg | **Sg** | **04 12 55.1** | **-1.9** |
| **LL1C** | **La Loma 1 Cana** | **2.53** | **324** | *e*P | **Pb** | **04 12 26.8** | **+0.9** |
| LL1C | | | | *e*S | **Sg** | **04 13 00.7** | **-0.8** |
| **LL6C** | **La Loma 6 Bece** | **2.55** | **332** | *e*P | **Pn** | **04 12 22.9** | **+1.0** |
| LL6C | | | | *e*S | **Sg** | **04 13 00.8** | **-1.0** |
| LL6C | | | | *i* | | 04 13 04.3 | |
| | comp=Z,94nm,0.6s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **2.57** | **249** | ⫛*e*P | **Pn** | **04 12 22.4** | **+0.2** |
| PTBC | | | | *e*S | **Sn** | **04 12 54.8** | **+1.1** |
| PTBC | | | | *i* | | 04 13 00.4 | |
| | comp=Z,101nm,0.2s | | | | | | |
| **ELOV** | **Elorza** | **2.59** | **100** | *e*P | **Pn** | **04 12 23.0** | **+0.5** |
| ELOV | | | | *e*Pg | **Pb** | **04 12 27.6** | **+0.7** |
| ELOV | | | | *e*S | **Sb** | **04 13 00.4** | **+1.4** |
| **ELOV** | **Elorza** | **2.59** | **100** | *e*P | **Pn** | **04 12 22.9** | **+0.5** |
| ELOV | | | | *e*S | **Sn** | **04 12 54.1** | **-0.1** |
| **MCQV** | **Machiques** | **2.60** | **349** | *e*P | **Pn** | **04 12 23.0** | **+0.5** |
| MCQV | | | | *e*S | **Sn** | **04 12 56.4** | **+2.0** |
| **SPBC** | **San Pablo de B** | **2.71** | **228** | *e*P | **Pn** | **04 12 25.3** | **+1.1** |
| SPBC | | | | *e*Pg | **Pb** | **04 12 28.8** | **-0.2** |
| SPBC | | | | *e*S | **Sn** | **04 12 59.8** | **+2.5** |
| SPBC | | | | *i* | | 04 13 08.9 | |
| | comp=Z,64nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **2.79** | **270** | *e*P | **Pn** | **04 12 26.6** | **+1.5** |
| ZARC | | | | *e*S | **Sb** | **04 13 02.8** | **-1.8** |
| ZARC | | | | *i* | | 04 13 10.3 | |
| | comp=Z,115nm,0.4s | | | | | | |
| **SANV** | **Sanarito** | **3.19** | **51** | *e*P | **Pn** | **04 12 32.3** | **+1.4** |
| **PTGC** | **Puerto Gaitan,** | **3.26** | **182** | *e*P | **Pn** | **04 12 30.0** | **-1.7** |
| PTGC | | | | *e*S | **Sn** | **04 13 11.3** | **+0.4** |
| PTGC | | | | *i* | | 04 13 24.8 | |
| | comp=Z,101nm,0.3s | | | | | | |
| **CHIC** | **Chingaza** | **3.29** | **211** | *e*P | **Pn** | **04 12 32.9** | **+0.4** |
| CHIC | | | | *e*S | **Sn** | **04 13 12.9** | **+0.8** |
| CHIC | | | | *i* | | 04 13 30.5 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **3.39** | **236** | *e*P | **Pn** | **04 12 35.0** | **+1.6** |
| NORC | | | | *e*S | **Sn** | **04 13 18.0** | **+3.9** |
| NORC | | | | *i* | | 04 13 24.4 | |
| | comp=Z,59nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **3.46** | **221** | *e*P | **Pn** | **04 12 38.5** | **+3.7** |
| ROSC | | | | *e*S | **Sb** | **04 13 22.8** | **-1.6** |
| **UREC** | **San Jos de Ur** | **3.46** | **275** | *e*P | **Pn** | **04 12 36.3** | **+1.8** |
| UREC | | | | *e*S | **Sb** | **04 13 22.4** | **-1.8** |
| UREC | | | | *i* | | 04 13 31.7 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **3.61** | **347** | *e*P | **Pn** | **04 12 36.8** | **+0.2** |
| CRJC | | | | *e*S | **Sn** | **04 13 19.1** | **-0.5** |
| **HELC** | **Santa Helena** | **3.69** | **250** | *e*P | **Pn** | **04 12 38.4** | **+0.5** |
| HELC | | | | *e*S | **Sn** | **04 13 22.9** | **+1.0** |
| **DABV** | **Dabajuro** | **3.69** | **22** | *e*P | **Pn** | **04 12 40.7** | **+3.1** |
| DABV | | | | *e*S | **Sn** | **04 13 25.4** | **+3.9** |
| **DABV** | **Dabajuro** | **3.69** | **22** | *e*P | **Pn** | **04 12 39.0** | **+1.4** |
| DABV | | | | *e*S | **Sn** | **04 13 21.3** | **-0.1** |
| **VILC** | **Villavicencio,** | **3.73** | **206** | *e*P | **Pn** | **04 12 38.8** | **+0.6** |
| VILC | | | | *e*S | **Sn** | **04 13 26.9** | **+4.4** |
| **MOTC** | **Monteria, Cord** | **3.81** | **290** | *e*P | **Pn** | **04 12 41.1** | **+2.0** |
| MOTC | | | | *e*S | **Sn** | **04 13 28.5** | **+4.2** |
| MOTC | | | | *i* | | 04 13 49.7 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **SIQV** | **Siquisique** | **3.85** | **35** | *e*P | **Pn** | **04 12 41.0** | **+1.2** |
| SIQV | | | | *e*S | **Sn** | **04 13 25.1** | **-0.3** |
| **SJCC** | **San Jacinto, C** | **3.92** | **308** | *e*P | **Pn** | **04 12 43.3** | **+2.5** |
| SJCC | | | | *e*S | **Sb** | **04 13 32.4** | **-4.9** |
| SJCC | | | | *i* | | 04 13 39.4 | |
| | comp=Z,19nm,0.4s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **3.99** | **236** | *e*P | **Pn** | **04 12 43.3** | **+1.2** |
| GUY2C | | | | *e*S | **Sn** | **04 13 32.4** | **+3.0** |
| GUY2C | | | | *i* | | 04 14 01.4 | |
| | comp=Z,23nm,0.6s | | | | | | |
| **DBBC** | **Dabeiba** | **4.16** | **264** | *e*P | **Pn** | **04 12 45.5** | **+1.4** |
| DBBC | | | | *e*S | **Sb** | **04 13 41.8** | **-2.3** |
| **BAUV** | **El Baul** | **4.22** | **70** | *e*P | **Pn** | **04 12 45.5** | **+0.5** |
| BAUV | | | | *e*S | **Sn** | **04 13 32.8** | **-2.3** |
| **MAPV** | **Macapo** | **4.25** | **56** | *e*P | **Pn** | **04 12 45.7** | **+0.4** |
| MAPV | | | | *e*S | **Sn** | **04 13 33.3** | **-2.0** |
| **CBOC** | **Ciudad Bolivar** | **4.25** | **248** | *e*P | **Pn** | **04 12 48.1** | **+2.6** |
| CBOC | | | | *e*S | **Sb** | **04 13 41.8** | **-5.2** |
| CBOC | | | | *i* | | 04 13 54.8 | |
| | comp=Z,15nm,0.5s | | | | | | |
| **ANIL** | **Santa Ana** | **4.47** | **229** | *e*P | **Pn** | **04 12 50.9** | **+2.3** |
| ANIL | | | | *e*S | **Sn** | **04 13 42.9** | **+1.8** |
| ANIL | | | | *i* | | 04 13 47.4 | |
| | comp=Z,30nm,0.4s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **4.77** | **222** | *e*P | **Pn** | **04 12 53.0** | **+0.6** |
| ORTC | | | | *e*S | **Sn** | **04 13 48.2** | **+0.2** |
| ORTC | | | | *i* | | 04 14 22.4 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **MONV** | **Montecano** | **4.89** | **25** | *e*P | **Pn** | **04 12 54.9** | **+0.8** |
| MONV | | | | *e*S | **Sn** | **04 13 49.7** | **-1.4** |
| **PLMC** | **San Jos del P** | **4.93** | **239** | *e*P | **Pn** | **04 12 56.5** | **+1.8** |
| PLMC | | | | *e*S | **Sn** | **04 13 53.1** | **+1.0** |
| PLMC | | | | *i* | | 04 14 20.3 | |
| | comp=Z,7.9nm,0.5s | | | | | | |
| **GUVC** | **San Jose del G** | **4.94** | **187** | *e*S | **Sn** | **04 13 47.5** | **-4.8** |
| **BENV** | **Beln** | **5.04** | **60** | *e*P | **Pn** | **04 12 56.4** | **+0.2** |
| BENV | | | | *e*S | **Sn** | **04 13 52.2** | **-2.7** |
| **CACV** | **CAICARA DEL OR** | **5.46** | **89** | *e*P | Pn | 04 13 08.6 | +6.7 |
| CACV | | | | *e*S | **Sb** | **04 14 14.7** | **-7.0** |
| **MACC** | **Macarena, Meta** | **5.60** | **199** | *e*P | **Pn** | **04 13 02.2** | **-1.6** |
| MACC | | | | *e*S | **Sb** | **04 14 29.1** | **+3.6** |
| MACC | | | | *i* | | 04 14 46.2 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **BIRV** | **Birongo** | **6.44** | **62** | *e*P | **Pn** | **04 13 15.4** | **0.0** |
| BIRV | | | | *e*S | **Sn** | **04 14 24.6** | **-4.6** |
| **FLOC** | **Florencia** | **6.87** | **212** | *e*P | **Pn** | **04 13 21.9** | **+0.5** |

*IDC **11** 04:21:47.8±1.7, 18.°57S×169.°22E, h258km±17km, mb3.5/9, mb1 3.7/11, mb1mx3.6/30, mbtmp4.1/11, Error ellipse: s-maj=21.8km s-min=14.4km az=161.0*
*NOU **11** 04:21:48.4, 18.°61S×169.°26E, h237km, MLv4.5/14, Vanuatu Islands*
**ISC 11 04:21:47.1**±0.6,**18.°56S**±0.°07×**169.°22E**±0.°10,**h250**km,**n27,**
**σ0s95/28,mb3.9/8,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.07** | **315** | P | **Pn** | **04 22 23.5** | **+0.9** |
| **DVP** | **Devils Point** | **1.28** | **310** | P | **Pn** | **04 22 24.4** | **+0.5** |
| **LIFNC** | **LIFOU** | **2.89** | **220** | P | **Pn** | **04 22 38.1** | **-0.3** |
| **SANVU** | **Saraoutou** | **3.65** | **328** | P | **Pn** | **04 22 48.0** | **+1.1** |
| **YATNC** | **Mamie plateau,** | **4.11** | **212** | P | **Pn** | **04 22 51.5** | **-0.7** |
| **DZM** | **Mont Dzumac** | **4.36** | **216** | P | **Pn** | **04 22 55.6** | **+0.4** |
| | 5.6nm,0.3s,baz=128,slow=22,SNR=26 | | | | | | |
| DZM | | | | S | **S** | **04 23 50.5** | **+1.1** |
| | 2.2nm,0.3s,baz=182,slow=12,SNR=5.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.36** | **216** | P | **Pn** | **04 22 56.1** | **+0.9** |
| **PINNC** | **Pines Island,** | **4.36** | **202** | P | **Pn** | **04 22 55.4** | **+0.3** |
| **OUENC** | **Ouen Island, N** | **4.44** | **210** | P | **Pn** | **04 22 57.3** | **+1.2** |
| **NOUC** | **Port Laguerre** | **4.46** | **217** | P | **Pn** | **04 22 57.3** | **+1.0** |
| **ONTNC** | **Ouen Toro** | **4.54** | **214** | P | **Pn** | **04 22 58.2** | **+0.9** |
| **MSVF** | **Nonsavu** | **8.44** | **86** | P | **Pn** | **04 23 47.1** | **+1.1** |
| | 2.4nm,0.3s,baz=266,slow=11,SNR=9.8 | | | | | | |
| **URZ** | **Urewera** | **20.80** | **162** | P | **P** | **04 26 09.9** | **+0.4** |
| | 3.2nm,0.5s,baz=323,slow=5.1,SNR=2.4 | | | | | | |
| **CTA** | **Charters Tower** | **21.72** | **262** | P | **P** | **04 26 19.5** | **+0.8** |
| | 2.7nm,0.6s,baz=92,slow=9.8,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.92** | **262** | P | **P** | **04 27 58.1** | **-0.4** |
| | 0.7nm,0.5s,baz=81,slow=6.0,SNR=12 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 30 36.2** | **-0.5** |
| | 0.4nm,0.8s,baz=96,slow=7.0,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **33.28** | **255** | P | **P** | **04 28 01.9** | **+0.3** |
| | 4.3nm,0.5s,baz=82,slow=8.7,SNR=55 | | | | | | |
| **QSPA** | **South Pole Qui** | **71.49** | **180** | P | **P** | **04 32 40.4** | **-0.1** |
| | 2.7nm,0.9s,baz=259,slow=1.5,SNR=6.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.06** | **353** | P | **P** | **04 32 44.4** | **+0.6** |
| | 2.5nm,0.7s,baz=192,slow=13,SNR=4.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.37** | **49** | P | **P** | **04 34 11.3** | **+0.2** |
| | 0.4nm,0.7s,baz=224,slow=6.7,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **89.59** | **17** | P | **P** | **04 34 14.6** | **-1.3** |
| | 0.6nm,0.5s,baz=238,slow=5.0,SNR=16 | | | | | | |
| **TXAR** | **Lajitas Array** | **96.46** | **61** | P | **P** | **04 34 48.9** | **+0.4** |
| | 0.3nm,0.7s,baz=208,slow=4.3,SNR=4.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **100.08** | **27** | P | **Pdif** | **04 35 04.3** | **+0.7** |
| | 0.5nm,0.6s,baz=257,slow=4.8,SNR=8.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.41** | **345** | PKP | **PKPdf** | **04 40 14.9** | **-0.8** |
| | 0.9nm,0.6s,baz=64,slow=2.1,SNR=7.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.83** | **353** | PKP | **PKPdf** | **04 40 47.9** | **-2.6** |
| | 1.2nm,0.8s,baz=347,slow=2.4,SNR=3.6 | | | | | | |
| **GERES** | **GERESS Array B** | **143.88** | **332** | PKP | PKPbc | 04 40 50.7 | -0.4 |
| | 0.2nm,0.3s,baz=34,slow=5.9,SNR=2.2 | | | | | | |
| **ABTA** | **Abfaltersbach** | **145.98** | **331** | *e*P | **PKPbc** | **04 40 57.1** | **-0.5** |
| | 1.7nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **146.57** | **333** | *e*P | **PKPab** | **04 40 59.8** | **-1.1** |

**IDC 11 04:23:16.8**±6.3,**4.°74S**×**153.°57E,h98**km±45km,**mb3.3/2,**
**mb1 3.6/2,mb1mx3.1/31,mbtmp3.6/2,Error ellipse:**
**s-maj=66.2km s-min=49.1km az=106.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **1.60** | **286** | P | Pn | 04 23 43.9 | -0.2 |
| | baz=128,slow=19 | | | | | | |
| KRVT | | | | S | Sn | 04 24 05.0 | 0.0 |
| | baz=163,slow=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.06** | **229** | P | P | 04 28 23.1 | +0.1 |
| | 0.9nm,0.4s,baz=54,slow=10.0,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **26.71** | **223** | P | P | 04 28 46.8 | -0.3 |
| | 0.5nm,0.7s,baz=74,slow=9.8,SNR=1.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.01** | **289** | PKPbc | PKPbc | 04 42 59.2 | -0.1 |
| | 0.7nm,1.0s,baz=85,slow=2.5,SNR=2.4 | | | | | | |

*NEIC **11** 04:58:48.6±1.3, 4.°3S±0.°1×153.°91E±0.°08, h249km±9km, mb4.2/15, Error ellipse: s-maj=20.9km s-min=5.3km az=212.0*
*IDC **11** 04:58:49.6±1.2, 4.°44S×153.°74E, h254km±7km, mb3.5/12, mb1 3.7/13, mb1mx3.5/37, mbtmp4.2/13, Error ellipse: s-maj=20.1km s-min=11.0km az=97.0*
**ISC 11 04:58:48.7**±0.7,**4.°36S**±0.°08×**153.°9E**±0.°1,**h250**km,**n68,**
**σ0s95/74,mb4.0/18,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.73** | **275** | Pn | **Pn** | **04 59 28.6** | **-0.3** |
| RABL | | | | Sn | **S** | **04 59 59.6** | **-0.8** |
| **KRVT** | **Keravat (AS076** | **1.86** | **271** | P | **Pn** | **04 59 31.0** | **+1.0** |
| | baz=232,slow=20 | | | | | | |
| KRVT | | | | S | **S** | **05 00 01.4** | **-0.9** |
| | baz=128,slow=19 | | | | | | |
| **COEN** | **Coen** | **14.23** | **227** | P | **P** | **05 02 01.3** | **+1.1** |
| **COEN** | **Coen** | **14.23** | **227** | P | **P** | **05 02 02.5** | **+2.3** |
| **MTSU** | **Mount Surprise** | **16.59** | **214** | P | **Pn** | **05 02 28.4** | **+0.5** |
| **CTA** | **Charters Tower** | **17.32** | **205** | P | **P** | **05 02 34.9** | **+0.9** |
| | 1.3nm,0.3s,baz=25,slow=9.5,SNR=8.6 | | | | | | |
| **CTA** | **Charters Tower** | **17.32** | **205** | P | **Pn** | **05 02 36.0** | **-0.4** |
| **CTAO** | **Charters Tower** | **17.32** | **205** | | **P** | **05 02 35.2** | **+1.1** |
| CTAO | | | | IAmb | IAmb | 05 02 37.1 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **17.32** | **205** | P | **Pn** | **05 02 36.0** | **-0.4** |
| **RK1H** | **Rockhampton Ha** | **19.20** | **190** | P | **P** | **05 02 55.5** | **+1.2** |
| **LIFNC** | **LIFOU** | **20.86** | **143** | P | **P** | **05 03 11.1** | **-0.9** |
| **EIDS** | **Eidsvold** | **21.07** | **187** | P | **P** | **05 03 14.0** | **0.0** |
| **QIS** | **Mount Isa** | **21.27** | **220** | P | **P** | **05 03 16.3** | **+0.2** |
| **QIS** | **Mount Isa** | **21.27** | **220** | P | **P** | **05 03 16.6** | **+0.5** |
| **DZM** | **Mont Dzumac** | **21.41** | **146** | P | **P** | **05 03 17.8** | **+0.3** |
| | comp=Z,3.2nm,0.6s,baz=324,slow=23,SNR=5.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.41** | **146** | IAmb | IAmb | 05 03 19.9 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **RMQ** | **Roma** | **22.55** | **192** | P | **P** | **05 03 28.0** | **+0.2** |
| **QLP** | **Quilpie** | **23.95** | **202** | P | **P** | **05 03 41.0** | **+0.4** |
| **QLP** | **Quilpie** | **23.95** | **202** | P | **P** | **05 03 40.9** | **+0.4** |
| **WB0** | **Warramunga Arr** | **24.41** | **230** | P | **P** | **05 03 44.9** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 05 03 45.6 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.41** | **229** | P | **P** | **05 03 45.0** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 05 03 45.7 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.54** | **229** | P | **P** | **05 03 46.2** | **+0.2** |
| **WRAB** | **Tennant Creek** | **24.54** | **229** | P | **P** | **05 03 48.7** | **+2.7** |
| **WB2** | **Warramunga Arr** | **24.54** | **229** | P | **P** | **05 03 46.1** | **+0.1** |
| **WRA** | **Warramunga Arr** | **24.55** | **229** | P | **P** | **05 03 45.8** | **-0.3** |
| | comp=Z,3.4nm,0.4s,baz=55,slow=10,SNR=43 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 07 17.0** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=44,slow=2.0,SNR=2.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **05 10 30.6** | **-1.6** |
| | comp=Z,0.6nm,1.1s,baz=54,slow=3.5,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.55** | **229** | P | **P** | **05 03 45.2** | **-0.9** |
| **ARMA** | **Armidale** | **26.01** | **184** | P | **P** | **05 03 59.8** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 05 04 00.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **27.21** | **223** | P | **P** | **05 04 09.8** | **0.0** |
| AS31 | | | | IAmb | IAmb | 05 04 10.1 | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **27.21** | **223** | P | **P** | **05 04 08.6** | **-1.3** |
| | comp=Z,3.0nm,0.4s,baz=55,slow=8.8,SNR=68 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 07 23.3** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=46,slow=2.7,SNR=1.7 | | | | | | |
| ASAR | | | | S | **S** | **05 08 27.4** | **-2.8** |
| | comp=Z,0.6nm,0.6s,baz=53,slow=15,SNR=4.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **05 10 39.2** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=54,slow=3.8,SNR=1.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.12** | **195** | P | **P** | **05 04 18.1** | **+0.3** |
| **OOD** | **Oodnadatta** | **29.05** | **215** | P | **P** | **05 04 25.8** | **-0.3** |
| **STKA** | **Stephens Creek** | **29.71** | **201** | P | **P** | **05 04 31.2** | **-0.6** |
| | comp=Z,6.2nm,0.5s,baz=41,slow=15,SNR=18 | | | | | | |
| **STKA** | **Stephens Creek** | **29.71** | **201** | P | **P** | **05 04 31.2** | **-0.6** |
| STKA | | | | IAmb | IAmb | 05 04 33.5 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **29.71** | **201** | P | **P** | **05 04 31.7** | **-0.2** |
| **STKA** | **Stephens Creek** | **29.71** | **201** | P | **P** | **05 04 31.9** | **0.0** |
| **LCRK** | **Leigh Creek** | **29.87** | **208** | P | **P** | **05 04 33.0** | **-0.3** |
| **LCRK** | **Leigh Creek** | **29.87** | **208** | P | **P** | **05 04 33.6** | **+0.3** |
| **CNB** | **Canberra Magne** | **31.09** | **187** | P | **P** | **05 04 45.1** | **+1.1** |
| **CAN** | **Canberra** | **31.14** | **188** | P | **P** | **05 04 45.1** | **+0.6** |
| CAN | | | | IAmb | IAmb | 05 05 04.5 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **MULG** | **Mulgathing** | **31.87** | **214** | P | **P** | **05 04 49.9** | **-0.9** |
| **WRKA** | **Warakurna** | **32.05** | **228** | P | **P** | **05 04 51.9** | **-0.7** |
| **HTT** | **Hallett** | **32.12** | **204** | P | **P** | **05 04 53.2** | **+0.2** |
| **HTT** | **Hallett** | **32.12** | **204** | P | **P** | **05 04 53.5** | **+0.5** |
| **NAPP** | **Napperby** | **32.23** | **205** | P | **P** | **05 04 54.4** | **+0.5** |
| **BBOO** | **Buckleboo** | **32.85** | **208** | P | **P** | **05 04 58.5** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 05 04 59.0 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **32.85** | **208** | P | **P** | **05 04 58.8** | **-0.5** |
| **ARPS** | **Mount Arapiles** | **34.11** | **197** | P | **P** | **05 05 10.2** | **+0.2** |
| **FORT** | **Forrest** | **35.82** | **220** | P | **P** | **05 05 24.3** | **-0.5** |
| **FORT** | **Forrest** | **35.82** | **220** | P | **P** | **05 05 24.2** | **-0.5** |
| **MBWA** | **Marble Bar** | **37.13** | **240** | P | **P** | **05 05 35.2** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **37.19** | **240** | P | **P** | **05 05 35.8** | **-0.6** |
| **TAU** | **Tasmania Unive** | **38.83** | **188** | P | **P** | **05 05 50.5** | **+0.7** |
| **MEEK** | **Meekatharra** | **40.33** | **233** | P | **P** | **05 06 02.2** | **-0.3** |
| **KLBR** | **Kellerberrin** | **43.40** | **227** | P | **P** | **05 06 25.9** | **-1.2** |
| **MORW** | **Morawa** | **43.47** | **231** | P | **P** | **05 06 27.0** | **-0.7** |
| **BLDU** | **Ballidu** | **43.68** | **229** | P | **P** | **05 06 28.4** | **-1.0** |
| **NWAO** | **Narrogin (SRO)** | **44.47** | **226** | P | **P** | **05 06 34.6** | **-1.0** |
| **KSRS** | **Korea Array** | **48.10** | **332** | P | **P** | **05 07 04.7** | **+1.1** |
| | comp=Z,1.4nm,0.7s,baz=140,slow=6.5,SNR=4.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.19** | **340** | P | **P** | **05 07 34.1** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=131,slow=5.2,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.19** | **340** | P | **P** | **05 07 30.6** | **-3.5** |
| **SONM** | **Songino Array** | **66.53** | **327** | P | **P** | **05 09 13.7** | **+1.6** |
| | comp=Z,1.9nm,0.5s,baz=141,slow=6.1,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.71** | **319** | P | **P** | **05 10 34.7** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=96,slow=7.8,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **81.34** | **22** | P | **P** | **05 10 37.1** | **-0.1** |
| | comp=Z,0.3nm,0.8s,baz=210,slow=4.9,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.39** | **326** | P | **P** | **05 10 37.9** | **+0.3** |
| | comp=Z,1.1nm,0.4s,baz=106,slow=5.8,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.39** | **326** | P | **P** | **05 10 36.9** | **-0.7** |
| **KURK** | **Kurchatov** | **84.09** | **322** | P | **P** | **05 10 51.9** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **84.12** | **322** | P | **P** | **05 10 52.0** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=104,slow=4.5,SNR=6.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **89.54** | **323** | P | **P** | **05 11 17.4** | **-0.4** |
| | comp=Z,0.7nm,0.5s,baz=70,slow=12,SNR=3.8 | | | | | | |

*ATH **11** 05:00:28.6, 38.°77N×20.°60E, h13km±1km, ML3.5/4, Error ellipse: s-maj=3.0km s-min=1.1km az=98.0*
*THE **11** 05:00:29.2, 38.°75N×20.°62E, h11km±1km, ML3.5/8, Error ellipse: s-maj=1.7km s-min=0.6km az=89.0*
**ISC 11 05:00:28.0**±0.8,**38.°77N**±0.°03×**20.°58E**±0.°06,**h16**km±5km,
**n32,σ1s13/53,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LKD2** | **Lefkada island** | **0.06** | **75** | P | **Pg** | **05 00 31.1** | **-0.1** |
| LKD2 | | | | S | **Sg** | **05 00 32.6** | **-0.7** |
| | 84μm,0.1s | | | | | | |
| **LKD2** | **Lefkada island** | **0.06** | **75** | P | **Pg** | **05 00 31.1** | **-0.1** |
| LKD2 | | | | S | **Sg** | **05 00 32.6** | **-0.7** |
| LKD2 | | | | AML | AML | 05 00 32.9 | |
| LKD2 | | | | AML | AML | 05 00 33.0 | |
| **TSLK** | **Tsoukalades, L** | **0.08** | **48** | P | **Pg** | **05 00 31.6** | **+0.3** |
| TSLK | | | | S | **Sg** | **05 00 33.8** | **+0.4** |
| | 120μm,0.2s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.08** | **48** | P | **Pg** | **05 00 31.6** | **+0.3** |
| TSLK | | | | S | **Sg** | **05 00 33.8** | **+0.4** |
| TSLK | | | | AML | AML | 05

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BUTP** | **Butuan** | **0.84** | **340** | ⇓*i*P | **Pn** | **05 25 56.4** | **+0.7** |
| **BUKP** | **Musuan** | **0.89** | **251** | ⇓*e*P | **Pn** | **05 25 54.8** | **-1.7** |
| BUKP | | | | *e*S | **Sn** | **05 26 06.3** | **-2.0** |
| **DAV** | **Davao City (W)** | **1.15** | **197** | P | **Pn** | **05 26 00.9** | **+0.9** |
| | 716nm,0.3s,baz=327,slow=3.0,SNR=26 | | | | | | |
| DAV | | | | S | **Sn** | **05 26 18.3** | **+3.8** |
| | 713nm,0.3s,baz=123,slow=23,SNR=15 | | | | | | |
| DAV | | | | LR | LR | 05 26 48.3 | |
| | comp=Z,1μm,18.7s,baz=122,slow=56 | | | | | | |
| **DAV** | **Davao City (W)** | **1.15** | **197** | | **Pn** | **05 26 00.7** | **+0.7** |
| DAV | | | | Sn | **Sn** | **05 26 16.6** | **+2.1** |
| **MATI** | **Mati** | **1.27** | **164** | ⇓*i*P | **Pn** | **05 26 01.8** | **+0.2** |
| **KCP** | **Kidapawan** | **1.42** | **215** | ⇑*i*P | **Pn** | **05 26 03.0** | **-0.7** |
| KCP | | | | *i* S | **Sn** | **05 26 21.1** | **-0.1** |
| **GLSP** | **General Luna,** | **1.61** | **8** | ⇑*i*P | **Pn** | **05 26 08.8** | **+2.4** |
| **CTBH** | **Cotabato--PC H** | **1.90** | **240** | ⇑*i*P | **Pn** | **05 26 10.2** | **-0.1** |
| CTBH | | | | *i* S | **Sn** | **05 26 34.1** | **+1.0** |
| **DDMP** | **Don Marcelino,** | **2.07** | **186** | ⇑*i*P | **Pn** | **05 26 12.0** | **-0.6** |
| **MSLP** | **Maasin** | **2.21** | **332** | ⇑*i*P | **Pn** | **05 26 14.5** | **0.0** |
| **GSPH** | **General Santos** | **2.28** | **205** | ⇑*i*P | **Pn** | **05 26 16.1** | **+0.4** |
| GSPH | | | | *e*S | **Sn** | **05 26 46.5** | **+3.8** |
| **TBP** | **Tagbilaran** | **2.52** | **307** | ⇑*e*P | **Pn** | **05 26 19.1** | **+0.2** |
| TBP | | | | *i* S | **Sn** | **05 26 49.1** | **+0.6** |
| **PAGZ** | **Pagadian** | **2.53** | **263** | ⇓*e*P | **Pn** | **05 26 21.6** | **+2.7** |
| **DCPH** | **Dipolog City** | **2.56** | **279** | ⇓*e*P | **Pn** | **05 26 20.9** | **+1.5** |
| **LLP** | **Lapu-Lapu** | **2.87** | **318** | ⇑*i*P | **Pn** | **05 26 24.6** | **+1.0** |
| LLP | | | | *i* S | **Sn** | **05 26 58.7** | **+1.8** |
| **SNPH** | **Sibulan** | **2.89** | **294** | ⇓*i*P | **Pn** | **05 26 24.3** | **+0.4** |
| SNPH | | | | *i* S | **Sn** | **05 26 57.4** | **-0.1** |
| **RCP** | **Roxas** | **4.59** | **317** | ⇓*e*P | **Pn** | **05 26 48.5** | **+1.3** |
| **GTOI** | **Gorontalo** | **8.03** | **201** | P | **Pn** | **05 27 32.3** | **-2.2** |
| | 19nm,0.6s | | | | | | |
| **I39PW** | **PALAU INFRASON** | **8.58** | **94** | *i* | | 06 20 30.0 | |
| | baz=274,slow=313,SNR=1.0 | | | | | | |
| **MRSI** | **Marisa** | **8.61** | **208** | P | **Pn** | **05 27 41.4** | **-1.1** |
| | 30nm,0.6s | | | | | | |
| **SANI** | **Sanana** | **10.16** | **180** | P | **Pn** | **05 27 58.9** | **-4.8** |
| | 36nm,0.8s | | | | | | |
| **SIJI** | **Sorong** | **10.45** | **149** | P | **Pn** | **05 28 08.8** | **+1.1** |
| | 3.4nm,0.3s,baz=330,slow=20,SNR=2.5 | | | | | | |
| **FAKI** | **Fak Fak** | **12.71** | **150** | Pn | **Pn** | **05 28 36.2** | **-2.4** |
| **SRPI** | **Serui, Papua** | **14.34** | **134** | P | Pn | 05 28 46.8 | -14 |
| **SBUM** | **Sibu** | **14.77** | **248** | Pn | **Pn** | **05 29 07.8** | **+1.3** |
| **BATI** | **Baumata** | **18.40** | **187** | LR | LR | 05 36 58.9 | |
| | comp=Z,112nm,20.5s,baz=354,slow=37 | | | | | | |
| **GUMO** | **Guam** | **19.37** | **72** | LR | LR | 05 38 05.9 | |
| | comp=Z,26nm,19.3s,baz=110,slow=39 | | | | | | |
| **MTN** | **Manton Dam** | **21.52** | **166** | P | **P** | **05 30 25.5** | **-0.4** |
| MTN | | | | IAmb | IAmb | 05 30 54.7 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **TPRI** | **Tanjung Pinang** | **22.49** | **252** | P | P | 05 30 48.2 | +12 |
| **KNRA** | **Kununurra** | **23.87** | **173** | P | **P** | **05 30 50.1** | **0.0** |
| KNRA | | | | IAmb | IAmb | 05 30 52.0 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **JNU** | **Nakatsue** | **25.25** | **10** | P | **P** | **05 31 02.0** | **-0.5** |
| | comp=Z,4.3nm,0.8s,baz=281,slow=5.2,SNR=2.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.11** | **181** | P | **P** | **05 31 10.1** | **-0.3** |
| | comp=Z,6.3nm,0.8s,baz=12,slow=9.7,SNR=10 | | | | | | |
| **PSI** | **Prapat** | **27.38** | **260** | LR | LR | 05 44 13.7 | |
| | comp=Z,41nm,18.2s,baz=70,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **27.44** | **129** | LR | LR | 05 43 06.2 | |
| | comp=Z,42nm,20.5s,baz=217,slow=38 | | | | | | |
| **COEN** | **Coen** | **27.88** | **142** | P | **P** | **05 31 26.6** | **+0.2** |
| COEN | | | | IAmb | IAmb | 05 31 38.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.12** | **294** | P | **P** | **05 31 27.9** | **-0.8** |
| | comp=Z,0.8nm,0.4s,baz=119,slow=8.6,SNR=5.2 | | | | | | |
| CMAR | | | | LR | LR | 05 42 22.3 | |
| | comp=Z,37nm,20.8s,baz=95,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.12** | **294** | P | **P** | **05 31 28.7** | **0.0** |
| **CHTO** | **Chiang Mai** | **28.23** | **295** | P | **P** | **05 31 30.4** | **+0.8** |
| **WRA** | **Warramunga Arr** | **29.15** | **164** | P | **P** | **05 31 36.0** | **-1.7** |
| | comp=Z,1.2nm,0.7s,baz=341,slow=9.9,SNR=6.8 | | | | | | |
| WRA | | | | LR | LR | 05 44 21.2 | |
| | comp=Z,51nm,18.2s,baz=36,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.15** | **164** | P | **P** | **05 31 36.9** | **-0.8** |
| **WB2** | **Warramunga Arr** | **29.15** | **164** | P | **P** | **05 31 37.4** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 05 32 02.4 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **29.78** | **192** | P | **P** | **05 31 44.2** | **+1.0** |
| MBWA | | | | IAmb | IAmb | 05 31 53.6 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **XAN** | **Xi'an** | **30.13** | **331** | ⇑P | **P** | **05 31 46.2** | **-0.1** |
| XAN | | | | sP | pP | 05 31 55.4 | -2.3 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.16** | **191** | P | **P** | **05 31 47.6** | **+1.0** |
| PSA00 | | | | IAmb | IAmb | 05 32 06.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **30.38** | **20** | LR | LR | 05 44 09.3 | |
| | comp=Z,41nm,19.1s,baz=144,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **32.60** | **166** | P | **P** | **05 32 07.1** | **-1.0** |
| | comp=Z,0.9nm,0.4s,baz=342,slow=6.9,SNR=15 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **36.27** | **7** | P | **P** | **05 32 39.1** | **-0.5** |
| USA0B | | | | IAmb | IAmb | 05 32 40.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.27** | **7** | P | **P** | **05 32 37.6** | **-2.0** |
| | comp=Z,4.0nm,0.8s,baz=204,slow=9.0,SNR=5.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.27** | **7** | P | **P** | **05 32 39.2** | **-0.4** |
| **SHL** | **Shillong** | **36.71** | **302** | P | **P** | **05 32 44.0** | **+0.1** |
| **GOMU** | **GeErMu** | **39.76** | **319** | P | **P** | **05 33 09.8** | **+0.2** |
| GOMU | | | | pP | pP | 05 33 13.7 | -7.6 |
| GOMU | | | | sP | sP | 05 33 17.1 | -9.2 |
| GOMU | | | | S | **S** | **05 39 14.6** | **+3.5** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,60nm,4.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,73nm,5.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,99nm,5.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,36nm,5.3s | | | | | | |
| **TAPN** | **Taplejung** | **40.84** | **303** | *e*P | **P** | **05 33 19.6** | **+1.0** |
| | comp=Z,5.7nm,0.5s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.89** | **71** | T | T | 06 16 31.8 | |
| | baz=258 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.90** | **71** | T | T | 06 16 21.5 | |
| | baz=258 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.91** | **71** | T | T | 06 16 24.5 | |
| | baz=258 | | | | | | |
| **ODAN** | **Odare** | **40.94** | **302** | *e*P | **P** | **05 33 21.1** | **+1.7** |
| | comp=Z,2.0nm,0.2s | | | | | | |
| **KLR** | **Kul'dur** | **41.21** | **6** | P | **P** | **05 33 20.2** | **-0.7** |
| | comp=Z,1.0nm,0.7s,baz=226,slow=3.7,SNR=5.8 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.28** | **69** | T | T | 06 16 59.4 | |
| | baz=259,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.29** | **69** | T | T | 06 17 00.6 | |
| | baz=259 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.30** | **69** | T | T | 06 17 08.6 | |
| | baz=259,slow=75 | | | | | | |
| **JIRN** | **Jiri** | **42.22** | **302** | *e*P | **P** | **05 33 30.6** | **+0.6** |
| **STKA** | **Stephens Creek** | **42.55** | **160** | P | **P** | **05 33 32.1** | **0.0** |
| | comp=Z,0.9nm,0.3s,baz=346,slow=8.7,SNR=4.1 | | | | | | |
| STKA | | | | LR | LR | 05 55 42.5 | |
| | comp=Z,53nm,18.6s,baz=24,slow=42 | | | | | | |
| **STKA** | **Stephens Creek** | **42.55** | **160** | P | **P** | **05 33 32.7** | **+0.6** |
| **GUN** | **Gumba** | **42.56** | **303** | *e*P | **P** | **05 33 32.8** | **+0.1** |
| | comp=Z,27nm,1.0s | | | | | | |
| **KOLN** | **Koldanda** | **44.42** | **302** | *e*P | **P** | **05 33 47.7** | **+0.1** |
| | comp=Z,17nm,0.8s | | | | | | |
| **DANN** | **Dangsing** | **44.47** | **302** | *e*P | **P** | **05 33 47.4** | **-0.7** |
| | comp=Z,12nm,0.6s | | | | | | |
| **PYUN** | **Piuthan** | **45.04** | **302** | *e*P | **P** | **05 33 51.9** | **-0.6** |
| | comp=Z,21nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **53.48** | **324** | P | **P** | **05 34 58.0** | **+1.4** |
| MK31 | | | | IAmb | IAmb | 05 34 58.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.48** | **324** | P | **P** | **05 34 57.9** | **+1.3** |
| | comp=Z,7.7nm,0.7s,baz=126,slow=8.0,SNR=90 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 36 02.6** | **-0.5** |
| | comp=Z,1.6nm,0.7s,baz=106,slow=4.4,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.48** | **324** | P | **P** | **05 34 58.1** | **+1.6** |
| **MAKZ** | **Makanchi** | **53.68** | **324** | P | **P** | **05 34 59.5** | **+1.6** |
| MAKZ | | | | IAmb | IAmb | 05 35 00.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **BOOM** | **Boomskoye usch** | **55.53** | **317** | P | **P** | **05 35 10.6** | **-1.0** |
| **ZAA0** | **Zalesovo Array** | **56.29** | **332** | P | **P** | **05 35 16.3** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **56.29** | **332** | P | **P** | **05 35 15.9** | **-0.7** |
| | comp=Z,1.2nm,0.6s,baz=122,slow=7.2,SNR=7.6 | | | | | | |
| ZALV | | | | LR | LR | 06 01 18.8 | |
| | comp=Z,47nm,18.6s,baz=72,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.29** | **332** | P | **P** | **05 35 17.2** | **+0.5** |
| **AAK** | **Ala-Archa** | **56.57** | **316** | LR | LR | 06 01 47.4 | |
| | comp=Z,56nm,19.0s,baz=93,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **57.59** | **326** | P | **P** | **05 35 27.3** | **+1.4** |
| **BRVK** | **Borovoye** | **63.26** | **326** | P | **P** | **05 36 05.5** | **+1.0** |
| **TIXI** | **Tiksi** | **63.44** | **1** | P | **P** | **05 36 04.8** | **-0.6** |
| | comp=Z,2.0nm,0.5s,baz=269,slow=22,SNR=3.1 | | | | | | |
| **AFI** | **Afiamalu** | **65.61** | **109** | LR | LR | 06 00 11.6 | |
| | comp=Z,40nm,20.7s,baz=30,slow=32 | | | | | | |
| **NRIK** | **Noril'sk** | **65.95** | **346** | P | **P** | **05 36 21.3** | **-0.5** |
| | comp=Z,1.1nm,0.3s,baz=116,slow=5.9,SNR=5.6 | | | | | | |
| **BKZ** | **Black Stump Fm** | **66.43** | **139** | P | **P** | **05 36 26.9** | **+1.4** |
| BKZ | | | | IAmb | IAmb | 05 36 26.9 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **KHZ** | **Kahutara** | **66.48** | **143** | P | **P** | **05 36 26.5** | **+0.9** |
| **ABKAR** | **Akbulak array** | **68.23** | **320** | P | **P** | **05 36 37.0** | **+0.3** |
| **AKTO** | **Aktyubinsk** | **69.71** | **321** | LR | LR | 06 09 00.8 | |
| | comp=Z,61nm,18.6s,baz=37,slow=37 | | | | | | |
| **ARU** | **Arti** | **70.78** | **327** | LR | LR | 06 08 26.6 | |
| | comp=Z,64nm,19.1s,baz=360,slow=36 | | | | | | |
| **KIRV** | **Kirov** | **76.03** | **328** | LR | LR | 06 13 19.6 | |
| | comp=Z,44nm,18.4s,baz=342,slow=38 | | | | | | |
| **KLMR** | **Klimovskoe** | **81.16** | **330** | *e*P | **P** | **05 37 49.2** | **-2.1** |
| KLMR | | | | AMP | | 05 37 51.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **81.47** | **26** | P | **P** | **05 37 53.1** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=249,slow=5.0,SNR=8.9 | | | | | | |
| **FINES** | **FINESS Array B** | **87.56** | **332** | P | **P** | **05 38 22.5** | **-1.2** |
| | comp=Z,4.8nm,0.9s,baz=99,slow=9.0,SNR=4.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.95** | **321** | P | **P** | **05 38 24.4** | **-1.5** |
| | comp=Z,0.6nm,0.6s,baz=64,slow=4.5,SNR=2.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **94.47** | **334** | LR | LR | 06 24 36.2 | |
| | comp=Z,43nm,18.6s,baz=60,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.80** | **24** | P | **P** | **05 39 01.9** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=299,slow=4.6,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.69** | **290** | PKP | **PKPdf** | **05 44 26.8** | **-1.9** |
| | comp=Z,0.4nm,0.8s,baz=51,slow=2.2,SNR=1.3 | | | | | | |

*IDC **11** 05:30:13.0±1.6, 52°.97N×173°.32E, h0km, mb3.2/3, mb1 3.6/4, mb1mx3.3/42, mbtmp3.3/4, Error ellipse: s-maj=43.2km s-min=9.9km az=31.0*
*NEIC **11** 05:30:13.6±2.2, 52°.42N±0°.10×173°.33E±0°.04, h35km±2km, mb3.7/7, Error ellipse: s-maj=16.5km s-min=3.5km az=187.0*

**ISC 11 05:30:14.5±1.4, 52°.6N±0°.3×173°.31E±0°.06, h33km, n22, σ1°33/19, mb3.6/7, Near Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHEM** | **Shemya Is, Ala** | **0.51** | **69** | Pg | **Pb** | **05 30 25.1** | **-0.1** |
| | 1μm,0.3s,baz=21,slow=2.8,SNR=1177 | | | | | | |
| SHEM | | | | Lg | Lg | 05 30 32.7 | |
| | 1μm,0.3s,baz=198,slow=23,SNR=72 | | | | | | |
| SHEM | | | | LR | LR | 05 30 45.8 | |
| | comp=Z,145nm,20.1s,baz=125,slow=62 | | | | | | |
| **SMY** | **Shemya** | **0.51** | **69** | | **Pb** | **05 30 25.1** | **-0.1** |
| SMY | | | | | **Sb** | **05 30 32.6** | **0.0** |
| **ADK** | **Adak** | **6.19** | **92** | Pn | **Pn** | **05 31 41.7** | **-1.7** |
| **PEA0B** | **Petropavlovsk-** | **9.47** | **280** | Pn | **Pn** | **05 32 26.9** | **-1.5** |
| PEA0B | | | | Sn | **Sn** | **05 34 13.1** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **9.47** | **280** | Pn | **Pn** | **05 32 30.6** | **+2.2** |
| | baz=98,slow=21,SNR=1.6 | | | | | | |
| PETK | | | | Sn | **Sn** | **05 34 12.0** | **-1.5** |
| | 0.3nm,0.3s,baz=239,slow=46,SNR=1.8 | | | | | | |
| **L19K** | **White Mountain** | **19.48** | **48** | P | **P** | **05 34 37.1** | **-1.2** |
| L19K | | | | IAmb | IAmb | 05 34 38.5 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **SML** | **Sawmill** | **22.43** | **51** | P | **P** | **05 35 10.6** | **+0.4** |
| **MCK** | **McKinley** | **22.48** | **45** | P | **P** | **05 35 09.2** | **-1.4** |
| MCK | | | | IAmb | IAmb | 05 35 14.3 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **22.99** | **36** | P | **P** | **05 35 17.5** | **+1.6** |
| **POKR** | **Poker Plat Res** | **23.42** | **42** | P | **P** | **05 35 20.6** | **+0.4** |
| POKR | | | | IAmb | IAmb | 05 35 22.3 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **23.57** | **43** | P | **P** | **05 35 22.3** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=239,slow=9.3,SNR=5.3 | | | | | | |
| **INK** | **Inuvik** | **29.39** | **37** | P | **P** | **05 36 13.8** | **-0.3** |
| INK | | | | IAmb | IAmb | 05 36 36.6 | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.14** | **191** | T | T | 06 12 10.3 | |
| | baz=6.4,slow=76 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.15** | **191** | T | T | 06 12 09.2 | |
| | baz=6.4,slow=76 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.15** | **191** | T | T | 06 12 09.0 | |
| | baz=6.4,slow=76 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.37** | **191** | T | T | 06 13 43.1 | |
| | baz=6.0,slow=76 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.38** | **191** | T | T | 06 13 51.9 | |
| | baz=6.0,slow=76 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.38** | **191** | T | T | 06 13 54.2 | |
| | baz=6.0,slow=76 | | | | | | |
| **MK31** | **Makanchi Array** | **55.39** | **303** | P | **P** | **05 39 45.5** | **+0.4** |
| MK31 | | | | IAmb | IAmb | 05 39 55.0 | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.39** | **303** | P | **P** | **05 39 45.4** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=54,slow=6.7,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.39** | **303** | P | **P** | **05 39 44.4** | **-0.7** |
| **TXAR** | **Lajitas Array** | **63.21** | **76** | P | **P** | **05 40 42.2** | **+2.8** |
| | comp=Z,0.1nm,0.3s,baz=317,slow=5.2,SNR=5.4 | | | | | | |

*RSPR **11** 06:05:17.4, 18°.33N×68°.68W, h142km±2km, MD3.7/13*
*NEIC **11** 06:05:18.3±0.9, 18°.3N±0°.2×68°.73W±0°.06, h115km±21km, Error ellipse: s-maj=28.7km s-min=7.6km az=186.0*
*OSPL **11** 06:05:19.4±2.9, 17°.96N×68°.77W, h117km±30km, ML2.7*

**ISC 11 06:05:17.9±1.6, 18°.2N±0°.1×68°.76W±0°.03, h120km±14km, n58, σ0°82/72, 14C-1D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DR12** | **Loma Pena Alta** | **0.85** | **316** | | **Pn** | **06 05 36.5** | **-2.1** |
| **SDD** | **Santo Domingo** | **1.13** | **285** | Pn | **Pn** | **06 05 42.5** | **+1.2** |
| SDD | | | | IAML | | 06 05 59.4 | |
| | comp=E,186nm,2.4s | | | | | | |
| SDD | | | | IAML | | 06 06 04.2 | |
| | comp=N,132nm,0.5s | | | | | | |
| **SDD** | **Santo Domingo** | **1.13** | **285** | *i* P | **Pn** | **06 05 41.0** | **-0.3** |
| SDD | | | | *e*S | **Sn** | **06 05 57.4** | **-1.5** |
| SDD | | | | IAML | | 06 06 04.0 | |
| | comp=Z,36nm,1.2s | | | | | | |
| **IDE** | **Isla Desecheo** | **1.24** | **80** | ⇑*e*P | **Pn** | **06 05 42.6** | **+0.2** |
| **IDE** | **Isla Desecheo** | **1.24** | **80** | *e*S | **Sn** | **06 06 01.2** | **+0.3** |
| **PRSN** | **Puerto Rico Se** | **1.53** | **88** | Pn | **Pn** | **06 05 46.0** | **+0.3** |
| **BANI** | **BANI** | **1.54** | **278** | | **Pn** | **06 05 46.1** | **+0.2** |
| **BANI** | **BANI** | **1.54** | **278** | *i* P | **Pn** | **06 05 45.9** | **0.0** |
| BANI | | | | *e*S | **Sn** | **06 06 07.3** | **+0.2** |
| BANI | | | | IAML | | 06 06 16.9 | |
| | comp=Z,65nm,0.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.58** | **96** | ⇑*e*P | **Pn** | **06 05 46.3** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.58** | **96** | *e*S | **Sn** | **06 06 09.4** | **+1.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.58** | **96** | | **Pn** | **06 05 45.9** | **-0.3** |
| CRPR | | | | | **Sn** | **06 06 07.4** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.58** | **96** | *i* P | **Pn** | **06 05 45.8** | **-0.3** |
| CRPR | | | | *e*S | **Sn** | **06 06 07.5** | **-0.3** |
| CRPR | | | | IAML | | 06 06 15.4 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **LSP** | **Las Mesas** | **1.59** | **90** | ⇑*e*P | **Pn** | **06 05 46.5** | **+0.1** |
| **LSP** | **Las Mesas** | **1.59** | **90** | *e*S | **Sn** | **06 06 08.7** | **+0.6** |
| **AGPR** | **Aguadilla, PR** | **1.59** | **79** | ⇓*e*P | **Pn** | **06 05 46.6** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **1.59** | **79** | | **Pn** | **06 05 46.7** | **+0.2** |
| AGPR | | | | | **Sn** | **06 06 08.7** | **+0.6** |
| AGPR | | | | IAML | | 06 06 12.1 | |
| | comp=E,180nm,0.4s | | | | | | |
| AGPR | | | | IAML | | 06 06 12.4 | |
| | comp=N,138nm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.59** | **79** | *i* P | **Pn** | **06 05 46.8** | **+0.4** |
| AGPR | | | | *e*S | **Sn** | **06 06 08.5** | **+0.5** |
| AGPR | | | | IAML | | 06 06 12.4 | |
| | comp=Z,96nm,0.2s | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **1.59** | **319** | *e*S | **Sn** | **06 06 09.4** | **+1.3** |
| **MLPR** | **Magueyes Islan** | **1.64** | **97** | ⇑*e*P | **Pn** | **06 05 47.0** | **0.0** |
| **MLPR** | **Magueyes Islan** | **1.64** | **97** | *e*S | **Sn** | **06 06 10.7** | **+1.6** |
| **MLPR** | **Magueyes Islan** | **1.64** | **97** | | **Pn** | **06 05 45.9** | **-1.2** |
| MLPR | | | | Sn | **Sn** | **06 06 11.2** | **+2.0** |
| **AOPR** | **Arecibo Observ** | **1.91** | **85** | ⇑*e*P | **Pn** | **06 05 50.2** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **1.91** | **85** | *e*S | **Sn** | **06 06 15.1** | **+0.1** |
| **AOPR** | **Arecibo Observ** | **1.91** | **85** | | **Pn** | **06 05 50.1** | **-0.2** |
| AOPR | | | | | **Sn** | **06 06 14.1** | **-1.0** |
| **UUPR** | **Utuado, UPR, P** | **1.94** | **87** | ⇑*e*P | **Pn** | **06 05 50.4** | **-0.2** |
| **UUPR** | **Utuado, UPR, P** | **1.94** | **87** | *e*S | **Sn** | **06 06 15.8** | **+0.3** |
| **UUPR** | **Utuado, UPR, P** | **1.94** | **87** | | **Pn** | **06 05 50.4** | **-0.2** |
| UUPR | | | | | **Sn** | **06 06 15.8** | **+0.3** |
| **OBIP** | **Obispado Ponce** | **2.05** | **93** | ⇑*e*P | **Pn** | **06 05 51.8** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **2.05** | **93** | *e*S | **Sn** | **06 06 19.4** | **+1.3** |
| **OBIP** | **Obispado Ponce** | **2.05** | **93** | | **Pn** | **06 05 51.8** | **-0.2** |
| OBIP | | | | | **Sn** | **06 06 18.3** | **+0.2** |
| **CELP** | **Cerrillos** | **2.07** | **92** | ⇑*e*P | **Pn** | **06 05 52.0** | **-0.3** |
| **CELP** | **Cerrillos** | **2.07** | **92** | *e*S | **Sn** | **06 06 19.2** | **+0.6** |
| **CELP** | **Cerrillos** | **2.07** | **92** | | **Pn** | **06 05 51.9** | **-0.4** |
| CELP | | | | IAML | | 06 06 23.2 | |
| | comp=E,48nm,0.6s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **2.14** | **82** | ⇑*e*P | **Pn** | **06 05 52.4** | **-0.7** |
| **EMPR** | **Esperanza - Ma** | **2.14** | **82** | *e*S | **Sn** | **06 06 20.1** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **2.14** | **82** | | **Pn** | **06 05 52.7** | **-0.4** |
| EMPR | | | | IAML | | 06 06 50.8 | |
| | comp=N,123nm,3.1s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.22** | **268** | *i* P | **Pn** | **06 05 54.0** | **-0.1** |
| LOBA2 | | | | *e*S | **Sn** | **06 06 19.6** | **-2.3** |
| LOBA2 | | | | IAML | | 06 06 23.6 | |
| | comp=Z,28nm,1.6s | | | | | | |
| **SC01** | **Santiago de Io** | **2.24** | **304** | Pn | **Pn** | **06 05 54.0** | **-0.4** |
| **SC01** | **Santiago de Io** | **2.24** | **304** | *i* P | **Pn** | **06 05 54.1** | **-0.4** |
| SC01 | | | | *e*S | **Sn** | **06 06 23.1** | **+0.6** |
| SC01 | | | | IAML | | 06 06 33.5 | |
| | comp=Z,67nm,0.2s | | | | | | |
| **SJG** | **San Juan** | **2.48** | **91** | Pn | **Pn** | **06 05 56.8** | **-0.7** |
| SJG | | | | IAML | | 06 06 34.0 | |
| | comp=Z,39nm,0.4s | | | | | | |
| SJG | | | | IAML | | 06 06 41.2 | |
| | comp=Z,44nm,0.4s | | | | | | |
| **IGPR** | **InterUniversit** | **2.53** | **94** | ⇑*e*P | **Pn** | **06 05 58.1** | **0.0** |
| **IGPR** | **InterUniversit** | **2.53** | **94** | *e*S | **Sn** | **06 06 29.7** | **+0.7** |
| **SDDR** | **Presa de Saban** | **2.53** | **289** | | **Pn** | **06 05 59.3** | **+1.2** |
| SDDR | | | | IAML | | 06 06 17.4 | |
| | comp=Z,44nm,3.5s | | | | | | |
| SDDR | | | | IAML | | 06 06 37.3 | |
| | comp=Z,49nm,0.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.53** | **289** | *i* P | **Pn** | **06 05 59.4** | **+1.2** |
| SDDR | | | | *e*S | **Sn** | **06 06 30.5** | **+1.4** |
| SDDR | | | | IAML | | 06 06 42.1 | |
| | comp=Z,40nm,3.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **2.54** | **87** | Pn | **Pn** | **06 05 57.7** | **-0.6** |
| GCPR | | | | IAML | | 06 06 43.1 | |
| | comp=N,35nm,3.2s | | | | | | |
| **PDPR** | **Patillas Dam,** | **2.61** | **93** | Pn | **Pn** | **06 05 58.7** | **-0.4** |
| PDPR | | | | IAML | | 06 06 28.0 | |
| | comp=E,26nm,4.2s | | | | | | |
| **HUMP** | **Col San Antoni** | **2.77** | **90** | ⇑*e*P | **Pn** | **06 06 00.9** | **-0.2** |
| **HUMP** | **Col San Antoni** | **2.77** | **90** | *e*S | **Sn** | **06 06 34.5** | **+0.1** |
| **HUMP** | **Col San Antoni** | **2.77** | **90** | | **Pn** | **06 06 00.8** | **-0.3** |
| HUMP | | | | | **Sn** | **06 06 33.6** | **-0.8** |
| HUMP | | | | IAML | | 06 06 39.6 | |
| | comp=N,45nm,0.2s | | | | | | |
| **MTP** | **Monte Pirata** | **3.05** | **91** | ⇑*e*P | **Pn** | **06 06 04.5** | **-0.4** |
| **MTP** | **Monte Pirata** | **3.05** | **91** | *e*S | **Sn** | **06 06 41.4** | **+0.4** |
| **MTP** | **Monte Pirata** | **3.05** | **91** | | **Pn** | **06 06 04.3** | **-0.6** |
| MTP | | | | IAML | | 06 07 10.9 | |
| | comp=N,21nm,3.5s | | | | | | |
| MTP | | | | IAML | | 06 07 19.1 | |
| | comp=E,21nm,4.0s | | | | | | |
| **CUPR** | **Culebra, Puert** | **3.31** | **87** | ⇑*e*P | **Pn** | **06 06 07.6** | **-0.6** |
| **CUPR** | **Culebra, Puert** | **3.31** | **87** | *e*S | **Sn** | **06 06 47.6** | **+0.5** |
| **CUPR** | **Culebra, Puert** | **3.31** | **87** | | **Pn** | **06 06 07.1** | **-1.1** |
| **STVI** | **Saint Thomas** | **3.62** | **87** | ⇑*e*P | **Pn** | **06 06 12.3** | **-0.1** |
| **STVI** | **Saint Thomas** | **3.62** | **87** | *e*S | **Sn** | **06 06 53.9** | **-0.7** |
| **STVI** | **Saint Thomas** | **3.62** | **87** | | **Pn** | **06 06 10.8** | **-1.6** |
| STVI | | | | IAML | | 06 07 14.8 | |
| | comp=N,24nm,2.4s | | | | | | |

*IDC **11** 06:56:43.4±0.8, 55°.25N×111°.20E, h0km, mb3.7/9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NIZ** | **Nizh Angarsk** | **1.03** | **302** | ⇑*i*Pg | **Pb** | **06 57 05.2** | **+0.2** |
| NIZ | | | | Pmax | | 06 57 05.7 | |
| | comp=N,2μm,0.2s | | | | | | |
| NIZ | | | | *e* | | 06 57 08.5 | |
| NIZ | | | | *e*Sg | **Sb** | **06 57 19.3** | **+0.8** |
| NIZ | | | | *e*Sb | **Sn** | **06 57 23.4** | **+3.3** |
| NIZ | | | | max | | 06 57 25.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| **UKT** | **Uakit** | **1.47** | **79** | *e*PG | **Pn** | **06 57 12.4** | **+0.7** |
| UKT | | | | *e* | | 06 57 31.9 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,351nm,0.3s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| **UKT** | **Uakit** | **1.47** | **79** | ⇑*i*Pg | **Pn** | **06 57 12.3** | **+0.6** |
| UKT | | | | Pmax | | 06 57 12.6 | |
| | comp=N,360nm,0.4s | | | | | | |
| UKT | | | | *e*Sg | **Sb** | **06 57 31.6** | **+0.2** |
| UKT | | | | Smax | | 06 57 32.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **SVKR** | **Severomuysk** | **1.65** | **57** | *e*PN | **Pb** | **06 57 16.2** | **+0.6** |
| SVKR | | | | *e* | | 06 57 37.4 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,300nm,0.3s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | |
| **SVKR** | **Severomuysk** | **1.65** | **57** | *e*Pg | **Pb** | **06 57 16.2** | **+0.6** |
| SVKR | | | | *e* | | 06 57 20.6 | |
| SVKR | | | | max | | 06 57 22.1 | |
| | comp=N,479nm,0.2s | | | | | | |
| SVKR | | | | *e*Sg | **Sg** | **06 57 38.4** | **+0.3** |
| SVKR | | | | Smax | | 06 57 46.6 | |
| | comp=N,3μm,0.6s | | | | | | |
| **SYVR** | **Suvo** | **1.71** | **202** | *e*PN | **Pb** | **06 57 16.5** | **-0.2** |
| SYVR | | | | *e* | | 06 57 40.3 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,490nm,0.3s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| **SYVR** | **Suvo** | **1.71** | **202** | *e*Pn | **Pb** | **06 57 16.4** | **-0.2** |
| SYVR | | | | *e*Pg | **Pb** | **06 57 17.3** | **+0.7** |
| SYVR | | | | Pmax | | 06 57 17.5 | |
| | comp=N,473nm,0.3s | | | | | | |
| SYVR | | | | *e*Sg | **Sg** | **06 57 40.2** | **+0.1** |
| SYVR | | | | Smax | | 06 57 41.8 | |
| | comp=N,2μm,0.4s | | | | | | |
| **MXMB** | **Maximikha** | **2.42** | **216** | *e*Pn | **Pn** | **06 57 26.3** | **+1.7** |
| MXMB | | | | *e*Pg | **Pb** | **06 57 29.1** | **+0.5** |
| MXMB | | | | *e*Sn | **Sn** | **06 57 55.4** | **+1.1** |
| MXMB | | | | *e*Sg | **Sg** | **06 58 01.6** | **-1.0** |
| **OGRR** | **Ongureny** | **2.59** | **233** | ⇓*i*PN | **Pb** | **06 57 31.2** | **-0.5** |
| OGRR | | | | *e* | | 06 58 09.0 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,165nm,1.0s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=N,1μm,0.6s | | | | | | |
| **OGRR** | **Ongureny** | **2.59** | **233** | ⇓*i* | **Pb** | **06 57 31.2** | **-0.5** |
| OGRR | | | | *e*Pg | **Pg** | **06 57 33.9** | **-0.8** |
| OGRR | | | | *e*PgPg | **PbPb** | **06 57 39.4** | **+4.6** |
| OGRR | | | | max | | 06 57 41.1 | |
| | comp=N,153nm,0.3s | | | | | | |
| OGRR | | | | *e* | | 06 58 02.7 | |
| OGRR | | | | *e*Sg | **Sg** | **06 58 08.0** | **-0.3** |
| OGRR | | | | Smax | | 06 58 09.6 | |
| | comp=N,1μm,0.4s | | | | | | |
| **NLYR** | **Nelyaty** | **2.89** | **62** | ⇓*i*PN | **Pn** | **06 57 32.4** | **+1.3** |
| NLYR | | | | *e* | | 06 57 37.4 | |
| NLYR | | | | *e* | | 06 58 14.4 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,102nm,0.7s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,1μm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **2.89** | **62** | *e*Pn | **Pn** | **06 57 32.4** | **+1.3** |
| NLYR | | | | *e*Pg | **Pb** | **06 57 38.0** | **+1.4** |
| NLYR | | | | Pmax | | 06 57 46.2 | |
| | comp=N,110nm,0.6s | | | | | | |
| NLYR | | | | *e*Sn | **Sn** | **06 58 06.1** | **+0.2** |
| NLYR | | | | *e*Sg | **Sg** | **06 58 15.4** | **-2.3** |
| NLYR | | | | Smax | | 06 58 23.5 | |
| | comp=N,1μm,0.9s | | | | | | |
| NLYR | | | | *e*SgSg | **SbSb** | **06 58 29.4** | **+12** |
| **BOD** | **Bodaibo** | **3.04** | **31** | *e*PN | **Pn** | **06 57 35.0** | **+1.7** |
| BOD | | | | *e* | | 06 57 41.2 | |
| BOD | | | | *e* | | 06 58 18.8 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,55nm,0.4s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=E,743nm,0.6s | | | | | | |
| **BOD** | **Bodaibo** | **3.04** | **31** | *e*Pn | **Pn** | **06 57 34.5** | **+1.2** |
| BOD | | | | *e*Pg | **Pb** | **06 57 39.6** | **+0.3** |
| BOD | | | | *e* | | 06 57 44.6 | |
| BOD | | | | max | | 06 57 46.5 | |
| | comp=E,54nm,0.4s | | | | | | |
| BOD | | | | *e*Sn | **Sn** | **06 58 08.8** | **-0.9** |
| BOD | | | | *e*Sg | **Sb** | **06 58 19.4** | **+2.9** |
| BOD | | | | Smax | | 06 58 20.2 | |
| | comp=E,745nm,0.6s | | | | | | |
| **KELR** | **Kotokel** | **3.06** | **217** | *e*Pn | **Pn** | **06 57 35.0** | **+1.5** |
| KELR | | | | *e*Pg | **Pb** | **06 57 41.4** | **+1.9** |
| KELR | | | | *e*Sn | **Sn** | **06 58 10.6** | **+0.5** |
| KELR | | | | *e*Sg | **Sg** | **06 58 21.3** | **-1.9** |
| KELR | | | | *e* | | 06 58 30.2 | |
| **CIT** | **Chita** | **3.55** | **155** | *e*PN | **Pn** | **06 57 42.7** | **+2.5** |
| CIT | | | | *e* | | 06 57 50.1 | |
| CIT | | | | *e*S | **Sn** | **06 58 21.8** | **-0.4** |
| CIT | | | | *e* | | 06 58 34.6 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,96nm,0.8s | | | | | | |
| CIT | | | | smax | smax | | |
| | comp=E,800nm,1.3s | | | | | | |
| **CIT** | **Chita** | **3.55** | **155** | *e*Pg | **Pb** | **06 57 50.1** | **+2.2** |
| CIT | | | | Pmax | | 06 57 51.0 | |
| | comp=E,143nm,0.4s | | | | | | |
| CIT | | | | *e*Sn | **Sn** | **06 58 21.6** | **-0.6** |
| CIT | | | | *e* | | 06 58 34.8 | |
| CIT | | | | *e*Sg | **Sg** | **06 58 36.1** | **-2.8** |
| CIT | | | | Smax | | 06 58 39.2 | |
| | comp=E,1μm,0.5s | | | | | | |
| **ZRHB** | **Zarechye** | **3.56** | **222** | *e*Sg | **Sb** | **06 58 36.2** | **+4.8** |
| ZRHB | | | | Smax | | 06 58 44.4 | |
| | comp=E,928nm,0.6s | | | | | | |
| **TRG** | **Tyrgan** | **3.74** | **230** | *e*PN | **Pn** | **06 57 44.9** | **+2.0** |
| TRG | | | | *e* | | 06 57 53.5 | |
| TRG | | | | *e*S | **Sn** | **06 58 27.7** | **+0.6** |
| TRG | | | | *e* | | 06 58 42.4 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,107nm,0.9s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=N,399nm,0.4s | | | | | | |
| **TRG** | **Tyrgan** | **3.74** | **230** | *e*Pn | **Pn** | **06 57 44.9** | **+2.0** |
| TRG | | | | *e*Pg | **Pb** | **06 57 54.0** | **+2.7** |
| TRG | | | | *e* | | 06 57 57.9 | |
| TRG | | | | max | | 06 58 02.9 | |
| | comp=N,107nm,0.8s | | | | | | |
| TRG | | | | *e*Sn | **Sn** | **06 58 26.6** | **-0.5** |
| TRG | | | | *e*Sg | **Sg** | **06 58 42.3** | **-2.9** |
| TRG | | | | Smax | | 06 58 47.5 | |
| | comp=N,402nm,0.4s | | | | | | |
| **UUDB** | **Ulan-Yde** | **3.95** | **212** | *e*Pn | **Pn** | **06 57 47.6** | **+1.8** |
| UUDB | | | | *e*Pg | **Pb** | **06 57 56.6** | **+1.8** |
| UUDB | | | | Pmax | | 06 57 58.3 | |
| | comp=N,105nm,0.8s | | | | | | |
| UUDB | | | | *e*Sg | **Sg** | **06 58 48.6** | **-3.3** |
| UUDB | | | | Smax | | 06 58 53.5 | |
| | comp=N,352nm,0.6s | | | | | | |
| **KAB** | **Kabansk** | **4.15** | **221** | *e*Pg | **Pb** | **06 58 01.0** | **+2.9** |
| KAB | | | | *e*PgPg | **PbPb** | **06 58 03.5** | **+2.2** |
| KAB | | | | max | | 06 58 20.2 | |
| | comp=N,160nm,0.4s | | | | | | |
| KAB | | | | *e*Sn | **Sn** | **06 58 37.3** | **+0.3** |
| KAB | | | | *e*Sg | **Sg** | **06 58 55.3** | **-2.8** |
| KAB | | | | Smax | | 06 59 18.2 | |
| | comp=N,776nm,1.4s | | | | | | |
| **STDB** | **Stepnoy Dvoret** | **4.17** | **224** | *e*Pn | **Pn** | **06 57 50.0** | **+1.3** |
| STDB | | | | *e*Pg | **Pb** | **06 58 01.5** | **+3.1** |
| STDB | | | | *e*Sg | **Sg** | **06 58 55.6** | **-3.1** |
| **VTMR** | **Vitim** | **4.28** | **10** | *e*Pg | **Pb** | **06 58 03.3** | **+2.9** |
| VTMR | | | | *e*Sn | **Sn** | **06 58 39.9** | **-0.3** |
| VTMR | | | | *e*Sg | **Sg** | **06 58 58.2** | **-4.2** |
| VTMR | | | | *e* | | 06 59 02.6 | |
| **CRS** | **Chara** | **4.35** | **65** | *e*Pn | **Pn** | **06 57 52.8** | **+1.5** |
| CRS | | | | *e*Pg | **Pb** | **06 58 04.5** | **+2.9** |
| CRS | | | | *e* | | 06 58 08.7 | |
| CRS | | | | max | | 06 58 12.1 | |
| | comp=N,108nm,0.9s | | | | | | |
| CRS | | | | *e*Sn | **Sn** | **06 58 40.4** | **-1.7** |
| CRS | | | | *e*Sg | **Sg** | **06 59 00.4** | **-4.3** |
| CRS | | | | Smax | | 06 59 05.8 | |
| | comp=N,532nm,2.4s | | | | | | |
| CRS | | | | *e* | | 06 59 15.0 | |
| **BGT** | **Bolshoye Golou** | **4.66** | **229** | *e*Pn | **Pn** | **06 57 56.8** | **+1.4** |
| BGT | | | | *e*Pg | **Pb** | **06 58 10.1** | **+3.3** |
| BGT | | | | Pmax | | 06 58 28.7 | |
| | comp=N,54nm,0.5s | | | | | | |
| BGT | | | | *e*Sn | **Sn** | **06 58 47.9** | **-1.6** |
| BGT | | | | *e*Sg | **Sg** | **06 59 10.7** | **-3.8** |
| BGT | | | | Smax | | 06 59 21.1 | |
| | comp=N,238nm,0.7s | | | | | | |
| **LSTR** | **Listvyanka** | **5.03** | **230** | *e*Pn | **Pn** | **06 58 01.8** | **+1.2** |
| LSTR | | | | *e*Pg | **Pb** | **06 58 17.0** | **+3.8** |
| LSTR | | | | *e* | | 06 58 20.8 | |
| LSTR | | | | max | | 06 58 22.2 | |
| | comp=N,18nm,0.4s | | | | | | |
| LSTR | | | | *e*Sn | **Sn** | **06 58 57.6** | **-1.2** |
| LSTR | | | | *e*Sg | **Sg** | **06 59 21.8** | **-4.7** |
| LSTR | | | | Smax | | 06 59 24.4 | |
| | comp=N,148nm,0.8s | | | | | | |
| **IRK** | **Irkutsk** | **5.04** | **236** | *e*Sg | **Sg** | **06 59 21.8** | **-4.9** |
| IRK | | | | Smax | | 06 59 26.1 | |
| | comp=N,739nm,0.5s | | | | | | |
| **TUP** | **Tupik** | **5.19** | **95** | *e*PN | **Pn** | **06 58 03.3** | **+0.5** |
| TUP | | | | *e* | | 06 58 18.4 | |
| TUP | | | | *e*S | **Sn** | **06 59 02.5** | **-0.2** |
| TUP | | | | *e* | | 06 59 25.6 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,49nm,0.4s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,446nm,1.0s | | | | | | |
| **TUP** | **Tupik** | **5.19** | **95** | *e*Pn | **Pn** | **06 58 03.4** | **+0.6** |
| TUP | | | | *e*Pg | **Pb** | **06 58 18.6** | **+2.7** |
| TUP | | | | Pmax | | 06 58 19.4 | |
| | comp=N,49nm,0.4s | | | | | | |
| TUP | | | | *e*Sn | **Sn** | **06 58 59.9** | **-2.8** |
| TUP | | | | *e*Sg | **Sg** | **06 59 25.6** | **-6.0** |
| TUP | | | | Smax | | 06 59 33.6 | |
| | comp=N,481nm,1.0s | | | | | | |
| **KHNR** | **Khani** | **5.26** | **68** | *e*Sg | **Sg** | **06 59 28.2** | **-5.5** |
| **IVK** | **Ivanovka** | **5.27** | **232** | *e*Pn | **Pn** | **06 58 04.7** | **+0.9** |
| IVK | | | | *e*Pg | **Pb** | **06 58 20.7** | **+3.5** |
| IVK | | | | Pmax | | 06 58 27.3 | |
| | comp=N,29nm,0.7s | | | | | | |
| IVK | | | | *e*Sn | **Sn** | **06 59 04.5** | **0.0** |
| IVK | | | | *e* | | 06 59 25.7 | |
| IVK | | | | *e*Sg | **Sg** | **06 59 29.4** | **-4.6** |
| IVK | | | | Smax | | 06 59 36.3 | |
| | comp=N,192nm,0.7s | | | | | | |
| **KPC** | **Khapcheranga** | **5.61** | **171** | *e*PN | **Pn** | **06 58 08.2** | **-0.3** |
| KPC | | | | *e* | | 06 58 24.8 | |
| KPC | | | | *e*S | **Sn** | **06 59 09.6** | **-3.4** |
| KPC | | | | *e* | | 06 59 37.3 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,474nm,1.0s | | | | | | |
| **KPC** | **Khapcheranga** | **5.61** | **171** | *e*Pn | **Pn** | **06 58 08.8** | **+0.3** |
| KPC | | | | *e*Pg | **Pb** | **06 58 27.2** | **+4.2** |
| KPC | | | | Pmax | | 06 58 35.7 | |
| | comp=E,25nm,0.7s | | | | | | |
| KPC | | | | *e*Sn | **Sn** | **06 59 10.1** | **-2.9** |
| KPC | | | | *e*Sg | **Sg** | **06 59 39.4** | **-5.5** |
| KPC | | | | Smax | | 06 59 41.5 | |
| | comp=E,475nm,0.9s | | | | | | |
| **TLY** | **Talaya** | **5.70** | **234** | *e*PN | **Pn** | **06 58 10.5** | **+0.7** |
| TLY | | | | *e* | | 06 58 28.2 | |
| TLY | | | | *e* | | 06 59 40.8 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,27nm,0.6s | | | | | | |
| TLY | | | | smax | smax | | |
| | comp=E,98nm,0.4s | | | | | | |
| **YKLR** | **Yuktali** | **6.09** | **73** | *e*Pn | **Pn** | **06 58 16.3** | **+1.2** |
| YKLR | | | | *e*Pg | **Pb** | **06 58 35.5** | **+4.3** |
| YKLR | | | | *e*Sn | **Sn** | **06 59 22.7** | **-2.2** |
| YKLR | | | | *e*Sg | **Sg** | **06 59 54.3** | **-6.2** |
| **ARS** | **Arshan** | **6.14** | **241** | *e*PN | **Pn** | **06 58 16.8** | **+0.9** |
| ARS | | | | *e*S | **Sn** | **06 59 26.0** | **-0.1** |
| ARS | | | | *e* | | 06 59 55.3 | |
| ARS | | | | pmax | pmax | | |
| | comp=Z,82nm,0.6s | | | | | | |
| ARS | | | | smax | smax | | |
| | comp=N,780nm,0.6s | | | | | | |
| **ARS** | **Arshan** | **6.14** | **241** | *e*Pn | **Pn** | **06 58 16.8** | **+0.9** |
| ARS | | | | *e*Pg | **Pb** | **06 58 36.4** | **+4.3** |
| ARS | | | | Pmax | | 06 58 42.5 | |
| | comp=N,81nm,0.7s | | | | | | |
| ARS | | | | *e*Sn | **Sn** | **06 59 25.1** | **-1.0** |
| ARS | | | | *e*Sg | **Sg** | **06 59 55.4** | **-6.6** |
| ARS | | | | Smax | | 07 00 00.5 | |
| | comp=N,778nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **6.79** | **227** | *e*PN | **Pn** | **06 58 26.0** | **+1.2** |
| ZAK | | | | *e*S | **Sn** | **06 59 46.3** | **+4.2** |
| ZAK | | | | *e* | | 07 00 14.8 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,111nm,0.5s | | | | | | |
| **ZAK** | **Zakamensk** | **6.79** | **227** | *e*Pn | **Pn** | **06 58 26.5** | **+1.7** |
| ZAK | | | | *e*Pg | Pb | 06 58 49.3 | +6.2 |
| ZAK | | | | *e* | | 06 58 59.3 | |
| ZAK | | | | max | | 06 59 00.3 | |
| | comp=N,12nm,0.9s | | | | | | |
| ZAK | | | | *e*Sn | **Sn** | **06 59 41.0** | **-1.1** |
| ZAK | | | | *e*Sg | **Sg** | **07 00 16.7** | **-6.1** |
| ZAK | | | | *e* | | 07 00 32.2 | |
| ZAK | | | | max | | 07 00 34.1 | |
| | comp=N,111nm,0.5s | | | | | | |
| **MOY** | **Mondy** | **7.01** | **243** | *e*PN | **Pn** | **06 58 30.3** | **+2.5** |
| MOY | | | | *e* | | 06 58 53.3 | |
| MOY | | | | *e*S | **Sn** | **06 59 45.7** | **-1.9** |
| MOY | | | | *e* | | 07 00 21.8 | |
| **MOY** | **Mondy** | **7.01** | **243** | *e*Pn | **Pn** | **06 58 29.8** | **+2.0** |
| MOY | | | | *e*Pg | Pb | 06 58 52.5 | +5.6 |
| MOY | | | | Pmax | | 06 59 06.1 | |
| | comp=N,28nm,0.7s | | | | | | |
| MOY | | | | *e*Sn | **Sn** | **06 59 45.7** | **-1.9** |
| MOY | | | | *e*Sg | **Sg** | **07 00 23.0** | **-6.9** |
| MOY | | | | Smax | | 07 00 25.8 | |
| | comp=N,255nm,1.6s | | | | | | |
| **ORL** | **Orlik** | **7.19** | **253** | *e*PN | **Pn** | **06 58 32.7** | **+2.3** |
| ORL | | | | *e* | | 06 58 56.3 | |
| ORL | | | | *e*S | **Sn** | **06 59 51.2** | **-0.9** |
| ORL | | | | *e* | | 07 00 28.7 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,236nm,1.5s | | | | | | |
| **ORL** | **Orlik** | **7.19** | **253** | *e*Pn | **Pn** | **06 58 32.6** | **+2.2** |
| ORL | | | | *e*Pg | Pb | 06 58 56.4 | +6.4 |
| ORL | | | | Pmax | | 06 59 16.8 | |
| | comp=N,32nm,0.9s | | | | | | |
| ORL | | | | *e*Sn | **Sn** | **06 59 51.0** | **-1.1** |
| ORL | | | | *e*Sg | **Sg** | **07 00 28.9** | **-6.9** |
| ORL | | | | Smax | | 07 00 37.3 | |
| | comp=N,236nm,1.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **7.80** | **200** | *i* PN | **Pn** | **06 58 39.7** | **+0.9** |
| **IENR** | **Iengra** | **7.84** | **77** | *e*Pn | **Pn** | **06 58 40.3** | **+1.2** |
| IENR | | | | *e*Pg | Pb | 06 59 06.5 | +5.6 |
| IENR | | | | *e*Sn | **Sn** | **07 00 03.6** | **-4.2** |
| IENR | | | | *e* | | 07 00 23.8 | |
| IENR | | | | *e*Sg | Sb | 07 00 47.4 | +13 |
| **CLNS** | **Chul'man** | **7.90** | **73** | *e*Pg | Pb | 06 59 08.1 | +6.2 |
| CLNS | | | | *e*Sn | **Sn** | **07 00 06.2** | **-3.1** |
| CLNS | | | | *e*Sg | Sb | 07 00 49.0 | +13 |
| CLNS | | | | *e* | | 07 00 54.0 | |
| CLNS | | | | *e* | | 07 01 04.3 | |
| **SONM** | **Songino Array** | **7.97** | **203** | Pn | **Pn** | **06 58 42.7** | **+1.6** |
| | comp=N,1.2nm,0.3s,baz=14,slow=13,SNR=16 | | | | | | |
| SONM | | | | Sn | **Sn** | **07 00 14.9** | **+3.5** |
| | comp=N,3.4nm,0.3s,baz=18,slow=27,SNR=10 | | | | | | |
| SONM | | | | Lg | Lg | 07 00 56.0 | |
| | comp=N,4.7nm,0.3s,baz=19,slow=28,SNR=10 | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **9.42** | **246** | *e*Sg | Sg | 07 01 37.2 | |
| **YAK** | **Yakutsk** | **11.80** | **47** | Lg | Lg | 07 02 49.5 | |
| | comp=N,0.2nm,0.3s,baz=324,slow=23,SNR=7.2 | | | | | | |
| **KLR** | **Kul'dur** | **13.99** | **107** | Pn | **Pn** | **07 00 02.5** | **-0.8** |
| | comp=N,0.2nm,0.3s,baz=315,slow=18,SNR=1.9 | | | | | | |
| KLR | | | | Sn | **Sn** | **07 02 38.4** | **-0.1** |
| | comp=N,0.1nm,0.3s,baz=58,slow=15,SNR=1.8 | | | | | | |
| KLR | | | | Lg | Lg | 07 04 02.2 | |
| | comp=N,0.2nm,0.3s,baz=106,slow=11,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **15.25** | **276** | Pn | **Pn** | **07 00 20.1** | **-0.2** |
| | comp=N,0.2nm,0.3s,baz=80,slow=10,SNR=23 | | | | | | |
| ZALV | | | | Lg | Lg | 07 04 45.7 | |
| | comp=N,0.2nm,0.3s,baz=77,slow=25,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **15.25** | **276** | *i* P | **Pn** | **07 00 21.0** | **+0.8** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **NRIK** | **Noril'sk** | **17.68** | **332** | P | **P** | **07 00 52.0** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=138,slow=14,SNR=3.0 | | | | | | |
| NRIK | | | | S | Sn | 07 03 53.7 | -14 |
| | comp=Z,0.1nm,0.3s,baz=149,slow=17,SNR=1.7 | | | | | | |
| NRIK | | | | Lg | Lg | 07 05 57.8 | |
| | comp=Z,0.2nm,0.3s,baz=198,slow=3.2,SNR=1.2 | | | | | | |
| **TIXI** | **Tiksi** | **18.14** | **18** | P | **Pn** | **07 00 54.1** | **-2.6** |
| | comp=Z,0.5nm,0.3s,baz=123,slow=10,SNR=6.9 | | | | | | |
| TIXI | | | | S | Sn | 07 04 03.0 | -16 |
| | comp=Z,0.2nm,0.3s,baz=90,slow=20,SNR=1.8 | | | | | | |
| TIXI | | | | Lg | Lg | 07 06 06.7 | |
| | comp=Z,0.3nm,0.3s,baz=90,slow=23,SNR=3.9 | | | | | | |
| **TIXI** | **Tiksi** | **18.14** | **18** | *i* P | **Pn** | **07 00 55.7** | **-1.0** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.4s | | | | | | |
| **MK31** | **Makanchi Array** | **19.87** | **257** | *i* P | **P** | **07 01 12.6** | **-3.6** |
| **MKAR** | **Makanchi Array** | **19.87** | **257** | P | **P** | **07 01 16.9** | **+0.7** |
| | comp=Z,0.2nm,0.3s,baz=53,slow=8.9,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.87** | **257** | *i* P | **P** | **07 01 17.2** | **+1.0** |
| **KURK** | **Kurchatov** | **19.95** | **270** | *i* P | **P** | **07 01 15.7** | **-1.3** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.05** | **270** | P | **P** | **07 01 18.5** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=68,slow=11,SNR=3.0 | | | | | | |
| **SEY** | **Seymchan** | **22.21** | **53** | *i* P | **P** | **07 01 42.4** | **+1.1** |
| **BVAR** | **Borovoye Array** | **23.71** | **282** | P | **P** | **07 01 57.6** | **+0.8** |
| | comp=Z,0.3nm,0.4s,baz=56,slow=11,SNR=2.4 | | | | | | |
| **BRVK** | **Borovoye** | **23.76** | **282** | *i* P | **P** | **07 01 55.3** | **-2.0** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.3s | | | | | | |
| **AAK** | **Ala-Archa** | **26.80** | **257** | *i* P | **P** | **07 02 23.5** | **-1.9** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **28.05** | **41** | *e*P | **P** | **07 02 36.2** | **+0.1** |
| BILL | | | | *e* | | 07 03 26.6 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.47** | **326** | P | **P** | **07 04 06.6** | **0.0** |
| | comp=Z,5.5nm,1.1s,baz=74,slow=9.5,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **42.02** | **314** | P | **P** | **07 04 35.7** | **-0.4** |
| | comp=Z,2.4nm,0.9s,baz=192,slow=26,SNR=1.6 | | | | | | |
| **KIV** | **Kislovodsk** | **44.01** | **285** | *e*P | **P** | **07 04 52.1** | **-0.4** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,23nm,16.0s | | | | | | |
| **ILAR** | **Eielson Array** | **46.41** | **35** | P | **P** | **07 05 11.8** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=294,slow=6.0,SNR=5.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **48.06** | **320** | P | **P** | **07 05 23.9** | **-0.2** |
| | comp=Z,2.0nm,1.1s,baz=58,slow=11,SNR=1.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **57.29** | **23** | P | **P** | **07 06 31.9** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=334,slow=7.2,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **57.29** | **23** | *i* P | **P** | **07 06 32.9** | **+0.5** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **77.47** | **158** | P | **P** | **07 08 39.7** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=353,slow=6.4,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **80.98** | **159** | P | **P** | **07 08 59.1** | **-0.5** |
| | comp=Z,0.4nm,0.7s,baz=359,slow=8.3,SNR=2.9 | | | | | | |

*SOME* ***11*** *06:57:34.2,41.˚40N×71.˚00E,h10km*
*NNC* ***11*** *06:57:41.4±6.7,41.˚71N×71.˚19E,h0km,mb3.0,mpv2.8, Error ellipse: s-maj=62.3km s-min=27.0km az=9.0*
**ISC 11 06:57:34.4±2.8,41.˚4N±0.˚2×71.˚04E±0.˚07,h10km,n6,**
**σ1§86/11,5C-1D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KK08** | **Karatay Array** | **1.75** | **347** | ⇓Pn | | **Pg** | | **06 58 07.2** | **-0.7** |
| | 6.9nm,0.6s,baz=157,slow=14 | | | | | | | | |
| KK08 | | | | ⇑Sn | | **Sg** | | **06 58 31.5** | **+0.9** |
| | 8.9nm,0.6s,baz=155,slow=25 | | | | | | | | |
| **BRLS** | **Boroldoy** | **1.85** | **332** | *e*P | | **Pn** | | **06 58 05.8** | **-0.5** |
| | 7.0nm,0.5s | | | | | | | | |
| BRLS | | | | *e*S | | **Sn** | | **06 58 30.1** | **+0.3** |
| | 22nm,0.6s | | | | | | | | |
| **MRKS** | **Merke** | **2.11** | **50** | *e*P | | **Pb** | | **06 58 12.7** | **-0.1** |
| | 4.0nm,0.7s | | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | | **06 58 41.3** | **-0.8** |
| | 5.3nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.85** | **63** | ⇑Pn | | **Pn** | | **06 58 22.9** | **+2.8** |
| | 3.7nm,0.6s | | | | | | | | |
| AAK | | | | ⇑Sn | | **Sb** | | **06 59 02.8** | **+2.3** |
| | 6.2nm,0.9s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.71** | **64** | ⇑Pg | | **Pg** | | **06 58 43.3** | **-2.1** |
| | 0.8nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | | 06 59 29.9 | |
| | 3.2nm,0.7s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.12** | **55** | *e*P | | **Pg** | | **06 58 50.7** | **-2.6** |
| | 2.5nm,1.1s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | | **06 59 45.8** | **-0.8** |
| | 2.4nm,0.4s | | | | | | | | |

*IDC* ***11*** *07:02:21.6±0.7,3.˚89N×82.˚56W,h0km,mb4.1/15, mb1 4.4/19,mb1mx4.3/31,mbtmp4.2/19,ML3.7/4,MS3.9/42, Ms1 3.9/42,ms1mx3.8/63,Error ellipse: s-maj=23.0km s-min=12.8km az=50.0*
*NEIC* ***11*** *07:02:23.4±2.2,3.˚94N±0.˚07×82.˚70W±0.˚07,h10km±1km, mb4.8/34,Error ellipse: s-maj=13.0km s-min=10.8km az=243.0*
*UPA* ***11*** *07:02:26.5±1.7,4.˚19N×82.˚55W,h0km±15km,MW4.8*
*GCMT* ***11*** *07:02:27.4±0.3,3.˚93N±0.˚01×82.˚61W±0.˚02,h14km±1km, MW4.8/97,Moment Tensor Solution. s8,c8; s97,c131, Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.26±.07; Mθθ=0.18±.07; Mϕϕ=0.08±.07; Mrθ=-0.50±.19; Mϕθ=1.70±.07; Mrϕ=0.39±.15; Best double couple: M₀=1.82800×10¹⁶ NP1:ϕs=183.00000°,δ73.00000°,λ=-166.00000°. NP2: ϕs=89.00000°,δ77.00000°,λ=-18.00000°. Principal axes: T 1.8340, Plg3.0000°, Azm136.0000°; N -0.0110, Plg68.0000°, Azm232.0000°; P -1.8230, Plg22.0000°, Azm45.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 11 07:02:23.2±0.4,3.˚87N±0.˚04×82.˚65W±0.˚05,h14km,n210,**
**σ1§65/195,mb4.6/29,MS3.9/38,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CACAO** | **El Cacao, Vera** | **3.89** | **27** | *e*P | | **Pn** | | **07 03 22.3** | **-0.3** |
| CACAO | | | | *e*S | | **Sn** | | **07 04 04.5** | **-3.6** |
| **AZU** | **Azuero** | **4.56** | **31** | *e*P | | **Pn** | | **07 03 31.9** | **0.0** |
| AZU | | | | *e*S | | **Sn** | | **07 04 21.3** | **-3.4** |
| **BRU2** | **Volcan** | **4.90** | **359** | *e*P | | **Pn** | | **07 03 33.4** | **-3.2** |
| **BRU2** | **Volcan** | **4.90** | **359** | | | **Pn** | | **07 03 33.9** | **-2.8** |
| **BRU2** | **Volcan** | **4.90** | **359** | *e*P | | **Pn** | | **07 03 34.1** | **-2.5** |
| BRU2 | | | | *e*S | | **Sn** | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POPC | **Popayan, Colom** | 6.11 | 102 | *e*P | | Pn | 07 03 52.8 | -0.5 | |
| BATAN | **Batan** | 6.24 | 353 | *e*P | | Pn | 07 03 54.9 | 0.0 | |
| BATAN | | | | *e*S | | Sn | 07 05 04.3 | -1.7 | |
| HDC | **Heredia** | 6.27 | 347 | Pn | | Pn | 07 03 53.6 | -1.9 | |
| SOTA | **Rioblanco** | 6.27 | 106 | *e*P | | Pn | 07 03 56.3 | +0.5 | |
| CAO2 | **Cobano, Puntar** | 6.28 | 337 | | | Pn | 07 03 52.6 | -2.9 | |
| YOTC | **Yotoco, Valle** | 6.29 | 89 | *e*P | | Pn | 07 03 55.9 | +0.1 | |
| CHPO | **Chepo, Panama** | 6.33 | 33 | *e*P | | Pn | 07 03 56.6 | +0.4 | |
| PCON | **Cinco Dias** | 6.42 | 104 | *e*P | | Pn | 07 03 59.9 | +1.9 | |
| PLMC | **San Jos del P** | 6.43 | 81 | *e*P | | Pn | 07 03 57.5 | -0.2 | |
| UPD2 | **Meteti** | 6.54 | 44 | *e*P | | Pn | 07 04 01.5 | +2.3 | |
| MARP | **Paez Belalcaza** | 6.76 | 98 | *e*P | | Pn | 07 04 04.6 | +2.3 | |
| JTS | **Las Juntas de** | 6.78 | 340 | | | Pn | 07 04 00.1 | -2.4 | |
| DUNO | **Dulce Nombre,** | 6.79 | 336 | | | Pn | 07 04 01.1 | -1.5 | |
| CBOC | **Ciudad Bolivar** | 6.90 | 73 | *e*P | | Pn | 07 04 04.5 | +0.2 | |
| CBOC | | | | *e*S | | Sn | 07 05 19.7 | -3.1 | |
| CBOC | | | | *i* | | | 07 05 29.0 | | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| COVE | **Coope Vega, Sa** | 7.03 | 346 | | | Pn | 07 04 04.6 | -1.2 | |
| ORTG | **Ortega, Santa** | 7.03 | 337 | | | Pn | 07 04 04.7 | -1.2 | |
| DBBC | **Dabeiba** | 7.13 | 64 | *e*P | | Pn | 07 04 08.6 | +1.3 | |
| ANIL | **Santa Ana** | 7.25 | 85 | *e*P | | Pn | 07 04 10.6 | +1.5 | |
| ANIL | | | | *e*S | | Sn | 07 05 30.8 | -0.7 | |
| ANIL | | | | *i* | | | 07 05 44.7 | | |
| | comp=Z,81nm,0.5s | | | | | | | | |
| NIZA | **Niza - Manizal** | 7.25 | 80 | *e*P | | Pn | 07 04 11.2 | +2.0 | |
| BETC | **Betania** | 7.29 | 99 | *e*P | | Pn | 07 04 12.9 | +3.5 | |
| GARC | **Garzon, Huila** | 7.34 | 109 | *e*P | | Pn | 07 04 11.7 | +1.4 | |
| FLOC | **Florencia** | 7.34 | 108 | *e*P | | Pn | 07 04 10.5 | +0.4 | |
| GUY2C | **Guyana, Caldas** | 7.38 | 79 | *e*P | | Pn | 07 04 13.0 | +1.9 | |
| ORTC | **Ortega, Tolima** | 7.38 | 89 | *e*P | | Pn | 07 04 12.7 | +2.0 | |
| HZTE | **Horizontes, Gu** | 7.41 | 337 | Pn | | Pn | 07 04 10.8 | -0.2 | |
| HELC | **Santa Helena** | 7.46 | 72 | *e*P | | Pn | 07 04 13.0 | +1.0 | |
| HELC | **Santa Helena** | 7.46 | 72 | *e*P | | Pn | 07 04 13.9 | +1.9 | |
| HELC | | | | *e*S | | Sn | 07 05 36.3 | -0.3 | |
| NORC | **Norcasia** | 7.93 | 77 | *e*P | | Pn | 07 04 20.5 | +2.2 | |
| UREC | **San Jos de Ur** | 8.06 | 61 | *e*P | | Pn | 07 04 20.7 | +0.7 | |
| ROSC | **El Rosal** | 8.36 | 83 | Pn | | Pn | 07 04 26.7 | +2.2 | |
| | comp=Z,8.9nm,0.3s,baz=226,slow=4.4,SNR=15 | | | | | | | | |
| ROSC | | | | Sn | | Sn | 07 06 01.9 | +3.0 | |
| | baz=258,slow=20,SNR=1.0 | | | | | | | | |
| ROSC | **El Rosal** | 8.36 | 83 | *e*P | | Pn | 07 04 26.9 | +2.5 | |
| ROSC | **El Rosal** | 8.36 | 83 | | | Pn | 07 04 27.6 | +3.1 | |
| ACON | **Acoyapa** | 8.43 | 343 | | | Pn | 07 04 25.1 | 0.0 | |
| ESPN | **Las Esperanzas** | 8.44 | 349 | Pn | | Pn | 07 04 24.5 | -0.7 | |
| MOTC | **Monteria, Cord** | 8.48 | 55 | Pn | | Pn | 07 04 24.9 | -0.8 | |
| ZARC | **Zaragoza, Cauc** | 8.55 | 65 | *e*P | | Pn | 07 04 28.5 | +1.9 | |
| ZARC | **Zaragoza, Cauc** | 8.55 | 65 | | | Pn | 07 04 28.1 | +1.4 | |
| PTBC | **PUERTO BERRIO,** | 8.58 | 72 | *e*P | | Pn | 07 04 29.5 | +2.4 | |
| SPBC | **San Pablo de B** | 8.73 | 78 | *e*P | | Pn | 07 04 31.7 | +2.5 | |
| PAYG | **Puerto Ayora** | 8.87 | 240 | Pn | | Pn | 07 04 31.9 | +0.9 | |
| CHIC | **Chingaza** | 8.92 | 85 | *e*P | | Pn | 07 04 34.6 | +2.4 | |
| VILC | **Villavicencio,** | 8.94 | 88 | *e*P | | Pn | 07 04 35.3 | +3.2 | |
| MACC | **Macarena, Meta** | 8.95 | 101 | *e*P | | Pn | 07 04 33.4 | +1.2 | |
| SJCC | **San Jacinto, C** | 9.53 | 51 | *e*P | | Pn | 07 04 42.9 | +2.7 | |
| SJCC | **San Jacinto, C** | 9.53 | 51 | Pn | | Pn | 07 04 41.8 | +1.6 | |
| SJCC | **San Jacinto, C** | 9.53 | 51 | *e*P | | Pn | 07 04 42.9 | +2.7 | |
| RUSC | **La Rusia** | 9.74 | 78 | *e*P | | Pn | 07 04 47.9 | +4.4 | |
| BARC | **Barichara** | 9.81 | 74 | *e*P | | Pn | 07 04 46.5 | +2.4 | |
| SMLC | **San Martn de** | 9.83 | 64 | *e*P | | Pn | 07 04 46.9 | +2.6 | |
| OCAC | **Ocana** | 10.24 | 64 | | | Pn | 07 04 50.6 | +0.6 | |
| TAMC | **Tame, Arauca** | 11.11 | 76 | *e*P | | Pn | 07 05 03.7 | +1.9 | |
| ATAH | **Atahualpa** | 11.72 | 159 | Pn | | Pn | 07 05 12.4 | +1.8 | |
| | comp=Z,0.7nm,0.3s,baz=358,slow=8.8,SNR=7.1 | | | | | | | | |
| ATAH | | | | Sn | | Sn | 07 07 19.9 | -1.7 | |
| | comp=Z,0.4nm,0.3s,baz=257,slow=15,SNR=1.4 | | | | | | | | |
| ATAH | | | | LR | | LR | 07 09 30.8 | | |
| | comp=Z,2µm,19.3s,baz=334,slow=37 | | | | | | | | |
| SOCV | **Socops** | 12.52 | 69 | *e*P | | Pn | 07 05 20.2 | -0.9 | |
| SDV | **Santo Domingo** | 12.94 | 67 | Pn | | Pn | 07 05 27.2 | +0.2 | |
| | comp=Z,1.4nm,0.3s,baz=244,slow=12,SNR=10 | | | | | | | | |
| SDV | | | | Sn | | Sn | 07 07 51.1 | +0.1 | |
| | baz=202,slow=13,SNR=1.1 | | | | | | | | |
| SDV | | | | LR | | LR | 07 10 11.4 | | |
| | comp=Z,857nm,21.3s,baz=246,slow=37 | | | | | | | | |
| SDV | **Santo Domingo** | 12.94 | 67 | *e*P | | Pn | 07 05 28.3 | +1.2 | |
| SDV | **Santo Domingo** | 12.94 | 67 | *e*P | | Pn | 07 05 28.5 | +1.5 | |
| SDV | **Santo Domingo** | 12.94 | 67 | Pn | | Pn | 07 05 28.2 | +1.2 | |
| URIC | **Uribia, Colomb** | 13.11 | 53 | Pn | | Pn | 07 05 31.8 | +2.6 | |
| APG | **El Apazote** | 13.48 | 326 | LR | | LR | 07 10 00.3 | | |
| | comp=Z,675nm,19.2s,baz=130,slow=34 | | | | | | | | |
| TBTG | **Tabatinga, AM** | 15.03 | 122 | *e*P | | Pn | 07 05 52.9 | -2.6 | |
| TBTG | **Tabatinga, AM** | 15.03 | 122 | Pn | | Pn | 07 05 55.1 | -0.3 | |
| CZSB | **Cruzeiro do Su** | 15.20 | 139 | | | Pn | 07 05 55.8 | -1.9 | |
| CZSB | | | | | IAmb | IAmb | 07 06 08.3 | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| BAUV | **El Baul** | 15.36 | 70 | Pn | | Pn | 07 05 57.3 | -2.5 | |
| BAUV | | | | | IAmb | IAmb | 07 06 07.6 | | |
| | comp=Z,55nm,1.0s | | | | | | | | |
| NNA | **Nana** | 16.77 | 160 | Pn | | P | 07 06 20.6 | +0.5 | |
| | comp=Z,0.9nm,0.3s,baz=325,slow=9.5,SNR=8.3 | | | | | | | | |
| NNA | | | | LR | | LR | 07 12 22.8 | | |
| | comp=Z,355nm,19.1s,baz=320,slow=36 | | | | | | | | |
| NNA | **Nana** | 16.77 | 160 | | | P | 07 06 21.9 | +1.7 | |
| NNA | | | | | IAmb | IAmb | 07 06 23.3 | | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| CMIG | **Matias Romero** | 17.80 | 318 | P | | Pn | 07 06 29.8 | -0.9 | |
| | comp=Z,0.2nm,0.3s,baz=150,slow=14,SNR=3.7 | | | | | | | | |
| CMIG | | | | LR | | LR | 07 12 12.9 | | |
| | comp=Z,417nm,18.4s,baz=140,slow=33 | | | | | | | | |
| BANI | **BANI** | 18.79 | 39 | P | | Pn | 07 06 44.2 | +1.2 | |
| PCRV | **Puerto La Cruz** | 18.94 | 70 | P | | P | 07 06 43.5 | -0.6 | |
| | comp=Z,0.7nm,0.3s,baz=292,slow=5.0,SNR=5.8 | | | | | | | | |
| DR12 | **Loma Pena Alta** | 19.70 | 40 | P | | Pn | 07 06 53.2 | -0.7 | |
| CRPR | **Cabo Rojo, PR** | 20.71 | 46 | P | | P | 07 07 03.1 | -0.2 | |
| OBIP | **Obispado Ponce** | 21.10 | 47 | P | | P | 07 07 06.3 | -1.2 | |
| OBIP | | | | | IAmb | IAmb | 07 07 12.8 | | |
| | comp=Z,52nm,1.1s | | | | | | | | |
| AOPR | **Arecibo Observ** | 21.19 | 46 | P | | P | 07 07 08.5 | 0.0 | |
| ETMB | **Extrema** | 21.28 | 130 | *e*P | | P | 07 07 09.8 | +0.3 | |
| ETMB | **Extrema** | 21.28 | 130 | P | | P | 07 07 09.4 | -0.1 | |
| ETMB | | | | | IAmb | IAmb | 07 07 15.7 | | |
| | comp=Z,40nm,1.0s | | | | | | | | |
| SJG | **San Juan** | 21.48 | 48 | P | | P | 07 07 11.1 | -0.5 | |
| | comp=Z,21nm,0.8s,baz=315,slow=7.1,SNR=1.4 | | | | | | | | |
| SJG | | | | LR | | LR | 07 14 20.6 | | |
| | comp=Z,96nm,19.4s,baz=252,slow=34 | | | | | | | | |
| SJG | **San Juan** | 21.48 | 48 | P | | P | 07 07 10.9 | -0.7 | |
| SJG | | | | | IAmb | IAmb | 07 07 16.5 | | |
| | comp=Z,32nm,0.9s | | | | | | | | |
| GCPR | **Guaynabo City** | 21.65 | 47 | P | | P | 07 07 13.5 | 0.0 | |
| BOAV | **Boa Vista** | 22.14 | 93 | *e*P | | P | 07 07 19.6 | +0.8 | |
| MACA | **Manacapuru-AM** | 23.03 | 107 | *e*P | | P | 07 07 29.4 | +1.1 | |
| PTGA | **Pitinga** | 23.12 | 101 | P | | P | 07 07 29.0 | -0.1 | |
| | comp=Z,9.6nm,0.8s,baz=287,slow=8.9,SNR=13 | | | | | | | | |
| PTGA | | | | LR | | LR | 07 16 33.5 | | |
| | comp=Z,378nm,18.5s,baz=284,slow=37 | | | | | | | | |
| LPAZ | **La Paz** | 24.64 | 145 | P | | P | 07 07 44.9 | +0.6 | |
| | comp=Z,22nm,1.0s,baz=330,slow=7.3,SNR=30 | | | | | | | | |
| LPAZ | | | | LR | | LR | 07 18 51.9 | | |
| | comp=Z,387nm,20.0s,baz=300,slow=40 | | | | | | | | |
| LPAZ | **La Paz** | 24.64 | 145 | *e*P | | P | 07 07 44.5 | +0.3 | |
| LPAZ | **La Paz** | 24.64 | 145 | P | | P | 07 07 44.6 | +0.3 | |
| PB12 | **IPOC Station P** | 25.42 | 152 | P | | P | 07 07 51.0 | +0.2 | |
| PB12 | | | | | IAmb | IAmb | 07 07 56.2 | | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| PB16 | **IPOC Station P** | 25.58 | 150 | P | | P | 07 07 53.1 | +0.4 | |
| PB16 | | | | | IAmb | IAmb | 07 08 09.8 | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| GO01 | **Chusmiza** | 26.87 | 151 | P | | P | 07 08 06.2 | +1.9 | |
| GO01 | | | | | IAmb | IAmb | 07 08 14.4 | | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| VILB | **Vilhena** | 27.86 | 127 | *e*P | | P | 07 08 14.1 | +1.3 | |
| VILB | **Vilhena** | 27.86 | 127 | P | | P | 07 08 14.6 | +1.8 | |
| VILB | | | | | IAmb | IAmb | 07 08 37.7 | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| SIV | **San Ignacio** | 29.07 | 133 | P | | P | 07 08 24.2 | +0.7 | |
| | comp=Z,1.0nm,0.8s,baz=285,slow=11,SNR=4.5 | | | | | | | | |
| SIV | | | | LR | | LR | 07 20 36.1 | | |
| | comp=Z,631nm,18.7s,baz=292,slow=38 | | | | | | | | |
| 833A | **Chaparral WMA,** | 29.08 | 328 | P | | P | 07 08 23.8 | +0.3 | |
| 833A | | | | | IAmb | IAmb | 07 09 11.2 | | |
| | comp=Z,26nm,1.4s | | | | | | | | |
| NPGB | **Novo Progresso** | 29.32 | 112 | *e*P | | P | 07 08 27.5 | +1.8 | |
| LVC | **Limon Verde** | 29.54 | 154 | LR | | LR | 07 20 52.1 | | |
| | comp=Z,196nm,18.5s,baz=332,slow=38 | | | | | | | | |
| MDP | **Montagnes des** | 29.94 | 87 | LR | | LR | 07 20 50.1 | | |
| | comp=Z,363nm,18.4s,baz=273,slow=37 | | | | | | | | |
| PDRB | **Porto dos Gac** | 30.02 | 121 | *e*P | | P | 07 08 32.7 | +0.8 | |
| PTLB | **Pontes e Lacer** | 30.17 | 130 | *e*P | | P | 07 08 34.3 | +1.1 | |
| PTLB | **Pontes e Lacer** | 30.17 | 130 | P | | P | 07 08 33.5 | +0.3 | |
| CLDB | **Colider** | 30.47 | 119 | *e*P | | P | 07 08 37.9 | +1.9 | |
| H06E1 | **SOCORRO T-PHAS** | 31.36 | 300 | T | | T | 07 41 41.2 | | |
| | SNR=24 | | | | | | | | |
| TKL | **Tuckaleechee C** | 31.65 | 358 | LR | | LR | 07 22 32.3 | | |
| | comp=Z,155nm,18.6s,baz=228,slow=38 | | | | | | | | |
| TXAR | **Lajitas Array** | 32.23 | 324 | P | | P | 07 08 52.6 | +1.1 | |
| | comp=Z,0.5nm,0.9s,baz=142,slow=9.7,SNR=4.5 | | | | | | | | |
| TXAR | | | | LR | | LR | 07 21 43.1 | | |
| | comp=Z,70nm,19.6s,baz=122,slow=36 | | | | | | | | |
| W39A | **Magazine** | 32.84 | 343 | P | | P | 07 08 56.2 | -0.3 | |
| SALV | **Santo Antonio** | 33.12 | 127 | *e*P | | P | 07 09 00.6 | +1.4 | |
| LPIG | **La Paz** | 33.41 | 310 | LR | | LR | 07 21 16.2 | | |
| | comp=Z,74nm,18.3s,baz=149,slow=34 | | | | | | | | |
| SNDB | **Serra Nova Dou** | 34.92 | 117 | *e*P | | P | 07 09 16.6 | +1.6 | |
| MNTX | **Cornudas Mount** | 34.97 | 325 | P | | P | 07 09 15.3 | +0.1 | |
| AQDB | **Aquidauana** | 35.84 | 133 | *e*P | | P | 07 09 23.4 | +0.7 | |
| AQDB | **Aquidauana** | 35.84 | 133 | P | | P | 07 09 22.8 | +0.1 | |
| AQDB | | | | | IAmb | IAmb | 07 09 25.4 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| ARAG | **Araguaiana, MT** | 36.18 | 123 | *e*P | | P | 07 09 25.8 | 0.0 | |
| SMTB | **Santa Maria do** | 37.17 | 110 | *e*P | | P | 07 09 34.5 | +0.2 | |
| H03N2 | **Juan Fernandez** | 37.27 | 175 | T | | T | 07 49 00.9 | | |
| | baz=354,slow=76,SNR=98 | | | | | | | | |
| H03N1 | **Juan Fernandez** | 37.27 | 175 | T | | T | 07 49 01.7 | | |
| | baz=354,slow=76,SNR=119 | | | | | | | | |
| H03N3 | **Juan Fernandez** | 37.28 | 175 | T | | T | 07 49 00.5 | | |
| | baz=354,slow=76,SNR=139 | | | | | | | | |
| PEXB | **Peixe** | 37.65 | 115 | *e*P | | P | 07 09 38.4 | +0.1 | |
| ANMO | **Albuquerque** | 37.99 | 327 | LR | | LR | 07 25 33.1 | | |
| | comp=Z,78nm,20.9s,baz=144,slow=37 | | | | | | | | |
| T25A | **Trinidad** | 38.67 | 332 | P | | P | 07 09 45.8 | -1.1 | |
| T25A | | | | | IAmb | IAmb | 07 09 50.6 | | |
| | comp=Z,36nm,1.4s | | | | | | | | |
| CPUP | **Villa Florida** | 38.75 | 142 | P | | P | 07 09 46.7 | -0.7 | |
| | comp=Z,2.5nm,0.9s,baz=334,slow=12,SNR=4.2 | | | | | | | | |
| CPUP | | | | LR | | LR | 07 26 34.9 | | |
| | comp=Z,263nm,21.1s,baz=326,slow=38 | | | | | | | | |
| CPUP | **Villa Florida** | 38.75 | 142 | *e*P | | P | 07 09 47.5 | +0.1 | |
| MT09 | **Talagante** | 39.02 | 164 | P | | P | 07 09 50.6 | +0.9 | |
| MT09 | | | | | IAmb | IAmb | 07 10 07.7 | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| ROSB | **Rosrio** | 39.08 | 99 | *e*P | | P | 07 09 50.7 | +0.4 | |
| LMEL | **Las Melosas** | 39.31 | 164 | P | | P | 07 09 53.6 | +1.5 | |
| BO04 | **La Punta** | 39.33 | 164 | P | | P | 07 09 52.9 | +0.7 | |
| BDFB | **Brasilia** | 39.38 | 120 | LR | | LR | 07 26 51.5 | | |
| | comp=Z,298nm,20.7s,baz=314,slow=37 | | | | | | | | |
| RPN | **Rapa Nui** | 40.17 | 218 | LR | | LR | 07 22 05.0 | | |
| | comp=Z,143nm,21.4s,baz=30,slow=29 | | | | | | | | |
| IPMB | **Ipameri, GO** | 40.30 | 124 | *e*P | | P | 07 10 00.2 | -0.3 | |
| Q24A | **Divide** | 40.49 | 333 | P | | P | 07 10 01.6 | -0.5 | |
| SDBA | **SAO DESIDERIO** | 40.84 | 114 | *e*P | | P | 07 10 05.2 | +0.1 | |
| SADO | **Sadowa** | 40.85 | 4 | LR | | LR | 07 27 34.5 | | |
| | comp=Z,126nm,20.2s,baz=302,slow=37 | | | | | | | | |
| PTGB | **Pitanga** | 41.12 | 135 | *e*P | | P | 07 10 08.4 | +1.2 | |
| K31A | **O'Neill** | 41.18 | 342 | P | | P | 07 10 07.0 | -0.3 | |
| BB19B | **Bebedouro** | 41.62 | 128 | *e*P | | P | 07 10 10.9 | -0.4 | |
| PV15 | **Paradox Valley** | 41.62 | 329 | P | | P | 07 10 09.6 | -1.8 | |
| PV15 | | | | | IAmb | IAmb | 07 10 14.6 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| ITQB | **Itaqui** | 41.64 | 145 | *e*P | | P | 07 10 12.5 | +1.2 | |
| ITQB | **Itaqui** | 41.64 | 145 | P | | P | 07 10 11.7 | +0.4 | |
| ITQB | | | | | IAmb | IAmb | 07 10 14.6 | | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| JANB | **Januaria** | 42.37 | 117 | *e*P | | P | 07 10 17.5 | 0.0 | |
| W13A | **Hualapai Mount** | 42.45 | 321 | P | | P | 07 10 17.4 | -0.8 | |
| ITAB | **Concordia** | 42.70 | 138 | *e*P | | P | 07 10 19.5 | -0.5 | |
| PFO | **Pinyon Flats O** | 43.22 | 317 | LR | | LR | 07 27 18.8 | | |
| | comp=Z,189nm,19.3s,baz=135,slow=35 | | | | | | | | |
| VAO | **Valinhos** | 43.88 | 129 | *e*P | | P | 07 10 30.5 | +0.7 | |
| DIAM | **Diamantina, MG** | 44.27 | 121 | *e*P | | P | 07 10 34.1 | +1.1 | |
| BSCB | **Bom Sucesso** | 44.60 | 125 | *e*P | | P | 07 10 35.9 | +0.4 | |
| NBPN | **Ponto Novo - B** | 44.71 | 110 | *e*P | | P | 07 10 36.4 | 0.0 | |
| PLTB | **Pedras Altas** | 44.93 | 144 | *e*P | | P | 07 10 38.0 | +0.1 | |
| PDAR | **Pinedale Array** | 45.53 | 332 | P | | P | 07 10 43.8 | +1.0 | |
| | comp=Z,0.6nm,0.7s,baz=139,slow=9.9,SNR=6.3 | | | | | | | | |
| PDAR | | | | LR | | LR | 07 31 31.6 | | |
| | comp=Z,146nm,18.6s,baz=304,slow=38 | | | | | | | | |
| TER01 | **Tubaro-SC** | 45.56 | 137 | *e*P | | P | 07 10 42.6 | -0.3 | |
| PLCA | **Paso Flores** | 45.74 | 167 | P | | P | 07 10 44.3 | 0.0 | |
| | comp=Z,1.2nm,0.7s,baz=315,slow=8.6,SNR=4.3 | | | | | | | | |
| PLCA | **Paso Flores** | 45.74 | 167 | IAmb | | IAmb | 07 11 17.8 | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| NBIT | **Itapeh - BA** | 46.70 | 115 | *e*P | | P | 07 10 53.0 | +0.9 | |
| CMC01 | **Camacan, BA** | 46.77 | 115 | *e*P | | P | 07 10 53.4 | +0.7 | |
| ELK | **Elko** | 46.98 | 326 | LR | | LR | 07 31 04.8 | | |
| | comp=Z,95nm,18.6s,baz=126,slow=37 | | | | | | | | |
| NVAR | **Mina Array Bea** | 47.30 | 321 | P | | P | 07 10 57.9 | +1.1 | |
| | comp=Z,1.9nm,0.8s,baz=139,slow=7.6,SNR=16 | | | | | | | | |
| NVAR | | | | LR | | LR | 07 30 30.8 | | |
| | comp=Z,158nm,19.8s,baz=174,slow=36 | | | | | | | | |
| NVAR | **Mina Array Bea** | 47.30 | 321 | P | | P | 07 10 56.3 | -0.5 | |
| ULM | **Lac du Bonnet** | 47.55 | 349 | P | | P | 07 10 59.6 | +1.3 | |
| | comp=Z,2.4nm,0.4s,baz=163,slow=9.6,SNR=2.9 | | | | | | | | |
| NBAN | **Anadia - AL** | 48.12 | 107 | *e*P | | P | 07 11 03.2 | 0.0 | |
| ORV | **Oroville** | 49.97 | 321 | P | | P | 07 11 16.9 | -0.1 | |
| WVOR | **Wild Horse Val** | 50.01 | 325 | P | | P | 07 11 16.5 | -0.9 | |
| WVOR | | | | | IAmb | IAmb | 07 11 21.2 | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| YBH | **Yreka Blue Hor** | 51.98 | 322 | LR | | LR | 07 36 00.8 | | |
| | comp=Z,120nm,18.7s,baz=20,slow=39 | | | | | | | | |
| FRB | **Frobisher Bay** | 60.64 | 7 | LR | | LR | 07 40 23.4 | | |
| | comp=Z,121nm,18.5s,baz=216,slow=38 | | | | | | | | |
| YKA | **Yellowknife Ar** | 63.11 | 344 | P | | P | 07 12 50.3 | +0.2 | |
| | comp=Z,1.9nm,0.7s,baz=140,slow=6.4,SNR=23 | | | | | | | | |
| PPT | **Papeete** | 69.33 | 250 | LR | | LR | 07 35 49.3 | | |
| | comp=Z,245nm,18.8s,baz=74,slow=29 | | | | | | | | |
| SUMG | **Summit** | 73.78 | 13 | *i* P | | P | 07 13 57.0 | -0.2 | |
| SUMG | **Summit** | 73.78 | 13 | P | | P | 07 13 57.2 | 0.0 | |
| BORG | **Borgarnes** | 74.58 | 23 | LR | | LR | 07 42 19.1 | | |
| | comp=Z,52nm,21.1s,baz=281,slow=32 | | | | | | | | |
| ILAR | **Eielson Array** | 75.74 | 337 | P | | P | 07 14 08.9 | +0.7 | |
| | comp=Z,0.6nm,0.8s,baz=121,slow=4.0,SNR=6.0 | | | | | | | | |
| ILAR | | | | LR | | LR | 07 51 11.4 | | |
| | comp=Z,139nm,18.3s,baz=156,slow=39 | | | | | | | | |
| KDAK | **Kodiak Island** | 76.12 | 329 | LR | | LR | 07 49 09.0 | | |
| | comp=Z,118nm,18.2s,baz=119,slow=37 | | | | | | | | |
| DBIC | **Dimbokro** | 77.45 | 84 | P | | P | 07 14 18.5 | -0.4 | |
| | comp=Z,4.7nm,1.0s,baz=356,slow=19,SNR=2.9 | | | | | | | | |
| DBIC | | | | LR | | LR | 07 45 54.0 | | |
| | comp=Z,42nm,19.4s,baz=322,slow=34 | | | | | | | | |
| MDT | **Midelt** | 77.86 | 57 | LR | | LR | 07 41 53.0 | | |
| | comp=Z,31nm,21.4s,baz=288,slow=30 | | | | | | | | |
| ESDC | **Sonseca Array** | 78.83 | 50 | P | | P | 07 14 26.1 | -0.1 | |
| | comp=Z,3.8nm,1.1s,baz=276,slow=5.1,SNR=7.6 | | | | | | | | |
| ESDC | | | | LR | | LR | 07 46 22.1 | | |
| | comp=Z,27nm,18.8s,baz=284,slow=34 | | | | | | | | |
| RAR | **Rarotonga** | 79.44 | 248 | LR | | LR | 07 40 26.7 | | |
| | comp=Z,115nm,21.7s,baz=100,slow=29 | | | | | | | | |
| JMIC | **Jan Mayen** | 81.22 | 19 | LR | | LR | 07 49 29.8 | | |
| | comp=Z,34nm,20.8s,baz=237,slow=35 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 83.63 | 7 | P | | P | 07 14 52.4 | +0.3 | |
| | comp=Z,3.5nm,1.1s,baz=279,slow=4.7,SNR=5.6 | | | | | | | | |
| SPITS | **Spitsbergen Ar** | 88.09 | 12 | LR | | LR | 07 57 02.0 | | |
| | comp=Z,34nm,20.0s,baz=354,slow=37 | | | | | | | | |
| NOA | **NORSAR Array B** | 88.52 | 29 | LR | | LR | 07 52 10.4 | | |
| | comp=Z,25nm,20.0s,baz=245,slow=34 | | | | | | | | |
| DAVOX | **Davos/Dischmat** | 88.94 | 43 | LR | | LR | 07 49 05.7 | | |
| | comp=Z,32nm,21.2s,baz=298,slow=32 | | | | | | | | |
| HFS | **Hagfors** | 89.84 | 30 | LR | | LR | 07 50 52.2 | | |
| | comp=Z,55nm,20.4s,baz=306,slow=32 | | | | | | | | |
| GERES | **GERESS Array B** | 91.30 | 41 | LR | | LR | 07 49 32.7 | | |
| | comp=Z,40nm,21.4s,baz=262,slow=31 | | | | | | | | |
| ARCES | **ARCESS Array B** | 92.67 | 20 | LR | | LR | 07 51 42.2 | | |
| | comp=Z,53nm,20.7s,baz=289,slow=32 | | | | | | | | |
| VRAC | **Vranov** | 93.11 | 40 | LR | | LR | 07 50 29.0 | | |
| | comp=Z,82nm,19.6s,baz=306,slow=31 | | | | | | | | |
| FINES | **FINESS Array B** | 95.46 | 27 | LR | | LR | 07 54 16.1 | | |
| | comp=Z,56nm,21.2s,baz=298,slow=33 | | | | | | | | |
| MNK | **Minsk** | 98.61 | 34 | *i* P | | P | 07 16 01.0 | -0.7 | |
| | comp=E,2.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | P | 07 16 01.0 | -0.7 | |
| | comp=N,26nm,1.0s | | | | | | | | |
| MNK | | | | *i* P | | P | 07 16 01.0 | -0.7 | |
| | comp=Z,8.0nm,1.5s,baz=289 | | | | | | | | |
| MNK | | | | *i* PP | | PP | 07 20 00.5 | -1.8 | |
| MNK | | | | *i* PPP | | PPP | 07 22 07.3 | | |
| MNK | | | | *i* S | | SKSac | 07 26 39.1 | -0.5 | |
| MNK | | | | *i* SS | | SS | 07 34 17.3 | +2.0 | |
| MNK | | | | *i* SSS | | SSS | 07 38 04.3 | | |
| MNK | | | | *i* LQ | | LQ | 07 55 03.5 | | |
| MNK | | | | *i* LR | | LR | 07 59 30.1 | | |
| MNK | | | | *i* LRM | | MLR | 08 01 47.4 | | |
| | comp=Z,129nm,19.1s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 08 02 16.1 | | |
| | comp=N,557nm,21.0s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 08 02 18.0 | | |
| | comp=E,126nm,21.0s | | | | | | | | |
| KURK | **Kurchatov** | 123.30 | 14 | | | PKiKP | 07 21 21.3 | +1.2 | |
| KURBB | **Kurchatov Arra** | 123.36 | 14 | PKP | | PKiKP | 07 21 21.3 | +1.1 | |
| | comp=E,0.5nm,0.9s,baz=327,slow=1.9,SNR=4.3 | | | | | | | | |
| MKAR | **Makanchi Array** | 127.83 | 13 | PKP | | PKPdf | 07 21 28.2 | -0.6 | |
| | comp=E,0.7nm,0.9s,baz=46,slow=3.5,SNR=5.0 | | | | | | | | |
| SONM | **Songino Array** | 127.91 | 352 | PKP | | PKiKP | 07 21 30.0 | +0.4 | |
| | comp=E,0.2nm,0.3s,baz=46,slow=4.2,SNR=1.9 | | | | | | | | |
| ASAR | **Alice Springs** | 139.61 | 237 | PKP | | PKPdf | 07 21 50.7 | -0.8 | |
| | comp=E,0.5nm,0.9s,baz=123,slow=3.4,SNR=2.5 | | | | | | | | |
| LZH | **Lanzhou** | 139.79 | 352 | *e*PKP | | PKPdf | 07 21 51.7 | 0.0 | |
| WRA | **Warramunga Arr** | 140.58 | 243 | PKhKP | | PKPpre | 07 21 42.8 | | |
| | comp=E,0.7nm,1.0s,baz=119,slow=2.4,SNR=2.8 | | | | | | | | |
| WRA | | | | PKP | | PKPdf | 07 21 53.8 | +0.5 | |
| | comp=E,1.1nm,1.0s,baz=101,slow=7.8,SNR=4.1 | | | | | | | | |
| XAN | **Xi'an** | 140.75 | 345 | PKP | | PKPdf | 07 21 43.1 | -10 | |
| PZH | **PanZhiHua** | 149.51 | 352 | PKPbc | | PKPdf | 07 22 07.5 | -1.2 | |

*IDC* ***11*** *07:03:03.7±0.7,28°.53N×55°.19E, h0km, mb3.7/16, mb1 3.9/19, mb1mx3.8/47, mbtmp3.8/19, ML3.9/3, MS2.8/2, Ms1 2.8/2, ms1mx2.4/85, Error ellipse: s-maj=18.1km s-min=16.8km az=128.0*

*OMAN* ***11*** *07:03:06.8±0.2,28°.61N×55°.26E, h126km±3km, ml3.6/13, Error ellipse: s-maj=6.8km s-min=2.6km az=18.0*

*TEH* ***11*** *07:03:06.0,28°.59N×55°.18E, h8km, ML3.7*

*DSN* ***11*** *07:03:10.3±1.7,28°.34N×55°.41E, h10km, ML3.2/8, Error ellipse: s-maj=33.2km s-min=9.1km az=55.0*

**ISC 11 07:03:05.4**±0.5,**28°.53N**±0°.04×**55°.23E**±0°.04,**h10**km,**n123,**
σ1**81**/140,**mb3.8**/15,**Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| LAR1 | **LAR** | 1.15 | 222 | *e*Pg | | Pb | 07 03 28.0 | +0.6 |
| LAR1 | | | | *e*Sg | | Sn | 07 03 46.7 | +3.3 |
| LAR1 | | | | *e* | | | 07 04 00.0 | |
| | comp=Z,37µm,0.4s | | | | | | | |
| BNDS | **Bandar-Abbas** | 1.40 | 143 | *e*Pg | | Pn | 07 03 33.1 | +1.9 |
| GENO | **Geno** | 1.40 | 143 | *e*Pg | | Pn | 07 03 33.1 | +1.9 |
| JHRM | **Jahrom** | 1.46 | 269 | *e*Pg | | Pn | 07 03 33.3 | +1.4 |
| JHRM | | | | *e* | | | 07 04 16.5 | |
| | comp=Z,12µm,0.7s | | | | | | | |
| NGRK | **Negar Kerman** | 1.72 | 49 | *e*Pg | | Pb | 07 03 38.7 | +1.4 |
| NGRK | | | | *e* | | | 07 04 08.5 | |
| | comp=Z,5µm,0.4s | | | | | | | |
| QIR1 | **Qir** | 1.93 | 269 | *e*Pn | | Pn | 07 03 40.0 | +1.6 |
| QIR1 | | | | *e* | | | 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KRSH | Karshahi | 6.04 335 | *e*Pn | Pn | 07 04 36.6 | +1.6 |
| WSAR | Wadi Sarin | 6.09 149 | Pn | Pn | 07 04 36.3 | +0.7 |
| | comp=Z,6.7nm,0.3s,baz=334,slow=12,SNR=17 | | | | | |
| WSAR | | | Sn | Sn | 07 05 42.8 | -2.7 |
| | comp=Z,0.7nm,0.3s,baz=9.5,slow=12,SNR=1.6 | | | | | |
| WSAR | | | LR | LR | 07 07 50.3 | |
| | comp=Z,45nm,20.1s,baz=324,slow=47 | | | | | |
| WSAR | Wadi Sarin | 6.09 149 | P | Pn | 07 04 36.6 | +1.0 |
| | SNR=6.2 | | | | | |
| WSAR | | | S | Sn | 07 05 45.7 | +0.3 |
| QAMS | Qamsar | 6.14 329 | *e*Pn | Pn | 07 04 37.4 | +0.9 |
| ISFB | Sefidab | 6.34 337 | *e*Pn | Pn | 07 04 40.6 | +1.5 |
| SRVN | Saravan | 6.43 98 | *e*Pn | Pn | 07 04 44.1 | +3.7 |
| JMDO | Jabal Madar | 6.66 156 | P | Pn | 07 04 45.0 | +1.6 |
| | SNR=5.4 | | | | | |
| WBK | Wadi Bani Khal | 6.79 149 | P | Pn | 07 04 46.0 | +0.8 |
| | SNR=9.5 | | | | | |
| KHMZ | Khomeyn | 6.88 320 | *e*Pn | Pn | 07 04 47.4 | +0.7 |
| IVRN | Varamin | 7.10 336 | *e*Pn | Pn | 07 04 50.8 | +1.3 |
| JLN | Jalan Bani Buh | 7.39 148 | P | Pn | 07 04 54.0 | +0.5 |
| | SNR=8.0 | | | | | |
| JLN | | | S | Sn | 07 06 15.1 | -2.2 |
| ASAO | Ashtian | 7.46 325 | *e*Pn | Pn | 07 04 55.7 | +1.0 |
| IDOB | Doab | 8.00 313 | *e*Pn | Pn | 07 05 00.7 | -1.3 |
| HSAM | Samen | 8.01 317 | *e*Pn | Pn | 07 05 01.9 | -0.3 |
| IKFM | Kafar-mosalman | 8.06 310 | *e*Pn | Pn | 07 05 03.2 | +0.7 |
| HAGD | Aghdareh | 8.14 322 | *e*Pn | Pn | 07 05 04.2 | +0.3 |
| IRAZ | Razeghan | 8.20 328 | *e*Pn | Pn | 07 05 05.3 | +0.6 |
| IBZA | Bozab | 8.64 315 | *e*Pn | Pn | 07 05 10.4 | -0.4 |
| DQM | DQM | 8.82 166 | P | Pn | 07 05 13.0 | 0.0 |
| | SNR=9.9 | | | | | |
| IDHR | Dehrash | 9.73 311 | *e*Pn | Pn | 07 05 24.7 | -1.0 |
| DOK | Doka | 9.92 186 | P | Pn | 07 05 28.0 | -0.2 |
| | SNR=8.8 | | | | | |
| RAYN | Ar Rayn | 10.07 243 | P | Pn | 07 05 28.9 | -1.3 |
| SHAO | Shalim | 10.46 178 | P | Pn | 07 05 34.4 | -1.2 |
| | SNR=34 | | | | | |
| WHFO | Wadi Hawf | 10.65 188 | P | Pn | 07 05 37.1 | -1.1 |
| | SNR=37 | | | | | |
| DMTO | DMTO | 10.77 181 | P | Pn | 07 05 39.0 | -0.8 |
| | SNR=12 | | | | | |
| ABTO | Aybut | 11.27 190 | P | Pn | 07 05 45.0 | -1.6 |
| | SNR=38 | | | | | |
| ASF | Jabal al Asfar | 16.24 287 | Pn | Pn | 07 06 51.1 | -2.7 |
| | comp=Z,0.2nm,0.3s,baz=72,slow=19,SNR=2.0 | | | | | |
| MMAI | Mount Meron Ar | 17.61 290 | P | Pn | 07 07 10.3 | -0.8 |
| | comp=Z,0.6nm,0.3s,baz=168,slow=20,SNR=1.7 | | | | | |
| MMAI | | | LR | LR | 07 15 41.9 | |
| | comp=Z,61nm,18.6s,baz=338,slow=43 | | | | | |
| AAK | Ala-Archa | 20.99 43 | P | P | 07 07 50.5 | +1.4 |
| | comp=Z,1.4nm,0.8s,baz=230,slow=11,SNR=2.4 | | | | | |
| BRTR | Keskin Array B | 21.02 308 | P | P | 07 07 48.8 | -0.6 |
| | comp=Z,4.3nm,0.8s,baz=128,slow=11,SNR=4.8 | | | | | |
| AKTO | Aktyubinsk | 21.98 5 | P | P | 07 07 58.9 | -0.6 |
| | comp=Z,1.2nm,0.8s,baz=163,slow=12,SNR=3.7 | | | | | |
| BVAR | Borovoye Array | 26.91 20 | P | P | 07 08 46.4 | -0.3 |
| | comp=Z,0.4nm,0.4s,baz=188,slow=2.9,SNR=2.8 | | | | | |
| MKAR | Makanchi Array | 27.92 42 | P | P | 07 08 56.5 | +0.8 |
| | comp=Z,0.1nm,0.4s,baz=225,slow=11,SNR=2.0 | | | | | |
| ZALV | Zalesovo Beam | 33.33 32 | P | P | 07 09 42.7 | -0.7 |
| | comp=Z,0.6nm,0.5s,baz=237,slow=9.1,SNR=3.1 | | | | | |
| KMBO | Kilima Mbogo | 34.16 213 | P | P | 07 09 52.4 | +1.2 |
| | comp=Z,1.2nm,0.3s,baz=17,slow=22,SNR=3.9 | | | | | |
| GERES | GERESS Array B | 37.64 314 | P | P | 07 10 22.0 | +1.4 |
| | comp=Z,0.4nm,0.5s,baz=120,slow=5.8,SNR=1.8 | | | | | |
| FINES | FINESS Array B | 38.19 338 | P | P | 07 10 23.4 | -1.6 |
| | comp=Z,4.0nm,1.1s,baz=153,slow=9.4,SNR=2.8 | | | | | |
| NOA | NORSAR Array B | 43.70 331 | P | P | 07 11 11.9 | +1.5 |
| | comp=Z,0.2nm,0.5s,baz=111,slow=9.8,SNR=2.3 | | | | | |
| TORD | Torodi Ar. Bea | 51.92 264 | P | P | 07 12 13.0 | -1.7 |
| | comp=Z,1.8nm,0.6s,baz=55,slow=7.2,SNR=14 | | | | | |
| KSRS | Korea Array | 60.26 61 | P | P | 07 13 13.0 | -1.1 |
| | comp=Z,0.5nm,0.3s,baz=227,slow=20,SNR=1.9 | | | | | |
| BOSA | Boshof | 63.66 209 | P | P | 07 13 36.2 | -0.8 |
| | comp=Z,0.6nm,0.5s,baz=297,slow=8.3,SNR=1.0 | | | | | |
| YKA | Yellowknife Ar | 88.93 355 | P | P | 07 15 59.4 | -0.5 |
| | comp=Z,0.2nm,0.6s,baz=4.7,slow=4.3,SNR=4.7 | | | | | |
| WRA | Warramunga Arr | 90.27 113 | P | P | 07 16 05.9 | -1.0 |
| | comp=Z,0.4nm,0.7s,baz=278,slow=5.8,SNR=9.6 | | | | | |
| ASAR | Alice Springs | 91.79 116 | P | P | 07 16 14.7 | +0.8 |
| | comp=Z,0.3nm,0.9s,baz=300,slow=5.3,SNR=1.9 | | | | | |

*IDC* ***11*** *07:14:36.2*$_{0}$*0.6,6°.76*$_{N}$*72°.96W,h158*$_{km}$*5km,mb4.0/27, mb1 4.2/34,mb1mx4.2/41,mbtmp4.5/34,MS3.1/2, Ms1 3.1/2,ms1mx2.6/66,Error ellipse: s-maj=8.1km s-min=6.3km az=119.0*

*NEIC* ***11*** *07:14:36.6*$_{\pm}$*2.8,6°.81*$_{N\pm}$*0°.05*$_{\times}$*73°.04W*$_{\pm}$*0°.06,h163*$_{km\pm}$*6km, Error ellipse: s-maj=9.4km s-min=6.5km az=117.0*

*VAO* ***11*** *07:14:37.7*$_{\pm}$*0.3,6°.65*$_{N\times}$*73°.00W,h156*$_{km}$*,mb4.5*

*RSNC* ***11*** *07:14:37.5*$_{\pm}$*1.0,6°.82*$_{N\times}$*73°.14W,h154*$_{km\pm}$*3km,ML4.8, Mw4.7,Fault plane solution: NP1:*$\phi_{s}$*70.00000°,*
*δ69.00000°,*$\lambda$*158.00000°.*

*UPA* ***11*** *07:14:39.3*$_{\pm}$*2.0,6°.98*$_{N\times}$*73°.19W,h100*$_{km}$*,MW4.9*

**ISC 11 07:14:36.1**$_{\pm}$0.5,**6°.82N**$_{\pm}$0°.03$_{\times}$**73°.09W**$_{\pm}$0°.03,**h157**$_{km\pm}$5km, **n445,**$\sigma$**1$46/514,mb4.7/49,48C-43D,Fault plane solution: NP1:**$\phi_{s}$167.42288°,δ83.71511°,$\lambda$13.59036°. **NP2:**$\phi_{s}$75.90692°,δ76.49287°,$\lambda$173.53558°. **Principal axes:** T Plg14.0380°, Azm32.3126°; N Plg75.0516°, Azm191.7857°; P Plg5.0341°, Azm301.0506°; **Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| BARC | Barichara | 0.24 | 202 | ⇑*i*P | | Pn | 07 14 58.5 | +0.8 |
| BARC | | | | *e*S | | Sn | 07 15 13.5 | -0.5 |
| BARC | | | | *i* | | | 07 15 15.4 | |
| | comp=Z,10μm,0.4s | | | | | | | |
| PAMC | Pamplona, Colo | 0.65 | 37 | ⇓*i*P | | Pn | 07 15 01.2 | +1.7 |
| PAMC | | | | *e*S | | Sn | 07 15 18.6 | +1.1 |
| PAMC | | | | *i* | | | 07 15 20.7 | |
| | comp=Z,11μm,0.6s | | | | | | | |
| RUSC | La Rusia | 0.92 | 180 | ⇑*i*P | | Pn | 07 15 02.3 | +0.8 |
| RUSC | | | | *e*S | | Sn | 07 15 21.0 | +0.1 |
| RUSC | | | | *i* | | | 07 15 23.8 | |
| | comp=Z,11μm,0.5s | | | | | | | |
| TAMC | Tame, Arauca | 1.35 | 106 | ⇓*i*P | | Pn | 07 15 06.6 | +2.0 |
| TAMC | | | | *i* | | | 07 15 27.6 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| TAMC | | | | *e*S | | Sn | 07 15 28.0 | +1.5 |
| PTBC | PUERTO BERRIO, | 1.39 | 258 | ⇑*i*P | | Pn | 07 15 04.9 | -0.1 |
| PTBC | | | | *e*S | | Sn | 07 15 26.2 | -0.9 |
| PTBC | | | | *i* | | | 07 15 34.0 | |
| | comp=Z,15μm,0.4s | | | | | | | |
| OCAC | Ocana | 1.43 | 351 | ⇓*e*P | | Pn | 07 15 06.5 | +0.9 |
| OCAC | | | | *e*S | | Sn | 07 15 28.7 | +0.4 |
| OCAC | | | | *i* | | | 07 15 40.4 | |
| | comp=Z,11μm,0.4s | | | | | | | |
| OCAC | Ocana | 1.43 | 351 | | | Pn | 07 15 06.5 | +0.9 |
| SPBC | San Pablo de B | 1.52 | 220 | ⇑*e*P | | Pn | 07 15 07.2 | +0.8 |
| SPBC | | | | *e*S | | Sn | 07 15 29.5 | -0.3 |
| SPBC | | | | *i* | | | 07 15 34.5 | |
| | comp=Z,11μm,0.2s | | | | | | | |
| ZARC | Zaragoza, Cauc | 1.88 | 291 | ⇓*i*P | | Pn | 07 15 10.5 | +0.2 |
| ZARC | | | | *e*S | | Sn | 07 15 36.4 | -0.1 |
| ZARC | | | | *i* | | | 07 15 42.3 | |
| | comp=Z,14μm,0.7s | | | | | | | |
| ZARC | Zaragoza, Cauc | 1.88 | 291 | | | Pn | 07 15 10.7 | +0.5 |
| NORC | Norcasia | 2.17 | 235 | ⇑*e*P | | Pn | 07 15 14.1 | +0.5 |
| NORC | | | | *e*S | | Sn | 07 15 41.9 | -0.6 |
| NORC | | | | *i* | | | 07 15 50.6 | |
| | comp=Z,7μm,0.3s | | | | | | | |
| SMLC | San Martn de | 2.19 | 334 | ⇓*e*P | | Pn | 07 15 14.5 | +0.6 |
| SMLC | | | | *e*S | | Sn | 07 15 43.1 | 0.0 |
| SMLC | | | | *i* | | | 07 15 47.4 | |
| | comp=Z,3μm,0.2s | | | | | | | |
| CHIC | Chingaza | 2.27 | 196 | ⇑*i*P | | Pn | 07 15 16.0 | +0.8 |
| CHIC | | | | *e*S | | Sn | 07 15 45.6 | +0.3 |
| CHIC | | | | *i* | | | 07 15 52.0 | |
| | comp=Z,4μm,0.7s | | | | | | | |
| ROSC | El Rosal | 2.32 | 212 | P | | Pn | 07 15 17.9 | +2.2 |
| | comp=Z,1μm,0.3s,baz=86,slow=14,SNR=584 | | | | | | | |
| ROSC | | | | S | | Sn | 07 15 46.8 | +0.4 |
| | comp=Z,1μm,0.3s,baz=37,slow=20,SNR=7.3 | | | | | | | |
| ROSC | | | | LR | | LR | 07 16 25.1 | |
| | comp=Z,259nm,19.2s,baz=173,slow=47 | | | | | | | |
| ROSC | El Rosal | 2.32 | 212 | ⇑*i*P | | Pn | 07 15 17.9 | +2.2 |
| ROSC | | | | *e*S | | Sn | 07 15 47.6 | +1.3 |
| ROSC | | | | *i* | | | 07 15 52.0 | |
| | comp=Z,9μm,0.4s | | | | | | | |
| ROSC | El Rosal | 2.32 | 212 | | | Pn | 07 15 17.8 | +2.0 |
| HELC | Santa Helena | 2.50 | 256 | *e*P | | Pn | 07 15 18.9 | +1.0 |
| HELC | | | | *e*S | | Sn | 07 15 49.6 | -0.6 |
| HELC | | | | *i* | | | 07 15 56.8 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| HELC | Santa Helena | 2.50 | 256 | *e*P | | Pn | 07 15 18.3 | +0.4 |
| HELC | | | | *e*S | | Sn | 07 15 45.9 | -4.3 |
| UREC | San Jos de Ur | 2.59 | 291 | *e*P | | Pn | 07 15 18.1 | -0.6 |
| UREC | | | | *e*S | | Sn | 07 15 49.4 | -2.2 |
| UREC | | | | *i* | | | 07 16 03.6 | |
| | comp=Z,6μm,0.2s | | | | | | | |
| SOCV | Socops | 2.65 | 57 | *e*P | | Pn | 07 15 19.7 | +0.4 |
| SOCV | | | | *e*S | | Sn | 07 15 51.8 | -1.1 |
| LL1C | La Loma 1 Cana | 2.74 | 350 | *e*P | | Pn | 07 15 22.7 | +2.2 |
| LL1C | | | | *e*S | | Sn | 07 15 57.5 | +2.5 |
| VILC | Villavicencio, | 2.76 | 193 | *e*P | | Pn | 07 15 21.5 | +0.7 |
| VILC | | | | *e*S | | Sn | 07 15 55.3 | -0.2 |
| GUY2C | Guyana, Caldas | 2.76 | 235 | *e*P | | Pn | 07 15 22.2 | +1.0 |
| GUY2C | | | | *e*S | | Sn | 07 15 55.9 | -0.2 |
| GUY2C | | | | *i* | | | 07 16 04.1 | |
| | comp=Z,6μm,0.6s | | | | | | | |
| PTGC | Puerto Gaitan, | 2.77 | 160 | ⇓*i*P | | Pn | 07 15 21.3 | +0.4 |
| PTGC | | | | *e*S | | Sn | 07 15 54.1 | -1.6 |
| PTGC | | | | *i* | | | 07 15 57.8 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| LL6C | La Loma 6 Bece | 2.90 | 356 | ⇑*i*P | | Pn | 07 15 22.9 | +0.4 |
| LL6C | | | | *e*S | | Sn | 07 15 57.2 | -1.3 |
| LL6C | | | | *i* | | | 07 16 07.3 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| LL5C | La Loma 5 El P | 2.98 | 348 | *e*P | | Pn | 07 15 25.0 | +1.6 |
| LL5C | | | | *e*S | | Sn | 07 16 00.9 | +0.7 |
| LL5C | | | | *i* | | | 07 16 06.5 | |
| | comp=Z,3μm,0.2s | | | | | | | |
| CBOC | Ciudad Bolivar | 3.06 | 252 | *e*P | | Pn | 07 15 25.7 | +1.1 |
| CBOC | | | | *e*S | | Sn | 07 16 02.1 | 0.0 |
| CBOC | | | | *i* | | | 07 16 04.2 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| DBBC | Dabeiba | 3.10 | 274 | ⇓*i*P | | Pn | 07 15 25.9 | +0.8 |
| DBBC | | | | *e*S | | Sn | 07 16 03.0 | -0.1 |
| CIBA1 | Ibague, SGC | 3.18 | 222 | *e*P | | Pn | 07 15 28.6 | +2.4 |
| CIBA1 | | | | *e*S | | Sn | 07 16 05.7 | +0.7 |
| SDV | Santo Domingo | 3.18 | 50 | P | | Pn | 07 15 27.6 | +1.4 |
| | comp=Z,207nm,0.3s,baz=218,slow=4.1,SNR=542 | | | | | | | |
| SDV | | | | S | | Sn | 07 16 04.4 | -0.7 |
| | comp=Z,459nm,0.3s,baz=276,slow=19,SNR=36 | | | | | | | |
| SDV | Santo Domingo | 3.18 | 50 | *e*P | | Pn | 07 15 27.8 | +1.6 |
| SDV | | | | *e*S | | Sn | 07 16 04.5 | -0.6 |
| SDV | | | | *i* | | | 07 16 07.1 | |
| | comp=Z,1μm,0.4s | | | | | | | |
| SDV | Santo Domingo | 3.18 | 50 | *e*P | | Pn | 07 15 27.7 | +1.4 |
| ANIL | Santa Ana | 3.26 | 225 | *e*P | | Pn | 07 15 28.2 | +0.9 |
| ANIL | | | | *e*S | | Sn | 07 16 08.3 | +1.2 |
| ELOV | Elorza | 3.59 | 87 | *e*P | | Pn | 07 15 32.1 | +1.0 |
| ELOV | | | | *e*S | | Sn | 07 16 13.6 | -0.3 |
| ORTC | Ortega, Tolima | 3.60 | 217 | ⇑*e*P | | Pn | 07 15 32.1 | +0.6 |
| ORTC | | | | *e*S | | Sn | 07 16 14.6 | +0.1 |
| ORTC | | | | *i* | | | 07 16 22.3 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| CVALL | Valledupar, Ce | 3.67 | 357 | *e*P | | Pn | 07 15 32.4 | +0.1 |
| CVALL | | | | *e*S | | Sn | 07 16 15.2 | -0.8 |
| CVALL | | | | *i* | | | 07 16 20.5 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| SJCC | San Jacinto, C | 3.69 | 326 | ⇓*i*P | | Pn | 07 15 32.0 | -0.6 |
| SJCC | | | | *e*S | | Sn | 07 16 13.7 | -2.9 |
| SJCC | | | | *i* | | | 07 16 18.9 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| SJCC | San Jacinto, C | 3.69 | 326 | Pn | | Pn | 07 15 32.0 | -0.6 |
| SJCC | San Jacinto, C | 3.69 | 326 | ⇓*i*P | | Pn | 07 15 32.0 | -0.6 |
| SJCC | | | | *e*S | | Sn | 07 16 09.3 | -7.2 |
| PLMC | San Jos del P | 3.70 | 239 | *e*P | | Pn | 07 15 33.8 | +1.1 |
| PLMC | | | | *e*S | | Sn | 07 16 16.4 | -0.3 |
| PLMC | | | | *i* | | | 07 16 25.5 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| LCBC | Los crdobas, | 3.83 | 302 | *e*P | | Pn | 07 15 34.2 | 0.0 |
| LCBC | | | | *e*S | | Sn | 07 16 17.9 | -1.6 |
| LCBC | | | | *i* | | | 07 16 27.1 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| CRJC | Cerrejon, Guaj | 4.18 | 3 | ⇑*i*P | | Pn | 07 15 38.5 | -0.4 |
| CRJC | | | | *e*S | | Sn | 07 16 24.5 | -3.4 |
| CRJC | | | | *i* | | | 07 16 32.7 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| GUVC | San Jose del G | 4.27 | 174 | *e*P | | Pn | 07 15 39.7 | -0.4 |
| GUVC | | | | *e*S | | Sn | 07 16 29.1 | -1.0 |
| GUVC | | | | *i* | | | 07 16 35.3 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| YOTC | Yotoco, Valle | 4.29 | 229 | ⇑*e*P | | Pn | 07 15 40.5 | 0.0 |
| YOTC | | | | *e*S | | Sn | 07 16 31.7 | +1.1 |
| SOLC | Bahia Solano | 4.33 | 262 | *e*P | | Pn | 07 15 41.9 | +1.1 |
| SOLC | | | | *e*S | | Sn | 07 16 31.4 | +0.1 |
| SOLC | | | | *i* | | | 07 16 38.9 | |
| | comp=Z,402nm,0.3s | | | | | | | |
| SMRC | Santa Marta, M | 4.46 | 346 | *e*P | | Pn | 07 15 42.7 | +0.2 |
| SMRC | | | | *e*S | | Sn | 07 16 31.1 | -3.3 |
| SMRC | | | | *i* | | | 07 16 35.1 | |
| | comp=Z,977nm,0.3s | | | | | | | |
| PIZC | Pizarro, Choco | 4.63 | 247 | *e*P | | Pn | 07 15 47.0 | +2.2 |
| PIZC | | | | *e*S | | Sn | 07 16 38.9 | +0.6 |
| PIZC | | | | *i* | | | 07 16 47.8 | |
| | comp=Z,733nm,0.5s | | | | | | | |
| PTAC | Punta Ardita, | 4.70 | 274 | *e*P | | Pn | 07 15 45.1 | -0.5 |
| PTAC | | | | *e*S | | Sn | 07 16 31.0 | -8.9 |
| PTAC | | | | *i* | | | 07 16 41.0 | |
| | comp=Z,362nm,0.2s | | | | | | | |
| MACC | Macarena, Meta | 4.71 | 189 | ⇑*i*P | | Pn | 07 15 45.1 | -0.7 |
| MACC | | | | *e*S | | Sn | 07 16 35.8 | -4.4 |
| MACC | | | | *i* | | | 07 16 41.1 | |
| | comp=Z,613nm,0.4s | | | | | | | |
| BETC | Betania | 4.73 | 210 | *e*P | | Pn | 07 15 46.0 | -0.1 |
| BETC | | | | *e*S | | Sn | 07 16 36.4 | -4.5 |
| BETC | | | | *i* | | | 07 16 47.0 | |
| | comp=Z,664nm,0.5s | | | | | | | |
| DABV | Dabajuro | 4.74 | 31 | ⇑*i*P | | Pn | 07 15 46.9 | +0.7 |
| DABV | | | | *e*S | | Sn | 07 16 38.6 | -2.5 |
| MARP | Paez Belalcaza | 4.87 | 216 | *e*P | | Pn | 07 15 48.3 | +0.1 |
| MARP | | | | *e*S | | Sn | 07 16 43.8 | -0.8 |
| URIC | Uribia, Colomb | 4.97 | 13 | *e*P | | Pn | 07 15 48.2 | -0.7 |
| URIC | | | | *e*S | | Sn | 07 16 43.4 | -3.1 |
| URIC | | | | *i* | | | 07 16 58.9 | |
| | comp=Z,284nm,0.4s | | | | | | | |
| URIC | Uribia, Colomb | 4.97 | 13 | Pn | | Pn | 07 15 48.6 | -0.7 |
| UPD2 | Meteti | 5.17 | 290 | ⇑*i*P | | Pn | 07 15 51.2 | -0.7 |
| UPD2 | | | | *e*S | | Sn | 07 16 47.0 | -4.2 |
| GARC | Garzon, Huila | 5.19 | 208 | *e*P | | Pn | 07 15 52.1 | -0.3 |
| GARC | | | | *e*S | | Sn | 07 16 50.8 | -1.1 |
| GARC | | | | *i* | | | 07 16 56.2 | |
| | comp=Z,647nm,0.3s | | | | | | | |
| BAUV | El Baul | 5.43 | 67 | Pn | | Pn | 07 15 54.0 | -1.2 |
| PCON | Cinco Dias | 5.55 | 217 | *e*P | | Pn | 07 15 58.7 | +1.3 |
| PCON | | | | *e*S | | Sn | 07 17 00.3 | -0.6 |
| PCON | | | | *i* | | | 07 17 22.3 | |
| | comp=Z,251nm,0.5s | | | | | | | |
| POPC | Popayan, Colom | 5.55 | 220 | ⇑*e*P | | Pn | 07 15 57.8 | +0.6 |
| POPC | | | | *e*S | | Sn | 07 16 54.5 | -6.1 |
| FLOC | Florencia | 5.80 | 206 | ⇑*e*P | | Pn | 07 16 00.3 | +0.1 |
| FLOC | | | | *e*S | | Sn | 07 17 06.3 | +0.2 |
| FLOC | | | | *i* | | | 07 17 34.6 | |
| | comp=Z,217nm,0.4s | | | | | | | |
| SOTA | Rioblanco | 5.83 | 217 | *e*P | | Pn | 07 16 02.7 | +1.7 |
| SOTA | | | | *e*S | | Sn | 07 17 06.7 | -0.8 |
| SOTA | | | | *i* | | | 07 17 20.3 | |
| | comp=Z,294nm,0.7s | | | | | | | |
| CHPO | Chepo, Panama | 6.41 | 292 | ⇑*e*P | | Pn | 07 16 07.0 | -1.2 |
| CHPO | | | | *e*S | | Sn | 07 17 15.5 | -5.0 |
| CHPO | | | | *i* | | | 07 17 17.4 | |
| AUA1 | Aruba | 6.41 | 28 | | | Pn | 07 16 09.6 | +1.3 |
| HATO | Hato, Curacao | 6.71 | 37 | | | Pn | 07 16 11.4 | -0.9 |
| UPA | Univ. de Panam | 6.73 | 289 | ⇓*e*P | | Pn | 07 16 11.1 | -1.5 |
| UPA | | | | *e*S | | Sn | 07 17 24.5 | -3.9 |
| ARRA3 | Arraijan, Pana | 6.85 | 289 | *e*P | | Pn | 07 16 13.0 | -1.1 |
| CPAS2 | Pasto | 6.94 | 217 | *e*P | | Pn | 07 16 18.4 | +2.7 |
| CPAS2 | | | | *e*S | | Sn | 07 17 33.7 | -0.1 |
| GCUF | Volcan Galeras | 6.99 | 218 | *e*P | | Pn | 07 16 18.1 | +1.6 |
| GCUF | | | | *e*S | | Sn | 07 17 34.1 | -1.2 |
| GCUF | | | | *i* | | | 07 17 43.0 | |
| | comp=Z,69nm,0.4s | | | | | | | |
| PCRI3 | Pocri, Los San | 7.02 | 277 | ⇑*i*P | | Pn | 07 16 16.6 | +0.1 |
| ZANG | Zanguenga, Cho | 7.04 | 288 | ⇑*e*P | | Pn | 07 16 15.6 | -1.2 |
| ACHO3 | Achotines, Los | 7.05 | 275 | ⇑*e*P | | Pn | 07 16 16.9 | +0.1 |
| BCIP | Isla Barro Col | 7.08 | 290 | Pn | | Pn | 07 16 15.9 | -1.2 |
| VTON | El Valle, Cocl | 7.18 | 285 | ⇑*e*P | | Pn | 07 16 19.5 | +0.8 |
| AZU | Azuero | 7.19 | 278 | *e*P | | Pn | 07 16 18.6 | -0.1 |
| AZU | | | | *e*S | | Sn | 07 17 35.3 | -4.1 |
| CHIT3 | Chitre | 7.35 | 279 | ⇑*e*P | | Pn | 07 16 20.8 | 0.0 |
| CHIT3 | | | | *e*S | | Sn | 07 17 38.5 | -4.7 |
| PNME | Penonome | 7.36 | 283 | *e*P | | Pn | 07 16 21.7 | +0.7 |
| CMBC | Cumbal | 7.51 | 219 | *e*P | | Pn | 07 16 25.4 | +2.0 |
| PESE3 | Pese, Herrera | 7.54 | 279 | *e*P | | Pn | 07 16 23.1 | -0.2 |
| CRIS3 | El Cristo, Coc | 7.60 | 281 | *e*P | | Pn | 07 16 24.5 | +0.4 |
| BIRV | Birongo | 7.66 | 61 | Pn | | Pn | 07 16 23.7 | -1.2 |
| CACAO | El Cacao, Vera | 7.73 | 274 | *i* P | | Pn | 07 16 25.4 | -0.5 |
| CALO3 | Calobre, Verag | 7.83 | 281 | *i* P | | Pn | 07 16 28.1 | +0.9 |
| MARI3 | Mariato, Verag | 7.88 | 276 | *e*P | | Pn | 07 16 23.0 | -4.9 |
| RSUS3 | Rio de Jesus, | 8.09 | 279 | *e*P | | Pn | 07 16 33.0 | +2.4 |
| CUSE | Cuicocha Este | 8.36 | 220 | *e*P | | Pn | 07 16 35.3 | +0.6 |
| OTAV | Otavalo | 8.45 | 219 | *e*P | | Pn | 07 16 35.8 | -0.1 |
| OTAV | | | | *e*S | | Sn | 07 18 07.6 | -2.7 |
| OTAV | Otavalo | 8.45 | 219 | *e*P | | Pn | 07 16 36.1 | +0.3 |
| OTAV | Otavalo | 8.45 | 219 | Pn | | Pn | 07 16 34.9 | -1.0 |
| PAC1 | Pacto, Paraso | 8.64 | 221 | *e*P | | Pn | 07 16 39.5 | +1.2 |
| PCRV | Puerto La Cruz | 9.00 | 68 | P | | Pn | 07 16 42.0 | -0.9 |
| | comp=Z,3.7nm,0.3s,baz=237,slow=5.4,SNR=18 | | | | | | | |
| PCRV | | | | S | | Sn | 07 18 20.2 | -2.8 |
| | comp=Z,5.6nm,0.3s,baz=290,slow=23,SNR=1.9 | | | | | | | |
| CHIR3 | Chiriqui UPA, | 9.29 | 280 | ⇓*e*P | | Pn | 07 16 49.0 | +2.3 |
| LOMA3 | Las Lomas, Chi | 9.36 | 280 | *e*P | | Pn | 07 16 49.6 | +2.1 |
| DVD | David | 9.42 | 280 | *e*P | | Pn | 07 16 48.9 | +0.6 |
| LNBQ3 | Los Naranjos, | 9.47 | 283 | ⇓*e*P | | Pn | 07 16 50.6 | +1.4 |
| BC3P | Paso Ancho | 9.64 | 282 | *e*P | | Pn | 07 16 52.8 | +1.3 |
| CNI2 | El Empalme, Bo | 9.64 | 286 | *e*P | | Pn | 07 16 52.2 | +0.9 |
| BRU2 | Volcan | 9.71 | 282 | Pn | | Pn | 07 16 53.0 | +0.6 |
| BRU2 | Volcan | 9.71 | 282 | ⇓*e*P | | Pn | 07 16 54.5 | +2.1 |
| MLIR3 | Monte Lirio, C | 9.84 | 282 | *e*P | | Pn | 07 16 55.5 | +1.5 |
| CDTO | Canoas | 9.85 | 281 | Pn | | Pn | 07 16 55.6 | +1.5 |
| SRBA | San Rafael, Bu | 10.45 | 284 | Pn | | Pn | 07 17 00.8 | -1.2 |
| PEZE | Perez Zeledon, | 10.79 | 284 | | | Pn | 07 17 07.0 | +0.5 |
| CVTR | Volcan Turrial | 11.02 | 287 | Pn | | Pn | 07 17 09.6 | -0.2 |
| RIMA | Rio Macho | 11.05 | 286 | | | Pn | 07 17 08.9 | -1.2 |
| HDC | Heredia | 11.35 | 287 | Pn | | Pn | 07 17 14.8 | +0.8 |
| TBTG | Tabatinga, AM | 11.38 | 164 | *e*P | | Pn | 07 17 12.1 | -2.2 |
| TBTG | | | | *e*S | | Sn | 07 19 13.1 | -7.3 |
| TBTG | Tabatinga, AM | 11.38 | 164 | *e*P | | Pn | 07 17 12.2 | -2.0 |
| TBTG | Tabatinga, AM | 11.38 | 164 | Pn | | Pn | 07 17 11.9 | -2.4 |
| TPP | Pointe-a-Pierr | 12.02 | 72 | *e* | | P | 07 17 31.4 | +2.6 |
| TRN | Trinidad (W) | 12.16 | 71 | *e* | | P | 07 17 30.5 | +0.2 |
| JTS | Las Juntas de | 12.23 | 287 | | | Pn | 07 17 24.2 | -0.9 |
| ESPN | Las Esperanzas | 12.28 | 297 | Pn | | Pn | 07 17 26.0 | +0.2 |
| GRFF | Grenada Fort F | 12.34 | 64 | *e* | | P | 07 17 33.4 | +1.1 |
| DR12 | Loma Pena Alta | 12.43 | 17 | | | Pn | 07 17 26.3 | -1.6 |
| GRGR | Grenville | 12.45 | 64 | *e* | | P | 07 17 31.6 | -2.0 |
| CRPR | Cabo Rojo, PR | 12.55 | 27 | | | Pn | 07 17 27.6 | -1.7 |
| GCMP | Grenada, Carri | 12.80 | 63 | *e* | | P | 07 17 36.6 | -0.8 |
| PDPR | Patillas Dam, | 13.09 | 31 | | | Pn | 07 17 35.1 | -1.1 |
| SJG | San Juan | 13.11 | 30 | P | | Pn | 07 17 35.7 | -0.7 |
| | comp=Z,18nm,0.3s,baz=204,slow=20,SNR=27 | | | | | | | |
| SJG | | | | S | | Sn | 07 19 48.6 | -13 |
| | comp=Z,2.7nm,0.3s,baz=129,slow=23,SNR=2.5 | | | | | | | |
| BOAV | Boa Vista | 13.27 | 109 | *e*P | | Pn | 07 17 39.2 | +0.6 |
| BOAV | Boa Vista | 13.27 | 109 | Pn | | Pn | 07 17 37.0 | -1.6 |
| HUMP | Col San Antoni | 13.28 | 31 | | | Pn | 07 17 38.0 | -0.7 |
| SVB | Belmont | 13.30 | 60 | *e* | | Pn | 07 17 35.6 | -3.3 |
| GCPR | Guaynabo City | 13.30 | 30 | | | Pn | 07 17 37.7 | -1.3 |
| MTP | Monte Pirata | 13.40 | 33 | Pn | | Pn | 07 17 39.4 | -0.8 |
| CUPR | Culebra, Puert | 13.72 | 33 | Pn | | Pn | 07 17 43.6 | -0.6 |
| MCLT | Moule a Chique | 13.77 | 59 | *e* | | P | 07 17 48.4 | +0.2 |
| SLU | Saint Lucia, B | 13.89 | 58 | *e* | | Pn | 07 17 46.9 | +0.4 |
| STVI | Saint Thomas | 13.94 | 34 | | | Pn | 07 17 45.5 | -1.5 |
| BIM | Bigot | 14.07 | 56 | *e* | | P | 07 17 55.1 | +3.6 |
| FDF | Fort de France | 14.12 | 55 | *e* | | Pn | 07 17 49.3 | 0.0 |
| FDF | Fort de France | 14.12 | 55 | | | Pn | 07 17 48.7 | -0.6 |
| MPOM | Morne Pois Mar | 14.20 | 57 | *e* | | Pn | 07 17 49.6 | -0.7 |
| DSLB | Salisbury | 14.29 | 52 | *e* | | P | 07 17 55.6 | +1.6 |
| TBG | Guadaloupe-3 | 14.36 | 50 | *e*P | | Pn | 07 17 53.1 | +0.8 |
| TDBA | Terre de Bas, | 14.37 | 50 | *e*P | | Pn | 07 17 53.0 | +0.7 |
| CZSB | Cruzeiro do Su | 14.46 | 178 | *e*

V48A Smith Brothers 31.42 338 P P 07 20 43.1 +0.7
V48A IAmb IAmb 07 20 46.0
comp=Z,18nm,1.0s
CBN Corbin Frederi 31.48 354 P P 07 20 45.5 +2.6
baz=172
NATX Nacogdoches 31.96 324 P P 07 20 48.7 +1.5
baz=137
AQDB Aquidauana 32.06 148 eP P 07 20 48.0 -0.2
AQDB Aquidauana 32.06 148 P P 07 20 47.6 -0.6
AQDB IAmb IAmb 07 21 24.4
comp=Z,13nm,0.8s
WVT Waverly 32.15 337 P P 07 20 50.4 +1.7
baz=152
ZAIG Zacatecas 32.51 302 P P 07 20 52.2 -0.3
833A Chaparral WMA, 32.81 314 P P 07 20 54.7 0.0
833A IAmb IAmb 07 20 56.0
comp=Z,9.3nm,0.7s
833A Chaparral WMA, 32.81 314 P P 07 20 55.5 +0.8
baz=126
X40A Basin Creek Fa 33.02 329 P P 07 20 58.0 +1.6
baz=142
435B Jarrell 33.09 319 P P 07 20 58.7 +1.6
baz=131
W41B Gary Mavity, V 33.27 331 P P 07 21 00.2 +1.6
baz=144
BDFB Brasilia 33.39 132 P P 07 20 59.8 -0.2
comp=Z,6.9nm,0.7s,baz=290,slow=11,SNR=8.5
BDFB Brasilia 33.39 132 P P 07 20 59.6 -0.4
MIAR Mount Ida 33.44 328 P P 07 21 01.1 +1.0
baz=141
NBPS Pedro II - PI 33.49 109 eP P 07 21 01.5 +0.6
O56A Blue Knob Stat 33.66 352 P P 07 21 03.5 +1.5
baz=170
P52A Corning 33.67 347 P P 07 21 03.3 +1.3
baz=164
WHTX Lake Whitney, 33.82 321 P P 07 21 05.0 +1.6
baz=133
SDBA SAO DESIDERIO 33.91 124 eP P 07 21 04.2 -0.3
N59A State Game Lan 34.04 356 P P 07 21 07.4 +2.3
baz=175
W39A Magazine 34.05 329 P P 07 21 07.0 +1.6
baz=141,SNR=6.0
O53A New Philadelph 34.07 349 P P 07 21 07.0 +1.6
baz=166
JCT Junction City 34.38 317 P P 07 21 09.1 +0.7
baz=128
ACSO Alum Creek Sta 34.43 347 P P 07 21 10.7 +2.2
baz=163
U40A Yellville 34.51 331 P P 07 21 10.6 +1.2
baz=144,SNR=14
N54A Moraine State 34.55 351 P P 07 21 11.6 +2.0
baz=168
ITRB Iturama 34.58 140 eP P 07 21 10.0 -0.1
IPMB Ipameri, GO 34.79 135 eP P 07 21 12.8 +0.8
M54A Oil Creek Stat 35.03 351 P P 07 21 16.5 +2.7
baz=169
CCM Cathedral Cave 35.19 335 P P 07 21 16.6 +1.6
baz=148
BINY Binghamton 35.33 356 P P 07 21 18.9 +2.7
baz=175
PCMB Pacaembu 35.45 143 eP P 07 21 17.7 +0.2
HRV Adam Dziewonsk 35.57 2 P P 07 21 20.5 +2.3
baz=183
ABTX Abilene, Hawle 35.62 320 P P 07 21 20.3 +1.4
baz=130
NBPB Pedra_Branca-C 35.62 109 eP P 07 21 19.3 +0.2
TUL1 Leonard 35.65 327 P P 07 21 19.8 +0.7
baz=139,SNR=5.2
SFIN Lafayette 35.69 342 P P 07 21 21.1 +1.8
baz=156
JANB Januaria 35.87 127 eP P 07 21 20.6 -0.6
QUOK Quay 36.34 327 P 07 21 25.6 +0.6
QUOK IAmb IAmb 07 21 26.5
comp=Z,18nm,0.6s
TXAR Lajitas Array 36.48 312 P P 07 21 27.7 +1.3
comp=Z,6.5nm,0.6s,baz=127,slow=9.3,SNR=103
TXAR PcP PcP 07 23 48.1 +1.1
comp=Z,1.1nm,0.6s,baz=140,slow=5.3,SNR=6.0
TXAR ScP ScP 07 27 18.8 -0.2
comp=Z,0.7nm,1.0s,baz=159,slow=3.9,SNR=2.4
TXAR LR LR 07 39 59.4
comp=Z,33nm,18.7s,baz=317,slow=42
TXAR Lajitas Array 36.48 312 P P 07 21 27.6 +1.2
TX31 Lajitas Ar. Si 36.49 312 P P 07 21 27.7 +1.3
TX31 IAmb IAmb 07 21 28.6
comp=Z,22nm,0.7s
TX32 Lajitas Array 36.49 312 P P 07 21 27.3 +0.9
WMOK Wichita Mounta 36.50 323 P P 07 21 26.8 +0.4
baz=134,SNR=7.5
HDIL Hopedale 36.59 339 P P 07 21 27.8 +0.8
baz=152
BB19B Bebedouro 36.74 140 eP P 07 21 27.8 -0.7
P40A Paris 36.76 335 P P 07 21 28.6 +0.2
NBMA Muriti-CE 37.02 112 eP P 07 21 31.5 +0.4
NBPN Ponto Novo - B 37.15 118 eP P 07 21 31.8 -0.2
LBNH Lisbon 37.29 1 P P 07 21 35.1 +2.3
baz=182
PTGB Pitanga 37.45 148 eP P 07 21 34.6 +0.1
P38A Dawn 37.48 334 P P 07 21 35.6 +1.1
P38A IAmb IAmb 07 21 35.9
comp=Z,14nm,0.6s
LONY Lake Ozonia 37.67 358 P P 07 21 38.1 +2.0
baz=178
SADO Sadowa 38.17 353 P P 07 21 41.4 +1.2
comp=Z,11nm,0.6s,baz=196,slow=2.3,SNR=10
SADO ScP S 07 27 24.2 +2.4
comp=Z,17nm,1.1s,baz=126,slow=1.7,SNR=3.1
DIAM Diamantina, MG 38.28 131 eP P 07 21 41.4 -0.2
AMTX Amarillo 38.37 321 P P 07 21 43.9 +1.7
baz=130
PKME Peaks-Kenny Pk 38.44 4 P P 07 21 44.0 +1.5
baz=186
KSU1 Kansas State U 38.50 330 P P 07 21 44.0 +1.0
baz=141
MSTX Muleshoe 38.50 319 P P 07 21 44.1 +0.7
baz=128
MNTX Cornudas Mount 38.99 314 P P 07 21 48.2 +0.9
baz=123,SNR=28
JFWS Jewell Farm 39.01 340 P P 07 21 48.2 +1.0
baz=152
GDU01 Guandu, BA 39.03 122 eP P 07 21 47.5 -0.3
VAO Valinhos 39.13 140 eP P 07 21 48.6 0.0
RCBR Riachuelo 39.18 108 eP P 07 21 49.5 +0.4
BSCB Bom Sucesso 39.21 135 eP P 07 21 49.5 +0.2
NBLA Lagarto - SE 39.34 116 eP P 07 21 49.4 -0.9
ITAB Concordia 39.47 150 eP P 07 21 50.9 -0.3
NBIT Itapeh - BA 39.75 123 eP P 07 21 54.0 +0.2
PET01 Itanhaem-SP 39.87 142 eP P 07 21 55.0 +0.4
CMC01 Camacan, BA 39.90 124 eP P 07 21 54.8 -0.2
CBKS Cedar Bluff 39.91 327 P P 07 21 55.7 +0.8
baz=136
NBPV Pedro Velho 39.94 108 eP P 07 21 55.6 +0.2
NBAN Anadia - AL 40.17 114 eP P 07 21 56.6 -0.6
D62A Allapoint, All 40.27 4 P P 07 21 58.1 +0.5
GUA01 Guaratinga, BA 40.31 126 eP P 07 21 58.1 -0.2
SJMB Sao Joao De Ma 40.41 129 eP P 07 21 59.5 +0.4
BGNE Belgrade 41.03 331 P P 07 22 05.1 +1.1
baz=140
121A Cookes Peak, D 41.17 313 P P 07 22 07.7 +2.3
baz=121,SNR=6.2
RIB01 Linhares ES 41.37 129 eP P 07 22 06.5 -0.5
T25A Trinidad 41.51 321 P P 07 22 10.0 +1.8
baz=129,SNR=5.2
ANMO Albuquerque 41.53 317 P P 07 22 10.0 +1.6
baz=125
CPSB Cacapava Do Su 41.54 154 eP P 07 22 08.5 +0.3
DUB01 Friburgo-RJ 41.60 134 eP P 07 22 09.7 +0.8
KSCO Kaye Shedlock' 41.66 325 P P 07 22 10.8 +1.5
baz=133
ALF01 Guarapari-ES 41.89 131 eP P 07 22 11.1 -0.1
SPMN Marine on St. 41.92 339 P P 07 22 12.7 +1.6
baz=150
TER01 Tubaro-SC 42.06 148 eP P 07 22 12.7 +0.2
ECSD EROS Data Cent 42.16 334 P P 07 22 13.8 +0.7
baz=144,SNR=7.1
SDCO Great Sand Dun 42.57 321 P P 07 22 19.0 +2.2
baz=128,SNR=11
Q24A Divide 43.12 323 P P 07 22 23.2 +1.9
baz=130
TUC Tucson 43.27 311 P P 07 22 24.3 +2.0
baz=118
S22A 4UR Ranch, Cre 43.41 320 P P 07 22 25.7 +2.1
baz=127,SNR=11
SUSD Miller 43.75 333 P P 07 22 26.4 +0.5
baz=141,SNR=12
EYMN Ely 43.88 342 P P 07 22 27.5 +0.7
baz=153,SNR=10
W18A Petrified Fore 43.89 315 P P 07 22 29.6 +2.3
baz=121
ISCO Idaho Springs 43.92 323 P P 07 22 29.2 +1.5
baz=130,SNR=7.2
MVCO Mesa Verde 44.18 318 P P 07 22 31.1 +1.5
baz=124,SNR=7.7
214A Orion Pipe Nat 44.65 309 P P 07 22 35.2 +1.9
baz=116,SNR=7.6
N23A Red Feather La 44.82 324 P P 07 22 36.7 +1.9
baz=130,SNR=5.7
PV13 Radium Mtn., P 44.92 319 P P 07 22 36.5 +0.9
PV13 IAmb IAmb 07 22 38.5
comp=Z,12nm,0.6s
B35A Bob, Littlefor 44.95 341 P P 07 22 35.5 +0.2
WUAZ Wupatki 45.24 315 P P 07 22 40.1 +2.1
baz=120,SNR=14
O20A White River Ci 45.72 322 P P 07 22 43.3 +1.5
baz=127
RSSD Black Hills 45.96 329 P P 07 22 44.9 +1.3
baz=135
GLA Glamis 46.66 310 P P 07 22 50.7 +1.7
baz=115
PDMCI Parker Dam,Lak 46.68 312 P P 07 22 50.3 +1.2
baz=116
MDND Maddock 46.71 336 P P 07 22 50.2 +1.0
baz=143,SNR=5.3
ULM Lac du Bonnet 47.30 340 P P 07 22 53.9 +0.2
comp=Z,9.0nm,0.4s,baz=155,slow=8.1,SNR=19
SWSC Sam W. Stewart 47.36 309 P P 07 22 55.7 +1.3
baz=114
IRM Iron Mountain 47.36 311 P P 07 22 55.7 +1.2
baz=115,SNR=6.5
PLCA Paso Flores 47.38 177 P P 07 22 53.0 -1.4
comp=Z,2.0nm,0.8s,baz=354,slow=9.2,SNR=11
PLCA Paso Flores 47.38 177 eP P 07 22 53.8 -0.6
PLCA Paso Flores 47.38 177 IAmb IAmb 07 23 44.2
comp=Z,28nm,1.9s
BC3 Big Chuckawall 47.38 310 P P 07 22 56.0 +1.2
baz=115
IKP In-Ko-Pah, Jac 47.48 309 P P 07 22 56.6 +1.1
baz=113
MONP2 Monument Peak 47.82 309 P P 07 22 59.4 +1.1
baz=113
BELC Belle Mtn. Jos 47.94 310 P P 07 23 00.2 +1.2
baz=114,SNR=6.1
JLU Jordanelle 47.98 321 P P 07 22 59.7 +0.2
GMRC Granite Mounta 48.02 311 P P 07 23 00.8 +1.2
baz=116
BW06 Boulder Array 48.10 324 P P 07 23 01.1 +0.9
baz=128,SNR=5.2
PD31 Pinedale Array 48.10 324 P P 07 22 59.6 -0.7
PDAR Pinedale Array 48.10 324 P P 07 23 01.3 +1.1
comp=Z,2.3nm,0.6s,baz=126,slow=9.4,SNR=28
PDAR PcP PcP 07 24 26.2 +0.7
comp=Z,1.1nm,0.4s,baz=106,slow=7.5,SNR=7.3
PDAR ScP ScP 07 28 05.2 -0.2
comp=Z,0.6nm,0.8s,baz=116,slow=6.8,SNR=4.1
TPFO Pinon Flats 48.13 310 P P 07 23 01.3 +0.8
baz=114
PFO Pinyon Flats O 48.13 310 P P 07 23 01.5 +0.9
baz=114
SCHQ Schefferville 48.14 5 P P 07 23 00.8 +0.8
comp=Z,46nm,0.6s,baz=193,slow=7.3,SNR=186
SCHQ ScP ScP 07 28 04.4 -0.6
comp=Z,5.6nm,0.8s,baz=201,slow=3.5,SNR=6.6
SCHQ Schefferville 48.14 5 P P 07 23 00.9 +0.8
TUQ Turquoise Moun 48.49 312 P P 07 23 04.9 +1.6
baz=116
HEC Hector,Ludlow 48.54 311 P P 07 23 05.0 +1.4
baz=115
DUG Dugway, Tooele 48.63 319 P P 07 23 06.1 +1.8
baz=122,SNR=7.5
BBRC Big Bear Solar 48.74 310 P P 07 23 06.9 +1.5
baz=114
LAO LASA Array 48.85 330 P P 07 23 06.6 +0.8
baz=134
GSC Goldstone, Bar 49.09 312 P P 07 23 09.2 +1.5
baz=115,SNR=7.3
BGU Big Grassy Mou 49.16 320 P P 07 23 08.9 +0.6
BGU IAmb IAmb 07 23 10.6
comp=Z,9.3nm,0.6s
DGMT Dagmar 49.16 333 P P 07 23 08.2 +0.1
DGMT Dagmar 49.16 333 P P 07 23 09.5 +1.5
baz=137,SNR=12
TPNV Topopah Spring 49.39 314 P P 07 23 12.1 +1.9
baz=117,SNR=6.3
RLMT Red Lodge 49.40 327 P P 07 23 11.5 +1.4
baz=130
R11A Troy Canyon, C 49.56 316 P P 07 23 13.1 +1.7
baz=118,SNR=6.8
FURC Furnace Creek, 49.62 313 P P 07 23 13.2 +1.6
baz=116,SNR=5.2
EDW2 Edwards Air Fo 49.80 311 P P 07 23 14.4 +1.3
baz=114,SNR=6.7
LRMC Laurel Mtn Rad 49.81 311 P P 07 23 14.4 +1.1
baz=114
MPMC Manual Prospec 49.91 312 P P 07 23 14.7 +0.6
baz=115
CCAC Calif City Air 49.93 311 P P 07 23 14.0 -0.1
CCAC IAmb IAmb 07 23 16.7
comp=Z,11nm,0.6s
ISA Isabella, Lake 50.48 311 P P 07 23 19.7 +1.5
baz=114
CWC Cottonwood Cre 50.50 312 P P 07 23 20.0 +1.5
baz=115
ELK Elko 50.50 319 P P 07 23 19.6 +1.1
comp=Z,1.2nm,0.5s,baz=88,slow=7.2
TPH Tonopah 50.59 315 P P 07 23 18.6 -0.5
TPH IAmb IAmb 07 23 21.8
comp=Z,50nm,1.4s
TIN Tinemaha, Big 50.87 313 P P 07 23 23.2 +2.1
baz=115
BOZ Bozeman (W) 51.00 326 P P 07 23 23.7 +1.7
baz=127
VES Vestal, Richgr 51.00 311 P P 07 23 23.6 +1.6
baz=113
HLID Hailey 51.46 322 P P 07 23 26.8 +1.3
baz=123,SNR=7.5
NVAR Mina Array Bea 51.51 315 P P 07 23 27.7 +1.7
comp=Z,2.1nm,0.7s,baz=118,slow=6.8,SNR=23
NVAR PcP PcP 07 24 39.2 +1.1
comp=Z,1.0nm,0.5s,baz=134,slow=4.7,SNR=6.3
EGMT Eagleton 51.53 329 P P 07 23 27.1 +1.3
baz=131
HRY Holter Researc 51.79 327 P P 07 23 28.3 +0.4
MSO Missoula 53.02 326 P P 07 23 38.0 +1.1
baz=126
M04C Macdoel 55.39 317 P P 07 23 55.0 +0.8
baz=115
NEW Newport 55.61 326 P P 07 23 56.2 +0.7
comp=Z,1.1nm,0.4s,baz=119,slow=2.1,SNR=2.7
NEW Newport 55.61 326 IAmb IAmb 07 24 35.3
comp=Z,16nm,1.7s
NEW Newport 55.61 326 P P 07 23 56.3 +0.7
baz=123
J05D Fort Rock, OR 55.64 319 P P 07 23 57.1 +1.2
baz=116,SNR=5.4
N02D Trinity Center 55.65 316 P P 07 23 55.6 -0.4
baz=114
K04D Chiloquin, OR 55.69 318 P P 07 23 57.2 +0.9
baz=115
L04D Klamath Falls 55.89 317 P P 07 23 58.3 +0.6
baz=115
M02C Callahan 55.92 316 P P 07 23 58.2 +0.3
baz=114
YBH Yreka Blue Hor 55.96 317 P P 07 23 57.8 -0.5
comp=Z,2.6nm,0.5s,baz=58,slow=13
I05D Terrebonne, OR 56.18 320 P P 07 24 01.3 +1.7
baz=117
J04D Tupgua Nationa 56.19 318 P P 07 24 01.4 +1.4
baz=116
I04A Tendick Farm, 56.63 319 P P 07 24 03.7 +0.8
baz=116
FRB Frobisher Bay 56.91 2 P P 07 24 04.2 -0.1
comp=Z,17nm,0.4s,baz=196,slow=6.8,SNR=135
K02D Willamette Mer 57.00 317 P P 07 24 06.3 +0.8
baz=114
I03D Drain, OR 57.20 318 P P 07 24 07.8 +1.0
baz=115
SFJD Kangerlussuaq 62.02 10 P P 07 24 39.4 +0.1
comp=Z,7.7nm,0.7s,baz=176,slow=4.8,SNR=4.5
YKA Yellowknife Ar 63.27 340 P P 07 24 48.3 +0.6
comp=Z,8.4nm,0.5s,baz=133,slow=6.6,SNR=205
YKA Yellowknife Ar 63.27 340 P P 07 24 48.0 +0.3
ILULI Ilulissat 63.97 9 iP P 07 24 51.7 -0.4
ILULI IAmb IAmb 07 24 52.8
comp=Z,18nm,0.7s
ICESG Greenland Ices 65.95 13 iP P 07 25 04.5 -0.9
ICESG IAmb IAmb 07 25 06.7
comp=Z,44nm,1.1s
WRGLY Wrigley 66.92 338 P P 07 25 12.3 +1.1
baz=124
TIC Toumodi 67.55 86 eP P 07 25 14.2 -1.9
LIC Lamto 67.57 86 eP P 07 25 15.0 -1.3
comp=Z,65nm,0.6s
CRAG Craig 67.70 328 P P 07 25 17.6 +1.3
baz=112
DBIC Dimbokro 67.70 86 P P 07 25 15.9 -1.2
comp=Z,18nm,0.7s,baz=292,slow=6.1,SNR=25
DBIC Dimbokro 67.70 86 IAmb IAmb 07 25 16.8
comp=Z,18nm,0.7s
KIC Kosan Boka 67.84 86 eP P 07 25 16.8 -1.2
comp=Z,52nm,0.6s
RES Resolute Bay 68.98 354 P P 07 25 23.9 0.0
comp=Z,0.9nm,0.4s,baz=170,slow=9.3,SNR=6.2
SUMG Summit 68.98 11 iP P 07 25 23.4 -1.1
SUMG IAmb IAmb 07 25 25.9
comp=Z,53nm,0.8s
SUMG Summit 68.98 11 P P 07 25 24.4 -0.1
ESDC Sonseca Array 69.63 50 P P 07 25 27.5 -1.2
comp=Z,0.6nm,0.6s,baz=268,slow=6.5,SNR=5.1
NEEM North Greenlan 71.55 5 iP P 07 25 40.0 +0.1
NEEM IAmb IAmb 07 25 41.4
comp=Z,45nm,0.9s
MAYO Mayo, Yukon 72.03 335 P P 07 25 44.5 +1.9
baz=112
A36M Sachs Harbour 72.44 345 P P 07 25 45.9 +1.0
baz=125
INK Inuvik 73.04 340 P P 07 25 49.4 +0.9
baz=116
YUK3 Moose Creek 73.42 333 P P 07 25 52.9 +1.8
baz=107
DAWY Dawson 73.65 335 P P 07 25 53.4 +1.2
baz=109
TORD Torodi Ar. Bea 73.71 78 P P 07 25 51.9 -1.5
comp=Z,2.5nm,0.4s,baz=283,slow=6.5,SNR=28
BVCY Beaver Creek 73.78 333 P P 07 25 54.8 +1.8
baz=107
DBG Daneborg 73.94 13 iP P 07 25 53.6 0.0
M27K Edge Creek, AK 74.22 333 P P 07 25 57.0 +1.3
baz=106
L27K Beaver Creek, 74.39 334 P P 07 25 58.1 +1.6
baz=106
EGAK Eagle 74.60 336 P P 07 25 59.2 +1.6
baz=107
M26K Nabesna, AK 74.73 333 P P 07 26 00.4 +1.9
baz=105
K27K Chicken 74.77 335 P P 07 26 00.2 +1.5
baz=106
L26K Log Cabin Wild 75.05 334 P P 07 26 01.8 +1.6
baz=105
J26L Joseph Creek 75.52 335 P P 07 26 04.5 +1.5
baz=105
SCRK Sand Creek 75.57 335 P P 07 26 04.8 +1.5
baz=104
DAG Danmarks Havn 75.65 11 iP P 07 26 02.2 -1.2
DAG IAmb IAmb 07 26 04.0
comp=Z,13nm,0.9s
KLU Klutina 75.87 332 P P 07 26 06.3 +1.2
baz=102
RIDG Independent Ri 75.88 334 P P 07 26 06.7 +1.6
baz=104
PAX Paxson 75.98 333 P P 07 26 07.2 +1.6
baz=103
J25K Salcha River, 76.31 335 P P 07 26 08.6 +1.2
baz=103
SCM Sheep Creek Mo 76.59 332 P P 07 26 10.9 +1.8
baz=101
PWL Port Wells 76.90 331 P P 07 26 12.1 +1.4
baz=100
WAT6 Susitna Watana 76.92 333 P P 07 26 11.8 +0.8
baz=101
HDA Harding Lake 76.93 335 P P 07 26 12.1 +1.2
baz=102
ILAR Eielson Array 76.98 335 P P 07 26 11.8 +0.6
comp=Z,1.1nm,0.6s,baz=100,slow=4.1,SNR=14
KNK Knik Glacier 77.05 331 P P 07 26 13.1 +1.5
baz=100
SML Sawmill 77.06 332 P P 07 26 12.9 +1.2
baz=100
POKR Poker Plat Res 77.28 335 P P 07 26 14.2 +1.4
baz=102
H24K Noodor Dome 77.60 336 P P 07 26 15.8 +1.2
baz=101
MCK McKinley 77.66 334 P P 07 26 15.9 +0.9
baz=100
TRF Thorofare Moun 78.21 333 P P 07 26 18.8 +0.6
baz=98
MLY Manley 78.64 335 P P 07 26 21.3 +0.9
baz=98
COLD Coldfoot 78.76 337 P P 07 26 22.3 +1.3
baz=99
TOLK Toolik Lake Re 78.77 339 P P 07 26 22.2 +1.2
baz=100
PPLA Purkeypile 79.00 333 P P 07 26 23.3 +0.8
baz=97
CAST Castle Rocks 79.01 333 P P 07 26 23.0 +0.6
baz=97
CHUM Lake Minchumin 79.17 334 P P 07 26 24.3 +1.2
baz=97
I21K Tanana 79.18 335 P P 07 26 24.3 +1.1
baz=97
L20K Farewell, AK 79.73 332 P P 07 26 26.8 +0.5
baz=95
N19K Bonanza Creek 79.88 331 P P 07 26 27.6 +0.4
baz=94
K20K Telida 79.89 333 P P 07 26 27.7 +0.5
baz=95
J20K Nowinta River 80.00 334 P P 07 26 28.6 +0.9
baz=95
L19K White Mountain 80.16 332 P P 07 26 29.1 +0.5
baz=94
O18K Koktuh Hills 80.18 330 P P 07 26 29.3 +0.5
baz=93
RSD Rainshed 80.42 289 P P 07 26 29.3 -1.7
TTA Tatalina 80.74 333 P P 07 26 32.7 +1.0
baz=93
NB2 NORSAR Subarra 81.31 29 P P 07 26 35.2 +0.4
comp=Z,3.2nm,0.6s,baz=268,slow=5.3
NOA NORSAR Array B 81.31 29 P P 07 26 35.1 +0.4
comp=Z,3.6nm,0.7s,baz=267,slow=5.4,SNR=15
GERES GERESS Array B 82.80 42 P P 07 26 41.8 -1.1
comp=Z,1.5nm,0.6s,baz=262,slow=2.7,SNR=11
ARCES ARCESS Array B 86.66 20 P P 07 27 01.6 -0.1
comp=Z,2.7nm,0.5s,baz=274,slow=3.4,SNR=24
GAMB Gambell 87.73 334 P P 07 27 08.7 +1.9
baz=79
FINES FINESS Array B 88.43 28 P P 07 27 09.9 -0.3
comp=Z,1.2nm,0.6s,baz=252,slow=3.8,SNR=5.6
MKAR Makanchi Array 122.31 20 PKP PKPdf 07 33 12.4 -0.3
comp=Z,2.2nm,0.4s,baz=301,slow=2.6,SNR=87
SONM Songino Array 125.58 0 PKP PKPdf 07 33 19.5 +0.4
comp=Z,2.4nm,0.5s,baz=314,slow=1.4,SNR=11
KSRS Korea Array 131.78 338 PKP PKPdf 07 33 31.7 +0.8
comp=Z,0.8nm,0.4s,baz=17,slow=2.5,SNR=2.3
LZH Lanzhou 137.22 4 ↑PKP PKPdf 07 33 42.6 +1.1
LZH pPKP pPKPdf 07 34 19.4 -4.4
LZH sPKP 07 34 42.1
STKA Stephens Creek 139.17 228 PKP PKPdf 07 33 43.9 -1.0
comp=Z,1.3nm,0.5s,baz=40,slow=11,SNR=3.8
XAN Xi'an 139.32 357 PKP PKiKP 07 33 48.7 +1.2
PZH PanZhiHua 146.50 8 PKPbc PKPdf 07 33 58.8 +0.6
ASAR Alice Springs 149.13 234 PKP PKPdf 07 34 02.4 -0.1
comp=Z,4.2nm,0.5s,baz=118,slow=3.7,SNR=39
ASAR PKPbc PKPbc 07 34 06.3 -0.5
comp=Z,4.6nm,0.5s,baz=118,slow=3.7,SNR=27
WRA Warramunga Arr 150.36 241 PKP PKPdf 07 34 04.3 -0.2
comp=Z,4.8nm,0.4s,baz=106,slow=2.9,SNR=38
WRA PKPbc PKPbc 07 34 09.6 -0.3
comp=Z,4.8nm,0.4s,baz=106,slow=2.8,SNR=28
CMAR Chiang Mai Arr 153.68 17 PKP PKPdf 07 34 10.0 +0.6
comp=Z,1.5nm,0.6s,baz=301,slow=2.3,SNR=12
CMAR PKPbc PKPbc 07 34 17.8 +0.5
comp=Z,6.1nm,0.6s,baz=323,slow=3.4,SNR=21
CMAR PKPab PKPab 07 34 30.2 -0.2
comp=Z,2.2nm,0.7s,baz=334,slow=4.9,SNR=4.8

*GUC* **11** *07:29:41.5±0.7,21°.70S×68°.44W,h125km±4km,ML3.7*
*IDC* **11** *07:29:50.4±9.5,21°.00S×67°.81W,h193km±80km,mb3.4/1,*
*mb1 3.1/2,mb1mx2.9/24,mbtmp3.6/2, Error ellipse:*
*s-maj=112.5km s-min=96.1km az=88.0*
**ISC 11 07:29:40.1**±1.1**,21°.65S**±0°.04×**68°.51W**±0°.10**,**

**h139**km±10km, **n20**, σ0°75/34, **4C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB09** | **IPOC Station P** | **0.70** | **258** | ⇑*iP* | **Pn** | **07 30 02.0** | **+0.4** |
| PB09 | | | | *e*S | **Sn** | **07 30 17.5** | **-0.4** |
| **LVC** | **Limon Verde** | **1.02** | **201** | *e*P | **Pn** | **07 30 04.3** | **-0.1** |
| LVC | | | | *i* S | **Sn** | **07 30 21.4** | **-1.6** |
| **PB01** | **IPOC Station P** | **1.10** | **303** | ⇑*iP* | **Pn** | **07 30 05.0** | **+0.2** |
| PB01 | | | | *e*S | **Sn** | **07 30 23.2** | **-0.3** |
| PB01 | | | | IAML | | 07 30 25.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| **PB03** | **IPOC Station P** | **1.22** | **251** | ⇑*iP* | **Pn** | **07 30 06.5** | **+0.4** |
| PB03 | | | | *i* S | **Sn** | **07 30 25.2** | **-0.7** |
| PB03 | | | | IAML | | 07 30 27.2 | |
| | comp=N,800nm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **1.28** | **266** | *e*P | **Pn** | **07 30 07.2** | **+0.5** |
| PB07 | | | | *i* S | **Sn** | **07 30 26.8** | **-0.2** |
| PB07 | | | | IAML | | 07 30 28.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **1.33** | **284** | *e*P | **Pn** | **07 30 07.6** | **+0.5** |
| PB02 | | | | *e*S | **Sn** | **07 30 27.8** | **+0.1** |
| PB02 | | | | IAML | | 07 30 32.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| **PB06** | **IPOC Station P** | **1.44** | **223** | *i* P | **Pn** | **07 30 08.8** | **+0.5** |
| PB06 | | | | *e*S | **Sn** | **07 30 29.4** | **-0.5** |
| **PB08** | **IPOC Station P** | **1.62** | **338** | ⇑*iP* | **Pn** | **07 30 11.7** | **+1.1** |
| PB08 | | | | *e*S | **Sn** | **07 30 34.4** | **+0.7** |
| PB08 | | | | IAML | | 07 30 38.6 | |
| | comp=E,494nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **1.67** | **246** | *e*P | **Pn** | **07 30 11.0** | **+0.2** |
| PB04 | | | | *e*S | **Sn** | **07 30 33.9** | **-0.4** |
| PB04 | | | | IAML | | 07 30 41.0 | |
| | comp=N,354nm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.74** | **298** | *e*P | **Pn** | **07 30 12.0** | **+0.4** |
| PATCX | | | | *i* S | **Sn** | **07 30 35.8** | **0.0** |
| **PB15** | **IPOC Station P** | **1.79** | **210** | *e*P | **Pn** | **07 30 13.6** | **+1.3** |
| **HMBC** | **Humberstone** | **1.88** | **316** | *e*P | **Pn** | **07 30 13.3** | **0.0** |
| HMBC | | | | *e*S | **Sn** | **07 30 38.2** | **-0.4** |
| HMBC | | | | IAML | | 07 30 39.9 | |
| | comp=E,1μm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **1.90** | **304** | *e*P | **Pn** | **07 30 13.4** | **0.0** |
| TA01 | | | | *e*S | **Sn** | **07 30 38.4** | **-0.4** |
| **TA02** | **Huaiquique** | **2.05** | **312** | *e*P | **Pn** | **07 30 14.6** | **-0.5** |
| TA02 | | | | *e*S | **Sn** | **07 30 40.5** | **-1.5** |
| **GO01** | **Chusmiza** | **2.08** | **342** | *e*P | **Pn** | **07 30 16.8** | **+0.9** |
| GO01 | | | | IAML | | 07 30 46.6 | |
| | comp=N,629nm,0.3s | | | | | | |
| **PB11** | **IPOC Station P** | **2.17** | **330** | *e*P | **Pn** | **07 30 16.9** | **+0.2** |
| PB11 | | | | *e*S | **Sn** | **07 30 44.6** | **-0.2** |
| **PB10** | **IPOC Station P** | **2.65** | **225** | *e*P | **Pn** | **07 30 22.5** | **0.0** |
| **LPAZ** | **La Paz** | **5.35** | **4** | P | Pn | 07 31 01.4 | +2.8 |
| | comp=N,0.4nm,0.3s,baz=174,slow=19,SNR=6.1 | | | | | | |
| LPAZ | | | | S | **Sn** | **07 31 57.6** | **-2.0** |
| | comp=N,0.1nm,0.3s,baz=229,slow=10.0,SNR=2.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.05** | **70** | P | **P** | **07 41 18.1** | **-0.2** |
| | comp=N,0.6nm,0.5s,baz=251,slow=5.4,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.53** | **36** | PKP | **PKPab** | **07 49 03.4** | **+0.8** |
| | comp=N,0.2nm,0.6s,baz=312,slow=4.7,SNR=2.4 | | | | | | |

*NNC **11** 07:56:34.8±0.3, 50.02N×78.72E, h0km, mb3.7, mpv3.5, Error ellipse: s-maj=6.2km s-min=1.4km az=82.0, Suspected Mining explosion.*
*IDC **11** 07:56:35.4±0.8, 50.04N×78.75E, h0km, mb1 3.2/4, mb1mx2.8/58, mbtmp3.2/4, ML3.0/4, Error ellipse: s-maj=10.8km s-min=6.2km az=66.0*
**ISC 11 07:56:35.1**±0.8, **49.98N**±0.03×**78.76E**±0.06, **h0**km, **n31**, σ2§13/41, **18C-9D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.62** | **345** | ⇓P | **Pg** | **07 56 46.3** | **-0.8** |
| KUR07 | | | | ⇓S | **Sg** | **07 56 55.1** | **-0.1** |
| **KUR06** | **Kurchatov Arra** | **0.64** | **346** | ⇑P | **Pg** | **07 56 46.5** | **-0.9** |
| KUR06 | | | | ⇑S | **Sg** | **07 56 55.4** | **-0.4** |
| **KUR14** | **Kurchatov Arra** | **0.64** | **350** | ⇑P | **Pg** | **07 56 46.5** | **-1.0** |
| KUR14 | | | | ⇓S | **Sg** | **07 56 55.1** | **-0.8** |
| **KUR15** | **Kurchatov Arra** | **0.65** | **349** | ⇑P | **Pg** | **07 56 46.8** | **-0.8** |
| KUR15 | | | | ⇑S | **Sg** | **07 56 55.2** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **0.66** | **347** | Pg | **Pg** | **07 56 46.6** | **-1.2** |
| | 3.5nm,0.3s,baz=166,slow=19,SNR=89 | | | | | | |
| KURBB | | | | Lg | Lg | 07 56 55.6 | |
| | 5.7nm,0.3s,baz=165,slow=32,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.66** | **347** | ⇑P | **Pg** | **07 56 47.0** | **-0.8** |
| | 17nm,0.2s | | | | | | |
| KURBB | | | | ⇓S | **Sg** | **07 56 55.9** | **-0.4** |
| | 170nm,0.6s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.67** | **345** | ⇑P | **Pg** | **07 56 47.1** | **-0.8** |
| KUR16 | | | | ⇓S | **Sg** | **07 56 55.7** | **-0.9** |
| **KUR05** | **Kurchatov Arra** | **0.68** | **348** | ⇑P | **Pg** | **07 56 47.2** | **-0.9** |
| KUR05 | | | | ⇑S | **Sg** | **07 56 56.2** | **-0.7** |
| **KUR17** | **Kurchatov Arra** | **0.68** | **344** | ⇑P | **Pg** | **07 56 47.4** | **-0.7** |
| KUR17 | | | | ⇓S | **Sb** | **07 56 56.8** | **-3.0** |
| **KUR04** | **Kurchatov Arra** | **0.70** | **348** | ⇑P | **Pg** | **07 56 47.7** | **-0.8** |
| KUR04 | | | | ⇑S | **Sg** | **07 56 56.8** | **-0.7** |
| **KURK** | **Kurchatov** | **0.74** | **353** | ⇑P | **Pg** | **07 56 48.2** | **-1.1** |
| | 8.8nm,0.3s | | | | | | |
| KURK | | | | ⇑S | **Sg** | **07 56 57.2** | **-1.7** |
| | 3.8nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **3.83** | **145** | ⇑Pg | **Pb** | **07 57 46.3** | **+2.8** |
| | 1.2nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 07 58 37.5 | |
| | 9.7nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **3.96** | **142** | ⇑Pn | **Pn** | **07 57 39.1** | **+2.0** |
| | 0.2nm,0.1s,baz=325,slow=10,SNR=65 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **07 57 47.7** | **+1.8** |
| | 0.5nm,0.2s,baz=319,slow=12,SNR=24 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 58 41.8 | |
| | 10nm,0.6s,baz=327,slow=26,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **3.96** | **142** | Pn | **Pn** | **07 57 38.9** | **+1.7** |
| | 0.9nm,0.3s,baz=321,slow=10,SNR=74 | | | | | | |
| MKAR | | | | Pg | **Pb** | **07 57 45.2** | **-0.6** |
| | 1.2nm,0.3s,baz=323,slow=12,SNR=16 | | | | | | |
| MKAR | | | | Sn | Sn | 07 58 14.7 | -10 |
| | 0.6nm,0.3s,baz=278,slow=38,SNR=1.3 | | | | | | |
| MKAR | | | | Lg | Lg | 07 58 38.2 | |
| | 4.3nm,0.3s,baz=331,slow=28,SNR=12 | | | | | | |
| **OTUK** | **Ortayu** | **4.56** | **250** | ⇓Pn | **Pn** | **07 57 46.1** | **+0.6** |
| | 1.2nm,0.3s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 58 57.6 | |
| | 12nm,0.8s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.72** | **175** | Pg | **Pb** | **07 58 00.3** | **+1.6** |
| | 2.6nm,0.2s | | | | | | |
| KAPS | | | | Lg | Lg | 07 59 04.5 | |
| | 9.2nm,0.7s | | | | | | |
| **TDK** | **Taldyqorghan** | **4.99** | **183** | Pg | **Pb** | **07 58 06.6** | **+3.3** |
| | 23nm,0.3s | | | | | | |
| TDK | | | | Lg | Lg | 07 59 13.1 | |
| | 14nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.46** | **41** | Pn | **Pn** | **07 57 58.9** | **+1.3** |
| | 2.1nm,0.3s,baz=229,slow=14,SNR=24 | | | | | | |
| ZALV | | | | Sn | **Sn** | **07 59 01.8** | **+0.7** |
| | 0.1nm,0.3s,baz=228,slow=23,SNR=1.0 | | | | | | |
| ZALV | | | | Lg | Lg | 07 59 28.9 | |
| | 0.5nm,0.3s,baz=234,slow=28,SNR=2.2 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.46** | **41** | *i* | | 08 29 10.0 | |
| | baz=222,slow=320,SNR=0.3 | | | | | | |
| **ARXS** | **Arharly** | **5.81** | **187** | Pg | **Pb** | **07 58 21.3** | **+4.0** |
| | 2.3nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 07 59 38.6 | |
| | 20nm,0.6s | | | | | | |
| **BTLS** | **Baital** | **5.88** | **215** | Pg | **Pb** | **07 58 21.7** | **+3.1** |
| | 1.3nm,0.3s | | | | | | |
| BTLS | | | | Lg | Lg | 07 59 40.1 | |
| | 2.4nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **5.89** | **182** | Pg | **Pb** | **07 58 22.4** | **+3.6** |
| | 7.8nm,0.6s | | | | | | |
| BLB | | | | Lg | Lg | 07 59 41.3 | |
| | 7.0nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **6.05** | **303** | Pn | **Pn** | **07 58 05.4** | **-0.4** |
| | 0.3nm,0.3s,baz=116,slow=32,SNR=2.5 | | | | | | |
| BVAR | | | | Sn | **Sn** | **07 59 13.0** | **-2.8** |
| | 0.7nm,0.3s,baz=110,slow=25,SNR=3.2 | | | | | | |
| BVAR | | | | Lg | Lg | 07 59 46.8 | |
| | 1.0nm,0.3s,baz=110,slow=31,SNR=5.1 | | | | | | |
| **CHKK** | **Chushkaly** | **6.25** | **192** | Pg | Pb | 07 58 29.7 | +5.0 |
| | 1.1nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 07 59 53.9 | |
| | 15nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **6.31** | **196** | Pg | **Pb** | **07 58 29.6** | **+3.8** |
| | 1.2nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 07 59 53.2 | |
| | 5.0nm,0.5s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTBS** | **Karatobe** | **6.43** | **194** | Pg | **Pb** | **07 58 32.5** | **+4.6** |
| | 0.8nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 07 59 58.0 | |
| | 7.4nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **6.51** | **184** | Pg | **Pg** | **07 58 36.1** | **-3.7** |
| | 4.7nm,0.9s | | | | | | |
| KURS | | | | Lg | Lg | 08 00 04.3 | |
| | 6.8nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **6.63** | **200** | Pg | Pg | 07 58 37.0 | -5.2 |
| | 0.7nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 08 00 05.6 | |
| | 4.7nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **6.84** | **178** | Pg | **Pg** | **07 58 42.1** | **-4.0** |
| | 1.9nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 08 00 14.6 | |
| | 5.9nm,0.7s | | | | | | |
| **SHLS** | **Shalkode** | **6.84** | **176** | Pg | Pb | 07 58 40.5 | +5.5 |
| | 2.7nm,0.4s | | | | | | |
| SHLS | | | | Lg | Lg | 08 00 11.8 | |
| | 5.6nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **7.92** | **204** | Pn | **Pn** | **07 58 32.6** | **+1.1** |
| | 0.4nm,0.3s,baz=40,slow=5.1,SNR=2.4 | | | | | | |
| AAK | | | | Lg | Lg | 08 00 46.7 | |
| | 0.2nm,0.3s,baz=73,slow=19,SNR=5.0 | | | | | | |

*ISK **11** 08:33:13.9, 39.46N×23.18E, h21km, ML3.5/16*
*ATH **11** 08:33:16.2, 39.58N×23.33E, h24km±1km, ML3.3/4, Error ellipse: s-maj=1.8km s-min=1.0km az=190.0*
*THE **11** 08:33:17.0, 39.59N×23.32E, h14km, ML3.2/11, Error ellipse: s-maj=0.9km s-min=0.4km az=287.0*
**ISC 11 08:33:16.5**±1.1, **39.56N**±0.02×**23.33E**±0.02, **h14**km±9km, **n80**, σ0°93/100, **5C-4D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **XOR** | **Xorichti** | **0.22** | **210** | P | **Pb** | **08 33 22.4** | **+0.1** |
| XOR | | | | S | **Sb** | **08 33 26.2** | **+0.1** |
| | 12μm,0.4s | | | | | | |
| **XOR** | **Xorichti** | **0.22** | **210** | P | **Pb** | **08 33 22.4** | **+0.1** |
| XOR | | | | S | **Sb** | **08 33 26.2** | **+0.1** |
| XOR | | | | AML | AML | 08 33 26.8 | |
| | comp=E,24266μm,0.5s | | | | | | |
| XOR | | | | AML | AML | 08 33 27.3 | |
| | comp=N,22976μm,0.4s | | | | | | |
| **NEO** | **Neokhori** | **0.26** | **199** | P | **Pb** | **08 33 23.1** | **+0.1** |
| NEO | | | | S | **Sb** | **08 33 27.4** | **0.0** |
| | comp=N,8μm,0.4s | | | | | | |
| **NEO** | **Neokhori** | **0.26** | **199** | P | **Pb** | **08 33 23.1** | **+0.1** |
| NEO | | | | S | **Sb** | **08 33 27.4** | **0.0** |
| NEO | | | | AML | AML | 08 33 28.0 | |
| | comp=E,15414μm,0.3s | | | | | | |
| NEO | | | | AML | AML | 08 33 29.1 | |
| | comp=N,16323μm,0.4s | | | | | | |
| **PAIG** | **Paliouri** | **0.46** | **36** | P | **Pg** | **08 33 25.7** | **+0.1** |
| PAIG | | | | S | **Sb** | **08 33 32.6** | **-0.4** |
| | comp=N,6μm,0.5s | | | | | | |
| **PAIG** | **Paliouri** | **0.46** | **36** | P | **Pg** | **08 33 25.7** | **+0.1** |
| PAIG | | | | S | **Sb** | **08 33 32.6** | **-0.4** |
| PAIG | | | | AML | AML | 08 33 35.2 | |
| | comp=E,13790μm,0.5s | | | | | | |
| PAIG | | | | AML | AML | 08 33 35.6 | |
| | comp=N,9653μm,0.5s | | | | | | |
| **ALNA** | **Alonissos** | **0.58** | **134** | P | **Pb** | **08 33 28.6** | **+0.2** |
| ALNA | | | | S | **Sb** | **08 33 37.1** | **+0.7** |
| **LRSO** | **Larissa Observ** | **0.74** | **279** | P | **Pg** | **08 33 29.9** | **-0.9** |
| LRSO | | | | S | **Sb** | **08 33 41.3** | **+0.3** |
| **LRSO** | **Larissa Observ** | **0.74** | **279** | P | **Pg** | **08 33 29.9** | **-0.9** |
| LRSO | | | | S | **Sb** | **08 33 41.3** | **+0.3** |
| **PLG** | **Polygyros** | **0.82** | **6** | P | **Pb** | **08 33 32.0** | **-0.6** |
| PLG | | | | S | **Sg** | **08 33 43.1** | **-0.2** |
| | comp=N,2μm,0.5s | | | | | | |
| **PLG** | **Polygyros** | **0.82** | **6** | P | **Pb** | **08 33 32.0** | **-0.6** |
| **LIT** | **Litokhoron** | **0.85** | **310** | P | **Pb** | **08 33 32.3** | **-0.7** |
| LIT | | | | S | **Sb** | **08 33 44.3** | **0.0** |
| | comp=N,1μm,0.4s | | | | | | |
| **LIT** | **Litokhoron** | **0.85** | **310** | P | **Pb** | **08 33 32.3** | **-0.7** |
| LIT | | | | AML | AML | 08 33 47.6 | |
| | comp=N,2177μm,0.4s | | | | | | |
| LIT | | | | AML | AML | 08 33 48.5 | |
| | comp=E,1727μm,0.2s | | | | | | |
| **ATAL** | **Atalanti** | **0.90** | **196** | P | **Pn** | **08 33 34.8** | **+0.1** |
| ATAL | | | | S | **Sn** | **08 33 48.1** | **+0.7** |
| | comp=E,1μm,0.7s | | | | | | |
| **ATAL** | **Atalanti** | **0.90** | **196** | P | **Pn** | **08 33 34.8** | **+0.1** |
| **OUR** | **Ouranopolis** | **0.92** | **32** | P | **Pb** | **08 33 34.3** | **0.0** |
| OUR | | | | S | **Sg** | **08 33 47.0** | **+0.5** |
| | comp=E,2μm,0.5s | | | | | | |
| **OUR** | **Ouranopolis** | **0.92** | **32** | P | **Pb** | **08 33 34.3** | **0.0** |
| **LKR** | **Lokris** | **0.94** | **196** | P | **Pn** | **08 33 35.5** | **+0.3** |
| LKR | | | | S | **Sn** | **08 33 48.2** | **-0.3** |
| | comp=E,688nm,0.5s | | | | | | |
| **LKR** | **Lokris** | **0.94** | **196** | P | **Pn** | **08 33 35.6** | **+0.3** |
| **AGG** | **Agios Georgios** | **0.94** | **236** | P | **Pg** | **08 33 35.0** | **+0.2** |
| AGG | | | | S | **Sn** | **08 33 48.8** | **+0.2** |
| | comp=E,2μm,0.8s | | | | | | |
| **AGG** | **Agios Georgios** | **0.94** | **236** | P | **Pg** | **08 33 35.0** | **+0.2** |
| **KYMI** | **Kymi, Euboea I** | **1.10** | **147** | P | **Pb** | **08 33 36.9** | **-0.3** |
| KYMI | | | | S | **Sn** | **08 33 52.9** | **+0.5** |
| | comp=E,882nm,0.4s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **1.10** | **147** | P | **Pb** | **08 33 36.9** | **-0.3** |
| **THE** | **Thessaloniki** | **1.11** | **345** | P | **Pb** | **08 33 37.4** | **-0.1** |
| THE | | | | S | **Sb** | **08 33 52.1** | **+0.3** |
| | comp=E,428nm,0.5s | | | | | | |
| **THE** | **Thessaloniki** | **1.11** | **345** | P | **Pb** | **08 33 37.4** | **-0.1** |
| **SKY** | **Skiros Island** | **1.16** | **125** | P | **Pn** | **08 33 37.7** | **-0.6** |
| **SKY** | **Skiros Island** | **1.16** | **125** | P | **Pn** | **08 33 37.7** | **-0.6** |
| **SOH** | **Sokhos** | **1.27** | **1** | P | **Pn** | **08 33 39.7** | **-0.1** |
| **SOH** | **Sokhos** | **1.27** | **1** | P | **Pn** | **08 33 39.7** | **-0.1** |
| **EFSA** | **Agios Efstrati** | **1.28** | **90** | P | **Pg** | **08 33 41.2** | **+0.1** |
| **KOKK** | **Kokkinochori,** | **1.36** | **22** | P | **Pn** | **08 33 40.5** | **-0.5** |
| **KOKK** | **Kokkinochori,** | **1.36** | **22** | P | **Pn** | **08 33 40.5** | **-0.5** |
| **KZN** | **Kozani** | **1.42** | **302** | P | **Pn** | **08 33 42.1** | **+0.2** |
| **KZN** | **Kozani** | **1.42** | **302** | P | **Pb** | **08 33 42.4** | **-0.4** |
| **LIA** | **Limnos Island** | **1.47** | **76** | P | **Pn** | **08 33 42.7** | **+0.2** |
| **LIA** | **Limnos Island** | **1.47** | **76** | P | **Pb** | **08 33 43.8** | **+0.3** |
| **THAS** | **Thassos island** | **1.49** | **45** | P | **Pn** | **08 33 42.3** | **-0.6** |
| **THAS** | **Thassos island** | **1.49** | **45** | P | **Pn** | **08 33 42.3** | **-0.6** |
| **KPRO** | **Kipourio** | **1.57** | **285** | P | **Pn** | **08 33 44.4** | **+0.4** |
| **KPRO** | **Kipourio** | **1.57** | **285** | P | **Pb** | **08 33 44.7** | **-0.6** |
| **SRS** | **Serrai** | **1.57** | **7** | P | **Pn** | **08 33 44.0** | **0.0** |
| **SRS** | **Serrai** | **1.57** | **7** | P | **Pn** | **08 33 44.0** | **0.0** |
| **KNT** | **Kendrikon** | **1.64** | **348** | P | **Pn** | **08 33 45.2** | **+0.3** |
| **KNT** | **Kendrikon** | **1.64** | **348** | P | **Pn** | **08 33 45.3** | **+0.5** |
| **LAKA** | **Lakka** | **1.69** | **219** | P | **Pb** | **08 33 46.7** | **-0.6** |
| **KAVA** | **Kavala** | **1.70** | **32** | P | **Pn** | **08 33 44.9** | **-0.8** |
| **KAVA** | **Kavala** | **1.70** | **32** | P | **Pn** | **08 33 44.9** | **-0.8** |
| **VAY** | **Valandovo** | **1.86** | **342** | *i* Pn | **Pn** | **08 33 48.8** | **+0.9** |
| **GADA** | **Gvkgeada** | **2.07** | **71** | PN | **Pn** | **08 33 50.8** | **0.0** |
| GADA | | | | SN | **Sn** | **08 34 16.9** | **+0.5** |
| **BOZC** | **Bozcaada** | **2.12** | **81** | PN | **Pn** | **08 33 51.2** | **-0.2** |
| BOZC | | | | SN | **Sn** | **08 34 18.2** | **+0.7** |
| **STIP** | **Stip** | **2.31** | **338** | *i* Pn | **Pn** | **08 33 54.4** | **+0.3** |
| **RDO** | **Rodhopi** | **2.31** | **46** | PN | **Pn** | **08 33 54.2** | **0.0** |
| **EZN** | **Ezine** | **2.32** | **82** | PN | **Pn** | **08 33 54.0** | **-0.3** |
| **ENEZ** | **Enez** | **2.46** | **60** | PN | **Pn** | **08 33 56.3** | **+0.1** |
| **OHR** | **Ohrid** | **2.48** | **310** | *i* Pn | **Pg** | **08 34 07.2** | **+3.1** |
| **GELI** | **Tayfur-Gelibol** | **2.56** | **70** | PN | **Pn** | **08 33 57.2** | **-0.3** |
| **ITM** | **Ithomi** | **2.62** | **205** | PN | **Pn** | **08 33 54.2** | **-4.1** |
| **ERIK** | **Erikli-Kesan** | **2.68** | **64** | PN | **Pn** | **08 33 58.9** | **-0.3** |
| **PLD** | **Plovdiv** | **2.75** | **22** | PN | **Pn** | **08 33 59.9** | **-0.2** |
| **URLA** | **Izmir** | **2.81** | **114** | PN | **Pn** | **08 34 00.2** | **-0.8** |
| **DKL** | **Dikili** | **2.81** | **99** | PN | **Pn** | **08 34 00.4** | **-0.6** |
| **UKOP** | **Uzunkopru-Edir** | **2.97** | **57** | PN | **Pn** | **08 34 03.5** | **+0.3** |
| **VTS** | **Vitosha** | **3.06** | **359** | ⇑P | **Pn** | **08 34 05.9** | **+1.3** |
| **RKY** | **Sarkoy-Tekirda** | **3.16** | **68** | PN | **Pn** | **08 34 05.9** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **3.16** | **73** | PN | **Pn** | **08 34 05.3** | **-0.4** |
| **EDRB** | **Edirne** | **3.46** | **47** | PN | **Pn** | **08 34 10.4** | **+0.5** |
| **IDI** | **Anoyia** | **4.44** | **163** | PN | **Pn** | **08 34 21.3** | **-2.1** |
| **YER** | **Yerkesik** | **4.58** | **120** | PN | **Pn** | **08 34 24.2** | **-1.2** |
| **MDVR** | **Moldovita** | **5.36** | **348** | ⇑P | **Pn** | **08 34 36.2** | **+0.2** |
| **GZR** | **Gura Zlata** | **5.85** | **356** | ⇓P | **Pn** | **08 34 43.6** | **+0.8** |
| **ARR** | **Arges** | **5.89** | **9** | ⇓P | **Pn** | **08 34 42.6** | **-0.7** |
| **VOIR** | | **6.01** | **12** | ⇓P | **Pn** | **08 34 44.2** | **-0.8** |
| **RICI** | **Ricice** | **6.09** | **312** | *e*Pn | **Pn** | **08 34 46.6** | **+0.6** |
| **BZS** | **Buzias** | **6.19** | **349** | ⇑P | **Pn** | **08 34 47.7** | **+0.3** |
| **MLR** | **Muntele Rosu** | **6.24** | **17** | ⇓P | **Pn** | **08 34 45.7** | **-2.5** |
| **VRI** | **Vrincioaia** | **6.78** | **20** | ⇑P | **Pn** | **08 34 51.5** | **-4.1** |
| **KIJV** | **Kijevo** | **6.82** | **313** | *e*Pn | **Pn** | **08 34 57.4** | **+1.2** |
| KIJV | | | | Sn | **Sn** | **08 36 10.9** | **-2.6** |
| **ZIRJ** | **Zirje** | **7.07** | **308** | *e*Pn | **Pn** | **08 35 00.2** | **+0.8** |
| **DRGR** | | **7.25** | **357** | ⇑P | **Pn** | **08 35 02.6** | **+0.7** |
| **DUGI** | **Dugi Otok** | **7.61** | **308** | *e*Pn | **Pn** | **08 35 06.4** | **-0.5** |

**IDC 11 08:43:05.0**±2.8, **53.60N**×**87.89E, h0**km, **mb1 3.0**/2, **mb1mx2.9**/39, **mbtmp3.0**/2, **ML2.9**/2, **Error ellipse: s-maj=23.7km s-min=15.0km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.86** | **282** | *i* | | 08 56 20.0 | |
| | baz=96,slow=348,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.86** | **282** | Pg | Pn | 08 43 38.4 | +0.3 |
| | 5.1nm,0.3s,baz=96,slow=17,SNR=52 | | | | | | |
| ZALV | | | | Lg | Lg | 08 44 04.5 | |
| | 4.8nm,0.3s,baz=102,slow=24,SNR=23 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **246** | Pn | Pn | 08 44 42.7 | +1.0 |
| | 0.2nm,0.3s,baz=61,slow=14,SNR=6.1 | | | | | | |
| KURBB | | | | Sn | Sn | 08 45 55.0 | -1.4 |
| | baz=63,slow=27,SNR=1.1 | | | | | | |
| KURBB | | | | Lg | Lg | 08 46 29.1 | |
| | 0.0nm,0.3s,baz=62,slow=32,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70** | **210** | Pn | Pn | 08 44 59.6 | +1.3 |
| | 0.2nm,0.3s,baz=29,slow=14,SNR=15 | | | | | | |
| MKAR | | | | Sn | Sn | 08 46 25.4 | -0.8 |
| | 0.1nm,0.3s,baz=30,slow=32,SNR=3.5 | | | | | | |

**NNC 11 08:43:17.8**±2.7, **51.81N**×**75.50E, h0**km, **mb3.0, mpv2.5, 5C-1D, Error ellipse: s-maj=158.7km s-min=15.0km az=26.0, Suspected Mining explosion., Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURK** | **Kurchatov** | **2.24** | **118** | ⇓Pg | Pb | 08 43 59.1 | -0.1 |
| | 3.6nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 44 26.7 | |
| | 7.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.25** | **121** | ⇑Pg | Pb | 08 43 59.4 | +0.2 |
| | 3.4nm,0.8s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 44 29.5 | |
| | 17nm,0.6s | | | | | | |
| **BVA3** | **Borovoye Array** | **3.37** | **293** | ⇑Lg | Lg | 08 45 03.7 | |
| | 2.1nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **6.70** | **136** | ⇑Lg | Lg | 08 46 51.0 | |
| | 1.4nm,0.7s,baz=318,slow=31,SNR=3.6 | | | | | | |

*IDC **11** 09:23:07.5±1.4, 11.48S×119.00E, h0km, mb3.9/4, mb1 4.2/7, mb1mx3.8/31, mbtmp4.1/7, ML4.4/3, MS3.0/3, Ms1 3.0/3, ms1mx2.5/72, Error ellipse: s-maj=49.5km s-min=20.7km az=53.0*
*DJA **11** 09:23:09.3±0.2, 12°S±3'×11°9E±', h10km, M4.7/19, mb4.8/17, mB5.2/7, MLv4.8/19, Mw(mB)4.6/7*
**ISC 11 09:23:09.4**±0.7, **11°57S**±0'.06×**119°06E**±0'.06, **h10**km, **n54**, σ1§29/54, **mb4.0**/4, **South of Sumba**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **1.95** | **10** | P | **Pn** | **09 23 43.8** | **+1.2** |
| WBSI | | | | S | **Sn** | **09 24 05.6** | **-1.5** |
| **BASI** | **Baing, Sumba** | **2.01** | **48** | P | **Pn** | **09 23 44.5** | **+1.1** |
| BASI | | | | S | **Sn** | **09 24 07.5** | **-1.1** |
| **MMRI** | **Maumere** | **4.28** | **47** | P | **Pn** | **09 24 14.7** | **+0.1** |
| **MMRI** | **Maumere** | **4.28** | **47** | P | **Pn** | **09 24 15.2** | **+0.6** |
| **BATI** | **Baumata** | **4.72** | **74** | Pn | **Pn** | **09 24 22.3** | **+1.5** |
| | 55nm,0.3s,baz=283,slow=3.9,SNR=24 | | | | | | |
| BATI | | | | Sn | **Sn** | **09 25 14.5** | **-1.1** |
| | 54nm,0.3s,baz=346,slow=22,SNR=9.8 | | | | | | |
| **BATI** | **Baumata** | **4.72** | **74** | P | **Pn** | **09 24 22.4** | **+1.7** |
| **IGBI** | **Denpasar** | **4.73** | **305** | P | **Pn** | **09 24 20.8** | **0.0** |
| **DNP** | **Denpasar** | **4.76** | **307** | P | **Pn** | **09 24 22.2** | **+0.9** |
| **SRBI** | **Singaraja** | **5.14** | **312** | P | **Pn** | **09 24 27.2** | **+0.8** |
| **SOEI** | **Soe** | **5.43** | **71** | P | **Pn** | **09 24 32.4** | **+1.8** |
| | 1.2nm4μm302nm,0.6s | | | | | | |
| **SOEI** | **Soe** | **5.43** | **71** | P | **Pn** | **09 24 32.7** | **+2.1** |
| **BSSI** | **Bau Bau, Buton** | **5.58** | **15** | P | **Pn** | **09 24 33.6** | **+1.1** |
| | 0.4nm81nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.73** | **302** | P | **Pn** | **09 24 33.4** | **-1.3** |
| | 0.6nm3μm75nm,0.6s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.73** | **302** | P | **Pn** | **09 24 34.1** | **-0.6** |
| **ABJI** | **Asem Bagus** | **6.06** | **308** | P | **Pn** | **09 24 39.1** | **0.0** |
| | 0.5nm54nm,0.8s | | | | | | |
| **BKSI** | **Bulukumba** | **6.30** | **10** | P | **Pn** | **09 24 44.0** | **+1.6** |
| | 0.4nm908nm56nm,0.6s | | | | | | |
| **GMJI

104nm,0.3s,baz=155,slow=5.0,SNR=16
HNR S **Sn** **09 41 35.3 +0.6**
43nm,0.3s,baz=114,slow=22,SNR=1.8
HNR LR LR 09 42 18.7
comp=Z,458nm,21.4s,baz=128,slow=39
**SANVU Saraoutou 5.74 137** P **Pn** **09 41 22.9 +1.1**
**DVP Devils Point 8.08 144** P **Pn** **09 41 57.4 +3.5**
**DZM Mont Dzumac 11.23 164** P **Pn** **09 42 38.6 +1.4**
0.4nm,0.3s,baz=328,slow=10,SNR=17
DZM S **Sn** **09 44 37.5 -4.1**
0.1nm,0.3s,baz=151,slow=22,SNR=1.2
**MSVF Nonsavu 15.79 116** LR LR 09 48 22.1
comp=Z,122nm,19.2s,baz=303,slow=32
**PMG Port Moresby 15.86 275** P **Pn** **09 43 40.1 +0.4**
0.6nm,0.3s,baz=188,slow=22,SNR=1.9
PMG LR LR 09 49 17.0
comp=Z,57nm,19.1s,baz=22,slow=35
**CTA Charters Tower 18.50 240** P **Pn** **09 44 14.2 +1.4**
0.2nm,0.3s,baz=31,slow=10,SNR=4.8
CTA LR LR 09 50 16.6
comp=Z,111nm,20.6s,baz=79,slow=33
**STKA Stephens Creek 28.61 221** P **P** **09 45 53.3 +1.2**
4.5nm,0.9s,baz=21,slow=9.8,SNR=7.2
STKA LR LR 09 56 02.5
comp=Z,94nm,21.3s,baz=26,slow=34
**WRA Warramunga Arr 29.05 249** P **P** **09 45 55.4 -0.9**
0.8nm,0.5s,baz=78,slow=9.1,SNR=8.4
WRA LR LR 09 56 41.6
comp=Z,108nm,18.9s,baz=36,slow=34
**H11S2 WAKE ISLAND Hy 29.74 7** T T 10 16 59.5
baz=188,slow=76,SNR=48
**H11S3 WAKE ISLAND Hy 29.74 7** T T 10 16 56.7
baz=188,slow=76,SNR=22
**H11S1 WAKE ISLAND Hy 29.75 7** T T 10 17 00.9
baz=188,slow=76,SNR=26
**ASAR Alice Springs 30.46 242** P **P** **09 46 07.7 -1.0**
0.7nm,0.6s,baz=64,slow=10,SNR=8.2
ASAR LR LR 09 57 42.7
comp=Z,70nm,19.6s,baz=72,slow=35
**H11N1 WAKE ISLAND Hy 30.97 7** T T 10 18 26.7
baz=188,slow=76,SNR=14
**H11N3 WAKE ISLAND Hy 30.97 7** T T 10 18 29.7
baz=188,slow=76,SNR=16
**H11N2 WAKE ISLAND Hy 30.98 7** T T 10 18 31.9
baz=188,slow=76,SNR=12
**FITZ Fitzroy Crossi 36.89 255** LR LR 10 02 03.6
comp=Z,55nm,19.2s,baz=88,slow=36
**KSRS Korea Array 58.64 327** LR LR 10 12 57.5
comp=Z,14nm,18.5s,baz=10.0,slow=34
**SONM Songino Array 77.34 325** P **P** **09 51 48.2 -2.1**
0.4nm,0.5s,baz=115,slow=6.8,SNR=1.7
**ILAR Eielson Array 84.51 19** P **P** **09 52 27.4 -0.6**
0.4nm,0.7s,baz=238,slow=5.8,SNR=2.3
**NVAR Mina Array Bea 88.08 50** P **P** **09 52 47.5 +1.0**
0.5nm,0.9s,baz=224,slow=4.1,SNR=3.7
**MKAR Makanchi Array 91.93 317** P **P** **09 53 04.1 0.0**
0.6nm,0.6s,baz=95,slow=6.7,SNR=7.2
**YKA Yellowknife Ar 96.30 28** P **P** **09 53 22.9 -0.7**
0.3nm,0.8s,baz=264,slow=4.3,SNR=2.8

*IDC **11** 09:45:01.2±5.6,29.°19S×69.°67W,h79km±42km, mb3.4/4, mb1 3.6/6,mb1mx3.5/28,mbtmp3.6/6,ML3.8/2, Error ellipse: s-maj=58.0km s-min=31.7km az=33.0*
*GUC **11** 09:45:05.1±0.7,28.°99S×69.°84W,h108km±10km, ML3.8*
**ISC 11 09:45:04.4±0.8,28.°99S±0.°04×69.°79W±0.°06,h113km±7km, n20,σ1°40/24,mb3.3/3,2C,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AC04** | **Llanos de Chal** | **1.37** | **305** | ⇑*iP* | | **Pn** | **09 45 30.5** | **+0.6** |
| AC04 | | | | *eS* | | **Sn** | **09 45 49.6** | **+0.3** |
| AC04 | | | | IAML | | | 09 45 51.2 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **VCA** | **Vinchina** | **1.42** | **80** | ⇑*iP* | | **Pn** | **09 45 31.8** | **+1.3** |
| VCA | | | | *i* S | | **Sn** | **09 45 52.2** | **+1.8** |
| **GO03** | **Copiap** | **1.45** | **344** | *eP* | | **Pn** | **09 45 31.3** | **+0.4** |
| GO03 | | | | *eS* | | **Sn** | **09 45 51.2** | **+0.3** |
| GO03 | | | | IAML | | | 09 45 52.9 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.47** | **217** | *eP* | | **Pn** | **09 45 31.6** | **+0.4** |
| GO04 | | | | *eS* | | **Sn** | **09 45 51.8** | **+0.2** |
| **CO05** | **La Serena** | **1.56** | **233** | *eP* | | **Pn** | **09 45 32.1** | **0.0** |
| CO05 | | | | *eS* | | **Sn** | **09 45 52.4** | **-0.7** |
| CO05 | | | | IAML | | | 09 45 57.6 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **AC02** | **Maricunga** | **2.23** | **15** | *eP* | | **Pn** | **09 45 42.2** | **+1.3** |
| AC02 | | | | *eS* | | **Sn** | **09 46 09.8** | **+1.0** |
| AC02 | | | | IAML | | | 09 46 11.1 | |
| | comp=N,431nm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **2.44** | **205** | *eP* | | **Pn** | **09 45 43.2** | **0.0** |
| CO02 | | | | *i* S | | **Sn** | **09 46 12.7** | **-0.4** |
| CO02 | | | | IAML | | | 09 46 21.1 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **LVC** | **Limon Verde** | **6.41** | **7** | P | | **Pn** | **09 46 36.0** | **-0.6** |
| | comp=N,0.6nm,0.3s,baz=139,slow=7.0,SNR=8.9 | | | | | | | |
| LVC | | | | S | | **Sn** | **09 47 45.2** | **-3.4** |
| | comp=N,0.7nm,0.3s,baz=200,slow=22,SNR=1.5 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **8.98** | **238** | T | | T | 09 55 15.9 | |
| | baz=63,slow=72,SNR=75 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **8.99** | **238** | T | | T | 09 55 15.7 | |
| | baz=63,slow=72,SNR=53 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **8.99** | **238** | T | | T | 09 55 16.2 | |
| | baz=63,slow=72,SNR=48 | | | | | | | |
| **CPUP** | **Villa Florida** | **11.36** | **79** | P | | **Pn** | **09 47 39.6** | **-3.7** |
| | comp=N,0.3nm,0.3s,baz=263,slow=10,SNR=4.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.42** | **328** | P | | **P** | **09 55 43.4** | **+1.8** |
| | comp=N,0.3nm,0.8s,baz=144,slow=7.8,SNR=2.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.23** | **331** | P | | **P** | **09 57 03.2** | **+0.6** |
| | comp=N,0.3nm,0.7s,baz=118,slow=5.5,SNR=2.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.68** | **69** | P | | **P** | **09 57 05.5** | **+0.2** |
| | comp=N,1.1nm,0.7s,baz=278,slow=5.7,SNR=8.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.96** | **341** | P | | Pdif | 09 58 30.3 | +3.3 |
| | comp=N,0.1nm,0.5s,baz=124,slow=7.6,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **122.89** | **206** | PKP | | **PKPdf** | **10 03 48.1** | **+0.3** |
| | comp=N,0.4nm,0.8s,baz=151,slow=2.1,SNR=2.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **126.06** | **208** | PKP | | **PKiKP** | **10 03 54.7** | **+0.3** |
| | comp=N,0.4nm,0.4s,baz=154,slow=1.7,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.96** | **29** | PKPbc | | **PKiKP** | **10 04 40.0** | **+0.2** |
| | comp=N,3.3nm,0.5s,baz=311,slow=3.1,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **151.91** | **43** | PKPbc | | **PKiKP** | **10 04 46.8** | **+0.6** |
| | comp=N,0.7nm,0.4s,baz=295,slow=2.0,SNR=18 | | | | | | | |

**KRSZO 11 10:07:09.0,46.°18N×18.°29E,h0km, Explosion. GT info : GT2 explosion locality : Koml Il., Hungary**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KOVH** | **Kovagotottos** | **0.16** | **237** | Pg | | Pg | 10 07 12.9 | +0.9 |
| KOVH | | | | Lg | | Lg | 10 07 15.8 | |
| **KOVH** | **Kovagotottos** | **0.16** | **237** | PG | | Pg | 10 07 12.9 | +0.9 |
| **KOVH** | **Kovagotottos** | **0.16** | **237** | S | | Sg | 10 07 15.8 | +1.7 |
| **MORH** | **Mrgy, Hungar** | **0.25** | **81** | Pg | | Pg | 10 07 14.7 | +1.0 |
| MORH | | | | Lg | | Lg | 10 07 18.5 | |
| **MORH** | **Mrgy, Hungar** | **0.25** | **81** | PG | | Pg | 10 07 14.7 | +1.0 |
| **MORH** | **Mrgy, Hungar** | **0.25** | **81** | S | | Sg | 10 07 18.5 | +1.6 |

**IDC 11 10:16:41.1±1.5,41.°56S×84.°89E,h0km,mb4.1/3, mb1 4.2/3,mb1mx3.5/43,mbtmp4.1/3,Error ellipse: s-maj=81.8km s-min=29.6km az=6.0,Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **44.34** | **82** | P | | P | 10 24 52.9 | -0.3 |
| | 0.8nm,0.6s,baz=224,slow=7.2,SNR=18 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.91** | **78** | P | | P | 10 25 13.3 | -0.2 |
| | 0.8nm,0.9s,baz=223,slow=7.7,SNR=3.8 | | | | | | | |
| **MBAR** | **Mbarara** | **63.49** | **295** | P | | P | 10 27 13.2 | -0.2 |
| | 7.4nm,0.2s,baz=82,slow=7.1,SNR=4.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **142.76** | **34** | PKP | | PKPdf | 10 36 15.9 | +0.6 |
| | 0.6nm,0.8s,baz=255,slow=3.5,SNR=4.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **165.96** | **148** | PKPab | | PKPab | 10 37 47.8 | -0.1 |
| | 0.1nm,0.5s,baz=175,slow=4.3,SNR=1.5 | | | | | | | |

*MAN **11** 10:18:58.1,13.°16N×124.°40E,h24km,mb5.0,ML3.9, MS3.9*
*MAN INTENSITY III - SORSOGON CITY & PRIETO DIAZ, SORSOGON; LEGAZPI CITY, ALBAY; VIRAC, CATANDUANES; INTENSITY II - BULAN, SORSOGON.*
*NEIC **11** 10:19:08.1±1.3,13.°1N±0.°1×124.°2E±0.°1,h79km±8km, mb4.2/13,Error ellipse: s-maj=17.6km s-min=13.9km az=222.0*
*IDC **11** 10:19:10.5±2.7,12.°98N×123.°99E,h106km±24km, mb3.6/13,mb1 3.7/13,mb1mx3.4/45,mbtmp3.9/13,MS3.0/3, Ms1 3.1/3,ms1mx2.6/71,Error ellipse: s-maj=25.0km s-min=14.0km az=73.0*
**ISC 11 10:18:59.2±0.6,13.°11N±0.°04×124.°27E±0.°06,h10km,n54, σ1°49/48,mb4.2/18,2C-13D,Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MMPH** | **Masbate** | **0.98** | **220** | ⇓*eP* | | **Pb** | **10 19 17.7** | **-0.5** |
| MMPH | | | | *eS* | | **Sg** | **10 19 30.8** | **0.0** |
| **AUQP** | **San Andres** | **1.56** | **278** | ⇓*eP* | | **Pn** | **10 19 27.6** | **+0.5** |
| **JCNP** | **Jose Panganiba** | **1.92** | **308** | ⇓*eP* | | **Pn** | **10 19 30.8** | **-1.2** |
| **JCNP** | **Jose Panganiba** | **1.92** | **308** | ⇓*eP* | | **Pn** | **10 19 31.2** | **-0.8** |
| **GQP** | **Guinayangan** | **1.94** | **294** | ⇓*eP* | | **Pn** | **10 19 31.1** | **-1.1** |
| GQP | | | | *eS* | | Sn | 10 19 48.3 | -8.3 |
| **RCP** | **Roxas** | **2.14** | **224** | ⇓*eP* | | **Pn** | **10 19 35.0** | **-0.1** |
| RCP | | | | *eS* | | **Sb** | **10 20 08.3** | **+3.4** |
| **BOAC** | **Boac** | **2.38** | **279** | ⇓*eP* | | **Pn** | **10 19 37.6** | **-0.8** |
| **LLP** | **Lapu-Lapu** | **2.79** | **186** | ⇓*eP* | | **Pb** | **10 19 46.6** | **-2.6** |
| LLP | | | | *eS* | | **Sg** | **10 20 30.2** | **+1.1** |
| **LQP** | **Lukban** | **2.83** | **291** | ⇓*eP* | | **Pn** | **10 19 43.9** | **-0.8** |
| **MSLP** | **Maasin** | **3.02** | **169** | ⇓*eP* | | **Pb** | **10 19 53.2** | **+0.2** |
| **SJMP** | **San Jose** | **3.14** | **258** | ⇓*eP* | | **Pn** | **10 19 45.1** | **-3.6** |
| **PGP** | **Puerto Galera** | **3.25** | **277** | ⇓*eP* | | **Pg** | **10 20 00.6** | **-0.9** |
| PGP | | | | *eS* | | Sn | 10 20 15.4 | -14 |
| **TGY** | **Tagaytay City** | **3.38** | **287** | P | | **Pb** | **10 19 58.2** | **-1.1** |
| | 131nm,0.3s,baz=144,slow=2.0,SNR=9.9 | | | | | | | |
| TGY | | | | S | | **Sn** | **10 20 36.9** | **+4.4** |
| | 76nm,0.3s,baz=122,slow=18,SNR=1.5 | | | | | | | |
| **TGY** | **Tagaytay City** | **3.38** | **287** | ⇓*eP* | | **Pn** | **10 19 52.9** | **+0.7** |
| **TBP** | **Tagbilaran** | **3.42** | **187** | ⇓*eP* | | Pn | 10 19 43.7 | -9.0 |
| TBP | | | | *eS* | | **Sb** | **10 20 42.4** | **+0.6** |
| **PCPH** | **Palayan** | **3.92** | **309** | ⇓*eP* | | **Pg** | **10 20 12.9** | **-1.4** |
| **DAV** | **Davao City (W)** | **6.14** | **168** | LR | | LR | 10 23 05.2 | |
| | comp=Z,216nm,19.3s,baz=255,slow=39 | | | | | | | |
| **YULB** | **Yu-li** | **10.61** | **345** | Pn | | Pn | 10 21 35.2 | +3.9 |
| **TPUB** | **Ta-pu** | **10.71** | **342** | Pn | | Pn | 10 21 38.2 | +5.6 |
| **NACB** | **Ninganchiao** | **11.29** | **347** | Pn | | Pn | 10 21 45.7 | +5.1 |
| **KSRS** | **Korea Array** | **24.46** | **7** | P | | **P** | **10 24 21.2** | **+2.9** |
| | 0.9nm,0.5s,baz=180,slow=8.2,SNR=4.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.93** | **286** | P | | **P** | **10 24 21.4** | **-1.5** |
| | 0.7nm,0.3s,baz=92,slow=7.4,SNR=5.9 | | | | | | | |
| CMAR | | | | LR | | LR | 10 34 21.6 | |
| | comp=Z,17nm,18.1s,baz=300,slow=37 | | | | | | | |
| **PSI** | **Prapat** | **27.08** | **250** | LR | | LR | 10 34 47.5 | |
| | comp=Z,45nm,20.9s,baz=127,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.68** | **11** | P | | **P** | **10 25 25.0** | **+2.2** |
| | 3.6nm,0.8s,baz=201,slow=8.0,SNR=5.3 | | | | | | | |
| **WB0** | **Warramunga Arr** | **34.16** | **163** | P | | **P** | **10 25 45.0** | **+0.2** |
| WB0 | | | | IAmb | | IAmb | 10 26 01.3 | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.30** | **163** | P | | **P** | **10 25 46.0** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 10 25 47.2 | |
| | comp=Z,5.9nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.31** | **163** | P | | **P** | **10 25 46.1** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=349,slow=9.2,SNR=1.7 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **10 28 19.9** | **-2.4** |
| | comp=Z,0.3nm,0.7s,baz=345,slow=2.8,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.31** | **163** | IAmb | | IAmb | 10 25 49.6 | |
| | comp=Z,0.2nm,1.2s | | | | | | | |
| **WB2** | **Warramunga Arr** | **34.31** | **163** | P | | **P** | **10 25 46.4** | **+0.3** |
| WB2 | | | | IAmb | | IAmb | 10 25 57.5 | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **34.38** | **163** | P | | **P** | **10 25 48.3** | **+1.6** |
| WR0 | | | | IAmb | | IAmb | 10 25 53.4 | |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **KLR** | **Kul'dur** | **36.54** | **8** | P | | **P** | **10 26 07.0** | **+2.1** |
| | comp=Z,0.8nm,0.6s,baz=234,slow=8.7,SNR=2.1 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **37.51** | **341** | P | | **P** | **10 26 13.0** | **-0.4** |
| **SONM** | **Songino Array** | **37.69** | **340** | P | | **P** | **10 26 15.3** | **+0.4** |
| | comp=Z,1.8nm,0.8s,baz=158,slow=9.5,SNR=7.5 | | | | | | | |
| **SONM** | **Songino Array** | **37.69** | **340** | IAmb | | IAmb | 10 26 16.6 | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **37.75** | **165** | P | | **P** | **10 26 15.3** | **-0.2** |
| **ASAR** | **Alice Springs** | **37.75** | **165** | P | | **P** | **10 26 16.0** | **+0.5** |
| | comp=Z,0.4nm,0.5s,baz=351,slow=6.3,SNR=17 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 28 31.5** | **-1.1** |
| | comp=Z,0.5nm,1.0s,baz=343,slow=3.1,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **37.75** | **165** | P | | **P** | **10 26 15.1** | **-0.5** |
| **H11S3** | **WAKE ISLAND Hy** | **41.09** | **77** | T | | T | 11 10 34.4 | |
| | baz=269,slow=75,SNR=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.11** | **77** | T | | T | 11 10 35.6 | |
| | baz=269,slow=75,SNR=52 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.11** | **77** | T | | T | 11 10 35.3 | |
| | baz=269,slow=75,SNR=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.33** | **75** | T | | T | 11 10 52.9 | |
| | baz=267,slow=75,SNR=213 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.33** | **75** | T | | T | 11 10 55.5 | |
| | baz=267,slow=75,SNR=170 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.34** | **75** | T | | T | 11 10 56.6 | |
| | baz=267,slow=75,SNR=242 | | | | | | | |
| **FORT** | **Forrest** | **43.79** | **175** | P | | **P** | **10 27 05.2** | **0.0** |
| **BBOO** | **Buckleboo** | **47.03** | **166** | P | | **P** | **10 27 31.4** | **+0.4** |
| **MK31** | **Makanchi Array** | **48.59** | **322** | P | | **P** | **10 27 43.0** | **-0.1** |
| MK31 | | | | IAmb | | IAmb | 10 27 44.3 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.59** | **322** | P | | **P** | **10 27 43.5** | **+0.5** |
| | comp=Z,2.3nm,0.6s,baz=118,slow=8.9,SNR=31 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **10 29 07.0** | **-1.6** |
| | comp=Z,0.2nm,0.7s,baz=144,slow=3.6,SNR=1.3 | | | | | | | |
| **MAKZ** | **Makanchi** | **48.79** | **322** | P | | **P** | **10 27 44.6** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **51.21** | **331** | P | | **P** | **10 28 02.6** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=130,slow=8.9,SNR=6.0 | | | | | | | |
| **KURK** | **Kurchatov** | **52.63** | **325** | P | | **P** | **10 28 13.5** | **+0.2** |
| **NRIK** | **Noril'sk** | **60.79** | **346** | P | | **P** | **10 29 11.8** | **+0.7** |
| | comp=Z,3.3nm,0.6s,baz=137,slow=7.3,SNR=5.1 | | | | | | | |
| **WSAR** | **Wadi Sarin** | **62.73** | **289** | P | | **P** | **10 29 23.1** | **-1.9** |
| | comp=Z,1.8nm,0.4s,baz=6.4,slow=12,SNR=1.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.86** | **339** | P | | **P** | **10 31 12.7** | **-0.5** |
| | comp=Z,4.0nm,0.9s,baz=64,slow=4.1,SNR=1.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.96** | **23** | P | | **P** | **10 32 08.1** | **+0.2** |
| | comp=Z,0.1nm,0.6s,baz=299,slow=4.5,SNR=2.0 | | | | | | | |

*IDC **11** 10:54:28.3±2.3,7.°16S×130.°06E,h82km±23km,mb3.7/2, mb1 4.1/7,mb1mx3.4/43,mbtmp4.3/7,MS2.8/2,Ms1 2.8/2, ms1mx2.4/66,Error ellipse: s-maj=36.1km s-min=20.4km az=86.0*
*DJA **11** 10:54:29.0±0.4,7.°5S±3.°×13.°0E±.°,h161km±10km,M4.5/8, mb4.6/6,mB4.9/5,MLv4.6/8,Mw(mB)4.2/5*
**ISC 11 10:54:29.3±0.7,7.°01S±0.°06×129.°88E±0.°06,h104km,n27, σ2°04/29,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.71** | **125** | P | | **Pn** | **10 54 59.5** | **+1.0** |
| SAUI | | | | S | | **Sn** | **10 55 22.7** | **+2.1** |
| **SAUI** | **Saumlaki** | **1.71** | **125** | P | | **Pn** | **10 54 59.5** | **+1.0** |
| **MSAI** | **Masohi** | **3.76** | **345** | P | | Pn | 10 55 32.5 | +7.1 |
| **FAKI** | **Fak Fak** | **4.70** | **30** | P | | **Pn** | **10 55 38.4** | **+0.3** |
| **FAKI** | **Fak Fak** | **4.70** | **30** | P | | **Pn** | **10 55 38.2** | **+0.1** |
| **DRS** | **Darwin Rock St** | **5.48** | **169** | P | | **Pn** | **10 55 48.9** | **+0.2** |
| **SOEI** | **Soe** | **6.18** | **243** | P | | **Pn** | **10 56 00.1** | **+1.8** |
| | 0.5nm1μm82nm,0.5s | | | | | | | |
| **SOEI** | **Soe** | **6.18** | **243** | P | | **Pn** | **10 56 00.3** | **+2.0** |
| **KDU** | **Kakadu** | **6.20** | **156** | P | | **Pn** | **10 55 57.1** | **-1.3** |
| **SIJI** | **Sorong** | **6.25** | **13** | P | | **Pn** | **10 56 00.1** | **+0.9** |
| | 7.3nm,0.3s,baz=207,slow=22,SNR=18 | | | | | | | |
| SIJI | | | | S | | **Sn** | **10 57 06.2** | **-3.1** |
| | 5.3nm,0.3s,baz=49,slow=23,SNR=7.3 | | | | | | | |
| SIJI | | | | LR | | LR | 10 58 20.2 | |
| | comp=Z,68nm,22.0s,baz=118,slow=36 | | | | | | | |
| **SWI** | **Sorong** | **6.26** | **13** | P | | **Pn** | **10 56 00.1** | **+0.9** |
| **BATI** | **Baumata** | **6.92** | **242** | P | | **Pn** | **10 56 10.6** | **+2.4** |
| | 26nm,0.3s,baz=28,slow=1.0,SNR=36 | | | | | | | |
| BATI | | | | S | | **Sn** | **10 57 23.4** | **-2.1** |
| | 7.8nm,0.3s,baz=65,slow=6.7,SNR=2.3 | | | | | | | |
| **BATI** | **Baumata** | **6.92** | **242** | P | | **Pn** | **10 56 10.1** | **+1.9** |
| | 0.2nm1μm36nm,0.6s | | | | | | | |
| **BASI** | **Baing, Sumba** | **9.73** | **250** | P | | **Pn** | **10 56 46.4** | **0.0** |
| | 59nm,0.9s | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **10.70** | **255** | P | | **Pn** | **10 57 00.7** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **11.77** | **200** | P | | **Pn** | **10 57 10.3** | **-3.7** |
| | 3.2nm,0.3s,baz=28,slow=12,SNR=66 | | | | | | | |
| FITZ | | | | S | | Sn | 10 59 10.2 | -13 |
| | 4.8nm,0.3s,baz=88,slow=20,SNR=8.6 | | | | | | | |
| FITZ | | | | LR | | LR | 11 01 51.5 | |
| | comp=Z,58nm,18.4s,baz=57,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.57** | **162** | P | | **Pn** | **10 57 33.1** | **-4.5** |
| | 1.1nm,0.3s,baz=346,slow=13,SNR=41 | | | | | | | |
| WRA | | | | S | | Sn | 10 59 50.7 | -16 |
| | 1.3nm,0.3s,baz=338,slow=22,SNR=8.3 | | | | | | | |
| **COEN** | **Coen** | **14.78** | **119** | P | | **Pn** | **10 57 52.0** | **-1.3** |
| **QIS** | **Mount Isa** | **16.44** | **146** | P | | **P** | **10 58 12.0** | **-2.9** |
| **ASAR** | **Alice Springs** | **17.01** | **167** | P | | **P** | **10 58 19.1** | **-2.1** |
| | 0.4nm,0.3s,baz=347,slow=9.7,SNR=30 | | | | | | | |
| ASAR | | | | S | | Sn | 11 01 15.3 | -15 |
| | 0.3nm,0.3s,baz=336,slow=15,SNR=5.2 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.43** | **213** | P | | **Pn** | **10 58 27.2** | **+1.2** |
| **MTSU** | **Mount Surprise** | **17.90** | **129** | P | | **Pn** | **10 58 31.2** | **-0.6** |
| **WRKA** | **Warakurna** | **17.99** | **185** | P | | **P** | **10 58 30.8** | **-1.2** |
| **OOD** | **Oodnadatta** | **21.40** | **166** | P | | **P** | **10 59 09.7** | **+0.9** |
| **SONM** | **Songino Array** | **58.41** | **342** | P | | **P** | **11 04 16.6** | **+2.5** |
| | 0.3nm,0.4s,baz=149,slow=7.9,SNR=2.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.16** | **327** | P | | **P** | **11 05 20.9** | **+2.5** |
| | 1.5nm,0.3s,baz=117,slow=7.9,SNR=61 | | | | | | | |
| **LPAZ** | **La Paz** | **150.79** | **143** | PKPbc | | **PKiKP** | **11 14 13.2** | **+1.2** |
| | 1.1nm,0.3s,baz=284,slow=4.2,SNR=6.7 | | | | | | | |

*EAF **11** 11:11:51.5±2.1,26.°43S×29.°91E,h0km±41km,MD3.7*
**BUL 11 11:11:50.1±0.7,26.°70S×29.°67E,h20km±16km,MD3.9, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.29** | **80** | *eP* | | Pn | 11 12 26.6 | -0.1 |
| CNG | | | | *eS* | | Sn | 11 12 53.4 | -1.0 |
| **CNG** | **Changalane** | **2.29** | **80** | *eP* | | Pn | 11 12 26.6 | -0.1 |
| CNG | | | | *eS* | | Sn | 11 12 53.4 | -1.0 |
| **MOPA** | **Mopani** | **3.53** | **27** | *eP* | | Pn | 11 12 41.9 | -2.0 |
| MOPA | | | | *eS* | | Sn | 11 13 18.4 | -6.7 |
| **MOPA** | **Mopani** | **3.53** | **27** | *eP* | | Pn | 11 12 41.9 | -2.0 |
| MOPA | | | | *eS* | | Sn | 11 13 18.4 | -6.7 |
| **MSNA** | **Messina** | **4.35** | **4** | *eP* | | Pn | 11 12 54.5 | -0.6 |
| MSNA | | | | *eS* | | Sn | 11 13 42.1 | -3.2 |
| **MSNA** | **Messina** | **4.35** | **4** | *eP* | | Pn | 11 12 54.5 | -0.6 |
| MSNA | | | | *eS* | | Sn | 11 13 42.1 | -3.2 |
| **BLWY** | **Bulawayo** | **6.60** | **351** | *eP* | | Pn | 11 13 25.1 | -1.1 |
| BLWY | | | | *eS* | | Sn | 11 14 35.4 | -5.6 |
| **BLWY** | **Bulawayo** | **6.60** | **351** | *eP* | | Pn | 11 13 25.1 | -1.1 |
| BLWY | | | | *eS* | | Sn | 11 14 35.4 | -5.6 |

*KRNET **11** 11:44:31.2±0.1,41.°25N×69.°68E,mb2.8*
*SOME **11** 11:44:33.8,41.°00N×70.°20E,h5km*
*NNC **11** 11:44:34.2±3.0,40.°93N×70.°22E,h0km,mb3.5,mpv3.1, Error ellipse: s-maj=22.7km s-min=10.2km az=25.0*
*ISU **11** 11:44:35,41.°10N×70.°30E,h5km*
**ISC 11 11:44:34.0±1.3,41.°06N±0.°02×70.°18E±0.°04,h2km±11km, n22,σ2°41/40,18C-4D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHMG** | **Chimgan** | **0.51** | **345** | *eP* | | **Pg** | **11 44 44.0** | **+0.3** |
| CHMG | | | | *i* S | | **Sg** | **11 44 51.0** | **+0.7** |
| **BTK** | **Batken** | **1.11** | **154** | ⇑*iP* | | **Pn** | **11 44 58.1** | **+1.4** |
| | baz=44 | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sn** | **11 45 17.7** | **+5.0** |
| | baz=44 | | | | | | | |
| **CHM** | **Chimkent** | **1.33** | **341** | *eP* | | **Pg** | **11 45 01.3** | **+1.8** |
| | 1.4nm,0.1s | | | | | | | |
| CHM | | | | *eS* | | **Sn** | **11 45 21.4** | **+3.4** |
| | 103nm,0.1s | | | | | | | |
| **ARK** | **Arkit** | **1.53** | **61** | *eP* | | **Pb** | **11 45 03.0** | **-0.2** |
| ARK | | | | *eS* | | **Sg** | **11 45 24.0** | **+0.9** |
| **ARK** | **Arkit** | **1.53** | **61** | ⇑*iP* | | **Pg** | **11 45 03.6** | **+0.3** |
| | baz=71 | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sg** | **11 45 27.2** | **+4.1** |
| | baz=71 | | | | | | | |
| **BRLS** | **Borolday** | **1.98** | **353** | *eP* | | **Pn** | **11 45 07.8** | **-0.9** |
| | 12nm,0.3s | | | | | | | |
| BRLS | | | | *eS* | | **Sn** | **11 45 32.7** | **-1.5** |
| | 11nm,0.3s | | | | | | | |
| **BRLS** | **Borolday** | **1.98** | **353** | P | | **Pn** | **11 45 07.8** | **-0.9** |
| | 12nm,0.3s | | | | | | | |
| BRLS | | | | S | | **Sn** | **11 45 32.7** | **-1.5** |
| | 11nm,0.3s | | | | | | | |
| **DRK** | **Karamyk** | **2.01** | **141** | ⇑*iP* | | **Pg** | **11 45 12.1** | **-0.4** |
| | baz=37 | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sg** | **11 45 41.9** | **+3.4** |
| | baz=37 | | | | | | | |
| **KK08** | **Karatay Array** | **2.06** | **6** | ⇑Pn | | **Pb** | **11 45 12.5** | **+0.4** |
| | 3.0nm,0.4s,baz=179,slow=16 | | | | | | | |
| KK08 | | | | ⇑Sn | | **Sg** | **11 45 41.4** | **+1.4** |
| | 8.9nm,0.5s,baz=192,slow=25 | | | | | | | |
| **GAR** | **Garm** | **2.06** | **177** | ⇑*iP* | | **Pb** | **11 45 10.7** | **-1.5** |
| | baz=68 | | | | | | | |
| GAR | | | | ⇑*i*S | | **Sg** | **11 45 39.3** | **-0.9** |
| | baz=68 | | | | | | | |
| **MNAS** | **Manas** | **2.25** | **50** | ⇑*iP* | | **Pn** | **11 45 12.6** | **+0.2** |
| | baz=59 | | | | | | | |
| MNAS | | | | ⇑*i*S | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BILE | | | | *i* AML | AML | 12 12 12.0 | | | |
| | comp=N,19nm,1.0s | | | | | | | | |
| BILE | | | | *i* AML | AML | 12 12 12.0 | | | |
| | comp=E,19nm,0.5s | | | | | | | | |
| **CAVI** | **Cavuskoy** | **0.84** | **306** | PG | **Pg** | **12 11 44.4** | **-0.5** | | |
| **GEYV** | **SAKARYA_Geyve** | **0.84** | **337** | P | **Pn** | **12 11 46.9** | **-0.9** | | |
| GEYV | | | | S | **Sn** | **12 12 00.6** | **-0.3** | | |
| GEYV | | | | *i* AML | AML | 12 12 27.0 | | | |
| | comp=N,29nm,0.7s | | | | | | | | |
| GEYV | | | | *i* AML | AML | 12 12 29.0 | | | |
| | comp=E,29nm,1.1s | | | | | | | | |
| **YLV** | **Yalova** | **1.35** | **310** | PN | **Pb** | **12 11 54.3** | **-0.6** | | |
| **KURT** | **Yalova, Merkez** | **1.46** | **307** | P | Pb | 12 12 05.2 | +8.4 | | |
| KURT | | | | S | **Sn** | **12 12 22.6** | **+6.4** | | |
| KURT | | | | *i* AML | AML | 12 12 23.0 | | | |
| | comp=E,18nm,1.2s | | | | | | | | |
| KURT | | | | *i* AML | AML | 12 12 25.0 | | | |
| | comp=N,25nm,1.0s | | | | | | | | |
| **YYLC** | **Yaylacik** | **1.59** | **293** | P | **Pg** | **12 12 03.1** | **+4.0** | | |
| YYLC | | | | *i* AML | AML | 12 12 15.0 | | | |
| | comp=E,348nm,0.7s | | | | | | | | |
| YYLC | | | | S | **Sg** | **12 12 20.7** | **+1.0** | | |
| YYLC | | | | *i* AML | AML | 12 12 29.0 | | | |
| | comp=N,43nm,1.2s | | | | | | | | |
| **USAK** | **Uak-Merkez** | **1.66** | **234** | P | Pg | 12 12 07.4 | +6.8 | | |
| USAK | | | | S | **Sg** | **12 12 24.8** | **+2.7** | | |
| USAK | | | | *i* AML | AML | 12 12 52.0 | | | |
| | comp=N,58nm,1.4s | | | | | | | | |
| USAK | | | | *i* AML | AML | 12 12 52.0 | | | |
| | comp=E,132nm,1.9s | | | | | | | | |
| **DEMI** | **Demirci** | **1.70** | **248** | P | **Pg** | **12 12 03.7** | **+2.4** | | |
| DEMI | | | | *i* AML | AML | 12 12 22.0 | | | |
| | comp=N,20nm,0.3s | | | | | | | | |
| DEMI | | | | S | **Sg** | **12 12 22.2** | **-1.1** | | |
| DEMI | | | | *i* AML | AML | 12 12 26.0 | | | |
| | comp=E,21nm,0.6s | | | | | | | | |
| **DURS** | **Dursunbey** | **1.75** | **267** | P | **Pb** | **12 12 00.4** | **-1.3** | | |
| DURS | | | | S | **Sn** | **12 12 14.9** | **-8.5** | | |

**RSNC 11 12:15:19.4±0.7, 6°00'N×74°23'W, h5km±7km, ML1.2, Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTBC** | **PUERTO BERRIO,** | **0.58** | **338** | *eP* | Pg | 12 15 29.6 | -1.0 |
| PTBC | | | | *eS* | Sg | 12 15 38.7 | +0.4 |
| PTBC | | | | *i* | | 12 15 42.3 | |
| | comp=Z,9.1nm,0.1s | | | | | | |
| **NORC** | **Norcasia** | **0.77** | **236** | *eP* | Pg | 12 15 32.5 | -1.7 |
| NORC | | | | *eS* | Sg | 12 15 43.0 | -1.1 |
| NORC | | | | *i* | | 12 15 45.5 | |
| | comp=Z,9.6nm,0.1s | | | | | | |
| **BARC** | **Barichara** | **1.20** | **60** | *eP* | Pg | 12 15 40.6 | -1.9 |
| BARC | | | | *eS* | Sg | 12 15 56.1 | -1.9 |
| BARC | | | | *i* | | 12 15 58.6 | |
| | comp=Z,2.6nm,0.1s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **1.36** | **236** | *eP* | Pn | 12 15 43.9 | -1.7 |
| GUY2C | | | | *eS* | Sg | 12 16 02.1 | -1.3 |
| GUY2C | | | | *i* | | 12 16 09.5 | |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **CHIC** | **Chingaza** | **1.45** | **160** | *eP* | Pn | 12 15 45.2 | -1.4 |
| CHIC | | | | *eS* | Sg | 12 16 04.6 | -1.4 |
| CHIC | | | | *i* | | 12 16 08.3 | |
| | comp=Z,2.2nm,0.4s | | | | | | |

*IDC **11** 12:18:01.2±2.7, 7°02'S×130°70'E, h73km±38km, mb3.2/2, mb1 4.0/6, mb1mx3.5/42, mbtmp4.0/6, ML4.2/4, Error ellipse: s-maj=61.6km s-min=23.0km az=88.0*
*DJA **11** 12:18:02.6±0.5, 7°S±4'×13°1'E±1°0, h129km±13km, M4.3/6, mb4.1/4, mB4.8/2, MLv4.4/6, Mw(mB)4.0/2*
**ISC 11 12:18:03.1±0.7, 6°87S±0°05×130°60E±0°10, h100km, n22, σ2§65/25, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.31** | **148** | P | **Pn** | **12 18 28.8** | **+1.7** |
| SAUI | | | | S | **Sn** | **12 18 48.5** | **+3.4** |
| **BNDI** | **Bandanaira** | **2.43** | **343** | P | **Pn** | **12 18 43.8** | **+2.4** |
| **FAKI** | **Fak Fak** | **4.25** | **23** | P | **Pn** | **12 19 06.2** | **+0.4** |
| **FAKI** | **Fak Fak** | **4.25** | **23** | P | **Pn** | **12 19 06.7** | **+0.9** |
| **DRS** | **Darwin Rock St** | **5.54** | **177** | P | **Pn** | **12 19 22.9** | **-0.2** |
| **MTN** | **Manton Dam** | **5.96** | **175** | P | **Pn** | **12 19 28.7** | **-0.2** |
| **SIJI** | **Sorong** | **6.00** | **6** | P | **Pn** | **12 19 29.2** | **-0.2** |
| | 2.6nm,0.3s,baz=195,slow=17,SNR=24 | | | | | | |
| SIJI | | | | S | **Sn** | **12 20 33.4** | **-3.3** |
| | 1.9nm,0.3s,baz=227,slow=22,SNR=1.9 | | | | | | |
| **SWI** | **Sorong** | **6.00** | **6** | P | **Pn** | **12 19 28.9** | **-0.6** |
| | 0.2nm28nm,1.2s | | | | | | |
| **KDU** | **Kakadu** | **6.07** | **162** | P | **Pn** | **12 19 29.9** | **-0.5** |
| **SOEI** | **Soe** | **6.89** | **245** | P | **Pn** | **12 19 41.5** | **-0.2** |
| | 0.2nm22nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **8.94** | **191** | P | **Pn** | **12 20 07.7** | **-1.7** |
| **FITZ** | **Fitzroy Crossi** | **12.16** | **203** | P | **Pn** | **12 20 49.5** | **-3.6** |
| | 1.2nm,0.3s,baz=23,slow=10,SNR=46 | | | | | | |
| FITZ | | | | S | Sn | 12 22 53.7 | -13 |
| | 1.4nm,0.3s,baz=201,slow=21,SNR=8.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.49** | **165** | P | **Pn** | **12 21 06.7** | **-3.9** |
| | 1.3nm,0.3s,baz=348,slow=13,SNR=42 | | | | | | |
| WRA | | | | S | Sn | 12 23 25.1 | -14 |
| | 0.7nm,0.3s,baz=336,slow=24,SNR=3.1 | | | | | | |
| **COEN** | **Coen** | **14.23** | **121** | P | **Pn** | **12 21 19.9** | **-0.2** |
| **QIS** | **Mount Isa** | **16.17** | **148** | P | **P** | **12 21 44.7** | **-1.2** |
| **ASAR** | **Alice Springs** | **17.00** | **170** | P | **Pn** | **12 21 53.7** | **-1.2** |
| | 0.9nm,0.3s,baz=346,slow=11,SNR=68 | | | | | | |
| ASAR | | | | S | **Sn** | **12 24 56.4** | **-7.5** |
| | 0.3nm,0.3s,baz=352,slow=24,SNR=6.4 | | | | | | |
| **WRKA** | **Warakurna** | **18.20** | **187** | P | **Pn** | **12 22 08.5** | **-0.9** |
| **OOD** | **Oodnadatta** | **21.36** | **168** | P | **P** | **12 22 44.4** | **+1.9** |
| **MULG** | **Mulgathing** | **23.52** | **172** | P | **P** | **12 23 06.4** | **+2.1** |
| **LCRK** | **Leigh Creek** | **24.52** | **164** | P | **P** | **12 23 16.8** | **+3.5** |
| **CMAR** | **Chiang Mai Arr** | **40.11** | **309** | P | **P** | **12 25 32.0** | **+2.7** |
| | 0.5nm,0.4s,baz=116,slow=8.1,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.44** | **327** | P | **P** | **12 28 56.3** | **+1.8** |
| | 0.2nm,0.6s,baz=125,slow=7.6,SNR=3.1 | | | | | | |

*IDC **11** 12:24:59.1±1.4, 4°01N×127°20E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.5/56, mbtmp3.7/6, MS2.3/1, Ms1 2.3/1, ms1mx2.1/66, Error ellipse: s-maj=100.6km s-min=18.9km az=68.0*
**ISC 11 12:25:03.8±1.5, 4°2N±0°3×127°7E±0°6, h35km, n7, σ1§29/7, mb3.8/6, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **3.54** | **324** | LR | LR | 12 26 50.3 | |
| | comp=Z,44nm,21.8s,baz=310,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.23** | **185** | P | **P** | **12 29 56.3** | **-1.2** |
| | 1.8nm,0.8s,baz=7.1,slow=9.6,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.86** | **165** | P | **P** | **12 30 22.0** | **-1.2** |
| | 0.8nm,0.4s,baz=342,slow=11,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **28.34** | **168** | P | **P** | **12 30 56.4** | **+1.7** |
| | 0.2nm,0.4s,baz=344,slow=10,SNR=5.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 34 07.5** | **+0.5** |
| | 0.2nm,0.5s,baz=339,slow=3.0,SNR=1.7 | | | | | | |
| **STKA** | **Stephens Creek** | **38.23** | **161** | P | **P** | **12 32 19.8** | **-0.7** |
| | 1.0nm,0.6s,baz=333,slow=11,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.72** | **325** | P | **P** | **12 34 51.0** | **-0.1** |
| | 0.5nm,0.5s,baz=119,slow=7.7,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.87** | **327** | P | **P** | **12 35 19.4** | **-0.1** |
| | 0.8nm,0.6s,baz=128,slow=6.7,SNR=4.4 | | | | | | |

**IDC 11 12:30:53.9±2.1, 3°45N×126°27E, h0km, mb3.3/4, mb1 3.4/4, mb1mx3.2/54, mbtmp3.3/4, Error ellipse: s-maj=211.6km s-min=23.7km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.56** | **161** | P | P | 12 36 15.4 | -0.2 |
| | 0.3nm,0.4s,baz=340,slow=11,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **27.96** | **165** | P | P | 12 36 47.0 | +0.6 |
| | 0.2nm,0.8s,baz=344,slow=9.6,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.52** | **326** | P | P | 12 40 45.2 | 0.0 |
| | 0.2nm,0.5s,baz=115,slow=8.4,SNR=5.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.73** | **328** | P | P | 12 41 13.7 | -0.4 |
| | 0.2nm,0.5s,baz=128,slow=6.5,SNR=4.4 | | | | | | |

*IDC **11** 12:31:26.1±0.8, 43°05N×45°98E, h0km, mb3.1/4, mb1 3.6/12, mb1mx3.4/43, mbtmp3.6/12, ML3.4/7, Error ellipse: s-maj=13.2km s-min=10.8km az=160.0*

*TIF **11** 12:31:31.4, 42°79N×45°98E, h139km±3km*
*MOS **11** 12:31:32.6±0.0, 43°05N×45°87E, h80km±2km, MPVA4.7*
*NORS **11** 12:31:33.1±0.0, 42°99N×45°90E, h88km±2km, MPVA4.4*
*AZER **11** 12:31:33.7±0.1, 42°73N×45°83E, h29km±3km, Error ellipse: s-maj=7.1km s-min=1.0km az=338.0*
*DRS **11** 12:31:34.5±0.0, 43°24N×45°53E, h27km*
**ISC 11 12:31:31.3±0.7, 43°07N±0°03×45°90E±0°02, h91km±5km, n155, σ2§16/260, mb3.0/4, 8C-5D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GROC** | **Groznyy** | **0.16** | **331** | *eP* | **Pn** | **12 31 45.4** | **+1.1** |
| GROC | | | | pmax | pmax | | |
| | comp=Z,77nm,0.1s | | | | | | |
| **GROC** | **Groznyy** | **0.16** | **331** | *ePg* | **Pn** | **12 31 46.1** | **+1.8** |
| GROC | | | | *eSg* | **Sn** | **12 31 54.1** | **+0.2** |
| **DVE** | **Vedeno** | **0.20** | **123** | *eP* | **Pn** | **12 31 45.3** | **+0.8** |
| DVE | | | | pmax | pmax | | |
| | comp=Z,293nm,0.1s | | | | | | |
| **DVE** | **Vedeno** | **0.20** | **123** | *ePg* | **Pn** | **12 31 45.4** | **+0.8** |
| DVE | | | | *eSg* | **Sn** | **12 31 54.4** | **+0.1** |
| **BTLR** | **Botlikh** | **0.47** | **149** | *d iP* | **Pn** | **12 31 47.2** | **+1.2** |
| **BTLR** | **Botlikh** | **0.47** | **149** | *ePg* | **Pn** | **12 31 47.2** | **+1.2** |
| BTLR | | | | *eSg* | **Sn** | **12 31 57.2** | **+0.3** |
| **DLMR** | **Dylym** | **0.54** | **89** | *i iP* | **Pn** | **12 31 47.7** | **+1.2** |
| DLMR | | | | *eS* | **Sn** | **12 31 58.2** | **+0.4** |
| DLMR | | | | *i* S | | 12 31 58.8 | |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.2s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=E,10μm,0.2s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=N,10μm,0.2s | | | | | | |
| **DLMR** | **Dylym** | **0.54** | **89** | *i* Pg | **Pn** | **12 31 47.7** | **+1.2** |
| DLMR | | | | *eSg* | **Sn** | **12 31 58.4** | **+0.6** |
| **DBC** | **Dubki** | **0.68** | **94** | *i iP* | **Pn** | **12 31 49.0** | **+1.1** |
| DBC | | | | *i* | | 12 32 00.9 | |
| DBC | | | | pmax | pmax | | |
| | comp=Z,1μm,0.4s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | |
| **DBC** | **Dubki** | **0.68** | **94** | *i* Pg | **Pn** | **12 31 49.2** | **+1.3** |
| DBC | | | | *eSg* | **Sn** | **12 32 00.9** | **+0.8** |
| **UNCR** | **Uncukul** | **0.75** | **118** | *i iP* | **Pn** | **12 31 49.2** | **+0.8** |
| UNCR | | | | *i* | | 12 32 01.7 | |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,885nm,0.2s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=E,886nm,0.6s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=N,924nm,0.5s | | | | | | |
| **UNCR** | **Uncukul** | **0.75** | **118** | *ePg* | **Pn** | **12 31 49.4** | **+0.9** |
| UNCR | | | | *eSg* | **Sn** | **12 32 01.9** | **+0.7** |
| **KMGR** | **Komgaron** | **0.76** | **270** | *i iP* | **Pn** | **12 31 50.8** | **+2.3** |
| KMGR | | | | *eS* | **Sn** | **12 32 04.5** | **+3.1** |
| **KMGR** | **Komgaron** | **0.76** | **270** | *i* Pg | **Pn** | **12 31 50.8** | **+2.3** |
| KMGR | | | | *eSg* | **Sn** | **12 32 04.3** | **+2.9** |
| **KRNR** | **Karanay** | **0.78** | **108** | *i iP* | **Pn** | **12 31 49.7** | **+0.9** |
| KRNR | | | | *i* | | 12 32 02.3 | |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,590nm,0.2s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=N,543nm,0.2s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=E,673nm,0.2s | | | | | | |
| **KRNR** | **Karanay** | **0.78** | **108** | *i* Pg | **Pn** | **12 31 49.9** | **+1.1** |
| KRNR | | | | *eSg* | **Sn** | **12 32 02.4** | **+0.5** |
| **XNZR** | **Khunzakh** | **0.79** | **131** | *eP* | **Pn** | **12 31 50.5** | **+1.5** |
| XNZR | | | | *eS* | **Sn** | **12 32 03.1** | **+0.9** |
| XNZR | | | | *i* S | | 12 32 03.9 | |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,566nm,0.4s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=N,1μm,0.3s | | | | | | |
| **XNZR** | **Khunzakh** | **0.79** | **131** | *ePg* | **Pn** | **12 31 50.6** | **+1.5** |
| XNZR | | | | *eSg* | **Sn** | **12 32 03.2** | **+0.9** |
| **VLKR** | **Vladikavkaz** | **0.90** | **269** | *eP* | **Pn** | **12 31 52.3** | **+2.3** |
| VLKR | | | | *eS* | **Sn** | **12 32 07.0** | **+3.0** |
| **VLKR** | **Vladikavkaz** | **0.90** | **269** | *ePg* | **Pn** | **12 31 54.4** | **+4.4** |
| VLKR | | | | *eSg* | **Sn** | **12 32 06.6** | **+2.6** |
| **BUJR** | **Buynaksk** | **0.92** | **105** | *eP* | **Pn** | **12 31 52.2** | **+2.0** |
| BUJR | | | | *eS* | **Sn** | **12 32 05.6** | **+1.2** |
| BUJR | | | | *i* S | | 12 32 07.1 | |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,761nm,0.3s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,1μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,976nm,0.7s | | | | | | |
| **BUJR** | **Buynaksk** | **0.92** | **105** | *ePg* | **Pn** | **12 31 52.3** | **+2.0** |
| BUJR | | | | *eSg* | **Sn** | **12 32 06.9** | **+2.5** |
| **ARKR** | **Arakani** | **0.93** | **120** | *i iP* | **Pn** | **12 31 51.7** | **+1.3** |
| ARKR | | | | *i* | | 12 32 06.0 | |
| ARKR | | | | pmax | pmax | | |
| | comp=Z,402nm,0.2s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=N,386nm,0.3s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=E,374nm,0.4s | | | | | | |
| **ARKR** | **Arakani** | **0.93** | **120** | *ePg* | **Pn** | **12 31 52.0** | **+1.6** |
| ARKR | | | | *eSg* | **Sn** | **12 32 05.8** | **+1.2** |
| **GNBR** | **Gunib** | **1.04** | **130** | *eP* | **Pn** | **12 31 53.5** | **+1.9** |
| GNBR | | | | *eS* | **Sn** | **12 32 08.1** | **+1.3** |
| GNBR | | | | *i* S | | 12 32 08.9 | |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,229nm,0.3s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=E,950nm,0.2s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| **GNBR** | **Gunib** | **1.04** | **130** | *i* Pg | **Pn** | **12 31 53.5** | **+1.9** |
| GNBR | | | | *eSg* | **Sn** | **12 32 09.1** | **+2.4** |
| **PNSH** | **Pansheti** | **1.04** | **246** | P | **Pn** | **12 31 52.8** | **+1.1** |
| PNSH | | | | S | **Sn** | **12 32 07.3** | **+0.3** |
| **PNSH** | **Pansheti** | **1.04** | **246** | P | **Pn** | **12 31 52.8** | **+1.1** |
| PNSH | | | | S | **Sn** | **12 32 07.3** | **+0.3** |
| **BTKR** | **Batakoyurt** | **1.04** | **288** | *eP* | **Pn** | **12 31 54.0** | **+2.4** |
| BTKR | | | | *eS* | **Sn** | **12 32 09.7** | **+2.9** |
| **BTKR** | **Batakoyurt** | **1.04** | **288** | *ePg* | **Pn** | **12 31 53.9** | **+2.3** |
| BTKR | | | | *eSg* | **Sn** | **12 32 09.4** | **+2.6** |
| **TRKR** | **Terskaya** | **1.07** | **308** | *i* P | **Pn** | **12 31 54.3** | **+2.4** |
| TRKR | | | | pmax | pmax | | |
| | comp=Z,685nm,0.2s | | | | | | |
| **TRKR** | **Terskaya** | **1.07** | **308** | *i* Pg | **Pn** | **12 31 54.4** | **+2.4** |
| TRKR | | | | *eSg* | **Sn** | **12 32 08.9** | **+1.5** |
| **MAK** | **Makhachkala** | **1.18** | **95** | *i iP* | **Pn** | **12 31 55.8** | **+2.6** |
| MAK | | | | *e* | | 12 32 13.5 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,296nm,0.2s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,891nm,0.3s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,951nm,0.5s | | | | | | |
| **MAK** | **Makhachkala** | **1.18** | **95** | *ePg* | **Pn** | **12 31 55.8** | **+2.6** |
| MAK | | | | *eSg* | **Sn** | **12 32 13.3** | **+3.6** |
| **ARNR** | **Ardon** | **1.19** | **276** | *i* P | **Pn** | **12 31 55.6** | **+2.3** |
| ARNR | | | | pmax | pmax | | |
| | comp=Z,179nm,0.2s | | | | | | |
| **ARNR** | **Ardon** | **1.19** | **276** | *i* Pg | **Pn** | **12 31 55.6** | **+2.3** |
| ARNR | | | | *eSg* | **Sn** | **12 32 12.7** | **+2.9** |
| **LACR** | **Lac** | **1.20** | **259** | *eP* | **Pn** | **12 31 54.6** | **+1.0** |
| LACR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.1s | | | | | | |
| **LACR** | **Lac** | **1.20** | **259** | *ePg* | **Pn** | **12 31 54.6** | **+1.0** |
| LACR | | | | *eSg* | **Sn** | **12 32 10.7** | **+0.4** |
| **LGD** | **Lagodekhi** | **1.26** | **168** | P | **Pn** | **12 31 55.9** | **+1.7** |
| LGD | | | | S | **Sn** | **12 32 13.4** | **+2.1** |
| **LGD** | **Lagodekhi** | **1.26** | **168** | P | **Pn** | **12 31 55.9** | **+1.7** |
| LGD | | | | S | **Sn** | **12 32 13.4** | **+2.1** |
| **KMKR** | **Kumukh** | **1.29** | **136** | *eP* | **Pn** | **12 31 57.0** | **+2.3** |
| KMKR | | | | *eS* | **Sn** | **12 32 14.0** | **+1.7** |
| KMKR | | | | *i* S | | 12 32 14.8 | |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,453nm,0.1s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=E,1μm,0.2s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| **KMKR** | **Kumukh** | **1.29** | **136** | *ePg* | **Pn** | **12 31 57.0** | **+2.3** |
| KMKR | | | | *eSg* | **Sn** | **12 32 14.0** | **+1.7** |
| **KORR** | **Kora** | **1.34** | **271** | *eP* | **Pn** | **12 31 57.6** | **+2.4** |
| KORR | | | | *eS* | **Sn** | **12 32 15.1** | **+1.9** |
| **KORR** | **Kora** | **1.34** | **271** | *ePg* | **Pn** | **12 31 57.3** | **+2.1** |
| KORR | | | | *eSg* | **Sn** | **12 32 14.9** | **+1.7** |
| **PRTR** | **Priterechnaya** | **1.36** | **301** | *i* P | **Pn** | **12 31 57.9** | **+2.5** |
| PRTR | | | | pmax | pmax | | |
| | comp=Z,280nm,0.1s | | | | | | |
| **PRTR** | **Priterechnaya** | **1.36** | **301** | *i* Pg | **Pn** | **12 31 57.9** | **+2.5** |
| PRTR | | | | *eSg* | **Sn** | **12 32 17.1** | **+3.5** |
| **STDR** | **Stavd-Durt** | **1.38** | **283** | *eP* | **Pn** | **12 31 58.0** | **+2.4** |
| STDR | | | | *eS* | **Sn** | **12 32 15.6** | **+1.7** |
| **STDR** | **Stavd-Durt** | **1.38** | **283** | *i* Pg | **Pn** | **12 31 58.0** | **+2.4** |
| STDR | | | | *eSg* | **Sn** | **12 32 15.7** | **+1.7** |
| **SGKR** | **Sergokala** | **1.43** | **115** | *eP* | **Pn** | **12 31 59.2** | **+2.9** |
| SGKR | | | | *eS* | **Sn** | **12 32 17.9** | **+2.8** |
| SGKR | | | | *i* S | | 12 32 18.7 | |
| SGKR | | | | pmax | pmax | | |
| | comp=Z,257nm,0.1s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=N,322nm,0.4s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=E,262nm,0.3s | | | | | | |
| SGKR | | | | smax | smax | | |
| | comp=N,305nm,0.9s | | | | | | |
| **SGKR** | **Sergokala** | **1.43** | **115** | *ePg* | **Pn** | **12 31 59.2** | **+2.9** |
| SGKR | | | | *eSg* | **Sn** | **12 32 17.9** | **+2.8** |
| **ZEI** | **Tsey** | **1.49** | **260** | *eP* | **Pn** | **12 31 58.2** | **+1.0** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,62nm,0.1s | | | | | | |
| **ZEI** | **Tsey** | **1.49** | **260** | *ePg* | **Pn** | **12 31 58.2** | **+1.0** |
| ZEI | | | | *eSg* | **Sn** | **12 32 16.6** | **-0.3** |
| **ZKTA** | **Zakatala** | **1.52** | **159** | P | **Pn** | **12 31 58.9** | **+1.4** |
| **ZKTA** | **Zakatala** SNR=16 | **1.52** | **159** | P | **Pn** | **12 31 58.9** | **+1.4** |
| ZKTA | | | | S | **Sn** | **12 32 18.1** | **+0.9** |
| **LSNR** | **Lesken** | **1.53** | **279** | *eP* | **Pn** | **12 31 59.6** | **+2.1** |
| LSNR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.2s | | | | | | |
| **LSNR** | **Lesken** | **1.53** | **279** | *ePg* | **Pn** | **12 31 59.6** | **+2.1** |
| LSNR | | | | *eSg* | **Sn** | **12 32 19.4** | **+2.0** |
| **SEAG** | **Tbilisi Sea** | **1.53** | **212** | P | **Pn** | **12 31 59.6** | **+2.1** |
| SEAG | | | | S | **Sn** | **12 32 19.6** | **+2.1** |
| **SEAG** | **Tbilisi Sea** | **1.53** | **212** | P | **Pn** | **12 31 59.7** | **+2.1** |
| SEAG | | | | S | **Sn** | **12 32 19.6** | **+2.1** |
| **URKR** | **Urkarakh** | **1.56** | **125** | *eP* | **Pn** | **12 32 00.6** | **+2.5** |
| URKR | | | | *eS* | **Sn** | **12 32 21.3** | **+3.0** |
| URKR | | | | *i* S | | 12 32 21.7 | |
| URKR | | | | pmax | pmax | | |
| | comp=Z,167nm,0.1s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=E,216nm,0.3s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=N,139nm,0.3s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=E,196nm,0.3s | | | | | | |
| **URKR** | **Urkarakh** | **1.56** | **125** | *ePg* | **Pn** | **12 32 00.6** | **+2.5** |
| URKR | | | | *eSg* | **Sn** | **12 32 21.3** | **+3.0** |
| **BTNK** | **Botanikuri** | **1.60** | **211** | P | **Pn** | **12 31 57.4** | **-1.1** |
| BTNK | | | | S | **Sn** | **12 32 18.4** | **-0.6** |
| **BTNK** | **Botanikuri** | **1.60** | **211** | P | **Pn** | **12 31 57.4** | **-1.1** |
| BTNK | | | | S | **Sn** | **12 32 18.5** | **-0.6** |
| **DDFL** | **Dedoflistskaro** | **1.63** | **174** | P | **Pn** | **12 32 02.3** | **+3.5** |
| DDFL | | | | S | **Sn** | **12 32 25.7** | **+6.0** |
| **DDFL** | **Dedoflistskaro** | **1.63** | **174** | P | **Pn** | **12 32 02.3** | **+3.5** |
| DDFL | | | | S | **Sn** | **12 32 25.7** | **+6.0** |
| **DIGR** | **Digorskoe uzhe** | **1.71** | **265** | *eP* | **Pn** | **12 32 01.0** | **+1.0** |
| DIGR | | | | *eS* | **Sn** | **12 32 22.4** | **+0.7** |
| **DIGR** | **Digorskoe uzhe** | **1.71** | **265** | *ePg* | **Pn** | **12 32 01.0** | **+1.0** |
| DIGR | | | | *eSg* | **Sn** | **12 32 21.2** | **-0.5** |
| **NCK** | **Nalchik** | **1.74** | **285** | *i* P | **Pn** | **12 32 02.3** | **+2.2** |
| NCK | | | | pmax | pmax | | |
| | comp=Z,411nm,0.3s | | | | | | |
| **NCK** | **Nalchik** | **1.74** | **285** | *i* Pg | **Pn** | **12 32 02.4** | **+2.2** |
| NCK | | | | *eSg* | **Sn** | **12 32 23.8** | **+1.7** |
| **KBTC** | **Kuba-Taba** | **1.96** | **293** | *eP* | **Pn** | **12 32 04.9** | **+1.8** |
| KBTC | | | | *eS* | **Sn** | **12 32 28.6** | **+1.2** |
| **KBTC** | **Kuba-Taba** | **1.96** | **293** | *ePg* | **Pn** | **12 32 04.9** | **+1.8** |
| KBTC | | | | *eSg* | **Sn** | **12 32 28.6** | **+1.2** |
| **KZRT** | **Kazreti** | **2.02** | **214** | P | **Pn** | **12 32 05.0** | **+1.2** |
| KZRT | | | | S | **Sn** | **12 32 30.0** | **+1.4** |
| **KZRT** | **Kazreti** | **2.02** | **214** | P | **Pn** | **12 32 05.0** | **+1.2** |
| KZRT | | | | S | **Sn** | **12 32 30.0** | **+1.4** |
| **TRLG** | **Trialeti** | **2.03** | **222** | P | **Pn** | **12 32 05.5** | **+1.4** |
| TRLG | | | | S | **Sn** | **12 32 31.1** | **+2.1** |
| **QZX** | **Qazax, Azerbai** SNR=38 | **2.04** | **191** | P | **Pn** | **12 32 04.1** | **-0.1** |
| QZX | | | | S | **Sn** | **12 32 29.3** | **+0.1** |
| **DRN** | **Derbent** | **2.07** | **119** | *eP* | **Pn** | **12 32 07.7** | **+3.2** |
| DRN | | | | *eS* | **Sn** | **12 32 33.1** | **+3.3** |
| **DRN** | **Derbent** | **2.07** | **119** | *ePg* | **Pn** | **12 32 07.7** | **+3.2** |
| DRN | | | | *eSg* | **Sn** | **12 32 33.1** | **+3.3** |
| **AKT** | **Akhty** | **2.09** | **139** | *eP* | **Pn** | **12 32 06.9** | **+2.1** |
| AKT | | | | pmax | pmax | | |
| | comp=Z,102nm,0.2s | | | | | | |
| **AKT** | **Akhty** | **2.09** | **139** | *ePg* | **Pn** | **12 32 06.9** | **+2.1** |
| AKT | | | | *eSg* | **Sn** | **12 32 31.9** | **+1.5** |
| **SEKA** | **Sheki** | **2.09** | **152** | P | **Pn** | **12 32 06.1** | **+1.2** |
| **SEKA** | **Sheki** SNR=16 | **2.09** | **152** | P | **Pn** | **12 32 06.1** | **+1.3** |
| SEKA | | | | S | **Sn** | **12 32 30.5** | **+0.1** |
| **DMNI** | **Dmanisi** | **2.15** | **217** | P | **Pn** | **12 32 06.8** | **+1.1** |
| DMNI | | | | S | **Sn** | **12 32 32.5** | **+0.6** |
| **DMNI** | **Dmanisi** | **2.15** | **217** | P | **Pn** | **12 32 06.8** | **+1.1** |
| DMNI | | | | S | **Sn** | **12 32 32.5** | **+0.6** |
| **KSMR** | **Kasumkent** | **2.21** | **131** | *eP* | **Pn** | **12 32 09.6** | **+3.3** |
| KSMR | | | | *eS* | **Sn** | **12 32 37.0** | **+3.9** |
| KSMR | | | | *i* S | | 12 32 37.7 | |
| KSMR | | | | pmax | pmax | | |
| | comp=Z,164nm,0.4s | | | | | | |
| KSMR | | | | smax | smax | | |
| | comp=E,2.0nm,0.4s | | | | | | |
| KSMR | | | | smax | smax | | |
| | comp=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KIV0** | **Kislovodsk Arr** | **2.50** | **292** | *e*Pn | | **Pn** | **12 32 11.6** | **+1.4** |
| KIV0 | | | | *e*Sn | | **Sn** | **12 32 39.4** | **-0.6** |
| **KVAR** | **Kislovodsk Arr** | **2.50** | **292** | Pn | | **Pn** | **12 32 11.6** | **+1.4** |
| | baz=163,slow=14,SNR=11 | | | | | | | |
| KVAR | | | | Sn | | **Sn** | **12 32 39.7** | **-0.3** |
| | baz=297,slow=19,SNR=13 | | | | | | | |
| **KIV** | **Kislovodsk** | **2.50** | **292** | *i* P | | **Pn** | **12 32 11.1** | **+0.8** |
| **KIV** | **Kislovodsk** | **2.50** | **292** | *e*Pn | | **Pn** | **12 32 11.6** | **+1.3** |
| KIV | | | | *e*Sn | | **Sn** | **12 32 39.4** | **-0.7** |
| **XNQ** | **Khinaliq** | **2.52** | **138** | P | | **Pn** | **12 32 12.9** | **+2.2** |
| | SNR=152 | | | | | | | |
| XNQ | | | | S | | **Sn** | **12 32 42.5** | **+1.6** |
| **QBL** | **Gabala** | **2.56** | **145** | P | | **Pn** | **12 32 13.6** | **+2.5** |
| QBL | | | | S | | **Sn** | **12 32 43.5** | **+1.9** |
| **QUBA** | **Quba, Azerbaij** | **2.58** | **131** | P | | **Pn** | **12 32 14.7** | **+3.5** |
| **ABS** | **Abastumani** | **2.63** | **241** | P | | **Pn** | **12 32 14.8** | **+2.7** |
| **ABS** | **Abastumani** | **2.63** | **241** | P | | **Pn** | **12 32 14.8** | **+2.7** |
| **ALER** | **Alexandrovskoy** | **2.75** | **309** | *i* P | | **Pn** | **12 32 15.7** | **+2.3** |
| ALER | | | | *e*S | | **Sn** | **12 32 46.3** | **+0.5** |
| **ALER** | **Alexandrovskoy** | **2.75** | **309** | *i* Pn | | **Pn** | **12 32 15.7** | **+2.3** |
| ALER | | | | *e*Sn | | **Sn** | **12 32 46.3** | **+0.5** |
| **IML** | **Ismayilli** | **2.84** | **142** | P | | **Pn** | **12 32 16.5** | **+1.7** |
| IML | | | | S | | **Sn** | **12 32 47.8** | **-0.3** |
| **GOF** | **Gofitskoye** | **2.87** | **315**⇑ | *i* P | | **Pn** | **12 32 17.0** | **+2.0** |
| GOF | | | | *e*S | | **Sn** | **12 32 49.8** | **+1.1** |
| GOF | | | | pmax | pmax | | | |
| | comp=Z,113nm,0.1s | | | | | | | |
| GOF | | | | smax | smax | | | |
| | comp=N,374nm,0.2s | | | | | | | |
| GOF | | | | smax | smax | | | |
| | comp=E,218nm,0.2s | | | | | | | |
| **GOF** | **Gofitskoye** | **2.87** | **315** | *e*Pn | | **Pn** | **12 32 16.5** | **+1.5** |
| GOF | | | | *e*Sn | | **Sn** | **12 32 49.9** | **+1.3** |
| **BRDA** | **Brd** | **2.96** | **161** | P | | **Pn** | **12 32 18.9** | **+2.6** |
| BRDA | | | | S | | **Sn** | **12 32 51.7** | **+0.7** |
| **SIZA** | **Siyzn** | **2.99** | **131** | P | | **Pn** | **12 32 19.2** | **+2.4** |
| | SNR=8.1 | | | | | | | |
| SIZA | | | | S | | **Sn** | **12 32 55.7** | **+3.9** |
| **PQL** | **Pirkuli** | **3.04** | **138** | P | | **Pn** | **12 32 19.5** | **+2.1** |
| PQL | | | | S | | **Sn** | **12 32 56.8** | **+3.7** |
| **GNI** | **Garni** | **3.04** | **197** | Pn | | **Pn** | **12 32 19.0** | **+1.4** |
| | comp=E,3.1nm,0.3s,baz=318,slow=21,SNR=14 | | | | | | | |
| GNI | | | | Sn | | **Sn** | **12 32 51.4** | **-1.8** |
| | comp=E,1.8nm,0.3s,baz=184,slow=16,SNR=1.9 | | | | | | | |
| **ZRD** | **Zardab** | **3.09** | **154** | P | | **Pn** | **12 32 20.0** | **+2.0** |
| | SNR=6.0 | | | | | | | |
| ZRD | | | | S | | **Sn** | **12 32 54.8** | **+0.7** |
| **AGDM** | **Agdam** | **3.09** | **163** | P | | **Pn** | **12 32 19.7** | **+1.6** |
| | SNR=7.1 | | | | | | | |
| AGDM | | | | S | | **Sn** | **12 32 55.6** | **+1.4** |
| **ATGJ** | **Altiaghaj** | **3.16** | **133** | P | | **Pn** | **12 32 21.0** | **+1.9** |
| ATGJ | | | | S | | **Sn** | **12 32 56.0** | **0.0** |
| **KDMR** | **Kurdemir** | **3.19** | **147** | S | | **Sn** | **12 32 57.1** | **+0.8** |
| **NVNR** | **Nevinnomyssk** | **3.24** | **300** | *e*P | | **Pn** | **12 32 22.0** | **+1.9** |
| NVNR | | | | *e*S | | **Sn** | **12 32 58.6** | **+0.9** |
| **NVNR** | **Nevinnomyssk** | **3.24** | **300** | *e*Pn | | **Pn** | **12 32 22.0** | **+1.9** |
| NVNR | | | | *e*Sn | | **Sn** | **12 32 58.6** | **+0.9** |
| **ARXR** | **Arkhyz** | **3.41** | **280** | *e*P | | Pn | 12 32 27.2 | +4.7 |
| ARXR | | | | *e*S | | Sn | 12 33 12.7 | +11 |
| **BLQ** | **Beylaqan** | **3.57** | **159** | P | | **Pn** | **12 32 25.6** | **+1.1** |
| BLQ | | | | S | | **Sn** | **12 33 06.2** | **+0.5** |
| **SBZ** | **Shahbuz** | **3.67** | **184** | P | | **Pn** | **12 32 28.0** | **+1.9** |
| SBZ | | | | S | | **Sn** | **12 33 10.3** | **+1.9** |
| **AHMR** | **Akhmetovskaya** | **3.69** | **289** | *e*P | | **Pn** | **12 32 29.0** | **+2.8** |
| AHMR | | | | *e*S | | **Sn** | **12 33 10.9** | **+2.2** |
| **AHMR** | **Akhmetovskaya** | **3.69** | **289** | *e*Pn | | **Pn** | **12 32 29.0** | **+2.8** |
| AHMR | | | | *e*Sn | | **Sn** | **12 33 10.9** | **+2.2** |
| **SAAT** | **Saatly** | **3.72** | **149** | P | | **Pn** | **12 32 27.4** | **+0.9** |
| | SNR=3.6 | | | | | | | |
| SAAT | | | | S | | **Sn** | **12 33 08.8** | **-0.6** |
| **GLBA** | **Clilabad** | **4.26** | **153** | P | | **Pn** | **12 32 35.2** | **+1.3** |
| GLBA | | | | S | | **Sn** | **12 33 21.8** | **-0.6** |
| **GUZR** | **Guzeripl'** | **4.31** | **284** | *i* P | | **Pn** | **12 32 36.7** | **+2.2** |
| **GUZR** | **Guzeripl'** | **4.31** | **284** | *e*Pn | | **Pn** | **12 32 38.1** | **+3.6** |
| **YRD** | **Yardimli** | **4.51** | **156** | P | | **Pn** | **12 32 38.4** | **+1.0** |
| | SNR=12 | | | | | | | |
| YRD | | | | S | | **Sn** | **12 33 26.3** | **-2.5** |
| **LRK** | **Lerik** | **4.79** | **156** | P | | **Pn** | **12 32 42.4** | **+1.2** |
| | SNR=7.6 | | | | | | | |
| LRK | | | | S | | **Sn** | **12 33 34.0** | **-1.6** |
| **LKRN** | **Lenkeran, Azer** | **4.87** | **152** | S | | **Sn** | **12 33 35.2** | **-2.0** |
| **BELG** | **Belogornoye** | **9.40** | **6** | Pn | | **Pn** | **12 33 43.0** | **-0.8** |
| | comp=E,1.4nm,0.3s,baz=152,slow=17,SNR=1.3 | | | | | | | |
| BELG | | | | Sn | | **Sn** | **12 35 22.6** | **-5.0** |
| | comp=E,1.3nm,0.3s,baz=167,slow=19,SNR=2.3 | | | | | | | |
| **BELG** | **Belogornoye** | **9.40** | **6** | P | | **Pn** | **12 33 43.0** | **-0.8** |
| **GEYT** | **Alibeck** | **10.62** | **115** | Pn | | **Pn** | **12 33 59.3** | **-1.3** |
| | comp=E,1.1nm,0.3s,baz=289,slow=15,SNR=9.0 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.10** | **44** | Pn | | **Pn** | **12 34 05.4** | **-1.5** |
| | comp=E,0.6nm,0.3s,baz=250,slow=4.4,SNR=14 | | | | | | | |
| AKTO | | | | Sn | | **Sn** | **12 36 01.7** | **-7.2** |
| | comp=E,0.5nm,0.3s,baz=227,slow=22,SNR=6.3 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.10** | **44** | P | | **Pn** | **12 34 05.9** | **-1.0** |
| **AKTO** | **Aktyubinsk** | **11.10** | **44** | ⇓P | | **Pn** | **12 34 05.9** | **-1.0** |
| | comp=E,4.2nm,0.8s | | | | | | | |
| AKTO | | | | ⇓S | | **Sn** | **12 36 01.0** | **-7.9** |
| | comp=E,3.1nm,0.8s | | | | | | | |
| **AB31** | **Akbulak array** | **11.53** | **53** | P | | **Pn** | **12 34 12.1** | **-0.6** |
| AB31 | | | | S | | **Sn** | **12 36 14.5** | **-4.9** |
| **AB31** | **Akbulak array** | **11.53** | **53** | ⇑P | | **Pn** | **12 34 12.1** | **-0.6** |
| | comp=E,0.8nm,0.4s,baz=231,slow=13,SNR=8.3 | | | | | | | |
| AB31 | | | | ⇓S | | **Sn** | **12 36 14.1** | **-5.3** |
| | comp=E,1.1nm,0.3s,baz=245,slow=25,SNR=8.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **13.71** | **310** | Pn | | **Pn** | **12 34 39.2** | **-2.4** |
| | comp=E,0.2nm,0.3s,baz=100,slow=13,SNR=2.1 | | | | | | | |
| **ARU** | **Arti** | **15.64** | **27** | Pn | | **Pn** | **12 35 03.1** | **-3.2** |
| | comp=E,0.0nm,0.3s,baz=275,slow=7.9,SNR=3.5 | | | | | | | |
| **MODS** | **Modra-Piesok** | **20.61** | **295** | *e*P | | Pn | 12 36 13.0 | +6.9 |
| **MODS** | **Modra-Piesok** | **20.61** | **295** | *e*P | | Pn | 12 36 13.0 | +6.9 |
| **AAK** | **Ala-Archa** | **20.93** | **81** | *i* P | | Pn | 12 36 16.5 | +6.4 |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,2.0s | | | | | | | |
| **FINES** | **FINESS Array B** | **21.88** | **334** | P | | **P** | **12 36 19.2** | **+2.7** |
| | comp=Z,1.5nm,0.8s,baz=144,slow=10,SNR=1.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **23.01** | **296** | P | | **P** | **12 36 31.4** | **+3.0** |
| | comp=Z,0.2nm,0.3s,baz=91,slow=7.3,SNR=1.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.42** | **60** | P | | **P** | **12 36 34.2** | **+2.1** |
| | comp=Z,0.3nm,0.5s,baz=267,slow=9.7,SNR=2.6 | | | | | | | |
| **KURK** | **Kurchatov** | **23.48** | **60** | P | | **P** | **12 36 34.2** | **+1.5** |
| **MKAR** | **Makanchi Array** | **25.88** | **69** | P | | **P** | **12 36 57.1** | **+2.6** |
| | comp=Z,0.1nm,0.5s,baz=264,slow=8.6,SNR=5.4 | | | | | | | |

**IDC 11 12:33:20.8±45.0, 15°.76S×174°.00W, h0km, mb4.1/3, mb1 4.3/3, mb1mx3.7/28, mbtmp4.1/3, Error ellipse: s-maj=871.6km s-min=182.7km az=78.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **43.36** | **240** | P | P | 12 41 25.0 | -0.1 |
| | 1.3nm,0.7s,baz=91,slow=12,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.20** | **257** | P | P | 12 42 11.3 | 0.0 |
| | 0.5nm,0.5s,baz=91,slow=8.1,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **49.45** | **252** | P | P | 12 42 12.9 | -0.2 |
| | 5.5nm,0.6s,baz=88,slow=8.1,SNR=126 | | | | | | |

*EAF **11** 12:38:27.9±1.5, 25°.97S×29°.31E, h29km±16km, MD4.1*
**BUL 11 12:38:28.0±1.2, 25°.98S×29°.29E, h28km±12km, MD4.4, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.63** | **97** | *i* P | Pn | 12 39 07.9 | -0.7 |
| CNG | | | | *e*S | Sn | 12 39 38.0 | -1.5 |
| **CNG** | **Changalane** | **2.63** | **97** | *i* P | Pn | 12 39 07.9 | -0.7 |
| CNG | | | | *e*S | Sn | 12 39 38.0 | -1.5 |
| **MOPA** | **Mopani** | **3.11** | **38** | *e*P | Pn | 12 39 14.6 | -0.7 |
| MOPA | | | | *e*S | Sn | 12 39 47.6 | -4.0 |
| **MOPA** | **Mopani** | **3.11** | **38** | *e*P | Pn | 12 39 14.6 | -0.7 |
| MOPA | | | | *e*S | Sn | 12 39 47.6 | -4.0 |
| **MSNA** | **Messina** | **3.68** | **11** | *e*P | Pn | 12 39 23.9 | +0.7 |
| MSNA | | | | *e*S | Sn | 12 40 03.0 | -2.6 |
| **MSNA** | **Messina** | **3.68** | **11** | *e*P | Pn | 12 39 23.9 | +0.7 |
| MSNA | | | | *e*S | Sn | 12 40 03.0 | -2.6 |
| **BOSA** | **Boshof** | **4.45** | **233** | *e*P | Pn | 12 39 33.5 | -0.3 |
| BOSA | | | | *e*S | Sn | 12 40 21.4 | -3.2 |
| **BOSA** | **Boshof** | **4.45** | **233** | *e*P | Pn | 12 39 33.5 | -0.3 |
| BOSA | | | | *e*S | Sn | 12 40 21.4 | -3.2 |
| **MATP** | **Matopo** | **5.58** | **352** | *e*P | Pn | 12 39 47.9 | -1.4 |
| MATP | | | | *e*S | Sn | 12 40 47.1 | -5.5 |
| **MATP** | **Matopo** | **5.58** | **352** | *e*P | Pn | 12 39 47.9 | -1.4 |
| MATP | | | | *e*S | Sn | 12 40 47.1 | -5.5 |
| **BLWY** | **Bulawayo** | **5.84** | **354** | *e*P | Pn | 12 39 52.1 | -0.9 |
| BLWY | | | | *e*S | Sn | 12 40 54.4 | -4.8 |
| **BLWY** | **Bulawayo** | **5.84** | **354** | *e*P | Pn | 12 39 52.1 | -0.9 |
| BLWY | | | | *e*S | Sn | 12 40 54.4 | -4.8 |

*TUL **11** 12:46:20.7±1.1, 35°.66N±0°.01×97°.38W±0°.01, h6km±4km, ML2.6, mb_Lg2.0/9(NEIC), Error ellipse: s-maj=1.6km s-min=1.0km az=147.0*
**NEIC 11 12:46:20.7±0.8, 35°.668N±0°.010×97°.39W±0°.01, h10km, Error ellipse: s-maj=1.6km s-min=1.4km az=120.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.09** | **200** | Pg | Pg | 12 46 23.2 | +0.1 |
| **OK025** | **Westminster Rd** | **0.10** | **156** | Pg | Pg | 12 46 22.9 | -0.2 |
| OK025 | | | | Sg | Sg | 12 46 24.2 | -0.7 |
| **OK001** | **Jones High Sch** | **0.13** | **144** | Pg | Pg | 12 46 23.6 | -0.1 |
| OK001 | | | | Sg | Sg | 12 46 25.9 | +0.1 |
| **OK029** | **Liberty Lake** | **0.14** | **336** | Pg | Pg | 12 46 24.0 | +0.2 |
| OK029 | | | | Sg | Sg | 12 46 26.5 | +0.4 |
| **BCOK** | **Bluff Creek, N** | **0.18** | **267** | Pg | Pg | 12 46 24.5 | 0.0 |
| BCOK | | | | Sg | Sg | 12 46 27.6 | +0.4 |
| **OKCFA** | **Oklahoma City** | **0.26** | **192** | Pg | Pg | 12 46 25.9 | 0.0 |
| OKCFA | | | | Sg | Sg | 12 46 29.8 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **189** | Pg | Pg | 12 46 26.0 | 0.0 |
| OKCSW | | | | Sg | Sg | 12 46 30.1 | +0.4 |
| **FNO** | **Franklin** | **0.41** | **182** | Pg | Pg | 12 46 28.7 | 0.0 |
| FNO | | | | Sg | Sg | 12 46 34.8 | +0.7 |
| **OK033** | **Mehan** | **0.52** | **44** | Pg | Pg | 12 46 31.0 | +0.2 |
| OK033 | | | | Sg | Sg | 12 46 38.3 | +0.6 |
| **OK031** | **S. Brethren Rd** | **0.53** | **57** | Pg | Pg | 12 46 31.1 | +0.2 |
| OK031 | | | | IAmb_Lg | | 12 46 37.8 | |
| | comp=Z,20nm,0.9s | | | | | | |
| OK031 | | | | Sg | Sg | 12 46 38.2 | +0.4 |
| **OK030** | **Cody Creek RV** | **0.55** | **62** | Pg | Pg | 12 46 31.5 | +0.1 |
| OK030 | | | | Sg | Sg | 12 46 39.1 | +0.4 |
| OK030 | | | | IAmb_Lg | | 12 46 39.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **OK034** | **N. Norfolk Rd.** | **0.64** | **58** | Pg | Pg | 12 46 33.0 | -0.1 |
| **W35A** | **Tecumseh** | **0.66** | **141** | Pg | Pg | 12 46 33.1 | -0.3 |
| W35A | | | | IAmb_Lg | | 12 46 42.1 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **QUOK** | **Quay** | **0.74** | **47** | Pg | Pg | 12 46 34.9 | -0.2 |
| **CROK** | **Carrier** | **0.97** | **330** | Pg | Pg | 12 46 39.1 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.13** | **199** | Pg | Pb | 12 46 41.9 | -0.4 |
| **GC02** | **Grant County #** | **1.24** | **342** | | Pn | 12 46 43.9 | -0.3 |
| **OK032** | **Salt Plains WL** | **1.32** | **330** | Pn | Pn | 12 46 44.8 | -0.4 |
| **TUL1** | **Leonard** | **1.32** | **79** | | Pn | 12 46 44.3 | -0.9 |
| **KAN13** | **South Haven SW** | **1.34** | **357** | Pn | Pb | 12 46 45.8 | -0.2 |
| **KAN14** | **Manchester OK** | **1.37** | **340** | Pn | Pn | 12 46 45.8 | -0.1 |
| **KAN17** | **Caldwell West** | **1.41** | **348** | Pn | Pb | 12 46 47.0 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.43** | **29** | Pn | Pn | 12 46 46.7 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | Pn | Pn | 12 46 47.2 | -0.1 |
| **KAN01** | **Argonia South** | **1.51** | **349** | Pn | Pn | 12 46 48.1 | +0.2 |
| **KAN12** | **Harper NE Stat** | **1.70** | **343** | IAmb_Lg | | 12 47 13.8 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **1.97** | **123** | Pn | Pn | 12 46 54.8 | +0.6 |
| **W39A** | **Magazine** | **2.98** | **98** | Pn | Pn | 12 47 07.9 | -0.2 |
| **W41B** | **Gary Mavity, V** | **4.22** | **95** | Pn | Pn | 12 47 25.6 | +0.4 |
| **FCAR** | **Ozark Folk Cen** | **4.28** | **86** | Pn | Pn | 12 47 25.7 | -0.3 |
| **MGMO** | **Mountain Grove** | **4.38** | **69** | Pn | Pn | 12 47 26.7 | -0.7 |

*IDC **11** 12:59:23.8±1.7, 3°.22S×145°.09E, h0km, mb3.6/4, mb1 3.9/6, mb1mx3.6/39, mbtmp3.7/6, ML3.7/2, MS3.1/3, Ms1 3.1/3, ms1mx2.7/49, Error ellipse: s-maj=63.1km s-min=23.8km az=107.0*
**ISC 11 12:59:28.8±1.3, 3°.3S±0°.2×145°.1E±0°.3, h35km, n8, σ0.60/6, mb3.5/4, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **4.50** | **280** | LR | LR | 13 02 20.1 | |
| | comp=Z,129nm,19.1s,baz=44,slow=40 | | | | | | |
| **CTA** | **Charters Tower** | **16.70** | **176** | Pn | **P** | **13 03 22.4** | **+0.1** |
| | 0.1nm,0.3s,baz=1.4,slow=12,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.59** | **212** | P | **P** | **13 03 54.3** | **+0.1** |
| | 0.3nm,0.3s,baz=42,slow=12,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **22.96** | **207** | P | **P** | **13 04 30.6** | **+0.3** |
| | 0.8nm,0.6s,baz=37,slow=8.3,SNR=17 | | | | | | |
| ASAR | | | | LR | LR | 13 13 59.3 | |
| | comp=Z,55nm,18.1s,baz=61,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.09** | **231** | P | **P** | **13 04 40.5** | **-0.8** |
| | 3.1nm,0.7s,baz=32,slow=7.4,SNR=6.8 | | | | | | |
| **STKA** | **Stephens Creek** | **28.60** | **186** | LR | LR | 13 18 02.0 | |
| | comp=Z,53nm,18.3s,baz=27,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **61.17** | **331** | P | **P** | **13 09 40.6** | **+0.5** |
| | 0.1nm,0.3s,baz=142,slow=7.3,SNR=1.8 | | | | | | |
| **ILAR** | **Eielson Array** | **83.77** | **24** | P | **P** | **13 11 53.8** | **-0.4** |
| | 0.4nm,0.9s,baz=248,slow=4.8,SNR=2.2 | | | | | | |

**IDC 11 13:04:02.0±2.2, 28°.54N×43°.67W, h0km, mb3.4/4, mb1 3.7/4, mb1mx3.2/55, mbtmp3.4/4, MS3.7/1, Ms1 3.7/1, ms1mx2.7/61, Error ellipse: s-maj=94.4km s-min=29.0km az=14.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **44.80** | **100** | P | P | 13 12 17.9 | -0.1 |
| | 0.9nm,1.1s,baz=297,slow=8.2,SNR=4.1 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.83** | **138** | T | T | 14 01 07.7 | |
| | baz=323,slow=75,SNR=12 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.84** | **138** | T | T | 14 01 05.6 | |
| | baz=323,slow=75,SNR=11 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.85** | **138** | T | T | 14 01 07.6 | |
| | baz=323,slow=75,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.99** | **286** | LR | LR | 13 32 56.3 | |
| | comp=Z,71nm,20.4s,baz=316,slow=33 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.11** | **304** | P | P | 13 13 29.2 | +0.2 |
| | 0.4nm,0.7s,baz=94,slow=9.5,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **57.90** | **46** | P | P | 13 13 55.6 | -0.1 |
| | 0.5nm,0.3s,baz=274,slow=6.5,SNR=2.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.49** | **300** | P | P | 13 14 20.7 | -0.3 |
| | 0.1nm,0.5s,baz=88,slow=7.7,SNR=1.8 | | | | | | |

*IDC **11** 13:10:54.8±0.5, 43°.46N×82°.76E, h0km, mb4.4/36, mb1 4.5/44, mb1mx4.3/61, mbtmp4.4/44, ML4.3/8, MS3.7/48, Ms1 3.7/48, ms1mx3.6/94, Error ellipse: s-maj=10.0km s-min=7.9km az=23.0*
*MOS **11** 13:10:55.7±1.3, 43°.50N×82°.78E, h13km, mb4.8/35, MS4.1/5, Error ellipse: s-maj=5.7km s-min=4.7km az=127.2*
*BJI **11** 13:10:57.4±0.0, 43°.60N×82°.59E, h10km, mb4.7/55, mB4.8/40, ML5.0/11, Ms4.4/39, Ms7 4.0/42*
*SOME **11** 13:10:58.2, 43°.50N×82°.47E, h5km, MS4.0*
*NEIC **11** 13:10:58.1±1.5, 43°.51N±0°.07×82°.73E±0°.10, h18km±4km, mb4.8/62, Error ellipse: s-maj=10.6km s-min=9.4km az=119.0*
*NNC **11** 13:11:00.9±2.4, 43°.67N×82°.32E, h0km, mb5.3, mpv5.0, Error ellipse: s-maj=26.7km s-min=8.9km az=129.0*
**ISC 11 13:10:57.1±0.5, 43°.56N±0°.03×82°.69E±0°.02, h13km±3km, n378, σ2.04/413, mb4.7/102, MS3.8/58, 36C-13D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **1.71** | **267** | *e*P | **Pb** | **13 11 28.2** | **-0.2** |
| | 624nm,0.6s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **13 11 49.9** | **+0.1** |
| | 3µm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **2.23** | **291** | *e*P | **Pb** | **13 11 36.3** | **-1.1** |
| | 5µm,0.5s | | | | | | |
| DJR | | | | *e*S | **Sb** | **13 12 05.4** | **+0.5** |
| | 13µm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.39** | **261** | *e*PN | **Pn** | **13 11 35.0** | **-1.1** |
| **SHLS** | **Shalkode** | **2.39** | **261** | *e*P | **Pn** | **13 11 34.4** | **-1.7** |
| | 3µm,0.6s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **13 12 01.9** | **-3.4** |
| | 75µm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **2.39** | **261** | *e*Pg | **Pn** | **13 11 35.1** | **-1.1** |
| | baz=262 | | | | | | |
| **KNOS** | **Konyrlen** | **2.66** | **289** | *e*P | **Pb** | **13 11 44.5** | **-0.1** |
| KNOS | | | | *e*S | **Sb** | **13 12 17.9** | **+0.6** |
| | 5µm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.71** | **262** | *e*PN | **Pn** | **13 11 42.0** | **+1.5** |
| **UZB** | **Uzynbulak** | **2.71** | **262** | *e*P | **Pb** | **13 11 45.6** | **+0.1** |
| | 1µm,0.6s | | | | | | |
| UZB | | | | *e*S | **Sb** | **13 12 20.1** | **+1.3** |
| | 5µm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **2.71** | **262** | *e*Pb | **Pb** | **13 11 45.4** | **-0.1** |
| | baz=264 | | | | | | |
| UZB | | | | *e*Pg | **Pg** | **13 11 47.1** | **-1.9** |
| | baz=264 | | | | | | |
| **KPKS** | **Kokpek** | **2.92** | **269** | *e*PN | **Pg** | **13 11 51.1** | **-1.8** |
| **KPKS** | **Kokpek** | **2.92** | **269** | *e*P | **Pb** | **13 11 49.3** | **+0.3** |
| | 1µm,0.5s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **13 12 27.1** | **+2.4** |
| | 6µm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.92** | **269** | *e*Pg | **Pg** | **13 11 51.1** | **-1.8** |
| | baz=271 | | | | | | |
| **KAPS** | **Kapalarasan** | **2.95** | **307** | *e*P | **Pb** | **13 11 50.3** | **+0.8** |
| | 1µm,0.6s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **13 12 28.5** | **-3.2** |
| | 3µm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **3.10** | **281** | *e*P | **Pg** | **13 11 53.8** | **-2.6** |
| | 2µm,0.5s | | | | | | |
| BLB | | | | *e*S | **Sg** | **13 12 34.8** | **-1.8** |
| | 5µm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **3.13** | **264** | *e*PN | **Pb** | **13 11 52.6** | **0.0** |
| ZHN | | | | *e* | | 13 11 54.5 | |
| **ZHN** | **Zhinishke** | **3.13** | **264** | *e*P | **Pb** | **13 11 53.3** | **+0.7** |
| | 844nm,0.3s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **13 12 33.4** | **+2.6** |
| | 3µm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **3.13** | **264** | *e*Pb | **Pb** | **13 11 52.6** | **0.0** |
| | baz=266 | | | | | | |
| ZHN | | | | *e*Pg | **Pg** | **13 11 54.5** | **-2.5** |
| | baz=266 | | | | | | |
| **SATY** | **Saty** | **3.17** | **262** | *e*PN | **Pg** | **13 11 55.3** | **-2.5** |
| **SATY** | **Saty** | **3.17** | **262** | *e*P | **Pb** | **13 11 52.9** | **-0.4** |
| | 1µm,0.5s | | | | | | |
| SATY | | | | *e*S | **Sb** | **13 12 32.8** | **+0.9** |
| | 4µm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.17** | **262** | *e*Pg | **Pg** | **13 11 55.3** | **-2.5** |
| | baz=264 | | | | | | |
| **MK31** | **Makanchi Array** | **3.24** | **355** | PN | **Pb** | **13 11 51.2** | **-3.4** |
| **MK31** | **Makanchi Array** | **3.24** | **355** | ⇓Pn | **Pb** | **13 11 51.1** | **-3.4** |
| | 17nm,0.3s,baz=188,slow=12 | | | | | | |
| MK31 | | | | ⇑Pg | **Pg** | **13 11 59.7** | **+0.5** |
| | 828nm,0.5s,baz=173,slow=16,SNR=181 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 13 12 42.3 | |
| | 3µm,0.7s,baz=171,slow=30,SNR=14 | | | | | | |
| **MK31** | **Makanchi Array** | **3.24** | **355** | | **Pb** | **13 11 51.2** | **-3.4** |
| **MKAR** | **Makanchi Array** | **3.24** | **355** | Pn | **Pb** | **13 11 51.2** | **-3.4** |
| | 47nm,0.3s,baz=178,slow=15,SNR=1291 | | | | | | |
| MKAR | | | | Sn | **Sn** | **13 12 26.6** | **+0.4** |
| | 232nm,0.3s,baz=172,slow=23,SNR=7.2 | | | | | | |
| MKAR | | | | Lg | Lg | 13 12 39.5 | |
| | 398nm,0.3s,baz=182,slow=29,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **3.24** | **355** | PN | **Pb** | **13 11 51.3** | **-3.2** |
| **MAKZ** | **Makanchi** | **3.29** | **351** | PN | **Pb** | **13 11 51.7** | **-3.6** |
| **MAKZ** | **Makanchi** | **3.29** | **351** | ⇑Pn | **Pb** | **13 11 51.5** | **-3.7** |
| | 28nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Pg | **Pg** | **13 12 00.5** | **+0.5** |
| | 243nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 13 12 43.8 | |
| | 1µm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **3.29** | **351** | | **Pb** | **13 11 51.7** | **-3.6** |
| **KURS** | **Kuram** | **3.29** | **270** | *e*P | **Pb** | **13 11 57.0** | **+1.7** |
| | 838nm,0.6s | | | | | | |
| KURS | | | | *e*S | **Sg** | **13 12 39.8** | **-2.9** |
| | 1µm,0.5s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.40** | **297** | *e*PN | **Pg** | **13 12 00.0** | **-2.1** |
| **TDK** | **Taldyqorghan** | **3.40** | **297** | *e*P | **Pb** | **13 11 58.4** | **+1.2** |
| | 5µm,0.6s | | | | | | |
| TDK | | | | *e*S | **Sg** | **13 12 42.2** | **-4.0** |
| | 3µm,0.6s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.40** | **297** | *e*Pg | **Pg** | **13 12 00.1** | **-2.1** |
| | baz=297 | | | | | | |
| **ARXS** | **Arharly** | **3.58** | **282** | *e*PN | **Pn** | **13 11 54.1** | **+1.7** |
| **ARXS** | **Arharly** | **3.58** | **282** | *e*P | **Pg** | **13 12 03.3** | **-2.3** |
| | 1µm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **13 12 51.3** | **-0.6** |
| | 5µm,0.5s | | | | | | |
| **WMQ** | **Urumqi** | **3.64** | **84** | *e*Pn | **Pb** | **13 11 57.3** | **-4.0** |
| WMQ | | | | Sn | **Sb** | **13 12 40.9** | **-4.4** |
| WMQ | | | | smax | smax | | |
| | comp=N,2µm,0.7s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,2µm,0.7s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **4.04** | **245** | | **Pn** | **13 12 01.7** | **+2.6** |
| **KOTS** | **Kotyrbulak** | **4.08** | **267** | *e*P | **Pb** | **13 12 11.3** | **+2.4** |
| | 746nm,0.5s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **13 13 04.9** | **-3.2** |
| | 10µm,0.6s | | | | | | |
| **MDOK** | **Mede

**TKM2 Tokmak 2 5.22 265** PN **Pn** **13 12 17.3 +2.2**
TKM2 13 12 33.7
**TKM2 Tokmak 2 5.22 265** ⇑Pn **Pn** **13 12 17.3 +2.2**
59nm,0.6s
TKM2 ⇓Pg **Pg** **13 12 33.7 -3.4**
301nm,0.7s
TKM2 ⇓Lg Lg 13 13 38.0
1µm,0.6s
**KBK Karagaybulak 5.74 264** P **Pn** **13 12 24.6 +2.4**
SNR=19
**CHMS Chumysh 5.83 267** P **Pn** **13 12 25.9 +2.8**
SNR=16
**USP Ospenovka 5.97 270** P **Pn** **13 12 27.6 +2.3**
SNR=15
**AAK Ala-Archa 6.07 264** Pn **Pn** **13 12 28.7 +2.1**
4.6nm,0.3s,baz=122,slow=8.2,SNR=36
AAK Pg **Pb** **13 12 46.0 +3.2**
18nm,0.3s,baz=171,slow=19,SNR=15
AAK Lg Lg 13 14 04.3
34nm,0.3s,baz=282,slow=18,SNR=8.5
**AAK Ala-Archa 6.07 264** P **Pn** **13 12 28.8 +2.1**
SNR=26
**AAK Ala-Archa 6.07 264** ⇑Pn **Pn** **13 12 28.1 +1.4**
117nm,0.5s
AAK ⇑Pg Pb 13 12 47.2 +4.4
260nm,0.7s
AAK Lg Lg 13 14 06.0
743nm,0.7s
**UCH Uchtor 6.16 260** P **Pn** **13 12 27.1 -1.0**
SNR=7.8
**BTLS Baital 6.38 286** *i* PN **Pn** **13 12 30.8 +0.1**
BTLS *e* 13 12 54.4
BTLS pmax pmax
comp=Z,11nm,0.6s
**BTLS Baital 6.38 286** *i* Pn **Pn** **13 12 30.9 +0.1**
comp=Z,11nm,0.6s,baz=287
BTLS *e*Pg **Pg** **13 12 54.4 -4.7**
baz=287
**KSH Kashi 6.46 234** Pn Pb 13 12 41.3 -8.1
KSH Sn **Sb** **13 14 02.7 -3.9**
KSH LR LR
comp=Z,1µm,4.5s
**EKS2 Erkin-Say 6.59 265** P Pn 13 12 26.7 -7.1
SNR=6.5
**AML Almayashu 6.77 261** P Pn 13 12 20.4 -16
SNR=7.4
**DGZ Jazzator, Alta 6.95 26***d* iPN Pn 13 12 42.8 +4.1
**KURBB Kurchatov Arra 7.61 340** Pn **Pn** **13 12 48.5 +0.9**
comp=Z,9.2nm,0.3s,baz=164,slow=13,SNR=643
KURBB Sn **Sn** **13 14 11.4 -2.3**
comp=Z,7.9nm,0.3s,baz=148,slow=24,SNR=9.7
KURBB Lg Lg 13 14 55.5
comp=Z,7.2nm,0.3s,baz=165,slow=26,SNR=4.7
KURBB LR LR 13 16 17.8
comp=Z,275nm,18.2s,baz=137,slow=42
**KURBB Kurchatov Arra 7.61 340** P **Pn** **13 12 48.4 +0.8**
KURBB 13 14 10.2
**KURBB Kurchatov Arra 7.61 340** ⇑Pn **Pn** **13 12 48.5 +0.9**
comp=Z,143nm,0.5s
KURBB ⇑Sn **Sn** **13 14 10.2 -3.5**
comp=Z,635nm,0.6s
KURBB ⇓Lg Lg 13 15 02.4
comp=Z,2µm,0.7s
**KURK Kurchatov 7.67 340***ce*P **Pn** **13 12 49.1 +0.6**
KURK pmax pmax
comp=Z,47nm,0.5s
**KURK Kurchatov 7.67 340** Pn **Pn** **13 12 49.2 +0.6**
**OTUK Ortayu 8.60 307** P **Pn** **13 13 01.3 0.0**
**OTUK Ortayu 8.60 307** ⇑Pn **Pn** **13 13 01.3 0.0**
comp=Z,21nm,0.6s
OTUK ⇓Pg Pg 13 13 33.4 -8.2
comp=Z,47nm,0.8s
OTUK ⇑Lg Lg 13 15 27.9
comp=Z,988nm,1.6s
**KKAR Karatay Array 8.89 271** P **Pn** **13 13 06.9 +1.6**
**KKAR Karatay Array 8.89 271** **Pn** **13 13 06.9 +1.6**
**KK08 Karatay Array 8.91 271** ⇓Pg **Pg** **13 13 45.8 -1.7**
comp=Z,36nm,0.7s
KK08 ⇑Lg Lg 13 15 38.6
comp=Z,184nm,0.7s
**BRLS Boroldaу 9.39 271** *e*P **Pn** **13 13 14.1 +2.0**
BRLS pmax pmax
comp=Z,3.0nm,0.7s
**BRLS Boroldaу 9.39 271** *e*Pn **Pn** **13 13 14.1 +2.0**
comp=Z,2.9nm,0.7s,baz=270
**BRZS Berezniki 9.40 317** *e*P **Pn** **13 13 12.9 +0.7**
BRZS pmax pmax
comp=Z,3.0nm,0.3s
**ZAA0 Zalesovo Array 10.49 7** Pn **Pn** **13 13 27.9 +0.9**
**ZALV Zalesovo Beam 10.49 7** Pn **Pn** **13 13 27.9 +0.9**
comp=Z,3.6nm,0.3s,baz=188,slow=13,SNR=69
ZALV Sn **Sn** **13 15 17.1 -7.2**
comp=Z,1.3nm,0.3s,baz=182,slow=26,SNR=2.9
ZALV Lg Lg 13 16 28.1
comp=Z,2.9nm,0.3s,baz=192,slow=35,SNR=2.8
ZALV LR LR 13 17 41.8
comp=Z,471nm,19.2s,baz=193,slow=38
**ZALV Zalesovo Beam 10.49 7** *i* P **Pn** **13 13 28.0 +0.9**
ZALV pmax pmax
comp=Z,11nm,0.4s
**GOMU GeErMu 11.86 124** Pn **Pn** **13 13 45.7 -0.5**
GOMU Sn **Sn** **13 15 51.1 -7.5**
GOMU smax smax
comp=N,54nm,0.5s
GOMU smax smax
comp=E,78nm,0.7s
**NIL Nilore 12.34 220** P **Pn** **13 13 51.4 -1.1**
**NIL Nilore 12.34 220** Pn **Pn** **13 13 51.4 -1.1**
**BVAR Borovoye Array 12.50 324** Pn **Pn** **13 13 53.9 -0.7**
comp=E,0.8nm,0.3s,baz=101,slow=15,SNR=18
BVAR Sn **Sn** **13 16 07.4 -6.3**
comp=E,1.6nm,0.3s,baz=116,slow=23,SNR=2.7
BVAR Lg Lg 13 17 27.2
comp=E,5.6nm,0.3s,baz=129,slow=32,SNR=3.9
**BRVK Borovoye 12.57 323***ce*P **Pn** **13 13 56.7 +1.2**
BRVK pmax pmax
comp=Z,9.0nm,1.0s
**BRVK Borovoye 12.57 323** ⇓Pn **Pn** **13 13 57.0 +1.5**
comp=Z,20nm,0.7s
**BRVK Borovoye 12.57 323** Pn **Pn** **13 13 56.0 +0.5**
**CEP Cherat 12.85 224** P **Pn** **13 14 00.5 +0.9**
**GTA Gaotai 13.49 102** ⇓P **Pn** **13 14 08.0 -0.2**
GTA PP **P** **13 14 19.2 +1.7**
GTA sP 13 14 22.2
GTA S **Sn** **13 16 38.0 0.0**
GTA pmax pmax
comp=Z,38nm,1.0s
GTA pmax pmax
comp=Z,110nm,6.2s
GTA LR LR
comp=Z,460nm,17.5s
**THW Thamme Wali 13.76 222** P **Pn** **13 14 11.6 -0.3**
**MOY Mondy 14.74 50** *e*P **P** **13 14 34.0 +2.7**
MOY pmax pmax
comp=Z,27nm,2.2s
**DANN Dangsing 15.21 176** *e*P **P** **13 14 37.5 +0.7**
comp=Z,58nm,0.5s
**PYUN Piuthan 15.43 179** *e*P **P** **13 14 38.7 -0.6**
comp=Z,19nm,0.6s
**NDI New Delhi 15.49 198** *e*P **Pn** **13 14 32.0 -3.2**
**ZAK Zakamensk 15.59 57** *e*P **Pn** **13 14 37.6 +1.0**
ZAK pmax pmax
comp=Z,21nm,1.2s
**GKN Gorkha 15.61 174** *e*P **P** **13 14 41.3 +0.2**
comp=Z,15nm,0.4s
**KOLN Koldanda 15.78 177** *e*P **P** **13 14 42.4 -0.7**
comp=Z,16nm,0.6s
**GUN Gumba 15.83 170** *e*P **P** **13 14 43.5 -0.3**
comp=Z,10nm,0.3s
**KKN Kakani 15.88 172** *e*P **P** **13 14 44.4 +0.2**
comp=Z,21nm,0.6s
**DMN Daman 16.04 172** *e*P **P** **13 14 45.8 -0.2**
comp=Z,7.1nm,0.5s
**PKIN Phulchoki 16.10 171** *e*P **P** **13 14 45.9 -0.8**
comp=Z,26nm,0.5s
**PKI Pulchoki 16.11 171** *e*P **P** **13 14 46.2 -0.7**
comp=Z,39nm,0.6s
**JIRN Jiri 16.12 169** *e*P **P** **13 14 46.7 -0.3**
comp=Z,7.0nm,0.3s
**AB31 Akbulak array 16.66 298** ⇓P **Pn** **13 14 47.1 -3.1**
comp=Z,24nm,0.7s,baz=99,slow=15,SNR=76
**ABKAR Akbulak array 16.66 298** Pn **Pn** **13 14 47.9 -2.3**
**ABKAR Akbulak array 16.66 298** P **Pn** **13 14 48.0 -2.2**
**TAPN Taplejung 16.68 164** *e*P **Pn** **13 14 51.7 +0.9**
comp=Z,33nm,0.5s
**IRK Irkutsk 16.82 51** *e*P **P** **13 14 56.8 +2.5**
IRK pmax pmax
comp=Z,57nm,1.8s
**RAMN Ramite 16.88 168** *e*P **Pn** **13 14 53.5 +0.2**
comp=Z,20nm,0.4s
**SONM Songino Array 17.08 67** P **P** **13 14 56.7 -0.6**
comp=Z,3.5nm,0.3s,baz=272,slow=11,SNR=51
SONM Lg Lg 13 19 59.8
comp=Z,0.3nm,0.3s,baz=259,slow=28,SNR=3.9
SONM LR LR 13 22 10.5
comp=Z,771nm,19.4s,baz=258,slow=40
**SONM Songino Array 17.08 67** P **P** **13 14 57.1 -0.2**
**ODAN Odare 17.09 166** *e*P **Pn** **13 14 55.8 -0.2**
comp=Z,61nm,0.7s
**ULN Ulaanbaatar 17.52 67***ce*P **P** **13 15 02.1 -0.1**
ULN pmax pmax
comp=Z,52nm,2.5s
**ULN Ulaanbaatar 17.52 67** **Pn** **13 15 00.9 -0.2**
**LZH Lanzhou 17.85 108** ⇑P **P** **13 15 05.8 -0.2**
LZH pP sP 13 15 10.4 -1.1
LZH sP pP 13 15 15.2 +5.4
LZH *e*S **Sn** **13 18 21.4 -2.8**
LZH pmax pmax
comp=Z,40nm,1.1s
LZH pmax pmax
comp=Z,180nm,4.6s
LZH LR LR
comp=Z,430nm,11.2s
LZH LR LR
comp=Z,490nm,11.0s
LZH LR LR
comp=Z,500nm,13.5s
**AKTO Aktyubinsk 18.13 301** P **Pn** **13 15 08.4 -0.1**
comp=Z,0.7nm,0.3s,baz=103,slow=12,SNR=9.6
AKTO S **Sn** **13 18 21.9 -8.6**
comp=Z,0.2nm,0.3s,baz=22,slow=21,SNR=1.5
AKTO Lg Lg 13 20 33.3
comp=Z,0.3nm,0.3s,baz=41,slow=20,SNR=2.8
AKTO LR LR 13 22 37.3
comp=Z,402nm,18.0s,baz=112,slow=38
**SVE Sverdlovsk 19.26 321** *e*P **Pn** **13 15 23.9 +1.8**
**GEYT Alibeck 19.42 262** P **P** **13 15 22.0 -1.1**
comp=Z,0.7nm,0.3s,baz=63,slow=11,SNR=1.6
GEYT LR LR 13 23 40.4
comp=Z,231nm,20.8s,baz=70,slow=39
**ARU Arti 20.02 318** P Pn 13 15 30.4 -0.9
comp=Z,1.8nm,0.2s,baz=115,slow=4.7,SNR=12
ARU S Sn 13 19 22.9 +6.8
comp=Z,3.0nm,0.2s,baz=295,slow=15,SNR=1.6
ARU Lg Lg 13 21 28.6
comp=Z,3.1nm,0.2s,baz=212,slow=19,SNR=3.6
ARU LR LR 13 23 37.9
comp=Z,163nm,18.9s,baz=112,slow=38
**ARU Arti 20.02 318** P Pn 13 15 31.4 +0.2
ARU 13 15 44.7
ARU S Sn 13 19 20.4 +4.3
ARU SS **SnSn** **13 19 38.8 +8.4**
**ARU Arti 20.02 318** Pn 13 15 31.1 -0.1
**BTO Baotou 20.46 89** *e*P **P** **13 15 33.3 -1.2**
BTO S **S** **13 19 21.2 -2.1**
BTO LR LR
comp=N,2µm,6.3s
BTO LR LR
comp=E,700nm,6.7s
**CD2 Chengdu 20.93 120** P Pn 13 15 40.9 -1.1
CD2 S **S** **13 19 33.1 +0.6**
CD2 pmax pmax
comp=E,50nm,0.7s
CD2 LR LR
comp=E,30nm,6.9s
CD2 LR LR
comp=E,250nm,8.3s
CD2 LR LR
comp=E,290nm,11.8s
**HHC Hu-ho-hao-te 21.51 87** *e*P **P** **13 15 46.7 +0.9**
HHC S **S** **13 19 38.3 -5.8**
HHC pmax pmax
comp=E,68nm,1.0s
HHC pmax pmax
comp=E,270nm,5.6s
HHC LR LR
comp=E,410nm,10.5s
HHC LR LR
comp=E,280nm,11.1s
HHC LR LR
comp=E,320nm,12.4s
**XAN Xi'an 22.47 106** ⇑P **P** **13 15 55.5 -0.5**
XAN pP sP 13 16 00.9 -0.7
XAN sP pP 13 16 04.7 +4.9
XAN pmax pmax
comp=E,48nm,1.0s
XAN LR LR
comp=E,320nm,13.1s
XAN LR LR
comp=E,310nm,13.7s
XAN LR LR
comp=E,300nm,13.7s
**PZH PanZhiHua 23.00 132** P **P** **13 16 03.2 +1.5**
PZH pP **sP** **13 16 06.4 -0.9**
PZH sP **pP** **13 16 09.4 +3.8**
PZH S **S** **13 20 12.4 +0.4**
PZH pmax pmax
comp=E,10.0nm,0.9s
PZH pmax pmax
comp=E,130nm,5.3s
PZH LR LR
comp=E,280nm,10.4s
PZH LR LR
comp=E,200nm,10.6s
PZH LR LR
comp=E,470nm,15.7s
**TIY Taiyuan 23.24 94** ⇑P **P** **13 16 03.9 -0.2**
TIY pP **sP** **13 16 09.6 -0.1**
TIY pmax pmax
comp=E,25nm,1.0s
TIY LR LR
comp=E,230nm,6.9s
TIY LR LR
comp=E,280nm,5.8s
TIY LR LR
comp=E,230nm,8.6s
**XLT XiLinHaoTe 24.04 78** *e*P **P** **13 16 12.3 +0.4**
XLT pP sP 13 16 19.2 +1.6
XLT sP pP 13 16 20.7 +4.8
XLT S **S** **13 20 33.8 +5.1**
XLT sS sS 13 20 43.8 +8.4
XLT PcS **PcS** **13 23 40.2 +7.3**
XLT pmax pmax
comp=E,23nm,0.9s
XLT pmax pmax
comp=E,130nm,3.8s
XLT LR LR
comp=E,1µm,7.9s
XLT LR LR
comp=E,620nm,14.2s
XLT LR LR
comp=E,680nm,19.5s
**BOD Bodaibo 24.15 43** *e*P **P** **13 16 13.8 +1.2**
BOD pmax pmax
comp=Z,24nm,1.2s
**KMI Kunming 24.64 132** ⇑P **P** **13 16 17.8 +0.2**
KMI pP sP 13 16 24.3 +0.9
KMI sP pP 13 16 26.8 +5.1
KMI pmax pmax
comp=Z,16nm,0.9s
KMI LR LR
comp=Z,110nm,8.5s
**LYN LuoYang 24.70 101** ⇓P **P** **13 16 20.5 +2.6**
LYN pP sP 13 16 24.8 +1.1
LYN sP pP 13 16 27.8 +5.8
LYN pmax pmax
comp=Z,20nm,0.8s
LYN pmax pmax
comp=Z,70nm,6.9s
LYN LR LR
comp=Z,230nm,20.2s
**BELG Belogornoye 24.87 303** P **P** **13 16 20.1 +1.0**
comp=Z,16nm,0.9s,baz=110,slow=4.2,SNR=2.5
BELG LR LR 13 26 49.0
comp=Z,138nm,18.2s,baz=164,slow=38
**BELG Belogornoye 24.87 303** *i* P **P** **13 16 19.7 +0.5**
BELG pmax pmax
comp=Z,5.0nm,0.8s
**HNS HongShan 25.02 93** ⇑P **P** **13 16 21.2 +0.5**
HNS *e*S **S** **13 20 44.4 +0.1**
HNS pmax pmax
comp=Z,20nm,1.0s
HNS LR LR
comp=Z,490nm,14.1s
HNS LR LR
comp=Z,370nm,18.6s
**ENH Enshi 25.07 113** P **P** **13 16 21.7 +0.4**
**BJI Beijing 25.11 86** P **P** **13 16 22.3 +0.8**
BJI pmax pmax
comp=Z,26nm,0.5s
BJI LR LR
comp=Z,270nm,12.4s
**BJT Baijiatuau 25.11 87** P **P** **13 16 22.2 +0.7**
BJT pmax pmax
comp=Z,20nm,0.6s
**BJT Baijiatuau 25.11 87** P **P** **13 16 22.2 +0.7**
BJT lAmb lAmb 13 16 25.5
comp=Z,20nm,0.6s
**KIRV Kirov 25.41 318** P **P** **13 16 26.2 +2.3**
comp=Z,9.8nm,0.6s,baz=134,slow=4.5,SNR=6.4
KIRV LR LR 13 26 54.5
comp=Z,123nm,18.3s,baz=125,slow=38
**KIRV Kirov 25.41 318***ce*P **P** **13 16 27.7 +3.7**
**MAK Makhachkala 25.52 281** *e*P **P** **13 16 22.5 -2.7**
MAK *e*S **S** **13 20 47.9 -4.3**
MAK MLR MLR
comp=Z,253nm,14.0s
**GYA Guiyang 25.87 123** ⇑*i*P **P** **13 16 29.1 +0.4**
GYA pmax pmax
comp=Z,64nm,1.0s
**NRIK Noril'sk 25.96 4** P **P** **13 16 29.4 +0.4**
comp=Z,4.2nm,0.4s,baz=176,slow=10,SNR=8.9
NRIK LR LR 13 27 55.8
comp=Z,133nm,20.5s,baz=194,slow=39
**NRIK Noril'sk 25.96 4** P **P** **13 16 29.4 +0.4**
NRIK lAmb lAmb 13 16 48.0
comp=Z,17nm,0.7s
**HIA Hailar 25.98 64** *i* P **P** **13 16 29.8 +0.4**
HIA pmax pmax
comp=Z,13nm,2.1s
**HIA Hailar 25.98 64** P **P** **13 16 29.9 +0.4**
**POO Poona 26.05 199** *e*P **P** **13 16 34.0 +3.8**
**DVD Vedeno 26.50 281** *i* P **P** **13 16 36.5 +2.3**
**CHTO Chiang Mai 28.21 146** P **P** **13 16 49.9 +0.3**
CHTO pmax pmax
comp=Z,6.0nm,1.0s
**CHTO Chiang Mai 28.21 146** P **P** **13 16 49.9 +0.3**
**WHN Wuhan 28.23 107** ⇑P **P** **13 16 50.2 +0.5**
WHN pmax pmax
comp=Z,54nm,0.6s
**GNI Garni 28.31 276** P **P** **13 16 51.2 +0.7**
comp=Z,2.8nm,0.5s,baz=48,slow=16,SNR=1.3
GNI LR LR 13 29 48.7
comp=Z,67nm,19.2s,baz=40,slow=40
**GNI Garni 28.31 276** *i* P **P** **13 16 52.2 +1.6**
GNI pmax pmax
comp=Z,13nm,0.9s
**GNI Garni 28.31 276** P **P** **13 16 50.4 -0.1**
GNI lAmb lAmb 13 17 15.2
comp=Z,12nm,0.8s
**PRGR Permogore 28.32 323** *e*P P 13 16 57.1 +7.0
PRGR pmax pmax
comp=Z,4.0nm,0.4s
**WSAR Wadi Sarin 28.36 232** P **P** **13 16 51.0 0.0**
comp=Z,2.5nm,0.7s,baz=51,slow=6.5,SNR=1.8
WSAR LR LR 13 31 04.9
comp=Z,60nm,19.5s,baz=60,slow=43
**CM31 Chiang Mai Arr 28.53 146** P **P** **13 16 52.6 +0.1**
CM31 lAmb lAmb 13 16 54.0
comp=Z,7.7nm,0.7s
**CMAR Chiang Mai Arr 28.53 146** P **P** **13 16 52.4 -0.1**
comp=Z,5.3nm,0.6s,baz=322,slow=8.5,SNR=52
CMAR LR LR 13 30 10.9
comp=Z,69nm,18.0s,baz=315,slow=41
**CMAR Chiang Mai Arr 28.53 146***c i*P **P** **13 16 53.5 +1.0**
CMAR pmax pmax
comp=Z,7.0nm,0.6s
**CMAR Chiang Mai Arr 28.53 146** P **P** **13 16 51.9 -0.5**
**KBZ Khabaz 28.61 284** P **P** **13 16 54.8 +1.8**
comp=Z,1.1nm,0.3s,baz=141,slow=7.9,SNR=2.7
KBZ LR LR 13 30 21.0
comp=Z,343nm,18.3s,baz=63,slow=41
**KBZ Khabaz 28.61 284** *i* P **P** **13 16 54.9 +2.0**
KBZ pmax pmax
comp=Z,6.0nm,1.1s
**KIV Kislovodsk 28.70 285** *e*P **P** **13 16 56.7 +2.8**
KIV pmax pmax
comp=Z,5.0nm,1.1s
KIV MLR MLR
comp=Z,266nm,15.0s
**KIV Kislovodsk 28.70 285** P **P** **13 16 55.6 +1.6**
**SHA1 Shidzhatmaz 28.78 284** *i* P **P** **13 16 57.9 +3.2**
**NJ2 Nanjing 30.57 100** *e*P **P** **13 17 11.7 +1.3**
NJ2 pmax pmax
comp=Z,12nm,0.7s
**CN2 Changchun 30.67 75** *e*P **P** **13 17 10.6 -0.6**
CN2 *e*S **S** **13 22 11.2 -2.1**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
CN2 pmax pmax
comp=Z,200nm,7.0s
CN2 LR LR
comp=Z,700nm,18.0s
CN2 LR LR
comp=Z,300nm,18.0s
CN2 LR LR
comp=Z,400nm,16.0s
**ZEA Zeya 30.67 55** *e*P **P** **13 17 09.0 -2.1**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**KLMR Klimovskoe 30.87 319** *e*P **P** **13 17 14.8 +2.0**
KLMR pmax pmax
comp=Z,13nm,0.8s
**KLMR Klimovskoe 30.87 319** *e*P **P** **13 17 14.9 +2.1**
KLMR AMP 13 17 26.6
comp=Z,13nm,0.8s
**SOC Sochi 30.88 285** *e*P **P** **13 17 10.6 -2.5**
SOC *e* 13 18 12.8
SOC *e*S **S** **13 22 13.9 -2.7**
SOC *e*SS **SnSn** **13 24 00.4 +4.5**
SOC MLR MLR
comp=Z,271nm,17.0s
**OBN Obninsk 31.62 308** LR LR 13 30 31.4
comp=Z,50nm,18.9s,baz=168,slow=37
**OBN Obninsk 31.62 308** *e*P **P** **13 17 20.7 +1.3**
OBN *e* 13 18 25.2
OBN *e*PPP PPP 13 18 34.2
OBN *e* 13 20 13.3
OBN pmax pmax
comp=Z,14nm,0.6s
**MARD Mardin 32.24 273** P **P** **13 17 25.9 +0.6**
**YAK Yakutsk 32.92 39** LR LR 13 30 56.3
comp=Z,65nm,18.3s,baz=301,slow=36
**YAK Yakutsk 32.92 39** *e*P **P** **13 17 30.3 -0.5**
YAK pmax pmax
comp=Z,10.0nm,0.9s
**YAK Yakutsk 32.92 39** P **P** **13 17 29.7 -1.1**
YAK lAmb lAmb 13 17 58.6
comp=Z,11nm,0.8s
**MDJ Mudanjiang 33.34 72** P **P** **13 17 34.9 +0.2**
MDJ S **S** **13 22 53.0 -2.0**
MDJ pmax pmax
comp=Z,10.0nm,0.6s
MDJ pmax pmax
comp=Z,160nm,5.3s
MDJ LR LR
comp=Z,660nm,15.5s
MDJ LR LR
comp=Z,400nm,9.8s
MDJ LR LR
comp=Z,620nm,16.1s
**QIZ Qiongzhong 33.44 128** P **P** **13 17 35.5 -0.2**
QIZ S **S** **13 22 55.4 -1.5**
QIZ pmax pmax
comp=Z,170nm,5.6s
**KLR Kul'dur 33.81 63** P **P** **13 17 39.5 +0.8**
comp=Z,7.6nm,0.7s,baz=285,slow=8.4,SNR=38
KLR LR LR 13 32 49.8
comp=Z,319nm,18.4s,baz=276,slow=39
**KLR Kul'dur 33.81 63***ce*P **P** **13 17 39.2 +0.5**
KLR pmax pmax
comp=Z,9.0nm,0.9s
**UBPT Khong Chiam 34.24 138** P **P** **13 17 41.7 -1.0**
UBPT lAmb lAmb 13 17 43.3
comp=Z,7.3nm,0.9s
**KS19 Wonju Array Si 34.53 84** P **P** **13 17 44.5 -0.5**
KS19 lAmb lAmb 13 18 02.7
comp=Z,15nm,1.1s

**KSAR Wonju Array Be 34.56 84** P **P** 13 17 44.4 -0.9
**KSAR Wonju Array Be 34.56 84** P **P** 13 17 44.4 -0.9
**KSRS Korea Array 34.59 84** P **P** 13 17 45.5 -0.1
comp=Z,3.5nm,0.7s,baz=285,slow=9.0,SNR=13
KSRS LR LR 13 32 40.6
comp=Z,65nm,18.7s,baz=285,slow=38
**USRK Ussuriysk Ar. 35.11 71** P **P** 13 17 50.4 +0.4
comp=Z,2.1nm,0.6s,baz=289,slow=9.0,SNR=4.5
USRK LR LR 13 33 55.8
comp=Z,377nm,18.1s,baz=280,slow=39
**TIXI Tiksi 35.83 23** P **P** 13 17 56.3 +0.5
comp=Z,6.9nm,0.5s,baz=270,slow=23,SNR=28
TIXI LR LR 13 33 08.9
comp=Z,251nm,19.0s,baz=186,slow=37
**TIXI Tiksi 35.83 23** *ce*P **P** 13 17 56.1 +0.3
TIXI pmax pmax
comp=Z,5.0nm,0.6s
**TIXI Tiksi 35.83 23** P **P** 13 17 55.9 +0.1
TIXI IAmb IAmb 13 17 56.9
comp=Z,7.0nm,0.7s
**PALK Pallekele 36.19 183** LR LR 13 33 04.1
comp=Z,83nm,21.2s,baz=98,slow=37
**AKASG Malin Array Be 36.38 301** P **P** 13 18 01.0 +0.2
comp=Z,0.3nm,0.3s,baz=66,slow=9.0,SNR=7.0
AKASG LR LR 13 33 54.0
comp=Z,59nm,18.6s,baz=356,slow=38
**AKASG Malin Array Be 36.38 301** *c i*P **P** 13 18 03.2 +2.4
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**AKBB Malin Array Si 36.38 301** *ce*P **P** 13 18 03.0 +2.2
**AKBB Malin Array Si 36.38 301** P **P** 13 18 02.4 +1.7
AKBB IAmb IAmb 13 18 12.7
comp=Z,7.7nm,0.7s
**BR131 Keskin Array S 36.43 281** *i*P **P** 13 18 01.7 +0.1
**BRTR Keskin Array B 36.43 281** P **P** 13 18 02.0 +0.3
comp=Z,2.4nm,1.0s,baz=54,slow=22,SNR=3.5
BRTR LR LR 13 36 25.3
comp=Z,81nm,18.6s,baz=58,slow=42
**BRTR Keskin Array B 36.43 281** *ce*P **P** 13 18 04.3 +2.7
BRTR pmax pmax
comp=Z,1.0nm,0.7s
**BRTR Keskin Array B 36.43 281** P **P** 13 18 02.1 +0.5
**RAYN Ar Rayn 36.48 249** P **P** 13 18 01.4 -0.6
RAYN pmax pmax
comp=Z,6.0nm,1.0s
**RAYN Ar Rayn 36.48 249** P **P** 13 18 01.4 -0.6
**GRNR Gornyy 36.53 59** *i*P **P** 13 18 03.4 +1.3
GRNR pmax pmax
comp=Z,3.0nm,0.9s
GRNR MLR MLR
comp=E,160nm,15.0s
GRNR MLR MLR
comp=Z,290nm,15.0s
GRNR MLR MLR
comp=N,70nm,13.0s
**VSU Vasula 37.05 314** *i*P **P** 13 18 08.5 +2.1
**FINES FINESS Array B 37.40 319** P **P** 13 18 11.4 +2.0
comp=N,4.6nm,1.1s,baz=101,slow=9.9,SNR=6.7
FINES LR LR 13 33 07.0
comp=N,86nm,18.4s,baz=84,slow=36
**FINES FINESS Array B 37.40 319** P **P** 13 18 11.6 +2.2
**MMAI Mount Meron Ar 38.12 270** LR LR 13 37 13.7
comp=N,53nm,20.4s,baz=210,slow=41
**ARCES ARCESS Array B 38.61 332** P **P** 13 18 20.6 +1.0
comp=N,1.6nm,0.6s,baz=76,slow=5.1,SNR=7.8
ARCES LR LR 13 34 58.4
comp=N,126nm,19.2s,baz=135,slow=37
**ARCES ARCESS Array B 38.61 332** P **P** 13 18 20.5 +1.0
ARCES pmax pmax
comp=Z,20nm,1.4s
**ARCES ARCESS Array B 38.61 332** P **P** 13 18 20.4 +1.0
ARCES IAmb IAmb 13 18 28.4
comp=Z,20nm,1.4s
**BURAR Bucovina Array 39.64 297** P **P** 13 18 29.9 +1.4
BURAR pmax pmax
comp=Z,2.0nm,0.7s
**BURAR Bucovina Array 39.64 297** P **P** 13 18 29.9 +1.4
**MLR Muntele Rosu 39.78 293** P **P** 13 18 30.8 +1.1
comp=Z,3.3nm,0.8s,baz=168,slow=14,SNR=2.2
MLR LR LR 13 37 03.5
comp=Z,185nm,19.1s,baz=20,slow=39
**EIL Elat 40.21 266** P **P** 13 18 34.3 +1.0
comp=Z,2.7nm,0.7s,baz=46,slow=18,SNR=2.7
**KWP Kalwaria Pacla 40.70 300** *e*P **P** 13 18 40.6 +3.5
**DRGR 41.51 296** P **P** 13 18 45.4 +1.4
DRGR pmax pmax
comp=Z,4.0nm,1.3s
**YSS Yuzh-Sakhalins 41.51 64** *e*P **P** 13 18 43.0 -0.8
YSS MLR MLR
comp=Z,600nm,14.0s
**ASAJ Asahikawa 42.36 68** P **P** 13 18 50.6 -0.2
comp=Z,3.9nm,0.6s,baz=250,slow=11,SNR=7.8
ASAJ LR LR 13 38 12.0
comp=Z,272nm,20.1s,baz=300,slow=39
**ASAJ Asahikawa 42.36 68** P **P** 13 18 51.0 +0.2
ASAJ pmax pmax
comp=Z,26nm,1.5s
**JKA Kamikawa-asahi 42.36 68** P **P** 13 18 51.0 +0.2
JKA IAmb IAmb 13 18 51.5
comp=Z,26nm,1.5s
**MAT Matsushiro 42.39 80** P **P** 13 18 49.4 -1.8
**MJAR Matsushiro Arr 42.39 80** P **P** 13 18 50.6 -0.6
comp=Z,3.1nm,0.7s,baz=295,slow=8.9,SNR=8.7
MJAR LR LR 13 38 06.6
comp=Z,132nm,19.4s,baz=299,slow=38
**SPITS Spitsbergen Ar 42.93 344** LR LR 13 41 12.9
comp=Z,112nm,19.3s,baz=232,slow=42
**PSI Prapat 43.07 156** LR LR 13 38 13.5
comp=Z,40nm,21.9s,baz=2.5,slow=38
**MA2 Magadan 43.17 44** *i*P **P** 13 18 56.6 -0.6
MA2 pmax pmax
comp=Z,6.0nm,1.4s
**SEY Seymchan 43.44 39** P **P** 13 18 59.8 +0.4
comp=Z,1.3nm,0.6s,baz=281,slow=8.4,SNR=9.8
SEY LR LR 13 39 13.7
comp=Z,90nm,20.4s,baz=350,slow=39
**HFS Hagfors 43.54 317** LR LR 13 37 39.3
comp=Z,118nm,19.5s,baz=78,slow=37
**JMM Marumori 43.63 77** P **P** 13 18 60.0 -1.2
**MORC Moravsky Berou 43.87 302** P **P** 13 19 06.2 +3.2
MORC pmax pmax
comp=Z,7.0nm,0.7s
**JYT Yasato 43.96 79** P **P** 13 19 02.5 -1.2
**NC405 NORSAR Array S 44.33 319** P **P** 13 19 07.4 +0.9
**DPC Dobruska-Polom 44.44 303** P **P** 13 19 09.7 +2.1
DPC pmax pmax
comp=Z,6.0nm,0.7s
**DPC Dobruska-Polom 44.44 303** *e*P P 13 19 19.8 +12
**NB2 NORSAR Subarra 44.58 319** P **P** 13 19 08.7 +0.2
comp=Z,5.3nm,0.6s,baz=79,slow=8.6
**NOA NORSAR Array B 44.58 319** P **P** 13 19 09.1 +0.6
comp=Z,1.2nm,0.6s,baz=77,slow=7.6,SNR=9.6
NOA LR LR 13 38 42.8
comp=Z,106nm,20.0s,baz=100,slow=37
**UPC Upice 44.58 303** P **P** 13 19 12.3 +3.6
UPC pmax pmax
comp=Z,11nm,0.7s
**UPC Upice 44.58 303** *e*P P 13 19 21.2 +13
**VRAC Vranov 44.61 302** LR LR 13 39 03.2
comp=Z,81nm,19.9s,baz=40,slow=38
**IDI Anoyia 44.62 280** P **P** 13 19 08.3 -0.9
comp=Z,7.6nm,0.8s,baz=40,slow=16,SNR=1.7
IDI LR LR 13 41 55.9
comp=Z,51nm,20.5s,baz=85,slow=42
**JHJ Hachijo jima 2 45.18 83** LR LR 13 37 41.7
comp=Z,89nm,19.3s,baz=281,slow=36
**CLL Collm 46.14 305** *e*P **P** 13 19 24.0 +3.1
CLL *i* 13 19 32.5
**CLL Collm 46.14 305** *e*P **P** 13 19 24.0 +3.1
CLL *i* (sP) sP 13 19 32.5 +5.7
comp=Z,10.0nm,0.7s
**CKRC Cesky Krumlov 46.19 302** *e*P **P** 13 19 24.9 +3.5
**KHC Kasperske Hory 46.53 302** *e*P P 13 19 29.6 +5.5
**GERES GERESS Array B 46.55 302** P **P** 13 19 25.5 +1.1
comp=Z,0.7nm,0.6s,baz=53,slow=6.5,SNR=2.3
**ATD Arta Tunnel 46.89 239** LR LR 13 43 18.0
comp=Z,64nm,18.8s,baz=38,slow=41
**BILL Bilibino 48.17 30** *e*P **P** 13 19 37.4 +0.7
BILL *e**PP **sP** 13 19 42.2 -0.3
BILL *e* 13 21 04.2
BILL *e* 13 21 28.5
BILL *e*PPP PPP 13 22 14.4
BILL pmax pmax
comp=Z,9.0nm,1.7s
**BILL Bilibino 48.17 30** P **P** 13 19 37.3 +0.7
BILL IAmb IAmb 13 19 59.9
comp=Z,11nm,1.4s
**WTTA Wattenberg 48.43 301** *e*P **P** 13 19 41.8 +2.6
comp=Z,4.4nm,0.6s
**WTTA Wattenberg 48.43 301** P **P** 13 19 40.7 +1.6
WTTA pmax pmax
comp=Z,13nm,0.9s
**WATA Walderalm 48.44 301** *e*P **P** 13 19 43.0 +3.8
comp=Z,4.1nm,0.5s
**PETK Petropavlovsk- 48.60 51** LR LR 13 41 51.5
comp=Z,62nm,18.9s,baz=100,slow=38
**MOTA Moosalm 48.73 301** *e*P **P** 13 19 43.3 +1.9
comp=Z,4.2nm,0.6s
**FETA Feichten 49.09 301** *e*P **P** 13 19 45.3 +1.1
comp=Z,2.1nm,0.5s
**DAVOX Davos/Dischmat 49.72 301** LR LR 13 42 41.0
comp=Z,112nm,18.3s,baz=77,slow=38
**DAG Danmarks Havn 50.56 343** P **P** 13 19 54.6 -0.1
**DAG Danmarks Havn 50.56 343** *i*P **P** 13 19 54.0 -0.7
**SAOF Saorge 52.42 298** P **P** 13 20 10.2 +1.0
SAOF pmax pmax
comp=Z,19nm,0.8s
**BNI Bardonecchia 52.49 300** P **P** 13 20 10.4 +0.6
BNI pmax pmax
comp=Z,6.0nm,0.6s
**KEST Kesra 55.34 289** LR LR 13 48 43.1
comp=Z,73nm,18.6s,baz=298,slow=41
**EUNU Eureka 56.49 358** P **P** 13 20 39.8 +1.5
**SUMG Summit 57.21 342** P **P** 13 20 45.3 +1.4
SUMG pmax pmax
comp=Z,14nm,1.2s
**SUMG Summit 57.21 342** P **P** 13 20 45.3 +1.4
SUMG IAmb IAmb 13 20 58.0
comp=Z,14nm,1.2s
**GAMB Gambell 58.11 30** P **P** 13 20 50.4 +0.6
baz=304
**TNA Tin City 58.39 27** P **P** 13 20 52.3 +0.5
baz=306
**ANM Nome 59.86 28** P **P** 13 21 02.4 +0.4
ANM pmax pmax
comp=Z,6.0nm,0.8s
**ANM Nome 59.86 28** P **P** 13 21 02.4 +0.4
ANM IAmb IAmb 13 21 04.8
comp=Z,6.0nm,0.8s
**ANM Nome 59.86 28** P **P** 13 21 03.1 +1.1
baz=309,SNR=5.9
**KMBO Kilima Mbogo 60.23 235** LR LR 13 48 09.5
comp=Z,82nm,19.3s,baz=92,slow=37
**TOLK Toolik Lake Re 61.58 19** P **P** 13 21 13.7 0.0
**TOLK Toolik Lake Re 61.58 19** P **P** 13 21 13.3 -0.3
baz=319,SNR=9.9
**ESDC Sonseca Array 62.01 299** P **P** 13 21 17.3 +0.3
comp=Z,1.1nm,0.5s,baz=52,slow=6.6,SNR=7.5
ESDC LR LR 13 51 34.1
comp=Z,65nm,18.8s,baz=320,slow=39
**ESDC Sonseca Array 62.01 299** P **P** 13 21 17.0 0.0
**GCSA Galena City Sc 62.46 25** P **P** 13 21 19.9 +0.4
baz=315
**IMAR Indian Mountai 62.48 23** P **P** 13 21 19.8 +0.1
**COLD Coldfoot 62.50 20** P **P** 13 21 20.5 +0.7
**COLD Coldfoot 62.50 20** P **P** 13 21 20.1 +0.4
baz=319,SNR=8.4
**H21K Melozitna Rive 62.98 23** P **P** 13 21 23.2 +0.1
H21K IAmb IAmb 13 21 35.9
comp=Z,3.2nm,0.6s
**A36M Sachs Harbour 63.07 9** P **P** 13 21 23.5 0.0
A36M IAmb IAmb 13 21 38.4
comp=Z,7.5nm,0.9s
**A36M Sachs Harbour 63.07 9** P **P** 13 21 23.2 -0.3
baz=338,SNR=5.7
**I21K Tanana 63.57 23** P **P** 13 21 27.2 +0.2
baz=318
**J20K Nowinta River 63.69 24** P **P** 13 21 28.5 +0.7
J20K IAmb IAmb 13 21 40.9
comp=Z,4.0nm,0.7s
**J20K Nowinta River 63.69 24** P **P** 13 21 28.3 +0.6
baz=317,SNR=5.1
**MBAR Mbarara 63.84 241** LR LR 13 52 20.0
comp=Z,75nm,18.4s,baz=30,slow=39
**MLY Manley 64.03 22** P **P** 13 21 29.9 -0.1
MLY IAmb IAmb 13 21 42.8
comp=Z,3.4nm,0.7s
**MLY Manley 64.03 22** P **P** 13 21 30.3 +0.3
baz=320
**TTA Tatalina 64.03 26** P **P** 13 21 30.3 +0.2
baz=316
**H24K Noodor Dome 64.16 21** P **P** 13 21 31.7 +0.8
H24K IAmb IAmb 13 21 43.9
comp=Z,4.6nm,0.8s
**H24K Noodor Dome 64.16 21** P **P** 13 21 31.5 +0.6
baz=321
**I23K Minto, Yukon-K 64.31 22** P **P** 13 21 32.6 +0.8
baz=320
**CHUM Lake Minchumin 64.45 24** P **P** 13 21 33.4 +0.7
baz=319
**BPAW Bear Paw Mtn. 64.67 23** P **P** 13 21 34.5 +0.3
baz=320
**NEA2 Nenana 64.82 22** P **P** 13 21 35.1 0.0
baz=321
**POKR Poker Plat Res 64.85 21** P **P** 13 21 34.3 -1.1
baz=322
**CAST Castle Rocks 64.87 24** P **P** 13 21 35.8 +0.3
baz=319
**TCOL CIGO, UAF Yank 64.93 21** P **P** 13 21 36.5 +0.7
**TCOL CIGO, UAF Yank 64.93 21** P **P** 13 21 35.9 +0.1
baz=322
**COLA College 64.93 21** *i*P **P** 13 21 35.8 0.0
COLA pmax pmax
comp=Z,29nm,3.1s
**COLA College 64.93 21** P **P** 13 21 35.8 0.0
**L20K Farewell, AK 65.03 25** P **P** 13 21 37.3 +0.7
baz=318
**INK Inuvik 65.20 14** P **P** 13 21 37.8 +0.3
comp=Z,2.0nm,0.5s,baz=343,slow=5.3,SNR=20
INK LR LR 13 55 41.7
comp=Z,95nm,18.2s,baz=228,slow=41
**INK Inuvik 65.20 14** P **P** 13 21 37.8 +0.3
INK IAmb IAmb 13 21 50.5
comp=Z,4.7nm,0.9s
**INK Inuvik 65.20 14** P **P** 13 21 37.8 +0.3
baz=332
**PPLA Purkeypile 65.23 24** P **P** 13 21 38.6 +0.5
**PPLA Purkeypile 65.23 24** P **P** 13 21 38.4 +0.3
baz=319,SNR=5.7
**IL31 65.26 21** P **P** 13 21 37.9 -0.1
IL31 IAmb IAmb 13 21 50.6
comp=Z,6.1nm,0.8s
**ILAR Eielson Array 65.26 21** P **P** 13 21 37.4 -0.7
comp=Z,3.5nm,0.8s,baz=322,slow=4.9,SNR=49
**ILAR Eielson Subarra 65.26 21** P **P** 13 21 37.6 -0.4
**ILAR Eielson Array 65.26 21** P **P** 13 21 37.6 -0.4
**MCK McKinley 65.53 23** P **P** 13 21 40.0 +0.2
baz=321
**C36M Paulatuk 65.68 10** P **P** 13 21 40.0 -0.6
**C36M Paulatuk 65.68 10** P **P** 13 21 39.8 -0.8
baz=339,SNR=10
**J25K Salcha River, 65.78 21** P **P** 13 21 40.7 -0.8
baz=324
**EPYK Eagle Plains 66.29 16** P **P** 13 21 43.9 -0.7
EPYK IAmb IAmb 13 21 57.0
comp=Z,5.5nm,0.7s
**EPYK Eagle Plains 66.29 16** P **P** 13 21 44.0 -0.7
baz=330
**J26L Joseph Creek 66.33 20** P **P** 13 21 45.0 0.0
J26L IAmb IAmb 13 21 57.2
comp=Z,6.9nm,0.7s
**J26L Joseph Creek 66.33 20** P **P** 13 21 44.9 -0.1
baz=325
**MDT Midelt 66.47 293** LR LR 13 53 10.2
comp=Z,34nm,18.8s,baz=352,slow=38
**DHY Denali Highway 66.48 22** P **P** 13 21 45.5 -0.6
baz=322
**RIDG Independent Ri 66.63 21** P **P** 13 21 46.1 -0.8
baz=324
**SCRK Sand Creek 66.65 20** P **P** 13 21 47.0 -0.1
SCRK IAmb IAmb 13 21 59.2
comp=Z,6.5nm,0.7s
**SCRK Sand Creek 66.65 20** P **P** 13 21 46.7 -0.4
baz=325,SNR=5.9
**EGAK Eagle 66.68 19** P **P** 13 21 46.8 -0.3
baz=327
**WAT6 Susitna Watana 66.78 23** P **P** 13 21 47.3 -0.7
baz=322
**PAX Paxson 67.09 22** P **P** 13 21 49.3 -0.6
baz=324
**SML Sawmill 67.22 24** P **P** 13 21 50.4 -0.3
baz=322
**SCM Sheep Creek Mo 67.49 23** P **P** 13 21 52.4 -0.1
baz=323
**KNK Knik Glacier 67.50 24** P **P** 13 21 51.5 -0.9
baz=322
**DAWY Dawson 67.70 19** P **P** 13 21 53.3 -0.3
DAWY IAmb IAmb 13 22 18.1
comp=Z,9.2nm,1.4s
**BCAR Beaver Creek A 67.97 20** P **P** 13 21 56.1 +0.7
**KDAK Kodiak Island 69.02 28** LR LR 13 55 41.7
comp=Z,156nm,20.3s,baz=121,slow=39
**MMPY Sheldon Lake, 70.72 16** P **P** 13 22 12.8 +0.3
baz=334
**HYT Haines Junctio 70.94 20** P **P** 13 22 14.5 +0.6
HYT IAmb IAmb 13 22 26.6
comp=Z,8.1nm,0.8s
**MTN Manton Dam 71.42 130** P **P** 13 22 16.5 -0.6
**WHY Whitehorse 71.70 18** P **P** 13 22 18.6 +0.1
WHY IAmb IAmb 13 22 23.5
comp=Z,5.8nm,1.0s
**KNRA Kununurra 72.46 133** P **P** 13 22 23.1 -0.3
**YKA Yellowknife Ar 73.38 8** P **P** 13 22 27.5 -0.8
comp=Z,1.4nm,0.6s,baz=339,slow=5.9,SNR=23
**YKA Yellowknife Ar 73.38 8** P **P** 13 22 27.8 -0.5
**TORD Torodi Ar. Bea 74.57 274** P **P** 13 22 34.7 -1.2
comp=Z,2.4nm,0.6s,baz=40,slow=5.0,SNR=14
**TORD Torodi Ar. Bea 74.57 274** P **P** 13 22 34.8 -1.2
**LSZ Lusaka 76.85 234** LR LR 13 57 56.4
comp=Z,69nm,18.8s,baz=340,slow=37
**SCHQ Schefferville 78.60 343** P **P** 13 22 56.9 -1.3
comp=Z,3.2nm,0.6s,baz=24,slow=8.5,SNR=11
**SCHQ Schefferville 78.60 343** P **P** 13 22 57.0 -1.2
**WB0 Warramunga Arr 78.85 131** P **P** 13 22 59.5 -0.4
WB0 IAmb IAmb 13 23 00.3
comp=Z,9.3nm,0.8s
**WRAB Tennant Creek 78.96 131** *ce*P **P** 13 22 58.7 -1.8
WRAB pmax pmax
comp=Z,9.0nm,1.0s
**WRA Warramunga Arr 78.96 131** P **P** 13 23 00.1 -0.4
comp=Z,6.0nm,0.7s,baz=329,slow=5.5,SNR=50
**WRA Warramunga Arr 78.96 131** P **P** 13 23 00.3 -0.2
**WB2 Warramunga Ar 78.97 131** P **P** 13 23 00.3 -0.2
WB2 IAmb IAmb 13 23 01.0
comp=Z,8.8nm,0.8s
**WR0 Warramunga Arr 79.08 131** P **P** 13 23 00.8 -0.4
WR0 IAmb IAmb 13 23 01.6
comp=Z,7.3nm,0.8s
**COEN Coen 79.45 121** P **P** 13 23 02.8 -0.5
COEN IAmb IAmb 13 23 03.6
comp=Z,5.3nm,0.7s
**AS31 Alice Springs 81.75 134** P **P** 13 23 15.2 -0.3
**ASAR Alice Springs 81.75 134** P **P** 13 23 15.1 -0.5
comp=Z,6.5nm,0.8s,baz=323,slow=5.2,SNR=88
**ASAR Alice Springs 81.75 134** P **P** 13 23 15.2 -0.3
**DBIC Dimbokro 83.68 273** P **P** 13 23 25.3 -0.5
comp=Z,2.2nm,0.6s,baz=189,slow=14,SNR=1.5
**KIC Kosan Boka 83.81 273** *e*PKIKP **P** 13 23 27.9 +1.4
comp=Z,5.7nm,0.6s
**TIC Toumodi 83.81 273** *e*PKIKP **P** 13 23 27.3 +0.7
**LIC Lamto 84.11 273** *e*PKIKP **P** 13 23 27.6 -0.4
comp=Z,27nm,1.2s
**FORT Forrest 84.84 142** P **P** 13 23 30.4 -0.8
**CTA Charters Tower 86.00 122** P **P** 13 23 36.7 -0.6
CTA pmax pmax
comp=Z,14nm,1.2s
**CTAO Charters Tower 86.00 122** P **P** 13 23 37.0 -0.3
CTAO pmax pmax
comp=Z,9.0nm,0.9s
**CTAO Charters Tower 86.00 122** P **P** 13 23 37.0 -0.3
**LBTB Lobatse 86.01 230** LR LR 14 06 13.9
comp=Z,25nm,18.7s,baz=284,slow=39
**VLDQ Val d'Or 87.05 347** P **P** 13 23 42.1 0.0
VLDQ IAmb IAmb 13 23 57.7
comp=Z,6.9nm,1.1s
**STKA Stephens Creek 92.38 133** P **P** 13 24 05.8 -1.3
comp=Z,4.0nm,0.7s,baz=320,slow=6.5,SNR=10
**STKA Stephens Creek 92.38 133** P **P** 13 24 04.9 -2.3
**PDAR Pinedale Array 93.36 9** P **P** 13 24 11.0 -1.1
comp=Z,0.4nm,0.6s,baz=348,slow=3.8,SNR=3.8
**NVAR Mina Array Bea 96.20 16** P **P** 13 24 24.9 -0.3
comp=Z,0.3nm,0.6s,baz=359,slow=4.7,SNR=4.0

*TUL* ***11*** *13:18:24.4±1.3,36°51N±0°02×99°01W±0°05, h4km±7km, ML3.0, mb_Lg2.6/17(NEIC), Error ellipse: s-maj=5.4km s-min=3.3km az=90.0*

**NEIC 11 13:18:24.2±1.2, 36°52N±0°02×99°03W±0°04, h5km±2km, Error ellipse: s-maj=6.0km s-min=3.0km az=290.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.14** | **170** | Pg | Pg | 13 18 27.7 | +0.6 |
| **OK035** | **E0210 Rd and N** | **0.32** | **54** | Pg | Pg | 13 18 30.9 | +0.4 |
| OK035 | | | | Sg | Sg | 13 18 35.5 | +0.8 |
| **CROK** | **Carrier** | **0.84** | **91** | Pg | Pg | 13 18 40.2 | -0.2 |
| CROK | | | | Sg | Sg | 13 18 51.5 | +0.1 |
| **KAN10** | **Anthony SW Sta** | **0.96** | **51** | Pg | Pb | 13 18 43.3 | -0.1 |
| **KAN14** | **Manchester OK** | **0.96** | **63** | Pg | Pg | 13 18 42.5 | -0.2 |
| **GC02** | **Grant County #** | **1.00** | **70** | Pg | Pg | 13 18 43.2 | -0.1 |
| **KAN16** | **Harper SW Stat** | **1.05** | **48** | Pg | Pg | 13 18 44.0 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.10** | **50** | Pg | Pg | 13 18 45.1 | -0.3 |
| KAN08 | | | | Sg | Sg | 13 18 59.8 | 0.0 |
| **KAN12** | **Harper NE Stat** | **1.13** | **47** | Pg | Pg | 13 18 44.6 | -1.4 |
| KAN12 | | | | Sg | Sg | 13 19 01.0 | +0.3 |
| **KAN17** | **Caldwell West** | **1.14** | **63** | Pg | Pg | 13 18 45.8 | -0.3 |
| KAN17 | | | | Sg | Sg | 13 19 00.9 | -0.1 |
| **KAN06** | **Argonia West S** | **1.19** | **52** | Pg | Pg | 13 18 46.4 | -0.6 |
| **KAN01** | **Argonia South** | **1.20** | **58** | Pg | Pg | 13 18 46.9 | -0.4 |
| **KAN13** | **South Haven SW** | **1.34** | **68** | Pn | Pn | 13 18 49.2 | -0.4 |
| **BCOK** | **Bluff Creek, N** | **1.44** | **126** | | Pn | 13 18 50.7 | -0.3 |
| **OK029** | **Liberty Lake** | **1.47** | **119** | Pn | Pn | 13 18 51.7 | +0.3 |
| **BLOK** | **Blackwell** | **1.48** | **80** | Pn | Pb | 13 18 52.0 | -0.2 |
| **OK025** | **Westminster Rd** | **1.66** | **124** | Pn | Pn | 13 18 54.5 | +0.4 |
| **OKCFA** | **Oklahoma City** | **1.69** | **130** | Pn | Pn | 13 18 54.9 | +0.4 |
| OKCFA | | | | IAmb_Lg | | 13 19 21.0 | |
| comp=Z,32nm,0.8s | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.71** | **130** | Pn | Pn | 13 18 53.9 | -0.8 |
| **WMOK** | **Wichita Mounta** | **1.79** | **173** | Pn | Pn | 13 18 56.4 | +0.5 |
| WMOK | | | | IAmb_Lg | | 13 19 19.2 | |
| comp=Z,21nm,1.1s | | | | | | | |
| **FNO** | **Franklin** | **1.83** | **133** | Pn | Pn | 13 18 57.1 | +0.8 |
| **KSCO** | **Kaye Shedlock'** | **3.78** | **312** | IAmb_Lg | | 13 20 32.6 | |
| comp=Z,10nm,0.8s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.92** | **188** | IAmb_Lg | | 13 20 31.7 | |
| comp=Z,11nm,0.9s | | | | | | | |
| **T25A** | **Trinidad** | **4.36** | **280** | IAmb_Lg | | 13 20 55.3 | |
| comp=Z,12nm,0.8s | | | | | | | |
| **U40A** | **Yellville** | **4.98** | **90** | IAmb_Lg | | 13 21 10.7 | |
| comp=Z,10nm,0.7s | | | | | | | |
| **Q24A** | **Divide** | **5.43** | **299** | IAmb_Lg | | 13 21 18.7 | |
| comp=Z,12nm,0.9s | | | | | | | |
| **JCT** | **Junction City** | **6.06** | **186** | IAmb_Lg | | 13 21 43.8 | |
| comp=Z,9.9nm,0.8s | | | | | | | |
| **N23A** | **Red Feather La** | **6.95** | **311** | IAmb_Lg | | 13 22 22.0 | |
| comp=Z,7.9nm,0.9s | | | | | | | |

*EAF* ***11*** *13:20:45.6±1.6,26°22S×28°74E, h10km, MD3.5*

**BUL 11 13:20:45.8±1.2, 26°22S×28°73E, h10km, MD3.6, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **3.11** | **92** | *e*P | Pn | 13 21 34.8 | -0.1 |
| CNG | | | | *e*S | Sn | 13 22 09.7 | -2.5 |
| **CNG** | **Changalane** | **3.11** | **92** | *e*P | Pn | 13 21 34.8 | -0.1 |
| CNG | | | | *e*S | Sn | 13 22 09.7 | -2.5 |
| **MOPA** | **Mopani** | **3.63** | **43** | *e*P | Pn | 13 21 41.7 | -0.3 |
| MOPA | | | | *e*S | Sn | 13 22 20.0 | -4.9 |
| **MOPA** | **Mopani** | **3.63** | **43** | *e*P | Pn | 13 21 41.7 | -0.3 |
| MOPA | | | | *e*S | Sn | 13 22 20.0 | -4.9 |
| **BOSA** | **Boshof** | **3.90** | **232** | *e*P | Pn | 13 21 45.5 | -0.4 |
| BOSA | | | | *e*S | Sn | 13 22 28.7 | -3.1 |
| **BOSA** | **Boshof** | **3.90** | **232** | *e*P | Pn | 13 21 45.5 | -0.4 |
| BOSA | | | | *e*S | Sn | 13 22 28.7 | -3.1 |
| **MSNA** | **Messina** | **4.04** | **17** | *e*P | Pn | 13 21 48.3 | +0.5 |
| MSNA | | | | *e*S | Sn | 13 22 32.4 | -2.8 |
| **MSNA** | **Messina** | **4.04** | **17** | *e*P | Pn | 13 21 48.3 | +0.5 |
| MSNA | | | | *e*S | Sn | 13 22 32.4 | -2.8 |
| **MATP** | **Matopo** | **5.78** | **358** | *e*P | Pn | 13 22 10.3 | -1.4 |
| MATP | | | | *e*S | Sn | 13 23 12.4 | -5.7 |
| **MATP** | **Matopo** | **5.78** | **358** | *e*P | Pn | 13 22 10.3 | -1.4 |
| MATP | | | | *e*S | Sn | 13 23 12.4 | -5.7 |

*BJI* **11** *13:47:11.5±0.0, 16°.89S×172°.91W, h51km, mb4.8/12, mB5.2/4*
*NEIC* **11** *13:47:13.6±1.4, 16°.94S±0°.08×173°.4W±0°.1, h44km±7km, mb4.8/51, Error ellipse: s-maj=14.9km s-min=10.1km az=116.0*
*IDC* **11** *13:47:13.6±2.7, 16°.98S×173°.50W, h41km±24km, mb4.4/12, mb1 4.7/15, mb1mx4.4/27, mbtmp4.6/15, ML4.4/3, MS3.6/19, Ms1 3.6/19, ms1mx3.4/60, Error ellipse: s-maj=23.8km s-min=13.6km az=143.0*
*NOU* **11** *13:47:18.4, 16°.90S×172°.95W, h83km, mb5.2/17, Samoa Islands Region*
**ISC 11 13:47:14.0±0.3, 17°.07S±0°.04×173°.45W±0°.05, h52km, n334, σ1§84/326, mb4.8/42, MS3.7/16, 21C-15D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.53** | **27** | P | | | **Pn** | **13 48 05.1** | **-1.3** |
| | 220nm,0.3s,baz=195,slow=3.5,SNR=446 | | | | | | | | |
| AFI | | | | S | | | **Sn** | **13 48 40.9** | **-6.1** |
| | 267nm,0.3s,baz=40,slow=23,SNR=25 | | | | | | | | |
| AFI | | | | LR | | LR | LR | 13 48 48.0 | |
| | comp=Z,186nm,19.6s,baz=240,slow=27 | | | | | | | | |
| **AFI** | **Afiamalu** | **3.53** | **27** | | | | **Pn** | **13 48 04.6** | **-1.8** |
| AFI | | | | Sn | | | **Sn** | **13 48 41.7** | **-5.3** |
| **AFI** | **Afiamalu** | **3.53** | **27** | P | | | **Pn** | **13 48 05.5** | **-0.9** |
| **NIUE** | **Niue** | **3.90** | **121** | P | | | **Pn** | **13 48 11.5** | **+0.1** |
| | baz=3.8,SNR=309 | | | | | | | | |
| **NIUE** | **Niue** | **3.90** | **121** | Pn | | | **Pn** | **13 48 11.3** | **-0.1** |
| NIUE | | | | Sn | | | **Sn** | **13 48 50.3** | **-5.6** |
| **NIUE** | **Niue** | **3.90** | **121** | P | | | **Pn** | **13 48 11.6** | **+0.2** |
| **TAVE** | **Taveuni** | **6.19** | **272** | P | | | Pn | 13 48 53.3 | +10 |
| **DGTI** | **Dogotuki** | **6.58** | **276** | P | | | Pn | 13 48 58.0 | +10 |
| **MSVF** | **Nonsavu** | **8.14** | **264** | P | | | Pn | 13 49 20.3 | +11 |
| | 5.3nm,0.3s,baz=95,slow=12,SNR=44 | | | | | | | | |
| **GLKZ** | **Green Lake** | **12.81** | **198** | P | | | **Pn** | **13 50 11.0** | **-2.4** |
| **RAR** | **Rarotonga** | **13.56** | **110** | P | | | **Pn** | **13 50 22.9** | **-0.8** |
| | 3.1nm,0.3s,baz=257,slow=8.0,SNR=14 | | | | | | | | |
| RAR | | | | S | | | Sn | 13 52 42.2 | -11 |
| | 0.5nm,0.3s,baz=41,slow=20,SNR=1.5 | | | | | | | | |
| RAR | | | | LR | | LR | LR | 13 54 07.9 | |
| | comp=Z,124nm,21.5s,baz=278,slow=30 | | | | | | | | |
| **RAR** | **Rarotonga** | **13.56** | **110** | P | | | **Pn** | **13 50 23.2** | **-0.5** |
| | 59nm,0.9s | | | | | | | | |
| **LIFNC** | **LIFOU** | **18.64** | **256** | P | | | **Pn** | **13 51 28.9** | **+0.6** |
| **PINNC** | **Pines Island,** | **18.79** | **250** | P | | | **Pn** | **13 51 32.4** | **+2.2** |
| PINNC | | | | IAmb | | IAmb | IAmb | 13 51 39.6 | |
| | comp=Z,70nm,1.1s | | | | | | | | |
| **OUENC** | **Ouen Island, N** | **19.30** | **251** | P | | | **Pn** | **13 51 37.1** | **+1.0** |
| **DZM** | **Mont Dzumac** | **19.59** | **252** | P | | | **Pn** | **13 51 39.6** | **0.0** |
| | comp=Z,1.0nm,0.3s,baz=79,slow=19,SNR=11 | | | | | | | | |
| DZM | | | | LR | | LR | LR | 13 57 25.6 | |
| | comp=Z,98nm,21.1s,baz=30,slow=31 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **19.59** | **252** | | | | **Pn** | **13 51 38.6** | **-1.0** |
| **DZM** | **Mont Dzumac** | **19.59** | **252** | P | | | **Pn** | **13 51 45.3** | **+5.6** |
| | comp=Z,26nm,0.9s | | | | | | | | |
| **ONTNC** | **Ouen Toro** | **19.62** | **251** | P | | | **P** | **13 51 37.6** | **-0.7** |
| ONTNC | | | | IAmb | | IAmb | IAmb | 13 51 46.1 | |
| | comp=Z,44nm,0.7s | | | | | | | | |
| **ONTNC** | **Ouen Toro** | **19.62** | **251** | P | | | **Pn** | **13 51 46.3** | **+6.3** |
| **NOUC** | **Port Laguerre** | **19.72** | **252** | P | | | **Pn** | **13 51 47.3** | **+6.1** |
| | comp=Z,38nm,1.3s | | | | | | | | |
| **OUZ** | **Omahuta** | **21.46** | **210** | P | | | **P** | **13 51 59.8** | **+1.9** |
| **OUZ** | **Omahuta** | **21.46** | **210** | P | | | **P** | **13 52 00.1** | **+2.1** |
| OUZ | | | | IAmb | | IAmb | IAmb | 13 52 04.7 | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| **MXZ** | **Matakaoa Point** | **21.67** | **198** | P | | | **P** | **13 52 05.2** | **+5.0** |
| **WCZ** | **Waipu Caves** | **21.70** | **208** | P | | | **P** | **13 52 03.1** | **+2.6** |
| **WMGZ** | **Waiomatatini S** | **21.88** | **198** | P | | | **P** | **13 52 02.5** | **+0.1** |
| **HAZ** | **Te Kaha** | **22.01** | **199** | P | | | **P** | **13 52 07.0** | **+3.2** |
| HAZ | | | | S | | | **S** | **13 55 56.3** | **-7.4** |
| **PKGZ** | **Pakihiroa** | **22.04** | **198** | P | | | **P** | **13 52 09.7** | **+5.5** |
| **ABAZ** | **Army Bay** | **22.05** | **206** | P | | | **P** | **13 52 06.5** | **+2.2** |
| **WIAZ** | **Waiheke Island** | **22.09** | **205** | P | | | **P** | **13 52 07.3** | **+2.5** |
| **PUZ** | **Puketiti** | **22.16** | **198** | P | | | **P** | **13 52 08.2** | **+2.7** |
| PUZ | | | | S | | | **S** | **13 55 57.4** | **-9.1** |
| **RUGZ** | **Raukumara Rang** | **22.23** | **199** | P | | | **P** | **13 52 07.1** | **+0.7** |
| RUGZ | | | | S | | | **S** | **13 56 01.4** | **-6.7** |
| **TWGZ** | **Tauwhareparae** | **22.34** | **198** | P | | | **P** | **13 52 12.0** | **+4.6** |
| TWGZ | | | | S | | | **S** | **13 56 02.9** | **-6.8** |
| **TGRZ** | **Tauranga** | **22.49** | **202** | P | | | **P** | **13 52 14.3** | **+5.3** |
| **OPRZ** | **Ohinepanea** | **22.49** | **201** | P | | | **P** | **13 52 11.5** | **+2.5** |
| **URZ** | **Urewera** | **22.68** | **200** | P | | | **P** | **13 52 12.4** | **+1.4** |
| | comp=Z,70nm,0.7s,baz=29,slow=2.4,SNR=68 | | | | | | | | |
| URZ | | | | S | | | **S** | **13 56 10.9** | **-4.7** |
| | comp=Z,2.3nm,0.5s,baz=8.7,slow=9.1,SNR=1.9 | | | | | | | | |
| **URZ** | **Urewera** | **22.68** | **200** | P | | | **P** | **13 52 11.7** | **+0.7** |
| URZ | | | | S | | | **S** | **13 56 10.0** | **-5.6** |
| **URZ** | **Urewera** | **22.68** | **200** | P | | | **P** | **13 52 12.0** | **+0.9** |
| **PPT** | **Papeete** | **22.79** | **95** | LR | | LR | LR | 13 58 32.7 | |
| | comp=Z,46nm,19.5s,baz=274,slow=30 | | | | | | | | |
| **HIZ** | **Hauiti** | **23.70** | **203** | P | | | **P** | **13 52 24.7** | **+3.7** |
| **BKZ** | **Black Stump Fm** | **23.70** | **200** | P | | | **P** | **13 52 23.1** | **+1.9** |
| **BKZ** | **Black Stump Fm** | **23.70** | **200** | P | | | **P** | **13 52 22.0** | **+0.9** |
| BKZ | | | | IAmb | | IAmb | IAmb | 13 52 26.4 | |
| | comp=Z,18nm,0.6s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **23.70** | **200** | P | | | **P** | **13 52 23.8** | **+2.7** |
| **MCHZ** | **McNeill Hill** | **23.89** | **199** | P | | | **P** | **13 52 26.0** | **+3.2** |
| **TUVZ** | **Tukino** | **24.07** | **201** | P | | | **P** | **13 52 26.4** | **+1.7** |
| **QRZ** | **Quartz Range** | **26.59** | **204** | P | | | **P** | **13 52 53.0** | **+5.7** |
| **HNR** | **Honiara** | **26.96** | **283** | S | | | **S** | **13 57 16.7** | **-8.1** |
| | comp=Z,84nm,0.5s,baz=129,slow=14,SNR=1.0 | | | | | | | | |
| HNR | | | | LR | | LR | LR | 14 02 00.9 | |
| | comp=Z,169nm,22.0s,baz=120,slow=33 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **29.63** | **203** | P | | | **P** | **13 53 17.9** | **+3.5** |
| **EIDS** | **Eidsvold** | **34.00** | **250** | P | | | **P** | **13 53 53.5** | **+0.5** |
| | baz=34,SNR=3.7 | | | | | | | | |
| **EIDS** | **Eidsvold** | **34.00** | **250** | P | | | **P** | **13 53 53.0** | **0.0** |
| **ARMA** | **Armidale** | **34.47** | **241** | P | | | **P** | **13 53 57.7** | **+0.6** |
| | baz=35,SNR=19 | | | | | | | | |
| **ARMA** | **Armidale** | **34.47** | **241** | P | | | **P** | **13 53 58.2** | **+1.1** |
| ARMA | | | | IAmb | | IAmb | IAmb | 13 53 58.5 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **CNB** | **Canberra Magne** | **37.72** | **234** | P | | | **P** | **13 54 25.8** | **+1.1** |
| | baz=38,SNR=11 | | | | | | | | |
| **CTA** | **Charters Tower** | **38.25** | **259** | LR | | LR | LR | 14 07 53.1 | |
| | comp=Z,94nm,21.4s,baz=70,slow=32 | | | | | | | | |
| **CTAO** | **Charters Tower** | **38.25** | **259** | P | | | **P** | **13 54 28.5** | **-0.9** |
| CTAO | | | | IAmb | | IAmb | IAmb | 13 54 34.0 | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **39.69** | **241** | P | | | **P** | **13 54 41.5** | **+0.3** |
| | baz=40,SNR=25 | | | | | | | | |
| **QLP** | **Quilpie** | **40.26** | **249** | P | | | **P** | **13 54 46.1** | **+0.1** |
| | baz=40,SNR=8.8 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.37** | **330** | T | | | T | 14 36 06.0 | |
| | baz=146,slow=74,SNR=10 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.38** | **330** | T | | | T | 14 36 06.3 | |
| | baz=146,slow=74,SNR=10 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.39** | **330** | T | | | T | 14 36 08.9 | |
| | baz=146,SNR=8.7 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.34** | **331** | T | | | T | 14 38 34.6 | |
| | baz=145,slow=75,SNR=12 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.34** | **331** | T | | | T | 14 38 33.6 | |
| | baz=145,slow=75,SNR=17 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.36** | **331** | T | | | T | 14 38 35.9 | |
| | baz=145,slow=75,SNR=10 | | | | | | | | |
| **TOO** | **Toolangi** | **41.39** | **232** | P | | | **P** | **13 54 55.9** | **+0.6** |
| | baz=42,SNR=9.4 | | | | | | | | |
| **TOO** | **Toolangi** | **41.39** | **232** | P | | | **P** | **13 54 55.9** | **+0.6** |
| TOO | | | | IAmb | | IAmb | IAmb | 13 54 59.1 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **42.08** | **224** | P | | | **P** | **13 55 01.6** | **+0.9** |
| TAU | | | | IAmb | | IAmb | IAmb | 13 55 13.8 | |
| | comp=Z,31nm,1.3s | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.18** | **241** | P | | | **P** | **13 55 10.6** | **+0.7** |
| | comp=Z,10nm,0.7s,baz=71,slow=8.7,SNR=23 | | | | | | | | |
| STKA | | | | LR | | LR | LR | 14 11 58.7 | |
| | comp=Z,64nm,18.1s,baz=29,slow=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.18** | **241** | P | | | **P** | **13 55 10.7** | **+0.7** |
| | baz=43,SNR=17 | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.18** | **241** | P | | | **P** | **13 55 10.6** | **+0.7** |
| **ARPS** | **Mount Arapiles** | **43.97** | **234** | P | | | **P** | **13 55 16.6** | **+0.4** |
| | baz=44,SNR=6.7 | | | | | | | | |
| **HTT** | **Hallett** | **45.65** | **240** | P | | | **P** | **13 55 30.3** | **+0.6** |
| | baz=46,SNR=11 | | | | | | | | |
| **BBOO** | **Buckleboo** | **47.95** | **241** | P | | | **P** | **13 55 47.8** | **+0.2** |
| | baz=48,SNR=23 | | | | | | | | |
| **BBOO** | **Buckleboo** | **47.95** | **241** | P | | | **P** | **13 55 47.8** | **+0.2** |
| BBOO | | | | IAmb | | IAmb | IAmb | 13 55 48.1 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **49.25** | **258** | P | | | **P** | **13 55 56.9** | **-0.8** |
| WR0 | | | | IAmb | | IAmb | IAmb | 13 56 10.0 | |
| | comp=Z,8.3nm,1.2s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **49.41** | **258** | P | | | **P** | **13 55 58.1** | **-0.9** |
| WB0 | | | | IAmb | | IAmb | IAmb | 13 55 58.5 | |
| | comp=Z,6.8nm,1.0s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **49.43** | **258** | P | | | **P** | **13 55 58.4** | **-0.7** |
| WB2 | | | | IAmb | | IAmb | IAmb | 13 55 59.1 | |
| | comp=Z,5.7nm,0.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **49.43** | **258** | P | | | **P** | **13 55 58.4** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | IAmb | 13 55 59.6 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.44** | **258** | P | | | **P** | **13 55 58.6** | **-0.6** |
| | comp=Z,5.0nm,0.7s,baz=97,slow=7.1,SNR=72 | | | | | | | | |
| WRA | | | | LR | | LR | LR | 14 16 12.0 | |
| | comp=Z,57nm,18.3s,baz=112,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.44** | **258** | P | | | **P** | **13 55 58.1** | **-1.1** |
| **AS31** | **Alice Springs** | **49.57** | **253** | P | | | **P** | **13 56 00.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **49.57** | **253** | P | | | **P** | **13 56 00.0** | **-0.2** |
| | comp=Z,36nm,0.6s,baz=87,slow=8.7,SNR=664 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **13 57 23.4** | **+2.0** |
| | comp=Z,1.3nm,0.7s,baz=108,slow=4.0,SNR=1.0 | | | | | | | | |
| ASAR | | | | S | | | **S** | **14 02 59.5** | **-5.4** |
| | comp=Z,0.8nm,0.9s,baz=91,slow=15,SNR=5.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **49.57** | **253** | P | | | **P** | **13 56 00.6** | **+0.3** |
| **WRKA** | **Warakurna** | **54.60** | **251** | P | | | **P** | **13 56 37.5** | **-0.1** |
| | baz=55,SNR=42 | | | | | | | | |
| **FORT** | **Forrest** | **54.64** | **244** | P | | | **P** | **13 56 37.8** | **+0.1** |
| **KNRA** | **Kununurra** | **55.29** | **263** | P | | | **P** | **13 56 41.8** | **-0.8** |
| | baz=56,SNR=3.1 | | | | | | | | |
| **KNRA** | **Kununurra** | **55.29** | **263** | P | | | **P** | **13 56 42.0** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **57.84** | **259** | LR | | LR | LR | 14 19 40.4 | |
| | comp=Z,58nm,21.1s,baz=85,slow=34 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.84** | **259** | P | | | **P** | **13 57 00.8** | **+0.1** |
| | baz=58,SNR=4.1 | | | | | | | | |
| **RPN** | **Rapa Nui** | **59.70** | **112** | LR | | LR | LR | 14 15 40.3 | |
| | comp=Z,39nm,19.3s,baz=62,slow=29 | | | | | | | | |
| **SOEI** | **Soe** | **60.82** | **268** | P | | | P | 13 57 16.4 | -5.1 |
| | comp=Z,34nm,1.2s | | | | | | | | |
| **VNDA** | **Vanda** | **61.72** | **186** | LR | | LR | LR | 14 20 42.0 | |
| | comp=Z,15nm,21.9s,baz=187,slow=32 | | | | | | | | |
| **VNDA** | **Vanda** | **61.72** | **186** | P | | | **P** | **13 57 26.5** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **62.70** | **254** | P | | | **P** | **13 57 34.0** | **+0.1** |
| PSA00 | | | | IAmb | | IAmb | IAmb | 13 57 34.7 | |
| | comp=Z,9.7nm,0.9s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **62.70** | **254** | P | | | **P** | **13 57 34.0** | **+0.1** |
| PSA00 | | | | IAmb | | IAmb | IAmb | 13 57 34.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| **MBWA** | **Marble Bar** | **62.87** | **255** | P | | | **P** | **13 57 35.0** | **-0.1** |
| **MEEK** | **Meekatharra** | **63.15** | **248** | P | | | **P** | **13 57 36.5** | **-0.4** |
| | baz=63,SNR=3.1 | | | | | | | | |
| **KLBR** | **Kellerberrin** | **63.43** | **243** | P | | | **P** | **13 57 37.5** | **-1.1** |
| | baz=64,SNR=7.7 | | | | | | | | |
| **MUN** | **Mundaring** | **64.71** | **242** | P | | | **P** | **13 57 48.7** | **+1.7** |
| | baz=65,SNR=6.0 | | | | | | | | |
| **MPSI** | **Mapaga** | **67.83** | **278** | P | | | P | 13 57 59.8 | -7.5 |
| **SHEM** | **Shemya Is, Ala** | **70.34** | **352** | LR | | LR | LR | 14 23 18.8 | |
| | comp=Z,42nm,21.5s,baz=75,slow=31 | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **70.81** | **267** | P | | | P | 13 58 20.2 | -5.5 |
| | comp=Z,68nm,1.2s | | | | | | | | |
| **ABJI** | **Asem Bagus** | **70.90** | **268** | P | | | P | 13 58 21.0 | -5.3 |
| | comp=Z,82nm,1.3s | | | | | | | | |
| **KMMI** | **Kalianget** | **71.36** | **268** | P | | | P | 13 58 22.2 | -6.8 |
| **PKM** | **Mcpherson Peak** | **72.53** | **44** | P | | | **P** | **13 58 37.6** | **+1.8** |
| | baz=234 | | | | | | | | |
| **SMMC** | **Simmler** | **72.67** | **43** | P | | | **P** | **13 58 38.2** | **+1.7** |
| | baz=234 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.98** | **180** | LR | | LR | LR | 14 30 02.6 | |
| | comp=Z,58nm,18.0s,baz=145,slow=35 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.98** | **180** | P | | | **P** | **13 58 40.4** | **+2.4** |
| **ARVC** | **Arvin** | **73.33** | **44** | P | | | **P** | **13 58 41.6** | **+1.3** |
| | baz=234 | | | | | | | | |
| **MURC** | **Murrieta** | **73.57** | **46** | P | | | **P** | **13 58 42.8** | **+0.9** |
| | baz=236 | | | | | | | | |
| **VES** | **Vestal, Richgr** | **73.58** | **44** | P | | | **P** | **13 58 42.5** | **+0.8** |
| | baz=234 | | | | | | | | |
| **MONP2** | **Monument Peak** | **73.72** | **47** | P | | | **P** | **13 58 44.1** | **+1.1** |
| | baz=237 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **73.75** | **45** | P | | | **P** | **13 58 43.4** | **+0.5** |
| | baz=235,SNR=8.8 | | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **73.81** | **48** | P | | | **P** | **13 58 43.7** | **+0.4** |
| | baz=237 | | | | | | | | |
| **ISA** | **Isabella, Lake** | **73.88** | **44** | P | | | **P** | **13 58 44.6** | **+1.0** |
| | baz=234,SNR=5.7 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **74.09** | **47** | LR | | LR | LR | 14 25 02.7 | |
| | comp=Z,112nm,19.4s,baz=323,slow=31 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **74.09** | **47** | P | | | **P** | **13 58 45.9** | **+0.9** |
| | baz=236 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **74.09** | **47** | P | | | **P** | **13 58 45.8** | **+0.8** |
| | baz=236 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.20** | **342** | P | | | **P** | **13 58 42.0** | **-3.0** |
| PEA0B | | | | IAmb | | IAmb | IAmb | 13 59 01.1 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.20** | **342** | P | | | **P** | **13 58 46.3** | **+1.3** |
| | comp=Z,1.5nm,0.5s,baz=136,slow=12,SNR=6.6 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.20** | **342** | P | | | **P** | **13 58 42.8** | **-2.1** |
| **LRMC** | **Laurel Mtn Rad** | **74.30** | **44** | P | | | **P** | **13 58 47.1** | **+0.9** |
| | baz=235,SNR=8.9 | | | | | | | | |
| **N02D** | **Trinity Center** | **74.47** | **37** | P | | | **P** | **13 58 48.2** | **+1.2** |
| | baz=230 | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **74.58** | **43** | P | | | **P** | **13 58 48.7** | **+0.9** |
| | baz=235 | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **74.62** | **47** | P | | | **P** | **13 58 48.9** | **+0.8** |
| | baz=237 | | | | | | | | |
| **M02C** | **Callahan** | **74.65** | **37** | P | | | **P** | **13 58 49.2** | **+1.3** |
| | baz=230 | | | | | | | | |
| **L02E** | **Cave Junction** | **74.72** | **36** | P | | | **P** | **13 58 49.5** | **+1.3** |
| | baz=229 | | | | | | | | |
| **MPMC** | **Manual Prospec** | **74.76** | **44** | P | | | **P** | **13 58 49.6** | **+0.7** |
| | baz=235,SNR=16 | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **74.79** | **45** | P | | | **P** | **13 58 49.3** | **+0.4** |
| | baz=236,SNR=5.9 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **74.81** | **47** | P | | | **P** | **13 58 49.7** | **+0.5** |
| | baz=237 | | | | | | | | |
| **TIN** | **Tinemaha, Big** | **74.84** | **43** | P | | | **P** | **13 58 50.8** | **+1.6** |
| | baz=234 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **74.85** | **46** | P | | | **P** | **13 58 50.0** | **+0.7** |
| | baz=236 | | | | | | | | |
| **GLA** | **Glamis** | **74.93** | **48** | P | | | **P** | **13 58 51.2** | **+1.5** |
| | baz=238 | | | | | | | | |
| **K02D** | **Willamette Mer** | **75.03** | **36** | P | | | **P** | **13 58 51.4** | **+1.2** |
| | baz=229 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **75.29** | **46** | P | | | **P** | **13 58 52.7** | **+0.8** |
| | baz=237 | | | | | | | | |
| **IRM** | **Iron Mountain** | **75.30** | **47** | P | | | **P** | **13 58 52.2** | **+0.4** |
| | baz=237,SNR=6.2 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **75.41** | **44** | P | | | **P** | **13 58 53.5** | **+1.1** |
| | baz=236 | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **75.46** | **45** | P | | | **P** | **13 58 54.0** | **+1.1** |
| | baz=236 | | | | | | | | |
| **M04C** | **Macdoel** | **75.49** | **37** | P | | | **P** | **13 58 53.6** | **+0.7** |
| | baz=231,SNR=6.1 | | | | | | | | |
| **L04D** | **Klamath Falls** | **75.50** | **37** | P | | | **P** | **13 58 54.2** | **+1.3** |
| | baz=230 | | | | | | | | |
| **RYN** | **Ryan** | **75.57** | **41** | P | | | **P** | **13 58 52.4** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **75.59** | **42** | P | | | **P** | **13 58 54.8** | **+1.1** |
| | comp=Z,6.1nm,0.8s,baz=227,slow=10,SNR=47 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **75.82** | **50** | P | | | **P** | **13 58 56.1** | **+1.3** |
| | baz=239 | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **76.08** | **47** | P | | | **P** | **13 58 57.3** | **+1.0** |
| | baz=238 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **76.08** | **44** | P | | | **P** | **13 58 56.0** | **-0.4** |
| **TPNV** | **Topopah Spring** | **76.08** | **44** | P | | | **P** | **13 58 57.4** | **+1.0** |
| | baz=236 | | | | | | | | |
| **J04D** | **Umpqua Nationa** | **76.26** | **36** | P | | | **P** | **13 58 58.4** | **+1.0** |
| | baz=230 | | | | | | | | |
| **I04A** | **Tendick Farm,** | **76.44** | **35** | P | | | **P** | **13 58 59.6** | **+1.5** |
| | baz=230 | | | | | | | | |
| **MOD** | **Modoc Plateau** | **76.46** | **38** | P | | | **P** | **13 58 58.1** | **-0.3** |
| MOD | | | | IAmb | | IAmb | IAmb | 13 59 00.6 | |
| | comp=Z,9.9nm,0.9s | | | | | | | | |
| **K05A** | **Summer Lake** | **76.62** | **37** | P | | | **P** | **13 58 59.2** | **-0.2** |
| **H04D** | **Lebanon** | **76.74** | **35** | P | | | **P** | **13 59 01.3** | **+1.6** |
| | baz=229 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **76.78** | **36** | P | | | **P** | **13 59 01.2** | **+1.0** |
| | baz=231,SNR=10.0 | | | | | | | | |
| **G03D** | **McMinnville, O** | **76.90** | **34** | P | | | **P** | **13 59 02.7** | **+2.1** |
| | baz=229 | | | | | | | | |
| **PINE** | **Pine Mountain** | **77.27** | **36** | P | | | **P** | **13 59 03.3** | **+0.3** |
| **R11A** | **Troy Canyon, C** | **77.30** | **43** | P | | | **P** | **13 59 03.7** | **+0.4** |
| | baz=236,SNR=8.1 | | | | | | | | |
| **I05D** | **Terrebonne, OR** | **77.39** | **35** | P | | | **P** | **13 59 04.8** | **+1.3** |
| | baz=231 | | | | | | | | |
| **G05D** | **Wamic, OR** | **77.97** | **35** | P | | | **P** | **13 59 08.2** | **+1.5** |
| | baz=230 | | | | | | | | |
| **E04D** | **Cinebar** | **78.15** | **33** | P | | | **P** | **13 59 09.1** | **+1.5** |
| | baz=229 | | | | | | | | |
| **D03D** | **Eldon** | **78.52** | **32** | P | | | **P** | **13 59 10.8** | **+1.2** |
| | baz=229 | | | | | | | | |
| **ELK** | **Elko** | **78.86** | **41** | LR | | LR | LR | 14 26 09.4 | |
| | comp=Z,85nm,19.0s,baz=308,slow=30 | | | | | | | | |
| **B05A** | **Bryant** | **79.51** | **32** | P | | | **P** | **13 59 15.8** | **+0.9** |
| | baz=229 | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **80.11** | **43** | P | | | **P** | **13 59 19.6** | **+0.9** |
| | baz=238 | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **80.69** | **36** | P | | | **P** | **13 59 20.7** | **-0.8** |
| F10A | | | | | | IAmb | IAmb | 13 59 23.0 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **PMR** | **Palmer** | **80.76** | **12** | P | | | **P** | **13 59 22.2** | **+0.9** |
| | baz=203 | | | | | | | | |
| **TTA** | **Tatalina** | **80.90** | **8** | P | | | **P** | **13 59 24.9** | **+2.6** |
| | baz=197 | | | | | | | | |
| **HLID** | **Hailey** | **80.94** | **39** | P | | | **P** | **13 59 24.3** | **+1.3** |
| | baz=236 | | | | | | | | |
| **NJ2** | **Nanjing** | **81.13** | **307** | *e*P | | | **P** | **13 59 26.2** | **+2.1** |
| NJ2 | | | | pmax | | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.33** | **12** | P | | | **P** | **13 59 25.2** | **+0.6** |
| | baz=205 | | | | | | | | |
| **MVCO** | **Mesa Verde** | **81.51** | **47** | P | | | **P** | **13 59 27.1** | **+0.8** |
| | baz=241 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.58** | **56** | P | | | **P** | **13 59 28.4** | **+1.7** |
| | comp=Z,5.6nm,1.2s,baz=230,slow=5.9,SNR=22 | | | | | | | | |
| TXAR | | | | LR | | | LR | 14 29 45.6 | |
| | comp=Z,66nm,18.7s,baz=320,slow=31 | | | | | | | | |
| **ANM** | **Nome** | **81.61** | **4** | P | | | **P** | **13 59 27.1** | **+1.2** |
| | baz=188 | | | | | | | | |
| **ANMO** | **Albuquerque** | **81.91** | **50** | LR | | LR | LR | 14 27 26.7 | |
| | comp=Z,43nm,19.0s,baz=306,slow=30 | | | | | | | | |
| **ANMO** | **Albuquerque** | **81.91** | **50** | P | | | **P** | **13 59 27.7** | **-0.7** |
| ANMO | | | | IAmb | | IAmb | IAmb | 13 59 31.9 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **ANMO** | **Albuquerque** | **81.91** | **50** | P | | | **P** | **13 59 29.4** | **+1.0** |
| | baz=243 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **81.93** | **12** | P | | | **P** | **13 59 28.8** | **+0.9** |
| | baz=205 | | | | | | | | |
| **CAST** | **Castle Rocks** | **81.94** | **10** | P | | | **P** | **13 59 28.2** | **+0.5** |
| | baz=200 | | | | | | | | |
| **BCYI** | **Bear Canyon** | **81.96** | **39** | P | | | **P** | **13 59 27.8** | **-0.7** |
| **PV07** | **Paradox Valley** | **82.00** | **46** | P | | | **P** | **13 59 27.1** | **-1.8** |
| PV07 | | | | IAmb | | IAmb | IAmb | 13 59 32.7 | |
| | comp=Z,7.1nm,1.0s | | | | | | | | |
| **PV15** | **Paradox Valley** | **82.06** | **46** | P | | | **P** | **13 59 27.9** | **-1.3** |
| PV15 | | | | IAmb | | IAmb | IAmb | 13 59 31.2 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **NEW** | **Newport** | **82.11** | **34** | P | | | **P** | **13 59 28.7** | **-0.2** |
| **NEW** | **Newport** | **82.11** | **34** | P | | | **P** | **13 59 28.9** | **0.0** |
| | baz=233 | | | | | | | | |
| **TRF** | **Thorofare Moun** | **82.27** | **10** | P | | | **P** | **13 59 30.1** | **+0.5** |
| | baz=202 | | | | | | | | |
| **HARP** | **HAARP** | **82.29** | **13** | P | | | **P** | **13 59 29.8** | **+0.3** |
| | baz=207 | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **82.34** | **9** | P | | | **P** | **13 59 30.1** | **+0.4** |
| | baz=200 | | | | | | | | |
| **J20K** | **Nowinta River** | **82.35** | **8** | P | | | **P** | **13 59 30.6** | **+0.9** |
| | baz=198 | | | | | | | | |
| **TNA** | **Tin City** | **82.48** | **2** | P | | | **P** | **13 59 31.5** | **+1.1** |
| | baz=185 | | | | | | | | |
| **MCK** | **McKinley** | **82.76** | **11** | P | | | **P** | **13 59 31.5** | **-0.4** |
| MCK | | | | IAmb | | IAmb | IAmb | 13 59 33.9 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **MCK** | **McKinley** | **82.76** | **11** | P | | | **P** | **13 59 32.7** | **+0.8** |
| | baz=204 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **82.77** | **14** | P | | | **P** | **13 59 33.1** | **+1.0** |
| | baz=209 | | | | | | | | |
| **HYT** | **Haines Junctio** | **82.81** | **17** | P | | | **P** | **13 59 33.6** | **+1.2** |
| | baz=214 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **82.93** | **47** | P | | | **P** | **13 59 35.2** | **+1.4** |
| | baz=242 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.99** | **14** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WHTX** | **Lake Whitney,** baz=248 | **87.54** | **56** | P | | **P** | **13 59 57.2 +0.6** |
| **EPYK** | **Eagle Plains** baz=215 | **87.59** | **14** | P | | **P** | **13 59 56.8 +0.7** |
| **RSSD** | **Black Hills** baz=244 | **87.72** | **42** | P | | **P** | **13 59 57.2 -0.3** |
| **PLCA** | **Paso Flores** comp=Z,1.0nm,0.8s,baz=203,slow=8.3,SNR=4.4 | **88.43** | **132** | P | | **P** | **14 00 02.7 +1.8** |
| **INK** | **Inuvik** comp=Z,104nm,18.2s,baz=192,slow=32 | **89.89** | **14** | LR | | LR | 14 35 23.9 |
| **INK** | **Inuvik** | **89.89** | **14** | P | | **P** | **14 00 07.3 +0.5** |
| **INK** | **Inuvik** baz=218 | **89.89** | **14** | P | | **P** | **14 00 07.5 +0.7** |
| **HHC** | **Hu-ho-hao-te** | **90.12** | **313** | *eP* | | **P** | **14 00 08.4 -0.3** |
| **MIAR** | **Mount Ida** baz=250 | **91.48** | **54** | P | | **P** | **14 00 15.4 +0.4** |
| **YKA** | **Yellowknife Ar** comp=Z,2.0nm,1.1s,baz=238,slow=4.3,SNR=10 | **91.64** | **23** | P | | **P** | **14 00 14.3 -0.7** |
| **U40A** | **Yellville** baz=251 | **92.64** | **53** | P | | **P** | **14 00 20.5 +0.2** |
| **W41B** | **Gary Mavity, V** baz=251 | **92.72** | **54** | P | | **P** | **14 00 21.1 +0.4** |
| **C36M** | **Paulatuk** baz=227 | **92.97** | **16** | P | | **P** | **14 00 22.1 +1.1** |
| **PZH** | **PanZhiHua** comp=Z,10.0nm,0.8s | **92.98** | **297** | P | | **P** | **14 00 22.9 +0.6** |
| PZH | | | | pmax | | pmax | |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.5nm,0.4s,baz=193,slow=2.0,SNR=4.1 | **93.09** | **288** | P | | **P** | **14 00 24.3 +1.5** |
| **LZH** | **Lanzhou** | **94.17** | **306** | *eP* | | **P** | **14 00 27.3 -0.3** |
| LZH | | | | pP | | pP | 14 00 44.2 +1.9 |
| LZH | | | | sP | | sP | 14 00 50.2 +2.3 |
| LZH | comp=Z,18nm,1.4s | | | pmax | | pmax | |
| **CCM** | **Cathedral Cave** baz=252 | **94.39** | **52** | P | | **P** | **14 00 28.6 +0.2** |
| **A36M** | **Sachs Harbour** | **94.53** | **13** | P | | **P** | **14 00 29.0 +0.9** |
| A36M | comp=Z,4.5nm,0.8s | | | IAmb | | IAmb | 14 00 30.4 |
| **A36M** | **Sachs Harbour** baz=226 | **94.53** | **13** | P | | **P** | **14 00 29.4 +1.3** |
| **ULM** | **Lac du Bonnet** comp=Z,130nm,18.7s,baz=265,slow=31 | **95.25** | **39** | LR | | LR | 14 36 24.0 |
| **O48B** | **Farmland** baz=256 | **99.55** | **51** | P | | **Pdif** | **14 00 51.6 -0.1** |
| **MKAR** | **Makanchi Array** comp=Z,0.6nm,0.5s,baz=224,slow=0.4,SNR=14 | **111.95** | **314** | PKiKP | | **PKiKP** | **14 05 43.6 +0.2** |
| **KSH** | **Kashi** | **116.42** | **306** | PKP | | **PKiKP** | **14 05 53.2 +0.9** |
| **ARCES** | **ARCESS Array B** comp=Z,5.3nm,0.9s,baz=17,slow=1.6,SNR=5.7 | **126.25** | **352** | PKP | | **PKPdf** | **14 06 09.4 -0.7** |
| **ARCES** | **ARCESS Array B** | **126.25** | **352** | | | **PKiKP** | **14 06 10.7 +0.1** |
| **KLMR** | **Klimovskoe** | **130.33** | **340** | *e*PKPdf | | **PKPdf** | **14 06 16.7 -1.4** |
| KLMR | comp=Z,25nm,1.5s | | | AMP | | | 14 06 20.2 |
| **AKASG** | **Malin Array Be** comp=Z,1.4nm,0.7s,baz=33,slow=1.6,SNR=5.3 | **141.85** | **337** | PKP | | **PKPdf** | **14 06 40.0 +0.2** |
| **KMBO** | **Kilima Mbogo** comp=Z,1.4nm,0.5s,baz=75,slow=3.6,SNR=4.6 | **144.75** | **242** | PKP | | **PKPdf** | **14 06 47.0 +0.7** |
| **KWP** | **Kalwaria Pacla** | **144.99** | **342** | *e*PKPdf | | **PKPab** | **14 06 42.8 -1.9** |
| **OJC** | **Ojcow** | **145.25** | **345** | *e*PKPdf | | **PKPdf** | **14 06 46.5 +0.7** |
| **KSP** | **Ksiaz** | **145.41** | **349** | *e*PKPdf | | **PKPab** | **14 06 47.4 +1.2** |
| **CLL** | **Collm** comp=Z,20nm,1.4s | **145.46** | **353** | *j* PKPbc | | **PKPab** | **14 06 46.8 +0.4** |
| **OSTC** | **Ostas** | **145.70** | **349** | *e*PKP | | **PKPab** | **14 06 48.7 +1.3** |
| **BRG** | **Berggiesshubel** | **145.76** | **352** | *e*PKP | | **PKPab** | **14 06 48.4 +0.9** |
| BRG | comp=Z,11nm,1.0s | | | Amp | | | 14 06 49.9 |
| BRG | | | | *ex* | | x | 14 07 11.2 |
| BRG | comp=Z,10nm,1.3s | | | Amp | | | 14 07 13.4 |
| **NIE** | **Niedzica** | **145.86** | **344** | *e*PKPdf | | **PKPab** | **14 06 48.7 +0.7** |
| **DPC** | **Dobruska-Polom** | **145.88** | **349** | *e*PKP | | **PKPab** | **14 06 49.0 +0.9** |
| DPC | | | | *ep*PKP | | **pPKPdf** | **14 07 00.0 -2.2** |
| **BURAR** | **Bucovina Array** | **145.89** | **337** | ↑P | | **PKPab** | **14 06 49.7 +1.4** |
| **PVCC** | **Panska Ves** | **146.01** | **351** | *e*PKP | | **PKPab** | **14 06 49.3 +0.8** |
| **CRVS** | **Cervenica-Dubn** | **146.01** | **342** | *e*PKP | | **PKPab** | **14 06 49.5 +0.9** |
| **MORC** | **Moravsky Berou** | **146.19** | **347** | ↑P | | **PKPab** | **14 06 49.6 +0.4** |
| **MORC** | **Moravsky Berou** | **146.19** | **347** | *e*PKP | | **PKPab** | **14 06 50.0 +0.7** |
| **LANS** | **Liptovska Anna** | **146.32** | **345** | *e*PKP | | **PKPab** | **14 06 50.6 +0.8** |
| **TRPA** | **Tarpa** | **146.37** | **341** | ↑P | | **PKPbc** | **14 06 49.3 +0.3** |
| **BSTI** | **Sart Tilman** | **146.56** | **1** | *d*PKiKP | | **PKPab** | **14 06 51.0 +0.4** |
| **BTNL** | **Ternell** | **146.56** | **0** | *d*PKiKP | | **PKPab** | **14 06 50.6 0.0** |
| **SNF** | **Seneffe** | **146.59** | **3** | *d*PKiKP | | **PKPab** | **14 06 50.9 +0.2** |
| **VRI** | **Vrincioaia** | **146.72** | **334** | ↑P | | **PKPbc** | **14 06 50.1 -0.1** |
| **BGES** | **Gesves** | **146.75** | **2** | *d*PKPdf | | **PKPdf** | **14 06 47.4 -1.0** |
| BGES | | | | *dp*PKP | | **pPKPdf** | **14 07 01.5 -2.1** |
| **TPGR** | **Topolog** | **146.76** | **331** | ↑P | | **PKPab** | **14 06 51.9 +0.3** |
| **BMRD** | **Maredsous** | **146.82** | **2** | *d*PKPdf | | **PKPdf** | **14 06 47.1 -1.4** |
| BMRD | | | | *d*PKP | | **PKPbc** | **14 06 48.5 -1.8** |
| BMRD | | | | *d*PKiKP | | **PKPab** | **14 06 51.5 -0.1** |
| BMRD | | | | *dp*PKP | | **pPKPdf** | **14 07 02.4 -1.3** |
| **VRAC** | **Vranov** | **146.83** | **348** | ||P | **PKiKP** | **14 06 52.5 -0.5** |
| **VRAC** | **Vranov** | **146.83** | **348** | *e*PKP | | **PKPab** | **14 06 52.0 +0.3** |
| **RCHB** | **Rochefort** | **146.98** | **2** | *d*PKiKP | | **PKPab** | **14 06 51.8 -0.4** |
| **DOU** | **Dourbes** | **147.02** | **2** | *d*PKiKP | | **PKPab** | **14 06 52.1 -0.2** |
| **JAVC** | **Velka Javorina** | **147.02** | **346** | *e*PKP | | **PKiKP** | **14 06 53.6 +0.1** |
| **VYHS** | **Vyhne** | **147.09** | **345** | *e*PKP | | **PKPab** | **14 06 52.8 0.0** |
| **KRUC** | **Moravsky** | **147.10** | **348** | *e*PKP | | **PKPab** | **14 06 52.5 -0.3** |
| **HARR** | **Harsova** | **147.12** | **331** | ↑P | | **PKPab** | **14 06 52.7 -0.3** |
| **DOPR** | **Dopca** | **147.19** | **335** | ↑P | | **PKPab** | **14 06 53.6 +0.4** |
| **PSZ** | **Piszkesteto** | **147.34** | **343** | ↑P | | **PKiKP** | **14 06 54.5 +0.2** |
| **MLR** | **Muntele Rosu** | **147.35** | **334** | ↑P | | **PKPab** | **14 06 53.3 -0.8** |
| MLR | | | | ↑P | | **PKiKP** | **14 06 53.9 -0.5** |
| **BRTR** | **Keskin Array B** comp=Z,3.7nm,0.8s,baz=113,slow=3.2,SNR=7.1 | **147.40** | **319** | PKPbc | | **PKPab** | **14 06 53.7 -0.8** |
| **DRGR** | | **147.48** | **339** | ↑P | | **PKPbc** | **14 06 53.3 +0.9** |
| **WLF** | **Walferdange** | **147.49** | **0** | *d*PKiKP | | **PKPbc** | **14 06 53.0 +0.9** |
| **KHC** | **Kasperske Hory** | **147.51** | **351** | *e*PKP | | **PKPbc** | **14 06 53.1 +0.8** |
| **MODS** | **Modra-Piesok** | **147.57** | **347** | *e*PKP | | **PKPab** | **14 06 56.0 +1.3** |
| **CKRC** | **Cesky Krumlov** | **147.71** | **350** | *e*PKP | | **PKiKP** | **14 06 54.1 -0.8** |
| **VOIR** | | **147.76** | **335** | ↑P | | **PKiKP** | **14 06 54.6 -0.6** |
| **GERES** | **GERESS Array B** comp=Z,3.0nm,0.9s,baz=29,slow=3.0,SNR=16 | **147.78** | **351** | PKPbc | | **PKPdf** | **14 06 51.7 +1.4** |
| **ARR** | **Arges** | **147.98** | **336** | ↑P | | **PKiKP** | **14 06 55.8 +0.2** |
| **CONA** | **Conrad Observa** comp=Z,11nm,1.1s | **148.29** | **348** | *e*P | | **PKiKP** | **14 06 56.1 0.0** |
| **MPLH** | **Magyarpolny** | **148.64** | **346** | ↑PKP | | **PKPbc** | **14 06 55.8 +0.5** |
| MPLH | | | | PKiKP | | **PKiKP** | **14 06 57.0 +0.2** |
| **GZR** | **Gura Zlata** | **148.66** | **338** | ↑P | | **PKPbc** | **14 06 56.2 +0.7** |
| **BZS** | **Buzias** | **148.88** | **339** | ↑P | | **PKPbc** | **14 06 56.0 0.0** |
| **ARSA** | **Arzberg** comp=Z,2.9nm,0.6s | **149.00** | **348** | *e*P | | **PKiKP** | **14 06 57.4 -0.2** |
| **HERR** | **Herculane** | **149.24** | **338** | ↑P | | **PKiKP** | **14 06 57.9 -0.2** |
| **MORH** | **Mrgy, Hungar** | **149.25** | **343** | ↑P | | **PKPbc** | **14 06 56.2 -0.7** |
| **MORH** | **Mrgy, Hungar** | **149.25** | **343** | ↑PKP | | **PKPbc** | **14 06 57.2 +0.4** |
| MORH | | | | PKiKP | | **PKiKP** | **14 06 58.2 +0.2** |
| **RETA** | **Reutte** comp=Z,11nm,1.3s | **149.47** | **354** | *e*P | | **PKiKP** | **14 06 58.9 +0.3** |
| **KOVH** | **Kovagotottos** | **149.51** | **344** | ↑PKP | | **PKPbc** | **14 06 57.3 -0.2** |
| KOVH | | | | PKiKP | | **PKiKP** | **14 06 58.9 +0.3** |
| **WATA** | **Walderalm** comp=Z,6.2nm,0.5s | **149.53** | **353** | *e*P | | **PKiKP** | **14 06 59.4 +0.5** |
| **KBA** | **Koelnbreinsper** comp=Z,5.2nm,0.8s | **149.55** | **351** | *e*P | | **PKiKP** | **14 06 58.8 -0.1** |
| **MOTA** | **Moosalm** comp=Z,19nm,1.2s | **149.58** | **354** | *e*P | | **PKiKP** | **14 06 59.0 +0.1** |
| **WTTA** | **Wattenberg** comp=Z,14nm,0.6s | **149.60** | **353** | *e*P | | **PKiKP** | **14 06 59.3 +0.3** |
| **SOKA** | **Soboth** comp=Z,12nm,1.3s | **149.65** | **348** | *e*P | | **PKiKP** | **14 06 58.9 -0.1** |
| **DAVA** | **Damuels** comp=Z,12nm,0.9s | **149.74** | **356** | *e*P | | **PKiKP** | **14 06 59.7 +0.4** |
| **FRGS** | **Fruska Gora** | **149.87** | **341** | ||P | **PKPbc** | **14 06 58.9 +0.4** |
| **FETA** | **Feichten** comp=Z,18nm,1.1s | **149.93** | **354** | *e*P | | **PKiKP** | **14 07 00.3 +0.6** |
| **MYKA** | **Terra Mystica** comp=Z,8.6nm,0.9s | **149.94** | **350** | *e*P | | **PKiKP** | **14 06 59.4 -0.2** |
| **ABTA** | **Abfaltersbach** comp=Z,14nm,0.7s | **150.00** | **352** | *e*P | | **PKiKP** | **14 06 59.4 -0.3** |
| **CRNS** | **Crni Vrh** | **150.37** | **349** | *j* PKPbc | | **PKiKP** | **14 07 00.2 -0.2** |
| **GBRS** | **Gornja Briga** | **150.79** | **348** | *j* PKPbc | | **PKiKP** | **14 07 01.7 +0.4** |
| **VTS** | **Vitosha** | **150.82** | **334** | ↑P | | **PKiKP** | **14 07 02.3 +0.6** |
| **TORD** | **Torodi Ar. Bea** comp=Z,1.5nm,0.8s,baz=332,slow=1.5,SNR=7.5 | **173.90** | **129** | PKP | | **PKPdf** | **14 07 17.8 -0.8** |
| TORD | | | | PKPab | | **PKPab** | **14 08 50.4 +1.1** |
| | comp=Z,2.0nm,0.8s,baz=261,slow=4.4,SNR=9.5 | | | | | | |

*IDC **11** 14:21:15.8±3.1,5˚43S×152˚33E,h63km±20km,mb3.7/9, mb1 3.9/10,mb1mx3.6/39,mbtmp4.0/10,MS3.2/7, Ms1 3.2/7,ms1mx2.9/58,Error ellipse: s-maj=45.2km s-min=11.0km az=114.0*

**ISC 11 14:21:12.7±1.0,5˚50S±0˚08×152˚5E±0˚2,h40km,n18,**
**σ1ᵍ05/14,mb3.9/9,MS3.1/5,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** baz=163,slow=19 | **1.29** | **336** | P | | | **Pn** | **14 21 34.9** | **+0.6** |
| KRVT | | | | S | | | **Sn** | **14 21 51.3** | **+1.0** |
| | baz=270,slow=20 | | | | | | | | |
| **PMG** | **Port Moresby** 2.3nm,0.3s,baz=38,slow=7.5,SNR=9.6 | **6.60** | **234** | P | | | **Pn** | **14 22 48.9** | **+1.5** |
| PMG | | | | S | | | **Sn** | **14 24 00.5** | **-0.9** |
| | 3.3nm,0.3s,baz=271,slow=2.3,SNR=3.9 | | | | | | | | |
| **HNR** | **Honiara** comp=Z,103nm,19.6s,baz=352,slow=35 | **8.32** | **118** | LR | | | LR | 14 26 14.8 | |
| **CTA** | **Charters Tower** comp=Z,84nm,18.1s,baz=30,slow=38 | **15.74** | **202** | LR | | | LR | 14 31 07.3 | |
| **DZM** | **Mont Dzumac** comp=Z,66nm,19.1s,baz=24,slow=35 | **21.27** | **142** | LR | | | LR | 14 33 42.9 | |
| **WRA** | **Warramunga Arr** 2.5nm,0.6s,baz=52,slow=10.0,SNR=12 | **22.80** | **229** | P | | | **P** | **14 26 13.7** | **+1.4** |
| **ASAR** | **Alice Springs** 0.9nm,0.7s,baz=57,slow=9.2,SNR=21 | **25.47** | **223** | P | | | **P** | **14 26 37.2** | **0.0** |
| **STKA** | **Stephens Creek** comp=Z,63nm,20.4s,baz=28,slow=36 | **28.18** | **200** | LR | | | LR | 14 38 22.0 | |
| **FITZ** | **Fitzroy Crossi** 3.3nm,0.7s,baz=48,slow=10.0,SNR=7.7 | **29.11** | **242** | P | | | **P** | **14 27 09.3** | **-0.6** |
| FITZ | | | | LR | | | LR | 14 38 56.6 | |
| | comp=Z,20nm,18.3s,baz=68,slow=37 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** comp=Z,23nm,20.9s,baz=72,slow=33 | **43.92** | **343** | LR | | | LR | 14 45 22.6 | |
| **PETK** | **Petropavlovsk-** 2.8nm,0.9s,baz=181,slow=5.8,SNR=2.0 | **58.55** | **4** | P | | | **P** | **14 31 05.0** | **-0.1** |
| **SHEM** | **Shemya Is, Ala** comp=Z,45nm,20.4s,baz=66,slow=31 | **60.82** | **15** | LR | | | LR | 14 52 45.2 | |
| **SONM** | **Songino Array** 0.9nm,0.7s,baz=116,slow=6.6,SNR=3.7 | **66.78** | **328** | P | | | **P** | **14 31 58.3** | **-2.0** |
| **MKAR** | **Makanchi Array** 0.5nm,0.8s,baz=94,slow=7.1,SNR=7.8 | **80.68** | **319** | P | | | **P** | **14 33 21.3** | **-0.4** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.4s,baz=132,slow=5.3,SNR=1.9 | **81.59** | **326** | P | | | **P** | **14 33 26.4** | **+0.1** |
| **ILAR** | **Eielson Array** 1.5nm,0.8s,baz=247,slow=5.6,SNR=13 | **82.89** | **22** | P | | | **P** | **14 33 33.0** | **0.0** |
| **YKA** | **Yellowknife Ar** 0.3nm,0.7s,baz=272,slow=4.9,SNR=6.3 | **96.16** | **28** | P | | | **P** | **14 34 37.1** | **+1.0** |
| **TORD** | **Torodi Ar. Bea** 0.4nm,0.6s,baz=117,slow=1.6,SNR=2.1 | **150.27** | **287** | PKPbc | | | **PKPbc** | **14 41 00.9** | **+0.2** |

*KRSC **11** 14:22:36.9±1.5,51˚93N×158˚82E,h54km±16km,ML4.4*
*MOS **11** 14:22:38.0±0.9,51˚93N×158˚66E,h62km,mb4.2/4, Error ellipse: s-maj=14.6km s-min=4.3km az=82.3*
*NEIC **11** 14:22:42.1±1.8,52˚30N±0˚05×158˚2E±0˚2,h88km±9km, mb4.0/17,Error ellipse: s-maj=17.1km s-min=8.0km az=85.0*
*IDC **11** 14:22:43.4±1.9,52˚23N×158˚40E,h92km±17km,mb3.4/9, mb1 3.8/10,mb1mx3.5/42,mbtmp3.8/10,Error ellipse: s-maj=34.4km s-min=15.2km az=139.0*

**ISC 11 14:22:38.9±0.7,51˚97N±0˚04×158˚78E±0˚05,h56km±6km, n121,σ1ᵍ57/136,mb3.9/19,1C-1D,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **0.46** | **250** | PN | | | **Pn** | **14 22 49.9** | **-0.2** |
| KDTR | | | | S | | | **Sn** | **14 22 57.5** | **-0.8** |
| **KDTR** | **Khodutka, Kamc** | **0.46** | **250** | *i* P | | | **Pn** | **14 22 49.9** | **-0.2** |
| KDTR | | | | *eS* | | | **Sn** | **14 22 57.5** | **-0.8** |
| **RUS** | **Russkaya** | **0.49** | **341** | PN | | | **Pn** | **14 22 50.2** | **-0.3** |
| RUS | | | | S | | | **Sn** | **14 22 58.2** | **-0.7** |
| **RUS** | **Russkaya** | **0.49** | **341** | *eP* | | | **Pn** | **14 22 50.2** | **-0.3** |
| RUS | | | | *eS* | | | **Sn** | **14 22 58.2** | **-0.7** |
| **MTVR** | **Mutnovka** | **0.63** | **325** | PN | | | **Pn** | **14 22 52.2** | **-0.1** |
| MTVR | | | | S | | | **Sn** | **14 23 01.6** | **-0.4** |
| **MTVR** | **Mutnovka** | **0.63** | **325** | *i* P | | | **Pn** | **14 22 52.2** | **-0.1** |
| MTVR | | | | *eS* | | | **Sn** | **14 23 01.6** | **-0.4** |
| **GRL** | **Gorelyy** | **0.73** | **324** | PN | | | **Pn** | **14 22 53.7** | **+0.3** |
| GRL | | | | S | | | **Sn** | **14 23 04.6** | **+0.6** |
| **GRL** | **Gorelyy** | **0.73** | **324** | *i* P | | | **Pn** | **14 22 53.7** | **+0.3** |
| GRL | | | | *eS* | | | **Sn** | **14 23 04.6** | **+0.6** |
| **KRMR** | **Karymshinskiy** | **0.95** | **336** | PN | | | **Pn** | **14 22 56.3** | **+0.1** |
| KRMR | | | | S | | | **Sn** | **14 23 09.3** | **+0.4** |
| **KRMR** | **Karymshinskiy** | **0.95** | **336** | *i* P | | | **Pn** | **14 22 56.3** | **+0.1** |
| KRMR | | | | *eS* | | | **Sn** | **14 23 09.3** | **+0.4** |
| **PET** | **Petropavlovsk** | **1.06** | **356** | *e*PN | | | **Pn** | **14 22 57.1** | **-0.5** |
| PET | | | | *eS* | | | **Sn** | **14 23 09.3** | **-2.2** |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,150nm,0.5s | | | | | | | | |
| PET | | | | smax | | smax | | | |
| | comp=E,2μm,0.6s | | | | | | | | |
| PET | | | | smax | | smax | | | |
| | comp=N,1μm,0.5s | | | | | | | | |
| **PET** | **Petropavlovsk** | **1.06** | **356** | | | | **Pn** | **14 22 57.5** | **-0.1** |
| **PET** | **Petropavlovsk** | **1.06** | **356** | *i* P | | | **Pn** | **14 22 57.6** | **-0.1** |
| PET | | | | *eS* | | | **Sn** | **14 23 10.4** | **-1.1** |
| **DALK** | **Dalny** | **1.07** | **359** | PN | | | **Pn** | **14 22 57.6** | **-0.1** |
| DALK | | | | S | | | **Sn** | **14 23 11.1** | **-0.5** |
| **DALK** | **Dalny** | **1.07** | **359** | *eP* | | | **Pn** | **14 22 57.6** | **-0.1** |
| DALK | | | | *eS* | | | **Sn** | **14 23 11.1** | **-0.5** |
| **UGLR** | **Uglovaya** | **1.25** | **1** | PN | | | **Pn** | **14 23 01.5** | **+1.3** |
| **UGLR** | **Uglovaya** | **1.25** | **1** | *eP* | | | **Pn** | **14 23 01.5** | **+1.3** |
| **NLC** | **Nalytchevo** | **1.26** | **16** | PN | | | **Pn** | **14 22 59.4** | **-0.8** |
| NLC | | | | S | | | **Sn** | **14 23 13.8** | **-2.3** |
| **NLC** | **Nalytchevo** | **1.26** | **16** | *eP* | | | **Pn** | **14 22 59.4** | **-0.8** |
| NLC | | | | *eS* | | | **Sn** | **14 23 13.8** | **-2.3** |
| **SMAR** | **Somma** | **1.30** | **1** | PN | | | **Pn** | **14 23 01.5** | **+0.5** |
| **SMAR** | **Somma** | **1.30** | **1** | *eP* | | | **Pn** | **14 23 01.5** | **+0.5** |
| **AVH** | **Avacha** | **1.30** | **359** | PN | | | **Pn** | **14 23 01.4** | **+0.5** |
| **AVH** | **Avacha** | **1.30** | **359** | *eP* | | | **Pn** | **14 23 01.4** | **+0.5** |
| **SDLR** | **Sedlovina** | **1.32** | **3** | PN | | | **Pn** | **14 23 00.8** | **-0.3** |
| **SDLR** | **Sedlovina** | **1.32** | **3** | *eP* | | | **Pn** | **14 23 00.8** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **1.32** | **331** | *d i*PN | | | **Pn** | **14 23 01.2** | **+0.1** |
| **PEA0B** | **Petropavlovsk-** | **1.32** | **331** | | | | **Pn** | **14 23 01.6** | **+0.5** |
| **PETK** | **Petropavlovsk-** comp=N,33nm,0.3s,baz=124,slow=18,SNR=763 | **1.32** | **331** | P | | | **Pn** | **14 23 00.9** | **-0.2** |
| PETK | | | | S | | | **Sn** | **14 23 18.2** | **+0.6** |
| | comp=N,42nm,0.3s,baz=148,slow=9.9,SNR=10 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **1.32** | **331** | | | | **Pn** | **14 23 00.6** | **-0.5** |
| **PAU** | **Pauzhetka** | **1.32** | **249** | PN | | | **Pn** | **14 23 01.3** | **+0.2** |
| PAU | | | | S | | | **Sn** | **14 23 17.8** | **+0.2** |
| **PAU** | **Pauzhetka** | **1.32** | **249** | *eP* | | | **Pn** | **14 23 01.3** | **+0.2** |
| PAU | | | | *eS* | | | **Sn** | **14 23 17.8** | **+0.2** |
| **KOK** | **Koryaka** | **1.33** | **356** | PN | | | **Pn** | **14 23 02.0** | **+0.7** |
| **KOK** | **Koryaka** | **1.33** | **356** | *eP* | | | **Pn** | **14 23 02.0** | **+0.7** |
| **KRER** | **Koryakskii** | **1.34** | **359** | PN | | | **Pn** | **14 23 02.3** | **+0.7** |
| **KRER** | **Koryakskii** | **1.34** | **359** | *eP* | | | **Pn** | **14 23 02.3** | **+0.7** |
| **SPN** | **Mys Shipunski** | **1.37** | **33** | PN | | | **Pn** | **14 23 02.2** | **+0.5** |
| SPN | | | | S | | | **Sn** | **14 23 19.2** | **+0.5** |
| **SPN** | **Mys Shipunski** | **1.37** | **33** | *eP* | | | **Pn** | **14 23 02.2** | **+0.5** |
| SPN | | | | *eS* | | | **Sn** | **14 23 19.2** | **+0.5** |
| **APC** | **Apacha** | **1.38** | **315** | PN | | | **Pn** | **14 23 02.3** | **+0.4** |
| APC | | | | S | | | **Sn** | **14 23 19.3** | **+0.2** |
| **APC** | **Apacha** | **1.38** | **315** | *eP* | | | **Pn** | **14 23 02.3** | **+0.4** |
| APC | | | | *eS* | | | **Sn** | **14 23 19.3** | **+0.2** |
| **GNL** | **Ganaly** | **1.81** | **344** | *eP* | | | **Pn** | **14 23 08.4** | **+0.6** |
| **SKR** | **Severo-Kuril's** | **2.11** | **233** | ↑*i*PN | | | **Pn** | **14 23 11.8** | **0.0** |
| SKR | | | | *eS* | | | **Sn** | **14 23 35.5** | **-1.2** |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,82nm,0.3s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=N,401nm,0.5s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=E,651nm,0.4s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.11** | **233** | *eP* | | | **Pn** | **14 23 11.7** | **0.0** |
| SKR | | | | *eS* | | | **Sn** | **14 23 35.7** | **-1.0** |
| **KII** | **Karymskiy** | **2.11** | **11** | PN | | | **Pn** | **14 23 13.7** | **+1.8** |
| **KII** | **Karymskiy** | **2.11** | **11** | *eP* | | | **Pn** | **14 23 13.7** | **+1.8** |
| **MKZ** | **Mys Kozlova** | **3.14** | **33** | PN | | | **Pn** | **14 23 26.2** | **+0.3** |
| **MKZ** | **Mys Kozlova** | **3.14** | **33** | *eP* | | | **Pn** | **14 23 26.2** | **+0.3** |
| **TUMD** | **Tumrok D** | **3.38** | **16** | *eP* | | | **Pn** | **14 23 31.0** | **+1.8** |
| **TUMR** | **Tumrok** | **3.42** | **13** | PN | | | **Pn** | **14 23 32.5** | **+2.7** |
| **TUMR** | **Tumrok** | **3.42** | **13** | *eP* | | | **Pn** | **14 23 32.5** | **+2.7** |
| **KMNR** | **Kamenistaya** | **3.90** | **12** | PN | | | **Pn** | **14 23 38.7** | **+2.4** |
| **KMNR** | **Kamenistaya** | **3.90** | **12** | *eP* | | | **Pn** | **14 23 38.7** | **+2.4** |
| **BZWR** | **Bezymyannyi-We** | **4.13** | **14** | PN | | | **Pn** | **14 23 42.6** | **+3.0** |
| **BZWR** | **Bezymyannyi-We** | **4.13** | **14** | *eP* | | | **Pn** | **14 23 42.6** | **+3.0** |
| **BZGR** | **Bezymyannyi-Gr** | **4.14** | **15** | PN | | | **Pn** | **14 23 43.2** | **+3.6** |
| **BZGR** | **Bezymyannyi-Gr** | **4.14** | **15** | *eP* | | | **Pn** | **14 23 43.2** | **+3.6** |
| **CIRR** | **Tsirk** | **4.32** | **15** | PN | | | Pn | 14 23 46.9 | +4.8 |
| **CIRR** | **Tsirk** | **4.32** | **15** | *eP* | | | Pn | 14 23 46.9 | +4.8 |
| **KRSR** | **Krestovskiy** | **4.39** | **13** | PN | | | **Pn** | **14 23 45.0** | **+2.0** |
| **KRSR** | **Krestovskiy** | **4.39** | **13** | *eP* | | | **Pn** | **14 23 45.0** | **+2.0** |
| **KBTR** | **Krutoberegovo** | **4.87** | **28** | PN | | | **Pn** | **14 23 51.6** | **+2.1** |
| **KBTR** | **Krutoberegovo** | **4.87** | **28** | *eP* | | | **Pn** | **14 23 51.6** | **+2.1** |
| **KBG** | **Krutoberegovo** | **4.88** | **27** | PN | | | **Pn** | **14 23 51.4** | **+1.8** |
| **KBG** | **Krutoberegovo** | **4.88** | **27** | *eP* | | | **Pn** | **14 23 51.4** | **+1.8** |
| **BKI** | **Bering** | **5.37** | **50** | *eS* | | | **Sn** | **14 24 52.1** | **-4.8** |
| **JKA** | **Kamikawa-asahi** | **13.35** | **240** | | | | **Pn** | **14 25 48.0** | **+2.5** |
| **ASAJ** | **Asahikawa** comp=E,0.6nm,0.3s,baz=74,slow=13,SNR=18 | **13.35** | **240** | P | | | **Pn** | **14 25 49.1** | **+3.6** |
| **ERM** | **Erimo** | **14.55** | **233** | P | | | **Pn** | **14 26 02.4** | **+0.9** |
| **ERM** | **Erimo** | **14.55** | **233** | Pn | | | **Pn** | **14 26 02.4** | **+0.9** |
| **BILL** | **Bilibino** | **16.53** | **10** | *eP* | | | **P** | **14 26 27.4** | **-1.0** |
| BILL | comp=Z,2.0nm,1.0s | | | pmax | | pmax | | | |
| **YAK** | **Yakutsk** | **18.61** | **314** | *i* P | | | **P** | **14 26 47.8** | **-3.5** |
| **JSD** | **Sado** | **20.01** | **234** | P | | | **P** | **14 27 04.5** | **-2.3** |
| JSD | comp=Z,7.0nm,0.9s | | | IAmb | | IAmb | | 14 27 08.6 | |
| **MJA0** | **Matsu Arr-Jizo** | **21.19** | **231** | *eP* | | | **P** | **14 27 25.1** | **+5.5** |
| MJA0 | comp=Z,3.0nm,0.6s | | | pmax | | pmax | | | |
| **MAJO** | **Matsushiro** | **21.21** | **231** | P | | | **P** | **14 27 18.2** | **-1.6** |
| MAJO | comp=Z,9.0nm,1.0s | | | pmax | | pmax | | | |
| **MAJO** | **Matsushiro** | **21.21** | **231** | P | | | **P** | **14 27 18.2** | **-1.6** |
| MAJO | comp=Z,8.7nm,1.0s | | | IAmb | | IAmb | | 14 27 25.6 | |
| **MJAR** | **Matsushiro Arr** comp=Z,1.9nm,0.4s,baz=17,slow=11,SNR=8.5 | **21.21** | **231** | P | | | **P** | **14 27 22.4** | **+2.6** |
| **MJAR** | **Matsushiro Arr** | **21.21** | **231** | *eP* | | | **P** | **14 27 25.1** | **+5.3** |
| MJAR | comp=Z,3.0nm,0.6s | | | pmax | | pmax | | | |
| **MJAR** | **Matsushiro Arr** | **21.21** | **231** | P | | | **P** | **14 27 19.8** | **-0.1** |
| **ANM** | **Nome** | **22.31** | **42** | P | | | **P** | **14 27 32.6** | **+1.3** |
| ANM | comp=Z,2.0nm,0.8s | | | pmax | | pmax | | | |
| **ANM** | **Nome** | **22.31** | **42** | P | | | **P** | **14 27 32.6** | **+1.3** |
| **TTA** | **Tatalina** | **26.10** | **48** | P | | | **P** | **14 28 07.2** | **+0.1** |
| TTA | comp=Z,2.0nm,1.0s | | | pmax | | pmax | | | |
| **TTA** | **Tatalina** | **26.10** | **48** | P | | | **P** | **14 28 07.2** | **+0.1** |
| **IMAR** | **Indian Mountai** | **27.38** | **41** | P | | | **P** | **14 28 18.6** | **+0.1** |
| **TOLK** | **Toolik Lake Re** | **29.35** | **36** | P | | | **P** | **14 28 34.6** | **-1.4** |
| **WRH** | **Wood River Hil** | **29.67** | **44** | P | | | **P** | **14 28 39.0** | **+0.1** |
| WRH | comp=Z,1.8nm,1.1s | | | IAmb | | IAmb | | 14 28 54.3 | |
| **CCB** | **Clear Creek Bu** | **29.79** | **44** | P | | | **P** | **14 28 39.8** | **-0.1** |
| CCB | comp=Z,2.2nm,0.8s | | | IAmb | | IAmb | | 14 28 42.5 | |
| **IL31** | | **30.18** | **44** | P | | | **P** | **14 28 43.9** | **+0.6** |
| IL31 | comp=Z,2.0nm,0.7s | | | IAmb | | IAmb | | 14 28 44.2 | |
| **ILAR** | **Eielson Array** comp=Z,2.1nm,0.7s,baz=266,slow=6.9,SNR=24 | **30.18** | **44** | P | | | **P** | **14 28 43.4** | **0.0** |
| **ILAR** | **Eielson Array** | **30.18** | **44** | *eP* | | | **P** | **14 28 43.8** | **+0.4** |
| ILAR | comp=Z,2.0n

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I18DK** | **QAANAAQ INFRAS** | **33.68** | **338** | *i* | | | 18 32 20.0 |
| | baz=53,slow=339,SNR=1.6 | | | | | | |

*MAN **11** 15:15:22.5, 9.°48N× 125.°55E, h15km, mb4.8, ML3.7, MS3.6*
*NEIC **11** 15:15:28.0±2.8, 9.°31N±0.°06× 125.°34E±0.°09, h65km±7km, mb4.7/38, Error ellipse: s-maj=13.3km s-min=8.1km az=113.0*
*IDC **11** 15:15:30.9±2.8, 9.°20N× 125.°04E, h83km±28km, mb3.7/12, mb1 3.9/14, mb1mx3.7/36, mbtmp4.1/14, MS3.3/17, Ms1 3.4/17, ms1mx3.1/80, Error ellipse: s-maj=30.0km s-min=13.9km az=76.0*

**ISC 11 15:15:26.6±1.1, 9.°33N±0.°05× 125.°38E±0.°06, h53km±11km, n92, σ1°46/76, mb4.6/33, MS3.2/16, 4C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BIPH** | **Bislig** | **1.49** | **139** | ↑*iP* | **Pn** | **15 15 49.6** | **-1.5** |
| BIPH | | | | *i* S | **Sn** | **15 16 08.3** | **-1.2** |
| **TBP** | **Tagbilaran** | **1.54** | **284** | *eP* | **Pn** | **15 15 50.3** | **-1.5** |
| TBP | | | | *i* S | **Sn** | **15 16 11.1** | **+0.4** |
| **LLP** | **Lapu-Lapu** | **1.71** | **305** | ↓*iP* | **Pn** | **15 15 52.9** | **-1.1** |
| LLP | | | | *i* S | **Sn** | **15 16 16.2** | **+1.4** |
| **SNPH** | **Sibulan** | **2.12** | **271** | *eP* | **Pn** | **15 15 55.5** | **-4.3** |
| SNPH | | | | *i* S | **Sn** | **15 16 29.4** | **+4.5** |
| **DAV** | **Davao City (W)** | **2.25** | **175** | P | Pn | 15 16 06.4 | +4.9 |
| | 34nm,0.3s,baz=71,slow=9.9,SNR=1.4 | | | | | | |
| DAV | | | | S | Sn | 15 16 42.7 | +15 |
| | 55nm,0.3s,baz=130,slow=23,SNR=5.7 | | | | | | |
| **DAV** | **Davao City (W)** | **2.25** | **175** | | **Pn** | **15 16 02.3** | **+0.9** |
| **KCP** | **Kidapawan** | **2.32** | **187** | ↑*iP* | **Pn** | **15 16 02.6** | **+0.2** |
| KCP | | | | *i* S | **Sn** | **15 16 31.6** | **+1.8** |
| **CTBH** | **Cotabato--PC H** | **2.37** | **208** | ↑*iP* | **Pn** | **15 16 03.8** | **+0.6** |
| **RCP** | **Roxas** | **3.42** | **311** | *eP* | **Pn** | **15 16 16.5** | **-0.9** |
| **JAP** | **San Jose, Anti** | **3.67** | **293** | *eP* | **Pn** | **15 16 21.6** | **+0.7** |
| **PGP** | **Puerto Galera** | **6.01** | **314** | *eP* | Pn | 15 16 59.9 | +6.9 |
| **LQP** | **Lukban** | **6.07** | **322** | *eP* | Pn | 15 16 59.9 | +5.9 |
| **I39PW** | **PALAU INFRASON** | **9.24** | **100** | *i* | | 16 14 30.0 | |
| | baz=284,slow=314,SNR=0.8 | | | | | | |
| **TPUB** | **Ta-pu** | **14.62** | **342** | Pn | **Pn** | **15 18 51.0** | **+0.5** |
| **SBUM** | **Sibu** | **14.76** | **243** | P | **P** | **15 18 55.1** | **-2.1** |
| **YHNB** | **Yeheng** | **15.73** | **346** | | **P** | **15 19 08.3** | **+0.2** |
| YHNB | | | | IAmb | IAmb | 15 19 19.9 | |
| | comp=Z,46nm,1.2s | | | | | | |
| **JOW** | **Kunigami** | **17.63** | **9** | P | **P** | **15 19 31.6** | **+2.7** |
| | comp=Z,5.6nm,0.3s,baz=133,slow=26,SNR=2.7 | | | | | | |
| **BATI** | **Baunata** | **19.48** | **185** | LR | LR | 15 27 21.1 | |
| | comp=Z,71nm,21.3s,baz=23,slow=37 | | | | | | |
| **MTN** | **Manton Dam** | **22.75** | **165** | P | **P** | **15 20 25.6** | **+1.0** |
| MTN | | | | IAmb | IAmb | 15 20 38.9 | |
| | comp=Z,35nm,1.3s | | | | | | |
| **KULM** | **Kulim** | **24.85** | **262** | P | **P** | **15 20 45.3** | **+0.9** |
| **KNRA** | **Kununurra** | **25.07** | **172** | P | **P** | **15 20 45.8** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 15 21 01.5 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **JMN** | **Monobe** | **25.52** | **17** | P | **P** | **15 20 49.7** | **-0.6** |
| JMN | | | | IAmb | IAmb | 15 20 51.3 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **JHS** | **Saijyo** | **26.52** | **14** | P | **P** | **15 20 59.1** | **-0.2** |
| JHS | | | | IAmb | IAmb | 15 21 23.4 | |
| | comp=Z,78nm,1.7s | | | | | | |
| **PSI** | **Prapat** | **27.08** | **258** | LR | LR | 15 33 08.3 | |
| | comp=Z,59nm,18.4s,baz=98,slow=40 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **27.15** | **27** | LR | LR | 15 33 35.4 | |
| | comp=Z,17nm,19.1s,baz=278,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.19** | **292** | P | **P** | **15 21 04.5** | **-1.0** |
| | comp=Z,0.4nm,0.4s,baz=97,slow=7.4,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 15 33 48.0 | |
| | comp=Z,42nm,18.0s,baz=260,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.25** | **179** | P | **P** | **15 21 06.4** | **+0.4** |
| | comp=Z,5.4nm,1.1s,baz=1.5,slow=15,SNR=3.3 | | | | | | |
| **KSRS** | **Korea Array** | **28.10** | **4** | P | **P** | **15 21 12.2** | **-1.2** |
| | comp=Z,1.2nm,0.6s,baz=182,slow=10,SNR=5.5 | | | | | | |
| KSRS | | | | LR | LR | 15 35 20.8 | |
| | comp=Z,22nm,18.1s,baz=115,slow=42 | | | | | | |
| **COEN** | **Coen** | **29.10** | **142** | P | **P** | **15 21 21.7** | **-0.8** |
| COEN | | | | IAmb | IAmb | 15 21 27.4 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **MAJO** | **Matsushiro** | **29.49** | **21** | P | **P** | **15 21 27.1** | **+1.3** |
| MAJO | | | | IAmb | IAmb | 15 21 45.2 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **29.49** | **21** | LR | LR | 15 31 25.8 | |
| | comp=Z,48nm,20.9s,baz=191,slow=32 | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **29.49** | **21** | P | **P** | **15 21 27.4** | **+1.6** |
| MJB9 | | | | IAmb | IAmb | 15 21 45.2 | |
| | comp=Z,23nm,1.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **30.24** | **163** | P | **P** | **15 21 33.1** | **+0.5** |
| **WRAB** | **Tennant Creek** | **30.39** | **163** | P | **P** | **15 21 35.2** | **+1.3** |
| WRAB | | | | IAmb | IAmb | 15 22 14.8 | |
| | comp=Z,26nm,1.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.39** | **163** | P | **P** | **15 21 34.8** | **+0.9** |
| | comp=Z,0.5nm,0.8s,baz=349,slow=9.4,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.39** | **163** | P | **P** | **15 21 35.2** | **+1.3** |
| **WB2** | **Warramunga Arr** | **30.39** | **163** | P | **P** | **15 21 34.5** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 15 21 35.0 | |
| | comp=Z,24nm,1.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.46** | **163** | P | **P** | **15 21 35.1** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 15 21 41.4 | |
| | comp=Z,19nm,1.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **31.18** | **190** | P | **P** | **15 21 41.6** | **+0.8** |
| **AS31** | **Alice Springs** | **33.83** | **166** | P | **P** | **15 22 03.2** | **-0.9** |
| **ASAR** | **Alice Springs** | **33.83** | **166** | P | **P** | **15 22 04.8** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=344,slow=7.3,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 24 43.7** | **+1.5** |
| | comp=Z,0.4nm,0.9s,baz=336,slow=2.0,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **33.83** | **166** | P | **P** | **15 22 03.3** | **-0.8** |
| **USRK** | **Ussuriysk Ar.** | **35.22** | **8** | P | **P** | **15 22 17.4** | **+1.7** |
| | comp=Z,1.0nm,0.6s,baz=169,slow=6.8,SNR=4.8 | | | | | | |
| USRK | | | | LR | LR | 15 39 05.9 | |
| | comp=Z,40nm,18.2s,baz=146,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.22** | **8** | P | **P** | **15 22 15.4** | **-0.3** |
| **CTA** | **Charters Tower** | **35.73** | **145** | LR | LR | 15 37 34.7 | |
| | comp=Z,31nm,21.0s,baz=32,slow=37 | | | | | | |
| **ERM** | **Erimo** | **36.13** | **23** | P | **P** | **15 22 25.5** | **+1.9** |
| **ASAJ** | **Asahikawa** | **37.75** | **20** | LR | LR | 15 39 15.7 | |
| | comp=Z,48nm,19.4s,baz=162,slow=38 | | | | | | |
| **HNR** | **Honiara** | **39.13** | **118** | LR | LR | 15 38 27.9 | |
| | comp=Z,45nm,20.0s,baz=12,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **40.13** | **6** | LR | LR | 15 39 17.0 | |
| | comp=Z,36nm,21.3s,baz=58,slow=35 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.38** | **71** | T | T | 16 06 38.8 | |
| | baz=265,slow=75,SNR=13 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.39** | **71** | T | T | 16 06 36.8 | |
| | baz=265,slow=75,SNR=10 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.40** | **71** | T | T | 16 06 31.7 | |
| | baz=265,slow=75,SNR=17 | | | | | | |
| **BBOO** | **Buckleboo** | **43.12** | **167** | P | **P** | **15 23 22.5** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 15 23 25.6 | |
| | comp=Z,34nm,1.6s | | | | | | |
| **STKA** | **Stephens Creek** | **43.81** | **160** | P | **P** | **15 23 28.1** | **+0.7** |
| | comp=Z,1.2nm,0.5s,baz=318,slow=4.6,SNR=3.5 | | | | | | |
| **STKA** | **Stephens Creek** | **43.81** | **160** | P | **P** | **15 23 27.9** | **+0.4** |
| **ARMA** | **Armidale** | **46.88** | **148** | P | **P** | **15 23 52.2** | **+0.3** |
| ARMA | | | | IAmb | IAmb | 15 24 33.2 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **SANVU** | **Saraoutou** | **48.19** | **120** | P | **P** | **15 23 60.0** | **-2.2** |
| **TOO** | **Toolangi** | **50.31** | **159** | P | **P** | **15 24 18.9** | **+0.8** |
| TOO | | | | IAmb | IAmb | 15 24 55.4 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **50.85** | **25** | P | **P** | **15 24 22.9** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **50.85** | **25** | P | P | 15 24 26.2 | +4.2 |
| | comp=Z,0.8nm,0.5s,baz=220,slow=4.9,SNR=8.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **50.85** | **25** | P | **P** | **15 24 21.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **50.94** | **128** | P | **P** | **15 24 21.9** | **-1.3** |
| **MK31** | **Makanchi Array** | **52.26** | **324** | P | **P** | **15 24 30.6** | **-2.0** |
| **MKAR** | **Makanchi Array** | **52.26** | **324** | P | **P** | **15 24 33.3** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=126,slow=8.3,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.26** | **324** | P | **P** | **15 24 31.3** | **-1.3** |
| **YAK** | **Yakutsk** | **52.70** | **3** | LR | LR | 15 47 43.9 | |
| | comp=Z,49nm,19.0s,baz=230,slow=37 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **52.76** | **316** | P | **P** | **15 24 38.1** | **+1.2** |
| TARG | | | | IAmb | IAmb | 15 25 03.5 | |
| | comp=Z,9,4nm,1.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.04** | **332** | P | **P** | **15 24 52.9** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=151,slow=6.6,SNR=1.7 | | | | | | |
| **AAK** | **Ala-Archa** | **55.38** | **316** | LR | LR | 15 51 05.8 | |
| | comp=Z,56nm,18.6s,baz=98,slow=39 | | | | | | |
| **KURK** | **Kurchatov** | **56.35** | **326** | P | **P** | **15 25 02.4** | **+0.1** |
| **KBL** | **Kabul** | **57.15** | **305** | P | **P** | **15 25 07.8** | **-0.7** |
| KBL | | | | IAmb | IAmb | 15 25 15.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **GAR** | **Garm** | **57.23** | **311** | P | **P** | **15 25 07.2** | **-1.6** |
| GAR | | | | IAmb | IAmb | 15 25 11.8 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **CHGR** | **Chuyangaron** | **58.01** | **310** | P | **P** | **15 25 11.9** | **-2.4** |
| CHGR | | | | IAmb | IAmb | 15 25 34.0 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **KKAR** | **Karatay Array** | **58.30** | **315** | P | **P** | **15 25 13.3** | **-2.8** |
| **THZ** | **Tophouse** | **66.93** | **143** | P | **P** | **15 26 12.1** | **-1.6** |
| THZ | | | | IAmb | IAmb | 15 26 36.6 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **67.02** | **320** | P | **P** | **15 26 13.9** | **-0.2** |
| **ABKAR** | **Akbulak array** | **67.02** | **320** | P | **P** | **15 26 12.7** | **-1.4** |
| ABKAR | | | | IAmb | IAmb | 15 26 43.8 | |
| | comp=Z,8.1nm,1.8s | | | | | | |
| **RPZ** | **Rata Peaks** | **67.09** | **146** | P | **P** | **15 26 12.8** | **-1.8** |
| **LTZ** | **Lake Taylor** | **67.19** | **144** | P | **P** | **15 26 14.1** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **67.64** | **139** | P | **P** | **15 26 17.6** | **-0.6** |
| **KHZ** | **Kahutara** | **67.70** | **143** | P | **P** | **15 26 17.9** | **-0.5** |
| **SDPT** | **Sand Point** | **73.37** | **35** | P | **P** | **15 26 56.1** | **+3.3** |
| **L19K** | **White Mountain** | **77.03** | **28** | P | **P** | **15 27 14.4** | **+0.6** |
| L19K | | | | IAmb | IAmb | 15 27 41.0 | |
| | comp=Z,28nm,1.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **77.82** | **24** | P | **P** | **15 27 17.2** | **-0.9** |
| **ILAR** | **Eielson Array** | **80.67** | **26** | P | **P** | **15 27 33.0** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=226,slow=4.8,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **84.77** | **340** | P | **P** | **15 27 56.7** | **+1.8** |
| | comp=Z,9.9nm,1.1s,baz=75,slow=6.9,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **86.30** | **332** | P | **P** | **15 28 02.9** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=80,slow=4.6,SNR=11 | | | | | | |
| **MLR** | **Muntele Rosu** | **89.97** | **316** | LR | LR | 16 11 34.7 | |
| | comp=Z,54nm,19.6s,baz=14,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **93.21** | **334** | LR | LR | 16 14 03.0 | |
| | comp=Z,26nm,18.6s,baz=0.0,slow=38 | | | | | | |
| **MBAR** | **Mbarara** | **94.68** | **270** | LR | LR | 16 12 04.0 | |
| | comp=Z,31nm,18.6s,baz=154,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.97** | **24** | P | **P** | **15 28 44.3** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=297,slow=4.6,SNR=3.1 | | | | | | |
| **LSZ** | **Lusaka** | **99.29** | **256** | LR | LR | 16 17 30.9 | |
| | comp=Z,26nm,18.1s,baz=151,slow=38 | | | | | | |

*EAF **11** 15:31:37.7±2.1, 25.°85S× 29.°56E, h10km, MD3.4*
**BUL 11 15:31:37.9±1.1, 25.°87S× 29.°54E, h10km, MD3.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.42** | **101** | *eP* | Pn | 15 32 17.1 | -0.4 |
| CNG | | | | *eS* | Sn | 15 32 46.5 | -0.7 |
| **CNG** | **Changalane** | **2.42** | **101** | *eP* | Pn | 15 32 17.1 | -0.4 |
| CNG | | | | *eS* | Sn | 15 32 46.5 | -0.7 |
| **MOPA** | **Mopani** | **2.89** | **36** | *eP* | Pn | 15 32 21.4 | -2.6 |
| MOPA | | | | *eS* | Sn | 15 32 54.1 | -4.8 |
| **MOPA** | **Mopani** | **2.89** | **36** | *eP* | Pn | 15 32 21.4 | -2.6 |
| MOPA | | | | *eS* | Sn | 15 32 54.1 | -4.8 |
| **MSNA** | **Messina** | **3.54** | **7** | *eP* | Pn | 15 32 33.4 | +0.4 |
| MSNA | | | | *eS* | Sn | 15 33 13.2 | -1.7 |
| **MSNA** | **Messina** | **3.54** | **7** | *eP* | Pn | 15 32 33.4 | +0.4 |
| MSNA | | | | *eS* | Sn | 15 33 13.2 | -1.7 |
| **LBTB** | **Lobatse** | **3.67** | **283** | *eP* | Pn | 15 32 33.7 | -1.0 |
| LBTB | | | | *eS* | Sn | 15 33 16.0 | -2.1 |
| **LBTB** | **Lobatse** | **3.67** | **283** | *eP* | Pn | 15 32 33.7 | -1.0 |
| LBTB | | | | *eS* | Sn | 15 33 16.0 | -2.1 |
| **BOSA** | **Boshof** | **4.69** | **233** | *eP* | Pn | 15 32 48.4 | -0.5 |
| BOSA | | | | *eS* | Sn | 15 33 40.0 | -3.5 |
| **BOSA** | **Boshof** | **4.69** | **233** | *eP* | Pn | 15 32 48.4 | -0.5 |
| BOSA | | | | *eS* | Sn | 15 33 40.0 | -3.5 |
| **MATP** | **Matopo** | **5.50** | **350** | *eP* | Pn | 15 32 59.1 | -1.0 |
| MATP | | | | *eS* | Sn | 15 33 58.4 | -5.1 |
| **MATP** | **Matopo** | **5.50** | **350** | *eP* | Pn | 15 32 59.1 | -1.0 |
| MATP | | | | *eS* | Sn | 15 33 58.4 | -5.1 |
| **BLWY** | **Bulawayo** | **5.77** | **351** | *eP* | Pn | 15 33 02.1 | -1.7 |
| BLWY | | | | *eS* | Sn | 15 34 05.6 | -4.4 |
| **BLWY** | **Bulawayo** | **5.77** | **351** | *eP* | Pn | 15 33 02.1 | -1.7 |
| BLWY | | | | *eS* | Sn | 15 34 05.6 | -4.4 |

*SKHL **11** 15:40:48.4±0.2, 52.°00N× 152.°10E, h520km±8km, mb3.8/5, msha4.2/3*
*MOS **11** 15:40:49.4±0.9, 52.°38N× 152.°26E, h505km, mb4.0/1, Error ellipse: s-maj=15.5km s-min=10.7km az=51.9*
*IDC **11** 15:40:50.4±1.3, 52.°45N× 152.°31E, h500km±16km, mb2.7/13, mb1 2.9/17, mb1mx2.8/54, mbtmp3.6/17, Error ellipse: s-maj=15.9km s-min=12.0km az=150.0*
*KRSC **11** 15:40:52.8±1.9, 52.°08N× 153.°27E, h499km±26km, ML4.4*
**ISC 11 15:40:49.9±0.6, 52.°29N±0.°08× 152.°54E±0.°08, h501km, n69, σ1°98/78, mb3.3/14, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.76** | **124** | *eP* | **P** | **15 41 58.3** | **-1.0** |
| SKR | | | | AMB | AMB | 15 41 59.7 | |
| | 10.0nm,0.8s | | | | | | |
| SKR | | | | *eS* | **S** | **15 42 53.0** | **-2.9** |
| SKR | | | | A | A | 15 43 20.5 | |
| | 30nm,1.0s | | | | | | |
| SKR | | | | A | A | 15 43 20.5 | |
| | 20nm,1.0s | | | | | | |
| **PAU** | **Pauzhetka** | **2.77** | **106** | P | **P** | **15 42 00.4** | **+1.0** |
| **PAU** | **Pauzhetka** | **2.77** | **106** | P | **P** | **15 42 00.4** | **+1.0** |
| **PAU** | **Pauzhetka** | **2.77** | **106** | *i* P | **P** | **15 42 00.5** | **+1.0** |
| PAU | | | | AMB | AMB | 15 42 00.8 | |
| | 10.0nm,0.7s | | | | | | |
| PAU | | | | *eS* | **S** | **15 42 56.6** | **+0.5** |
| PAU | | | | A | A | 15 42 59.8 | |
| | 20nm,0.8s | | | | | | |
| PAU | | | | A | A | 15 42 59.8 | |
| | 10.0nm,0.4s | | | | | | |
| **APC** | **Apacha** | **2.89** | **75** | P | **P** | **15 42 01.9** | **+1.8** |
| **APC** | **Apacha** | **2.89** | **75** | P | **P** | **15 42 01.9** | **+1.8** |
| **PETK** | **Petropavlovsk-** | **3.24** | **73** | P | **P** | **15 42 02.6** | **+0.1** |
| | 2.2nm,0.3s,baz=235,slow=4.4,SNR=122 | | | | | | |
| PETK | | | | S | **S** | **15 43 03.5** | **+1.6** |
| | 0.2nm,0.3s,baz=267,slow=12,SNR=1.5 | | | | | | |
| **GRL** | **Gorelyy** | **3.40** | **83** | P | **P** | **15 42 05.9** | **+2.1** |
| **GRL** | **Gorelyy** | **3.40** | **83** | *eP* | **P** | **15 42 05.9** | **+2.1** |
| **KDTR** | **Khodutka, Kamc** | **3.45** | **96** | P | **P** | **15 42 03.9** | **-0.2** |
| KDTR | | | | S | **S** | **15 43 01.4** | **-3.2** |
| **KDTR** | **Khodutka, Kamc** | **3.45** | **96** | P | **P** | **15 42 03.9** | **-0.2** |
| KDTR | | | | S | **S** | **15 43 01.4** | **-3.2** |
| **KRMR** | **Karymshinskiy** | **3.46** | **79** | P | **P** | **15 42 05.4** | **+1.4** |
| **KRMR** | **Karymshinskiy** | **3.46** | **79** | P | **P** | **15 42 05.4** | **+1.4** |
| **MTVR** | **Mutnovka** | **3.46** | **85** | P | **P** | **15 42 06.0** | **+1.7** |
| **MTVR** | **Mutnovka** | **3.46** | **85** | *eP* | **P** | **15 42 06.0** | **+1.7** |
| **GNL** | **Ganaly** | **3.56** | **65** | P | **P** | **15 42 06.6** | **+1.7** |
| **RUS** | **Russkaya** | **3.67** | **85** | P | **P** | **15 42 06.1** | **+0.5** |
| RUS | | | | S | **S** | **15 43 04.8** | **-2.7** |
| **RUS** | **Russkaya** | **3.67** | **85** | *eP* | **P** | **15 42 06.1** | **+0.5** |
| RUS | | | | *eS* | **S** | **15 43 04.8** | **-2.7** |
| **RUS** | **Russkaya** | **3.67** | **85** | *eP* | **P** | **15 42 06.1** | **+0.5** |
| **PET** | **Petropavlovsk** | **3.79** | **76** | *eP* | **P** | **15 42 07.5** | **+0.9** |
| PET | | | | *eS* | **S** | **15 43 08.1** | **-1.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,25nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,15nm,0.5s | | | | | | |
| **PET** | **Petropavlovsk** | **3.79** | **76** | *eP* | **P** | **15 42 07.6** | **+0.9** |
| PET | | | | *eS* | **S** | **15 43 07.1** | **-2.2** |
| **PET** | **Petropavlovsk** | **3.79** | **76** | *i* P | **P** | **15 42 07.7** | **+1.1** |
| PET | | | | AMB | AMB | 15 42 08.5 | |
| | comp=N,30nm,0.7s | | | | | | |
| PET | | | | *eS* | **S** | **15 43 09.6** | **+0.3** |
| PET | | | | A | A | 15 43 12.7 | |
| | comp=N,10.0nm,0.7s | | | | | | |
| PET | | | | A | A | 15 43 12.7 | |
| | comp=N,30nm,0.7s | | | | | | |
| **KOK** | **Koryaka** | **3.83** | **72** | P | **P** | **15 42 09.0** | **+1.9** |
| **KOK** | **Koryaka** | **3.83** | **72** | *eP* | **P** | **15 42 09.0** | **+1.9** |
| **KOK** | **Koryaka** | **3.83** | **72** | *eP* | **P** | **15 42 09.0** | **+1.9** |
| **DALK** | **Dalny** | **3.86** | **76** | P | **P** | **15 42 07.8** | **+0.7** |
| **DALK** | **Dalny** | **3.86** | **76** | P | **P** | **15 42 07.8** | **+0.7** |
| **AVH** | **Avacha** | **3.89** | **73** | P | **P** | **15 42 09.9** | **+2.4** |
| **AVH** | **Avacha** | **3.89** | **73** | *eP* | **P** | **15 42 09.9** | **+2.4** |
| **KRER** | **Koryakskii** | **3.90** | **73** | P | **P** | **15 42 09.3** | **+1.6** |
| **KRER** | **Koryakskii** | **3.90** | **73** | P | **P** | **15 42 09.3** | **+1.6** |
| **SMAR** | **Somma** | **3.92** | **73** | P | **P** | **15 42 09.6** | **+1.7** |
| **SMAR** | **Somma** | **3.92** | **73** | P | **P** | **15 42 09.6** | **+1.7** |
| **UGLR** | **Uglovaya** | **3.93** | **74** | P | **P** | **15 42 09.7** | **+1.9** |
| **UGLR** | **Uglovaya** | **3.93** | **74** | *eP* | **P** | **15 42 09.7** | **+1.9** |
| **SDLR** | **Sedlovina** | **3.98** | **73** | P | **P** | **15 42 09.5** | **+1.3** |
| SDLR | | | | S | **S** | **15 43 10.1** | **-2.1** |
| **SDLR** | **Sedlovina** | **3.98** | **73** | *eP* | **P** | **15 42 09.5** | **+1.3** |
| SDLR | | | | *eS* | **S** | **15 43 10.1** | **-2.1** |
| **SPN** | **Mys Shipunski** | **4.62** | **77** | P | P | 15 42 06.6 | -6.9 |
| **SPN** | **Mys Shipunski** | **4.62** | **77** | S | **S** | **15 43 16.6** | **-5.2** |
| **ESO** | **Esso** | **5.14** | **42** | P | **P** | **15 42 20.3** | **+2.3** |
| **ESO** | **Esso** | **5.14** | **42** | P | **P** | **15 42 20.3** | **+2.3** |
| **ESO** | **Esso** | **5.14** | **42** | *eP* | **P** | **15 42 20.3** | **+2.3** |
| **TUMR** | **Tumrok** | **5.41** | **53** | P | **P** | **15 42 23.9** | **+3.2** |
| **TUMR** | **Tumrok** | **5.41** | **53** | P | **P** | **15 42 24.3** | **+3.6** |
| **TUMD** | **Tumrok D** | **5.50** | **55** | P | **P** | **15 42 23.9** | **+2.5** |
| **KMNR** | **Kamenistaya** | **5.71** | **50** | P | **P** | **15 42 27.3** | **+3.9** |
| **KMNR** | **Kamenistaya** | **5.71** | **50** | P | **P** | **15 42 27.3** | **+3.9** |
| **KBG** | **Krutoberegovo** | **7.15** | **52** | S | **S** | **15 44 01.2** | **-4.5** |
| **KUR** | **Kuril'sk** | **7.71** | **205** | *eP* | P | 15 42 37.0 | -6.3 |
| KUR | | | | AMB | AMB | 15 42 38.1 | |
| | comp=N,10.0nm,0.9s | | | | | | |
| **BKI** | **Bering** | **8.48** | **65** | S | **S** | **15 44 28.4** | **-2.2** |
| **YUK** | **Yuzh-Kuril'sk** | **9.39** | **211** | *eP* | P | 15 42 55.2 | -5.6 |
| **ASAJ** | **Asahikawa** | **10.52** | **223** | P | **P** | **15 43 13.9** | **+1.1** |
| | comp=N,0.4nm,0.3s,baz=62,slow=4.7,SNR=6.1 | | | | | | |
| **SEY** | **Seymchan** | **10.67** | **360** | P | **P** | **15 43 14.6** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=188,slow=11,SNR=12 | | | | | | |
| **YAK** | **Yakutsk** | **15.68** | **317** | P | **P** | **15 44 05.0** | **-1.8** |
| | comp=N,0.1nm,0.3s,baz=282,slow=0.8,SNR=1.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **31.17** | **58** | P | P | 15 46 27.4 | +0.6 |
| | comp=N,15nm,1.0s,baz=42,slow=6.7,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **32.61** | **44** | P | **P** | **15 46 39.8** | **+0.6** |
| | comp=N,0.6nm,0.5s,baz=259,slow=6.3,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.27** | **300** | P | **P** | **15 47 32.3** | **-2.1** |
| | comp=N,0.4nm,0.3s,baz=21,slow=6.3,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.27** | **292** | P | **P** | **15 48 13.6** | **-0.6** |
| | comp=N,0.5nm,0.4s,baz=64,slow=7.2,SNR=20 | | | | | | |
| **YKA** | **Yellowknife Ar** | **46.79** | **40** | P | **P** | **15 48 33.2** | **+0.1** |
| | comp=N,0.5nm,0.5s,baz=301,slow=7.1,SNR=7.2 | | | | | | |
| **CMAR** | **Chiang Mai Ar** | **53.53** | **252** | P | P | 15 49 23.9 | +0.6 |
| | comp=N,0.3nm,0.7s,baz=26,slow=8.3,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **58.89** | **333** | P | **P** | **15 49 58.5** | **-1.0** |
| | comp=N,0.8nm,0.4s,baz=35,slow=6.9,SNR=7.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.29** | **65** | P | **P** | **15 50 10.3** | **+0.7** |
| | comp=N,0.1nm,0.3s,baz=188,slow=35,SNR=1.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **61.85** | **56** | P | **P** | **15 50 20.7** | **+0.8** |
| | comp=N,0.1nm,0.3s,baz=8.3,slow=2.5,SNR=4.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **62.87** | **340** | P | **P** | **15 50 24.9** | **-1.0** |
| | comp=N,0.3nm,0.6s,baz=46,slow=22,SNR=1.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.76** | **325** | P | **P** | **15 50 49.0** | **-1.6** |
| | comp=N,0.3nm,0.4s,baz=34,slow=7.0,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.76** | **325** | P | **P** | **15 50 49.0** | **-1.6** |
| **WRA** | **Warramunga Arr** | **73.66** | **198** | P | **P** | **15 51 32.7** | **+0.8** |
| | comp=N,0.4nm,0.7s,baz=13,slow=6.4,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.12** | **61** | P | **P** | **15 51 41.8** | **+1.4** |
| | comp=N,0.1nm,0.4s,baz=49,slow=40,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **77.37** | **197** | P | **P** | **15 51 53.8** | **+1.3** |
| | comp=N,0.6nm,0.5s,baz=10,slow=4.9,SNR=26 | | | | | | |

*IDC **11** 16:11:18.1±2.7, 2.°68S× 128.°92E, h0km, mb3.5/2, mb1 3.9/3, mb1mx3.5/23, mbtmp3.6/3, ML3.7/1, Error ellipse: s-maj=199.5km s-min=28.7km az=69.0*
*DJA **11** 16:11:21.9±0.8, 3.°S±3.°× 12.°9E±.°, h21km±8km, M3.3/8, MLv3.3/8*

**ISC 11 16:11:19.0±1.6, 2.°48S±0.°04× 128.°85E±0.°05, h15km±12km, n9, σ1°63/14, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.86** | **175** | P | **Pb** | **16 11 35.2** | **-0.5** |
| MSAI | | | | S | **Sg** | **16 11 47.7** | **+0.6** |
| **AAI** | **Ambon** | **1.36** | **209** | P | **Pg** | **16 11 45.6** | **+0.3** |
| AAI | | | | S | **Sb** | **16 12 02.4** | **+0.8** |
| **LBMI** | **Labuha** | **2.27** | **324** | P | **Pb** | **

ALF01 Guarapari-ES 25.21 276 eP P 17 05 58.4 +0.1
RIB01 Linhares ES 25.33 279 eP P 17 06 00.5 +1.0
CAM01 Campos-RJ 25.73 273 eP P 17 06 04.0 +1.0
GUA01 Guaratinga, BA 25.85 286 eP P 17 06 04.5 +0.3
CMC01 Camacan, BA 26.14 288 eP P 17 06 06.9 +0.1
SJMB Sao Joao De Ma 26.24 280 eP P 17 06 08.1 +0.4
NBIT Itapeh - BA 26.27 289 eP P 17 06 08.1 0.0
DUB01 Friburgo-RJ 26.31 272 eP P 17 06 08.9 +0.5
NBRF Rio Formoso - 26.46 306 eP P 17 06 09.9 +0.2
GDU01 Guandu, BA 26.98 292 eP P 17 06 14.6 +0.1
NBLA Lagarto - SE 27.02 299 eP P 17 06 15.4 +0.6
MAN01 Angra dos Reis 27.57 270 eP P 17 06 20.6 +0.9
NBPV Pedro Velho 28.15 310 eP P 17 06 24.6 -0.3
DIAM Diamantina, MG 28.59 279 eP P 17 06 29.0 0.0
BSCB Bom Sucesso 28.74 273 eP P 17 06 30.7 +0.4
PARB Paraibuna 28.96 268 eP P 17 06 32.8 +0.7
RCBR Riachuelo 28.99 310 eP P 17 06 31.8 -0.6
RCBR Riachuelo 28.99 310 P P 17 06 32.2 -0.3
NBPN Ponto Novo - B 29.03 296 eP P 17 06 33.0 +0.2
TSUM Tsumeb 29.73 84 P P 17 06 38.4 -0.7
15nm,0.9s,baz=244,slow=9.1,SNR=18
TSUM LR LR 17 16 06.9
comp=Z,1µm,21.3s,baz=256,slow=32
TSUM Tsumeb 29.73 84⇑iP P 17 06 39.1 0.0
TSUM Tsumeb 29.73 84 P P 17 06 37.5 -1.6
TSUM IAmb IAmb 17 06 40.4
comp=Z,54nm,1.4s
CVNA Calvinia 29.95 109 eP P 17 06 41.4 +0.5
CVNA IAmb IAmb 17 06 43.5
comp=Z,65nm,1.1s
NBMA Muriti-CE 30.02 303 eP P 17 06 41.1 -0.5
VAO Valinhos 30.24 268 eP P 17 06 44.0 +0.4
PET01 Itanhaem-SP 30.27 266 eP P 17 06 44.4 +0.7
JANB Januaria 30.42 285 eP P 17 06 45.0 -0.1
AUGR Augrabies 30.47 103 eP P 17 06 44.7 -0.7
MATJ Matjiesfontein 30.75 112 eP P 17 06 48.7 +0.7
MATJ IAmb IAmb 17 06 50.6
comp=Z,48nm,1.0s
RCLB Rio Claro- Sao 30.88 269 eP P 17 06 49.6 +0.4
SUR Sutherland 30.88 110 P P 17 06 49.8 +0.6
comp=Z,43nm,1.0s,baz=277,slow=6.7,SNR=18
SUR LR LR 17 16 59.6
comp=Z,4µm,18.1s,baz=268,slow=32
SUR Sutherland 30.88 110 P P 17 06 49.3 0.0
KEIM Keimoes 31.02 103 eP P 17 06 50.3 0.0
KEIM IAmb IAmb 17 06 52.3
comp=Z,20nm,1.1s
UPI Upington 31.29 103 eP P 17 06 51.8 -1.0
UPI IAmb IAmb 17 06 54.9
comp=Z,23nm,1.1s
TIJ01 Guaruva-PR 31.66 263 eP P 17 06 56.5 +0.5
GRAN Grantham 32.03 110 eP P 17 06 58.6 -0.6
GRAN IAmb IAmb 17 07 02.2
comp=Z,55nm,0.9s
SDBA SAO DESIDERIO 32.14 289 eP P 17 06 59.9 -0.4
FRTB Fartura 32.51 267 eP P 17 07 04.1 +0.6
IPMB Ipameri, GO 32.75 277 eP P 17 07 05.7 0.0
LIC Lamto 33.01 16 eP P 17 07 07.0 -0.7
comp=Z,66nm,1.1s
LIC Lamto 33.01 16 P P 17 07 07.0 -0.7
KIC Kosan Boka 33.21 17 eP P 17 07 08.7 -0.8
comp=Z,18nm,0.8s
KIC Kosan Boka 33.21 17 P P 17 07 08.7 -0.8
TIC Toumodi 33.41 16 eP P 17 07 10.5 -0.8
TIC Toumodi 33.41 16 P P 17 07 10.5 -0.8
BDFB Brasilia 33.43 281 P P 17 07 12.0 +0.3
comp=Z,18nm,0.8s,baz=111,slow=7.5,SNR=17
BDFB LR LR 17 18 43.7
comp=Z,3µm,19.5s,baz=113,slow=33
BDFB Brasilia 33.43 281 P P 17 07 11.3 -0.4
BDFB IAmb IAmb 17 07 15.4
comp=Z,24nm,0.9s
DBIC Dimbokro 33.48 16 P P 17 07 11.3 -0.5
comp=Z,11nm,1.0s,baz=204,slow=9.3,SNR=6.3
DBIC LR LR 17 17 19.7
comp=Z,3µm,20.9s,baz=204,slow=30
DBIC Dimbokro 33.48 16 eP P 17 07 11.4 -0.5
DBIC Dimbokro 33.48 16 P P 17 07 10.1 -1.7
DBIC IAmb IAmb 17 07 13.7
comp=Z,77nm,1.9s
NBMO Morrinhos-CE 33.68 307 eP P 17 07 12.9 -0.8
NBPS Pedro II - PI 33.97 304 eP P 17 07 15.0 -1.3
ITRB Iturama 34.13 273 eP P 17 07 17.6 -0.1
ITAB Concordia 34.19 259 eP P 17 07 18.9 +0.8
ITAB Concordia 34.19 259 P P 17 07 18.9 +0.8
PCMB Pacaembu 34.43 269 eP P 17 07 20.8 +0.6
PTGB Pitanga 34.49 263 eP P 17 07 20.8 0.0
BOSA Boshof 34.78 104 P P 17 07 22.6 -0.7
comp=Z,60nm,0.9s,baz=262,slow=8.4,SNR=66
BOSA LR LR 17 19 40.6
comp=Z,3µm,18.1s,baz=267,slow=33
BOSA Boshof 34.78 104⇑iP P 17 07 22.7 -0.7
BOSA IAmb IAmb 17 07 24.6
comp=Z,83nm,1.0s
BOSA Boshof 34.78 104 P P 17 07 22.2 -1.1
SOE Somerset East 34.90 111 eP P 17 07 24.7 +0.5
SOE IAmb IAmb 17 07 26.4
comp=Z,103nm,0.9s
SWZ Schweizer 34.99 101 eP P 17 07 25.1 -0.1
SWZ IAML 17 07 27.4
comp=Z,23nm,0.8s
CPSB Cacapava Do Su 35.09 253 eP P 17 07 26.8 +1.0
PLTB Pedras Altas 35.19 251 eP P 17 07 27.6 +0.8
PLTB Pedras Altas 35.19 251 P P 17 07 28.2 +1.5
PLTB IAmb IAmb 17 07 38.1
comp=Z,29nm,1.0s
PEXB Peixe 35.20 286 eP P 17 07 27.1 +0.2
LBTB Lobatse 35.55 97 P P 17 07 29.1 -0.8
comp=Z,56nm,0.8s,baz=258,slow=8.9,SNR=60
LBTB LR LR 17 20 00.0
comp=Z,2µm,18.4s,baz=254,slow=33
LBTB Lobatse 35.55 97⇑iP P 17 07 29.3 -0.7
LBTB IAmb IAmb 17 07 31.0
comp=Z,64nm,0.8s
LBTB Lobatse 35.55 97 P P 17 07 29.0 -1.0
SMTB Santa Maria do 36.21 292 eP P 17 07 35.5 -0.1
KSR Koster 36.57 99 eP P 17 07 38.2 -0.6
KSR IAML 17 07 40.4
comp=Z,38nm,0.6s
ARAG Araguaiana, MT 36.78 278 eP P 17 07 40.5 +0.1
PRYS Parys 36.82 101 eP P 17 07 40.0 -0.9
PRYS IAmb IAmb 17 07 42.3
comp=Z,64nm,1.0s
WDLM Western Deep L 36.95 100 eP P 17 07 42.2 +0.2
WDLM IAmb IAmb 17 07 43.1
comp=Z,19nm,0.8s
ROSB Rosrio 36.96 303 eP P 17 07 41.4 -0.6
SNKL Senekal, Frees 37.02 103 eP P 17 07 42.7 +0.1
SNKL IAML 17 07 44.8
comp=Z,25nm,0.7s
SLR Silverton 37.82 99 eP P 17 07 48.5 -0.8
SLR IAmb IAmb 17 07 50.5
comp=Z,69nm,1.2s
SNDB Serra Nova Dou 37.86 284 eP P 17 07 49.7 +0.1
ITQB Itaqui 37.89 254 eP P 17 07 50.6 +0.9
ITQB Itaqui 37.89 254 P P 17 07 51.7 +2.0
ITQB IAmb IAmb 17 08 01.6
comp=Z,43nm,1.0s
AQDB Aquidauana 38.73 269 eP P 17 07 57.2 +0.3
AQDB Aquidauana 38.73 269 P P 17 07 58.0 +1.1
PP1B Ponte de Pedra 38.86 274 eP P 17 07 58.2 +0.2
CPUP Villa Florida 38.91 259 P P 17 08 00.6 +2.2
comp=Z,3.3nm,0.9s,baz=117,slow=9.4,SNR=5.5
CPUP LR LR 17 20 48.8
comp=Z,735nm,21.8s,baz=108,slow=31
CPUP Villa Florida 38.91 259 eP P 17 07 58.9 +0.6
CPUP Villa Florida 38.91 259 P P 17 08 00.6 +2.2
NWCL Newcastle 38.94 103 eP P 17 07 57.8 -1.0
NWCL IAmb IAmb 17 08 00.1
comp=Z,16nm,0.7s
MATP Matopo 39.19 91 P P 17 08 00.5 -0.4
comp=Z,17nm,1.0s,baz=258,slow=15,SNR=20
MATP LR LR 17 21 29.5
comp=Z,675nm,21.8s,baz=255,slow=32
BLWY Bulawayo 39.37 91 eP P 17 08 00.3 -2.1
BLWY IAmb IAmb 17 08 03.3
comp=Z,131nm,1.0s
PRPB Parauapebas 39.51 293 eP P 17 08 03.2 -0.3
MSNA Messina 40.07 95 eP P 17 08 07.0 -1.1
MSNA IAmb IAmb 17 08 09.3
comp=Z,36nm,0.8s
SALV Santo Antonio 40.18 276 eP P 17 08 09.2 +0.2
TMAB Tom-Au,PA,Br 40.35 300 eP P 17 08 09.9 -0.5
MAGG Maguga Dam 40.41 101 eP P 17 08 11.0 +0.1
MAGG IAmb IAmb 17 08 12.8
comp=Z,96nm,0.9s
LSZ Lusaka 40.59 83 LR LR 17 22 47.7
comp=Z,2µm,21.6s,baz=258,slow=33
LSZ Lusaka 40.59 83 eP P 17 08 12.0 -0.5
LSZ IAmb IAmb 17 08 15.1
comp=Z,775nm,1.4s
POGA Pongola 40.59 103 eP P 17 08 12.2 -0.2
POGA IAmb IAmb 17 08 14.0
comp=Z,117nm,1.4s
MOPA Mopani 41.03 97⇑iP P 17 08 14.4 -1.6
MOPA IAmb IAmb 17 08 16.6
comp=Z,3.1nm,0.8s
TORD Torodi Ar. Bea 41.60 23 P P 17 08 20.5 -0.1
comp=Z,10nm,0.8s,baz=200,slow=6.5,SNR=43
TORD Torodi Ar. Bea 41.60 23 P P 17 08 17.6 -3.1
CLDB Colider 42.30 283 eP P 17 08 26.9 +0.4
PDRB Porto dos Gac 42.80 281 eP P 17 08 30.8 +0.2
PTLB Pontes e Lacer 43.44 275 eP P 17 08 36.5 +0.8
PTLB Pontes e Lacer 43.44 275 P P 17 08 36.9 +1.2
NPGB Novo Progresso 43.73 288 eP P 17 08 38.6 +0.5
MCPB Macapa, AP 44.70 298 eP P 17 08 45.9 +0.1
SIV San Ignacio 44.98 273 LR LR 17 25 57.7
comp=Z,2µm,19.2s,baz=118,slow=34
TETE Tete 45.11 87 eP P 17 08 49.0 -0.1
TETE IAmb IAmb 17 08 51.2
comp=Z,153nm,1.5s
VNA2 Neumayer--Watz 45.27 177 P P 17 08 51.1 +1.4
baz=344,slow=9.7
VILB Vilhena 45.34 277 eP P 17 08 51.7 +0.8
VILB Vilhena 45.34 277 P P 17 08 52.5 +1.5
VILB IAmb IAmb 17 08 54.9
comp=Z,35nm,0.9s
ITTB Itaituba 45.43 291 eP P 17 08 52.0 +0.4
VNA3 Neumayer Olymp 45.50 178 P P 17 08 53.1 +1.6
MALB Monte Alegre 45.60 295 eP P 17 08 53.5 +0.5
SNAA Sanae 46.28 175 P P 17 08 59.7 +1.9
SNAA Sanae 46.28 175 P P 17 08 59.0 +1.3
comp=Z,1.5nm,0.8s,baz=311,slow=11,SNR=2.2
SNAA LR LR 17 23 58.2
comp=Z,431nm,21.0s,baz=356,slow=30
ZON Zonda 48.02 250 P P 17 09 12.5 +0.7
MDP Montagnes des 48.60 304 LR LR 17 28 54.1
comp=Z,2µm,18.3s,baz=132,slow=35
PLCA Paso Flores 48.87 237 P P 17 09 19.8 +1.5
comp=Z,11nm,1.0s,baz=87,slow=5.7,SNR=18
PLCA LR LR 17 26 10.6
comp=Z,628nm,21.2s,baz=94,slow=32
PLCA Paso Flores 48.87 237 eP P 17 09 19.2 +0.8
LMEL Las Melosas 49.01 247 P P 17 09 19.7 +0.1
USHA Ushuaia 49.02 219 LR LR 17 27 27.0
comp=Z,1µm,20.5s,baz=86,slow=33
AC02 Maricunga 49.21 256 P P 17 09 24.3 +2.7
AC02 IAmb IAmb 17 09 32.6
comp=Z,21nm,1.0s
BO04 La Punta 49.33 246 P P 17 09 22.3 +0.4
BO04 IAmb IAmb 17 09 52.8
comp=Z,30nm,1.1s
BO02 Sierra Bellavi 49.39 245 P P 17 09 23.6 +1.3
PEL Peldehue 49.50 247 P P 17 09 24.4 +1.2
MT09 Talagante 49.67 247 P P 17 09 25.1 +0.5
MT09 IAmb IAmb 17 09 34.4
comp=Z,40nm,0.9s
BO01 Tunca 49.68 246 P P 17 09 25.4 +0.9
BO01 IAmb IAmb 17 09 34.4
comp=Z,22nm,0.8s
MBAR Mbarara 49.74 67 P P 17 09 27.1 +1.7
comp=Z,5.8nm,0.7s,baz=229,slow=4.6,SNR=2.6
MBAR LR LR 17 28 49.6
comp=Z,650nm,19.0s,baz=220,slow=34
MBAR Mbarara 49.74 67 P P 17 09 22.4 -2.9
MBAR IAmb IAmb 17 09 31.2
comp=Z,42nm,1.5s
ROC1 El Roble 49.79 248 P P 17 09 26.0 +0.3
ML02 Panimavida 49.81 244 P P 17 09 26.4 +0.9
CO03 El Pedregal 49.83 250 P P 17 09 26.0 +0.2
CO03 IAmb IAmb 17 10 04.2
comp=Z,39nm,1.6s
LL02 Futaleuf 49.84 234 P P 17 09 24.7 -0.9
LL02 IAmb IAmb 17 09 36.0
comp=Z,34nm,1.1s
MT02 Curacav 49.86 247 P P 17 09 27.9 +2.0
MT02 IAmb IAmb 17 09 35.6
comp=Z,32nm,1.2s
MT01 Popeta 49.88 246 P P 17 09 26.9 +0.9
MT01 IAmb IAmb 17 09 35.8
comp=Z,48nm,1.4s
LC01 Cunco 49.95 240 P P 17 09 26.6 +0.1
LVC Limon Verde 50.01 261 LR LR 17 29 08.2
comp=Z,436nm,20.0s,baz=120,slow=34
LVC Limon Verde 50.01 261 eP P 17 09 28.1 +0.4
GO03 Copiap 50.02 255 P P 17 09 29.3 +2.0
GO04 Tololo Observa 50.03 251 P P 17 09 27.2 -0.3
GO04 IAmb IAmb 17 09 47.1
comp=Z,40nm,0.9s
CO02 Combarbal 50.03 250 P P 17 09 28.6 +1.3
CO02 IAmb IAmb 17 09 37.6
comp=Z,28nm,1.0s
COYC Coyhaique 50.07 231 P P 17 09 26.0 -1.3
COYC IAmb IAmb 17 09 37.9
comp=Z,29nm,1.1s
VA06 Catapilco 50.08 248 P P 17 09 29.2 +1.6
VA06 IAmb IAmb 17 09 39.4
comp=Z,29nm,0.9s
VA05 Santo Domingo 50.20 247 P P 17 09 29.3 +0.8
VA05 IAmb IAmb 17 09 38.5
comp=Z,48nm,1.1s
MACA Manacapuru-AM 50.26 289 eP P 17 09 29.4 +0.2
MACA Manacapuru-AM 50.26 289 P P 17 09 28.7 -0.4
LL04 Puerto Octay 50.28 237 P P 17 09 28.6 -0.3
LL04 IAmb IAmb 17 09 38.2
comp=Z,47nm,1.7s
PMSA Palmer Station 50.29 205 LR LR 17 26 37.1
comp=Z,2µm,19.8s,baz=66,slow=31
PB14 IPOC Station P 50.83 258 P P 17 09 32.2 -1.6
PB08 IPOC Station P 50.92 264 P P 17 09 33.9 -0.7
PTGA Pitinga 50.94 292 P P 17 09 36.3 +2.0
comp=Z,3.8nm,0.3s,baz=96,slow=8.1,SNR=11
PTGA LR LR 17 29 09.4
comp=Z,3µm,19.5s,baz=135,slow=34
PB01 IPOC Station P 50.96 263 P P 17 09 34.3 -0.1
PB01 IAmb IAmb 17 10 00.8
comp=Z,53nm,1.9s
GO01 Chusmiza 51.10 265 P P 17 09 33.9 -2.1
PB04 IPOC Station P 51.19 261 P P 17 09 34.4 -1.9
LPAZ La Paz 51.24 269 P P 17 09 37.6 +0.4
comp=Z,8.9nm,0.8s,baz=132,slow=4.8,SNR=15
LPAZ LR LR 17 29 31.2
comp=Z,2µm,21.2s,baz=110,slow=34
LPAZ La Paz 51.24 269 eP P 17 09 37.2 -0.1
LPAZ La Paz 51.24 269 P P 17 09 37.1 -0.1
PB02 IPOC Station P 51.24 263 P P 17 09 34.7 -1.9
PB02 IAmb IAmb 17 09 46.8
comp=Z,67nm,1.3s
PB11 IPOC Station P 51.49 265 P P 17 09 36.3 -2.3
PB11 IAmb IAmb 17 10 03.9
comp=Z,25nm,1.0s
PB16 IPOC Station P 51.80 266 P P 17 09 39.1 -2.2
PB16 IAmb IAmb 17 10 02.7
comp=Z,42nm,1.3s
ETMB Extrema 51.99 278 eP P 17 09 43.1 +0.9
ETMB Extrema 51.99 278 P P 17 09 42.9 +0.7
ETMB IAmb IAmb 17 09 46.7
comp=Z,25nm,1.0s
PB12 IPOC Station P 52.45 266 P P 17 09 46.0 +0.4
PB12 IAmb IAmb 17 09 49.1
comp=Z,32nm,0.8s
BOAV Boa Vista 53.14 295 eP P 17 09 50.6 -0.1
BOAV Boa Vista 53.14 295 P P 17 09 51.9 +1.2
BOAV IAmb IAmb 17 09 54.8
comp=Z,51nm,1.5s
KMBO Kilima Mbogo 54.95 72 P P 17 10 05.3 +1.1
comp=Z,1.2nm,0.3s,baz=216,slow=15,SNR=1.7
KMBO LR LR 17 31 55.7
comp=Z,401nm,18.4s,baz=254,slow=34
LODK Lodwar 55.81 66 P P 17 10 08.5 -1.7
ABPO Ambohimpanom 56.45 96 P P 17 10 14.1 -0.7
ABPO IAmb IAmb 17 10 18.1
comp=Z,28nm,1.1s
TBTG Tabatinga, AM 57.77 282 eP P 17 10 24.2 +0.2
TBTG Tabatinga, AM 57.77 282 P P 17 10 23.3 -0.7
TBTG IAmb IAmb 17 10 39.9
comp=Z,31nm,0.8s
CZSB Cruzeiro do Su 58.68 277 eP P 17 10 31.0 +0.6
CZSB Cruzeiro do Su 58.68 277 P P 17 10 30.6 +0.2
MDT Midelt 58.99 9 P P 17 10 34.4 +2.2
comp=Z,2.9nm,1.0s,baz=168,slow=4.4,SNR=4.0
MDT LR LR 17 34 13.6
comp=Z,1µm,18.1s,baz=191,slow=34
NNA Nana 60.67 270 LR LR 17 36 59.3
comp=Z,1µm,18.7s,baz=128,slow=36
PCRV Puerto La Cruz 61.00 299 LR LR 17 36 06.7
comp=Z,3µm,19.3s,slow=35
MAW Mawson 61.33 155 LR LR 17 33 02.1
comp=Z,622nm,18.7s,baz=270,slow=32
BAUV El Baul 63.00 296 P P 17 10 58.1 -1.7
ELOV Elorza 63.10 293 eP P 17 10 51.7 -8.7
ATAH Atahualpa 64.03 275 LR LR 17 39 01.8
comp=Z,2µm,18.9s,baz=147,slow=36
QSPA South Pole Qui 64.38 180 LR LR 17 36 24.8
comp=Z,724nm,18.5s,baz=205,slow=34
SOCV Socops 64.94 294 eP P 17 11 12.2 -0.4
KEST Kesra 65.05 21 P P 17 11 14.2 +1.4
comp=Z,18nm,1.0s,baz=162,slow=3.2,SNR=11
KEST LR LR 17 37 33.2
comp=Z,1µm,19.6s,baz=162,slow=34
KEST Kesra 65.05 21 P P 17 11 12.8 0.0
SDV Santo Domingo 65.08 294 LR LR 17 37 21.1
comp=Z,4µm,21.1s,baz=112,slow=34
SDV Santo Domingo 65.08 294 eP P 17 11 14.8 +1.1
SDV Santo Domingo 65.08 294 eP P 17 11 13.9 +0.2
SDV Santo Domingo 65.08 294 P P 17 11 14.4 +0.7
CHIC Chingaza 65.42 289 eP P 17 11 14.9 -1.2
RUSC La Rusia 65.52 290 eP P 17 11 16.3 -0.7
ESDC Sonseca Array 65.83 8 P P 17 11 16.9 -0.9
comp=Z,1.1nm,0.8s,baz=181,slow=7.8,SNR=6.8
ESDC LR LR 17 37 41.1
comp=Z,430nm,19.6s,baz=174,slow=34
BETC Betania 65.91 286 eP P 17 11 18.6 -0.4
PAMC Pamplona, Colo 65.96 292 eP P 17 11 21.2 +1.5
BARC Barichara 65.97 291 eP P 17 11 20.9 +1.4
ROSC El Rosal 66.03 288 P P 17 11 21.9 +1.9
comp=Z,12nm,0.3s,baz=147,slow=17,SNR=0.9
ROSC LR LR 17 39 13.3
comp=Z,4µm,19.2s,baz=114,slow=35
SPBC San Pablo de B 66.23 289 eP P 17 11 20.2 -0.9
ORTC Ortega, Tolima 66.35 287 eP P 17 11 19.4 -2.4
MARP Paez Belalcaza 66.44 286 eP P 17 11 23.7 +1.1
ATD Arta Tunnel 66.49 63 LR LR 17 37 54.1
comp=Z,649nm,20.8s,baz=222,slow=34
SOTA Rioblanco 66.66 285 eP P 17 11 23.9 -0.4
NORC Norcasia 66.87 289 eP P 17 11 24.7 -0.3
POPC Popayan, Colom 66.92 285 eP P 17 11 16.8 -8.8
OCAC Ocana 66.96 292 P P 17 11 23.3 -2.4
OCAC IAmb IAmb 17 11 39.7
comp=Z,22nm,1.5s
PTBC PUERTO BERRIO, 67.02 290 eP P 17 11 25.1 -0.9
GUY2C Guyana, Caldas 67.12 288 eP P 17 11 21.6 -5.6
OTAV Otavalo 67.37 282 eP P 17 11 29.2 +0.4
ZARC Zaragoza, Cauc 67.86 291 eP P 17 11 31.2 0.0
ZARC Zaragoza, Cauc 67.86 291 P P 17 11 30.4 -0.9
VAE Valguarnera 68.36 24 LR LR 17 40 22.2
comp=Z,782nm,18.0s,baz=166,slow=35
UREC San Jos de Ur 68.56 290 eP P 17 11 36.1 +0.4
DBBC Dabeiba 68.75 289 eP P 17 11 34.9 -2.0
SJCC San Jacinto, C 69.39 293 eP P 17 11 42.9 +2.0
IDI Anoyia 70.99 33 LR LR 17 42 25.0
comp=Z,217nm,19.0s,baz=198,slow=35
EIL Elat 72.36 43 LR LR 17 41 11.1
comp=Z,363nm,20.7s,baz=246,slow=34
OSSC Osservatorio P 72.77 19 P P 17 12 00.1 -0.6
OSSC IAmb IAmb 17 12 10.2
comp=Z,26nm,1.1s
TUE Stuetta 74.98 16 P P 17 12 12.8 -1.0
TUE IAmb IAmb 17 12 25.6
comp=Z,22nm,1.1s
MMAI Mount Meron Ar 74.98 41 LR LR 17 42 10.6
comp=Z,282nm,21.8s,baz=16,slow=33
CTI Castel Tesino 75.20 18 P P 17 12 15.7 +0.7
DAVOX Davos/Dischmat 75.40 17 LR LR 17 44 31.6
comp=Z,1µm,18.6s,baz=217,slow=35
RAYN Ar Rayn 75.55 55 P P 17 12 18.9 +1.5
STAL STALIGIAL 75.70 19 P P 17 12 16.9 -0.8
STAL IAmb IAmb 17 12 27.4
comp=Z,18nm,1.0s
FETA Feichten 75.85 17 eP P 17 12 20.0 +1.3
comp=Z,16nm,1.1s
DAVA Damuels 75.87 16 eP P 17 12 20.5 +1.7
comp=Z,28nm,0.9s
ABTA Abfaltersbach 76.08 18 eP P 17 12 20.0 0.0
comp=Z,8.8nm,1.1s
ABTA eP pwP 17 12 27.7 +0.3
comp=Z,10.0nm,0.9s
ECH Echery 76.09 14 P P 17 12 18.8 -1.1
DIVS Divibare 76.19 24 P P 17 12 22.1 +1.4
DIVS IAmb IAmb 17 12 39.3
comp=Z,32nm,1.3s
MOTA Moosalm 76.24 17 eP P 17 12 29.1 +8.1
comp=Z,6.4nm,1.0s
WTTA Wattenberg 76.31 18 eP P 17 12 23.5 +2.1
comp=Z,22nm,1.1s
BFO Black Forest 76.47 15 P P 17 12 21.4 -0.7
BFO IAmb IAmb 17 12 31.9
comp=Z,22nm,1.1s
KBA Koelnbreinsper 76.62 19 eP P 17 12 31.0 +7.9
comp=Z,15nm,1.2s
SOKA Soboth 76.77 20 eP P 17 12 22.8 -1.1
comp=Z,16nm,1.1s
VNDA Vanda 76.84 179 LR LR 17 43 54.4
comp=Z,548nm,18.3s,baz=174,slow=34
STU Stuttgart 77.08 15 P P 17 12 23.5 -2.0
STU IAmb IAmb 17 12 34.9
comp=Z,19nm,0.9s
KOVH Kovagotttos 77.24 22 P P 17 12 26.9 +0.5
WLF Walferdange 77.25 13 P P 17 12 25.1 -1.3
WLF IAmb IAmb 17 12 36.4
comp=Z,34nm,1.1s
WLF Walferdange 77.25 13 dpP P 17 12 27.4 +1.1
WLF dsP pP 17 12 28.6 -0.1
WLF dPcP pwP 17 12 34.1 +0.3
ARSA Arzberg 77.43 20 eP P 17 12 30.1 +2.6
comp=Z,14nm,1.0s
MORH Mrgy, Hungar 77.54 22 ⇑P P 17 12 28.6 +0.5
MORH Mrgy, Hungar 77.54 22 P P 17 12 28.4 +0.4
MOA Molln 77.59 19 eP P 17 12 30.0 +1.7
comp=Z,8.7nm,1.0s
BGES Gesves 77.72 12 dpP pP 17 12 31.8 +0.3
BGES dPcP pwP 17 12 37.0 +0.6
HERR Herculane 77.78 25 ⇑P P 17 12 31.0 +1.5
BCLA Clavier 77.80 12 dP P 17 12 28.5 -0.9
BCLA dpP pP 17 12 32.1 +0.3
JTS Las Juntas de 77.86 288 LR LR 17 46 24.0
comp=Z,1µm,19.2s,baz=176,slow=35
MPLH Magyarpolny 78.00 21 P P 17 12 33.0 +2.3
BZS Buzias 78.09 25 ⇑P P 17 12 32.4 +1.2
BTNL Ternell 78.12 13 dP P 17 12 29.4 -1.8
BTNL dpP pP 17 12 32.5 -1.2
SOP Sopron 78.14 20 P P 17 12 40.5 +9.2
CONA Conrad Observa 78.14 20 eP P 17 12 34.1 +2.6
comp=Z,12nm,1.0s
DUNO Dulce Nombre, 78.22 287 P P 17 12 30.1 -2.6
GEC2 GERESS Array S 78.33 18 P P 17 12 30.3 -2.2
GERES GERESS Array B 78.33 18 P P 17 12 32.6 +0.1
comp=Z,2.0nm,0.8s,baz=194,slow=3.8,SNR=13
GERES PP PP 17 15 18.3 -12
comp=Z,0.9nm,0.9s,baz=186,slow=3.0,SNR=2.9
GERES LR LR 17 47 00.7
comp=Z,668nm,18.1s,baz=236,slow=36
GERES GERESS Array B 78.33 18 P P 17 12 32.4 -0.1
GZR Gura Zlata 78.35 25 ⇑P P 17 12 33.4 +0.7
AMBH Ambrzfalva 78.39 24 ⇑P P 17 12 34.4 +1.6
AMBH Ambrzfalva 78.39 24 P P 17 12 34.7 +1.9
GRFO Grafenberg 78.44 16 P P 17 12 32.8 -0.2
GRFO IAmb IAmb 17 12 42.6
comp=Z,27nm,1.0s
GRA1 Grafenberg Arr 78.44 16 P P 17 12 32.3 -0.7
GRA1 IAmb IAmb 17 12 42.7
comp=Z,31nm,1.1s
GRF Grafenberg Arr 78.44 16 eP P 17 12 32.8 -0.2
comp=Z,18nm,1.0s,baz=202,slow=6.0
CKRC Cesky Krumlov 78.48 19 eP P 17 12 33.4 +0.1
CKRC ex x 17 12 40.5
CKRC AMS AMS 17 46 50.0
comp=Z,600nm,18.9s
KHC Kasperske Hory 78.55 18 eP P 17 12 35.5 +1.8
KHC ePCP pwP 17 12 41.3 +0.2
KHC AMS AMS 17 45 20.0
comp=Z,800nm,18.1s
KHC Kasperske Hory 78.55 18 P P 17 12 32.7 -1.0
ZST Bratislava 78.76 21 eP P 17 12 36.4 +1.6

**SRO Srobarova 78.82 21** *e*P **P** **17 12 36.7 +1.6**
**BR131 Keskin Array S 78.83 35** P **P** **17 12 33.9 -1.7**
BR131 IAmb IAmb 17 12 50.5
comp=Z,25nm,1.1s
**BRTR Keskin Array B 78.83 35** P **P** **17 12 37.5 +1.9**
comp=Z,5.0nm,1.0s,baz=193,slow=5.1,SNR=7.3
BRTR PP **PP** **17 15 38.0 +3.5**
comp=Z,1.9nm,0.6s,baz=231,slow=15,SNR=6.7
BRTR LR LR 17 46 22.5
comp=Z,144nm,21.6s,baz=242,slow=35
**BRTR Keskin Array B 78.83 35** P **P** **17 12 35.2 -0.4**
**MODS Modra-Piesok 78.97 21** *e*P **P** **17 12 38.0 +2.0**
**TREC Trest 79.24 19** AMS AMS 17 45 10.0
comp=Z,900nm,21.6s
**NKC Novy Kostel 79.25 17** AMS AMS 17 46 40.0
comp=Z,1μm,15.3s
**VOIR 79.28 27** ⇑P **P** **17 12 37.6 -0.2**
**KRUC Moravsky 79.31 20** *e*P **P** **17 12 39.5 +1.7**
**PSZ Piszkesteto 79.44 22** ⇓P **P** **17 12 39.6 +1.0**
**PSZ Piszkesteto 79.44 22** P **P** **17 12 36.7 -2.0**
PSZ IAmb IAmb 17 12 48.4
comp=Z,38nm,0.9s
**DRGR 79.49 25** ⇑P **P** **17 12 39.5 +0.5**
**KOLL Kolacno 79.51 21** *e*P **P** **17 12 39.9 +1.0**
**JAVC Velka Javorina 79.53 21** *e*P **P** **17 12 41.8 +2.7**
**VYHS Vyhne 79.58 21** *e*P **P** **17 12 40.5 +1.2**
**VRAC Vranov 79.59 20** LR LR 17 46 16.4
comp=Z,1μm,20.9s,baz=228,slow=34
**VRAC Vranov 79.59 20** *e*P **P** **17 12 41.0 +1.7**
**PRU Pruhonice 79.59 18** *e*P **P** **17 12 41.4 +2.1**
PRU *e*PCP **pwP** **17 12 46.4 -0.4**
**MLR Muntele Rosu 79.69 27** ⇑P **P** **17 12 40.7 +0.5**
**MLR Muntele Rosu 79.69 27** LR LR 17 47 14.3
comp=Z,220nm,21.1s,baz=229,slow=35
**MLR Muntele Rosu 79.69 27** P **P** **17 12 39.0 -1.2**
**CJR Cluj-Napoca 79.76 25** ⇑P **P** **17 12 41.8 +1.4**
**COVR Voineasa-Covas 80.09 27** ⇑P **P** **17 12 42.7 +0.5**
**PVCC Panska Ves 80.09 18** *e*P **P** **17 12 44.3 +2.3**
PVCC *e*PCP **pwP** **17 12 49.5 +0.1**
PVCC AMS AMS 17 45 50.0
comp=Z,1μm,20.4s
**BRG Berggiesshubel 80.23 17** *e*P **P** **17 12 45.0 +2.2**
BRG Amp 17 12 46.3
comp=Z,6.5nm,1.0s
BRG *ex* x 17 12 49.3
BRG Amp 17 12 52.5
comp=Z,16nm,1.1s
BRG Amp 17 48 19.0
comp=E,0.2nm,16.0s
BRG Amp 17 48 21.0
comp=Z,0.6nm,16.8s
BRG Amp 17 48 32.0
comp=N,0.5nm,16.0s
**MORC Moravsky Berou 80.29 20** ⇑P **P** **17 12 43.8 +0.6**
**MORC Moravsky Berou 80.29 20** *e*P **P** **17 12 45.2 +2.0**
**MORC Moravsky Berou 80.29 20** P **P** **17 12 41.9 -1.3**
**VRI Vrincioaia 80.32 27** ⇑P **P** **17 12 45.0 +1.6**
**KRLC Kraliky 80.32 19** *e*P **P** **17 12 45.2 +1.8**
KRLC *e*PCP **pwP** **17 12 51.4 +0.6**
KRLC AMS AMS 17 46 10.0
comp=N,800nm,18.5s
**LANS Liptovska Anna 80.36 21** *e*P **P** **17 12 43.6 0.0**
**CFR Carcaliu 80.37 29** ⇑P **P** **17 12 43.7 +0.1**
**CLL Collm 80.38 17** *e*P **P** **17 12 46.0 +2.5**
CLL *i* x x 17 12 51.0
comp=Z,8.0nm,1.1s
CLL *e*PP **PP** **17 15 47.0 +0.1**
CLL *e*S **S** **17 22 54.0 +4.9**
CLL *e*PS **PnS** **17 23 36.0 +1.1**
CLL *e*PPS PPS 17 23 42.0
CLL *e*SS **SS** **17 28 00.0 -1.5**
CLL *e*SSS SSS 17 31 36.0
CLL *e*SSSS 17 34 00.0
CLL Lm MLR 17 47 00.0
comp=N,300nm,19.9s
CLL Lm MLR 17 47 00.0
comp=E,400nm,18.6s
CLL Lm MLR 17 47 00.0
comp=Z,600nm,18.9s
**DPC Dobruska-Polom 80.43 19** *e*P **P** **17 12 44.7 +0.8**
DPC *e*PCP **pwP** **17 12 51.7 +0.3**
DPC AMS AMS 17 46 30.0
comp=Z,700nm,18.9s
**UPC Upice 80.48 19** AMS AMS 17 45 40.0
comp=Z,700nm,16.8s
**BMR Baia Mare 80.52 25** ⇑P **P** **17 12 46.2 +1.8**
**OKC Ostrava-Krasne 80.53 20** AMS AMS 17 48 00.0
comp=Z,1μm,18.0s
**CHVC Chvalec 80.56 19** *e*P **P** **17 12 45.7 +1.1**
CHVC *ex* x 17 12 52.9
**OSTC Ostas 80.58 19** *e*P **P** **17 12 46.8 +2.1**
OSTC *ex* x 17 12 53.1
OSTC AMS AMS 17 45 30.0
comp=Z,800nm,20.2s
**CRVS Cervenica-Dubn 80.82 23** *e*P **P** **17 12 47.6 +1.6**
**KSP Ksiaz 80.86 19** *e*P **P** **17 12 47.4 +1.3**
KSP *e*L L 17 45 44.7
comp=Z,805nm,22.5s
**NIE Niedzica 80.87 22** *e*P **P** **17 12 49.4 +3.1**
NIE *e*S **S** **17 22 53.9 -0.6**
NIE *e*L L 17 44 05.2
comp=Z,310nm,25.4s
**BURAR Bucovina Array 81.13 26** ⇑P **P** **17 12 49.1 +1.3**
**EKA Eskdalemuir Ar 81.36 6** LR LR 17 47 56.4
comp=Z,322nm,19.4s,baz=190,slow=35
**OJC Ojcow 81.39 21** *e*P **P** **17 12 51.0 +2.0**
OJC *e*S **S** **17 23 01.6 +1.8**
OJC *e*L L 17 42 59.8
comp=Z,513nm,26.9s
**OJC Ojcow 81.39 21** P **P** **17 12 50.0 +1.0**
OJC IAmb IAmb 17 14 36.3
comp=Z,18nm,0.8s
**KWP Kalwaria Pacla 81.88 23** *e*P **P** **17 12 53.9 +2.3**
**KWP Kalwaria Pacla 81.88 23** P **P** **17 12 51.2 -0.4**
**KOPT Kop Dagi 82.78 39** P **P** **17 12 54.8 -2.1**
**SORM Soroca 82.80 27** ⇓P **P** **17 12 56.8 +0.3**
**RPN Rapa Nui 83.12 243** LR LR 17 45 37.6
comp=Z,487nm,18.2s,baz=108,slow=32
**AKASG Malin Array Be 85.18 26** P **P** **17 13 08.8 +0.4**
comp=Z,6.9nm,0.8s,baz=220,slow=4.7,SNR=19
AKASG LR LR 17 51 52.1
comp=Z,388nm,19.3s,baz=196,slow=36
**AKASG Malin Array Be 85.18 26** P **P** **17 13 06.3 -2.2**
**AKBB Malin Array Si 85.18 26** P **P** **17 13 08.8 +0.3**
AKBB IAmb IAmb 17 13 17.8
comp=Z,22nm,0.9s
**GNI Garni 85.32 41** LR LR 17 51 07.0
comp=Z,175nm,18.7s,baz=236,slow=36
**WSAR Wadi Sarin 85.44 62** LR LR 17 48 50.2
comp=Z,358nm,21.7s,baz=252,slow=34
**SUW Suwalki 85.72 21** *e*P **P** **17 13 11.0 -0.1**
SUW *e*L L 17 45 06.9
comp=Z,521nm,30.4s
**SUW Suwalki 85.72 21** P **P** **17 13 10.7 -0.4**
**KBZ Khabaz 86.58 37** LR LR 17 52 02.7
comp=Z,87nm,20.4s,baz=238,slow=36
**NACGM Naroch 87.65 22** *i* P **P** **17 13 24.2 +3.7**
**MNK Minsk 87.70 23** *i* P **P** **17 13 20.8 0.0**
comp=E,2.0nm,0.8s
MNK *i* P **P** **17 13 20.8 0.0**
comp=N,12nm,0.8s
MNK *i* P **P** **17 13 20.8 0.0**
comp=Z,28nm,0.8s,baz=216
MNK *i* PP **PP** **17 16 43.5 -3.2**
MNK *i* PPP PPP 17 18 38.6
MNK *i* S **SKSac** **17 23 48.1 -0.3**
MNK *i* SS **SS** **17 29 49.0 -0.7**
MNK *i* SSS SSS 17 33 22.7
MNK *i* LQ LQ 17 46 57.6
MNK *i* LR LR 17 52 12.3
MNK *i* LRM MLR 17 56 10.2
comp=Z,129nm,10.5s
MNK *i* LRM MLR 17 56 47.1
comp=N,288nm,17.8s
MNK *i* LRM MLR 17 57 01.1
comp=E,36nm,16.6s
**HFS Hagfors 88.59 13** LR LR 17 52 19.9
comp=E,326nm,19.6s,baz=215,slow=35
**NB2 NORSAR Subarra 88.94 12** P **P** **17 13 29.2 +2.6**
comp=Z,7.1nm,0.9s,baz=202,slow=4.6
**NB2 NORSAR Subarra 88.94 12** P **P** **17 13 29.2 +2.6**
baz=202,slow=4.6
**NOA NORSAR Array B 88.94 12** P **P** **17 13 29.2 +2.6**
comp=Z,4.3nm,0.9s,baz=202,slow=4.7,SNR=12
NOA LR LR 17 52 49.5
comp=Z,184nm,20.5s,baz=200,slow=35
**LMQ La Malbaie 88.95 326** P **P** **17 13 24.8 -2.1**
**CMIG Matias Romero 89.56 289** LR LR 17 54 00.3
comp=Z,752nm,20.0s,baz=113,slow=36
**TKL Tuckaleechee C 89.98 310** LR LR 17 46 55.4
comp=Z,344nm,20.5s,baz=140,slow=31
**BORG Borgarnes 90.48 357** LR LR 17 47 48.2
comp=Z,191nm,19.9s,baz=169,slow=31
**OBN Obninsk 91.43 26** LR LR 17 55 43.5
comp=Z,74nm,19.7s,baz=216,slow=36
**SADO Sadowa 92.06 320** LR LR 17 46 32.8
comp=Z,555nm,20.6s,baz=155,slow=30
**SCHQ Schefferville 92.27 332** P **P** **17 13 43.1 +0.9**
comp=Z,4.3nm,1.0s,baz=155,slow=8.8,SNR=3.8
SCHQ LR LR 17 48 04.5
comp=Z,994nm,20.7s,baz=127,slow=31
**GEYT Alibeck 92.57 49** LR LR 17 55 05.0
comp=Z,479nm,18.7s,baz=252,slow=35
**FINES FINESS Array B 92.76 18** P **P** **17 13 46.1 +1.9**
comp=Z,15nm,0.9s,baz=215,slow=2.3,SNR=7.5
FINES LR LR 17 56 12.9
comp=Z,362nm,18.6s,baz=230,slow=36
**BELG Belogornoye 94.52 33** LR LR 17 58 32.0
comp=Z,154nm,19.4s,baz=294,slow=37
**KLMR Klimovskoe 96.59 23** *e*P **P** **17 14 02.7 +0.9**
KLMR AMP 17 14 04.7
comp=Z,13nm,1.5s
KLMR *e*PP **PP** **17 17 58.2 +1.6**
**SFJD Kangerlussuaq 96.60 346** LR LR 17 47 47.2
comp=Z,324nm,21.0s,baz=158,slow=29
**JMIC Jan Mayen 96.63 2** LR LR 17 51 28.8
comp=Z,190nm,20.4s,baz=181,slow=32
**PALK Pallekele 97.21 85** LR LR 17 52 14.9
comp=Z,528nm,20.0s,baz=341,slow=32
**AKTO Aktyubinsk 98.85 38** LR LR 18 00 20.6
comp=Z,144nm,21.1s,baz=228,slow=36
**FRB Frobisher Bay 99.01 338** LR LR 17 54 48.8
comp=Z,198nm,18.4s,baz=166,slow=33
**KIRV Kirov 99.03 28** LR LR 18 01 04.8
comp=Z,214nm,18.3s,baz=248,slow=37
**ARCES ARCESS Array B 99.25 13** LR LR 17 58 25.5
comp=Z,349nm,20.0s,baz=230,slow=35
**TXAR Lajitas Array 102.05 297** PP **PP** **17 18 39.3 +0.2**
comp=Z,0.7nm,0.8s,baz=120,slow=7.5,SNR=6.0
**MKAR Makanchi Array 112.41 48** PKKPab PKKPab 17 30 09.2 +4.0
comp=Z,0.5nm,0.9s,baz=76,slow=5.1,SNR=3.7
**WMQ Urumqi 115.45 52** *e*PKP **PKiKP** **17 19 14.8 +0.4**
WMQ LR LR
comp=Z,400nm,21.1s
WMQ LR LR
comp=Z,250nm,21.1s
**ZALV Zalesovo Beam 115.46 40** PP PP 17 20 15.4 -0.6
comp=Z,1.0nm,0.4s,baz=272,slow=4.9,SNR=6.2
ZALV PKKPbc **PKKPab** **17 29 50.2 -1.1**
comp=Z,0.3nm,0.3s,baz=54,slow=2.5,SNR=1.9
ZALV PKKPab **PKKPbc** **17 29 54.3 +5.4**
comp=Z,0.5nm,0.5s,baz=83,slow=4.5,SNR=5.1
**NVAR Mina Array Bea 116.42 302** PKP **PKiKP** **17 19 18.7 +2.0**
comp=Z,0.4nm,0.6s,baz=80,slow=2.0,SNR=4.4
**YKA Yellowknife Ar 117.52 329** PKP **PKPdf** **17 19 17.7 0.0**
comp=Z,0.5nm,0.8s,baz=92,slow=2.5,SNR=5.8
YKA PKKPab **PKKPbc** **17 29 41.4 -0.5**
comp=Z,0.3nm,0.9s,baz=279,slow=4.9,SNR=3.9
**CMAR Chiang Mai Arr 117.89 82** PKP **PKiKP** **17 19 20.3 +0.5**
comp=Z,0.3nm,0.7s,baz=235,slow=3.2,SNR=2.7
**PPT2 Papeete2 119.03 230** *e*PS PS 17 30 27.8 -1.2
comp=Z,63nm,23.2s
PPT2 *e*SS SS 17 37 03.9 +2.8
comp=Z,452nm,30.5s
**PPT2 Papeete2 119.03 230** *e*LQ LQ 17 50 43.4
comp=Z,582nm,33.0s
PPT2 *e*LR LR 17 55 45.4
comp=Z,528nm,24.8s
**ASAR Alice Springs 121.72 145** PKP **PKPdf** **17 19 26.4 -0.8**
comp=Z,0.9nm,0.7s,baz=196,slow=1.6,SNR=16
**PZH PanZhiHua 122.77 74** PKP **PKPdf** **17 19 25.3 -3.8**
PZH PP **PP** **17 21 10.0 +2.6**
PZH SKKS 17 28 02.6
PZH AMB AMB
comp=Z,120nm,5.3s
PZH LR LR
comp=Z,450nm,21.8s
PZH LR LR
comp=Z,420nm,20.4s
PZH LR LR
comp=Z,800nm,21.6s
**GTA Gaotai 123.67 58** *e*PKP **PKiKP** **17 19 31.5 +0.8**
GTA LR LR
comp=Z,180nm,20.7s
GTA LR LR
comp=Z,210nm,20.4s
GTA LR LR
comp=Z,220nm,21.4s
**INK Inuvik 124.63 337** PKP **PKPdf** **17 19 31.1 -0.1**
comp=Z,2.9nm,0.9s,baz=125,slow=2.2,SNR=7.9
**INK Inuvik 124.63 337** **PKiKP** **17 19 32.4 +0.9**
**WRA Warramunga Arr 124.99 143** PKP **PKPdf** **17 19 33.3 -0.2**
comp=Z,1.3nm,0.9s,baz=241,slow=2.3,SNR=6.0
**CD2 Chengdu 125.49 69** PKP **PKPdf** **17 19 32.8 -1.3**
**LZH Lanzhou 126.40 63** *e*PKP **PKPdf** **17 19 30.3 -5.6**
LZH sPKP 17 19 35.2
LZH LR LR
comp=Z,300nm,17.5s
LZH LR LR
comp=Z,370nm,17.9s
LZH LR LR
comp=Z,320nm,20.0s
**QIZ Qiongzhong 127.84 85** PKP **PKPdf** **17 19 33.4 -5.5**
QIZ SS SS 17 38 52.2 -2.3
QIZ LR LR
comp=Z,330nm,20.7s
QIZ LR LR
comp=Z,370nm,19.1s
QIZ LR LR
comp=Z,460nm,18.3s
**SONM Songino Array 128.77 48** PKP **PKPdf** **17 19 40.1 +0.2**
comp=Z,1.4nm,0.9s,baz=197,slow=4.0,SNR=5.2
**BMAR Burnt Mountain 128.82 338** **PKiKP** **17 19 40.4 +0.3**
**COLD Coldfoot 130.78 339** **PKPdf** **17 19 42.9 -0.1**
**IL31 130.94 336** **PKPdf** **17 19 41.2 -2.1**
**ILAR Eielson Array 130.94 336** PKP **PKiKP** **17 19 44.8 +0.5**
comp=Z,2.1nm,0.9s,baz=58,slow=1.7,SNR=17
**ILAR Eielson Array 130.94 336** **PKPdf** **17 19 43.0 -0.4**
**RND Reindeer 132.37 334** PKPdf **PKPdf** **17 19 46.5 +0.3**
**DZM Mont Dzumac 132.37 180** *e*LR LR 18 01 59.5
comp=Z,514nm,28.1s
**HHC Hu-ho-hao-te 132.73 57** *e*PKP **PKPdf** **17 19 43.4 -4.3**
HHC PP **PP** **17 22 12.9 +0.2**
HHC LR LR
comp=Z,180nm,15.9s
HHC LR LR
comp=Z,170nm,15.2s
HHC LR LR
comp=Z,440nm,15.9s
**HNS HongShan 135.19 62** *e*PKP **PKiKP** **17 19 55.4 +1.7**
HNS PP **PP** **17 22 34.9 +6.6**
HNS LR LR
comp=Z,270nm,18.4s
HNS LR LR
comp=Z,400nm,21.7s
**XLT XiLinHaoTe 135.86 53** *e*PKP **PKPdf** **17 19 48.8 -4.6**
XLT PP **PP** **17 22 40.1 +7.7**
XLT AMB AMB
comp=Z,130nm,7.1s
XLT LR LR
comp=Z,290nm,17.9s
XLT LR LR
comp=Z,360nm,18.6s
XLT LR LR
comp=Z,380nm,19.6s
**BILL Bilibino 137.78 360** PKPdf **PKPdf** **17 19 54.0 -2.1**
**NJ2 Nanjing 138.41 70** *e*PKP **PKPdf** **17 19 58.3 0.0**
**MA2 Magadan 144.62 13** **PKPab** **17 20 06.6 -0.6**
**MDJ Mudanjiang 145.12 48** PKPbc **PKPbc** **17 20 09.2 -0.3**
**KSAR Wonju Array Be 145.65 61** **PKPdf** **17 20 08.9 -2.2**
**KSRS Korea Array 145.68 61** PKPbc **PKPdf** **17 20 10.3 -0.8**
comp=Z,8.7nm,0.9s,baz=282,slow=2.9,SNR=16
**USRK Ussuriysk Ar. 146.88 48** PKPbc **PKPbc** **17 20 14.8 -0.1**
comp=Z,5.2nm,0.9s,baz=298,slow=4.1,SNR=6.9
**PETK Petropavlovsk- 152.04 11** PKPbc **PKPbc** **17 20 25.6 -1.8**
comp=Z,1.4nm,0.8s,baz=270,slow=0.6,SNR=4.1
**PETK Petropavlovsk- 152.04 11** **PKPdf** **17 20 16.7 -4.2**
**MAT Matsushiro 153.91 59** *e*PKP **PKPdf** **17 20 24.3 +0.1**
**MJAR Matsushiro Arr 153.91 59** PKPbc **PKPbc** **17 20 30.5 -1.7**
comp=Z,1.5nm,0.8s,baz=286,slow=2.3,SNR=5.3
**MJAR Matsushiro Arr 153.91 59** **PKPdf** **17 20 23.1 -1.1**

*NORS* ***11*** *17:12:55.8±0.0, 42°.25N×47°.46E, h16km, MPVA4.0*
*DRS* ***11*** *17:12:55.5±0.0, 42°.09N×47°.31E, h12km*
**MOS 11 17:12:55.2±0.0, 42°.15N×47°.41E, h23km, MPVA4.1,5C-2D,**
**Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **URKR** | **Urkarakh** | **0.17** | **83** | ⇑*i* | *i*PG | Pn | 17 13 01.5 | -1.0 |
| URKR | | | | | *e*S | Sb | 17 13 05.3 | +1.4 |
| URKR | | | | | pmax | pmax | | |
| | comp=Z,1μm,0.1s | | | | | | | |
| URKR | | | | | smax | smax | | |
| | comp=N,7μm,0.1s | | | | | | | |
| URKR | | | | | smax | smax | | |
| | comp=E,6μm,0.3s | | | | | | | |
| URKR | | | | | smax | smax | | |
| | comp=N,7μm,0.2s | | | | | | | |
| **URKR** | **Urkarakh** | **0.17** | **83** | *i* | Pg | Pn | 17 13 01.5 | -1.0 |
| URKR | | | | | *e*Sg | Sb | 17 13 05.4 | +1.5 |
| **KMKR** | **Kumukh** | **0.23** | **267** | ⇓ | *i*PG | Pb | 17 13 02.2 | +1.0 |
| KMKR | | | | | *i* S | Sb | 17 13 07.5 | +2.2 |
| KMKR | | | | | pmax | pmax | | |
| | comp=Z,788nm,0.1s | | | | | | | |
| KMKR | | | | | smax | smax | | |
| | comp=E,5μm,0.2s | | | | | | | |
| **KMKR** | **Kumukh** | **0.23** | **267** | *e* | Pg | Pb | 17 13 02.2 | +1.0 |
| KMKR | | | | | *e*Sg | Sb | 17 13 06.9 | +1.6 |
| **SGKR** | **Sergokala** | **0.36** | **30** | *e* | PG | Pn | 17 13 04.3 | -0.9 |
| SGKR | | | | | *e*S | Sn | 17 13 10.6 | -1.0 |
| SGKR | | | | | pmax | pmax | | |
| | comp=Z,254nm,0.2s | | | | | | | |
| SGKR | | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | | |
| SGKR | | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | | |
| SGKR | | | | | smax | smax | | |
| | comp=E,918nm,0.2s | | | | | | | |
| **SGKR** | **Sergokala** | **0.36** | **30** | *e* | Pg | Pn | 17 13 04.3 | -0.8 |
| SGKR | | | | | *e*Sg | Sn | 17 13 10.7 | -1.0 |
| **GNBR** | **Gunib** | **0.41** | **307** | ⇑*i* | PG | Pn | 17 13 05.0 | -0.8 |
| GNBR | | | | | *e*S | Sn | 17 13 11.8 | -1.0 |
| **GNBR** | **Gunib** | **0.41** | **307** | *e* | Pg | Pn | 17 13 05.0 | -0.8 |
| GNBR | | | | | *e*Sg | Sn | 17 13 11.6 | -1.2 |
| **ARKR** | **Arakani** | **0.55** | **326** | *e* | PG | Pn | 17 13 07.3 | -0.4 |
| ARKR | | | | | *i* S | Sn | 17 13 15.9 | -0.4 |
| ARKR | | | | | pmax | pmax | | |
| | comp=Z,104nm,0.3s | | | | | | | |
| ARKR | | | | | smax | smax | | |
| | comp=E,659nm,0.4s | | | | | | | |
| **ARKR** | **Arakani** | **0.55** | **326** | *e* | Pg | Pn | 17 13 07.3 | -0.4 |
| ARKR | | | | | *e*Sg | Sn | 17 13 15.4 | -0.9 |
| **XNZR** | **Khunzakh** | **0.66** | **307** | ⇓ | *i*PG | Pn | 17 13 09.0 | -0.3 |
| XNZR | | | | | *i* | | 17 13 19.0 | |
| XNZR | | | | | pmax | pmax | | |
| | comp=Z,179nm,0.2s | | | | | | | |
| XNZR | | | | | smax | smax | | |
| | comp=N,914nm,0.5s | | | | | | | |
| XNZR | | | | | smax | smax | | |
| | comp=E,742nm,0.4s | | | | | | | |
| **XNZR** | **Khunzakh** | **0.66** | **307** | *e* | Pg | Pn | 17 13 09.1 | -0.2 |
| XNZR | | | | | *e*Sg | Sn | 17 13 19.1 | +0.1 |
| **DRN** | **Derbent** | **0.70** | **99** | ⇑*i* | PG | Pn | 17 13 10.3 | +0.7 |
| DRN | | | | | *i* | | 17 13 21.0 | |
| DRN | | | | | pmax | pmax | | |
| | comp=Z,177nm,0.2s | | | | | | | |
| DRN | | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | | |
| DRN | | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | | |
| **DRN** | **Derbent** | **0.70** | **99** | *e* | Pg | Pn | 17 13 10.4 | +0.8 |
| DRN | | | | | *e*Sg | Sn | 17 13 21.4 | +1.7 |
| **AKT** | **Akhty** | **0.71** | **160** | *e* | PG | Pn | 17 13 09.5 | -0.4 |
| AKT | | | | | *i* S | Sn | 17 13 20.2 | 0.0 |
| AKT | | | | | pmax | pmax | | |
| | comp=Z,327nm,0.2s | | | | | | | |
| AKT | | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | | |
| **AKT** | **Akhty** | **0.71** | **160** | *e* | Pg | Pn | 17 13 09.5 | -0.4 |
| AKT | | | | | *e*Sg | Sb | 17 13 18.9 | +0.6 |
| **BUJR** | **Buynaksk** | **0.71** | **342** | *e* | PG | Pn | 17 13 10.2 | +0.2 |
| BUJR | | | | | *e*S | Sn | 17 13 20.8 | +0.5 |
| BUJR | | | | | pmax | pmax | | |
| | comp=Z,63nm,0.3s | | | | | | | |
| BUJR | | | | | smax | smax | | |
| | comp=N,731nm,0.4s | | | | | | | |
| BUJR | | | | | smax | smax | | |
| | comp=E,464nm,0.6s | | | | | | | |
| BUJR | | | | | smax | smax | | |
| | comp=N,577nm,0.3s | | | | | | | |
| **BUJR** | **Buynaksk** | **0.71** | **342** | *e* | Pg | Pn | 17 13 10.3 | +0.3 |
| BUJR | | | | | *e*Sg | Sn | 17 13 20.9 | +0.6 |
| **UNCR** | **Uncukul** | **0.73** | **322** | *e* | PG | Pn | 17 13 10.6 | +0.4 |
| UNCR | | | | | *i* S | Sn | 17 13 21.6 | +1.0 |
| UNCR | | | | | pmax | pmax | | |
| | comp=Z,79nm,0.2s | | | | | | | |
| UNCR | | | | | smax | smax | | |
| | comp=E,305nm,0.4s | | | | | | | |
| **UNCR** | **Uncukul** | **0.73** | **322** | *e* | Pg | Pn | 17 13 10.6 | +0.4 |
| UNCR | | | | | *e*Sg | Sn | 17 13 21.2 | +0.6 |
| **KSMR** | **Kasumkent** | **0.76** | **135** | *e* | PG | Pn | 17 13 11.3 | +0.6 |
| KSMR | | | | | *e*S | Sn | 17 13 22.7 | +1.2 |
| KSMR | | | | | pmax | pmax | | |
| | comp=Z,112nm,0.2s | | | | | | | |
| KSMR | | | | | smax | smax | | |
| | comp=E,9.0nm,0.4s | | | | | | | |
| KSMR | | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | | |
| KSMR | | | | | smax | smax | | |
| | comp=N,2μm,0.3s | | | | | | | |
| **KSMR** | **Kasumkent** | **0.76** | **135** | *e* | Pg | Pn | 17 13 11.4 | +0.7 |
| KSMR | | | | | *e*Sg | Sn | 17 13 22.8 | +1.3 |
| **KRNR** | **Karanay** | **0.78** | **332** | *e* | PG | Pn | 17 13 11.3 | +0.4 |
| KRNR | | | | | *i* S | Sn | 17 13 22.9 | +1.0 |
| KRNR | | | | | pmax | pmax | | |
| | comp=Z,53nm,0.3s | | | | | | | |
| KRNR | | | | | smax | smax | | |
| | comp=E,239nm,0.3s | | | | | | | |
| **KRNR** | **Karanay** | **0.78** | **332** | *e* | Pg | Pn | 17 13 11.1 | +0.2 |
| KRNR | | | | | *e*Sg | Sn | 17 13 21.6 | -0.3 |
| **MAK** | **Makhachkala** | **0.82** | **5** | ⇑*i* | PG | Pn | 17 13 12.6 | +1.3 |
| MAK | | | | | *e* | | 17 13 24.7 | |
| MAK | | | | | pmax | pmax | | |
| | comp=Z,166nm,0.3s | | | | | | | |
| MAK | | | | | smax | smax | | |
| | comp=E,397nm,0.4s | | | | | | | |
| MAK | | | | | smax | smax | | |
| | comp=E,443nm,0.5s | | | | | | | |
| **MAK** | **Makhachkala** | **0.82** | **5** | *e* | Pg | Pn | 17 13 12.3 | +1.0 |
| MAK | | | | | *e*Sg | Sn | 17 13 25.8 | +3.0 |
| **DBC** | **Dubki** | **0.97** | **334** | *e* | PG | Pn | 17 13 14.7 | +1.1 |
| DBC | | | | | *i* S | Sn | 17 13 29.0 | +2.3 |
| DBC | | | | | pmax | pmax | | |
| | comp=Z,61nm,0.2s | | | | | | | |
| DBC | | | | | smax | smax | | |
| | comp=E,295nm,0.3s | | | | | | | |
| **DBC** | **Dubki** | **0.97** | **334** | *i* | Pg | Pn | 17 13 14.8 | +1.2 |
| DBC | | | | | *e*Sg | Sn | 17 13 28.0 | +1.3 |
| **DLMR** | **Dylym** | **1.09** | **328** | *e* | PG | Pb | 17 13 17.0 | +1.6 |
| DLMR | | | | | *i* S | Sn | 17 13 32.7 | +3.2 |
| DLMR | | | | | pmax | pmax | | |
| | comp=Z,86nm,0.2s | | | | | | | |
| DLMR | | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **DLMR** | **Dylym** | **1.09** | **328** | *e* | Pg | Pb | 17 13 17.0 | +1.7 |
| DLMR | | | | | *e*Sg | Sn | 17 13 32.0 | +2.5 |
| **DVE** | **Vedeno** | **1.25** | **311** | *e* | PG | Pb | 17 13 19.6 | +1.5 |
| DVE | | | | | pmax | pmax | | |
| | comp=Z,62nm,0.3s | | | | | | | |
| **DVE** | **Vedeno** | **1.25** | **311** | *e* | Pg | Pb | 17 13 19.7 | +1.6 |
| DVE | | | | | *e*Sg | Sb | 17 13 37.2 | +3.5 |
| **GROC** | **Groznyy** | **1.59** | **312** | *e* | PN | Pb | 17 13 25.7 | +1.8 |
| GROC | | | | | *e* | | 17 13 48.3 | |
| GROC | | | | | pmax | pmax | | |
| | comp=Z,31nm,0.3s | | | | | | | |
| GROC | | | | | smax | smax | | |
| | comp=N,152nm,0.6s | | | | | | | |
| GROC | | | | | smax | smax | | |
| | comp=E,122nm,0.4s | | | | | | | |
| GROC | | | | | smax | smax | | |
| | comp=E,123nm,0.8s | | | | | | | |
| **GROC** | **Groznyy** | **1.59** | **312** | *e* | Pg | Pb | 17 13 26.0 | +2.1 |
| GROC | | | | | *e*Sg | Sb | 17 13 47.0 | +3.5 |
| **KMGR** | **Komgaron** | **2.09** | **297** | *e* | PN | Pb | 17 13 33.5 | +1.1 |

KMGR eS Sb 17 14 03.3 +5.4
**KMGR Komgaron 2.09 297** ePg Pb 17 13 33.5 +1.1
**LACR Lac 2.40 288** ePN Pb 17 13 38.8 +1.0
LACR pmax pmax
comp=Z,14nm,0.4s
**KORR Kora 2.64 292** ePN Pb 17 13 46.5 +4.7
KORR eS Sb 17 14 13.5 -0.3
**ZEI Tsey 2.67 285** ePN Pb 17 13 42.7 +0.2
ZEI eS Sb 17 14 17.8 +2.9
**GNI Garni 2.83 226** i PN Pb 17 13 42.4 -2.8
**LSNR Lesken 2.87 294** ePN Pb 17 13 50.6 +4.8
LSNR eS Sb 17 14 17.9 -2.6
**LSNR Lesken 2.87 294** eSn Sb 17 14 17.9 -2.6
**DIGR Digorskoe uzhe 2.93 286** ePN Pb 17 13 47.8 +1.0
DIGR eS Sb 17 14 18.8 -3.4
**ONI Oni 2.96 280** ePN Pb 17 13 49.3 +1.9
ONI eS Sb 17 14 30.5 +7.3
**NCK Nalchik 3.11 297** i PN Pn 17 13 45.8 +2.9
**KBTC Kuba-Taba 3.38 301** ePN Pn 17 13 50.0 +3.4
KBTC eS Sb 17 14 33.0 -2.0
**KBTC Kuba-Taba 3.38 301** ePn Pn 17 13 50.0 +3.4
KBTC eSn Sb 17 14 33.0 -2.0
**KBZ Khabaz 3.67 297** ePN Pn 17 13 52.7 +2.2
KBZ eS Sn 17 14 36.8 +3.7
**KBZ Khabaz 3.67 297** ePn Pn 17 13 52.8 +2.3
KBZ eSn Sn 17 14 36.9 +3.8
**SHA1 Shidzhatmaz 3.83 296** i PN Pn 17 13 56.7 +3.7
**SHA1 Shidzhatmaz 3.83 296** ePn Pn 17 13 57.0 +3.9
SHA1 eSn Sb 17 14 43.1 -5.2
**BEYR Belyy Ugol+ 3.85 301** ePN Pn 17 13 55.6 +2.6
BEYR eS Sn 17 14 41.0 +3.5
**BEYR Belyy Ugol+ 3.85 301** ePn Pn 17 13 55.6 +2.5
BEYR eSn Sn 17 14 41.1 +3.6
**KIV0 Kislovodsk Arr 3.90 299** ePn Pn 17 13 57.3 +3.5
KIV0 eSn Sn 17 14 43.9 +5.0
**KIV Kislovodsk 3.91 299** ePN Pn 17 13 57.2 +3.3
KIV eS Sn 17 14 43.6 +4.6
**KIV Kislovodsk 3.91 299** ePn Pn 17 13 57.2 +3.4
KIV eSn Sn 17 14 43.6 +4.6
**ALER Alexandrovskoy 4.19 310** ePN Pn 17 14 00.9 +3.2
ALER eS Sn 17 14 50.1 +4.1
**ALER Alexandrovskoy 4.19 310** ePn Pn 17 14 00.9 +3.2
ALER eSn Sn 17 14 50.1 +4.2
**GOF Gofitskoye 4.30 314**⇑ ePN Pn 17 14 00.4 +1.1
GOF eS Sn 17 14 55.1 +6.4
GOF pmax pmax
comp=Z,32nm,0.6s
GOF smax smax
comp=E,135nm,1.9s
GOF smax smax
comp=N,29nm,0.6s
**OBN Obninsk 14.80 335** eP Pn 17 16 25.4 +2.5
OBN pmax pmax
comp=Z,4.0nm,0.3s
**ARU Arti 16.01 23** i P Pn 17 16 37.8 -0.9
ARU pmax pmax
comp=Z,3.0nm,1.2s

*IDC* ***11*** *17:24:38.6±3.3,51˚.74N×173˚.34W,h0km,mb3.2/2, mb1 3.4/3,mb1mx2.7/59,mbtmp3.1/3,ML3.2/1,Error ellipse: s-maj=91.3km s-min=37.2km az=1.0*
*AEIC* ***11*** *17:24:41±0.4,51˚.5N±0˚.3×173˚.2W±0˚.1,h26km±8km,ML2.8, Error ellipse: s-maj=41.5km s-min=3.0km az=168.0*
*NEIC* ***11*** *17:24:42.4±1.3,51˚.8N±0˚.4×173˚.2W±0˚.1,h23km±13km, Error ellipse: s-maj=55.1km s-min=3.1km az=168.0*
**ISC 11 17:24:43.3±2.1,51˚.7N±0˚.4×173˚.22W±0˚.09,h37km,n13, σ1s21/7,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSTR** | **Great Sitkin T** | **1.80** | **284** | Pn | **Pn** | **17 25 11.8** | **0.0** |
| **CLES** | **Cleveland East** | **2.33** | **60** | Pn | **Pn** | **17 25 17.4** | **-1.6** |
| **KIWB** | **Kanaga Island** | **2.45** | **275** | Pn | **Pn** | **17 25 19.2** | **-1.5** |
| **NIKH** | **Nikolski High** | **2.96** | **63** | Pn | **Pn** | **17 25 27.4** | **-0.3** |
| **ILAR** | **Eielson Array** | **18.87** | **36** | P | **P** | **17 29 00.3** | **+0.4** |
| | 0.1nm,0.3s,baz=236,slow=9.6,SNR=5.1 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 35.52** | **213** | | T | T | 18 09 43.7 | |
| | baz=21,slow=76,SNR=4.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 35.52** | **213** | | T | T | 18 09 41.0 | |
| | baz=21,slow=76,SNR=6.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 35.53** | **213** | | T | T | 18 09 39.7 | |
| | baz=21,slow=76,SNR=5.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 36.72** | **213** | | T | T | 18 11 10.2 | |
| | baz=15,slow=74,SNR=4.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 36.73** | **213** | | T | T | 18 11 07.6 | |
| | baz=15,slow=74,SNR=4.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 36.73** | **213** | | T | T | 18 11 03.6 | |
| | baz=15 | | | | | | |
| **PDAR** | **Pinedale Array** | **42.87** | **76** | P | **P** | **17 32 38.9** | **+0.8** |
| | 0.2nm,0.7s,baz=301,slow=7.0,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.50** | **311** | P | **P** | **17 35 03.0** | **+0.3** |
| | 0.1nm,0.4s,baz=49,slow=6.6,SNR=4.6 | | | | | | |

*IDC* ***11*** *17:29:40.0±1.9,6˚.90S×130˚.03E,h64km±29km,mb2.7/1, mb1 3.5/6,mb1mx3.1/43,mbtmp3.6/6,ML3.3/5,Error ellipse: s-maj=24.5km s-min=13.1km az=102.0*
**ISC 11 17:29:39.6±0.9,6˚.98S±0˚.06×130˚.1E±0˚.1,h50km,n6, σ2s56/11,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.18** | **11** | P | **Pn** | **17 31 09.8** | **+1.3** |
| | 0.6nm,0.3s,baz=172,slow=17,SNR=0.9 | | | | | | |
| SIJI | | | | S | **Sn** | **17 32 14.1** | **-3.7** |
| | 2.0nm,0.3s,baz=237,slow=23,SNR=15 | | | | | | |
| **BATI** | **Baumata** | **7.11** | **243** | P | **Pn** | **17 31 22.9** | **+1.8** |
| | 3.6nm,0.3s,baz=48,slow=10,SNR=6.8 | | | | | | |
| BATI | | | | S | **Sn** | **17 32 39.7** | **-0.9** |
| | 1.0nm,0.3s,baz=44,slow=23,SNR=1.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.87** | **201** | P | **Pn** | **17 32 27.5** | **+1.3** |
| | 0.1nm,0.3s,baz=22,slow=11,SNR=2.1 | | | | | | |
| FITZ | | | | S | **Sn** | **17 34 32.5** | **-4.8** |
| | 0.1nm,0.3s,baz=64,slow=18,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.54** | **163** | P | **Pn** | **17 32 51.1** | **+2.0** |
| | 0.1nm,0.3s,baz=341,slow=12,SNR=2.0 | | | | | | |
| WRA | | | | S | **Sn** | **17 35 16.5** | **-1.5** |
| | 0.1nm,0.3s,baz=334,slow=23,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **17.00** | **168** | P | **Pn** | **17 33 35.0** | **+1.0** |
| | 0.3nm,0.3s,baz=348,slow=11,SNR=32 | | | | | | |
| ASAR | | | | S | **Sn** | **17 36 41.5** | **-0.6** |
| | 0.0nm,0.3s,baz=350,slow=26,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.25** | **327** | P | **P** | **17 40 35.0** | **-0.2** |
| | 0.1nm,0.5s,baz=114,slow=8.9,SNR=1.5 | | | | | | |

*IDC* ***11*** *17:41:53.0±0.6,50˚.25N×179˚.06E,h0km,mb4.4/26, mb1 4.5/29,mb1mx4.5/37,mbtmp4.4/29,ML4.1/3,MS3.7/8, Ms1 3.7/8,ms1mx3.1/103,Error ellipse: s-maj=18.1km s-min=11.6km az=176.0*
*BJI* ***11*** *17:41:55.8±0.0,50˚.79N×178˚.49E,h5km,mb4.5/31, mB4.9/18,Ms4.5/11,Ms7 4.3/11*
*MOS* ***11*** *17:41:57.5±1.0,50˚.33N×179˚.01E,h39km,mb5.0/41,Error ellipse: s-maj=8.2km s-min=5.0km az=98.9*
*AEIC* ***11*** *17:41:58±1.9,50˚.27N±0˚.09×179˚.02E±0˚.09,h1km±3km, Error ellipse: s-maj=13.8km s-min=7.8km az=165.0*
*NEIC* ***11*** *17:41:59.2±1.5,50˚.33N±0˚.07×179˚.08E±0˚.08,h38km±5km, mb4.6/164,ML4.3(AEIC),Error ellipse: s-maj=10.2km s-min=6.5km az=207.0*
*BGR* ***11*** *17:42:06.5±0.0,51˚.61N×179˚.99E,h33km,mb4.8*
**ISC 11 17:41:57.3±0.8,50˚.28N±0˚.07×179˚.07E±0˚.04,h27km±5km, n412,σ1s30/436,mb4.7/182,MS4.1/14,13C-5D,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GASW** | **Gareloi Southw** | **1.99** | **40** | | **Pn** | **17 42 29.3** | **+0.1** |
| GASW | | | | | **Sn** | **17 42 53.4** | **+0.3** |
| **GALAA** | **Gareloi Lava P** | **2.01** | **42** | | **Pn** | **17 42 30.0** | **+0.5** |
| **GAEA** | **Gareloi East** | **2.04** | **42** | | **Pn** | **17 42 30.2** | **+0.4** |
| **TASE** | **Tanaga Southea** | **2.40** | **48** | | **Pn** | **17 42 35.3** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **2.47** | **48** | | **Pn** | **17 42 36.0** | **+0.3** |
| TAFP | | | | | **Sn** | **17 43 04.7** | **-0.2** |
| **TAPA** | **Tanaga Point A** | **2.50** | **51** | | **Pn** | **17 42 36.5** | **+0.3** |
| TAPA | | | | | **Sn** | **17 43 06.4** | **+0.7** |
| **KIMD** | **Kanaga Island** | **2.76** | **56** | | **Pn** | **17 42 39.8** | **0.0** |
| **KIWB** | **Kanaga Island** | **2.86** | **55** | | **Pn** | **17 42 41.4** | **+0.3** |
| **KIKV** | **Kanaga Island** | **2.86** | **55** | | **Pn** | **17 42 41.3** | **+0.2** |
| **KICM** | **Kanaga Island** | **2.87** | **54** | | **Pn** | **17 42 41.8** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **3.47** | **58** | | **Pn** | **17 42 50.0** | **+0.6** |
| **GSTD** | **Great Sitkin T** | **3.50** | **58** | | **Pn** | **17 42 50.3** | **+0.4** |
| GSTD | | | | | **Sn** | **17 43 30.7** | **+0.3** |
| **GSMY** | **Great Sitkin M** | **3.54** | **58** | | **Pn** | **17 42 51.1** | **+0.7** |
| **GSTR** | **Great Sitkin T** | **3.56** | **57** | | **Pn** | **17 42 51.5** | **+0.7** |
| **SHEM** | **Shemya Is, Ala** | **3.96** | **310** | Pn | **Pn** | **17 42 56.1** | **0.0** |
| | 16nm,0.3s,baz=128,slow=1.4,SNR=8.3 | | | | | | |
| SHEM | | | | | Sn | **17 43 38.3** | **-3.3** |
| | 11nm,0.3s,baz=312,slow=23,SNR=10 | | | | | | |
| SHEM | | | | | LR | 17 44 47.3 | |
| | comp=Z,145nm,19.0s,baz=124,slow=44 | | | | | | |
| **SMY** | **Shemya** | **3.96** | **310** | P | **Pn** | **17 42 57.1** | **+1.0** |
| **SMY** | **Shemya** | **3.96** | **310** | | **Pn** | **17 42 57.1** | **+1.0** |
| **ATKA** | **Atka Island** | **4.65** | **63** | | **Pn** | **17 43 05.5** | **-0.1** |
| **KOFP** | **Korovin Flat P** | **4.73** | **62** | | **Pn** | **17 43 07.6** | **+0.8** |
| **KOSE** | **Korovin Southe** | **4.78** | **62** | | **Pn** | **17 43 08.8** | **+1.2** |
| **NIKH** | **Nikolski High** | **7.98** | **66** | | **Pn** | **17 43 52.1** | **+0.7** |
| **MAPS** | **Pakushin South** | **9.31** | **62** | | **Pn** | **17 44 09.9** | **+0.3** |
| **SPIA** | **Saint Paul Isl** | **9.36** | **38** | Pn | **Pn** | **17 44 13.2** | **+3.0** |
| **MREP** | **Makushin Rep't** | **9.43** | **63** | | **Pn** | **17 44 11.6** | **+0.4** |
| **UNV** | **Unalaska Valle** | **9.57** | **63** | | **Pn** | **17 44 13.5** | **+0.4** |
| **PET** | **Petropavlovsk** | **12.97** | **290** | i P | **Pn** | **17 44 57.6** | **-1.9** |
| **SDPT** | **Sand Point** | **13.35** | **60** | Pn | **Pn** | **17 45 04.2** | **-0.6** |
| **PEA0B** | **Petropavlovsk-** | **13.55** | **290** | i P | **Pn** | **17 45 06.8** | **-0.7** |
| **PEA0B** | **Petropavlovsk-** | **13.55** | **290** | | **Pn** | **17 45 07.8** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **13.55** | **290** | Pn | **Pn** | **17 45 06.8** | **-0.6** |
| | 1.0nm,0.3s,baz=94,slow=14,SNR=12 | | | | | | |
| PETK | | | | | Sn | **17 47 30.3** | **-6.6** |
| | 0.3nm,0.3s,baz=66,slow=36,SNR=3.5 | | | | | | |
| **GAMB** | **Gambell** | **14.41** | **17** | | **Pn** | **17 45 20.2** | **+1.1** |
| **CHGN** | **Chignik** | **14.71** | **57** | Pn | **Pn** | **17 45 24.5** | **+1.2** |
| **ANM** | **Nome** | **16.51** | **24** | P | **P** | **17 45 48.7** | **-0.4** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ANM** | **Nome** | **16.51** | **24** | P | **P** | **17 45 48.7** | **-0.4** |
| **TNA** | **Tin City** | **16.75** | **19** | P | **P** | **17 45 50.6** | **-1.0** |
| **SVW2** | **Sparrevohn** | **17.80** | **43** | | **Pn** | **17 46 01.9** | **-0.9** |
| **KDAK** | **Kodiak Island** | **18.16** | **55** | P | **Pn** | **17 46 03.1** | **-4.0** |
| | comp=Z,1.6nm,0.3s,baz=307,slow=9.8,SNR=11 | | | | | | |
| KDAK | | | | | S | **Sn** | **17 49 21.0** | **-7.8** |
| | comp=Z,0.2nm,0.3s,baz=90,slow=13,SNR=1.6 | | | | | | |
| KDAK | | | | | LR | LR | 17 55 15.4 | |
| | comp=Z,127nm,18.1s,baz=263,slow=44 | | | | | | |
| **KDAK** | **Kodiak Island** | **18.16** | **55** | P | **Pn** | **17 46 05.3** | **-1.9** |
| KDAK | | | | | | 17 49 21.0 | |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,45nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **18.16** | **55** | Pn | **Pn** | **17 46 05.3** | **-1.9** |
| KDAK | | | | lAmb | lAmb | 17 47 01.4 | |
| | comp=Z,45nm,1.1s | | | | | | |
| **N19K** | **Bonanza Creek** | **18.16** | **44** | P | **P** | **17 46 07.7** | **+0.2** |
| **TTA** | **Tatalina** | **18.51** | **37** | P | **Pn** | **17 46 11.5** | **0.0** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **TTA** | **Tatalina** | **18.51** | **37** | P | **Pn** | **17 46 11.5** | **0.0** |
| **MA2** | **Magadan** | **18.60** | **311** | i P | **Pn** | **17 46 12.6** | **+0.1** |
| **MA2** | **Magadan** | **18.60** | **311** | | **Pn** | **17 46 12.5** | **0.0** |
| **L19K** | **White Mountain** | **18.60** | **40** | P | **P** | **17 46 11.9** | **-0.2** |
| **M19K** | **Big River Lodg** | **18.67** | **41** | P | **P** | **17 46 12.5** | **-0.4** |
| **BILL** | **Bilibino** | **18.91** | **345** | eP | **P** | **17 46 14.7** | **-0.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,104nm,17.0s | | | | | | |
| **BILL** | **Bilibino** | **18.91** | **345** | | **P** | **17 46 15.1** | **-0.3** |
| **SEY** | **Seymchan** | **19.21** | **321** | P | **Pn** | **17 46 19.9** | **+0.1** |
| | comp=Z,1.6nm,0.3s,baz=117,slow=12,SNR=38 | | | | | | |
| **CNPM** | **China Poot** | **19.26** | **50** | P | **P** | **17 46 18.0** | **-1.5** |
| **K20K** | **Telida** | **19.48** | **38** | P | **P** | **17 46 21.2** | **-0.6** |
| **BRLK** | **Bradley Lake** | **19.50** | **49** | | **P** | **17 46 21.5** | **-0.5** |
| **J20K** | **Nowinta River** | **19.88** | **35** | P | **P** | **17 46 26.0** | **0.0** |
| J20K | | | | lAmb | lAmb | 17 46 30.5 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **RDOG** | **Red Dog Mine** | **19.93** | **20** | P | **P** | **17 46 26.1** | **-0.5** |
| RDOG | | | | lAmb | lAmb | 17 46 32.2 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **PPLA** | **Purkeypile** | **20.03** | **40** | P | **P** | **17 46 27.7** | **-0.2** |
| PPLA | | | | lAmb | lAmb | 17 46 59.6 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **CAST** | **Castle Rocks** | **20.30** | **39** | P | **P** | **17 46 30.8** | **+0.1** |
| CAST | | | | lAmb | lAmb | 17 46 31.8 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **CUT** | **Chulitna** | **20.64** | **42** | P | **P** | **17 46 33.1** | **-1.2** |
| CUT | | | | lAmb | lAmb | 17 46 55.0 | |
| | comp=Z,43nm,1.2s | | | | | | |
| **KTH** | **Kantishna Hill** | **20.83** | **39** | P | **P** | **17 46 36.4** | **-0.1** |
| KTH | | | | lAmb | lAmb | 17 46 54.1 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **GHO** | **Glory Hole Cre** | **21.01** | **45** | P | **P** | **17 46 35.9** | **-2.6** |
| GHO | | | | lAmb | lAmb | 17 47 34.2 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **IMAR** | **Indian Mountai** | **21.02** | **31** | P | **P** | **17 46 37.9** | **-0.6** |
| **TRF** | **Thorofare Moun** | **21.04** | **40** | P | **P** | **17 46 37.2** | **-1.7** |
| TRF | | | | lAmb | lAmb | 17 47 27.9 | |
| | comp=Z,29nm,1.3s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **21.05** | **38** | P | **P** | **17 46 38.3** | **-0.5** |
| BPAW | | | | lAmb | lAmb | 17 46 42.1 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **KNK** | **Knik Glacier** | **21.12** | **46** | P | **P** | **17 46 39.6** | **+0.1** |
| KNK | | | | lAmb | lAmb | 17 46 59.8 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **21.16** | **33** | P | **P** | **17 46 39.5** | **-0.5** |
| **I21K** | **Tanana** | **21.20** | **34** | P | **P** | **17 46 40.4** | **+0.1** |
| **MLY** | **Manley** | **21.58** | **35** | P | **P** | **17 46 44.1** | **-0.4** |
| **RND** | **Reindeer** | **21.62** | **40** | P | **P** | **17 46 44.3** | **-0.7** |
| RND | | | | pmax | pmax | | |
| | comp=Z,29nm,1.5s | | | | | | |
| **RND** | **Reindeer** | **21.62** | **40** | P | **P** | **17 46 44.3** | **-0.7** |
| RND | | | | lAmb | lAmb | 17 47 04.4 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **BWN** | **Browne** | **21.68** | **38** | P | **P** | **17 46 45.7** | **+0.2** |
| BWN | | | | lAmb | lAmb | 17 47 45.2 | |
| | comp=Z,39nm,1.2s | | | | | | |
| **MCK** | **McKinley** | **21.71** | **40** | P | **P** | **17 46 46.1** | **+0.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,63nm,1.9s | | | | | | |
| **MCK** | **McKinley** | **21.71** | **40** | P | **P** | **17 46 46.1** | **+0.2** |
| MCK | | | | lAmb | lAmb | 17 46 58.9 | |
| | comp=Z,63nm,1.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.76** | **45** | P | **P** | **17 46 44.4** | **-2.0** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,51nm,1.4s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.76** | **45** | P | **P** | **17 46 44.4** | **-2.0** |
| SCM | | | | lAmb | lAmb | 17 46 50.6 | |
| | comp=Z,51nm,1.4s | | | | | | |
| **NEA2** | **Nenana** | **22.01** | **37** | P | **P** | **17 46 47.9** | **-1.3** |
| NEA2 | | | | lAmb | lAmb | 17 47 07.4 | |
| | comp=Z,65nm,1.9s | | | | | | |
| **DHY** | **Denali Highway** | **22.12** | **42** | P | **P** | **17 46 49.7** | **-0.8** |
| DHY | | | | lAmb | lAmb | 17 46 52.1 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **22.15** | **36** | P | **P** | **17 46 49.3** | **-1.2** |
| I23K | | | | lAmb | lAmb | 17 47 06.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **22.35** | **38** | P | **P** | **17 46 49.1** | **-3.6** |
| **M24K** | **Tolsona, Glenn** | **22.36** | **45** | P | **P** | **17 46 53.6** | **+0.7** |
| **MDM** | **Murphy Dome** | **22.50** | **37** | P | **P** | **17 46 52.6** | **-1.7** |
| **CCB** | **Clear Creek Bu** | **22.53** | **38** | P | **P** | **17 46 52.5** | **-2.1** |
| **COLA** | **College** | **22.61** | **37** | i P | **P** | **17 46 55.2** | **-0.2** |
| **HDA** | **Harding Lake** | **22.78** | **39** | P | **P** | **17 46 56.7** | **-0.6** |
| **BMRM** | **Bremner River** | **22.82** | **48** | P | **P** | **17 46 57.6** | **-0.1** |
| BMRM | | | | lAmb | lAmb | 17 47 12.3 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **POKR** | **Poker Flat Res** | **22.87** | **37** | P | **P** | **17 46 55.6** | **-2.7** |
| **COLD** | **Coldfoot** | **22.89** | **31** | P | **P** | **17 46 56.2** | **-2.2** |
| **ILAR** | **Eielson Array** | **22.94** | **38** | P | **P** | **17 46 55.5** | **-3.5** |
| | comp=Z,0.8nm,0.4s,baz=247,slow=8.9,SNR=18 | | | | | | |
| **ILAR** | **Eielson Array** | **22.94** | **38** | P | **P** | **17 46 57.9** | **-1.1** |
| **ILAR** | **Eielson Array** | **22.94** | **38** | P | **P** | **17 46 57.9** | **-1.1** |
| **N25K** | **Chitina, Valde** | **22.95** | **47** | P | **P** | **17 46 59.2** | **0.0** |
| N25K | | | | lAmb | lAmb | 17 47 51.7 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **23.01** | **35** | P | **P** | **17 46 58.5** | **-1.3** |
| **GLB** | **Gilahina Butte** | **23.29** | **47** | P | **P** | **17 47 02.2** | **-0.4** |
| GLB | | | | lAmb | lAmb | 17 47 51.5 | |
| | comp=Z,51nm,1.8s | | | | | | |
| **VRDI** | **Verde Repeater** | **23.41** | **48** | P | **P** | **17 47 03.4** | **-0.6** |
| **RIDG** | **Independent Ri** | **23.42** | **41** | P | **P** | **17 47 03.1** | **-0.7** |
| **MENT** | **Mentasta** | **23.68** | **44** | P | **P** | **17 47 05.7** | **-0.6** |
| MENT | | | | lAmb | lAmb | 17 47 09.0 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **UGL** | **Uglegorsk** | **23.82** | **282** | eP | **P** | **17 47 08.8** | **+1.1** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **23.85** | **41** | P | **P** | **17 47 06.8** | **-1.2** |
| **L26K** | **Log Cabin Wild** | **23.86** | **43** | P | **P** | **17 47 07.5** | **-0.6** |
| L26K | | | | lAmb | lAmb | 17 47 12.2 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **24.09** | **276** | i P | **P** | **17 47 09.4** | **-0.8** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,28nm,1.9s | | | | | | |
| **FYU** | **Fort Yukon** | **24.30** | **35** | P | **P** | **17 47 11.7** | **-0.3** |
| **M27K** | **Edge Creek, AK** | **24.37** | **45** | P | **P** | **17 47 12.8** | **-0.1** |
| M27K | | | | lAmb | lAmb | 17 47 17.4 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **L27K** | **Beaver Creek,** | **24.54** | **44** | P | **P** | **17 47 13.7** | **-0.6** |
| **BCAR** | **Beaver Creek A** | **24.56** | **44** | P | **P** | **17 47 13.3** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **24.89** | **33** | P | **P** | **17 47 16.6** | **-0.8** |
| **EGAK** | **Eagle** | **25.26** | **40** | P | **P** | **17 47 20.0** | **-0.8** |
| EGAK | | | | lAmb | lAmb | 17 47 21.9 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **ASAJ** | **Asahikawa** | **25.35** | **270** | P | **P** | **17 47 22.3** | **+0.5** |
| | comp=Z,10nm,0.8s,baz=65,slow=8.8,SNR=10.0 | | | | | | |
| **DAWY** | **Dawson** | **25.83** | **42** | P | **P** | **17 47 24.0** | **-2.0** |
| **I29M** | **Ogilvie Camp,** | **26.58** | **39** | P | **P** | **17 47 31.7** | **-1.1** |
| **GRNR** | **Gornyy** | **26.85** | **288**⇓ | iP | **P** | **17 47 35.6** | **+0.3** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=N,70nm,15.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=Z,110nm,16.0s | | | | | | |
| **INK** | **Inuvik** | **29.13** | **34** | P | **P** | **17 47 54.5** | **-0.9** |
| | comp=Z,0.9nm,0.4s,baz=264,slow=4.5,SNR=9.3 | | | | | | |
| INK | | | | PcP | **PcP** | **17 51 02.1** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=286,slow=1.6,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **29.13** | **34** | P | **P** | **17 47 57.5** | **+2.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **29.13** | **34** | P | **P** | **17 47 57.5** | **+2.1** |
| **YAK** | **Yakutsk** | **29.15** | **313** | P | **P** | **17 47 54.7** | **-1.0** |
| | comp=Z,9.3nm,0.8s,baz=55,slow=1.5,SNR=15 | | | | | | |
| **YAK** | **Yakutsk** | **29.15** | **313** | eP | **P** | **17 47 54.4** | **-1.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **29.15** | **313** | P | **P** | **17 47 54.3** | **-1.3** |
| YAK | | | | lAmb | lAmb | 17 47 55.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **30.19** | **287** | ceP | **P** | **17 48 05.0** | **0.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **30.95** | **332** | P | **P** | **17 48 11.2** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=90,slow=22,SNR=14 | | | | | | |
| TIXI | | | | PcP | **PcP** | **17 51 06.7** | **-0.2** |
| | comp=Z,1.9nm,0.6s,baz=271,slow=24,SNR=5.2 | | | | | | |
| **TIXI** | **Tiksi** | **30.95** | **332** | ceP | **P** | **17 48 10.3** | **-1.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | |
| **TIXI** | **Tiksi** | **30.95** | **332** | P | **P** | **17 48 11.8** | **+0.3** |
| TIXI | | | | | **PcP** | **17 51 06.8** | **-0.2** |
| **ZEA** | **Zeya** | **31.50** | **297** | eP | **P** | **17 48 13.3** | **-3.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **A36M** | **Sachs Harbour** | **32.70** | **28** | P | **P** | **17 48 27.1** | **+0.3** |
| A36M | | | | lAmb | lAmb | 17 48 28.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| A36M | | | | | **PcP** | **17 51 11.7** | **0.0** |
| **YKA** | **Yellowknife Ar** | **36.97** | **45** | P | **P** | **17 49 03.6** | **-0.1** |
| | comp=Z,3.3nm,0.5s,baz=280,slow=8.3,SNR=46 | | | | | | |
| YKA | | | | PcP | **PcP** | **17 51 24.5** | **+0.3** |
| | comp=Z,1.0nm,0.6s,baz=286,slow=3.2,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.97** | **45** | i P | **P** | **17 49 03.5** | **-0.2** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.97** | **45** | P | **P** | **17 49 02.9** | **-0.8** |
| **BOD** | **Bodaibo** | **37.56** | **307** | eP | **P** | **17 49 07.7** | **-1.1** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **38.30** | **271** | P | **P** | **17 49 16.3** | **+1.1** |
| | comp=Z,2.7nm,0.8s,baz=55,slow=7.8,SNR=5.2 | | | | | | |
| **B08A** | **Colville Reser** | **39.19** | **68** | P | **P** | **17 49 24.9** | **+2.2** |
| B08A | | | | lAmb | lAmb | 17 49 26.3 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **EDM** | **Edmonton** | **40.53** | **59** | P | **P** | **17 49 33.7** | **-0.1** |
| EDM | | | | pmax | pmax | | |
| | comp=Z,78nm,1.2s | | | | | | |
| **EDM** | **Edmonton** | **40.53** | **59** | P | **P** | **17 49 33.6** | **-0.1** |
| **NEW** | **Newport** | **40.54** | **67** | P | **P** | **17 49 33.1** | **-0.8** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,15nm,1.5s | | | | | | |
| **NEW** | **Newport** | **40.54** | **67** | P | **P** | **17 49 33.1** | **-0.8** |
| NEW | | | | lAmb | lAmb | 17 49 47.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **F10A** | **Beach Ranch, E** | **41.58** | **70** | P | **P** | **17 49 41.9** | **-0.7** |
| **EUNU** | **Eureka** | **41.70** | **15** | P | **P** | **17 49 42.7** | **-0.4** |
| **WALA** | **Waterton Lakes** | **42.05** | **65** | P | **P** | **17 49 46.2** | **-0.2** |
| WALA | | | | lAmb | lAmb | 17 49 49.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **XLT** | **XiLinHaoTe** | **42.21** | **287** | eP | **P** | **17 49 47.5** | **-0.2** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,140nm,6.1s | | | | | | |
| **WVOR** | **Wild Horse Val** | **42.56** | **76** | P | **P** | **17 49 47.7** | **-3.0** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **BEKR** | **Beckworth** | **42.91** | **80** | P | **P** | **17 49 53.2** | **-0.4** |
| BEKR | | | | lAmb | l

comp=Z,39nm,1.3s
**TPH Tonopah 45.94 80** P **P** **17 50 17.7 -0.1**
**YHH Holmes Hill 46.03 68** P **P** **17 50 17.9 -0.7**
YHH IAmb IAmb 17 50 22.0
comp=Z,5.6nm,0.7s
**YNR Norris Junctio 46.18 68** P **P** **17 50 19.9 +0.2**
YNR IAmb IAmb 17 50 24.5
comp=Z,8.1nm,1.1s
**LCH Last Change Ra 46.18 81** P **P** **17 50 20.0 +0.3**
**ZAK Zakamensk 46.36 301** *eP* **P** **17 50 21.4 +0.5**
ZAK *e* 17 50 31.1
ZAK pmax pmax
comp=Z,15nm,1.3s
ZAK pmax pmax
comp=Z,10.0nm,1.4s
**H17A Grant Village 46.41 69** P **P** **17 50 22.8 +1.3**
H17A IAmb IAmb 17 50 49.1
comp=Z,7.3nm,1.1s
**LKWY Lake 46.43 68** P **P** **17 50 23.2 +1.6**
LKWY pmax pmax
comp=Z,5.0nm,0.7s
**LKWY Lake 46.43 68** P **P** **17 50 23.2 +1.6**
LKWY IAmb IAmb 17 50 34.0
comp=Z,4.7nm,0.7s
**TULEG Thule 46.44 17** P **P** **17 50 19.4 -1.6**
TULEG IAmb IAmb 17 50 52.2
comp=Z,9.3nm,1.1s
**HNS HongShan 46.77 280** ⇑P **P** **17 50 24.3 +0.3**
HNS pmax pmax
comp=Z,8.0nm,1.1s
**RLMT Red Lodge 46.79 67** P **P** **17 50 24.8 +0.4**
**R11A Troy Canyon, C 46.81 79** P **P** **17 50 24.9 +0.3**
R11A IAmb IAmb 17 50 36.1
comp=Z,5.7nm,1.2s
**TPNV Topopah Spring 47.24 80** P **P** **17 50 28.6 +0.6**
TPNV pmax pmax
comp=Z,4.0nm,0.8s
**TPNV Topopah Spring 47.24 80** P **P** **17 50 28.6 +0.6**
TPNV IAmb IAmb 17 50 29.6
comp=Z,3.7nm,0.8s
**DUG Dugway, Tooele 47.45 75** P **P** **17 50 30.4 +0.9**
DUG pmax pmax
comp=Z,5.0nm,0.9s
**DUG Dugway, Tooele 47.45 75** P **P** **17 50 30.4 +0.9**
DUG IAmb IAmb 17 50 41.8
comp=Z,5.4nm,0.9s
**FCC Fort Churchill 47.69 45** P **P** **17 50 31.1 +0.1**
FCC pmax pmax
comp=Z,6.0nm,0.9s
**FCC Fort Churchill 47.69 45** P **P** **17 50 31.1 +0.1**
FCC IAmb IAmb 17 50 32.4
comp=Z,5.8nm,0.8s
**PRN Pahroc Range 47.72 79** P **P** **17 50 32.5 +0.9**
PRN IAmb IAmb 17 50 35.8
comp=Z,7.7nm,0.8s
**GSC Goldstone, Bar 47.91 83** P **P** **17 50 33.2 +0.1**
GSC pmax pmax
comp=Z,7.0nm,1.1s
**GSC Goldstone, Bar 47.91 83** P **P** **17 50 33.2 +0.1**
GSC IAmb IAmb 17 50 34.7
comp=Z,7.3nm,1.1s
**BW06 Boulder Array 47.94 70** P **P** **17 50 33.2 -0.2**
BW06 IAmb IAmb 17 50 37.8
comp=Z,3.8nm,0.8s
**PD31 Pinedale Array 47.94 70** P **P** **17 50 32.9 -0.5**
PD31 IAmb IAmb 17 50 37.8
comp=Z,3.5nm,0.7s
**PDAR Pinedale Array 47.94 70** P **P** **17 50 33.5 0.0**
comp=Z,2.2nm,0.5s,baz=306,slow=3.8,SNR=23
**PDAR Pinedale Array 47.94 70** P **P** **17 50 32.9 -0.5**
**CCUT Cedar City 48.69 78** P **P** **17 50 39.2 -0.1**
CCUT IAmb IAmb 17 50 40.9
comp=Z,9.0nm,1.5s
**NEEM North Greenlan 48.81 13** *i* P **P** **17 50 39.3 -0.5**
NEEM IAmb IAmb 17 50 40.0
comp=Z,22nm,0.6s
**TMUT Trail Mountain 48.97 75** P **P** **17 50 42.4 +0.9**
TMUT IAmb IAmb 17 51 23.2
comp=Z,8.3nm,1.2s
**LCMT Little Creek M 49.10 78** P **P** **17 50 42.7 +0.5**
LCMT IAmb IAmb 17 50 44.1
comp=Z,7.3nm,1.1s
**MTPU Mount Pierson 49.13 77** P **P** **17 50 43.2 +0.5**
MTPU IAmb IAmb 17 50 44.7
comp=Z,6.5nm,1.2s
**RDMU Red Mountain 49.22 72** P **P** **17 50 43.9 +0.6**
RDMU IAmb IAmb 17 50 58.3
comp=Z,5.3nm,0.8s
**PMD Palm Desert 49.23 84** P **P** **17 50 42.4 -0.7**
PMD IAmb IAmb 17 50 44.4
comp=Z,4.0nm,0.9s
**KNB Kanab 49.36 78** P **P** **17 50 45.3 +1.0**
KNB pmax pmax
comp=Z,4.0nm,0.8s
**KNB Kanab 49.36 78** P **P** **17 50 45.3 +1.0**
KNB IAmb IAmb 17 50 45.8
comp=Z,3.9nm,0.8s
**P18A Preston Nutter 49.37 74** P **P** **17 50 45.2 +0.6**
P18A IAmb IAmb 17 51 12.1
comp=Z,8.2nm,1.4s
**SRU San Rafael Swe 49.51 75** P **P** **17 50 46.8 +1.3**
SRU pmax pmax
comp=Z,11nm,1.4s
**SRU San Rafael Swe 49.51 75** P **P** **17 50 46.8 +1.3**
SRU IAmb IAmb 17 51 19.1
comp=Z,11nm,1.4s
**W13A Hualapai Mount 49.89 81** P **P** **17 50 48.8 +0.4**
**U15A North Rim 50.06 78** P **P** **17 50 50.6 +0.8**
U15A IAmb IAmb 17 50 51.6
comp=Z,8.0nm,1.1s
**BLYC Blythe 50.35 83** P **P** **17 50 51.7 +0.1**
BLYC IAmb IAmb 17 50 53.2
comp=Z,8.9nm,1.0s
**PV11 David Mesa, Pa 51.03 74** P **P** **17 50 57.1 +0.1**
PV11 IAmb IAmb 17 51 09.1
comp=Z,6.6nm,0.7s
**PV13 Radium Mtn., P 51.15 74** P **P** **17 50 57.8 -0.1**
PV13 IAmb IAmb 17 51 31.1
comp=Z,8.3nm,0.9s
**WUAZ Wupatki 51.21 79** P **P** **17 50 59.0 +0.7**
WUAZ IAmb IAmb 17 51 00.0
comp=Z,4.2nm,0.8s
**SPITS Spitsbergen Ar 51.37 355** P **P** **17 50 58.5 -0.3**
SPITS pmax pmax
comp=Z,1.0nm,0.4s
**SPB2 Spitsbergen Ar 51.37 355** P **P** **17 50 58.4 -0.4**
**WHN Wuhan 51.37 273** ⇓P P 17 51 09.2 +10
**ULM Lac du Bonnet 51.42 55** P **P** **17 50 59.9 +0.4**
comp=Z,3.1nm,0.7s,baz=329,slow=7.0,SNR=2.6
**X16A Lo Mia Camp, P 51.87 80** P **P** **17 51 04.2 +0.9**
**W18A Petrified Fore 52.49 78** P **P** **17 51 07.9 0.0**
**XAN Xi'an 52.53 280** ⇑P **P** **17 51 07.8 -0.3**
XAN pP sP 17 51 19.2 +2.5
XAN pmax pmax
comp=Z,10.0nm,1.3s
**S22A 4UR Ranch, Cre 52.63 74** P **P** **17 51 10.2 +1.2**
S22A IAmb IAmb 17 51 31.1
comp=Z,18nm,1.9s
**DAG Danmarks Havn 52.72 5** *i* P **P** **17 51 08.0 -0.8**
DAG IAmb IAmb 17 51 09.1
comp=Z,36nm,2.1s
**TUC Tucson 53.66 81** P **P** **17 51 15.8 -0.6**
TUC pmax pmax
comp=Z,4.0nm,1.0s
**TUC Tucson 53.66 81** P **P** **17 51 15.8 -0.6**
**ZALV Zalesovo Beam 53.80 313** P **P** **17 51 16.4 -0.6**
comp=Z,1.0nm,0.5s,baz=51,slow=6.6,SNR=6.0
ZALV PcP **PcP** **17 52 22.2 -0.4**
comp=Z,1.3nm,0.7s,baz=19,slow=4.9,SNR=3.8
**ZALV Zalesovo Beam 53.80 313** *i* P **P** **17 51 14.8 -2.2**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**LZH Lanzhou 54.38 286** ⇓P **P** **17 51 22.4 +0.6**
LZH pP pP 17 51 30.1 +2.1
LZH sP sP 17 51 35.2 +4.8
LZH pmax pmax
comp=Z,28nm,1.3s
LZH pmax pmax
comp=Z,180nm,6.2s
LZH LR LR
comp=Z,260nm,15.6s
LZH LR LR
comp=Z,310nm,15.2s
LZH LR LR
comp=Z,410nm,18.4s

**ANMO Albuquerque 54.66 76** *i* P **P** **17 51 23.0 -0.8**
ANMO pmax pmax
comp=Z,3.0nm,1.3s
**FRB Frobisher Bay 54.66 30** P **P** **17 51 23.3 +0.2**
FRB pmax pmax
comp=Z,11nm,2.4s
**ENH Enshi 54.66 276** P **P** **17 51 22.9 -0.8**
**SUMG Summit 54.68 13** P **P** **17 51 23.4 -0.3**
SUMG pmax pmax
comp=Z,25nm,1.3s
**SUMG Summit 54.68 13** *i* P **P** **17 51 22.2 -1.5**
SUMG IAmb IAmb 17 51 26.2
comp=Z,16nm,1.0s
**SUMG Summit 54.68 13** P **P** **17 51 23.4 -0.3**
**GTA Gaotai 54.71 291** *eP* **P** **17 51 24.1 0.0**
GTA pP pP 17 51 31.4 +1.1
GTA sP sP 17 51 35.1 +2.4
GTA pmax pmax
comp=Z,5.0nm,1.0s
GTA pmax pmax
comp=Z,98nm,5.5s
GTA LR LR
comp=Z,200nm,18.2s
GTA LR LR
comp=Z,210nm,19.3s
GTA LR LR
comp=Z,190nm,19.3s
**DBG Daneborg 55.02 6** *i* P **P** **17 51 23.3 -2.3**
**DGZ Jazzator, Alta 55.15 308** *i* P **P** **17 51 26.3 -0.8**
DGZ pmax pmax
comp=Z,7.0nm,1.1s
**MNTX Cornudas Mount 57.48 78** P **P** **17 51 44.4 +0.5**
MNTX IAmb IAmb 17 51 45.4
comp=Z,3.0nm,0.8s
**ICESG Greenland Ices 57.57 15** *i* P **P** **17 51 43.7 -0.7**
ICESG IAmb IAmb 17 51 45.0
comp=Z,9.5nm,0.8s
**KURK Kurchatov 58.79 313** *ceP* **P** **17 51 52.2 -0.5**
KURK pmax pmax
comp=Z,19nm,1.3s
**KURK Kurchatov 58.79 313** P **P** **17 51 52.2 -0.5**
**ARCES ARCESS Array B 58.94 349** P **P** **17 51 52.8 -0.6**
comp=Z,5.1nm,0.8s,baz=25,slow=8.8,SNR=14
**I42A Draeger Farm, 59.09 57** P **P** **17 51 54.0 -0.8**
**LVZ Lovozero 59.17 345** P **P** **17 51 55.3 +0.2**
LVZ pmax pmax
comp=Z,149nm,1.9s
**LVZ Lovozero 59.17 345** P **P** **17 51 55.3 +0.2**
**H43A Windswept, Lux 59.32 56** P **P** **17 51 57.4 +0.9**
**MK31 Makanchi Array 59.65 308** P **P** **17 51 57.9 -0.8**
MK31 pmax pmax
comp=Z,4.0nm,1.2s
**MK31 Makanchi Array 59.65 308** P **P** **17 51 57.9 -0.8**
MK31 IAmb IAmb 17 51 59.0
comp=Z,4.1nm,1.1s
**MKAR Makanchi Array 59.65 308** P **P** **17 51 58.0 -0.7**
comp=Z,2.6nm,0.8s,baz=50,slow=6.0,SNR=28
**MKAR Makanchi Array 59.65 308** P **P** **17 51 57.9 -0.9**
**MAKZ Makanchi 59.80 308** P **P** **17 51 59.0 -0.7**
MAKZ pmax pmax
comp=Z,23nm,2.0s
**MAKZ Makanchi 59.80 308** P **P** **17 51 59.0 -0.7**
**GOMU GeErMu 59.80 291** P **P** **17 51 59.8 -0.6**
GOMU pP pP 17 52 02.8 -3.8
GOMU sP sP 17 52 07.0 -2.1
GOMU S **S** **18 00 15.4 +5.2**
GOMU pmax pmax
comp=Z,4.0nm,0.8s
GOMU pmax pmax
comp=Z,100nm,5.3s
GOMU LR LR
comp=Z,150nm,16.1s
GOMU LR LR
comp=Z,130nm,16.1s
GOMU LR LR
comp=Z,84nm,16.3s
**E46A Sault Ste Mari 59.86 53** P **P** **17 52 01.1 +1.0**
**TX31 Lajitas Ar. Si 60.17 79** P **P** **17 52 02.5 -0.2**
**TX32 Lajitas Array 60.17 79** P **P** **17 52 02.6 0.0**
TX32 IAmb IAmb 17 52 03.4
comp=Z,3.1nm,0.7s
**TXAR Lajitas Array 60.17 79** P **P** **17 52 02.7 +0.1**
comp=Z,2.4nm,0.6s,baz=298,slow=4.9,SNR=32
TXAR PcP **PcP** **17 52 48.7 +0.7**
comp=Z,0.9nm,0.7s,baz=240,slow=1.5,SNR=3.6
**TXAR Lajitas Array 60.17 79** P **P** **17 52 02.5 -0.2**
**BRVK Borovoye 60.87 319** *ceP* **P** **17 52 06.3 -0.6**
BRVK pmax pmax
comp=Z,20nm,1.7s
**BRVK Borovoye 60.87 319** P **P** **17 52 07.0 +0.1**
**R40A Maddies Statio 60.98 64** P **P** **17 52 08.0 +0.1**
R40A IAmb IAmb 17 52 29.5
comp=Z,5.4nm,0.7s
**SCHQ Schefferville 61.70 37** P **P** **17 52 12.6 0.0**
comp=Z,6.2nm,0.7s,baz=314,slow=6.6,SNR=15
**SCHQ Schefferville 61.70 37** P **P** **17 52 12.8 +0.2**
**JAY Jayapura 62.02 225** LR LR 18 14 33.3
comp=Z,528nm,21.9s,baz=214,slow=32
**ARU Arti 62.82 327** *di* P **P** **17 52 20.6 +0.7**
ARU 17 54 37.1
ARU S **S** **18 00 52.7 +5.7**
ARU SS **SS** **18 04 47.1 -4.1**
ARU pmax pmax
comp=Z,20nm,0.9s
**ARU Arti 62.82 327** P **P** **17 52 20.3 +0.4**
**W41B Gary Mavity, V 63.13 67** P **P** **17 52 24.5 +2.2**
W41B IAmb IAmb 17 52 25.8
comp=Z,7.7nm,0.9s
**KIRV Kirov 63.96 333** *ceP* **P** **17 52 28.2 +0.8**
**BORG Borgarnes 64.22 10** LR LR 18 22 23.0
comp=Z,46nm,19.6s,baz=294,slow=38
**KLMR Klimovskoe 64.54 339** *eP* **P** **17 52 29.4 -1.8**
KLMR 17 54 50.8
KLMR pmax pmax
comp=Z,32nm,1.3s
**KLMR Klimovskoe 64.54 339** *eP* **P** **17 52 29.5 -1.8**
KLMR AMP 17 52 32.5
comp=Z,32nm,1.3s
KLMR *e*PP **PP** **17 54 50.9 -1.8**
**HKT Hockley 64.62 73** *i* P **P** **17 52 33.2 +1.1**
HKT pmax pmax
comp=Z,5.0nm,0.9s
**T47A Sharon Grove 64.83 62** P **P** **17 52 34.0 +0.5**
**AAK Ala-Archa 66.51 309** *ceP* **P** **17 52 44.0 -0.5**
AAK pmax pmax
comp=Z,10.0nm,2.5s
**AAK Ala-Archa 66.51 309** P **P** **17 52 45.1 +0.6**
AAK IAmb IAmb 17 52 45.6
comp=Z,4.0nm,0.8s
**FINES FINESS Array B 66.54 346** P **P** **17 52 43.9 -0.2**
comp=Z,6.7nm,0.7s,baz=37,slow=9.0,SNR=19
FINES LR LR 18 22 52.5
comp=Z,41nm,21.9s,baz=313,slow=37
**ABKAR Akbulak array 67.98 322** P **P** **17 52 53.7 +0.2**
**ABKAR Akbulak array 67.98 322** P **P** **17 52 53.8 +0.3**
ABKAR IAmb IAmb 17 52 54.7
comp=Z,6.5nm,1.1s
**KSH Kashi 68.06 306** P **P** **17 52 58.5 +4.2**
KSH sP pwP 17 53 08.8 -1.0
KSH S **S** **18 01 58.1 +6.1**
KSH pmax pmax
comp=Z,10.0nm,1.2s
KSH LR LR
comp=Z,410nm,18.6s
KSH LR LR
comp=Z,430nm,16.8s
**KKAR Karatay Array 68.12 312** P **P** **17 52 54.4 -0.1**
**KKAR Karatay Array 68.12 312** P **P** **17 52 54.4 -0.1**
**NC204 NORSAR Array S 68.40 354** P **P** **17 52 56.1 +0.1**
**NB201 NORSAR Array S 68.59 354** P **P** **17 52 57.4 +0.3**
**NB2 NORSAR Subarra 68.60 354** P **P** **17 52 57.7 +0.5**
comp=Z,4.6nm,0.8s,baz=9.2,slow=6.5
**NOA NORSAR Array B 68.60 354** P **P** **17 52 57.4 +0.1**
comp=Z,6.4nm,0.8s,baz=8.8,slow=6.3,SNR=20
NOA LR LR 18 24 06.1
comp=Z,26nm,19.7s,baz=265,slow=37
**NORES NORESS Array B 68.88 353** P **P** **17 52 58.8 -0.1**
**UPP Uppsala 69.19 350** *eP* **P** **17 53 01.2 +0.4**
**VSU Vasula 69.28 345** *i* P **P** **17 53 00.5 -0.9**
**MTSE Matsula 69.50 347** *eP* **P** **17 53 02.9 +0.2**
**BELG Belogornoye 69.76 331** *i* P **P** **17 53 04.0 -0.5**
BELG pmax pmax
comp=Z,3.0nm,0.9s
**CMAR Chiang Mai Arr 69.77 275** P **P** **17 53 04.8 -0.3**
comp=Z,1.3nm,0.8s,baz=30,slow=6.4,SNR=13

CMAR PcP **PcP** **17 53 28.4 +0.8**
comp=Z,1.5nm,0.8s,baz=20,slow=3.5,SNR=10
**CMAR Chiang Mai Arr 69.77 275** *ceP* **P** **17 53 04.5 -0.6**
CMAR pmax pmax
comp=Z,1.0nm,0.8s
**CMAR Chiang Mai Arr 69.77 275** P **P** **17 53 04.1 -1.0**
**TAPN Taplejung 70.31 289** *eP* **P** **17 53 08.5 -0.1**
comp=Z,29nm,1.0s
**OBN Obninsk 70.40 338** *eP* **P** **17 53 08.0 -0.3**
OBN *e* 17 53 17.6
OBN *e* 17 53 28.1
OBN *e* 17 55 45.7
OBN *e*PPP PPP 17 57 27.2
OBN pmax pmax
comp=Z,6.0nm,0.5s
OBN MLR MLR
comp=Z,89nm,17.0s
**OBN Obninsk 70.40 338** P **P** **17 53 08.6 +0.3**
**VIKU Vikbolandet 70.62 350** *eP* **P** **17 53 09.6 0.0**
**HAL Halifax 70.93 42** pP 17 53 24.1 +6.2
**JIRN Jiri 71.00 290** *eP* **P** **17 53 13.5 +0.6**
comp=Z,48nm,0.9s
**GUN Gumba 71.00 291** *eP* **P** **17 53 13.1 +0.2**
comp=Z,61nm,0.9s
**RAMN Ramite 71.27 290** *eP* **P** **17 53 14.5 +0.1**
comp=Z,30nm,0.6s
**GAR Garm 71.33 309** P **P** **17 53 14.7 +0.2**
**KKN Kakani 71.45 291** *eP* **P** **17 53 15.8 +0.3**
comp=Z,22nm,0.7s
**PKI Pulchoki 71.53 291** *eP* **P** **17 53 16.1 0.0**
comp=Z,5.6nm,0.6s
**PKIN Phulchoki 71.53 291** *eP* **P** **17 53 15.7 -0.3**
comp=Z,5.0nm,0.5s
**GKN Gorkha 71.67 292** *eP* **P** **17 53 16.9 +0.1**
**DANN Dangsing 71.94 293** *eP* **P** **17 53 18.9 +0.4**
comp=Z,34nm,0.8s
**CHGR Chuyangaron 72.18 309** P **P** **17 53 19.4 -0.1**
**KOLN Koldanda 72.46 292** *eP* **P** **17 53 21.7 +0.2**
comp=Z,16nm,0.8s
**PYUN Piuthan 72.58 293** *eP* **P** **17 53 22.5 +0.3**
comp=Z,22nm,0.9s
**NACGM Naroch 72.65 344** *i* P **P** **17 53 21.9 -0.1**
**MNK Minsk 72.83 343** *i* P **P** **17 53 21.3 -1.7**
MNK *i* 17 56 04.9
MNK *i* PPP PPP 17 57 48.6
MNK *i* S **S** **18 02 48.4 +1.5**
MNK *i* SS **SS** **18 07 30.0 +4.2**
MNK pmax pmax
comp=E,2.0nm,0.9s
MNK pmax pmax
comp=N,8.0nm,0.7s
MNK pmax pmax
comp=Z,27nm,0.9s
MNK MLR MLR
comp=E,57nm,19.0s
MNK MLR MLR
comp=N,436nm,23.0s
MNK MLR MLR
comp=Z,93nm,20.0s
**MNK Minsk 72.83 343** *i* P **P** **17 53 21.3 -1.7**
comp=E,2.0nm,0.9s
MNK *i* P **P** **17 53 21.3 -1.7**
comp=N,8.0nm,0.7s
MNK *i* P **P** **17 53 21.3 -1.7**
comp=Z,27nm,0.9s,baz=19
MNK *i* PP **PP** **17 56 05.0 +0.5**
MNK *i* PPP PPP 17 57 48.7
MNK *i* S **S** **18 02 48.5 +1.6**
MNK *i* SS **SS** **18 07 30.0 +4.2**
MNK *i* SSS SSS 18 10 51.6
MNK *i* LQ LQ 18 20 28.1
MNK *i* LR LR 18 25 04.9
MNK *i* LRM MLR 18 28 43.7
comp=E,57nm,19.1s
MNK *i* LRM MLR 18 28 46.2
comp=N,436nm,22.9s
MNK *i* LRM MLR 18 29 04.0
comp=Z,93nm,20.4s
**DEL Delary 72.91 351** *eP* **P** **17 53 23.3 -0.1**
**PPT Papeete 72.99 149** LR LR 18 21 33.8
comp=Z,56nm,19.9s,baz=12,slow=33
**NIL Nilore 73.91 303** P **P** **17 53 30.6 +0.8**
NIL pmax pmax
comp=Z,14nm,0.9s
**NIL Nilore 73.91 303** P **P** **17 53 30.6 +0.8**
**EKA Eskdalemuir Ar 74.74 1** P **P** **17 53 34.8 +0.6**
**KBL Kabul 75.43 307** P **P** **17 53 38.3 -0.5**
KBL pmax pmax
comp=Z,11nm,1.1s
**KBL Kabul 75.43 307** P **P** **17 53 38.2 -0.5**
KBL IAmb IAmb 17 53 39.1
comp=Z,11nm,1.1s
**BSEG Bad Segeberg 75.73 353** P **P** **17 53 41.1 +1.3**
BSEG pmax pmax
comp=Z,25nm,0.9s
**AKASG Malin Array Be 76.16 341** P **P** **17 53 42.5 +0.1**
comp=Z,3.6nm,0.5s,baz=22,slow=6.5,SNR=24
**AKASG Malin Array Be 76.16 341** P **P** **17 53 42.6 +0.2**
AKASG pmax pmax
comp=Z,20nm,2.0s
**AKASG Malin Array Be 76.16 341** P **P** **17 53 42.6 +0.2**
AKASG IAmb IAmb 17 53 43.9
comp=Z,20nm,1.9s
**AKBB Malin Array Si 76.16 341** *ceP* **P** **17 53 42.4 0.0**
**AKBB Malin Array Si 76.16 341** P **P** **17 53 42.5 0.0**
AKBB IAmb IAmb 17 53 43.8
comp=Z,11nm,1.1s
**KIEV Kiev 76.17 341** P **P** **17 53 42.0 -0.4**
**GOF Gofitskoye 77.65 330** ⇓*i* P **P** **17 53 52.1 +1.2**
GOF pmax pmax
comp=Z,47nm,0.9s
**LVV L'vov 78.02 344** *eP* **P** **17 53 53.2 +0.3**
**CLL Collm 78.10 351** *eP* **P** **17 53 53.0 -0.3**
CLL pmax pmax
comp=Z,3.0nm,0.9s
**CLL Collm 78.10 351** *eP* **P** **17 53 53.0 -0.3**
comp=Z,3.0nm,0.9s
**HORU Horodok 78.14 342** P **P** **17 53 53.4 -0.2**
**KSP Ksiaz 78.19 349** *eP* **P** **17 53 54.0 +0.3**
**OJC Ojcow 78.32 347** *eP* **P** **17 53 53.1 -1.5**
**OJC Ojcow 78.32 347** P **P** **17 53 54.7 +0.2**
OJC pmax pmax
comp=Z,17nm,1.3s
**OJC Ojcow 78.32 347** P **P** **17 53 54.7 +0.2**
**KWP Kalwaria Pacla 78.43 345** *eP* **P** **17 53 56.5 +1.4**
**KWP Kalwaria Pacla 78.43 345** P **P** **17 53 56.5 +1.4**
**KWP Kalwaria Pacla 78.43 345** P **P** **17 53 56.5 +1.4**
**BRG Berggiesshubel 78.43 350** *eP* **P** **17 53 55.6 +0.5**
BRG Amp 17 53 56.5
comp=Z,11nm,1.4s
**BRG Berggiesshubel 78.43 350** *eP* **P** **17 53 55.6 +0.5**
BRG pmax pmax
comp=Z,11nm,1.4s
**PYA1 Pyatigorsk 78.52 329** *i* P **P** **17 53 56.5 +0.7**
**DPC Dobruska-Polom 78.67 349** P **P** **17 53 57.5 +1.0**
DPC pmax pmax
comp=Z,8.0nm,1.1s
**DPC Dobruska-Polom 78.67 349** *eP* **P** **17 53 57.5 +1.0**
DPC *e*pP **sP** **17 54 08.5 +3.1**
**KIV Kislovodsk 78.75 329** *eP* **P** **17 53 58.3 +1.2**
KIV pmax pmax
comp=Z,9.0nm,1.0s
**KMPD K-Podol'skiy 78.76 342** P **P** **17 53 58.0 +1.1**
**NCK Nalchik 78.86 329** *i* P **P** **17 53 58.6 +0.9**
NCK pmax pmax
comp=Z,20nm,1.0s
**KRLC Kraliky 78.88 348** *eP* **P** **17 53 58.5 +0.8**
**KBZ Khabaz 78.88 329** P **P** **17 53 59.0 +1.3**
comp=Z,7.3nm,0.9s,baz=61,slow=3.4,SNR=9.2
**KBZ Khabaz 78.88 329** *ceP* **P** **17 53 56.7 -1.0**
KBZ pmax pmax
comp=Z,13nm,1.1s
**MOX Moxa 78.89 352** P **P** **17 53 58.2 +0.6**
MOX pmax pmax
comp=Z,8.0nm,1.0s
**HRA Herat 78.94 311** P **P** **17 53 59.2 +0.7**
HRA IAmb IAmb 17 54 00.3
comp=Z,7.7nm,1.1s
**SHA1 Shidzhatmaz 78.95 329** *i* P **P** **17 53 57.5 -0.9**
**NIE Niedzica 79.03 346** *eP* **P** **17 53 58.3 -0.2**
**MORC Moravsky Berou 79.07 348** P **P** **17 53 58.5 -0.3**
MORC pmax pmax
comp=Z,12nm,1.3s
**MORC Moravsky Berou 79.07 348** *eP* **P** **17 53 59.5 +0.7**
**MORC Moravsky Berou 79.07 348** P **P** **17 53 58.5 -0.3**

MORC IAmb IAmb 17 54 00.6
comp=Z,12nm,1.3s
**NKC Novy Kostel 79.21 351** *eP* **P** 17 54 00.1 +0.6
**KSV Kosov 79.27 343** P **P** 17 54 00.1 +0.3
**CRVS Cervenica-Dubn 79.34 345** *eP* **P** 17 54 01.6 +1.4
**CRVS Cervenica-Dubn 79.34 345** *eP* **P** 17 54 01.6 +1.4
**ZEI Tsey 79.38 328** *eP* **P** 17 54 00.7 -0.1
ZEI pmax pmax
comp=Z,13nm,1.0s
**LANS Liptovska Anna 79.41 347** *eP* **P** 17 54 02.3 +1.7
**LANS Liptovska Anna 79.41 347** *eP* **P** 17 54 02.3 +1.7
**VRAC Vranov 79.66 348** *eP* **P** 17 54 03.0 +1.1
**GRF Grafenberg Arr 79.86 352** *eP* **P** 17 54 03.4 +0.3
comp=Z,12nm,1.1s,baz=12,slow=4.9
**BUR08 Bucovina Ar. S 79.89 342** P **P** 17 54 03.8 +0.5
**BURAR Bucovina Array 79.91 342** P **P** 17 54 03.8 +0.4
BURAR IAmb IAmb 17 54 06.2
comp=Z,8.2nm,0.7s
**KRUC Moravsky 79.93 349** P **P** 17 54 04.3 +1.0
KRUC pmax pmax
comp=Z,9.0nm,1.3s
**KRUC Moravsky 79.93 349** *eP* **P** 17 54 04.3 +1.0
**JAVC Velka Javorina 79.96 348** *eP* **P** 17 54 05.7 +2.1
**VYHS Vyhne 80.15 347** *eP* **P** 17 54 05.9 +1.3
**VYHS Vyhne 80.15 347** *eP* **P** 17 54 05.9 +1.3
**KHC Kasperske Hory 80.19 350** *i* P **P** 17 54 02.0 -2.8
KHC pmax pmax
comp=Z,17nm,1.2s
**KHC Kasperske Hory 80.19 350** *eP* **P** 17 54 05.0 +0.1
KHC *ep*P **sP** 17 54 16.2 +2.5
**KHC Kasperske Hory 80.19 350** P **P** 17 54 04.9 +0.1
KHC IAmb IAmb 17 54 06.8
comp=Z,7.4nm,1.1s
**WRA Warramunga Arr 80.29 222** P **P** 17 54 04.2 -1.4
comp=Z,1.6nm,1.0s,baz=35,slow=5.7,SNR=7.4
**WRA Warramunga Arr 80.29 222** *i* P **P** 17 54 06.5 +1.0
WRA pmax pmax
comp=Z,1.0nm,0.8s
**CKRC Cesky Krumlov 80.42 350** *eP* **P** 17 54 06.7 +0.7
**GERES GERESS Array B 80.46 350** P **P** 17 54 06.8 +0.4
comp=Z,2.4nm,0.8s,baz=35,slow=4.9,SNR=14
**GERES GERESS Array B 80.46 350** P **P** 17 54 06.6 +0.3
**CONA Conrad Observa 81.11 349** *i* P **P** 17 54 10.9 +1.1
comp=Z,9.4nm,1.4s,SNR=4.5
**FLN La Foliniere 81.34 360** *eP* **P** 17 54 10.7 -0.2
FLN pmax pmax
comp=Z,27nm,1.1s
**CDF Champ du Feu 81.44 354** *eP* **P** 17 54 11.8 +0.3
CDF pmax pmax
comp=Z,9.0nm,1.1s
**LDF La Druitiere 81.50 359** *eP* **P** 17 54 11.4 -0.4
LDF pmax pmax
comp=Z,47nm,1.7s
**GRR Gorron 81.71 360** *eP* **P** 17 54 12.9 0.0
GRR pmax pmax
comp=Z,50nm,1.6s
**ROSF Rostrenen 81.74 2** *eP* **P** 17 54 13.2 +0.2
ROSF pmax pmax
comp=Z,88nm,1.5s
**MLR Muntele Rosu 81.80 341** LR LR 18 35 27.4
comp=Z,77nm,18.9s,baz=320,slow=39
**ARSA Arzberg 81.82 349** *eP* **P** 17 54 14.9 +1.4
comp=Z,5.0nm,0.8s
**SGMF Saint Gilles 81.84 1** *eP* **P** 17 54 13.7 +0.2
SGMF pmax pmax
comp=Z,41nm,1.4s
**HINF Hinteralfeld 82.05 355** *eP* **P** 17 54 18.5 +3.7
HINF pmax pmax
comp=Z,14nm,1.5s
**RETA Reutte 82.09 352** *eP* **P** 17 54 16.0 +1.0
comp=Z,7.1nm,1.1s
**WATA Walderalm 82.17 351** *eP* **P** 17 54 16.2 +0.7
comp=Z,14nm,1.1s
**MOTA Moosalm 82.20 352** *eP* **P** 17 54 16.3 +0.6
comp=Z,13nm,1.2s
**WTTA Wattenberg 82.23 351** *eP* **P** 17 54 16.5 +0.6
comp=Z,8.5nm,0.8s
**KBA Koelnbreinsper 82.24 350** *eP* **P** 17 54 17.4 +1.5
comp=Z,14nm,0.6s
**DAVA Damuels 82.37 353** *eP* **P** 17 54 17.5 +1.0
comp=Z,8.4nm,1.2s
**SOKA Soboth 82.44 349** *i* P **P** 17 54 18.0 +1.2
comp=Z,13nm,1.3s,SNR=6.5
**FETA Feichten 82.56 352** *i* P **P** 17 54 18.7 +1.1
comp=Z,9.0nm,1.0s,SNR=4.7
**OBKA Obir 82.67 349** *eP* **P** 17 54 19.7 +1.7
comp=Z,8.4nm,0.8s
**LOR Lormes 82.75 357** *eP* **P** 17 54 19.0 +0.7
LOR pmax pmax
comp=Z,52nm,2.1s
**SSF Saint Saulge 82.96 357** *eP* **P** 17 54 20.1 +0.6
SSF pmax pmax
comp=Z,3.0nm,0.6s
**AVF Avril sur Loir 83.24 357** *eP* **P** 17 54 21.3 +0.4
AVF pmax pmax
comp=Z,10.0nm,1.1s
**SMF Signal de Mont 83.37 357** *eP* **P** 17 54 20.7 -0.9
SMF pmax pmax
comp=Z,14nm,1.2s
**ASAR Alice Springs 83.77 221** P **P** 17 54 23.0 -0.8
comp=Z,0.8nm,0.7s,baz=25,slow=5.5,SNR=8.3
**LPG La Plagne 84.37 355** *eP* **P** 17 54 29.3 +2.2
LPG pmax pmax
comp=Z,5.0nm,0.9s
**BNI Bardonecchia 84.82 355** P **P** 17 54 30.7 +1.6
BNI pmax pmax
comp=Z,12nm,1.1s
**BNI Bardonecchia 84.82 355** P **P** 17 54 30.7 +1.6
**ORIF Oris-en-Rattie 85.00 355** *eP* **P** 17 54 32.4 +2.4
ORIF pmax pmax
comp=Z,7.0nm,0.9s
**MBDF Montbardon 85.14 354** *eP* **P** 17 54 31.6 +0.8
MBDF pmax pmax
comp=Z,8.0nm,0.8s
**LFF La Frestale 85.15 359** *eP* **P** 17 54 34.6 +4.0
LFF pmax pmax
comp=Z,152nm,2.2s
**MARD Mardin 85.35 328** P **P** 17 54 33.1 +1.2
**BRTR Keskin Array B 85.36 334** P **P** 17 54 32.1 +0.1
comp=Z,3.1nm,0.8s,baz=41,slow=3.9,SNR=7.1
**BRTR Keskin Array B 85.36 334** *ceP* **P** 17 54 32.7 +0.7
BRTR pmax pmax
comp=Z,3.0nm,0.8s
**BNN Bunyan 85.53 332** P **P** 17 54 34.0 +1.2
**ETSF Etsaut 87.20 360** *eP* **P** 17 54 42.2 +1.3
ETSF pmax pmax
comp=Z,88nm,2.1s
**ESDC Sonseca Array 90.38 2** P **P** 17 54 55.1 -0.9
comp=Z,0.3nm,0.3s,baz=8.2,slow=4.8,SNR=4.2
**TSUM Tsumeb 145.66 328** PKPbc **PKPab** 18 01 34.0 +0.2
comp=Z,11nm,1.0s,baz=20,slow=3.5,SNR=9.6
**TSUM Tsumeb 145.66 328** **PKPdf** 18 01 30.0 -3.2
**BOSA Boshof 150.65 308** PKPbc **PKPbc** 18 01 46.6 0.0
comp=Z,2.3nm,0.6s,baz=35,slow=3.1,SNR=9.0

**MAN 11 17:46:08.1,15°.98N×119°.97E,h23km,mb4.0,ML2.8, MS2.4,Luzon**

*KOLA **11** 18:05:40.1,66°.91N×20°.53E,h0km,ML2.5*
*IDC **11** 18:05:42.0±1.0,67°.13N×21°.27E,h0km,mb1 2.7/3, mb1mx2.7/31,mbtmp2.6/3,ML1.9/3,Error ellipse: s-maj=11.7km s-min=6.4km az=128.0*
*HEL **11** 18:05:41.8±0.1,67°.07N×20°.95E,h0km,ML2.2, ML2.4(UPP),Explosion*
*UPP **11** 18:05:41.0±0.1,67°.06N×20°.92E,h0km,ML2.4,Explosion*
**ISC 11 18:05:40.7±0.8,67°.08N±0°.03×20°.93E±0°.03,h0km,n47, σ1§03/56,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MASU** | **Masugnsbyn** | **0.56** | **47** | P | **Pg** | **18 05 52.1** | **+0.6** |
| **MASU** | **Masugnsbyn** | **0.56** | **47** | P | **Pg** | **18 05 52.1** | **+0.6** |
| **PAJU** | **Pajala** | **0.86** | **93** | P | **Pg** | **18 05 56.8** | **-0.3** |
| **PAJU** | **Pajala** | **0.86** | **93** | *i* P | **Pg** | **18 05 56.8** | **-0.3** |
| **KUA** | **Kurravaara** | **0.91** | **346** | P | **Pg** | **18 05 58.0** | **-0.1** |
| **KUA** | **Kurravaara** | **0.91** | **346** | *eP* | **Pg** | **18 05 58.0** | **-0.1** |
| **HARU** | **Harads** | **0.92** | **179** | P | **Pg** | **18 05 57.8** | **-0.5** |
| **HARU** | **Harads** | **0.92** | **179** | *eP* | **Pg** | **18 05 57.8** | **-0.5** |
| **SALU** | **Saltoluokta** | **0.99** | **289** | P | **Pg** | **18 05 59.8** | **0.0** |
| **SALU** | **Saltoluokta** | **0.99** | **289** | *eP* | **Pg** | **18 05 59.8** | **0.0** |
| **LANU** | **Lannavaara** | **1.06** | **22** | P | **Pg** | **18 06 00.6** | **-0.4** |
| LANU | | | | S | **Sb** | **18 06 15.6** | **-0.7** |
| **LANU** | **Lannavaara** | **1.06** | **22** | *eP* | **Pg** | **18 06 00.8** | **-0.2** |
| **NIKU** | **Nikkaluokta** | **1.08** | **318** | P | **Pg** | **18 06 01.2** | **-0.2** |
| **NIKU** | **Nikkaluokta** | **1.08** | **318** | *eP* | **Pg** | **18 06 01.2** | **-0.2** |
| **KOVU** | **Salmi** | **1.19** | **346** | P | **Pg** | **18 06 03.2** | **-0.3** |
| **KOVU** | **Salmi** | **1.19** | **346** | *eP* | **Pg** | **18 06 03.2** | **-0.3** |
| **KLF** | **Kolari** | **1.19** | **81** | *eP* | **Pg** | **18 06 03.0** | **-0.5** |
| **KALU** | **Kalix** | **1.56** | **140** | P | **Pn** | **18 06 09.3** | **-0.3** |
| **KALU** | **Kalix** | **1.56** | **140** | *eP* | **Pn** | **18 06 09.3** | **-0.3** |
| **TOF** | **Tornio** | **1.69** | **125** | *eP* | **Pn** | **18 06 11.4** | **+0.1** |
| TOF | | | | MSG | | 18 06 46.2 | |
| comp=Z,15nm,0.2s | | | | | | | |
| **HEF** | **Hetta** | **1.69** | **37** | *eP* | **Pn** | **18 06 11.4** | **-0.1** |
| **HEF** | **Hetta** | **1.69** | **37** | *eP* | **Pn** | **18 06 11.7** | **+0.2** |
| HEF | | | | *eS* | **Sg** | **18 06 34.5** | **-0.6** |
| HEF | | | | MSG | | 18 06 39.4 | |
| comp=Z,15nm,0.2s | | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.94** | **359** | *eP* | **Pb** | **18 06 16.3** | **-0.6** |
| **KIF** | **Kilpisjarvi** | **1.94** | **359** | *eP* | **Pb** | **18 06 16.6** | **-0.3** |
| KIF | | | | *eS* | **Sb** | **18 06 41.4** | **-0.1** |
| KIF | | | | MSG | | 18 06 48.4 | |
| comp=Z,33nm,0.2s | | | | | | | |
| **RNF** | **Rovaniemi** | **2.06** | **101** | *eP* | **Pn** | **18 06 17.6** | **+1.0** |
| **I37NO** | **I37NO** | **2.19** | **338** | *i* | | 18 19 50.0 | |
| baz=152,slow=334,SNR=2.4 | | | | | | | |
| **SGF** | **Sodankyl** | **2.20** | **78** | *eP* | **Pn** | **18 06 20.0** | **+1.5** |
| **OBF4** | **Vikkela, Lumij** | **2.84** | **141** | *eP* | **Pn** | **18 06 27.9** | **+0.6** |
| **OUL** | **Oulu** | **2.84** | **132** | *eP* | **Pn** | **18 06 28.4** | **+1.1** |
| **ARA0** | **ARCESS Array S** | **3.00** | **32** | *eP* | **Pn** | **18 06 30.5** | **+1.0** |
| ARA0 | | | | *eS* | **Sn** | **18 07 06.2** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **3.00** | **32** | Pn | **Pn** | **18 06 30.3** | **+0.9** |
| baz=218,slow=13,SNR=32 | | | | | | | |
| ARCES | | | | Lg | Lg | 18 07 10.0 | |
| baz=214,slow=21,SNR=7.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **3.00** | **32** | P | **Pn** | **18 06 30.1** | **+0.7** |
| ARCES | | | | S | **Sb** | **18 07 10.2** | **-1.8** |
| **VRF** | **Varrio** | **3.42** | **75** | *eP* | **Pn** | **18 06 35.8** | **+0.6** |
| **KEV** | **Kevo** | **3.50** | **37** | *eP* | **Pn** | **18 06 37.2** | **+0.8** |
| KEV | | | | *eS* | **Sn** | **18 07 17.2** | **-1.1** |
| **VAF** | **Ylistaro** | **4.12** | **169** | *eP* | **Pn** | **18 06 46.4** | **+1.7** |
| **APA0** | **Apatity Array** | **4.70** | **78** | P | **Pn** | **18 06 54.8** | **+2.1** |
| APA0 | | | | S | **Sn** | **18 07 48.2** | **+0.5** |
| **RMF** | **Romuvaara** | **4.70** | **123** | *eP* | **Pn** | **18 06 54.3** | **+1.5** |
| **SUF** | **Sumiainen** | **4.91** | **151** | *eP* | **Pn** | **18 06 56.9** | **+1.3** |
| SUF | | | | *eS* | **Sn** | **18 07 51.6** | **-1.4** |
| **PRVG** | **Vayda Guba** | **4.94** | **52** | P | **Pn** | **18 06 57.3** | **+1.2** |
| PRVG | | | | S | **Sn** | **18 07 56.0** | **+2.2** |
| **KEF** | **Keuruu** | **5.21** | **159** | *eP* | **Pn** | **18 07 01.3** | **+1.5** |
| **KAF** | **Kangasniemi** | **5.49** | **153** | *eP* | **Pn** | **18 07 06.0** | **+2.4** |
| **TERR** | **Teriberka** | **5.71** | **62** | S | **Sn** | **18 08 12.3** | **-0.3** |
| **JOF** | **Joensuu** | **6.06** | **129** | *eP* | **Pn** | **18 07 12.3** | **+0.9** |
| **FIA0** | **FINESS Array S** | **6.08** | **156** | *eP* | **Pn** | **18 07 12.8** | **+1.1** |
| **FINES** | **FINESS Array B** | **6.08** | **156** | Pn | **Pn** | **18 07 13.1** | **+1.3** |
| comp=Z,0.1nm,0.3s,baz=348,slow=14,SNR=8.3 | | | | | | | |
| FINES | | | | Sn | **Sn** | **18 08 20.9** | **-1.1** |
| comp=Z,0.3nm,0.3s,baz=341,slow=22,SNR=7.4 | | | | | | | |
| FINES | | | | Lg | Lg | 18 08 53.9 | |
| comp=Z,0.1nm,0.3s,baz=337,slow=27,SNR=1.8 | | | | | | | |
| **RAF** | **Rauma** | **6.09** | **176** | *eP* | **Pn** | **18 07 12.8** | **+1.0** |
| **NOA** | **NORSAR Array B** | **7.40** | **220** | Pn | **Pn** | **18 07 32.4** | **+2.5** |
| comp=Z,0.0nm,0.3s,baz=29,slow=13,SNR=6.5 | | | | | | | |
| NOA | | | | Lg | Lg | 18 09 38.5 | |
| comp=Z,0.0nm,0.3s,baz=33,slow=22,SNR=3.6 | | | | | | | |

*TUL **11** 18:32:58.8±1.6,36°.48N±0°.03×98°.75W±0°.05,h10km±5km, ML3.2,mb_Lg2.9/48(NEIC),Error ellipse: s-maj=5.4km s-min=3.7km az=104.0*
**NEIC 11 18:32:59.7±1.4,36°.48N±0°.01×98°.67W±0°.05,h10km±6km, Error ellipse: s-maj=5.3km s-min=1.6km az=93.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK035** | **E0210 Rd and N** | **0.23** | **351** | Pg | Pg | 18 33 03.8 | -0.6 |
| OK035 | | | | Sg | Sg | 18 33 07.5 | -0.2 |
| **U32A** | **Winter Ranch,** | **0.29** | **249** | Pg | Pg | 18 33 03.7 | -1.9 |
| U32A | | | | Sg | Sg | 18 33 07.3 | -2.1 |
| **OK032** | **Salt Plains WL** | **0.49** | **49** | | Pg | 18 33 09.2 | 0.0 |
| OK032 | | | | Sg | Sb | 18 33 16.7 | -0.8 |
| **CROK** | **Carrier** | **0.55** | **87** | Pg | Pg | 18 33 10.4 | 0.0 |
| CROK | | | | Sg | Sb | 18 33 19.0 | -0.3 |
| **KAN14** | **Manchester OK** | **0.74** | **50** | Pg | Pg | 18 33 13.8 | -0.1 |
| KAN14 | | | | Sg | Sg | 18 33 23.4 | -0.2 |
| **GC02** | **Grant County #** | **0.75** | **60** | Pg | Pg | 18 33 14.0 | -0.1 |
| GC02 | | | | Sg | Sg | 18 33 24.4 | +0.5 |
| **KAN10** | **Anthony SW Sta** | **0.79** | **36** | Pg | Pg | 18 33 14.4 | -0.5 |
| KAN10 | | | | Sg | Sg | 18 33 24.5 | -0.7 |
| **KAN16** | **Harper SW Stat** | **0.89** | **33** | | Pg | 18 33 15.9 | -0.8 |
| KAN16 | | | | Sg | Sb | 18 33 28.7 | -0.3 |
| **KAN17** | **Caldwell West** | **0.92** | **52** | Pg | Pg | 18 33 17.0 | -0.3 |
| KAN17 | | | | Sg | Sb | 18 33 29.9 | 0.0 |
| **KAN08** | **Anthony NE Sta** | **0.93** | **37** | | Pg | 18 33 16.6 | -1.0 |
| KAN08 | | | | Sg | Sb | 18 33 30.4 | +0.1 |
| **KAN12** | **Harper NE Stat** | **0.97** | **33** | | Pg | 18 33 17.6 | -0.8 |
| **KAN01** | **Argonia South** | **0.99** | **47** | | Pg | 18 33 18.3 | -0.4 |
| **KAN06** | **Argonia West S** | **1.00** | **40** | | Pg | 18 33 18.1 | -0.9 |
| **KAN13** | **South Haven SW** | **1.09** | **61** | Pn | Pb | 18 33 20.1 | -0.5 |
| **BCOK** | **Bluff Creek, N** | **1.19** | **134** | | Pb | 18 33 21.7 | -0.5 |
| BCOK | | | | Sg | Sg | 18 33 38.2 | +0.2 |
| **OK029** | **Liberty Lake** | **1.20** | **125** | | Pb | 18 33 21.6 | -0.8 |
| OK029 | | | | Sg | Sn | 18 33 38.6 | -0.1 |
| **BLOK** | **Blackwell** | **1.20** | **76** | | Pb | 18 33 21.9 | -0.5 |
| **OK025** | **Westminster Rd** | **1.40** | **129** | | Pn | 18 33 25.2 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.45** | **137** | Pn | Pn | 18 33 25.6 | -0.3 |
| **OK033** | **Mehan** | **1.46** | **107** | | Pn | 18 33 26.3 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.47** | **137** | Pn | Pn | 18 33 26.2 | 0.0 |
| **OK031** | **S. Brethren Rd** | **1.57** | **109** | | Pn | 18 33 27.9 | +0.4 |
| **FNO** | **Franklin** | **1.60** | **140** | | Pn | 18 33 28.4 | +0.4 |
| **QUOK** | **Quay** | **1.61** | **101** | | Pn | 18 33 28.4 | +0.3 |
| **OK030** | **Cody Creek RV** | **1.62** | **109** | | Pn | 18 33 28.8 | +0.6 |
| **OK034** | **N. Norfolk Rd.** | **1.65** | **106** | | Pn | 18 33 29.0 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.74** | **183** | Pn | Pn | 18 33 29.3 | -0.7 |
| **T35A** | **Sooner Cattle** | **1.79** | **75** | | Pn | 18 33 31.2 | +0.7 |
| **W35A** | **Tecumseh** | **1.97** | **132** | | Pn | 18 33 33.8 | +0.8 |
| **X34A** | **Smith Ranch, M** | **2.00** | **160** | | Pn | 18 33 34.6 | +1.1 |
| **TUL1** | **Leonard** | **2.40** | **103** | | Pn | 18 33 39.7 | +0.8 |
| TUL1 | | | | IAmb_Lg | | 18 34 15.2 | |
| comp=Z,37nm,0.7s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **340** | | Pn | 18 33 41.2 | +1.1 |
| **LOOK** | **Love County** | **2.77** | **153** | | Pn | 18 33 43.8 | -0.2 |
| LOOK | | | | IAmb_Lg | | 18 34 29.2 | |
| comp=Z,41nm,0.8s | | | | | | | |
| **AMTX** | **Amarillo** | **2.93** | **238** | | Pn | 18 33 46.5 | +0.2 |
| AMTX | | | | IAmb_Lg | | 18 34 35.2 | |
| comp=Z,58nm,0.8s | | | | | | | |
| **KSU1** | **Kansas State U** | **3.08** | **31** | | Pn | 18 33 48.7 | +0.4 |
| **X37A** | **Clayton** | **3.29** | **124** | | Pn | 18 33 51.6 | +0.5 |
| X37A | | | | IAmb_Lg | | 18 34 53.6 | |
| comp=Z,50nm,0.8s | | | | | | | |
| **HHAR** | **Hobbs** | **3.82** | **92** | | Pn | 18 33 57.9 | -0.6 |
| **ABTX** | **Abilene, Hawle** | **3.93** | **192** | | Pn | 18 34 00.7 | +0.6 |
| ABTX | | | | IAmb_Lg | | 18 35 05.1 | |
| comp=Z,25nm,1.1s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.03** | **310** | | Pn | 18 34 01.4 | -0.1 |
| KSCO | | | | IAmb_Lg | | 18 35 15.9 | |
| comp=Z,39nm,0.8s | | | | | | | |
| **W39A** | **Magazine** | **4.17** | **106** | | Pn | 18 34 02.8 | -0.5 |
| W39A | | | | IAmb_Lg | | 18 35 13.8 | |
| comp=Z,38nm,0.9s | | | | | | | |
| **MSTX** | **Muleshoe** | **4.19** | **234** | | Pn | 18 34 03.6 | -0.1 |
| MSTX | | | | IAmb_Lg | | 18 35 15.5 | |
| comp=Z,33nm,0.9s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.42** | **136** | Pn | Pn | 18 34 07.9 | +1.2 |
| Z38A | | | | IAmb_Lg | | 18 35 20.8 | |
| comp=Z,35nm,1.1s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.58** | **113** | | Pn | 18 34 08.7 | -0.2 |
| **WHTX** | **Lake Whitney,** | **4.59** | **167** | Pn | Pn | 18 34 08.5 | -0.6 |
| **T25A** | **Trinidad** | **4.66** | **280** | | Pn | 18 34 09.6 | -0.6 |
| **U40A** | **Yellville** | **4.69** | **90** | | Pn | 18 34 10.9 | +0.5 |
| U40A | | | | IAmb_Lg | | 18 35 39.2 | |
| comp=Z,21nm,0.9s | | | | | | | |
| **BGNE** | **Belgrade** | **4.94** | **5** | | Pn | 18 34 13.8 | -0.1 |
| BGNE | | | | IAmb_Lg | | 18 35 46.0 | |
| comp=Z,32nm,0.8s | | | | | | | |
| **237A** | **Washetta, Mont** | **5.06** | **151** | Pn | Pn | 18 34 15.3 | -0.2 |
| 237A | | | | IAmb_Lg | | 18 35 54.0 | |
| comp=Z,22nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.16** | **111** | | Pn | 18 34 16.4 | -0.5 |
| X40A | | | | IAmb_Lg | | 18 35 46.4 | |
| comp=Z,17nm,0.7s | | | | | | | |
| **OGNE** | **Ogallala** | **5.17** | **330** | | Pn | 18 34 17.8 | +0.6 |
| **MGMO** | **Mountain Grove** | **5.18** | **81** | Pn | Pn | 18 34 17.3 | +0.1 |
| **WHAR** | **Wooly Hollow** | **5.31** | **101** | | Pn | 18 34 18.6 | -0.4 |
| WHAR | | | | IAmb_Lg | | 18 35 51.9 | |
| comp=Z,24nm,1.0s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.33** | **94** | | Pn | 18 34 17.8 | -1.4 |
| FCAR | | | | IAmb_Lg | | 18 35 49.8 | |
| comp=Z,24nm,0.9s | | | | | | | |
| **WLAR** | **White Oak Lake** | **5.34** | **120** | IAmb_Lg | | 18 35 48.3 | |
| comp=Z,17nm,0.8s | | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.38** | **102** | IAmb_Lg | | 18 36 06.5 | |
| comp=Z,18nm,0.7s | | | | | | | |
| **R40A** | **Maddies Static** | **5.41** | **69** | IAmb_Lg | | 18 35 55.0 | |
| comp=Z,18nm,0.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.61** | **285** | | Pn | 18 34 22.9 | -0.5 |
| **435B** | **Jarrell** | **5.76** | **171** | IAmb_Lg | | 18 36 07.3 | |
| comp=Z,21nm,0.8s | | | | | | | |
| **JCT** | **Junction City** | **6.06** | **189** | IAmb_Lg | | 18 36 19.2 | |
| comp=Z,19nm,0.8s | | | | | | | |
| **CCM** | **Cathedral Cave** | **6.12** | **73** | IAmb_Lg | | 18 36 14.2 | |
| comp=Z,23nm,0.7s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.63** | **85** | IAmb_Lg | | 18 36 40.6 | |
| comp=Z,12nm,0.7s | | | | | | | |
| **SCIA** | **State Center** | **6.87** | **36** | IAmb_Lg | | 18 36 51.3 | |
| comp=Z,21nm,0.8s | | | | | | | |
| **833A** | **Chaparral WMA,** | **8.16** | **185** | IAmb_Lg | | 18 37 33.7 | |
| comp=Z,9.8nm,0.9s | | | | | | | |

*IGIL **11** 18:43:44.8,35°.63N×4°.87W,h5km,ML2.0*
*INMG **11** 18:43:45.8±0.7,35°.57N×4°.82W,h31km,ML2.1,Error ellipse: s-maj=6.0km s-min=4.0km az=57.0*
*CNRM **11** 18:43:48.4,35°.06N×4°.52W,h51km*
**ISC 11 18:43:43.5±1.2,35°.45N±0°.04×4°.86W±0°.06,h35km,n17, σ1§39/32,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.79** | **107** | P | **Pn** | **18 43 59.2** | **+1.1** |
| PALE | | | | S | **Sn** | **18 44 08.6** | **0.0** |
| **SICH** | **Sidi Chahed** | **1.39** | **196** | S | **Sn** | **18 44 24.0** | **+0.5** |
| **LCRM** | **LCR** | **1.76** | **180** | P | **Pn** | **18 44 13.5** | **+1.9** |
| LCRM | | | | S | **Sn** | **18 44 31.9** | **-0.9** |
| **MD31** | **MD31** | **2.57** | **178** | P | **Pn** | **18 44 22.7** | **0.0** |
| MD31 | | | | S | Sn | 18 44 49.1 | -3.8 |
| **MDT** | **Midelt** | **2.63** | **175** | P | **Pn** | **18 44 23.6** | **+0.1** |
| MDT | | | | S | **Sn** | **18 44 51.2** | **-3.1** |
| **PVAQ** | **Vaqueiros** | **3.02** | **311** | *ePn* | **Pn** | **18 44 29.8** | **+1.0** |
| PVAQ | | | | *eSn* | **Sn** | **18 45 03.2** | **-0.6** |
| PVAQ | | | | A | A | 18 45 04.0 | |
| 7.0nm,0.2s | | | | | | | |
| **PCVE** | **Castro Verde** | **3.36** | **311** | *ePn* | **Pn** | **18 44 34.5** | **+1.0** |
| PCVE | | | | *eSn* | **Sn** | **18 45 11.7** | **-0.5** |
| PCVE | | | | A | A | 18 45 14.5 | |
| 2.5nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **3.58** | **302** | *eP* | **Pn** | **18 44 37.8** | **+1.3** |
| MORF | | | | *eS* | **Sn** | **18 45 16.5** | **-1.1** |
| MORF | | | | IAML | | 18 45 17.6 | |
| comp=N,5.1nm,0.4s | | | | | | | |
| **MESJ** | **Messejana** | **3.61** | **312** | *eP* | **Pn** | **18 44 37.9** | **+1.0** |
| MESJ | | | | *eS* | **Sn** | **18 45 16.5** | **-1.7** |
| MESJ | | | | IAML | | 18 45 18.7 | |
| comp=E,3.7nm,0.1s | | | | | | | |
| **MESJ** | **Messejana** | **3.61** | **312** | *ePn* | **Pn** | **18 44 37.9** | **+1.0** |
| MESJ | | | | *eSn* | **Sn** | **18 45 17.2** | **-1.0** |
| MESJ | | | | A | A | 18 45 21.4 | |
| comp=E,4.2nm,0.3s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.62** | **299** | *ePn* | **Pn** | **18 44 39.1** | **+2.1** |
| PFVI | | | | *eSn* | **Sn** | **18 45 17.5** | **-1.0** |
| **PTEO** | **Sao Teotonio** | **3.75** | **305** | *ePn* | **Pn** | **18 44 40.7** | **+1.9** |
| PTEO | | | | *eSn* | **Sn** | **18 45 21.1** | **-0.7** |
| **PNCL** | **Nicolau / Gran** | **3.97** | **313** | *ePn* | **Pn** | **18 44 42.3** | **+0.9** |
| PNCL | | | | *eSn* | **Sn** | **18 45 25.9** | **-1.2** |
| PNCL | | | | A | A | 18 45 27.1 | |
| comp=E,3.1nm,0.5s | | | | | | | |
| **EVO** | **Evora** | **3.98** | **322** | *ePn* | **Pn** | **18 44 43.3** | **+1.3** |
| EVO | | | | *eSn* | **Sn** | **18 45 26.0** | **-1.5** |
| EVO | | | | A | A | 18 45 27.7 | |
| comp=E,5.2nm,0.1s | | | | | | | |
| **PESTR** | **Estremoz** | **4.05** | **328** | *ePn* | **Pn** | **18 44 44.2** | **+1.2** |
| PESTR | | | | *eSn* | **Sn** | **18 45 27.4** | **-1.8** |
| PESTR | | | | A | A | 18 45 28.1 | |
| comp=E,2.4nm,0.4s | | | | | | | |
| **PMRV** | **Marv??o** | **4.46** | **334** | *ePn* | **Pn** | **18 44 49.6** | **+1.1** |
| PMRV | | | | *eSn* | **Sn** | **18 45 37.1** | **-2.1** |
| PMRV | | | | A | A | 18 45 39.3 | |
| comp=E,2.2nm,0.5s | | | | | | | |
| **PMTG** | **Montargil** | **4.50** | **324** | *ePn* | **Pn** | **18 44 50.1** | **+0.9** |
| PMTG | | | | *eSn* | **Sn** | **18 45 38.7** | **-1.6** |
| PMTG | | | | A | A | 18 45 41.7 | |
| comp=E,2.7nm,0.7s | | | | | | | |

**IDC 11 18:46:25.9±2.0,2°.49N×127°.01E,h0km,mb3.3/4, mb1 3.6/4,mb1mx3.4/31,mbtmp3.4/4,Error ellipse: s-maj=119.6km s-min=24.5km az=69.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.50** | **184** | P | P | 18 51 06.3 | +0.6 |
| 3.7nm,1.1s,baz=338,slow=16,SNR=3.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.43** | **162** | P | P | 18 51 36.2 | -0.7 |
| 0.5nm,0.6s,baz=341,slow=11,SNR=9.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.85** | **166** | P | P | 18 52 08.9 | +0.5 |
| 0.2nm,0.3s,baz=347,slow=7.0,SNR=6.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.73** | **326** | P | P | 18 56 25.4 | -0.2 |
| 0.1nm,0.3s,baz=118,slow=8.0,SNR=5.7 | | | | | | | |

**IDC 11 19:31:36.9±17.0,19°.12S×179°.98W,h371km±51km, mb2.9/3,mb1 3.0/4,mb1mx2.7/35,mbtmp3.6/4,Error ellipse: s-maj=347.7km s-min=117.4km az=83.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.33** | **306** | P | Pn | 19 32 32.6 | 0.0 |
| 1.7nm,0.3s,baz=120,slow=6.6,SNR=7.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.75** | **242** | P | P | 19 38 10.6 | +0.1 |
| 0.5nm,0.3s,baz=15,slow=16,SNR=2.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.96** | **261** | P | P | 19 39 01.4 | +0.1 |
| 0.3nm,0.3s,baz=96,slow=8.2,SNR=12 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.04** | **256** | P | P | 19 39 01.4 | -0.6 |
| 0.7nm,0.6s,baz=89,slow=8.7,SNR=12 | | | | | | | |

*TUL **11** 19:49:13.4±1.3,36°.48N±0°.03×98°.75W±0°.05,h7km±7km, ML3.1,mb_Lg2.8/30(NEIC),Error ellipse: s-maj=5.9km s-min=3.5km az=62.0*
**NEIC 11 19:49:13.5±1.0,36°.47N±0°.03×98°.72W±0°.06,h5km±2km, Error ellipse: s-maj=7.8km s-min=4.5km az=269.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X34A | Smith Ranch, M | 2.00 | 159 | | Pb | 19 49 49.4 | -1.0 |
| TUL1 | Leonard | 2.43 | 102 | | Pn | 19 49 54.3 | +0.4 |
| TUL1 | | | | IAmb_Lg | | 19 50 30.6 | |
| | comp=Z,34nm,0.8s | | | | | | |
| LOOK | Love County | 2.78 | 153 | | Pn | 19 49 59.6 | +0.9 |
| KSU1 | Kansas State U | 3.11 | 32 | IAmb_Lg | | 19 50 59.0 | |
| | comp=Z,22nm,0.8s | | | | | | |
| X37A | Clayton | 3.31 | 124 | | Pn | 19 50 06.4 | +0.4 |
| ABTX | Abilene, Hawle | 3.92 | 192 | | Pn | 19 50 15.9 | +1.5 |
| KSCO | Kaye Shedlock' | 4.00 | 310 | IAmb_Lg | | 19 51 24.3 | |
| | comp=Z,18nm,0.7s | | | | | | |
| MSTX | Muleshoe | 4.15 | 234 | IAmb_Lg | | 19 51 27.5 | |
| | comp=Z,20nm,0.9s | | | | | | |
| W39A | Magazine | 4.21 | 106 | Pn | Pn | 19 50 16.6 | -1.7 |
| Z38A | Mt. Pleasant | 4.44 | 135 | IAmb_Lg | | 19 51 37.0 | |
| | comp=Z,18nm,0.8s | | | | | | |
| MIAR | Mount Ida | 4.61 | 113 | Pn | Pn | 19 50 24.5 | +0.6 |
| T25A | Trinidad | 4.62 | 280 | Pn | Pn | 19 50 24.2 | 0.0 |
| U40A | Yellville | 4.73 | 90 | IAmb_Lg | | 19 51 53.9 | |
| | comp=Z,17nm,0.7s | | | | | | |
| BGNE | Belgrade | 4.95 | 5 | Pn | Pn | 19 50 27.8 | -0.8 |
| WHAR | Wooly Hollow | 5.35 | 101 | IAmb_Lg | | 19 52 07.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| FCAR | Ozark Folk Cen | 5.36 | 94 | IAmb_Lg | | 19 52 04.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| W41B | Gary Mavity, V | 5.41 | 102 | Pn | Pn | 19 50 34.4 | -0.5 |
| W41B | | | | IAmb_Lg | | 19 52 15.1 | |
| | comp=Z,17nm,0.8s | | | | | | |
| R40A | Maddies Statio | 5.45 | 69 | Pn | Pn | 19 50 35.4 | +0.1 |
| R40A | | | | IAmb_Lg | | 19 52 09.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| SDCO | Great Sand Dun | 5.57 | 285 | Pn | Pn | 19 50 36.2 | -1.1 |
| Q24A | Divide | 5.67 | 298 | IAmb_Lg | | 19 52 18.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| 435B | Jarrell | 5.75 | 170 | IAmb_Lg | | 19 52 21.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| JCT | Junction City | 6.04 | 189 | IAmb_Lg | | 19 52 32.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| K31A | O'Neill | 6.14 | 360 | IAmb_Lg | | 19 52 35.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 6.67 | 85 | IAmb_Lg | | 19 52 45.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| PHWY | Pilot Hill | 7.13 | 315 | IAmb_Lg | | 19 53 13.5 | |
| | comp=Z,9.5nm,0.8s | | | | | | |

*IDC* ***11*** *20:00:57.3±6.5,20˚.77S×179˚.24W,h607km±43km,mb2.7/4, mb1 3.0/5,mb1mx2.6/45,mbtmp3.6/5,Error ellipse: s-maj=178.5km s-min=22.5km az=148.0*

**ISC 11 20:00:56.1±1.8,21˚.0S±0˚.4×179˚.2W±0˚.3,h600km,n7, σ1ᵖ08/7,mb3.1/4,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 4.15 | 320 | P | P | 20 02 22.8 | 0.0 |
| | 1.2nm,0.3s,baz=107,slow=19,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 43.37 | 257 | P | P | 20 08 08.0 | +0.8 |
| | 1.3nm,0.6s,baz=97,slow=7.6,SNR=15 | | | | | | |
| WRA | Warramunga Arr | 43.47 | 263 | P | P | 20 08 07.8 | -0.2 |
| | 0.3nm,0.3s,baz=96,slow=7.7,SNR=10 | | | | | | |
| NVAR | Mina Array Bea | 82.09 | 44 | P | P | 20 12 15.7 | +0.4 |
| | 0.3nm,0.6s,baz=240,slow=7.2,SNR=2.2 | | | | | | |
| ILAR | Eielson Array | 88.99 | 13 | P | P | 20 12 47.8 | +0.3 |
| | 0.1nm,0.5s,baz=218,slow=4.7,SNR=4.2 | | | | | | |
| AKASG | Malin Array Be | 142.87 | 330 | PKP | PKPdf | 20 19 20.1 | -1.9 |
| | 0.9nm,0.4s,baz=44,slow=4.3,SNR=11 | | | | | | |
| GERES | GERESS Array B | 150.32 | 343 | PKPbc | PKPbc | 20 19 40.8 | +0.2 |
| | 0.3nm,0.5s,baz=352,slow=5.0,SNR=2.2 | | | | | | |

*IDC* ***11*** *20:03:21.4±0.9,21˚.90N×125˚.95E,h0km,mb3.9/7, mb1 4.0/9,mb1mx3.7/47,mbtmp3.9/9,ML3.4/2,MS3.2/10, Ms1 3.3/10,ms1mx2.9/88,Error ellipse: s-maj=28.8km s-min=17.4km az=79.0*

*NEIC* ***11*** *20:03:23.1±1.9,21˚.87N±0˚.09×125˚.8E±0˚.1,h10km±2km, mb4.1/14,Error ellipse: s-maj=19.2km s-min=14.8km az=95.0*

*JMA* ***11*** *20:03:27.1±0.2,22˚.44N×125˚.83E,h137km,M3.6*

**ISC 11 20:03:21.8±0.7,22˚.08N±0˚.06×126˚.00E±0˚.04,h10km,n66, σ2ᵖ42/68,mb4.0/15,MS3.2/8,Southeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JMJ2 | Miyako jima3 | 2.72 | 347 | P | Pn | 20 04 06.0 | +0.4 |
| JMJ2 | | | | eS | Sn | 20 04 35.8 | -2.8 |
| JOGS | Gusukube | 2.72 | 349 | P | Pn | 20 04 06.0 | +0.3 |
| JOGS | | | | eS | Sn | 20 04 35.3 | -3.4 |
| JTJ | Tarama | 2.81 | 335 | P | Pn | 20 04 07.1 | +0.2 |
| JTJ | | | | S | Sn | 20 04 37.8 | -3.1 |
| HATJ | Hateruma jima | 2.82 | 315 | eS | Sn | 20 04 38.1 | -3.0 |
| JKRS | Kuro-shima | 2.82 | 320 | P | Pn | 20 04 07.8 | +0.8 |
| JKRS | | | | eS | Sn | 20 04 38.9 | -2.2 |
| JIRB | Irabujima | 2.84 | 345 | P | Pn | 20 04 07.1 | -0.2 |
| JIRB | | | | eS | Sn | 20 04 38.7 | -2.8 |
| JIJ | Ishigaki jima | 2.84 | 323 | P | Pn | 20 04 07.2 | -0.1 |
| JIJ | | | | eS | Sn | 20 04 37.9 | -3.7 |
| JIKM | Ikemajima | 2.91 | 346 | P | Pn | 20 04 08.5 | +0.2 |
| JISG | Ishigakijimahi | 2.94 | 328 | P | Pn | 20 04 08.7 | +0.1 |
| IRIF | Iriomote-Funau | 3.06 | 318 | P | Pn | 20 04 10.7 | +0.3 |
| YOJ | Yonaguni jima | 3.63 | 311 | P | Pn | 20 04 18.6 | +0.5 |
| YOJ | | | | S | Sn | 20 04 57.2 | -3.8 |
| YOJ | Yonaguni jima | 3.63 | 311 | Pn | Pn | 20 04 18.4 | +0.3 |
| YOJ | | | | Sn | Sn | 20 04 54.0 | -7.0 |
| JYNG | Yonagunijimaku | 3.67 | 311 | P | Pn | 20 04 19.1 | +0.4 |
| JYNG | | | | eS | Sn | 20 04 57.9 | -4.1 |
| JKE | Kume jima 2 | 4.29 | 9 | P | Pn | 20 04 27.3 | +0.1 |
| JKE | | | | eS | Sn | 20 05 14.1 | -3.2 |
| JJT3 | Tamagusuku3 | 4.36 | 22 | eS | Sn | 20 05 17.0 | -2.1 |
| YULB | Yu-li | 4.53 | 288 | Pn | Pn | 20 04 27.3 | -3.3 |
| YULB | | | | Sn | Sn | 20 05 13.4 | -10 |
| NACB | Ninganchiao | 4.56 | 298 | Pn | Pn | 20 04 30.1 | -0.8 |
| NACB | | | | Sn | Sn | 20 05 15.1 | -8.9 |
| TWG | Pinlang | 4.62 | 280 | Pn | Pn | 20 04 28.4 | -3.4 |
| TWG | | | | Sn | Sn | 20 05 16.0 | -9.4 |
| JAGN | Aguni-jima | 4.63 | 14 | eS | Sn | 20 05 22.4 | -3.3 |
| SSLB | Suanglung | 4.95 | 291 | Pn | Pn | 20 04 34.7 | -1.7 |
| SSLB | | | | Sn | Sn | 20 05 26.3 | -7.4 |
| YHNB | Yeheng | 4.97 | 302 | Pn | Pn | 20 04 36.5 | -0.1 |
| TATO | Taipei | 5.04 | 306 | Pn | Pn | 20 04 38.9 | +1.4 |
| TPUB | Ta-pu | 5.11 | 285 | Pn | Pn | 20 04 38.2 | -0.2 |
| JOW | Kunigami | 5.17 | 23 | Pn | Pn | 20 04 40.6 | +1.4 |
| | 5.1nm,0.3s,baz=141,slow=21,SNR=5.6 | | | | | | |
| JOW | | | | Sn | Sn | 20 05 36.2 | -2.7 |
| | 5.1nm,0.3s,baz=99,slow=25,SNR=1.8 | | | | | | |
| JOW | Kunigami | 5.17 | 23 | P | Pn | 20 04 40.1 | +0.8 |
| JOW | | | | S | Sn | 20 05 35.9 | -3.1 |
| JIH | Iheya | 5.25 | 20 | eS | Sn | 20 05 37.4 | -3.6 |
| JMZ | Minamidaito 2 | 6.06 | 51 | P | Pn | 20 04 48.8 | -2.7 |
| JMZ | | | | eS | Sn | 20 05 54.0 | -6.9 |
| JKDJ | Kitadaitoujima | 6.19 | 50 | P | Pn | 20 04 50.7 | -2.6 |
| JKDJ | | | | eS | Sn | 20 05 59.2 | -5.0 |
| JTK | Tokunoshima | 6.28 | 25 | eS | Sn | 20 06 03.7 | -2.8 |
| KNMB | Chin-men Tao | 7.39 | 290 | Pn | Pn | 20 05 08.3 | -1.5 |
| KSRS | Korea Array | 15.41 | 6 | LR | LR | 20 13 17.7 | |
| | comp=Z,74nm,18.6s,baz=190,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 17.89 | 34 | P | P | 20 07 34.6 | +3.1 |
| | 0.0nm,0.3s,baz=231,slow=9.5,SNR=4.7 | | | | | | |
| MJAR | | | | LR | LR | 20 12 42.8 | |
| | comp=Z,37nm,20.6s,baz=86,slow=31 | | | | | | |
| MJAR | Matsushiro Arr | 17.89 | 34 | IAmb | IAmb | 20 07 37.1 | |
| | comp=Z,5.6nm,1.3s | | | | | | |
| SIJI | Sorong | 23.38 | 167 | LR | LR | 20 15 20.6 | |
| | comp=Z,50nm,22.0s,baz=124,slow=31 | | | | | | |
| SBUM | Sibu | 23.66 | 216 | P | P | 20 08 32.6 | -1.1 |
| SBUM | | | | IAmb | IAmb | 20 09 01.5 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| CHTO | Chiang Mai | 25.54 | 268 | P | P | 20 08 51.6 | +0.6 |
| CHTO | | | | IAmb | IAmb | 20 08 54.9 | |
| | comp=Z,4.1nm,1.3s | | | | | | |
| CMAR | Chiang Mai Arr | 25.62 | 267 | P | P | 20 08 52.7 | +1.0 |
| | comp=Z,1.1nm,0.8s,baz=70,slow=8.0,SNR=7.9 | | | | | | |
| CMAR | | | | LR | LR | 20 19 03.9 | |
| | comp=Z,34nm,19.4s,baz=75,slow=37 | | | | | | |
| KLR | Kul'dur | 27.48 | 8 | P | P | 20 09 12.3 | +4.1 |
| | comp=Z,1.2nm,0.8s,baz=211,slow=10,SNR=4.5 | | | | | | |
| SONM | Songino Array | 30.13 | 333 | LR | LR | 20 21 52.6 | |
| | comp=Z,65nm,20.7s,baz=356,slow=37 | | | | | | |
| PMG | Port Moresby | 37.55 | 144 | LR | LR | 20 26 23.5 | |
| | comp=Z,14nm,18.5s,baz=357,slow=37 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.25 | 88 | T | T | 20 51 23.1 | |
| | baz=283,slow=75,SNR=4.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.26 | 88 | T | T | 20 51 23.9 | |
| | baz=283,slow=75,SNR=4.7 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.27 | 88 | T | T | 20 51 24.2 | |
| | baz=283,slow=75,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 42.55 | 168 | P | P | 20 11 17.1 | -0.8 |
| | comp=Z,1.2nm,0.4s,baz=346,slow=8.9,SNR=17 | | | | | | |
| WRA | Warramunga Arr | 42.55 | 168 | P | P | 20 11 16.9 | -1.1 |
| WB2 | Warramunga Arr | 42.55 | 168 | P | P | 20 11 16.8 | -1.2 |
| WR0 | Warramunga Arr | 42.61 | 168 | P | P | 20 11 17.8 | -0.7 |
| MK31 | Makanchi Array | 42.93 | 316 | P | P | 20 11 21.8 | +1.0 |
| MKAR | Makanchi Array | 42.93 | 316 | P | P | 20 11 22.4 | +1.6 |
| | comp=Z,1.7nm,0.7s,baz=104,slow=9.5,SNR=17 | | | | | | |
| MKAR | Makanchi Array | 42.93 | 316 | P | P | 20 11 22.2 | +1.4 |
| MAKZ | Makanchi | 43.13 | 316 | P | P | 20 11 24.1 | +1.6 |
| MAKZ | | | | IAmb | IAmb | 20 11 33.6 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 43.80 | 188 | P | P | 20 11 27.1 | -0.9 |
| PSA00 | | | | IAmb | IAmb | 20 11 41.8 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| ZAA0 | Zalesovo Array | 44.43 | 326 | P | P | 20 11 33.7 | +0.9 |
| ZAA0 | | | | IAmb | IAmb | 20 11 53.8 | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 44.43 | 326 | P | P | 20 11 34.4 | +1.7 |
| | comp=Z,0.6nm,0.6s,baz=105,slow=9.3,SNR=4.4 | | | | | | |
| ZALV | Zalesovo Beam | 44.43 | 326 | P | P | 20 11 33.7 | +0.9 |
| PALK | Pallekele | 46.03 | 258 | LR | LR | 20 33 24.4 | |
| | comp=Z,26nm,18.0s,baz=94,slow=39 | | | | | | |
| AS31 | Alice Springs | 46.12 | 170 | P | P | 20 11 46.3 | -0.2 |
| AS31 | | | | IAmb | IAmb | 20 11 48.1 | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ASAR | Alice Springs | 46.12 | 170 | P | P | 20 11 46.4 | -0.1 |
| | comp=Z,1.4nm,0.4s,baz=353,slow=12,SNR=34 | | | | | | |
| ASAR | Alice Springs | 46.12 | 170 | P | P | 20 11 45.9 | -0.6 |
| CTA | Charters Tower | 46.35 | 153 | LR | LR | 20 33 27.0 | |
| | comp=Z,28nm,18.8s,baz=42,slow=39 | | | | | | |
| KURK | Kurchatov | 46.55 | 320 | P | P | 20 11 50.8 | +1.2 |
| KURK | | | | IAmb | IAmb | 20 12 07.2 | |
| | comp=Z,2.8nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 46.57 | 320 | P | P | 20 11 51.1 | +1.3 |
| | comp=Z,0.8nm,0.7s,baz=107,slow=8.2,SNR=6.2 | | | | | | |
| GAR | Garm | 50.08 | 303 | P | P | 20 12 18.5 | +1.2 |
| ABKAR | Akbulak array | 58.06 | 315 | P | P | 20 13 15.6 | +0.4 |
| ABKAR | | | | IAmb | IAmb | 20 13 32.5 | |
| | comp=Z,3.2nm,1.5s | | | | | | |
| FINES | FINESS Array B | 75.47 | 331 | LR | LR | 20 51 53.6 | |
| | comp=Z,62nm,19.1s,baz=28,slow=38 | | | | | | |
| NOA | NORSAR Array B | 82.11 | 334 | LR | LR | 20 56 27.1 | |
| | comp=Z,26nm,18.3s,baz=345,slow=39 | | | | | | |

**IDC 11 20:03:37.0±5.6,29˚.63S×137˚.80E,h0km,mb1 2.8/3, mb1mx2.8/39,mbtmp2.5/3,ML2.5/3,Error ellipse: s-maj=179.2km s-min=18.0km az=46.0,South Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| STKA | Stephens Creek | 3.96 | 125 | Pn | Pn | 20 04 39.0 | 0.0 |
| | 0.1nm,0.3s,baz=291,slow=7.0,SNR=4.5 | | | | | | |
| STKA | | | | Sn | Sn | 20 05 28.7 | +2.5 |
| | 0.6nm,0.3s,baz=84,slow=2.6,SNR=6.7 | | | | | | |
| STKA | | | | Lg | Lg | 20 05 41.9 | |
| | 0.5nm,0.3s,baz=325,slow=12,SNR=3.8 | | | | | | |
| ASAR | Alice Springs | 6.89 | 329 | Pn | Pn | 20 05 19.8 | +0.5 |
| | 0.1nm,0.3s,baz=175,slow=8.1,SNR=8.0 | | | | | | |
| ASAR | | | | Sn | Sn | 20 06 37.3 | -1.1 |
| | 0.1nm,0.3s,baz=212,slow=36,SNR=2.4 | | | | | | |
| WRA | Warramunga Arr | 10.14 | 341 | Pn | Pn | 20 06 04.1 | +0.1 |
| | 0.1nm,0.3s,baz=164,slow=13,SNR=1.7 | | | | | | |

*SJA* ***11*** *20:04:08.1±0.8,31˚.31S×68˚.63W,h111km±2km,ML4.9, MW4.5*

*IDC* ***11*** *20:04:08.4±0.4,31˚.28S×68˚.63W,h103km±3km,mb4.4/13, mb1 4.4/16,mb1mx4.3/37,mbtmp4.8/16,MS3.5/3, Ms1 3.5/3,ms1mx2.9/53,Error ellipse: s-maj=16.3km s-min=10.8km az=64.0*

*VAO* ***11*** *20:04:09.0±0.4,31˚.34S×68˚.69W,h114km,mb4.5*

*NEIC* ***11*** *20:04:09.1±2.0,31˚.30S±0˚.06×68˚.72W±0˚.10,h108km±4km, mb4.5/67,Md5.0(SJA),Error ellipse: s-maj=12.0km s-min=8.3km az=90.0*

**ISC 11 20:04:08.0±0.3,31˚.26S±0˚.03×68˚.69W±0˚.03,h106km±3km, h106km:pP-P,n300,σ1ᵖ51/372,mb4.5/44,6C-10D,San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RTLL | Cerro Villicun | 0.20 | 111 | eP | Pn | 20 04 23.8 | +0.9 |
| RTLL | | | | eS | Sn | 20 04 34.0 | -0.1 |
| RTLL | Cerro Villicun | 0.20 | 111 | eP | Pn | 20 04 24.0 | +1.1 |
| RTLL | | | | eS | Sn | 20 04 37.9 | +3.7 |
| ZON | Zonda | 0.29 | 178 | Pn | Pn | 20 04 24.3 | +1.0 |
| ZON | Zonda | 0.29 | 178 | eP | Pn | 20 04 24.4 | +1.0 |
| ZON | | | | eS | Sn | 20 04 36.0 | +1.3 |
| RTCV | Cerro Valdivia | 0.62 | 168 | eP | Pn | 20 04 26.2 | +0.9 |
| RTCV | | | | eS | Sn | 20 04 38.9 | +0.6 |
| AUSP | Uspallata | 1.13 | 211 | eP | Pn | 20 04 32.1 | +1.5 |
| AUSP | | | | eS | Sn | 20 04 49.9 | +2.3 |
| ASAL | Salagasta | 1.33 | 185 | eP | Pn | 20 04 33.8 | +1.2 |
| ASAL | | | | eS | Sn | 20 04 48.8 | -2.6 |
| ARCO | CERRO ARCO | 1.59 | 187 | eP | Pn | 20 04 37.0 | +1.2 |
| ARCO | | | | eS | Sn | 20 04 58.8 | +1.8 |
| ARCO | | | | IAML | | 20 05 00.8 | |
| | comp=Z,11μm,0.4s | | | | | | |
| ACAN | Cantantal | 1.63 | 129 | eP | Pn | 20 04 39.3 | +3.2 |
| CO03 | El Pedregal | 1.77 | 283 | ↑iP | Pn | 20 04 40.3 | +2.4 |
| CO03 | | | | i S | Sn | 20 05 03.7 | +3.0 |
| CO03 | | | | IAML | | 20 05 05.2 | |
| | comp=E,24μm,0.3s | | | | | | |
| CO03 | El Pedregal | 1.77 | 283 | | Pn | 20 04 40.1 | +2.2 |
| CO03 | El Pedregal | 1.77 | 283 | eP | Pn | 20 04 40.3 | +2.4 |
| CO03 | | | | eS | Sn | 20 05 04.0 | +3.3 |
| CO03 | | | | IAML | | 20 05 04.9 | |
| | comp=Z,9μm,0.5s | | | | | | |
| AAGR | Agrelo | 1.83 | 184 | eP | Pn | 20 04 39.8 | +1.1 |
| AAGR | | | | eS | Sn | 20 04 59.4 | -2.7 |
| CO02 | Combarbal | 1.98 | 271 | ↑iP | Pn | 20 04 42.5 | +1.9 |
| CO02 | | | | i S | Sn | 20 05 07.8 | +2.3 |
| CO02 | | | | IAML | | 20 05 09.7 | |
| | comp=N,34μm,0.2s | | | | | | |
| CO02 | Combarbal | 1.98 | 271 | Pn | Pn | 20 04 42.5 | +1.9 |
| CO02 | Combarbal | 1.98 | 271 | eP | Pn | 20 04 36.8 | -3.9 |
| CO02 | | | | eP | Pn | 20 04 42.5 | +1.9 |
| CO02 | | | | eS | Sn | 20 05 08.5 | +2.9 |
| CO02 | | | | IAML | | 20 05 09.6 | |
| | comp=Z,11μm,0.5s | | | | | | |
| APLL | PUNTA DE LOS L | 2.05 | 66 | eP | Pn | 20 04 42.7 | +1.2 |
| GO04 | Tololo Observa | 2.11 | 300 | ↑iP | Pn | 20 04 44.3 | +1.9 |
| GO04 | | | | i S | Sn | 20 05 11.8 | +3.0 |
| GO04 | Tololo Observa | 2.11 | 300 | | Pn | 20 04 44.4 | +1.9 |
| VA03 | San Esteban | 2.18 | 226 | ↓iP | Pn | 20 04 48.8 | +1.6 |
| VA03 | | | | i S | Sn | 20 05 12.9 | +2.8 |
| VA03 | | | | IAML | | 20 05 17.9 | |
| | comp=E,4μm,0.3s | | | | | | |
| VA03 | San Esteban | 2.18 | 226 | | Pn | 20 04 44.7 | +1.6 |
| VA03 | San Esteban | 2.18 | 226 | eP | Pn | 20 04 44.9 | +1.6 |
| VA03 | | | | eS | Sn | 20 05 11.2 | +1.1 |
| AVIZ | Vizcacheras | 2.21 | 176 | eP | Pn | 20 04 44.6 | +1.0 |
| ACLC | CERRO LA CRUZ | 2.37 | 40 | eP | Pn | 20 04 46.9 | +1.2 |
| ACLC | | | | eS | Sn | 20 05 16.5 | +2.0 |
| ACLC | | | | IAML | | 20 05 46.2 | |
| | comp=Z,7μm,0.6s | | | | | | |
| PEL | Peldehue | 2.53 | 221 | ↓eP | Pn | 20 04 48.6 | +0.9 |
| PEL | Peldehue | 2.53 | 221 | | Pn | 20 04 48.7 | +0.9 |
| PEL | Peldehue | 2.53 | 221 | eP | Pn | 20 04 48.7 | +1.0 |
| VCA | Vinchina | 2.55 | 10 | eP | Pn | 20 04 50.3 | +2.2 |
| VCA | | | | eS | Sn | 20 05 20.8 | +2.0 |
| VCA | Vinchina | 2.55 | 10 | eP | Pn | 20 04 50.3 | +2.2 |
| VCA | | | | eS | Sn | 20 05 21.1 | +2.3 |
| VCA | | | | IAML | | 20 05 25.3 | |
| | comp=Z,9μm,0.3s | | | | | | |
| VA06 | Catapilco | 2.57 | 239 | ↓eP | Pn | 20 04 48.1 | -0.1 |
| VA06 | | | | eS | Sn | 20 05 17.5 | -1.5 |
| VA06 | | | | IAML | | 20 05 27.1 | |
| | comp=E,3μm,0.4s | | | | | | |
| VA06 | Catapilco | 2.57 | 239 | Pn | Pn | 20 04 48.0 | -0.1 |
| CO05 | La Serena | 2.57 | 301 | ↑eP | Pn | 20 04 49.2 | +1.0 |
| CO05 | | | | eS | Sn | 20 05 18.5 | -0.6 |
| CO05 | | | | IAML | | 20 05 22.6 | |
| | comp=N,7μm,0.5s | | | | | | |
| CO05 | La Serena | 2.57 | 301 | Pn | Pn | 20 04 48.2 | 0.0 |
| CO06 | Fray Jorge | 2.59 | 282 | ↑iP | Pn | 20 04 48.6 | +0.1 |
| CO06 | | | | eS | Sn | 20 05 18.2 | -1.4 |
| CO06 | Fray Jorge | 2.59 | 282 | | Pn | 20 04 48.5 | 0.0 |
| ROCH | El Roble | 2.61 | 228 | ↓iP | Pn | 20 04 49.4 | +0.5 |
| ROCH | | | | eS | Sn | 20 05 20.7 | +0.4 |
| ROCH | | | | IAML | | 20 05 27.6 | |
| | comp=N,4μm,0.3s | | | | | | |
| ROC1 | El Roble | 2.61 | 228 | | Pn | 20 04 48.0 | -1.0 |
| ROC1 | El Roble | 2.61 | 228 | eP | Pn | 20 04 48.3 | -0.7 |
| ROC1 | | | | eS | Sn | 20 05 20.8 | +0.3 |
| MT05 | Renca | 2.75 | 219 | ↓eP | Pn | 20 04 51.5 | +1.0 |
| MT05 | | | | eS | Sn | 20 05 24.3 | +1.0 |
| MT05 | | | | IAML | | 20 05 29.0 | |
| | comp=N,5μm,0.3s | | | | | | |
| MT05 | Renca | 2.75 | 219 | Pn | Pn | 20 04 51.5 | +1.0 |
| MT05 | Renca | 2.75 | 219 | eP | Pn | 20 04 51.9 | +1.4 |
| MT05 | | | | eS | Sn | 20 05 25.4 | +2.1 |
| MRA | San Martin | 2.78 | 115 | eP | Pn | 20 04 51.5 | +0.4 |
| MRA | | | | eS | Sn | 20 05 24.1 | -0.2 |
| MRA | | | | IAML | | 20 05 50.0 | |
| | comp=Z,9μm,0.6s | | | | | | |
| LCO | Las Campanas | 2.84 | 322 | ↑eP | Pn | 20 04 53.3 | +1.4 |
| LCO | | | | eS | Sn | 20 05 27.4 | +1.7 |
| LCO | Las Campanas | 2.84 | 322 | Pn | Pn | 20 04 53.4 | +1.4 |
| LCO | Las Campanas | 2.84 | 322 | eP | Pn | 20 04 53.7 | +1.8 |
| LCO | | | | eS | Sn | 20 05 22.8 | -3.0 |
| MT02 | Curacav | 2.88 | 225 | ↓iP | Pn | 20 04 52.2 | -0.1 |
| MT02 | | | | eS | Sn | 20 05 23.8 | -2.6 |
| MT02 | Curacav | 2.88 | 225 | | Pn | 20 04 52.0 | -0.2 |
| MT02 | Curacav | 2.88 | 225 | eP | Pn | 20 04 52.5 | +0.3 |
| MT02 | | | | eS | Sn | 20 05 25.9 | -0.5 |
| LMEL | Las Melosas | 2.88 | 206 | | Pn | 20 04 53.6 | +1.2 |
| VA01 | Torpederas | 3.06 | 234 | | Pn | 20 04 54.1 | -0.6 |
| VA01 | Torpederas | 3.06 | 234 | eP | Pn | 20 04 54.4 | -0.3 |
| VA01 | | | | eS | Sn | 20 05 20.3 | -10 |
| BO04 | La Punta | 3.17 | 210 | Pn | Pn | 20 04 57.1 | +0.9 |
| MT09 | Talagante | 3.17 | 217 | ↓eP | Pn | 20 04 56.4 | +0.1 |
| MT09 | | | | eS | Sn | 20 05 33.6 | 0.0 |
| MT09 | | | | IAML | | 20 05 39.3 | |
| | comp=N,2μm,0.7s | | | | | | |
| MT09 | Talagante | 3.17 | 217 | | Pn | 20 04 56.2 | -0.1 |
| TINO | Tinogasta | 3.33 | 17 | eP | Pn | 20 05 00.9 | +2.5 |
| TINO | | | | eS | Sn | 20 05 36.8 | -0.5 |
| MT01 | Popeta | 3.38 | 219 | ↓iP | Pn | 20 04 58.2 | -0.7 |
| MT01 | | | | eS | Sn | 20 05 36.7 | -1.6 |
| MT01 | Popeta | 3.38 | 219 | | Pn | 20 04 58.0 | -0.9 |
| MT01 | Popeta | 3.38 | 219 | eP | Pn | 20 04 58.5 | -0.5 |
| MT01 | | | | eS | Sn | 20 05 20.3 | -18 |
| MT01 | | | | eS | Sn | 20 05 38.7 | +0.4 |
| VA05 | Santo Domingo | 3.44 | 225 | eP | Pn | 20 04 58.9 | -0.8 |
| VA05 | | | | eS | Sn | 20 05 38.8 | -0.9 |
| VA05 | Santo Domingo | 3.44 | 225 | | Pn | 20 04 58.9 | -0.8 |
| RFA | San Rafael | 3.51 | 177 | eP | Pn | 20 05 00.5 | -0.2 |
| RFA | | | | eS | Sn | 20 05 41.0 | -0.4 |
| RFA | | | | IAML | | 20 05 42.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| AC04 | Llanos de Chal | 3.68 | 325 | eP | Pn | 20 05 02.9 | -0.1 |
| AC04 | | | | eS | Sn | 20 05 44.9 | -0.7 |
| AC04 | Llanos de Chal | 3.68 | 325 | Pn | Pn | 20 05 03.6 | +0.6 |
| BO01 | Tunca | 3.72 | 212 | ↓iP | Pn | 20 05 02.8 | -0.6 |
| BO01 | | | | eS | Sn | 20 05 43.4 | -3.0 |
| BO01 | Tunca | 3.72 | 212 | Pn | Pn | 20 05 02.6 | -0.8 |
| BO01 | Tunca | 3.72 | 212 | eP | Pn | 20 05 03.0 | -0.5 |
| BO01 | | | | eS | Sn | 20 05 46.9 | +0.5 |
| GO03 | Copiap | 3.89 | 339 | Pn | Pn | 20 05 07.1 | +1.3 |
| BO02 | Sierra Bellavi | 3.94 | 206 | eP | Pn | 20 05 06.5 | 0.0 |
| BO02 | | | | eS | Sn | 20 05 49.6 | -2.2 |
| BO02 | Sierra Bellavi | 3.94 | 206 | | Pn | 20 05 06.8 | +0.3 |
| BO02 | Sierra Bellavi | 3.94 | 206 | eP | Pn | 20 05 06.9 | +0.4 |
| BO02 | | | | eS | Sn | 20 05 39.6 | -12 |
| BO02 | | | | IAML | | 20 05 58.1 | |
| | comp=Z,728nm,0.3s | | | | | | |
| AC02 | Maricunga | 4.42 | 355 | Pn | Pn | 20 05 15.8 | +2.4 |
| EDS3 | Malargue | 4.54 | 187 | eP | Pn | 20 05 15.0 | +0.4 |
| EDS3 | | | | eS | Sn | 20 06 05.0 | -1.4 |
| GO05 | Huala | 4.62 | 215 | | Pn | 20 05 13.2 | -2.4 |
| ML02 | Panimavida | 5.04 | 206 | Pn | Pn | 20 05 19.8 | -1.4 |
| AHML | Horco Molle | 5.34 | 34 | eP | Pn | 20 05 25.3 | -0.1 |
| AHML | | | | eS | Sn | 20 06 24.6 | -1.1 |
| AHML | | | | IAML | | 20 06 58.4 | |
| | comp=Z,290nm,0.7s | | | | | | |
| FSA | Cafayete | 5.65 | 26 | eP | Pn | 20 05 31.0 | +1.2 |
| FSA | | | | eS | Sn | 20 06 36.7 | +3.1 |
| BI05 | Punta Hualpn | 6.63 | 213 | Pn | Pn | 20 05 39.1 | -3.6 |
| PB14 | IPOC Station P | 6.78 | 347 | | Pn | 20 05 44.0 | -1.2 |
| PB10 | IPOC Station P | 7.89 | 347 | Pn | Pn | 20 05 58.0 | -2.0 |
| PB15 | IPOC Station P | 8.05 | 355 | Pn | Pn | 20 06 01.3 | -1.0 |
| PB15 | IPOC Station P | 8.05 | 355 | eP | Pn | 20 06 01.5 | -0.8 |
| PB15 | | | | eS | Sn | 20 07 28.6 | -3.2 |
| LC01 | Cunco | 8.06 | 198 | Pn | Pn | 20 05 58.4 | -3.8 |
| PB06 | IPOC Station P | 8.55 | 355 | Pn | Pn | 20 06 07.2 | -1.9 |
| LVC | Limon Verde | 8.62 | 359 | P | Pn | 20 06 09.0 | -1.2 |
| | comp=Z,33nm,0.3s,baz=185,slow=2,SNR=111 | | | | | | |
| LVC | | | | S | Sn | 20 07 40.1 | -5.7 |
| | comp=Z,7.8nm,0.3s,baz=21,slow=19,SNR=1.6 | | | | | | |
| LVC | Limon Verde | 8.62 | 359 | Pn | Pn | 20 06 09.1 | -1.0 |
| LR03 | Panguipulli | 8.87 | 199 | | Pn | 20 06 05.5 | -7.7 |
| PB04 | IPOC Station P | 8.98 | 351 | Pn | Pn | 20 06 11.6 | -3.4 |
| PB03 | IPOC Station P | 9.22 | 354 | Pn | Pn | 20 06 15.0 | -3.3 |
| LR04 | Corral | 9.43 | 203 | Pn | Pn | 20 06 15.3 | -5.4 |
| PB09 | IPOC Station P | 9.44 | 357 | Pn | Pn | 20 06 18.2 | -2.9 |
| PB07 | I

comp=Z,72nm,0.9s,baz=4.7,slow=7.2,SNR=20
**CZSB Cruzeiro do Su 23.71 350** *e*P **P 20 09 11.2 +0.9**
**CZSB Cruzeiro do Su 23.71 350** P **P 20 09 09.6 -0.7**
**BSCB Bom Sucesso 23.73 70** *e*P **P 20 09 10.4 -0.2**
**BDFB Brasilia 24.46 55** P **P 20 09 19.2 +2.0**
comp=Z,1.6nm,0.4s,baz=246,slow=10,SNR=4.6
**BDFB Brasilia 24.46 55** P **P 20 09 16.2 -1.1**
BDFB IAmb IAmb 20 09 42.0
comp=Z,23nm,1.3s
**SNDB Serra Nova Dou 25.03 44** *e*P **P 20 09 23.6 +1.3**
**DIAM Diamantina, MG 26.05 66** *e*P **P 20 09 32.7 +1.0**
**PEXB Peixe 26.79 49** *e*P **P 20 09 38.8 +0.6**
**TBTG Tabatinga, AM 26.95 357** *e*P **P 20 09 40.5 +0.9**
**NPGB Novo Progresso 27.13 30** *e*P **P 20 09 41.6 +0.3**
**JANB Januaria 27.52 60** *e*P **P 20 09 44.8 0.0**
**SJMB Sao Joao De Ma 27.80 70** *e*P **P 20 09 48.1 +0.9**
**RIB01 Linhares ES 28.13 72** *e*P **P 20 09 50.3 +0.1**
**SDBA SAO DESIDERIO 28.86 55** *e*P **P 20 09 57.3 +0.5**
**ITTB Itaituba 29.40 27** *e*P **P 20 10 03.2 +1.8**
**GUA01 Guaratinga, BA 30.06 68** *e*P **P 20 10 07.4 +0.2**
**PRPB Parauapebas 30.59 39** *e*P **P 20 10 13.4 +1.5**
**CMC01 Camacan, BA 30.98 66** *e*P **P 20 10 15.7 +0.3**
**GDU01 Guandu, BA 31.92 63** *e*P **P 20 10 23.6 -0.1**
**MALB Monte Alegre 32.27 28** *e*P **P 20 10 27.5 +0.8**
**NBPN Ponto Novo - B 33.29 59** *e*P **P 20 10 35.1 -0.5**
**BOAV Boa Vista 34.36 15** *e*P **P 20 10 45.8 +0.9**
**MCPB Macapa, AP 34.54 30** *e*P **P 20 10 46.7 +0.3**
**NBLA Lagarto - SE 34.98 62** *e*P **P 20 10 50.0 -0.3**
**ROSB Rosrio 36.51 44** *e*P **P 20 11 04.5 +1.2**
**SDV Santo Domingo 39.96 357** *e*P **P 20 11 32.1 -0.3**
**CVTR Volcan Turrial 43.51 338** P **P 20 12 02.9 +1.3**
**PDPR Patillas Dam, 49.06 3** P **P 20 12 42.2 -2.2**
**BELA Belgrano 2 49.11 171** P **P 20 12 44.5 +0.3**
**VNA3 Neumayer Olymp 50.86 159** P **P 20 12 57.7 +0.2**
**VNA2 Neumayer--Watz 51.48 158** P **P 20 13 02.6 +0.5**
baz=280,slow=7.7
**SNAA Sanae 53.08 159** P **P 20 13 14.4 +0.3**
**SNAA Sanae 53.08 159** P **P 20 13 14.4 +0.3**
comp=Z,14nm,0.8s,baz=280,slow=9.1,SNR=24
**SNAA Sanae 53.08 159** P **P 20 13 14.3 +0.3**
**CMIG Matias Romero 54.26 329** LR LR 20 33 19.9
comp=Z,49nm,18.5s,baz=224,slow=32
**QSPA South Pole Qui 58.97 180** P **P 20 13 57.1 +0.9**
comp=Z,25nm,0.7s,baz=166,slow=1.2,SNR=65
**QSPA South Pole Qui 58.97 180** P **P 20 13 56.4 +0.3**
**833A Chaparral WMA, 66.08 330** P **P 20 14 45.5 +1.9**
**TXAR Lajitas Array 68.83 328** P **P 20 15 02.6 +1.5**
comp=Z,1.6nm,0.6s,baz=153,slow=8.2,SNR=25
TXAR pP **pP 20 15 28.4 +0.2**
comp=Z,1.1nm,0.7s,baz=144,slow=7.9,SNR=7.1
**TXAR Lajitas Array 68.83 328** P **P 20 15 01.2 0.0**
**TX31 Lajitas Ar. Si 68.84 328** P **P 20 15 01.7 +0.6**
TX31 IAmb IAmb 20 15 03.6
comp=Z,5.6nm,0.7s
**TX32 Lajitas Array 68.84 328** P **P 20 15 02.2 +1.1**
**LCAR Lake Charles 70.21 341** P **P 20 15 09.8 +0.6**
LCAR IAmb IAmb 20 15 11.6
comp=Z,7.8nm,0.6s
**WCI Wyandotte Cave 71.05 345** P **P 20 15 15.3 +1.0**
WCI IAmb IAmb 20 15 25.8
comp=Z,10nm,1.1s
**LIC Lamto 71.21 70** *e*P **P 20 15 15.8 -0.1**
comp=Z,29nm,0.8s
**TIC Toumodi 71.46 70** *e*P **P 20 15 17.4 0.0**
**KIC Kosan Boka 71.52 70** *e*P **P 20 15 17.9 +0.1**
comp=Z,14nm,0.7s
**DBIC Dimbokro 71.61 70** P **P 20 15 18.8 +0.6**
comp=Z,9.1nm,0.7s,baz=243,slow=6.4,SNR=12
DBIC pP **pP 20 15 45.0 -0.1**
comp=Z,13nm,0.8s,baz=230,slow=6.4,SNR=12
**DBIC Dimbokro 71.61 70** P **P 20 15 18.3 +0.1**
**MNTX Cornudas Mount 71.62 328** P **P 20 15 16.1 -1.9**
MNTX IAmb IAmb 20 15 19.2
comp=Z,4.2nm,0.8s
**CCM Cathedral Cave 72.10 341** P **P 20 15 21.1 +0.4**
CCM IAmb IAmb 20 15 22.3
comp=Z,8.6nm,0.8s
**MSTX Muleshoe 72.41 331** P **P 20 15 22.6 -0.2**
MSTX IAmb IAmb 20 15 25.0
comp=Z,15nm,1.0s
**R40A Maddies Statio 72.60 341** P **P 20 15 24.3 +0.7**
R40A IAmb IAmb 20 15 25.3
comp=Z,11nm,0.8s
**M54A Oil Creek Stat 73.11 351** P **P 20 15 29.2 +2.6**
**319A Douglas 73.22 324** P **P 20 15 27.6 0.0**
319A IAmb IAmb 20 15 30.7
comp=Z,6.4nm,0.8s
**121A Cookes Peak, D 73.44 326** P **P 20 15 30.7 +1.7**
121A IAmb IAmb 20 15 32.1
comp=Z,8.3nm,0.9s
**SUR Sutherland 73.65 118** P **P 20 15 31.6 +1.2**
comp=Z,5.9nm,0.7s,baz=218,slow=6.4,SNR=11
SUR pP **pP 20 15 58.0 +0.6**
comp=Z,5.3nm,0.6s,baz=234,slow=6.6,SNR=6.9
**ANMO Albuquerque 74.83 329** P **P 20 15 38.8 +1.8**
**214A Organ Pipe Nat 75.49 322** P **P 20 15 40.7 +0.1**
**X16A Lo Mia Camp, P 76.74 325** P **P 20 15 49.3 +1.5**
X16A IAmb IAmb 20 15 51.0
comp=Z,6.1nm,1.0s
**SDCO Great Sand Dun 76.78 331** P **P 20 15 49.7 +1.6**
**TSUM Tsumeb 77.21 105** LR LR 20 48 37.5
comp=Z,42nm,18.8s,baz=282,slow=35
**WUAZ Wupatki 77.59 326** **P 20 15 53.9 +1.4**
WUAZ IAmb IAmb 20 15 55.8
comp=Z,7.5nm,1.0s
**MVCO Mesa Verde 77.63 328** P **P 20 15 53.1 +0.2**
**Q24A Divide 77.67 332** P **P 20 15 54.5 +1.4**
Q24A IAmb IAmb 20 15 55.8
comp=Z,6.6nm,0.7s
Q24A pP **pP 20 16 22.5 +1.8**
**D62A Allapoint, All 77.98 360** P **P 20 15 53.0 -1.2**
D62A IAmb IAmb 20 15 56.0
comp=Z,9.7nm,1.1s
D62A **pP 20 16 23.8 +2.0**
**I37A Lemond, Waseca 78.24 342** P **P 20 15 56.6 +0.8**
**W13A Hualapai Mount 78.50 324** P **P 20 15 59.9 +2.2**
W13A **pP 20 16 28.3 +2.9**
**PV13 Radium Mtn., P 78.55 329** P **P 20 15 57.3 -0.6**
PV13 IAmb IAmb 20 16 00.5
comp=Z,5.4nm,0.9s
**SMCO Snowmass 78.60 331** P **P 20 15 59.1 +0.7**
SMCO IAmb IAmb 20 16 01.6
comp=Z,6.3nm,0.8s
**PV05 Paradox Valley 78.61 329** P **P 20 15 59.0 +0.7**
PV05 IAmb IAmb 20 16 00.6
comp=Z,3.9nm,0.8s
**U15A North Rim 78.76 325** P **P 20 16 01.3 +2.1**
**BOSA Boshof 78.80 117** P **P 20 15 59.5 -0.1**
comp=Z,7.9nm,0.7s,baz=242,slow=4.7,SNR=22
BOSA pP **pP 20 16 26.5 -0.4**
comp=Z,5.2nm,0.7s,baz=243,slow=4.6,SNR=8.1
**BOSA Boshof 78.80 117** P **P 20 15 59.8 +0.2**
BOSA IAmb IAmb 20 16 00.4
comp=Z,8.6nm,0.8s
BOSA **pP 20 16 27.4 +0.6**
**ECSD EROS Data Cent 78.88 340** P **P 20 15 59.6 +0.3**
ECSD IAmb IAmb 20 16 00.4
comp=Z,5.8nm,0.7s
ECSD **pP 20 16 27.9 +0.9**
**KNB Kanab 79.49 325** P **P 20 16 05.0 +2.0**
KNB IAmb IAmb 20 16 05.7
comp=Z,5.0nm,0.8s
KNB **pP 20 16 32.1 +1.4**
**MTPU Mount Pierson 80.00 327** P **P 20 16 06.8 +0.9**
**SRU San Rafael Swe 80.09 328** P **P 20 16 07.5 +1.2**
SRU IAmb IAmb 20 16 08.4
comp=Z,4.1nm,0.6s
**CCUT Cedar City 80.17 325** P **P 20 16 08.7 +1.9**
CCUT IAmb IAmb 20 16 10.1
comp=Z,4.9nm,0.8s
CCUT pP **pP 20 16 36.3 +1.7**
**P18A Preston Nutter 80.39 329** P **P 20 16 08.6 +0.7**
P18A IAmb IAmb 20 16 10.2
comp=Z,4.8nm,0.6s
**TORD Torodi Ar. Bea 80.60 68** P **P 20 16 09.5 +0.2**
comp=Z,16nm,0.7s,baz=261,slow=4.5,SNR=85
TORD pP **pP 20 16 36.1 -0.5**
comp=Z,5.7nm,0.9s,baz=258,slow=4.7,SNR=6.5
**TORD Torodi Ar. Bea 80.60 68** P **P 20 16 09.2 0.0**
**LBTB Lobatse 80.85 114** P **P 20 16 10.4 -0.3**
LBTB IAmb IAmb 20 16 11.0
comp=Z,6.9nm,0.7s
**RDMU Red Mountain 80.87 330** P **P 20 16 10.9 +0.5**
RDMU IAmb IAmb 20 16 12.6
comp=Z,6.8nm,0.8s
RDMU pP **pP 20 16 40.5 +2.4**
**R11A Troy Canyon, C 81.89 325** P **P 20 16 17.1 +1.4**
**DUG Dugway, Tooele 82.01 327** P **P 20 16 16.5 +0.2**
**BW06 Boulder Array 82.67 331** P **P 20 16 20.4 +0.6**
**PD31 Pinedale Array 82.67 331** P **P 20 16 20.2 +0.4**
**PDAR Pinedale Array 82.67 331** P **P 20 16 20.4 +0.7**
comp=Z,1.3nm,0.7s,baz=136,slow=7.0,SNR=13
PDAR pP **pP 20 16 48.2 +0.5**
comp=Z,1.4nm,0.8s,baz=133,slow=7.1,SNR=5.2
**PDAR Pinedale Array 82.67 331** P **P 20 16 20.0 +0.2**
**HVU Hansel Valley 83.26 328** P **P 20 16 23.5 +0.8**
HVU IAmb IAmb 20 16 24.1
comp=Z,2.8nm,0.7s
**NVAR Mina Array Bea 83.33 323** P **P 20 16 25.1 +1.8**
comp=Z,2.4nm,0.8s,baz=152,slow=6.1,SNR=16
NVAR pP **pP 20 16 51.9 +0.6**
comp=Z,1.2nm,0.8s,baz=156,slow=6.5,SNR=5.6
**ELK Elko 83.58 326** P **P 20 16 25.3 +0.8**
**KVN Kaiserville 83.69 323** P **P 20 16 24.1 -1.0**
**LOHW Long Hollow 83.80 331** P **P 20 16 26.4 +0.9**
**YHH Holmes Hill 84.86 331** P **P 20 16 32.4 +1.4**
YHH IAmb IAmb 20 16 33.5
comp=Z,4.4nm,0.9s
YHH pP **pP 20 17 00.2 +1.2**
**HLID Hailey 85.41 329** P **P 20 16 34.6 +1.0**
HLID IAmb IAmb 20 16 36.1
comp=Z,4.5nm,0.9s
**DGMT Dagmar 85.49 337** P **P 20 16 34.3 +0.6**
**MCMT McKenzie Canyo 85.73 330** P **P 20 16 35.8 +0.6**
**SCHQ Schefferville 85.75 1** P **P 20 16 35.0 +0.3**
comp=Z,2.9nm,0.7s,baz=166,slow=5.9,SNR=6.1
SCHQ pP **pP 20 17 03.0 +0.3**
comp=Z,4.9nm,0.9s,baz=189,slow=9.5,SNR=3.8
**SCHQ Schefferville 85.75 1** IAmb IAmb 20 17 04.5
comp=Z,7.1nm,1.0s
**LRM Limekiln Ridge 86.36 331** P **P 20 16 38.4 +0.1**
**MOD Modoc Plateau 86.94 324** P **P 20 16 42.1 +1.0**
MOD IAmb IAmb 20 16 43.4
comp=Z,4.9nm,0.7s
**J08A Circle Bar Ran 87.13 326** P **P 20 16 43.7 +1.8**
**PLID Pearl Lake 87.31 329** P **P 20 16 43.7 +0.7**
PLID IAmb IAmb 20 16 45.0
comp=Z,7.2nm,0.8s
**K05A Summer Lake 87.84 324** P **P 20 16 47.5 +2.1**
**PINE Pine Mountain 88.65 325** P **P 20 16 50.4 +1.1**
**WALA Waterton Lakes 89.55 332** P **P 20 16 52.9 -0.4**
WALA IAmb IAmb 20 16 55.1
comp=Z,9.0nm,1.1s
**FCC Fort Churchill 92.15 347** P **P 20 17 05.6 +0.7**
**YKA Yellowknife Ar 100.41 340** P **Pdif 20 17 42.2 0.0**
comp=Z,0.3nm,0.7s,baz=140,slow=4.3,SNR=6.0
YKA pP **pPdif 20 18 10.3 -0.3**
comp=Z,0.8nm,0.9s,baz=136,slow=4.5,SNR=6.5
**ILAR Eielson Array 113.04 333** PKiKP **PKiKP 20 22 31.6 -0.3**
comp=Z,0.5nm,0.8s,baz=108,slow=1.1,SNR=4.4
**AKASG Malin Array Be 118.26 46** PKP **PKPdf 20 22 41.1 -1.2**
comp=Z,0.9nm,0.6s,baz=270,slow=2.4,SNR=6.7
**ASAR Alice Springs 121.25 204** PKP **PKPdf 20 22 48.0 -1.2**
comp=Z,1.8nm,0.7s,baz=137,slow=1.7,SNR=33
**WRA Warramunga Arr 124.50 207** PKP **PKPdf 20 22 54.7 -0.7**
comp=Z,4.2nm,0.6s,baz=164,slow=1.7,SNR=68
**WRA Warramunga Arr 124.50 207** PKPdf **PKPdf 20 22 54.4 -1.0**
**PSA00 Pilbara Seismi 126.84 190** PKPdf **PKPdf 20 22 59.0 -0.8**
**ABKAR Akbulak array 137.76 50** PKPdf **PKPdf 20 23 19.5 +0.1**
**BRVK Borovoye 143.29 42** **PKPdf 20 23 29.5 +0.2**
**BVAR Borovoye Array 143.36 42** PKhKP PKPpre 20 23 27.7
comp=Z,0.5nm,0.4s,baz=37,slow=8.4,SNR=9.1
**KBL Kabul 144.55 73** **PKPab 20 23 30.3 -0.8**
**URV Uravakonda 144.91 110** *e*PKPab **PKPab 20 23 30.6 -2.1**
**CHGR Chuyangaron 144.91 66** **PKPab 20 23 32.2 0.0**
**KKAR Karatay Array 145.73 58** **PKPdf 20 23 33.7 -0.2**
**KLRI Killari 145.98 104** *e*PKPab **PKPdf 20 23 35.3 +0.2**
**SKHT Srikalahasti 146.17 114** *e*PKiKP **PKPab 20 23 37.3 -0.1**
**RCLA Racherla 146.55 111** *e*PKPab **PKPbc 20 23 37.3 -0.3**
**SRLM Srisailam 146.85 110** *e*PKPab **PKPbc 20 23 38.5 -0.1**
**YAK Yakutsk 146.98 344** PKPbc **PKPbc 20 23 37.9 +0.4**
comp=Z,18nm,0.6s,baz=26,slow=0.1,SNR=23
YAK pPKPbc pPKPbc 20 24 06.6 -0.1
comp=Z,17nm,0.6s,baz=204,slow=0.8,SNR=13
**YAK Yakutsk 146.98 344** PKPdf **PKPdf 20 23 35.9 +0.5**
**HYBB Hyderabad (bro 147.27 107** *e*PKPab **PKPbc 20 23 40.0 +0.3**
HYBB *ep*PKPab **pPKPbc 20 24 08.9 +0.4**
**NJS Nagarjunasagar 147.43 109** *e*PKPbc **PKPdf 20 23 38.3 +0.8**
NJS *e*PKPab **PKPbc 20 23 40.0 -0.1**
**CUPL Choutuppal 147.50 108** *e*PKPbc **PKPdf 20 23 37.9 +0.3**
CUPL *e*PKPab **PKPbc 20 23 40.3 0.0**
CUPL *ep*PKPab **pPKPbc 20 24 09.5 +0.3**
**ADKI Addanki 147.57 111** *e*PKPdf **PKPdf 20 23 35.7 -2.0**
ADKI *e*PKPab **PKPbc 20 23 41.1 +0.6**
ADKI *ep*PKPdf **pPKPdf 20 24 05.2 -1.7**
ADKI *ep*PKPab **pPKPbc 20 24 09.4 0.0**
**SRSP Sriramsagar 147.84 105** *e*PKiKP **PKPbc 20 23 41.0 -0.2**
SRSP *ep*PKiKP **pPKPab 20 24 11.7 -0.5**
**RPR Rampur 148.60 106** *e*PKiKP **PKPbc 20 23 43.5 +0.3**
**MYLAV Mylavaram 148.60 110** *e*PKiKP **PKPbc 20 23 43.8 +0.6**
**AAK Ala-Archa 148.69 58** PKPbc **PKiKP 20 23 44.0 -0.3**
comp=Z,11nm,0.6s,baz=203,slow=2.7,SNR=39
**AAK Ala-Archa 148.69 58** PKPdf **PKPdf 20 23 39.4 +0.3**
**TOLI2 Tolitoli 148.70 198** PKPdf **PKPdf 20 23 39.1 -0.6**
**KURBB Kurchatov Arra 148.94 42** PKP **PKPdf 20 23 40.4 +1.5**
comp=Z,6.2nm,0.7s,baz=302,slow=3.1,SNR=42
KURBB PKPbc **PKPbc 20 23 43.6 +0.6**
comp=Z,6.2nm,0.7s,baz=300,slow=3.2,SNR=57
KURBB pPKPbc **pPKPbc 20 24 10.6 -1.5**
comp=Z,2.9nm,0.7s,baz=301,slow=3.2,SNR=8.5
**KURK Kurchatov 148.96 42** PKPdf **PKPdf 20 23 39.6 +0.6**
KURK pPKPdf **pPKPdf 20 24 07.0 -1.2**
**PVM Polavaram 149.67 110** *e*PKiKP **PKiKP 20 23 46.5 -0.3**
**KSH Kashi 150.18 64** PKPbc **PKiKP 20 23 47.3 -0.2**
KSH pPKP pPKPdf 20 24 13.7 +3.0
KSH sPKP 20 24 26.9
**ZAA0 Zalesovo Array 150.41 32** **PKPbc 20 23 46.1 -0.4**
**ZALV Zalesovo Beam 150.41 32** PKPbc **PKPbc 20 23 46.1 -0.4**
comp=Z,22nm,0.6s,baz=307,slow=3.3,SNR=100
ZALV PKPab **PKPab 20 23 54.1 +0.8**
comp=Z,4.5nm,0.6s,baz=308,slow=4.0,SNR=6.8
ZALV pPKPbc **pPKPbc 20 24 13.9 -1.7**
comp=Z,13nm,0.6s,baz=298,slow=3.2,SNR=14
**ZALV Zalesovo Beam 150.41 32** PKPdf **PKPdf 20 23 41.4 +0.3**
**YSS Yuzh-Sakhalins 151.24 312** **PKPbc 20 23 48.6 -0.1**
**IPM Ipoh 151.66 158** **PKPbc 20 23 50.0 -0.7**
**ASAJ Asahikawa 152.29 306** PKPbc **PKiKP 20 23 51.5 0.0**
comp=Z,5.3nm,0.6s,baz=51,slow=11,SNR=7.4
**MAKZ Makanchi 152.63 47** **PKPbc 20 23 51.9 0.0**
**MKAR Makanchi Array 152.84 47** PKP **PKPdf 20 23 45.0 -0.1**
comp=Z,1.0nm,1.0s,baz=94,slow=1.1,SNR=7.4
MKAR PKPbc **PKiKP 20 23 52.5 -0.1**
comp=Z,6.4nm,0.8s,baz=301,slow=2.0,SNR=58
MKAR PKPab **PKPab 20 24 04.3 +0.5**
comp=Z,5.3nm,0.6s,baz=288,slow=3.2,SNR=24
MKAR pPKPbc **pPKPbc 20 24 19.8 -1.7**
comp=Z,4.5nm,0.7s,baz=300,slow=2.2,SNR=11
**MKAR Makanchi Array 152.84 47** PKPdf **PKPdf 20 23 44.5 -0.6**
MKAR **PKPbc 20 23 52.0 -0.3**
**KLR Kul'dur 156.34 325** PKPbc PKPdf 20 23 59.5 +10
comp=Z,1.1nm,0.6s,baz=327,slow=3.8,SNR=6.1
**MJAR Matsushiro Arr 157.09 291** PKPab **PKPab 20 24 23.2 +0.8**
comp=Z,4.6nm,0.9s,baz=114,slow=2.3,SNR=6.2
**MJAR Matsushiro Arr 157.09 291** PKPab **PKPab 20 24 23.3 +0.9**
**SONM Songino Array 163.02 11** PKPab **PKPab 20 24 48.7 +0.9**
comp=Z,1.9nm,0.7s,baz=313,slow=3.9,SNR=9.6
**SONM Songino Array 163.02 11** **PKPab 20 24 48.4 +0.6**
**CMAR Chiang Mai Arr 163.04 136** PKP **PKPdf 20 23 58.9 +0.5**
comp=Z,0.9nm,0.9s,baz=243,slow=2.3,SNR=6.9
CMAR PKPab **PKPab 20 24 48.2 -0.3**
comp=Z,0.7nm,0.8s,baz=235,slow=4.4,SNR=5.8
**GTA Gaotai 167.59 46** ⇓PKP **PKPdf 20 24 01.8 0.0**
GTA pPKP pPKPdf 20 24 30.2 -1.0
GTA sPKP 20 24 39.0
GTA PKPab **PKPab 20 25 09.3 +1.0**
GTA LR LR
comp=N,60nm,19.3s
GTA LR LR
comp=E,81nm,20.0s
GTA LR LR
comp=Z,94nm,18.2s
**PZH PanZhiHua 170.37 117** PKP **PKPdf 20 24 02.9 -1.0**
**XAN Xi'an 176.57 35** PKP **PKPdf 20 24 06.4 +0.5**
XAN pPKP pPKPdf 20 24 16.9 -19

*MOS* ***11*** *20:44:48.3±1.3, 45°.81N×150°.58E, h119km, mb4.2/9, Error ellipse: s-maj=8.1km s-min=6.1km az=75.5*
*SKHL* ***11*** *20:44:48.3±0.6, 45°.50N×150°.90E, h119km±7km, mb5.4/5, msha5.5/3*
*NEIC* ***11*** *20:44:50.4±1.6, 45°.9N±0°.1×150°.4E±0°.1, h112km±10km, mb4.6/35, Error ellipse: s-maj=21.5km s-min=12.9km az=153.0*
*IDC* ***11*** *20:44:52.4±2.5, 46°.12N×150°.36E, h123km±20km, mb3.7/16, mb1 3.8/22, mb1mx3.6/38, mbtmp4.0/22, Error ellipse: s-maj=30.9km s-min=13.9km az=155.0*
*JMA* ***11*** *20:44:52.9±0.7, 45°.03N×150°.49E, h133km, M4.2*
**ISC 11 20:44:46.0±0.6, 45°.49N±0°.06×150°.83E±0°.06, h100km, n224,σ2°21/242, mb4.4/62, 20C-13D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.11** | **264** | *d* iPN | | **Pn** | **20 45 23.9** | **+4.0** |
| KUR | | | | *e*S | | **Sn** | **20 45 49.6** | **+3.8** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,4μm,0.3s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=N,1μm,0.2s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,675nm,0.2s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,3μm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,1μm,0.4s | | | | | | | |
| **KUR** | **Kuril'sk** | **2.11** | **264** | *i* P | | **Pn** | **20 45 23.9** | **+4.0** |
| KUR | | | | AMB | | AMB | 20 45 24.6 | |
| | comp=E,390nm,0.4s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **20 45 50.1** | **+4.3** |
| KUR | | | | A | | A | 20 45 50.6 | |
| | comp=E,330nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 20 45 50.6 | |
| | comp=E,100nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **3.28** | **242** | *d* iPN | | **Pn** | **20 45 38.1** | **+2.6** |
| SHO | | | | *e*S | | **Sn** | **20 46 14.5** | **+0.8** |
| SHO | | | | pmax | | pmax | | |
| | comp=E,170nm,0.4s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,250nm,0.4s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=N,206nm,0.2s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,254nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,463nm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **3.28** | **242** | *i* P | | **Pn** | **20 45 38.4** | **+2.9** |
| SHO | | | | AMB | | AMB | 20 45 41.6 | |
| | comp=E,250nm,0.4s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **20 46 15.2** | **+1.5** |
| SHO | | | | A | | A | 20 46 20.1 | |
| | comp=E,150nm,0.5s | | | | | | | |
| SHO | | | | A | | A | 20 46 20.1 | |
| | comp=E,260nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.83** | **249** | ⇓*i* PN | | **Pn** | **20 45 46.5** | **+3.7** |
| YUK | | | | *e*S | | **Sn** | **20 46 28.9** | **+2.1** |
| YUK | | | | pmax | | pmax | | |
| | comp=E,282nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,2μm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=N,306nm,0.1s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,129nm,0.1s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,535nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.83** | **249** | *i* P | | **Pn** | **20 45 46.6** | **+3.7** |
| YUK | | | | AMB | | AMB | 20 45 47.1 | |
| | comp=E,180nm,0.4s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **20 46 30.1** | **+3.3** |
| YUK | | | | A | | A | 20 46 35.4 | |
| | comp=E,130nm,0.4s | | | | | | | |
| YUK | | | | A | | A | 20 46 35.4 | |
| | comp=E,540nm,0.4s | | | | | | | |
| **GLVR** | **Golovnino** | **4.18** | **247** | *d* iPN | | **Pn** | **20 45 51.0** | **+3.5** |
| GLVR | | | | *e*S | | **Sn** | **20 46 37.1** | **+1.9** |
| GLVR | | | | pmax | | pmax | | |
| | comp=N,42nm,0.1s | | | | | | | |
| GLVR | | | | pmax | | pmax | | |
| | comp=Z,777nm,0.1s | | | | | | | |
| GLVR | | | | smax | | smax | | |
| | comp=E,445nm,0.4s | | | | | | | |
| GLVR | | | | smax | | smax | | |
| | comp=N,317nm,0.1s | | | | | | | |
| **GLVR** | **Golovnino** | **4.18** | **247** | *i* P | | **Pn** | **20 45 51.0** | **+3.5** |
| GLVR | | | | AMB | | AMB | 20 45 51.6 | |
| | comp=N,40nm,0.2s | | | | | | | |
| GLVR | | | | AMB | | AMB | 20 45 51.6 | |
| | comp=N,80nm,0.2s | | | | | | | |
| GLVR | | | | *e*S | | **Sn** | **20 46 37.1** | **+1.9** |
| GLVR | | | | A | | A | 20 46 40.9 | |
| | comp=N,320nm,0.5s | | | | | | | |
| GLVR | | | | A | | A | 20 46 40.9 | |
| | comp=N,450nm,0.5s | | | | | | | |
| **RUSJ** | **Misakicho** | **4.21** | **253** | ⇓*i* PN | | **Pn** | **20 45 51.9** | **+3.9** |
| RUSJ | | | | *e*S | | **Sn** | **20 46 43.1** | **+7.1** |
| **NEM2** | **Nemuro 2** | **4.22** | **242** | P | | **Pn** | **20 45 50.4** | **+2.3** |
| NEM2 | | | | *e*S | | **Sn** | **20 46 36.1** | **-0.1** |
| **NMR** | **Nemuro--Hokkai** | **4.22** | **242** | ⇓*i* PN | | **Pn** | **20 45 50.4** | **+2.2** |
| NMR | | | | *e*S | | **Sn** | **20 46 36.1** | **-0.3** |
| **NMR** | **Nemuro--Hokkai** | **4.22** | **242** | *i* P | | **Pn** | **20 45 50.6** | **+2.4** |
| **JRA** | **Rausu** | **4.35** | **251** | P | | **Pn** | **20 45 53.8** | **+3.9** |
| **JNK** | **Nakash** | **4.76** | **249** | P | | **Pn** | **20 45 58.9** | **+3.4** |
| **AKK** | **Akkeshi** | **4.96** | **242** | *i* P | | **Pn** | **20 46 00.4** | **+2.3** |
| **JAK** | **Akkeshi** | **5.06** | **243** | P | | **Pn** | **20 46 01.6** | **+2.1** |
| JAK | | | | *e*S | | **Sn** | **20 46 55.4** | **-1.3** |
| **JTKR** | **Abashiri--Toko** | **5.16** | **255** | P | | **Pn** | **20 46 04.5** | **+3.7** |
| **JAR** | **Ashorobuto** | **5.51** | **249** | P | | **Pn** | **20 46 09.1** | **+3.4** |
| **JMP** | **Maruseppu** | **5.52** | **257** | P | | **Pn** | **20 46 09.2** | **+3.4** |
| **JOB** | **Onbets** | **5.65** | **245** | P | | **Pn** | **20 46 10.1** | **+2.5** |
| **YSS** | **Yuzh-Sakhalins** | **5.79** | **288** | ⇑*e*PN | | **Pn** | **20 46 12.6** | **+3.1** |
| YSS | | | | *e*S | | **Sn** | **20 47 14.1** | **-0.4** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| YSS | | | | smax | | smax | | |
| | comp=N,30nm,1.1s | | | | | | | |
| YSS | | | | smax | | smax | | |
| | comp=E,20nm,1.2s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.79** | **288** | Pn | | **Pn** | **20 46 09.0** | **-0.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.79** | **288** | *i* P | | **Pn** | **20 46 12.5** | **+3.1** |
| YSS | | | | AMB | | AMB | 20 46 12.9 | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| YSS | | | | *i* S | | **Sn** | **20 47 15.5** | **+1.0** |
| YSS | | | | A | | A | 20 47 16.5 | |
| | comp=E,30nm,0.8s | | | | | | | |
| YSS | | | | A | | A | 20 47 16.5 | |
| | comp=E,20nm,0.8s | | | | | | | |
| **JSE** | **Soyaes** | **5.85** | **268** | P | | **Pn** | **20 46 14.1** | **+3.9** |
| **JKK2** | **Kamakawa 2** | **5.99** | **257** | P | | **Pn** | **20 46 15.9** | **+3.8** |
| **JKA** | **Kamikawa-asahi** | **6.01** | **260** | Pn | | **Pn** | **20 46 16.5** | **+4.0** |
| **JKA** | **Kamikawa-asahi** | **6.01** | **260** | *e*P | | **Pn** | **20 46 16.5** | **+4.0** |
| **ASAJ** | **Asahikawa** | **6.02** | **260** | P | | **Pn** | **20 46 16.6** | **+4.1** |
| | comp=E,10nm,0.3s,baz=78,slow=4.2,SNR=125 | | | | | | | |
| **ASAJ** | **Asahikawa** | **6.02** | **260** | P | | **Pn** | **20 46 16.5** | **+4.1** |
| **JCH** | **Churui** | **6.10** | **245** | P | | **Pn** | **20 46 15.6** | **+2.0** |
| JCH | | | | *e*S | | **Sn** | **20 47 20.1** | **-1.9** |
| **SKR** | **Severo-Kuril's** | **6.29** | **32** | *e*PN | | **Pn** | **20 46 17.2** | **+1.1** |
| SKR | | | | *e*S | | **Sn** | **20 47 22.1** | **-4.4** |
| SKR | | | | pmax | | pmax | | |
| | comp=Z,348nm,0.6s | | | | | | | |
| SKR | | | | smax | | smax | | |
| | comp=N,252nm,0.6s | | | | | | | |
| SKR | | | | smax | | smax | | |
| | comp=E,147nm,0.6s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=N,17μm,13.0s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=Z,1μm,13.0s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=E,3μm,14.0s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=Z,2μm,14.0s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=N,16μm,13.0s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=E,4μm,13.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **6.29** | **32** | *i* P | | **Pn** | **20 46 18.0** | **+1.9** |
| SKR | | | | AMB | | AMB | 20 46 18.5 | |
| | comp=E,250nm,0.7s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **20 47 25.8** | **-0.7** |
| SKR | | | | A | | A | 20 47 29.4 | |
| | comp=E,150nm,0.6s | | | | | | | |
| SKR | | | | A | | A | 20 47 29.4 | |

comp=E,70nm,0.6s
**JFR Furan 6.35 251** P **Pn** **20 46 20.6 +3.6**
**JEM Erimo 6.55 241** P **Pn** **20 46 23.1 +3.4**
**ERM Erimo 6.55 241** *i* PN **Pn** **20 46 22.8 +3.1**
**ERM Erimo 6.55 241** Pn **Pn** **20 46 23.7 +3.9**
**JNBK Urakawa-nobuka 6.66 244** P **Pn** **20 46 22.4 +1.2**
JNBK *eS* **Sn** **20 47 32.7 -2.9**
**JBT2 Biratori 2 6.67 249** P **Pn** **20 46 23.7 +2.4**
**PAU Pauzhetka 7.18 31** *eP* **Pn** **20 46 30.5 +2.3**
PAU AMB AMB 20 46 32.3
comp=E,40nm,0.3s
PAU *eS* **Sn** **20 47 46.6 -1.6**
PAU A A 20 47 51.7
comp=E,30nm,0.3s
PAU A A 20 47 51.7
comp=E,50nm,0.3s
**JEW Eniwo 7.25 252** P **Pn** **20 46 32.4 +3.2**
**JEW Eniwo 7.25 252** Pn **Pn** **20 46 32.4 +3.2**
**JNB Noboribetsu 7.68 250** P **Pn** **20 46 36.7 +1.6**
JNB *eS* **Sn** **20 47 58.3 -2.1**
**JKB Kayabe 7.96 247** P **Pn** **20 46 40.0 +1.1**
JKB *eS* **Sn** **20 48 03.0 -4.2**
**JSH Shimam 8.27 254** P **Pn** **20 46 45.6 +2.5**
**JYM2 Yakumo 2 8.28 250** P **Pn** **20 46 44.6 +1.3**
**JANG Nango 8.53 236** P **Pn** **20 46 46.6 -0.1**
JANG *eS* **Sn** **20 48 14.5 -6.7**
**JTM Tenmabayashi 8.54 240** P **Pn** **20 46 47.4 +0.6**
JTM *eS* **Sn** **20 48 15.4 -6.0**
**JTM Tenmabayashi 8.54 240** Pn **Pn** **20 46 48.3 +1.4**
**JTH Tanohata 8.62 233** P **Pn** **20 46 48.0 +0.1**
JTH *eS* **Sn** **20 48 17.5 -5.8**
**PEA0B Petropavlovsk- 8.85 28** *i* PN **Pn** **20 46 51.4 +0.5**
**PEA0B Petropavlovsk- 8.85 28** Pn **Pn** **20 46 52.2 +1.3**
**PETK Petropavlovsk- 8.85 28** P **Pn** **20 46 52.0 +1.2**
comp=E,0.8nm,0.3s,baz=214,slow=12,SNR=10
**PETK Petropavlovsk- 8.85 28** **Pn** **20 46 51.6 +0.8**
**JOSM Okushiri--Mats 8.89 252** P **Pn** **20 46 53.2 +1.7**
**OFUJ Ofunato 9.33 230** *eS* **Sn** **20 48 37.1 -3.5**
**JRG Rokugo 9.68 235** P **Pn** **20 47 03.1 +0.8**
JRG *eS* **Sn** **20 48 45.2 -4.0**
**JIO Ouri 9.96 228** P **Pn** **20 47 06.2 +0.2**
JIO *eS* **Sn** **20 48 50.7 -5.1**
**TEY Ternei 10.05 272** *eP* **Pn** **20 47 10.0 +2.8**
**JMM Marumori 10.69 228** Pn **Pn** **20 47 15.7 -0.3**
**JYA Atsumi 10.75 234** P **Pn** **20 47 18.1 +1.2**
**GRNR Gornyy 10.98 304** *eP* **Pn** **20 47 20.4 +0.5**
**JFY Yanaizu 11.60 230** P **Pn** **20 47 29.8 +1.4**
**JSD Sado 11.97 236** Pn **Pn** **20 47 33.2 0.0**
**MAJO Matsushiro 13.05 231** *i* PN **Pn** **20 47 49.3 +1.8**
**MAJO Matsushiro 13.05 231** Pn **Pn** **20 47 49.5 +2.0**
**MJAR Matsushiro Arr 13.05 231** P **Pn** **20 47 49.7 +2.1**
comp=E,0.2nm,0.3s,baz=29,slow=14,SNR=17
**MJAR Matsushiro Arr 13.05 231** PN **Pn** **20 47 49.4 +1.9**
**MJAR Matsushiro Arr 13.05 231** Pn **Pn** **20 47 49.4 +1.9**
**MJB9 Matsu-Tunnel 13.05 231** **Pn** **20 47 49.4 +1.9**
**GRTR Gornotajezhnoj 13.43 269** *eP* **Pn** **20 47 52.8 +0.4**
GRTR AMB AMB 20 47 54.3
**USRK Ussuriysk Ar. 13.44 271** P **Pn** **20 47 53.9 +1.4**
baz=84,slow=13,SNR=4.3
**KLR Kul'dur 13.46 293** *i* PN **Pn** **20 47 50.9 -1.9**
**KLR Kul'dur 13.46 293** *i* P **Pn** **20 47 50.9 -1.9**
**MA2 Magadan 14.11 360** *i* P **Pn** **20 47 58.6 -2.6**
**MA2 Magadan 14.11 360** *i* Pn **Pn** **20 47 58.6 -2.6**
**SEY Seymchan 17.50 2** P **P** **20 48 41.5 -1.7**
comp=E,0.2nm,0.3s,baz=188,slow=11,SNR=6.1
**SEY Seymchan 17.50 2** *i* P **P** **20 48 40.9 -2.2**
**SEY Seymchan 17.50 2** *i* P **P** **20 48 40.9 -2.2**
**KSRS Korea Array 18.91 253** P **Pn** **20 49 02.6 +2.3**
comp=E,0.2nm,0.3s,baz=57,slow=11,SNR=5.9
**YAK Yakutsk 20.59 331** P **P** **20 49 14.9 -1.8**
comp=E,0.3nm,0.3s,baz=121,slow=2.8,SNR=12
**YAK Yakutsk 20.59 331** *eP* **P** **20 49 13.4 -3.3**
YAK pmax pmax
comp=Z,17nm,0.9s
**YAK Yakutsk 20.59 331** **P** **20 49 14.2 -2.5**
YAK IAmb IAmb 20 49 17.9
comp=Z,22nm,0.9s
**BILL Bilibino 23.99 14** *eP* **P** **20 49 50.5 -0.5**
BILL pmax pmax
comp=Z,7.0nm,2.4s
**BILL Bilibino 23.99 14** *eP* **P** **20 49 50.5 -0.5**
**TIXI Tiksi 28.26 346** P **P** **20 50 26.3 -3.0**
comp=Z,2.1nm,0.4s,baz=92,slow=23,SNR=15
**H11N2 WAKE ISLAND Hy 28.92 147** T T 21 21 38.6
baz=336,slow=76,SNR=520
**H11N1 WAKE ISLAND Hy 28.93 147** T T 21 21 39.1
baz=336,slow=76,SNR=354
**H11N3 WAKE ISLAND Hy 28.93 147** T T 21 21 41.9
baz=336,slow=76,SNR=475
**H11S1 WAKE ISLAND Hy 29.96 149** T T 21 23 40.7
SNR=370
**H11S3 WAKE ISLAND Hy 29.97 149** T T 21 22 59.6
baz=336,slow=74,SNR=273
**H11S2 WAKE ISLAND Hy 29.98 149** T T 21 23 02.5
baz=233,slow=74,SNR=314
**SONM Songino Array 30.27 291** P **P** **20 50 46.7 -0.9**
comp=Z,0.3nm,0.4s,baz=90,slow=7.8,SNR=2.1
**IMAR Indian Mountai 35.72 35** P **P** **20 51 36.3 +1.7**
**LZH Lanzhou 36.34 272** *eP* **P** **20 51 43.5 +3.1**
LZH pmax pmax
comp=Z,26nm,1.4s
**GTA Gaotai 37.60 279** *eP* **P** **20 51 52.6 +1.6**
GTA pmax pmax
comp=Z,7.0nm,0.7s
**TOLK Toolik Lake Re 37.65 31** P **P** **20 51 50.5 -0.4**
TOLK IAmb IAmb 20 51 53.4
comp=Z,8.7nm,1.4s
**ILAR Eielson Array 38.52 38** P **P** **20 51 59.0 +0.8**
comp=Z,0.4nm,0.8s,baz=267,slow=7.6,SNR=2.4
**BMAR Burnt Mountain 39.45 33** P **P** **20 52 06.9 +0.9**
**ZALV Zalesovo Beam 42.07 306** P **P** **20 52 25.1 -2.5**
comp=Z,0.4nm,0.4s,baz=82,slow=7.4,SNR=3.5
ZALV PcP **PcP** **20 54 21.1 +0.7**
comp=Z,0.7nm,0.6s,baz=52,slow=2.4,SNR=4.5
**ZALV Zalesovo Beam 42.07 306** *eP* **P** **20 52 28.4 +0.8**
**GOMU GeErMu 42.61 278** P **P** **20 52 34.0 +1.3**
GOMU pmax pmax
comp=Z,4.0nm,0.7s
GOMU pmax pmax
comp=Z,80nm,4.1s
**INK Inuvik 43.56 32** P **P** **20 52 41.3 +1.9**
comp=Z,0.8nm,0.3s,baz=303,slow=7.1,SNR=6.6
**MK31 Makanchi Array 46.11 297** P **P** **20 52 59.3 -0.7**
MK31 pmax pmax
comp=Z,1.0nm,0.6s
**MK31 Makanchi Array 46.11 297** P **P** **20 52 59.3 -0.7**
**MKAR Makanchi Array 46.11 297** P **P** **20 52 59.0 -1.0**
comp=Z,0.4nm,0.4s,baz=72,slow=6.6,SNR=9.7
MKAR PcP **PcP** **20 54 35.8 +1.3**
comp=Z,0.5nm,0.6s,baz=67,slow=5.0,SNR=4.8
**MKAR Makanchi Array 46.11 297** *eP* **P** **20 52 59.2 -0.8**
**MAKZ Makanchi 46.30 298** P **P** **20 52 58.3 -3.2**
MAKZ pmax pmax
comp=Z,4.0nm,1.5s
**MAKZ Makanchi 46.30 298** P **P** **20 52 58.3 -3.2**
**C36M Paulatuk 46.70 29** P **P** **20 53 05.4 +1.2**
C36M IAmb IAmb 20 53 10.0
comp=Z,13nm,1.5s
**KURK Kurchatov 46.74 304** *i* P **P** **20 53 01.7 -3.1**
KURK pmax pmax
comp=Z,2.0nm,0.8s
**KURK Kurchatov 46.74 304** P **P** **20 53 02.6 -2.2**
**EUNU Eureka 50.67 11** P **P** **20 53 35.3 +0.7**
EUNU IAmb IAmb 20 53 35.6
comp=Z,4.0nm,0.8s
**RES Resolute Bay 52.53 18** P **P** **20 53 49.3 +0.9**
RES pmax pmax
comp=Z,13nm,0.5s
**RES Resolute Bay 52.53 18** P **P** **20 53 49.3 +0.9**
**TAPN Taplejung 52.58 273** *eP* **P** **20 53 52.2 +2.4**
comp=Z,1.0nm,0.3s
**YKA Yellowknife Ar 52.88 35** P **P** **20 53 52.9 +1.8**
comp=Z,0.6nm,0.7s,baz=298,slow=7.0,SNR=6.1
**AAK Ala-Archa 52.97 296** *i* P **P** **20 53 51.7 -0.6**
AAK pmax pmax
comp=Z,2.0nm,0.9s
**AAK Ala-Archa 52.97 296** P **P** **20 53 53.2 +1.0**
**AAK Ala-Archa 52.97 296** *eP* **P** **20 53 51.7 -0.6**
**JIRN Jiri 53.46 274** *eP* **P** **20 53 58.4 +2.1**
comp=Z,13nm,0.3s
**GUN Gumba 53.52 274** *eP* **P** **20 53 59.8 +3.1**
comp=Z,5.8nm,0.2s
**RAMN Ramite 53.60 273** *eP* **P** **20 53 58.7 +1.5**
comp=Z,11nm,0.4s

**KSH Kashi 53.66 292** P P 20 54 02.6 +5.3
KSH pP pP 20 54 25.7 +4.4
KSH pmax pmax
comp=Z,3.0nm,0.8s
**KKN Kakani 54.02 275** *eP* **P** **20 54 02.8 +2.6**
comp=Z,3.0nm,0.2s
**PKI Pulchoki 54.06 274** *eP* **P** **20 54 02.2 +1.6**
comp=Z,3.1nm,0.4s
**PKIN Phulchoki 54.06 274** *eP* **P** **20 54 02.9 +2.3**
comp=Z,2.5nm,0.3s
**DMN Daman 54.25 275** *eP* **P** **20 54 04.0 +2.1**
comp=Z,1.0nm,0.3s
**GKN Gorkha 54.34 275** *eP* **P** **20 54 04.3 +1.9**
comp=Z,7.8nm,0.3s
**DANN Dangsing 54.74 276** *eP* **P** **20 54 07.8 +2.3**
comp=Z,9.7nm,0.3s
**ARU Arti 54.87 317** *d iP* **P** **20 54 04.2 -1.4**
ARU S **S** **21 01 33.2 -5.7**
ARU SS **SS** **21 05 16.5 -6.4**
ARU pmax pmax
comp=Z,3.0nm,0.6s
**ARU Arti 54.87 317** P **P** **20 54 04.3 -1.3**
ARU IAmb IAmb 20 54 04.8
comp=Z,4.7nm,0.6s
**KOLN Koldanda 55.20 276** *eP* **P** **20 54 10.1 +1.3**
comp=Z,5.2nm,0.3s
**PYUN Piuthan 55.43 276** *eP* **P** **20 54 12.4 +2.0**
comp=Z,5.8nm,0.3s
**GAR Garm 57.60 294** P **P** **20 54 26.0 +0.5**
**DAG Danmarks Havn 57.84 357** *eP* **P** **20 54 25.6 -0.8**
**ABKAR Akbulak array 58.01 309** P **P** **20 54 25.8 -2.3**
**ARCES ARCESS Array B 58.52 340** P **P** **20 54 30.4 -0.8**
comp=Z,1.8nm,0.8s,baz=35,slow=7.3,SNR=6.1
**ARCES ARCESS Array B 58.52 340** *eP* **P** **20 54 31.0 -0.3**
ARCES pmax pmax
comp=Z,2.0nm,0.8s
**ARCES ARCESS Array B 58.52 340** IAmb IAmb 20 54 32.6
comp=Z,24nm,1.4s
**CHGR Chuyangaron 58.54 295** P **P** **20 54 32.4 +0.4**
**NIL Nilore 58.79 288** P **P** **20 54 35.5 +1.7**
NIL pmax pmax
comp=Z,8.0nm,0.7s
**NIL Nilore 58.79 288** P **P** **20 54 35.5 +1.7**
NIL IAmb IAmb 20 54 36.3
comp=Z,7.8nm,0.7s
**KBL Kabul 61.05 291** P **P** **20 54 49.1 -0.3**
KBL pmax pmax
comp=Z,5.0nm,0.7s
**KBL Kabul 61.05 291** P **P** **20 54 49.1 -0.3**
KBL IAmb IAmb 20 54 50.2
comp=Z,4.6nm,0.7s
**SUMG Summit 62.06 3** P **P** **20 54 56.4 +0.6**
SUMG pmax pmax
comp=Z,13nm,0.9s
**SUMG Summit 62.06 3** *i* P **P** **20 54 56.0 +0.1**
**SUMG Summit 62.06 3** P **P** **20 54 56.4 +0.6**
SUMG IAmb IAmb 20 54 58.1
comp=Z,13nm,0.9s
**BELG Belogornoye 62.41 318** *i* P **P** **20 54 55.2 -2.8**
BELG pmax pmax
comp=Z,1.0nm,1.0s
**FIA1 FINESS Array S 64.49 334** P **P** **20 55 11.0 -0.6**
**FINES FINESS Array B 64.49 334** P **P** **20 55 10.0 -1.5**
comp=Z,2.6nm,0.5s,baz=30,slow=8.8,SNR=32
**GEYT Alibeck 65.88 300** P **P** **20 55 21.8 +0.8**
comp=Z,3.2nm,0.6s,baz=254,slow=32,SNR=4.1
**GEYT Alibeck 65.88 300** IAmb IAmb 20 55 22.8
comp=Z,4.6nm,0.9s
**PDAR Pinedale Array 66.77 52** P **P** **20 55 29.3 +2.4**
comp=Z,0.4nm,0.6s,baz=279,slow=2.9,SNR=4.2
**NC303 NORSAR Array S 68.70 340** P **P** **20 55 37.5 -0.8**
NC303 IAmb IAmb 20 55 38.1
comp=Z,18nm,1.1s
**NC405 NORSAR Array S 68.71 340** P **P** **20 55 37.6 -0.8**
**NC204 NORSAR Array S 68.80 341** P **P** **20 55 37.7 -1.3**
**NB201 NORSAR Array S 68.87 340** P **P** **20 55 38.2 -1.2**
**NB2 NORSAR Subarra 68.90 340** P **P** **20 55 38.6 -1.0**
comp=Z,1.6nm,0.3s,baz=29,slow=6.5
**NOA NORSAR Array B 68.90 340** P **P** **20 55 38.8 -0.8**
comp=Z,1.6nm,0.3s,baz=28,slow=6.6,SNR=20
**NC602 NORSAR Array S 69.08 340** P **P** **20 55 40.4 -0.3**
**NORES NORESS Array B 69.08 340** P **P** **20 55 40.1 -0.6**
**KIV Kislovodsk 70.53 313** *eP* **P** **20 55 51.3 +1.3**
KIV pmax pmax
comp=Z,8.0nm,1.0s
**KIV Kislovodsk 70.53 313** P **P** **20 55 51.0 +1.0**
KIV IAmb IAmb 20 55 52.4
comp=Z,6.4nm,0.7s
**KBZ Khabaz 70.58 313** P **P** **20 55 51.4 +1.3**
comp=Z,6.1nm,0.8s,baz=85,slow=4.3,SNR=12
**KBZ Khabaz 70.58 313** *i* P **P** **20 55 50.7 +0.6**
KBZ pmax pmax
comp=Z,7.0nm,0.9s
**KBZ Khabaz 70.58 313** *i* P **P** **20 55 50.7 +0.6**
**AKASG Malin Array Be 71.70 325** P **P** **20 55 56.0 -0.8**
comp=Z,2.0nm,0.4s,baz=37,slow=6.2,SNR=22
**AKBB Malin Array Si 71.70 325** P **P** **20 55 56.2 -0.6**
AKBB pmax pmax
comp=Z,3.0nm,0.6s
**AKBB Malin Array Si 71.70 325** P **P** **20 55 56.1 -0.6**
AKBB IAmb IAmb 20 55 56.7
comp=Z,3.3nm,0.6s
**SORM Soroca 74.06 324** ⇓P **P** **20 56 09.9 -0.8**
**SORM Soroca 74.06 324** ⇓P **P** **20 56 09.9 -0.8**
**GURO Guroymak-BITLI 74.73 310** P **P** **20 56 16.6 +1.6**
**MILM Milestii Mici 74.82 323** ⇓P **P** **20 56 14.6 -0.6**
**MILM Milestii Mici 74.82 323** ⇓P **P** **20 56 14.6 -0.6**
**BUR08 Bucovina Ar. S 75.73 325** P **P** **20 56 20.9 +0.4**
BUR08 IAmb IAmb 20 56 21.8
comp=Z,5.9nm,0.5s
**BURAR Bucovina Array 75.75 325** ⇑P **P** **20 56 20.4 -0.2**
**BURAR Bucovina Array 75.75 325** ⇑P **P** **20 56 20.4 -0.2**
**BURAR Bucovina Array 75.75 325** P **P** **20 56 20.7 +0.1**
BURAR IAmb IAmb 20 56 21.9
comp=Z,8.0nm,0.5s
**VLDR Vladesti 75.98 323** ⇑P **P** **20 56 22.4 +0.6**
**TESR Tescani 76.05 324** ⇑P **P** **20 56 21.3 -1.0**
**TRPA Tarpa 76.37 327** ⇑P **P** **20 56 24.6 +0.6**
**TPGR Topolog 76.62 322** ⇑P **P** **20 56 25.9 +0.4**
**DPC Dobruska-Polom 76.72 332** *eP* **P** **20 56 25.8 -0.2**
**MORC Moravsky Berou 76.80 331** ⇑P **P** **20 56 27.4 +1.0**
**MORC Moravsky Berou 76.80 331** ⇑P **P** **20 56 27.4 +1.0**
**CLL Collm 76.94 334** P **P** **20 56 26.8 -0.3**
CLL pmax pmax
comp=Z,10.0nm,1.2s
**CLL Collm 76.94 334** *i* P **P** **20 56 27.3 +0.2**
comp=Z,6.0nm,0.6s
**CLL Collm 76.94 334** P **P** **20 56 26.8 -0.3**
CLL IAmb IAmb 20 56 27.3
comp=Z,10nm,1.2s
**MLR Muntele Rosu 77.17 324** ⇑P **P** **20 56 29.9 +1.2**
**MLR Muntele Rosu 77.17 324** ⇑P **P** **20 56 29.9 +1.2**
**EKA Eskdalemuir Ar 77.17 345** P **P** **20 56 28.5 +0.1**
**ICOR Ion Corvin 77.48 322** ⇑P **P** **20 56 31.8 +1.5**
**VRAC Vranov 77.52 331** ⇑P **P** **20 56 31.5 +1.1**
**VRAC Vranov 77.52 331** ⇑P **P** **20 56 31.5 +1.1**
**VOIR 77.58 324** ⇓P **P** **20 56 31.9 +0.9**
**VOIR 77.58 324** ⇓P **P** **20 56 31.9 +0.9**
**BRTR Keskin Array B 78.20 316** P **P** **20 56 34.9 +0.3**
comp=Z,0.9nm,0.6s,baz=52,slow=13,SNR=2.7
**GZR Gura Zlata 78.53 326** ⇑P **P** **20 56 35.9 -0.3**
**GZR Gura Zlata 78.53 326** ⇑P **P** **20 56 35.9 -0.3**
**KHC Kasperske Hory 78.66 333** P **P** **20 56 36.8 0.0**
KHC pmax pmax
comp=Z,5.0nm,0.7s
**KHC Kasperske Hory 78.66 333** *eP* **P** **20 56 37.4 +0.6**
**KHC Kasperske Hory 78.66 333** P **P** **20 56 36.8 0.0**
KHC IAmb IAmb 20 56 38.5
comp=Z,4.7nm,0.7s
**CKRC Cesky Krumlov 78.70 332** *eP* **P** **20 56 37.1 +0.1**
**GEC2 GERESS Array S 78.87 333** P **P** **20 56 38.1 +0.1**
**GERES GERESS Array B 78.87 333** P **P** **20 56 38.3 +0.3**
comp=Z,1.1nm,0.6s,baz=35,slow=4.9,SNR=13
**GERES GERESS Array B 78.87 333** *eP* **P** **20 56 38.5 +0.4**
GERES pmax pmax
comp=Z,1.0nm,0.6s
**GERES GERESS Array B 78.87 333** P **P** **20 56 38.2 +0.1**
**CONA Conrad Observa 78.95 331** *eP* **P** **20 56 39.5 +1.0**
comp=Z,2.0nm,0.6s
**HERR Herculane 79.10 325** ⇑P **P** **20 56 38.7 -0.5**
**MORH Mrgy, Hungar 79.43 328** ⇑P **P** **20 56 39.2 -1.8**
**MOA Molln 79.56 332** *eP* **P** **20 56 43.0 +1.3**
comp=Z,0.7nm,0.5s
**FRGS Fruska Gora 79.89 327** ⇑P **P** **20 56 41.4 -2.2**

**SOKA Soboth 80.32 331** *eP* **P** **20 56 46.3 +0.4**
comp=Z,1.8nm,0.7s
**KBA Koelnbreinsper 80.54 332** *eP* **P** **20 56 48.2 +1.0**
comp=Z,1.3nm,0.3s
**OBKA Obir 80.63 331** *eP* **P** **20 56 48.1 +0.5**
comp=Z,1.0nm,0.5s
**VTS Vitosha 80.64 324** ⇑P **P** **20 56 48.4 +0.6**
**VTS Vitosha 80.64 324** P **P** **20 56 48.3 +0.5**
VTS pmax pmax
comp=Z,6.0nm,0.9s
**VTS Vitosha 80.64 324** P **P** **20 56 48.2 +0.5**
VTS IAmb IAmb 20 56 50.0
comp=Z,5.7nm,0.9s
**WATA Walderalm 80.88 333** *eP* **P** **20 56 49.8 +0.8**
comp=Z,2.4nm,0.5s
**WTTA Wattenberg 80.92 333** *eP* **P** **20 56 50.2 +1.0**
comp=Z,3.1nm,0.3s
**MOTA Moosalm 81.02 334** *eP* **P** **20 56 50.4 +0.7**
comp=Z,1.9nm,0.5s
**H03N2 Juan Fernandez 140.33 90** T T 23 41 01.0
baz=307,slow=77,SNR=7.9
**H03N1 Juan Fernandez 140.35 90** T T 23 40 52.9
baz=307,slow=77,SNR=10
**H03N3 Juan Fernandez 140.35 90** T T 23 41 16.7
baz=307,slow=77,SNR=5.2

*BJI* **11** *21:20:18.3±0.0, 7.60N×127.01E, h39km, mb4.3/37, mB4.8/12, Ms4.2/9, Ms7 3.9/10*
*MAN* **11** *21:20:20.8, 8.05N×127.01E, h6km, mb5.3, ML4.2, MS4.4*
*DJA* **11** *21:20:21.3±1.4, 8.1N±3.3×12.7E±.1, h29km±11km, M4.9/26, mB5.3/5, mb4.7/26, MLv5.1/5, Mw(mB)4.7/5*
*IDC* **11** *21:20:22.7±2.5, 8.03N×126.75E, h36km±19km, mb4.0/18, mb1 4.1/18, mb1mx4.1/28, mbtmp4.2/18, MS3.5/32, Ms1 3.5/32, ms1mx3.4/77, Error ellipse: s-maj=29.3km s-min=13.5km az=75.0*
*NEIC* **11** *21:20:26.1.9, 8.07N±0.08×126.96E±0.10, h60km±7km, mb4.4/42, Error ellipse: s-maj=13.7km s-min=11.2km az=75.0*
**ISC 11 21:20:24.0**±0.4, **8.12N**±0.05×**127.04E**±0.06, **h46**km, **n147,** σ1§**53**/132, **mb4.4**/56, **MS3.7**/31, **4C-7D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **0.67** | **275** | ⇓*eP* | | **Pn** | | **21 20 35.7** | **-1.4** |
| BIPH | | | | *eS* | | **Sn** | | **21 20 45.0** | **-1.7** |
| **DAV** | **Davao City (W)** | **1.78** | **234** | | | **Pn** | | **21 20 53.9** | **+1.6** |
| **KCP** | **Kidapawan** | **2.22** | **240** | ⇑*iP* | | **Pn** | | **21 20 58.5** | **+0.1** |
| **CTBH** | **Cotabato--PC H** | **2.91** | **252** | ⇓*iP* | | **Pn** | | **21 21 08.0** | **+0.2** |
| CTBH | | | | *i* S | | **Sn** | | **21 21 42.7** | **+1.2** |
| **MSLP** | **Maasin** | **2.94** | **313** | ⇓*eP* | | **Pn** | | **21 21 09.3** | **+1.1** |
| MSLP | | | | *eS* | | Sn | | 21 21 53.0 | +11 |
| **TBP** | **Tagbilaran** | **3.50** | **297** | *eP* | | Pn | | 21 21 26.8 | +11 |
| TBP | | | | *eS* | | **Sn** | | **21 21 58.9** | **+2.8** |
| **LLP** | **Lapu-Lapu** | **3.73** | **306** | ⇑*iP* | | **Pn** | | **21 21 20.1** | **+1.0** |
| LLP | | | | *i* S | | **Sn** | | **21 22 08.7** | **+6.8** |
| **SNPH** | **Sibulan** | **3.95** | **288** | ⇓*eP* | | **Pn** | | **21 21 22.7** | **+0.6** |
| SNPH | | | | *i* S | | **Sn** | | **21 22 10.2** | **+3.0** |
| **SGSI** | **Sangihe** | **4.65** | **199** | P | | **Pn** | | **21 21 33.4** | **+1.6** |
| **RCP** | **Roxas** | **5.43** | **309** | ⇓*eP* | | **Pn** | | **21 21 43.9** | **+1.4** |
| **JAP** | **San Jose, Anti** | **5.66** | **298** | ⇓*eP* | | Pn | | 21 21 52.6 | +7.1 |
| **TNTI** | **Ternate** 63nm,0.9s | **7.31** | **177** | P | | **Pn** | | **21 22 09.8** | **+1.6** |
| **TNTI** | **Ternate** | **7.31** | **177** | Pn | | **Pn** | | **21 22 09.1** | **+0.9** |
| **LQP** | **Lukban** | **8.03** | **318** | ⇓*eP* | | **Pn** | | **21 22 19.4** | **+1.1** |
| **KMSI** | **Cibinong** 3μm91nm,0.7s | **8.09** | **202** | P | | **Pn** | | **21 22 20.7** | **+1.7** |
| **GTOI** | **Gorontalo** 331nm23nm,1.2s | **8.45** | **209** | P | | **Pn** | | **21 22 23.7** | **-0.2** |
| **LBMI** | **Labuha** 42nm,0.8s | **8.71** | **177** | P | | **Pn** | | **21 22 28.0** | **+0.5** |
| **MRSI** | **Marisa** 40nm,0.9s | **9.13** | **214** | P | | **Pn** | | **21 22 34.6** | **+1.3** |
| **TOLI2** | **Tolitoli** | **9.34** | **222** | Pn | | **Pn** | | **21 22 34.6** | **-1.5** |
| **SWI** | **Sorong** 20nm,0.9s | **9.87** | **155** | P | | **Pn** | | **21 22 41.2** | **-2.1** |
| **SIJI** | **Sorong** comp=Z,250nm,18.7s,baz=272,slow=45 | **9.88** | **155** | LR | | LR | | 21 27 45.9 | |
| **SANI** | **Sanana** 21nm,0.9s | **10.16** | **186** | P | | **Pn** | | **21 22 46.7** | **-0.6** |
| **KKM** | **Kota Kinabalu** | **10.93** | **260** | Pn | | **Pn** | | **21 22 57.2** | **-0.8** |
| **FAKI** | **Fak Fak** | **12.14** | **154** | Pn | | **Pn** | | **21 23 12.9** | **-1.5** |
| **TTSI** | **Tana Toraja** | **13.22** | **213** | P | | **P** | | **21 23 40.8** | **+2.8** |
| **TWG** | **Pinlang** | **15.70** | **339** | Pn | | **P** | | **21 24 03.7** | **-1.8** |
| TWG | | | | IAmb | IAmb | | | 21 24 15.0 | |
| comp=Z,27nm,1.0s | | | | | | | | | |
| **SBUM** | **Sibu** | **15.79** | **250** | P | | **P** | | **21 24 08.2** | **+1.7** |
| **JAY** | **Jayapura** | **17.25** | **127** | LR | | LR | | 21 30 27.3 | |
| comp=Z,215nm,19.7s,baz=17,slow=35 | | | | | | | | | |
| **JAY** | **Jayapura** | **17.25** | **127** | P | | **P** | | **21 24 22.5** | **-0.3** |
| comp=Z,12nm,1.0s | | | | | | | | | |
| **SOEI** | **Soe** | **17.97** | **189** | P | | **P** | | **21 24 32.4** | **+1.6** |
| comp=Z,50nm,1.0s | | | | | | | | | |
| **SOEI** | **Soe** | **17.97** | **189** | P | | **P** | | **21 24 32.7** | **+1.9** |
| SOEI | | | | IAmb | IAmb | | | 21 24 46.6 | |
| comp=Z,25nm,0.8s | | | | | | | | | |
| **BATI** | **Baumata** | **18.51** | **191** | LR | | LR | | 21 33 01.2 | |
| comp=Z,118nm,21.0s,baz=28,slow=41 | | | | | | | | | |
| **BATI** | **Baumata** | **18.51** | **191** | P | | **Pn** | | **21 24 39.6** | **+2.4** |
| comp=Z,37nm,1.0s | | | | | | | | | |
| **QIZ** | **Qiongzhong** | **19.90** | **305** | P | | **P** | | **21 24 51.1** | **-0.7** |
| QIZ | | | | S | | **Sn** | | **21 28 37.6** | **+0.8** |
| QIZ | | | | LR | LR | | | | |
| comp=Z,270nm,16.7s | | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| comp=Z,210nm,15.7s | | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| comp=Z,310nm,19.1s | | | | | | | | | |
| **QIZ** | **Qiongzhong** | **19.90** | **305** | P | | **P** | | **21 24 51.4** | **-0.4** |
| **MTN** | **Manton Dam** | **21.22** | **169** | P | | **P** | | **21 25 05.9** | **-0.2** |
| MTN | | | | IAmb | IAmb | | | 21 25 19.6 | |
| comp=Z,15nm,0.7s | | | | | | | | | |
| **UBPT** | **Khong Chiam** | **22.27** | **291** | P | | **P** | | **21 25 16.9** | **-0.5** |
| **KPJI** | **Karang Pucung** comp=Z,22nm,1.7s | **23.70** | **230** | P | | **P** | | **21 25 31.5** | **-0.3** |
| **KNRA** | **Kununurra** | **23.71** | **176** | P | | **P** | | **21 25 32.1** | **+0.2** |
| **LEM** | **Lembang** comp=Z,102nm,18.9s,baz=46,slow=40 | **24.40** | **233** | LR | | LR | | 21 36 35.5 | |
| **NJ2** | **Nanjing** | **25.00** | **343** | *eP* | | **P** | | **21 25 46.0** | **+2.5** |
| NJ2 | | | | pmax | pmax | | | | |
| comp=Z,12nm,0.5s | | | | | | | | | |
| **KLI** | **Kotabumi** | **25.61** | **240** | P | | **P** | | **21 25 46.9** | **-2.4** |
| **COEN** | **Coen** | **27.16** | **144** | P | | **P** | | **21 26 03.8** | **+0.5** |
| COEN | | | | IAmb | IAmb | | | 21 26 05.5 | |
| comp=Z,14nm,1.0s | | | | | | | | | |
| **JHJ** | **Hachijo jima 2** comp=Z,54nm,20.6s,baz=279,slow=33 | **27.53** | **24** | LR | | LR | | 21 35 37.4 | |
| **WB0** | **Warramunga Arr** | **28.64** | **165** | P | | **P** | | **21 26 16.4** | **-0.1** |
| WB0 | | | | IAmb | IAmb | | | 21 26 23.9 | |
| comp=Z,6.2nm,0.8s | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **28.79** | **166** | P | | **P** | | **21 26 18.4** | **+0.6** |
| **WRA** | **Warramunga Arr** comp=Z,1.3nm,0.8s,baz=347,slow=10.0,SNR=8.2 | **28.80** | **166** | P | | **P** | | **21 26 15.8** | **-2.0** |
| WRA | | | | PcP | | **PcP** | | **21 29 27.6** | **+0.5** |
| comp=Z,1.0nm,1.1s,baz=337,slow=2.7,SNR=2.2 | | | | | | | | | |
| WRA | | | | ScP | | **ScP** | | **21 33 05.0** | **+0.1** |
| comp=Z,0.5nm,1.0s,baz=343,slow=2.8,SNR=1.8 | | | | | | | | | |
| WRA | | | | LR | LR | | | 21 40 25.8 | |
| comp=Z,45nm,18.6s,baz=27,slow=42 | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.80** | **166** | P | | **P** | | **21 26 18.7** | **+0.9** |
| **WB2** | **Warramunga Arr** | **28.80** | **166** | P | | **P** | | **21 26 18.1** | **+0.2** |
| **WR0** | **Warramunga Arr** | **28.87** | **165** | P | | **P** | | **21 26 17.7** | **-0.7** |
| WR0 | | | | IAmb | IAmb | | | 21 26 30.1 | |
| comp=Z,6.5nm,1.1s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.6nm,0.6s,baz=98,slow=6.5,SNR=5.0 | **29.16** | **293** | P | | **P** | | **21 26 20.1** | **-1.0** |
| CMAR | | | | ScP | | **ScP** | | **21 33 05.7** | **-0.4** |
| comp=Z,0.4nm,0.4s,baz=100,slow=3.9,SNR=3.4 | | | | | | | | | |
| CMAR | | | | LR | LR | | | 21 37 59.6 | |
| comp=Z,54nm,19.1s,baz=80,slow=36 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.16** | **293** | P | | **P** | | **21 26 21.6** | **+0.4** |
| **KSRS** | **Korea Array** comp=Z,3.0nm,1.0s,baz=172,slow=10,SNR=5.7 | **29.21** | **1** | P | | **P** | | **21 26 22.1** | **+0.8** |
| KSRS | | | | LR | LR | | | 21 40 38.6 | |
| comp=Z,62nm,18.0s,baz=195,slow=42 | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** comp=Z,50nm,21.9s,baz=196,slow=34 | **30.07** | **18** | LR | LR | | | 21 37 17.8 | |
| **GSI** | **Gunungsitoli** | **30.11** | **259** | P | | **P** | | **21 26 28.6** | **-1.0** |
| GSI | | | | IAmb | IAmb | | | 21 26 33.4 | |
| comp=Z,18nm,1.1s | | | | | | | | | |
| **PZH** | **PanZhiHua** | **30.18** | **310** | P | | **P** | | **21 26 32.2** | **+2.0** |
| PZH | | | | pmax | pmax | | | | |
| comp=Z,10.0nm,0.5s |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PZH | | | | pmax | pmax | | | |
| | comp=Z,90nm,5.3s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.34** | **193** | P | **P** | **21 26 31.3** | **-0.2** | |
| PSA00 | | | | IAmb | IAmb | 21 26 38.8 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **XAN** | **Xi'an** | **30.73** | **330** | P | **P** | **21 26 32.2** | **-2.6** | |
| XAN | | | | pP | pP | 21 26 44.4 | -1.3 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **HNS** | **HongShan** | **31.22** | **341** | ⇓P | **P** | **21 26 37.4** | **-1.6** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **32.30** | **168** | P | **P** | **21 26 48.5** | **-0.3** | |
| | comp=Z,0.7nm,0.5s,baz=357,slow=8.5,SNR=15 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 29 37.1** | **+0.9** | |
| | comp=Z,0.5nm,0.5s,baz=341,slow=2.8,SNR=2.3 | | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 33 16.4** | **0.0** | |
| | comp=Z,1.1nm,0.9s,baz=345,slow=4.0,SNR=6.6 | | | | | | | |
| ASAR | | | | LR | LR | 21 43 28.9 | | |
| | comp=Z,63nm,18.1s,baz=345,slow=43 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.30** | **168** | P | **P** | **21 26 50.7** | **+2.0** | |
| **BJT** | **Baijiatuau** | **33.22** | **345** | P | **P** | **21 26 56.1** | **-0.4** | |
| BJT | | | | IAmb | IAmb | 21 27 10.5 | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **33.82** | **146** | LR | LR | 21 40 57.4 | | |
| | comp=Z,87nm,21.4s,baz=336,slow=36 | | | | | | | |
| **LZH** | **Lanzhou** | **34.97** | **326** | *e*P | **P** | **21 27 08.0** | **-4.0** | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,380nm,13.6s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,300nm,14.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,250nm,16.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **35.38** | **340** | *e*P | **P** | **21 27 18.9** | **+3.5** | |
| **USA0B** | **Ussuriysk Arra** | **36.20** | **6** | P | **P** | **21 27 23.7** | **+1.5** | |
| **USRK** | **Ussuriysk Ar.** | **36.20** | **6** | P | **P** | **21 27 23.3** | **+1.1** | |
| | comp=Z,8.6nm,0.9s,baz=190,slow=7.9,SNR=13 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.20** | **6** | P | **P** | **21 27 23.7** | **+1.5** | |
| **MDJ** | **Mudanjiang** | **36.42** | **3** | P | **P** | **21 27 26.6** | **+2.4** | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **36.42** | **3** | P | **P** | **21 27 25.6** | **+1.4** | |
| **HNR** | **Honiara** | **37.13** | **117** | LR | LR | 21 42 41.8 | | |
| | comp=Z,35nm,19.0s,baz=259,slow=36 | | | | | | | |
| **ASAJ** | **Asahikawa** | **38.34** | **18** | LR | LR | 21 43 01.2 | | |
| | comp=Z,94nm,20.3s,baz=190,slow=35 | | | | | | | |
| **MORW** | **Morawa** | **38.46** | **196** | P | **P** | **21 27 40.5** | **-1.1** | |
| MORW | | | | IAmb | IAmb | 21 27 46.6 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **38.69** | **179** | P | **P** | **21 27 43.1** | **-0.4** | |
| **GTA** | **Gaotai** | **39.57** | **326** | ⇓P | **P** | **21 27 49.9** | **-1.1** | |
| GTA | | | | pP | pP | 21 28 01.0 | -1.1 | |
| GTA | | | | sP | sP | 21 28 06.0 | -1.0 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,95nm,6.2s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,77nm,18.2s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,140nm,19.6s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,99nm,18.9s | | | | | | | |
| **LSA** | **Lhasa** | **39.90** | **307** | P | **P** | **21 27 53.4** | **-0.9** | |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.26** | **69** | T | T | 22 11 51.4 | | |
| | baz=265,slow=74,SNR=4.3 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.27** | **69** | T | T | 22 11 54.2 | | |
| | baz=265,slow=74,SNR=4.3 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.28** | **69** | T | T | 22 11 55.4 | | |
| | baz=265,slow=74,SNR=5.1 | | | | | | | |
| **KLR** | **Kul'dur** | **41.16** | **5** | LR | LR | 21 48 05.0 | | |
| | comp=Z,46nm,18.1s,baz=130,slow=40 | | | | | | | |
| **BBOO** | **Buckleboo** | **41.60** | **169** | P | **P** | **21 28 07.6** | **0.0** | |
| BBOO | | | | IAmb | IAmb | 21 28 19.6 | | |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **TAPN** | **Taplejung** | **41.81** | **302** | *e*P | **P** | **21 28 09.0** | **-0.8** | |
| | comp=Z,13nm,0.5s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **41.87** | **192** | P | **P** | **21 28 10.2** | **+0.4** | |
| **ODAN** | **Odare** | **41.91** | **301** | *e*P | **P** | **21 28 10.1** | **-0.5** | |
| | comp=Z,25nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **42.14** | **161** | P | **P** | **21 28 11.4** | **-0.6** | |
| | comp=Z,0.9nm,0.5s,baz=356,slow=11,SNR=3.3 | | | | | | | |
| **STKA** | **Stephens Creek** | **42.14** | **161** | P | **P** | **21 28 12.1** | **+0.1** | |
| **ULN** | **Ulaanbaatar** | **43.09** | **340** | P | **P** | **21 28 19.6** | **-0.1** | |
| **JIRN** | **Jiri** | **43.18** | **302** | *e*P | **P** | **21 28 20.6** | **-0.5** | |
| | comp=Z,9.1nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **43.28** | **340** | P | **P** | **21 28 20.4** | **-0.9** | |
| | comp=Z,0.6nm,0.6s,baz=160,slow=9.1,SNR=4.2 | | | | | | | |
| SONM | | | | PcP | **PcP** | **21 30 09.6** | **-0.1** | |
| | comp=Z,0.8nm,0.7s,baz=167,slow=3.7,SNR=4.1 | | | | | | | |
| SONM | | | | LR | LR | 21 48 09.0 | | |
| | comp=Z,99nm,19.5s,baz=180,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **43.28** | **340** | IAmb | IAmb | 21 28 24.3 | | |
| | comp=Z,1.7nm,1.1s | | | | | | | |
| **GUN** | **Gumba** | **43.52** | **302** | *e*P | **P** | **21 28 23.3** | **-0.5** | |
| | comp=Z,32nm,0.8s | | | | | | | |
| **PKI** | **Pulchoki** | **43.81** | **302** | *e*P | **P** | **21 28 24.9** | **-1.2** | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **DMN** | **Daman** | **44.08** | **302** | *e*P | **P** | **21 28 27.3** | **-0.8** | |
| | comp=Z,80nm,1.4s | | | | | | | |
| **KOLN** | **Koldanda** | **45.40** | **301** | *e*P | **P** | **21 28 37.9** | **-0.7** | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **DANN** | **Dangsing** | **45.44** | **302** | *e*P | **P** | **21 28 37.6** | **-1.4** | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **PALK** | **Pallekele** | **45.90** | **272** | LR | LR | 21 48 55.4 | | |
| | comp=Z,38nm,20.1s,baz=198,slow=38 | | | | | | | |
| **PYUN** | **Piuthan** | **46.01** | **301** | *e*P | **P** | **21 28 41.9** | **-1.6** | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **WMQ** | **Urumqi** | **49.38** | **323** | *e*P | **P** | **21 29 11.3** | **+2.2** | |
| **PETK** | **Petropavlovsk-** | **51.29** | **23** | P | **P** | **21 29 25.0** | **+1.7** | |
| | comp=Z,3.8nm,1.0s,baz=189,slow=6.7,SNR=2.0 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **51.29** | **23** | P | **P** | **21 29 24.4** | **+1.1** | |
| **YAK** | **Yakutsk** | **53.84** | **2** | LR | LR | 21 55 33.4 | | |
| | comp=Z,31nm,18.1s,baz=70,slow=39 | | | | | | | |
| **MK31** | **Makanchi Array** | **54.19** | **323** | P | **P** | **21 29 44.6** | **-0.3** | |
| MK31 | | | | IAmb | IAmb | 21 29 44.8 | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.19** | **323** | P | **P** | **21 29 44.0** | **-0.8** | |
| | comp=Z,2.9nm,0.7s,baz=120,slow=7.8,SNR=37 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **21 30 48.9** | **-0.1** | |
| | comp=Z,1.6nm,0.6s,baz=123,slow=4.5,SNR=5.8 | | | | | | | |
| MKAR | | | | LR | LR | 21 54 54.9 | | |
| | comp=Z,104nm,18.4s,baz=98,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.19** | **323** | P | **P** | **21 29 44.6** | **-0.3** | |
| **KAAM** | **Kaadhehdhoo** | **54.37** | **265** | P | **P** | **21 29 45.5** | **-1.2** | |
| **MAKZ** | **Makanchi** | **54.38** | **323** | P | **P** | **21 29 45.8** | **-0.4** | |
| MAKZ | | | | IAmb | IAmb | 21 29 46.1 | | |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **KSH** | **Kashi** | **55.23** | **313** | P | **P** | **21 29 52.8** | **+0.1** | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.9s | | | | | | | |
| **NIL** | **Nilore** | **55.57** | **305** | P | **P** | **21 29 54.6** | **-0.6** | |
| **ZAA0** | **Zalesovo Array** | **56.86** | **332** | P | **P** | **21 30 02.9** | **-1.0** | |
| ZAA0 | | | | IAmb | IAmb | 21 30 03.1 | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.86** | **332** | P | **P** | **21 30 02.4** | **-1.5** | |
| | comp=Z,2.6nm,0.7s,baz=123,slow=5.9,SNR=14 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 30 57.9** | **-1.2** | |
| | comp=Z,1.1nm,0.7s,baz=178,slow=6.8,SNR=1.9 | | | | | | | |
| ZALV | | | | LR | LR | 21 56 52.6 | | |
| | comp=Z,55nm,18.9s,baz=96,slow=38 | | | | | | | |
| **AAK** | **Ala-Archa** | **57.38** | **316** | LR | LR | 21 56 45.8 | | |
| | comp=Z,100nm,20.4s,baz=88,slow=38 | | | | | | | |
| **KURK** | **Kurchatov** | **58.26** | **326** | P | **P** | **21 30 13.1** | **-0.7** | |
| **KBL** | **Kabul** | **59.17** | **305** | P | **P** | **21 30 19.7** | **-1.1** | |
| KBL | | | | IAmb | IAmb | 21 30 21.4 | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **59.25** | **311** | P | **P** | **21 30 20.3** | **-0.8** | |
| **CHGR** | **Chuyangaron** | **60.03** | **310** | P | **P** | **21 30 26.5** | **0.0** | |
| **KKAR** | **Karatay Array** | **60.29** | **315** | P | **P** | **21 30 27.8** | **-0.3** | |
| **TIXI** | **Tiksi** | **63.48** | **1** | LR | LR | 21 59 33.4 | | |
| | comp=Z,70nm,19.9s,baz=182,slow=37 | | | | | | | |
| **TIXI** | **Tiksi** | **63.48** | **1** | P | **P** | **21 30 49.1** | **+0.2** | |
| TIXI | | | | IAmb | IAmb | 21 30 50.7 | | |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **BRVK** | **Borovoye** | **63.92** | **326** | P | **P** | **21 30 51.8** | **-0.4** | |
| BRVK | | | | IAmb | IAmb | 21 30 52.4 | | |
| | comp=Z,5.8nm,1.0s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **64.75** | **149** | P | **P** | **21 30 56.3** | **-1.3** | |
| MLZ | | | | IAmb | IAmb | 21 31 13.0 | | |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| **URZ** | **Urewera** | **65.56** | **138** | LR | LR | 21 57 37.8 | | |
| | comp=Z,53nm,21.5s,baz=312,slow=34 | | | | | | | |
| **NRIK** | **Noril'sk** | **66.27** | **346** | P | **P** | **21 31 06.7** | **-0.4** | |
| | comp=Z,4.7nm,0.7s,baz=141,slow=5.9,SNR=10 | | | | | | | |
| **NRIK** | **Noril'sk** | **66.27** | **346** | P | **P** | **21 31 07.2** | **+0.1** | |
| NRIK | | | | IAmb | IAmb | 21 31 08.2 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **WSAR** | **Wadi Sarin** | **67.03** | **292** | LR | LR | 22 05 10.6 | | |
| | comp=Z,19nm,18.1s,baz=84,slow=40 | | | | | | | |
| **GEYT** | **Alibeck** | **68.44** | **307** | LR | LR | 22 06 17.8 | | |
| | comp=Z,43nm,18.4s,baz=89,slow=40 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **70.45** | **321** | LR | LR | 22 05 11.3 | | |
| | comp=Z,63nm,18.8s,baz=32,slow=38 | | | | | | | |
| **ARU** | **Arti** | **71.43** | **327** | LR | LR | 22 05 10.6 | | |
| | comp=Z,46nm,18.9s,baz=258,slow=38 | | | | | | | |
| **GNI** | **Garni** | **78.94** | **309** | LR | LR | 22 11 08.8 | | |
| | comp=Z,33nm,18.0s,baz=22,slow=39 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **79.24** | **26** | P | **P** | **21 32 26.1** | **+2.0** | |
| BPAW | | | | IAmb | IAmb | 21 32 28.5 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **79.99** | **25** | P | **P** | **21 32 30.6** | **+2.5** | |
| I23K | | | | IAmb | IAmb | 21 32 33.3 | | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **MCK** | **McKinley** | **80.12** | **27** | P | **P** | **21 32 30.7** | **+1.7** | |
| MCK | | | | IAmb | IAmb | 21 32 43.3 | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **81.04** | **26** | P | **P** | **21 32 34.0** | **+0.2** | |
| | comp=Z,1.0nm,0.7s,baz=237,slow=5.1,SNR=12 | | | | | | | |
| **ILAR** | **Eielson Array** | **81.04** | **26** | P | **P** | **21 32 35.2** | **+1.4** | |
| **KLMR** | **Klimovskoe** | **81.76** | **330** | *e*P | P | 21 32 31.4 | -6.3 | |
| KLMR | | | | AMP | | 21 32 48.0 | | |
| KLMR | | | | *e*PP | **PP** | **21 35 39.3** | **-5.6** | |
| **PPT** | **Papeete** | **86.18** | **108** | LR | LR | 22 11 20.8 | | |
| | comp=Z,35nm,18.1s,baz=5.5,slow=35 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.46** | **340** | P | **P** | **21 33 00.4** | **-1.0** | |
| | comp=Z,4.4nm,0.7s,baz=60,slow=2.9,SNR=8.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.46** | **340** | P | **P** | **21 33 01.3** | **-0.2** | |
| **MMAI** | **Mount Meron Ar** | **87.00** | **303** | LR | LR | 22 17 19.0 | | |
| | comp=Z,31nm,18.3s,baz=20,slow=39 | | | | | | | |
| **FINES** | **FINESS Array B** | **88.13** | **332** | P | **P** | **21 33 08.1** | **-1.5** | |
| | comp=Z,1.7nm,0.5s,baz=94,slow=5.3,SNR=21 | | | | | | | |
| **FINES** | **FINESS Array B** | **88.13** | **332** | P | **P** | **21 33 09.0** | **-0.6** | |
| **AKASG** | **Malin Array Be** | **88.70** | **321** | P | **P** | **21 33 11.0** | **-1.5** | |
| | comp=Z,1.0nm,0.7s,baz=68,slow=4.3,SNR=5.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **95.01** | **334** | P | **P** | **21 33 40.3** | **-1.4** | |
| | comp=Z,1.1nm,0.9s,baz=61,slow=4.9,SNR=3.2 | | | | | | | |
| NOA | | | | LR | LR | 22 21 12.9 | | |
| | comp=Z,19nm,18.3s,baz=265,slow=38 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.40** | **24** | P | **P** | **21 33 44.5** | **+1.2** | |
| | comp=Z,0.5nm,0.6s,baz=298,slow=4.5,SNR=10 | | | | | | | |
| **MBAR** | **Mbarara** | **96.32** | **270** | LR | LR | 22 16 14.4 | | |
| | comp=Z,24nm,18.3s,baz=226,slow=35 | | | | | | | |
| **GERES** | **GERESS Array B** | **98.84** | **322** | P | **P** | **21 33 58.8** | **-0.5** | |
| | comp=Z,0.3nm,0.6s,baz=339,slow=3.0,SNR=3.7 | | | | | | | |
| GERES | | | | LR | LR | 22 20 34.1 | | |
| | comp=Z,42nm,19.2s,baz=318,slow=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | **118.63** | **50** | PKP | **PKiKP** | **21 39 09.6** | **+1.8** | |
| | comp=Z,0.2nm,0.5s,baz=0.0,slow=2.7,SNR=2.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.75** | **291** | PKP | **PKiKP** | **21 39 13.9** | **-0.2** | |
| | comp=Z,0.4nm,0.4s,baz=103,slow=2.6,SNR=4.1 | | | | | | | |

*IDC* ***11*** *21:30:04.3±4.1,* ***17.52S×179.05E, h0km, mb3.8****/4,*
***mb1 4.0****/4,* ***mb1mx3.4****/35,* ***mbtmp3.8****/4,* ***Error ellipse:***
***s-maj=169.1km s-min=37.6km az=140.0, Fiji Islands***

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.71** | **240** | P | | P | | 21 37 13.7 | +0.4 |
| | 0.6nm,0.5s,baz=106,slow=18,SNR=2.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.32** | **259** | P | | P | | 21 38 00.2 | -0.1 |
| | 0.4nm,0.3s,baz=95,slow=7.5,SNR=17 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.57** | **254** | P | | P | | 21 38 01.9 | -0.5 |
| | 2.0nm,0.5s,baz=87,slow=8.8,SNR=29 | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.08** | **14** | P | | P | | 21 42 46.6 | 0.0 |
| | 0.4nm,1.0s,baz=224,slow=6.3,SNR=2.0 | | | | | | | | |

*NIC* ***11*** *21:51:31.8±0.0,35.70N×32.45E, h20km±2km, Ml2.7/4*
*DDA* ***11*** *21:51:32.0±0.0,35.84N×31.99E, h69km±1km, ML2.3*
*ISK* ***11*** *21:51:33.3,35.66N×32.58E, h17km, ML2.7/23*
***ISC 11 21:51:32.9±1.4,35.65N±0.02×32.42E±0.04, h21km±4km,***
***n41,σ0 95/56, Cyprus region***

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ALFC** | **Alefka** | **0.52** | **163** | P | | **Pb** | | **21 51 43.4** | **+0.1** |
| ALFC | | | | S | | **Sb** | | **21 51 51.2** | **+0.7** |
| ALFC | | | | AMI | | | | 21 51 52.8 | |
| | 2.1nm,0.3s | | | | | | | | |
| ALFC | | | | AMI | | | | 21 51 52.8 | |
| | 2.1nm,0.3s | | | | | | | | |
| **AKDN** | **Akdeniz- Kıbrı** | **0.57** | **128** | PG | | **Pb** | | **21 51 44.1** | **-0.2** |
| **GAZI** | **Gazipasa** | **0.58** | **352** | PG | | **Pn** | | **21 51 45.8** | **-0.2** |
| GAZI | | | | SG | | **Sn** | | **21 51 55.1** | **+0.2** |
| **GAZI** | **Gazipasa** | **0.58** | **352** | P | | **Pn** | | **21 51 45.2** | **-0.8** |
| GAZI | | | | S | | **Sn** | | **21 51 55.3** | **+0.3** |
| **AKMS** | **Akamas** | **0.64** | **186** | P | | **Pb** | | **21 51 45.4** | **0.0** |
| AKMS | | | | S | | **Sb** | | **21 51 54.8** | **+0.9** |
| AKMS | | | | AMI | | | | 21 52 01.3 | |
| | 0.8nm,0.5s | | | | | | | | |
| AKMS | | | | AMI | | | | 21 52 01.3 | |
| | 0.8nm,0.5s | | | | | | | | |
| AKMS | | | | AMI | | | | 21 52 02.9 | |
| | 0.9nm,0.3s | | | | | | | | |
| AKMS | | | | AMI | | | | 21 52 02.9 | |
| | 0.9nm,0.3s | | | | | | | | |
| **LEF** | **Lefka** | **0.66** | **144** | PG | | **Pb** | | **21 51 45.1** | **-0.6** |
| LEF | | | | SG | | **Sb** | | **21 51 54.1** | **-0.4** |
| **TEKE** | **Tekeli-Mersin** | **0.75** | **49** | PG | | **Pb** | | **21 51 47.3** | **+0.1** |
| **NATA** | **Nata** | **0.88** | **172** | P | | **Pb** | | **21 51 49.3** | **-0.2** |
| NATA | | | | S | | **Sn** | | **21 52 03.7** | **+1.5** |
| NATA | | | | AMI | | | | 21 52 09.0 | |
| | 1.2nm,0.7s | | | | | | | | |
| NATA | | | | AMI | | | | 21 52 09.0 | |
| | 1.2nm,0.7s | | | | | | | | |
| NATA | | | | AMI | | | | 21 52 09.3 | |
| | 2.2nm,0.4s | | | | | | | | |
| NATA | | | | AMI | | | | 21 52 09.3 | |
| | 2.2nm,0.4s | | | | | | | | |
| **BERE** | **Bereket-Mersin** | **0.95** | **43** | PG | | **Pb** | | **21 51 50.6** | **-0.2** |
| **SZAC** | **Souni** | **0.97** | **157** | P | | **Pb** | | **21 51 50.8** | **-0.3** |
| SZAC | | | | S | | **Sn** | | **21 52 05.8** | **+1.3** |
| SZAC | | | | AMI | | | | 21 52 08.7 | |
| | 0.8nm,0.2s | | | | | | | | |
| SZAC | | | | AMI | | | | 21 52 08.7 | |
| | 0.8nm,0.2s | | | | | | | | |
| SZAC | | | | AMI | | | | 21 52 09.1 | |
| | 0.7nm,0.5s | | | | | | | | |
| SZAC | | | | AMI | | | | 21 52 09.1 | |
| | 0.7nm,0.5s | | | | | | | | |
| **LFK** | **Lefkose** | **0.98** | **112** | PG | | **Pb** | | **21 51 50.1** | **-1.1** |
| **OREN** | **Orenkoy-Mersin** | **1.01** | **57** | PG | | **Pb** | | **21 51 51.1** | **-0.5** |
| **CSS** | **Mathiatis** | **1.02** | **132** | PG | | **Pb** | | **21 51 51.6** | **-0.2** |
| **AKKU** | **Akkuyu-Mersin** | **1.05** | **61** | PG | | **Pb** | | **21 51 51.7** | **-0.6** |
| AKKU | | | | SG | | **Sb** | | **21 52 05.5** | **-0.1** |
| **ERMK** | **Ermenek** | **1.06** | **22** | P | | **Pn** | | **21 51 52.7** | **0.0** |
| ERMK | | | | S | | **Sn** | | **21 52 09.1** | **+2.1** |
| **ASGA** | **Asgata** | **1.10** | **142** | P | | **Pn** | | **21 51 51.5** | **-1.6** |
| ASGA | | | | S | | **Sn** | | **21 52 07.8** | **+0.1** |
| **TEVE** | **Tevekalti-Mers** | **1.14** | **47** | PG | | **Pb** | | **21 51 53.9** | **0.0** |
| **TISA** | **Tisan-Mersin** | **1.14** | **63** | PG | | **Pn** | | **21 51 53.1** | **-0.5** |
| **IKL** | **Isikli** | **1.18** | **60** | PG | | **Pn** | | **21 51 53.7** | **-0.5** |
| IKL | | | | SG | | **Sb** | | **21 52 09.3** | **-0.2** |
| **KARG** | **Kargicak-Mersi** | **1.18** | **62** | PG | | **Pn** | | **21 51 53.5** | **-0.7** |
| **HDMB** | **Hadim** | **1.31** | **2** | PN | | **Pb** | | **21 51 57.6** | **+0.7** |
| **KEBE** | **Keben-Mersin** | **1.31** | **53** | PN | | **Pn** | | **21 51 56.2** | **+0.1** |
| **KEPZ** | **Antalya-Kepez** | **1.41** | **332** | P | | **Pn** | | **21 51 56.6** | **-0.7** |
| KEPZ | | | | S | | **Sn** | | **21 52 13.6** | **-1.7** |
| **SILI** | **Silifke-Mersin** | **1.41** | **59** | PN | | **Pn** | | **21 51 57.5** | **+0.2** |
| **EREN** | **Erenkoy** | **1.44** | **94** | PN | | **Pn** | | **21 51 57.7** | **+0.1** |
| **SLFK** | **Silifke-Mersin** | **1.44** | **59** | PN | | **Pn** | | **21 51 57.9** | **+0.2** |
| **KKBE** | **Karaman, Kazim** | **1.62** | **15** | P | | **Pb** | | **21 52 01.7** | **-0.4** |
| KKBE | | | | S | | **Sb** | | **21 52 23.2** | **+1.0** |
| **KIZK** | **Mersin** | **1.62** | **59** | PN | | **Pn** | | **21 52 00.6** | **+0.4** |
| **KIZK** | **Mersin** | **1.62** | **59** | P | | **Pn** | | **21 51 59.6** | **-0.6** |
| KIZK | | | | S | | **Sn** | | **21 52 19.0** | **-1.5** |
| KIZK | | | | *i* AML | | AML | | 21 52 22.0 | |
| | comp=N,34nm,0.6s | | | | | | | | |
| **SEYD** | **Seydisehir-KON** | **1.81** | **345** | PN | | **Pb** | | **21 52 04.8** | **-0.5** |
| **SEDI** | **Konya, Seydise** | **1.87** | **344** | P | | **Pn** | | **21 52 04.3** | **+0.6** |
| **MERS** | **Mersin** | **2.09** | **54** | PN | | **Pn** | | **21 52 06.9** | **+0.2** |
| **SUTC** | **Sutluce-Ispart** | **2.15** | **328** | PN | | **Pb** | | **21 52 10.3** | **-0.8** |
| **KERG** | **Konya-Eregli** | **2.23** | **38** | P | | **Pn** | | **21 52 09.2** | **+0.4** |
| KERG | | | | S | | **Sn** | | **21 52 36.7** | **+1.0** |
| KERG | | | | *i* AML | | AML | | 21 52 55.0 | |
| | comp=N,32nm,1.7s | | | | | | | | |
| **KONT** | **Konya--Tatoy** | **2.29** | **359** | PN | | **Pn** | | **21 52 11.1** | **+1.7** |
| **KONT** | **Konya--Tatoy** | **2.29** | **359** | P | | **Pn** | | **21 52 05.8** | **-3.6** |
| **KARA** | **Karaisali** | **2.66** | **52** | PN | | **Pn** | | **21 52 15.4** | **+0.9** |
| **YVAC** | **Isparta, Yalva** | **2.78** | **341** | P | | **Pn** | | **21 52 17.4** | **+1.2** |
| **KDHN** | **Kadinhani** | **2.87** | **355** | P | | **Pn** | | **21 52 17.1** | **-0.4** |
| **CMRD** | **Camardi-Nigde** | **2.88** | **45** | PN | | **Pn** | | **21 52 18.6** | **+1.0** |
| **TAHT** | **Tahtakopru-Hat** | **3.14** | **76** | PN | | **Pn** | | **21 52 21.6** | **+0.5** |

*IDC* ***11*** *22:08:15.8±0.8,50.23N×179.05E, h0km, mb4.0/25,*
*mb1 4.2/28, mb1mx4.1/54, mbtmp4.1/28, ML3.6/3, MS3.4/16,*
*Ms1 3.4/16, ms1mx3.0/98, Error ellipse: s-maj=21.1km*
*s-min=13.3km az=176.0*
*MOS* ***11*** *22:08:18.8±1.1,50.34N×179.02E, h27km, mb4.6/22, Error*
*ellipse: s-maj=11.1km s-min=6.1km az=97.0*
*NEIC* ***11*** *22:08:20.9±1.4,50.4N±0.1×178.97E±0.08, h26km±7km,*
*mb4.3/84, ML3.7(AEIC), Error ellipse: s-maj=18.3km*
*s-min=7.7km az=176.0*
*AEIC* ***11*** *22:08:21±3.0,50.3N±0.1×179.19E±0.09, h82km±6km,*
*Error ellipse: s-maj=15.8km s-min=8.4km az=177.0*
***ISC 11 22:08:21.8±0.6, 50.35N±0.09×179.00E±0.04, h35km, n252,***
***σ1837/244, mb4.3/100, MS3.5/16, 26C-3D, Rat Islands***

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GASW** | **Gareloi Southw** | **1.97** | **43** | | | | **Pn** | **22 08 52.5** | **-0.1** |
| GASW | | | | | | | **Sn** | **22 09 17.0** | **+0.9** |
| **GALAA** | **Gareloi Lava P** | **1.99** | **44** | | | | **Pn** | **22 08 53.1** | **+0.2** |
| **GAEA** | **Gareloi East** | **2.02** | **44** | | | | **Pn** | **22 08 53.0** | **-0.2** |
| **TASE** | **Tanaga Southea** | **2.39** | **50** | | | | **Pn** | **22 08 58.3** | **-0.1** |
| **TAFP** | **Tanaga Falls P** | **2.45** | **50** | | | | **Pn** | **22 08 59.0** | **-0.3** |
| TAFP | | | | | | | **Sn** | **22 09 28.6** | **+0.6** |
| **TAPA** | **Tanaga Point A** | **2.49** | **53** | | | | **Pn** | **22 08 59.8** | **0.0** |
| TAPA | | | | | | | **Sn** | **22 09 30.2** | **+1.3** |
| **KIMD** | **Kanaga Island** | **2.76** | **58** | | | | **Pn** | **22 09 03.0** | **-0.5** |
| **KIWB** | **Kanaga Island** | **2.85** | **57** | | | | **Pn** | **22 09 04.2** | **-0.5** |
| **KIKV** | **Kanaga Island** | **2.86** | **56** | | | | **Pn** | **22 09 04.5** | **-0.3** |
| **KICM** | **Kanaga Island** | **2.86** | **55** | | | | **Pn** | **22 09 05.0** | **+0.1** |
| **GSCK** | **Great Sitkin C** | **3.47** | **59** | | | | **Pn** | **22 09 13.0** | **-0.2** |
| **GSTD** | **Great Sitkin T** | **3.50** | **59** | | | | **Pn** | **22 09 13.3** | **-0.3** |
| GSTD | | | | | | | **Sn** | **22 09 54.0** | **+0.2** |
| **GSMY** | **Great Sitkin M** | **3.54** | **60** | | | | **Pn** | **22 09 14.2** | **0.0** |
| **GSTR** | **Great Sitkin T** | **3.56** | **59** | | | | **Pn** | **22 09 14.4** | **-0.1** |
| **SHEM** | **Shemya Is, Ala** | **3.88** | **310** | Pn | | Pn | | **22 09 20.3** | **+1.5** |
| | 5.5nm,0.3s,baz=82,slow=14,SNR=1.8 | | | | | | | | |
| SHEM | | | | | | | **Sn** | **22 10 00.8** | **-2.3** |
| | 5.4nm,0.3s,baz=315,slow=20,SNR=6.3 | | | | | | | | |
| SHEM | | | | LR | | LR | | 22 10 15.0 | |
| | comp=Z,92nm,19.7s,baz=66,slow=30 | | | | | | | | |
| **SMY** | **Shemya** | **3.88** | **310** | P | | **Pn** | | **22 09 18.6** | **-0.2** |
| **SMY** | **Shemya** | **3.88** | **310** | Pn | | **Pn** | | **22 09 18.6** | **-0.2** |
| **ATKA** | **Atka Island** | **4.66** | **64** | | | | **Pn** | **22 09 28.7** | **-0.8** |
| ATKA | | | | | | | **Sn** | **22 10 20.6** | **-1.6** |
| **KOFP** | **Korovin Flat P** | **4.74** | **63** | | | | **Pn** | **22 09 30.7** | **0.0** |
| **CLES** | **Cleveland East** | **7.35** | **66** | Pn | | Pn | | **22 10 06.9** | **+0.5** |
| **NIKH** | **Nikolski High** | **8.00** | **66** | Pn | | Pn | | **22 10 14.7** | **-0.6** |
| **SPIA** | **Saint Paul Isl** | **9.33** | **39** | Pn | | Pn | | **22 10 35.7** | **+2.1** |
| **UNV** | **Unalaska Valle** | **9.58** | **63** | Pn | | Pn | | **22 10 36.8** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **13.48** | **290** | Pn | | Pn | | **22 11 29.7** | **-0.6** |
| | 0.5nm,0.3s,baz=105,slow=17,SNR=5.5 | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **13.74** | **63** | Pn | | Pn | | **22 11 32.9** | **-1.0** |
| **CHIR** | **Chirikof Islan** | **16.15** | **60** | Pn | | Pn | | **22 12 05.8** | **+0.1** |
| **

comp=Z,12nm,1.2s
**WRH Wood River Hil 22.32 38 P P 22 13 13.4 -2.5**
**M24K Tolsona, Glenn 22.34 45** P **P 22 13 17.0 +0.8**
**MDM Murphy Dome 22.47 37** P **P 22 13 16.8 -0.8**
**CCB Clear Creek Bu 22.50 38** P **P 22 13 17.2 -0.6**
**COLA College 22.58 37** *i* P **P 22 13 16.1 -2.6**
COLA pmax pmax
comp=Z,15nm,1.9s
**HDA Harding Lake 22.75 39** P **P 22 13 20.0 -0.5**
**BMRM Bremner River 22.80 48** P **P 22 13 20.6 -0.5**
BMRM IAmb IAmb 22 13 22.9
comp=Z,21nm,1.2s
**POKR Poker Plat Res 22.84 37** P **P 22 13 20.1 -1.3**
POKR IAmb IAmb 22 13 23.7
comp=Z,7.6nm,0.9s
**PAX Paxson 22.89 43** P **P 22 13 21.5 -0.6**
PAX pmax pmax
comp=Z,8.0nm,1.1s
**PAX Paxson 22.89 43** P **P 22 13 21.5 -0.6**
PAX IAmb IAmb 22 13 40.7
comp=Z,8.1nm,1.1s
**ILAR Eielson Array 22.92 38** P **P 22 13 20.4 -1.9**
comp=Z,0.5nm,0.5s,baz=237,slow=7.4,SNR=9.7
ILAR LR LR 22 22 41.3
comp=Z,107nm,18.2s,baz=159,slow=38
**N25K Chitina, Valde 22.94 47** P **P 22 13 22.4 -0.2**
N25K IAmb IAmb 22 13 23.2
comp=Z,7.5nm,0.8s
**H24K Noodor Dome 22.98 35** IAmb IAmb 22 13 23.6
comp=Z,8.8nm,1.0s
**GLB Gilahina Butte 23.27 47** P **P 22 13 25.5 -0.5**
**RIDG Independent Ri 23.39 41** P **P 22 13 26.1 -1.0**
**VRDI Verde Repeater 23.40 48** P **P 22 13 26.5 -0.8**
VRDI IAmb IAmb 22 13 34.8
comp=Z,13nm,1.1s
**J25K Salcha River, 23.46 39** P **P 22 13 27.2 -0.5**
**MENT Mentasta 23.66 44** P **P 22 13 29.8 +0.2**
**DOT Dot Lake 23.70 42** P **P 22 13 28.9 -1.1**
DOT IAmb IAmb 22 13 30.6
comp=Z,5.9nm,0.9s
**SCRK Sand Creek 23.83 41** P **P 22 13 30.0 -1.3**
**TOLK Toolik Lake Re 23.83 28** P **P 22 13 30.8 -0.4**
TOLK IAmb IAmb 22 13 32.6
comp=Z,7.5nm,0.7s
**M26K Nabesna, AK 23.85 45** P **P 22 13 30.9 -0.6**
M26K IAmb IAmb 22 13 32.3
comp=Z,9.4nm,1.1s
**BARN Barnard Glacie 24.23 49** P **P 22 13 35.5 +0.3**
BARN IAmb IAmb 22 13 36.1
comp=Z,8.2nm,0.9s
**FYU Fort Yukon 24.26 35** P **P 22 13 35.1 0.0**
FYU IAmb IAmb 22 13 47.6
comp=Z,11nm,1.0s
**M27K Edge Creek, AK 24.35 46** IAmb IAmb 22 13 37.5
comp=Z,9.9nm,0.8s
**TABL Table Mountain 24.40 50** P **P 22 13 37.3 +0.5**
**L27K Beaver Creek, 24.52 44** IAmb IAmb 22 13 53.0
comp=Z,5.1nm,0.9s
**BCAR Beaver Creek A 24.54 44** P **P 22 13 37.8 0.0**
**BMAR Burnt Mountain 24.86 33** P **P 22 13 41.5 +0.9**
**EGAK Eagle 25.24 40** P **P 22 13 44.3 +0.3**
EGAK IAmb IAmb 22 13 45.5
comp=Z,15nm,1.1s
**DAWY Dawson 25.81 42** P **P 22 13 48.8 -0.5**
DAWY IAmb IAmb 22 14 04.2
comp=Z,6.7nm,1.1s
**M30M Minto, Yukon 26.72 46** P **P 22 13 59.1 +1.6**
**YAK Yakutsk 29.07 313** LR LR 22 26 56.9
comp=Z,44nm,19.0s,baz=92,slow=38
**YAK Yakutsk 29.07 313** *ce* P **P 22 14 17.8 -0.6**
YAK pmax pmax
comp=Z,6.0nm,0.7s
**INK Inuvik 29.10 34** P **P 22 14 17.8 -0.8**
comp=Z,1.2nm,0.8s,baz=244,slow=2.2,SNR=5.5
INK LR LR 22 28 30.9
comp=Z,123nm,18.5s,baz=154,slow=42
**INK Inuvik 29.10 34** P **P 22 14 18.5 -0.1**
INK pmax pmax
comp=Z,4.0nm,1.2s
**INK Inuvik 29.10 34** P **P 22 14 18.5 -0.1**
**KLR Kul'dur 30.13 286** *ce* P **P 22 14 26.0 -1.9**
KLR pmax pmax
comp=Z,3.0nm,0.9s
**TIXI Tiksi 30.86 332** P **P 22 14 35.8 +1.7**
comp=Z,0.7nm,0.5s,baz=89,slow=23,SNR=4.6
**TIXI Tiksi 30.86 332** *ce* P **P 22 14 34.6 +0.4**
TIXI pmax pmax
comp=Z,6.0nm,2.5s
**YKA Yellowknife Ar 36.95 45** P **P 22 15 26.9 -0.1**
comp=Z,4.4nm,0.7s,baz=281,slow=8.4,SNR=33
**YKA Yellowknife Ar 36.95 45** P **P 22 15 26.6 -0.4**
**BOD Bodaibo 37.48 307** *eP* **P 22 15 30.8 -0.8**
BOD pmax pmax
comp=Z,8.0nm,1.4s
**NEW Newport 40.56 67** P **P 22 15 57.1 -0.4**
comp=Z,3.8nm,0.9s,baz=276,slow=10,SNR=5.6
**I07A Izee 41.18 74** P **P 22 16 03.5 +0.8**
**RES Resolute Bay 41.25 24** P **P 22 16 01.6 -1.2**
comp=Z,0.5nm,0.5s,baz=294,slow=9.0,SNR=2.0
RES LR LR 22 38 21.9
comp=Z,51nm,18.8s,baz=278,slow=44
**WALA Waterton Lakes 42.06 65** P **P 22 16 10.2 +0.2**
**NRIK Noril'sk 44.59 330** P **P 22 16 30.3 +0.4**
comp=Z,2.8nm,0.8s,baz=87,slow=11,SNR=5.0
**NRIK Noril'sk 44.59 330** *ce* P **P 22 16 30.0 +0.1**
NRIK pmax pmax
comp=Z,8.0nm,1.7s
**NVAR Mina Array Bea 45.08 80** P **P 22 16 34.6 +0.2**
comp=Z,1.2nm,0.8s,baz=292,slow=8.0,SNR=9.5
**BOZ Bozeman (W) 45.15 68** IAmb IAmb 22 16 48.8
comp=Z,3.7nm,0.8s
**ULN Ulaanbaatar 45.46 296** *ce* P **P 22 16 36.4 -0.9**
ULN pmax pmax
comp=Z,4.0nm,1.7s
**ELK Elko 45.65 76** P **P 22 16 38.9 0.0**
comp=Z,0.7nm,0.7s,baz=308,slow=11,SNR=2.4
**SONM Songino Array 45.86 296** P **P 22 16 41.3 +0.9**
comp=Z,0.7nm,0.6s,baz=75,slow=7.8,SNR=5.4
**YHH Holmes Hill 46.05 68** P **P 22 16 42.4 +0.2**
YHH IAmb IAmb 22 16 45.8
comp=Z,2.6nm,0.7s
**ZAK Zakamensk 46.29 301** *eP* **P 22 16 43.7 0.0**
ZAK pmax pmax
comp=Z,7.0nm,1.3s
**H17A Grant Village 46.43 69** IAmb IAmb 22 17 00.4
comp=Z,5.3nm,1.1s
**HHC Hu-ho-hao-te 46.63 285** *eP* **P 22 16 47.6 +1.1**
HHC LR LR
comp=N,190nm,14.6s
HHC LR LR
comp=E,130nm,15.2s
HHC LR LR
comp=Z,190nm,15.9s
**TPNV Topopah Spring 47.27 81** P **P 22 16 52.2 +0.6**
TPNV pmax pmax
comp=Z,2.0nm,0.8s
**TPNV Topopah Spring 47.27 81** P **P 22 16 52.2 +0.6**
TPNV IAmb IAmb 22 16 52.8
comp=Z,2.4nm,0.8s
**PDAR Pinedale Array 47.96 70** P **P 22 16 58.2 +1.2**
**NEEM North Greenlan 48.75 13** *i* P **P 22 17 02.9 +0.1**
NEEM *eP* **pP 22 17 03.5 -7.3**
NEEM IAmb IAmb 22 17 14.5
comp=Z,14nm,0.7s
**U15A North Rim 50.09 78** P **P 22 17 14.0 +0.6**
U15A IAmb IAmb 22 17 14.7
comp=Z,3.4nm,1.0s
**PV13 Radium Mtn., P 51.17 74** IAmb IAmb 22 17 31.6
comp=Z,4.5nm,0.9s
**SPITS Spitsbergen Ar 51.30 355** P **P 22 17 21.8 +0.1**
SPITS pmax pmax
comp=Z,35nm,1.2s
**SPB2 Spitsbergen Ar 51.30 355** P **P 22 17 21.8 +0.1**
**DAG Danmarks Havn 52.65 5** *i* P **P 22 17 31.1 -0.6**
DAG IAmb IAmb 22 17 44.4
comp=Z,1.3nm,0.8s
**ZALV Zalesovo Beam 53.72 313** P **P 22 17 39.1 -0.7**
comp=Z,0.6nm,0.5s,baz=54,slow=7.3,SNR=3.7
**ZALV Zalesovo Beam 53.72 313** *i* P **P 22 17 42.7 +2.8**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**LZH Lanzhou 54.32 285** *eP* **P 22 17 40.7 -4.0**
LZH pP pP 22 17 45.7 -7.3
LZH pmax pmax
comp=Z,16nm,1.3s

**SUMG Summit 54.62 13** P **P 22 17 47.3 +0.7**
SUMG pmax pmax
comp=Z,6.0nm,0.9s
**SUMG Summit 54.62 13** *i* P **P 22 17 46.0 -0.7**
SUMG IAmb IAmb 22 17 49.0
comp=Z,12nm,1.1s
**SUMG Summit 54.62 13** P **P 22 17 47.3 +0.7**
**FRB Frobisher Bay 54.62 30** P **P 22 17 45.6 -0.7**
comp=Z,3.5nm,0.9s,baz=301,slow=9.3,SNR=7.2
**GTA Gaotai 54.65 291** *eP* **P 22 17 47.8 +0.8**
GTA pP pwP 22 18 03.5 -1.1
GTA sP sP 22 18 13.6 +15
GTA pmax pmax
comp=Z,2.0nm,0.9s
GTA pmax pmax
comp=Z,44nm,4.7s
GTA LR LR
comp=N,90nm,14.9s
GTA LR LR
comp=E,130nm,17.8s
GTA LR LR
comp=Z,80nm,18.2s
**DGZ Jazzator, Alta 55.07 308** *i* P **P 22 17 49.3 -0.7**
DGZ pmax pmax
comp=Z,3.0nm,1.1s
**SFJD Kangerlussuaq 57.12 21** LR LR 22 47 58.2
comp=Z,58nm,18.2s,baz=250,slow=42
**ICESG Greenland Ices 57.52 15** *i* P **P 22 18 05.9 -1.4**
**KURK Kurchatov 58.71 313** *ce* P **P 22 18 15.8 +0.3**
KURK pmax pmax
comp=Z,8.0nm,1.3s
**KURK Kurchatov 58.71 313** P **P 22 18 15.3 -0.2**
**WMQ Urumqi 58.72 302** *eP* **P 22 18 19.6 +3.8**
**ARCES ARCESS Array B 58.86 349** P **P 22 18 15.8 -0.4**
comp=Z,3.3nm,0.9s,baz=3.3,slow=8.5,SNR=5.8
ARCES LR LR 22 45 16.3
comp=Z,32nm,20.4s,baz=3.0,slow=38
**LVZ Lovozero 59.09 345** P **P 22 18 18.1 +0.2**
LVZ pmax pmax
comp=Z,11nm,0.8s
**LVZ Lovozero 59.09 345** P **P 22 18 18.1 +0.2**
**I42A Draeger Farm, 59.09 57** P **P 22 18 19.0 +0.7**
**MKAR Makanchi Array 59.57 308** P **P 22 18 21.4 -0.2**
comp=Z,1.1nm,0.8s,baz=49,slow=5.2,SNR=11
**MKAR Makanchi Array 59.57 308** *i* P **P 22 18 21.3 -0.3**
MKAR pmax pmax
comp=Z,1.0nm,0.8s
**MAKZ Makanchi 59.72 308** P **P 22 18 22.1 -0.5**
MAKZ pmax pmax
comp=Z,2.0nm,1.0s
**MAKZ Makanchi 59.72 308** P **P 22 18 22.1 -0.5**
MAKZ IAmb IAmb 22 18 23.2
comp=Z,2.4nm,1.0s
**E46A Sault Ste Mari 59.85 53** P **P 22 18 24.0 +0.6**
**TXAR Lajitas Array 60.20 79** P **P 22 18 26.0 -0.2**
comp=Z,1.2nm,0.6s,baz=299,slow=4.9,SNR=15
**BRVK Borovoye 60.78 319** *ce* P **P 22 18 30.0 +0.3**
BRVK pmax pmax
comp=Z,7.0nm,1.3s
**BRVK Borovoye 60.78 319** P **P 22 18 30.0 +0.3**
**SCHQ Schefferville 61.67 37** P **P 22 18 35.6 -0.1**
comp=Z,9.2nm,1.2s,baz=336,slow=6.8,SNR=4.2
**SCHQ Schefferville 61.67 37** P **P 22 18 36.1 +0.4**
**HNR Honiara 61.81 201** LR LR 22 40 13.8
comp=Z,24nm,19.9s,baz=283,slow=31
**PZH PanZhiHua 62.13 279** P **P 22 18 42.6 +3.2**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
**IVI Ivigtut 62.55 24** P **P 22 18 41.8 +0.4**
**FCAR Ozark Folk Cen 62.72 66** P **P 22 18 44.4 +1.4**
**ARU Arti 62.73 327** *d i* P **P 22 18 43.8 +1.0**
ARU 22 19 21.9
ARU 22 21 00.4
ARU S **S 22 27 11.8 +3.1**
ARU pmax pmax
comp=Z,8.0nm,0.7s
**ARU Arti 62.73 327** P **P 22 18 43.8 +1.0**
**KIRV Kirov 63.88 333** *i* P **P 22 18 51.4 +1.1**
**BORG Borgarnes 64.16 10** LR LR 22 47 59.4
comp=Z,40nm,19.8s,baz=304,slow=37
**KLMR Klimovskoe 64.46 339** *eP* **P 22 18 54.2 +0.2**
KLMR pmax pmax
comp=Z,12nm,1.2s
**KLMR Klimovskoe 64.46 339** *eP* **P 22 18 54.3 +0.2**
KLMR AMP 22 18 56.9
comp=Z,12nm,1.2s
**FINES FINESS Array B 66.47 346** P **P 22 19 06.6 -0.4**
comp=Z,2.4nm,0.7s,baz=35,slow=7.0,SNR=6.7
**FINES FINESS Array B 66.47 346** *i* P **P 22 19 07.1 +0.1**
FINES pmax pmax
comp=Z,2.0nm,0.7s
**KSH Kashi 67.98 306** P **P 22 19 21.3 +4.1**
KSH pP pwP 22 19 32.4 -2.7
KSH sP PcP 22 19 38.4 -4.9
KSH PcP **PcP 22 19 48.4 +5.1**
**NB2 NORSAR Subarra 68.53 354** P **P 22 19 20.8 +0.7**
comp=Z,4.4nm,0.9s,baz=8.0,slow=6.5
**NOA NORSAR Array B 68.53 354** P **P 22 19 20.4 +0.2**
comp=Z,4.0nm,0.9s,baz=7.6,slow=6.3,SNR=8.2
NOA LR LR 22 51 45.1
comp=Z,18nm,19.0s,baz=270,slow=38
**CMAR Chiang Mai Arr 69.72 275** P **P 22 19 27.9 -0.2**
comp=Z,0.6nm,0.3s,baz=29,slow=6.2,SNR=1.8
**TAPN Taplejung 70.24 289** *eP* **P 22 19 30.9 -0.7**
comp=Z,2.0nm,0.3s
**OBN Obninsk 70.32 338** *eP* **P 22 19 32.1 +0.9**
OBN *e* 22 19 52.0
OBN *e* 22 22 03.0
OBN pmax pmax
comp=Z,7.0nm,1.1s
**JIRN Jiri 70.93 290** *eP* **P 22 19 36.5 +0.6**
comp=Z,25nm,1.0s
**GUN Gumba 70.93 291** *eP* **P 22 19 36.6 +0.7**
comp=Z,24nm,0.9s
**RAMN Ramite 71.20 290** *eP* **P 22 19 36.2 -1.2**
comp=Z,13nm,0.6s
**PKI Pulchoki 71.47 291** *eP* **P 22 19 39.4 +0.3**
comp=Z,17nm,0.5s
**PKIN Phulchoki 71.47 291** *eP* **P 22 19 38.8 -0.2**
comp=Z,3.2nm,0.5s
**GKN Gorkha 71.61 292** *eP* **P 22 19 40.0 +0.3**
comp=Z,1.8nm,0.4s
**DMN Daman 71.62 291** *eP* **P 22 19 40.1 +0.2**
**DANN Dangsing 71.87 293** *eP* **P 22 19 42.2 +0.7**
comp=Z,22nm,0.8s
**PYUN Piuthan 72.51 293** *eP* **P 22 19 45.5 +0.3**
comp=Z,22nm,1.0s
**PPT Papeete 73.07 149** LR LR 22 47 59.6
comp=Z,14nm,18.4s,baz=0.5,slow=33
**AKASG Malin Array Be 76.08 341** P **P 22 20 05.7 +0.4**
comp=Z,1.0nm,0.4s,baz=22,slow=6.2,SNR=9.3
**CLL Collm 78.02 351** *eP* **P 22 20 16.0 -0.2**
CLL *e* 22 20 22.0
**CLL Collm 78.02 351** *eP* **P 22 20 16.0 -0.2**
CLL *e*(pP) **pP 22 20 22.0 -2.8**
**DPC Dobruska-Polom 78.59 349** *eP* **P 22 20 21.1 +1.7**
**KIV Kislovodsk 78.67 329** *eP* **P 22 20 18.1 -1.9**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**SORM Soroca 78.69 340** ⇑P **P 22 20 19.9 0.0**
**SORM Soroca 78.69 340** ⇑P **P 22 20 19.9 0.0**
**NCK Nalchik 78.78 329** *i* P **P 22 20 21.3 +0.7**
NCK pmax pmax
comp=Z,11nm,1.0s
**KBZ Khabaz 78.80 329** P **P 22 20 21.4 +0.8**
comp=Z,2.5nm,0.8s,baz=54,slow=5.9,SNR=3.7
**SHA1 Shidzhatmaz 78.87 329** *i* P **P 22 20 21.8 +0.5**
**MORC Moravsky Berou 79.00 348** ⇑P **P 22 20 23.3 +1.6**
**MORC Moravsky Berou 79.00 348** ⇑P **P 22 20 23.3 +1.6**
**CRVS Cervenica-Dubn 79.26 345** *eP* **P 22 20 24.7 +1.6**
**CRVS Cervenica-Dubn 79.26 345** *eP* **P 22 20 24.7 +1.6**
**ZEI Tsey 79.30 328** *eP* **P 22 20 20.3 -3.4**
ZEI pmax pmax
comp=Z,6.0nm,1.1s
**LANS Liptovska Anna 79.33 346** *eP* **P 22 20 26.5 +3.0**
**LANS Liptovska Anna 79.33 346** *eP* **P 22 20 26.5 +3.0**
**VRAC Vranov 79.58 348** ⇑P **P 22 20 25.9 +1.1**
**VRAC Vranov 79.58 348** LR LR 23 00 19.5
comp=Z,26nm,19.1s,baz=332,slow=39
**VRAC Vranov 79.58 348** ⇑P **P 22 20 25.9 +1.1**
**TRPA Tarpa 79.83 344** ⇓P **P 22 20 28.1 +2.0**
**BURAR Bucovina Array 79.83 342** ⇑P **P 22 20 27.3 +1.0**
**BURAR Bucovina Array 79.83 342** ⇑P **P 22 20 27.3 +1.0**

**KHC Kasperske Hory 80.11 350** *i* P **P 22 20 27.4 -0.3**
KHC pmax pmax
comp=Z,7.0nm,1.0s
**KHC Kasperske Hory 80.11 350** *eP* **P 22 20 29.1 +1.4**
**SMOL Smolenice 80.25 348** *eP* **P 22 20 30.4 +2.0**
**SMOL Smolenice 80.25 348** *eP* **P 22 20 30.4 +2.0**
**WRA Warramunga Arr 80.31 222** P **P 22 20 27.1 -1.9**
comp=Z,0.9nm,0.9s,baz=41,slow=5.5,SNR=5.1
**WRA Warramunga Arr 80.31 222** *i* P **P 22 20 29.5 +0.5**
WRA pmax pmax
comp=Z,1.0nm,1.0s
**GERES GERESS Array B 80.38 350** P **P 22 20 29.6 +0.3**
comp=Z,0.8nm,0.7s,baz=23,slow=4.8,SNR=6.9
**MODS Modra-Piesok 80.41 348** *eP* **P 22 20 33.6 +4.3**
**MODS Modra-Piesok 80.41 348** *eP* **P 22 20 33.6 +4.3**
**PSZ Piszkesteto 80.47 346** ⇑P **P 22 20 32.3 +2.5**
**PSZ Piszkesteto 80.47 346** ⇑P **P 22 20 32.3 +2.5**
**ARCR ARCALIA 80.50 343** ⇑P **P 22 20 31.9 +2.1**
**AKH Akhalkalaki 80.66 328** ⇓P **P 22 20 32.7 +1.7**
**CONA Conrad Observa 81.03 349** *eP* **P 22 20 34.6 +1.8**
comp=Z,4.7nm,1.1s
**GNI Garni 81.35 326** LR LR 23 01 51.2
comp=Z,8.6nm,18.4s,baz=345,slow=40
**MLR Muntele Rosu 81.72 341** ⇑P **P 22 20 38.6 +2.1**
**MLR Muntele Rosu 81.72 341** LR LR 23 02 57.3
comp=Z,35nm,18.3s,baz=345,slow=40
**MLR Muntele Rosu 81.72 341** ⇑P **P 22 20 38.6 +2.1**
**ARSA Arzberg 81.74 349** *eP* **P 22 20 38.9 +2.4**
comp=Z,6.0nm,1.2s
**VOIR 81.95 342** ⇑P **P 22 20 39.2 +1.5**
**VOIR 81.95 342** ⇑P **P 22 20 39.2 +1.5**
**RETA Reutte 82.02 352** *eP* **P 22 20 39.2 +1.2**
comp=Z,8.3nm,1.6s
**WATA Walderalm 82.09 351** *eP* **P 22 20 39.7 +1.3**
comp=Z,0.9nm,0.3s
**MOTA Moosalm 82.13 352** *eP* **P 22 20 40.0 +1.4**
comp=Z,0.9nm,0.5s
**WTTA Wattenberg 82.16 351** *eP* **P 22 20 40.5 +1.7**
comp=Z,2.6nm,0.6s
**KBA Koelnbreinsper 82.16 350** *eP* **P 22 20 40.9 +2.1**
comp=Z,12nm,0.9s
**SOKA Soboth 82.36 349** *eP* **P 22 20 41.4 +1.6**
comp=Z,8.6nm,1.4s
**GZR Gura Zlata 82.43 343** ⇑P **P 22 20 40.6 +0.5**
**GZR Gura Zlata 82.43 343** ⇑P **P 22 20 40.6 +0.5**
**FETA Feichten 82.48 352** *eP* **P 22 20 41.8 +1.3**
comp=Z,2.0nm,0.8s
**ABTA Abfaltersbach 82.58 351** *eP* **P 22 20 41.8 +0.8**
comp=Z,1.7nm,0.7s
**FRGS Fruska Gora 83.17 345** ⇑P **P 22 20 44.2 +0.3**
**ASAR Alice Springs 83.79 221** P **P 22 20 45.9 -1.4**
comp=Z,0.8nm,0.9s,baz=28,slow=5.2,SNR=4.4
**BRTR Keskin Array B 85.28 334** P **P 22 20 55.5 +0.5**
comp=Z,12nm,0.7s,baz=40,slow=7.6,SNR=3.6
**STKA Stephens Creek 88.31 211** LR LR 22 56 03.9
comp=Z,35nm,19.5s,baz=27,slow=32
**BOSA Boshof 150.57 308** PKPbc **PKPbc 22 28 09.9 +0.2**
comp=Z,2.0nm,0.9s,baz=63,slow=2.3,SNR=4.3

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*SOME* ***11*** *22:21:58.8, 40.87N×74.15E, h5km*
*NNC* ***11*** *22:22:01.3±1.4, 40.92N×74.19E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=10.6km s-min=6.6km az=170.0*
*KRNET* ***11*** *22:22:01.1±0.1, 40.99N×73.90E, h29km, mb3.0*
*KNET* ***11*** *22:22:03.5±0.4, 41.13N×74.11E, h0km, ml2.6, Error ellipse: s-maj=3.1km s-min=2.0km az=58.0*

**ISC 11 22:22:01.3±0.9, 40.98N±0.03×74.00E±0.02, h13km±7km, n70, σ1.967/110, 33C-27D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SALK** | **Salom-Alik** baz=9.0 | **0.17** | **234** | ⇑*eP* | | **Pg** | **22 22 05.7** | **+0.2** |
| SALK | | | | ⇑*e*S | | **Sg** | **22 22 08.9** | **+0.6** |
| **ARLS** | **Aral** baz=20 | **0.92** | **15** | ⇓*e*P | | **Pg** | **22 22 18.3** | **-0.8** |
| ARLS | | | | ⇓*e*S | | **Sb** | **22 22 31.5** | **+0.2** |
| **OHH** | **Osh** baz=42 | **1.03** | **244** | ⇑*i*P | | **Pg** | **22 22 19.2** | **-2.0** |
| OHH | | | | ⇑*i*S | | **Sg** | **22 22 32.6** | **-2.0** |
| **AML** | **Almayashu** 70nm,0.6s,SNR=43 | **1.18** | **349** | ⇑P | | **Pb** | **22 22 23.3** | **-0.4** |
| AML | | | | ⇓S | | **Sn** | **22 22 39.9** | **0.0** |
| **UCH** | **Uchtor** 13nm,0.3s,SNR=30 | **1.31** | **17** | ⇑P | | **Pn** | **22 22 25.3** | **-0.4** |
| UCH | | | | ⇓S | | **Sb** | **22 22 43.0** | **+0.1** |
| **UCH** | **Uchtor** baz=20 | **1.31** | **17** | ⇑*i*P | | **Pn** | **22 22 25.2** | **-0.4** |
| UCH | | | | ⇑*e*S | | **Sn** | **22 22 43.5** | **+0.3** |
| **EKS2** | **Erkin-Say** 5.9nm,0.2s,SNR=7.5 | **1.69** | **354** | ⇓P | | **Pg** | **22 22 32.5** | **-1.3** |
| EKS2 | | | | ⇑S | | **Sg** | **22 22 56.5** | **+0.7** |
| **EKS2** | **Erkin-Say** baz=57 | **1.69** | **354** | ⇓*i*P | | **Pn** | **22 22 31.1** | **+0.4** |
| EKS2 | | | | ⇓*i*S | | **Sb** | **22 22 53.3** | **-0.3** |
| **AAK** | **Ala-Archa** 14nm,0.3s,SNR=22 | **1.70** | **12** | ⇓P | | **Pb** | **22 22 32.4** | **-0.1** |
| AAK | | | | ⇓S | | **Sg** | **22 22 55.6** | **-0.5** |
| **AAK** | **Ala-Archa** 6.8nm,0.3s | **1.70** | **12** | ⇑P | | **Pg** | **22 22 32.9** | **-1.1** |
| AAK | | | | ⇑S | | **Sg** | **22 22 55.7** | **-0.3** |
| **AAK** | **Ala-Archa** baz=15 | **1.70** | **12** | ⇓*i*P | | **Pb** | **22 22 31.6** | **-0.9** |
| AAK | | | | ⇓*i*S | | **Sb** | **22 22 54.1** | **+0.3** |
| **ARK** | **Arkit** baz=0.0 | **1.74** | **299** | ⇓*i*P | | **Pn** | **22 22 31.0** | **-0.3** |
| ARK | | | | ⇓*i*S | | **Sn** | **22 22 53.0** | **-0.3** |
| **KBK** | **Karagaybulak** 16nm,0.1s,SNR=14 | **1.82** | **23** | ⇑P | | **Pb** | **22 22 35.0** | **+0.4** |
| KBK | | | | ⇑S | | **Sg** | **22 22 59.3** | **-0.6** |
| **KBK** | **Karagaybulak** baz=25 | **1.82** | **23** | ⇓*i*P | | **Pn** | **22 22 33.5** | **+1.0** |
| KBK | | | | ⇓*i*S | | **Sb** | **22 22 57.4** | **0.0** |
| **MRKS** | **Merke** 30nm,0.4s | **1.86** | **342** | *eP* | | **Pg** | **22 22 36.5** | **-0.5** |
| MRKS | | | | *e*S | | **Sg** | **22 23 04.3** | **+3.2** |
| **MRKS** | **Merke** 30nm,0.4s | **1.86** | **342** | Pg | | **Pg** | **22 22 36.5** | **-0.5** |
| MRKS | | | | Lg | | Lg | 22 23 04.3 | |
| **FRU1** | **Bishkek** baz=16 | **1.89** | **14** | ⇑*i*P | | **Pb** | **22 22 34.6** | **-1.1** |
| FRU1 | | | | ⇑*i*S | | **Sb** | **22 22 59.1** | **-0.2** |
| **BOOM** | **Boomskoye usch** baz=45 | **2.10** | **43** | ⇓*i*P | | **Pn** | **22 22 37.8** | **+1.5** |
| BOOM | | | | ⇓*e*S | | **Sb** | **22 23 04.6** | **-0.7** |
| **CHMS** | **Chumysh** 7.8nm,0.3s,SNR=7.3 | **2.10** | **15** | ⇓P | | **Pg** | **22 22 40.0** | **-1.6** |
| CHMS | | | | ⇑S | | **Sg** | **22 23 07.8** | **-0.9** |
| **ULHL** | **Ulahol** baz=54 | **2.11** | **52** | ⇑*i*P | | **Pn** | **22 22 38.0** | **+1.6** |
| ULHL | | | | ⇑*i*S | | **Sb** | **22 23 05.2** | **-0.4** |
| **TRKS** | **Terek-Say** baz=84 | **2.23** | **285** | ⇑*i*P | | **Pn** | **22 22 37.2** | **-0.8** |
| TRKS | | | | ⇑*i*S | | **Sn** | **22 23 03.7** | **-1.7** |
| **DRK** | **Karamyk** baz=27 | **2.25** | **229** | ⇓*i*P | | **Pn** | **22 22 38.7** | **+0.2** |
| DRK | | | | ⇓*i*S | | **Sn** | **22 23 06.2** | **-0.1** |
| **TKM2** | **Tokmak 2** 7.7nm,0.3s | **2.28** | **31** | ⇓Pn | | **Pb** | **22 22 42.8** | **+0.4** |
| TKM2 | | | | ⇑Sn | | **Sb** | **22 23 12.3** | **+1.7** |
| **USP** | **Ospenovka** 10nm,0.2s,SNR=22 | **2.32** | **9** | ⇑P | | **Pb** | **22 22 43.8** | **+0.8** |
| USP | | | | ⇑S | | **Sg** | **22 23 15.0** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **USP** | **Ospenovka** | **2.32** | **9** | ⇓*e*P | **Pn** | **22 22 40.2** | **+1.0** |
| | baz=11 | | | | | | |
| USP | | | | ⇓*i*S | **Sn** | **22 23 09.0** | **+1.4** |
| | baz=11 | | | | | | |
| **KST** | **Kastek** | **2.53** | **35** | *e*P | **Pb** | **22 22 47.2** | **+0.6** |
| | 18nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sg** | **22 23 21.9** | **-0.7** |
| | 73nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.53** | **35** | Pg | **Pb** | **22 22 47.2** | **+0.6** |
| | 18nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 22 23 21.9 | |
| | 73nm,0.3s | | | | | | |
| **BTK** | **Batken** | **2.59** | **250** | ⇑*i*P | **Pn** | **22 22 43.1** | **+0.1** |
| | baz=49 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **22 23 13.5** | **-0.9** |
| | baz=49 | | | | | | |
| **DGS** | **Degeres** | **2.62** | **30** | *e*P | **Pb** | **22 22 48.9** | **+0.7** |
| | 32nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **22 23 25.1** | **-0.4** |
| | 113nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.62** | **30** | Pg | **Pb** | **22 22 48.9** | **+0.7** |
| | 32nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 22 23 25.1 | |
| | 113nm,0.4s | | | | | | |
| **KDJ** | **Kajisay** | **2.65** | **63** | ⇑*i*P | **Pn** | **22 22 45.8** | **+1.9** |
| | baz=64 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sn** | **22 23 18.7** | **+2.7** |
| | baz=64 | | | | | | |
| **MTBS** | **Maitube** | **2.81** | **39** | *e*P | **Pb** | **22 22 51.6** | **+0.2** |
| | 12nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **22 23 30.2** | **-1.4** |
| | 102nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **2.81** | **39** | Pg | **Pb** | **22 22 51.6** | **+0.2** |
| | 12nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 22 23 30.2 | |
| | 102nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **2.99** | **24** | *e*P | **Pb** | **22 22 55.1** | **+0.7** |
| | 11nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **22 23 35.4** | **-1.9** |
| | 46nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **2.99** | **24** | Pg | **Pb** | **22 22 55.1** | **+0.7** |
| | 11nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 22 23 35.4 | |
| | 46nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.01** | **46** | *e*P | **Pb** | **22 22 55.1** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **22 23 35.4** | **-2.6** |
| | 20nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.01** | **46** | Pg | **Pb** | **22 22 55.1** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 22 23 35.4 | |
| | 20nm,0.4s | | | | | | |
| **AAA** | **Alma-Ata** | **3.11** | **43** | *e*P | **Pb** | **22 22 57.3** | **+0.8** |
| | 15nm,0.3s | | | | | | |
| AAA | | | | *e*S | **Sg** | **22 23 39.2** | **-2.0** |
| | 73nm,0.7s | | | | | | |
| **AAA** | **Alma-Ata** | **3.11** | **43** | Pg | **Pb** | **22 22 57.3** | **+0.8** |
| | 15nm,0.3s | | | | | | |
| AAA | | | | Lg | Lg | 22 23 39.2 | |
| | 73nm,0.7s | | | | | | |
| **KNDC** | **Almaty** | **3.14** | **44** | ⇓Pg | **Pb** | **22 22 58.9** | **+1.8** |
| | 13nm,0.4s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 22 23 40.3 | |
| | 43nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.15** | **45** | *e*P | **Pb** | **22 22 57.1** | **-0.1** |
| | 6.6nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **22 23 39.5** | **-3.0** |
| | 24nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.15** | **45** | ⇑Pg | **Pb** | **22 22 57.0** | **-0.3** |
| | 3.8nm,0.4s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 22 23 40.1 | |
| | 29nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **3.15** | **45** | Pg | **Pb** | **22 22 57.2** | **-0.1** |
| | 6.6nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 22 23 39.5 | |
| | 24nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.23** | **45** | *e*P | **Pb** | **22 22 59.5** | **+0.8** |
| | 8.2nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **22 23 42.9** | **-2.3** |
| | 39nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.23** | **45** | Pg | **Pb** | **22 22 59.5** | **+0.8** |
| | 8.2nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 22 23 42.9 | |
| | 39nm,0.6s | | | | | | |
| **KK08** | **Karatay Array** | **3.37** | **310** | ⇓Pn | **Pb** | **22 23 02.2** | **+1.3** |
| | 2.0nm,0.4s,baz=126,slow=16 | | | | | | |
| KK08 | | | | ⇑Lg | Lg | 22 23 49.0 | |
| | 6.0nm,0.5s,baz=128,slow=30 | | | | | | |
| **KTBS** | **Karatobe** | **3.38** | **35** | *e*P | **Pb** | **22 23 00.8** | **-0.2** |
| | 2.8nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **22 23 46.0** | **+4.0** |
| | 37nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.38** | **35** | Pg | **Pb** | **22 23 00.8** | **-0.2** |
| | 2.8nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 22 23 46.0 | |
| | 37nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.39** | **30** | *e*P | **Pb** | **22 23 01.7** | **+0.4** |
| | 2.8nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sg** | **22 23 46.7** | **-3.5** |
| | 32nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.39** | **30** | Pg | **Pb** | **22 23 01.7** | **+0.4** |
| | 2.8nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 22 23 46.7 | |
| | 32nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **3.72** | **305** | *e*P | **Pb** | **22 23 08.5** | **+1.7** |
| | 4.7nm,0.7s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **22 23 58.8** | **-1.9** |
| | 13nm,0.7s | | | | | | |
| **BRLS** | **Borolday** | **3.72** | **305** | Pg | **Pb** | **22 23 08.5** | **+1.7** |
| | 4.7nm,0.7s | | | | | | |
| BRLS | | | | Lg | Lg | 22 23 58.8 | |
| | 13nm,0.7s | | | | | | |
| **SATY** | **Saty** | **3.89** | **56** | *e*P | **Pb** | **22 23 09.4** | **-0.4** |
| | 6.7nm,0.5s | | | | | | |
| SATY | | | | *e*S | **Sb** | **22 24 00.8** | **+4.0** |
| | 12nm,0.7s | | | | | | |
| **SATY** | **Saty** | **3.89** | **56** | Pg | **Pb** | **22 23 09.4** | **-0.4** |
| | 6.7nm,0.5s | | | | | | |
| SATY | | | | Lg | Lg | 22 24 00.8 | |
| | 12nm,0.7s | | | | | | |
| **ZHN** | **Zhinishke** | **3.96** | **55** | *e*P | **Pb** | **22 23 10.9** | **-0.1** |
| | 4.3nm,0.3s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **22 24 03.8** | **+4.9** |
| | 13nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **3.96** | **55** | Pg | **Pb** | **22 23 10.9** | **-0.1** |
| | 4.3nm,0.3s | | | | | | |
| ZHN | | | | Lg | Lg | 22 24 03.8 | |
| | 13nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **3.98** | **50** | *e*P | **Pb** | **22 23 11.8** | **+0.4** |
| | 2.7nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sg** | **22 24 05.2** | **-4.1** |
| | 5.2nm,0.9s | | | | | | |
| **KURS** | **Kuram** | **3.98** | **50** | Pg | **Pb** | **22 23 11.8** | **+0.4** |
| | 2.7nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 22 24 05.2 | |
| | 5.2nm,0.9s | | | | | | |
| **ARXS** | **Arharly** | **4.29** | **40** | *e*P | **Pb** | **22 23 17.7** | **+1.1** |
| | 0.1nm,0.1s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **22 24 14.7** | **-4.5** |
| | 11nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **4.29** | **40** | Pg | **Pb** | **22 23 17.7** | **+1.1** |
| | 0.1nm,0.1s | | | | | | |
| ARXS | | | | Lg | Lg | 22 24 14.7 | |
| | 11nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **4.32** | **58** | *e*P | **Pb** | **22 23 17.2** | **0.0** |
| | 5.8nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sb** | **22 24 14.1** | **+4.8** |
| | 7.3nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **4.32** | **58** | Pg | **Pb** | **22 23 17.2** | **0.0** |
| | 5.8nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 22 24 14.1 | |
| | 7.3nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **4.61** | **60** | *e*P | **Pg** | **22 23 26.4** | **-3.2** |
| | 4.1nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **22 24 29.5** | **+0.1** |
| | 6.3nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **4.61** | **60** | Pg | **Pg** | **22 23 26.5** | **-3.2** |
| | 4.1nm,0.3s | | | | | | |
| SHLS | | | | Lg | Lg | 22 24 31.6 | |
| | 6.3nm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **5.16** | **37** | *e*P | **Pb** | **22 23 35.0** | **+3.6** |
| | 4.3nm,0.1s | | | | | | |
| TDK | | | | *e*S | **Sg** | **22 24 44.0** | **-2.9** |
| | 9.7nm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **5.16** | **37** | Pg | **Pb** | **22 23 35.0** | **+3.6** |
| | 4.3nm,0.1s | | | | | | |
| TDK | | | | Lg | Lg | 22 24 44.0 | |
| | 9.7nm,0.4s | | | | | | |
| **OTUK** | **Ortayu** | **7.36** | **351** | ⇓Lg | Lg | 22 25 53.3 | |
| | 2.2nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **8.34** | **43** | ⇑Lg | Lg | 22 26 25.6 | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.15** | **17** | ⇑Lg | Lg | 22 27 21.3 | |
| | 6.2nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **10.26** | **17** | ⇑Lg | Lg | 22 27 21.3 | |
| | 4.6nm,1.2s | | | | | | |

*IDC* ***11*** *22:25:26.5±0.7,6°.13S×76°.82W,h0km,mb3.8/8, mb1 4.0/12,mb1mx3.9/41,mbtmp3.9/12,ML3.8/2,MS3.0/4, Ms1 3.0/4,ms1mx2.8/62,Error ellipse: s-maj=16.3km s-min=14.8km az=167.0*

*NEIC* ***11*** *22:25:35.2±2.8,6°.14S±0°.04×76°.74W±0°.08,h55km±10km, mb4.4/15,Error ellipse: s-maj=12.1km s-min=3.9km az=107.0*

**ISC 11 22:25:32.0±0.5,6°.06S±0°.05×76°.72W±0°.07,h35km,n48, σ1§49/49,mb4.0/9,Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **1.98** | **237** | Pn | **Pn** | **22 26 01.8** | **-1.5** |
| | 63nm,0.3s,baz=45,slow=11,SNR=419 | | | | | | |
| ATAH | | | | Sn | **Sn** | **22 26 26.4** | **-0.7** |
| | 126nm,0.3s,baz=216,slow=15,SNR=9.5 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **4.32** | **113** | | **Pn** | **22 26 36.4** | **+1.2** |
| **NNA** | **Nana** | **5.89** | **181** | Pn | **Pn** | **22 26 56.2** | **-0.7** |
| | 12nm,0.3s,baz=3.1,slow=11,SNR=12 | | | | | | |
| NNA | | | | Sn | **Sn** | **22 28 02.5** | **-0.8** |
| | 31nm,0.3s,baz=170,slow=18,SNR=11 | | | | | | |
| NNA | | | | Lg | Lg | 22 28 39.5 | |
| | 6.5nm,0.3s,baz=265,slow=4.2,SNR=4.3 | | | | | | |
| NNA | | | | LR | LR | 22 28 41.7 | |
| | comp=Z,47nm,21.7s,baz=344,slow=34 | | | | | | |
| **NNA** | **Nana** | **5.89** | **181** | | **Pn** | **22 26 58.0** | **+1.1** |
| NNA | | | | Sn | **Sn** | **22 28 04.8** | **+1.5** |
| **PTLC** | **Puerto Leguiza** | **6.48** | **17** | *e*P | Pn | 22 27 00.5 | -4.4 |
| PTLC | | | | *e*S | Sn | 22 28 07.4 | -10 |
| **OTAV** | **Otavalo** | **6.49** | **344** | Pn | **Pn** | **22 27 06.4** | **+1.0** |
| **TBTG** | **Tabatinga, AM** | **7.03** | **75** | | **Pn** | **22 27 13.7** | **+1.2** |
| **FLOC** | **Florencia** | **7.66** | **8** | *e*P | **Pn** | **22 27 20.7** | **-0.5** |
| FLOC | | | | *e*S | **Sn** | **22 28 43.1** | **-3.8** |
| **SOTA** | **Rioblanco** | **8.14** | **1** | *e*P | **Pn** | **22 27 27.6** | **-0.6** |
| **PCON** | **Cinco Dias** | **8.34** | **2** | *e*P | **Pn** | **22 27 30.8** | **-0.1** |
| PCON | | | | *e*S | Sn | 22 28 30.2 | -34 |
| **MACC** | **Macarena, Meta** | **8.64** | **19** | *e*P | **Pn** | **22 27 34.3** | **-0.3** |
| MACC | | | | *e*S | **Sn** | **22 29 07.6** | **-3.2** |
| **MARP** | **Paez Belalcaza** | **8.87** | **5** | *e*P | **Pn** | **22 27 36.6** | **-1.5** |
| MARP | | | | *e*S | **Sn** | **22 29 16.3** | **-0.7** |
| **ETMB** | **Extrema** | **11.06** | **110** | | **Pn** | **22 28 05.9** | **-1.8** |
| **ROSC** | **El Rosal** | **11.09** | **13** | Lg | Lg | 22 31 34.6 | |
| | 1.7nm,0.3s,baz=326,slow=22,SNR=2.2 | | | | | | |
| **LPAZ** | **La Paz** | **13.20** | **141** | Pn | **Pn** | **22 28 35.0** | **-2.6** |
| | 0.1nm,0.3s,baz=290,slow=12,SNR=3.5 | | | | | | |
| LPAZ | | | | Lg | Lg | 22 32 26.7 | |
| | 0.2nm,0.3s,baz=176,slow=16,SNR=2.0 | | | | | | |
| **PB16** | **IPOC Station P** | **14.09** | **151** | P | **P** | **22 28 57.6** | **+0.6** |
| **PB11** | **IPOC Station P** | **15.26** | **154** | P | **P** | **22 29 09.0** | **-0.5** |
| **GO01** | **Chusmiza** | **15.38** | **152** | P | **P** | **22 29 12.2** | **+0.9** |
| **PB08** | **IPOC Station P** | **15.81** | **153** | P | **P** | **22 29 17.4** | **+1.4** |
| PB08 | | | | IAmb | IAmb | 22 29 35.0 | |
| | comp=Z,36nm,1.9s | | | | | | |
| **SDV** | **Santo Domingo** | **16.04** | **22** | Lg | Lg | 22 33 51.5 | |
| | comp=Z,0.8nm,0.3s,baz=324,slow=5.0,SNR=3.4 | | | | | | |
| **PB02** | **IPOC Station P** | **16.55** | **157** | P | **P** | **22 29 24.5** | **+0.6** |
| **PB07** | **IPOC Station P** | **16.92** | **158** | P | **Pn** | **22 29 27.9** | **+1.6** |
| PB07 | | | | IAmb | IAmb | 22 29 29.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PB09** | **IPOC Station P** | **17.24** | **156** | P | **P** | **22 29 32.0** | **+0.4** |
| PB09 | | | | IAmb | IAmb | 22 30 14.1 | |
| | comp=Z,39nm,1.6s | | | | | | |
| **PB03** | **IPOC Station P** | **17.27** | **158** | | **P** | **22 29 32.4** | **+0.6** |
| PB03 | | | | IAmb | IAmb | 22 29 39.0 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **PTGA** | **Pitinga** | **17.54** | **73** | P | **Pn** | **22 29 34.2** | **+0.4** |
| | baz=276,slow=12,SNR=5.0 | | | | | | |
| PTGA | | | | S | **S** | **22 32 55.8** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=333,slow=23,SNR=1.3 | | | | | | |
| PTGA | | | | Lg | Lg | 22 34 40.7 | |
| | comp=Z,0.4nm,0.3s,baz=329,slow=23,SNR=2.1 | | | | | | |
| PTGA | | | | LR | LR | 22 36 59.7 | |
| | comp=Z,73nm,19.1s,baz=200,slow=39 | | | | | | |
| **LVC** | **Limon Verde** | **18.10** | **156** | LR | LR | 22 36 04.5 | |
| | comp=Z,54nm,20.1s,baz=224,slow=35 | | | | | | |
| **BOAV** | **Boa Vista** | **18.22** | **63** | P | **Pn** | **22 29 43.9** | **+1.6** |
| BOAV | | | | IAmb | IAmb | 22 30 33.1 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **SIV** | **San Ignacio** | **18.24** | **124** | P | **P** | **22 29 40.9** | **-1.7** |
| | baz=300,slow=13,SNR=8.2 | | | | | | |
| SIV | | | | Lg | Lg | 22 34 55.8 | |
| | comp=Z,0.1nm,0.3s,baz=219,slow=21,SNR=4.0 | | | | | | |
| **AOPR** | **Arecibo Observ** | **26.17** | **22** | P | **P** | **22 31 06.9** | **+3.6** |
| **MDP** | **Montagnes des** | **26.47** | **66** | LR | LR | 22 43 42.3 | |
| | comp=Z,55nm,18.0s,baz=144,slow=41 | | | | | | |
| **CPUP** | **Villa Florida** | **27.36** | **140** | P | **P** | **22 31 13.3** | **-0.7** |
| | comp=Z,0.9nm,0.4s,baz=335,slow=17,SNR=2.9 | | | | | | |
| **PLCA** | **Paso Flores** | **34.97** | **172** | P | **P** | **22 32 19.2** | **-1.7** |
| | comp=Z,0.5nm,0.4s,baz=331,slow=9.8,SNR=6.3 | | | | | | |
| **PLCA** | **Paso Flores** | **34.97** | **172** | P | **P** | **22 32 19.7** | **-1.2** |
| PLCA | | | | IAmb | IAmb | 22 33 24.7 | |
| | comp=Z,16nm,1.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **43.70** | **325** | P | **P** | **22 33 33.8** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=139,slow=7.2,SNR=3.1 | | | | | | |
| **TUL1** | **Leonard** | **45.43** | **338** | P | **P** | **22 33 44.8** | **-2.7** |
| TUL1 | | | | IAmb | IAmb | 22 33 50.4 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **ANMO** | **Albuquerque** | **49.49** | **328** | P | **P** | **22 34 20.2** | **+0.9** |
| | comp=Z,1.2nm,0.7s,baz=166,slow=8.3,SNR=2.6 | | | | | | |
| **FRNY** | **Flat Rock** | **50.74** | **3** | P | **P** | **22 34 30.3** | **+2.0** |
| **PDAR** | **Pinedale Array** | **57.02** | **332** | P | **P** | **22 35 14.1** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=178,slow=6.3,SNR=2.0 | | | | | | |
| **TPH** | **Tonopah** | **57.83** | **323** | P | **P** | **22 35 21.7** | **+1.3** |
| **PLID** | **Pearl Lake** | **61.88** | **329** | P | **P** | **22 35 50.5** | **+2.4** |
| **DBIC** | **Dimbokro** | **72.82** | **81** | P | **P** | **22 36 57.7** | **0.0** |
| | comp=Z,4.7nm,1.0s,baz=285,slow=6.2,SNR=4.4 | | | | | | |
| **DBIC** | **Dimbokro** | **72.82** | **81** | IAmb | IAmb | 22 37 06.4 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.24** | **343** | P | **P** | **22 37 04.6** | **-0.5** |
| | comp=Z,0.4nm,0.6s,baz=140,slow=6.4,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.16** | **76** | P | **P** | **22 37 39.7** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=297,slow=4.8,SNR=8.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.16** | **76** | P | **P** | **22 37 39.8** | **+0.4** |
| TORD | | | | IAmb | IAmb | 22 37 41.1 | |
| | comp=Z,6.1nm,1.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **129.95** | **14** | PKP | **PKPdf** | **22 44 37.8** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=278,slow=3.9,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **135.57** | **21** | PKP | **PKPdf** | **22 44 48.1** | **-0.7** |
| | comp=Z,0.2nm,0.6s,baz=317,slow=2.2,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **139.99** | **229** | PKP | **PKPdf** | **22 44 59.0** | **+1.3** |
| | comp=Z,0.3nm,0.6s,baz=117,slow=2.2,SNR=5.0 | | | | | | |

*SOME* ***11*** *22:28:34.5,40°.88N×74°.15E,h5km*

*ISU* ***11*** *22:28:35,41°.00N×74°.00E,h10km*

*NNC* ***11*** *22:28:35.3±0.9,40°.88N×74°.11E,h0km,mb3.9,mpv3.6, Error ellipse: s-maj=7.2km s-min=4.3km az=171.0*

*KRNET* ***11*** *22:28:36.3±0.1,41°.00N×73°.95E,h19km,mb3.1*

*KNET* ***11*** *22:28:38.4±0.4,41°.12N×74°.08E,h0km±2km,ml2.8, Error ellipse: s-maj=4.2km s-min=2.6km az=114.0*

**ISC 11 22:28:35.0±0.8,40°.96N±0°.03×74°.00E±0°.02,h4km,n78, σ1§73/128,28C-24D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARLS** | **Aral** | **0.93** | **15** | ⇑*i*P | **Pb** | **22 28 53.1** | **-0.7** |
| | baz=19 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sb** | **22 29 06.0** | **-0.6** |
| | baz=19 | | | | | | |
| **OHH** | **Osh** | **1.02** | **245** | ⇑*i*P | **Pb** | **22 28 55.1** | **-0.2** |
| | baz=42 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **22 29 08.7** | **-0.4** |
| | baz=42 | | | | | | |
| **AML** | **Almayashu** | **1.19** | **349** | ⇓P | **Pn** | **22 28 58.7** | **-0.1** |
| | 65nm,0.4s,SNR=54 | | | | | | |
| AML | | | | ⇓S | **Sn** | **22 29 15.4** | **-0.3** |
| | 128nm,0.5s | | | | | | |
| **TSTA** | **Tashata** | **1.22** | **252** | *e*P | **Pn** | **22 28 59.0** | **+0.1** |
| TSTA | | | | *e*S | **Sn** | **22 29 16.0** | **+0.2** |
| **ANR** | **Andizhan** | **1.26** | **261** | *e*P | **Pn** | **22 29 01.0** | **+1.6** |
| ANR | | | | *e*S | **Sn** | **22 29 20.0** | **+3.1** |
| **UCH** | **Uchtor** | **1.32** | **17** | ⇓P | **Pn** | **22 29 00.7** | **0.0** |
| | 11nm,0.2s,SNR=32 | | | | | | |
| UCH | | | | ⇓S | **Sn** | **22 29 18.6** | **-0.4** |
| | 83nm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **1.32** | **17** | ⇓*e*P | **Pn** | **22 29 00.5** | **-0.2** |
| | baz=19 | | | | | | |
| UCH | | | | ⇓*i*S | **Sn** | **22 29 18.3** | **-0.7** |
| | baz=19 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.70** | **354** | ⇑P | **Pg** | **22 29 07.8** | **+0.1** |
| | 7.4nm,0.2s,SNR=11 | | | | | | |
| EKS2 | | | | ⇑S | **Sg** | **22 29 31.1** | **+1.3** |
| | 39nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **12** | ⇑P | **Pg** | **22 29 07.9** | **+0.1** |
| | 20nm,0.3s,SNR=34 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **22 29 31.0** | **+0.9** |
| | 42nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **12** | ⇓P | **Pg** | **22 29 07.9** | **+0.1** |
| | 9.4nm,0.3s | | | | | | |
| AAK | | | | ⇓S | **Sg** | **22 29 31.2** | **+1.1** |
| | 28nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **12** | ⇑*i*P | **Pg** | **22 29 07.2** | **-0.7** |
| | baz=14 | | | | | | |
| AAK | | | | ⇑*i*S | **Sg** | **22 29 30.2** | **+0.1** |
| | baz=14 | | | | | | |
| **ARK** | **Arkit** | **1.74** | **299** | P | **Pg** | **22 29 09.0** | **+0.5** |
| ARK | | | | S | **Sg** | **22 29 36.0** | **+4.9** |
| **ARK** | **Arkit** | **1.74** | **299** | ⇓*i*P | **Pg** | **22 29 07.3** | **-1.2** |
| | baz=99 | | | | | | |
| ARK | | | | ⇓*i*S | **Sg** | **22 29 30.4** | **-0.7** |
| | baz=99 | | | | | | |
| **FRG** | **Fergana** | **1.79** | **251** | *e*P | **Pg** | **22 29 10.0** | **+0.8** |
| FRG | | | | *e*S | **Sg** | **22 29 34.0** | **+1.6** |
| **KBK** | **Karagaybulak** | **1.83** | **22** | ⇑P | **Pg** | **22 29 10.0** | **-0.2** |
| | 13nm,0.2s,SNR=47 | | | | | | |
| KBK | | | | ⇑S | **Sg** | **22 29 34.3** | **+0.3** |
| | 65nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **1.83** | **22** | ⇑*e*P | **Pg** | **22 29 09.6** | **-0.6** |
| | baz=24 | | | | | | |
| KBK | | | | ⇑*i*S | **Sg** | **22 29 33.8** | **-0.2** |
| | baz=24 | | | | | | |
| **MRKS** | **Merke** | **1.87** | **342** | *e*P | **Pg** | **22 29 12.0** | **+1.1** |
| | 43nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **22 29 39.2** | **+4.0** |
| | 50nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **1.87** | **342** | Pg | **Pg** | **22 29 12.0** | **+1.1** |
| | 43nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 22 29 39.2 | |
| | 50nm,0.4s | | | | | | |
| **FRU1** | **Bishkek** | **1.90** | **14** | ⇓*i*P | **Pg** | **22 29 10.4** | **-1.1** |
| | baz=15 | | | | | | |
| FRU1 | | | | ⇓*i*S | **Sg** | **22 29 35.8** | **-0.4** |
| | baz=15 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.11** | **43** | ⇓*i*P | **Pb** | **22 29 14.0** | **+0.1** |
| | baz=44 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sg** | **22 29 41.4** | **-1.3** |
| | baz=44 | | | | | | |
| **CHMS** | **Chumysh** | **2.11** | **15** | ⇑P | **Pg** | **22 29 15.2** | **-0.3** |
| | 9.1nm,0.2s,SNR=18 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **22 29 43.1** | **+0.3** |
| | 46nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **2.11** | **15** | ⇑*i*P | **Pb** | **22 29 13.0** | **-0.8** |
| | baz=17 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sb** | **22 29 40.3** | **-0.1** |
| | baz=17 | | | | | | |
| **TRKS** | **Terek-Say** | **2.23** | **286** | ⇓*i*P | **Pb** | **22 29 14.4** | **-1.6** |
| | baz=83 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sb** | **22 29 42.1** | **-1.9** |
| | baz=83 | | | | | | |
| **DRK** | **Karamyk** | **2.24** | **229** | ⇑*i*P | **Pb** | **22 29 16.1** | **-0.2** |
| | baz=28 | | | | | | |
| DRK | | | | ⇑*i*S | **Sb** | **22 29 44.4** | **-0.1** |
| | baz=28 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.29** | **31** | ⇑Pn | **Pg** | **22 29 18.2** | **-0.8** |
| | 8.2nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sg** | **22 29 48.0** | **-0.6** |
| | 44nm,0.5s | | | | | | |
| **USP** | **Ospenovka** | **2.33** | **9** | ⇓P | **Pg** | **22 29 18.9** | **-0.8** |
| | 18nm,0.3s,SNR=24 | | | | | | |
| USP | | | | ⇑S | **Sg** | **22 29 50.3** | **+0.3** |
| | 35nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.54** | **35** | *e*P | **Pg** | **22 29 22.7** | **-1.0** |
| | 25nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sg** | **22 29 57.4** | **+0.8** |
| | 43nm,0.7s | | | | | | |
| **KST** | **Kastek** | **2.54** | **35** | Pg | **Pg** | **22 29 22.7** | **-1.0** |
| | 25nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 22 29 57.4 | |
| | 43nm,0.7s | | | | | | |
| **BTK** | **Batken** | **2.59** | **251** | *e*P | **Pg** | **22 29 24.0** | **-0.6** |
| BTK | | | | *e*S | **Sg** | **22 30 00.0** | **+1.8** |
| **BTK** | **Batken** | **2.59** | **251** | ⇓*i*P | **Pb** | **22 29 20.1** | **-1.9** |
| | baz=49 | | | | | | |
| BTK | | | | ⇓*i*S | **Sb** | **22 29 52.0** | **-2.2** |
| | baz=49 | | | | | | |
| **DGS** | **Degeres** | **2.63** | **30** | *e*P | **Pg** | **22 29 24.3** | **-1.1** |
| | 44nm,0.6s | | | | | | |
| DGS | | | | *e*S | **Sg** | **22 30 00.4** | **+0.9** |
| | 166nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **2.63** | **30** | Pg | **Pg** | **22 29 24.2** | **-1.3** |
| | 45nm,0.7s | | | | | | |
| DGS | | | | Pg | **Pg** | **22 29 24.3** | **-1.1** |
| | 44nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 22 30 00.4 | |
| | 165nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 22 30 00.4 | |
| | 166nm,0.6s | | | | | | |
| **KDJ** | **Kajisay** | **2.66** | **63** | ⇓*i*P | **Pb** | **22 29 22.0** | **-1.3** |
| | baz=64 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sb** | **22 29 55.4** | **-0.9** |
| | baz=64 | | | | | | |
| **MTBS** | **Maitube** | **2.82** | **39** | *e*P | **Pb** | **22 29 27.0** | **+1.0** |
| | 14nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **22 30 05.2** | **-0.4** |
| | 150nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.82** | **39** | Pg | **Pb** | **22 29 27.0** | **+1.0** |
| | 14nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 22 30 05.2 | |
| | 150nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **3.00** | **24** | *e*P | **Pg** | **22 29 30.7** | **-1.8** |
| | 11nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **22 30 11.1** | **-0.2** |
| | 68nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **3.00** | **24** | Pg | **Pg** | **22 29 30.5** | **-2.0** |
| KRBS | | | | Pg | **Pg** | **22 29 30.7** | **-1.8** |
| | 11nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 22 30 10.8 | |
| KRBS | | | | Lg | Lg | 22 30 11.1 | |
| | 68nm,0.4s | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KOTS | | | | | Pg | **Pg** | **22 29 35.1** | **-2.0** |
| KOTS | | | | | Lg | Lg | 22 30 18.3 | |
| | 57nm,0.5s | | | | | | | |
| KOTS | | | | | Lg | Lg | 22 30 18.7 | |
| **KK08** | **Karatay Array** | **3.38** | **310** | ⇑ | Pg | **Pg** | **22 29 37.8** | **-1.9** |
| | 1.2nm,0.5s,baz=125,slow=17 | | | | | | | |
| KK08 | | | | ⇓ | Lg | Lg | 22 30 24.6 | |
| | 17nm,0.7s,baz=131,slow=28 | | | | | | | |
| **KTBS** | **Karatobe** | **3.39** | **35** | *eP* | | **Pb** | **22 29 37.0** | **+1.3** |
| | 3.4nm,0.3s | | | | | | | |
| KTBS | | | | *eS* | | **Sg** | **22 30 21.7** | **-2.2** |
| | 49nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **3.39** | **35** | | Pg | **Pb** | **22 29 36.9** | **+1.2** |
| KTBS | | | | | Pg | **Pb** | **22 29 37.0** | **+1.3** |
| | 3.4nm,0.3s | | | | | | | |
| KTBS | | | | | Lg | Lg | 22 30 21.7 | |
| | 49nm,0.5s | | | | | | | |
| KTBS | | | | | Lg | Lg | 22 30 21.9 | |
| **KUU** | **Kurty** | **3.40** | **30** | *eP* | | **Pb** | **22 29 37.4** | **+1.6** |
| | 3.3nm,0.3s | | | | | | | |
| KUU | | | | *eS* | | **Sg** | **22 30 22.3** | **-2.0** |
| | 80nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **3.40** | **30** | | Pg | **Pb** | **22 29 37.4** | **+1.6** |
| | 3.3nm,0.3s | | | | | | | |
| KUU | | | | | Lg | Lg | 22 30 22.3 | |
| | 80nm,0.5s | | | | | | | |
| **CHKK** | **Chushkaly** | **3.64** | **36** | *eP* | | **Pb** | **22 29 41.6** | **+1.7** |
| | 2.3nm,0.1s | | | | | | | |
| CHKK | | | | *eS* | | **Sg** | **22 30 29.5** | **-2.4** |
| | 20nm,0.4s | | | | | | | |
| **CHKK** | **Chushkaly** | **3.64** | **36** | | Pg | **Pb** | **22 29 41.6** | **+1.7** |
| | 2.3nm,0.1s | | | | | | | |
| CHKK | | | | | Lg | Lg | 22 30 29.5 | |
| | 20nm,0.4s | | | | | | | |
| **BRLS** | **Borolday** | **3.73** | **305** | *eP* | | **Pg** | **22 29 44.0** | **-2.4** |
| | 8.9nm,0.6s | | | | | | | |
| BRLS | | | | *eS* | | **Sg** | **22 30 34.2** | **-0.5** |
| | 21nm,0.8s | | | | | | | |
| **BRLS** | **Borolday** | **3.73** | **305** | | Pg | **Pg** | **22 29 44.0** | **-2.4** |
| | 8.9nm,0.5s | | | | | | | |
| BRLS | | | | | Pg | **Pg** | **22 29 44.0** | **-2.4** |
| | 8.9nm,0.6s | | | | | | | |
| BRLS | | | | | Lg | Lg | 22 30 34.2 | |
| | 21nm,0.8s | | | | | | | |
| BRLS | | | | | Lg | Lg | 22 30 34.3 | |
| | 21nm,0.6s | | | | | | | |
| **SATY** | **Saty** | **3.89** | **56** | *eP* | | **Pb** | **22 29 44.9** | **+0.5** |
| | 11nm,0.4s | | | | | | | |
| SATY | | | | *eS* | | **Sb** | **22 30 36.1** | **+4.2** |
| | 20nm,0.4s | | | | | | | |
| **SATY** | **Saty** | **3.89** | **56** | | Pg | **Pb** | **22 29 44.9** | **+0.5** |
| | 11nm,0.4s | | | | | | | |
| SATY | | | | | Lg | Lg | 22 30 36.1 | |
| | 20nm,0.4s | | | | | | | |
| **ZHN** | **Zhinishke** | **3.97** | **55** | *eP* | | **Pb** | **22 29 46.5** | **+0.9** |
| | 6.2nm,0.2s | | | | | | | |
| ZHN | | | | *eS* | | **Sg** | **22 30 38.9** | **-3.6** |
| | 16nm,0.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **3.97** | **55** | | Pg | **Pb** | **22 29 46.5** | **+0.9** |
| | 6.2nm,0.2s | | | | | | | |
| ZHN | | | | | Lg | Lg | 22 30 38.9 | |
| | 16nm,0.2s | | | | | | | |
| **KURS** | **Kuram** | **3.99** | **49** | *eP* | | **Pb** | **22 29 47.3** | **+1.3** |
| | 5.1nm,0.6s | | | | | | | |
| KURS | | | | *eS* | | **Sg** | **22 30 40.5** | **-2.8** |
| | 4.8nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **3.99** | **49** | | Pg | **Pb** | **22 29 47.3** | **+1.3** |
| | 5.1nm,0.6s | | | | | | | |
| KURS | | | | | Lg | Lg | 22 30 40.5 | |
| | 4.8nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **4.08** | **0** | *eP* | | **Pg** | **22 29 51.1** | **-2.0** |
| | 1.8nm,0.2s | | | | | | | |
| BTLS | | | | *eS* | | **Sg** | **22 30 46.9** | **+1.0** |
| | 9.0nm,0.5s | | | | | | | |
| **BTLS** | **Baital** | **4.08** | **0** | | Pg | **Pg** | **22 29 50.8** | **-2.2** |
| BTLS | | | | | Pg | **Pg** | **22 29 51.1** | **-2.0** |
| | 1.8nm,0.2s | | | | | | | |
| BTLS | | | | | Lg | Lg | 22 30 44.2 | |
| BTLS | | | | | Lg | Lg | 22 30 46.9 | |
| | 9.0nm,0.5s | | | | | | | |
| **ARXS** | **Arharly** | **4.30** | **40** | *eP* | | **Pb** | **22 29 53.1** | **+1.8** |
| | 0.2nm,0.4s | | | | | | | |
| ARXS | | | | *eS* | | **Sg** | **22 30 49.7** | **-3.6** |
| | 11nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **4.30** | **40** | | Pg | **Pb** | **22 29 53.1** | **+1.8** |
| | 0.2nm,0.4s | | | | | | | |
| ARXS | | | | | Lg | Lg | 22 30 49.7 | |
| | 11nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.33** | **58** | *eP* | | **Pb** | **22 29 52.3** | **+0.5** |
| | 5.4nm,0.4s | | | | | | | |
| UZB | | | | *eS* | | **Sb** | **22 30 49.4** | **+5.0** |
| | 10nm,0.3s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.33** | **58** | | Pg | **Pb** | **22 29 52.3** | **+0.5** |
| | 5.4nm,0.4s | | | | | | | |
| UZB | | | | | Lg | Lg | 22 30 49.4 | |
| | 10nm,0.3s | | | | | | | |
| **SHLS** | **Shalkode** | **4.62** | **60** | *eP* | | **Pg** | **22 30 03.6** | **0.0** |
| | 6.8nm,0.4s | | | | | | | |
| SHLS | | | | *eS* | | **Sg** | **22 31 06.9** | **+3.6** |
| | 6.6nm,0.5s | | | | | | | |
| **SHLS** | **Shalkode** | **4.62** | **60** | | Pg | **Pg** | **22 30 03.6** | **0.0** |
| | 6.8nm,0.4s | | | | | | | |
| SHLS | | | | | Lg | Lg | 22 31 06.9 | |
| | 6.6nm,0.5s | | | | | | | |
| **DJR** | **Jarkent** | **5.44** | **50** | *eP* | | **Pb** | **22 30 14.1** | **+3.5** |
| | 2.5nm,0.6s | | | | | | | |
| DJR | | | | *eS* | | **Sg** | **22 31 23.8** | **-5.8** |
| | 6.9nm,0.3s | | | | | | | |
| **DJR** | **Jarkent** | **5.44** | **50** | | Pg | **Pb** | **22 30 14.1** | **+3.5** |
| | 2.5nm,0.6s | | | | | | | |
| DJR | | | | | Lg | Lg | 22 31 23.8 | |
| | 6.9nm,0.3s | | | | | | | |
| **OTUK** | **Ortayu** | **7.38** | **351** | ⇑ | Lg | Lg | 22 32 29.0 | |
| | 2.4nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.35** | **43** | ⇓ | Lg | Lg | 22 33 01.3 | |
| | 0.5nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.16** | **17** | ⇑ | Lg | Lg | 22 33 59.3 | |
| | 7.7nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **10.27** | **17** | ⇑ | Lg | Lg | 22 33 58.6 | |
| | 6.7nm,1.2s | | | | | | | |

*JMA **11** 22:34:42.5±0.1,24.°99N×123.°52E, h19km, M3.0*
*IDC **11** 22:34:52.6±7.6,24.°35N×122.°22E, h83km±75km, mb3.2/7, mb1 3.4/8, mb1mx3.2/35, mbtmp3.5/8, ML3.3/1, Error ellipse: s-maj=50.6km s-min=17.8km az=65.0*

**ISC 11 22:34:42.6±1.6,24.°95N±0.°07×123.°53E±0.°04, h13km±11km, n16, σ0.°47/22, mb3.3/7, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.64** | **163** | P | | **Pb** | **22 34 55.6** | **0.0** |
| IRIF | | | | *eS* | | **Sb** | **22 35 04.5** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.67** | **224** | P | | **Pg** | **22 34 55.8** | **+0.1** |
| YOJ | | | | *eS* | | **Sb** | **22 35 05.1** | **-0.3** |
| **JYNG** | **Yonagunijimaku** | **0.72** | **227** | P | | **Pg** | **22 34 56.6** | **-0.1** |
| JYNG | | | | *eS* | | **Sb** | **22 35 06.8** | **0.0** |
| **JISG** | **Ishigakijimahi** | **0.80** | **117** | P | | **Pg** | **22 34 57.9** | **-0.2** |
| JISG | | | | *eS* | | **Sg** | **22 35 09.0** | **+0.4** |
| **JIJ** | **Ishigaki jima** | **0.81** | **136** | P | | **Pg** | **22 34 58.0** | **-0.3** |
| JIJ | | | | S | | **Sg** | **22 35 08.6** | **-0.3** |
| **JKRS** | **Kuro-shima** | **0.83** | **148** | P | | **Pg** | **22 34 58.5** | **-0.3** |
| JKRS | | | | S | | **Sb** | **22 35 10.8** | **+0.8** |
| **HATJ** | **Hateruma jima** | **0.92** | **164** | P | | **Pb** | **22 35 00.3** | **-0.1** |
| HATJ | | | | *eS* | | **Sg** | **22 35 13.1** | **+0.5** |
| **JTJ** | **Tarama** | **1.11** | **106** | P | | **Pb** | **22 35 03.6** | **-0.1** |
| JTJ | | | | *eS* | | **Sb** | **22 35 18.1** | **+0.1** |
| **KSRS** | **Korea Array** | **13.02** | **16** | P | | P | 22 38 07.6 | +10 |
| | 0.1nm,0.3s,baz=196,slow=13,SNR=5.4 | | | | | | | |
| **SONM** | **Songino Array** | **26.56** | **334** | P | | **P** | **22 40 21.2** | **+0.9** |
| | 0.1nm,0.4s,baz=151,slow=6.5,SNR=1.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.30** | **314** | P | | **P** | **22 42 10.6** | **-0.6** |
| | 0.4nm,0.6s,baz=100,slow=9.7,SNR=7.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.79** | **326** | P | | **P** | **22 42 23.4** | **0.0** |
| | 0.4nm,0.5s,baz=120,slow=8.5,SNR=2.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.92** | **319** | P | | **P** | **22 42 40.8** | **-0.1** |
| | 0.6nm,0.9s,baz=114,slow=9.5,SNR=6.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.84** | **166** | P | | **P** | **22 43 03.5** | **-1.0** |
| | 1.0nm,0.7s,baz=346,slow=8.8,SNR=8.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.36** | **167** | P | | **P** | **22 43 32.4** | **+0.5** |
| | 0.3nm,0.5s,baz=350,slow=7.5,SNR=4.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.43** | **24** | P | | P | 22 47 05.8 | +6.8 |
| | 0.1nm,0.4s,baz=302,slow=5.2,SNR=2.4 | | | | | | | |

*TUL **11** 22:35:11.6±1.1,36.°368N±0.°006×97.°35W±0.°01, h7km±6km,*

*ML2.7, mb_Lg2.4/13(NEIC), Error ellipse: s-maj=1.5km s-min=0.6km az=117.0*

**NEIC 11 22:35:11.8±1.0,36.°37N±0.°01×97.°352W±0.°007, h2km±7km, Error ellipse: s-maj=1.6km s-min=0.8km az=166.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **BLOK** | **Blackwell** | **0.41** | **16** | Pg | | Pg | 22 35 19.8 | +0.1 |
| BLOK | | | | Sg | | Sg | 22 35 25.2 | +0.2 |
| **OK033** | **Mehan** | **0.46** | **134** | Pg | | Pg | 22 35 20.8 | +0.1 |
| OK033 | | | | Sg | | Sg | 22 35 27.2 | +0.6 |
| **CROK** | **Carrier** | **0.53** | **285** | Pg | | Pg | 22 35 21.9 | 0.0 |
| CROK | | | | Sg | | Sg | 22 35 29.3 | +0.5 |
| **QUOK** | **Quay** | **0.56** | **110** | Pg | | Pg | 22 35 22.5 | +0.1 |
| QUOK | | | | Sg | | Sg | 22 35 29.7 | +0.1 |
| **OK029** | **Liberty Lake** | **0.57** | **188** | Pg | | Pg | 22 35 22.7 | -0.1 |
| OK029 | | | | Sg | | Sg | 22 35 30.6 | +0.4 |
| **OK031** | **S. Brethren Rd** | **0.58** | **135** | Pg | | Pg | 22 35 23.0 | 0.0 |
| OK031 | | | | Sg | | Sg | 22 35 31.1 | +0.5 |
| **OK034** | **N. Norfolk Rd.** | **0.63** | **124** | Pg | | Pg | 22 35 23.8 | 0.0 |
| OK034 | | | | Sg | | Sg | 22 35 32.2 | +0.3 |
| **GC02** | **Grant County #** | **0.63** | **320** | Pg | | Pg | 22 35 23.8 | -0.2 |
| GC02 | | | | Sg | | Sg | 22 35 32.5 | +0.3 |
| **OK030** | **Cody Creek RV** | **0.64** | **133** | Pg | | Pg | 22 35 24.0 | 0.0 |
| OK030 | | | | Sg | | Sg | 22 35 32.5 | +0.4 |
| **KAN13** | **South Haven SW** | **0.65** | **351** | Pg | | Pg | 22 35 24.2 | -0.1 |
| KAN13 | | | | Sg | | Sg | 22 35 33.4 | +0.6 |
| **BCOK** | **Bluff Creek, N** | **0.74** | **197** | Pg | | Pg | 22 35 25.7 | -0.2 |
| **KAN17** | **Caldwell West** | **0.75** | **334** | Pg | | Pg | 22 35 25.9 | -0.3 |
| **KAN14** | **Manchester OK** | **0.77** | **320** | Pg | | Pg | 22 35 26.2 | -0.3 |
| **OK025** | **Westminster Rd** | **0.78** | **179** | Pg | | Pg | 22 35 26.6 | -0.2 |
| **OK032** | **Salt Plains WL** | **0.82** | **303** | Pg | | Pg | 22 35 27.1 | -0.4 |
| **KAN01** | **Argonia South** | **0.85** | **338** | | | Pg | 22 35 27.7 | -0.4 |
| **T35A** | **Sooner Cattle** | **0.87** | **51** | Pg | | Pg | 22 35 28.2 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.95** | **185** | Pg | | Pg | 22 35 29.4 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **0.96** | **184** | Pg | | Pg | 22 35 29.6 | -0.6 |
| **KAN10** | **Anthony SW Sta** | **0.96** | **322** | Pg | | Pg | 22 35 29.9 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **0.99** | **330** | | | Pg | 22 35 30.3 | -0.5 |
| **KAN16** | **Harper SW Stat** | **1.03** | **326** | Pg | | Pg | 22 35 30.9 | -0.7 |
| **KAN12** | **Harper NE Stat** | **1.06** | **331** | Pg | | Pg | 22 35 31.6 | -0.6 |
| **FNO** | **Franklin** | **1.11** | **182** | | | Pg | 22 35 31.6 | -1.4 |
| **OK035** | **E0210 Rd and N** | **1.15** | **288** | Pg | | Pg | 22 35 33.1 | -0.6 |
| **W35A** | **Tecumseh** | **1.27** | **162** | Pn | | Pg | 22 35 34.9 | -1.2 |
| **TUL1** | **Leonard** | **1.34** | **109** | | | Pg | 22 35 36.1 | -1.4 |
| **X34A** | **Smith Ranch, M** | **1.81** | **193** | | | Pn | 22 35 44.4 | +0.4 |
| **WMOK** | **Wichita Mounta** | **2.00** | **216** | | | Pn | 22 35 46.6 | 0.0 |
| **LOOK** | **Love County** | **2.37** | **177** | Pn | | Pn | 22 35 52.6 | +0.8 |
| **X37A** | **Clayton** | **2.40** | **137** | Pn | | Pn | 22 35 51.9 | -0.3 |
| **HHAR** | **Hobbs** | **2.76** | **91** | | | Pn | 22 35 58.4 | +1.4 |
| **KSU1** | **Kansas State U** | **2.79** | **12** | Pn | | Pn | 22 35 58.0 | +0.5 |
| KSU1 | | | | | | Pg | 22 36 03.9 | -1.4 |
| **CBKS** | **Cedar Bluff** | **3.09** | **323** | | | Pn | 22 36 00.8 | -0.9 |
| **W39A** | **Magazine** | **3.13** | **111** | Pn | | Pn | 22 36 02.4 | +0.3 |
| W39A | | | | IAmb_Lg | | | 22 36 56.1 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.58** | **119** | Pn | | Pn | 22 36 08.2 | -0.2 |
| MIAR | | | | IAmb_Lg | | | 22 37 08.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **AMTX** | **Amarillo** | **3.82** | **249** | IAmb_Lg | | | 22 37 18.2 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.14** | **116** | IAmb_Lg | | | 22 37 25.9 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.16** | **78** | IAmb_Lg | | | 22 37 31.8 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.18** | **208** | IAmb_Lg | | | 22 37 28.3 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **FCAR** | **Frank Folk Cen** | **4.26** | **95** | IAmb_Lg | | | 22 37 30.5 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |

*NIED **11** 22:38:53.1,24.°91N×123.°45E, h24km, MW4.0, Moment Tensor Solution. s2 Moment tensor: Scale 10^15 Nm; Mrr-0.86; Mθθ 0.90; Mφφ-0.04; Mrθ-0.57; Mθφ-0.09; Mφr 0.13; Fault plane solution: M0 1.06000×10^15 NP1: φs100.00000°, δ62.00000°, λ-86.00000°. NP2: φs271.00000°, δ28.00000°, λ-98.00000°.*
*JMA **11** 22:38:53.1±0.1,24.°91N×123.°45E, h24km±4km, M3.7*
*JMA Felt I J1.*
*NEIC **11** 22:38:54.8±1.9,24.°92N±0.°05×123.°23E±0.°09, h10km±1km, mb4.4/25, Error ellipse: s-maj=14.6km s-min=6.3km az=119.0*
*IDC **11** 22:39:04.8±5.6,24.°94N×123.°26E, h113km±54km, mb3.6/12, mb1 3.7/13, mb1mx3.5/37, mbtmp3.9/13, MS3.3/10, Ms1 3.3/10, ms1mx2.9/77, Error ellipse: s-maj=24.6km s-min=13.7km az=73.0*

**ISC 11 22:38:52.1±2.1,24.°88N±0.°04×123.°49E±0.°03, h5km±14km, n68, σ1.°35/66, mb4.2/23, MS3.2/8, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.58** | **158** | P | | **Pb** | **22 39 05.1** | **+0.3** |
| IRIF | | | | *eS* | | **Sn** | **22 39 13.9** | **-3.0** |
| **YOJ** | **Yonaguni jima** | **0.60** | **226** | P | | **Pb** | **22 39 04.6** | **-0.4** |
| YOJ | | | | S | | **Sb** | **22 39 12.3** | **-1.5** |
| **YOJ** | **Yonaguni jima** | **0.60** | **226** | | | **Pb** | **22 39 04.5** | **-0.5** |
| **JYNG** | **Yonagunijimaku** | **0.65** | **229** | P | | **Pb** | **22 39 05.4** | **-0.5** |
| JYNG | | | | S | | **Sg** | **22 39 13.5** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **0.79** | **130** | P | | **Pb** | **22 39 08.2** | **0.0** |
| JIJ | | | | S | | **Sn** | **22 39 19.6** | **-2.4** |
| **JKRS** | **Kuro-shima** | **0.79** | **143** | P | | **Pn** | **22 39 08.8** | **-1.1** |
| JKRS | | | | S | | **Sn** | **22 39 19.8** | **-2.4** |
| **JISG** | **Ishigakijimahi** | **0.80** | **111** | P | | **Pn** | **22 39 08.7** | **-1.4** |
| JISG | | | | S | | **Sb** | **22 39 19.7** | **0.0** |
| **HATJ** | **Hateruma jima** | **0.87** | **160** | P | | **Pn** | **22 39 09.8** | **-1.1** |
| HATJ | | | | *eS* | | **Sn** | **22 39 21.4** | **-2.5** |
| **JTJ** | **Tarama** | **1.13** | **102** | P | | **Pn** | **22 39 14.5** | **-0.1** |
| JTJ | | | | *eS* | | **Sn** | **22 39 29.7** | **-0.8** |
| **JIRB** | **Irabujima** | **1.53** | **91** | P | | **Pb** | **22 39 20.9** | **-0.1** |
| **JIKM** | **Ikemajima** | **1.60** | **88** | P | | **Pb** | **22 39 21.9** | **-0.2** |
| **JMJ2** | **Miyako jima3** | **1.68** | **94** | P | | **Pb** | **22 39 22.4** | **-1.1** |
| **JOGS** | **Gusukube** | **1.75** | **93** | *eS* | | **Sn** | **22 39 45.1** | **-0.7** |
| **TATO** | **Taipei** | **1.82** | **274** | | | **Pn** | **22 39 23.2** | **-0.8** |
| **NACB** | **Ninganchiao** | **1.86** | **248** | | | **Pn** | **22 39 24.2** | **-0.5** |
| **YHNB** | **Yeheng** | **1.93** | **264** | | | **Pn** | **22 39 25.0** | **-0.7** |
| **YULB** | **Yu-li** | **2.49** | **234** | | | **Pn** | **22 39 33.1** | **-0.2** |
| **SSLB** | **Suanglung** | **2.55** | **245** | | | **Pn** | **22 39 35.0** | **+0.8** |
| **TWG** | **Pinlang** | **3.01** | **228** | | | **Pn** | **22 39 40.0** | **-0.5** |
| **TPUB** | **Ta-pu** | **3.04** | **240** | | | **Pn** | **22 39 41.3** | **+0.3** |
| **KNMB** | **Chin-men Tao** | **4.66** | **266** | Pn | | **Pn** | **22 40 02.1** | **-1.0** |
| **KSRS** | **Korea Array** | **13.10** | **16** | P | | **P** | **22 42 06.9** | **-2.3** |
| | 0.2nm,0.3s,baz=201,slow=13,SNR=3.0 | | | | | | | |
| KSRS | | | | | LR | LR | 22 47 36.0 | |
| | comp=Z,51nm,18.5s,baz=210,slow=39 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.16** | **44** | LR | | LR | 22 50 56.4 | |
| | comp=Z,53nm,18.5s,baz=360,slow=41 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.67** | **259** | P | | **P** | **22 44 05.0** | **+0.2** |
| | 0.8nm,0.3s,baz=55,slow=7.6,SNR=8.3 | | | | | | | |
| **ASAJ** | **Asahikawa** | **24.72** | **34** | LR | | LR | 22 53 27.6 | |
| | comp=Z,28nm,18.5s,baz=117,slow=35 | | | | | | | |
| **KLR** | **Kul'dur** | **25.16** | **13** | P | | **P** | **22 44 19.1** | **+1.0** |
| | 1.0nm,0.6s,baz=173,slow=8.1,SNR=5.9 | | | | | | | |
| KLR | | | | | LR | LR | 22 54 22.2 | |
| | comp=Z,55nm,18.3s,baz=166,slow=36 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.38** | **335** | P | | **P** | **22 44 31.0** | **+1.6** |
| **SONM** | **Songino Array** | **26.61** | **334** | P | | **P** | **22 44 32.0** | **+0.5** |
| | 3.8nm,0.8s,baz=150,slow=10,SNR=25 | | | | | | | |
| SONM | | | | | LR | LR | 22 55 47.7 | |
| | comp=Z,75nm,18.9s,baz=117,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **26.61** | **334** | P | | **P** | **22 44 32.9** | **+1.3** |
| SONM | | | | | IAmb | IAmb | 22 44 33.3 | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **37.38** | **5** | LR | | LR | 23 04 00.7 | |
| | comp=Z,37nm,19.2s,baz=140,slow=40 | | | | | | | |
| **MK31** | **Makanchi Array** | **39.33** | **314** | P | | **P** | **22 46 21.8** | **-0.5** |
| **MKAR** | **Makanchi Array** | **39.33** | **314** | P | | **P** | **22 46 21.4** | **-0.9** |
| | comp=Z,1.9nm,0.7s,baz=100,slow=11,SNR=20 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.33** | **314** | P | | **P** | **22 46 22.4** | **+0.2** |
| **MAKZ** | **Makanchi** | **39.53** | **314** | P | | **P** | **22 46 23.2** | **-0.7** |
| MAKZ | | | | | IAmb | IAmb | 22 46 24.8 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **40.63** | **172** | P | | **P** | **22 46 34.9** | **+1.7** |
| KNRA | | | | | IAmb | IAmb | 22 46 51.9 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.83** | **326** | P | | **P** | **22 46 33.7** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **40.83** | **326** | P | | **P** | **22 46 32.5** | **-2.1** |
| | comp=Z,1.8nm,0.7s,baz=106,slow=9.3,SNR=9.6 | | | | | | | |
| ZALV | | | | | LR | LR | 23 04 36.0 | |
| | comp=Z,30nm,20.0s,baz=33,slow=38 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.83** | **326** | P | | **P** | **22 46 33.9** | **-0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **42.95** | **319** | P | | **P** | **22 46 50.9** | **-1.1** |
| | comp=Z,0.8nm,0.7s,baz=108,slow=8.2,SNR=7.5 | | | | | | | |
| **COEN** | **Coen** | **43.11** | **151** | P | | P | 22 46 57.6 | +4.0 |
| COEN | | | | | IAmb | IAmb | 22 47 14.5 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.78** | **166** | P | | **P** | **22 47 15.7** | **+0.9** |
| WRAB | | | | | IAmb | IAmb | 22 47 21.7 | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.78** | **166** | P | | **P** | **22 47 15.5** | **+0.6** |
| | comp=Z,4.4nm,0.7s,baz=348,slow=8.8,SNR=22 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.78** | **166** | P | | **P** | **22 47 17.7** | **+2.8** |
| **WB2** | **Warramunga Arr** | **45.79** | **166** | P | | **P** | **22 47 16.6** | **+1.7** |
| **WR0** | **Warramunga Arr** | **45.85** | **165** | P | | **P** | **22 47 19.1** | **+3.7** |
| WR0 | | | | | IAmb | IAmb | 22 47 22.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **46.31** | **185** | P | | **P** | **22 47 19.4** | **+0.5** |
| **GAR** | **Garm** | **46.65** | **301** | P | | **P** | **22 47 21.2** | **-0.6** |
| GAR | | | | | IAmb | IAmb | 22 47 22.6 | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **TIXI** | **Tiksi** | **46.90** | **2** | P | | **P** | **22 47 23.9** | **+0.8** |
| TIXI | | | | | IAmb | IAmb | 22 47 24.3 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **BRVK** | **Borovoye** | **48.55** | **320** | P | | **P** | **22 47 35.6** | **-0.6** |
| BRVK | | | | | IAmb | IAmb | 22 47 37.0 | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **NRIK** | **Noril'sk** | **49.30** | **344** | P | | **P** | **22 47 41.2** | **-0.5** |
| | comp=Z,1.7nm,0.6s,baz=132,slow=7.0,SNR=3.6 | | | | | | | |
| **NRIK** | **Noril'sk** | **49.30** | **344** | P | | **P** | **22 47 41.7** | **0.0** |
| NRIK | | | | | IAmb | IAmb | 22 47 50.0 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **AS31** | **Alice Springs** | **49.30** | **167** | P | | P | 22 47 47.3 | +5.1 |
| **ASAR** | **Alice Springs** | **49.30** | **167** | P | | **P** | **22 47 41.9** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=347,slow=7.0,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.30** | **167** | P | | P | 22 47 46.7 | +4.5 |
| **ABKAR** | **Akbulak array** | **54.47** | **314** | P | | **P** | **22 48 20.4** | **-0.2** |
| ABKAR | | | | | IAmb | IAmb | 22 48 21.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **55.51** | **175** | P | | **P** | **22 48 30.0** | **+1.8** |
| **ARU** | **Arti** | **55.83** | **323** | P | | **P** | **22 48 29.0** | **-1.3** |
| ARU | | | | | IAmb | IAmb | 22 48 29.6 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **58.60** | **168** | P | | P | 22 48 54.1 | +4.0 |
| **STKA** | **Stephens Creek** | **59.03** | **162** | P | | **P** | **22 48 55.4** | **+2.4** |
| | comp=Z,1.9nm,0.8s,baz=356,slow=13,SNR=4.3 | | | | | | | |
| **KIRV** | **Kirov** | **60.86** | **325** | LR | | LR | 23 17 30.0 | |
| | comp=Z,76nm,18.5s,baz=345,slow=38 | | | | | | | |
| **J20K** | **Nowinta River** | **64.60** | **29** | P | | **P** | **22 49 31.9** | **+1.7** |
| **K20K** | **Telida** | **64.71** | **30** | P | | **P** | **22 49 32.3** | **+1.3** |
| **H21K** | **Melozitna Rive** | **65.04** | **27** | P | | **P** | **22 49 34.0** | **+0.9** |
| H21K | | | | | IAmb | IAmb | 22 49 39.3 | |
| | comp=Z,4.4nm,1.4s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **65.41** | **34** | P | | **P** | **22 49 37.3** | **+1.7** |
| **FINES** | **FINESS Array B** | **71.91** | **330** | LR | | LR | 23 26 24.9 | |
| | comp=Z,32nm,20.8s,baz=220,slow=40 | | | | | | | |
| **NOA** | **NORSAR Array B** | **78.59** | **333** | P | | **P** | **22 50 52.7** | **-1.9** |
| | comp=Z,0.9nm,0.7s,baz=54,slow=2.3,SNR=3.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.51** | **23** | P | | **P** | **22 51 09.6** | **-0.7** |
| | comp=Z,1.1nm,0.8s,baz=308,slow=5.1,SNR=16 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **87.05** | **267** | LR | | LR | 23 29 56.7 | |
| | comp=Z,23nm,21.5s,baz=100,slow=35 | | | | | | | |

*SFS **11** 23:12:34.0,35.°41N×3.°87W, ML2.3, ALBORAN S.*
*CNRM **11** 23:12:35.0,35.°42N×3.°87W, h17km, ml2.9*
*IGIL **11** 23:12:35.3,35.°42N×3.°88W, h0km, ML2.4*
*INMG **11** 23:12:35.1±1.2,35.°42N×3.°82W, h10km±8km, ML2.3, Error ellipse: s-maj=5.0km s-min=4.0km az=120.0*

**ISC 11 23:12:34.2±1.0,35.°42N±0.°03×3.°80W±0.°03, h15km±7km, n38, σ1.°35/62, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **PALE** | **Palemas** | **0.23** | **208** | P | | **Pg** | **23 12 39.0** | **-0.4** |
| PALE | | | | S | | **Sg** | **23 12 43.0** | **0.0** |
| **PALE** | **Palemas** | **0.23** | **208** | P | | **Pg** | **23 12 39.0** | **-0.4** |
| PALE | | | | S | | **Sg** | **23 12 42.9** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.15** | **102** | P | | **Pn** | **23 12 55.6** | **-0.1** |
| CHAS | | | | S | | **Sb** | **23 13 10.9** | **+0.4** |
| **TAF** | **Taforalt** | **1.29** | **118** | P | | **Pn** | **23 12 56.8** | **-1.0** |
| TAF | | | | S | | **Sg** | **23 13 17.3** | **+1.4** |
| **CHEFC** | **Chefchaouen** | **1.30** | **

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLK3** | **Peulik 3** | **0.83** | **288** | | **Pn** | **23 27 01.3** | **+0.6** |
| PLK3 | | | | | **Sn** | **23 27 13.4** | **+0.2** |
| **OHAK** | **Old Harbor** | **0.85** | **104** | | **Pn** | **23 27 01.1** | **+0.2** |
| OHAK | | | | | **Sn** | **23 27 13.6** | **0.0** |
| OHAK | comp=N,2μm,0.3s | | | IAML | | 23 27 14.2 | |
| **OHAK** | **Old Harbor** baz=283 | **0.85** | **104** | P | **Pn** | **23 27 01.1** | **+0.2** |
| OHAK | baz=283 | | | S | **Sn** | **23 27 13.6** | **0.0** |
| **SII** | **Sitkinak Islan** | **0.95** | **159** | | **Pn** | **23 27 02.3** | **+0.1** |
| SII | | | | | **Sn** | **23 27 15.4** | **-0.2** |
| SII | comp=N,3μm,0.5s | | | IAML | | 23 27 16.6 | |
| **SII** | **Sitkinak Islan** baz=338 | **0.95** | **159** | P | **Pn** | **23 27 02.3** | **+0.1** |
| SII | baz=338 | | | S | **Sn** | **23 27 15.7** | **0.0** |
| **KDAK** | **Kodiak Island** comp=N,90nm,0.3s,baz=280,slow=8.8,SNR=1256 | **1.24** | **73** | P | **Pn** | **23 27 06.1** | **+0.4** |
| KDAK | comp=N,32nm,0.3s,baz=359,slow=22,SNR=13 | | | S | **Sn** | **23 27 22.3** | **+0.3** |
| **KDAK** | **Kodiak Island** | **1.24** | **73** | | **Pn** | **23 27 06.2** | **+0.6** |
| **KDAK** | **Kodiak Island** | **1.24** | **73** | | **Sn** | **23 27 22.8** | **+0.7** |
| **Q19K** | **Cape Douglas,** | **1.61** | **22** | Pn | **Pn** | **23 27 11.1** | **+0.6** |
| Q19K | comp=N,607nm,1.0s | | | IAML | | 23 27 38.9 | |
| Q19K | comp=E,676nm,1.0s | | | IAML | | 23 27 45.9 | |
| **CHIR** | **Chirikof Islan** | **1.69** | **196** | | **Pn** | **23 27 11.1** | **-0.4** |
| **CHIR** | **Chirikof Islan** | **1.69** | **196** | | **Sn** | **23 27 31.2** | **-1.3** |
| **CHIR** | **Chirikof Islan** comp=N,469nm,0.5s | **1.69** | **196** | IAML | | 23 27 32.0 | |
| CHIR | comp=E,390nm,0.8s | | | IAML | | 23 27 32.2 | |
| **CHIR** | **Chirikof Islan** baz=15 | **1.69** | **196** | P | **Pn** | **23 27 11.0** | **-0.4** |
| CHIR | baz=15 | | | S | **Sn** | **23 27 31.2** | **-1.3** |
| **P18K** | **Big Mountain,** | **1.97** | **354** | | **Pn** | **23 27 15.6** | **+0.3** |
| P18K | | | | | **Sn** | **23 27 39.4** | **+0.3** |
| **P18K** | **Big Mountain,** baz=174 | **1.97** | **354** | P | **Pn** | **23 27 15.6** | **+0.3** |
| P18K | baz=174 | | | S | **Sn** | **23 27 39.4** | **+0.3** |
| **CHGN** | **Chignik** | **2.29** | **242** | | **Pn** | **23 27 19.6** | **+0.1** |
| **CHGN** | **Chignik** comp=N,410nm,0.3s | **2.29** | **242** | IAML | | 23 27 47.5 | |
| **CHGN** | **Chignik** baz=59 | **2.29** | **242** | P | **Pn** | **23 27 19.6** | **+0.1** |
| **ILSW** | **Iliamna Southw** | **2.69** | **18** | | **Pn** | **23 27 26.1** | **+1.1** |
| **VNHG** | **Veniaminof 1** | **2.69** | **245** | | **Pn** | **23 27 25.8** | **+0.8** |
| **O19K** | **Port Alsworth** | **2.77** | **5** | Pn | **Pn** | **23 27 26.9** | **+0.9** |
| O19K | comp=N,143nm,0.5s | | | IAML | | 23 28 00.8 | |
| O19K | comp=E,159nm,0.5s | | | IAML | | 23 28 16.6 | |
| **CNPM** | **China Poot** | **2.80** | **40** | | **Pn** | **23 27 27.6** | **+1.1** |
| **CNPM** | **China Poot** comp=E,173nm,0.2s | **2.80** | **40** | IAML | | 23 28 00.8 | |
| CNPM | comp=N,172nm,0.4s | | | IAML | | 23 28 01.1 | |
| **VNFG** | **Fog Glacier, M** | **2.86** | **248** | | **Pn** | **23 27 28.2** | **+0.9** |
| **VNFG** | **Fog Glacier, M** baz=65 | **2.86** | **248** | P | **Pn** | **23 27 28.2** | **+0.9** |
| **O20K** | **Slope Mountain** | **2.88** | **22** | | **Pn** | **23 27 29.0** | **+1.5** |
| **O20K** | **Slope Mountain** baz=204 | **2.88** | **22** | P | **Pn** | **23 27 29.0** | **+1.5** |
| **BRLK** | **Bradley Lake** | **3.10** | **40** | | **Pn** | **23 27 30.9** | **+0.4** |
| **RED** | **Redoubt Volcan** | **3.16** | **19** | | **Pn** | **23 27 32.7** | **+1.3** |
| **RSO** | **Redoubt South** | **3.21** | **18** | | **Pn** | **23 27 33.7** | **+1.6** |
| **NCT** | **North Crescent** | **3.27** | **16** | | **Pn** | **23 27 34.3** | **+1.4** |
| **DFR** | **Drift River** | **3.34** | **18** | | **Pn** | **23 27 35.1** | **+1.3** |
| **RDT** | **Redoubt** | **3.38** | **21** | | **Pn** | **23 27 35.3** | **+1.1** |
| **N19K** | **Bonanza Creek** | **3.38** | **3** | | **Pn** | **23 27 35.8** | **+1.4** |
| **SVW2** | **Sparrevohn** | **3.69** | **354** | | **Pn** | **23 27 39.1** | **+0.7** |
| **CNBA** | **Chernabura Isl** | **3.75** | **228** | Pn | **Pn** | **23 27 38.5** | **-0.9** |
| CNBA | comp=E,57nm,0.3s | | | IAML | | 23 28 27.4 | |
| CNBA | comp=N,63nm,4.9s | | | IAML | | 23 30 03.6 | |
| **SDPT** | **Sand Point** | **3.79** | **239** | | **Pn** | **23 27 40.0** | **+0.2** |
| **SDPT** | **Sand Point** comp=N,102nm,0.4s | **3.79** | **239** | IAML | | 23 28 25.3 | |
| SDPT | comp=E,118nm,4.6s | | | IAML | | 23 28 42.9 | |
| **SDPT** | **Sand Point** baz=54 | **3.79** | **239** | P | **Pn** | **23 27 40.0** | **+0.2** |
| **CAPN** | **Captain Cook N** | **3.83** | **28** | Pn | **Pn** | **23 27 42.4** | **+2.1** |
| **SEW** | **Seward** | **3.86** | **44** | | **Pn** | **23 27 40.6** | **-0.1** |
| **SEW** | **Seward** baz=228 | **3.86** | **44** | P | **Pn** | **23 27 40.6** | **-0.1** |
| **SLKM** | **Skilak Lake** | **3.88** | **36** | | **Pn** | **23 27 41.5** | **+0.4** |
| **SPCN** | **Chakachatna No** | **4.02** | **18** | | **Pn** | **23 27 44.6** | **+1.5** |
| **SPNN** | **North Nagishla** | **4.08** | **14** | | **Pn** | **23 27 45.4** | **+1.5** |
| **SPCG** | **Spurr Capps Gl** | **4.11** | **19** | | **Pn** | **23 27 45.5** | **+1.2** |
| **BLHA** | **Black Hill** | **4.38** | **250** | | **Pn** | **23 27 48.5** | **+0.6** |
| **BLHA** | **Black Hill** baz=64 | **4.38** | **250** | P | **Pn** | **23 27 48.5** | **+0.6** |
| **M19K** | **Big River Lodg** | **4.48** | **2** | Pn | **Pn** | **23 27 50.5** | **+1.3** |
| **RC01** | **Rabbit Creek A** | **4.49** | **33** | | **Pn** | **23 27 50.2** | **+0.9** |
| **RC01** | **Rabbit Creek A** comp=N,52nm,0.5s | **4.49** | **33** | IAML | | 23 28 40.6 | |
| RC01 | comp=E,86nm,0.3s | | | IAML | | 23 28 41.0 | |
| **RC01** | **Rabbit Creek A** baz=217 | **4.49** | **33** | P | **Pn** | **23 27 50.2** | **+0.9** |
| **L19K** | **White Mountain** | **4.75** | **360** | | **Pn** | **23 27 54.2** | **+1.2** |
| **L19K** | **White Mountain** comp=N,26nm,3.9s | **4.75** | **360** | IAML | | 23 30 08.8 | |
| **L19K** | **White Mountain** baz=180 | **4.75** | **360** | P | **Pn** | **23 27 54.2** | **+1.2** |
| **PWL** | **Port Wells** | **4.78** | **41** | | **Pn** | **23 27 53.4** | **+0.1** |
| **PWL** | **Port Wells** comp=E,65nm,1.0s | **4.78** | **41** | IAML | | 23 28 52.9 | |
| **M22K** | **Willow** | **4.93** | **27** | Pn | **Pn** | **23 27 56.4** | **+1.1** |
| **PMR** | **Palmer** | **5.06** | **32** | Pn | **Pn** | **23 27 57.3** | **+0.2** |
| PMR | comp=E,27nm,1.0s | | | IAML | | 23 28 53.7 | |
| PMR | comp=N,32nm,4.3s | | | IAML | | 23 29 53.1 | |
| **KNK** | **Knik Glacier** | **5.13** | **36** | | **Pn** | **23 27 58.2** | **+0.1** |
| **KNK** | **Knik Glacier** comp=N,45nm,0.2s | **5.13** | **36** | IAML | | 23 28 55.2 | |
| KNK | comp=E,39nm,0.6s | | | IAML | | 23 28 57.6 | |
| **KNK** | **Knik Glacier** baz=222 | **5.13** | **36** | P | **Pn** | **23 27 58.2** | **+0.1** |
| **GLI** | **Glacier Island** | **5.25** | **46** | Pn | **Pn** | **23 28 00.5** | **+0.8** |
| **GHO** | **Glory Hole Cre** | **5.27** | **32** | Pn | **Pn** | **23 28 01.1** | **+1.1** |
| GHO | comp=N,40nm,0.4s | | | IAML | | 23 29 03.1 | |
| GHO | comp=E,40nm,0.6s | | | IAML | | 23 29 03.8 | |
| **FID** | **Port Fidalgo** | **5.42** | **49** | | **Pn** | **23 28 01.2** | **-0.8** |
| **SML** | **Sawmill** | **5.47** | **34** | Pn | **Pn** | **23 28 03.4** | **+0.7** |
| **CUT** | **Chulitna** | **5.47** | **23** | | **Sn** | **23 29 05.0** | **+0.8** |
| **CUT** | **Chulitna** | **5.47** | **23** | | **Pn** | **23 28 03.7** | **+1.0** |
| **CUT** | **Chulitna** baz=206 | **5.47** | **23** | P | **Pn** | **23 28 03.7** | **+1.0** |
| **TT01** | **Tatalina** | **5.51** | **354** | | **Pn** | **23 28 04.7** | **+1.4** |
| **TTA** | **Tatalina** | **5.54** | **354** | | **Pn** | **23 28 04.9** | **+1.2** |
| **TTA** | **Tatalina** baz=173 | **5.54** | **354** | P | **Pn** | **23 28 04.9** | **+1.2** |
| **JPK** | **Jack Peak** | **5.55** | **46** | | **Pn** | **23 28 03.8** | **-0.1** |
| **EYAK** | **Cordova Ski Ar** | **5.62** | **53** | Pn | **Pn** | **23 28 04.7** | **0.0** |
| **PPLA** | **Purkeypile** | **5.62** | **12** | Pn | **Pn** | **23 28 06.6** | **+1.7** |
| **SCM** | **Sheep Creek Mo** | **5.81** | **38** | | **Pn** | **23 28 07.8** | **+0.4** |
| **DIV** | **Divide** | **5.92** | **48** | Pn | **Pn** | **23 28 09.6** | **+0.7** |
| **KLU** | **Klutina** | **6.08** | **44** | | **Pn** | **23 28 11.4** | **+0.4** |
| **KLU** | **Klutina** baz=232 | **6.08** | **44** | P | **Pn** | **23 28 11.4** | **+0.4** |
| **GOAT** | **Goat Mountain** | **6.08** | **55** | | **Pn** | **23 28 11.6** | **+0.6** |
| **CAST** | **Castle Rocks** | **6.14** | **11** | Pn | **Pn** | **23 28 13.2** | **+1.3** |
| **WAT7** | **Susitna Watana** | **6.17** | **26** | | **Pn** | **23 28 12.4** | **+0.1** |
| **HMT** | **Hamilton** | **6.18** | **58** | Pn | **Pn** | **23 28 12.8** | **+0.3** |
| **WAT6** | **Susitna Watana** | **6.25** | **32** | | **Pn** | **23 28 13.8** | **+0.3** |
| **WAT6** | **Susitna Watana** baz=217 | **6.25** | **32** | P | **Pn** | **23 28 13.8** | **+0.3** |
| **BMRM** | **Bremner River** | **6.32** | **52** | | **Pn** | **23 28 14.7** | **+0.4** |
| **BMRM** | **Bremner River** baz=240 | **6.32** | **52** | P | **Pn** | **23 28 14.7** | **+0.4** |
| **M24K** | **Tolsona, Glenn** | **6.39** | **39** | Pn | **Pn** | **23 28 16.9** | **+1.7** |
| **KTH** | **Kantishna Hill** | **6.42** | **16** | | **Pn** | **23 28 16.2** | **+0.5** |
| **TRF** | **Thorofare Moun** | **6.42** | **18** | Pn | **Pn** | **23 28 16.5** | **+0.7** |
| **BERG** | **Berg Lake** | **6.46** | **58** | Pn | **Pn** | **23 28 16.6** | **+0.3** |
| **N25K** | **Chitina, Valde** | **6.66** | **47** | | **Pn** | **23 28 19.5** | **+0.5** |
| **N25K** | **Chitina, Valde** baz=235 | **6.66** | **47** | P | **Pn** | **23 28 19.5** | **+0.5** |
| **RND** | **Reindeer** | **6.66** | **24** | | **Pn** | **23 28 19.4** | **+0.3** |
| **DHY** | **Denali Highway** | **6.75** | **30** | | **Pn** | **23 28 20.4** | **+0.2** |
| **DHY** | **Denali Highway** baz=216 | **6.75** | **30** | P | **Pn** | **23 28 20.4** | **+0.2** |
| **SNH** | **Sunshine Point** | **6.79** | **61** | Pn | **Pn** | **23 28 21.7** | **+0.9** |
| **WAX** | **Waxell Ridge** | **6.88** | **59** | Pn | **Pn** | **23 28 22.4** | **+0.4** |
| **GLB** | **Gilahina Butte** | **6.89** | **50** | | **Pn** | **23 28 22.4** | **+0.3** |
| **VRDI** | **Verde Repeater** | **6.93** | **52** | Pn | **Pn** | **23 28 23.3** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **6.93** | **14** | Pn | **Pn** | **23 28 22.8** | **+0.1** |
| **MCK** | **McKinley** | **6.94** | **22** | | **Pn** | **23 28 23.0** | **+0.3** |
| **MCK** | **McKinley** baz=207 | **6.94** | **22** | P | **Pn** | **23 28 23.0** | **+0.3** |
| **AKUT** | **Akutan** | **7.02** | **246** | Pn | **Pn** | **23 28 24.8** | **+1.0** |
| **ISLE** | **Juniper Island** | **7.17** | **59** | Pn | **Pn** | **23 28 26.5** | **+0.5** |
| **MESA** | **MESA** | **7.21** | **62** | Pn | **Pn** | **23 28 27.6** | **+0.9** |
| **PAX** | **Paxson** | **7.23** | **36** | Pn | **Pn** | **23 28 27.9** | **+1.1** |
| **KIAG** | **Kiagna River** | **7.28** | **56** | | **Pn** | **23 28 27.8** | **+0.3** |
| **BALM** | **Baldy** | **7.33** | **55** | | **Pn** | **23 28 28.5** | **+0.3** |
| **YAH** | **Yahtse** | **7.37** | **61** | | **Pn** | **23 28 29.1** | **+0.3** |
| **UNV** | **Unalaska Valle** | **7.54** | **246** | | **Pn** | **23 28 30.5** | **-0.4** |
| **UNV** | **Unalaska Valle** baz=57 | **7.54** | **246** | P | **Pn** | **23 28 30.5** | **-0.4** |
| **BARN** | **Barnard Glacie** | **7.65** | **56** | | **Pn** | **23 28 33.3** | **+0.8** |
| **TABL** | **Table Mountain** | **7.67** | **61** | Pn | **Pn** | **23 28 34.0** | **+1.1** |
| **NEA2** | **Nenana** | **7.69** | **19** | Pn | **Pn** | **23 28 32.0** | **-1.0** |
| **M26K** | **Nabesna, AK** | **7.73** | **45** | Pn | **Pn** | **23 28 33.7** | **+0.1** |
| **WRH** | **Wood River Hil** | **7.77** | **22** | | **Pn** | **23 28 32.8** | **-1.2** |
| **MENT** | **Mentasta** | **7.79** | **40** | Pn | **Pn** | **23 28 36.1** | **+1.7** |
| **MLY** | **Manley** | **7.86** | **13** | Pn | **Pn** | **23 28 34.9** | **-0.4** |
| **I21K** | **Tanana** | **7.88** | **9** | | **Pn** | **23 28 35.5** | **0.0** |
| **I21K** | **Tanana** baz=191 | **7.88** | **9** | P | **Pn** | **23 28 35.5** | **0.0** |
| **HDA** | **Harding Lake** | **7.96** | **25** | Pn | **Pn** | **23 28 37.1** | **+0.4** |
| **CCB** | **Clear Creek Bu** | **7.98** | **22** | | **Pn** | **23 28 35.5** | **-1.4** |
| **RIDG** | **Independent Ri** | **7.99** | **34** | Pn | **Pn** | **23 28 38.2** | **+1.1** |
| **PCA** | **Pinnacle** | **8.01** | **65** | Pn | **Pn** | **23 28 38.1** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **8.14** | **47** | Pn | **Pn** | **23 28 40.7** | **+1.4** |
| **I23K** | **Minto, Yukon-K** | **8.16** | **16** | Pn | **Pn** | **23 28 39.0** | **-0.4** |
| **MDM** | **Murphy Dome** | **8.18** | **20** | | **Pn** | **23 28 38.5** | **-1.1** |
| **IL31** | | **8.28** | **24** | | **Pn** | **23 28 39.9** | **-1.1** |
| **ILAR** | **Eielson Array** comp=E,1.0nm,0.3s,baz=217,slow=14,SNR=24 | **8.28** | **24** | P | **Pn** | **23 28 40.0** | **-1.1** |
| ILAR | comp=E,0.7nm,0.3s,baz=212,slow=22,SNR=7.7 | | | S | **Sn** | **23 30 06.2** | **-6.7** |
| **YUK2** | **White River** | **8.30** | **53** | | **Pn** | **23 28 42.9** | **+1.5** |
| **SCRK** | **Sand Creek** | **8.42** | **34** | Pn | **Pn** | **23 28 43.4** | **+0.4** |
| **POKR** | **Poker Plat Res** | **8.47** | **22** | Pn | **Pn** | **23 28 43.8** | **+0.2** |
| **J25K** | **Salcha River,** | **8.52** | **28** | | **Pn** | **23 28 44.4** | **+0.1** |
| **J25K** | **Salcha River,** baz=217 | **8.52** | **28** | P | **Pn** | **23 28 44.4** | **+0.1** |
| **L27K** | **Beaver Creek,** | **8.55** | **43** | Pn | **Pn** | **23 28 46.0** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **8.57** | **43** | Pn | **Pn** | **23 28 46.1** | **+1.0** |
| **IMAR** | **Indian Mountai** | **8.59** | **3** | Pn | **Pn** | **23 28 45.8** | **+0.6** |
| **ANM** | **Nome** | **8.79** | **329** | Pn | **Pn** | **23 28 49.6** | **+1.8** |
| **H24K** | **Noodor Dome** | **9.04** | **18** | Pn | **Pn** | **23 28 50.8** | **-0.5** |
| **CLES** | **Cleveland East** | **9.80** | **248** | Pn | **Pn** | **23 29 00.2** | **-1.6** |
| **DAWY** | **Dawson** | **10.02** | **42** | Pn | **Pn** | **23 29 06.2** | **+1.4** |
| **COLD** | **Coldfoot** | **10.05** | **10** | Pn | **Pn** | **23 29 03.8** | **-1.3** |
| **FYU** | **Fort Yukon** | **10.18** | **22** | Pn | **Pn** | **23 29 06.2** | **-0.7** |
| **M30M** | **Minto, Yukon** | **10.36** | **53** | Pn | **Pn** | **23 29 10.4** | **+1.0** |
| **WHY** | **Whitehorse** | **10.74** | **64** | Pn | **Pn** | **23 29 15.8** | **+1.1** |
| **BMAR** | **Burnt Mountain** | **11.06** | **21** | Pn | **Pn** | **23 29 17.5** | **-1.4** |
| **M31M** | **Drury Creek, Y** | **11.30** | **57** | Pn | **Pn** | **23 29 23.1** | **+0.9** |
| **DLBC** | **Dease Lake** comp=E,0.2nm,0.3s,baz=274,slow=13,SNR=3.1 | **13.18** | **75** | P | **Pn** | **23 29 49.5** | **+1.8** |
| **INK** | **Inuvik** comp=E,0.3nm,0.3s,baz=231,slow=15,SNR=9.1 | **14.48** | **33** | P | **Pn** | **23 30 04.7** | **+0.2** |
| **INK** | **Inuvik** | **14.48** | **33** | P | **Pn** | **23 30 05.0** | **+0.5** |
| **YKA** | **Yellowknife Ar** comp=E,0.3nm,0.6s,baz=273,slow=10,SNR=5.5 | **20.48** | **59** | P | **P** | **23 31 16.1** | **+1.1** |
| **RES** | **Resolute Bay** comp=E,0.3nm,0.4s,baz=256,slow=11,SNR=2.3 | **27.99** | **29** | P | **P** | **23 32 27.5** | **+0.7** |
| **ARCES** | **ARCESS Array B** comp=E,1.7nm,0.8s,baz=9.2,slow=7.3,SNR=4.1 | **53.32** | **360** | P | **P** | **23 35 52.7** | **-1.7** |
| **FINES** | **FINESS Array B** comp=E,0.8nm,0.5s,baz=1.9,slow=8.3,SNR=8.4 | **61.45** | **360** | P | **P** | **23 36 51.6** | **0.0** |
| **MKAR** | **Makanchi Array** comp=E,0.2nm,0.5s,baz=28,slow=5.9,SNR=4.5 | **65.83** | **321** | P | **P** | **23 37 20.6** | **-0.2** |
| **AKASG** | **Malin Array Be** comp=E,0.4nm,0.4s,baz=5.0,slow=5.8,SNR=4.1 | **72.17** | **357** | P | **P** | **23 37 59.6** | **-0.2** |

*IDC **11** 23:30:10.9±1.1, 22.81N×122.73E, h0km, mb3.4/6, mb1 3.6/7, mb1mx3.2/51, mbtmp3.5/7, ML3.5/1, MS4.0/1, Ms1 4.0/1, ms1mx2.5/49, Error ellipse: s-maj=60.3km s-min=21.3km az=70.0*

*JMA **11** 23:30:20.3±0.1, 24.95N×123.53E, h23km, M2.8*

**ISC 11 23:30:22.0±2.0, 24°84N±0.08'×123°55E±0.05, h2km±14km, n12, σ1s72/15, mb3.4/4, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.53** | **162** | P | **Pg** | **23 30 32.4** | **+0.3** |
| IRIF | | | | S | **Sb** | **23 30 40.7** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **0.62** | **233** | P | **Pg** | **23 30 33.1** | **-0.7** |
| YOJ | | | | *eS* | **Sg** | **23 30 42.5** | **+0.7** |
| **JIJ** | **Ishigaki jima** | **0.72** | **131** | P | **Pg** | **23 30 35.3** | **-0.5** |
| JIJ | | | | *eS* | **Sb** | **23 30 46.5** | **-1.0** |
| **JKRS** | **Kuro-shima** | **0.73** | **145** | P | **Pg** | **23 30 35.9** | **-0.1** |
| JKRS | | | | *eS* | **Sb** | **23 30 47.7** | **-0.1** |
| **JISG** | **Ishigakijimahi** | **0.74** | **110** | P | **Pg** | **23 30 35.3** | **-0.8** |
| **HATJ** | **Hateruma jima** | **0.81** | **163** | P | **Pg** | **23 30 36.9** | **-0.7** |
| HATJ | | | | S | **Sg** | **23 30 49.3** | **+1.2** |
| **KSRS** | **Korea Array** 0.2nm,0.3s,baz=198,slow=11,SNR=3.4 | **13.12** | **16** | Pn | P | 23 33 45.7 | +5.9 |
| **SONM** | **Songino Array** 0.8nm,0.9s,baz=152,slow=7.6,SNR=4.2 | **26.67** | **334** | P | **P** | **23 36 06.0** | **+3.7** |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=95,slow=11,SNR=4.2 | **39.39** | **314** | P | **P** | **23 37 50.3** | **-2.8** |
| **ZALV** | **Zalesovo Beam** 0.3nm,0.3s,baz=104,slow=6.1,SNR=2.0 | **40.90** | **326** | P | **P** | **23 38 03.6** | **-1.8** |
| **PMG** | **Port Moresby** comp=Z,212nm,21.6s,baz=6.0,slow=32 | **41.09** | **143** | LR | LR | 23 51 14.8 | |
| **YKA** | **Yellowknife Ar** 0.3nm,0.8s,baz=306,slow=5.3,SNR=3.9 | **81.52** | **24** | P | **P** | **23 42 42.0** | **+1.2** |

*DNK **11** 23:41:09.2±5.9, 80.00N×1.61E, h40km±98km, ML3.2*

*NAO **11** 23:41:09.6±1.9, 79.34N×2.99E, ML4.2*

*BER **11** 23:41:11.7±1.8, 79.15N×3.01E, h10km, ML3.2, ML4.2(NAO), Confirmed Earthquake*

*IDC **11** 23:41:12.3±0.6, 79.19N×3.10E, h0km, mb3.7/15, mb1 3.9/21, mb1mx3.8/49, mbtmp3.8/21, ML2.9/4, MS3.2/18, Ms1 3.2/18, ms1mx2.9/95, Error ellipse: s-maj=15.8km s-min=10.5km az=33.0*

*NEIC **11** 23:41:12.4±2.8, 79.35N±0.09×3.4E±0.3, h10km±1km, mb4.2/5, Error ellipse: s-maj=16.6km s-min=6.8km az=204.0*

*IEPN **11** 23:41:15.0, 79.02N×3.73E, h10km*

**ISC 11 23:41:13.3±0.5, 79°21N±0.05×3°61E±0.05, h12km, n78, σ2s63/87, mb3.7/17, MS3.1/13, 2C, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **1.61** | **96** | Pn | **Pn** | **23 41 40.2** | **-1.4** |
| KBS | | | | Sn | **Sn** | **23 41 58.6** | **-3.6** |
| **KBS** | **Kingsbay** | **1.61** | **96** | *i* P | **Pn** | **23 41 40.2** | **-1.4** |
| KBS | | | | *eS* | **Sn** | **23 41 59.0** | **-3.2** |
| KBS | comp=Z,440nm,0.3s | | | IAML | | 23 42 01.9 | |
| **KBS** | **Kingsbay** | **1.61** | **96** | Pn | **Pn** | **23 41 40.1** | **-1.4** |
| KBS | | | | Sn | **Sn** | **23 41 59.0** | **-3.2** |
| **KBS** | **Kingsbay** | **1.61** | **96** | *i* P | **Pn** | **23 41 40.2** | **-1.4** |
| KBS | | | | *i* S | **Sn** | **23 41 58.6** | **-3.6** |
| **BRBB** | **Barentsburg B** | **2.38** | **113** | Pn | **Pn** | **23 41 50.6** | **-1.3** |
| BRBB | | | | Sn | **Sn** | **23 42 18.3** | **-2.7** |
| **BRBB** | **Barentsburg B** | **2.38** | **113** | *eP* | **Pn** | **23 41 50.8** | **-1.2** |
| BRBB | | | | *eS* | **Sn** | **23 42 18.0** | **-3.0** |
| **BRBA** | **Barentsburg A** | **2.40** | **114** | Pn | **Pn** | **23 41 50.9** | **-1.4** |
| BRBA | | | | Sn | **Sn** | **23 42 19.9** | **-1.6** |
| **BRBA** | **Barentsburg A** | **2.40** | **114** | *eP* | **Pn** | **23 41 52.3** | **+0.1** |
| BRBA | | | | *eS* | **Sn** | **23 42 18.4** | **-3.1** |
| BRBA | comp=Z,483nm,0.6s | | | IAML | | 23 42 23.2 | |
| **SPA0** | **Spitsbergen Ar** | **2.72** | **106** | Pn | **Pn** | **23 41 56.2** | **-0.5** |
| | baz=311,slow=8.6 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **23 42 27.9** | **-1.5** |
| **SPA0** | **Spitsbergen Ar** baz=311,slow=8.6 | **2.72** | **106** | Pn | **Pn** | **23 41 56.2** | **-0.5** |
| SPA0 | | | | Sn | **Sn** | **23 42 27.9** | **-1.5** |
| **SPITS** | **Spitsbergen Ar** baz=299,slow=7.4,SNR=912 | **2.72** | **106** | Pn | **Pn** | **23 41 56.2** | **-0.5** |
| SPITS | baz=251,slow=26,SNR=9.2 | | | Sn | **Sn** | **23 42 30.2** | **+0.8** |
| **SPB2** | **Spitsbergen Ar** | **2.72** | **106** | | **Pn** | **23 41 56.3** | **-0.4** |
| **HSPB** | **Hornsund (broa** | **3.31** | **126** | Pn | **Pn** | **23 42 03.0** | **-1.8** |
| HSPB | | | | Sn | **Sn** | **23 42 38.5** | **-5.5** |
| **HSPB** | **Hornsund (broa** | **3.31** | **126** | *eP* | **Pn** | **23 42 02.8** | **-2.1** |
| HSPB | | | | *eS* | **Sn** | **23 42 38.5** | **-5.5** |
| HSPB | comp=Z,77nm,0.4s | | | IAML | | 23 42 44.4 | |
| **HSPB** | **Hornsund (broa** | **3.31** | **126** | *eP* | **Pn** | **23 42 03.9** | **-1.0** |
| HSPB | | | | *eS* | **Sn** | **23 42 39.2** | **-4.8** |
| **NOR** | **Nord** | **4.13** | **315** | Pn | **Pn** | **23 42 12.7** | **-3.4** |
| **NOR** | **Nord** | **4.13** | **315** | Pn | **Pn** | **23 42 12.7** | **-3.4** |
| **DAG** | **Danmarks Havn** | **5.22** | **253** | *i* P | **Pn** | **23 42 26.8** | **-4.3** |
| DAG | | | | *i* S | Sn | 23 43 19.8 | -11 |
| DAG | comp=Z,105nm,0.4s | | | IAML | | 23 43 22.6 | |
| **DAG** | **Danmarks Havn** | **5.22** | **253** | *eP* | **Pn** | **23 42 26.5** | **-4.6** |
| DAG | | | | *eS* | Sn | 23 43 19.9 | -11 |
| **HOPEN** | **Hopen** | **5.24** | **110** | Pn | **Pn** | **23 42 29.4** | **-1.8** |
| HOPEN | | | | Sn | **Sn** | **23 43 27.0** | **-4.4** |
| **HOPEN** | **Hopen** | **5.24** | **110** | *eP* | **Pn** | **23 42 30.0** | **-1.3** |
| HOPEN | | | | *eS* | **Sn** | **23 43 26.5** | **-4.9** |
| HOPEN | comp=Z,64nm,0.4s | | | IAML | | 23 43 30.2 | |
| **HOPEN** | **Hopen** | **5.24** | **110** | *eP* | **Pn** | **23 42 29.6** | **-1.6** |
| HOPEN | | | | *eS* | **Sn** | **23 43 25.3** | **-6.1** |
| **BJO1** | **Bjornoya** | **5.86** | **136** | P | **Pn** | **23 42 38.5** | **-1.3** |
| BJO1 | | | | S | **Sn** | **23 43 40.6** | **-6.2** |
| **DBG** | **Daneborg** | **7.29** | **240** | Pn | **Pn** | **23 42 54.2** | **-5.2** |
| DBG | | | | Sn | **Sn** | **23 44 09.4** | **-12** |
| **ZFI2** | **Zemlya Franca-** | **7.66** | **57** | *eP* | **Pn** | **23 43 04.0** | **-0.4** |
| ZFI2 | | | | *eS* | **Sn** | **23 44 24.4** | **-6.5** |
| **ZFI** | **Zemlya Franca-** comp=Z,27nm,1.5s | **7.66** | **57** | *eP* | **Pn** | **23 43 04.0** | **-0.4** |
| ZFI | | | | *eS* | **Sn** | **23 44 24.3** | **-6.6** |
| **SCO** | **Scoresbysund** | **10.86** | **230** | *i* P | **Pn** | **23 43 44.0** | **-4.2** |
| SCO | | | | *i* S | Sn | 23 45 33.9 | -16 |
| **SCO** | **Scoresbysund** | **10.86** | **230** | Pn | **Pn** | **23 43 48.3** | **0.0** |
| **KEV** | **Kevo** | **11.22** | **135** | Pn | **Pn** | **23 43 54.4** | **+1.1** |
| **ARA0** | **ARCESS Array S** baz=345,slow=14 | **11.23** | **138** | Pn | **Pn** | **23 43 52.8** | **-0.6** |
| **ARA0** | **ARCESS Array S** baz=345,slow=14 | **11.23** | **138** | Pn | **Pn** | **23 43 52.8** | **-0.6** |
| **ARCES** | **ARCESS Array B** baz=348,slow=12,SNR=15 | **11.23** | **138** | Pn | **Pn** | **23 43 54.0** | **+0.6** |
| ARCES | baz=298,slow=2.6,SNR=2.6 | | | Sn | **Sn** | **23 45 54.6** | **-4.1** |
| ARCES | comp=Z,75nm,21.0s,baz=0.5,slow=36 | | | LR | LR | 23 47 56.9 | |
| **SUMG** | **Summit** | **11.87** | **259** | *i* P | Pn | 23 43 57.0 | -5.5 |
| SUMG | | | | *eS* | Sn | 23 45 56.3 | -19 |
| **SUMG** | **Summit** | **11.87** | **259** | | **Pn** | **23 43 58.4** | **-4.1** |
| **TULEG** | **Thule** | **14.52** | **297** | Pn | **Pn** | **23 44 30.9** | **-7.3** |
| **EUNU** | **Eureka** | **14.74** | **317** | Pn | Pn | **23 44 35.8** | **-5.4** |
| **NOA** | **NORSAR Array B** comp=Z,0.0nm,0.3s,baz=359,slow=8.5,SNR=2.1 | **18.41** | **168** | P | **Pn** | **23 45 29.9** | **+2.0** |
| NOA | comp=Z,45nm,20.2s,baz=355,slow=32 | | | LR | LR | 23 51 08.3 | |
| **SFJD** | **Kangerlussuaq** comp=Z,1.2nm,0.3s,baz=17,slow=14,SNR=4.7 | **18.85** | **261** | P | **Pn** | **23 45 34.2** | **+0.9** |
| SFJD | comp=Z,159nm,19.9s,baz=320,slow=34 | | | LR | LR | 23 51 55.3 | |
| **SFJD** | **Kangerlussuaq** | **18.85** | **261** | P | **P** | **23 45 32.3** | **-0.4** |
| SFJD | comp=Z,27nm,1.3s | | | IAmb | IAmb | 23 45 35.1 | |
| **FINES** | **FINESS Array B** comp=Z,0.1nm,0.3s,baz=0.8,slow=10,SNR=1.4 | **19.10** | **146** | P | **Pn** | **23 45 37.0** | **+0.7** |
| FINES | comp=Z,64nm,21.8s,baz=172,slow=36 | | | LR | LR | 23 52 31.8 | |
| **FINES** | **FINESS Array B** | **19.10** | **146** | P | **Pn** | **23 45 37.2** | **+0.9** |
| **HFS** | **Hagfors** comp=Z,0.4nm,0.3s,baz=11,slow=9.2,SNR=9.5 | **19.42** | **165** | P | **Pn** | **23 45 39.9** | **-0.3** |
| HFS | comp=Z,81nm,19.8s,baz=294,slow=33 | | | LR | LR | 23 51 50.0 | |
| **HFS** | **Hagfors** baz=360,slow=11 | **19.42** | **165** | P | **Pn** | **23 45 39.7** | **-0.5** |
| **HFS** | **Hagfors** | **19.42** | **165** | P | **

*IDC **11** 23:46:32.9±1.0,4.91S×152.37E,h52km±7km,mb4.5/22, mb1 4.6/24,mb1mx4.5/34,mbtmp4.7/24,MS3.7/43, Ms1 3.7/43,ms1mx3.7/60,Error ellipse: s-maj=14.0km s-min=8.9km az=105.0*

*BJI **11** 23:46:32.5±0.0,4.63S×152.60E,h55km,mb4.8/47, mB5.0/29,Ms4.6/14,Ms7 4.3/14*

*DJA **11** 23:46:33.8±0.5,5.5S×15.3E±.°,h65km±5km,M5.0/30, mB5.3/7,mb4.9/30,MLv5.3/3,Mw(mB)4.7/7*

*NEIC **11** 23:46:34.3±1.8,4.90S±0.06×152.45E±0.08,h51km±6km, mb4.9/124,Error ellipse: s-maj=12.3km s-min=7.6km az=109.0*

**ISC 11 23:46:33.8**±0.3,**4.89S**±0.05×**152.46E**±0.06,**h55**km,**n404,** σ1§**11**/366,**mb4.9**/109,**MS3.8**/44,**1C**,**New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **0.72** | **324** | P | **Pn** | **23 46 48.2** | **+0.1** |
| KRVT | | | | S | **Sn** | **23 46 57.8** | **-0.7** |
| **RABL** | **Rabaul** | **0.76** | **337** | Pn | **Pn** | **23 46 48.3** | **-0.2** |
| **MANU** | **Manus Island** | **5.81** | **299** | Pn | **Pn** | **23 47 58.0** | **+0.5** |
| **PMG** | **Port Moresby** | **6.91** | **229** | P | **Pn** | **23 48 12.3** | **-0.1** |
| | 12nm,0.3s,baz=34,slow=12,SNR=14 | | | | | | |
| PMG | | | | S | **Sn** | **23 49 29.0** | **-0.7** |
| | 11nm,0.3s,baz=128,slow=24,SNR=11 | | | | | | |
| **PMG** | **Port Moresby** | **6.91** | **229** | Pn | **Pn** | **23 48 12.6** | **+0.1** |
| **PMG** | **Port Moresby** | **6.91** | **229** | P | **Pn** | **23 48 15.0** | **+2.6** |
| **HNR** | **Honiara** | **8.69** | **122** | LR | LR | 23 52 13.8 | |
| | comp=Z,695nm,18.3s,baz=287,slow=39 | | | | | | |
| **JAY** | **Jayapura** | **11.96** | **281** | P | **Pn** | **23 49 24.2** | **+2.5** |
| | 0.9nm,0.3s,baz=158,slow=19,SNR=2.6 | | | | | | |
| **JAY** | **Jayapura** | **11.96** | **281** | P | **Pn** | **23 49 23.5** | **+1.8** |
| | 15nm,0.9s | | | | | | |
| **GENI** | **Genyem** | **12.47** | **280** | P | **Pn** | **23 49 29.6** | **+1.0** |
| | 59nm,1.3s | | | | | | |
| **COEN** | **Coen** | **12.84** | **225** | Pn | **Pn** | **23 49 34.0** | **+0.4** |
| **COEN** | **Coen** | **12.84** | **225** | P | **Pn** | **23 49 35.5** | **+1.9** |
| **MTSU** | **Mount Surprise** | **15.38** | **211** | P | **Pn** | **23 50 09.0** | **+1.5** |
| | baz=16,SNR=27 | | | | | | |
| **CTA** | **Charters Tower** | **16.26** | **201** | P | **Pn** | **23 50 18.4** | **-0.3** |
| | 0.3nm,0.3s,baz=19,slow=13,SNR=10 | | | | | | |
| CTA | | | | LR | LR | 23 55 57.1 | |
| | comp=Z,292nm,21.0s,baz=34,slow=35 | | | | | | |
| **BAKI** | **Biak** | **16.73** | **282** | P | **Pn** | **23 50 25.2** | **+0.6** |
| **SANVU** | **Saraoutou** | **17.89** | **127** | P | **Pn** | **23 50 38.5** | **-0.4** |
| SANVU | | | | IAmb | IAmb | 23 50 40.8 | |
| | comp=Z,91nm,1.1s | | | | | | |
| **GUMO** | **Guam** | **19.85** | **338** | P | **Pn** | **23 51 02.0** | **-0.3** |
| | comp=Z,10nm,0.3s,baz=190,slow=18,SNR=2.5 | | | | | | |
| GUMO | | | | LR | LR | 23 57 46.3 | |
| | comp=Z,82nm,20.5s,baz=110,slow=34 | | | | | | |
| **QIS** | **Mount Isa** | **19.96** | **218** | P | **P** | **23 51 01.7** | **0.0** |
| | baz=20,SNR=15 | | | | | | |
| **QIS** | **Mount Isa** | **19.96** | **218** | P | **P** | **23 51 01.6** | **0.0** |
| **FAKI** | **Fak Fak** | **20.25** | **275** | P | **P** | **23 51 05.1** | **+0.3** |
| | comp=Z,66nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **20.25** | **275** | P | **P** | **23 51 04.9** | **+0.1** |
| FAKI | | | | IAmb | IAmb | 23 51 09.1 | |
| | comp=Z,76nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **20.25** | **275** | P | **P** | **23 51 05.8** | **+1.0** |
| **EIDS** | **Eidsvold** | **20.40** | **184** | P | **P** | **23 51 06.3** | **0.0** |
| | baz=21,SNR=4.2 | | | | | | |
| **EIDS** | **Eidsvold** | **20.40** | **184** | P | **P** | **23 51 06.5** | **+0.2** |
| **KDU** | **Kakadu** | **21.20** | **247** | P | **P** | **23 51 13.3** | **-1.7** |
| | baz=21,SNR=22 | | | | | | |
| **KDU** | **Kakadu** | **21.20** | **247** | P | **P** | **23 51 13.4** | **-1.6** |
| **SIJI** | **Sorong** | **21.53** | **280** | P | **P** | **23 51 18.9** | **+0.3** |
| | comp=Z,112nm,0.6s,baz=100,slow=6.9,SNR=33 | | | | | | |
| SIJI | | | | LR | LR | 23 58 37.5 | |
| | comp=Z,302nm,20.8s,baz=77,slow=34 | | | | | | |
| **SWI** | **Sorong** | **21.54** | **280** | P | **P** | **23 51 20.0** | **+1.4** |
| | comp=Z,193nm,0.6s | | | | | | |
| **RMQ** | **Roma** | **21.76** | **189** | P | **P** | **23 51 20.8** | **-0.1** |
| | baz=22,SNR=16 | | | | | | |
| **RMQ** | **Roma** | **21.76** | **189** | P | **P** | **23 51 20.8** | **-0.1** |
| **DZM** | **Mont Dzumac** | **21.80** | **143** | P | **P** | **23 51 21.5** | **+0.1** |
| | comp=Z,320nm,0.5s,baz=310,slow=7.5,SNR=60 | | | | | | |
| DZM | | | | LR | LR | 23 59 01.2 | |
| | comp=Z,288nm,22.0s,baz=284,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.80** | **143** | P | **P** | **23 51 21.9** | **+0.4** |
| DZM | | | | IAmb | IAmb | 23 51 24.6 | |
| | comp=Z,39nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.80** | **143** | P | **P** | **23 51 23.3** | **+1.9** |
| **YATNC** | **Mamie plateau,** | **22.06** | **142** | P | **P** | **23 51 27.2** | **+3.1** |
| **OUENC** | **Ouen Island, N** | **22.30** | **143** | P | **P** | **23 51 25.9** | **-0.8** |
| OUENC | | | | IAmb | IAmb | 23 51 29.0 | |
| | comp=Z,82nm,1.3s | | | | | | |
| **OUENC** | **Ouen Island, N** | **22.30** | **143** | P | **P** | **23 51 28.5** | **+1.8** |
| **MTN** | **Manton Dam** | **22.48** | **248** | P | **P** | **23 51 28.4** | **-0.3** |
| | baz=23,SNR=4.3 | | | | | | |
| **MTN** | **Manton Dam** | **22.48** | **248** | P | **P** | **23 51 28.4** | **-0.3** |
| MTN | | | | IAmb | IAmb | 23 51 43.3 | |
| | comp=Z,67nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **22.48** | **248** | P | **P** | **23 51 28.5** | **-0.3** |
| **DRS** | **Darwin Rock St** | **22.57** | **249** | P | **P** | **23 51 29.1** | **-0.6** |
| **QLP** | **Quilpie** | **22.95** | **199** | P | **P** | **23 51 33.1** | **-0.4** |
| | baz=23,SNR=8.8 | | | | | | |
| **QLP** | **Quilpie** | **22.95** | **199** | P | **P** | **23 51 32.9** | **-0.7** |
| **WB0** | **Warramunga Arr** | **22.98** | **228** | P | **P** | **23 51 31.6** | **-2.4** |
| WB0 | | | | IAmb | IAmb | 23 51 34.3 | |
| | comp=Z,55nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.99** | **228** | P | **P** | **23 51 31.9** | **-2.1** |
| WR0 | | | | IAmb | IAmb | 23 51 34.5 | |
| | comp=Z,63nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.11** | **228** | P | **P** | **23 51 33.0** | **-2.2** |
| WRAB | | | | IAmb | IAmb | 23 51 40.8 | |
| | comp=Z,32nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.12** | **228** | P | **P** | **23 51 33.3** | **-2.0** |
| WB2 | | | | IAmb | IAmb | 23 51 40.6 | |
| | comp=Z,36nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.12** | **228** | P | **P** | **23 51 33.3** | **-2.1** |
| | comp=Z,19nm,0.6s,baz=50,slow=10.0,SNR=93 | | | | | | |
| WRA | | | | S | **S** | **23 55 41.0** | **-1.8** |
| | comp=Z,2.4nm,1.0s,baz=52,slow=19,SNR=6.4 | | | | | | |
| WRA | | | | ScP | **ScP** | **23 58 55.0** | **-1.2** |
| | comp=Z,1.5nm,1.1s,baz=44,slow=3.5,SNR=3.9 | | | | | | |
| WRA | | | | LR | LR | 00 01 03.9 | |
| | comp=Z,120nm,18.7s,baz=47,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.12** | **228** | P | **P** | **23 51 32.8** | **-2.6** |
| **LBMI** | **Labuha** | **25.28** | **279** | P | **P** | **23 51 56.5** | **+1.3** |
| | comp=Z,1μmcomp=Z,101nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **25.40** | **182** | P | **P** | **23 51 56.5** | **+0.2** |
| | baz=26,SNR=8.2 | | | | | | |
| **ARMA** | **Armidale** | **25.40** | **182** | P | **P** | **23 51 56.0** | **-0.3** |
| **ARMA** | **Armidale** | **25.40** | **182** | P | **P** | **23 51 56.6** | **+0.3** |
| **KNRA** | **Kununurra** | **25.62** | **244** | P | **P** | **23 51 58.6** | **+0.3** |
| | baz=26,SNR=29 | | | | | | |
| **KNRA** | **Kununurra** | **25.62** | **244** | P | **P** | **23 51 57.7** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 23 52 02.8 | |
| | comp=Z,29nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **25.62** | **244** | P | **P** | **23 51 58.1** | **-0.2** |
| **AS31** | **Alice Springs** | **25.85** | **222** | P | **P** | **23 52 00.8** | **+0.4** |
| **ASAR** | **Alice Springs** | **25.85** | **222** | P | **P** | **23 51 59.1** | **-1.2** |
| | comp=Z,12nm,0.7s,baz=57,slow=8.0,SNR=32 | | | | | | |
| ASAR | | | | S | **S** | **23 56 34.4** | **+8.0** |
| | comp=Z,3.6nm,1.1s,baz=44,slow=18,SNR=8.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **23 59 03.9** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=64,slow=2.2,SNR=3.0 | | | | | | |
| ASAR | | | | LR | LR | 00 02 47.9 | |
| | comp=Z,84nm,19.1s,baz=56,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **25.85** | **222** | P | **P** | **23 51 59.5** | **-0.8** |
| **SANI** | **Sanana** | **26.57** | **275** | P | **P** | **23 52 06.6** | **-0.3** |
| | comp=Z,22nm,0.7s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.25** | **193** | P | **P** | **23 52 11.7** | **-1.1** |
| | baz=28,SNR=8.2 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.25** | **193** | P | **P** | **23 52 12.0** | **-0.9** |
| **OOD** | **Oodnadatta** | **27.81** | **213** | P | **P** | **23 52 17.1** | **-0.8** |
| **MSVF** | **Nonsavu** | **28.10** | **119** | LR | LR | 00 02 45.2 | |
| | comp=Z,441nm,21.5s,baz=316,slow=34 | | | | | | |
| **SOEI** | **Soe** | **28.36** | **259** | P | **P** | **23 52 24.8** | **+1.7** |
| | comp=Z,32nm,1.5s | | | | | | |
| **SOEI** | **Soe** | **28.36** | **259** | P | **P** | **23 52 22.0** | **-1.2** |
| SOEI | | | | IAmb | IAmb | 23 52 40.3 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **28.71** | **199** | P | **P** | **23 52 23.9** | **-1.9** |
| | comp=Z,2.9nm,0.6s,baz=24,slow=13,SNR=11 | | | | | | |
| STKA | | | | LR | LR | 00 03 27.5 | |
| | comp=Z,168nm,21.8s,baz=25,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **28.71** | **199** | P | **P** | **23 52 24.5** | **-1.4** |
| | baz=29,SNR=5.0 | | | | | | |
| **STKA** | **Stephens Creek** | **28.71** | **199** | P | **P** | **23 52 24.6** | **-1.4** |
| **STKA** | **Stephens Creek** | **28.71** | **199** | P | **P** | **23 52 25.0** | **-0.9** |
| **LCRK** | **Leigh Creek** | **28.75** | **206** | P | **P** | **23 52 26.0** | **-0.2** |
| **BATI** | **Baumata** | **29.01** | **258** | LR | LR | 00 07 24.0 | |
| | comp=Z,244nm,19.2s,baz=93,slow=43 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.31** | **241** | P | **P** | **23 52 29.3** | **-2.1** |
| | comp=Z,14nm,0.6s,baz=49,slow=6.8,SNR=59 | | | | | | |
| FITZ | | | | LR | LR | 00 05 39.0 | |
| | comp=Z,143nm,18.8s,baz=68,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.31** | **241** | P | **P** | **23 52 29.4** | **-1.9** |
| | baz=30,SNR=44 | | | | | | |
| **DAV** | **Davao City (W)** | **29.34** | **294** | LR | LR | 00 03 39.5 | |
| | comp=Z,158nm,18.9s,baz=52,slow=35 | | | | | | |
| **GTOI** | **Gorontalo** | **29.92** | **280** | P | **P** | **23 52 37.9** | **+1.1** |
| | comp=Z,15nm,0.7s | | | | | | |
| **MULG** | **Mulgathing** | **30.64** | **212** | P | **P** | **23 52 41.7** | **-1.3** |
| **WRKA** | **Warakurna** | **30.64** | **227** | P | **P** | **23 52 41.4** | **-1.7** |
| | baz=31,SNR=39 | | | | | | |
| **WRKA** | **Warakurna** | **30.64** | **227** | P | **P** | **23 52 41.6** | **-1.6** |
| **HTT** | **Hallett** | **31.07** | **202** | P | **P** | **23 52 45.8** | **-0.9** |
| | baz=31,SNR=6.9 | | | | | | |
| **HTT** | **Hallett** | **31.07** | **202** | P | **P** | **23 52 45.9** | **-0.9** |
| **BBOO** | **Buckleboo** | **31.71** | **207** | P | **P** | **23 52 51.2** | **-1.3** |
| | baz=32,SNR=9.3 | | | | | | |
| **BBOO** | **Buckleboo** | **31.71** | **207** | P | **P** | **23 52 51.2** | **-1.3** |
| BBOO | | | | IAmb | IAmb | 23 52 52.0 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **31.71** | **207** | P | **P** | **23 52 51.2** | **-1.3** |
| **BASI** | **Baing, Sumba** | **32.02** | **259** | P | **P** | **23 52 53.7** | **-1.7** |
| | comp=Z,45nm,2.0s | | | | | | |
| **TOLI2** | **Tolitoli** | **32.20** | **280** | P | **P** | **23 52 56.2** | **-0.8** |
| **MPSI** | **Mapaga** | **32.93** | **278** | P | **P** | **23 53 02.3** | **-1.0** |
| | comp=Z,12nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **33.14** | **190** | P | **P** | **23 53 04.2** | **-0.7** |
| **ARPS** | **Mount Arapiles** | **33.19** | **196** | P | **P** | **23 53 04.9** | **-0.4** |
| | baz=33,SNR=5.8 | | | | | | |
| **FORT** | **Forrest** | **34.50** | **219** | P | **P** | **23 53 15.4** | **-1.3** |
| | baz=35,SNR=9.9 | | | | | | |
| **FORT** | **Forrest** | **34.50** | **219** | P | **P** | **23 53 14.8** | **-2.0** |
| **FORT** | **Forrest** | **34.50** | **219** | P | **P** | **23 53 15.4** | **-1.3** |
| **MBWA** | **Marble Bar** | **35.63** | **240** | P | **P** | **23 53 24.6** | **-2.0** |
| **MBWA** | **Marble Bar** | **35.63** | **240** | P | **P** | **23 53 24.9** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **35.69** | **239** | P | **P** | **23 53 25.7** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **35.69** | **239** | P | **P** | **23 53 25.6** | **-1.4** |
| PSA00 | | | | IAmb | IAmb | 23 53 28.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **35.69** | **239** | P | **P** | **23 53 25.1** | **-2.0** |
| **AFI** | **Afiamalu** | **36.36** | **107** | LR | LR | 00 07 58.0 | |
| | comp=Z,151nm,18.2s,baz=35,slow=35 | | | | | | |
| **MEEK** | **Meekatharra** | **38.87** | **233** | P | **P** | **23 53 52.5** | **-1.6** |
| | baz=39,SNR=11 | | | | | | |
| **MEEK** | **Meekatharra** | **38.87** | **233** | P | **P** | **23 53 52.6** | **-1.5** |
| **HIZ** | **Hauiti** | **39.17** | **152** | P | **P** | **23 53 55.7** | **-0.6** |
| **JHJ** | **Hachijo jima 2** | **39.67** | **343** | LR | LR | 00 09 26.6 | |
| | comp=Z,93nm,18.4s,baz=280,slow=35 | | | | | | |
| **QRZ** | **Quartz Range** | **40.06** | **156** | P | **P** | **23 54 04.7** | **+1.0** |
| QRZ | | | | IAmb | IAmb | 23 54 06.0 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **40.08** | **149** | P | **P** | **23 54 03.6** | **-0.3** |
| | comp=Z,9.3nm,0.5s,baz=270,slow=2.3,SNR=15 | | | | | | |
| URZ | | | | LR | LR | 00 09 58.7 | |
| | comp=Z,136nm,18.6s,baz=322,slow=35 | | | | | | |
| **URZ** | **Urewera** | **40.08** | **149** | P | **P** | **23 54 05.0** | **+1.1** |
| **URZ** | **Urewera** | **40.08** | **149** | P | **P** | **23 54 05.2** | **+1.3** |
| **MXZ** | **Matakaoa Point** | **40.18** | **148** | P | **P** | **23 54 05.9** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **40.47** | **151** | P | **P** | **23 54 06.9** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **40.47** | **151** | P | **P** | **23 54 07.9** | **+0.7** |
| **NNZ** | **Nelson** | **40.73** | **156** | P | **P** | **23 54 11.3** | **+2.0** |
| NNZ | | | | IAmb | IAmb | 23 54 14.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **40.92** | **241** | P | **P** | **23 54 10.3** | **-0.8** |
| | baz=41,SNR=5.7 | | | | | | |
| **GIRL** | **Giralia** | **40.92** | **241** | P | **P** | **23 54 10.3** | **-0.8** |
| **GIRL** | **Giralia** | **40.92** | **241** | P | **P** | **23 54 10.3** | **-0.8** |
| **THZ** | **Tophouse** | **41.00** | **157** | P | **P** | **23 54 12.1** | **+0.6** |
| THZ | | | | IAmb | IAmb | 23 54 13.6 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **TUWZ** | **Tuamarina** | **41.14** | **155** | P | **P** | **23 54 13.0** | **+0.4** |
| **BSWZ** | **Blackbirch Sta** | **41.35** | **156** | P | **P** | **23 54 14.6** | **+0.2** |
| **YULB** | **Yu-li** | **41.41** | **314** | P | **P** | **23 54 15.7** | **+0.5** |
| **FOZ** | **Fox Glacier** | **41.42** | **161** | P | **P** | **23 54 17.1** | **+2.3** |
| FOZ | | | | IAmb | IAmb | 23 54 45.2 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **BHW** | **Baring Head** | **41.52** | **154** | P | **P** | **23 54 15.7** | **0.0** |
| **CMWZ** | **Cape Campbell** | **41.52** | **155** | P | **P** | **23 54 16.9** | **+1.2** |
| **BFZ** | **Birch Farm** | **41.55** | **152** | P | **P** | **23 54 16.4** | **+0.5** |
| **BFZ** | **Birch Farm** | **41.55** | **152** | P | **P** | **23 54 16.2** | **+0.2** |
| **LTZ** | **Lake Taylor** | **41.63** | **158** | IAmb | IAmb | 23 54 19.1 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **NACB** | **Ninganchiao** | **41.70** | **315** | P | **P** | **23 54 17.6** | **+0.2** |
| NACB | | | | IAmb | IAmb | 23 54 19.6 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **PLWZ** | **Palliser** | **41.82** | **154** | P | **P** | **23 54 18.4** | **+0.2** |
| **TPUB** | **Ta-pu** | **41.84** | **313** | P | **P** | **23 54 18.9** | **+0.3** |
| TPUB | | | | IAmb | IAmb | 23 54 19.6 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **41.91** | **314** | P | **P** | **23 54 19.6** | **+0.4** |
| SSLB | | | | IAmb | IAmb | 23 54 22.2 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **RPZ** | **Rata Peaks** | **42.00** | **160** | P | **P** | **23 54 20.6** | **+0.9** |
| RPZ | | | | IAmb | IAmb | 23 54 21.7 | |
| | comp=Z,44nm,1.3s | | | | | | |
| **RPZ** | **Rata Peaks** | **42.00** | **160** | P | **P** | **23 54 20.9** | **+1.2** |
| **OXZ** | **Oxford** | **42.01** | **159** | P | **P** | **23 54 20.4** | **+0.7** |
| **MORW** | **Morawa** | **42.02** | **231** | P | **P** | **23 54 19.6** | **-0.4** |
| | baz=42,SNR=8.0 | | | | | | |
| **MORW** | **Morawa** | **42.02** | **231** | P | **P** | **23 54 18.8** | **-1.3** |
| **MORW** | **Morawa** | **42.02** | **231** | P | **P** | **23 54 18.5** | **-1.5** |
| **YHNB** | **Yeheng** | **42.17** | **316** | P | **P** | **23 54 22.9** | **+1.6** |
| **JMN** | **Monobe** | **42.24** | **337** | P | **P** | **23 54 23.5** | **+1.7** |
| JMN | | | | IAmb | IAmb | 23 54 44.9 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **BLDU** | **Ballidu** | **42.26** | **228** | P | **P** | **23 54 20.1** | **-1.9** |
| **TATO** | **Taipei** | **42.28** | **316** | P | **P** | **23 54 23.6** | **+1.4** |
| **LBZ** | **Lake Benmore** | **42.31** | **161** | P | **P** | **23 54 22.4** | **+0.3** |
| LBZ | | | | IAmb | IAmb | 23 54 35.0 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **DCZ** | **Deep Cove** | **42.40** | **165** | P | **P** | **23 54 22.7** | **-0.1** |
| **MLZ** | **Mavora Lakes** | **42.57** | **164** | P | **P** | **23 54 24.4** | **+0.2** |
| MLZ | | | | IAmb | IAmb | 23 54 25.2 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **JGF** | **Kuroka** | **42.70** | **342** | P | **P** | **23 54 27.0** | **+1.5** |
| **JNU** | **Nakatsue** | **42.99** | **333** | P | **P** | **23 54 29.3** | **+1.4** |
| JNU | | | | IAmb | IAmb | 23 54 29.6 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **43.08** | **225** | P | **P** | **23 54 30.0** | **+1.5** |
| NWAO | | | | IAmb | IAmb | 23 54 31.7 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.32** | **343** | P | **P** | **23 54 28.8** | **-1.7** |
| | comp=Z,3.6nm,0.6s,baz=168,slow=8.1,SNR=7.4 | | | | | | |
| MJAR | | | | LR | LR | 00 10 51.4 | |
| | comp=Z,98nm,21.9s,baz=184,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.32** | **343** | P | **P** | **23 54 29.5** | **-1.0** |
| **MAT** | **Matsushiro** | **43.32** | **343** | P | **P** | **23 54 30.3** | **-0.1** |
| **JHS** | **Saijyo** | **43.66** | **337** | P | **P** | **23 54 34.0** | **+0.8** |
| JHS | | | | IAmb | IAmb | 23 54 34.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **KNMB** | **Chin-men Tao** | **44.17** | **313** | P | **P** | **23 54 38.4** | **+1.0** |
| **LEM** | **Lembang** | **44.63** | **265** | LR | LR | 00 17 17.1 | |
| | comp=Z,23nm,19.4s,baz=165,slow=41 | | | | | | |
| **JSD** | **Sado** | **44.70** | **344** | P | **P** | **23 54 41.9** | **+0.4** |
| JSD | | | | IAmb | IAmb | 23 54 44.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **JTM** | **Tenmabayashi** | **46.64** | **348** | P | **P** | **23 54 56.6** | **-0.1** |
| **KSRS** | **Korea Array** | **47.93** | **334** | P | **P** | **23 55 06.8** | **+0.1** |
| | comp=Z,4.0nm,0.8s,baz=153,slow=7.3,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 00 14 05.5 | |
| | comp=Z,37nm,19.7s,baz=145,slow=34 | | | | | | |
| **QIZ** | **Qiongzhong** | **48.22** | **301** | P | **P** | **23 55 10.2** | **+0.8** |
| QIZ | | | | LR | LR | | |
| | comp=Z,120nm,19.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,120nm,18.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,150nm,24.9s | | | | | | |
| **RAR** | **Rarotonga** | **49.06** | **114** | LR | LR | 00 15 14.5 | |
| | comp=Z,28nm,18.6s,baz=274,slow=35 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **49.59** | **351** | P | **P** | **23 55 22.2** | **+2.9** |
| **USRK** | **Ussuriysk Ar.** | **52.23** | **341** | P | **P** | **23 55 39.5** | **+0.3** |
| | comp=Z,3.8nm,0.8s,baz=174,slow=8.4,SNR=8.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.23** | **341** | P | **P** | **23 55 40.4** | **+1.2** |
| **USA0B** | **Ussuriysk Arra** | **52.23** | **341** | P | **P** | **23 55 40.0** | **+0.8** |
| **KULM** | **Kulim** | **52.72** | **280** | P | **P** | **23 55 44.2** | **+0.8** |
| **MDJ** | **Mudanjiang** | **53.39** | **340** | P | **P** | **23 55 49.2** | **+1.4** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,270nm,4.6s | | | | | | |
| **ENH** | **Enshi** | **53.97** | **313** | IAmb | IAmb | 23 55 54.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **PSI** | **Prapat** | **54.02** | **277** | LR | LR | 00 22 20.6 | |
| | comp=Z,30nm,20.8s,baz=64,slow=40 | | | | | | |
| **HNS** | **HongShan** | **54.82** | **323** | ⇑P | **P** | **23 55 58.7** | **+0.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **BJI** | **Beijing** | **55.78** | **327** | P | **P** | **23 56 05.1** | **-0.1** |
| BJI | | | | pP | **pP** | **23 56 18.5** | **-1.7** |
| BJI | | | | PcP | **PcP** | **23 57 04.3** | **+0.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| **XAN** | **Xi'an** | **56.45** | **317** | P | **P** | **23 56 10.5** | **+0.3** |
| XAN | | | | pP | pP | 23 56 26.9 | +1.7 |
| XAN | | | | sP | sP | 23 56 34.5 | +3.0 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **56.84** | **344** | LR | LR | 00 20 12.6 | |
| | comp=Z,26nm,18.0s,baz=164,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.61** | **295** | P | **P** | **23 56 18.8** | **+0.1** |
| | comp=Z,3.2nm,0.6s,baz=124,slow=4.8,SNR=15 | | | | | | |
| CMAR | | | | LR | LR | 00 19 27.8 | |
| | comp=Z,40nm,21.0s,baz=135,slow=34 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **57.95** | **4** | P | **P** | **23 56 21.2** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **57.95** | **4** | P | **P** | **23 56 20.6** | **+0.2** |
| | comp=Z,5.1nm,0.6s,baz=166,slow=7.6,SNR=5.6 | | | | | | |
| PETK | | | | LR | LR | 00 17 26.7 | |
| | comp=Z,104nm,19.4s,baz=177,slow=32 | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.95** | **4** | P | **P** | **23 56 21.6** | **+1.2** |
| **PPT** | **Papeete** | **58.02** | **108** | LR | LR | 00 17 18.7 | |
| | comp=Z,36nm,21.6s,baz=356,slow=32 | | | | | | |
| **PZH** | **PanZhiHua** | **58.15** | **305** | P | **P** | **23 56 23.8** | **+1.4** |
| PZH | | | | S | **S** | **00 04 21.4** | **+1.2** |
| PZH | | | | ScS | **ScS** | **00 06 04.7** | **-3.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,70nm,5.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,230nm,20.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,310nm,21.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,550nm,19.6s | | | | | | |
| **CD2** | **Chengdu** | **58.54** | **311** | P | **P** | **23 56 25.9** | **+0.9** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.92** | **325** | eP | **P** | **23 56 31.7** | **+4.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **60.27** | **15** | LR | LR | 00 17 49.1 | |
| | comp=Z,130nm,20.7s,baz=305,slow=31 | | | | | | |
| **LZH** | **Lanzhou** | **61.06** | **316** | eP | **P** | **23 56 41.7** | **-0.6** |
| LZH | | | | pP | pP | 23 56 57.6 | +0.1 |
| LZH | | | | sP | sP | 23 57 07.5 | +3.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,130nm,6.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,130nm,15.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,180nm,15.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,210nm,18.5s | | | | | | |
| **GTA** | **Gaotai** | **65.49** | **317** | eP | **P** | **23 57 12.8** | **+1.2** |
| GTA | | | | pP | pP | 23 57 24.5 | -2.4 |
| GTA | | | | sP | sP | 23 57 28.7 | -4.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,58nm,5.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,92nm,18.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,100nm,17.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,120nm,19.3s | | | | | | |
| **SONM** | **Songino Array** | **66.22** | **328** | P | **P** | **23 57 15.9** | **-0.2** |
| | comp=Z,1.4nm,0.6s,baz=144,slow=5.3,SNR=10 | | | | | | |
| SONM | | | | LR | LR | 00 26 14.7 | |
| | comp=Z,82nm,19.7s,baz=111,slow=36 | | | | | | |
| **GOMU** | **GeErMu** | **67.57** | **312** | P | **P** | **23 57 26.9** | **+1.7** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,50nm,4.3s | | | | | | |
| **SEY** | **Seymchan** | **67.64** | **360** | LR | LR | 00 27 13.8 | |
| | comp=Z,35nm,18.8s,baz=324,slow=36 | | | | | | |
| **SPIA** | **Saint Paul Isl** | **68.86** | **21** | P | **P** | **23 57 32.1** | **-0.3** |
| | baz=220 | | | | | | |
| **YAK** | **Yakutsk** | **69.00** | **349** | LR | LR | 00 25 48.8 | |
| | comp=Z,71nm,21.6s,baz=246,slow=34 | | | | | | |
| **ODAN** |

baz=240
**CHUM Lake Minchumin 79.89 22 P P 23 58 36.6 +0.2**
baz=236,SNR=5.4
**PMR Palmer 79.91 24 P P 23 58 35.9 -0.6**
baz=240
**Q23K Middleton Isla 80.06 27 P P 23 58 36.8 -0.5**
baz=242
**KNK Knik Glacier 80.10 25 P P 23 58 37.9 +0.3**
baz=240
**MK31 Makanchi Array 80.17 319 P P 23 58 39.3 +1.0**
**MKAR Makanchi Array 80.17 319 P P 23 58 37.8 -0.5**
comp=Z,4.8nm,0.6s,baz=98,slow=4.6,SNR=78
MKAR LR LR 00 32 38.4
comp=Z,59nm,21.7s,baz=64,slow=34
**MKAR Makanchi Array 80.17 319 P P 23 58 38.6 +0.3**
**KTH Kantishna Hill 80.23 22 IAmb IAmb 23 58 40.8**
comp=Z,12nm,1.0s
**SML Sawmill 80.35 24 P P 23 58 39.2 +0.2**
baz=240
**MAKZ Makanchi 80.38 319 P P 23 58 39.1 -0.3**
MAKZ IAmb IAmb 23 58 41.4
comp=Z,10nm,0.7s
**TRF Thorofare Moun 80.42 23 IAmb IAmb 23 58 41.7**
comp=Z,11nm,0.8s
**TRF Thorofare Moun 80.42 23 P P 23 58 38.9 -0.5**
baz=238
**GLI Glacier Island 80.42 26 P P 23 58 39.0 -0.2**
baz=242
**BPAW Bear Paw Mtn. 80.50 22 P P 23 58 38.9 -0.8**
baz=237
**I21K Tanana 80.73 21 IAmb IAmb 23 58 43.3**
comp=Z,12nm,0.9s
**SCM Sheep Creek Mo 80.78 25 P P 23 58 41.1 -0.2**
baz=241
**RND Reindeer 80.95 23 IAmb IAmb 23 58 42.2**
comp=Z,15nm,0.7s
**WAT6 Susitna Watana 80.97 24 P P 23 58 42.0 -0.4**
baz=241
**ZALV Zalesovo Beam 81.04 326 P P 23 58 41.0 -1.8**
comp=Z,7.1nm,0.6s,baz=113,slow=6.3,SNR=44
ZALV LR LR 00 33 06.5
comp=Z,43nm,21.8s,baz=86,slow=34
**ZALV Zalesovo Beam 81.04 326 P P 23 58 41.5 -1.2**
**SHLS Shalkode 81.05 315 eP P 23 58 41.0 -2.2**
baz=315
**MCK McKinley 81.08 23 P P 23 58 41.9 -0.9**
baz=239,SNR=13
**MLY Manley 81.09 21 P P 23 58 42.4 -0.4**
baz=238,SNR=25
**KLU Klutina 81.21 25 IAmb IAmb 23 58 44.9**
comp=Z,21nm,1.1s
**KLU Klutina 81.21 25 P P 23 58 43.9 +0.3**
baz=242
**DHY Denali Highway 81.36 24 P P 23 58 44.9 +0.4**
baz=241
**M24K Tolsona, Glenn 81.39 25 P P 23 58 44.6 +0.1**
baz=242
**NEA2 Nenana 81.47 22 IAmb IAmb 23 58 44.7**
comp=Z,12nm,0.6s
**NEA2 Nenana 81.47 22 P P 23 58 43.9 -0.9**
baz=239,SNR=8.6
**BMRM Bremner River 81.54 26 P P 23 58 45.8 +0.5**
baz=244
**I23K Minto, Yukon-K 81.65 21 P P 23 58 45.6 -0.1**
baz=239,SNR=7.1
**KPKS Kokpek 81.68 315 eP P 23 58 46.2 -0.3**
baz=315
**SATY Saty 81.78 315 eP P 23 58 46.2 -0.9**
baz=315
**WRH Wood River Hil 81.78 22 IAmb IAmb 23 58 49.5**
comp=Z,11nm,0.9s
**ZHN Zhinishke 81.78 315 eP P 23 58 46.2 -0.9**
baz=315
**N25K Chitina, Valde 81.83 25 P P 23 58 47.4 +0.6**
baz=244
**HARP HAARP 81.95 25 P P 23 58 48.1 +0.7**
baz=243
**MDM Murphy Dome 81.97 22 P P 23 58 48.2 +0.7**
**CCB Clear Creek Bu 81.97 22 IAmb IAmb 23 58 47.0**
comp=Z,9.1nm,0.7s
**TCOL CIGO, UAF Yank 82.06 22 P P 23 58 47.6 -0.3**
baz=240
**COLA College 82.07 22 P P 23 58 47.5 -0.4**
baz=240
**PAX Paxson 82.08 24 P P 23 58 48.4 +0.2**
baz=243
**GLB Gilahina Butte 82.09 26 IAmb IAmb 23 58 56.4**
comp=Z,30nm,1.4s
**HDA Harding Lake 82.18 22 P P 23 58 47.9 -0.7**
baz=241
**TDK Taldyqorghan 82.27 316 eP P 23 58 49.4 0.0**
comp=Z,7.4nm,0.7s,baz=316
**POKR Poker Plat Res 82.34 22 P P 23 58 48.7 -0.7**
baz=241
**IL31 82.38 22 IAmb IAmb 23 58 49.4**
comp=Z,12nm,0.8s
**ILAR Eielson Array 82.38 22 P P 23 58 48.0 -1.6**
comp=Z,9.4nm,0.7s,baz=246,slow=5.7,SNR=107
ILAR LR LR 00 35 09.3
comp=Z,32nm,18.1s,baz=184,slow=35
**MESA MESA 82.39 27 P P 23 58 49.4 -0.6**
baz=246
**COLD Coldfoot 82.46 19 P P 23 58 51.0 +1.1**
**COLD Coldfoot 82.46 19 P P 23 58 49.9 -0.1**
baz=238
**H24K Noodor Dome 82.54 21 IAmb IAmb 23 58 51.4**
comp=Z,6.8nm,0.6s
**RIDG Independent Ri 82.68 23 P P 23 58 50.6 -0.7**
baz=243
**KSH Kashi 82.73 311 P P 23 58 53.6 +1.4**
KSH pP pP 23 59 07.0 -1.0
KSH pmax pmax
comp=Z,10.0nm,0.8s
**MENT Mentasta 82.78 24 IAmb IAmb 23 58 58.7**
comp=Z,8.4nm,0.7s
**TNSS Tian-Shan 82.81 314 eP P 23 58 51.6 -1.2**
baz=314
**J25K Salcha River, 82.88 23 P P 23 58 51.6 -0.6**
baz=243,SNR=22
**DOT Dot Lake 82.95 24 IAmb IAmb 23 58 53.8**
comp=Z,15nm,0.8s
**L26K Log Cabin Wild 82.97 24 P P 23 58 52.9 +0.2**
baz=245,SNR=7.1
**SCRK Sand Creek 83.13 23 IAmb IAmb 23 58 54.3**
comp=Z,8.7nm,0.8s
**SCRK Sand Creek 83.13 23 P P 23 58 53.4 -0.3**
baz=244,SNR=7.2
**PINM Pinnacle 83.14 28 P P 23 58 54.4 +0.7**
baz=248
**PNL Peninsula 83.39 28 P P 23 58 55.5 +0.6**
baz=249
**TOLK Toolik Lake Re 83.41 18 P P 23 58 55.2 +0.3**
TOLK IAmb IAmb 23 58 56.1
comp=Z,9.8nm,0.7s
**TOLK Toolik Lake Re 83.41 18 P P 23 58 55.4 +0.5**
baz=238
**KUU Kurty 83.44 315 eP P 23 58 55.4 -0.1**
comp=Z,8.3nm,0.7s,baz=315
**L27K Beaver Creek, 83.62 25 IAmb IAmb 23 58 57.4**
comp=Z,7.1nm,0.8s
**KURK Kurchatov 83.63 322 P P 23 58 56.4 +0.1**
KURK IAmb IAmb 23 58 57.6
comp=Z,8.7nm,0.8s
**BCAR Beaver Creek A 83.64 25 P P 23 58 56.7 +0.5**
**KURBB Kurchatov Arra 83.66 322 LR LR 00 35 06.8**
comp=Z,57nm,21.6s,baz=81,slow=35
**YUK3 Moose Creek 83.69 26 P P 23 58 56.9 +0.2**
baz=247
**NIL Nilore 83.75 304 P P 23 58 57.2 -0.1**
NIL IAmb IAmb 23 58 59.2
comp=Z,11nm,0.8s
**BVCY Beaver Creek 83.77 25 P P 23 58 57.4 +0.6**
baz=247,SNR=7.0
**FYU Fort Yukon 83.83 21 IAmb IAmb 23 58 58.1**
comp=Z,12nm,0.7s
**KBK Karagaybulak 84.16 314 P P 23 59 00.9 +1.5**
SNR=5.1
**YUK6 Outpost Mounta 84.32 27 P P 23 59 01.0 +1.1**
baz=249
**YUK4 Talbot Arm 84.34 27 P P 23 59 01.3 +1.3**
baz=249,SNR=6.0
**CHMS Chumysh 84.37 314 P P 23 58 59.8 -0.5**
SNR=8.7
**UCH Uchtor 84.39 313 P P 23 59 03.0 +2.1**
SNR=13
**BMAR Burnt Mountain 84.45 20 P P 23 59 01.2 +1.0**
**AAK Ala-Archa 84.48 314 LR LR 00 37 21.9**
comp=Z,54nm,19.7s,baz=108,slow=36
**AAK Ala-Archa 84.48 314 P P 23 59 02.2 +1.1**
SNR=8.1
**AAK Ala-Archa 84.48 314 P P 23 59 02.1 +1.1**
AAK IAmb IAmb 23 59 03.2
comp=Z,7.5nm,0.8s
**SGDS Sogindy 84.55 314 eP P 23 59 01.0 -0.3**
baz=314
**EGAK Eagle 84.58 23 IAmb IAmb 23 59 04.7**
comp=Z,10nm,0.8s
**EGAK Eagle 84.58 23 P P 23 59 01.5 +0.6**
baz=246
**USP Ospenovka 84.61 314 P P 23 59 02.5 +1.0**
SNR=9.8
**HYT Haines Junctio 84.68 28 P P 23 59 02.3 +0.7**
baz=250,SNR=11
**AML Almayashu 84.96 313 P P 23 59 04.7 +0.8**
SNR=28
**EKS2 Erkin-Say 85.00 313 P P 23 59 04.7 +1.0**
SNR=12
**DAWY Dawson 85.01 24 P P 23 59 03.7 +0.6**
baz=248,SNR=7.8
**QSPA South Pole Qui 85.07 180 P P 23 59 03.2 -0.3**
QSPA IAmb IAmb 23 59 05.6
comp=Z,12nm,1.4s
**BTLS Baital 85.29 316 eP P 23 59 05.0 +0.1**
comp=Z,4.6nm,0.7s,baz=316
**MAW Mawson 85.35 203 LR LR 00 35 24.3**
comp=Z,24nm,18.2s,baz=78,slow=34
**M30M Minto, Yukon 85.59 26 IAmb IAmb 23 59 07.4**
comp=Z,7.7nm,0.6s
**M30M Minto, Yukon 85.59 26 P P 23 59 06.5 +0.5**
baz=251,SNR=6.2
**WHY Whitehorse 85.84 28 P P 23 59 08.0 +0.6**
baz=252
**I29M Ogilvie Camp, 85.92 23 P P 23 59 07.6 +0.1**
baz=249
**NRIK Noril'sk 85.94 341 P P 23 59 07.0 -0.5**
comp=Z,5.3nm,0.5s,baz=102,slow=5.0,SNR=16
**NRIK Noril'sk 85.94 341 IAmb IAmb 23 59 10.5**
comp=Z,5.9nm,0.5s
**M31M Drury Creek, Y 86.53 27 P P 23 59 11.0 +0.3**
baz=253
**P33M Teslin, Yukon 86.70 29 P P 23 59 12.0 +0.4**
baz=254
**EPYK Eagle Plains 86.88 22 P P 23 59 12.5 +0.2**
baz=250
**GAR Garm 86.96 309 IAmb IAmb 23 59 14.8**
comp=Z,11nm,1.1s
**FARO Faro, Yukon 87.01 27 P P 23 59 13.3 +0.3**
baz=254
**BRZS Berezniki 87.17 320 eP P 23 59 13.4 -0.6**
baz=320
**KBL Kabul 87.33 305 P P 23 59 15.4 -0.1**
**DLBC Dease Lake 87.64 31 LR LR 00 32 59.0**
comp=Z,165nm,20.1s,baz=284,slow=32
**CHGR Chvangaron 87.80 309 P P 23 59 18.3 +0.8**
**MMPY Sheldon Lake, 88.05 27 P P 23 59 18.8 +0.8**
baz=256
**J01E Myrtle Point 88.66 47 P P 23 59 21.1 -0.1**
baz=262
**INK Inuvik 88.66 21 P P 23 59 20.1 -0.5**
comp=Z,3.8nm,0.5s,baz=237,slow=4.4,SNR=24
INK LR LR 00 36 24.9
comp=Z,74nm,20.2s,baz=176,slow=34
**INK Inuvik 88.66 21 P P 23 59 21.3 +0.6**
baz=253
**BRVK Borovoye 89.18 323 P P 23 59 22.9 -0.6**
BRVK IAmb IAmb 23 59 24.3
comp=Z,5.5nm,0.8s
**M02C Callahan 89.22 49 P P 23 59 25.9 +1.8**
baz=263
**N02D Trinity Center 89.28 49 P P 23 59 26.0 +1.6**
baz=263
**L04D Klamath Falls 89.73 48 P P 23 59 27.6 +1.1**
baz=263
**J04D Umpqua Nationa 90.00 47 P P 23 59 28.8 +1.0**
baz=263
**M04C Macdoel 90.03 48 P P 23 59 28.4 +0.5**
baz=264
**J05D Fort Rock, OR 90.64 47 P P 23 59 32.0 +1.3**
baz=264
**K05A Summer Lake 90.83 47 P P 23 59 32.6 +1.0**
**CIS Catalina Islan 91.94 57 P P 23 59 37.3 +0.5**
baz=265
**I07A Izee 91.96 46 P P 23 59 38.0 +1.2**
I07A IAmb IAmb 23 59 40.2
comp=Z,4.5nm,1.0s
**A36M Sachs Harbour 92.23 18 P P 23 59 37.2 -0.1**
baz=261
**C36M Paulatuk 92.24 21 P P 23 59 37.1 -0.2**
baz=262
**EDW2 Edwards Air Fo 92.40 55 P P 23 59 39.1 +0.2**
baz=266
**NVAR Mina Array Bea 92.41 52 P P 23 59 40.0 +0.9**
comp=Z,17nm,0.7s,baz=254,slow=6.4,SNR=12
**LRMC Laurel Mtn Rad 92.69 55 P P 23 59 39.8 -0.6**
baz=266
**MPMC Manual Prospec 92.89 54 P P 23 59 40.0 -1.4**
baz=266
**PFO Pinyon Flats O 93.58 57 P P 23 59 44.3 -0.2**
baz=266
**TPFO Pinon Flats 93.58 57 P P 23 59 44.9 +0.3**
baz=266
**BMO Blue Mountains 93.58 45 P P 23 59 44.6 +0.4**
**IKP In-Ko-Pah, Jac 93.82 58 P P 23 59 44.7 -0.9**
baz=267
**NEW Newport 93.90 42 P P 23 59 45.8 +0.2**
baz=267
**TPNV Topopah Spring 93.94 53 P P 23 59 46.3 +0.1**
baz=267
**BELC Belle Mtn. Jos 93.99 56 P P 23 59 46.4 0.0**
baz=267
**SWSC Sam W. Stewart 94.09 57 P P 23 59 46.9 +0.2**
baz=267
**TUQ Turquoise Moun 94.12 55 P P 23 59 47.6 +0.6**
baz=267
**GMRC Granite Mounta 94.31 56 P P 23 59 48.1 +0.2**
baz=267
**R11A Troy Canyon, C 94.54 52 P P 23 59 50.9 +2.0**
baz=267
**IRM Iron Mountain 94.70 56 P P 23 59 50.9 +1.3**
baz=267
**RPN Rapa Nui 95.07 118 LR LR 00 35 49.8**
comp=Z,56nm,20.6s,baz=283,slow=31
**WSAR Wadi Sarin 95.42 293 LR LR 00 44 44.6**
comp=Z,10nm,20.1s,baz=145,slow=37
**HLID Hailey 95.61 47 P P 23 59 54.4 +0.8**
baz=269
**YKA Yellowknife Ar 95.67 28 P P 23 59 52.9 -0.3**
comp=Z,2.4nm,0.6s,baz=272,slow=4.9,SNR=49
**YKA Yellowknife Ar 95.67 28 P P 23 59 53.5 +0.3**
**ARU Arti 96.20 326 P P 23 59 55.2 -0.6**
comp=Z,1.2nm,0.6s,baz=59,slow=5.9,SNR=7.2
ARU LR LR 00 44 26.2
comp=Z,86nm,20.2s,baz=78,slow=36
**EDM Edmonton 96.40 37 P P 23 59 57.4 +0.5**
**AKTO Aktyubinsk 96.57 320 LR LR 00 44 42.3**
comp=Z,41nm,19.4s,baz=48,slow=36
**214A Organ Pipe Nat 96.58 59 P P 23 59 59.4 +1.2**
baz=268
**TUC Tucson 98.30 58 P P 00 00 05.9 -0.1**
baz=269
**EGMT Eagleton 98.83 42 P Pdif 00 00 08.3 +0.4**
baz=272
**BW06 Boulder Array 99.17 48 P Pdif 00 00 09.5 -0.3**
baz=272
**PDAR Pinedale Array 99.17 48 P Pdif 00 00 09.3 -0.5**
comp=Z,0.9nm,0.7s,baz=234,slow=2.2,SNR=11
PDAR LR LR 00 37 36.0
comp=Z,93nm,20.8s,baz=288,slow=31
**S22A 4UR Ranch, Cre 101.45 53 P Pdif 00 00 20.3 +0.1**
baz=273
**N23A Red Feather La 101.96 49 P Pdif 00 00 22.2 -0.1**
baz=274
**ISCO Idaho Springs 102.28 50 P Pdif 00 00 23.5 -0.3**
baz=274
**RSSD Black Hills 103.09 46 P Pdif 00 00 27.4 +0.2**
baz=276
**FINES FINESS Array B 111.00 336 Pdiff Pdif 00 01 00.6 -1.1**
comp=Z,1.4nm,0.8s,baz=72,slow=4.5,SNR=5.9
FINES PKiKP PKiKP 00 05 00.2 -0.4
comp=Z,1.3nm,0.8s,baz=67,slow=4.7,SNR=4.7
**MIAR Mount Ida 112.45 55 P PKiKP 00 05 04.2 -0.1**
baz=280
**AKASG Malin Array Be 114.37 324 PKP PKPdf 00 05 05.4 -2.0**
comp=Z,0.5nm,0.4s,baz=56,slow=2.7,SNR=4.3
**BRTR Keskin Array B 115.11 312 PKP PKiKP 00 05 07.7 -1.7**
comp=Z,0.5nm,0.5s,baz=315,slow=38,SNR=1.6
**NB2 NORSAR Subarra1 116.88 340 PKPdf PKPdf 00 05 11.3 -0.8**
comp=Z,0.9nm,0.9s,baz=44,slow=1.9
**NOA NORSAR Array B 116.88 340 PKP PKPdf 00 05 10.7 -1.4**
comp=Z,0.5nm,0.6s,baz=46,slow=1.9,SNR=4.9
**O48B Farmland 117.58 47 P PKPdf 00 05 13.8 -0.2**
baz=288
**M53A WI Miller and 120.36 44 P PKPdf 00 05 19.3 0.0**
baz=293
**GOGA Godfrey 120.89 54 P PKPdf 00 05 20.3 -0.2**
baz=286
**BLA Blacksburg 122.08 49 P PKPdf 00 05 22.2 -0.5**
baz=290
**CLL Collm 122.77 331 ePKPdf PKiKP 00 05 24.0 +0.2**
**PRU Pruhonice 122.82 329 ePKPDF PKPdf 00 05 23.3 -0.4**
**CKRC Cesky Krumlov 123.65 328 ePKPDF PKPdf 00 05 24.9 -0.5**
**KHC Kasperske Hory 123.84 329 ePKPDF PKPdf 00 05 25.2 -0.6**
**GERES GERESS Array B 123.95 328 PKP PKPdf 00 05 25.3 -0.8**
comp=Z,1.7nm,0.5s,baz=78,slow=1.9,SNR=24
**SOKA Soboth 124.52 326 eP PKPdf 00 05 26.5 -0.7**
comp=Z,3.9nm,1.3s
**ABTA Abfaltersbach 125.87 327 i P PKPdf 00 05 29.4 -0.4**
comp=Z,1.7nm,0.6s
**WATA Walderalm 126.01 328 i P PKPdf 00 05 29.7 -0.5**
comp=Z,2.6nm,0.6s
**WTTA Wattenberg 126.02 328 i P PKPdf 00 05 30.0 -0.3**
comp=Z,2.1nm,0.4s
**MOTA Moosalm 126.25 328 i P PKPdf 00 05 30.2 -0.5**
comp=Z,2.7nm,0.5s
**RETA Reutte 126.34 329 i P PKiKP 00 05 31.0 -0.1**
comp=Z,1.7nm,0.8s
**DAVA Damuels 126.93 329 i P PKPdf 00 05 31.8 -0.1**
comp=Z,4.1nm,0.7s
**LPAZ La Paz 134.68 119 PKP PKPdf 00 05 48.6 +0.6**
comp=Z,1.1nm,0.6s,baz=198,slow=6.4,SNR=4.2
**ESDC Sonseca Array 139.35 332 PKP PKPdf 00 05 56.1 +0.8**
comp=Z,0.4nm,0.7s,baz=11,slow=2.5,SNR=2.0
**TORD Torodi Ar. Bea 150.01 288 PKPbc PKPbc 00 06 17.8 -1.4**
comp=Z,19nm,0.7s,baz=84,slow=2.4,SNR=106
**BDFB Brasilia 151.24 136 PKPbc PKPbc 00 06 21.4 -0.9**
comp=Z,3.6nm,0.5s,baz=235,slow=1.1,SNR=7.2
**DBIC Dimbokro 157.36 276 PKPab PKPab 00 06 54.5 -1.8**
comp=Z,3.2nm,0.8s,baz=80,slow=4.3,SNR=2.1

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**IDC 12 00:25:33.1±1.5, 0.10S×126.05E, h0km, mb3.1/3, mb1 3.4/3, mb1mx3.2/34, mbtmp3.1/3, Error ellipse: s-maj=163.3km s-min=15.8km az=64.0, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.33** | **158** | P | P | 00 30 22.1 | +0.3 |
| | 0.3nm,0.3s,baz=338,slow=10,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **24.64** | **163** | P | P | 00 30 54.2 | -1.3 |
| | 0.2nm,0.4s,baz=353,slow=7.5,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.33** | **327** | P | P | 00 35 44.0 | +0.2 |
| | 0.1nm,0.5s,baz=114,slow=6.2,SNR=1.9 | | | | | | |

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*IDC **12** 00:28:30.7±0.8, 8.30N×127.06E, h0km, mb3.9/11, mb1 4.0/11, mb1mx3.8/37, mbtmp3.8/11, MS3.3/1, Ms1 3.2/1, ms1mx2.4/78, Error ellipse: s-maj=29.2km s-min=15.5km az=93.0*

*MAN **12** 00:28:34.5, 8.04N×126.97E, h10km, mb4.6, ML3.5, MS3.4*

*NEIC **12** 00:28:43.0±2.0, 7.95N±0.09×126.5E±0.1, h95km±8km, mb4.1/22, Error ellipse: s-maj=19.1km s-min=13.7km az=92.0*

**ISC 12 00:28:37.2±0.5, 8.10N±0.05×126.99E±0.07, h46km, n55, σ2s09/60, mb4.0/22, 2C-9D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BIPH** | **Bislig** | **0.63** | **277** | ↓*i* P | **Pn** | **00 28 48.6** | **-1.3** |
| BIPH | | | | *i* S | **Sn** | **00 28 57.2** | **-1.9** |
| **MATI** | **Mati** | **1.36** | **212** | ↓*i* P | **Pn** | **00 28 57.9** | **-1.9** |
| **BUTP** | **Butuan** | **1.61** | **302** | ↓*i* P | **Pn** | **00 29 03.6** | **+0.4** |
| **DAV** | **Davao City (W)** | **1.74** | **234** | Pn | **Pn** | **00 29 05.1** | **+0.1** |
| | 132nm,0.3s,baz=78,slow=22,SNR=4.3 | | | | | | |
| DAV | | | | Sn | **Sn** | **00 29 31.9** | **+5.9** |
| | 196nm,0.3s,baz=256,slow=22,SNR=27 | | | | | | |
| **DAV** | **Davao City (W)** | **1.74** | **234** | | **Pn** | **00 29 06.2** | **+1.2** |
| **GLSP** | **General Luna,** | **1.88** | **333** | ↓*i* P | **Pn** | **00 29 05.4** | **-1.5** |
| **KCP** | **Kidapawan** | **2.18** | **240** | ↑*e* P | **Pn** | **00 29 11.2** | **+0.2** |
| KCP | | | | *i* S | **Sn** | **00 29 35.0** | **-1.9** |
| **DDMP** | **Don Marcelino,** | **2.36** | **213** | ↑*e* P | **Pn** | **00 29 13.7** | **+0.2** |
| **CTBH** | **Cotabato--PC H** | **2.86** | **252** | ↓*i* P | **Pn** | **00 29 21.1** | **+0.7** |
| CTBH | | | | *i* S | **Sn** | **00 29 54.5** | **+0.8** |
| **MSLP** | **Maasin** | **2.92** | **314** | ↓*i* P | **Pn** | **00 29 22.1** | **+1.0** |
| **TBP** | **Tagbilaran** | **3.47** | **297** | ↓*i* P | **Pn** | **00 29 30.4** | **+1.6** |
| **PAGZ** | **Pagadian** | **3.59** | **266** | ↓*e* P | **Pn** | **00 29 30.7** | **+0.3** |
| PAGZ | | | | *e* S | Sn | 00 30 01.6 | -10 |
| **LLP** | **Lapu-Lapu** | **3.71** | **307** | ↓*e* P | **Pn** | **00 29 30.6** | **-1.5** |
| LLP | | | | *e* S | **Sn** | **00 30 21.6** | **+7.0** |
| **TNTI** | **Ternate** | **7.29** | **177** | Pn | **Pn** | **00 30 24.7** | **+3.4** |
| **MMRI** | **Maumere** | **17.29** | **196** | Pn | **Pn** | **00 32 32.9** | **-2.6** |
| **MTN** | **Manton Dam** | **21.21** | **169** | P | **P** | **00 33 19.8** | **+0.5** |
| MTN | | | | IAmb | IAmb | 00 33 24.9 | |
| comp=Z,9.2nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **23.69** | **176** | P | **P** | **00 33 44.0** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 00 34 03.0 | |
| comp=Z,14nm,1.0s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.07** | **183** | P | **P** | **00 34 07.9** | **+1.3** |
| comp=Z,4.5nm,1.1s,baz=176,slow=21,SNR=2.2 | | | | | | | |
| **COEN** | **Coen** | **27.17** | **144** | P | **P** | **00 34 17.6** | **+1.0** |
| COEN | | | | IAmb | IAmb | 00 34 32.8 | |
| comp=Z,5.1nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **28.64** | **165** | P | **P** | **00 34 31.9** | **+2.3** |
| WB0 | | | | IAmb | IAmb | 00 34 51.7 | |
| comp=Z,3.1nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.79** | **166** | P | **P** | **00 34 30.5** | **-0.5** |
| comp=Z,0.4nm,0.8s,baz=349,slow=9.2,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.79** | **166** | P | **P** | **00 34 30.9** | **-0.1** |
| **WB2** | **Warramunga Arr** | **28.80** | **166** | P | **P** | **00 34 32.2** | **+1.1** |
| WB2 | | | | IAmb | IAmb | 00 34 42.1 | |
| comp=Z,2.8nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **28.86** | **165** | P | **P** | **00 34 31.0** | **-0.6** |
| **ASAR** | **Alice Springs** | **32.29** | **168** | P | **P** | **00 35 03.8** | **+1.8** |
| comp=Z,0.4nm,0.4s,baz=347,slow=6.9,SNR=7.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.22** | **6** | P | **P** | **00 35 33.9** | **-1.8** |
| comp=Z,3.2nm,0.8s,baz=187,slow=8.6,SNR=8.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.22** | **6** | P | **P** | **00 35 36.8** | **+1.1** |
| **MORW** | **Morawa** | **38.44** | **196** | P | **P** | **00 35 51.2** | **-3.4** |
| MORW | | | | IAmb | IAmb | 00 35 55.7 | |
| comp=Z,7.4nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **38.67** | **179** | P | **P** | **00 35 55.6** | **-0.9** |
| **BBOO** | **Buckleboo** | **41.59** | **168** | P | **P** | **00 36 20.1** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 00 36 37.2 | |
| comp=Z,3.7nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **42.13** | **161** | LR | LR | 00 59 05.4 | |
| comp=Z,34nm,18.0s,baz=23,slow=43 | | | | | | | |
| **SONM** | **Songino Array** | **43.29** | **340** | P | **P** | **00 36 33.2** | **-1.3** |
| comp=Z,0.3nm,0.6s,baz=159,slow=9.8,SNR=2.5 | | | | | | | |
| **MK31** | **Makanchi Array** | **54.18** | **323** | P | **P** | **00 37 56.1** | **-2.0** |
| MK31 | | | | IAmb | IAmb | 00 37 58.3 | |
| comp=Z,0.9nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.18** | **323** | P | **P** | **00 37 57.4** | **-0.7** |
| comp=Z,0.9nm,0.6s,baz=112,slow=6.9,SNR=14 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **00 39 01.4** | **-0.7** |
| comp=Z,0.7nm,0.7s,baz=114,slow=4.4,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.18** | **323** | P | **P** | **00 37 56.8** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **56.86** | **332** | P | **P** | **00 38 14.9** | **-2.2** |
| comp=Z,0.3nm,0.3s,baz=122,slow=7.8,SNR=4.1 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **00 39 11.1** | **-1.2** |
| comp=Z,0.3nm,0.3s,baz=67,slow=4.8,SNR=1.5 | | | | | | | |
| **KURK** | **Kurchatov** | **58.25** | **326** | P | **P** | **00 38 25.6** | **-1.4** |
| KURK | | | | IAmb | IAmb | 00 38 28.1 | |
| comp=Z,1.9nm,0.8s | | | | | | | |
| **NRIK** | **Noril'sk** | **66.28** | **346** | P | **P** | **00 39 19.7** | **-0.7** |
| comp=Z,1.3nm,0.6s,baz=116,slow=6.5,SNR=6.8 | | | | | | | |
| **NRIK** | **Noril'sk** | **66.28** | **346** | IAmb | IAmb | 00 39 21.0 | |
| comp=Z,1.4nm,0.7s | | | | | | | |
| **BFZ** | **Birch Farm** | **66.39** | **141** | P | **P** | **00 39 25.8** | **+4.2** |
| **ABKAR** | **Akbulak array** | **68.98** | **320** | P | **P** | **00 39 38.4** | **+0.6** |
| **IMAR** | **Indian Mountai** | **78.27** | **24** | P | **P** | **00 40 34.1** | **+2.1** |
| **CNPM** | **China Poot** | **78.89** | **31** | P | **P** | **00 40 37.6** | **+2.0** |
| **I23K** | **Minto, Yukon-K** | **80.02** | **25** | P | **P** | **00 40 44.4** | **+2.8** |
| I23K | | | | IAmb | IAmb | 00 40 45.8 | |
| comp=Z,2.0nm,0.7s | | | | | | | |
| **SML** | **Sawmill** | **80.39** | **29** | P | **P** | **00 40 45.9** | **+2.2** |
| SML | | | | IAmb | IAmb | 00 41 05.3 | |
| comp=Z,7.2nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **80.50** | **25** | P | **P** | **00 40 46.1** | **+1.9** |
| **H24K** | **Noodor Dome** | **80.66** | **25** | P | **P** | **00 40 47.8** | **+2.6** |
| **ILAR** | **Eielson Array** | **81.07** | **26** | P | **P** | **00 40 46.9** | **-0.4** |

comp=Z,0.4nm,0.8s,baz=228,slow=5.6,SNR=4.9
**ILAR Eielson Array 81.07 26 P P 00 40 47.7 +0.5**
**BMAR Burnt Mountain 81.97 23 P P 00 40 54.3 +2.3**
**L27K Beaver Creek, 83.37 27 P P 00 41 02.1 +2.7**
**BCAR Beaver Creek A 83.39 27 P P 00 41 02.1 +2.6**
**FINES FINESS Array B 88.12 332 P P 00 41 21.6 -1.3**
comp=Z,1.4nm,0.6s,baz=62,slow=4.0,SNR=7.9
**FINES FINESS Array B 88.12 332 P P 00 41 21.4 -1.5**
**YKA Yellowknife Ar 95.43 24 P P 00 41 57.2 +0.5**
comp=Z,0.3nm,0.7s,baz=302,slow=4.8,SNR=5.0

*SFS* ***12*** *00:29:47.0, 35˚.35'N×3˚.76'W, ML2.2, ALBORAN SUR*
*INMG* ***12*** *00:29:47.8±1.4, 35˚.51'N×3˚.78'W, h2km±4km, ML2.2, Error ellipse: s-maj=2.5km s-min=2.4km az=63.0*
*CNRM* ***12*** *00:29:48.3, 35˚.37'N×3˚.99'W, h19km, ml2.5*
**ISC 12 00:29:47.3±1.0, 35˚.42'N±0˚.03×3˚.84'W±0˚.03, h17km±7km, n32, σ1§38/52, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.22** | **202** | S | **Sg** | **00 29 56.0** | **0.0** |
| **PALE** | **Palemas** | **0.22** | **202** | P | **Pg** | **00 29 51.9** | **-0.6** |
| PALE | | | | S | **Sg** | **00 29 55.5** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.18** | **101** | P | **Pn** | **00 30 08.0** | **-1.0** |
| CHAS | | | | S | **Sb** | **00 30 21.4** | **-2.7** |
| **CHEFC** | **Chefchaouen** | **1.27** | **256** | P | **Pg** | **00 30 13.0** | **+1.2** |
| **CHEFC** | **Chefchaouen** | **1.27** | **256** | P | **Pb** | **00 30 10.6** | **-0.2** |
| CHEFC | | | | S | **Sb** | **00 30 24.3** | **-2.6** |
| **SMIR** | **Smir Dam** | **1.28** | **282** | P | **Pg** | **00 30 15.0** | **+2.9** |
| **SMIR** | **Smir Dam** | **1.28** | **282** | S | **Sn** | **00 30 27.6** | **+0.3** |
| **TAF** | **Taforalt** | **1.32** | **117** | P | **Pb** | **00 30 12.0** | **+0.3** |
| **TAF** | **Taforalt** | **1.32** | **117** | P | **Pb** | **00 30 11.9** | **+0.3** |
| TAF | | | | S | **Sg** | **00 30 32.2** | **+2.3** |
| **CEU** | **Ceuta** | **1.34** | **291** | P | **Pn** | **00 30 10.5** | **-0.7** |
| CEU | | | | S | **Sn** | **00 30 23.5** | **-5.1** |
| **EMAL** | **Malaga-Limoner** | **1.42** | **341** | P | **Pb** | **00 30 13.1** | **-0.3** |
| EMAL | | | | S | **Sn** | **00 30 30.8** | **+0.2** |
| **JBK** | **JBK** | **1.51** | **136** | P | **Pn** | **00 30 14.1** | **+0.3** |
| **SICH** | **Sidi Chahed** | **1.79** | **223** | P | **Pb** | **00 30 19.1** | **-0.6** |
| SICH | | | | S | **Sn** | **00 30 39.4** | **-0.5** |
| **LCRM** | **LCR** | **1.92** | **206** | P | **Pb** | **00 30 21.0** | **-1.0** |
| **LCRM** | **LCR** | **1.92** | **206** | P | **Pb** | **00 30 21.0** | **-1.0** |
| LCRM | | | | S | **Sn** | **00 30 43.5** | **+0.2** |
| **IFR** | **Ifrane** | **2.18** | **210** | P | **Pn** | **00 30 22.9** | **0.0** |
| IFR | | | | S | **Sn** | **00 30 49.2** | **-0.4** |
| **MD31** | **MD31** | **2.66** | **197** | P | **Pn** | **00 30 30.4** | **+0.9** |
| MD31 | | | | S | **Sn** | **00 31 02.1** | **+0.7** |
| **MDT** | **Midelt** | **2.68** | **194** | P | **Pn** | **00 30 31.4** | **+1.7** |
| MDT | | | | S | **Sn** | **00 31 02.3** | **+0.5** |
| **ZHG** | **ZHG** | **3.04** | **230** | P | **Pn** | **00 30 36.5** | **+1.8** |
| ZHG | | | | S | **Sn** | **00 31 11.2** | **+0.4** |
| **PVAQ** | **Vaqueiros** | **3.70** | **303** | *e*Pn | **Pn** | **00 30 44.1** | **+0.3** |
| PVAQ | | | | *e*Sn | **Sn** | **00 31 26.3** | **-0.6** |
| PVAQ | | | | A | A | 00 31 29.2 | |
| | 8.3nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **303** | P | **Pn** | **00 30 44.0** | **+0.3** |
| PVAQ | | | | S | **Sn** | **00 31 26.0** | **-0.9** |
| **MESJ** | **Messejana** | **4.27** | **306** | *e*Pn | **Pn** | **00 30 52.6** | **+1.1** |
| MESJ | | | | *e*Sn | **Sn** | **00 31 41.6** | **+0.6** |
| MESJ | | | | A | A | 00 31 42.6 | |
| | 5.2nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **297** | *e*Sn | **Sn** | **00 31 42.5** | **+0.4** |
| MORF | | | | A | A | 00 31 45.7 | |
| | 3.2nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.47** | **300** | *e*Sn | **Sn** | **00 31 46.9** | **+1.0** |
| **EVO** | **Evora** | **4.56** | **314** | P | **Pn** | **00 30 54.0** | **-1.5** |
| EVO | | | | S | **Sn** | **00 31 46.4** | **-1.7** |
| **EVO** | **Evora** | **4.56** | **314** | *e*Pn | **Pn** | **00 30 56.5** | **+1.0** |
| EVO | | | | *e*Sn | **Sn** | **00 31 47.8** | **-0.3** |
| EVO | | | | A | A | 00 31 48.8 | |
| | 2.2nm,0.2s | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **320** | *e*Sn | **Sn** | **00 31 47.5** | **-0.7** |
| **PESTR** | **Estremoz** | **4.56** | **320** | P | **Pn** | **00 30 56.4** | **+0.8** |
| PESTR | | | | S | **Sn** | **00 31 46.4** | **-1.8** |
| **PNCL** | **Nicolau / Gran** | **4.62** | **307** | *e*Pn | **Pn** | **00 30 57.3** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **00 31 49.3** | **-0.4** |
| PNCL | | | | A | A | 00 31 51.7 | |
| | 2.2nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **5.05** | **317** | *e*Pn | **Pn** | **00 31 03.9** | **+1.7** |
| **OUZM** | **OUZ** | **5.12** | **209** | P | **Pn** | **00 31 04.6** | **+1.2** |
| OUZM | | | | S | **Sn** | **00 32 01.5** | **-0.7** |
| **PSBE** | **So Bento** | **5.68** | **317** | *e*Pn | **Pn** | **00 31 12.6** | **+1.7** |

*TUL* ***12*** *00:33:47.3±1.1, 36˚.16'N±0˚.01×97˚.04'W±0˚.01, h6km±6km, ML2.9, mb_Lg2.5/21(NEIC), Error ellipse: s-maj=1.7km s-min=1.5km az=156.0*
**NEIC 12 00:33:47.5±0.8, 36˚.17'N±0˚.01×97˚.05'W±0˚.01, h5km±6km, Error ellipse: s-maj=1.7km s-min=1.6km az=202.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK001** | **Jones High Sch** | **0.64** | **198** | Pg | Pg | 00 33 59.8 | -0.1 |
| **OK009** | **Oakdale Elemen** | **0.66** | **207** | Pg | Pg | 00 34 00.2 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.82** | **203** | | Pg | 00 34 02.9 | -0.4 |
| OKCFA | | | | Sg | Sg | 00 34 14.1 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.82** | **202** | Pg | Pg | 00 34 02.9 | -0.5 |
| **T35A** | **Sooner Cattle** | **0.86** | **30** | Pg | Pg | 00 34 03.8 | -0.3 |
| T35A | | | | Sg | Sg | 00 34 16.0 | +0.7 |
| **FNO** | **Franklin** | **0.95** | **197** | Pg | Pg | 00 34 05.0 | -0.8 |
| FNO | | | | Sg | Sg | 00 34 18.2 | 0.0 |
| **W35A** | **Tecumseh** | **1.03** | **172** | Pg | Pg | 00 34 06.0 | -1.2 |
| W35A | | | | Sg | Sg | 00 34 20.1 | -0.4 |
| **TUL1** | **Leonard** | **1.05** | **104** | Pg | Pg | 00 34 06.7 | -1.1 |
| TUL1 | | | | Sg | Sg | 00 34 20.8 | -0.7 |
| **X34A** | **Smith Ranch, M** | **1.69** | **202** | Pn | Pn | 00 34 18.1 | +0.4 |
| **WMOK** | **Wichita Mounta** | **2.01** | **225** | Pn | Pn | 00 34 22.6 | +0.5 |
| **X37A** | **Clayton** | **2.09** | **138** | Pn | Pn | 00 34 23.1 | -0.1 |
| X37A | | | | lAmb_Lg | | 00 34 55.2 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **2.83** | **109** | Pn | Pn | 00 34 33.9 | +0.4 |
| **KSU1** | **Kansas State U** | **2.95** | **7** | Pn | Pn | 00 34 35.0 | 0.0 |
| KSU1 | | | | lAmb_Lg | | 00 35 28.3 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.27** | **119** | Pn | Pn | 00 34 39.8 | +0.3 |
| **Z38A** | **Mt. Pleasant** | **3.37** | **149** | lAmb_Lg | | 00 35 42.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.39** | **322** | lAmb_Lg | | 00 35 44.7 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **3.97** | **74** | Pn | Pn | 00 34 50.3 | +1.2 |
| MGMO | | | | lAmb_Lg | | 00 35 56.9 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WHAR** | **Wooly Hollow** | **3.98** | **101** | Pn | Pn | 00 34 49.2 | +0.1 |
| WHAR | | | | lAmb_Lg | | 00 35 53.4 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.99** | **253** | lAmb_Lg | | 00 35 58.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.00** | **93** | Pn | Pn | 00 34 50.3 | +0.8 |
| **W41B** | **Gary Mavity, V** | **4.04** | **103** | Pn | Pn | 00 34 49.6 | -0.4 |
| W41B | | | | lAmb_Lg | | 00 36 02.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.08** | **126** | lAmb_Lg | | 00 35 55.5 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **4.37** | **60** | Pn | Pn | 00 34 54.3 | -0.2 |
| **CCM** | **Cathedral Cave** | **5.01** | **66** | lAmb_Lg | | 00 36 29.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **FVM** | **French Village** | **5.60** | **69** | lAmb_Lg | | 00 36 45.9 | |
| | comp=Z,10nm,0.8s | | | | | | |

*TUL* ***12*** *00:41:10.8±1.1, 36˚.873N±0˚.010×97˚.97W±0˚.02, h7km±3km, ML2.5, mb_Lg2.3/8(NEIC), Error ellipse: s-maj=1.7km s-min=1.4km az=76.0*
**NEIC 12 00:41:10.9±0.8, 36˚.854N±0˚.010×97˚.98W±0˚.01, h5km±1km, Error ellipse: s-maj=2.8km s-min=1.9km az=84.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.18** | **87** | | Pg | 00 41 32.9 | -0.6 |
| **OKCFA** | **Oklahoma City** | **1.50** | **163** | Pn | Pn | 00 41 38.4 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.51** | **163** | Pn | Pn | 00 41 38.7 | +0.1 |
| **FNO** | **Franklin** | **1.66** | **163** | Pn | Pn | 00 41 40.2 | -0.5 |
| **W35A** | **Tecumseh** | **1.92** | **152** | | Pn | 00 41 44.4 | +0.2 |
| **TUL1** | **Leonard** | **2.00** | **117** | Pn | Pn | 00 41 45.5 | +0.2 |
| **WMOK** | **Wichita Mounta** | **2.21** | **197** | Pn | Pn | 00 41 48.0 | -0.2 |
| **X34A** | **Smith Ranch, M** | **2.25** | **177** | | Pn | 00 41 48.3 | -0.5 |
| X34A | | | | lAmb_Lg | | 00 42 23.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.40** | **325** | Pn | Pn | 00 41 50.5 | -0.4 |
| **KSU1** | **Kansas State U** | **2.49** | **25** | Pn | Pn | 00 41 53.0 | +0.9 |
| **X37A** | **Clayton** | **3.10** | **136** | Pn | Pn | 00 41 59.6 | -0.9 |
| **HHAR** | **Hobbs** | **3.30** | **99** | | Pn | 00 42 02.9 | -0.4 |
| HHAR | | | | lAmb_Lg | | 00 42 55.4 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.59** | **238** | | Pn | 00 42 07.8 | +0.5 |
| **U40A** | **Yellville** | **4.16** | **95** | lAmb_Lg | | 00 43 20.8 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.26** | **302** | lAmb_Lg | | 00 43 27.6 | |
| | comp=Z,10nm,0.7s | | | | | | |

*SFS* ***12*** *00:47:05.0, 35˚.17'N×3˚.86'W, ML2.5, ALBORAN SUR*
*CNRM* ***12*** *00:47:06.1, 35˚.42'N×3˚.83'W, h25km, ml3.3*
*IGIL* ***12*** *00:47:06.9, 35˚.47'N×3˚.86'W, h0km, ML2.5*
*INMG* ***12*** *00:47:07.3±1.5, 35˚.52'N×3˚.76'W, h20km±8km, ML2.5, Error ellipse: s-maj=5.4km s-min=3.2km az=75.0*
**ISC 12 00:47:05.1±1.1, 35˚.45'N±0˚.03×3˚.80'W±0˚.03, h16km±7km, n50, σ1§75/74, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.26** | **206** | P | **Pg** | **00 47 10.6** | **-0.2** |
| PALE | | | | S | **Sg** | **00 47 14.4** | **-0.3** |
| **PALE** | **Palemas** | **0.26** | **206** | P | **Pg** | **00 47 10.6** | **-0.2** |
| PALE | | | | S | **Sg** | **00 47 13.9** | **-0.8** |
| **AKLM** | **AKL** | **0.94** | **183** | P | **Pb** | **00 47 23.3** | **+0.3** |
| AKLM | | | | S | **Sb** | **00 47 35.0** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.15** | **103** | P | **Pn** | **00 47 27.2** | **+0.8** |
| CHAS | | | | S | **Sb** | **00 47 40.3** | **-0.8** |
| **TAF** | **Taforalt** | **1.30** | **119** | P | **Pn** | **00 47 28.6** | **0.0** |
| TAF | | | | S | **Sn** | **00 47 44.0** | **-1.6** |
| **CHEFC** | **Chefchaouen** | **1.31** | **255** | P | **Pg** | **00 47 31.0** | **+0.7** |
| **CHEFC** | **Chefchaouen** | **1.31** | **255** | P | **Pn** | **00 47 29.3** | **+0.6** |
| CHEFC | | | | S | **Sn** | **00 47 42.2** | **-3.7** |
| **SMIR** | **Smir Dam** | **1.31** | **281** | P | **Pg** | **00 47 33.4** | **+3.0** |
| **CEU** | **Ceuta** | **1.36** | **290** | P | **Pn** | **00 47 27.4** | **-1.9** |
| CEU | | | | S | **Sn** | **00 47 42.1** | **-4.9** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **339** | P | **Pn** | **00 47 31.4** | **+1.4** |
| EMAL | | | | S | **Sn** | **00 47 45.2** | **-2.9** |
| **JBK** | **JBK** | **1.50** | **137** | P | **Pg** | **00 47 35.0** | **+0.9** |
| **JBK** | **JBK** | **1.50** | **137** | P | **Pn** | **00 47 32.8** | **+1.3** |
| JBK | | | | S | **Sn** | **00 47 48.6** | **-2.2** |
| **RSA** | **Sarsar** | **1.75** | **252** | P | **Pb** | **00 47 37.3** | **+0.5** |
| **SICH** | **Sidi Chahed** | **1.83** | **223** | P | **Pn** | **00 47 37.3** | **+1.4** |
| **LCRM** | **LCR** | **1.96** | **207** | P | **Pb** | **00 47 40.0** | **-0.6** |
| **LCRM** | **LCR** | **1.96** | **207** | P | **Pn** | **00 47 38.9** | **+1.1** |
| LCRM | | | | S | **Sn** | **00 48 03.5** | **+1.3** |
| **IFR** | **Ifrane** | **2.22** | **210** | P | **Pn** | **00 47 41.9** | **+0.5** |
| IFR | | | | S | **Sn** | **00 48 07.9** | **-0.6** |
| **MD31** | **MD31** | **2.70** | **197** | P | **Pn** | **00 47 49.0** | **+1.2** |
| **MDT** | **Midelt** | **2.71** | **195** | P | **Pn** | **00 47 49.5** | **+1.5** |
| **MDT** | **Midelt** | **2.71** | **195** | P | **Pn** | **00 47 49.5** | **+1.5** |
| **TDRA** | **Tendrara** | **2.81** | **148** | P | **Pn** | **00 47 50.6** | **+1.1** |
| **ZHG** | **ZHG** | **3.08** | **230** | P | **Pn** | **00 47 55.0** | **+1.8** |
| **ZHG** | **ZHG** | **3.08** | **230** | P | **Pn** | **00 47 54.4** | **+1.3** |
| **AVE** | **Averroes** | **3.68** | **235** | P | **Pg** | **00 48 13.8** | **-1.8** |
| AVE | | | | S | **Sn** | **00 48 49.4** | **+5.1** |
| **PVAQ** | **Vaqueiros** | **3.71** | **303** | *e*Pn | **Pn** | **00 48 02.8** | **+1.1** |
| PVAQ | | | | *e*Sn | **Sn** | **00 48 44.0** | **-1.1** |
| PVAQ | | | | A | A | 00 48 48.0 | |
| | 9.3nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **303** | P | **Pn** | **00 48 02.8** | **+1.1** |
| **PVAQ** | **Vaqueiros** | **3.71** | **303** | P | **Pn** | **00 48 02.8** | **+1.1** |
| PVAQ | | | | S | **Sn** | **00 48 44.4** | **-0.7** |
| **PCVE** | **Castro Verde** | **4.05** | **304** | *e*Pn | **Pn** | **00 48 07.6** | **+1.3** |
| PCVE | | | | *e*Sn | **Sn** | **00 48 53.5** | **+0.1** |
| PCVE | | | | A | A | 00 49 00.6 | |
| | 5.7nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **305** | *e*P | **Pn** | **00 48 10.5** | **+1.1** |
| MESJ | | | | *e*S | **Sn** | **00 48 57.2** | **-1.9** |
| MESJ | | | | IAML | | 00 49 01.1 | |
| | comp=E,8.0nm,0.7s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **305** | *e*Pn | **Pn** | **00 48 10.6** | **+1.1** |
| **MORF** | **Marmelete** | **4.33** | **297** | *e*P | **Pn** | **00 48 11.2** | **+1.0** |
| MORF | | | | *e*S | **Sn** | **00 48 58.4** | **-2.1** |
| MORF | | | | IAML | | 00 49 01.3 | |
| | comp=E,13nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.33** | **297** | *e*Pn | **Pn** | **00 48 11.3** | **+1.0** |
| MORF | | | | *e*Sn | **Sn** | **00 48 58.0** | **-2.4** |
| MORF | | | | A | A | 00 49 04.5 | |
| | comp=E,6.6nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **294** | *e*Sn | **Sn** | **00 49 00.3** | **-1.6** |
| PFVI | | | | A | A | 00 49 07.0 | |
| | comp=E,6.8nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **294** | P | **Pn** | **00 48 09.4** | **-1.6** |
| PFVI | | | | S | **Sn** | **00 49 02.8** | **+0.9** |
| **PTEO** | **Sao Teotonio** | **4.49** | **299** | *e*Sn | **Sn** | **00 49 02.5** | **-1.6** |
| PTEO | | | | A | A | 00 49 08.3 | |
| | comp=E,8.6nm,0.7s | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **320** | *e*Pn | **Pn** | **00 48 16.0** | **+2.6** |
| **PESTR** | **Estremoz** | **4.56** | **320** | P | **Pn** | **00 48 15.9** | **+2.6** |
| PESTR | | | | S | **Sn** | **00 49 04.9** | **-1.1** |
| **EVO** | **Evora** | **4.57** | **314** | P | **Pn** | **00 48 15.3** | **+1.9** |
| EVO | | | | S | **Sn** | **00 49 06.3** | **+0.2** |
| **EVO** | **Evora** | **4.57** | **314** | *e*Pn | **Pn** | **00 48 15.2** | **+1.8** |
| EVO | | | | *e*Sn | **Sn** | **00 49 05.0** | **-1.1** |
| EVO | | | | A | A | 00 49 07.7 | |
| | comp=E,5.6nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **306** | *e*Pn | **Pn** | **00 48 15.5** | **+1.2** |
| PNCL | | | | *e*Sn | **Sn** | **00 49 06.2** | **-1.6** |
| PNCL | | | | A | A | 00 49 09.9 | |
| | comp=E,3.4nm,0.7s | | | | | | |
| **TZRR** | **Tazzarine** | **4.88** | **198** | P | **Pn** | **00 48 18.9** | **+1.0** |
| **PMRV** | **Marv??o** | **4.89** | **325** | *e*Pn | **Pn** | **00 48 20.1** | **+2.2** |
| **PMTG** | **Montargil** | **5.05** | **317** | *e*Pn | **Pn** | **00 48 21.8** | **+1.7** |
| PMTG | | | | *e*Sn | **Sn** | **00 49 16.2** | **-1.9** |
| PMTG | | | | A | A | 00 49 20.7 | |
| | comp=E,2.3nm,0.2s | | | | | | |
| **OUZM** | **OUZ** | **5.17** | **210** | P | **Pn** | **00 48 23.1** | **+1.3** |
| **PACT** | **Alcochete** | **5.21** | **311** | *e*Pn | **Pn** | **00 48 24.4** | **+2.1** |
| **OUK** | **Oukaimeden** | **5.43** | **220** | P | **Pn** | **00 48 26.6** | **+1.0** |
| **ZGR** | **Zagora** | **5.53** | **197** | P | **Pn** | **00 48 26.0** | **-0.9** |
| **PSBE** | **So Bento** | **5.68** | **317** | *e*Pn | **Pn** | **00 48 30.5** | **+2.1** |
| **MVO** | **Moncorvo** | **6.25** | **337** | *e*Pn | **Pn** | **00 48 39.5** | **+3.0** |
| **TTIG** | **Tnine Tigouga,** | **6.25** | **220** | P | **Pn** | **00 48 36.0** | **-0.7** |

*IDC* ***12*** *00:57:28.9±0.8, 55˚.57S×27˚.09W, h0km, mb4.2/5, mb1 4.2/6, mb1mx4.0/23, mbtmp4.1/6, ML3.8/1, MS3.4/8, Ms1 3.4/8, ms1mx3.1/42, Error ellipse: s-maj=30.7km s-min=21.6km az=54.0*
*NEIC* ***12*** *00:57:33.0±2.0, 55˚.7S±0˚.2×27˚.3W±0˚.1, h22km±6km, mb4.5/18, Error ellipse: s-maj=22.6km s-min=9.5km az=189.0*
**ISC 12 00:57:33.8±0.6, 55˚.7S±0˚.1×27˚.30W±0˚.09, h35km, n35, σ1§04/29, mb4.4/9, MS3.4/8, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.47** | **281** | Pn | **Pn** | **00 58 52.4** | **-0.3** |
| HOPE | | | | Sn | **Sn** | **00 59 52.1** | **-2.2** |
| **EFI** | **East Falkland** | **18.57** | **270** | P | **Pn** | **01 01 48.0** | **+0.1** |
| EFI | | | | lAmb | lAmb | 01 01 49.4 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **19.12** | **156** | P | **Pn** | **01 01 55.0** | **+0.5** |
| **SNAA** | **Sanae** | **19.12** | **156** | P | **Pn** | **01 01 55.1** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=310,slow=12,SNR=7.7 | | | | | | |
| **SNAA** | **Sanae** | **19.12** | **156** | lAmb | lAmb | 01 02 03.4 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **BELA** | **Belgrano 2** | **22.46** | **184** | P | **P** | **01 02 28.2** | **-1.1** |
| BELA | | | | lAmb | lAmb | 01 02 30.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **PLCA** | **Paso Flores** | **31.87** | **280** | LR | LR | 01 17 57.8 | |
| | comp=Z,63nm,18.1s,baz=176,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.59** | **180** | P | **P** | **01 04 19.3** | **+0.3** |
| | comp=Z,2.8nm,0.7s,baz=281,slow=1.0,SNR=10 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.59** | **180** | P | **P** | **01 04 19.9** | **+0.9** |
| QSPA | | | | lAmb | lAmb | 01 04 21.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **CPUP** | **Villa Florida** | **36.51** | **311** | P | **P** | **01 04 35.6** | **0.0** |
| | comp=Z,3.6nm,0.8s,baz=150,slow=7.8,SNR=7.0 | | | | | | |
| CPUP | | | | LR | LR | 01 18 43.8 | |
| | comp=Z,59nm,20.8s,baz=154,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **36.51** | **311** | P | **P** | **01 04 35.8** | **+0.2** |
| CPUP | | | | lAmb | lAmb | 01 04 36.9 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **ZON** | **Zonda** | **37.63** | **292** | P | **P** | **01 04 45.4** | **+0.3** |
| ZON | | | | lAmb | lAmb | 01 04 53.4 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **40.60** | **75** | LR | LR | 01 18 22.4 | |
| | comp=Z,89nm,18.2s,baz=204,slow=31 | | | | | | |
| **AC02** | **Maricunga** | **41.65** | **296** | P | **P** | **01 05 20.1** | **+0.9** |
| AC02 | | | | lAmb | lAmb | 01 05 21.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **45.05** | **300** | P | **P** | **01 05 48.2** | **+1.7** |
| LVC | | | | lAmb | lAmb | 01 05 49.8 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **45.94** | **76** | P | **P** | **01 05 52.1** | **-1.0** |
| | comp=Z,1.4nm,0.8s,baz=272,slow=7.9,SNR=3.3 | | | | | | |
| BOSA | | | | LR | LR | 01 23 45.5 | |
| | comp=Z,37nm,18.3s,baz=193,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **45.94** | **76** | P | **P** | **01 05 52.3** | **-0.8** |
| **PB01** | **IPOC Station P** | **46.66** | **300** | P | **P** | **01 06 00.0** | **+1.1** |
| **SIV** | **San Ignacio** | **47.27** | **313** | LR | LR | 01 28 19.3 | |
| | comp=Z,36nm,18.1s,baz=117,slow=39 | | | | | | |
| **GO01** | **Chusmiza** | **47.69** | **302** | P | **P** | **01 06 08.9** | **+1.6** |
| **LBTB** | **Lobatse** | **48.96** | **74** | LR | LR | 01 23 41.1 | |
| | comp=Z,37nm,18.9s,baz=254,slow=32 | | | | | | |
| **PB16** | **IPOC Station P** | **48.98** | **302** | P | **P** | **01 06 18.7** | **+1.3** |
| **TSUM** | **Tsumeb** | **49.55** | **61** | LR | LR | 01 23 47.6 | |
| | comp=Z,37nm,18.8s,baz=329,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **50.10** | **305** | P | **P** | **01 06 27.3** | **+1.3** |
| | comp=Z,4.4nm,0.7s,baz=148,slow=5.9,SNR=16 | | | | | | |
| **LPAZ** | **La Paz** | **50.10** | **305** | P | **P** | **01 06 27.0** | **+0.9** |
| LPAZ | | | | lAmb | lAmb | 01 06 28.2 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **PTGA** | **Pitinga** | **60.83** | **322** | LR | LR | 01 34 55.2 | |
| | comp=Z,40nm,18.9s,baz=102,slow=37 | | | | | | |
| **OTAV** | **Otavalo** | **69.39** | **304** | P | **P** | **01 08 39.9** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **72.75** | **30** | P | **P** | **01 08 58.2** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=196,slow=6.4,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **124.07** | **28** | PKP | **PKiKP** | **01 16 26.1** | **-1.0** |
| | comp=Z,1.0nm,0.6s,baz=176,slow=5.7,SNR=4.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.61** | **22** | PKP | **PKiKP** | **01 16 39.6** | **-0.4** |
| | comp=Z,6.5nm,1.0s,baz=0.0,slow=5.0,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **135.84** | **318** | PKP | **PKiKP** | **01 16 51.7** | **+0.9** |
| | comp=Z,0.4nm,0.6s,baz=135,slow=2.3,SNR=6.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **136.82** | **71** | PKP | **PKiKP** | **01 16 53.1** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=180,slow=3.9,SNR=3.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.25** | **63** | PKP | **PKiKP** | **01 17 03.3** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=343,slow=4.5,SNR=2.3 | | | | | | |
| **ILAR** | **Eielson Array** | **149.81** | **312** | PKPbc | **PKiKP** | **01 17 18.2** | **-1.2** |
| | comp=Z,2.4nm,0.9s,baz=130,slow=1.7,SNR=17 | | | | | | |
| **SONM** | **Songino Array** | **150.76** | **86** | PKPbc | **PKiKP** | **01 17 21.3** | **-0.7** |
| | comp=Z,1.8nm,0.8s,baz=219,slow=4.0,SNR=13 | | | | | | |

*INMG* ***12*** *01:08:18.7±1.8, 35˚.46N×3˚.87W, h12km±5km, ML2.6, Error ellipse: s-maj=4.6km s-min=3.5km az=30.0*
*SFS* ***12*** *01:08:19.0, 35˚.50N×3˚.88W, ML2.7, ALBORAN SUR*
*CNRM* ***12*** *01:08:19.2, 35˚.45N×3˚.82W, h15km, ml2.9*
*IGIL* ***12*** *01:08:19.8, 35˚.51N×3˚.84W, h0km, ML2.7*
**ISC 12 01:08:18.8±1.1, 35˚.46N±0˚.03×3˚.79W±0˚.03, h17km±8km, n41, σ1§58/67, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.27** | **206** | P | **Pg** | **01 08 23.6** | **-1.1** |
| **PALE** | **Palemas** | **0.27** | **206** | P | **Pg** | **01 08 23.1** | **-1.7** |
| PALE | | | | S | **Sb** | **01 08 29.6** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.15** | **104** | P | **Pn** | **01 08 40.0** | **-0.1** |
| CHAS | | | | S | **Sb** | **01 08 52.9** | **-1.9** |
| **TAF** | **Taforalt** | **1.30** | **119** | P | **Pn** | **01 08 42.7** | **+0.4** |
| TAF | | | | S | **Sg** | **01 09 02.2** | **+1.3** |
| **SMIR** | **Smir Dam** | **1.31** | **280** | P | **Pg** | **01 08 46.2** | **+2.1** |
| **SMIR** | **Smir Dam** | **1.31** | **280** | P | **Pg** | **01 08 45.9** | **+1.8** |
| SMIR | | | | S | **Sg** | **01 09 02.2** | **+0.9** |
| **CHEFC** | **Chefchaouen** | **1.31** | **255** | P | **Pb** | **01 08 43.0** | **-0.1** |
| **CHEFC** | **Chefchaouen** | **1.31** | **255** | P | **Pb** | **01 08 43.3** | **+0.2** |
| CHEFC | | | | S | **Sg** | **01 09 02.1** | **+0.8** |
| **CEU** | **Ceuta** | **1.36** | **289** | P | **Pn** | **01 08 40.6** | **-2.4** |
| **CEU** | **Ceuta** | **1.36** | **289** | S | **Sn** | **01 08 55.1** | **-5.5** |
| **EMAL** | **Malaga-Limoner** | **1.40** | **339** | P | **Pn** | **01 08 43.8** | **+0.3** |
| EMAL | | | | S | **Sn** | **01 09 01.1** | **-0.5** |
| **JBK** | **JBK** | **1.51** | **138** | P | **Pg** | **01 08 48.0** | **+0.1** |
| **JBK** | **JBK** | **1.51** | **138** | P | **Pn** | **01

| | | | | | | |
|---|---|---|---|---|---|---|
| TAF | | | S | **Sb** | **01 36 10.2** | **+4.3** |
| **EMAL** | **Malaga-Limoner** | **1.38 336** | P | **Pn** | **01 35 49.3** | **-1.0** |
| EMAL | | | S | **Sn** | **01 36 06.0** | **-1.8** |
| **CEU** | **Ceuta** | **1.39 287** | P | **Pn** | **01 35 49.7** | **-0.7** |
| CEU | | | S | **Sn** | **01 36 04.0** | **-4.1** |
| **SICH** | **Sidi Chahed** | **1.90 224** | P | **Pb** | **01 36 03.0** | **+2.5** |
| SICH | | | S | **Sb** | **01 36 26.1** | **+2.2** |
| **LCRM** | **LCR** | **2.03 208** | P | **Pb** | **01 36 01.8** | **-1.0** |
| LCRM | | | S | **Sb** | **01 36 29.8** | **+2.1** |
| **IFR** | **Ifrane** | **2.28 211** | P | **Pb** | **01 36 05.3** | **-1.9** |
| IFR | | | S | **Sn** | **01 36 30.8** | **+0.4** |
| **MD31** | **MD31** | **2.76 198** | P | **Pn** | **01 36 10.9** | **+1.5** |
| MD31 | | | S | **Sb** | **01 36 45.4** | **-3.1** |
| **MDT** | **Midelt** | **2.77 195** | P | **Pb** | **01 36 13.2** | **-2.2** |
| **TDRA** | **Tendrara** | **2.83 150** | P | **Pb** | **01 36 16.7** | **+0.3** |
| TDRA | | | S | **Sb** | **01 36 48.6** | **-2.0** |
| **PVAQ** | **Vaqueiros** | **3.73 302** | *e*Pn | **Pn** | **01 36 23.6** | **+1.0** |
| PVAQ | | | *e*Sn | **Sn** | **01 37 05.3** | **-0.6** |
| PVAQ | | | A | A | 01 37 10.2 | |
| | 4.5nm,0.5s | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73 302** | P | **Pn** | **01 36 24.5** | **+1.9** |
| PVAQ | | | S | **Sn** | **01 37 08.2** | **+2.3** |
| **EVO** | **Evora** | **4.57 313** | P | **Pn** | **01 36 35.2** | **+1.0** |
| EVO | | | S | **Sn** | **01 37 25.4** | **-1.2** |
| **EVO** | **Evora** | **4.57 313** | *e*Pn | **Pn** | **01 36 35.2** | **+1.0** |
| **PNCL** | **Nicolau / Gran** | **4.65 306** | *e*Pn | **Pn** | **01 36 35.9** | **+0.7** |
| **PSBE** | **So Bento** | **5.68 316** | *e*Pn | **Pn** | **01 36 51.7** | **+2.3** |

*IDC* ***12*** *01:40:00.3±2.5,8°.98S×119°.30E, h109$^{km}$±22$^{km}$, mb4.1/10, mb1 4.2/13, mb1mx3.9/34, mbtmp4.5/13, MS2.8/4, Ms1 2.8/4, ms1mx2.5/74, Error ellipse: s-maj=32.2km s-min=13.2km az=63.0*

*DJA* ***12*** *01:40:00.7±0.2,9°.5±2°×11°.9E±°, h113$^{km}$±3$^{km}$, M4.7/23, mB5.4/6, mb4.8/13, MLv4.6/23, Mw(mB)4.8/6*

*NEIC* ***12*** *01:40:00.5±1.6,9°.09S±0°.07×119°.18E±0°.05, h115$^{km}$±7$^{km}$, mb4.5/25, Error ellipse: s-maj=11.9km s-min=4.0km az=147.0*

**ISC 12 01:39:58.9±0.4,9°.11S±0°.04×119°.23E±0°.04, h102$^{km}$, n98, σ1ᵍ92/102, mb4.5/34, 2C, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.55** | **163** | P | **Pn** | **01 40 18.8** | **+3.5** |
| WBSI | | | | S | **Sn** | **01 40 32.1** | **+4.5** |
| **BASI** | **Baing, Sumba** | **1.73** | **130** | P | **Pn** | **01 40 31.3** | **+3.3** |
| BASI | | | | S | **Sn** | **01 40 53.6** | **+3.4** |
| **MMRI** | **Maumere** | **3.01** | **81** | Pn | **Pn** | **01 40 47.8** | **+2.9** |
| **MMRI** | **Maumere** | **3.01** | **81** | P | **Pn** | **01 40 48.0** | **+3.2** |
| MMRI | | | | S | **Sn** | **01 41 23.1** | **+2.8** |
| **BSSI** | **Bau Bau, Buton** | **3.21** | **23** | P | **Pn** | **01 40 50.2** | **+2.7** |
| BSSI | | | | S | **Sn** | **01 41 27.4** | **+2.5** |
| **BKSI** | **Bulukumba** | **3.87** | **13** | P | **Pn** | **01 40 59.7** | **+3.3** |
| BKSI | | | | S | **Sn** | **01 41 42.6** | **+1.7** |
| **DNP** | **Denpasar** | **4.00** | **276** | P | **Pn** | **01 41 01.7** | **+3.7** |
| **IGBI** | **Denpasar** | **4.04** | **274** | P | **Pn** | **01 41 02.1** | **+3.4** |
| IGBI | | | | S | **Sn** | **01 41 47.4** | **+2.3** |
| **SRBI** | **Singaraja** | **4.10** | **284** | P | **Pn** | **01 41 02.2** | **+2.7** |
| SRBI | | | | S | **Sn** | **01 41 48.1** | **+1.6** |
| **BATI** | **Baumata** | **4.50** | **104** | P | **Pn** | **01 41 06.7** | **+1.8** |
| | 136nm,0.3s,baz=288,slow=2.1,SNR=65 | | | | | | |
| BATI | | | | S | **Sn** | **01 41 57.0** | **+0.6** |
| | 81nm,0.3s,baz=345,slow=21,SNR=11 | | | | | | |
| **BATI** | **Baumata** | **4.50** | **104** | P | **Pn** | **01 41 07.9** | **+2.9** |
| BATI | | | | S | **Sn** | **01 41 56.9** | **+0.6** |
| **BNSI** | **Bone** | **4.76** | **11** | P | Pn | 01 41 13.6 | +5.2 |
| **BBSI** | **Bau Bau** | **4.89** | **43** | P | **Pn** | **01 41 12.7** | **+2.5** |
| **SOEI** | **Soe** | **5.01** | **98** | Pn | **Pn** | **01 41 14.5** | **+2.7** |
| **SOEI** | **Soe** | **5.01** | **98** | P | **Pn** | **01 41 14.6** | **+2.7** |
| **JAGI** | **Jajag, Banyuwa** | **5.06** | **277** | Pn | **Pn** | **01 41 13.8** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **5.06** | **277** | P | **Pn** | **01 41 13.9** | **+1.5** |
| | 2.6nm12µm348nm,0.5s | | | | | | |
| **ABJI** | **Asem Bagus** | **5.11** | **284** | P | **Pn** | **01 41 16.9** | **+3.8** |
| | 0.7nm82nm,0.9s | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.14** | **6** | P | Pn | 01 41 18.8 | +5.2 |
| | 0.1nm27nm,0.6s | | | | | | |
| **KMMI** | **Kalianget** | **5.60** | **291** | P | **Pn** | **01 41 22.5** | **+2.7** |
| | 0.3nm81nm,1.6s | | | | | | |
| **BLJI** | **Banyuglugur** | **5.74** | **283** | P | **Pn** | **01 41 24.8** | **+3.2** |
| **GMJI** | **Gumukmas** | **5.78** | **278** | P | **Pn** | **01 41 23.2** | **+1.0** |
| | 0.6nm2µm95nm,0.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **7.42** | **278** | P | **Pn** | **01 41 46.7** | **+2.1** |
| | 0.5nm32nm,0.9s | | | | | | |
| **PCJI** | **Pacitan** | **8.01** | **276** | P | **Pn** | **01 41 55.6** | **+3.0** |
| | 38nm,0.5s | | | | | | |
| **UGM** | **Wanagama** | **8.69** | **277** | Pn | **Pn** | **01 42 01.7** | **-0.1** |
| **UGM** | **Wanagama** | **8.69** | **277** | P | **Pn** | **01 42 04.6** | **+2.7** |
| | 166nm,1.6s | | | | | | |
| **KPJI** | **Karang Pucung** | **10.35** | **279** | P | **Pn** | **01 42 25.9** | **+1.6** |
| | 31nm,2.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.89** | **146** | P | **Pn** | **01 42 32.2** | **+0.6** |
| | 0.9nm,0.3s,baz=337,slow=11,SNR=31 | | | | | | |
| FITZ | | | | S | **Sn** | **01 44 25.9** | **-5.7** |
| | 6.3nm,0.3s,baz=191,slow=17,SNR=12 | | | | | | |
| FITZ | | | | LR | LR | 01 46 27.2 | |
| | comp=Z,46nm,20.7s,baz=353,slow=35 | | | | | | |
| **KNRA** | **Kununurra** | **11.37** | **126** | Pn | **Pn** | **01 42 37.6** | **-0.5** |
| **MBWA** | **Marble Bar** | **11.99** | **178** | | | **01 42 45.4** | **-1.0** |
| **MTN** | **Manton Dam** | **12.26** | **109** | Pn | **Pn** | **01 42 49.3** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **12.40** | **177** | Pn | **Pn** | **01 42 52.6** | **+0.7** |
| **CGJI** | **Cibinong** | **13.64** | **280** | P | **Pn** | **01 43 06.8** | **-1.3** |
| | 3µm59nm,0.6s | | | | | | |
| **GIRL** | **Giralia** | **14.28** | **199** | Pn | **Pn** | **01 43 16.7** | **+0.3** |
| **FAKI** | **Fak Fak** | **14.33** | **65** | P | **Pn** | **01 43 17.5** | **+0.4** |
| **WB0** | **Warramunga Arr** | **18.09** | **127** | P | **Pn** | **01 44 03.6** | **-0.1** |
| **WRA** | **Warramunga Arr** | **18.14** | **128** | P | **Pn** | **01 44 04.6** | **+0.3** |
| | 1.8nm,0.3s,baz=303,slow=13,SNR=92 | | | | | | |
| WRA | | | | S | **S** | **01 47 19.5** | **-6.5** |
| | 1.3nm,0.3s,baz=324,slow=22,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 01 52 15.9 | |
| | comp=Z,41nm,18.7s,baz=64,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.14** | **128** | P | **Pn** | **01 44 04.0** | **-0.4** |
| **WB2** | **Warramunga Arr** | **18.15** | **128** | P | **Pn** | **01 44 04.3** | **-0.1** |
| **WR0** | **Warramunga Arr** | **18.31** | **128** | P | **Pn** | **01 44 06.3** | **0.0** |
| WR0 | | | | IAmb | IAmb | 01 44 09.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **20.16** | **138** | P | **P** | **01 44 25.3** | **0.0** |
| **ASAR** | **Alice Springs** | **20.16** | **138** | P | Pn | 01 44 27.8 | -0.3 |
| | comp=Z,13nm,0.7s,baz=330,slow=13,SNR=112 | | | | | | |
| ASAR | | | | S | **S** | **01 48 05.8** | **-0.4** |
| | comp=Z,3.8nm,0.8s,baz=311,slow=23,SNR=15 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 52 03.2** | **-0.2** |
| | comp=Z,1.0nm,0.5s,baz=315,slow=1.5,SNR=5.2 | | | | | | |
| ASAR | | | | LR | LR | 01 53 07.6 | |
| | comp=Z,19nm,21.6s,baz=66,slow=39 | | | | | | |
| **ASAR** | **Alice Springs** | **20.16** | **138** | P | Pn | 01 44 27.3 | -0.7 |
| **TGY** | **Tagaytay City** | **23.13** | **4** | P | **P** | **01 44 57.0** | **+0.6** |
| | comp=Z,298nm,0.3s,baz=182,slow=10,SNR=3.8 | | | | | | |
| **COEN** | **Coen** | **23.94** | **104** | P | **P** | **01 45 03.9** | **+0.1** |
| COEN | | | | IAmb | IAmb | 01 45 06.2 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **28.25** | **149** | P | **P** | **01 45 43.2** | **+0.7** |
| BBOO | | | | IAmb | IAmb | 01 46 07.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **28.29** | **116** | LR | LR | 02 00 16.6 | |
| | comp=Z,32nm,18.7s,baz=88,slow=43 | | | | | | |
| **STKA** | **Stephens Creek** | **30.72** | **141** | P | **P** | **01 46 05.4** | **+1.1** |
| | comp=Z,2.8nm,0.6s,baz=313,slow=12,SNR=9.3 | | | | | | |
| **STKA** | **Stephens Creek** | **30.72** | **141** | IAmb | IAmb | 01 46 07.4 | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Ar** | **33.93** | **324** | P | **P** | **01 46 33.4** | **+0.9** |
| | comp=Z,3.2nm,0.7s,baz=154,slow=6.8,SNR=17 | | | | | | |
| **CHTO** | **Chiang Mai** | **34.21** | **324** | P | **P** | **01 46 34.1** | **-0.8** |
| CHTO | | | | IAmb | IAmb | 01 46 37.3 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **ENH** | **Enshi** | **40.26** | **347** | P | **P** | **01 47 24.6** | **-1.3** |
| **XAN** | **Xi'an** | **44.02** | **348** | ⇑P | **P** | **01 47 56.3** | **-0.1** |
| XAN | | | | pP | pP | 01 48 17.8 | -2.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **H08S2** | **Diego Garcia H** | **46.24** | **268** | T | T | 02 37 51.8 | |
| | baz=96,slow=75,SNR=15 | | | | | | |
| **H08S3** | **Diego Garcia H** | **46.25** | **268** | T | T | 02 37 53.7 | |
| | baz=96,slow=75,SNR=14 | | | | | | |
| **H08S1** | **Diego Carcia H** | **46.26** | **268** | T | T | 02 37 53.7 | |
| | baz=96,slow=75,SNR=6.3 | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.02** | **9** | P | **P** | **01 48 20.2** | **+0.2** |
| **KSRS** | **Korea Array** | **47.03** | **9** | P | **P** | **01 48 19.1** | **-0.9** |
| | comp=Z,2.1nm,0.9s,baz=184,slow=9.5,SNR=3.0 | | | | | | |
| **LZH** | **Lanzhou** | **47.24** | **343** | *e*P | **P** | **01 48 21.4** | **-0.5** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.4s | | | | | | |
| **ODAN** | **Odare** | **47.25** | **320** | *e*P | **P** | **01 48 22.9** | **+0.6** |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **47.40** | **321** | *e*P | **P** | **01 48 23.9** | **+0.4** |
| **RAMN** | **Ramite** | **47.82** | **319** | *e*P | **P** | **01 48 27.4** | **+0.7** |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **JIRN** | **Jiri** | **48.58** | **320** | *e*P | **P** | **01 48 33.1** | **+0.5** |
| | comp=Z,17nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **48.95** | **320** | *e*P | **P** | **01 48 35.8** | **+0.4** |
| **PKI** | **Pulchoki** | **49.02** | **319** | *e*P | **P** | **01 48 35.8** | **-0.2** |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **49.03** | **319** | *e*P | **P** | **01 48 35.7** | **-0.3** |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **50.33** | **318** | *e*P | **P** | **01 48 45.2** | **-0.6** |
| | comp=Z,15nm,0.6s | | | | | | |
| **GOMU** | **GeErMu** | **50.59** | **334** | P | **P** | **01 48 48.4** | **+0.6** |
| GOMU | | | | S | **S** | **01 55 51.8** | **-3.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,77nm,6.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,56nm,5.7s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,68nm,6.1s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,30nm,5.1s | | | | | | |
| **DANN** | **Dangsing** | **50.61** | **319** | *e*P | **P** | **01 48 47.9** | **-0.1** |
| | comp=Z,40nm,0.5s | | | | | | |
| **PYUN** | **Piuthan** | **50.95** | **318** | *e*P | **P** | **01 48 50.5** | **0.0** |
| | comp=Z,16nm,0.4s | | | | | | |
| **GTA** | **Gaotai** | **51.53** | **341** | ⇑P | **P** | **01 48 55.6** | **+1.1** |
| GTA | | | | sP | PcP | 01 50 06.4 | -0.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **CN2** | **Changchun** | **52.97** | **6** | *e*P | **P** | **01 49 06.8** | **+2.0** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.31** | **11** | P | **P** | **01 49 13.7** | **-0.9** |
| | comp=Z,2.5nm,0.5s,baz=186,slow=6.9,SNR=7.5 | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.75** | **350** | P | **P** | **01 49 37.9** | **-1.4** |
| ULN | | | | IAmb | IAmb | 01 49 40.7 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **57.83** | **350** | P | **P** | **01 49 40.3** | **+0.5** |
| | comp=Z,7.1nm,0.7s,baz=167,slow=8.5,SNR=57 | | | | | | |
| **SONM** | **Songino Array** | **57.83** | **350** | P | **P** | **01 49 39.3** | **-0.5** |
| **NIL** | **Nilore** | **60.94** | **317** | P | **P** | **01 50 00.4** | **-1.0** |
| NIL | | | | IAmb | IAmb | 01 50 00.9 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **64.33** | **315** | P | **P** | **01 50 23.0** | **-1.2** |
| **MK31** | **Makanchi Array** | **64.66** | **333** | P | **P** | **01 50 25.2** | **-0.6** |
| MK31 | | | | IAmb | IAmb | 01 50 27.8 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **64.66** | **333** | P | **P** | **01 50 25.8** | **0.0** |
| | comp=Z,2.6nm,0.4s,baz=153,slow=6.6,SNR=60 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.66** | **333** | P | **P** | **01 50 25.2** | **-0.6** |
| **MAKZ** | **Makanchi** | **64.81** | **333** | P | **P** | **01 50 26.0** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 01 50 26.9 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **KKAR** | **Karatay Array** | **68.28** | **324** | P | **P** | **01 50 48.8** | **-0.2** |
| **ZAA0** | **Zalesovo Array** | **69.23** | **339** | P | **P** | **01 50 53.4** | **-1.1** |
| ZAA0 | | | | IAmb | IAmb | 01 50 54.3 | |
| | comp=Z,4.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.23** | **339** | P | **P** | **01 50 53.5** | **-1.0** |
| | comp=Z,4.4nm,0.4s,baz=141,slow=5.2,SNR=31 | | | | | | |
| **MA2** | **Magadan** | **72.97** | **16** | P | **P** | **01 51 16.1** | **-0.9** |
| MA2 | | | | IAmb | IAmb | 01 51 18.4 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **77.78** | **325** | P | **P** | **01 51 44.5** | **-0.3** |
| **RAYN** | **Ar Rayn** | **78.96** | **296** | P | **P** | **01 51 50.8** | **-1.1** |
| **TIXI** | **Tiksi** | **80.84** | **3** | P | **P** | **01 51 59.6** | **-1.3** |
| TIXI | | | | IAmb | IAmb | 01 52 14.4 | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **85.76** | **310** | P | **P** | **01 52 26.3** | **-0.9** |
| GURO | | | | IAmb | IAmb | 01 52 29.3 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **MARD** | **Mardin** | **86.41** | **308** | P | **P** | **01 52 29.7** | **-0.7** |
| **KBZ** | **Khabaz** | **86.52** | **315** | P | **P** | **01 52 29.9** | **-0.6** |
| | comp=Z,3.4nm,1.1s,baz=123,slow=3.4,SNR=4.1 | | | | | | |
| **BOSA** | **Boshof** | **89.15** | **241** | P | **P** | **01 52 45.6** | **+1.9** |
| | comp=Z,1.8nm,0.8s,baz=174,slow=4.0,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **114.20** | **24** | PKP | PKPdf | 01 58 25.3 | -0.7 |
| | comp=Z,0.2nm,0.6s,baz=300,slow=2.6,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.70** | **280** | PKP | **PKiKP** | **01 58 36.6** | **+0.5** |
| | comp=Z,2.0nm,0.5s,baz=42,slow=2.1,SNR=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.70** | **280** | | **PKPdf** | **01 58 35.7** | **-0.4** |
| **ESDC** | **Sonseca Array** | **121.15** | **311** | PKP | **PKiKP** | **01 58 41.1** | **+0.8** |
| | comp=Z,0.3nm,0.4s,baz=34,slow=1.7,SNR=2.0 | | | | | | |
| **CPUP** | **Villa Florida** | **144.61** | **185** | PKP | **PKPdf** | **01 59 25.4** | **+1.1** |
| | comp=Z,1.3nm,0.5s,baz=33,slow=1.3,SNR=3.9 | | | | | | |

*CNRM* ***12*** *01:48:07.3, 35°.58N×3°.67W, h18$^{km}$, ml3.3*

*IGIL* ***12*** *01:48:08.5, 35°.62N×3°.78W, h0$^{km}$, ML2.8*

*INMG* ***12*** *01:48:08.5±1.5, 35°.64N×3°.80W, h2$^{km}$±4$^{km}$, ML2.7, Error ellipse: s-maj=3.3km s-min=2.5km az=164.0*

*SFS* ***12*** *01:48:08.0, 35°.62N×3°.78W, ML3.0, ALBORAN SUR*

**ISC 12 01:48:07.4±1.3, 35°.58N±0°.03×3°.69W±0°.03, h20$^{km}$±6$^{km}$, n47, σ1ᵍ25/75, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.42** | **209** | P | **Pg** | **01 48 16.0** | **-0.1** |
| PALE | | | | S | **Sb** | **01 48 22.1** | **+0.1** |
| **PALE** | **Palemas** | **0.42** | **209** | P | **Pg** | **01 48 15.7** | **-0.3** |
| PALE | | | | S | **Sg** | **01 48 21.5** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.11** | **111** | P | **Pn** | **01 48 27.1** | **-0.6** |
| CHAS | | | | S | **Sb** | **01 48 41.4** | **-0.4** |
| **TAF** | **Taforalt** | **1.30** | **126** | P | **Pb** | **01 48 31.0** | **-0.2** |
| **TAF** | **Taforalt** | **1.30** | **126** | P | **Pn** | **01 48 30.8** | **+0.3** |
| TAF | | | | S | **Sn** | **01 48 47.2** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.32** | **333** | P | **Pn** | **01 48 30.5** | **-0.1** |
| EMAL | | | | S | **Sn** | **01 48 46.1** | **-1.6** |
| **CEU** | **Ceuta** | **1.40** | **283** | P | Pn | 01 48 26.0 | -5.8 |
| CEU | | | | S | Sn | 01 48 40.2 | -10 |
| **CHEFC** | **Chefchaouen** | **1.43** | **251** | P | **Pg** | **01 48 35.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.43** | **251** | P | **Pb** | **01 48 33.0** | **-0.4** |
| CHEFC | | | | S | **Sb** | **01 48 51.2** | **+0.1** |
| **JBK** | **JBK** | **1.55** | **143** | P | **Pn** | **01 48 34.3** | **+0.2** |
| **JBK** | **JBK** | **1.55** | **143** | P | **Pn** | **01 48 34.1** | **+0.1** |
| JBK | | | | S | **Sn** | **01 48 52.3** | **-1.4** |
| **SICH** | **Sidi Chahed** | **1.99** | **223** | P | **Pb** | **01 48 42.0** | **-0.9** |
| SICH | | | | S | **Sb** | **01 49 08.7** | **+1.4** |
| **LCRM** | **LCR** | **2.12** | **207** | P | **Pn** | **01 48 42.7** | **+0.9** |
| LCRM | | | | S | **Sb** | **01 49 11.0** | **-0.2** |
| **IFR** | **Ifrane** | **2.38** | **210** | P | **Pn** | **01 48 46.0** | **+0.6** |
| IFR | | | | S | **Sn** | **01 49 14.1** | **+0.1** |
| **MD31** | **MD31** | **2.85** | **198** | P | **Pn** | **01 48 53.1** | **+1.3** |
| MD31 | | | | S | **Sn** | **01 49 27.0** | **+1.4** |
| **MDT** | **Midelt** | **2.86** | **196** | P | **Pn** | **01 48 53.4** | **+1.4** |
| **MDT** | **Midelt** | **2.86** | **196** | P | **Pn** | **01 48 53.4** | **+1.4** |
| MDT | | | | S | **Sn** | **01 49 26.8** | **+0.9** |
| **TDRA** | **Tendrara** | **2.89** | **151** | P | **Pn** | **01 48 53.6** | **+1.2** |
| **ZHG** | **ZHG** | **3.23** | **230** | P | **Pn** | **01 48 57.4** | **+0.3** |
| **PVAQ** | **Vaqueiros** | **3.72** | **300** | *e*Pn | **Pn** | **01 49 04.2** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **01 49 45.4** | **-1.4** |
| PVAQ | | | | A | A | 01 49 48.0 | |
| | 20nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **300** | P | **Pn** | **01 49 04.2** | **+0.6** |
| PVAQ | | | | S | **Sn** | **01 49 46.5** | **-0.3** |
| **AVE** | **Averroes** | **3.83** | **235** | S | **Sn** | **01 49 49.1** | **-0.5** |
| **PAB** | **San Pablo** | **3.99** | **353** | P | **Pn** | **01 49 11.2** | **+3.7** |
| **PCVE** | **Castro Verde** | **4.05** | **302** | *e*Pn | **Pn** | **01 49 09.3** | **+1.1** |
| PCVE | | | | *e*Sn | **Sn** | **01 49 54.1** | **-1.0** |
| PCVE | | | | A | A | 01 49 59.4 | |
| | 13nm,0.5s | | | | | | |
| **PBEJ** | **Beja** | **4.14** | **307** | *e*Pn | **Pn** | **01 49 10.7** | **+1.2** |
| PBEJ | | | | *e*Sn | **Sn** | **01 49 56.9** | **-0.4** |
| PBEJ | | | | A | A | 01 50 00.8 | |
| | 8.9nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **303** | *e*P | **Pn** | **01 49 11.7** | **+0.4** |
| MESJ | | | | *e*S | **Sn** | **01 49 58.2** | **-2.4** |
| MESJ | | | | IAML | | 01 50 02.3 | |
| | comp=N,16nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **303** | *e*Pn | **Pn** | **01 49 12.3** | **+1.0** |
| MESJ | | | | *e*Sn | **Sn** | **01 49 59.5** | **-1.2** |
| MESJ | | | | A | A | 01 50 10.0 | |
| | comp=N,13nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **295** | *e*P | **Pn** | **01 49 12.7** | **+0.3** |
| MORF | | | | *e*S | **Sn** | **01 49 59.8** | **-2.8** |
| MORF | | | | IAML | | 01 50 06.1 | |
| | comp=N,24nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **295** | *e*Pn | **Pn** | **01 49 13.5** | **+1.1** |
| MORF | | | | *e*Sn | **Sn** | **01 50 01.1** | **-1.5** |
| MORF | | | | A | A | 01 50 07.0 | |
| | comp=N,7.2nm,0.4s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **292** | *e*Sn | **Sn** | **01 50 03.9** | **-0.3** |
| PFVI | | | | A | A | 01 50 06.0 | |
| | comp=N,10nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.50** | **297** | *e*Pn | **Pn** | **01 49 15.7** | **+1.3** |
| PTEO | | | | *e*Sn | **Sn** | **01 50 05.5** | **-0.6** |
| PTEO | | | | A | A | 01 50 09.6 | |
| | comp=N,9.9nm,0.9s | | | | | | |
| **PESTR** | **Estremoz** | **4.52** | **318** | *e*Pn | **Pn** | **01 49 16.5** | **+1.8** |
| PESTR | | | | *e*Sn | **Sn** | **01 50 05.9** | **-0.7** |
| PESTR | | | | A | A | 01 50 12.7 | |
| | comp=N,7.9nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.52** | **318** | P | **Pn** | **01 49 16.2** | **+1.5** |
| **EVO** | **Evora** | **4.54** | **312** | S | **Sn** | **01 50 04.9** | **-2.2** |
| **EVO** | **Evora** | **4.54** | **312** | *e*Pn | **Pn** | **01 49 15.9** | **+1.0** |
| EVO | | | | *e*Sn | **Sn** | **01 50 06.2** | **-0.9** |
| EVO | | | | A | A | 01 50 09.3 | |
| | comp=N,17nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **304** | *e*Pn | **Pn** | **01 49 16.9** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **01 50 07.8** | **-1.5** |
| PNCL | | | | A | A | 01 50 10.2 | |
| | comp=N,10nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **4.83** | **324** | *e*Pn | **Pn** | **01 49 20.6** | **+1.6** |
| PMRV | | | | *e*Sn | **Sn** | **01 50 13.2** | **-1.2** |
| PMRV | | | | A | A | 01 50 50.0 | |
| | comp=N,9.4nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **315** | *e*Pn | **Pn** | **01 49 22.9** | **+1.4** |
| PMTG | | | | *e*Sn | **Sn** | **01 50 18.0** | **-0.8** |
| PMTG | | | | A | A | 01 50 30.2 | |
| | comp=N,5.4nm,0.5s | | | | | | |
| **PACT** | **Alcochete** | **5.19** | **309** | *e*Pn | **Pn** | **01 49 25.7** | **+1.8** |
| **PCBR** | **Castelo Branco** | **5.20** | **326** | *e*Pn | **Pn** | **01 49 25.6** | **+1.6** |
| PCBR | | | | *e*Sn | **Sn** | **01 50 21.9** | **-1.5** |
| PCBR | | | | A | A | 01 50 23.9 | |
| | comp=N,6.2nm,0.6s | | | | | | |
| **PMAFR** | **Mafra** | **5.58** | **309** | *e*Pn | **Pn** | **01 49 29.9** | **+0.6** |
| **PSBE** | **So Bento** | **5.64** | **316** | *e*Pn | **Pn** | **01 49 31.8** | **+1.7** |
| **MTE** | **Manteigas** | **5.69** | **329** | *e*Sn | **Sn** | **01 50 34.8** | **-0.8** |
| MTE | | | | A | A | 01 50 37.3 | |
| | comp=N,8.2nm,0.5s | | | | | | |
| **PVIS** | **Viseu** | **6.10** | **328** | *e*Pn | **Pn** | **01 49 38.1** | **+1.7** |
| **MVO** | **Moncorvo** | **6.16** | **336** | *e*Pn | **Pn** | **01 49 39.4** | **+2.2** |
| MVO | | | | *e*Sn | **Sn** | **01 50 47.2** | **+0.1** |
| MVO | | | | A | A | 01 50 57.3 | |
| | comp=N,5.6nm,0.5s | | | | | | |
| **PVRL** | **Vila Real** | **6.50** | **332** | *e*Pn | **Pn** | **01 49 43.4** | **+1.5** |
| PVRL | | | | *e*Sn | **Sn** | **01 50 54.9** | **-0.6** |
| PVRL | | | | A | A | 01 50 55.8 | |
| | comp=N,11nm,0.6s | | | | | | |
| **PBRG** | **Braganca** | **6.65** | **340** | *e*Pn | **Pn** | **01 49 46.4** | **+2.4** |

**SVSA 12 02:09:55.6±0.9, 39°.44N×29°.92W, h10$^{km}$, ML3.9** (INMG), **5C, Error ellipse: s-maj=9.5km s-min=1.9km az=28.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H07N1** | **FLORES T-PHASE** | **0.96** | **285** | *e*S | Sg | 02 10 21.7 | -5.0 |
| H07N1 | | | | A | A | 02 10 23.4 | |
| | 497nm,0.3s | | | | | | |
| **H07S1** | **FLORES T-PHASE** | **1.00** | **267** | *e*P | Pg | 02 10 10.9 | -4.0 |
| H07S1 | | | | *e*S | Sg | 02 10 22.4 | -5.5 |
| H07S1 | | | | A | A | 02 10 26.9 | |
| | 285nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **1.25** | **130** | ⇑*i*P | Pn | 02 10 14.3 | -4.8 |
| PCED | | | | *e*S | Sb | 02 10 28.3 | -7.0 |
| PCED | | | | A | A | 02 10 30.6 | |
| | 672nm,0.2s | | | | | | |
| **CALA** | **Caldeira** | **1.28** | **132** | *e*P | Pn | 02 10 15.0 | -4.6 |
| CALA | | | | *e*S | Sb | 02 10 29.5 | -6.8 |
| CALA | | | | A | A | 02 10 32.0 | |
| | 2µm,0.4s | | | | | | |
| **PFCBR** | **Castelo Branco** | **1.31** | **134** | *e*P | Pn | 02 10 15.4 | -4.5 |
| PFCBR | | | | *e*S | Sb | 02 10 29.6 | -7.5 |
| PFCBR | | | | A | A | 02 10 31.6 | |
| | 525nm,0.3s | | | | | | |
| **HOR** | **Horta** | **1.35** | **132** | ⇑*i*P | Pn | 02 10 15.9 | -4.7 |
| HOR | | | | *e*S | Sb | 02 10 31.1 |

CEU **Ceuta** 1.37 282 P **Pn** 02 11 01.2 -2.7
CEU S **Sb** 02 11 16.3 -5.6
**ECEU Ceuta** 1.37 282 Pg **Pn** 02 11 02.7 -1.3
9.2nm,0.2s,SNR=7.7
ECEU Lg Lg 02 11 19.9
110nm,0.1s
**CHEFC Chefchaouen** 1.41 249 P **Pn** 02 11 04.7 +0.1
**CHEFC Chefchaouen** 1.41 249 P **Pn** 02 11 04.2 -0.4
CHEFC S **Sb** 02 11 22.7 -0.6
**EBER Berja** 1.45 28 Pg **Pn** 02 11 05.0 -0.2
6.5nm,0.3s,SNR=30
EBER Lg Lg 02 11 26.1
293nm,0.6s,SNR=8.9
**EGOR Sierra Gorda,** 1.52 348 Pg **Pn** 02 11 06.7 +0.5
1.3nm,0.1s,SNR=7.9
EGOR Lg Lg 02 11 28.1
156nm,0.3s,SNR=7.9
**JBK JBK** 1.60 143 P **Pn** 02 11 06.0 -1.3
**JBK JBK** 1.60 143 P **Pn** 02 11 05.6 -1.7
JBK S **Sn** 02 11 24.5 -3.5
**EQUE Quentar** 1.60 8 Pg **Pb** 02 11 09.1 +0.5
366nm,8.5s,SNR=38
EQUE Lg Lg 02 11 29.8
183nm,0.5s,SNR=5.0
**EJIF Jimena Fronter** 1.64 301 Pg **Pn** 02 11 08.0 +0.4
4µm,0.2s,SNR=7.9
EJIF Lg Lg 02 11 33.9
SNR=7.9
**ENIJ Nijar** 1.83 42 Pn **Pn** 02 11 11.7 +1.5
8.3nm,0.2s,SNR=7.9
ENIJ Sn **Sn** 02 11 32.6 -0.8
SNR=7.9
**RSA Sarsar** 1.86 247 P **Pn** 02 11 12.2 +1.4
RSA S **Sb** 02 11 37.9 +1.6
**LIJA Lijar** 1.87 314 P **Pb** 02 11 13.2 +0.2
LIJA S **Sg** 02 11 39.9 +1.0
**SICH Sidi Chahed** 2.00 221 S Sn 02 11 22.0 -16
**SICH Sidi Chahed** 2.00 221 P **Pn** 02 11 13.4 +0.8
**CNIL Conil** 2.03 292 P **Pg** 02 11 18.8 +1.0
CNIL S **Sg** 02 11 46.4 +2.3
**ESPR Espera** 2.12 307 Pg **Pb** 02 11 16.7 -0.7
4.1nm,0.3s,SNR=16
ESPR Lg Lg 02 11 45.4
55nm,0.4s,SNR=5.9
**LCRM LCR** 2.14 206 P **Pn** 02 11 15.0 +0.3
**LCRM LCR** 2.14 206 P **Pn** 02 11 14.2 -0.5
LCRM S **Sn** 02 11 41.4 0.0
**EQES Quesada** 2.25 13 ⇓Pn **Pb** 02 11 19.1 -0.4
2.9nm,0.1s,SNR=18
EQES Sn **Sb** 02 11 47.9 +0.5
131nm,0.6s,SNR=4.7
**IFR Ifrane** 2.39 209 P **Pn** 02 11 17.7 -0.5
IFR S **Sn** 02 11 46.1 -1.5
**TLOR Lorca, Murcia** 2.61 38 Pn **Pn** 02 11 22.0 +0.9
4.8nm,0.3s,SNR=7.9
TLOR Sn **Sn** 02 11 53.9 +1.0
SNR=7.9
**EADA Adamuz** 2.63 345 Pn **Pn** 02 11 23.6 +2.2
0.9nm,0.3s,SNR=31
EADA Sn **Sb** 02 11 57.0 -1.5
15nm,0.3s,SNR=4.9
**EZAR Zarzadilla de** 2.78 35 Pn **Pn** 02 11 25.2 +1.7
16nm,2.1s,SNR=7.9
EZAR Sn **Sn** 02 11 58.2 +1.0
47nm,2.7s,SNR=7.9
**ECAB El Cabril** 2.80 332 Pn **Pn** 02 11 25.3 +1.6
5.6nm,0.4s,SNR=14
ECAB Sn **Sn** 02 11 57.4 -0.2
24nm,0.3s,SNR=7.8
**MD31 MD31** 2.87 198 P **Pn** 02 11 24.7 0.0
MD31 S **Sn** 02 11 58.1 -1.3
**MDT Midelt** 2.89 195 Pn **Pn** 02 11 24.9 -0.1
1.7nm,0.3s,baz=208,slow=6.3,SNR=33
MDT Sn **Sn** 02 11 58.3 -1.5
7.2nm,0.3s,baz=130,slow=6.3,SNR=7.2
MDT LR LR 02 12 42.7
comp=Z,72nm,21.5s,baz=206,slow=45
**MDT Midelt** 2.89 195 P **Pn** 02 11 24.8 -0.1
**TDRA Tendrara** 2.93 151 P **Pn** 02 11 26.0 +0.4
**TDRA Tendrara** 2.93 151 P **Pn** 02 11 25.5 -0.1
**CART Cartagena** 2.95 47 P **Pn** 02 11 26.5 +0.9
CART S **Sn** 02 11 58.2 -2.8
**CART Cartagena** 2.95 47 P **Pn** 02 11 25.5 -0.1
CART S **Sn** 02 11 57.8 -3.2
**EMUR La Murta** 2.99 41 Pn **Pn** 02 11 27.3 +1.0
6.0nm,0.3s,SNR=9.7
EMUR Sn **Sn** 02 12 02.2 +0.1
11nm,0.4s,SNR=4.5
**EMIN Mina Concepcio** 3.19 313 Pn **Pn** 02 11 29.5 +0.5
3.3nm,0.3s,SNR=16
EMIN Sn **Sn** 02 12 06.7 -0.5
14nm,0.3s
**ZHG ZHG** 3.24 229 P **Pn** 02 11 31.0 +1.3
**ZHG ZHG** 3.24 229 P **Pn** 02 11 28.8 -0.9
**ETOB Tobarra** 3.49 29 Pn **Pn** 02 11 35.9 +2.7
14nm,0.3s,SNR=49
ETOB Sn **Sn** 02 12 15.8 +1.2
63nm,0.9s
**EGRO El Granado** 3.58 303 Pn **Pn** 02 11 34.7 +0.5
11nm,0.3s,SNR=23
EGRO Sn **Sn** 02 12 15.0 -1.5
19nm,0.5s
**PVAQ Vaqueiros** 3.67 300 *e*Pn **Pn** 02 11 35.8 +0.1
PVAQ *e*Sn **Sn** 02 12 17.6 -1.4
PVAQ A A 02 12 19.8
42nm,0.5s
**PVAQ Vaqueiros** 3.67 300 P **Pn** 02 11 35.8 +0.1
PVAQ S **Sn** 02 12 19.3 +0.3
**PVAQ Vaqueiros** 3.67 300 P **Pn** 02 11 35.8 +0.1
PVAQ S **Sn** 02 12 19.3 +0.3
**AVE Averroes** 3.82 234 P **Pn** 02 11 39.3 +1.6
AVE S **Sn** 02 12 19.9 -2.8
**AVE Averroes** 3.82 234 P **Pn** 02 11 36.6 -1.1
**PAB San Pablo** 3.95 353 Pn **Pn** 02 11 41.5 +1.9
1.5nm,2.7s,SNR=7.9
PAB Sn **Sn** 02 12 25.7 -0.3
6.0nm,3.1s,SNR=7.9
**PAB San Pablo** 3.95 353 P **Pn** 02 11 41.8 +2.2
**PCVE Castro Verde** 4.01 301 *e*Pn **Pn** 02 11 40.4 +0.2
PCVE *e*Sn **Sn** 02 12 25.9 -1.3
PCVE A A 02 12 31.6
25nm,0.4s
**GOLM Goulmima** 4.03 195 P **Pn** 02 11 41.5 +0.8
**FIGM Figuig** 4.04 149 P **Pn** 02 11 40.2 -0.6
**ESDC Sonseca Array** 4.05 357 Pn **Pn** 02 11 43.3 +2.4
1.1nm,0.3s,baz=181,slow=12,SNR=52
ESDC Sn **Sn** 02 12 29.1 +0.7
1.1nm,0.3s,baz=188,slow=23,SNR=5.8
**ESDC Sonseca Array** 4.05 357 Pn **Pn** 02 11 43.4 +2.4
2.6nm,0.3s,baz=180,slow=12,SNR=52
**EBAD Badajoz** 4.08 321 Pn **Pn** 02 11 42.1 +0.8
5.5nm,0.3s,SNR=38
EBAD Sn **Sn** 02 12 28.5 -0.6
9.8nm,0.3s,SNR=5.7
**PBEJ Beja** 4.10 307 *e*Pn **Pn** 02 11 42.6 +1.1
PBEJ *e*Sn **Sn** 02 12 28.3 -1.1
PBEJ A A 02 12 32.7
12nm,0.4s
**MESJ Messejana** 4.23 303 *e*P **Pn** 02 11 43.6 +0.2
MESJ *e*S **Sn** 02 12 30.1 -2.7
MESJ IAML 02 12 34.2
comp=N,23nm,0.4s
**MESJ Messejana** 4.23 303 *e*Pn **Pn** 02 11 43.8 +0.5
MESJ *e*Sn **Sn** 02 12 30.7 -2.1
MESJ A A 02 12 31.7
comp=N,14nm,0.8s
**MORF Marmelete** 4.31 294 *e*P **Pn** 02 11 44.5 +0.1
MORF *e*S **Sn** 02 12 31.4 -3.3
MORF IAML 02 12 36.6
comp=N,40nm,0.2s
**MORF Marmelete** 4.31 294 *e*Pn **Pn** 02 11 44.5 +0.1
MORF *e*Sn **Sn** 02 12 33.2 -1.5
MORF A A 02 12 38.8
comp=N,16nm,0.3s
**PFVI Vila Bisbo** 4.38 292 *e*Sn **Sn** 02 12 33.8 -2.6
PFVI A A 02 12 48.9
comp=N,17nm,0.6s
**PFVI Vila Bisbo** 4.38 292 Pn **Pn** 02 11 45.5 +0.1
comp=N,12nm,0.5s,SNR=5.5
PFVI Sn **Sn** 02 12 34.0 -2.4
comp=N,8.9nm,0.3s,SNR=5.8
**PFVI Vila Bisbo** 4.38 292 P **Pn** 02 11 45.4 0.0
**PTEO Sao Teotonio** 4.46 297 *e*Pn **Pn** 02 11 47.1 +0.7
PTEO *e*Sn **Sn** 02 12 36.9 -1.4
PTEO A A 02 12 39.2
comp=N,12nm,0.6s
**PESTR Estremoz** 4.47 318 *e*Pn **Pn** 02 11 48.1 +1.4
PESTR *e*Sn **Sn** 02 12 37.6 -1.1
PESTR A A 02 13 08.0
comp=N,12nm,0.6s
**PESTR Estremoz** 4.47 318 P **Pn** 02 11 48.3 +1.7
**PESTR Estremoz** 4.47 318 P **Pn** 02 11 47.7 +1.0
**EVO Evora** 4.49 312 P **Pn** 02 11 47.6 +0.6
EVO S **Sn** 02 12 37.7 -1.5
**EVO Evora** 4.49 312 *e*Pn **Pn** 02 11 47.7 +0.8
EVO *e*Sn **Sn** 02 12 37.2 -2.0
EVO A A 02 12 41.1
comp=N,24nm,0.5s
**ECHE Chera** 4.53 28 Pn **Pn** 02 11 48.2 +0.7
SNR=7.9
**PNCL Nicolau / Gran** 4.58 304 *e*Pn **Pn** 02 11 48.5 +0.4
PNCL *e*Sn **Sn** 02 12 40.0 -1.4
PNCL A A 02 12 41.8
comp=N,17nm,0.5s
**UCM Universidad Co** 4.70 5 P Pn 02 11 55.9 +6.1
UCM S **Sn** 02 12 42.8 -1.5
**PMRV Marv??o** 4.79 324 *e*Pn **Pn** 02 11 52.0 +1.0
PMRV *e*Sn **Sn** 02 12 45.1 -1.4
PMRV A A 02 13 13.6
comp=N,13nm,0.6s
**EPLA Plasencia** 4.81 338 Pn **Pn** 02 11 52.9 +1.5
comp=N,2.9nm,0.3s,SNR=16
EPLA Sn **Sn** 02 12 45.5 -1.6
comp=N,3.3nm,0.3s,SNR=7.0
**PMTG Montargil** 4.97 315 *e*Pn **Pn** 02 11 54.4 +1.0
PMTG *e*Sn **Sn** 02 12 49.5 -1.4
PMTG A A 02 12 56.8
comp=N,9.4nm,0.7s
**TZRR Tazzarine** 5.06 198 P **Pn** 02 11 55.2 +0.4
**PACT Alcochete** 5.15 309 *e*Pn **Pn** 02 11 57.4 +1.5
PACT *e*Sn **Sn** 02 12 54.5 -0.7
PACT A A 02 12 59.0
comp=N,21nm,0.5s
**PCBR Castelo Branco** 5.16 326 *e*Pn **Pn** 02 11 57.4 +1.4
PCBR *e*Sn **Sn** 02 12 53.8 -1.7
PCBR A A 02 13 06.6
comp=N,8.6nm,0.5s
**EIBI Ibiza** 5.28 48 Pn **Pn** 02 11 58.0 +0.2
SNR=7.9
EIBI Sn **Sn** 02 12 56.5 -2.1
SNR=7.9
**OUZM OUZ** 5.34 209 P **Pn** 02 11 60.0 +1.3
OUZM S **Sn** 02 13 01.0 +0.8
**OUZM OUZ** 5.34 209 P **Pn** 02 11 59.3 +0.6
**PMST Lisbon--Monsan** 5.35 307 *e*Pn **Pn** 02 11 59.9 +1.2
**ETOR Torete** 5.36 14 Pn **Pn** 02 11 59.6 +0.8
comp=N,5.3nm,0.5s,SNR=7.8
ETOR Sn **Sn** 02 12 58.6 -2.0
SNR=7.9
**EMOS Mosqueruela** 5.39 28 Pn **Pn** 02 12 01.2 +1.7
comp=N,4.5nm,4.7s,SNR=7.9
**PMAFR Mafra** 5.54 309 *e*Sn **Sn** 02 13 03.3 -1.7
PMAFR A A 02 13 05.6
comp=N,22nm,0.8s
**PMAFR Mafra** 5.54 309 Pn **Pn** 02 12 01.4 +0.1
comp=N,0.5nm,3.7s,SNR=7.9
PMAFR Sn **Sn** 02 13 01.3 -3.7
comp=N,6.9nm,3.3s,SNR=7.9
**OUK Oukaimeden** 5.59 219 P **Pn** 02 12 02.4 0.0
**PSBE So Bento** 5.60 316 *e*Pn **Pn** 02 12 03.5 +1.4
PSBE *e*Sn **Sn** 02 13 05.1 -1.3
PSBE A A 02 13 22.2
comp=N,14nm,0.7s
**MTE Manteigas** 5.64 329 *e*Pn **Pn** 02 12 04.7 +1.9
MTE *e*Sn **Sn** 02 13 07.5 -0.2
MTE A A 02 13 21.1
comp=N,15nm,0.4s
**ZGR Zagora** 5.71 197 P **Pn** 02 12 03.7 0.0
**PCAS Casmilo, Conde** 5.82 321 *e*Pn **Pn** 02 12 06.8 +1.7
**PVIS Viseu** 6.05 328 *e*Pn **Pn** 02 12 10.3 +1.9
PVIS *e*Sn **Sn** 02 13 16.2 -1.6
PVIS A A 02 13 20.2
comp=N,6.7nm,0.5s
**MVO Moncorvo** 6.11 336 *e*Pn **Pn** 02 12 11.1 +1.9
MVO *e*Sn **Sn** 02 13 17.9 -1.3
MVO A A 02 13 28.7
comp=N,11nm,0.6s
**MVO Moncorvo** 6.11 336 Pn **Pn** 02 12 10.6 +1.4
comp=N,6.3nm,2.0s,SNR=7.9
MVO Sn **Sn** 02 13 16.9 -2.3
comp=N,7.7nm,0.3s,SNR=11
**ERTA Horta de San J** 6.21 30 Pn **Pn** 02 12 11.5 +1.0
comp=N,0.3nm,2.8s,SNR=7.9
**TTIG Tnine Tigouga,** 6.42 219 P **Pn** 02 12 10.9 -2.6
**PVRL Vila Real** 6.46 332 *e*Pn **Pn** 02 12 15.6 +1.7
PVRL *e*Sn **Sn** 02 13 26.3 -1.3
PVRL A A 02 13 29.4
comp=N,15nm,0.5s
**POLO Lamas de Olo** 6.57 332 *e*Pn **Pn** 02 12 17.3 +1.8
**PBRG Braganca** 6.61 340 *e*Pn **Pn** 02 12 18.4 +2.4
PBRG *e*Sn **Sn** 02 13 31.5 +0.1
PBRG A A 02 13 33.5
comp=N,5.7nm,0.8s
**ETOS Mallorca** 6.64 49 Pn **Pn** 02 12 17.7 +1.3
comp=N,4.1nm,2.8s,SNR=7.9
ETOS Sn Sn 02 13 19.3 -13
comp=N,13nm,1.1s,SNR=4.7
**ELAN Lanestosa** 7.61 2 Pn **Pn** 02 12 30.7 +1.0
comp=N,2.1nm,3.6s,SNR=7.9
**ETSF Etsaut** 7.67 18 *e*Pn **Pn** 02 12 33.8 +3.1
ETSF *e*Sn **Sn** 02 13 55.0 -2.7
comp=N,3.0nm,0.6s
**SJPF Ste Jean** 7.73 14 *e*Pn **Pn** 02 12 34.1 +2.7
SJPF *e*Sn **Sn** 02 13 56.3 -2.7
**CSOR Sort** 7.74 28 Pn **Pn** 02 12 33.0 +1.5
comp=N,1.8nm,3.6s,SNR=7.9
**EARI Arriondas** 7.76 352 Pn **Pn** 02 12 32.6 +0.8
comp=N,2.3nm,5.2s,SNR=7.9
**ATE Arette** 7.82 17 Pn **Pn** 02 12 33.9 +1.3
comp=N,3.1nm,4.2s,SNR=7.9
**EPF Esparros** 8.05 22 *e*Pn **Pn** 02 12 37.2 +1.5
EPF *e*Sn **Sn** 02 14 03.7 -3.0
**MTLF Montolieu** 8.98 29 *e*Pn **Pn** 02 12 49.4 +0.9
MTLF *e*Sn **Sn** 02 14 25.6 -4.0
**QUIF Quistinic** 12.30 2 *e*Pn **Pn** 02 13 35.2 +1.4
QUIF *e*Sn **Sn** 02 15 46.0 -4.9
comp=N,5.1nm,0.8s
**TORD Torodi Ar. Bea** 22.90 166 P **P** 02 15 47.5 +4.7
comp=N,1.4nm,0.8s,baz=347,slow=12,SNR=7.1
**GEYT Alibeck** 48.78 68 LR LR 02 45 04.9
comp=N,18nm,18.0s,baz=49,slow=42
**MKAR Makanchi Array** 62.60 51 P P 02 21 09.4 +6.3
comp=N,0.3nm,0.8s,baz=280,slow=8.6,SNR=2.9
**YKA Yellowknife Ar** 67.75 332 P **P** 02 21 37.5 +1.3
comp=N,0.1nm,0.4s,baz=59,slow=7.4,SNR=1.6

*MDD* ***12*** *02:16:35.9±0.6,36°.31N×4°.58W, h97km±5km, mb3.5/48, Error ellipse: s-maj=5.5km s-min=3.6km az=171.0*
*MDD EMS: II INTENSIDAD MAXIMA.*
*CNRM* ***12*** *02:16:35.4,36°.21N×4°.81W, h90km, ml4.1*
*IDC* ***12*** *02:16:35.0±2.0,36°.26N×4°.38W, h103km±21km, mb3.3/9, mb1 3.5/13, mb1mx3.3/40, mbtmp3.7/13, Error ellipse: s-maj=39.5km s-min=14.1km az=97.0*
*IGIL* ***12*** *02:16:35.4,36°.31N×4°.58W, h24km, ML4.0*
*LDG* ***12*** *02:16:35.6±0.2,36°.40N×4°.59W, h10km, Ml3.6/17, Error ellipse: s-maj=4.1km s-min=1.7km az=171.0*
*INMG* ***12*** *02:16:35.8±1.7,36°.30N×4°.64W, h95km±7km, ML3.5, Error ellipse: s-maj=4.5km s-min=2.9km az=3.0*
*SFS* ***12*** *02:16:36.0,36°.10N×4°.50W, h96km, ML3.4, ALBORAN W.*

**ISC 12 02:16:34.0±0.6,36°32N±0°03×4°59W±0°03,h105km±6km, n170,σ1s97/279,mb3.5/8,20C,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMIJ** | **Mijas** | **0.29** | **329** | ⇑P | **Pn** | **02 16 49.6** | **+0.4** |
| | 339nm,0.3s,SNR=18 | | | | | | |
| EMIJ | | | | S | **Sn** | **02 16 60.0** | **-0.6** |
| | 1µm,0.2s | | | | | | |
| **EMAL** | **Malaga-Limoner** | **0.46** | **16** | P | **Pn** | **02 16 50.9** | **+0.9** |
| EMAL | | | | S | **Sn** | **02 17 01.2** | **-0.9** |
| **EJIF** | **Jimena Fronter** | **0.73** | **281** | ⇑P | **Pn** | **02 16 53.9** | **+1.7** |
| | SNR=18 | | | | | | |
| EJIF | | | | S | **Sn** | **02 17 01.8** | **-3.9** |
| | SNR=7.9 | | | | | | |
| **CEU** | **Ceuta** | **0.76** | **237** | P | **Pn** | **02 16 52.4** | **0.0** |
| CEU | | | | S | **Sn** | **02 17 06.3** | **0.0** |

**ECEU Ceuta** 0.77 237 P **Pn** 02 16 53.7 +1.2
150nm,0.1s,SNR=82
ECEU S **Sn** 02 17 07.3 +0.9
312nm,0.1s,SNR=8.7
**EGOR Sierra Gorda,** 0.88 26 P **Pn** 02 16 55.2 +1.4
102nm,0.2s,SNR=7.9
EGOR S **Sn** 02 17 09.4 +0.8
651nm,0.3s,SNR=7.9
**LIJA Lijar** 0.88 312 P **Pn** 02 16 56.5 +2.8
LIJA S **Sn** 02 17 07.1 -1.5
**ELGU Los Guajares,** 0.95 54 P **Pn** 02 16 54.3 0.0
36nm,0.1s,SNR=7.9
ELGU S **Sn** 02 17 08.2 -1.5
729nm,0.2s,SNR=7.9
**ESPR Espera** 1.16 299 ⇑P **Pn** 02 16 58.1 +1.5
250nm,0.2s,SNR=18
ESPR S **Sn** 02 17 14.4 +0.8
803nm,0.2s,SNR=27
**CNIL Conil** 1.19 273 P **Pn** 02 17 00.0 +3.2
CNIL S **Sn** 02 17 12.0 -2.1
**PALE Palemas** 1.22 154 P **Pn** 02 16 57.5 +0.2
**PALE Palemas** 1.22 154 P **Pn** 02 16 57.3 +0.1
PALE S **Sn** 02 17 13.4 -1.4
**EQUE Quentar** 1.28 46 ⇑P **Pn** 02 16 59.7 +1.7
27nm,0.2s,SNR=18
EQUE S **Sn** 02 17 17.0 +0.9
211nm,0.3s,SNR=18
**EALB Alboran** 1.31 106 S **Sn** 02 17 15.0 -1.6
314nm,0.3s,SNR=7.9
**SFS San Fernando** 1.32 277 P **Pn** 02 17 00.2 +2.0
SFS S **Sn** 02 17 19.1 +2.3
**SFS San Fernando** 1.32 277 S **Pn** 02 17 00.4 +2.1
**SFS San Fernando** 1.32 277 P **Pn** 02 17 00.4 +2.1
SFS S **Sn** 02 17 14.4 -2.3
**CHEFC Chefchaouen** 1.35 207 P **Pn** 02 17 00.7 +1.8
CHEFC S **Sn** 02 17 19.0 +1.3
**EBER Berja** 1.48 66 P **Pn** 02 17 01.2 +0.8
38nm,0.3s,SNR=36
EBER S **Sn** 02 17 20.6 0.0
283nm,0.5s,SNR=7.9
**EMEL Melilla** 1.67 127 ⇑P **Pn** 02 17 03.1 +0.6
404nm,0.2s,SNR=18
EMEL S **Sn** 02 17 22.2 -2.1
580nm,0.3s
**EADA Adamuz** 1.85 0 ⇑P **Pn** 02 17 05.9 +1.0
71nm,0.1s,SNR=18
EADA S **Sn** 02 17 27.4 -1.0
117nm,0.1s,SNR=9.9
**ECAB El Cabril** 1.88 339 ⇑P **Pn** 02 17 05.8 +0.6
101nm,0.2s,SNR=18
ECAB S **Sn** 02 17 28.2 -0.8
87nm,0.2s,SNR=13
**ARNO Arenosillo** 1.89 295 P **Pn** 02 17 06.9 +1.5
ARNO S **Sn** 02 17 29.9 +0.6
**EQES Quesada** 1.92 39 ⇑P **Pn** 02 17 07.1 +1.3
110nm,0.2s,SNR=18
EQES S **Sn** 02 17 30.0 0.0
335nm,0.2s,SNR=38
**ENIJ Nijar** 2.02 70 P **Pn** 02 17 08.1 +1.0
14nm,0.2s,SNR=7.9
ENIJ S **Sn** 02 17 31.2 -1.2
62nm,0.3s,SNR=7.9
**CHAS Isla Isabel II** 2.08 122 S **Sn** 02 17 31.5 -2.3
**EMIN Mina Concepcio** 2.21 312 P **Pn** 02 17 10.2 +0.7
294nm,0.1s,SNR=1139
EMIN S **Sn** 02 17 35.2 -1.4
59nm,0.0s,SNR=20
**SICH Sidi Chahed** 2.29 195 S **Pn** 02 17 11.5 +1.0
**SICH Sidi Chahed** 2.29 195 P **Pn** 02 17 11.2 +0.7
SICH S **Sn** 02 17 37.5 -0.9
**TAF Taforalt** 2.32 130 P **Pn** 02 17 11.6 +0.6
**JBK JBK** 2.58 140 P **Pn** 02 17 15.0 +0.5
**EGRO El Granado** 2.62 298 P **Pn** 02 17 15.6 +0.8
305nm,0.2s,SNR=710
EGRO S **Sn** 02 17 44.6 -1.6
411nm,0.1s,SNR=17
**LCRM LCR** 2.63 185 P **Pn** 02 17 15.2 +0.1
LCRM S **Sn** 02 17 47.0 +0.2
**LCRM LCR** 2.63 185 P **Pn** 02 17 15.0 -0.2
**PBAR Barrancos** 2.70 314 *e*P **Pn** 02 17 16.7 +0.9
PBAR *e*S **Sn** 02 17 46.9 -1.1
PBAR A A 02 17 48.7
168nm,0.2s
**PVAQ Vaqueiros** 2.74 294⇑ *e*P **Pn** 02 17 17.0 +0.7
PVAQ *e*S **Sn** 02 17 47.1 -1.8
PVAQ A A 02 17 49.6
392nm,0.2s
**PVAQ Vaqueiros** 2.74 294 P **Pn** 02 17 16.5 +0.2
PVAQ S **Sn** 02 17 47.1 -1.8
**PVAQ Vaqueiros** 2.74 294 P **Pn** 02 17 16.5 +0.2
PVAQ S **Sn** 02 17 47.1 -1.8
**EZAR Zarzadilla de** 2.79 55 P **Pn** 02 17 20.5 +3.4
6.5nm,0.2s,SNR=7.9
EZAR S **Sn** 02 17 50.5 +0.3
2.2nm,0.0s,SNR=7.9
**IFR Ifrane** 2.83 189 P **Pn** 02 17 17.8 0.0
IFR S **Sn** 02 17 48.1 -3.4
**PCVE Castro Verde** 3.06 296 *e*P **Pn** 02 17 21.3 +0.6
PCVE *e*S **Sn** 02 17 54.7 -2.0
PCVE A A 02 17 55.8
220nm,0.2s
**EMUR La Murta** 3.08 59 P **Pn** 02 17 22.7 +1.8
3.5nm,0.3s,SNR=7.2
EMUR S **Sn** 02 17 56.6 -0.5
SNR=7.9
**EBAD Badajoz** 3.11 322 ⇑P **Pn** 02 17 22.2 +1.0
251nm,0.2s,SNR=18
EBAD S **Sn** 02 17 56.5 -1.2
440nm,0.2s,SNR=7.2
**PBEJ Beja** 3.13 304 *e*P **Pn** 02 17 22.2 +0.7
PBEJ *e*S **Sn** 02 17 56.3 -1.9
PBEJ A A 02 17 58.9
95nm,0.2s
**PAB San Pablo** 3.23 3 ⇑P **Pn** 02 17 23.7 +0.7
29nm,0.2s,SNR=18
PAB S **Sn** 02 17 58.7 -2.1
59nm,0.3s,SNR=7.9
**PAB San Pablo** 3.23 3 P **Pn** 02 17 23.7 +0.7
**MESJ Messejana** 3.28 299 *e*P **Pn** 02 17 24.1 +0.6
MESJ *e*S **Sn** 02 17 59.6 -2.3
MESJ IAML 02 18 02.7
comp=N,314nm,0.2s
**MESJ Messejana** 3.28 299 *e*P **Pn** 02 17 24.2 +0.6
MESJ *e*S **Sn** 02 17 59.9 -2.0
MESJ A A 02 18 02.5
comp=N,122nm,0.2s
**ZHG ZHG** 3.33 211 P **Pn** 02 17 24.1 -0.2
**ZHG ZHG** 3.33 211 P **Pn** 02 17 24.0 -0.2
ZHG S **Sn** 02 17 58.9 -4.2
**ETOB Tobarra** 3.35 45 P **Pn** 02 17 25.4 +0.8
comp=N,53nm,0.2s,SNR=378
ETOB S **Sn** 02 18 01.2 -2.5
comp=N,63nm,0.2s,SNR=7.8
**ESDC Sonseca Array** 3.39 8 P **Pn** 02 17 25.9 +0.8
comp=N,7.2nm,0.3s,baz=192,slow=12,SNR=215
ESDC S **Sn** 02 18 02.4 -2.1
comp=N,6.6nm,0.3s,baz=192,slow=24,SNR=12
**ESDC Sonseca Array** 3.39 8 P **Pn** 02 17 25.9 +0.8
comp=N,16nm,0.3s,baz=194,slow=13,SNR=345
ESDC S **Sn** 02 18 02.1 -2.4
comp=N,11nm,0.3s,baz=189,slow=23,SNR=7.8
**MORF Marmelete** 3.41 288 *e*P **Pn** 02 17 25.7 +0.4
MORF *e*S **Sn** 02 18 02.6 -2.5
MORF IAML 02 18 05.3
comp=N,555nm,0.3s
**MORF Marmelete** 3.41 288 *e*P **Pn** 02 17 25.7 +0.4
MORF *e*S **Sn** 02 18 03.0 -2.0
MORF A A 02 18 06.5
comp=N,265nm,0.1s
**MD31 MD31** 3.44 182 P **Pn** 02 17 26.2 +0.3
MD31 S **Sn** 02 18 03.2 -2.7
**PESTR Estremoz** 3.49 318 *e*P **Pn** 02 17 27.2 +0.8
PESTR *e*S **Sn** 02 18 05.3 -1.6
PESTR A A 02 18 20.9
comp=N,50nm,0.4s
**PESTR Estremoz** 3.49 318 P **Pn** 02 17 27.2 +0.8
**PESTR Estremoz** 3.49 318 P **Pn** 02 17 27.2 +0.8
PESTR S **Sn** 02 18 04.9 -2.0
**MDT Midelt** 3.49 180 P **Pn** 02 17 26.9 +0.4
comp=N,11nm,0.3s,baz=153,slow=21,SNR=586
MDT S **Sn** 02 18 03.7 -3.5
comp=N,58nm,0.3s,baz=196,slow=8.0,SNR=27
**MDT Midelt** 3.49 180 P **Pn** 02 17 27.0 +0.4
MDT S **Sn** 02 18 05.2 -2.0
**MDT Midelt** 3.49 180 P **Pn** 02 17 26.9 +0.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MDT | | | | S | Sn | 02 18 05.2 | -2.0 | |
| **PFVI** | **Vila Bisbo** | **3.50** | **285** | *e*P | Pn | 02 17 26.9 | +0.3 | |
| PFVI | | | | *e*S | Sn | 02 18 04.9 | -2.4 | |
| PFVI | | | | A | A | 02 18 06.9 | | |
| | comp=N,119nm,0.1s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.50** | **285** | P | Pn | 02 17 27.0 | +0.3 | |
| | comp=N,22nm,0.1s,SNR=47 | | | | | | | |
| PFVI | | | | S | Sn | 02 18 04.8 | -2.4 | |
| | comp=N,339nm,0.2s,SNR=7.8 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.50** | **285** | P | Pn | 02 17 26.8 | +0.3 | |
| PFVI | | | | S | Sn | 02 18 05.4 | -1.9 | |
| **PFVI** | **Vila Bisbo** | **3.50** | **285** | P | Pn | 02 17 26.8 | +0.3 | |
| PFVI | | | | S | Sn | 02 18 05.4 | -1.9 | |
| **EVO** | **Evora** | **3.51** | **310** | P | Pn | 02 17 27.6 | +0.9 | |
| EVO | | | | S | Sn | 02 18 05.5 | -1.9 | |
| **EVO** | **Evora** | **3.51** | **310**⇑ | *e*P | Pn | 02 17 27.6 | +0.9 | |
| EVO | | | | *e*S | Sn | 02 18 05.7 | -1.7 | |
| EVO | | | | A | A | 02 18 08.2 | | |
| | comp=N,186nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **3.54** | **292** | *e*P | Pn | 02 17 27.8 | +0.8 | |
| PTEO | | | | *e*S | Sn | 02 18 06.2 | -1.8 | |
| PTEO | | | | A | A | 02 18 08.2 | | |
| | comp=N,99nm,0.3s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.62** | **301**⇑ | *e*P | Pn | 02 17 28.7 | +0.6 | |
| PNCL | | | | *e*S | Sn | 02 18 08.0 | -2.0 | |
| PNCL | | | | A | A | 02 18 10.6 | | |
| | comp=N,105nm,0.3s | | | | | | | |
| **AVE** | **Averroes** | **3.81** | **219** | P | Pn | 02 17 30.9 | +0.2 | |
| AVE | | | | S | Sn | 02 18 04.5 | -10 | |
| **AVE** | **Averroes** | **3.81** | **219** | P | Pn | 02 17 30.7 | +0.1 | |
| **AVE** | **Averroes** | **3.81** | **219** | P | Pn | 02 17 30.7 | +0.1 | |
| AVE | | | | S | Sn | 02 18 10.7 | -3.8 | |
| **PMRV** | **Marv??o** | **3.82** | **325**⇑ | *e*P | Pn | 02 17 31.8 | +1.0 | |
| PMRV | | | | *e*S | Sn | 02 18 13.1 | -1.7 | |
| PMRV | | | | A | A | 02 18 27.8 | | |
| | comp=N,48nm,0.3s | | | | | | | |
| **TDRA** | **Tendrara** | **3.89** | **146** | P | Pn | 02 17 34.0 | +2.0 | |
| **TDRA** | **Tendrara** | **3.89** | **146** | P | Pn | 02 17 33.2 | +1.2 | |
| TDRA | | | | S | Sn | 02 18 19.9 | +3.1 | |
| **EPLA** | **Plasencia** | **3.92** | **343**⇑ | P | Pn | 02 17 33.4 | +1.2 | |
| | comp=N,27nm,0.1s,SNR=18 | | | | | | | |
| EPLA | | | | S | Sn | 02 18 16.7 | -0.6 | |
| | comp=N,22nm,0.1s | | | | | | | |
| **AFON** | **Font Roja** | **3.98** | **53** | P | Pn | 02 17 34.5 | +1.5 | |
| | comp=N,19nm,0.4s,SNR=8.8 | | | | | | | |
| AFON | | | | S | Sn | 02 18 17.1 | -1.7 | |
| | comp=N,32nm,0.3s,SNR=5.5 | | | | | | | |
| **PMTG** | **Montargil** | **3.99** | **315**⇑ | *e*P | Pn | 02 17 33.6 | +0.6 | |
| PMTG | | | | *e*S | Sn | 02 18 16.6 | -2.2 | |
| PMTG | | | | A | A | 02 18 17.7 | | |
| | comp=N,36nm,0.6s | | | | | | | |
| **UCM** | **Universidad Co** | **4.12** | **14** | P | Pn | 02 17 36.1 | +1.2 | |
| UCM | | | | S | Sn | 02 18 19.6 | -2.5 | |
| **PACT** | **Alcochete** | **4.17** | **307** | *e*P | Pn | 02 17 36.6 | +1.1 | |
| PACT | | | | *e*S | Sn | 02 18 22.0 | -1.2 | |
| PACT | | | | A | A | 02 18 35.3 | | |
| | comp=N,58nm,0.5s | | | | | | | |
| **PCBR** | **Castelo Branco** | **4.19** | **328**⇑ | *e*P | Pn | 02 17 36.9 | +1.1 | |
| PCBR | | | | *e*S | Sn | 02 18 21.5 | -2.3 | |
| PCBR | | | | A | A | 02 18 34.8 | | |
| | comp=N,28nm,0.4s | | | | | | | |
| **GUD** | **Guadarrama** | **4.33** | **4**⇑ | P | Pn | 02 17 38.6 | +0.8 | |
| | comp=N,6.6nm,0.2s,SNR=18 | | | | | | | |
| **ECHE** | **Chera** | **4.34** | **40** | P | Pn | 02 17 38.4 | +0.5 | |
| | comp=N,10nm,0.3s,SNR=7.9 | | | | | | | |
| **LIS** | **Lisbon** | **4.35** | **305** | *e*P | Pn | 02 17 39.7 | +1.8 | |
| LIS | | | | *e*S | Sn | 02 18 26.0 | -1.5 | |
| **PMST** | **Lisbon--Monsan** | **4.38** | **305** | *e*P | Pn | 02 17 39.6 | +1.3 | |
| PMST | | | | *e*S | Sn | 02 18 26.6 | -1.7 | |
| PMST | | | | A | A | 02 18 44.0 | | |
| | comp=N,44nm,0.2s | | | | | | | |
| **PMAFR** | **Mafra** | **4.56** | **307** | *e*P | Pn | 02 17 41.7 | +0.9 | |
| PMAFR | | | | *e*S | Sn | 02 18 31.8 | -1.0 | |
| PMAFR | | | | A | A | 02 18 34.3 | | |
| | comp=N,64nm,0.8s | | | | | | | |
| **PMAFR** | **Mafra** | **4.56** | **307**⇑ | P | Pn | 02 17 42.4 | +1.6 | |
| | comp=N,36nm,0.2s,SNR=18 | | | | | | | |
| PMAFR | | | | S | Sn | 02 18 30.9 | -1.9 | |
| | comp=N,39nm,0.1s,SNR=7.9 | | | | | | | |
| **GOLM** | **Goulmima** | **4.61** | **184** | P | Pn | 02 17 43.0 | +1.3 | |
| **GOLM** | **Goulmima** | **4.61** | **184** | P | Pn | 02 17 42.7 | +1.1 | |
| GOLM | | | | S | Sn | 02 18 34.2 | 0.0 | |
| **PSBE** | **So Bento** | **4.61** | **315** | *e*P | Pn | 02 17 42.3 | +0.8 | |
| PSBE | | | | *e*S | Sn | 02 18 32.6 | -1.4 | |
| PSBE | | | | A | A | 02 18 37.8 | | |
| | comp=N,38nm,0.3s | | | | | | | |
| **MTE** | **Manteigas** | **4.69** | **331** | *e*P | Pn | 02 17 43.4 | +0.8 | |
| **PCAS** | **Casmilo, Conde** | **4.84** | **322** | *e*P | Pn | 02 17 45.3 | +0.8 | |
| PCAS | | | | *e*S | Sn | 02 18 36.7 | -2.7 | |
| PCAS | | | | A | A | 02 19 11.9 | | |
| | comp=N,26nm,0.4s | | | | | | | |
| **ETOR** | **Torete** | **4.91** | **23**⇑ | P | Pn | 02 17 46.4 | +0.8 | |
| | comp=N,56nm,0.1s,SNR=18 | | | | | | | |
| ETOR | | | | S | Sn | 02 18 36.9 | -4.4 | |
| | comp=N,56nm,0.3s,SNR=8.1 | | | | | | | |
| **COI** | **Coimbra** | **4.92** | **323** | *e*P | Pn | 02 17 46.5 | +0.9 | |
| **PVIS** | **Viseu** | **5.10** | **330** | *e*P | Pn | 02 17 48.9 | +0.8 | |
| PVIS | | | | *e*S | Sn | 02 18 44.4 | -1.4 | |
| PVIS | | | | A | A | 02 18 58.4 | | |
| | comp=N,16nm,0.5s | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.17** | **37** | P | Pn | 02 17 51.3 | +2.1 | |
| | comp=N,4.5nm,0.2s,SNR=8.4 | | | | | | | |
| EMOS | | | | S | Sn | 02 18 44.7 | -3.1 | |
| | comp=N,13nm,0.2s,SNR=8.7 | | | | | | | |
| **MVO** | **Moncorvo** | **5.20** | **339** | *e*P | Pn | 02 17 50.4 | +0.9 | |
| **MVO** | **Moncorvo** | **5.20** | **339** | P | Pn | 02 17 50.5 | +0.9 | |
| | comp=N,18nm,0.1s,SNR=60 | | | | | | | |
| MVO | | | | S | Sn | 02 18 46.3 | -2.1 | |
| | comp=N,11nm,0.3s,SNR=7.1 | | | | | | | |
| **PVRL** | **Vila Real** | **5.52** | **335** | *e*P | Pn | 02 17 55.0 | +1.2 | |
| PVRL | | | | *e*S | Sn | 02 18 54.1 | -1.9 | |
| PVRL | | | | A | A | 02 18 59.0 | | |
| | comp=N,21nm,0.2s | | | | | | | |
| **TZRR** | **Tazzarine** | **5.58** | **189** | P | Pn | 02 17 56.0 | +1.3 | |
| **TZRR** | **Tazzarine** | **5.58** | **189** | P | Pn | 02 17 55.7 | +1.0 | |
| TZRR | | | | S | Sn | 02 18 55.3 | -2.3 | |
| **POLO** | **Lamas de Olo** | **5.64** | **335** | *e*P | Pn | 02 17 57.1 | +1.7 | |
| **OUZM** | **OUZ** | **5.69** | **199** | P | Pn | 02 17 57.0 | +0.8 | |
| **OUZM** | **OUZ** | **5.69** | **199** | P | Pn | 02 17 56.8 | +0.6 | |
| **PBRG** | **Braganca** | **5.73** | **344** | *e*P | Pn | 02 17 58.3 | +1.6 | |
| PBRG | | | | *e*S | Sn | 02 18 59.0 | -2.1 | |
| PBRG | | | | A | A | 02 19 02.0 | | |
| | comp=N,6.1nm,0.2s | | | | | | | |
| **PTO** | **Porto** | **5.75** | **328** | *e*P | Pn | 02 17 57.8 | +1.0 | |
| PTO | | | | *e*S | Sn | 02 18 59.8 | -1.6 | |
| PTO | | | | A | A | 02 19 02.5 | | |
| | comp=N,19nm,0.3s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.78** | **209** | P | Pn | 02 17 58.0 | +0.3 | |
| **OUK** | **Oukaimeden** | **5.78** | **209** | P | Pn | 02 17 57.5 | -0.2 | |
| **PCAB** | **Cabril** | **6.01** | **335** | *e*P | Pn | 02 18 02.2 | +1.7 | |
| **ERTA** | **Horta de San J** | **6.02** | **38** | P | Pn | 02 18 02.6 | +2.0 | |
| | comp=N,2.6nm,0.2s,SNR=18 | | | | | | | |
| ERTA | | | | S | Sn | 02 19 05.6 | -2.6 | |
| | comp=N,8.4nm,0.2s,SNR=43 | | | | | | | |
| **ELOB** | **Lobios** | **6.17** | **335** | P | Pn | 02 18 04.3 | +1.8 | |
| | comp=N,9.5nm,0.2s,SNR=10.0 | | | | | | | |
| ELOB | | | | S | Sn | 02 19 09.0 | -2.8 | |
| | comp=N,6.3nm,0.3s,SNR=7.6 | | | | | | | |
| **ZGR** | **Zagora** | **6.24** | **188** | P | Pn | 02 18 04.2 | +0.5 | |
| **PGAV** | **Gavieira, Arco** | **6.33** | **334** | *e*P | Pn | 02 18 06.1 | +1.3 | |
| **TTIG** | **Tnine Tigouga,** | **6.59** | **210** | P | Pn | 02 18 06.1 | -2.4 | |
| **TTIG** | **Tnine Tigouga,** | **6.59** | **210** | P | Pn | 02 18 06.1 | -2.4 | |
| **EZAM** | **Zamans** | **6.64** | **333** | P | Pn | 02 18 10.8 | +1.8 | |
| | comp=N,1.2nm,0.0s,SNR=7.9 | | | | | | | |
| EZAM | | | | S | Sn | 02 19 20.0 | -3.2 | |
| | comp=N,2.7nm,0.2s,SNR=7.9 | | | | | | | |
| **EPOB** | **Poblet** | **6.69** | **40** | P | Pn | 02 18 10.7 | +0.9 | |
| | comp=N,4.4nm,0.2s,SNR=19 | | | | | | | |
| EPOB | | | | S | Sn | 02 19 20.7 | -3.8 | |
| | comp=N,3.2nm,0.3s,SNR=7.9 | | | | | | | |
| **ETOS** | **Mallorca** | **6.78** | **57** | S | Sn | 02 19 22.4 | -4.1 | |
| | comp=N,1.0nm,0.3s,SNR=7.9 | | | | | | | |
| **EARA** | **Aranguren** | **6.85** | **19** | S | Sn | 02 19 25.8 | -2.5 | |
| | comp=N,9.7nm,0.3s,SNR=7.9 | | | | | | | |
| **ELAN** | **Lanestosa** | **6.96** | **7** | P | Pn | 02 18 14.1 | +0.8 | |
| | comp=N,3.9nm,0.3s,SNR=20 | | | | | | | |
| ELAN | | | | S | Sn | 02 19 27.5 | -3.5 | |
| | comp=N,4.1nm,0.3s,SNR=8.2 | | | | | | | |
| **EARI** | **Arriondas** | **6.99** | **356** | P | Pn | 02 18 15.0 | +1.3 | |
| | comp=N,1.6nm,0.2s,SNR=16 | | | | | | | |
| EARI | | | | S | Sn | 02 19 28.7 | -3.0 | |
| | comp=N,1.6nm,0.3s,SNR=7.9 | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **7.02** | **338** | P | Pn | 02 18 16.2 | +2.1 | |
| | comp=N,3.8nm,0.1s,SNR=7.9 | | | | | | | |
| **EORO** | **Oroz-Betelu** | **7.04** | **20** | P | Pn | 02 18 15.7 | +1.3 | |
| | comp=N,1.6nm,0.1s,SNR=6.7 | | | | | | | |
| EORO | | | | S | Sn | 02 19 29.9 | -2.9 | |
| | comp=N,17nm,0.4s,SNR=5.5 | | | | | | | |
| **SJPF** | **Ste Jean** | **7.26** | **20** | *e*Pn | Pn | 02 18 18.0 | +0.6 | |
| SJPF | | | | *e*Sn | Sn | 02 19 34.5 | -3.8 | |
| | comp=N,12nm,0.3s | | | | | | | |
| **ETSF** | **Etsaut** | **7.27** | **24** | *e*Pn | Pn | 02 18 18.2 | +0.7 | |
| ETSF | | | | *e*Sn | Sn | 02 19 35.0 | -3.5 | |
| | comp=N,6.1nm,0.3s | | | | | | | |
| **EPON** | **Pontenova** | **7.27** | **345** | P | Pn | 02 18 19.1 | +1.6 | |
| | comp=N,6.2nm,0.2s,SNR=11 | | | | | | | |
| EPON | | | | S | Sn | 02 19 36.9 | -1.7 | |
| | comp=N,1.4nm,0.2s,SNR=134 | | | | | | | |
| **EALK** | **Alkurruntz** | **7.29** | **18** | P | Pn | 02 18 19.9 | +2.1 | |
| | comp=N,7.4nm,0.2s,SNR=12 | | | | | | | |
| EALK | | | | S | Sn | 02 19 35.1 | -3.9 | |
| | comp=N,96nm,0.5s,SNR=292 | | | | | | | |
| **EMIR** | **Miracle** | **7.33** | **38** | P | Pn | 02 18 20.6 | +2.2 | |
| | comp=N,6.0nm,0.3s,SNR=7.9 | | | | | | | |
| **ECHI** | **Chisagues Biel** | **7.34** | **29** | P | Pn | 02 18 20.3 | +1.8 | |
| | comp=N,1.8nm,0.2s,SNR=7.9 | | | | | | | |
| ECHI | | | | S | Sn | 02 19 36.3 | -4.0 | |
| | comp=N,2.7nm,0.3s,SNR=7.9 | | | | | | | |
| **ATE** | **Arette** | **7.39** | **23** | P | Pn | 02 18 20.6 | +1.4 | |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | | |
| ATE | | | | S | Sn | 02 19 38.0 | -3.4 | |
| | comp=N,6.5nm,0.4s,SNR=7.9 | | | | | | | |
| **CSOR** | **Sort** | **7.50** | **34** | P | Pn | 02 18 21.6 | +0.9 | |
| | comp=N,2.1nm,0.2s,SNR=17 | | | | | | | |
| CSOR | | | | S | Sn | 02 19 41.2 | -2.9 | |
| | comp=N,5.0nm,0.2s,SNR=7.9 | | | | | | | |
| **EPF** | **Esparros** | **7.71** | **28** | *e*Pn | Pn | 02 18 24.5 | +1.1 | |
| EPF | | | | *e*Sn | Sn | 02 19 46.0 | -3.0 | |
| | comp=N,5.2nm,0.2s | | | | | | | |
| **CFON** | **Fontmartina** | **7.71** | **43** | P | Pn | 02 18 24.6 | +1.1 | |
| | comp=N,2.9nm,0.2s,SNR=8.9 | | | | | | | |
| CFON | | | | S | Sn | 02 19 44.4 | -4.7 | |
| | comp=N,8.7nm,0.3s,SNR=7.9 | | | | | | | |
| **CLLI** | **Llivia** | **7.98** | **38** | P | Pn | 02 18 29.2 | +2.0 | |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | | |
| **MTLF** | **Montolieu** | **8.75** | **35** | *e*Pn | Pn | 02 18 37.7 | +0.1 | |
| MTLF | | | | *e*Sn | Sn | 02 20 10.6 | -3.8 | |
| | comp=N,2.3nm,0.4s | | | | | | | |
| **LFF** | **La Frestale** | **9.51** | **24** | *e*Pn | Pn | 02 18 48.7 | +0.8 | |
| LFF | | | | *e*Sn | Sn | 02 20 28.5 | -4.4 | |
| | comp=N,4.1nm,0.3s | | | | | | | |
| **CAF** | **Calviac** | **9.97** | **28** | *e*Pn | Pn | 02 18 55.0 | +0.8 | |
| CAF | | | | *e*Sn | Sn | 02 20 39.6 | -4.5 | |
| | comp=N,1.5nm,0.3s | | | | | | | |
| **LASF** | **Ste Croix** | **10.08** | **37** | *e*Pn | Pn | 02 18 56.8 | +1.1 | |
| **RJF** | **Les Rejaudoux** | **10.10** | **25** | *e*Pn | Pn | 02 18 56.6 | +0.8 | |
| **RJF** | **Les Rejaudoux** | **10.10** | **25** | *e*Sn | Sn | 02 20 42.5 | -4.6 | |
| | comp=N,7.4nm,0.4s | | | | | | | |
| **LMR** | **La Mourre** | **11.03** | **47** | *e*Pn | Pn | 02 19 09.5 | +1.0 | |
| LMR | | | | *e*Sn | Sn | 02 21 05.6 | -4.2 | |
| | comp=N,0.8nm,0.4s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **11.19** | **25** | *e*Pn | Pn | 02 19 11.6 | +0.9 | |
| **QUIF** | **Quistinic** | **11.64** | **5** | *e*Pn | Pn | 02 19 17.3 | +0.7 | |
| QUIF | | | | *e*Sn | Sn | 02 21 19.0 | -5.5 | |
| | comp=N,0.7nm,0.2s | | | | | | | |
| **BGF** | **Bois d'Agland** | **11.65** | **26** | *e*Pn | Pn | 02 19 17.7 | +1.0 | |
| BGF | | | | *e*Sn | Sn | 02 21 19.3 | -5.4 | |
| | comp=N,3.8nm,0.5s | | | | | | | |
| **SGMF** | **Saint Gilles** | **12.02** | **7** | *e*Pn | Pn | 02 19 22.6 | +0.9 | |
| SGMF | | | | *e*Sn | Sn | 02 21 28.3 | -5.5 | |
| | comp=N,2.2nm,0.4s | | | | | | | |
| **AVF** | **Avril sur Loir** | **12.03** | **27** | *e*Pn | Pn | 02 19 22.8 | +1.0 | |
| **MBDF** | **Montbardon** | **12.04** | **42** | *e*Pn | Pn | 02 19 23.5 | +1.4 | |
| **ROSF** | **Rostrenen** | **12.05** | **4** | *e*Pn | Pn | 02 19 22.9 | +0.8 | |
| ROSF | | | | *e*Sn | Sn | 02 21 28.8 | -5.6 | |
| | comp=N,3.0nm,0.5s | | | | | | | |
| **SMF** | **Signal de Mont** | **12.09** | **29** | *e*Pn | Pn | 02 19 23.9 | +1.3 | |
| **PGF** | **Pioggiola** | **12.20** | **55** | *e*Pn | Pn | 02 19 26.2 | +2.0 | |
| PGF | | | | *e*Sn | Sn | 02 21 34.0 | -4.4 | |
| | comp=N,0.8nm,0.3s | | | | | | | |
| **SSF** | **Saint Saulge** | **12.31** | **27** | *e*Pn | Pn | 02 19 26.8 | +1.3 | |
| **GRR** | **Gorron** | **12.37** | **12** | *e*Pn | Pn | 02 19 27.5 | +1.2 | |
| GRR | | | | *e*Sn | Sn | 02 21 36.5 | -5.7 | |
| | comp=N,1.0nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **12.55** | **39** | *e*Pn | Pn | 02 19 30.4 | +1.5 | |
| LPL | | | | *e*Sn | Sn | 02 21 41.7 | -5.1 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **LDF** | **La Druitiere** | **12.70** | **14** | *e*Pn | Pn | 02 19 32.1 | +1.5 | |
| **GERES** | **GERESS Array B** | **18.33** | **41** | P | Pn | 02 20 41.2 | 0.0 | |
| | comp=N,0.2nm,0.3s,baz=219,slow=11,SNR=8.0 | | | | | | | |
| **KHC** | **Kasperske Hory** | **18.43** | **40** | *e*P | Pn | 02 20 43.4 | +1.0 | |
| **EKA** | **Eskdalemuir Ar** | **19.05** | **2** | P | Pn | 02 20 50.1 | +0.6 | |
| | baz=165,slow=8.5,SNR=1.4 | | | | | | | |
| **MODS** | **Modra-Piesok** | **20.08** | **46** | *e*P | Pn | 02 21 02.9 | +1.2 | |
| **VRAC** | **Vranov** | **20.16** | **43** | P | P | 02 21 00.4 | +0.6 | |
| | comp=N,1.7nm,0.5s,baz=231,slow=9.3,SNR=4.0 | | | | | | | |
| **SMOL** | **Smolenice** | **20.23** | **46** | *e*P | P | 02 21 01.9 | +1.3 | |
| **KRLC** | **Krakovy** | **20.68** | **42** | *e*P | P | 02 21 06.9 | +1.5 | |
| **TORD** | **Torodi Ar. Bea** | **23.75** | **165** | P | P | 02 21 37.1 | +0.4 | |
| | comp=N,0.5nm,0.5s,baz=346,slow=8.2,SNR=7.8 | | | | | | | |
| **HFS** | **Hagfors** | **26.58** | **21** | P | P | 02 22 03.2 | +1.3 | |
| | comp=N,1.5nm,0.9s,baz=211,slow=8.4,SNR=8.2 | | | | | | | |
| **DBIC** | **Dimbokro** | **29.51** | **181** | P | P | 02 22 29.2 | +0.8 | |
| | comp=N,1.9nm,0.8s,baz=15,slow=12,SNR=1.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **31.68** | **28** | P | P | 02 22 48.3 | +1.2 | |
| | comp=N,2.4nm,1.0s,baz=206,slow=15,SNR=1.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **37.08** | **17** | P | P | 02 23 35.2 | +1.6 | |
| | comp=N,3.3nm,1.0s,baz=207,slow=7.9,SNR=1.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.28** | **42** | P | P | 02 26 38.0 | +0.1 | |
| | comp=N,0.2nm,0.4s,baz=318,slow=8.4,SNR=1.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.70** | **51** | P | P | 02 26 47.7 | +0.1 | |
| | comp=N,0.1nm,0.4s,baz=316,slow=4.0,SNR=1.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **66.80** | **332** | P | P | 02 27 15.9 | +2.0 | |
| | comp=N,0.1nm,0.5s,baz=57,slow=6.6,SNR=3.2 | | | | | | | |

*IDC* ***12*** *02:46:40.3±1.0, 33.745N×132.771E, h0km, mb3.4/7, mb1 3.6/9, mb1mx3.3/44, mbtmp3.4/9, ML2.8/2, MS2.9/3, Ms1 2.9/3, ms1mx2.4/54, Error ellipse: s-maj=18.8km s-min=12.4km az=164.0*

*NIED* ***12*** *02:46:43.2, 33.746N×132.759E, h15km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-3.25; Mθθ4.18; Mφφ-0.93; Mrθ1.76; Mθφ-1.88; Mφr1.90; Fault plane solution: Mo4.96000×10¹⁴ NP1: φs258.00000°, δ61.00000°, λ-129.00000°. NP2: φs138.00000°, δ47.00000°, λ-41.00000°.*

*JMA* ***12*** *02:46:43.2, 33.746N×132.759E, h15km, M3.8 Broadband fault plane solution: P waves. NP1:φs250.00000°, δ59.00000°, λ-151.00000°. NP2:φs144.00000°, δ65.00000°, λ-34.00000°. Principal axes: T Plg4.0000°, Azm198.0000°; N Plg49.0000°, Azm293.0000°; P Plg41.0000°, Azm105.0000°;*

*JMA Felt II J1.*

**ISC 12 02:46:43.0±0.9, 33.745N±0.04×132.760E±0.04, h15km±5km, n17, σ0.94/22, mb3.3/7, 2C-2D, Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNA** | **Nagahama** | **0.14** | **316** | ⇓P | **Pg** | **02 46 46.8** | **0.0** |
| JNA | | | | *S* | **Sg** | **02 46 49.2** | **-0.2** |
| **UWA2** | **Uwa jima 2** | **0.24** | **175** | ⇑P | **Pg** | **02 46 48.5** | **+0.2** |
| UWA2 | | | | *S* | **Sg** | **02 46 52.0** | **+0.1** |
| **JKU** | **Kubokawa** | **0.42** | **110** | ⇓P | **Pg** | **02 46 51.7** | **+0.3** |
| JKU | | | | *S* | **Sg** | **02 46 57.5** | **+0.4** |
| **JET** | **Tanbara** | **0.50** | **49** | ⇑P | **Pg** | **02 46 52.8** | **-0.1** |
| JET | | | | *S* | **Sg** | **02 46 59.2** | **-0.4** |
| **JNU** | **Nakatsue** | **1.48** | **258** | Pg | **Pn** | **02 47 09.2** | **+0.2** |
| | 28nm,0.3s,baz=98,slow=4.2,SNR=53 | | | | | | |
| JNU | | | | Lg | Lg | 02 47 31.4 | |
| | 71nm,0.3s,baz=326,slow=20,SNR=12 | | | | | | |
| **KSRS** | **Korea Array** | **5.52** | **318** | Pn | **Pn** | **02 48 05.8** | **+1.2** |
| | 0.4nm,0.3s,baz=132,slow=14,SNR=4.3 | | | | | | |
| KSRS | | | | Sn | **Sn** | **02 49 09.9** | **+2.2** |
| | 0.6nm,0.3s,baz=137,slow=24,SNR=4.4 | | | | | | |
| KSRS | | | | Lg | Lg | 02 49 40.0 | |
| | 0.2nm,0.3s,baz=146,slow=28,SNR=3.5 | | | | | | |
| KSRS | | | | LR | LR | 02 50 27.6 | |
| | comp=Z,105nm,19.4s,baz=125,slow=41 | | | | | | |
| **MAT** | **Matsushiro** | **5.54** | **55** | P | **Pn** | **02 48 06.9** | **+2.0** |
| MAT | | | | *eS* | **Sn** | **02 49 08.9** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **5.54** | **55** | Pn | **Pn** | **02 48 03.5** | **-1.3** |
| | 0.2nm,0.3s,baz=240,slow=14,SNR=9.8 | | | | | | |
| MJAR | | | | Lg | Lg | 02 49 37.2 | |
| | 0.1nm,0.3s,baz=232,slow=30,SNR=5.1 | | | | | | |
| MJAR | | | | LR | LR | 02 50 26.4 | |
| | comp=Z,102nm,19.0s,baz=264,slow=41 | | | | | | |
| **KLR** | **Kul'dur** | **15.78** | **358** | Pn | **P** | **02 50 27.8** | **-0.5** |
| | 0.1nm,0.3s,baz=262,slow=2.9,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **24.38** | **314** | P | **P** | **02 51 59.8** | **-0.7** |
| | 0.3nm,0.5s,baz=128,slow=9.1,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **33.57** | **252** | LR | LR | 03 07 54.4 | |
| | comp=Z,15nm,18.6s,baz=55,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.05** | **305** | P | **P** | **02 54 16.5** | **-0.9** |
| | 0.1nm,0.5s,baz=95,slow=13,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.12** | **178** | P | **P** | **02 55 59.4** | **-0.6** |
| | 0.2nm,0.5s,baz=357,slow=7.8,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **56.81** | **179** | P | **P** | **02 56 26.8** | **+0.1** |
| | 0.2nm,0.6s,baz=357,slow=5.6,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **68.47** | **330** | P | **P** | **02 57 44.3** | **+0.2** |
| | 2.2nm,0.7s,baz=64,slow=4.4,SNR=7.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **70.39** | **27** | P | **P** | **02 57 56.4** | **+0.4** |
| | 0.2nm,0.7s,baz=313,slow=4.1,SNR=2.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **72.51** | **320** | P | **P** | **02 58 08.3** | **-0.7** |
| | 0.2nm,0.4s,baz=54,slow=6.4,SNR=2.3 | | | | | | |

**IDC 12 02:21:31.1±1.8, 2.02N×128.27E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.4/24, mbtmp3.6/3, Error ellipse: s-maj=145.9km s-min=14.7km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.63** | **165** | P | P | 02 26 33.8 | 0.0 |
| | 1.0nm,0.3s,baz=344,slow=10,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **26.12** | **168** | P | P | 02 27 07.7 | +0.7 |
| | 0.4nm,0.5s,baz=347,slow=7.1,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.82** | **325** | P | P | 02 31 38.3 | -0.1 |
| | 0.1nm,0.3s,baz=123,slow=5.3,SNR=1.8 | | | | | | |

*TUL* ***12*** *02:46:41.3±0.7, 36.72N±0.02×98.43W±0.03, h5km±7km, ML2.8, mb_Lg2.5/18(NEIC), Error ellipse: s-maj=4.5km s-min=2.2km az=128.0*

**NEIC 12 02:46:41.8±1.2, 36.68N±0.02×98.41W±0.03, h7km±7km, Error ellipse: s-maj=4.5km s-min=2.2km az=124.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **1.48** | **148** | | Pn | 02 47 08.9 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **148** | | Pn | 02 47 09.5 | +0.3 |
| **T35A** | **Sooner Cattle** | **1.54** | **81** | Pn | Pn | 02 47 09.8 | -0.1 |
| **FNO** | **Franklin** | **1.64** | **150** | | Pn | 02 47 11.5 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.96** | **189** | Pn | Pn | 02 47 15.7 | +0.1 |
| **W35A** | **Tecumseh** | **1.97** | **140** | Pn | Pn | 02 47 16.2 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.13** | **167** | Pn | Pb | 02 47 19.8 | -1.0 |
| X34A | | | | IAmb_Lg | | 02 47 54.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.25** | **109** | | Pn | 02 47 19.9 | +0.4 |
| TUL1 | | | | IAmb_Lg | | 02 47 53.6 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.37** | **334** | Pn | Pn | 02 47 21.3 | +0.1 |
| CBKS | | | | IAmb_Lg | | 02 47 54.7 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.81** | **30** | Pn | Pn | 02 47 27.4 | +0.2 |
| **X37A** | **Clayton** | **3.24** | **129** | | Pn | 02 47 33.4 | +0.2 |
| **HHAR** | **Hobbs** | **3.63** | **95** | | Pn | 02 47 38.6 | +0.1 |
| **W39A** | **Magazine** | **4.04** | **110** | | Pn | 02 47 44.9 | +0.8 |
| W39A | | | | | LR | 02 48 48.2 | |
| W39A | | | | IAmb_Lg | | 02 48 59.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.07** | **306** | Pn | Pn | 02 47 44.1 | -0.5 |
| KSCO | | | | IAmb_Lg | | 02 48 51.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.17** | **194** | Pn | Pn | 02 47 45.9 | -0.2 |
| **MSTX** | **Muleshoe** | **4.47** | **234** | Pn | Pn | 02 47 49.4 | -0.8 |
| **MIAR** | **Mount Ida** | **4.48** | **117** | Pn | Pn | 02 47 49.8 | -0.4 |
| MIAR | | | | IAmb_Lg | | 02 49 08.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.72** | **2** | Pn | Pn | 02 47 52.8 | -0.8 |
| **T25A** | **Trinidad** | **4.83** | **277** | Pn | Pn | 02 47 53.2 | -2.0 |
| **X40A** | **Basin Creek Fa** | **5.05** | **114** | IAmb_Lg | | 02 49 29.8 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.14** | **70** | Pn | Pn | 02 47 59.3 | 0.0 |
| **W41B** | **Gary Mavity, V** | **5.22** | **105** | IAmb_Lg | | 02 49 32.7 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BO04 | La Punta | 8.22 | 189 | | | Pn | 02 49 31.8 | -0.6 |
| LPAZ | La Paz | 9.55 | 6 | P | | Pn | 02 49 50.8 | -0.3 |
| | comp=N,0.8nm,0.3s,baz=208,slow=9.0,SNR=16 | | | | | | | |
| LPAZ | La Paz | 9.55 | 6 | | | Pn | 02 49 51.0 | -0.1 |
| LPAZ | La Paz | 9.55 | 6 | eP | | Pn | 02 49 51.2 | +0.1 |
| CPUP | Villa Florida | 10.59 | 95 | P | | Pn | 02 50 02.7 | -2.0 |
| | comp=N,0.1nm,0.3s,baz=295,slow=17,SNR=1.8 | | | | | | | |
| SIV | San Ignacio | 12.34 | 39 | P | | Pn | 02 50 24.2 | -3.9 |
| | comp=N,3.2nm,0.3s,baz=237,slow=10,SNR=48 | | | | | | | |
| PTLB | Pontes e Lacer | 13.92 | 44 | eP | | Pn | 02 50 46.0 | -2.7 |
| ITAB | Concordia | 15.25 | 99 | eP | | P | 02 51 07.3 | -1.1 |
| PTGB | Pitanga | 15.45 | 90 | eP | | P | 02 51 10.5 | -0.3 |
| PCMB | Pacaembu | 16.87 | 79 | eP | | P | 02 51 26.9 | +0.6 |
| ARAG | Araguaiana, MT | 19.03 | 61 | eP | | Pn | 02 51 51.4 | -0.6 |
| CLDB | Colider | 19.50 | 43 | eP | | P | 02 51 55.2 | +0.1 |
| VAO | Valinhos | 20.35 | 87 | eP | | P | 02 52 05.1 | +0.7 |
| IPMB | Ipameri, GO | 20.88 | 72 | eP | | P | 02 52 09.2 | -0.9 |
| SNDB | Serra Nova Dou | 21.73 | 54 | eP | | P | 02 52 17.7 | -1.6 |
| BDFB | Brasilia | 22.15 | 67 | P | | P | 02 52 21.7 | -2.0 |
| | comp=N,0.9nm,0.4s,baz=250,slow=12,SNR=3.4 | | | | | | | |
| PEXB | Peixe | 23.90 | 59 | eP | | P | 02 52 41.0 | +0.4 |
| MACA | Manacapuru-AM | 23.96 | 21 | eP | | P | 02 52 42.4 | +1.4 |
| ITTB | Itaituba | 24.91 | 33 | eP | | P | 02 52 50.4 | +0.9 |
| TXAR | Lajitas Array | 64.11 | 327 | P | | P | 02 58 01.7 | +2.1 |
| | comp=N,0.3nm,0.5s,baz=156,slow=7.4,SNR=6.3 | | | | | | | |
| TXAR | Lajitas Array | 64.11 | 327 | P | | P | 02 57 56.7 | -2.8 |
| DBIC | Dimbokro | 70.19 | 72 | P | | P | 02 58 38.2 | 0.0 |
| | comp=N,4.0nm,0.9s,baz=204,slow=10.0,SNR=2.4 | | | | | | | |
| PDAR | Pinedale Array | 77.78 | 331 | P | | P | 02 59 24.1 | +2.0 |
| | comp=N,0.5nm,0.9s,baz=128,slow=8.2,SNR=2.1 | | | | | | | |
| NVAR | Mina Array Bea | 78.81 | 323 | P | | P | 02 59 30.2 | +2.4 |
| | comp=N,0.3nm,0.6s,baz=177,slow=5.9,SNR=3.9 | | | | | | | |
| NVAR | Mina Array Bea | 78.81 | 323 | P | | P | 02 59 25.6 | -2.3 |
| TORD | Torodi Ar. Bea | 79.00 | 70 | P | | P | 02 59 29.8 | +0.6 |
| | comp=N,3.3nm,0.5s,baz=267,slow=5.2,SNR=43 | | | | | | | |
| TORD | | | | pP | | pP | 02 59 58.3 | +1.7 |
| | comp=N,1.1nm,0.7s,baz=238,slow=5.1,SNR=2.9 | | | | | | | |
| TORD | Torodi Ar. Bea | 79.00 | 70 | P | | P | 02 59 27.9 | -1.2 |
| TORD | | | | IAmb | | IAmb | 02 59 30.4 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| YKA | Yellowknife Ar | 95.21 | 341 | P | | P | 03 00 47.0 | -0.4 |
| | comp=Z,0.5nm,0.7s,baz=138,slow=4.3,SNR=8.0 | | | | | | | |
| YKA | | | | pP | | pP | 03 01 16.4 | +1.1 |
| | comp=Z,0.4nm,0.7s,baz=136,slow=4.4,SNR=4.0 | | | | | | | |
| ASAR | Alice Springs | 125.98 | 206 | PKP | | PKiKP | 03 06 27.4 | +0.2 |
| | comp=Z,0.8nm,0.7s,baz=138,slow=1.8,SNR=8.3 | | | | | | | |
| WRA | Warramunga Arr | 129.11 | 209 | PKP | | PKPdf | 03 06 32.3 | -0.5 |
| | comp=Z,0.7nm,0.6s,baz=168,slow=1.6,SNR=8.3 | | | | | | | |
| ZALV | Zalesovo Beam | 145.91 | 28 | PKPbc | | PKPbc | 03 07 04.5 | +0.7 |
| | comp=Z,4.7nm,0.6s,baz=307,slow=3.7,SNR=22 | | | | | | | |
| ZALV | | | | pPKPbc | pPKPab | | 03 07 33.8 | +1.5 |
| | comp=Z,2.3nm,0.6s,baz=288,slow=3.8,SNR=6.0 | | | | | | | |
| ZALV | Zalesovo Beam | 145.91 | 28 | PKPbc | | PKPbc | 03 07 03.5 | +0.2 |
| MK31 | Makanchi Array | 149.16 | 40 | | | PKPbc | 03 07 12.9 | +0.5 |
| MKAR | Makanchi Array | 149.16 | 40 | PKPbc | | PKiKP | 03 07 13.6 | 0.0 |
| | comp=Z,2.2nm,0.8s,baz=309,slow=2.7,SNR=18 | | | | | | | |
| MKAR | | | | pPKPbc | | pPKPbc | 03 07 42.8 | +1.5 |
| | comp=Z,1.0nm,0.6s,baz=311,slow=2.9,SNR=7.4 | | | | | | | |
| MKAR | Makanchi Array | 149.16 | 40 | | | PKPbc | 03 07 12.4 | 0.0 |
| MJAR | Matsushiro Arr | 154.40 | 301 | PKPab | | PKPab | 03 07 40.8 | +1.5 |
| | comp=Z,1.6nm,0.4s,baz=101,slow=5.4,SNR=4.2 | | | | | | | |

**IDC 12 02:53:15.1±2.8, 5°85N×126°64E, h0km, mb3.3/3, mb1 3.5/3, mb1mx2.9/36, mbtmp3.3/3, Error ellipse: s-maj=227.4km s-min=28.2km az=66.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 26.73 | 164 | P | P | 02 58 56.6 | +0.1 |
| | 0.3nm,0.6s,baz=344,slow=10.0,SNR=7.0 | | | | | | |
| ASAR | Alice Springs | 30.18 | 167 | P | P | 02 59 27.2 | -0.1 |
| | 0.2nm,0.3s,baz=350,slow=8.0,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 55.78 | 324 | P | P | 03 02 53.9 | -0.1 |
| | 0.2nm,0.5s,baz=125,slow=7.9,SNR=4.3 | | | | | | |

*IDC 12 02:54:30.2±7.5, 0°55N×122°75E, h294km±84km, mb3.4/5, mb1 3.4/6, mb1mx2.9/35, mbtmp4.0/6, Error ellipse: s-maj=79.5km s-min=17.3km az=64.0*
*DJA 12 02:54:30.3±0.8, 1°1N±10°×12°3E±°, h294km±7km, M3.8/6, mb3.7/1, MLv3.8/6*
**ISC 12 02:54:30.3±0.9, 0°.6N±0°.1×122°.97E±0°.09, h297km±7km, n12, σ0°.61/15, mb3.5/5, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GTOI | Gorontalo | 0.05 | 55 | P | Pn | 02 55 08.2 | +0.2 |
| GTOI | | | | S | S | 02 55 38.1 | +0.2 |
| MRSI | Marisa | 1.04 | 263 | P | Pn | 02 55 10.2 | -0.4 |
| APSI | Ampana | 2.00 | 221 | P | Pn | 02 55 16.9 | 0.0 |
| MPSI | Mapaga | 3.08 | 265 | P | Pn | 02 55 26.3 | -0.4 |
| SANI | Sanana | 4.01 | 131 | P | Pn | 02 55 35.6 | -0.9 |
| SANI | | | | S | S | 02 56 29.3 | -0.2 |
| LBMI | Labuha | 4.70 | 105 | P | Pn | 02 55 44.2 | -0.1 |
| FITZ | Fitzroy Crossi | 18.77 | 172 | P | P | 02 58 27.9 | -0.6 |
| | 0.2nm,0.3s,baz=2.3,slow=9.6,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 23.27 | 152 | P | P | 02 59 12.2 | +0.1 |
| | 5.3nm,0.6s,baz=335,slow=9.7,SNR=40 | | | | | | |
| ASAR | Alice Springs | 26.36 | 157 | P | P | 02 59 41.0 | +1.0 |
| | 0.5nm,0.3s,baz=331,slow=9.3,SNR=12 | | | | | | |
| STKA | Stephens Creek | 36.81 | 153 | P | P | 03 01 11.3 | +0.8 |
| | 2.4nm,0.6s,baz=331,slow=9.8,SNR=8.8 | | | | | | |
| SONM | Songino Array | 49.20 | 345 | P | P | 03 02 49.3 | +0.3 |
| | 1.8nm,0.8s,baz=162,slow=9.3,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 58.08 | 328 | P | P | 03 03 52.7 | -0.3 |
| | 0.4nm,0.4s,baz=123,slow=8.4,SNR=18 | | | | | | |
| MKAR | | | | PcP | PcP | 03 04 40.4 | -0.8 |
| | 0.5nm,0.6s,baz=127,slow=4.2,SNR=5.1 | | | | | | |

*TUL 12 03:09:57.5±0.9, 36°.879N±0°.009×97°.80W±0°.02, h4km±4km, ML2.5, mb_Lg2.1/5(NEIC), Error ellipse: s-maj=1.8km s-min=1.2km az=101.0*
**NEIC 12 03:09:57.6±0.4, 36°.86N±0°.01×97°.78W±0°.01, h5km±4km, Error ellipse: s-maj=1.8km s-min=1.6km az=128.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| T35A | Sooner Cattle | 1.02 | 86 | Pg | Pg | 03 10 16.6 | -0.5 |
| OKCFA | Oklahoma City | 1.47 | 169 | IAmb_Lg | | 03 10 45.1 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| TUL1 | Leonard | 1.86 | 120 | Pn | Pn | 03 10 29.9 | -0.3 |
| TUL1 | | | | IAmb_Lg | | 03 10 57.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| HHAR | Hobbs | 3.14 | 99 | Pn | Pn | 03 10 48.2 | +0.4 |
| HHAR | | | | IAmb_Lg | | 03 11 46.2 | |
| | comp=Z,6.4nm,0.9s | | | | | | |

**NOU 12 03:13:12.4, 17°.11S×168°.22E, h26km, MLv4.7/13, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DVP | Devils Point | 0.61 | 183 | P | Pb | 03 13 25.0 | +0.4 |
| RTV | Rentapao | 0.71 | 164 | P | Pb | 03 13 26.4 | +0.3 |
| SANVU | Saraoutou | 1.92 | 329 | P | Pn | 03 13 42.9 | -0.5 |
| KOUNC | Koumac, New Ca | 5.06 | 227 | P | Pn | 03 14 27.1 | +0.5 |
| | 23nm,1.0s | | | | | | |
| YATNC | Mamie plateau, | 5.08 | 194 | P | Pn | 03 14 26.1 | -0.8 |
| DZM | Mont Dzumac | 5.21 | 198 | P | Pn | 03 14 27.9 | -0.9 |
| NOUC | Port Laguerre | 5.28 | 200 | P | Pn | 03 14 29.8 | +0.1 |
| OUENC | Ouen Island, N | 5.44 | 194 | P | Pn | 03 14 32.5 | +0.7 |

*IDC 12 03:18:35.8±1.1, 20°.95S×67°.67W, h164km±13km, mb3.1/3, mb1 3.4/6, mb1mx3.2/26, mbtmp3.6/6, Error ellipse: s-maj=29.9km s-min=16.8km az=121.0*
*SCB 12 03:18:38.2±2.1, 20°.89S×67°.93W, h126km±26km, ML3.2/4, Error ellipse: s-maj=6.8km s-min=5.2km az=0.0*
**ISC 12 03:18:36.2±0.9, 20°.88S±0°.05×67°.91W±0°.05, h166km±8km, n28, σ1°34/39, mb3.4/3, 4C, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PB08 | IPOC Station P | 1.37 | 302 | iP | Pn | 03 19 07.2 | +1.1 |
| PB08 | | | | i S | Sn | 03 19 30.1 | +0.9 |
| PB08 | | | | IAML | | 03 19 32.7 | |
| | comp=E,292nm,0.3s | | | | | | |
| PB08 | IPOC Station P | 1.37 | 302 | P | Pn | 03 19 07.4 | +1.2 |
| PB01 | IPOC Station P | 1.48 | 263 | eP | Pn | 03 19 07.3 | +0.5 |
| PB01 | | | | eS | Sn | 03 19 30.7 | +0.2 |
| PB01 | | | | IAML | | 03 19 32.6 | |
| | comp=N,586nm,0.1s | | | | | | |
| PB01 | IPOC Station P | 1.48 | 263 | P | Pn | 03 19 07.5 | +0.7 |
| PB09 | IPOC Station P | 1.54 | 233 | eP | Pn | 03 19 08.3 | +0.8 |
| PB09 | | | | i S | Sn | 03 19 32.7 | +0.9 |
| PB09 | | | | IAML | | 03 19 34.7 | |
| | comp=N,104nm,0.3s | | | | | | |
| PB09 | IPOC Station P | 1.54 | 233 | P | Pn | 03 19 09.1 | +1.6 |
| PB09 | | | | S | Sn | 03 19 29.5 | -2.3 |
| PB09 | | | | IAML | | 03 19 34.6 | |
| | comp=N,89nm,0.2s | | | | | | |
| GO01 | Chusmiza | 1.70 | 315 | iP | Pn | 03 19 10.3 | +0.7 |
| GO01 | | | | IAML | | 03 19 41.6 | |
| PB02 | IPOC Station P | 1.91 | 256 | P | Pn | 03 19 12.2 | +0.9 |
| PB02 | | | | S | Sn | 03 19 36.0 | -2.4 |
| PB02 | | | | IAML | | 03 19 38.6 | |
| | comp=N,410nm,1.0s | | | | | | |
| HMBC | Humberstone | 1.94 | 287 | iP | Pn | 03 19 11.8 | 0.0 |
| HMBC | | | | i S | Sn | 03 19 38.9 | -0.3 |
| HMBC | | | | IAML | | 03 19 40.6 | |
| | comp=E,739nm,0.2s | | | | | | |
| HMBC | Humberstone | 1.94 | 287 | P | Pn | 03 19 12.0 | +0.2 |
| HMBC | | | | S | Sn | 03 19 36.9 | -2.3 |
| LVC | Limon Verde | 1.96 | 208 | P | Pn | 03 19 13.6 | +1.4 |
| | comp=E,2.5nm,0.3s,baz=354,slow=8.4,SNR=24 | | | | | | |
| LVC | | | | S | Sn | 03 19 40.7 | +0.7 |
| | comp=E,12nm,0.3s,baz=255,slow=22,SNR=62 | | | | | | |
| PB11 | IPOC Station P | 1.98 | 304 | iP | Pn | 03 19 12.5 | +0.4 |
| PB11 | | | | i S | Sn | 03 19 39.9 | -0.1 |
| PB11 | | | | IAML | | 03 19 41.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| PB11 | IPOC Station P | 1.98 | 304 | P | Pn | 03 19 12.6 | +0.4 |
| PB07 | IPOC Station P | 2.03 | 245 | P | Pn | 03 19 13.4 | +0.7 |
| PB03 | IPOC Station P | 2.08 | 235 | P | Pn | 03 19 14.1 | +0.8 |
| MOCB | Mochara | 2.16 | 100 | P | Pn | 03 19 14.7 | +1.2 |
| MOCB | | | | S | Sn | 03 19 42.7 | -1.3 |
| MOCB | | | | IAML | | 03 19 47.0 | |
| | comp=E,73nm,0.4s | | | | | | |
| PB06 | IPOC Station P | 2.39 | 220 | P | Pn | 03 19 17.8 | +0.9 |
| PB06 | | | | S | Sn | 03 19 45.6 | -2.9 |
| PB06 | | | | IAML | | 03 19 50.0 | |
| | comp=E,110nm,0.2s | | | | | | |
| PB04 | IPOC Station P | 2.54 | 235 | P | Pn | 03 19 19.3 | +0.6 |
| PB15 | IPOC Station P | 2.73 | 212 | P | Pn | 03 19 22.3 | +1.2 |
| PB15 | | | | | | 03 21 49.1 | |
| BBOE | La Paz, Chanca | 4.04 | 359 | P | Pn | 03 19 39.8 | +1.8 |
| BBOD | La Paz, Gloria | 4.26 | 351 | P | Pn | 03 19 42.3 | +1.5 |
| LPAZ | La Paz | 4.57 | 357 | P | Pn | 03 19 45.9 | +1.0 |
| | comp=E,3.3nm,0.3s,baz=152,slow=6.9,SNR=59 | | | | | | |
| LPAZ | La Paz | 4.57 | 357 | P | Pn | 03 19 46.1 | +1.3 |
| SIV | San Ignacio | 8.11 | 54 | P | Pn | 03 20 28.2 | -2.8 |
| | comp=E,1.0nm,0.3s,baz=238,slow=11,SNR=22 | | | | | | |
| TXAR | Lajitas Array | 60.66 | 324 | P | P | 03 28 30.6 | +0.6 |
| | comp=E,0.1nm,0.5s,baz=157,slow=7.8,SNR=1.9 | | | | | | |
| TORD | Torodi Ar. Bea | 76.27 | 70 | P | P | 03 30 05.8 | -1.2 |
| | comp=E,0.3nm,0.4s,baz=251,slow=5.2,SNR=8.7 | | | | | | |
| YKA | Yellowknife Ar | 90.91 | 340 | P | P | 03 31 21.0 | +0.4 |
| | comp=E,0.3nm,0.5s,baz=130,slow=4.3,SNR=7.8 | | | | | | |
| MKAR | Makanchi Array | 144.58 | 36 | PKP | PKPab | 03 37 52.2 | +0.2 |
| | comp=E,0.2nm,0.4s,baz=330,slow=2.9,SNR=6.5 | | | | | | |

*CNRM 12 03:23:37.5, 35°.39N×3°.95W, h20km, ml2.7*
*INMG 12 03:23:40.6±1.2, 35°.67N×3°.87W, h0km, ML2.0, Error ellipse: s-maj=6.9km s-min=3.4km az=169.0*
*SFS 12 03:23:40.0, 35°.65N×3°.87W, ML1.9, ALBORAN SUR*
**ISC 12 03:23:37.3±1.1, 35°.41N±0°.03×3°.91W±0°.04, h17km±7km, n19, σ1°31/34, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PALE | Palemas | 0.19 | 187 | P | Pg | 03 23 41.8 | -0.3 |
| PALE | | | | S | Sg | 03 23 45.7 | +0.4 |
| CHEFC | Chefchaouen | 1.21 | 256 | P | Pg | 03 24 00.6 | -0.1 |
| CHEFC | | | | S | Sb | 03 24 13.8 | -1.4 |
| CEU | Ceuta | 1.29 | 293 | P | Pn | 03 23 59.8 | -0.7 |
| CEU | | | | S | Sb | 03 24 13.0 | -4.3 |
| TAF | Taforalt | 1.36 | 115 | P | Pn | 03 23 59.6 | -2.0 |
| TAF | | | | S | Sn | 03 24 20.1 | +0.7 |
| EMAL | Malaga-Limoner | 1.41 | 343 | P | Pb | 03 24 04.0 | +0.8 |
| EMAL | | | | S | Sn | 03 24 20.3 | -0.2 |
| SICH | Sidi Chahed | 1.74 | 222 | P | Pb | 03 24 09.0 | +0.2 |
| SICH | | | | S | Sn | 03 24 27.6 | -1.0 |
| LCRM | LCR | 1.89 | 205 | P | Pn | 03 24 09.0 | +0.1 |
| LCRM | | | | S | Sn | 03 24 32.5 | +0.1 |
| IFR | Ifrane | 2.14 | 208 | P | Pn | 03 24 12.9 | +0.5 |
| IFR | | | | S | Sn | 03 24 39.0 | +0.4 |
| MD31 | MD31 | 2.63 | 196 | P | Pn | 03 24 20.8 | +1.7 |
| MD31 | | | | S | Sn | 03 24 51.7 | +1.0 |
| MDT | Midelt | 2.65 | 193 | P | Pn | 03 24 18.8 | -0.6 |
| MDT | | | | S | Sn | 03 24 52.4 | +1.2 |
| TDRA | Tendrara | 2.83 | 146 | S | Sn | 03 24 57.6 | +1.9 |
| PVAQ | Vaqueiros | 3.66 | 304 | ePn | Pn | 03 24 33.9 | +0.7 |
| PVAQ | | | | eSn | Sn | 03 25 15.5 | -0.4 |
| PVAQ | | | | A | A | 03 25 17.0 | |
| | 3.4nm,0.5s | | | | | | |
| PVAQ | Vaqueiros | 3.66 | 304 | P | Pn | 03 24 33.8 | +0.7 |
| PVAQ | | | | S | Sn | 03 25 15.4 | -0.4 |
| MESJ | Messejana | 4.23 | 306 | ePn | Pn | 03 24 42.6 | +1.6 |
| MESJ | | | | eSn | Sn | 03 25 30.6 | +0.6 |
| MESJ | | | | A | A | 03 25 32.4 | |
| | 3.2nm,0.5s | | | | | | |
| EVO | Evora | 4.53 | 315 | ePn | Pn | 03 24 46.8 | +1.7 |
| EVO | | | | eSn | Sn | 03 25 37.3 | 0.0 |
| EVO | | | | A | A | 03 25 39.0 | |
| | 1.9nm,0.6s | | | | | | |
| PESTR | Estremoz | 4.53 | 321 | eSn | Sn | 03 25 38.4 | +0.9 |
| PNCL | Nicolau / Gran | 4.58 | 307 | ePn | Pn | 03 24 47.1 | +1.2 |
| PNCL | | | | eSn | Sn | 03 25 39.2 | +0.5 |
| PNCL | | | | A | A | 03 25 42.0 | |
| | 1.4nm,0.1s | | | | | | |
| PMTG | Montargil | 5.02 | 318 | ePn | Pn | 03 24 53.7 | +1.9 |
| OUZM | OUZ | 5.08 | 209 | P | Pn | 03 24 54.0 | +1.1 |

*IDC 12 03:51:37.7±1.2, 30°.72S×71°.57W, h0km, mb3.9/4, mb1 3.8/9, mb1mx3.7/22, mbtmp3.7/9, ML3.5/5, MS3.0/2, Ms1 3.0/2, ms1mx2.7/50, Error ellipse: s-maj=34.7km s-min=27.6km az=113.0*
*GUC 12 03:51:43.0±0.8, 30°.67S×71°.62W, h45km±3km, ML4.1*
*NEIC 12 03:51:44.7±1.6, 30°.63S±0°.03×71°.5W±0°.1, h33km±7km, mb4.0/4, ML4.1(GUC), Error ellipse: s-maj=17.3km s-min=4.4km az=94.0*
**ISC 12 03:51:42.9±0.8, 30°.64S±0°.03×71°.63W±0°.06, h32km±4km, n61, σ1°42/63, mb3.9/4, 2C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CO06 | Fray Jorge | 0.03 | 181 | | Pn | 03 51 48.8 | +0.5 |
| CO06 | Fray Jorge | 0.03 | 181 | i P | Pn | 03 51 49.0 | +0.7 |
| CO06 | | | | IAML | | 03 51 53.7 | |
| | comp=N,18μm,0.4s | | | | | | |
| CO02 | Combarbal | 0.78 | 136 | | Pn | 03 51 58.2 | +0.3 |
| CO02 | Combarbal | 0.78 | 136 | iP | Pn | 03 51 58.1 | +0.3 |
| CO02 | | | | i S | Sn | 03 52 08.2 | -0.4 |
| CO02 | | | | IAML | | 03 52 12.8 | |
| | comp=N,21μm,0.3s | | | | | | |
| CO05 | La Serena | 0.80 | 26 | | Pn | 03 51 59.1 | +1.2 |
| CO05 | La Serena | 0.80 | 26 | eP | Pn | 03 51 58.6 | +0.7 |
| CO05 | | | | i S | Sb | 03 52 10.2 | +1.4 |
| CO05 | | | | IAML | | 03 52 13.4 | |
| | comp=E,7μm,0.5s | | | | | | |
| CO03 | El Pedregal | 0.84 | 104 | | Pn | 03 51 59.0 | +0.4 |
| CO03 | El Pedregal | 0.84 | 104 | iP | Pn | 03 51 59.0 | +0.4 |
| CO03 | | | | eS | Sb | 03 52 10.1 | 0.0 |
| CO03 | | | | IAML | | 03 52 11.5 | |
| | comp=E,8μm,0.2s | | | | | | |
| GO04 | Tololo Observa | 0.86 | 57 | | Pb | 03 51 59.8 | +0.3 |
| GO04 | Tololo Observa | 0.86 | 57 | iP | Pb | 03 51 60.0 | +0.4 |
| LCO | Las Campanas | 1.81 | 27 | | Pn | 03 52 13.7 | +1.5 |
| LCO | Las Campanas | 1.81 | 27 | iP | Pn | 03 52 13.6 | +1.4 |
| LCO | | | | i S | Sn | 03 52 36.5 | +2.3 |
| VA06 | Catapilco | 1.94 | 172 | | Pn | 03 52 15.3 | +1.7 |
| VA06 | Catapilco | 1.94 | 172 | eP | Pn | 03 52 14.6 | +1.0 |
| VA06 | | | | i S | Sn | 03 52 37.5 | +0.7 |
| VA06 | | | | IAML | | 03 52 46.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| VA03 | San Esteban | 2.31 | 157 | | Pn | 03 52 21.7 | +2.8 |
| VA03 | San Esteban | 2.31 | 157 | eP | Pn | 03 52 21.0 | +2.2 |
| VA03 | | | | i S | Sn | 03 52 50.1 | +3.9 |
| VA03 | | | | IAML | | 03 53 01.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| VA01 | Torpederas | 2.38 | 180 | | Pn | 03 52 22.2 | +2.6 |
| ROCH | El Roble | 2.38 | 167 | eP | Pn | 03 52 21.3 | +1.3 |
| ROCH | | | | eS | Sn | 03 52 49.4 | +1.2 |
| ROCH | | | | IAML | | 03 53 03.7 | |
| | comp=N,912nm,0.5s | | | | | | |
| ROC1 | El Roble | 2.39 | 167 | | Pn | 03 52 20.1 | +0.1 |
| AC04 | Llanos de Chal | 2.48 | 12 | | Pn | 03 52 22.0 | +1.0 |
| PEL | Peldehue | 2.62 | 162 | | Pn | 03 52 24.4 | +1.3 |
| PEL | Peldehue | 2.62 | 162 | iP | Pn | 03 52 24.1 | +1.0 |
| PEL | | | | i S | Sn | 03 52 55.1 | +1.2 |
| PEL | | | | IAML | | 03 53 07.2 | |
| | comp=E,630nm,0.7s | | | | | | |
| MT02 | Curacav | 2.65 | 171 | | Pn | 03 52 25.3 | +2.0 |
| MT05 | Renca | 2.85 | 165 | | Pn | 03 52 28.1 | +1.9 |
| MT05 | Renca | 2.85 | 165 | eP | Pn | 03 52 27.4 | +1.2 |
| MT05 | | | | eS | Sn | 03 53 00.7 | +1.3 |
| MT05 | | | | IAML | | 03 53 15.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| VA05 | Santo Domingo | 3.01 | 180 | | Pn | 03 52 29.9 | +1.5 |
| MT09 | Talagante | 3.17 | 170 | Pn | Pn | 03 52 32.3 | +1.6 |
| MT09 | Talagante | 3.17 | 170 | eP | Pn | 03 52 31.8 | +1.0 |
| MT09 | | | | i S | Sn | 03 53 08.2 | +0.6 |
| MT09 | | | | IAML | | 03 53 23.0 | |
| | comp=E,508nm,0.5s | | | | | | |
| MT01 | Popeta | 3.23 | 174 | | Pn | 03 52 33.4 | +2.0 |
| MT01 | Popeta | 3.23 | 174 | eP | Pn | 03 52 32.2 | +0.8 |
| MT01 | | | | IAML | | 03 53 25.1 | |
| | comp=E,262nm,0.1s | | | | | | |
| GO03 | Copiap | 3.27 | 22 | | Pn | 03 52 33.3 | +1.3 |
| GO03 | Copiap | 3.27 | 22 | eP | Pn | 03 52 33.4 | +1.4 |
| GO03 | | | | IAML | | 03 53 28.8 | |
| | comp=N,469nm,0.4s | | | | | | |
| LMEL | Las Melosas | 3.42 | 160 | | Pn | 03 52 35.6 | +1.5 |
| BO04 | La Punta | 3.45 | 166 | | Pn | 03 52 36.1 | +1.6 |
| BO01 | Tunca | 3.77 | 173 | | Pn | 03 52 40.5 | +1.7 |
| GO05 | Huala | 4.36 | 183 | | Pn | 03 52 46.2 | -0.6 |
| AC02 | Maricunga | 4.38 | 31 | | Pn | 03 52 48.9 | +1.2 |
| H03N1 | Juan Fernandez | 6.78 | 244 | T | T | 04 00 15.1 | |
| | baz=72,slow=72,SNR=3421 | | | | | | |
| H03N2 | Juan Fernandez | 6.79 | 244 | T | T | 04 00 15.8 | |
| | baz=72,slow=72,SNR=1893 | | | | | | |
| H03N3 | Juan Fernandez | 6.79 | 244 | T | T | 04 00 09.9 | |
| | baz=72,slow=72,SNR=1918 | | | | | | |
| LC01 | Cunco | 8.24 | 181 | Pn | Pn | 03 53 39.5 | -0.7 |
| LVC | Limon Verde | 8.36 | 18 | Pn | Pn | 03 53 40.2 | -2.0 |
| | comp=N,0.2nm,0.3s,baz=211,slow=6.4,SNR=1.7 | | | | | | |
| PB03 | IPOC Station P | 8.72 | 12 | Pn | Pn | 03 53 46.0 | -1.0 |
| PLCA | Paso Flores | 10.11 | 175 | Pn | Pn | 03 54 04.9 | -1.0 |
| | comp=N,0.1nm,0.3s,baz=336,slow=8.4,SNR=3.1 | | | | | | |
| PLCA | | | | LR | LR | 03 58 24.3 | |
| | comp=N,109nm,18.4s,baz=198,slow=40 | | | | | | |
| ITQB | Itaqui | 13.03 | 90 | Pn | Pn | 03 54 45.8 | 0.0 |
| CPUP | Villa Florida | 13.29 | 75 | Pn | Pn | 03 54 48.3 | -1.1 |
| | comp=N,0.1nm,0.3s,baz=270,slow=11,SNR=1.4 | | | | | | |
| LPAZ | La Paz | 14.64 | 13 | Pn | Pn | 03 55 08.7 | +0.3 |
| | comp=N,0.2nm,0.3s,baz=117,slow=4.2,SNR=4.6 | | | | | | |
| LPAZ | | | | LR | LR | 04 01 17.6 | |
| | comp=N,39nm,18.5s,baz=82,slow=39 | | | | | | |
| SIV | San Ignacio | 17.50 | 36 | P | Pn | 03 55 42.6 | -1.9 |
| | comp=N,0.2nm,0.3s,baz=228,slow=11,SNR=5.4 | | | | | | |
| MG05 | Puerto Natales | 21.03 | 182 | P | P | 03 56 24.3 | +0.5 |
| BDFB | Brasilia | 26.28 | 61 | P | P | 03 57 14.7 | -1.0 |
| | comp=N,1.7nm,0.5s,baz=226,slow=5.5,SNR=5.8 | | | | | | |
| BDFB | Brasilia | 26.28 | 61 | IAmb | IAmb | 03 57 19.1 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 66.99 | 330 | P | P | 04 02 34.0 | +1.2 |
| | comp=Z,2.2nm,0.6s,baz=152,slow=5.7,SNR=3.6 | | | | | | |
| DBIC | Dimbokro | 73.80 | 72 | P | P | 04 03 14.8 | +0.3 |
| | comp=Z,1.7nm,0.5s,baz=238,slow=7.1,SNR=1.9 | | | | | | |
| TORD | Torodi Ar. Bea | 82.75 | 70 | P | P | 04 04 03.5 | -0.6 |
| | comp=Z,0.5nm,0.7s,baz=271,slow=6.9,SNR=6.0 | | | | | | |
| TORD | Torodi Ar. Bea | 82.75 | 70 | IAmb | IAmb | 04 04 18.9 | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 123.85 | 210 | PKP | PKPdf | 04 10 35.6 | -2.6 |
| | comp=Z,0.5nm,0.8s,baz=160,slow=1.6,SNR=2.4 | | | | | | |
| H11S2 | WAKE ISLAND Hyl | 126.10 | 271 | T | T | 06 29 34.6 | |
| | baz=115,slow=75,SNR=23 | | | | | | |
| H11S1 | WAKE ISLAND Hyl | 126.11 | 271 | T | T | 06 29 32.2 | |
| | baz=115,slow=75,SNR=24 | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 126.12 | 271 | T | T | 06 29 31.5 | |
| | baz=115,slow=75,SNR=26 | | | | | | |
| ZALV | Zalesovo Beam | 151.17 | 29 | PKPbc | PKPbc | 04 11 32.7 | +0.3 |
| | comp=Z,1.9nm,0.7s,baz=320,slow=3.9,SNR=9.6 | | | | | | |
| ZALV | Zalesovo Beam | 151.17 | 29 | | PKPbc | 04 11 32.9 | +0.5 |

*NEIC 12 04:01:28.9±1.0, 18°.0N±0°.2×68°.10W±0°.07, h79km±19km, Error ellipse: s-maj=23.1km s-min=8.4km az=188.0*
*RSPR 12 04:01:29.1, 18°.06N×68°.10W, h83km±1km, MD3.3/16*
**ISC 12 04:01:28.0±1.4, 18°.1N±0°.1×68°.10W±0°.05, h94km, n56, σ0°58/65, 12C-4D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PCDR | Punta Cana, DR | 0.51 | 329 | Pn | Pn | 04 01 43.1 | -0.1 |
| IDE | Isla Desecheo | 0.67 | 62 | eP | Pn | 04 01 44.1 | -0.5 |
| IDE | Isla Desecheo | 0.67 | 62 | eS | Sn | 04 01 55.6 | -1.4 |
| PRSN | Puerto Rico Se | 0.92 | 81 | Pn | Pn | 04 01 46.4 | -0.7 |
| CRPR | Cabo Rojo, PR | 0.94 | 94 | eP | Pn | 04 01 46.9 | -0.5 |
| CRPR | Cabo Rojo, PR | 0.94 | 94 | eS | Sn | 04 02 01.5 | -0.3 |
| CRPR | Cabo Rojo, PR | 0.94 | 94 | | Pn | 04 01 46.9 | -0.5 |
| CRPR | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CUPR | | | | | | Sn | 04 02 40.9 | -0.4 |
| **SC01** | **Santiago de lo** | **2.83** | **299** | | | **Pn** | **04 02 12.6** | **+1.3** |
| **STVI** | **Saint Thomas** | **3.00** | **84** | ⇑ | *eP* | **Pn** | **04 02 14.3** | **+0.7** |
| **STVI** | **Saint Thomas** | **3.00** | **84** | | *eS* | **Sn** | **04 02 49.3** | **+0.5** |
| **STVI** | **Saint Thomas** | **3.00** | **84** | | | **Pn** | **04 02 14.3** | **+0.7** |
| STVI | | | | | | **Sn** | **04 02 49.3** | **+0.5** |
| **STVI** | **Saint Thomas** | **3.00** | **84** | | IAML | | 04 02 52.4 | |
| | comp=N,69nm,0.2s | | | | | | | |
| **SDDR** | **Presa de Saban** | **3.16** | **287** | | | **Pn** | **04 02 16.7** | **+1.0** |
| SDDR | | | | | IAML | | 04 03 03.9 | |
| | comp=N,42nm,0.8s | | | | | | | |
| SDDR | | | | | IAML | | 04 03 05.9 | |
| | comp=N,49nm,1.4s | | | | | | | |

**IDC 12 04:01:59.5±3.9, 28°34N×96°03E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.2/29, mbtmp3.3/3, MS3.1/1, Ms1 3.1/1, ms1mx2.3/43, Error ellipse: s-maj=550.8km s-min=17.4km az=58.0, Eastern Xizang-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **21.34** | **333** | P | P | 04 06 48.1 | 0.0 |
| | 0.2nm,0.6s,baz=144,slow=10.0,SNR=3.0 | | | | | | |
| **GEYT** | **Alibeck** | **32.96** | **297** | LR | LR | 04 25 08.5 | |
| | comp=Z,31nm,19.7s,baz=157,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.62** | **138** | P | P | 04 12 12.9 | +0.5 |
| | 0.3nm,0.6s,baz=330,slow=6.7,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **63.29** | **141** | P | P | 04 12 29.9 | -0.4 |
| | 0.5nm,0.7s,baz=325,slow=6.4,SNR=4.2 | | | | | | |

*VAO 12 04:12:19.5±0.9, 17°60S×69°51W, h149km±7km, mb3.6*
*IDC 12 04:12:20.6±1.7, 17°77S×69°23W, h146km±13km, mb3.4/5, mb1 3.4/7, mb1mx3.3/27, mbtmp3.9/7, Error ellipse: s-maj=27.8km s-min=12.9km az=111.0*
*GUC 12 04:12:20.5±0.8, 17°73S×69°79W, h159km±4km, ML3.7*
**ISC 12 04:12:19.2±0.8, 17°66S±0°06×69°46W±0°08, h139km±9km, n31, σ1s45/41, mb3.7/4, 2C, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **1.09** | **230** | *eP* | **Pn** | **04 12 43.7** | **0.0** |
| AP01 | | | | *i* S | **Sn** | **04 13 02.4** | **0.0** |
| AP01 | | | | IAML | | 04 13 02.9 | |
| | comp=E,4μm,0.2s | | | | | | |
| **PB12** | **IPOC Station P** | **1.25** | **221** | ⇑ *iP* | **Pn** | **04 12 45.3** | **-0.1** |
| PB12 | | | | *i* S | **Sn** | **04 13 05.0** | **-0.4** |
| PB12 | | | | IAML | | 04 13 06.1 | |
| | comp=N,807nm,0.2s | | | | | | |
| **LPAZ** | **La Paz** | **1.87** | **43** | P | **Pn** | **04 12 54.2** | **+1.5** |
| | comp=N,29nm,0.3s,baz=255,slow=2.1,SNR=720 | | | | | | |
| **LPAZ** | **La Paz** | **1.87** | **43** | *eP* | **Pn** | **04 12 54.2** | **+1.5** |
| **GO01** | **Chusmiza** | **2.01** | **173** | ⇑ *iP* | **Pn** | **04 12 56.2** | **+2.0** |
| GO01 | | | | IAML | | 04 13 31.7 | |
| | comp=E,442nm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **2.09** | **185** | *iP* | **Pn** | **04 12 56.0** | **+1.1** |
| PB11 | | | | *i* S | **Sn** | **04 13 23.4** | **+1.0** |
| PB11 | | | | IAML | | 04 13 26.6 | |
| | comp=E,228nm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **2.48** | **173** | *iP* | **Pn** | **04 13 01.7** | **+1.9** |
| PB08 | | | | *i* S | **Sn** | **04 13 32.9** | **+1.7** |
| PB08 | | | | IAML | | 04 13 36.6 | |
| | comp=E,124nm,0.1s | | | | | | |
| **HMBC** | **Humberstone** | **2.63** | **189** | *eP* | **Pn** | **04 13 01.9** | **+0.4** |
| HMBC | | | | *eS* | **Sn** | **04 13 33.8** | **-0.4** |
| HMBC | | | | IAML | | 04 13 38.2 | |
| | comp=N,130nm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **2.67** | **194** | IAML | | 04 13 36.7 | |
| | comp=N,477nm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **2.97** | **193** | *eP* | **Pn** | **04 13 05.2** | **-0.4** |
| TA01 | | | | *eS* | **Sn** | **04 13 39.4** | **-2.2** |
| TA01 | | | | IAML | | 04 13 45.4 | |
| | comp=E,81nm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **3.21** | **192** | *eP* | **Pn** | **04 13 09.0** | **+0.1** |
| PATCX | | | | *eS* | **Sn** | **04 13 45.0** | **-2.3** |
| **PB01** | **IPOC Station P** | **3.36** | **180** | *iP* | **Pn** | **04 13 11.7** | **+0.8** |
| PB01 | | | | *i* S | **Sn** | **04 13 49.5** | **-1.4** |
| PB01 | | | | IAML | | 04 13 50.7 | |
| | comp=E,233nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **3.66** | **186** | *eP* | **Pn** | **04 13 15.3** | **+0.5** |
| PB02 | | | | *i* S | **Sn** | **04 13 55.0** | **-2.9** |
| **LVC** | **Limon Verde** | **4.95** | **174** | P | **Pn** | **04 13 33.4** | **+1.3** |
| | comp=E,2.4nm,0.3s,baz=29,slow=11,SNR=31 | | | | | | |
| LVC | | | | S | **Sn** | **04 14 26.8** | **-2.0** |
| | comp=E,4.8nm,0.3s,baz=127,slow=18,SNR=15 | | | | | | |
| **LVC** | **Limon Verde** | **4.95** | **174** | *eP* | **Pn** | **04 13 33.0** | **+1.0** |
| **SIV** | **San Ignacio** | **8.20** | **80** | P | **Pn** | **04 14 14.1** | **-1.3** |
| | comp=E,2.4nm,0.3s,baz=257,slow=8.7,SNR=112 | | | | | | |
| SIV | | | | S | **Sn** | **04 15 41.8** | **-4.9** |
| | comp=E,0.4nm,0.3s,baz=349,slow=23,SNR=4.9 | | | | | | |
| **ETMB** | **Extrema** | **8.41** | **22** | *eP* | **Pn** | **04 14 17.6** | **-0.6** |
| **PTLB** | **Pontes e Lacer** | **10.14** | **79** | *eP* | **Pn** | **04 14 41.5** | **+0.3** |
| **SALV** | **Santo Antonio** | **13.30** | **74** | *eP* | **Pn** | **04 15 24.4** | **+1.7** |
| **PTGB** | **Pitanga** | **17.66** | **116** | *eP* | **Pn** | **04 16 16.6** | **-0.1** |
| **SNDB** | **Serra Nova Dou** | **18.44** | **75** | *eP* | **P** | **04 16 24.8** | **+0.6** |
| **ITTB** | **Itaituba** | **18.85** | **47** | *eP* | **P** | **04 16 28.4** | **-0.3** |
| **CPSB** | **Cacapava Do Su** | **19.33** | **134** | *eP* | **P** | **04 16 34.4** | **+0.7** |
| **PLTB** | **Pedras Altas** | **20.08** | **137** | *eP* | **P** | **04 16 41.7** | **-0.1** |
| **IPMB** | **Ipameri, GO** | **20.23** | **94** | *eP* | **P** | **04 16 44.7** | **+1.1** |
| **BDFB** | **Brasilia** | **20.64** | **88** | P | **P** | **04 16 48.7** | **+0.6** |
| | comp=E,1.1nm,0.4s,baz=200,slow=7.0,SNR=4.0 | | | | | | |
| **PLCA** | **Paso Flores** | **23.01** | **182** | P | **P** | **04 17 12.9** | **+0.9** |
| | comp=E,1.0nm,0.8s,baz=324,slow=7.8,SNR=3.8 | | | | | | |
| **JANB** | **Januaria** | **24.26** | **88** | *eP* | **P** | **04 17 23.4** | **-0.3** |
| **DBIC** | **Dimbokro** | **68.20** | **75** | P | **P** | **04 23 04.8** | **-0.4** |
| | comp=E,1.7nm,0.5s,baz=254,slow=5.6,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.59** | **71** | P | **P** | **04 23 54.5** | **-0.5** |
| | comp=E,1.9nm,0.5s,baz=258,slow=5.4,SNR=25 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.41** | **341** | P | **P** | **04 24 50.6** | **+0.2** |
| | comp=E,0.1nm,0.5s,baz=133,slow=5.4,SNR=2.3 | | | | | | |

*IDC 12 05:49:37.7±1.8, 42°93N×127°09W, h0km, mb3.0/3, mb1 3.5/3, mb1mx3.2/45, mbtmp3.1/3, Error ellipse: s-maj=43.8km s-min=16.2km az=55.0*
*NEIC 12 05:49:41.0±1.4, 43°26N±0°10×127°0W±0°2, h10km±2km, ML3.1/44, Error ellipse: s-maj=21.3km s-min=14.6km az=241.0*
*ANF 12 05:49:41.1±1.1, 43°19N×126°89W, h10km, ML3.5/4, Error ellipse: s-maj=11.7km s-min=6.2km az=61.0*
**ISC 12 05:49:40.8±1.7, 43°23N±0°08×127°0W±0°1, h10km, n50, σ0s85/48, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KEBM** | **Edson Butte** | **1.97** | **100** | Pn | **Pn** | **05 50 13.6** | **-0.7** |
| KEBM | | | | IAML | | 05 50 46.5 | |
| | comp=E,88nm,2.3s | | | | | | |
| **J01E** | **Myrtle Point** | **2.23** | **91** | Pn | **Pn** | **05 50 16.7** | **-1.0** |
| **J01E** | **Myrtle Point** | **2.23** | **91** | P | **Pn** | **05 50 16.7** | **-1.0** |
| | baz=273,SNR=20 | | | | | | |
| J01E | | | | S | **Sn** | **05 50 44.9** | **-0.3** |
| | baz=273 | | | | | | |
| **I02E** | **Swisshome, OR** | **2.43** | **68** | P | **Pn** | **05 50 19.9** | **-0.7** |
| | baz=251,SNR=9.4 | | | | | | |
| **K02D** | **Willamette Mer** | **2.49** | **101** | P | **Pn** | **05 50 20.8** | **-0.6** |
| | baz=284,SNR=25 | | | | | | |
| K02D | | | | S | **Sn** | **05 50 51.0** | **-0.8** |
| | baz=284 | | | | | | |
| **I03D** | **Drain, OR** | **2.68** | **79** | P | **Pn** | **05 50 23.2** | **-0.8** |
| | baz=262,SNR=32 | | | | | | |
| I03D | | | | S | **Sn** | **05 50 55.8** | **-0.7** |
| | baz=262 | | | | | | |
| **DBO** | **Dodson Butte** | **2.73** | **91** | | **Pn** | **05 50 23.9** | **-0.9** |
| **COR** | **Corvallis** | **2.98** | **62** | Pn | **Pn** | **05 50 27.6** | **-0.5** |
| COR | | | | IAML | | 05 50 49.3 | |
| | comp=E,40nm,2.1s | | | | | | |
| COR | | | | IAML | | 05 51 21.0 | |
| | comp=E,44nm,4.1s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.02** | **101** | Pn | **Pn** | **05 50 28.8** | **+0.1** |
| **BUCK** | **Buck Mountain** | **3.05** | **70** | | **Pn** | **05 50 29.4** | **+0.2** |
| BUCK | | | | IAML | | 05 51 10.9 | |
| | comp=N,38nm,3.0s | | | | | | |
| BUCK | | | | IAML | | 05 52 07.5 | |
| | comp=E,44nm,3.5s | | | | | | |
| **G03D** | **McMinnville, O** | **3.32** | **52** | Pn | **Pn** | **05 50 32.6** | **-0.2** |
| G03D | | | | IAML | | 05 52 06.7 | |
| | comp=N,51nm,3.0s | | | | | | |
| G03D | | | | IAML | | 05 52 14.1 | |
| | comp=E,41nm,3.8s | | | | | | |
| **G03D** | **McMinnville, O** | **3.32** | **52** | P | **Pn** | **05 50 32.7** | **-0.2** |
| | baz=235 | | | | | | |
| G03D | | | | S | **Sn** | **05 51 12.5** | **+0.2** |
| | baz=235 | | | | | | |
| **H04D** | **Lebanon** | **3.32** | **66** | | **Pn** | **05 50 32.7** | **-0.1** |
| H04D | | | | IAML | | 05 51 21.9 | |
| | comp=E,36nm,1.8s | | | | | | |
| H04D | | | | IAML | | 05 51 30.3 | |
| | comp=N,45nm,4.0s | | | | | | |
| **H04D** | **Lebanon** | **3.32** | **66** | P | **Pn** | **05 50 33.2** | **+0.3** |
| | baz=249,SNR=17 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **3.49** | **114** | Pn | **Pn** | **05 50 36.6** | **+1.3** |
| **L04D** | **Klamath Falls** | **3.58** | **105** | Pn | **Pn** | **05 50 38.3** | **+1.7** |
| L04D | | | | IAML | | 05 51 10.6 | |
| | comp=E,35nm,3.9s | | | | | | |
| **H04A** | **Detroit Lake** | **3.75** | **66** | | **Pn** | **05 50 39.1** | **+0.4** |
| H04A | | | | IAML | | 05 52 03.0 | |
| | comp=E,24nm,4.4s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.23** | **73** | P | **Pn** | **05 50 45.6** | **+0.3** |
| | baz=257 | | | | | | |
| **F04A** | **Amboy** | **4.23** | **49** | | **Pn** | **05 50 45.4** | **+0.1** |
| F04A | | | | IAML | | 05 51 43.2 | |
| | comp=N,20nm,3.9s | | | | | | |
| F04A | | | | IAML | | 05 52 47.6 | |
| | comp=E,23nm,4.8s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.36** | **59** | Pn | **Pn** | **05 50 48.3** | **+1.1** |
| HOOD | | | | IAML | | 05 51 24.1 | |
| | comp=N,23nm,1.0s | | | | | | |
| **PINE** | **Pine Mountain** | **4.42** | **81** | | **Pn** | **05 50 48.6** | **+0.4** |
| PINE | | | | IAML | | 05 52 01.1 | |
| | comp=E,13nm,4.5s | | | | | | |
| PINE | | | | IAML | | 05 53 12.8 | |
| | comp=N,22nm,4.2s | | | | | | |
| **K05A** | **Summer Lake** | **4.49** | **94** | Pn | **Pn** | **05 50 49.9** | **+0.8** |
| K05A | | | | IAML | | 05 52 12.8 | |
| | comp=N,22nm,4.9s | | | | | | |
| K05A | | | | IAML | | 05 52 20.5 | |
| | comp=E,19nm,4.7s | | | | | | |
| **WISH** | **Wishkah** | **4.50** | **29** | Pn | **Pn** | **05 50 48.5** | **-0.4** |
| **G05D** | **Wamic, OR** | **4.53** | **62** | P | **Pn** | **05 50 50.2** | **+0.7** |
| | baz=246,SNR=12 | | | | | | |
| **E04D** | **Cinebar** | **4.57** | **42** | Pn | **Pn** | **05 50 49.8** | **-0.1** |
| **E04D** | **Cinebar** | **4.57** | **42** | P | **Pn** | **05 50 50.3** | **+0.4** |
| | baz=225 | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.70** | **27** | Pn | **Pn** | **05 50 51.3** | **-0.5** |
| **F05D** | **White Salmon** | **4.75** | **54** | | **Pn** | **05 50 53.1** | **+0.7** |
| F05D | | | | IAML | | 05 51 50.1 | |
| | comp=E,20nm,0.4s | | | | | | |
| **F05D** | **White Salmon** | **4.75** | **54** | P | **Pn** | **05 50 53.3** | **+0.8** |
| | baz=238,SNR=11 | | | | | | |
| **D03D** | **Eldon** | **5.10** | **31** | P | **Pn** | **05 50 56.8** | **-0.5** |
| | baz=214 | | | | | | |
| **D05A** | **Enumclaw** | **5.30** | **40** | Pn | **Pn** | **05 51 00.8** | **+0.8** |
| **I07A** | **Izee** | **5.49** | **79** | | **Pn** | **05 51 03.4** | **+0.7** |
| **CLRS** | **Cowichan Lake** | **5.93** | **18** | Pn | **Pn** | **05 51 07.4** | **-1.2** |
| **PGC** | **Sidney** | **5.95** | **23** | Pn | **Pn** | **05 51 08.9** | **0.0** |
| **LTY** | **Liberty** | **6.00** | **46** | Pn | **Pn** | **05 51 10.6** | **+0.9** |
| **E07A** | **Sunnyside** | **6.05** | **54** | | **Pn** | **05 51 11.8** | **+1.5** |
| **B05A** | **Bryant** | **6.08** | **32** | P | **Pn** | **05 51 10.6** | **-0.1** |
| | baz=216 | | | | | | |
| **HAWA** | **Hanford** | **6.16** | **57** | Pn | **Pn** | **05 51 12.8** | **+0.9** |
| **WVOR** | **Wild Horse Val** | **6.18** | **95** | Pn | **Pn** | **05 51 12.4** | **+0.2** |
| **BMO** | **Blue Mountains** | **7.15** | **74** | | **Pn** | **05 51 26.4** | **+0.9** |
| **NEW** | **Newport** | **8.53** | **50** | Pn | **Pn** | **05 51 44.9** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **20.62** | **16** | P | **P** | **05 54 21.7** | **+1.8** |
| | comp=E,0.4nm,0.8s,baz=206,slow=9.6,SNR=5.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.25** | **119** | P | **P** | **05 54 46.2** | **-2.3** |
| | comp=E,0.5nm,1.0s,baz=324,slow=5.6,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **24.34** | **339** | P | **P** | **05 54 59.1** | **+0.7** |
| | comp=E,0.5nm,0.8s,baz=157,slow=7.0,SNR=4.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **59.49** | **269** | T | T | 07 04 02.9 | |
| | baz=50,slow=75,SNR=21 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.49** | **269** | T | T | 07 04 03.7 | |
| | baz=50,slow=75,SNR=16 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.51** | **269** | T | T | 07 04 04.2 | |
| | baz=50,slow=75,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **60.41** | **268** | T | T | 07 05 09.5 | |
| | baz=50,slow=75,SNR=160 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **60.42** | **268** | T | T | 07 05 10.6 | |
| | baz=50,slow=75,SNR=118 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **60.43** | **268** | T | T | 07 05 11.8 | |
| | baz=50,slow=75,SNR=108 | | | | | | |

*CNRM 12 06:16:46.6, 36°07N×8°43W, h0km, ml2.6*
*IGIL 12 06:16:52.9, 36°26N×8°42W, h6km, ML2.1*
*INMG 12 06:16:53.2±1.2, 36°24N×8°45W, h15km±6km, ML1.9, Error ellipse: s-maj=9.1km s-min=3.4km az=51.0*
**ISC 12 06:16:48.3±1.4, 36°11N±0°03×8°48W±0°08, h16km±10km, n22, σ1s24/39, 1D, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **1.06** | **345** | ⇓ *eP* | **Pn** | **06 17 09.8** | **+1.2** |
| PFVI | | | | *eS* | **Sg** | **06 17 22.8** | **0.0** |
| PFVI | | | | A | A | 06 17 24.5 | |
| | 12nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.06** | **345** | P | **Pn** | **06 17 10.0** | **+1.5** |
| PFVI | | | | S | **Sb** | **06 17 21.1** | **-0.9** |
| **MORF** | **Marmelete** | **1.21** | **354** | *eP* | **Pg** | **06 17 11.8** | **+0.2** |
| MORF | | | | *eS* | **Sb** | **06 17 25.6** | **-0.7** |
| MORF | | | | IAML | | 06 17 27.4 | |
| | comp=N,30nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **1.21** | **354** | *eP* | **Pg** | **06 17 11.8** | **+0.2** |
| MORF | | | | *eS* | **Sb** | **06 17 26.1** | **-0.1** |
| MORF | | | | A | A | 06 17 26.8 | |
| | comp=N,23nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.43** | **25** | *eP* | **Pg** | **06 17 15.3** | **-0.6** |
| PVAQ | | | | *eS* | **Sn** | **06 17 31.4** | **-0.8** |
| PVAQ | | | | A | A | 06 17 34.3 | |
| | comp=N,7.9nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.43** | **25** | P | **Pg** | **06 17 15.4** | **-0.6** |
| PVAQ | | | | S | **Sg** | **06 17 33.6** | **-1.0** |
| **PTEO** | **Sao Teotonio** | **1.45** | **352** | *eP* | **Pb** | **06 17 15.3** | **+0.3** |
| PTEO | | | | *eS* | **Sn** | **06 17 32.5** | **-0.1** |
| PTEO | | | | A | A | 06 17 34.8 | |
| | comp=N,8.4nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **1.56** | **13** | *eP* | **Pb** | **06 17 17.5** | **+0.6** |
| PCVE | | | | *eS* | **Sn** | **06 17 35.1** | **-0.4** |
| PCVE | | | | A | A | 06 17 38.0 | |
| | comp=N,4.9nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.74** | **7** | *eP* | **Pb** | **06 17 19.7** | **-0.3** |
| MESJ | | | | *eS* | **Sn** | **06 17 39.2** | **-0.7** |
| MESJ | | | | IAML | | 06 17 40.2 | |
| | comp=N,19nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.74** | **7** | *eP* | **Pb** | **06 17 19.7** | **-0.3** |
| MESJ | | | | *eS* | **Sn** | **06 17 39.4** | **-0.5** |
| MESJ | | | | A | A | 06 17 40.1 | |
| | comp=N,15nm,0.2s | | | | | | |
| **PBEJ** | **Beja** | **1.98** | **14** | *eSn* | **Sn** | **06 17 44.8** | **-0.9** |
| PBEJ | | | | A | A | 06 17 46.8 | |
| | comp=N,4.7nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.00** | **359** | *ePn* | **Pn** | **06 17 23.0** | **+1.5** |
| PNCL | | | | *eSn* | **Sn** | **06 17 44.8** | **-1.5** |
| PNCL | | | | A | A | 06 17 47.5 | |
| | comp=N,4.0nm,0.2s | | | | | | |
| **EVO** | **Evora** | **2.45** | **9** | *ePn* | **Pn** | **06 17 29.2** | **+1.5** |
| EVO | | | | *eSn* | **Sn** | **06 17 55.8** | **-1.5** |
| EVO | | | | A | A | 06 17 57.1 | |
| | comp=N,8.0nm,0.1s | | | | | | |
| **PESTR** | **Estremoz** | **2.85** | **14** | *eSn* | **Sn** | **06 18 05.9** | **-1.2** |
| **PMTG** | **Montargil** | **2.97** | **4** | *ePn* | **Pn** | **06 17 36.3** | **+1.6** |
| PMTG | | | | *eSn* | **Sn** | **06 18 08.0** | **-2.0** |
| PMTG | | | | A | A | 06 18 08.6 | |
| | comp=N,3.7nm,0.7s | | | | | | |
| **PSBE** | **So Bento** | **3.41** | **356** | *ePn* | **Pn** | **06 17 43.1** | **+2.2** |
| PSBE | | | | *eSn* | **Sn** | **06 18 20.9** | **-0.2** |
| **PMRV** | **Marv??o** | **3.43** | **14** | *ePn* | **Pn** | **06 17 43.4** | **+2.3** |
| PMRV | | | | *eSn* | **Sn** | **06 18 19.9** | **-1.6** |
| PMRV | | | | A | A | 06 18 21.9 | |
| | comp=N,2.9nm,0.7s | | | | | | |
| **MD31** | **MD31** | **4.46** | **135** | P | **Pn** | **06 17 56.8** | **+1.5** |
| MD31 | | | | S | **Sn** | **06 18 45.9** | **-1.1** |
| **MDT** | **Midelt** | **4.58** | **135** | P | **Pn** | **06 17 58.9** | **+1.8** |
| **OUK** | **Oukaimeden** | **4.91** | **174** | P | **Pn** | **06 18 02.5** | **+0.6** |
| **OUZM** | **OUZ** | **5.38** | **164** | P | **Pn** | **06 18 09.9** | **+1.8** |
| OUZM | | | | S | **Sn** | **06 19 10.7** | **+1.0** |
| **TTIG** | **Tnine Tigouga,** | **5.54** | **180** | P | **Pn** | **06 18 08.4** | **-1.9** |

*INET 12 06:36:09.2±0.7, 12°71N×88°09W, h16km±7km, MW3.5*
*UCR 12 06:36:09.1±1.4, 12°66N×88°31W, h20km±4km, ML3.6*
*SNET 12 06:36:09.0±1.3, 12°65N×88°33W, h17km±4km, ML3.6*
**ISC 12 06:36:06.9±2.0, 12°59N±0°08×88°24W±0°04, h19km±3km, n79, σ0s66/117, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNCH** | **Conchagua** | **0.80** | **30** | *eP* | **Pb** | **06 36 22.9** | **+0.6** |
| **CNCH** | **Conchagua** | **0.80** | **30** | *eP* | **Pb** | **06 36 22.9** | **+0.6** |
| **LCND** | **La Caada** | **0.80** | **26** | *eP* | **Pb** | **06 36 22.5** | **+0.3** |
| LCND | | | | *eS* | **Sb** | **06 36 33.9** | **+1.2** |
| LCND | | | | IAML | | 06 36 36.1 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **ALJI** | **Alcalda de J** | **0.80** | **337** | *eP* | **Pg** | **06 36 23.0** | **+0.3** |
| **ALJI** | **Alcalda de J** | **0.80** | **337** | *eP* | **Pg** | **06 36 23.0** | **+0.3** |
| **LCY** | **Lacayo** | **0.83** | **357** | *eP* | **Pb** | **06 36 23.6** | **+0.7** |
| **LCY** | **Lacayo** | **0.83** | **357** | *eP* | **Pb** | **06 36 23.6** | **+0.7** |
| **VSM** | **San Miguel** | **0.84** | **358** | *eP* | **Pg** | **06 36 23.9** | **+0.5** |
| **VSM** | **San Miguel** | **0.84** | **358** | *eP* | **Pb** | **06 36 23.9** | **+0.5** |
| **RANC** | **El Ranchito** | **0.84** | **357** | *eP* | **Pb** | **06 36 23.6** | **+0.5** |
| RANC | | | | *eS* | **Sn** | **06 36 35.7** | **-0.2** |
| RANC | | | | IAML | | 06 36 38.3 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **RANC** | **El Ranchito** | **0.84** | **357** | *eP* | **Pb** | **06 36 23.6** | **+0.5** |
| RANC | | | | *eS* | **Sn** | **06 36 35.7** | **-0.2** |
| RANC | | | | IAML | | 06 36 38.3 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **PACA** | **Pacayal** | **0.88** | **355** | *eP* | **Pb** | **06 36 24.5** | **+0.8** |
| PACA | | | | *eS* | **Sn** | **06 36 36.5** | **-0.3** |
| **PACA** | **Pacayal** | **0.88** | **355** | *eP* | **Pb** | **06 36 24.5** | **+0.8** |
| PACA | | | | *eS* | **Sg** | **06 36 36.3** | **+0.4** |
| **PACA** | **Pacayal** | **0.88** | **355** | *eP* | **Pb** | **06 36 24.5** | **+0.8** |
| PACA | | | | *eS* | **Sn** | **06 36 36.5** | **-0.3** |
| **CNRM** | **Centro Naciona** | **0.89** | **5** | *eP* | **Pb** | **06 36 23.8** | **+0.1** |
| CNRM | | | | *eS* | **Sg** | **06 36 36.4** | **+0.3** |
| **CNRM** | **Centro Naciona** | **0.89** | **5** | *eP* | **Pb** | **06 36 23.8** | **+0.1** |
| CNRM | | | | *eS* | **Sg** | **06 36 36.4** | **+0.3** |
| **COEB** | **Comit de Eme** | **0.95** | **343** | *eP* | **Pb** | **06 36 24.9** | **+0.1** |
| COEB | | | | *eS* | **Sn** | **06 36 38.0** | **-0.4** |
| COEB | | | | IAML | | 06 36 40.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **COEB** | **Comit de Eme** | **0.95** | **343** | *eP* | **Pb** | **06 36 24.9** | **+0.1** |
| COEB | | | | *eS* | **Sn** | **06 36 38.0** | **-0.4** |
| COEB | | | | IAML | | 06 36 40.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.08** | **343** | *eP* | **Pb** | **06 36 26.9** | **-0.1** |
| PQSS | | | | *eS* | **Sb** | **06 36 40.8** | **+0.2** |
| **PQSS** | **Presa 15 de Se** | **1.08** | **343** | *eP* | **Pb** | **06 36 26.9** | **-0.1** |
| PQSS | | | | *eS* | **Sb** | **06 36 40.8** | **+0.2** |
| **TECO** | **Alcaldia de Te** | **1.08** | **331** | *eP* | **Pb** | **06 36 26.8** | **-0.2** |
| TECO | | | | *eS* | **Sb** | **06 36 40.6** | **-0.2** |
| **TECO** | **Alcaldia de Te** | **1.08** | **331** | *eP* | **Pb** | **06 36 26.8** | **-0.2** |
| TECO | | | | *eS* | **Sb** | **06 36 40.6** | **-0.2** |
| **CRIN** | **San Cristobal** | **1.17** | **84** | *eP* | **Pn** | **06 36 27.9** | **-0.4** |
| **UESV** | **Universidad de** | **1.17** | **333** | *eP* | **Pb** | **06 36 28.4** | **-0.2** |
| UESV | | | | *eS* | **Sb** | **06 36 43.1** | **-0.4** |
| **UESV** | **Universidad de** | **1.17** | **333** | *eP* | **Pb** | **06 36 28.4** | **-0.2** |
| UESV | | | | *eS* | **Sb** | **06 36 43.1** | **-0.4** |
| **SNVI** | **San Vicente** | **1.17** | **330** | *eP* | **Pb** | **06 36 28.6** | **-0.1** |
| **SNVI** | **San Vicente** | **1.17** | **330** | *eP* | **Pb** | **06 36 28.6** | **-0.1** |
| **COEG** | **Centro de Oper** | **1.20** | **329** | *eP* | **Pb** | **06 36 28.6** | **-0.5** |
| COEG | | | | *eS* | **Sb** | **06 36 44.0** | **-0.3** |
| **COEG** | **Centro de Oper** | **1.20** | **329** | *eP* | **Pb** | **06 36 28.6** | **-0.5** |
| COEG | | | | *eS* | **Sb** | **06 36 44.0** | **-0.3** |
| **SCLA** | **Alcaldia de Sa** | **1.21** | **337** | *eP* | **Pb** | **06 36 28.9** | **-0.3** |
| SCLA | | | | *eS* | **Sg** | **06 36 45.1** | **-1.1** |
| **SCLA** | **Alcaldia de Sa** | **1.21** | **337** | *eP* | **Pb** | **06 36 28.9** | **-0.3** |
| SCLA | | | | *eS* | **Sg** | **06 36 45.1** | **-1.1** |
| **SJTE** | **Alcalda de S** | **1.26** | **324** | *eP* | **Pn** | **06 36 29.8** | **+0.1** |
| SJTE | | | | *eS* | **Sb** | **06 36 45.5** | **-0.6** |
| **SJTE** | **Alcalda de S** | **1.26** | **324** | *eP* | **Pn** | **06 36 29.8** | **+0.1** |
| SJTE | | | | *eS* | **Sb** | **06 36 45.5** | **-0.6** |
| **LFRS** | **El Faro** | **1.30** | **322** | *eP* | **Pn** | **06 36 30.8** | **+0.6** |
| **LFRS** | **El Faro** | **1.30** | **322** | *eP* | **Pn** | **06 36 30.8** | **+0.6** |
| **PAVA** | **Las Pavas** | **1.31** | **329** | *eP* | **Pn** | **06 36 31.2** | **+0.9** |
| PAVA | | | | *eS* | **Sg** | **06 36 48.0** | **-1.4** |
| **PAVA** | **Las Pavas** | **1.31** | **329** | *eP* | **Pn** | **06 36 31.1** | **+0.8** |
| **PAVA** | **Las Pavas** | **1.31** | **329** | *eP* | **Pn** | **06 36 31.2** | **+0.9** |
| PAVA | | | | *eS* | **Sg** | **06 36 48.0** | **-1.4** |
| **IGN** | **Direccin Gen** | **1.44** | **321** | *eS* | **Sb** | **06 36 51.4** | **+0.2** |
| **IGN** | **Direccin Gen** | **1.44** | **321** | *eS* | **Sb** | **06 36 51.4** | **+0.2** |
| **UTEC** | **Universidad Te** | **1.45** | **320** | *eP* | **Pn** | **06 36 33.3** | **+1.1** |
| UTEC | | | | *eS* | **Sn** | **06 36 50.5** | **-0.2** |
| **UTEC** | **Universidad Te** | **1.45** | **320** | *eP* | **Pn** | **06 36 33.3** | **+1.1** |
| UTEC | | | | *eS* | **Sn** | **06 36 50.5** | **-0.2** |
| **OPAM** | **Oficina de Pla** | **1.46** | **320** | *eP* | **Pn** | **06 36 33.2** | **+0.9** |
| OPAM | | | | *eS* | **Sn** | **06 36 50.7** | **-0.2** |
| **OPAM** | **Oficina de Pla** | **1.46** | **320** | *eP* | **Pn** | **06 36 33.2** | **+0.9** |
| OPAM | | | | *eS* | **Sn** | **06 36 50.7** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **1.46** | **319** | *eS* | **Sb** | **06 36 51.2** | **-0.5** |
| **SNET** | **Serv Nac Est T** | **1.46** | **319** | *eS* | **Sb** | **06 36 51.2** | **-0.5** |
| **UESS** | **Universidad de**

**PB16 IPOC Station P 3.37 123** ⇓*i*P Pn **06 51 23.3 +2.7**
PB16 *i* S **Sn** **06 52 00.3 +0.5**
PB16 IAML 06 52 02.9
comp=N,3μm,0.9s
**PB16 IPOC Station P 3.37 123** *i* P **Pn** **06 51 23.4 +2.8**
PB16 *e*S **Sn** **06 52 01.0 +1.2**
PB16 IAML 06 52 02.0
comp=Z,795nm,0.4s
**LPAZ La Paz 4.17 88** P Pn 06 51 34.9 +3.4
comp=Z,8.5nm,0.3s,baz=315,slow=5.8,SNR=202
LPAZ S **Sn** **06 52 21.9 +2.5**
baz=250,slow=16,SNR=1.4
**PB11 IPOC Station P 4.21 141** Pn **Pn** **06 51 33.0 +1.3**
**PB11 IPOC Station P 4.21 141** *i* P **Pn** **06 51 33.1 +1.3**
PB11 *i* S **Sn** **06 52 18.5 -1.3**
PB11 IAML 06 52 20.6
comp=N,2μm,0.3s
**PB11 IPOC Station P 4.21 141** *i* P **Pn** **06 51 33.2 +1.5**
PB11 *e*S **Sn** **06 52 19.6 -0.2**
PB11 IAML 06 52 20.4
comp=Z,859nm,0.3s
**TA02 Huaiquique 4.37 150** **Pn** **06 51 35.8 +2.1**
**GO01 Chusmiza 4.44 136** **Pn** **06 51 37.2 +2.1**
**TA01 Diego Aracena 4.60 152** Pn **Pn** **06 51 38.8 +1.9**
**PB08 IPOC Station P 4.81 140** **Pn** **06 51 42.0 +1.9**
**PB08 IPOC Station P 4.81 140** *i* P **Pn** **06 51 41.9 +1.8**
PB08 *e*S **Sn** **06 52 33.8 -0.9**
PB08 IAML 06 52 36.3
comp=Z,513nm,0.4s
**PATCX Punta Patache 4.84 153** Pn **Pn** **06 51 42.1 +1.9**
**PB01 IPOC Station P 5.34 149** **Pn** **06 51 48.7 +1.7**
**PB02 IPOC Station P 5.39 154** **Pn** **06 51 49.3 +1.6**
**PB02 IPOC Station P 5.39 154** *i* P **Pn** **06 51 49.5 +1.8**
PB02 *e*S **Sn** **06 52 46.0 -2.5**
**PB07 IPOC Station P 5.75 155** **Pn** **06 51 54.6 +1.8**
**PB07 IPOC Station P 5.75 155** *i* P **Pn** **06 51 54.4 +1.6**
PB07 *e*S **Sn** **06 52 53.6 -3.9**
PB07 IAML 06 52 58.7
comp=Z,397nm,0.3s
**PB03 IPOC Station P 6.10 156** **Pn** **06 51 59.1 +1.6**
**PB03 IPOC Station P 6.10 156** *i* P **Pn** **06 51 59.0 +1.6**
PB03 *e*S **Sn** **06 53 03.9 -2.0**
**PB09 IPOC Station P 6.10 150** **Pn** **06 51 59.9 +2.4**
**PB09 IPOC Station P 6.10 150** *i* P **Pn** **06 51 59.8 +2.3**
**NNA Nana 6.16 316** P **Pn** **06 52 01.6 +3.4**
comp=Z,19nm,0.3s,baz=151,slow=10,SNR=31
NNA S **Sn** **06 53 10.7 +3.2**
comp=Z,7.4nm,0.3s,baz=228,slow=18,SNR=1.8
NNA LR LR 06 54 08.4
comp=Z,68nm,21.4s,baz=109,slow=35
**NNA Nana 6.16 316** **Pn** **06 51 59.6 +1.4**
**PB04 IPOC Station P 6.21 160** **Pn** **06 52 00.0 +1.0**
**PB04 IPOC Station P 6.21 160** *i* P **Pn** **06 52 00.3 +1.2**
PB04 *e*S **Sn** **06 53 04.9 -3.8**
**PB06 IPOC Station P 6.76 157** **Pn** **06 52 07.4 +0.9**
**PB06 IPOC Station P 6.76 157** *i* P **Pn** **06 52 07.8 +1.3**
PB06 *e*S **Sn** **06 53 20.2 -2.0**
**LVC Limon Verde 6.95 152** P **Pn** **06 52 11.7 +2.4**
comp=Z,45nm,0.3s,baz=358,slow=8.8,SNR=753
LVC S **Sn** **06 53 27.7 +0.5**
comp=Z,33nm,0.3s,baz=147,slow=13,SNR=15
**LVC Limon Verde 6.95 152** *e*P **Pn** **06 52 11.2 +1.9**
**LVC Limon Verde 6.95 152** *i* P **Pn** **06 52 11.7 +2.4**
LVC *e*S **Sn** **06 53 28.1 +1.0**
**PB10 IPOC Station P 7.22 166** Pn **Pn** **06 52 13.8 +1.2**
**PB10 IPOC Station P 7.22 166** *i* P **Pn** **06 52 13.7 +1.2**
**PB15 IPOC Station P 7.26 158** **Pn** **06 52 14.6 +1.3**
**PB14 IPOC Station P 8.32 167** Pn **Pn** **06 52 28.6 +0.6**
**CZSB Cruzeiro do Su 8.71 358** *e*P **Pn** **06 52 30.6 -2.4**
**ETMB Extrema 9.00 43** *e*P **Pn** **06 52 36.2 -0.8**
**AC02 Maricunga 10.75 164** **Pn** **06 53 03.4 +2.1**
**ATAH Atahualpa 10.95 327** P **Pn** **06 53 05.5 +1.5**
comp=Z,0.3nm,0.3s,baz=158,slow=19,SNR=1.4
**SIV San Ignacio 10.96 89** P **Pn** **06 53 01.9 -1.8**
comp=Z,0.5nm,0.3s,baz=278,slow=12,SNR=6.3
**VILB Vilhena 12.38 75** *e*P **Pn** **06 53 22.6 -0.5**
**TBTG Tabatinga, AM 12.48 12** *e*P **Pn** **06 53 22.7 -1.8**
**PDRB Porto dos Gac 16.02 74** *e*P **P** **06 54 10.5 -2.1**
**SALV Santo Antonio 16.12 90** *e*P **P** **06 54 12.0 -1.8**
**AQDB Aquidauana 16.39 107** *e*P **P** **06 54 17.1 +0.4**
**CLDB Colider 17.13 73** *e*P **P** **06 54 23.5 -1.4**
**MACA Manacapuru-AM 17.59 42** *e*P **Pn** **06 54 27.3 -2.8**
**H03N1 Juan Fernandez 17.85 198** T T 07 12 58.9
baz=22,slow=73,SNR=142
**H03N2 Juan Fernandez 17.86 198** T T 07 12 58.5
baz=22,slow=73,SNR=205
**H03N3 Juan Fernandez 17.87 198** T T 07 12 57.7
baz=22,slow=73,SNR=238
**PCON Cinco Dias 19.09 348** *e*P **Pn** **06 54 48.5 -0.1**
**NPGB Novo Progresso 19.18 63** *e*P **P** **06 54 45.3 -2.2**
**POPC Popayan, Colom 19.36 347** *e*P **Pn** **06 54 49.6 -1.8**
**ITQB Itaqui 19.58 135** P **Pn** **06 54 54.7 +1.0**
ITQB IAmb IAmb 06 55 23.5
comp=Z,79nm,1.9s
**ITQB Itaqui 19.58 135** *e*P **Pn** **06 54 54.3 +0.6**
**ARAG Araguaiana, MT 19.86 91** *e*P **Pn** **06 54 55.8 -1.3**
**PTGA Pitinga 19.92 39** P **P** **06 54 54.1 -1.5**
comp=Z,2.1nm,0.3s,baz=219,slow=12,SNR=10
PTGA LR LR 07 03 25.6
comp=Z,71nm,18.6s,baz=28,slow=39
**ITTB Itaituba 20.37 56** *e*P **P** **06 54 58.2 -2.2**
**PCMB Pacaembu 20.68 108** *e*P Pn 06 55 05.6 -1.1
**YOTC Yotoco, Valle 20.70 349** *e*P Pn 06 55 04.5 -2.6
**PTGB Pitanga 20.76 117** *e*P **P** **06 55 05.3 +0.7**
**SNDB Serra Nova Dou 21.00 80** *e*P **P** **06 55 05.2 -2.0**
**PLMC San Jos del P 21.59 350** *e*P **P** **06 55 15.6 +2.0**
**ITAB Concordia 21.66 123** P **P** **06 55 15.9 +1.8**
ITAB IAmb IAmb 06 55 56.0
comp=Z,53nm,1.8s
**ITAB Concordia 21.66 123** *e*P **P** **06 55 15.6 +1.5**
**GUY2C Guyana, Caldas 21.76 352** *e*P **P** **06 55 16.7 +0.9**
**SPBC San Pablo de B 22.05 356** *e*P **P** **06 55 18.1 -0.4**
**BOAV Boa Vista 22.16 33** *e*P **P** **06 55 18.5 -1.1**
**CPSB Cacapava Do Su 22.24 132** *e*P **P** **06 55 23.4 +3.0**
**CBBC Ciudad Bolivar 22.48 351** *e*P **P** **06 55 20.4 +1.2**
**PLTB Pedras Altas 22.91 135** P **P** **06 55 30.8 +3.4**
**PLTB Pedras Altas 22.91 135** *e*P **P** **06 55 30.0 +2.6**
**MALB Monte Alegre 23.08 53** *e*P **P** **06 55 27.1 -2.0**
**IPMB Ipameri, GO 23.21 97** *e*P **P** **06 55 30.5 0.0**
**BDFB Brasilia 23.51 91** P **P** **06 55 32.2 -1.1**
comp=Z,3.3nm,0.5s,baz=274,slow=12,SNR=6.9
**BDFB Brasilia 23.51 91** P **P** **06 55 32.6 -0.8**
BDFB IAmb IAmb 06 56 03.3
comp=Z,31nm,1.7s
**DBBC Dabeiba 23.65 351** *e*P **P** **06 55 36.0 +1.5**
**PEXB Peixe 23.81 83** *e*P **P** **06 55 34.6 -1.3**
**ZARC Zaragoza, Cauc 23.94 354** P **P** **06 55 36.4 -0.6**
**ZARC Zaragoza, Cauc 23.94 354** *e*P **P** **06 55 36.1 -0.9**
**PLCA Paso Flores 24.22 176** P **P** **06 55 41.1 +1.8**
comp=Z,3.1nm,0.9s,baz=356,slow=10,SNR=12
**PLCA Paso Flores 24.22 176** P **P** **06 55 42.0 +2.6**
**PLCA Paso Flores 24.22 176** *e*P **P** **06 55 41.3 +1.9**
**PRPB Parauapebas 24.43 68** *e*P **P** **06 55 41.2 -0.4**
**SMTB Santa Maria do 25.41 76** *e*P **P** **06 55 49.8 -0.6**
**BAUV El Baul 25.64 10** P **P** **06 55 51.4 -1.1**
BAUV IAmb IAmb 06 56 28.6
comp=Z,20nm,1.0s
**MCPB Macapa, AP 25.72 53** *e*P **P** **06 55 53.2 -0.1**
**BSCB Bom Sucesso 26.59 104** *e*P **P** **06 56 02.3 +1.2**
**SDBA SAO DESIDERIO 26.99 85** *e*P **P** **06 56 04.3 -0.4**
**JANB Januaria 27.13 91** *e*P **P** **06 56 05.3 -0.7**
**MC01 Montes Claros 27.33 95** *e*P **P** **06 56 08.0 +0.1**
**DIAM Diamantina, MG 27.53 98** *e*P **P** **06 56 11.1 +1.4**
**NBIT Itapeh - BA 31.82 92** *e*P **P** **06 56 48.9 +1.4**
**NBPN Ponto Novo - B 31.83 84** *e*P **P** **06 56 45.8 -1.8**
**GDU01 Guandu, BA 31.86 90** *e*P **P** **06 56 47.3 -0.6**
**NBPB Pedra_Branca-C 34.00 75** *e*P **P** **06 57 06.6 0.0**
**NBLA Lagarto - SE 34.09 85** *e*P **P** **06 57 06.6 -0.8**
**NBMA Muriti-CE 34.15 79** *e*P **P** **06 57 07.9 0.0**
**NBCL Cascavel-CE 35.69 74** *e*P **P** **06 57 20.6 -0.5**
**NBCA Caruaru-PE 36.49 81** *e*P **P** **06 57 28.0 -0.1**
**TX32 Lajitas Array 54.61 326** P **P** **06 59 51.8 +1.0**
TX32 IAmb IAmb 07 00 45.0
comp=Z,13nm,1.9s
**TXAR Lajitas Array 54.61 326** P **P** **06 59 51.8 +1.0**
comp=Z,0.7nm,1.0s,baz=154,slow=9.3,SNR=9.4
**TXAR Lajitas Array 54.61 326** P **P** **06 59 51.6 +0.8**
**X37A Clayton 55.27 337** P **P** **06 59 56.3 +1.0**
**X34A Smith Ranch, M 56.24 335** P **P** **07 00 03.5 +1.2**
**R40A Maddies Statio 57.57 342** P **P** **07 00 11.1 -0.5**
**SDCO Great Sand Dun 62.25 331** P **P** **07 00 45.8 +1.7**
**ECSD EROS Data Cent 63.88 341** P **P** **07 00 54.9 +0.5**

**PDAR Pinedale Array 68.11 331** P **P** **07 01 21.4 -0.5**
comp=Z,0.4nm,0.7s,baz=122,slow=7.2,SNR=4.0
**NVAR Mina Array Bea 69.49 323** P **P** **07 01 30.8 +0.4**
comp=Z,0.4nm,0.6s,baz=151,slow=6.4,SNR=6.1
**ULM Lac du Bonnet 69.58 344** P **P** **07 01 28.9 -1.6**
comp=Z,3.8nm,0.5s,baz=133,slow=3.5,SNR=4.0
**ULM Lac du Bonnet 69.58 344** IAmb IAmb 07 03 31.8
comp=Z,12nm,1.2s
**TORD Torodi Ar. Bea 78.97 73** P **P** **07 02 25.0 -0.8**
comp=Z,0.5nm,0.3s,baz=257,slow=5.4,SNR=3.4
**YKA Yellowknife Ar 85.38 342** P **P** **07 02 58.7 +0.4**
comp=Z,1.7nm,0.7s,baz=137,slow=5.0,SNR=34
**H11S2 WAKE ISLAND Hyl 23.74 281** T T 09 25 21.9
baz=109,slow=74,SNR=8.5
**H11S1 WAKE ISLAND Hyl 23.75 281** T T 09 25 23.2
SNR=10
**H11S3 WAKE ISLAND Hyl 23.76 281** T T 09 25 28.0
baz=100,slow=74,SNR=6.6
**ZALV Zalesovo Beam 138.65 20** PKP **PKPdf** **07 09 46.1 -0.6**
comp=Z,0.4nm,0.3s,baz=284,slow=1.2,SNR=3.6
**SONM Songino Array 148.73 1** PKPbc **PKiKP** **07 10 09.4 -0.6**
comp=Z,0.9nm,0.7s,baz=327,slow=2.9,SNR=6.1
**LZH Lanzhou 160.21 9** *e*PKP **PKPdf** **07 10 15.4 -5.6**
LZH pPKP pPKPdf 07 10 35.1 -7.9
**PZH PanZhiHua 168.67 27** PKP **PKPdf** **07 10 28.7 0.0**

*BEO* ***12*** *07:08:09.4±0.6, 44.21N×15.97E, h0km, ML3.9/11*
*IDC* ***12*** *07:08:14.7±1.3, 44.21N×17.02E, h0km, mb3.4/2, mb1 3.9/7, mb1mx3.5/50, mbtmp3.7/7, ML3.9/5, Error ellipse: s-maj=21.8km s-min=13.1km az=76.0*
*PDG* ***12*** *07:08:15.3±0.5, 44.12N×16.72E, h0km±11km, MD3.9/3, ML3.9/11, Error ellipse: s-maj=0.6km s-min=0.9km az=0.0*
*RHSSO* ***12*** *07:08:17.0±0.3, 44.11N×16.70E, h6km±1km, ML3.8/19*
*LDG* ***12*** *07:08:17.8±0.1, 44.17N×16.69E, h10km, Ml3.8/26, Error ellipse: s-maj=3.4km s-min=2.0km az=24.0*
*PRU* ***12*** *07:08:18.7±0.0, 44.28N×16.81E, h1km*
*THE* ***12*** *07:08:18.2, 43.77N×16.41E, h7km±53km, ML3.8/2, Error ellipse: s-maj=70.7km s-min=4.4km az=314.0*
**ISC 12 07:08:15.9**±0.9, **44.10N**±0.01×**16.64E**±0.02, **h13**km±6km, **n204,** σ2**12**/338**, 31C-11D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.19** | **241** | *e*Pg | **Pg** | **07 08 20.2** | **0.0** |
| KIJV | | | | Sg | **Sg** | **07 08 23.3** | **+0.1** |
| **MGRS** | **Mrkonjic Grad** | **0.45** | **45** | *e*Pg | **Pg** | **07 08 24.5** | **-0.3** |
| MGRS | | | | *e*Sg | **Sg** | **07 08 30.6** | **-0.3** |
| **RICI** | **Ricice** | **0.70** | **149** | *e*Pg | **Pg** | **07 08 27.9** | **-1.6** |
| RICI | | | | Sg | **Sg** | **07 08 38.2** | **-0.6** |
| **MORI** | **Morici** | **0.71** | **251** | *e*Pg | **Pg** | **07 08 29.2** | **-0.5** |
| MORI | | | | Sg | **Sb** | **07 08 40.6** | **+0.8** |
| **BLY** | **Banja Luka** | **0.76** | **31** | *e*Pg | **Pg** | **07 08 30.7** | **+0.1** |
| BLY | | | | *e*Sg | **Sb** | **07 08 42.1** | **+0.9** |
| **BLY** | **Banja Luka** | **0.76** | **31** | ⇓*i*Pg | **Pg** | **07 08 30.6** | **0.0** |
| BLY | | | | *e*Sg | **Sb** | **07 08 40.9** | **-0.3** |
| **UDBI** | **Udbina** | **0.76** | **305** | *e*Pg | **Pg** | **07 08 30.5** | **-0.2** |
| UDBI | | | | Sg | **Sg** | **07 08 40.7** | **+0.1** |
| **ZIRJ** | **Zirje** | **0.85** | **239** | *i* Pg | **Pg** | **07 08 31.5** | **-0.8** |
| ZIRJ | | | | Sg | **Sg** | **07 08 43.4** | **+0.1** |
| **MAKA** | **Makarska** | **0.86** | **161** | *e*Pg | **Pg** | **07 08 30.8** | **-1.7** |
| MAKA | | | | Sg | **Sg** | **07 08 43.7** | **0.0** |
| **PRIJ** | **Prijedor** | **0.88** | **3** | *e*Pg | **Pb** | **07 08 33.1** | **+0.1** |
| PRIJ | | | | *e*Sg | **Sb** | **07 08 44.7** | **0.0** |
| **HVAR** | **Hvar** | **0.93** | **189** | *e*Pg | **Pg** | **07 08 32.1** | **-1.7** |
| HVAR | | | | Sg | **Sb** | **07 08 46.6** | **+0.5** |
| **MRAK** | **Mrakovica** | **0.93** | **11** | ⇓*i*Pg | **Pb** | **07 08 34.1** | **+0.1** |
| MRAK | | | | *e*Sg | **Sb** | **07 08 46.5** | **+0.2** |
| **PLIT** | **Plitvice** | **1.07** | **317** | *e*Pg | **Pb** | **07 08 34.7** | **-1.5** |
| PLIT | | | | Sg | **Sb** | **07 08 50.0** | **-0.1** |
| **DUGI** | **Dugi Otok** | **1.15** | **265** | *e*Pg | **Pb** | **07 08 37.3** | **-0.3** |
| DUGI | | | | Sg | **Sn** | **07 08 55.2** | **+2.0** |
| **DOB** | **Doboj** | **1.22** | **58** | *e*Pg | **Pn** | **07 08 37.6** | **-1.1** |
| DOB | | | | *e*Sg | **Sb** | **07 08 53.9** | **-0.7** |
| **LSTV** | **Lastovo** | **1.34** | **172** | *e*Pg | **Pn** | **07 08 39.1** | **-1.2** |
| LSTV | | | | Sg | **Sn** | **07 08 58.2** | **+0.2** |
| **NVLJ** | **Novalja** | **1.35** | **291** | *e*Pg | **Pb** | **07 08 41.1** | **+0.1** |
| NVLJ | | | | Sg | **Sg** | **07 08 59.3** | **+2.9** |
| **STON** | **Ston** | **1.45** | **147** | *e*Pg | **Pn** | **07 08 41.8** | **0.0** |
| STON | | | | *e*Sg | **Sg** | **07 09 06.9** | **+4.3** |
| **STON** | **Ston** | **1.45** | **147** | *e*Pg | **Pn** | **07 08 42.0** | **+0.2** |
| STON | | | | *e*Sg | **Sg** | **07 09 02.6** | **0.0** |
| **STON** | **Ston** | **1.45** | **147** | *e*Pn | **Pn** | **07 08 40.8** | **-1.0** |
| STON | | | | Sg | **Sg** | **07 09 02.7** | **+0.2** |
| **RABC** | **Rab** | **1.48** | **297** | *e*Pg | **Pb** | **07 08 43.6** | **+0.3** |
| RABC | | | | Sg | **Sg** | **07 09 04.9** | **+1.3** |
| **MOSL** | **Moslavina** | **1.52** | **3** | *e*Pg | **Pn** | **07 08 43.2** | **+0.5** |
| MOSL | | | | Sg | **Sn** | **07 09 02.9** | **+0.5** |
| **BOJS** | **Bojanci** | **1.72** | **325** | *i* Pn | **Pb** | **07 08 47.1** | **-0.1** |
| BOJS | | | | *e*Sn | **Sg** | **07 09 10.4** | **-0.7** |
| BOJS | | | | IAML | | 07 09 19.9 | |
| comp=Z,875nm,0.7s | | | | | | | |
| **OZLJ** | **Ozalj** | **1.73** | **332** | *e*Pn | **Pb** | **07 08 47.0** | **-0.5** |
| **ZAG** | **Zagreb** | **1.79** | **345** | *e*Pn | **Pb** | **07 08 47.9** | **0.6** |
| ZAG | | | | *e*Sn | **Sb** | **07 09 11.5** | **+0.7** |
| **BRY** | **Bratogost** | **1.83** | **130** | ⇑*i*Pn | **Pb** | **07 08 48.6** | **-0.7** |
| BRY | | | | *e*Sn | **Sb** | **07 09 12.2** | **+0.1** |
| **BRY** | **Bratogost** | **1.83** | **130** | ⇑*i*Pn | **Pb** | **07 08 48.6** | **-0.7** |
| BRY | | | | *e*Sn | **Sg** | **07 09 15.6** | **+0.9** |
| **TREB** | **Trebinje** | **1.86** | **137** | *e*Pn | **Pb** | **07 08 49.7** | **0.0** |
| TREB | | | | *e*Sn | **Sg** | **07 09 16.4** | **+0.7** |
| **TREB** | **Trebinje** | **1.86** | **137** | ⇑*i*Pn | **Pb** | **07 08 49.6** | **-0.1** |
| TREB | | | | *e*Sn | **Sb** | **07 09 13.3** | **+0.4** |
| **PTJ** | **Puntijarka** | **1.87** | **345** | *e*Pn | **Pn** | **07 08 48.2** | **+0.5** |
| **UPM** | **Unac-Piva** | **1.87** | **118** | ⇑*i*Pn | **Pn** | **07 08 48.9** | **+1.1** |
| UPM | | | | *e*Sn | **Sb** | **07 09 13.1** | **-0.3** |
| **UPM** | **Unac-Piva** | **1.87** | **118** | ⇑*i*Pn | **Pb** | **07 08 49.1** | **-1.0** |
| UPM | | | | *e*Sn | **Sg** | **07 09 16.3** | **+0.2** |
| **GCIS** | **Gornji Cirnik** | **1.91** | **338** | *i* Pn | **Pn** | **07 08 49.4** | **+1.3** |
| **CRES** | **Cresnjev** | **1.92** | **334** | ⇑*i*Pn | **Pb** | **07 08 49.7** | **-1.1** |
| CRES | | | | *e*Sn | **Sb** | **07 09 15.0** | **+0.4** |
| **RIY** | **Rijeka** | **1.97** | **309** | *e*Pn | **Pb** | **07 08 51.7** | **+0.2** |
| RIY | | | | *e*Sn | **Sb** | **07 09 18.3** | **+0.4** |
| **RIY** | **Rijeka** | **1.97** | **309** | *e*Pn | **Pb** | **07 08 51.2** | **-0.3** |
| **BLJ** | **Bijeljina** | **2.00** | **69** | *e*Pn | **Pn** | **07 08 49.2** | **-0.2** |
| BLJ | | | | *e*Sn | **Sn** | **07 09 14.4** | **+0.1** |
| **SMRN** | **Sveta Marina** | **2.01** | **299** | *e*Pn | **Pb** | **07 08 51.6** | **-0.7** |
| SMRN | | | | Sn | **Sg** | **07 09 19.3** | **-1.2** |
| **BBLS** | **Lazići** | **2.01** | **96** | *e*Pn | **Pn** | **07 08 50.9** | **+1.3** |
| BBLS | | | | *e*Sn | **Sg** | **07 09 24.1** | **+3.6** |
| **BBLS** | **Lazići** | **2.01** | **96** | ⇑*i*Pn | **Pn** | **07 08 50.8** | **+1.2** |
| BBLS | | | | *e*Sn | **Sb** | **07 09 16.3** | **-1.0** |
| **RUDO** | **Rudo** | **2.03** | **103** | *e*Pn | **Pn** | **07 08 50.4** | **+0.6** |
| RUDO | | | | *e*Sn | **Sb** | **07 09 16.7** | **-1.2** |
| **KALN** | **Kalnik** | **2.04** | **356** | *e*Pn | **Pn** | **07 08 50.4** | **+0.4** |
| **LOBO** | **Lobor** | **2.10** | **349** | *e*Pn | **Pn** | **07 08 51.7** | **+1.0** |
| LOBO | | | | Sn | **Sn** | **07 09 17.5** | **+0.9** |
| **TEKS** | **Tekeris** | **2.12** | **77** | *e*Pn | **Pn** | **07 08 50.9** | **-0.2** |
| TEKS | | | | *e*Sn | **Sg** | **07 09 23.3** | **+0.8** |
| **TEKS** | **Tekeris** | **2.12** | **77** | *e*Pn | **Pn** | **07 08 51.6** | **+0.5** |
| TEKS | | | | *e*Sn | **Sn** | **07 09 18.7** | **+1.4** |
| **VISS** | **Visnje** | **2.13** | **324** | *i* Pn | **Pn** | **07 08 52.9** | **+1.7** |
| **HCY** | **Herceg Novi** | **2.13** | **140** | ⇑*i*Pn | **Pb** | **07 08 53.6** | **-0.8** |
| HCY | | | | *e*Sn | **Sb** | **07 09 19.7** | **-1.1** |
| **HCY** | **Herceg Novi** | **2.13** | **140** | ⇓*i*Pn | **Pb** | **07 08 53.0** | **-1.4** |
| HCY | | | | *i* Sn | **Sb** | **07 09 22.5** | **+1.7** |
| **PLE** | **Pljevlja** | **2.14** | **110** | ⇑*i*Pn | **Pn** | **07 08 52.7** | **+1.3** |
| PLE | | | | *i* Sn | **Sb** | **07 09 22.0** | **+1.0** |
| **NKME** | **Niksic** | **2.15** | **128** | ⇑*i*Pn | **Pn** | **07 08 53.0** | **+1.5** |
| NKME | | | | *i* Sn | **Sb** | **07 09 22.6** | **+1.4** |
| **KNDS** | **Knezji Dol** | **2.15** | **312** | *i* Pn | **Pb** | **07 08 54.4** | **-0.3** |
| **BRJN** | **Brijuni** | **2.22** | **292** | *i* Pn | **Pn** | **07 08 54.1** | **+1.7** |
| **KOVH** | **Kovagotottos** | **2.24** | **27** | PN | **Pn** | **07 08 52.7** | **0.0** |
| KOVH | | | | PB | **Pb** | **07 08 52.9** | **-3.3** |
| **CEY** | **Cerknica** | **2.27** | **317** | *e*Pn | **Pb** | **07 08 55.3** | **-1.5** |
| CEY | | | | *e*Sn | **Sb** | **07 09 23.8** | **-1.0** |
| **CEME** | **Cevo** | **2.27** | **132** | ⇑*i*Pn | **Pn** | **07 08 54.8** | **+1.6** |
| CEME | | | | *i* Sn | **Sb** | **07 09 25.7** | **+0.8** |
| **SKDS** | **Skadanscina** | **2.36** | **309** | ⇑*i*Pn | **Pb** | **07 08 56.7** | **-1.6** |
| SKDS | | | | *e*Sn | **Sb** | **07 09 25.7** | **-1.7** |
| **BEHE** | **Becsehely** | **2.37** | **2** | *e*Pn | **Pn** | **07 08 56.0** | **+1.5** |
| BEHE | | | | *e*Sn | **Sn** | **07 09 25.3** | **+1.8** |
| **BEHE** | **Becsehely** | **2.37** | **2** | PN | **Pn** | **07 08 56.1** | **+1.6** |
| BEHE | | | | PB | **Pb** | **07 08 56.9** | **-1.5** |
| BEHE | | | | SN | **Sn** | **07 09 23.6** | **+0.2** |
| **DIVS** | **Divibare** | **2.42** | **89** | *e*Pn | **Pn** | **07 08 55.7** | **+0.5** |
| DIVS | | | | *e*Sn | **Sg** | **07 09 32.2** | **-1.3** |
| **DIVS** | **Divibare** | **2.42** | **89** | ⇑*i*Pn | **Pn** | **07 08 55.9** | **+0.7** |
| DIVS | | | | *e*Sn | **Sn** | **07 09 26.1** | **+1.5** |

**KOME Kolasin 2.44 120** ⇓*i*Pn **Pn** **07 08 56.9 +1.4**
KOME *i* Sn **Sb** **07 09 29.4 -0.2**
**BUM Brajici-Budva 2.44 137** ⇑*i*Pn **Pn** **07 08 57.1 +1.6**
BUM *i* Sn **Sb** **07 09 29.7 +0.1**
**LJU Ljubljana 2.45 323** *e*Pn **Pn** **07 08 57.2 +1.6**
LJU *e*Sn **Sb** **07 09 28.5 -1.5**
**FRGS Fruska Gora 2.50 64** *e*Pn **Pn** **07 08 56.2 -0.1**
FRGS *e*Sn **Sb** **07 09 33.5 +2.2**
**FRGS Fruska Gora 2.50 64** *e*Pn **Pn** **07 08 57.8 +1.5**
FRGS *e*Sn **Sn** **07 09 27.6 +1.0**
**PDG Podgorica 2.54 130** ⇑P **Pn** **07 08 59.0 +2.2**
PDG ⇓S **Sb** **07 09 31.4 -0.9**
**PDG Podgorica 2.54 130** *e*Pn **Pb** **07 09 00.0 -1.2**
PDG *e*Sn **Sb** **07 09 34.3 +2.0**
**PDG Podgorica 2.54 130** *e*Pn **Pn** **07 08 58.9 +2.2**
PDG *e*Sn **Sn** **07 09 29.1 +1.6**
**TTG Podgorica 2.54 130** ⇑*i*Pn **Pn** **07 08 58.3 +1.6**
TTG *i* Sn **Sb** **07 09 31.9 -0.4**
**MORH Mrgy, Hungar 2.55 33** *e*Pn **Pn** **07 08 58.3 +1.4**
MORH *e*Sn **Sn** **07 09 30.2 +2.5**
**MORH Mrgy, Hungar 2.55 33** PN **Pn** **07 08 56.8 0.0**
MORH PB **Pb** **07 08 58.7 -2.7**
**SJES Sjenica 2.56 108** *e*Pn **Pn** **07 08 58.8 +1.6**
SJES *e*Sn **Sg** **07 09 37.1 -1.0**
**IVAS Ivanjica 2.59 100** *e*Pn **Pn** **07 08 58.4 +0.8**
IVAS *e*Sn **Sb** **07 09 36.3 +2.2**
**IVA Berane 2.67 116** ⇑*i*Pn **Pn** **07 09 00.0 +1.4**
IVA *i* Sn **Sb** **07 09 34.7 -1.5**
**TRUS Trudelj 2.71 86** *e*Pn **Pn** **07 09 00.0 +0.8**
TRUS *e*Sn **Sb** **07 09 38.9 +1.4**
**SOKA Soboth 2.82 337** *e*Pn **Pn** **07 09 02.0 +1.3**
comp=Z,14nm,0.3s,SNR=16
SOKA *e*Sn **Sn** **07 09 35.6 +1.0**
comp=Z,32nm,0.4s
**OBKA Obir 2.83 329** *e*Pn **Pn** **07 09 02.4 +1.5**
comp=Z,14nm,0.2s,SNR=7.9
OBKA *e*Sn **Sb** **07 09 40.0 -0.8**
comp=Z,102nm,0.4s
**PVY Plav 2.85 121** ⇓*i*Pn **Pn** **07 09 02.6 +1.4**
PVY *i* Sn **Sb** **07 09 39.3 -2.2**
**ULC Ulcinj 2.86 137** ⇑*i*Pn **Pn** **07 09 03.7 +2.4**
ULC *i* Sn **Sb** **07 09 39.9 -1.9**
**TIH Tihany 2.94 17** PN **Pn** **07 09 02.7 +0.5**
**AQU L'Aquila 2.94 235** *e*Pn **Pn** **07 09 04.9 +2.5**
AQU *e*Sn **Sn** **07 09 40.6 +3.1**
**GRUS Gruza 2.95 93** *e*Pn **Pn** **07 09 03.5 +1.1**
GRUS *e*Sn **Sb** **07 09 45.8 +1.6**
**MPLH Magyarpolny 3.13 11** PN **Pn** **07 09 06.2 +1.2**
**ARSA Arzberg 3.25 346** *i* Pn **Pn** **07 09 08.1 +1.5**
comp=Z,15nm,0.2s,SNR=11
**MYKA Terra Mystica 3.30 321** *e*Pn **Pn** **07 09 10.5 +3.2**
comp=Z,5.0nm,0.2s
MYKA *i* Sn **Sn** **07 09 48.1 +1.7**
comp=Z,18nm,0.4s
MYKA *e*Sg **Sg** **07 10 06.5 +4.8**
comp=Z,49nm,0.4s
**EGYH Egyhazaskeszo 3.35 8** PN **Pn** **07 09 09.9 +1.9**
EGYH PB **Pb** **07 09 15.4 +0.2**
EGYH SN **Sn** **07 09 48.6 +0.9**
**SELS Selova 3.37 104** *e*Pn **Pn** **07 09 09.0 +0.8**
**MATE Matera 3.45 179** ⇑P **Pn** **07 09 11.1 +1.8**
**CSKK Cskako 3.46 19** PN **Pn** **07 09 10.9 +1.5**
**SOP Sopron 3.58 359** PN **Pn** **07 09 12.6 +1.5**
SOP SN **Sn** **07 09 52.0 -1.3**
**TIR Tirane 3.63 138** ⇑P **Pn** **07 09 14.8 +3.0**
**TIR Tirane 3.63 138** *e*Pn **Pn** **07 09 14.0 +2.2**
**PHP Peshkopia 3.69 130** P **Pn** **07 09 16.4 +3.7**
**BOVS Bovan 3.69 95** ⇑P **Pn** **07 09 13.4 +0.8**
**MDVR Moldovita 3.70 78** ⇑P **Pn** **07 09 14.7 +1.9**
**KBA Koelnbreinsper 3.77 323** *i* Pn **Pn** **07 09 15.6 +1.7**
comp=Z,8.1nm,0.3s
**BZS Buzias 3.85 65** ⇑P **Pn** **07 09 17.0 +2.2**
**CONA Conrad Observa 3.87 352** *e*Pn **Pn** **07 09 16.7 +1.5**
comp=Z,14nm,0.3s,SNR=19
CONA *e*Sn **Sn** **07 10 01.8 +1.4**
comp=Z,35nm,0.4s
**SRO Srobarova 3.89 17** *e*PN **Pn** **07 09 17.1 +1.7**
SRO *e*SN **Sn** **07 10 01.3 +0.4**
**ABTA Abfaltersbach 3.93 314** *e*Pg **Pn** **07 09 18.9 +2.9**
comp=Z,7.5nm,0.2s
ABTA *e*Sn **Sn** **07 10 07.4 +5.3**
comp=Z,41nm,0.6s
ABTA Sg **Sg** **07 10 24.7 +2.7**
comp=Z,84nm,0.6s
**BARS Barje 3.98 107** *e*Pn **Pn** **07 09 14.7 -1.9**
**BARS Barje 3.98 107** *e*Pn **Pn** **07 09 18.0 +1.4**
**ZAGS Zajecar 4.05 92** *e*Pn **Pn** **07 09 18.3 +0.8**
**MOA Molln 4.10 337** *i* Pn **Pn** **07 09 20.7 +2.4**
comp=Z,9.8nm,0.2s,SNR=8.3
MOA *i* Sn **Sn** **07 10 08.0 +1.9**
comp=Z,15nm,0.2s
**ZST Bratislava 4.11 4** *e*PN **Pn** **07 09 19.6 +1.2**
ZST *e*SN **Sn** **07 10 05.3 -1.0**
**SKO Skopje 4.11 119** *i* Pn **Pn** **07 09 22.2 +3.8**
**HERR Herculane 4.21 77** ⇓P **Pn** **07 09 20.4 +0.7**
**DJES Djerdap 4.25 80** ⇑P **Pn** **07 09 20.9 +0.6**
**PRVS Prvonek 4.27 110** *e*Pn **Pn** **07 09 22.6 +1.9**
**OHR Ohrid 4.28 133** *i* Pn **Pn** **07 09 24.2 +3.4**
**MODS Modra-Piesok 4.30 6** *e*PN **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LANS** | **Liptovska Anna** | **5.42** | **20** | *e*PN | **Pn** | **07 09 38.5** | **+2.2** |
| **KPRO** | **Kipourio** | **5.43** | **138** | P | **Pn** | **07 09 39.6** | **+3.0** |
| KPRO | | | | S | **Sn** | **07 10 41.8** | **+2.8** |
| | comp=Z,90nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **5.46** | **338** | *e*PN | **Pn** | **07 09 38.7** | **+1.8** |
| KHC | | | | *ex* | x | 07 09 48.5 | |
| KHC | | | | *e*SN | **Sn** | **07 10 38.3** | **-1.2** |
| **DAVOX** | **Davos/Dischmat** | **5.46** | **302** | Pn | **Pn** | **07 09 40.4** | **+3.2** |
| | comp=Z,17nm,0.3s,baz=109,slow=13,SNR=83 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **07 10 45.0** | **+5.2** |
| | comp=Z,3.8nm,0.3s,baz=292,slow=21,SNR=3.6 | | | | | | |
| **KNT** | **Kendrikon** | **5.47** | **120** | P | **Pn** | **07 09 39.7** | **+2.6** |
| **DAVA** | **Damuels** | **5.71** | **306** | *i* Pn | **Pn** | **07 09 44.0** | **+3.5** |
| | comp=Z,5.1nm,0.2s | | | | | | |
| DAVA | | | | *e*Sn | **Sn** | **07 10 50.9** | **+5.0** |
| | comp=Z,16nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **5.71** | **6** | ⇓P | **Pn** | **07 09 42.1** | **+1.6** |
| **MORC** | **Moravsky Berou** | **5.71** | **6** | *e*PN | **Pn** | **07 09 42.6** | **+2.2** |
| MORC | | | | *e*SN | **Sn** | **07 10 43.8** | **-2.1** |
| **TRPA** | **Tarpa** | **5.75** | **43** | ⇑P | **Pn** | **07 09 42.3** | **+1.4** |
| **PGF** | **Pioggiola** | **5.79** | **257** | *e*Pn | **Pn** | **07 09 43.8** | **+2.3** |
| PGF | | | | *e*Sn | **Sn** | **07 10 45.9** | **-1.9** |
| | comp=Z,2.1nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **5.83** | **10** | *e*SN | **Sn** | **07 10 47.1** | **-1.6** |
| **ARR** | **Arges** | **5.83** | **75** | ⇑P | **Pn** | **07 09 44.1** | **+2.0** |
| **LIT** | **Litokhoron** | **5.91** | **131** | P | **Pn** | **07 09 44.6** | **+1.5** |
| **KRLC** | **Kraliky** | **5.98** | **1** | *e*PN | **Pn** | **07 09 46.1** | **+2.0** |
| **THL** | **Klokotos Trika** | **6.05** | **137** | P | **Pn** | **07 09 46.5** | **+1.4** |
| **PRU** | **Pruhonice** | **6.06** | **347** | *e*PN | **Pn** | **07 09 47.9** | **+2.7** |
| **LKD2** | **Lefkada island** | **6.10** | **149** | P | **Pn** | **07 09 46.9** | **+1.1** |
| LKD2 | | | | S | **Sn** | **07 10 55.7** | **+0.2** |
| **VOIR** | | **6.13** | **74** | ⇑P | **Pn** | **07 09 47.4** | **+1.1** |
| **NYDR** | **Nydri-Lefkada** | **6.18** | **149** | P | **Pn** | **07 09 47.5** | **+0.6** |
| **EVGI** | **Lefkada island** | **6.25** | **150** | P | **Pn** | **07 09 48.5** | **+0.7** |
| **DPC** | **Dobruska-Polom** | **6.26** | **358** | *e*PN | **Pn** | **07 09 49.2** | **+1.3** |
| DPC | | | | *e*SN | **Sn** | **07 10 55.8** | **-3.5** |
| **OSTC** | **Ostas** | **6.47** | **358** | *e*PN | **Pn** | **07 09 52.1** | **+1.3** |
| **KEF3** | **Kipouria, Keph** | **6.52** | **153** | P | **Pn** | **07 09 51.7** | **+0.2** |
| **MAKR** | **Makrakomi, Fth** | **6.54** | **139** | P | **Pn** | **07 09 53.8** | **+2.0** |
| **VLS** | **Valsamata** | **6.62** | **152** | P | **Pn** | **07 09 53.3** | **+0.4** |
| **AGG** | **Agios Georgios** | **6.63** | **138** | P | **Pn** | **07 09 54.3** | **+1.3** |
| **SBF** | **Sospel** | **6.65** | **271** | *e*Pn | **Pn** | **07 09 53.8** | **+0.5** |
| SBF | | | | *e*Sn | **Sn** | **07 11 05.5** | **-3.4** |
| | comp=Z,40nm,0.5s | | | | | | |
| **NKC** | **Novy Kostel** | **6.77** | **337** | *e*PN | **Pn** | **07 09 57.1** | **+2.2** |
| **XOR** | **Xorichti** | **6.81** | **132** | P | **Pn** | **07 09 56.7** | **+1.2** |
| **BURAR** | **Bucovina Array** | **6.94** | **57** | ⇑P | **Pn** | **07 09 58.7** | **+1.3** |
| **BRG** | **Berggiesshubel** | **7.02** | **346** | Pn | **Pn** | **07 10 01.4** | **+3.1** |
| BRG | | | | Amp | | 07 10 04.5 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| BRG | | | | *ex* | x | 07 11 14.3 | |
| **BRG** | **Berggiesshubel** | **7.02** | **346** | Sg | **Sb** | **07 11 37.4** | **-3.8** |
| BRG | | | | Amp | | 07 11 47.6 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **MBDF** | **Montbardon** | **7.10** | **279** | *e*Pn | **Pn** | **07 09 59.7** | **+0.2** |
| MBDF | | | | *e*Sn | **Sn** | **07 11 16.6** | **-3.5** |
| | comp=Z,32nm,0.6s | | | | | | |
| **LPG** | **La Plagne** | **7.17** | **285** | *e*Pn | **Pn** | **07 10 00.7** | **0.0** |
| LPG | | | | *e*Sn | **Sn** | **07 11 18.2** | **-4.0** |
| | comp=Z,52nm,0.8s | | | | | | |
| **LPL** | **La Plagne** | **7.19** | **285** | *e*Pn | **Pn** | **07 10 00.8** | **-0.1** |
| LPL | | | | *e*Sn | **Sn** | **07 11 18.6** | **-3.9** |
| | comp=Z,35nm,0.5s | | | | | | |
| **FRF** | **La Foret Royal** | **7.25** | **269** | *e*Pn | **Pn** | **07 10 01.5** | **0.0** |
| FRF | | | | *e*Sn | **Sn** | **07 11 20.0** | **-3.6** |
| | comp=Z,9.8nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **7.38** | **268** | *e*Pn | **Pn** | **07 10 03.4** | **+0.1** |
| LMR | | | | *e*Sn | **Sn** | **07 11 23.1** | **-3.8** |
| | comp=Z,6.6nm,0.3s | | | | | | |
| **CLL** | **Collm** | **7.62** | **343** | *e*Pn | Pn | 07 09 57.0 | -9.5 |
| CLL | | | | *e*Pg | **Pg** | **07 10 42.0** | **+0.4** |
| CLL | | | | *e*Sn | Sn | 07 11 20.0 | -13 |
| CLL | | | | *e*Sb | **Sb** | **07 11 56.0** | **-2.4** |
| CLL | | | | *e*Sg | **Sg** | **07 12 18.0** | **-2.1** |
| | comp=Z,22nm,1.2s | | | | | | |
| CLL | | | | *e*Sglp | | 07 12 22.0 | |
| | comp=N,100nm,12.9s | | | | | | |
| CLL | | | | *e*Sglp | | 07 12 22.0 | |
| | comp=E,100nm,20.4s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **7.74** | **280** | *e*Pn | **Pn** | **07 10 08.9** | **+0.6** |
| ORIF | | | | *e*Sn | **Sn** | **07 11 31.6** | **-4.2** |
| | comp=E,38nm,0.7s | | | | | | |
| **HINF** | **Hinteralfeld** | **7.77** | **302** | *e*Pn | **Pn** | **07 10 10.3** | **+1.7** |
| HINF | | | | *e*Sn | **Sn** | **07 11 32.0** | **-4.4** |
| | comp=E,6.1nm,0.3s | | | | | | |
| **CDF** | **Champ du Feu** | **7.79** | **307** | *e*Pn | **Pn** | **07 10 10.3** | **+1.3** |
| CDF | | | | *e*Sn | **Sn** | **07 11 32.6** | **-4.5** |
| | comp=E,21nm,0.9s | | | | | | |
| **CABF** | **La Chapelle** | **7.85** | **292** | *e*Pn | **Pn** | **07 10 09.7** | **-0.1** |
| CABF | | | | *e*Sn | **Sn** | **07 11 34.3** | **-4.1** |
| | comp=E,1.8nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **7.97** | **273** | *e*Pn | **Pn** | **07 10 12.9** | **+1.4** |
| SMRF | | | | *e*Sn | **Sn** | **07 11 37.2** | **-4.4** |
| | comp=E,113nm,1.6s | | | | | | |
| **HAU** | **Haudompre** | **8.15** | **302** | *e*Pn | **Pn** | **07 10 15.1** | **+1.2** |
| HAU | | | | *e*Sn | **Sn** | **07 11 41.1** | **-4.8** |
| | comp=E,16nm,0.5s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **8.59** | **279** | *e*Pn | **Pn** | **07 10 20.6** | **+0.7** |
| VIVF | | | | *e*Sn | **Sn** | **07 11 52.2** | **-4.5** |
| | comp=E,7.1nm,0.4s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **9.15** | **303** | *e*Pn | **Pn** | **07 10 27.1** | **-0.4** |
| **LASF** | **Ste Croix** | **9.20** | **274** | *e*Pn | **Pn** | **07 10 28.1** | **-0.2** |
| LASF | | | | *e*Sn | **Sn** | **07 12 06.6** | **-5.1** |
| | comp=E,3.9nm,0.6s | | | | | | |
| **SMF** | **Signal de Mont** | **9.36** | **290** | *e*Pn | **Pn** | **07 10 30.6** | **+0.1** |
| SMF | | | | *e*Sn | **Sn** | **07 12 10.5** | **-5.1** |
| | comp=E,30nm,0.8s | | | | | | |
| **LOR** | **Lormes** | **9.49** | **294** | *e*Pn | **Pn** | **07 10 33.7** | **+1.5** |
| | baz=114 | | | | | | |
| LOR | | | | *e*Sn | **Sn** | **07 12 13.5** | **-5.2** |
| | comp=E,7.9nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **9.67** | **292** | *e*Pn | **Pn** | **07 10 34.5** | **-0.2** |
| SSF | | | | *e*Sn | **Sn** | **07 12 19.0** | **-4.2** |
| | comp=E,12nm,0.7s | | | | | | |
| **AVF** | **Avril sur Loir** | **9.72** | **291** | *e*Pn | **Pn** | **07 10 36.0** | **+0.7** |
| AVF | | | | *e*Sn | **Sn** | **07 12 18.7** | **-5.6** |
| | comp=E,4.1nm,0.5s | | | | | | |
| **BGF** | **Bois d'Agland** | **10.02** | **289** | *e*Pn | **Pn** | **07 10 39.2** | **-0.3** |
| BGF | | | | *e*Sn | **Sn** | **07 12 25.8** | **-5.9** |
| | comp=E,22nm,0.6s | | | | | | |
| **BAIF** | **Baives** | **10.36** | **309** | *e*Pn | **Pn** | **07 10 43.4** | **-0.7** |
| **TCF** | **Toulx Ste Croi** | **10.42** | **287** | *e*Pn | **Pn** | **07 10 44.3** | **-0.7** |
| TCF | | | | *e*Sn | **Sn** | **07 12 35.7** | **-5.8** |
| | comp=E,1.9nm,0.3s | | | | | | |
| **CAF** | **Calviac** | **10.45** | **280** | *e*Pn | **Pn** | **07 10 45.1** | **-0.2** |
| CAF | | | | *e*Sn | **Sn** | **07 12 36.2** | **-6.0** |
| | comp=E,1.5nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **10.47** | **271** | *e*Pn | **Pn** | **07 10 45.5** | **-0.2** |
| MTLF | | | | *e*Sn | **Sn** | **07 12 36.7** | **-6.1** |
| | comp=E,1.3nm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **10.85** | **141** | Pn | **Pn** | **07 10 51.8** | **+0.9** |
| | comp=E,0.9nm,0.3s,baz=324,slow=12,SNR=3.2 | | | | | | |
| **GRR** | **Gorron** | **12.85** | **296** | *e*Pn | **Pn** | **07 11 18.8** | **+0.7** |
| **ESDC** | **Sonseca Array** | **15.96** | **261** | Pn | **P** | **07 12 04.2** | **+0.6** |
| | comp=E,0.1nm,0.3s,baz=67,slow=12,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.40** | **207** | P | **P** | **07 14 54.9** | **+0.7** |
| | comp=E,0.8nm,0.8s,baz=5.3,slow=8.2,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.93** | **62** | P | **P** | **07 16 29.5** | **-0.8** |
| | comp=E,0.1nm,0.5s,baz=292,slow=6.7,SNR=4.6 | | | | | | |

*NNC* ***12*** *07:30:32.9±0.5,50°.13N×79°.00E, h0km, mb3.3, mpv2.9, Error ellipse: s-maj=8.8km s-min=2.5km az=62.0, Suspected Mining explosion.*

*IDC* ***12*** *07:30:33.9±0.8,50°.11N×78°.78E, h0km, mb1 3.0/3, mb1mx2.9/38, mbtmp3.0/3, ML2.8/3, Error ellipse: s-maj=11.6km s-min=5.9km az=58.0*

**ISC 12 07:30:33.4±0.8, 50°.19N±0°.05×78°.90E±0°.06, h0km, n19, σ0s95/34, 24C-8D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.47** | **328** | ⇑P | | **Pb** | | **07 30 43.6** | **-0.8** |
| KUR07 | | | | ⇑S | | **Sb** | | **07 30 51.8** | **-0.1** |
| **KUR14** | **Kurchatov Arra** | **0.47** | **335** | ⇓P | | **Pb** | | **07 30 43.8** | **-0.7** |
| KUR14 | | | | ⇓S | | **Sb** | | **07 30 52.0** | **-0.1** |
| **KUR06** | **Kurchatov Arra** | **0.48** | **330** | ⇑P | | **Pb** | | **07 30 43.9** | **-0.8** |
| KUR06 | | | | ⇓S | | **Sb** | | **07 30 52.3** | **-0.1** |
| **KUR15** | **Kurchatov Arra** | **0.48** | **333** | ⇑P | | **Pb** | | **07 30 44.0** | **-0.7** |
| KUR15 | | | | ⇑S | | **Sb** | | **07 30 52.2** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **0.50** | **331** | Pg | | **Pg** | | **07 30 43.2** | **+0.3** |
| | 2.8nm,0.3s,baz=164,slow=19,SNR=164 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 07 30 53.4 | |
| | 1.8nm,0.3s,baz=163,slow=32,SNR=11 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.50** | **331** | ⇑P | | **Pb** | | **07 30 44.2** | **-0.8** |
| | 24nm,0.3s | | | | | | | | |
| KURBB | | | | ⇓S | | **Sb** | | **07 30 53.0** | **+0.2** |
| | 21nm,0.4s | | | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.51** | **330** | ⇑P | | **Pb** | | **07 30 44.4** | **-0.9** |
| KUR16 | | | | ⇑S | | **Sb** | | **07 30 52.8** | **-0.4** |
| **KUR05** | **Kurchatov Arra** | **0.51** | **333** | ⇑P | | **Pb** | | **07 30 44.4** | **-0.9** |
| KUR05 | | | | ⇑S | | **Sb** | | **07 30 53.3** | **0.0** |
| **KUR17** | **Kurchatov Arra** | **0.53** | **328** | ⇑P | | **Pb** | | **07 30 44.6** | **-0.9** |
| KUR17 | | | | ⇑S | | **Sb** | | **07 30 53.0** | **-0.6** |
| **KUR04** | **Kurchatov Arra** | **0.53** | **334** | ⇑P | | **Pb** | | **07 30 44.9** | **-0.7** |
| KUR04 | | | | ⇓S | | **Sb** | | **07 30 53.9** | **+0.1** |
| **KURK** | **Kurchatov** | **0.56** | **341** | ⇑P | | **Pb** | | **07 30 45.4** | **-0.6** |
| | 6.9nm,0.3s | | | | | | | | |
| KURK | | | | ⇑S | | **Sb** | | **07 30 53.9** | **-0.7** |
| | 8.1nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.95** | **148** | ⇓Pg | | **Pb** | | **07 31 43.2** | **-0.6** |
| | 1.2nm,0.5s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | | 07 32 37.0 | |
| | 1.8nm,0.3s | | | | | | | | |
| **MK31** | **Makanchi Array** | **4.07** | **145** | ⇑Pn | | **Pn** | | **07 31 36.4** | **-0.5** |
| | 0.2nm,0.2s,baz=320,slow=9.9,SNR=62 | | | | | | | | |
| MK31 | | | | ⇓Pg | | **Pb** | | **07 31 43.8** | **-2.1** |
| | 0.9nm,0.3s,baz=329,slow=14,SNR=6.5 | | | | | | | | |
| MK31 | | | | ⇓Sn | | **Sn** | | **07 32 26.1** | **+0.8** |
| | 0.3nm,0.2s | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | | 07 32 40.2 | |
| | 1.3nm,0.3s,baz=328,slow=27,SNR=6.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.07** | **145** | Pn | | **Pn** | | **07 31 36.5** | **-0.5** |
| | 0.6nm,0.3s,baz=327,slow=11,SNR=53 | | | | | | | | |
| MKAR | | | | Pg | | **Pb** | | **07 31 45.7** | **-0.3** |
| | 1.6nm,0.3s,baz=327,slow=15,SNR=28 | | | | | | | | |
| MKAR | | | | Sn | | **Sn** | | **07 32 26.6** | **+1.3** |
| | 0.8nm,0.3s,baz=337,slow=22,SNR=5.5 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 07 32 37.6 | |
| | 2.0nm,0.3s,baz=332,slow=28,SNR=9.2 | | | | | | | | |
| **OTUK** | **Ortayu** | **4.72** | **248** | ⇑Pn | | **Pn** | | **07 31 43.5** | **-2.3** |
| | 1.6nm,0.3s | | | | | | | | |
| OTUK | | | | ⇑Pg | | **Pb** | | **07 31 57.4** | **+0.5** |
| | 1.2nm,0.6s | | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | | 07 33 01.9 | |
| | 1.4nm,0.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.24** | **42** | Pn | | Pn | | 07 31 56.8 | +3.9 |
| | 1.4nm,0.3s,baz=229,slow=14,SNR=18 | | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.24** | **42** | *i* | | | | 08 03 10.0 | |
| | baz=224,slow=333,SNR=2.7 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **6.02** | **301** | Pn | | **Pn** | | **07 32 02.3** | **-1.3** |
| | 0.2nm,0.3s,baz=125,slow=12,SNR=2.6 | | | | | | | | |
| BVAR | | | | Sn | | **Sn** | | **07 33 13.2** | **+0.1** |
| | 0.4nm,0.3s,baz=103,slow=31,SNR=2.7 | | | | | | | | |
| **BRVK** | **Borovoye** | **6.09** | **301** | ⇓Pn | | **Pn** | | **07 32 04.8** | **+0.3** |
| | 1.3nm,0.7s | | | | | | | | |
| BRVK | | | | ⇑Sn | | **Sn** | | **07 33 17.1** | **+2.2** |
| | 1.5nm,0.8s | | | | | | | | |
| BRVK | | | | ⇑Lg | | Lg | | 07 33 48.9 | |
| | 1.1nm,0.7s | | | | | | | | |

**WEL 12 07:41:15.6±1.2, 34°S×21°×17°9W±3°0, h149km±48km, M3.8/7, mB4.5/3, ML4.0/11, MLv3.8/7, Mw(mB)3.6/3, Error ellipse: s-maj=0.0km s-min=0.0km az=122.4, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.82** | **209** | P | | Pn | | 07 42 13.0 | -0.4 |
| MXZ | | | | S | | Sn | | 07 42 58.9 | +0.5 |
| **WMGZ** | **Waiomatatini S** | **4.01** | **206** | P | | Pn | | 07 42 16.2 | +0.4 |
| WMGZ | | | | S | | Sn | | 07 43 04.5 | +1.8 |
| **HAZ** | **Te Kaha** | **4.21** | **212** | P | | Pn | | 07 42 18.1 | -0.4 |
| HAZ | | | | S | | Sn | | 07 43 09.1 | +1.7 |
| **PUZ** | **Puketiti** | **4.29** | **206** | P | | Pn | | 07 42 19.5 | 0.0 |
| PUZ | | | | S | | Sn | | 07 43 08.7 | -0.6 |
| **RUGZ** | **Raukumara Rang** | **4.43** | **212** | P | | Pn | | 07 42 21.3 | -0.2 |
| RUGZ | | | | S | | Sn | | 07 43 13.6 | +0.8 |
| **TWGZ** | **Tauwhareparae** | **4.48** | **208** | P | | Pn | | 07 42 22.5 | +0.4 |
| TWGZ | | | | S | | Sn | | 07 43 13.1 | -0.9 |
| **MWZ** | **Matawai** | **4.80** | **211** | P | | Pn | | 07 42 26.1 | -0.3 |
| MWZ | | | | S | | Sn | | 07 43 19.0 | -2.5 |
| **OPRZ** | **Ohinepanea** | **4.89** | **221** | P | | Pn | | 07 42 28.2 | +0.8 |
| **URZ** | **Urewera** | **4.92** | **214** | P | | Pn | | 07 42 27.0 | -0.9 |
| URZ | | | | S | | Sn | | 07 43 24.8 | +0.4 |
| **RAGZ** | **Rawiri** | **4.98** | **210** | P | | Pn | | 07 42 28.5 | -0.4 |
| RAGZ | | | | S | | Sn | | 07 43 27.3 | +1.3 |
| **RIGZ** | **Rimuhau** | **5.03** | **206** | P | | Pn | | 07 42 30.0 | +0.6 |
| RIGZ | | | | S | | Sn | | 07 43 26.7 | -0.2 |
| **SNGZ** | **Shannon Statio** | **5.26** | **209** | P | | Pn | | 07 42 32.1 | -0.3 |
| SNGZ | | | | S | | Sn | | 07 43 34.4 | +2.1 |
| **RTZ** | **Ruatahuna** | **5.27** | **213** | P | | Pn | | 07 42 32.5 | -0.1 |
| **RAHZ** | **Arahi** | **5.48** | **210** | P | | Pn | | 07 42 36.4 | +1.1 |
| **MTHZ** | **Maungataniwha** | **5.53** | **212** | P | | Pn | | 07 42 35.8 | -0.2 |
| **ARHZ** | **Aropaoanui** | **5.81** | **209** | P | | Pn | | 07 42 39.7 | 0.0 |

**IDC 12 07:51:28.8±58.0, 19°41S×179°78E, h0km, mb3.9/3, mb1 4.1/3, mb1mx3.6/39, mbtmp3.9/3, Error ellipse: s-maj=1049.0km s-min=153.2km az=80.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.41** | **242** | P | | P | | 07 58 35.3 | +0.1 |
| | 1.2nm,0.7s,baz=82,slow=11,SNR=3.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.69** | **261** | P | | P | | 07 59 27.6 | -0.1 |
| | 0.6nm,0.3s,baz=96,slow=7.6,SNR=26 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.74** | **256** | P | | P | | 07 59 27.9 | -0.3 |
| | 1.2nm,0.7s,baz=96,slow=7.9,SNR=19 | | | | | | | | |

*NNC* ***12*** *07:58:35.5±3.3, 53°.77N×88°.10E, h0km, mb3.4, mpv3.0, Error ellipse: s-maj=26.2km s-min=15.8km az=52.0, Suspected Mining explosion.*

**IDC 12 07:58:34.6±2.8, 53°.82N×88°.23E, h0km, mb1 3.3/3, mb1mx3.0/59, mbtmp3.3/3, ML2.8/3, 6C-4D, Error ellipse: s-maj=23.7km s-min=16.9km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **2.02** | **275** | *i* | | | | 08 12 50.0 | |
| | baz=90,slow=344,SNR=1.1 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **2.02** | **275** | ⇑Pg | | Pn | | 07 59 10.4 | +0.5 |
| | 2.6nm,0.6s | | | | | | | | |
| ZAA0 | | | | ⇑Lg | | Lg | | 07 59 39.3 | |
| | 5.7nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.02** | **275** | Pn | | Pn | | 07 59 10.6 | +0.7 |
| | 4.1nm,0.3s,baz=90,slow=12,SNR=64 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 07 59 38.5 | |
| | 6.9nm,0.3s,baz=95,slow=24,SNR=18 | | | | | | | | |
| **KURK** | **Kurchatov** | **6.67** | **246** | ⇑Pn | | Pn | | 08 00 14.1 | +0.4 |
| | 2.1nm,0.9s | | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | | 08 02 01.8 | |
| | 5.5nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.76** | **246** | Pn | | Pn | | 08 00 15.7 | +0.6 |
| | 0.3nm,0.3s,baz=63,slow=14,SNR=13 | | | | | | | | |
| KURBB | | | | Sn | | Sn | | 08 01 31.3 | -1.4 |
| | 0.1nm,0.3s,baz=97,slow=28,SNR=1.6 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 08 02 07.8 | |
| | 0.1nm,0.3s,baz=64,slow=33,SNR=6.7 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.76** | **246** | ⇓Pn | | Pn | | 08 00 15.6 | +0.6 |
| | 2.6nm,0.3s | | | | | | | | |
| KURBB | | | | ⇑Sn | | Sn | | 08 01 31.6 | -1.1 |
| | 4.6nm,0.7s | | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | | 08 02 05.2 | |
| | 6.6nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **8.00** | **211** | ⇑Pn | | Pn | | 08 00 33.3 | +1.3 |
| | 0.1nm,0.3s,baz=29,slow=12,SNR=16 | | | | | | | | |
| MK31 | | | | ⇓Sn | | Sn | | 08 02 02.9 | -0.1 |
| | 0.4nm,0.5s,baz=38,slow=27,SNR=5.2 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | | 08 02 46.5 | |
| | 1.9nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.00** | **211** | Pn | | Pn | | 08 00 32.7 | +0.7 |
| | 0.3nm,0.3s,baz=31,slow=14,SNR=19 | | | | | | | | |
| MKAR | | | | Sn | | Sn | | 08 02 03.8 | +0.8 |
| | 0.2nm,0.3s,baz=35,slow=28,SNR=5.4 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 08 02 48.4 | |
| | 0.1nm,0.3s,baz=21,slow=32,SNR=4.5 | | | | | | | | |

**NNC 12 08:05:46.1±2.7, 53°.66N×88°.06E, h0km, mb3.5, mpv3.2, 6C-7D, Error ellipse: s-maj=20.3km s-min=11.6km az=62.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **1.94** | **280** | ⇑Pg | | Pn | | 08 06 20.6 | +0.3 |
| | 3.9nm,0.8s | | | | | | | | |
| ZAA0 | | | | ⇓Lg | | Lg | | 08 06 49.5 | |
| | 13nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **6.51** | **247** | ⇓Pn | | Pn | | 08 07 24.1 | +1.1 |
| | 3.6nm,1.0s | | | | | | | | |
| KURK | | | | ⇑Sn | | Sn | | 08 08 38.4 | +0.5 |
| | 4.9nm,1.0s | | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | | 08 09 15.0 | |
| | 8.0nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.61** | **246** | ⇑Pn | | Pn | | 08 07 25.7 | +1.4 |
| | 1.8nm,0.3s | | | | | | | | |
| KURBB | | | | ⇑Sn | | Sn | | 08 08 40.3 | 0.0 |
| | 5.8nm,0.7s | | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | | 08 09 18.8 | |
| | 7.8nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.81** | **211** | ⇓Pn | | Pn | | 08 07 43.0 | +2.2 |
| | 0.7nm,0.8s,baz=26,slow=13,SNR=5.3 | | | | | | | | |
| MK31 | | | | ⇑Sn | | Sn | | 08 09 10.9 | +1.0 |
| | 0.7nm,0.6s,baz=48,slow=30,SNR=4.4 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | | 08 09 55.6 | |
| | 2.4nm,0.8s,baz=26,slow=29 | | | | | | | | |
| **MAKZ** | **Makanchi** | **7.89** | **212** | ⇓Sn | | Sn | | 08 09 12.0 | +0.1 |
| | 1.0nm,0.5s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | | 08 09 55.8 | |
| | 5.0nm,1.1s | | | | | | | | |

*ANF* ***12*** *08:10:25.1±0.7, 31°.98N×117°.29W, h5km, ML3.7/21, Error ellipse: s-maj=5.3km s-min=3.2km az=174.0*

*PAS* ***12*** *08:10:26.5±1.8, 31°.93N±0°.01×117°.28W±0°.03, h6km±2km, ML3.9/99, ML3.6/42(NEIC), Error ellipse: s-maj=4.9km s-min=3.0km az=111.0*

*MEX* ***12*** *08:10:27.3±0.7, 32°.07N×117°.45W, h32km±39km, MD4.2*

*ECX* ***12*** *08:10:27.8±0.5, 31°.93N×117°.22W, h20km±14km, MD3.4, ML3.6, Fault plane solution: NP1:ϕs137.00000°, δ28.00000°, λ177.00000°.*

*NEIC* ***12*** *08:10:28.1±2.1, 32°.03N±0°.02×117°.21W±0°.05, h15km±6km, Error ellipse: s-maj=6.9km s-min=1.2km az=61.0*

*IDC* ***12*** *08:10:29.0±2.0, 32°.06N×116°.89W, h0km, mb3.2/2, mb1 3.3/6, mb1mx3.2/54, mbtmp2.9/6, ML3.1/4, Error ellipse: s-maj=27.3km s-min=17.0km az=75.0*

**ISC 12 08:10:25.2±1.4, 31°.93N±0°.03×117°.29W±0°.03, h2km±10km, n83, σ1s38/110, 10C-10D, Off west coast of Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **CCX** | **Cicese** | **0.54** | **97** | | | **Pg** | | **08 10 35.6** | **+0.2** |
| **CCX** | **Cicese** | **0.54** | **97** | ⇑*i*P | | **Pg** | | **08 10 36.5** | **+1.1** |
| CCX | | | | *e*S | | **Sg** | | **08 10 43.4** | **+1.0** |
| **PLATJ** | **Playas de Tiju** | **0.59** | **14** | ⇓*e*P | | **Pb** | | **08 10 38.6** | **+0.4** |
| PLATJ | | | | *e*S | | **Sb** | | **08 10 46.7** | **-0.3** |
| **AGUTJ** | **Tijuana** | **0.59** | **24** | *e*P | | **Pb** | | **08 10 38.1** | **-0.2** |
| AGUTJ | | | | *e*S | | **Sb** | | **08 10 46.5** | **-0.7** |
| **DRETJ** | **Distrito Refor** | **0.60** | **28** | ⇑*e*P | | **Pb** | | **08 10 38.3** | **-0.1** |
| DRETJ | | | | *e*S | | **Sb** | | **08 10 46.6** | **-0.9** |
| **TJX** | **Tijuana** | **0.61** | **19** | | | **Pb** | | **08 10 38.5** | **0.0** |
| **TJX** | **Tijuana** | **0.61** | **19** | ⇑*i*P | | **Pb** | | **08 10 38.6** | **0.0** |
| TJX | | | | *e*S | | **Sb** | | **08 10 46.9** | **-0.7** |
| **TJX** | **Tijuana** | **0.61** | **19** | ⇓*i*P | | **Pb** | | **08 10 38.5** | **0.0** |
| TJX | | | | *i* S | | **Sb** | | **08 10 47.1** | **-0.5** |
| TJX | | | | *e* | | | | 08 10 48.4 | |
| **HGTTJ** | **Hospital Gral.** | **0.64** | **22** | ⇑*e*P | | **Pb** | | **08 10 39.0** | **0.0** |
| HGTTJ | | | | *e*S | | **Sb** | | **08 10 47.6** | **-0.8** |
| **CBX** | **Cerro Bola** | **0.65** | **54** | | | **Pb** | | **08 10 39.1** | **-0.4** |
| CBX | | | | IAML | | | | 08 10 48.2 | |
| | comp=E,6μm,0.4s | | | | | | | | |
| **CBX** | **Cerro Bola** | **0.65** | **54** | ⇑*e*P | | **Pb** | | **08 10 39.0** | **-0.4** |
| CBX | | | | *e*S | | **Sb** | | **08 10 47.5** | **-1.6** |
| CBX | | | | ⇓*e* | | | | 08 10 48.3 | |
| CBX | | | | IAML | | | | 08 10 48.3 | |
| | comp=E,5μm,0.4s | | | | | | | | |
| CBX | | | | ⇓*e* | | | | 08 10 49.4 | |
| CBX | | | | IAML | | | | 08 10 49.4 | |
| | comp=N,5μm,0.4s | | | | | | | | |
| **PIPTJ** | **Tijuana** | **0.66** | **31** | ⇑*e*P | | **Pb** | | **08 10 39.6** | **+0.2** |
| **TJIG** | **Tijuana** | **0.72** | **46** | | | **Pg** | | **08 10 39.8** | **+0.8** |
| TJIG | | | | | | **Sb** | | **08 10 49.0** | **-1.9** |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SPIG | | | | | *e*S | | **Sn** | 08 11 20.9 | -0.1 |
| **SPIG** | **San Pedro Mart** | **1.79** | **119** | ⇑ | *e*P | | **Pn** | 08 10 56.1 | -1.4 |
| **PFO** | **Pinyon Flats O** | **1.81** | **22** | | Pg | | **Pb** | 08 10 58.5 | -0.7 |
| | comp=E,21nm,0.3s,baz=208,slow=13,SNR=311 | | | | | | | | |
| PFO | | | | | Lg | | Lg | 08 11 21.4 | |
| | comp=E,70nm,0.3s,baz=104,slow=16,SNR=19 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.81** | **22** | | | | **Pb** | 08 10 58.3 | -0.9 |
| PFO | | | | | IAML | | | 08 11 28.0 | |
| | comp=E,484nm,0.8s | | | | | | | | |
| PFO | | | | | IAML | | | 08 11 34.8 | |
| | comp=E,419nm,0.9s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.81** | **22** | | P | | **Pn** | 08 10 57.1 | -0.5 |
| | baz=202,SNR=203 | | | | | | | | |
| PFO | | | | | Sb | | **Sg** | 08 11 22.1 | -1.4 |
| | baz=202 | | | | | | | | |
| **MBIG** | **Mexicali** | **1.84** | **75** | | | | **Pn** | 08 10 56.5 | -1.2 |
| MBIG | | | | | | | **Sn** | 08 11 18.5 | -3.1 |
| **MBIG** | **Mexicali** | **1.84** | **75** | | *e*P | | **Pn** | 08 10 56.5 | -1.2 |
| MBIG | | | | | *e*S | | **Sn** | 08 11 18.5 | -3.1 |
| **GUVIX** | **Guadalupe Vict** | **1.91** | **78** | | | | **Pb** | 08 11 01.9 | +1.1 |
| **SFX** | **San Felipe** | **2.27** | **113** | | Pn | | **Pn** | 08 11 06.0 | +2.4 |
| **SFX** | **San Felipe** | **2.27** | **113** | | IAML | | | 08 11 44.8 | |
| | comp=N,267nm,1.1s | | | | | | | | |
| SFX | | | | ⇑ | *e* | | | 08 11 44.8 | |
| **SNCC** | **San Nicolas Is** | **2.30** | **305** | | S | | **Sn** | 08 11 30.2 | -2.8 |
| | baz=124 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **2.31** | **42** | | P | | **Pn** | 08 11 03.8 | -0.6 |
| | baz=222,SNR=37 | | | | | | | | |
| BC3 | | | | | Sb | | **Sg** | 08 11 36.8 | -2.7 |
| | baz=222 | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.33** | **27** | | P | | **Pn** | 08 11 03.9 | -0.8 |
| | baz=208,SNR=92 | | | | | | | | |
| BELC | | | | | Sb | | **Sg** | 08 11 37.6 | -2.5 |
| | baz=208 | | | | | | | | |
| **GLA** | **Glamis** | **2.36** | **61** | | | | **Pn** | 08 11 05.6 | +0.5 |
| GLA | | | | | IAML | | | 08 11 42.9 | |
| | comp=N,336nm,0.5s | | | | | | | | |
| GLA | | | | | IAML | | | 08 11 51.7 | |
| | comp=E,339nm,0.8s | | | | | | | | |
| **GLA** | **Glamis** | **2.36** | **61** | | Sb | | **Sb** | 08 11 37.8 | -0.3 |
| | baz=242 | | | | | | | | |
| **IRM** | **Iron Mountain** | **2.86** | **39** | | P | | **Pn** | 08 11 11.5 | -0.4 |
| | baz=219,SNR=11 | | | | | | | | |
| **RRX** | **Edison Barstow** | **2.94** | **5** | | Pb | | **Pb** | 08 11 18.2 | -0.2 |
| | baz=185 | | | | | | | | |
| RRX | | | | | Sb | | **Sg** | 08 11 56.5 | -3.3 |
| | baz=185 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **3.00** | **15** | | Pb | | **Pb** | 08 11 19.2 | -0.2 |
| | baz=195 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **3.00** | **349** | | P | | **Pn** | 08 11 13.7 | -0.1 |
| | baz=168,SNR=25 | | | | | | | | |
| EDW2 | | | | | Sb | | **Sb** | 08 11 55.1 | -1.4 |
| | baz=168 | | | | | | | | |
| **113A** | **Mohawk Valley,** | **3.10** | **73** | | Pn | | **Pn** | 08 11 14.4 | -0.7 |
| **GMRC** | **Granite Mounta** | **3.15** | **25** | | P | | **Pn** | 08 11 15.7 | -0.3 |
| | baz=206,SNR=13 | | | | | | | | |
| **CCAC** | **Calif City Air** | **3.27** | **349** | | | | **Pn** | 08 11 17.5 | 0.0 |
| CCAC | | | | | IAML | | | 08 12 23.3 | |
| | comp=E,167nm,1.1s | | | | | | | | |
| CCAC | | | | | IAML | | | 08 12 25.8 | |
| | comp=N,198nm,0.8s | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **3.38** | **7** | | | | **Pn** | 08 11 19.9 | +0.8 |
| GSC | | | | | IAML | | | 08 12 24.2 | |
| | comp=E,202nm,0.8s | | | | | | | | |
| GSC | | | | | IAML | | | 08 12 28.6 | |
| | comp=N,142nm,1.0s | | | | | | | | |
| **ARVC** | **Arvin** | **3.44** | **338** | | Pb | | **Pb** | 08 11 24.9 | -1.8 |
| | baz=158 | | | | | | | | |
| **BCW** | **Bitter Crk WRg** | **3.48** | **330** | | | | **Pn** | 08 11 20.3 | -0.3 |
| BCW | | | | | IAML | | | 08 12 25.2 | |
| | comp=E,122nm,0.8s | | | | | | | | |
| BCW | | | | | IAML | | | 08 12 28.8 | |
| | comp=N,91nm,1.4s | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **3.67** | **18** | | Pb | | **Pb** | 08 11 29.1 | -1.9 |
| | baz=198,SNR=20 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **3.81** | **88** | | Pn | | **Pn** | 08 11 26.2 | +1.3 |
| **214A** | **Organ Pipe Nat** | **3.81** | **88** | | P | | **Pn** | 08 11 24.8 | -0.1 |
| | baz=271 | | | | | | | | |
| **ISA** | **Isabella, Lake** | **3.85** | **345** | | | | **Pn** | 08 11 27.5 | +2.0 |
| **MPMC** | **Manual Prospec** | **4.12** | **358** | | P | | **Pn** | 08 11 29.3 | 0.0 |
| | baz=178,SNR=6.7 | | | | | | | | |
| **GWY** | **Greenwater Val** | **4.27** | **7** | | Pn | | **Pn** | 08 11 32.7 | +1.3 |
| **LCMT** | **Little Creek M** | **6.07** | **32** | | | | **Pn** | 08 11 57.8 | +1.7 |
| **U15A** | **North Rim** | **6.10** | **41** | | Pn | | **Pn** | 08 11 56.5 | -0.2 |
| **NVAR** | **Mina Array Bea** | **6.54** | **353** | | Pn | | **Pn** | 08 12 04.7 | +2.1 |
| | comp=N,0.1nm,0.3s,baz=176,slow=14,SNR=2.9 | | | | | | | | |
| **ELK** | **Elko** | **8.95** | **10** | | Pn | | **Pn** | 08 12 39.1 | +3.4 |
| | comp=N,0.1nm,0.3s,baz=62,slow=14,SNR=2.0 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **12.02** | **99** | | Pn | | **Pn** | 08 13 19.3 | +1.7 |
| | comp=N,0.0nm,0.3s,baz=142,slow=19,SNR=2.0 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **12.43** | **27** | | Pn | | **Pn** | 08 13 26.1 | +2.7 |
| | comp=N,0.0nm,0.3s,baz=220,slow=14,SNR=1.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.62** | **2** | | P | | **P** | 08 16 44.2 | +3.7 |
| | comp=N,0.3nm,0.9s,baz=184,slow=8.6,SNR=3.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **37.59** | **340** | | P | | P | 08 17 45.8 | +4.9 |
| | comp=N,0.4nm,0.7s,baz=147,slow=7.7,SNR=5.6 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **68.10** | **280** | | T | | T | 09 35 27.5 | |
| | baz=63,slow=75,SNR=3.8 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **68.10** | **280** | | T | | T | 09 35 27.9 | |
| | baz=63,slow=75,SNR=5.3 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **68.11** | **280** | | T | | T | 09 35 29.2 | |
| | baz=63,slow=75,SNR=6.7 | | | | | | | | |

*IDC* ***12*** *08:20:35.9±2.2, 17.°11S×175.°28W, h242km±25km, mb4.2/6, mb1 4.3/7, mb1mx3.4/45, mbtmp4.8/7, Error ellipse: s-maj=29.4km s-min=18.0km az=126.0*

*NEIC* ***12*** *08:20:36.5± 1.3, 17.°3S± 0.°1×175.°0W± 0.°1, h258km± 8km, mb4.3/14, Error ellipse: s-maj=16.7km s-min=13.9km az=138.0*

*NOU* ***12*** *08:21:27.9, 13.°86S×172.°11W, h133km, MLv2.3/4, Samoa Islands*

**ISC 12 08:20:35.7±0.6, 17.°14S±0.°10×175.°06W±0.°09, h256km, n30, σ0 97/31, mb4.3/14, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.51** | **45** | P | **Pn** | **08 21 47.2** | **+1.4** |
| | 20nm,0.3s,baz=262,slow=1.0,SNR=24 | | | | | | |
| AFI | | | | S | **S** | **08 22 39.1** | **-2.6** |
| | 53nm,0.3s,baz=22,slow=21,SNR=9.9 | | | | | | |
| **AFI** | **Afiamalu** | **4.51** | **45** | | **Pn** | **08 21 45.6** | **-0.2** |
| **AFI** | **Afiamalu** | **4.51** | **45** | P | **Pn** | **08 21 47.5** | **+1.7** |
| **NIUE** | **Niue** | **5.25** | **112** | | **Pn** | **08 21 55.8** | **+1.1** |
| **MSVF** | **Nonsavu** | **6.60** | **264** | Pn | **Pn** | **08 22 12.3** | **+0.8** |
| **URZ** | **Urewera** | **22.14** | **197** | P | **P** | **08 25 11.4** | **+1.1** |
| | 8.3nm,0.5s,baz=55,slow=3.3,SNR=19 | | | | | | |
| **BKZ** | **Black Stump Fm** | **23.16** | **197** | P | **P** | **08 25 18.2** | **-1.4** |
| BKZ | | | | IAmb | IAmb | 08 25 33.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **33.09** | **240** | P | **P** | **08 26 47.6** | **-0.3** |
| ARMA | | | | IAmb | IAmb | 08 26 49.2 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **36.73** | **259** | P | **P** | **08 27 18.8** | **-0.1** |
| | comp=Z,6.9nm,0.9s,baz=91,slow=11,SNR=7.0 | | | | | | |
| **CTAO** | **Charters Tower** | **36.73** | **259** | P | **P** | **08 27 19.2** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 08 27 19.9 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **COEN** | **Coen** | **40.31** | **268** | P | **P** | **08 27 48.4** | **-0.3** |
| COEN | | | | IAmb | IAmb | 08 27 54.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **41.80** | **241** | P | **P** | **08 28 01.0** | **+0.4** |
| | comp=Z,6.3nm,0.8s,baz=92,slow=10.0,SNR=17 | | | | | | |
| **STKA** | **Stephens Creek** | **41.80** | **241** | P | **P** | **08 28 00.7** | **+0.1** |
| **BBOO** | **Buckleboo** | **46.57** | **241** | P | **P** | **08 28 38.0** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 08 28 39.4 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **47.88** | **259** | P | **P** | **08 28 47.9** | **-0.7** |
| **WRA** | **Warramunga Arr** | **47.91** | **258** | P | **P** | **08 28 48.1** | **-0.7** |
| | comp=Z,4.0nm,0.4s,baz=96,slow=7.1,SNR=172 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.91** | **258** | P | **P** | **08 28 47.6** | **-1.2** |
| **AS31** | **Alice Springs** | **48.07** | **253** | P | **P** | **08 28 49.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **48.07** | **253** | P | **P** | **08 28 49.9** | **-0.2** |
| | comp=Z,43nm,0.5s,baz=88,slow=8.7,SNR=1124 | | | | | | |
| **ASAR** | **Alice Springs** | **48.07** | **253** | P | **P** | **08 28 50.1** | **+0.1** |
| **FORT** | **Forrest** | **53.22** | **244** | P | **P** | **08 29 27.4** | **-0.9** |
| **KNRA** | **Kununurra** | **53.75** | **263** | P | **P** | **08 29 31.5** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 08 29 50.1 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **SIJI** | **Sorong** | **55.20** | **281** | P | **P** | **08 29 43.3** | **+0.7** |
| | comp=Z,14nm,0.6s,baz=64,slow=9.4,SNR=5.5 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.19** | **254** | P | **P** | **08 30 23.1** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 08 30 24.5 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **61.36** | **255** | P | **P** | **08 30 24.4** | **-0.7** |
| MBWA | | | | IAmb | IAmb | 08 30 40.6 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.92** | **180** | P | **P** | **08 31 36.7** | **-0.2** |
| **PEA0B** | **Petropavlovsk-** | **73.81** | **343** | P | **P** | **08 31 43.3** | **+1.4** |
| **ILAR** | **Eielson Array** | **84.45** | **12** | P | **P** | **08 32 40.2** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=211,slow=5.1,SNR=1.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.43** | **318** | PKPbc | **PKPab** | **08 39 48.0** | **-0.5** |
| | comp=Z,0.9nm,0.8s,baz=123,slow=4.6,SNR=4.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.58** | **349** | PKPbc | **PKiKP** | **08 39 51.0** | **-0.7** |
| | comp=Z,0.7nm,0.9s,baz=249,slow=1.1,SNR=3.4 | | | | | | |

**IDC 12 08:46:00.2±1.3, 54.°20N×86.°10E, h0km, mb1 2.9/2, mb1mx2.4/60, mbtmp2.9/2, ML2.7/2, Error ellipse: s-maj=9.7km s-min=4.3km az=14.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.79** | **252** | *i* | | 08 50 58.3 | |
| | baz=68,slow=350,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.79** | **252** | Pg | Pg | 08 46 13.8 | -1.6 |
| | 1.1nm,0.3s,baz=69,slow=19,SNR=5.3 | | | | | | |
| ZALV | | | | Lg | Lg | 08 46 26.8 | |
| | 3.8nm,0.3s,baz=77,slow=27,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.85** | **235** | Pn | Pn | 08 47 28.2 | +0.1 |
| | 0.1nm,0.3s,baz=52,slow=13,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.80** | **200** | Pn | Pn | 08 47 55.5 | +0.6 |
| | 0.2nm,0.3s,baz=21,slow=13,SNR=9.9 | | | | | | |
| MKAR | | | | Sn | Sn | 08 49 22.0 | -1.7 |
| | 0.0nm,0.3s,baz=23,slow=23,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 08 50 08.1 | |
| | 0.0nm,0.3s,baz=24,slow=32,SNR=2.1 | | | | | | |

*IDC* ***12*** *09:00:32.6±2.8, 52.°25N×35.°64E, h0km, mb3.2/1, mb1 3.7/5, mb1mx3.0/68, mbtmp3.5/5, ML2.8/4, Error ellipse: s-maj=33.5km s-min=12.1km az=129.0*

**ISC 12 09:00:34.1±2.1, 52.°5N±0.°1×34.°7E±0.°1, h10km, n8, σ0 82/9, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OBN** | **Obninsk** | **2.89** | **22** | Pg | **Pb** | **09 01 25.3** | **-0.3** |
| | 2.7nm,0.3s,baz=205,slow=19,SNR=2.9 | | | | | | |
| OBN | | | | Lg | Lg | 09 02 00.8 | |
| | baz=102,slow=23,SNR=7.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **3.83** | **245** | Pg | **Pg** | **09 01 47.9** | **+0.6** |
| | 1.9nm,0.3s,baz=58,slow=15,SNR=5.2 | | | | | | |
| AKASG | | | | Sn | **Sb** | **09 02 27.2** | **-0.8** |
| | 1.7nm,0.3s,baz=61,slow=21,SNR=5.1 | | | | | | |
| AKASG | | | | Lg | Lg | 09 02 41.6 | |
| | 2.2nm,0.3s,baz=61,slow=30,SNR=4.9 | | | | | | |
| **FINES** | **FINESS Array B** | **10.15** | **336** | Pn | **Pn** | **09 02 59.8** | **+0.2** |
| | 0.1nm,0.3s,baz=155,slow=13,SNR=7.4 | | | | | | |
| FINES | | | | Sn | **Sn** | **09 04 53.9** | **+0.6** |
| | 0.2nm,0.3s,baz=151,slow=24,SNR=1.2 | | | | | | |
| **HFS** | **Hagfors** | **13.90** | **312** | Pn | **Pn** | **09 03 51.1** | **+0.1** |
| | 0.2nm,0.3s,baz=108,slow=17,SNR=1.9 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.70** | **89** | *i* | | 10 28 12.2 | |
| | baz=291,slow=311,SNR=3.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **15.39** | **313** | Pn | **Pn** | **09 04 10.3** | **-0.8** |
| | 0.0nm,0.3s,baz=113,slow=13,SNR=2.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **17.66** | **349** | Pn | **Pn** | **09 04 38.7** | **-1.2** |
| | baz=158,slow=10,SNR=6.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.85** | **345** | P | **P** | **09 11 00.2** | **+0.8** |
| | 0.2nm,0.6s,baz=13,slow=6.6,SNR=2.9 | | | | | | |

*IDC* ***12*** *09:05:42.6±4.8, 5.°59S×153.°41E, h43km±46km, mb3.7/12, mb1 3.8/13, mb1mx3.5/46, mbtmp3.9/13, ML1.9/1, MS3.1/6, Ms1 3.1/6, ms1mx2.8/59, Error ellipse: s-maj=29.6km s-min=25.0km az=91.0*

**ISC 12 09:05:42.6±0.9, 5.°6S±0.°1×153.°4E±0.°2, h43km, n18, σ0 75/14, mb3.9/11, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.24** | **238** | P | **Pn** | **09 07 25.8** | **-0.1** |
| | 1.3nm,0.3s,baz=88,slow=20,SNR=2.2 | | | | | | |
| PMG | | | | LR | LR | 09 09 56.0 | |
| | comp=Z,76nm,19.1s,baz=34,slow=35 | | | | | | |
| **HNR** | **Honiara** | **7.53** | **121** | LR | LR | 09 10 25.4 | |
| | comp=Z,230nm,18.6s,baz=248,slow=38 | | | | | | |
| **JAY** | **Jayapura** | **13.02** | **283** | LR | LR | 09 13 56.8 | |
| | comp=Z,138nm,18.0s,baz=3.5,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **15.98** | **205** | LR | LR | 09 14 56.0 | |
| | comp=Z,67nm,18.9s,baz=34,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.67** | **144** | P | **P** | **09 10 19.5** | **+0.4** |
| | 5.5nm,0.6s,baz=206,slow=15,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.38** | **231** | P | **P** | **09 10 47.3** | **-0.3** |
| | 1.6nm,0.9s,baz=57,slow=11,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.97** | **224** | P | **P** | **09 11 12.1** | **+0.6** |
| | 0.6nm,0.7s,baz=56,slow=9.0,SNR=8.3 | | | | | | |
| **STKA** | **Stephens Creek** | **28.38** | **201** | LR | LR | 09 23 48.0 | |
| | comp=Z,52nm,18.5s,baz=31,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.81** | **243** | P | **P** | **09 11 45.0** | **-0.7** |
| | 1.8nm,0.7s,baz=43,slow=10,SNR=2.3 | | | | | | |
| **KSRS** | **Korea Array** | **48.98** | **333** | P | **P** | **09 14 25.3** | **+0.4** |
| | 1.0nm,0.6s,baz=152,slow=7.6,SNR=3.2 | | | | | | |
| **KLR** | **Kul'dur** | **57.78** | **343** | P | **P** | **09 15 28.6** | **-0.8** |
| | 1.8nm,0.8s,baz=127,slow=4.5,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.75** | **295** | P | **P** | **09 15 38.0** | **+1.2** |
| | 1.2nm,0.3s,baz=119,slow=5.4,SNR=4.2 | | | | | | |
| CMAR | | | | LR | LR | 09 38 19.3 | |
| | comp=Z,8.4nm,21.8s,baz=205,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **67.31** | **328** | P | **P** | **09 16 33.8** | **+0.6** |
| | 0.5nm,0.6s,baz=150,slow=6.1,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **81.32** | **319** | P | **P** | **09 17 55.1** | **+0.5** |
| | 1.3nm,1.0s,baz=98,slow=6.2,SNR=7.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.14** | **326** | P | **P** | **09 17 58.1** | **-0.7** |
| | 1.0nm,0.6s,baz=124,slow=6.5,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **82.68** | **22** | P | **P** | **09 18 01.1** | **-0.2** |
| | 0.2nm,0.8s,baz=274,slow=5.0,SNR=1.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.79** | **322** | P | **P** | **09 18 11.2** | **-1.2** |
| | 0.5nm,0.2s,baz=107,slow=4.1,SNR=6.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.11** | **287** | PKPbc | **PKPbc** | **09 25 31.7** | **-0.4** |
| | 1.5nm,0.8s,baz=43,slow=3.0,SNR=9.2 | | | | | | |

*MOS* ***12*** *09:06:00.2± 1.1, 42.°58N×145.°41E, h39km, mb4.2/1, Error ellipse: s-maj=20.4km s-min=9.1km az=80.2*

*NIED* ***12*** *09:06:03.0, 42.°79N×145.°40E, h47km, MW3.5, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr 0.52; Mθθ 0.61; Mϕϕ -1.13; Mrθ 1.23; Mθϕ -1.47; Mϕr 1.20; Fault plane solution: M0 2.32000×10^14 NP1: ϕs 64.00000°, δ 84.00000°, λ 131.00000°. NP2: ϕs 161.00000°, δ 42.00000°, λ 9.00000°.*

*JMA* ***12*** *09:06:02.9± 0.1, 42.°79N×145.°40E, h47km± 1km, M3.7 JMA Felt I J1.*

*SKHL* ***12*** *09:06:03.5± 0.3, 42.°80N×145.°40E, h50km± 3km, mb5.2/6*

*IDC* ***12*** *09:06:05.1± 3.2, 42.°49N×145.°25E, h69km± 25km, mb3.3/7, mb1 3.5/9, mb1mx3.2/58, mbtmp3.6/9, Error ellipse: s-maj=26.5km s-min=23.7km az=5.0*

**ISC 12 09:06:02.9±1.1, 42.°74N±0.°08×145.°46E±0.°04, h38km±2km, n39, σ1 21/51, mb3.4/7, 2C, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKHN** | **Kushirohamanak** | **0.41** | **327** | P | **Pn** | **09 06 12.2** | **+0.1** |
| JKHN | | | | *e*S | **Sn** | **09 06 18.8** | **-0.1** |
| **AKK** | **Akkeshi** | **0.53** | **302** | *i* P | **Pn** | **09 06 13.6** | **-0.4** |
| AKK | | | | AMB | AMB | 09 06 13.8 | |
| | 1μm,0.2s | | | | | | |
| AKK | | | | *i* S | **Sn** | **09 06 21.3** | **-0.5** |
| AKK | | | | A | A | 09 06 21.5 | |
| | 4μm,0.2s | | | | | | |
| AKK | | | | A | A | 09 06 21.5 | |
| | 4μm,0.2s | | | | | | |
| **JAK** | **Akkeshi** | **0.61** | **295** | P | **Pn** | **09 06 14.8** | **-0.5** |
| JAK | | | | *e*S | **Sn** | **09 06 23.4** | **-0.5** |
| **NEM2** | **Nemuro 2** | **0.66** | **18** | P | **Pn** | **09 06 15.5** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **09 06 24.6** | **-0.3** |
| **NMR** | **Nemuro--Hokkai** | **0.66** | **17** | *i* P | **Pn** | **09 06 15.5** | **-0.3** |
| NMR | | | | *i* S | **Sn** | **09 06 23.2** | **-1.7** |
| **NMR** | **Nemuro--Hokkai** | **0.66** | **17** | *i* P | **Pn** | **09 06 15.5** | **-0.3** |
| NMR | | | | AMB | AMB | 09 06 16.0 | |
| | 1μm,0.2s | | | | | | |
| NMR | | | | *i* S | **Sn** | **09 06 23.6** | **-1.3** |
| NMR | | | | A | A | 09 06 25.1 | |
| | 3μm,0.2s | | | | | | |
| NMR | | | | A | A | 09 06 25.1 | |
| | 3μm,0.2s | | | | | | |
| **GLVR** | **Golovnino** | **1.00** | **3** | *e*PN | **Pn** | **09 06 20.2** | **-0.2** |
| GLVR | | | | *i* S | **Sn** | **09 06 32.8** | **-0.4** |
| GLVR | | | | pmax | pmax | | |
| | comp=E,159nm,0.1s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,487nm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,4μm,0.2s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,3μm,0.2s | | | | | | |
| **GLVR** | **Golovnino** | **1.00** | **3** | *e*P | **Pn** | **09 06 20.2** | **-0.2** |
| GLVR | | | | AMB | AMB | 09 06 21.9 | |
| | comp=E,160nm,0.2s | | | | | | |
| GLVR | | | | AMB | AMB | 09 06 21.9 | |
| | comp=E,490nm,0.2s | | | | | | |
| GLVR | | | | *i* S | **Sn** | **09 06 32.8** | **-0.4** |
| GLVR | | | | A | A | 09 06 35.7 | |
| | comp=E,4μm,0.3s | | | | | | |
| GLVR | | | | A | A | 09 06 35.7 | |
| | comp=E,3μm,0.3s | | | | | | |
| **JNK** | **Nakash** | **1.00** | **328** | P | **Pn** | **09 06 19.7** | **-0.7** |
| JNK | | | | *e*S | **Sn** | **09 06 31.5** | **-1.8** |
| **JOB** | **Onbets** | **1.21** | **278** | P | **Pn** | **09 06 22.9** | **-0.3** |
| **JRA** | **Rausu** | **1.22** | **349** | P | **Pn** | **09 06 23.1** | **-0.3** |
| JRA | | | | *e*S | **Sn** | **09 06 38.3** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **1.33** | **13** | *e*PN | **Pn** | **09 06 24.7** | **-0.2** |
| YUK | | | | *e*S | **Sn** | **09 06 41.0** | **-0.3** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,923nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,929nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,2μm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.33** | **13** | *i* P | **Pn** | **09 06 24.7** | **-0.2** |
| YUK | | | | AMB | AMB | 09 06 25.8 | |
| | comp=E,920nm,0.2s | | | | | | |
| YUK | | | | *i* S | **Sn** | **09 06 40.3** | **-1.0** |
| YUK | | | | A | A | 09 06 44.5 | |
| | comp=E,930nm,0.3s | | | | | | |
| YUK | | | | A | A | 09 06 44.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| **JAR** | **Ashorobuto** | **1.36** | **295** | P | **Pn** | **09 06 24.9** | **-0.4** |
| **RUSJ** | **Misakicho** | **1.37** | **354** | ⇑ *i* PN | **Pn** | **09 06 25.8** | **+0.3** |
| RUSJ | | | | *e*S | **Sn** | **09 06 42.9** | **+0.5** |
| **SHO** | **Shikotan** | **1.51** | **41** | *e*PN | **Pn** | **09 06 26.6** | **-0.8** |
| SHO | | | | *e*S | **Sn** | **09 06 44.6** | **-1.2** |
| SHO | | | | pmax | pmax | | |
| | comp=N,17nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,86nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,30nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,657nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,839nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.51** | **41** | *e*P | **Pn** | **09 06 27.5** | **+0.1** |
| SHO | | | | AMB | AMB | 09 06 30.0 | |
| | comp=N,20nm,0.2s | | | | | | |
| SHO | | | | AMB | AMB | 09 06 30.0 | |
| | comp=N,30nm,0.2s | | | | | | |
| SHO | | | | AMB | AMB | 09 06 30.0 | |
| | comp=N,90nm,0.2s | | | | | | |
| SHO | | | | *i* S | **Sn** | **09 06 45.7** | **-0.1** |
| SHO | | | | A | A | 09 06 47.7 | |
| | comp=N,840nm,0.2s | | | | | | |
| SHO | | | | A | A | 09 06 47.7 | |
| | comp=N,660nm,0.2s | | | | | | |
| **JCH** | **Churui** | **1.55** | **266** | P | **Pn** | **09 06 27.6** | **-0.4** |
| **JTKR** | **Abashiri--Toko** | **1.67** | **318** | P | **Pn** | **09 06 29.7** | **+0.1** |
| **JKA** | **Kamikawa-asahi** | **2.49** | **304** | *e*P | **Pn** | **09 06 42.3** | **+1.4** |
| **ASAJ** | **Asahikawa** | **2.50** | **304** | P | **Pn** | **09 06 42.3** | **+1.4** |
| | comp=N,9.3nm,0.3s,baz=149,slow=14,SNR=28 | | | | | | |
| ASAJ | | | | S | **Sn** | **09 07 14.7** | **+4.5** |
| | comp=N,13nm,0.3s,baz=332,slow=23,SNR=13 | | | | | | |
| **KUR** | **Kuril'sk** | **3.04** | **34** | *e*PN | **Pn** | **09 06 50.0** | **+1.6** |
| KUR | | | | *e*S | **Sn** | **09 07 25.5** | **+2.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,83nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,36nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,191nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,120nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **3.04** | **34** | *e*P | **Pn** | **09 06 50.0** | **+1.6** |
| KUR | | | | AMB | AMB | 09 06 52.3 | |
| | comp=N,40nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 09 06 52.3 | |
| | comp=N,80nm,0.3s | | | | | | |
| KUR | | | | *e*S | **Sn** | **09 07 24.7** | **+1.2** |
| KUR | | | | A | A | 09 07 31.4 | |
| | comp=N,150nm,0.2s | | | | | | |
| KUR | | | | A | A | 09 07 31.4 | |
| | comp=N,190nm,0.2s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.63** | **336** | *e*P | **Pn** | **09 07 12.1** | **+1.9** |
| YSS | | | | AMB | AMB | 09 07 12.3 | |
| | comp=N,20nm,0.2s | | | | | | |
| **MJAR** | **Matsushiro Ar** | **8.34** | **224** | P | **Pn** | **09 07 59.6** | **-1.7** |
| | comp=N,0.1nm,0.3s,baz=29,slow=15,SNR=3.0 | | | | | | |
| **SONM** | **Songino Array** | **27.74** | **294** | P | **P** | **09 11 47.2** | **-0.7** |
| | comp=N,0.3nm,0.6s,baz=73,slow=7.8,SNR=2.2 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.20** | **135** | T | T | 09 43 00.5 | |
| | baz=327,slow=76,SNR=93 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.21** | **135** | T | T | 09 42 58.9 | |
| | baz=327,slow=76,SNR=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.22** | **135** | T | T | 09 43 07.4 | |
| | baz=327,slow=76,SNR=81 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| PESTR | | | | A | A | 09 20 09.0 |
| | 4.4nm,0.4s | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **317** | P | **Pn** | **09 19 04.7 +1.0** |
| PESTR | | | | S | **Sn** | **09 19 52.5 -2.6** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **304** | *e*Pn | **Pn** | **09 19 05.3 -0.1** |
| PNCL | | | | *e*Sn | **Sn** | **09 19 56.4 -1.7** |
| PNCL | | | | A | A | 09 20 15.1 |
| | 3.5nm,0.8s | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **323** | *e*Pn | **Pn** | **09 19 08.5 +0.5** |
| PMRV | | | | *e*Sn | **Sn** | **09 20 01.0 -1.7** |
| **PMTG** | **Montargil** | **5.00** | **314** | *e*Pn | **Pn** | **09 19 10.8 +0.3** |
| **MVO** | **Moncorvo** | **6.12** | **335** | *e*Pn | **Pn** | **09 19 27.2 +1.2** |

*EAF* ***12*** *09:28:37.1±2.1,25°.75S×30°.08E,h10km,MD3.5*
**BUL 12 09:28:37.1±0.9,25°.81S×30°.03E,h10km,MD3.5,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.00** | **104** | *i* P | Pn | 09 29 10.1 | -0.8 |
| CNG | | | | *i* S | Sn | 09 29 35.2 | -0.8 |
| **CNG** | **Changalane** | **2.00** | **104** | *i* P | Pn | 09 29 10.1 | -0.8 |
| CNG | | | | *i* S | Sn | 09 29 35.2 | -0.8 |
| **MOPA** | **Mopani** | **2.60** | **29** | *i* P | Pn | 09 29 17.3 | -1.9 |
| MOPA | | | | *i* S | Sn | 09 29 45.5 | -5.3 |
| **MOPA** | **Mopani** | **2.60** | **29** | *i* P | Pn | 09 29 17.3 | -1.9 |
| MOPA | | | | *i* S | Sn | 09 29 45.5 | -5.3 |
| **MSNA** | **Messina** | **3.45** | **360** | *e*P | Pn | 09 29 30.9 | 0.0 |
| MSNA | | | | *e*S | Sn | 09 30 10.1 | -1.8 |
| **MSNA** | **Messina** | **3.45** | **360** | *e*P | Pn | 09 29 30.9 | 0.0 |
| MSNA | | | | *e*S | Sn | 09 30 10.1 | -1.8 |
| **LBTB** | **Lobatse** | **4.09** | **280** | *i* P | Pn | 09 29 39.6 | -0.2 |
| LBTB | | | | *i* S | Sn | 09 30 24.9 | -2.9 |
| **LBTB** | **Lobatse** | **4.09** | **280** | *i* P | Pn | 09 29 39.6 | -0.2 |
| LBTB | | | | *i* S | Sn | 09 30 24.9 | -2.9 |
| **MATP** | **Matopo** | **5.54** | **345** | *e*P | Pn | 09 29 58.4 | -1.4 |
| MATP | | | | *e*S | Sn | 09 30 57.9 | -5.7 |
| **MATP** | **Matopo** | **5.54** | **345** | *e*P | Pn | 09 29 58.4 | -1.4 |
| MATP | | | | *e*S | Sn | 09 30 57.9 | -5.7 |

*TAP* ***12*** *09:33:14.1,24°.70N×122°.59E,h112km,ML3.4,C*
*JMA* ***12*** *09:33:14.1±0.2,24°.70N×122°.56E,h10km±2km,M2.6*
**ISC 12 09:33:15.1±1.4,24°.66N±0°.04×122°.58E±0°.02,h104km±8km, n68,σ0°72/133,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.39** | **122** | P | **Pn** | **09 33 30.8** | **+0.2** |
| JYNG | | | | S | **Sn** | **09 33 43.0** | **+0.8** |
| **YOJ** | **Yonaguni jima** | **0.43** | **116** | P | **Pn** | **09 33 31.1** | **+0.2** |
| YOJ | | | | *e*S | **Sn** | **09 33 43.2** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **0.43** | **116** | *i* P | **Pn** | **09 33 30.9** | **+0.1** |
| | baz=127 | | | | | | |
| YOJ | | | | *i* S | **Sn** | **09 33 43.4** | **+0.7** |
| **TWB1** | **Santiao Chiao** | **0.65** | **303** | P | **Pn** | **09 33 32.4** | **0.0** |
| | baz=300 | | | | | | |
| TWB1 | | | | S | **Sn** | **09 33 45.6** | **+0.1** |
| | baz=300 | | | | | | |
| **TWC** | **Suao** | **0.67** | **266** | *i* P | **Pn** | **09 33 32.3** | **-0.3** |
| | baz=259 | | | | | | |
| TWC | | | | S | **Sn** | **09 33 45.5** | **-0.4** |
| | baz=259 | | | | | | |
| **TIPB** | **Shuangxi** | **0.76** | **295** | *i* P | **Pn** | **09 33 33.4** | **-0.1** |
| | baz=286 | | | | | | |
| TIPB | | | | S | **Sn** | **09 33 46.9** | **-0.4** |
| | baz=286 | | | | | | |
| **EWUT** | **Wuta** | **0.76** | **254** | P | **Pn** | **09 33 33.5** | **0.0** |
| | baz=251 | | | | | | |
| EWUT | | | | S | **Sn** | **09 33 47.8** | **+0.6** |
| | baz=251 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.78** | **304** | *i* P | **Pn** | **09 33 33.5** | **-0.1** |
| | baz=296 | | | | | | |
| SXI1 | | | | S | **Sn** | **09 33 47.6** | **-0.1** |
| | baz=296 | | | | | | |
| **NDS** | **Dongshan** | **0.79** | **269** | P | **Pn** | **09 33 34.1** | **+0.4** |
| | baz=264 | | | | | | |
| NDS | | | | S | **Sn** | **09 33 47.7** | **0.0** |
| | baz=264 | | | | | | |
| **ENA** | **Nanau** | **0.80** | **254** | P | **Pn** | **09 33 34.0** | **+0.1** |
| | baz=251 | | | | | | |
| ENA | | | | S | **Sn** | **09 33 47.6** | **-0.3** |
| | baz=251 | | | | | | |
| **TWE** | **Neicheng** | **0.84** | **275** | P | **Pn** | **09 33 34.1** | **-0.1** |
| | baz=270 | | | | | | |
| TWE | | | | S | **Sn** | **09 33 48.0** | **-0.5** |
| | baz=270 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.84** | **300** | P | **Pn** | **09 33 34.1** | **-0.1** |
| | baz=292 | | | | | | |
| NWF | | | | S | **Sn** | **09 33 48.7** | **0.0** |
| | baz=292 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **277** | P | **Pn** | **09 33 34.8** | **-0.2** |
| | baz=280 | | | | | | |
| FUSB | | | | S | **Sn** | **09 33 49.4** | **-0.6** |
| | baz=280 | | | | | | |
| **ENTT** | **Nioudou** | **0.93** | **269** | P | **Pn** | **09 33 35.5** | **+0.4** |
| | baz=270 | | | | | | |
| ENTT | | | | S | **Sn** | **09 33 50.8** | **+0.7** |
| | baz=270 | | | | | | |
| **LATG** | **Datong** | **0.97** | **263** | P | **Pn** | **09 33 35.9** | **+0.3** |
| | baz=261 | | | | | | |
| LATG | | | | S | **Sn** | **09 33 51.9** | **+0.8** |
| | baz=261 | | | | | | |
| **NDT** | **Datong Townshi** | **0.98** | **267** | P | **Pn** | **09 33 36.2** | **+0.6** |
| | baz=264 | | | | | | |
| NDT | | | | S | **Sn** | **09 33 51.9** | **+0.8** |
| | baz=264 | | | | | | |
| **NWLT** | **Wulai** | **0.99** | **277** | P | **Pn** | **09 33 35.5** | **-0.3** |
| | baz=280 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **09 33 50.1** | **-1.2** |
| | baz=280 | | | | | | |
| **ETL** | **Fush Village** | **1.01** | **241** | P | **Pn** | **09 33 35.3** | **-0.6** |
| | baz=245 | | | | | | |
| ETL | | | | *e*S | **Sn** | **09 33 51.0** | **-0.7** |
| | baz=245 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.01** | **288** | P | **Pn** | **09 33 35.5** | **-0.4** |
| | baz=278 | | | | | | |
| NHDH | | | | S | **Sn** | **09 33 50.7** | **-1.0** |
| | baz=278 | | | | | | |
| **NACB** | **Ninganchiao** | **1.02** | **242** | P | **Pn** | **09 33 35.5** | **-0.6** |
| | baz=241 | | | | | | |
| NACB | | | | S | **Sn** | **09 33 50.8** | **-1.1** |
| | baz=241 | | | | | | |
| **YM01** | **YM01** | **1.04** | **298** | P | **Pn** | **09 33 36.1** | **-0.2** |
| | baz=288 | | | | | | |
| YM01 | | | | S | **Sn** | **09 33 51.7** | **-0.7** |
| | baz=288 | | | | | | |
| **TWD** | **Chiawan** | **1.07** | **238** | P | **Pn** | **09 33 36.1** | **-0.5** |
| | baz=232 | | | | | | |
| TWD | | | | S | **Sn** | **09 33 52.7** | **-0.1** |
| | baz=232 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.09** | **107** | P | **Pn** | **09 33 36.7** | **-0.1** |
| IRIF | | | | S | **Sn** | **09 33 53.0** | **-0.2** |
| **ETLH** | **Xiulin Townshi** | **1.10** | **246** | P | **Pn** | **09 33 36.7** | **-0.3** |
| | baz=241 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **09 33 53.5** | **0.0** |
| | baz=241 | | | | | | |
| **YHNB** | **Yeheng** | **1.10** | **271** | P | **Pn** | **09 33 37.2** | **+0.2** |
| | baz=274 | | | | | | |
| YHNB | | | | S | **Sn** | **09 33 53.5** | **0.0** |
| | baz=274 | | | | | | |
| **NSK** | **Sanguang** | **1.12** | **271** | P | **Pn** | **09 33 37.2** | **+0.1** |
| | baz=275 | | | | | | |
| NSK | | | | S | **Sn** | **09 33 53.6** | **-0.2** |
| | baz=275 | | | | | | |
| **NNSB** | **Datong** | **1.12** | **259** | P | **Pn** | **09 33 37.3** | **+0.1** |
| | baz=252 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **09 33 53.7** | **-0.2** |
| | baz=252 | | | | | | |
| **NNS** | **Nan Shan** | **1.12** | **259** | P | **Pn** | **09 33 37.4** | **+0.1** |
| | baz=252 | | | | | | |
| NNS | | | | *e*S | **Sn** | **09 33 54.0** | **0.0** |
| | baz=252 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.26** | **118** | P | **Pn** | **09 33 39.2** | **+0.5** |
| HATJ | | | | S | **Sn** | **09 33 57.6** | **+1.0** |
| **FUSS** | **Fushou** | **1.29** | **252** | P | **Pn** | **09 33 39.6** | **+0.3** |
| | baz=247 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **09 33 57.5** | **-0.1** |
| | baz=247 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.31** | **247** | P | **Pn** | **09 33 39.7** | **0.0** |
| | baz=242 | | | | | | |
| WHF | | | | S | **Sn** | **09 33 58.1** | **-0.2** |
| | baz=242 | | | | | | |
| **NCUH** | **Zhongli** | **1.31** | **284** | *e*P | **Pn** | **09 33 39.0** | **-0.3** |
| | baz=289 | | | | | | |
| NCUH | | | | *e*S | **Sn** | **09 33 57.3** | **-0.3** |
| | baz=289 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.33** | **269** | P | **Pn** | **09 33 40.0** | **+0.4** |
| | baz=272 | | | | | | |
| NFF | | | | S | **Sn** | **09 33 58.2** | **-0.1** |
| | baz=272 | | | | | | |
| **ESL** | **Shilin** | **1.34** | **232** | P | **Pn** | **09 33 39.1** | **-0.6** |
| | baz=226 | | | | | | |
| ESL | | | | S | **Sn** | **09 33 57.3** | **-1.0** |
| | baz=226 | | | | | | |
| **TWT** | **Tachien** | **1.34** | **253** | P | **Pn** | **09 33 40.6** | **+0.8** |
| | baz=246 | | | | | | |
| TWT | | | | S | **Sn** | **09 33 59.2** | **+0.6** |
| | baz=246 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.36** | **107** | P | **Pn** | **09 33 40.1** | **+0.2** |
| JKRS | | | | S | **Sn** | **09 33 59.1** | **+0.4** |
| **CHGB** | **Renai** | **1.42** | **246** | P | **Pn** | **09 33 41.0** | **+0.2** |
| | baz=240 | | | | | | |
| CHGB | | | | S | **Sn** | **09 34 00.7** | **+0.5** |
| | baz=240 | | | | | | |
| **LIOB** | **Emei** | **1.43** | **270** | P | **Pn** | **09 33 41.0** | **+0.3** |
| | baz=268 | | | | | | |
| LIOB | | | | S | **Sn** | **09 34 00.1** | **0.0** |
| | baz=268 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.45** | **101** | P | **Pn** | **09 33 40.7** | **-0.2** |
| JIJ | | | | S | **Sn** | **09 33 59.6** | **-1.0** |
| **WUSB** | **Renai** | **1.49** | **244** | P | **Pn** | **09 33 41.9** | **+0.2** |
| | baz=239 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **09 34 01.4** | **-0.3** |
| | baz=239 | | | | | | |
| **WHP** | **Taichung City** | **1.54** | **256** | *e*P | **Pn** | **09 33 43.0** | **+0.8** |
| | baz=255 | | | | | | |
| WHP | | | | *e*S | **Sn** | **09 34 03.2** | **+0.5** |
| | baz=255 | | | | | | |
| **HGSD** | **Ruisui** | **1.57** | **223** | P | **Pn** | **09 33 42.1** | **-0.4** |
| | baz=222 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **09 34 02.7** | **-0.5** |
| | baz=222 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.57** | **92** | P | **Pn** | **09 33 42.3** | **-0.1** |
| JISG | | | | S | **Sn** | **09 34 02.4** | **-0.8** |
| **EHY** | **Hungye** | **1.62** | **225** | P | **Pn** | **09 33 42.2** | **-0.9** |
| | baz=225 | | | | | | |
| EHY | | | | *e*S | **Sn** | **09 34 02.6** | **-1.8** |
| | baz=225 | | | | | | |
| **NMLH** | **Miaoli** | **1.64** | **266** | *e*P | **Pn** | **09 33 43.3** | **+0.1** |
| | baz=265 | | | | | | |
| NMLH | | | | *e*S | **Sn** | **09 34 04.3** | **-0.4** |
| | baz=265 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.64** | **249** | P | **Pn** | **09 33 44.1** | **+0.9** |
| | baz=248 | | | | | | |
| WCS | | | | *e*S | **Sn** | **09 34 05.5** | **+0.8** |
| | baz=248 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.72** | **244** | *e*P | **Pn** | **09 33 45.4** | **+1.1** |
| | baz=238 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **09 34 09.0** | **+2.3** |
| | baz=238 | | | | | | |
| **SSLB** | **Suanglung** | **1.72** | **240** | P | **Pn** | **09 33 44.4** | **+0.1** |
| | baz=237 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **09 34 07.2** | **+0.6** |
| | baz=237 | | | | | | |
| **YULB** | **Yu-li** | **1.72** | **223** | *e*P | **Pn** | **09 33 43.4** | **-0.9** |
| | baz=229 | | | | | | |
| YULB | | | | *e*S | **Sn** | **09 34 05.1** | **-1.5** |
| | baz=229 | | | | | | |
| **EYUL** | **Yuli** | **1.74** | **222** | *e*P | **Pn** | **09 33 44.3** | **-0.3** |
| | baz=229 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **09 34 08.1** | **+1.1** |
| | baz=229 | | | | | | |
| **TYC** | **Yuchr** | **1.75** | **245** | *e*P | **Pn** | **09 33 45.4** | **+0.8** |
| | baz=248 | | | | | | |
| TYC | | | | *e*S | **Sn** | **09 34 08.7** | **+1.7** |
| | baz=248 | | | | | | |
| **WDJ** | **Dajia District** | **1.80** | **261** | *e*S | **Sn** | **09 34 07.8** | **-0.4** |
| | baz=260 | | | | | | |
| **FULB** | **Fuli** | **1.87** | **219** | *e*P | **Pn** | **09 33 46.1** | **-0.2** |
| | baz=214 | | | | | | |
| FULB | | | | *e*S | **Sn** | **09 34 10.3** | **+0.3** |
| | baz=214 | | | | | | |
| **WJS** | **Zhushan** | **1.89** | **244** | *e*P | **Pn** | **09 33 47.4** | **+1.0** |
| | baz=254 | | | | | | |
| WJS | | | | *e*S | **Sn** | **09 34 12.2** | **+2.0** |
| | baz=254 | | | | | | |
| **YUS** | **Yu-Shan** | **1.89** | **232** | *e*P | **Pn** | **09 33 47.2** | **+0.3** |
| | baz=228 | | | | | | |
| YUS | | | | *e*S | **Sn** | **09 34 10.4** | **-0.8** |
| | baz=228 | | | | | | |
| **JTJ** | **Tarama** | **1.93** | **90** | P | **Pn** | **09 33 46.8** | **-0.1** |
| JTJ | | | | *e*S | **Sn** | **09 34 10.9** | **-0.2** |
| **ALS** | **Alishan** | **1.99** | **235** | *e*P | **Pn** | **09 33 48.6** | **+0.7** |
| | baz=230 | | | | | | |
| ALS | | | | *e*S | **Sn** | **09 34 13.6** | **+0.6** |
| | baz=230 | | | | | | |
| **EDH** | **Donghe** | **2.04** | **215** | *e*P | **Pn** | **09 33 47.8** | **-0.6** |
| | baz=210 | | | | | | |
| EDH | | | | *e*S | **Sn** | **09 34 13.1** | **-0.8** |
| | baz=210 | | | | | | |
| **STYH** | **Taoyuan** | **2.22** | **229** | *e*P | **Pn** | **09 33 51.2** | **+0.5** |
| | baz=228 | | | | | | |
| STYH | | | | *e*S | **Sn** | **09 34 18.2** | **+0.3** |
| | baz=228 | | | | | | |
| **LDUT** | **Ludao** | **2.22** | **208** | *e*P | **Pn** | **09 33 49.9** | **-0.8** |
| | baz=212 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **09 34 16.7** | **-1.2** |
| | baz=212 | | | | | | |
| **WTP** | **Ta-pu** | **2.29** | **232** | *e*P | **Pn** | **09 33 52.1** | **+0.5** |
| | baz=232 | | | | | | |
| WTP | | | | *e*S | **Sn** | **09 34 20.6** | **+1.1** |
| | baz=232 | | | | | | |
| **JIRB** | **Irabujima** | **2.36** | **85** | P | **Pn** | **09 33 52.7** | **+0.2** |
| JIRB | | | | S | **Sn** | **09 34 20.3** | **-0.8** |
| **CHN1** | **Nanshi** | **2.38** | **233** | *e*P | **Pn** | **09 33 53.4** | **+0.5** |
| | baz=232 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **09 34 22.6** | **+0.8** |
| | baz=232 | | | | | | |
| **JIKM** | **Ikemajima** | **2.44** | **83** | S | **Sn** | **09 34 23.3** | **+0.4** |
| **JMJ2** | **Miyako jima3** | **2.50** | **87** | P | **Pn** | **09 33 54.7** | **+0.5** |
| JMJ2 | | | | S | **Sn** | **09 34 24.2** | **-0.1** |
| **SSD** | **Sandimen** | **2.61** | **224** | *e*P | **Pn** | **09 33 57.2** | **+1.4** |
| | baz=224 | | | | | | |
| SSD | | | | *e*S | **Sn** | **09 34 27.4** | **+0.3** |
| | baz=224 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.71** | **222** | *e*P | **Pn** | **09 33 56.9** | **-0.2** |
| | baz=232 | | | | | | |
| MASBT | | | | *e*S | **Sn** | **09 34 29.3** | **-0.1** |
| | baz=232 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.98** | **248** | *e*S | **Sn** | **09 34 32.4** | **-3.3** |
| | baz=248 | | | | | | |

**VIE 12 09:55:04.2±0.3,48°.21N×8°.78E,h0km,mb2.1/3,ml2.1/4, Error ellipse: s-maj=2.5km s-min=1.4km az=23.0 16 km WSW of Onstmettingen Suspected Mining explosion.,Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAVA** | **Damuels** | **1.19** | **141** | *i* Pg | Pg | 09 55 27.2 | +0.2 |
| | 0.7nm,0.1s | | | | | | |
| DAVA | | | | *e*Sg | Sn | 09 55 44.5 | -0.7 |
| | 9.5nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **1.52** | **118** | *e*Sn | Sn | 09 55 53.6 | +0.4 |
| | 5.6nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **1.78** | **131** | *e*Pg | Pg | 09 55 38.2 | -0.1 |
| | 0.1nm,0.1s | | | | | | |
| FETA | | | | *e*Sn | Sb | 09 56 00.7 | +0.1 |
| | 2.6nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **1.79** | **118** | *e*Sn | Sb | 09 56 01.3 | +0.2 |
| | 3.8nm,0.3s | | | | | | |

*IDC* ***12*** *10:02:21.7±1.3,9°.41S×119°.36E,h10km±7km,mb5.9/45, mb1 5.8/47,mb1mx5.7/52,mbtmp5.9/47,ML5.6/2,MS5.8/68, Ms1 5.8/68,ms1mx5.7/73,Error ellipse: s-maj=10.6km s-min=8.5km az=38.0*
*NEIC* ***12*** *10:02:22.2,9°.66S×119°.41E,h28km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr0.89; Mθθ-0.79; Mϕϕ-0.11; Mrθ1.14; Mθϕ0.05; Mϕr-0.19; Fault plane solution: M₀1.43000×10¹⁸ NP1:ϕs98.22000°, δ71.98000°,λ92.01000°. NP2:ϕs271.75000°,δ18.13000°, λ83.85000°. Principal axes: T 1.4794, Plg63.0000°, Azm11.0000°; N -0.1047, Plg2.0000°, Azm278.0000°; P -1.3746, Plg27.0000°, Azm187.0000°;*
*BJI* ***12*** *10:02:22.8±0.0,9°.58S×119°.27E,h30km,mb6.4/93, mB6.5/69,Ms6.0/99,Ms7 5.9/94*
*NEIC* ***12*** *10:02:24.1±2.3,9°.63S±0°.06×119°.40E±0°.05,h28km±1km, mb6.3/223,Ms_20 6.0/252,Mwb6.0/64,Mwc6.2/81,Mww6.3, Error ellipse: s-maj=10.5km s-min=8.9km az=201.0*
*DJA* ***12*** *10:02:25.9±0.1,10°.5±1°.1×11°.9E±°,h54km±2km,M6.2/139, mB6.5/135,mb6.2/139,MLv6.8/29,Mw6.2/76, Mw(mB)6.3/135,MwMwp6.0/115,Mwp6.0/115*
*MOS* ***12*** *10:02:26.9±1.1,9°.26S×119°.31E,h27km,mb6.6/98, MS5.8/32,Error ellipse: s-maj=6.4km s-min=4.2km az=116.6*
*KLM* ***12*** *10:02:27,9°.73S×119°.51E,h55km,mb6.4*
*NEIC* ***12*** *10:02:28,9°.79S×119°.50E,h50km,Moment Tensor Solution. Duration: 9≥2 Moment tensor: Scale 10¹⁸Nm; Mrr1.71; Mθθ-1.93; Mϕϕ0.22; Mrθ2.44; Mθϕ-0.07; Mϕr-0.30; Fault plane solution: M₀3.07000×10¹⁸ NP1: ϕs259.00000°,δ19.00000°,λ74.00000°. NP2:ϕs95.00000°, δ72.00000°,λ95.00000°. Principal axes: T 2.9691, Plg63.0000°, Azm14.0000°; N 0.1857, Plg5.0000°, Azm274.0000°; P -3.1547, Plg27.0000°, Azm181.0000°;*
*GCMT* ***12*** *10:02:29.0±0.0,9°.87S×119°.35E,h38km,MW6.2/168, Moment Tensor Solution. s168,c409; s162,c609; Duration: 3≥2 Moment tensor: Scale 10¹⁸Nm; Mrr2.11±.01; Mθθ-2.32±.01; Mϕϕ0.20±.01; Mrθ1.81±.02; Mθϕ0.06±.01; Mϕr-0.31±.01; Best double couple: M₀2.87900×10¹⁸ NP1:ϕs265.00000°,δ26.00000°, λ79.00000°. NP2:ϕs97.00000°,δ65.00000°,λ95.00000°. Principal axes: T 2.7840, Plg70.0000°, Azm18.0000°; N 0.1860, Plg5.0000°, Azm275.0000°; P -2.9740, Plg20.0000°, Azm183.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***12*** *10:02:38.7,9°.61S×119°.45E,h36km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr2.12; Mθθ-2.08; Mϕϕ-0.04; Mrθ1.26; Mθϕ0.05; Mϕr-0.37; Fault plane solution: M₀2.47000×10¹⁸ NP1:ϕs263.91000°, δ29.90000°,λ76.75000°. NP2:ϕs99.10000°,δ60.97000°, λ97.51000°. Principal axes: T 2.5135, Plg73.0000°, Azm27.0000°; N -0.0774, Plg7.0000°, Azm275.0000°; P -2.4362, Plg16.0000°, Azm184.0000°;*
**ISC 12 10:02:26.5±0.1,9°.57S±0°.02×119°.32E±0°.02,h50km, h50km:pP-P,n2047,σ2s03/2236,mb6.3/314,MS5.9/245, 219C-50D,Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **0.10** | **136** | P | **Pn** | **10 02 30.7** | **-3.7** |
| **BASI** | **Baing, Sumba** | **1.40** | **118** | P | **Pn** | **10 02 46.1** | **-3.5** |
| **MMRI** | **Maumere** | **3.03** | **72** | Pn | **Pn** | **10 03 10.3** | **-1.6** |
| **MMRI** | **Maumere** | **3.03** | **72** | ⇑P | **Pn** | **10 03 11.4** | **-0.6** |
| **MMRI** | **Maumere** | **3.03** | **72** | P | **Pn** | **10 03 11.2** | **-0.7** |
| **MMRI** | **Maumere** | **3.03** | **72** | P | **Pn** | **10 03 11.6** | **-0.3** |
| **BSSI** | **Bau Bau, Buton** | **3.59** | **19** | P | **Pn** | **10 03 21.5** | **+1.8** |
| **DNP** | **Denpasar** | **4.15** | **282** | P | **Pn** | **10 03 30.4** | **+3.0** |
| **DNP** | **Denpasar** | **4.15** | **282** | P | **Pn** | **10 03 28.9** | **+1.5** |
| **IGBI** | **Denpasar** | **4.19** | **280** | P | **Pn** | **10 03 27.1** | **-0.8** |
| **BKSI** | **Bulukumba** | **4.29** | **11** | P | **Pn** | **10 03 32.4** | **+3.1** |
| **SRBI** | **Singaraja** | **4.32** | **290** | P | **Pn** | **10 03 30.5** | **+0.8** |
| **BATI** | **Baumata** | **4.33** | **99** | Pn | **Pn** | **10 03 28.8** | **-1.1** |
| | 1μm,0.3s,baz=278,slow=1.2,SNR=219 | | | | | | |
| BATI | | | | Sn | **Sn** | **10 04 18.9** | **-0.2** |
| | 1μm,0.3s,baz=220,slow=21,SNR=8.3 | | | | | | |
| **BATI** | **Baumata** | **4.33** | **99** | P | **Pn** | **10 03 29.3** | **-0.5** |
| **SOEI** | **Soe** | **4.88** | **93** | Pn | **Pn** | **10 03 34.3** | **-3.2** |
| **SOEI** | **Soe** | **4.88** | **93** | ⇑P | **Pn** | **10 03 37.7** | **+0.2** |
| **SOEI** | **Soe** | **4.88** | **93** | P | **Pn** | **10 03 37.7** | **+0.2** |
| **SOEI** | **Soe** | **4.88** | **93** | P | **Pn** | **10 03 38.7** | **+1.2** |
| **BBSI** | **Bau Bau** | **5.18** | **39** | P | **Pn** | **10 03 43.6** | **+2.1** |
| | 6.0nm16μm2μm,1.0s | | | | | | |
| **BNSI** | **Bone** | **5.19** | **9** | P | **Pn** | **10 03 46.0** | **+4.3** |
| | 151nm388μm250μm19μm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.22** | **282** | Pn | **Pn** | **10 03 40.7** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **5.22** | **282** | ⇑P | **Pn** | **10 03 40.8** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **5.22** | **282** | P | **Pn** | **10 03 42.1** | **0.0** |
| | 88nm85μm105μm7μm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.22** | **282** | P | **Pn** | **10 03 44.2** | **+2.1** |
| **ABJI** | **Asem Bagus** | **5.33** | **289** | P | **Pn** | **10 03 45.3** | **+1.8** |
| | 77nm146μm81μm7μm,0.8s | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.58** | **5** | P | **Pn** | **10 03 50.3** | **+3.2** |
| | 60nm369μm134μm9μm,0.8s | | | | | | |
| **KMMI** | **Kalianget** | **5.86** | **295** | P | **Pn** | **10 03 53.1** | **+2.3** |
| | 26nm189μm47μm3μm,0.8s | | | | | | |
| **BLJI** | **Banyuglugur** | **5.94** | **287** | P | **Pn** | **10 03 52.6** | **+0.6** |
| | 31nm69μm44μm4μm,0.7s | | | | | | |
| **GMJI** | **Gumukmas** | **5.95** | **282** | P | **Pn** | **10 03 51.3** | **-0.7** |
| | 62nm83μm58μm7μm,1.2s | | | | | | |
| **TTSI** | **Tana Toraja** | **6.50** | **4** | P | **Pn** | **10 04 04.2** | **+4.6** |
| | 39nm316μm112μm10μm,0.9s | | | | | | |
| **KBKI** | **Kotabaru** | **6.97** | **333** | P | **Pn** | **10 04 09.2** | **+3.1** |
| | 16nm3μm30μm3μm,0.8s | | | | | | |
| **GRJI** | **Gresik** | **7.26** | **291** | P | **Pn** | **10 04 11.7** | **+1.6** |
| | 10nm2μm31μm3μm,0.7s | | | | | | |
| **BBKI** | **Banjar Baru** | **7.52** | **323** | P | **Pn** | **10 04 17.2** | **+3.6** |
| | 17nm132μm42μm4μm,0.9s | | | | | | |
| **BWJI** | **Bawean** | **7.56** | **299** | P | **Pn** | **10 04 17.1** | **+2.9** |
| | 23nm80μm35μm3μm,1.1s | | | | | | |
| **PWJI** | **Pagerwojo** | **7.58** | **281** | P | **Pn** | **10 04 15.8** | **+1.3** |
| | 35nm58μm31μm2μm,1.3s | | | | | | |
| **TBJI** | **Tambak Boyo** | **7.88** | **290** | P | **Pn** | **10 04 21.9** | **+3.3** |
| | 16nm58μm33μm4μm,1.1s | | | | | | |
| **PCJI** | **Pacitan** | **8.16** | **279** | P | **Pn** | **10 04 22.7** | **+0.3** |
| | 44μm38μm5μm,1.2s | | | | | | |
| **BKB** | **Balikpapan** | **8.60** | **344** | | **Pn** | **10 04 27.2** | **-1.2** |
| **BKB** | **Balikpapan** | **8.60** | **344** | P | Pn | 10 04 33.9 | +5.5 |
| | 271μm103μm10μm,1.1s | | | | | | |
| **BKB** | **Balikpapan** | **8.60** | **344** | P | Pn | 10 04 36.2 | +7.8 |
| **UGM** | **Wanagama** | **8.85** | **280** | Pn | **Pn** | **10 04 32.0** | **+0.2** |
| UGM | | | | Sn | **Sn** | **10 06 12.7** | **+2.4** |
| **UGM** | **Wanagama** | **8.85** | **280** | P | **Pn** | **10 04 33.5** | **+1.6** |
| | 49μm35μm3μm,1.1s | | | | | | |
| **UGM** | **Wanagama** | **8.85** | **280** | P | **Pn** | **10 04 35.0** | **+3.1** |
| **APSI** | **Ampana** | **8.91** | **15** | P | **Pn** | **10 04 36.7** | **+4.1** |
| | 116μm60μm3μm,1.0s | | | | | | |
| **YOGI** | **Yogyakarta** | **9.09** | **280** | P | **Pn** | **10 04 36.8** | **+1.7** |
| | 25μm24μm2μm,1.1s | | | | | | |
| **SMRI** | **Semarang** | **9.13** | **285** | | **Pn** | **10 04 37.5** | **+1.7** |
| SMRI | | | | Sn | **Sn** | **10 06 15.6** | **-1.7** |
| **SMRI** | **Semarang** | **9.13** | **285** | ⇑P | **Pn** | **10 04 39.5** | **+3.7** |
| **SMRI** | **Semarang** | **9.13** | **285** | P | **Pn** | **10 04 37.4** | **+1.7** |
| | 65μm27μm1μm,0.9s | | | | | | |
| **SMRI** | **Semarang** | **9.13** | **285** | P | **Pn** | **10 04 39.6** | **+3.8** |
| **SMKI** | **Samarinda** | **9.30** | **347** | P | **Pn** | **10 04 41.6** | **+3.6** |
| | 260μm120μm13μm,1.3s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **9.63** | **333** | P | **Pn** | **10 04 42.8** | **+0.2** |
| | 100μm36μm4μm,1.2s | | | | | | |
| **MPSI** | **Mapaga** | **9.86** | **3** | P | Pn | 10 04 50.8 | +5.2 |
| | 245μm26μm1μm,1.1s | | | | | | |
| **SANI** | **Sanana** | **9.99** | **42** | ⇑P | **Pn** | **10 04 50.2** | **+2.8** |
| **SANI** | **Sanana** | **9.99** | **42** | P | **Pn** | **10 04 50.3** | **+2.9** |
| | 89μm24μm913nm,1.5s | | | | | | |
| **SANI** | **Sanana** | **9.99** | **42** | P | **Pn** | **10 04 50.6** | **+3.2** |
| **PBKI** | **Pangkalan Bun** | **10.21** | **311** | P | Pn | 10 04 55.8 | +5.3 |
| | 89μm60μm5μm,1.3s | | | | | | |
| **MRSI** | **Marisa** | **10.31** | **15** | P | **Pn** | **10 04 56.1** | **+4.2** |
| | 116μm65μm6μm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.47** | **145** | Pn | Pn | 10 04 49.1 | -4.

comp=Z,2µmcomp=Z,28µmcomp=Z,4µm,1.0s
**JCJI Jatiwangi 11.36 285** P **Pn** **10 05 05.9 -0.3**
comp=Z,47µmcomp=Z,22µmcomp=Z,1µm,1.1s
**MSAI Masohi 11.37 58** P Pn 10 05 11.9 +5.5
comp=Z,453nmcomp=Z,2µmcomp=Z,160nm,0.9s
**MBWA Marble Bar 11.53 178** Pn **Pn**
**MBWA Marble Bar 11.53 178** P Pn 10 05 01.0 -7.5
**DRS Darwin Rock St 11.72 105** P **Pn** 10 05 01.6 -6.9
**LEM Lembang 11.90 282** Pn **Pn** **10 05 07.5 -3.6**
comp=Z,8.9nm,0.3s,baz=103,slow=7.1,SNR=16
**LEM Lembang 11.90 282** P **Pn** **10 05 14.4 +0.7**
LEM pmax pmax **10 05 14.9 +1.2**
comp=Z,693nm,0.7s
**LEM Lembang 11.90 282** P **Pn** **10 05 14.3 +0.6**
comp=Z,24µmcomp=Z,8µmcomp=Z,436nm,0.7s
**SAUI Saumlaki 11.95 83** Pn **Pn** **10 05 11.8 -2.4**
**SAUI Saumlaki 11.95 83** ⇑P **Pn** **10 05 12.4 -1.8**
**SAUI Saumlaki 11.95 83** P **Pn** **10 05 14.4 +0.2**
comp=Z,76µmcomp=Z,65µmcomp=Z,8µm,0.9s
**SAUI Saumlaki 11.95 83** P **Pn** **10 05 14.3 +0.1**
**PSA00 Pilbara Seismi 11.95 178** Pn Pn 10 05 06.9 -7.3
**PSA00 Pilbara Seismi 11.95 178** P Pn 10 05 06.9 -7.3
**MTN Manton Dam 12.04 107** P **Pn** **10 05 12.0 -3.5**
baz=12,SNR=53
MTN S Sn 10 07 16.9 -11
baz=12
**MTN Manton Dam 12.04 107** Pn **Pn** **10 05 12.0 -3.5**
**MTN Manton Dam 12.04 107** ⇓P **Pn** **10 05 11.9 -3.5**
**MTN Manton Dam 12.04 107** P **Pn** **10 05 12.3 -3.2**
**LBMI Labuha 12.04 43** P Pn 10 05 20.9 +5.4
comp=Z,68µmcomp=Z,45µmcomp=Z,4µm,1.2s
**CNJI Cibinong 12.27 280** P **Pn** **10 05 15.8 -2.8**
comp=Z,27µmcomp=Z,15µmcomp=Z,1µm,1.3s
**STKI Sintang 12.35 320** P **Pn** **10 05 23.2 +3.5**
comp=Z,52µmcomp=Z,32µmcomp=Z,2µm,1.7s
**DBJI Dramaga 12.80 283** P **Pn** **10 05 27.4 +1.5**
comp=Z,43µmcomp=Z,19µmcomp=Z,1µm,1.0s
**SKJI Sukabumi 12.88 280** P **Pn** **10 05 28.8 +1.8**
comp=Z,10µmcomp=Z,852nm,0.7s
**TNTI Ternate 13.03 38** Pn **Pn** **10 05 30.2 +1.3**
**TNTI Ternate 13.03 38** ⇑P **Pn** **10 05 32.3 +3.3**
**TNTI Ternate 13.03 38** P **Pn** **10 05 32.8 +3.8**
comp=Z,45µmcomp=Z,31µmcomp=Z,3µm,1.0s
**TNTI Ternate 13.03 38** P **P** **10 05 34.1 -3.9**
**KDU Kakadu 13.27 105** P **Pn** **10 05 27.7 -4.6**
baz=13,SNR=399
**KDU Kakadu 13.27 105** ⇑P **Pn** **10 05 27.8 -4.6**
KDU ⇑S **Sn** **10 07 49.8 -8.7**
**KDU Kakadu 13.27 105** P **Pn** **10 05 29.4 -3.0**
**TPI Tanjungpandan 13.42 300** P **Pn** **10 05 35.5 +1.1**
comp=Z,6µmcomp=Z,293nm,1.2s
**XMI Christmas Isla 13.45 265** ⇓P **Pn** **10 05 34.8 -0.1**
XMI ⇑S Sn 10 07 54.5 -8.4
**XMI Christmas Isla 13.45 265** P **Pn** **10 05 34.8 -0.1**
**XMIS Christmas Isla 13.49 265** Pn **Pn** **10 05 33.4 -2.0**
**XMIS Christmas Isla 13.49 265** P **Pn** **10 05 35.1 -0.3**
**CGJI Cibinong 13.81 281** P **Pn** **10 05 38.9 -0.7**
comp=Z,31µmcomp=Z,15µmcomp=Z,1µm,0.9s
**SBUM Sibu 13.88 329** **Pn** **10 05 44.0 +3.5**
**SBUM Sibu 13.88 329** ⇑P **P** **10 05 45.3 -2.1**
**SBUM Sibu 13.88 329** P **P** **10 05 46.0 -1.5**
**GIRL Giralia 13.89 200** P Pn 10 05 34.3 -6.4
baz=14,SNR=86
**GIRL Giralia 13.89 200** Pn 10 05 34.7 -6.0
**GIRL Giralia 13.89 200** ⇓P Pn 10 05 34.8 -5.8
**GIRL Giralia 13.89 200** P Pn 10 05 34.5 -6.2
**KSM Kuching 14.17 320** Pn **Pn** **10 05 46.6 +2.0**
**KSM Kuching 14.17 320** ⇑P **P** **10 05 48.8 -2.0**
**KSM Kuching 14.17 320** P **P** **10 05 49.0 -1.8**
**KSM Kuching 14.17 320** P **P** **10 05 50.7 -0.1**
**FAKI Fak Fak 14.44 64** **Pn** **10 05 45.6 -2.7**
**FAKI Fak Fak 14.44 64** ⇑P **Pn** **10 05 45.5 -2.7**
**FAKI Fak Fak 14.44 64** P **Pn** **10 05 45.5 -2.7**
comp=Z,57µmcomp=Z,26µmcomp=Z,3µm,0.9s
**FAKI Fak Fak 14.44 64** P **Pn** **10 05 47.6 -0.6**
**SPMM Sapulut 14.46 349** P **P** **10 05 55.0 +1.0**
**SGSI Sangihe 14.55 25** P **P** **10 05 53.1 -1.8**
comp=Z,4µmcomp=Z,20µmcomp=Z,2µm,1.0s
**BLSI Bandar Lampung 14.56 286** P **Pn** **10 05 49.0 -0.8**
comp=Z,25µmcomp=Z,12µmcomp=Z,1µm,1.0s
**MYLDM Lahad Datu 14.67 357** **P** **10 05 56.7 +0.4**
**MYLDM Lahad Datu 14.67 357** ⇑P **P** **10 05 58.3 +2.0**
**SWI Sorong 14.69 55** P **Pn** **10 05 52.1 +0.6**
comp=Z,61µmcomp=Z,49µmcomp=Z,6µm,1.0s
**SIJI Sorong 14.70 55** Pn **Pn** **10 05 50.7 -0.8**
comp=Z,49nm,0.3s,baz=212,slow=7.4,SNR=181
SIJI Sn **Sn** **10 08 34.0 +0.9**
comp=Z,4.0nm,0.3s,baz=87,slow=22,SNR=1.9
SIJI LR LR 10 11 38.2
comp=Z,89µm,21.2s,baz=233,slow=38
**PPBI Pangkal Pinang 15.03 298** P **Pn** **10 05 57.1 +1.2**
comp=Z,37µmcomp=Z,16µmcomp=Z,753nm,0.9s
**KLI Kotabumi 15.09 287** P **Pn** **10 05 55.1 -1.5**
comp=Z,28µmcomp=Z,23µmcomp=Z,2µm,0.9s
**KASI Kota Agung 15.23 284** P **Pn** **10 05 56.3 -2.2**
comp=Z,25µmcomp=Z,15µmcomp=Z,2µm,1.0s
**LWLI Liwa 15.79 286** P **Pn** **10 06 07.0 +1.2**
comp=Z,63µmcomp=Z,3µm,0.8s
**KKM Kota Kinabalu 15.81 349** **Pn** **10 06 08.2 +2.1**
KKM IAmb IAmb 10 06 19.1
comp=Z,5µm,1.6s
**KKM Kota Kinabalu 15.81 349** ⇑P **P** **10 06 09.7 +0.6**
**KKM Kota Kinabalu 15.81 349** P **P** **10 06 12.4 +3.3**
**MDSI Maura Dua 15.85 288** P **Pn** **10 06 04.2 -2.2**
comp=Z,19µmcomp=Z,5µmcomp=Z,274nm,1.0s
**PMBI Palembang 15.89 294** **P** **10 06 11.1 +1.3**
PMBI IAmb IAmb 10 06 23.1
comp=Z,2µm,1.2s
**PMBI Palembang 15.89 294** P **Pn** **10 06 09.3 +2.4**
comp=Z,33µmcomp=Z,29µmcomp=Z,2µm,1.2s
**GSPH General Santos 16.53 20**i*eP* **P** **10 06 20.3 +3.2**
**ZCP Zamboanga City 16.62 10**⇑*eP* **P** **10 06 21.2 +3.3**
**LHSI Lahat 16.69 289** P **Pn** **10 06 17.2 +0.2**
comp=Z,17µmcomp=Z,1µm,1.0s
**MEEK Meekatharra 16.99 182** P **Pn** **10 06 14.3 -6.5**
baz=17,SNR=674
**MEEK Meekatharra 16.99 182** P **Pn** **10 06 15.1 -5.7**
**DSRI Dabo 17.23 301** P **Pn** **10 06 23.8 +0.1**
comp=Z,22µmcomp=Z,6µmcomp=Z,731nm,0.9s
**CTBH Cotabato--PC H 17.38 17***eP* **P** **10 06 30.1 +3.7**
**KCP Kidapawan 17.44 19**i*P* **P** **10 06 29.9 +2.8**
**JMBI JAMBI 17.47 296** P **Pn** **10 06 27.6 +0.9**
comp=Z,15µmcomp=Z,2µm,1.3s
**WRKA Warakurna 17.60 152** P **Pn** **10 06 23.7 -4.6**
baz=18,SNR=110
**WRKA Warakurna 17.60 152** ⇓P **Pn** **10 06 22.8 -5.5**
**WRKA Warakurna 17.60 152** P **Pn** **10 06 23.5 -4.8**
**KSI Kapahiang 17.62 288** P **Pn** **10 06 28.6 0.0**
KSI pmax pmax
comp=Z,2µm,1.0s
**KSI Kapahiang 17.62 288** P **Pn** **10 06 27.6 -1.0**
comp=Z,21µmcomp=Z,2µm,1.0s
**DAV Davao City (W) 17.66 21** P **P** **10 06 30.6 +1.1**
comp=Z,92nm,0.3s,baz=121,slow=1.1,SNR=16
DAV LR LR 10 14 28.5
comp=Z,35µm,18.5s,baz=177,slow=42
**DAV Davao City (W) 17.66 21** P **Pn** **10 06 28.1 -1.1**
**DAV Davao City (W) 17.66 21** P **P** **10 06 30.4 +0.9**
DAV P **P** **10 06 30.4 +0.9**
DAV P **P** **10 06 30.4 +0.9**
**WB0 Warramunga Arr 17.75 127** Pn **Pn** **10 06 24.8 -5.4**
WB0 IAmb IAmb 10 06 32.3
comp=Z,3µm,2.0s
**PAGZ Pagadian 17.77 13**⇑*eP* **P** **10 06 33.9 +3.3**
**WRA Warramunga Arr 17.80 127** P **Pn** **10 06 25.4 -5.4**
comp=Z,3.0nm,0.3s,baz=303,slow=14,SNR=107
WRA S Sn 10 09 34.0 -14
comp=Z,8.9nm,0.3s,baz=300,slow=24,SNR=9.3
WRA LR LR 10 13 58.5
comp=Z,66µm,21.9s,baz=300,slow=39
WRA P3KPbc 10 41 24.2
comp=Z,0.0nm,0.3s,baz=123,slow=4.2,SNR=5.5
**WRA Warramunga Arr 17.80 127** *i* P **Pn** **10 06 25.3 -5.4**
WRA pmax pmax
comp=Z,29nm,0.4s
**WRA Warramunga Arr 17.80 127** Pn **Pn** **10 06 24.6 -6.2**
**WRAB Tennant Creek 17.80 127** P **Pn** **10 06 24.9 -5.9**
WRAB pmax pmax
comp=Z,3µm,2.0s
**WRAB Tennant Creek 17.80 127** Pn **Pn** **10 06 24.9 -5.9**
WRAB IAmb IAmb 10 06 37.0
comp=Z,3µm,1.9s
**WB2 Warramunga Arr 17.81 127** P **Pn** **10 06 25.9 -4.9**
**WR0 Warramunga Arr 17.97 127** **Pn** **10 06 28.1 -4.7**
**TPRI Tanjung Pinang 18.04 304** P **P** **10 06 33.3 -0.4**
comp=Z,10µmcomp=Z,562nm,0.8s
**MASI Maura Aman, Be 18.13 290** P **P** **10 06 33.7 -1.0**
comp=Z,39µmcomp=Z,56µmcomp=Z,6µm,1.0s
**BUKP Musuan 18.25 18**i*eP* **Pn** **10 06 40.7 +4.4**
**SRPI Serui, Papua 18.48 67** P **P** **10 06 35.8 -2.7**
comp=Z,32µmcomp=Z,12µmcomp=Z,448nm,1.2s
**BAKI Biak 18.66 65** P **P** **10 06 39.5 -1.0**
comp=Z,85µmcomp=Z,6µm,1.5s
**MYKOM Kota Tinggi 19.10 305** P **P** **10 06 45.9 +0.6**
**MYKOM Kota Tinggi 19.10 305** ⇑P **P** **10 06 45.5 +0.2**
**MYKOM Kota Tinggi 19.10 305** P **Pn** **10 06 48.0 +1.5**
**SNPH Sibulan 19.19 12***eP* **Pn** **10 06 49.6 +2.1**
**PPR Puerto Princes 19.23 358**⇓*iP* **Pn** **10 06 50.5 +2.6**
**KRJI Kerinci 19.24 292** P **P** **10 06 45.1 -1.9**
comp=Z,30µmcomp=Z,82µmcomp=Z,5µm,0.8s
**CNOP Candoni, Negro 19.55 10**⇑*eP* **Pn** **10 06 54.1 +2.3**
**MORW Morawa 19.64 189** P **P** **10 06 48.9 -2.3**
baz=20,SNR=92
**MORW Morawa 19.64 189** P **P** **10 06 48.2 -2.9**
MORW IAmb IAmb 10 07 07.4
comp=Z,1µm,1.1s
**MORW Morawa 19.64 189** ⇑P **P** **10 06 48.8 -2.3**
**MORW Morawa 19.64 189** P **P** **10 06 49.1 -2.0**
**TBP Tagbilaran 19.66 13***eP* **Pn** **10 06 53.0 -0.1**
**AS31 Alice Springs 19.77 137** P **P** **10 06 50.3 -2.3**
**ASAR Alice Springs 19.77 137** P **P** **10 06 51.3 -1.3**
comp=Z,4.7nm,0.3s,baz=307,slow=7.7,SNR=240
ASAR S S 10 10 20.1 -13
comp=Z,3.8nm,0.3s,baz=310,slow=22,SNR=5.9
ASAR LR LR 10 14 46.1
comp=Z,54µm,20.2s,baz=310,slow=38
ASAR P3KPbc 10 41 13.2
comp=Z,0.0nm,0.3s,baz=181,slow=1.1,SNR=7.2
**ASAR Alice Springs 19.77 137** P **P** **10 06 50.4 -2.2**
**WAMI Wamena 20.06 75** P **P** **10 06 55.7 -0.1**
comp=Z,19µmcomp=Z,1µm,1.0s
**MSLP Maasin 20.33 16**⇑*eP* Pn 10 07 01.2 +0.1
**PPSI Pulau Pagai 20.34 288** P **P** **10 06 55.6 -3.3**
comp=Z,19µmcomp=Z,38µmcomp=Z,3µm,1.6s
**JAP San Jose, Anti 20.35 7**⇓*eP* Pn 10 07 03.6 +2.4
**BKNI Bangkinang 20.68 297** P **P** **10 07 02.6 +0.1**
**BKNI Bangkinang 20.68 297** ⇑P **P** **10 07 02.0 -0.6**
**BKNI Bangkinang 20.68 297** P **P** **10 07 01.6 -0.9**
comp=Z,34µmcomp=Z,24µmcomp=Z,2µm,1.2s
**MMPI Merauke 20.83 89** P **P** **10 07 02.9 -1.3**
comp=Z,60µmcomp=Z,52µmcomp=Z,3µm,0.8s
**BLDU Ballidu 21.08 186** P **P** **10 07 05.3 -1.4**
baz=21,SNR=121
**BLDU Ballidu 21.08 186** P **P** **10 07 04.1 -2.6**
**RCP Roxas 21.26 9**⇓*eP* **P** **10 07 10.5 +1.7**
**JRMM Jerantut 21.45 308** P **P** **10 07 12.0 +1.2**
**SISI Saibi 21.72 291** P **P** **10 07 09.1 -4.6**
comp=Z,13µmcomp=Z,5µmcomp=Z,475nm,0.9s
**GENI Genyem 21.85 73** ⇑P **P** **10 07 13.2 -1.8**
**GENI Genyem 21.85 73** P **P** **10 07 12.9 -2.1**
comp=Z,46µmcomp=Z,29µmcomp=Z,2µm,1.3s
**GENI Genyem 21.85 73** P **P** **10 07 17.4 +2.4**
**KLBR Kellerberrin 21.96 184** P **P** **10 07 15.0 -1.1**
baz=22,SNR=51
**KLBR Kellerberrin 21.96 184** P **P** **10 07 15.0 -1.1**
**MNSI Mandailing Nat 22.19 297** P **P** **10 07 16.1 -2.6**
comp=Z,24µmcomp=Z,7µmcomp=Z,246nm,0.8s
**JAY Jayapura 22.38 73** P **P** **10 07 18.6 -2.3**
comp=Z,311nm,1.0s,baz=200,slow=6.4,SNR=34
JAY LR LR 10 17 14.0
comp=Z,12µm,21.7s,baz=263,slow=40
**JAY Jayapura 22.38 73** P **P** **10 07 18.0 -2.8**
comp=Z,23µmcomp=Z,8µmcomp=Z,342nm,1.9s
**QIS Mount Isa 22.40 122** P **P** **10 07 19.1 -1.9**
baz=22,SNR=77
**QIS Mount Isa 22.40 122** P **P** **10 07 20.0 -1.0**
**MUN Mundaring 22.49 187** P **P** **10 07 20.0 -1.8**
baz=23,SNR=27
**MUN Mundaring 22.49 187** P **P** **10 07 19.9 -1.8**
**MTKN Mount Kenneth 22.50 188** P **P** **10 07 22.6 +0.7**
**FORT Forrest 22.62 160** P **P** **10 07 21.6 -1.6**
baz=23,SNR=45
**FORT Forrest 22.62 160** P **P** **10 07 20.1 -3.1**
FORT IAmb IAmb 10 07 55.7
comp=Z,726nm,0.8s
**FORT Forrest 22.62 160** ⇓P **P** **10 07 21.0 -2.2**
**FORT Forrest 22.62 160** P **P** **10 07 21.1 -2.1**
**I39PW PALAU INFRASON 22.78 42** *i* 12 27 20.0
baz=224,slow=318,SNR=0.4
**IPM Ipoh 22.96 307** P **P** **10 07 26.9 0.0**
IPM IAmb IAmb 10 07 29.8
comp=Z,1µm,1.4s
**IPM Ipoh 22.96 307** P **P** **10 07 28.0 +1.1**
**IPM Ipoh 22.96 307** P **P** **10 07 28.3 +1.4**
**PGP Puerto Galera 22.98 4**⇑*iP* **P** **10 07 28.8 +1.8**
**LUBP Lubang 23.17 2**⇑*eP* **P** **10 07 31.6 +2.7**
**NWAO Narrogin (SRO) 23.33 184** P **P** **10 07 27.4 -2.9**
NWAO pmax pmax
comp=Z,1µm,1.3s
**NWAO Narrogin (SRO) 23.33 184** P **P** **10 07 27.4 -2.9**
NWAO IAmb IAmb 10 07 56.5
comp=Z,1µm,1.2s
**NWAO Narrogin (SRO) 23.33 184** P **P** **10 07 28.5 -1.8**
**GQP Guinayangan 23.52 8**⇓*eP* **P** **10 07 32.9 +0.6**
**TGY Tagaytay City 23.57 4** P **P** **10 07 34.6 +1.8**
comp=Z,41µm,1.0s,baz=203,slow=3.3,SNR=312
TGY LR LR 10 17 18.7
comp=Z,16µm,19.2s,baz=192,slow=38
**TGY Tagaytay City 23.57 4***eP* **P** **10 07 36.3 +3.5**
**LQP Lukban 23.63 5**⇑*eP* **P** **10 07 33.7 +0.2**
**PSI Prapat 23.75 300** P **P** **10 07 33.1 -1.5**
comp=Z,2µm,1.1s,baz=156,slow=8.6,SNR=478
PSI LR LR 10 18 25.0
comp=Z,25µm,20.8s,baz=128,slow=41
**KULM Kulim 23.75 308** P **P** **10 07 33.9 -0.6**
KULM IAmb IAmb 10 07 37.0
comp=Z,2µm,1.5s
KULM IAMs_20 IAMs_20 10 17 38.1
comp=Z,64µm,20.0s
**KULM Kulim 23.75 308** ⇑P **P** **10 07 33.1 -1.3**
**KULM Kulim 23.75 308** P **P** **10 07 35.0 +0.6**
**COEN Coen 23.75 103** P **P** **10 07 31.7 -2.8**
COEN IAmb IAmb 10 07 36.5
comp=Z,938nm,1.1s
**COEN Coen 23.75 103** ⇑P **P** **10 07 32.6 -1.9**
**COEN Coen 23.75 103** P **P** **10 07 33.0 -1.5**
**OOD Oodnadatta 23.80 142** P **P** **10 07 32.6 -2.2**
**JCNP Jose Panganiba 23.94 8**⇓*eP* **P** **10 07 36.9 +0.8**
**GSI Gunungsitoli 24.20 295** P **P** **10 07 35.5 -3.1**
GSI IAMs_20 IAMs_20 10 18 48.6
comp=Z,57µm,20.0s
**GSI Gunungsitoli 24.20 295** ⇑P **P** **10 07 35.5 -3.1**
**GSI Gunungsitoli 24.20 295** P **P** **10 07 36.6 -2.0**
comp=Z,20µmcomp=Z,16µmcomp=Z,452nm,1.0s
**GSI Gunungsitoli 24.20 295** P **P** **10 07 39.1 +0.5**
**TSI Tuntungan 24.42 301** P **P** **10 07 40.0 -0.6**
comp=Z,30µmcomp=Z,28µmcomp=Z,4µm,0.8s
**MULG Mulgathing 24.78 148** P **P** **10 07 42.7 -1.0**
**RKGY Rocky Gully 25.02 185** P **P** **10 07 46.1 +0.3**
baz=25,SNR=16
**PCPH Palayan 25.03 4**⇑*eP* **P** **10 07 46.0 0.0**
**KCSI Kotacane, Aceh 25.10 300** P **P** **10 07 44.8 -2.0**
comp=Z,11µmcomp=Z,1µm,1.2s
**MTSU Mount Surprise 25.69 112** P **P** **10 07 51.1 -1.1**
baz=26,SNR=247
**MTSU Mount Surprise 25.69 112** P **P** **10 07 51.9 -0.3**
**SRIT Nakonsritamara 26.67 312** P **P** **10 08 00.7 -0.2**
SRIT IAmb IAmb 10 08 33.7
comp=Z,932nm,1.6s
**LHMI Lhok Sumawe 26.70 302** P **P** **10 08 00.6 -0.7**
LHMI IAmb IAmb 10 08 43.0
comp=Z,2µm,1.2s
**LHMI Lhok Sumawe 26.70 302** ⇑P **P** **10 08 00.4 -0.9**
**LHMI Lhok Sumawe 26.70 302** P **P** **10 07 59.6 -1.7**
comp=Z,24µmcomp=Z,12µmcomp=Z,841nm,1.1s
**INKA Innaminka 27.10 135** P **P** **10 08 04.9 +0.2**
**LCRK Leigh Creek 27.24 142** P **P** **10 08 05.5 -0.5**
**APYP Conner 27.32 4**⇑*eP* **P** **10 08 08.2 +1.5**
**PMG Port Moresby 27.46 92** P **P** **10 08 07.9 -0.2**
comp=Z,101nm,0.8s,baz=265,slow=3.0,SNR=30
PMG LR LR 10 21 16.2
comp=Z,18µm,18.7s,baz=261,slow=41
**PMG Port Moresby 27.46 92** *i* P **P** **10 08 06.1 -2.0**
PMG pmax pmax
comp=Z,413nm,1.0s
**PMG Port Moresby 27.46 92** P **P** **10 08 06.3 -1.8**
PMG IAmb IAmb 10 08 15.6
comp=Z,487nm,1.0s
**PMG Port Moresby 27.46 92** ⇑P **P** **10 08 06.7 -1.4**
**PMG Port Moresby 27.46 92** P **P** **10 08 08.5 +0.4**
**PMG Port Moresby 27.46 92** P **P** **10 08 08.7 +0.6**
**BBOO Buckleboo 27.82 149** P **P** **10 08 08.4 -2.8**
baz=28,SNR=35
**BBOO Buckleboo 27.82 149** P **P** **10 08 09.3 -1.9**
**BBOO Buckleboo 27.82 149** P **P** **10 08 10.3 -0.9**
**CTA Charters Tower 28.02 115** P **P** **10 08 12.3 -0.8**
comp=Z,75nm,1.1s,baz=280,slow=7.9,SNR=3.6
CTA LR LR 10 20 36.6
comp=Z,44µm,20.8s,baz=288,slow=39
**CTA Charters Tower 28.02 115** P **P** **10 08 14.3 +1.2**
**CTAO Charters Tower 28.02 115** P **P** **10 08 11.8 -1.3**
CTAO pmax pmax
comp=Z,229nm,1.2s
CTAO MLR MLR
comp=Z,42µm,20.0s
**CTAO Charters Tower 28.02 115** P **P** **10 08 11.8 -1.3**
**CTAO Charters Tower 28.02 115** IAMs_20 IAMs_20 10 20 23.7
comp=Z,42µm,20.0s
**CTAO Charters Tower 28.02 115** ⇑P **P** **10 08 12.8 -0.3**
**CTAO Charters Tower 28.02 115** P **P** **10 08 14.2 +1.2**
**UBPT Khong Chiam 28.25 331** P **P** **10 08 15.9 +0.9**
UBPT IAmb IAmb 10 08 18.6
comp=Z,955nm,1.3s
**UBPT Khong Chiam 28.25 331** ⇑P **P** **10 08 15.9 +0.9**
**MANU Manus Island 28.87 77** P **P** **10 08 21.6 +0.9**
MANU IAmb IAmb 10 08 23.0
comp=Z,546nm,1.1s
**QLP Quilpie 29.02 129** P **P** **10 08 21.4 -0.5**
baz=29,SNR=45
**QLP Quilpie 29.02 129** ⇑P **P** **10 08 20.7 -1.2**
**QLP Quilpie 29.02 129** P **P** **10 08 21.7 -0.2**
**NAPP Napperby 29.22 146** P **P** **10 08 23.5 -0.1**
**HTT Hallett 29.83 146** P **P** **10 08 27.6 -1.4**
baz=30,SNR=48
**HTT Hallett 29.83 146** ⇓P **P** **10 08 27.8 -1.3**
**HTT Hallett 29.83 146** P **P** **10 08 27.8 -1.3**
**QIZ Qiongzhong 29.91 342** P **P** **10 08 31.5 +1.7**
QIZ IAmb IAmb 10 08 33.4
comp=Z,703nm,1.1s
**QIZ Qiongzhong 29.91 342**⇑*iP* **P** **10 08 31.8 +2.0**
QIZ sP **pP** **10 08 45.5 +2.9**
QIZ S **S** **10 13 24.3 +0.4**
QIZ sS **sS** **10 13 43.2 -2.7**
QIZ pmax pmax
comp=Z,510nm,1.2s
QIZ pmax pmax
comp=Z,4µm,2.7s
QIZ LR LR
comp=Z,13µm,24.4s
QIZ LR LR
comp=Z,15µm,25.5s
**QIZ Qiongzhong 29.91 342** P **P** **10 08 32.0 +2.2**
**STKA Stephens Creek 30.32 140** P **P** **10 08 32.6 -0.8**
comp=Z,40nm,0.6s,baz=308,slow=9.9,SNR=32
STKA LR LR 10 23 00.3
comp=Z,21µm,18.4s,baz=297,slow=41
**STKA Stephens Creek 30.32 140** P **P** **10 08 31.8 -1.6**
baz=30,SNR=47
**STKA Stephens Creek 30.32 140** P **P** **10 08 31.6 -1.8**
**STKA Stephens Creek 30.32 140** P **P** **10 08 33.8 +0.5**
**TWOA Tennyson Woods 30.86 148** P **P** **10 08 37.6 -0.5**
**MCO Taipa Grande 32.00 350** P **P** **10 08 51.0 +2.9**
**HKPS Hong Kong Po S 32.05 351** P **P** **10 08 48.5 -0.2**
HKPS IAmb IAmb 10 08 50.9
comp=Z,395nm,1.2s
**HKC Hong Kong Obse 32.07 351** ⇑P **P** **10 08 50.0 +1.2**
**TWG Pinlang 32.23 3** P **P** **10 08 49.8 -0.4**
TWG IAmb IAmb 10 09 06.0
comp=Z,330nm,0.9s
**RMQ Roma 32.54 125** P **P** **10 08 53.0 +0.1**
baz=32,SNR=55
**RMQ Roma 32.54 125** P **P** **10 08 53.9 +0.9**
**TPUB Ta-pu 32.69 2** P **P** **10 08 53.9 -0.4**
TPUB IAmb IAmb 10 08 56.8
comp=Z,581nm,1.0s
**TPUB Ta-pu 32.69 2** P **P** **10 08 55.5 +1.2**
**CMSA Cobar Meteorol 32.81 136** P **P** **10 08 55.6 +0.3**
baz=33,SNR=60
**CMSA Cobar Meteorol 32.81 136** P **P** **10 08 55.2 -0.1**
**YULB Yu-li 32.81 3** P **P** **10 08 53.2 -2.1**
YULB IAmb IAmb 10 08 59.5
comp=Z,467nm,0.9s
**GZH Guangzhou 32.98 350**⇑*iP* P 10 09 02.8 +6.1
GZH pP pP 10 09 11.6 +2.0
GZH S S 10 14 23.2 +12
GZH pmax pmax
comp=Z,7µm,2.3s
GZH LR LR
comp=Z,13µm,17.3s
GZH LR LR
comp=Z,7µm,18.7s
**RABL Rabaul 33.03 83** P **P** **10 08 55.8 -1.6**
RABL IAmb IAmb 10 09 01.1
comp=Z,264nm,0.8s
**RABL Rabaul 33.03 83** ⇑P **P** **10 08 55.6 -1.8**
**RABL Rabaul 33.03 83** P **P** **10 09 00.2 +2.8**
**SSLB Suanglung 33.19 3** P **P** **10 08 58.4 -0.2**
SSLB IAmb IAmb 10 09 00.1
comp=Z,562nm,1.1s
**SSLB Suanglung 33.19 3** P **P** **10 08 59.0 +0.4**
**NACB Ninganchiao 33.61 4** P **P** **10 09 00.5 -1.8**
NACB IAmb IAmb 10 09 03.8
comp=Z,470nm,1.2s
**KNMB Chin-men Tao 33.84 358** P **P** **10 09 03.6 -0.6**
**ARPS Mount Arapiles 33.90 147** P **P** **10 09 03.0 -1.7**
baz=34,SNR=100
**ARPS Mount Arapiles 33.90 147** P **P** **10 09 03.5 -1.2**
**EIDS Eidsvold 34.01 122** P **P** **10 09 05.7 0.0**
baz=34,SNR=5.9
**EIDS Eidsvold 34.01 122** P **P** **10 09 02.7 -3.1**
**EIDS Eidsvold 34.01 122** ⇓P **P** **10 09 08.2 +2.4**
**EIDS Eidsvold 34.01 122** P **P** **10 09 07.8 +2.0**
**YOJ Yonaguni jima 34.01 6** P **P** **10 09 06.7 +1.0**
YOJ pmax pmax
comp=Z,2µm,1.2s
**YOJ Yonaguni jima 34.01 6** P **P** **10 09 06.7 +1.0**
**YOJ Yonaguni jima 34.01 6** ⇑P **P** **10 09 06.3 +0.6**
**YOJ Yonaguni jima 34.01 6** P **P** **10 09 06.8 +1.0**
**YHNB Yeheng 34.09 3** P **P** **10 09 06.1 -0.4**
**YHNB Yeheng 34.09 3** P **P** **10 09 06.6 +0.1**
**GUMO Guam 34.24 48** P **P** **10 09 05.5 -2.4**
comp=Z,828nm,1.1s,baz=193,slow=8.5,SNR=9.3
**GUMO Guam 34.24 48** P **P** **10 09 06.6 -1.3**
GUMO pmax pmax
comp=Z,1µm,1.1s
**GUMO Guam 34.24 48** P **P** **10 09 06.6 -1.3**
**GUMO Guam 34.24 48** P **P** **10 09 11.7 +3.9**
comp=Z,1µm,1.5s
**QZH Quanzhou 34.31 359**⇑*iP* **P** **10 09 08.5 +0.2**
QZH S S 10 14 23.7 -8.5
QZH pmax pmax
comp=Z,610nm,1.1s
QZH pmax pmax
comp=Z,4µm,8.8s
QZH LR LR
comp=Z,7µm,19.4s
QZH LR LR
comp=Z,5µm,21.3s
QZH LR LR
comp=Z,10µm,20.4s
**CM31 Chiang Mai Arr 34.35 324** P **P** **10 09 09.7 +1.0**
**CM31 Chiang Mai Arr 34.35 324** P **P** **10 09 10.1 +1.3**
SNR=299
CM31 P **P** **10 09 10.1 +1.3**
SNR=299
CM31 P **P** **10 09 10.1 +1.3**
SNR=299
**CMAR Chiang Mai Arr 34.35 324** P **P** **10 09 09.2 +0.4**
comp=Z,254nm,1.0s,baz=148,slow=6.3,SNR=444
CMAR PcP **PcP** **10 11 46.2 +2.2**
comp=Z,90nm,1.1s,baz=169,slow=2.6,SNR=4.1
CMAR PKiKP **PKiKP** **10 19 09.1 +1.4**
comp=Z,4.7nm,0.9s,baz=243,slow=1.8,SNR=4.5
CMAR LR LR 10 24 45.2
comp=Z,39µm,19.0s,baz=150,slow=39
CMAR PKPPKP **P'P'df** **10 42 28.4 +3.4**
comp=Z,1.2nm,0.3s,baz=292,slow=3.0,SNR=6.2
**CMAR Chiang Mai Arr 34.35 324***ce*P **P** **10 09 09.8 +1.0**
CMAR pmax pmax
comp=Z,265nm,1.0s
**CMAR Chiang Mai Arr 34.35 324** P **P** **10 09 09.5 +0.7**
CMAR PcP **PcP** **10 11 46.3 +2.3**
**TATO Taipei 34.40 3** P **P** **10 09 08.3 -0.7**
**TATO Taipei 34.40 3** P **P** **10 09 07.1 -1.9**
TATO P **P** **10 09 07.1 -1.9**

**DGPR DIGLIPUR 34.60 310 eP P 10 09 09.1 -1.9**
DGPR IAmb IAmb 10 09 12.8
comp=Z,371nm,1.1s
**CHTO Chiang Mai 34.63 325 P P 10 09 11.8 +0.6**
CHTO pmax pmax
comp=Z,997nm,1.3s
CHTO MLR MLR
comp=Z,41µm,19.0s
**CHTO Chiang Mai 34.63 325 P P 10 09 11.8 +0.6**
**CHTO Chiang Mai 34.63 325 P P 10 09 12.5 +1.3**
CHTO P P 10 09 12.5 +1.3
CHTO P P 10 09 12.5 +1.3
CHTO S S 10 14 34.6 -2.9
CHTO S S 10 14 34.6 -2.9
CHTO S S 10 14 34.6 -2.9
**CHTO Chiang Mai 34.63 325 ⇑P P 10 09 11.9 +0.7**
**CHTO Chiang Mai 34.63 325 P P 10 09 12.9 +1.7**
**JMJ Miyako jima 2 34.67 10 P P 10 09 17.7 +6.3**
comp=Z,4µm,1.0s
**TOO Toolangi 36.53 144 P P 10 09 27.3 0.0**
baz=37,SNR=27
**TOO Toolangi 36.53 144 P P 10 09 25.7 -1.7**
TOO pmax pmax
comp=Z,178nm,1.1s
**TOO Toolangi 36.53 144 P P 10 09 25.7 -1.7**
**TOO Toolangi 36.53 144 ⇑P P 10 09 27.5 +0.1**
**TOO Toolangi 36.53 144 P P 10 09 26.9 -0.4**
**ARMA Armidale 36.56 129 P P 10 09 29.8 +2.0**
baz=37,SNR=19
**ARMA Armidale 36.56 129 P P 10 09 25.5 -2.3**
**ARMA Armidale 36.56 129 ⇓P P 10 09 29.6 +1.8**
**ARMA Armidale 36.56 129 P P 10 09 28.2 +0.4**
**JOW Kunigami 37.21 13 P P 10 09 33.3 +0.1**
comp=Z,123nm,0.8s,baz=192,slow=6.6,SNR=9.1
JOW LR LR 10 25 10.9
comp=Z,12µm,20.5s,baz=198,slow=37
**JOW Kunigami 37.21 13 P P 10 09 32.8 -0.4**
**JOW Kunigami 37.21 13 ⇑P P 10 09 33.3 +0.1**
**JOW Kunigami 37.21 13 P P 10 09 35.0 +1.8**
comp=Z,212nm,1.1s
**CAN Canberra 37.27 138 P P 10 09 32.1 -1.6**
CAN pmax pmax
comp=Z,217nm,1.3s
CAN MLR MLR
comp=Z,29µm,21.0s
**CAN Canberra 37.27 138 P P 10 09 32.1 -1.6**
CAN IAMs_20 IAMs_20 10 25 23.6
comp=Z,29µm,21.0s
**CAN Canberra 37.27 138 ⇑P P 10 09 34.0 +0.3**
**CAN Canberra 37.27 138 P P 10 09 35.1 +1.4**
**CNB Canberra Magne 37.51 138 P P 10 09 37.6 +1.8**
baz=38,SNR=15
**CNB Canberra Magne 37.51 138 P P 10 09 37.0 +1.2**
**MGCD Mangrove Creek 37.55 134 P P 10 09 37.3 +1.3**
baz=38,SNR=24
**MGCD Mangrove Creek 37.55 134 P P 10 09 39.0 +3.0**
**GYA Guiyang 37.86 341 ⇑P P 10 09 40.7 +1.9**
GYA pP pP 10 09 47.9 -3.9
GYA S S 10 15 30.7 +3.8
GYA ScS ScS 10 19 52.1 +4.8
GYA pmax pmax
comp=Z,770nm,1.3s
GYA pmax pmax
comp=Z,5µm,3.5s
GYA LR LR
comp=Z,18µm,21.8s
GYA LR LR
comp=Z,12µm,24.1s
GYA LR LR
comp=Z,24µm,23.7s
**RIV Riverview 37.91 134 P P 10 09 39.6 +0.6**
baz=38,SNR=5.7
**RIV Riverview 37.91 134 ⇑P P 10 09 42.5 +3.4**
**CNSH ChangSha 38.03 351 ⇑P P 10 09 35.9 -4.2**
CNSH S S 10 15 24.5 -4.6
CNSH pmax pmax
comp=Z,800nm,1.2s
CNSH LR LR
comp=Z,10µm,16.3s
CNSH LR LR
comp=Z,3µm,18.9s
CNSH LR LR
comp=Z,9µm,16.3s
**KMI Kunming 38.08 335 ⇑P P 10 09 43.8 +3.0**
KMI pP pP 10 09 50.2 -3.6
KMI S S 10 15 36.7 +6.3
KMI ScP ScP 10 15 41.5 +2.5
KMI ScS ScS 10 19 51.9 +3.1
KMI pmax pmax
comp=Z,440nm,2.0s
KMI pmax pmax
comp=Z,5µm,8.3s
KMI LR LR
comp=Z,8µm,22.9s
KMI LR LR
comp=Z,13µm,21.9s
KMI LR LR
comp=Z,18µm,27.8s
**MILA Mila 38.42 140 P P 10 09 44.2 +0.8**
baz=38,SNR=5.4
**PZH PanZhiHua 39.71 335 P P 10 09 55.1 +0.7**
PZH pP pP 10 10 06.5 -0.9
PZH sP sP 10 10 09.6 -3.6
PZH S S 10 15 51.1 -3.7
PZH SS SS 10 18 41.1 -11
PZH pmax pmax
comp=Z,370nm,1.0s
PZH pmax pmax
comp=Z,4µm,8.2s
PZH LR LR
comp=Z,28µm,19.8s
PZH LR LR
comp=Z,42µm,20.0s
PZH LR LR
comp=Z,43µm,21.8s
**HNR Honiara 40.05 93 P P 10 09 56.7 -0.6**
comp=Z,830nm,0.8s,baz=198,slow=2.2,SNR=14
HNR LR LR 10 27 22.4
comp=Z,11µm,21.0s,baz=264,slow=38
**HNR Honiara 40.05 93 P P 10 09 55.9 -1.3**
**HNR Honiara 40.05 93 ⇑P P 10 09 57.3 +0.1**
**WHN Wuhan 40.16 353 ⇑iP P 10 10 00.0 +2.2**
WHN pP pP 10 10 07.8 -3.2
WHN sP sP 10 10 11.3 -5.5
WHN S S 10 16 04.4 +3.3
WHN sS sS 10 16 16.6 -7.0
WHN ScS ScS 10 20 02.3 +2.0
WHN pmax pmax
comp=Z,5µm,1.2s
WHN LR LR
comp=Z,26µm,15.4s
WHN LR LR
comp=Z,8µm,14.2s
WHN LR LR
comp=Z,41µm,18.0s
**GLAD Gladstone 40.28 146 P P 10 09 58.8 0.0**
**SSE Sheshan 40.47 2 P P 10 10 01.8 +1.4**
SSE sP pP 10 10 14.4 +0.9
SSE S S 10 16 08.8 +3.2
SSE pmax pmax
comp=Z,290nm,1.2s
SSE pmax pmax
comp=Z,3µm,3.8s
SSE LR LR
comp=Z,2µm,18.4s
**ENH Enshi 40.72 347 P P 10 10 02.5 -0.1**
**MOO Moorlands 40.85 148 P P 10 10 08.6 +5.1**
baz=41,SNR=4.4
**TAU Tasmania Unive 41.25 148 P P 10 10 01.2 -5.5**
TAU pmax pmax
comp=Z,69nm,1.5s
**TAU Tasmania Unive 41.25 148 P P 10 10 07.4 +0.7**
**NJ2 Nanjing 41.38 359 ⇑iP P 10 10 09.5 +1.6**
NJ2 sP pP 10 10 21.5 +0.5
NJ2 PcS PcS 10 15 56.9 +0.2
NJ2 S S 10 16 25.0 +5.8
NJ2 sS sS 10 16 34.3 -7.5
NJ2 pmax pmax
comp=Z,540nm,1.3s
NJ2 pmax pmax
comp=Z,7µm,3.5s
NJ2 LR LR
comp=Z,7µm,21.6s
NJ2 LR LR
comp=Z,4µm,17.9s
NJ2 LR LR
comp=Z,10µm,23.0s
**PALK Pallekele 41.95 292 P P 10 10 12.2 -0.7**
comp=Z,80nm,0.9s,baz=215,slow=8.0,SNR=30
PALK LR LR 10 27 48.0
comp=Z,12µm,21.7s,baz=219,slow=36
**PALK Pallekele 41.95 292 P P 10 10 12.7 -0.2**
PALK pmax pmax
comp=Z,635nm,2.0s
PALK MLR MLR
comp=Z,15µm,22.0s
**PALK Pallekele 41.95 292 P P 10 10 12.7 -0.2**
PALK IAmb IAmb 10 10 14.7
comp=Z,635nm,1.9s
**PALK Pallekele 41.95 292 P P 10 10 11.5 -1.5**
PALK P P 10 10 11.5 -1.5
PALK P P 10 10 11.5 -1.5
**PALK Pallekele 41.95 292 ⇑P P 10 10 12.5 -0.4**
**PATS Pohnpei 42.13 69 P P 10 10 15.1 +0.8**
baz=42,SNR=4.2
**PATS Pohnpei 42.13 69 P P 10 10 13.9 -0.4**
PATS IAmb IAmb 10 10 15.5
comp=Z,714nm,1.3s
**IMP Imphal 42.20 325 eP P 10 10 15.2 +0.3**
IMP IAmb IAmb 10 10 22.1
comp=Z,181nm,0.6s
**JSU Suzuyama 42.21 14 P P 10 10 13.9 -0.8**
**JSU Suzuyama 42.21 14 ⇑P P 10 10 13.5 -1.2**
**JCJ Chichijima 42.66 31 P P 10 10 17.6 -0.9**
JCJ IAmb IAmb 10 10 23.7
comp=Z,822nm,1.0s
**JCJ Chichijima 42.66 31 P P 10 10 19.3 +0.9**
**KOHI KOHIMA 42.81 326 eP P 10 10 19.1 -0.7**
KOHI IAmb IAmb 10 10 22.7
comp=Z,3µm,1.3s
**LHI Lord Howe Isla 42.81 127 P P 10 10 23.8 +4.1**
baz=43,SNR=3.5
**CD2 Chengdu 42.93 340 P P 10 10 20.6 0.0**
CD2 sP pP 10 10 31.7 -2.0
CD2 PP PP 10 12 03.6 +2.5
CD2 S S 10 16 42.5 +0.3
CD2 sS sS 10 17 00.9 -3.9
CD2 pmax pmax
comp=Z,3µm,1.0s
CD2 pmax pmax
comp=Z,3µm,3.9s
CD2 LR LR
comp=Z,14µm,16.1s
CD2 LR LR
comp=Z,16µm,21.8s
**MOKO MOKOCHONG 43.05 327 eP P 10 10 22.4 +0.7**
MOKO IAmb IAmb 10 10 27.9
comp=Z,2µm,1.1s
**AGT Agartala 43.10 321 eP P 10 10 23.8 +1.8**
AGT IAmb IAmb 10 10 24.8
comp=Z,3µm,1.5s
**LKP Lekhapani 43.17 329 eP P 10 10 23.4 +0.9**
LKP IAmb IAmb 10 10 28.2
comp=Z,1µm,1.0s
**JNU Nakatsue 43.86 14 P P 10 10 25.8 -2.2**
comp=Z,168nm,1.0s,baz=144,slow=4.3,SNR=22
JNU LR LR 10 29 21.2
comp=Z,5µm,21.2s,baz=170,slow=37
**JNU Nakatsue 43.86 14 P P 10 10 27.6 -0.4**
**JNU Nakatsue 43.86 14 ⇑P P 10 10 26.8 -1.3**
**SHL Shillong 43.97 323 eP P 10 10 29.3 +0.1**
SHL IAmb IAmb 10 10 33.9
comp=Z,204nm,0.8s
**ITAN ITANAGAR 44.14 326 eP P 10 10 31.1 +0.8**
ITAN IAmb IAmb 10 10 33.9
comp=Z,2µm,1.1s
**LYN LuoYang 44.35 352 iP P 10 10 32.8 +0.9**
LYN pP pP 10 10 42.3 -2.8
LYN PP PP 10 12 17.3 +1.1
LYN S S 10 16 58.5 -4.3
LYN sS sS 10 17 17.8 -7.7
LYN pmax pmax
comp=Z,430nm,2.0s
LYN pmax pmax
comp=Z,5µm,13.1s
LYN LR LR
comp=Z,7µm,17.5s
LYN LR LR
comp=Z,4µm,18.2s
LYN LR LR
comp=Z,11µm,21.8s
**BWNR Bhubaneshwar 44.36 312 eP P 10 10 31.3 -0.9**
**XAN Xi'an 44.48 348 ⇑P P 10 10 32.7 -0.3**
XAN pP pP 10 10 42.8 -3.4
XAN sP sP 10 10 46.3 -5.7
XAN PP PP 10 12 14.4 -3.2
XAN PcP PcP 10 12 16.7 +0.9
XAN PcS PcS 10 16 08.3 -1.0
XAN S S 10 16 58.2 -6.5
XAN sS sS 10 17 19.6 -7.8
XAN ScS ScS 10 20 25.4 -1.4
XAN pmax pmax
comp=Z,2µm,1.2s
XAN pmax pmax
comp=Z,8µm,3.6s
XAN LR LR
comp=Z,13µm,22.0s
XAN LR LR
comp=Z,7µm,22.0s
XAN LR LR
comp=Z,23µm,24.7s
**GUWA GUWAHATI 44.55 324 eP P 10 10 33.2 -0.4**
GUWA IAmb IAmb 10 10 37.8
comp=Z,1µm,1.5s
**CHLP Challavanipeta 44.59 309 ⇑eP P 10 10 34.3 +0.2**
CHLP IVmB_BB 10 10 34.8
comp=Z,4µm,1.7s
CHLP eS S 10 17 02.6 -4.2
CHLP IVMs_BB IVMs_BB 10 30 09.7
comp=Z,4µm,21.1s
**KOUNC Koumac, New Ca 44.64 110 P P 10 10 34.5 0.0**
KOUNC IAMs_20 IAMs_20 10 29 01.4
comp=Z,13µm,20.0s
**KOUNC Koumac, New Ca 44.64 110 ⇓P P 10 10 36.0 +1.6**
**KOUNC Koumac, New Ca 44.64 110 P P 10 10 36.3 +1.8**
**VIS Vishakhapatnam 44.71 307 eP P 10 10 35.5 +0.4**
**MDRS Chennai 44.84 299 eP P 10 10 36.4 +0.2**
MDRS IAmb IAmb 10 10 38.3
comp=Z,140nm,1.4s
**JTU Tsushima 44.88 12 P P 10 10 36.0 -0.1**
JTU IAmb IAmb 10 10 37.5
comp=Z,521nm,1.3s
**JTU Tsushima 44.88 12 ⇑P P 10 10 36.0 -0.1**
**JMN Monobe 45.23 17 P P 10 10 38.8 -0.2**
JMN IAmb IAmb 10 10 52.9
comp=Z,205nm,0.9s
**JMN Monobe 45.23 17 ⇑P P 10 10 38.0 -0.9**
**DHUB DHUBRI 45.44 322 eP P 10 10 41.7 +1.0**
DHUB IAmb IAmb 10 10 46.0
comp=Z,400nm,0.8s
**RAGD RAYAGADA 45.49 309 ⇑eP P 10 10 40.8 -0.5**
**TIA Tai'an 45.58 358 ⇑P P 10 10 41.4 -0.2**
TIA sP pP 10 10 54.2 -0.7
TIA S S 10 17 16.9 -3.6
TIA pmax pmax
comp=Z,140nm,1.5s
TIA LR LR
comp=Z,9µm,14.3s
TIA LR LR
comp=Z,3µm,13.3s
TIA LR LR
comp=Z,12µm,15.1s
**SKHT Srikalahasti 45.62 300 eP P 10 10 41.6 -0.8**
SKHT IVmB_BB 10 10 42.5
comp=Z,2µm,1.4s
SKHT eS S 10 17 16.0 -5.7
SKHT IVMs_BB IVMs_BB 10 35 00.1
comp=Z,1µm,17.9s
**PVM Polavaram 45.81 305 eP P 10 10 43.2 -0.5**
PVM IVmB_BB 10 10 44.0
comp=Z,2µm,1.5s
PVM eS S 10 17 19.0 -5.3
PVM IVMs_BB IVMs_BB 10 27 44.8
comp=Z,2µm,26.5s
**KOD Kodaikanal 46.06 294 eP P 10 10 45.3 -0.8**
**JHS Saijyo 46.21 16 P P 10 10 46.2 -0.4**
JHS IAmb IAmb 10 10 50.4
comp=Z,277nm,1.0s
**JHS Saijyo 46.21 16 ⇑P P 10 10 46.0 -0.6**
**VJD Vijayawada 46.21 304 ⇑eP P 10 10 46.7 -0.2**
**H08S2 Diego Garcia H 46.31 269 T T 11 00 08.0**
baz=96,slow=75,SNR=114
**TJN Taejon 46.32 9 cP P 10 10 47.1 -0.3**
**TJN Taejon 46.32 9 P P 10 10 46.7 -0.7**
**TJN Taejon 46.32 9 P P 10 10 49.2 +1.8**
**H08S3 Diego Garcia H 46.32 269 T T 11 00 14.2**
baz=96,slow=75,SNR=76
**H08S1 Diego Garcia H 46.33 269 T T 11 00 15.0**
baz=96,slow=75,SNR=89
**MYLAV Mylavaram 46.34 304 ⇑eP P 10 10 47.6 -0.4**
MYLAV IVmB_BB 10 10 48.4
comp=Z,2µm,1.6s
MYLAV eS S 10 17 26.7 -5.3
MYLAV IVMs_BB IVMs_BB 10 29 04.9
comp=Z,3µm,25.0s
**DGAR Diego Garcia 46.38 269 cP P 10 10 49.4 +1.1**
DGAR pmax pmax
comp=Z,459nm,0.9s
**DGAR Diego Garcia 46.38 269 P P 10 10 47.5 -0.8**
DGAR P P 10 10 47.5 -0.8
**DGAR Diego Garcia 46.38 269 ⇑P P 10 10 51.0 +2.6**
**ADKI Addanki 46.43 303 ⇑eP P 10 10 48.2 -0.4**
ADKI IVmB_BB 10 10 49.0
comp=Z,2µm,1.3s
ADKI eS S 10 17 29.3 -3.9
ADKI IVMs_BB IVMs_BB 10 29 37.5
comp=Z,4µm,22.4s
**BOK Bokaro 46.55 316 eP P 10 10 49.2 -0.4**
BOK IAmb IAmb 10 10 50.9
comp=Z,881nm,1.8s
BOK ⇓ex x 10 10 51.1
**NOUC Port Laguerre 46.70 111 P P 10 10 53.0 +2.2**
**JHJ Hachijo jima 2 46.71 24 LR LR 10 32 00.7**
comp=Z,3µm,19.3s,baz=246,slow=38
**JHSG JHARSUGUGA 46.76 312 eP P 10 10 51.2 0.0**
**DZM Mont Dzumac 46.83 111 eP P 10 10 55.5 +3.6**
comp=Z,217nm,1.1s
DZM eS S 10 17 41.7 +2.5
comp=Z,11µm,26.5s
DZM eSS SS 10 21 08.3 +2.0
comp=Z,10µm,27.7s
DZM eLR LR 10 24 05.5
comp=Z,43µm,22.4s
**DZM Mont Dzumac 46.83 111 LR LR 10 32 30.6**
comp=Z,30µm,18.1s,baz=283,slow=39
**DZM Mont Dzumac 46.83 111 P P 10 10 49.6 -2.3**
**DZM Mont Dzumac 46.83 111 ⇑P P 10 10 54.0 +2.1**
**DZM Mont Dzumac 46.83 111 P P 10 10 52.1 +0.2**
**AIS Amsterdam Isla 46.87 226 IAMs_20 IAMs_20 10 26 31.8**
comp=Z,13µm,21.0s
**ONTNC Ouen Toro 46.87 112 P P 10 10 50.9 -1.2**
**SLGI Shiliguri 46.90 321 ⇑eP P 10 10 53.9 +1.7**
**HNS HongShan 46.92 355 ⇑P P 10 10 51.5 -0.6**
HNS pP pP 10 11 00.4 -5.0
HNS sP sP 10 11 04.6 -6.5
HNS PcP PcP 10 12 25.8 +1.7
HNS PP PP 10 12 43.4 +0.3
HNS ScP ScP 10 16 17.3 +3.4
HNS S S 10 17 35.5 -4.1
HNS ScS ScS 10 20 46.5 +4.2
HNS SS SS 10 21 04.5 -2.6
HNS pmax pmax
comp=Z,390nm,1.7s
HNS pmax pmax
comp=Z,3µm,4.0s
HNS LR LR
comp=Z,12µm,19.4s
HNS LR LR
comp=Z,6µm,17.3s
HNS LR LR
comp=Z,13µm,18.6s
**SANVU Saraoutou 47.03 102 P P 10 10 52.9 -0.6**
SANVU IAMs_20 IAMs_20 10 30 22.4
comp=Z,14µm,21.0s
**SANVU Saraoutou 47.03 102 ⇑P P 10 10 53.9 +0.4**
**SANVU Saraoutou 47.03 102 P P 10 10 54.8 +1.4**
**RCLA Racherla 47.09 301 eP P 10 10 52.7 -1.1**
RCLA eS S 10 17 36.5 -6.2
**KAAM Kaadhehdhoo 47.18 280 P P 10 10 55.0 +0.3**
**KAAM Kaadhehdhoo 47.18 280 ⇑P P 10 10 56.3 +1.7**
**GTK Tadong 47.23 322 eP P 10 10 54.8 -0.2**
GTK IAmb IAmb 10 11 02.5
comp=Z,930nm,1.1s
**YATNC Mamie plateau, 47.24 111 P P 10 10 56.5 +1.5**
**OUENC Ouen Island, N 47.24 112 P P 10 10 56.7 +1.7**
**OUENC Ouen Island, N 47.24 112 P P 10 10 58.0 +3.0**
**INCN Inchon 47.30 8 P P 10 10 54.1 -1.1**
INCN pmax pmax
comp=Z,547nm,1.5s
**INCN Inchon 47.30 8 P P 10 10 54.0 -1.1**
INCN IAmb IAmb 10 10 56.9
comp=Z,547nm,1.5s
**INCN Inchon 47.30 8 P P 10 10 51.8 -3.4**
**NJS Nagarjunasagar 47.34 303 eP P 10 10 54.7 -1.0**
NJS IVmB_BB 10 10 55.5
comp=Z,2µm,1.5s
NJS eS S 10 17 39.9 -6.4
NJS IVMs_BB IVMs_BB 10 30 15.1
comp=Z,3µm,23.7s
**LIFNC LIFOU 47.41 109 P P 10 10 54.1 -2.3**
LIFNC IAmb IAmb 10 11 11.1
comp=Z,618nm,1.4s
**KSAR Wonju Array Be 47.45 9 P P 10 10 56.5 +0.3**
**KSAR Wonju Array Be 47.45 9 P P 10 10 56.5 +0.3**
**SRLM Srisailam 47.45 302 eP P 10 10 55.6 -1.1**
SRLM IVmB_BB 10 10 56.5
comp=Z,2µm,1.5s
SRLM eS S 10 17 41.6 -6.4
SRLM IVMs_BB IVMs_BB 10 30 04.9
comp=Z,3µm,24.8s
**KSRS Korea Array 47.46 9 P P 10 10 56.8 +0.5**
comp=Z,158nm,0.9s,baz=181,slow=8.1,SNR=261
KSRS PcP PcP 10 12 27.7 +1.6
comp=Z,40nm,0.8s,baz=182,slow=4.1,SNR=7.5
KSRS ScP ScP 10 16 19.2 +3.0
comp=Z,10nm,1.1s,baz=189,slow=2.5,SNR=3.4
KSRS S S 10 17 59.5 +12
comp=Z,4.0nm,1.0s,baz=188,slow=16,SNR=4.5
KSRS LR LR 10 31 06.1
comp=Z,9µm,21.9s,baz=190,slow=36
**TIY Taiyuan 47.47 353 ⇓P P 10 10 56.4 -0.1**
TIY pP pP 10 11 06.2 -3.7
TIY sP sP 10 11 10.4 -5.2
TIY S S 10 17 48.3 +0.6
TIY sS sS 10 18 05.3 -5.3
TIY SS SS 10 21 08.2 -8.1
TIY pmax pmax
comp=Z,260nm,1.5s
TIY pmax pmax
comp=Z,2µm,6.3s
TIY LR LR
comp=Z,4µm,26.8s
TIY LR LR
comp=Z,3µm,19.2s
TIY LR LR
comp=Z,10µm,30.9s
**JSG Sagara 47.49 21 P P 10 10 55.8 -0.8**
JSG IAmb IAmb 10 11 16.5
comp=Z,285nm,1.0s
**KS19 Wonju Array Si 47.50 9 P P 10 10 56.7 0.0**
**LSA Lhasa 47.54 326 P P 10 10 58.7 +1.0**
LSA S S 10 17 45.6 -4.1
LSA pmax pmax
comp=Z,600nm,1.6s
LSA LR LR
comp=Z,14µm,19.6s
LSA LR LR
comp=Z,15µm,19.9s
LSA LR LR
comp=Z,21µm,18.9s
**ODAN Odare 47.66 320 eP P 10 10 58.8 +0.4**
comp=Z,2µm,1.2s
**LZH Lanzhou 47.69 343 ⇑P P 10 10 59.3 +0.9**
LZH pP pP 10 11 09.7 -2.0
LZH sP sP 10 11 12.7 -4.7
LZH PP PP 10 12 47.0 -3.6
LZH ScP ScP 10 16 21.9 +4.4
LZH S S 10 17 50.0 -1.1
LZH sS sS 10 18 08.0 -6.0
LZH pmax pmax
comp=Z,2µm,1.3s
LZH pmax pmax
comp=Z,8µm,6.1s
LZH LR LR
comp=Z,13µm,14.3s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LZH | | | | | LR | LR | | | | |
| | comp=Z,9μm,14.5s | | | | | | | | | |
| LZH | | | | | LR | LR | | | | |
| | comp=Z,20μm,16.7s | | | | | | | | | |
| **INU** | **Inuyama** | **47.70** | **20** | | P | **P** | **10 10 57.1** | **-1.2** | | |
| **INU** | **Inuyama** | **47.70** | **20** | ⇑ | P | **P** | **10 10 56.9** | **-1.4** | | |
| **INU** | **Inuyama** | **47.70** | **20** | | P | **P** | **10 10 59.5** | **+1.2** | | |
| **HJU** | **Haeju** | **47.74** | **7** | | P | **P** | **10 10 59.1** | **+0.7** | | |
| HJU | | | | | sP | **pP** | **10 11 13.2** | **+1.5** | | |
| HJU | | | | | S | **S** | **10 17 50.9** | **-0.4** | | |
| HJU | | | | | AmB | | | | | |
| | comp=Z,6μm,2.8s | | | | | | | | | |
| HJU | | | | | AMS | AMS | | | | |
| | comp=N,5μm,5.3s | | | | | | | | | |
| HJU | | | | | AMS | AMS | | | | |
| | comp=E,3μm,3.3s | | | | | | | | | |
| HJU | | | | | AMS | AMS | | | | |
| | comp=Z,8μm,9.1s | | | | | | | | | |
| **TAPN** | **Taplejung** | **47.80** | **321** | | *e*P | **P** | **10 10 59.9** | **+0.3** | | |
| | comp=Z,3μm,1.2s | | | | | | | | | |
| **PINNC** | **Pines Island,** | **47.82** | **112** | | P | **P** | **10 10 58.6** | **-0.9** | | |
| **PINNC** | **Pines Island,** | **47.82** | **112** | | P | **P** | **10 11 01.6** | **+2.1** | | |
| **CUPL** | **Choutuppal** | **48.03** | **304** | ⇑ | *e*P | **P** | **10 11 00.0** | **-1.1** | | |
| CUPL | | | | | IVmB_BB | | 10 11 00.8 | | | |
| | comp=Z,2μm,1.6s | | | | | | | | | |
| CUPL | | | | | *e*S | **S** | **10 17 50.1** | **-6.0** | | |
| CUPL | | | | | IVMs_BB | IVMs_BB | 10 30 38.5 | | | |
| | comp=Z,2μm,23.7s | | | | | | | | | |
| **JGF** | **Kuroka** | **48.04** | **20** | | P | **P** | **10 10 59.3** | **-1.7** | | |
| **JGF** | **Kuroka** | **48.04** | **20** | ⇑ | P | **P** | **10 10 59.8** | **-1.2** | | |
| **BLSP** | **Bilaspur** | **48.19** | **311** | | *e*P | **P** | **10 11 01.8** | **-0.5** | | |
| **RAMN** | **Ramite** | **48.22** | **320** | | *e*P | **P** | **10 11 03.0** | **+0.2** | | |
| | comp=Z,74nm,0.5s | | | | | | | | | |
| **DL2** | **Dalian** | **48.27** | **2** | ⇑ | *i*P | **P** | **10 11 02.0** | **-0.6** | | |
| DL2 | | | | | PP | **PP** | **10 12 51.3** | **-4.2** | | |
| DL2 | | | | | S | **S** | **10 17 55.5** | **-3.3** | | |
| DL2 | | | | | ScS | **ScS** | **10 20 51.6** | **+0.4** | | |
| DL2 | | | | | pmax | pmax | | | | |
| | comp=Z,940nm,1.0s | | | | | | | | | |
| DL2 | | | | | pmax | pmax | | | | |
| | comp=Z,4μm,6.3s | | | | | | | | | |
| DL2 | | | | | LR | LR | | | | |
| | comp=Z,5μm,22.7s | | | | | | | | | |
| DL2 | | | | | LR | LR | | | | |
| | comp=Z,4μm,21.6s | | | | | | | | | |
| DL2 | | | | | LR | LR | | | | |
| | comp=Z,8μm,22.4s | | | | | | | | | |
| **URV** | **Uravakonda** | **48.28** | **300** | | *e*P | **P** | **10 11 02.0** | **-1.1** | | |
| URV | | | | | IVmB_BB | | 10 11 04.1 | | | |
| | comp=Z,1μm,1.3s | | | | | | | | | |
| URV | | | | | *e*S | **S** | **10 17 52.9** | **-6.8** | | |
| URV | | | | | IVMs_BB | IVMs_BB | 10 34 04.1 | | | |
| | comp=Z,1μm,17.4s | | | | | | | | | |
| **HYB** | **Hyderabad** | **48.39** | **304** | | *e*P | **P** | **10 11 02.2** | **-1.7** | | |
| HYB | | | | | IAmb | IAmb | 10 11 05.5 | | | |
| | comp=Z,269nm,0.8s | | | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **48.39** | **304** | ⇑ | *e*P | **P** | **10 11 02.8** | **-1.2** | | |
| HYBB | | | | | IVmB_BB | | 10 11 03.5 | | | |
| | comp=Z,2μm,1.6s | | | | | | | | | |
| HYBB | | | | | *e*S | **S** | **10 17 55.1** | **-6.2** | | |
| HYBB | | | | | IVMs_BB | IVMs_BB | 10 30 36.2 | | | |
| | comp=Z,3μm,23.4s | | | | | | | | | |
| **RPR** | **Rampur** | **48.54** | **306** | | *e*P | **P** | **10 11 04.2** | **-0.8** | | |
| RPR | | | | | IVmB_BB | | 10 11 04.9 | | | |
| | comp=Z,2μm,1.6s | | | | | | | | | |
| RPR | | | | | *e*S | **S** | **10 17 57.7** | **-5.4** | | |
| RPR | | | | | IVMs_BB | IVMs_BB | 10 29 31.2 | | | |
| | comp=Z,3μm,25.8s | | | | | | | | | |
| **PYAG** | **Pyongyang** | **48.74** | **7** | | P | **P** | **10 11 07.0** | **+0.8** | | |
| PYAG | | | | | sP | **pP** | **10 11 21.2** | **+1.7** | | |
| PYAG | | | | | S | **S** | **10 18 04.5** | **-0.8** | | |
| PYAG | | | | | AmB | | | | | |
| | comp=Z,3μm,1.3s | | | | | | | | | |
| PYAG | | | | | AMS | AMS | | | | |
| | comp=N,825nm,8.3s | | | | | | | | | |
| PYAG | | | | | AMS | AMS | | | | |
| | comp=E,311nm,3.1s | | | | | | | | | |
| PYAG | | | | | AMS | AMS | | | | |
| | comp=Z,166nm,1.7s | | | | | | | | | |
| **HMDM** | **Hanimaadhoo** | **48.75** | **288** | | P | **P** | **10 11 07.5** | **+0.7** | | |
| **HMDM** | **Hanimaadhoo** | **48.75** | **288** | | P | **P** | **10 11 09.3** | **+2.5** | | |
| | SNR=19 | | | | | | | | | |
| **HMDM** | **Hanimaadhoo** | **48.75** | **288** | ⇑ | P | **P** | **10 11 08.2** | **+1.5** | | |
| **JIRN** | **Jiri** | **48.98** | **320** | | *e*P | **P** | **10 11 08.7** | **0.0** | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.19** | **20** | | P | **P** | **10 11 08.1** | **-1.6** | | |
| | comp=Z,210nm,1.1s,baz=194,slow=7.6,SNR=174 | | | | | | | | | |
| MJAR | | | | | ScP | **ScP** | **10 16 26.1** | **+2.5** | | |
| | comp=Z,20nm,1.1s,baz=210,slow=4.6,SNR=4.4 | | | | | | | | | |
| MJAR | | | | | S | **S** | **10 18 16.5** | **+4.6** | | |
| | comp=Z,9.7nm,1.2s,baz=189,slow=15,SNR=4.2 | | | | | | | | | |
| MJAR | | | | | LR | LR | 10 30 43.8 | | | |
| | comp=Z,8μm,21.5s,baz=198,slow=35 | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.19** | **20** | | P | **P** | **10 11 07.5** | **-2.2** | | |
| MJAR | | | | | IAmb | IAmb | 10 11 09.7 | | | |
| | comp=Z,500nm,1.3s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **49.19** | **20** | *c* | *i*P | **P** | **10 11 08.2** | **-1.5** | | |
| MAJO | | | | | pmax | pmax | | | | |
| | comp=Z,556nm,1.5s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **49.19** | **20** | | P | **P** | **10 11 07.8** | **-1.9** | | |
| MAJO | | | | | IAmb | IAmb | 10 11 09.8 | | | |
| | comp=Z,704nm,1.4s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **49.19** | **20** | ⇑ | P | **P** | **10 11 08.0** | **-1.7** | | |
| **MAJO** | **Matsushiro** | **49.19** | **20** | | P | **P** | **10 11 09.6** | **-0.1** | | |
| **MAT** | **Matsushiro** | **49.19** | **20** | | P | **P** | **10 11 07.9** | **-1.8** | | |
| MAT | | | | | S | **S** | **10 18 06.0** | **-5.8** | | |
| **MJB9** | **Matsu-Tunnel** | **49.19** | **20** | | P | **P** | **10 11 08.0** | **-1.7** | | |
| MJB9 | | | | | IAmb | IAmb | 10 11 09.8 | | | |
| | comp=Z,698nm,1.4s | | | | | | | | | |
| **SRSP** | **Sriramsagar** | **49.34** | **305** | | *e*P | **P** | **10 11 09.6** | **-1.6** | | |
| SRSP | | | | | *e*S | **S** | **10 18 08.5** | **-6.0** | | |
| **GUN** | **Gumba** | **49.35** | **320** | | *e*P | **P** | **10 11 11.4** | **-0.1** | | |
| | comp=Z,2μm,0.8s | | | | | | | | | |
| **MNCY** | **Minicoy** | **49.38** | **290** | | *e*P | P | 10 11 28.3 | +17 | | |
| MNCY | | | | | IAmb | IAmb | 10 11 29.2 | | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **PKI** | **Pulchoki** | **49.41** | **319** | | *e*P | **P** | **10 11 11.3** | **-0.7** | | |
| | comp=Z,965nm,1.1s | | | | | | | | | |
| **BJT** | **Baijiatuan** | **49.42** | **357** | | P | **P** | **10 11 11.7** | **+0.3** | | |
| BJT | | | | | pmax | pmax | | | | |
| | comp=Z,387nm,1.0s | | | | | | | | | |
| **BJT** | **Baijiatuan** | **49.42** | **357** | | P | **P** | **10 11 11.7** | **+0.3** | | |
| BJT | | | | | IAmb | IAmb | 10 11 19.8 | | | |
| | comp=Z,387nm,1.0s | | | | | | | | | |
| **PKIN** | **Phulchoki** | **49.43** | **319** | | *e*P | **P** | **10 11 11.3** | **-0.7** | | |
| | comp=Z,283nm,0.7s | | | | | | | | | |
| **BJI** | **Beijing** | **49.44** | **357** | | P | **P** | **10 11 11.0** | **-0.5** | | |
| BJI | | | | | PP | **PP** | **10 13 06.3** | **+0.1** | | |
| BJI | | | | | S | **S** | **10 18 11.4** | **-3.8** | | |
| BJI | | | | | sS | **sS** | **10 18 31.3** | **-6.9** | | |
| BJI | | | | | pmax | pmax | | | | |
| | comp=Z,470nm,1.9s | | | | | | | | | |
| BJI | | | | | pmax | pmax | | | | |
| | comp=Z,4μm,3.5s | | | | | | | | | |
| BJI | | | | | LR | LR | | | | |
| | comp=Z,6μm,20.7s | | | | | | | | | |
| BJI | | | | | LR | LR | | | | |
| | comp=Z,6μm,19.7s | | | | | | | | | |
| BJI | | | | | LR | LR | | | | |
| | comp=Z,9μm,21.2s | | | | | | | | | |
| **JYT** | **Yasato** | **49.61** | **22** | | P | **P** | **10 11 10.8** | **-2.1** | | |
| **DMN** | **Daman** | **49.64** | **319** | | *e*P | **P** | **10 11 13.2** | **-0.4** | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **KKN** | **Kakani** | **49.65** | **319** | | *e*P | **P** | **10 11 13.3** | **-0.3** | | |
| | comp=Z,973nm,1.0s | | | | | | | | | |
| **SUJ** | **Sinuiju** | **49.65** | **5** | | P | **P** | **10 11 13.0** | **-0.1** | | |
| SUJ | | | | | sP | **pP** | **10 11 26.7** | **+0.2** | | |
| SUJ | | | | | S | **S** | **10 18 18.2** | **+0.1** | | |
| SUJ | | | | | AmB | | | | | |
| | comp=Z,4μm,2.0s | | | | | | | | | |
| SUJ | | | | | AMS | AMS | | | | |
| | comp=N,860nm,15.5s | | | | | | | | | |
| SUJ | | | | | AMS | AMS | | | | |
| | comp=E,819nm,14.8s | | | | | | | | | |
| SUJ | | | | | AMS | AMS | | | | |
| | comp=Z,156nm,2.8s | | | | | | | | | |
| **HHU** | **Hamhung** | **49.83** | **8** | | P | **P** | **10 11 14.8** | **+0.4** | | |
| HHU | | | | | sP | **sP** | **10 11 33.8** | **+0.3** | | |
| HHU | | | | | S | **S** | **10 18 19.2** | **-1.4** | | |
| HHU | | | | | AmB | | | | | |
| | comp=Z,4μm,2.1s | | | | | | | | | |
| HHU | | | | | AMS | AMS | | | | |
| | comp=N,3μm,15.0s | | | | | | | | | |
| HHU | | | | | AMS | AMS | | | | |
| | comp=E,835nm,3.7s | | | | | | | | | |
| HHU | | | | | AMS | AMS | | | | |
| | comp=Z,924nm,4.1s | | | | | | | | | |
| **GKN** | **Gorkha** | **50.21** | **319** | | *e*P | **P** | **10 11 17.3** | **-0.5** | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **KLRI** | **Killari** | **50.33** | **303** | ⇑ | *e*P | **P** | **10 11 17.4** | **-1.4** | | |
| KLRI | | | | | IVmBBB | | 10 11 18.3 | | | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| KLRI | | | | | *e*S | **S** | **10 18 21.9** | **-6.6** | | |
| KLRI | | | | | IVMs_BB | IVMs_BB | 10 31 29.1 | | | |
| | comp=Z,3μm,20.4s | | | | | | | | | |
| **ALBI** | **Allahabad** | **50.36** | **314** | | *e*P | **P** | **10 11 18.6** | **-0.3** | | |
| **JSD** | **Sado** | **50.56** | **19** | | P | **P** | **10 11 19.1** | **-0.9** | | |
| JSD | | | | | IAmb | IAmb | 10 11 21.5 | | | |
| | comp=Z,358nm,0.7s | | | | | | | | | |
| **JSD** | **Sado** | **50.56** | **19** | ⇑ | P | **P** | **10 11 18.2** | **-1.8** | | |
| **BTO** | **Baotou** | **50.66** | **351** | | *e*P | **P** | **10 11 22.4** | **+1.5** | | |
| BTO | | | | | S | **S** | **10 18 33.8** | **+1.5** | | |
| BTO | | | | | LR | LR | | | | |
| | comp=Z,54μm,15.7s | | | | | | | | | |
| BTO | | | | | LR | LR | | | | |
| | comp=Z,24μm,16.7s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.67** | **352** | | *e*P | **P** | **10 11 21.6** | **+0.6** | | |
| HHC | | | | | sP | pP | 10 11 35.5 | +1.1 | | |
| HHC | | | | | S | **S** | **10 18 28.3** | **-4.3** | | |
| HHC | | | | | sS | sS | 10 18 52.4 | -3.3 | | |
| HHC | | | | | LR | LR | | | | |
| | comp=Z,8μm,20.3s | | | | | | | | | |
| HHC | | | | | LR | LR | | | | |
| | comp=Z,2μm,18.2s | | | | | | | | | |
| HHC | | | | | LR | LR | | | | |
| | comp=Z,13μm,23.1s | | | | | | | | | |
| **KOLN** | **Koldanda** | **50.73** | **318** | | *e*P | **P** | **10 11 21.2** | **-0.6** | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **DANN** | **Dangsing** | **51.01** | **319** | | *e*P | **P** | **10 11 23.5** | **-0.5** | | |
| | comp=Z,2μm,0.8s | | | | | | | | | |
| **GOMU** | **GeErMu** | **51.04** | **334** | | P | **P** | **10 11 24.4** | **+0.2** | | |
| GOMU | | | | | PcP | **PcP** | **10 12 40.3** | **+0.7** | | |
| GOMU | | | | | PP | **PP** | **10 13 25.4** | **+4.1** | | |
| GOMU | | | | | S | **S** | **10 18 37.5** | **-0.8** | | |
| GOMU | | | | | pmax | pmax | | | | |
| | comp=Z,220nm,1.2s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,8μm,18.6s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,5μm,17.6s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,12μm,17.7s | | | | | | | | | |
| **JMM** | **Marumori** | **51.28** | **22** | | P | **P** | **10 11 24.8** | **-0.7** | | |
| JMM | | | | | IAmb | IAmb | 10 11 26.6 | | | |
| | comp=Z,652nm,1.2s | | | | | | | | | |
| **JMM** | **Marumori** | **51.28** | **22** | ⇑ | P | **P** | **10 11 24.8** | **-0.7** | | |
| **SNY** | **Shenyang** | **51.29** | **4** | ⇓ | P | **P** | **10 11 24.8** | **-0.7** | | |
| SNY | | | | | S | **S** | **10 18 35.7** | **-5.1** | | |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,1.1s | | | | | | | | | |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,9.4s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,9μm,22.2s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,5μm,22.2s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,13μm,30.6s | | | | | | | | | |
| **AKL** | **Akola** | **51.33** | **306** | | *e*P | **P** | **10 11 25.3** | **-0.9** | | |
| **PYUN** | **Piuthan** | **51.35** | **318** | | *e*P | **P** | **10 11 26.0** | **-0.5** | | |
| | comp=Z,2μm,1.1s | | | | | | | | | |
| **GOA** | **Goa** | **51.48** | **299** | | *e*P | **P** | **10 11 28.2** | **+0.8** | | |
| GOA | | | | | IAmb | IAmb | 10 11 30.0 | | | |
| | comp=Z,202nm,0.8s | | | | | | | | | |
| **GTA** | **Gaotai** | **51.99** | **341** | ⇑ | P | **P** | **10 11 31.5** | **+0.6** | | |
| GTA | | | | | pP | pP | 10 11 42.9 | -1.7 | | |
| GTA | | | | | sP | sP | 10 11 47.9 | -2.5 | | |
| GTA | | | | | PcP | **PcP** | **10 12 42.6** | **-0.2** | | |
| GTA | | | | | ScP | **ScP** | **10 16 38.7** | **+3.0** | | |
| GTA | | | | | PcS | **PcS** | **10 16 40.2** | **-0.9** | | |
| GTA | | | | | S | **S** | **10 18 51.7** | **+0.8** | | |
| GTA | | | | | sS | sS | 10 19 08.8 | -5.2 | | |
| GTA | | | | | ScS | **ScS** | **10 21 16.8** | **-0.1** | | |
| GTA | | | | | pmax | pmax | | | | |
| | comp=Z,870nm,1.5s | | | | | | | | | |
| GTA | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,5.8s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,8μm,20.7s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,7μm,20.7s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,14μm,22.5s | | | | | | | | | |
| **KAD** | **Karad** | **51.99** | **301** | | *e*P | **P** | **10 11 30.7** | **-0.5** | | |
| **BHPL** | **Bhopal** | **52.38** | **309** | | *e*P | **P** | **10 11 32.9** | **-1.1** | | |
| BHPL | | | | | IAmb | IAmb | 10 11 34.0 | | | |
| | comp=Z,943nm,1.6s | | | | | | | | | |
| **POO** | **Poona** | **52.84** | **302** | | *e*P | **P** | **10 11 35.8** | **-1.6** | | |
| POO | | | | | IAmb | IAmb | 10 11 39.1 | | | |
| | comp=Z,306nm,1.0s | | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **53.01** | **11** | *c* | *e*P | **P** | **10 11 38.2** | **0.0** | | |
| MSHR | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,2.5s | | | | | | | | | |
| MSHR | | | | | MLR | MLR | | | | |
| | comp=Z,7μm,21.0s | | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **53.29** | **357** | ⇑ | *i*P | **P** | **10 11 40.2** | **-0.2** | | |
| XLT | | | | | pP | pP | 10 11 46.8 | -7.4 | | |
| XLT | | | | | sP | sP | 10 11 50.3 | -10 | | |
| XLT | | | | | ScP | **ScP** | **10 16 43.9** | **+2.7** | | |
| XLT | | | | | S | **S** | **10 19 06.8** | **-1.6** | | |
| XLT | | | | | sS | pS | 10 19 24.9 | +1.5 | | |
| XLT | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,1.0s | | | | | | | | | |
| XLT | | | | | pmax | pmax | | | | |
| | comp=Z,9μm,3.7s | | | | | | | | | |
| XLT | | | | | LR | LR | | | | |
| | comp=Z,10μm,15.2s | | | | | | | | | |
| XLT | | | | | LR | LR | | | | |
| | comp=Z,5μm,20.2s | | | | | | | | | |
| XLT | | | | | LR | LR | | | | |
| | comp=Z,11μm,15.2s | | | | | | | | | |
| **CN2** | **Changchun** | **53.41** | **6** | | *e*P | **P** | **10 11 40.2** | **-0.9** | | |
| CN2 | | | | | *ep*P | pP | 10 11 50.2 | -4.7 | | |
| CN2 | | | | | PcP | **PcP** | **10 12 45.3** | **-2.5** | | |
| CN2 | | | | | PP | **PP** | **10 13 42.7** | **+0.6** | | |
| CN2 | | | | | ScP | **ScP** | **10 16 39.8** | **-1.8** | | |
| CN2 | | | | | *e*S | **S** | **10 19 11.4** | **+1.7** | | |
| CN2 | | | | | pmax | pmax | | | | |
| | comp=Z,340nm,1.0s | | | | | | | | | |
| CN2 | | | | | pmax | pmax | | | | |
| | comp=Z,2μm,3.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,7μm,18.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,5μm,18.0s | | | | | | | | | |
| **VLA** | **Vladivostok** | **53.67** | **11** | *c* | *i*P | **P** | **10 11 41.8** | **-1.3** | | |
| VLA | | | | | pmax | pmax | | | | |
| | comp=Z,449nm,1.3s | | | | | | | | | |
| VLA | | | | | MLR | MLR | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **JTM** | **Tenmabayashi** | **53.98** | **20** | | P | **P** | **10 11 44.6** | **-0.7** | | |
| JTM | | | | | IAmb | IAmb | 10 11 46.2 | | | |
| | comp=Z,435nm,1.1s | | | | | | | | | |
| **JTM** | **Tenmabayashi** | **53.98** | **20** | ⇑ | P | **P** | **10 11 44.3** | **-1.1** | | |
| **LGTI** | **Lohaghat** | **54.05** | **317** | | *e*P | **P** | **10 11 45.1** | **-1.1** | | |
| **PTH** | **Pithoragarh** | **54.13** | **317** | | *e*P | **P** | **10 11 45.6** | **-1.4** | | |
| **DCZ** | **Deep Cove** | **54.32** | **140** | | P | **P** | **10 11 46.3** | **-1.6** | | |
| **PYZ** | **Puysegur Point** | **54.34** | **141** | | P | **P** | **10 11 46.4** | **-1.6** | | |
| PYZ | | | | | IAmb | IAmb | 10 12 01.0 | | | |
| | comp=Z,281nm,1.5s | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **54.72** | **9** | | P | **P** | **10 11 50.2** | **-0.5** | | |
| **MDJ** | **Mudanjiang** | **54.72** | **9** | | P | **P** | **10 11 51.0** | **+0.3** | | |
| MDJ | | | | | pP | pP | 10 11 59.1 | -5.4 | | |
| MDJ | | | | | sP | sP | 10 12 03.0 | -7.3 | | |
| MDJ | | | | | PP | **PP** | **10 13 52.9** | **-1.1** | | |
| MDJ | | | | | S | **S** | **10 19 28.0** | **+0.5** | | |
| MDJ | | | | | SS | **SS** | **10 23 07.9** | **-3.6** | | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,1.1s | | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,4.1s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,6μm,21.5s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,4μm,19.6s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,13μm,21.5s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.73** | **11** | | P | **P** | **10 11 50.6** | **-0.2** | | |
| USA0B | | | | | pmax | pmax | | | | |
| | comp=Z,418nm,1.0s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.73** | **11** | | P | **P** | **10 11 50.5** | **-0.2** | | |
| USA0B | | | | | IAmb | IAmb | 10 11 51.6 | | | |
| | comp=Z,418nm,0.9s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.73** | **11** | | P | **P** | **10 11 49.9** | **-0.9** | | |
| | comp=Z,284nm,0.8s,baz=191,slow=5.8,SNR=359 | | | | | | | | | |
| USRK | | | | | LR | LR | 10 35 39.5 | | | |
| | comp=Z,4μm,20.4s,baz=182,slow=37 | | | | | | | | | |
| USRK | | | | | PKPPKP | | 10 42 10.1 | | | |
| | comp=Z,1.4nm,0.8s,baz=28,slow=8.6,SNR=4.1 | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.73** | **11** | | P | **P** | **10 11 50.1** | **-0.7** | | |
| **USRK** | **Ussuriysk Ar.** | **54.73** | **11** | | P | **P** | **10 11 50.1** | **-0.7** | | |
| **MCQ** | **Macquarie Isla** | **54.75** | **153** | | P | **P** | **10 11 52.2** | **+1.4** | | |
| | baz=55,SNR=5.8 | | | | | | | | | |
| **MCQ** | **Macquarie Isla** | **54.75** | **153** | | P | **P** | **10 11 52.2** | **+1.4** | | |
| MCQ | | | | | pmax | pmax | | | | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| **MCQ** | **Macquarie Isla** | **54.75** | **153** | | P | **P** | **10 11 52.1** | **+1.4** | | |
| **MCQ** | **Macquarie Isla** | **54.75** | **153** | ⇑ | P | P | 10 11 55.1 | +4.3 | | |
| **MLZ** | **Mavora Lakes** | **54.89** | **140** | | P | **P** | **10 11 52.7** | **+0.5** | | |
| MLZ | | | | | IAMs_20 | IAMs_20 | 10 37 56.0 | | | |
| | comp=Z,14μm,18.0s | | | | | | | | | |
| **SONA** | **Sohna** | **55.50** | **314** | ⇑ | *e*P | **P** | **10 11 54.8** | **-1.8** | | |
| **BNX** | **BinXian** | **55.53** | **7** | ⇓ | P | **P** | **10 11 55.1** | **-1.4** | | |
| BNX | | | | | pP | **pP** | **10 12 04.2** | **-6.1** | | |
| BNX | | | | | PP | **PP** | **10 14 02.8** | **+1.7** | | |
| BNX | | | | | S | **S** | **10 19 33.6** | **-4.7** | | |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,970nm,1.1s | | | | | | | | | |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,6.5s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,7μm,15.0s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,5μm,16.9s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,16μm,20.7s | | | | | | | | | |
| **AYAN** | **Aya Nagar** | **55.60** | **314** | | *e*P | **P** | **10 11 55.9** | **-1.4** | | |
| **NDI** | **New Delhi** | **55.66** | **314** | | *e*P | **P** | **10 11 55.6** | **-2.2** | | |
| **ERM** | **Erimo** | **55.79** | **21** | *ce* | P | **P** | **10 11 58.1** | **-0.4** | | |
| ERM | | | | | pmax | pmax | | | | |
| | comp=Z,106nm,0.9s | | | | | | | | | |
| ERM | | | | | MLR | MLR | | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | |
| **ERM** | **Erimo** | **55.79** | **21** | | P | **P** | **10 11 58.3** | **-0.2** | | |
| ERM | | | | | IAmb | IAmb | 10 12 00.6 | | | |
| | comp=Z,178nm,1.1s | | | | | | | | | |
| **ERM** | **Erimo** | **55.79** | **21** | ⇑ | P | **P** | **10 11 58.3** | **-0.2** | | |
| **ERM** | **Erimo** | **55.79** | **21** | | P | **P** | **10 11 59.1** | **+0.6** | | |
| **KUDL** | **Kundal** | **55.86** | **314** | | *e*P | **P** | **10 11 56.8** | **-2.4** | | |
| **JEW** | **Eniwo** | **55.94** | **20** | | P | **P** | **10 11 59.1** | **-0.4** | | |
| JEW | | | | | IAmb | IAmb | 10 12 00.7 | | | |
| | comp=Z,561nm,1.2s | | | | | | | | | |
| **JEW** | **Eniwo** | **55.94** | **20** | ⇑ | P | **P** | **10 11 59.2** | **-0.2** | | |
| **DDI** | **Dehra Dun** | **56.08** | **317** | | *e*P | **P** | **10 11 59.3** | **-1.5** | | |
| DDI | | | | | IAmb | IAmb | 10 12 02.1 | | | |
| | comp=Z,123nm,0.8s | | | | | | | | | |
| **RPZ** | **Rata Peaks** | **56.18** | **137** | | P | **P** | **10 12 02.8** | **+1.4** | | |
| **AJM** | **Ajmer** | **56.26** | **311** | | *e*P | **P** | **10 12 01.4** | **-0.8** | | |
| **ODZ** | **Otahua Downs** | **56.40** | **138** | ⇑ | P | **P** | **10 12 05.6** | **+2.7** | | |
| **ODZ** | **Otahua Downs** | **56.40** | **138** | | P | **P** | **10 12 05.3** | **+2.4** | | |
| **TEY** | **Ternei** | **56.55** | **15** | ⇓ | *i*P | **P** | **10 12 03.1** | **-0.7** | | |
| TEY | | | | | *e* | | 10 19 42.2 | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=N,100nm,1.1s | | | | | | | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=E,20nm,1.1s | | | | | | | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=Z,220nm,1.1s | | | | | | | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=N,300nm,2.9s | | | | | | | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=Z,700nm,2.4s | | | | | | | | | |
| **PAF** | **Port-aux-Franc** | **56.83** | **216** | | IAMs_20 | IAMs_20 | 10 31 32.5 | | | |
| | comp=Z,14μm,20.0s | | | | | | | | | |
| **CASY** | **Casey** | **56.95** | **184** | | P | **P** | **10 12 05.6** | **-0.8** | | |
| **CASY** | **Casey** | **56.95** | **184** | | IAMs_20 | IAMs_20 | 10 33 05.0 | | | |
| | comp=Z,12μm,20.0s | | | | | | | | | |
| **CASY** | **Casey** | **56.95** | **184** | ⇓ | P | **P** | **10 12 06.6** | **+0.2** | | |
| **SMLA** | **Simla** | **57.17** | **317** | | *e*P | **P** | **10 12 07.0** | **-1.5** | | |
| SMLA | | | | | IAmb | IAmb | 10 12 09.1 | | | |
| | comp=Z,686nm,1.0s | | | | | | | | | |
| **HIZ** | **Hauiti** | **57.30** | **130** | | P | **P** | **10 12 11.1** | **+1.7** | | |
| **ASAJ** | **Asahikawa** | **57.45** | **20** | | LR | LR | 10 36 05.0 | | | |
| | comp=Z,9μm,21.4s,baz=218,slow=35 | | | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.45** | **20** | | P | **P** | **10 12 10.0** | **-0.2** | | |
| ASAJ | | | | | pmax | pmax | | | | |
| | comp=Z,318nm,1.1s | | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.45** | **20** | | P | **P** | **10 12 10.0** | **-0.2** | | |
| JKA | | | | | IAmb | IAmb | 10 12 10.9 | | | |
| | comp=Z,318nm,1.1s | | | | | | | | | |
| **KHZ** | **Kahutara** | **57.45** | **135** | | P | **P** | **10 12 08.5** | **-1.8** | | |
| KHZ | | | | | IAmb | IAmb | 10 12 13.9 | | | |
| | comp=Z,251nm,1.2s | | | | | | | | | |
| **KHZ** | **Kahutara** | **57.45** | **135** | ⇑ | P | **P** | **10 12 11.4** | **+1.0** | | |
| **KHZ** | **Kahutara** | **57.45** | **135** | | P | **P** | **10 12 11.9** | **+1.5** | | |
| **MSVF** | **Nonsavu** | **57.46** | **105** | | P | **P** | **10 12 12.0** | **+1.1** | | |
| | comp=Z,149nm,1.2s,baz=262,slow=8.9,SNR=18 | | | | | | | | | |
| MSVF | | | | | LR | LR | 10 37 54.6 | | | |
| | comp=Z,5μm,19.1s,baz=257,slow=37 | | | | | | | | | |
| **MSVF** | **Nonsavu** | **57.46** | **105** | | P | **P** | **10 12 12.3** | **+1.3** | | |
| MSVF | | | | | IAmb | IAmb | 10 12 24.6 | | | |
| | comp=Z,188nm,1.1s | | | | | | | | | |
| **MSVF** | **Nonsavu** | **57.46** | **105** | ⇓ | P | **P** | **10 12 13.3** | **+2.4** | | |
| **MSVF** | **Nonsavu** | **57.46** | **105** | | P | **P** | **10 12 13.4** | **+2.4** | | |
| **BHK** | **Bhakra** | **57.86** | **317** | | *e*P | **P** | **10 12 11.2** | **-2.2** | | |
| **SNZO** | **South Karori** | **57.95** | **133** | | P | **P** | **10 12 12.3** | **-1.6** | | |
| SNZO | | | | | IAmb | IAmb | 10 12 16.7 | | | |
| | comp=Z,217nm,1.1s | | | | | | | | | |
| **SNZO** | **South Karori** | **57.95** | **133** | ⇓ | P | **P** | **10 12 15.7** | **+1.8** | | |
| **SNZO** | **South Karori** | **57.95** | **133** | | P | **P** | **10 12 15.6** | **+1.7** | | |
| **O

URZ LR LR 10 40 08.1
comp=Z,14μm,18.6s,baz=303,slow=38
**URZ Urewera 58.96 129 P P 10 12 21.1 +0.1**
URZ IAMs_20 IAMs_20 10 38 53.1
comp=Z,14μm,20.0s
**URZ Urewera 58.96 129 ⇑P P 10 12 22.1 +1.2**
**FUNA Funafuti 59.08 94 P P 10 12 20.6 -1.6**
**PRHZ Porangahau 59.08 131 P P 10 12 24.3 +2.5**
**RAHZ Arahi 59.09 130 P P 10 12 24.3 +2.4**
**DGTI Dogotuki 59.09 103 P P 10 12 24.2 +1.9**
**KAHZ Kahuranaki 59.14 131 P P 10 12 24.0 +1.7**
**PXZ Pawanui 59.19 131 P P 10 12 25.7 +3.1**
**SNGZ Shannon Statio 59.25 130 P P 10 12 23.4 +0.3**
**MWZ Matawai 59.30 129 P P 10 12 23.8 +0.5**
**RUGZ Raukumara Rang 59.33 129 P P 10 12 24.8 +1.1**
**JASL Jaisalmer 59.33 309** *eP* **P 10 12 22.8 -0.9**
**HAZ Te Kaha 59.37 128 P P 10 12 22.4 -1.4**
**KLR Kul'dur 59.56 9** *ceP* **P 10 12 23.9 -0.9**
comp=Z,141nm,0.9s,baz=211,slow=5.0,SNR=222
**KLR Kul'dur 59.56 9** *ceP* **P 10 12 24.1 -0.7**
KLR pmax pmax
comp=Z,993nm,2.2s
KLR MLR MLR
comp=Z,3μm,16.0s
**RIGZ Rimuhau 59.56 129 P P 10 12 27.4 +2.3**
**TWGZ Tauwhareparae 59.61 129 P P** 10 12 29.6 +4.1
**MXZ Matakaoa Point 59.73 128 P P 10 12 26.7 +0.4**
**WMGZ Waiomatatini S 59.87 128 P P 10 12 27.8 +0.6**
**YSS Yuzh-Sakhalins 60.03 18** *α iP* **P 10 12 27.8 -0.2**
YSS *e**SP **pP 10 12 41.0 -1.0**
YSS *e* 10 13 11.5
YSS *e*S **S 10 20 35.2 -1.9**
YSS pmax pmax
comp=Z,310nm,1.8s
YSS pmax pmax
comp=Z,3μm,8.7s
YSS pmax pmax
comp=N,1μm,6.8s
**YSS Yuzh-Sakhalins 60.03 18** P **P 10 12 27.6 -0.5**
**YSS Yuzh-Sakhalins 60.03 18 ⇑P P 10 12 27.9 -0.2**
**KUR Kuril'sk 60.31 23** *c iP* **P 10 12 30.2 +0.2**
KUR *e* 10 13 14.2
KUR *e*S **S 10 20 41.0 +0.3**
KUR *e* 10 22 07.4
KUR *e*SS **SS 10 24 41.8 +2.6**
KUR pmax pmax
comp=Z,2μm,1.3s
KUR pmax pmax
comp=E,189nm,1.1s
KUR pmax pmax
comp=N,556nm,1.8s
KUR pmax pmax
comp=Z,6μm,3.0s
KUR MLR MLR
comp=Z,3μm,21.0s
KUR MLR MLR
comp=E,2μm,20.0s
**WMQ Urumqi 60.40 334 ⇑P P 10 12 31.7 +0.9**
WMQ pP pP 10 12 39.1 -5.6
WMQ sP sP 10 12 47.4 -3.0
WMQ S **S 10 20 43.4 +1.2**
WMQ sS pS 10 20 59.6 +1.6
WMQ ScS **ScS 10 22 18.5 +1.1**
WMQ pmax pmax
comp=E,960nm,1.1s
WMQ pmax pmax
comp=E,5μm,3.7s
WMQ LR LR
comp=E,7μm,17.3s
WMQ LR LR
comp=E,9μm,22.1s
WMQ LR LR
comp=E,8μm,25.9s
**ZAK Zakamensk 61.31 348** *eP* **P 10 12 37.0 +0.1**
ZAK *e* 10 13 17.5
ZAK *e* 10 20 57.8
ZAK pmax pmax
comp=Z,401nm,1.3s
**NIL Nilore 61.33 317** P **P 10 12 35.8 -1.5**
NIL pmax pmax
comp=Z,585nm,1.1s
**NIL Nilore 61.33 317** P **P 10 12 35.8 -1.5**
**CIT Chita 61.54 356** *eP* **P 10 12 39.4 +1.1**
CIT *e* 10 12 57.8
CIT *e* 10 13 27.0
CIT *e* 10 14 59.8
CIT *e*S **S 10 21 00.8 +4.4**
CIT pmax pmax
comp=Z,1μm,2.1s
**RAO Raoul Island 61.66 118** LR LR 10 38 25.4
comp=Z,20μm,21.4s,baz=265,slow=35
**UGL Uglegorsk 61.73 17** *c iP* **P 10 12 40.2 +0.7**
UGL *e*S **S 10 20 57.8 -0.8**
UGL *e*SS **SS 10 24 51.9 -9.4**
UGL pmax pmax
comp=Z,710nm,1.3s
UGL pmax pmax
comp=Z,4μm,5.0s
UGL pmax pmax
comp=N,950nm,5.0s
UGL pmax pmax
comp=E,570nm,5.0s
UGL smax smax
comp=E,3μm,9.0s
UGL smax smax
comp=N,2μm,8.0s
**GRNR Gornyy 61.90 12** *i*⇑*P* **P 10 12 41.7 +1.0**
GRNR *e*S **S 10 21 07.4 +6.5**
GRNR pmax pmax
comp=E,40nm,1.1s
GRNR pmax pmax
comp=Z,500nm,1.1s
GRNR pmax pmax
comp=N,230nm,1.2s
**RER Riviere de l'E 62.03 251** ⇓P **P 10 12 45.9 +3.5**
**IRK Irkutsk 62.91 350** *eP* **P 10 12 47.7 +0.3**
IRK *e* 10 21 21.2
IRK pmax pmax
comp=Z,3μm,1.8s
**MOY Mondy 63.01 347** *eP* **P 10 12 49.0 +0.8**
MOY pmax pmax
comp=Z,855nm,4.0s
**KSH Kashi 63.25 324** P **P 10 12 49.8 -0.3**
KSH pP pP 10 12 57.7 -6.4
KSH sP sP 10 13 02.4 -7.3
KSH PP **PP 10 15 12.8 +3.0**
KSH S **S 10 21 17.0 -1.5**
KSH pmax pmax
comp=Z,790nm,1.2s
KSH pmax pmax
comp=Z,4μm,2.6s
KSH LR LR
comp=Z,5μm,24.7s
KSH LR LR
comp=Z,10μm,24.1s
KSH LR LR
comp=Z,13μm,25.1s
**ZEA Zeya 63.42 5** *ceP* **P 10 12 50.1 -0.7**
ZEA *e*S **S 10 21 20.6 +0.8**
ZEA pmax pmax
comp=N,320nm,1.2s
ZEA pmax pmax
comp=E,80nm,1.2s
ZEA pmax pmax
comp=Z,590nm,1.1s
ZEA pmax pmax
comp=N,700nm,7.1s
ZEA pmax pmax
comp=Z,1μm,8.0s
ZEA smax smax
comp=E,600nm,4.9s
**MSEY Mahe Island 63.46 270** P **P 10 12 51.7 -0.3**
MSEY pmax pmax
comp=Z,164nm,1.1s
**MSEY Mahe Island 63.46 270** P **P 10 12 51.7 -0.3**
MSEY IAmb IAmb 10 12 55.3
comp=Z,164nm,1.1s
**MSEY Mahe Island 63.46 270** IAMs_20 IAMs_20 10 36 45.0
comp=Z,10μm,20.0s
**MSEY Mahe Island 63.46 270** P **P 10 12 52.6 +0.6**
MSEY P **P 10 12 52.6 +0.6**
**MSEY Mahe Island 63.46 270** *i P* **P 10 12 53.5 +1.6**
SNR=8.7
**TYV Tymovskoe 63.50 16** *eP* **P 10 12 52.5 +1.1**
TYV *e*S **S 10 21 28.0 +7.1**
TYV pmax pmax
comp=Z,347nm,1.6s
TYV pmax pmax
comp=Z,4μm,2.9s
**TARG Taragay, Kyrgy 63.69 326** P **P 10 12 53.7 +0.3**
TARG IAmb IAmb 10 12 58.6
comp=Z,341nm,1.0s
**SHLS Shalkode 63.80 328** *i P* **P 10 12 52.8 -0.9**
SHLS pmax pmax
comp=Z,284nm,1.2s
**UZB Uzynbulak 64.02 328** *i P* **P 10 12 54.5 -0.6**
UZB pmax pmax
comp=Z,471nm,1.4s
**UZB Uzynbulak 64.02 328** *i P* **P 10 12 54.6 -0.6**
comp=Z,471nm,1.4s,baz=328
**SATY Saty 64.28 328** *c iP* **P 10 12 56.3 -0.5**
SATY *e*S **S 10 21 32.6 +1.4**
SATY pmax pmax
comp=Z,508nm,1.4s
**SATY Saty 64.28 328** *i*⇑*P* **P 10 12 56.4 -0.5**
comp=Z,508nm,1.4s,baz=328
SATY *e*S **S 10 21 32.6 +1.4**
baz=328
**ZHN Zhinishke 64.34 328** *i P* **P 10 12 56.5 -0.7**
ZHN pmax pmax
comp=Z,82nm,1.1s
**ZHN Zhinishke 64.34 328** *i P* **P 10 12 56.5 -0.7**
comp=Z,82nm,1.1s,baz=328
**KPKS Kokpek 64.42 328** *eP* **P 10 12 56.9 -0.8**
KPKS pmax pmax
comp=Z,505nm,1.3s
**KPKS Kokpek 64.42 328** *eP* **P 10 12 57.0 -0.8**
comp=Z,505nm,1.3s,baz=328
**ZSN Zaisan 64.49 335** *eP* **P 10 12 57.5 -0.4**
ZSN *e*S **S 10 21 35.5 +2.2**
ZSN pmax pmax
comp=Z,180nm,1.0s
**ZSN Zaisan 64.49 335** *eP* **P 10 12 57.6 -0.4**
comp=Z,180nm,1.0s,baz=335
ZSN *e*S **S 10 21 35.6 +2.2**
baz=335
**KBL Kabul 64.72 315** P **P 10 12 58.8 -1.2**
KBL pmax pmax
comp=Z,1μm,1.3s
**KBL Kabul 64.72 315** P **P 10 12 58.8 -1.2**
**KBL Kabul 64.72 315** P **P 10 12 58.8 -1.2**
SNR=426
KBL P **P 10 12 58.8 -1.2**
SNR=426
**TNSS Tian-Shan 65.04 327** *eP* **P 10 13 02.1 -0.1**
baz=327
**MDOK Medeo 65.07 327** *eP* **P 10 13 01.6 -0.4**
**MDOK Medeo 65.07 327** *eP* **P 10 13 01.6 -0.4**
baz=327
**NKL Nikolayevsk 65.08 14** *eP* **P 10 13 01.2 -0.4**
NKL *e*S **S 10 21 39.4 -0.8**
NKL pmax pmax
comp=N,365nm,0.8s
NKL pmax pmax
comp=Z,669nm,1.3s
NKL pmax pmax
comp=E,3.0nm,0.7s
NKL smax smax
comp=E,3.0nm,2.9s
NKL smax smax
comp=N,743nm,3.5s
**MK31 Makanchi Array 65.10 333** *i P* **P 10 13 01.8 -0.2**
MK31 pmax pmax
comp=Z,797nm,1.0s
**MK31 Makanchi Array 65.10 333** P **P 10 13 01.7 -0.2**
**MKAR Makanchi Array 65.10 333** P **P 10 13 01.4 -0.7**
comp=Z,553nm,0.9s,baz=142,slow=5.6,SNR=581
MKAR S **S 10 21 47.1 +6.1**
comp=Z,6.3nm,1.0s,baz=136,slow=18,SNR=3.7
MKAR PKPPKP P'P'df 10 41 50.8 +7.4
comp=Z,6.4nm,1.1s,baz=336,slow=2.7,SNR=11
MKAR LR LR 10 45 17.1
comp=Z,6μm,19.1s,baz=140,slow=40
MKAR P4KPbc 10 49 56.5
comp=Z,3.2nm,0.9s,baz=140,slow=4.8,SNR=21
**MKAR Makanchi Array 65.10 333** *i P* **P 10 13 01.3 -0.7**
MKAR pmax pmax
comp=Z,551nm,0.9s
**MKAR Makanchi Array 65.10 333** P **P 10 13 01.8 -0.2**
**AAA Alma-Ata 65.18 327** *eP* **P 10 13 02.0 -0.6**
AAA *e*S **S 10 21 43.9 +1.8**
AAA pmax pmax
comp=Z,322nm,1.3s
**AAA Alma-Ata 65.18 327** *eP* **P 10 13 02.0 -0.6**
comp=Z,322nm,1.3s,baz=327
AAA *e*S **S 10 21 44.0 +1.8**
baz=327
**MAKZ Makanchi 65.25 333** P **P 10 13 02.6 -0.4**
MAKZ pmax pmax
comp=Z,378nm,1.0s
MAKZ MLR MLR
comp=Z,6μm,21.0s
**MAKZ Makanchi 65.25 333** P **P 10 13 02.6 -0.4**
MAKZ IAmb IAmb 10 13 06.4
comp=Z,378nm,1.0s
**MAKZ Makanchi 65.25 333** ⇑P **P 10 13 01.1 -1.9**
MAKZ ⇓P **P 10 13 02.6 -0.4**
**DGZ Jazzator, Alta 65.28 338** *c iP* **P 10 13 03.5 +0.2**
DGZ pmax pmax
comp=Z,932nm,1.0s
**ARXS Arharly 65.39 328** P **P 10 13 03.0 -1.0**
**CHKK Chushkaly 65.58 328** *eP* **P 10 13 04.6 -0.5**
baz=328
**TDK Taldyqorghan 65.64 329** *eP* **P 10 13 05.0 -0.5**
TDK pmax pmax
comp=Z,613nm,1.2s
**TDK Taldyqorghan 65.64 329** *eP* **P 10 13 05.1 -0.5**
comp=Z,614nm,1.2s,baz=329
**TKM2 Tokmak 2 65.70 326** P **P 10 13 05.8 -0.4**
SNR=110
**TKM2 Tokmak 2 65.70 326** *i P* **P 10 13 05.9 -0.3**
TKM2 pmax pmax
comp=Z,493nm,1.4s
**UCH Uchtor 65.85 325** P **P 10 13 07.2 -0.3**
SNR=214
**KBK Karagaybulak 65.88 326** P **P 10 13 07.1 -0.2**
SNR=450
**KUU Kurty 65.95 327** *eP* **P 10 13 07.0 -0.5**
KUU pmax pmax
comp=Z,655nm,1.3s
**KUU Kurty 65.95 327** *eP* **P 10 13 07.1 -0.5**
comp=Z,656nm,1.3s,baz=327
**AAK Ala-Archa 66.12 325** P **P 10 13 08.7 -0.1**
comp=Z,320nm,1.0s,baz=140,slow=4.8,SNR=319
AAK S **S 10 21 55.5 +1.6**
comp=Z,10.0nm,1.1s,baz=325,slow=21,SNR=7.4
AAK LR LR 10 45 43.1
comp=Z,10μm,21.8s,baz=140,slow=39
**AAK Ala-Archa 66.12 325** P **P 10 13 08.7 -0.1**
SNR=370
**AAK Ala-Archa 66.12 325** *i P* **P 10 13 08.8 -0.1**
AAK pmax pmax
comp=Z,571nm,1.1s
**AAK Ala-Archa 66.12 325** P **P 10 13 08.7 -0.1**
**AAK Ala-Archa 66.12 325** IAMs_20 IAMs_20 10 47 23.6
comp=Z,10μm,19.0s
**AAK Ala-Archa 66.12 325** P **P 10 13 08.7 -0.1**
**CHMS Chumysh 66.22 326** P **P 10 13 08.3 -0.9**
SNR=108
**AML Almayashu 66.25 324** P **P 10 13 09.7 -0.3**
SNR=804
**AML Almayashu 66.25 324** P **P 10 13 10.6 +0.6**
**AML Almayashu 66.25 324** *i P* **P 10 13 09.7 -0.3**
SNR=791
**GAR Garm 66.38 320** P **P 10 13 10.1 -0.4**
**USP Ospenovka 66.53 326** P **P 10 13 10.8 -0.6**
SNR=234
**EKS2 Erkin-Say 66.54 325** P **P 10 13 11.6 +0.1**
SNR=288
**SGDS Sogindy 66.58 326** *i P* **P 10 13 11.1 -0.5**
SGDS pmax pmax
comp=Z,252nm,1.2s
**SGDS Sogindy 66.58 326** *eP* **P 10 13 10.8 -0.8**
comp=Z,204nm,1.1s,baz=326
**JLN Jalan Bani Buh 66.64 299** P **P 10 13 13.0 +0.6**
SNR=22
JLN P **P 10 13 13.0 +0.6**
SNR=22
JLN P **P 10 13 13.0 +0.6**
SNR=22
**CHGR Chuyangaron 66.92 319** P **P 10 13 12.7 -1.3**
**WBK Wadi Bani Khal 67.19 299** P **P 10 13 17.0 +1.1**
SNR=18
WBK P **P 10 13 17.0 +1.1**
SNR=18
**BOD Bodaibo 67.29 357** ⇓*i P* **P 10 13 15.2 -0.5**
BOD *e* 10 22 07.1
BOD pmax pmax
comp=Z,864nm,1.4s
**AFI Afiamalu 67.41 101** P **P 10 13 18.2 +0.7**
comp=Z,74nm,0.9s,baz=254,slow=6.7,SNR=8.9
AFI LR LR 10 43 06.0
comp=Z,2μm,18.7s,baz=270,slow=36
**AFI Afiamalu 67.41 101** P **P 10 13 14.2 -3.2**
AFI IAmb IAmb 10 13 29.8
comp=Z,306nm,1.4s
**AFI Afiamalu 67.41 101** ⇑P **P 10 13 20.4 +2.9**
**DQM DQM 67.49 296** P **P 10 13 18.0 +0.2**
SNR=47
DQM P **P 10 13 18.0 +0.2**
SNR=47
**CRZF Crozet Islands 67.62 224** IAMs_20 IAMs_20 10 37 06.7
comp=Z,6μm,20.0s
**WSAR Wadi Sarin 67.71 300** P **P 10 13 18.7 -0.4**
comp=Z,389nm,1.1s,baz=141,slow=6.4,SNR=66
WSAR LR LR 10 43 46.2
comp=Z,5μm,20.8s,baz=132,slow=37
**WSAR Wadi Sarin 67.71 300** P **P 10 13 19.6 +0.5**
SNR=31
**JMDO Jabal Madar 67.85 299** P **P 10 13 21.0 +0.9**
SNR=31
JMDO P **P 10 13 21.0 +0.9**
SNR=31
JMDO P **P 10 13 21.0 +0.9**
SNR=31
JMDO S **S 10 22 10.9 -4.1**
JMDO S **S 10 22 10.9 -4.1**
JMDO S **S 10 22 10.9 -4.1**
**SBV Sambava 67.92 259** P **P 10 13 22.3 +1.7**
SNR=12
**SBV Sambava 67.92 259** ⇑P **P 10 13 22.5 +1.9**
SBV ⇓P **P 10 13 23.1 +2.5**
**SBV Sambava 67.92 259** P **P 10 13 23.1 +2.5**
**BTLS Baital 67.94 327** *eP* **P 10 13 19.0 -1.1**
BTLS pmax pmax
comp=Z,190nm,1.7s
**BTLS Baital 67.94 327** *eP* **P 10 13 19.0 -1.1**
comp=Z,190nm,1.7s,baz=327
**SKR Severo-Kuril's 67.97 24** *eP* **P 10 13 21.1 +0.9**
SKR *e*S **S 10 22 18.3 +2.9**
SKR pmax pmax
comp=Z,3μm,3.0s
SKR pmax pmax
comp=Z,460nm,1.3s
SKR pmax pmax
comp=Z,700nm,3.0s
SKR MLR MLR
comp=Z,1μm,17.0s
**DZA Taraz 68.09 324** *eP* **P 10 13 20.0 -1.1**
DZA pmax pmax
comp=Z,100nm,1.3s
**DZA Taraz 68.09 324** *eP* **P 10 13 20.1 -1.1**
comp=Z,100nm,1.3s,baz=324
**SMDO Samad 68.14 300** P **P 10 13 23.0 +1.0**
SNR=43
SMDO P **P 10 13 23.0 +1.0**
SNR=43
**BIDO Bidbid 68.24 300** P **P 10 13 23.0 +0.5**
SNR=68
**TAS Tashkent 68.37 322** P **P 10 13 23.4 +0.5**
TAS pmax pmax
comp=Z,2μm,1.3s
**TAS Tashkent 68.37 322** P **P 10 13 23.4 +0.5**
**IUG Iuzhnay 68.41 323** *eP* **P 10 13 22.6 -0.6**
**IUG Iuzhnay 68.41 323** *eP* **P 10 13 22.7 -0.6**
baz=323
**SOCY Socotra 68.42 287** P **P 10 13 23.5 -0.4**
**SOCY Socotra 68.42 287** P **P 10 13 24.1 +0.3**
SNR=77
**SOCY Socotra 68.42 287** ⇑P **P 10 13 23.3 -0.6**
SOCY ⇑P **P 10 13 23.4 -0.4**
**SHAO Shalim 68.58 294** P **P 10 13 25.0 +0.3**
SNR=47
SHAO P **P 10 13 25.0 +0.3**
SNR=47
SHAO S **S 10 22 20.2 -3.8**
SHAO S **S 10 22 20.2 -3.8**
**SHAO Shalim 68.58 294** *i P* **P 10 13 24.3 -0.5**
SNR=21
**KKAR Karatay Array 68.70 324** P **P 10 13 23.8 -1.2**
**KKAR Karatay Array 68.70 324** P **P 10 13 23.8 -1.2**
**BSY Bisya 68.76 299** P **P 10 13 26.0 +0.2**
SNR=69
BSY P **P 10 13 26.0 +0.2**
SNR=69
BSY P **P 10 13 26.0 +0.2**
SNR=69
**MAW Mawson 68.81 200** LR LR 10 41 37.7
comp=Z,11μm,18.4s,baz=52,slow=34
**NIUE Niue 68.83 107** P **P 10 13 26.2 0.0**
**HOQ Hoqain 68.96 300** P **P 10 13 28.0 +1.0**
SNR=56
HOQ P **P 10 13 28.0 +1.0**
SNR=56
**BRLS Borolday 69.05 323** *eP* **P 10 13 26.0 -1.1**
BRLS pmax pmax
comp=Z,190nm,1.7s
**BRLS Borolday 69.05 323** *eP* **P 10 13 26.1 -1.1**
comp=Z,190nm,1.7s,baz=323
**DMTO DMTO 69.10 293** P **P 10 13 29.0 +1.0**
SNR=61
DMTO P **P 10 13 29.0 +1.0**
SNR=61
DMTO P **P 10 13 29.0 +1.0**
SNR=61
**HRA Herat 69.48 312** P **P 10 13 28.7 -1.5**
**ARQ Araqi 69.55 299** P **P 10 13 31.0 +0.3**
SNR=43
ARQ P **P 10 13 31.0 +0.3**
SNR=43
ARQ S **S 10 22 31.7 -3.6**
ARQ S **S 10 22 31.7 -3.6**
**KURBB Kurchatov Arra 69.61 334** P **P 10 13 29.5 -0.9**
comp=Z,260nm,1.0s,baz=148,slow=5.5,SNR=421
KURBB S **S 10 22 38.7 +3.8**
comp=Z,6.5nm,1.1s,baz=140,slow=15,SNR=5.5
KURBB LR LR 10 47 23.9
comp=Z,12μm,21.3s,baz=117,slow=39
**KURBB Kurchatov Arra 69.61 334** P **P 10 13 29.4 -1.0**
**KURK Kurchatov 69.64 334** *ceP* **P 10 13 29.8 -0.8**
KURK pmax pmax
comp=Z,621nm,1.0s
**KURK Kurchatov 69.64 334** P **P 10 13 30.1 -0.4**
**KURK Kurchatov 69.64 334** P **P 10 13 30.2 -0.4**
KURK P **P 10 13 30.2 -0.4**
KURK P **P 10 13 30.2 -0.4**
**ZAA0 Zalesovo Array 69.68 339** P **P 10 13 29.6 -1.1**
**ZALV Zalesovo Beam 69.68 339** P **P 10 13 29.2 -1.5**
comp=Z,572nm,0.9s,baz=130,slow=2.3,SNR=426
ZALV S **S 10 22 35.9 +0.3**
comp=Z,20nm,1.1s,baz=141,slow=9.6,SNR=9.1
ZALV PKPPKP P'P'df 10 41 43.9 +8.7
comp=Z,3.7nm,0.9s,baz=270,slow=3.0,SNR=5.1
ZALV LR LR 10 47 42.5
comp=Z,5μm,18.9s,baz=151,slow=39
**ZALV Zalesovo Beam 69.68 339** *i P* **P 10 13 29.2 -1.5**
ZALV pmax pmax
comp=Z,567nm,0.9s
**ZALV Zalesovo Beam 69.68 339** P **P 10 13 29.9 -0.9**
**RBK Rabkut 69.72 293** P **P 10 13 32.0 +0.2**
SNR=142
RBK P **P 10 13 32.0 +0.2**
SNR=142
RBK P **P 10 13 32.0 +0.2**
SNR=142
RBK S **S 10 22 31.7 -5.7**
RBK S **S 10 22 31.7 -5.7**
RBK S **S 10 22 31.7 -5.7**
**SOHO SOHO 69.82 300** P **P 10 13 32.2 -0.1**
**SOHO SOHO 69.82 300** *i P* **P 10 13 31.5 -0.7**
SNR=77
**ABPO Ambohimpanom 70.10 253** P **P 10 13 35.0 +0.7**
ABPO pmax pmax
comp=Z,210nm,1.3s
**ABPO Ambohimpanom 70.10 253** P **P 10 13 35.0 +0.7**
ABPO IAmb IAmb 10 13 47.7
comp=Z,210nm,1.3s

**ABPO Ambohimpanom 70.10 253** IAMs_20 IAMs_20 10 37 39.1
comp=Z,8μm,21.0s
**DOK Doka 70.12 294** P **P** **10 13 34.0 -0.2**
SNR=167
DOK P **P** **10 13 34.0 -0.2**
SNR=167
DOK P **P** **10 13 34.0 -0.2**
SNR=167
DOK S **S** **10 22 35.9 -6.2**
DOK S **S** **10 22 35.9 -6.2**
DOK S **S** **10 22 35.9 -6.2**
**OPO Ambohidratompo 70.16 254** P **P** **10 13 36.0 +1.3**
comp=Z,39nm,0.7s,baz=97,slow=3.5,SNR=35
**WHFO Wadi Hawf 70.23 293** P **P** **10 13 34.2 -0.7**
SNR=151
WHFO P **P** **10 13 34.2 -0.7**
SNR=151
WHFO S **S** **10 22 37.9 -5.6**
WHFO S **S** **10 22 37.9 -5.6**
**VOI Vohitsoka 70.35 250** P **P** **10 13 36.9 +1.1**
VOI IAmb IAmb 10 14 12.0
comp=Z,392nm,1.5s
VOI IAMs_20 IAMs_20 10 39 13.6
comp=Z,8μm,20.0s
**VOI Vohitsoka 70.35 250** P **P** **10 13 36.1 +0.3**
SNR=13
**VOI Vohitsoka 70.35 250** ⇑P **P** **10 13 37.8 +2.0**
VOI ⇓P **P** **10 13 38.2 +2.4**
**VOI Vohitsoka 70.35 250** P **P** **10 13 38.4 +2.6**
**UOSS Minazif 70.39 301** P **P** **10 13 35.2 -0.5**
**UOSS Minazif 70.39 301** P **P** **10 13 35.2 -0.5**
UOSS P **P** **10 13 35.2 -0.5**
UOSS P **P** **10 13 35.2 -0.5**
**UOSS Minazif 70.39 301** *i* P **P** **10 13 35.2 -0.5**
SNR=49
**HATD Hatta, Dubai 70.41 301** P **P** **10 13 36.2 +0.3**
SNR=53
HATD P **P** **10 13 36.2 +0.3**
SNR=53
**HATD Hatta, Dubai 70.41 301** *i* P **P** **10 13 35.3 -0.5**
SNR=63
**ASHO Ashiyiah 70.42 300** P **P** **10 13 36.1 +0.1**
SNR=63
ASHO S **S** **10 22 40.6 -4.9**
**ASHO Ashiyiah 70.42 300** *i* P **P** **10 13 35.3 -0.7**
SNR=94
**ALNE Al Ain 70.46 300** P **P** **10 13 36.7 +0.5**
SNR=42
**ALNE Al Ain 70.46 300** *i* P **P** **10 13 36.1 -0.1**
SNR=36
**PEA0B Petropavlovsk- 70.47 23** P **P** **10 13 35.4 -0.2**
PEA0B pmax pmax
comp=Z,2μm,2.0s
**PEA0B Petropavlovsk- 70.47 23** P **P** **10 13 35.4 -0.2**
**PETK Petropavlovsk- 70.47 23** P **P** **10 13 35.6 0.0**
comp=Z,72nm,0.8s,baz=51,slow=1.0,SNR=72
**PETK Petropavlovsk- 70.47 23** P **P** **10 13 36.0 +0.4**
**PETK Petropavlovsk- 70.47 23** P **P** **10 13 36.0 +0.4**
**ABTO Aybut 70.50 292** P **P** **10 13 37.0 +0.4**
SNR=140
ABTO P **P** **10 13 37.0 +0.4**
SNR=140
ABTO P **P** **10 13 37.0 +0.4**
SNR=140
ABTO S **S** **10 22 39.5 -7.1**
ABTO S **S** **10 22 39.5 -7.1**
ABTO S **S** **10 22 39.5 -7.1**
**MSFE Esma-Masafi 70.58 301** *i* P **P** **10 13 36.6 -0.3**
SNR=35
**MASF Masafi 70.58 301** P **P** **10 13 37.1 +0.1**
SNR=22
MASF P **P** **10 13 37.1 +0.1**
SNR=22
MASF P **P** **10 13 37.1 +0.1**
SNR=22
MASF S **S** **10 22 43.1 -4.2**
MASF S **S** **10 22 43.1 -4.2**
MASF S **S** **10 22 43.1 -4.2**
**BANOM Banah 70.66 302** P **P** **10 13 37.7 +0.3**
SNR=9.5
BANOM P **P** **10 13 37.7 +0.3**
SNR=9.5
BANOM S **S** **10 22 44.1 -4.1**
BANOM S **S** **10 22 44.1 -4.1**
**BANOM Banah 70.66 302** *i* P **P** **10 13 37.3 -0.1**
SNR=8.6
**PET Petropavlovsk 70.78 24***c i*P **P** **10 13 37.4 0.0**
PET *e* 10 16 18.0
PET *e*S **S** **10 22 49.6 +1.2**
PET *e*PS **PnS** **10 23 21.0 -1.1**
PET *e*PPS PPS 10 23 28.0
PET *e*SS **SS** **10 27 26.0 +4.3**
PET pmax pmax
comp=Z,5μm,2.5s
PET pmax pmax
comp=Z,584nm,1.7s
PET pmax pmax
comp=Z,3μm,9.5s
**PET Petropavlovsk 70.78 24** P **P** **10 13 37.5 0.0**
**FAQ Al Faqa, Dubai 70.84 300** P **P** **10 13 38.6 +0.2**
SNR=39
FAQ S **S** **10 22 43.2 -7.1**
**FAQ Al Faqa, Dubai 70.84 300** *i* P **P** **10 13 37.7 -0.8**
SNR=111
**SHME Shamm 70.84 302** P **P** **10 13 38.8 +0.3**
SNR=16
SHME P **P** **10 13 38.8 +0.3**
SNR=16
SHME P **P** **10 13 38.8 +0.3**
SNR=16
SHME S **S** **10 22 46.2 -4.0**
SHME S **S** **10 22 46.2 -4.0**
SHME S **S** **10 22 46.2 -4.0**
**SHME Shamm 70.84 302** *i* P **P** **10 13 37.9 -0.5**
SNR=26
**NAZ Nazwa, Dubai 70.87 301** P **P** **10 13 39.0 +0.3**
SNR=21
NAZ S **S** **10 22 46.5 -4.1**
**NAZ Nazwa, Dubai 70.87 301** *i* P **P** **10 13 38.5 -0.1**
SNR=38
**OTUK Ortayu 70.92 329** P **P** **10 13 37.8 -0.7**
**ASUD Al Ashush, Dub 71.02 300** P **P** **10 13 40.6 +1.0**
SNR=16
ASUD S **S** **10 22 48.6 -3.7**
**ASUD Al Ashush, Dub 71.02 300** *i* P **P** **10 13 39.2 -0.3**
SNR=14
**UMQ Umm Al-Quwin 71.06 301** P **P** **10 13 41.6 +1.9**
SNR=6.5
UMQ S **S** **10 22 50.6 -2.1**
**UMQ Umm Al-Quwin 71.06 301** *i* P **P** **10 13 40.3 +0.6**
SNR=12
**AJN Ajban 71.29 300** P **P** **10 13 41.3 +0.1**
SNR=8.8
**AJN Ajban 71.29 300** *i* P **P** **10 13 40.2 -1.0**
SNR=9.6
**VNDA Vanda 71.38 171** P **P** **10 13 42.3 +1.4**
comp=Z,12nm,0.6s,baz=336,slow=6.8,SNR=9.3
VNDA LR LR 10 43 51.3
comp=Z,9μm,19.5s,baz=1.0,slow=35
**VNDA Vanda 71.38 171** P **P** **10 13 40.7 -0.2**
VNDA IAmb IAmb 10 13 54.8
comp=Z,231nm,1.6s
**YAK Yakutsk 71.83 5** P **P** **10 13 42.8 -0.8**
comp=Z,421nm,0.9s,baz=360,slow=3.8,SNR=138
YAK LR LR 10 46 35.0
comp=Z,3μm,21.4s,baz=191,slow=37
**YAK Yakutsk 71.83 5***c i*P **P** **10 13 43.5 -0.1**
YAK *e**PP **sP** **10 14 07.7 +4.2**
YAK *e* 10 16 23.7
YAK *e*PPP PPP 10 18 07.6
YAK *e*S **S** **10 22 57.0 -3.2**
YAK *e* 10 23 32.0
YAK *e**SS **SKSac** **10 23 41.5 -1.4**
YAK *e*SS **SS** **10 27 31.0 -6.6**
YAK pmax pmax
comp=Z,780nm,0.9s
YAK pmax pmax
comp=N,242nm,1.0s
YAK pmax pmax
comp=E,65nm,1.1s
YAK pmax pmax
comp=Z,573nm,2.6s
YAK pmax pmax
comp=N,430nm,2.5s
YAK pmax pmax
comp=E,186nm,2.0s
YAK smax smax
comp=N,598nm,2.5s
YAK smax smax
comp=E,665nm,2.5s
**YAK Yakutsk 71.83 5** P **P** **10 13 42.6 -1.0**
**BRZS Berezniki 71.88 330** *e*P **P** **10 13 43.7 -0.5**
BRZS pmax pmax
comp=Z,263nm,1.0s
**BRZS Berezniki 71.88 330** *e*P **P** **10 13 43.8 -0.5**
comp=Z,263nm,1.0s,baz=330
**MZWR Madinat Zayed 71.97 299** P **P** **10 13 45.7 +0.4**
MZWR P **P** **10 13 45.7 +0.4**
**MZR Muzera 72.07 298** P **P** **10 13 46.5 +0.5**
SNR=30
MZR P **P** **10 13 46.5 +0.5**
SNR=30
**MZR Muzera 72.07 298** *i* P **P** **10 13 45.7 -0.3**
SNR=64
**GHWR Ruwais 72.91 299** P **P** **10 13 51.4 +0.5**
GHWR P **P** **10 13 51.4 +0.5**
**MA2 Magadan 73.38 16***ce*P **P** **10 13 53.4 +0.5**
MA2 pmax pmax
comp=Z,354nm,0.9s
MA2 MLR MLR
comp=Z,2μm,21.0s
**MA2 Magadan 73.38 16** P **P** **10 13 53.1 +0.2**
MA2 IAmb IAmb 10 13 55.9
comp=Z,449nm,0.9s
**SLWR Sila 73.97 298** P **P** **10 13 57.6 +0.5**
SLWR P **P** **10 13 57.6 +0.5**
SLWR S **SKiKP** **10 23 19.5 -2.2**
SLWR S **SKiKP** **10 23 19.5 -2.2**
**GEYT Alibeck 74.06 314** P **P** **10 13 57.5 +0.1**
comp=Z,138nm,1.0s,baz=163,slow=5.7,SNR=89
GEYT LR LR 10 53 27.0
comp=Z,3μm,18.1s,baz=130,slow=41
**GEYT Alibeck 74.06 314** P **P** **10 13 57.3 -0.1**
GEYT IAmb IAmb 10 14 00.1
comp=Z,440nm,1.4s
**GYA0B ALIBECK ARRAY 74.06 314** P **P** **10 13 57.6 +0.1**
GYA0B IAmb IAmb 10 14 00.0
comp=Z,539nm,1.4s
**TRNA Turayna 74.59 299** P **P** **10 14 01.0 +0.3**
**KHOR Al-Khor Airpor 74.61 300** P **P** **10 14 01.4 +0.5**
**BVAR Borovoye Array 74.94 332** S **S** **10 23 37.2 +1.3**
comp=Z,16nm,1.1s,baz=93,slow=18,SNR=7.6
**BRVK Borovoye 75.01 332***ce*P **P** **10 14 01.7 -0.9**
BRVK pmax pmax
comp=Z,523nm,1.3s
**BRVK Borovoye 75.01 332** P **P** **10 14 02.3 -0.3**
BRVK IAmb IAmb 10 14 04.2
comp=Z,512nm,1.2s
**BRVK Borovoye 75.01 332** IAMs_20 IAMs_20 10 50 39.3
comp=Z,8μm,20.0s
**BRVK Borovoye 75.01 332** P **P** **10 14 02.7 +0.1**
**SHMA Al-Shehemyia 75.16 300** P **P** **10 14 04.4 +0.5**
**SAKB Bahrain 75.56 300** P **P** **10 14 06.6 +0.3**
**SEY Seymchan 76.63 15** S **S** **10 23 56.2 +2.2**
comp=Z,4.7nm,1.1s,baz=102,slow=18,SNR=7.1
SEY LR LR 10 47 27.3
comp=Z,2μm,21.6s,baz=224,slow=35
**SEY Seymchan 76.63 15***c i*P **P** **10 14 12.1 +0.6**
**SYO Syowa Base 77.44 201**⇑*e*P **P** **10 14 19.0 +2.9**
**SYO Syowa Base 77.44 201**⇓*e*pP pP 10 14 24.2 -6.4
**SHEM Shemya Is, Ala 77.59 31** LR LR 10 44 45.8
comp=Z,2μm,21.7s,baz=224,slow=33
**SMY Shemya 77.59 31** P **P** **10 14 17.0 -0.2**
SMY pmax pmax
comp=Z,704nm,1.1s
**SMY Shemya 77.59 31** P **P** **10 14 16.9 -0.2**
**RAR Rarotonga 78.18 110** P **P** **10 14 22.3 +1.1**
comp=Z,70nm,1.0s,baz=226,slow=6.6,SNR=7.9
RAR LR LR 10 49 26.4
comp=Z,2μm,19.9s,baz=256,slow=36
**AB31 Akbulak array 78.20 325** *i* P **P** **10 14 19.6 -1.1**
**ABKAR Akbulak array 78.20 325** P **P** **10 14 20.0 -0.7**
**ABKAR Akbulak array 78.20 325** P **P** **10 14 19.9 -0.7**
ABKAR IAmb IAmb 10 14 22.3
comp=Z,478nm,1.1s
**ATD Arta Tunnel 78.85 284** LR LR 10 48 13.8
comp=Z,1μm,18.1s,baz=101,slow=35
**ATD Arta Tunnel 78.85 284** P **P** **10 14 26.1 +1.1**
ATD IAmb IAmb 10 14 35.4
comp=Z,197nm,1.0s
**ATD Arta Tunnel 78.85 284** P **P** **10 14 27.3 +2.2**
SNR=41
**ATD Arta Tunnel 78.85 284** *e*P **P** **10 14 27.1 +2.0**
ATD *e*S **S** **10 24 21.5 +1.4**
ATD IAMs_20 IAMs_20 10 24 39.8
comp=N,17μm,6.3s
**RAYN Ar Rayn 79.23 296** P **P** **10 14 26.8 -0.2**
RAYN pmax pmax
comp=Z,294nm,1.1s
**RAYN Ar Rayn 79.23 296** P **P** **10 14 26.8 -0.2**
RAYN IAmb IAmb 10 14 30.5
comp=Z,294nm,1.1s
**RAYN Ar Rayn 79.23 296** P **P** **10 14 28.0 +1.0**
RAYN S **S** **10 24 16.1 -7.7**
**RAYN Ar Rayn 79.23 296** *i* P **P** **10 14 26.8 -0.2**
SNR=192
**AKTO Aktyubinsk 79.87 325** LR LR 10 53 55.0
comp=Z,9μm,22.0s,baz=126,slow=39
**AKTO Aktyubinsk 79.87 325** P **P** **10 14 28.6 -1.2**
**QSPA South Pole Qui 80.43 180** P **P** **10 14 32.6 -0.2**
comp=Z,29nm,1.0s,baz=304,slow=1.5,SNR=40
QSPA LR LR 10 47 52.9
comp=Z,6μm,21.5s,baz=344,slow=34
**QSPA South Pole Qui 80.43 180** P **P** **10 14 32.2 -0.6**
QSPA IAmb IAmb 10 15 13.1
comp=Z,208nm,1.2s
**KIBK Kibwezi 81.01 269** P **P** **10 14 38.0 +1.1**
KIBK IAmb IAmb 10 14 40.6
comp=Z,167nm,1.0s
KIBK IAMs_20 IAMs_20 10 46 31.1
comp=Z,5μm,20.0s
**KIBK Kibwezi 81.01 269** P **P** **10 14 38.1 +1.3**
SNR=79
**LKRN Lenkeran, Azer 81.13 312** P **P** **10 14 36.9 +0.1**
**TIXI Tiksi 81.29 3** S **S** **10 24 45.6 +2.3**
comp=Z,4.8nm,0.9s,baz=270,slow=24,SNR=10
TIXI LR LR 10 52 20.5
comp=Z,5μm,21.6s,baz=182,slow=37
**TIXI Tiksi 81.29 3***ce*P **P** **10 14 35.4 -1.5**
TIXI pmax pmax
comp=Z,357nm,1.0s
TIXI MLR MLR
comp=Z,5μm,19.0s
**TIXI Tiksi 81.29 3** P **P** **10 14 35.3 -1.5**
TIXI IAmb IAmb 10 14 43.2
comp=Z,260nm,0.9s
TIXI IAMs_20 IAMs_20 10 52 09.3
comp=Z,5μm,20.0s
**ANKE Ethiopia-Afar 81.46 281** *e*P **P** **10 14 42.0 +2.5**
ANKE *e*S **S** **10 24 53.7 +5.5**
**SVE Sverdlovsk 81.73 332***d i*P **P** **10 14 39.3 -0.2**
SVE *e* 10 17 45.2
SVE *e*S **S** **10 24 44.3 -4.1**
SVE pmax pmax
comp=Z,520nm,1.1s
SVE MLR MLR
comp=Z,9μm,20.0s
SVE MLR MLR
comp=E,6μm,20.0s
**NRIK Noril'sk 81.77 349** P **P** **10 14 39.2 -0.3**
comp=E,117nm,1.0s,baz=141,slow=5.4,SNR=55
NRIK PP **PP** **10 17 49.0 +1.8**
comp=E,181nm,1.1s,baz=138,slow=7.5,SNR=12
NRIK S **S** **10 24 48.4 0.0**
comp=E,10nm,1.1s,baz=342,slow=21,SNR=16
NRIK LR LR 10 54 47.8
comp=E,5μm,19.3s,baz=158,slow=38
**NRIK Noril'sk 81.77 349***c i*P **P** **10 14 39.6 +0.1**
NRIK pmax pmax
comp=Z,403nm,1.7s
NRIK MLR MLR
comp=Z,3μm,14.0s
**NRIK Noril'sk 81.77 349** P **P** **10 14 40.0 +0.5**
NRIK IAmb IAmb 10 14 42.8
comp=Z,694nm,1.7s
**KIWB Kanaga Island 81.77 34** P **P** **10 14 39.0 -0.9**
**DESE Dese 81.85 283** *e*P P 10 14 48.3 +6.7
DESE *e*S **S** **10 24 57.0 +4.9**
DESE IAMs_20 IAMs_20 10 25 08.0
comp=N,8μm,30.5s
**KMBO Kilima Mbogo 81.99 270** P **P** **10 14 43.6 +1.3**
comp=N,134nm,0.9s,baz=77,slow=5.5,SNR=115
KMBO LR LR 10 45 59.4
comp=N,8μm,21.8s,baz=98,slow=32
**KMBO Kilima Mbogo 81.99 270**⇑*i*P **P** **10 14 44.1 +1.8**
KMBO IAmb IAmb 10 14 45.7
comp=Z,424nm,0.9s
**KMBO Kilima Mbogo 81.99 270** P **P** **10 14 43.2 +1.0**
KMBO IAmb IAmb 10 14 46.0
comp=Z,147nm,0.9s
**KMBO Kilima Mbogo 81.99 270** IAMs_20 IAMs_20 10 45 58.1
comp=Z,8μm,21.0s
**KMBO Kilima Mbogo 81.99 270** P **P** **10 14 44.0 +1.8**
KMBO P **P** **10 14 44.0 +1.8**
**KMBO Kilima Mbogo 81.99 270** *e*P **P** **10 14 44.2 +2.0**
KMBO *e*S **S** **10 24 54.8 +1.3**
KMBO IAMs_20 IAMs_20 10 25 00.4
comp=Z,5μm,23.1s
**KMBO Kilima Mbogo 81.99 270** *i* P **P** **10 14 43.5 +1.3**
SNR=42
**DILA Dilla 82.28 278** *e*P **P** **10 14 46.7 +3.1**
**FURI Furi 82.35 280** IAMs_20 IAMs_20 10 47 00.1
comp=Z,9μm,22.0s
**FURI Furi 82.35 280** *e*P **P** **10 14 48.1 +3.9**
FURI *e*S **S** **10 25 01.6 +4.4**
FURI IAMs_20 IAMs_20 10 25 25.1
comp=Z,10μm,8.8s
**GSTR Great Sitkin T 82.48 34** P **P** **10 14 44.0 +0.3**
**ARU Arti 82.51 331** LR LR 10 55 50.1
comp=Z,4μm,18.9s,baz=114,slow=39
**ARU Arti 82.51 331***c i*P **P** **10 14 42.8 -0.8**
ARU 10 17 49.7
ARU S **S** **10 24 55.2 -1.3**
ARU SS **SS** **10 30 10.2 -8.7**
ARU pmax pmax
comp=Z,409nm,1.2s
ARU MLR MLR
comp=Z,8μm,24.0s
**ARU Arti 82.51 331** P **P** **10 14 43.0 -0.6**
ARU IAmb IAmb 10 14 44.6
comp=Z,410nm,1.2s
ARU IAMs_20 IAMs_20 10 54 04.6
comp=Z,7μm,22.0s
**MNGR Mingechevir, A 83.04 313** P **P** **10 14 47.6 +0.8**
**SEKA Sheki 83.10 314** P **P** **10 14 47.8 +0.6**
**CNG Changalane 83.28 245**⇑*i*P **P** **10 14 50.1 +1.8**
CNG IAmb IAmb 10 15 01.3
comp=Z,84nm,1.5s
**CNG Changalane 83.28 245** *i* P **P** **10 14 49.3 +0.9**
**CNG Changalane 83.28 245** *i* P **P** **10 14 49.3 +0.9**
**TETE Tete 83.34 255** *e*P **P** **10 14 51.7 +2.8**
TETE IAmb IAmb 10 14 52.7
comp=Z,229nm,1.0s
**MAK Makhachkala 83.46 315** *e*P **P** **10 14 48.6 -0.3**
MAK *e* 10 17 59.1
MAK *e*PPP PPP 10 19 48.8
MAK *e*S **S** **10 25 06.6 -0.1**
MAK pmax pmax
comp=Z,707nm,1.4s
**GANJ Ganja 83.55 313** P **P** **10 14 50.2 +0.7**
**POGA Pongola 83.57 243** *e*P **P** **10 14 51.6 +1.7**
POGA IAmb IAmb 10 15 03.2
comp=Z,458nm,1.4s
**ZKTA Zakatala 83.65 314** P **P** **10 14 51.1 +1.2**
**NAX Nakhchivan 83.70 311** P **P** **10 14 50.4 +0.1**
**MAGG Maguga Dam 84.13 245** *e*P **P** **10 14 55.0 +2.2**
MAGG IAmb IAmb 10 15 05.9
comp=Z,70nm,1.0s
**BILL Bilibino 84.25 16***d i*P **P** **10 14 52.3 -0.1**
BILL *i* 10 18 06.1
BILL *e*PPP PPP 10 19 59.8
BILL *i*S S 10 25 00.5 -13
BILL *i*SS **SS** **10 30 40.8 -3.3**
BILL pmax pmax
comp=Z,281nm,2.5s
BILL MLR MLR
comp=Z,1μm,18.0s
**BILL Bilibino 84.25 16** P **P** **10 14 52.0 -0.3**
**MOPA Mopani 84.36 247** *e*P **P** **10 14 55.5 +1.5**
MOPA IAmb IAmb 10 15 00.7
comp=Z,16nm,0.9s
**MOPA Mopani 84.36 247** *e*P **P** **10 14 55.8 +1.8**
**MOPA Mopani 84.36 247** *i*P **P** **10 14 54.3 +0.3**
**MOPA Mopani 84.36 247** *i*P **P** **10 14 54.3 +0.3**
**GNI Garni 84.55 312** LR LR 10 57 01.4
comp=Z,3μm,21.2s,baz=110,slow=39
**GNI Garni 84.55 312***ce*P **P** **10 14 55.6 +0.9**
GNI pmax pmax
comp=Z,470nm,2.5s
**GNI Garni 84.55 312** P **P** **10 14 55.1 +0.4**
GNI IAmb IAmb 10 15 24.9
comp=Z,371nm,1.1s
**GNI Garni 84.55 312** P **P** **10 14 56.2 +1.4**
**GNI Garni 84.55 312** P **P** **10 14 55.7 +0.9**
**LODK Lodwar 84.61 274** P **P** **10 14 56.5 +1.0**
**LODK Lodwar 84.61 274** P **P** **10 14 57.5 +2.0**
SNR=61
**NWCL Newcastle 85.11 243**⇑*i*P **P** **10 14 60.0 +2.1**
NWCL IAmb IAmb 10 15 00.5
comp=Z,49nm,0.9s
**CRLN Carolina, Mapu 85.25 245** *e*P **P** **10 15 00.7 +2.0**
**GEVA Gevas 85.28 310** P **P** **10 14 59.0 +0.6**
**SIRT Sirnak 85.53 309** P **P** **10 15 00.5 +0.9**
**MSNA Messina 85.78 248**⇑*i*P **P** **10 15 03.2 +2.0**
MSNA IAmb IAmb 10 15 14.2
comp=Z,338nm,1.8s
**MSNA Messina 85.78 248** *i* P **P** **10 15 02.8 +1.6**
**MSNA Messina 85.78 248** *i* P **P** **10 15 02.8 +1.6**
**AKH Akhalkalaki 85.82 313**⇑P **P** **10 15 03.0 +1.9**
**AKH Akhalkalaki 85.82 313** P **P** **10 15 03.0 +1.9**
**KARS Kars 85.90 312** P **P** **10 15 02.6 +1.1**
KARS pmax pmax
comp=Z,5μm,1.8s
**KARS Kars 85.90 312** P **P** **10 15 02.6 +1.1**
**ZEI Tsey 85.93 314** *e*P **P** **10 14 59.2 -2.4**
ZEI pmax pmax
comp=Z,241nm,1.0s
**GURO Guroymak-BITLI 86.12 310** P **P** **10 15 03.9 +1.3**
**ONI Oni 86.19 314** P **P** **10 15 04.5 +1.8**
ONI pmax pmax
comp=Z,265nm,1.2s
**ONI Oni 86.19 314** P **P** **10 15 04.5 +1.8**
ONI IAmb IAmb 10 15 29.3
comp=Z,265nm,1.2s
**NCK Nalchik 86.34 315***c i*P **P** **10 15 04.3 +0.9**
NCK pmax pmax
comp=Z,88nm,1.0s
**BELG Belogornoye 86.60 324** LR LR 10 58 49.6
comp=Z,6μm,21.4s,baz=113,slow=39
**BELG Belogornoye 86.60 324***c i*P **P** **10 15 03.5 -0.9**
BELG pmax pmax
comp=Z,313nm,1.0s
**KIP Kipapa 86.71 68***ce*P **P** **10 15 03.9 -1.7**
KIP pmax pmax
comp=Z,530nm,2.5s
**MARD Mardin 86.76 308** P **P** **10 15 06.1 +0.4**
MARD IAmb IAmb 10 15 16.8
comp=Z,167nm,0.8s
**SLR Silverton 86.84 245** *e*P **P** **10 15 07.8 +1.3**
SLR IAmb IAmb 10 15 19.1
comp=Z,385nm,1.5s
**SLR Silverton 86.84 245** *e*P **P** **10 15 07.4 +1.0**
**NIKH Nikolski High 86.87 35** P **P** **10 15 04.3 -1.4**
NIKH IAmb IAmb 10 15 20.2
comp=Z,274nm,1.4s
**NIKH Nikolski High 86.87 35** P **P** **10 15 04.9 -0.8**
baz=250
**NEY Neytrino 86.89 315***c i*P **P** **10 15 07.6 +1.3**
NEY pmax pmax
comp=Z,164nm,2.3s
**KBZ Khabaz 86.90 315** P **P** **10 15 07.0 +1.0**
comp=Z,90nm,0.9s,baz=103,slow=2.9,SNR=68
KBZ PKKPbc **PKKPbc** **10 33 02.4 +1.2**
comp=Z,9.8nm,0.8s,baz=259,slow=0.9,SNR=13
KBZ LR LR 11 00 24.7
comp=Z,2μm,20.6s,baz=108,slow=40
**KBZ Khabaz 86.90 315***ce*P **P** **10 15 06.6 +0.6**
KBZ pmax pmax
comp=Z,102nm,0.9s
**SHA1 Shidzhatmaz 87.07 315***c i*P **P** **10 15 07.5 +0.3**
**KVAR Kislovodsk Arr 87.10 315** LR LR 10 59 53.9
comp=Z,2μm,20.2s,baz=54,slow=40
**KIV Kislovodsk 87.11 315**⇑P **P** **10 15 08.9 +1.6**
**KIV Kislovodsk 87.11 315** *e*P **P** **10 15 07.0 -0.2**
KIV *e* 10 18 30.7

KIV *e* 10 25 31.0
KIV *eSS* SS 10 31 30.0 +2.6
KIV pmax pmax
comp=Z,289nm,2.9s
KIV pmax pmax
comp=Z,63nm,1.0s
**KIV Kislovodsk 87.11 315** P **P** **10 15 07.3 +0.1**
**KIV Kislovodsk 87.11 315** P **P** **10 15 07.8 +0.6**
KIV P **P** **10 15 07.8 +0.6**
**KIV Kislovodsk 87.11 315** *i* P **P** **10 15 07.6 +0.4**
SNR=44
**GOF Gofitskoye 87.17 316**⇑ *i* P **P** **10 15 08.1 +0.7**
GOF *eS* **SKSac** **10 25 32.0 +1.3**
GOF pmax pmax
comp=Z,593nm,1.2s
GOF smax smax
comp=N,271nm,1.5s
GOF smax smax
comp=E,278nm,1.4s
**CHVG Ch'k'valeri 87.19 314**⇑ P **P** **10 15 10.1 +2.6**
**BLWY Bulavayo 87.42 250**⇑ *i* P **P** **10 15 11.2 +1.8**
BLWY IAmb IAmb 10 15 15.2
comp=Z,888nm,1.0s
**BLWY Bulavayo 87.42 250** *i* P **P** **10 15 12.7 +3.3**
**BLWY Bulavayo 87.42 250** *i* P **P** **10 15 12.7 +3.3**
**PRYS Parys 87.46 243** *eP* **P** **10 15 10.0 +0.6**
PRYS IAmb IAmb 10 15 21.7
comp=Z,387nm,1.9s
**PRYS Parys 87.46 243** *eP* **P** **10 15 11.3 +1.8**
**MATP Matopo 87.48 250** P **P** **10 15 10.5 +0.9**
comp=Z,52nm,0.9s,baz=105,slow=8.9,SNR=84
**MATP Matopo 87.48 250** *i* P **P** **10 15 13.2 +3.6**
**MATP Matopo 87.48 250** *i* P **P** **10 15 13.2 +3.6**
**WDLM Western Deep L 87.49 244** *eP* **P** **10 15 12.0 +2.3**
WDLM IAmb IAmb 10 15 22.4
comp=Z,196nm,1.5s
**SPIA Saint Paul Isl 87.63 31** P **P** **10 15 09.1 -0.2**
baz=248
**KIRV Kirov 87.89 331** LR LR 10 58 50.9
comp=Z,8μm,21.1s,baz=119,slow=39
**KIRV Kirov 87.89 331** *ceP* **P** **10 15 09.1 -1.3**
**SOE Somerset East 88.03 237** *eP* **P** **10 15 15.3 +3.3**
SOE IAmb IAmb 10 15 21.9
comp=Z,43nm,0.9s
**KSR Koster 88.05 244** *eP* **P** **10 15 14.6 +2.3**
KSR IAmb IAmb 10 15 44.0
comp=Z,78nm,0.9s
**PAE Paea 88.18 107** *eP* **P** **10 15 16.5 +3.7**
comp=Z,60nm,1.3s
**PPT2 Papeete2 88.20 107** *eP* **P** **10 15 16.9 +3.9**
comp=Z,212nm,1.5s
**PPT2 Papeete2 88.20 107** *eS* **S** **10 25 55.2 +0.9**
comp=Z,11μm,27.8s
**PPT2 Papeete2 88.20 107** *e* LQ LQ 10 39 32.9
comp=Z,16μm,41.2s
PPT2 *e* LR LR 10 43 20.0
comp=Z,12μm,25.2s
**PPT Papeete 88.20 107** P **P** **10 15 14.0 +1.0**
comp=Z,73nm,1.0s,baz=320,slow=3.1,SNR=7.9
PPT LR LR 10 51 14.3
comp=Z,2μm,21.3s,baz=262,slow=33
**PPT Papeete 88.20 107** P **P** **10 15 14.0 +1.0**
**KTUT Trabzon 88.42 312**⇑ P **P** **10 15 15.4 +1.9**
**TVO Taravao 88.47 108** *eP* **P** **10 15 18.0 +3.7**
comp=Z,237nm,1.6s
**UNV Unalaska Valle 88.49 35** P **P** **10 15 13.7 +0.2**
UNV IAmb IAmb 10 15 27.9
comp=Z,111nm,1.2s
**UNV Unalaska Valle 88.49 35** P **P** **10 15 12.7 -0.7**
baz=251
**MBAR Mbarara 88.50 270** P **P** **10 15 15.4 +0.8**
comp=Z,168nm,1.0s,baz=86,slow=6.8,SNR=117
MBAR LR LR 10 49 21.5
comp=Z,4μm,21.8s,baz=80,slow=32
**MBAR Mbarara 88.50 270** *c i* P **P** **10 15 15.2 +0.5**
MBAR pmax pmax
comp=Z,202nm,1.0s
**MBAR Mbarara 88.50 270** P **P** **10 15 15.5 +0.8**
MBAR IAmb IAmb 10 15 18.2
comp=Z,240nm,1.1s
**MBAR Mbarara 88.50 270** IAMs_20 IAMs_20 10 48 48.4
comp=Z,5μm,22.0s
**MBAR Mbarara 88.50 270** P **P** **10 15 16.2 +1.5**
MBAR P **P** **10 15 16.2 +1.5**
**MBAR Mbarara 88.50 270** *eP* **P** **10 15 16.7 +2.0**
MBAR *eS* **SKSac** **10 25 44.6 +4.1**
MBAR IAMs_20 IAMs_20 10 26 19.9
comp=Z,4μm,14.0s
**KROM Kromhout 88.55 236** *eP* **P** **10 15 17.4 +3.1**
**LSZ Lusaka 88.60 255** P **P** **10 15 17.0 +2.0**
comp=Z,180nm,1.1s,baz=107,slow=4.0,SNR=122
LSZ LR LR 10 50 44.8
comp=Z,8μm,20.5s,baz=116,slow=33
**UWE Uwekahuna 88.84 70** P **P** **10 15 14.6 -1.5**
**RIM Rim 88.85 70** P **P** **10 15 15.3 -0.8**
**AKUT Akutan 88.99 35** P **P** **10 15 15.5 -0.3**
**BOSA Boshof 89.01 241** P **P** **10 15 17.2 +0.4**
comp=Z,30nm,0.9s,baz=106,slow=5.2,SNR=29
BOSA PKKPbc **PKKPbc** **10 32 57.0 +1.8**
comp=Z,5.7nm,1.1s,baz=60,slow=3.0,SNR=4.7
BOSA LR LR 10 50 15.4
comp=Z,5μm,19.3s,baz=100,slow=32
**BOSA Boshof 89.01 241**⇑ *i* P **P** **10 15 17.4 +0.7**
BOSA IAmb IAmb 10 15 43.5
comp=Z,77nm,1.2s
**BOSA Boshof 89.01 241** *eP* **P** **10 15 18.1 +1.3**
**BOSA Boshof 89.01 241** P **P** **10 15 17.5 +0.7**
BOSA pmax pmax
comp=Z,40nm,0.9s
**BOSA Boshof 89.01 241** P **P** **10 15 17.4 +0.7**
**BOSA Boshof 89.01 241** *i* P **P** **10 15 19.2 +2.5**
**BOSA Boshof 89.01 241** *i* P **P** **10 15 19.2 +2.5**
**SOC Sochi 89.09 314** *eP* **P** **10 15 14.2 -2.3**
SOC *e*SP* **pP** **10 15 28.7 -2.5**
SOC *e* 10 18 43.9
SOC *e* PPP PPP 10 20 40.2
SOC *eS* **SKSac** **10 25 40.8 -1.5**
SOC *i *SS* **S** **10 25 59.4 -2.1**
SOC *eSS* **SS** **10 31 51.0 -5.1**
SOC *eSSS* SSS 10 35 27.3
SOC pmax pmax
comp=Z,90nm,1.1s
**SWZ Schweizer 89.20 243** *eP* **P** **10 15 19.4 +1.7**
SWZ IAmb IAmb 10 15 30.5
comp=Z,282nm,1.7s
**LBTB Lobatse 89.35 245** LR LR 10 48 45.4
comp=Z,15μm,21.2s,baz=105,slow=31
**LBTB Lobatse 89.35 245**⇑ *eP* **P** **10 15 20.1 +1.7**
LBTB IAmb IAmb 10 15 31.3
comp=Z,234nm,1.5s
**LBTB Lobatse 89.35 245** *eP* **P** **10 15 20.2 +1.8**
**LBTB Lobatse 89.35 245** P **P** **10 15 19.6 +1.2**
LBTB pmax pmax
comp=Z,220nm,1.5s
**LBTB Lobatse 89.35 245** P **P** **10 15 19.6 +1.2**
LBTB IAmb IAmb 10 15 31.6
comp=Z,220nm,1.5s
**LBTB Lobatse 89.35 245** *i* P **P** **10 15 22.4 +4.0**
**LBTB Lobatse 89.35 245** *i* P **P** **10 15 22.4 +4.0**
**JAWL J.Aulia 89.45 285** *i* P **P** **10 15 20.9 +2.0**
JAWL *i* 10 15 26.4
baz=351,slow=14
JAWL *i* S **PP** **10 18 53.4 +2.7**
**GAMB Gambell 89.47 25** P **P** **10 15 18.2 +0.4**
**GAMB Gambell 89.47 25** P **P** **10 15 18.2 +0.4**
baz=247,SNR=14
**MEH Mehetia 89.57 108** *eP* **P** **10 15 22.5 +3.1**
comp=Z,119nm,1.2s
**GHAJ Ghor Haditha 89.63 302** P **P** **10 15 19.5 +0.2**
GHAJ IAmb IAmb 10 15 42.4
comp=Z,151nm,0.9s
GHAJ IAMs_20 IAMs_20 10 55 11.3
comp=Z,7μm,21.0s
**VRH Novokhopyorsk 89.72 322** *eP* **P** **10 15 18.7 -0.5**
VRH *eS* **SKSac** **10 25 41.9 -3.7**
VRH pmax pmax
comp=Z,190nm,0.9s
VRH smax smax
comp=N,800nm,1.4s
VRH MLR MLR
comp=Z,6μm,22.0s
**EIL Elat 89.83 300** LR LR 10 58 20.9
comp=Z,3μm,19.1s,baz=106,slow=37
**SHBL Chebaa 89.88 304** *eP* **P** **10 15 22.5 +1.8**
**HWQ Hawqa 89.90 305** *eP* **P** **10 15 22.1 +1.4**

**BHL Bhannes 90.07 304** *eP* **P** **10 15 23.1 +1.6**
**MMAI Mount Meron Ar 90.10 303** LR LR 11 01 06.4
comp=Z,5μm,18.8s,baz=262,slow=39
**PMOR Pomariorio Ree 90.22 105** *eP* **P** **10 15 26.2 +3.8**
comp=Z,364nm,1.2s
**VAH Vaihoa 90.44 105** *eP* **P** **10 15 27.0 +3.6**
comp=Z,374nm,1.4s
**FALS False Pass 90.52 34** P **P** **10 15 22.4 -0.4**
**FALS False Pass 90.52 34** P **P** **10 15 22.1 -0.8**
baz=254
**SNAA Sanae 90.54 196** P **P** **10 15 23.1 +0.2**
**SNAA Sanae 90.54 196** LR LR 10 51 36.5
comp=Z,25μm,21.7s,baz=102,slow=33
**SNAA Sanae 90.54 196** *ceP* **P** **10 15 22.7 -0.2**
SNAA pmax pmax
comp=Z,25nm,1.0s
**SNAA Sanae 90.54 196** P **P** **10 15 22.9 -0.1**
**TOKA Tokat 90.71 311** P **P** **10 15 25.0 +0.7**
TOKA IAmb IAmb 10 15 42.3
comp=Z,110nm,1.4s
**PRGR Permogore 90.73 333** *eP* **P** **10 15 22.5 -1.2**
PRGR 10 18 54.8
PRGR *eS* **SKSac** **10 25 51.8 +0.8**
PRGR pmax pmax
comp=Z,156nm,1.0s
**BNN Bunyan 90.89 309** P **P** **10 15 25.3 0.0**
BNN IAmb IAmb 10 15 42.5
comp=Z,128nm,1.1s
**GRAN Grantham 90.92 237** *eP* **P** **10 15 29.0 +3.4**
GRAN IAmb IAmb 10 15 40.6
comp=Z,13nm,0.8s
**GRAN Grantham 90.92 237** *eP* **P** **10 15 26.7 +1.1**
**VORD Divnogorie 91.14 321** *eP* **P** **10 15 25.1 -0.8**
VORD *eS* **SKSac** **10 25 54.2 +0.4**
VORD pmax pmax
comp=Z,60nm,1.0s
VORD smax smax
comp=E,100nm,3.3s
**VSR Storozhevoye 91.28 322** *eP* **P** **10 15 25.1 -1.4**
VSR *eS* **SKSac** **10 25 55.2 +0.6**
VSR pmax pmax
comp=Z,140nm,0.9s
VSR smax smax
comp=N,960nm,12.1s
VSR MLR MLR
comp=Z,4μm,22.0s
**VORR Voronezh 91.36 322** *eP* **P** **10 15 26.6 -0.3**
VORR pmax pmax
comp=Z,255nm,1.0s
**BELA Belgrano 2 91.48 185** P **P** **10 15 27.1 0.0**
**TNA Tin City 91.63 23** P **P** **10 15 27.9 +0.1**
**TNA Tin City 91.63 23** P **P** **10 15 28.1 +0.2**
baz=250,SNR=12
**LPSR Galich'ya Gora 91.74 323** *eP* **P** **10 15 28.3 -0.3**
LPSR *eS* **SKSac** **10 25 54.2 -3.0**
LPSR pmax pmax
comp=Z,220nm,1.0s
LPSR smax smax
comp=E,1μm,8.3s
**MATJ Matjiesfontein 92.03 236** *eP* **P** **10 15 33.5 +2.8**
MATJ IAmb IAmb 10 15 53.9
comp=Z,96nm,1.1s
**SUR Sutherland 92.03 237** P **P** **10 15 31.6 +0.8**
comp=Z,52nm,1.1s,baz=89,slow=1.5,SNR=14
SUR LR LR 10 50 43.8
comp=Z,8μm,20.8s,baz=104,slow=32
**CSS Mathiatis 92.15 305** P **P** **10 15 30.7 -0.3**
CSS IAmb IAmb 10 15 59.4
comp=Z,98nm,1.1s
CSS IAMs_20 IAMs_20 10 58 46.0
comp=Z,6μm,22.0s
**VNA2 Neumayer--Watz 92.17 195** P **P** **10 15 29.2 -1.2**
baz=109,slow=3.5
**SDPT Sand Point 92.28 34** P **P** **10 15 30.3 -0.7**
SDPT IAmb IAmb 10 15 31.4
comp=Z,120nm,0.8s
**SDPT Sand Point 92.28 34** P **P** **10 15 29.6 -1.4**
baz=256
**ANM Nome 92.34 25** P **P** **10 15 31.3 +0.1**
ANM pmax pmax
comp=Z,42nm,1.1s
**ANM Nome 92.34 25** P **P** **10 15 31.3 +0.1**
**ANM Nome 92.34 25** P **P** **10 15 31.5 +0.3**
baz=252,SNR=30
**ELIM Elim 92.41 235** *eP* **P** **10 15 36.0 +3.7**
ELIM IAmb IAmb 10 15 48.1
comp=Z,31nm,0.9s
**UPI Upington 92.52 241** *eP* **P** **10 15 34.9 +1.9**
UPI IAmb IAmb 10 15 55.4
comp=Z,46nm,1.3s
**VNA3 Neumayer Olymp 92.55 195** P **P** **10 15 31.4 -0.8**
**VNA1 Neumayer--Stat 92.57 195** P **P** **10 15 32.4 +0.2**
**CHNA Chernabura Isl 92.65 35** P **P** **10 15 30.9 -1.9**
baz=257
**KEIM Keimoes 92.69 240**⇑ *i* P **P** **10 15 36.9 +3.1**
KEIM IAmb IAmb 10 15 38.7
comp=Z,48nm,1.1s
**BR131 Keskin Array S 92.74 310** P **P** **10 15 32.8 -1.0**
BR131 pmax pmax
comp=Z,55nm,1.1s
**BR131 Keskin Array S 92.74 310** P **P** **10 15 32.8 -1.0**
**BR131 Keskin Array S 92.74 310** P **P** **10 15 33.2 -0.6**
SNR=14
BR131 P **P** **10 15 33.2 -0.6**
SNR=14
**BRTR Keskin Array B 92.74 310** P **P** **10 15 33.5 -0.3**
comp=Z,22nm,0.9s,baz=123,slow=4.6,SNR=43
BRTR PP **PP** **10 19 19.6 +3.2**
comp=Z,18nm,1.1s,baz=113,slow=4.0,SNR=4.1
BRTR PKKPbc **PKKPbc** **10 32 47.9 +1.3**
comp=Z,5.2nm,0.9s,baz=264,slow=2.6,SNR=11
BRTR PKPPKP **P'P'df** **10 40 59.4 +3.4**
comp=Z,0.4nm,0.6s,baz=114,slow=3.0,SNR=3.6
BRTR LR LR 11 00 47.8
comp=Z,3μm,21.1s,baz=114,slow=38
**BRTR Keskin Array B 92.74 310** P **P** **10 15 33.0 -0.8**
**BZK Bozkurt 92.86 312**⇑ P **P** **10 15 34.9 +0.8**
**BZK Bozkurt 92.86 312** P **P** **10 15 33.6 -0.5**
**CVNA Calvinia 93.10 238**⇑ *i* P **P** **10 15 38.5 +2.8**
CVNA IAmb IAmb 10 15 40.6
comp=Z,67nm,1.1s
**MOS Moscow 93.19 326** *eP* **P** **10 15 32.0 -3.2**
MOS *e* 10 15 51.3
MOS *e* 10 19 18.0
MOS *e* 10 21 22.2
MOS *eS* **SKSac** **10 26 03.1 -2.0**
MOS *e* 10 26 34.2
MOS *eP* PS 10 27 59.2 +1.8
MOS pmax pmax
comp=Z,240nm,1.3s
MOS pmax pmax
comp=Z,800nm,2.3s
**AUGR Augrabies 93.25 240** *eP* **P** **10 15 38.3 +1.9**
**SIM Simferopol' 93.31 315** *eP* **P** **10 15 35.2 -0.9**
SIM *e* 10 19 20.0
SIM *e* 10 26 08.0
SIM *eS* **S** **10 26 41.0 +1.2**
SIM pmax pmax
comp=Z,102nm,1.2s
SIM pmax pmax
comp=Z,69nm,1.3s
**KLMR Klimovskoe 93.35 331** *eP* **P** **10 15 31.8 -4.1**
KLMR *eS* **SKSac** **10 26 01.8 -4.0**
KLMR pmax pmax
comp=Z,405nm,1.2s
**KLMR Klimovskoe 93.35 331** *eP* **P** **10 15 31.8 -4.1**
KLMR AMP 10 15 36.7
comp=Z,405nm,1.2s
KLMR *eP* PP 10 19 10.6 -10
KLMR *eS* **SKSac** **10 26 01.9 -3.9**
KLMR *eS* **SKSac** **10 26 01.9 -3.9**
KLMR LQ LQ 10 49 35.5
KLMR LQ LQ 10 49 35.5
KLMR LR LR 10 55 32.4
KLMR AMP 11 02 11.5
comp=Z,5μm,19.8s
**ANTO Ankara 93.41 310** P **P** **10 15 36.7 -0.1**
ANTO pmax pmax
comp=Z,33nm,1.0s
**ANTO Ankara 93.41 310** P **P** **10 15 36.7 -0.1**
**CHGN Chignik 93.62 34** P **P** **10 15 36.2 -1.0**
baz=258
**OBN Obninsk 93.65 325**⇑ P **P** **10 15 37.2 -0.2**
**OBN Obninsk 93.65 325** LR LR 11 03 57.0
comp=Z,745nm,18.4s,baz=98,slow=40

**OBN Obninsk 93.65 325** *c i* P **P** **10 15 36.9 -0.5**
OBN *i* 10 19 23.9
OBN *eSSS* SSS 10 36 37.4
OBN pmax pmax
comp=Z,303nm,1.3s
OBN MLR MLR
comp=Z,8μm,23.0s
**OBN Obninsk 93.65 325** P **P** **10 15 37.2 -0.2**
OBN IAMs_20 IAMs_20 11 05 12.8
comp=Z,5μm,22.0s
**RDOG Red Dog Mine 94.27 22** P **P** **10 15 40.4 +0.5**
RDOG IAmb IAmb 10 15 42.1
comp=Z,164nm,1.5s
**RDOG Red Dog Mine 94.27 22** P **P** **10 15 40.5 +0.5**
baz=255,SNR=20
**MDUB Mudurnu 94.71 310** P **P** **10 15 42.6 -0.2**
MDUB IAmb IAmb 10 15 58.0
comp=Z,185nm,1.0s
**ISP Isparta 94.84 307** P **P** **10 15 43.3 -0.2**
ISP pmax pmax
comp=Z,55nm,1.2s
**ISP Isparta 94.84 307** P **P** **10 15 43.3 -0.2**
**CHIR Chirikof Islan 95.07 34** P **P** **10 15 43.6 -0.3**
baz=260
**ELL Elmali 95.18 306** P **P** **10 15 44.6 -0.4**
ELL pmax pmax
comp=Z,204nm,1.2s
**ELL Elmali 95.18 306** P **P** **10 15 44.6 -0.4**
ELL IAmb IAmb 10 16 07.9
comp=Z,204nm,1.2s
**BORA Eskisehir 95.19 309** P **P** **10 15 44.6 -0.3**
**P18K Big Mountain, 95.84 31** P **P** **10 15 46.3 -1.1**
baz=261
**SVW2 Sparrevohn 95.94 29** P **P** **10 15 47.8 0.0**
**GCSA Galena City Sc 95.94 25** P **P** **10 15 47.6 -0.1**
baz=260
**SII Sitkinak Islan 95.98 34** IAMs_20 IAMs_20 10 54 57.7
comp=Z,5μm,22.0s
**SII Sitkinak Islan 95.98 34** P **P** **10 15 48.1 +0.1**
baz=262
**TTA Tatalina 96.02 27** P **P** **10 15 47.7 -0.5**
TTA pmax pmax
comp=Z,69nm,1.3s
**TTA Tatalina 96.02 27** P **P** **10 15 47.7 -0.5**
**TTA Tatalina 96.02 27** P **P** **10 15 48.2 0.0**
baz=261,SNR=24
**O19K Port Alsworth 96.42 30** P **P** **10 15 48.9 -1.0**
O19K IAmb IAmb 10 16 04.3
comp=Z,164nm,1.9s
**O19K Port Alsworth 96.42 30** P **P** **10 15 49.2 -0.7**
baz=262,SNR=5.0
**N19K Bonanza Creek 96.42 29** P **P** **10 15 49.7 -0.4**
N19K IAmb IAmb 10 15 51.6
comp=Z,108nm,0.9s
**N19K Bonanza Creek 96.42 29** P **P** **10 15 50.2 +0.1**
baz=262
**L19K White Mountain 96.44 28** P **P** **10 15 50.0 -0.1**
L19K IAmb IAmb 10 15 51.7
comp=Z,83nm,1.1s
**L19K White Mountain 96.44 28** P **P** **10 15 50.3 +0.2**
baz=262,SNR=26
**OHAK Old Harbor 96.56 33** P **P** **10 15 50.3 -0.3**
baz=262
**Q19K Cape Douglas, 96.59 31** P **P** **10 15 50.7 -0.1**
baz=262
**M19K Big River Lodg 96.62 28** P **P** **10 15 50.8 0.0**
**M19K Big River Lodg 96.62 28** P **P** **10 15 51.0 +0.2**
baz=262
**LVZ Lovozero 96.79 338** *ceP* **P** **10 15 50.8 -0.7**
LVZ pmax pmax
comp=Z,192nm,1.1s
**LVZ Lovozero 96.79 338** P **P** **10 15 50.8 -0.7**
LVZ IAmb IAmb 10 15 52.3
comp=Z,188nm,1.1s
LVZ IAMs_20 IAMs_20 11 02 54.6
comp=Z,7μm,22.0s
**L20K Farewell, AK 96.93 28** P **P** **10 15 52.4 +0.2**
baz=262
**K20K Telida 96.95 27** P **P** **10 15 52.4 0.0**
K20K IAmb IAmb 10 15 53.5
comp=Z,62nm,1.1s
**K20K Telida 96.95 27** P **P** **10 15 52.6 +0.2**
baz=262
**KDAK Kodiak Island 97.00 33** P **P** **10 15 51.9 -0.7**
comp=Z,29nm,1.0s,baz=270,slow=7.1,SNR=5.4
KDAK LR LR 10 54 04.5
comp=Z,2μm,21.1s,baz=279,slow=32
**KDAK Kodiak Island 97.00 33** IAMs_20 IAMs_20 10 54 47.7
comp=Z,4μm,21.0s
**KDAK Kodiak Island 97.00 33** IAmb IAmb 10 15 53.1
comp=Z,124nm,1.4s
**KDAK Kodiak Island 97.00 33** P Pdif 10 15 52.6 -0.1
baz=263
**J20K Nowinta River 97.03 26** P **P** **10 15 52.0 -0.6**
J20K IAmb IAmb 10 15 54.5
comp=Z,145nm,1.6s
**J20K Nowinta River 97.03 26** P Pdif 10 15 53.0 +0.3
baz=262
**A21K Barrow 97.09 19** P Pdif 10 15 53.5 +0.6
baz=261
**APA Apatity 97.21 337**⇓ *i* P **P** **10 15 51.0 -2.4**
APA *i* 10 19 53.0
APA *i* 10 26 17.0
APA *i* S **S** **10 27 05.0 -7.7**
APA *i* PS **PS** **10 28 44.0 +2.9**
APA *i* PPS PPS 10 29 15.0
APA pmax pmax
comp=Z,63nm,1.0s
**RSO Redoubt South 97.22 30** P **P** **10 15 53.1 -0.7**
**MILM Milestii Mici 97.25 316** *c i* P **P** **10 15 53.0 -1.0**
MILM *e* 10 19 48.0
MILM *i* 10 26 28.0
MILM *eS* **S** **10 27 14.0 +0.1**
MILM *eP* **PS** **10 28 32.0 -10**
MILM pmax pmax
comp=Z,300nm,2.3s
**KIS Kishinev 97.25 316** *eP* **P** **10 15 53.0 -1.0**
**KIS Kishinev 97.25 316** *eP* PP 10 20 00.0 +8.9
KIS *eSKS* **SKSac** **10 26 28.0 +0.8**
KIS *eSKKS* **SKKSac** **10 26 46.0 -8.5**
KIS *eS* **S** **10 27 13.0 -1.0**
KIS *eL* L 10 58 26.0
KIS LRM MLR 11 07 45.0
comp=Z,800nm,23.0s
**KIS Kishinev 97.25 316** *eP* **P** **10 15 53.0 -1.0**
KIS *e* 10 26 28.0
KIS *eS* **S** **10 27 13.0 -1.0**
**TIRR Tirgusor 97.26 314**⇑ P **P** **10 15 54.1 -0.1**
**TIRR Tirgusor 97.26 314** P **P** **10 15 52.9 -1.2**
TIRR pmax pmax
comp=Z,91nm,1.1s
**TIRR Tirgusor 97.26 314** IAmb IAmb 10 15 55.4
comp=Z,167nm,1.3s
**TPGR Topolog 97.30 314**⇑ P **P** **10 15 54.0 -0.4**
**AKASG Malin Array Be 97.38 320** P **P** **10 15 53.4 -1.1**
comp=Z,32nm,0.9s,baz=80,slow=4.5,SNR=48
AKASG PP **PP** **10 19 51.9 -0.1**
comp=Z,28nm,1.1s,baz=82,slow=7.0,SNR=6.1
AKASG PKKPbc **PKKPbc** **10 32 33.6 -0.7**
comp=Z,0.4nm,0.4s,baz=274,slow=3.5,SNR=5.1
AKASG LR LR 11 06 41.3
comp=Z,4μm,19.4s,baz=92,slow=40
**AKASG Malin Array Be 97.38 320** P **P** **10 15 53.4 -1.1**
**AKBB Malin Array Si 97.38 320** *ceP* **P** **10 15 53.5 -1.0**
**AKBB Malin Array Si 97.38 320** P **P** **10 15 53.5 -1.0**
**IMAR Indian Mountai 97.41 24** P Pdif 10 15 54.3 -0.1
**CFR Carcaliu 97.53 314**⇑ P **P** **10 15 54.6 -0.8**
**SPU Mount Spurr 97.64 29** P **P** **10 15 54.5 -1.1**
**VLDR Vladesti 97.64 315**⇑ P Pdif 10 15 56.7 +0.8
**PUL Pulkovo 97.68 329** *ceP* **P** **10 15 55.8 +0.2**
PUL pmax pmax
comp=Z,321nm,1.0s
PUL MLR MLR
comp=Z,9μm,25.0s
**SORM Soroca 97.69 317**⇑ P **P** **10 15 55.9 -0.1**
**SORM Soroca 97.69 317** P **P** **10 15 55.8 -0.1**
**PPLA Purkeypile 97.75 28** P **P** **10 15 55.5 -0.6**
PPLA IAmb IAmb 10 15 57.2
comp=Z,158nm,1.6s
**PPLA Purkeypile 97.75 28** P **P** **10 15 55.5 -0.6**
baz=264,SNR=12
**H21K Melozitna Rive 97.77 25** IAmb IAmb 10 15 58.0
comp=Z,113nm,1.6s
**H21K Melozitna Rive 97.77 25** P Pdif 10 15 56.4 +0.4
baz=264,SNR=31

TSUM **Tsumeb** 97.79 249 P Pdif 10 15 58.1 +0.7
comp=Z,16nm,1.1s,baz=111,slow=6.1,SNR=12
TSUM LR LR 10 56 48.3
comp=Z,10µm,18.8s,baz=116,slow=33
**TSUM Tsumeb 97.79 249** *eP* Pdif 10 15 59.9 +2.5
**CHUM Lake Minchumin 97.79 27** P Pdif 10 15 56.3 +0.1
baz=264,SNR=33
**CAST Castle Rocks 97.85 27** P **P** **10 15 56.0 -0.4**
**CAST Castle Rocks 97.85 27** P **P** **10 15 55.9 -0.5**
baz=264,SNR=28
**CNPM China Poot 97.89 31** IAmb IAmb 10 15 57.2
comp=Z,74nm,1.0s
**CAPN Captain Cook N 98.04 30** P Pdif 10 15 57.1 -0.1
baz=265
**I21K Tanana 98.06 25** P Pdif 10 15 57.5 +0.2
baz=265,SNR=15
**BRLK Bradley Lake 98.08 31** P **P** **10 15 57.0 -0.5**
BRLK IAmb IAmb 10 15 58.3
comp=Z,111nm,1.1s
**BRSE Bradley Lake S 98.16 31** P **P** **10 15 56.8 -1.0**
baz=265,SNR=5.5
**PANC Panciu 98.29 315** ⇑P Pdif 10 15 59.6 +0.8
**KTH Kantishna Hill 98.38 27** IAmb IAmb 10 15 59.6
comp=Z,66nm,1.1s
**BPAW Bear Paw Mtn. 98.40 26** Pdiff **P** **10 15 58.2 -0.7**
baz=265
**MNK Minsk 98.54 324** *i* P **P** **10 15 59.7 +0.1**
MNK *i* 10 20 01.0
MNK *i* PPP PPP 10 22 06.6
MNK *i* S **SKSac** **10 26 35.0 +1.6**
MNK *i* PS PS 10 28 56.8 +0.8
MNK *i* SS **SS** **10 34 14.0 +3.6**
MNK *i* SSS SSS 10 38 02.3
MNK pmax pmax
comp=Z,161nm,1.0s
MNK MLR MLR
comp=N,2µm,19.0s
MNK MLR MLR
comp=E,638nm,22.0s
MNK MLR MLR
comp=Z,6µm,26.0s
**MNK Minsk 98.54 324** *i* P **P** **10 15 59.7 +0.1**
MNK *i* P **P** **10 15 59.7 +0.1**
MNK *i* P **P** **10 15 59.7 +0.1**
comp=Z,161nm,1.0s,baz=274
MNK *i* PP **PP** **10 20 01.0 +0.3**
MNK *i* PPP PPP 10 22 06.7
MNK *i* S **SKSac** **10 26 35.0 +1.6**
MNK *i* PS **PS** **10 28 56.9 +0.8**
MNK *i* SS **SS** **10 34 14.1 +3.6**
MNK *i* SSS SSS 10 38 02.3
MNK *i* LQ LQ 10 52 59.2
MNK *i* LR LR 10 58 57.9
MNK *i* LRM MLR 11 02 00.6
comp=N,2µm,18.5s
MNK *i* LRM MLR 11 02 38.3
comp=E,638nm,21.7s
MNK *i* LRM MLR 11 02 38.3
comp=Z,6µm,26.2s
**MLY Manley 98.57 25** P Pdif 10 15 59.7 0.0
**MLY Manley 98.57 25** Pdiff **P** **10 15 59.5 -0.1**
baz=266
**VRI Vrincioaia 98.59 315** ⇑P **P** **10 15 60.0 -0.1**
**CUT Chulitna 98.59 28** P **P** **10 15 59.2 -0.4**
CUT IAmb IAmb 10 16 00.1
comp=Z,89nm,1.0s
**CUT Chulitna 98.59 28** Pdiff **P** **10 15 58.7 -1.0**
baz=266
**M22K Willow 98.62 29** IAmb IAmb 10 16 00.0
comp=Z,182nm,1.1s
**M22K Willow 98.62 29** Pdiff **P** **10 15 58.8 -1.0**
baz=266
**PLOR Plostina 98.64 315** ⇑P **P** **10 16 00.3 -0.1**
**TRF Thorofare Moun 98.66 27** Pdiff **P** **10 15 59.3 -0.9**
baz=266
**TESR Tescani 98.69 316** ⇑P **P** **10 16 00.7 +0.1**
**O22K Cooper Landing 98.72 30** P **P** **10 15 59.9 -0.5**
O22K IAmb IAmb 10 16 06.9
comp=Z,106nm,0.7s
**O22K Cooper Landing 98.72 30** Pdiff **P** **10 15 59.8 -0.5**
baz=266
**RC01 Rabbit Creek A 98.75 29** IAmb IAmb 10 16 00.9
comp=Z,58nm,0.9s
**RC01 Rabbit Creek A 98.75 29** Pdiff **P** **10 15 59.6 -0.9**
baz=266
**TAOE Nuku Hiva Isla 98.80 101** *e*S **S** **10 27 28.9 +0.2**
comp=Z,10µm,26.9s
TAOE *e*SS **SS** **10 34 19.0 +3.0**
comp=Z,6µm,28.1s
TAOE *e*LQ LQ 10 44 00.1
comp=Z,8µm,41.4s
TAOE *e*LR LR 10 48 08.5
comp=Z,8µm,24.1s
**SEW Seward 98.83 30** IAmb IAmb 10 16 04.5
comp=Z,88nm,1.0s
**SEW Seward 98.83 30** Pdiff **P** **10 16 00.3 -0.5**
baz=266
**NEHR Nehoiu 98.85 315** ⇑P Pdif 10 16 01.9 +0.6
**COLD Coldfoot 98.93 23** Pdif 10 16 01.5 +0.4
COLD IAmb IAmb 10 16 03.4
comp=Z,83nm,1.4s
**COLD Coldfoot 98.93 23** Pdiff Pdif 10 16 01.6 +0.4
baz=266
**COVR Voineasa-Covas 98.95 315** ⇑P **Pdif** **10 16 01.9 +0.2**
**IDI Anoyia 99.05 304** ⇑P **Pdif** **10 16 04.1 +1.6**
**IDI Anoyia 99.05 304** LR LR 11 05 45.0
comp=Z,2µm,21.7s,baz=81,slow=38
**IDI Anoyia 99.05 304** IAmb IAmb 10 16 04.8
comp=Z,123nm,1.6s
**BWN Browne 99.07 26** P **Pdif** **10 16 01.7 -0.1**
BWN IAmb IAmb 10 16 03.0
comp=Z,102nm,1.1s
**PMR Palmer 99.08 29** P **Pdif** **10 16 01.6 -0.3**
PMR pmax pmax
comp=Z,225nm,1.8s
**PMR Palmer 99.08 29** **Pdif** **10 16 01.6 -0.3**
PMR IAmb IAmb 10 16 02.5
comp=Z,225nm,1.8s
**PMR Palmer 99.08 29** Pdiff **Pdif** **10 16 01.2 -0.7**
baz=267
**MLR Muntele Rosu 99.10 315** ⇑P **Pdif** **10 16 03.3 +0.7**
**MLR Muntele Rosu 99.10 315** LR LR 11 07 24.2
comp=Z,3µm,21.2s,baz=73,slow=39
**MLR Muntele Rosu 99.10 315** IAmb IAmb 10 20 04.3
comp=Z,119nm,1.4s
MLR IAMs_20 IAMs_20 11 09 15.6
comp=Z,5µm,21.0s
**I23K Minto, Yukon-K 99.16 25** P **Pdif** **10 16 02.2 +0.1**
I23K IAmb IAmb 10 16 03.9
comp=Z,279nm,1.7s
**I23K Minto, Yukon-K 99.16 25** Pdiff **Pdif** **10 16 02.6 +0.4**
baz=267
**NACGM Naroch 99.21 324** *i* P **Pdif** **10 16 02.4 -0.2**
**TOLK Toolik Lake Re 99.24 22** **Pdif** **10 16 03.3 +0.7**
**TOLK Toolik Lake Re 99.24 22** Pdiff **Pdif** **10 16 03.5 +1.0**
baz=267
**IDID Didziasalis 99.26 325** *e*P **Pdif** **10 16 02.2 -0.6**
**NEA2 Nenana 99.26 26** Pdiff **Pdif** **10 16 01.9 -0.8**
baz=267
**MCK McKinley 99.28 27** P **Pdif** **10 16 01.7 -1.1**
MCK pmax pmax
comp=Z,89nm,1.1s
MCK MLR MLR
comp=Z,2µm,22.0s
**MCK McKinley 99.28 27** **Pdif** **10 16 01.7 -1.1**
MCK IAmb IAmb 10 16 03.5
comp=Z,89nm,1.1s
**MCK McKinley 99.28 27** Pdiff **Pdif** **10 16 02.1 -0.7**
baz=267
**RND Reindeer 99.30 27** IAmb IAmb 10 16 03.3
comp=Z,88nm,0.9s
**KNK Knik Glacier 99.39 29** Pdiff **Pdif** **10 16 03.0 -0.3**
baz=267
**PWL Port Wells 99.42 30** P **Pdif** **10 16 03.0 -0.5**
PWL IAmb IAmb 10 16 03.8
comp=Z,69nm,1.2s
**PWL Port Wells 99.42 30** Pdiff **Pdif** **10 16 02.8 -0.7**
baz=267
**VSU Vasula 99.43 328** *i* P **Pdif** **10 16 03.4 -0.1**
VSU pmax pmax
comp=Z,496nm,1.1s
**VSU Vasula 99.43 328** *e*P **Pdif** **10 16 03.6 +0.1**
**SML Sawmill 99.47 29** P **Pdif** **10 16 03.1 -0.6**
SML IAmb IAmb 10 16 04.7
comp=Z,117nm,0.9s
**SML Sawmill 99.47 29** Pdiff **Pdif** **10 16 03.2 -0.5**
baz=267
**DOPR Dopca 99.53 315** ⇑P **Pdif** **10 16 05.3 +1.0**
**IIGN Ignalina 99.55 325** *e*P **Pdif** **10 16 03.8 -0.4**
**ISAL Salakas 99.62 325** *e*P **Pdif** **10 16 05.3 +0.9**
**KEV Kevo 99.71 339** IAMs_20 IAMs_20 11 09 21.8
comp=Z,5µm,19.0s
**BURAR Bucovina Array 99.75 317** ⇑P **Pdif** **10 16 06.6 +1.2**
**BURAR Bucovina Array 99.75 317** P **Pdif** **10 16 06.5 +1.2**
**WAT6 Susitna Watana 99.78 28** Pdiff **Pdif** **10 16 04.7 -0.5**
baz=268
**TCOL CIGO, UAF Yank 99.79 26** Pdiff **Pdif** **10 16 04.0 -1.0**
baz=268
**COLA College 99.79 26** Pdiff **Pdif** **10 16 04.1 -0.9**
baz=268
**H24K Noodor Dome 99.81 25** Pdiff **Pdif** **10 16 05.5 +0.4**
baz=268
**SGF Sodankyl 99.84 337** P **Pdif** **10 16 04.6 -0.5**
SGF pmax pmax
comp=Z,126nm,1.3s
**FINES FINESS Array B 99.88 331** P **Pdif** **10 16 04.7 -0.8**
comp=Z,86nm,0.9s,baz=94,slow=5.7,SNR=61
FINES LR LR 11 06 08.3
comp=Z,5µm,19.4s,baz=92,slow=38
**FINES FINESS Array B 99.88 331** *i* P **Pdif** **10 16 05.5 +0.1**
FINES pmax pmax
comp=Z,86nm,0.9s
**SCM Sheep Creek Mo 99.95 29** Pdiff **Pdif** **10 16 05.3 -0.5**
baz=268
**DHY Denali Highway 99.96 27** Pdiff **Pdif** **10 16 05.6 -0.4**
baz=268
**POKR Poker Plat Res 99.98 25** Pdiff **Pdif** **10 16 04.8 -1.0**
baz=269
**GLI Glacier Island 100.03 30** Pdiff **Pdif** **10 16 05.8 -0.4**
baz=268
**OUL Oulu 100.05 335** P **Pdif** **10 16 05.4 -0.7**
OUL pmax pmax
comp=Z,97nm,1.3s
**HDA Harding Lake 100.17 26** Pdiff **Pdif** **10 16 05.3 -1.4**
baz=269
**ILAR Eielson Array 100.20 26** P **Pdif** **10 16 05.1 -1.8**
comp=Z,4.5nm,0.9s,baz=256,slow=4.1,SNR=32
ILAR PP **PP** **10 20 15.4 +2.3**
comp=Z,13nm,1.0s,baz=253,slow=6.7,SNR=9.1
ILAR PKKPbc **PKKPdf** **10 32 30.9 -0.8**
comp=Z,2.1nm,0.8s,baz=83,slow=1.2,SNR=7.1
ILAR PKPPKP 10 40 47.0
comp=Z,0.4nm,1.0s,baz=119,slow=1.8,SNR=4.3
**ILAR Eielson Array 100.20 26** P **Pdif** **10 16 05.4 -1.4**
**ILAR Eielson Array 100.20 26** Pdif **Pdif** **10 16 05.4 -1.4**
**ARA0 ARCESS Array S 100.23 339** *e*P **Pdif** **10 16 07.8 +0.9**
**ARCES ARCESS Array B 100.23 339** P **Pdif** **10 16 05.7 -1.2**
comp=Z,26nm,1.1s,baz=86,slow=7.7,SNR=18
ARCES PP **PP** **10 20 16.0 +2.8**
comp=Z,14nm,0.9s,baz=76,slow=5.1,SNR=4.6
**ARCES ARCESS Array B 100.23 339** P **Pdif** **10 16 06.4 -0.5**
**ARCES ARCESS Array B 100.23 339** Pdif **Pdif** **10 16 06.4 -0.5**
**HOPEN Hopen 100.25 346** *e*Pdif **Pdif** **10 16 03.8 -3.0**
HOPEN *e*PS PS 10 29 15.2 +1.6
**Q23K Middleton Isla 100.37 31** Pdiff **Pdif** **10 16 07.9 +0.2**
baz=269
**M24K Tolsona, Glenn 100.50 28** Pdiff **Pdif** **10 16 08.8 +0.5**
baz=269
**KLU Klutina 100.61 29** Pdiff **Pdif** **10 16 08.4 -0.5**
baz=269
**LVV L'vov 100.64 319** *d* P **Pdif** **10 16 09.0 -0.1**
LVV *e*PPP PPP 10 22 32.3
LVV *e* 10 26 41.5
LVV *e*S **Sdif** **10 27 39.8 -2.6**
LVV *e*PS PS 10 29 13.7 -5.1
LVV pmax pmax
comp=Z,100nm,1.4s
LVV MLR MLR
comp=E,3µm,22.0s
LVV MLR MLR
comp=N,3µm,23.0s
LVV MLR MLR
comp=Z,3µm,23.0s
**EYAK Cordova Ski Ar 100.69 30** Pdiff **Pdif** **10 16 08.9 -0.1**
baz=269
**PRP Porcupine Dome 100.78 25** Pdiff **Pdif** **10 16 09.0 -0.5**
baz=270
**PAX Paxson 100.82 28** Pdiff **Pdif** **10 16 09.9 +0.1**
baz=270
**HAMF Hammerfest 100.83 340** *e*Pdif **Pdif** **10 16 08.7 -0.8**
HAMF *e*PP **PP** **10 20 17.5 -0.2**
HAMF *e*SKSac **SKSac** **10 26 41.5 -2.6**
HAMF *e*PS **PS** **10 29 26.1 +6.0**
**PABE Paberze 100.84 325** *e*P **Pdif** **10 16 10.1 +0.3**
**VTS Vitosha 100.87 312** P **Pdif** **10 16 10.4 -0.1**
VTS pmax pmax
comp=Z,12nm,1.2s
**BMR Baia Mare 100.91 317** ⇑P **Pdif** **10 16 11.0 +0.6**
**MTSE Matsula 100.97 328** *e*P **Pdif** **10 16 10.3 0.0**
**HARP HAARP 100.97 28** Pdiff **Pdif** **10 16 10.6 +0.2**
baz=270
**KTK1 Kautokeino 101.05 339** *e*Pdif **Pdif** **10 16 10.7 +0.1**
KTK1 *e*PP **PP** **10 20 22.0 +2.6**
KTK1 *e*SKSac **SKSac** **10 26 44.4 -0.8**
KTK1 *e*PS PS 10 29 26.1 +3.7
KTK1 IVMs_BB IVMs_BB 10 59 25.0
comp=Z,1µm,4.0s
**RIDG Independent Ri 101.10 27** Pdiff **Pdif** **10 16 10.9 0.0**
baz=271
**BMAR Burnt Mountain 101.11 23** Pdif **Pdif** **10 16 11.5 +0.6**
**N25K Chitina, Valde 101.24 29** Pdif **Pdif** **10 16 12.1 +0.5**
**N25K Chitina, Valde 101.24 29** Pdiff **Pdif** **10 16 11.9 +0.2**
baz=271
**BMRM Bremner River 101.25 30** Pdiff **Pdif** **10 16 11.8 +0.1**
baz=270
**DEV Deva 101.25 315** P **Pdif** **10 16 12.6 +0.7**
DEV pmax pmax
comp=Z,46nm,1.2s
**SUW Suwalki 101.28 323** *e*P **Pdif** **10 16 11.6 -0.2**
SUW *e*L L 11 04 06.2
comp=Z,6µm,26.0s
**SUW Suwalki 101.28 323** P **Pdif** **10 16 12.2 +0.4**
SUW pmax pmax
comp=Z,249nm,1.1s
**SUW Suwalki 101.28 323** IAMs_20 IAMs_20 11 08 23.6
comp=Z,4µm,21.0s
**SUW Suwalki 101.28 323** *e*P **Pdif** **10 16 11.9 0.0**
**KAIM Kayak Island 101.35 31** Pdiff **Pdif** **10 16 12.3 +0.3**
baz=270
**DRGR 101.42 316** ⇑P **Pdif** **10 16 13.7 +0.9**
**DRGR 101.42 316** P **Pdif** **10 16 13.7 +0.9**
**SCRK Sand Creek 101.47 27** Pdif **Pdif** **10 16 12.6 -0.1**
**SCRK Sand Creek 101.47 27** Pdiff **Pdif** **10 16 12.7 -0.1**
baz=272
**KWP Kalwaria Pacla 101.50 319** P **Pdif** **10 16 13.3 +0.3**
KWP pmax pmax
comp=Z,100nm,0.6s
**TRPA Tarpa 101.57 317** PDIF **Pdif** **10 16 11.3 -2.0**
**UZH Uzhgorod 101.75 318** *e*P **Pdif** **10 16 16.4 +2.3**
UZH *e* 10 20 19.8
UZH *e* 10 22 31.6
UZH *e* 10 26 46.6
UZH *e*S **Sdif** **10 27 52.5 +0.8**
UZH *e* 10 29 25.0
UZH *e* 10 34 48.4
**L26K Log Cabin Wild 101.79 28** Pdiff **Pdif** **10 16 14.2 +0.2**
baz=272
**BJO1 Bjornoya 101.92 344** *e*Pdif **Pdif** **10 16 15.1 +0.8**
BJO1 *e*PP **PP** **10 20 27.4 +1.6**
BJO1 *e*SKSac **SKSac** **10 26 51.2 +2.0**
BJO1 *e*SP **SP** **10 29 27.8 +3.3**
BJO1 IVMs_BB IVMs_BB 11 06 55.7
comp=Z,6µm,3.7s
**SPA0 Spitsbergen Ar 101.95 348** *e*Pdif **Pdif** **10 16 15.1 +0.7**
SPA0 IVmBBB 10 16 16.0
comp=Z,2µm,3.5s
SPA0 *e*PP **PP** **10 20 25.2 -0.8**
SPA0 *e*SKSac **SKSac** **10 26 46.6 -2.7**
SPA0 *e*SP SP 10 29 27.9 +3.1
SPA0 IVMs_BB IVMs_BB 11 06 23.7
comp=Z,2µm,4.0s
**M26K Nabesna, AK 101.98 28** Pdiff **Pdif** **10 16 15.0 +0.1**
baz=272
**PBUR Paburge 102.00 325** *e*P **Pdif** **10 16 16.1 +1.1**
**JETT Jettan, Norway 102.02 339** *e*Pdif **Pdif** **10 16 15.1 +0.2**
JETT *e*PP **PP** **10 20 24.0 -2.7**
JETT *e*SKSac **SKSac** **10 26 51.4 +1.4**
JETT *e*PS **PS** **10 29 35.1 +2.3**
JETT IVMs_BB IVMs_BB 10 59 41.2
comp=Z,2µm,4.2s
**BZS Buzias 102.15 315** ⇑P **Pdif** **10 16 16.5 +0.6**
**BZS Buzias 102.15 315** P **Pdif** **10 16 15.7 -0.2**
BZS pmax pmax
comp=Z,16nm,1.1s
**CRVS Cervenica-Dubn 102.30 318** ⇑*e*P **Pdif** **10 16 18.1 +1.5**
CRVS MLR MLR
comp=Z,5µm,27.0s
**CRVS Cervenica-Dubn 102.30 318** *e*PDIFF **Pdif** **10 16 18.1 +1.5**
**K27K Chicken 102.31 26** Pdiff **Pdif** **10 16 17.4 +1.1**
baz=273
**HSPB Hornsund (broa 102.36 347** *e*Pdif **Pdif** **10 16 16.3 +0.1**
HSPB *e*PP **PP** **10 20 29.9 +0.9**
HSPB *e*SKSac **SKSac** **10 26 52.6 +1.5**
HSPB *e*SP SP 10 29 31.0 +2.0
**L27K Beaver Creek, 102.48 27** Pdiff **Pdif** **10 16 17.4 +0.4**
baz=273
**BCAR Beaver Creek A 102.50 27** Pdif **Pdif** **10 16 17.7 +0.5**
**M27K Edge Creek, AK 102.50 28** Pdiff **Pdif** **10 16 18.0 +0.7**
baz=273
**TRO Tromso 102.53 339** *e*Pdif **Pdif** **10 16 16.6 -0.5**
TRO *e*PP **PP** **10 20 28.4 -2.0**
TRO *e*SKSac **SKSac** **10 27 01.7 +9.5**
TRO *e*SP SP 10 29 33.1 +2.0
TRO IVMs_BB IVMs_BB 11 02 48.9
comp=Z,2µm,4.6s
**MESA MESA 102.58 30** Pdiff **Pdif** **10 16 17.9 +0.1**
baz=273
**KBS Kingsbay 102.65 349** IAMs_20 IAMs_20 11 12 19.8
comp=Z,5µm,21.0s
**KBS Kingsbay 102.65 349** IVmB_BB 10 16 16.7
comp=Z,2µm,3.2s
KBS *e*Pdif **Pdif** **10 16 17.6 +0.1**
KBS *e*PP **PP** **10 20 32.0 +0.9**
KBS *e*SKSac **SKSac** **10 26 51.9 -0.6**
KBS *e*SP SP 10 29 37.6 +5.5
KBS IVMs_BB IVMs_BB 11 06 35.1
comp=Z,3µm,27.0s
**EGAK Eagle 102.66 26** Pdiff **Pdif** **10 16 17.8 0.0**
baz=274
**BVCY Beaver Creek 102.97 28** Pdiff **Pdif** **10 16 20.2 +0.9**
baz=274
**NIE Niedzica 103.06 319** *e*P **Pdif** **10 16 21.6 +1.6**
NIE *e*L L 11 08 26.5
comp=Z,4µm,22.4s
**YUK3 Moose Creek 103.21 29** Pdiff **Pdif** **10 16 20.8 +0.2**
baz=274
**PSZ Piszkesteto 103.34 317** P **Pdif** **10 16 21.3 0.0**
PSZ pmax pmax
comp=Z,21nm,1.6s
**OJC Ojcow 103.38 319** *e*P **Pdif** **10 16 21.6 +0.3**
OJC *e*L L 11 06 18.1
comp=Z,5µm,25.8s
**PINM Pinnacle 103.44 30** Pdiff **Pdif** **10 16 21.9 +0.4**
baz=274
**DAWY Dawson 103.49 26** Pdif **Pdif** **10 16 21.9 +0.4**
**DAWY Dawson 103.49 26** Pdiff **Pdif** **10 16 22.1 +0.6**
baz=276
**LANS Liptovska Anna 103.61 318** *e*PP **PP** **10 20 39.3 +0.1**
**I29M Ogilvie Camp, 103.80 25** Pdiff **Pdif** **10 16 23.6 +0.7**
baz=277
**PDG Podgorica 103.80 311** ⇑P **Pdif** **10 16 22.9 -0.5**
**PNL Peninsula 103.90 31** Pdiff **Pdif** **10 16 24.0 +0.6**
baz=275
**J29M Klondike Camp 103.95 26** Pdiff **Pdif** **10 16 24.3 +0.7**
baz=277
**VYHS Vyhne 104.04 318** ⇑*e*P **Pdif** **10 16 25.5 +1.2**
VYHS *e* 10 20 42.0
VYHS MLR MLR
comp=Z,6µm,26.1s
**VYHS Vyhne 104.04 318** *e*PDIFF **Pdif** **10 16 25.5 +1.2**
**VYHS Vyhne 104.04 318** *e*PP **PP** **10 20 42.0 -0.4**
**UPP Uppsala 104.09 329** *e*P **Pdif** **10 16 24.4 +0.2**
**STEI Steigen 104.09 338** *e*Pdif **Pdif** **10 16 23.6 -0.4**
STEI *e*PP **PP** **10 20 41.5 -0.6**
STEI *e*SKSac **SKSac** **10 26 58.8 -0.7**
STEI *e*SS **SS** **10 35 33.6 +7.0**
STEI IVMs_BB IVMs_BB 11 06 50.8
comp=Z,2µm,25.8s
**YUK4 Talbot Arm 104.11 29** Pdiff **Pdif** **10 16 25.3 +0.7**
baz=276
**FAUS Fauske 104.17 337** *e*Pdif **Pdif** **10 16 21.9 -2.5**
FAUS *e*PP **PP** **10 20 43.9 +1.2**
FAUS *e*SKSac **SKSac** **10 27 00.7 +0.8**
FAUS *e*SP **SP** **10 29 53.8 +5.4**
FAUS *e*SS **SS** **10 35 29.9 +2.3**
FAUS IVMs_BB IVMs_BB 11 11 47.6
comp=Z,2µm,25.3s
**YUK6 Outpost Mounta 104.29 29** Pdiff **Pdif** **10 16 25.9 +0.5**
baz=276
**EPYK Eagle Plains 104.30 24** Pdiff **Pdif** **10 16 25.0 -0.1**
baz=273
**SRO Srobarova 104.41 317** *e*PP **PP** **10 20 46.5 +1.4**
**OKC Ostrava-Krasne 104.45 319** *e*SKS 10 27 03.0
OKC AMS AMS 11 10 00.0
comp=Z,5µm,19.8s
**LOF Lofoten 104.69 338** *e*Pdif **Pdif** **10 16 25.4 -1.3**
LOF *e*PP **PP** **10 20 43.2 -3.3**
LOF *e*SKSac **SKSac** **10 27 01.4 -0.9**
LOF *e*SP SP 10 30 01.0 +7.3
LOF IVMs_BB IVMs_BB 10 57 59.5
comp=Z,1µm,4.3s
**VIKU Vikbolandet 104.69 328** *e*P **Pdif** **10 16 27.4 +0.5**
**MOR8 Moi Rana 104.70 336** *e*Pdif **Pdif** **10 16 24.6 -2.2**
MOR8 *e*PP **PP** **10 20 42.8 -4.0**
MOR8 *e*SKSac **SKSac** **10 27 02.0 -0.4**
MOR8 *e*SP SP 10 29 54.6 +0.6
**HYT Haines Junctio 104.72 30** Pdiff **Pdif** **10 16 27.1 -0.1**
baz=277
**JAVC Velka Javorina 104.80 318** *e*PDIFF **Pdif** **10 16 27.7 -0.1**
JAVC *e*SKS 10 27 09.5
**M30M Minto, Yukon 104.83 28** Pdiff **Pdif** **10 16 28.5 +1.0**
baz=278
**MORC Moravsky Berou 104.85 319** ⇑P **Pdif** **10 16 28.5 +0.5**
**MORC Moravsky Berou 104.85 319** P **Pdif** **10 16 28.4 +0.5**
**MORC Moravsky Berou 104.85 319** *e*PDIFF **Pdif** **10 16 28.1 +0.2**
MORC *e*SKS 10 27 07.4
**MODS Modra-Piesok 105.08 318** ⇑*e*P **Pdif** **10 16 32.4 +3.4**
MODS *e* 10 20 50.3
MODS *e* 10 27 06.2
**INK Inuvik 105.16 22** PP **PP** **10 20 53.8 +3.8**
comp=Z,15nm,1.0s,baz=273,slow=2.7,SNR=5.7
INK PKKPbc **PKKPbc** **10 32 16.1 +3.8**
comp=Z,2.0nm,0.7s,baz=52,slow=2.7,SNR=8.3
**INK Inuvik 105.16 22** P **Pdif** **10 16 29.1 +0.4**
**INK Inuvik 105.16 22** Pdif **Pdif** **10 16 29.1 +0.4**
**KONS Konsvik 105.17 336** *e*Pdif **Pdif** **10 16 28.6 -0.2**
**STOK Stokkvaagen 105.24 336** *e*P **Pdif** **10 16 29.8 +0.7**
**KRLC Kraliky 105.32 319** P **Pdif** **10 16 31.5 +1.5**
**KRLC Kraliky 105.32 319** *e*PDIFF **Pdif** **10 16 28.1 -1.9**
KRLC *e*SKS **SKSac** **10 27 09.5 +3.5**
KRLC AMS AMS 11 09 30.0
comp=Z,5µm,21.7s
**VRAC Vranov 105.49 319** P **Pdif** **10 16 31.9 +1.2**
**VRAC Vranov 105.49 319** *e*PDIFF **Pdif** **10 16 30.5 -0.2**
VRAC *e*SKS **SKSac** **10 27 10.3 +3.6**
**KSP Ksiaz 105.58 320** P **Pdif** **10 16 32.5 +1.4**
**DPC Dobruska-Polom 105.60 320** *e*PDIFF **Pdif** **10 16 30.2 -1.0**
DPC *e*SKS **SKSac** **10 27 12.3 +5.0**
DPC AMS AMS 11 09 30.0
comp=Z,6µm,20.0s
**KRUC Moravsky 105.63 318** P **Pdif** **10 16 31.0 -0.4**
**KRUC Moravsky 105.63 318** *e*PDIFF **Pdif** **10 16 30.8 -0.6**
KRUC *e*SKS **SKSac** **10 27 11.5 +4.2**
**OSTC Ostas 105.65 320** *e*PDIFF **Pdif** **10 16 32.4 +1.0**
OSTC *e*SKS **SKSac** **10 27 09.5 +2.1**
OSTC AMS AMS 11 10 20.0
comp=Z,6µm,21.4s
**CHVC Chvalec 105.75 320** AMS AMS 11 10 30.0
comp=Z,6µm,20.1s
**UPC Upice 105.78 320** *e*PDIFF **Pdif** **10 16 34.5 +2.5**
UPC AMS AMS 11 10 30.0
comp=Z,6µm,18.9s
**NSS Namsos 106.03 335** *e*Pdif **Pdif** **10 16 31.1 -1.6**
NSS *e*PP **PP** **10 20 59.0 +2.4**
NSS *e*SKSac **SKSac** **10 27 07.0 -1.4**
NSS *e*PS PS 10 30 17.2 +2.4
NSS IVMs_BB IVMs_BB 11 08 06.0
comp=Z,3µm,26.8s
**CONA Conrad Observa 106.06 317** *e*P **PKiKP** **10 20 43.2 -2.1**
comp=Z,82nm,1.3s
**TREC Trest 106.21 319** *e*PDIFF **Pdif** **10 16 34.5 +0.5**
TREC AMS AMS 11 11 00.0
comp=Z,5µm,20.3s
**ARSA Arzberg 106.33 316** *e*P **PKiKP** **10 20 43.8 -1.9**
comp=Z,76nm,1.9s

DEL Delary 106.45 326 eP Pdif 10 16 35.1 +0.4
SOKA Soboth 106.70 316 eP PKiKP 10 20 45.4 -1.1
comp=Z,76nm,1.5s
PVCC Panska Ves 106.70 320 AMS AMS 11 10 30.0
comp=Z,5µm,20.6s
PRU Pruhonice 106.77 319 ePDIFF Pdif 10 16 32.4 -4.0
PRU AMS AMS 11 10 10.0
comp=Z,6µm,21.5s
NC602 NORSAR Array S 106.96 331 ePdif Pdif 10 16 38.6 +1.6
NC602 IVmB_BB 10 16 39.9
comp=Z,730nm,3.8s
NC602 ePP PP 10 21 05.4 +1.9
NC602 eSKSac SKSac 10 27 14.6 +1.9
NC602 eSP SP 10 30 23.4 +5.8
NC602 IVMsBB 10 59 06.0
comp=Z,1µm,27.0s
CKRC Cesky Krumlov 107.02 318 ePDIFF Pdif 10 16 35.6 -2.0
CKRC eSKS SKSac 10 27 18.0 +4.4
CKRC AMS AMS 11 11 50.0
comp=Z,4µm,19.3s
TBLU Trondheim 107.04 333 ePdif Pdif 10 16 34.9 -2.3
OBKA Obir 107.04 316 eP PKiKP 10 20 47.9 +0.8
comp=Z,78nm,1.3s
NB2 NORSAR Subarra 107.06 331 P Pdif 10 16 37.1 -0.4
comp=Z,66nm,1.4s,baz=73,slow=4.4
NB2 NORSAR Subarra 107.06 331 P Pdif 10 16 37.0 -0.4
NB2 pmax pmax
comp=Z,803nm,3.2s
NB2 NORSAR Subarra 107.06 331 P Pdif 10 16 37.1 -0.4
baz=73,slow=4.4
NOA NORSAR Array B 107.06 331 Pdiff Pdif 10 16 37.0 -0.4
comp=Z,12nm,1.0s,baz=75,slow=4.5,SNR=15
NOA PP PP 10 21 07.2 +2.9
comp=Z,18nm,1.0s,baz=71,slow=7.1,SNR=4.5
BRG Berggiesshubel 107.06 320 ePiff 10 16 38.2
BRG Amp 10 16 43.8
comp=Z,12nm,1.0s
BRG ex x 10 20 13.4
BRG Amp 10 20 19.4
comp=Z,36nm,1.6s
BRG PP PP 10 21 00.0 -4.6
BRG Amp 10 21 03.9
comp=Z,51nm,1.3s
BRG Berggiesshubel 107.06 320 SKS SKSac 10 27 15.0 +1.4
BRG Berggiesshubel 107.06 320 SP SP 10 30 20.0 +0.7
BRG PKKP 10 32 05.8
BRG Amp 10 32 07.7
comp=Z,6.4nm,1.1s
BRG Berggiesshubel 107.06 320 SS SS 10 36 07.0 -1.1
BRG Amp 11 11 03.0
comp=N,1.7nm,22.5s
BRG Amp 11 11 06.0
comp=E,3.9nm,22.5s
BRG Amp 11 11 11.0
comp=Z,4.7nm,19.9s
BRG Berggiesshubel 107.06 320 eP Pdif 10 16 38.1 +0.4
BRG 10 21 00.0
BRG 10 23 23.0
BRG S SKSac 10 27 15.0 +1.4
BRG S SP 10 30 20.0 +0.7
BRG S SS 10 36 07.0 -1.1
BRG pmax pmax
comp=Z,12nm,1.0s
BRG pmax pmax
comp=Z,51nm,1.3s
MOA Molln 107.13 317 eP PKiKP 10 20 46.1 -1.1
comp=Z,72nm,1.4s
NC204 NORSAR Array S 107.23 331 Pdif Pdif 10 16 37.7 -0.6
GERES GERESS Array B 107.42 318 Pdiff Pdif 10 16 39.8 +0.3
comp=Z,1.0nm,0.8s,baz=79,slow=5.1,SNR=6.6
GERES PKiKP PKiKP 10 20 49.6 +1.8
comp=Z,7.7nm,0.8s,baz=64,slow=3.1,SNR=12
GERES PP PP 10 21 08.1 +0.6
comp=Z,20nm,1.1s,baz=90,slow=6.7,SNR=8.7
GERES PKKPbc PKKPbc 10 32 05.9 +1.0
comp=Z,2.4nm,0.9s,baz=318,slow=1.8,SNR=8.8
GERES GERESS Array B 107.42 318 P Pdif 10 16 39.9 +0.5
KHC Kasperske Hory 107.47 318 ePDIFF Pdif 10 16 36.9 -2.7
KHC ePP PP 10 21 05.5 -2.2
KHC eSKS SKSac 10 27 18.1 +2.5
KHC ePKKP PKKPbc 10 32 05.5 +0.9
KHC AMS AMS 11 11 50.0
comp=Z,7µm,21.4s
CLL Collm 107.61 321 eP Pdif 10 16 42.0 +1.9
CLL MLR MLR
comp=Z,4µm,20.9s
CLL Collm 107.61 321 ePdif Pdif 10 16 42.0 +1.9
CLL ex x 10 19 55.0
CLL i PKiKP PKiKP 10 20 49.4 +1.5
CLL ex x 10 21 02.0
CLL ePP PP 10 21 11.0 +2.4
comp=Z,114nm,1.9s
CLL ePPP PPP 10 23 25.0
CLL eSKSac SKSac 10 27 24.0 +8.1
CLL eSKKSac SKKSac 10 28 12.0 +3.8
CLL eSdif SKSdf 10 28 41.0 +45
CLL ePS PS 10 30 31.0 -0.6
CLL ePPS PPS 10 31 33.0
CLL eSS SS 10 36 06.0 -9.4
CLL eSSS SSS 10 40 06.0
CLL eSSSS 10 43 48.0
CLL ex x 10 46 12.0
CLL LmV 11 12 00.0
comp=Z,4µm,20.9s
CLL Collm 107.61 321 IAms_20 IAms_20 11 12 18.2
comp=Z,4µm,20.0s
MYKA Terra Mystica 107.66 316 eP PKiKP 10 20 47.9 -0.4
comp=Z,47nm,1.3s
KBA Koelnbreinsper 107.82 316 eP PKiKP 10 20 47.0 -1.7
comp=Z,50nm,1.2s
NKC Novy Kostel 108.08 320 AMS AMS 11 11 10.0
comp=Z,6µm,24.4s
KONO Kongsberg 108.14 330 IAms_20 IAms_20 11 10 56.2
comp=Z,4µm,22.0s
KONO Kongsberg 108.14 330 ePdif Pdif 10 16 42.3 +0.1
KONO ePP PP 10 21 14.3 +2.2
KONO eSKSac SKSac 10 27 16.5 -1.3
KONO eSS SS 10 36 27.0 +5.0
KONO IVMs_BB IVMs_BB 11 06 15.4
comp=Z,2µm,33.3s
AQU L'Aquila 108.14 311 IAms_20 IAms_20 11 12 58.9
comp=Z,4µm,22.0s
MOL Molde 108.41 333 ePdif Pdif 10 16 41.1 -2.3
MOL IVmB_BB 10 16 44.3
comp=Z,815nm,2.3s
MOL ePP PP 10 21 13.4 -0.5
MOL eSKSac SKSac 10 27 20.2 +1.4
MOL IVMs_BB IVMs_BB 11 11 35.6
comp=Z,3µm,18.4s
ABTA Abfaltersbach 108.42 316 eP PKiKP 10 20 48.9 -0.8
comp=Z,12nm,0.8s
AKN Aaknes 108.76 333 ePdif Pdif 10 16 45.8 +0.8
AKN ePP PP 10 21 18.2 +1.6
AKN eSKSac SKSac 10 27 22.7 +2.2
AKN ePS PS 10 30 48.8 +5.9
AKN IVMs_BB IVMs_BB 11 09 38.4
comp=Z,2µm,15.4s
DLBC Dease Lake 108.87 31 PP PP 10 21 17.2 -0.4
comp=Z,13nm,1.0s,baz=280,slow=6.2,SNR=6.5
GRF Grafenberg Arr 108.94 319 ePdiff Pdif 10 16 45.9 -0.2
baz=82,slow=3.0
GRF ePP PP 10 21 16.3 -2.0
baz=88,slow=7.0
GRF eL L 11 11 53.9
comp=Z,6µm,21.8s
WTTA Wattenberg 108.96 317 eP PKiKP 10 20 51.6 +0.7
comp=Z,38nm,1.0s
HOMB Homborsund 108.99 329 ePdif Pdif 10 16 46.4 +0.4
HOMB ePP PP 10 21 19.6 +1.3
HOMB eSKSac SKSac 10 27 20.5 -1.0
HOMB eSP SP 10 30 40.9 +2.5
HOMB IVMs_BB IVMs_BB 11 05 26.5
comp=Z,2µm,37.3s
WATA Walderalm 109.00 317 eP PKiKP 10 20 51.9 +1.1
comp=Z,23nm,1.0s
DAG Danmarks Havn 109.23 351 i P PKiKP 10 20 59.3 +9.0
DAG IAms_20 IAms_20 11 14 35.9
comp=Z,5µm,22.8s
MOTA Moosalm 109.31 317 eP PKiKP 10 20 52.4 +0.9
comp=Z,14nm,1.0s
RETA Reutte 109.53 317 eP PKiKP 10 20 52.8 +1.1
comp=Z,20nm,1.2s
ODD1 Odda 109.53 330 ePdif Pdif 10 16 49.3 +0.8
ODD1 ePP PP 10 21 24.2 +1.8
ODD1 eSKPdf SKiKP 10 24 22.0 -0.7
ODD1 eSP SP 10 30 46.5 +2.6
FETA Feichten 109.61 316 eP PKiKP 10 20 50.4 -1.6
comp=Z,18nm,0.9s
BLS5 Blasjo 109.74 330 ePdif Pdif 10 16 44.9 -4.6
BLS5 ePP PP 10 21 26.0 +2.2
BLS5 ePS PKKPbc 10 30 57.5 -60
BLS5 IVMs_BB IVMs_BB 11 10 10.2
comp=Z,2µm,3.7s
FOO Floro 109.81 332 ePdif Pdif 10 16 50.5 +0.9
FOO ePP PP 10 21 24.0 -0.2
FOO eSKSac SKSac 10 27 27.4 +2.6
FOO ePS PS 10 30 54.3 +1.0
FOO IVMs_BB IVMs_BB 11 16 54.1
comp=Z,2µm,16.0s
BER Bergen 110.03 331 ePP PP 10 21 25.4 -0.3
BER eSKSac SKSac 10 27 26.1 +0.4
BER eSP SP 10 30 52.5 +3.9
BER IVMs_BB IVMs_BB 11 13 48.2
comp=Z,3µm,21.1s
SUE Sulen 110.10 332 ePdif Pdif 10 16 52.5 +1.7
SUE ePP PP 10 21 28.7 +2.4
SUE eSKSac SKSac 10 27 24.0 -2.0
DAVA Damuels 110.15 317 eP PKiKP 10 20 51.7 -1.3
comp=Z,44nm,1.1s
VLC Villacollemand 110.18 314 IAMs_20 IAMs_20 11 15 39.8
comp=Z,3µm,21.0s
DAVOX Davos/Dischmat 110.21 316 PKKPbc PKKPbc 10 31 57.9 +1.9
comp=Z,3.1nm,0.8s,baz=190,slow=16,SNR=4.1
STU Stuttgart 110.38 318 IAMs_20 IAMs_20 11 13 11.8
comp=Z,6µm,22.0s
BFO Black Forest 111.02 318 IAMs_20 IAMs_20 11 14 13.7
comp=Z,5µm,20.0s
KEST Kesra 111.72 305 PKiKP PKiKP 10 20 57.7 +1.4
comp=Z,13nm,0.9s,baz=179,slow=1.2,SNR=7.2
KEST PP PP 10 21 39.9 +0.8
comp=Z,43nm,1.0s,baz=342,slow=4.8,SNR=7.7
ECH Echery 111.81 318 IAMs_20 IAMs_20 11 14 16.6
comp=Z,4µm,20.0s
NEEM North Greenlan 111.95 358 i P PKiKP 10 20 59.3 +3.4
NEEM IAMs_20 IAMs_20 11 20 23.2
comp=Z,5µm,22.8s
BTNL Ternell 112.01 321 dPP PP 10 21 39.9 -0.6
RES Resolute Bay 112.08 9 PKiKP PKiKP 10 20 56.8 +1.1
comp=Z,5.4nm,0.7s,baz=270,slow=3.1,SNR=12
RES PP PP 10 21 41.9 +1.9
comp=Z,14nm,0.8s,baz=338,slow=5.6,SNR=5.6
MEM Membach 112.08 321 dPKiKP PKiKP 10 20 56.1 -0.2
MEM dPP PP 10 21 40.5 -0.4
BHOU Houvegnez 112.14 321 dPP PP 10 21 41.1 -0.2
BSTI Sart Tilman 112.36 321 dPP PP 10 21 42.7 -0.2
BCLA Clavier 112.56 321 dPP PP 10 21 43.6 -0.7
RCHB Rochefort 112.67 320 dPKiKP PKiKP 10 20 59.0 +1.5
RCHB dPP PP 10 21 45.3 +0.2
BNI Bardonecchia 112.68 315 IAMs_20 IAMs_20 11 17 07.9
comp=Z,4µm,21.0s
BGES Gesves 112.71 321 dPP PP 10 21 45.3 0.0
TULEG Thule 112.91 2 i P PKiKP 10 20 59.5 +2.3
TULEG IAMs_20 IAMs_20 11 01 32.1
comp=Z,3µm,30.3s
BMRD Maredsous 112.92 321 dPKiKP PKiKP 10 20 59.3 +1.3
BMRD dPP PP 10 21 46.7 -0.2
DOU Dourbes 113.08 321 dPKiKP PKiKP 10 21 00.1 +1.8
DOU dPP PP 10 21 48.1 +0.1
SNF Seneffe 113.18 321 dPP PP 10 21 48.5 -0.1
SSB Saint Sauveur 114.13 315 IAMs_20 IAMs_20 11 16 53.1
comp=Z,4µm,21.0s
YKA Yellowknife Ar 114.58 24 PKP PKiKP 10 21 00.3 -0.5
comp=Z,11nm,0.7s,baz=306,slow=1.8,SNR=70
YKA SKP 10 24 36.5
comp=Z,1.6nm,0.6s,baz=304,slow=2.0,SNR=4.1
YKA PKKPbc PKKPab 10 31 43.6 -1.7
comp=Z,1.2nm,0.8s,baz=107,slow=3.7,SNR=7.0
CLF Chambon-Foret 115.06 319 IAMs_20 IAMs_20 11 15 41.5
comp=Z,5µm,22.0s
MAHO Mahon 115.26 310 PP PP 10 22 02.5 -1.3
MAHO Mahon 115.26 310 PS PS 10 31 45.6 +1.1
D03D Eldon 115.53 42 PKiKP PKPdf 10 21 04.6 +1.5
baz=284
SUMG Summit 115.63 353 i PKiKP PKPdf 10 21 03.9 +0.8
SUMG Summit 115.63 353 i P PKPdf 10 21 03.5 +0.5
SUMG Summit 115.63 353 PKiKP PKPdf 10 21 03.9 +0.8
HPK Haverah Park 115.65 326 eP PKPdf 10 21 04.4 +1.3
LBWR Ladybower, Pea 115.90 325 eP PKPdf 10 21 03.7 +0.1
B05A Bryant 115.99 41 PKiKP PKiKP 10 21 05.2 +1.3
baz=285
ESK Eskdalemuir 116.02 328 IAMs_20 IAMs_20 11 16 59.5
comp=Z,5µm,20.0s
COR Corvallis 116.08 45 IAMs_20 IAMs_20 10 57 50.0
comp=Z,3µm,18.0s
E04D Cinebar 116.12 43 PKiKP PKiKP 10 21 05.7 +1.5
baz=284
K02D Willamette Mer 116.22 47 PKiKP PKiKP 10 21 06.0 +1.4
baz=281
I03D Drain, OR 116.24 46 PKiKP PKiKP 10 21 06.4 +1.9
baz=282
B06A Marblemount 116.31 40 PKiKP 10 21 05.7 +1.1
L02E Cave Junction 116.37 48 PKiKP PKiKP 10 21 06.5 +1.5
baz=281
KPL Plockton 116.44 330 eP PKiKP 10 21 04.8 +0.4
H04D Lebanon 116.49 45 PKiKP PKiKP 10 21 06.7 +1.7
baz=283
STRD Stroud 116.70 324 eP PKiKP 10 21 06.9 +1.7
UPNV Upernavik 116.77 358 i P PKiKP 10 21 05.8 +1.0
H04A Detroit Lake 116.83 45 PKiKP 10 21 06.5 +0.8
HLM1 Long Mynd 116.86 325 eP PKiKP 10 21 06.4 +0.9
I04A Tendick Farm, 116.88 46 PKiKP PKiKP 10 21 07.0 +1.1
baz=283
GAL1 Galloway 116.99 327 eP PKPdf 10 21 05.1 -0.5
F05D White Salmon 117.03 43 IAMs_20 IAMs_20 10 58 08.2
comp=Z,2µm,18.0s
MONM Monmouth 117.06 324 eP PKiKP 10 21 07.2 +1.3
M02C Callahan 117.08 48 PKiKP PKiKP 10 21 07.8 +1.4
baz=281
YBH Yreka Blue Hor 117.11 48 PKP PKiKP 10 21 06.8 +0.4
comp=Z,4.6nm,0.9s,baz=17,slow=7.4,SNR=6.9
YBH PP PP 10 22 20.8 +4.0
comp=Z,18nm,1.1s,baz=244,slow=2.3,SNR=4.7
YBH Yreka Blue Hor 117.11 48 PKPdf PKiKP 10 21 07.8 +1.4
LTY Liberty 117.19 42 PKiKP 10 21 07.4 +1.0
J04D Umpqua Nationa 117.22 46 PKiKP PKiKP 10 21 08.2 +1.4
baz=283
N02D Trinity Center 117.27 49 PKiKP PKiKP 10 21 08.0 +1.3
baz=281
G05D Wamic, OR 117.29 44 PKiKP PKiKP 10 21 08.0 +1.4
baz=284
L04D Klamath Falls 117.31 47 PKiKP PKiKP 10 21 08.0 +1.1
baz=282
WLF1 Llynfaes 117.43 326 eP PKiKP 10 21 07.8 +1.2
I05D Terrebonne, OR 117.50 45 PKiKP PKiKP 10 21 08.3 +1.2
baz=284
K04D Chiloquin, OR 117.61 47 PKiKP PKiKP 10 21 08.5 +1.0
baz=283
B08A Colville Reser 117.72 40 PKPdf PKiKP 10 21 08.0 +0.6
M04C Macdoel 117.74 48 PKiKP PKiKP 10 21 09.1 +1.3
baz=282
J05D Fort Rock, OR 117.83 46 PKiKP PKiKP 10 21 09.5 +1.6
baz=284
SOEG Soedalen 118.32 348 i P PKiKP 10 21 09.1 +1.2
TORD Torodi Ar. Bea 118.87 280 PKP PKiKP 10 21 10.5 +0.1
comp=Z,76nm,0.9s,baz=46,slow=1.3,SNR=120
TORD SKP 10 24 48.7
comp=Z,12nm,1.1s,baz=28,slow=2.5,SNR=4.1
TORD PKKPbc PKKPab 10 31 30.3 +2.5
comp=Z,6.0nm,1.1s,baz=303,slow=4.6,SNR=6.0
TORD SKKPbc SKKPbc 10 35 16.1 +7.5
comp=Z,1.1nm,0.8s,baz=257,slow=3.7,SNR=3.8
TORD Torodi Ar. Bea 118.87 280 PKPdf PKPdf 10 21 10.2 -0.2
ICESG Greenland Ices 118.99 352 i P PKiKP 10 21 10.3 +0.7
NEW Newport 119.15 40 PKP PKiKP 10 21 11.6 +1.5
comp=Z,9.8nm,0.8s,baz=231,slow=1.7,SNR=19
NEW PP PP 10 22 31.1 +0.5
comp=Z,21nm,1.1s,baz=306,slow=6.0,SNR=10.0
NEW Newport 119.15 40 PKIKP PKiKP 10 21 11.3 +1.1
NEW Newport 119.15 40 PKPdf PKiKP 10 21 11.3 +1.1
NEW Newport 119.15 40 PKiKP PKiKP 10 21 11.3 +1.1
baz=290
CART Cartagena 119.72 308 PP PP 10 22 36.4 +1.4
CART Cartagena 119.72 308 PS PS 10 32 27.7 +2.7
WVOR Wild Horse Val 119.89 46 IAMs_20 IAMs_20 11 04 01.5
comp=Z,4µm,20.0s
ILULI Ilulissat 120.09 356 eP PKPdf 10 21 11.1 -0.1
BMO Blue Mountains 120.13 43 IAMs_20 IAMs_20 11 05 45.2
comp=Z,2µm,19.0s
SMMC Simmler 120.44 55 PKiKP PKiKP 10 21 14.7 +1.6
baz=280
PKM Mcpherson Peak 120.66 55 PKiKP PKiKP 10 21 15.6 +1.9
baz=280
VOG Valley Oaks Go 120.74 53 PKiKP PKiKP 10 21 14.6 +1.0
baz=281
UCM Universidad Co 120.82 311 PP PP 10 22 37.8 -4.6
UCM Universidad Co 120.82 311 PS PS 10 32 23.9 -11
FIGM Figuig 120.87 302 P PKiKP 10 21 17.0 +2.8
MLAC Mammoth, Mammt 120.90 52 PKiKP PKiKP 10 21 15.5 +1.3
baz=282
VES Vestal, Richgr 121.07 54 PKiKP PKiKP 10 21 15.2 +1.0
baz=281
JTMT Jette 121.12 39 PKiKP 10 21 14.6 +0.5
NVAR Mina Array Bea 121.13 51 PKP PKiKP 10 21 15.4 +0.8
comp=Z,12nm,0.8s,baz=255,slow=1.8,SNR=49
NVAR PP PP 10 22 45.3 +0.4
comp=Z,14nm,1.0s,baz=267,slow=7.8,SNR=9.0
NVAR PKKPbc PKKPbc 10 31 21.8 +4.1
comp=Z,1.6nm,0.7s,baz=122,slow=5.1,SNR=9.1
NVAR SKKPbc SKKPbc 10 35 11.0 +8.1
comp=Z,5.4nm,1.2s,baz=95,slow=4.6,SNR=3.6
NVAR Mina Array Bea 121.13 51 PKPdf PKiKP 10 21 15.2 +0.6
CHAS Isla Isabel II 121.32 305 PP PP 10 22 46.9 +0.9
CHAS Isla Isabel II 121.32 305 PS PS 10 32 43.8 +4.5
TAF Taforalt 121.38 305 P PKiKP 10 21 18.0 +3.0
ARVC Arvin 121.41 55 PKiKP PKiKP 10 21 16.6 +1.6
baz=281
ESDC Sonseca Array 121.52 311 PKP PKiKP 10 21 16.3 +1.3
comp=Z,28nm,1.0s,baz=39,slow=2.6,SNR=54
ESDC PP PP 10 22 50.9 +3.7
comp=Z,5.9nm,0.8s,baz=60,slow=4.9,SNR=4.6
ESDC Sonseca Array 121.52 311 PKPdf PKiKP 10 21 15.2 +0.1
JBK JBK 121.59 304 P PKiKP 10 21 18.0 +2.4
ISA Isabella, Lake 121.59 54 PKiKP PKiKP 10 21 16.8 +1.4
baz=281
OSI Osito Audit: C 121.59 55 PKiKP PKiKP 10 21 16.9 +1.5
baz=281
MSO Missoula 121.68 40 PKPdf PKiKP 10 21 15.4 +0.2
MSO Missoula 121.68 40 PKiKP PKiKP 10 21 15.9 +0.6
baz=292
CWC Cottonwood Cre 121.75 53 PKiKP PKiKP 10 21 17.3 +1.5
baz=282
ANGG Ammassalik, Gr 121.80 349 IAMs_20 IAMs_20 11 21 11.9
comp=Z,3µm,21.0s
PAB San Pablo 121.83 311 IAMs_20 IAMs_20 11 21 56.5
comp=Z,3µm,21.0s
PAB San Pablo 121.83 311 P PKiKP 10 21 17.7 +2.0
DECC Green Verdugo 121.98 56 PKiKP PKiKP 10 21 17.0 +0.9
baz=281
CIS Catalina Islan 122.07 57 PKiKP PKiKP 10 21 17.4 +1.1
baz=280
ISOG Isortoq, Green 122.11 350 i P PKiKP 10 21 15.2 -0.1
EDW2 Edwards Air Fo 122.13 55 PKiKP PKiKP 10 21 18.2 +1.7
baz=281
GRAC Grapevine Rang 122.18 52 PKiKP PKiKP 10 21 18.0 +1.6
baz=283
SFJD Kangerlussuaq 122.24 355 PKIKP PKiKP 10 21 15.8 +0.2
SFJD Kangerlussuaq 122.24 355 i P PKiKP 10 21 15.5 -0.1
SFJD Kangerlussuaq 122.24 355 PKiKP 10 21 15.8 +0.2
SFJD Kangerlussuaq 122.24 355 IAMs_20 IAMs_20 11 21 38.0
comp=Z,4µm,20.0s
LRMC Laurel Mtn Rad 122.26 54 PKiKP PKiKP 10 21 18.4 +1.6
baz=282
MPMC Manual Prospec 122.29 53 PKiKP PKiKP 10 21 18.5 +1.6
baz=282
DY2G Dye2 122.32 353 i P PKiKP 10 21 16.1 0.0
HLID Hailey 122.51 44 IAMs_20 IAMs_20 11 03 49.3
comp=Z,3µm,20.0s
HLID Hailey 122.51 44 PKiKP PKiKP 10 21 18.9 +1.8
baz=289
EMAL Malaga-Limoner 122.58 308 PP PP 10 22 53.9 -0.5
EMAL Malaga-Limoner 122.58 308 PS PS 10 32 48.9 -1.5
FURC Furnace Creek, 122.70 53 PKiKP PKiKP 10 21 18.3 +0.9
baz=283
ELK Elko 122.81 47 PKP PKiKP 10 21 19.1 +1.3
comp=Z,25nm,1.0s,baz=286,slow=1.9,SNR=46
ELK PP PP 10 22 56.9 +0.7
comp=Z,16nm,0.9s,baz=265,slow=3.8,SNR=10
ELK Elko 122.81 47 PKIKP PKiKP 10 21 18.8 +1.0
ELK Elko 122.81 47 PKPdf PKiKP 10 21 18.8 +1.0
ELK IAMs_20 IAMs_20 11 00 33.4
comp=Z,3µm,21.0s
PBRG Braganca 122.94 314 ePKPdf PKiKP 10 21 19.5 +1.7
RRX Edison Barstow 122.94 55 PKiKP PKiKP 10 21 19.1 +1.1
baz=282
GSC Goldstone, Bar 123.00 54 PKiKP PKiKP 10 21 20.1 +1.9
baz=282
MURC Murrieta 123.03 56 PKiKP PKiKP 10 21 19.3 +1.1
baz=281
TPNV Topopah Spring 123.06 52 PKiKP PKiKP 10 21 19.5 +1.1
baz=284
BBRC Big Bear Solar 123.12 55 PKiKP PKiKP 10 21 20.2 +1.5
baz=282
R11A Troy Canyon, C 123.22 50 PKiKP PKiKP 10 21 20.1 +1.5
baz=285
109C Camp Elliot, M 123.24 57 PKiKP PKiKP 10 21 19.9 +1.3
baz=280
MVO Moncorvo 123.34 313 ePKPdf PKiKP 10 21 20.9 +2.3
MVO Moncorvo 123.34 313 eLR LR 11 10 38.9
comp=Z,2µm,22.0s
HEC Hector,Ludlow 123.48 55 PKiKP PKiKP 10 21 20.6 +1.5
baz=282
CEU Ceuta 123.52 307 PP PP 10 22 58.8 -1.9
MDT Midelt 123.55 303 P PKiKP 10 21 21.6 +2.3
LCRM LCR 123.58 304 P PKiKP 10 21 22.0 +2.5
BOZ Bozeman (W) 123.63 41 PKiKP PKiKP 10 21 20.4 +1.2
baz=293
PFO Pinyon Flats O 123.63 56 PKP PKiKP 10 21 20.8 +1.2
comp=Z,20nm,0.9s,baz=246,slow=1.5,SNR=26
PFO PP PP 10 23 06.9 +5.0
comp=Z,12nm,1.0s,baz=214,slow=2.7,SNR=4.0
PFO PKKPbc PKKPbc 10 31 11.2 +3.4
comp=Z,3.3nm,0.8s,baz=168,slow=1.8,SNR=4.6
PFO Pinyon Flats O 123.63 56 IAMs_20 IAMs_20 11 09 09.5
comp=Z,4µm,20.0s
PFO Pinyon Flats O 123.63 56 PKiKP PKiKP 10 21 21.1 +1.6
baz=281
TPFO Pinon Flats 123.64 56 PKiKP PKiKP 10 21 21.1 +1.6
baz=281
CHEFC Chefchaouen 123.67 306 P PKiKP 10 21 22.0 +2.5
TUQ Turquoise Moun 123.67 54 PKiKP PKiKP 10 21 21.1 +1.5
baz=283
EGMT Eagleton 123.79 38 PKPdf PKiKP 10 21 19.5 +0.2
EGMT Eagleton 123.79 38 PKiKP PKiKP 10 21 20.2 +0.9
baz=296
MONP2 Monument Peak 123.80 57 PKiKP PKiKP 10 21 21.8 +1.8
baz=281
POLO Lamas de Olo 123.82 314 ePKPdf PKiKP 10 21 21.7 +2.1
IFR Ifrane 123.84 304 PP PP 10 23 01.1 -2.2
IFR Ifrane 123.84 304 PS PS 10 33 08.8 +6.6
SICH Sidi Chahed 123.87 305 P PKiKP 10 21 22.0 +2.2
BELC Belle Mtn. Jos 123.93 55 PKiKP PKiKP 10 21 22.2 +2.0
baz=282
MTE Manteigas 123.95 313 ePKPdf PKiKP 10 21 22.3 +2.4
MTE Manteigas 123.95 313 eLR LR 11 07 26.7
comp=Z,2µm,22.0s
MTE Manteigas 123.95 313 IAMs_20 IAMs_20 11 21 27.3
comp=Z,3µm,22.0s
PGAV Gavieira, Arco 123.97 315 ePKPdf PKiKP 10 21 21.8 +1.9
PGAV Gavieira, Arco 123.97 315 eLR LR 11 06 18.2
comp=Z,2µm,20.0s
GMRC Granite Mounta 124.03 54 PKiKP PKiKP 10 21 22.1 +1.8
baz=283
SFS San Fernando 124.03 308 PP PP 10 23 02.2 -2.0
SFS San Fernando 124.03 308 IAMs_20 IAMs_20 11 20 57.9
comp=Z,4µm,22.0s
GOLM Goulmima 124.04 302 P PKiKP 10 21 23.0 +2.6
PCBR Castelo Branco 124.07 312 ePKPdf PKiKP 10 21 22.1 +2.1
PVIS Viseu 124.10 313 ePKPdf PKiKP 10 21 21.9 +1.8
IKP In-Ko-Pah, Jac 124.11 57 PKiKP PKiKP 10 21 21.9 +1.5
baz=281
PMRV Marv??o 124.13 311 ePKPdf PKiKP 10 21 21.8 +1.6
PMRV Marv??o 124.13 311 eLR LR 11 11 07.6
comp=Z,2µm,20.0s
ARNO Arenosillo 124.28 309 PP PP 10 23 05.5 -0.4
SWSC Sam W. Stewart 124.31 57 PKiKP PKiKP 10 21 22.3 +1.6
baz=281
FFC Flin Flon 124.36 28 PKIKP PKiKP 10 21 20.2 +0.1
FFC Flin Flon 124.36 28 PKPdf PKiKP 10 21 20.2 +0.1
FFC Flin Flon 124.36 28 IAMs_20 IAMs_20 11 07 57.9
comp=Z,4µm,22.0s
PESTR Estremoz 124.44 311 ePKPdf PKiKP 10 21 22.6 +1.8
PESTR Estremoz 124.44 311 P PKiKP 10 21 22.7 +1.8
BC3 Big Chuckawall 124.44 56 PKiKP PKiKP 10 21 22.9 +1.8
baz=282
PTO Porto 124.47 314 ePKPdf PKiKP 10 21 23.3 +2.5
KIC Kosan Boka 124.56 271 ePKP1 PKiKP 10 21 21.5 -0.2

comp=Z,151nm,1.0s
IRM Iron Mountain 124.58 55 PKiKP PKiKP 10 21 22.6 +1.3
baz=283
COI Coimbra 124.64 313 ePKPdf PKiKP 10 21 23.1 +2.0
COI Coimbra 124.64 313 IAMs_20 IAMs_20 11 23 54.5
comp=Z,4µm,21.0s
DBIC Dimbokro 124.71 272 PKP PKiKP 10 21 22.3 +0.3
comp=Z,113nm,1.0s,baz=113,slow=1.9,SNR=58
DBIC Dimbokro 124.71 272 PKPdf PKPdf 10 21 20.8 -0.9
TZRR Tazzarine 124.72 301 P PKiKP 10 21 24.0 +2.2
DUG Dugway, Tooele 124.74 47 PKiKP PKiKP 10 21 23.0 +1.4
baz=288
FCC Fort Churchill 124.75 20 PKiKP PKPdf 10 21 20.3 -0.1
FCC Fort Churchill 124.75 20 PKPdf PKPdf 10 21 20.3 -0.1
PCAS Casmilo, Conde 124.75 312 ePKPdf PKiKP 10 21 22.0 +0.6
H17A Grant Village 124.79 42 PKiKP PKiKP 10 21 23.7 +2.0
baz=293
LIC Lamto 124.82 271 ePKP1 PKPdf 10 21 20.8 -1.1
comp=Z,403nm,1.1s
PMTG Montargil 124.86 311 ePKPdf PKiKP 10 21 22.9 +1.3
EVO Evora 124.86 311 PP PP 10 23 04.8 -4.9
EVO Evora 124.86 311 PP PP 10 23 06.2 -3.4
EVO Evora 124.86 311 PS PS 10 33 10.1 -0.4
EVO Evora 124.86 311 PS PS 10 33 15.3 +4.9
EVO Evora 124.86 311 ePKPdf PKiKP 10 21 23.5 +1.9
TIC Toumodi 124.86 271 ePKP1 PKPdf 10 21 21.7 -0.3
NEE2 Needles Airpor 124.87 54 PKiKP PKiKP 10 21 22.8 +1.0
baz=283
ZGR Zagora 124.88 300 P PKiKP 10 21 24.0 +1.9
PBEJ Beja 124.89 310 ePKPdf PKiKP 10 21 22.7 +1.0
PVAQ Vaqueiros 124.96 309 ePKPdf PKiKP 10 21 23.2 +1.3
PVAQ Vaqueiros 124.96 309 eLR LR 11 08 27.0
comp=Z,3µm,20.0s
PVAQ Vaqueiros 124.96 309 P PKiKP 10 21 24.1 +2.3
GLA Glamis 125.08 56 PKiKP PKiKP 10 21 23.9 +1.6
baz=282
NUUK Nuuk 125.11 355 i P PKiKP 10 21 21.7 +0.4
PCVE Castro Verde 125.14 309 ePKPdf PKiKP 10 21 24.4 +2.2
PSBE So Bento 125.14 312 ePKPdf PKiKP 10 21 24.5 +2.3
MESJ Messejana 125.22 310 ePKPdf PKiKP 10 21 23.0 +0.7
MESJ ePP PP 10 23 13.9 +1.9
MESJ IAMs_20 IAMs_20 11 19 57.4
comp=E,4µm,33.2s
MESJ Messejana 125.22 310 ePKPdf PKiKP 10 21 24.6 +2.3
MESJ Messejana 125.22 310 ePKIKP PKiKP 10 21 23.0 +0.7
MESJ e 10 23 13.9
RLMT Red Lodge 125.34 41 PKiKP PKiKP 10 21 24.0 +1.3
baz=295
PDMCI Parker Dam,Lak 125.36 55 PKiKP PKiKP 10 21 23.5 +0.7
baz=284
PNCL Nicolau / Gran 125.37 310 ePKPdf PKiKP 10 21 24.8 +2.2
LIS Lisbon 125.65 311 ePP PP 10 23 16.6 +1.7
LIS IAMs_20 IAMs_20 11 19 27.7
comp=E,6µm,37.4s
PMAFR Mafra 125.67 311 ePKPdf PKiKP 10 21 25.3 +2.0
PTEO Sao Teotonio 125.68 310 ePKPdf PKiKP 10 21 25.9 +2.6
MORF Marmelete 125.70 309 ePKPdf PKiKP 10 21 23.9 +0.4
MORF ePP PP 10 23 17.2 +1.9
MORF IAMs_20 IAMs_20 11 23 06.5
comp=Z,4µm,25.5s
MORF Marmelete 125.70 309 ePKPdf PKiKP 10 21 25.8 +2.4
MORF Marmelete 125.70 309 ePKIKP PKiKP 10 21 23.8 +0.4
MORF e 10 23 17.2
OUZM OUZ 125.70 301 P PKiKP 10 21 26.0 +2.3
AVE Averroes 125.75 304 P PKiKP 10 21 25.3 +1.7
PFVI Vila Bisbo 125.88 309 ePKPdf PKiKP 10 21 24.9 +1.2
PFVI Vila Bisbo 125.88 309 P PKiKP 10 21 26.0 +2.3
BW06 Boulder Array 126.11 43 PKiKP PKiKP 10 21 24.5 +0.2
baz=293
PDAR Pinedale Array 126.11 43 PKP PKiKP 10 21 24.1 -0.3
comp=Z,9.2nm,1.0s,baz=116,slow=3.4,SNR=4.2
PDAR PP PP 10 23 24.1 +6.0
comp=Z,4.7nm,0.9s,baz=270,slow=4.4,SNR=4.5
PDAR SKKPbc SKKPbc 10 34 53.4 +6.8
comp=Z,3.9nm,1.1s,baz=101,slow=7.7,SNR=4.0
PDAR Pinedale Array 126.11 43 PKPdf PKiKP 10 21 24.6 +0.3
TMUT Trail Mountain 126.20 48 PKPdf 10 21 24.2 -0.1
LAO LASA Array 126.53 38 PKPdf PKiKP 10 21 25.6 +0.8
LAO LASA Array 126.53 38 PKiKP PKiKP 10 21 26.1 +1.3
baz=299
OUK Oukaimeden 126.58 302 P PKiKP 10 21 28.0 +2.2
DGMT Dagmar 126.81 35 IAMs_20 IAMs_20 11 09 08.3
comp=Z,2µm,20.0s
DGMT Dagmar 126.81 35 PKiKP PKiKP 10 21 25.8 +0.6
baz=302
214A Organ Pipe Nat 126.99 57 PKiKP PKiKP 10 21 27.4 +1.3
baz=283
TTIG Tnine Tigouga, 127.20 301 P PKiKP 10 21 29.0 +2.3
WUAZ Wupatki 127.24 52 IAMs_20 IAMs_20 11 09 55.9
comp=Z,3µm,22.0s
WUAZ Wupatki 127.24 52 PKiKP PKiKP 10 21 27.5 +0.8
baz=286
NRS Narsarsuaq 127.28 351 i P PKPdf 10 21 25.4 +0.2
IVI Ivigtut 127.64 352 i P PKiKP 10 21 26.4 0.0
O20A White River Ci 128.04 46 PKiKP PKiKP 10 21 29.4 +1.1
baz=292
RWWY Rawlins 128.14 44 IAMs_20 IAMs_20 11 15 25.2
comp=Z,2µm,20.0s
K22A Casper 128.20 42 PKiKP PKiKP 10 21 28.2 -0.2
baz=296
TUC Tucson 128.57 56 IAMs_20 IAMs_20 11 06 53.2
comp=Z,3µm,21.0s
TUC Tucson 128.57 56 PKiKP PKiKP 10 21 30.1 +0.8
baz=284
W18A Petrified Fore 128.64 52 PKiKP PKiKP 10 21 30.6 +1.1
baz=287
MVCO Mesa Verde 128.91 49 IAMs_20 IAMs_20 11 10 14.0
comp=Z,3µm,22.0s
MVCO Mesa Verde 128.91 49 PKiKP PKiKP 10 21 31.4 +1.3
baz=290
RSSD Black Hills 129.13 40 PKIKP PKiKP 10 21 29.8 -0.5
RSSD Black Hills 129.13 40 PKPdf PKiKP 10 21 29.8 -0.5
RSSD Black Hills 129.13 40 PKiKP PKiKP 10 21 30.0 -0.3
baz=299
PLCA Paso Flores 129.13 170 PKP PKiKP 10 21 32.2 +2.0
comp=Z,16nm,1.1s,baz=178,slow=2.9,SNR=20
PLCA PKKP PKKPdf 10 31 42.4 +6.4
comp=Z,2.0nm,0.8s,baz=158,slow=2.2,SNR=4.0
PLCA Paso Flores 129.13 170 eP PKPdf 10 21 28.6 -1.0
N23A Red Feather La 129.34 44 PKiKP PKiKP 10 21 31.5 +0.6
baz=295
PHWY Pilot Hill 129.50 43 PKPdf PKiKP 10 21 30.6 -0.6
MDND Maddock 129.71 33 PKPdf PKiKP 10 21 30.8 -0.2
MDND Maddock 129.71 33 PKiKP PKiKP 10 21 30.8 -0.2
baz=306
S22A 4UR Ranch, Cre 129.96 48 PKiKP PKiKP 10 21 32.6 +0.4
baz=292
ISCO Idaho Springs 130.03 45 PKiKP PKiKP 10 21 32.8 +0.4
baz=294
ULM Lac du Bonnet 130.09 29 PKP PKiKP 10 21 31.8 +0.1
comp=Z,16nm,0.9s,baz=304,slow=3.5,SNR=9.4
ULM PP PP 10 23 45.6 +2.3
comp=Z,14nm,1.0s,baz=321,slow=6.9,SNR=4.1
ULM SKPbc SKPbc 10 24 51.2 +1.5
comp=Z,18nm,0.9s,baz=345,slow=3.5,SNR=5.7
ULM Lac du Bonnet 130.09 29 PKPdf PKiKP 10 21 31.6 -0.1
LPIG La Paz 130.61 66 PKP PKiKP 10 21 34.3 +0.8
comp=Z,36nm,1.2s,baz=199,slow=2.0,SNR=9.2
LPIG SKPbc SKPab 10 24 55.4 +2.9
comp=Z,70nm,0.8s,baz=252,slow=1.4,SNR=11
Q24A Divide 130.70 46 PKiKP PKiKP 10 21 34.0 +0.3
baz=294
SDCO Great Sand Dun 130.94 48 IAMs_20 IAMs_20 11 13 09.5
comp=Z,3µm,22.0s
SDCO Great Sand Dun 130.94 48 PKiKP PKiKP 10 21 35.2 +0.9
baz=293
121A Cookes Peak, D 130.95 55 PKPdf PKiKP 10 21 35.7 +1.4
121A Cookes Peak, D 130.95 55 PKiKP PKiKP 10 21 35.3 +1.1
baz=287
SLBS Sierra La Lagu 131.00 67 IAMs_20 IAMs_20 11 06 11.2
comp=Z,4µm,22.0s
Y22D IRIS PASSCAL I 131.17 53 PKiKP PKiKP 10 21 35.9 +1.2
baz=289
ANMO Albuquerque 131.24 52 PKP PKiKP 10 21 35.5 +0.7
comp=Z,18nm,0.9s,baz=199,slow=3.0,SNR=24
ANMO PP PP 10 23 50.9 -1.1
comp=Z,16nm,1.2s,baz=297,slow=4.1,SNR=7.6
ANMO SKPbc SKPab 10 24 57.9 +2.8
comp=Z,25nm,0.9s,baz=293,slow=3.0,SNR=15
ANMO Albuquerque 131.24 52 IAMs_20 IAMs_20 11 09 02.9
comp=Z,2µm,21.0s
ANMO Albuquerque 131.24 52 PKiKP PKiKP 10 21 35.6 +0.8
baz=290
BNM Barren Site 131.38 53 PKPdf PKiKP 10 21 35.7 +0.5
AGMN Agassiz Nation 131.39 31 IAMs_20 IAMs_20 11 11 35.3
comp=Z,3µm,22.0s
OGNE Ogallala 131.96 42 PKiKP PKiKP 10 21 35.2 -0.8
baz=299
T25A Trinidad 131.97 48 PKiKP PKiKP 10 21 36.6 +0.4
baz=293
SUSD Miller 132.05 37 PKiKP PKiKP 10 21 35.9 0.0
baz=304
EPT El Paso 132.21 56 IAMs_20 IAMs_20 11 09 51.7
comp=Z,3µm,22.0s
KSCO Kaye Shedlock' 132.46 45 PKiKP PKiKP 10 21 37.1 0.0
baz=296
F33A 5 Mile Ranch, 132.73 34 PKiKP 10 21 37.0 -0.3
PMPS Porto Santo 133.00 307 ePKPdf PKiKP 10 21 40.3 +2.2
MNTX Cornudas Mount 133.15 55 PKPdf PKiKP 10 21 39.0 +0.5
MNTX IAMs_20 IAMs_20 11 17 51.4
comp=Z,3µm,21.0s
MNTX Cornudas Mount 133.15 55 PKiKP PKiKP 10 21 39.0 +0.5
baz=288
PMOZ Porto Moniz, M 133.76 307 eLR LR 11 21 46.7
comp=Z,2µm,20.0s
EYMN Ely 133.76 28 PKiKP PKiKP 10 21 39.3 +0.1
baz=315
ECSD EROS Data Cent 133.84 36 PKiKP PKiKP 10 21 38.8 -0.8
baz=306
BGNE Belgrade 134.24 40 PKiKP PKPdf 10 21 39.2 +0.1
baz=303
MSTX Muleshoe 134.43 51 PKiKP PKPdf 10 21 40.0 +0.2
baz=292
CBKS Cedar Bluff 134.54 44 PKiKP PKiKP 10 21 40.6 -0.6
baz=299
SCHQ Schefferville 134.59 5 PKP PKiKP 10 21 41.1 +0.4
comp=Z,12nm,0.6s,baz=1.7,slow=1.8,SNR=12
SCHQ PP PP 10 24 12.2 +0.5
comp=Z,27nm,1.0s,baz=2.5,slow=9.7,SNR=5.1
SCHQ SKPbc SKPab 10 25 08.1 -0.5
comp=Z,26nm,0.9s,baz=4.5,slow=4.5,SNR=4.4
AMTX Amarillo 134.91 50 PKPdf PKiKP 10 21 41.9 -0.2
AMTX Amarillo 134.91 50 PKiKP PKiKP 10 21 41.1 -0.9
baz=294
SPMN Marine on St. 135.00 32 PKPdf PKiKP 10 21 41.4 -0.5
SPMN Marine on St. 135.00 32 PKiKP PKPdf 10 21 40.8 +0.5
baz=312
TX32 Lajitas Array 135.27 58 PKPdf PKPdf 10 21 40.1 -1.4
TXAR Lajitas Array 135.27 58 PKhKP PKPpre 10 21 29.8
comp=Z,2.8nm,0.7s,baz=264,slow=1.3,SNR=12
TXAR PKP PKiKP 10 21 43.3 +0.3
comp=Z,7.9nm,0.8s,baz=215,slow=1.1,SNR=13
TXAR PP PP 10 24 23.1 +5.3
comp=Z,3.0nm,0.9s,baz=223,slow=3.7,SNR=3.9
TXAR SKPbc SKPab 10 25 11.8 -0.8
comp=Z,17nm,0.8s,baz=258,slow=2.3,SNR=13
TXAR SKKPbc SKKPbc 10 34 21.4 +8.5
comp=Z,2.2nm,1.1s,baz=108,slow=4.1,SNR=3.7
TXAR Lajitas Array 135.27 58 PKIKP PKPdf 10 21 39.8 -1.7
TXAR Lajitas Array 135.27 58 PKPdf PKPdf 10 21 39.8 -1.7
RFA San Rafael 135.29 171 i P PKiKP 10 21 43.4 +0.5
LPA La Plata 135.69 183 dePKIKP PKiKP 10 21 42.8 -0.8
LPA PP PP 10 24 18.7 +0.2
LPA SKP 10 25 06.2
LPA PPP PPP 10 27 20.3
LPA SKIKS 10 28 43.2
LPA SDIFF 10 32 35.0
COWI Conover 136.22 29 IAMs_20 IAMs_20 11 23 26.6
comp=Z,3µm,21.0s
G40A Rib Lake 136.30 30 PKPpre 10 21 32.0
KSU1 Kansas State U 136.48 42 PKPpre 10 21 33.1
KSU1 Kansas State U 136.48 42 PKiKP PKPdf 10 21 43.8 +0.5
baz=303
ROC1 El Roble 136.56 167 i P PKPdf 10 21 44.3 +0.3
VA03 San Esteban 136.87 168 PKPdf 10 21 42.2 -2.1
AAGR Agrelo 136.88 170 i P PKiKP 10 21 46.7 +0.5
SCIA State Center 136.93 36 IAMs_20 IAMs_20 11 25 23.9
comp=Z,2µm,19.0s
SCIA State Center 136.93 36 PKiKP PKPdf 10 21 44.5 +0.4
baz=309
I40A Norwalk 137.05 32 PKPdf PKPdf 10 21 41.5 -2.7
WMOK Wichita Mounta 137.12 48 PKiKP PKiKP 10 21 45.4 -1.1
baz=296
ASAL Salagasta 137.36 170 eP PKPdf 10 21 37.6 -7.7
ABTX Abilene, Hawle 137.37 52 PKiKP PKiKP 10 21 46.0 -1.1
baz=294
AUSP Uspallata 137.62 169 eP PKPdf 10 21 38.9 -7.1
JFWS Jewell Farm 137.92 33 IAMs_20 IAMs_20 11 16 49.0
comp=Z,3µm,22.0s
JFWS Jewell Farm 137.92 33 PKiKP PKPdf 10 21 46.2 +0.3
baz=313
JCT Junction City 138.06 55 PKiKP PKiKP 10 21 47.4 -1.2
baz=291
E46A Sault Ste Mari 138.15 25 PKPdf PKPdf 10 21 43.4 -2.7
PLTB Pedras Altas 138.35 189 eP PKPdf 10 21 46.8 -0.3
TUL1 Leonard 138.71 45 IAMs_20 IAMs_20 11 17 32.5
comp=Z,3µm,22.0s
TUL1 Leonard 138.71 45 PKiKP PKPdf 10 21 47.9 +0.4
baz=289
833A Chaparral WMA, 139.15 57 PKiKP PKiKP 10 21 49.9 -0.8
baz=289
GLMI Grayling 139.25 26 PKPdf 10 21 45.0 -3.2
ACCO Cerro Coronel 139.27 169 i P PKPdf 10 21 43.6 -5.5
WHTX Lake Whitney, 139.32 51 PKiKP PKPdf 10 21 49.3 +0.6
baz=295
AVFE Valle Fertil 139.48 171 i P PKPdf 10 21 44.1 -5.1
AROD Rodeo 139.60 168 i P PKPdf 10 21 45.9 -3.9
CPSB Cacapava Do Su 139.65 190 eP PKPdf 10 21 47.7 -1.8
ACDV Cuesta del Vie 139.67 169 eP PKPdf 10 21 45.6 -4.1
L44A Lake County Fo 139.67 32 IAMs_20 IAMs_20 11 29 34.2
comp=Z,3µm,21.0s
L44A Lake County Fo 139.67 32 PKiKP PKPdf 10 21 49.2 +0.2
baz=316
435B Jarrell 139.71 53 PKPdf 10 21 47.1 -2.3
435B Jarrell 139.71 53 PKiKP PKPdf 10 21 50.3 +0.8
baz=293
R40A Maddies Statio 139.73 40 PKPpre 10 21 40.2
HDIL Hopedale 140.05 35 IAMs_20 IAMs_20 11 33 14.4
comp=Z,2µm,22.0s
HDIL Hopedale 140.05 35 PKiKP PKPdf 10 21 50.0 +0.2
baz=312
735A Kenedy 140.27 56 PKPdf 10 21 47.3 -3.3
DRLN Deer Lake 140.35 357 PKPdf PKPdf 10 21 48.5 -1.6
LCO Las Campanas 140.45 166 PKIKP PKPdf 10 21 48.4 -2.9
LCO Las Campanas 140.45 166 PKPdf PKPdf 10 21 48.4 -2.9
U40A Yellville 140.48 42 IAMs_20 IAMs_20 11 19 07.2
comp=Z,3µm,21.0s
U40A Yellville 140.48 42 PKiKP PKPdf 10 21 50.7 0.0
baz=304
W39A Magazine 140.48 45 IAMs_20 IAMs_20 11 35 38.3
comp=Z,2µm,21.0s
W39A Magazine 140.48 45 PKiKP PKPdf 10 21 51.4 +0.7
baz=302
CCM Cathedral Cave 140.51 39 PKHKP PKPpre 10 21 43.5
CCM Cathedral Cave 140.51 39 PKPpre 10 21 43.5
CCM Cathedral Cave 140.51 39 IAMs_20 IAMs_20 11 31 30.3
comp=Z,2µm,20.0s
CCM Cathedral Cave 140.51 39 PKiKP PKPdf 10 21 51.4 +0.7
baz=308
ACLC CERRO LA CRUZ 140.77 171 eP PKPdf 10 21 51.1 -0.6
ITQB Itaqui 140.79 186 eP PKPdf 10 21 50.1 -1.4
MIAR Mount Ida 140.97 45 PKHKP PKPpre 10 21 46.4
MIAR Mount Ida 140.97 45 PKPdf PKPdf 10 21 46.4 -5.3
MIAR IAMs_20 IAMs_20 11 17 59.0
comp=Z,3µm,21.0s
MIAR Mount Ida 140.97 45 PKiKP PKPdf 10 21 52.0 +0.4
baz=302
FCAR Ozark Folk Cen 141.23 43 PKPdf PKPdf 10 21 46.2 -5.9
VCA Vinchina 141.23 169 i P PKiKP 10 21 55.0 -0.3
SFIN Lafayette 141.38 33 PKiKP PKPdf 10 21 52.7 +0.5
baz=315
HKT Hockley 141.43 53 PKIKP PKPdf 10 21 49.4 -3.1
HKT Hockley 141.43 53 PKPdf PKPdf 10 21 49.4 -3.1
SADO Sadowa 141.47 21 PKhKP PKPpre 10 21 46.5
comp=Z,9.9nm,0.6s,baz=295,slow=3.9,SNR=6.6
X40A Basin Creek Fa 141.52 45 PKPdf 10 21 50.0 -2.7
X40A IAMs_20 IAMs_20 11 20 43.8
comp=Z,2µm,21.0s
X40A Basin Creek Fa 141.52 45 PKiKP PKPdf 10 21 52.9 +0.3
baz=302
W41B Gary Mavity, V 141.55 44 PKiKP PKPdf 10 21 52.9 +0.3
baz=304
NATX Nacogdoches 141.55 50 IAMs_20 IAMs_20 11 38 32.8
comp=Z,2µm,21.0s
AAM Ann Arbor 141.66 28 IAMs_20 IAMs_20 11 35 32.7
comp=Z,3µm,21.0s
WLAR White Oak Lake 141.74 46 PKPdf PKPdf 10 21 49.1 -3.9
GO03 Copiap 141.92 166 i P PKiKP 10 21 55.6 -1.0
Z41A Richland Creek 142.19 47 PKPdf 10 21 50.7 -3.1
PARMO Parma 142.31 40 PKPdf 10 21 50.7 -3.2
HBAR Harrisburg 142.39 42 PKPdf 10 21 51.7 -2.5
ITAB Concordia 142.49 193 eP PKPdf 10 21 53.1 -1.5
PQI Presque Isle 142.50 8 IAMs_20 IAMs_20 11 30 51.2
comp=Z,3µm,22.0s
HICK Hickman 142.71 39 PKPdf 10 21 51.9 -2.8
USIN University of 142.73 36 PKPdf PKPdf 10 21 51.5 -3.2
GLAT Glass 142.84 40 PKPdf 10 21 51.8 -3.1
LONY Lake Ozonia 143.06 17 IAMs_20 IAMs_20 11 35 31.3
comp=Z,3µm,21.0s
FRNY Flat Rock 143.13 15 PKPdf PKPdf 10 21 54.4 -0.7
441A DeRidder 143.13 50 PKPdf 10 21 54.2 -1.4
P49A Miami Univ. Ec 143.25 32 IAMs_20 IAMs_20 11 30 24.0
comp=Z,2µm,21.0s
WCI Wyandotte Cave 143.34 35 IAMs_20 IAMs_20 11 20 44.5
comp=Z,2µm,22.0s
143A Socs Landing, 143.48 46 PKPdf 10 21 54.7 -1.5
342A Flagon Creek P 143.49 49 PKPdf PKPdf 10 21 55.4 -0.8
TIJ01 Guaruva-PR 143.50 198 eP PKPdf 10 21 56.1 -0.5
AHML Horco Molle 143.58 173 i P PKPdf 10 21 56.4 -0.2
ACSO Alum Creek Sta 143.59 29 PKPbc 10 21 54.0 +0.4
ACSO IAMs_20 IAMs_20 11 26 04.9
comp=Z,3µm,22.0s
CAM01 Campos-RJ 143.64 211 eP PKPdf 10 21 55.8 -0.9
PKME Peaks-Kenny Pk 143.67 10 PKPdf PKPdf 10 21 55.0 -1.1
LMN Caledonia Moun 143.67 5 PKPdf PKPbc 10 21 54.1 +0.5
M53A WI Miller and 143.68 26 PKPbc 10 21 54.6 +0.8
M53A IAMs_20 IAMs_20 11 37 58.0
comp=Z,3µm,22.0s
MMNY Mt. Morris Dam 143.68 22 PKPbc 10 21 54.2 +0.4
WVNY West Valley, N 143.70 23 PKPdf PKPbc 10 21 54.5 +0.6
T47A Sharon Grove 143.72 37 PKPdf PKPbc 10 21 53.8 -0.3
ALLY Alegheny Colle 143.73 25 PKPbc 10 21 54.4 +0.4
J57A Williamstown 143.74 19 PKPdf PKPbc 10 21 54.0 +0.1
DUB01 Friburgo-RJ 143.78 210 eP PKPbc 10 21 55.2 +0.5
VT1 Waterbury 143.82 15 IAMs_20 IAMs_20 11 33 03.4
comp=Z,2µm,21.0s
OXF Oxford 143.84 42 PKIKP PKPbc 10 21 54.5 0.0
OXF MLR MLR
comp=Z,2µm,22.0s
OXF Oxford 143.84 42 PKPbc 10 21 54.5 0.0
OXF IAMs_20 IAMs_20 11 22 59.9
comp=Z,2µm,22.0s
WVT Waverly 143.84 39 PKIKP PKPbc 10 21 54.1 -0.3
WVT Waverly 143.84 39 PKPdf PKPbc 10 21 54.1 -0.3
WVT Waverly 143.84 39 IAMs_20 IAMs_20 11 40 02.3
comp=Z,2µm,21.0s
MAN01 Angra dos Reis 143.85 207 eP PKPdf 10 21 56.1 -1.1
PET01 Itanhaem-SP 143.89 201 eP PKPdf 10 21 56.4 -0.7
R49A Shelbyville 143.92 34 PKPbc 10 21 54.7 +0.1
H62A Milan 143.96 13 PKPbc 10 21 55.1 +0.6
G65A Princeton 144.00 8 PKPbc 10 21 55.1 +0.5
J58A Remsen 144.00 18 PKPbc 10 21 54.6 -0.1
M54A Oil Creek Stat 144.04 25 PKPbc 10 21 54.8 -0.1
PARB Paraibuna 144.13 204 eP PKPbc 10 21 56.1 +0.4
ALF01 Guarapari-ES 144.16 213 eP PKPdf 10 21 56.7 -0.9
FSA Cafayete 144.16 172 i P PKPdf 10 21 57.6 -0.2
CPUP Villa Florida 144.17 185 PKP PKPdf 10 21 57.2 -0.4
comp=Z,40nm,0.9s,baz=170,slow=3.1,SNR=54
CPUP Villa Florida 144.17 185 eP PKPdf 10 21 56.4 -1.2
GGN Saint George 144.18 7 PKPdf PKPbc 10 21 55.1 0.0
WVL Waterville 144.28 11 PKPbc 10 21 55.9 +0.5
WVL IAMs_20 IAMs_20 11 37 01.2
comp=Z,3µm,20.0s
N54A Moraine State 144.37 25 PKPab 10 21 55.1 -0.5
N54A IAMs_20 IAMs_20 11 39 53.1
comp=Z,3µm,20.0s
VBMS Vicksburg 144.37 46 PKPbc 10 21 56.5 +0.3
VBMS IAMs_20 IAMs_20 11 22 54.0
comp=Z,3µm,20.0s
O53A New Philadelph 144.41 27 IAMs_20 IAMs_20 11 39 14.4
comp=Z,3µm,22.0s
PLAL Pickwick Lake 144.42 40 PKPdf PKPab 10 21 55.6 -0.4
P52A Corning 144.47 29 IAMs_20 IAMs_20 11 26 39.0
comp=Z,3µm,21.0s
HNH Hanover 144.52 15 PKPdf 10 21 57.0 -0.6
HNH IAMs_20 IAMs_20 11 34 25.8
comp=Z,3µm,22.0s
I63A Otisfield 144.59 12 PKPdf PKPdf 10 21 57.0 -0.7
I62A Tamworth 144.59 13 PKPdf PKPdf 10 21 57.0 -0.7
PB14 IPOC Station P 144.72 165 i P PKPab 10 21 56.7 -1.1
CLTN Cedars of Leba 144.78 37 PKPbc 10 21 57.4 0.0
BINY Binghamton 144.82 20 PKPdf PKPab 10 21 56.9 -0.4
BINY IAMs_20 IAMs_20 11 36 17.0
comp=Z,3µm,21.0s
U49A Red Boiling Sp 144.82 36 PKPab 10 21 57.2 -0.2
PTGB Pitanga 144.90 194 eP PKPab 10 21 55.2 -2.9
VAO Valinhos 144.96 202 eP PKPab 10 21 56.4 -1.9
RIB01 Linhares ES 145.02 215 eP PKPbc 10 21 55.5 -3.1
TRY Troy 145.06 17 IAMs_20 IAMs_20 11 35 49.2
comp=Z,3µm,22.0s
M57A Sunshine Farm, 145.18 22 PKPbc 10 21 58.3 -0.2
SSPA Standing Stone 145.50 23 PKPbc PKPdf 10 21 59.1 -0.3
SSPA Standing Stone 145.50 23 IAMs_20 IAMs_20 11 38 58.0
comp=Z,3µm,22.0s
MCWV Mont Chateau 145.50 27 IAMs_20 IAMs_20 11 38 55.2
comp=Z,3µm,21.0s
Z47A Carrollton 145.51 43 PKPbc PKPdf 10 21 59.5 -0.2
O56A Blue Knob Stat 145.54 25 IAMs_20 IAMs_20 11 40 59.1
comp=Z,3µm,19.0s
SLA San Lorenzo 145.60 172 i P PKPab 10 22 00.8 0.0
SLA San Lorenzo 145.60 172 i P PKiKP 10 22 02.4 -2.0
SWET Sewanee 145.61 38 PKPbc PKPdf 10 21 59.4 -0.5
RCLB Rio Claro- Sao 145.70 202 eP PKPdf 10 22 00.1 -0.4
PB10 IPOC Station P 145.73 164 eP PKPbc 10 22 00.2 -0.6
PB10 IPOC Station P 145.73 164 i P PKiKP 10 22 02.9 -1.5
BSCB Bom Sucesso 145.84 207 eP PKPdf 10 21 59.5 -1.3
CMIG Matias Romero 145.93 74 PKPbc PKPab 10 22 02.6 +0.5
comp=Z,370nm,1.0s,baz=282,slow=3.1,SNR=19
SJMB Sao Joao De Ma 145.96 214 eP PKPbc 10 22 01.3 -0.3
WES Weston 146.00 14 IAMs_20 IAMs_20 11 38 46.9
comp=Z,3µm,19.0s
N59A State Game Lan 146.04 21 IAMs_20 IAMs_20 11 37 36.1
comp=Z,3µm,22.0s
TZTN Tazewell 146.07 34 IAMs_20 IAMs_20 11 23 36.8
comp=Z,3µm,21.0s
BCX Boston College 146.08 14 IAMs_20 IAMs_20 11 39 08.1
comp=Z,3µm,21.0s
FPAL Fort Paine 146.25 39 PKPbc PKPdf 10 22 01.3 +0.3
S54A Dingess, Beckl 146.30 30 PKPbc PKPab 10 22 02.5 -0.5
PB15 IPOC Station P 146.31 165 i P PKPab 10 22 04.2 +0.6
PB15 IPOC Station P 146.31 165 i P PKiKP 10 22 04.6 -1.4
LRAL Lakeview Retre 146.32 42 IAMs_20 IAMs_20 11 40 12.0
comp=Z,2µm,21.0s
BRYW Bryant College 146.39 15 IAMs_20 IAMs_20 11 31 12.2
comp=Z,3µm,21.0s
P57A Homestead Farm 146.43 25 PKPbc PKPab 10 22 02.9 -0.4
LUPA Lehigh Univers 146.46 20 PKPbc PKPab 10 22 02.9 -0.5
R55A Marlinton 146.49 28 PKPbc PKPab 10 22 03.5 -0.2
L64A Middleborough 146.54 14 PKPbc PKPbc 10 22 02.0 -0.6
PAL Palisades 146.57 18 PKP2 PKPbc 10 22 02.6 -0.1
PAL MLR MLR
comp=Z,2µm,20.0s
PAL Palisades 146.57 18 PKPbc 10 22 02.6 -0.1
PAL IAMs_20 IAMs_20 11 29 06.2
comp=Z,2µm,20.0s
YLE Yale 146.57 17 IAMs_20 IAMs_20 11 41 16.3
comp=Z,2µm,21.0s
TKL Tuckaleechee C 146.58 35 PKPbc PKPbc 10 22 02.6 -0.3
comp=Z,140nm,0.8s,baz=176,slow=1.4,SNR=138
WSPT Westport, CT 146.59 17 PKPbc 10 22 03.2 +0.4
WSPT IAMs_20 IAMs_20 11 25 01.8
comp=Z,3µm,22.0s
MVL Millersville 146.63 22 PKPbc PKPbc 10 22 02.5 -0.4
CPNY Central Park 146.75 19 PKPbc 10 22 04.0 -0.5
PB06 IPOC Station P 146.76 165 i P PKPab 10 22 04.8 -0.4
GUA01 Guaratinga, BA 146.81 219 eP PKPdf 10 21 59.5 -2.9
W52A Murphy 146.89 36 PKPbc 10 22 03.6 -0.3
SDMD Soldier's Deli 146.96 23 PKPbc 10 22 03.1 -0.9
PB04 IPOC Station P 146.97 164 i P PKiKP 10 22 06.2 -1.0
WUPA West Chester U 146.97 21 PKPbc 10 22 03.6 -0.3
LVC Limon Verde 147.02 166 PKPbc PKPbc 10 22 05.0 0.0
comp=Z,56nm,1.1s,baz=201,slow=3.4,SNR=18
LVC Limon Verde 147.02 166 eP PKPdf 10 22 02.5 -0.6
LVC Limon Verde 147.02 166 i P PKiKP 10 22 07.0 -0.5
HJA Humahuaca 147.10 172 eP PKPbc 10 22 05.4 +0.1
BLA Blacksburg 147.20 30 PKIKP PKPdf 10 22 03.0 +0.5
BLA Blacksburg 147.20 30 PKPdf 10 22 03.0 +0.5
PB03 IPOC Station P 147.34 164 PKPbc PKPbc 10 22 04.8 -0.9
PB03 IPOC Station P 147.34 164 i P PKPbc 10 22 05.7 -0.1
BRAL Brewton 147.40 45 PKiKP PKPab 10 22 06.7 -0.7
baz=305
250A Grady 147.46 43 PKPbc 10 22 04.2 -1.3
BG3 Lake Jocassee 147.53 35 PKPbc 10 22 04.3 -1.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CMC01 | Camacan, BA | 147.55 | 220 | eP | | PKPdf | 10 22 03.1 | -0.5 |
| PB07 | IPOC Station P | 147.62 | 164 | ⇑iP | | PKPdf | 10 22 01.8 | -2.0 |
| PB07 | IPOC Station P | 147.62 | 164 | i P | | PKPbc | 10 22 06.2 | -0.3 |
| DIAM | Diamantina, MG | 147.62 | 211 | eP | | PKPdf | 10 22 02.5 | -1.4 |
| PCMB | Pacaembu | 147.67 | 197 | eP | | PKPbc | 10 22 04.9 | -1.5 |
| PB09 | IPOC Station P | 147.72 | 165 | ⇑iP | | PKPbc | 10 22 05.3 | -1.5 |
| PB09 | IPOC Station P | 147.72 | 165 | i P | | PKPbc | 10 22 07.0 | +0.3 |
| CBN | Corbin Frederi | 147.78 | 25 | PKPbc | | PKPdf | 10 22 04.0 | +0.7 |
| CBN | comp=Z,3µm,22.0s | | | IAMs_20 | IAMs_20 | | 11 41 54.4 | |
| CBN | Corbin Frederi | 147.78 | 25 | PKiKP | | PKPbc | 10 22 06.7 | +0.5 |
| | baz=328 | | | | | | | |
| NBIT | Itapeh - BA | 147.81 | 221 | eP | | PKPdf | 10 22 03.1 | -0.9 |
| JSRW | J. Sargeant Re | 147.99 | 26 | PKPbc | | PKPbc | 10 22 07.5 | +0.7 |
| PB02 | IPOC Station P | 148.00 | 164 | | | PKPdf | 10 22 04.8 | +0.5 |
| PB02 | IPOC Station P | 148.00 | 164 | i P | | PKPbc | 10 22 07.0 | -0.4 |
| 152A | Waverly Hall | 148.04 | 40 | PKPdf | | PKPdf | 10 22 03.4 | -0.5 |
| 152A | | | | | | PKiKP | 10 22 08.5 | -0.4 |
| PAULI | Pauline | 148.29 | 34 | | | PKPdf | 10 22 05.2 | +0.9 |
| PAULI | | | | | | PKiKP | 10 22 08.7 | -0.6 |
| KMSC | Kings Mountain | 148.32 | 33 | PKPbc | | PKPdf | 10 22 04.4 | +0.1 |
| KMSC | | | | PKPab | | PKiKP | 10 22 09.1 | -0.3 |
| KMSC | Kings Mountain | 148.32 | 33 | PKiKP | | PKPbc | 10 22 08.2 | +0.4 |
| | baz=318 | | | | | | | |
| GOGA | Godfrey | 148.33 | 38 | PKP2 | | PKiKP | 10 22 09.5 | 0.0 |
| GOGA | Godfrey | 148.33 | 38 | PKPab | | PKiKP | 10 22 09.5 | 0.0 |
| GOGA | Godfrey | 148.33 | 38 | IAMs_20 | IAMs_20 | | 11 42 55.0 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| GOGA | Godfrey | 148.33 | 38 | PKiKP | | PKiKP | 10 22 08.7 | -0.8 |
| | baz=313 | | | | | | | |
| PB01 | IPOC Station P | 148.37 | 164 | | | PKPbc | 10 22 08.0 | -0.5 |
| PB01 | IPOC Station P | 148.37 | 164 | i P | | PKPbc | 10 22 07.9 | -0.5 |
| PATCX | Punta Patache | 148.40 | 163 | | | PKPbc | 10 22 07.9 | -0.6 |
| HODGE | Hodges | 148.47 | 36 | | | PKPdf | 10 22 06.1 | +1.5 |
| TA01 | Diego Aracena | 148.63 | 163 | | | PKPbc | 10 22 08.1 | -0.9 |
| 451A | Vernon | 148.63 | 45 | | | PKPab | 10 22 12.2 | -0.1 |
| 352A | Blakely | 148.66 | 42 | | | PKPdf | 10 22 05.5 | +0.6 |
| NBRF | Rio Formoso - | 148.76 | 235 | eP | | PKPdf | 10 22 04.3 | -1.3 |
| GDU01 | Guandu, BA | 148.79 | 222 | eP | | PKPdf | 10 22 03.4 | -2.3 |
| PAYG | Puerto Ayora | 148.82 | 107 | | PKPbc | PKPbc | 10 22 08.0 | -1.7 |
| TA02 | Huaiquique | 148.93 | 163 | | | PKPbc | 10 22 08.2 | -1.5 |
| JSC | Jenkinsville | 149.00 | 34 | PKiKP | | PKPdf | 10 22 06.5 | +1.1 |
| JSC | Jenkinsville | 149.00 | 34 | | | PKPdf | 10 22 06.5 | +1.1 |
| BIRD | Birdtown, Kers | 149.16 | 33 | | | PKPdf | 10 22 06.8 | +1.1 |
| ITRB | Iturama | 149.19 | 199 | eP | | PKPdf | 10 22 06.7 | +0.5 |
| RTAL | Retalhuleu | 149.29 | 78 | PKPab | | PKPab | 10 22 13.4 | -2.1 |
| PB08 | IPOC Station P | 149.32 | 164 | i P | | PKPdf | 10 22 01.4 | -5.5 |
| PB08 | IPOC Station P | 149.32 | 164 | i P | | PKPbc | 10 22 09.3 | -2.0 |
| HUEH | Huehuetenango | 149.39 | 76 | | | PKiKP | 10 22 13.1 | +0.7 |
| NBLA | Lagarto - SE | 149.41 | 229 | eP | | PKPdf | 10 22 05.8 | -0.9 |
| PB11 | IPOC Station P | 149.55 | 163 | | | PKPbc | 10 22 09.6 | -1.9 |
| PB11 | IPOC Station P | 149.55 | 163 | i P | | PKPbc | 10 22 09.3 | -2.2 |
| TIGA | Tifton | 149.57 | 41 | | | PKPdf | 10 22 08.2 | +1.8 |
| TIGA | Tifton | 149.57 | 41 | PKiKP | | PKiKP | 10 22 12.3 | +0.2 |
| | baz=310 | | | | | | | |
| AQDB | Aquidauana | 149.75 | 189 | PKPab | | PKiKP | 10 22 14.4 | +1.6 |
| AQDB | Aquidauana | 149.75 | 189 | eP | | PKPdf | 10 22 06.7 | -0.4 |
| 553A | Crawfordville | 149.80 | 44 | PKPbc | | PKPdf | 10 22 08.7 | +1.9 |
| 553A | | | | PKPab | | PKiKP | 10 22 13.5 | +0.9 |
| IPMB | Ipameri, GO | 149.98 | 204 | eP | | PKPdf | 10 22 05.5 | -2.1 |
| CNNC | Cliffs of the | 150.00 | 29 | IAMs_20 | IAMs_20 | | 11 41 39.5 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| CNNC | Cliffs of the | 150.00 | 29 | PKiKP | | PKiKP | 10 22 12.6 | -0.3 |
| | baz=324 | | | | | | | |
| NBPV | Pedro Velho | 150.13 | 239 | eP | | PKPdf | 10 22 06.4 | -1.4 |
| APG | El Apazote | 150.42 | 76 | PKP | | PKPdf | 10 22 10.4 | +2.0 |
| | comp=Z,287nm,1.4s,baz=310,slow=4.6,SNR=68 | | | | | | | |
| APG | | | | PKPbc | | PKiKP | 10 22 14.9 | +0.3 |
| | comp=Z,524nm,1.1s,baz=308,slow=4.2,SNR=61 | | | | | | | |
| PB12 | IPOC Station P | 150.42 | 161 | i P | | PKPdf | 10 22 10.4 | +2.1 |
| NHSC | New Hope | 150.47 | 35 | IAMs_20 | IAMs_20 | | 11 44 52.3 | |
| | comp=Z,2µm,19.0s | | | | | | | |
| NHSC | New Hope | 150.47 | 35 | PKiKP | | PKiKP | 10 22 14.5 | +0.6 |
| | baz=318 | | | | | | | |
| JANB | Januaria | 150.64 | 214 | eP | | PKPdf | 10 22 07.6 | -1.0 |
| PETF | Flores | 150.69 | 72 | | | PKPdf | 10 22 09.7 | +1.2 |
| PB16 | IPOC Station P | 150.94 | 163 | | | PKPdf | 10 22 12.1 | +2.4 |
| PB16 | IPOC Station P | 150.94 | 163 | i P | | PKPbc | 10 22 12.6 | -2.8 |
| RCBR | Riachuelo | 150.96 | 239 | PKiKP | | PKPdf | 10 22 10.5 | +1.3 |
| RCBR | Riachuelo | 150.96 | 239 | | | PKPdf | 10 22 10.5 | +1.3 |
| RCBR | Riachuelo | 150.96 | 239 | eP | | PKPdf | 10 22 06.4 | -2.8 |
| 456A | Hilliard | 151.05 | 40 | | | PKPdf | 10 22 06.8 | -1.9 |
| 456A | | | | PKPbc | | PKPbc | 10 22 14.5 | -0.1 |
| NBPN | Ponto Novo - B | 151.25 | 226 | eP | | PKPdf | 10 22 08.5 | -1.1 |
| ESQI | Esquipulas | 151.55 | 77 | | | PKPdf | 10 22 06.7 | -3.4 |
| ESQI | | | | PKPbc | | PKPbc | 10 22 12.4 | -3.9 |
| SNET | Serv Nac Est T | 151.75 | 79 | IAMs_20 | IAMs_20 | | 11 27 37.0 | |
| | comp=Z,3µm,21.0s | | | | | | | |
| BDFB | Brasilia | 151.99 | 207 | PKP | | PKPdf | 10 22 12.6 | +1.9 |
| | comp=Z,39nm,1.1s,baz=89,slow=1.3,SNR=6.4 | | | | | | | |
| PP1B | Ponte de Pedra | 152.40 | 192 | eP | | PKPdf | 10 22 10.0 | -1.2 |
| NBMA | Muriti-CE | 152.44 | 233 | eP | | PKPdf | 10 22 11.2 | -0.2 |
| SDBA | SAO DESIDERIO | 153.12 | 216 | eP | | PKPdf | 10 22 11.2 | -1.2 |
| DWPF | Disney Wildern | 153.14 | 44 | PKiKP | | PKiKP | 10 22 19.7 | +0.2 |
| | baz=309 | | | | | | | |
| NNA | Nana | 153.23 | 143 | PKP | | PKPdf | 10 22 14.2 | +1.7 |
| | comp=Z,45nm,1.0s,baz=303,slow=3.2,SNR=11 | | | | | | | |
| NNA | | | | PKPbc | | PKiKP | 10 22 21.1 | +0.9 |
| | comp=Z,148nm,0.9s,baz=273,slow=4.2,SNR=28 | | | | | | | |
| NNA | Nana | 153.23 | 143 | PKiKP | | PKPdf | 10 22 09.7 | -2.9 |
| NNA | | | | | | | 10 22 15.4 | |
| NNA | Nana | 153.23 | 143 | PKPdf | | PKPdf | 10 22 09.7 | -2.9 |
| NNA | | | | PKPbc | | PKPbc | 10 22 15.4 | -4.6 |
| LPAZ | La Paz | 153.27 | 164 | PKP | | PKPdf | 10 22 15.5 | +2.2 |
| | comp=Z,14nm,1.1s,baz=40,slow=1.0,SNR=33 | | | | | | | |
| LPAZ | | | | PKPbc | | PKiKP | 10 22 23.1 | +2.2 |
| | comp=Z,50nm,1.0s,baz=172,slow=3.1,SNR=31 | | | | | | | |
| LPAZ | La Paz | 153.27 | 164 | | | PKPdf | 10 22 16.4 | +3.2 |
| LPAZ | La Paz | 153.27 | 164 | eP | | PKPdf | 10 22 15.1 | +1.9 |
| LPAZ | La Paz | 153.27 | 164 | eP | | PKPdf | 10 22 11.6 | -1.7 |
| ARAG | Araguaiana, MT | 153.40 | 199 | eP | | PKPdf | 10 22 13.1 | +0.4 |
| TGUH | Tegucigalpa,Un | 153.60 | 78 | | | PKPdf | 10 22 14.9 | +1.7 |
| TGUH | | | | IAMs_20 | IAMs_20 | | 11 21 22.1 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| TGUH | Tegucigalpa,Un | 153.60 | 78 | eP | | PKPdf | 10 22 14.4 | +1.3 |
| NBCL | Cascavel-CE | 153.82 | 239 | eP | | PKPdf | 10 22 13.4 | 0.0 |
| NBPB | Pedra_Branca-C | 154.17 | 235 | eP | | PKPdf | 10 22 13.1 | -0.8 |
| SALV | Santo Antonio | 154.22 | 191 | eP | | PKPdf | 10 22 12.8 | -1.1 |
| SIV | San Ignacio | 154.60 | 179 | PKP | | PKPdf | 10 22 16.0 | +1.5 |
| | comp=Z,11nm,1.0s,baz=197,slow=1.8,SNR=29 | | | | | | | |
| SOR | Soroa | 154.90 | 56 | PKiKP | | PKPdf | 10 22 16.6 | +2.0 |
| SOR | Soroa | 154.90 | 56 | | | PKPdf | 10 22 16.6 | +2.0 |
| PTLB | Pontes e Lacer | 155.10 | 184 | eP | | PKPdf | 10 22 15.8 | +0.7 |
| PEXB | Peixe | 155.20 | 210 | eP | | PKPdf | 10 22 14.9 | -0.4 |
| DUNO | Dulce Nombre, | 155.55 | 87 | PKPdf | | PKPdf | 10 22 13.3 | -2.4 |
| DUNO | | | | PKPab | | pPKPbc | 10 22 38.7 | -1.5 |
| ATAH | Atahualpa | 155.78 | 133 | PKP | | PKPdf | 10 22 18.3 | +1.7 |
| | comp=Z,38nm,1.0s,baz=252,slow=1.0,SNR=30 | | | | | | | |
| NBMO | Morrinhos-CE | 155.78 | 239 | eP | | PKPdf | 10 22 15.8 | -0.3 |
| JTS | Las Juntas de | 156.08 | 86 | IAMs_20 | IAMs_20 | | 11 24 52.6 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| JTS | Las Juntas de | 156.08 | 86 | eP | | PKPdf | 10 22 17.1 | +0.6 |
| NBPS | Pedro II - PI | 156.34 | 235 | eP | | PKPdf | 10 22 16.1 | -0.8 |
| COVE | Coope Vega, Sa | 156.62 | 85 | PKPdf | | PKPdf | 10 22 14.5 | -2.7 |
| COVE | | | | | | sPKPdf | 10 22 41.5 | +3.6 |
| HDC | Heredia | 156.90 | 87 | IAMs_20 | IAMs_20 | | 11 45 19.4 | |
| | comp=Z,3µm,21.0s | | | | | | | |
| SMTB | Santa Maria do | 157.53 | 216 | eP | | PKPdf | 10 22 16.7 | -1.7 |
| VILB | Vilhena | 157.62 | 181 | eP | | PKPdf | 10 22 17.0 | -1.4 |
| BRU2 | Volcan | 158.26 | 90 | ⇑eP | | PKPdf | 10 22 21.1 | +1.6 |
| PDRB | Porto dos Gac | 158.60 | 191 | eP | | PKPdf | 10 22 19.1 | -0.5 |
| CZSB | Cruzeiro do Su | 159.05 | 145 | eP | | PKPdf | 10 22 19.4 | -0.8 |
| CLDB | Colider | 159.12 | 194 | eP | | PKPdf | 10 22 18.8 | -1.5 |
| ROSB | Rosrio | 159.38 | 234 | eP | | PKPdf | 10 22 19.7 | -0.8 |
| PRVC | Isla de Provid | 159.38 | 77 | ⇓eP | | PKPdf | 10 22 22.4 | +1.9 |
| PAC1 | Pacto, Paraso | 159.75 | 116 | ⇑iP | | PKPdf | 10 22 22.3 | +1.1 |
| ETMB | Extrema | 159.97 | 164 | eP | | PKPdf | 10 22 19.7 | -1.5 |
| OTAV | Otavalo | 160.03 | 117 | ⇑iP | | PKPdf | 10 22 23.9 | +2.0 |
| OTAV | Otavalo | 160.03 | 117 | eP | | PKPdf | 10 22 20.3 | -1.6 |
| PRPB | Paraupebas | 160.98 | 215 | eP | | PKPdf | 10 22 21.7 | -0.7 |
| GCUF | Volcan Galeras | 161.47 | 116 | ⇑eP | | PKPdf | 10 22 25.7 | +2.2 |
| SOTA | Rioblanco | 162.53 | 114 | eP | | PKPdf | 10 22 26.4 | +1.8 |
| POPC | Popayan, Colom | 162.64 | 113 | eP | | PKPdf | 10 22 24.7 | +0.3 |
| NPGB | Novo Progresso | 162.67 | 198 | eP | | PKPdf | 10 22 22.7 | -1.4 |
| GTBY | Guantanamo Bay | 162.67 | 52 | eP | | PKPdf | 10 22 23.5 | -0.3 |
| PCON | Cinco Dias | 162.80 | 114 | ⇑eP | | PKPdf | 10 22 27.1 | +2.2 |
| PTAC | Punta Ardita, | 162.88 | 97 | ⇑iP | | PKPdf | 10 22 25.7 | +1.4 |
| FLOC | Florencia | 163.13 | 117 | eP | | PKPdf | 10 22 26.2 | +1.6 |
| MARP | Paez Belalcaza | 163.42 | 113 | ⇑iP | | PKPdf | 10 22 27.0 | +1.9 |
| YOTC | Yotoco, Valle | 163.49 | 109 | eP | | PKPdf | 10 22 25.1 | +0.1 |
| TBTG | Tabatinga, AM | 163.53 | 146 | ⇑eP | | PKPdf | 10 22 25.7 | +0.8 |
| TBTG | Tabatinga, AM | 163.53 | 146 | eP | | PKPdf | 10 22 24.1 | -0.8 |
| GARC | Garzon, Huila | 163.55 | 116 | ⇑eP | | PKPdf | 10 22 26.6 | +1.3 |
| BETC | Betania | 163.81 | 114 | ⇑eP | | PKPdf | 10 22 27.8 | +2.5 |
| PLMC | San Jos del P | 163.85 | 106 | eP | | PKPdf | 10 22 25.6 | +0.3 |
| CBOC | Ciudad Bolivar | 164.37 | 103 | ⇑eP | | PKPdf | 10 22 26.7 | +0.9 |
| ORTC | Ortega, Tolima | 164.49 | 110 | ⇑iP | | PKPdf | 10 22 26.9 | +1.0 |
| ANIL | Santa Ana | 164.55 | 108 | ⇑iP | | PKPdf | 10 22 27.1 | +0.8 |
| GUY2C | Guyana, Caldas | 164.81 | 105 | eP | | PKPdf | 10 22 27.7 | +1.0 |
| HELC | Santa Helena | 164.91 | 102 | eP | | PKPdf | 10 22 27.5 | +0.9 |
| MACC | Macarena, Meta | 164.98 | 119 | ⇑iP | | PKPdf | 10 22 27.3 | +1.0 |
| UREC | San Jos de Ur | 165.21 | 96 | eP | | PKPdf | 10 22 27.3 | +0.9 |
| ITTB | Itaituba | 165.31 | 200 | eP | | PKPdf | 10 22 25.9 | -0.6 |
| NORC | Norcasia | 165.38 | 105 | ⇑eP | | PKPdf | 10 22 26.9 | +0.2 |
| ROSC | El Rosal | 165.68 | 108 | PKP | | PKPdf | 10 22 29.0 | +1.7 |
| | comp=Z,34nm,0.9s,baz=98,slow=0.8,SNR=28 | | | | | | | |
| ROSC | El Rosal | 165.68 | 108 | PKPab | | PKPab | 10 23 26.2 | -0.2 |
| ROSC | El Rosal | 165.68 | 108 | ⇑eP | | PKPdf | 10 22 29.0 | +1.7 |
| SJCC | San Jacinto, C | 165.70 | 87 | i P | | PKPdf | 10 22 28.6 | +1.8 |
| ZARC | Zaragoza, Cauc | 165.83 | 97 | ⇑iP | | PKPdf | 10 22 28.1 | +1.1 |
| VILC | Villavicencio, | 165.99 | 112 | eP | | PKPdf | 10 22 27.5 | +0.3 |
| PTBC | PUERTO BERRIO | 166.03 | 101 | ⇑iP | | PKPdf | 10 22 27.5 | +0.4 |
| SDDR | Presa de Saban | 166.10 | 46 | eP | | PKPdf | 10 22 26.4 | -0.7 |
| CHIC | Chingaza | 166.15 | 110 | ⇑iP | | PKPdf | 10 22 28.5 | +0.8 |
| SPBC | San Pablo de B | 166.17 | 105 | eP | | PKPdf | 10 22 28.4 | +1.1 |
| SMRC | Santa Marta, M | 166.58 | 82 | eP | | PKPdf | 10 22 28.3 | +0.9 |
| MCPB | Macapa, AP | 166.93 | 222 | eP | | PKPdf | 10 22 27.1 | -0.7 |
| MALB | Monte Alegre | 166.98 | 210 | eP | | PKPdf | 10 22 26.8 | -1.0 |
| RUSC | La Rusia | 167.18 | 106 | ⇑eP | | PKPdf | 10 22 29.0 | +0.4 |
| BARC | Barichara | 167.27 | 102 | ⇑eP | | PKPdf | 10 22 28.6 | +0.2 |
| LL1C | La Loma 1 Cana | 167.30 | 89 | eP | | PKPdf | 10 22 29.3 | +1.3 |
| MACA | Manacapuru-AM | 167.35 | 180 | eP | | PKPdf | 10 22 27.4 | -0.7 |
| OCAC | Ocana | 167.44 | 95 | ⇑eP | | PKPdf | 10 22 29.0 | +0.7 |
| PTGC | Puerto Gaitan, | 167.44 | 114 | ⇑iP | | PKPdf | 10 22 27.9 | -0.2 |
| LL6C | La Loma 6 Bece | 167.59 | 88 | ⇑eP | | PKPdf | 10 22 29.4 | +1.1 |
| CRJC | Cerrejon, Guaj | 167.91 | 82 | ⇑eP | | PKPdf | 10 22 29.4 | +0.8 |
| PAMC | Pamplona, Colo | 167.91 | 100 | eP | | PKPdf | 10 22 29.7 | +0.6 |
| TAMC | Tame, Arauca | 168.57 | 105 | eP | | PKPdf | 10 22 27.5 | -1.5 |
| URIC | Uribia, Colomb | 168.68 | 78 | eP | | PKPdf | 10 22 29.0 | +0.1 |
| PTGA | Pitinga | 169.75 | 184 | PKP | | PKPdf | 10 22 30.4 | +0.7 |
| | comp=Z,35nm,1.1s,baz=207,slow=0.9,SNR=18 | | | | | | | |
| OBIP | Obispado Ponce | 169.80 | 34 | | | PKPdf | 10 22 28.6 | -0.9 |
| OBIP | | | | | | PKPab | 10 23 41.6 | -2.2 |
| SOCV | Socops | 169.87 | 96 | eP | | PKPdf | 10 22 28.8 | -1.0 |
| SJG | San Juan | 169.98 | 31 | PKP | | PKPdf | 10 22 30.2 | +0.6 |
| | comp=Z,52nm,0.9s,baz=20,slow=2.0,SNR=17 | | | | | | | |
| SJG | San Juan | 169.98 | 31 | PKiKP | | PKPdf | 10 22 28.3 | -1.3 |
| SJG | | | | | | | 10 23 43.2 | |
| SJG | San Juan | 169.98 | 31 | | | PKPdf | 10 22 28.3 | -1.3 |
| SJG | | | | PKPab | | PKPab | 10 23 43.2 | -1.3 |
| SJG | San Juan | 169.98 | 31 | eP | | PKPdf | 10 22 28.5 | -1.1 |
| DABV | Dabajuro | 170.11 | 81 | eP | | PKPdf | 10 22 30.8 | +1.0 |
| SDV | Santo Domingo | 170.15 | 93 | PKP | | PKPdf | 10 22 30.4 | +0.3 |
| | comp=Z,85nm,1.0s,baz=276,slow=2.5 | | | | | | | |
| SDV | | | | PP | | PP | 10 27 37.7 | +1.2 |
| | comp=Z,5.8nm,0.7s,baz=306,slow=2.9,SNR=4.0 | | | | | | | |
| SDV | Santo Domingo | 170.15 | 93 | ⇑iP | | PKPdf | 10 22 30.6 | +0.5 |
| SDV | Santo Domingo | 170.15 | 93 | eP | | PKPdf | 10 22 29.7 | -0.4 |
| MTP | Monte Pirata | 170.29 | 29 | PKPdf | | PKPdf | 10 22 28.5 | -1.3 |
| MTP | | | | PKPab | | PKPab | 10 23 45.4 | -0.5 |
| MDP | Montagnes des | 170.88 | 241 | PKP | | PKPdf | 10 22 31.4 | +1.1 |
| | comp=Z,145nm,1.0s,baz=43,slow=1.1 | | | | | | | |
| SMRT | St. Maarten | 171.25 | 15 | eP | | PKPdf | 10 22 30.6 | +0.3 |
| SEUS | St. Eustatius | 171.81 | 16 | eP | | PKPdf | 10 22 29.4 | -1.1 |
| ANWB | Willy Bob | 171.88 | 7 | eP | | PKPdf | 10 22 30.0 | -0.6 |
| BOAV | Boa Vista | 172.87 | 181 | eP | | PKPdf | 10 22 30.0 | -1.2 |
| CBE | Ff, Capester | 173.47 | 8 | eP | | PKPdf | 10 22 31.9 | +0.5 |
| MAGL | Barre de l'ile | 173.63 | 5 | eP | | PKPdf | 10 22 31.7 | +0.3 |
| TDBA | Terre de Bas, | 173.69 | 8 | eP | | PKPdf | 10 22 31.2 | -0.2 |
| DSLB | Salisbury | 174.12 | 7 | eP | | PKPdf | 10 22 32.4 | +0.8 |
| MDN | Morne-Daniel | 174.24 | 7 | eP | | PKPdf | 10 22 32.5 | +0.9 |
| DLPL | La Plaine | 174.24 | 5 | eP | | PKPdf | 10 22 32.5 | +0.9 |
| FDF | Fort de France | 174.84 | 5 | eP | | PKPdf | 10 22 32.8 | +1.0 |
| MPOM | Morne Pois Mar | 175.15 | 2 | eP | | PKPdf | 10 22 31.7 | -0.2 |
| SLBI | Saint Lucia, B | 175.56 | 4 | eP | | PKPdf | 10 22 30.1 | -1.9 |
| MCLT | Moule a Chique | 175.88 | 4 | eP | | PKPdf | 10 22 33.3 | +1.2 |
| PCRV | Puerto La Cruz | 176.06 | 81 | PKP | | PKPdf | 10 22 31.5 | -0.7 |
| | comp=Z,27nm,1.0s,baz=3.9,slow=10.0 | | | | | | | |
| SVB | Belmont | 176.28 | 9 | eP | | PKPdf | 10 22 30.1 | -2.1 |
| GCMP | Grenada, Carri | 177.01 | 14 | eP | | PKPdf | 10 22 33.0 | +0.7 |
| GRGR | Grenville | 177.28 | 20 | eP | | PKPdf | 10 22 31.8 | -0.6 |
| TOSP | Speyside | 178.27 | 355 | eP | | PKPdf | 10 22 33.1 | +0.6 |
| TRN | Trinidad (W) | 178.71 | 33 | eP | | PKPdf | 10 22 28.9 | -3.7 |

*NNC* ***12*** *10:02:59.4±4.0,51.21N×82.00E,h0km,mb3.1,mpv2.6, Error ellipse: s-maj=28.2km s-min=15.3km az=56.0, Suspected Mining explosion.*
*IDC* ***12*** *10:03:02.9±0.5,51.39N×81.77E,h0km,mb1 2.1/3, mb1mx2.1/66,mbtmp2.1/3,ML1.6/3,Error ellipse: s-maj=5.5km s-min=3.1km az=128.0*

**ISC 12 10:03:01.3±1.3,51.49N±0.09×82.0E±0.1,h0km,n8, σ0.9 41/6,4C-1D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KURK | Kurchatov | 2.27 | 251 | ⇑Pg | Pn | 10 03 39.5 | -0.5 |
| | 3.8nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 04 09.1 | |
| | 12nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 2.36 | 250 | Pn | Pn | 10 03 41.2 | 0.0 |
| | 0.1nm,0.3s,baz=72,slow=18,SNR=6.6 | | | | | | |
| KURBB | | | | Lg | Lg | 10 04 11.7 | |
| | 0.2nm,0.3s,baz=69,slow=30,SNR=6.5 | | | | | | |
| KURBB | Kurchatov Arra | 2.36 | 250 | ⇓Pg | Pn | 10 03 41.4 | +0.1 |
| | 4.0nm,0.8s,baz=73,slow=16 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 10 04 10.7 | |
| | 21nm,0.7s,baz=71,slow=31 | | | | | | |
| I46RU | ZALESOVO INFRA | 3.00 | 34 | i | | 10 21 00.0 | |
| | baz=208,slow=315,SNR=2.1 | | | | | | |
| ZALV | Zalesovo Beam | 3.00 | 34 | Pn | Pb | 10 03 55.5 | +0.1 |
| | 0.3nm,0.3s,baz=221,slow=16,SNR=7.0 | | | | | | |
| ZALV | | | | Lg | Lg | 10 04 41.9 | |
| | 0.5nm,0.3s,baz=214,slow=25,SNR=6.5 | | | | | | |
| MAKZ | Makanchi | 4.69 | 180 | ⇑Lg | Lg | 10 05 17.1 | |
| | 7.5nm,1.2s | | | | | | |
| MK31 | Makanchi Array | 4.71 | 178 | Lg | Lg | 10 05 17.6 | |
| | 1.9nm,0.6s,baz=333,slow=30,SNR=4.0 | | | | | | |
| MKAR | Makanchi Array | 4.71 | 178 | Pn | Pn | 10 04 13.2 | -0.3 |
| | 0.1nm,0.3s,baz=353,slow=13,SNR=2.2 | | | | | | |
| MKAR | | | | Sn | Sn | 10 05 09.2 | +0.4 |
| | 0.1nm,0.3s,baz=325,slow=21,SNR=8.1 | | | | | | |

**IDC 12 10:05:27.8±3.6,26.24S×28.66E,h0km,mb1 2.8/3, mb1mx2.7/42,mbtmp2.7/3,ML1.9/3,Error ellipse: s-maj=29.8km s-min=21.0km az=102.0,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LBTB | Lobatse | 3.02 | 293 | Pn | Pn | 10 06 18.5 | +1.5 |
| | 0.1nm,0.3s,baz=116,slow=7.8,SNR=1.3 | | | | | | |
| LBTB | | | | Pg | Pb | 10 06 23.6 | +1.1 |
| | 0.9nm,0.3s,baz=111,slow=17,SNR=25 | | | | | | |
| LBTB | | | | Sn | Sn | 10 06 56.0 | +2.1 |
| | 0.5nm,0.3s,baz=21,slow=21,SNR=2.0 | | | | | | |
| LBTB | | | | Lg | Lg | 10 07 03.3 | |
| | 1.3nm,0.3s,baz=20,slow=22,SNR=8.5 | | | | | | |
| LBTB | | | | Rg | Rg | 10 07 17.7 | |
| | 4.7nm,0.4s,baz=349,slow=19,SNR=5.3 | | | | | | |
| BOSA | Boshof | 3.84 | 231 | Pn | Pn | 10 06 28.8 | +0.6 |
| | 0.1nm,0.3s,baz=50,slow=11,SNR=2.6 | | | | | | |
| BOSA | | | | Pg | Pb | 10 06 36.7 | +0.3 |
| | 0.0nm,0.3s,baz=53,slow=17,SNR=0.9 | | | | | | |
| BOSA | | | | Sn | Sn | 10 07 13.3 | -0.8 |
| | 0.3nm,0.3s,baz=130,slow=17,SNR=4.1 | | | | | | |
| BOSA | | | | Lg | Lg | 10 07 29.4 | |
| | 0.7nm,0.3s,baz=139,slow=19,SNR=9.8 | | | | | | |
| I47ZA | BOSHOF INFRASO | 3.85 | 231 | i | | 10 30 00.0 | |
| | baz=49,slow=298,SNR=0.5 | | | | | | |
| MATP | Matopo | 5.79 | 359 | Pn | Pn | 10 06 53.8 | -1.3 |
| | 0.0nm,0.3s,baz=161,slow=4.2,SNR=1.3 | | | | | | |
| MATP | | | | Sn | Sn | 10 07 56.3 | -6.1 |
| | 0.1nm,0.3s,baz=335,slow=24,SNR=1.2 | | | | | | |
| MATP | | | | Lg | Lg | 10 08 24.5 | |
| | 0.3nm,0.3s,baz=270,slow=22,SNR=10 | | | | | | |
| SUR | Sutherland | 9.18 | 226 | Sn | Sn | 10 09 18.5 | -7.3 |
| | 0.1nm,0.3s,baz=264,slow=20,SNR=1.5 | | | | | | |
| I35NA | TSUMEB INFRASO | 12.40 | 302 | i | | 11 22 20.0 | |
| | baz=127,slow=311,SNR=1.6 | | | | | | |

*TAP* ***12*** *10:22:47.2,24.90N×122.23E,h113km,ML3.7,B*
*JMA* ***12*** *10:22:47.1±0.2,24.89N×122.22E,h110km±2km,M2.7*
**ISC 12 10:22:46.4±1.4,24.91N±0.04×122.23E±0.02,h119km±6km,**

**n113,σ0.968/190,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWB1 | Santiao Chiao | 0.24 | 294 | P | Pn | 10 23 03.3 | +0.3 |
| | baz=297 | | | | | | |
| TWB1 | | | | eS | Sn | 10 23 14.7 | -0.7 |
| | baz=297 | | | | | | |
| EGS | | 0.27 | 256 | eP | Pn | 10 23 03.5 | +0.4 |
| | baz=258 | | | | | | |
| EGS | | | | eS | Sn | 10 23 14.8 | -0.8 |
| | baz=258 | | | | | | |
| NTC | Toucheng | 0.36 | 261 | P | Pn | 10 23 03.6 | +0.1 |
| | baz=263 | | | | | | |
| NTC | | | | eS | Sn | 10 23 15.7 | -0.6 |
| | baz=263 | | | | | | |
| SXI1 | Grass Mountain | 0.37 | 300 | P | Pn | 10 23 03.8 | +0.2 |
| | baz=301 | | | | | | |
| SXI1 | | | | eS | Sn | 10 23 15.9 | -0.6 |
| | baz=301 | | | | | | |
| TIPB | Shuangxi | 0.37 | 280 | i P | Pn | 10 23 03.9 | +0.4 |
| | baz=281 | | | | | | |
| TIPB | | | | eS | Sn | 10 23 15.6 | -0.9 |
| | baz=281 | | | | | | |
| NWF | Wu-fen Shan | 0.43 | 292 | P | Pn | 10 23 04.3 | +0.3 |
| | baz=293 | | | | | | |
| NWF | | | | S | Sn | 10 23 16.9 | -0.2 |
| | baz=293 | | | | | | |
| WFSB | Wu-fen Shan | 0.43 | 292 | P | Pn | 10 23 04.3 | +0.4 |
| | baz=293 | | | | | | |
| WFSB | | | | eS | Sn | 10 23 16.8 | -0.2 |
| | baz=293 | | | | | | |
| TWC | Suao | 0.46 | 229 | eP | Pn | 10 23 04.0 | +0.1 |
| | baz=229 | | | | | | |
| TWC | | | | eS | Sn | 10 23 16.0 | -1.2 |
| | baz=229 | | | | | | |
| ILA | Ilan | 0.46 | 252 | eP | Pn | 10 23 04.5 | +0.6 |
| | baz=252 | | | | | | |
| ILA | | | | eS | Sn | 10 23 17.0 | -0.2 |
| | baz=252 | | | | | | |
| TNOU | National Taiwa | 0.47 | 300 | P | Pn | 10 23 04.5 | +0.4 |
| | baz=301 | | | | | | |
| TNOU | | | | eS | Sn | 10 23 17.3 | -0.1 |
| | baz=301 | | | | | | |
| NDS | Dongshan | 0.54 | 239 | P | Pn | 10 23 04.9 | +0.4 |
| | baz=240 | | | | | | |
| NDS | | | | eS | Sn | 10 23 17.6 | -0.5 |
| | baz=240 | | | | | | |
| TWE | Neicheng | 0.54 | 250 | i P | Pn | 10 23 04.8 | +0.4 |
| | baz=250 | | | | | | |
| TWE | | | | eS | Sn | 10 23 17.6 | -0.4 |
| | baz=250 | | | | | | |
| TWA | Mucha | 0.59 | 277 | P | Pn | 10 23 05.1 | +0.3 |
| | baz=277 | | | | | | |
| TWA | | | | eS | Sn | 10 23 17.9 | -0.8 |
| | baz=277 | | | | | | |
| FUSB | Fushanzhiwuyua | 0.60 | 256 | eP | Pn | 10 23 05.3 | +0.3 |
| | baz=256 | | | | | | |
| NHY | Taipei | 0.61 | 282 | eP | Pn | 10 23 05.3 | +0.4 |
| | baz=283 | | | | | | |
| EWUT | Wuta | 0.62 | 221

baz=209
TEYL eS Sn 10 23 27.6 -0.7
baz=209
**CHGB Renai** 1.28 229 eP Pn 10 23 12.3 +0.8
baz=229
CHGB eS Sn 10 23 30.4 -0.1
baz=229
**TEGC Jichi Village** 1.35 208 eS Sn 10 23 31.5 0.0
baz=207
**NMLH Miaoli** 1.36 254 eP Pn 10 23 12.6 +0.5
baz=254
NMLH eS Sn 10 23 31.3 -0.3
baz=254
**WUSB Renai** 1.36 228 eP Pn 10 23 13.2 +0.8
baz=228
WUSB eS Sn 10 23 31.9 -0.1
baz=228
**NSY Sanyi** 1.42 250 eP Pn 10 23 13.6 +0.8
baz=250
NSY eS Sn 10 23 33.0 +0.1
baz=250
**TWQ1 Liyutan** 1.44 247 P Pn 10 23 13.7 +0.6
baz=247
TWQ1 eS Sn 10 23 33.2 -0.1
baz=247
**WPL Puli Township** 1.46 233 eP Pn 10 23 14.2 +0.8
baz=232
WPL eS Sn 10 23 34.2 +0.5
baz=232
**WCS Beigang Elemen** 1.47 235 eP Pn 10 23 14.1 +0.7
baz=235
WCS eS Sn 10 23 34.1 +0.3
baz=235
**IRIF Iriomote-Funau** 1.48 112 P Pn 10 23 13.6 0.0
IRIF eS Sn 10 23 33.6 -0.6
**TYC Yuchr** 1.60 231 eP Pn 10 23 15.8 +0.9
baz=231
TYC eS Sn 10 23 37.2 +0.6
baz=231
**TCU Taichung** 1.60 242 eP Pn 10 23 15.6 +0.6
baz=241
TCU eS Sn 10 23 36.6 0.0
baz=241
**SSLB Suanglung** 1.61 226 P Pn 10 23 16.0 +0.9
baz=226
SSLB eS Sn 10 23 37.5 +0.6
baz=226
**WWF Wufeng** 1.64 238 eP Pn 10 23 16.0 +0.6
baz=238
WWF eS Sn 10 23 37.8 +0.4
baz=238
**HATJ Hateruma jima** 1.67 120 P Pn 10 23 16.6 +0.8
HATJ S Sn 10 23 38.6 +0.5
**WNT1 Nantou City** 1.73 235 eP Pn 10 23 17.3 +0.8
baz=235
WNT1 eS Sn 10 23 39.5 +0.1
baz=235
**WCHH Zhanghua** 1.73 242 eP Pn 10 23 17.0 +0.5
baz=241
WCHH eS Sn 10 23 39.4 0.0
baz=241
**ECBN Changbin** 1.74 204 eP Pn 10 23 16.8 +0.2
baz=204
ECBN eS Sn 10 23 38.5 -1.1
baz=204
**WNT Mingjian** 1.74 234 eP Pn 10 23 17.4 +0.8
baz=234
WNT eS Sn 10 23 40.1 +0.5
baz=234
**WJS Zhushan** 1.74 232 eP Pn 10 23 17.4 +0.8
baz=231
WJS eS Sn 10 23 39.8 +0.1
baz=231
**JKRS Kuro-shima** 1.76 112 P Pn 10 23 17.3 +0.5
JKRS eS Sn 10 23 39.9 -0.1
**EYUL Yuli** 1.76 208 eP Pn 10 23 17.8 +0.9
baz=208
**JIJ Ishigaki jima** 1.83 107 P Pn 10 23 18.0 +0.3
JIJ S Sn 10 23 40.6 -0.9
**ALS Alishan** 1.90 223 eP Pn 10 23 19.9 +0.9
baz=223
ALS eS Sn 10 23 44.8 +1.1
baz=223
**FULB Fuli** 1.91 207 eP Pn 10 23 19.0 +0.3
baz=206
FULB eS Sn 10 23 43.2 -0.1
baz=206
**JISG Ishigakijimahi** 1.92 99 P Pn 10 23 19.5 +0.7
JISG S Sn 10 23 43.1 -0.5
**CHN5 Tsauling** 1.93 228 eP Pn 10 23 20.1 +1.1
baz=227
CHN5 eS Sn 10 23 44.5 +0.7
baz=227
**WGK Gukeng** 1.95 232 eP Pn 10 23 20.3 +1.2
baz=231
WGK eS Sn 10 23 45.0 +0.8
baz=231
**WDLH Douliu** 1.96 232 eP Pn 10 23 20.2 +0.8
baz=232
WDLH eS Sn 10 23 44.7 +0.2
baz=232
**WRL Guolierlin Hig** 1.96 240 eP Pn 10 23 19.4 +0.1
baz=239
WRL eS Sn 10 23 43.5 -1.0
baz=239
**ECS Chishang** 2.03 207 eS Sn 10 23 46.0 0.0
baz=207
**ELDTW Lidau** 2.04 213 eP Pn 10 23 21.6 +1.1
baz=212
ELDTW eS Sn 10 23 45.2 -1.3
baz=212
**WTCT Ta-ch'eng** 2.06 240 eS Sn 10 23 46.0 -0.6
baz=239
**WTK Tuku** 2.07 234 eP Pn 10 23 21.2 +0.5
baz=234
WTK eS Sn 10 23 47.0 +0.1
baz=234
**EDH Donghe** 2.11 204 eP Pn 10 23 20.7 -0.5
baz=203
EDH eS Sn 10 23 45.7 -2.0
baz=203
**CHN4 Tsaushan** 2.15 224 eP Pn 10 23 22.8 +1.0
baz=224
CHN4 eS Sn 10 23 49.8 +1.0
baz=224
**CHY Chiayi** 2.16 230 eP Pn 10 23 22.2 +0.3
baz=229
CHY eS Sn 10 23 48.9 -0.1
baz=229
**TPUB Ta-pu** 2.17 223 eP Pn 10 23 22.7 +0.7
baz=222
TPUB eS Sn 10 23 50.1 +0.9
baz=222
**STYH Taoyuan** 2.18 218 eP Pn 10 23 23.0 +0.9
baz=217
STYH eS Sn 10 23 50.8 +1.4
baz=217
**WSF Szhu** 2.22 236 eS Sn 10 23 50.5 +0.1
baz=235
**LONT Longtian** 2.23 207 eS Sn 10 23 49.3 -1.3
baz=206
**JTJ Tarama** 2.27 96 P Pn 10 23 24.1 +0.9
JTJ S Sn 10 23 51.4 +0.1
**TWK Hsinying** 2.28 224 eP Pn 10 23 24.3 +0.9
baz=224
TWK eS Sn 10 23 51.8 +0.1
baz=224
**WSL Shuilin Townsh** 2.29 233 eP Pn 10 23 23.4 0.0
baz=233
WSL eS Sn 10 23 51.6 -0.2
baz=233
**CHN1 Nanshi** 2.31 222 eP Pn 10 23 24.2 +0.3
baz=222
CHN1 eS Sn 10 23 52.5 0.0
baz=222
**TWG Pinlang** 2.33 207 eP Pn 10 23 23.6 -0.5
baz=206
**TWGBT Beinan** 2.33 207 eP Pn 10 23 23.4 -0.6
baz=206
**ICHU Yjihu** 2.35 229 eS Sn 10 23 52.8 -0.6
baz=229
**SGST Jiashian** 2.36 220 eP Pn 10 23 25.4 +1.1
baz=219
SGST eS Sn 10 23 53.4 -0.2
baz=219
**CHN8 Yiju** 2.41 230 eS Sn 10 23 54.2 -0.4
baz=229
**SCLT Jiali** 2.54 227 eS Sn 10 23 57.4 -0.1
baz=227
**JIRB Irabujima** 2.68 91 S Sn 10 24 01.1 +0.3
**MASBT Mashibuluo** 2.71 213 eP Pn 10 23 30.1 +1.1
baz=212
MASBT eS Sn 10 24 01.4 -0.2
baz=212
**JIKM Ikemajima** 2.74 89 S Sn 10 24 02.7 +0.4
**LYJJ Jianjiangzhen** 2.76 307 eP Pn 10 23 29.6 +0.1
baz=306
**PNG Penghu** 2.78 242 eP Pn 10 23 29.2 -0.5
baz=241
PNG eS Sn 10 24 00.7 -2.5
baz=241
**PHUB P'eng-hu** 2.79 241 eP Pn 10 23 29.2 -0.8
baz=240
PHUB eS Sn 10 24 00.9 -2.6
baz=240
**PTMZ Houxiangcun** 2.82 273 eP Pn 10 23 30.5 +0.2
baz=272
**WDGT Dungji** 2.86 235 eP Pn 10 23 30.7 -0.2
baz=235
**JOGS Gusukube** 2.89 92 S Sn 10 24 04.4 -1.4
**KNMB Chin-men Tao** 3.52 264 eP Pn 10 23 39.2 -0.3
baz=262
**AXDP Jialang** 3.86 271 eP Pn 10 23 44.3 +0.2
baz=270
**ZPLA Ao Xicun** 4.20 257 eP Pn 10 23 48.4 -0.2
baz=256

*NNC* ***12*** *10:28:09.5±8.2, 39.17N×73.61E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=66.3km s-min=44.4km az=170.0*
*IDC* ***12*** *10:28:12.3±3.7, 39.18N×73.46E, h88km±34km, mb3.5/4, mb1 3.5/6, mb1mx3.2/54, mbtmp3.7/6, Error ellipse: s-maj=52.0km s-min=31.3km az=139.0*
**ISC 12 10:28:01.0**±1.6, **38.5N**±0.1×**73.3E**±0.1, **h10**km, **n9,** σ1§**94**/10, **mb3.8**/4, **3C-3D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **4.20** | **12** | ⇓Pn | **Pn** | **10 29 05.6** | **+0.4** |
| | 9.8nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 10 30 02.3 | |
| | 22nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.71** | **21** | ⇑Pg | **Pb** | **10 29 25.7** | **+1.9** |
| | 8.1nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 10 30 18.6 | |
| | 12nm,0.8s | | | | | | |
| **KK09** | **Karatay Array** | **5.07** | **336** | ⇓Pn | **Pn** | **10 29 18.1** | **+1.0** |
| | 6.4nm,0.7s,baz=139,slow=13 | | | | | | |
| KK09 | | | | ⇑Sn | **Sn** | **10 30 15.4** | **-0.3** |
| | 13nm,0.6s,baz=144,slow=25 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.56** | **36** | P | **Pn** | **10 30 32.8** | **+0.4** |
| | 0.1nm,0.3s,baz=218,slow=14,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.31** | **23** | P | **Pn** | **10 32 00.2** | **-2.4** |
| | 0.2nm,0.3s,baz=217,slow=12,SNR=5.2 | | | | | | |
| **FINES** | **FINESS Array B** | **36.89** | **324** | P | **P** | **10 35 06.8** | **-2.6** |
| | 5.5nm,1.1s,baz=97,slow=11,SNR=1.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.91** | **322** | P | **P** | **10 36 07.7** | **0.0** |
| | 0.8nm,0.7s,baz=97,slow=7.4,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.51** | **269** | P | **P** | **10 39 00.4** | **+2.1** |
| | 1.1nm,0.9s,baz=50,slow=5.5,SNR=2.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.12** | **4** | P | **P** | **10 40 03.3** | **-2.0** |
| | 0.1nm,0.5s,baz=347,slow=5.4,SNR=2.6 | | | | | | |

**IDC 12 10:39:32.7**±1.4, **4.24S**×**151.43E, h0**km, **mb3.4**/3, **mb1 3.7**/3, **mb1mx3.0**/38, **mbtmp3.4**/3, **Error ellipse: s-maj=36.3km s-min=15.8km az=171.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **0.60** | **97** | Pn | Pn | 10 39 48.3 | -0.1 |
| KRVT | | | | Sn | Sn | 10 39 59.8 | +0.9 |
| **WRA** | **Warramunga Arr** | **22.83** | **225** | P | P | 10 44 38.0 | +0.4 |
| | 0.6nm,0.6s,baz=47,slow=9.5,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.68** | **220** | P | P | 10 45 04.0 | -0.5 |
| | 0.4nm,0.8s,baz=54,slow=8.5,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **82.16** | **22** | P | P | 10 51 55.5 | +0.3 |
| | 0.4nm,0.6s,baz=243,slow=5.6,SNR=7.7 | | | | | | |

**IDC 12 10:42:41.7**±5.8, **51.49N**×**91.68E, h0**km, **mb1 2.4**/1, **mb1mx2.4**/49, **mbtmp2.4**/1, **ML2.3**/1, **Error ellipse: s-maj=53.8km s-min=28.3km az=74.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **4.84** | **303** | *i* | | 11 18 00.0 | |
| | baz=114,slow=347,SNR=1.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **4.84** | **303** | Pg | Pb | 10 44 09.6 | +2.3 |
| | 0.4nm,0.3s,baz=114,slow=16,SNR=5.0 | | | | | | |
| ZALV | | | | Lg | Lg | 10 45 15.4 | |
| | 0.2nm,0.3s,baz=120,slow=32,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.74** | **236** | Pn | Pn | 10 44 36.7 | +1.1 |
| | 0.1nm,0.3s,baz=54,slow=15,SNR=1.6 | | | | | | |
| MKAR | | | | Lg | Lg | 10 46 44.4 | |
| | 0.0nm,0.3s,baz=51,slow=30,SNR=1.9 | | | | | | |

*BUL* ***12*** *10:53:01.5±1.0, 25.67S×30.07E, h10km, MD3.6*
*EAF* ***12*** *10:53:01.2±2.2, 25.64S×30.10E, h10km, MD3.5*
**ISC 12 10:52:59.0**±1.0, **25.67S**±0.04×**30.12E**±0.04, **h10**km, **n14,** σ1§**83**/28, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **1.96** | **109** | eP | **Pb** | **10 53 35.2** | **+0.3** |
| CNG | | | | eS | **Sb** | **10 54 00.0** | **+0.6** |
| **CNG** | **Changalane** | **1.96** | **109** | eP | **Pb** | **10 53 35.2** | **+0.3** |
| CNG | | | | eS | **Sb** | **10 54 00.0** | **+0.6** |
| **MOPA** | **Mopani** | **2.44** | **29** | eP | **Pn** | **10 53 38.2** | **-0.8** |
| MOPA | | | | eS | **Sn** | **10 54 07.5** | **-1.4** |
| **MOPA** | **Mopani** | **2.44** | **29** | eP | **Pn** | **10 53 38.2** | **-0.8** |
| MOPA | | | | eS | **Sn** | **10 54 07.5** | **-1.4** |
| **MSNA** | **Messina** | **3.31** | **358** | eP | **Pn** | **10 53 53.1** | **+2.2** |
| MSNA | | | | eS | **Sn** | **10 54 30.4** | **-0.1** |
| **MSNA** | **Messina** | **3.31** | **358** | eP | **Pn** | **10 53 53.1** | **+2.2** |
| MSNA | | | | eS | **Sn** | **10 54 30.4** | **-0.1** |
| **LBTB** | **Lobatse** | **4.14** | **278** | eP | **Pn** | **10 54 03.8** | **+1.3** |
| LBTB | | | | eS | **Sn** | **10 54 49.9** | **-1.1** |
| **LBTB** | **Lobatse** | **4.14** | **278** | eP | **Pn** | **10 54 03.8** | **+1.3** |
| LBTB | | | | eS | **Sn** | **10 54 49.9** | **-1.1** |
| **BOSA** | **Boshof** | **5.23** | **235** | eP | **Pn** | **10 54 19.1** | **+1.7** |
| BOSA | | | | eS | **Sn** | **10 55 14.4** | **-3.4** |
| **BOSA** | **Boshof** | **5.23** | **235** | eP | **Pn** | **10 54 19.1** | **+1.7** |
| BOSA | | | | eS | **Sn** | **10 55 14.4** | **-3.4** |
| **MATP** | **Matopo** | **5.43** | **344** | eP | **Pn** | **10 54 21.9** | **+1.7** |
| MATP | | | | eS | **Sn** | **10 55 20.6** | **-2.3** |
| **MATP** | **Matopo** | **5.43** | **344** | eP | **Pn** | **10 54 21.9** | **+1.7** |
| MATP | | | | eS | **Sn** | **10 55 20.6** | **-2.3** |
| **BLWY** | **Bulawayo** | **5.68** | **346** | eP | **Pn** | **10 54 24.6** | **+1.0** |
| BLWY | | | | eS | **Sn** | **10 55 26.2** | **-2.7** |
| **BLWY** | **Bulawayo** | **5.68** | **346** | eP | **Pn** | **10 54 24.6** | **+1.0** |
| BLWY | | | | eS | **Sn** | **10 55 26.2** | **-2.7** |

*SOME* ***12*** *11:00:47.1, 40.87N×70.17E, h20km*
*NNC* ***12*** *11:00:48.2±3.5, 40.94N×70.17E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=25.8km s-min=13.7km az=28.0*
*KRNET* ***12*** *11:00:48.5±0.1, 40.99N×70.31E, h14km, mb2.8*
*ISU* ***12*** *11:01:21, 40.50N×70.60E, h5km*
**ISC 12 11:00:47.1**±1.3, **41.00N**±0.03×**70.30E**±0.04, **h2**km±11km, **n18,** σ1§**62**/31, **11C-5D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHMG** | **Chimgan** | **0.59** | **338** | eP | **Pg** | **11 00 58.0** | **-0.4** |
| CHMG | | | | eS | **Sg** | **11 01 05.0** | **-1.0** |
| **TRKS** | **Terek-Say** | **0.82** | **50** | ⇓*i*P | **Pb** | **11 01 04.1** | **-0.1** |
| | baz=54 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sb** | **11 01 15.4** | **-0.4** |
| | baz=54 | | | | | | |
| **BTK** | **Batken** | **1.02** | **157** | ⇑eP | **Pn** | **11 01 07.7** | **-0.8** |
| | baz=57 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **11 01 21.7** | **-1.8** |
| | baz=57 | | | | | | |
| **IUG** | **luzhnay** | **1.16** | **350** | eP | **Pn** | **11 01 11.5** | **+1.1** |
| | 128nm,0.2s | | | | | | |
| IUG | | | | eS | **Sn** | **11 01 28.7** | **+1.9** |
| | 94nm,0.3s | | | | | | |
| **IUG** | **luzhnay** | **1.16** | **350** | P | **Pn** | **11 01 11.5** | **+1.1** |
| | 128nm,0.2s | | | | | | |
| IUG | | | | S | **Sn** | **11 01 28.7** | **+1.9** |
| | 94nm,0.3s | | | | | | |
| **ARK** | **Arkit** | **1.48** | **57** | ⇑*i*P | **Pg** | **11 01 16.2** | **+0.7** |
| | baz=56 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **11 01 36.8** | **+2.1** |
| | baz=56 | | | | | | |
| **GAR** | **Garm** | **2.00** | **180** | ⇑*i*P | **Pg** | **11 01 25.2** | **-0.2** |
| | baz=80 | | | | | | |
| GAR | | | | ⇑*i*S | **Sg** | **11 01 52.2** | **+0.8** |
| | baz=80 | | | | | | |
| **BRLS** | **Borolday** | **2.05** | **351** | eP | **Pn** | **11 01 22.0** | **-0.6** |
| | 8.1nm,0.4s | | | | | | |
| BRLS | | | | eS | **Sn** | **11 01 46.6** | **-2.2** |
| | 7.7nm,0.3s | | | | | | |
| **BRLS** | **Borolday** | **2.05** | **351** | P | **Pn** | **11 01 22.0** | **-0.6** |
| | 8.1nm,0.4s | | | | | | |
| BRLS | | | | S | **Sn** | **11 01 46.6** | **-2.2** |
| | 7.7nm,0.3s | | | | | | |
| **KK09** | **Karatay Array** | **2.12** | **4** | ⇓Pn | **Pg** | **11 01 26.8** | **-1.0** |
| | 5.8nm,0.6s,baz=189,slow=15 | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 11 01 55.5 | |
| | 7.0nm,0.7s,baz=193,slow=29 | | | | | | |
| **MNAS** | **Manas** | **2.22** | **47** | ⇑*i*P | **Pb** | **11 01 28.8** | **+0.8** |
| | baz=47 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **11 01 58.2** | **-0.2** |
| | baz=47 | | | | | | |
| **MRKS** | **Merke** | **2.79** | **51** | eP | **Pb** | **11 01 38.9** | **+1.2** |
| | 5.1nm,0.2s | | | | | | |
| MRKS | | | | eS | **Sg** | **11 02 16.1** | **-0.8** |
| | 9.0nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **2.79** | **51** | Pg | **Pb** | **11 01 38.9** | **+1.2** |
| | 5.1nm,0.2s | | | | | | |
| MRKS | | | | Lg | Lg | 11 02 16.1 | |
| | 9.0nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **3.54** | **61** | ⇓Pg | **Pg** | **11 01 54.4** | **-0.4** |
| | 3.0nm,1.0s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 11 02 44.7 | |
| | 2.7nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.39** | **62** | ⇑Pg | **Pg** | **11 02 11.2** | **0.0** |
| | 1.7nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 11 03 11.2 | |
| | 3.1nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.64** | **59** | eP | **Pb** | **11 02 12.6** | **+3.3** |
| | 3.4nm,0.7s | | | | | | |
| DGS | | | | eS | **Sg** | **11 03 13.6** | **-2.7** |
| | 4.2nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.64** | **59** | Pg | **Pb** | **11 02 12.6** | **+3.3** |
| | 3.4nm,0.7s | | | | | | |
| DGS | | | | Lg | Lg | 11 03 13.6 | |
| | 4.2nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.81** | **54** | eP | **Pg** | **11 02 16.5** | **-2.7** |
| | 0.3nm,0.1s | | | | | | |
| KRBS | | | | eS | **Sg** | **11 03 20.7** | **-0.7** |
| | 1.2nm,0.6s | | | | | | |

*MOS* ***12*** *11:02:06.6±1.4, 45.16N×147.68E, h102km, mb4.0/1, Error ellipse: s-maj=25.4km s-min=14.5km az=61.3*
*SKHL* ***12*** *11:02:07.0±0.7, 44.90N×148.00E, h150km±2km, mb4.2/3, msha5.2/4*
*JMA* ***12*** *11:02:10.0±0.6, 44.70N×147.79E, h154km, M3.5*
*IDC* ***12*** *11:02:24.4±12.0, 45.49N×147.43E, h303km±126km, mb3.0/7, mb1 3.2/7, mb1mx2.9/29, mbtmp3.6/7, MS4.0/1, Ms1 4.0/1, ms1mx3.4/18, Error ellipse: s-maj=54.4km s-min=27.1km az=5.0*
**ISC 12 11:02:06.8**±0.9, **44.79N**±0.10×**147.96E**±0.10, **h167**km±6km, **n33,** σ1§**71**/49, **mb3.1**/7, **4D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **0.45** | **351** | *d*iPN | **Pn** | **11 02 29.3** | **-0.5** |
| KUR | | | | *i* S | **Sn** | **11 02 45.5** | **-2.0** |
| KUR | | | | pmax | pmax | | |
| | comp=N,20nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,81nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,160nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,131nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **0.45** | **351** | *i* P | **Pn** | **11 02 29.3** | **-0.5** |
| KUR | | | | AMB | AMB | 11 02 29.7 | |
| | comp=E,80nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **11 02 45.6** | **-2.0** |
| KUR | | | | A | A | 11 02 46.1 | |
| | comp=E,160nm,0.2s | | | | | | |
| KUR | | | | A | A | 11 02 46.1 | |
| | comp=E,130nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.23** | **222** | ⇓*i*PN | **Pn** | **11 02 35.8** | **+0.7** |
| SHO | | | | *i* S | **Sn** | **11 02 55.9** | **-0.9** |
| SHO | | | | pmax | pmax | | |
| | comp=N,19nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,27nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,65nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,808nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.23** | **222** | *i* P | **Pn** | **11 02 35.9** | **+0.8** |
| SHO | | | | AMB | AMB | 11 02 36.2 | |
| | comp=N,20nm,0.4s | | | | | | |
| SHO | | | | AMB | AMB | 11 02 36.2 | |
| | comp=N,30nm,0.4s | | | | | | |
| SHO | | | | AMB | AMB | 11 02 36.2 | |
| | comp=N,70nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **11 02 56.5** | **-0.3** |
| SHO | | | | A | A | 11 02 57.5 | |
| | comp=N,270nm,0.6s | | | | | | |
| SHO | | | | A | A | 11 02 57.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.69** | **244** | ePN | **Pn** | **11 02 39.4** | **-0.1** |
| YUK | | | | *i* S | **Sn** | **11 03 05.2** | **+0.4** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,300nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,42nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,127nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,354nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,465nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.69** | **244** | eP | **Pn** | **11 02 40.3** | **+0.8** |
| YUK | | | | AMB | AMB | 11 02 41.9 | |
| | comp=E,120nm,0.4s | | | | | | |
| YUK | | | | eS | **Sn** | **11 03 05.2** | **+0.4** |
| YUK | | | | A | A | 11 03 05.9 | |
| | comp=E,350nm,0.7s | | | | | | |
| YUK | | | | A | A | 11 03 05.9 | |
| | comp=E,470nm,0.7s | | | | | | |
| **GLVR** | **Golovnino** | **2.05** | **240** | ePN | **Pn** | **11 02 45.1** | **+1.6** |
| GLVR | | | | eS | **Sn** | **11 03 12.5** | **+0.7** |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,133nm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,546nm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,144nm,0.2s | | | | | | |
| **GLVR** | **Golovnino** | **2.05** | **240** | eP | **Pn** | **11 02 45.1** | **+1.6** |
| GLVR | | | | AMB | AMB | 11 02 45.5 | |
| | comp=N,130nm,0.5s | | | | | | |
| GLVR | | | | eS | **Sn** | **11 03 12.5** | **+0.7** |
| GLVR | | | | A | A | 11 03 13.9 | |
| | comp=N,140nm,0.5s | | | | | | |
| GLVR | | | | A | A | 11 03 13.9 | |
| | comp=N,550nm,0.5s | | | | | | |
| **RUSJ** | **Misakicho** | **2.06** | **251** | ⇓*i*PN | **Pn** | **11 02 44.4** | **+0.8** |
| RUSJ | | | | eS | **Sn** | **11 03 17.6** | **+5.5** |
| **NEM2** | **Nemuro 2** | **2.15** | **229** | P | **Pn** | **11 02 45.1** | **+0.5** |
| NEM2 | | | | eS | **Sn** | **11 03 12.3** | **-1.5** |
| **NMR** | **Nemuro--Hokkai** | **2.15** | **229** | ⇓*i*PN | **Pn** | **11 02 45.1** | **+0.5** |
| NMR | | | | *i* S | **Sn** | **11 03 12.3** | **-1.6** |
| **NMR** | **Nemuro--Hokkai** | **2.15** | **229** | *i* P | **Pn** | **11 02 45.1** | **+0.5** |
| NMR | | | | eS | **Sn** | **11 03 13.2** | **-0.7** |
| **JRA** | **Rausu** | **2.21** | **248** | P | **Pn** | **11 02 46.2** | **+0.9** |
| **JNSB** | **Nemuroshibetsu** | **2.36** | **245** | P | **Pn** | **11 02 48.3** | **+1.3** |
| **JNK** | **Nakash** | **2.63** | **244** | P | **Pn** | **11 02 51.4** | **+1.1** |
| **JKHN** | **Kushirohamanak** | **2.65** | **231** | P | **Pn** | **11 02 51.4** | **+0.9** |
| JKHN | | | | eS | **Sn** | **11 03 23.5** | **-0.9** |
| **AKK** | **Akkeshi** | **2.87** | **233** | *i* P | **Pn** | **11 02 54.0** | **+0.8** |
| **JAK** | **Akkeshi** | **2.97** | **234** | P | **Pn** | **11 02 55.1** | **+0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JAK | | | | *e*S | | **Sn** | **11 03 30.2** | **-1.1** |
| **JTKR** | **Abashiri--Tokyo** | **3.02** | **256** | P | | **Pn** | **11 02 55.7** | **+0.6** |
| **JAR** | **Ashorobuto** | **3.37** | **245** | P | | **Pn** | **11 03 01.1** | **+1.6** |
| **JKK2** | **Kamakawa 2** | **3.85** | **258** | P | | **Pn** | **11 03 06.8** | **+1.2** |
| **JCH** | **Churui** | **3.98** | **238** | P | | **Pn** | **11 03 07.9** | **+0.6** |
| JCH | | | | *e*S | | **Sn** | **11 03 53.0** | **-1.4** |
| **JNBK** | **Urakawa-nobuka** | **4.55** | **238** | P | | **Pn** | **11 03 14.4** | **-0.1** |
| **JKB** | **Kayabe** | **5.83** | **243** | P | | **Pn** | **11 03 31.0** | **-0.4** |
| JKB | | | | *e*S | | **Sn** | **11 04 33.7** | **-4.0** |
| **JOT** | **Ohata** | **6.10** | **238** | P | | **Pn** | **11 03 34.2** | **-0.8** |
| JOT | | | | *e*S | | **Sn** | **11 04 38.8** | **-5.4** |
| **SHEM** | **Shemya Is, Ala** | **18.89** | **56** | LR | | LR | 11 12 24.1 | |
| | comp=N,453nm,21.7s,baz=296,slow=32 | | | | | | | |
| **SONM** | **Songino Array** | **28.62** | **291** | P | | **P** | **11 07 47.8** | **+0.2** |
| | comp=N,0.1nm,0.4s,baz=79,slow=7.5,SNR=2.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.84** | **306** | P | | **P** | **11 09 32.4** | **+0.6** |
| | comp=N,0.6nm,0.7s,baz=64,slow=7.0,SNR=2.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.62** | **297** | P | | **P** | **11 10 01.6** | **-0.9** |
| | comp=N,0.4nm,0.6s,baz=79,slow=7.5,SNR=6.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.61** | **34** | P | | **P** | **11 11 18.9** | **+1.3** |
| | comp=N,0.1nm,0.4s,baz=304,slow=7.1,SNR=1.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.47** | **340** | P | | **P** | **11 11 42.2** | **-2.5** |
| | comp=N,3.9nm,0.9s,baz=36,slow=7.8,SNR=2.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.21** | **333** | P | | **P** | **11 12 21.8** | **-1.5** |
| | comp=N,3.6nm,0.9s,baz=41,slow=7.7,SNR=8.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.59** | **57** | P | | **P** | **11 14 08.7** | **+2.5** |
| | comp=N,0.3nm,0.8s,baz=295,slow=4.1,SNR=4.7 | | | | | | | |

**IDC 12 11:09:32.7±1.9, 3°04'S×139°22'E, h0km, mb3.2/2, mb1 3.7/3, mb1mx3.4/18, mbtmp3.5/3, ML3.9/1, Error ellipse: s-maj=75.7km s-min=7.5km az=89.0, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **17.46** | **195** | P | Pn | 11 13 37.9 | 0.0 |
| | 0.4nm,0.3s,baz=24,slow=12,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **21.14** | **194** | P | P | 11 14 19.5 | 0.0 |
| | 0.5nm,0.8s,baz=18,slow=9.8,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.36** | **322** | P | P | 11 20 48.6 | 0.0 |
| | 0.2nm,0.4s,baz=107,slow=7.8,SNR=8.4 | | | | | | |

*EAF **12** 11:13:16.8±1.3, 25°35'S×29°29'E, h10km, MD3.8*
*BUL **12** 11:13:17.1±1.2, 25°34'S×29°27'E, h10km, MD4.1*
**PRE 12 11:13:38.3±0.8, 26°37'S×28°71'E, h5km, ML2.2, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRYS** | **Parys** | **1.33** | **245** | *e*P | Pb | 11 14 04.0 | +0.2 |
| PRYS | | | | *e*S | Sn | 11 14 22.0 | +0.1 |
| PRYS | | | | IAML | | 11 14 25.9 | |
| | comp=Z,44nm,0.2s | | | | | | |
| **KSR** | **Koster** | **1.71** | **287** | *e*P | Pn | 11 14 09.3 | +0.3 |
| KSR | | | | *e*S | Sb | 11 14 32.5 | +0.2 |
| KSR | | | | IAML | | 11 14 34.1 | |
| | comp=Z,130nm,0.3s | | | | | | |
| **POGA** | **Pongola** | **2.85** | **111** | *e*P | Pn | 11 14 25.4 | +1.0 |
| POGA | | | | *e*S | Sn | 11 14 59.3 | +0.2 |
| POGA | | | | IAML | | 11 15 09.1 | |
| | comp=Z,12nm,1.9s | | | | | | |
| **SWZ** | **Schweizer** | **3.13** | **254** | *e*P | Pn | 11 14 29.4 | +0.9 |
| SWZ | | | | *e*S | Sn | 11 15 07.2 | +0.9 |
| SWZ | | | | IAML | | 11 15 19.1 | |
| | comp=Z,8.5nm,0.3s | | | | | | |
| **MOPA** | **Mopani** | **3.74** | **41** | *e*P | Pn | 11 14 37.2 | +0.4 |
| MOPA | | | | *e*S | Sn | 11 15 20.8 | -0.4 |
| MOPA | | | | IAML | | 11 15 30.4 | |
| | comp=Z,7.0nm,2.0s | | | | | | |
| **BOSA** | **Boshof** | **3.80** | **233** | *e*P | Pn | 11 14 37.9 | +0.3 |
| BOSA | | | | *e*S | Sn | 11 15 22.2 | -0.6 |
| BOSA | | | | IAML | | 11 15 38.9 | |
| | comp=Z,18nm,5.2s | | | | | | |
| **BOSA** | **Boshof** | **3.80** | **233** | *e*P | Pn | 11 14 29.2 | -8.5 |
| BOSA | | | | *e*S | Sn | 11 15 21.9 | -0.8 |
| **BOSA** | **Boshof** | **3.80** | **233** | *e*P | Pn | 11 14 29.2 | -8.5 |
| BOSA | | | | *e*S | Sn | 11 15 21.9 | -0.8 |

*SKHL **12** 11:41:32.5±0.5, 44°50N×146°50E, h160km±3km, mb4.4/4, msha5.0/5*
*JMA **12** 11:41:34.0±0.5, 44°62N×146°28E, h163km±4km, M3.2*
*IDC **12** 11:41:35.0±5.8, 44°85N×146°12E, h172km±51km, mb2.9/6, mb1 3.2/7, mb1mx3.0/33, mbtmp3.4/7, Error ellipse: s-maj=29.1km s-min=7.8km az=168.0*
**ISC 12 11:41:33.6±0.7, 44°62N±0°08×146°31E±0°06, h165km±7km, n27, σ0°72/39, mb3.2/6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YUK** | **Yuzh-Kuril'sk** | **0.67** | **209** | *e*P | **Pn** | **11 41 57.7** | **+0.1** |
| YUK | | | | AMB | AMB | 11 41 58.3 | |
| | 140nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **11 42 16.9** | **+1.1** |
| YUK | | | | A | A | 11 42 19.4 | |
| | 310nm,0.6s | | | | | | |
| YUK | | | | A | A | 11 42 19.4 | |
| | 700nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **0.84** | **153** | *i* P | **Pn** | **11 41 58.0** | **-0.6** |
| SHO | | | | AMB | AMB | 11 41 59.1 | |
| | 20nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 11 41 59.1 | |
| | 50nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 11 41 59.1 | |
| | 150nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **11 42 17.1** | **-0.7** |
| SHO | | | | A | A | 11 42 18.7 | |
| | 1μm,0.5s | | | | | | |
| SHO | | | | A | A | 11 42 18.7 | |
| | 530nm,0.5s | | | | | | |
| **GLVR** | **Golovnino** | **1.05** | **213** | *e*P | **Pn** | **11 42 01.3** | **+1.1** |
| GLVR | | | | AMB | AMB | 11 42 05.3 | |
| | 200nm,0.3s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **11 42 21.5** | **+0.9** |
| GLVR | | | | A | A | 11 42 23.4 | |
| | 100nm,0.4s | | | | | | |
| GLVR | | | | A | A | 11 42 23.4 | |
| | 630nm,0.4s | | | | | | |
| **JRA** | **Rausu** | **1.09** | **232** | P | **Pn** | **11 42 00.6** | **0.0** |
| **KUR** | **Kuril'sk** | **1.26** | **61** | *i* P | **Pn** | **11 42 02.0** | **0.0** |
| KUR | | | | AMB | AMB | 11 42 02.6 | |
| | 50nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 11 42 02.6 | |
| | 50nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 11 42 02.6 | |
| | 120nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **11 42 24.5** | **+0.6** |
| KUR | | | | A | A | 11 42 41.5 | |
| | 80nm,0.3s | | | | | | |
| KUR | | | | A | A | 11 42 41.5 | |
| | 40nm,0.3s | | | | | | |
| **JNSB** | **Nemuroshibetsu** | **1.27** | **228** | P | **Pn** | **11 42 02.4** | **+0.3** |
| **NMR** | **Nemuro--Hokkai** | **1.32** | **199** | *i* P | **Pn** | **11 42 02.4** | **-0.2** |
| NMR | | | | *i* S | **Sn** | **11 42 24.1** | **-0.8** |
| **NEM2** | **Nemuro 2** | **1.32** | **198** | P | **Pn** | **11 42 02.3** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **11 42 23.9** | **-1.0** |
| **JNK** | **Nakash** | **1.55** | **228** | P | **Pn** | **11 42 05.2** | **+0.4** |
| **JKHN** | **Kushirohamanak** | **1.75** | **209** | P | **Pn** | **11 42 07.0** | **+0.1** |
| JKHN | | | | *e*S | **Sn** | **11 42 31.9** | **-0.7** |
| **JTKR** | **Abashiri--Toko** | **1.84** | **250** | P | **Pn** | **11 42 07.9** | **0.0** |
| JTKR | | | | *e*S | **Sn** | **11 42 34.8** | **+0.5** |
| **AKK** | **Akkeshi** | **1.93** | **214** | *i* P | **Pn** | **11 42 08.7** | **-0.1** |
| AKK | | | | *e*S | **Sn** | **11 42 35.5** | **-0.5** |
| **JAK** | **Akkeshi** | **2.00** | **216** | P | **Pn** | **11 42 09.7** | **0.0** |
| JAK | | | | *e*S | **Sn** | **11 42 36.8** | **-0.7** |
| **JMP** | **Maruseppu** | **2.21** | **255** | P | **Pn** | **11 42 12.0** | **0.0** |
| **JAR** | **Ashorobuto** | **2.26** | **235** | P | **Pn** | **11 42 13.8** | **+1.1** |
| **JOB** | **Onbets** | **2.48** | **227** | P | **Pn** | **11 42 15.9** | **+0.6** |
| JOB | | | | *e*S | **Sn** | **11 42 47.6** | **+0.1** |
| **JKK2** | **Kamakawa 2** | **2.67** | **255** | P | **Pn** | **11 42 18.0** | **+0.5** |
| **JSE** | **Soyaes** | **2.67** | **279** | P | **Pn** | **11 42 17.2** | **-0.3** |
| **JCH** | **Churui** | **2.94** | **228** | P | **Pn** | **11 42 20.8** | **0.0** |
| JCH | | | | *e*S | **Sn** | **11 42 56.4** | **-0.9** |
| **JNBK** | **Urakawa-nobuka** | **3.49** | **229** | P | **Pn** | **11 42 27.2** | **-0.6** |
| **SEY** | **Seymchan** | **18.68** | **9** | P | **P** | **11 45 37.5** | **-1.3** |
| | baz=190,slow=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.65** | **297** | P | **P** | **11 49 20.4** | **-1.3** |
| | 0.8nm,0.5s,baz=79,slow=7.9,SNR=16 | | | | | | |
| **INK** | **Inuvik** | **45.95** | **31** | P | **P** | **11 49 39.4** | **-0.1** |
| | 1.2nm,1.1s,baz=258,slow=7.5,SNR=3.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **55.41** | **34** | P | **P** | **11 50 50.3** | **0.0** |
| | 0.1nm,0.3s,baz=303,slow=7.3,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **68.90** | **192** | P | **P** | **11 52 22.4** | **+1.9** |
| | 0.1nm,0.4s,baz=13,slow=8.9,SNR=1.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **69.80** | **50** | P | **P** | **11 52 26.6** | **+0.4** |
| | 0.3nm,0.5s,baz=275,slow=1.6,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **82.66** | **56** | P | **P** | **11 53 39.0** | **+0.2** |
| | 0.1nm,0.5s,baz=291,slow=3.9,SNR=6.3 | | | | | | |

*TUL **12** 11:57:19.6±1.0, 36°26N±0°01×97°98W±0°02, h6km±6km, ML2.5, ML2.5/50(NEIC), Error ellipse: s-maj=2.8km s-min=1.6km az=79.0*
**NEIC 12 11:57:19.6±0.8, 36°250N±0°010×97°98W±0°01, h5km±2km, Error ellipse: s-maj=3.0km s-min=2.2km az=288.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **0.94** | **153** | Pg | Pg | 11 57 37.2 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.95** | **152** | Pg | Pg | 11 57 37.5 | -0.3 |
| **FNO** | **Franklin** | **1.10** | **154** | Pg | Pg | 11 57 40.2 | -0.4 |
| FNO | | | | IAML | | 11 58 01.8 | |
| | comp=E,120nm,0.2s | | | | | | |
| FNO | | | | IAML | | 11 58 01.9 | |
| | comp=N,113nm,0.2s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.35** | **60** | Pn | Pn | 11 57 44.8 | -0.4 |
| **W35A** | **Tecumseh** | **1.42** | **140** | Pn | Pn | 11 57 45.4 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.65** | **204** | Pn | Pn | 11 57 48.9 | -0.3 |
| **X34A** | **Smith Ranch, M** | **1.65** | **176** | Pn | Pb | 11 57 50.0 | -0.5 |
| **TUL1** | **Leonard** | **1.80** | **100** | Pn | Pn | 11 57 52.1 | +0.8 |
| **X37A** | **Clayton** | **2.70** | **127** | Pn | Pn | 11 58 04.6 | +1.0 |
| **KSU1** | **Kansas State U** | **3.05** | **20** | Pn | Pn | 11 58 09.2 | +0.8 |
| **AMTX** | **Amarillo** | **3.31** | **247** | Pn | Pn | 11 58 13.2 | +1.0 |
| **W39A** | **Magazine** | **3.57** | **106** | Pn | Pn | 11 58 15.6 | 0.0 |

*EAF **12** 12:27:39.4±2.6, 26°54S×30°03E, h10km, MD4.1*
*BUL **12** 12:27:41.4±1.3, 26°53S×29°88E, h10km, MD4.4*
*IDC **12** 12:27:46.9±3.8, 26°14S×28°94E, h0km, mb1 3.3/2, mb1mx3.1/34, mbtmp3.4/2, ML2.7/2, Error ellipse: s-maj=31.3km s-min=22.7km az=107.0*
**ISC 12 12:27:37.9±1.4, 26°52S±0°07×30°03E±0°08, h10km, n14, σ3°11/22, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOPA** | **Mopani** | **3.24** | **23** | *e*P | **Pn** | **12 28 30.6** | **+1.7** |
| MOPA | | | | *e*S | **Sn** | **12 29 05.2** | **-2.3** |
| **MOPA** | **Mopani** | **3.24** | **23** | *e*P | **Pn** | **12 28 30.6** | **+1.7** |
| MOPA | | | | *e*S | **Sn** | **12 29 05.2** | **-2.3** |
| **LBTB** | **Lobatse** | **4.26** | **290** | Pg | **Pn** | **12 28 46.0** | **+3.0** |
| | 1.0nm,0.3s,baz=106,slow=13,SNR=10 | | | | | | |
| LBTB | | | | Lg | Lg | 12 29 29.4 | |
| | 3.5nm,0.3s,baz=17,slow=21,SNR=34 | | | | | | |
| **LBTB** | **Lobatse** | **4.26** | **290** | *i* P | **Pn** | **12 28 44.3** | **+1.3** |
| LBTB | | | | *i* S | **Sn** | **12 29 30.8** | **-2.1** |
| **LBTB** | **Lobatse** | **4.26** | **290** | *i* P | **Pn** | **12 28 44.3** | **+1.3** |
| LBTB | | | | *i* S | **Sn** | **12 29 30.8** | **-2.1** |
| **BOSA** | **Boshof** | **4.72** | **243** | Pg | **Pb** | **12 29 01.3** | **+0.5** |
| | 0.2nm,0.3s,baz=54,slow=18,SNR=1.7 | | | | | | |
| BOSA | | | | Sn | **Sn** | **12 29 39.6** | **-4.5** |
| | 0.3nm,0.3s,baz=91,slow=13,SNR=1.7 | | | | | | |
| BOSA | | | | Lg | Lg | 12 29 56.5 | |
| | 1.7nm,0.3s,baz=153,slow=22,SNR=16 | | | | | | |
| **BOSA** | **Boshof** | **4.72** | **243** | *i* P | **Pn** | **12 28 51.5** | **+2.2** |
| BOSA | | | | *e*S | **Sn** | **12 29 40.0** | **-4.1** |
| **BOSA** | **Boshof** | **4.72** | **243** | *i* P | **Pn** | **12 28 51.5** | **+2.2** |
| BOSA | | | | *e*S | **Sn** | **12 29 40.0** | **-4.1** |
| **I47ZA** | **BOSHOF INFRASO** | **4.74** | **243** | *i* | | 12 54 00.0 | |
| | baz=54,slow=320,SNR=0.9 | | | | | | |
| **MATP** | **Matopo** | **6.23** | **347** | Pn | **Pn** | **12 29 12.4** | **+2.4** |
| | 0.2nm,0.3s,baz=195,slow=2.9,SNR=1.5 | | | | | | |
| MATP | | | | Sn | Sn | 12 30 13.3 | -8.0 |
| | 0.2nm,0.3s,baz=66,slow=14,SNR=1.4 | | | | | | |
| MATP | | | | Lg | Lg | 12 30 38.6 | |
| | 0.3nm,0.3s,baz=279,slow=22,SNR=6.2 | | | | | | |
| **MATP** | **Matopo** | **6.23** | **347** | *e*P | **Pn** | **12 29 13.4** | **+3.3** |
| MATP | | | | *e*S | **Sn** | **12 30 18.4** | **-3.0** |
| **MATP** | **Matopo** | **6.23** | **347** | *e*P | **Pn** | **12 29 13.4** | **+3.3** |
| MATP | | | | *e*S | **Sn** | **12 30 18.4** | **-3.0** |
| **SUR** | **Sutherland** | **9.93** | **232** | Pn | **Pn** | **12 30 05.5** | **+4.7** |
| | 0.1nm,0.3s,baz=42,slow=14,SNR=0.9 | | | | | | |
| SUR | | | | Sn | **Sn** | **12 31 48.8** | **-3.5** |
| | 0.1nm,0.3s,baz=342,slow=5.9,SNR=2.4 | | | | | | |
| SUR | | | | Lg | Lg | 12 32 43.3 | |
| | 0.1nm,0.3s,baz=51,slow=17,SNR=1.7 | | | | | | |
| **I35NA** | **TSUMEB INFRASO** | **13.59** | **300** | *i* | | 13 46 00.0 | |
| | baz=127,slow=310,SNR=4.3 | | | | | | |

*NEIC **12** 12:30:15.6±1.1, 60°04N±0°03×152°82W±0°06, h99km±4km, Error ellipse: s-maj=4.6km s-min=4.5km az=214.0*
*IDC **12** 12:30:15.5±1.9, 59°92N×152°67W, h90km±33km, mb3.3/1, mb1 3.4/5, mb1mx2.8/50, mbtmp3.5/5, Error ellipse: s-maj=41.8km s-min=16.8km az=111.0*
*AEIC **12** 12:30:16.6±1.2, 60°01N±0°03×152°81W±0°06, h94km±4km, ML3.0/118, ML3.3/124(NEIC), Error ellipse: s-maj=4.7km s-min=4.1km az=83.0*
**ISC 12 12:30:15.8±1.0, 60°01N±0°04×152°78W±0°04, h100km±6km, n203, σ0°82/188, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **O20K** | **Slope Mountain** | **0.11** | **46** | | **Pn** | **12 30 29.5** | **-0.3** |
| O20K | | | | | **Sn** | **12 30 40.1** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.11** | **46** | P | **Pn** | **12 30 29.5** | **-0.3** |
| | baz=233 | | | | | | |
| O20K | | | | S | **Sn** | **12 30 40.1** | **-0.2** |
| | baz=233 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.41** | **0** | | **Pn** | **12 30 30.4** | **-0.7** |
| RED | | | | | **Sn** | **12 30 41.5** | **-1.1** |
| **OPT** | **Oil Point** | **0.42** | **213** | | **Pn** | **12 30 30.8** | **-0.3** |
| **OPT** | **Oil Point** | **0.42** | **213** | P | **Pn** | **12 30 30.8** | **-0.3** |
| | baz=31 | | | | | | |
| **RSO** | **Redoubt South** | **0.46** | **1** | | **Pn** | **12 30 31.0** | **-0.5** |
| **NCT** | **North Crescent** | **0.56** | **352** | | **Pn** | **12 30 31.5** | **-0.6** |
| NCT | | | | | **Sn** | **12 30 43.2** | **-1.2** |
| **DFR** | **Drift River** | **0.59** | **4** | | **Pn** | **12 30 31.7** | **-0.6** |
| DFR | | | | | **Sn** | **12 30 44.0** | **-0.7** |
| **RDT** | **Redoubt** | **0.60** | **18** | | **Pn** | **12 30 31.8** | **-0.6** |
| **HOM** | **Homer** | **0.67** | **121** | | **Pn** | **12 30 33.0** | **+0.1** |
| HOM | | | | | **Sn** | **12 30 46.5** | **+0.8** |
| **HOM** | **Homer** | **0.67** | **121** | IAML | | 12 30 48.4 | |
| | comp=E,1μm,0.3s | | | | | | |
| **HOM** | **Homer** | **0.67** | **121** | P | **Pn** | **12 30 33.0** | **+0.1** |
| | baz=302 | | | | | | |
| **AUL** | **Augustine Lava** | **0.71** | **208** | | **Pn** | **12 30 33.1** | **-0.1** |
| AUL | | | | | **Sn** | **12 30 46.4** | **+0.1** |
| **AUH** | **Augustine H** | **0.73** | **208** | | **Pn** | **12 30 33.6** | **+0.1** |
| **AUQ** | **Augustine Qik'** | **0.73** | **207** | | **Pn** | **12 30 33.3** | **-0.2** |
| **O19K** | **Port Alsworth** | **0.80** | **284** | | **Pn** | **12 30 33.2** | **-0.8** |
| O19K | | | | | **Sn** | **12 30 47.0** | **-0.7** |
| **O19K** | **Port Alsworth** | **0.80** | **284** | IAML | | 12 30 48.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.80** | **284** | P | **Pn** | **12 30 33.2** | **-0.8** |
| | baz=103 | | | | | | |
| O19K | | | | S | **Sn** | **12 30 47.0** | **-0.7** |
| | baz=103 | | | | | | |
| **CNPM** | **China Poot** | **0.92** | **121** | | **Pn** | **12 30 35.1** | **-0.3** |
| CNPM | | | | | **Sn** | **12 30 49.8** | **-0.2** |
| **CNPM** | **China Poot** | **0.92** | **121** | IAML | | 12 30 50.4 | |
| | comp=N,497nm,0.5s | | | | | | |
| **BRLK** | **Bradley Lake** | **0.98** | **103** | | **Pn** | **12 30 35.5** | **-0.5** |
| **BRLK** | **Bradley Lake** | **0.98** | **103** | IAML | | 12 30 52.9 | |
| | comp=N,647nm,0.1s | | | | | | |
| BRLK | | | | IAML | | 12 30 53.0 | |
| | comp=E,453nm,0.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.06** | **104** | | **Pn** | **12 30 36.7** | **-0.2** |
| **BRSE** | **Bradley Lake S** | **1.06** | **104** | P | **Pn** | **12 30 36.7** | **-0.2** |
| | baz=285 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.11** | **46** | | **Pn** | **12 30 38.7** | **+1.4** |
| **CAPN** | **Captain Cook N** | **1.11** | **46** | IAML | | 12 30 58.1 | |
| | comp=E,1μm,0.9s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.11** | **46** | P | **Pn** | **12 30 38.7** | **+1.4** |
| | baz=228 | | | | | | |
| **Q19K** | **Cape Douglas,** | **1.17** | **203** | | **Pn** | **12 30 37.6** | **-0.5** |
| **Q19K** | **Cape Douglas,** | **1.17** | **203** | P | **Pn** | **12 30 37.6** | **-0.5** |
| | baz=21 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.17** | **314** | | **Pn** | **12 30 37.7** | **-0.5** |
| N19K | | | | | **Sn** | **12 30 53.9** | **-1.2** |
| **N19K** | **Bonanza Creek** | **1.17** | **314** | P | **Pn** | **12 30 37.7** | **-0.5** |
| | baz=133 | | | | | | |
| N19K | | | | S | **Sn** | **12 30 53.8** | **-1.2** |
| | baz=133 | | | | | | |
| **SPU** | **Mount Spurr** | **1.23** | **17** | | **Pn** | **12 30 38.5** | **-0.4** |
| **SPCN** | **Chakachatna No** | **1.26** | **13** | | **Pn** | **12 30 39.0** | **-0.1** |
| **SPCG** | **Spurr Capps Gl** | **1.34** | **16** | | **Pn** | **12 30 40.0** | **-0.2** |
| **SPNN** | **North Nagishla** | **1.36** | **2** | | **Pn** | **12 30 40.3** | **-0.2** |
| **SLKM** | **Skilak Lake** | **1.37** | **67** | | **Pn** | **12 30 40.3** | **-0.1** |
| SLKM | | | | | **Sn** | **12 30 58.1** | **-1.0** |
| **P18K** | **Big Mountain,** | **1.39** | **245** | | **Pn** | **12 30 40.0** | **-0.7** |
| **P18K** | **Big Mountain,** | **1.39** | **245** | IAML | | 12 30 46.3 | |
| | comp=N,37nm,3.3s | | | | | | |
| P18K | | | | IAML | | 12 31 06.1 | |
| | comp=E,36nm,4.1s | | | | | | |
| **P18K** | **Big Mountain,** | **1.39** | **245** | P | **Pn** | **12 30 40.0** | **-0.7** |
| | baz=62 | | | | | | |
| **STLK** | **Strandline Lak** | **1.57** | **17** | | **Pn** | **12 30 42.7** | **-0.2** |
| **O22K** | **Cooper Landing** | **1.60** | **71** | | **Pn** | **12 30 43.0** | **-0.2** |
| **O22K** | **Cooper Landing** | **1.60** | **71** | P | **Pn** | **12 30 43.0** | **-0.2** |
| | baz=254 | | | | | | |
| **SEW** | **Seward** | **1.67** | **85** | | **Pn** | **12 30 43.2** | **-0.9** |
| **SEW** | **Seward** | **1.67** | **85** | P | **Pn** | **12 30 43.2** | **-0.9** |
| | baz=268 | | | | | | |
| **SVW2** | **Sparrevohn** | **1.77** | **310** | | **Pn** | **12 30 44.5** | **-0.8** |
| **RC01** | **Rabbit Creek A** | **1.85** | **53** | | **Pn** | **12 30 46.2** | **-0.2** |
| **RC01** | **Rabbit Creek A** | **1.85** | **53** | IAML | | 12 31 10.6 | |
| | comp=E,359nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.85** | **53** | P | **Pn** | **12 30 46.2** | **-0.2** |
| | baz=236 | | | | | | |
| **M19K** | **Big River Lodg** | **2.06** | **338** | | **Pn** | **12 30 48.9** | **-0.2** |
| **M19K** | **Big River Lodg** | **2.06** | **338** | P | **Pn** | **12 30 48.8** | **-0.2** |
| | baz=157 | | | | | | |
| **M22K** | **Willow** | **2.18** | **35** | | **Pn** | **12 30 51.0** | **+0.3** |
| **M22K** | **Willow** | **2.18** | **35** | P | **Pn** | **12 30 51.0** | **+0.3** |
| | baz=218 | | | | | | |
| **KELA** | **Mount Kelaz** | **2.19** | **225** | | **Pn** | **12 30 50.6** | **-0.2** |
| **KDAK** | **Kodiak Island** | **2.23** | **177** | P | **Pn** | **12 30 50.2** | **-1.2** |
| | comp=E,2.8nm,0.3s,baz=44,slow=9.9,SNR=49 | | | | | | |
| KDAK | | | | S | **Sn** | **12 31 16.0** | **-2.5** |
| | comp=E,3.1nm,0.3s,baz=32,slow=14,SNR=4.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.23** | **177** | | **Pn** | **12 30 51.3** | **-0.1** |
| **PWL** | **Port Wells** | **2.36** | **67** | | **Pn** | **12 30 51.8** | **-1.2** |
| **PWL** | **Port Wells** | **2.36** | **67** | IAML | | 12 31 20.2 | |
| | comp=E,262nm,0.3s | | | | | | |
| **PMR** | **Palmer** | **2.39** | **47** | | **Pn** | **12 30 52.6** | **-0.8** |
| **PMR** | **Palmer** | **2.39** | **47** | IAML | | 12 31 22.4 | |
| | comp=N,197nm,0.2s | | | | | | |
| PMR | | | | IAML | | 12 31 22.7 | |
| | comp=E,144nm,0.2s | | | | | | |
| **PMR** | **Palmer** | **2.39** | **47** | P | **Pn** | **12 30 52.6** | **-0.8** |
| | baz=230 | | | | | | |
| **L19K** | **White Mountain** | **2.40** | **336** | | **Pn** | **12 30 53.4** | **-0.2** |
| **L19K** | **White Mountain** | **2.40** | **336** | P | **Pn** | **12 30 53.4** | **-0.2** |
| | baz=155 | | | | | | |
| **L20K** | **Farewell, AK** | **2.54** | **348** | | **Pn** | **12 30 54.8** | **-0.6** |
| **KNK** | **Knik Glacier** | **2.55** | **55** | | **Pn** | **12 30 54.5** | **-1.0** |
| **KNK** | **Knik Glacier** | **2.55** | **55** | IAML | | 12 31 24.9 | |
| | comp=E,216nm,0.3s | | | | | | |
| **KNK** | **Knik Glacier** | **2.55** | **55** | P | **Pn** | **12 30 54.5** | **-1.0** |
| | baz=238 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.59** | **45** | | **Pn** | **12 30 55.5** | **-0.5** |
| **GHO** | **Glory Hole Cre** | **2.59** | **45** | IAML | | 12 31 27.2 | |
| | comp=E,212nm,0.3s | | | | | | |
| GHO | | | | IAML | | 12 31 28.8 | |
| | comp=N,144nm,0.3s | | | | | | |
| **CUT** | **Chulitna** | **2.69** | **26** | | **Pn** | **12 30 57.7** | **+0.4** |
| CUT | | | | IAML | | 12 31 33.0 | |
| | comp=N,132nm,0.3s | | | | | | |
| CUT | | | | IAML | | 12 31 33.9 | |
| | comp=E,194nm,0.3s | | | | | | |
| **OHAK** | **Old Harbor** | **2.81** | **186** | | **Pn** | **12 30 58.0** | **-0.9** |
| **OHAK** | **Old Harbor** | **2.81** | **186** | IAML | | 12 31 46.6 | |
| | comp=E,61nm,3.0s | | | | | | |
| OHAK | | | | IAML | | 12 31 47.8 | |
| | comp=N,75nm,2.6s | | | | | | |
| **SML** | **Sawmill** | **2.83** | **48** | | **Pn** | **12 30 58.2** | **-1.0** |
| **SML** | **Sawmill** | **2.83** | **48** | IAML | | 12 31 32.2 | |
| | comp=E,134nm,0.3s | | | | | | |
| SML | | | | IAML | | 12 31 32.8 | |
| | comp=N,101nm,0.6s | | | | | | |
| **SML** | **Sawmill** | **2.83** | **48** | P | **Pn** | **12 30 58.2** | **-1.0** |
| | baz=232 | | | | | | |
| **PPLA** | **Purkeypile** | **2.91** | **5** | | **Pn** | **12 31 01.0** | **+0.6** |
| **PPLA** | **Purkeypile** | **2.91** | **5** | P | **Pn** | **12 31 01.0** | **+0.6** |
| | baz=186 | | | | | | |
| **GLI** | **Glacier Island** | **2.95** | **70** | | **Pn** | **12 30 59.0** | **-1.8** |
| **GLI** | **Glacier Island** | **2.95** | **70** | IAML | | 12 31 33.0 | |
| | comp=N,136nm,0.3s | | | | | | |
| **FID** | **Port Fidalgo** | **3.22** | **74** | | **Pn** | **12 31 01.8** | **-2.6** |
| **SCM** | **Sheep Creek Mo** | **3.23** | **53** | | **Pn** | **12 31 03.9** | **-0.8** |
| **SCM** | **Sheep Creek Mo** | **3.23** | **53** | IAML | | 12 31 43.2 | |
| | comp=N,93nm,0.5s | | | | | | |
| SCM | | | | IAML | | 12 31 44.4 | |
| | comp=E,115nm,0.5s | | | | | | |
| **TT01** | **Tatalina** | **3.30** | **333** | | **Pn** | **12 31 05.1** | **-0.4** |
| **TTA** | **Tatalina** | **3.32** | **334** | Pn | **Pn** | **12 31 05.7** | **-0.1** |
| **K20K** | **Telida** | **3.42** | **350** | | **Pn** | **12 31 07.2** | **+0.1** |
| **CAST** | **Castle Rocks** | **3.44** | **5** | | **Pn** | **12 31 07.4** | **0.0** |
| **SII** | **Sitkinak Islan** | **3.54** | **193** | | **Pn** | **12 31 07.7** | **-1.0** |
| **EYAK** | **Cordova Ski Ar** | **3.54** | **78** | | **Pn** | **12 31 08.5** | **-0.2** |
| **EYAK** | **Cordova Ski Ar** | **3.54** | **78** | P | **Pn** | **12 31 08.5** | **-0.2** |
| | baz=264 | | | | | | |
| **WAT6** | **Susitna Watana** | **3.55** | **41** | | **Pn** | **12 31 08.2** | **-0.7** |
| **WAT6** | **Susitna Watana** | **3.55** | **41** | P | **Pn** | **12 31 08.2** | **-0.7** |
| | baz=226 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GLB | | | | IAML | | | 12 32 16.1 | |
| | comp=E,27nm,0.6s | | | | | | | |
| **VRDI** | **Verde Repeater** | **4.75** | **71** | | | **Pn** | **12 31 24.0** | **-1.3** |
| **VRDI** | **Verde Repeater** | **4.75** | **71** | IAML | | | 12 32 59.4 | |
| | comp=N,22nm,4.7s | | | | | | | |
| VRDI | | | | IAML | | | 12 34 13.5 | |
| | comp=E,22nm,3.9s | | | | | | | |
| **CHGN** | **Chignik** | **4.76** | **221** | Pn | | **Pn** | **12 31 25.5** | **+0.3** |
| CHGN | | | | IAML | | | 12 32 41.3 | |
| | comp=E,29nm,1.2s | | | | | | | |
| CHGN | | | | IAML | | | 12 32 56.1 | |
| | comp=N,25nm,1.9s | | | | | | | |
| **PS10** | **TAPS Pump St10** | **4.78** | **41** | | | **Pn** | **12 31 26.1** | **+0.6** |
| **NEA2** | **Nenana** | **4.92** | **19** | | | **Pn** | **12 31 26.9** | **-0.4** |
| **NEA2** | **Nenana** | **4.92** | **19** | IAML | | | 12 32 22.8 | |
| | comp=N,13nm,4.5s | | | | | | | |
| NEA2 | | | | IAML | | | 12 33 51.7 | |
| | comp=E,11nm,4.2s | | | | | | | |
| **NEA2** | **Nenana** | **4.92** | **19** | P | | **Pn** | **12 31 26.9** | **-0.4** |
| | baz=202 | | | | | | | |
| **WAX** | **Waxell Ridge** | **4.97** | **81** | Pn | | **Pn** | **12 31 27.7** | **-0.3** |
| **SNH** | **Sunshine Point** | **4.98** | **84** | Pn | | **Pn** | **12 31 29.5** | **+1.3** |
| **WRH** | **Wood River Hil** | **4.99** | **24** | | | **Pn** | **12 31 27.5** | **-0.7** |
| **WRH** | **Wood River Hil** | **4.99** | **24** | IAML | | | 12 32 19.6 | |
| | comp=N,12nm,3.9s | | | | | | | |
| WRH | | | | IAML | | | 12 34 07.1 | |
| | comp=E,19nm,4.4s | | | | | | | |
| **MLY** | **Manley** | **5.13** | **10** | | | **Pn** | **12 31 29.7** | **-0.4** |
| **MLY** | **Manley** | **5.13** | **10** | IAML | | | 12 32 32.7 | |
| | comp=E,10nm,3.7s | | | | | | | |
| **MLY** | **Manley** | **5.13** | **10** | P | | **Pn** | **12 31 29.7** | **-0.4** |
| | baz=192 | | | | | | | |
| **HDA** | **Harding Lake** | **5.19** | **29** | | | **Pn** | **12 31 30.6** | **-0.4** |
| HDA | | | | IAML | | | 12 32 29.4 | |
| | comp=N,29nm,0.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.20** | **24** | | | **Pn** | **12 31 30.5** | **-0.6** |
| **CCB** | **Clear Creek Bu** | **5.20** | **24** | IAML | | | 12 32 12.1 | |
| | comp=N,9.1nm,4.0s | | | | | | | |
| CCB | | | | IAML | | | 12 34 02.8 | |
| | comp=E,11nm,3.5s | | | | | | | |
| **I21K** | **Tanana** | **5.21** | **4** | | | **Pn** | **12 31 32.3** | **+1.1** |
| I21K | | | | IAML | | | 12 32 22.9 | |
| | comp=N,16nm,4.9s | | | | | | | |
| I21K | | | | IAML | | | 12 34 31.0 | |
| | comp=E,15nm,4.1s | | | | | | | |
| **ISLE** | **Juniper Island** | **5.23** | **79** | Pn | | **Pn** | **12 31 31.5** | **-0.1** |
| **KIAG** | **Kiagna River** | **5.24** | **75** | | | **Pn** | **12 31 31.5** | **-0.3** |
| **MENT** | **Mentasta** | **5.24** | **52** | Pn | | **Pn** | **12 31 30.8** | **-0.9** |
| MENT | | | | IAML | | | 12 32 47.1 | |
| | comp=E,24nm,0.8s | | | | | | | |
| MENT | | | | IAML | | | 12 32 47.7 | |
| | comp=N,22nm,0.5s | | | | | | | |
| **BALM** | **Baldy** | **5.26** | **74** | | | **Pn** | **12 31 31.9** | **0.0** |
| **RIDG** | **Independent Ri** | **5.30** | **42** | | | **Pn** | **12 31 32.3** | **-0.2** |
| **RIDG** | **Independent Ri** | **5.30** | **42** | P | | **Pn** | **12 31 32.3** | **-0.2** |
| | baz=229 | | | | | | | |
| **M26K** | **Nabesna, AK** | **5.30** | **59** | | | **Pn** | **12 31 31.9** | **-0.6** |
| **M26K** | **Nabesna, AK** | **5.30** | **59** | IAML | | | 12 32 31.3 | |
| | comp=E,22nm,1.7s | | | | | | | |
| M26K | | | | IAML | | | 12 32 34.2 | |
| | comp=N,21nm,3.5s | | | | | | | |
| **M26K** | **Nabesna, AK** | **5.30** | **59** | P | | **Pn** | **12 31 31.9** | **-0.6** |
| | baz=248 | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.33** | **29** | | | **Pn** | **12 31 32.4** | **-0.5** |
| **TCOL** | **CIGO, UAF Yank** | **5.39** | **23** | | | **Pn** | **12 31 33.5** | **-0.2** |
| **TCOL** | **CIGO, UAF Yank** | **5.39** | **23** | IAML | | | 12 32 36.2 | |
| | comp=N,23nm,0.4s | | | | | | | |
| TCOL | | | | IAML | | | 12 32 44.0 | |
| | comp=E,20nm,0.6s | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.39** | **23** | P | | **Pn** | **12 31 33.5** | **-0.2** |
| | baz=207 | | | | | | | |
| **COLA** | **College** | **5.39** | **23** | | | **Pn** | **12 31 33.4** | **-0.2** |
| **COLA** | **College** | **5.39** | **23** | IAML | | | 12 32 36.0 | |
| | comp=E,26nm,0.4s | | | | | | | |
| COLA | | | | IAML | | | 12 32 44.4 | |
| | comp=E,22nm,0.6s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.40** | **16** | | | **Pn** | **12 31 33.8** | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **5.40** | **16** | IAML | | | 12 32 36.8 | |
| | comp=E,14nm,4.3s | | | | | | | |
| I23K | | | | IAML | | | 12 34 30.7 | |
| | comp=N,14nm,4.7s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.40** | **16** | P | | **Pn** | **12 31 33.8** | **+0.1** |
| | baz=199 | | | | | | | |
| **MDM** | **Murphy Dome** | **5.40** | **21** | | | **Pn** | **12 31 33.5** | **-0.3** |
| **MESA** | **MESA** | **5.42** | **83** | | | **Pn** | **12 31 34.5** | **+0.2** |
| **MESA** | **MESA** | **5.42** | **83** | P | | **Pn** | **12 31 34.5** | **+0.2** |
| | baz=273 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **5.43** | **52** | | | **Pn** | **12 31 34.1** | **-0.2** |
| **L26K** | **Log Cabin Wild** | **5.43** | **52** | P | | **Pn** | **12 31 34.1** | **-0.2** |
| | baz=240 | | | | | | | |
| **IL31** | | **5.51** | **27** | | | **Pn** | **12 31 34.5** | **-0.7** |
| **ILAR** | **Eielson Array** | **5.51** | **27** | P | | **Pn** | **12 31 34.5** | **-0.8** |
| | comp=N,1.5nm,0.3s,baz=212,slow=13,SNR=55 | | | | | | | |
| ILAR | | | | S | | **Sn** | **12 32 33.8** | **-3.4** |
| | comp=N,1.3nm,0.3s,baz=217,slow=22,SNR=9.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **5.51** | **27** | Pn | | **Pn** | **12 31 33.8** | **-1.4** |
| **DOT** | **Dot Lake** | **5.51** | **45** | Pn | | **Pn** | **12 31 35.3** | **-0.1** |
| **YAH** | **Yahtse** | **5.52** | **82** | | | **Pn** | **12 31 35.4** | **-0.3** |
| **BARN** | **Barnard Glacie** | **5.59** | **74** | | | **Pn** | **12 31 36.5** | **0.0** |
| **H21K** | **Melozitna Rive** | **5.67** | **360** | | | **Pn** | **12 31 36.9** | **-0.6** |
| **POKR** | **Poker Plat Res** | **5.69** | **23** | Pn | | **Pn** | **12 31 37.3** | **-0.5** |
| **SCRK** | **Sand Creek** | **5.75** | **42** | | | **Pn** | **12 31 37.7** | **-0.9** |
| **SCRK** | **Sand Creek** | **5.75** | **42** | P | | **Pn** | **12 31 38.1** | **-0.5** |
| | baz=230 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **5.78** | **61** | Pn | | **Pn** | **12 31 38.5** | **-0.5** |
| **TABL** | **Table Mountain** | **5.82** | **81** | Pn | | **Pn** | **12 31 39.9** | **+0.2** |
| **IM03** | | **6.02** | **356** | | | **Pn** | **12 31 41.2** | **-0.9** |
| **IMAR** | **Indian Mountai** | **6.02** | **356** | Pn | | **Pn** | **12 31 42.4** | **+0.3** |
| **H23K** | **Yukon River** | **6.02** | **13** | | | **Pn** | **12 31 42.7** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.07** | **55** | Pn | | **Pn** | **12 31 42.0** | **-0.9** |
| **BC03** | | **6.08** | **55** | | | **Pn** | **12 31 42.1** | **-1.0** |
| **BCAR** | **Beaver Creek A** | **6.08** | **55** | Pn | | **Pn** | **12 31 42.0** | **-1.1** |
| **H24K** | **Noodor Dome** | **6.26** | **19** | | | **Pn** | **12 31 45.2** | **-0.4** |
| **H24K** | **Noodor Dome** | **6.26** | **19** | P | | **Pn** | **12 31 45.2** | **-0.4** |
| | baz=203 | | | | | | | |
| **PCA** | **Pinnacle** | **6.27** | **84** | Pn | | **Pn** | **12 31 46.2** | **+0.5** |
| **K27K** | **Chicken** | **6.45** | **47** | Pn | | **Pn** | **12 31 48.0** | **-0.1** |
| **PRP** | **Porcupine Dome** | **6.45** | **28** | Pn | | **Pn** | **12 31 48.7** | **+0.5** |
| **EGAK** | **Eagle** | **7.21** | **43** | | | **Pn** | **12 31 57.3** | **-1.0** |
| **EGAK** | **Eagle** | **7.21** | **43** | P | | **Pn** | **12 31 57.9** | **-0.4** |
| | baz=234 | | | | | | | |
| **M30M** | **Minto, Yukon** | **8.11** | **65** | Pn | | **Pn** | **12 32 11.5** | **+0.8** |
| **BM03** | **Burnt Mountain** | **8.27** | **22** | | | **Pn** | **12 32 11.6** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **8.28** | **22** | Pn | | **Pn** | **12 32 12.0** | **-1.0** |
| **I29M** | **Ogilvie Camp,** | **8.54** | **45** | Pn | | **Pn** | **12 32 17.2** | **+0.9** |
| **TOLK** | **Toolik Lake Re** | **8.78** | **8** | Pn | | **Pn** | **12 32 20.6** | **+0.9** |
| **SKAG** | **Skagway** | **8.83** | **86** | Pn | | **Pn** | **12 32 20.6** | **+0.3** |
| **BESE** | **Bessie Mountai** | **9.28** | **91** | Pn | | **Pn** | **12 32 27.7** | **+1.1** |
| **JIS** | **Juneau Island** | **9.61** | **92** | Pn | | **Pn** | **12 32 33.7** | **+2.8** |
| **DLBC** | **Dease Lake** | **11.75** | **88** | P | | **Pn** | **12 33 02.5** | **+2.6** |
| | comp=N,0.4nm,0.3s,baz=270,slow=10,SNR=12 | | | | | | | |
| **INK** | **Inuvik** | **11.77** | **37** | P | | **Pn** | **12 33 01.5** | **+1.5** |
| | comp=N,0.1nm,0.3s,baz=232,slow=12,SNR=3.7 | | | | | | | |
| **INK** | **Inuvik** | **11.77** | **37** | Pn | | **Pn** | **12 33 02.1** | **+2.1** |
| **YKA** | **Yellowknife Ar** | **18.35** | **66** | P | | **P** | **12 34 22.4** | **+0.3** |
| | comp=N,0.2nm,0.3s,baz=276,slow=9.8,SNR=34 | | | | | | | |
| **SONM** | **Songino Array** | **54.88** | **306** | P | | **P** | **12 39 37.0** | **+1.3** |
| | comp=N,0.1nm,0.4s,baz=39,slow=7.7,SNR=3.6 | | | | | | | |

**IDC 12 12:35:44.6±2.2, 1°42'N×126°89'E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.0/42, mbtmp3.4/3, MS4.1/1, Ms1 4.1/1, ms1mx3.0/35, Error ellipse: s-maj=166.1km s-min=27.7km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.46** | **161** | P | P | 12 40 45.9 | +0.4 |
| | 1.0nm,0.4s,baz=340,slow=11,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **25.86** | **165** | P | P | 12 41 17.8 | -0.4 |
| | 0.2nm,0.4s,baz=347,slow=7.7,SNR=11 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **33.78** | **20** | LR | LR | 12 52 42.4 | |
| | comp=Z,348nm,21.6s,baz=68,slow=30 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.53** | **326** | P | P | 12 45 49.9 | 0.0 |
| | 0.2nm,0.5s,baz=120,slow=6.7,SNR=2.1 | | | | | | |

*BGR **12** 12:59:22.8±0.0, 27°.85N×129°.58E, h33km, mb5.1*
*BJI **12** 12:59:23.4±0.0, 26°.78N×127°.99E, h77km, mb4.2/41, mB4.6/19, Ms3.9/7, Ms7 3.8/6*
*IDC **12** 12:59:29.7±0.7, 27°.17N×127°.52E, h80km±9km, mb4.0/20, mb1 4.1/21, mb1mx3.7/72, mbtmp4.3/21, Error ellipse: s-maj=19.2km s-min=15.3km az=58.0*
*NEIC **12** 12:59:30.8±1.9, 27°.06N±0°.08×127°.54E±0°.06, h89km±7km,*

*mb4.5/61, Error ellipse: s-maj=12.7km s-min=7.6km az=159.0*
*JMA **12** 12:59:31.0±0.2, 27°.12N×127°.58E, h89km±2km, M4.2*
*JMA Felt I J1*

**ISC 12 12:59:30.7±0.6, 27°.06N±0°.05×127°.63E±0°.05, h98km±5km, n174, σ1§26/188, mb4.5/68, 1C-1D, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIH** | **Iheya** | **0.30** | **95** | P | **Pn** | **12 59 45.0** | **0.0** |
| JIH | | | | S | **Sn** | **12 59 54.8** | **-0.9** |
| **JAGN** | **Aguni-jima** | **0.59** | **217** | P | **Pn** | **12 59 46.5** | **-0.4** |
| JAGN | | | | S | **Sn** | **12 59 58.2** | **-0.8** |
| **JOW** | **Kunigami** | **0.62** | **112** | P | **Pn** | **12 59 47.4** | **+0.3** |
| | 2μm,0.3s,baz=156,slow=5.8,SNR=1605 | | | | | | |
| JOW | | | | S | **Sn** | **12 59 59.0** | **-0.5** |
| | 3μm,0.3s,baz=34,slow=27,SNR=21 | | | | | | |
| **JOW** | **Kunigami** | **0.62** | **112** | P | **Pn** | **12 59 47.4** | **+0.3** |
| JOW | | | | S | **Sn** | **12 59 58.9** | **-0.6** |
| **JNTH** | **Nagotoyohara** | **0.64** | **147** | P | **Pn** | **12 59 47.8** | **+0.4** |
| JNTH | | | | S | **Sn** | **12 59 59.7** | **-0.1** |
| **JYRO** | **Yoronjima** | **0.73** | **93** | P | **Pn** | **12 59 48.4** | **+0.3** |
| JYRO | | | | S | **Sn** | **13 00 00.7** | **-0.5** |
| **JOKE** | **Okinoerabujima** | **0.89** | **70** | P | **Pn** | **12 59 49.8** | **+0.1** |
| JOKE | | | | S | **Sn** | **13 00 03.1** | **-1.0** |
| **JJT3** | **Tamagusuku3** | **0.92** | **172** | P | **Pn** | **12 59 51.2** | **+1.1** |
| JJT3 | | | | S | **Sn** | **13 00 06.0** | **+1.3** |
| **JKE** | **Kume jima 2** | **1.05** | **226** | P | **Pn** | **12 59 51.2** | **-0.3** |
| JKE | | | | S | **Sn** | **13 00 06.3** | **-0.9** |
| **JTK** | **Tokunoshima** | **1.38** | **58** | P | **Pn** | **12 59 55.4** | **+0.1** |
| JTK | | | | S | **Sn** | **13 00 13.1** | **-0.8** |
| **JAMN** | **Amaminishikomi** | **1.81** | **49** | P | **Pn** | **13 00 00.4** | **-0.2** |
| JAMN | | | | *eS* | **Sn** | **13 00 22.0** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **4.91** | **239** | | **Pn** | **13 00 41.3** | **-0.8** |
| **JSU** | **Suzuyama** | **5.07** | **28** | Pn | **Pn** | **13 00 44.9** | **+0.6** |
| **TATO** | **Taipei** | **5.91** | **251** | | **Pn** | **13 00 55.5** | **-0.2** |
| **YHNB** | **Yeheng** | **6.12** | **248** | Pn | **Pn** | **13 00 58.8** | **+0.2** |
| **NACB** | **Ninganchiao** | **6.16** | **244** | | **Pn** | **13 00 57.2** | **-2.0** |
| **JNU** | **Nakatsue** | **6.66** | **24** | P | **Pn** | **13 01 07.4** | **+1.5** |
| | 18nm,0.3s,baz=326,slow=2.9,SNR=60 | | | | | | |
| **JNU** | **Nakatsue** | **6.66** | **24** | Pn | **Pn** | **13 01 07.3** | **+1.3** |
| **YULB** | **Yu-li** | **6.80** | **239** | Pn | **Pn** | **13 01 04.6** | **-3.3** |
| **SSLB** | **Suanglung** | **6.86** | **243** | | **Pn** | **13 01 06.4** | **-2.3** |
| **TWG** | **Pinlang** | **7.30** | **236** | | **Pn** | **13 01 10.7** | **-3.9** |
| **TPUB** | **Ta-pu** | **7.37** | **241** | | **Pn** | **13 01 14.1** | **-1.4** |
| **JMN** | **Monobe** | **8.56** | **38** | Pn | **Pn** | **13 01 30.1** | **-1.6** |
| **KNMB** | **Chin-men Tao** | **8.73** | **255** | Pn | **Pn** | **13 01 33.3** | **-0.8** |
| **NJ2** | **Nanjing** | **9.12** | **305** | *eP* | **Pn** | **13 01 37.8** | **-1.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **JHS** | **Saijyo** | **9.20** | **29** | Pn | **Pn** | **13 01 40.3** | **-0.2** |
| **KSAR** | **Wonju Array Be** | **10.35** | **1** | Pn | **Pn** | **13 01 59.0** | **+2.9** |
| **KSRS** | **Korea Array** | **10.37** | | P | **Pn** | **13 01 58.0** | **+1.7** |
| | 0.3nm,0.3s,baz=178,slow=13,SNR=19 | | | | | | |
| **INU** | **Inuyama** | **11.52** | **42** | Pn | **Pn** | **13 02 11.9** | **+0.1** |
| **JGF** | **Kuroka** | **11.89** | **42** | Pn | **Pn** | **13 02 16.8** | **-0.1** |
| **MAJO** | **Matsushiro** | **13.04** | **41** | Pn | **Pn** | **13 02 32.1** | **0.0** |
| **MJB9** | **Matsu-Tunnel** | **13.04** | **41** | Pn | **Pn** | **13 02 32.2** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **13.04** | **41** | P | **Pn** | **13 02 31.0** | **-1.1** |
| | 0.2nm,0.3s,baz=243,slow=13,SNR=8.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.04** | **41** | Pn | **Pn** | **13 02 33.7** | **+1.6** |
| **JYT** | **Yasato** | **14.06** | **46** | Pn | **P** | **13 02 47.8** | **-2.2** |
| **JSD** | **Sado** | **14.13** | **37** | Pn | **P** | **13 02 49.4** | **-1.4** |
| **LYN** | **LuoYang** | **15.01** | **304** | *eP* | **P** | **13 03 01.3** | **+0.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,270nm,18.1s | | | | | | |
| **HNS** | **HongShan** | **15.01** | **317** | ‖P | **Pn** | **13 02 58.5** | **+0.9** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **JMM** | **Marumori** | **15.46** | **43** | | **P** | **13 03 05.5** | **0.0** |
| JMM | | | | IAmb | IAmb | 13 03 08.3 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **BJT** | **Baijiatuan** | **16.05** | **326** | | **P** | **13 03 11.4** | **-0.7** |
| **BJI** | **Beijing** | **16.07** | **327** | P | **P** | **13 03 11.8** | **-0.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ENH** | **Enshi** | **16.25** | **286** | P | **P** | **13 03 14.8** | **+0.4** |
| **XAN** | **Xi'an** | **17.54** | **298** | ⇑P | **P** | **13 03 28.6** | **-0.1** |
| XAN | | | | pP | pP | 13 03 42.8 | -3.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.11** | **320** | *eP* | **Pn** | **13 03 47.2** | **-0.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,210nm,5.0s | | | | | | |
| **XLT** | **XiLinHaoTe** | **19.22** | **334** | *eP* | **P** | **13 03 46.1** | **-1.0** |
| XLT | | | | pP | pP | 13 04 02.6 | -2.7 |
| XLT | | | | sP | sP | 13 04 16.8 | -0.7 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,190nm,5.3s | | | | | | |
| **LZH** | **Lanzhou** | **22.13** | **300** | *eP* | **P** | **13 04 18.0** | **-0.5** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| **PZH** | **PanZhiHua** | **23.11** | **275** | P | **P** | **13 04 28.2** | **-0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **GTA** | **Gaotai** | **26.21** | **305** | *eP* | **P** | **13 04 55.1** | **-1.4** |
| GTA | | | | pP | pwP | 13 05 20.2 | +0.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,130nm,5.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,240nm,20.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,130nm,19.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,270nm,20.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.27** | **328** | P | **P** | **13 04 56.5** | **-0.4** |
| **SONM** | **Songino Array** | **26.57** | **327** | P | **P** | **13 05 00.1** | **+0.6** |
| | comp=Z,4.3nm,0.6s,baz=140,slow=11,SNR=44 | | | | | | |
| **SONM** | **Songino Array** | **26.57** | **327** | P | **P** | **13 04 59.5** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **27.76** | **258** | P | **P** | **13 05 11.3** | **+1.0** |
| | comp=Z,0.8nm,0.4s,baz=56,slow=7.1,SNR=6.7 | | | | | | |
| **GOMU** | **GeErMu** | **29.28** | **296** | P | **P** | **13 05 25.8** | **+1.7** |
| GOMU | | | | S | **S** | **13 10 08.5** | **-1.8** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,53nm,4.7s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,140nm,15.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,41nm,14.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,120nm,15.7s | | | | | | |
| **ODAN** | **Odare** | **35.76** | **279** | *eP* | **P** | **13 06 20.8** | **+0.1** |
| | comp=Z,22nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **36.18** | **308** | *eP* | **P** | **13 06 25.8** | **+2.0** |
| **H11N1** | **WAKE ISLAND Hy** | **36.65** | **93** | T | T | 13 44 52.5 | |
| | baz=289 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.65** | **93** | T | T | 13 44 40.1 | |
| | baz=289,slow=74,SNR=4.9 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.67** | **93** | T | T | 13 44 35.4 | |
| | baz=289,slow=74,SNR=4.3 | | | | | | |
| **GUN** | **Gumba** | **36.92** | **281** | *eP* | **P** | **13 06 31.5** | **+0.9** |
| **PKI** | **Pulchoki** | **37.39** | **281** | *eP* | **P** | **13 06 34.3** | **-0.3** |
| **PKIN** | **Phulchoki** | **37.40** | **281** | *eP* | **P** | **13 06 34.6** | **0.0** |
| | comp=Z,3.2nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **38.71** | **282** | *eP* | **P** | **13 06 46.1** | **+0.5** |
| | comp=Z,12nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **38.94** | **281** | *eP* | **P** | **13 06 47.6** | **+0.2** |
| **PYUN** | **Piuthan** | **39.42** | **282** | *eP* | **P** | **13 06 51.9** | **+0.5** |
| **MK31** | **Makanchi Array** | **40.59** | **311** | P | **P** | **13 06 59.9** | **-0.7** |
| **MKAR** | **Makanchi Array** | **40.59** | **311** | P | **P** | **13 06 59.9** | **-0.7** |
| | comp=Z,3.6nm,0.6s,baz=93,slow=10,SNR=50 | | | | | | |
| MKAR | | | | PcP | **PcP** | **13 09 01.3** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=90,slow=3.6,SNR=6.6 | | | | | | |
| **MAKZ** | **Makanchi** | **40.80** | **311** | P | **P** | **13 07 01.8** | **-0.5** |
| MAKZ | | | | IAmb | IAmb | 13 07 03.7 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.27** | **322** | P | **P** | **13 07 06.4** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **41.27** | **322** | P | **P** | **13 07 04.7** | **-1.3** |
| | comp=Z,2.4nm,0.5s,baz=113,slow=8.4,SNR=11 | | | | | | |
| ZALV | | | | PcP | **PcP** | **13 09 03.1** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=142,slow=5.4,SNR=3.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.27** | **322** | P | **P** | **13 07 06.0** | **0.0** |
| **TARG** | **Taragay, Kyrgy** | **43.06** | **303** | P | **P** | **13 07 20.0** | **-1.3** |
| TARG | | | | IAmb | IAmb | 13 07 24.0 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **43.85** | **316** | P | **P** | **13 07 27.2** | **+0.2** |
| KURK | | | | IAmb | IAmb | 13 07 28.1 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.89** | **316** | P | **P** | **13 07 26.1** | **-1.2** |
| | comp=Z,3.3nm,0.7s,baz=104,slow=8.4,SNR=25 | | | | | | |
| KURBB | | | | PcP | **PcP** | **13 09 12.4** | **+0.7** |
| | comp=Z,1.0nm,0.7s,baz=104,slow=3.5,SNR=7.7 | | | | | | |
| **KSH** | **Kashi** | **44.38** | **300** | P | **P** | **13 07 36.3** | **+4.7** |
| **NIL** | **Nilore** | **46.94** | **292** | P | **P** | **13 07 52.0** | **+0.3** |
| NIL | | | | IAmb | IAmb | 13 07 52.5 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **47.01** | **171** | P | **P** | **13 07 53.1** | **+0.9** |
| WB0 | | | | IAmb | IAmb | 13 08 19.8 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.17** | **171** | P | **P** | **13 07 54.7** | **+1.1** |
| | comp=Z,1.2nm,0.7s,baz=353,slow=8.5,SNR=6.9 | | | | | | |
| WRA | | | | S | **S** | **13 14 40.0** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=348,slow=13,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.17** | **171** | P | **P** | **13 07 53.8** | **+0.2** |
| **WB2** | **Warramunga Arr** | **47.18** | **171** | P | **P** | **13 07 54.6** | **+1.1** |
| WB2 | | | | IAmb | IAmb | 13 07 58.5 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.22** | **171** | P | **P** | **13 07 53.7** | **-0.2** |
| **NRIK** | **Noril'sk** | **48.30** | **342** | PcP | **PcP** | **13 09 28.6** | **+1.7** |
| | comp=Z,3.3nm,0.7s,baz=138,slow=3.0,SNR=6.0 | | | | | | |
| **KKAR** | **Karatay Array** | **48.50** | **305** | P | **P** | **13 08 03.1** | **-0.5** |
| **GAR** | **Garm** | **48.79** | **299** | P | **P** | **13 08 05.3** | **-0.7** |
| **BVAR** | **Borovoye Array** | **49.30** | **318** | P | **P** | **13 08 09.0** | **-0.5** |
| | comp=Z,3.2nm,0.8s,baz=64,slow=17,SNR=18 | | | | | | |
| BVAR | | | | PcP | **PcP** | **13 09 31.4** | **+0.5** |
| | comp=Z,2.1nm,0.5s,baz=70,slow=9.5,SNR=7.1 | | | | | | |
| **BRVK** | **Borovoye** | **49.37** | **318** | P | **P** | **13 08 09.1** | **-1.0** |
| BRVK | | | | IAmb | IAmb | 13 08 11.8 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **CHGR** | **Chuyangaron** | **49.72** | **299** | P | **P** | **13 08 12.5** | **-0.6** |
| **KBL** | **Kabul** | **50.28** | **294** | P | **P** | **13 08 18.2** | **+0.7** |
| KBL | | | | IAmb | IAmb | 13 08 18.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **50.79** | **173** | P | **P** | **13 08 22.8** | **+1.7** |
| | comp=Z,0.4nm,0.8s,baz=0.1,slow=15,SNR=5.1 | | | | | | |
| ASAR | | | | S | **S** | **13 15 24.9** | **-4.7** |
| | comp=Z,0.2nm,0.3s,baz=347,slow=10,SNR=8.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.69** | **313** | P | **P** | **13 08 56.2** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 13 08 58.1 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **55.69** | **313** | P | **P** | **13 08 56.3** | **-0.5** |
| **ANM** | **Nome** | **56.04** | **29** | P | **P** | **13 09 00.5** | **+1.5** |
| ANM | | | | IAmb | IAmb | 13 09 01.7 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **ARU** | **Arti** | **56.41** | **321** | P | **P** | **13 09 01.6** | **-0.1** |
| | comp=Z,0.7nm,0.4s,baz=335,slow=17,SNR=4.0 | | | | | | |
| **ARU** | **Arti** | **56.41** | **321** | P | **P** | **13 09 00.9** | **-0.9** |
| ARU | | | | IAmb | IAmb | 13 09 02.2 | |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.87** | **314** | P | **P** | **13 09 05.2** | **+0.1** |
| | comp=Z,1.6nm,0.7s,baz=62,slow=14,SNR=7.9 | | | | | | |
| **GEYT** | **Alibeck** | **58.41** | **300** | P | **P** | **13 09 17.0** | **+0.8** |
| | comp=Z,3.1nm,0.6s,baz=39,slow=19,SNR=3.7 | | | | | | |
| **GEYT** | **Alibeck** | **58.41** | **300** | IAmb | IAmb | 13 09 17.9 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **58.41** | **300** | P | **P** | **13 09 16.5** | **+0.3** |
| **TTA** | **Tatalina** | **60.09** | **31** | P | **P** | **13 09 28.9** | **+1.5** |
| TTA | | | | IAmb | IAmb | 13 09 29.9 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **60.99** | **27** | P | **P** | **13 09 32.8** | **-0.6** |
| **H21K** | **Melozitna Rive** | **61.39** | **28** | P | **P** | **13 09 38.6** | **+2.5** |
| H21K | | | | IAmb | IAmb | 13 09 39.2 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **CAST** | **Castle Rocks** | **61.84** | **30** | P | **P** | **13 09 40.6** | **+1.4** |
| CAST | | | | IAmb | IAmb | 13 10 00.9 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **62.27** | **29** | P | **P** | **13 09 42.8** | **+0.8** |
| BPAW | | | | IAmb | IAmb | 13 09 48.2 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **MLY** | **Manley** | **62.30** | **28** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SCO | | | | IAmb | IAmb | 13 11 32.3 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **VYHS** | **Vyhne** | **81.56** | **320** | *eP* | **P** | 13 11 40.3 | **+2.7** |
| **KRLC** | **Kraliky** | **81.86** | **323** | *eP* | **P** | 13 11 41.5 | **+2.4** |
| **DPC** | **Dobruska-Polom** | **81.96** | **323** | *eP* | **P** | 13 11 40.0 | **+0.3** |
| **JAVC** | **Velka Javorina** | **82.03** | **321** | *eP* | **P** | 13 11 41.7 | **+1.7** |
| **SMOL** | **Smolenice** | **82.35** | **321** | *eP* | **P** | 13 11 43.3 | **+1.7** |
| **VRAC** | **Vranov** | **82.38** | **322** | *eP* | **P** | 13 11 44.1 | **+2.3** |
| **MODS** | **Modra-Piesok** | **82.51** | **321** | *eP* | **P** | 13 11 46.3 | **+3.8** |
| **KRUC** | **Moravsky** | **82.62** | **322** | *eP* | **P** | 13 11 45.1 | **+2.0** |
| **PRU** | **Pruhonice** | **83.12** | **323** | *eP* | **P** | 13 11 46.9 | **+1.3** |
| **DIVS** | **Divibare** | **83.16** | **316** | P | **P** | 13 11 46.5 | **+0.5** |
| **CONA** | **Conrad Observa** | **83.54** | **321** | *eP* | **P** | 13 11 49.3 | **+1.3** |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **ICESG** | **Greenland Ices** | **83.68** | **355** | *i* P | **P** | 13 11 48.5 | **-0.1** |
| ICESG | | | | IAmb | IAmb | 13 11 50.2 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **83.90** | **322** | *eP* | **P** | 13 11 50.6 | **+0.9** |
| **KHC** | **Kasperske Hory** | **84.12** | **323** | *eP* | **P** | 13 11 52.3 | **+1.5** |
| **GERES** | **GERESS Array B** | **84.22** | **323** | P | **P** | 13 11 51.8 | **+0.5** |
| | comp=Z,3.6nm,0.7s,baz=57,slow=4.9,SNR=23 | | | | | | |
| **GERES** | **GERESS Array B** | **84.22** | **323** | P | **P** | 13 11 52.2 | **+0.9** |
| **SOKA** | **Soboth** | **84.71** | **320** | *eP* | **P** | 13 11 55.7 | **+1.8** |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **GRF** | **Grafenberg Arr** | **85.04** | **324** | *eP* | **P** | 13 11 56.0 | **+0.6** |
| | comp=Z,12nm,0.8s,baz=59,slow=4.5 | | | | | | |
| **KBA** | **Koelnbreiner** | **85.43** | **321** | *i* P | **P** | 13 11 58.1 | **+0.5** |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **ITM** | **Ithomi** | **85.44** | **310** | P | **P** | 13 11 57.2 | **-0.4** |
| **ABTA** | **Abfaltersbach** | **86.09** | **321** | *eP* | **P** | 13 12 00.6 | **-0.2** |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **86.27** | **322** | *eP* | **P** | 13 12 02.4 | **+0.6** |
| | comp=Z,10nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **86.51** | **322** | *i* P | **P** | 13 12 03.5 | **+0.6** |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **RETA** | **Reutte** | **86.61** | **323** | *eP* | **P** | 13 12 04.6 | **+1.3** |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **FETA** | **Feichten** | **86.91** | **322** | *eP* | **P** | 13 12 04.6 | **-0.2** |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **DAVA** | **Damuels** | **87.20** | **323** | *i* P | **P** | 13 12 06.1 | **-0.1** |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **TUE** | **Stuetta** | **88.00** | **322** | P | **P** | 13 12 10.7 | **+0.6** |

*IDC* ***12*** *12:59:33.7±0.6, 17°.34N×62°.91W, h124km±6km, mb3.9/16, mb1 4.1/18, mb1mx3.7/59, mbtmp4.3/18, Error ellipse: s-maj=13.2km s-min=6.0km az=31.0*

*TRN* ***12*** *12:59:33.2, 17°.50N×62°.82W, h134km, MD4.3*

*NEIC* ***12*** *12:59:34.7±1.9, 17°.33N±0°.06×62°.92W±0°.03, h125km±5km, mb4.3/104, Error ellipse: s-maj=8.9km s-min=4.6km az=190.0*

**ISC 12 12:59:34.4±0.6, 17°.38N±0°.04×62°.92W±0°.04, h130km±5km, n222, σ1§02/237, mb4.3/62, 2C-4D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SEUS** | **St. Eustatius** | **0.13** | **330** | | | **Pn** | **12 59 52.8** | **+0.7** |
| SEUS | | | | | Sn | **Sn** | **13 00 06.2** | **+0.7** |
| **SEUS** | **St. Eustatius** | **0.13** | **330** | ||*iP* | | **Pn** | **12 59 52.6** | **+0.5** |
| SEUS | | | | | *eS* | **Sn** | **13 00 06.0** | **+0.5** |
| **SKI** | **Saint Kitts** | **0.17** | **106** | *eP* | | **Pn** | **12 59 53.1** | **+0.9** |
| SKI | | | | | *eS* | **Sn** | **13 00 06.8** | **+1.2** |
| **SKOC** | **St. Kitts, UWI** | **0.20** | **117** | *eP* | | **Pn** | **12 59 53.3** | **+1.2** |
| **SMRT** | **St. Maarten** | **0.68** | **347** | | | **Pn** | **12 59 54.9** | **+0.3** |
| SMRT | | | | | Sn | **Sn** | **13 00 09.1** | **-0.8** |
| **SMRT** | **St. Maarten** | **0.68** | **347** | *eP* | | **Pn** | **12 59 54.9** | **+0.3** |
| SMRT | | | | | *eS* | **Sn** | **13 00 09.2** | **-0.8** |
| **ANWB** | **Willy Bob** | **1.11** | **75** | Pn | | **Pn** | **12 59 58.4** | **0.0** |
| ANWB | | | | | Sn | **Sn** | **13 00 16.0** | **-0.5** |
| **ANWB** | **Willy Bob** | **1.11** | **75** | ||*iP* | | **Pn** | **12 59 58.4** | **0.0** |
| ANWB | | | | | *eS* | **Sn** | **13 00 15.7** | **-0.8** |
| **ANBD** | **Bethesda, Anti** | **1.15** | **107** | ||*iP* | | **Pn** | **12 59 58.6** | **0.0** |
| ANBD | | | | | *eS* | **Sn** | **13 00 16.7** | **-0.5** |
| **GDHS** | **Morne Mazeau,** | **1.56** | **135** | Pn | | **Pn** | **13 00 03.7** | **+0.5** |
| **ABD** | **La Joyeuse, An** | **1.64** | **123** | Pn | | **Pn** | **13 00 03.0** | **-1.0** |
| **ABD** | **La Joyeuse, An** | **1.64** | **123** | *eP* | | **Pn** | **13 00 04.3** | **+0.3** |
| ABD | | | | | *eS* | **Sn** | **13 00 26.6** | **0.0** |
| **CDVI** | **St. Croix** | **1.80** | **282** | Pn | | **Pn** | **13 00 06.6** | **+0.7** |
| **CBE** | **Ff, Capester** | **1.81** | **136** | Pn | | **Pn** | **13 00 07.1** | **+1.0** |
| **CBE** | **Ff, Capester** | **1.81** | **136** | *eP* | | **Pn** | **13 00 07.1** | **+1.0** |
| **TBG** | **Guadaloupe-3** | **1.95** | **141** | *eP* | | **Pn** | **13 00 08.2** | **+0.5** |
| TBG | | | | | *eS* | **Sn** | **13 00 34.1** | **+0.9** |
| **TDBA** | **Terre de Bas,** | **1.96** | **141** | Pn | | **Pn** | **13 00 08.7** | **+0.8** |
| **TDBA** | **Terre de Bas,** | **1.96** | **141** | *eP* | | **Pn** | **13 00 08.5** | **+0.6** |
| TDBA | | | | | *eS* | **Sn** | **13 00 35.7** | **+2.3** |
| **GDSD** | **La Dsirade Is** | **2.07** | **121** | Pn | | **Pn** | **13 00 09.0** | **-0.2** |
| **H05N1** | **Guadeloupe/Mar** | **2.07** | **121** | P | | **Pn** | **13 00 09.1** | **-0.1** |
| H05N1 | | | | | S | **Sn** | **13 00 34.1** | **-1.8** |
| | SNR=3533 | | | | | | | |
| **MAGL** | **Barre de l'ile** | **2.12** | **132** | Pn | | **Pn** | **13 00 10.1** | **+0.3** |
| **MAGL** | **Barre de l'ile** | **2.12** | **132** | *eP* | | **Pn** | **13 00 10.5** | **+0.7** |
| **STVI** | **Saint Thomas** | **2.17** | **297** | | | **Pn** | **13 00 10.5** | **+0.2** |
| **MDCT** | **Cottage Hill,** | **2.24** | **141** | *eP* | | **Pn** | **13 00 11.9** | **+0.6** |
| MDCT | | | | | *eS* | **Sn** | **13 00 40.5** | **+0.9** |
| **DSLB** | **Salisbury** | **2.41** | **143** | *eP* | | **Pn** | **13 00 13.9** | **+0.5** |
| DSLB | | | | | *eS* | **Sn** | **13 00 44.0** | **+0.6** |
| **MDN** | **Morne-Daniel** | **2.52** | **144** | *eP* | | **Pn** | **13 00 15.8** | **+0.9** |
| MDN | | | | | *eS* | **Sn** | **13 00 47.4** | **+1.5** |
| **DLPL** | **La Plaine** | **2.59** | **142** | *eP* | | **Pn** | **13 00 15.6** | **-0.2** |
| DLPL | | | | | *eS* | **Sn** | **13 00 47.9** | **+0.3** |
| **MTP** | **Monte Pirata** | **2.61** | **286** | Pn | | **Pn** | **13 00 19.2** | **+3.2** |
| **HUMP** | **Col San Antoni** | **2.90** | **286** | Pn | | **Pn** | **13 00 21.5** | **+1.9** |
| **PDPR** | **Patillas Dam,** | **3.03** | **283** | Pn | | **Pn** | **13 00 21.5** | **+0.2** |
| **PCM** | **Pelee Case Pet** | **3.03** | **147** | *eP* | | **Pn** | **13 00 22.0** | **+0.6** |
| **SVN** | **Savane Anatole** | **3.03** | **146** | | | **Pn** | **13 00 21.8** | **+0.3** |
| **SVN** | **Savane Anatole** | **3.03** | **146** | *eP* | | **Pn** | **13 00 22.1** | **+0.6** |
| **BAMF** | **Morne Balai** | **3.07** | **146** | *eP* | | **Pn** | **13 00 22.7** | **+0.8** |
| **GBMF** | **Grand Be** | **3.07** | **147** | *eP* | | **Pn** | **13 00 22.7** | **+0.7** |
| **PML** | **Morne Lenard** | **3.08** | **147** | *eP* | | **Pn** | **13 00 22.6** | **+0.5** |
| **FDF** | **Fort de France** | **3.13** | **147** | Pn | | **Pn** | **13 00 23.5** | **+0.7** |
| **FDF** | **Fort de France** | **3.13** | **147** | *eP* | | **Pn** | **13 00 23.4** | **+0.6** |
| FDF | | | | | *eS* | **Sn** | **13 01 01.1** | **+0.9** |
| **GCPR** | **Guaynabo City** | **3.15** | **287** | Pn | | **Pn** | **13 00 24.0** | **+1.0** |
| **SJG** | **San Juan** | **3.17** | **284** | P | | **Pn** | **13 00 23.8** | **+0.7** |
| | 76nm,0.3s,baz=96,slow=12,SNR=68 | | | | | | | |
| SJG | | | | | S | **Sn** | **13 01 00.7** | **-0.1** |
| | 34nm,0.3s,baz=185,slow=15,SNR=16 | | | | | | | |
| **SJG** | **San Juan** | **3.17** | **284** | | | **Pn** | **13 00 23.5** | **+0.4** |
| **ILAM** | **Ilet Lapin Mar** | **3.25** | **143** | *eP* | | **Pn** | **13 00 26.0** | **+1.7** |
| **ZAM** | **Aeronautique** | **3.33** | **147** | *eP* | | **Pn** | **13 00 25.9** | **+0.6** |
| **TRMF** | **Trois Ilets** | **3.35** | **147** | ||*eP* | | **Pn** | **13 00 26.0** | **+0.5** |
| **BIM** | **Bigot** | **3.36** | **148** | | | **Pn** | **13 00 26.1** | **+0.4** |
| **BIM** | **Bigot** | **3.36** | **148** | ||*eP* | | **Pn** | **13 00 26.4** | **+0.7** |
| **LPMF** | **Morne Lapointe** | **3.36** | **146** | ||*eP* | | **Pn** | **13 00 26.1** | **+0.3** |
| **MVM** | **Montagne Vaucl** | **3.42** | **145** | *eP* | | **Pn** | **13 00 27.4** | **+0.9** |
| **ICMP** | **Isla Caja de M** | **3.48** | **279** | | | **Pn** | **13 00 27.0** | **-0.2** |
| **MPOM** | **Morne Pois Mar** | **3.53** | **146** | Pn | | **Pn** | **13 00 28.5** | **+0.6** |
| **MPOM** | **Morne Pois Mar** | **3.53** | **146** | *eP* | | **Pn** | **13 00 28.7** | **+0.8** |
| **H05S1** | **Guadeloupe/Mar** | **3.56** | **145** | P | | **Pn** | **13 00 25.9** | **-2.4** |
| H05S1 | | | | | S | **Sn** | **13 01 09.7** | **-0.3** |
| | SNR=182 | | | | | | | |
| **CELP** | **Cerrillos** | **3.56** | **282** | Pn | | **Pn** | **13 00 28.5** | **+0.3** |
| **OBIP** | **Obispado Ponce** | **3.58** | **281** | | | **Pn** | **13 00 27.9** | **-0.6** |
| **SLBI** | **Saint Lucia, B** | **3.83** | **150** | *eP* | | **Pn** | **13 00 32.3** | **+0.5** |
| SLBI | | | | | *eS* | **Sn** | **13 01 17.0** | **+0.6** |
| **MLPR** | **Magueyes Islan** | **3.98** | **279** | Pn | | **Pn** | **13 00 32.5** | **-1.3** |
| **CRPR** | **Cabo Rojo, PR** | **4.05** | **279** | Pn | | **Pn** | **13 00 34.1** | **-0.6** |
| **PRSN** | **Puerto Rico Se** | **4.11** | **282** | Pn | | **Pn** | **13 00 36.0** | **+0.4** |
| **MCLT** | **Moule a Chique** | **4.12** | **152** | Pn | | **Pn** | **13 00 36.6** | **+0.9** |
| **MCLT** | **Moule a Chique** | **4.12** | **152** | *eP* | | **Pn** | **13 00 36.1** | **+0.3** |
| **MCLT** | **Moule a Chique** | **4.12** | **152** | *eS* | | **Sn** | **13 01 23.3** | **0.0** |
| **SVV** | **Soufriere Volc** | **4.36** | **158** | *eP* | | **Pn** | **13 00 40.1** | **+1.1** |
| **SVB** | **Belmont** | **4.39** | **158** | | | **Pn** | **13 00 39.7** | **+0.3** |
| **SVB** | **Belmont** | **4.39** | **158** | *eP* | | **Pn** | **13 00 40.4** | **+1.0** |
| **GCMP** | **Grenada, Carri** | **5.08** | **163** | *eP* | | **Pn** | **13 00 49.2** | **+0.7** |
| **BBGH** | **Gun Hill** | **5.32** | **142** | *eP* | | **Pn** | **13 00 53.2** | **+1.5** |
| **BBGH** | **Gun Hill** | **5.32** | **142** | *eS* | | **Sn** | **13 01 50.5** | **-1.5** |
| **BBSP** | **Saint Philip** | **5.41** | **141** | *eP* | | **Pn** | **13 00 53.5** | **+0.5** |
| **DR12** | **Loma Pena Alta** | **6.31** | **284** | Pn | | **Pn** | **13 01 05.0** | **0.0** |
| **TOSP** | **Speyside** | **6.47** | **159** | Pn | | **Pn** | **13 01 08.6** | **+1.3** |
| **BANI** | **BANI** | **7.16** | **279** | Pn | | **Pn** | **13 01 16.4** | **-0.2** |
| **BIRV** | **Birongo** | **7.60** | **206** | Pn | | **Pn** | **13 01 20.6** | **-1.9** |
| **SDDR** | **Presa de Saban** | **8.12** | **283** | | | **Pn** | **13 01 29.0** | **-0.5** |
| **BAUV** | **El Baul** | **9.76** | **211** | Pn | | **Pn** | **13 01 50.4** | **-1.2** |
| **OCAC** | **Ocana** | **13.61** | **229** | | | **Pn** | **13 02 41.1** | **-1.3** |
| **OCAC** | **Ocana** | **13.61** | **229** | *eP* | | **Pn** | **13 02 44.2** | **+1.8** |
| **PAMC** | **Pamplona, Colo** | **13.81** | **225** | *eP* | | **P** | **13 02 48.5** | **-0.9** |
| **SJCC** | **San Jacinto, C** | **14.04** | **240** | | | **Pn** | **13 02 46.0** | **-1.8** |
| **SJCC** | **San Jacinto, C** | **14.04** | **240** | *eP* | | **P** | **13 02 51.5** | **-0.1** |
| **BARC** | **Barichara** | **14.68** | **224** | *eP* | | **Pn** | **13 02 56.7** | **+0.6** |
| **RUSC** | **La Rusia** | **15.14** | **222** | *eP* | | **Pn** | **13 03 02.7** | **+0.6** |
| **ZARC** | **Zaragoza, Cauc** | **15.24** | **231** | *eP* | | **P** | **13 03 03.8** | **-1.0** |
| **UREC** | **San Jos de Ur** | **15.59** | **234** | *eP* | | **Pn** | **13 03 06.9** | **-0.3** |
| **PTBC** | **PUERTO BERRIO,** | **15.60** | **228** | *eP* | | **Pn** | **13 03 06.6** | **-0.6** |
| **MDP** | **Montagnes des** | **15.82** | **139** | P | | **Pn** | **13 03 08.3** | **-1.7** |
| | 1.7nm,0.3s,baz=328,slow=14,SNR=8.4 | | | | | | | |
| MDP | | | | | S | Sn | 13 05 51.8 | -14 |
| | 1.4nm,0.3s,baz=235,slow=24,SNR=11 | | | | | | | |
| **SPBC** | **San Pablo de B** | **15.97** | **224** | *eP* | | **Pn** | **13 03 11.2** | **-0.7** |
| SPBC | | | | | *eP* | **P** | **13 03 12.7** | **-0.2** |
| **NORC** | **Norcasia** | **16.57** | **226** | *eP* | | **Pn** | **13 03 18.3** | **-1.0** |
| **HELC** | **Santa Helena** | **16.60** | **229** | *eP* | | **Pn** | **13 03 19.3** | **-0.7** |
| **ROSC** | **El Rosal** | **16.74** | **223** | P | | **Pn** | **13 03 21.5** | **-0.1** |
| ROSC | | | | | IAmb | IAmb | 13 03 28.3 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **17.16** | **227** | *eP* | | **P** | **13 03 24.7** | **-1.8** |
| **CBOC** | **Ciudad Bolivar** | **17.18** | **230** | *eP* | | **P** | **13 03 22.8** | **-3.5** |
| **PLMC** | **San Jos del P** | **18.03** | **228** | *eP* | | **P** | **13 03 35.4** | **-0.2** |
| **BCIP** | **Isla Barro Col** | **18.37** | **246** | P | | **P** | **13 03 38.9** | **-0.4** |
| **SOR** | **Soroa** | **19.62** | **289** | P | | **P** | **13 03 52.6** | **-0.1** |
| SOR | | | | | IAmb | IAmb | 13 03 58.0 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **PCON** | **Cinco Dias** | **19.98** | **223** | *eP* | | **P** | **13 03 57.3** | **0.0** |
| **TZTN** | **Tazewell** | **26.40** | **320** | P | | **P** | **13 05 00.7** | **+1.9** |
| TZTN | | | | | IAmb | IAmb | 13 05 23.7 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **ATAH** | **Atahualpa** | **28.77** | **213** | P | | **P** | **13 05 21.9** | **+1.4** |
| | comp=Z,13nm,0.9s,baz=64,slow=7.3,SNR=7.7 | | | | | | | |
| **CCM** | **Cathedral Cave** | **32.24** | **315** | P | | **P** | **13 05 51.1** | **+0.7** |
| **MGMO** | **Mountain Grove** | **32.48** | **313** | P | | **P** | **13 05 53.1** | **+0.5** |
| MGMO | | | | | IAmb | IAmb | 13 05 53.6 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **SIV** | **San Ignacio** | **33.21** | **177** | P | | **P** | **13 05 58.0** | **-1.1** |
| | comp=Z,1.6nm,0.5s,baz=357,slow=9.7,SNR=6.5 | | | | | | | |
| **X37A** | **Clayton** | **33.64** | **307** | P | | **P** | **13 06 03.6** | **+1.0** |
| X37A | | | | | IAmb | IAmb | 13 06 29.2 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **33.85** | **189** | P | | **P** | **13 06 04.8** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=17,slow=7.4,SNR=6.9 | | | | | | | |
| **LPAZ** | **La Paz** | **33.85** | **189** | P | | **P** | **13 06 04.5** | **-0.7** |
| **JCT** | **Junction City** | **35.98** | **298** | P | | **P** | **13 06 22.9** | **0.0** |
| **PB16** | **IPOC Station P** | **36.08** | **191** | P | | **P** | **13 06 22.4** | **-1.9** |
| PB16 | | | | | IAmb | IAmb | 13 06 24.8 | |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **36.32** | **305** | P | | **P** | **13 06 25.4** | **-0.3** |
| WMOK | | | | | IAmb | IAmb | 13 06 25.9 | |
| | comp=Z,7.7nm,1.2s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **36.37** | **302** | P | | **P** | **13 06 26.2** | **0.0** |
| **PB12** | **IPOC Station P** | **36.51** | **192** | P | | **P** | **13 06 25.2** | **-2.2** |
| PB12 | | | | | IAmb | IAmb | 13 06 50.4 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **GO01** | **Chusmiza** | **37.33** | **190** | P | | **P** | **13 06 32.2** | **-2.6** |
| **PB11** | **IPOC Station P** | **37.50** | **190** | P | | **P** | **13 06 33.3** | **-2.5** |
| **PB08** | **IPOC Station P** | **37.79** | **190** | P | | **P** | **13 06 36.4** | **-2.2** |
| **PATCX** | **Punta Patache** | **38.62** | **191** | P | | **P** | **13 06 43.5** | **-1.8** |
| **ECSD** | **EROS Data Cent** | **38.70** | **320** | P | | **P** | **13 06 45.7** | **+0.1** |
| ECSD | | | | | IAmb | IAmb | 13 06 46.6 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **PB01** | **IPOC Station P** | **38.73** | **190** | P | | **P** | **13 06 44.5** | **-1.6** |
| **TXAR** | **Lajitas Array** | **39.07** | **295** | P | | **P** | **13 06 48.6** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=134,slow=7.3,SNR=22 | | | | | | | |
| TXAR | | | | | PcP | **PcP** | **13 08 57.4** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=113,slow=5.8,SNR=3.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **39.07** | **295** | P | | **P** | **13 06 48.5** | **-0.5** |
| **TX31** | **Lajitas Ar. Si** | **39.07** | **295** | P | | **P** | **13 06 48.6** | **-0.4** |
| TX31 | | | | | IAmb | IAmb | 13 07 05.1 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **TX32** | **Lajitas Array** | **39.07** | **295** | P | | **P** | **13 06 48.7** | **-0.3** |
| **MSTX** | **Muleshoe** | **39.26** | **303** | P | | **P** | **13 06 50.7** | **+0.2** |
| **PB07** | **IPOC Station P** | **39.46** | **190** | P | | **P** | **13 06 50.6** | **-1.7** |
| **LVC** | **Limon Verde** | **40.18** | **189** | P | | **P** | **13 06 56.3** | **-2.1** |
| | comp=Z,7.6nm,0.4s,baz=23,slow=6.2,SNR=15 | | | | | | | |
| **LVC** | **Limon Verde** | **40.18** | **189** | P | | **P** | **13 06 56.0** | **-2.5** |
| **MNTX** | **Cornudas Mount** | **40.91** | **299** | P | | **P** | **13 07 04.0** | **-0.1** |
| **T25A** | **Trinidad** | **41.41** | **307** | P | | **P** | **13 07 08.6** | **+0.3** |
| T25A | | | | | IAmb | IAmb | 13 07 08.9 | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **42.10** | **329** | P | | **P** | **13 07 12.7** | **-0.7** |
| | comp=Z,5.0nm,0.5s,baz=131,slow=10,SNR=3.8 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **42.41** | **307** | P | | **P** | **13 07 16.8** | **+0.3** |
| SDCO | | | | | IAmb | IAmb | 13 07 17.1 | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **BNM** | **Barren Site** | **42.41** | **302** | P | | **P** | **13 07 17.0** | **+0.5** |
| **ANMO** | **Albuquerque** | **42.44** | **303** | P | | **P** | **13 07 17.6** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=98,slow=7.2,SNR=8.8 | | | | | | | |
| **ANMO** | **Albuquerque** | **42.44** | **303** | P | | **P** | **13 07 17.4** | **+0.7** |
| **LENM** | **Lemitar** | **42.70** | **302** | P | | **P** | **13 07 21.1** | **+2.3** |
| **ISCO** | **Idaho Springs** | **43.12** | **310** | P | | **P** | **13 07 23.0** | **+0.8** |
| **S22A** | **4UR Ranch, Cre** | **43.42** | **307** | P | | **P** | **13 07 25.0** | **+0.4** |
| **PHWY** | **Pilot Hill** | **43.51** | **312** | P | | **P** | **13 07 24.5** | **-0.8** |
| **CPUP** | **Villa Florida** | **43.79** | **173** | P | | **P** | **13 07 25.1** | **-2.2** |
| | comp=Z,1.3nm,0.4s,baz=357,slow=8.0,SNR=3.4 | | | | | | | |
| **CPUP** | **Villa Florida** | **43.79** | **173** | IAmb | IAmb | 13 07 41.7 | | |
| | comp=Z,6.2nm,1.5s | | | | | | | |
| **319A** | **Douglas** | **44.16** | **297** | P | | **P** | **13 07 31.2** | **+0.8** |
| 319A | | | | | IAmb | IAmb | 13 07 32.3 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **AC02** | **Maricunga** | **44.37** | **188** | P | | **P** | **13 07 32.0** | **-0.4** |
| AC02 | | | | | IAmb | IAmb | 13 07 32.8 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| **PV13** | **Radium Mtn., P** | **45.05** | **307** | P | | **P** | **13 07 38.5** | **+0.9** |
| PV13 | | | | | IAmb | IAmb | 13 07 38.6 | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **45.12** | **307** | P | | **P** | **13 07 38.4** | **+0.3** |
| PV11 | | | | | IAmb | IAmb | 13 07 39.4 | |
| | comp=Z,5.6nm,0.6s | | | | | | | |
| **X18A** | **Snowflake** | **45.18** | **302** | P | | **P** | **13 07 39.4** | **+0.8** |
| X18A | | | | | IAmb | IAmb | 13 07 40.3 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **TUC** | **Tucson** | **45.54** | **298** | P | | **P** | **13 07 41.8** | **+0.5** |
| **X16A** | **Lo Mia Camp, P** | **46.38** | **301** | P | | **P** | **13 07 49.4** | **+1.3** |
| **P18A** | **Preston Nutter** | **46.49** | **308** | P | | **P** | **13 07 49.3** | **+0.4** |
| P18A | | | | | IAmb | IAmb | 13 07 49.8 | |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| **WUAZ** | **Wupatki** | **46.50** | **303** | P | | **P** | **13 07 50.0** | **+1.1** |
| WUAZ | | | | | IAmb | IAmb | 13 07 50.7 | |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| **SRU** | **San Rafael Swe** | **46.57** | **308** | P | | **P** | **13 07 49.8** | **+0.4** |
| SRU | | | | | IAmb | IAmb | 13 07 50.4 | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **BW06** | **Boulder Array** | **46.87** | **313** | P | | **P** | **13 07 52.1** | **+0.3** |
| BW06 | | | | | IAmb | IAmb | 13 07 52.8 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **PD31** | **Pinedale Array** | **46.87** | **313** | P | | **P** | **13 07 52.3** | **+0.5** |
| PD31 | | | | | IAmb | IAmb | 13 07 52.8 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **46.87** | **313** | P | | **P** | **13 07 52.0** | **+0.2** |
| | comp=Z,3.2nm,0.5s,baz=118,slow=9.6,SNR=46 | | | | | | | |
| PDAR | | | | | PcP | **PcP** | **13 09 22.4** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=115,slow=5.8,SNR=6.7 | | | | | | | |
| **TMUT** | **Trail Mountain** | **47.13** | **308** | P | | **P** | **13 07 54.9** | **+0.9** |
| **214A** | **Organ Pipe Nat** | **47.21** | **298** | P | | **P** | **13 07 55.4** | **+1.0** |
| **U15A** | **North Rim** | **47.39** | **304** | P | | **P** | **13 07 57.4** | **+1.4** |
| U15A | | | | | IAmb | IAmb | 13 07 57.9 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **RLMT** | **Red Lodge** | **47.44** | **316** | P | | **P** | **13 07 56.8** | **+0.6** |
| RLMT | | | | | IAmb | IAmb | 13 07 57.4 | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **Y14A** | **Wickenburg** | **47.60** | **300** | P | | **P** | **13 07 58.4** | **+1.1** |
| Y14A | | | | | IAmb | IAmb | 13 07 59.0 | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **JLU** | **Jordanelle** | **47.63** | **309** | P | | **P** | **13 07 58.4** | **+0.7** |
| JLU | | | | | IAmb | IAmb | 13 07 59.5 | |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **LOHW** | **Long Hollow** | **47.86** | **314** | P | | **P** | **13 07 59.7** | **+0.3** |
| **CTU** | **Camp Tracy** | **47.87** | **309** | P | | **P** | **13 07 59.9** | **+0.4** |
| CTU | | | | | IAmb | IAmb | 13 08 00.8 | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **AHID** | **Auburn Hatcher** | **47.95** | **312** | P | | **P** | **13 08 00.4** | **+0.3** |
| AHID | | | | | IAmb | IAmb | 13 08 01.3 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **TPAW** | **Teton Pass** | **48.06** | **313** | P | | **P** | **13 08 00.3** | **-0.7** |
| TPAW | | | | | IAmb | IAmb | 13 08 01.3 | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **LCMT** | **Little Creek M** | **48.25** | **304** | P | | **P** | **13 08 03.4** | **+1.0** |
| **YMR** | **Madison River** | **48.43** | **315** | P | | **P** | **13 08 05.2** | **+1.4** |
| YMR | | | | | IAmb | IAmb | 13 08 06.8 | |
| | comp=Z,8.3nm,1.2s | | | | | | | |
| **CO03** | **El Pedregal** | **48.52** | **189** | P | | **P** | **13 08 03.1** | **-1.2** |
| **DUG** | **Dugway, Tooele** | **48.54** | **309** | P | | **P** | **13 08 05.3** | **+0.7** |
| **QLMT** | **Earthquake Lak** | **48.80** | **315** | P | | **P** | **13 08 04.4** | **+1.8** |
| **BGU** | **Big Grassy Mou** | **48.87** | **309** | P | | **P** | **13 08 07.7** | **+0.6** |
| **HVU** | **Hansel Valley** | **48.89** | **311** | P | | **P** | **13 08 07.7** | **+0.5** |
| HVU | | | | | IAmb | IAmb | 13 08 08.2 | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **HRY** | **Holter Researc** | **49.66** | **317** | P | | **P** | **13 08 13.9** | **+0.9** |
| **CBX** | **Cerro Bola** | **50.50** | **298** | P | | **P** | **13 08 20.2** | **+0.7** |
| CBX | | | | IAmb | IAmb | 13 08 20.9 | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **HLID** | **Hailey** | **50.50** | **313** | P | | **P** | **13 08 20.6** | **+1.1** |
| **TPNV** | **Topopah Spring** | **50.62** | **304** | P | | **P** | **13 08 21.1** | **+0.7** |
| **GWY** | **Greenwater Val** | **50.85** | **303** | P | | **P** | **13 08 23.0** | **+0.8** |
| GWY | | | | IAmb | IAmb | 13 08 23.3 | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **JTMT** | **Jette** | **51.58** | **318** | P | | **P** | **13 08 28.0** | **+0.6** |
| **BO04** | **La Punta** | **51.61** | **188** | P | | **P** | **13 08 26.4** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **52.42** | **305** | P | | **P** | **13 08 34.2** | **+0.3** |
| | comp=Z,1.5nm,0.6s,baz=90,slow=7.9,SNR=16 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **52.42** | **305** | P | | **P** | **13 08 32.0** | **-1.9** |
| **LHV** | **Little Huntoon** | **52.56** | **305** | P | | **P** | **13 08 35.0** | **+0.4** |
| **RYN** | **Ryan** | **52.62** | **306** | P | | **P** | **13 08 35.3** | **+0.1** |
| RYN | | | | IAmb | IAmb | 13 08 36.2 | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **NEW** | **Newport** | **53.55** | **318** | P | | **P** | **13 08 42.0** | **+0.2** |
| | comp=Z,3.1nm,0.7s,baz=114,slow=8.5,SNR=8.6 | | | | | | | |
| **NEW** | **Newport** | **53.55** | **318** | IAmb | IAmb | 13 08 42.5 | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **54.00** | **114** | T | T | 14 06 10.3 | | |
| | baz=298,slow=76,SNR=9.0 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **54.01** | **114** | T | T | 14 06 11.4 | | |
| | baz=298,slow=76,SNR=4.7 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **54.03** | **114** | T | T | 14 06 12.0 | | |
| | baz=298,slow=76,SNR=11 | | | | | | | |
| **BEKR** | **Beckwor

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PAVA** | **Las Pavas** | **1.15** | **63** | *e*P | | Pn | 13 07 52.8 | +0.5 |
| PAVA | | | | IAML | | | 13 08 11.1 | |
| | comp=Z,209nm,0.2s | | | | | | | |
| **COEG** | **Centro de Oper** | **1.16** | **69** | *e*P | | Pn | 13 07 51.8 | -0.6 |
| **TECO** | **Alcaldia de Te** | **1.22** | **74** | *e*P | | Pn | 13 07 53.1 | -0.1 |
| **SCLA** | **Alcaldia de Sa** | **1.32** | **68** | *e*P | | Pb | 13 07 55.8 | -0.9 |
| **PCG** | **Pacaya** | **1.33** | **333** | *e*P | | Pb | 13 07 55.9 | -1.0 |
| PCG | | | | *e*S | | Sb | 13 08 19.8 | +6.0 |
| **NBG** | **Las Nubes** | **1.42** | **346** | *e*P | | Pb | 13 07 58.5 | 0.0 |
| NBG | | | | *e*S | | Sb | 13 08 16.5 | +0.1 |
| **COEB** | **Comit de Eme** | **1.45** | **78** | *e*P | | Pn | 13 07 56.4 | 0.0 |
| **PQSS** | **Presa 15 de Se** | **1.45** | **73** | *e*P | | Pn | 13 07 56.6 | +0.3 |
| PQSS | | | | *e*S | | Sn | 13 08 15.0 | +0.7 |
| PQSS | | | | IAML | | | 13 08 16.0 | |
| | comp=Z,133nm,0.2s | | | | | | | |
| **FUG** | **Fuego 3** | **1.49** | **326** | *e*P | | Pn | 13 07 57.8 | +0.8 |
| FUG | | | | *e*S | | Sb | 13 08 17.7 | -0.6 |
| **STG3** | **Santiaguito 3,** | **2.15** | **315** | *e*P | | Pn | 13 07 59.5 | -6.6 |
| STG3 | | | | *e*S | | Sn | 13 08 18.4 | -13 |

**IDC 12 13:19:23.4±7.0, 1°.68S×134°.33E, h0km, mb3.8/2, mb1 3.8/4, mb1mx3.4/31, mbtmp3.6/4, ML3.2/2, Error ellipse: s-maj=146.7km s-min=32.8km az=44.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **3.17** | **285** | Pn | Pn | 13 20 14.5 | 0.0 |
| | 4.7nm,0.3s,baz=108,slow=16,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.15** | **180** | P | Pn | 13 23 36.2 | -0.9 |
| | 0.1nm,0.3s,baz=353,slow=13,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **21.86** | **181** | P | P | 13 24 19.1 | +1.2 |
| | 1.9nm,1.0s,baz=3.7,slow=12,SNR=8.0 | | | | | | |
| **STKA** | **Stephens Creek** | **30.81** | **168** | P | P | 13 25 40.4 | -0.6 |
| | 3.3nm,0.9s,baz=346,slow=7.5,SNR=4.7 | | | | | | |

*CNRM 12 13:55:47.9, 35°.48N×3°.83W, h13km, ml3.5*
*INMG 12 13:55:47.8±1.6, 35°.45N×3°.92W, h0km, ML3.0, Error ellipse: s-maj=5.4km s-min=3.1km az=3.0*
*SFS 12 13:55:47.0, 35°.45N×3°.89W, ML3.2, ALBORAN SUR*
*IDC 12 13:55:48.3±1.1, 35°.50N×4°.28W, h0km, mb3.5/5, mb1 3.7/7, mb1mx3.3/54, mbtmp3.5/7, ML3.4/2, Error ellipse: s-maj=38.8km s-min=19.1km az=91.0*
*IGIL 12 13:55:49.4, 35°.46N×3°.89W, h0km*
**ISC 12 13:55:48.4±1.1, 35°.49N±0°.03×3°.85W±0°.02, h8km±8km, n63, σ1s71/92, mb3.8/5, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.28** | **195** | P | **Pg** | **13 55 54.0** | **+0.1** |
| PALE | | | | S | **Sg** | **13 55 56.0** | **-1.6** |
| **PALE** | **Palemas** | **0.28** | **195** | P | **Pg** | 13 55 53.7 | -0.3 |
| PALE | | | | S | **Sg** | **13 55 57.8** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.75** | **110** | P | **Pg** | **13 56 02.0** | **-0.8** |
| GOG | | | | S | **Pg** | **13 56 02.0** | **-0.8** |
| **GOG** | **Mont Gurugu** | **0.75** | **110** | P | **Pg** | **13 56 02.0** | **-0.8** |
| GOG | | | | S | **Sb** | **13 56 12.1** | **-1.9** |
| **CHAS** | **Isla Isabel II** | **1.20** | **104** | P | **Pn** | **13 56 08.9** | **-2.5** |
| CHAS | | | | S | **Sb** | **13 56 25.1** | **-1.8** |
| **CHEFC** | **Chefchaouen** | **1.27** | **253** | P | **Pg** | **13 56 14.0** | **+1.1** |
| **CHEFC** | **Chefchaouen** | **1.27** | **253** | P | **Pb** | **13 56 12.1** | **-0.5** |
| CHEFC | | | | S | **Sg** | **13 56 31.0** | **+1.6** |
| **CEU** | **Ceuta** | **1.31** | **289** | P | **Pn** | **13 56 09.8** | **-3.1** |
| CEU | | | | S | **Sb** | **13 56 24.7** | **-5.3** |
| **TAF** | **Taforalt** | **1.35** | **119** | P | **Pg** | **13 56 14.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.35** | **119** | P | **Pn** | **13 56 11.7** | **-1.9** |
| TAF | | | | S | **Sg** | **13 56 31.3** | **-0.6** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **340** | P | **Pn** | **13 56 12.7** | **-0.9** |
| EMAL | | | | S | **Sb** | **13 56 30.9** | **-0.6** |
| **JBK** | **JBK** | **1.56** | **137** | P | **Pn** | **13 56 15.0** | **-1.6** |
| **JBK** | **JBK** | **1.56** | **137** | P | **Pn** | **13 56 15.0** | **-1.6** |
| JBK | | | | S | **Sg** | **13 56 45.6** | **+7.0** |
| **SICH** | **Sidi Chahed** | **1.83** | **222** | S | Pg | 13 56 29.0 | +5.5 |
| **SICH** | **Sidi Chahed** | **1.83** | **222** | P | **Pn** | **13 56 20.1** | **0.0** |
| **LCRM** | **LCR** | **1.98** | **205** | P | **Pb** | **13 56 24.1** | **-0.6** |
| **LCRM** | **LCR** | **1.98** | **205** | P | **Pb** | **13 56 22.7** | **-2.0** |
| LCRM | | | | S | **Sb** | **13 56 49.1** | **-0.4** |
| **IFR** | **Ifrane** | **2.23** | **209** | P | **Pn** | **13 56 25.6** | **-0.2** |
| IFR | | | | S | **Sn** | **13 56 50.8** | **-2.7** |
| **MD31** | **MD31** | **2.72** | **196** | P | **Pn** | **13 56 32.7** | **+0.3** |
| **MDT** | **Midelt** | **2.74** | **193** | Pn | **Pn** | **13 56 33.2** | **+0.6** |
| | 2.9nm,0.3s,baz=217,slow=8.5,SNR=30 | | | | | | |
| MDT | | | | Sn | **Sn** | **13 57 06.2** | **+0.3** |
| | 6.3nm,0.3s,baz=120,slow=21,SNR=5.0 | | | | | | |
| **MDT** | **Midelt** | **2.74** | **193** | P | **Pn** | **13 56 33.9** | **+1.2** |
| MDT | | | | S | **Pn** | **13 56 33.8** | **+1.2** |
| **MDT** | **Midelt** | **2.74** | **193** | P | **Sn** | **13 56 32.9** | **+0.3** |
| **TDRA** | **Tendrara** | **2.87** | **148** | P | **Pn** | **13 56 34.0** | **-0.5** |
| **ZHG** | **ZHG** | **3.07** | **229** | P | **Pn** | **13 56 36.3** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.66** | **303** | *e*Pn | **Pn** | **13 56 45.1** | **-0.1** |
| PVAQ | | | | *e*Sn | **Sn** | **13 57 26.4** | **-2.1** |
| PVAQ | | | | A | A | 13 57 29.0 | |
| | 40nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.66** | **303** | P | **Pn** | **13 56 45.2** | **-0.1** |
| **PVAQ** | **Vaqueiros** | **3.66** | **303** | P | **Pn** | **13 56 45.2** | **-0.1** |
| PVAQ | | | | S | **Sn** | **13 57 26.9** | **-1.6** |
| **PCVE** | **Castro Verde** | **4.00** | **304** | *e*Pn | **Pn** | **13 56 49.7** | **-0.2** |
| PCVE | | | | *e*Sn | **Sn** | **13 57 35.6** | **-1.2** |
| PCVE | | | | A | A | 13 57 39.3 | |
| | 19nm,0.6s | | | | | | |
| **PAB** | **San Pablo** | **4.07** | **355** | P | **Pn** | **13 56 52.6** | **+1.6** |
| **PBEJ** | **Beja** | **4.10** | **309** | *e*Pn | **Pn** | **13 56 52.1** | **+0.8** |
| PBEJ | | | | *e*Sn | **Sn** | **13 57 37.4** | **-2.1** |
| PBEJ | | | | A | A | 13 57 41.9 | |
| | 14nm,0.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **359** | Pn | **Pn** | **13 56 53.9** | **+1.4** |
| | 1.7nm,0.3s,baz=179,slow=12,SNR=31 | | | | | | |
| **MESJ** | **Messejana** | **4.23** | **305** | *e*P | **Pn** | **13 56 52.9** | **-0.1** |
| **MESJ** | **Messejana** | **4.23** | **305** | *e*Pn | **Pn** | **13 56 52.9** | **-0.1** |
| MESJ | | | | *e*Sn | **Sn** | **13 57 40.9** | **-1.6** |
| MESJ | | | | A | A | 13 57 55.8 | |
| | 23nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.28** | **297** | *e*P | **Pn** | **13 56 53.7** | **-0.1** |
| **MORF** | **Marmelete** | **4.28** | **297** | *e*Pn | **Pn** | **13 56 54.1** | **+0.3** |
| MORF | | | | *e*Sn | **Sn** | **13 57 42.2** | **-1.7** |
| MORF | | | | A | A | 13 57 46.6 | |
| | 14nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.34** | **294** | *e*Pn | **Pn** | **13 56 55.9** | **+1.3** |
| PFVI | | | | *e*Sn | **Sn** | **13 57 43.9** | **-1.5** |
| PFVI | | | | A | A | 13 57 47.0 | |
| | 16nm,0.8s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.34** | **294** | P | **Pn** | **13 56 54.8** | **+0.2** |
| **PTEO** | **Sao Teotonio** | **4.43** | **299** | *e*Pn | **Pn** | **13 56 56.0** | **+0.2** |
| PTEO | | | | *e*Sn | **Sn** | **13 57 45.8** | **-1.8** |
| PTEO | | | | A | A | 13 57 53.3 | |
| | 26nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **320** | *e*Pn | **Pn** | **13 56 57.8** | **+0.9** |
| PESTR | | | | *e*Sn | **Sn** | **13 57 47.5** | **-2.0** |
| PESTR | | | | A | A | 13 57 51.9 | |
| | 16nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **320** | P | **Pn** | **13 56 58.6** | **+1.6** |
| **PESTR** | **Estremoz** | **4.51** | **320** | P | **Pn** | **13 56 58.6** | **+1.6** |
| **EVO** | **Evora** | **4.51** | **314** | P | **Pn** | **13 56 57.4** | **+0.4** |
| EVO | | | | S | **Sn** | **13 57 47.1** | **-2.4** |
| **EVO** | **Evora** | **4.51** | **314** | *e*Pn | **Pn** | **13 56 57.5** | **+0.6** |
| EVO | | | | *e*Sn | **Sn** | **13 57 47.4** | **-2.1** |
| EVO | | | | A | A | 13 57 50.0 | |
| | 25nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.58** | **306** | *e*Pn | **Pn** | **13 56 57.9** | **0.0** |
| PNCL | | | | *e*Sn | **Sn** | **13 57 48.9** | **-2.3** |
| PNCL | | | | A | A | 13 57 54.4 | |
| | 13nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.84** | **325** | *e*Pn | **Pn** | **13 57 02.3** | **+0.8** |
| PMRV | | | | *e*Sn | **Sn** | **13 57 55.9** | **-1.8** |
| PMRV | | | | A | A | 13 58 12.3 | |
| | 21nm,0.5s | | | | | | |
| **TZRR** | **Tazzarine** | **4.90** | **198** | P | **Pn** | **13 57 03.2** | **+0.8** |
| **PMTG** | **Montargil** | **5.00** | **317** | *e*Pn | **Pn** | **13 57 04.0** | **+0.4** |
| PMTG | | | | *e*Sn | **Sn** | **13 58 00.2** | **-1.3** |
| PMTG | | | | A | A | 13 58 01.4 | |
| | 31nm,0.4s | | | | | | |
| **PACT** | **Alcochete** | **5.16** | **311** | *e*Pn | **Pn** | **13 57 06.7** | **+0.9** |
| PACT | | | | *e*Sn | **Sn** | **13 58 04.5** | **-0.9** |
| PACT | | | | A | A | 13 58 08.8 | |
| | 29nm,0.4s | | | | | | |
| **OUZM** | **OUZ** | **5.17** | **209** | P | **Pn** | **13 57 09.0** | **+2.8** |
| **OUZM** | **OUZ** | **5.17** | **209** | P | **Pn** | **13 57 06.3** | **+0.1** |
| **PCBR** | **Castelo Branco** | **5.21** | **328** | *e*Pn | **Pn** | **13 57 07.7** | **+1.1** |
| PCBR | | | | *e*Sn | **Sn** | **13 58 04.5** | **-2.4** |
| PCBR | | | | A | A | 13 58 07.4 | |
| | 12nm,0.5s | | | | | | |
| **OUK** | **Oukaimeden** | **5.43** | **219** | P | **Pn** | **13 57 08.4** | **-1.5** |
| **PMAFR** | **Mafra** | **5.55** | **310** | *e*Pn | **Pn** | **13 57 12.1** | **+0.9** |
| **PSBE** | **So Bento** | **5.62** | **317** | *e*Pn | **Pn** | **13 57 13.3** | **+1.0** |
| **MVO** | **Moncorvo** | **6.20** | **337** | *e*Pn | **Pn** | **13 57 21.7** | **+1.5** |
| **TTIG** | **Tnine Tigouga,** | **6.25** | **219** | P | **Pn** | **13 57 18.4** | **-2.6** |
| **PVRL** | **Vila Real** | **6.53** | **333** | *e*Sn | **Sn** | **13 58 37.2** | **-2.2** |
| PVRL | | | | A | A | 13 58 40.7 | |
| | 17nm,0.6s | | | | | | |
| **PBRG** | **Braganca** | **6.70** | **341** | *e*Pn | **Pn** | **13 57 28.6** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **22.80** | **166** | P | **P** | **14 00 54.0** | **+2.4** |
| | 1.1nm,0.9s,baz=351,slow=8.5,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.49** | **42** | P | **P** | **14 06 07.3** | **+2.0** |
| | 0.5nm,0.5s,baz=302,slow=5.0,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.77** | **50** | P | **P** | **14 06 17.5** | **+3.4** |
| | 0.5nm,0.8s,baz=295,slow=4.4,SNR=6.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.82** | **332** | P | **P** | **14 06 46.6** | **+0.2** |
| | 0.4nm,0.6s,baz=61,slow=6.2,SNR=5.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.80** | **313** | P | **P** | **14 07 40.8** | **-0.1** |
| | 0.1nm,0.4s,baz=70,slow=7.8,SNR=1.9 | | | | | | |

*IDC 12 13:59:47.0±3.2, 30°.74S×76°.02E, h0km, mb3.8/5, mb1 4.0/5, mb1mx3.5/64, mbtmp3.8/5, MS3.4/5, Ms1 3.5/5, ms1mx3.0/66, Error ellipse: s-maj=102.3km s-min=34.0km az=42.0*
*NEIC 12 13:59:49.0±0.8, 30°.4S±0°.1×75°.8E±0°.1, h15km±3km, mb4.3/13, Error ellipse: s-maj=19.6km s-min=16.0km az=176.0*
**ISC 12 13:59:48.1±0.7, 30°.4S±0°.1×75°.9E±0°.2, h10km, n33, σ1s17/26, mb4.1/12, MS3.4/5, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **22.87** | **351** | T | T | 14 28 48.3 | |
| | baz=173,slow=76,SNR=63 | | | | | | |
| **H08S1** | **Diego Garcia H** | **22.87** | **351** | T | T | 14 28 48.4 | |
| | baz=173,slow=76,SNR=36 | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.89** | **351** | T | T | 14 28 49.5 | |
| | baz=173,slow=76,SNR=63 | | | | | | |
| **PALK** | **Pallekele** | **37.76** | **8** | LR | LR | 14 19 26.3 | |
| | comp=Z,45nm,20.4s,baz=271,slow=31 | | | | | | |
| **PSI** | **Prapat** | **39.70** | **38** | LR | LR | 14 19 54.1 | |
| | comp=Z,60nm,21.6s,baz=303,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **51.66** | **97** | P | **P** | **14 08 54.4** | **-1.0** |
| | 1.7nm,1.0s,baz=247,slow=5.8,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **51.66** | **97** | P | **P** | **14 08 54.5** | **-0.9** |
| **CM31** | **Chiang Mai Arr** | **53.43** | **28** | P | **P** | **14 09 07.1** | **-1.3** |
| CM31 | | | | IAmb | IAmb | 14 09 13.3 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.43** | **28** | P | **P** | **14 09 10.7** | **+2.3** |
| | comp=Z,0.6nm,0.7s,baz=211,slow=6.8,SNR=4.4 | | | | | | |
| CMAR | | | | LR | LR | 14 29 21.1 | |
| | comp=Z,17nm,19.3s,baz=270,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.43** | **28** | P | **P** | **14 09 07.2** | **-1.2** |
| **WRA** | **Warramunga Arr** | **53.44** | **93** | P | **P** | **14 09 07.6** | **-1.0** |
| | comp=Z,1.5nm,1.0s,baz=249,slow=6.9,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.44** | **93** | P | **P** | **14 09 08.1** | **-0.5** |
| **WB2** | **Warramunga Arr** | **53.45** | **93** | P | **P** | **14 09 08.4** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 14 09 32.4 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **53.45** | **93** | P | **P** | **14 09 07.6** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 14 09 16.2 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **53.56** | **93** | P | **P** | **14 09 08.8** | **-0.7** |
| **WR0** | **Warramunga Arr** | **53.61** | **93** | P | **P** | **14 09 09.3** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 14 09 11.9 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **59.69** | **165** | LR | LR | 14 33 18.3 | |
| | comp=Z,75nm,18.4s,baz=188,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **59.69** | **165** | P | **P** | **14 09 52.3** | **+0.1** |
| **QSPA** | **South Pole Qui** | **59.73** | **180** | P | **P** | **14 09 53.0** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 14 09 58.9 | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **GEYT** | **Alibeck** | **69.98** | **345** | LR | LR | 14 36 32.3 | |
| | comp=Z,27nm,22.0s,baz=9.0,slow=31 | | | | | | |
| **KKAR** | **Karatay Array** | **73.32** | **356** | P | **P** | **14 11 20.2** | **+0.5** |
| **MK31** | **Makanchi Array** | **77.07** | **5** | P | **P** | **14 11 40.0** | **-1.1** |
| **MKAR** | **Makanchi Array** | **77.07** | **5** | P | **P** | **14 11 42.6** | **+1.4** |
| | comp=Z,0.9nm,1.0s,baz=187,slow=6.1,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **77.07** | **5** | P | **P** | **14 11 40.9** | **-0.3** |
| **ORCD** | **Orcadas** | **77.13** | **206** | P | **P** | **14 11 41.8** | **+0.2** |
| **ABKAR** | **Akbulak array** | **80.57** | **350** | P | **P** | **14 11 58.5** | **-1.8** |
| ABKAR | | | | IAmb | IAmb | 14 12 16.3 | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **82.58** | **20** | P | **P** | **14 12 11.3** | **+0.1** |
| SONM | | | | IAmb | IAmb | 14 12 15.9 | |
| | comp=Z,1.9nm,1.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **83.21** | **39** | P | **P** | **14 12 14.5** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **83.35** | **289** | P | **P** | **14 12 14.9** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **84.37** | **5** | P | **P** | **14 12 22.9** | **+2.8** |
| | comp=Z,0.9nm,0.7s,baz=191,slow=7.1,SNR=5.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **147.20** | **9** | PKPbc | **PKPbc** | **14 19 31.7** | **+0.8** |
| | comp=Z,1.0nm,0.9s,baz=328,slow=3.6,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **147.20** | **9** | PKPdf | **PKPdf** | **14 19 28.7** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **165.85** | **52** | PKPab | **PKPab** | **14 20 54.5** | **+1.3** |
| | comp=Z,0.9nm,1.0s,baz=273,slow=4.8,SNR=5.5 | | | | | | |

*IDC 12 14:09:17.5±0.6, 16°.52S×173°.83W, h0km, mb4.5/14, mb1 4.8/16, mb1mx4.4/42, mbtmp4.6/16, ML4.5/2, MS3.8/5, Ms1 3.8/5, ms1mx3.3/40, Error ellipse: s-maj=27.2km s-min=14.2km az=141.0*
*NEIC 12 14:09:22.2±1.5, 16°.54S±0°.07×173°.74W±0°.10, h23km±4km, mb4.8/62, Error ellipse: s-maj=13.6km s-min=9.8km az=95.0*
**ISC 12 14:09:19.4±0.3, 16°.54S±0°.06×173°.72W±0°.06, h10km, n329, σ1s29/311, mb4.8/49, MS3.9/8, 26C-6D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.22** | **36** | Pn | **Pn** | **14 10 11.0** | **+0.9** |
| | 146nm,0.3s,baz=187,slow=1.6,SNR=201 | | | | | | |
| AFI | | | | Sn | **Sn** | **14 10 44.3** | **-4.3** |
| | 320nm,0.3s,baz=32,slow=21,SNR=20 | | | | | | |
| **AFI** | **Afiamalu** | **3.22** | **36** | Pn | **Pn** | **14 10 11.0** | **+0.9** |
| AFI | | | | Sn | **Sn** | **14 10 44.6** | **-3.9** |
| **NIUE** | **Niue** | **4.40** | **125** | Pn | **Pn** | **14 10 27.7** | **+1.4** |
| NIUE | | | | Sn | **Sn** | **14 11 12.6** | **-5.1** |
| **RAR** | **Rarotonga** | **13.99** | **112** | Pn | **Pn** | **14 12 38.7** | **+1.0** |
| | 6.9nm,0.3s,baz=263,slow=7.8,SNR=19 | | | | | | |
| **RAR** | **Rarotonga** | **13.99** | **112** | Pn | **Pn** | **14 12 37.9** | **+0.2** |
| **OUENC** | **Ouen Island, N** | **19.23** | **249** | | **P** | **14 13 43.5** | **-0.4** |
| OUENC | | | | IAmb | IAmb | 14 14 07.3 | |
| | comp=Z,97nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.51** | **251** | *e*LR | LR | 14 18 21.9 | |
| | comp=Z,590nm,29.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.51** | **251** | | **P** | **14 13 45.8** | **-1.2** |
| **DZM** | **Mont Dzumac** | **19.51** | **251** | *e*P | **P** | **14 13 49.7** | **+2.7** |
| | comp=Z,56nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.51** | **251** | *e*LQ | LQ | 14 17 32.6 | |
| | comp=Z,678nm,35.5s | | | | | | |
| **URZ** | **Urewera** | **23.09** | **199** | P | **P** | **14 14 25.2** | **-0.1** |
| | comp=Z,6.6nm,0.5s,baz=25,slow=4.4,SNR=18 | | | | | | |
| **URZ** | **Urewera** | **23.09** | **199** | P | **P** | **14 14 24.8** | **-0.4** |
| URZ | | | | IAmb | IAmb | 14 14 36.2 | |
| | comp=Z,43nm,1.5s | | | | | | |
| **PAE** | **Paea** | **23.09** | **96** | *e*T | T | 14 38 00.9 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| **PPT2** | **Papeete2** | **23.10** | **96** | *e*LR | LR | 14 19 44.3 | |
| | comp=Z,366nm,28.6s | | | | | | |
| **PPT2** | **Papeete2** | **23.10** | **96** | *e*T | T | 14 38 01.4 | |
| | comp=Z,3.6nm,0.3s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **23.11** | **96** | P | **P** | **14 14 26.0** | **+0.2** |
| **TVO** | **Taravao** | **23.41** | **97** | *e*P | **P** | **14 14 33.9** | **+5.1** |
| | comp=Z,20nm,1.0s | | | | | | |
| **TVO** | **Taravao** | **23.41** | **97** | *e*T | T | 14 38 09.4 | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **24.54** | **97** | *e*T | T | 14 39 47.8 | |
| **PMOR** | **Pomariorio Ree** | **24.89** | **90** | *e*T | T | 14 40 17.1 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| **VAH** | **Vaihoa** | **25.12** | **91** | *e*T | T | 14 40 29.1 | |
| | comp=Z,5.3nm,0.3s | | | | | | |
| **QRZ** | **Quartz Range** | **26.97** | **203** | P | **P** | **14 15 03.3** | **+2.1** |
| **TUWZ** | **Tuamarina** | **26.99** | **201** | P | **P** | **14 14 59.8** | **-1.6** |
| **LTZ** | **Lake Taylor** | **28.76** | **202** | P | P | 14 15 14.8 | -2.4 |
| **TAOE** | **Nuku Hiva Isla** | **33.59** | **81** | *e*LR | LR | 14 24 32.3 | |
| | comp=Z,230nm,29.5s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **33.59** | **81** | *e*T | T | 14 50 45.5 | |
| | comp=Z,30nm,0.2s | | | | | | |
| **ARMA** | **Armidale** | **34.50** | **240** | P | **P** | **14 16 07.7** | **-0.3** |
| ARMA | | | | IAmb | IAmb | 14 16 49.8 | |
| | comp=Z,14nm,1.1s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAN** | **Canberra** | **38.10** | **233** | P | **P** | **14 16 37.3** | **-1.4** |
| CAN | | | | IAmb | IAmb | 14 17 13.1 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **PMG** | **Port Moresby** | **38.73** | **276** | LR | LR | 14 30 17.1 | |
| | comp=Z,82nm,20.3s,baz=133,slow=33 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.79** | **330** | T | T | 14 59 23.0 | |
| | baz=147 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.80** | **330** | T | T | 15 00 11.4 | |
| | baz=147,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.81** | **330** | T | T | 14 59 23.2 | |
| | baz=147,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.76** | **331** | T | T | 15 00 22.9 | |
| | baz=145,slow=74,SNR=2.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.76** | **331** | T | T | 15 00 41.9 | |
| | baz=145,slow=74,SNR=2.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.77** | **331** | T | T | 15 00 24.2 | |
| | baz=145 | | | | | | |
| **TOO** | **Toolangi** | **41.51** | **232** | P | **P** | **14 17 05.9** | **-1.1** |
| **STKA** | **Stephens Creek** | **43.21** | **241** | P | **P** | **14 17 20.3** | **-0.5** |
| | comp=Z,2.7nm,0.5s,baz=94,slow=12,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **43.21** | **241** | P | **P** | **14 17 19.2** | **-1.7** |
| **BBOO** | **Buckleboo** | **47.98** | **241** | P | **P** | **14 17 57.5** | **-1.1** |
| BBOO | | | | IAmb | IAmb | 14 18 33.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **49.10** | **258** | P | **P** | **14 18 06.3** | **-1.2** |
| **WB0** | **Warramunga Arr** | **49.26** | **258** | P | **P** | **14 18 07.9** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 14 18 28.7 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **49.28** | **258** | P | **P** | **14 18 08.8** | **-0.1** |
| **WRAB** | **Tennant Creek** | **49.28** | **258** | P | **P** | **14 18 08.3** | **-0.6** |
| **WRA** | **Warramunga Arr** | **49.29** | **258** | P | P | 14 18 06.8 | -2.1 |
| | comp=Z,1.0nm,0.4s,baz=96,slow=7.1,SNR=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.29** | **258** | P | **P** | **14 18 08.8** | **-0.1** |
| **AS31** | **Alice Springs** | **49.47** | **253** | P | **P** | **14 18 08.5** | **-1.8** |
| **ASAR** | **Alice Springs** | **49.47** | **253** | P | **P** | **14 18 08.9** | **-1.4** |
| | comp=Z,16nm,0.6s,baz=88,slow=8.4,SNR=255 | | | | | | |
| **ASAR** | **Alice Springs** | **49.47** | **253** | P | **P** | **14 18 08.5** | **-1.8** |
| **KNRA** | **Kununurra** | **55.10** | **262** | P | **P** | **14 18 51.6** | **-0.5** |
| **SOEI** | **Soe** | **60.58** | **268** | P | **P** | **14 19 30.6** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **62.59** | **254** | P | **P** | **14 19 44.0** | **-0.2** |
| **MBWA** | **Marble Bar** | **62.76** | **254** | P | **P** | **14 19 44.4** | **-0.9** |
| **NIKH** | **Nikolski High** | **69.35** | **3** | P | **P** | **14 20 26.7** | **-0.2** |
| | baz=185 | | | | | | |
| **CIS** | **Catalina Islan** | **72.44** | **46** | P | **P** | **14 20 45.7** | **-0.5** |
| | baz=236 | | | | | | |
| **SDPT** | **Sand Point** | **72.48** | **8** | P | **P** | **14 20 45.9** | **0.0** |
| **SDPT** | **Sand Point** | **72.48** | **8** | P | **P** | **14 20 45.5** | **-0.4** |
| | baz=193 | | | | | | |
| **ELS** | **Elsinore Mount** | **73.27** | **46** | P | **P** | **14 20 51.2** | **0.0** |
| ELS | | | | IAmb | IAmb | 14 20 52.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **MURC** | **Murrieta** | **73.40** | **47** | P | **P** | **14 20 52.6** | **+0.7** |
| | baz=236 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.51** | **180** | P | **P** | **14 20 52.1** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 14 20 55.0 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **MONP2** | **Monument Peak** | **73.56** | **48** | P | **P** | **14 20 53.8** | **+0.7** |
| | baz=237,SNR=8.0 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **73.56** | **45** | P | **P** | **14 20 53.3** | **+0.4** |
| | baz=236,SNR=13 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.62** | **343** | P | **P** | **14 20 52.3** | **-0.4** |
| | comp=Z,5.5nm,0.9s,baz=152,slow=9.5,SNR=7.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.62** | **343** | P | **P** | **14 20 53.0** | **+0.3** |
| **RMX** | **La Rumorosa** | **73.65** | **48** | P | **P** | **14 20 54.3** | **+0.7** |
| RMX | | | | IAmb | IAmb | 14 20 55.2 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **73.65** | **48** | P | **P** | **14 20 54.1** | **+0.6** |
| | baz=238,SNR=5.7 | | | | | | |
| **ISA** | **Isabella, Lake** | **73.68** | **44** | P | **P** | **14 20 54.3** | **+0.7** |
| ISA | | | | IAmb | IAmb | 14 20 55.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **ISA** | **Isabella, Lake** | **73.68** | **44** | P | **P** | **14 20 54.3** | **+0.7** |
| | baz=235,SNR=6.9 | | | | | | |
| **YUH** | **Yuha Desert** | **73.78** | **48** | P | **P** | **14 20 54.3** | **+0.1** |
| YUH | | | | IAmb | IAmb | 14 20 55.7 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **73.82** | **41** | P | **P** | **14 

baz=198
TUC Tucson 77.35 51 P P 14 21 15.4 +0.6
TUC Tucson 77.35 51 P P 14 21 15.9 +1.1
baz=241
E04D Cinebar 77.86 33 P P 14 21 17.9 +0.8
baz=230
X16A Lo Mia Camp, P 77.90 48 P P 14 21 18.6 +0.7
X16A IAmb IAmb 14 21 20.0
comp=Z,8.6nm,0.9s
319A Douglas 78.03 52 P P 14 21 18.8 +0.1
319A IAmb IAmb 14 21 20.6
comp=Z,14nm,1.0s
O19K Port Alsworth 78.06 10 P P 14 21 17.6 -0.3
baz=199
CCUT Cedar City 78.15 45 P P 14 21 20.0 +0.7
CCUT IAmb IAmb 14 21 21.5
comp=Z,12nm,1.2s
BRSE Bradley Lake S 78.28 12 P P 14 21 18.9 -0.3
baz=202
WUAZ Wupatki 78.49 48 P P 14 21 22.3 +1.1
baz=240
ELK Elko 78.64 41 LR LR 14 48 17.3
comp=Z,102nm,21.5s,baz=225,slow=30
SEW Seward 78.87 12 P P 14 21 21.9 -0.5
baz=204
X18A Snowflake 79.03 49 P P 14 21 24.2 +0.1
M19K Big River Lodg 79.68 9 P P 14 21 26.7 -0.1
baz=199
121A Cookes Peak, D 79.69 52 P P 14 21 29.2 +1.4
baz=243
PWL Port Wells 79.78 12 P P 14 21 28.8 +1.4
baz=205
L19K White Mountain 79.87 9 P P 14 21 28.2 +0.3
baz=198
DUG Dugway, Tooele 79.90 43 P P 14 21 29.1 +0.4
baz=238
GLI Glacier Island 80.06 13 P P 14 21 28.5 -0.4
baz=206
GAMB Gambell 80.08 1 P P 14 21 29.7 +0.8
baz=182
M22K Willow 80.26 11 P P 14 21 29.8 -0.1
baz=203
PMR Palmer 80.30 12 P P 14 21 30.0 -0.1
baz=204
L20K Farewell, AK 80.30 9 P P 14 21 30.0 -0.2
baz=199
TTA Tatalina 80.42 8 P P 14 21 31.3 +0.4
baz=197,SNR=5.3
TMUT Trail Mountain 80.50 44 P P 14 21 33.1 +0.9
TMUT IAmb IAmb 14 21 34.3
comp=Z,11nm,1.0s
NJ2 Nanjing 80.61 307 eP P 14 21 34.2 +1.7
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
SML Sawmill 80.65 12 P P 14 21 33.1 +0.9
baz=205
BMRM Bremner River 80.69 14 P P 14 21 31.8 -0.6
baz=208
HLID Hailey 80.70 39 P P 14 21 33.5 +0.5
baz=237,SNR=9.1
CUT Chulitna 80.83 11 P P 14 21 32.7 -0.3
baz=203
SCM Sheep Creek Mo 80.88 12 P P 14 21 33.6 +0.2
baz=206
K20K Telida 81.10 9 P P 14 21 35.1 +0.7
baz=199
ANM Nome 81.11 4 P P 14 21 35.1 +0.6
baz=188,SNR=6.0
MNTX Cornudas Mount 81.15 53 P P 14 21 35.5 0.0
MNTX IAmb IAmb 14 21 36.6
comp=Z,6.5nm,0.8s
MNTX Cornudas Mount 81.15 53 P P 14 21 36.5 +1.0
baz=244
N25K Chitina, Valde 81.26 14 P P 14 21 35.2 -0.2
baz=208
BNM Barren Site 81.28 51 P P 14 21 37.3 +0.9
KLR Kul'dur 81.31 327 LR LR 14 49 34.3
comp=Z,47nm,21.4s,baz=230,slow=30
MVCO Mesa Verde 81.34 47 P P 14 21 37.5 +0.9
baz=242
M24K Tolsona, Glenn 81.36 13 P P 14 21 36.3 +0.3
baz=207
WAT6 Susitna Watana 81.47 12 P P 14 21 36.7 +0.1
baz=205
TX31 Lajitas Ar. Si 81.50 56 P P 14 21 37.8 +0.3
TX32 Lajitas Array 81.50 56 P P 14 21 37.6 +0.1
TX32 IAmb IAmb 14 21 39.6
comp=Z,12nm,1.5s
TXAR Lajitas Array 81.50 56 P P 14 21 38.1 +0.6
comp=Z,1.6nm,0.7s,baz=220,slow=7.8,SNR=26
PV13 Radium Mtn., P 81.57 46 P P 14 21 38.1 +0.3
PV13 IAmb IAmb 14 21 40.1
comp=Z,18nm,1.4s
BNX BinXian 81.65 323 ⇓P P 14 21 37.4 -0.4
BNX pmax pmax
comp=Z,9.0nm,0.9s
ANMO Albuquerque 81.77 50 P P 14 21 39.0 +0.1
ANMO Albuquerque 81.77 50 P P 14 21 39.9 +1.0
baz=243
TRF Thorofare Moun 81.80 10 P P 14 21 38.1 -0.2
baz=203
CHUM Lake Minchumin 81.87 9 P P 14 21 37.9 -0.6
baz=201,SNR=6.3
J20K Nowinta River 81.87 9 P P 14 21 38.9 +0.4
baz=199
TNA Tin City 81.97 2 P P 14 21 39.6 +0.6
baz=186,SNR=12
DHY Denali Highway 81.99 12 P P 14 21 39.5 +0.1
baz=205
GCSA Galena City Sc 82.06 7 P P 14 21 40.3 +0.9
baz=196
PAX Paxson 82.28 13 P P 14 21 40.2 -0.6
baz=207
BPAW Bear Paw Mtn. 82.28 10 P P 14 21 40.0 -0.7
baz=202
MCK McKinley 82.30 11 P P 14 21 40.2 -0.6
baz=204,SNR=11
M26K Nabesna, AK 82.32 14 P P 14 21 41.4 +0.4
baz=210
MCMT McKenzie Canyo 82.33 39 P P 14 21 42.5 +0.8
HYT Haines Junctio 82.39 17 P P 14 21 42.2 +0.8
baz=215
YUK3 Moose Creek 82.40 15 P P 14 21 41.8 +0.2
baz=212
YUK4 Talbot Arm 82.51 16 P P 14 21 43.2 +1.0
baz=214
M27K Edge Creek, AK 82.55 14 P P 14 21 42.7 +0.4
baz=211
S22A 4UR Ranch, Cre 82.77 47 P P 14 21 44.4 +0.2
S22A IAmb IAmb 14 21 46.1
comp=Z,12nm,0.8s
S22A 4UR Ranch, Cre 82.77 47 P P 14 21 45.2 +1.0
baz=243
MSO Missoula 82.78 37 P P 14 21 44.1 +0.3
baz=237
L26K Log Cabin Wild 82.79 13 P P 14 21 43.5 +0.1
baz=209
BVCY Beaver Creek 82.84 15 P P 14 21 43.8 +0.1
baz=212
O20A White River Ci 82.91 45 P P 14 21 45.3 +0.6
baz=242
WHY Whitehorse 83.01 18 P P 14 21 44.5 -0.2
baz=217
QIZ Qiongzhong 83.05 292 P P 14 21 46.2 +0.5
QIZ S S 14 32 05.4 -0.2
QIZ LR LR
comp=Z,270nm,12.7s
QIZ LR LR
comp=Z,150nm,19.9s
QIZ LR LR
comp=Z,130nm,13.2s
NEA2 Nenana 83.06 10 P P 14 21 44.5 -0.3
baz=204
RIDG Independent Ri 83.10 12 P P 14 21 44.8 -0.2
baz=208
I21K Tanana 83.14 9 P P 14 21 45.3 +0.2
baz=201
L27K Beaver Creek, 83.17 14 P P 14 21 45.3 0.0
baz=211
MLY Manley 83.19 10 P P 14 21 44.6 -0.8
baz=202,SNR=6.5
QLMT Earthquake Lak 83.19 39 P P 14 21 46.4 +0.2
HDA Harding Lake 83.28 11 P P 14 21 45.3 -0.5
baz=206,SNR=6.5
P33M Teslin, Yukon 83.29 19 P P 14 21 46.2 0.0
baz=219
BW06 Boulder Array 83.32 42 P P 14 21 47.0 +0.1
BW06 IAmb IAmb 14 21 47.6
comp=Z,6.6nm,0.8s
BW06 Boulder Array 83.32 42 P P 14 21 46.5 -0.4
baz=240,SNR=8.5
PD31 Pinedale Array 83.32 42 P P 14 21 46.9 0.0
PD31 IAmb IAmb 14 21 47.6
comp=Z,5.9nm,0.8s
PDAR Pinedale Array 83.32 42 P P 14 21 46.4 -0.5
comp=Z,5.8nm,0.7s,baz=214,slow=3.3,SNR=56
PDAR Pinedale Array 83.32 42 P P 14 21 46.2 -0.6
SMCO Snowmass 83.32 46 P P 14 21 46.4 -0.8
SMCO IAmb IAmb 14 21 48.6
comp=Z,15nm,1.3s
H21K Melozitna Rive 83.46 9 P P 14 21 47.1 +0.3
baz=200
BOZ Bozeman (W) 83.47 39 P P 14 21 47.7 +0.2
baz=238,SNR=9.5
SCRK Sand Creek 83.49 13 P P 14 21 46.9 -0.2
baz=209
H17A Grant Village 83.49 40 P P 14 21 49.0 +1.3
baz=239,SNR=6.8
I23K Minto, Yukon-K 83.53 10 P P 14 21 46.4 -0.6
baz=203,SNR=5.9
TCOL CIGO, UAF Yank 83.53 11 P P 14 21 46.5 -0.6
baz=205,SNR=7.5
COLA College 83.54 11 P P 14 21 47.0 -0.1
baz=205
ILAR Eielson Array 83.62 11 P P 14 21 46.8 -0.8
comp=Z,3.0nm,0.8s,baz=228,slow=4.9,SNR=22
IMAR Indian Mountai 83.64 8 P P 14 21 47.9 +0.2
SDCO Great Sand Dun 83.70 48 P P 14 21 49.4 +0.3
baz=244
POKR Poker Plat Res 83.83 11 P P 14 21 48.5 -0.2
baz=205
HRY Holter Researc 83.94 38 P P 14 21 49.6 -0.2
H23K Yukon River 84.12 10 P P 14 21 49.6 -0.6
baz=203
T25A Trinidad 84.22 49 P P 14 21 52.4 +0.8
baz=244
RWWY Rawlins 84.33 44 P P 14 21 51.4 -0.7
RWWY IAmb IAmb 14 21 53.0
comp=Z,9.7nm,0.9s
M31M Drury Creek, Y 84.39 17 P P 14 21 51.0 -0.6
baz=218
H24K Noodor Dome 84.41 10 P P 14 21 50.8 -0.8
baz=205
Q24A Divide 84.49 47 P P 14 21 53.8 +0.7
baz=244
ISCO Idaho Springs 84.54 46 P P 14 21 53.6 +0.3
baz=243
PRP Porcupine Dome 84.55 11 P P 14 21 52.2 -0.3
baz=207,SNR=7.7
CMIG Matias Romero 84.55 70 LR LR 14 50 04.2
comp=Z,55nm,20.8s,baz=288,slow=29
DAWY Dawson 84.60 14 P P 14 21 52.6 -0.1
baz=213,SNR=5.5
RLMT Red Lodge 84.66 40 P P 14 21 53.9 +0.2
baz=240,SNR=6.6
FARO Faro, Yukon 84.71 18 P P 14 21 52.9 -0.3
baz=219
RDOG Red Dog Mine 84.73 4 P P 14 21 53.8 +0.6
baz=190
EGAK Eagle 84.80 13 P P 14 21 54.1 +0.6
EGAK Eagle 84.80 13 P P 14 21 54.2 +0.6
baz=211
N23A Red Feather La 84.81 45 P P 14 21 55.2 +0.6
baz=243
H03S2 Juan Fernandez 84.83 124 T T 15 55 21.2
baz=251,SNR=11
H03S1 Juan Fernandez 84.84 124 T T 15 55 22.7
baz=251,SNR=12
H03S3 Juan Fernandez 84.84 124 T T 15 55 18.8
baz=251,SNR=14
H03N2 Juan Fernandez 84.93 123 T T 15 55 25.7
baz=257,SNR=6.2
H03N3 Juan Fernandez 84.94 123 T T 15 55 20.5
baz=257
H03N1 Juan Fernandez 84.95 123 T T 15 55 24.5
baz=257
AMTX Amarillo 85.29 52 P P 14 21 57.5 +0.6
baz=246
COLD Coldfoot 85.31 9 P P 14 21 56.8 +0.6
baz=203,SNR=9.1
BILL Bilibino 85.60 353 P P 14 21 56.9 -0.6
MMPY Sheldon Lake, 85.63 18 P P 14 21 58.1 +0.2
baz=220
EGMT Eagleton 85.82 37 P P 14 21 59.2 0.0
baz=240
I29M Ogilvie Camp, 85.94 14 P P 14 21 59.2 -0.1
baz=214
ABTX Abilene, Hawle 85.97 54 P P 14 22 00.1 -0.2
ABTX Abilene, Hawle 85.97 54 P P 14 22 00.9 +0.6
baz=248
BMAR Burnt Mountain 86.43 11 P P 14 22 02.7 +1.0
TOLK Toolik Lake Re 86.72 9 P P 14 22 03.6 +0.5
baz=203
XLT XiLinHaoTe 87.75 317 eP P 14 22 08.6 -0.1
XLT pP PcP 14 22 13.6 +3.0
XLT sP sP 14 22 16.0 +3.3
XLT pmax pmax
comp=Z,2.0nm,1.1s
XLT pmax pmax
comp=Z,120nm,4.6s
XAN Xi'an 89.05 306 P P 14 22 15.7 +0.6
XAN sP sP 14 22 22.7 +3.6
XAN pmax pmax
comp=Z,5.0nm,1.5s
DGMT Dagmar 89.31 39 P P 14 22 17.1 +1.2
baz=244
INK Inuvik 89.44 14 P P 14 22 15.8 -0.2
comp=Z,3.0nm,0.9s,baz=205,slow=5.8,SNR=9.3
INK Inuvik 89.44 14 P P 14 22 16.4 +0.4
baz=218
HHC Hu-ho-hao-te 89.58 313 eP P 14 22 18.4 +0.9
HHC pmax pmax
comp=Z,5.0nm,1.2s
HHC pmax pmax
comp=Z,91nm,5.0s
YKA Yellowknife Ar 91.26 23 P P 14 22 24.2 -0.4
comp=Z,1.8nm,0.9s,baz=233,slow=4.2,SNR=17
YKA LR LR 14 56 10.5
comp=Z,73nm,19.1s,baz=328,slow=31
W39A Magazine 91.44 54 P P 14 22 27.8 +1.7
baz=251
PZH PanZhiHua 92.51 297 P P 14 22 32.7 +1.3
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,120nm,4.9s
C36M Paulatuk 92.54 16 P P 14 22 30.7 +0.4
baz=227
W41B Gary Mavity, V 92.62 54 P P 14 22 31.2 -0.4
baz=252
CMAR Chiang Mai Arr 92.68 288 P P 14 22 32.5 +0.3
comp=Z,1.0nm,0.9s,baz=81,slow=2.0,SNR=8.5
LZH Lanzhou 93.65 306 eP P 14 22 35.7 -0.9
LZH pP PcP 14 22 39.9 +2.8
LZH sP pP 14 22 42.4 +2.9
LZH pmax pmax
comp=Z,16nm,1.5s
A36M Sachs Harbour 94.08 14 P P 14 22 38.0 +0.6
baz=226
GTA Gaotai 97.65 309 eP P 14 22 53.3 -1.4
GTA pP sP 14 23 03.2 +4.5
GTA sP pP 14 23 08.3 +11
GTA pmax pmax
comp=Z,2.0nm,1.2s
BVAR Borovoye Array 118.59 322 PKP PKPdf 14 28 06.1 -1.3
comp=Z,0.7nm,0.6s,baz=74,slow=11,SNR=5.3
ARCES ARCESS Array B 125.69 352 PKP PKPdf 14 28 19.8 -0.9
comp=Z,6.6nm,1.0s,baz=0.0,slow=0.9,SNR=4.3
KMBO Kilima Mbogo 144.76 243 PKP PKPab 14 28 57.2 +0.5
comp=Z,6.6nm,0.8s,baz=70,slow=4.4,SNR=11
CLL Collm 144.91 353 i PKPdf PKPab 14 28 54.9 -0.9
comp=Z,14nm,1.5s
CLL e(pPKiKP) 14 29 06.0
CHVC Chvalec 145.14 349 ePKP PKPbc 14 28 55.9 -0.8
OSTC Ostas 145.14 349 ePKP PKPbc 14 28 56.8 +0.1
BRG Berggiesshubel 145.21 351 ePKP PKPbc 14 28 56.6 -0.3
BRG Amp 14 28 58.0
comp=Z,11nm,1.2s
UPC Upice 145.22 349 ePKP PKPbc 14 28 57.0 +0.1
BURAR Bucovina Array 145.31 337 ⇑P PKPbc 14 28 57.3 -0.1
DPC Dobruska-Polom 145.32 349 ePKP PKPbc 14 28 57.3 0.0
CRVS Cervenica-Dubn 145.43 342 ePKP PKPbc 14 28 58.0 +0.4
PVCC Panska Ves 145.45 351 ePKP PKPbc 14 28 57.4 -0.2
KRLC Kraliky 145.49 348 ePKP PKPbc 14 28 57.8 0.0
MORC Moravsky Berou 145.62 347 ⇑P PKPdf 14 28 58.0 -0.1
MORC Moravsky Berou 145.62 347 ePKP PKPdf 14 28 58.0 -0.1
TESR Tescani 145.66 335 ⇑P PKPdf 14 28 57.9 -0.2
TLCR 145.75 331 ⇑P PKPdf 14 28 58.2 -0.1
LANS Liptovska Anna 145.75 345 ePKP PKPdf 14 28 59.4 +1.1
TRPA Tarpa 145.79 341 ⇑P PKPdf 14 28 59.0 +0.7
TRPA Tarpa 145.79 341 PKPDF PKPdf 14 28 57.6 -0.6
PRU Pruhonice 145.98 350 ePKP PKPdf 14 28 59.4 +0.8
NKC Novy Kostel 146.03 353 ePKP PKPdf 14 28 59.5 +0.8
JURR Jurilovca 146.04 331 ⇑P PKPdf 14 28 59.8 +1.0
BSTI Sart Tilman 146.04 1 dPKP PKPdf 14 28 58.4 -0.2
BTNL Ternell 146.04 0 dPKP PKPdf 14 28 58.9 +0.1
CFR Carcaliu 146.06 332 ⇑P PKPdf 14 28 59.4 +0.6
VRI Vrincioaia 146.14 334 ⇑P PKPdf 14 28 59.7 +0.7
TPGR Topolog 146.18 331 ⇑P PKPdf 14 29 00.2 +1.1
PLOR Plostina 146.19 334 ⇑P PKPdf 14 29 00.4 +1.2
BCLA Clavier 146.20 1 dPKP PKPdf 14 29 00.7 +1.7
VRAC Vranov 146.26 348 ⇑P PKPdf 14 29 00.9 +1.8
VRAC Vranov 146.26 348 ePKP PKPdf 14 28 59.5 +0.4
JAVC Velka Javorina 146.45 346 ePKP PKPdf 14 29 01.6 +2.1
DOU Dourbes 146.50 2 dPKP PKPdf 14 29 00.8 +1.3
VYHS Vyhne 146.52 345 ePKP PKPdf 14 29 01.4 +1.8
HARR Harsova 146.53 331 ⇑P PKPdf 14 29 01.5 +1.8
KRUC Moravsky 146.53 348 ePKP PKPdf 14 29 00.5 +0.9
DOPR Dopca 146.61 335 ⇑P PKPdf 14 29 01.2 +1.4
GRF Grafenberg Arr 146.69 354 ePKP PKPdf 14 29 00.8 +0.9
baz=8.8,slow=3.3
PSZ Piszkesteto 146.77 343 ⇑P PKPdf 14 29 02.6 +2.5
PSZ Piszkesteto 146.77 343 ⇑PKP PKPdf 14 29 01.6 +1.5
PSZ PKPDF PKPbc 14 29 02.0 +0.2
MLR Muntele Rosu 146.77 334 ⇑P PKPdf 14 29 02.4 +2.2
ISR Istrita 146.81 333 ⇑P PKPdf 14 29 02.0 +1.8
BRTR Keskin Array B 146.84 320 PKPbc PKPdf 14 29 01.8 +1.3
comp=Z,9.2nm,0.8s,baz=98,slow=2.3,SNR=43
DRGR 146.90 339 ⇑P PKPdf 14 29 01.7 +1.4
KHC Kasperske Hory 146.96 351 ePKP PKPdf 14 29 02.4 +2.1
WLF Walferdange 146.96 0 dPKP PKPdf 14 29 03.0 +2.7
MODS Modra-Piesok 147.00 346 ePKP PKPdf 14 29 03.5 +3.1
CKRC Cesky Krumlov 147.15 350 ePKP PKPdf 14 29 03.2 +2.6
VOIR 147.18 335 ⇑P PKPdf 14 29 03.9 +3.0
GERES GERESS Array B 147.22 351 PKPbc PKPdf 14 29 02.6 +1.8
comp=Z,4.5nm,1.0s,baz=29,slow=3.0,SNR=20
ARR Arges 147.40 336 ⇑P PKPdf 14 29 04.1 +2.9
CONA Conrad Observa 147.72 348 iP PKPdf 14 29 04.4 +2.7
comp=Z,13nm,1.3s
MPLH Magyarpolny 148.07 345 ⇑PKP PKPdf 14 29 05.1 +2.9
GZR Gura Zlata 148.08 338 ⇑P PKPdf 14 29 05.5 +3.2
MOA Molln 148.09 350 iP PKPdf 14 29 05.8 +3.6
comp=Z,8.9nm,1.2s
BZS Buzias 148.30 339 ⇑P PKPdf 14 29 06.1 +3.5
ARSA Arzberg 148.44 348 iP PKPdf 14 29 01.5 -1.3
comp=Z,6.3nm,1.4s
ARSA iP pPKPdf 14 29 06.2 +0.3
comp=Z,6.5nm,1.1s
MORH Mrgy, Hungar 148.67 343 ⇑P PKPdf 14 29 06.0 +2.8
MORH Mrgy, Hungar 148.67 343 ⇑PKP PKPdf 14 29 07.2 +4.1
RETA Reutte 148.92 354 eP PKPdf 14 29 02.7 -1.0
comp=Z,1.6nm,0.5s
RETA eP pPKPdf 14 29 06.4 -0.4
comp=Z,10nm,1.3s
WATA Walderalm 148.98 353 iP PKPdf 14 29 07.2 +3.3
comp=Z,12nm,1.1s
KBA Koelnbreinsper 149.00 351 iP PKPdf 14 29 07.0 +3.0
comp=Z,6.7nm,1.1s
MOTA Moosalm 149.03 354 iP PKPdf 14 29 07.6 +3.6
comp=Z,14nm,1.1s
WTTA Wattenberg 149.05 353 iP PKPdf 14 29 07.1 +3.1
comp=Z,17nm,1.5s
SOKA Soboth 149.09 348 iP PKPdf 14 29 07.9 +3.9
comp=Z,10nm,1.3s
DAVA Damuels 149.20 355 iP PKPdf 14 29 07.0 +2.8
comp=Z,8.4nm,0.9s
MYKA Terra Mystica 149.38 350 iP PKPdf 14 29 02.3 -2.1
comp=Z,4.7nm,0.9s
MYKA iP pPKPdf 14 29 07.7 +0.2
comp=Z,7.9nm,1.1s
FETA Feichten 149.39 354 iP PKPdf 14 29 08.4 +3.9
comp=Z,16nm,1.2s
ABTA Abfaltersbach 149.44 352 eP PKPdf 14 29 02.7 -1.9
comp=Z,9.9nm,1.3s
ABTA iP pPKPdf 14 29 08.8 +1.1
comp=Z,10nm,1.1s
VTS Vitosha 150.24 334 ⇑P PKPdf 14 29 11.2 +5.2
TORD Torodi Ar. Bea 174.43 127 PKP PKPdf 14 29 28.6 -1.7
comp=Z,1.2nm,0.9s,baz=331,slow=1.2,SNR=4.8
TORD PKPab PKPab 14 31 02.5 -0.5
comp=Z,3.4nm,1.1s,baz=243,slow=4.1,SNR=9.2
TORD Torodi Ar. Bea 174.43 127 PKPdf 14 29 27.7 -2.7
TORD PKPab PKPab 14 31 01.5 -1.5

**IDC 12 14:09:36.2±3.5, 17.12°S×173.61°W, h0km, mb4.3/5, mb1 4.7/5, mb1mx3.7/41, mbtmp4.3/5, MS4.0/2, Ms1 4.0/2, ms1mx3.1/41, Error ellipse: s-maj=196.1km s-min=27.1km az=148.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **7.99** | **264** | LR | LR | 14 14 12.3 | |
| | comp=Z,556nm,20.8s,baz=120,slow=35 | | | | | | |
| WRA | **Warramunga Arr** | **49.28** | **258** | P | P | 14 18 27.6 | +0.3 |
| | 2.3nm,0.9s,baz=93,slow=8.5,SNR=7.3 | | | | | | |
| ASAR | **Alice Springs** | **49.41** | **253** | P | P | 14 18 27.5 | -0.8 |
| | 21nm,0.8s,baz=85,slow=8.5,SNR=9.7 | | | | | | |
| YBH | **Yreka Blue Hor** | **75.08** | **37** | LR | LR | 14 50 57.0 | |
| | comp=Z,132nm,18.1s,baz=314,slow=33 | | | | | | |
| PDAR | **Pinedale Array** | **83.67** | **42** | P | P | 14 22 07.2 | -0.1 |
| | 2.1nm,0.8s,baz=212,slow=2.9,SNR=7.1 | | | | | | |
| ILAR | **Eielson Array** | **84.16** | **11** | P | P | 14 22 08.1 | -0.8 |
| | 1.1nm,0.7s,baz=226,slow=6.1,SNR=4.8 | | | | | | |
| YKA | **Yellowknife Ar** | **91.74** | **23** | P | P | 14 22 45.5 | +0.1 |
| | 0.9nm,1.0s,baz=234,slow=4.3,SNR=3.7 | | | | | | |
| BRTR | **Keskin Array B** | **147.34** | **319** | PKPbc | PKPbc | 14 29 23.0 | +0.6 |
| | 3.7nm,0.9s,baz=108,slow=2.7,SNR=4.2 | | | | | | |

*IDC **12** 14:15:22.2±6.2, 6°.81S×156°.52E, h302km±102km, mb3.1/6, mb1 3.3/7, mb1mx2.8/45, mbtmp3.9/7, Error ellipse: s-maj=133.1km s-min=28.0km az=126.0*

**ISC 12 14:15:22.1±1.1, 6.8S±0.2×156.5E±0.2, h300km, n7, σ0§30/7, mb3.4/6, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HNR | **Honiara** | **4.30** | **128** | P | Pn | 14 16 31.7 | **0.0** |
| | 93nm,0.3s,baz=146,slow=21,SNR=6.3 | | | | | | |
| WRA | **Warramunga Arr** | **25.16** | **237** | P | P | 14 20 21.0 | +0.1 |
| | 0.6nm,0.8s,baz=62,slow=9.0,SNR=2.0 | | | | | | |
| ASAR | **Alice Springs** | **27.43** | **230** | P | P | 14 20 41.1 | -0.1 |
| | 0.5nm,1.0s,baz=60,slow=9.5,SNR=0.8 | | | | | | |
| SONM | **Songino Array** | **69.99** | **327** | P | P | 14 26 02.0 | +0.3 |
| | 0.5nm,0.6s,baz=144,slow=4.6,SNR=4.3 | | | | | | |
| MKAR | **Makanchi Array** | **84.25** | **318** | P | P | 14 27 20.5 | **0.0** |
| | 1.3nm,0.8s,baz=106,slow=6.0,SNR=16 | | | | | | |
| ZALV | **Zalesovo Beam** | **84.86** | **326** | P | | 14 27 22.9 | -0.4 |
| | 1.1nm,0.5s,baz=107,slow=5.9,SNR=5.9 | | | | | | |
| KURBB | **Kurchatov Arra** | **87.64** | **321** | P | P | 14 27 36.6 | -0.3 |
| | 0.3nm,0.6s,baz=102,slow=4.5,SNR=4.1 | | | | | | |

*IDC **12** 14:17:05.5±2.5, 20°.84S×178°.76W, h590km±22km, mb3.3/8, mb1 3.5/9, mb1mx3.1/35, mbtmp4.1/9, Error ellipse: s-maj=47.9km s-min=16.4km az=148.0*

*NEIC **12** 14:17:05.0±1.1, 20°.8S±0°.1×178°.6W±0°.2, h587km±4km, mb4.6/23, Error ellipse: s-maj=23.5km s-min=18.8km az=105.0*

*NOU **12** 14:17:20.9, 20°.10S×179°.08W, h444km, MLv4.3/5, Fiji Islands Region*

**ISC 12 14:17:06.1±0.6, 20°.8S±0°.1×178°.8W±0°.1, h600km, n54, σ1§00/52, mb4.4/22, 1C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LKBA | **Tubou, Lakemba** | **2.58** | **359** | P | P | 14 18 20.2 | **-2.9** |
| TAVE | **Taveuni** | **4.24** | **345** | P | P | 14 18 31.7 | **-1.6** |
| MSVF | **Nonsavu** | **4.31** | **315** | P | P | 14 18 32.3 | **-1.6** |
| | 5.9nm,0.3s,baz=238,slow=22,SNR=28 | | | | | | |
| MSVF | **Nonsavu** | **4.31** | **315** | P | P | 14 18 31.9 | **-2.1** |
| MSVF | **Nonsavu** | **4.31** | **315** | P | P | 14 18 32.5 | **-1.5** |
| DGTI | **Dogotuki** | **4.72** | **342** | P | P | 14 18 35.0 | **-2.0** |
| THZ | **Tophouse** | **22.04** | **197** | P | P | 14 21 15.7 | **-2.3** |
| THZ | | | | IAmb | IAmb | 14 21 23.0 | |
| | comp=Z,28nm,1.5s | | | | | | |
| WHZ | **Wether Hill Ro** | **27.29** | **201** | P | P | 14 22 03.8 | **-0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHZ | | | | | IAmb | IAmb | 14 22 04.0 | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **CTAO** | **Charters Tower** | **32.76** | **265** | | P | **P** | **14 22 52.1** | **+0.6** |
| CTAO | | | | | IAmb | IAmb | 14 23 14.3 | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **PMG** | **Port Moresby** | **34.73** | **284** | | P | **P** | **14 23 08.2** | **+0.1** |
| **COEN** | **Coen** | **36.91** | **274** | | P | **P** | **14 23 26.1** | **+0.2** |
| **WR0** | **Warramunga Arr** | **43.67** | **263** | | P | **P** | **14 24 19.1** | **-0.4** |
| WR0 | | | | | IAmb | IAmb | 14 25 39.3 | | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **43.76** | **257** | | P | **P** | **14 24 20.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **43.76** | **257** | | P | **P** | **14 24 20.3** | **+0.1** |
| | comp=Z,1.8nm,0.5s,baz=92,slow=7.8,SNR=52 | | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **14 25 54.0** | **+0.6** | |
| | comp=Z,0.8nm,0.6s,baz=103,slow=3.9,SNR=9.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **43.76** | **257** | | P | **P** | **14 24 19.8** | **-0.5** |
| **WB0** | **Warramunga Arr** | **43.84** | **263** | | P | **P** | **14 24 21.1** | **+0.2** |
| **WB2** | **Warramunga Arr** | **43.85** | **263** | | P | **P** | **14 24 20.5** | **-0.4** |
| WB2 | | | | | IAmb | IAmb | 14 24 34.3 | | |
| | comp=Z,32nm,2.0s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.85** | **263** | | P | **P** | **14 24 20.7** | **-0.3** |
| WRAB | | | | | IAmb | IAmb | 14 24 46.0 | | |
| | comp=Z,23nm,1.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.86** | **263** | | P | **P** | **14 24 20.6** | **-0.4** |
| | comp=Z,0.6nm,0.3s,baz=96,slow=7.4,SNR=61 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.86** | **263** | | P | **P** | **14 24 20.2** | **-0.9** |
| **MTN** | **Manton Dam** | **48.47** | **271** | | P | **P** | **14 24 55.3** | **-0.5** |
| MTN | | | | | IAmb | IAmb | 14 25 33.1 | | |
| | comp=Z,29nm,1.4s | | | | | | | | |
| **KNRA** | **Kununurra** | **49.94** | **267** | | P | **P** | **14 25 07.1** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **56.91** | **257** | | P | **P** | **14 25 55.7** | **0.0** |
| **MBWA** | **Marble Bar** | **57.10** | **258** | | P | **P** | **14 25 57.0** | **0.0** |
| MBWA | | | | | IAmb | IAmb | 14 27 55.3 | | |
| | comp=Z,43nm,1.6s | | | | | | | | |
| **VNDA** | **Vanda** | **57.53** | **185** | | P | **P** | **14 26 00.0** | **+1.1** |
| VNDA | | | | | IAmb | IAmb | 14 27 15.9 | | |
| | comp=Z,124nm,1.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **69.25** | **180** | | P | **P** | **14 27 13.6** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **76.40** | **346** | | P | **P** | **14 27 54.4** | **-0.3** |
| PEA0B | | | | | IAmb | IAmb | 14 29 19.2 | | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.40** | **346** | | P | **P** | **14 27 55.2** | **+0.6** |
| | comp=Z,1.9nm,0.8s,baz=225,slow=10,SNR=9.7 | | | | | | | | |
| **SDPT** | **Sand Point** | **77.45** | **11** | | P | **P** | **14 28 00.2** | **0.0** |
| **NVAR** | **Mina Array Bea** | **81.74** | **44** | | P | **P** | **14 28 24.1** | **+0.6** |
| | comp=Z,1.0nm,0.6s,baz=226,slow=8.1,SNR=9.5 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.74** | **44** | | P | **P** | **14 28 23.9** | **+0.4** |
| **K05A** | **Summer Lake** | **82.65** | **39** | | P | **P** | **14 28 28.8** | **+0.9** |
| K05A | | | | | IAmb | IAmb | 14 29 01.8 | | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| **SEY** | **Seymchan** | **86.53** | **347** | | P | **P** | **14 28 46.9** | **+0.9** |
| | comp=Z,1.4nm,0.5s,baz=127,slow=6.8,SNR=17 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.82** | **58** | | P | **P** | **14 28 54.0** | **+1.0** |
| | comp=Z,0.8nm,0.8s,baz=202,slow=5.4,SNR=8.2 | | | | | | | | |
| **MLY** | **Manley** | **88.25** | **12** | | P | **P** | **14 28 53.4** | **-0.7** |
| MLY | | | | | IAmb | IAmb | 14 31 44.7 | | |
| | comp=Z,21nm,2.0s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **88.45** | **10** | | P | **P** | **14 28 55.2** | **+0.3** |
| H21K | | | | | IAmb | IAmb | 14 30 25.8 | | |
| | comp=Z,21nm,1.9s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **88.52** | **16** | | P | **P** | **14 28 55.6** | **+0.2** |
| **IMAR** | **Indian Mountai** | **88.59** | **10** | | P | **P** | **14 28 55.7** | **+0.1** |
| **ILAR** | **Eielson Array** | **88.78** | **13** | | P | **P** | **14 28 56.1** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=216,slow=5.1,SNR=8.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **88.78** | **13** | | P | **P** | **14 28 56.8** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **89.56** | **290** | | P | **P** | **14 29 03.8** | **+2.6** |
| | comp=Z,1.3nm,0.8s,baz=136,slow=2.9,SNR=8.7 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **89.67** | **44** | | P | **P** | **14 29 01.5** | **0.0** |
| | comp=Z,1.1nm,0.7s,baz=208,slow=3.4,SNR=12 | | | | | | | | |
| **EGAK** | **Eagle** | **90.09** | **15** | | P | **P** | **14 29 03.3** | **+0.8** |
| **BVAR** | **Borovoye Array** | **118.87** | **320** | | PKP | **PKiKP** | **14 34 46.7** | **-0.4** |
| | comp=Z,0.6nm,0.4s,baz=58,slow=7.9,SNR=7.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.11** | **349** | | PKP | **PKiKP** | **14 35 06.1** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=114,slow=1.5,SNR=5.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.11** | **349** | | | **PKiKP** | **14 35 06.3** | **-0.7** |
| **AKASG** | **Malin Array Be** | **142.95** | **330** | | PKP | | 14 35 29.7 | | |
| | comp=Z,2.6nm,0.6s,baz=43,slow=4.3,SNR=30 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.95** | **330** | | | | 14 35 30.2 | | |
| **AKBB** | **Malin Array Si** | **142.95** | **330** | | | | 14 35 29.5 | | |
| **BRTR** | **Keskin Array B** | **146.53** | **311** | | PKPbc | **PKPbc** | **14 35 41.5** | **0.0** |
| | comp=Z,1.5nm,0.6s,baz=139,slow=5.2,SNR=7.8 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.53** | **311** | | | **PKPbc** | **14 35 41.1** | **-0.5** |
| **CLL** | **Collm** | **148.21** | **346** | | *e*PKPbc | **PKiKP** | **14 35 45.0** | **-1.5** |
| **KHC** | **Kasperske Hory** | **150.08** | **344** | | *e*PKP | **PKiKP** | **14 35 50.0** | **-0.5** |
| **GERES** | **GERESS Array B** | **150.31** | **343** | | PKPbc | **PKiKP** | **14 35 50.8** | **-0.3** |
| | comp=Z,1.5nm,0.8s,baz=46,slow=3.9,SNR=8.0 | | | | | | | | |

*NIED* **12** *14:23:33.9,29˚.41N×130˚.08E,h51km,MW4.1,Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.35; $M_{\theta\theta}$0.16; $M_{\phi\phi}$-0.51; $M_{r\theta}$0.96; $M_{\theta\phi}$-0.28; $M_{r\phi}$1.05; Fault plane solution: $M_0$1.51000×$10^{15}$ NP1:$\phi_s$42.00000°, δ82.00000°,λ,102.00000°. NP2:$\phi_s$167.00000°,δ14.00000°, λ,35.00000°.*

*JMA* **12** *14:23:33.9±0.1,29˚.41N×130˚.08E,h51km±3km,M3.8*

*IDC* **12** *14:23:35.8±1.7,29˚.41N×130˚.04E,h65km±17km,mb3.5/12, mb1 3.6/15,mb1mx3.5/43,mbtmp3.8/15,MS3.2/3, Ms1 3.2/3,ms1mx2.7/51,Error ellipse: s-maj=19.8km s-min=11.7km az=105.0*

*NEIC* **12** *14:23:35.4±1.2,29˚.36N±0˚.07×130˚.1E±0˚.1,h57km±8km, mb4.5/17,Error ellipse: s-maj=13.3km s-min=9.4km az=117.0*

**ISC 12 14:23:33.9**±0.9,**29˚.33N**±0˚.04×**130˚.18E**±0˚.05,**h50**km±9km, **n72,**σ1$^s$**23/79,mb4.1**/21,**Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JNN** | **Nakanoshima** | **0.58** | **333** | P | | **Pn** | **14 23 44.8** | **-1.3** |
| JNN | | | | *e*S | | **Sn** | **14 23 53.2** | **-1.7** |
| **JTAJ** | **Takarajima** | **0.87** | **259** | P | | **Pn** | **14 23 49.4** | **-0.5** |
| JTAJ | | | | *e*S | | **Sn** | **14 24 01.2** | **-0.4** |
| **JYAK** | **Yakushimahirau** | **0.95** | **17** | P | | **Pn** | **14 23 50.4** | **-0.6** |
| JYAK | | | | *e*S | | **Sn** | **14 24 03.0** | **-0.5** |
| **JZK** | **Kikaishima** | **1.03** | **190** | P | | **Pn** | **14 23 54.0** | **+2.0** |
| **JAM** | **Amami Oshima** | **1.04** | **209** | P | | **Pn** | **14 23 52.4** | **+0.2** |
| **JKC** | **Kuchinoerabu** | **1.13** | **1** | P | | **Pn** | **14 23 52.8** | **-0.6** |
| JKC | | | | *e*S | | **Sn** | **14 24 06.7** | **-1.1** |
| **JMTN** | **Minamitane** | **1.24** | **30** | P | | **Pn** | **14 23 55.3** | **+0.5** |
| **JAMN** | **Amaminishikomi** | **1.40** | **219** | P | | **Pn** | **14 23 56.9** | **-0.1** |
| JAMN | | | | *e*S | | **Sn** | **14 24 14.0** | **-0.3** |
| **JTN** | **Tanegashima 3** | **1.49** | **28** | P | | **Pn** | **14 23 58.7** | **+0.4** |
| **JTK** | **Tokunoshima** | **1.88** | **215** | P | | **Pn** | **14 24 04.1** | **+0.5** |
| **JTSR** | **Tashiro 2** | **1.94** | **19** | P | | **Pn** | **14 24 05.0** | **+0.5** |
| **JSU** | **Suzuyama** | **2.18** | **6** | | | **Pn** | **14 24 08.6** | **+0.8** |
| **JOKE** | **Okinoerabujima** | **2.42** | **216** | P | | **Pn** | **14 24 11.9** | **+0.9** |
| **JYRO** | **Yoronjima** | **2.76** | **214** | P | | **Pn** | **14 24 16.3** | **+0.7** |
| **JOW** | **Kunigami** | **3.00** | **215** | P | | **Pn** | **14 24 19.8** | **+0.7** |
| | 8.3nm,0.3s,baz=82,slow=24,SNR=8.8 | | | | | | | | |
| JOW | | | | S | | **Sn** | **14 24 56.5** | **+2.7** | |
| | 6.8nm,0.3s,baz=164,slow=18,SNR=3.5 | | | | | | | | |
| **JOW** | **Kunigami** | **3.00** | **215** | P | | **Pn** | **14 24 19.7** | **+0.7** |
| **JOW** | **Kunigami** | **3.00** | **215** | | | **Pn** | **14 24 19.3** | **+0.3** |
| **JIH** | **Iheya** | **3.01** | **221** | P | | **Pn** | **14 24 20.2** | **+1.2** |
| **JNTH** | **Nagotoyohara** | **3.39** | **215** | P | | **Pn** | **14 24 25.0** | **+0.7** |
| **JKDJ** | **Kitadaitoujima** | **3.51** | **163** | P | | **Pn** | **14 24 26.1** | **+0.2** |
| JKDJ | | | | *e*S | | **Sn** | **14 25 03.8** | **-2.4** |
| **JMZ** | **Minamidaito 2** | **3.62** | **165** | P | | **Pn** | **14 24 28.2** | **+0.8** |
| JMZ | | | | *e*S | | **Sn** | **14 25 06.5** | **-2.3** |
| **JNU** | **Nakatsue** | **3.83** | **9** | P | | **Pn** | **14 24 32.5** | **+2.1** |
| | 12nm,0.3s,baz=136,slow=0.3,SNR=49 | | | | | | | | |
| **JNU** | **Nakatsue** | **3.83** | **9** | | | **Pn** | **14 24 32.7** | **+2.4** |
| **JMN** | **Monobe** | **5.40** | **35** | Pn | | **Pn** | **14 24 53.2** | **+1.2** |
| **JHS** | **Saijyo** | **6.18** | **23** | Pn | | **Pn** | **14 25 03.8** | **+1.2** |
| **KSRS** | **Korea Array** | **8.32** | **347** | P | | **Pn** | **14 25 35.9** | **+4.0** |
| | 0.4nm,0.3s,baz=170,slow=13,SNR=16 | | | | | | | | |
| KSRS | | | | | LR | LR | 14 29 00.4 | | |
| | comp=Z,64nm,19.9s,baz=165,slow=40 | | | | | | | | |
| **INU** | **Inuyama** | **8.33** | **42** | Pn | | **Pn** | **14 25 34.0** | **+1.9** |
| **JGF** | **Kuroka** | **8.71** | **42** | Pn | | **Pn** | **14 25 40.3** | **+3.0** |
| **MAJO** | **Matsushiro** | **9.86** | **41** | | | **Pn** | **14 25 54.5** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **9.86** | **41** | P | | **Pn** | **14 25 55.0** | **+2.0** |
| | 0.2nm,0.3s,baz=238,slow=14,SNR=7.6 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **9.86** | **41** | | | **Pn** | **14 25 54.7** | **+1.7** |
| **MJB9** | **Matsu-Tunnel** | **9.86** | **41** | | | **Pn** | **14 25 54.5** | **+1.5** |
| **BJT** | **Baijiatuau** | **15.68** | **317** | | | **Pn** | **14 27 11.6** | **+0.1** |
| **ASAJ** | **Asahikawa** | **17.77** | **30** | LR | | LR | 14 34 15.9 | | |
| | comp=Z,63nm,20.7s,baz=293,slow=36 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.71** | **322** | P | | **P** | **14 28 59.2** | **-0.4** |
| **SONM** | **Songino Array** | **26.04** | **322** | P | | **P** | **14 29 01.3** | **-1.3** |
| | 1.5nm,0.6s,baz=138,slow=9.2,SNR=11 | | | | | | | | |
| **SONM** | **Songino Array** | **26.04** | **322** | P | | **P** | **14 29 02.2** | **-0.4** |
| **SEY** | **Seymchan** | **36.56** | **17** | P | | **P** | **14 30 34.4** | **-0.2** |
| | 0.6nm,0.7s,baz=171,slow=5.0,SNR=3.5 | | | | | | | | |
| **RABL** | **Rabaul** | **39.45** | **144** | P | | **P** | **14 30 59.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | **40.85** | **309** | P | | **P** | **14 31 10.8** | **0.0** |
| | 0.4nm,0.8s,baz=94,slow=9.2,SNR=4.1 | | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **14 33 10.0** | **-0.9** | |
| | 0.6nm,0.8s,baz=76,slow=2.9,SNR=5.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.85** | **309** | P | | **P** | **14 31 09.8** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **40.91** | **320** | P | | **P** | **14 31 10.9** | **-0.3** |
| | 0.7nm,0.7s,baz=90,slow=7.2,SNR=3.7 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.88** | **314** | P | | **P** | **14 31 34.7** | **-0.7** |
| | 1.1nm,0.6s,baz=98,slow=9.0,SNR=12 | | | | | | | | |
| **KNRA** | **Kununurra** | **44.76** | **182** | P | | **P** | **14 31 43.2** | **+0.5** |
| **WB0** | **Warramunga Arr** | **48.98** | **175** | P | | **P** | **14 32 16.3** | **+0.8** |
| WB0 | | | | | IAmb | IAmb | 14 32 26.2 | | |
| | comp=Z,6.5nm,1.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **49.14** | **175** | P | | **P** | **14 32 17.2** | **+0.4** |
| **WRA** | **Warramunga Arr** | **49.15** | **175** | P | | **P** | **14 32 17.4** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=354,slow=8.4,SNR=7.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.15** | **175** | P | | **P** | **14 32 17.2** | **+0.3** |
| **WB2** | **Warramunga Arr** | **49.15** | **175** | P | | **P** | **14 32 17.6** | **+0.8** |
| WB2 | | | | | IAmb | IAmb | 14 32 40.0 | | |
| | comp=Z,5.1nm,1.1s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.17** | **316** | P | | **P** | **14 32 16.1** | **-0.7** |
| | comp=Z,2.0nm,0.8s,baz=74,slow=16,SNR=12 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **49.18** | **175** | P | | **P** | **14 32 17.9** | **+0.8** |
| WR0 | | | | | IAmb | IAmb | 14 32 31.6 | | |
| | comp=Z,6.7nm,1.3s | | | | | | | | |
| **BRVK** | **Borovoye** | **49.24** | **316** | P | | **P** | **14 32 17.3** | **+0.1** |
| BRVK | | | | | IAmb | IAmb | 14 32 18.1 | | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **52.81** | **176** | P | | **P** | **14 32 45.9** | **+1.6** |
| | comp=Z,0.4nm,0.6s,baz=6.7,slow=14,SNR=8.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **52.81** | **176** | P | | **P** | **14 32 44.1** | **-0.3** |
| **ABKAR** | **Akbulak array** | **55.83** | **312** | P | | **P** | **14 33 05.5** | **-0.7** |
| ABKAR | | | | | IAmb | IAmb | 14 33 06.3 | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.93** | **313** | LR | | LR | 14 59 24.7 | | |
| | comp=Z,52nm,19.1s,baz=50,slow=38 | | | | | | | | |
| **J20K** | **Nowinta River** | **57.81** | **30** | P | | **P** | **14 33 20.4** | **+0.5** |
| J20K | | | | | IAmb | IAmb | 14 33 26.5 | | |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **57.95** | **28** | P | | **P** | **14 33 20.9** | **+0.1** |
| **TOLK** | **Toolik Lake Re** | **59.49** | **25** | P | | **P** | **14 33 32.9** | **+1.3** |
| TOLK | | | | | IAmb | IAmb | 14 33 37.1 | | |
| | comp=Z,5.8nm,1.4s | | | | | | | | |
| **RND** | **Reindeer** | **60.21** | **31** | P | | **P** | **14 33 36.7** | **+0.1** |
| **ILAR** | **Eielson Array** | **60.90** | **29** | P | | **P** | **14 33 41.0** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=285,slow=6.8,SNR=5.7 | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **61.48** | **26** | P | | **P** | **14 33 46.9** | **+1.7** |
| **BCAR** | **Beaver Creek A** | **63.42** | **31** | P | | **P** | **14 33 59.6** | **+1.5** |
| **INK** | **Inuvik** | **65.37** | **24** | P | | **P** | **14 34 10.9** | **+0.2** |
| | comp=Z,1.2nm,0.9s,baz=290,slow=5.9,SNR=4.6 | | | | | | | | |
| **INK** | **Inuvik** | **65.37** | **24** | P | | **P** | **14 34 11.3** | **+0.6** |
| INK | | | | | IAmb | IAmb | 14 34 26.5 | | |
| | comp=Z,4.5nm,1.4s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **66.75** | **19** | P | | **P** | **14 34 19.9** | **+0.4** |
| A36M | | | | | IAmb | IAmb | 14 34 21.0 | | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **71.03** | **330** | P | | **P** | **14 34 44.0** | **-2.3** |
| | comp=Z,1.5nm,0.7s,baz=127,slow=5.0,SNR=4.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **71.03** | **330** | P | | **P** | **14 34 45.9** | **-0.4** |
| **YKA** | **Yellowknife Ar** | **75.00** | **26** | P | | **P** | **14 35 10.2** | **+0.5** |
| | comp=Z,1.2nm,0.7s,baz=306,slow=5.4,SNR=21 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.00** | **26** | P | | **P** | **14 35 10.4** | **+0.7** |
| **SUMG** | **Summit** | **78.07** | **357** | P | | **P** | **14 35 27.2** | **-0.2** |
| **CLL** | **Collm** | **82.59** | **326** | *i* P | | **P** | **14 35 50.9** | **-0.7** |
| | comp=Z,5.0nm,0.7s | | | | | | | | |

*IDC* **12** *14:32:22.3±1.7,35˚.55N×4˚.19W,h0km,mb3.5/2,mb1 3.7/3, mb1mx3.3/53,mbtmp3.4/3,ML3.3/1,MS2.5/1,Ms1 2.5/1, ms1mx2.3/62,Error ellipse: s-maj=53.9km s-min=21.3km az=85.0*

*SFS* **12** *14:32:22.0,35˚.51N×3˚.85W,ML2.9,ALBORAN SUR*

*INMG* **12** *14:32:22.5±1.2,35˚.51N×3˚.84W,h0km,ML2.9,Error ellipse: s-maj=2.8km s-min=2.2km az=30.0*

*IGIL* **12** *14:32:23.3,35˚.51N×3˚.85W,h0km,ML2.9*

**ISC 12 14:32:21.8**±1.0,**35˚.46N**±0˚.04×**3˚.83W**±0˚.05,**h11**km,**n27,** σ1$^s$**60/43,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CHAS** | **Isla Isabel II** | **1.17** | **103** | P | | **Pn** | **14 32 42.8** | **-1.4** |
| CHAS | | | | S | | **Sb** | **14 32 56.7** | **-2.5** |
| **CEU** | **Ceuta** | **1.33** | **290** | S | | **Sb** | **14 32 59.8** | **-4.0** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **340** | P | | **Pn** | **14 32 47.3** | **+0.2** |
| EMAL | | | | S | | **Sb** | **14 33 04.8** | **-0.7** |
| **IFR** | **Ifrane** | **2.22** | **209** | P | | **Pn** | **14 32 59.2** | **+0.6** |
| IFR | | | | S | | **Sn** | **14 33 25.7** | **-0.4** |
| **MDT** | **Midelt** | **2.72** | **194** | LR | | LR | 14 34 01.4 | | |
| | comp=Z,91nm,21.8s,baz=149,slow=36 | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **303** | *e*Pn | | **Pn** | **14 33 18.9** | **+0.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **14 34 01.1** | **-1.1** |
| PVAQ | | | | A | | A | 14 34 04.2 | | |
| | 24nm,0.4s | | | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **304** | *e*Pn | | **Pn** | **14 33 24.0** | **+0.6** |
| PCVE | | | | *e*Sn | | **Sn** | **14 34 09.8** | **-0.7** |
| PCVE | | | | A | | A | 14 34 15.8 | | |
| | 17nm,0.6s | | | | | | | | |
| **PBEJ** | **Beja** | **4.13** | **309** | *e*Pn | | **Pn** | **14 33 26.0** | **+1.1** |
| PBEJ | | | | *e*Sn | | **Sn** | **14 34 12.0** | **-1.2** |
| PBEJ | | | | A | | A | 14 34 16.6 | | |
| | 13nm,0.4s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.21** | **359** | Pn | | **Pn** | **14 33 27.3** | **+1.3** |
| | 1.0nm,0.3s,baz=178,slow=12,SNR=16 | | | | | | | | |
| ESDC | | | | | Lg | Lg | 14 34 32.4 | | |
| | 1.3nm,0.3s,baz=184,slow=27,SNR=4.4 | | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **305** | *e*P | | **Pn** | **14 33 26.7** | **+0.1** |
| MESJ | | | | *e*S | | **Sn** | **14 34 13.3** | **-2.9** |
| MESJ | | | | IAML | | | 14 34 17.6 | | |
| | comp=N,13nm,0.4s | | | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **305** | *e*Pn | | **Pn** | **14 33 27.0** | **+0.5** |
| MESJ | | | | *e*Sn | | **Sn** | **14 34 14.9** | **-1.3** |
| MESJ | | | | A | | A | 14 34 21.7 | | |
| | comp=N,14nm,0.8s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **297** | *e*P | | **Pn** | **14 33 27.8** | **+0.5** |
| MORF | | | | *e*S | | **Sn** | **14 34 14.6** | **-2.9** |
| MORF | | | | IAML | | | 14 34 25.6 | | |
| | comp=N,40nm,0.3s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **297** | *e*Pn | | **Pn** | **14 33 28.0** | **+0.7** |
| MORF | | | | *e*Sn | | **Sn** | **14 34 16.2** | **-1.3** |
| MORF | | | | A | | A | 14 34 21.7 | | |
| | comp=N,9.8nm,1.0s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.54** | **320** | *e*Pn | | **Pn** | **14 33 31.8** | **+1.4** |
| PESTR | | | | *e*Sn | | **Sn** | **14 34 22.3** | **-0.9** |
| PESTR | | | | A | | A | 14 34 25.6 | | |
| | comp=N,11nm,0.3s | | | | | | | | |
| **EVO** | **Evora** | **4.54** | **314** | P | | **Pn** | **14 33 31.2** | **+0.8** |
| EVO | | | | S | | **Sn** | **14 34 21.8** | **-1.4** |
| **EVO** | **Evora** | **4.54** | **314** | *e*Pn | | **Pn** | **14 33 31.4** | **+0.9** |
| EVO | | | | *e*Sn | | **Sn** | **14 34 22.3** | **-0.9** |
| EVO | | | | A | | A | 14 34 27.0 | | |
| | comp=N,16nm,0.3s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.61** | **306** | *e*Pn | | **Pn** | **14 33 31.9** | **+0.5** |
| PNCL | | | | *e*Sn | | **Sn** | **14 34 23.4** | **-1.5** |
| PNCL | | | | A | | A | 14 34 27.3 | | |
| | comp=N,11nm,0.9s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.87** | **325** | *e*Pn | | **Pn** | **14 33 36.8** | **+1.8** |
| **PMTG** | **Montargil** | **5.03** | **317** | *e*Pn | | **Pn** | **14 33 38.4** | **+1.3** |
| PMTG | | | | *e*Sn | | **Sn** | **14 34 33.9** | **-1.3** |
| PMTG | | | | A | | A | 14 34 38.3 | | |
| | comp=N,14nm,0.5s | | | | | | | | |
| **PACT** | **Alcochete** | **5.19** | **311** | *e*Pn | | **Pn** | **14 33 41.1** | **+1.8** |
| **PCBR** | **Castelo Branco** | **5.24** | **328** | *e*Pn | | **Pn** | **14 33 41.2** | **+1.1** |
| PCBR | | | | *e*Sn | | **Sn** | **14 34 39.4** | **-1.1** |
| PCBR | | | | A | | A | 14 34 41.4 | | |
| | comp=N,9.9nm,0.4s | | | | | | | | |
| **PSBE** | **So Bento** | **5.66** | **317** | *e*Pn | | **Pn** | **14 33 47.1** | **+1.3** |
| **PCAS** | **Casmilo, Conde** | **5.89** | **322** | *e*Sn | | **Sn** | **14 34 54.7** | **-1.8** |
| PCAS | | | | A | | A | 14 35 15.5 | | |
| | comp=N,9.6nm,0.1s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.23** | **337** | *e*Pn | | **Pn** | **14 33 55.1** | **+1.4** |
| MVO | | | | *e*Sn | | **Sn** | **14 35 03.1** | **-1.8** |
| MVO | | | | A | | A | 14 35 11.4 | | |
| | comp=N,12nm,0.9s | | | | | | | | |
| **PBRG** | **Braganca** | **6.73** | **341** | *e*Pn | | **Pn** | **14 34 02.0** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **22.77** | **166** | P | | **P** | **14 37 27.9** | **+3.6** |
| | comp=N,1.0nm,0.9s,baz=340,slow=9.2,SNR=3.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.85** | **332** | P | | **P** | **14 43 20.5** | **+0.9** |
| | comp=N,0.5nm,0.7s,baz=58,slow=6.7,SNR=5.9 | | | | | | | | |

*INMG* **12** *14:34:14.0±1.2,35˚.44N×3˚.92W,h2km±4km,ML2.7,Error ellipse: s-maj=3.0km s-min=2.5km az=57.0*

*CNRM* **12** *14:34:14.1,35˚.50N×3˚.87W,h11km,ml3.3*

*SFS* **12** *14:34:14.0,35˚.45N×3˚.91W,ML2.8,ALBORAN SUR*

**ISC 12 14:34:13.4**±1.2,**35˚.52N**±0˚.03×**3˚.83W**±0˚.03,**h4**km±10km, **n23,**σ1$^s$**00/34,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.31** | **197** | P | | **Pg** | **14 34 19.6** | **+0.2** |
| PALE | | | | S | | **Sg** | **14 34 23.5** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.74** | **113** | P | | **Pg** | **14 34 28.0** | **+0.3** |
| GOG | | | | S | | **Sg** | **14 34 37.5** | **+0.3** |
| **AKLM** | **AKL** | **1.00** | **182** | P | | **Pn** | **14 34 34.0** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.19** | **106** | P | | **Pg** | **14 34 34.8** | **-1.4** |
| CHAS | | | | S | | **Sg** | **14 34 51.0** | **-0.6** |
| **CHEFC** | **Chefchaouen** | **1.30** | **252** | P | | **Pb** | **14 34 38.8** | **+0.3** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **339** | S | | **Sg** | **14 34 56.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.35** | **121** | P | | **Pn** | **14 34 38.7** | **-0.5** |
| TAF | | | | S | | **Sn** | **14 34 59.5** | **+1.8** |
| **JBK** | **JBK** | **1.57** | **138** | P | | **Pn** | **14 34 42.5** | **+0.2** |
| **SICH** | **Sidi Chahed** | **1.86** | **221** | P | | **Pb** | **14 34 48.7** | **+0.6** |
| **LCRM** | **LCR** | **2.01** | **205** | P | | **Pb** | **14 34 50.4** | **-0.2** |
| LCRM | | | | S | | **Sb** | **14 35 15.7** | **-0.5** |
| **IFR** | **Ifrane** | **2.26** | **209** | P | | **Pg** | **14 34 56.5** | **-0.4** |
| IFR | | | | S | | **Sb** | **14 35 24.1** | **+0.7** |
| **MD31** | **MD31** | **2.75** | **197** | P | | **Pn** | **14 34 59.1** | **+0.6** |
| MD31 | | | | S | | **Sn** | **14 35 31.9** | **-0.3** |
| **TDRA** | **Tendrara** | **2.88** | **148** | P | | **Pn** | **14 35 01.1** | **+0.8** |
| **ZHG** | **ZHG** | **3.11** | **229** | P | | **Pn** | **14 35 03.3** | **-0.1** |
| ZHG | | | | S | | **Sn** | **14 35 40.5** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.66** | **302** | *e*Pn | | **Pn** | **14 35 11.0** | **+0.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **14 35 52.5** | **-1.9** |
| PVAQ | | | | A | | A | 14 35 57.8 | | |
| | 15nm,1.0s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.66** | **302** | P | | **Pn** | **14 35 11.1** | **+0.3** |
| PVAQ | | | | S | | **Sn** | **14 35 52.3** | **-2.1** |
| **PCVE** | **Castro Verde** | **3.99** | **303** | *e*Sn | | **Sn** | **14 36 02.0** | **-0.7** |
| PCVE | | | | A | | A | 14 36 10.5 | | |
| | 8.1nm,0.4s | | | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **305** | *e*Pn | | **Pn** | **14 35 19.8** | **+1.2** |
| **PESTR** | **Estremoz** | **4.50** | **319** | *e*Sn | | **Sn** | **14 36 14.7** | **-0.4** |
| PESTR | | | | A | | A | 14 36 19.2 | | |
| | 7.1nm,0.6s | | | | | | | | |
| **EVO** | **Evora** | **4.50** | **313** | P | | **Pn** | **14 35 24.0** | **+1.5** |
| EVO | | | | S | | **Sn** | **14 36 15.1** | **-0.2** |
| **EVO** | **Evora** | **4.50** | **313**

comp=Z,2.0nm,0.7s,baz=347,slow=8.9,SNR=17
**WRA Warramunga Arr 45.86 166** P **P** **14 42 41.7 +0.5**
**WB2 Warramunga Arr 45.86 166** P **P** **14 42 41.6 +0.3**
WB2 IAmb IAmb 14 42 48.3
comp=Z,8.9nm,0.9s
**WR0 Warramunga Arr 45.92 166** P **P** **14 42 41.6 -0.1**
WR0 IAmb IAmb 14 42 48.8
comp=Z,10.0nm,1.0s
**MBWA Marble Bar 46.00 185** P **P** **14 42 41.0 -1.3**
MBWA IAmb IAmb 14 42 48.0
comp=Z,7.3nm,0.8s
**NRIK Noril'sk 49.22 344** LR LR 15 06 10.3
comp=Z,109nm,18.4s,baz=34,slow=38
**AS31 Alice Springs 49.38 167** P **P** **14 43 08.8 +0.3**
**ASAR Alice Springs 49.38 167** P **P** **14 43 08.8 +0.2**
comp=Z,0.7nm,0.5s,baz=349,slow=7.0,SNR=22
**ASAR Alice Springs 49.38 167** P **P** **14 43 09.2 +0.7**
**CTA Charters Tower 49.94 152** LR LR 15 04 32.2
comp=Z,30nm,19.0s,baz=303,slow=36
**ABKAR Akbulak array 54.44 314** P **P** **14 43 46.1 +0.1**
**EIDS Eidsvold 56.69 150** P **P** **14 44 05.5 +3.1**
**BBOO Buckleboo 58.68 168** P **P** **14 44 16.1 -0.2**
**BPAW Bear Paw Mtn. 65.88 29** P P 14 45 09.6 +5.3
BPAW IAmb IAmb 14 45 25.9
comp=Z,6.8nm,1.4s
**BMAR Burnt Mountain 67.93 25** P P 14 45 23.9 +6.6
**K27C Chicken 69.73 28** P P 14 45 34.5 +6.0
K27C IAmb IAmb 14 45 52.7
comp=Z,8.2nm,1.4s
**M26K Nabesna, AK 69.76 30** P P 14 45 35.8 +7.0
M26K IAmb IAmb 14 45 54.1
comp=Z,14nm,1.4s
**BCAR Beaver Creek A 70.12 29** P P 14 45 35.6 +4.6
**NOA NORSAR Array B 78.53 333** LR LR 15 24 54.4
comp=Z,41nm,19.0s,baz=340,slow=38
**YKA Yellowknife Ar 81.41 24** P **P** **14 46 35.4 0.0**
comp=Z,0.5nm,0.8s,baz=309,slow=3.0,SNR=3.1

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*IDC* ***12*** *14:39:36.1±3.3,38.°01N×73.°95E,h157km±29km,mb3.2/5, mb1 3.3/9,mb1mx3.0/52,mbtmp3.7/9, Error ellipse: s-maj=29.3km s-min=20.5km az=163.0*
*NNC* ***12*** *14:39:41.8±6.5,38.°59N×74.°22E,h0km,mb4.2,mpv3.8, Error ellipse: s-maj=50.4km s-min=35.5km az=148.0*

**ISC 12 14:39:28.3±0.9,38.°20N±0.°06×74.°18E±0.°07,h10km,n44, σ2s04/43,mb3.4/5,8C-1D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **1.92** | **46** | Pg | Pg | 14 40 11.0 | +5.9 |
| KSH | | | | Sg | **Sg** | **14 40 34.0** | **+4.0** |
| KSH | | | | smax | smax | | |
| | comp=N,810nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,410nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **3.94** | **355** | P | **Pb** | **14 40 39.3** | **+1.2** |
| | SNR=184 | | | | | | |
| **UCH** | **Uchtor** | **4.03** | **4** | P | **Pb** | **14 40 40.8** | **+1.2** |
| | SNR=36 | | | | | | |
| **AAK** | **Ala-Archa** | **4.44** | **3** | P | **Pb** | **14 40 46.1** | **-0.3** |
| | comp=E,1.8nm,0.3s,baz=187,slow=7.6,SNR=26 | | | | | | |
| AAK | | | | S | **Sb** | **14 41 38.5** | **-1.5** |
| | comp=E,3.1nm,0.3s,baz=61,slow=13,SNR=5.4 | | | | | | |
| **AAK** | **Ala-Archa** | **4.44** | **3** | P | **Pb** | **14 40 46.1** | **-0.3** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **4.44** | **3** | ⇑Pn | **Pb** | **14 40 45.8** | **-0.6** |
| | comp=E,9.2nm,0.6s | | | | | | |
| AAK | | | | ⇑Pg | Pg | 14 40 59.1 | +5.8 |
| | comp=E,13nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | **Sb** | **14 41 37.2** | **-2.8** |
| | comp=E,22nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **4.46** | **356** | P | **Pb** | **14 40 46.0** | **-0.8** |
| | SNR=28 | | | | | | |
| **KBK** | **Karagaybulak** | **4.49** | **7** | P | **Pb** | **14 40 47.0** | **-0.2** |
| | SNR=59 | | | | | | |
| **CHMS** | **Chumysh** | **4.81** | **5** | P | **Pb** | **14 40 50.9** | **-1.7** |
| | SNR=8.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.84** | **12** | P | **Pb** | **14 40 51.3** | **-1.9** |
| | SNR=9.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.84** | **12** | ⇑Pn | **Pb** | **14 40 51.0** | **-2.2** |
| | comp=E,18nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Pg | **Pg** | **14 41 04.4** | **+3.5** |
| | comp=E,8.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sb** | **14 41 46.0** | **-5.5** |
| | comp=E,26nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 14 42 05.5 | |
| | comp=E,15nm,0.6s | | | | | | |
| **KST** | **Kastek** | **5.02** | **15** | Pg | **Pg** | **14 41 03.6** | **-0.8** |
| | comp=E,13nm,0.8s | | | | | | |
| KST | | | | Lg | Lg | 14 42 05.4 | |
| | comp=E,18nm,1.2s | | | | | | |
| **USP** | **Ospenovka** | **5.07** | **3** | P | **Pb** | **14 40 53.8** | **-3.2** |
| | SNR=8.2 | | | | | | |
| **DGS** | **Degeres** | **5.18** | **13** | Pg | **Pg** | **14 41 07.9** | **+0.5** |
| | comp=E,26nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 14 42 12.7 | |
| | comp=E,23nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **5.21** | **18** | Pg | **Pg** | **14 41 08.8** | **+0.8** |
| | comp=E,13nm,0.6s | | | | | | |
| MTBS | | | | Lg | Lg | 14 42 14.0 | |
| | comp=E,6.8nm,0.7s | | | | | | |
| **SGDS** | **Sogindy** | **5.26** | **4** | Pg | **Pb** | **14 41 02.8** | **+2.5** |
| | comp=E,9.4nm,0.7s | | | | | | |
| SGDS | | | | Lg | Lg | 14 42 03.3 | |
| | comp=E,22nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.27** | **23** | Pg | **Pg** | **14 41 08.0** | **-1.2** |
| | comp=E,7.1nm,0.8s | | | | | | |
| TNSS | | | | Lg | Lg | 14 42 12.6 | |
| | comp=E,6.2nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **5.42** | **23** | Pg | **Pg** | **14 41 14.5** | **+2.6** |
| | comp=E,4.9nm,1.2s | | | | | | |
| MDOK | | | | Lg | Lg | 14 42 23.8 | |
| | comp=E,12nm,0.7s | | | | | | |
| **KK08** | **Karatay Array** | **5.64** | **331** | ⇑Pn | Pb | 14 40 59.9 | -7.0 |
| | comp=E,4.7nm,0.5s,baz=131,slow=12 | | | | | | |
| KK08 | | | | ⇑Sn | **Sn** | **14 42 02.3** | **+5.2** |
| | comp=E,51nm,0.5s,baz=136,slow=25 | | | | | | |
| **BRLS** | **Boroldaу** | **5.84** | **327** | Pg | Pn | 14 41 00.1 | +5.1 |
| | comp=E,6.1nm,0.2s | | | | | | |
| BRLS | | | | Lg | Lg | 14 41 59.0 | |
| | comp=E,44nm,0.5s | | | | | | |
| **WMQ** | **Urumqi** | **11.65** | **57** | *eP* | Pn | 14 42 21.9 | +7.3 |
| WMQ | | | | smax | smax | | |
| | comp=N,8.0nm,0.9s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,9.0nm,0.9s | | | | | | |
| **PYUN** | **Piuthan** | **12.48** | **141** | *eP* | **Pn** | **14 42 26.6** | **+0.4** |
| | comp=E,22nm,0.4s | | | | | | |
| **GEYT** | **Alibeck** | **12.66** | **274** | P | **Pn** | **14 42 27.9** | **-0.6** |
| | comp=E,0.8nm,0.3s,baz=114,slow=10,SNR=6.3 | | | | | | |
| **DANN** | **Dangsing** | **12.67** | **138** | *eP* | **Pn** | **14 42 29.8** | **+0.9** |
| **KOLN** | **Koldanda** | **13.06** | **140** | *eP* | **Pn** | **14 42 34.8** | **+0.7** |
| | comp=E,13nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **13.42** | **136** | *eP* | **Pn** | **14 42 39.5** | **+0.6** |
| | comp=E,18nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **13.94** | **135** | *eP* | **Pn** | **14 42 46.3** | **+0.2** |
| | comp=E,8.5nm,0.2s | | | | | | |
| **DMN** | **Daman** | **13.98** | **136** | *eP* | **Pn** | **14 42 47.4** | **+0.7** |
| | comp=E,13nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **14.17** | **135** | *eP* | **Pn** | **14 42 49.7** | **+0.4** |
| | comp=E,5.6nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **14.18** | **135** | *eP* | **Pn** | **14 42 49.8** | **+0.3** |
| | comp=E,11nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **14.19** | **133** | *eP* | **Pn** | **14 42 50.2** | **+0.6** |
| | comp=E,8.6nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **14.55** | **133** | *eP* | **Pn** | **14 42 55.5** | **+0.8** |
| | comp=E,41nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **15.33** | **133** | *eP* | **Pn** | **14 43 04.9** | **-0.1** |
| | comp=E,4.9nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **15.69** | **130** | *eP* | **Pn** | **14 43 09.6** | **-0.1** |
| | comp=E,11nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **15.86** | **132** | *eP* | **Pn** | **14 43 11.5** | **-0.3** |
| | comp=E,14nm,0.5s | | | | | | |
| **GOMU** | **GeErMu** | **16.57** | **91** | P | **Pn** | **14 43 21.6** | **+0.6** |
| GOMU | | | | pP | P | 14 43 25.4 | +1.8 |
| GOMU | | | | sP | sP | 14 43 29.5 | +0.2 |
| GOMU | | | | S | **Sn** | **14 46 28.0** | **+2.9** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| GOMU | | | | AMB | AMB | | |
| | comp=Z,110nm,4.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,130nm,10.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,83nm,9.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,95nm,10.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.78** | **322** | P | **Pn** | **14 43 22.9** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=126,slow=9.9,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.36** | **21** | P | **Pn** | **14 43 30.0** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=214,slow=10,SNR=5.3 | | | | | | |
| **GTA** | **Gaotai** | **20.00** | **79** | *eP* | **P** | **14 43 59.9** | **-1.2** |
| GTA | | | | sP | sP | 14 44 33.8 | +27 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,93nm,4.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,140nm,15.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,150nm,15.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,100nm,15.6s | | | | | | |
| **SONM** | **Songino Array** | **25.29** | **57** | P | **P** | **14 44 50.9** | **-4.0** |
| | comp=Z,0.4nm,0.8s,baz=267,slow=9.8,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.27** | **270** | P | P | 14 50 19.4 | -10 |
| | comp=Z,1.3nm,0.6s,baz=45,slow=5.6,SNR=6.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.40** | **4** | P | P | 14 51 25.2 | -8.9 |
| | comp=Z,0.3nm,0.5s,baz=349,slow=5.3,SNR=8.6 | | | | | | |
| **WRA** | **Warramunga Ar** | **80.80** | **124** | P | P | 14 51 32.1 | -10 |
| | comp=Z,0.3nm,0.8s,baz=333,slow=4.9,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **83.20** | **127** | P | P | 14 51 45.2 | -10 |
| | comp=Z,0.2nm,0.8s,baz=318,slow=3.6,SNR=4.3 | | | | | | |

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*IDC* ***12*** *14:41:34.3±1.4,35.°46N×3.°94W,h0km,mb3.1/3,mb1 3.3/5, mb1mx3.2/43,mbtmp3.1/5,ML3.0/2, Error ellipse: s-maj=51.8km s-min=20.4km az=94.0*
*SFS* ***12*** *14:41:35.0,35.°45N×3.°84W,ML3.0,ALBORAN SUR*
*IGIL* ***12*** *14:41:36.3,35.°46N×3.°84W,h0km,ML2.9*
*INMG* ***12*** *14:41:36.5±1.3,35.°47N×3.°87W,h2km±5km,ML2.9, Error ellipse: s-maj=2.9km s-min=2.4km az=13.0*
*CNRM* ***12*** *14:41:41.8,35.°30N×3.°81W,h18km,ml3.6*

**ISC 12 14:41:36.0±1.1,35.°47N±0.°03×3.°88W±0.°03,h13km±8km, n46,σ1s28/63,mb3.3/3,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.26** | **191** | P | **Pg** | **14 41 40.5** | **-0.9** |
| PALE | | | | S | **Sg** | **14 41 43.0** | **-2.0** |
| **GOG** | **Mont Gurugu** | **0.76** | **109** | P | **Pn** | **14 41 55.0** | **+2.4** |
| GOG | | | | S | **Pn** | **14 41 55.0** | **+2.4** |
| **AKLM** | **AKL** | **0.96** | **179** | P | **Pb** | **14 41 54.6** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.22** | **103** | P | **Pn** | **14 41 56.5** | **-2.2** |
| CHAS | | | | S | **Sb** | **14 42 12.3** | **-2.2** |
| **SMIR** | **Smir Dam** | **1.24** | **280** | P | Pg | 14 42 06.0 | +6.1 |
| **CHEFC** | **Chefchaouen** | **1.25** | **254** | P | **Pb** | **14 42 01.0** | **+1.5** |
| CHEFC | | | | S | **Sg** | **14 42 18.2** | **+1.9** |
| **CEU** | **Ceuta** | **1.29** | **290** | P | **Pn** | **14 41 58.0** | **-1.7** |
| CEU | | | | S | **Sb** | **14 42 12.9** | **-3.7** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **341** | P | **Pn** | **14 41 59.6** | **-1.2** |
| EMAL | | | | S | **Sn** | **14 42 17.7** | **-0.9** |
| **TAF** | **Taforalt** | **1.37** | **118** | P | **Pb** | **14 42 02.0** | **+0.5** |
| **JBK** | **JBK** | **1.56** | **136** | P | **Pg** | **14 42 06.0** | **-0.1** |
| JBK | | | | S | **Sg** | **14 42 27.0** | **+0.6** |
| **SICH** | **Sidi Chahed** | **1.80** | **221** | P | Pg | 14 42 16.0 | +5.4 |
| SICH | | | | S | Pg | 14 42 16.0 | +5.4 |
| **LCRM** | **LCR** | **1.95** | **205** | P | **Pg** | **14 42 14.0** | **+0.5** |
| LCRM | | | | S | **Sb** | **14 42 36.5** | **+0.6** |
| **IFR** | **Ifrane** | **2.20** | **208** | P | **Pn** | **14 42 10.9** | **-1.6** |
| IFR | | | | S | **Sn** | **14 42 37.6** | **-2.1** |
| **CZD** | **Col de Zad** | **2.62** | **202** | P | **Pn** | **14 42 18.5** | **+0.3** |
| **MD31** | **MD31** | **2.70** | **196** | P | **Pn** | **14 42 19.8** | **+0.7** |
| **MDT** | **Midelt** | **2.72** | **193** | Pn | **Pn** | **14 42 20.0** | **+0.6** |
| | 2.2nm,0.3s,baz=178,slow=8.7,SNR=13 | | | | | | |
| MDT | | | | Sn | **Sn** | **14 42 52.0** | **-0.2** |
| | 9.4nm,0.3s,baz=58,slow=23,SNR=8.1 | | | | | | |
| **MDT** | **Midelt** | **2.72** | **193** | P | **Pn** | **14 42 20.6** | **+1.1** |
| **TDRA** | **Tendrara** | **2.87** | **147** | P | **Pn** | **14 42 21.4** | **-0.2** |
| **ZHG** | **ZHG** | **3.05** | **229** | P | **Pn** | **14 42 24.0** | **0.0** |
| **PVAQ** | **Vaqueiros** | **3.65** | **303** | *ePn* | **Pn** | **14 42 32.8** | **+0.7** |
| PVAQ | | | | *eSn* | **Sn** | **14 43 13.9** | **-1.1** |
| PVAQ | | | | A | A | 14 43 19.6 | |
| | 28nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.65** | **303** | P | **Pn** | **14 42 31.7** | **-0.4** |
| **PCVE** | **Castro Verde** | **3.98** | **304** | *ePn* | **Pn** | **14 42 37.5** | **+0.8** |
| PCVE | | | | *eSn* | **Sn** | **14 43 23.3** | **0.0** |
| PCVE | | | | A | A | 14 43 34.9 | |
| | 14nm,0.4s | | | | | | |
| **PBEJ** | **Beja** | **4.09** | **310** | *ePn* | **Pn** | **14 42 39.5** | **+1.2** |
| **ESDC** | **Sonseca Array** | **4.20** | **359** | Pn | **Pn** | **14 42 40.6** | **+0.9** |
| | 0.5nm,0.3s,baz=181,slow=12,SNR=19 | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **305** | *eP* | **Pn** | **14 42 40.0** | **+0.1** |
| MESJ | | | | *eS* | **Sn** | **14 43 27.2** | **-1.8** |
| MESJ | | | | IAML | | 14 43 34.6 | |
| | comp=N,26nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **305** | *ePn* | **Pn** | **14 42 40.8** | **+0.9** |
| MESJ | | | | *eSn* | **Sn** | **14 43 29.3** | **+0.3** |
| MESJ | | | | A | A | 14 43 35.9 | |
| | comp=N,18nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.26** | **297** | *eSn* | **Sn** | **14 43 30.8** | **+0.5** |
| MORF | | | | A | A | 14 43 36.5 | |
| | comp=N,9.6nm,1.0s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.33** | **294** | P | **Pn** | **14 42 42.4** | **+0.9** |
| **PESTR** | **Estremoz** | **4.50** | **320** | *ePn* | **Pn** | **14 42 45.5** | **+1.6** |
| PESTR | | | | *eSn* | **Sn** | **14 43 35.6** | **-0.6** |
| PESTR | | | | A | A | 14 43 43.1 | |
| | comp=N,9.9nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **320** | P | **Pn** | **14 42 45.7** | **+1.8** |
| **EVO** | **Evora** | **4.50** | **314** | P | **Pn** | **14 42 44.5** | **+0.6** |
| EVO | | | | S | **Sn** | **14 43 34.5** | **-1.7** |
| **EVO** | **Evora** | **4.50** | **314** | *ePn* | **Pn** | **14 42 44.9** | **+1.0** |
| EVO | | | | *eSn* | **Sn** | **14 43 37.8** | **+1.7** |
| EVO | | | | A | A | 14 43 40.5 | |
| | comp=N,16nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.57** | **307** | *ePn* | **Pn** | **14 42 45.3** | **+0.5** |
| PNCL | | | | *eSn* | **Sn** | **14 43 38.2** | **+0.5** |
| PNCL | | | | A | A | 14 43 41.2 | |
| | comp=N,9.6nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **4.84** | **326** | *ePn* | **Pn** | **14 42 50.0** | **+1.5** |
| PMRV | | | | *eSn* | **Sn** | **14 43 44.2** | **-0.2** |
| PMRV | | | | A | A | 14 44 06.4 | |
| | comp=N,10nm,0.6s | | | | | | |
| **TZRR** | **Tazzarine** | **4.88** | **197** | P | **Pn** | **14 42 49.5** | **+0.3** |
| **PMTG** | **Montargil** | **4.99** | **317** | *ePn* | **Pn** | **14 42 51.9** | **+1.3** |
| PMTG | | | | *eSn* | **Sn** | **14 43 48.4** | **+0.2** |
| PMTG | | | | A | A | 14 43 52.0 | |
| | comp=N,21nm,0.5s | | | | | | |
| **OUZM** | **OUZ** | **5.15** | **209** | P | Pn | 14 42 59.0 | +6.1 |
| **PCBR** | **Castelo Branco** | **5.21** | **328** | *eSn* | **Sn** | **14 43 52.4** | **-1.2** |
| PCBR | | | | A | A | 14 44 09.0 | |
| | comp=N,8.2nm,0.4s | | | | | | |
| **OUK** | **Oukaimeden** | **5.40** | **219** | P | **Pn** | **14 42 58.1** | **+1.5** |
| **PSBE** | **So Bento** | **5.62** | **317** | *ePn* | **Pn** | **14 43 00.5** | **+1.3** |
| **MVO** | **Moncorvo** | **6.20** | **337** | *eSn* | **Sn** | **14 44 17.7** | **-0.4** |
| MVO | | | | A | A | 14 44 41.8 | |
| | comp=N,11nm,0.5s | | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.23** | **219** | P | **Pn** | **14 43 07.3** | **-0.4** |
| **PBRG** | **Braganca** | **6.71** | **341** | *ePn* | **Pn** | **14 43 15.7** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **22.79** | **166** | P | **P** | **14 46 38.8** | **+0.4** |
| | comp=N,0.5nm,0.9s,baz=341,slow=13,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.79** | **50** | P | **P** | **14 52 01.4** | **+0.3** |
| | comp=N,0.1nm,0.5s,baz=288,slow=5.9,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.82** | **332** | P | **P** | **14 52 33.6** | **+0.2** |
| | comp=N,0.3nm,0.7s,baz=65,slow=6.5,SNR=3.4 | | | | | | |

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**NNC 12 15:01:12.6±14.0,36.°66N×69.°29E,h0km,mb4.4,mpv4.0, 3C-2D,Error ellipse: s-maj=120.1km s-min=113.4km az=62.0,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **6.44** | **31** | P | Pn | 15 02 49.4 | +0.4 |
| | SNR=120 | | | | | | |
| **KK07** | **Karatay Array** | **6.49** | **8** | ⇑Pn | Pn | 15 02 51.3 | +2.0 |
| | 2.5nm,0.5s,baz=190,slow=16 | | | | | | |
| KK07 | | | | ⇑Sn | Sn | 15 04 07.0 | +2.9 |
| | 3.2nm,0.6s,baz=196,slow=24 | | | | | | |
| **UCH** | **Uchtor** | **6.87** | **34** | P | Pn | 15 02 54.4 | -0.5 |
| | SNR=54 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.92** | **29** | P | Pn | 15 02 56.1 | +0.8 |
| | SNR=19 | | | | | | |
| **AAK** | **Ala-Archa** | **7.19** | **32** | P | Pn | 15 02 59.1 | 0.0 |
| | SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **7.19** | **32** | ⇓Pn | Pn | 15 02 59.0 | -0.1 |
| | 6.0nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 15 04 19.8 | -1.8 |
| | 11nm,1.0s | | | | | | |
| **KBK** | **Karagaybulak** | **7.41** | **34** | P | Pn | 15 03 01.6 | -0.5 |
| | SNR=7.4 | | | | | | |
| **CHMS** | **Chumysh** | **7.59** | **32** | P | Pn | 15 03 03.7 | -0.8 |
| | SNR=9.0 | | | | | | |
| **USP** | **Ospenovka** | **7.71** | **30** | P | Pn | 15 03 06.2 | 0.0 |
| | SNR=10 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.91** | **36** | P | Pn | 15 03 08.0 | -1.1 |
| | SNR=6.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.91** | **36** | ⇓Pn | Pn | 15 03 07.6 | -1.5 |
| | 13nm,0.5s | | | | | | |

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*IDC* ***12*** *15:18:58.0±2.8,5.°97S×146.°68E,h20km±18km,mb4.3/19, mb1 4.4/22,mb1mx4.1/43,mbtmp4.4/22,ML4.2/1,MS4.1/40, Ms1 4.1/40,ms1mx3.9/60,Error ellipse: s-maj=18.2km s-min=9.1km az=91.0*
*BJI* ***12*** *15:18:59.6±0.0,6.°05S×147.°06E,h70km,mb4.6/44, mB5.1/21,Ms4.6/11,Ms7 4.3/9*
*DJA* ***12*** *15:18:59.6±0.4,6.°5S×14.°7E±.°,h32km±3km,M4.8/41, mB5.3/12,mb4.8/41,MLv5.1/4,Mw(mB)4.7/12*
*NEIC* ***12*** *15:19:01.9±1.7,6.°10S±0.°04×146.°75E±0.°09,h57km±7km, mb4.8/38,Error ellipse: s-maj=12.3km s-min=5.6km az=95.0*
*GCMT* ***12*** *15:19:01.9±0.4,6.°03S±0.°02×146.°70E±0.°03,h32km±1km, MW4.9/56,Moment Tensor Solution. s25,c33; s56,c72; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.99±.24; Mθθ-2.82±.13; Mφφ-0.16±.15; Mrθ-0.61±.16; Mφθ0.98±.09; Mφr-0.73±.25; Best double couple: Mo3.21200×10¹⁶ NP1:φs123.00000°,δ44.00000°,λ113.00000°. NP2: φs273.00000°,δ50.00000°,λ69.00000°. Principal axes: T 3.2610, Plg74.0000°, Azm119.0000°; N -0.0930, Plg16.0000°, Azm286.0000°; P -3.1620, Plg3.0000°, Azm17.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 12 15:18:56.7±0.3,5.°97S±0.°04×146.°75E±0.°05,h10km,n195, σ1s83/176,mb4.7/57,MS4.1/39,4C,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.44** | **173** | Pn | **Pn** | **15 19 51.7** | **+1.4** |
| | 14nm,0.3s,baz=34,slow=5.5,SNR=37 | | | | | | |
| PMG | | | | Pg | **Pb** | **15 20 01.5** | **+3.8** |
| | 61nm,0.3s,baz=348,slow=9.7,SNR=54 | | | | | | |
| PMG | | | | Sn | **Sn** | **15 20 32.9** | **+1.8** |
| | 60nm,0.3s,baz=300,slow=21,SNR=6.4 | | | | | | |
| PMG | | | | Lg | Lg | 15 20 48.5 | |
| | 62nm,0.3s,baz=269,slow=21,SNR=8.2 | | | | | | |
| PMG | | | | LR | LR | 15 21 44.7 | |
| | comp=Z,4μm,19.9s,baz=351,slow=48 | | | | | | |
| **PMG** | **Port Moresby** | **3.44** | **173** | Pn | **Pn** | **15 19 51.3** | **+1.0** |
| **PMG** | **Port Moresby** | **3.44** | **173** | P | **Pn** | **15 19 51.3** | **+1.0** |
| **PMG** | **Port Moresby** | **3.44** | **173** | P | **Pn** | **15 19 51.9** | **+1.6** |
| **MANU** | **Manus Island** | **3.95** | **9** | | **Pn** | **15 20 01.8** | **+4.3** |
| **RABL** | **Rabaul** | **5.67** | **72** | Pn | **Pn** | **15 20 23.7** | **+2.6** |
| **RABL** | **Rabaul** | **5.67** | **72** | P | **Pn** | **15 20 23.7** | **+2.6** |
| **JAY** | **Jayapura** | **6.94** | **299** | Pn | **Pn** | **15 20 41.1** | **+2.6** |
| | 0.7nm,0.3s,baz=121,slow=12,SNR=3.1 | | | | | | |
| JAY | | | | LR | LR | 15 23 49.5 | |
| | comp=Z,2μm,20.6s,baz=119,slow=42 | | | | | | |
| **JAY** | **Jayapura** | **6.94** | **299** | P | **Pb** | **15 21 00.6** | **+3.2** |
| **GENI** | **Genyem** | **7.37** | **297** | P | **Pn** | **15 20 44.5** | **+0.1** |
| | 1.2nm111nm,1.1s | | | | | | |
| **COEN** | **Coen** | **8.68** | **204** | Pn | **Pn** | **15 21 03.3** | **+0.9** |
| **COEN** | **Coen** | **8.68** | **204** | P | **Pn** | **15 21 03.9** | **+1.5** |
| **SRPI** | **Serui, Papua** | **11.25** | **291** | P | **Pn** | **15 21 39.6** | **+2.0** |
| | 4μm71nm,1.0s | | | | | | |
| **MTSU** | **Mount Surprise** | **12.32** | **191** | P | **Pn** | **15 21 51.9** | **-0.4** |
| | baz=12,SNR=7.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **12.32** | **191** | P | **Pn** | **15 21 53.0** | **+0.7** |
| **CTA** | **Charters Tower** | **14.04** | **182** | Pn | **Pn** | **15 22 19.4** | **+3.6** |
| | 0.8nm,0.3s,baz=359,slow=14,SNR=8.5 | | | | | | |
| CTA | | | | LR | LR | 15 27 24.8 | |
| | comp=Z,2μm,20.9s,baz=6.0,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **14.04** | **182** | P | **Pn** | **15 22 19.6** | **+3.8** |
| **CTAO** | **Charters Tower** | **14.04** | **182** | | **Pn** | **15 22 17.3** | **+1.5** |
| **CTAO** | **Charters Tower** | **14.04** | **182** | P | **Pn** | **15 22 19.4** | **+3.6** |
| **FAKI** | **Fak Fak** | **14.77** | **281** | Pn | **Pn** | **15 22 27.9** | **+2.0** |
| **FAKI** | **Fak Fak** | **14.77** | **281** | P | **Pn** | **15 22 22.1** | **-3.7** |
| | 34nm,1.0s | | | | | | |
| **KDU** | **Kakadu** | **15.58** | **244** | P | **Pn** | **15 22 37.3** | **+0.7** |
| | baz=16,SNR=29 | | | | | | |
| **KDU** | **Kakadu** | **15.58** | **244** | P | **Pn** | **15 22 37.6** | **+1.0** |
| **QIS** | **Mount Isa** | **16.07** | **205** | P | **Pn** | **15 22 43.2** | **+0.2** |
| | baz=16,SNR=12 | | | | | | |
| **QIS** | **Mount Isa** | **16.07** | **205** | P | **Pn** | **15 22 44.0** | **+1.1** |
| **SIJI** | **Sorong** | **16.26** | **288** | Pn | **Pn** | **15 22 46.0** | **+0.6** |
| | 2.8nm,0.3s,baz=77,slow=9.9,SNR=16 | | | | | | |
| SIJI | | | | LR | LR | 15 29 22.2 | |
| | comp=Z,427nm,20.3s,baz=86,slow=38 | | | | | | |
| **SWI** | **Sorong** | **16.27** | **288** | P | **P** | **15 22 47.7** | **-0.8** |
| | 113nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **16.84** | **245** | P | **Pn** | **15 22 53.0** | **+0.2** |
| | baz=17,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **16.84** | **245** | P | **Pn** | **15 22 53.7** | **+0.9** |
| **MTN** | **Manton Dam** | **16.84** | **245** | P | **Pn** | **15 22 53.9** | **+1.1** |
| **DRS** | **Darwin Rock St** | **16.91** | **247** | P | **Pn** | **15 22 52.7** | **-0.9** |
| **WB0** | **Warramunga Arr** | **18.23** | **220** | P | **Pn** | **15 23 09.7** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 15 23 28.9 | |
| | comp=Z,69nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **18.28** | **219** | P | **Pn** | **15 23 09.9** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 15 23 25.3 | |
| | comp=Z,57nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **18.39** | **220** | P | **Pn** | **15 23 11.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 15 23 29.2 | |
| | comp=Z,70nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.39** | **220** | P | **Pn** | **15 23 10.5** | **-1.5** |
| | comp=Z,0.8nm,0.3s,baz=41,slow=11,SNR=54 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 27 42.9** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=27,slow=1.8,SNR=8.0 | | | | | | |
| WRA | | | | LR | LR | 15 30 58.9 | |
| | comp=Z,603nm,21.9s,baz=37,slow=39 | | | | | | |
| **WRA** | **Warram

comp=Z,31nm,0.8s,baz=60,slow=8.6,SNR=34
FITZ LR LR 15 34 50.7
comp=Z,666nm,18.4s,baz=56,slow=40
**FITZ Fitzroy Crossi 23.87 238** P **P** **15 24 08.8 -1.8**
baz=24,SNR=31
**OOD Oodnadatta 24.11 205** P **P** **15 24 11.7 -1.0**
**GTOI Gorontalo 24.59 285** P **P** **15 24 18.3 +1.0**
comp=Z,545nmcomp=Z,41nm,0.8s
**ARMA Armidale 24.75 170** P **P** **15 24 19.0 +0.4**
**DAV Davao City (W) 24.78 301** LR LR 15 33 47.5
comp=Z,195nm,21.2s,baz=143,slow=36
**DZM Mont Dzumac 24.87 132** *e*P **P** **15 24 19.0 -0.8**
comp=Z,14nm,0.7s
DZM *e*S **S** **15 28 36.0 -7.1**
comp=Z,280nm,26.3s
DZM *e*LR LR 15 30 35.2
comp=Z,1μm,28.5s
**DZM Mont Dzumac 24.87 132** P **P** **15 24 19.5 -0.3**
comp=Z,11nm,0.7s,baz=335,slow=23,SNR=7.7
DZM LR LR 15 33 50.5
comp=Z,259nm,18.0s,baz=358,slow=36
**DZM Mont Dzumac 24.87 132** P **P** **15 24 19.9 +0.1**
**CMSA Cobar Meteorol 25.45 182** P **P** **15 24 24.6 -0.3**
baz=25,SNR=12
**CMSA Cobar Meteorol 25.45 182** P **P** **15 24 24.8 -0.1**
**APSI Ampana 25.55 280** P **P** **15 24 25.8 -0.1**
comp=Z,560nmcomp=Z,57nm,1.2s
**MRSI Marisa 25.58 284** P **P** **15 24 25.3 -1.0**
comp=Z,37nm,1.1s
**LCRK Leigh Creek 25.64 197** P **P** **15 24 25.5 -1.1**
**WRKA Warakurna 25.93 221** P **P** **15 24 26.9 -2.4**
baz=26,SNR=31
**WRKA Warakurna 25.93 221** P **P** **15 24 27.8 -1.5**
**STKA Stephens Creek 26.22 190** P **P** **15 24 30.5 -1.3**
comp=Z,3.9nm,0.7s,baz=4.3,slow=8.4,SNR=11
STKA LR LR 15 35 43.6
comp=Z,1μm,18.8s,baz=16,slow=38
**STKA Stephens Creek 26.22 190** P **P** **15 24 30.6 -1.3**
baz=26,SNR=9.5
**STKA Stephens Creek 26.22 190** P **P** **15 24 30.2 -1.7**
**STKA Stephens Creek 26.22 190** P **P** **15 24 31.0 -0.8**
**TOLI2 Tolitoli 26.87 284** P **P** **15 24 35.0 -2.9**
TOLI2 IAmb IAmb 15 24 46.5
comp=Z,22nm,0.9s
**TOLI2 Tolitoli 26.87 284** P **P** **15 24 37.0 -0.9**
**SPSI Sidrap Palu 26.95 273** P **P** **15 24 36.7 -2.0**
comp=Z,18nm,1.2s
**MULG Mulgathing 26.97 205** P **P** **15 24 38.2 -0.5**
**WBSI Waikabubak, Su 27.34 261** P **P** **15 24 43.4 +1.2**
comp=Z,63nm,1.3s
**NAPP Napperby 28.23 195** P **P** **15 24 49.5 -0.4**
**HTT Hallett 28.27 194** P **P** **15 24 50.9 +0.5**
baz=28,SNR=17
**HTT Hallett 28.27 194** P **P** **15 24 50.8 +0.5**
**BBOO Buckleboo 28.50 199** P **P** **15 24 51.0 -1.3**
baz=28,SNR=6.9
**BBOO Buckleboo 28.50 199** P **P** **15 24 51.0 -1.3**
**H11S3 WAKE ISLAND Hy 31.27 39** T T 15 58 05.9
baz=220
**H11S2 WAKE ISLAND Hy 31.28 39** T T 15 58 06.5
baz=220
**H11S1 WAKE ISLAND Hy 31.29 39** T T 15 58 06.8
baz=220
**MSVF Nonsavu 32.72 114** LR LR 15 38 20.1
comp=Z,166nm,18.4s,baz=312,slow=35
**MEEK Meekatharra 33.78 229** P **P** **15 25 37.8 -1.2**
baz=34,SNR=14
**MEEK Meekatharra 33.78 229** P **P** **15 25 38.0 -1.0**
**SBUM Sibu 35.48 283** P **P** **15 25 51.9 -2.0**
SBUM IAmb IAmb 15 26 04.1
comp=Z,13nm,1.1s
**MORW Morawa 37.01 228** P **P** **15 26 06.0 -0.7**
**KSM Kuching 37.13 280** P **P** **15 26 06.2 -1.7**
**JOW Kunigami 37.20 332** LR LR 15 40 06.9
comp=Z,213nm,19.3s,baz=152,slow=34
**KLBR Kellerberrin 37.22 223** P **P** **15 26 06.6 -1.9**
baz=37,SNR=8.5
**KLBR Kellerberrin 37.22 223** P **P** **15 26 06.6 -1.9**
**BLDU Ballidu 37.38 225** P **P** **15 26 08.3 -1.4**
baz=37,SNR=8.9
**BLDU Ballidu 37.38 225** P **P** **15 26 08.4 -1.4**
**NWAO Narrogin (SRO) 38.38 222** P **P** **15 26 19.7 +1.4**
**MUN Mundaring 38.51 224** P **P** **15 26 18.5 -1.0**
baz=38,SNR=3.1
**MUN Mundaring 38.51 224** P **P** **15 26 18.4 -1.0**
**TPUB Ta-pu 38.70 320** P **P** **15 26 19.6 -1.5**
**NACB Ninganchiao 38.72 322** P **P** **15 26 19.8 -1.4**
**SSLB Suanglung 38.84 321** P **P** **15 26 21.6 -0.7**
comp=Z,14nm,1.9s
**LEM Lembang 38.89 267** LR LR 15 44 11.7
comp=Z,238nm,20.6s,baz=96,slow=39
**YHNB Yeheng 39.22 322** P **P** **15 26 24.0 -1.5**
**YHNB Yeheng 39.22 322** P **P** **15 26 26.6 +1.1**
**TATO Taipei 39.38 322** P **P** **15 26 26.1 -0.6**
**KNMB Chin-men Tao 40.97 319** P **P** **15 26 39.3 -0.6**
KNMB IAmb IAmb 15 26 40.6
comp=Z,58nm,1.4s
**AFI Afiamalu 41.55 104** LR LR 15 41 44.9
comp=Z,186nm,19.1s,baz=248,slow=33
**JNU Nakatsue 41.70 340** P **P** **15 26 46.0 +0.2**
comp=Z,13nm,0.9s,baz=150,slow=11,SNR=4.0
JNU LR LR 15 43 15.4
comp=Z,163nm,21.0s,baz=162,slow=35
**URZ Urewera 42.32 144** P **P** **15 26 51.1 +0.3**
comp=Z,3.2nm,0.5s,baz=254,slow=0.7,SNR=8.0
URZ LR LR 15 44 15.6
comp=Z,270nm,19.0s,baz=318,slow=36
**URZ Urewera 42.32 144** P **P** **15 26 51.4 +0.6**
**BKZ Black Stump Fm 42.58 145** P **P** **15 26 53.9 +0.9**
**TUWZ Tuamarina 42.83 150** P **P** **15 26 53.3 -1.6**
**MJAR Matsushiro Arr 43.04 350** P **P** **15 26 56.6 -0.1**
comp=Z,1.6nm,0.7s,baz=180,slow=6.6,SNR=4.0
MJAR LR LR 15 43 51.4
comp=Z,79nm,20.3s,baz=154,slow=35
**RPZ Rata Peaks 43.24 154** P **P** **15 26 59.7 +1.5**
**BFZ Birch Farm 43.49 147** P **P** **15 27 00.5 +0.2**
**QIZ Qiongzhong 44.04 305** P **P** **15 27 09.5 +4.5**
QIZ S **S** **15 33 41.8 +4.3**
QIZ pmax pmax
comp=Z,14nm,1.7s
QIZ LR LR
comp=Z,210nm,20.1s
QIZ LR LR
comp=Z,200nm,19.9s
**UBPT Khong Chiam 46.03 298** P **P** **15 27 19.7 -1.2**
UBPT IAmb IAmb 15 27 48.9
comp=Z,9.1nm,1.1s
**NJ2 Nanjing 46.22 327** *e*P **P** **15 27 24.2 +2.1**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**KSRS Korea Array 46.64 339** P **P** **15 27 24.7 -0.5**
comp=Z,7.8nm,0.9s,baz=156,slow=9.6,SNR=19
KSRS LR LR 15 44 00.3
comp=Z,197nm,21.8s,baz=155,slow=32
**IPM Ipoh 46.82 282** P **P** **15 27 25.3 -1.9**
**KULM Kulim 47.37 283** P **P** **15 27 31.3 -0.2**
**WHN Wuhan 47.76 321** ⇑P **P** **15 27 35.3 +1.1**
WHN pmax pmax
comp=Z,54nm,1.2s
**ASAJ Asahikawa 50.00 356** LR LR 15 46 17.6
comp=Z,84nm,21.5s,baz=156,slow=33
**LYN LuoYang 51.68 324** *e*P **P** **15 28 03.1 -0.9**
LYN S **S** **15 35 18.6 -7.0**
LYN pmax pmax
comp=Z,10.0nm,1.2s
LYN LR LR
comp=Z,200nm,16.7s
**USRK Ussuriysk Ar. 51.69 346** P **P** **15 28 03.3 -0.6**
comp=Z,2.3nm,0.6s,baz=157,slow=7.3,SNR=8.2
**HNS HongShan 52.49 328** ⇑P **P** **15 28 08.8 -1.1**
HNS pmax pmax
comp=Z,22nm,1.0s
**CM31 Chiang Mai Arr 53.02 298** IAmb IAmb 15 28 15.5
comp=Z,18nm,1.1s
**CMAR Chiang Mai Arr 53.02 298** P **P** **15 28 13.9 -0.4**
comp=Z,13nm,1.1s,baz=119,slow=5.6,SNR=51
**CHTO Chiang Mai 53.16 299** P **P** **15 28 15.2 -0.1**
CHTO IAmb IAmb 15 28 16.1
comp=Z,11nm,1.1s
**XAN Xi'an 53.50 321** ⇑P **P** **15 28 16.1 -1.5**
XAN pP sP 15 28 32.0 +9.2
XAN sP pP 15 28 40.4 +19
XAN pmax pmax
comp=Z,25nm,1.4s
**BJT Baijiatuan 53.74 331** P **P** **15 28 19.0 -0.2**
BJT IAmb IAmb 15 28 31.2
comp=Z,13nm,1.3s
**BJI Beijing 53.76 331** P **P** **15 28 17.6 -1.7**
BJI pmax pmax
comp=Z,8.0nm,1.2s
**RAR Rarotonga 53.88 112** LR LR 15 47 35.0
comp=Z,90nm,21.4s,baz=250,slow=32
**PZH PanZhiHua 54.25 309** P **P** **15 28 22.0 -1.3**
PZH pmax pmax
comp=Z,10.0nm,1.5s
PZH pmax pmax
comp=Z,110nm,4.1s
**BNX BinXian 54.31 343** ⇑P **P** **15 28 22.8 -0.4**
BNX pmax pmax
comp=Z,14nm,0.6s
**KLR Kul'dur 56.51 348** P **P** **15 28 39.2 +0.2**
comp=Z,0.6nm,0.4s,baz=204,slow=6.8,SNR=4.1
**HHC Hu-ho-hao-te 56.68 328** *e*P **P** **15 28 40.2 -0.3**
HHC pmax pmax
comp=Z,9.0nm,1.1s
HHC pmax pmax
comp=Z,200nm,5.1s
**LZH Lanzhou 58.03 319** *e*P **P** **15 28 49.5 -0.7**
LZH pmax pmax
comp=Z,23nm,1.3s
LZH pmax pmax
comp=Z,100nm,6.2s
LZH LR LR
comp=Z,200nm,16.3s
LZH LR LR
comp=Z,260nm,16.2s
LZH LR LR
comp=Z,230nm,17.5s
**PETK Petropavlovsk- 59.58 8** P **P** **15 29 01.7 +1.2**
comp=Z,2.2nm,0.7s,baz=178,slow=10.0,SNR=3.0
PETK LR LR 15 50 23.4
comp=Z,248nm,21.9s,baz=195,slow=32
**GTA Gaotai 62.56 320** *e*P **P** **15 29 20.2 -1.0**
GTA pmax pmax
comp=Z,3.0nm,1.4s
GTA pmax pmax
comp=Z,96nm,5.1s
GTA LR LR
comp=Z,93nm,14.9s
GTA LR LR
comp=Z,89nm,17.5s
GTA LR LR
comp=Z,82nm,16.0s
**PPT2 Papeete2 63.14 107** *e*LR LR 15 48 22.4
comp=Z,147nm,23.0s
**ULN Ulaanbaatar 63.97 331** P **P** **15 29 30.0 -0.3**
**LSA Lhasa 64.03 307** P **P** **15 29 31.7 +0.2**
LSA pmax pmax
comp=Z,7.0nm,1.4s
**SONM Songino Array 64.26 331** P **P** **15 29 31.8 -0.5**
comp=Z,4.5nm,1.0s,baz=146,slow=6.2,SNR=21
SONM LR LR 15 58 36.4
comp=Z,70nm,19.6s,baz=168,slow=37
**SONM Songino Array 64.26 331** IAmb IAmb 15 29 33.4
comp=Z,9.8nm,1.2s
**MA2 Magadan 65.42 2** P **P** **15 29 39.2 -0.1**
**SEY Seymchan 68.84 3** P **P** **15 30 01.7 +0.7**
comp=Z,2.0nm,0.6s,baz=179,slow=7.2,SNR=4.3
SEY LR LR 15 55 21.0
comp=Z,91nm,21.7s,baz=256,slow=32
**YAK Yakutsk 69.08 351** LR LR 15 59 03.1
comp=Z,44nm,21.8s,baz=96,slow=35
**VNDA Vanda 71.95 177** P **P** **15 30 19.7 -0.3**
comp=Z,4.2nm,0.7s,baz=342,slow=8.1,SNR=5.8
VNDA LR LR 16 00 33.2
comp=Z,128nm,18.2s,baz=336,slow=35
**WMQ Urumqi 72.61 319** *e*P **P** **15 30 25.6 +1.1**
**BILL Bilibino 75.12 7** P **P** **15 30 38.4 -0.2**
**MKAR Makanchi Array 77.32 321** P **P** **15 30 50.1 -1.5**
comp=Z,0.8nm,0.5s,baz=99,slow=7.6,SNR=9.2
**MAKZ Makanchi 77.52 320** P **P** **15 30 51.2 -1.6**
MAKZ IAmb IAmb 15 30 52.2
comp=Z,8.1nm,1.3s
**TIXI Tiksi 78.36 354** P **P** **15 30 55.3 -1.6**
comp=Z,1.6nm,0.4s,baz=272,slow=19,SNR=9.0
**TIXI Tiksi 78.36 354** P **P** **15 30 55.4 -1.5**
TIXI **PcP** **15 31 12.7 +6.6**
**ZALV Zalesovo Beam 78.86 328** LR LR 16 04 51.4
comp=Z,86nm,21.5s,baz=103,slow=35
**KSH Kashi 79.17 312** P **P** **15 31 02.1 -0.1**
KSH pmax pmax
comp=Z,2.0nm,1.5s
**KDAK Kodiak Island 79.99 28** LR LR 16 00 09.9
comp=Z,159nm,21.7s,baz=269,slow=31
**KURK Kurchatov 81.04 323** P **P** **15 31 09.6 -2.2**
KURK IAmb IAmb 15 31 10.9
comp=Z,20nm,1.8s
**MAW Mawson 82.18 203** LR LR 16 07 10.4
comp=Z,109nm,19.3s,baz=69,slow=35
**QSPA South Pole Qui 84.00 180** LR LR 16 07 31.0
comp=Z,216nm,20.0s,baz=10.0,slow=35
**QSPA South Pole Qui 84.00 180** P **P** **15 31 25.5 -1.6**
QSPA IAmb IAmb 15 31 36.5
comp=Z,12nm,1.1s
**KKAR Karatay Array 84.09 314** P **P** **15 31 26.1 -1.9**
**MLY Manley 84.19 22** IAmb IAmb 15 31 29.0
comp=Z,5.1nm,0.8s
**NRIK Noril'sk 85.17 342** P **P** **15 31 31.0 -1.8**
comp=Z,2.4nm,0.4s,baz=127,slow=6.1,SNR=7.3
NRIK LR LR 16 09 31.9
comp=Z,74nm,19.2s,baz=140,slow=36
**NRIK Noril'sk 85.17 342** IAmb IAmb 15 31 32.8
comp=Z,15nm,1.4s
**IL31 85.55 23** IAmb IAmb 15 31 34.1
comp=Z,5.4nm,0.8s
**ILAR Eielson Array 85.55 23** P **P** **15 31 32.1 -2.7**
comp=Z,3.8nm,0.7s,baz=251,slow=4.8,SNR=28
ILAR LR LR 16 05 52.9
comp=Z,128nm,21.1s,baz=248,slow=33
**DAWY Dawson 88.35 25** P **P** **15 31 49.0 +0.5**
**WSAR Wadi Sarin 90.60 293** LR LR 16 17 59.2
comp=Z,24nm,18.7s,baz=132,slow=39
**BBB Bella Bella 91.69 38** LR LR 16 05 39.2
comp=Z,116nm,20.1s,baz=230,slow=30
**INK Inuvik 91.72 21** P **P** **15 32 03.5 -0.6**
comp=Z,2.7nm,1.1s,baz=242,slow=6.1,SNR=3.8
INK LR LR 16 08 18.1
comp=Z,68nm,19.9s,baz=200,slow=32
**YBH Yreka Blue Hor 94.33 49** LR LR 16 08 26.7
comp=Z,158nm,19.2s,baz=324,slow=32
**F05D White Salmon 95.49 45** P **P** **15 32 23.9 +1.9**
**NVAR Mina Array Bea 97.55 52** LR LR 16 11 23.5
comp=Z,114nm,18.6s,baz=190,slow=32
**PFO Pinon Flats O 98.92 57** LR LR 16 10 42.4
comp=Z,154nm,18.9s,baz=312,slow=31
**ELK Elko 99.93 50** LR LR 16 09 03.1
comp=Z,70nm,21.9s,baz=243,slow=30
**SNAA Sanae 99.98 189** LR LR 16 18 37.8
comp=Z,188nm,18.4s,baz=183,slow=36
**PLCA Paso Flores 122.28 147** PKP **PKPdf** **15 37 51.9 -0.6**
comp=Z,1.9nm,0.7s,baz=296,slow=2.8,SNR=4.2
**LPAZ La Paz 139.01 123** PKP **PKPdf** **15 38 25.1 -0.4**
comp=Z,6.7nm,1.0s,baz=366,slow=3.0,SNR=13
**CPUP Villa Florida 140.29 145** PKP **PKPdf** **15 38 26.5 -0.3**
comp=Z,3.7nm,0.9s,baz=112,slow=3.9,SNR=4.8
**TORD Torodi Ar. Bea 144.84 284** PKP **PKPab** **15 38 32.4 -1.6**
comp=Z,3.7nm,0.7s,baz=52,slow=3.7,SNR=23
**KIC Kosan Boka 151.66 272** *e*P **PKPdf** **15 38 49.5 +3.2**
comp=Z,35nm,1.1s
**DBIC Dimbokro 151.77 273** PKPbc **PKPbc** **15 38 52.1 -0.7**
comp=Z,9.3nm,0.7s,baz=125,slow=1.8,SNR=13
DBIC PKPab **PKPab** **15 39 01.2 -0.4**
comp=Z,11nm,0.8s,baz=124,slow=1.5,SNR=8.5
**TIC Toumodi 151.94 273** *e*P **PKPbc** **15 38 51.8 -1.4**
**LIC Lamto 151.94 272** *e*P **PKPbc** **15 38 51.6 -1.6**
comp=Z,54nm,0.9s
**BDFB Brasilia 154.02 146** PKPbc **PKPbc** **15 38 57.3 -0.5**
comp=Z,2.7nm,0.5s,baz=148,slow=3.0,SNR=4.0

*SKHL **12** 15:21:14.7±0.0, 43.80N×147.50E, h56km±5km, mb5.2/5*
*MOS **12** 15:21:14.4±0.9, 43.88N×147.53E, h49km, mb4.3/11, Error ellipse: s-maj=8.5km s-min=6.8km az=74.7*
*NIED **12** 15:21:15.2, 43.72N×147.34E, h17km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.65; Mθθ-0.34; Mϕϕ-0.30; Mrθ0.55; Mθϕ-0.37; Mϕr0.65; Fault plane solution: M₀1.08000×10¹⁵ NP1:ϕs41.00000°, δ71.00000°, λ86.00000°. NP2:ϕs233.00000°, δ19.00000°, λ101.00000°.*
*IDC **12** 15:21:15.9±0.8, 43.99N×147.39E, h42km±7km, mb3.7/16, mb1 3.9/20, mb1mx3.7/55, mbtmp3.9/20, ML3.0/4, MS2.9/4,*

*Ms1 2.9/4, ms1mx2.6/92 Error ellipse: s-maj=22.8km s-min=14.5km az=154.0*
*JMA **12** 15:21:15.2±0.2, 43.72N×147.34E, h17km, M4.5*
*NEIC **12** 15:21:19.1±2.7, 43.99N±0.09×147.46E±0.10, h79km±9km, mb4.2/18, Error ellipse: s-maj=14.5km s-min=9.0km az=154.0*
**ISC 12 15:21:15.7**±0.7, **43.87N**±0.05×**147.48E**±0.05, **h43**km±5km, **n135**, σ1s**26**/148, **mb4.0**/34, **MS3.9**/3, **4C-7D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **0.47** | **270** | *d* iPN | **Pn** | **15 21 25.7** | **-0.5** |
| SHO | | | | *e*S | **Sn** | **15 21 32.6** | **-1.0** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,878nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,625nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,326nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,14μm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,9μm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **0.47** | **270** | *i* P | **Pn** | **15 21 25.7** | **-0.5** |
| SHO | | | | AMB | AMB | 15 21 27.0 | |
| | comp=E,330nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 15 21 27.0 | |
| | comp=E,630nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 15 21 27.0 | |
| | comp=E,880nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **15 21 32.7** | **-0.9** |
| SHO | | | | A | A | 15 21 35.2 | |
| | comp=E,14μm,0.4s | | | | | | |
| SHO | | | | A | A | 15 21 35.2 | |
| | comp=E,9μm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.18** | **278** | ⇓*i* PN | **Pn** | **15 21 35.4** | **-0.3** |
| YUK | | | | *i* S | **Sn** | **15 21 50.0** | **-0.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,371nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,577nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,6μm,0.7s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.18** | **278** | *i* P | **Pn** | **15 21 35.4** | **-0.3** |
| YUK | | | | AMB | AMB | 15 21 36.1 | |
| | comp=N,370nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 15 21 36.1 | |
| | comp=N,580nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 15 21 36.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **15 21 50.2** | **-0.4** |
| YUK | | | | A | A | 15 21 50.5 | |
| | comp=N,2μm,0.6s | | | | | | |
| YUK | | | | A | A | 15 21 50.5 | |
| | comp=N,6μm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.36** | **249** | P | **Pn** | **15 21 37.4** | **-0.8** |
| NEM2 | | | | *e*S | **Sn** | **15 21 52.5** | **-2.5** |
| **NMR** | **Nemuro--Hokkai** | **1.37** | **249** | ⇓*i* PN | **Pn** | **15 21 37.4** | **-0.9** |
| NMR | | | | *e*S | **Sn** | **15 21 53.5** | **-1.7** |
| **NMR** | **Nemuro--Hokkai** | **1.37** | **249** | *i* P | **Pn** | **15 21 37.4** | **-0.9** |
| NMR | | | | *e*S | **Sn** | **15 21 53.5** | **-1.7** |
| **KUR** | **Kuril'sk** | **1.39** | **11** | *c* iPN | **Pn** | **15 21 38.3** | **-0.3** |
| KUR | | | | *i* S | **Sn** | **15 21 54.9** | **-0.8** |
| KUR | | | | pmax | pmax | | |
| | comp=N,174nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,83nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,387nm,0.1s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| **KUR** | **Kuril'sk** | **1.39** | **11** | *i* P | **Pn** | **15 21 38.3** | **-0.3** |
| KUR | | | | AMB | AMB | 15 21 40.5 | |
| | comp=E,170nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 15 21 40.5 | |
| | comp=E,80nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 15 21 40.5 | |
| | comp=E,390nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **15 21 55.0** | **-0.8** |
| KUR | | | | A | A | 15 21 56.9 | |
| | comp=E,2μm,0.4s | | | | | | |
| KUR | | | | A | A | 15 21 56.9 | |
| | comp=E,2μm,0.4s | | | | | | |
| **GLVR** | **Golovnino** | **1.43** | **265** | *d* iPN | **Pn** | **15 21 39.2** | **+0.1** |
| GLVR | | | | *e*S | **Sn** | **15 21 56.5** | **-0.1** |
| GLVR | | | | pmax | pmax | | |
| | comp=N,206nm,0.3s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,3μm,0.3s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=E,437nm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,6μm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,4μm,0.3s | | | | | | |
| **GLVR** | **Golovnino** | **1.43** | **265** | *i* P | **Pn** | **15 21 39.2** | **+0.1** |
| GLVR | | | | AMB | AMB | 15 21 40.1 | |
| | comp=E,210nm,0.4s | | | | | | |
| GLVR | | | | AMB | AMB | 15 21 40.1 | |
| | comp=E,440nm,0.4s | | | | | | |
| GLVR | | | | AMB | AMB | 15 21 40.1 | |
| | comp=E,3μm,0.4s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **15 21 56.5** | **-0.1** |
| GLVR | | | | A | A | 15 22 01.9 | |
| | comp=E,6μm,0.4s | | | | | | |
| GLVR | | | | A | A | 15 22 01.9 | |
| | comp=E,4μm,0.4s | | | | | | |
| **RUSJ** | **Misakicho** | **1.63** | **279** | ⇓*i* PN | **Pn** | **15 21 42.6** | **+0.7** |
| RUSJ | | | | *e*S | **Sn** | **15 22 02.0** | **+0.4** |
| **JRA** | **Rausu** | **1.71** | **273** | P | **Pn** | **15 21 43.3** | **+0.4** |
| **JNSB** | **Nemuroshibetsu** | **1.79** | **268** | P | **Pn** | **15 21 44.7** | **+0.5** |
| JNSB | | | | *e*S | **Sn** | **15 22 06.1** | **+0.4** |
| **JKHN** | **Kushirohamanak** | **1.86** | **246** | P | **Pn** | **15 21 44.8** | **-0.3** |
| **JNK** | **Nakash** | **2.02** | **263** | P | **Pn** | **15 21 47.4** | **+0.1** |
| JNK | | | | *e*S | **Sn** | **15 22 11.1** | **-0.2** |
| **AKK** | **Akkeshi** | **2.10** | **247** | *i* P | **Pn** | **15 21 48.0** | **-0.4** |
| AKK | | | | *e*S | **Sn** | **15 22 13.0** | **-0.3** |
| **JAK** | **Akkeshi** | **2.21** | **248** | P | **Pn** | **15 21 49.4** | **-0.4** |
| JAK | | | | *e*S | **Sn** | **15 22 14.7** | **-1.2** |
| **JTKR** | **Abashiri--Toko** | **2.58** | **273** | P | **Pn** | **15 21 56.1** | **+1.1** |
| **JAR** | **Ashorobuto** | **2.76** | **259** | P | **Pn** | **15 21 58.2** | **+0.8** |
| JAR | | | | *e*S | **Sn** | **15 22 30.2** | **+0.8** |
| **JOB** | **Onbets** | **2.83** | **251** | P | **Pn** | **15 21 58.9** | **+0.6** |
| **JMP** | **Maruseppu** | **2.98** | **274** | P | **Pn** | **15 22 01.8** | **+1.3** |
| **JCH** | **Churui** | **3.26** | **249** | P | **Pn** | **15 22 04.2** | **-0.1** |
| JCH | | | | *e*S | **Sn** | **15 22 40.4** | **-1.4** |
| **JKK2** | **Kamakawa 2** | **3.42** | **272** | P | **Pn** | **15 22 08.5** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **3.53** | **276** | | **Pn** | **15 22 10.3** | **+2.3** |
| **JKA** | **Kamikawa-asahi** | **3.53** | **276** | *e*P | **Pn** | **15 22 10.3** | **+2.3** |
| **ASAJ** | **Asahikawa** | **3.53** | **276** | P | **Pn** | **15 22 10.1** | **+2.0** |
| | comp=E,6.9nm,0.3s,baz=70,slow=12,SNR=59 | | | | | | |
| ASAJ | | | | LR | LR | 15 23 43.3 | |
| | comp=E,217nm,20.0s,baz=142,slow=43 | | | | | | |
| **ASAJ** | **Asahikawa** | **3.53** | **276** | PN | **Pn** | **15 22 10.3** | **+2.3** |
| **JFR** | **Furan** | **3.62** | **260** | P | **Pn** | **15 22 11.4** | **+2.1** |
| **JSE** | **Soyaes** | **3.67** | **289** | P | **Pn** | **15 22 11.1** | **+1.2** |
| **ERM** | **Erimo** | **3.68** | **241** | *i* PN | **Pn** | **15 22 12.7** | **+2.7** |
| **ERM** | **Erimo** | **3.68** | **241** | Pn | **Pn** | **15 22 12.9** | **+2.9** |
| **JEM** | **Erimo** | **3.68** | **241** | | **Pn** | **15 22 12.7** | **+2.7** |
| **JNBK** | **Urakawa-nobuka** | **3.81** | **247** | P | **Pn** | **15 22 11.5** | **-0.4** |
| **JEW** | **Eniwo** | **4.52** | **259** | Pn | **Pn** | **15 22 25.0** | **+3.5** |
| **YSS** | **Yuzh-Sakhalins** | **4.54** | **314** | *e*PN | **Pn** | **15 22 23.0** | **+1.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.54** | **314** | | **Pn** | **15 22 23.1** | **+1.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.54** | **314** | *e*P | **Pn** | **15 22 23.0** | **+1.2** |
| YSS | | | | AMB | AMB | 15 22 23.3 | |
| | comp=Z,80nm,0.3s | | | | | | |
| YSS | | | | *e*S | **Sn** | **15 23 13.2** | **0.0** |
| YSS | | | | A | A | 15 23 20.7 | |
| | comp=Z,20nm,0.4s | | | | | | |
| YSS | | | | A | A | 15 23 20.7 | |
| | comp=Z,20nm,0.4s | | | | | | |
| **JTM** | **Tenmabayashi** | **5.67** | **239** | Pn | **Pn** | **15 22 38.0** | **+0.7** |
| **JMM** | **Marumori** | **7.85** | **222** | Pn | **Pn** | **15 23 06.2** | **-1.1** |
| **TEY** | **Ternei** | **7.87** | **282** | *e*P | **Pn** | **15 23 09.8** | **+2.3** |
| TEY | | | | AMB | AMB | 15 23 15.1 | |
| | comp=Z,10.0nm,1.0s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **JSD** | **Sado** | | **9.09** | **233** | Pn | | **Pn** | **15 23 24.2** | **0.0** |
| **MJA0** | **Matsu Arr-Jizo** | | **10.17** | **227** | *e*PN | | **Pn** | **15 23 41.3** | **+2.2** |
| **MJAR** | **Matsushiro Arr** | | **10.19** | **227** | P | | **Pn** | **15 23 39.0** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=23,slow=14,SNR=4.3 | | | | | | | | |
| MJAR | | | | | LR | | LR | 15 27 57.9 | |
| | comp=Z,58nm,21.6s,baz=28,slow=39 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | | **10.19** | **227** | PN | | **Pn** | **15 23 42.2** | **+2.9** |
| **MJAR** | **Matsushiro Arr** | | **10.19** | **227** | | | **Pn** | **15 23 42.2** | **+2.9** |
| **MAJO** | **Matsushiro** | | **10.19** | **227** | *i* PN | | **Pn** | **15 23 39.0** | **-0.3** |
| **GRNR** | **Gornyy** | | **10.19** | **316** | *e*P | | **Pn** | **15 23 40.9** | **+1.6** |
| **USRK** | **Ussuriysk Ar.** | | **11.16** | **227** | LR | | LR | 15 27 54.7 | |
| | comp=Z,56nm,19.7s,baz=153,slow=36 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | **11.45** | **33** | *i* PN | | **Pn** | **15 23 58.7** | **+2.2** |
| **PEA0B** | **Petropavlovsk-** | | **11.45** | **33** | Pn | | **Pn** | **15 23 55.1** | **-1.4** |
| **PETK** | **Petropavlovsk-** | | **11.45** | **33** | P | | **Pn** | **15 23 55.8** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=199,slow=12,SNR=15 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | | **11.45** | **33** | | | **Pn** | **15 23 55.4** | **-1.1** |
| **KLR** | **Kul'dur** | | **12.08** | **302** | LR | | LR | 15 29 00.5 | |
| | comp=Z,52nm,20.0s,baz=343,slow=39 | | | | | | | | |
| **KLR** | **Kul'dur** | | **12.08** | **302** | *i* PN | | **Pn** | **15 24 06.8** | **+1.8** |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **KLR** | **Kul'dur** | | **12.08** | **302** | *e*P | | **Pn** | **15 24 05.0** | **0.0** |
| **MA2** | **Magadan** | | **15.85** | **6** | *i* P | | **Pn** | **15 24 55.4** | **-0.2** |
| MA2 | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **MA2** | **Magadan** | | **15.85** | **6** | *i* P | | **Pn** | **15 24 55.4** | **-0.2** |
| **KSRS** | **Korea Array** | | **16.15** | **253** | P | | **Pn** | **15 25 00.9** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=60,slow=13,SNR=4.8 | | | | | | | | |
| **SEY** | **Seymchan** | | **19.31** | **7** | P | | **P** | **15 25 35.1** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=194,slow=9.2,SNR=9.6 | | | | | | | | |
| **SEY** | **Seymchan** | | **19.31** | **7** | *i* P | | **P** | **15 25 36.7** | **-0.1** |
| **YAK** | **Yakutsk** | | **20.98** | **336** | *i* P | | **P** | **15 25 55.9** | **+1.0** |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | | **20.98** | **336** | *i* P | | **P** | **15 25 55.9** | **+1.0** |
| **BILL** | **Bilibino** | | **26.18** | **16**[1] | *e*P | | **P** | **15 26 46.3** | **+0.6** |
| BILL | | | | | *e* | | | 15 27 27.0 | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | | |
| BILL | | | | | MLR | MLR | | | |
| | comp=Z,38nm,13.0s | | | | | | | | |
| **BILL** | **Bilibino** | | **26.18** | **16** | *e*P | | **P** | **15 26 46.3** | **+0.6** |
| **SONM** | **Songino Array** | | **28.64** | **293** | P | | **P** | **15 27 08.4** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=76,slow=7.6,SNR=5.7 | | | | | | | | |
| **SONM** | **Songino Array** | | **28.64** | **293** | P | | **P** | **15 27 07.2** | **-1.0** |
| **H11N2** | **WAKE ISLAND Hy** | | **29.04** | **140** | T | | T | 15 57 51.6 | |
| | baz=331,slow=76,SNR=612 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | | **29.05** | **140** | T | | T | 15 57 54.7 | |
| | baz=331,slow=76,SNR=546 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | | **29.05** | **140** | T | | T | 15 57 51.4 | |
| | baz=331,slow=76,SNR=505 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | | **30.01** | **141** | T | | T | 15 59 02.3 | |
| | baz=332,slow=76,SNR=687 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | | **30.02** | **141** | T | | T | 15 59 02.0 | |
| | baz=332,slow=76,SNR=1086 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | | **30.03** | **141** | T | | T | 15 59 04.3 | |
| | baz=332,slow=76,SNR=508 | | | | | | | | |
| **IMAR** | **Indian Mountai** | | **38.41** | **34** | P | | **P** | **15 28 32.4** | **-0.2** |
| **H21K** | **Melozitna Rive** | | **38.77** | **35** | P | | **P** | **15 28 35.4** | **-0.2** |
| **BRLK** | **Bradley Lake** | | **39.69** | **44** | P | | **P** | **15 28 41.5** | **-1.8** |
| **COLD** | **Coldfoot** | | **39.92** | **32** | P | | **P** | **15 28 44.7** | **-0.5** |
| **H23K** | **Yukon River** | | **40.12** | **35** | P | | **P** | **15 28 46.5** | **-0.3** |
| H23K | | | | | IAmb | IAmb | | 15 28 49.0 | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | | **40.19** | **36** | P | | **P** | **15 28 47.3** | **-0.1** |
| I23K | | | | | IAmb | IAmb | | 15 29 06.8 | |
| | comp=Z,4.9nm,1.3s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | | **40.26** | **30** | P | | **P** | **15 28 48.3** | **+0.3** |
| TOLK | | | | | IAmb | IAmb | | 15 28 55.1 | |
| | comp=Z,3.5nm,1.3s | | | | | | | | |
| **GOMU** | **GeErMu** | | **40.46** | **278** | P | | **P** | **15 28 50.6** | **+0.1** |
| GOMU | | | | | pP | | pP | 15 28 54.0 | -8.2 |
| GOMU | | | | | sP | | sP | 15 28 58.6 | -8.6 |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,61nm,4.1s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | | **40.56** | **300** | *i* P | | **P** | **15 28 49.9** | **-1.0** |
| DGZ | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,2.4s | | | | | | | | |
| **H24K** | **Noodor Dome** | | **40.81** | **35** | P | | **P** | **15 28 52.6** | **0.0** |
| H24K | | | | | IAmb | IAmb | | 15 29 03.4 | |
| | comp=Z,3.2nm,1.1s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **41.12** | **307** | PcP | | **PcP** | **15 30 53.6** | **-0.3** |
| | comp=Z,1.0nm,0.4s,baz=106,slow=2.2,SNR=7.9 | | | | | | | | |
| **ILAR** | **Eielson Array** | | **41.25** | **36** | P | | **P** | **15 28 56.1** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=276,slow=8.1,SNR=4.2 | | | | | | | | |
| **K27K** | **Chicken** | | **43.39** | **37** | P | | **P** | **15 29 14.4** | **+0.8** |
| K27K | | | | | IAmb | IAmb | | 15 29 15.3 | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **L27K** | **Beaver Creek,** | | **43.63** | **39** | P | | **P** | **15 29 16.9** | **+1.3** |
| **BCAR** | **Beaver Creek A** | | **43.65** | **39** | P | | **P** | **15 29 16.9** | **+1.2** |
| **EGAK** | **Eagle** | | **43.69** | **36** | P | | **P** | **15 29 16.2** | **+0.2** |
| EGAK | | | | | IAmb | IAmb | | 15 29 16.4 | |
| | comp=Z,7.5nm,1.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | | **44.74** | **298** | P | | **P** | **15 29 22.5** | **-2.2** |
| MK31 | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **MK31** | **Makanchi Array** | | **44.74** | **298** | P | | **P** | **15 29 22.5** | **-2.2** |
| **MKAR** | **Makanchi Array** | | **44.74** | **298** | P | | **P** | **15 29 24.1** | **-0.5** |
| | comp=Z,1.2nm,0.8s,baz=81,slow=8.3,SNR=12 | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **44.74** | **298** | *e*P | | **P** | **15 29 23.5** | **-1.2** |
| MKAR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **44.74** | **298** | P | | **P** | **15 29 23.8** | **-0.9** |
| **KURK** | **Kurchatov** | | **45.66** | **304** | *i* P | | **P** | **15 29 33.6** | **+1.8** |
| KURK | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | | **45.66** | **304** | P | | **P** | **15 29 31.0** | **-0.8** |
| KURK | | | | | IAmb | IAmb | | 15 29 57.7 | |
| | comp=Z,3.2nm,1.2s | | | | | | | | |
| **INK** | **Inuvik** | | **46.17** | **30** | P | | **P** | **15 29 36.0** | **+0.4** |
| | comp=Z,0.6nm,0.4s,baz=295,slow=8.7,SNR=6.6 | | | | | | | | |
| **INK** | **Inuvik** | | **46.17** | **30** | P | | **P** | **15 29 36.0** | **+0.4** |
| **INK** | **Inuvik** | | **46.17** | **30** | P | | **P** | **15 29 35.3** | **-0.3** |
| INK | | | | | IAmb | IAmb | | 15 29 47.4 | |
| | comp=Z,2.3nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | | **51.52** | **296** | *c*e*i*P | | **P** | **15 30 16.8** | **-0.4** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | | **51.52** | **296** | *e*P | | **P** | **15 30 16.8** | **-0.4** |
| **KSH** | **Kashi** | | **52.04** | **291** | P | | **P** | **15 30 25.1** | **+4.0** |
| **ARU** | **Arti** | | **54.42** | **317** | *d i*P | | **P** | **15 30 38.1** | **0.0** |
| ARU | | | | | | | | 15 32 36.3 | |
| ARU | | | | | S | | **S** | **15 38 15.0** | **+1.7** |
| ARU | | | | | SS | | **SS** | **15 41 55.7** | **+0.4** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.8s | | | | | | | | |
| **ARU** | **Arti** | | **54.42** | **317** | *i* P | | **P** | **15 30 38.1** | **0.0** |
| **YKA** | **Yellowknife Ar** | | **55.57** | **34** | P | | **P** | **15 30 46.3** | **0.0** |
| | comp=Z,0.9nm,0.6s,baz=298,slow=6.7,SNR=12 | | | | | | | | |
| **GAR** | **Garm** | | **56.08** | **294** | P | | **P** | **15 30 48.2** | **-2.3** |
| **ABKAR** | **Akbulak array** | | **57.17** | **309** | P | | **P** | **15 30 56.0** | **-1.9** |
| ABKAR | | | | | IAmb | IAmb | | 15 30 58.2 | |
| | comp=Z,2.1nm,1.1s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **59.22** | **340** | P | | **P** | **15 31 11.2** | **-0.8** |
| | comp=Z,5.4nm,1.0s,baz=37,slow=3.0,SNR=3.5 | | | | | | | | |
| **MTSU** | **Mount Surprise** | | **61.77** | **183** | P | | **P** | **15 31 32.6** | **+2.7** |
| **WB2** | **Warramunga Arr** | | **64.63** | **194** | P | | **P** | **15 31 48.5** | **-0.3** |
| **FINES** | **FINESS Array B** | | **64.88** | **333** | P | | **P** | **15 31 48.7** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=46,slow=8.2,SNR=13 | | | | | | | | |
| **FINES** | **FINESS Array B** | | **64.88** | **333** | P | | **P** | **15 31 48.3** | **-1.7** |
| **OBN** | **Obninsk** | | **65.36** | **324** | *d i*P | | **P** | **15 31 53.3** | **+0.1** |
| OBN | | | | | *e* | | | 15 32 26.2 | |
| OBN | | | | | *e* | | | 15 34 18.5 | |
| OBN | | | | | *e*S | | S | 15 41 10.5 | +37 |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| OBN | | | | | MLR | MLR | | | |
| | comp=Z,67nm,18.0s | | | | | | | | |
| **OBN** | **Obninsk** | | **65.36** | **324** | *i* P | | **P** | **15 31 53.3** | **+0.1** |
| **NVAR** | **Mina Array Bea** | | **67.31** | **58** | P | | **P** | **15 32 07.1** | **+0.8** |
| | comp=Z,0.7nm,0.7s,baz=281,slow=6.8,SNR=6.5 | | | | | | | | |
| NVAR | | | | | pP | | pP | 15 32 18.9 | +0.2 |
| | comp=Z,0.6nm,0.7s,baz=291,slow=7.0,SNR=4.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | | **68.35** | **193** | P | | **P** | **15 32 12.7** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=13,slow=7.0,SNR=1.1 | | | | | | | | |
| ASAR | | | | | pP | | pP | 15 32 26.4 | +1.5 |
| | comp=Z,0.5nm,0.7s,baz=15,slow=5.9,SNR=2.1 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | | **69.58** | **339** | P | | **P** | **15 32 18.6** | **-1.2** |
| | comp=Z,1.0nm,0.4s,baz=32,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | | **69.58** | **339** | P | | **P** | **15 32 18.6** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=32,slow=6.6,SNR=11 | | | | | | | | |
| **PDAR** | **Pinedale Array** | | **69.65** | **50** | P | | **P** | **15 32 20.7** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=290,slow=2.6,SNR=5.7 | | | | | | | | |
| **PDAR** | **Pinedale Array** | | **69.65** | **50** | P | | **P** | **15 32 19.7** | **-1.2** |
| **KIV** | **Kislovodsk** | | **69.86** | **312** | *e*P | | **P** | **15 32 22.8** | **+0.9** |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | | **69.86** | **312** | *e*P | | **P** | **15 32 22.8** | **+0.9** |
| **KBZ** | **Khabaz** | | **69.90** | **312** | P | | **P** | **15 32 22.6** | **+0.5** |
| | comp=Z,4.0nm,0.8s,baz=91,slow=1.5,SNR=9.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | | **71.62** | **324** | P | | **P** | **15 32 31.3** | **-1.1** |
| | comp=Z,1.0nm,0.3s,baz=41,slow=6.7,SNR=11 | | | | | | | | |
| **AKBB** | **Malin Array Si** | | **71.62** | **324** | *c*e*i*P | | **P** | **15 32 32.3** | **-0.1** |
| **BUR08** | **Bucovina Ar. S** | | **75.66** | **324** | P | | **P** | **15 32 55.3** | **-1.0** |
| BUR08 | | | | | IAmb | IAmb | | 15 32 56.5 | |
| | comp=Z,7.7nm,1.5s | | | | | | | | |
| **CLL** | **Collm** | | **77.32** | **333** | *i* P | | **P** | **15 33 04.8** | **-0.6** |
| CLL | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **CLL** | **Collm** | | **77.32** | **333** | *i* P | | **P** | **15 33 04.8** | **-0.6** |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| CLL | | | | | Lm | MLR | | 16 29 00.0 | |
| | comp=Z,100nm,20.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **77.63** | **314** | P | | **P** | **15 33 07.5** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=79,slow=6.4,SNR=4.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **77.63** | **314** | *e*P | | **P** | **15 33 07.6** | **0.0** |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **GERES** | **GERESS Array B** | | **79.17** | **331** | P | | **P** | **15 33 15.3** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=47,slow=5.9,SNR=5.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | | **82.38** | **56** | P | | **P** | **15 33 33.7** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=297,slow=3.5,SNR=8.4 | | | | | | | | |
| TXAR | | | | | pP | | pP | **15 33 45.8** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=295,slow=3.9,SNR=9.1 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | | **142.72** | **90** | T | | T | 18 19 53.6 | |
| | baz=305,slow=77,SNR=5.7 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | | **142.74** | **90** | T | | T | 18 19 53.9 | |
| | baz=305,slow=77,SNR=7.2 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | | **142.74** | **90** | T | | T | 18 19 55.7 | |
| | baz=305,slow=77,SNR=7.6 | | | | | | | | |

*IDC* ***12*** *15:24:57.8±1.2,50.28N×179.11E,h0km,mb3.8/10, mb1 4.0/12,mb1mx3.7/61,mbtmp3.8/12, ML2.9/2, Error ellipse: s-maj=33.6km s-min=20.9km az=1.0*
*NEIC* ***12*** *15:25:02.5±1.7,50.2N±0.1×179.2E±0.2,h29km±9km, mb4.0/34,ML3.4/4(AEIC), Error ellipse: s-maj=21.5km s-min=13.8km az=141.0*
*AEIC* ***12*** *15:25:03±2.6,50.26N±0.09×179.5E±0.2,h27km±6km, Error ellipse: s-maj=19.2km s-min=5.6km az=127.0*
**ISC 12 15:25:02.9±0.8,50.3N±0.1×179.15E±0.07,h35km,n70,**
**σ0$^{s}$67/73,mb3.9/24,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **GASW** | **Gareloi Southw** | **1.98** | **39** | | | **Pn** | **15 25 33.8** | **-0.2** |
| GASW | | | | | | **Sn** | **15 25 58.3** | **+0.8** |
| **GAEA** | **Gareloi East** | **2.03** | **40** | | | **Pn** | **15 25 35.1** | **+0.6** |
| **GANO** | **Gareloi North** | **2.04** | **39** | | | **Pn** | **15 25 34.7** | **+0.1** |
| **TASE** | **Tanaga Southea** | **2.38** | **47** | | | **Pn** | **15 25 39.6** | **+0.2** |
| **TAPA** | **Tanaga Point A** | **2.48** | **50** | | | **Pn** | **15 25 41.0** | **+0.3** |
| **KIMD** | **Kanaga Island** | **2.74** | **55** | | | **Pn** | **15 25 44.2** | **-0.1** |
| KIMD | | | | | | **Sn** | **15 26 16.7** | **+0.1** |
| **KIWB** | **Kanaga Island** | **2.84** | **54** | | | **Pn** | **15 25 45.5** | **-0.1** |
| **KIKV** | **Kanaga Island** | **2.84** | **54** | | | **Pn** | **15 25 45.7** | **0.0** |
| **KICM** | **Kanaga Island** | **2.85** | **53** | | | **Pn** | **15 25 47.0** | **+1.2** |
| **GSCK** | **Great Sitkin C** | **3.44** | **57** | | | **Pn** | **15 25 54.4** | **+0.4** |
| **GSTD** | **Great Sitkin T** | **3.47** | **57** | | | **Pn** | **15 25 54.3** | **-0.1** |
| GSTD | | | | | | **Sn** | **15 26 34.7** | **+0.4** |
| **GSMY** | **Great Sitkin M** | **3.52** | **57** | | | **Pn** | **15 25 55.8** | **+0.8** |
| **ATKA** | **Atka Island** | **4.62** | **62** | | | **Pn** | **15 26 09.6** | **-0.4** |
| **KOFP** | **Korovin Flat P** | **4.70** | **62** | | | **Pn** | **15 26 11.8** | **+0.5** |
| **NIKH** | **Nikolski High** | **7.95** | **65** | Pn | | **Pn** | **15 26 56.1** | **+0.3** |
| **MSW** | **Makushin Switc** | **9.41** | **62** | | | **Pn** | **15 27 16.3** | **+0.6** |
| **UNV** | **Unalaska Valle** | **9.54** | **62** | | | **Pn** | **15 27 17.8** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **13.60** | **290** | Pn | | **Pn** | **15 28 12.5** | **-0.5** |
| | 0.2nm,0.3s,baz=95,slow=19,SNR=7.5 | | | | | | | |
| **OHAK** | **Old Harbor** | **17.65** | **56** | Pn | | **Pn** | **15 29 03.6** | **-2.0** |
| **BILL** | **Bilibino** | **18.95** | **345** | P | | **Pn** | **15 29 21.4** | **+0.1** |
| **SEY** | **Seymchan** | **19.26** | **321** | P | | **P** | **15 29 24.6** | **+0.6** |
| | 0.1nm,0.3s,baz=121,slow=14,SNR=14 | | | | | | | |
| **K20K** | **Telida** | **19.48** | **38** | P | | **P** | **15 29 27.2** | **+0.7** |
| **J20K** | **Nowinta River** | **19.87** | **35** | P | | **P** | **15 29 30.8** | **+0.1** |
| J20K | | | | | IAmb | IAmb | 15 29 36.1 | |
| | comp=Z,8.9nm,1.3s | | | | | | | |
| **PPLA** | **Purkeypile** | **20.02** | **40** | P | | **P** | **15 29 33.3** | **+0.8** |
| PPLA | | | | | IAmb | IAmb | 15 29 56.9 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **CAST** | **Castle Rocks** | **20.30** | **39** | P | | **P** | **15 29 35.4** | **0.0** |
| CAST | | | | | IAmb | IAmb | 15 29 36.2 | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **KTH** | **Kantishna Hill** | **20.82** | **39** | P | | **P** | **15 29 41.0** | **0.0** |
| KTH | | | | | IAmb | IAmb | 15 29 44.2 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **IMAR** | **Indian Mountai** | **21.02** | **31** | P | | **P** | **15 29 42.5** | **-0.6** |
| **BPAW** | **Bear Paw Mtn.** | **21.04** | **38** | P | | **P** | **15 29 42.5** | **-0.9** |
| BPAW | | | | | IAmb | IAmb | 15 29 46.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** | **21.16** | **33** | P | | **P** | **15 29 45.2** | **+0.6** |
| H21K | | | | | IAmb | IAmb | 15 30 10.9 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.74** | **45** | P | | **P** | **15 29 52.2** | **+1.2** |
| **NEA2** | **Nenana** | **22.01** | **37** | P | | **P** | **15 29 53.1** | **-0.6** |
| NEA2 | | | | | IAmb | IAmb | 15 29 55.6 | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **DHY** | **Denali Highway** | **22.11** | **42** | P | | **P** | **15 29 54.7** | **-0.3** |
| DHY | | | | | IAmb | IAmb | 15 29 56.2 | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **22.34** | **45** | P | | **P** | **15 29 56.9** | **-0.5** |
| **MDM** | **Murphy Dome** | **22.49** | **37** | P | | **P** | **15 29 58.0** | **-0.9** |
| MDM | | | | | IAmb | IAmb | 15 30 16.8 | |
| | comp=Z,4.8nm,1.2s | | | | | | | |
| **HDA** | **Harding Lake** | **22.77** | **39** | P | | **P** | **15 30 01.3** | **-0.5** |
| HDA | | | | | IAmb | IAmb | 15 30 20.8 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **COLD** | **Coldfoot** | **22.89** | **31** | P | | **P** | **15 30 02.4** | **-0.7** |
| **ILAR** | **Eielson Array** | **22.94** | **38** | P | | **P** | **15 30 02.2** | **-1.3** |
| | comp=Z,0.4nm,0.8s,baz=235,slow=7.8,SNR=4.5 | | | | | | | |
| **H24K** | **Noodor Dome** | **23.01** | **35** | P | | **P** | **15 30 03.0** | **-1.4** |
| H24K | | | | | IAmb | IAmb | 15 30 05.4 | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **23.88** | **28** | | | **P** | **15 30 12.3** | **-0.5** |
| **FYU** | **Fort Yukon** | **24.30** | **34** | P | | **P** | **15 30 16.2** | **-0.4** |
| FYU | | | | | IAmb | IAmb | 15 30 41.1 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **24.36** | **45** | P | | **P** | **15 30 17.0** | **-0.3** |
| **BCAR** | **Beaver Creek A** | **24.55** | **44** | P | | **P** | **15 30 17.6** | **-1.4** |
| **K27K** | **Chicken** | **24.67** | **41** | P | | **P** | **15 30 18.9** | **-1.1** |
| **BMAR** | **Burnt Mountain** | **24.89** | **33** | P | | **P** | **15 30 21.9** | **-0.1** |
| **EGAK** | **Eagle** | **25.25** | **40** | P | | **P** | **15 30 24.1** | **-1.1** |
| **A36M** | **Sachs Harbour** | **32.70** | **28** | P | | **P** | **15 31 31.0** | **-0.3** |
| A36M | | | | | IAmb | IAmb | 15 31 33.4 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **HOLB** | **Holberg** | **32.99** | **69** | P | | **P** | **15 31 33.4** | **-0.8** |
| **YKA** | **Yellowknife Ar** | **36.95** | **45** | P | | **P** | **15 32 08.3** | **+0.1** |
| | comp=Z,1.8nm,0.7s,baz=280,slow=8.3,SNR=14 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.95** | **45** | P | | **P** | **15 32 07.5** | **-0.6** |
| **JSU** | **Suzuyama** | **40.47** | **261** | P | | **P** | **15 32 39.0** | **+1.0** |
| **DLMT** | **Dillon** | **44.65** | **69** | P | | **P** | **15 33 11.5** | **-0.5** |
| DLMT | | | | | IAmb | IAmb | 15 33 29.8 | |
| | comp=Z,2.4nm,1.1s | | | | | | | |
| **BCYI** | **Bear Canyon** | **44.73** | **70** | P | | **P** | **15 33 12.3** | **-0.3** |
| **KVN** | **Kaiserville** | **44.77** | **79** | P | | **P** | **15 33 12.4** | **-0.7** |
| **MCMT** | **McKenzie Canyo** | **44.78** | **69** | P | | **P** | **15 33 12.9** | **-0.2** |
| **BOZ** | **Bozeman (W)** | **45.10** | **68** | P | | **P** | **15 33 15.6** | **0.0** |
| BOZ | | | | | IAmb | IAmb | 15 33 18.8 | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **YHH** | **Holmes Hill** | **46.00** | **68** | P | | **P** | **15 33 23.5** | **+0.7** |
| **R11A** | **Troy Canyon, C** | **46.77** | **79** | P | | **P** | **15 33 28.3** | **-0.5** |
| R11A | | | | | IAmb | IAmb | 15 33 41.5 | |
| | comp=Z,2.4nm,1.5s | | | | | | | |
| **TPNV** | **Topopah Spring** | **47.20** | **81** | P | | **P** | **15 33 31.5** | **-0.6** |
| TPNV | | | | | IAmb | IAmb | 15 33 34.0 | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **FCC** | **Fort Churchill** | **47.68** | **45** | P | | **P** | **15 33 35.7** | **+0.3** |
| **PDAR** | **Pinedale Array** | **47.91** | **70** | P | | **P** | **15 33 38.0** | **+0.3** |
| | comp=Z,0.9nm,0.8s,baz=319,slow=4.3,SNR=6.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **47.91** | **70** | P | | **P** | **15 33 37.4** | **-0.3** |
| **U15A** | **North Rim** | **50.02** | **78** | P | | **P** | **15 33 54.5** | **+0.5** |
| U15A | | | | | IAmb | IAmb | 15 33 55.5 | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.70** | **308** | P | | **P** | **15 35 02.9** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=48,slow=5.8,SNR=3.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.13** | **79** | P | | **P** | **15 35 07.5** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=299,slow=5.0,SNR=6.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **66.58** | **346** | P | | **P** | **15 35 48.1** | **-0.7** |
| | comp=Z,1.5nm,0.7s,baz=60,slow=11,SNR=3.7 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.64** | **354** | P | | **P** | **15 36 02.2** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=8.1,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.64** | **354** | P | | **P** | **15 36 02.4** | **+0.4** |
| | comp=Z,1.1nm,0.6s,baz=8.8,slow=6.3,SNR=5.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.20** | **341** | P | | **P** | **15 36 47.0** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=22,slow=6.5,SNR=6.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **83.78** | **221** | P | | **P** | **15 37 28.5** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=54,slow=4.8,SNR=4.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.41** | **334** | P | | **P** | **15 37 37.2** | **+0.6** |
| | comp=Z,0.6nm,0.8s,baz=36,slow=4.6,SNR=3.8 | | | | | | | |

*IDC* ***12*** *15:28:37.4±3.1,5.93S×146.72E,h21km±20km,mb4.0/9, mb1 4.1/11,mb1mx3.7/45,mbtmp4.1/11,ML4.1/1,MS3.4/5, Ms1 3.4/5,ms1mx3.0/59,Error ellipse: s-maj=27.8km s-min=11.1km az=99.0*
*NEIC* ***12*** *15:28:41.4±1.5,6.03S±0.06×146.66E±0.09,h50km±9km, mb4.3/19,Error ellipse: s-maj=13.0km s-min=7.6km az=71.0*
**ISC 12 15:28:36.2±0.6,5.90S±0.06×146.60E±0.09,h10km,n72,**
**σ1$^{s}$38/69,mb4.3/14,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PMG** | **Port Moresby** | **3.53** | **171** | Pn | | **Pn** | **15 29 31.0** | **-0.2** |
| | 12nm,0.3s,baz=45,slow=7.0,SNR=26 | | | | | | | |
| PMG | | | | | Pg | **Pb** | **15 29 41.6** | **+2.8** |
| | 41nm,0.3s,baz=350,slow=9.0,SNR=34 | | | | | | | |
| PMG | | | | | Sn | **Sn** | **15 30 11.7** | **-1.2** |
| | 37nm,0.3s,baz=106,slow=22,SNR=9.4 | | | | | | | |
| PMG | | | | | Lg | Lg | 15 30 28.0 | |
| | 42nm,0.3s,baz=295,slow=20,SNR=7.7 | | | | | | | |
| PMG | | | | | LR | LR | 15 31 15.8 | |
| | comp=Z,674nm,20.9s,baz=0.0,slow=46 | | | | | | | |
| **PMG** | **Port Moresby** | **3.53** | **171** | | | **Pn** | **15 29 31.4** | **+0.3** |
| **PMG** | **Port Moresby** | **3.53** | **171** | P | | **Pn** | **15 29 30.9** | **-0.2** |
| **PMG** | **Port Moresby** | **3.53** | **171** | P | | **Pn** | **15 29 32.1** | **+1.0** |
| **RABL** | **Rabaul** | **5.79** | **73** | Pn | | **Pn** | **15 30 04.2** | **+1.9** |
| **JAY** | **Jayapura** | **6.78** | **299** | LR | | LR | 15 33 29.8 | |
| | comp=Z,289nm,19.4s,baz=132,slow=42 | | | | | | | |
| **COEN** | **Coen** | **8.69** | **203** | | | **Pn** | **15 30 43.6** | **+1.5** |
| **COEN** | **Coen** | **8.69** | **203** | P | | **Pn** | **15 30 43.7** | **+1.6** |
| **HNR** | **Honiara** | **13.68** | **106** | LR | | LR | 15 36 20.9 | |
| | comp=Z,101nm,19.6s,baz=340,slow=34 | | | | | | | |
| **CTA** | **Charters Tower** | **14.11** | **181** | Pn | | **Pn** | **15 31 58.8** | **+2.5** |
| | 0.4nm,0.3s,baz=355,slow=14,SNR=5.7 | | | | | | | |
| CTA | | | | | LR | LR | 15 37 04.6 | |
| | comp=Z,198nm,18.8s,baz=348,slow=36 | | | | | | | |
| **

*IDC **12** 15:33:41.4±1.0, 1°.87N×96°.68E, h0km, mb4.2/18, mb1 4.2/20, mb1mx4.0/60, mbtmp4.2/20, ML3.8/2, MS3.6/13, Ms1 3.6/13, ms1mx3.2/83, Error ellipse: s-maj=26.8km s-min=16.4km az=42.0*
*DJA **12** 15:33:45.3±0.5, 2°N±4°×9°7E±°, h22km±11km, M4.5/11, mb4.7/2, mB4.7/2, MLv4.3/11, Mw(mB)3.9/2*
*NEIC **12** 15:33:47.3±1.6, 2°.02N±0°.08×96°.8E±0°.1, h30km±6km, mb4.3/15, Error ellipse: s-maj=19.5km s-min=8.8km az=61.0*

**ISC 12 15:33:46.0±0.6, 1°.97N±0°.05×96°.67E±0°.07, h28km, n68, σ1°23/61, mb4.2/25, MS3.7/10, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SNSI** | **Sinabang, Aceh** | **0.55** | **322** | P | **Pb** | **15 33 58.3** | **+1.0** |
| SNSI | | | | S | **Sb** | **15 34 04.3** | **-0.6** |
| **GSI** | **Gunungsitoli** | **1.12** | **126** | Pn | **Pn** | **15 34 06.5** | **+0.5** |
| **GSI** | **Gunungsitoli** | **1.12** | **126** | P | **Pn** | **15 34 06.4** | **+0.5** |
| GSI | | | | S | **Sb** | **15 34 21.6** | **+0.6** |
| **KCSI** | **Kotacane, Aceh** | **1.89** | **35** | P | **Pn** | **15 34 16.6** | **+0.1** |
| KCSI | | | | S | **Sn** | **15 34 41.2** | **+1.7** |
| **PSI** | **Prapat** | **2.40** | **70** | Pn | **Pn** | **15 34 23.6** | **+0.1** |
| | 4.6nm,0.3s,baz=260,slow=4.8,SNR=7.9 | | | | | | |
| PSI | | | | LR | LR | 15 35 13.9 | |
| | comp=Z,422nm,22.0s,baz=294,slow=39 | | | | | | |
| **TSI** | **Tuntungan** | **2.42** | **51** | P | **Pn** | **15 34 24.1** | **+0.3** |
| **MNSI** | **Mandailing Nat** | **3.13** | **112** | P | **Pn** | **15 34 33.7** | **+0.1** |
| **LHMI** | **Lhok Sumawe** | **3.25** | **5** | | **Pn** | **15 34 35.5** | **+0.3** |
| **LHMI** | **Lhok Sumawe** | **3.25** | **5** | P | **Pn** | **15 34 35.4** | **+0.3** |
| **SISI** | **Saibi** | **4.07** | **144** | P | **Pn** | **15 34 46.3** | **-0.2** |
| **PPI** | **Padang Panjang** | **4.44** | **123** | P | **Pn** | **15 34 52.3** | **+0.8** |
| PPI | | | | S | **Sn** | **15 35 43.3** | **+1.0** |
| **BKNI** | **Bangkinang** | **4.66** | **110** | P | **Pn** | **15 34 54.9** | **+0.3** |
| **IPM** | **Ipoh** | **5.01** | **60** | Pn | **Pn** | **15 34 59.5** | **0.0** |
| **KULM** | **Kulim** | **5.16** | **50** | Pn | **Pn** | **15 35 01.8** | **+0.3** |
| **MYKOM** | **Kota Tinggi** | **7.18** | **91** | Pn | **Pn** | **15 35 29.8** | **+0.6** |
| **UBPT** | **Khong Chiam** | **15.82** | **33** | Pn | **Pn** | **15 37 26.2** | **-0.8** |
| **CM31** | **Chiang Mai Arr** | **16.53** | **8** | P | **Pn** | **15 37 36.9** | **+0.8** |
| CM31 | | | | IAmb | IAmb | 15 37 38.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.53** | **8** | Pn | **Pn** | **15 37 34.7** | **-1.4** |
| | comp=Z,0.4nm,0.3s,baz=198,slow=12,SNR=54 | | | | | | |
| CMAR | | | | LR | LR | 15 44 11.3 | |
| | comp=Z,134nm,21.8s,baz=115,slow=38 | | | | | | |
| **PALK** | **Pallekele** | **16.76** | **289** | LR | LR | 15 43 27.6 | |
| | comp=Z,141nm,19.5s,baz=208,slow=35 | | | | | | |
| **KOHI** | **KOHIMA** | **23.74** | **354** | *e*P | **P** | **15 38 51.4** | **-4.8** |
| KOHI | | | | eS | S | 15 42 59.0 | -11 |
| **MOKO** | **MOKOCHONG** | **24.30** | **355** | *e*P | **P** | **15 38 60.0** | **-1.5** |
| MOKO | | | | *e*S | **S** | **15 43 20.2** | **+1.2** |
| **H08S2** | **Diego Garcia H** | **25.94** | **248** | T | T | 16 06 08.9 | |
| | baz=69,slow=75,SNR=679 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.95** | **248** | T | T | 16 06 11.4 | |
| | baz=69,slow=75,SNR=408 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.96** | **248** | T | T | 16 06 12.1 | |
| | baz=69,slow=75,SNR=408 | | | | | | |
| **BATI** | **Baumata** | **29.47** | **115** | LR | LR | 15 53 11.9 | |
| | comp=Z,231nm,21.7s,baz=267,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **34.80** | **126** | LR | LR | 15 54 37.1 | |
| | comp=Z,60nm,21.9s,baz=322,slow=36 | | | | | | |
| **NIL** | **Nilore** | **38.39** | **328** | P | **P** | **15 41 05.9** | **+0.8** |
| **WB0** | **Warramunga Arr** | **42.86** | **122** | P | **P** | **15 41 39.3** | **-2.9** |
| WB0 | | | | IAmb | IAmb | 15 41 51.7 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.89** | **122** | P | **P** | **15 41 39.7** | **-2.8** |
| | comp=Z,2.1nm,0.7s,baz=337,slow=9.6,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.89** | **122** | P | **P** | **15 41 39.8** | **-2.7** |
| **WRAB** | **Tennant Creek** | **42.90** | **122** | P | **P** | **15 41 40.5** | **-2.1** |
| WRAB | | | | IAmb | IAmb | 15 41 53.7 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.90** | **122** | P | **P** | **15 41 40.6** | **-2.0** |
| WB2 | | | | IAmb | IAmb | 15 41 52.3 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.07** | **122** | P | **P** | **15 41 41.1** | **-2.8** |
| WR0 | | | | IAmb | IAmb | 15 41 53.6 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **44.28** | **127** | P | **P** | **15 41 54.1** | **+0.4** |
| | comp=Z,2.0nm,0.9s,baz=299,slow=8.1,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **44.28** | **127** | P | **P** | **15 41 53.8** | **+0.1** |
| **AS31** | **Alice Springs** | **44.28** | **127** | P | **P** | **15 41 53.2** | **-0.5** |
| **AAK** | **Ala-Archa** | **45.09** | **337** | P | **P** | **15 42 01.8** | **+1.8** |
| | comp=Z,1.2nm,0.7s,baz=172,slow=11,SNR=5.1 | | | | | | |
| **KSRS** | **Korea Array** | **45.52** | **35** | P | **P** | **15 42 03.0** | **-0.3** |
| | comp=Z,2.5nm,0.8s,baz=222,slow=9.3,SNR=11 | | | | | | |
| **MK31** | **Makanchi Array** | **46.37** | **346** | P | **P** | **15 42 10.2** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 15 42 11.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.37** | **346** | P | **P** | **15 42 10.2** | **+0.3** |
| | comp=Z,6.7nm,0.7s,baz=162,slow=7.4,SNR=45 | | | | | | |
| MKAR | | | | LR | LR | 16 05 38.5 | |
| | comp=Z,63nm,19.5s,baz=116,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **46.45** | **9** | P | **P** | **15 42 10.6** | **0.0** |
| | comp=Z,3.9nm,0.8s,baz=190,slow=8.7,SNR=26 | | | | | | |
| **SONM** | **Songino Array** | **46.45** | **9** | P | **P** | **15 42 10.6** | **0.0** |
| SONM | | | | IAmb | IAmb | 15 42 12.0 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **46.46** | **346** | P | **P** | **15 42 10.6** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 15 42 11.6 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **47.13** | **334** | P | **P** | **15 42 17.3** | **+1.4** |
| **KURBB** | **Kurchatov Arra** | **50.85** | **345** | P | **P** | **15 42 44.6** | **+0.4** |
| | comp=Z,3.1nm,0.8s,baz=166,slow=6.9,SNR=33 | | | | | | |
| KURBB | | | | LR | LR | 16 09 21.9 | |
| | comp=Z,73nm,18.5s,baz=119,slow=42 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.48** | **43** | P | **P** | **15 42 49.3** | **0.0** |
| | comp=Z,2.3nm,0.9s,baz=216,slow=6.9,SNR=5.0 | | | | | | |
| **PMG** | **Port Moresby** | **51.55** | **104** | LR | LR | 16 07 57.6 | |
| | comp=Z,45nm,18.2s,baz=18,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.39** | **32** | P | **P** | **15 42 56.2** | **+0.3** |
| | comp=Z,0.9nm,0.4s,baz=249,slow=6.7,SNR=6.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.39** | **32** | P | **P** | **15 42 55.0** | **-0.9** |
| **ZAA0** | **Zalesovo Array** | **52.72** | **351** | P | **P** | **15 42 57.9** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **52.72** | **351** | P | **P** | **15 42 58.4** | **+0.3** |
| | comp=Z,9.5nm,0.8s,baz=177,slow=5.8,SNR=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.72** | **351** | P | **P** | **15 42 58.5** | **+0.4** |
| **STKA** | **Stephens Creek** | **54.26** | **132** | LR | LR | 16 09 43.3 | |
| | comp=Z,25nm,19.2s,baz=16,slow=40 | | | | | | |
| **BRVK** | **Borovoye** | **55.41** | **341** | P | **P** | **15 43 18.4** | **+0.6** |
| BRVK | | | | IAmb | IAmb | 15 43 18.5 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **55.81** | **27** | P | **P** | **15 43 21.0** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=274,slow=6.3,SNR=6.1 | | | | | | |
| **ABKAR** | **Akbulak array** | **56.59** | **332** | P | **P** | **15 43 26.1** | **-0.2** |
| **YAK** | **Yakutsk** | **64.83** | **16** | P | **P** | **15 44 21.5** | **-0.6** |
| | comp=Z,5.1nm,0.6s,baz=184,slow=0.4,SNR=7.4 | | | | | | |
| **NRIK** | **Noril'sk** | **67.53** | **357** | P | **P** | **15 44 39.4** | **0.0** |
| | comp=Z,2.4nm,0.8s,baz=158,slow=7.8,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.20** | **312** | P | **P** | **15 44 44.3** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=120,slow=8.5,SNR=2.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.33** | **322** | P | **P** | **15 45 21.0** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=90,slow=4.0,SNR=6.0 | | | | | | |
| **FINES** | **FINESS Array B** | **79.08** | **333** | P | **P** | **15 45 47.9** | **+0.3** |
| | comp=Z,2.2nm,0.8s,baz=108,slow=6.2,SNR=4.7 | | | | | | |
| FINES | | | | LR | LR | 16 23 14.5 | |
| | comp=Z,54nm,18.6s,baz=34,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.64** | **340** | P | **P** | **15 46 01.9** | **+0.6** |
| | comp=Z,2.1nm,0.9s,baz=31,slow=2.8,SNR=6.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.64** | **340** | P | **P** | **15 46 01.5** | **+0.3** |
| **URZ** | **Urewera** | **83.71** | **129** | LR | LR | 16 26 40.3 | |
| | comp=Z,26nm,18.5s,baz=267,slow=38 | | | | | | |
| **GERES** | **GERESS Array B** | **83.89** | **319** | P | **P** | **15 46 14.2** | **+0.7** |
| | comp=Z,0.7nm,0.8s,baz=64,slow=4.5,SNR=5.7 | | | | | | |
| **HFS** | **Hagfors** | **84.79** | **330** | LR | LR | 16 26 46.4 | |
| | comp=Z,68nm,18.6s,baz=42,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.08** | **331** | LR | LR | 16 29 07.8 | |
| | comp=Z,36nm,19.8s,baz=60,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.28** | **31** | PKP | PKPbc | 15 53 17.2 | +1.6 |
| | comp=Z,0.3nm,0.7s,baz=12,slow=4.6,SNR=4.0 | | | | | | |

**WEL 12 15:36:40.6±1.3, 34°S±38°×17°9E±3°1, h534km±48km, M3.9/6, mB5.1/1, ML3.8/8, MLv3.9/6, Mw(mB)4.4/1, Error ellipse: s-maj=0.0km s-min=0.0km az=3.5, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **4.00** | **186** | P | P | 15 38 00.3 | -0.9 |
| **KUZ** | **Kuaotunu** | **4.05** | **218** | P | P | 15 37 59.4 | -2.2 |
| **WMGZ** | **Waiomatatini S** | **4.25** | **184** | P | P | 15 38 03.2 | +0.1 |
| WMGZ | | | | S | S | 15 39 14.3 | +3.7 |
| **HAZ** | **Te Kaha** | **4.26** | **191** | P | P | 15 38 01.6 | -1.6 |
| HAZ | | | | S | S | 15 39 12.9 | +2.1 |
| **RUGZ** | **Raukumara Rang** | **4.48** | **191** | P | P | 15 38 04.4 | -0.7 |
| RUGZ | | | | S | S | 15 39 15.3 | +1.0 |
| **PUZ** | **Puketiti** | **4.51** | **185** | P | P | 15 38 05.8 | +0.5 |
| PUZ | | | | S | S | 15 39 12.0 | -2.6 |
| **TWGZ** | **Tauwhareparae** | **4.64** | **188** | P | P | 15 38 06.9 | +0.5 |
| **KMRZ** | **Kaimai** | **4.86** | **208** | P | P | 15 38 10.4 | +2.2 |
| **MWZ** | **Matawai** | **4.86** | **192** | P | P | 15 38 08.2 | 0.0 |
| MWZ | | | | S | S | 15 39 19.6 | -0.3 |
| **URZ** | **Urewera** | **4.87** | **196** | P | P | 15 38 07.0 | -1.3 |
| URZ | | | | S | S | 15 39 19.2 | -0.8 |
| **KARZ** | **Kaharoa** | **4.90** | **204** | P | P | 15 38 11.2 | +2.7 |
| **TKGZ** | **Te Karaka** | **4.92** | **189** | P | P | 15 38 09.2 | +0.5 |
| TKGZ | | | | S | S | 15 39 20.1 | -0.6 |
| **TOZ** | **Tahuroa Road** | **4.94** | **212** | P | P | 15 38 10.1 | +1.2 |
| **MUGZ** | **Murupara** | **5.16** | **198** | P | P | 15 38 11.9 | +1.1 |

*IDC **12** 15:53:40.1±0.8, 6°.69N×72°.90W, h158km±11km, mb2.9/2, mb1 3.4/4, mb1mx3.1/31, mbtmp3.6/4, Error ellipse: s-maj=46.5km s-min=7.8km az=132.0*
*RSNC **12** 15:53:41.8±0.9, 6°.83N×73°.18W, h140km±4km, ML3.2, Mw3.6*

**ISC 12 15:53:39.7±0.9, 6°.82N±0°.03×73°.12W±0°.03, h155km±6km, n39, σ1°88/73, 4C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **196** | *i*P | **Pn** | **15 54 01.0** | **-0.1** |
| BARC | | | | *e*S | **Sn** | **15 54 15.5** | **-1.8** |
| BARC | | | | *i* | | 15 54 17.1 | |
| | comp=Z,372nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.66** | **39** | *i*P | **Pn** | **15 54 03.9** | **+0.8** |
| PAMC | | | | *e*S | **Sn** | **15 54 20.7** | **-0.3** |
| PAMC | | | | *i* | | 15 54 23.0 | |
| | comp=Z,980nm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **0.93** | **178** | *e*P | **Pn** | **15 54 05.1** | **+0.1** |
| RUSC | | | | *e*S | **Sn** | **15 54 23.2** | **-1.1** |
| RUSC | | | | *i* | | 15 54 25.1 | |
| | comp=Z,248nm,0.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.36** | **258** | *e*P | **Pn** | **15 54 07.8** | **-0.5** |
| PTBC | | | | *e*S | **Sn** | **15 54 28.1** | **-2.1** |
| PTBC | | | | *i* | | 15 54 32.1 | |
| | comp=Z,174nm,0.2s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **106** | *i*P | **Pn** | **15 54 09.4** | **+1.0** |
| TAMC | | | | *e*S | **Sn** | **15 54 30.6** | **+0.2** |
| TAMC | | | | *i* | | 15 54 32.2 | |
| | comp=Z,94nm,0.5s | | | | | | |
| **OCAC** | **Ocana** | **1.42** | **352** | *e*P | **Pn** | **15 54 09.3** | **+0.2** |
| OCAC | | | | *e*S | **Sn** | **15 54 30.9** | **-0.8** |
| **SPBC** | **San Pablo de B** | **1.50** | **219** | *e*P | **Pn** | **15 54 10.0** | **+0.1** |
| SPBC | | | | *e*S | **Sn** | **15 54 31.3** | **-1.7** |
| SPBC | | | | *i* | | 15 54 34.7 | |
| | comp=Z,203nm,0.1s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | *e*P | **Pn** | **15 54 14.0** | **+0.5** |
| ZARC | | | | *e*S | **Sn** | **15 54 39.6** | **+0.1** |
| ZARC | | | | *i* | | 15 54 45.3 | |
| | comp=Z,245nm,0.4s | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **234** | *e*P | **Pn** | **15 54 17.3** | **+0.4** |
| NORC | | | | *e*S | **Sn** | **15 54 44.2** | **-1.5** |
| NORC | | | | *i* | | 15 54 50.8 | |
| | comp=Z,121nm,0.3s | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **196** | *e*P | **Pn** | **15 54 19.1** | **+0.3** |
| CHIC | | | | *e*S | **Sn** | **15 54 48.6** | **-0.2** |
| CHIC | | | | *i* | | 15 54 52.0 | |
| | comp=Z,75nm,0.6s | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | P | **Pn** | **15 54 21.2** | **+2.0** |
| | comp=Z,22nm,0.3s,baz=97,slow=17,SNR=22 | | | | | | |
| ROSC | | | | S | **Sn** | **15 54 50.5** | **+0.9** |
| | comp=Z,46nm,0.3s,baz=357,slow=19,SNR=8.6 | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | *e*P | **Pn** | **15 54 20.9** | **+1.7** |
| ROSC | | | | *e*S | **Sn** | **15 54 50.3** | **+0.7** |
| ROSC | | | | *i* | | 15 55 00.5 | |
| | comp=Z,148nm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.48** | **255** | *e*P | **Pn** | **15 54 21.4** | **+0.2** |
| HELC | | | | *e*S | **Sn** | **15 54 52.2** | **-1.0** |
| HELC | | | | *i* | | 15 55 00.6 | |
| | comp=Z,63nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.57** | **291** | *e*P | **Pn** | **15 54 21.6** | **-0.4** |
| UREC | | | | *e*S | **Sn** | **15 54 52.0** | **-2.6** |
| UREC | | | | *i* | | 15 54 55.2 | |
| | comp=Z,152nm,0.1s | | | | | | |
| **SOCV** | **Socops** | **2.67** | **57** | *e*P | **Pn** | **15 54 23.0** | **-0.2** |
| SOCV | | | | *e*S | **Sn** | **15 54 52.7** | **-4.1** |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **235** | *e*P | **Pn** | **15 54 25.7** | **+1.1** |
| GUY2C | | | | *e*S | **Sn** | **15 54 58.4** | **-0.8** |
| GUY2C | | | | *i* | | 15 55 08.7 | |
| | comp=Z,108nm,0.6s | | | | | | |
| **VILC** | **Villavicencio,** | **2.75** | **192** | *e*P | **Pn** | **15 54 24.6** | **+0.2** |
| VILC | | | | *e*S | **Sn** | **15 54 58.4** | **-0.6** |
| **PTGC** | **Puerto Gaitan,** | **2.78** | **159** | *e*P | **Pn** | **15 54 24.3** | **-0.3** |
| PTGC | | | | *e*S | **Sn** | **15 54 57.4** | **-2.0** |
| PTGC | | | | *i* | | 15 54 59.3 | |
| | comp=Z,85nm,0.3s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.90** | **357** | *e*P | **Pn** | **15 54 25.9** | **-0.1** |
| LL6C | | | | *e*S | **Sn** | **15 55 01.7** | **-0.3** |
| LL6C | | | | *i* | | 15 55 08.1 | |
| | comp=Z,37nm,0.4s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **252** | *e*P | **Pn** | **15 54 29.1** | **+1.2** |
| CBOC | | | | *e*S | **Sn** | **15 55 03.9** | **-1.3** |
| CBOC | | | | *i* | | 15 55 07.9 | |
| | comp=Z,26nm,0.2s | | | | | | |
| **DBBC** | **Dabeiba** | **3.08** | **274** | *e*P | **Pn** | **15 54 29.1** | **+0.7** |
| DBBC | | | | *e*S | **Sn** | **15 55 03.8** | **-2.3** |
| **SDV** | **Santo Domingo** | **3.20** | **50** | P | **Pn** | **15 54 30.9** | **+0.9** |
| | comp=Z,14nm,0.3s,baz=260,slow=6.1,SNR=32 | | | | | | |
| SDV | | | | S | **Sn** | **15 55 08.0** | **-1.0** |
| | comp=Z,24nm,0.3s,baz=80,slow=21,SNR=36 | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *e*P | **Pn** | **15 54 30.9** | **+0.9** |
| SDV | | | | *e*S | **Sn** | **15 55 07.8** | **-1.3** |
| SDV | | | | *i* | | 15 55 12.3 | |
| | comp=Z,88nm,0.7s | | | | | | |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *e*P | **Pn** | **15 54 32.0** | **+1.2** |
| ANIL | | | | *e*S | **Sn** | **15 55 09.6** | **-0.7** |
| ANIL | | | | *i* | | 15 55 17.1 | |
| | comp=Z,162nm,0.4s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | *e*P | **Pn** | **15 54 35.9** | **+1.0** |
| ORTC | | | | *e*S | **Sn** | **15 55 18.1** | **+0.4** |
| ORTC | | | | *i* | | 15 55 24.3 | |
| | comp=Z,57nm,0.6s | | | | | | |
| **CVALL** | **Valledupar, Ce** | **3.66** | **358** | *e*P | **Pn** | **15 54 35.5** | **-0.3** |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | *e*P | **Pn** | **15 54 35.4** | **-0.6** |
| SJCC | | | | *e*S | **Sn** | **15 55 16.7** | **-3.0** |
| SJCC | | | | *i* | | 15 55 20.8 | |
| | comp=Z,75nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.68** | **239** | *e*P | **Pn** | **15 54 37.2** | **+1.1** |
| PLMC | | | | *e*S | **Sn** | **15 55 16.2** | **-3.7** |
| PLMC | | | | *i* | | 15 55 25.9 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | *e*P | **Pn** | **15 54 41.7** | **-0.9** |
| CRJC | | | | *e*S | **Sn** | **15 55 27.5** | **-4.0** |
| CRJC | | | | *i* | | 15 55 35.4 | |
| | comp=Z,31nm,0.1s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.28** | **229** | *e*P | **Pn** | **15 54 44.1** | **+0.2** |
| YOTC | | | | *e*S | **Sn** | **15 55 33.5** | **-0.4** |
| YOTC | | | | *i* | | 15 55 41.4 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.45** | **346** | *e*P | **Pn** | **15 54 46.0** | **-0.1** |
| SMRC | | | | *e*S | **Sn** | **15 55 35.1** | **-2.6** |
| SMRC | | | | *i* | | 15 55 39.0 | |
| | comp=Z,16nm,0.2s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.71** | **189** | *e*P | **Pn** | **15 54 48.3** | **-1.2** |
| MACC | | | | *e*S | **Sn** | **15 55 35.7** | **-8.1** |
| MACC | | | | *i* | | 15 55 50.7 | |
| | comp=Z,13nm,0.2s | | | | | | |
| **MARP** | **Paez Belalcaza** | **4.86** | **216** | *e*P | **Pn** | **15 54 52.5** | **+0.7** |
| MARP | | | | *e*S | **Sn** | **15 55 44.7** | **-3.2** |
| **GARC** | **Garzon, Huila** | **5.18** | **207** | *e*P | **Pn** | **15 54 55.6** | **-0.3** |
| GARC | | | | *e*S | **Sn** | **15 55 53.0** | **-2.4** |
| GARC | | | | *i* | | 15 55 56.1 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **POPC** | **Popayan, Colom** | **5.54** | **220** | *e*P | **Pn** | **15 55 01.8** | **+1.1** |
| POPC | | | | *e*S | **Sn** | **15 55 58.2** | **-5.8** |
| POPC | | | | *i* | | 15 56 07.9 | |
| | comp=Z,5.4nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.48** | **315** | P | **P** | **16 02 31.7** | **+2.0** |
| | comp=Z,0.2nm,0.6s,baz=130,slow=3.6,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | **P** | **16 03 52.9** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=134,slow=6.5,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | **PKPbc** | **16 13 10.4** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=120,slow=4.0,SNR=5.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.34** | **241** | PKPbc | **PKPbc** | **16 13 13.6** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=106,slow=2.8,SNR=4.8 | | | | | | |

*CNRM **12** 16:01:40.9, 35°.52N×3°.86W, h11km, ml3.2*
*INMG **12** 16:01:42.7±1.1, 35°.47N×3°.90W, h0km, ML2.5, Error ellipse: s-maj=3.0km s-min=2.6km az=21.0*
*SFS **12** 16:01:42.0, 35°.46N×3°.90W, ML2.6, ALBORAN SUR*
*IGIL **12** 16:01:43.5, 35°.46N×3°.90W, h0km, ML2.5*

**ISC 12 16:01:41.3±1.1, 35°.52N±0°.03×3°.86W±0°.03, h10km±9km, n30, σ1°18/45, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.31** | **191** | P | **Pg** | **16 01 47.1** | **-0.5** |
| PALE | | | | S | **Sg** | **16 01 51.4** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.77** | **113** | P | **Pb** | **16 01 57.0** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.77** | **113** | P | **Pb** | **16 01 57.0** | **+0.2** |
| GOG | | | | S | **Sg** | **16 02 05.6** | **-0.6** |
| **CHAS** | **Isla Isabel II** | **1.22** | **106** | P | **Pn** | **16 02 03.5** | **-0.9** |
| CHAS | | | | S | **Sb** | **16 02 18.8** | **-1.4** |
| **SMIR** | **Smir Dam** | **1.25** | **278** | P | Pg | 16 02 13.0 | +7.7 |
| **CHEFC** | **Chefchaouen** | **1.28** | **251** | P | **Pg** | **16 02 06.3** | **+0.4** |
| CHEFC | | | | S | **Sg** | **16 02 22.9** | **+0.5** |
| **CEU** | **Ceuta** | **1.28** | **287** | P | **Pn** | **16 02 03.4** | **-1.8** |
| CEU | | | | S | **Sb** | **16 02 18.1** | **-4.0** |
| **EMAL** | **Malaga-Limoner** | **1.32** | **340** | P | **Pb** | **16 02 05.8** | **-0.3** |
| EMAL | | | | S | **Sg** | **16 02 23.4** | **-0.4** |
| **TAF** | **Taforalt** | **1.38** | **120** | P | **Pg** | **16 02 09.0** | **+1.2** |
| **TAF** | **Taforalt** | **1.38** | **120** | P | **Pn** | **16 02 05.8** | **-0.9** |
| TAF | | | | S | **Sg** | **16 02 26.0** | **+0.2** |
| **JBK** | **JBK** | **1.59** | **138** | P | **Pg** | **16 02 13.0** | **+1.1** |
| **JBK** | **JBK** | **1.59** | **138** | P | **Pn** | **16 02 08.5** | **-1.2** |
| JBK | | | | S | **Sb** | **16 02 30.8** | **-0.4** |
| **LCRM** | **LCR** | **2.01** | **204** | P | **Pb** | **16 02 16.8** | **-1.2** |
| LCRM | | | | S | **Sb** | **16 02 42.8** | **-0.3** |
| **IFR** | **Ifrane** | **2.26** | **208** | P | **Pn** | **16 02 19.1** | **+0.3** |
| IFR | | | | S | **Sn** | **16 02 46.3** | **-0.5** |
| **MD31** | **MD31** | **2.75** | **196** | P | **Pn** | **16 02 26.3** | **+0.7** |
| **MDT** | **Midelt** | **2.77** | **193** | P | **Pb** | **16 02 32.2** | **+1.2** |
| **MDT** | **Midelt** | **2.77** | **193** | P | **Pn** | **16 02 26.6** | **+0.8** |
| **ZHG** | **ZHG** | **3.09** | **229** | P | **Pn** | **16 02 31.2** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **3.63** | **302** | *e*Pn | **Pn** | **16 02 39.0** | **+1.5** |
| PVAQ | | | | *e*Sn | **Sn** | **16 03 20.4** | **0.0** |
| PVAQ | | | | A | A | 16 03 24.5 | |
| | 9.5nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.63** | **302** | P | **Pn** | **16 02 38.6** | **+1.1** |
| PVAQ | | | | S | **Sn** | **16 03 18.9** | **-1.5** |
| **PCVE** | **Castro Verde** | **3.96** | **303** | *e*Pn | **Pn** | **16 02 43.8** | **+1.7** |
| **MESJ** | **Messejana** | **4.20** | **305** | *e*P | **Pn** | **16 02 46.8** | **+1.5** |
| MESJ | | | | *e*S | **Sn** | **16 03 33.3** | **-1.0** |
| MESJ | | | | IAML | | 16 03 37.8 | |
| | comp=N,8.8nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.20** | **305** | *e*Pn | **Pn** | **16 02 47.1** | **+1.8** |
| MESJ | | | | *e*Sn | **Sn** | **16 03 34.4** | **0.0** |
| MESJ | | | | A | A | 16 03 37.8 | |
| | comp=N,6.3nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **4.47** | **319** | *e*Sn | **Sn** | **16 03 42.4** | **+1.2** |
| PESTR | | | | A | A | 16 03 43.6 | |
| | comp=N,5.8nm,0.7s | | | | | | |
| **EVO** | **Evora** | **4.48** | **313** | P | Pn | 16 02 31.4 | -18 |
| EVO | | | | S | **Sn** | **16 03 41.2** | **-0.1** |
| **EVO** | **Evora** | **4.48** | **313** | *e*Sn | **Sn** | **16 03 41.5** | **+0.2** |
| EVO | | | | A | A | 16 03 44.0 | |
| | comp=N,8.3nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.55** | **306** | *e*Pn | **Pn** | **16 02 51.6** | **+1.5** |
| PNCL | | | | *e*Sn | **Sn** | **16 03 43.7** | **+0.7** |
| PNCL | | | | A | A | 16 03 54.3 | |
| | comp=N,5.6nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.96** | **317** | *e*Pn | **Pn** | **16 02 56.9** | **+1.1** |
| PMTG | | | | *e*Sn | **Sn** | **16 03 54.2** | **+1.0** |
| **PCBR** | **Castelo Branco** | **5.17** | **327** | *e*Sn | **Sn** | **16 03 59.3** | **+0.8** |
| PCBR | | | | A | A | 16 04 01.7 | |
| | comp=N,5.1nm,0.5s | | | | | | |
| **OUZM** | **OUZ** | **5.20** | **209** | P | **Pn** | **16 03 00.5** | **+1.2** |

**IDC 12 16:04:25.2±2.4, 0°.54S×135°.30E, h0km, mb3.5/2, mb1 3.8/5, mb1mx3.2/37, mbtmp3.6/5, ML3.5/3, MS3.2/2, Ms1 3.2/2, ms1mx2.6/40, Error ellipse: s-maj=55.4km s

| | | | | | | |
|---|---|---|---|---|---|---|
| **NWF** | **Wu-fen Shan** | **0.83 304** | P | Pn | 16 13 01.3 | +0.4 |
| | baz=297 | | | | | |
| NWF | | | *e*S | Sn | 16 13 15.2 | +0.2 |
| | baz=297 | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.88 280** | P | Pn | 16 13 01.7 | +0.3 |
| | baz=286 | | | | | |
| FUSB | | | S | Sn | 16 13 15.2 | -0.7 |
| | baz=286 | | | | | |
| **ENTT** | **Nioudou** | **0.89 272** | *i* P | Pn | 16 13 02.2 | +0.8 |
| | baz=270 | | | | | |
| ENTT | | | *e*S | Sn | 16 13 15.7 | -0.3 |
| | baz=270 | | | | | |
| **LATG** | **Datong** | **0.93 266** | P | Pn | 16 13 02.2 | +0.2 |
| | baz=261 | | | | | |
| LATG | | | S | Sn | 16 13 16.8 | -0.1 |
| | baz=261 | | | | | |
| **NDT** | **Datong Townshi** | **0.94 270** | P | Pn | 16 13 02.6 | +0.7 |
| | baz=270 | | | | | |
| NDT | | | S | Sn | 16 13 17.4 | +0.6 |
| | baz=270 | | | | | |
| **TWA** | **Mucha** | **0.95 293** | *e*P | Pn | 16 13 01.8 | -0.2 |
| | baz=286 | | | | | |
| TWA | | | *e*S | Sn | 16 13 16.1 | -0.9 |
| | baz=286 | | | | | |
| **ETL** | **Fush Village** | **0.95 242** | *e*P | Pn | 16 13 01.7 | -0.4 |
| | baz=237 | | | | | |
| ETL | | | *e*S | Sn | 16 13 16.2 | -0.9 |
| | baz=237 | | | | | |
| **NWLT** | **Wulai** | **0.96 280** | P | Pn | 16 13 02.7 | +0.5 |
| | baz=287 | | | | | |
| NWLT | | | *e*S | Sn | 16 13 16.5 | -0.8 |
| | baz=287 | | | | | |
| **NACB** | **Ninganchiao** | **0.97 244** | P | Pn | 16 13 01.7 | -0.5 |
| | baz=244 | | | | | |
| NACB | | | *e*S | Sn | 16 13 15.2 | -2.2 |
| | baz=244 | | | | | |
| **TWD** | **Chiawan** | **1.01 239** | P | Pn | 16 13 02.0 | -0.7 |
| | baz=235 | | | | | |
| TWD | | | *e*S | Sn | 16 13 17.5 | -0.7 |
| | baz=235 | | | | | |
| **YM01** | **YM01** | **1.03 301** | P | Pn | 16 13 03.2 | +0.2 |
| | baz=292 | | | | | |
| YM01 | | | *e*S | Sn | 16 13 18.3 | -0.4 |
| | baz=292 | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.05 248** | P | Pn | 16 13 03.0 | -0.2 |
| | baz=248 | | | | | |
| ETLH | | | *e*S | Sn | 16 13 18.8 | -0.2 |
| | baz=248 | | | | | |
| **HWA** | **Hwalien** | **1.06 234** | *e*P | Pn | 16 13 02.8 | -0.4 |
| | baz=234 | | | | | |
| **YHNB** | **Yeheng** | **1.06 274** | P | Pn | 16 13 03.8 | +0.5 |
| | baz=268 | | | | | |
| YHNB | | | S | Sn | 16 13 19.2 | -0.1 |
| | baz=268 | | | | | |
| **NNSB** | **Datong** | **1.07 261** | P | Pn | 16 13 03.8 | +0.3 |
| | baz=254 | | | | | |
| NNSB | | | S | Sn | 16 13 18.9 | -0.7 |
| | baz=254 | | | | | |
| **NNS** | **Nan Shan** | **1.08 261** | *i* P | Pn | 16 13 04.0 | +0.4 |
| | baz=255 | | | | | |
| NNS | | | *i* S | Sn | 16 13 19.4 | -0.3 |
| | baz=255 | | | | | |
| **NSK** | **Sanguang** | **1.08 274** | P | Pn | 16 13 03.8 | +0.3 |
| | baz=268 | | | | | |
| NSK | | | *e*S | Sn | 16 13 19.5 | -0.2 |
| | baz=268 | | | | | |
| **TWY** | **Chenhua** | **1.08 308** | *e*P | Pn | 16 13 03.6 | +0.2 |
| | baz=300 | | | | | |
| **TWS1** | **Kuangyinshan** | **1.13 296** | P | Pn | 16 13 03.8 | -0.2 |
| | baz=296 | | | | | |
| TWS1 | | | *e*S | Sn | 16 13 20.2 | -0.4 |
| | baz=296 | | | | | |
| **FUSS** | **Fushou** | **1.24 253** | P | Pn | 16 13 05.9 | +0.4 |
| | baz=250 | | | | | |
| FUSS | | | *e*S | Sn | 16 13 22.9 | -0.3 |
| | baz=250 | | | | | |
| **WHF** | **Hehuan Shan** | **1.25 249** | P | Pn | 16 13 05.9 | 0.0 |
| | baz=249 | | | | | |
| WHF | | | *e*S | Sn | 16 13 23.2 | -0.6 |
| | baz=249 | | | | | |
| **NCU** | **National Centr** | **1.28 287** | *e*P | Pn | 16 13 06.7 | +0.9 |
| | baz=294 | | | | | |
| NCU | | | *e*S | Sn | 16 13 24.2 | +0.5 |
| | baz=294 | | | | | |
| **NCUH** | **Zhongli** | **1.28 286** | *e*P | Pn | 16 13 06.4 | +0.6 |
| | baz=278 | | | | | |
| NCUH | | | *e*S | Sn | 16 13 23.9 | +0.2 |
| | baz=278 | | | | | |
| **ESL** | **Shilin** | **1.28 232** | P | Pn | 16 13 05.2 | -0.6 |
| | baz=228 | | | | | |
| ESL | | | *e*S | Sn | 16 13 22.0 | -1.8 |
| | baz=228 | | | | | |
| **TWT** | **Tachien** | **1.29 254** | *e*P | Pn | 16 13 06.8 | +0.7 |
| | baz=254 | | | | | |
| TWT | | | *e*S | Sn | 16 13 24.2 | 0.0 |
| | baz=254 | | | | | |
| **NFF** | **Wufeng Townshi** | **1.30 271** | P | Pn | 16 13 06.4 | +0.3 |
| | baz=276 | | | | | |
| NFF | | | *e*S | Sn | 16 13 23.7 | -0.4 |
| | baz=276 | | | | | |
| **CHGB** | **Renai** | **1.36 247** | P | Pn | 16 13 07.2 | +0.2 |
| | baz=241 | | | | | |
| CHGB | | | *e*S | Sn | 16 13 25.0 | -0.7 |
| | baz=241 | | | | | |
| **LIOB** | **Emei** | **1.39 272** | P | Pn | 16 13 07.3 | +0.2 |
| | baz=272 | | | | | |
| LIOB | | | *e*S | Sn | 16 13 26.1 | +0.1 |
| | baz=272 | | | | | |
| **WUSB** | **Renai** | **1.44 245** | P | Pn | 16 13 08.0 | +0.2 |
| | baz=240 | | | | | |
| WUSB | | | S | Sn | 16 13 26.6 | -0.6 |
| | baz=240 | | | | | |
| **HGSD** | **Ruisui** | **1.51 223** | *e*P | Pn | 16 13 07.9 | -0.6 |
| | baz=223 | | | | | |
| HGSD | | | *e*S | Sn | 16 13 27.5 | -1.0 |
| | baz=223 | | | | | |
| **EHY** | **Hungye** | **1.56 226** | P | Pn | 16 13 08.6 | -0.7 |
| | baz=233 | | | | | |
| **WCS** | **Beigang Elemen** | **1.58 250** | *e*P | Pn | 16 13 10.2 | +0.7 |
| | baz=250 | | | | | |
| WCS | | | *e*S | Sn | 16 13 30.2 | 0.0 |
| | baz=250 | | | | | |
| **NMLH** | **Miaoli** | **1.60 268** | *e*P | Pn | 16 13 10.0 | +0.4 |
| | baz=258 | | | | | |
| NMLH | | | *e*S | Sn | 16 13 29.6 | -0.8 |
| | baz=258 | | | | | |
| **TWQ1** | **Liyutan** | **1.63 261** | *e*P | Pn | 16 13 10.4 | +0.3 |
| | baz=261 | | | | | |
| TWQ1 | | | *e*S | Sn | 16 13 29.8 | -1.5 |
| | baz=261 | | | | | |
| **NSY** | **Sanyi** | **1.63 264** | *e*P | Pn | 16 13 10.8 | +0.8 |
| | baz=263 | | | | | |
| NSY | | | *e*S | Sn | 16 13 30.8 | -0.6 |
| | baz=263 | | | | | |
| **YULB** | **Yu-li** | **1.66 224** | *e*P | Pn | 16 13 09.7 | -0.8 |
| | baz=230 | | | | | |
| YULB | | | *e*S | Sn | 16 13 29.6 | -2.4 |
| | baz=230 | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.66 245** | *e*P | Pn | 16 13 11.3 | +0.7 |
| | baz=239 | | | | | |
| SMLT | | | *e*S | Sn | 16 13 32.8 | +0.6 |
| | baz=239 | | | | | |
| **SSLB** | **Suanglung** | **1.66 241** | P | Pn | 16 13 10.4 | -0.1 |
| | baz=238 | | | | | |
| SSLB | | | *e*S | Sn | 16 13 31.2 | -0.8 |
| | baz=238 | | | | | |
| **EYUL** | **Yuli** | **1.68 222** | *e*P | Pn | 16 13 10.2 | -0.5 |
| | baz=229 | | | | | |
| EYUL | | | *e*S | Sn | 16 13 32.5 | +0.1 |
| | baz=229 | | | | | |
| **TYC** | **Yuchr** | **1.69 246** | P | Pn | 16 13 11.9 | +1.1 |
| | baz=241 | | | | | |
| TYC | | | *e*S | Sn | 16 13 33.5 | +0.9 |
| | baz=241 | | | | | |
| **WDJ** | **Dajia District** | **1.75 262** | *e*P | Pn | 16 13 11.3 | -0.2 |
| | baz=262 | | | | | |
| WDJ | | | *e*S | Sn | 16 13 34.7 | +0.8 |
| | baz=262 | | | | | |
| **FULB** | **Fuli** | **1.81 219** | *e*P | Pn | 16 13 12.1 | -0.2 |
| | baz=214 | | | | | |
| FULB | | | *e*S | Sn | 16 13 35.6 | +0.2 |
| | baz=214 | | | | | |
| **WJS** | **Zhushan** | **1.83 245** | *e*P | Pn | 16 13 13.2 | +0.6 |
| | baz=245 | | | | | |
| WJS | | | *e*S | Sn | 16 13 37.4 | +1.6 |
| | baz=245 | | | | | |
| **WNT** | **Mingjian** | **1.84 247** | *e*P | Pn | 16 13 13.5 | +0.8 |
| | baz=247 | | | | | |
| WNT | | | *e*S | Sn | 16 13 37.6 | +1.5 |
| | baz=247 | | | | | |
| **ALS** | **Alishan** | **1.93 236** | *e*P | Pn | 16 13 15.0 | +0.9 |
| | baz=236 | | | | | |
| ALS | | | *e*S | Sn | 16 13 40.1 | +1.6 |
| | baz=236 | | | | | |
| **CHN5** | **Tsauling** | **1.98 240** | P | Pn | 16 13 15.7 | +1.2 |
| | baz=250 | | | | | |
| CHN5 | | | *e*S | Sn | 16 13 40.9 | +1.6 |
| | baz=250 | | | | | |
| **EDH** | **Donghe** | **1.98 215** | *e*P | Pn | 16 13 13.6 | -0.9 |
| | baz=210 | | | | | |
| EDH | | | *e*S | Sn | 16 13 37.9 | -1.4 |
| | baz=210 | | | | | |
| **ELDTW** | **Lidau** | **1.99 225** | *e*P | Pn | 16 13 14.3 | -0.4 |
| | baz=222 | | | | | |
| **WDLH** | **Douliu** | **2.05 244** | *e*P | Pn | 16 13 16.5 | +1.1 |
| | baz=254 | | | | | |
| **WRL** | **Guolierlin Hig** | **2.10 251** | *e*P | Pn | 16 13 15.7 | -0.3 |
| | baz=259 | | | | | |
| WRL | | | *e*S | Sn | 16 13 41.2 | -0.7 |
| | baz=259 | | | | | |
| **STYH** | **Taoyuan** | **2.16 229** | *e*P | Pn | 16 13 17.7 | +0.9 |
| | baz=229 | | | | | |
| STYH | | | *e*S | Sn | 16 13 44.2 | +0.9 |
| | baz=229 | | | | | |
| **LDUT** | **Ludao** | **2.16 207** | *e*P | Pn | 16 13 15.4 | -1.4 |
| | baz=212 | | | | | |
| LDUT | | | *e*S | Sn | 16 13 40.7 | -2.7 |
| | baz=212 | | | | | |
| **WTK** | **Tuku** | **2.17 245** | P | Pn | 16 13 17.4 | +0.5 |
| | baz=246 | | | | | |
| WTK | | | *e*S | Sn | 16 13 42.8 | -0.7 |
| | baz=246 | | | | | |
| **TPUB** | **Ta-pu** | **2.18 234** | *e*P | Pn | 16 13 17.6 | +0.5 |
| | baz=234 | | | | | |
| TPUB | | | *e*S | Sn | 16 13 45.4 | +1.6 |
| | baz=234 | | | | | |
| **WTP** | **Ta-pu** | **2.23 233** | *e*P | Pn | 16 13 18.6 | +0.9 |
| | baz=233 | | | | | |
| WTP | | | *e*S | Sn | 16 13 46.4 | +1.5 |
| | baz=233 | | | | | |
| **TWGBT** | **Beinan** | **2.23 217** | *e*P | Pn | 16 13 16.9 | -0.8 |
| | baz=217 | | | | | |
| **TWG** | **Pinlang** | **2.23 217** | *e*P | Pn | 16 13 16.8 | -1.0 |
| | baz=217 | | | | | |
| **TWK** | **Hsinying** | **2.31 235** | *e*P | Pn | 16 13 19.7 | +0.9 |
| | baz=235 | | | | | |
| **CHN1** | **Nanshi** | **2.33 233** | *e*P | Pn | 16 13 20.2 | +1.3 |
| | baz=233 | | | | | |
| **WSF** | **Szhu** | **2.33 246** | *e*P | Pn | 16 13 19.5 | +0.5 |
| | baz=246 | | | | | |
| **SGST** | **Jiashian** | **2.35 230** | *e*P | Pn | 16 13 19.8 | +0.5 |
| | baz=240 | | | | | |
| **SLGT** | **Liugui** | **2.37 228** | *e*P | Pn | 16 13 20.2 | +0.6 |
| | baz=237 | | | | | |
| **WSL** | **Shuilin Townsh** | **2.38 243** | *e*P | Pn | 16 13 19.8 | +0.2 |
| | baz=244 | | | | | |
| **ICHU** | **Yijhu** | **2.41 239** | *e*P | Pn | 16 13 20.8 | +0.7 |
| | baz=240 | | | | | |
| **ECL** | **Taimali** | **2.48 216** | *e*P | Pn | 16 13 19.5 | -1.4 |
| | baz=216 | | | | | |
| **SSD** | **Sandimen** | **2.55 224** | *e*P | Pn | 16 13 23.4 | +1.5 |
| | baz=231 | | | | | |
| **TSMG** | **Majia** | **2.57 223** | *e*P | Pn | 16 13 23.3 | +1.1 |
| | baz=230 | | | | | |
| **MASBT** | **Mashibuluo** | **2.65 222** | *e*P | Pn | 16 13 23.8 | +0.5 |
| | baz=222 | | | | | |
| **EAST** | **Anshuo** | **2.71 215** | *e*P | Pn | 16 13 23.1 | -0.9 |
| | baz=211 | | | | | |
| **SSPT** | **Xinbi** | **2.78 221** | *e*P | Pn | 16 13 26.6 | +1.6 |
| | baz=221 | | | | | |
| **SCZT** | **Fangliau** | **2.84 219** | *e*P | Pn | 16 13 26.7 | +0.9 |
| | baz=230 | | | | | |
| **SLIU** | **Shizi** | **2.87 214** | *e*P | Pn | 16 13 25.6 | -0.6 |
| | baz=214 | | | | | |

*IDC* ***12*** *16:19:33.7±1.0, 19.86N×121.22E, h0km, mb3.6/7, mb1 3.8/7, mb1mx3.4/36, mbtmp3.6/7, MS3.3/6, Ms1 3.3/6, ms1mx2.8/73, Error ellipse: s-maj=46.5km s-min=19.0km az=64.0*

*MAN* ***12*** *16:19:36.4, 20.17N×121.24E, h32km, mb4.8, ML3.8, MS3.7*

**ISC 12 16:19:39.0±0.8, 20.06N±0.08×121.4E±0.1, h35km, n16, σ1§70/12, mb3.6/7, MS3.6/5, 3C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BBP** | **Basco** | **0.64** | **53** | ⇑*e*P | | **Pn** | **16 19 50.5** | **-1.0** |
| BBP | | | | *i* S | | **Sn** | **16 19 60.0** | **-0.5** |
| **SIPP** | **Brgy, Tapao** | **2.31** | **203** | ⇓*i*P | | **Pn** | **16 20 13.0** | **-1.6** |
| SIPP | | | | *e*S | | Sn | 16 21 10.9 | +29 |
| **PCPH** | **Palayan** | **4.49** | **184** | ⇑*e*P | | **Pn** | **16 20 45.9** | **+1.4** |
| **LQP** | **Lukban** | **5.92** | **179** | ⇑*e*P | | **Pn** | **16 21 05.0** | **+0.6** |
| **DAV** | **Davao City (W)** | **13.53** | **162** | LR | | LR | 16 27 28.1 | |
| | comp=Z,62nm,21.5s,baz=316,slow=35 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.28** | **269** | P | | **P** | **16 24 21.8** | **-0.8** |
| | 0.3nm,0.6s,baz=84,slow=8.5,SNR=1.6 | | | | | | | |
| CMAR | | | | LR | | LR | 16 32 33.3 | |
| | comp=Z,20nm,21.0s,baz=100,slow=37 | | | | | | | |
| **BATI** | **Baumata** | **30.16** | **176** | LR | | LR | 16 37 14.7 | |
| | comp=Z,27nm,20.9s,baz=99,slow=35 | | | | | | | |
| **SONM** | **Songino Array** | **30.27** | **340** | P | | **P** | **16 25 48.5** | **+1.7** |
| | 0.3nm,0.7s,baz=160,slow=10,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.51** | **319** | P | | **P** | **16 27 21.6** | **-1.3** |
| | 0.8nm,0.9s,baz=122,slow=6.3,SNR=6.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.72** | **162** | P | | **P** | **16 27 23.0** | **-1.8** |
| | 2.1nm,0.7s,baz=343,slow=9.0,SNR=14 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.85** | **329** | P | | **P** | **16 27 40.9** | **-0.7** |
| | 0.9nm,0.9s,baz=125,slow=12,SNR=2.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **164** | P | | **P** | **16 27 50.9** | **-1.4** |
| | 1.0nm,0.7s,baz=345,slow=6.9,SNR=31 | | | | | | | |
| **TIXI** | **Tiksi** | **51.78** | **3** | LR | | LR | 16 52 18.9 | |
| | comp=Z,55nm,18.1s,baz=346,slow=38 | | | | | | | |
| **NOA** | **NORSAR Array B** | **81.96** | **333** | LR | | LR | 17 10 12.9 | |
| | comp=Z,28nm,18.1s,baz=330,slow=37 | | | | | | | |
| **IDI** | **Anoyia** | **83.76** | **305** | LR | | LR | 17 16 42.2 | |
| | comp=Z,53nm,19.0s,baz=272,slow=41 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.67** | **23** | P | | **P** | **16 32 21.8** | **+3.0** |
| | 0.4nm,0.7s,baz=305,slow=4.5,SNR=3.0 | | | | | | | |

**IDC 12 16:51:03.1±4.5, 4.68S×152.41E, h0km, mb3.1/2, mb1 3.4/2, mb1mx3.1/26, mbtmp3.1/2, Error ellipse: s-maj=215.7km s-min=53.7km az=120.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.23** | **228** | P | | P | 16 56 12.6 | +0.4 |
| | 0.6nm,1.0s,baz=52,slow=10.0,SNR=3.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.98** | **222** | P | | P | 16 56 37.7 | -0.1 |
| | 0.4nm,1.0s,baz=62,slow=8.5,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.90** | **288** | PKPbc | | PKPbc | 17 10 55.9 | -0.6 |
| | 0.6nm,0.7s,baz=53,slow=2.3,SNR=3.8 | | | | | | | |

*IDC* ***12*** *16:55:12.2±4.1, 8.59S×120.92E, h164km±41km, mb2.6/1, mb1 3.0/5, mb1mx2.8/34, mbtmp3.4/5, Error ellipse: s-maj=77.0km s-min=29.7km az=63.0*

*DJA* ***12*** *16:55:12.5±0.4, 9°S±4°×12°1E±°, h148km±6km, M3.5/10, mb3.5/1, MLv3.4/10*

**ISC 12 16:55:11.5±0.9, 8.75S±0.06×120.81E±0.05, h150km, n14, σ1§87/19, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **1.41** | **85** | P | | **Pn** | **16 55 41.8** | **+1.7** |
| **BASI** | **Baing, Sumba** | **1.48** | **189** | P | | **Pn** | **16 55 42.4** | **+1.6** |
| BASI | | | | S | | **Sn** | **16 56 04.8** | **+1.4** |
| **WBSI** | **Waikabubak, Su** | **1.66** | **238** | P | | **Pn** | **16 55 44.2** | **+1.4** |
| WBSI | | | | S | | **Sn** | **16 56 07.4** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **2.61** | **353** | P | | **Pn** | **16 55 54.6** | **+0.6** |
| **PLAI** | **Plampang** | **3.00** | **268** | P | | **Pn** | **16 56 01.0** | **+2.1** |
| PLAI | | | | S | | **Sn** | **16 56 36.4** | **+0.9** |
| **BATI** | **Baumata** | **3.16** | **117** | P | | **Pn** | **16 56 02.7** | **+1.7** |
| | 7.0nm,0.3s,baz=307,slow=20,SNR=27 | | | | | | | |
| BATI | | | | S | | **Sn** | **16 56 40.9** | **+1.7** |
| | 5.1nm,0.3s,baz=311,slow=12,SNR=2.2 | | | | | | | |
| **BATI** | **Baumata** | **3.16** | **117** | P | | **Pn** | **16 56 02.3** | **+1.4** |
| **BKSI** | **Bulukumba** | **3.48** | **349** | P | | **Pn** | **16 56 05.7** | **+0.8** |
| **SOEI** | **Soe** | **3.55** | **107** | P | | **Pn** | **16 56 07.0** | **+1.0** |
| **GMJI** | **Gumukmas** | **7.30** | **273** | P | | **Pn** | **16 56 56.6** | **+1.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **10.41** | **154** | P | **Pn** | **16 57 37.2** | **+0.3** |
| | 0.1nm,0.3s,baz=324,slow=12,SNR=6.4 | | | | | | |
| FITZ | | | | S | **Sn** | **16 59 26.9** | **-5.2** |
| | 0.1nm,0.3s,baz=219,slow=21,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.17** | **132** | P | **Pn** | **16 59 02.0** | **-0.6** |
| | 0.1nm,0.3s,baz=305,slow=13,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **19.42** | **141** | P | **P** | **16 59 27.2** | **+0.9** |
| | 0.2nm,0.3s,baz=323,slow=11,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.07** | **332** | P | **P** | **17 05 34.4** | **-1.5** |
| | 0.1nm,0.5s,baz=132,slow=6.0,SNR=1.5 | | | | | | |

*SOME* ***12*** *16:58:37.5, 47.75N×83.50E, h0km*

*NNC* ***12*** *16:58:38.2±2.1, 46.86N×84.41E, h0km, mb2.9, mpv2.9, Error ellipse: s-maj=12.5km s-min=10.9km az=89.0*

**ISC 12 16:58:40.1±1.8, 47.1N±0.2×84.3E±0.1, h10km, n6, σ1§53/8, 4C-2D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **0.57** | **45** | *e*P | | **Pg** | **16 58 50.7** | **-0.6** |
| | 7.8nm,0.1s | | | | | | | |
| ZSN | | | | *e*S | | **Sg** | **16 59 00.4** | **+1.6** |
| | 73nm,0.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **1.38** | **260** | ⇑P | | **Pn** | **16 59 04.9** | **-0.5** |
| | 3.6nm,0.4s,baz=85,slow=16,SNR=210 | | | | | | | |
| MK31 | | | | ⇓S | | **Sg** | **16 59 24.7** | **+0.3** |
| | 3.6nm,0.3s,baz=87,slow=30,SNR=19 | | | | | | | |
| **MAKZ** | **Makanchi** | **1.58** | **262** | ⇑P | | **Pb** | **16 59 08.6** | **-1.0** |
| | 4.3nm,0.3s | | | | | | | |
| MAKZ | | | | ⇑S | | **Sg** | **16 59 31.7** | **+0.7** |
| | 7.3nm,0.4s | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.84** | **244** | *e*P | | **Pb** | **16 59 47.1** | **-0.8** |
| | 0.2nm,0.0s | | | | | | | |
| KAPS | | | | *e*S | | **Sb** | **17 00 37.0** | **+2.5** |
| | 1.2nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.21** | **315** | ⇓Lg | | Lg | 17 01 29.8 | |
| | 4.6nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **5.23** | **317** | ⇑Lg | | Lg | 17 01 29.7 | |
| | 2.0nm,0.6s | | | | | | | |

**MAN 12 17:04:06.7, 15.02N×120.27E, h31km, mb3.8, ML2.5, MS2.1, Luzon**

*IDC* ***12*** *17:07:25.4±4.0, 24.48N×94.50E, h86km±40km, mb3.2/6, mb1 3.2/7, mb1mx3.0/41, mbtmp3.4/7, Error ellipse: s-maj=59.5km s-min=16.9km az=62.0*

**ISC 12 17:07:25.3±1.4, 24.5N±0.2×94.5E±0.4, h82km, n7, σ0§73/7, mb3.4/6, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.28** | **145** | P | | **Pn** | **17 09 09.2** | **+0.2** |
| | 0.2nm,0.3s,baz=312,slow=13,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **24.31** | **339** | P | | **P** | **17 12 34.3** | **-0.8** |
| | 0.5nm,0.4s,baz=152,slow=10,SNR=20 | | | | | | | |
| **AAK** | **Ala-Archa** | **24.51** | **322** | P | | **P** | **17 12 37.8** | **+0.7** |
| | 0.4nm,0.3s,baz=154,slow=9.0,SNR=4.2 | | | | | | | |
| **SONM** | **Songino Array** | **25.11** | **19** | P | | **P** | **17 12 43.1** | **+0.7** |
| | 0.4nm,0.7s,baz=204,slow=10,SNR=4.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.29** | **349** | P | | **P** | **17 13 27.8** | **-0.7** |
| | 0.4nm,0.4s,baz=179,slow=9.7,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **58.76** | **135** | P | | **P** | **17 17 14.7** | **-0.3** |
| | 0.4nm,0.8s,baz=323,slow=7.3,SNR=4.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **61.24** | **138** | P | | **P** | **17 17 31.8** | **-0.2** |
| | 0.4nm,0.9s,baz=320,slow=6.6,SNR=4.7 | | | | | | | |

*TAP* ***12*** *17:13:38.3, 25.01N×122.57E, h151km±1km, ML2.8, D*

*JMA* ***12*** *17:13:38.6±0.3, 25.01N×122.55E, h144km±3km, M2.5*

**ISC 12 17:13:38.7±2.1, 24.96N±0.08×122.57E±0.03, h147km±13km, n51, σ0§60/98, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonaguni jima** | **0.61** | **146** | P | | **Pn** | **17 14 00.4** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.64** | **141** | *e*P | | **Pn** | **17 14 00.7** | **+0.1** |
| | baz=143 | | | | | | | |
| YOJ | | | | *e*S | | **Sn** | **17 14 17.6** | **+0.5** |
| | baz=143 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.64** | **282** | *e*P | | **Pn** | **17 14 00.8** | **+0.2** |
| | baz=277 | | | | | | | |
| SXI1 | | | | *e*S | | **Sn** | **17 14 15.9** | **-1.4** |
| | baz=277 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.67** | **271** | *e*P | | **Pn** | **17 14 01.1** | **+0.3** |
| | baz=267 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **17 14 17.7** | **+0.2** |
| | baz=267 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.72** | **279** | *e*P | | **Pn** | **17 14 01.6** | **+0.4** |
| | baz=275 | | | | | | | |
| **TWC** | **Suao** | **0.74** | **242** | *e*P | | **Pn** | **17 14 01.7** | **+0.5** |
| | baz=238 | | | | | | | |
| TWC | | | | *e*S | | **Sn** | **17 14 18.1** | **-0.1** |
| | baz=238 | | | | | | | |
| **NDS** | **Dongshan** | **0.84** | **247** | *e*P | | **Pn** | **17 14 02.0** | **+0.1** |
| | baz=244 | | | | | | | |
| NDS | | | | *e*S | | **Sn** | **17 14 19.1** | **-0.4** |
| | baz=244 | | | | | | | |
| **TWE** | **Neicheng** | **0.85** | **254** | P | | **Pn** | **17 14 02.2** | **+0.1** |
| | baz=250 | | | | | | | |
| TWE | | | | *e*S | | **Sn** | **17 14 19.9** | **+0.2** |
| | baz=250 | | | | | | | |
| **EWUT** | **Wuta** | **0.88** | **235** | *e*P | | **Pn** | **17 14 02.5** | **+0.2** |
| | baz=232 | | | | | | | |
| EWUT | | | | *e*S | | **Sn** | **17 14 20.1** | **0.0** |
| | baz=232 | | | | | | | |
| **TWA** | **Mucha** | **0.89** | **271** | *e*P | | **Pn** | **17 14 02.4** | **0.0** |
| | baz=268 | | | | | | | |
| TWA | | | | *e*S | | **Sn** | **17 14 19.1** | **-1.3** |
| | baz=268 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **257** | P | | **Pn** | **17 14 02.4** | **-0.2** |
| | baz=254 | | | | | | | |
| FUSB | | | | *e*S | | **Sn** | **17 14 20.1** | **-0.6** |
| | baz=254 | | | | | | | |
| **ENA** | **Nanau** | **0.92** | **235** | *e*P | | **Pn** | **17 14 02.9** | **+0.3** |
| | baz=232 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **17 14 20.9** | **+0.2** |
| | baz=232 | | | | | | | |
| **YM01** | **YM01** | **0.92** | **282** | *e*P | | **Pn** | **17 14 02.9** | **+0.3** |
| | baz=278 | | | | | | | |
| YM01 | | | | *e*S | | **Sn** | **17 14 20.1** | **-0.7** |
| | baz=278 | | | | | | | |
| **ENTT** | **Nioudou** | **0.96** | **251** | *e*P | | **Pn** | **17 14 03.2** | **+0.2** |
| | baz=247 | | | | | | | |
| ENTT | | | | *e*S | | **Sn** | **17 14 22.7** | **+1.3** |
| | baz=247 | | | | | | | |
| **NWLT** | **Wulai** | **0.98** | **259** | *e*P | | **Pn** | **17 14 03.7** | **+0.5** |
| | baz=256 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **17 14 21.4** | **-0.3** |
| | baz=256 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.02** | **250** | *e*P | | **Pn** | **17 14 03.7** | **+0.2** |
| | baz=247 | | | | | | | |
| NDT | | | | *e*S | | **Sn** | **17 14 23.3** | **+1.0** |
| | baz=247 | | | | | | | |
| **LATG** | **Datong** | **1.04** | **246** | *e*P | | **Pn** | **17 14 04.2** | **+0.5** |
| | baz=243 | | | | | | | |
| LATG | | | | *e*S | | **Sn** | **17 14 23.9** | **+1.2** |
| | baz=243 | | | | | | | |
| **YHNB** | **Yeheng** | **1.12** | **255** | *e*P | | **Pn** | **17 14 04.3** | **-0.1** |
| | baz=252 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **17 14 23.4** | **-0.6** |
| | baz=252 | | | | | | | |
| **NSK** | **Sanguang** | **1.14** | **256** | *e*P | | **Pn** | **17 14 04.4** | **-0.2** |
| | baz=253 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **17 14 23.8** | **-0.3** |
| | baz=253 | | | | | | | |
| **ETL** | **Fush Village** | **1.17** | **227** | *e*P | | **Pn** | **17 14 05.0** | **+0.1** |
| | baz=225 | | | | | | | |
| ETL | | | | *e*S | | **Sn** | **17 14 24.5** | **-0.3** |
| | baz=225 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.18** | **229** | *e*P | | **Pn** | **17 14 04.8** | **-0.1** |
| | baz=226 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **17 14 24.2** | **-0.7** |
| | baz=226 | | | | | | | |
| **NNSB** | **Datong** | **1.20** | **244** | *e*P | | **Pn** | **17 14 05.5** | **+0.3** |
| | baz=241 | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | **17 14 25.6** | **+0.2** |
| | baz=241 | | | | | | | |
| **NNS** | **Nan Shan** | **1.20** | **245** | *e*P | | **Pn** | **17 14 05.6** | **+0.4** |
| | baz=242 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **17 14 25.6** | **+0.2** |
| | baz=242 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.23** | **120** | P | | **Pn** | **17 14 05.3** | **0.0** |
| IRIF | | | | *e*S | | **Sn** | **17 14 25.2** | **-0.4** |
| **ETLH** | **Xiulin Townshi** | **1.24** | **233** | *e*P | | **Pn** | **17 14 05.5** | **-0.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=231 | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | 17 14 25.2 | **-0.8** |
| | baz=231 | | | | | | | |
| **TWD** | **Chiawan** | **1.25** | **225** | *e*P | | **Pn** | 17 14 05.4 | **-0.1** |
| | baz=223 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | 17 14 25.6 | **-0.3** |
| | baz=223 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.36** | **256** | *e*P | | **Pn** | 17 14 06.3 | **-0.4** |
| | baz=254 | | | | | | | |
| NFF | | | | *e*S | | **Sn** | 17 14 27.4 | **-0.6** |
| | baz=254 | | | | | | | |
| **FUSS** | **Fushou** | **1.40** | **240** | *e*P | | **Pn** | 17 14 07.7 | **+0.4** |
| | baz=237 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | 17 14 29.2 | **+0.1** |
| | baz=237 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.44** | **236** | *e*P | | **Pn** | 17 14 08.1 | **+0.2** |
| | baz=233 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | 17 14 29.7 | **-0.4** |
| | baz=233 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.44** | **128** | P | | **Pn** | 17 14 08.1 | **+0.6** |
| HATJ | | | | *e*S | | **Sn** | 17 14 30.1 | **+0.7** |
| **LIOB** | **Emei** | **1.45** | **258** | *e*P | | **Pn** | 17 14 07.4 | **-0.1** |
| | baz=255 | | | | | | | |
| LIOB | | | | *e*S | | **Sn** | 17 14 29.1 | **-0.4** |
| | baz=255 | | | | | | | |
| **TWT** | **Tachien** | **1.45** | **241** | *e*P | | **Pn** | 17 14 09.2 | **+1.4** |
| | baz=239 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | 17 14 31.3 | **+1.4** |
| | baz=239 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.50** | **118** | P | | **Pn** | 17 14 08.5 | **+0.5** |
| JKRS | | | | S | | **Sn** | 17 14 30.9 | **+0.5** |
| **ESL** | **Shilin** | **1.54** | **222** | *e*P | | **Pn** | 17 14 07.7 | **-0.9** |
| | baz=220 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | 17 14 29.4 | **-1.9** |
| | baz=220 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.55** | **112** | P | | **Pn** | 17 14 08.7 | **+0.1** |
| JIJ | | | | S | | **Sn** | 17 14 30.7 | **-0.8** |
| **CHGB** | **Renai** | **1.56** | **235** | *e*P | | **Pn** | 17 14 09.4 | **+0.5** |
| | baz=233 | | | | | | | |
| CHGB | | | | *e*S | | **Sn** | 17 14 32.1 | **+0.1** |
| | baz=233 | | | | | | | |
| **WHP** | **Taichung City** | **1.63** | **246** | *e*P | | **Pn** | 17 14 10.0 | **+0.5** |
| | baz=243 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | 17 14 33.4 | **+0.3** |
| | baz=243 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.63** | **103** | P | | **Pn** | 17 14 09.4 | **0.0** |
| JISG | | | | S | | **Sn** | 17 14 32.4 | **-0.5** |
| **WUSB** | **Renai** | **1.64** | **234** | *e*P | | **Pn** | 17 14 10.4 | **+0.7** |
| | baz=232 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | 17 14 33.4 | **0.0** |
| | baz=232 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.76** | **240** | *e*P | | **Pn** | 17 14 11.3 | **+0.4** |
| | baz=237 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | 17 14 35.6 | **0.0** |
| | baz=237 | | | | | | | |
| **HGSD** | **Ruisui** | **1.80** | **216** | *e*P | | **Pn** | 17 14 11.4 | **0.0** |
| | baz=214 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | 17 14 36.5 | **+0.1** |
| | baz=214 | | | | | | | |
| **WDJ** | **Dajia District** | **1.86** | **251** | *e*P | | **Pn** | 17 14 11.9 | **-0.1** |
| | baz=249 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.86** | **235** | *e*P | | **Pn** | 17 14 12.8 | **+0.5** |
| | baz=233 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | 17 14 39.0 | **+1.2** |
| | baz=233 | | | | | | | |
| **SSLB** | **Suanglung** | **1.88** | **232** | *e*P | | **Pn** | 17 14 12.8 | **+0.5** |
| | baz=230 | | | | | | | |
| SSLB | | | | *e*S | | **Sn** | 17 14 38.2 | **+0.1** |
| | baz=230 | | | | | | | |
| **YULB** | **Yu-li** | **1.95** | **217** | *e*P | | **Pn** | 17 14 12.3 | **-0.9** |
| | baz=215 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | 17 14 38.0 | **-1.5** |
| | baz=215 | | | | | | | |
| **JTJ** | **Tarama** | **1.97** | **99** | P | | **Pn** | 17 14 13.6 | **+0.3** |
| JTJ | | | | S | | **Sn** | 17 14 39.4 | **-0.3** |
| **FULB** | **Fuli** | **2.11** | **214** | *e*P | | **Pn** | 17 14 14.9 | **-0.1** |
| | baz=212 | | | | | | | |
| FULB | | | | *e*S | | **Sn** | 17 14 43.0 | **+0.2** |
| | baz=212 | | | | | | | |
| **ALS** | **Alishan** | **2.16** | **228** | *e*P | | **Pn** | 17 14 16.3 | **+0.4** |
| | baz=227 | | | | | | | |
| ALS | | | | *e*S | | **Sn** | 17 14 45.6 | **+1.1** |
| | baz=227 | | | | | | | |
| **CHN5** | **Tsauling** | **2.19** | **232** | *e*P | | **Pn** | 17 14 16.2 | **+0.1** |
| | baz=230 | | | | | | | |
| CHN5 | | | | *e*S | | **Sn** | 17 14 45.0 | **+0.1** |
| | baz=230 | | | | | | | |
| **ELDTW** | **Lidau** | **2.26** | **219** | *e*P | | **Pn** | 17 14 16.4 | **-0.6** |
| | baz=217 | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | 17 14 45.4 | **-1.0** |
| | baz=217 | | | | | | | |
| **CHN4** | **Tsaushan** | **2.41** | **229** | *e*P | | **Pn** | 17 14 18.8 | **+0.1** |
| | baz=227 | | | | | | | |

*ATH **12** 17:16:31.6,34°.28N×26°.13E,h20km±4km, ML2.7/1, Error ellipse: s-maj=11.0km s-min=2.8km az=333.0*
*DDA **12** 17:16:40.8±0.0,34°.99N×26°.41E,h12km±4km, ML2.6*
**ISC 12 17:16:35.0**±2.4,**34°.5N**±0°.2×**26°.20E**±0°.06,**h32**km,**n11**, σ1§**69**/18, **Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.66** | **1** | P | **Pb** | **17 16 47.6** | **-0.6** |
| ZKR | | | | S | **Sn** | **17 16 59.2** | **+1.8** |
| ZKR | | | | AML | AML | 17 17 08.2 | |
| | comp=N,539μm,0.6s | | | | | | |
| ZKR | | | | AML | AML | 17 17 08.9 | |
| | comp=E,1783μm,0.5s | | | | | | |
| **NPS** | **Neapolis** | **0.94** | **329** | P | **Pn** | **17 16 51.7** | **-0.3** |
| **IDI** | **Anoyia** | **1.36** | **308** | P | **Pn** | **17 16 58.7** | **+0.9** |
| **IMMV** | **Iera Moni Meta** | **2.08** | **300** | P | **Pn** | **17 17 08.2** | **+0.5** |
| **TURN** | **Turunc** | **2.86** | **35** | P | **Pn** | **17 17 19.4** | **+1.1** |
| **FETY** | **Fethiye** | **3.21** | **46** | P | **Pn** | **17 17 24.1** | **+0.9** |
| FETY | | | | S | **Sn** | **17 17 57.7** | **-2.6** |
| FETY | | | | *i* AML | AML | 17 18 09.0 | |
| | comp=E,17nm,1.0s | | | | | | |
| FETY | | | | *i* AML | AML | 17 18 26.0 | |
| | comp=E,24nm,1.6s | | | | | | |
| **AKAS** | **Kas** | **3.30** | **56** | P | **Pn** | **17 17 25.7** | **+1.1** |
| AKAS | | | | S | **Sn** | **17 18 00.9** | **-1.9** |
| AKAS | | | | *i* AML | AML | 17 18 12.0 | |
| | comp=E,29nm,0.4s | | | | | | |
| AKAS | | | | *i* AML | AML | 17 18 15.0 | |
| | comp=E,26nm,0.8s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **3.73** | **35** | P | **Pn** | **17 17 31.0** | **+0.6** |
| TAVA | | | | S | **Sn** | **17 18 14.2** | **+1.0** |
| **AKUM** | **Antalya-Kumluc** | **3.87** | **60** | P | **Pn** | **17 17 34.4** | **+2.2** |
| AKUM | | | | S | **Sn** | **17 18 14.1** | **-2.4** |
| AKUM | | | | *i* AML | AML | 17 18 21.0 | |
| | comp=E,16nm,1.1s | | | | | | |
| AKUM | | | | *i* AML | AML | 17 18 25.0 | |
| | comp=E,14nm,1.0s | | | | | | |
| **GOLH** | **Golhisar** | **3.90** | **44** | P | **Pn** | **17 17 34.6** | **+1.9** |
| GOLH | | | | S | **Sn** | **17 18 16.2** | **-1.2** |
| GOLH | | | | *i* AML | AML | 17 18 35.0 | |
| | comp=E,16nm,1.8s | | | | | | |
| **SEDI** | **Konya, Seydise** | **5.41** | **55** | P | **Pn** | **17 17 55.5** | **+2.0** |
| SEDI | | | | S | **Sn** | **17 18 52.8** | **-1.9** |
| SEDI | | | | *i* AML | AML | 17 19 01.0 | |
| | comp=E,8.4nm,1.3s | | | | | | |
| SEDI | | | | *i* AML | AML | 17 19 02.0 | |
| | comp=E,5.6nm,1.2s | | | | | | |

**SSNC 12 17:28:01.3**±3.0,**19°.84N**×**73°.48W**,**h0**km±47km,**ML2.1,1C, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MASC** | **Masc** | **0.78** | **295** | ⇑*i*P | Pg | 17 28 13.8 | -2.5 |
| MASC | | | | *e*S | Sg | 17 28 23.8 | -2.6 |
| MASC | | | | IAML | | 17 28 24.8 | |
| | comp=N,70nm,0.3s | | | | | | |
| MASC | | | | IAML | | 17 28 25.0 | |
| | comp=E,34nm,0.2s | | | | | | |
| **MASC** | **Masc** | **0.78** | **295** | *e*P | Pg | 17 28 13.9 | -2.4 |
| MASC | | | | *e*S | Sg | 17 28 24.1 | -2.3 |
| MASC | | | | IAML | | 17 28 24.4 | |
| | comp=E,46nm,0.2s | | | | | | |
| MASC | | | | IAML | | 17 28 24.7 | |
| | comp=N,72nm,0.3s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.54** | **273** | *e*P | Pn | 17 28 27.7 | -2.3 |
| GTBY | | | | *e*S | Sn | 17 28 46.7 | -4.0 |
| **GTBY** | **Guantanamo Bay** | **1.54** | **273** | *e*P | Pn | 17 28 27.1 | -2.9 |
| **MOAC** | **Moa** | **1.61** | **301** | *e*P | Pn | 17 28 28.4 | -2.6 |
| MOAC | | | | *e*S | Sn | 17 28 49.5 | -3.0 |
| MOAC | | | | IAML | | 17 28 50.1 | |
| | comp=E,25nm,0.2s | | | | | | |
| MOAC | | | | IAML | | 17 28 50.5 | |
| | comp=N,34nm,0.3s | | | | | | |
| **MOAC** | **Moa** | **1.61** | **301** | *e*P | Pn | 17 28 28.7 | -2.3 |
| MOAC | | | | *e*S | Sn | 17 28 49.1 | -3.4 |
| MOAC | | | | IAML | | 17 28 49.9 | |
| | comp=E,25nm,0.2s | | | | | | |
| MOAC | | | | IAML | | 17 28 50.5 | |
| | comp=N,34nm,0.2s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.09** | **275** | *e*P | Pn | 17 28 35.0 | -2.6 |
| RCC | | | | *e*S | Sn | 17 28 59.8 | -4.6 |
| RCC | | | | IAML | | 17 29 02.8 | |
| | comp=N,7.6nm,0.2s | | | | | | |
| RCC | | | | IAML | | 17 29 05.0 | |
| | comp=E,9.9nm,0.2s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.09** | **275** | *e*P | Pn | 17 28 34.5 | -3.1 |
| RCC | | | | *e*S | Sn | 17 28 58.7 | -5.6 |
| RCC | | | | IAML | | 17 29 02.8 | |
| | comp=N,7.6nm,0.3s | | | | | | |
| RCC | | | | IAML | | 17 29 04.9 | |
| | comp=E,10.0nm,0.1s | | | | | | |

*NEIC **12** 17:34:17.0±1.7,20°.6S±0°.1×177°.9W±0°.1,h528km±8km, mb4.3/22, Error ellipse: s-maj=18.1km s-min=15.3km az=132.0*
*IDC **12** 17:34:18.5±4.4,20°.70S×178°.07W,h542km±30km, mb3.2/8, mb1 3.3/9,mb1mx2.8/43,mbtmp4.1/9, Error ellipse: s-maj=78.6km s-min=19.5km az=135.0*
**ISC 12 17:34:17.6**±0.6,**20.7S**±0°.1×**178.01W**±0°.10,**h534**km,**n39**, σ1§**08**/40,**mb4.2**/18,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.74** | **307** | P | **P** | **17 35 45.5** | **+1.1** |
| | 3.2nm,0.3s,baz=256,slow=22,SNR=14 | | | | | | |
| **MSVF** | **Nonsavu** | **4.74** | **307** | P | **P** | **17 35 45.0** | **+0.6** |
| **NIUE** | **Niue** | **7.77** | **80** | P | **P** | **17 36 12.9** | **+0.4** |
| NIUE | | | | S | S | 17 37 32.5 | -14 |
| **PINNC** | **Pines Island,** | **13.66** | **259** | P | **P** | **17 37 13.6** | **+0.2** |
| **BFZ** | **Birch Farm** | **20.54** | **193** | P | **P** | **17 38 17.2** | **-1.9** |
| **LTZ** | **Lake Taylor** | **23.51** | **198** | P | **P** | **17 38 44.3** | **-1.5** |
| **MLZ** | **Mavora Lakes** | **27.16** | **202** | P | **P** | **17 39 19.5** | **+1.5** |
| MLZ | | | | IAmb | IAmb | 17 39 35.0 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **27.67** | **201** | P | **P** | **17 39 24.1** | **+1.7** |
| WHZ | | | | IAmb | IAmb | 17 39 25.0 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **28.80** | **255** | P | **P** | **17 39 32.3** | **-0.3** |
| **ARMA** | **Armidale** | **28.99** | **244** | P | **P** | **17 39 35.0** | **+0.7** |
| ARMA | | | | IAmb | IAmb | 17 39 59.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **33.47** | **265** | P | **P** | **17 40 12.7** | **0.0** |
| | comp=Z,2.2nm,0.4s,baz=84,slow=8.6,SNR=9.6 | | | | | | |
| **CTAO** | **Charters Tower** | **33.47** | **265** | P | **P** | **17 40 12.6** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 17 40 33.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **35.79** | **234** | P | **P** | **17 40 31.3** | **-0.6** |
| TOO | | | | IAmb | IAmb | 17 40 49.6 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.59** | **274** | P | **P** | **17 40 46.6** | **-0.3** |
| **STKA** | **Stephens Creek** | **37.71** | **244** | P | **P** | **17 40 48.1** | **+0.4** |
| | comp=Z,0.7nm,0.4s,baz=95,slow=13,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **37.71** | **244** | P | **P** | **17 40 47.5** | **-0.2** |
| **BBOO** | **Buckleboo** | **42.47** | **244** | P | **P** | **17 41 25.1** | **-0.7** |
| BBOO | | | | IAmb | IAmb | 17 41 43.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.38** | **262** | P | **P** | **17 41 39.9** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 17 41 51.0 | |
| | comp=Z,11nm,1.5s | | | | | | |
| WR0 | | | | PcP | **PcP** | **17 43 13.0** | **-0.3** |
| **AS31** | **Alice Springs** | **44.47** | **257** | P | **P** | **17 41 41.3** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.47** | **257** | P | **P** | **17 41 41.2** | **-0.4** |
| | comp=Z,2.6nm,0.5s,baz=89,slow=8.5,SNR=126 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 43 14.2** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=110,slow=3.7,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.47** | **257** | PcP | **PcP** | **17 43 14.1** | **+0.6** |
| **WB0** | **Warramunga Arr** | **44.55** | **262** | P | **P** | **17 41 41.3** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 17 41 42.1 | |
| | comp=Z,13nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.56** | **262** | P | **P** | **17 41 40.8** | **-1.5** |
| **WRAB** | **Tennant Creek** | **44.56** | **262** | P | **P** | **17 41 41.4** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 17 41 59.9 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **262** | P | **P** | **17 41 41.5** | **-0.9** |
| | comp=Z,1.1nm,0.3s,baz=96,slow=7.3,SNR=48 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **262** | P | **P** | **17 41 40.7** | **-1.7** |
| **KNRA** | **Kununurra** | **50.64** | **266** | P | **P** | **17 42 26.5** | **-1.4** |
| **QSPA** | **South Pole Qui** | **69.40** | **180** | P | **P** | **17 44 34.1** | **+2.4** |
| **PEA0B** | **Petropavlovsk-** | **76.44** | **345** | P | **P** | **17 45 12.5** | **+0.5** |
| PEA0B | | | | IAmb | IAmb | 17 45 22.1 | |
| | comp=Z,28nm,1.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.44** | **345** | P | **P** | **17 45 12.2** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=141,slow=7.4,SNR=5.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.44** | **345** | P | **P** | **17 45 11.6** | **-0.4** |
| **SLBS** | **Sierra La Lagu** | **79.60** | **60** | P | **P** | **17 45 28.1** | **-1.7** |
| SLBS | | | | IAmb | IAmb | 17 45 34.9 | |
| | comp=Z,32nm,1.6s | | | | | | |
| **PMSA** | **Palmer Station** | **81.13** | **157** | P | **P** | **17 45 36.3** | **-0.6** |
| **SEY** | **Seymchan** | **86.54** | **347** | P | **P** | **17 46 04.7** | **+1.3** |
| | comp=Z,1.2nm,0.6s,baz=135,slow=5.7,SNR=7.0 | | | | | | |
| **ILAR** | **Eielson Array** | **88.48** | **13** | P | **P** | **17 46 13.1** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=216,slow=4.9,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.17** | **290** | P | **P** | **17 46 20.9** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=88,slow=3.0,SNR=4.2 | | | | | | |
| **NRIK** | **Noril'sk** | **110.72** | **338** | PKiKP | **PKiKP** | **17 51 46.5** | **-2.4** |
| | comp=Z,2.1nm,0.5s,baz=71,slow=2.0,SNR=5.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.16** | **331** | PKP | PKPab | 17 52 48.6 | +0.2 |
| | comp=Z,0.9nm,0.5s,baz=43,slow=4.6,SNR=17 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.95** | **312** | PKPbc | **PKPbc** | **17 53 00.9** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=118,slow=4.8,SNR=5.1 | | | | | | |

*JMA **12** 18:02:18.6±0.2,24°.98N×123°.53E,h10km,M3.1*
*IDC **12** 18:02:19.1±1.1,24°.50N×122°.75E,h0km,mb3.6/6, mb1 3.7/7,mb1mx3.3/46,mbtmp3.6/7, Error ellipse: s-maj=50.5km s-min=19.6km az=74.0*
**ISC 12 18:02:18.9**±1.6,**24°.93N**±0°.06×**123°.52E**±0°.04,**h10**km±12km, **n15**,σ0§**81**/21,**mb3.5/6**,**Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.63** | **162** | P | **Pb** | **18 02 31.7** | **-0.2** |
| IRIF | | | | S | **Sb** | **18 02 40.6** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.66** | **225** | P | **Pb** | **18 02 32.1** | **-0.4** |
| YOJ | | | | S | **Sb** | **18 02 41.5** | **-0.2** |
| **JYNG** | **Yonagunijimaku** | **0.71** | **228** | P | **Pg** | **18 02 32.8** | **+0.2** |
| JYNG | | | | S | **Sb** | **18 02 42.6** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **0.80** | **115** | P | **Pg** | **18 02 34.1** | **-0.2** |
| **JIJ** | **Ishigaki jima** | **0.80** | **135** | P | **Pg** | **18 02 34.2** | **-0.2** |
| JIJ | | | | S | **Sg** | **18 02 45.1** | **+0.3** |
| **JKRS** | **Kuro-shima** | **0.82** | **147** | P | **Pg** | **18 02 35.1** | **+0.3** |
| JKRS | | | | S | **Sb** | **18 02 46.3** | **-0.2** |
| **HATJ** | **Hateruma jima** | **0.91** | **163** | P | **Pg** | **18 02 36.6** | **+0.2** |
| HATJ | | | | S | **Sb** | **18 02 49.5** | **+0.5** |
| **JTJ** | **Tarama** | **1.11** | **105** | P | **Pb** | **18 02 40.4** | **+0.1** |
| JTJ | | | | S | **Sb** | **18 02 54.6** | **-0.2** |
| **KSRS** | **Korea Array** | **13.04** | **16** | Pn | **P** | **18 05 32.8** | **-1.9** |
| | baz=204,slow=14,SNR=2.8 | | | | | | |
| **KLR** | **Kul'dur** | **25.09** | **13** | P | P | 18 07 51.2 | +7.5 |
| | 0.5nm,0.6s,baz=211,slow=9.6,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **26.57** | **334** | P | **P** | **18 07 59.4** | **+2.1** |
| | 0.3nm,0.6s,baz=130,slow=7.8,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.31** | **314** | P | **P** | **18 09 48.3** | **+0.2** |
| | 0.5nm,0.6s,baz=99,slow=10,SNR=6.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.80** | **326** | P | **P** | **18 10 01.6** | **+1.2** |
| | 0.7nm,0.5s,baz=119,slow=9.0,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.83** | **166** | P | **P** | **18 10 40.8** | **-0.5** |
| | 0.9nm,0.7s,baz=350,slow=8.6,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **49.35** | **167** | P | **P** | **18 11 08.5** | **-0.1** |
| | 0.3nm,0.5s,baz=348,slow=7.0,SNR=7.6 | | | | | | |

*IDC **12** 18:02:21.4±2.1,7°.30S×128°.67E,h152km±26km, mb2.9/1, mb1 3.2/5,mb1mx2.8/36,mbtmp3.7/5, Error ellipse: s-maj=27.9km s-min=20.1km az=126.0*
**ISC 12 18:02:21.2**±1.1,**7°.4S**±0°.1×**128°.7E**±0°.1,**h151**km,**n6**, σ1§**27**/7,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **5.73** | **240** | P | **Pn** | **18 03 45.0** | **+0.6** |
| | 15nm,0.3s,baz=313,slow=3.0,SNR=23 | | | | | | |
| BATI | | | | S | **Sn** | **18 04 49.3** | **0.0** |
| | 6.3nm,0.3s,baz=116,slow=20,SNR=2.8 | | | | | | |
| **SIJI** | **Sorong** | **6.95** | **22** | P | **Pn** | **18 04 00.5** | **-0.2** |
| | 0.6nm,0.3s,baz=98,slow=19,SNR=8.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.07** | **195** | P | **Pn** | **18 04 53.5** | **-1.8** |
| | 0.3nm,0.3s,baz=4.1,slow=9.9,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.63** | **157** | P | **Pn** | **18 05 29.1** | **+0.6** |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=10.0 | | | | | | |
| WRA | | | | S | Sn | 18 07 49.0 | -11 |
| | 0.2nm,0.3s,baz=331,slow=23,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **16.95** | **163** | P | **Pn** | **18 06 10.9** | **+1.4** |
| | 0.2nm,0.3s,baz=342,slow=10,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.85** | **327** | P | **P** | **18 13 02.5** | **-0.7** |
| | 0.2nm,0.4s,baz=133,slow=7.0,SNR=3.9 | | | | | | |

*IDC **12** 18:11:40.5±0.6,24°.90N×123°.47E,h0km,mb4.0/17, mb1 4.1/18,mb1mx3.9/56,mbtmp4.0/18,ML3.0/1,MS3.7/39, Ms1 3.7/39,ms1mx3.5/91, Error ellipse: s-maj=22.6km s-min=13.5km az=72.0*
*NIED **12** 18:11:41.2,25°.01N×123°.52E,h11km,MW4.5,Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁵Nm; Mrr-5.50; Mθθ5.48; Mϕϕ0.02; Mrθ2.52; Mθϕ0.76; Mϕr0.20; Fault plane solution: M₀6.09000×10¹⁵ NP1: ϕs264.00000°,δ57.00000°,λ-88.00000°. NP2:ϕs81.00000°, δ33.00000°,λ-92.00000°.*
*JMA **12** 18:11:41.2±0.2,25°.01N×123°.52E,h11km±4km,M4.7*
*BJI **12** 18:11:42.0±0.0,24°.68N×123°.35E,h17km,mb4.0/46, mB4.7/36,ML3.6/2,Ms4.4/48,Ms7 4.1/47*
*NEIC **12** 18:11:44.8±1.5,24°.88N±0°.07×123°.40E±0°.06,h29km±5km, mb4.8/89, Error ellipse: s-maj=10.8km s-min=7.9km az=153.0*
**ISC 12 18:11:43.8**±1.0,**24°.87N**±0°.03×**123°.49E**±0°.02,**h26**km±8km, **n198**,σ1§**49**/193,**mb4.7**/67,**MS3.7**/40,**2C-2D, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.57** | **158** | P | **Pb** | **18 11 54.7** | **-0.6** |
| IRIF | | | | S | **Sb** | **18 12 03.7** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **0.59** | **227** | P | **Pb** | **18 11 54.8** | **-0.8** |
| YOJ | | | | S | **Sb** | **18 12 04.1** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.59** | **227** | | **Pb** | **18 11 54.8** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **0.59** | **227** | P | **Pb** | **18 11 55.0** | **-0.6** |
| **JYNG** | **Yonagunijimaku** | **0.65** | **230** | P | **Pb** | **18 11 55.6** | **-0.9** |
| JYNG | | | | S | **Sn** | **18 12 06.6** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **0.78** | **130** | P | **Pb** | **18 11 57.1** | **-1.6** |
| JIJ | | | | *e*S | **Sb** | **18 12 08.3** | **-0.5** |
| **JKRS** | **Kuro-shima** | **0.78** | **143** | P | **Pb** | **18 11 57.9** | **-0.9** |
| JKRS | | | | S | **Sn** | **18 12 10.0** | **0.0** |
| **JISG** | **Ishigakijimahi** | **0.80** | **110** | P | **Pb** | **18 11 57.1** | **-1.9** |
| JISG | | | | S | **Sb** | **18 12 08.1** | **-1.3** |
| **HATJ** | **Hateruma jima** | **0.85** | **160** | P | **Pb** | **18 11 59.4** | **-0.6** |
| HATJ | | | | S | **Sn** | **18 12 12.6** | **+0.8** |
| **JTJ** | **Tarama** | **1.12** | **101** | P | **Pn** | **18 12 02.5** | **-1.3** |
| JTJ | | | | *e*S | **Sn** | **18 12 17.4** | **-1.0** |
| **JIRB** | **Irabujima** | **1.53** | **91** | P | **Pn** | **18 12 08.5** | **-0.9** |
| JIRB | | | | S | **Sn** | **18 12 28.4** | **-0.1** |
| **JIKM** | **Ikemajima** | **1.60** | **88** | P | **Pn** | **18 12 09.8** | **-0.6** |
| JIKM | | | | S | **Sn** | **18 12 29.6** | **-0.5** |
| **JMJ** | **Miyako jima 2** | **1.64** | **91** | P | **Pb** | **18 12 13.7** | **+0.4** |
| **JMJ2** | **Miyako jima3** | **1.67** | **94** | P | **Pn** | **18 12 11.2** | **-0.2** |
| JMJ2 | | | | *e*S | **Sn** | **18 12 31.9** | **-0.1** |
| **JOGS** | **Gusukube** | **1.74** | **93** | P | **Pn** | **18 12 12.0** | **-0.4** |
| JOGS | | | | S | **Sn** | **18 12 33.5** | **-0.3** |
| **TATO** | **Taipei** | **1.82** | **274** | Pn | **Pn** | **18 12 13.0** | **-0.5** |
| **NACB** | **Ninganchiao** | **1.86** | **249** | | **Pn** | **18 12 14.0** | **0.0** |
| **YHNB** | **Yeheng** | **1.93** | **265** | Pn | **Pn** | **18 12 14.2** | **-0.9** |
| **YHNB** | **Yeheng** | **1.93** | **265** | P | **Pn** | **18 12 15.5** | **+0.4** |
| **YULB** | **Yu-li** | **2.48** | **234** | | **Pn** | **18 12 22.2** | **-0.4** |
| **SSLB** | **Suanglung** | **2.55** | **246** | | **Pn** | **18 12 23.3** | **-0.3** |
| **SSLB** | **Suanglung** | **2.55** | **246** | P | **Pn** | **18 12 25.2** | **+1.6** |
| **TWG** | **Pinlang** | **3.01** | **228** | | **Pn** | **18 12 29.3** | **-0.6** |
| **TPUB** | **Ta-pu** | **3.04** | **240** | Pn | **Pn** | **18 12 30.6** | **+0.3** |
| **TPUB** | **Ta-pu** | **3.04** | **240** | P | **Pn** | **18 12 33.1** | **+2.8** |
| **QZH** | **Quanzhou** | **4.45** | **272** | Pn | **Pn** | **18 12 50.6** | **+1.0** |
| QZH | | | | Sn | **Sn** | **18 13 40.6** | **0.0** |
| QZH | | | | smax | smax | | |
| | comp=N,41nm,1.6s | | | | | | |
| QZH | | | | smax | smax | | |
| | comp=E,28nm,1.1s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=N,2μm,9.7s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=E,2μm,9.7s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,2μm,9.9s | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.66** | **266** | | **Pn** | **18 12 51.7** | **-0.8** |
| **JOW** | **Kunigami** | **4.73** | **65** | Pn | **Pn** | **18 12 53.9** | **+0.3** |
| **NJ2** | **Nanjing** | **8.24** | **331** | *e*P | **Pn** | **18 13 42.4** | **+0.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=N,2μm,8.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,760nm,7.3s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1μm,9.3s | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.09** | **16** | Pn | **Pn** | **18 14 48.5** | **+0.5** |
| **KSRS** | **Korea Array** | **13.11** | **16** | Pn | **Pn** | **18 14 49.3** | **+1.0** |
| | 0.1nm,0.3s,baz=201,slow=12,SNR=4.7 | | | | | | |
| KSRS | | | | LR | LR | 18 20 14.4 | |
| | comp=Z,228nm,18.6s,baz=210,slow=39 | | | | | | |
| **KS19** | **Wonju Array Si** | **13.14** | **15** | Pn | **Pn** | **18 14 49.2** | **+0.5** |
| **QIZ** | **Qiongzhong** | **13.93** | **248** | P | **Pn** | **18 14 59.7** | **+0.1** |
| QIZ | | | | S | **Sn** | **18 17 27.9** | **-5.6** |
| QIZ | | | | LR | LR | | |
| | comp=N,430nm,15.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,250nm,17.

comp=E,350nm,9.8s
HHC LR LR
comp=Z,480nm,9.9s
**CN2 Changchun 18.96 4** *e*P **Pn 18 16 06.3 +2.5**
CN2 *e*S **Sn 18 19 32.9 -2.3**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 LR LR
comp=N,600nm,10.0s
CN2 LR LR
comp=E,500nm,10.0s
CN2 LR LR
comp=Z,700nm,10.0s
**UBPT Khong Chiam 19.41 244** P **P 18 16 06.4 -1.8**
**JMM Marumori 19.61 45** P **Pn 18 16 12.0 +0.4**
JMM IAmb IAmb 18 16 34.9
comp=Z,92nm,1.8s
**PZH PanZhiHua 19.67 279** P **P 18 16 09.2 -1.9**
PZH S **S 18 19 44.5 -7.2**
PZH sS **Sn 18 19 55.7 +2.8**
PZH SS **SnSn 18 20 09.4 +2.2**
PZH pmax pmax
comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,170nm,4.5s
PZH LR LR
comp=Z,1μm,12.7s
PZH LR LR
comp=Z,690nm,12.2s
PZH LR LR
comp=Z,680nm,12.8s
**XLT XiLinHaoTe 19.93 344** *e*P **P 18 16 14.6 +0.8**
XLT pP sP 18 16 22.8 -0.5
XLT sP pwP 18 16 27.0 +4.0
XLT S **S 18 19 57.0 +0.2**
XLT sS sS 18 20 09.3 +2.2
XLT pmax pmax
comp=Z,9.0nm,0.9s
XLT pmax pmax
comp=Z,230nm,4.1s
XLT LR LR
comp=Z,480nm,13.1s
XLT LR LR
comp=Z,650nm,13.9s
XLT LR LR
comp=Z,720nm,15.6s
**KKM Kota Kinabalu 19.97 202** P **P 18 16 14.3 -0.1**
KKM IAmb IAmb 18 16 17.5
comp=Z,26nm,0.9s
**MYLDM Lahad Datu 20.15 195** P **P 18 16 13.2 -3.0**
**LZH Lanzhou 20.25 308** *e*P Pn 18 16 18.9 -0.6
LZH pP sP 18 16 26.9 -0.1
LZH sP pwP 18 16 31.6 +5.0
LZH *e*S Sn 18 20 07.8 +0.9
LZH SS **SnSn 18 20 29.7 +8.1**
LZH pmax pmax
comp=Z,25nm,1.0s
LZH pmax pmax
comp=Z,250nm,4.7s
LZH LR LR
comp=Z,580nm,10.2s
LZH LR LR
comp=Z,470nm,11.0s
LZH LR LR
comp=Z,660nm,12.6s
**USA0B Ussuriysk Arra 20.50 18** **P 18 16 19.4 -0.3**
USA0B IAmb IAmb 18 16 29.4
comp=Z,29nm,1.4s
**USRK Ussuriysk Ar. 20.50 18** P **P 18 16 20.6 +0.8**
comp=Z,2.2nm,0.7s,baz=198,slow=12,SNR=5.6
USRK LR LR 18 25 09.0
comp=Z,122nm,18.1s,baz=177,slow=40
**USRK Ussuriysk Ar. 20.50 18** **P 18 16 19.1 -0.6**
**BNX BinXian 21.07 8** ⇓P **P 18 16 27.8 +1.9**
BNX pmax pmax
comp=Z,16nm,1.0s
BNX pmax pmax
comp=Z,350nm,3.9s
**GUMO Guam 23.05 115** P **P 18 16 47.7 +0.4**
**JEW Eniwo 23.24 35** P **P 18 16 50.4 +1.4**
**CHTO Chiang Mai 23.55 260** P **P 18 16 50.6 -1.7**
**CM31 Chiang Mai Arr 23.67 259** P **P 18 16 51.5 -2.0**
**CMAR Chiang Mai Arr 23.67 259** P **P 18 16 54.4 +0.9**
comp=Z,2.5nm,0.9s,baz=61,slow=7.8,SNR=16
CMAR PcP **PcP 18 20 38.5 +0.9**
comp=Z,0.2nm,0.3s,baz=106,slow=0.4,SNR=4.2
CMAR LR LR 18 27 25.1
comp=Z,155nm,18.2s,baz=80,slow=40
**CMAR Chiang Mai Arr 23.67 259** P **P 18 16 52.0 -1.4**
**TOLI2 Tolitoli 23.76 187** P **P 18 16 53.0 -1.3**
TOLI2 IAmb IAmb 18 17 04.2
comp=Z,17nm,1.1s
**GTOI Gorontalo 24.09 181** P **P 18 16 56.9 -0.5**
comp=Z,263nmcomp=Z,18nm,0.9s
**TNTI Ternate 24.24 171** P **P 18 16 58.9 +0.1**
**TNTI Ternate 24.24 171** P **P 18 17 02.3 +3.5**
comp=Z,31nm,1.5s
**MRSI Marisa 24.29 184** P **P 18 17 00.8 +1.6**
comp=Z,638nmcomp=Z,24nm,1.8s
**HIA Hailar 24.53 354** P **P 18 17 01.4 +0.2**
**MPSI Mapaga 24.63 189** P **P 18 17 02.3 0.0**
comp=Z,14nm,1.7s
**GTA Gaotai 24.65 312** ⇑P **P 18 17 02.7 +0.2**
GTA pP sP 18 17 15.9 +3.4
GTA pmax pmax
comp=Z,3.0nm,0.9s
GTA pmax pmax
comp=Z,130nm,4.7s
GTA LR LR
comp=Z,310nm,16.4s
GTA LR LR
comp=Z,250nm,17.1s
GTA LR LR
comp=Z,270nm,16.4s
**ASAJ Asahikawa 24.73 34** LR LR 18 27 30.1
comp=Z,133nm,18.2s,baz=172,slow=38
**SBUM Sibu 24.80 208** P **P 18 17 02.8 -1.1**
SBUM IAmb IAmb 18 17 13.2
comp=Z,17nm,1.4s
**KLR Kul'dur 25.17 13** P **P 18 17 07.9 +1.0**
comp=Z,5.8nm,1.1s,baz=200,slow=4.7,SNR=5.6
KLR LR LR 18 27 41.0
comp=Z,197nm,18.8s,baz=218,slow=38
**LBMI Labuha 25.65 171** P **P 18 17 11.7 +0.2**
comp=Z,22nm,1.3s
**APSI Ampana 25.69 184** P **P 18 17 15.1 +3.2**
comp=Z,459nmcomp=Z,39nm,1.2s
**ULN Ulaanbaatar 26.39 335** P **P 18 17 17.9 -0.3**
**KSM Kuching 26.52 211** P **P 18 17 20.1 +0.7**
KSM IAmb IAmb 18 17 23.3
comp=Z,16nm,0.9s
**SONM Songino Array 26.62 334** P **P 18 17 20.9 +0.7**
comp=Z,1.3nm,0.8s,baz=148,slow=11,SNR=12
**SONM Songino Array 26.62 334** P **P 18 17 20.2 -0.1**
**SlJI Sorong 26.67 162** LR LR 18 25 48.0
comp=Z,137nm,21.6s,baz=39,slow=32
**SANI Sanana 26.86 174** P **P 18 17 22.0 -0.5**
comp=Z,22nm,1.5s
**GOMU GeErMu 27.06 301** P **P 18 17 26.7 +2.0**
GOMU pP pP 18 17 30.2 -1.5
GOMU sP sP 18 17 34.6 0.0
GOMU pmax pmax
comp=Z,3.0nm,1.0s
GOMU pmax pmax
comp=Z,51nm,4.5s
GOMU LR LR
comp=Z,250nm,12.1s
GOMU LR LR
comp=Z,120nm,12.2s
GOMU LR LR
comp=Z,250nm,13.1s
**JAY Jayapura 31.94 146** LR LR 18 28 36.5
comp=Z,211nm,20.8s,baz=324,slow=32
**PSI Prapat 32.28 231** LR LR 18 30 38.1
comp=Z,80nm,19.9s,baz=38,slow=35
**MNSI Mandailing Nat 33.27 228** P **P 18 18 20.6 +1.3**
comp=Z,22nm,0.8s
**WMQ Urumqi 34.73 312** *e*P **P 18 18 33.9 +2.1**
WMQ LR LR
comp=Z,340nm,16.7s
WMQ LR LR
comp=Z,100nm,18.5s
**BATI Baumata 34.86 180** LR LR 18 34 55.6
comp=Z,41nm,18.3s,baz=318,slow=40
**YAK Yakutsk 37.39 5** LR LR 18 34 31.0
comp=Z,98nm,19.7s,baz=238,slow=37

**PEA0B Petropavlovsk- 38.14 33** P **P 18 19 02.9 +2.2**
PEA0B IAmb IAmb 18 19 32.1
comp=Z,27nm,1.4s
**PETK Petropavlovsk- 38.14 33** LR LR 18 34 33.5
comp=Z,87nm,20.3s,baz=222,slow=36
**PETK Petropavlovsk- 38.14 33** P **P 18 19 00.9 +0.3**
**MTN Manton Dam 38.21 168** P **P 18 19 01.5 -0.1**
**PET Petropavlovsk 38.57 34** P **P 18 19 06.9 +2.7**
PET IAmb IAmb 18 19 44.6
comp=Z,35nm,1.7s
**XMIS Christmas Isla 39.21 208** P **P 18 19 08.6 -1.5**
**MK31 Makanchi Array 39.34 314** P **P 18 19 10.6 -0.3**
**MKAR Makanchi Array 39.34 314** P **P 18 19 10.8 0.0**
comp=Z,2.1nm,0.8s,baz=102,slow=10.0,SNR=26
MKAR LR LR 18 35 49.9
comp=Z,100nm,19.8s,baz=106,slow=37
**MKAR Makanchi Array 39.34 314** P **P 18 19 10.3 -0.6**
**MAKZ Makanchi 39.55 314** P **P 18 19 12.4 -0.3**
**ZAA0 Zalesovo Array 40.84 326** P **P 18 19 22.9 -0.3**
**ZALV Zalesovo Beam 40.84 326** P **P 18 19 23.2 -0.1**
comp=Z,1.7nm,0.7s,baz=113,slow=8.7,SNR=4.7
ZALV LR LR 18 37 40.2
comp=Z,139nm,19.0s,baz=120,slow=38
**PMG Port Moresby 41.15 143** LR LR 18 33 54.4
comp=Z,61nm,21.7s,baz=335,slow=32
**KSH Kashi 42.31 302** P **P 18 19 40.1 +4.5**
KSH pP sP 18 19 51.4 +5.6
**FITZ Fitzroy Crossi 42.76 177** LR LR 18 39 30.0
comp=Z,22nm,19.8s,baz=356,slow=39
**KURK Kurchatov 42.94 319** P **P 18 19 39.7 -0.7**
**KURBB Kurchatov Arra 42.97 319** P **P 18 19 40.2 -0.4**
comp=Z,1.9nm,0.7s,baz=111,slow=8.6,SNR=17
**COEN Coen 43.10 151** P **P 18 19 43.7 +1.7**
COEN IAmb IAmb 18 20 01.7
comp=Z,17nm,1.2s
**AAK Ala-Archa 43.78 306** P **P 18 19 48.7 +1.2**
comp=Z,1.0nm,0.6s,baz=146,slow=5.8,SNR=6.6
AAK LR LR 18 39 21.5
comp=Z,102nm,18.3s,baz=100,slow=38
**AAK Ala-Archa 43.78 306** P **P 18 19 48.1 +0.6**
**PALK Pallekele 44.45 254** LR LR 18 40 53.3
comp=Z,25nm,18.4s,baz=162,slow=39
**WB0 Warramunga Arr 45.62 166** P **P 18 20 02.1 0.0**
WB0 IAmb IAmb 18 20 11.4
comp=Z,21nm,1.4s
**WRA Warramunga Arr 45.77 166** P **P 18 20 03.7 +0.3**
comp=Z,7.0nm,0.7s,baz=349,slow=8.8,SNR=41
**WRA Warramunga Arr 45.77 166** P **P 18 20 03.5 +0.2**
**WB2 Warramunga Arr 45.77 166** P **P 18 20 04.2 +0.9**
WB2 IAmb IAmb 18 20 12.6
comp=Z,15nm,1.1s
**WR0 Warramunga Arr 45.84 165** P **P 18 20 04.7 +0.9**
WR0 IAmb IAmb 18 20 06.2
comp=Z,9.5nm,0.8s
**MBWA Marble Bar 45.90 185** P **P 18 20 04.1 -0.2**
MBWA IAmb IAmb 18 20 05.9
comp=Z,17nm,0.8s
**PSA00 Pilbara Seismi 46.30 185** P **P 18 20 06.9 -0.5**
**PSA00 Pilbara Seismi 46.30 185** P **P 18 20 07.1 -0.3**
PSA00 IAmb IAmb 18 20 09.2
comp=Z,11nm,0.8s
**GAR Garm 46.66 301** P **P 18 20 10.5 +0.1**
GAR IAmb IAmb 18 20 12.1
comp=Z,8.5nm,1.1s
**KKAR Karatay Array 46.74 307** P **P 18 20 10.8 0.0**
**TIXI Tiksi 46.91 2** LR LR 18 41 36.8
comp=Z,193nm,19.1s,baz=181,slow=38
**TIXI Tiksi 46.91 2** P **P 18 20 10.3 -1.4**
TIXI IAmb IAmb 18 20 19.7
comp=Z,12nm,1.4s
**SMY Shemya 46.96 40** P **P 18 20 11.1 -1.2**
**CHGR Chuyangaron 47.56 300** P **P 18 20 15.6 -1.8**
CHGR IAmb IAmb 18 20 27.1
comp=Z,5.8nm,0.8s
**GIRL Giralia 48.07 192** P **P 18 20 21.3 0.0**
**BRVK Borovoye 48.56 320** P **P 18 20 23.9 -0.9**
**HNR Boniara 49.25 129** LR LR 18 37 52.9
comp=Z,38nm,21.8s,baz=245,slow=32
**AS31 Alice Springs 49.29 167** P **P 18 20 29.9 -0.8**
**ASAR Alice Springs 49.29 167** P **P 18 20 32.1 +1.5**
comp=Z,2.1nm,0.8s,baz=353,slow=8.3,SNR=30
ASAR PcP **PcP 18 21 53.5 +0.2**
comp=Z,1.2nm,0.8s,baz=357,slow=3.9,SNR=5.2
ASAR LR LR 18 41 50.1
comp=Z,26nm,21.1s,baz=356,slow=37
**ASAR Alice Springs 49.29 167** P **P 18 20 30.2 -0.5**
ASAR PcP **PcP 18 21 52.8 -0.5**
**NRIK Noril'sk 49.31 344** LR LR 18 43 51.7
comp=Z,200nm,18.6s,baz=183,slow=39
**NRIK Noril'sk 49.31 344** P **P 18 20 29.5 -0.8**
NRIK IAmb IAmb 18 20 37.9
comp=Z,7.3nm,1.1s
**CTA Charters Tower 49.87 152** LR LR 18 42 59.3
comp=Z,63nm,18.5s,baz=358,slow=38
**MORW Morawa 54.10 188** P **P 18 21 05.5 -1.0**
**KAAM Kaadhehdhoo 54.45 251** P **P 18 21 07.2 -2.2**
**ABKAR Akbulak array 54.48 314** P **P 18 21 08.8 -0.3**
**ABKAR Akbulak array 54.48 314** P **P 18 21 08.2 -0.8**
ABKAR IAmb IAmb 18 21 19.0
comp=Z,12nm,1.6s
**FORT Forrest 55.50 175** P **P 18 21 18.0 +1.4**
**ARU Arti 55.84 323** LR LR 18 47 21.7
comp=Z,52nm,19.1s,baz=90,slow=38
**NWAO Narrogin (SRO) 57.78 186** P **P 18 21 33.6 +0.8**
**BBOO Buckleboo 58.59 168** P **P 18 21 39.5 +1.1**
BBOO IAmb IAmb 18 22 07.3
comp=Z,9.3nm,1.1s
**STKA Stephens Creek 59.02 162** P **P 18 21 42.6 +1.2**
comp=Z,3.1nm,0.7s,baz=0.4,slow=5.8,SNR=11
STKA LR LR 18 48 38.1
comp=Z,42nm,19.8s,baz=18,slow=38
**STKA Stephens Creek 59.02 162** P **P 18 21 42.1 +0.7**
**KIRV Kirov 60.87 325** LR LR 18 50 33.5
comp=Z,190nm,18.2s,baz=93,slow=38
**ARMA Armidale 61.23 152** P **P 18 21 57.8 +1.1**
ARMA IAmb IAmb 18 22 01.8
comp=Z,14nm,1.1s
**DZM Mont Dzumac 62.58 135** LR LR 18 45 06.8
comp=Z,56nm,21.2s,baz=18,slow=32
**TTA Tatalina 63.87 30** P **P 18 22 13.7 -0.3**
TTA IAmb IAmb 18 22 17.7
comp=Z,19nm,1.7s
**L19K White Mountain 64.46 31** P **P 18 22 18.8 +1.0**
L19K IAmb IAmb 18 22 31.1
comp=Z,15nm,1.7s
**P18K Big Mountain, 64.55 34** P **P 18 22 18.8 +0.3**
**CAN Canberra 64.55 157** P **P 18 22 19.9 +1.2**
**J20K Nowinta River 64.61 29** P **P 18 22 19.3 +0.6**
J20K IAmb IAmb 18 22 34.5
comp=Z,20nm,1.8s
**M19K Big River Lodg 64.70 31** P **P 18 22 20.2 +0.8**
M19K IAmb IAmb 18 22 28.8
comp=Z,14nm,1.6s
**K20K Telida 64.71 30** P **P 18 22 19.9 +0.5**
K20K IAmb IAmb 18 22 40.7
comp=Z,18nm,1.8s
**H21K Melozitna Rive 65.05 27** P **P 18 22 21.5 -0.1**
H21K IAmb IAmb 18 22 27.0
comp=Z,20nm,1.8s
**TOO Toolangi 65.46 161** P **P 18 22 24.3 -0.3**
TOO IAmb IAmb 18 22 49.2
comp=Z,16nm,1.6s
**PPLA Purkeypile 65.61 30** P **P 18 22 24.8 -0.7**
PPLA IAmb IAmb 18 22 35.1
comp=Z,22nm,1.4s
**KLMR Klimovskoe 65.71 328** *e*P **P 18 22 25.3 -0.6**
KLMR AMP 18 22 39.5
comp=Z,16nm,1.5s
**MLY Manley 65.98 28** P **P 18 22 27.0 -0.7**
MLY IAmb IAmb 18 23 05.3
comp=Z,13nm,1.7s
**TOLK Toolik Lake Re 65.99 24** P **P 18 22 28.1 +0.5**
**GNI Garni 66.15 305** LR LR 18 54 27.9
comp=Z,43nm,18.9s,baz=67,slow=39
**H23K Yukon River 66.37 27** P **P 18 22 31.8 +1.7**
H23K IAmb IAmb 18 22 38.9
comp=Z,7.0nm,1.2s
**CAPN Captain Cook N 66.39 32** P **P 18 22 32.3 +2.1**
**KBZ Khabaz 66.69 309** P **P 18 22 33.1 +0.6**
comp=Z,2.9nm,0.8s,baz=60,slow=8.1,SNR=5.7
**RND Reindeer 67.04 29** P **P 18 22 33.7 -0.7**
RND IAmb IAmb 18 22 41.6
comp=Z,5.5nm,0.8s
**H24K Noodor Dome 67.04 27** P **P 18 22 34.2 -0.3**
H24K IAmb IAmb 18 23 03.2
comp=Z,11nm,1.6s
**MDM Murphy Dome 67.04 28** P **P 18 22 34.7 +0.2**
MDM IAmb IAmb 18 22 43.0
comp=Z,4.2nm,0.9s
**WRH Wood River Hil 67.19 28** P **P 18 22 35.3 0.0**
WRH IAmb IAmb 18 22 51.0
comp=Z,24nm,1.8s
**ILAR Eielson Array 67.64 28** P **P 18 22 38.6 +0.5**
comp=Z,0.2nm,0.7s,baz=285,slow=4.6,SNR=1.7
**BMAR Burnt Mountain 68.04 25** P **P 18 22 40.6 -0.1**
**SCRK Sand Creek 69.04 28** P **P 18 22 47.2 0.0**
SCRK IAmb IAmb 18 22 54.0
comp=Z,17nm,1.8s
**DOT Dot Lake 69.09 29** P **P 18 22 47.8 +0.5**
DOT IAmb IAmb 18 23 06.0
comp=Z,8.9nm,1.3s
**SPITS Spitsbergen Ar 69.27 348** LR LR 18 56 19.7
comp=Z,73nm,20.4s,baz=286,slow=39
**N25K Chitina, Valde 69.34 31** P **P 18 22 48.5 -0.5**
N25K IAmb IAmb 18 23 12.2
comp=Z,23nm,1.4s
**MENT Mentasta 69.41 29** P **P 18 22 49.8 +0.5**
MENT IAmb IAmb 18 23 26.3
comp=Z,18nm,1.7s
**ARCES ARCESS Array B 69.69 338** LR LR 18 56 15.7
comp=Z,41nm,21.9s,baz=22,slow=38
**GLB Gilahina Butte 69.75 31** P **P 18 22 52.3 +0.8**
GLB IAmb IAmb 18 23 11.3
comp=Z,25nm,1.4s
**KBS Kingsbay 69.77 349** P **P 18 22 54.1 +2.8**
**M26K Nabesna, AK 69.87 30** P **P 18 22 52.6 +0.4**
M26K IAmb IAmb 18 23 20.4
comp=Z,18nm,1.6s
**VRDI Verde Repeater 69.97 31** P **P 18 22 53.6 +0.6**
**L27K Beaver Creek, 70.21 29** P **P 18 22 54.3 0.0**
L27K IAmb IAmb 18 23 16.8
comp=Z,7.8nm,1.4s
**BCAR Beaver Creek A 70.23 29** P **P 18 22 55.1 +0.8**
**M27K Edge Creek, AK 70.39 30** P **P 18 22 55.4 -0.1**
M27K IAmb IAmb 18 23 20.2
comp=Z,11nm,1.4s
**WAX Waxell Ridge 70.46 32** P **P 18 22 56.7 +0.9**
**BARN Barnard Glacie 70.85 31** P **P 18 22 58.2 -0.2**
**MESA MESA 70.97 32** P **P 18 22 59.6 +0.5**
**FINES FINESS Array B 71.92 330** P **P 18 23 04.8 +0.3**
comp=Z,2.9nm,0.9s,baz=42,slow=4.3,SNR=1.1
FINES LR LR 18 57 29.8
comp=Z,101nm,19.0s,baz=38,slow=38
**FINES FINESS Array B 71.92 330** P **P 18 23 04.3 -0.2**
**BRTR Keskin Array B 74.45 307** P **P 18 23 19.8 -0.4**
comp=Z,0.6nm,0.8s,baz=108,slow=4.7,SNR=4.6
**RES Resolute Bay 77.65 10** LR LR 19 04 15.0
comp=Z,46nm,18.1s,baz=18,slow=41
**MLR Muntele Rosu 77.68 314** LR LR 19 03 23.8
comp=Z,57nm,18.3s,baz=287,slow=40
**HFS Hagfors 77.99 331** LR LR 19 01 29.9
comp=Z,118nm,19.4s,baz=70,slow=38
**NB2 NORSAR Subarra 78.60 333** P P 18 23 48.7 +5.7
comp=Z,3.5nm,1.1s,baz=54,slow=6.2
**NOA NORSAR Array B 78.60 333** P **P 18 23 44.3 +1.2**
comp=Z,0.8nm,0.8s,baz=57,slow=5.7,SNR=2.9
NOA LR LR 19 02 18.5
comp=Z,84nm,18.3s,baz=60,slow=39
**URZ Urewera 80.43 140** LR LR 18 55 15.4
comp=Z,40nm,20.6s,baz=6.5,slow=32
**YKA Yellowknife Ar 81.52 23** P **P 18 23 58.4 -0.3**
comp=Z,0.5nm,0.6s,baz=312,slow=4.4,SNR=7.9
**BORG Borgarnes 86.60 346** LR LR 19 06 43.5
comp=Z,67nm,19.1s,baz=3.6,slow=38
**EKA Eskdalemuir Ar 88.09 333** LR LR 19 07 12.9
comp=Z,100nm,19.5s,baz=344,slow=38

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*NNC* ***12*** *18:26:21.7±0.4,42°.81N×72°.81E,h0km,mb3.3,mpv3.0, Error ellipse: s-maj=7.6km s-min=2.4km az=5.0*
*KNET* ***12*** *18:26:23.8±0.5,42°.77N×72°.95E,h25km±5km,ml2.6,Error ellipse: s-maj=3.4km s-min=2.5km az=104.0*
*SOME* ***12*** *18:26:23.4,42°.82N×72°.83E,h20km*
*KRNET* ***12*** *18:26:23.3±0.1,42°.78N×72°.88E,h22km,mb3.2*
**ISC 12 18:26:21.4±1.0,42°.94N±0°.03×72°.87E±0°.02,h16km±9km, n69,σ1°.23/116,36C-21D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRKS** | **Merke** | **0.33** | **126** | *e*P | **Pb** | **18 26 29.9** | **+1.0** |
| | 136nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **18 26 34.3** | **+0.4** |
| | 920nm,0.1s | | | | | | |
| **EKS2** | **Erkin-Say** | **0.72** | **112** | ⇓P | **Pn** | **18 26 36.4** | **-0.7** |
| | 16nm,0.1s,SNR=67 | | | | | | |
| EKS2 | | | | ⇓S | **Sb** | **18 26 46.3** | **+0.9** |
| | 342nm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **0.72** | **112** | ⇑*i*P | **Pn** | **18 26 36.2** | **-0.9** |
| | baz=99 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **18 26 45.5** | **+0.1** |
| | baz=99 | | | | | | |
| **AML** | **Almayashu** | **1.01** | **143** | ⇓P | **Pb** | **18 26 40.0** | **-0.8** |
| | 16nm,0.2s,SNR=30 | | | | | | |
| AML | | | | ⇓S | **Sg** | **18 26 52.5** | **-1.9** |
| | 98nm,0.1s | | | | | | |
| **DZA** | **Taraz** | **1.13** | **268** | *e*P | **Pg** | **18 26 43.1** | **-0.1** |
| | 40nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sn** | **18 26 57.2** | **-0.5** |
| | 186nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **1.23** | **104** | ⇓P | **Pg** | **18 26 45.9** | **+0.7** |
| | 32nm,0.3s,SNR=65 | | | | | | |
| AAK | | | | ⇓S | **Sg** | **18 27 02.4** | **+1.1** |
| | 64nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **1.23** | **104** | ⇑P | **Pg** | **18 26 45.9** | **+0.7** |
| | 16nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sg** | **18 27 02.2** | **+0.9** |
| | 23nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **1.23** | **104** | ⇓*i*P | **Pg** | **18 26 45.4** | **+0.2** |
| | baz=96 | | | | | | |
| AAK | | | | ⇓*i*S | **Sg** | **18 27 01.5** | **+0.1** |
| | baz=96 | | | | | | |
| **USP** | **Ospenovka** | **1.24** | **74** | ⇑P | **Pg** | **18 26 46.5** | **+1.2** |
| | 21nm,0.2s,SNR=7.5 | | | | | | |
| USP | | | | ⇑S | **Sg** | **18 27 04.3** | **+2.8** |
| | 52nm,0.2s | | | | | | |
| **FRU1** | **Bishkek** | **1.30** | **95** | ⇑*i*P | **Pg** | **18 26 46.9** | **+0.4** |
| | baz=87 | | | | | | |
| FRU1 | | | | ⇑*i*S | **Sg** | **18 27 04.0** | **+0.5** |
| | baz=87 | | | | | | |
| **ARK** | **Arkit** | **1.32** | **211** | ⇓*e*P | **Pb** | **18 26 45.6** | **-0.3** |
| | baz=15 | | | | | | |
| ARK | | | | ⇓*i*S | **Sb** | **18 27 01.3** | **-1.3** |
| | baz=15 | | | | | | |
| **CHMS** | **Chumysh** | **1.38** | **87** | ⇑P | **Pg** | **18 26 48.6** | **+0.5** |
| | 8.4nm,0.1s,SNR=11 | | | | | | |
| CHMS | | | | ⇓S | **Sg** | **18 27 07.7** | **+1.6** |
| | 63nm,0.2s | | | | | | |
| **CHMS** | **Chumysh** | **1.38** | **87** | ⇑*i*P | **Pg** | **18 26 48.5** | **+0.5** |
| | baz=80 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sg** | **18 27 07.2** | **+1.1** |
| | baz=80 | | | | | | |
| **SGDS** | **Sogindy** | **1.39** | **68** | *e*P | **Pg** | **18 26 49.8** | **+1.7** |
| | 6.7nm,0.2s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **18 27 09.2** | **+3.0** |
| | 41nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **1.41** | **120** | ⇑P | **Pg** | **18 26 48.4** | **-0.2** |
| | 9.6nm,0.1s,SNR=45 | | | | | | |
| UCH | | | | ⇑S | **Sg** | **18 27 06.5** | **-0.5** |
| | 63nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **1.41** | **120** | ⇑*i*P | **Pg** | **18 26 47.9** | **-0.7** |
| | baz=14 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **18 27 05.9** | **+0.5** |
| | baz=14 | | | | | | |
| **ARLS** | **Aral** | **1.52** | **134** | ⇑*i*P | **Pb** | **18 26 49.1** | **-0.3** |
| | baz=30 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **18 27 08.3** | **-0.2** |
| | baz=30 | | | | | | |
| **KBK** | **Karagaybulak** | **1.56** | **100** | P | **Pg** | **18 26 51.5** | **+0.1** |
| | 15nm,0.1s,SNR=74 | | | | | | |
| KBK | | | | ⇑S | **Sg** | **18 27 11.6** | **-0.1** |
| | 114nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **1.56** | **100** | ⇑*e*P | **Pg** | **18 26 51.3** | **-0.1** |
| | baz=94 | | | | | | |
| KBK | | | | ⇑*i*S | **Sg** | **18 27 11.5** | **-0.1** |
| | baz=94 | | | | | | |
| **KK09** | **Karatay Array** | **1.75** | **277** | ⇑P | **Pg** | **18 26 53.6** | **-1.3** |
| | 12nm,0.2s,baz=103,slow=15 | | | | | | |
| KK09 | | | | ⇑S | **Sg** | **18 27 15.5** | **-2.1** |
| | 42nm,0.3s,baz=103,slow=30 | | | | | | |
| **TRKS** | **Terek-Say** | **1.90** | **223** | ⇑*i*P | **Pb** | **18 26 56.1** | **+0.3** |
| | baz=25 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sb** | **18 27 20.1** | **+0.7** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=25 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.00** | **90** | ⇑P | | **Pg** | **18 26 58.5** | **-1.3** |
| | 14nm,0.2s,SNR=20 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.00** | **90** | ⇑Pn | | **Pg** | **18 26 58.6** | **-1.3** |
| | 9.1nm,0.4s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 18 27 25.9 | | |
| | 28nm,0.4s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.00** | **90** | ⇑*i*P | | **Pg** | **18 26 58.4** | **-1.5** |
| | baz=85 | | | | | | | | |
| TKM2 | | | | ⇑*i*S | | **Sg** | **18 27 24.8** | **-1.1** |
| | baz=85 | | | | | | | | |
| **DGS** | **Degeres** | **2.15** | **81** | *e*P | | **Pg** | **18 27 02.6** | **0.0** |
| | 21nm,0.5s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **18 27 31.3** | **+0.7** |
| | 75nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **2.15** | **81** | Pg | | **Pg** | **18 27 02.6** | **0.0** |
| | 21nm,0.5s | | | | | | | | |
| DGS | | | | Lg | | Lg | 18 27 31.3 | | |
| | 75nm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **2.19** | **69** | *e*P | | **Pg** | **18 27 03.3** | **0.0** |
| | 2.4nm,0.2s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **18 27 32.2** | **+0.5** |
| | 52nm,0.3s | | | | | | | | |
| **KRBS** | **Karabastau** | **2.19** | **69** | Pg | | **Pg** | **18 27 03.3** | **0.0** |
| | 2.4nm,0.2s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 18 27 32.2 | | |
| | 52nm,0.3s | | | | | | | | |
| **BRLS** | **Boroldaу** | **2.23** | **273** | *e*P | | **Pg** | **18 27 03.9** | **-0.2** |
| | 3.1nm,0.1s | | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **18 27 33.4** | **+0.4** |
| | 55nm,0.8s | | | | | | | | |
| **BRLS** | **Boroldaу** | **2.23** | **273** | Pg | | **Pg** | **18 27 03.9** | **-0.2** |
| | 3.1nm,0.1s | | | | | | | | |
| BRLS | | | | Lg | | Lg | 18 27 33.4 | | |
| | 55nm,0.8s | | | | | | | | |
| **IUG** | **Iuzhnay** | **2.24** | **250** | *e*P | | **Pb** | **18 27 02.2** | **+0.7** |
| | 556nm,0.4s | | | | | | | | |
| IUG | | | | *e*S | | **Sb** | **18 27 29.9** | **+0.9** |
| | 149nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **2.27** | **22** | *e*P | | **Pg** | **18 27 04.2** | **-0.7** |
| BTLS | | | | *e*S | | **Sg** | **18 27 33.3** | **-1.0** |
| **BTLS** | **Baital** | **2.27** | **22** | Pg | | **Pg** | **18 27 04.1** | **-0.7** |
| BTLS | | | | Lg | | Lg | 18 27 33.3 | | |
| **KST** | **Kastek** | **2.27** | **86** | *e*P | | **Pg** | **18 27 05.1** | **+0.1** |
| | 4.1nm,0.1s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | **18 27 35.0** | **+0.5** |
| | 155nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **2.27** | **86** | Pg | | **Pg** | **18 27 05.1** | **+0.1** |
| | 4.1nm,0.1s | | | | | | | | |
| KST | | | | Lg | | Lg | 18 27 35.0 | | |
| | 155nm,0.6s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.31** | **100** | ⇓*i*P | | **Pb** | **18 27 03.0** | **+0.3** |
| | baz=96 | | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sb** | **18 27 31.0** | **-0.1** |
| | baz=96 | | | | | | | | |
| **OHH** | **Osh** | **2.41** | **181** | ⇓*i*P | | **Pn** | **18 27 01.9** | **+1.6** |
| | baz=82 | | | | | | | | |
| OHH | | | | ⇓*i*S | | **Sn** | **18 27 29.6** | **+0.1** |
| | baz=82 | | | | | | | | |
| **CHM** | **Chimkent** | **2.49** | **257** | *e*P | | **Pg** | **18 27 08.3** | **-0.7** |
| | 3.2nm,0.3s | | | | | | | | |
| CHM | | | | *e*S | | **Sg** | **18 27 40.3** | **-1.0** |
| | 65nm,0.5s | | | | | | | | |
| **MTBS** | **Maitube** | **2.62** | **85** | *e*P | | **Pg** | **18 27 10.9** | **-0.7** |
| | 3.0nm,0.2s | | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **18 27 44.9** | **-0.6** |
| | 29nm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **2.62** | **85** | Pg | | **Pg** | **18 27 10.9** | **-0.7** |
| | 3.0nm,0.2s | | | | | | | | |
| MTBS | | | | Lg | | Lg | 18 27 44.9 | | |
| | 29nm,0.6s | | | | | | | | |
| **KUU** | **Kurty** | **2.70** | **68** | *e*P | | **Pg** | **18 27 13.2** | **0.0** |
| | 1.4nm,0.3s | | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **18 27 48.9** | **+0.6** |
| | 18nm,0.4s | | | | | | | | |
| **KUU** | **Kurty** | **2.70** | **68** | Pg | | **Pg** | **18 27 13.2** | **0.0** |
| | 1.4nm,0.3s | | | | | | | | |
| KUU | | | | Lg | | Lg | 18 27 48.9 | | |
| | 18nm,0.4s | | | | | | | | |
| **KTBS** | **Karatobe** | **2.89** | **73** | *e*P | | **Pg** | **18 27 16.1** | **-0.7** |
| | 2.4nm,0.5s | | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **18 27 53.8** | **-0.4** |
| | 31nm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **2.89** | **73** | Pg | | **Pg** | **18 27 16.1** | **-0.7** |
| | 2.4nm,0.5s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 18 27 53.8 | | |
| | 31nm,0.6s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.98** | **83** | *e*P | | **Pg** | **18 27 18.4** | **-0.1** |
| | 25nm,0.1s | | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **18 27 57.4** | **+0.4** |
| | 38nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.00** | **87** | *e*P | | **Pg** | **18 27 18.0** | **-0.8** |
| | 1.8nm,0.2s | | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **18 27 57.2** | **-0.4** |
| | 7.2nm,0.4s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.00** | **87** | Pg | | **Pg** | **18 27 18.0** | **-0.8** |
| | 1.8nm,0.2s | | | | | | | | |
| TNSS | | | | Lg | | Lg | 18 27 57.2 | | |
| | 7.2nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **3.07** | **84** | *e*P | | **Pg** | **18 27 18.8** | **-1.5** |
| | 2.4nm,0.4s | | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **18 27 58.4** | **-1.7** |
| | 12nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **3.07** | **84** | ⇑Pg | | **Pg** | **18 27 21.3** | **+1.0** |
| | 2.0nm,0.4s | | | | | | | | |
| MDOK | | | | ⇓Lg | | Lg | 18 27 59.4 | | |
| | 15nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **3.07** | **84** | Pg | | **Pg** | **18 27 18.8** | **-1.5** |
| | 2.4nm,0.4s | | | | | | | | |
| MDOK | | | | Lg | | Lg | 18 27 58.4 | | |
| | 12nm,0.4s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.12** | **83** | *e*P | | **Pg** | **18 27 19.9** | **-1.4** |
| | 1.3nm,0.3s | | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **18 28 00.9** | **-0.9** |
| | 20nm,0.3s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.12** | **83** | Pg | | **Pg** | **18 27 19.9** | **-1.4** |
| | 1.3nm,0.3s | | | | | | | | |
| KOTS | | | | Lg | | Lg | 18 28 00.9 | | |
| | 20nm,0.3s | | | | | | | | |
| **CHKK** | **Chushkaly** | **3.14** | **72** | *e*P | | **Pg** | **18 27 21.4** | **-0.2** |
| | 1.3nm,0.1s | | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | **18 28 02.6** | **+0.4** |
| | 16nm,0.2s | | | | | | | | |
| **BTK** | **Batken** | **3.26** | **209** | ⇓*i*P | | **Pn** | **18 27 14.3** | **+2.3** |
| | baz=10.0 | | | | | | | | |
| BTK | | | | ⇓*i*S | | **Sn** | **18 27 51.2** | **+0.7** |
| | baz=10.0 | | | | | | | | |
| **KDJ** | **Kajisay** | **3.29** | **103** | ⇓*i*P | | **Pb** | **18 27 16.1** | **-3.3** |
| | baz=0.0 | | | | | | | | |
| KDJ | | | | ⇓*i*S | | **Sn** | **18 27 54.5** | **+3.3** |
| | baz=0.0 | | | | | | | | |
| **DRK** | **Karamyk** | **3.55** | **193** | ⇑*i*P | | **Pn** | **18 27 18.3** | **+2.2** |
| | baz=94 | | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sn** | **18 27 57.5** | **-0.3** |
| | baz=94 | | | | | | | | |
| **ARXS** | **Arharly** | **3.82** | **69** | *e*P | | **Pg** | **18 27 33.2** | **-1.4** |
| | 0.2nm,0.8s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **18 28 23.3** | **-0.8** |
| | 13nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **3.82** | **69** | Pg | | **Pg** | **18 27 33.2** | **-1.4** |
| | 0.2nm,0.8s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 18 28 23.3 | | |
| | 13nm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **3.92** | **80** | *e*P | | **Pg** | **18 27 34.6** | **-1.8** |
| | 1.3nm,0.4s | | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **18 28 25.3** | **-1.8** |
| | 9.2nm,0.5s | | | | | | | | |
| **SATY** | **Saty** | **4.07** | **86** | *e*P | | **Pg** | **18 27 37.8** | **-1.4** |
| | 1.3nm,0.3s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **18 28 31.4** | **-0.5** |
| | 6.6nm,0.1s | | | | | | | | |
| **SATY** | **Saty** | **4.07** | **86** | Pg | | **Pg** | **18 27 37.8** | **-1.4** |
| | 1.3nm,0.3s | | | | | | | | |
| SATY | | | | Lg | | Lg | 18 28 31.4 | | |
| | 6.6nm,0.1s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.09** | **85** | *e*P | | **Pg** | **18 27 38.2** | **-1.5** |
| | 1.8nm,0.2s | | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **18 28 31.6** | **-1.0** |
| | 18nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.24** | **72** | *e*P | | **Pg** | **18 27 40.9** | **-1.7** |
| | 3.7nm,0.3s | | | | | | | | |
| BLB | | | | *e*S | | **Sg** | **18 28 36.1** | **-1.4** |
| | 12nm,0.3s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.29** | **81** | *e*P | | **Pg** | **18 27 40.8** | **-2.7** |
| | 2.5nm,0.3s | | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **18 28 35.9** | **-3.0** |
| | 18nm,0.5s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **4.50** | **61** | *e*P | | **Pg** | **18 27 46.6** | **-0.9** |
| | 11nm,0.4s | | | | | | | | |
| TDK | | | | *e*S | | **Sg** | **18 28 45.9** | **+0.2** |
| | 21nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.52** | **85** | *e*P | | **Pg** | **18 27 45.0** | **-2.9** |
| | 4.1nm,0.3s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **18 28 43.2** | **-3.2** |
| | 9.8nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.86** | **83** | ⇑Lg | | Lg | 18 28 59.4 | | |
| | 6.3nm,0.9s | | | | | | | | |
| **OTUK** | **Ortayu** | **5.32** | **356** | ⇑Pn | | Pn | 18 27 44.0 | +3.9 | |
| | 2.2nm,0.9s | | | | | | | | |
| OTUK | | | | ⇓Lg | | Lg | 18 29 16.2 | | |
| | 7.7nm,0.5s | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.72** | **57** | ⇑Pn | | Pn | 18 28 18.2 | +5.1 | |
| | 0.1nm,0.3s,baz=235,slow=13,SNR=6.1 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 18 30 34.2 | | |
| | 1.6nm,0.7s | | | | | | | | |

*TUL* ***12*** *18:45:22.8±1.1,36°.508N×0°.010×97°.30W±0°.01, h5km±6km, ML2.6,mb_Lg2.4/10(NEIC),Error ellipse: s-maj=1.7km s-min=1.4km az=110.0*

**NEIC 12 18:45:22.9±0.8,36°.51N±0°.01×97°.29W±0°.02,h7km±7km, Error ellipse: s-maj=1.9km s-min=1.6km az=54.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.75** | **56** | | | Pg | 18 45 37.5 | +0.2 |
| T35A | | | | | | Sg | 18 45 46.9 | -0.1 |
| **FNO** | **Franklin** | **1.25** | **184** | Pg | | Pb | 18 45 46.2 | -0.6 |
| **TUL1** | **Leonard** | **1.35** | **116** | | | Pn | 18 45 47.6 | -0.6 |
| **W35A** | **Tecumseh** | **1.39** | **166** | Pn | | Pn | 18 45 47.9 | -0.9 |
| **WMOK** | **Wichita Mounta** | **2.14** | **215** | Pn | | Pn | 18 46 00.1 | +0.9 |
| WMOK | | | | IAmb_Lg | | | 18 46 33.4 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **X37A** | **Clayton** | **2.47** | **140** | | | Pn | 18 46 05.1 | +1.5 |
| **HHAR** | **Hobbs** | **2.71** | **94** | Pn | | Pn | 18 46 08.3 | +1.4 |
| HHAR | | | | IAmb_Lg | | | 18 46 50.1 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.01** | **321** | | | Pn | 18 46 10.7 | -0.4 |
| CBKS | | | | IAmb_Lg | | | 18 46 56.4 | |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| **W39A** | **Magazine** | **3.13** | **114** | Pn | | Pn | 18 46 12.7 | 0.0 |
| **U40A** | **Yellville** | **3.58** | **91** | IAmb_Lg | | | 18 47 19.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.16** | **118** | Pn | | Pn | 18 46 25.8 | -1.0 |
| **FCAR** | **Ozark Folk Cen** | **4.22** | **97** | Pn | | Pn | 18 46 27.9 | +0.2 |
| **N33A** | **J Bar K, Exete** | **4.23** | **358** | | | Pn | 18 46 27.9 | 0.0 |
| **WHAR** | **Wooly Hollow** | **4.24** | **105** | Pn | | Pn | 18 46 27.4 | -0.5 |
| WHAR | | | | IAmb_Lg | | | 18 47 37.1 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.38** | **64** | Pn | | Pn | 18 46 28.5 | -1.3 |
| **CCM** | **Cathedral Cave** | **5.06** | **70** | Pn | | Pn | 18 46 35.5 | -3.8 |

*GII* ***12*** *19:01:32.6±0.2,33°.40N×35°.49E,h10km,MD1.4/3, Mm1.5/2*

*GRAL* ***12*** *19:01:34.3±0.3,33°.37N×35°.48E,h1km±28km,MD2.8*

**ISC 12 19:01:32.7±1.2,33°.38N±0°.03×35°.50E±0°.04,h16km±10km, n14,σ0s34/25,Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SHBL** | **Chebaa** | **0.21** | **98** | *e*P | | **Pb** | **19 01 38.3** | **+0.1** |
| SHBL | | | | *e*S | | **Sb** | **19 01 41.4** | **-0.5** |
| **GEM** | **Giv'at Ha'Em** | **0.21** | **141** | Pg | | **Pb** | **19 01 38.3** | **0.0** |
| GEM | | | | Sg | | **Sb** | **19 01 42.0** | **0.0** |
| **QRWL** | **Qaraoun** | **0.23** | **42** | *e*P | | **Pb** | **19 01 38.8** | **+0.2** |
| **NATI** | **Neve Ativ** | **0.23** | **120** | Pg | | **Pb** | **19 01 38.3** | **-0.2** |
| NATI | | | | Sg | | **Sb** | **19 01 42.6** | **+0.2** |
| **RCY** | **Rachaya** | **0.30** | **67** | *e*P | | **Pb** | **19 01 40.2** | **+0.2** |
| RCY | | | | *e*S | | **Sb** | **19 01 44.5** | **-0.3** |
| **DQRL** | **Deir Qamar** | **0.33** | **10** | *e*P | | **Pb** | **19 01 40.5** | **+0.1** |
| DQRL | | | | *e*S | | **Sb** | **19 01 45.0** | **-0.5** |
| **MMA0B** | **Mount Meron ar** | **0.37** | **193** | Pg | | **Pg** | **19 01 40.3** | **-0.1** |
| MMA0B | | | | Sg | | **Sb** | **19 01 46.8** | **+0.2** |
| **HNTI** | **Hanita** | **0.40** | **223** | Pg | | **Pg** | **19 01 40.6** | **-0.3** |
| HNTI | | | | Sg | | **Sb** | **19 01 47.3** | **-0.1** |
| **BHL** | **Bhannes** | **0.54** | **14** | *e*P | | **Pb** | **19 01 44.2** | **+0.3** |
| **BLGI** | **Bet Lehem HaGe** | **0.69** | **202** | Pg | | **Pb** | **19 01 46.4** | **-0.1** |
| **OFRI** | **`Ofer** | **0.87** | **210** | Pg | | **Pb** | **19 01 49.6** | **+0.1** |
| OFRI | | | | Sg | | **Sn** | **19 02 02.4** | **-0.3** |
| **MMLI** | **Mount Malkishu** | **0.94** | **184** | Pg | | **Pb** | **19 01 50.7** | **0.0** |
| MMLI | | | | Sg | | **Sn** | **19 02 04.3** | **-0.2** |
| **HMDT** | **Nahal Hemdat** | **1.12** | **179** | Pg | | **Pb** | **19 01 53.7** | **-0.1** |
| HMDT | | | | Sg | | **Sn** | **19 02 09.7** | **+0.8** |
| **SLTI** | **Sal'it** | **1.20** | **199** | Pg | | **Pg** | **19 01 55.5** | **-0.4** |
| SLTI | | | | Sg | | **Sg** | **19 02 12.2** | **+0.7** |

*IDC* ***12*** *19:07:11.1±2.4,1°.26N×128°.17E,h0km,mb3.4/3, mb1 3.6/3,mb1mx3.0/45,mbtmp3.4/3,Error ellipse: s-maj=191.0km s-min=23.9km az=67.0*

*DJA* ***12*** *19:07:20.5±1.1,1°.N±4°×12°.7E±°,h24km±12km,M2.9/7, MLv2.9/7*

**ISC 12 19:07:20.0±1.1,0°.55N±0°.08×126°.61E±0°.06,h35km,n8, σ2s05/9,mb3.4/3,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.79** | **74** | P | | **Pn** | **19 07 35.6** | **+1.0** |
| TNTI | | | | S | | **Sn** | **19 07 46.6** | **+1.4** |
| **LBMI** | **Labuha** | **1.48** | **143** | P | | **Pn** | **19 07 45.3** | **+1.2** |
| LBMI | | | | S | | **Sn** | **19 08 04.0** | **+1.7** |
| **KMSI** | **Cibinong** | **2.63** | **271** | S | | **Sn** | **19 08 33.6** | **+3.0** |
| **SANI** | **Sanana** | **2.66** | **193** | P | | **Pn** | **19 08 00.5** | **+0.2** |
| **GTOI** | **Gorontalo** | **3.60** | **271** | P | | Pn | 19 08 18.3 | +5.0 |
| **WRA** | **Warramunga Arr** | **21.73** | **160** | P | | **P** | **19 12 06.1** | **-2.4** |
| | 0.4nm,0.4s,baz=345,slow=9.5,SNR=9.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.10** | **164** | P | | **P** | **19 12 40.9** | **-0.6** |
| | 0.4nm,0.4s,baz=343,slow=12,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.10** | **326** | P | | **P** | **19 17 22.1** | **-1.7** |
| | 0.3nm,0.4s,baz=115,slow=8.0,SNR=13 | | | | | | | |

*IDC* ***12*** *19:19:26.6±0.6,11°.20S×164°.00E,h0km,mb4.5/18, mb1 4.7/20,mb1mx4.5/40,mbtmp4.6/20,ML4.9/2,MS3.8/35, Ms1 3.8/35,ms1mx3.7/60,Error ellipse: s-maj=18.8km s-min=15.8km az=120.0*

*BJI* ***12*** *19:19:27.3±0.0,10°.97S×164°.06E,h13km,mb4.7/52, mB5.1/29,Ms5.0/7,Ms7 4.5/5*

*NEIC* ***12*** *19:19:28.4±2.0,11°.17S±0°.08×164°.15E±0°.09,h14km±4km, mb5.1/138,Error ellipse: s-maj=14.6km s-min=8.6km az=46.0*

*GCMT* ***12*** *19:19:30.4±0.2,11°.28S±0°.02×164°.02E±0°.03,h13km±1km, MW4.8/84,Moment Tensor Solution. s32,c45; s84,c110; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=2.17±.13; Mθθ 1.76±.10; Mφφ 0.40±.08; Mrθ -0.60±.21; Mrφ 0.80±.06; Mθφ 0.23±.23; Best double couple: M=2.24400×10^16 NP1:φs=244.00000°,δ37.00000°,λ-92.00000°. NP2: φs=66.00000°,δ53.00000°,λ-89.00000°. Principal axes: T 2.2230, Plg8.0000°, Azm155.0000°; N 0.0380, Plg1.0000°, Azm246.0000°; P -2.2660, Plg82.0000°, Azm342.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*MOS* ***12*** *19:19:31.0±1.1,11°.17S×163°.92E,h43km,mb5.0/16 Error ellipse: s-maj=10.4km s-min=8.4km az=100.3*

**ISC 12 19:19:30.3±0.3,11°.20S±0°.05×164°.14E±0°.05,h29km,n386, σ1s30/353,mb5.0/121,MS3.8/34,14C-5D,Santa Cruz Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HNR** | **Honiara** | **4.48** | **293** | Pn | | **Pn** | **19 20 36.2** | **-0.1** |
| | 108nm,0.3s,baz=113,slow=4.7,SNR=12 | | | | | | | |
| HNR | | | | Sn | | **Sn** | **19 21 27.6** | **+0.1** |
| | 37nm,0.3s,baz=5.4,slow=23,SNR=2.0 | | | | | | | |
| HNR | | | | LR | | LR | 19 21 53.7 | |
| | comp=Z,448nm,19.7s,baz=109,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **4.48** | **293** | Pn | | **Pn** | **19 20 35.7** | **-0.6** |
| HNR | | | | Sn | | **Sn** | **19 21 26.9** | **-0.6** |
| **HNR** | **Honiara** | **4.48** | **293** | P | | **Pn** | **19 20 36.4** | **+0.1** |
| **SANVU** | **Saraoutou** | **5.17** | **145** | Pn | | **Pn** | **19 20 45.4** | **-0.3** |
| SANVU | | | | Sn | | **Sn** | **19 21 40.6** | **-3.8** |
| **SANVU** | **Saraoutou** | **5.17** | **145** | P | | **Pn** | **19 20 46.3** | **+0.6** |
| **DVP** | **Devils Point** | **7.58** | **149** | P | | **Pn** | **19 21 19.9** | **+1.1** |
| **RTV** | **Rentapao** | **7.76** | **148** | P | | **Pn** | **19 21 22.4** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **9.30** | **179** | P | | **Pn** | **19 21 43.3** | **+0.9** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **LIFNC** | **LIFOU** | **9.98** | **163** | Pn | | **Pn** | **19 21 51.0** | **-0.8** |
| **LIFNC** | **LIFOU** | **9.98** | **163** | P | | **Pn** | **19 21 53.0** | **+1.3** |
| **DZM** | **Mont Dzumac** | **11.03** | **169** | *e*Pn | | **Pn** | **19 22 07.2** | **+0.9** |
| | 138nm,1.1s | | | | | | | | |
| DZM | | | | *e*LR | | LR | 19 24 40.4 | | |
| | comp=Z,3μm,26.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **11.03** | **169** | Pn | | **Pn** | **19 22 06.5** | **+0.2** |
| | 4.8nm,0.3s,baz=314,slow=20,SNR=46 | | | | | | | | |
| DZM | | | | Sn | | **Sn** | **19 24 05.5** | **-3.2** |
| | 1.2nm,0.3s,baz=356,slow=23,SNR=1.8 | | | | | | | | |
| DZM | | | | LR | | LR | 19 25 34.6 | | |
| | comp=Z,2μm,21.2s,baz=5.0,slow=33 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **11.03** | **169** | | | **Pn** | **19 22 06.2** | **-0.1** |
| **DZM** | **Mont Dzumac** | **11.03** | **169** | P | | **Pn** | **19 22 06.9** | **+0.6** |
| **NOUC** | **Port Laguerre** | **11.04** | **169** | P | | **Pn** | **19 22 06.9** | **+0.7** |
| **YATNC** | **Mamie plateau,** | **11.11** | **167** | P | | **Pn** | **19 22 06.1** | **-1.2** |
| **ONTNC** | **Ouen Toro** | **11.26** | **169** | Pn | | **Pn** | **19 22 10.1** | **+0.7** |
| **ONTNC** | **Ouen Toro** | **11.26** | **169** | P | | **Pn** | **19 22 11.2** | **+1.8** |
| **OUENC** | **Ouen Island, N** | **11.45** | **167** | Pn | | **Pn** | **19 22 12.7** | **+0.7** |
| **OUENC** | **Ouen Island, N** | **11.45** | **167** | P | | **Pn** | **19 22 12.6** | **+0.7** |
| **PINNC** | **Pines Island,** | **11.78** | **165** | | | **Pn** | **19 22 16.8** | **+0.3** |
| **RABL** | **Rabaul** | **13.75** | **300** | Pn | | **Pn** | **19 22 42.2** | **-1.2** |
| **RABL** | **Rabaul** | **13.75** | **300** | P | | **Pn** | **19 22 43.1** | **-0.4** |
| **MSVF** | **Nonsavu** | **14.95** | **117** | LR | | LR | 19 27 52.6 | | |
| | comp=Z,522nm,21.6s,baz=294,slow=34 | | | | | | | | |
| **PMG** | **Port Moresby** | **16.80** | **275** | LR | | LR | 19 29 37.0 | | |
| | comp=Z,699nm,19.1s,baz=108,slow=37 | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.75** | **219** | | | **Pn** | **19 23 49.6** | **+2.1** |
| **CTA** | **Charters Tower** | **19.34** | **241** | P | | **Pn** | **19 23 55.0** | **+0.3** |
| | 1.0nm,0.3s,baz=67,slow=10,SNR=24 | | | | | | | | |
| CTA | | | | LR | | LR | 19 30 20.0 | | |
| | comp=Z,73nm,20.2s,baz=56,slow=34 | | | | | | | | |
| **CTA** | **Charters Tower** | **19.34** | **241** | P | | **Pn** | **19 23 55.1** | **+0.3** |
| **CTAO** | **Charters Tower** | **19.34** | **241** | P | | **Pn** | **19 23 55.0** | **+0.3** |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,38nm,1.0s | | | | | | | | |
| **CTAO** | **Charters Tower** | **19.34** | **241** | P | | **Pn** | **19 23 55.0** | **+0.3** |
| **CTAO** | **Charters Tower** | **19.34** | **241** | P | | **Pn** | **19 23 55.1** | **+0.3** |
| **KWAJ** | **Kwajalein Atol** | **20.17** | **10** | P | | **P** | **19 23 57.9** | **-4.7** |
| KWAJ | | | | pmax | | pmax | | | |
| | comp=Z,189nm,0.8s | | | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **20.17** | **10** | P | | **P** | **19 23 57.9** | **-4.7** |
| **MTSU** | **Mount Surprise** | **20.36** | **248** | P | | Pn | 19 24 06.8 | -0.1 |
| **COEN** | **Coen** | **20.64** | **260** | P | | **P** | **19 24 08.2** | **+0.5** |
| **COEN** | **Coen** | **20.64** | **260** | P | | **P** | **19 24 08.6** | **+0.9** |
| **RMQ** | **Roma** | **21.01** | **222** | P | | **P** | **19 24 13.9** | **+2.2** |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **ARMA** | **Armidale** | **22.38** | **209** | P | | **P** | **19 24 27.0** | **+0.6** |
| **AFI** | **Afiamalu** | **23.66** | **99** | LR | | LR | 19 32 33.6 | | |
| | comp=Z,169nm,18.0s,baz=183,slow=33 | | | | | | | | |
| **RAO** | **Raoul Island** | **24.55** | **140** | LR | | LR | 19 33 01.7 | | |
| | comp=Z,417nm,20.8s,baz=132,slow=33 | | | | | | | | |
| **QIS** | **Mount Isa** | **25.33** | **245** | P | | **P** | **19 24 54.6** | **-0.3** |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.46** | **217** | P | | **P** | **19 25 05.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **29.26** | **222** | P | | **P** | **19 25 30.8** | **+0.8** |
| | comp=Z,4.3nm,0.9s,baz=19,slow=10,SNR=9.0 | | | | | | | | |
| STKA | | | | PcP | | **PcP** | **19 28 37.8** | **+1.2** |
| | comp=Z,3.8nm,0.7s,baz=13,slow=4.5,SNR=5.6 | | | | | | | | |
| STKA | | | | LR | | LR | 19 37 12.4 | | |
| | comp=Z,155nm,18.3s,baz=31,slow=36 | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.26** | **222** | P | | **P** | **19 25 30.2** | **+0.2** |
| **URZ** | **Urewera** | **29.34** | **159** | LR | | LR | 19 35 40.3 | | |
| | comp=Z,350nm,18.4s,baz=356,slow=33 | | | | | | | | |
| **URZ** | **Urewera** | **29.34** | **159** | P | | **P** | **19 25 29.4** | **-1.2** |
| **H11S2** | **WAKE ISLAND Hy** | **29.61** | **5** | T | | T | 19 56 43.6 | | |
| | baz=175,slow=74,SNR=24 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.61** | **5** | T | | T | 19 56 43.5 | | |
| | baz=175 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.63** | **5** | T | | T | 19 56 46.4 | | |
| | baz=175,slow=74,SNR=21 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **29.77** | **249** | P | | **P** | **19 25 33.3** | **-1.3** |
| **WB0** | **Warramunga Arr** | **29.86** | **250** | P | | **P** | **19 25 34.0** | **-1.5** |
| WB0 | | | | IAmb | | IAmb | 19 25 37.2 | | |
| | comp=Z,39nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **29.94** | **249** | P | | **P** | **19 25 34.6** | **-1.6** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **29.94** | **249** | P | | **P** | **19 25 34.6** | **-1.6** |
| WRAB | | | | IAmb | | IAmb | 19 25 37.4 | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **29.94** | **249** | P | | **P** | **19 25 34.8** | **-1.3** |
| WB2 | | | | IAmb | | IAmb | 19 25 37.9 | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.95** | **249** | P | | **P** | **19 25 34.9** | **-1.3** |
| | comp=Z,18nm,0.8s,baz=81,slow=8.9,SNR=95 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **19 28 39.7** | **+1.1** |
| | comp=Z,2.0nm,0.7s,baz=78,slow=3.6,SNR=7.6 | | | | | | | | |
| WRA | | | | LR | | LR | 19 37 16.7 | | |
| | comp=Z,213nm,18.9s,baz=21,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.95** | **249** | P | | **P** | **19 25 34.1** | **-2.2** |
| **LCRK** | **Leigh Creek** | **30.75** | **228** | P | | **P** | **19 25 44.2** | **+1.0** |
| **H11N1** | **WAKE ISLAND Hy** | **30.84** | **5** | T | | T | 19 58 14.2 | | |
| | baz=184,slow=76,SNR=11 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.84** | **5** | T | | T | 19 58 13.7 | | |
| |

**SANI Sanana** 38.92 281 P P 19 26 53.8 -0.1
comp=Z,15nm,0.9s
**DAV Davao City (W)** 42.45 294 LR LR 19 46 21.1
comp=Z,42nm,18.0s,baz=124,slow=38
**MCQ Macquarie Isla** 43.38 184 P P 19 27 29.6 -0.4
MCQ pmax pmax
comp=Z,260nm,1.6s
**MCQ Macquarie Isla** 43.38 184 P P 19 27 29.6 -0.4
**PSA00 Pilbara Seismi** 43.59 251 P P 19 27 31.3 -0.9
**PSA00 Pilbara Seismi** 43.59 251 P 19 27 31.3 -0.9
**JCJ Chichijima** 43.63 331 P P 19 27 29.0 -3.3
**MBWA Marble Bar** 43.65 251 P P 19 27 31.2 -1.5
**TOLI2 Tolitoli** 44.80 283 P P 19 27 40.0 -1.9
**PPT2 Papeete2** 45.19 104 *e*LR LR 19 40 21.7
comp=Z,124nm,23.8s
**NWAO Narrogin (SRO)** 48.07 236 P P 19 28 06.4 -1.0
NWAO pmax pmax
comp=Z,82nm,1.7s
**NWAO Narrogin (SRO)** 48.07 236 P P 19 28 06.4 -1.0
**MORW Morawa** 48.17 241 P P 19 28 06.0 -2.3
MORW lAmb lAmb 19 28 10.9
comp=Z,22nm,1.0s
**MYLDM Lahad Datu** 48.24 287 P P 19 28 06.6 -2.4
MYLDM lAmb lAmb 19 28 33.2
comp=Z,32nm,1.3s
**KKM Kota Kinabalu** 50.67 287 P P 19 28 25.2 -2.4
KKM lAmb lAmb 19 29 28.7
comp=Z,22nm,1.0s
**JOW Kunigami** 51.40 318 LR LR 19 48 22.7
comp=Z,150nm,21.9s,baz=120,slow=34
**JGF Kuroka** 52.99 333 P P 19 28 43.6 -0.8
JGF lAmb lAmb 19 29 18.0
comp=Z,27nm,1.5s
**JMN Monobe** 53.16 328 P P 19 28 46.2 +0.5
**MJAR Matsushiro Arr** 53.40 334 P P 19 28 47.0 -0.5
comp=Z,5.2nm,0.8s,baz=172,slow=7.9,SNR=11
MJAR LR LR 19 49 44.4
comp=Z,81nm,21.9s,baz=138,slow=34
**MJAR Matsushiro Arr** 53.40 334 P P 19 28 47.0 -0.5
**MJAR Matsushiro Arr** 53.40 334 P P 19 28 46.9 -0.5
**MAJO Matsushiro** 53.40 334 P P 19 28 45.5 -1.9
MAJO pmax pmax
comp=Z,9.0nm,0.9s
**MAJO Matsushiro** 53.40 334 P P 19 28 45.5 -1.9
**MAT Matsushiro** 53.40 334 P P 19 28 47.0 -0.5
MAT *e*S S 19 36 19.0 +1.1
**MJB9 Matsu-Tunnel** 53.41 334 P P 19 28 46.0 -1.5
**JMM Marumori** 53.49 337 P P 19 28 48.4 +0.4
**YOJ Yonaguni jima** 53.56 312 P P 19 28 48.8 0.0
YOJ pmax pmax
comp=Z,188nm,1.2s
**YOJ Yonaguni jima** 53.56 312 P P 19 28 48.8 0.0
**YULB Yu-li** 54.21 310 P P 19 28 52.1 -1.5
**JNU Nakatsue** 54.30 325 P P 19 28 53.9 -0.2
**NACB Ninganchiao** 54.43 311 P P 19 28 54.8 -0.4
**JHS Saijyo** 54.54 329 P P 19 28 55.1 -0.7
**JSD Sado** 54.64 335 P P 19 28 57.5 +1.0
JSD lAmb lAmb 19 28 59.9
comp=Z,14nm,0.9s
**TPUB Ta-pu** 54.66 309 P P 19 28 55.9 -1.1
**SSLB Suanglung** 54.69 310 P P 19 28 56.6 -0.6
SSLB lAmb lAmb 19 30 45.5
comp=Z,36nm,1.5s
**YHNB Yeheng** 54.88 311 P 19 28 57.7 -0.8
**JTM Tenmabayashi** 55.95 339 P P 19 29 05.2 -0.7
**JKA Kamikawa-asahi** 58.43 342 P P 19 29 24.7 +1.4
**ASAJ Asahikawa** 58.44 342 P P 19 29 24.9 +1.5
comp=Z,21nm,0.7s,baz=200,slow=6.9,SNR=20
ASAJ LR LR 19 50 22.8
comp=Z,128nm,21.8s,baz=158,slow=32
**ASAJ Asahikawa** 58.44 342 P P 19 29 24.7 +1.4
ASAJ pmax pmax
comp=Z,30nm,0.8s
**KSRS Korea Array** 59.13 327 P P 19 29 28.9 +0.6
comp=Z,3.9nm,0.9s,baz=140,slow=7.2,SNR=14
KSRS LR LR 19 50 58.4
comp=Z,42nm,20.9s,baz=130,slow=32
**NJ2 Nanjing** 61.03 316 *e*P P 19 29 43.7 +2.2
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**USA0B Ussuriysk Arra** 62.39 334 P P 19 29 50.2 -0.2
USA0B pmax pmax
comp=Z,27nm,1.4s
**USA0B Ussuriysk Arra** 62.39 334 P P 19 29 50.2 -0.2
USA0B lAmb lAmb 19 29 54.5
comp=Z,27nm,1.4s
**USRK Ussuriysk Ar.** 62.39 334 P P 19 29 51.3 +0.9
comp=Z,5.9nm,0.8s,baz=129,slow=7.4,SNR=9.6
**USRK Ussuriysk Ar.** 62.39 334 P P 19 29 50.6 +0.2
**USRK Ussuriysk Ar.** 62.39 334 P P 19 29 50.6 +0.2
**MDJ Mudanjiang** 63.76 333 P P 19 30 02.4 +2.9
MDJ pmax pmax
comp=Z,8.0nm,0.9s
MDJ pmax pmax
comp=Z,160nm,3.5s
**PET Petropavlovsk** 64.14 356 *ce*P P 19 30 02.8 +1.1
PET pmax pmax
comp=Z,9.0nm,1.0s
**SHEM Shemya Is, Ala** 64.25 7 LR LR 19 53 04.3
comp=Z,84nm,21.9s,baz=1.5,slow=31
**PETK Petropavlovsk-** 64.29 356 P P 19 30 03.7 +1.0
comp=Z,6.2nm,0.8s,baz=154,slow=3.4,SNR=11
PETK LR LR 19 53 25.3
comp=Z,101nm,21.1s,baz=156,slow=32
**CN2 Changchun** 65.08 330 *e*P P 19 30 08.2 +0.1
CN2 pmax pmax
comp=Z,10.0nm,1.1s
**BNX BinXian** 65.61 333 ⇑P P 19 30 11.6 +0.1
BNX pmax pmax
comp=Z,10.0nm,0.6s
**GRNR Gornyy** 66.27 341 ⇑*i*P P 19 30 17.4 +1.7
GRNR pmax pmax
comp=Z,3.0nm,1.0s
**VNDA Vanda** 66.32 181 LR LR 19 55 00.8
comp=Z,66nm,21.4s,baz=308,slow=32
**KLR Kul'dur** 66.58 338 LR LR 19 57 50.6
comp=Z,34nm,21.1s,baz=196,slow=35
**KLR Kul'dur** 66.58 338 *ce*P P 19 30 18.2 +0.5
KLR pmax pmax
comp=Z,8.0nm,0.9s
**ENH Enshi** 66.78 310 P P 19 30 18.5 -0.9
ENH lAmb lAmb 19 30 21.9
comp=Z,10nm,0.9s
**LYN LuoYang** 66.84 315 *e*P P 19 30 21.5 +1.9
LYN pmax pmax
comp=Z,10.0nm,0.9s
LYN pmax pmax
comp=Z,80nm,3.8s
**HNS HongShan** 66.95 319 ⇓P P 19 30 20.5 +0.2
HNS pmax pmax
comp=Z,8.0nm,1.2s
**GYA Guiyang** 67.21 305 ⇓P P 19 30 22.9 +0.6
GYA pmax pmax
comp=Z,5.0nm,0.6s
**NIKH Nikolski High** 67.98 17 P P 19 30 27.8 +1.4
baz=209
**XAN Xi'an** 69.07 313 P P 19 30 33.4 -0.3
XAN sP sP 19 30 42.4 -1.2
XAN pmax pmax
comp=Z,6.0nm,1.2s
**UNV Unalaska Valle** 69.44 18 P P 19 30 37.2 +1.7
baz=211
**KMI Kunming** 69.86 302 ⇓P P 19 30 39.7 +0.6
KMI pP sP 19 30 48.3 -0.6
KMI sP pwP 19 30 50.3 -3.8
KMI pmax pmax
comp=Z,14nm,1.1s
**XLT XiLinHaoTe** 70.08 325 *e*P P 19 30 41.0 +1.2
XLT pP pP 19 30 45.4 -1.8
XLT sP sP 19 30 48.0 -2.0
XLT pmax pmax
comp=Z,12nm,0.9s
XLT pmax pmax
comp=Z,290nm,5.1s
**CMAR Chiang Mai Arr** 70.73 294 P P 19 30 44.3 +0.1
comp=Z,0.7nm,0.4s,baz=123,slow=4.5,SNR=11
CMAR LR LR 19 59 57.6
comp=Z,21nm,22.0s,baz=115,slow=34
**CMAR Chiang Mai Arr** 70.73 294 *ce*P P 19 30 45.0 +0.8
CMAR pmax pmax
comp=Z,2.0nm,0.8s
**CHTO Chiang Mai** 70.85 294 P P 19 30 44.1 -0.8
CHTO pmax pmax
comp=Z,2.0nm,1.0s
**CHTO Chiang Mai** 70.85 294 P P 19 30 44.1 -0.8

**HHC Hu-ho-hao-te** 70.94 320 *e*P P 19 30 46.7 +1.5
HHC pmax pmax
comp=Z,6.0nm,1.0s
HHC pmax pmax
comp=Z,73nm,4.4s
**PZH PanZhiHua** 71.23 303 P P 19 30 47.0 -0.3
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,190nm,4.7s
**MA2 Magadan** 71.36 353 *ce*P P 19 30 46.7 -0.4
MA2 pmax pmax
comp=Z,6.0nm,0.8s
**MA2 Magadan** 71.36 353 P P 19 30 46.4 -0.7
**CD2 Chengdu** 71.45 308 P P 19 30 48.1 -0.3
CD2 pmax pmax
comp=Z,10.0nm,0.7s
**HIA Hailar** 71.73 331 *i*P P 19 30 50.4 +0.7
HIA pmax pmax
comp=Z,11nm,1.1s
**ZEA Zeya** 71.88 338 *e*P P 19 30 52.0 +1.6
ZEA pmax pmax
comp=N,10.0nm,0.8s
ZEA pmax pmax
comp=Z,10.0nm,1.3s
**SDPT Sand Point** 72.64 20 P P 19 30 54.6 -0.2
**SDPT Sand Point** 72.64 20 P P 19 30 55.3 +0.4
baz=216
**LZH Lanzhou** 73.70 313 ⇓P P 19 31 02.7 +0.8
LZH pP pP 19 31 08.7 -0.4
LZH sP sP 19 31 12.0 +0.3
LZH pmax pmax
comp=Z,23nm,1.3s
**CHGN Chignik** 74.10 21 P P 19 31 03.8 +0.3
baz=218
**SEY Seymchan** 74.47 354 LR LR 20 00 26.4
comp=Z,92nm,21.0s,baz=304,slow=33
**SEY Seymchan** 74.47 354 *i*P P 19 31 05.4 -0.1
**OHAK Old Harbor** 76.64 22 P P 19 31 19.1 +1.1
baz=223
**GAMB Gambell** 77.01 11 P P 19 31 21.5 +1.5
baz=204
**KDAK Kodiak Island** 77.31 22 P P 19 31 23.2 +1.4
baz=224
**ULN Ulaanbaatar** 77.51 325 *ce*P P 19 31 23.8 +0.4
ULN pmax pmax
comp=Z,9.0nm,0.8s
**ULN Ulaanbaatar** 77.51 325 P P 19 31 23.6 +0.2
ULN lAmb lAmb 19 31 27.5
comp=Z,9.0nm,0.8s
**P18K Big Mountain,** 77.57 20 P P 19 31 23.6 +0.3
**P18K Big Mountain,** 77.57 20 P P 19 31 24.3 +0.9
baz=221
**Q19K Cape Douglas,** 77.77 21 P P 19 31 25.8 +1.3
baz=222
**YAK Yakutsk** 77.81 344 LR LR 20 06 41.4
comp=Z,33nm,18.5s,baz=103,slow=36
**YAK Yakutsk** 77.81 344 *e*P P 19 31 24.9 +0.4
YAK *e* 19 31 32.5
YAK *e**PP pwP 19 31 38.4 -0.6
YAK *e* 19 34 17.3
YAK *e*PPP PPP 19 36 14.0
YAK *e*S S 19 41 14.9 -0.1
YAK *e**SS SKSac 19 41 33.9 -2.0
YAK *e*SS SS 19 46 19.3 +3.2
YAK pmax pmax
comp=Z,13nm,0.8s
YAK pmax pmax
comp=N,2.0nm,0.9s
YAK pmax pmax
comp=E,1.0nm,1.1s
YAK pmax pmax
comp=Z,38nm,2.4s
YAK pmax pmax
comp=N,47nm,2.7s
YAK pmax pmax
comp=E,25nm,2.5s
YAK smax smax
comp=N,19nm,2.9s
YAK smax smax
comp=E,56nm,3.0s
**YAK Yakutsk** 77.81 344 P P 19 31 24.2 -0.2
YAK lAmb lAmb 19 31 25.8
comp=Z,17nm,0.9s
**SONM Songino Array** 77.87 324 P P 19 31 26.0 +0.7
comp=Z,4.0nm,0.8s,baz=144,slow=6.2,SNR=28
SONM LR LR 20 05 18.1
comp=Z,56nm,20.2s,baz=121,slow=35
**GTA Gaotai** 78.03 314 ⇓P P 19 31 27.2 +0.7
GTA pP PcP 19 31 35.3 -0.8
GTA sP pwP 19 31 39.7 -1.9
GTA pmax pmax
comp=Z,4.0nm,1.0s
**O19K Port Alsworth** 78.48 20 P P 19 31 29.5 +1.2
baz=222
**SVW2 Sparrevohn** 78.76 19 P P 19 31 31.0 +1.2
**QSPA South Pole Qui** 78.80 180 LR LR 20 02 15.8
comp=Z,51nm,21.0s,baz=332,slow=33
**N19K Bonanza Creek** 78.89 19 P P 19 31 31.8 +1.1
N19K lAmb lAmb 19 31 32.4
comp=Z,10.0nm,0.8s
**N19K Bonanza Creek** 78.89 19 P P 19 31 32.1 +1.4
baz=221
**ANM Nome** 78.99 13 P P 19 31 32.6 +1.6
baz=210
**BILL Bilibino** 79.05 1 *c**i*P P 19 31 31.4 +0.2
BILL *e* 19 31 39.0
BILL *e* 19 34 32.2
BILL *e*PPP PPP 19 36 18.3
BILL pmax pmax
comp=Z,32nm,1.3s
BILL MLR MLR
comp=Z,30nm,16.0s
**BILL Bilibino** 79.05 1 P P 19 31 31.5 +0.2
BILL lAmb lAmb 19 31 33.3
comp=Z,27nm,1.1s
**RSO Redoubt South** 79.20 20 P P 19 31 32.9 +0.4
**TNA Tin City** 79.33 11 P P 19 31 34.4 +1.6
baz=208
**BRSE Bradley Lake S** 79.39 21 P P 19 31 35.0 +1.7
baz=225
**M19K Big River Lodg** 79.74 19 P P 19 31 36.8 +1.5
M19K lAmb lAmb 19 31 38.4
comp=Z,25nm,0.8s
**M19K Big River Lodg** 79.74 19 P P 19 31 37.3 +2.1
baz=221,SNR=12
**L19K White Mountain** 79.81 18 P P 19 31 35.2 -0.4
L19K lAmb lAmb 19 31 38.6
comp=Z,18nm,0.8s
**L19K White Mountain** 79.81 18 P P 19 31 37.7 +2.1
baz=221,SNR=12
**TTA Tatalina** 80.04 17 P P 19 31 37.7 +0.9
TTA pmax pmax
comp=Z,37nm,1.7s
**TTA Tatalina** 80.04 17 P P 19 31 37.7 +0.9
TTA lAmb lAmb 19 31 40.9
comp=Z,37nm,1.7s
**TTA Tatalina** 80.04 17 P P 19 31 38.6 +1.7
baz=220,SNR=6.1
**L20K Farewell, AK** 80.33 18 P P 19 31 40.4 +2.0
baz=222,SNR=6.3
**ZAK Zakamensk** 80.93 326 *e*P P 19 31 40.5 -1.5
ZAK pmax pmax
comp=Z,8.0nm,1.3s
**K20K Telida** 80.94 18 P P 19 31 42.5 +0.9
**M22K Willow** 81.03 20 P P 19 31 43.8 +1.8
baz=225
**PWL Port Wells** 81.03 21 P P 19 31 43.3 +1.2
**PWL Port Wells** 81.03 21 P P 19 31 43.5 +1.4
baz=227
**PPLA Purkeypile** 81.17 19 P P 19 31 44.5 +1.5
baz=223
**GCSA Galena City Sc** 81.21 16 P P 19 31 44.6 +1.7
baz=219
**CUT Chulitna** 81.44 20 P P 19 31 45.2 +1.0
baz=225
**GLI Glacier Island** 81.49 22 P P 19 31 46.2 +1.7
baz=228
**J20K Nowinta River** 81.53 17 P P 19 31 45.5 +0.8
**J20K Nowinta River** 81.53 17 P P 19 31 46.7 +2.0
baz=221,SNR=7.3
**CAST Castle Rocks** 81.58 18 P P 19 31 45.6 +0.6
CAST lAmb lAmb 19 31 48.4
comp=Z,13nm,0.7s
**CAST Castle Rocks** 81.58 18 P P 19 31 45.6 +0.6
baz=223,SNR=9.8

**SML Sawmill** 81.68 21 P P 19 31 46.7 +1.1
baz=227
**CHUM Lake Minchumin** 81.85 18 P P 19 31 47.5 +1.1
baz=223
**SCM Sheep Creek Mo** 82.05 21 P P 19 31 48.7 +1.1
baz=228
**DIV Divide** 82.14 22 P P 19 31 48.5 +0.4
**TRF Thorofare Moun** 82.17 19 P P 19 31 48.6 +0.3
**TRF Thorofare Moun** 82.17 19 P P 19 31 49.2 +0.9
baz=225
**KLU Klutina** 82.32 22 P P 19 31 50.1 +1.0
baz=229
**WAT6 Susitna Watana** 82.41 20 P P 19 31 51.2 +1.6
baz=227
**BMRM Bremner River** 82.47 23 P P 19 31 51.1 +1.3
BMRM lAmb lAmb 19 31 54.7
comp=Z,15nm,0.8s
**BMRM Bremner River** 82.47 23 P P 19 31 51.1 +1.3
baz=230
**RDOG Red Dog Mine** 82.49 12 P P 19 31 49.6 -0.1
RDOG lAmb lAmb 19 31 51.9
comp=Z,10nm,0.7s
**RDOG Red Dog Mine** 82.49 12 P P 19 31 51.2 +1.5
baz=212
**RND Reindeer** 82.60 19 P P 19 31 50.1 -0.3
RND pmax pmax
comp=Z,54nm,1.8s
**RND Reindeer** 82.60 19 P P 19 31 50.1 -0.3
**M24K Tolsona, Glenn** 82.63 21 P P 19 31 52.7 +2.1
**M24K Tolsona, Glenn** 82.63 21 P P 19 31 52.1 +1.5
baz=229
**MCK McKinley** 82.80 19 P P 19 31 51.9 +0.5
MCK pmax pmax
comp=Z,19nm,1.0s
**MCK McKinley** 82.80 19 P P 19 31 51.9 +0.5
MCK lAmb lAmb 19 31 55.1
comp=Z,19nm,1.0s
**MCK McKinley** 82.80 19 P P 19 31 52.3 +0.8
baz=226,SNR=5.2
**DHY Denali Highway** 82.86 20 P P 19 31 51.8 -0.1
DHY lAmb lAmb 19 31 55.4
comp=Z,18nm,1.4s
**DHY Denali Highway** 82.86 20 P P 19 31 53.3 +1.4
baz=228
**N25K Chitina, Valde** 82.88 22 lAmb lAmb 19 31 54.7
comp=Z,15nm,0.8s
**N25K Chitina, Valde** 82.88 22 P P 19 31 53.5 +1.5
baz=230
**I21K Tanana** 82.90 17 P P 19 31 53.4 +1.5
I21K lAmb lAmb 19 31 54.7
comp=Z,13nm,1.1s
**BWN Browne** 82.94 19 P P 19 31 51.9 -0.2
**IMAR Indian Mountai** 83.00 16 P P 19 31 52.8 +0.4
**H21K Melozitna Rive** 83.02 17 P P 19 31 53.2 +0.7
H21K lAmb lAmb 19 31 55.4
comp=Z,7.4nm,0.9s
**GLB Gilahina Butte** 83.07 22 P P 19 31 52.0 -0.9
GLB lAmb lAmb 19 31 55.4
comp=Z,14nm,0.8s
**MLY Manley** 83.16 18 lAmb lAmb 19 31 56.6
comp=Z,19nm,1.6s
**MLY Manley** 83.16 18 P P 19 31 54.2 +0.9
baz=224,SNR=6.1
**HARP HAARP** 83.19 21 P P 19 31 54.5 +1.1
baz=230
**NEA2 Nenana** 83.36 18 lAmb lAmb 19 31 56.4
comp=Z,26nm,1.7s
**NEA2 Nenana** 83.36 18 P P 19 31 55.2 +0.9
baz=226
**PAX Paxson** 83.45 21 P P 19 31 55.7 +0.9
baz=230
**WRH Wood River Hil** 83.58 19 P P 19 31 54.2 -1.1
WRH lAmb lAmb 19 31 59.7
comp=Z,10nm,0.7s
**PINM Pinnacle** 83.65 25 P P 19 31 56.5 +0.6
baz=234
**I23K Minto, Yukon-K** 83.66 18 P P 19 31 56.5 +0.8
baz=226
**PNL Peninsula** 83.75 25 P P 19 31 56.9 +0.5
baz=235
**CCB Clear Creek Bu** 83.79 19 P P 19 31 56.2 -0.3
CCB lAmb lAmb 19 31 58.7
comp=Z,6.6nm,0.8s
**MDM Murphy Dome** 83.87 18 lAmb lAmb 19 31 58.8
comp=Z,13nm,1.0s
**HDA Harding Lake** 83.90 19 P P 19 31 57.2 +0.1
**HDA Harding Lake** 83.90 19 P P 19 31 58.1 +1.0
baz=228,SNR=16
**TCOL CIGO, UAF Yank** 83.93 19 P P 19 31 58.1 +1.0
baz=227
**COLA College** 83.93 19 P P 19 31 57.0 -0.1
COLA pmax pmax
comp=Z,23nm,1.0s
**COLA College** 83.93 19 P P 19 31 57.0 -0.1
**COLA College** 83.93 19 P P 19 31 58.1 +1.0
baz=227
**M26K Nabesna, AK** 83.97 22 lAmb lAmb 19 32 00.2
comp=Z,12nm,0.9s
**MENT Mentasta** 84.04 21 lAmb lAmb 19 32 04.0
comp=Z,9.3nm,0.8s
**H23K Yukon River** 84.08 17 P P 19 31 58.9 +1.0
H23K lAmb lAmb 19 32 00.4
comp=Z,11nm,0.8s
**RIDG Independent Ri** 84.16 20 lAmb lAmb 19 32 00.5
comp=Z,9.9nm,0.9s
**RIDG Independent Ri** 84.16 20 P P 19 32 00.2 +1.8
baz=230
**IL31** 84.17 19 lAmb lAmb 19 32 00.1
comp=Z,18nm,1.5s
**ILAR Eielson Array** 84.17 19 P P 19 31 58.8 +0.4
comp=Z,4.5nm,0.9s,baz=217,slow=5.4,SNR=20
**POKR Poker Plat Res** 84.23 19 P P 19 31 59.6 +0.9
baz=228
**L26K Log Cabin Wild** 84.23 21 P P 19 32 00.2 +1.5
L26K lAmb lAmb 19 32 01.3
comp=Z,12nm,1.0s
**L26K Log Cabin Wild** 84.23 21 P P 19 32 00.4 +1.6
baz=231
**DOT Dot Lake** 84.37 21 P P 19 32 00.8 +1.3
DOT lAmb lAmb 19 32 02.0
comp=Z,8.8nm,0.8s
**YUK3 Moose Creek** 84.55 23 P P 19 32 02.6 +1.9
baz=234
**H24K Noodor Dome** 84.58 18 P P 19 32 01.5 +1.0
baz=227
**SCRK Sand Creek** 84.61 20 lAmb lAmb 19 32 03.5
comp=Z,9.1nm,0.8s
**SCRK Sand Creek** 84.61 20 P P 19 32 02.4 +1.6
baz=231,SNR=9.2
**BVCY Beaver Creek** 84.77 23 P P 19 32 03.3 +1.7
baz=234
**L27K Beaver Creek,** 84.80 22 lAmb lAmb 19 32 04.6
comp=Z,11nm,0.8s
**BCAR Beaver Creek A** 84.82 22 P P 19 32 03.2 +1.4
**N02D Trinity Center** 84.88 47 P P 19 32 03.9 +1.2
baz=250
**COLD Coldfoot** 84.88 16 P P 19 32 04.1 +2.1
baz=225
**M02C Callahan** 84.92 46 P P 19 32 04.5 +1.7
baz=250
**YUK4 Talbot Arm** 85.01 24 P P 19 32 05.2 +2.2
baz=236
**HYT Haines Junctio** 85.18 25 P P 19 32 05.3 +1.5
baz=237
**TIXI Tiksi** 85.95 349 LR LR 20 07 40.7
comp=Z,32nm,21.1s,baz=180,slow=34
**TIXI Tiksi** 85.95 349 *ce*P P 19 32 05.9 -1.2
TIXI pmax pmax
comp=Z,9.0nm,1.3s
**TIXI Tiksi** 85.95 349 P P 19 32 06.9 -0.3
**TOLK Toolik Lake Re** 86.06 15 P P 19 32 09.6 +1.7
baz=225
**WHY Whitehorse** 86.19 26 P P 19 32 09.9 +1.2
baz=239
**DAWY Dawson** 86.28 22 P P 19 32 09.6 +0.6
DAWY lAmb lAmb 19 32 12.1
comp=Z,8.5nm,1.0s
**DAWY Dawson** 86.28 22 P P 19 32 11.1 +2.0
baz=235,SNR=5.6
**ISA Isabella, Lake** 86.42 53 P P 19 32 10.8 +0.4
baz=254
**EDW2 Edwards Air Fo** 86.58 54 P P 19 32 12.9 +1.6
baz=254,SNR=8.8
**BMAR Burnt Mountain** 86.62 18 P P 19 32 12.6 +2.0
**J05D Fort Rock, OR** 86.67 45 P P 19 32 13.0 +1.4
baz=251
**PAHR Pah Rah Range** 86.89 49 P P 19 32 13.5 +0.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PAHR | | | | IAmb | IAmb | 19 32 41.6 | |
| | comp=Z,17nm,1.9s | | | | | | |
| **J29M** | **Klondike Camp** | **86.92** | **22** | P | **P** | **19 32 14.4** | **+2.2** |
| | baz=236 | | | | | | |
| **CWC** | **Cottonwood Cre** | **86.94** | **52** | P | **P** | **19 32 14.2** | **+1.1** |
| | baz=254 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **86.99** | **53** | P | **P** | **19 32 14.2** | **+0.9** |
| | baz=254 | | | | | | |
| **MPMC** | **Manual Prospec** | **87.30** | **53** | P | **P** | **19 32 16.1** | **+1.3** |
| | baz=254 | | | | | | |
| **MONP2** | **Monument Peak** | **87.31** | **56** | P | **P** | **19 32 16.7** | **+1.7** |
| | baz=255,SNR=5.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.33** | **50** | P | **P** | **19 32 16.5** | **+1.5** |
| | comp=Z,3.2nm,1.0s,baz=237,slow=8.1,SNR=14 | | | | | | |
| NVAR | | | | PKKPbc | **PKKPbc** | **19 50 07.3** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=106,slow=3.2,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.33** | **50** | P | **P** | **19 32 15.8** | **+0.8** |
| **I29M** | **Ogilvie Camp,** | **87.39** | **21** | IAmb | IAmb | 19 32 17.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **87.39** | **21** | P | **P** | **19 32 16.2** | **+1.8** |
| | baz=236,SNR=12 | | | | | | |
| **NV11** | **Mina Array Sit** | **87.44** | **50** | P | **P** | **19 32 15.7** | **+0.3** |
| **PFO** | **Pinyon Flats O** | **87.46** | **55** | P | **P** | **19 32 17.6** | **+1.9** |
| | comp=Z,1.7nm,0.6s,baz=195,slow=3.6,SNR=4.2 | | | | | | |
| **PFO** | **Pinyon Flats O** | **87.46** | **55** | IAmb | IAmb | 19 35 18.1 | |
| | comp=Z,27nm,1.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **87.46** | **55** | P | **P** | **19 32 16.7** | **+1.1** |
| | baz=255 | | | | | | |
| **TPFO** | **Pinon Flats** | **87.47** | **55** | P | **P** | **19 32 16.7** | **+1.1** |
| | baz=255 | | | | | | |
| **A04D** | **Lummi Island** | **87.50** | **39** | P | **P** | **19 32 17.0** | **+1.8** |
| | baz=250 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **87.50** | **56** | P | **P** | **19 32 16.8** | **+1.1** |
| | baz=255 | | | | | | |
| **RMX** | **La Rumorosa** | **87.51** | **56** | P | **P** | **19 32 16.7** | **+0.8** |
| RMX | | | | IAmb | IAmb | 19 32 19.7 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| **FARO** | **Faro, Yukon** | **87.62** | **25** | P | **P** | **19 32 17.7** | **+2.1** |
| | baz=241 | | | | | | |
| **YUH** | **Yuha Desert** | **87.65** | **56** | IAmb | IAmb | 19 32 19.5 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **SWSC** | **Sam W. Stewart** | **87.83** | **56** | P | **P** | **19 32 18.8** | **+1.6** |
| | baz=255 | | | | | | |
| **HEC** | **Hector,Ludlow** | **87.88** | **54** | P | **P** | **19 32 19.1** | **+1.6** |
| | baz=255 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **87.94** | **55** | P | **P** | **19 32 19.7** | **+1.8** |
| | baz=255,SNR=7.4 | | | | | | |
| **WMQ** | **Urumqi** | **88.09** | **315** | *e*P | **P** | **19 32 19.7** | **+1.4** |
| WMQ | | | | pP | pP | 19 32 25.4 | -0.4 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,100nm,21.1s | | | | | | |
| **BC3** | **Big Chuckawall** | **88.29** | **55** | P | **P** | **19 32 20.9** | **+1.4** |
| | baz=255 | | | | | | |
| **TUQ** | **Turquoise Moun** | **88.36** | **54** | P | **P** | **19 32 21.4** | **+1.5** |
| | baz=255 | | | | | | |
| **GMRC** | **Granite Mounta** | **88.41** | **54** | P | **P** | **19 32 21.7** | **+1.6** |
| | baz=255 | | | | | | |
| **J08A** | **Circle Bar Ran** | **88.61** | **45** | P | **P** | **19 32 20.9** | **+0.1** |
| **GLA** | **Glamis** | **88.64** | **56** | P | **P** | **19 32 23.0** | **+1.9** |
| | baz=256 | | | | | | |
| **IRM** | **Iron Mountain** | **88.66** | **55** | P | **P** | **19 32 23.2** | **+2.0** |
| | baz=256,SNR=9.5 | | | | | | |
| **SHPR** | **Sheep Range** | **89.23** | **53** | P | **P** | **19 32 22.4** | **-1.6** |
| SHPR | | | | IAmb | IAmb | 19 32 27.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **R11A** | **Troy Canyon, C** | **89.37** | **51** | P | **P** | **19 32 26.2** | **+1.6** |
| | baz=255 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **89.50** | **55** | P | **P** | **19 32 26.9** | **+1.9** |
| | baz=256 | | | | | | |
| **PRN** | **Pahroc Range** | **89.54** | **52** | IAmb | IAmb | 19 32 29.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BMO** | **Blue Mountains** | **89.84** | **44** | P | **P** | **19 32 25.8** | **-0.8** |
| BMO | | | | pmax | pmax | | |
| | comp=Z,19nm,2.0s | | | | | | |
| **BMO** | **Blue Mountains** | **89.84** | **44** | P | **P** | **19 32 25.8** | **-0.8** |
| BMO | | | | IAmb | IAmb | 19 32 28.6 | |
| | comp=Z,19nm,2.0s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **90.02** | **321** | *i* P | **P** | **19 32 27.2** | **-0.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **214A** | **Organ Pipe Nat** | **90.04** | **58** | P | **P** | **19 32 26.7** | **-1.0** |
| **214A** | **Organ Pipe Nat** | **90.04** | **58** | P | **P** | **19 32 29.4** | **+1.7** |
| | baz=257 | | | | | | |
| **F10A** | **Beach Ranch, E** | **90.20** | **43** | IAmb | IAmb | 19 32 31.8 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **BELA** | **Belgrano 2** | **90.44** | **176** | P | **P** | **19 32 28.8** | **+0.1** |
| BELA | | | | IAmb | IAmb | 19 32 30.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **90.56** | **19** | P | **P** | **19 32 31.8** | **+2.6** |
| | comp=Z,0.7nm,0.4s,baz=225,slow=4.3,SNR=3.0 | | | | | | |
| **INK** | **Inuvik** | **90.56** | **19** | P | **P** | **19 32 31.9** | **+2.7** |
| | baz=240 | | | | | | |
| **PLID** | **Pearl Lake** | **90.80** | **44** | IAmb | IAmb | 19 32 51.5 | |
| | comp=Z,15nm,1.8s | | | | | | |
| **CCUT** | **Cedar City** | **90.88** | **52** | P | **P** | **19 32 31.5** | **-0.3** |
| **SYO** | **Syowa Base** | **91.17** | **197** | *e*X | P | 19 32 46.0 | +14 |
| **U15A** | **North Rim** | **91.46** | **53** | IAmb | IAmb | 19 32 38.6 | |
| | comp=Z,8.3nm,1.3s | | | | | | |
| **HLID** | **Hailey** | **91.52** | **46** | IAmb | IAmb | 19 32 38.1 | |
| | comp=Z,12nm,1.8s | | | | | | |
| **HLID** | **Hailey** | **91.52** | **46** | P | **P** | **19 32 36.3** | **+1.8** |
| | baz=256 | | | | | | |
| **TUC** | **Tucson** | **91.80** | **58** | P | **P** | **19 32 37.6** | **+1.7** |
| | baz=258 | | | | | | |
| **HVU** | **Hansel Valley** | **92.28** | **48** | P | **P** | **19 32 37.1** | **-0.9** |
| HVU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **HVU** | **Hansel Valley** | **92.28** | **48** | P | **P** | **19 32 37.1** | **-0.9** |
| HVU | | | | IAmb | IAmb | 19 32 41.1 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **92.56** | **317** | P | **P** | **19 32 39.1** | **+0.1** |
| | comp=Z,2.1nm,0.7s,baz=98,slow=6.2,SNR=21 | | | | | | |
| MKAR | | | | PKKPbc | **PKKPdf** | **19 49 52.7** | **+0.9** |
| | comp=Z,0.5nm,0.8s,baz=270,slow=2.3,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **92.56** | **317** | *ce*P | **P** | **19 32 39.0** | **0.0** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **92.56** | **317** | P | **P** | **19 32 38.5** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **92.76** | **324** | P | **P** | **19 32 38.9** | **-0.8** |
| | comp=Z,1.1nm,0.8s,baz=114,slow=3.6,SNR=6.1 | | | | | | |
| ZALV | | | | LR | LR | 20 12 39.3 | |
| | comp=Z,27nm,22.0s,baz=70,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **92.76** | **324** | *i* P | **P** | **19 32 41.5** | **+1.8** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MAKZ** | **Makanchi** | **92.77** | **317** | P | **P** | **19 32 39.7** | **-0.3** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **MAKZ** | **Makanchi** | **92.77** | **317** | P | **P** | **19 32 39.7** | **-0.3** |
| **X18A** | **Snowflake** | **92.93** | **56** | IAmb | IAmb | 19 33 56.2 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **93.91** | **44** | P | **P** | **19 32 47.2** | **+1.7** |
| | baz=258 | | | | | | |
| **C36M** | **Paulatuk** | **94.11** | **20** | P | **P** | **19 32 46.5** | **+0.9** |
| | baz=249 | | | | | | |
| **A36M** | **Sachs Harbour** | **94.71** | **17** | P | **P** | **19 32 48.9** | **+0.6** |
| A36M | | | | IAmb | IAmb | 19 32 50.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **94.82** | **48** | P | **P** | **19 32 50.6** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=256,slow=6.0,SNR=3.7 | | | | | | |
| **KSH** | **Kashi** | **95.62** | **309** | P | **P** | **19 32 54.5** | **+1.1** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,3.1s | | | | | | |
| **NRIK** | **Noril'sk** | **95.72** | **340** | LR | LR | 20 16 35.9 | |
| | comp=Z,36nm,20.6s,baz=84,slow=36 | | | | | | |
| **NRIK** | **Noril'sk** | **95.72** | **340** | *i* P | **P** | **19 32 52.5** | **-0.5** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **95.79** | **320** | LR | LR | 20 15 06.0 | |
| | comp=Z,72nm,21.9s,baz=66,slow=35 | | | | | | |
| **ANMO** | **Albuquerque** | **95.84** | **56** | *ce*P | **P** | **19 32 54.8** | **+0.2** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.84** | **27** | P | **P** | **19 32 53.7** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=256,slow=4.6,SNR=9.4 | | | | | | |
| **SNAA** | **Sanae** | **96.86** | **184** | LR | LR | 20 15 57.7 | |
| | comp=Z,121nm,18.4s,baz=182,slow=35 | | | | | | |
| **AAK** | **Ala-Archa** | **97.22** | **312** | LR | LR | 20 16 59.5 | |
| | comp=Z,52nm,21.7s,baz=52,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **116.08** | **345** | PKP | **PKPdf** | **19 38 10.3** | **+0.2** |
| | comp=Z,2.5nm,0.8s,baz=80,slow=1.4,SNR=7.5 | | | | | | |
| **OBN** | **Obninsk** | **120.11** | **328** | *e*PKIKP | **PKPdf** | **19 38 16.9** | **-1.2** |
| OBN | | | | *e* | | 19 39 41.4 | |
| OBN | | | | *e*SS | SS | 19 56 03.9 | -3.9 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,49nm,16.0s | | | | | | |
| **LPAZ** | **La Paz** | **121.52** | **117** | PKP | **PKiKP** | **19 38 24.5** | **+1.5** |
| | comp=Z,2.1nm,0.7s,baz=264,slow=1.1,SNR=6.2 | | | | | | |
| **LPAZ** | **La Paz** | **121.52** | **117** | PKIKP | **PKPdf** | **19 38 22.0** | **-0.8** |
| **LPAZ** | **La Paz** | **121.52** | **117** | PKPdf | **PKPdf** | **19 38 22.0** | **-0.8** |
| **BOSA** | **Boshof** | **123.91** | **224** | PKP | **PKiKP** | **19 38 27.6** | **+0.8** |
| | comp=Z,2.8nm,0.8s,baz=98,slow=0.7,SNR=7.2 | | | | | | |
| **CPUP** | **Villa Florida** | **125.08** | **133** | PKP | **PKiKP** | **19 38 29.9** | **+0.9** |
| | comp=Z,2.7nm,0.7s,baz=244,slow=6.4,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **126.12** | **326** | PKP | **PKPdf** | **19 38 29.9** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=62,slow=2.3,SNR=4.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **126.12** | **326** | *c i* PKIKP | **PKiKP** | **19 38 30.7** | **+0.4** |
| **NOA** | **NORSAR Array B** | **126.43** | **344** | PKP | **PKiKP** | **19 38 30.8** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=337,slow=1.8,SNR=3.5 | | | | | | |
| **CLL** | **Collm** | **133.60** | **335** | *e*PKPdf | **PKiKP** | **19 38 46.0** | **+0.7** |
| **KEST** | **Kesra** | **146.56** | **321** | PKPbc | **PKPab** | **19 39 10.2** | **-0.4** |
| | comp=Z,5.3nm,0.9s,baz=327,slow=9.3,SNR=5.1 | | | | | | |
| **ESDC** | **Sonseca Array** | **149.74** | **342** | PKPbc | **PKiKP** | **19 39 19.2** | **+0.4** |
| | comp=Z,1.5nm,0.8s,baz=349,slow=1.5,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.73** | **278** | PKP | **PKPdf** | **19 39 31.2** | **+0.6** |
| | comp=Z,1.4nm,1.0s,baz=349,slow=2.3,SNR=5.0 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 40 19.4** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=68,slow=2.5,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.73** | **278** | | **PKPdf** | **19 39 29.2** | **-1.4** |

*IDC* ***12*** *19:21:08.3±2.7, 36.86N×141.80E, h0km, mb3.3/3, mb1 3.5/4, mb1mx3.1/63, mbtmp3.3/4, ML2.5/1, MS2.5/1, Ms1 2.5/1, ms1mx2.1/49, Error ellipse: s-maj=67.6km s-min=33.8km az=58.0*

*JMA* ***12*** *19:21:09.7±0.3, 36.39N×141.80E, h48km, M2.9*

**ISC 12 19:21:10.7±1.6, 36.35N±0.05×141.5E±0.1, h26km, n18, σ1°81/15, mb3.6/3, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.82** | **289** | P | **Pb** | **19 21 27.7** | **+1.4** |
| **CHOJ** | **Chosi** | **0.84** | **220** | P | **Pn** | **19 21 28.2** | **+1.3** |
| CHOJ | | | | *e*S | **Sn** | **19 21 41.9** | **+3.5** |
| **ONAJ** | **Iwakimizuishiy** | **0.95** | **322** | P | **Pb** | **19 21 28.4** | **-0.3** |
| **JFK** | **Kawauchi** | **1.14** | **333** | P | **Pb** | **19 21 31.1** | **-0.8** |
| **JFT** | **Otama** | **1.51** | **321** | P | **Pb** | **19 21 37.5** | **-0.6** |
| **JMM** | **Marumori** | **1.62** | **339** | P | **Pn** | **19 21 37.2** | **-0.5** |
| **JAG** | **Ashikaga** | **1.68** | **273** | P | **Pb** | **19 21 40.4** | **-0.5** |
| **BSO3** | **Boso 3** | **1.75** | **209** | P | **Pb** | **19 21 39.7** | **-2.4** |
| **JFY** | **Yanaizu** | **1.80** | **306** | P | **Pb** | **19 21 42.6** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **2.68** | **275** | Pn | **Pb** | **19 21 55.7** | **-2.3** |
| | 0.7nm,0.3s,baz=96,slow=8.7,SNR=38 | | | | | | |
| **MAT** | **Matsushiro** | **2.69** | **275** | P | **Pb** | **19 21 55.9** | **-2.2** |
| MAT | | | | *e*S | **Sb** | **19 22 28.3** | **-2.3** |
| **KSRS** | **Korea Array** | **10.95** | **280** | LR | LR | 19 27 32.4 | |
| | comp=Z,26nm,19.4s,baz=0.0,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.72** | **120** | T | T | 19 55 49.3 | |
| | baz=314 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.73** | **120** | T | T | 19 55 38.8 | |
| | baz=314 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.74** | **120** | T | T | 19 55 34.0 | |
| | baz=314 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.56** | **303** | P | **P** | **19 29 21.2** | **+0.8** |
| | 0.2nm,0.5s,baz=90,slow=9.8,SNR=2.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.50** | **309** | P | **P** | **19 29 35.6** | **0.0** |
| | 0.4nm,0.6s,baz=82,slow=7.6,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.40** | **188** | P | P | 19 30 55.1 | +5.2 |
| | 0.4nm,0.7s,baz=0.8,slow=7.4,SNR=5.4 | | | | | | |

*NEIC* ***12*** *19:23:04.7±0.9, 19.39N±0.04×155.03W±0.03, h20km±2km, Error ellipse: s-maj=6.5km s-min=4.1km az=205.0*

*HVO* ***12*** *19:23:05.8±1.4, 19.35N±0.03×155.05W±0.03, h8km±2km, ML4.1/27, ML4.1/44(NEIC), Error ellipse: s-maj=4.9km s-min=3.2km az=145.0*

*IDC* ***12*** *19:23:06.0±17.0, 19.66N×155.46W, h0km, mb3.6/4, mb1 4.1/4, mb1mx3.5/60, mbtmp3.6/4, Error ellipse: s-maj=356.3km s-min=53.7km az=37.0*

**ISC 12 19:23:06.5±0.8, 19.43N±0.05×155.10W±0.04, h10km±5km, n50, σ1°36/53, mb3.9/7, Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NPOC** | **North of Pu'u** | **0.04** | **200** | | **Pg** | **19 23 08.2** | **-0.3** |
| NPOC | | | | Sg | **Sg** | **19 23 09.9** | **-0.1** |
| **JCUZ** | **Jacuzzi** | **0.05** | **187** | | **Pg** | **19 23 08.0** | **-0.6** |
| JCUZ | | | | Sg | **Sg** | **19 23 09.5** | **-0.6** |
| **STCH** | **Steam Cracks** | **0.05** | **212** | | **Pg** | **19 23 08.3** | **-0.4** |
| **BYL** | **Byron's Ledge** | **0.16** | **264** | | **Pg** | **19 23 10.2** | **+0.2** |
| BYL | | | | Sg | **Sg** | **19 23 13.6** | **+1.1** |
| BYL | | | | IAML | | 19 23 14.1 | |
| | comp=E,27μm,0.8s | | | | | | |
| BYL | | | | IAML | | 19 23 14.2 | |
| | comp=N,29μm,0.5s | | | | | | |
| **HATHI** | **Halema'uma'u T** | **0.16** | **268** | | **Pg** | **19 23 10.3** | **+0.2** |
| HATHI | | | | Sg | **Sg** | **19 23 13.9** | **+1.4** |
| HATHI | | | | IAML | | 19 23 15.6 | |
| | comp=E,30μm,0.5s | | | | | | |
| HATHI | | | | IAML | | 19 23 16.7 | |
| | comp=N,41μm,0.5s | | | | | | |
| **SBLHI** | **Steaming Bluff** | **0.16** | **269** | | **Pg** | **19 23 10.4** | **+0.2** |
| SBLHI | | | | Sg | **Sg** | **19 23 14.3** | **+1.6** |
| **KKO** | **Keanakako`i** | **0.16** | **259** | | **Pg** | **19 23 10.3** | **+0.1** |
| KKO | | | | IAML | | 19 23 15.2 | |
| | comp=N,27μm,0.8s | | | | | | |
| KKO | | | | IAML | | 19 23 16.6 | |
| | comp=E,25μm,0.7s | | | | | | |
| **RIM** | **Rim** | **0.17** | **259** | | **Pg** | **19 23 10.4** | **+0.1** |
| RIM | | | | Sg | **Sg** | **19 23 14.1** | **+1.2** |
| RIM | | | | IAML | | 19 23 15.4 | |
| | comp=E,43μm,0.5s | | | | | | |
| RIM | | | | IAML | | 19 23 17.1 | |
| | comp=N,36μm,0.5s | | | | | | |
| **UWB** | **Uwekahuna B** | **0.17** | **268** | | **Pg** | **19 23 10.4** | **+0.1** |
| UWB | | | | IAML | | 19 23 17.6 | |
| | comp=N,25μm,0.9s | | | | | | |
| **RSD** | **Rainshed** | **0.17** | **281** | | **Pg** | **19 23 10.9** | **+0.5** |
| RSD | | | | Sg | **Sg** | **19 23 14.7** | **+1.6** |
| **NPH** | **North Pit** | **0.18** | **264** | | **Pg** | **19 23 10.2** | **-0.1** |
| **OBL** | **Observatory Le** | **0.18** | **266** | | **Pg** | **19 23 10.7** | **+0.3** |
| **UWE** | **Uwekahuna** | **0.19** | **267** | | **Pg** | **19 23 10.6** | **0.0** |
| UWE | | | | Sg | **Sg** | **19 23 15.1** | **+1.7** |
| UWE | | | | IAML | | 19 23 16.5 | |
| | comp=N,46μm,0.5s | | | | | | |
| **SDHHI** | **Sand Hill** | **0.19** | **258** | | **Pg** | **19 23 10.7** | **0.0** |
| SDHHI | | | | Sg | **Sg** | **19 23 14.1** | **+0.6** |
| SDHHI | | | | IAML | | 19 23 18.8 | |
| | comp=N,39μm,0.5s | | | | | | |
| SDHHI | | | | IAML | | 19 23 19.3 | |
| | comp=E,38μm,0.4s | | | | | | |
| **WRMHI** | **West Rim** | **0.19** | **263** | | **Pg** | **19 23 10.8** | **+0.1** |
| WRMHI | | | | IAML | | 19 23 18.7 | |
| | comp=E,52μm,0.8s | | | | | | |
| **HLP** | **Hilina Pali** | **0.24** | **237** | | **Pg** | **19 23 11.2** | **-0.3** |
| HLP | | | | Sg | **Sg** | **19 23 15.6** | **+0.8** |
| HLP | | | | IAML | | 19 23 16.9 | |
| | comp=N,25μm,0.5s | | | | | | |
| HLP | | | | IAML | | 19 23 19.0 | |
| | comp=E,33μm,0.6s | | | | | | |
| **MLH** | **Mauna Loa** | **0.28** | **283** | | **Pg** | **19 23 12.8** | **+0.5** |
| MLH | | | | Sg | **Sb** | **19 23 18.3** | **-0.3** |
| **AIN** | **Ainahou** | **0.35** | **261** | | **Pg** | **19 23 13.4** | **0.0** |
| AIN | | | | Sg | **Sb** | **19 23 20.6** | **+0.1** |
| **HMH** | **Humu'ula Sheep** | **0.40** | **295** | | **Pg** | **19 23 15.0** | **+0.5** |
| HMH | | | | Sg | **Sb** | **19 23 22.7** | **+0.5** |
| **MLOA** | **Mauna Loa Obse** | **0.47** | **283** | | **Pg** | **19 23 15.8** | **+0.1** |
| MLOA | | | | Sg | **Sg** | **19 23 23.8** | **+1.8** |
| MLOA | | | | IAML | | 19 23 24.5 | |
| | comp=N,21μm,0.5s | | | | | | |
| **MWH** | **Moku'aweowe** | **0.48** | **277** | | **Pg** | **19 23 15.9** | **0.0** |
| **POHA** | **Pohakuloa** | **0.53** | **308** | IAML | | 19 23 33.9 | |
| | comp=N,10μm,0.8s | | | | | | |
| **POHA** | **Pohakuloa** | **0.53** | **308** | | **Pg** | **19 23 16.9** | **+0.1** |
| POHA | | | | Sg | **Sg** | **19 23 25.2** | **+1.5** |
| **HUH** | **Hualalai** | **0.74** | **290** | | **Pg** | **19 23 20.1** | **-0.8** |
| **KHLU** | **Kahalu`u** | **0.77** | **282** | | **Pg** | **19 23 19.7** | **-1.6** |
| KHLU | | | | Sg | **Sg** | **19 23 30.0** | **-1.4** |
| **HPAH** | **Hawaii Prepara** | **0.82** | **317** | | **Pg** | **19 23 20.8** | **-1.6** |
| **HLK** | **Haleakala** | **1.71** | **321** | | **Pn** | **19 23 33.0** | **-3.5** |
| **KHLH** | **Kahului Airpor** | **1.92** | **320** | | **Pn** | **19 23 36.5** | **-2.8** |
| **HON** | **Honolulu** | **3.31** | **305** | Pn | **Pn** | **19 23 54.5** | **-3.8** |
| **KIP** | **Kipapa** | **3.38** | **306** | IAML | | 19 24 45.2 | |
| | comp=N,292nm,1.6s | | | | | | |
| KIP | | | | IAML | | 19 24 53.0 | |
| | comp=N,231nm,0.5s | | | | | | |
| **KIP** | **Kipapa** | **3.38** | **306** | | **Pn** | **19 23 56.1** | **-3.1** |
| **OPA** | **Opana** | **3.54** | **310** | Pn | Pn | 19 23 56.5 | -4.9 |
| **H11N3** | **WAKE ISLAND Hy** | **35.75** | **277** | T | T | 20 07 11.6 | |
| | baz=84,slow=75,SNR=40 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.76** | **277** | T | T | 20 07 12.1 | |
| | baz=84,slow=75,SNR=62 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.77** | **277** | T | T | 20 07 12.7 | |
| | baz=84,slow=75,SNR=95 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.09** | **275** | T | T | 20 07 36.4 | |
| | baz=83,slow=75,SNR=33 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.09** | **275** | T | T | 20 07 36.6 | |
| | baz=83,slow=75,SNR=34 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.11** | **275** | T | T | 20 07 37.6 | |
| | baz=83,slow=75,SNR=30 | | | | | | |
| **H02S1** | **DAWSON INLET T** | **37.98** | **22** | T | T | 20 10 35.4 | |
| | SNR=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **44.72** | **48** | P | **P** | **19 31 22.9** | **+2.7** |
| | comp=N,0.6nm,0.9s,baz=277,slow=7.7,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **45.65** | **5** | P | **P** | **19 31 26.4** | **-0.5** |
| | comp=N,0.7nm,0.7s,baz=190,slow=7.9,SNR=7.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **47.55** | **68** | P | **P** | **19 31 45.0** | **+2.5** |
| | comp=N,0.7nm,0.7s,baz=248,slow=8.2,SNR=8.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.24** | **23** | P | **P** | **19 32 10.1** | **+0.2** |
| | comp=N,0.9nm,0.7s,baz=233,slow=7.5,SNR=11 | | | | | | |
| **XLT** | **XiLinHaoTe** | **75.97** | **312** | *e*P | **P** | **19 34 53.0** | **-0.9** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,86nm,4.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **80.00** | **310** | *e*P | **P** | **19 35 15.7** | **-0.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,7.9s | | | | | | |
| **H03N2** | **Juan Fernandez** | **89.58** | **126** | T | T | 21 14 59.0 | |
| | baz=298,slow=76,SNR=317 | | | | | | |
| **H03N3** | **Juan Fernandez** | **89.59** | **126** | T | T | 21 14 59.9 | |
| | baz=298,slow=76,SNR=374 | | | | | | |
| **H03N1** | **Juan Fernandez** | **89.59** | **126** | T | T | 21 15 01.8 | |
| | baz=298,slow=76,SNR=297 | | | | | | |
| **PZH** | **PanZhiHua** | **92.62** | **299** | P | **P** | **19 36 18.3** | **-0.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **WMQ** | **Urumqi** | **94.83** | **320** | *e*P | **P** | **19 36 29.9** | **+1.1** |

*IDC* ***12*** *19:32:21.9±4.8, 9.27S×124.50E, h76km±60km, mb3.2/3, mb1 3.7/6, mb1mx3.2/29, mbtmp3.7/6, ML3.9/3, Error ellipse: s-maj=65.8km s-min=24.3km az=31.0*

*NEIC* ***12*** *19:32:21.9±2.4, 9.40S±0.09×124.28E±0.09, h96km±8km, mb4.1/8, Error ellipse: s-maj=16.9km s-min=8.8km az=222.0*

*DJA* ***12*** *19:32:23.2±0.4, 9°S±3°×12°4E±°, h58km±8km, M4.1/8, mb4.8/2, mB5.0/2, MLv3.8/8, Mw(mB)4.3/2*

**ISC 12 19:32:22.8±0.6, 9.43S±0.06×124.27E±0.06, h100km, n41, σ1°93/45, mb3.9/5, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.32** | **181** | | **Pn** | **19 32 36.6** | **-1.1** |
| **SOEI** | **Soe** | **0.32** | **181** | P | **Pn** | **19 32 36.9** | **-0.8** |
| **SOEI** | **Soe** | **0.32** | **181** | P | **Pn** | **19 32 37.2** | **-0.5** |
| **BATI** | **Baumata** | **0.97** | **218** | P | **Pn** | **19 32 44.3** | **+1.2** |
| | 20nm,0.3s,baz=164,slow=2.9,SNR=42 | | | | | | |
| BATI | | | | S | **Sn** | **19 33 00.1** | **+1.9** |
| | 81nm,0.3s,baz=355,slow=23,SNR=9.4 | | | | | | |
| **BATI** | **Baumata** | **0.97** | **218** | P | **Pn** | **19 32 44.2** | **+1.2** |
| **MMRI** | **Maumere** | **2.16** | **291** | | **Pn** | **19 32 55.8** | **-1.6** |
| MMRI | | | | | **Sn** | **19 33 22.0** | **-2.0** |
| **MMRI** | **Maumere** | **2.16** | **291** | P | **Pn** | **19 32 56.5** | **-0.9** |
| **BASI** | **Baing, Sumba** | **3.72** | **258** | P | **Pn** | **19 33 18.8** | **+0.6** |
| **WBSI** | **Waikabubak, Su** | **4.82** | **267** | P | **Pn** | **19 33 32.7** | **-0.4** |
| **DRS** | **Darwin Rock St** | **7.16** | **115** | P | **Pn** | **19 34 05.7** | **+0.8** |
| **MTN** | **Manton Dam** | **7.54** | **117** | | **Pn** | **19 34 10.9** | **+0.8** |
| **MTN** | **Manton Dam** | **7.54** | **117** | P | **Pn** | **19 34 11.0** | **+0.9** |
| **KNRA** | **Kununurra** | **7.60** | **145** | | **Pn** | **19 34 11.6** | **+0.8** |
| **KNRA** | **Kununurra** | **7.60** | **145** | P | **Pn** | **19 34 11.8** | **+0.9** |
| **KDU** | **Kakadu** | **8.68** | **113** | P | **Pn** | **19 34 25.8** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **8.72** | **171** | P | **Pn** | **19 34 27.1** | **+1.1** |
| | 0.9nm,0.3s,baz=356,slow=14,SNR=62 | | | | | | |
| FITZ | | | | S | **Sn** | **19 35 58.6** | **-4.0** |
| | 5.0nm,0.3s,baz=106,slow=8.9,SNR=22 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **10.04** | **275** | Pn | **Pn** | **19 34 42.2** | **-1.9** |
| **WB0** | **Warramunga Arr** | **14.19** | **138** | Pn | **Pn** | **19 35 38.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **14.28** | **138** | P | **Pn** | **19 35 39.8** | **-0.6** |
| | 0.9nm,0.3s,baz=321,slow=13,SNR=52 | | | | | | |
| WRA | | | | S | Sn | 19 38 07.9 | -10 |
| | 1.7nm,0.3s,ba

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SOEI | Soe | 4.89 | 89 | P | | Pn | 19 56 37.4 | +3.6 |
| SOEI | Soe | 4.89 | 89 | P | | Pn | 19 56 37.2 | +3.4 |
| JAGI | Jajag, Banyuwa | 5.29 | 285 | | | Pn | 19 56 41.0 | +1.8 |
| JAGI | | | | | Sn | Sn | 19 57 39.9 | +0.8 |
| JAGI | Jajag, Banyuwa<br>0.4nm55nm,0.5s | 5.29 | 285 | P | | Pn | 19 56 40.9 | +1.6 |
| JAGI | Jajag, Banyuwa | 5.29 | 285 | P | | Pn | 19 56 41.1 | +1.8 |
| BNSI | Bone<br>0.2nm725nm50nm,0.6s | 5.53 | 8 | P | | Pn | 19 56 45.9 | +3.3 |
| SPSI | Sidrap Palu<br>0.1nm42nm,0.6s | 5.92 | 4 | P | | Pn | 19 56 50.2 | +2.2 |
| GMJI | Gumukmas<br>0.3nm38nm,1.0s | 6.02 | 285 | P | | Pn | 19 56 50.2 | +0.9 |
| PWJI | Pagerwojo | 7.65 | 284 | P | | Pn | 19 57 15.5 | +3.8 |
| UGM | Wanagama | 8.91 | 282 | Pn | | Pn | 19 57 31.6 | +2.6 |
| UGM | | | | | Sn | Sn | 19 59 07.1 | -1.1 |
| UGM | Wanagama | 8.91 | 282 | P | | Pn | 19 57 32.9 | +3.9 |
| FITZ | Fitzroy Crossi<br>0.6nm,0.3s,baz=334,slow=11,SNR=40 | 10.19 | 144 | P | | Pn | 19 57 48.4 | +1.9 |
| FITZ | | | | S | | Sn | 19 59 36.1 | -3.5 |
| | 2.5nm,0.3s,baz=195,slow=23,SNR=18 | | | | | | | |
| FITZ | | | | LR | | LR | 20 01 46.1 | |
| | comp=Z,57nm,21.6s,baz=10,slow=37 | | | | | | | |
| KNRA | Kununurra | 10.85 | 123 | Pn | | Pn | 19 57 57.4 | +1.8 |
| KNRA | Kununurra | 10.85 | 123 | P | | Pn | 19 57 57.8 | +2.2 |
| MBWA | Marble Bar | 11.19 | 178 | Pn | | Pn | 19 58 01.2 | +0.9 |
| MBWA | Marble Bar | 11.19 | 178 | P | | Pn | 19 58 01.6 | +1.4 |
| PSA00 | Pilbara Seismi | 11.61 | 178 | | | Pn | 19 58 06.2 | +0.3 |
| PSA00 | | | | | | Sn | 20 00 07.5 | -6.9 |
| PSA00 | Pilbara Seismi | 11.61 | 178 | Pn | | Pn | 19 58 07.1 | +1.2 |
| PSA00 | | | | | | Sn | 20 00 08.0 | -6.4 |
| PSA00 | Pilbara Seismi | 11.61 | 178 | P | | Pn | 19 58 07.5 | +1.6 |
| DRS | Darwin Rock St | 11.64 | 104 | P | | Pn | 19 58 08.1 | +1.7 |
| MTN | Manton Dam | 11.95 | 105 | | | Pn | 19 58 11.1 | +0.5 |
| MTN | Manton Dam | 11.95 | 105 | P | | Pn | 19 58 11.5 | +0.9 |
| KDU | Kakadu | 13.20 | 103 | P | | Pn | 19 58 29.0 | +1.3 |
| GIRL | Giralia | 13.56 | 200 | Pn | | Pn | 19 58 34.7 | +2.1 |
| GIRL | Giralia | 13.56 | 200 | P | | Pn | 19 58 35.8 | +3.2 |
| FAKI | Fak Fak | 14.61 | 62 | Pn | | Pn | 19 58 47.5 | +0.6 |
| FAKI | Fak Fak | 14.61 | 62 | P | | Pn | 19 58 48.4 | +1.5 |
| SIJI | Sorong<br>0.7nm,0.3s,baz=212,slow=13,SNR=4.5 | 14.90 | 54 | P | | Pn | 19 58 51.4 | +0.5 |
| SIJI | | | | LR | | LR | 20 04 27.0 | |
| | comp=Z,52nm,21.3s,baz=117,slow=36 | | | | | | | |
| MYLDM | Lahad Datu | 15.01 | 357 | Pn | | Pn | 19 58 53.4 | +1.0 |
| KKM | Kota Kinabalu | 16.15 | 349 | | | Pn | 19 59 08.5 | +1.3 |
| KKM | | | | IAmb | | IAmb | 19 59 48.0 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| MEEK | Meekatharra | 16.65 | 182 | P | | Pn | 19 59 15.7 | +2.3 |
| WRKA | Warakurna | 17.30 | 152 | P | | P | 19 59 24.2 | +1.5 |
| WB0 | Warramunga Arr | 17.55 | 126 | P | | Pn | 19 59 24.4 | -0.3 |
| WB0 | | | | IAmb | | IAmb | 19 59 35.2 | |
| | comp=Z,26nm,1.8s | | | | | | | |
| WRA | Warramunga Arr | 17.60 | 126 | P | | P | 19 59 27.4 | +1.3 |
| | comp=Z,0.2nm,0.3s,baz=303,slow=13,SNR=15 | | | | | | | |
| WRA | Warramunga Arr | 17.60 | 126 | P | | Pn | 19 59 26.2 | +0.9 |
| WRAB | Tennant Creek | 17.60 | 126 | P | | Pn | 19 59 23.8 | -1.5 |
| WB2 | Warramunga Arr | 17.61 | 126 | P | | Pn | 19 59 25.7 | +0.2 |
| WR0 | Warramunga Arr | 17.77 | 126 | P | | Pn | 19 59 27.0 | -0.4 |
| WR0 | | | | IAmb | | IAmb | 19 59 37.4 | |
| | comp=Z,15nm,1.6s | | | | | | | |
| MORW | Morawa | 19.30 | 189 | P | | P | 19 59 45.3 | +0.6 |
| MORW | | | | IAmb | | IAmb | 20 00 37.0 | |
| | comp=Z,58nm,1.9s | | | | | | | |
| MORW | Morawa | 19.30 | 189 | P | | Pn | 19 59 49.2 | +3.2 |
| AS31 | Alice Springs | 19.52 | 136 | P | | P | 19 59 46.1 | -1.2 |
| ASAR | Alice Springs<br>comp=Z,0.2nm,0.3s,baz=316,slow=11,SNR=30 | 19.52 | 136 | P | | Pn | 19 59 50.6 | +2.0 |
| ASAR | | | | S | | S | 20 03 16.2 | -10 |
| | comp=Z,0.1nm,0.3s,baz=306,slow=22,SNR=6.7 | | | | | | | |
| ASAR | Alice Springs | 19.52 | 136 | P | | P | 19 59 46.8 | -0.5 |
| NWAO | Narrogin (SRO) | 22.99 | 184 | P | | P | 20 00 21.4 | -3.0 |
| NWAO | | | | IAmb | | IAmb | 20 00 59.9 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| COEN | Coen | 23.68 | 102 | P | | P | 20 00 30.8 | -0.6 |
| COEN | | | | IAmb | | IAmb | 20 01 21.2 | |
| | comp=Z,66nm,1.7s | | | | | | | |
| STKA | Stephens Creek | 30.06 | 140 | P | | P | 20 01 29.4 | +0.8 |
| QIZ | Qiongzhong | 30.23 | 342 | P | | P | 20 01 30.0 | -0.2 |
| PBA | Port Blair | 34.01 | 308 | P | | P | 20 02 02.1 | -1.4 |
| CMAR | Chiang Mai Arr | 34.62 | 324 | P | | P | 20 02 09.3 | +0.5 |
| | comp=Z,0.4nm,0.7s,baz=154,slow=6.7,SNR=4.2 | | | | | | | |
| CMAR | Chiang Mai Arr | 34.62 | 324 | P | | P | 20 02 08.1 | -0.6 |
| TOO | Toolangi | 36.26 | 144 | P | | P | 20 02 23.1 | +0.5 |
| TOO | | | | IAmb | | IAmb | 20 03 38.5 | |
| | comp=Z,21nm,1.6s | | | | | | | |
| H08S2 | Diego Garcia H | 46.30 | 269 | T | | T | 20 53 16.2 | |
| | baz=96,slow=75,SNR=24 | | | | | | | |
| H08S3 | Diego Garcia H | 46.31 | 269 | T | | T | 20 53 12.0 | |
| | baz=96,slow=75,SNR=23 | | | | | | | |
| H08S1 | Diego Garcia H | 46.32 | 269 | T | | T | 20 53 04.8 | |
| | baz=96,slow=75,SNR=15 | | | | | | | |
| SONM | Songino Array | 58.62 | 350 | P | | P | 20 05 17.0 | +0.6 |
| | comp=Z,0.6nm,0.7s,baz=166,slow=7.1,SNR=5.7 | | | | | | | |
| SONM | Songino Array | 58.62 | 350 | P | | P | 20 05 15.8 | -0.5 |
| SONM | | | | IAmb | | IAmb | 20 05 26.5 | |
| | comp=Z,1.7nm,0.9s | | | | | | | |
| MK31 | Makanchi Array | 65.40 | 333 | P | | P | 20 06 00.8 | -1.0 |
| MK31 | | | | IAmb | | IAmb | 20 07 48.3 | |
| | comp=Z,4.0nm,1.6s | | | | | | | |
| MKAR | Makanchi Array | 65.40 | 333 | P | | P | 20 06 01.9 | +0.1 |
| | comp=Z,0.4nm,0.6s,baz=148,slow=6.7,SNR=7.4 | | | | | | | |
| MKAR | Makanchi Array | 65.40 | 333 | P | | P | 20 06 00.2 | -1.5 |
| GAR | Garm | 66.64 | 320 | P | | P | 20 06 09.4 | -0.6 |
| CHGR | Chuyangaron | 67.18 | 319 | P | | P | 20 06 11.8 | -1.6 |
| CHGR | | | | IAmb | | IAmb | 20 07 34.7 | |
| | comp=Z,19nm,1.8s | | | | | | | |
| SOCY | Socotra | 68.51 | 287 | P | | P | 20 06 19.8 | -2.5 |
| ZAA0 | Zalesovo Array | 70.00 | 339 | P | | P | 20 06 29.2 | -1.3 |
| ZAA0 | | | | IAmb | | IAmb | 20 06 41.3 | |
| | comp=Z,2.3nm,1.1s | | | | | | | |
| ZALV | Zalesovo Beam<br>comp=Z,0.5nm,0.5s,baz=64,slow=3.4,SNR=2.4 | 70.00 | 339 | P | | P | 20 06 31.0 | +0.5 |
| ZALV | Zalesovo Beam | 70.00 | 339 | P | | P | 20 06 28.7 | -1.8 |
| ABKAR | Akbulak array | 78.48 | 325 | P | | P | 20 07 18.1 | -2.0 |

*NEIC* ***12*** *20:03:28.8±2.0, 53.°32N±0.°07×164.°15W±0.°05, h10km±1km, mb4.0/11, ML3.7/10, ML3.7/44(AEIC), Error ellipse: s-maj=11.1km s-min=4.8km az=181.0*

*IDC* ***12*** *20:03:29.2±1.1, 53.°59N×164.°41W, h0km, mb4.0/18, mb1 4.1/20, mb1mx3.8/62, mbtmp3.9/20, ML3.2/2, MS3.3/5, Ms1 3.3/5, ms1mx2.8/104, Error ellipse: s-maj=28.0km s-min=14.1km az=175.0*

*AEIC* ***12*** *20:03:32.6±2.8, 53.°31N±0.°08×164.°20W±0.°06, h25km±5km, Error ellipse: s-maj=11.3km s-min=4.9km az=167.0*

**ISC 12 20:03:29.1±2.1, 53.°35N±0.°08×164.°18W±0.°04, h8km±12km, n123, σ1°28/117, mb4.1/18, MS3.3/4, Unimak Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WESE | West Dahl East | 1.15 | 348 | | Pn | 20 03 51.5 | -0.1 |
| AKSA | Akutan Strait | 1.20 | 312 | | Pb | 20 03 52.1 | +0.1 |
| AKSA | | | | | Sn | 20 04 08.3 | -0.2 |
| AKUT | Akutan | 1.23 | 310 | | Pb | 20 03 52.8 | +0.2 |
| AKUT | | | | Sn | Sn | 20 04 09.1 | -0.3 |
| AKUT | | | | IAML | | 20 04 11.1 | |
| | comp=E,1μm,0.4s | | | | | | |
| WECS | Westdahl Cape | 1.23 | 343 | | Pg | 20 03 52.9 | +0.2 |
| AKBBA | Akutan Broad B | 1.28 | 306 | | Pn | 20 03 53.1 | -0.2 |
| ZRO | Akutan Zero | 1.30 | 305 | | Pb | 20 03 54.0 | +0.2 |
| BRPK | Brown Peak | 1.32 | 11 | | Pg | 20 03 54.7 | +0.3 |
| SSLS | Shishaldin Sou | 1.36 | 4 | | Pb | 20 03 55.0 | +0.1 |
| ISLZ | Isanotski Laza | 1.40 | 11 | | Pb | 20 03 55.4 | -0.2 |
| SSLN | Shishaldin Nor | 1.47 | 4 | | Pb | 20 03 56.3 | -0.3 |
| UNV | Unalaska Valle | 1.47 | 290 | Pn | Pn | 20 03 56.0 | +0.1 |
| UNV | Unalaska Valle | 1.47 | 290 | | Sb | 20 04 15.6 | 0.0 |
| ISNN | Isanotski Nort | 1.50 | 9 | | Pg | 20 03 57.9 | +0.1 |
| FALS | False Pass | 1.57 | 16 | | Pb | 20 03 58.2 | -0.2 |
| MREP | Makushin Rep't | 1.60 | 288 | | Pn | 20 03 58.1 | +0.4 |
| MTBL | Makushin Table | 1.61 | 294 | | Pn | 20 03 58.6 | +0.7 |
| MSW | Makushin Switc | 1.65 | 291 | | Pn | 20 03 59.0 | +0.6 |
| MSW | | | | | Sb | 20 04 20.8 | 0.0 |
| MGOD | Makushin Gods | 1.67 | 286 | | Pn | 20 03 59.4 | +0.8 |
| BALA | Baldy Mountain | 2.02 | 23 | | Pb | 20 04 06.0 | +0.1 |
| OKFG | Magazine Ridge | 2.24 | 273 | | Pn | 20 04 06.8 | +0.3 |
| OKSO | Okmok South | 2.39 | 272 | | Pn | 20 04 09.2 | +0.7 |
| OKSO | | | | | Sn | 20 04 36.5 | -1.5 |
| PS4A | Pavlof South-4 | 2.41 | 33 | | Pn | 20 04 10.6 | +1.8 |
| OKSP | Okmok Steeple | 2.47 | 269 | | Pn | 20 04 09.9 | +0.2 |
| BLHA | Black Hill | 2.66 | 27 | | Pn | 20 04 13.7 | +1.5 |
| NIKH | Nikolski High | 2.84 | 264 | | Pn | 20 04 14.9 | +0.2 |
| NIKH | Nikolski High | 2.84 | 264 | | Sn | 20 04 47.8 | -1.3 |
| SDPT | Sand Point | 2.95 | 46 | Pn | Pn | 20 04 17.3 | +1.2 |
| SDPT | | | | Sn | Sn | 20 04 51.0 | -0.7 |
| SDPT | | | | IAML | | 20 04 53.4 | |
| | comp=N,291nm,0.5s | | | | | | |
| SDPT | | | | IAML | | 20 04 53.5 | |
| | comp=E,260nm,0.4s | | | | | | |
| CNBA | Chernabura Isl | 3.08 | 60 | | Pn | 20 04 18.5 | +0.6 |
| CNBA | | | | Sn | Sn | 20 04 52.3 | -2.5 |
| CNBA | | | | IAML | | 20 04 56.2 | |
| | comp=E,201nm,0.5s | | | | | | |
| VNHG | Veniaminof 1 | 4.08 | 43 | | Pn | 20 04 33.9 | +2.1 |
| CHGN | Chignik | 4.45 | 46 | | Pn | 20 04 36.1 | -0.7 |
| CHGN | | | | IAML | | 20 05 31.1 | |
| | comp=N,75nm,0.7s | | | | | | |
| CHGN | | | | IAML | | 20 05 32.1 | |
| | comp=E,72nm,0.5s | | | | | | |
| SPIA | Saint Paul Isl | 5.17 | 320 | Pn | Pn | 20 04 46.4 | -0.2 |
| CHIR | Chirikof Islan | 5.55 | 60 | Pn | Pn | 20 04 54.1 | +2.2 |
| KOFP | Korovin Flat P | 6.11 | 264 | | Pn | 20 04 60.0 | +0.3 |
| ATKA | Atka Island | 6.19 | 263 | | Pn | 20 05 00.7 | +0.1 |
| SII | Sitkinak Islan | 6.59 | 57 | Pn | Pn | 20 05 06.0 | -0.2 |
| OHAK | Old Harbor | 7.32 | 54 | Pn | Pn | 20 05 15.4 | -0.8 |
| GSCK | Great Sitkin C | 7.41 | 264 | | Pn | 20 05 18.6 | +1.2 |
| P18K | Big Mountain, | 7.82 | 36 | Pn | Pn | 20 05 21.9 | -1.2 |
| KDAK | Kodiak Island | 7.92 | 51 | Pn | Pn | 20 05 24.2 | -0.3 |
| | comp=E,1.1nm,0.3s,baz=182,slow=6.4,SNR=13 | | | | | | |
| KDAK | Kodiak Island | 7.92 | 51 | Pn | Pn | 20 05 23.9 | -0.6 |
| KIWB | Kanaga Island | 8.04 | 264 | Pn | Pn | 20 05 24.2 | -1.9 |
| Q19K | Cape Douglas, | 8.11 | 42 | Pn | Pn | 20 05 25.1 | -1.9 |
| SVW2 | Sparrevohn | 9.05 | 27 | Pn | Pn | 20 05 40.4 | +0.6 |
| N19K | Bonanza Creek | 9.14 | 31 | Pn | Pn | 20 05 39.2 | -2.0 |
| CNPM | China Poot | 9.46 | 44 | Pn | Pn | 20 05 45.9 | +0.5 |
| BRLK | Bradley Lake | 9.74 | 43 | Pn | Pn | 20 05 48.3 | -1.0 |
| M19K | Big River Lodg | 10.04 | 27 | Pn | Pn | 20 05 51.7 | -1.7 |
| TTA | Talatina | 10.52 | 21 | Pn | Pn | 20 06 01.0 | +1.0 |
| K20K | Telida | 11.33 | 24 | | Pn | 20 06 12.3 | +1.2 |
| PWL | Port Wells | 11.41 | 42 | Pn | Pn | 20 06 11.1 | -1.0 |
| PPLA | Purkeypile | 11.45 | 29 | Pn | Pn | 20 06 12.8 | -0.1 |
| KNK | Knik Glacier | 11.68 | 40 | Pn | Pn | 20 06 14.3 | -1.6 |
| CAST | Castle Rocks | 11.89 | 27 | Pn | Pn | 20 06 17.6 | -1.2 |
| SML | Sawmill | 11.97 | 39 | Pn | Pn | 20 06 17.6 | -2.2 |
| J20K | Nowinta River | 12.02 | 21 | Pn | Pn | 20 06 19.4 | -1.1 |
| FID | Port Fidalgo | 12.12 | 45 | Pn | Pn | 20 06 20.5 | -1.4 |
| SCM | Sheep Creek Mo | 12.37 | 40 | Pn | Pn | 20 06 23.2 | -2.1 |
| KLU | Klutina | 12.73 | 43 | | Pn | 20 06 29.2 | -1.1 |
| M24K | Tolsona, Glenn | 12.97 | 40 | Pn | Pn | 20 06 32.2 | -1.4 |
| BMRM | Bremner River | 13.03 | 46 | Pn | Pn | 20 06 33.0 | -1.4 |
| SHEM | Shemya Is, Ala<br>comp=E,84nm,19.6s,baz=315,slow=36 | 13.08 | 276 | LR | LR | 20 11 11.6 | |
| N25K | Chitina, Valde | 13.34 | 44 | Pn | Pn | 20 06 36.9 | -1.7 |
| I21K | Tanana | 13.36 | 23 | Pn | Pn | 20 06 38.5 | -0.3 |
| H21K | Melozitna Rive | 13.59 | 20 | Pn | Pn | 20 06 43.2 | +1.4 |
| GLB | Gilbert Butte | 13.59 | 45 | Pn | Pn | 20 06 40.8 | -1.2 |
| VRDI | Verde Repeater | 13.65 | 47 | Pn | Pn | 20 06 41.9 | -1.1 |
| IMAR | Indian Mountai | 13.69 | 18 | Pn | Pn | 20 06 42.6 | -0.6 |
| ISLE | Juniper Island | 13.89 | 50 | Pn | Pn | 20 06 45.6 | -0.6 |
| I23K | Minto, Yukon-K | 13.99 | 27 | Pn | Pn | 20 06 47.1 | -0.2 |
| CCB | Clear Creek Bu | 14.06 | 30 | Pn | Pn | 20 06 46.5 | -1.8 |
| MDM | Murphy Dome | 14.16 | 29 | Pn | Pn | 20 06 47.0 | -2.8 |
| BARN | Barnard Glacie | 14.37 | 49 | Pn | Pn | 20 06 49.3 | -3.6 |
| MENT | Mentasta | 14.38 | 40 | Pn | Pn | 20 06 50.2 | -2.5 |
| M26K | Nabesna, AK | 14.39 | 43 | Pn | Pn | 20 06 51.1 | -1.8 |
| TABL | Table Mountain | 14.39 | 51 | Pn | Pn | 20 06 50.2 | -2.9 |
| ILAR | Eielson Array<br>comp=E,0.0nm,0.3s,baz=228,slow=12,SNR=1.7 | 14.42 | 31 | Pn | Pn | 20 06 51.0 | -2.3 |
| H23K | Yukon River | 14.48 | 25 | Pn | Pn | 20 06 52.9 | -1.2 |
| L26K | Log Cabin Wild | 14.57 | 40 | | Pn | 20 06 54.8 | -0.5 |
| DOT | Dot Lake | 14.65 | 37 | | Pn | 20 06 55.8 | -0.6 |
| M27K | Edge Creek, AK | 14.83 | 44 | | Pn | 20 06 57.2 | -1.7 |
| SCRK | Sand Creek | 14.87 | 36 | Pn | Pn | 20 06 57.6 | -1.9 |
| L27K | Beaver Creek, | 15.18 | 41 | P | Pn | 20 07 01.1 | -2.5 |
| L27K | | | | IAmb | IAmb | 20 07 13.6 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| BCAR | Beaver Creek A | 15.20 | 41 | P | Pn | 20 07 02.6 | -1.3 |
| DAWY | Dawson | 16.63 | 40 | | Pn | 20 07 21.8 | -0.4 |
| TOLK | Toolik Lake Re | 16.81 | 19 | P | P | 20 07 26.9 | +0.1 |
| BMAR | Burnt Mountain | 16.99 | 26 | P | Pn | 20 07 26.7 | -0.1 |
| M31M | Drury Creek, Y | 18.03 | 49 | P | Pn | 20 07 38.8 | -0.9 |
| M31M | | | | IAmb | IAmb | 20 07 48.8 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| P33M | Teslin, Yukon | 18.36 | 56 | P | Pn | 20 07 41.3 | -2.6 |
| P33M | | | | IAmb | IAmb | 20 07 48.4 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| INK | Inuvik | 20.81 | 32 | P | P | 20 08 10.5 | +0.1 |
| | comp=Z,5.6nm,0.5s,baz=255,slow=7.2,SNR=31 | | | | | | |
| INK | Inuvik | 20.81 | 32 | P | P | 20 08 09.3 | -1.1 |
| INK | | | | IAmb | IAmb | 20 08 16.1 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| PETK | Petropavlovsk- | 22.65 | 285 | P | P | 20 08 29.2 | -1.2 |
| | comp=Z,1.4nm,0.4s,baz=99,slow=13,SNR=5.2 | | | | | | |
| PETK | | | | LR | LR | 20 17 07.7 | |
| | comp=Z,49nm,19.5s,baz=93,slow=36 | | | | | | |
| C36M | Paulatuk | 24.36 | 34 | P | P | 20 08 46.5 | -0.6 |
| SEY | Seymchan | 24.38 | 310 | P | P | 20 08 47.2 | -0.1 |
| | comp=Z,0.7nm,0.6s,baz=85,slow=15,SNR=4.3 | | | | | | |
| MA2 | Magadan | 25.24 | 302 | P | P | 20 08 53.1 | -2.1 |
| MA2 | | | | IAmb | IAmb | 20 08 55.6 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| YKA | Yellowknife Ar | 27.20 | 51 | P | P | 20 09 14.3 | +1.4 |
| | comp=Z,1.0nm,0.7s,baz=275,slow=9.9,SNR=14 | | | | | | |
| YKA | Yellowknife Ar | 27.20 | 51 | P | P | 20 09 14.1 | +1.2 |
| NVAR | Mina Array Bea<br>comp=Z,1.0nm,0.8s,baz=294,slow=9.3,SNR=7.2 | 34.59 | 97 | P | P | 20 10 21.8 | +3.4 |
| NVAR | Mina Array Bea | 34.59 | 97 | P | P | 20 10 19.1 | +0.6 |
| YAK | Yakutsk | 34.90 | 311 | LR | LR | 20 25 18.9 | |
| | comp=Z,48nm,18.0s,baz=83,slow=38 | | | | | | |
| KLR | Kul'dur | 39.08 | 291 | LR | LR | 20 26 33.1 | |
| | comp=Z,49nm,21.5s,baz=336,slow=36 | | | | | | |
| H11N2 | WAKE ISLAND Hy<br>baz=26,slow=76,SNR=17 | 40.28 | 225 | T | T | 20 54 46.4 | |
| H11N3 | WAKE ISLAND Hy<br>baz=26,slow=76,SNR=14 | 40.29 | 225 | T | T | 20 54 39.8 | |
| H11N1 | WAKE ISLAND Hy<br>baz=26,slow=76,SNR=12 | 40.30 | 225 | T | T | 20 54 34.5 | |
| H11S1 | WAKE ISLAND Hy<br>baz=25,slow=76,SNR=14 | 41.46 | 224 | T | T | 20 56 03.1 | |
| H11S2 | WAKE ISLAND Hy<br>baz=25,slow=76,SNR=20 | 41.47 | 224 | T | T | 20 55 55.3 | |
| H11S3 | WAKE ISLAND Hy<br>baz=25,slow=76,SNR=19 | 41.47 | 224 | T | T | 20 55 53.9 | |
| FRB | Frobisher Bay<br>comp=Z,1.0nm,0.5s,baz=303,slow=9.2,SNR=4.1 | 46.31 | 38 | P | P | 20 11 55.8 | +1.1 |
| KSRS | Korea Array<br>comp=Z,1.8nm,0.8s,baz=56,slow=7.9,SNR=7.4 | 48.38 | 279 | P | P | 20 12 11.7 | +0.5 |
| TXAR | Lajitas Array<br>comp=Z,0.4nm,0.5s,baz=277,slow=4.9,SNR=6.8 | 49.62 | 94 | P | P | 20 12 22.8 | +1.8 |
| TXAR | Lajitas Array | 49.62 | 94 | P | P | 20 12 20.4 | -0.6 |
| SONM | Songino Array<br>comp=Z,1.4nm,0.7s,baz=41,slow=6.6,SNR=12 | 53.45 | 303 | P | P | 20 12 49.4 | -0.1 |
| SONM | Songino Array<br>comp=Z,1.4nm,1.0s | 53.45 | 303 | IAmb | IAmb | 20 12 50.2 | |
| ARCES | ARCESS Array B<br>comp=Z,4.2nm,0.9s,baz=12,slow=7.8,SNR=8.9 | 57.22 | 356 | P | P | 20 13 16.0 | -0.1 |
| ZALV | Zalesovo Beam<br>comp=Z,0.5nm,0.3s,baz=30,slow=6.4,SNR=4.3 | 58.76 | 320 | P | P | 20 13 26.6 | -0.5 |
| ARU | Arti<br>comp=Z,36nm,18.9s,baz=334,slow=39 | 65.11 | 335 | LR | LR | 20 45 10.7 | |
| FINES | FINESS Array B<br>comp=Z,1.4nm,0.6s,baz=23,slow=6.2,SNR=8.6 | 65.26 | 355 | P | P | 20 14 10.1 | -0.6 |
| MKAR | Makanchi Array<br>comp=Z,0.8nm,0.6s,baz=46,slow=6.1,SNR=11 | 65.35 | 316 | P | P | 20 14 10.8 | -0.7 |
| HFS | Hagfors<br>comp=Z,2.0nm,0.7s,baz=49,slow=3.1,SNR=10 | 66.85 | 1 | P | P | 20 14 20.7 | -0.2 |
| AKASG | Malin Array Be<br>comp=Z,1.6nm,0.6s,baz=11,slow=5.7,SNR=9.1 | 75.71 | 351 | P | P | 20 15 13.9 | -0.6 |
| AKASG | Malin Array Be<br>comp=Z,1.8nm,1.2s | 75.71 | 351 | IAmb | IAmb | 20 15 31.6 | |
| GERES | GERESS Array B<br>comp=Z,0.3nm,0.3s,baz=326,slow=3.6,SNR=3.8 | 78.16 | 1 | P | P | 20 15 29.5 | +0.9 |
| CMAR | Chiang Mai Arr<br>comp=Z,0.3nm,0.4s,baz=27,slow=6.3,SNR=6.0 | 79.42 | 287 | P | P | 20 15 35.7 | -0.1 |
| BRTR | Keskin Array B<br>comp=Z,2.0nm,0.8s,baz=46,slow=2.3,SNR=5.3 | 86.02 | 346 | P | P | 20 16 10.6 | +0.6 |

**IDC 12 20:29:37.4±4.3, 4.°28S×152.°25E, h0km, mb2.9/2, mb1 3.2/2, mb1mx3.1/29, mbtmp3.0/2, MS3.3/1, Ms1 3.3/1, ms1mx2.5/14, Error ellipse: s-maj=188.2km s-min=54.1km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr<br>0.2nm,0.8s,baz=52,slow=9.9,SNR=1.6 | 23.38 | 227 | P | P | 20 34 47.1 | -0.9 |
| ASAR | Alice Springs<br>0.2nm,0.6s,baz=60,slow=9.5,SNR=4.6 | 26.17 | 221 | P | P | 20 35 14.9 | +1.1 |
| FITZ | Fitzroy Crossi<br>comp=Z,55nm,18.7s,baz=290,slow=39 | 29.43 | 240 | LR | LR | 20 48 40.0 | |
| TORD | Torodi Ar. Bea<br>0.4nm,0.7s,baz=71,slow=2.2,SNR=2.2 | 149.62 | 289 | PKPbc | PKPbc | 20 49 29.2 | -0.9 |

*NEIC* ***12*** *20:29:54.9±1.1, 22.°91S±0.°08×174.°64W±0.°09, h10km±2km, mb4.5/9, Error ellipse: s-maj=17.9km s-min=8.7km az=49.0*

*IDC* ***12*** *20:29:56.8±2.4, 23.°15S×175.°11W, h0km, mb4.1/8, mb1 4.3/8, mb1mx4.1/32, mbtmp4.1/8, MS3.4/2, Ms1 3.4/2, ms1mx2.9/61, Error ellipse: s-maj=104.4km s-min=24.5km az=149.0*

**ISC 12 20:29:55.3±0.8, 23.°0S±0.°1×174.°66W±0.°09, h10km, n27, σ1°86/24, mb4.3/12, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIUE | Niue | 5.90 | 49 | | Pn | 20 31 21.1 | -1.6 |
| MSVF | Nonsavu | 8.61 | 306 | Pn | Pn | 20 31 59.0 | -1.1 |
| AFI | Afiamalu | 9.44 | 17 | Pn | Pn | 20 32 09.6 | -2.0 |
| RAR | Rarotonga<br>comp=Z,129nm,18.9s,baz=260,slow=36 | 13.92 | 86 | LR | LR | 20 38 26.1 | |
| RAR | Rarotonga | 13.92 | 86 | Pn | Pn | 20 33 11.5 | -1.1 |
| PPT | Papeete<br>comp=Z,73nm,18.2s,baz=284,slow=36 | 24.13 | 82 | LR | LR | 20 44 28.3 | |
| CTA | Charters Tower<br>2.8nm,0.6s,baz=94,slow=9.0,SNR=6.0 | 36.40 | 267 | P | P | 20 37 00.3 | +0.2 |
| CTAO | Charters Tower | 36.40 | 267 | P | P | 20 36 58.1 | -2.0 |
| STKA | Stephens Creek<br>1.2nm,0.8s,baz=72,slow=8.7,SNR=3.2 | 39.60 | 247 | P | P | 20 37 27.8 | +0.7 |
| STKA | Stephens Creek | 39.60 | 247 | P | P | 20 37 26.6 | -0.5 |
| AS31 | Alice Springs | 47.02 | 259 | P | P | 20 38 25.9 | -1.2 |
| AS31 | | | | IAmb | IAmb | 20 38 28.9 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| ASAR | Alice Springs<br>comp=Z,4.1nm,0.9s,baz=93,slow=7.9,SNR=26 | 47.02 | 259 | P | P | 20 38 26.0 | -1.1 |
| ASAR | Alice Springs | 47.02 | 259 | P | P | 20 38 25.4 | -1.8 |
| WR0 | Warramunga Arr | 47.18 | 264 | P | P | 20 38 26.6 | -1.8 |
| WR0 | | | | IAmb | IAmb | 20 38 33.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 47.36 | 264 | P | P | 20 38 28.3 | -1.5 |
| WB2 | | | | IAmb | IAmb | 20 38 56.8 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| WB0 | Warramunga Arr | 47.36 | 264 | P | P | 20 38 28.3 | -1.5 |
| WB0 | | | | IAmb | IAmb | 20 38 35.3 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| WRA | Warramunga Arr<br>comp=Z,2.5nm,0.7s,baz=101,slow=7.9,SNR=11 | 47.37 | 264 | P | P | 20 38 27.9 | -1.9 |
| WRA | Warramunga Arr | 47.37 | 264 | P | P | 20 38 28.1 | -1.8 |
| KNRA | Kununurra | 53.61 | 267 | P | P | 20 39 16.1 | -1.0 |
| MORW | Morawa | 61.77 | 248 | P | P | 20 40 13.4 | -1.0 |
| NVAR | Mina Array Bea<br>comp=Z,0.4nm,0.7s,baz=229,slow=8.2,SNR=3.8 | 80.77 | 41 | P | P | 20 42 14.9 | +5.6 |
| USRK | Ussuriysk Ar.<br>comp=Z,3.3nm,0.8s,baz=76,slow=8.0,SNR=4.6 | 82.78 | 324 | P | P | 20 42 22.7 | +3.3 |
| ILAR | Eielson Array<br>comp=Z,0.7nm,0.9s,baz=221,slow=6.3,SNR=4.1 | 90.09 | 12 | P | P | 20 42 58.3 | +3.4 |
| CMAR | Chiang Mai Arr<br>comp=Z,1.2nm,0.9s,baz=121,slow=2.7,SNR=9.7 | 93.86 | 288 | P | P | 20 43 16.4 | +3.0 |
| CMAR | Chiang Mai Arr | 93.86 | 288 | P | P | 20 43 14.3 | +0.8 |
| AKASG | Malin Array Be | 146.68 | 332 | PKPbc | PKiKP | 20 49 38.7 | -1.2 |
| | comp=Z,1.3nm,0.6s,baz=41,slow=4.2,SNR=11 | | | | | | |
| BRTR | Keskin Array B<br>comp=Z,0.8nm,0.9s,baz=124,slow=1.8,SNR=4.5 | 150.81 | 311 | PKPbc | PKiKP | 20 49 50.8 | +1.8 |

*TUL* ***12*** *20:37:49.4±1.4, 36.°18N±0.°01×96.°97W±0.°01, h6km±3km, ML2.7, mb_Lg2.4/10(NEIC), Error ellipse: s-maj=1.7km s-min=1.5km az=222.0*

**NEIC 12 20:37:49.3±0.8, 36.°19N±0.°01×96.°97W±0.°02, h14km±2km, Error ellipse: s-maj=2.2km s-min=1.8km az=76.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| T35A | Sooner Cattle | 0.81 | 26 | Pg | Pg | 20 38 05.1 | 0.0 |
| T35A | | | | Sg | Sg | 20 38 15.8 | 0.0 |
| OKCFA | Oklahoma City | 0.86 | 207 | Pg | Pg | 20 38 05.6 | -0.5 |
| OKCFA | | | | Sg | Sb | 20 38 17.7 | 0.0 |
| OKCSW | OKLAHO

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 396nm,0.7s | | | | | | |
| **MRSI** | **Marisa** | **8.43 353** | P | | **Pn** | **20 43 08.6** | **+1.5** |
| | 20nm,1.1s | | | | | | |
| **ABJI** | **Asem Bagus** | **8.62 270** | P | | **Pn** | **20 43 10.5** | **+1.0** |
| | 59nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.71 266** | Pn | | **Pn** | **20 43 09.1** | **-1.6** |
| **JAGI** | **Jajag, Banyuwa** | **8.71 266** | P | | **Pn** | **20 43 09.0** | **-1.6** |
| | 2µm57nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.71 266** | P | | **Pn** | **20 43 13.2** | **+2.6** |
| | 57nm,0.9s | | | | | | |
| **MPSI** | **Mapaga** | **8.77 340** | P | | Pn | 20 43 14.6 | +3.2 |
| | 0.0nm15nm,1.0s | | | | | | |
| **KMMI** | **Kalianget** | **8.93 275** | P | | **Pn** | **20 43 14.9** | **+1.4** |
| | 94nm,1.0s | | | | | | |
| **DRS** | **Darwin Rock St** | **9.02 120** | P | | **Pn** | **20 43 13.8** | **-0.7** |
| | 236nm,0.7s | | | | | | |
| **BBKI** | **Banjar Baru** | **9.20 299** | P | | **P** | **20 43 20.0** | **-3.8** |
| | 2µm84nm,1.3s | | | | | | |
| **TOLI2** | **Tolitoli** | **9.25 347** | Pn | | **P** | **20 43 19.7** | **-4.7** |
| **TOLI2** | **Tolitoli** | **9.25 347** | P | | **P** | **20 43 20.4** | **-4.0** |
| | 44nm,1.0s | | | | | | |
| **BLJI** | **Banyuglugur** | **9.25 271** | P | | P | 20 43 19.4 | -5.0 |
| | 61nm,0.9s | | | | | | |
| **GMJI** | **Gumukmas** | **9.40 267** | P | | **Pn** | **20 43 17.6** | **-1.8** |
| | 22nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **9.42 122** | Pn | | **Pn** | **20 43 18.6** | **-1.0** |
| **MTN** | **Manton Dam** | **9.42 122** | P | | **Pn** | **20 43 19.1** | **-0.5** |
| | 374nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **9.57 144** | Pn | | **Pn** | **20 43 20.3** | **-1.1** |
| **KNRA** | **Kununurra** | **9.57 144** | P | | **Pn** | **20 43 20.8** | **-0.6** |
| | 184nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.43 166** | P | | **Pn** | **20 43 31.9** | **-0.4** |
| | 1.0nm,0.3s,baz=360,slow=9.9,SNR=64 | | | | | | |
| FITZ | | | S | | **S** | **20 45 32.2** | **+2.9** |
| | 16nm,0.3s,baz=87,slow=3.6,SNR=13 | | | | | | |
| **KDU** | **Kakadu** | **10.50 117** | P | | **Pn** | **20 43 32.4** | **-0.8** |
| | 90nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **10.53 62** | Pn | | **Pn** | **20 43 32.2** | **-1.5** |
| FAKI | | | | | **S** | **20 45 32.1** | **+0.1** |
| **FAKI** | **Fak Fak** | **10.53 62** | P | | **Pn** | **20 43 32.8** | **-0.9** |
| | 99nm,0.8s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **10.61 311** | P | | **P** | **20 43 36.2** | **-3.3** |
| | 21nm,0.5s | | | | | | |
| **SWI** | **Sorong** | **10.88 50** | P | | **Pn** | **20 43 37.5** | **-0.5** |
| | 69nm,0.7s | | | | | | |
| **SIJI** | **Sorong** | **10.88 50** | P | | **Pn** | **20 43 37.5** | **-0.6** |
| | 2.5nm,0.3s,baz=234,slow=3.9,SNR=22 | | | | | | |
| **PWJI** | **Pagerwojo** | **11.02 269** | P | | Pn | **20 43 39.2** | **-0.6** |
| | 2µm80nm,0.7s | | | | | | |
| **PCJI** | **Pacitan** | **11.64 268** | P | | **Pn** | **20 43 46.8** | **-0.7** |
| | 4µm351nm,0.6s | | | | | | |
| **UGM** | **Wanagama** | **12.29 269** | Pn | | **Pn** | **20 43 54.3** | **-1.3** |
| **PBKI** | **Pangkalan Bun** | **12.36 294** | P | | **P** | **20 43 56.9** | **-2.1** |
| | 1µm152nm,0.9s | | | | | | |
| **SMRI** | **Semarang** | **12.42 273** | P | | **P** | **20 43 58.9** | **-0.7** |
| **MBWA** | **Marble Bar** | **13.49 193** | | | **P** | **20 44 13.2** | **+1.7** |
| **MYLDM** | **Lahad Datu** | **13.77 341** | | | **P** | **20 44 15.0** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.87 192** | P | | **P** | **20 44 16.9** | **+1.3** |
| **PSA00** | **Pilbara Seismi** | **13.87 192** | P | | **P** | **20 44 17.4** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **13.87 192** | P | | **P** | **20 44 17.2** | **+1.5** |
| **KPJI** | **Karang Pucung** | **13.89 272** | P | | **P** | **20 44 14.9** | **-1.1** |
| | 39nm,1.2s | | | | | | |
| **STKI** | **Sintang** | **13.92 304** | P | | **P** | **20 44 17.7** | **+1.4** |
| | 2µm50nm,1.0s | | | | | | |
| **CMJI** | **Cimerak** | **14.35 270** | P | | **P** | **20 44 19.7** | **-1.3** |
| | 45nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **14.86 314** | | | Pn | 20 44 29.1 | +2.2 |
| **LEM** | **Lembang** | **15.23 273** | P | | **Pn** | **20 44 31.8** | **+0.2** |
| | 2.4nm,0.3s,baz=30,slow=9.8,SNR=8.8 | | | | | | |
| **KKM** | **Kota Kinabalu** | **15.43 334** | | | **Pn** | **20 44 34.5** | **+0.6** |
| **KKM** | **Kota Kinabalu** | **15.43 334** | P | | **Pn** | **20 44 36.4** | **+2.5** |
| | 43nm,1.0s | | | | | | |
| **CNJI** | **Cibinong** | **15.68 271** | P | | **Pn** | **20 44 35.3** | **-1.4** |
| | 1µm76nm,0.7s | | | | | | |
| **KSM** | **Kuching** | **15.69 306** | P | | **Pn** | **20 44 37.5** | **+0.7** |
| **KSM** | **Kuching** | **15.69 306** | P | | **Pn** | **20 44 38.6** | **+1.8** |
| | 62nm,1.3s | | | | | | |
| **DBJI** | **Dramaga** | **16.11 274** | P | | **Pn** | **20 44 44.3** | **+2.4** |
| | 2µm50nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **16.17 138** | P | | **Pn** | **20 44 41.1** | **-1.4** |
| **WRA** | **Warramunga Arr** | **16.26 138** | P | | **Pn** | **20 44 42.5** | **-1.0** |
| | 3.0nm,0.3s,baz=313,slow=13,SNR=111 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.26 138** | P | | **Pn** | **20 44 41.6** | **-2.0** |
| **WRAB** | **Tennant Creek** | **16.26 138** | P | | **Pn** | **20 44 42.2** | **-1.3** |
| **WB2** | **Warramunga Arr** | **16.27 138** | P | | **Pn** | **20 44 42.2** | **-1.4** |
| WB2 | | | IAmb | | IAmb | 20 44 53.8 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **16.40 138** | P | | **Pn** | **20 44 44.1** | **-1.1** |
| WR0 | | | IAmb | | IAmb | 20 45 06.4 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **XMIS** | **Christmas Isla** | **17.24 260** | | | **Pn** | **20 44 53.3** | **-1.8** |
| **WRKA** | **Warakurna** | **17.75 164** | P | | **Pn** | **20 44 59.9** | **-1.1** |
| **AS31** | **Alice Springs** | **18.84 147** | P | | **Pn** | **20 45 11.1** | **-2.7** |
| **ASAR** | **Alice Springs** | **18.84 147** | P | | **Pn** | **20 45 11.5** | **-2.3** |
| | comp=Z,2.2nm,0.3s,baz=336,slow=13,SNR=207 | | | | | | |
| ASAR | | | S | | **S** | **20 48 27.8** | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=326,slow=21,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.84 147** | P | | **P** | **20 45 10.6** | **+0.5** |
| **MEEK** | **Meekatharra** | **19.04 192** | P | | **Pn** | **20 45 13.2** | **-2.9** |
| **QIS** | **Mount Isa** | **20.42 130** | P | | **P** | **20 45 27.7** | **+0.7** |
| **COEN** | **Coen** | **20.74 108** | P | | **P** | **20 45 30.4** | **0.0** |
| COEN | | | IAmb | | IAmb | 20 46 00.5 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **21.35 296** | P | | **P** | **20 45 38.1** | **+1.6** |
| MYKOM | | | IAmb | | IAmb | 20 45 40.6 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **21.99 196** | P | | **P** | **20 45 43.1** | **+0.8** |
| **MORW** | **Morawa** | **21.99 196** | P | | **P** | **20 45 43.2** | **+1.0** |
| **KRJI** | **Kerinci** | **22.16 284** | P | | **P** | **20 45 45.3** | **+1.3** |
| **MTSU** | **Mount Surprise** | **23.14 118** | P | | **P** | **20 45 53.7** | **+0.9** |
| **OOD** | **Oodnadatta** | **23.14 150** | P | | **P** | **20 45 53.5** | **+0.8** |
| **FORT** | **Forrest** | **23.21 169** | P | | **P** | **20 45 54.2** | **+0.9** |
| **FORT** | **Forrest** | **23.21 169** | P | | **P** | **20 45 54.3** | **+0.9** |
| **BLDU** | **Ballidu** | **23.29 194** | P | | **P** | **20 45 54.8** | **+0.7** |
| **KLBR** | **Kellerberrin** | **24.02 191** | P | | **P** | **20 46 00.9** | **+0.3** |
| **MULG** | **Mulgathing** | **24.54 156** | P | | **P** | **20 46 06.4** | **+1.0** |
| **NWAO** | **Narrogin (SRO)** | **25.41 191** | P | | **P** | **20 46 14.0** | **+0.8** |
| NWAO | | | IAmb | | IAmb | 20 46 14.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **LCRK** | **Leigh Creek** | **26.57 149** | P | | **P** | **20 46 24.5** | **+0.9** |
| **GSI** | **Gunungsitoli** | **26.91 289** | P | | **P** | **20 46 26.1** | **-0.7** |
| GSI | | | IAmb | | IAmb | 20 46 48.0 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **QLP** | **Quilpie** | **27.43 135** | P | | **P** | **20 46 33.2** | **+1.8** |
| | comp=Z,30nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **27.57 156** | P | | **P** | **20 46 32.9** | **+0.4** |
| **UBPT** | **Khong Chiam** | **28.85 323** | P | | **P** | **20 46 45.1** | **+1.2** |
| **HTT** | **Hallett** | **29.36 152** | P | | **P** | **20 46 49.9** | **+1.6** |
| **STKA** | **Stephens Creek** | **29.47 146** | P | | **P** | **20 46 50.6** | **+1.3** |
| | comp=Z,18nm,0.6s,baz=318,slow=9.5,SNR=74 | | | | | | |
| **STKA** | **Stephens Creek** | **29.47 146** | P | | **P** | **20 46 50.3** | **+0.9** |
| **STKA** | **Stephens Creek** | **29.47 146** | P | | **P** | **20 46 50.7** | **+1.3** |
| **RMQ** | **Roma** | **30.68 130** | P | | **P** | **20 47 01.9** | **+1.8** |
| **CMSA** | **Cobar Meteorol** | **31.64 141** | P | | **P** | **20 47 09.9** | **+1.6** |
| **ARPS** | **Mount Arapiles** | **33.45 152** | P | | **P** | **20 47 25.8** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **35.34 318** | P | | **P** | **20 47 41.1** | **+0.8** |
| | comp=Z,2.6nm,0.8s,baz=143,slow=6.9,SNR=22 | | | | | | |
| CMAR | | | PcP | | **PcP** | **20 50 05.5** | **+0.7** |
| | comp=Z,1.4nm,0.7s,baz=169,slow=3.2,SNR=10 | | | | | | |
| CMAR | | | ScP | | **ScP** | **20 53 29.7** | **+3.1** |
| | comp=Z,0.5nm,0.6s,baz=176,slow=2.9,SNR=6.4 | | | | | | |
| **CHTO** | **Chiang Mai** | **35.59 319** | P | | **P** | **20 47 43.1** | **+0.6** |
| **CHTO** | **Chiang Mai** | **35.59 319** | P | | P | 20 47 44.8 | +2.3 |
| **TOO** | **Toolangi** | **35.88 149** | P | | **P** | **20 47 46.1** | **+1.3** |
| TOO | | | IAmb | | IAmb | 20 47 48.4 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **39.95 330** | P | | **P** | **20 48 19.7** | **+0.8** |
| PZH | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PZH | | | pmax | | pmax | | |
| | comp=Z,90nm,4.1s | | | | | | |
| **NJ2** | **Nanjing** | **39.97 355** | *e*P | | P | 20 48 23.3 | +4.6 |
| NJ2 | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **ENH** | **Enshi** | **40.13 342** | P | | **P** | **20 48 19.9** | **-0.3** |
| **XAN** | **Xi'an** | **43.82 343** | P | | **P** | **20 48 49.6** | **-0.3** |
| XAN | | | pP | | pP | 20 49 48.3 | +6.4 |
| XAN | | | sP | | sP | 20 50 17.0 | +7.2 |
| XAN | | | PcP | | **PcP** | **20 50 31.6** | **-0.1** |
| XAN | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **46.52 17** | P | | **P** | **20 49 09.9** | **-1.1** |
| | comp=Z,1.9nm,0.5s,baz=192,slow=8.6,SNR=5.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **46.52 17** | P | | **P** | **20 49 10.4** | **-0.6** |
| **MAT** | **Matsushiro** | **46.52 17** | P | | **P** | **20 49 09.8** | **-1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LZH** | **Lanzhou** | **47.34 339** | *e*P | | **P** | **20 49 19.0** | **+1.5** |
| LZH | | | pP | | pwP | 20 50 17.0 | +4.7 |
| LZH | | | sP | | sP | 20 50 34.9 | -3.1 |
| LZH | | | pmax | | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **ODAN** | **Odare** | **48.83 316** | *e*P | | **P** | **20 49 29.3** | **+0.2** |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **48.93 317** | *e*P | | **P** | **20 49 30.5** | **+0.5** |
| | comp=Z,10nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **49.43 316** | *e*P | | **P** | **20 49 34.8** | **+1.1** |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.67 349** | *e*P | | P | 20 49 39.0 | +3.9 |
| HHC | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| HHC | | | pmax | | pmax | | |
| | comp=Z,130nm,6.3s | | | | | | |
| **GUN** | **Gumba** | **50.53 316** | *e*P | | **P** | **20 49 42.2** | **+0.1** |
| | comp=Z,8.4nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **50.65 316** | *e*P | | **P** | **20 49 42.7** | **-0.2** |
| | comp=Z,13nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **50.66 316** | *e*P | | **P** | **20 49 42.7** | **-0.2** |
| | comp=Z,9.5nm,0.3s | | | | | | |
| **GTA** | **Gaotai** | **51.77 337** | *e*P | | **P** | **20 49 51.9** | **+1.2** |
| GTA | | | sP | | PcP | 20 51 02.6 | +2.3 |
| GTA | | | pmax | | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| **XLT** | **XiLinHaoTe** | **51.98 354** | *e*P | | P | 20 49 54.9 | +2.8 |
| XLT | | | pP | | pwP | 20 50 50.9 | +2.4 |
| XLT | | | sP | | sP | 20 51 15.3 | +2.1 |
| XLT | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| XLT | | | pmax | | pmax | | |
| | comp=Z,190nm,4.9s | | | | | | |
| **KOLN** | **Koldanda** | **52.03 315** | *e*P | | **P** | **20 49 53.1** | **+0.1** |
| | comp=Z,7.3nm,0.2s | | | | | | |
| **DANN** | **Dangsing** | **52.27 315** | *e*P | | **P** | **20 49 54.8** | **0.0** |
| | comp=Z,44nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.55 8** | P | | **P** | **20 49 56.0** | **-0.2** |
| | comp=Z,3.5nm,0.5s,baz=188,slow=7.0,SNR=12 | | | | | | |
| **PYUN** | **Piuhan** | **52.66 314** | *e*P | | **P** | **20 49 57.6** | **0.0** |
| | comp=Z,26nm,0.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **52.66 6** | P | | P | 20 49 59.7 | +2.7 |
| MDJ | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| MDJ | | | pmax | | pmax | | |
| | comp=Z,160nm,3.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **54.97 139** | P | | **P** | **20 50 15.1** | **+1.3** |
| RPZ | | | IAmb | | IAmb | 20 50 16.3 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **TUWZ** | **Tuamarina** | **56.00 135** | P | | **P** | **20 50 21.2** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **57.06 132** | P | | **P** | **20 50 29.4** | **+0.6** |
| BKZ | | | IAmb | | IAmb | 20 50 30.3 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **57.44 347** | P | | **P** | **20 50 31.5** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=161,slow=7.6,SNR=7.4 | | | | | | |
| **SONM** | **Songino Array** | **57.44 347** | P | | **P** | **20 50 31.0** | **-0.2** |
| **WMQ** | **Urumqi** | **60.61 331** | *e*P | | P | 20 50 56.6 | +3.7 |
| **NIL** | **Nilore** | **62.69 314** | P | | **P** | **20 51 06.6** | **-0.4** |
| NIL | | | IAmb | | IAmb | 20 51 08.8 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **64.16 321** | P | | **P** | **20 51 17.7** | **+1.1** |
| KSH | | | sP | | PcP | 20 51 45.3 | -4.0 |
| KSH | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **65.38 331** | P | | **P** | **20 51 24.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **65.38 331** | P | | **P** | **20 51 24.6** | **+0.4** |
| | comp=Z,1.7nm,0.5s,baz=133,slow=7.1,SNR=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.38 331** | P | | **P** | **20 51 24.0** | **-0.2** |
| **KBL** | **Kabul** | **66.15 313** | P | | **P** | **20 51 29.4** | **-0.2** |
| KBL | | | IAmb | | IAmb | 20 51 31.9 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **66.91 323** | P | | **P** | **20 51 35.0** | **+0.8** |
| | comp=Z,3.2nm,0.7s,baz=132,slow=4.4,SNR=20 | | | | | | |
| **AAK** | **Ala-Archa** | **66.91 323** | P | | **P** | **20 51 34.0** | **-0.1** |
| AAK | | | IAmb | | IAmb | 20 51 37.2 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **GAR** | **Garm** | **67.51 318** | P | | **P** | **20 51 37.8** | **-0.1** |
| GAR | | | IAmb | | IAmb | 20 51 41.6 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **67.61 22** | P | | **P** | **20 51 39.0** | **+1.0** |
| | comp=Z,3.2nm,0.4s,baz=207,slow=9.5,SNR=4.9 | | | | | | |
| **CHGR** | **Chuyangaron** | **68.11 317** | P | | **P** | **20 51 40.9** | **-0.7** |
| CHGR | | | IAmb | | IAmb | 20 51 43.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **69.52 337** | P | | **P** | **20 51 49.5** | **-0.3** |
| ZAA0 | | | IAmb | | IAmb | 20 51 50.9 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.52 337** | P | | **P** | **20 51 49.8** | **0.0** |
| | comp=Z,4.3nm,0.6s,baz=136,slow=5.1,SNR=27 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.52 337** | P | | **P** | **20 51 49.4** | **-0.4** |
| **KURBB** | **Kurchatov Arra** | **69.83 332** | P | | **P** | **20 51 51.6** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=142,slow=5.5,SNR=19 | | | | | | |
| **KURK** | **Kurchatov** | **69.85 332** | P | | **P** | **20 51 51.5** | **-0.3** |
| **MA2** | **Magadan** | **70.88 15** | P | | **P** | **20 51 56.9** | **-1.0** |
| MA2 | | | IAmb | | IAmb | 20 51 59.8 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **75.26 330** | P | | **P** | **20 52 24.0** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=96,slow=15,SNR=5.3 | | | | | | |
| **GEYT** | **Alibeck** | **75.57 312** | P | | **P** | **20 52 27.6** | **+1.7** |
| | comp=Z,2.3nm,0.5s,baz=60,slow=18,SNR=4.1 | | | | | | |
| **TIXI** | **Tiksi** | **79.53 2** | P | | **P** | **20 52 46.4** | **-0.4** |
| | comp=Z,1.6nm,0.4s,baz=88,slow=23,SNR=13 | | | | | | |
| **TIXI** | **Tiksi** | **79.53 2** | IAmb | | IAmb | 20 52 48.0 | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.62 324** | P | | **P** | **20 52 53.8** | **+0.6** |
| | comp=Z,2.1nm,0.7s,baz=113,slow=8.3,SNR=7.3 | | | | | | |
| **RAYN** | **Ar Rayn** | **81.76 295** | P | | **P** | **20 52 58.6** | **-1.1** |
| RAYN | | | IAmb | | IAmb | 20 53 02.9 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **ARU** | **Arti** | **82.89 330** | P | | **P** | **20 53 05.7** | **+0.9** |
| | comp=Z,0.7nm,0.6s,baz=139,slow=6.4,SNR=4.8 | | | | | | |
| **ARU** | **Arti** | **82.89 330** | P | | **P** | **20 53 04.7** | **-0.2** |
| ARU | | | IAmb | | IAmb | 20 53 07.0 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **85.57 269** | P | | P | 20 53 23.1 | +3.6 |
| | comp=Z,1.2nm,0.4s,baz=61,slow=5.5,SNR=4.3 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **85.57 269** | P | | **P** | **20 53 18.8** | **-0.8** |
| **GURO** | **Guroymak-BITLI** | **87.85 309** | P | | **P** | **20 53 29.9** | **+0.1** |
| GURO | | | IAmb | | IAmb | 20 53 32.7 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **88.30 314** | P | | **P** | **20 53 33.0** | **+1.3** |
| | comp=Z,3.2nm,0.9s,baz=121,slow=8.5,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **94.47 309** | P | | **P** | **20 54 01.1** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=122,slow=5.6,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **94.47 309** | P | | **P** | **20 54 00.3** | **-0.2** |
| **AKASG** | **Malin Array Be** | **98.44 320** | P | | **P** | **20 54 17.5** | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=74,slow=4.6,SNR=5.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **111.62 25** | PKiKP | | **PKiKP** | **20 59 12.3** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=317,slow=2.0,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.10 281** | PKP | | **PKiKP** | **20 59 33.8** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=82,slow=1.8,SNR=6.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **122.48 44** | PKP | | **PKiKP** | **20 59 34.5** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=188,slow=1.0,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **131.39 58** | SKPbc | | **SKPab** | **21 02 54.4** | **+0.4** |
| | comp=Z,1.6nm,0.8s,baz=251,slow=3.7,SNR=10 | | | | | | |
| **CPUP** | **Villa Florida** | **145.93 180** | PKPbc | | **PKiKP** | **21 00 20.0** | **-2.3** |
| | comp=Z,4.8nm,0.8s,baz=144,slow=4.0,SNR=7.5 | | | | | | |
| **LPAZ** | **La Paz** | **153.55 156** | PKPab | | **PKPab** | **21 00 54.0** | **+1.7** |
| | comp=Z,2.9nm,0.6s,baz=196,slow=2.0,SNR=10 | | | | | | |

*CNRM **12** 20:55:58.0, 35˚.72N×3˚.54W, h0km, ml2.9*
*SFS **12** 20:56:01.0, 35˚.51N×3˚.78W, ML2.7, ALBORAN SUR*
**ISC 12 20:56:00.7±1.2, 35˚.56N±0˚.03×3˚.69W±0˚.02, h14km±9km, n29, σ1°66/45, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.40** | **211** | P | **Pg** | **20 56 07.5** | **-1.2** |
| PALE | | | | S | **Sb** | **20 56 15.2** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.66** | **120** | P | **Pb** | **20 56 14.0** | **-0.1** |
| GOG | | | | S | **Sb** | **20 56 24.0** | **+0.9** |
| **GOG** | **Mont Gurugu** | **0.66** | **120** | P | **Pb** | **20 56 14.0** | **-0.1** |
| GOG | | | | S | **Sb** | **20 56 24.0** | **+0.9** |
| **CHAS** | **Isla Isabel II** | **1.10** | **110** | P | **Pn** | **20 56 21.9** | **+0.3** |
| CHAS | | | | S | **Sb** | **20 56 35.1** | **-0.5** |
| **TAF** | **Taforalt** | **1.28** | **125** | P | **Pg** | **20 56 25.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.28** | **125** | P | **Pb** | **20 56 23.8** | **-0.9** |
| TAF | | | | S | **Sg** | **20 56 41.0** | **-1.1** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **334** | P | **Pb** | **20 56 24.3** | **-1.3** |
| EMAL | | | | S | **Sb** | **20 56 40.1** | **-2.5** |
| **SMIR** | **Smir Dam** | **1.38** | **276** | S | **Sg** | **20 56 49.2** | **+3.9** |
| **CEU** | **Ceuta** | **1.41** | **284** | P | **Pn** | **20 56 25.2** | **-0.7** |
| CEU | | | | S | **Sn** | **20 56 41.2** | **-3.1** |
| **CHEFC** | **Chefchaouen** | **1.42** | **252** | P | **Pg** | **20 56 28.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.42** | **252** | P | **Pb** | **20 56 26.4** | **-0.6** |
| CHEFC | | | | S | **Sg** | **20 56 48.3** | **+1.8** |
| **JBK** | **JBK** | **1.53** | **143** | P | **Pg** | **20 56 30.0** | **-0.1** |
| **JBK** | **JBK** | **1.53** | **143** | P | **Pb** | **20 56 28.1** | **-0.9** |
| JBK | | | | S | **Sb** | **20 56 47.9** | **-0.4** |
| **LCRM** | **LCR** | **2.10** | **208** | P | **Pg** | **20 56 41.0** | **0.0** |
| **LCRM** | **LCR** | **2.10** | **208** | P | **Pg** | **20 56 41.0** | **0.0** |
| **IFR** | **Ifrane** | **2.36** | **211** | P | **Pn** | **20 56 40.5** | **+1.4** |
| IFR | | | | S | **Sn** | **20 57 05.0** | **-2.9** |
| **MD31** | **MD31** | **2.83** | **199** | P | **Pn** | **20 56 46.2** | **+0.6** |
| MD31 | | | | S | **Sb** | **20 57 27.8** | **+2.4** |
| **MDT** | **Midelt** | **2.84** | **196** | P | **Pn** | **20 56 47.0** | **+1.3** |
| MDT | | | | S | **Sb** | **20 57 28.3** | **+2.4** |
| **TDRA** | **Tendrara** | **2.86** | **151** | P | **Pn** | **20 56 46.6** | **+0.4** |
| TDRA | | | | S | **Sn** | **20 57 21.4** | **+0.9** |
| **ZHG** | **ZHG** | **3.22** | **230** | P | **Pb** | **20 56 56.4** | **-1.3** |
| ZHG | | | | S | **Sg** | **20 57 41.2** | **-3.0** |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | *e*Pn | **Pn** | **20 56 59.3** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **20 57 42.3** | **+0.7** |
| PVAQ | | | | A | A | 20 57 46.1 | |
| | 5.5nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **301** | P | **Pn** | **20 56 56.9** | **-1.0** |
| PVAQ | | | | S | **Sn** | **20 57 42.5** | **+0.9** |
| **MESJ** | **Messejana** | **4.29** | **303** | *e*Pn | **Pn** | **20 57 06.9** | **+1.3** |
| **EVO** | **Evora** | **4.56** | **312** | P | Pn | 20 57 03.3 | -5.9 |
| EVO | | | | S | **Sn** | **20 58 00.4** | **-1.6** |
| **EVO** | **Evora** | **4.56** | **312** | *e*Pn | **Pn** | **20 57 10.5** | **+1.3** |
| **PNCL** | **Nicolau / Gran** | **4.64** | **305** | *e*Pn | **Pn** | **20 57 11.8** | **+1.4** |
| **PMRV** | **Marv??o** | **4.86** | **324** | *e*Pn | **Pn** | **20 57 16.4** | **+3.1** |
| **PMTG** | **Montargil** | **5.03** | **315** | *e*Pn | **Pn** | **20 57 17.9** | **+2.1** |
| **MVO** | **Moncorvo** | **6.18** | **336** | *e*Pn | **Pn** | **20 57 34.4** | **+2.8** |

*BJI **12** 20:56:46.6±0.0, 11˚.42S×163˚.57E, h24km, mb4.6/60, mB5.4/47, Ms5.4/57, Ms7 5.2/57*
*IDC **12** 20:56:47.9±0.9, 11˚.24S×162˚.63E, h0km, mb4.4/14, mb1 4.5/16, mb1mx4.4/34, mbtmp4.4/16, ML4.6/2, MS5.0/59, Ms1 5.0/59, ms1mx5.0/64, Error ellipse: s-maj=25.8km s-min=18.5km az=115.0*
*NEIC **12** 20:56:48.4±1.6, 11˚.33S±0˚.09×162˚.82E±0˚.09, h10km±1km, mb5.2/86, Mwb5.4/31, Error ellipse: s-maj=18.8km s-min=10.6km az=42.0*
*NEIC **12** 20:56:48.4, 11˚.33S×162˚.82E, h8km, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.02; $M_{\theta\theta}$-0.38; $M_{\phi\phi}$0.40; $M_{r\theta}$0.56; $M_{\theta\phi}$1.51; $M_{\phi r}$-0.32; Fault plane solution: $M_0$1.69000×$10^{17}$ NP1:φ261.16000°, δ78.61000°, λ-16.83000°. NP2:φ354.57000°, δ73.51000°, λ-168.12000°. Principal axes: T 1.5760, Plg4.0000°, Azm308.0000°; N 0.2094, Plg70.0000°, Azm48.0000°; P -1.7854, Plg20.0000°, Azm217.0000°;*
*MOS **12** 20:56:51.4±1.2, 11˚.32S×162˚.67E, h38km, mb5.1/16, MS5.0/7 Error ellipse: s-maj=9.6km s-min=7.9km az=112.4*
*GCMT **12** 20:56:52.4±0.1, 11˚.14S±0˚.01×162˚.62E±0˚.01, h14km, MW5.5/148, Moment Tensor Solution. s121,c209; s148,c292; Duration: 1ᵗˢ4 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$0.02±.03; $M_{\theta\theta}$-0.83±.03; $M_{\phi\phi}$0.81±.03; $M_{r\theta}$0.14±.05; $M_{\theta\phi}$2.14±.03; $M_{\phi r}$-0.89±.08; Best double couple: $M_0$2.46400×$10^{17}$ NP1:φ260.00000°, δ69.00000°, λ1.00000°. NP2:φ169.00000°, δ89.00000°, λ159.00000°. Principal axes: T 2.4630, Plg15.0000°, Azm122.0000°; N 0.0030, Plg69.0000°, Azm348.0000°; P -2.4650, Plg15.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 12 20:56:49.0±0.4, 11˚.36S±0˚.05×162˚.80E±

STKA Stephens Creek 28.28 221 P P 21 02 45.7 +3.0
WR0 Warramunga Arr 28.48 249 P P 21 02 43.0 -1.7
WR0 IAmb IAmb 21 03 18.4
comp=Z,68nm,1.6s
WB0 Warramunga Arr 28.58 249 P P 21 02 44.4 -1.1
WB0 IAmb IAmb 21 03 16.8
comp=Z,51nm,1.3s
WRAB Tennant Creek 28.65 249 P P 21 02 44.4 -1.8
WRAB pmax pmax
comp=Z,51nm,1.5s
WRAB Tennant Creek 28.65 249 P P 21 02 44.4 -1.8
WRAB IAmb IAmb 21 03 37.6
comp=Z,51nm,1.5s
WB2 Warramunga Arr 28.66 249 P P 21 02 44.1 -2.1
WB2 IAmb IAmb 21 03 20.1
comp=Z,49nm,1.4s
WRA Warramunga Arr 28.67 249 P P 21 02 45.1 -1.3
comp=Z,2.7nm,0.6s,baz=78,slow=9.5,SNR=28
WRA LR LR 21 13 23.3
comp=Z,8µm,19.7s,baz=68,slow=35
WRA Warramunga Arr 28.67 249 P P 21 02 45.0 -1.3
LCRK Leigh Creek 29.68 227 P P 21 02 59.5 +4.3
URZ Urewera 29.69 157 LR LR 21 13 40.1
comp=Z,3µm,20.3s,baz=340,slow=34
H11S2 WAKE ISLAND Hy 29.91 7 T T 21 33 50.9
baz=188,slow=76,SNR=75
H11S3 WAKE ISLAND Hy 29.91 7 T T 21 33 49.5
baz=188,slow=76,SNR=55
H11S1 WAKE ISLAND Hy 29.93 7 T T 21 33 51.0
baz=188,slow=76,SNR=56
AS31 Alice Springs 30.08 242 P P 21 02 57.4 -1.5
ASAR Alice Springs 30.08 242 P P 21 02 57.5 -1.4
comp=Z,4.5nm,0.8s,baz=65,slow=10,SNR=61
ASAR LR LR 21 14 53.4
comp=Z,8µm,18.7s,baz=71,slow=36
ASAR Alice Springs 30.08 242 P P 21 02 56.8 -2.0
BKZ Black Stump Fm 30.26 159 P P 21 02 59.3 -0.9
TOO Toolangi 30.38 208 P P 21 03 00.3 -1.0
TOO pmax pmax
comp=Z,17nm,1.1s
TOO Toolangi 30.38 208 P P 21 03 00.3 -1.0
GUMO Guam 30.51 324 LR LR 21 14 09.7
comp=Z,5µm,21.8s,baz=148,slow=34
MTN Manton Dam 30.99 264 P P 21 03 07.4 +0.5
baz=31,SNR=5.2
HTT Hallett 31.00 221 P P 21 03 09.3 +2.5
baz=32,SNR=4.3
HTT Hallett 31.00 221 P P 21 03 08.8 +1.9
H11N1 WAKE ISLAND Hy 31.14 7 T T 21 35 20.9
baz=188,slow=76,SNR=30
H11N3 WAKE ISLAND Hy 31.14 8 T T 21 35 23.6
baz=188,slow=76,SNR=31
H11N2 WAKE ISLAND Hy 31.16 7 T T 21 35 23.1
baz=188,slow=76,SNR=37
FAKI Fak Fak 31.42 283 P P 21 03 09.7 -1.1
TUWZ Tuamarina 31.51 164 P P 21 03 11.0 -0.2
KHZ Kahutara 32.33 165 P P 21 03 17.2 -1.2
KHZ IAmb IAmb 21 04 01.6
comp=Z,36nm,1.3s
LTZ Lake Taylor 32.38 167 P P 21 03 16.9 -2.0
LTZ IAmb IAmb 21 04 23.4
comp=Z,52nm,1.6s
BBOO Buckleboo 32.54 225 P P 21 03 22.1 +1.7
baz=33,SNR=7.0
BBOO Buckleboo 32.54 225 P P 21 03 17.4 -2.9
BBOO IAmb IAmb 21 04 05.8
comp=Z,59nm,1.8s
FOZ Fox Glacier 32.63 171 P P 21 03 20.1 -0.9
FOZ IAmb IAmb 21 03 37.1
comp=Z,22nm,1.0s
OXZ Oxford 32.84 168 P P 21 03 21.8 -1.1
OXZ IAmb IAmb 21 03 38.8
comp=Z,44nm,1.3s
SIJI Sorong 32.99 286 LR LR 21 17 40.6
comp=Z,3µm,19.8s,baz=120,slow=38
RPZ Rata Peaks 33.02 169 P P 21 03 24.0 -0.4
RPZ IAmb IAmb 21 03 41.0
comp=Z,32nm,1.3s
MQZ McQueen's Vall 33.34 167 P P 21 03 25.4 -1.7
KNRA Kununurra 33.35 259 P P 21 03 26.6 -1.0
baz=34,SNR=11
KNRA Kununurra 33.35 259 P P 21 03 25.8 -1.8
DCZ Deep Cove 34.19 175 P P 21 03 33.0 -1.6
DCZ IAmb IAmb 21 03 50.0
comp=Z,40nm,1.5s
ODZ Otahua Downs 34.24 170 P P 21 03 31.4 -3.6
ODZ IAmb IAmb 21 03 38.5
comp=Z,74nm,2.0s
WHZ Wether Hill Ro 34.70 174 P P 21 03 39.0 +0.1
WHZ IAmb IAmb 21 04 11.7
comp=Z,74nm,1.8s
WRKA Warakurna 35.37 243 P P 21 03 44.0 -1.2
baz=36,SNR=40
FITZ Fitzroy Crossi 36.51 255 LR LR 21 19 00.2
comp=Z,6µm,18.5s,baz=80,slow=37
FITZ Fitzroy Crossi 36.51 255 P P 21 03 54.4 -0.5
baz=37,SNR=12
RAR Rarotonga 37.15 110 LR LR 21 16 10.5
comp=Z,832nm,22.0s,baz=278,slow=31
FORT Forrest 37.51 234 P P 21 04 02.9 -0.4
BATI Baumata 38.44 268 LR LR 21 20 57.0
comp=Z,3µm,19.5s,baz=110,slow=38
DAV Davao City (W) 41.31 295 LR LR 21 21 54.3
comp=Z,1µm,18.1s,baz=107,slow=37
PSA00 Pilbara Seismi 42.30 250 P P 21 04 42.1 -1.2
PSA00 Pilbara Seismi 42.30 250 P P 21 04 42.3 -1.0
PSA00 IAmb IAmb 21 05 05.3
comp=Z,64nm,1.6s
MBWA Marble Bar 42.36 251 P P 21 04 42.5 -1.3
MBWA IAmb IAmb 21 04 55.4
comp=Z,42nm,1.2s
MEEK Meekatharra 44.22 243 P P 21 04 59.3 +0.5
baz=45,SNR=14
PPT Papeete 46.43 103 LR LR 21 22 54.8
comp=Z,1µm,18.2s,baz=272,slow=34
PPT2 Papeete2 46.43 103 eS S 21 12 13.0 +8.2
comp=Z,749nm,26.0s
PPT2 eLQ LQ 21 16 32.4
comp=Z,7µm,26.5s
PPT2 eLR LR 21 18 30.9
comp=Z,3µm,26.0s
BLDU Ballidu 46.73 239 P P 21 05 19.0 +0.5
baz=47,SNR=4.2
MORW Morawa 46.94 241 P P 21 05 18.7 -1.6
MYLDM Lahad Datu 47.04 288 P P 21 05 19.5 -1.7
GIRL Giralia 47.59 250 P P 21 05 24.2 -1.2
JAGI Jajag, Banyuwa 47.97 269 P P 21 05 25.5 -2.9
TGY Tagaytay City 48.60 300 LR LR 21 23 47.4
comp=Z,1µm,21.9s,baz=118,slow=34
JHJ Hachijo jima 2 49.38 334 LR LR 21 24 35.3
comp=Z,1µm,22.0s,baz=102,slow=34
JOW Kunigami 50.65 319 LR LR 21 26 37.2
comp=Z,724nm,18.4s,baz=129,slow=36
UGM Wanagama 51.60 269 P P 21 05 55.3 -0.9
INU Inuyama 52.47 333 P P 21 06 01.2 -1.0
INU IAmb IAmb 21 06 25.4
comp=Z,58nm,1.4s
MJAR Matsushiro Arr 52.98 335 P P 21 06 06.3 +0.4
comp=Z,6.2nm,1.1s,baz=165,slow=8.0,SNR=5.4
MJAR LR LR 21 27 00.6
comp=Z,2µm,21.6s,baz=158,slow=34
MJAR Matsushiro Arr 52.98 335 P P 21 06 04.8 -1.1
MAT Matsushiro 52.98 335 P P 21 06 06.4 +0.5
MAT S S 21 13 35.4 -0.2
JNU Nakatsue 53.69 327 LR LR 21 25 27.2
comp=Z,810nm,21.6s,baz=124,slow=32
KSM Kuching 53.71 280 P P 21 06 11.1 -0.7
KSM IAmb IAmb 21 07 00.1
comp=Z,34nm,1.6s
LEM Lembang 54.61 270 LR LR 21 31 43.5
comp=Z,796nm,18.8s,baz=100,slow=38
TAOE Nuku Hiva Isla 56.15 93 eLR LR 21 23 07.7
comp=Z,1µm,24.1s
TJN Taejon 58.04 327 ceP P 21 06 42.5 +0.1
KSRS Korea Array 58.55 328 P P 21 06 45.7 -0.2
comp=Z,3.0nm,0.9s,baz=143,slow=6.5,SNR=10
KSRS LR LR 21 29 54.9
comp=Z,1µm,19.9s,baz=130,slow=34
KSAR Wonju Array Be 58.56 328 P P 21 06 45.1 -0.9
KSAR Wonju Array Be 58.56 328 P P 21 06 45.1 -0.9
NJ2 Nanjing 60.25 317 eP P 21 07 01.7 +4.0
NJ2 S S 21 15 18.9 +6.9
NJ2 SS SS 21 19 09.9 +0.2
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
NJ2 LR LR
comp=Z,2µm,17.4s
NJ2 LR LR
comp=Z,1µm,18.0s
NJ2 LR LR
comp=Z,2µm,21.2s
QIZ Qiongzhong 60.30 300 P P 21 06 55.3 -3.1
QIZ S S 21 15 15.3 +2.2
QIZ LR LR
comp=N,760nm,23.9s
QIZ LR LR
comp=E,760nm,25.5s
QIZ LR LR
comp=Z,1µm,23.9s
YSS Yuzh-Sakhalins 60.76 344 eP P 21 07 07.8 +6.9
YSS eS S 21 15 23.8 +5.9
YSS e 21 21 49.0
YSS pmax pmax
comp=Z,600nm,4.0s
YSS MLR MLR
comp=Z,1µm,15.0s
TEY Ternei 60.93 339 deP P 21 07 03.8 +1.7
TEY e 21 15 19.7
TEY pmax pmax
comp=Z,100nm,3.3s
MSHR Mys Shultsa 61.01 334 i P P 21 07 03.2 +0.5
MSHR pmax pmax
comp=Z,12nm,1.0s
USRK Ussuriysk Ar. 61.98 335 P P 21 07 08.6 -0.6
comp=Z,12nm,0.9s,baz=146,slow=6.7,SNR=16
USRK LR LR 21 31 39.7
comp=Z,1µm,21.1s,baz=134,slow=34
USRK Ussuriysk Ar. 61.98 335 P P 21 07 08.8 -0.4
USRK Ussuriysk Ar. 61.98 335 P P 21 07 08.8 -0.4
USA0B Ussuriysk Arra 61.98 335 P P 21 07 08.6 -0.6
USA0B pmax pmax
comp=Z,73nm,1.5s
USA0B Ussuriysk Arra 61.98 335 P P 21 07 08.6 -0.6
SKR Severo-Kuril's 62.05 355 eP P 21 07 16.8 +7.2
SKR eS S 21 15 40.4 +6.2
SKR eSSS SSS 21 22 14.7
SKR MLR MLR
comp=Z,800nm,19.0s
MDJ Mudanjiang 63.32 334 P P 21 07 17.7 -0.5
MDJ IAmb IAmb 21 07 21.5
comp=Z,27nm,1.2s
MDJ Mudanjiang 63.32 334 P P 21 07 19.5 +1.3
MDJ pP sP 21 07 22.7 +3.3
MDJ PP PP 21 09 37.0 -0.7
MDJ S S 21 15 55.0 +4.6
MDJ SS SS 21 20 02.6 +5.2
MDJ pmax pmax
comp=Z,22nm,1.2s
MDJ pmax pmax
comp=Z,560nm,4.5s
MDJ LR LR
comp=Z,2µm,20.6s
MDJ LR LR
comp=Z,2µm,20.6s
MDJ LR LR
comp=Z,2µm,17.7s
PEA0B Petropavlovsk- 64.36 357 ceP P 21 07 25.0 +0.2
PEA0B Petropavlovsk- 64.36 357 P P 21 07 25.0 +0.2
PETK Petropavlovsk- 64.36 357 P P 21 07 27.4 +2.6
comp=Z,7.1nm,1.1s,baz=138,slow=5.4,SNR=5.6
PETK LR LR 21 30 02.2
comp=Z,855nm,22.0s,baz=182,slow=31
PETK Petropavlovsk- 64.36 357 P P 21 07 24.6 -0.3
PETK Petropavlovsk- 64.36 357 P P 21 07 24.6 -0.3
TYV Tymovskoe 64.40 346 eP P 21 07 35.8 +11
TYV pmax pmax
comp=Z,9.0nm,1.3s
TYV pmax pmax
comp=Z,600nm,4.4s
SHEM Shemya Is, Ala 64.56 8 LR LR 21 29 50.1
comp=Z,1µm,21.7s,baz=185,slow=31
CN2 Changchun 64.56 331 eP P 21 07 25.6 -0.8
CN2 eSP pwP 21 07 34.2 -2.8
CN2 eS S 21 16 03.0 -3.0
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 pmax pmax
comp=Z,200nm,4.0s
CN2 LR LR
comp=Z,2µm,17.0s
CN2 LR LR
comp=Z,1µm,17.0s
CN2 LR LR
comp=Z,1µm,19.0s
PSI Prapat 65.05 278 LR LR 21 40 08.8
comp=Z,566nm,18.1s,baz=124,slow=40
BNX BinXian 65.15 333 ⇓P P 21 07 29.8 -0.4
BNX sP pwP 21 07 40.0 -0.8
BNX S S 21 16 09.6 -3.5
BNX sS sS 21 16 26.0 +11
BNX pmax pmax
comp=Z,24nm,0.9s
BNX pmax pmax
comp=Z,1µm,4.4s
BNX LR LR
comp=Z,3µm,17.7s
BNX LR LR
comp=Z,2µm,14.5s
BNX LR LR
comp=Z,5µm,18.8s
ENH Enshi 65.88 311 P P 21 07 32.9 -2.3
GRNR Gornyy 66.00 342 ⇑iP P 21 07 37.6 +2.0
GRNR pmax pmax
comp=Z,1.0nm,1.2s
GSI Gunungsitoli 66.02 277 P P 21 07 34.4 -2.1
LYN LuoYang 66.03 316 ⇑P P 21 07 36.1 0.0
LYN S S 21 16 17.6 -6.7
LYN pmax pmax
comp=Z,10.0nm,1.1s
LYN pmax pmax
comp=Z,170nm,6.1s
LYN LR LR
comp=Z,2µm,19.6s
LYN LR LR
comp=Z,620nm,19.4s
LYN LR LR
comp=Z,2µm,22.7s
VNDA Vanda 66.15 180 LR LR 21 30 47.5
comp=Z,1µm,21.0s,baz=4.5,slow=31
HNS HongShan 66.22 320 ⇑P P 21 07 36.9 -0.3
HNS PP PP 21 10 07.1 +3.9
HNS eS S 21 16 24.2 -2.2
HNS pmax pmax
comp=Z,7.0nm,1.3s
HNS pmax pmax
comp=Z,310nm,7.1s
HNS LR LR
comp=Z,600nm,16.3s
HNS LR LR
comp=Z,1µm,18.4s
HNS LR LR
comp=Z,2µm,20.8s
GYA Guiyang 66.22 306 ⇑P P 21 07 39.4 +1.7
GYA pmax pmax
comp=Z,5.0nm,1.7s
KLR Kul'dur 66.23 338 LR LR 21 33 15.7
comp=Z,834nm,21.6s,baz=154,slow=33
KLR Kul'dur 66.23 338 ceP P 21 07 36.9 -0.2
KLR pmax pmax
comp=Z,31nm,1.8s
BJI Beijing 66.94 323 P P 21 07 44.0 +2.2
BJI S S 21 16 36.3 +1.2
BJI pmax pmax
comp=Z,6.0nm,1.5s
BJI LR LR
comp=Z,920nm,18.6s
BJI LR LR
comp=Z,770nm,20.2s
BJI LR LR
comp=Z,1µm,25.3s
NKL Nikolayevsk 66.98 346 eP P 21 07 53.3 +12
NKL pmax pmax
comp=N,524nm,1.2s
NKL pmax pmax
comp=Z,17nm,1.3s
NKL pmax pmax
comp=E,4.0nm,1.1s
NKL MLR MLR
comp=N,14µm,22.0s
NKL MLR MLR
comp=E,126nm,17.0s
NKL MLR MLR
comp=Z,474nm,17.0s
XAN Xi'an 68.22 314 P P 21 07 49.6 -0.5
XAN pP sP 21 07 56.5 +4.5
XAN PP PP 21 10 27.2 +6.3
XAN S S 21 16 44.1 -6.8
XAN ScS SKiKP 21 17 46.0 +0.3
XAN pmax pmax
comp=Z,6.0nm,1.4s
XAN LR LR
comp=Z,680nm,19.9s
XAN LR LR
comp=Z,1µm,19.9s
XAN LR LR
comp=Z,2µm,21.3s
KMI Kunming 68.83 303 ⇑P P 21 07 57.0 +2.6
KMI pP sP 21 08 00.6 +4.4
KMI S S 21 16 56.3 -2.6
KMI pmax pmax
comp=Z,11nm,1.4s
KMI LR LR
comp=Z,800nm,25.9s
KMI LR LR
comp=Z,650nm,20.6s
KMI LR LR
comp=Z,1µm,21.4s
XLT XiLinHaoTe 69.46 326 eP P 21 07 58.3 +0.6
XLT pP sP 21 08 02.2 +2.6
XLT sP pwP 21 08 05.4 -1.4
XLT PcP PcP 21 08 20.2 -0.8
XLT S S 21 17 04.9 -0.4
XLT pmax pmax
comp=Z,31nm,1.0s
XLT pmax pmax
comp=Z,650nm,4.1s
XLT LR LR
comp=Z,2µm,14.7s
XLT LR LR
comp=Z,1µm,16.8s
XLT LR LR
comp=Z,2µm,17.7s
CMAR Chiang Mai Arr 69.60 295 P P 21 07 57.1 -1.8
comp=Z,0.7nm,0.3s,baz=321,slow=48,SNR=2.2
CMAR LR LR 21 37 05.1
comp=Z,210nm,21.9s,baz=105,slow=35
CHTO Chiang Mai 69.72 295 P P 21 07 58.0 -1.7
CHTO pmax pmax
comp=Z,12nm,1.4s
CHTO Chiang Mai 69.72 295 P P 21 07 58.0 -1.7
PZH PanZhiHua 70.22 304 P P 21 08 04.2 +1.4
PZH PcP PcP 21 08 25.4 +0.8
PZH PP PP 21 10 45.7 +7.3
PZH S S 21 17 10.4 -4.5
PZH ScS SKSac 21 18 02.5 -2.4
PZH SS SS 21 21 45.6 +0.2
PZH pmax pmax
comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,190nm,5.5s
PZH LR LR
comp=Z,850nm,19.4s
PZH LR LR
comp=Z,670nm,20.4s
PZH LR LR
comp=Z,1µm,21.6s
HHC Hu-ho-hao-te 70.23 321 eP P 21 08 05.7 +3.2
HHC sP pwP 21 08 13.3 +1.7
HHC S S 21 17 12.4 -2.1
HHC SS SS 21 21 52.6 +7.6
HHC pmax pmax
comp=Z,6.0nm,0.9s
HHC pmax pmax
comp=Z,290nm,6.2s
HHC LR LR
comp=Z,570nm,19.5s
HHC LR LR
comp=Z,1µm,18.4s
HHC LR LR
comp=Z,2µm,19.2s
CD2 Chengdu 70.51 309 P P 21 08 06.8 +2.4
CD2 pmax pmax
comp=Z,10.0nm,0.6s
BTO Baotou 71.05 320 eP P 21 08 18.4 +11
HIA Hailar 71.25 332 P P 21 08 06.6 -1.8
HIA pmax pmax
comp=Z,32nm,1.3s
HIA Hailar 71.25 332 P P 21 08 06.6 -1.8
HIA IAmb IAmb 21 08 33.1
comp=Z,32nm,1.3s
MA2 Magadan 71.36 354 ceP P 21 08 08.5 -0.3
MA2 pmax pmax
comp=Z,15nm,2.5s
MA2 Magadan 71.36 354 P P 21 08 08.6 -0.3
MA2 IAmb IAmb 21 08 50.9
comp=Z,55nm,2.0s
ZEA Zeya 71.54 339 eP P 21 08 11.4 +1.3
ZEA e 21 08 33.9
ZEA eS S 21 17 33.6 +4.6
ZEA pmax pmax
comp=N,10.0nm,0.9s
ZEA pmax pmax
comp=Z,10.0nm,1.3s
ZEA pmax pmax
comp=Z,300nm,4.5s
ZEA smax smax
comp=E,200nm,6.2s
LZH Lanzhou 72.85 313 eP P 21 08 19.8 +1.3
LZH pP sP 21 08 24.5 +4.1
LZH sP pwP 21 08 27.2 -0.5
LZH S S 21 17 38.3 -6.8
LZH SS SS 21 22 33.5 +8.0
LZH pmax pmax
comp=E,31nm,1.3s
LZH pmax pmax
comp=E,230nm,6.5s
LZH LR LR
comp=E,1µm,16.0s
LZH LR LR
comp=E,1µm,16.3s
LZH LR LR
comp=E,2µm,18.5s
SEY Seymchan 74.50 355 LR LR 21 35 52.7
comp=E,736nm,21.2s,baz=159,slow=32
SEY Seymchan 74.50 355 i P P 21 08 27.7 +0.3
CIT Chita 76.01 331 eP P 21 08 36.1 -0.3
CIT e 21 08 45.6
CIT pmax pmax
comp=Z,56nm,1.6s
SII Sitkinak Islan 76.47 23 P P 21 08 36.7 -2.2
ULN Ulaanbaatar 76.88 325 ceP P 21 08 41.7 +0.1
ULN pmax pmax
comp=Z,42nm,1.7s
ULN Ulaanbaatar 76.88 325 P P 21 08 40.2 -1.4
GTA Gaotai 77.21 315 ⇓P P 21 08 44.5 +0.9
GTA pP pwP 21 08 51.2 -1.6
GTA sP PcP 21 08 54.2 -0.1
GTA S S 21 18 31.1 -2.4
GTA sS sS 21 18 46.0 +11
GTA SS SS 21 23 31.8 +0.1
GTA pmax pmax
comp=Z,3.0nm,1.0s
GTA pmax pmax
comp=Z,290nm,5.1s
GTA LR LR
comp=Z,800nm,19.3s
GTA LR LR
comp=Z,1µm,19.3s
GTA LR LR
comp=Z,2µm,21.1s
SONM Songino Array 77.23 325 P P 21 08 42.3 -1.3
comp=Z,7.6nm,0.8s,baz=141,slow=4.2,SNR=48
SONM LR LR 21 40 47.2
comp=Z,673nm,22.0s,baz=119,slow=34
SONM Songino Array 77.23 325 P P 21 08 41.9 -1.6
SONM IAmb IAmb 21 08 55.4
comp=Z,21nm,1.2s
YAK Yakutsk 77.60 345 LR LR 21 41 23.2
comp=Z,604nm,21.3s,baz=148,slow=34
YAK Yakutsk 77.60 345 eP P 21 08 44.9 -0.2
YAK e 21 08 53.7
YAK e*PP PcP 21 09 01.9 +6.7
YAK e 21 11 37.5
YAK ePPP PPP 21 13 25.2
YAK eS S 21 18 34.0 -2.4
YAK e*SS SKSac 21 18 53.7 -4.6
YAK eSS SS 21 23 34.2 -2.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YAK | | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.2s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.2s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,41nm,2.6s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,33nm,2.7s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,21nm,2.8s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=N,130nm,4.5s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=E,122nm,4.2s | | | | | | | |
| **YAK** | **Yakutsk** | **77.60** | **345** | | P | **P** | **21 08 44.7** | **-0.4** |
| YAK | | | | | IAmb | IAmb | 21 09 07.3 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **KDAK** | **Kodiak Island** | **77.95** | **23** | | LR | LR | 21 39 42.3 | |
| | comp=Z,439nm,19.5s,baz=247,slow=33 | | | | | | | |
| **P18K** | **Big Mountain,** | **78.17** | **20** | | P | **P** | **21 08 47.1** | **-1.3** |
| **QSPA** | **South Pole Qui** | **78.65** | **180** | | LR | LR | 21 39 56.8 | |
| | comp=Z,586nm,19.8s,baz=14,slow=33 | | | | | | | |
| **BILL** | **Bilibino** | **79.23** | | **1** | *ce*P | **P** | **21 08 53.6** | **-0.4** |
| BILL | | | | | *e* | | 21 09 03.3 | |
| BILL | | | | | *e* | | 21 11 56.4 | |
| BILL | | | | | *i* S | **S** | **21 18 53.3** | **-0.4** |
| BILL | | | | | *e*SS | **SS** | **21 23 52.9** | **-7.7** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,24nm,1.7s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,469nm,18.0s | | | | | | | |
| **BILL** | **Bilibino** | **79.23** | | **1** | P | **P** | **21 08 52.9** | **-1.1** |
| BILL | | | | | IAmb | IAmb | 21 09 07.0 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **SVW2** | **Sparrevohn** | **79.33** | **19** | | P | **P** | **21 08 53.3** | **-1.4** |
| SVW2 | | | | | IAmb | IAmb | 21 09 14.1 | |
| | comp=Z,34nm,1.1s | | | | | | | |
| **ANM** | **Nome** | **79.44** | **13** | | P | **P** | **21 08 55.9** | **+0.7** |
| ANM | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **ANM** | **Nome** | **79.44** | **13** | | P | **P** | **21 08 55.9** | **+0.7** |
| **GOMU** | **GeErMu** | **79.50** | **310** | | P | **P** | **21 08 57.9** | **+1.3** |
| GOMU | | | | | pP | sP | 21 09 01.5 | +3.0 |
| GOMU | | | | | sP | PcP | 21 09 05.7 | +1.1 |
| GOMU | | | | | SS | SS | 21 24 09.7 | +3.0 |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| GOMU | | | | | LR | LR | | |
| | comp=Z,310nm,18.2s | | | | | | | |
| GOMU | | | | | LR | LR | | |
| | comp=Z,560nm,18.6s | | | | | | | |
| GOMU | | | | | LR | LR | | |
| | comp=Z,500nm,17.8s | | | | | | | |
| **BOD** | **Bodaibo** | **79.61** | **336** | | *e*P | **P** | **21 08 55.4** | **-0.8** |
| BOD | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.7s | | | | | | | |
| **TNA** | **Tin City** | **79.75** | **12** | | P | **P** | **21 08 53.9** | **-2.9** |
| **M19K** | **Big River Lodg** | **80.31** | **19** | | P | **P** | **21 08 56.6** | **-3.4** |
| M19K | | | | | IAmb | IAmb | 21 09 19.6 | |
| | comp=Z,28nm,1.1s | | | | | | | |
| **ZAK** | **Zakamensk** | **80.32** | **326** | | *e*P | **P** | **21 09 00.7** | **+0.3** |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.6s | | | | | | | |
| **L19K** | **White Mountain** | **80.37** | **19** | | P | **P** | **21 08 57.6** | **-2.7** |
| **TTA** | **Tatalina** | **80.58** | **18** | | P | **P** | **21 08 59.7** | **-1.8** |
| TTA | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **TTA** | **Tatalina** | **80.58** | **18** | | P | **P** | **21 08 59.7** | **-1.8** |
| **IRK** | **Irkutsk** | **80.76** | **328** | | *e*P | **P** | **21 09 04.4** | **+1.8** |
| IRK | | | | | pmax | pmax | | |
| | comp=Z,36nm,2.8s | | | | | | | |
| **K20K** | **Telida** | **81.49** | **18** | | | **P** | **21 09 05.5** | **-0.7** |
| **J20K** | **Nowinta River** | **82.07** | **18** | | P | **P** | **21 09 09.2** | **-0.1** |
| J20K | | | | | IAmb | IAmb | 21 09 28.6 | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **CAST** | **Castle Rocks** | **82.15** | **19** | | P | **P** | **21 09 07.7** | **-2.0** |
| **ODAN** | **Odare** | **82.37** | **299** | | *e*P | **P** | **21 09 12.4** | **+0.4** |
| | comp=Z,22nm,0.9s | | | | | | | |
| **RDOG** | **Red Dog Mine** | **82.92** | **12** | | P | **P** | **21 09 12.4** | **-1.2** |
| RDOG | | | | | IAmb | IAmb | 21 09 44.0 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **RPN** | **Rapa Nui** | **83.03** | **116** | | LR | LR | 21 38 21.3 | |
| | comp=Z,422nm,21.5s,baz=276,slow=30 | | | | | | | |
| **RND** | **Reindeer** | **83.19** | **20** | | P | **P** | **21 09 15.0** | **-0.2** |
| RND | | | | | pmax | pmax | | |
| | comp=Z,32nm,1.6s | | | | | | | |
| **RND** | **Reindeer** | **83.19** | **20** | | P | **P** | **21 09 15.0** | **-0.2** |
| RND | | | | | IAmb | IAmb | 21 09 56.5 | |
| | comp=Z,32nm,1.6s | | | | | | | |
| **MAW** | **Mawson** | **83.34** | **202** | | LR | LR | 21 42 38.2 | |
| | comp=Z,672nm,19.6s,baz=76,slow=33 | | | | | | | |
| **MCK** | **McKinley** | **83.38** | **20** | | P | **P** | **21 09 13.9** | **-2.3** |
| MCK | | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | | |
| **MCK** | **McKinley** | **83.38** | **20** | | P | **P** | **21 09 13.9** | **-2.3** |
| **I21K** | **Tanana** | **83.44** | **18** | | P | **P** | **21 09 15.2** | **-1.2** |
| I21K | | | | | IAmb | IAmb | 21 09 35.6 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| **IMAR** | **Indian Mountai** | **83.52** | **16** | | P | **P** | **21 09 16.0** | **-0.8** |
| **N25K** | **Chitina, Valde** | **83.52** | **22** | | P | **P** | **21 09 15.4** | **-1.6** |
| **H21K** | **Melozitna Rive** | **83.55** | **17** | | P | **P** | **21 09 16.3** | **-0.7** |
| **MLY** | **Manley** | **83.71** | **18** | | P | **P** | **21 09 16.2** | **-1.6** |
| **PALK** | **Pallekele** | **83.73** | **279** | | LR | LR | 21 49 45.4 | |
| | comp=Z,328nm,18.9s,baz=213,slow=38 | | | | | | | |
| **WRH** | **Wood River Hil** | **84.16** | **19** | | P | **P** | **21 09 19.5** | **-0.5** |
| WRH | | | | | IAmb | IAmb | 21 09 37.8 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **PKI** | **Pulchoki** | **84.26** | **299** | | *e*P | **P** | **21 09 21.1** | **-0.8** |
| **CCB** | **Clear Creek Bu** | **84.36** | **19** | | P | **P** | **21 09 20.3** | **-0.8** |
| **KKN** | **Kakani** | **84.43** | **300** | | *e*P | **P** | **21 09 20.5** | **-2.1** |
| **MDM** | **Murphy Dome** | **84.44** | **19** | | P | **P** | **21 09 21.0** | **-0.6** |
| MDM | | | | | IAmb | IAmb | 21 09 39.3 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **HDA** | **Harding Lake** | **84.49** | **20** | | P | **P** | **21 09 20.9** | **-0.8** |
| HDA | | | | | IAmb | IAmb | 21 09 40.0 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **DMN** | **Daman** | **84.53** | **299** | | *e*P | **P** | **21 09 22.3** | **-0.9** |
| | comp=Z,6.1nm,0.3s | | | | | | | |
| **H23K** | **Yukon River** | **84.62** | **18** | | P | **P** | **21 09 21.9** | **-0.6** |
| H23K | | | | | IAmb | IAmb | 21 09 40.6 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.75** | **19** | | P | **P** | **21 09 22.8** | **-0.3** |
| | comp=Z,1.2nm,0.8s,baz=233,slow=4.4,SNR=5.8 | | | | | | | |
| ILAR | | | | | LR | LR | 21 41 11.7 | |
| | comp=Z,1μm,21.6s,baz=236,slow=32 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.75** | **19** | | P | **P** | **21 09 21.9** | **-1.1** |
| **ILAR** | **Eielson Array** | **84.75** | **19** | | P | **P** | **21 09 21.9** | **-1.1** |
| **M27K** | **Edge Creek, AK** | **85.00** | **23** | | P | **P** | **21 09 23.6** | **-1.0** |
| **GKN** | **Gorkha** | **85.04** | **300** | | *e*P | **P** | **21 09 23.2** | **-2.4** |
| | comp=Z,18nm,0.7s | | | | | | | |
| **J25K** | **Salcha River,** | **85.14** | **20** | | P | **P** | **21 09 23.9** | **-1.2** |
| J25K | | | | | IAmb | IAmb | 21 09 43.2 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **KOLN** | **Koldanda** | **85.86** | **299** | | *e*P | **P** | **21 09 28.5** | **-1.3** |
| **TIXI** | **Tiksi** | **85.86** | **350** | | P | **P** | **21 09 28.5** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=269,slow=22,SNR=6.1 | | | | | | | |
| **TIXI** | **Tiksi** | **85.86** | **350** | | *ce*P | **P** | **21 09 28.6** | **+0.1** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.7s | | | | | | | |
| **TIXI** | **Tiksi** | **85.86** | **350** | | P | **P** | **21 09 27.5** | **-0.9** |
| **DANN** | **Dangsing** | **85.88** | **300** | | *e*P | **P** | **21 09 27.3** | **-2.6** |
| | comp=Z,7.7nm,0.6s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **85.94** | **47** | | P | **P** | **21 09 28.7** | **-0.9** |
| WDC | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.7s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **85.94** | **47** | | P | **P** | **21 09 28.7** | **-0.9** |
| WDC | | | | | IAmb | IAmb | 21 09 51.3 | |
| | comp=Z,22nm,1.7s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **86.19** | **46** | | LR | LR | 21 41 00.9 | |
| | comp=Z,863nm,20.1s,baz=258,slow=31 | | | | | | | |
| **PYUN** | **Piuhan** | **86.47** | **299** | | *e*P | **P** | **21 09 30.4** | **-2.4** |
| | comp=Z,20nm,1.0s | | | | | | | |
| **BBB** | **Bella Bella** | **86.48** | **35** | | LR | LR | 21 39 31.3 | |
| | comp=Z,266nm,21.3s,baz=247,slow=30 | | | | | | | |
| **EGAK** | **Eagle** | **86.68** | **21** | | P | **P** | **21 09 32.6** | **-0.1** |
| EGAK | | | | | IAmb | IAmb | 21 09 52.1 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **87.17** | **18** | | P | **P** | **21 09 34.5** | **-0.6** |
| **WMQ** | **Urumqi** | **87.28** | **316** | | *e*P | **P** | **21 09 37.1** | **+0.9** |
| WMQ | | | | | sP | pwP | 21 09 43.2 | -2.2 |
| WMQ | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,1μm,16.3s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,950nm,20.7s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,1μm,24.3s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **88.01** | | **21** | P | **P** | **21 09 37.6** | **-1.5** |
| I29M | | | | | IAmb | IAmb | 21 10 01.7 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **DLBC** | **Dease Lake** | **88.07** | | **29** | LR | LR | 21 41 34.5 | |
| | comp=Z,1μm,20.7s,baz=272,slow=30 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.44** | | **50** | P | **P** | **21 09 42.5** | **+0.4** |
| | comp=Z,2.5nm,1.2s,baz=230,slow=7.4,SNR=9.5 | | | | | | | |
| NVAR | | | | | LR | LR | 21 41 45.6 | |
| | comp=Z,1μm,20.1s,baz=270,slow=30 | | | | | | | |
| **NV11** | **Mina Array Sit** | **88.55** | | **50** | P | **P** | **21 09 43.8** | **+1.3** |
| NV11 | | | | | IAmb | IAmb | 21 11 55.4 | |
| | comp=Z,28nm,1.9s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **88.63** | | **55** | LR | LR | 21 42 21.6 | |
| | comp=Z,1μm,20.2s,baz=264,slow=31 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **89.29** | | **47** | P | **P** | **21 09 44.2** | **-1.6** |
| WVOR | | | | | pmax | pmax | | |
| | comp=Z,29nm,1.7s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **89.29** | | **47** | P | **P** | **21 09 44.2** | **-1.6** |
| WVOR | | | | | IAmb | IAmb | 21 10 07.7 | |
| | comp=Z,30nm,1.7s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **89.31** | **321** | | *i* P | **P** | **21 09 43.9** | **-1.9** |
| DGZ | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **90.49** | | **51** | P | **P** | **21 09 49.7** | **-1.9** |
| **SYO** | **Syowa Base** | **90.63** | **198** | | *e*P | **P** | **21 09 51.6** | **+0.2** |
| **INK** | **Inuvik** | **91.14** | | **19** | LR | LR | 21 45 14.5 | |
| | comp=Z,1μm,21.4s,baz=236,slow=32 | | | | | | | |
| **ELK** | **Elko** | **91.32** | | **49** | LR | LR | 21 44 10.4 | |
| | comp=Z,744nm,20.4s,baz=239,slow=31 | | | | | | | |
| **LPIG** | **La Paz** | **91.77** | | **66** | LR | LR | 21 45 00.3 | |
| | comp=Z,644nm,19.1s,baz=244,slow=32 | | | | | | | |
| **MK31** | **Makanchi Array** | **91.78** | **317** | | P | **P** | **21 09 56.0** | **-1.2** |
| MK31 | | | | | pmax | pmax | | |
| | comp=Z,27nm,2.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **91.78** | **317** | | P | **P** | **21 09 56.0** | **-1.2** |
| MK31 | | | | | IAmb | IAmb | 21 10 22.5 | |
| | comp=Z,26nm,1.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **91.78** | **317** | | P | **P** | **21 09 55.7** | **-1.5** |
| | comp=Z,1.0nm,0.6s,baz=91,slow=7.0,SNR=10.0 | | | | | | | |
| MKAR | | | | | LR | LR | 21 51 01.6 | |
| | comp=Z,489nm,20.9s,baz=88,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **91.78** | **317** | | P | **P** | **21 09 55.9** | **-1.3** |
| **MKAR** | **Makanchi Array** | **91.78** | **317** | | P | **P** | **21 09 55.9** | **-1.3** |
| **PLID** | **Pearl Lake** | **91.83** | | **44** | P | **P** | **21 09 56.4** | **-1.3** |
| **NEW** | **Newport** | **91.87** | | **41** | LR | LR | 21 45 10.6 | |
| | comp=Z,528nm,19.9s,baz=238,slow=32 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **92.13** | **325** | | P | **P** | **21 09 56.8** | **-1.8** |
| ZAA0 | | | | | IAmb | IAmb | 21 10 23.2 | |
| | comp=Z,21nm,1.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **92.13** | **325** | | P | **P** | **21 09 57.3** | **-1.3** |
| | comp=Z,0.8nm,0.6s,baz=99,slow=7.7,SNR=6.4 | | | | | | | |
| ZALV | | | | | LR | LR | 21 53 52.8 | |
| | comp=Z,274nm,18.7s,baz=100,slow=37 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **92.13** | **325** | | P | **P** | **21 09 56.9** | **-1.7** |
| **KSH** | **Kashi** | **94.70** | **309** | | P | **P** | **21 10 12.3** | **+1.3** |
| KSH | | | | | S | **S** | **21 21 21.9** | **-2.8** |
| KSH | | | | | LR | LR | | |
| | comp=Z,780nm,18.2s | | | | | | | |
| KSH | | | | | LR | LR | | |
| | comp=Z,770nm,16.5s | | | | | | | |
| KSH | | | | | LR | LR | | |
| | comp=Z,1μm,20.3s | | | | | | | |
| **KURK** | **Kurchatov** | **95.04** | **321** | | *ce*P | **P** | **21 10 10.8** | **-1.2** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **95.08** | **320** | | LR | LR | 21 55 29.0 | |
| | comp=Z,305nm,18.2s,baz=70,slow=37 | | | | | | | |
| **NRIK** | **Noril'sk** | **95.41** | **340** | | LR | LR | 21 53 21.9 | |
| | comp=Z,720nm,21.2s,baz=111,slow=36 | | | | | | | |
| **NRIK** | **Noril'sk** | **95.41** | **340** | | *ce*P | **P** | **21 10 12.8** | **-0.5** |
| NRIK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **95.89** | | **48** | LR | LR | 21 47 00.2 | |
| | comp=Z,597nm,20.2s,baz=260,slow=31 | | | | | | | |
| **PMSA** | **Palmer Station** | **96.35** | **162** | | LR | LR | 21 46 18.8 | |
| | comp=Z,522nm,21.4s,baz=234,slow=31 | | | | | | | |
| **AAK** | **Ala-Archa** | **96.35** | **312** | | LR | LR | 21 54 53.4 | |
| | comp=Z,465nm,20.1s,baz=78,slow=36 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.58** | | **28** | P | **P** | **21 10 19.0** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=252,slow=4.6,SNR=4.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.58** | | **28** | P | **P** | **21 10 17.2** | **-1.6** |
| **YKA** | **Yellowknife Ar** | **96.58** | | **28** | P | **P** | **21 10 17.2** | **-1.6** |
| **SNAA** | **Sanae** | **96.60** | **185** | | LR | LR | 21 51 57.8 | |
| | comp=Z,952nm,18.6s,baz=180,slow=34 | | | | | | | |
| **TXAR** | **Lajitas Array** | **98.52** | | **62** | LR | LR | 21 46 07.7 | |
| | comp=Z,761nm,21.9s,baz=262,slow=30 | | | | | | | |
| **MAK** | **Makhachkala** | **116.13** | **312** | | *e*P | **Pdif** | **21 11 37.5** | **-8.8** |
| MAK | | | | | *e* | | 21 22 10.1 | |
| MAK | | | | | pmax | pmax | | |
| | comp=Z,347nm,1.7s | | | | | | | |
| **KBZ** | **Khabaz** | **119.29** | **314** | | *i* PKIKP | **PKPdf** | **21 15 39.1** | **+0.3** |
| **KIV** | **Kislovodsk** | **119.39** | **314** | | *i* PKIKP | **PKPdf** | **21 15 39.7** | **+0.6** |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| KIV | | | | | MLR | MLR | | |
| | comp=Z,477nm,22.0s | | | | | | | |
| **OBN** | **Obninsk** | **119.55** | **328** | | *e*PKIKP | **PKPdf** | **21 15 39.4** | **+0.5** |
| OBN | | | | | *e* | | 21 16 59.5 | |
| OBN | | | | | *e* | | 21 22 38.9 | |
| OBN | | | | | *e*SS | SS | 21 33 12.8 | -11 |
| OBN | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| OBN | | | | | MLR | MLR | | |
| | comp=Z,628nm,18.0s | | | | | | | |
| **MNK** | **Minsk** | **124.25** | **330** | | *i* PKIKP | **PKPdf** | **21 15 46.5** | **-1.5** |
| MNK | | | | | *i* | | 21 17 31.1 | |
| MNK | | | | | *i* PPP | PPP | 21 20 09.4 | |
| MNK | | | | | *i* | | 21 22 58.4 | |
| MNK | | | | | *i* PS | **PS** | **21 27 29.4** | **-2.4** |
| MNK | | | | | *i* SS | SS | 21 34 14.1 | -10 |
| MNK | | | | | *i* SSS | SSS | 21 38 58.1 | |
| MNK | | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| MNK | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| MNK | | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.6s | | | | | | | |
| MNK | | | | | MLR | MLR | | |
| | comp=E,54nm,20.0s | | | | | | | |
| MNK | | | | | MLR | MLR | | |
| | comp=N,306nm,20.0s | | | | | | | |
| MNK | | | | | MLR | MLR | | |
| | comp=Z,542nm,21.0s | | | | | | | |
| **MNK** | **Minsk** | **124.25** | **330** | | *i* PKP | **PKPdf** | **21 15 46.6** | **-1.4** |
| | comp=E,1.0nm,0.6s | | | | | | | |
| MNK | | | | | *i* PKP | **PKPdf** | **21 15 46.6** | **-1.4** |
| | comp=N,6.0nm,0.6s | | | | | | | |
| MNK | | | | | *i* PKP | **PKPdf** | **21 15 46.6** | **-1.4** |
| | comp=Z,9.0nm,0.7s,baz=58 | | | | | | | |
| MNK | | | | | *i* PP | **PP** | **21 17 31.1** | **-1.6** |
| MNK | | | | | *i* PPP | PPP | 21 20 09.4 | |
| MNK | | | | | *i* SKS | **SKSdf** | **21 22 58.5** | **-1.4** |
| MNK | | | | | *i* PS | **PS** | **21 27 29.4** | **-2.4** |
| MNK | | | | | *i* SS | SS | 21 34 14.2 | -10 |
| MNK | | | | | *i* SSS | SSS | 21 38 58.1 | |
| MNK | | | | | *i* LR | LR | 22 06 58.0 | |
| MNK | | | | | *i* LRM | MLR | 22 09 33.0 | |
| | comp=E,54nm,20.0s | | | | | | | |
| MNK | | | | | *i* LRM | MLR | 22 09 40.1 | |
| | comp=N,306nm,20.0s | | | | | | | |
| MNK | | | | | *i* LRM | MLR | 22 09 54.3 | |
| | comp=Z,542nm,20.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **125.51** | **326** | | PKP | **PKPdf** | **21 15 50.6** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=60,slow=2.2,SNR=1.9 | | | | | | | |
| **CLL** | **Collm** | **133.18** | **334** | | *e*SS | SS | 21 36 19.0 | +4.9 |
| CLL | | | | | *e*SSS | SSS | 21 41 06.0 | |
| CLL | | | | | *ex* | x | 21 42 54.0 | |
| **KHC** | **Kasperske Hory** | **134.50** | **332** | | *e*PKP | **PKiKP** | **21 16 11.0** | **+1.9** |
| **KEST** | **Kesra** | **145.85** | **320** | | PKPbc | **PKPdf** | **21 16 29.1** | **+0.4** |
| | comp=Z,7.5nm,0.9s,baz=14,slow=5.7,SNR=6.5 | | | | | | | |
| **KEST** | **Kesra** | **145.85** | **320** | | | **PKPdf** | **21 16 26.2** | **-2.5** |
| **TORD** | **Torodi Ar. Bea** | **161.45** | **277** | | PKP | **PKPdf** | **21 16 51.8** | **+0.7** |
| | comp=Z,1.1nm,1.0s,baz=209,slow=0.4,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.45** | **277** | | | **PKPdf** | **21 16 49.1** | **-2.1** |

*IDC **12** 21:01:54.0±2.4, 11°.37S×163°.04E, h0km, mb3.9/5, mb1 4.1/7, mb1mx3.8/34, mbtmp4.0/7, ML4.0/2, Error ellipse: s-maj=48.4km s-min=31.1km az=96.0*
*NEIC **12** 21:01:56.5±2.3, 11°.2S±0°.1×163°.31E±0°.07, h28km±5km, mb4.5/12, Error ellipse: s-maj=16.8km s-min=8.0km az=205.0*

**ISC 12 21:01:57.4±0.7, 11°.28S±0°.09×163°.24E±0°.09, h35km, n23, σ1s05/25, mb4.2/10, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **3.72** | **299** | Pn | | **Pn** | **21 02 52.3** | **-0.1** |
| | 64nm,0.3s,baz=329,slow=0.4,SNR=4.9 | | | | | | | |
| HNR | | | | Sn | | **Sn** | **21 03 34.6** | **-0.5** |
| | 182nm,0.3s,baz=165,slow=19,SNR=5.2 | | | | | | | |
| **HNR** | **Honiara** | **3.72** | **299** | | | **Pn** | **21 02 52.0** | **-0.4** |
| HNR | | | | | | **Sn** | **21 03 35.5** | **+0.4** |
| **SANVU** | **Saraoutou** | **5.66** | **137** | Pn | | **Pn** | **21 03 18.4** | **-0.6** |
| **LIFNC** | **LIFOU** | **10.19** | **158** | Pn | | **Pn** | **21 04 22.0** | **+0.7** |
| **DZM** | **Mont Dzumac** | **11.16** | **164** | Pn | | **Pn** | **21 04 34.1** | **-0.5** |
| **CTA** | **Charters Tower** | **18.53** | **240** | P | | **P** | **21 06 10.6** | **-0.5** |
| | 0.1nm,0.3s,baz=75,slow=16,SNR=2.9 | | | | | | | |
| **COEN** | **Coen** | **19.76** | **260** | P | | **Pn** | **21 06 26.2** | **0.0** |
| COEN | | | | IAmb | | IAmb | 21 06 40.2 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.61** | **221** | P | | **P** | **21 07 50.6** | **0.0** |
| | comp=Z,3.1nm,1.1s,baz=31,slow=12,SNR=2.1 | | | | | | | |
| **WR0** | **Warramunga Arr** | **28.91** | **249** | P | | **P** | **21 07 52.3** | **-1.1** |
| **WB0** | **Warramunga Arr** | **29.01** | **250** | P | | **P** | **21 07 53.6** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | 21 07 55.2 | |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.09** | **249** | P | | **P** | **21 07 53.9** | **-1.1** |
| | comp=Z,0.8nm,0.8s,baz=79,slow=9.1,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **30.50** | **242** | P | | **P** | **21 08 06.9** | **-0.5** |
| | comp=Z,1.2nm,0.8s,baz=66,slow=9.9,SNR=6.5 | | | | | | | |
| **BBOO** | **Buckleboo** | **32.89** | **225** | P | | **P** | **21 08 29.3** | **+1.0** |
| BBOO | | | | IAmb | | IAmb | 21 08 33.3 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **33.78** | **259** | P | | **P** | **21 08 36.1** | **-0.2** |
| **MLZ** | **Mavora Lakes** | **34.22** | **174** | P | | **P** | **21 08 40.4** | **+0.7** |
| **TOLI2** | **Tolitoli** | **43.96** | **284** | P | | **P** | **21 10 01.2** | **-0.3** |
| TOLI2 | | | | IAmb | | IAmb | 21 10 11.7 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **MORW** | **Morawa** | **47.36** | **241** | P | | **P** | **21 10 27.9** | **-0.4** |
| **OHAK** | **Old Harbor** | **77.05** | **23** | P | | **P** | **21 13 47.5** | **+0.9** |
| **GAMB** | **Gambell** | **77.25** | **11** | P | | **P** | **21 13 45.7** | **-1.9** |
| GAMB | | | | IAmb | | IAmb | 21 14 03.0 | |
| | comp=Z,5.9nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **77.42** | **325** | P | | **P** | **21 13 51.1** | **+2.0** |
| | comp=Z,0.9nm,0.8s,baz=139,slow=5.7,SNR=3.7 | | | | | | | |
| **SONM** | **Songino Array** | **77.42** | **325** | P | | **P** | **21 13 51.1** | **+2.0** |
| **GLB** | **Gilahina Butte** | **83.48** | **23** | P | | **P** | **21 14 19.5** | **-1.8** |
| GLB | | | | IAmb | | IAmb | 21 14 19.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **92.02** | **317** | P | | **P** | **21 15 04.3** | **+1.5** |
| | comp=Z,0.2nm,0.6s,baz=102,slow=3.9,SNR=1.5 | | | | | | | |

*IDC **12** 21:13:36.7±3.7, 0°.83N×97°.21E, h0km, mb3.8/4, mb1 3.8/6, mb1mx3.4/51, mbtmp3.7/6, ML3.5/2, Error ellipse: s-maj=79.7km s-min=24.1km az=148.0*
*DJA **12** 21:13:39.9±1.7, 1°.1N±4°×97°.7E±1°.0, h16km±7km, M4.1/10, mb4.1/4, MLv4.1/10*
*NEIC **12** 21:13:45.0±2.6, 1°.2N±0°.1×97°.34E±0°.06, h35km±2km, mb4.0/3, Error ellipse: s-maj=19.8km s-min=4.8km az=154.0*

**ISC 12 21:13:41.8±0.9, 1°.07N±0°.06×97°.23E±0°.09, h25km, n28, σ0s84/26, mb4.0/5, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **0.42** | **57** | | | **Pn** | **21 13 51.5** | **-0.8** |
| GSI | | | | | | **Sn** | **21 13 58.8** | **-0.5** |
| **GSI** | **Gunungsitoli** | **0.42** | **57** | P | | **Pn** | **21 13 51.5** | **-0.8** |
| GSI | | | | S | | **Sn** | **21 13 58.4** | **-0.8** |
| **MNSI** | **Mandailing Nat** | **2.37** | **97** | P | | **Pn** | **21 14 18.8** | **-0.3** |
| **PSI** | **Prapat** | **2.42** | **45** | Pn | | **Pn** | **21 14 19.5** | **-0.4** |
| | 3.6nm,0.3s,baz=192,slow=8.0,SNR=5.8 | | | | | | | |
| PSI | | | | Lg | | Lg | 21 14 57.1 | |
| | 5.9nm,0.3s,baz=284,slow=14,SNR=5.5 | | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **2.49** | **13** | P | | **Pn** | **21 14 20.9** | **0.0** |
| **TSI** | **Tuntungan** | **2.76** | **29** | P | | **Pn** | **21 14 24.2** | **-0.3** |
| **SISI** | **Saibi** | **3.02** | **142** | P | | **Pn** | **21 14 26.4** | **-1.7** |
| **PPI** | **Padang Panjang** | **3.52** | **116** | P | | **Pn** | **21 14 35.8** | **+0.9** |
| **BKNI** | **Bangkinang** | **3.88** | **101** | Pn | | **Pn** | **21 14 40.9** | **+0.9** |
| **IPM** | **Ipoh** | **5.08** | **48** | | | **Pn** | **21 14 57.5** | **+1.0** |
| **KULM** | **Kulim** | **5.41** | **39** | Pn | | **Pn** | **21 15 00.7** | **-0.2** |
| **MYKOM** | **Kota Tinggi** | **6.66** | **84** | Pn | | **Pn** | **21 15 17.6** | **-0.6** |
| **SBUM** | **Sibu** | **15.05** | **85** | Pn | | **Pn** | **21 17 14.1** | **+1.1** |
| **UBPT** | **Khong Chiam** | **16.30** | **30** | | | **Pn** | **21 17 28.5** | **-0.7** |
| UBPT | | | | IAmb | | IAmb | 21 17 33.1 | |
| | comp=Z,12nm,1.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **17.36** | **5** | P | | **P** | **21 17 43.0** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=195,slow=11,SNR=12 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **17.36** | **5** | | | **Pn** | **21 17 41.3** | **-1.3** |
| **H08S2** | **Diego Garcia H** | **26.14** | **250** | T | | T | 21 46 22.9 | |
| | baz=71,slow=75 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.15** | **250** | T | | T | 21 46 19.0 | |
| | baz=71,slow=75 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.16** | **250** | T | | T | 21 46 20.1 | |
| | baz=71,slow=75 | | | | | | | |
| **MEEK** | **Meekatharra** | **34.41** | **145** | P | | **P** | **21 20 27.9** | **+0.5** |
| **KSRS** | **Korea Array** | **45.94** | **34** | P | | **P** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,803nm,18.0s,baz=4.7,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **28.47** | **221** | IAmb | IAmb | 21 21 32.1 | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **28.85** | **249** | P | **P** | **21 21 28.1** | **-0.7** | |
| **WB2** | **Warramunga Arr** | **28.85** | **249** | P | P | 21 21 26.1 | -2.8 | |
| WB2 | | | | IAmb | IAmb | 21 21 39.8 | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.86** | **249** | P | **P** | **21 21 27.6** | **-1.4** | |
| | comp=Z,1.0nm,0.5s,baz=80,slow=8.5,SNR=2.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.86** | **249** | IAmb | IAmb | 21 21 35.2 | | |
| | comp=Z,0.1nm,0.9s | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.78** | **7** | T | T | 21 52 35.1 | | |
| | baz=188,slow=76 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.78** | **7** | T | T | 21 52 35.0 | | |
| | baz=188,slow=76 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.80** | **7** | T | T | 21 52 36.2 | | |
| | baz=188,slow=76 | | | | | | | |
| **ASAR** | **Alice Springs** | **30.28** | **242** | P | **P** | **21 21 40.4** | **-1.1** | |
| | comp=Z,2.0nm,0.6s,baz=68,slow=9.7,SNR=11 | | | | | | | |
| **GUMO** | **Guam** | **30.52** | **323** | LR | LR | 21 32 27.6 | | |
| | comp=Z,445nm,21.3s,baz=146,slow=34 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.01** | **7** | T | T | 21 54 02.5 | | |
| | baz=188,slow=76 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.01** | **7** | T | T | 21 54 06.5 | | |
| | baz=188,slow=76 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.02** | **7** | T | T | 21 54 09.7 | | |
| | baz=188,slow=76 | | | | | | | |
| **MSWZ** | **Moikau Station** | **31.93** | **162** | P | P | 21 21 53.1 | -2.7 | |
| **BBOO** | **Buckleboo** | **32.73** | **225** | P | P | 21 22 00.4 | -2.6 | |
| **DCZ** | **Deep Cove** | **34.29** | **175** | P | **P** | **21 22 15.7** | **-0.6** | |
| **ODZ** | **Otahua Downs** | **34.32** | **170** | P | **P** | **21 22 15.3** | **-1.3** | |
| ODZ | | | | IAmb | IAmb | 21 22 21.2 | | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **FORT** | **Forrest** | **37.71** | **234** | P | **P** | **21 22 46.1** | **+0.3** | |
| FORT | | | | IAmb | IAmb | 21 23 04.5 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.70** | **295** | P | **P** | **21 26 39.7** | **-0.8** | |
| | comp=Z,0.2nm,0.4s,baz=128,slow=5.1,SNR=1.6 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.88** | **325** | P | **P** | **21 27 21.6** | **-0.9** | |
| ULN | | | | IAmb | IAmb | 21 27 34.3 | | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **77.24** | **325** | P | **P** | **21 27 24.6** | **+0.1** | |
| | comp=Z,1.9nm,0.8s,baz=133,slow=6.1,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **77.24** | **325** | P | **P** | **21 27 23.7** | **-0.7** | |
| SONM | | | | IAmb | IAmb | 21 27 36.6 | | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **P18K** | **Big Mountain,** | **78.01** | **20** | P | **P** | **21 27 28.6** | **+0.2** | |
| P18K | | | | IAmb | IAmb | 21 27 44.1 | | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **BILL** | **Bilibino** | **79.11** | **1** | P | **P** | **21 27 34.7** | **+0.4** | |
| BILL | | | | IAmb | IAmb | 21 27 48.8 | | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.59** | **19** | P | **P** | **21 28 04.2** | **+1.0** | |
| | comp=Z,0.4nm,0.8s,baz=239,slow=3.0,SNR=3.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.25** | **50** | P | **P** | **21 28 24.8** | **+2.8** | |
| | comp=Z,0.8nm,0.8s,baz=226,slow=4.9,SNR=2.3 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **88.44** | **55** | LR | LR | 22 00 00.7 | | |
| | comp=Z,155nm,20.5s,baz=267,slow=30 | | | | | | | |

*NEIC **12** 21:16:26.8±2.0, 9°.56S±0°.04×122°.23E±0°.06, h79km±5km, mb4.0/22, Error ellipse: s-maj=8.5km s-min=5.9km az=81.0*
*DJA **12** 21:16:27.5±1.2, 10°.3S±3°.×12°.2E±°, h27km±13km, M4.5/16, mb4.6/16, MLv4.5/16, MwMwp5.3/1, Mwp5.5/1*
*IDC **12** 21:16:30.2±1.8, 9°.67S×122°.30E, h126km±20km, mb3.5/5, mb1 3.6/10, mb1mx3.3/52, mbtmp4.0/10, Error ellipse: s-maj=31.2km s-min=23.8km az=73.0*
**ISC 12 21:16:27.8±0.4, 9°.55S±0°.05×122°.18E±0°.05, h100km, n91, σ2s14/94, mb4.0/11, 1C, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **0.91** | **4** | Pn | **Pn** | **21 16 44.6** | **-2.7** |
| MMRI | | | | | **Sn** | **21 16 56.2** | **-5.6** |
| **MMRI** | **Maumere** | **0.91** | **4** | P | **Pn** | **21 16 44.6** | **-2.7** |
| MMRI | | | | S | **Sn** | **21 16 56.5** | **-5.3** |
| **MMRI** | **Maumere** | **0.91** | **4** | P | **Pn** | **21 16 44.8** | **-2.5** |
| **BATI** | **Baumata** | **1.60** | **114** | P | **Pn** | **21 16 56.8** | **+1.4** |
| | 458nm,0.3s,baz=273,slow=1.9,SNR=80 | | | | | | |
| BATI | | | | S | **Sn** | **21 17 18.4** | **+2.1** |
| | 145nm,0.3s,baz=251,slow=13,SNR=6.9 | | | | | | |
| **BATI** | **Baumata** | **1.60** | **114** | P | **Pn** | **21 16 56.8** | **+1.4** |
| **BASI** | **Baing, Sumba** | **1.71** | **247** | P | **Pn** | **21 16 57.6** | **+0.9** |
| **SOEI** | **Soe** | **2.07** | **96** | Pn | **Pn** | **21 17 03.0** | **+1.6** |
| **SOEI** | **Soe** | **2.07** | **96** | P | **Pn** | **21 17 03.3** | **+1.9** |
| **SOEI** | **Soe** | **2.07** | **96** | P | **Pn** | **21 17 03.9** | **+2.5** |
| **WBSI** | **Waikabubak, Su** | **2.75** | **268** | P | **Pn** | **21 17 09.3** | **-1.0** |
| **BSSI** | **Bau Bau, Buton** | **3.77** | **334** | P | **Pn** | **21 17 24.5** | **+0.6** |
| **BBSI** | **Bau Bau** | **4.05** | **6** | P | **Pn** | **21 17 29.9** | **+2.2** |
| **PLAI** | **Plampang** | **4.40** | **279** | P | **Pn** | **21 17 33.2** | **+0.7** |
| PLAI | | | | S | **Sn** | **21 18 21.0** | **-1.7** |
| **BKSI** | **Bulukumba** | **4.67** | **334** | P | **Pn** | **21 17 36.5** | **+0.5** |
| **BNSI** | **Bone** | **5.51** | **338** | P | **Pn** | **21 17 48.9** | **+1.4** |
| | 0.1nm36nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.04** | **337** | P | **Pn** | **21 17 57.0** | **+2.4** |
| | 0.1nm17µm20nm,0.6s | | | | | | |
| **IGBI** | **Denpasar** | **6.98** | **275** | P | **Pn** | **21 18 07.5** | **+0.1** |
| | 0.5nm100nm,1.0s | | | | | | |
| **SRBI** | **Singaraja** | **7.04** | **281** | P | **Pn** | **21 18 07.7** | **-0.5** |
| | 0.2nm32nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.00** | **277** | Pn | **Pn** | **21 18 19.0** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **8.00** | **277** | P | **Pn** | **21 18 19.0** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **8.00** | **277** | P | **Pn** | **21 18 19.7** | **-1.6** |
| **SANI** | **Sanana** | **8.36** | **27** | P | **Pn** | **21 18 28.2** | **+2.0** |
| | 46nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **8.36** | **27** | P | **Pn** | **21 18 28.2** | **+2.0** |
| **APSI** | **Ampana** | **8.60** | **356** | P | Pn | 21 18 33.6 | +4.2 |
| | 12nm,0.8s | | | | | | |
| **GMJI** | **Gumukmas** | **8.72** | **278** | P | **Pn** | **21 18 29.5** | **-1.6** |
| | 16nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **8.85** | **134** | | **Pn** | **21 18 31.7** | **-1.2** |
| **KNRA** | **Kununurra** | **8.85** | **134** | P | **Pn** | **21 18 31.5** | **-1.4** |
| **DRS** | **Darwin Rock St** | **9.03** | **109** | P | **Pn** | **21 18 35.3** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **9.14** | **159** | P | **Pn** | **21 18 37.4** | **+0.6** |
| | 0.9nm,0.3s,baz=3.0,slow=9.2,SNR=24 | | | | | | |
| FITZ | | | | S | **Sn** | **21 20 14.7** | **-3.3** |
| | 1.6nm,0.3s,baz=169,slow=5.7,SNR=8.9 | | | | | | |
| **SAUI** | **Saumlaki** | **9.15** | **81** | Pn | **Pn** | **21 18 37.4** | **+0.4** |
| **MTN** | **Manton Dam** | **9.38** | **111** | Pn | **Pn** | **21 18 39.2** | **-0.8** |
| **MTN** | **Manton Dam** | **9.38** | **111** | P | **Pn** | **21 18 38.4** | **-1.6** |
| **PWJI** | **Pagerwojo** | **10.37** | **278** | P | **Pn** | **21 18 53.2** | **-0.3** |
| | 20nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **10.57** | **108** | P | **Pn** | **21 18 55.1** | **-1.2** |
| **TOLI2** | **Tolitoli** | **10.68** | **352** | Pn | **Pn** | **21 18 54.3** | **-3.5** |
| **PCJI** | **Pacitan** | **10.95** | **276** | P | **Pn** | **21 19 00.5** | **-1.0** |
| | 29nm,1.4s | | | | | | |
| **TNTI** | **Ternate** | **11.48** | **27** | Pn | **Pn** | **21 19 07.4** | **-1.2** |
| **UGM** | **Wanagama** | **11.63** | **277** | Pn | **Pn** | **21 19 10.1** | **-0.6** |
| **UGM** | **Wanagama** | **11.63** | **277** | P | **Pn** | **21 19 10.3** | **-0.4** |
| **MBWA** | **Marble Bar** | **11.78** | **191** | Pn | **Pn** | **21 19 12.9** | **+0.2** |
| **MBWA** | **Marble Bar** | **11.78** | **191** | P | **Pn** | **21 19 11.6** | **-1.0** |
| **FAKI** | **Fak Fak** | **11.98** | **57** | Pn | **Pn** | **21 19 15.8** | **+0.6** |
| **FAKI** | **Fak Fak** | **11.98** | **57** | P | **Pn** | **21 19 17.1** | **+1.8** |
| | 48nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **11.98** | **57** | P | **Pn** | **21 19 16.3** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **12.17** | **190** | Pn | **Pn** | **21 19 18.0** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **12.17** | **190** | Pn | **Pn** | **21 19 17.9** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **12.17** | **190** | P | **Pn** | **21 19 18.9** | **+1.2** |
| **SWI** | **Sorong** | **12.49** | **47** | P | **Pn** | **21 19 24.5** | **+2.4** |
| | 20nm,0.8s | | | | | | |
| **SIJI** | **Sorong** | **12.49** | **47** | P | **Pn** | **21 19 22.9** | **+0.8** |
| | 1.9nm,0.3s,baz=163,slow=22,SNR=11 | | | | | | |
| **KPJI** | **Karang Pucung** | **13.29** | **279** | P | **Pn** | **21 19 34.2** | **+1.7** |
| **GIRL** | **Giralia** | **15.09** | **209** | | **P** | **21 19 57.3** | **-1.3** |
| **GIRL** | **Giralia** | **15.09** | **209** | P | **P** | **21 19 57.8** | **-0.7** |
| **SBUM** | **Sibu** | **15.51** | **320** | Pn | **Pn** | **21 20 01.0** | **0.0** |
| **WB0** | **Warramunga Arr** | **15.57** | **132** | Pn | **Pn** | **21 19 59.8** | **-2.1** |
| **WRA** | **Warramunga Arr** | **15.64** | **133** | P | **Pn** | **21 20 00.3** | **-2.4** |
| | 0.4nm,0.3s,baz=313,slow=13,SNR=20 | | | | | | |
| WRA | | | | S | Sn | 21 22 44.0 | -12 |
| | 0.8nm,0.3s,baz=126,slow=11,SNR=2.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **15.65** | **133** | Pn | **Pn** | **21 20 01.7** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 21 20 19.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **15.65** | **133** | | **Pn** | **21 20 01.1** | **-1.8** |
| WB2 | | | | IAmb | IAmb | 21 20 08.6 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.80** | **132** | Pn | **Pn** | **21 20 03.3** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 21 20 10.6 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **XMIS** | **Christmas Isla** | **16.30** | **265** | | **P** | **21 20 13.2** | **+1.0** |
| XMIS | | | | IAmb | IAmb | 21 20 20.0 | |
| | comp=Z,48nm,1.1s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRKA** | **Warakurna** | **16.47** | **160** | P | **P** | **21 20 16.9** | **+3.0** | |
| **KKM** | **Kota Kinabalu** | **16.59** | **339** | | **P** | **21 20 16.8** | **+1.5** | |
| KKM | | | | IAmb | IAmb | 21 20 25.7 | | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **17.96** | **143** | P | **Pn** | **21 20 29.5** | **-1.7** | |
| **ASAR** | **Alice Springs** | **17.96** | **143** | P | **Pn** | **21 20 29.5** | **-1.7** | |
| | comp=Z,0.2nm,0.3s,baz=323,slow=13,SNR=16 | | | | | | | |
| ASAR | | | | S | **S** | **21 23 41.0** | **-11** | |
| | comp=Z,0.2nm,0.3s,baz=310,slow=22,SNR=4.4 | | | | | | | |
| **JAY** | **Jayapura** | **19.69** | **70** | P | **Pn** | **21 20 49.5** | **-2.2** | |
| | comp=Z,0.9nm,0.3s,baz=204,slow=10.0,SNR=1.8 | | | | | | | |
| **QIS** | **Mount Isa** | **20.05** | **125** | P | **Pn** | **21 20 57.8** | **+1.9** | |
| **MORW** | **Morawa** | **20.26** | **196** | P | Pn | 21 20 57.8 | -0.3 | |
| MORW | | | | IAmb | IAmb | 21 20 59.8 | | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | **20.26** | **196** | P | Pn | 21 20 58.8 | +0.7 | |
| **OOD** | **Oodnadatta** | **22.17** | **147** | P | **P** | **21 21 18.8** | **+3.1** | |
| **MULG** | **Mulgathing** | **23.42** | **153** | P | **P** | **21 21 32.1** | **+4.0** | |
| **IPM** | **Ipoh** | **25.27** | **303** | P | **P** | **21 21 46.6** | **+1.7** | |
| IPM | | | | IAmb | IAmb | 21 21 50.8 | | |
| | comp=Z,8.8nm,1.0s | | | | | | | |
| **IPM** | **Ipoh** | **25.27** | **303** | P | **P** | **21 21 46.8** | **+1.8** | |
| **KULM** | **Kulim** | **26.03** | **304** | P | **P** | **21 21 52.5** | **+0.6** | |
| KULM | | | | IAmb | IAmb | 21 22 03.0 | | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **TWG** | **Pinlang** | **32.19** | **358** | P | **P** | **21 22 47.0** | **+0.7** | |
| **CMAR** | **Chiang Mai Arr** | **36.06** | **320** | P | **P** | **21 23 21.6** | **+1.7** | |
| | comp=Z,0.3nm,0.4s,baz=146,slow=8.3,SNR=4.6 | | | | | | | |
| **KOHI** | **KOHIMA** | **44.44** | **323** | *ex* | **P** | **21 24 27.0** | **-2.2** | |
| **MOKO** | **MOKOCHONG** | **44.65** | **324** | *ex* | **P** | **21 24 30.1** | **-0.7** | |
| **USA0B** | **Ussuriysk Arra** | **54.23** | **9** | P | **P** | **21 25 43.9** | **+0.8** | |
| **USRK** | **Ussuriysk Ar.** | **54.23** | **9** | P | **P** | **21 25 43.9** | **+0.7** | |
| | comp=Z,1.3nm,0.4s,baz=190,slow=6.7,SNR=8.3 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.23** | **9** | P | **P** | **21 25 44.3** | **+1.2** | |
| **CASY** | **Casey** | **57.22** | **186** | P | **P** | **21 26 02.2** | **-2.0** | |
| **SONM** | **Songino Array** | **58.82** | **348** | P | **P** | **21 26 16.3** | **+0.4** | |
| | comp=Z,0.3nm,0.6s,baz=152,slow=4.3,SNR=3.6 | | | | | | | |
| **MK31** | **Makanchi Array** | **66.41** | **331** | P | **P** | **21 27 07.8** | **+1.6** | |
| **MKAR** | **Makanchi Array** | **66.41** | **331** | P | **P** | **21 27 07.1** | **+0.9** | |
| | comp=Z,0.7nm,0.5s,baz=144,slow=7.8,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.41** | **331** | P | **P** | **21 27 07.4** | **+1.2** | |
| **ZAA0** | **Zalesovo Array** | **70.70** | **338** | P | **P** | **21 27 33.6** | **+0.9** | |
| ZAA0 | | | | IAmb | IAmb | 21 27 35.9 | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.70** | **338** | P | **P** | **21 27 32.2** | **-0.5** | |
| | comp=Z,1.2nm,0.4s,baz=134,slow=4.6,SNR=9.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.70** | **338** | P | **P** | **21 27 33.8** | **+1.1** | |
| **KURK** | **Kurchatov** | **70.90** | **332** | P | **P** | **21 27 35.0** | **+1.0** | |
| KURK | | | | IAmb | IAmb | 21 27 35.3 | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **70.98** | **172** | P | **P** | **21 27 34.7** | **+0.6** | |
| **SOCY** | **Socotra** | **71.11** | **286** | P | **P** | **21 27 37.0** | **+0.9** | |
| SOCY | | | | IAmb | IAmb | 21 27 45.7 | | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **RAYN** | **Ar Rayn** | **81.76** | **296** | P | **P** | **21 28 38.7** | **+2.6** | |
| RAYN | | | | IAmb | IAmb | 21 28 39.2 | | |
| | comp=Z,1.8nm,0.7s | | | | | | | |

*IDC **12** 21:41:54.8±1.2, 19°.63S×68°.92W, h114km±10km, mb3.8/2, mb1 3.8/6, mb1mx3.4/41, mbtmp4.0/6, MS3.7/1, Ms1 3.7/1, ms1mx2.7/61, Error ellipse: s-maj=32.3km s-min=8.7km az=97.0*
*GUC **12** 21:41:54.4±0.6, 19°.52S×69°.26W, h95km±2km, ML3.9*
**ISC 12 21:41:52.8±0.8, 19°.55S±0°.04×69°.25W±0°.07, h102km±6km, n27, σ1s16/41, 2C-7D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **0.13** | **154** | *i* P | **Pn** | **21 42 08.3** | **+0.5** |
| GO01 | | | | *i* S | **Sn** | **21 42 19.5** | **+0.6** |
| GO01 | | | | IAML | | 21 42 21.3 | |
| | comp=E,9µm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **0.43** | **241** | *i* P | **Pn** | **21 42 09.2** | **+0.6** |
| PB11 | | | | *e*S | **Sn** | **21 42 19.6** | **-0.8** |
| PB11 | | | | IAML | | 21 42 21.9 | |
| | comp=E,7µm,0.4s | | | | | | |
| **PB08** | **IPOC Station P** | **0.59** | **171** | *i* P | **Pn** | **21 42 10.9** | **+0.9** |
| PB08 | | | | *i* S | **Sn** | **21 42 23.7** | **+0.9** |
| PB08 | | | | IAML | | 21 42 25.7 | |
| | comp=N,3µm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **0.94** | **219** | *i* P | **Pn** | **21 42 13.3** | **+0.4** |
| HMBC | | | | *i* S | **Sn** | **21 42 28.4** | **+0.4** |
| HMBC | | | | IAML | | 21 42 33.2 | |
| | comp=E,3µm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.09** | **229** | *e*P | **Pn** | **21 42 15.1** | **+0.7** |
| TA02 | | | | *i* S | **Sn** | **21 42 31.0** | **+0.3** |
| TA02 | | | | IAML | | 21 42 32.1 | |
| | comp=N,9µm,0.1s | | | | | | |
| **PB16** | **IPOC Station P** | **1.23** | **349** | *i* P | **Pn** | **21 42 18.3** | **+1.6** |
| PB16 | | | | *e*S | **Sn** | **21 42 35.4** | **+0.9** |
| **TA01** | **Diego Aracena** | **1.33** | **221** | *i* P | **Pn** | **21 42 17.6** | **+0.5** |
| TA01 | | | | *i* S | **Sn** | **21 42 35.8** | **+0.1** |
| TA01 | | | | IAML | | 21 42 39.8 | |
| | comp=N,2µm,0.2s | | | | | | |
| **PB12** | **IPOC Station P** | **1.38** | **312** | *i* P | **Pn** | **21 42 18.2** | **+0.4** |
| PB12 | | | | *e*S | **Sn** | **21 42 36.4** | **-0.4** |
| **PB01** | **IPOC Station P** | **1.50** | **188** | *e*P | **Pn** | **21 42 20.3** | **+0.9** |
| PB01 | | | | *e*S | **Sn** | **21 42 40.4** | **+1.0** |
| PB01 | | | | IAML | | 21 42 43.4 | |
| | comp=N,3µm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.52** | **214** | *i* P | **Pn** | **21 42 20.0** | **+0.5** |
| PATCX | | | | *e*S | **Sn** | **21 42 40.1** | **+0.3** |
| PATCX | | | | IAML | | 21 42 47.5 | |
| | comp=E,3µm,0.4s | | | | | | |
| **AP01** | **Chacalluta** | **1.56** | **319** | *e*P | **Pn** | **21 42 20.6** | **+0.6** |
| AP01 | | | | *e*S | **Sn** | **21 42 40.5** | **-0.1** |
| AP01 | | | | IAML | | 21 42 46.9 | |
| | comp=E,2µm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **1.86** | **199** | *e*P | **Pn** | **21 42 24.6** | **+0.8** |
| PB02 | | | | *e*S | **Sn** | **21 42 47.3** | **-0.1** |
| PB02 | | | | IAML | | 21 42 55.4 | |
| | comp=E,2µm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.23** | **180** | *e*P | **Pn** | **21 42 30.3** | **+1.6** |
| PB09 | | | | IAML | | 21 43 12.8 | |
| | comp=E,398nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.24** | **195** | *e*P | **Pn** | **21 42 29.9** | **+1.0** |
| PB07 | | | | *e*S | **Sn** | **21 42 57.1** | **+0.7** |
| PB07 | | | | IAML | | 21 43 05.9 | |
| | comp=E,1µm,0.4s | | | | | | |
| **PB03** | **IPOC Station P** | **2.53** | **191** | *e*P | **Pn** | **21 42 33.9** | **+1.4** |
| PB03 | | | | *e*S | **Sn** | **21 43 02.9** | **0.0** |
| PB03 | | | | IAML | | 21 43 11.7 | |
| | comp=E,444nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.89** | **197** | *e*P | **Pn** | **21 42 38.5** | **+1.1** |
| PB04 | | | | *e*S | **Sn** | **21 43 07.5** | **-4.1** |
| PB04 | | | | IAML | | 21 43 36.5 | |
| | comp=E,426nm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **3.06** | **174** | P | **Pn** | **21 42 41.6** | **+1.9** |
| | comp=E,5.7nm,0.3s,baz=31,slow=11,SNR=57 | | | | | | |
| LVC | | | | S | **Sn** | **21 43 16.3** | **+0.4** |
| | comp=E,27nm,0.3s,baz=83,slow=16,SNR=10 | | | | | | |
| **PB06** | **IPOC Station P** | **3.15** | **185** | *e*P | **Pn** | **21 42 42.1** | **+1.3** |
| PB06 | | | | IAML | | 21 43 27.7 | |
| | comp=E,487nm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **3.42** | **18** | P | Pn | 21 42 47.8 | +3.0 |
| | comp=E,1.5nm,0.3s,baz=190,slow=7.4,SNR=25 | | | | | | |
| LPAZ | | | | S | Sn | 21 43 27.4 | +2.6 |
| | comp=E,0.6nm,0.3s,baz=7.4,slow=15,SNR=4.9 | | | | | | |
| **SIV** | **San Ignacio** | **8.56** | **67** | P | **Pn** | **21 43 52.1** | **-1.9** |
| | comp=E,2.5nm,0.3s,baz=256,slow=10.0,SNR=42 | | | | | | |
| **CPUP** | **Villa Florida** | **12.89** | **124** | P | **Pn** | **21 44 50.3** | **-1.8** |
| | comp=E,0.3nm,0.3s,baz=273,slow=13,SNR=3.3 | | | | | | |
| **SDV** | **Santo Domingo** | **28.29** | **357** | LR | LR | 22 00 15.1 | |
| | comp=E,156nm,21.7s,baz=281,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.02** | **71** | P | **P** | **21 53 34.1** | **-1.0** |
| | comp=E,0.7nm,0.4s,baz=251,slow=5.0,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.25** | **341** | P | **P** | **21 54 37.5** | **+0.7** |
| | comp=E,1.1nm,0.7s,baz=133,slow=5.0,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.44** | **212** | PKP | **PKPdf** | **22 01 00.5** | **+0.6** |
| | comp=E,0.2nm,0.6s,baz=151,slow=1.6,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **144.23** | **34** | PKP | **PKPdf** | **22 01 17.0** | **+0.2** |
| | comp=E,0.2nm,0.8s,baz=349,slow=2.9,SNR=1.8 | | | | | | |
| **SONM** | **Songino Array** | **151.57** | **6** | PKPbc | **PKiKP** | **22 01 36.3** | **+0.7** |
| | comp=E,0.9nm,0.5s,baz=323,slow=1.8,SNR=9.4 | | | | | | |

*SJA **12** 21:43:13.5±1.6, 31°.72S×71°.49W, h41km±53km, ML4.3, MW4.0*
*GUC **12** 21:43:15.3±0.7, 31°.72S×71°.31W, h55km±5km, ML4.3*
*NEIC **12** 21:43:15.8±1.4, 31°.71S±0°.03×71°.39W±0°.06, h52km±5km, Error ellipse: s-maj=7.1km s-min=4.0km az=89.0*
*IDC **12** 21:43:15.8±0.6, 31°.68S×71°.17W, h53km±5km, mb4.0/12, mb1 4.1/17, mb1mx4.0/41, mbtmp4.3/17, Error ellipse: s-maj=18.2km s-min=11.5km az=90.0*
*NEIC **12** 21:43:15.8, 31°.71S×71°.38W, h57km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.23; $M_{\theta\theta}$0.40; $M_{\phi\phi}$-2.63; $M_{r\theta}$0.71; $M_{r\phi}$0.35; $M_{\theta\phi}$-1.91; Fault plane solution: $M_0$3.21000×$10^{15}$ NP1:ϕs5.78000°, δ26.55000°, λ109.99000°. NP2:ϕs163.64000°, δ65.16000°, λ80.30000°. Principal axes: T 3.0101, Plg68.0000°, Azm55.0000°; N 0.3646, Plg9.0000°, Azm168.0000°; P -3.3747, Plg20.0000°, Azm261.0000°;*
*VAO **12** 21:43:16.8±0.4, 31°.82S×71°.22W, h77km±2km, mb4.4*
**ISC 12 21:43:15.1±0.4, 31°.70S±0°.03×71°.39W±0°.04, h52km±3km, h52km:pP-P, n184, σ1s26/210, mb4.4/20, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO02** | **Combarbal** | **0.59** | **34** | | **Pn** | **21 43 28.1** | **+0.4** |
| CO02 | | | | Sn | **Sn** | **21 43 37.1** | **+0.3** |
| **CO02** | **Combarbal** | **0.59** | **34** | *e*P | **Pn** | **21 43 28.1** | **+0.4** |
| CO02 | | | | *i* S | **Sn** | **21 43 37.2** | **+0.4** |
| **CO02** | **Combarbal** | **0.59** | **34** | *i* P | **Pn** | **21 43 28.0** | **+0.2** |
| CO02 | | | | *e*S | **Sn** | **21 43 37.1** | **+0.3** |
| CO02 | | | | IAML | | 21 43 39.4 | |
| | comp=Z,28µm,0.4s | | | | | | |
| **VA06** | **Catapilco** | **0.86** | **175** | | **Pn** | **21 43 31.2** | **+0.2** |
| VA06 | | | | Sn | **Sn** | **21 43 43.3** | **+0.6** |
| **VA06** | **Catapilco** | **0.86** | **175** | *e*P | **Pn** | **21 43 31.2** | **+0.2** |
| VA06 | | | | *i* S | **Sn** | **21 43 43.6** | **+0.9** |
| **CO06** | **Fray Jorge** | **1.04** | **348** | | **Pn** | **21 43 34.4** | **+0.9** |
| CO06 | | | | Sn | **Sn** | **21 43 47.2** | **+0.2** |
| **CO06** | **Fray Jorge** | **1.04** | **348** | *e*P | **Pn** | **21 43 34.5** | **+0.9** |
| CO06 | | | | *i* S | **Sn** | **21 43 46.9** | **-0.2** |
| CO06 | | | | IAML | | 21 43 52.3 | |
| | comp=N,8µm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **1.05** | **35** | | **Pn** | **21 43 34.2** | **+0.6** |
| CO03 | | | | Sn | **Sn** | **21 43 48.1** | **+0.8** |
| **CO03** | **El Pedregal** | **1.05** | **35** | *e*P | **Pn** | **21 43 34.1** | **+0.6** |
| CO03 | | | | *i* S | **Sn** | **21 43 48.0** | **+0.8** |
| **CO03** | **El Pedregal** | **1.05** | **35** | *i* P | **Pn** | **21 43 34.0** | **+0.4** |
| CO03 | | | | *e*S | **Sn** | **21 43 48.2** | **+1.0** |
| CO03 | | | | IAML | | 21 43 48.8 | |
| | comp=Z,7µm,0.1s | | | | | | |
| **VA03** | **San Esteban** | **1.28** | **146** | | **Pn** | **21 43 36.6** | **-0.1** |
| VA03 | | | | Sn | **Sn** | **21 43 53.0** | **+0.3** |
| **VA03** | **San Esteban** | **1.28** | **146** | *e*P | **Pn** | **21 43 36.7** | **0.0** |
| VA03 | | | | *i* S | **Sn** | **21 43 52.7** | **-0.1** |
| VA03 | | | | IAML | | 21 43 55.4 | |
| | comp=E,12µm,0.1s | | | | | | |
| **VA03** | **San Esteban** | **1.28** | **146** | *i* P | **Pn** | **21 43 36.0** | **-0.7** |
| VA03 | | | | *e*S | **Sn** | **21 43 53.9** | **+1.1** |
| VA03 | | | | IAML | | 21 43 55.1 | |
| | comp=Z,5µm,0.7s | | | | | | |
| **ROCH** | **El Roble** | **1.31** | **166** | *e*P | **Pn** | **21 43 37.6** | **+0.3** |
| ROCH | | | | *i* S | **Sn** | **21 43 54.0** | **+0.2** |
| ROCH | | | | *i* S | | 21 43 54.7 | |
| ROCH | | | | IAML | | 21 43 54.8 | |
| | comp=N,10µm,0.3s | | | | | | |
| ROCH | | | | IAML | | 21 43 57.9 | |
| | comp=N,13µm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **1.31** | **166** | | **Pn** | **21 43 36.0** | **-1.3** |
| ROC1 | | | | Sn | **Sn** | **21 43 54.0** | **+0.1** |
| **ROC1** | **El Roble** | **1.31** | **166** | *i* P | **Pn** | **21 43 36.0** | **-1.3** |
| ROC1 | | | | *e*S | **Sn** | **21 43 54.3** | **+0.5** |
| **VA01** | **Torpederas** | **1.34** | **189** | | **Pn** | **21 43 37.8** | **+0.3** |
| VA01 | | | | Sn | **Sn** | **21 43 54.7** | **+0.6** |
| **VA01** | **Torpederas** | **1.34** | **189** | *e*P | **Pn** | **21 43 37.9** | **+0.6** |
| VA01 | | | | *i* S

comp=Z,1μm,0.5s
**AVFE Valle Fertil 3.53 74** *i* P **Pn 21 44 09.0 +1.6**
AVFE IAML 21 44 58.2
comp=Z,762nm,0.7s
**RFA San Rafael 3.92 142** *i* P **Pn 21 44 14.0 +1.2**
RFA IAML 21 45 23.9
comp=Z,141nm,0.9s
**VCA Vinchina 4.04 44** *i* P **Pn 21 44 18.0 +3.4**
VCA IAML 21 45 24.3 -1.1
comp=Z,1μm,0.6s
**ML02 Panimavida 4.05 180 Pn 21 44 15.6 +1.0**
**ACHE Chepes 4.07 84** *i* P **Pn 21 44 16.0 +1.0**
**GO03 Copiap 4.21 14** Pn **Pn 21 44 18.2 +1.3**
**GO03 Copiap 4.21 14** *i* P **Pn 21 44 18.0 +1.1**
**APLL PUNTA DE LOS L 4.37 74** *i* P **Pn 21 44 20.0 +1.0**
APLL IAML 21 45 18.3
comp=Z,5μm,3.1s
**MRA San Martin 4.87 100** *i* P **Pn 21 44 26.0 +0.1**
MRA IAML 21 45 28.8
comp=Z,468nm,0.6s
**AC02 Maricunga 5.23 23** Pn **Pn 21 44 32.2 +0.9**
**AC02 Maricunga 5.23 23** *i* P **Pn 21 44 34.0 +2.7**
AC02 IAML 21 46 05.2
comp=Z,282nm,0.6s
**H03N1 Juan Fernandez 6.58 253** T T 21 51 30.2
baz=79,slow=73
**H03N3 Juan Fernandez 6.60 253** T T 21 51 33.7
baz=79,slow=73
**H03N2 Juan Fernandez 6.60 253** T T 21 51 26.5
baz=79,slow=73
**LC01 Cunco 7.19 183** Pn **Pn 21 44 58.5 +0.9**
**LC01 Cunco 7.19 183** *i* P **Pn 21 44 58.0 +0.4**
LC01 IAML 21 47 02.2
comp=Z,20nm,0.7s
**FSA Cafayete 7.31 42** *i* P **Pn 21 45 00.0 +0.5**
**LR04 Corral 8.33 191** Pn **Pn 21 45 12.6 -0.5**
**PLCA Paso Flores 9.04 176** P **Pn 21 45 24.4 +1.4**
comp=Z,0.3nm,0.3s,baz=328,slow=5.8,SNR=3.3
**PLCA Paso Flores 9.04 176** *eP* **Pn 21 45 23.1 +0.1**
**LL04 Puerto Octay 9.23 185** Pn **Pn 21 45 25.7 +0.2**
**LVC Limon Verde 9.32 14** P **Pn 21 45 26.9 -0.2**
baz=175,slow=12,SNR=0.7
LVC S **Sn 21 47 09.5 -1.2**
comp=Z,0.9nm,0.3s,baz=31,slow=12,SNR=1.7
**LVC Limon Verde 9.32 14** *eP* **Pn 21 45 29.6 +2.5**
**ITQB Itaqui 12.87 85** Pn **Pn 21 46 15.0 -0.2**
**ITQB Itaqui 12.87 85** *eP* **Pn 21 46 14.2 -1.1**
**CPUP Villa Florida 13.41 70** P **Pn 21 46 20.6 -2.1**
comp=Z,0.4nm,0.3s,baz=235,slow=13,SNR=5.6
CPUP S **Sn 21 48 47.3 -2.9**
comp=Z,0.2nm,0.3s,baz=179,slow=14,SNR=3.0
**CPUP Villa Florida 13.41 70** Pn **Pn 21 46 22.1 -0.6**
**PLTB Pedras Altas 15.14 95** Pn **Pn 21 46 43.1 -2.6**
**PLTB Pedras Altas 15.14 95** *eP* **Pn 21 46 43.6 -2.1**
**CPSB Cacapava Do Su 15.44 90** *eP* **Pn 21 46 47.3 -2.3**
**LPAZ La Paz 15.63 12** P **Pn 21 46 53.2 +0.6**
comp=Z,0.7nm,0.3s,baz=188,slow=6.8,SNR=8.8
**LPAZ La Paz 15.63 12 Pn 21 46 53.9 +1.3**
**LPAZ La Paz 15.63 12** *eP* **Pn 21 46 53.7 +1.1**
**ITAB Concordia 17.34 80** P **P 21 47 14.0 -0.3**
**ITAB Concordia 17.34 80** *eP* **Pn 21 47 13.3 -0.2**
**AQDB Aquidauana 17.96 55** P **Pn 21 47 19.4 -1.8**
**AQDB Aquidauana 17.96 55** *eP* **Pn 21 47 20.4 -0.8**
**SIV San Ignacio 18.24 33** P **P 21 47 24.0 -0.4**
comp=Z,1.5nm,0.3s,baz=202,slow=10,SNR=29
**PTGB Pitanga 18.38 73** *eP* **P 21 47 25.5 -0.4**
**TER01 Tubaro-SC 19.51 86** *eP* **P 21 47 35.6 -2.4**
**PTLB Pontes e Lacer 19.66 37** *eP* **P 21 47 40.0 +0.2**
**PP1B Ponte de Pedra 20.51 51** *eP* **P 21 47 49.1 +0.1**
**PCMB Pacaembu 20.57 66** *eP* **P 21 47 48.9 -0.8**
**TIJ01 Guaruva-PR 20.65 78** *eP* **P 21 47 49.4 -1.3**
**SALV Santo Antonio 21.25 46** *eP* **P 21 47 56.4 -0.7**
**VILB Vilhena 21.31 31** *eP* **P 21 47 56.6 -1.0**
**MG03 Isla Dawson 22.15 179** P **P 21 48 07.2 +1.0**
**EFI East Falkland 22.23 158** P **P 21 48 07.4 +0.2**
EFI IAmb IAmb 21 48 14.5
comp=Z,22nm,1.1s
**ETMB Extrema 22.30 14** *eP* **P 21 48 08.8 +0.6**
**ITRB Iturama 22.35 63** *eP* **P 21 48 07.4 -1.4**
**USHA Ushuaia 23.22 176** P **P 21 48 18.5 +1.1**
comp=Z,13nm,0.8s,baz=81,slow=1.9,SNR=4.9
**VAO Valinhos 23.32 74** *eP* **P 21 48 17.6 -1.2**
**ARAG Araguaiana, MT 23.91 53** *eP* **P 21 48 22.9 -1.4**
**PDRB Porto dos Gac 24.14 37** *eP* **P 21 48 26.1 -0.3**
**IPMB Ipameri, GO 25.01 62** *eP* **P 21 48 32.8 -1.6**
**CLDB Colider 25.25 38** *eP* **P 21 48 36.1 -0.3**
**BDFB Brasilia 26.63 59** P **P 21 48 48.0 -1.1**
comp=Z,11nm,0.9s,baz=232,slow=7.1,SNR=13
**BDFB Brasilia 26.63 59** P **P 21 48 48.1 -0.9**
BDFB IAmb IAmb 21 48 49.6
comp=Z,14nm,1.0s
**DIAM Diamantina, MG 28.35 69** *eP* **P 21 49 03.2 -1.3**
**JANB Januaria 29.75 62** *eP* **P 21 49 16.0 -0.8**
**MACA Manacapuru-AM 30.12 22** *eP* **P 21 49 19.9 -0.1**
**SJMB Sao Joao De Ma 30.13 72** *eP* **P 21 49 18.9 -1.2**
**SDBA SAO DESIDERIO 31.02 58** *eP* **P 21 49 26.9 -1.2**
**SMTB Santa Maria do 31.71 49** *eP* **P 21 49 33.5 -0.6**
**PRPB Parauapebas 32.44 43** *eP* **P 21 49 39.4 -1.0**
**PTGA Pitinga 32.64 22** P **P 21 49 41.4 -0.8**
comp=Z,2.4nm,0.4s,baz=185,slow=7.4,SNR=7.2
**GDU01 Guandu, BA 34.19 66** *eP* **P 21 49 54.4 -1.4**
**BOAV Boa Vista 35.45 19** *eP* **P 21 50 06.1 -0.4**
**NBPN Ponto Novo - B 35.50 61** *eP* **P 21 50 05.4 -1.7**
NBPN *ep*P **sP 21 50 24.4 -2.6**
**MCPB Macapa, AP 36.14 34** *eP* **P 21 50 11.7 -0.8**
MCPB *ep*P **sP 21 50 30.3 -2.1**
**NBLA Lagarto - SE 37.23 64** *eP* **P 21 50 19.5 -2.3**
**NBMA Muriti-CE 38.86 58** *eP* **P 21 50 34.9 -0.7**
**NBPS Pedro II - PI 39.08 52** *eP* **P 21 50 36.1 -1.3**
**NBAN Anadia - AL 39.22 64** *eP* **P 21 50 37.1 -1.4**
**NBPB Pedra_Branca-C 39.53 55** *eP* **P 21 50 38.2 -2.9**
**NBCA Caruaru-PE 40.33 62** *eP* **P 21 50 46.3 -1.6**
**SDV Santo Domingo 40.36 1** *eP* **P 21 50 48.1 0.0**
SDV *ep*P **pP 21 51 05.5 +3.6**
**BAUV El Baul 40.54 5** P **P 21 50 48.0 -1.4**
BAUV IAmb IAmb 21 50 51.1
comp=Z,14nm,1.1s
**CRPR Cabo Rojo, PR 49.59 5** P **P 21 52 00.4 -0.7**
**GCPR Guaynabo City 49.98 7** P **P 21 52 06.3 +2.1**
**PCDR Punta Cana, DR 50.01 4** P **P 21 52 05.9 +1.6**
**AGPR Aguadilla, PR 50.05 5** P **P 21 52 06.4 +1.8**
**SNAA Sanae 53.51 159** P **P 21 52 29.9 -0.1**
comp=Z,5.8nm,1.0s,baz=257,slow=8.3,SNR=5.2
SNAA pP **pP 21 52 44.3 0.0**
comp=Z,3.5nm,0.8s,baz=256,slow=8.3,SNR=2.4
**SNAA Sanae 53.51 159** P **P 21 52 29.9 -0.1**
**SOR Soroa 55.31 347** P **P 21 52 44.0 +0.5**
**QSPA South Pole Qui 58.53 180** P **P 21 53 06.9 +0.9**
comp=Z,2.2nm,0.6s,baz=168,slow=1.0,SNR=13
QSPA pP **pP 21 53 21.1 +0.7**
comp=Z,5.4nm,0.9s,baz=136,slow=1.5,SNR=7.1
**QSPA South Pole Qui 58.53 180 P 21 53 07.1 +1.1**
QSPA IAmb IAmb 21 53 22.5
comp=Z,3.9nm,0.8s
**TXAR Lajitas Array 68.01 330** P **P 21 54 10.4 +1.4**
comp=Z,1.5nm,0.8s,baz=149,slow=8.5,SNR=16
TXAR pP **pP 21 54 24.7 +1.1**
comp=Z,0.6nm,0.6s,baz=151,slow=9.1,SNR=5.4
TXAR sP **sP 21 54 30.8 +1.4**
comp=Z,0.4nm,0.6s,baz=150,slow=8.9,SNR=2.8
**TX31 Lajitas Ar. Si 68.01 330** P **P 21 54 10.1 +1.0**
**TX32 Lajitas Array 68.01 330** P **P 21 54 09.8 +0.8**
TX32 IAmb IAmb 21 54 11.5
comp=Z,3.8nm,1.0s
**LCAR Lake Charles 69.92 343** P **P 21 54 20.8 +0.2**
**MNTX Cornudas Mount 70.79 330** P **P 21 54 26.6 +0.5**
**HHAR Hobbs 70.85 341** P **P 21 54 26.5 +0.2**
HHAR IAmb IAmb 21 54 27.9
comp=Z,10nm,1.2s
**R40A Maddies Statio 72.30 343** P **P 21 54 35.7 +0.7**
**DBIC Dimbokro 73.93 71** P **P 21 54 44.4 -0.7**
comp=Z,3.1nm,0.7s,baz=300,slow=5.3,SNR=3.5
**DBIC Dimbokro 73.93 71** IAmb IAmb 21 54 45.4
comp=Z,6.8nm,0.9s
**ECSD EROS Data Cent 78.54 342** P **P 21 55 11.2 +0.6**
ECSD IAmb IAmb 21 55 12.3
comp=Z,6.8nm,0.8s
**KOWA Kowa 79.19 66** P **P 21 55 15.0 +0.2**
KOWA IAmb IAmb 21 55 15.7
comp=Z,5.6nm,0.7s
**P18A Preston Nutter 79.61 330** P **P 21 55 18.9 +2.0**
P18A IAmb IAmb 21 55 19.3
comp=Z,4.3nm,1.0s
**BOSA Boshof 80.65 118** P **P 21 55 22.7 -0.2**
comp=Z,1.4nm,0.7s,baz=267,slow=5.8,SNR=4.0
**PDAR Pinedale Array 81.97 333** P **P 21 55 29.6 +0.1**
comp=Z,0.3nm,0.6s,baz=134,slow=5.2,SNR=2.8
**NVAR Mina Array Bea 82.32 325** P **P 21 55 32.9 +1.5**
comp=Z,0.8nm,0.7s,baz=163,slow=5.8,SNR=8.7
NVAR pP **pP 21 55 48.3 +1.9**
comp=Z,0.1nm,0.4s,baz=156,slow=7.5,SNR=3.9
**ELK Elko 82.70 328** P **P 21 55 34.2 +0.9**
comp=Z,1.2nm,0.7s,baz=250,slow=4.1,SNR=5.1
**LBTB Lobatse 82.77 115** P **P 21 55 33.6 -0.5**
LBTB IAmb IAmb 21 55 34.2
comp=Z,3.7nm,0.8s
**TORD Torodi Ar. Bea 82.91 70** P **P 21 55 34.3 -0.4**
comp=Z,5.2nm,0.8s,baz=263,slow=4.9,SNR=28
**TORD Torodi Ar. Bea 82.91 70** P **P 21 55 34.8 +0.1**
TORD IAmb IAmb 21 55 35.4
comp=Z,5.7nm,0.8s
**YKA Yellowknife Ar 100.06 341** P **Pdif 21 56 54.2 +0.1**
comp=Z,0.2nm,0.4s,baz=144,slow=5.0,SNR=3.8
**ASAR Alice Springs 119.86 207** PKP **PKPdf 22 01 59.4 -0.8**
comp=Z,0.4nm,0.4s,baz=145,slow=1.8,SNR=6.6
**BRTR Keskin Array B 120.22 60** PKP **PKPdf 22 01 59.7 -0.7**
comp=Z,0.3nm,0.6s,baz=225,slow=1.8,SNR=2.7
**AKASG Malin Array Be 120.22 46** PKP **PKPdf 22 01 58.9 -0.9**
comp=Z,0.2nm,0.3s,baz=299,slow=1.9,SNR=1.7
**WRA Warramunga Arr 123.03 209** PKP **PKPdf 22 02 06.0 -0.4**
comp=Z,1.1nm,0.5s,baz=160,slow=1.7,SNR=31
**H11S2 WAKE ISLAND Hyl 126.33 270** T T 00 21 12.5
baz=117,slow=75
**H11S1 WAKE ISLAND Hyl 126.34 270** T T 00 21 18.2
baz=117,slow=75
**H11S3 WAKE ISLAND Hyl 126.34 270** T T 00 21 17.4
baz=117,slow=75
**H11N3 WAKE ISLAND Hyl 126.68 272** T T 00 21 32.0
baz=116,slow=75
**H11N1 WAKE ISLAND Hyl 126.70 272** T T 00 21 34.7
baz=116,slow=75
**H11N2 WAKE ISLAND Hyl 126.70 272** T T 00 21 33.3
baz=116,slow=75
**ZALV Zalesovo Beam 151.98 31** PKPbc **PKPbc 22 03 04.1 +0.2**
comp=Z,5.4nm,0.4s,baz=310,slow=3.1,SNR=36
ZALV PKPab **PKPab 22 03 13.9 +0.5**
comp=Z,2.0nm,0.7s,baz=294,slow=4.6,SNR=6.1
**KSH Kashi 152.45 64** PKPbc **PKPbc 22 03 05.9 +0.3**
KSH pPKP pPKPdf 22 03 15.8 +1.3
**MKAR Makanchi Array 154.81 46** PKPbc **PKPbc 22 03 10.3 -0.1**
comp=Z,0.7nm,0.6s,baz=288,slow=1.8,SNR=8.1
MKAR PKPab **PKPab 22 03 25.9 +0.3**
comp=Z,2.1nm,0.7s,baz=290,slow=3.5,SNR=19
**SONM Songino Array 163.80 5** PKPab **PKPab 22 04 05.1 +0.5**
comp=Z,0.5nm,0.9s,baz=331,slow=1.8,SNR=3.8

*IDC* ***12*** *22:05:05.0±1.8, 7.°02S×129.°65E,h154km±17km, mb3.7/5, mb1 3.9/10,mb1mx3.5/30,mbtmp4.3/10, Error ellipse: s-maj=28.9km s-min=14.4km az=76.0*
*DJA* ***12*** *22:05:06.2±0.3, 7.°S±3.°×13.°0E±.°,h145km±9km, M4.5/8, mb4.3/6,mB5.0/5,MLv4.7/8,Mw(mB)4.3/5*
*NEIC* ***12*** *22:05:07.2±2.5, 6.°94S±0.°06×129.°69E±0.°07,h171km±7km, mb4.2/27, Error ellipse: s-maj=9.5km s-min=8.5km az=93.0*
**ISC 12 22:05:04.6±0.4,6.°96S±0.°04×129.°61E±0.°05,h150km,n72,**
**σ1§72/80,mb4.1/15,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **SAUI** | **Saumlaki** | **1.96** | **121** | Pn | | **Pn** | **22 05 42.3** | **+3.0** |
| SAUI | | | | Sn | | **Sn** | **22 06 07.7** | **+1.8** |
| **SAUI** | **Saumlaki** | **1.96** | **121** | P | | **Pn** | **22 05 42.6** | **+3.3** |
| **SAUI** | **Saumlaki** | **1.96** | **121** | P | | **Pn** | **22 05 43.2** | **+3.9** |
| **FAKI** | **Fak Fak** | **4.80** | **33** | Pn | | **Pn** | **22 06 16.2** | **+0.8** |
| FAKI | | | | | | **Sn** | **22 07 09.5** | **-1.1** |
| **FAKI** | **Fak Fak** | **4.80** | **33** | P | | **Pn** | **22 06 15.6** | **+0.2** |
| FAKI | | | | S | | **Sn** | **22 07 08.8** | **-1.8** |
| **DRS** | **Darwin Rock St** | **5.58** | **167** | P | | **Pn** | **22 06 27.6** | **+1.8** |
| **SOEI** | **Soe** | **5.97** | **242** | Pn | | **Pn** | **22 06 33.8** | **+2.8** |
| SOEI | | | | | | **Sn** | **22 07 37.0** | **-1.6** |
| **SOEI** | **Soe** | **5.97** | **242** | P | | **Pn** | **22 06 31.1** | **+0.1** |
| | 0.6nm49nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | **5.97** | **242** | P | | **Pn** | **22 06 29.1** | **-1.9** |
| **MTN** | **Manton Dam** | **6.04** | **166** | Pn | | **Pn** | **22 06 32.7** | **+0.9** |
| MTN | | | | Sn | | **Sn** | **22 07 37.1** | **-3.0** |
| **MTN** | **Manton Dam** | **6.04** | **166** | P | | **Pn** | **22 06 33.3** | **+1.5** |
| **SIJI** | **Sorong** | **6.27** | **15** | P | | **Pn** | **22 06 36.0** | **+1.0** |
| | 5.1nm,0.3s,baz=145,slow=23,SNR=16 | | | | | | | |
| SIJI | | | | S | | **Sn** | **22 07 43.5** | **-2.3** |
| | 3.9nm,0.3s,baz=234,slow=24,SNR=12 | | | | | | | |
| **SWI** | **Sorong** | **6.28** | **15** | P | | **Pn** | **22 06 36.1** | **+1.1** |
| | 0.3nm2μm14nm,0.5s | | | | | | | |
| **BATI** | **Baumata** | **6.71** | **241** | P | | **Pn** | **22 06 42.2** | **+1.4** |
| | 9.4nm,0.3s,baz=253,slow=1.6,SNR=7.0 | | | | | | | |
| BATI | | | | S | | **Sn** | **22 07 53.6** | **-2.5** |
| | 13nm,0.3s,baz=108,slow=4.8,SNR=4.7 | | | | | | | |
| **BATI** | **Baumata** | **6.71** | **241** | P | | **Pn** | **22 06 42.1** | **+1.4** |
| | 0.3nm17nm,0.6s | | | | | | | |
| **KNRA** | **Kununurra** | **8.70** | **185** | Pn | | **Pn** | **22 07 07.0** | **-0.4** |
| **KNRA** | **Kununurra** | **8.70** | **185** | P | | **Pn** | **22 07 07.1** | **-0.3** |
| **MRSI** | **Marisa** | **10.63** | **314** | P | | **Pn** | **22 07 37.2** | **+4.2** |
| | 493nm23nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.73** | **199** | P | | **Pn** | **22 07 45.5** | **-1.9** |
| | 1.3nm,0.3s,baz=12,slow=9.0,SNR=40 | | | | | | | |
| FITZ | | | | S | | Sn | 22 09 46.5 | -10 |
| | 1.0nm,0.3s,baz=74,slow=19,SNR=2.9 | | | | | | | |
| **WB0** | **Warramunga Arr** | **13.55** | **160** | Pn | | **Pn** | **22 08 09.9** | **-1.0** |
| **WRA** | **Warramunga Arr** | **13.70** | **161** | P | | **Pn** | **22 08 10.3** | **-2.5** |
| | 0.6nm,0.3s,baz=335,slow=14,SNR=26 | | | | | | | |
| WRA | | | | S | | Sn | 22 10 35.5 | -9.0 |
| | 2.5nm,0.3s,baz=342,slow=22,SNR=7.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.70** | **161** | P | | **Pn** | **22 08 11.9** | **-0.8** |
| **WB2** | **Warramunga Arr** | **13.70** | **161** | Pn | | **Pn** | **22 08 10.3** | **-2.5** |
| **WR0** | **Warramunga Ar** | **13.78** | **160** | | | **Pn** | **22 08 12.1** | **-1.7** |
| **COEN** | **Coen** | **15.04** | **119** | P | | **Pn** | **22 08 30.8** | **+1.2** |
| **COEN** | **Coen** | **15.04** | **119** | P | | **P** | **22 08 32.0** | **+0.7** |
| **QIS** | **Mount Isa** | **16.63** | **145** | P | | **Pn** | **22 08 49.8** | **+0.7** |
| **MBWA** | **Marble Bar** | **17.05** | **213** | P | | **P** | **22 08 53.4** | **0.0** |
| MBWA | | | | | | **Pn** | **22 08 53.6** | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **MBWA** | **Marble Bar** | **17.05** | **213** | P | | **P** | **22 08 53.4** | **0.0** |
| **AS31** | **Alice Springs** | **17.12** | **166** | | | **Pn** | **22 08 55.9** | **+1.0** |
| AS31 | | | | | | IAmb | 22 08 56.6 | |
| | comp=Z,5.5nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.12** | **167** | P | | **Pn** | **22 08 55.2** | **+0.3** |
| | comp=Z,1.3nm,0.3s,baz=347,slow=11,SNR=121 | | | | | | | |
| ASAR | | | | S | | **S** | **22 11 58.9** | **-6.3** |
| | comp=Z,0.8nm,0.3s,baz=354,slow=28,SNR=6.1 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **22 16 50.0** | **-1.9** |
| | baz=346,slow=2.1,SNR=5.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.12** | **167** | | | **Pn** | **22 08 55.6** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **17.32** | **212** | P | | **Pn** | **22 08 57.7** | **+0.3** |
| PSA00 | | | | | | IAmb | 22 09 13.2 | |
| | comp=Z,9.3nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.32** | **212** | P | | **P** | **22 08 56.1** | **-0.4** |
| **WRKA** | **Warakurna** | **18.02** | **184** | P | | **Pn** | **22 09 05.7** | **0.0** |
| **KKM** | **Kota Kinabalu** | **18.59** | **314** | P | | **Pn** | **22 09 12.0** | **-0.5** |
| KKM | | | | | | IAmb | 22 09 21.4 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **UGM** | **Wanagama** | **18.95** | **266** | P | | **Pn** | **22 09 16.3** | **-0.4** |
| **SBUM** | **Sibu** | **19.71** | **298** | | | **Pn** | **22 09 26.0** | **+0.4** |
| SBUM | | | | | | IAmb | 22 09 26.8 | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **OOD** | **Oodnadatta** | **21.51** | **165** | P | | **P** | **22 09 42.6** | **+0.9** |
| **MULG** | **Mulgathing** | **23.57** | **170** | P | | **P** | **22 10 03.0** | **+1.4** |
| **FORT** | **Forrest** | **23.74** | **183** | P | | **P** | **22 10 04.9** | **+1.8** |
| FORT | | | | | | IAmb | 22 10 05.8 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **FORT** | **Forrest** | **23.74** | **183** | P | | **P** | **22 10 05.4** | **+2.3** |
| **LCRK** | **Leigh Creek** | **24.73** | **162** | P | | **P** | **22 10 14.3** | **+2.3** |
| **BBOO** | **Buckleboo** | **26.41** | **168** | P | | **P** | **22 10 27.4** | **+0.1** |
| BBOO | | | | | | IAmb | 22 10 38.4 | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **BBOO** | **Buckleboo** | **26.41** | **168** | P | | **P** | **22 10 29.3** | **+2.0** |
| **STKA** | **Stephens Creek** | **27.20** | **157** | P | | **P** | **22 10 34.2** | **-0.1** |
| | comp=Z,2.0nm,0.7s,baz=252,slow=5.4,SNR=6.3 | | | | | | | |
| **KULM** | **Kulim** | **31.36** | **292** | P | | **P** | **22 11 12.5** | **+1.2** |
| KULM | | | | | | IAmb | 22 11 28.2 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **PATS** | **Pohnpei** | **31.75** | **65** | P | | **P** | **22 11 11.7** | **-3.0** |
| **QIZ** | **Qiongzhong** | **32.35** | **323** | P | | **P** | **22 11 20.3** | **+0.4** |
| **UBPT** | **Khong Chiam** | **32.56** | **313** | P | | **P** | **22 11 22.2** | **+0.4** |
| UBPT | | | | | | IAmb | 22 11 22.7 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **GSI** | **Gunungsitoli** | **33.00** | **283** | P | | **P** | **22 11 27.0** | **+1.3** |
| GSI | | | | | | IAmb | 22 11 27.4 | |
| | comp=Z,5.2nm,0.5s | | | | | | | |
| **OUENC** | **Ouen Island, N** | **39.01** | **117** | P | | **P** | **22 12 15.7** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **39.41** | **310** | P | | **P** | **22 12 20.6** | **+0.6** |
| | comp=Z,2.0nm,0.3s,baz=133,slow=6.6,SNR=10 | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.62** | **311** | P | | **P** | **22 12 22.6** | **+0.8** |
| CHTO | | | | | | IAmb | 22 12 23.1 | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **50.95** | **146** | P | | **P** | **22 13 51.7** | **+1.0** |
| **TUWZ** | **Tuamarina** | **52.17** | **138** | P | | **P** | **22 14 00.3** | **+0.4** |
| **SNZO** | **South Karori** | **52.62** | **138** | P | | **P** | **22 14 01.4** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **52.90** | **135** | P | | **P** | **22 14 05.5** | **+0.1** |
| BKZ | | | | | | IAmb | 22 14 08.8 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **58.28** | **342** | P | | **P** | **22 14 44.4** | **+0.8** |
| | comp=Z,0.5nm,0.7s,baz=168,slow=6.2,SNR=5.0 | | | | | | | |
| **SONM** | **Songino Array** | **58.28** | **342** | IAmb | | IAmb | 22 14 46.2 | |
| | comp=Z,0.8nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.98** | **327** | P | | **P** | **22 15 48.2** | **+0.8** |
| | comp=Z,3.1nm,0.5s,baz=118,slow=8.1,SNR=91 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.98** | **327** | P | | **P** | **22 15 48.1** | **+0.6** |
| **MAKZ** | **Makanchi** | **68.16** | **327** | P | | **P** | **22 15 49.3** | **+0.8** |
| MAKZ | | | | | | IAmb | 22 15 50.5 | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **70.26** | **320** | P | | **P** | **22 16 02.6** | **+0.9** |
| **SMY** | **Shemya** | **70.42** | **27** | P | | **P** | **22 15 59.8** | **-2.4** |
| **ZAA0** | **Zalesovo Array** | **71.38** | **334** | P | | **P** | **22 16 07.9** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **71.38** | **334** | P | | **P** | **22 16 07.9** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=143,slow=6.1,SNR=8.1 | | | | | | | |
| **KURK** | **Kurchatov** | **72.28** | **329** | P | | **P** | **22 16 14.0** | **+0.5** |
| **BRVK** | **Borovoye** | **77.89** | **328** | P | | **P** | **22 16 46.1** | **+0.4** |
| BRVK | | | | | | IAmb | 22 16 46.9 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **VOI** | **Vohitsoka** | **80.80** | **249** | P | | **P** | **22 17 02.7** | **+0.5** |
| VOI | | | | | | IAmb | 22 17 19.1 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **ABKAR** | **Akbulak array** | **82.23** | **322** | P | | **P** | **22 17 09.2** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **128.42** | **281** | PKP | | **PKPdf** | **22 23 55.0** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=77,slow=2.8,SNR=2.9 | | | | | | | |

*SJA* ***12*** *22:32:02.3±2.0, 19.°95S×70.°32W,h60km±52km, ML4.7, MW4.4*
*IDC* ***12*** *22:32:04.2±0.4, 19.°88S×70.°20W,h69km±3km, mb4.2/12, mb1 4.4/16,mb1mx4.1/39,mbtmp4.5/16,MS3.7/9, Ms1 3.7/9,ms1mx3.4/61,Error ellipse: s-maj=15.9km s-min=8.8km az=69.0*
*VAO* ***12*** *22:32:04.4±0.4, 19.°79S×70.°14W,h64km, mb5.0*
*NEIC* ***12*** *22:32:04.3±2.2, 19.°96S±0.°03×70.°31W±0.°06,h62km±4km, mb4.9/18,Mwr4.6/45,Mwr4.8(GUC),Error ellipse: s-maj=8.1km s-min=4.4km az=92.0*
*NEIC* ***12*** *22:32:04.3, 19.°97S×70.°31W,h66km,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr=4.83; Mθθ2.28; Mθφ2.55; Mrθ4.61; Mθφ -2.95; Mφr-6.42; Fault plane solution: Mo9.42000×10¹⁵ NP1:φs138.86000°, δ16.88000°,λ-104.74000°. NP2:φs323.24000°, δ73.69000°,λ-85.58000°. Principal axes: T 9.6402, Plg29.0000°, Azm50.0000°; N -0.4579, Plg4.0000°, Azm142.0000°; P -9.1822, Plg61.0000°, Azm240.0000°;*
*GUC* ***12*** *22:32:05.0±0.7, 19.°94S×70.°31W,h53km±11km, ML5.0, MW4.8*
*BJI* ***12*** *22:32:05.0±0.0, 19.°90S×70.°30W,h69km,mB5.4/5*
**ISC 12 22:32:03.7±0.4,20.°00S±0.°03×70.°28W±0.°04,h69km±3km,**
**n216,σ1§60/247,mb4.8/19,19C-16D,Fault plane solution: NP1:φs138.83040°,δ23.58566°,λ-100.12314°. NP2:φs329.85458°,δ66.80319°,λ-85.61189°. Principal axes:** T Plg21.6857°, Azm56.5168°; N Plg4.0328°, Azm148.1233°; P Plg67.9048°, Azm248.1243°; **Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **TA02** | **Huaiquique** | **0.31** | **152** | | | **Pn** | **22 32 15.8** | **+1.0** |
| TA02 | | | | Sn | | **Sn** | **22 32 24.2** | **+1.2** |
| **TA02** | **Huaiquique** | **0.31** | **152** | ⇓*i* | | P | **22 32 15.9** | **+1.0** |
| TA02 | | | | *eS* | | **Sn** | **22 32 24.1** | **+1.1** |
| **HMBC** | **Humberstone** | **0.46** | **127** | ⇓*i* | | P | **22 32 17.1** | **+0.8** |
| HMBC | | | | *i* | S | **Sn** | **22 32 26.4** | **+0.9** |
| **TA01** | **Diego Aracena** | **0.57** | **170** | | | **Pn** | **22 32 18.2** | **+1.0** |
| TA01 | | | | Sn | | **Sn** | **22 32 28.0** | **+0.9** |
| **TA01** | **Diego Aracena** | **0.57** | **170** | ⇑*i* | | P | **22 32 18.1** | **+1.0** |
| TA01 | | | | *i* | S | **Sn** | **22 32 28.1** | **+1.0** |
| TA01 | | | | IAML | | | 22 32 29.1 | |
| | comp=N,73μm,0.2s | | | | | | | |
| **PB11** | **IPOC Station P** | **0.64** | **68** | | | **Pn** | **22 32 18.5** | **+0.4** |
| PB11 | | | | Sn | | **Sn** | **22 32 28.7** | **+0.2** |
| **PATCX** | **Punta Patache** | **0.83** | **171** | Pn | | **Pn** | **22 32 21.1** | **+0.9** |
| PATCX | | | | Sn | | **Sn** | **22 32 33.0** | **+0.7** |
| **PATCX** | **Punta Patache** | **0.83** | **171** | ⇑*i* | | P | **22 32 21.1** | **+0.9** |
| PATCX | | | | *i* | S | **Sn** | **22 32 33.3** | **+1.0** |
| **PB08** | **IPOC Station P** | **1.07** | **98** | | | **Pn** | **22 32 24.3** | **+0.9** |
| **PB08** | **IPOC Station P** | **1.07** | **98** | ⇑*i* | | P | **22 32 24.5** | **+1.1** |
| PB08 | | | | *i* | S | **Sn** | **22 32 39.6** | **+1.5** |
| PB08 | | | | IAML | | | 22 32 41.0 | |
| | comp=N,53μm,0.3s | | | | | | | |
| **PB08** | **IPOC Station P** | **1.07** | **98** | *i* | P | **Pn** | **22 32 24.7** | **+1.2** |
| PB08 | | | | *i* | S | **Sn** | **22 32 39.4** | **+1.3** |
| PB08 | | | | IAML | | | 22 32 40.4 | |
| | comp=Z,19μm,0.3s | | | | | | | |
| **GO01** | **Chusmiza** | **1.08** | **72** | | | **Pn** | **22 32 24.4** | **+0.8** |
| GO01 | | | | Sn | | **Sn** | **22 32 39.3** | **+0.9** |
| **GO01** | **Chusmiza** | **1.08** | **72** | *eP* | | **Pn** | **22 32 24.2** | **+0.6** |
| GO01 | | | | *i* | S | **Sn** | **22 32 39.4** | **+0.9** |
| GO01 | | | | IAML | | | 22 32 41.4 | |
| | comp=N,153μm,0.2s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.28** | **144** | | | **Pn** | **22 32 26.9** | **+1.0** |
| **PB01** | **IPOC Station P** | **1.28** | **144** | ⇓*i* | | P | **22 32 26.9** | **+1.0** |
| PB01 | | | | *eS* | | **Sn** | **22 32 41.6** | **-0.8** |
| **PB01** | **IPOC Station P** | **1.28** | **144** | *i* | P | **Pn** | **22 32 26.9** | **+1.0** |
| PB01 | | | | IAML | | | 22 32 46.9 | |
| | comp=Z,4μm,0.3s | | | | |

PB03 *i* S **Sn** **22 33 02.2 +0.1**
**PB03 IPOC Station P 2.10 166** *i* P **Pn** **22 32 38.2 +1.3**
PB03 IAML 22 33 28.6
comp=Z,3µm,0.9s
**PB04 IPOC Station P 2.33 177**⇑ *i* P **Pn** **22 32 40.4 +0.4**
PB04 *i* S **Sn** **22 33 06.5 -1.1**
PB04 IAML 22 33 10.7
comp=N,5µm,0.3s
**PB04 IPOC Station P 2.33 177** *i* P **Pn** **22 32 40.5 +0.5**
PB04 IAML 22 33 22.8
comp=Z,4µm,0.5s
**PB06 IPOC Station P 2.77 166** **Pn** **22 32 46.6 +0.6**
**PB06 IPOC Station P 2.77 166**⇑ *i* P **Pn** **22 32 46.6 +0.6**
PB06 *i* S **Sn** **22 33 17.8 -0.7**
**PB06 IPOC Station P 2.77 166** *i* P **Pn** **22 32 46.7 +0.7**
PB06 IAML 22 33 34.4
comp=Z,2µm,0.8s
**LVC Limon Verde 2.90 154** P **Pn** **22 32 50.0 +2.1**
comp=Z,100nm,0.3s,baz=352,slow=8.3,SNR=226
LVC S **Sn** **22 33 24.7 +2.9**
comp=Z,85nm,0.3s,baz=104,slow=16,SNR=4.4
LVC LR LR 22 34 23.0
comp=Z,347nm,19.4s,baz=289,slow=47
**LVC Limon Verde 2.90 154** *eP* **Pn** **22 32 49.9 +2.1**
**LVC Limon Verde 2.90 154** *i* P **Pn** **22 32 50.1 +2.3**
LVC IAML 22 33 47.8
comp=Z,829nm,0.5s
**PB15 IPOC Station P 3.28 167** *i* P **Pn** **22 32 53.6 +0.7**
PB15 *i* S **Sn** **22 33 33.3 +2.3**
PB15 IAML 22 33 38.5
comp=Z,3µm,0.2s
**PB10 IPOC Station P 3.51 184** *i* P **Pn** **22 32 55.4 -0.4**
PB10 *i* S **Sn** **22 33 34.5 -1.6**
PB10 IAML 22 33 37.1
comp=Z,1µm,0.8s
**LPAZ La Paz 4.22 29** P **Pn** **22 33 08.5 +2.3**
comp=Z,32nm,0.3s,baz=205,slow=7.4,SNR=225
LPAZ S **Sn** **22 33 53.8 -0.7**
baz=342,slow=9.6,SNR=1.6
**AC02 Maricunga 6.89 171** Pn **Pn** **22 33 43.0 +0.5**
**GO03 Copiap 7.56 180** Pn **Pn** **22 33 50.5 -0.8**
GO03 Sn **Sn** **22 35 12.2 -3.4**
**AC04 Llanos de Chal 8.20 185** Pn **Pn** **22 33 56.4 -3.6**
AC04 Sn **Sn** **22 35 24.0 -7.2**
**LCO Las Campanas 8.98 182** Pn **Pn** **22 34 08.5 -2.4**
**SIV San Ignacio 9.63 67** P **Pn** **22 34 17.6 -2.0**
comp=Z,17nm,0.3s,baz=266,slow=8.6,SNR=193
SIV LR LR 22 38 33.9
comp=Z,552nm,20.7s,baz=268,slow=41
**NNA Nana 10.16 321** P **Pn** **22 34 27.4 +0.5**
comp=Z,2.2nm,0.3s,baz=149,slow=18,SNR=2.0
NNA S **Sn** **22 36 15.7 -3.5**
comp=Z,5.9nm,0.3s,baz=201,slow=15,SNR=4.0
**CO06 Fray Jorge 10.70 186** Pn **Pn** **22 34 30.5 -3.6**
**CO03 El Pedregal 10.80 182** Pn **Pn** **22 34 32.1 -3.5**
**ETMB Extrema 10.86 22** *eP* **Pn** **22 34 33.8 -2.6**
**CO02 Combarbal 11.18 183** Pn **Pn** **22 34 38.3 -2.5**
**PTLB Pontes e Lacer 11.54 69** *eP* **Pn** **22 34 43.1 -2.6**
**VILB Vilhena 11.94 56** *eP* **Pn** **22 34 49.0 -2.1**
**CZSB Cruzeiro do Su 12.42 349** *eP* **Pn** **22 34 54.9 -2.8**
**VA06 Catapilco 12.54 184** Pn **Pn** **22 35 00.7 +1.4**
**VA03 San Esteban 12.71 181** **Pn** **22 35 02.9 +1.2**
**MT02 Curacav 13.23 183** Pn **Pn** **22 35 09.6 +1.0**
**CPUP Villa Florida 13.47 120** P **Pn** **22 35 12.4 +0.6**
comp=Z,0.2nm,0.3s,baz=304,slow=15,SNR=1.8
CPUP LR LR 22 40 32.0
comp=Z,151nm,21.1s,baz=292,slow=38
**AQDB Aquidauana 13.70 94** Pn **Pn** **22 35 15.8 +0.9**
**AQDB Aquidauana 13.70 94** *eP* **Pn** **22 35 14.0 -0.9**
**LMEL Las Melosas 13.79 180** Pn **Pn** **22 35 18.5 +2.3**
**BO01 Tunca 14.35 183** Pn **Pn** **22 35 24.0 +0.6**
**SALV Santo Antonio 14.47 76** *eP* **Pn** **22 35 23.5 -1.5**
**BO02 Sierra Bellavi 14.74 182** Pn **P** **22 35 31.2 -1.7**
**PP1B Ponte de Pedra 14.78 83** *eP* **Pn** **22 35 28.5 -0.6**
**H03N1 Juan Fernandez baz=34 15.44 208** T T 22 52 09.1
**H03N2 Juan Fernandez baz=34,slow=74 15.45 208** T T 22 51 57.0
**H03N3 Juan Fernandez baz=34,slow=74 15.46 208** T T 22 51 49.1
**PDRB Porto dos Gac 15.47 59** *eP* **Pn** **22 35 35.6 -2.3**
**CLDB Colider 16.64 59** *eP* **Pn** **22 35 52.1 -0.5**
**PTGB Pitanga 17.49 109** *eP* **Pn** **22 36 02.2 -0.9**
**PCMB Pacaembu 17.86 98** *eP* **P** **22 36 06.5 -0.9**
**ARAG Araguaiana, MT 18.09 79** *eP* **P** **22 36 09.0 -1.0**
**ITAB Concordia 18.11 117** P **Pn** **22 36 10.6 -0.1**
**ITAB Concordia 18.11 117** *eP* **Pn** **22 36 10.7 +0.1**
**CPSB Cacapava Do Su 18.41 128** *eP* **Pn** **22 36 14.2 0.0**
**ITRB Iturama 18.75 93** *eP* **Pn** **22 36 17.8 -0.5**
**LC01 Cunco 18.88 184** P **Pn** **22 36 21.3 +1.5**
**PLTB Pedras Altas 19.01 131** *eP* **Pn** **22 36 23.0 +1.6**
**MACA Manacapuru-AM 19.18 30** *eP* **P** **22 36 21.2 -0.7**
**NPGB Novo Progresso 19.38 50** *eP* **P** **22 36 21.9 -2.2**
**FRTB Fartura 19.54 104** *eP* **Pn** **22 36 27.0 -0.8**
**SNDB Serra Nova Dou 19.91 69** *eP* **P** **22 36 28.4 -1.5**
**BB19B Bebedouro 20.40 97** *eP* **P** **22 36 35.6 +0.3**
**PLCA Paso Flores 20.67 181** P **P** **22 36 39.2 +1.2**
comp=Z,17nm,0.6s,baz=349,slow=10,SNR=22
PLCA LR LR 22 44 05.8
comp=Z,212nm,19.6s,baz=15,slow=35
**PLCA Paso Flores 20.67 181** P Pn 22 36 39.8 -1.1
PLCA IAmb IAmb 22 36 43.6
comp=Z,32nm,1.1s
**PLCA Paso Flores 20.67 181** *eP* Pn 22 36 39.9 -1.0
**IPMB Ipameri, GO 20.97 88** *eP* **P** **22 36 39.7 -1.7**
**ITTB Itaituba 21.03 44** *eP* **P** **22 36 39.8 -2.2**
**RCLB Rio Claro- Sao 21.35 101** *eP* **P** **22 36 45.3 -0.1**
**BDFB Brasilia 21.63 82** P **P** **22 36 47.4 -1.1**
comp=Z,11nm,0.5s,baz=254,slow=10,SNR=22
BDFB LR LR 22 46 06.1
comp=Z,367nm,19.4s,baz=36,slow=39
**BDFB Brasilia 21.63 82** P **P** **22 36 47.2 -1.3**
BDFB IAmb IAmb 22 36 54.2
comp=Z,36nm,0.8s
**OTAV Otavalo 21.64 337** *eP* **P** **22 36 55.6 +6.6**
**OTAV Otavalo 21.64 337** *eP* **P** **22 36 49.2 +0.2**
**PTGA Pitinga 21.65 29** P **P** **22 36 46.2 -2.4**
comp=Z,115nm,0.3s,baz=334,slow=23,SNR=240
**PET01 Itanhaem-SP 21.73 106** *eP* **P** **22 36 50.7 +1.3**
**VAO Valinhos 21.90 102** *eP* **P** **22 36 50.9 -0.4**
**FLOC Florencia 22.09 346** *eP* **P** **22 36 53.7 +0.4**
**GCUF Volcan Galeras 22.20 341** *eP* **P** **22 37 01.2 +6.2**
**PEXB Peixe 22.52 73** *eP* **P** **22 36 55.7 -2.3**
**SOTA Rioblanco 22.86 344** *eP* **P** **22 37 03.7 +1.7**
**PCON Cinco Dias 22.98 344** *eP* **P** **22 37 05.0 +1.6**
**PARB Paraibuna 23.15 103** *eP* **P** **22 37 04.5 0.0**
**MARP Paez Belalcaza 23.37 346** *eP* **P** **22 37 06.8 +0.1**
**MALB Monte Alegre 23.88 43** *eP* **P** **22 37 09.3 -1.8**
**BSCB Bom Sucesso 23.91 97** *eP* **P** **22 37 11.2 -0.2**
**PRPB Parauapebas 24.17 58** *eP* **P** **22 37 12.4 -1.3**
**BOAV Boa Vista 24.23 24** *eP* **P** **22 37 14.2 -0.1**
**ORTC Ortega, Tolima 24.25 348** *eP* **P** **22 37 12.4 -2.0**
**SMTB Santa Maria do 24.57 66** *eP* **P** **22 37 16.3 -1.1**
**CHIC Chingaza 24.71 352** *eP* **P** **22 37 18.1 -0.9**
**ANIL Santa Ana 24.85 348** *eP* **P** **22 37 19.9 -0.3**
ANIL *eP* **P** **22 37 21.8 +1.6**
**DIAM Diamantina, MG 25.19 91** *eP* **P** **22 37 22.6 -0.6**
**JANB Januaria 25.23 83** *eP* **P** **22 37 22.8 -0.7**
**PLMC San Jos del P 25.44 346** *eP* **P** **22 37 25.6 +0.3**
**SDBA SAO DESIDERIO 25.49 77** *eP* **P** **22 37 24.7 -1.1**
**GUY2C Guyana, Caldas 25.56 348** *eP* **P** **22 37 27.4 +0.6**
**SPBC San Pablo de B 25.76 351** *eP* **P** **22 37 27.4 -0.8**
**NORC Norcasia 25.80 349** *eP* **P** **22 37 27.4 -1.1**
**RUSC La Rusia 25.88 354** *eP* **P** **22 37 30.4 +0.7**
**TAMC Tame, Arauca 26.31 357** *eP* **P** **22 37 31.2 -1.9**
**CBOC Ciudad Bolivar 26.31 347** *eP* **P** **22 37 35.0 +1.7**
**MCPB Macapa, AP 26.45 45** *eP* **P** **22 37 33.6 -0.7**
**HELC Santa Helena 26.53 348** *eP* **P** **22 37 35.0 -0.5**
**BARC Barichara 26.58 354** *eP* **P** **22 37 33.1 -2.7**
**PTBC PUERTO BERRIO, 26.69 351** *eP* **P** **22 37 35.0 -1.6**
**PAMC Pamplona, Colo 27.27 355** *eP* **P** **22 37 40.6 -1.7**
**SJMB Sao Joao De Ma 27.47 92** *eP* **P** **22 37 45.5 +1.9**
**ZARC Zaragoza, Cauc 27.69 350** P **P** **22 37 44.9 -0.5**
**ZARC Zaragoza, Cauc 27.69 350** *eP* **P** **22 37 42.5 -3.0**
**ALF01 Guarapari-ES 27.71 96** *eP* **P** **22 37 48.4 +2.7**
**TMAB Tom-Au,PA,Br 27.87 54** *eP* **P** **22 37 46.9 -0.2**
**UREC San Jos de Ur 28.06 349** *eP* **P** **22 37 46.2 -2.5**
**SOCV Socops 28.11 359** *eP* **P** **22 37 46.2 -3.0**
**RIB01 Linhares ES 28.14 94** *eP* **P** **22 37 50.7 +1.2**
**NAN01 Guarapari, ES 28.59 91** *eP* **P** **22 37 52.7 -0.9**
**SDV Santo Domingo 28.70 359** P **P** **22 37 53.2 -1.5**
comp=Z,2.2nm,0.4s,baz=196,slow=3.2,SNR=3.8
**SDV Santo Domingo 28.70 359** *eP* **P** **22 37 54.0 -0.7**
**BAUV El Baul 28.84 5** P **P** **22 37 55.1 -0.6**
**GUA01 Guaratinga, BA 29.12 88** *eP* **P** **22 37 57.7 -0.5**
**CMC01 Camacan, BA 29.65 86** *eP* **P** **22 38 03.9 +1.0**
**NBIT Itapeh - BA 29.83 85** *eP* **P** **22 38 04.0 -0.5**
**GDU01 Guandu, BA 30.01 83** *eP* **P** **22 38 04.8 -1.4**
**NBPN Ponto Novo - B 30.35 77** *eP* **P** **22 38 08.1 -1.1**
**MDP Montagnes des 30.38 37** P **P** **22 38 08.8 -0.6**
comp=Z,10nm,0.5s,baz=209,slow=8.7,SNR=14
MDP LR LR 22 50 35.6
comp=Z,426nm,18.2s,baz=87,slow=37
**BCIP Isla Barro Col 30.47 341** P **P** **22 38 10.5 +0.3**
BCIP IAmb IAmb 22 38 26.1
comp=Z,35nm,1.0s
**BIRV Birongo 30.54 8** P **P** **22 38 09.8 -0.9**
BIRV IAmb IAmb 22 38 26.5
comp=Z,17nm,0.9s
**ROSB Rosrio 30.67 60** *eP* **P** **22 38 11.1 -0.9**
**NBPS Pedro II - PI 32.08 65** *eP* **P** **22 38 23.5 -1.0**
**NBLA Lagarto - SE 32.52 79** *eP* **P** **22 38 26.5 -1.7**
**NBMA Muriti-CE 33.02 72** *eP* **P** **22 38 31.9 -0.8**
**EFI East Falkland 33.03 166** P **P** **22 38 33.1 +0.8**
EFI IAmb IAmb 22 38 51.1
comp=Z,23nm,1.1s
**NBPB Pedra_Branca-C 33.12 68** *eP* **P** **22 38 33.1 -0.4**
**MG03 Isla Dawson 33.79 180** P **P** **22 38 40.5 +1.7**
MG03 IAmb IAmb 22 38 41.5
comp=Z,24nm,0.8s
**NBMO Morrinhos-CE 33.84 65** *eP* **P** **22 38 38.6 -1.1**
**NBAN Anadia - AL 34.37 78** *eP* **P** **22 38 43.1 -1.3**
**USHA Ushuaia 34.80 178** P **P** **22 38 49.4 +1.8**
comp=Z,9.0nm,0.7s,baz=2.6,slow=7.9,SNR=7.2
**NBCL Cascavel-CE 34.88 68** *eP* **P** **22 38 48.2 -0.5**
**RCBR Riachuelo 36.25 72** P **P** **22 39 00.4 -0.1**
**RCBR Riachuelo 36.25 72** *eP* **P** **22 39 00.8 +0.3**
**RPN Rapa Nui 36.38 251** LR LR 22 50 15.5
comp=Z,33nm,20.3s,baz=132,slow=30
**NBPV Pedro Velho 36.54 73** *eP* **P** **22 39 02.7 -0.3**
**CELP Cerrillos 38.01 6** P **P** **22 39 14.9 -0.3**
CELP IAmb IAmb 22 39 15.6
comp=Z,19nm,0.7s
**TXAR Lajitas Array 58.67 326** P **P** **22 41 54.5 +0.3**
comp=Z,0.5nm,0.8s,baz=141,slow=8.1,SNR=4.9
TXAR pP **pP** **22 42 12.2 +0.3**
comp=Z,0.8nm,0.6s,baz=151,slow=9.7,SNR=8.0
**VNA2 Neumayer--Watz 62.48 161** P **P** **22 42 20.6 +1.1**
baz=285,slow=10
**SNAA Sanae 64.11 161** P **P** **22 42 31.5 +1.2**
**SNAA Sanae 64.11 161** *eP* **P** **22 42 31.6 +1.2**
comp=Z,7.8nm,0.6s,baz=269,slow=7.8,SNR=18
**SNAA Sanae 64.11 161** P **P** **22 42 31.2 +0.8**
SNAA IAmb IAmb 22 42 32.8
comp=Z,12nm,0.8s
**LIC Lamto 69.22 75** *eP* **P** **22 43 03.6 -0.1**
comp=Z,47nm,1.6s
**TIC Toumodi 69.40 75** *eP* **P** **22 43 04.3 -0.6**
**KIC Kosan Boka 69.54 75** *eP* **P** **22 43 05.1 -0.6**
comp=Z,18nm,0.6s
**DBIC Dimbokro 69.56 75** P **P** **22 43 04.5 -1.3**
comp=Z,2.3nm,0.3s,baz=253,slow=5.6,SNR=7.9
**PDAR Pinedale Array 72.18 331** P **P** **22 43 21.2 -0.1**
comp=Z,0.6nm,0.8s,baz=116,slow=6.3,SNR=4.0
PDAR pP **PcP** **22 43 39.0 -0.3**
comp=Z,0.8nm,0.6s,baz=131,slow=8.7,SNR=6.1
**PDAR Pinedale Array 72.18 331** P **P** **22 43 22.0 +0.6**
**LCH Last Change Ra 72.33 322** P **P** **22 43 24.6 +2.4**
**NVAR Mina Array Bea 73.53 322** P **P** **22 43 29.6 +0.2**
comp=Z,0.9nm,0.7s,baz=142,slow=4.6,SNR=6.8
NVAR pP **pP** **22 43 49.0 +1.3**
comp=Z,2.1nm,0.8s,baz=144,slow=6.0,SNR=7.2
**TORD Torodi Ar. Bea 78.08 71** P **P** **22 43 54.9 -0.7**
comp=Z,9.1nm,0.8s,baz=251,slow=5.3,SNR=70
**SYO Syowa Base 78.35 160**‖ *eP* **P** **22 43 52.8 -3.4**
**MDT Midelt 81.79 51** LR LR 23 18 12.9
comp=Z,54nm,20.0s,baz=334,slow=34
**ESDC Sonseca Array 85.68 45** LR LR 23 19 40.9
comp=Z,70nm,18.1s,baz=256,slow=33
**YKA Yellowknife Ar 89.35 341** P **P** **22 44 52.4 +0.4**
comp=Z,5.4nm,0.8s,baz=136,slow=4.8,SNR=68
YKA pP **pP** **22 45 10.2 -0.8**
comp=Z,4.5nm,0.8s,baz=132,slow=4.8,SNR=10
**SUMG Summit 94.79 9** *i* P **P** **22 45 19.0 +1.4**
**CLL Collm 101.28 39** *ep*Pdif pPdif 22 46 03.0 -3.2
**H11S2 WAKE ISLAND Hyl 26.40 279** T T 01 10 20.6
baz=101,slow=74
**H11S1 WAKE ISLAND Hyl 26.41 279** T T 01 10 22.4
baz=101,slow=74
**H11S3 WAKE ISLAND Hyl 26.42 279** T T 01 10 22.2
baz=101,slow=74
**H11N3 WAKE ISLAND Hyl 26.44 280** T T 01 10 31.0
baz=101,slow=75
**H11N2 WAKE ISLAND Hyl 26.46 280** T T 01 10 24.4
baz=101,slow=75
**H11N1 WAKE ISLAND Hyl 26.46 280** T T 01 10 30.8
baz=101,slow=75
**ASAR Alice Springs 130.61 210** PKP **PKPdf** **22 51 07.7 +0.1**
comp=Z,1.4nm,0.5s,baz=149,slow=2.1,SNR=15
**WRA Warramunga Arr 133.55 213** PKP **PKiKP** **22 51 13.6 -0.7**
comp=Z,1.8nm,0.7s,baz=153,slow=1.8,SNR=29
WRA pPKP **pPKPdf** **22 51 33.2 +0.3**
comp=Z,0.6nm,0.7s,baz=139,slow=1.6,SNR=2.1
**ZALV Zalesovo Beam 141.12 23** PKP **PKPdf** **22 51 26.6 +0.6**
comp=Z,2.4nm,0.5s,baz=9.5,slow=3.6,SNR=15
ZALV pPKP **pPKPdf** **22 51 46.1 +0.6**
comp=Z,5.0nm,0.7s,baz=263,slow=1.5,SNR=6.0
**ZALV Zalesovo Beam 141.12 23** **PKPdf** **22 51 26.9 +1.0**
**KSH Kashi 145.12 49** PKP **PKPdf** **22 51 34.5 +0.8**
**MKAR Makanchi Array 145.14 34** PKP **PKPdf** **22 51 33.6 +0.3**
comp=Z,4.2nm,0.6s,baz=320,slow=3.8,SNR=60
MKAR pPKPbc pPKPab 22 51 51.9 -0.5
comp=Z,8.8nm,0.8s,baz=316,slow=2.7,SNR=20
**KLR Kul'dur 145.91 334** PKPbc **PKPab** **22 51 35.8 0.0**
comp=Z,2.9nm,0.8s,baz=36,slow=2.5,SNR=8.8
**USRK Ussuriysk Ar. 149.56 327** PKPbc **PKiKP** **22 51 46.0 -0.3**
comp=Z,6.5nm,0.8s,baz=53,slow=1.5,SNR=19
**USRK Ussuriysk Ar. 149.56 327** **PKiKP** **22 51 46.4 0.0**
**WMQ Urumqi 149.95 33** *e*PKPbc **PKPdf** **22 51 42.0 +0.6**
**MJAR Matsushiro Arr 150.13 310** PKPbc **PKiKP** **22 51 47.5 -0.3**
comp=Z,6.3nm,0.6s,baz=84,slow=1.1,SNR=17
MJAR pPKPbc **pPKPbc** **22 52 07.5 +1.0**
comp=Z,2.9nm,0.5s,baz=74,slow=1.1,SNR=4.1
**MJAR Matsushiro Arr 150.13 310** **PKiKP** **22 51 48.0 +0.2**
**MAT Matsushiro 150.13 310** PKP **PKPbc** **22 51 47.1 +0.1**
**SIJI Sorong 150.40 228** PKPbc **PKiKP** **22 51 49.4 +0.4**
comp=Z,24nm,0.7s,baz=25,slow=7.3,SNR=14
**SONM Songino Array 152.10 5** PKP **PKPdf** **22 51 45.1 +0.4**
comp=Z,0.6nm,0.7s,baz=93,slow=1.6,SNR=4.8
SONM PKPbc **PKiKP** **22 51 52.1 +0.5**
comp=Z,3.2nm,0.7s,baz=318,slow=1.2,SNR=27
SONM pPKPbc **pPKPbc** **22 52 10.8 -0.2**
comp=Z,3.9nm,0.7s,baz=312,slow=1.2,SNR=9.0
**XLT XiLinHaoTe 155.58 349** *e*PKP **PKPdf** **22 51 53.8 +4.1**
XLT AMB AMB
comp=Z,200nm,4.1s
**GTA Gaotai 158.86 22** *e*PKP **PKPdf** **22 51 55.5 +1.5**
**HHC Hu-ho-hao-te 159.16 356** *e*PKP **PKPdf** **22 51 57.6 +3.3**
**LZH Lanzhou 163.16 17** *e*PKP **PKPdf** **22 51 57.0 -1.8**
LZH pPKP pPKPdf 22 52 15.7 -2.8
**NJ2 Nanjing 165.47 327** *e*PKP **PKPdf** **22 52 01.4 +0.7**
**CMAR Chiang Mai Arr 169.71 97** PKP **PKPdf** **22 52 04.4 +0.3**
comp=Z,0.8nm,0.3s,baz=276,slow=2.7,SNR=5.2

**NOU 12 22:34:12.0,17°08S×167°22E,h13km,MLv4.6/15,**
**Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **1.12** | **125** | P | Pb | 22 34 32.9 | -0.4 |
| **RTV** | **Rentapao** | **1.35** | **122** | P | Pn | 22 34 36.7 | +0.1 |
| **SANVU** | **Saraoutou** | **1.62** | **359** | P | Pn | 22 34 39.8 | -0.5 |
| **KOUNC** | **Koumac, New Ca** | **4.43** | **218** | P | Pn | 22 35 19.3 | +0.3 |
| **YATNC** | **Mamie plateau,** | **4.96** | **184** | P | Pn | 22 35 24.9 | -1.4 |
| **DZM** | **Mont Dzumac** | **5.02** | **188** | P | Pn | 22 35 27.2 | +0.1 |
| **NOUC** | **Port Laguerre** | **5.07** | **190** | P | Pn | 22 35 28.0 | +0.3 |
| **ONTNC** | **Ouen Toro** | **5.25** | **188** | P | Pn | 22 35 30.5 | +0.3 |
| **OUENC** | **Ouen Island, N** | **5.32** | **184** | P | Pn | 22 35 31.4 | +0.2 |

*IDC **12** 22:47:45.7±1.3, 13°71N×144°28E, h138km±81km, mb3.0/3, mb1 3.3/3, mb1mx2.9/38, mbtmp3.5/3, Error ellipse: s-maj=277.8km s-min=24.5km az=81.0*
*NEIC **12** 22:47:46.4±1.7, 13°65N±0°09×144°1E±0°1, h130km±7km, mb4.2/14, Error ellipse: s-maj=16.0km s-min=12.5km az=72.0*

**ISC 12 22:47:46.7±0.6, 13°63N±0°09×144°2E±0°1, h142km, n21,**
**σ0s97/23, mb4.0/11, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **0.66** | **93** | P | **Pn** | **22 48 07.2** | **-0.9** |
| | 224nm,0.3s,baz=160,slow=1.2,SNR=45 | | | | | | |
| GUMO | | | | S | **Sn** | **22 48 22.9** | **-1.3** |
| | 180nm,0.3s,baz=325,slow=22,SNR=39 | | | | | | |
| **GUMO** | **Guam** | **0.66** | **93** | | **Pn** | **22 48 07.1** | **-0.9** |
| GUMO | | | | | **Sn** | **22 48 22.6** | **-1.6** |
| **JCJ** | **Chichijima** | **13.53** | **352** | Pn | **Pn** | **22 50 53.6** | **+0.6** |
| **PATS** | **Pohnpei** | **15.44** | **115** | Pn | **Pn** | **22 51 17.2** | **+0.1** |
| **YULB** | **Yu-li** | **23.75** | **297** | P | **P** | **22 52 45.7** | **-0.5** |
| YULB | | | | IAmb | IAmb | 22 53 04.9 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **ERM** | **Erimo** | **28.30** | **358** | P | **P** | **22 53 27.0** | **+0.2** |
| **WB0** | **Warramunga Arr** | **34.56** | **196** | P | **P** | **22 54 21.8** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 22 54 26.4 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.70** | **196** | P | **P** | **22 54 23.2** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 22 54 39.8 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **34.73** | **196** | P | **P** | **22 54 23.9** | **+0.5** |
| **WB2** | **Warramunga Arr** | **34.74** | **196** | P | **P** | **22 54 23.4** | **0.0** |
| WB2 | | | | IAmb | IAmb | 22 54 37.7 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.74** | **196** | P | **P** | **22 54 23.6** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=19,slow=8.8,SNR=10.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.74** | **196** | P | **P** | **22 54 22.5** | **-0.9** |
| **ASAR** | **Alice Springs** | **38.41** | **195** | P | **P** | **22 54 54.4** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=17,slow=13,SNR=6.8 | | | | | | |
| **SONM** | **Songino Array** | **46.33** | **325** | P | **P** | **22 55 58.0** | **-0.4** |
| **BBOO** | **Buckleboo** | **46.82** | **189** | P | **P** | **22 56 00.8** | **-1.5** |
| BBOO | | | | IAmb | IAmb | 22 56 13.2 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **50.94** | **179** | P | **P** | **22 56 33.3** | **-0.4** |
| TOO | | | | IAmb | IAmb | 22 56 45.8 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.01** | **316** | P | **P** | **22 57 44.4** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=100,slow=7.9,SNR=6.3 | | | | | | |
| **THZ** | **Tophouse** | **61.15** | **156** | P | **P** | **22 57 48.1** | **+1.9** |
| THZ | | | | IAmb | IAmb | 22 58 03.0 | |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **MAKZ** | **Makanchi** | **61.22** | **316** | P | **P** | **22 57 46.6** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 22 57 47.6 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **OHAK** | **Old Harbor** | **63.87** | **33** | P | **P** | **22 58 04.9** | **+1.0** |
| **MCQ** | **Macquarie Isla** | **69.01** | **171** | P | **P** | **22 58 38.3** | **+1.8** |

**IDC 12 22:49:05.5±1.6, 9°61N×58°06E, h0km, mb3.6/5, mb1 3.7/5,**
**mb1mx3.4/38, mbtmp3.6/5, Error ellipse: s-maj=42.1km**
**s-min=33.3km az=178.0, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRTR** | **Keskin Array B** | **37.06** | **328** | P | P | 22 56 17.6 | 0.0 |
| | 0.7nm,0.8s,baz=156,slow=9.0,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.41** | **25** | P | P | 22 57 01.7 | -0.2 |
| | 0.2nm,0.6s,baz=201,slow=8.1,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.14** | **21** | P | P | 22 57 54.8 | -0.2 |
| | 1.4nm,0.6s,baz=224,slow=7.7,SNR=7.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **55.28** | **279** | P | P | 22 58 41.1 | -0.1 |
| | 0.9nm,0.8s,baz=85,slow=5.2,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.57** | **112** | P | P | 23 01 20.6 | +0.1 |
| | 0.4nm,0.9s,baz=295,slow=4.5,SNR=1.8 | | | | | | |

*GEN **12** 22:50:43.9, 44°96N×6°67E, h6km, Ml2.2*
*STR **12** 22:50:44.8±0.3, 45°N±1°×±°, h7km, MLv2.1/10, preliminary*
*LDG **12** 22:50:44.6±0.0, 44°96N×6°67E, h4km, Md2.6/4, Ml2.4/26, Error ellipse: s-maj=0.7km s-min=0.5km az=63.0*
*ROM **12** 22:50:44.4±0.2, 44°963N±0°007×6°69E±0°02, h9km, ML2.1/1, Error ellipse: s-maj=1.7km s-min=0.6km az=252.0*

**ISC 12 22:50:44.1±0.8, 44°98N±0°01×6°64E±0°01, h12km±4km,**
**n107, σ1s15/171, 1D, France**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNI** | **Bardonecchia** | **0.08** | **18** | P | **Pg** | **22 50 46.9** | **0.0** |
| BNI | | | | S | **Sg** | **22 50 48.5** | **-0.5** |
| **BNI** | **Bardonecchia** | **0.08** | **18** | P | **Pg** | **22 50 46.9** | **0.0** |
| BNI | | | | S | **Sg** | **22 50 48.5** | **-0.5** |
| **RRL** | **Rocca Remolon** | **0.12** | **117** | P | **Pg** | **22 50 47.1** | **-0.3** |
| RRL | | | | S | **Sg** | **22 50 49.0** | **-0.8** |
| **RRL** | **Rocca Remolon** | **0.12** | **117** | P | **Pg** | **22 50 47.2** | **-0.3** |
| RRL | | | | S | **Sg** | **22 50 49.0** | **-0.8** |
| **OGMO** | **Fort Saint-Gob** | **0.24** | **7** | Pg | **Pg** | **22 50 50.0** | **+0.8** |
| OGMO | | | | Sg | **Sg** | **22 50 53.2** | **+0.6** |
| **OGMO** | **Fort Saint-Gob** | **0.24** | **7** | P | **Pg** | **22 50 50.0** | **+0.8** |
| OGMO | | | | S | **Sg** | **22 50 53.4** | **+0.8** |
| **MBDF** | **Montbardon** | **0.26** | **160** | *e*Pg | **Pg** | **22 50 49.3** | **-0.4** |
| MBDF | | | | *e*Sg | **Sg** | **22 50 52.8** | **-0.6** |
| | 305nm,0.2s | | | | | | |
| **GDM** | **Grand'Maison** | **0.44** | **302** | Pg | **Pg** | **22 50 53.4** | **+0.6** |
| **BHB** | **Bricherasio** | **0.46** | **107** | P | **Pg** | **22 50 53.3** | **+0.1** |
| BHB | | | | S | **Sg** | **22 50 59.4** | **+0.1** |
| **BHB** | **Bricherasio** | **0.46** | **107** | P | **Pg** | **22 50 53.3** | **+0.1** |
| BHB | | | | S | **Sg** | **22 50 59.4** | **+0.1** |
| **RSP** | **Reno Superiore** | **0.47** | **68** | P | **Pg** | **22 50 53.8** | **+0.2** |
| RSP | | | | S | **Sb** | **22 51 00.6** | **-0.9** |
| RSP | | | | AML | AML | | |
| | comp=E,325µm,1.0s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,264µm,0.6s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,273µm,1.2s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=E,346µm,1.1s | | | | | | |
| **RSP** | **Reno Superiore** | **0.47** | **68** | P | **Pg** | **22 50 53.7** | **+0.2** |
| RSP | | | | S | **Sg** | **22 51 00.2** | **+0.4** |
| **SURF** | **Saint Ours** | **0.51** | **166** | Pg | **Pg** | **22 50 54.1** | **0.0** |
| SURF | | | | Sg | **Sg** | **22 51 01.7** | **+0.8** |
| **SURF** | **Saint Ours** | **0.51** | **166** | P | **Pg** | **22 50 54.1** | **0.0** |
| SURF | | | | S | **Sg** | **22 51 01.6** | **+0.7** |
| **OGAG** | **Argentiere** | **0.53** | **188** | Pg | Pg | 22 50 48.5 | -5.9 |
| OGAG | | | | Sg | Sg | 22 50 51.1 | -10 |
| **OGAG** | **Argentiere** | **0.53** | **188** | P | Pg | 22 50 48.5 | -5.9 |
| OGAG | | | | S | Sg | 22 50 51.1 | -10 |
| **LPG** | **La Plagne** | **0.53** | **8** | *e*Pg | **Pb** | **22 50 55.3** | **-0.3** |
| **LPG** | **La Plagne** | **0.53** | **8** | *e*Pn | **Pn** | **22 50 57.8** | **0.0** |
| LPG | | | | *e*Sg | **Sg** | **22 51 02.4** | **+0.7** |
| | comp=E,46nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **0.54** | **264** | *e*Pg | **Pg** | **22 50 55.1** | **+0.3** |
| ORIF | | | | *e*Sg | **Sg** | **22 51 02.0** | **0.0** |
| | comp=E,123nm,0.3s | | | | | | |
|

| | | | | | AML | AML | | |
|---|---|---|---|---|---|---|---|---|
| MONC | | | | | | | | |
| | comp=E,258µm,1.0s | | | | | | | |
| **MONC** | **Moncucco Torin** | **0.92** | **83** | | P | **Pn** | **22 51 03.1** | **+0.2** |
| MONC | | | | | S | **Sn** | **22 51 17.5** | **+1.5** |
| **OGSM** | **Saint Maurice** | **0.92** | **314** | | Pg | **Pn** | **22 51 02.9** | **0.0** |
| **ENR** | **Entracque** | **0.93** | **143** | | P | **Pg** | **22 51 01.7** | **-0.4** |
| **ENR** | **Entracque** | **0.93** | **143** | | P | **Pg** | **22 51 01.7** | **-0.4** |
| ENR | | | | | S | **Sg** | **22 51 14.2** | **-0.1** |
| **REMY** | **Saint-Rhmy-en** | **0.94** | **23** | | P | **Pb** | **22 51 02.9** | **+0.4** |
| **REMY** | **Saint-Rhmy-en** | **0.94** | **23** | | P | **Pb** | **22 51 02.8** | **+0.4** |
| REMY | | | | | S | **Sb** | **22 51 15.5** | **+0.5** |
| **TRAV** | **Traversella** | **0.95** | **55** | | P | **Pg** | **22 51 02.5** | **+0.1** |
| **TRAV** | **Traversella** | **0.95** | **55** | | P | **Pg** | **22 51 02.6** | **+0.1** |
| TRAV | | | | | S | **Sg** | **22 51 14.6** | **-0.2** |
| **SPIF** | **crte de Spivo** | **1.01** | **155** | | Pg | **Pg** | **22 51 03.6** | **-0.1** |
| **BLAF** | **les Blancs** | **1.11** | **203** | | Pg | **Pn** | **22 51 05.9** | **+0.4** |
| BLAF | | | | | P | **Pg** | **22 51 07.5** | **+2.0** |
| **GBOS** | **Grotte di Boss** | **1.13** | **130** | | P | Pn | 22 51 17.6 | +12 |
| GBOS | | | | | S | **Sb** | **22 51 19.4** | **-0.8** |
| **TURF** | **col de Turini** | **1.13** | **152** | | Pg | **Pg** | **22 51 05.9** | **-0.1** |
| TURF | | | | | Sg | **Sn** | **22 51 21.1** | **-0.5** |
| **TURF** | **col de Turini** | **1.13** | **152** | | P | **Pg** | **22 51 05.9** | **-0.1** |
| TURF | | | | | S | **Sn** | **22 51 21.1** | **-0.5** |
| **MVIF** | **Mont Vial** | **1.14** | **161** | | P | **Pn** | **22 51 09.9** | **+3.9** |
| MVIF | | | | | S | **Sn** | **22 51 23.4** | **+1.8** |
| **SAOF** | **Saorge** | **1.19** | **146** | | P | **Pb** | **22 51 06.5** | **-0.1** |
| **DIX** | **Grande Dixence** | **1.23** | **26** | | P | **Pn** | **22 51 07.5** | **+0.1** |
| **DIX** | **Grande Dixence** | **1.23** | **26** | | P | **Pb** | **22 51 07.7** | **+0.3** |
| **SATI** | **Passo dei Sala** | **1.25** | **43** | | P | **Pg** | **22 51 08.3** | **+0.2** |
| SATI | | | | | S | **Sn** | **22 51 24.8** | **+0.1** |
| **SBF** | **Sospel** | **1.25** | **153** | *eP*g | Pn | **Pn** | **22 51 07.5** | **0.0** |
| SBF | | | | *e*Sg | S | **Sb** | **22 51 23.3** | **-0.4** |
| | comp=E,55nm,0.3s | | | | | | | |
| **MGRO** | **Montegrosso** | **1.25** | **138** | | P | **Pn** | **22 51 07.0** | **-0.6** |
| **MGRO** | **Montegrosso** | **1.25** | **138** | | P | **Pn** | **22 51 07.2** | **-0.5** |
| MGRO | | | | | S | **Sb** | **22 51 23.4** | **-0.5** |
| **SMRF** | **Simiane la Rot** | **1.26** | **218** | *eP* | Pg | **Pg** | **22 51 09.1** | **+0.8** |
| SMRF | | | | *e*Sg | S | **Sn** | **22 51 24.8** | **+0.4** |
| | comp=E,40nm,0.5s | | | | | | | |
| **ESCA** | **l'Escarene** | **1.26** | **155** | | P | **Pg** | **22 51 09.0** | **+0.7** |
| ESCA | | | | | S | **Sg** | **22 51 26.0** | **+1.3** |
| **RORO** | **Rocca Rossa** | **1.33** | **130** | | P | **Pn** | **22 51 08.6** | **0.0** |
| **RORO** | **Rocca Rossa** | **1.33** | **130** | | P | **Pn** | **22 51 08.7** | **+0.1** |
| RORO | | | | | S | **Sb** | **22 51 25.8** | **-0.6** |
| **CANO** | **Canova, Maglio** | **1.37** | **123** | | P | **Pb** | **22 51 09.6** | **-0.2** |
| **QLNO** | **Quiliano** | **1.38** | **118** | | P | **Pb** | **22 51 09.7** | **-0.2** |
| **QLNO** | **Quiliano** | **1.38** | **118** | | P | **Pb** | **22 51 09.8** | **-0.1** |
| **VIVF** | **Saint-Julien-l** | **1.40** | **266** | *eP*g | Pb | **Pb** | **22 51 11.0** | **+0.7** |
| VIVF | | | | *e*Sg | Sg | **Sg** | **22 51 29.8** | **+0.5** |
| | comp=E,28nm,0.4s | | | | | | | |
| **FRF** | **La Foret Royal** | **1.41** | **180** | *eP* | Pg | **Pg** | **22 51 11.2** | **-0.1** |
| FRF | | | | *e*Sg | Sg | **Sg** | **22 51 29.7** | **+0.1** |
| | comp=E,69nm,0.3s | | | | | | | |
| **MMK** | **Mattmark** | **1.42** | **40** | | P | **Pb** | **22 51 10.9** | **+0.2** |
| **MMK** | **Mattmark** | **1.42** | **40** | | P | **Pb** | **22 51 10.9** | **+0.2** |
| **PCP** | **Piancastagn** | **1.42** | **107** | | P | **Pb** | **22 51 10.6** | **-0.1** |
| **PCP** | **Piancastagn** | **1.42** | **107** | | P | **Pb** | **22 51 10.7** | **0.0** |
| **LMR** | **La Mourre** | **1.64** | **183** | *e*Pg | Pb | **Pb** | **22 51 15.0** | **+0.7** |
| LMR | | | | *e*Sg | Sg | **Sg** | **22 51 36.4** | **-0.6** |
| | comp=E,28nm,0.2s | | | | | | | |
| **CABF** | **La Chapelle** | **1.68** | **347** | *eP* | Pb | **Pb** | **22 51 15.8** | **+0.7** |
| CABF | | | | *e*Sg | Sg | **Sg** | **22 51 38.3** | **0.0** |
| | comp=E,3.5nm,0.2s | | | | | | | |
| **MILN** | **Milano** | **1.90** | **74** | ⇓P | Pg | **Pg** | **22 51 21.1** | **+0.5** |
| **LASF** | **Ste Croix** | **2.19** | **247** | *e*Pn | Pn | **Pn** | **22 51 20.2** | **-0.1** |
| **LASF** | **Ste Croix** | **2.19** | **247** | *e*Pg | Pg | **Pg** | **22 51 25.4** | **-0.6** |
| LASF | | | | *e*Sn | Sn | **Sn** | **22 51 46.3** | **-1.0** |
| | comp=E,1.8nm,0.2s | | | | | | | |
| **SMF** | **Signal de Mont** | **2.58** | **311** | *eP* | Pn | **Pn** | **22 51 28.2** | **+2.5** |
| **SMF** | **Signal de Mont** | **2.58** | **311** | *e*Pg | Pg | **Pg** | **22 51 33.1** | **-0.4** |
| SMF | | | | *e*Sg | Sg | **Sg** | **22 52 06.1** | **-0.7** |
| | comp=E,6.9nm,0.3s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.85** | **3** | *e*Pn | Pn | **Pn** | **22 51 29.7** | **+0.3** |
| **HINF** | **Hinteralfeld** | **2.85** | **3** | *e*Pg | Pg | **Pg** | **22 51 38.3** | **-0.4** |
| HINF | | | | *e*Sg | Sg | **Sg** | **22 52 14.6** | **-1.0** |
| | comp=E,3.9nm,0.5s | | | | | | | |
| **AVF** | **Avril sur Loir** | **2.93** | **309** | *eP* | Pn | **Pn** | **22 51 33.1** | **+2.6** |
| **AVF** | **Avril sur Loir** | **2.93** | **309** | *e*Pg | Pg | **Pg** | **22 51 39.0** | **-1.2** |
| AVF | | | | *e*Sn | Sn | **Sn** | **22 52 04.8** | **-0.8** |
| AVF | | | | *e*Sg | Sg | **Sg** | **22 52 17.1** | **-1.1** |
| | comp=E,1.8nm,0.3s | | | | | | | |
| **PGF** | **Pioggiola** | **2.97** | **144** | *e*Pn | Pn | **Pn** | **22 51 30.5** | **-0.6** |
| PGF | | | | *e*Sn | Sn | **Sn** | **22 52 04.4** | **-2.3** |
| | comp=E,1.9nm,0.2s | | | | | | | |
| **LOR** | **Lormes** | **3.00** | **321** | *e*Pn | Pn | **Pn** | **22 51 31.2** | **-0.3** |
| | baz=137 | | | | | | | |
| **LOR** | **Lormes** | **3.00** | **321** | *eP* | Pn | **Pn** | **22 51 34.4** | **+2.9** |
| | baz=140 | | | | | | | |
| LOR | | | | *e*Sg | Sg | **Sg** | **22 52 19.4** | **-1.1** |
| | comp=E,1.5nm,0.3s,baz=147 | | | | | | | |
| **SSF** | **Saint Saulge** | **3.02** | **315** | *eP* | Pn | **Pn** | **22 51 34.6** | **+2.8** |
| **SSF** | **Saint Saulge** | **3.02** | **315** | *e*Pg | Pg | **Pg** | **22 51 41.4** | **-0.6** |
| SSF | | | | *e*Sn | Sn | **Sn** | **22 52 07.3** | **-0.8** |
| SSF | | | | *e*Sg | Sg | **Sg** | **22 52 20.1** | **-1.1** |
| | comp=E,3.8nm,0.4s | | | | | | | |
| **HAU** | **Haudompre** | **3.04** | **356** | *eP* | Pn | **Pn** | **22 51 34.1** | **+2.0** |
| HAU | | | | *e*Sg | Sg | **Sg** | **22 52 20.5** | **-1.2** |
| | comp=E,6.2nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **3.09** | **302** | *eP* | Pn | **Pn** | **22 51 35.7** | **+2.9** |
| **BGF** | **Bois d'Agland** | **3.09** | **302** | *e*Pg | Pg | **Pg** | **22 51 42.4** | **-1.0** |
| BGF | | | | *e*Sn | Sn | **Sn** | **22 52 07.4** | **-2.3** |
| BGF | | | | *e*Sg | Sg | **Sg** | **22 52 22.1** | **-1.3** |
| | comp=E,16nm,0.5s | | | | | | | |
| **CAF** | **Calviac** | **3.25** | **271** | *eP* | Pn | **Pn** | **22 51 37.4** | **+2.4** |
| **CAF** | **Calviac** | **3.25** | **271** | *e*Pg | Pg | **Pg** | **22 51 45.6** | **-0.8** |
| CAF | | | | *e*Sg | Sg | **Sg** | **22 52 27.3** | **-1.2** |
| | comp=E,0.4nm,0.2s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.38** | **294** | *e*Pn | Pn | **Pn** | **22 51 36.5** | **-0.2** |
| **TCF** | **Toulx Ste Croi** | **3.38** | **294** | *eP* | Pn | **Pn** | **22 51 39.0** | **+2.3** |
| **TCF** | **Toulx Ste Croi** | **3.38** | **294** | *e*Pg | Pg | **Pg** | **22 51 47.2** | **-1.6** |
| TCF | | | | *e*Sn | Sn | **Sn** | **22 52 15.0** | **-1.7** |
| TCF | | | | *e*Sg | Sg | **Sg** | **22 52 30.7** | **-1.8** |
| | comp=E,1.0nm,0.3s | | | | | | | |
| **SFTF** | **Sexfontaines** | **3.42** | **342** | *eP* | Pn | **Pn** | **22 51 40.1** | **+2.9** |
| **SFTF** | **Sexfontaines** | **3.42** | **342** | *e*Pg | Pg | **Pg** | **22 51 48.2** | **-1.3** |
| | baz=161 | | | | | | | |
| SFTF | | | | *e*Sg | Sg | **Sg** | **22 52 31.2** | **-2.6** |
| | comp=E,3.7nm,0.4s | | | | | | | |
| **CDF** | **Champ du Feu** | **3.47** | **7** | *e*Pn | Pn | **Pn** | **22 51 37.3** | **-0.7** |
| CDF | | | | *e*Sn | Sn | **Sn** | **22 52 17.5** | **-1.5** |
| CDF | | | | *e*Sg | Sg | **Sg** | **22 52 35.2** | **-0.2** |
| | comp=E,2.1nm,0.4s | | | | | | | |
| **MTLF** | **Montolieu** | **3.58** | **244** | *e*Pg | Pg | **Pg** | **22 51 51.1** | **-1.6** |
| MTLF | | | | *e*Sn | Sn | **Sn** | **22 52 19.5** | **-2.2** |
| | comp=E,2.1nm,0.4s | | | | | | | |
| MTLF | | | | *e*Sg | Sg | **Sg** | **22 52 37.7** | **-1.3** |
| | comp=E,0.3nm,0.2s | | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.64** | **350** | *eP* | Pn | **Pn** | **22 51 42.8** | **+2.5** |
| PAGF | | | | *e*Sg | Sg | **Sg** | **22 52 39.6** | **-1.3** |
| | comp=E,0.9nm,0.3s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **3.64** | **277** | *eP* | Pn | **Pn** | **22 51 42.7** | **+2.4** |
| **RJF** | **Les Rejaudoux** | **3.64** | **277** | *e*Pg | Pg | **Pg** | **22 51 52.9** | **-1.0** |
| **MEZF** | **Maizieres J'vi** | **3.69** | **343** | *eP* | Pn | **Pn** | **22 51 44.2** | **+3.2** |
| **MEZF** | **Maizieres J'vi** | **3.69** | **343** | *e*Pg | Pg | **Pg** | **22 51 53.6** | **-1.3** |
| | baz=158 | | | | | | | |
| **SAVF** | **Savonnieres en** | **3.79** | **345** | *eP* | Pn | **Pn** | **22 51 44.8** | **+2.5** |
| SAVF | | | | *e*Sg | Sg | **Sg** | **22 52 44.1** | **-1.6** |
| | comp=E,1.3nm,0.3s | | | | | | | |
| **BAIF** | **Baives** | **5.35** | **343** | *eP* | Pn | **Pn** | **22 52 06.2** | **+2.5** |

*IDC **12** 23:05:29.3±2.3,5˚32S×145˚88E,h95km±23km,mb3.8/8, mb1 4.0/12,mb1mx3.8/29,mbtmp4.2/12,MS3.3/11, Ms1 3.3/11,ms1mx3.0/55,Error ellipse: s-maj=22.9km s-min=15.4km az=71.0*

*NEIC **12** 23:05:30.4±2.0,5˚26S±0˙06×145˚83E±0˙07,h91km±8km, mb4.4/25,Error ellipse: s-maj=10.1km s-min=8.1km az=51.0*

*DJA **12** 23:05:31.4±0.5,5˚S±4˚×14˚6E±˚,h84km±6km,M4.8/14, mB4.9/3,mb4.6/14,MLv5.0/2,Mw(mB)4.2/3*

**ISC 12 23:05:30.3±0.5,5˚28S±0˙05×145˚78E±0˙07,h100km,n72, σ1§42/70,mb4.4/23,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MANU** | **Manus Island** | **3.59** | **26** | Pn | **Pn** | **23 06 22.2** | **-1.8** |
| **PMG** | **Port Moresby** | **4.32** | **162** | P | **Pn** | **23 06 33.3** | **-0.6** |
| | 36nm,0.3s,baz=13,slow=4.7,SNR=66 | | | | | | |
| PMG | | | | S | **Sn** | **23 07 20.3** | **-2.8** |
| | 94nm,0.3s,baz=149,slow=20,SNR=16 | | | | | | |
| PMG | | | | LR | LR | 23 08 08.1 | |
| | comp=Z,319nm,19.9s,baz=24,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **4.32** | **162** | Pn | **Pn** | **23 06 33.0** | **-0.9** |
| **PMG** | **Port Moresby** | **4.32** | **162** | P | **Pn** | **23 06 33.4** | **-0.5** |
| **JAY** | **Jayapura** | **5.76** | **298** | P | **Pn** | **23 06 54.5** | **+1.0** |
| | 1.2nm,0.3s,baz=146,slow=11,SNR=1.9 | | | | | | |
| **RABL** | **Rabaul** | **6.45** | **81** | Pn | **Pn** | **23 07 03.5** | **+0.6** |
| **RABL** | **Rabaul** | **6.45** | **81** | P | Pn | 23 07 08.5 | +5.6 |
| **COEN** | **Coen** | **8.99** | **196** | Pn | **Pn** | **23 07 37.2** | **-0.3** |
| **COEN** | **Coen** | **8.99** | **196** | P | **Pn** | **23 07 39.0** | **+1.6** |
| **MTSU** | **Mount Surprise** | **12.85** | **186** | P | **Pn** | **23 08 31.1** | **+1.7** |
| **CTA** | **Charters Tower** | **14.72** | **178** | P | **P** | **23 08 58.0** | **+0.8** |
| | 0.5nm,0.3s,baz=7.5,slow=13,SNR=6.9 | | | | | | |
| CTA | | | | S | **Sn** | **23 11 34.4** | **-1.8** |
| | 0.3nm,0.3s,baz=338,slow=19,SNR=2.5 | | | | | | |
| CTA | | | | LR | LR | 23 14 43.6 | |
| | comp=Z,65nm,19.2s,baz=36,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **14.72** | **178** | | **P** | **23 08 57.9** | **+0.8** |
| **SIJI** | **Sorong** | **15.14** | **286** | P | **Pn** | **23 08 58.9** | **-0.1** |
| | 1.1nm,0.3s,baz=88,slow=9.1,SNR=5.4 | | | | | | |
| **SWI** | **Sorong** | **15.15** | **286** | P | **Pn** | **23 08 58.6** | **-0.5** |
| | 32nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **16.33** | **201** | P | **Pn** | **23 09 14.7** | **+0.9** |
| **WB0** | **Warramunga Arr** | **18.17** | **217** | P | **P** | **23 09 35.8** | **+0.6** |
| **WR0** | **Warramunga Arr** | **18.23** | **216** | P | **P** | **23 09 35.6** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 23 09 40.6 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.32** | **216** | P | **P** | **23 09 36.3** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 23 09 37.0 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **18.33** | **216** | P | **P** | **23 09 37.8** | **+0.8** |
| **WRA** | **Warramunga Arr** | **18.34** | **216** | P | **P** | **23 09 35.9** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=40,slow=10,SNR=29 | | | | | | |
| WRA | | | | S | **S** | **23 12 55.9** | **-5.7** |
| | comp=Z,0.1nm,0.3s,baz=41,slow=25,SNR=2.1 | | | | | | |
| WRA | | | | LR | LR | 23 17 06.4 | |
| | comp=Z,95nm,20.1s,baz=86,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.34** | **216** | P | **P** | **23 09 37.3** | **+0.2** |
| **GUMO** | **Guam** | **18.77** | **357** | LR | LR | 23 16 28.9 | |
| | comp=Z,128nm,18.3s,baz=86,slow=35 | | | | | | |
| **LBMI** | **Labuha** | **18.82** | **284** | P | **P** | **23 09 41.9** | **-0.5** |
| | comp=Z,1µmcomp=Z,72nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **19.64** | **237** | P | **P** | **23 09 52.3** | **+1.0** |
| KNRA | | | | IAmb | IAmb | 23 09 59.9 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **20.61** | **166** | P | **P** | **23 10 02.7** | **+1.0** |
| EIDS | | | | IAmb | IAmb | 23 10 20.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **21.23** | **184** | P | **P** | **23 10 09.9** | **+1.6** |
| **RMQ** | **Roma** | **21.28** | **173** | P | **P** | **23 10 10.5** | **+1.7** |
| **AS31** | **Alice Springs** | **21.56** | **211** | P | **P** | **23 10 13.7** | **+1.8** |
| **ASAR** | **Alice Springs** | **21.56** | **211** | P | **P** | **23 10 11.3** | **-0.6** |
| | comp=Z,5.0nm,1.0s,baz=41,slow=6.3,SNR=27 | | | | | | |
| ASAR | | | | LR | LR | 23 20 31.2 | |
| | comp=Z,79nm,18.2s,baz=56,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **21.56** | **211** | P | **P** | **23 10 13.6** | **+1.6** |
| **BATI** | **Baumata** | **22.45** | **256** | P | **P** | **23 10 21.2** | **-0.1** |
| | comp=Z,22nm,0.5s,baz=222,slow=4.2,SNR=5.2 | | | | | | |
| **BATI** | **Baumata** | **22.45** | **256** | P | **P** | **23 10 20.5** | **-0.9** |
| | comp=Z,27nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.44** | **235** | P | **P** | **23 10 30.8** | **-0.1** |
| | comp=Z,6.1nm,0.7s,baz=55,slow=8.7,SNR=20 | | | | | | |
| FITZ | | | | LR | LR | 23 21 23.4 | |
| | comp=Z,62nm,19.3s,baz=74,slow=41 | | | | | | |
| **OOD** | **Oodnadatta** | **24.36** | **202** | P | **P** | **23 10 39.8** | **+0.7** |
| **APSI** | **Ampana** | **24.48** | **279** | P | **P** | **23 10 41.6** | **+1.2** |
| | comp=Z,33nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **25.60** | **168** | P | **P** | **23 10 51.5** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 23 10 53.6 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **25.60** | **168** | P | **P** | **23 10 52.8** | **+2.3** |
| **TOLI2** | **Tolitoli** | **25.76** | **284** | P | **P** | **23 10 53.3** | **+1.3** |
| TOLI2 | | | | IAmb | IAmb | 23 10 55.9 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **25.88** | **57** | P | **P** | **23 10 53.0** | **-0.1** |
| **TTSI** | **Tana Toraja** | **25.98** | **274** | P | **P** | **23 10 53.6** | **-0.5** |
| | comp=Z,26nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **26.05** | **132** | LR | LR | 23 19 27.8 | |
| | comp=Z,95nm,21.8s,baz=102,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **26.05** | **132** | P | **P** | **23 10 54.0** | **-0.6** |
| DZM | | | | IAmb | IAmb | 23 11 09.7 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.12** | **180** | P | **P** | **23 10 56.8** | **+1.8** |
| **STKA** | **Stephens Creek** | **26.75** | **188** | P | **P** | **23 11 00.8** | **+0.1** |
| | comp=Z,7.6nm,0.8s,baz=10,slow=10,SNR=15 | | | | | | |
| STKA | | | | LR | LR | 23 22 04.1 | |
| | comp=Z,60nm,21.1s,baz=23,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **26.75** | **188** | P | **P** | **23 11 01.6** | **+0.9** |
| **STKA** | **Stephens Creek** | **26.75** | **188** | P | **P** | **23 11 01.7** | **+1.0** |
| **BBOO** | **Buckleboo** | **28.85** | **197** | P | **P** | **23 11 20.4** | **+0.9** |
| BBOO | | | | IAmb | IAmb | 23 11 23.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **30.04** | **175** | P | **P** | **23 11 31.2** | **+1.2** |
| CAN | | | | IAmb | IAmb | 23 11 32.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **30.35** | **211** | P | **P** | **23 11 33.6** | **+0.9** |
| **TOO** | **Toolangi** | **32.14** | **180** | P | **P** | **23 11 50.1** | **+1.7** |
| TOO | | | | IAmb | IAmb | 23 11 51.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **32.14** | **180** | P | **P** | **23 11 51.0** | **+2.6** |
| **BRAT** | **Ballarat** | **32.16** | **183** | P | **P** | **23 11 51.2** | **+2.7** |
| **URZ** | **Urewera** | **43.45** | **143** | LR | LR | 23 29 24.2 | |
| | comp=Z,71nm,21.0s,baz=254,slow=33 | | | | | | |
| **LBZ** | **Lake Benmore** | **44.44** | **155** | P | **P** | **23 13 31.0** | **-0.4** |
| LBZ | | | | IAmb | IAmb | 23 13 33.4 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **44.80** | **158** | P | **P** | **23 13 35.3** | **+1.1** |
| WHZ | | | | IAmb | IAmb | 23 13 44.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **NIUE** | **Niue** | **45.27** | **112** | P | **P** | **23 13 38.2** | **0.0** |
| **KSRS** | **Korea Array** | **45.66** | **340** | P | **P** | **23 13 40.8** | **-0.3** |
| | comp=Z,2.1nm,0.9s,baz=161,slow=8.3,SNR=6.1 | | | | | | |
| KSRS | | | | LR | LR | 23 31 07.2 | |
| | comp=Z,10nm,21.2s,baz=320,slow=34 | | | | | | |
| **JTM** | **Tenmabayashi** | **46.05** | **355** | P | **P** | **23 13 44.3** | **+0.3** |
| **KULM** | **Kulim** | **46.27** | **282** | P | **P** | **23 13 46.7** | **+0.4** |
| KULM | | | | IAmb | IAmb | 23 13 53.9 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **52.36** | **321** | P | **P** | **23 14 31.8** | **-0.6** |
| XAN | | | | sP | pP | 23 14 53.4 | -3.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **PZH** | **PanZhiHua** | **53.07** | **309** | P | **P** | **23 14 35.3** | **-2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **55.59** | **329** | *eP* | **P** | **23 14 53.3** | **-2.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,230nm,5.9s | | | | | | |
| **KLR** | **Kul'dur** | **55.65** | **349** | LR | LR | 23 34 07.6 | |
| | comp=Z,38nm,21.1s,baz=356,slow=31 | | | | | | |
| **GTA** | **Gaotai** | **61.42** | **321** | *eP* | **P** | **23 15 37.8** | **+1.4** |
| GTA | | | | pP | pP | 23 15 52.4 | -8.9 |
| GTA | | | | sP | sP | 23 15 59.1 | -13 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **WMQ** | **Urumqi** | **71.46** | **320** | *eP* | **P** | **23 16 38.1** | **-2.1** |
| **MKAR** | **Makanchi Array** | **76.18** | **321** | P | **P** | **23 17 08.1** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=113,slow=8.0,SNR=4.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **77.76** | **328** | P | **P** | **23 17 17.5** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **77.76** | **328** | P | **P** | **23 17 16.7** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=124,slow=2.7,SNR=3.8 | | | | | | |
| **CAPN** | **Captain Cook N** | **81.85** | **26** | P | **P** | **23 17 38.2** | **0.0** |
| **RAGM** | **Ragged Mountai** | **84.64** | **28** | P | **P** | **23 17 52.5** | **-0.2** |
| **ILAR** | **Eielson Array** | **85.31** | **23** | P | **P** | **23 17 54.8** | **-1.1** |
| | comp=Z,1.1nm,0.8s,baz=247,slow=5.5,SNR=9.5 | | | | | | |
| **ILAR** | **Eielson Array** | **85.31** | **23** | P | **P** | **23 17 55.2** | **-0.7** |

**KRSC 12 22:57:04.6±3.0,48˚76N×156˚79E,h19km±34km,ML3.9, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **2.71** | **0** | *eP* | Pb | 22 57 50.2 | -2.2 |
| **KDTR** | **Khodutka, Kamc** | **3.16** | **15** | *eP* | Pb | 22 57 56.8 | -3.3 |
| KDTR | | | | *e*S | Sb | 22 58 35.2 | -3.0 |
| **MTVR** | **Mutnovka** | **3.83** | **13** | *eP* | Pn | 22 58 06.3 | +3.7 |
| MTVR | | | | *e*S | Sb | 22 58 53.5 | -4.1 |
| **RUS** | **Russkaya** | **3.84** | **16** | *eP* | Pn | 22 58 05.9 | +3.3 |
| RUS | | | | *e*S | Sb | 22 58 53.1 | -4.5 |
| **GRL** | **Gorelyy** | **3.88** | **12** | *eP* | Pn | 22 58 07.2 | +3.9 |
| **UGLR** | **Uglovaya** | **4.64** | **15** | *eP* | Pn | 22 58 18.1 | +4.5 |
| **AVH** | **Avacha** | **4.67** | **14** | *eP* | Pn | 22 58 19.1 | +4.9 |
| **SMAR** | **Somma** | **4.68** | **15** | *eP* | Pn | 22 58 19.3 | +4.9 |
| **KOK** | **Koryaka** | **4.69** | **14** | *eP* | Pn | 22 58 19.6 | +5.3 |
| **SDLR** | **Sedlovina** | **4.71** | **15** | *eP* | Pn | 22 58 18.5 | +3.8 |
| **KRER** | **Koryakskii** | **4.71** | **14** | *eP* | Pn | 22 58 20.2 | +5.4 |
| **SPN** | **Mys Shipunski** | **4.80** | **24** | *eP* | Pn | 22 58 20.7 | +4.9 |
| **GNL** | **Ganaly** | **4.99** | **8** | *eP* | Pn | 22 58 23.2 | +4.6 |
| **MKZ** | **Mys Kozlova** | **6.56** | **26** | *eP* | Pn | 22 58 43.8 | +3.8 |

*IDC **12** 23:21:52.9±4.7,36˚20N×70˚70E,h165km±40km,mb3.4/6, mb1 3.4/11,mb1mx3.1/51,mbtmp3.8/11,MS2.9/1, Ms1 2.9/1,ms1mx2.3/67,Error ellipse: s-maj=45.6km s-min=28.4km az=143.0*

*NNC **12** 23:21:52.3±7.8,36˚86N×69˚47E,h0km,mb4.6,mpv4.3, Error ellipse: s-maj=63.4km s-min=59.4km az=45.0*

*NEIC **12** 23:21:58.2±1.4,36˚51N±0˙03×70˚49E±0˙08,h201km±6km, mb4.1/8,Error ellipse: s-maj=10.6km s-min=2.7km az=66.0*

**ISC 12 23:21:57.8±0.8,36˚50N±0˙07×70˚67E±0˙08,h204km,n48, σ1§62/50,mb4.0/7,5D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.36** | **215** | Pn | **Pn** | **23 22 39.9** | **-0.7** |
| **CHGR** | **Chuyangaron** | **2.47** | **331** | Pn | **Pn** | **23 22 40.6** | **-1.1** |
| **GAR** | **Garm** | **2.52** | **354** | | **Pn** | **23 22 41.8** | **-0.5** |
| **NIL** | **Nilore** | **3.54** | **143** | Pn | **Pn** | **23 22 55.5** | **+1.4** |
| **TAS** | **Tashkent** | **4.94** | **348** | Pn | **Pn** | **23 23 11.6** | **+0.1** |
| **THN** | **Thein Dam** | **5.81** | **133** | *eP* | **Pn** | **23 23 23.1** | **+0.4** |
| THN | | | | *e*S | **S** | **23 24 28.1** | **-1.5** |
| **AML** | **Almayashu** | **6.10** | **22** | P | **Pn** | **23 23 26.4** | **-0.3** |
| | SNR=106 | | | | | | |
| **UCH** | **Uchtor** | **6.45** | **26** | P | **Pn** | **23 23 31.2** | **-0.1** |
| | SNR=42 | | | | | | |
| **KKAR** | **Karatay Array** | **6.60** | **359** | Pn | **Pn** | **23 23 31.9** | **-0.9** |
| **KK08** | **Karatay Array** | **6.60** | **359** | ⇓Pn | Pn | 23 23 28.1 | -4.8 |
| | 8.1nm,0.5s,baz=188,slow=13 | | | | | | |
| KK08 | | | | ⇓Sn | **S** | **23 24 40.3** | **-7.8** |
| | 4.1nm,0.4s,baz=191,slow=24 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.61** | **20** | P | **Pn** | **23 23 33.1** | **+0.1** |
| | SNR=18 | | | | | | |
| **AAK** | **Ala-Archa** | **6.81** | **25** | P | **Pn** | **23 23 35.6** | **0.0** |
| | 3.6nm,0.3s,baz=199,slow=4.6,SNR=59 | | | | | | |
| AAK | | | | S | **S** | **23 24 49.6** | **-3.5** |
| | 0.9nm,0.3s,baz=323,slow=21,SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **6.81** | **25** | P | **Pn** | **23 23 35.8** | **+0.2** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.81** | **25** | Pn | **Pn** | **23 23 35.5** | **-0.1** |
| **AAK** | **Ala-Archa** | **6.81** | **25** | ⇓Pn | **Pn** | **23 23 35.5** | **-0.1** |
| | 6.0nm,0.5s | | | | | | |
| AAK | | | | ⇓Sn | **S** | **23 24 55.5** | **+2.4** |
| | 7.6nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **6.98** | **27** | P | **Pn** | **23 23 38.0** | **+0.1** |
| | SNR=14 | | | | | | |
| **CHMS** | **Chumysh** | **7.21** | **25** | P | **Pn** | **23 23 40.8** | **0.0** |
| | SNR=15 | | | | | | |
| **USP** | **Ospenovka** | **7.38** | **22** | P | **Pn** | **23 23 42.3** | **-0.6** |
| | SNR=8.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.45** | **29** | P | **Pn** | **23 23 43.8** | **-0

comp=Z,1.9nm,0.8s,baz=102,slow=8.5,SNR=5.1
**ARCES ARCESS Array B 41.05 338** IAmb IAmb 23 29 40.2
comp=Z,20nm,1.4s
**NB2 NORSAR Subarra 44.23 323** P **P** **23 29 47.1 +0.6**
comp=Z,1.5nm,0.6s,baz=96,slow=7.9
**NOA NORSAR Array B 44.23 323** P **P** **23 29 47.4 +0.9**
comp=Z,0.8nm,0.6s,baz=97,slow=7.7,SNR=4.4
**TORD Torodi Ar. Bea 65.45 268** P **P** **23 32 17.9 -1.3**
comp=Z,0.5nm,0.5s,baz=49,slow=5.9,SNR=19
**ILAR Eielson Array 74.86 16** P **P** **23 33 15.7 +0.2**
comp=Z,0.2nm,0.5s,baz=306,slow=5.3,SNR=2.4
**ILAR Eielson Array 74.86 16** P **P** **23 33 15.1 -0.4**
**KTH Kantishna Hill 74.95 18** P **P** **23 33 17.2 +1.1**
KTH IAmb IAmb 23 33 44.0
comp=Z,7.2nm,1.2s
**PPLA Purkeypile 75.17 19** P **P** **23 33 18.3 +0.8**
**M19K Big River Lodg 75.39 20** P **P** **23 33 18.9 +0.3**

*IDC* ***12*** *23:22:13.8±1.9,5°.54N×125°.27E,h0km,mb3.4/5, mb1 3.6/5,mb1mx3.2/41,mbtmp3.4/5,Error ellipse: s-maj=142.7km s-min=22.0km az=69.0*
**ISC 12 23:22:21.2±1.1,5°.1N±0°.1×124°.2E±0°.2,h35km,n7,σ2s36/7, mb3.5/5,1C-1D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.23** | **36** | *eP* | | Pn | | 23 22 47.7 | +5.7 |
| **KCP** | **Kidapawan** | **2.10** | **24** | *iP* | | **Pn** | | **23 22 54.9** | **+1.0** |
| KCP | | | | *i* | S | **Sn** | | **23 23 18.6** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **23.08** | **177** | P | | **P** | | **23 27 27.1** | **+3.2** |
| | 1.7nm,0.9s,baz=6.0,slow=12,SNR=1.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.79** | **158** | P | | **P** | | **23 27 55.5** | **-2.6** |
| | 0.2nm,0.8s,baz=337,slow=11,SNR=1.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.10** | **162** | P | | **P** | | **23 28 25.9** | **-1.8** |
| | 0.3nm,0.6s,baz=347,slow=7.7,SNR=2.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.02** | **326** | P | | **P** | | **23 31 49.0** | **-0.3** |
| | 0.2nm,0.4s,baz=113,slow=6.3,SNR=4.9 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.26** | **328** | P | | **P** | | **23 32 18.1** | **-1.0** |
| | 0.2nm,0.5s,baz=127,slow=5.0,SNR=4.2 | | | | | | | | |

*IDC* ***12*** *23:42:25.5±1.3,6°.22S×103°.55E,h0km,mb4.0/12, mb1 4.0/13,mb1mx3.8/39,mbtmp4.0/13,ML3.7/1,MS2.8/2, Ms1 2.8/2,ms1mx2.5/79,Error ellipse: s-maj=40.7km s-min=14.9km az=47.0*
*DJA* ***12*** *23:42:29.3±1.4,6°.5S±6°×10°.4E±°,h10km±8km,M4.2/10, mb4.7/1,MLv4.0/10*
*NEIC* ***12*** *23:42:29.5±1.3,6°.42S±0°.07×103°.44E±0°.08,h32km±6km, mb4.5/18,Error ellipse: s-maj=14.8km s-min=2.5km az=47.0*
**ISC 12 23:42:26.4±0.6,6°.31S±0°.07×103°.55E±0°.06,h10km,n54, σ1s38/50,mb4.3/19,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KASI** | **Kota Agung** | **1.23** | **50** | P | | **Pn** | | **23 42 49.3** | **-0.3** |
| KASI | | | | S | | **Sb** | | **23 43 03.0** | **-2.5** |
| **LWLI** | **Liwa** | **1.38** | **22** | P | | **Pn** | | **23 42 52.8** | **+0.9** |
| **MDSI** | **Maura Dua** | **1.92** | **19** | P | | **Pn** | | **23 43 00.9** | **+1.8** |
| **BLSI** | **Bandar Lampung** | **1.93** | **61** | P | | **Pn** | | **23 43 00.5** | **+1.2** |
| **KLI** | **Kotabumi** | **1.94** | **42** | P | | **Pn** | | **23 43 01.0** | **+1.6** |
| **KLSI** | | **2.00** | **36** | P | | **Pn** | | **23 43 01.8** | **+1.6** |
| **CGJI** | **Cibinong** | **2.15** | **98** | P | | **Pn** | | **23 43 02.8** | **+0.5** |
| CGJI | | | | S | | **Sn** | | **23 43 28.2** | **-0.9** |
| **LHSI** | **Lahat** | **2.47** | **359** | P | | **Pn** | | **23 43 09.1** | **+2.4** |
| **KSI** | **Kapahiang** | **2.81** | **340** | P | | **Pn** | | **23 43 15.1** | **+3.6** |
| **MASI** | **Maura Aman, Be** | **3.41** | **337** | P | | **Pn** | | **23 43 21.8** | **+2.1** |
| **LEM** | **Lembang** | **4.07** | **97** | Pn | | **Pn** | | **23 43 30.6** | **+1.7** |
| | 4.6nm,0.3s,baz=315,slow=20,SNR=1.9 | | | | | | | | |
| LEM | | | | Sn | | **Sn** | | **23 44 20.5** | **+3.7** |
| | 5.6nm,0.3s,baz=136,slow=22,SNR=3.6 | | | | | | | | |
| LEM | | | | LR | | LR | | 23 44 40.5 | |
| | comp=Z,48nm,19.2s,baz=324,slow=33 | | | | | | | | |
| **XMIS** | **Christmas Isla** | **4.63** | **153** | Pn | | Pn | | 23 43 33.9 | -2.6 |
| **UGM** | **Wanagama** | **7.10** | **103** | Pn | | **Pn** | | **23 44 13.0** | **+2.6** |
| **UGM** | **Wanagama** | **7.10** | **103** | P | | **Pn** | | **23 44 10.9** | **+0.5** |
| **GSI** | **Gunungsitoli** | **9.67** | **322** | Pn | | **Pn** | | **23 44 45.7** | **+0.5** |
| **BATI** | **Baumata** | **20.27** | **102** | P | | **P** | | **23 47 03.2** | **+0.8** |
| | 12nm,0.3s,baz=27,slow=6.8,SNR=2.5 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.53** | **120** | P | | **P** | | **23 47 48.0** | **+1.6** |
| | 5.3nm,1.2s,baz=311,slow=9.3,SNR=2.6 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.03** | **350** | P | | **P** | | **23 47 51.0** | **+0.1** |
| | 2.0nm,0.6s,baz=182,slow=9.1,SNR=14 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **25.38** | **350** | P | | **P** | | **23 47 53.0** | **-1.0** |
| **PALK** | **Pallekele** | **26.49** | **300** | P | | **P** | | **23 48 02.1** | **-2.2** |
| PALK | | | | IAmb | IAmb | | | 23 48 29.6 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **SAUI** | **Saumlaki** | **27.58** | **95** | P | | **P** | | **23 48 13.9** | **-0.1** |
| **H08S2** | **Diego Garcia H** | **30.85** | **266** | T | | T | | 00 21 11.8 | |
| | baz=89,slow=76 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **30.86** | **266** | T | | T | | 00 21 16.7 | |
| | baz=89,slow=76 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **30.87** | **266** | T | | T | | 00 21 15.7 | |
| | baz=89,slow=76 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **32.81** | **117** | P | | **P** | | **23 48 59.0** | **-1.3** |
| WB0 | | | | IAmb | IAmb | | | 23 49 56.2 | |
| | comp=Z,18nm,1.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.82** | **117** | P | | **P** | | **23 49 00.7** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=301,slow=9.3,SNR=4.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.82** | **117** | P | | **P** | | **23 49 00.2** | **-0.2** |
| **ASAR** | **Alice Springs** | **33.90** | **124** | P | | **P** | | **23 49 10.0** | **+0.2** |
| | comp=Z,0.1nm,0.5s,baz=300,slow=7.9,SNR=1.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **33.90** | **124** | P | | **P** | | **23 49 09.1** | **-0.7** |
| **AIS** | **Amsterdam Isla** | **39.24** | **213** | P | | **P** | | **23 49 53.4** | **-1.6** |
| **COEN** | **Coen** | **39.69** | **104** | P | | **P** | | **23 50 00.1** | **+0.9** |
| COEN | | | | IAmb | IAmb | | | 23 51 15.0 | |
| | comp=Z,87nm,2.0s | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.66** | **131** | P | | **P** | | **23 50 33.0** | **+1.4** |
| | comp=Z,0.8nm,0.6s,baz=236,slow=5.8,SNR=3.3 | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.66** | **131** | P | | **P** | | **23 50 30.4** | **-1.2** |
| **KSRS** | **Korea Array** | **49.13** | **26** | P | | **P** | | **23 51 14.2** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=227,slow=7.7,SNR=6.4 | | | | | | | | |
| **ARMA** | **Armidale** | **51.05** | **124** | P | | **P** | | **23 51 27.8** | **-1.4** |
| **WSAR** | **Wadi Sarin** | **52.80** | **305** | LR | | LR | | 00 11 58.5 | |
| | comp=Z,26nm,18.9s,baz=248,slow=34 | | | | | | | | |
| **SONM** | **Songino Array** | **53.97** | **2** | P | | **P** | | **23 51 50.6** | **0.0** |
| | comp=Z,3.1nm,0.9s,baz=181,slow=8.8,SNR=20 | | | | | | | | |
| **SONM** | **Songino Array** | **53.97** | **2** | IAmb | IAmb | | | 23 51 51.7 | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.03** | **3** | P | | **P** | | **23 51 51.1** | **0.0** |
| ULN | | | | IAmb | IAmb | | | 23 52 05.5 | |
| | comp=Z,7.4nm,1.8s | | | | | | | | |
| **MK31** | **Makanchi Array** | **56.14** | **343** | P | | **P** | | **23 52 06.2** | **0.0** |
| MK31 | | | | IAmb | IAmb | | | 23 54 07.9 | |
| | comp=Z,6.5nm,1.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.14** | **343** | P | | **P** | | **23 52 06.2** | **0.0** |
| | comp=Z,1.3nm,0.5s,baz=156,slow=8.3,SNR=24 | | | | | | | | |
| **HRA** | **Herat** | **56.21** | **319** | P | | **P** | | **23 52 06.4** | **-0.8** |
| **MAKZ** | **Makanchi** | **56.25** | **342** | P | | **P** | | **23 52 07.3** | **+0.4** |
| MAKZ | | | | IAmb | IAmb | | | 23 54 00.5 | |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.44** | **24** | P | | **P** | | **23 52 08.1** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=203,slow=4.7,SNR=5.7 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **62.07** | **348** | P | | **P** | | **23 52 46.4** | **-0.7** |
| ZAA0 | | | | IAmb | IAmb | | | 23 52 47.9 | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.07** | **348** | P | | **P** | | **23 52 46.4** | **-0.7** |
| | comp=Z,2.4nm,0.5s,baz=152,slow=5.2,SNR=15 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.07** | **348** | P | | **P** | | **23 52 46.6** | **-0.5** |
| **ABKAR** | **Akbulak array** | **67.10** | **331** | P | | **P** | | **23 53 20.3** | **+0.2** |
| ABKAR | | | | IAmb | IAmb | | | 23 53 35.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **67.10** | **331** | P | | **P** | | **23 53 19.8** | **-0.3** |
| **TUWZ** | **Tuamarina** | **71.17** | **132** | P | | **P** | | **23 53 45.1** | **-0.4** |
| **PLWZ** | **Palliser** | **72.16** | **132** | P | | P | | 23 53 49.1 | -2.5 |
| **RAO** | **Raoul Island** | **76.95** | **118** | P | | **P** | | **23 54 19.4** | **-0.2** |
| **BRTR** | **Keskin Array B** | **78.83** | **312** | P | | **P** | | **23 54 31.1** | **+1.1** |
| | comp=Z,0.6nm,0.8s,baz=135,slow=12,SNR=4.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.60** | **45** | PKPbc | | **PKPdf** | | **00 02 06.7** | **+0.8** |
| | comp=Z,0.8nm,0.5s,baz=297,slow=1.3,SNR=13 | | | | | | | | |

**IDC 12 23:50:04.9±1.7,4°.09S×130°.14E,h0km,mb3.2/1, mb1 3.4/4,mb1mx3.2/41,mbtmp3.2/4,ML3.1/3,MS2.8/1, Ms1 2.8/1,ms1mx2.3/25,Error ellipse: s-maj=61.6km s-min=24.3km az=90.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **3.40** | **19** | Pn | | Pn | | 23 50 59.1 | 0.0 |
| | 2.5nm,0.3s,baz=239,slow=23,SNR=11 | | | | | | | | |
| SIJI | | | | Sn | | Sn | | 23 51 40.9 | +0.7 |
| | 1.4nm,0.3s,baz=233,slow=20,SNR=1.5 | | | | | | | | |
| **DAV** | **Davao City (W)** | **11.98** | **338** | LR | | LR | | 23 57 13.0 | |
| | comp=Z,47nm,19.5s,baz=348,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.28** | **166** | Pn | | Pn | | 23 53 54.0 | -1.1 |
| | 0.0nm,0.3s,baz=348,slow=12,SNR=1.9 | | | | | | | | |
| WRA | | | | Sn | | Sn | | 23 56 48.1 | -8.3 |
| | 0.1nm,0.3s,baz=258,slow=29,SNR=1.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **19.80** | **170** | P | | P | | 23 54 37.5 | +0.4 |
| | 0.1nm,0.3s,baz=348,slow=9.7,SNR=7.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.89** | **326** | P | | P | | 00 00 52.6 | +0.1 |
| | 0.1nm,0.3s,baz=121,slow=7.2,SNR=1.7 | | | | | | | | |

*ATH* ***12*** *23:50:56.2,38°.41N×20°.46E,h16km±2km,ML2.4/4,Error ellipse: s-maj=3.0km s-min=0.7km az=127.0*
*THE* ***12*** *23:50:56.2,38°.41N×20°.47E,h13km±1km,ML2.6/9,Error ellipse: s-maj=1.5km s-min=0.3km az=117.0*
**ISC 12 23:50:55.0±0.9,38°.43N±0°.02×20°.38E±0°.07,h17km±7km, n27,σ0s91/53,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.15** | **80** | P | | P | **Pg** | **23 50 59.2** | **0.0** |
| FSK | | | | S | | S | **Sg** | **23 51 00.9** | **-1.1** |
| | 7µm,0.2s | | | | | | | | |
| **FSK** | **Fiskardo** | **0.15** | **80** | P | | P | **Pg** | **23 50 59.2** | **0.0** |
| FSK | | | | S | | S | **Sg** | **23 51 00.9** | **-1.1** |
| FSK | | | | AML | | AML | | 23 51 01.1 | |
| | comp=N,7758µm,0.2s | | | | | | | | |
| FSK | | | | AML | | AML | | 23 51 01.6 | |
| | comp=E,18828µm,0.2s | | | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.18** | **167** | P | | P | **Pb** | **23 51 00.1** | **+0.2** |
| KEF4 | | | | S | | S | **Sg** | **23 51 02.9** | **+0.3** |
| | comp=E,27µm,0.2s | | | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.18** | **167** | P | | P | **Pb** | **23 51 00.1** | **+0.2** |
| KEF4 | | | | S | | S | **Sb** | **23 51 03.2** | **+0.1** |
| **DMLN** | **Damoulianata-K** | **0.20** | **180** | P | | P | **Pb** | **23 51 00.6** | **+0.4** |
| DMLN | | | | S | | S | **Sb** | **23 51 04.0** | **+0.5** |
| | comp=E,4µm,0.3s | | | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.20** | **180** | P | | P | **Pb** | **23 51 00.6** | **+0.4** |
| DMLN | | | | S | | S | **Sb** | **23 51 04.0** | **+0.5** |
| **KEF3** | **Kipouria, Keph** | **0.23** | **185** | P | | P | **Pb** | **23 51 00.8** | **0.0** |
| KEF3 | | | | S | | S | **Sg** | **23 51 04.2** | **+0.2** |
| | comp=E,6µm,0.4s | | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.23** | **185** | P | | P | **Pb** | **23 51 00.8** | **0.0** |
| KEF3 | | | | S | | S | **Sb** | **23 51 04.5** | **-0.1** |
| **LXRA** | **Lixouri, Kepha** | **0.24** | **168** | P | | P | **Pb** | **23 51 01.1** | **+0.2** |
| LXRA | | | | S | | S | **Sb** | **23 51 05.3** | **+0.5** |
| **EVGI** | **Lefkada island** | **0.29** | **50** | P | | P | **Pg** | **23 51 01.6** | **+0.2** |
| EVGI | | | | S | | S | **Sg** | **23 51 05.9** | **+0.3** |
| | comp=E,3µm,0.2s | | | | | | | | |
| **EVGI** | **Lefkada island** | **0.29** | **50** | P | | P | **Pb** | **23 51 01.7** | **0.0** |
| EVGI | | | | S | | S | **Sg** | **23 51 06.0** | **+0.3** |
| **DRAG** | **Dragano-Lefkad** | **0.29** | **32** | P | | P | **Pb** | **23 51 02.0** | **+0.1** |
| DRAG | | | | S | | S | **Sb** | **23 51 06.8** | **+0.3** |
| | comp=E,4µm,0.2s | | | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.29** | **32** | P | | P | **Pb** | **23 51 02.0** | **+0.1** |
| DRAG | | | | S | | S | **Sb** | **23 51 07.3** | **+0.8** |
| **VLS** | **Valsamata** | **0.31** | **146** | P | | P | **Pg** | **23 51 01.5** | **-0.2** |
| VLS | | | | S | | S | **Sg** | **23 51 05.3** | **-0.8** |
| | comp=E,978nm,0.1s | | | | | | | | |
| **VLS** | **Valsamata** | **0.31** | **146** | P | | P | **Pg** | **23 51 01.5** | **-0.2** |
| VLS | | | | S | | S | **Sg** | **23 51 05.8** | **-0.4** |
| VLS | | | | AML | | AML | | 23 51 06.5 | |
| | comp=N,1765µm,0.2s | | | | | | | | |
| VLS | | | | AML | | AML | | 23 51 07.1 | |
| | comp=E,2031µm,0.1s | | | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.36** | **153** | P | | P | **Pg** | **23 51 02.6** | **+0.1** |
| PSDA | | | | S | | S | **Sg** | **23 51 07.4** | **-0.2** |
| **PSDA** | **Pessada-Kefalo** | **0.36** | **153** | P | | P | **Pg** | **23 51 02.6** | **+0.1** |
| PSDA | | | | S | | S | **Sb** | **23 51 08.1** | **-0.2** |
| **NYDR** | **Nydri-Lefkada** | **0.38** | **42** | P | | P | **Pg** | **23 51 03.1** | **+0.2** |
| NYDR | | | | S | | S | **Sg** | **23 51 07.9** | **-0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.38** | **42** | P | | P | **Pg** | **23 51 03.2** | **+0.4** |
| NYDR | | | | S | | S | **Sb** | **23 51 08.8** | **0.0** |
| **LKD2** | **Lefkada island** | **0.42** | **32** | P | | P | **Pb** | **23 51 04.1** | **+0.1** |
| LKD2 | | | | S | | S | **Sb** | **23 51 10.4** | **+0.3** |
| | comp=E,468nm,0.4s | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.42** | **32** | P | | P | **Pb** | **23 51 04.1** | **+0.1** |
| LKD2 | | | | S | | S | **Sb** | **23 51 10.7** | **+0.7** |
| LKD2 | | | | AML | | AML | | 23 51 11.3 | |
| | comp=N,924µm,0.5s | | | | | | | | |
| LKD2 | | | | AML | | AML | | 23 51 12.1 | |
| | comp=E,928µm,0.3s | | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.45** | **29** | P | | P | **Pb** | **23 51 04.9** | **+0.4** |
| TSLK | | | | S | | S | **Sb** | **23 51 11.2** | **+0.3** |
| | comp=E,650nm,0.3s | | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.45** | **29** | P | | P | **Pb** | **23 51 04.9** | **+0.4** |
| TSLK | | | | S | | S | **Sb** | **23 51 12.2** | **+1.3** |
| TSLK | | | | AML | | AML | | 23 51 13.8 | |
| | comp=E,1092µm,0.3s | | | | | | | | |
| TSLK | | | | AML | | AML | | 23 51 14.3 | |
| | comp=N,1198µm,0.5s | | | | | | | | |
| **STON** | **Ston** | **4.88** | **336** | *e*Pn | | **Pn** | | **23 52 08.8** | **+1.3** |
| STON | | | | Sn | | **Sn** | | **23 53 00.1** | **-3.4** |
| **RICI** | **Ricice** | **5.62** | **335** | *e*Pn | | **Pn** | | **23 52 19.0** | **+1.3** |
| RICI | | | | Sn | | **Sn** | | **23 53 10.9** | **-3.0** |
| **KIJV** | **Kijevo** | **6.32** | **333** | *e*Pn | | **Pn** | | **23 52 28.9** | **+1.6** |
| KIJV | | | | Sn | | **Sn** | | **23 53 37.3** | **-1.8** |
| **MORI** | **Morici** | **6.47** | **329** | *e*Pn | | **Pn** | | **23 52 30.9** | **+1.5** |

*MEX* ***13*** *00:02:42.4±0.3,27°.65N×111°.61W,h5km±3km,MD4.6*
*IDC* ***13*** *00:02:43.2±1.6,27°.72N×111°.44W,h0km,mb1 3.5/6, mb1mx3.1/51,mbtmp3.2/6,ML3.4/6,Error ellipse: s-maj=19.4km s-min=13.0km az=47.0*
**ISC 13 00:02:42.2±1.2,27°.67N±0°.05×111°.62W±0°.03, h12km±10km,n19,σ2s75/23,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SRIG** | **Santa Rosalia** | **0.65** | **238** | *e*P | | P | **Pg** | **00 03 54.1** | **-0.7** |
| SRIG | | | | *e*S | | S | **Sg** | **00 03 03.3** | **0.0** |
| **GUYB** | **Guaymas** | **0.70** | **71** | *i*P | | P | **Pg** | **00 02 55.0** | **-0.8** |
| GUYB | | | | *i*S | | S | **Sg** | **00 03 04.6** | **-0.5** |
| **HSIG** | | **1.47** | **24** | *e*P | | **Pn** | **Pn** | **00 03 06.2** | **-2.4** |
| HSIG | | | | *i*S | | **Sn** | **Sn** | **00 03 22.3** | **-5.4** |
| **BAHB** | **Baha de los** | **2.13** | **307** | *i*P | | **Pn** | **Pn** | **00 03 14.4** | **-3.2** |
| BAHB | | | | *i*S | | **Sn** | **Sn** | **00 03 40.2** | **-3.8** |
| **LAPR** | **La Primavera** | **2.88** | **348** | *i*P | | **Pn** | **Pn** | **00 03 26.5** | **-1.5** |
| LAPR | | | | *i*S | | **Sn** | **Sn** | **00 04 01.0** | **-1.7** |
| **CSIG** | **Choix** | **3.02** | **105** | *e*P | | **Pn** | **Pn** | **00 03 27.9** | **-1.9** |
| CSIG | | | | *i*S | | **Sn** | **Sn** | **00 04 02.8** | **-3.1** |
| **TSIG** | **Topolobambo** | **3.10** | **131** | *i*P | | Pn | Pn | 00 03 27.2 | -3.7 |
| TSIG | | | | *i*S | | **Sb** | **Sb** | **00 04 13.5** | **-1.6** |
| **NZIG** | **Nacozari, Sono** | **3.25** | **33** | *i*P | | **Pb** | **Pb** | **00 03 39.3** | **-0.5** |
| NZIG | | | | *i*S | | **Sn** | **Sn** | **00 04 12.2** | **+0.4** |
| **LPIG** | **La Paz** | **3.75** | **161** | Pn | | **Pn** | **Pn** | **00 03 43.1** | **+3.3** |
| | 6.2nm,0.3s,baz=166,slow=4.4,SNR=1.9 | | | | | | | | |
| LPIG | | | | Lg | | Lg | Lg | 00 04 42.3 | |
| | 11nm,0.3s,baz=45,slow=2.0,SNR=2.0 | | | | | | | | |
| **CGIG** | | **4.17** | **49** | *e*P | | Pn | | 00 03 42.1 | -3.7 |
| CGIG | | | | *e*S | | **Sn** | | **00 04 32.2** | **-2.5** |
| **TXAR** | **Lajitas Array** | **7.20** | **75** | Pn | | **Pn** | | **00 04 27.8** | **+0.4** |
| | 0.5nm,0.3s,baz=252,slow=12,SNR=21 | | | | | | | | |
| TXAR | | | | Sn | | **Sn** | | **00 05 47.8** | **-1.3** |
| | 0.4nm,0.3s,baz=248,slow=32,SNR=3.8 | | | | | | | | |
| TXAR | | | | Lg | | Lg | | 00 06 24.1 | |
| | 1.0nm,0.3s,baz=229,slow=26,SNR=4.5 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **7.24** | **326** | Lg | | Lg | | 00 06 39.2 | |
| | 0.1nm,0.3s,baz=267,slow=14,SNR=6.3 | | | | | | | | |
| **ANMO** | **Albuquerque** | **8.49** | **30** | Pn | | **Pn** | | **00 04 47.0** | **+1.8** |
| | 0.1nm,0.3s,baz=214,slow=14,SNR=1.9 | | | | | | | | |
| ANMO | | | | Lg | | Lg | | 00 07 06.5 | |
| | 0.2nm,0.3s,baz=51,slow=22,SNR=2.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **12.10** | **334** | Pn | | **Pn** | | **00 05 39.1** | **+4.5** |
| | 0.1nm,0.3s,baz=160,slow=13,SNR=2.6 | | | | | | | | |
| NVAR | | | | Lg | | Lg | | 00 09 06.5 | |
| | 0.1nm,0.3s,baz=262,slow=30,SNR=1.3 | | | | | | | | |
| **ELK** | **Elko** | **13.38** | **348** | Pn | | **Pn** | | **00 05 55.8** | **+3.6** |
| | 0.1nm,0.3s,baz=201,slow=16,SNR=1.9 | | | | | | | | |
| ELK | | | | Lg | | Lg | | 00 09 45.3 | |
| | 0.1nm,0.3s,baz=212,slow=10,SNR=1.5 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **15.15** | **6** | Pn | | **P** | | **00 06 23.9** | **+2.5** |
| | 0.0nm,0.3s,baz=172,slow=14,SNR=4.6 | | | | | | | | |
| PDAR | | | | Lg | | Lg | | 00 10 39.7 | |
| | 0.0nm,0.3s,baz=188,slow=24,SNR=2.9 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **68.24** | **151** | T | | T | | 01 28 06.9 | |
| | baz=331,slow=77,SNR=6.3 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **68.25** | **151** | T | | T | | 01 28 12.9 | |
| | baz=331,slow=77,SNR=12 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **68.26** | **151** | T | | T | | 01 28 09.2 | |
| | baz=331,slow=77,SNR=9.4 | | | | | | | | |

*IDC* ***13*** *00:06:52.0±1.5,34°.33N×135°.80E,h359km±18km,mb2.5/2, mb1 2.6/5,mb1mx2.2/50,mbtmp3.2/5,Error ellipse: s-maj=33.3km s-min=27.0km az=39.0*
*JMA* ***13*** *00:06:51.3±0.1,34°.56N×135°.97E,h389km,M2.5*
**ISC 13 00:06:51.7±1.1,34°.3N±0°.1×135°.87E±0°.08,h350km,n15, σ2s44/16,Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JKN2** | **Miekihoku** | **0.35** | **104** | P | | **Pn** | | **00 07 40.0** | **+4.3** |
| **JWT** | **Wachi** | **1.03** | **338** | P | | **Pn** | | **00 07 40.4** | **+2.9** |
| **JNY** | **Yasuok** | **1.94** | **57** | P | | **Pn** | | **00 07 45.2** | **+2.6** |
| **JKG** | **Kaga** | **1.98** | **11** | P | | **Pn** | | **00 07 44.6** | **+1.8** |
| **JHS** | **Saijyo** | **2.37** | **287** | P | | **Pn** | | **00 07 49.0** | **+3.3** |
| **JOI** | **OKI** | **2.90** | **313** | P | | **Pn** | | **00 07 52.8** | **+2.7** |
| **MJAR** | **Matsushiro Arr** | **2.92** | **40** | P | | **Pn** | | **00 07 51.7** | **+1.4** |
| | 0.1nm,0.3s,baz=219,slow=7.8,SNR=4.4 | | | | | | | | |
| **JRY** | **Ryogami san** | **3.00** | **55** | P | | **Pn** | | **00 07 53.4** | **+2.3** |
| **JAG** | **Ashikaga** | **3.60** | **53** | P | | **Pn** | | **00 07 57.0** | **+0.4** |
| JAG | | | | *e*S | | **S** | | **00 08 46.5** | **-2.5** |
| **BSO3** | **Boso 3** | **3.86** | **82** | P | | **Pn** | | **00 08 00.0** | **+1.1** |
| **JNU** | **Nakatsue** | **4.33** | **255** | P | | **Pn** | | **00 08 03.3** | **-0.8** |
| | 2.5nm,0.3s,baz=105,slow=16,SNR=13 | | | | | | | | |
| **JHO** | **Hitachi** | **4.46** | **58** | P | | **Pn** | | **00 08 05.1** | **-0.3** |
| **KSRS** | **Korea Array** | **7.16** | **298** | P | | **Pn** | | **00 08 37.7** | **+1.8** |
| | 0.2nm,0.3s,baz=111,slow=12,SNR=4.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.80** | **304** | P | | **P** | | **00 14 06.6** | **-1.6** |
| | 0.2nm,0.8s,baz=68,slow=8.2,SNR=2.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **53.99** | **182** | P | | **P** | | **00 15 40.4** | **-0.4** |
| | 0.1nm,0.3s,baz=360,slow=7.6,SNR=5.1 | | | | | | | | |

**RSNC 13 00:07:24.5±0.6,6°.77N×73°.17W,h138km±5km,ML1.6, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PAMC** | **Pamplona, Colo** | **0.73** | **40** | *e*P | | Pn | | 00 07 46.0 | -0.5 |
| PAMC | | | | *e*S | | Sn | | 00 08 03.3 | 0.0 |
| PAMC | | | | IAML | | | | 00 08 05.5 | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.73** | **40** | *e*P | | Pn | | 00 07 46.1 | -0.5 |
| PAMC | | | | *e*S | | Sn | | 00 08 03.0 | -0.3 |
| PAMC | | | | *i* | | | | 00 08 05.5 | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.88** | **174** | *e*P | | Pn | | 00 07 47.7 | 0.0 |
| RUSC | | | | *e*S | | Sn | | 00 08 06.0 | +0.7 |
| RUSC | | | | IAML | | | | 00 08 06.5 | |
| | comp=Z,2.3nm,0.3s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.88** | **174** | *e*P | | Pn | | 00 07 47.6 | -0.2 |
| RUSC | | | | *e*S | | Sn | | 00 08 05.4 | 0.0 |
| RUSC | | | | *i* | | | | 00 08 06.5 | |
| | comp=Z,2.3nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.30** | **260** | *e*P | | Pn | | 00 07 50.2 | -0.9 |
| PTBC | | | | *e*S | | Sn | | 00 08 11.1 | -0.3 |
| PTBC | | | | IAML | | | | 00 08 13.8 | |
| | comp=Z,7.7nm,0.1s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.30** | **260** | *e*P | | Pn | | 00 07 50.3 | -0.8 |
| PTBC | | | | *e*S | | Sn | | 00 08 10.7 | -0.6 |
| PTBC | | | | *i* | | | | 00 08 13.8 | |
| | comp=Z,7.7nm,0.1s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.43** | **219** | *e*S | | Sn | | 00 08 14.5 | +0.5 |
| **SPBC** | **San Pablo de B** | **1.43** | **219** | *e*P | | Pn | | 00 07 52.0 | -0.6 |
| SPBC | | | | *e*S | | Sn | | 00 08 13.5 | -0.5 |
| SPBC | | | | *i* | | | | 00 08 19.4 | |
| | comp=Z,5.8nm,0.1s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.82** | **293** | *e*S | | Sn | | 00 08 22.6 | +1.0 |
| **ZARC** | **Zaragoza, Cauc** | **1.82** | **293** | *e*P | | Pn | | 00 07 56.6 | -0.2 |
| ZAR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SSPT** | **Xinbi** | **0.04** | **319** | P | **Pb** | **00 36 54.8** | **+0.1** |
| | baz=293 | | | | | | | |
| SSPT | | | | S | **Sb** | **00 36 59.1** | **+2.0** |
| | baz=293 | | | | | | | |
| **SCZT** | **Fangliau** | **0.08** | **166** | P | **Pb** | **00 36 54.7** | **-0.2** |
| | baz=176 | | | | | | | |
| SCZT | | | | S | **Sb** | **00 36 58.0** | **+0.5** |
| | baz=176 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.16** | **11** | P | **Pb** | **00 36 55.5** | **-1.3** |
| | baz=11 | | | | | | | |
| MASBT | | | | S | **Sb** | **00 36 59.4** | **-1.5** |
| | baz=11 | | | | | | | |
| **WLCH** | **Liuqiu** | **0.23** | **244** | P | **Pb** | **00 36 58.4** | **+1.5** |
| | baz=233 | | | | | | | |
| WLCH | | | | *e*S | **Sb** | **00 37 04.2** | **+3.2** |
| | baz=233 | | | | | | | |
| **EAST** | **Anshuo** | **0.24** | **106** | P | **Pb** | **00 36 57.0** | **-0.1** |
| | baz=105 | | | | | | | |
| EAST | | | | *e*S | **Sb** | **00 37 01.1** | **-0.2** |
| | baz=105 | | | | | | | |
| **TSMG** | **Majia** | **0.26** | **10** | P | **Pb** | **00 36 56.9** | **-0.3** |
| | baz=11 | | | | | | | |
| TSMG | | | | S | **Sb** | **00 37 01.2** | **-0.2** |
| | baz=11 | | | | | | | |
| **SGLT** | **Jiouru** | **0.29** | **340** | *e*P | **Pn** | **00 36 58.7** | **-1.3** |
| | baz=345 | | | | | | | |
| SGLT | | | | *e*S | **Sn** | **00 37 04.0** | **-1.8** |
| | baz=345 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.29** | **112** | P | **Pb** | **00 36 57.5** | **-0.1** |
| | baz=108 | | | | | | | |
| TAWH | | | | *e*S | **Sb** | **00 37 02.8** | **+0.8** |
| | baz=108 | | | | | | | |
| **TAW** | **Tawu** | **0.29** | **109** | P | **Pb** | **00 36 57.5** | **0.0** |
| | baz=104 | | | | | | | |
| TAW | | | | S | **Sb** | **00 37 02.5** | **+0.5** |
| | baz=104 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.29** | **293** | *e*P | **Pn** | **00 36 59.2** | **-0.9** |
| | baz=290 | | | | | | | |
| KAU | | | | *e*S | **Sn** | **00 37 05.5** | **-0.3** |
| | baz=290 | | | | | | | |
| **SSD** | **Sandimen** | **0.29** | **6** | *e*P | **Pb** | **00 36 57.5** | **-0.2** |
| | baz=4.0 | | | | | | | |
| SSD | | | | S | **Sb** | **00 37 02.1** | **-0.1** |
| | baz=4.0 | | | | | | | |
| **SLIU** | **Shizi** | **0.30** | **141** | P | **Pb** | **00 36 57.5** | **-0.1** |
| | baz=146 | | | | | | | |
| SLIU | | | | S | **Sb** | **00 37 03.1** | **+0.8** |
| | baz=146 | | | | | | | |
| **ECL** | **Taimali** | **0.36** | **66** | P | **Pb** | **00 36 58.5** | **0.0** |
| | baz=75 | | | | | | | |
| ECL | | | | *e*S | **Sb** | **00 37 04.3** | **+0.6** |
| | baz=75 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.39** | **321** | *e*P | **Pn** | **00 37 00.1** | **-1.4** |
| | baz=319 | | | | | | | |
| SNJT | | | | *e*S | **Sn** | **00 37 06.4** | **-1.8** |
| | baz=319 | | | | | | | |
| **TWM1** | **Shoushan** | **0.41** | **336** | *e*P | **Pn** | **00 37 01.0** | **-0.7** |
| | baz=344 | | | | | | | |
| TWM1 | | | | *e*S | **Sn** | **00 37 07.6** | **-1.1** |
| | baz=344 | | | | | | | |
| **SCST** | **Cishan** | **0.44** | **347** | *e*P | **Pn** | **00 37 01.2** | **-1.0** |
| | baz=354 | | | | | | | |
| SCST | | | | *e*S | **Sn** | **00 37 08.2** | **-1.4** |
| | baz=354 | | | | | | | |
| **HEN** | **Hengchun** | **0.46** | **164** | P | **Pb** | **00 37 01.1** | **+0.7** |
| | baz=157 | | | | | | | |
| HEN | | | | S | **Sn** | **00 37 09.2** | **-0.8** |
| | baz=157 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.48** | **153** | *e*P | **Pb** | **00 37 00.9** | **+0.1** |
| | baz=155 | | | | | | | |
| SMST | | | | *e*S | **Sb** | **00 37 08.8** | **+1.5** |
| | baz=155 | | | | | | | |
| **TWG** | **Pinlang** | **0.57** | **50** | *e*P | **Pb** | **00 37 02.3** | **-0.1** |
| | baz=47 | | | | | | | |
| TWG | | | | S | **Sb** | **00 37 09.7** | **-0.5** |
| | baz=47 | | | | | | | |
| **TWGBT** | **Beinan** | **0.57** | **51** | *e*P | **Pb** | **00 37 02.1** | **-0.4** |
| | baz=47 | | | | | | | |
| TWGBT | | | | S | **Sb** | **00 37 09.5** | **-0.8** |
| | baz=47 | | | | | | | |
| **TTN** | **Taitung** | **0.59** | **59** | *e*P | **Pb** | **00 37 03.3** | **+0.6** |
| | baz=57 | | | | | | | |
| TTN | | | | *e*S | **Sb** | **00 37 11.4** | **+0.7** |
| | baz=57 | | | | | | | |
| **SHHT** | **Tainan City** | **0.61** | **338** | *e*P | **Pn** | **00 37 04.3** | **-0.2** |
| | baz=320 | | | | | | | |
| SHHT | | | | *e*S | **Sn** | **00 37 13.8** | **0.0** |
| | baz=320 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **0.61** | **153** | *e*P | **Pb** | **00 37 03.5** | **+0.4** |
| | baz=158 | | | | | | | |
| TSEB | | | | S | **Sn** | **00 37 13.2** | **-0.6** |
| | baz=158 | | | | | | | |
| **SGST** | **Jiashian** | **0.63** | **359** | *e*P | **Pb** | **00 37 03.0** | **-0.4** |
| | baz=7.0 | | | | | | | |
| SGST | | | | *e*S | **Sn** | **00 37 13.3** | **-0.9** |
| | baz=7.0 | | | | | | | |
| **CHN3** | **Shinhua** | **0.66** | **341** | *e*P | **Pn** | **00 37 05.0** | **-0.1** |
| | baz=340 | | | | | | | |
| CHN3 | | | | *e*S | **Sn** | **00 37 15.0** | **+0.1** |
| | baz=340 | | | | | | | |
| **LONT** | **Longtian** | **0.67** | **47** | *e*P | **Pb** | **00 37 03.9** | **-0.1** |
| | baz=44 | | | | | | | |
| LONT | | | | *e*S | **Sb** | **00 37 12.7** | **-0.2** |
| | baz=44 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.68** | **330** | *e*S | **Sn** | **00 37 16.0** | **+0.6** |
| | baz=329 | | | | | | | |
| **CHN1** | **Nanshi** | **0.73** | **355** | *e*P | **Pn** | **00 37 05.8** | **-0.5** |
| | baz=7.0 | | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **00 37 16.8** | **0.0** |
| | baz=7.0 | | | | | | | |
| **STYH** | **Taoyuan** | **0.73** | **13** | *e*P | **Pb** | **00 37 05.4** | **+0.3** |
| | baz=12 | | | | | | | |
| STYH | | | | *e*S | **Sn** | **00 37 16.8** | **0.0** |
| | baz=12 | | | | | | | |
| **SSHA** | **Shanhua** | **0.74** | **337** | *e*P | **Pn** | **00 37 06.3** | **+0.1** |
| | baz=337 | | | | | | | |
| SSHA | | | | *e*S | **Sn** | **00 37 17.8** | **+0.9** |
| | baz=337 | | | | | | | |
| **SNST** | **Tainan City** | **0.77** | **353** | *e*P | **Pn** | **00 37 06.2** | **-0.5** |
| | baz=5.0 | | | | | | | |
| SNST | | | | *e*S | **Sn** | **00 37 17.7** | **0.0** |
| | baz=5.0 | | | | | | | |
| **WTP** | **Ta-pu** | **0.79** | **1** | *e*P | **Pb** | **00 37 06.3** | **+0.2** |
| WTP | | | | *e*S | **Sn** | **00 37 18.5** | **+0.2** |
| **SCLT** | **Jiali** | **0.81** | **333** | *e*P | **Pn** | **00 37 07.1** | **-0.2** |
| | baz=333 | | | | | | | |
| SCLT | | | | *e*S | **Sn** | **00 37 18.7** | **+0.1** |
| | baz=333 | | | | | | | |
| **TWK** | **Hsinying** | **0.82** | **353** | *e*P | **Pn** | **00 37 07.2** | **-0.2** |
| | baz=5.0 | | | | | | | |
| TWK | | | | *e*S | **Sn** | **00 37 19.1** | **+0.2** |
| | baz=5.0 | | | | | | | |
| **ELDTW** | **Lidau** | **0.83** | **28** | *e*P | **Pb** | **00 37 06.9** | **+0.1** |
| | baz=28 | | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **00 37 19.0** | **-0.3** |
| | baz=28 | | | | | | | |
| **EDH** | **Donghe** | **0.83** | **51** | *e*P | **Pb** | **00 37 07.0** | **+0.2** |
| | baz=67 | | | | | | | |
| EDH | | | | *e*S | **Sb** | **00 37 18.2** | **+0.7** |
| | baz=67 | | | | | | | |
| **LDUT** | **Ludao** | **0.83** | **74** | *e*P | **Pb** | **00 37 06.4** | **-0.4** |
| | baz=74 | | | | | | | |
| LDUT | | | | *e*S | **Sb** | **00 37 18.1** | **+0.6** |
| | baz=74 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.85** | **2** | *e*P | **Pb** | **00 37 06.8** | **-0.2** |
| | baz=1.0 | | | | | | | |
| TPUB | | | | *e*S | **Sn** | **00 37 20.2** | **+0.6** |
| | baz=1.0 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.85** | **2** | P | **Pb** | **00 37 07.0** | **0.0** |
| **CHN4** | **Tsaushan** | **0.90** | **360** | *e*P | **Pb** | **00 37 07.5** | **-0.3** |
| | baz=360 | | | | | | | |
| CHN4 | | | | S | **Sn** | **00 37 20.7** | **-0.1** |
| | baz=360 | | | | | | | |
| **ICHU** | **Yijhu** | **0.95** | **342** | P | **Pn** | **00 37 08.8** | **-0.4** |
| | baz=342 | | | | | | | |
| ICHU | | | | S | **Sn** | **00 37 22.7** | **+0.6** |
| | baz=342 | | | | | | | |
| **CHKT** | **Chengkung** | **0.96** | **48** | *e*P | **Pb** | **00 37 08.8** | **-0.1** |
| | baz=62 | | | | | | | |
| CHKT | | | | *e*S | **Sn** | **00 37 22.1** | **-0.1** |
| | baz=62 | | | | | | | |
| **CHN8** | **Yiju** | **0.96** | **338** | *e*P | **Pn** | **00 37 10.5** | **+1.2** |
| | baz=339 | | | | | | | |
| CHN8 | | | | *e*S | **Sn** | **00 37 23.2** | **+0.9** |
| | baz=339 | | | | | | | |
| **LAY** | **Lan-yu** | **0.97** | **115** | *e*P | **Pb** | **00 37 07.9** | **-1.3** |
| | baz=103 | | | | | | | |
| LAY | | | | *e*S | **Sb** | **00 37 21.4** | **-0.2** |
| | baz=103 | | | | | | | |
| **FULB** | **Fuli** | **0.98** | **41** | *e*P | **Pb** | **00 37 09.4** | **+0.1** |
| | baz=34 | | | | | | | |
| FULB | | | | *e*S | **Sn** | **00 37 23.3** | **+0.3** |
| | baz=34 | | | | | | | |
| **LYUB** | **Lan-yu** | **1.02** | **116** | *e*P | **Pb** | **00 37 07.3** | **-2.6** |
| | baz=103 | | | | | | | |
| LYUB | | | | *e*S | **Sb** | **00 37 20.5** | **-2.3** |
| | baz=103 | | | | | | | |
| **CHY** | **Chiayi** | **1.05** | **351** | *e*P | **Pn** | **00 37 11.0** | **+0.4** |
| | baz=352 | | | | | | | |
| CHY | | | | *e*S | **Sn** | **00 37 25.0** | **+0.4** |
| | baz=352 | | | | | | | |
| **ALS** | **Alishan** | **1.07** | **10** | *e*P | **Pb** | **00 37 10.5** | **-0.6** |
| | baz=11 | | | | | | | |
| ALS | | | | *e*S | **Sb** | **00 37 25.0** | **+0.3** |
| | baz=11 | | | | | | | |
| **CHN2** | **Minshiung** | **1.08** | **354** | *e*P | **Pb** | **00 37 11.8** | **+0.7** |
| | baz=355 | | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **00 37 26.2** | **+0.9** |
| | baz=355 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.08** | **17** | *e*P | **Pb** | **00 37 10.9** | **-0.4** |
| | baz=26 | | | | | | | |
| YUS | | | | *e*S | **Sb** | **00 37 25.4** | **+0.1** |
| | baz=26 | | | | | | | |
| **EYUL** | **Yuli** | **1.11** | **37** | *e*P | **Pb** | **00 37 11.5** | **0.0** |
| | baz=36 | | | | | | | |
| EYUL | | | | *e*S | **Sn** | **00 37 26.6** | **+0.5** |
| | baz=36 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.12** | **342** | *e*P | **Pn** | **00 37 11.1** | **-0.5** |
| | baz=343 | | | | | | | |
| WSL | | | | *e*S | **Sn** | **00 37 26.9** | **+0.6** |
| | baz=343 | | | | | | | |
| **YULB** | **Yu-li** | **1.14** | **34** | *e*P | **Pn** | **00 37 11.4** | **-0.3** |
| | baz=38 | | | | | | | |
| YULB | | | | *e*S | **Sn** | **00 37 26.7** | **-0.1** |
| | baz=38 | | | | | | | |
| **CHN5** | **Tsauling** | **1.14** | **4** | *e*P | **Pn** | **00 37 11.8** | **-0.1** |
| | baz=4.0 | | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **00 37 27.1** | **+0.1** |
| | baz=4.0 | | | | | | | |
| **WDGT** | **Dungji** | **1.18** | **313** | *e*P | **Pb** | **00 37 12.6** | **-0.1** |
| | baz=312 | | | | | | | |
| **WSF** | **Szhu** | **1.23** | **344** | *e*S | **Sn** | **00 37 29.1** | **+0.1** |
| | baz=345 | | | | | | | |
| **WDLH** | **Douliu** | **1.23** | **357** | *e*P | **Pn** | **00 37 12.8** | **-0.2** |
| | baz=343 | | | | | | | |
| WDLH | | | | *e*S | **Sn** | **00 37 30.2** | **+1.1** |
| | baz=343 | | | | | | | |
| **EHY** | **Hungye** | **1.24** | **32** | *e*P | **Pn** | **00 37 13.1** | **-0.1** |
| | baz=33 | | | | | | | |
| EHY | | | | *e*S | **Sb** | **00 37 29.8** | **+0.4** |
| | baz=33 | | | | | | | |
| **WTK** | **Tuku** | **1.25** | **351** | *e*P | **Pn** | **00 37 12.6** | **-0.6** |
| | baz=352 | | | | | | | |
| WTK | | | | *e*S | **Sn** | **00 37 29.4** | **0.0** |
| | baz=352 | | | | | | | |
| **HGSD** | **Ruisui** | **1.29** | **36** | *e*P | **Pb** | **00 37 14.4** | **-0.1** |
| | baz=28 | | | | | | | |
| HGSD | | | | *e*S | **Sb** | **00 37 31.3** | **+0.7** |
| | baz=28 | | | | | | | |
| **SSLB** | **Suanglung** | **1.37** | **14** | *e*P | **Pn** | **00 37 14.2** | **-0.8** |
| | baz=15 | | | | | | | |
| SSLB | | | | *e*S | **Sb** | **00 37 32.9** | **-0.1** |
| | baz=15 | | | | | | | |
| **SSLB** | **Suanglung** | **1.37** | **14** | P | **Pn** | **00 37 14.7** | **-0.3** |
| **WJS** | **Zhushan** | **1.37** | **5** | *e*P | **Pn** | **00 37 15.1** | **+0.1** |
| | baz=6.0 | | | | | | | |
| WJS | | | | *e*S | **Sb** | **00 37 33.3** | **+0.3** |
| | baz=6.0 | | | | | | | |
| **WNT** | **Mingjian** | **1.42** | **3** | *e*P | **Pn** | **00 37 15.4** | **-0.3** |
| | baz=5.0 | | | | | | | |
| WNT | | | | *e*S | **Sb** | **00 37 34.5** | **-0.1** |
| | baz=5.0 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.44** | **348** | *e*S | **Sb** | **00 37 35.0** | **+0.1** |
| | baz=350 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.45** | **11** | *e*P | **Pn** | **00 37 16.2** | **0.0** |
| | baz=356 | | | | | | | |
| SMLT | | | | *e*S | **Sb** | **00 37 35.2** | **-0.3** |
| | baz=356 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.46** | **352** | *e*P | **Pn** | **00 37 15.2** | **-1.0** |
| | baz=353 | | | | | | | |
| WRL | | | | *e*S | **Sn** | **00 37 34.6** | **-0.1** |
| | baz=353 | | | | | | | |
| **TYC** | **Yuchr** | **1.47** | **9** | *e*P | **Pn** | **00 37 16.1** | **-0.2** |
| | baz=355 | | | | | | | |
| TYC | | | | *e*S | **Sb** | **00 37 35.6** | **-0.2** |
| | baz=355 | | | | | | | |
| **ESL** | **Shilin** | **1.56** | **29** | *e*P | **Pb** | **00 37 18.4** | **-0.8** |
| | baz=48 | | | | | | | |
| ESL | | | | *e*S | **Sn** | **00 37 37.8** | **+0.6** |
| | baz=48 | | | | | | | |
| **WUSB** | **Renai** | **1.61** | **17** | *e*P | **Pn** | **00 37 17.8** | **-0.5** |
| | baz=18 | | | | | | | |
| WUSB | | | | *e*S | **Sn** | **00 37 37.7** | **-0.8** |
| | baz=18 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.62** | **359** | *e*P | **Pn** | **00 37 18.7** | **+0.3** |
| WCHH | | | | *e*S | **Sn** | **00 37 39.0** | **+0.3** |
| **WCS** | **Beigang Elemen** | **1.62** | **10** | *e*P | **Pn** | **00 37 18.2** | **-0.2** |
| | baz=12 | | | | | | | |
| WCS | | | | *e*S | **Sn** | **00 37 38.7** | **-0.1** |
| | baz=12 | | | | | | | |
| **CHGB** | **Renai** | **1.69** | **18** | *e*P | **Pn** | **00 37 19.1** | **-0.4** |
| | baz=3.0 | | | | | | | |
| CHGB | | | | *e*S | **Sn** | **00 37 41.2** | **+0.6** |
| | baz=3.0 | | | | | | | |
| **TCU** | **Taichung** | **1.69** | **2** | *e*S | **Sn** | **00 37 41.1** | **+0.7** |
| | baz=4.0 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.79** | **20** | *e*P | **Pn** | **00 37 21.4** | **+0.3** |
| | baz=22 | | | | | | | |
| WHF | | | | *e*S | **Sn** | **00 37 43.6** | **0.0** |
| | baz=22 | | | | | | | |
| **TWD** | **Chiawan** | **1.86** | **29** | *e*S | **Sn** | **00 37 44.8** | **+0.2** |
| | baz=31 | | | | | | | |
| **TWT** | **Tachien** | **1.87** | **16** | *e*P | **Pn** | **00 37 22.8** | **+0.8** |
| | baz=18 | | | | | | | |
| TWT | | | | *e*S | **Sn** | **00 37 45.2** | **+0.1** |
| | baz=18 | | | | | | | |
| **FUSS** | **Fushou** | **1.88** | **18** | *e*P | **Pn** | **00 37 22.2** | **0.0** |
| | baz=20 | | | | | | | |
| FUSS | | | | *e*S | **Sn** | **00 37 45.7** | **+0.2** |
| | baz=20 | | | | | | | |
| **WDJ** | **Dajia District** | **1.89** | **1** | *e*P | **Pn** | **00 37 22.5** | **+0.4** |
| | baz=3.0 | | | | | | | |
| WDJ | | | | *e*S | **Sb** | **00 37 46.9** | **-1.1** |
| | baz=3.0 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.90** | **5** | *e*P | **Pn** | **00 37 22.3** | **+0.1** |
| | baz=7.0 | | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **00 37 46.3** | **+0.8** |
| | baz=7.0 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.93** | **25** | *e*P | **Pn** | **00 37 23.0** | **+0.3** |
| | baz=9.0 | | | | | | | |
| **ETL** | **Fush Village** | **1.94** | **29** | *e*S | **Sn** | **00 37 47.6** | **+0.9** |
| | baz=44 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.94** | **28** | *e*P | **Pn** | **00 37 23.1** | **+0.3** |
| | baz=30 | | | | | | | |
| NACB | | | | *e*S | **Sn** | **00 37 47.5** | **+0.9** |
| | baz=30 | | | | | | | |
| **NSY** | **Sanyi** | **1.96** | **4** | *e*P | **Pn** | **00 37 23.5** | **+0.4** |
| | baz=7.0 | | | | | | | |
| NSY | | | | *e*S | **Sn** | **00 37 48.4** | **+1.2** |
| | baz=7.0 | | | | | | | |
| **NMLH** | **Miaoli** | **2.08** | **5** | *e*S | **Sn** | **00 37 51.0** | **+0.8** |
| | baz=352 | | | | | | | |
| **NNSB** | **Datong** | **2.10** | **20** | *e*P | **Pn** | **00 37 25.6** | **+0.5** |
| | baz=22 | | | | | | | |
| NNSB | | | | *e*S | **Sn** | **00 37 50.7** | **+0.1** |
| | baz=22 | | | | | | | |
| **NNS** | **Nan Shan** | **2.10** | **20** | *e*P | **Pn** | **00 37 25.5** | **+0.3** |
| | baz=22 | | | | | | | |
| NNS | | | | *e*S | **Sn** | **00 37 50.1** | **-0.7** |
| | baz=22 | | | | | | | |
| **LIOB** | **Emei** | **2.22** | **10** | *e*P | **Pn** | **00 37 26.6** | **0.0** |
| | baz=356 | | | | | | | |
| LIOB | | | | *e*S | **Sn** | **00 37 53.5** | **+0.1** |
| | baz=356 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.22** | **12** | *e*P | **Pn** | **00 37 27.7** | **+0.9** |
| | baz=358 | | | | | | | |
| NFF | | | | *e*S | **Sn** | **00 37 54.1** | **+0.4** |
| | baz=358 | | | | | | | |
| **ENA** | **Nanau** | **2.23** | **28** | *e*S | **Sn** | **00 37 54.7** | **+1.0** |
| | baz=30 | | | | | | | |
| **LATG** | **Datong** | **2.24** | **22** | *e*P | **Pn** | **00 37 27.5** | **+0.4** |
| | baz=9.0 | | | | | | | |
| LATG | | | | *e*S | **Sn** | **00 37 54.8** | **+0.6** |
| | baz=9.0 | | | | | | | |
| **EWUT** | **Wuta** | **2.26** | **28** | *e*P | **Pn** | **00 37 28.8** | **+1.6** |
| | baz=30 | | | | | | | |
| EWUT | | | | *e*S | **Sn** | **00 37 54.8** | **+0.3** |
| | baz=30 | | | | | | | |
| **NDT** | **Datong Townshi** | **2.30** | **21** | *e*P | **Pn** | **00 37 29.0** | **+1.2** |
| | baz=9.0 | | | | | | | |
| NDT | | | | *e*S | **Sn** | **00 37 56.3** | **+0.8** |
| | baz=9.0 | | | | | | | |
| **YHNB** | **Yeheng** | **2.32** | **18** | *e*P | **Pn** | **00 37 28.7** | **+0.6** |
| | baz=20 | | | | | | | |
| YHNB | | | | *e*S | **Sn** | **00 37 55.5** | **-0.6** |
| | baz=20 | | | | | | | |
| **YHNB** | **Yeheng** | **2.32** | **18** | P | **Pn** | **00 37 29.1** | **+1.0** |
| **NSK** | **Sanguang** | **2.32** | **17** | *e*P | **Pn** | **00 37 28.3** | **+0.2** |
| | baz=19 | | | | | | | |
| NSK | | | | *e*S | **Sn** | **00 37 56.4** | **+0.3** |
| | baz=19 | | | | | | | |
| **ENTT** | **Nioudou** | **2.35** | **22** | *e*P | **Pn** | **00 37 29.5** | **+1.0** |
| | baz=10.0 | | | | | | | |
| ENTT | | | | *e*S | **Sn** | **00 37 57.7** | **+0.9** |
| | baz=10.0 | | | | | | | |
| **NDS** | **Dongshan** | **2.40** | **25** | *e*P | **Pn** | **00 37 30.8** | **+1.6** |
| | baz=40 | | | | | | | |
| NDS | | | | *e*S | **Sn** | **00 37 58.6** | **+0.6** |
| | baz=40 | | | | | | | |
| **TWC** | **Suao** | **2.44** | **28** | *e*P | **Pn** | **00 37 30.8** | **+1.2** |
| | baz=28 | | | | | | | |
| **NWLT** | **Wulai** | **2.46** | **20** | *e*P | **Pn** | **00 37 31.5** | **+1.5** |
| | baz=6.0 | | | | | | | |
| NWLT | | | | *e*S | **Sn** | **00 38 00.1** | **+0.6** |
| | baz=6.0 | | | | | | | |
| **TWE** | **Neicheng** | **2.46** | **23** | *e*P | **Pn** | **00 37 31.5** | **+1.5** |
| | baz=12 | | | | | | | |
| TWE | | | | *e*S | **Sn** | **00 38 00.1** | **+0.7** |
| | baz=12 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.47** | **21** | *e*P | **Pn** | **00 37 31.0** | **+0.8** |
| | baz=7.0 | | | | | | | |
| FUSB | | | | *e*S | **Sn** | **00 38 00.7** | **+0.9** |
| | baz=7.0 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.75** | **24** | *e*P | **Pn** | **00 37 35.0** | **+1.1** |
| | baz=26 | | | | | | | |
| TIPB | | | | *e*S | **Sn** | **00 38 06.9** | **+0.3** |
| | baz=26 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.82** | **22** | *e*P | **Pn** | **00 37 36.7** | **+1.7** |
| | baz=7.0 | | | | | | | |
| NWF | | | | *e*S | **Sn** | **00 38 09.2** | **+0.7** |
| | baz=7.0 | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.88** | **24** | *e*P | **Pn** | **00 37 38.0** | **+2.2** |
| | baz=8.0 | | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **00 38 09.4** | **-0.5** |
| | baz=8.0 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.91** | **333** | *e*P | **Pn** | **00 37 36.7** | **+0.6** |
| | baz=331 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **4.15** | **350** | *e*P | **Pn** | **00 37 51.9** | **-1.3** |
| | baz=352 | | | | | | | |
| LYJJ | | | | *e*S | **Sn** | **00 38 38.8** | **-2.4** |
| | baz=352 | | | | | | | |
| **XPSS** | **Dashiqiu** | **4.47** | **355** | *e*P | **Pn** | **00 37 56.8** | **-0.9** |
| | baz=359 | | | | | | | |
| XPSS | | | | *e*S | **Sn** | **00 38 46.7** | **-2.4** |
| | baz=359 | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.76** | **326** | *e*P | **Pn** | **00 38 02.8** | **+1.2** |
| | baz=324 | | | | | | | |

*KLM* ***13*** *00:59:20, 6.70N×123.96E, h580km, mb5.0*
*MAN* ***13*** *00:59:20.6, 6.74N×123.79E, h580km, mb5.4, ML4.3, MS4.6*
*IDC* ***13*** *00:59:21.9±0.5, 6.77N×123.77E, h590km±5km, mb4.0/41, mb1 4.0/43, mb1mx3.8/60, mbtmp4.9/43, Error ellipse: s-maj=8.1km s-min=5.0km az=70.0*
*NEIC* ***13*** *00:59:21.7±1.3, 6.75N±0.07×123.77E±0.09, h582km±2km, mb4.7/165, Error ellipse: s-maj=13.1km s-min=10.3km az=79.0*
*DJA* ***13*** *00:59:22.2±0.2, 7.1N±2.1×12.4E±.1°, h579km±3km, M4.6/79, mB5.2/38, mb4.9/79, MLv5.3/11, Mw(mB)4.5/38, MwMwp5.3/2, Mwp5.5/2*

**ISC 13 00:59:21.5±0.4, 6.74N±0.03×123.78E±0.05, h591km±3km, n473, σ1°29/533, mb4.7/163, 50C-60D, Fault plane solution: NP1:** ϕs241.94089°, δ65.46959°, λ-97.12357°. **NP2:** ϕs78.69348°, δ25.48223°, λ-74.79797°. **Principal axes:** T Plg20.1662°, Azm337.3010°; N Plg6.4777°, Azm244.9111°; P Plg68.7318°, Azm137.9515°; **Fault plane solution: NP1:** ϕs57.95445°, δ87.43758°, λ17.17751°. **NP2:** ϕs327.16266°, δ72.84020°, λ177.31812°. **Principal axes:** T Plg13.9005°, Azm283.8517°; N Plg72.6381°, Azm66.1840°; P Plg10.1956°, Azm191.3006°; **Fault plane solution: NP1:** ϕs219.17471°, δ65.24949°, λ-65.56538°. **NP2:** ϕs351.83429°, δ34.22849°, λ-131.90051°. **Principal axes:** T Plg16.7738°, Azm291.3867°; N Plg22.0649°, Azm28.4045°; P Plg61.7244°, Azm167.3055°; **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTBH** | **Cotabato--PC H** | **0.67** | **44** | ↑*i*P | **P** | **01 00 30.6** | **-0.7** |
| CTBH | | | | *i* S | **S** | **01 01 24.6** | **-3.4** |
| **KCP** | **Kidapawan** | **1.33** | **78** | ↓*i*P | **P** | **01 00 31.6** | **-1.2** |
| KCP | | | | *i* S | **S** | **01 01 28.8** | **-1.9** |
| **DAV** | **Davao City (W)** | **1.82** | **80** | P | **P** | **01 00 33.1** | **-1.2** |
| | 56nm,0.3s,baz=269,slow=0.8,SNR=9.6 | | | | | | |
| DAV | | | | S | **S** | **01 01 30.1** | **-3.4** |
| | 44nm,0.3s,baz=77,slow=13,SNR=1.2 | | | | | | |
| **DAV** | **Davao City (W)** | **1.82** | **80** | P | **P** | **01 00 32.9** | **-1.4** |
| DAV | | | | S | **S** | **01 01 34.3** | **+0.9** |
| **MATI** | **Mati** | **2.47** | **85** | ↓*i*P | **P** | **01 00 35.4** | **-1.7** |
| **TBP** | **Tagbilaran** | **2.93** | **2** | ↓*i*P | **P** | **01 00 38.0** | **-1.5** |
| TBP | | | | *i* S | **S** | **01 01 39.5** | **-3.6** |
| **BIPH** | **Bislig** | **2.93** | **61** | ↑*e*P | **P** | **01 00 38.8** | **-0.8** |
| **LLP** | **Lapu-Lapu** | **3.56** | **3** | ↑*e*P | **P** | **01 00 41.7** | **-1.7** |
| LLP | | | | *i* S | **S** | **01 01 47.4** | **-2.6** |
| **GLSP** | **General Luna,** | **3.81** | **37** | ↑*e*P | **P** | **01 00 43.3** | **-1.7** |
| **JAP** | **San Jose, Anti** | **4.37** | **336** | ↓*e*P | **P** | **01 00 48.2** | **-0.8** |
| **RCP** | **Roxas** | **4.90** | **348** | ↓*e*P | **P** | **01 00 50.3** | **-2.8** |
| **MYLDM** | **Lahad Datu** | **5.47** | **254** | P | **P** | **01 00 58.2** | **+0.4** |
| **GTOI** | **Gorontalo** | **6.11** | **187** | P | **P** | **01 01 00.8** | **-2.5** |
| | 0.2nm854nm79nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **6.13** | **178** | P | **P** | **01 01 04.0** | **+0.6** |
| | 1.4nm140nm,0.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **6.34** | **208** | P | **P** | **01 01 04.0** | **-1.3** |
| **TOLI2** | **Tolitoli** | **6.34** | **208** | P | **P** | **01 01 04.5** | **-0.8** |
| **MRSI** | **Marisa** | **6.49** | **196** | P | **P** | **01 01 05.5** | **-1.1** |
| | 0.5nm1μm138nm,0.9s | | | | | | |
| **AUQP** | **San Andres** | **6.63** | **351** | ↓*e*P | **P** | **01 01 08.8** | **+1.0** |
| **TNTI** | **Ternate** | **6.93** | **149** | P | **P** | **01 01 10.3** | **-0.3** |
| TNTI | | | | S | **S** | **01 02 36.9** | **-2.8** |
| **TNTI** | **Ternate** | **6.93** | **149** | P | **P** | **01 01 09.9** | **-0.6** |
| | 1.1nm80nm,1.0s | | | | | | |
| **TNTI** | **Ternate** | **6.93** | **149** | P | **P** | **01 01 12.3** | **+1.8** |
| **PGP** | **Puerto Galera** | **7.27** | **338** | ↓*e*P | **P** | **01 01 13.2** | **-0.5** |
| **MPSI** | **Mapaga** | **7.45** | **211** | P | **P** | **01 01 15.0** | **-0.4** |
| | 1.0nm1μm83nm,1.3s | | | | | | |
| **KKM** | **Kota Kinabalu** | **7.55** | **265** | P | **P** | **01 01 14.8** | **-1.6** |
| **KKM** | **Kota Kinabalu** | **7.55** | **265** | P | **P** | **01 01 15.7** | **-0.7** |
| **SPMM** | **Sapulut** | **7.55** | **255** | P | **P** | **01 01 16.0** | **-0.4** |
| **LQP** | **Lukban** | **7.65** | **343** | ↓*e*P | **P** | **01 01 16.4** | **-1.0** |
| **TGY** | **Tagaytay City** | **7.83** | **339** | P | **P** | **01 01 18.7** | **-0.3** |
| | 216nm,0.3s,baz=185,slow=2.6,SNR=50 | | | | | | |
| TGY | | | | S | **S** | **01 02 53.9** | **-1.3** |
| | 40nm,0.3s,baz=149,slow=22,SNR=7.4 | | | | | | |
| **APSI** | **Ampana** | **7.89** | **196** | P | **P** | **01 01 19.6** | **0.0** |
| | 0.9nm2μm147nm,0.9s | | | | | | |
| **MACP** | **Maragondon, Ca** | **8.06** | **338** | ↓*e*P | **P** | **01 01 19.9** | **-1.1** |
| **LBMI** | **Labuha** | **8.22** | **153** | P | **P** | **01 01 23.8** | **+1.1** |
| | 2μm184nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **9.01** | **166** | P | **P** | **01 01 28.4** | **-2.0** |
| | 2μm136nm,0.8s | | | | | | |
| **TTSI** | **Tana Toraja** | **10.49**

KBKI **Kotabaru** 12.54 218 P P 01 02 05.2 -0.6
2µm64nm,0.6s
FAKI **Fak Fak** 12.79 138 P P 01 02 08.8 +0.4
BBKI **Banjar Baru** 13.50 222 P P 01 02 13.6 -2.1
40nm,1.3s
STKI **Sintang** 13.95 242 P P 01 02 21.2 +1.0
61nm,1.0s
KSM **Kuching** 14.41 249 P P 01 02 24.3 -0.3
KSM **Kuching** 14.41 249 P P 01 02 25.1 +0.5
PBKI **Pangkalan Bun** 15.30 233 P P 01 02 34.3 +1.4
477nm,1.0s
MMRI **Maumere** 15.35 186 P P 01 02 33.8 +0.5
MMRI **Maumere** 15.35 186 P P 01 02 34.5 +1.2
5µm480nm,0.7s
MMRI **Maumere** 15.35 186 P P 01 02 35.0 +1.7
TWG **Pinlang** 16.20 351 P P 01 02 39.9 -1.2
SOEI **Soe** 16.39 178 P P 01 02 42.6 -0.5
SOEI **Soe** 16.39 178 P P 01 02 43.2 +0.1
1µm140nm,0.9s
SOEI **Soe** 16.39 178 P P 01 02 43.7 +0.6
PLAI **Plampang** 16.58 201 P P 01 02 45.5 +0.8
YULB **Yu-li** 16.73 352 P P 01 02 44.5 -1.4
YULB IAmb IAmb 01 02 49.0
comp=Z,27nm,0.6s
TPUB **Ta-pu** 16.74 350 P P 01 02 46.2 +0.2
TPUB **Ta-pu** 16.74 350 P P 01 02 46.6 +0.6
BATI **Baumata** 16.84 180 P P 01 02 46.9 -0.1
comp=Z,66nm,0.3s,baz=356,slow=0.5,SNR=84
BATI S S 01 05 34.0 -0.3
comp=Z,2.8nm,0.3s,baz=342,slow=21,SNR=1.8
BATI ScP ScP 01 09 39.8 +1.6
comp=Z,2.4nm,0.3s,baz=353,slow=4.4,SNR=6.0
BATI **Baumata** 16.84 180 P P 01 02 46.7 -0.3
comp=Z,4µmcomp=Z,412nm,0.8s
KMMI **Kalianget** 16.84 216 P P 01 02 46.7 -0.3
comp=Z,2µmcomp=Z,187nm,1.1s
WBSI **Waikabubak, Su** 16.85 195 P P 01 02 46.8 -0.4
comp=Z,26µmcomp=Z,2µmcomp=Z,220nm,0.8s
SRBI **Singaraja** 17.03 210 P P 01 02 49.2 +0.5
comp=Z,1µmcomp=Z,96nm,1.0s
BASI **Baing, Sumba** 17.15 191 P P 01 02 48.4 -1.4
comp=Z,2µmcomp=Z,139nm,0.6s
SSLB **Suanglung** 17.16 351 P P 01 02 49.8 -0.1
SSLB **Suanglung** 17.16 351 P P 01 02 50.2 +0.3
BLJI **Banyuglugur** 17.61 215 P P 01 02 55.1 +1.0
comp=Z,1µmcomp=Z,21nm,0.5s
GRJI **Gresik** 17.64 220 P P 01 02 56.9 +2.6
comp=Z,61nm,1.2s
JAGI **Jajag, Banyuwa** 17.90 213 P P 01 02 57.2 +0.5
JAGI **Jajag, Banyuwa** 17.90 213 P P 01 02 58.0 +1.3
comp=Z,124nm,0.9s
JAGI **Jajag, Banyuwa** 17.90 213 P P 01 02 58.0 +1.3
comp=Z,126nm,0.9s
YHNB **Yeheng** 17.98 353 P P 01 02 57.4 +0.1
YHNB **Yeheng** 17.98 353 P P 01 02 58.6 +1.3
GMJI **Gumukmas** 18.13 215 P P 01 02 59.6 +0.8
comp=Z,57nm,1.0s
UWJI **Ujung Watu** 18.30 225 P P 01 03 02.0 +1.7
comp=Z,219nm,1.0s
KNMB **Chin-men Tao** 18.36 344 P P 01 03 00.8 0.0
KNMB IAmb IAmb 01 03 04.1
comp=Z,15nm,0.7s
GENI **Genyem** 18.80 119 P P 01 03 07.5 +2.5
comp=Z,104nm,1.1s
SMRI **Semarang** 19.10 224 P P 01 03 08.3 +0.7
SMRI **Semarang** 19.10 224 P P 01 03 10.2 +2.6
comp=Z,123nm,1.0s
SMRI **Semarang** 19.10 224 P P 01 03 08.2 +0.6
JAY **Jayapura** 19.23 118 P P 01 03 09.5 +0.6
comp=Z,2.8nm,0.3s,baz=236,slow=2.8,SNR=7.1
UBPT **Khong Chiam** 19.86 297 P P 01 03 14.4 0.0
DRS **Darwin Rock St** 20.32 160 P P 01 03 19.2 +0.6
comp=Z,71nm,0.7s
KPJI **Karang Pucung** 20.37 227 P P 01 03 20.3 +1.2
comp=Z,87nm,0.8s
JOW **Kunigami** 20.43 12 P P 01 03 20.4 +0.8
comp=Z,17nm,0.6s,baz=135,slow=22,SNR=1.7
JOW **Kunigami** 20.43 12 IAmb IAmb 01 03 37.0
comp=Z,34nm,1.1s
MYKOM **Kota Tinggi** 20.47 257 P P 01 03 19.9 -0.2
LEM **Lembang** 21.02 230 P P 01 03 25.6 +0.5
comp=Z,109nm,0.9s,baz=92,slow=9.8,SNR=13
KDU **Kakadu** 21.15 156 P P 01 03 26.2 +0.2
CBJI **Citeko** 21.36 233 P P 01 03 29.9 +1.9
comp=Z,14µmcomp=Z,202nm,0.6s
DBJI **Dramaga** 21.52 232 P P 01 03 30.5 +1.0
comp=Z,144nm,1.7s
CNJI **Cibinong** 21.69 230 P P 01 03 30.5 -0.5
comp=Z,1µmcomp=Z,144nm,1.1s
JMBI **JAMBI** 21.75 248 P P 01 03 34.3 +2.8
comp=Z,156nm,0.4s
BLSI **Bandar Lampung** 22.07 237 P P 01 03 35.9 +1.6
comp=Z,163nm,0.4s
KLI **Kotabumi** 22.13 239 P P 01 03 35.8 +0.9
comp=Z,5µmcomp=Z,117nm,0.5s
KLSI **22.15 240** P P 01 03 35.6 +0.5
comp=Z,671nmcomp=Z,78nm,1.0s
CGJI **Cibinong** 22.40 234 P P 01 03 36.6 -0.7
comp=Z,148nm,0.9s
MDSI **Maura Dua** 22.52 241 P P 01 03 38.2 -0.2
comp=Z,34nm,0.9s
IPM **Ipoh** 22.75 266 P P 01 03 39.4 -1.1
IPM IAmb IAmb 01 03 41.7
comp=Z,33nm,1.1s
KASI **Kota Agung** 22.78 238 P P 01 03 40.5 -0.1
comp=Z,99nm,1.1s
KNRA **Kununurra** 22.81 168 P P 01 03 41.1 +0.2
KNRA **Kununurra** 22.81 168 P P 01 03 41.5 +0.6
LWLI **Liwa** 22.89 240 P P 01 03 42.1 +0.3
comp=Z,378nm,0.9s
KULM **Kulim** 23.05 268 P P 01 03 42.5 -0.5
KULM IAmb IAmb 01 03 44.0
comp=Z,23nm,1.0s
KULM **Kulim** 23.05 268 P P 01 03 44.0 +0.9
BKNI **Bangkinang** 23.56 255 P P 01 03 47.1 -0.5
KRJI **Kerinci** 23.94 249 P P 01 03 52.4 +1.3
comp=Z,191nm,0.5s
SRIT **Nakonsritamara** 24.03 276 P P 01 03 52.4 +0.6
PPI **Padang Panjang** 24.40 254 P P 01 03 54.9 -0.2
comp=Z,70nm,0.8s
FITZ **Fitzroy Crossi** 24.75 176 P P 01 03 58.0 0.0
comp=Z,15nm,0.3s,baz=8.6,slow=7.6,SNR=233
FITZ ScP ScP 01 09 58.2 +0.6
comp=Z,14nm,0.8s,baz=181,slow=2.3,SNR=17
FITZ ScS ScS 01 13 45.4 -1.6
comp=Z,2.1nm,1.0s,baz=334,slow=23,SNR=1.8
MNSI **Mandailing Nat** 24.85 257 P P 01 03 58.4 -0.6
comp=Z,38nm,0.8s
PSI **Prapat** 25.07 262 P P 01 04 01.4 +0.3
comp=Z,37nm,0.8s,baz=79,slow=4.4,SNR=40
PSI S S 01 07 43.7 -1.7
comp=Z,1.1nm,0.3s,baz=169,slow=21,SNR=1.2
PSI ScP ScP 01 09 58.9 0.0
comp=Z,3.9nm,0.2s,baz=213,slow=6.5,SNR=7.3
PSI ScS ScS 01 13 46.0 -2.9
comp=Z,1.2nm,0.3s,baz=143,slow=23,SNR=1.6
GYA **Guiyang** 25.50 322 ⇑P P 01 04 12.6 +7.9
GYA pmax pmax
comp=Z,17nm,0.6s
NJ2 **Nanjing** 25.60 350 *eP* P 01 04 06.7 +1.4
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
SISI **Saibi** 25.91 253 P P 01 04 07.5 -0.9
comp=Z,1µmcomp=Z,124nm,0.7s
KCSI **Kotacane, Aceh** 26.10 264 P P 01 04 09.5 -0.5
comp=Z,991nmcomp=Z,118nm,0.9s
GSI **Gunungsitoli** 26.68 259 P 01 04 14.2 -1.0
GSI **Gunungsitoli** 26.68 259 P P 01 04 14.2 -1.0
comp=Z,2µmcomp=Z,302nm,0.8s
GSI **Gunungsitoli** 26.68 259 P P 01 04 15.2 0.0
LHMI **Lhok Sumawe** 26.73 268 P P 01 04 16.0 +0.5
CM31 **Chiang Mai Arr** 26.85 298 P P 01 04 17.4 +0.9
CM31 IAmb IAmb 01 04 19.1
comp=Z,13nm,1.0s
CMAR **Chiang Mai Arr** 26.85 298 P P 01 04 18.1 +1.6
comp=Z,5.2nm,0.7s,baz=113,slow=6.9,SNR=31
CMAR S S 01 08 14.7 +1.9
comp=Z,1.5nm,0.3s,baz=206,slow=9.5,SNR=4.3
CMAR ScP ScP 01 10 05.5 +1.6
comp=Z,2.1nm,0.4s,baz=127,slow=1.4,SNR=21
CMAR ScS ScS 01 13 57.8 +1.5
comp=Z,0.9nm,0.3s,baz=282,slow=28,SNR=2.1
CMAR **Chiang Mai Arr** 26.85 298 P P 01 04 16.6 0.0
CHTO **Chiang Mai** 26.98 299 P P 01 04 18.3 +0.6
CHTO IAmb IAmb 01 04 19.8
comp=Z,11nm,0.8s

CHTO **Chiang Mai** 26.98 299 P P 01 04 19.1 +1.4
ENH **Enshi** 26.99 332 P P 01 04 17.9 +0.3
ENH IAmb IAmb 01 04 19.6
comp=Z,15nm,0.7s
KMI **Kunming** 27.19 315 ⇑P P 01 04 22.4 +2.7
KMI pmax pmax
comp=Z,7.0nm,0.9s
MBWA **Marble Bar** 28.01 188 P P 01 04 25.8 -0.8
MBWA **Marble Bar** 28.01 188 P P 01 04 26.5 -0.1
COEN **Coen** 28.17 137 P P 01 04 27.2 -0.8
COEN IAmb IAmb 01 04 28.1
comp=Z,11nm,0.8s
PSA00 **Pilbara Seismi** 28.40 188 P P 01 04 29.0 -0.9
PSA00 **Pilbara Seismi** 28.40 188 P P 01 04 28.6 -1.4
PSA00 IAmb IAmb 01 04 30.6
comp=Z,31nm,0.9s
PSA00 **Pilbara Seismi** 28.40 188 P P 01 04 30.1 +0.1
JMN **Monobe** 28.44 18 P P 01 04 29.5 -0.7
WRAB **Tennant Creek** 28.48 159 P P 01 04 30.6 0.0
WRAB **Tennant Creek** 28.48 159 P P 01 04 30.7 0.0
WRA **Warramunga Arr** 28.48 159 P P 01 04 30.4 -0.3
comp=Z,51nm,0.6s,baz=342,slow=9.2,SNR=308
WRA PcP PcP 01 07 23.8 +0.8
comp=Z,1.9nm,0.8s,baz=322,slow=4.4,SNR=2.6
WRA S S 01 08 32.2 -5.8
comp=Z,2.6nm,0.5s,baz=259,slow=28,SNR=11
WRA ScP ScP 01 10 09.4 +0.5
comp=Z,27nm,0.7s,baz=344,slow=3.3,SNR=57
WRA ScS ScS 01 14 00.0 -3.7
comp=Z,3.3nm,1.2s,baz=316,slow=4.7,SNR=5.0
WB2 **Warramunga Arr** 28.48 159 P P 01 04 30.6 -0.2
WR0 **Warramunga Arr** 28.57 158 P P 01 04 30.9 -0.6
PZH **PanZhiHua** 28.75 316 P P 01 04 35.2 +2.1
PZH pmax pmax
comp=Z,8.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,4.8s
JHS **Saijyo** 29.41 16 P P 01 04 39.3 +0.7
JHS IAmb IAmb 01 04 41.3
comp=Z,30nm,1.0s
LYN **LuoYang** 29.58 341 ⇓P P 01 04 41.5 +1.5
LYN pmax pmax
comp=Z,10.0nm,0.7s
TIA **Tai'an** 29.96 349 ⇑P P 01 04 43.8 +0.6
TIA pmax pmax
comp=Z,11nm,0.7s
XAN **Xi'an** 30.44 335 ⇑P P 01 04 48.1 +0.6
XAN PcP PcP 01 07 28.8 +0.8
XAN S S 01 09 06.8 -1.3
XAN ScP ScP 01 10 15.4 +0.2
XAN PcS PcS 01 11 13.3 +0.6
XAN ScS ScS 01 14 11.4 -1.6
XAN pmax pmax
comp=Z,20nm,0.8s
CD2 **Chengdu** 30.50 325 P P 01 04 48.6 +0.6
CD2 pmax pmax
comp=Z,10.0nm,0.6s
GIRL **Giralia** 30.66 197 P P 01 04 49.6 +0.2
KSAR **Wonju Array Be** 30.79 6 P P 01 04 50.5 +0.2
KSRS **Korea Array** 30.80 6 P P 01 04 51.5 +1.1
comp=Z,5.2nm,0.9s,baz=183,slow=10,SNR=15
KSRS PcP PcP 01 07 29.4 +0.6
comp=Z,1.9nm,0.7s,baz=166,slow=1.6,SNR=5.0
KSRS ScP ScP 01 10 17.1 +0.9
comp=Z,3.7nm,0.9s,baz=176,slow=3.0,SNR=10
INU **Inuyama** 30.96 21 P P 01 04 51.5 -0.4
INU IAmb IAmb 01 04 53.0
comp=Z,17nm,0.6s
INU **Inuyama** 30.96 21 P P 01 04 54.0 +2.1
comp=Z,30nm,1.0s
QIS **Mount Isa** 31.27 151 P P 01 04 55.7 +1.0
HNS **HongShan** 31.62 346 ⇑P P 01 04 58.4 +1.1
HNS pmax pmax
comp=Z,19nm,1.1s
AS31 **Alice Springs** 31.80 162 P P 01 04 59.3 +0.2
ASAR **Alice Springs** 31.80 162 P P 01 04 59.8 +0.6
comp=Z,59nm,0.3s,baz=338,slow=7.6,SNR=1437
ASAR PcP PcP 01 07 32.1 +0.2
comp=Z,1.7nm,0.6s,baz=347,slow=3.8,SNR=2.1
ASAR S S 01 09 27.1 -1.8
comp=Z,15nm,0.8s,baz=346,slow=16,SNR=33
ASAR ScP ScP 01 10 20.2 +0.3
comp=Z,13nm,0.8s,baz=344,slow=3.3,SNR=21
ASAR ScS ScS 01 14 16.4 -3.7
comp=Z,0.8nm,1.0s,baz=352,slow=6.3,SNR=4.4
ASAR **Alice Springs** 31.80 162 P P 01 04 58.9 -0.2
WRKA **Warakurna** 31.89 172 P P 01 05 00.8 +0.9
MAJO **Matsushiro** 32.46 22 P P 01 05 03.5 -1.1
MAJO IAmb IAmb 01 05 05.0
comp=Z,35nm,1.1s
MAJO **Matsushiro** 32.46 22 P P 01 05 04.9 +0.3
MAT **Matsushiro** 32.46 22 P P 01 05 03.7 -0.9
MAT S S 01 09 35.3 -3.4
MJAR **Matsushiro Arr** 32.46 22 P P 01 05 04.3 -0.3
comp=Z,22nm,0.9s,baz=198,slow=8.9,SNR=30
MJAR PcP PcP 01 07 34.0 +0.5
comp=Z,1.3nm,0.4s,baz=195,slow=1.9,SNR=4.3
MJAR S S 01 09 35.8 -3.0
comp=Z,0.7nm,0.3s,baz=36,slow=23,SNR=2.2
MJAR ScP ScP 01 10 22.6 +0.6
comp=Z,11nm,1.1s,baz=169,slow=3.1,SNR=9.1
MJAR **Matsushiro Arr** 32.46 22 P P 01 05 03.3 -1.3
MJB9 **Matsu-Tunnel** 32.47 22 P P 01 05 03.5 -1.2
MJB9 IAmb IAmb 01 05 05.0
comp=Z,34nm,1.1s
MEEK **Meekatharra** 33.56 188 P P 01 05 14.2 +0.3
JSD **Sado** 33.81 21 P P 01 05 15.2 -0.7
JSD IAmb IAmb 01 05 16.3
comp=Z,15nm,0.8s
BJT **Baijiatuau** 33.83 349 P P 01 05 16.3 +0.3
BJT IAmb IAmb 01 05 18.5
comp=Z,31nm,1.2s
BJI **Beijing** 33.85 349 P P 01 05 16.7 +0.6
BJI ScP ScP 01 10 28.0 +1.2
BJI pmax pmax
comp=Z,22nm,1.1s
LZH **Lanzhou** 34.45 331 *eP* P 01 05 23.6 +2.2
LZH ScP ScP 01 10 30.4 +1.1
LZH ScS ScS 01 14 36.3 +2.2
LZH pmax pmax
comp=Z,18nm,1.1s
CTA **Charters Tower** 34.64 141 P P 01 05 24.5 +1.5
comp=Z,8.5nm,0.8s,baz=314,slow=10.0,SNR=8.4
CTA ScP ScP 01 10 31.2 +1.2
comp=Z,14nm,0.9s,baz=264,slow=4.0,SNR=11
CTAO **Charters Tower** 34.64 141 P P 01 05 23.8 +0.7
HHC **Hu-ho-hao-te** 35.67 344 *eP* P 01 05 32.6 +1.2
HHC pmax pmax
comp=Z,15nm,0.8s
HHC pmax pmax
comp=Z,58nm,4.1s
SHL **Shillong** 35.74 305 P P 01 05 33.2 +0.8
OOD **Oodnadatta** 36.21 162 P P 01 05 37.0 +1.1
MORW **Morawa** 36.37 191 P P 01 05 36.9 -0.3
MORW **Morawa** 36.37 191 P P 01 05 37.6 +0.4
JTM **Tenmabayashi** 37.26 22 P P 01 05 44.1 -0.1
FORT **Forrest** 37.53 174 P P 01 05 46.5 -0.1
FORT **Forrest** 37.53 174 P P 01 05 47.4 +0.8
XLT **XiLinHaoTe** 37.62 351 ⇑*i*P P 01 05 48.2 +0.9
XLT pmax pmax
comp=Z,52nm,0.9s
XLT pmax pmax
comp=Z,170nm,3.7s
BLDU **Ballidu** 37.76 190 P P 01 05 48.5 0.0
USA0B **Ussuriysk Arra** 38.00 10 P P 01 05 51.0 +0.8
USA0B IAmb IAmb 01 05 52.2
comp=Z,27nm,1.1s
USRK **Ussuriysk Ar.** 38.00 10 P P 01 05 51.0 +0.8
comp=Z,11nm,0.8s,baz=204,slow=8.2,SNR=14
MDJ **Mudanjiang** 38.07 7 IAmb IAmb 01 05 52.7
comp=Z,18nm,0.8s
MDJ **Mudanjiang** 38.07 7 P P 01 05 50.8 0.0
MDJ pmax pmax
comp=Z,25nm,1.0s
MDJ pmax pmax
comp=Z,150nm,4.5s
MDJ **Mudanjiang** 38.07 7 P P 01 05 52.0 +1.2
comp=Z,30nm,1.0s
MULG **Mulgathing** 38.11 166 P P 01 05 52.1 +0.8
KLBR **Kellerberrin** 38.55 188 P P 01 05 55.0 +0.1
QLP **Quilpie** 38.61 150 P P 01 05 56.7 +1.3
BNX **BinXian** 38.98 4 ⇓P P 01 05 58.3 +0.2
BNX pmax pmax
comp=Z,28nm,0.8s
BNX pmax pmax

comp=Z,350nm,4.1s
GTA **Gaotai** 39.03 330 ⇑P P 01 06 00.1 +1.3
GTA PcP PcP 01 07 53.6 +0.1
GTA sP sP 01 08 48.9 +2.3
GTA ScP ScP 01 10 47.4 +1.0
GTA ScS ScS 01 14 59.2 -1.0
GTA pmax pmax
comp=Z,7.0nm,1.0s
ERM **Erimo** 39.11 23 P P 01 06 00.1 +1.0
ERM IAmb IAmb 01 06 04.2
comp=Z,38nm,1.0s
MUN **Mundaring** 39.17 190 P P 01 06 00.2 +0.3
LCRK **Leigh Creek** 39.48 160 P P 01 06 03.7 +1.3
GOMU **GeErMu** 39.52 322 P P 01 06 02.9 -0.2
GOMU S S 01 11 22.7 -1.7
GOMU pmax pmax
comp=Z,120nm,5.0s
TAPN **Taplejung** 39.88 305 *eP* P 01 06 07.1 +1.1
comp=Z,8.4nm,0.4s
TAPN **Taplejung** 39.88 305 *eP* ScP 01 10 50.6 +0.3
comp=Z,30nm,1.0s
NWAO **Narrogin (SRO)** 39.94 189 P P 01 06 06.0 +0.1
NWAO **Narrogin (SRO)** 39.94 189 P P 01 06 06.6 +0.6
ODAN **Odare** 39.95 304 *eP* ScP 01 10 50.9 +0.5
CHLP **Challavanipeta** 40.39 291 *eP* P 01 06 11.3 +1.5
CHLP IVmB_BB 01 06 11.8
comp=Z,83nm,0.8s
RAMN **Ramite** 40.63 304 *eP* P 01 06 13.5 +1.6
comp=Z,1.5nm,0.4s
ASAJ **Asahikawa** 40.71 21 P P 01 06 13.2 +1.3
comp=Z,33nm,0.8s,baz=231,slow=15,SNR=12
ASAJ S S 01 11 40.1 -0.5
comp=Z,4.1nm,0.5s,baz=120,slow=32,SNR=1.4
JKA **Kamikawa-asahi** 40.71 21 S 01 11 40.1 -0.5
JKA **Kamikawa-asahi** 40.71 21 P P 01 06 12.9 +1.0
JKA IAmb IAmb 01 06 14.2
comp=Z,29nm,0.8s
BBOO **Buckleboo** 41.03 164 P P 01 06 15.4 +0.7
BBOO **Buckleboo** 41.03 164 P P 01 06 15.5 +0.8
JIRN **Jiri** 41.24 305 *eP* P 01 06 17.7 +0.8
comp=Z,7.6nm,0.3s
JIRN **Jiri** 41.24 305 *eP* ScP 01 10 56.0 +0.2
EIDS **Eidsvold** 41.52 141 P P 01 06 18.9 +0.3
EIDS IAmb IAmb 01 06 20.0
comp=Z,17nm,0.9s
EIDS **Eidsvold** 41.52 141 P P 01 06 19.8 +1.2
GUN **Gumba** 41.59 305 *eP* P 01 06 20.8 +1.1
comp=Z,10.0nm,0.3s
GUN **Gumba** 41.59 305 *eP* ScP 01 10 57.3 +0.2
comp=Z,29nm,0.8s
RKGY **Rocky Gully** 41.63 188 P P 01 06 21.0 +1.7
WHYH **Whyalla** 41.67 162 P P 01 06 20.5 +0.8
comp=Z,65nm,0.8s
PKI **Pulchoki** 41.85 304 *eP* P 01 06 22.4 +0.8
comp=Z,3.8nm,0.3s
PKI **Pulchoki** 41.85 304 *eP* ScP 01 10 58.1 0.0
comp=Z,56nm,0.9s
PKIN **Phulchoki** 41.86 304 *eP* P 01 06 22.4 +0.7
comp=Z,3.3nm,0.3s
PKIN **Phulchoki** 41.86 304 *eP* ScP 01 10 58.4 +0.3
comp=Z,50nm,0.8s
NAPP **Napperby** 41.99 162 P P 01 06 23.3 +1.2
comp=Z,41nm,0.5s
STKA **Stephens Creek** 42.00 157 P P 01 06 23.3 +1.0
comp=Z,34nm,0.7s,baz=332,slow=7.7,SNR=83
STKA ScP ScP 01 10 58.8 +0.7
comp=Z,12nm,0.7s,baz=337,slow=6.6,SNR=15
STKA S S 01 11 59.6 +0.2
comp=Z,4.7nm,0.9s,baz=44,slow=21,SNR=6.0
STKA ScS ScS 01 15 14.5 -3.8
comp=Z,1.9nm,0.9s,baz=19,slow=23,SNR=2.2
STKA **Stephens Creek** 42.00 157 P P 01 06 22.8 +0.5
STKA **Stephens Creek** 42.00 157 P P 01 06 23.5 +1.2
KKN **Kakani** 42.04 305 *eP* P 01 06 23.6 +0.6
comp=Z,8.2nm,0.3s
KKN **Kakani** 42.04 305 *eP* ScP 01 10 58.8 +0.1
DMN **Daman** 42.11 304 *eP* P 01 06 24.7 +1.1
comp=Z,1.3nm,0.2s
DMN **Daman** 42.11 304 *eP* ScP 01 10 59.4 +0.3
PVM **Polavaram** 42.44 288 *eP* P 01 06 27.2 +1.2
PVM IVmB_BB 01 06 27.6
comp=Z,58nm,0.6s
HTT **Hallett** 42.46 161 P P 01 06 27.4 +1.5
HIA **Hailar** 42.52 356 IAmb IAmb 01 06 28.1
comp=Z,24nm,0.9s
GKN **Gorkha** 42.64 305 *eP* P 01 06 28.6 +1.0
comp=Z,3.2nm,0.3s
GKN **Gorkha** 42.64 305 *eP* ScP 01 11 00.6 -0.5
comp=Z,35nm,0.8s
PALK **Pallekele** 42.75 273 P P 01 06 29.2 +0.7
comp=Z,6.9nm,0.6s,baz=184,slow=8.7,SNR=5.2
PALK ScP ScP 01 11 02.2 +0.6
comp=Z,5.1nm,0.9s,baz=108,slow=6.4,SNR=3.9
PALK S S 01 12 09.8 -1.0
comp=Z,3.8nm,0.8s,baz=306,slow=20,SNR=1.5
PALK **Pallekele** 42.75 273 P P 01 06 28.9 +0.4
PALK IAmb IAmb 01 06 29.8
comp=Z,13nm,0.9s
KLR **Kul'dur** 42.88 8 PcP PcP 01 08 06.4 +0.4
comp=Z,1.6nm,0.7s,baz=225,slow=4.3,SNR=2.2
KLR ScP ScP 01 11 02.5 +1.2
comp=Z,3.9nm,0.8s,baz=272,slow=2.7,SNR=12
KLR S S 01 12 10.3 -1.2
comp=Z,1.2nm,0.9s,baz=312,slow=21,SNR=1.2
MYLAV **Mylavaram** 43.31 287 *eP* P 01 06 34.0 +1.3
MYLAV IVmB_BB 01 06 34.5
comp=Z,88nm,1.0s
ULN **Ulaanbaatar** 43.39 344 P P 01 06 34.3 +1.2
ULN IAmb IAmb 01 06 35.4
comp=Z,27nm,1.1s
KOLN **Koldanda** 43.41 304 *eP* P 01 06 34.9 +1.2
comp=Z,18nm,0.3s
KOLN **Koldanda** 43.41 304 *eP* ScP 01 11 03.9 -0.4
comp=Z,18nm,0.8s
CMSA **Cobar Meteorol** 43.44 152 P P 01 06 36.2 +2.7
DANN **Dangsing** 43.49 305 *eP* P 01 06 35.4 +1.0
comp=Z,13nm,0.2s
DANN **Dangsing** 43.49 305 *eP* ScP 01 11 04.2 -0.6
comp=Z,36nm,0.8s
SONM **Songino Array** 43.55 343 P P 01 06 35.4 +1.1
comp=Z,12nm,0.9s,baz=158,slow=8.6,SNR=71
SONM PcP PcP 01 08 08.8 +0.3
comp=Z,2.3nm,0.8s,baz=147,slow=2.3,SNR=4.9
SONM ScP ScP 01 11 04.8 +0.5
comp=Z,2.4nm,0.7s,baz=161,slow=4.4,SNR=8.6
SONM S S 01 12 20.5 -0.9
comp=Z,0.2nm,0.5s,baz=55,slow=44,SNR=1.0
SONM ScS ScS 01 15 24.7 -3.2
comp=Z,0.2nm,0.4s,baz=346,slow=5.5,SNR=1.3
SONM **Songino Array** 43.55 343 P P 01 06 35.0 +0.7
SONM IAmb IAmb 01 06 36.4
comp=Z,18nm,1.0s
TWOA **Tennyson Woods** 43.83 162 P P 01 06 37.8 +1.3
comp=Z,48nm,0.7s
SKHT **Srikalahasti** 43.87 283 *eP* P 01 06 38.0 +0.9
SKHT IVmB_BB 01 06 38.6
comp=Z,94nm,1.1s
PYUN **Piuthan** 44.03 304 *eP* P 01 06 39.2 +0.7
comp=Z,3.9nm,0.2s
PYUN **Piuthan** 44.03 304 *eP* ScP 01 11 06.2 -0.7
comp=Z,31nm,0.9s
NJS **Nagarjunasagar** 44.54 287 *eP* P 01 06 43.2 +0.9
NJS IVmB_BB 01 06 43.5
comp=Z,83nm,0.5s
RCLA **Racherla** 44.75 285 *eP* P 01 06 44.2 +0.3
SRLM **Srisailam** 44.88 286 *eP* P 01 06 45.3 +0.4
SRLM IVmB_BB 01 06 45.9
comp=Z,84nm,1.9s
RPR **Rampur** 44.89 290 *eP* P 01 06 45.5 +0.6
RPR IVmB_BB 01 06 46.2
comp=Z,117nm,0.9s
CUPL **Choutuppal** 45.01 288 *eP* P 01 06 46.3 +0.5
CUPL IVmBBB 01 06 46.8
comp=Z,41nm,0.5s
HYBB **Hyderabad (bro** 45.37 288 *eP* P 01 06 48.8 +0.1
HYBB *eP* P 01 06 49.2 +0.6
HYBB IVmBBB 01 06 50.0
comp=Z,120nm,1.0s
ARMA **Armidale** 45.59 146 P P 01 06 51.6 +1.5
ARMA IAmb IAmb 01 06 53.4
comp=Z,21nm,0.9s
ARMA **Armidale** 45.59 146 P P 01 06 52.6 +2.5
SRSP **Sriramsagar** 45.79 290 *eP* P 01 06 52.1 +0.3
SRSP IVmB_BB 01 06 53.0
comp=Z,67nm,0.8s
URV **Uravakonda** 46.33 284 *eP* P 01 06 56.0 0.0

URV IVmBBB 01 06 57.2
comp=Z,73nm,1.1s
**ARPS Mount Arapiles 46.47 160** P **P** **01 06 57.7 +1.1**
**KLRI Killari 47.30 288** *eP* **P** **01 07 03.6 +0.4**
KLRI IVmB_BB 01 07 03.9
comp=Z,156nm,0.9s
**CAN Canberra 48.12 152** P **P** **01 07 10.0 +1.1**
CAN IAmb IAmb 01 07 11.8
comp=Z,24nm,0.8s
**CAN Canberra 48.12 152** P **P** **01 07 11.0 +2.1**
**CNB Canberra Magne 48.28 152** P **P** **01 07 11.6 +1.4**
**TOO Toolangi 48.52 157** P **P** **01 07 12.9 +1.0**
TOO IAmb IAmb 01 07 14.6
comp=Z,24nm,0.9s
**TOO Toolangi 48.52 157** P **P** **01 07 13.9 +2.0**
**WMQ Urumqi 48.59 325** *eP* **P** **01 07 14.3 +1.9**
WMQ pmax pmax
comp=Z,22nm,1.1s
**LIFNC LIFOU 50.70 124** P **P** **01 07 28.9 +0.9**
**MK31 Makanchi Array 53.42 325** P **P** **01 07 48.2 +1.0**
MK31 IAmb IAmb 01 07 48.7
comp=Z,12nm,0.5s
**MKAR Makanchi Array 53.42 325** P **P** **01 07 48.3 +1.1**
comp=Z,16nm,0.5s,baz=119,slow=7.7,SNR=423
MKAR PcP **PcP** **01 08 45.0 +0.3**
comp=Z,3.0nm,0.5s,baz=120,slow=5.0,SNR=6.2
MKAR ScP **ScP** **01 11 46.1 -0.2**
comp=Z,3.2nm,0.7s,baz=120,slow=5.2,SNR=10.0
MKAR S **S** **01 14 37.0 +1.0**
comp=Z,2.7nm,1.0s,baz=123,slow=15,SNR=15
MKAR ScS **ScS** **01 16 31.9 -3.2**
comp=Z,0.3nm,0.7s,baz=354,slow=7.9,SNR=2.5
**MKAR Makanchi Array 53.42 325** P **P** **01 07 48.5 +1.3**
MKAR ScP **ScP** **01 11 45.8 -0.6**
**TARG Taragay, Kyrgy 53.56 318** P **P** **01 07 48.9 +0.2**
**MAKZ Makanchi 53.61 325** P **P** **01 07 49.5 +1.0**
MAKZ IAmb IAmb 01 07 50.0
comp=Z,17nm,0.6s
**NIL Nilore 53.77 307** P **P** **01 07 50.6 +0.7**
**PEA0B Petropavlovsk- 53.85 25** P **P** **01 07 50.8 +0.8**
PEA0B IAmb IAmb 01 07 53.1
comp=Z,34nm,0.8s
**PETK Petropavlovsk- 53.85 25** P **P** **01 07 50.8 +0.8**
comp=Z,20nm,0.7s,baz=195,slow=2.9,SNR=61
PETK PcP **PcP** **01 08 46.4 +0.3**
comp=Z,2.5nm,0.7s,baz=193,slow=5.9,SNR=1.8
**KSH Kashi 53.85 315** P **P** **01 07 53.2 +2.7**
KSH pP pwP 01 09 45.8 +2.8
KSH pmax pmax
comp=Z,4.0nm,0.8s
**PET Petropavlovsk 54.19 25** P **P** **01 07 53.3 +0.9**
PET IAmb IAmb 01 07 54.2
comp=Z,28nm,0.8s
**YAK Yakutsk 55.35 3** P **P** **01 08 00.9 +0.7**
comp=Z,23nm,0.5s,baz=185,slow=1.4,SNR=3.3
YAK S **S** **01 15 00.4 0.0**
comp=Z,9.3nm,0.5s,baz=148,slow=23,SNR=6.2
**YAK Yakutsk 55.35 3** P **P** **01 08 00.9 +0.7**
**TKM2 Tokmak 2 55.56 318** P **P** **01 08 03.8 +1.4**
SNR=9.6
**UCH Uchtor 55.98 317** P **P** **01 08 07.2 +1.5**
SNR=16
**CHMS Chumysh 56.15 318** P **P** **01 08 07.3 +1.1**
SNR=5.4
**AAK Ala-Archa 56.17 318** P **P** **01 08 08.0 +1.4**
comp=Z,1.9nm,0.5s,baz=150,slow=7.0
AAK ScP **ScP** **01 11 58.7 0.0**
comp=Z,1.9nm,0.7s,baz=143,slow=5.4,SNR=4.3
AAK S **S** **01 15 13.9 +1.8**
comp=Z,0.8nm,0.8s,baz=233,slow=23,SNR=10
**AAK Ala-Archa 56.17 318** P **P** **01 08 08.2 +1.6**
SNR=5.3
**AAK Ala-Archa 56.17 318** P **P** **01 08 07.6 +1.1**
**USP Ospenovka 56.43 318** P **P** **01 08 09.4 +1.2**
SNR=17
**AML Almayashu 56.50 317** P **P** **01 08 10.9 +1.8**
SNR=15
**MA2 Magadan 56.58 16** P **P** **01 08 09.5 +0.7**
MA2 IAmb IAmb 01 08 11.3
comp=Z,43nm,0.8s
**ZAA0 Zalesovo Array 56.59 334** P **P** **01 08 08.6 -0.4**
**ZALV Zalesovo Beam 56.59 334** P **P** **01 08 09.0 0.0**
comp=Z,6.8nm,0.6s,baz=123,slow=6.2,SNR=41
ZALV ScP **ScP** **01 11 58.6 -1.5**
comp=Z,1.0nm,0.8s,baz=158,slow=4.2,SNR=2.8
ZALV S **S** **01 15 15.5 -1.3**
comp=Z,2.0nm,0.9s,baz=130,slow=14,SNR=7.6
ZALV ScS **ScS** **01 16 52.6 -5.1**
comp=Z,0.5nm,0.6s,baz=113,slow=10,SNR=1.9
**EKS2 Erkin-Say 56.66 317** P **P** **01 08 11.6 +1.7**
SNR=12
**KBL Kabul 57.37 307** P **P** **01 08 15.0 0.0**
**KURBB Kurchatov Arra 57.64 328** P **P** **01 08 17.0 +0.8**
comp=Z,26nm,0.6s,baz=128,slow=6.3,SNR=235
KURBB S **S** **01 15 30.5 +0.3**
comp=Z,0.5nm,0.2s,baz=108,slow=22,SNR=4.9
**KURK Kurchatov 57.64 328** P **P** **01 08 17.1 +0.9**
KURK IAmb IAmb 01 08 17.9
comp=Z,47nm,0.7s
**KURK Kurchatov 57.64 328** **S** **01 15 30.5 +0.3**
**GAR Garm 57.74 312** P **P** **01 08 17.6 +0.3**
GAR IAmb IAmb 01 08 18.9
comp=Z,22nm,0.6s
**CHGR Chuyangaron 58.48 312** P **P** **01 08 22.8 +0.5**
**HRA Herat 62.80 305** P **P** **01 08 51.0 +0.1**
**BVAR Borovoye Array 63.21 327** P **P** **01 08 53.4 +0.6**
comp=Z,11nm,0.8s,baz=91,slow=13,SNR=45
**BRVK Borovoye 63.28 327** P **P** **01 08 53.7 +0.5**
BRVK IAmb IAmb 01 08 54.9
comp=Z,18nm,0.9s
**WSAR Wadi Sarin 64.55 292** P **P** **01 09 01.9 -0.1**
comp=Z,14nm,1.0s,baz=129,slow=2.0,SNR=3.5
**DCZ Deep Cove 64.84 148** P **P** **01 09 04.1 +0.9**
DCZ IAmb IAmb 01 09 05.3
comp=Z,17nm,0.9s
**TIXI Tiksi 64.92 2** P **P** **01 09 03.1 -0.1**
comp=Z,18nm,0.4s,baz=270,slow=3.0,SNR=51
TIXI S **S** **01 16 57.5 -1.5**
comp=Z,0.7nm,0.4s,baz=90,slow=24,SNR=6.3
TIXI ScS **SKSac** **01 17 55.0 -4.7**
comp=Z,0.8nm,0.3s,baz=273,slow=23,SNR=2.0
**TIXI Tiksi 64.92 2** P **P** **01 09 02.8 -0.5**
TIXI IAmb IAmb 01 09 04.1
comp=Z,26nm,0.7s
**LBZ Lake Benmore 65.81 145** P **P** **01 09 10.0 +0.7**
LBZ IAmb IAmb 01 09 11.4
comp=Z,14nm,0.8s
**THZ Tophouse 65.87 142** P **P** **01 09 10.6 +0.8**
**RPZ Rata Peaks 65.90 144** P **P** **01 09 10.8 +0.9**
**TUWZ Tuamarina 66.32 141** P **P** **01 09 12.9 +0.4**
**BKZ Black Stump Fm 66.77 138** P **P** **01 09 15.7 +0.2**
BKZ IAmb IAmb 01 09 17.9
comp=Z,17nm,0.7s
**NRIK Noril'sk 66.84 347** P **P** **01 09 15.8 +0.7**
comp=Z,12nm,0.6s,baz=132,slow=6.1,SNR=44
NRIK S **S** **01 17 21.5 -0.2**
comp=Z,0.7nm,0.4s,baz=33,slow=23,SNR=16
**NRIK Noril'sk 66.84 347** P **P** **01 09 15.8 +0.7**
NRIK IAmb IAmb 01 09 16.8
comp=Z,15nm,0.8s
**BILL Bilibino 67.45 16** P **P** **01 09 19.6 +0.6**
BILL IAmb IAmb 01 09 20.5
comp=Z,15nm,1.0s
**ABKAR Akbulak array 67.97 321** P **P** **01 09 22.9 +0.4**
**ABKAR Akbulak array 67.97 321** IAmb IAmb 01 09 23.9
comp=Z,6.5nm,0.7s
**SOCY Socotra 68.91 280** P **P** **01 09 27.9 -1.0**
**AKTO Aktyubinsk 69.49 321** P **P** **01 09 32.2 +0.6**
comp=Z,7.3nm,0.7s,baz=100,slow=8.1,SNR=28
AKTO S **S** **01 17 52.1 -0.9**
comp=Z,0.5nm,0.6s,baz=227,slow=20,SNR=1.5
**ARU Arti 70.84 328** P **P** **01 09 39.3 -0.1**
comp=Z,2.5nm,0.5s,baz=160,slow=2.7,SNR=17
ARU S **S** **01 18 04.8 -3.3**
comp=Z,0.4nm,0.3s,baz=80,slow=13,SNR=6.1
**ARU Arti 70.84 328** P **P** **01 09 39.4 0.0**
**NIKH Nikolski High 71.09 36** P **P** **01 09 41.5 +0.5**
**NIKH Nikolski High 71.09 36** P **P** **01 09 41.8 +0.7**
baz=256
**UNV Unalaska Valle 72.67 36** P **P** **01 09 50.8 +0.7**
baz=257
**GAMB Gambell 72.88 25** P **P** **01 09 52.2 +1.1**
GAMB IAmb IAmb 01 09 53.5
comp=Z,24nm,1.0s
**GAMB Gambell 72.88 25** P **P** **01 09 52.7 +1.6**
baz=250

**FALS False Pass 74.64 35** P **P** **01 10 01.4 +0.2**
**FALS False Pass 74.64 35** P **P** **01 10 01.9 +0.7**
baz=260
**TNA Tin City 75.00 24** P **P**
**TNA Tin City 75.00 24** P **P** **01 10 04.2 +1.2**
baz=253 **01 10 04.0 +1.0**
**ANM Nome 75.77 25** P **P** **01 10 08.3 +1.0**
**ANM Nome 75.77 25** P **P** **01 10 09.0 +1.7**
baz=255
**KIRV Kirov 76.14 329** P **P** **01 10 09.8 +0.3**
comp=Z,18nm,0.6s,baz=194,slow=2.3,SNR=12
KIRV S **S** **01 19 02.0 -3.9**
comp=Z,2.0nm,0.5s,baz=89,slow=23,SNR=1.4
**BELG Belogornoye 76.24 322** P **P** **01 10 10.2 +0.1**
comp=Z,16nm,0.9s,baz=14,slow=2.3,SNR=4.8
**SDPT Sand Point 76.38 35** P **P** **01 10 11.6 +0.8**
**SDPT Sand Point 76.38 35** P **P** **01 10 11.3 +0.4**
baz=262
**RAYN Ar Rayn 76.61 293** P **P** **01 10 12.9 0.0**
**RDOG Red Dog Mine 77.57 22** P **P** **01 10 18.1 +1.0**
**RDOG Red Dog Mine 77.57 22** P **P** **01 10 18.6 +1.5**
baz=257
**SIRT Sirnak 79.07 307** P **P** **01 10 26.8 +0.9**
**RSD Rainshed 79.27 72** pP 01 12 24.3 -6.8
**GURO Guroymak-BITLI 79.39 308** P **P** **01 10 28.1 +0.5**
**GCSA Galena City Sc 79.39 25** P **P** **01 10 28.6 +1.8**
baz=263
**TTA Tatalina 79.57 27** P **P** **01 10 29.1 +1.2**
TTA IAmb IAmb 01 10 30.6
comp=Z,20nm,1.0s
**TTA Tatalina 79.57 27** P **P** **01 10 29.6 +1.7**
baz=264,SNR=11
**ABPO Ambohimpanom 79.59 249** P **P** **01 10 28.8 -0.2**
**SVW2 Sparrevohn 79.61 29** P **P** **01 10 29.5 +1.4**
SVW2 IAmb IAmb 01 10 30.9
comp=Z,25nm,1.0s
**P18K Big Mountain, 79.64 31** P **P** **01 10 29.3 +0.9**
baz=266
**O18K Koktuh Hills 79.69 30** IAmb IAmb 01 10 31.3
comp=Z,41nm,0.8s
**O18K Koktuh Hills 79.69 30** P **P** **01 10 30.6 +2.0**
baz=266
**SII Sitkinak Islan 80.02 34** P **P** **01 10 32.1 +1.8**
baz=267
**L19K White Mountain 80.04 28** IAmb IAmb 01 10 33.3
comp=Z,33nm,1.0s
**L19K White Mountain 80.04 28** P **P** **01 10 32.3 +1.9**
baz=266,SNR=20
**N19K Bonanza Creek 80.12 29** IAmb IAmb 01 10 33.4
comp=Z,31nm,0.8s
**N19K Bonanza Creek 80.12 29** P **P** **01 10 32.9 +2.0**
baz=266
**O19K Port Alsworth 80.16 30** P **P** **01 10 32.5 +1.6**
O19K IAmb IAmb 01 10 33.3
comp=Z,45nm,1.1s
**O19K Port Alsworth 80.16 30** P **P** **01 10 32.6 +1.6**
baz=266
**M19K Big River Lodg 80.24 28** IAmb IAmb 01 10 34.5
comp=Z,27nm,1.1s
**M19K Big River Lodg 80.24 28** P **P** **01 10 33.5 +2.1**
baz=266
**K20K Telida 80.49 27** IAmb IAmb 01 10 35.3
comp=Z,19nm,0.9s
**K20K Telida 80.49 27** P **P** **01 10 34.8 +2.1**
baz=266
**J20K Nowinta River 80.51 26** P **P** **01 10 34.2 +1.5**
J20K IAmb IAmb 01 10 35.3
comp=Z,15nm,0.8s
**J20K Nowinta River 80.51 26** P **P** **01 10 34.8 +2.1**
baz=266
**L20K Farewell, AK 80.52 28** P **P** **01 10 34.7 +1.9**
baz=266
**VOI Vohitsoka 80.53 247** P **P**
VOI IAmb IAmb 01 10 34.5 **01 10 33.4 -0.4**
comp=Z,17nm,0.9s
**OHAK Old Harbor 80.54 33** P **P** **01 10 34.4 +1.5**
baz=268
**KDAK Kodiak Island 80.94 33** P **P** **01 10 36.4 +1.4**
baz=268
**H21K Melozitna Rive 81.18 25** IAmb IAmb 01 10 38.6
comp=Z,15nm,1.0s
**H21K Melozitna Rive 81.18 25** P **P** **01 10 38.0 +1.9**
baz=267
**CHUM Lake Minchumin 81.30 26** P **P** **01 10 38.7 +1.9**
baz=268,SNR=21
**PPLA Purkeypile 81.32 27** P **P**
PPLA IAmb IAmb 01 10 38.9 **01 10 38.0 +1.0**
comp=Z,24nm,0.8s
**PPLA Purkeypile 81.32 27** P **P** **01 10 38.4 +1.4**
baz=268,SNR=8.3
**KLMR Klimovskoe 81.36 330** *eP* **P** **01 10 35.7 -1.4**
KLMR AMP 01 10 37.6
comp=Z,10.0nm,0.6s
**CAST Castle Rocks 81.39 27** IAmb IAmb 01 10 39.6
comp=Z,30nm,0.8s
**CAST Castle Rocks 81.39 27** P **P** **01 10 38.7 +1.4**
baz=268,SNR=20
**I21K Tanana 81.50 25** IAmb IAmb 01 10 40.8
comp=Z,35nm,0.9s
**I21K Tanana 81.50 25** P **P** **01 10 39.8 +2.1**
baz=268
**BPAW Bear Paw Mtn. 81.89 26** P **P** **01 10 41.4 +1.5**
**BPAW Bear Paw Mtn. 81.89 26** P **P** **01 10 41.5 +1.7**
baz=269,SNR=14
**KTH Kantishna Hill 81.91 27** P **P** **01 10 41.4 +1.4**
KTH IAmb IAmb 01 10 42.7
comp=Z,24nm,1.0s
**BRSE Bradley Lake S 81.94 31** P **P** **01 10 41.0 +0.9**
baz=270
**MLY Manley 82.02 25** P **P** **01 10 42.1 +1.6**
baz=269
**CUT Chulitna 82.19 28** P **P** **01 10 42.5 +1.2**
CUT IAmb IAmb 01 10 44.5
comp=Z,22nm,0.7s
**TRF Thorofare Moun 82.19 27** P **P** **01 10 42.4 +0.8**
TRF IAmb IAmb 01 10 43.2
comp=Z,37nm,1.0s
**TRF Thorofare Moun 82.19 27** P **P** **01 10 42.6 +1.0**
baz=269,SNR=11
**M22K Willow 82.26 29** P **P** **01 10 42.4 +0.8**
baz=270
**COLD Coldfoot 82.28 23** P **P** **01 10 43.2 +1.5**
COLD IAmb IAmb 01 10 44.9
comp=Z,41nm,1.0s
**COLD Coldfoot 82.28 23** P **P** **01 10 43.8 +2.1**
baz=269
**RC01 Rabbit Creek A 82.44 29** IAmb IAmb 01 10 43.5
comp=Z,19nm,0.8s
**RC01 Rabbit Creek A 82.44 29** P **P** **01 10 43.0 +0.4**
baz=270
**H23K Yukon River 82.53 24** IAmb IAmb 01 10 46.0
comp=Z,33nm,0.8s
**H23K Yukon River 82.53 24** P **P** **01 10 44.9 +1.9**
baz=270
**TOLK Toolik Lake Re 82.54 22** P **P** **01 10 44.7 +1.7**
**TOLK Toolik Lake Re 82.54 22** P **P** **01 10 45.1 +2.1**
baz=269
**SEW Seward 82.59 30** P **P** **01 10 44.4 +1.0**
SEW IAmb IAmb 01 10 46.3
comp=Z,40nm,1.0s
**SEW Seward 82.59 30** P **P** **01 10 44.3 +1.0**
baz=271
**I23K Minto, Yukon-K 82.61 25** P **P** **01 10 44.9 +1.6**
I23K IAmb IAmb 01 10 45.5
comp=Z,24nm,0.8s
**I23K Minto, Yukon-K 82.61 25** P **P** **01 10 45.0 +1.7**
baz=270,SNR=30
**PMR Palmer 82.73 29** P **P** **01 10 45.2 +1.2**
PMR IAmb IAmb 01 10 45.4
comp=Z,14nm,1.0s
**PMR Palmer 82.73 29** P **P** **01 10 44.7 +0.7**
baz=271
**NEA2 Nenana 82.73 26** IAmb IAmb 01 10 47.0
comp=Z,41nm,1.2s
**NEA2 Nenana 82.73 26** P **P** **01 10 45.6 +1.6**
baz=270,SNR=12
**MCK McKinley 82.80 27** P **P** **01 10 45.4 +1.0**
baz=271,SNR=22
**GHO Glory Hole Cre 82.83 29** P **P** **01 10 45.1 +0.5**
**RND Reindeer 82.84 27** IAmb IAmb 01 10 46.0
comp=Z,29nm,0.7s
**OBN Obninsk 82.92 325** P **P** **01 10 45.2 +0.1**
comp=Z,2.1nm,0.5s,baz=351,slow=4.5,SNR=5.6
**KNK Knik Glacier 83.06 29** IAmb IAmb 01 10 47.7
comp=Z,27nm,0.9s
**KNK Knik Glacier 83.06 29** P **P** **01 10 47.0 +1.3**
baz=271

**MDM Murphy Dome 83.09 25** IAmb IAmb 01 10 49.1
comp=Z,26nm,1.2s
**SML Sawmill 83.11 29** P **P** **01 10 46.6 +0.6**
SML IAmb IAmb 01 10 47.9
comp=Z,32nm,0.9s
**SML Sawmill 83.11 29** P **P** **01 10 47.2 +1.2**
baz=271
**PWL Port Wells 83.13 30** P **P** **01 10 46.9 +0.9**
PWL IAmb IAmb 01 10 47.8
comp=Z,50nm,1.2s
**PWL Port Wells 83.13 30** P **P** **01 10 47.2 +1.1**
baz=272
**WRH Wood River Hil 83.16 26** IAmb IAmb 01 10 48.3
comp=Z,26nm,1.1s
**H24K Noodor Dome 83.22 24** P **P** **01 10 47.8 +1.3**
H24K IAmb IAmb 01 10 50.5
comp=Z,15nm,1.1s
**H24K Noodor Dome 83.22 24** P **P** **01 10 48.4 +1.9**
baz=271
**WAT6 Susitna Watana 83.36 28** P **P** **01 10 48.4 +1.0**
baz=272,SNR=6.2
**POKR Poker Plat Res 83.42 25** P **P** **01 10 48.8 +1.3**
**LVZ Lovozero 83.47 338** P **P** **01 10 47.9 +0.2**
**DHY Denali Highway 83.52 27** P **P** **01 10 49.1 +1.0**
baz=272
**SCM Sheep Creek Mo 83.58 29** P **P** **01 10 49.5 +1.1**
SCM IAmb IAmb 01 10 51.5
comp=Z,18nm,1.0s
**HDA Harding Lake 83.66 26** P **P** **01 10 48.4 -0.2**
baz=272,SNR=5.7
**ILAR Eielson Array 83.67 26** P **P** **01 10 48.1 -0.5**
comp=Z,2.1nm,0.5s,baz=240,slow=5.3,SNR=54
**GLI Glacier Island 83.73 29** P **P** **01 10 50.4 +1.3**
**GLI Glacier Island 83.73 29** P **P** **01 10 50.4 +1.3**
baz=272
**M24K Tolsona, Glenn 84.11 28** P **P** **01 10 52.2 +1.2**
M24K IAmb IAmb 01 11 06.9
comp=Z,21nm,1.0s
**FYU Fort Yukon 84.26 24** P **P** **01 10 53.6 +2.1**
**KLU Klutina 84.27 29** P **P** **01 10 53.0 +1.2**
KLU IAmb IAmb 01 11 00.1
comp=Z,12nm,1.1s
**J25K Salcha River, 84.33 26** P **P** **01 10 51.9 0.0**
baz=274,SNR=5.2
**PAX Paxson 84.39 27** P **P** **01 10 53.3 +0.9**
**PAX Paxson 84.39 27** P **P** **01 10 53.3 +0.9**
baz=274
**RIDG Independent Ri 84.62 27** P **P** **01 10 54.1 +0.7**
RIDG IAmb IAmb 01 10 55.8
comp=Z,12nm,0.6s
**RIDG Independent Ri 84.62 27** P **P** **01 10 53.9 +0.5**
baz=274,SNR=7.4
**SCRK Sand Creek 84.98 26** P **P** **01 10 56.0 +0.8**
baz=275
**J26L Joseph Creek 85.11 26** P **P** **01 10 56.3 +0.4**
baz=275
**BRTR Keskin Array B 85.85 309** P **P** **01 10 59.6 -0.4**
comp=Z,0.4nm,0.4s,baz=140,slow=3.6,SNR=7.8
**L27K Beaver Creek, 86.03 27** IAmb IAmb 01 11 02.3
comp=Z,7.6nm,0.8s
**L27K Beaver Creek, 86.03 27** P **P** **01 11 01.4 +1.2**
baz=277
**EGAK Eagle 86.11 25** IAmb IAmb 01 11 02.1
comp=Z,12nm,1.1s
**EGAK Eagle 86.11 25** P **P** **01 11 01.0 +0.5**
baz=278
**ARCES ARCESS Array B 86.62 340** P **P** **01 11 02.4 -0.4**
comp=Z,6.3nm,0.8s,baz=80,slow=5.6,SNR=13
**KMBO Kilima Mbogo 86.68 268** P **P** **01 11 05.2 +0.7**
comp=Z,3.3nm,0.8s,baz=70,slow=7.2,SNR=7.6
**VNDA Vanda 86.78 172** P **P** **01 11 03.7 +0.4**
comp=Z,8.5nm,0.9s,baz=320,slow=6.3,SNR=7.2
**VNDA Vanda 86.78 172** IAmb IAmb 01 11 04.9
comp=Z,13nm,1.1s
**SPITS Spitsbergen Ar 86.97 349** P **P** **01 11 04.3 0.0**
comp=Z,7.8nm,0.6s,baz=128,slow=12,SNR=19
**DAWY Dawson 86.97 26** P **P** **01 11 05.7 +1.0**
**DAWY Dawson 86.97 26** P **P** **01 11 05.6 +1.0**
baz=279
**FINES FINESS Array B 87.81 332** P **P** **01 11 07.6 -0.8**
comp=Z,4.3nm,0.7s,baz=73,slow=4.0,SNR=18
**HYT Haines Junctio 88.40 29** P **P** **01 11 12.8 +1.4**
baz=281
**INK Inuvik 88.45 21** P **P** **01 11 11.3 0.0**
comp=Z,6.1nm,1.0s,baz=296,slow=3.9,SNR=12
INK S **SKSac** **01 20 43.6 -0.5**
comp=Z,0.7nm,0.8s,baz=52,slow=13,SNR=5.2
**INK Inuvik 88.45 21** P **P** **01 11 11.7 +0.4**
baz=284,SNR=7.1
**WHY Whitehorse 89.70 29** P **P** **01 11 18.9 +1.5**
baz=283
**FARO Faro, Yukon 90.03 27** P **P** **01 11 20.2 +1.3**
baz=284
**MMPY Sheldon Lake, 90.87 27** P **P** **01 11 24.2 +1.5**
baz=286
**C36M Paulatuk 91.37 19** IAmb IAmb 01 11 26.6
comp=Z,4.2nm,0.7s
**C36M Paulatuk 91.37 19** P **P** **01 11 25.3 +0.5**
baz=293,SNR=5.7
**HFS Hagfors 94.00 332** P **P** **01 11 35.8 -1.2**
comp=Z,0.6nm,0.4s,baz=104,slow=6.3,SNR=9.2
**NB2 NORSAR Subarra 94.80 333** P **P** **01 11 39.3 -1.4**
comp=Z,0.9nm,0.6s,baz=66,slow=4.6
**NOA NORSAR Array B 94.80 333** P **P** **01 11 39.0 -1.6**
comp=Z,1.3nm,0.7s,baz=67,slow=4.6,SNR=5.5
**YKA Yellowknife Ar 97.96 24** P **P** **01 11 55.6 +0.8**
comp=Z,1.2nm,0.8s,baz=297,slow=4.7,SNR=15
YKA PP **PP** **01 16 04.0 +0.9**
comp=Z,1.0nm,0.9s,baz=300,slow=7.4,SNR=5.7
YKA PKKPbc **PKKPbc** **01 28 24.6 -3.7**
comp=Z,0.5nm,0.7s,baz=123,slow=2.6,SNR=5.8
**NVAR Mina Array Bea 107.04 47** PKKPbc PKKPbc 01 28 01.3 -0.3
comp=Z,0.4nm,0.7s,baz=118,slow=4.4,SNR=4.1
NVAR PKKPab **PKKPab** **01 28 16.9 -2.2**
comp=Z,0.5nm,0.7s,baz=148,slow=4.5,SNR=4.5
**PDAR Pinedale Array 110.97 39** PKiKP **PKiKP** **01 16 48.5 -0.5**
comp=Z,0.2nm,0.6s,baz=209,slow=1.7,SNR=2.6
PDAR PKKPbc **PKKPbc** **01 27 47.0 -2.5**
comp=Z,0.2nm,0.6s,baz=119,slow=5.4,SNR=2.2
PDAR PKKPab **PKKPab** **01 27 58.9 -2.8**
comp=Z,1.0nm,0.9s,baz=122,slow=5.5,SNR=7.4
**O20A White River Ci 113.19 41** P **PKiKP** **01 16 54.8 +1.5**
baz=302
**SCHQ Schefferville 118.01 7** PKP **PKiKP** **01 17 02.4 +0.5**
comp=Z,3.4nm,0.9s,baz=315,slow=4.3,SNR=7.3
**TORD Torodi Ar. Bea 119.18 289** PKP **PKPdf** **01 17 04.5 -0.7**
comp=Z,0.5nm,0.8s,baz=49,slow=2.2,SNR=4.2
TORD SKP **SKPdf** **01 19 45.2 -0.1**
comp=Z,0.7nm,0.7s,baz=35,slow=1.7,SNR=6.1
**KSU1 Kansas State U 121.02 36** P **PKiKP** **01 17 08.9 +0.6**
baz=312
**TXAR Lajitas Array 121.98 49** PKP **PKPdf** **01 17 10.0 -0.4**
comp=Z,0.1nm,0.3s,baz=270,slow=0.3,SNR=5.4
TXAR PP **PP** **01 18 53.0 -1.3**
comp=Z,0.3nm,0.9s,baz=285,slow=7.3,SNR=2.3
TXAR SKP **SKPdf** **01 19 51.7 +1.3**
comp=Z,0.5nm,0.7s,baz=282,slow=1.7,SNR=5.1
**S39A Bolivar 123.88 35** PKPdf **PKiKP** **01 17 14.3 +0.3**
**JCT Junction City 124.21 46** P **PKiKP** **01 17 16.0 +1.1**
baz=304
**U40A Yellville 125.07 36** P **PKiKP** **01 17 16.8 +0.4**
baz=314
**DBIC Dimbokro 127.05 284** SKPbc SKPbc 01 19 43.3
comp=Z,1.8nm,0.5s,baz=81,slow=3.6,SNR=5.4
**WVT Waverly 128.05 33** P **PKiKP** **01 17 22.8 +0.5**
baz=319
**USHA Ushuaia 131.05 171** SKPbc **SKPab** **01 19 58.1 +0.3**
comp=Z,7.9nm,0.7s,baz=203,slow=7.6,SNR=5.7
**PLCA Paso Flores 143.81 161** PKP **PKPdf** **01 17 51.4 +0.7**
comp=Z,8.0nm,0.8s,baz=229,slow=3.3,SNR=12
PLCA SKPbc **SKiKP** **01 20 35.4 +0.2**
comp=Z,4.5nm,0.8s,baz=228,slow=1.8,SNR=9.0
**ACON Acoyapa 145.73 57** PKPab **PKPab** **01 17 57.7 -0.4**
**ORTG Ortega, Santa 146.29 60** **PKiKP** **01 17 59.9 -0.3**
**LPAZ La Paz 164.97 130** PKP **PKPdf** **01 18 21.3 +0.9**
comp=Z,0.6nm,0.4s,baz=281,slow=5.2,SNR=3.1

*TEH* ***13*** *01:07:04.7, 37.37N×54.49E, h8km, ML3.6*
*AZER* ***13*** *01:07:10.4±0.3, 37.40N×53.85E, h7km, Error ellipse: s-maj=10.0km s-min=5.7km az=31.0*
**ISC 13 01:07:05.6±0.8, 37.37N±0.04×54.50E±0.03, h10km, n95, σ1.9 94/127, Iran-Turkmenistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IMND** | **Minoodasht** | **0.73** | **99** | *e*Pg | | **Pb** | **01 07 19.6** | **-0.9** |

IMND eSg Sg 01 07 29.2 -0.2
**IGLO Ghalloghah 1.02 212** ePg Pb 01 07 24.6 -0.9
IGLO eSg Sn 01 07 39.1 -1.5
IGLO e 01 07 44.3
comp=Z,32µm,0.2s
**MRVT Maraveh tapeh 1.30 77** ePg Pg 01 07 31.2 +0.6
**ISHM Shahmirzad 1.84 212** ePn Pg 01 07 39.3 -1.6
ISHM e 01 08 08.5
comp=Z,10µm,0.3s
**SHRO Shahrood 1.84 138** ePn Pb 01 07 38.1 -1.3
**IANJ Anjilo 1.96 194** ePn Pb 01 07 41.2 -0.3
IANJ e 01 08 09.9
comp=Z,3µm,0.3s
**IPRN Peran 2.07 238** ePn Pb 01 07 42.0 -1.3
**BJRD Bojnurd 2.34 81** ePn Pb 01 07 45.8 -2.2
**ILAS Lasjerd 2.34 212** ePn Pb 01 07 46.5 -1.6
ILAS e 01 08 27.5
comp=Z,3µm,0.6s
**DAMV Damavand 2.67 230** ePn Pb 01 07 52.4 -1.4
**SBZV Sabzevar 2.68 110** ePn Pn 01 07 50.3 +1.2
**ISFR Sfrayin 2.81 95** ePn Pn 01 07 52.3 +1.3
ISFR e 01 08 43.2
comp=Z,2µm,0.4s
**CHTH Charan 3.08 243** ePn Pb 01 07 58.3 -2.4
**QALM Alamut, Qazvin 3.23 254** ePn Pn 01 07 57.2 +0.6
**THKV Tehran--Karaj 3.25 245** ePn Pn 01 07 58.6 +1.7
**IVRN Varamin 3.26 224** ePn Pn 01 07 58.5 +1.6
IVRN e Sg 01 08 51.9 +1.5
comp=Z,1µm,0.3s
**IAKL Akhelmad 3.50 101** ePn Pn 01 08 01.7 +1.4
IAKL e Sg 01 08 58.5 +0.5
comp=Z,689nm,0.3s
**IMHD Mahdasht 3.51 243** e Sg 01 09 04.3 +5.8
comp=Z,869nm,0.2s
**ISFB Sefidab 3.52 212** ePn Pn 01 08 02.2 +1.6
**LHJ2 Lahijan - Gila 3.54 268** ePn Pn 01 08 01.0 +0.3
**IGZV Ghazvin 3.57 255** e Sg 01 09 02.3 +2.1
comp=Z,1µm,0.4s
**IPAY Payeh 3.72 103** ePn Pn 01 08 05.0 +1.6
IPAY e 01 09 12.2
comp=Z,548nm,0.6s
**IQOM Qom 3.75 229** e 01 08 35.2
comp=Z,550nm,0.4s
IQOM ePn Pn 01 08 06.4 +2.6
**TNSJ Nastanj 3.81 153** ePn Pn 01 08 06.2 +1.7
TNSJ e 01 09 04.0
comp=Z,2µm,1.0s
**JIR1 Jirandeh 3.81 261** ePn Pn 01 08 05.4 +0.8
**GHVR GHOM 3.88 223** ePn Pb 01 08 10.3 -3.9
**KRSH Karshahi 3.90 210** ePn Pn 01 08 07.1 +1.3
KRSH e 01 09 17.2
comp=Z,974nm,0.6s
**IKRD Kardeh 4.06 97** ePn Pn 01 08 09.4 +1.4
**IMOG Moghan 4.09 106** ePn Pn 01 08 09.8 +1.3
**ANAR Anarak 4.22 189** ePn Pn 01 08 11.5 +1.4
**TABS Tabas 4.29 149** ePn Pn 01 08 12.3 +1.3
**QABG Abgarm-Qazvin 4.29 249** ePn Pn 01 08 12.7 +1.5
**TKDS Koohdasht(Taba 4.32 149** ePn Pn 01 08 12.9 +1.4
TKDS e 01 08 27.0
comp=Z,586nm,0.8s
**IMYA Miami 4.61 101** ePn Pn 01 08 17.2 +1.6
**ASTR Astara 4.66 286** ePn Pn 01 08 17.1 +1.1
**ASTR Astara 4.66 286** P Pn 01 08 17.2 +1.1
SNR=5.8
ASTR S Sn 01 09 07.2 -3.0
**TPRV Parvadeh(Tabas 4.69 157** ePn Pn 01 08 18.1 +1.5
TPRV e 01 09 39.0
comp=Z,505nm,0.7s
**IKLH Kolahrood 4.69 211** ePn Pn 01 08 17.8 +1.0
**ZNJK Zanjan 4.70 263** ePn Pn 01 08 19.1 +2.2
**LKRN Lenkeran, Azer 4.71 288** ePn Pn 01 08 17.5 +0.8
**LKRN Lenkeran, Azer 4.71 288** P Pn 01 08 17.5 +0.8
LKRN S Sn 01 09 05.5 -1.8
**NASN Na'in 4.77 197** ePn Pn 01 08 19.3 +1.5
**IZEF Zefreh 4.80 202** ePn Pn 01 08 20.5 +2.2
**JRKH Jarkhoshk 4.93 105** ePn Pn 01 08 20.7 +0.8
**YZKH Yazd 4.97 179** ePn Pn 01 08 21.4 +1.0
**ALIB Äli-Bayra 5.01 303** ePn Pn 01 08 23.0 +2.2
**ALIB Äli-Bayra 5.01 303** P Pn 01 08 23.1 +2.2
ALIB S Sn 01 09 17.9 -1.0
**LRK Lerik 5.03 287** ePn Pn 01 08 22.4 +1.2
**LRK Lerik 5.03 287** P Pn 01 08 22.4 +1.2
SNR=21
LRK S Sn 01 09 16.6 -2.9
**ICHK Chekchek 5.12 181** ePn Pn 01 08 23.6 +1.1
**GLBA Clilabad 5.15 293** ePn Pn 01 08 24.4 +1.6
**GLBA Clilabad 5.15 293** P Pn 01 08 24.4 +1.6
SNR=34
GLBA S Sn 01 09 19.8 -2.5
**TBJM Torbat-e-JAM 5.16 112** ePn Pn 01 08 24.0 +0.9
**YRD Yardimli 5.17 289** ePn Pn 01 08 24.2 +1.0
**YRD Yardimli 5.17 289** P Pn 01 08 24.3 +1.0
SNR=12
YRD S Sn 01 09 20.6 -2.4
**KHMZ Khomeyn 5.18 227** ePn Pn 01 08 25.1 +1.7
**GBS Qobustan 5.36 308** ePn Pn 01 08 28.1 +2.4
**GBS Qobustan 5.36 308** P Pn 01 08 28.2 +2.4
GBS S Sn 01 09 30.9 +3.4
**GRMI Germi 5.40 287** ePn Pn 01 08 27.9 +1.5
**ISRB Sarab 5.44 277** ePn Pn 01 08 29.0 +2.0
**ISAD Sadrabad 5.49 187** ePn Pn 01 08 29.0 +1.3
ISAD e 01 08 31.3
comp=Z,211nm,0.2s
**ATGJ Altiaghaj 5.55 311** ePn Pn 01 08 31.7 +3.3
**ATGJ Altiaghaj 5.55 311** P Pn 01 08 31.7 +3.3
ATGJ S Sn 01 09 31.7 -0.6
**ITEG Tejag 5.66 141** ePn Pn 01 08 31.2 +1.2
ITEG e 01 08 41.0
comp=Z,371nm,0.2s
**SIZA Siyzn 5.71 312** ePn Pn 01 08 32.7 +2.2
**SIZA Siyzn 5.71 312** P Pn 01 08 32.8 +2.2
SIZA S Sn 01 09 35.2 -0.9
**PQL Pirkuli 5.72 308** P Pn 01 08 34.2 +3.4
PQL S Sn 01 09 34.8 -1.8
**KDMR Kurdemir 5.77 303** P Pn 01 08 34.3 +3.1
KDMR S Sn 01 09 38.5 +1.1
**IRAM Ramesheh 5.82 198** ePn Pn 01 08 33.7 +1.5
**IBAF Bafgh 5.83 171** ePn Pn 01 08 33.7 +1.3
**BLQ Beylaqan 5.92 295** P Pn 01 08 35.0 +1.6
SNR=14
BLQ S Sn 01 09 39.5 -1.8
**IMEH Mehriz 5.97 179** ePn Pn 01 08 35.3 +1.0
**IHRS Heris 5.97 281** ePn Pn 01 08 36.2 +1.9
**IML Ismayilli 5.98 307** P Pn 01 08 37.0 +2.7
SNR=12
IML S Sn 01 09 41.0 -1.9
**QRD Qoradiz 6.01 293** P Pn 01 08 36.3 +1.7
SNR=8.5
QRD S Sn 01 09 40.3 -3.1
**SHRT Shahrakht 6.01 126** ePn Pn 01 08 35.3 +0.6
**IBST Bostanabad 6.05 275** ePn Pn 01 08 37.1 +1.7
**ZRD Zardab 6.06 301** P Pn 01 08 35.8 +0.5
ZRD S Sn 01 09 43.5 -1.1
**QUBA Quba, Azerbaij 6.12 312** P Pn 01 08 38.5 +2.3
QUBA S Sn 01 09 44.9 -1.4
**IKOO Kooshah 6.17 142** ePn Pn 01 08 38.2 +1.1
IKOO e 01 08 46.7
comp=Z,138nm,0.2s
**XNQ Khinaliq 6.22 310** P Pn 01 08 40.0 +2.3
SNR=36
XNQ S Sn 01 09 47.1 -1.9
**QBL Gabala 6.29 307** P Pn 01 08 40.6 +2.1
QBL S Sn 01 09 48.9 -1.4
**QSAR Qusar 6.36 313** P Pn 01 08 43.0 +3.6
SNR=9.1
QSAR S Sn 01 09 50.3 -1.8
**AGDM Agdam 6.39 298** P Pn 01 08 41.7 +1.9
SNR=3.2
AGDM S Sn 01 09 50.0 -2.9
**BRDA Brd 6.40 299** P Pn 01 08 42.8 +2.8
BRDA S Sn 01 09 51.9 -1.2
**BSRN Basiran 6.60 143** ePn Pn 01 08 43.9 +1.0
**SEKA Sheki 6.83 306** P Pn 01 08 47.8 +1.8
SEKA S Sn 01 10 01.0 -2.9
**ORD Ordubad 6.88 286** P Pn 01 08 48.0 +1.4
ORD S Sn 01 10 03.9 -1.1
**IMRD Marand 7.07 284** ePn Pn 01 08 51.1 +1.8
**GANJ Ganja 7.16 300** P Pn 01 08 51.5 +1.2
GANJ S Sn 01 10 07.9 -3.8
**SBZ Shahbuz 7.31 289** P Pn 01 08 54.7 +2.1
SNR=3.4
SBZ S Sn 01 10 13.7 -2.0

**ZKTA Zakatala 7.43 307** P Pn 01 08 55.9 +1.8
ZKTA S Sn 01 10 16.6 -1.8
**NHDN Nehbandan 7.52 141** ePn Pn 01 08 56.9 +1.4
**GDB GEDABAY 7.58 299** P Pn 01 08 57.1 +0.8
SNR=3.9
GDB S Sn 01 10 18.9 -3.5
**QZX Qazax, Azerbai 7.98 300** P Pn 01 09 03.5 +1.8
QZX S Sn 01 10 30.0 -2.0

*NAO **13** 01:14:48.9±2.3, 71.96N×0.10W, ML3.2*
*IEPN **13** 01:14:49.0, 71.72N×1.50W, h10km*
*IDC **13** 01:14:51.0±0.7, 72.08N×0.38E, h0km, mb3.8/14, mb1 3.9/20, mb1mx3.6/69, mbtmp3.8/20, ML3.3/6, MS3.5/35, Ms1 3.5/35, ms1mx3.2/102, Error ellipse: s-maj=19.8km s-min=12.3km az=53.0*
*NEIC **13** 01:14:52.5±1.6, 72.17N±0.10×0.5E±0.3, h10km±2km, mb4.2/10, Error ellipse: s-maj=18.1km s-min=12.8km az=216.0*
*BER **13** 01:14:56.2±2.4, 72.07N×0.75E, h10km, ML2.3, ML3.2(NAO), Confirmed Earthquake*

**ISC 13 01:14:52.1±0.5, 72.05N±0.06×0.69E±0.06, h10km, n111, σ28.15/94, mb3.8/17, MS3.5/29, Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JMIC** | **Jan Mayen** | **3.12** | **254** | LR | LR | 01 16 07.3 | |
| | comp=Z,114nm,19.3s,baz=54,slow=25 | | | | | | |
| **LOF** | **Lofoten** | **5.89** | **126** | *e*P | **Pn** | **01 16 20.4** | **+1.1** |
| **HSPB** | **Hornsund (broa** | **6.34** | **32** | Pn | **Pn** | **01 16 24.4** | **-1.0** |
| **HSPB** | **Hornsund (broa** | **6.34** | **32** | *e*P | **Pn** | **01 16 26.6** | **+1.3** |
| **DBG** | **Daneborg** | **6.45** | **300** | Pn | Pn | 01 16 21.2 | -5.8 |
| **DBG** | **Daneborg** | **6.45** | **300** | *e*P | Pn | 01 16 21.4 | -5.6 |
| **TRO** | **Tromso** | **6.46** | **103** | *e*P | **Pn** | **01 16 27.6** | **+0.5** |
| TRO | | | | *e*S | **Sn** | **01 17 36.5** | **-4.3** |
| TRO | | | | IAML | | 01 17 41.9 | |
| | comp=Z,5.3nm,0.5s | | | | | | |
| **STEI** | **Steigen** | **6.47** | **123** | *e*P | **Pn** | **01 16 28.5** | **+1.3** |
| STEI | | | | *e*S | **Sn** | **01 17 37.6** | **-3.4** |
| STEI | | | | IAML | | 01 17 45.2 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **FAUS** | **Fauske** | **6.89** | **126** | *e*P | **Pn** | **01 16 33.6** | **+0.6** |
| **JETT** | **Jettan, Norway** | **6.95** | **102** | *e*P | **Pn** | **01 16 35.5** | **+1.6** |
| JETT | | | | *e*S | **Sn** | **01 17 49.3** | **-3.6** |
| **BRBB** | **Barentsburg B** | **6.98** | **24** | Pn | **Pn** | **01 16 35.8** | **+1.7** |
| **BRBB** | **Barentsburg B** | **6.98** | **24** | *e*P | **Pn** | **01 16 36.2** | **+2.1** |
| **DAG** | **Danmarks Havn** | **7.00** | **321** | *e* | Pn | 01 16 22.8 | -12 |
| | baz=119,slow=12 | | | | | | |
| DAG | | | | *i* P | Pn | 01 16 29.6 | -4.9 |
| DAG | | | | *i* S | Sn | 01 17 36.2 | -18 |
| DAG | | | | IAML | | 01 17 39.9 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| **DAG** | **Danmarks Havn** | **7.00** | **321** | *i* P | Sn | 01 17 37.4 | -17 |
| **DAG** | **Danmarks Havn** | **7.00** | **321** | *e*P | Pn | 01 16 29.0 | -5.5 |
| DAG | | | | *e*S | Sn | 01 17 37.6 | -16 |
| **KONS** | **Konsvik** | **7.09** | **136** | *e*P | **Pn** | **01 16 36.3** | **+0.5** |
| KONS | | | | *e*S | **Sn** | **01 17 50.4** | **-5.9** |
| **SPA0** | **Spitsbergen Ar** | **7.32** | **26** | Pn | **Pn** | **01 16 40.2** | **+1.3** |
| | baz=212,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **7.32** | **26** | Pn | **Pn** | **01 16 40.2** | **+1.3** |
| | baz=212,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **7.32** | **26** | *e*P | **Pn** | **01 16 39.9** | **+1.0** |
| SPA0 | | | | S | **Sn** | **01 18 01.9** | **0.0** |
| **SPB2** | **Spitsbergen Ar** | **7.32** | **26** | Pn | **Pn** | **01 16 38.2** | **-0.7** |
| **SPITS** | **Spitsbergen Ar** | **7.32** | **26** | Pn | **Pn** | **01 16 39.5** | **+0.6** |
| | baz=209,slow=15,SNR=28 | | | | | | |
| **KIF** | **Kilpisjarvi** | **7.36** | **105** | Pn | **Pn** | **01 16 41.0** | **+1.6** |
| KIF | | | | Sn | **Sn** | **01 17 59.1** | **-3.8** |
| **KIF** | **Kilpisjarvi** | **7.36** | **105** | *e*P | **Pn** | **01 16 40.4** | **+1.0** |
| KIF | | | | *e*S | **Sn** | **01 17 58.0** | **-4.9** |
| **SCO** | **Scoresbysund** | **7.43** | **269** | *i* S | Pn | **01 16 37.0** | **-3.4** |
| **KBS** | **Kingsbay** | **7.44** | **17** | Pn | **Pn** | **01 16 40.8** | **+0.3** |
| **KBS** | **Kingsbay** | **7.44** | **17** | *e*P | **Pn** | **01 16 41.1** | **+0.6** |
| **HAMF** | **Hammerfest** | **7.49** | **90** | Pn | **Pn** | **01 16 40.5** | **-0.6** |
| **HAMF** | **Hammerfest** | **7.49** | **90** | *e*P | **Pn** | **01 16 40.6** | **-0.6** |
| **MOR8** | **Moi Rana** | **7.66** | **134** | *e*P | **Pn** | **01 16 42.8** | **-0.8** |
| **KTK1** | **Kautokeino** | **8.09** | **101** | *e*P | **Pn** | **01 16 51.2** | **+1.8** |
| **ARA0** | **ARCESS Array S** | **8.52** | **95** | Pn | **Pn** | **01 16 56.0** | **+0.6** |
| | baz=303,slow=12 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **01 18 26.8** | **-4.6** |
| | baz=293,slow=18 | | | | | | |
| **ARA0** | **ARCESS Array S** | **8.52** | **95** | Pn | **Pn** | **01 16 56.0** | **+0.6** |
| | baz=303,slow=12 | | | | | | |
| ARA0 | | | | *e*P | **Pn** | **01 16 56.1** | **+0.7** |
| ARA0 | | | | Sn | **Sn** | **01 18 26.8** | **-4.6** |
| | baz=293,slow=18 | | | | | | |
| **ARCES** | **ARCESS Array B** | **8.52** | **95** | Pn | **Pn** | **01 16 55.9** | **+0.5** |
| | baz=301,slow=9.2,SNR=24 | | | | | | |
| ARCES | | | | Sn | **Sn** | **01 18 26.5** | **-4.9** |
| | baz=15,slow=1.4,SNR=2.3 | | | | | | |
| ARCES | | | | LR | LR | 01 20 12.4 | |
| | comp=Z,99nm,18.2s,baz=314,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **8.52** | **95** | Pn | **Pn** | **01 16 55.0** | **-0.4** |
| **HEF** | **Hetta** | **8.56** | **104** | *e*P | **Pn** | **01 16 57.7** | **+1.8** |
| **NSS** | **Namsos** | **8.61** | **146** | *e*P | **Pn** | **01 16 58.0** | **+1.4** |
| NSS | | | | *e*S | **Sn** | **01 18 27.3** | **-6.4** |
| NSS | | | | IAML | | 01 18 34.8 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **KEV** | **Kevo** | **8.88** | **92** | *e*P | **Pn** | **01 17 00.6** | **+0.3** |
| **NC204** | **NORSAR Array S** | **11.51** | **155** | Pn | **Pn** | **01 17 38.8** | **+2.5** |
| **NC303** | **NORSAR Array S** | **11.64** | **154** | Pn | **Pn** | **01 17 38.9** | **+0.9** |
| **SUMG** | **Summit** | **11.76** | **291** | *i* P | **Pn** | **01 17 38.0** | **-2.0** |
| **SUMG** | **Summit** | **11.76** | **291** | Pn | **Pn** | **01 17 38.1** | **-2.0** |
| **NOA** | **NORSAR Array B** | **11.80** | **154** | Pn | **Pn** | **01 17 42.0** | **+1.8** |
| | comp=Z,0.0nm,0.3s,baz=341,slow=14,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 01 22 12.6 | |
| | comp=Z,169nm,19.0s,baz=340,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **11.88** | **96** | Pn | **Pn** | **01 17 40.4** | **-0.9** |
| **APA0** | **Apatity Array** | **11.88** | **96** | Pn | **Pn** | **01 17 40.4** | **-0.9** |
| **HFS** | **Hagfors** | **13.03** | **150** | Pn | **Pn** | **01 17 56.8** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=8.9,slow=10,SNR=11 | | | | | | |
| HFS | | | | LR | LR | 01 22 50.7 | |
| | comp=Z,134nm,18.9s,baz=358,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **13.03** | **150** | Pn | **Pn** | **01 17 57.7** | **+0.8** |
| | baz=348,slow=11 | | | | | | |
| **HFS** | **Hagfors** | **13.03** | **150** | Pn | **Pn** | **01 17 57.7** | **+0.8** |
| | baz=348,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **14.45** | **124** | P | **Pn** | **01 18 17.3** | **+1.0** |
| | baz=328,slow=18 | | | | | | |
| **FIA0** | **FINESS Array S** | **14.45** | **124** | P | **Pn** | **01 18 17.3** | **+1.0** |
| | baz=328,slow=18 | | | | | | |
| **FIA1** | **FINESS Array S** | **14.45** | **124** | Pn | **Pn** | **01 18 15.8** | **-0.5** |
| **FINES** | **FINESS Array B** | **14.45** | **124** | Pn | **Pn** | **01 18 16.3** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=0.4,slow=7.2,SNR=8.9 | | | | | | |
| FINES | | | | LR | LR | 01 23 24.5 | |
| | comp=Z,285nm,18.5s,baz=19,slow=35 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.86** | **188** | Pn | **Pn** | **01 18 49.0** | **+1.1** |
| | baz=4.7,slow=11,SNR=11 | | | | | | |
| **LSH** | **Leshukonskoye** | **17.59** | **91** | *e*P | **Pn** | **01 18 56.4** | **-0.5** |
| | comp=Z,41nm,1.8s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **18.12** | **280** | LR | LR | 01 25 02.6 | |
| | comp=Z,152nm,19.3s,baz=12,slow=34 | | | | | | |
| **KLMR** | **Klimovskoe** | **18.69** | **107** | *e*P | **P** | **01 19 06.9** | **-3.2** |
| | comp=Z,34nm,1.6s | | | | | | |
| **KLMR** | **Klimovskoe** | **18.69** | **107** | *e* | **P** | **01 19 08.0** | **-2.1** |
| KLMR | | | | AMP | | 01 19 11.8 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **PRGR** | **Permogore** | **19.93** | **98** | P | **Pn** | **01 19 27.5** | **+2.3** |
| **EUNU** | **Eureka** | **20.12** | **330** | P | **P** | **01 19 24.7** | **-1.0** |
| EUNU | | | | IAmb | IAmb | 01 19 27.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **CLL** | **Collm** | **21.53** | **159** | *e*P | **P** | **01 19 44.0** | **+3.0** |
| **NKC** | **Novy Kostel** | **22.53** | **160** | *e*P | **P** | **01 19 55.6** | **+3.9** |
| **CHVC** | **Chvalec** | **22.62** | **154** | *e*P | **P** | **01 19 54.5** | **+1.8** |
| **OSTC** | **Ostas** | **22.67** | **154** | *e*P | **P** | **01 19 56.2** | **+3.0** |
| **OBN** | **Obninsk** | **22.71** | **119** | P | **P** | **01 19 53.7** | **+0.2** |
| | comp=Z,1.2nm,0.5s,baz=322,slow=19,SNR=3.1 | | | | | | |
| OBN | | | | LR | LR | 01 28 23.2 | |
| | comp=Z,69nm,19.3s,baz=356,slow=36 | | | | | | |
| **OBN** | **Obninsk** | **22.71** | **119** | P | **P** | **01 19 53.5** | **0.0** |
| OBN | | | | IAmb | IAmb | 01 20 18.6 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **22.89** | **154** | *e*P | **P** | **01 19 57.3** | **+1.8** |
| **PRU** | **Pruhonice** | **23.01** | **157** | *e*P | **P** | **01 19 59.5** | **+2.8** |
| **KRLC** | **Kraliky** | **23.22** | **153** | *e*P | P | 01 20 07.1 | +8.1 |
| **KIRV** | **Kirov** | **23.51** | **99** | LR | LR | 01 28 30.5 | |
| | comp=Z,61nm,21.9s,baz=310,slow=35 | | | | | | |
| **OJC** | **Ojcow** | **23.54** | **148** | P | **P** | **01 20 03.6** | **+1.5** |
| OJC | | | | IAmb | IAmb | 01 20 10.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **23.74** | **159** | *e*P | **P** | **01 20 06.2** | **+2.1** |
| **VRAC** | **Vranov** | **23.94** | **154** | P | **P** | **01 20 07.8** | **+1.8** |
| | comp=Z,1.1nm,0.3s,baz=342,slow=8.6,SNR=4.2 | | | | | | |
| VRAC | | | | LR | LR | 01 29 38.8 | |
| | comp=Z,87nm,19.2s,baz=348,slow=37 | | | | | | |
| **GERES** | **GERESS Array B** | **24.04** | **159** | P | **P** | **01 20 09.3** | **+2.3** |
| | comp=Z,3.3nm,0.7s,baz=357,slow=9.4,SNR=27 | | | | | | |
| GERES | | | | LR | LR | 01 29 59.3 | |
| | comp=Z,93nm,18.6s,baz=328,slow=38 | | | | | | |
| **CKRC** | **Cesky Krumlov** | **24.13** | **158** | *e*P | **P** | **01 20 10.5** | **+2.7** |
| **RES** | **Resolute Bay** | **24.70** | **321** | LR | LR | 01 29 35.1 | |
| | comp=Z,166nm,21.3s,baz=74,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **24.91** | **134** | P | **P** | **01 20 16.7** | **+1.9** |
| | comp=Z,1.2nm,0.6s,baz=341,slow=10,SNR=5.0 | | | | | | |
| AKASG | | | | LR | LR | 01 29 42.5 | |
| | comp=Z,201nm,18.9s,baz=346,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **24.91** | **134** | IAmb | IAmb | 01 20 21.4 | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **AKBB** | **Malin Array Si** | **24.91** | **134** | P | **P** | **01 20 16.4** | **+1.6** |
| AKBB | | | | IAmb | IAmb | 01 20 19.0 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **25.71** | **165** | LR | LR | 01 30 32.5 | |
| | comp=Z,186nm,18.0s,baz=350,slow=36 | | | | | | |
| **FRB** | **Frobisher Bay** | **25.79** | **287** | LR | LR | 01 30 11.8 | |
| | comp=Z,73nm,20.3s,baz=188,slow=36 | | | | | | |
| **NRIK** | **Noril'sk** | **26.51** | **53** | P | **P** | **01 20 30.4** | **+1.2** |
| | comp=Z,0.7nm,0.3s,baz=347,slow=10,SNR=3.9 | | | | | | |
| **ARU** | **Arti** | **28.10** | **93** | LR | LR | 01 31 51.7 | |
| | comp=Z,62nm,20.9s,baz=308,slow=36 | | | | | | |
| **BELG** | **Belogornoye** | **28.23** | **109** | LR | LR | 01 31 40.3 | |
| | comp=Z,169nm,18.5s,baz=279,slow=36 | | | | | | |
| **MLR** | **Muntele Rosu** | **29.19** | **142** | LR | LR | 01 32 56.6 | |
| | comp=Z,185nm,18.6s,baz=310,slow=37 | | | | | | |
| **AKTO** | **Aktyubinsk** | **33.08** | **99** | LR | LR | 01 34 57.7 | |
| | comp=Z,74nm,18.8s,baz=338,slow=36 | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **34.52** | **121** | LR | LR | 01 36 53.0 | |
| | comp=Z,65nm,21.5s,baz=106,slow=38 | | | | | | |
| **KBZ** | **Khabaz** | **34.78** | **121** | LR | LR | 01 35 54.6 | |
| | comp=Z,116nm,18.1s,baz=6.5,slow=36 | | | | | | |
| **BR131** | **Keskin Array S** | **36.31** | **135** | P | **P** | **01 21 58.9** | **+3.2** |
| BR131 | | | | IAmb | IAmb | 01 22 04.2 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **36.31** | **135** | P | **P** | **01 21 57.7** | **+2.0** |
| | comp=Z,0.5nm,0.8s,baz=78,slow=3.4,SNR=3.7 | | | | | | |
| BRTR | | | | LR | LR | 01 38 33.2 | |
| | comp=Z,29nm,19.1s,baz=337,slow=39 | | | | | | |
| **INK** | **Inuvik** | **36.66** | **333** | P | **P** | **01 21 56.4** | **-1.7** |
| | comp=Z,1.7nm,1.0s,baz=25,slow=6.6,SNR=3.1 | | | | | | |
| INK | | | | LR | LR | 01 39 59.8 | |
| | comp=Z,47nm,18.7s,baz=70,slow=41 | | | | | | |
| **INK** | **Inuvik** | **36.66** | **333** | P | **P** | **01 21 57.8** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **38.22** | **72** | LR | LR | 01 40 26.9 | |
| | comp=Z,26nm,21.9s,baz=340,slow=40 | | | | | | |
| **GNI** | **Garni** | **38.61** | **121** | LR | LR | 01 38 15.4 | |
| | comp=Z,65nm,18.6s,baz=328,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.69** | **318** | P | **P** | **01 22 14.8** | **-0.6** |
| | comp=Z,1.1nm,1.0s,baz=24,slow=8.9,SNR=7.4 | | | | | | |
| YKA | | | | PcP | **PcP** | **01 24 26.5** | **-0.4** |
| | comp=Z,0.2nm,0.8s,baz=38,slow=2.4,SNR=4.4 | | | | | | |
| YKA | | | | LR | LR | 01 36 33.5 | |
| | comp=Z,71nm,19.3s,baz=286,slow=34 | | | | | | |
| **IDI** | **Anoyia** | **38.91** | **148** | LR | LR | 01 39 21.2 | |
| | comp=Z,23nm,19.5s,baz=268,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **39.19** | **80** | P | **P** | **01 22 20.8** | **+1.2** |
| **KURK** | **Kurchatov** | **39.19** | **80** | IAmb | IAmb | 01 22 33.0 | |
| | comp=Z,2.3nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **39.24** | **80** | P | **P** | **01 22 20.8** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=335,slow=7.7,SNR=1.9 | | | | | | |
| **ILAR** | **Eielson Array** | **41.68** | **340** | P | **P** | **01 22 41.1** | **+0.9** |
| | comp=Z,1.0nm,0.9s,baz=5.0,slow=6.8,SNR=8.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **43.14** | **136** | LR | LR | 01 41 39.9 | |
| | comp=Z,30nm,21.9s,baz=68,slow=37 | | | | | | |
| **MK31** | **Makanchi Array** | **43.79** | **79** | P | **P** | **01 22 58.4** | **+0.9** |
| **MKAR** | **Makanchi Array** | **43.79** | **79** | P | **P** | **01 22 58.1** | **+0.6** |
| | comp=Z,0.5nm,1.0s,baz=27,slow=8.3,SNR=3.6 | | | | | | |
| MKAR | | | | PcP | **PcP** | **01 24 43.5** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=345,slow=4.1,SNR=3.6 | | | | | | |
| **GEYT** | **Kilbeck** | **44.44** | **108** | LR | LR | 01 43 38.5 | |
| | comp=Z,72nm,18.5s,baz=356,slow=39 | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.07** | **296** | P | **P** | **01 23 06.5** | **-1.2** |
| | comp=Z,1.9nm,0.5s,baz=183,slow=7.1,SNR=2.2 | | | | | | |
| ULM | | | | LR | LR | 01 40 48.4 | |
| | comp=Z,91nm,18.3s,baz=338,slow=35 | | | | | | |
| **AAK** | **Ala-Archa** | **45.13** | **89** | LR | LR | 01 41 41.3 | |
| | comp=Z,42nm,19.1s,baz=343,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **49.76** | **58** | P | **P** | **01 23 44.9** | **+0.6** |
| | comp=Z,0.6nm,0.9s,baz=330,slow=8.3,SNR=3.6 | | | | | | |
| **NEW** | **Newport** | **52.36** | **312** | LR | LR | 01 45 52.7 | |
| | comp=Z,85nm,18.9s,baz=49,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **55.65** | **303** | LR | LR | 01 47 20.7 | |
| | comp=Z,45nm,18.1s,baz=281,slow=35 | | | | | | |
| **ELK** | **Elko** | **58.99** | **307** | LR | LR | 01 51 13.1 | |
| | comp=Z,63nm,18.7s,baz=264,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **62.16** | **297** | LR | LR | 01 50 57.7 | |
| | comp=Z,74nm,21.4s,baz=250,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.66** | **293** | LR | LR | 01 57 08.7 | |
| | comp=Z,40nm,21.7s,baz=290,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.11** | **76** | P | **P** | **01 26 35.0** | **+0.9** |
| | comp=Z,1.3nm,0.3s,baz=346,slow=6.9,SNR=1.7 | | | | | | |

*MEX **13** 01:29:33.2±0.8, 15.74N×93.80W, h90km±8km, MD4.3*
*IDC **13** 01:29:34.4±2.2, 16.18N×93.47W, h81km±15km, mb3.2/5, mb1 3.6/7, mb1mx3.2/47, mbtmp3.6/7, Error ellipse: s-maj=93.3km s-min=6.5km az=29.0*

**ISC 13 01:29:32.0±0.9, 15.69N±0.05×93.83W±0.03, h82km±9km, n38, σ1.99/63, mb3.4/5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.59** | **88** | *i* P | **Pn** | **01 29 47.1** | **+0.4** |
| PCIG | | | | *i* S | **Sn** | **01 29 58.3** | **+0.5** |
| **TGIG** | | **1.28** | **32** | *i* P | **Pn** | **01 29 54.2** | **-0.5** |
| TGIG | | | | *i* S | **Sn** | **01 30 09.7** | **-2.1** |
| **PATR** | **El Naranjo** | **1.64** | **110** | *i* P | **Pn** | **01 29 59.7** | **+0.2** |
| PATR | | | | *i* S | **Sn** | **01 30 20.0** | **-0.2** |
| **UXUV** | **UXUV** | **1.65** | **350** | *i* P | **Pn** | **01 29 59.9** | **+0.6** |
| UXUV | | | | *i* S | **Sn** | **01 30 19.0** | **-1.1** |
| **PAVE** | **Pavencul** | **1.67** | **107** | *i* P | **Pn** | **01 30 00.5** | **+0.7** |
| PAVE | | | | *i* S | **Sn** | **01 30 21.6** | **+0.7** |
| **THIG** | | **1.70** | **117** | *i* P | **Pn** | **01 30 00.6** | **+0.7** |
| THIG | | | | *i* S | **Sn** | **01 30 20.3** | **-0.9** |
| **CMIG** | **Matias Romero** | **1.72** | **324** | P | **Pn** | **01 30 00.9** | **+0.5** |
| | 99nm,0.3s,baz=138,slow=12,SNR=976 | | | | | | |
| CMIG | | | | S | **Sn** | **01 30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DAIG** | **Los Arroyos** | **5.74** | **284** | *i* P | **Pn** | **01 30 52.8** | **-1.9** |
| DAIG | | | | *i* S | **Sn** | **01 31 56.0** | **-3.2** |
| **YAIG** | **Yautepec** | **5.92** | **303** | *i* P | **Pn** | **01 31 00.4** | **+3.2** |
| YAIG | | | | *i* S | **Sn** | **01 32 00.3** | **-3.4** |
| **TXAR** | **Lajitas Array** | **16.33** | **328** | P | **Pn** | **01 33 17.4** | **+1.0** |
| | 0.1nm,0.3s,baz=150,slow=14,SNR=9.3 | | | | | | |
| **ANMO** | **Albuquerque** | **22.28** | **332** | P | **P** | **01 34 21.8** | **-0.8** |
| | 0.8nm,0.8s,baz=135,slow=11,SNR=3.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **30.17** | **337** | P | **P** | **01 35 33.8** | **-0.8** |
| | 0.2nm,0.7s,baz=138,slow=9.6,SNR=2.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **31.25** | **321** | P | **P** | **01 35 46.3** | **+2.1** |
| | 0.6nm,0.7s,baz=135,slow=9.0,SNR=5.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.00** | **347** | P | **P** | **01 38 09.3** | **-0.7** |
| | 0.7nm,0.6s,baz=153,slow=7.3,SNR=12 | | | | | | |
| **H03N2** | **Juan Fernandez** | **50.88** | **164** | T | T | 02 34 28.7 | |
| | baz=336 | | | | | | |
| **H03N1** | **Juan Fernandez** | **50.88** | **164** | T | T | 02 34 25.6 | |
| | baz=336 | | | | | | |
| **H03N3** | **Juan Fernandez** | **50.90** | **164** | T | T | 02 34 22.0 | |
| | baz=336 | | | | | | |
| **INK** | **Inuvik** | **58.33** | **344** | P | **P** | **01 39 17.7** | **-0.3** |
| | 0.7nm,0.6s,baz=141,slow=5.3,SNR=4.8 | | | | | | |

*IDC* ***13*** *01:31:14.8±9.4, 13°.13S×166°.99E, h256km±100km, mb3.3/3, mb1 3.4/4, mb1mx2.8/45, mbtmp3.8/4, Error ellipse: s-maj=103.2km s-min=34.1km az=158.0*

**ISC 13 01:31:14.2**±1.2, **13°.1S**±0°.2×**167°.0E**±0°.3, **h250**km, **n6,** σ0**78**/6, **mb3.6**/3, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **8.97** | **183** | P | **Pn** | **01 33 20.1** | **+0.2** |
| | 0.2nm,0.3s,baz=321,slow=22,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **33.04** | **247** | P | **P** | **01 37 26.1** | **-0.5** |
| | 0.5nm,0.5s,baz=75,slow=9.1,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **85.04** | **18** | P | **P** | **01 43 20.8** | **-0.6** |
| | 0.9nm,0.7s,baz=234,slow=5.5,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **95.81** | **317** | P | **P** | **01 44 13.2** | **+1.0** |
| | 0.2nm,0.5s,baz=114,slow=4.2,SNR=5.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **118.58** | **346** | PKP | **PKPdf** | **01 49 31.4** | **-0.3** |
| | 3.1nm,0.9s,baz=46,slow=2.6,SNR=9.5 | | | | | | |
| **FINES** | **FINESS Array B** | **124.08** | **339** | PKP | **PKPdf** | **01 49 42.8** | **+0.3** |
| | 1.4nm,0.8s,baz=62,slow=3.8,SNR=1.3 | | | | | | |

**IDC 13 01:31:27.2**±11.0, **7°.62S**×**128°.67E, h160**km±121km, **mb2.8**/**1**, **mb1 3.0**/5, **mb1mx2.6**/40, **mbtmp3.4**/5, **ML3.2**/3, **MS2.8**/**1**, **Ms1 2.8**/**1**, **ms1mx2.4**/9, **Error ellipse: s-maj=139.6km s-min=30.6km az=45.0**, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **5.57** | **242** | P | Pn | 01 32 48.9 | +0.4 |
| | 11nm,0.3s,baz=111,slow=7.0,SNR=6.6 | | | | | | |
| BATI | | | | S | Sn | 01 33 46.5 | -5.5 |
| | 3.4nm,0.3s,baz=8.5,slow=10.0,SNR=1.8 | | | | | | |
| **SIJI** | **Sorong** | **7.19** | **21** | LR | LR | 01 36 53.7 | |
| | comp=Z,62nm,18.9s,baz=178,slow=45 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.82** | **196** | P | Pn | 01 33 57.1 | -0.9 |
| | 0.1nm,0.3s,baz=17,slow=11,SNR=1.8 | | | | | | |
| FITZ | | | | S | Sn | 01 35 52.0 | -5.9 |
| | 0.1nm,0.3s,baz=262,slow=22,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.43** | **156** | P | Pn | 01 34 30.7 | -0.9 |
| | 0.2nm,0.3s,baz=335,slow=13,SNR=14 | | | | | | |
| WRA | | | | S | Sn | 01 36 55.4 | -5.1 |
| | 0.3nm,0.3s,baz=331,slow=23,SNR=6.8 | | | | | | |
| **ASAR** | **Alice Springs** | **16.73** | **163** | P | Pn | 01 35 13.6 | +1.2 |
| | 0.1nm,0.3s,baz=331,slow=9.5,SNR=1.7 | | | | | | |
| ASAR | | | | S | S | 01 38 11.1 | -6.8 |
| | 0.1nm,0.3s,baz=214,slow=39,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.03** | **328** | P | P | 01 42 09.3 | -0.1 |
| | 0.1nm,0.5s,baz=132,slow=6.5,SNR=1.9 | | | | | | |

*ISK* ***13*** *01:33:38.2, 35°.23N×29°.53E, h11km, ML2.8/9*
*DDA* ***13*** *01:33:42.1±0.0, 35°.40N×29°.47E, h21km±1km, ML2.5*
*NIC* ***13*** *01:33:45.8±0.0, 35°.39N×29°.89E, h16km±11km, Ml3.1/2*
*GII* ***13*** *01:33:47.4±0.2, 35°.19N×29°.80E, h91km, Mm2.1/1*
*THE* ***13*** *01:33:49.7, 36°.53N×29°.91E, h0km±2km, ML2.0/1, Error ellipse: s-maj=5.6km s-min=0.9km az=73.0*

**ISC 13 01:33:38.7**±1.4, **35°.50N**±0°.03×**29°.75E**±0°.04, **h3**km±11km, **n54,** σ2**08**/75, **Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.67** | **348** | P | **Pn** | **01 33 59.2** | **+4.2** |
| KSL | | | | S | **Sn** | **01 34 07.3** | **+1.4** |
| | 248nm,0.5s | | | | | | |
| **AKAS** | **Kas** | **0.75** | **351** | PG | **Pn** | **01 33 57.9** | **+1.7** |
| **AKAS** | **Kas** | **0.75** | **351** | P | **Pn** | **01 33 57.6** | **+1.4** |
| AKAS | | | | S | **Sn** | **01 34 07.8** | **-0.3** |
| AKAS | | | | *i* AML | AML | 01 34 13.0 | |
| | comp=E,199nm,0.7s | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **0.96** | **30** | P | **Pn** | **01 34 02.0** | **+3.1** |
| AKUM | | | | *i* AML | AML | 01 34 29.0 | |
| | comp=E,78nm,0.4s | | | | | | |
| **ELL** | **Elmali** | **1.26** | **6** | PN | **Pn** | **01 34 06.6** | **+3.4** |
| **FETY** | **Fethiye** | **1.26** | **335** | P | **Pg** | **01 34 03.6** | **+0.8** |
| FETY | | | | S | **Sg** | **01 34 14.3** | **-4.9** |
| **FETY** | **Fethiye** | **1.26** | **335** | P | **Pg** | **01 34 03.1** | **+0.2** |
| FETY | | | | *i* AML | AML | 01 34 29.0 | |
| | comp=E,60nm,0.6s | | | | | | |
| FETY | | | | *i* AML | AML | 01 34 30.0 | |
| | comp=N,56nm,0.4s | | | | | | |
| **ARG** | **Arkhangelos** | **1.50** | **299** | P | Pg | 01 34 15.7 | +8.2 |
| **KORT** | **Korkueli** | **1.58** | **18** | PN | **Pg** | **01 34 11.1** | **+2.1** |
| **KORT** | **Korkueli** | **1.58** | **18** | P | **Pg** | **01 34 10.5** | **+1.5** |
| KORT | | | | S | **Sn** | **01 34 27.7** | **-1.0** |
| KORT | | | | *i* AML | AML | 01 34 36.0 | |
| | comp=E,38nm,0.5s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **1.59** | **326** | PN | **Pn** | **01 34 09.2** | **+1.5** |
| **CAEL** | **Denizli, Camel** | **1.66** | **348** | P | **Pg** | **01 34 12.3** | **+1.7** |
| **GOLH** | **Golhisar** | **1.75** | **355** | P | **Pg** | **01 34 13.3** | **+1.2** |
| GOLH | | | | S | **Sg** | **01 34 35.0** | **+0.2** |
| **TURN** | **Turunc** | **1.77** | **317** | PN | **Pn** | **01 34 10.8** | **+0.8** |
| **TURN** | **Turunc** | **1.77** | **317** | P | **Pn** | **01 34 10.9** | **+0.8** |
| **YER** | **Yerkesik** | **2.02** | **325** | P | **Pn** | **01 34 15.7** | **+2.0** |
| **YER** | **Yerkesik** | **2.02** | **325** | PN | **Pn** | **01 34 15.2** | **+1.5** |
| **TAVA** | **DENIZLI_Tavas** | **2.08** | **341** | P | **Pn** | **01 34 15.8** | **+1.3** |
| **AKMS** | **Akamas** | **2.17** | **102** | P | **Pb** | **01 34 19.4** | **+0.9** |
| AKMS | | | | S | **Sg** | **01 34 47.7** | **-0.7** |
| AKMS | | | | AMI | | 01 34 48.9 | |
| | 0.2nm,0.9s | | | | | | |
| AKMS | | | | AMI | | 01 34 48.9 | |
| | 0.2nm,0.9s | | | | | | |
| AKMS | | | | AMI | | 01 34 51.8 | |
| | 0.3nm,0.8s | | | | | | |
| AKMS | | | | AMI | | 01 34 51.8 | |
| | 0.3nm,0.8s | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **2.21** | **6** | P | **Pg** | **01 34 24.1** | **+3.1** |
| **GAZI** | **Gazipasa** | **2.21** | **70** | PN | **Pb** | **01 34 19.8** | **+0.5** |
| **GAZI** | **Gazipasa** | **2.21** | **70** | P | **Pb** | **01 34 19.6** | **+0.4** |
| GAZI | | | | S | **Sb** | **01 34 44.2** | **-2.8** |
| GAZI | | | | *i* AML | AML | 01 34 50.0 | |
| | comp=N,26nm,0.5s | | | | | | |
| GAZI | | | | *i* AML | AML | 01 34 54.0 | |
| | comp=E,22nm,0.3s | | | | | | |
| **SUTC** | **Sutluce-Ispart** | **2.22** | **27** | PN | **Pg** | **01 34 20.6** | **-0.6** |
| **ALFC** | **Alefka** | **2.35** | **97** | P | **Pb** | **01 34 22.0** | **+0.3** |
| **OSC1** | **CSNet OBS 1** | **2.36** | **147** | P | **Pn** | **01 34 20.4** | **+2.2** |
| OSC1 | | | | S | **Sn** | **01 34 49.8** | **+2.3** |
| **MLSB** | **Milas** | **2.40** | **319** | PN | **Pn** | **01 34 20.2** | **+1.3** |
| **NATA** | **Nata** | **2.42** | **106** | P | **Pb** | **01 34 23.0** | **+0.2** |
| NATA | | | | S | **Sb** | **01 34 51.8** | **-1.2** |
| NATA | | | | AMI | | 01 34 55.8 | |
| | 0.5nm,0.9s | | | | | | |
| NATA | | | | AMI | | 01 34 55.8 | |
| | 0.5nm,0.9s | | | | | | |
| NATA | | | | AMI | | 01 34 57.1 | |
| | 0.5nm,0.4s | | | | | | |
| NATA | | | | AMI | | 01 34 57.1 | |
| | 0.5nm,0.4s | | | | | | |
| **SEDI** | **Konya, Seydise** | **2.53** | **39** | P | **Pb** | **01 34 25.1** | **+0.2** |
| SEDI | | | | S | **Sg** | **01 34 57.6** | **-2.5** |
| SEDI | | | | *i* AML | AML | 01 35 02.0 | |
| | comp=N,30nm,0.5s | | | | | | |
| SEDI | | | | *i* AML | AML | 01 35 03.0 | |
| | comp=E,16nm,0.4s | | | | | | |
| **SZAC** | **Souni** | **2.67** | **105** | P | **Pb** | **01 34 26.6** | **-0.6** |
| **KZIL** | **AFYON_Kizioren** | **2.77** | **6** | P | **Pb** | **01 34 28.8** | **-0.1** |
| **ERMK** | **Ermenek** | **2.81** | **65** | P | **Pb** | **01 34 30.0** | **+0.4** |
| ERMK | | | | S | **Sg** | **01 35 06.4** | **-2.5** |
| ERMK | | | | *i* AML | AML | 01 35 13.0 | |
| | comp=E,19nm,0.4s | | | | | | |
| ERMK | | | | *i* AML | AML | 01 35 13.0 | |
| | comp=N,21nm,0.3s | | | | | | |
| **ASGA** | **Asgata** | **2.95** | **103** | P | **Pb** | **01 34 30.4** | **-1.5** |
| **CSS** | **Mathiatis** | **2.98** | **99** | P | **Pb** | **01 34 30.7** | **-1.7** |
| **YVAC** | **Isparta, Yalva** | **3.02** | **23** | P | **Pb** | **01 34 32.3** | **-0.7** |
| YVAC | | | | S | **Sb** | **01 35 09.1** | **-1.3** |
| YVAC | | | | *i* AML | AML | 01 35 13.0 | |
| | comp=E,9.4nm,0.5s | | | | | | |
| **DOGA** | **KONYA_Doganhis** | **3.03** | **30** | P | **Pb** | **01 34 33.3** | **+0.1** |
| DOGA | | | | S | **Sb** | **01 35 09.1** | **-1.6** |
| DOGA | | | | *i* AML | AML | 01 35 10.0 | |
| | comp=E,20nm,0.6s | | | | | | |
| DOGA | | | | *i* AML | AML | 01 35 13.0 | |
| | comp=N,23nm,0.8s | | | | | | |
| **KKBE** | **Karaman, Kazim** | **3.10** | **55** | P | **Pb** | **01 34 33.5** | **-0.9** |
| KKBE | | | | S | **Sb** | **01 35 11.1** | **-1.6** |
| **KONT** | **Konya--Tatoy** | **3.22** | **40** | P | **Pb** | **01 34 34.8** | **-1.7** |
| **HNTI** | **Hanita** | **5.09** | **117** | Pn | **Pn** | **01 34 59.0** | **+3.1** |
| HNTI | | | | Sn | **Sn** | **01 35 55.6** | **+0.4** |
| **MMA0B** | **Mount Meron ar** | **5.29** | **116** | Pn | **Pn** | **01 35 02.1** | **+3.4** |
| **GEM** | **Giv'at Ha'Em** | **5.39** | **113** | Pn | **Pn** | **01 35 02.8** | **+2.8** |
| **NATI** | **Neve Ativ** | **5.43** | **113** | Pn | **Pn** | **01 35 03.6** | **+3.2** |
| **SLTI** | **Sal'it** | **5.47** | **125** | Pn | **Pn** | **01 35 03.7** | **+2.7** |
| **MMLI** | **Mount Malkishu** | **5.61** | **121** | Pn | **Pn** | **01 35 05.8** | **+2.8** |
| MMLI | | | | Sn | **Sn** | **01 36 07.6** | **-0.4** |
| **HMDT** | **Nahal Hemdat** | **5.79** | **122** | Pn | **Pn** | **01 35 08.6** | **+3.2** |
| **AMAZ** | **Amatzia** | **5.85** | **131** | Pn | **Pn** | **01 35 08.5** | **+2.2** |
| **KZIT** | **Kziot** | **6.01** | **138** | Pn | **Pn** | **01 35 10.7** | **+2.3** |
| KZIT | | | | Sn | **Sn** | **01 36 14.9** | **-2.8** |
| **YTIR** | **Yattir** | **6.09** | **131** | Pn | **Pn** | **01 35 11.6** | **+2.0** |
| YTIR | | | | Sn | **Sn** | **01 36 18.4** | **-1.5** |
| **DSI** | **Dead Sea** | **6.12** | **128** | Pn | **Pn** | **01 35 13.0** | **+3.1** |
| DSI | | | | Sn | **Sn** | **01 36 19.8** | **-0.6** |
| **GHAJ** | **Ghor Haditha** | **6.41** | **129** | Pn | **Pn** | **01 35 16.7** | **+2.8** |
| **ZFRI** | **Zfri** | **6.71** | **136** | Pn | **Pn** | **01 35 19.1** | **+1.1** |
| **PRNI** | **Paran** | **6.77** | **138** | Pn | **Pn** | **01 35 21.1** | **+2.2** |
| PRNI | | | | Sn | **Sn** | **01 36 33.9** | **-2.6** |
| **KRMI** | **Paran Flat** | **6.80** | **141** | Pn | **Pn** | **01 35 21.8** | **+2.4** |
| KRMI | | | | Sn | **Sn** | **01 36 34.6** | **-2.7** |
| **HRFI** | **Mount Harif** | **7.03** | **139** | Pn | **Pn** | **01 35 24.6** | **+2.1** |
| HRFI | | | | Sn | **Sn** | **01 36 40.1** | **-2.8** |
| **EIL** | **Elat** | **7.28** | **141** | Pn | **Pn** | **01 35 28.4** | **+2.5** |

*IDC* ***13*** *01:38:14.7±0.9, 50°.75N×173°.35W, h0km, mb3.8/15, mb1 4.0/17, mb1mx3.8/39, mbtmp3.8/17, ML3.5/2, Error ellipse: s-maj=26.9km s-min=15.5km az=174.0*
*NEIC* ***13*** *01:38:19.0±1.5, 50°.9N±0°.1×173°.36W±0°.08, h27km±8km, mb4.0/12, ML3.5(AEIC), Error ellipse: s-maj=17.0km s-min=7.7km az=182.0*
*AEIC* ***13*** *01:38:21±1.9, 50°.9N±0°.1×173°.38W±0°.08, h4km±5km, Error ellipse: s-maj=15.4km s-min=7.3km az=185.0*

**ISC 13 01:38:20.2**±0.8, **50°.9N**±0°.1×**173°.30W**±0°.06, **h35**km, **n62,** σ1**05**/62, **mb3.8**/15, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATKA** | **Atka Island** | **1.41** | **337** | | **Pn** | **01 38 42.5** | **-0.8** |
| **KOFP** | **Korovin Flat P** | **1.45** | **340** | | **Pn** | **01 38 43.8** | **-0.2** |
| **KOSE** | **Korovin Southe** | **1.51** | **342** | | **Pn** | **01 38 44.9** | **+0.1** |
| **KONE** | **Korovin Northe** | **1.57** | **341** | | **Pn** | **01 38 45.8** | **+0.2** |
| **GSMY** | **Great Sitkin M** | **2.06** | **304** | | **Pn** | **01 38 51.6** | **-0.8** |
| **GSTR** | **Great Sitkin T** | **2.09** | **306** | Pn | **Pn** | **01 38 51.8** | **-1.0** |
| **GSCK** | **Great Sitkin C** | **2.10** | **303** | | **Pn** | **01 38 51.9** | **-0.9** |
| **GSTD** | **Great Sitkin T** | **2.12** | **304** | | **Pn** | **01 38 52.3** | **-0.8** |
| **KIWB** | **Kanaga Island** | **2.59** | **293** | | **Pn** | **01 38 58.9** | **-0.7** |
| **KIMD** | **Kanaga Island** | **2.61** | **291** | | **Pn** | **01 38 58.9** | **-1.0** |
| **KIKV** | **Kanaga Island** | **2.61** | **293** | | **Pn** | **01 38 59.3** | **-0.5** |
| **KICM** | **Kanaga Island** | **2.64** | **294** | | **Pn** | **01 38 59.7** | **-0.5** |
| **TAPA** | **Tanaga Point A** | **2.97** | **289** | | **Pn** | **01 39 04.4** | **-0.5** |
| **TAFP** | **Tanaga Falls P** | **3.09** | **290** | | **Pn** | **01 39 06.4** | **-0.2** |
| **TASE** | **Tanaga Southea** | **3.11** | **289** | | **Pn** | **01 39 06.5** | **-0.3** |
| **NIKH** | **Nikolski High** | **3.44** | **51** | Pn | **Pn** | **01 39 10.9** | **-0.3** |
| **GALAA** | **Gareloi Lava P** | **3.53** | **286** | | **Pn** | **01 39 12.6** | **0.0** |
| **OKSP** | **Okmok Steeple** | **3.88** | **51** | | **Pn** | **01 39 17.7** | **+0.3** |
| **OKCE** | **Okmok Cone E** | **4.04** | **49** | | **Pn** | **01 39 20.7** | **+1.1** |
| **MREP** | **Makushin Rep't** | **4.96** | **52** | | **Pn** | **01 39 32.9** | **+0.7** |
| **MSW** | **Makushin Switc** | **5.00** | **50** | | **Pn** | **01 39 33.5** | **+0.8** |
| **UNV** | **Unalaska Valle** | **5.09** | **52** | Pn | **Pn** | **01 39 34.0** | **0.0** |
| **WECS** | **Westdahl Cape** | **6.32** | **52** | | **Pn** | **01 39 52.5** | **+1.6** |
| **SSLN** | **Shishaldin Nor** | **6.85** | **52** | | **Pn** | **01 40 00.0** | **+1.9** |
| **ISLZ** | **Isanotski Laza** | **6.95** | **53** | | **Pn** | **01 40 00.4** | **+0.9** |
| **SHEM** | **Shemya Is, Ala** | **8.02** | **288** | Pn | **Pn** | **01 40 16.1** | **+2.0** |
| | 4.6nm,0.3s,baz=251,slow=23,SNR=2.4 | | | | | | |
| **SMY** | **Shemya** | **8.02** | **288** | | **Pn** | **01 40 14.5** | **+0.4** |
| **SDPT** | **Sand Point** | **8.90** | **55** | Pn | **Pn** | **01 40 25.6** | **-0.5** |
| **CNBA** | **Chernabura Isl** | **9.17** | **59** | Pn | **Pn** | **01 40 28.8** | **-1.0** |
| **KDAK** | **Kodiak Island** | **13.87** | **52** | Pn | **Pn** | **01 41 31.2** | **-2.8** |
| | 0.6nm,0.3s,baz=147,slow=11,SNR=2.0 | | | | | | |
| **ANM** | **Nome** | **14.31** | **14** | Pn | **Pn** | **01 41 37.6** | **-2.4** |
| **CAST** | **Castle Rocks** | **16.90** | **34** | Pn | **Pn** | **01 42 12.0** | **-1.7** |
| **BPAW** | **Bear Paw Mtn.** | **17.70** | **33** | Pn | **Pn** | **01 42 22.7** | **-0.9** |
| BPAW | | | | IAmb | IAmb | 01 42 27.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **17.93** | **288** | P | **P** | **01 42 26.8** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=92,slow=16,SNR=4.8 | | | | | | |
| **MLY** | **Manley** | **18.37** | **31** | P | **Pn** | **01 42 32.2** | **+0.4** |
| MLY | | | | IAmb | IAmb | 01 42 47.4 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **18.90** | **32** | P | **P** | **01 42 36.7** | **-0.7** |
| **H23K** | **Yukon River** | **19.26** | **30** | P | **P** | **01 42 40.2** | **-1.2** |
| **ILAR** | **Eielson Array** | **19.54** | **35** | P | **P** | **01 42 44.0** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=229,slow=9.6,SNR=44 | | | | | | |
| **H24K** | **Noodor Dome** | **19.81** | **31** | P | **P** | **01 42 48.3** | **+0.9** |
| H24K | | | | IAmb | IAmb | 01 42 51.3 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **BILL** | **Bilibino** | **19.88** | **337** | P | **P** | **01 42 47.5** | **-0.6** |
| BILL | | | | IAmb | IAmb | 01 43 02.7 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| **COLD** | **Coldfoot** | **20.00** | **27** | P | **P** | **01 42 49.5** | **+0.1** |
| COLD | | | | IAmb | IAmb | 01 42 54.9 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **20.02** | **36** | P | **P** | **01 42 48.4** | **-1.3** |
| **SCRK** | **Sand Creek** | **20.25** | **39** | P | **P** | **01 42 50.9** | **-1.3** |
| SCRK | | | | IAmb | IAmb | 01 42 53.1 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **21.16** | **24** | P | **P** | **01 43 01.3** | **-0.7** |
| **EGAK** | **Eagle** | **21.70** | **38** | P | **P** | **01 43 09.0** | **+1.3** |
| **BMAR** | **Burnt Mountain** | **21.81** | **30** | P | **P** | **01 43 10.4** | **+1.5** |
| **DLBC** | **Dease Lake** | **25.74** | **56** | P | **P** | **01 43 48.7** | **+1.6** |
| | comp=Z,3.1nm,1.0s,baz=266,slow=26,SNR=2.4 | | | | | | |
| **INK** | **Inuvik** | **25.91** | **33** | P | **P** | **01 43 48.8** | **+0.3** |
| | comp=Z,2.1nm,0.5s,baz=226,slow=11,SNR=0.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.04** | **47** | P | **P** | **01 44 53.6** | **+1.8** |
| | comp=Z,0.6nm,0.4s,baz=274,slow=8.4,SNR=18 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.04** | **47** | P | **P** | **01 44 52.4** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **40.15** | **86** | P | **P** | **01 45 52.7** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=306,slow=7.7,SNR=2.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **43.12** | **75** | P | **P** | **01 46 17.9** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=307,slow=3.6,SNR=15 | | | | | | |
| **KSRS** | **Korea Array** | **43.12** | **275** | P | **P** | **01 46 17.3** | **+0.4** |
| | comp=Z,0.7nm,0.4s,baz=50,slow=8.4,SNR=2.9 | | | | | | |
| **NRIK** | **Noril'sk** | **46.53** | **331** | P | **P** | **01 46 44.3** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=54,slow=8.7,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **49.92** | **300** | P | **P** | **01 47 10.9** | **+0.6** |
| | comp=Z,0.6nm,0.4s,baz=57,slow=6.4,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **55.27** | **85** | P | **P** | **01 47 49.7** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=310,slow=5.6,SNR=2.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.08** | **352** | P | **P** | **01 48 16.3** | **+0.1** |
| | comp=Z,1.1nm,0.5s,baz=23,slow=7.9,SNR=7.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.98** | **312** | P | **P** | **01 48 44.0** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=46,slow=5.2,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **66.93** | **350** | P | **P** | **01 49 08.9** | **+0.5** |
| | comp=Z,3.1nm,0.9s,baz=5.2,slow=7.7,SNR=6.9 | | | | | | |
| **NOA** | **NOSAR Array B** | **68.34** | **358** | P | **P** | **01 49 17.5** | **0.0** |
| | comp=Z,0.5nm,0.8s,baz=3.8,slow=6.7,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **84.19** | **228** | P | **P** | **01 50 45.3** | **-2.4** |
| | comp=Z,0.5nm,1.0s,baz=37,slow=5.2,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **87.59** | **227** | P | **P** | **01 51 04.2** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=45,slow=5.2,SNR=1.8 | | | | | | |

*TUL* ***13*** *01:44:31.9±0.6, 36°.94N±0°.04×97°.97W±0°.06, h4km±7km, ML2.6, mb_Lg2.0/3(NEIC), Error ellipse: s-maj=7.9km s-min=3.4km az=60.0*

**NEIC 13 01:44:32.2**±0.6, **36°.92N**±0°.04×**97°.95W**±0°.06, **h6**km±7km, **Error ellipse: s-maj=7.4km s-min=3.7km az=56.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.15** | **90** | Pg | Pg | 01 44 53.9 | -0.5 |
| **R32A** | **Long Quarter,** | **1.62** | **338** | | Pn | 01 45 01.0 | -0.4 |
| **FNO** | **Franklin** | **1.72** | **165** | Pn | Pn | 01 45 02.9 | +0.2 |
| **W35A** | **Tecumseh** | **1.97** | **153** | | Pn | 01 45 06.4 | +0.2 |
| **TUL1** | **Leonard** | **2.01** | **119** | Pn | Pn | 01 45 07.2 | +0.5 |
| **WMOK** | **Wichita Mounta** | **2.28** | **197** | Pn | Pn | 01 45 11.1 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.31** | **178** | Pn | Pn | 01 45 10.8 | -0.1 |
| **CBKS** | **Cedar Bluff** | **2.36** | **324** | Pn | Pn | 01 45 11.5 | -0.1 |
| **U38A** | **Gravette** | **2.91** | **98** | Pn | Pn | 01 45 19.8 | +0.7 |
| **X37A** | **Clayton** | **3.13** | **137** | Pn | Pn | 01 45 21.9 | -0.3 |
| **HHAR** | **Hobbs** | **3.29** | **100** | Pn | Pn | 01 45 25.0 | +0.7 |
| **S39A** | **Bolivar** | **3.77** | **77** | Pn | Pn | 01 45 30.5 | -0.4 |
| **W39A** | **Magazine** | **3.79** | **116** | Pn | Pn | 01 45 31.1 | 0.0 |
| **U40A** | **Yellville** | **4.14** | **96** | IAmb_Lg | | 01 46 50.2 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **4.40** | **51** | Pn | Pn | 01 45 39.3 | -0.3 |

*NEIC* ***13*** *01:57:44.3±0.6, 4°.66S±0°.10×151°.66E±0°.08, h36km±11km, mb4.3/9, Error ellipse: s-maj=15.9km s-min=9.1km az=142.0*
*IDC* ***13*** *01:57:49.0±5.4, 4°.76S×151°.37E, h68km±49km, mb3.7/8, mb1 3.9/10, mb1mx3.6/41, mbtmp4.1/10, ML2.7/2, MS3.4/3, Ms1 3.4/3, ms1mx2.7/59, Error ellipse: s-maj=33.2km s-min=25.8km az=69.0*

**ISC 13 01:57:44.0**±0.8, **4°.63S**±0°.08×**151°.61E**±0°.08, **h35**km, **n23,** σ1**25**/21, **mb4.2**/13, **New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.70** | **52** | | **Pn** | **01 57 57.2** | **-0.2** |
| **MANU** | **Manus Island** | **4.96** | **301** | Pn | **Pn** | **01 58 56.8** | **+0.8** |
| **PMG** | **Port Moresby** | **6.49** | **223** | P | **Pn** | **01 59 17.6** | **+0.6** |
| | 1.7nm,0.3s,baz=332,slow=16,SNR=2.5 | | | | | | |
| **HNR** | **Honiara** | **9.55** | **120** | LR | LR | 02 03 17.1 | |
| | comp=Z,57nm,20.4s,baz=295,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **16.23** | **198** | P | **P** | **02 01 31.8** | **-0.5** |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=3.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.52** | **142** | P | **P** | **02 02 44.6** | **+3.6** |
| | 12nm,1.1s,baz=6.2,slow=15,SNR=2.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.52** | **142** | P | **P** | **02 02 39.8** | **-1.2** |
| **WB0** | **Warramunga Arr** | **22.54** | **227** | P | **P** | **02 02 40.5** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 02 02 46.5 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.55** | **226** | P | **P** | **02 02 40.9** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 02 03 04.2 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.68** | **226** | P | **P** | **02 02 41.3** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 02 02 47.7 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.68** | **226** | P | **P** | **02 02 42.2** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 02 02 52.4 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.69** | **226** | P | **P** | **02 02 41.8** | **-0.9** |
| | comp=Z,3.9nm,0.6s,baz=45,slow=11,SNR=44 | | | | | | |
| **AS31** | **Alice Springs** | **25.50** | **220** | P | **P** | **02 03 08.6** | **-0.6** |
| **ASAR** | **Alice Springs** | **25.50** | **220** | P | **P** | **02 03 09.0** | **-0.2** |
| | comp=Z,3.3nm,0.6s,baz=56,slow=8.5,SNR=39 | | | | | | |
| **STKA** | **Stephens Creek** | **28.69** | **198** | P | **P** | **02 03 37.7** | **-0.1** |
| | comp=Z,2.3nm,0.8s,baz=7.1,slow=13,SNR=3.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.71** | **240** | P | **P** | **02 03 37.4** | **-0.7** |
| | comp=Z,2.4nm,0.7s,baz=65,slow=11,SNR=2.8 | | | | | | |
| FITZ | | | | LR | LR | 02 16 59.2 | |
| | comp=Z,41nm,19.8s,baz=109,slow=40 | | | | | | |
| **TOLI2** | **Tolitoli** | **31.33** | **280** | P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EDW2** | **Edwards Air Fo** | **1.63** | **120** | P | | **Pn** | **02 19 55.3** | **+0.8** |
| | baz=302,SNR=16 | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.67** | **98** | Pb | | **Pb** | **02 19 56.9** | **-0.9** |
| | baz=279,SNR=20 | | | | | | | |
| LRMC | | | | Sb | | **Sb** | **02 20 18.3** | **-0.2** |
| | baz=279 | | | | | | | |
| **SAO** | **San Andreas Ge** | **1.75** | **307** | Pn | | **Pn** | **02 19 55.9** | **-0.2** |
| **TIN** | **Tinemaha, Big** | **1.79** | **41** | Pb | | **Pb** | **02 19 59.3** | **-0.6** |
| | baz=222,SNR=40 | | | | | | | |
| TIN | | | | Sb | | **Sb** | **02 20 22.1** | **+0.2** |
| | baz=222 | | | | | | | |
| **MPMC** | **Manual Prospec** | **1.83** | **79** | Pn | | **Pn** | **02 19 58.5** | **+1.1** |
| | baz=260,SNR=54 | | | | | | | |
| MPMC | | | | Pb | | **Pb** | **02 20 00.5** | **-0.2** |
| | baz=260 | | | | | | | |
| MPMC | | | | Sb | | **Sb** | **02 20 23.6** | **+0.3** |
| | baz=260 | | | | | | | |
| **MTUM** | **Tungsten Hills** | **1.88** | **29** | | | **Pb** | **02 20 00.5** | **-0.8** |
| **PASC** | **Pasadena Art C** | **1.99** | **141** | Pn | | **Pn** | **02 19 60.0** | **+0.6** |
| **MLAC** | **Mammoth, Mammo** | **2.03** | **20** | P | | **Pb** | **02 20 03.0** | **-1.1** |
| | baz=200,SNR=16 | | | | | | | |
| MLAC | | | | S | | **Sb** | **02 20 29.2** | **+0.2** |
| | baz=200 | | | | | | | |
| **LCH** | **Last Change Ra** | **2.25** | **47** | | | **Pn** | **02 20 05.6** | **+2.5** |
| LCH | | | | IAML | | | 02 20 37.2 | |
| | comp=E,179nm,0.2s | | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.28** | **55** | | | **Pn** | **02 20 04.5** | **+1.0** |
| **GRAC** | **Grapevine Rang** | **2.28** | **55** | P | | **Pn** | **02 20 05.6** | **+2.2** |
| | baz=236,SNR=50 | | | | | | | |
| GRAC | | | | Sb | | **Sb** | **02 20 37.5** | **+1.5** |
| | baz=236 | | | | | | | |
| **QSM** | **Queen of Sheba** | **2.32** | **83** | Pn | | **Pn** | **02 20 04.5** | **+0.5** |
| QSM | | | | IAML | | | 02 20 40.1 | |
| | comp=E,76nm,0.5s | | | | | | | |
| QSM | | | | IAML | | | 02 20 42.9 | |
| | comp=N,99nm,0.5s | | | | | | | |
| **CMB** | **Columbia Colle** | **2.38** | **347** | Pn | | **Pn** | **02 20 05.8** | **+1.0** |
| CMB | | | | IAML | | | 02 20 37.6 | |
| | comp=E,58nm,0.4s | | | | | | | |
| CMB | | | | IAML | | | 02 20 42.6 | |
| | comp=N,77nm,0.6s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.40** | **99** | | | **Pn** | **02 20 05.2** | **0.0** |
| GSC | | | | IAML | | | 02 20 45.7 | |
| | comp=E,130nm,0.6s | | | | | | | |
| **FURC** | **Furnace Creek,** | **2.42** | **71** | Sb | | **Sb** | **02 20 42.4** | **+2.4** |
| | baz=253 | | | | | | | |
| **GWY** | **Greenwater Val** | **2.51** | **78** | Pn | | **Pn** | **02 20 07.1** | **+0.4** |
| GWY | | | | IAML | | | 02 20 46.7 | |
| | comp=E,69nm,0.5s | | | | | | | |
| GWY | | | | IAML | | | 02 20 51.3 | |
| | comp=N,66nm,0.5s | | | | | | | |
| **CIS** | **Catalina Islan** | **2.54** | **155** | P | | **Pn** | **02 20 07.2** | **+0.1** |
| | baz=336 | | | | | | | |
| CIS | | | | S | | **Sn** | **02 20 36.3** | **-0.8** |
| | baz=336 | | | | | | | |
| **ELS** | **Elsinore Mount** | **2.79** | **137** | Pn | | **Pn** | **02 20 09.9** | **-0.6** |
| **HEC** | **Hector,Ludlow** | **2.90** | **107** | P | | **Pn** | **02 20 12.2** | **+0.2** |
| | baz=289,SNR=8.4 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **2.93** | **22** | Pn | | **Pn** | **02 20 11.6** | **-0.9** |
| **MURC** | **Murrieta** | **2.96** | **135** | P | | **Pn** | **02 20 12.9** | **+0.2** |
| | baz=317 | | | | | | | |
| **NV11** | **Mina Array Sit** | **2.98** | **24** | Pn | | **Pn** | **02 20 13.7** | **+0.5** |
| NV11 | | | | IAML | | | 02 21 03.5 | |
| | comp=N,42nm,0.8s | | | | | | | |
| **TPNV** | **Topopah Spring** | **3.05** | **65** | | | **Pn** | **02 20 14.8** | **+0.7** |
| **TPNV** | **Topopah Spring** | **3.05** | **65** | P | | **Pn** | **02 20 16.0** | **+1.8** |
| | baz=247,SNR=10 | | | | | | | |
| **RYN** | **Ryan** | **3.06** | **18** | | | **Pn** | **02 20 13.1** | **-1.1** |
| RYN | | | | IAML | | | 02 21 12.8 | |
| | comp=N,25nm,0.8s | | | | | | | |
| **TPH** | **Tonopah** | **3.08** | **40** | Pn | | **Pn** | **02 20 13.4** | **-1.2** |
| **TUQ** | **Turquoise Moun** | **3.10** | **94** | P | | **Pn** | **02 20 15.6** | **+0.8** |
| | baz=277 | | | | | | | |
| **EMB** | **Emerald Bay** | **3.27** | **355** | Pn | | **Pn** | **02 20 17.2** | **0.0** |
| EMB | | | | IAML | | | 02 21 12.7 | |
| | comp=E,63nm,0.6s | | | | | | | |
| **YERR** | **Yerington** | **3.28** | **6** | | | **Pn** | **02 20 17.6** | **+0.2** |
| YERR | | | | IAML | | | 02 21 12.9 | |
| | comp=E,76nm,0.5s | | | | | | | |
| YERR | | | | IAML | | | 02 21 14.0 | |
| | comp=N,52nm,0.9s | | | | | | | |
| **RUBR** | **Rubicon Trail** | **3.35** | **354** | Pn | | **Pn** | **02 20 18.6** | **+0.3** |
| **PNTR** | **Pine Nut** | **3.37** | **1** | | | **Pn** | **02 20 18.5** | **0.0** |
| **PFO** | **Pinyon Flats O** | **3.40** | **127** | Pn | | **Pn** | **02 20 18.9** | **-0.1** |
| **PFO** | **Pinyon Flats O** | **3.40** | **127** | P | | **Pn** | **02 20 19.7** | **+0.7** |
| | baz=310 | | | | | | | |
| **GMRC** | **Granite Mounta** | **3.44** | **105** | P | | **Pn** | **02 20 19.6** | **+0.1** |
| | baz=287 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **3.50** | **118** | P | | **Pn** | **02 20 20.6** | **+0.3** |
| | baz=301 | | | | | | | |
| **KVN** | **Kaiserville** | **3.56** | **21** | | | **Pn** | **02 20 21.1** | **-0.1** |
| KVN | | | | IAML | | | 02 21 26.0 | |
| | comp=E,17nm,1.2s | | | | | | | |
| **VCNR** | **Virginia City** | **3.57** | **1** | Pn | | **Pn** | **02 20 20.3** | **-1.1** |
| **MPK** | **Martis Peak** | **3.58** | **356** | Pn | | **Pn** | **02 20 22.0** | **+0.5** |
| **SHPR** | **Sheep Range** | **3.77** | **77** | Pn | | **Pn** | **02 20 24.4** | **+0.4** |
| **MONP2** | **Monument Peak** | **3.92** | **135** | P | | **Pn** | **02 20 26.9** | **+0.8** |
| | baz=318 | | | | | | | |
| **BAR** | **Barrett** | **3.94** | **139** | Pn | | **Pn** | **02 20 25.7** | **-0.5** |
| **PAHR** | **Pah Rah Range** | **3.99** | **4** | Pn | | **Pn** | **02 20 26.4** | **-0.7** |
| PAHR | | | | IAML | | | 02 21 33.1 | |
| | comp=N,15nm,1.5s | | | | | | | |
| PAHR | | | | IAML | | | 02 21 33.3 | |
| | comp=E,17nm,1.8s | | | | | | | |
| **ORV** | **Oroville** | **4.09** | **340** | | | **Pn** | **02 20 28.8** | **+0.6** |
| ORV | | | | IAML | | | 02 21 36.5 | |
| | comp=E,13nm,2.4s | | | | | | | |
| **PRN** | **Pahroc Range** | **4.11** | **64** | | | **Pn** | **02 20 29.6** | **+0.9** |
| PRN | | | | IAML | | | 02 21 38.8 | |
| | comp=N,22nm,1.2s | | | | | | | |
| PRN | | | | IAML | | | 02 21 46.1 | |
| | comp=E,22nm,0.7s | | | | | | | |
| **BEKR** | **Beckworth** | **4.17** | **353** | | | **Pn** | **02 20 32.1** | **+2.5** |
| BEKR | | | | IAML | | | 02 21 38.3 | |
| | comp=E,28nm,0.7s | | | | | | | |
| BEKR | | | | IAML | | | 02 21 43.6 | |
| | comp=N,20nm,0.9s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **4.22** | **50** | Pn | | **Pn** | **02 20 30.8** | **+0.6** |
| R11A | | | | IAML | | | 02 21 41.3 | |
| | comp=E,13nm,0.9s | | | | | | | |
| **CCUT** | **Cedar City** | **5.42** | **68** | Pn | | **Pn** | **02 20 47.1** | **+0.3** |
| CCUT | | | | IAML | | | 02 21 49.6 | |
| | comp=E,6.8nm,5.0s | | | | | | | |
| CCUT | | | | IAML | | | 02 23 26.4 | |
| | comp=N,5.4nm,4.5s | | | | | | | |
| **PSUT** | **Pine Spring** | **5.46** | **57** | Pn | | **Pn** | **02 20 47.3** | **+0.1** |

*CNRM **13** 02:27:29.8, 35°.63N × 3°.90W, h15km, ml2.5*

**IDC 13 02:27:31.9±1.6, 35°.50N±0°.05 × 3°.77W±0°.07, h12km±11km, n5, σ1s45/10, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.31** | **207** | P | **Pg** | **02 27 37.1** | **-1.2** |
| PALE | | | | S | **Sb** | **02 27 44.4** | **0.0** |
| **TAF** | **Taforalt** | **1.30** | **121** | P | **Pn** | **02 27 54.4** | **-1.5** |
| TAF | | | | S | **Sg** | **02 28 16.3** | **+2.5** |
| **EMAL** | **Malaga-Limoner** | **1.37** | **337** | *e*P | **Pn** | **02 27 57.5** | **+0.7** |
| EMAL | | | | *e*S | **Sn** | **02 28 14.1** | **-0.8** |
| **MD31** | **MD31** | **2.75** | **198** | P | **Pn** | **02 28 16.3** | **+0.5** |
| MD31 | | | | S | **Sn** | **02 28 50.0** | **+1.0** |
| **MDT** | **Midelt** | **2.77** | **195** | P | **Pn** | **02 28 15.9** | **-0.1** |
| MDT | | | | S | **Sn** | **02 28 49.1** | **-0.3** |

**IDC 13 02:30:12.5±2.9, 2°.66S × 132°.75E, h0km, mb3.3/2, mb1 3.7/5, mb1mx3.5/29, mbtmp3.4/5, ML3.1/3, Error ellipse: s-maj=98.1km s-min=21.0km az=70.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.31** | **320** | Pn | Pn | 02 30 51.6 | -0.3 |
| | 5.1nm,0.3s,baz=213,slow=23,SNR=8.6 | | | | | | |
| SIJI | | | | Sn | Sb | 02 31 23.5 | -0.8 |
| | 6.3nm,0.3s,baz=74,slow=22,SNR=3.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **16.86** | **204** | Pn | Pn | 02 34 09.5 | -0.5 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=2.3 | | | | | | |
| FITZ | | | | Sn | Sn | 02 37 10.9 | -7.2 |
| | 0.0nm,0.3s,baz=174,slow=17,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.25** | **175** | P | Pn | 02 34 13.2 | -1.9 |
| | 0.0nm,0.3s,baz=351,slow=13,SNR=1.9 | | | | | | |
| WRA | | | | S | Sn | 02 37 19.7 | -8.0 |
| | 0.0nm,0.3s,baz=356,slow=24,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **20.92** | **177** | P | P | 02 34 58.0 | +1.1 |
| | 2.4nm,0.8s,baz=3.3,slow=12,SNR=18 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.20** | **325** | P | P | 02 41 02.0 | -0.2 |
| | 0.1nm,0.3s,baz=132,slow=6.2,SNR=1.5 | | | | | | |

*NNC **13** 03:03:45.1±1.4, 44°.83N × 84°.00E, h0km, mb3.5, mpv3.3, Error ellipse: s-maj=11.0km s-min=4.3km az=115.0*

*SOME **13** 03:03:46.6, 45°.07N × 83°.78E, h5km*

**ISC 13 03:03:46.1±1.6, 44°.77N±0°.07 × 83°.79E±0°.08, h10km, n33, σ1s97/49, 4C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK31** | **Makanchi Array** | **2.28** | **333** | ⇑Pn | **Pn** | **03 04 24.1** | **+0.3** |
| | 2.4nm,0.3s,baz=140,slow=16,SNR=296 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **03 04 54.6** | **+2.7** |
| | 18nm,0.6s,baz=144,slow=28,SNR=35 | | | | | | |
| **MAKZ** | **Makanchi** | **2.40** | **329** | ⇓Pn | **Pn** | **03 04 26.6** | **+1.2** |
| | 3.3nm,0.6s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sb** | **03 04 58.1** | **-0.9** |
| | 6.3nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **2.78** | **15** | *e*P | **Pn** | **03 04 31.2** | **+0.5** |
| | 9.4nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sn** | **03 05 03.6** | **-0.7** |
| | 24nm,0.6s | | | | | | |
| **ZSN** | **Zaisan** | **2.78** | **15** | Pg | **Pn** | **03 04 31.5** | **+0.8** |
| | 10nm,0.2s | | | | | | |
| ZSN | | | | Lg | Lg | 03 05 04.1 | |
| | 17nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **2.81** | **243** | *e*P | **Pg** | **03 04 40.3** | **+0.4** |
| | 3.3nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **03 05 18.4** | **+2.1** |
| | 25nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **2.81** | **243** | Pg | **Pg** | **03 04 40.3** | **+0.4** |
| | 3.3nm,0.1s | | | | | | |
| KTMS | | | | Lg | Lg | 03 05 18.4 | |
| | 25nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.89** | **263** | *e*P | **Pg** | **03 04 41.4** | **-0.1** |
| | 2.1nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **03 05 21.5** | **+2.5** |
| | 6.1nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.89** | **263** | Pg | **Pg** | **03 04 41.4** | **-0.1** |
| | 2.1nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 03 05 21.5 | |
| | 6.1nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.19** | **281** | *e*P | **Pg** | **03 04 46.7** | **-0.4** |
| | 1.7nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **03 05 29.9** | **+1.6** |
| | 5.6nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.19** | **281** | Pg | **Pg** | **03 04 46.7** | **-0.4** |
| | 1.7nm,0.2s | | | | | | |
| KAPS | | | | Lg | Lg | 03 05 29.9 | |
| | 5.6nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **3.42** | **247** | Pg | **Pg** | **03 04 50.1** | **-1.4** |
| | 1.2nm,0.5s | | | | | | |
| PDGK | | | | Lg | Lg | 03 05 35.4 | |
| | 3.4nm,0.3s | | | | | | |
| **UZB** | **Uzunbulak** | **3.81** | **246** | *e*P | **Pg** | **03 04 57.1** | **-1.9** |
| | 4.1nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sg** | **03 05 47.3** | **-1.0** |
| | 3.7nm,0.2s | | | | | | |
| **UZB** | **Uzunbulak** | **3.81** | **246** | Pg | **Pg** | **03 04 57.1** | **-1.9** |
| | 4.1nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 03 05 47.3 | |
| | 3.7nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **3.87** | **262** | *e*P | **Pg** | **03 04 59.9** | **-0.2** |
| | 6.9nm,0.3s | | | | | | |
| BLB | | | | *e*S | **Sg** | **03 05 52.9** | **+2.8** |
| | 13nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **3.87** | **262** | Pg | **Pg** | **03 04 59.9** | **-0.2** |
| | 6.9nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 03 05 52.9 | |
| | 13nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **3.90** | **252** | *e*P | **Pg** | **03 05 00.3** | **-0.5** |
| | 2.5nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **03 05 53.1** | **+1.7** |
| | 15nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **4.25** | **254** | *e*P | **Pg** | **03 05 06.0** | **-1.4** |
| | 1.5nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sg** | **03 06 02.7** | **+0.3** |
| | 2.7nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **4.25** | **254** | Pg | **Pg** | **03 05 06.0** | **-1.4** |
| | 1.5nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 03 06 02.7 | |
| | 2.7nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.06** | **255** | *e*P | **Pg** | **03 05 22.6** | **-0.3** |
| | 1.8nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **03 06 31.4** | **+3.0** |
| | 6.7nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.06** | **255** | Pg | **Pg** | **03 05 22.6** | **-0.3** |
| | 1.8nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 03 06 31.4 | |
| | 6.7nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.22** | **261** | *e*P | **Pg** | **03 05 23.2** | **-2.7** |
| | 0.7nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **03 06 32.9** | **-0.6** |
| | 3.2nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.22** | **261** | Pg | **Pg** | **03 05 23.2** | **-2.7** |
| | 0.7nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 03 06 32.9 | |
| | 3.2nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **5.42** | **263** | *e*P | **Pg** | **03 05 26.3** | **-3.5** |
| | 0.9nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sg** | **03 06 37.5** | **-2.5** |
| | 2.6nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **5.42** | **263** | Pg | **Pg** | **03 05 26.3** | **-3.5** |
| | 0.9nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 03 06 37.5 | |
| | 2.6nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **5.47** | **254** | *e*P | **Pg** | **03 05 30.0** | **-0.8** |
| | 1.4nm,0.3s | | | | | | |
| IZV | | | | *e*S | **Sg** | **03 06 44.8** | **+3.2** |
| | 3.9nm,0.3s | | | | | | |
| **IZV** | **Izvestkoviy** | **5.47** | **254** | Pg | **Pg** | **03 05 30.0** | **-0.8** |
| | 1.4nm,0.3s | | | | | | |
| IZV | | | | Lg | Lg | 03 06 44.8 | |
| | 3.9nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **5.56** | **255** | *e*P | **Pg** | **03 05 30.8** | **-1.8** |
| | 1.2nm,0.4s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **03 06 45.4** | **+0.8** |
| | 3.6nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **5.56** | **255** | Pg | **Pg** | **03 05 30.7** | **-1.8** |
| | 1.2nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 03 06 45.4 | |
| | 3.6nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **5.93** | **262** | *e*P | **Pg** | **03 05 36.3** | **-3.3** |
| | 0.7nm,0.1s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **03 06 54.7** | **-1.7** |
| | 1.6nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **5.93** | **262** | Pg | **Pg** | **03 05 36.3** | **-3.3** |
| | 0.7nm,0.1s | | | | | | |
| KRBS | | | | Lg | Lg | 03 06 54.7 | |
| | 1.6nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **5.98** | **258** | *e*P | **Pg** | **03 05 36.9** | **-3.7** |
| | 1.4nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **03 06 56.1** | **-2.0** |
| | 8.7nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **5.98** | **258** | Pg | **Pg** | **03 05 36.9** | **-3.7** |
| | 1.4nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 03 06 56.1 | |
| | 8.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.85** | **331** | ⇑Lg | Lg | 03 07 22.9 | |
| | 4.7nm,0.6s | | | | | | |

**IDC 13 03:12:43.8±3.1, 33°.62N × 76°.06E, h0km, mb3.3/2, mb1 3.5/4, mb1mx3.2/48, mbtmp3.4/4, ML3.2/2, Error ellipse: s-maj=81.9km s-min=51.5km az=134.0, Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **13.99** | **18** | Pn | Pn | 03 16 02.6 | -0.7 |
| | 0.0nm,0.3s,baz=197,slow=13,SNR=2.5 | | | | | | |
| **GEYT** | **Alibeck** | **15.19** | **292** | Pn | Pn | 03 16 19.2 | -0.4 |
| | 0.4nm,0.3s,baz=183,slow=13,SNR=2.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.26** | **14** | P | P | 03 17 32.2 | +0.8 |
| | 0.3nm,0.4s,baz=178,slow=17,SNR=1.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.84** | **5** | P | P | 03 25 14.9 | 0.0 |
| | 0.2nm,0.6s,baz=342,slow=4.8,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **117.39** | **360** | PKP | PKPdf | 03 31 31.6 | -0.2 |
| | 0.2nm,0.7s,baz=5.7,slow=0.9,SNR=2.3 | | | | | | |

*DJA **13** 03:31:28.9±0.4, 3°.N±3°.× 12°.7E±°, h10km, M4.0/10, mb4.2/2, ML3.9/10*

*IDC **13** 03:31:30.0±0.8, 3°.61N × 126°.52E, h0km, mb3.8/10, mb1 3.9/11, mb1mx3.8/47, mbtmp3.9/11, ML4.0/1, Error ellipse: s-maj=45.2km s-min=15.5km az=74.0*

*NEIC **13** 03:31:34.8±1.5, 3°.59N±0°.09 × 126°.56E±0°.06, h29km±7km, mb4.0/11, Error ellipse: s-maj=13.1km s-min=8.5km az=179.0*

**ISC 13 03:31:36.6±0.6, 3°.41N±0°.06 × 126°.57E±0°.08, h53km, n32, σ1s76/29, mb4.0/15, 1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGSI** | **Sangihe** | **1.08** | **285** | P | **Pn** | **03 31 57.1** | **+1.6** |
| SGSI | | | | S | **Sn** | **03 32 13.0** | **+3.5** |
| **TNTI** | **Ternate** | **2.73** | **163** | Pn | **Pn** | **03 32 18.0** | **-0.1** |
| **TNTI** | **Ternate** | **2.73** | **163** | P | Pn | 03 32 11.6 | -6.5 |
| **KMSI** | **Cibinong** | **3.82** | **223** | P | **Pn** | **03 32 31.5** | **-1.5** |
| **KCP** | **Kidapawan** | **3.87** | **338** | *i*P | **Pn** | **03 32 34.3** | **+0.6** |
| KCP | | | | *i*S | **Sn** | **03 33 20.8** | **+2.7** |
| **LBMI** | **Labuha** | **4.12** | **167** | P | Pn | 03 32 30.9 | -6.2 |
| **GTOI** | **Gorontalo** | **4.50** | **232** | P | **Pn** | **03 32 42.1** | **-0.2** |
| **SANI** | **Sanana** | **5.45** | **186** | P | Pn | 03 32 50.6 | -4.8 |
| **MRSI** | **Marisa** | **5.47** | **238** | P | **Pn** | **03 32 53.5** | **-2.1** |
| | 0.1nm23nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **6.22** | **249** | Pn | **Pn** | **03 33 04.0** | **-1.9** |
| **SIJI** | **Sorong** | **6.33** | **132** | Pn | **Pn** | **03 33 07.2** | **-0.2** |
| | 3.4nm,0.3s,baz=324,slow=19,SNR=4.8 | | | | | | |
| **APSI** | **Ampana** | **6.53** | **229** | P | **Pn** | **03 33 09.0** | **-1.1** |
| **KNRA** | **Kununurra** | **19.08** | **174** | P | **P** | **03 35 55.9** | **+0.9** |
| KNRA | | | | IAmb | IAmb | 03 36 00.9 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.39** | **182** | P | **P** | **03 36 23.1** | **+3.1** |
| | comp=Z,2.6nm,1.0s,baz=339,slow=14,SNR=2.0 | | | | | | |
| **WB0** | **Warramunga Arr** | **24.28** | **162** | P | **P** | **03 36 50.7** | **+1.6** |
| WB0 | | | | IAmb | IAmb | 03 37 01.0 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.42** | **162** | P | **P** | **03 36 50.8** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=342,slow=12,SNR=9.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **24.43** | **162** | P | **P** | **03 36 51.6** | **+1.1** |
| WB2 | | | | IAmb | IAmb | 03 37 05.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **27.84** | **165** | P | **P** | **03 37 23.2** | **+1.9** |
| AS31 | | | | IAmb | IAmb | 03 37 37.7 | |
| | comp=Z,1.7nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **27.84** | **165** | P | **P** | **03 37 23.6** | **+2.3** |
| | comp=Z,0.3nm,0.5s,baz=332,slow=11,SNR=5.0 | | | | | | |
| **KSRS** | **Korea Array** | **33.91** | **2** | P | **P** | **03 38 13.6** | **-1.0** |
| | comp=Z,1.3nm,0.7s,baz=193,slow=10,SNR=4.7 | | | | | | |
| **BJT** | **Baijiatuan** | **37.65** | **347** | P | **P** | **03 38 43.5** | **-3.1** |
| **STKA** | **Stephens Creek** | **37.88** | **159** | P | **P** | **03 38 51.3** | **+2.6** |
| | comp=Z,0.9nm,0.3s,baz=7.8,slow=14,SNR=3.0 | | | | | | |
| **STKA** | **Stephens Creek** | **37.88** | **159** | IAmb | IAmb | 03 38 56.3 | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **39.94** | **307** | P | **P** | **03 39 05.0** | **-1.3** |
| SHL | | | | IAmb | IAmb | 03 39 06.4 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **47.55** | **342** | P | **P** | **03 40 06.0** | **-1.1** |
| | comp=Z,0.2nm,0.4s,baz=142,slow=5.2,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **47.55** | **342** | IAmb | IAmb | 03 40 17.5 | |
| | comp=Z,1.3nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.79** | **22** | P | **P** | **03 41 07.3** | **-0.9** |
| | comp=Z,4.4nm,1.0s,baz=180,slow=3.0,SNR=5.4 | | | | | | |
| **MK31** | **Makanchi Array** | **57.73** | **325** | P | **P** | **03 41 21.6** | **-0.5** |
| MK31 | | | | IAmb | IAmb | 03 41 32.4 | |
| | comp=Z,2.4nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.73** | **325** | P | **P** | **03 41 20.9** | **-1.3** |
| | comp=Z,1.1nm,0.7s,baz=122,slow=6.8,SNR=15 | | | | | | |
| **KURK** | **Kurchatov** | **61.93** | **328** | P | **P** | **03 41 50.2** | **-0.6** |
| **BRTR** | **Keskin Array B** | **90.11** | **310** | P | **P** | **03 44 31.4** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=139,slow=7.3,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **92.04** | **332** | P | **P** | **03 44 39.8** | **+0.1** |
| | comp=Z,3.5nm,0.9s,baz=117,slow=24,SNR=1.4 | | | | | | |

**IDC 13 03:37:22.1±2.3, 6.73S × 129°.96E, h0km, mb3.6/1, mb1 3.4/4, mb1mx3.3/32, mbtmp3.3/4, ML3.2/3, Error ellipse: s-maj=91.0km s-min=29.1km az=78.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **12.06** | **200** | Pn | Pn | 03 40 15.8 | +0.5 |
| | 0.2nm,0.3s,baz=27,slow=10,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.81** | **162** | Pn | Pn | 03 40 39.3 | 0.0 |
| | 0.1nm,0.3s,baz=341,slow=11,SNR=1.7 | | | | | | |
| WRA | | | | Sn | Sn | 03 43 01.9 | -12 |
| | 0.2nm,0.3s,baz=330,slow=23,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **17.27** | **168** | Pn | Pn | 03 41 24.2 | -0.6 |
| | 0.0nm,0.3s,baz=344,slow=9.6,SNR=1.5 | | | | | | |
| ASAR | | | | Sn | Sn | 03 44 23.9 | -14 |
| | 0.0nm,0.3s,baz=358,slow=29,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.97** | **327** | P | P | 03 48 23.0 | 0.0 |
| | 0.2nm,0.4s,baz=117,slow=7.5,SNR=6.2 | | | | | | |

*IDC **13** 03:39:39.0±1.2, 26°.92S × 177°.59W, h0km, mb3.5/4, mb1 3.9/5, mb1mx3.6/35, mbtmp3.6/5, ML4.4/1, Error ellipse: s-maj=36.4km s-min=26.9km az=122.0*

**ISC 13 03:39:40.3±1.1, 26°.96S±0°.10 × 177°.6W±0°.2, h10km, n6, σ0s82/7, mb3.4/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.30** | **187** | Pn | **Pn** | **03 40 17.7** | **-0.6** |
| | 97nm,0.3s,baz=98,slow=19,SNR=2.5 | | | | | | |
| RAO | | | | Sn | **Sb** | **03 40 51.0** | **+0.6** |
| | 65nm,0.3s,baz=61,slow=22,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.76** | **263** | P | **P** | **03 47 46.0** | **-0.3** |
| | 0.4nm,0.9s,baz=102,slow=6.7,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.44** | **268** | P | **P** | **03 47 51.6** | **-0.2** |
| | 0.8nm,0.9s,baz=103,slow=7.2,SNR=5.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.48** | **43** | P | **P** | **03 52 18.7** | **0.0** |
| | 0.4nm,0.8s,baz=212,slow=5.3,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.23** | **57** | P | **P** | **03 52 41.2** | **-0.3** |
| | 0.1nm,0.6s,baz=242,slow=3.9,SNR=1.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.12** | **304** | PKPbc | **PKiKP** | **03 59 35.9** | **+1.3** |
| | 0.4nm,0.8s,baz=70,slow=4.7,SNR=2.5 | | | | | | |

*IDC **13** 03:44:43.5±1.1, 11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **15.47 276** | Pn | | **Pn** | **03 48 22.1** | **-1.2** |
| | 0.8nm,0.3s,baz=169,slow=14,SNR=2.0 | | | | | | |
| PMG | | | LR | | LR | 03 53 36.1 | |
| | comp=Z,2μm,21.0s,baz=120,slow=35 | | | | | | |
| **MSVF** | **Nonsavu** | **16.10 115** | LR | | LR | 03 54 07.2 | |
| | comp=Z,974nm,18.2s,baz=308,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **18.12 239** | P | | **P** | **03 48 56.7** | **0.0** |
| | 0.2nm,0.3s,baz=66,slow=14,SNR=8.5 | | | | | | |
| CTA | | | LR | | LR | 03 55 21.9 | |
| | comp=Z,1μm,19.0s,baz=62,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **18.12 239** | P | | **P** | **03 48 57.6** | **+0.9** |
| **COEN** | **Coen** | **19.30 260** | P | | **Pn** | **03 49 10.7** | **-0.2** |
| COEN | | | IAmb | | IAmb | 03 49 15.0 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **JAY** | **Jayapura** | **23.56 290** | LR | | LR | 03 59 05.5 | |
| | comp=Z,538nm,21.6s,baz=360,slow=37 | | | | | | |
| **AFI** | **Afiamalu** | **24.97 99** | LR | | LR | 03 57 57.3 | |
| | comp=Z,1μm,20.3s,baz=280,slow=32 | | | | | | |
| **RAO** | **Raoul Island** | **25.36 138** | LR | | LR | 03 58 30.9 | |
| | comp=Z,1μm,19.0s,baz=76,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **28.29 220** | P | | **P** | **03 50 39.1** | **+1.3** |
| | comp=Z,1.2nm,0.3s,baz=91,slow=17,SNR=1.7 | | | | | | |
| STKA | | | LR | | LR | 04 01 22.5 | |
| | comp=Z,2μm,18.1s,baz=35,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **28.29 220** | IAmb | | IAmb | 03 50 46.9 | |
| | comp=Z,2.7nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **28.56 249** | P | | **P** | **03 50 39.9** | **-0.6** |
| WB0 | | | IAmb | | IAmb | 03 50 54.0 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.65 249** | P | | **P** | **03 50 40.2** | **-1.1** |
| | comp=Z,0.7nm,0.6s,baz=70,slow=9.8,SNR=5.7 | | | | | | |
| WRA | | | LR | | LR | 04 01 15.5 | |
| | comp=Z,1μm,19.0s,baz=68,slow=35 | | | | | | |
| **URZ** | **Urewera** | **29.74 157** | LR | | LR | 04 01 35.2 | |
| | comp=Z,593nm,18.5s,baz=338,slow=34 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.87 8** | T | | T | 04 22 45.2 | |
| | baz=188,slow=76,SNR=10 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.88 7** | T | | T | 04 22 45.2 | |
| | baz=188,slow=76,SNR=76 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.89 8** | T | | T | 04 22 46.5 | |
| | baz=188,slow=66,SNR=66 | | | | | | |
| **ASAR** | **Alice Springs** | **30.07 242** | P | | **P** | **03 50 52.2** | **-1.6** |
| | comp=Z,1.0nm,0.6s,baz=66,slow=10.0,SNR=11 | | | | | | |
| ASAR | | | LR | | LR | 04 02 36.9 | |
| | comp=Z,1μm,19.1s,baz=72,slow=36 | | | | | | |
| **GUMO** | **Guam** | **30.46 324** | LR | | LR | 04 02 14.4 | |
| | comp=Z,1μm,21.5s,baz=126,slow=35 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.10 8** | T | | T | 04 24 17.5 | |
| | baz=188,slow=76,SNR=39 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.11 8** | T | | T | 04 24 18.0 | |
| | baz=188,slow=76,SNR=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.12 8** | T | | T | 04 24 17.8 | |
| | baz=188,slow=76,SNR=30 | | | | | | |
| **SIJI** | **Sorong** | **32.95 286** | LR | | LR | 04 04 53.8 | |
| | comp=Z,683nm,21.1s,baz=96,slow=37 | | | | | | |
| **RPZ** | **Rata Peaks** | **33.06 169** | LR | | LR | 04 02 59.6 | |
| | comp=Z,755nm,19.1s,baz=342,slow=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **36.49 255** | P | | **P** | **03 51 48.7** | **-1.0** |
| | comp=Z,2.3nm,0.8s,baz=69,slow=9.2,SNR=2.7 | | | | | | |
| FITZ | | | LR | | LR | 04 06 52.7 | |
| | comp=Z,800nm,18.4s,baz=80,slow=37 | | | | | | |
| **RAR** | **Rarotonga** | **37.20 110** | LR | | LR | 04 05 41.4 | |
| | comp=Z,172nm,18.4s,baz=264,slow=34 | | | | | | |
| **BATI** | **Baumata** | **38.41 268** | LR | | LR | 04 07 55.2 | |
| | comp=Z,533nm,21.7s,baz=111,slow=36 | | | | | | |
| **DAV** | **Davao City (W)** | **41.27 295** | LR | | LR | 04 10 06.3 | |
| | comp=Z,279nm,18.0s,baz=156,slow=37 | | | | | | |
| **PPT** | **Papeete** | **46.47 103** | LR | | LR | 04 08 48.5 | |
| | comp=Z,214nm,18.5s,baz=266,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **46.47 104** | *e*S | | **S** | **03 59 49.2** | **-8.7** |
| | comp=Z,128nm,26.8s | | | | | | |
| PPT2 | | | *e*LR | | LR | 04 06 22.8 | |
| | comp=Z,917nm,32.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.93 335** | LR | | LR | 04 14 43.2 | |
| | comp=Z,389nm,22.0s,baz=150,slow=34 | | | | | | |
| **LEM** | **Lembang** | **54.58 270** | LR | | LR | 04 19 36.9 | |
| | comp=Z,158nm,18.5s,baz=9.0,slow=38 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **56.18 93** | *e*LR | | LR | 04 10 51.0 | |
| | comp=Z,310nm,24.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **58.14 343** | LR | | LR | 04 19 06.6 | |
| | comp=Z,114nm,20.0s,baz=170,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **58.50 328** | P | | **P** | **03 54 41.3** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=128,slow=7.9,SNR=1.8 | | | | | | |
| KSRS | | | LR | | LR | 04 17 48.5 | |
| | comp=Z,254nm,19.8s,baz=125,slow=34 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **61.93 335** | P | | **P** | **03 55 04.7** | **+1.0** |
| **USRK** | **Ussuriysk Ar.** | **61.93 335** | P | | **P** | **03 55 05.1** | **+1.4** |
| | comp=Z,0.9nm,0.5s,baz=145,slow=5.3,SNR=3.7 | | | | | | |
| USRK | | | LR | | LR | 04 19 43.2 | |
| | comp=Z,213nm,20.9s,baz=131,slow=34 | | | | | | |
| **PETK** | **Petropavlovsk-** | **64.32 357** | LR | | LR | 04 18 19.7 | |
| | comp=Z,183nm,21.5s,baz=181,slow=31 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **64.51 8** | LR | | LR | 04 17 55.9 | |
| | comp=Z,270nm,21.4s,baz=221,slow=31 | | | | | | |
| **PSI** | **Prapat** | **65.02 278** | LR | | LR | 04 24 50.2 | |
| | comp=Z,93nm,21.8s,baz=114,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **66.19 338** | LR | | LR | 04 22 31.1 | |
| | comp=Z,167nm,20.8s,baz=177,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.56 295** | LR | | LR | 04 23 47.6 | |
| | comp=Z,36nm,21.6s,baz=110,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.56 295** | P | | **P** | **03 55 52.8** | **-0.7** |
| **CHTO** | **Chiang Mai** | **69.68 295** | P | | **P** | **03 55 54.0** | **-0.2** |
| CHTO | | | IAmb | | IAmb | 03 55 57.2 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **HIA** | **Hailar** | **71.20 332** | P | | **P** | **03 56 05.0** | **+2.1** |
| HIA | | | IAmb | | IAmb | 03 56 06.4 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **74.46 355** | LR | | LR | 04 22 50.4 | |
| | comp=Z,141nm,21.3s,baz=178,slow=31 | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.83 325** | P | | **P** | **03 56 37.3** | **+1.3** |
| **SONM** | **Songino Array** | **77.18 325** | P | | **P** | **03 56 38.3** | **+0.4** |
| | comp=Z,2.0nm,1.0s,baz=137,slow=4.8,SNR=9.4 | | | | | | |
| SONM | | | LR | | LR | 04 30 03.0 | |
| | comp=Z,74nm,18.9s,baz=117,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **77.18 325** | IAmb | | IAmb | 03 56 41.7 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **YAK** | **Yakutsk** | **77.56 345** | LR | | LR | 04 29 37.4 | |
| | comp=Z,121nm,20.9s,baz=108,slow=35 | | | | | | |
| **SHL** | **Shillong** | **78.09 299** | P | | **P** | **03 56 42.9** | **-0.7** |
| **BILL** | **Bilibino** | **79.19 1** | P | | **P** | **03 56 49.8** | **+1.3** |
| BILL | | | IAmb | | IAmb | 03 57 01.1 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **RPN** | **Rapa Nui** | **83.08 116** | LR | | LR | 04 26 16.8 | |
| | comp=Z,115nm,21.8s,baz=270,slow=30 | | | | | | |
| **MAW** | **Mawson** | **83.37 202** | LR | | LR | 04 30 23.5 | |
| | comp=Z,166nm,19.8s,baz=74,slow=33 | | | | | | |
| **PALK** | **Pallekele** | **83.70 279** | LR | | LR | 04 39 46.0 | |
| | comp=Z,58nm,18.0s,baz=220,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **84.72 19** | P | | **P** | **03 57 18.4** | **+0.8** |
| | comp=Z,0.7nm,0.8s,baz=232,slow=3.9,SNR=3.1 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **86.18 46** | LR | | LR | 04 31 30.0 | |
| | comp=Z,192nm,18.0s,baz=241,slow=32 | | | | | | |
| **BBB** | **Bella Bella** | **86.47 35** | LR | | LR | 04 26 53.5 | |
| | comp=Z,101nm,21.5s,baz=250,slow=29 | | | | | | |
| **DLBC** | **Dease Lake** | **88.05 29** | LR | | LR | 04 30 01.1 | |
| | comp=Z,259nm,20.2s,baz=315,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.44 50** | P | | **P** | **03 57 40.1** | **+3.3** |
| | comp=Z,0.4nm,0.7s,baz=249,slow=7.8,SNR=4.1 | | | | | | |
| **PFO** | **Pinyon Flats O** | **88.64 55** | LR | | LR | 04 30 27.4 | |
| | comp=Z,217nm,19.8s,baz=265,slow=31 | | | | | | |
| **INK** | **Inuvik** | **91.12 19** | LR | | LR | 04 32 04.2 | |
| | comp=Z,249nm,20.7s,baz=222,slow=31 | | | | | | |
| **MK31** | **Makanchi Array** | **91.73 317** | P | | **P** | **03 57 51.9** | **+0.3** |
| **MKAR** | **Makanchi Array** | **91.73 317** | P | | **P** | **03 57 50.3** | **-1.3** |
| | comp=Z,0.1nm,0.5s,baz=92,slow=4.5,SNR=4.9 | | | | | | |
| MKAR | | | LR | | LR | 04 39 16.4 | |
| | comp=Z,93nm,20.5s,baz=82,slow=36 | | | | | | |
| **LPIG** | **La Paz** | **91.78 66** | LR | | LR | 04 34 21.5 | |
| | comp=Z,111nm,18.2s,baz=311,slow=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **92.08 325** | P | | **P** | **03 57 52.0** | **-1.0** |
| | comp=Z,0.4nm,0.5s,baz=108,slow=9.3,SNR=2.1 | | | | | | |
| ZALV | | | LR | | LR | 04 39 26.9 | |
| | comp=Z,39nm,21.1s,baz=102,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **95.03 320** | LR | | LR | 04 38 36.1 | |
| | comp=Z,90nm,21.8s,baz=59,slow=34 | | | | | | |
| **NRIK** | **Noril'sk** | **95.36 340** | LR | | LR | 04 41 14.8 | |
| | comp=Z,133nm,21.1s,baz=103,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **95.89 48** | LR | | LR | 04 36 35.3 | |
| | comp=Z,100nm,19.2s,baz=236,slow=32 | | | | | | |
| **AAK** | **Ala-Archa** | **96.30 312** | LR | | LR | 04 42 57.2 | |
| | comp=Z,75nm,19.9s,baz=68,slow=36 | | | | | | |
| **PMSA** | **Palmer Station** | **96.40 162** | LR | | LR | 04 38 59.1 | |
| | comp=Z,192nm,18.4s,baz=220,slow=34 | | | | | | |
| **SNAA** | **Sanae** | **96.64 185** | LR | | LR | 04 42 39.4 | |
| | comp=Z,172nm,18.7s,baz=354,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **97.01 56** | LR | | LR | 04 36 46.1 | |
| | comp=Z,126nm,19.0s,baz=260,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **98.53 62** | LR | | LR | 04 36 23.3 | |

comp=Z,97nm,19.1s,baz=266,slow=31

*MOS* ***13*** *03:46:42.9±1.3, 16°.76S×70°.67W, h85km, mb5.5/37, Error ellipse: s-maj=10.2km s-min=6.3km az=99.2*
*NEIC* ***13*** *03:46:45.8±2.4, 16°.92S±0°.04×70°.81W±0°.08, h105km±4km, mb5.1/317, Mww5.0, ML5.3(ARE), Error ellipse: s-maj=11.2km s-min=6.1km az=94.0*
*ARE* ***13*** *03:46:45±3.5, 17°.11S±0°.06×71°.02W±0°.07, h121km±3km, Error ellipse: s-maj=0.0km s-min=0.0km az=139.0*
*IDC* ***13*** *03:46:46.7±0.4, 16°.85S×70°.72W, h107km±2km, mb4.6/20, mb1 4.7/25, mb1mx4.7/31, mbtmp5.0/25, MS4.0/9, Ms1 4.0/9, ms1mx3.5/59, Error ellipse: s-maj=12.9km s-min=10.0km az=60.0*
*GCMT* ***13*** *03:46:47.8±0.3, 16°.91S±0°.02×71°.02W±0°.02, h129km±2km, MW5.1/105, Moment Tensor Solution. s50,c53; s105,c140; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-1.18±.16; Mθθ 0.95±.17; Mϕϕ 0.23±.20; Mrθ 1.35±.10; Mθϕ-3.58±.18; Mϕr-4.40±.12; Best double couple: M=5.84800×10^16 NP1:ϕs88.00000°,δ35.00000°, λ-167.00000°. NP2:ϕs348.00000°,δ83.00000°, λ-55.00000°. Principal axes: T 6.4200, Plg29.0000°, Azm50.0000°; N -1.1400, Plg34.0000°, Azm163.0000°; P -5.2750, Plg42.0000°, Azm290.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*VAO* ***13*** *03:46:47.3±0.3, 16°.90S×70°.68W, h114km, mb5.3*
*NEIC* ***13*** *03:46:49, 17°.01S×70°.91W, h110km, Moment Tensor Solution. Duration: 8s0 Moment tensor: Scale 10^16Nm; Mrr-1.40; Mθθ-0.01; Mϕϕ 1.41; Mrθ 1.24; Mθϕ-2.18; Mϕr-3.46; Fault plane solution: M=4.50000×10^16 NP1: ϕs108.00000°,δ22.00000°,λ-143.00000°. NP2: ϕs344.00000°,δ77.00000°,λ-71.00000°. Principal axes: T 4.9945, Plg29.0000°, Azm59.0000°; N -1.2526, Plg18.0000°, Azm160.0000°; P -3.7419, Plg55.0000°, Azm277.0000°;*

**ISC 13 03:46:45.7±0.3, 16°.93S±0°.04×70°.84W±0°.05, h105km±2km, h106km:pP-P, n628, σ1948/540, mb5.2/219, 14C, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **AP01** | **Chacalluta** | **1.51** | **162** | | | **Pn** | **03 47 13.3** | **+0.9** |
| **AP01** | **Chacalluta** | **1.51** | **162** | ↑ *i*P | | **Pn** | **03 47 13.2** | **+0.9** |
| AP01 | | | | *i* S | | **Sn** | **03 47 32.9** | **+0.4** |
| AP01 | | | | IAML | | | 03 47 35.9 | |
| | comp=E,67μm,0.5s | | | | | | | |
| **PB12** | **IPOC Station P** | **1.74** | **164** | | | **Pn** | **03 47 15.8** | **+0.4** |
| **PB12** | **IPOC Station P** | **1.74** | **164** | ↑ *i*P | | **Pn** | **03 47 15.7** | **+0.4** |
| PB12 | | | | *i* S | | **Sn** | **03 47 37.0** | **-0.9** |
| PB12 | | | | IAML | | | 03 47 39.5 | |
| | comp=E,24μm,0.3s | | | | | | | |
| **PB16** | **IPOC Station P** | **1.89** | **138** | | | **Pn** | **03 47 18.9** | **+1.3** |
| **I08BO** | **LAS PENAS INFR** | **2.40** | **73** | P | | Pn | 03 47 28.8 | +4.6 |
| | baz=264,slow=11,SNR=8.7 | | | | | | | |
| **LPAZ** | **La Paz** | **2.68** | **77** | P | | **Pn** | **03 47 31.6** | **+3.7** |
| | comp=E,362nm,0.3s,baz=256,slow=8.7,SNR=9424 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **03 48 05.2** | **+5.0** |
| | comp=E,94nm,0.3s,baz=163,slow=25,SNR=9.0 | | | | | | | |
| **LPAZ** | **La Paz** | **2.68** | **77** | Pn | | **Pn** | **03 47 31.7** | **+3.8** |
| **PB11** | **IPOC Station P** | **3.03** | **158** | | | **Pn** | **03 47 31.8** | **-0.3** |
| **PB11** | **IPOC Station P** | **3.03** | **158** | ↑ *e*P | | **Pn** | **03 47 31.8** | **-0.3** |
| **GO01** | **Chusmiza** | **3.14** | **150** | | | **Pn** | **03 47 35.6** | **+1.7** |
| **GO01** | **Chusmiza** | **3.14** | **150** | ↑ *i*P | | **Pn** | **03 47 35.7** | **+1.8** |
| **TA02** | **Huaiquique** | **3.39** | **169** | | | **Pn** | **03 47 36.3** | **-0.5** |
| **HMBC** | **Humberstone** | **3.45** | **165** | ↑ *i*P | | **Pn** | **03 47 36.8** | **-0.9** |
| **PB08** | **IPOC Station P** | **3.57** | **154** | | | **Pn** | **03 47 40.5** | **+0.9** |
| **PB08** | **IPOC Station P** | **3.57** | **154** | *i* P | | **Pn** | **03 47 40.4** | **+0.9** |
| **TA01** | **Diego Aracena** | **3.67** | **170** | Pn | | **Pn** | **03 47 40.0** | **-0.6** |
| **TA01** | **Diego Aracena** | **3.67** | **170** | ↑ *i*P | | **Pn** | **03 47 39.9** | **-0.6** |
| **PATCX** | **Punta Patache** | **3.92** | **171** | Pn | | **Pn** | **03 47 43.3** | **-0.7** |
| **PB01** | **IPOC Station P** | **4.28** | **163** | | | **Pn** | **03 47 48.1** | **-0.8** |
| **PB02** | **IPOC Station P** | **4.45** | **169** | | | **Pn** | **03 47 50.5** | **-0.7** |
| **PB07** | **IPOC Station P** | **4.85** | **169** | | | **Pn** | **03 47 56.0** | **-0.7** |
| **PB09** | **IPOC Station P** | **5.07** | **163** | | | **Pn** | **03 47 59.5** | **0.0** |
| **PB03** | **IPOC Station P** | **5.19** | **169** | | | **Pn** | **03 48 00.3** | **-0.9** |
| **PB04** | **IPOC Station P** | **5.41** | **173** | | | **Pn** | **03 48 02.3** | **-1.9** |
| **PB06** | **IPOC Station P** | **5.87** | **168** | | | **Pn** | **03 48 08.8** | **-1.5** |
| **LVC** | **Limon Verde** | **5.93** | **162** | P | | **Pn** | **03 48 11.4** | **0.0** |
| | comp=E,15nm,0.3s,baz=17,slow=7.7,SNR=214 | | | | | | | |
| LVC | | | | S | | **Sn** | **03 49 16.6** | **-1.7** |
| | comp=E,28nm,0.3s,baz=211,slow=23,SNR=8.5 | | | | | | | |
| **LVC** | **Limon Verde** | **5.93** | **162** | *e*P | | **Pn** | **03 48 11.6** | **+0.2** |
| **PB10** | **IPOC Station P** | **6.55** | **178** | Pn | | **Pn** | **03 48 17.2** | **-2.3** |
| **NNA** | **Nana** | **7.61** | **309** | P | | **Pn** | **03 48 33.6** | **-0.3** |
| | comp=E,8.9nm,0.3s,baz=147,slow=9.2,SNR=17 | | | | | | | |
| NNA | | | | S | | **Sn** | **03 49 53.7** | **-5.0** |
| | comp=E,7.9nm,0.3s,baz=203,slow=18,SNR=1.4 | | | | | | | |
| **NNA** | **Nana** | **7.61** | **309** | *c*e*P* | | **Pn** | **03 48 33.7** | **-0.3** |
| NNA | | | | pmax | | pmax | | |
| | comp=Z,136nm,1.0s | | | | | | | |
| **NNA** | **Nana** | **7.61** | **309** | Pn | | **Pn** | **03 48 32.9** | **-1.1** |
| **ETMB** | **Extrema** | **8.38** | **33** | *e*P | | **Pn** | **03 48 44.6** | **+0.1** |
| **CZSB** | **Cruzeiro do Su** | **9.33** | **349** | *e*P | | **Pn** | **03 48 57.6** | **+0.4** |
| **SIV** | **San Ignacio** | **9.42** | **86** | P | | **Pn** | **03 48 57.1** | **-1.5** |
| | comp=E,26nm,0.3s,baz=270,slow=11,SNR=348 | | | | | | | |
| SIV | | | | LR | | LR | 03 53 35.4 | |
| | comp=Z,902nm,18.5s,baz=282,slow=44 | | | | | | | |
| **GO03** | **Copiap** | **10.62** | **177** | Pn | | **Pn** | **03 49 13.4** | **-1.5** |
| **VILB** | **Vilhena** | **11.02** | **70** | *e*P | | **Pn** | **03 49 18.4** | **-1.8** |
| **PTLB** | **Pontes e Lacer** | **11.34** | **84** | *e*P | | **Pn** | **03 49 22.6** | **-1.9** |
| **LCO** | **Las Campanas** | **12.02** | **179** | *e*P | | **Pn** | **03 49 33.9** | **+0.1** |
| **ATAH** | **Atahualpa** | **12.22** | **322** | P | | **Pn** | **03 49 37.9** | **+1.3** |
| | comp=Z,0.4nm,0.3s,baz=147,slow=18,SNR=4.2 | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **12.70** | **4** | *e*P | | **Pn** | **03 49 42.4** | **-0.1** |
| **GO04** | **Tololo Observa** | **13.18** | **180** | Pn | | **Pn** | **03 49 46.8** | **-2.2** |
| **SALV** | **Santo Antonio** | **14.57** | **88** | *e*P | | **Pn** | **03 50 04.4** | **-2.4** |
| **AQDB** | **Aquidauana** | **14.77** | **106** | Pn | | **Pn** | **03 50 07.3** | **-2.0** |
| **AQDB** | **Aquidauana** | **14.77** | **106** | *e*P | | **Pn** | **03 50 07.7** | **-1.7** |
| **PP1B** | **Ponte de Pedra** | **15.26** | **95** | *e*P | | **Pn** | **03 50 13.4** | **-2.2** |
| **CPUP** | **Villa Florida** | **15.65** | **129** | P | | **Pn** | **03 50 17.9** | **-2.5** |
| | comp=Z,0.5nm,0.3s,baz=315,slow=12,SNR=13 | | | | | | | |
| **CPUP** | **Villa Florida** | **15.65** | **129** | P | | **Pn** | **03 50 18.1** | **-2.3** |
| CPUP | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **CPUP** | **Villa Florida** | **15.65** | **129** | Pn | | **Pn** | **03 50 18.1** | **-2.3** |
| **CPUP** | **Villa Florida** | **15.65** | **129** | *e*P | | **Pn** | **03 50 18.6** | **-1.7** |
| **CLDB** | **Colider** | **15.79** | **70** | *e*P | | **Pn** | **03 50 21.7** | **-0.6** |
| **VA01** | **Torpederas** | **16.04** | **182** | | | **P** | **03 50 25.9** | **-0.5** |
| VA01 | | | | IAmb | | IAmb | 03 50 29.6 | |
| | comp=Z,95nm,1.4s | | | | | | | |
| **PEL** | **Peldehue** | **16.14** | **180** | P | | **P** | **03 50 27.7** | **0.0** |
| PEL | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | | |
| **LMEL** | **Las Melosas** | **16.85** | **178** | IAmb | | IAmb | 03 50 59.4 | |
| | comp=Z,51nm,0.9s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **16.94** | **37** | *e*P | | **Pn** | **03 50 35.6** | **-0.7** |
| **H03N1** | **Juan Fernandez** | **17.97** | **202** | P | | **Pn** | **03 50 53.8** | **+5.4** |
| | baz=108,slow=14,SNR=12 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **17.98** | **202** | P | | **Pn** | **03 50 54.1** | **+5.6** |
| | baz=108,slow=14,SNR=9.5 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **17.99** | **202** | P | | **Pn** | **03 50 53.8** | **+5.1** |
| | baz=108,slow=14,SNR=16 | | | | | | | |
| **NPGB** | **Novo Progresso** | **18.04** | **59** | *e*P | | **P** | **03 50 48.3** | **-0.5** |
| **ITQB** | **Itaqui** | **18.18** | **137** | P | | **P** | **03 50 50.0** | **-0.2** |
| **ITQB** | **Itaqui** | **18.18** | **137** | *e*P | | **Pn** | **03 50 50.7** | **-0.5** |
| **ARAG** | **Araguaiana, MT** | **18.31** | **89** | *e*P | | **P** | **03 50 51.1** | **-0.6** |
| **H03S3** | **Juan Fernandez** | **18.32** | **202** | P | | **Pn** | **03 50 57.6** | **+5.0** |
| | SNR=6.4 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **18.33** | **202** | P | | **Pn** | **03 50 57.7** | **+5.0** |
| | SNR=5.8 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **18.33** | **202** | P | | **Pn** | **03 50 57.7** | **+4.9** |
| | SNR=8.3 | | | | | | | |
| **OTAV** | **Otavalo** | **18.64** | **336** | P | | **Pn** | **03 50 56.9** | **-0.4** |
| OTAV | | | | pmax | | pmax | | |
| | comp=Z,137nm,1.5s | | | | | | | |
| **OTAV** | **Otavalo** | **18.64** | **336** | P | | **Pn** | **03 50 56.9** | **-0.4** |
| OTAV | | | | IAmb | | IAmb | 03 51 09.5 | |
| | comp=Z,137nm,1.5s | | | | | | | |
| **OTAV** | **Otavalo** | **18.64** | **336** | *e*P | | **Pn** | **03 50 57.7** | **+0.4** |
| **CUSE** | **Cuicocha Este** | **18.68** | **336** | *e*P | | **Pn** | **03 51 04.2** | **+6.5** |
| **ML02** | **Panimavida** | **18.76** | **181** | IAmb | | IAmb | 03 50 59.4 | |
| | comp=Z,71nm,0.8s | | | | | | | |
| **TULM** | **Tulcn-Chalpat** | **18.83** | **338** | *e*P | | **Pn** | **03 51 03.3** | **+3.8** |
| **FLOC** | **Florencia** | **19.00** | **345** | *e*P | | **P** | **03 50 60.0** | **+0.7** |
| **CMBC** | **Cumbal** | **19.05** | **338** | *e*P | | **Pn** | **03 51 06.8** | **+4.6** |
| **PCMB** | **Pacaembu** | **19.06** | **107** | *e*P | | **P** | **03 50 59.2** | **-0.6** |
| **GCUF** | **Volcan Galeras** | **19.15** | **340** | *e*P | | **Pn** | **03 51 06.5** | **+3.2** |
| **PTGB** | **Pitanga** | **19.17** | **117** | *e*P | | **P** | **03 51 01.2** | **0.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MACC** | **Macarena, Meta** | **19.19** | **351** | *e*P | | **Pn** | **03 51 02.7** | **-0.6** |
| **PTGA** | **Pitinga** | **19.34** | **35** | P | | **P** | **03 51 03.1** | **+0.2** |
| | comp=Z,23nm,0.3s,baz=208,slow=11,SNR=268 | | | | | | | |
| PTGA | | | | LR | | LR | 03 59 59.5 | |
| | comp=Z,162nm,19.6s,baz=198,slow=41 | | | | | | | |
| **ITTB** | **Itaituba** | **19.38** | **52** | *e*P | | **P** | **03 51 02.7** | **-0.7** |
| **GARC** | **Garzon, Huila** | **19.55** | **346** | *e*P | | **P** | **03 51 05.3** | **-0.2** |
| **SNDB** | **Serra Nova Dou** | **19.56** | **78** | *e*P | | **P** | **03 51 05.4** | **+0.1** |
| **ITRB** | **Iturama** | **19.64** | **101** | *e*P | | **P** | **03 51 06.6** | **+0.4** |
| **SOTA** | **Rioblanco** | **19.78** | **343** | *e*P | | **Pn** | **03 51 11.1** | **+0.4** |
| **BI05** | **Punta Hualpn** | **19.85** | **186** | IAmb | | IAmb | 03 51 10.8 | |
| | comp=Z,47nm,0.8s | | | | | | | |
| **PCON** | **Cinco Dias** | **19.91** | **344** | *e*P | | **Pn** | **03 51 12.9** | **+0.6** |
| **BETC** | **Betania** | **20.01** | **346** | *e*P | | **P** | **03 51 11.2** | **+0.9** |
| **ITAB** | **Concordia** | **20.12** | **124** | P | | **P** | **03 51 10.1** | **-1.2** |
| ITAB | | | | IAmb | | IAmb | 03 51 14.9 | |
| | comp=Z,124nm,0.9s | | | | | | | |
| **ITAB** | **Concordia** | **20.12** | **124** | *e*P | | **P** | **03 51 11.0** | **-0.2** |
| **CPSB** | **Cacapava Do Su** | **20.79** | **133** | *e*P | | **P** | **03 51 18.2** | **-0.3** |
| **FRTB** | **Fartura** | **20.96** | **111** | *e*P | | **P** | **03 51 19.6** | **-0.9** |
| **PTGC** | **Puerto Gaitan,** | **21.04** | **356** | *e*P | | **P** | **03 51 20.2** | **-1.0** |
| **ORTC** | **Ortega, Tolima** | **21.16** | **348** | *e*P | | **P** | **03 51 22.1** | **-0.5** |
| **YOTC** | **Yotoco, Valle** | **21.48** | **345** | *e*P | | **P** | **03 51 25.9** | **-0.2** |
| **BB19B** | **Bebedouro** | **21.49** | **105** | *e*P | | **P** | **03 51 26.9** | **+0.8** |
| **PLTB** | **Pedras Altas** | **21.51** | **136** | *e*P | | **P** | **03 51 25.4** | **-0.8** |
| **IPMB** | **Ipameri, GO** | **21.61** | **96** | *e*P | | **P** | **03 51 25.7** | **-1.7** |
| **CHIC** | **Chingaza** | **21.61** | **352** | *e*P | | **P** | **03 51 26.5** | **-1.3** |
| **BOAV** | **Boa Vista** | **21.74** | **29** | *e*P | | **P** | **03 51 29.0** | **+0.3** |
| **ANIL** | **Santa Ana** | **21.76** | **348** | *e*P | | **P** | **03 51 26.8** | **-2.5** |
| **LC01** | **Cunco** | **21.90** | **182** | P | | **P** | **03 51 27.3** | **-3.0** |
| **ROSC** | **El Rosal** | **21.91** | **351** | P | | **P** | **03 51 31.0** | **+0.1** |
| | comp=Z,13nm,0.5s,baz=256,slow=24,SNR=8.6 | | | | | | | |
| ROSC | | | | S | | **S** | **03 55 25.8** | **-1.1** |
| | comp=Z,3.1nm,0.4s,baz=158,slow=21,SNR=1.1 | | | | | | | |
| **ROSC** | **El Rosal** | **21.91** | **351** | P | | **P** | **03 51 28.8** | **-2.1** |
| **BDFB** | **Brasilia** | **21.95** | **90** | P | | **P** | **03 51 29.9** | **-1.3** |
| | comp=Z,49nm,0.7s,baz=253,slow=15,SNR=80 | | | | | | | |
| **BDFB** | **Brasília** | **21.95** | **90** | P | | **P** | **03 51 29.6** | **-1.6** |
| BDFB | | | | IAmb | | IAmb | 03 51 33.3 | |
| | comp=Z,52nm,0.9s | | | | | | | |
| **TIJ01** | **Guaruva-PR** | **21.99** | **116** | *e*P | | **P** | **03 51 31.9** | **+0.5** |
| **MALB** | **Monte Alegre** | **22.15** | **49** | *e*P | | **P** | **03 51 32.9** | **-0.1** |
| **PEXB** | **Peixe** | **22.34** | **81** | *e*P | | **P** | **03 51 34.1** | **-1.0** |
| **PLMC** | **San Jos del P** | **22.36** | **346** | *e*P | | **P** | **03 51 34.6** | **-0.7** |
| **GUY2C** | **Guyana, Caldas** | **22.46** | **348** | *e*P | | **P** | **03 51 36.7** | **-0.1** |
| **RCLB** | **Rio Claro- Sao** | **22.61** | **108** | *e*P | | **P** | **03 51 36.6** | **-1.2** |
| **SPBC** | **San Pablo de B** | **22.67** | **352** | *e*P | | **P** | **03 51 35.4** | **-3.0** |
| **NORC** | **Norcasia** | **22.70** | **350** | *e*P | | **P** | **03 51 36.5** | **-2.3** |
| **RUSC** | **La Rusia** | **22.79** | **354** | *e*P | | **P** | **03 51 38.4** | **-1.7** |
| **TER01** | **Tubaro-SC** | **23.07** | **124** | *e*P | | **P** | **03 51 40.6** | **-1.6** |
| **PRP

| | | | | | | |
|---|---|---|---|---|---|---|
| 152A | **Waverly Hall** | **51.08** | **345** | IAmb | IAmb | 03 55 39.2 |
| | comp=Z,41nm,1.0s | | | | | |
| GOGA | **Godfrey** | **51.49** | **346** | IAmb | IAmb | 03 55 41.6 |
| | comp=Z,20nm,0.9s | | | | | |
| GOGA | **Godfrey** | **51.49** | **346** | P | **P** | **03 55 40.9 +0.4** |
| | baz=165,SNR=6.2 | | | | | |
| Z51A | **Franklin** | **51.81** | **345** | IAmb | IAmb | 03 55 44.1 |
| | comp=Z,15nm,0.8s | | | | | |
| JSC | **Jenkinsville** | **51.89** | **349** | IAmb | IAmb | 03 55 44.6 |
| | comp=Z,22nm,1.0s | | | | | |
| HODGE | **Hodges** | **52.03** | **348** | IAmb | IAmb | 03 55 45.7 |
| | comp=Z,21nm,0.8s | | | | | |
| LRAL | **Lakeview Retre** | **52.03** | **343** | IAmb | IAmb | 03 56 13.4 |
| | comp=Z,25nm,1.1s | | | | | |
| LRAL | **Lakeview Retre** | **52.03** | **343** | P | **P** | **03 55 45.5 +1.0** |
| | baz=160,SNR=5.1 | | | | | |
| Y52A | **Lilburn** | **52.06** | **346** | IAmb | IAmb | 03 55 45.7 |
| | comp=Z,18nm,0.9s | | | | | |
| HKT | **Hockley** | **52.47** | **332** | *i* P | **P** | **03 55 48.8 +1.1** |
| HKT | | | | pmax | pmax | |
| | comp=Z,6.0nm,1.0s | | | | | |
| HKT | **Hockley** | **52.47** | **332** | P | **P** | **03 55 47.4 -0.3** |
| KMSC | **Kings Mountain** | **52.74** | **349** | IAmb | IAmb | 03 55 51.0 |
| | comp=Z,33nm,0.8s | | | | | |
| KMSC | **Kings Mountain** | **52.74** | **349** | P | **P** | **03 55 50.3 +0.6** |
| | baz=168,SNR=7.9 | | | | | |
| 833A | **Chaparral WMA,** | **52.80** | **328** | IAmb | IAmb | 03 55 52.3 |
| | comp=Z,25nm,0.9s | | | | | |
| 833A | **Chaparral WMA,** | **52.80** | **328** | P | **P** | **03 55 51.3 +1.0** |
| | baz=145,SNR=8.9 | | | | | |
| BG3 | **Lake Jocassee** | **52.90** | **348** | IAmb | IAmb | 03 55 52.3 |
| | comp=Z,24nm,0.9s | | | | | |
| X48A | **Hartselle** | **53.38** | **343** | IAmb | IAmb | 03 55 55.8 |
| | comp=Z,19nm,0.8s | | | | | |
| V53A | **Saluda** | **53.53** | **348** | IAmb | IAmb | 03 55 56.6 |
| | comp=Z,21nm,0.8s | | | | | |
| W50A | **Signal Mountai** | **53.64** | **345** | P | **P** | **03 55 55.7 -0.6** |
| W50A | | | | IAmb | IAmb | 03 55 57.5 |
| | comp=Z,26nm,0.9s | | | | | |
| CPCT | **Cooper Cave** | **53.69** | **346** | IAmb | IAmb | 03 55 57.7 |
| | comp=Z,17nm,0.9s | | | | | |
| TKL | **Tuckaleechee C** | **53.72** | **347** | LR | LR | 04 21 14.8 |
| | comp=Z,64nm,18.2s,baz=158,slow=38 | | | | | |
| TKL | **Tuckaleechee C** | **53.72** | **347** | IAmb | IAmb | 03 55 57.7 |
| | comp=Z,28nm,0.8s | | | | | |
| SWET | **Sewanee** | **53.80** | **345** | IAmb | IAmb | 03 55 58.6 |
| | comp=Z,18nm,0.7s | | | | | |
| T59A | **Double "B" Far** | **53.99** | **353** | IAmb | IAmb | 03 55 59.0 |
| | comp=Z,21nm,0.8s | | | | | |
| TZTN | **Tazewell** | **54.53** | **347** | P | **P** | **03 56 02.0 -0.8** |
| TZTN | | | | IAmb | IAmb | 03 56 03.6 |
| | comp=Z,27nm,0.9s | | | | | |
| TZTN | **Tazewell** | **54.53** | **347** | P | **P** | **03 56 02.8 +0.1** |
| | baz=165 | | | | | |
| V48A | **Smith Brothers** | **54.53** | **344** | IAmb | IAmb | 03 56 04.0 |
| | comp=Z,26nm,0.8s | | | | | |
| BLA | **Blacksburg** | **54.60** | **351** | IAmb | IAmb | 03 56 33.4 |
| | comp=Z,15nm,0.9s | | | | | |
| BLA | **Blacksburg** | **54.60** | **351** | P | **P** | **03 56 03.9 +0.6** |
| | baz=169 | | | | | |
| W45A | **Hickory Valley** | **54.65** | **342** | IAmb | IAmb | 03 56 04.8 |
| | comp=Z,23nm,0.7s | | | | | |
| CLTN | **Cedars of Leba** | **54.74** | **345** | IAmb | IAmb | 03 56 05.8 |
| | comp=Z,24nm,0.8s | | | | | |
| JCT | **Junction City** | **54.77** | **329** | IAmb | IAmb | 03 56 34.1 |
| | comp=Z,21nm,1.2s | | | | | |
| JCT | **Junction City** | **54.77** | **329** | P | **P** | **03 56 05.6 +0.9** |
| | baz=146 | | | | | |
| WHTX | **Lake Whitney,** | **54.93** | **332** | P | **P** | **03 56 06.0 +0.3** |
| WHTX | | | | IAmb | IAmb | 03 56 35.1 |
| | comp=Z,39nm,0.9s | | | | | |
| WHTX | **Lake Whitney,** | **54.93** | **332** | P | **P** | **03 56 06.8 +1.1** |
| | baz=149,SNR=8.2 | | | | | |
| Z38A | **Mt. Pleasant** | **54.98** | **335** | IAmb | IAmb | 03 56 35.8 |
| | comp=Z,36nm,1.1s | | | | | |
| U49A | **Red Boiling Sp** | **55.00** | **345** | IAmb | IAmb | 03 56 06.9 |
| | comp=Z,19nm,0.6s | | | | | |
| WVT | **Waverly** | **55.17** | **343** | P | **P** | **03 56 06.1 -1.3** |
| WVT | | | | pmax | pmax | |
| | comp=Z,19nm,0.9s | | | | | |
| WVT | **Waverly** | **55.17** | **343** | P | **P** | **03 56 06.1 -1.3** |
| WVT | | | | IAmb | IAmb | 03 56 08.0 |
| | comp=Z,19nm,0.8s | | | | | |
| WVT | **Waverly** | **55.17** | **343** | P | **P** | **03 56 07.2 -0.2** |
| | baz=160 | | | | | |
| HPIG | | **55.18** | **322** | P | **P** | **03 56 07.6 -0.3** |
| HPIG | | | | IAmb | IAmb | 03 56 10.1 |
| | comp=Z,8.2nm,0.8s | | | | | |
| T50A | **Nancy** | **55.26** | **346** | IAmb | IAmb | 03 56 08.7 |
| | comp=Z,15nm,0.8s | | | | | |
| MIAR | **Mount Ida** | **55.58** | **337** | IAmb | IAmb | 03 56 39.5 |
| | comp=Z,28nm,1.0s | | | | | |
| MIAR | **Mount Ida** | **55.58** | **337** | P | **P** | **03 56 11.0 +0.7** |
| | baz=154 | | | | | |
| S51A | **Beattyville** | **55.59** | **348** | IAmb | IAmb | 03 56 11.1 |
| | comp=Z,17nm,0.8s | | | | | |
| R55A | **Marlinton** | **55.61** | **351** | IAmb | IAmb | 03 56 16.7 |
| | comp=Z,44nm,1.2s | | | | | |
| ASCN | **Ascension** | **55.72** | **88** | P | **P** | **03 56 11.0 -0.8** |
| TXAR | **Lajitas Array** | **55.86** | **325** | P | **P** | **03 56 13.1 +0.5** |
| | comp=Z,3.7nm,0.7s,baz=150,slow=9.2,SNR=43 | | | | | |
| TXAR | | | | pP | **pP** | **03 56 39.1 -0.4** |
| | comp=Z,2.5nm,0.8s,baz=152,slow=6.8,SNR=4.0 | | | | | |
| TX31 | **Lajitas Ar. Si** | **55.86** | **325** | IAmb | IAmb | 03 56 14.3 |
| | comp=Z,32nm,1.2s | | | | | |
| TX32 | **Lajitas Array** | **55.86** | **325** | IAmb | IAmb | 03 56 14.3 |
| | comp=Z,11nm,1.2s | | | | | |
| Q56A | **Snyder Ridge,** | **56.23** | **352** | IAmb | IAmb | 03 56 16.4 |
| | comp=Z,16nm,0.7s | | | | | |
| W39A | **Magazine** | **56.23** | **337** | P | **P** | **03 56 16.9 +1.9** |
| | baz=154 | | | | | |
| FCAR | **Ozark Folk Cen** | **56.27** | **339** | P | **P** | **03 56 15.1 -0.1** |
| FCAR | | | | IAmb | IAmb | 03 56 43.7 |
| | comp=Z,9.6nm,1.0s | | | | | |
| X37A | **Clayton** | **56.30** | **336** | IAmb | IAmb | 03 56 45.3 |
| | comp=Z,25nm,1.0s | | | | | |
| R50A | **Paris** | **56.36** | **347** | IAmb | IAmb | 03 56 16.6 |
| | comp=Z,22nm,0.9s | | | | | |
| ABTX | **Abilene, Hawle** | **56.46** | **331** | P | **P** | **03 56 17.7 +1.0** |
| | baz=147,SNR=11 | | | | | |
| WCI | **Wyandotte Cave** | **56.76** | **345** | P | **P** | **03 56 17.8 -0.8** |
| WCI | | | | pmax | pmax | |
| | comp=Z,18nm,0.7s | | | | | |
| WCI | **Wyandotte Cave** | **56.76** | **345** | P | **P** | **03 56 17.8 -0.8** |
| WCI | | | | IAmb | IAmb | 03 56 19.3 |
| | comp=Z,18nm,0.7s | | | | | |
| WCI | **Wyandotte Cave** | **56.76** | **345** | P | **P** | **03 56 18.8 +0.2** |
| | baz=162 | | | | | |
| USIN | **University of** | **56.85** | **344** | IAmb | IAmb | 03 56 20.6 |
| | comp=Z,24nm,0.8s | | | | | |
| Q51A | **Peebles** | **56.88** | **348** | IAmb | IAmb | 03 56 20.1 |
| | comp=Z,26nm,0.9s | | | | | |
| MCWV | **Mont Chateau** | **56.92** | **352** | IAmb | IAmb | 03 56 21.1 |
| | comp=Z,33nm,0.9s | | | | | |
| MCWV | **Mont Chateau** | **56.92** | **352** | P | **P** | **03 56 20.2 +0.5** |
| | baz=170,SNR=5.5 | | | | | |
| U40A | **Yellville** | **56.94** | **339** | IAmb | IAmb | 03 56 48.8 |
| | comp=Z,17nm,0.9s | | | | | |
| U40A | **Yellville** | **56.94** | **339** | P | **P** | **03 56 21.0 +1.0** |
| | baz=155 | | | | | |
| T42A | **Van Buren** | **56.97** | **341** | IAmb | IAmb | 03 56 21.7 |
| | comp=Z,7.9nm,0.7s | | | | | |
| S44A | **Carbondale** | **57.03** | **343** | P | **P** | **03 56 20.3 -0.3** |
| P52A | **Corning** | **57.25** | **350** | P | **P** | **03 56 22.1 0.0** |
| | baz=167,SNR=9.7 | | | | | |
| HHAR | **Hobbs** | **57.26** | **338** | IAmb | IAmb | 03 56 51.7 |
| | comp=Z,20nm,1.0s | | | | | |
| P51A | **Williamsport** | **57.27** | **349** | IAmb | IAmb | 03 56 22.6 |
| | comp=Z,31nm,0.8s | | | | | |
| O56A | **Blue Knob Stat** | **57.36** | **353** | P | **P** | **03 56 23.3 +0.4** |
| | baz=171 | | | | | |
| W35A | **Tecumseh** | **57.39** | **335** | IAmb | IAmb | 03 56 51.8 |
| | comp=Z,33nm,1.0s | | | | | |
| MGMO | **Mountain Grove** | **57.47** | **340** | IAmb | IAmb | 03 56 26.5 |
| | comp=Z,26nm,1.2s | | | | | |
| O54A | **Avella** | **57.51** | **351** | IAmb | IAmb | 03 56 26.2 |
| | comp=Z,18nm,0.8s | | | | | |
| TUL1 | **Leonard** | **57.62** | **336** | IAmb | IAmb | 03 56 54.1 |
| | comp=Z,23nm,0.9s | | | | | |
| TUL1 | **Leonard** | **57.62** | **336** | P | **P** | **03 56 25.8 +1.0** |
| | baz=152 | | | | | |
| FVM | **French Village** | **57.64** | **342** | P | **P** | **03 56 25.4 +0.5** |
| FVM | | | | pmax | pmax | |
| | comp=Z,65nm,0.9s | | | | | |
| FVM | **French Village** | **57.64** | **342** | P | **P** | **03 56 25.4 +0.5** |
| P49A | **Miami Univ. Ec** | **57.65** | **347** | IAmb | IAmb | 03 56 25.0 |
| | comp=Z,26nm,0.9s | | | | | |
| P49A | **Miami Univ. Ec** | **57.65** | **347** | P | **P** | **03 56 24.2 -0.7** |
| | baz=164,SNR=6.2 | | | | | |
| O53A | **New Philadelph** | **57.70** | **351** | P | **P** | **03 56 25.4 +0.1** |
| | baz=168,SNR=6.5 | | | | | |
| BLO | **Bloomington** | **57.71** | **346** | IAmb | IAmb | 03 56 26.0 |
| | comp=Z,19nm,0.8s | | | | | |
| P48A | **Milroy** | **57.73** | **347** | IAmb | IAmb | 03 56 25.6 |
| | comp=Z,17nm,0.9s | | | | | |
| CCM | **Cathedral Cave** | **57.96** | **341** | P | **P** | **03 56 27.0 -0.1** |
| CCM | | | | pmax | pmax | |
| | comp=Z,23nm,1.0s | | | | | |
| CCM | **Cathedral Cave** | **57.96** | **341** | P | **P** | **03 56 27.0 -0.1** |
| CCM | | | | IAmb | IAmb | 03 56 29.6 |
| | comp=Z,22nm,1.0s | | | | | |
| CCM | **Cathedral Cave** | **57.96** | **341** | P | **P** | **03 56 28.7 +1.6** |
| | baz=157 | | | | | |
| ACSO | **Alum Creek Sta** | **57.98** | **349** | P | **P** | **03 56 27.1 -0.2** |
| | baz=166,SNR=9.9 | | | | | |
| O49A | **Covington** | **58.20** | **348** | IAmb | IAmb | 03 56 29.1 |
| | comp=Z,33nm,0.9s | | | | | |
| N54A | **Moraine State** | **58.22** | **352** | P | **P** | **03 56 29.5 +0.6** |
| | baz=170,SNR=5.3 | | | | | |
| S39A | **Bolivar** | **58.30** | **339** | P | **P** | **03 56 28.4 -1.2** |
| S39A | | | | pP | **pP** | **03 56 56.3 -0.5** |
| S39A | | | | IAmb | IAmb | 03 56 58.9 |
| | comp=Z,16nm,0.9s | | | | | |
| O48B | **Farmland** | **58.44** | **347** | P | **P** | **03 56 30.3 -0.1** |
| | baz=164 | | | | | |
| R40A | **Maddies Statio** | **58.50** | **340** | IAmb | IAmb | 03 56 32.7 |
| | comp=Z,10nm,0.7s | | | | | |
| MNTX | **Cornudas Mount** | **58.62** | **326** | IAmb | IAmb | 03 56 33.1 |
| | comp=Z,14nm,1.1s | | | | | |
| MNTX | **Cornudas Mount** | **58.62** | **326** | P | **P** | **03 56 32.2 +0.3** |
| | baz=141,SNR=16 | | | | | |
| M54A | **Oil Creek Stat** | **58.72** | **352** | P | **P** | **03 56 32.6 +0.2** |
| | baz=170 | | | | | |
| T35A | **Sooner Cattle** | **58.78** | **336** | IAmb | IAmb | 03 57 03.0 |
| | comp=Z,20nm,1.3s | | | | | |
| M53A | **WI Miller and** | **58.79** | **351** | P | **P** | **03 56 33.1 +0.3** |
| | baz=169,SNR=7.5 | | | | | |
| N49A | **Columbus Grove** | **58.88** | **348** | P | **P** | **03 56 32.6 -0.8** |
| L59A | **Walton** | **58.95** | **356** | IAmb | IAmb | 03 56 35.1 |
| | comp=Z,24nm,0.9s | | | | | |
| BINY | **Binghamton** | **59.03** | **356** | P | **P** | **03 56 34.6 +0.1** |
| | baz=174 | | | | | |
| MSTX | **Muleshoe** | **59.06** | **329** | P | **P** | **03 56 35.5 +0.5** |
| | baz=144,SNR=10 | | | | | |
| HRV | **Adam Dziewonsk** | **59.15** | **359** | P | **P** | **03 56 34.0 -1.3** |
| HRV | | | | pmax | pmax | |
| | comp=Z,31nm,0.9s | | | | | |
| HRV | **Adam Dziewonsk** | **59.15** | **359** | P | **P** | **03 56 34.0 -1.3** |
| HRV | **Adam Dziewonsk** | **59.15** | **359** | P | **P** | **03 56 35.1 -0.1** |
| | baz=179 | | | | | |
| AMTX | **Amarillo** | **59.28** | **331** | P | **P** | **03 56 35.9 -0.5** |
| AMTX | | | | pP | **pP** | **03 57 01.2 -2.5** |
| AMTX | | | | IAmb | IAmb | 03 57 04.4 |
| | comp=Z,8.3nm,0.9s | | | | | |
| ERPA | **Erie** | **59.36** | **352** | P | **P** | **03 56 37.1 +0.3** |
| | baz=170 | | | | | |
| TRY | **Troy** | **59.42** | **358** | IAmb | IAmb | 03 56 38.3 |
| | comp=Z,29nm,0.9s | | | | | |
| P40A | **Paris** | **59.56** | **341** | IAmb | IAmb | 03 56 40.3 |
| | comp=Z,24nm,0.9s | | | | | |
| HDIL | **Hopedale** | **59.71** | **344** | P | **P** | **03 56 39.0 -0.1** |
| | baz=160 | | | | | |
| L48A | **N Adams** | **59.91** | **348** | P | **P** | **03 56 39.5 -1.1** |
| P38A | **Dawn** | **60.12** | **340** | IAmb | IAmb | 03 56 46.6 |
| | comp=Z,27nm,1.4s | | | | | |
| 121A | **Cookes Peak, D** | **60.57** | **324** | IAmb | IAmb | 03 57 16.6 |
| | comp=Z,11nm,0.9s | | | | | |
| 121A | **Cookes Peak, D** | **60.57** | **324** | P | **P** | **03 56 46.8 +1.3** |
| | baz=139,SNR=5.9 | | | | | |
| 319A | **Douglas** | **60.58** | **322** | IAmb | IAmb | 03 56 48.0 |
| | comp=Z,23nm,1.0s | | | | | |
| I63A | **Otisfield** | **60.69** | **0** | IAmb | IAmb | 03 56 47.1 |
| | comp=Z,24nm,0.8s | | | | | |
| KSU1 | **Kansas State U** | **60.73** | **337** | IAmb | IAmb | 03 57 14.6 |
| | comp=Z,24nm,1.0s | | | | | |
| KSU1 | **Kansas State U** | **60.73** | **337** | P | **P** | **03 56 48.8 +2.6** |
| | baz=152 | | | | | |
| LBNH | **Lisbon** | **60.88** | **359** | IAmb | IAmb | 03 56 48.0 |
| | comp=Z,24nm,0.9s | | | | | |
| LBNH | **Lisbon** | **60.88** | **359** | P | **P** | **03 56 47.4 +0.3** |
| | baz=179 | | | | | |
| R32A | **Long Quarter,** | **60.95** | **335** | P | **P** | **03 56 47.6 -0.1** |
| R32A | | | | IAmb | IAmb | 03 56 49.4 |
| | comp=Z,29nm,1.1s | | | | | |
| R32A | | | | pP | **pP** | **03 57 15.8 +0.6** |
| LONY | **Lake Ozonia** | **61.35** | **357** | P | **P** | **03 56 49.7 -0.5** |
| | baz=176 | | | | | |
| ANMO | **Albuquerque** | **61.69** | **327** | *ce*P | **P** | **03 56 53.6 +0.6** |
| ANMO | | | | pmax | pmax | |
| | comp=Z,6.0nm,1.0s | | | | | |
| ANMO | **Albuquerque** | **61.69** | **327** | P | **P** | **03 56 52.6 -0.4** |
| ANMO | **Albuquerque** | **61.69** | **327** | P | **P** | **03 56 54.2 +1.1** |
| | baz=141 | | | | | |
| CBKS | **Cedar Bluff** | **61.71** | **335** | IAmb | IAmb | 03 57 22.9 |
| | comp=Z,26nm,0.8s | | | | | |
| G62A | **West of Eustis** | **61.85** | **0** | P | **P** | **03 56 52.9 -0.7** |
| PKME | **Peaks-Kenny Pk** | **61.91** | **1** | IAmb | IAmb | 03 56 54.7 |
| | comp=Z,24nm,0.8s | | | | | |
| PKME | **Peaks-Kenny Pk** | **61.91** | **1** | P | **P** | **03 56 53.7 -0.2** |
| | baz=182 | | | | | |
| TUC | **Tucson** | **62.13** | **322** | P | **P** | **03 56 55.8 -0.1** |
| TUC | | | | pmax | pmax | |
| | comp=Z,6.0nm,1.0s | | | | | |
| TUC | **Tucson** | **62.13** | **322** | P | **P** | **03 56 55.8 -0.1** |
| TUC | **Tucson** | **62.13** | **322** | P | **P** | **03 56 57.1 +1.2** |
| | baz=136 | | | | | |
| JFWS | **Jewell Farm** | **62.17** | **344** | IAmb | IAmb | 03 56 57.1 |
| | comp=Z,22nm,0.7s | | | | | |
| JFWS | **Jewell Farm** | **62.17** | **344** | P | **P** | **03 56 56.6 +0.8** |
| | baz=159 | | | | | |
| T25A | **Trinidad** | **62.40** | **330** | IAmb | IAmb | 03 57 27.8 |
| | comp=Z,9.6nm,1.0s | | | | | |
| T25A | **Trinidad** | **62.40** | **330** | P | **P** | **03 56 59.2 +1.5** |
| | baz=144 | | | | | |
| F64A | **Sherman** | **62.54** | **2** | P | **P** | **03 56 56.9 -1.2** |
| F64A | | | | IAmb | IAmb | 03 56 58.9 |
| | comp=Z,26nm,0.8s | | | | | |
| F64A | | | | pP | **pP** | **03 57 22.4 -3.0** |
| 214A | **Organ Pipe Nat** | **63.10** | **320** | IAmb | IAmb | 03 57 05.2 |
| | comp=Z,21nm,1.1s | | | | | |
| 214A | **Organ Pipe Nat** | **63.10** | **320** | P | **P** | **03 57 04.2 +2.0** |
| | baz=134,SNR=12 | | | | | |
| KSCO | **Kaye Shedlock'** | **63.10** | **333** | IAmb | IAmb | 03 57 32.2 |
| | comp=Z,39nm,0.9s | | | | | |
| KSCO | **Kaye Shedlock'** | **63.10** | **333** | P | **P** | **03 57 03.6 +1.3** |
| | baz=146,SNR=6.2 | | | | | |
| X18A | **Snowflake** | **63.26** | **324** | IAmb | IAmb | 03 57 06.3 |
| | comp=Z,16nm,1.3s | | | | | |
| BGNE | **Belgrade** | **63.32** | **337** | P | **P** | **03 57 04.2 +0.8** |
| | baz=151,SNR=7.7 | | | | | |
| SDCO | **Great Sand Dun** | **63.41** | **330** | IAmb | IAmb | 03 57 34.5 |
| | comp=Z,17nm,1.1s | | | | | |
| SDCO | **Great Sand Dun** | **63.41** | **330** | P | **P** | **03 57 05.8 +1.3** |
| | baz=143,SNR=19 | | | | | |
| W18A | **Petrified Fore** | **63.58** | **325** | IAmb | IAmb | 03 57 35.7 |
| | comp=Z,28nm,1.4s | | | | | |
| W18A | **Petrified Fore** | **63.58** | **325** | P | **P** | **03 57 07.1 +1.6** |
| | baz=138 | | | | | |
| X16A | **Lo Mia Camp, P** | **64.03** | **323** | IAmb | IAmb | 03 57 12.0 |
| | comp=Z,12nm,0.9s | | | | | |
| S22A | **4UR Ranch, Cre** | **64.06** | **329** | P | **P** | **03 57 10.2 +1.4** |
| | baz=142,SNR=5.3 | | | | | |
| BATG | **Bathurst New B** | **64.06** | **4** | P | **P** | **03 57 07.5 -0.7** |
| BATG | | | | IAmb | IAmb | 03 57 08.7 |
| | comp=Z,20nm,0.7s | | | | | |
| I37A | **Lemond, Waseca** | **64.07** | **342** | IAmb | IAmb | 03 57 10.3 |
| | comp=Z,21nm,0.5s | | | | | |
| E46A | **Sault Ste Mari** | **64.17** | **350** | IAmb | IAmb | 03 57 09.8 |
| | comp=Z,44nm,0.9s | | | | | |
| LMQ | **La Malbaie** | **64.19** | **0** | IAmb | IAmb | 03 57 09.1 |
| | comp=Z,8.2nm,0.7s | | | | | |
| Q24A | **Divide** | **64.21** | **331** | IAmb | IAmb | 03 57 39.8 |
| | comp=Z,11nm,1.0s | | | | | |
| Q24A | **Divide** | **64.21** | **331** | P | **P** | **03 57 11.1 +1.3** |
| | baz=143,SNR=5.5 | | | | | |
| 113A | **Mohawk Valley,** | **64.24** | **320** | IAmb | IAmb | 03 57 12.4 |
| | comp=Z,12nm,1.0s | | | | | |
| MVCO | **Mesa Verde** | **64.49** | **327** | IAmb | IAmb | 03 57 41.6 |
| | comp=Z,17nm,1.4s | | | | | |
| MVCO | **Mesa Verde** | **64.49** | **327** | P | **P** | **03 57 12.9 +1.4** |
| | baz=140 | | | | | |
| Y14A | **Wickenburg** | **64.60** | **322** | IAmb | IAmb | 03 57 41.4 |
| | comp=Z,13nm,1.2s | | | | | |
| WUAZ | **Wupatki** | **64.78** | **324** | IAmb | IAmb | 03 57 16.9 |
| | comp=Z,21nm,1.1s | | | | | |
| WUAZ | **Wupatki** | **64.78** | **324** | P | **P** | **03 57 15.2 +1.8** |
| | baz=137,SNR=12 | | | | | |
| ECSD | **EROS Data Cent** | **64.82** | **340** | IAmb | IAmb | 03 57 42.8 |
| | comp=Z,18nm,1.1s | | | | | |
| ECSD | **EROS Data Cent** | **64.82** | **340** | P | **P** | **03 57 13.9 +0.6** |
| | baz=153,SNR=9.9 | | | | | |
| SPMN | **Marine on St.** | **65.00** | **343** | IAmb | IAmb | 03 57 16.2 |
| | comp=Z,17nm,0.9s | | | | | |
| SPMN | **Marine on St.** | **65.00** | **343** | P | **P** | **03 57 15.3 +0.9** |
| | baz=157,SNR=5.9 | | | | | |
| VLDQ | **Val d'Or** | **65.02** | **355** | IAmb | IAmb | 03 57 15.4 |
| | comp=Z,26nm,1.0s | | | | | |
| ISCO | **Idaho Springs** | **65.09** | **331** | P | **P** | **03 57 16.8 +1.4** |
| | baz=143,SNR=7.4 | | | | | |
| SMCO | **Snowmass** | **65.24** | **330** | P | **P** | **03 57 16.8 +0.2** |
| SMCO | | | | IAmb | IAmb | 03 57 19.0 |
| | comp=Z,8.1nm,0.7s | | | | | |
| PDMCI | **Parker Dam,Lak** | **65.53** | **321** | P | **P** | **03 57 19.9 +1.9** |
| | baz=134 | | | | | |
| RMX | **La Rumorosa** | **65.56** | **319** | P | **P** | **03 57 17.1 -1.3** |
| RMX | | | | IAmb | IAmb | 03 57 21.3 |
| | comp=Z,16nm,1.0s | | | | | |
| IKP | **In-Ko-Pah, Jac** | **65.61** | **319** | P | **P** | **03 57 21.1 +2.4** |
| | baz=132,SNR=6.3 | | | | | |
| F36A | **Milaca** | **65.79** | **343** | IAmb | IAmb | 03 57 22.0 |
| | comp=Z,24nm,1.1s | | | | | |
| BC3 | **Big Chuckawall** | **65.88** | **320** | P | **P** | **03 57 22.6 +2.1** |
| | baz=133,SNR=6.9 | | | | | |
| MONP2 | **Monument Peak** | **65.97** | **319** | P | **P** | **03 57 23.4 +2.3** |
| | baz=132,SNR=5.2 | | | | | |
| BAR | **Barrett** | **65.99** | **319** | P | **P** | **03 57 21.6 +0.6** |
| BAR | | | | IAmb | IAmb | 03 57 24.1 |
| | comp=Z,24nm,0.9s | | | | | |
| BAR | | | | pP | **pP** | **03 57 49.5 +1.3** |
| IRM | **Iron Mountain** | **66.03** | **321** | P | **P** | **03 57 23.1 +1.9** |
| | baz=133,SNR=15 | | | | | |
| N23A | **Red Feather La** | **66.12** | **332** | IAmb | IAmb | 03 57 24.3 |
| | comp=Z,16nm,1.4s | | | | | |
| N23A | **Red Feather La** | **66.12** | **332** | P | **P** | **03 57 23.4 +1.5** |
| | baz=143 | | | | | |
| BELC | **Belle Mtn. Jos** | **66.44** | **320** | P | **P** | **03 57 26.1 +2.0** |
| | baz=132,SNR=5.4 | | | | | |
| PFO | **Pinyon Flats O** | **66.47** | **319** | P | **P** | **03 57 25.8 +1.6** |
| | baz=132 | | | | | |
| F33A | **5 Mile Ranch,** | **66.60** | **341** | IAmb | IAmb | 03 57 27.2 |
| | comp=Z,22nm,0.7s | | | | | |
| O20A | **White River Ci** | **66.60** | **330** | P | **P** | **03 57 26.6 +1.6** |
| | baz=141,SNR=7.1 | | | | | |
| KNB | **Kanab** | **66.67** | **324** | IAmb | IAmb | 03 57 29.0 |
| | comp=Z,25nm,1.1s | | | | | |
| GMRC | **Granite Mounta** | **66.77** | **321** | P | **P** | **03 57 28.1 +2.0** |
| | baz=133,SNR=13 | | | | | |
| ELS | **Elsinore Mount** | **67.10** | **319** | P | **P** | **03 57 28.1 0.0** |
| SNAA | **Sanae** | **67.17** | **161** | P | **P** | **03 57 29.3 +1.3** |
| SNAA | **Sanae** | **67.17** | **161** | *ce*P | **P** | **03 57 29.3 +1.3** |
| SNAA | | | | pmax | pmax | |
| | comp=Z,27nm,1.7s | | | | | |
| SNAA | **Sanae** | **67.17** | **161** | P | **P** | **03 57 28.0 0.0** |
| SNAA | | | | IAmb | IAmb | 03 57 32.1 |
| | comp=Z,19nm,1.2s | | | | | |
| EYMN | **Ely** | **67.18** | **345** | IAmb | IAmb | 03 57 30.2 |
| | comp=Z,19nm,0.8s | | | | | |
| EYMN | **Ely** | **67.18** | **345** | P | **P** | **03 57 28.6 +0.4** |
| | baz=159 | | | | | |
| HEC | **Hector,Ludlow** | **67.21** | **320** | P | **P** | **03 57 31.3 +2.5** |
| | baz=132,SNR=11 | | | | | |
| P17A | **Butcher Ranch,** | **67.35** | **327** | IAmb | IAmb | 03 57 32.2 |
| | comp=Z,33nm,1.0s | | | | | |
| CCUT | **Cedar City** | **67.36** | **324** | IAmb | IAmb | 03 57 33.5 |
| | comp=Z,13nm,1.0s | | | | | |
| TUQ | **Turquoise Moun** | **67.37** | **321** | P | **P** | **03 57 31.9 +2.0** |
| | baz=133,SNR=8.7 | | | | | |
| SHPR | **Sheep Range** | **67.65** | **323** | IAmb | IAmb | 03 57 34.8 |
| | comp=Z,12nm,1.0s | | | | | |
| K22A | **Casper** | **67.78** | **332** | IAmb | IAmb | 03 58 02.5 |
| | comp=Z,14nm,1.2s | | | | | |
| K22A | **Casper** | **67.78** | **332** | P | **P** | **03 57 33.5 +1.1** |
| | baz=143 | | | | | |
| GSC | **Goldstone, Bar** | **67.81** | **321** | IAmb | IAmb | 03 57 35.8 |
| | comp=Z,21nm,1.4s | | | | | |
| RSSD | **Black Hills** | **67.91** | **335** | P | **P** | **03 57 32.4 -0.8** |
| RSSD | | | | pmax | pmax | |
| | comp=Z,9.0nm,0.9s | | | | | |
| RSSD | **Black Hills** | **67.91** | **335** | P | **P** | **03 57 32.4 -0.8** |
| RSSD | **Black Hills** | **67.91** | **335** | P | **P** | **03 57 33.7 +0.5** |
| | baz=146 | | | | | |
| B35A | **Bob, Littlefor** | **68.13** | **344** | IAmb | IAmb | 03 57 36.6 |
| | comp=Z,30nm,1.1s | | | | | |
| EDW2 | **Edwards Air Fo** | **68.26** | **320** | P | **P** | **03 57 37.1 +1.7** |
| | baz=131,SNR=6.8 | | | | | |
| QSM | **Queen of Sheba** | **68.29** | **321** | IAmb | IAmb | 03 57 38.4 |
| | comp=Z,15nm,1.0s | | | | | |
| GWY | **Greenwater Val** | **68.32** | **321** | IAmb | IAmb | 03 57 38.7 |
| | comp=Z,14nm,0.9s | | | | | |
| CCAC | **Calif City Air** | **68.45** | **320** | P | **P** | **03 57 37.9 +1.4** |
| CCAC | | | | IAmb | IAmb | 03 57 39.6 |
| | comp=Z,17nm,0.8s | | | | | |
| LRMC | **Laurel Mtn Rad** | **68.46** | **320** | P | **P** | **03 57 39.0 +2.3** |
| | baz=132,SNR=9.3 | | | | | |
| TPNV | **Topopah Spring** | **68.59** | **322** | P | **P** | **03 57 40.0 +2.4** |
| | baz=133,SNR=14 | | | | | |
| FURC | **Furnace Creek,** | **68.62** | **321** | P | **P** | **03 57 40.2 +2.7** |
| | baz=132,SNR=11 | | | | | |
| MPMC | **Manual Prospec** | **68.73** | **321** | P | **P** | **03 57 40.4 +2.0** |
| | baz=132,SNR=7.6 | | | | | |
| DUG | **Dugway, Tooele** | **68.96** | **327** | P | **P** | **03 57 41.6 +1.8** |
| | baz=137,SNR=7.9 | | | | | |
| LIC | **Lamto** | **68.98** | **76** | *e*P | **P** | **03 57 39.6 -0.6** |
| | comp=Z,205nm,1.0s | | | | | |
| ISA | **Isabella, Lake** | **69.07** | **320** | P | **P** | **03 57 41.0 +0.6** |
| ISA | | | | pmax | pmax | |
| | comp=Z,15nm,1.0s | | | | | |
| ISA | **Isabella, Lake** | **69.07** | **320** | P | **P** | **03 57 41.0 +0.6** |
| ISA | | | | IAmb | IAmb | 03 57 43.7 |
| | comp=Z,15nm,0.9s | | | | | |
| ISA | **Isabella, Lake** | **69.07** | **320** | P | **P** | **03 57 42.8 +2.4** |
| | baz=131,SNR=9.9 | | | | | |
| TIC | **Toumodi** | **69.14** | **76** | *e*P | **P** | **03 57 40.6 -0.6** |
| R11A | **Troy Canyon, C** | **69.16** | **324** | P | **P** | **03 57 43.3 +2.2** |
| | baz=134,SNR=11 | | | | | |
| BW06 | **Boulder Array** | **69.26** | **330** | P | **P** | **03 57 42.5 +0.8** |
| | baz=140,SNR=6.2 | | | | | |
| PDAR | **Pinedale Array** | **69.26** | **330** | P | **P** | **03 57 42.1 +0.4** |
| | comp=Z,0.9nm,0.5s,baz=127,slow=7.5,SNR=12 | | | | | |
| KIC | **Kosan Boka** | **69.30** | **76** | *e*P | **P** | **03 57 41.2 -1.0** |
| | comp=Z,145nm,0.8s | | | | | |
| DBIC | **Dimbokro** | **69.30** | **76** | P | **P** | **03 57 41.9 -0.3** |
| | comp=Z,84nm,0.8s,baz=250,slow=5.3,SNR=83 | | | | | |
| DBIC | | | | pP | **pP** | **03 58 09.9 -0.3** |
| | comp=Z,24nm,0.8s,baz=310,slow=3.7,SNR=3.7 | | | | | |
| DBIC | | | | LR | LR | 04 26 24.3 |
| | comp=Z,160nm,19.8s,baz=258,slow=34 | | | | | |
| DBIC | **Dimbokro** | **69.30** | **76** | *e*P | **P** | **03 57 40.9 -1.3** |
| DBIC | **Dimbokro** | **69.30** | **76** | P | **P** | **03 57

comp=Z,12nm,0.9s,baz=165,slow=3.6,SNR=5.5
**SCHQ Schefferville 71.56 2 P P 03 57 54.0 -1.1**
SCHQ IAmb IAmb 03 57 55.6
comp=Z,16nm,0.9s
**YERR Yerington 71.70 322** IAmb IAmb 03 57 59.9
comp=Z,20nm,1.2s
**HLID Hailey 72.22 328** P P **03 58 01.3 +1.8**
baz=136,SNR=7.5
**PAHR Pah Rah Range 72.26 323** IAmb IAmb 03 58 03.2
comp=Z,19nm,1.0s
**BOZ Bozeman (W) 72.38 331** P P **03 58 01.4 +1.0**
baz=139
**MFID Camas Ranch 72.84 327** P P **03 58 03.8 +0.6**
MFID IAmb IAmb 03 58 34.9
comp=Z,13nm,0.8s
**KOWA Kowa 72.97 69** P P **03 58 03.3 -1.1**
KOWA IAmb IAmb 03 58 05.1
comp=Z,54nm,0.8s
**ORV Oroville 73.41 321** P P **03 58 06.6 +0.2**
ORV *PP **pP** **03 58 35.5 +1.4**
ORV pmax pmax
comp=Z,24nm,1.2s
**ORV Oroville 73.41 321** P P **03 58 06.6 +0.2**
ORV IAmb IAmb 03 58 09.8
comp=Z,24nm,1.1s
ORV pP **pP** **03 58 35.5 +1.4**
ORV sP **sP** **03 58 47.8 +1.8**
**EGMT Eagleton 73.42 334** P P **03 58 07.7 +1.3**
baz=141
**MSO Missoula 74.37 331** P P **03 58 14.6 +2.6**
baz=137
**M04C Macdoel 75.03 323** IAmb IAmb 03 58 18.8
comp=Z,18nm,1.1s
**M04C Macdoel 75.03 323** P P **03 58 17.9 +1.9**
baz=130
**K05A Summer Lake 75.10 324** IAmb IAmb 03 58 19.3
comp=Z,33nm,1.5s
**J05D Fort Rock, OR 75.65 324** P P **03 58 20.6 +1.1**
baz=131
**J04D Umpqua Nationa 76.11 324** P P **03 58 23.9 +1.7**
baz=130
**FFC Flin Flon 76.14 342** P P **03 58 22.2 +0.4**
FFC pmax pmax
comp=Z,3.0nm,0.9s
**FFC Flin Flon 76.14 342** P P **03 58 22.2 +0.4**
**L02E Cave Junction 76.28 322** P P **03 58 24.6 +1.7**
baz=128
**TTIG Tnine Tigouga, 76.34 52** P P **03 58 25.3 +1.6**
**I05D Terrebonne, OR 76.39 325** P P **03 58 25.9 +2.4**
baz=131
**K02D Willamette Mer 76.65 323** P P **03 58 27.5 +2.4**
baz=129
**HOOD Mount Hood Mea 77.20 326** P P **03 58 27.2 -0.9**
HOOD IAmb IAmb 03 58 32.0
comp=Z,20nm,1.1s
HOOD pP **pP** **03 58 57.5 +1.4**
**TORD Torodi Ar. Bea 77.62 72** P P **03 58 30.6 -0.4**
comp=Z,42nm,0.7s,baz=254,slow=5.9,SNR=363
TORD pP **pP** **03 58 59.5 0.0**
comp=Z,14nm,0.9s,baz=257,slow=4.9,SNR=2.4
**OUZM OUZ 77.78 52** P P **03 58 33.1 +1.3**
**LTY Liberty 77.96 328** IAmb IAmb 03 58 35.9
comp=Z,20nm,1.4s
**ZGR Zagora 78.28 53** P P **03 58 36.0 +1.5**
**AVE Averroes 78.44 50** P P **03 58 36.5 +1.3**
**TZRR Tazzarine 78.63 53** P P **03 58 38.0 +1.6**
**EDM Edmonton 78.87 336** IAmb IAmb 03 58 42.0
comp=Z,14nm,0.8s
**ZHG ZHG 79.08 50** P P **03 58 39.0 +0.3**
**PFVI Vila Bisbo 79.34 46** *eP* P **03 58 41.2 +1.2**
**GOLM Goulmima 79.52 52** P P **03 58 43.2 +1.9**
**MORF Marmelete 79.55 46** *eP* P **03 58 41.8 +0.6**
MORF IAmb IAmb 03 58 43.2
comp=Z,59nm,0.8s
**MORF Marmelete 79.55 46** *eP* P **03 58 42.9 +1.7**
comp=Z,90nm,1.0s
**MORF Marmelete 79.55 46** *eP* P **03 58 41.8 +0.6**
MORF pmax pmax
comp=Z,59nm,0.8s
**PNCL Nicolau / Gran 80.04 45** *eP* P **03 58 45.1 +1.4**
comp=Z,49nm,1.1s
**MESJ Messejana 80.12 46** *eP* P **03 58 44.9 +0.8**
MESJ IAmb IAmb 03 58 46.5
comp=Z,36nm,0.9s
**MESJ Messejana 80.12 46** *eP* P **03 58 45.6 +1.5**
**MESJ Messejana 80.12 46** *eP* P **03 58 44.9 +0.8**
MESJ pmax pmax
comp=Z,36nm,0.9s
**PCVE Castro Verde 80.14 46** *eP* P **03 58 45.6 +1.3**
comp=Z,60nm,0.8s
**PVAQ Vaqueiros 80.24 46** *eP* P **03 58 46.2 +1.4**
**MDT Midelt 80.29 51** P P **03 58 46.7 +1.4**
**PBEJ Beja 80.45 46** *eP* P **03 58 47.3 +1.3**
comp=Z,44nm,0.7s
**PSBE So Bento 80.58 44** *eP* P **03 58 47.7 +1.0**
**EVO Evora 80.61 45** *eP* P **03 58 47.7 +0.9**
**PMTG Montargil 80.73 44** *eP* P **03 58 48.3 +0.9**
comp=Z,48nm,0.9s
**LLLB Lillooet 80.77 330** IAmb IAmb 03 58 50.4
comp=Z,20nm,1.4s
**VNDA Vanda 81.00 190** P P **03 58 50.7 +2.4**
comp=Z,4.1nm,0.8s,baz=149,slow=11,SNR=2.0
**VNDA Vanda 81.00 190** P P **03 58 47.9 -0.4**
**PCAS Casmilo, Conde 81.06 43** *eP* P **03 58 49.6 +0.5**
**PESTR Estremoz 81.06 45** *eP* P **03 58 50.3 +1.1**
comp=Z,63nm,1.2s
**PESTR Estremoz 81.06 45** P P **03 58 49.0 -0.2**
PESTR IAmb IAmb 03 58 51.1
comp=Z,24nm,1.0s
**PESTR Estremoz 81.06 45** P P **03 58 50.5 +1.3**
**PMRV Marv??o 81.47 44** *eP* P **03 58 51.8 +0.4**
**PCBR Castelo Branco 81.62 44** *eP* P **03 58 52.9 +0.8**
comp=Z,52nm,1.5s
**MTE Manteigas 81.86 44** *eP* P **03 58 54.2 +0.7**
comp=Z,60nm,1.2s
**PCAB Cabril 82.21 42** *eP* P **03 58 55.9 +0.7**
**TDRA Tendrara 82.33 52** P P **03 58 58.0 +1.7**
**FIGM Figuig 82.52 53** P P **03 58 59.1 +1.9**
**MVO Moncorvo 82.58 43** *eP* P **03 58 58.0 +0.8**
comp=Z,48nm,1.4s
**RAR Rarotonga 83.06 250** LR LR 04 26 06.8
comp=Z,77nm,21.9s,baz=196,slow=28
**PBRG Braganca 83.09 43** *eP* P **03 59 00.3 +0.5**
comp=Z,52nm,1.4s
**TSUM Tsumeb 83.14 108** *eP* P **03 58 59.4 -1.4**
**TSUM Tsumeb 83.14 108** P P **03 59 00.1 -0.6**
TSUM IAmb IAmb 03 59 02.9
comp=Z,32nm,0.8s
**KEIM Keimoes 83.58 118** *eP* P **03 59 03.4 +0.7**
KEIM IAmb IAmb 03 59 05.3
comp=Z,32nm,0.8s
**PAB San Pablo 83.59 46** P P **03 59 02.0 -0.5**
PAB pmax pmax
comp=Z,44nm,1.1s
**PAB San Pablo 83.59 46** P P **03 59 02.0 -0.5**
PAB IAmb IAmb 03 59 04.4
comp=Z,44nm,1.1s
**PAB San Pablo 83.59 46** P P **03 59 03.6 +1.2**
**GRAN Grantham 83.61 122** *eP* P **03 59 04.4 +1.5**
GRAN IAmb IAmb 03 59 05.2
comp=Z,9.1nm,0.9s
**ESDC Sonseca Array 83.92 46** P P **03 59 04.8 +0.7**
comp=Z,29nm,0.8s,baz=253,slow=5.2,SNR=97
ESDC pP **pP** **03 59 33.1 +0.2**
comp=Z,4.4nm,0.8s,baz=259,slow=5.4,SNR=3.0
**ESDC Sonseca Array 83.92 46** IAmb IAmb 03 59 06.1
comp=Z,32nm,0.9s
**ESBB Sonseca Array 83.92 46** IAmb IAmb 03 59 06.0
comp=Z,44nm,0.9s
**DY2G Dye2 85.17 10** *i* P P **03 59 09.3 -0.7**
DY2G IAmb IAmb 03 59 10.5
comp=Z,24nm,0.6s
**YKA Yellowknife Ar 86.30 341** P P **03 59 16.3 +0.9**
comp=Z,4.0nm,0.7s,baz=134,slow=5.0,SNR=55
YKA pP **pP** **03 59 43.8 -0.1**
comp=Z,5.6nm,0.8s,baz=134,slow=4.9,SNR=5.3
**BOSA Boshof 87.22 119** P P **03 59 21.0 +0.1**
comp=Z,5.1nm,0.8s,baz=282,slow=4.2,SNR=9.0
**BOSA Boshof 87.22 119** *eP* P **03 59 21.2 +0.3**
BOSA IAmb IAmb 03 59 25.3
comp=Z,538nm,4.2s
**BOSA Boshof 87.22 119** IAmb IAmb 03 59 25.0
comp=Z,7.6nm,0.9s
**SJPF Ste Jean 87.31 43** *eP* P **03 59 21.6 +0.9**
SJPF pmax pmax
comp=Z,25nm,1.2s
**ETSF Etsaut 87.65 44** *eP* P **03 59 23.0 +0.5**
ETSF pmax pmax
comp=Z,15nm,0.9s
**SWZ Schweizer 87.72 118** *eP* P **03 59 23.3 0.0**
SWZ IAmb IAmb 03 59 24.4
comp=Z,9.2nm,0.7s
**QUIF Quistinic 88.26 39** *eP* P **03 59 23.8 -1.3**
QUIF pmax pmax
comp=Z,120nm,1.8s
**EPF Esparros 88.31 44** *eP* P **03 59 25.1 -0.4**
EPF pmax pmax
comp=Z,11nm,0.8s
**LBTB Lobatse 88.61 116** *i* P **03 59 28.6 +1.1**
LBTB IAmb IAmb 03 59 29.2
comp=Z,14nm,0.9s
**LBTB Lobatse 88.61 116** P P **03 59 26.5 -1.1**
LBTB pmax pmax
comp=Z,13nm,1.0s
**LBTB Lobatse 88.61 116** P P **03 59 26.4 -1.1**
LBTB IAmb IAmb 03 59 29.4
comp=Z,13nm,0.9s
**ICESG Greenland Ices 88.64 11** *i* P P **03 59 26.0 -0.9**
ICESG IAmb IAmb 03 59 27.9
comp=Z,29nm,0.8s
**LFF La Frestale 89.37 42** *eP* P **03 59 29.5 -0.9**
LFF pmax pmax
comp=Z,20nm,0.8s
**SNKL Senekal, Frees 89.43 119** *eP* P **03 59 30.6 -0.9**
SNKL IAmb IAmb 03 59 33.5
comp=Z,27nm,0.9s
**MFF Saint Martin d 89.51 41** *eP* P **03 59 29.9 -1.1**
MFF pmax pmax
comp=Z,129nm,1.8s
**MTLF Montolieu 89.69 44** *eP* P **03 59 31.0 -0.9**
MTLF pmax pmax
comp=Z,17nm,0.9s
**GRR Gorron 89.85 39** *eP* P **03 59 31.1 -1.5**
GRR pmax pmax
comp=Z,21nm,0.8s
**RJF Les Rejaudoux 90.02 42** *eP* P **03 59 32.3 -1.2**
RJF pmax pmax
comp=Z,23nm,1.2s
**CAF Calviac 90.22 43** *eP* P **03 59 33.5 -0.9**
CAF pmax pmax
comp=Z,11nm,0.9s
**FLN La Foliniere 90.24 39** *eP* P **03 59 33.1 -1.3**
FLN pmax pmax
comp=Z,55nm,1.3s
**LDF La Druitiere 90.38 39** *eP* P **03 59 33.7 -1.3**
LDF pmax pmax
comp=Z,24nm,0.9s
**SLR Silverton 90.68 117** *eP* P **03 59 37.6 +0.3**
SLR IAmb IAmb 03 59 39.4
comp=Z,12nm,1.0s
**TCF Toulx Ste Croi 90.86 42** *eP* P **03 59 36.0 -1.4**
TCF pmax pmax
comp=Z,10.0nm,1.0s
**BGF Bois d'Agland 91.38 41** *eP* P **03 59 38.5 -1.2**
BGF pmax pmax
comp=Z,22nm,0.9s
**NWCL Newcastle 91.38 119** *eP* P **03 59 40.5 +0.1**
NWCL IAmb IAmb 03 59 42.7
comp=Z,7.2nm,0.8s
**AVF Avril sur Loir 91.79 41** *eP* P **03 59 40.1 -1.5**
AVF pmax pmax
comp=Z,31nm,1.6s
**SUMG Summit 91.86 9** P P **03 59 42.1 +0.2**
SUMG pmax pmax
comp=Z,27nm,1.0s
**SUMG Summit 91.86 9** *i* P P **03 59 42.0 +0.2**
SUMG IAmb IAmb 03 59 44.4
comp=Z,11nm,0.9s
**SUMG Summit 91.86 9** P P **03 59 42.1 +0.2**
**SSF Saint Saulge 91.99 41** *eP* P **03 59 42.9 +0.3**
SSF pmax pmax
comp=Z,11nm,1.0s
**KEST Kesra 92.04 53** P P **03 59 43.6 +0.4**
comp=Z,6.1nm,0.9s,baz=256,slow=3.6,SNR=5.1
**SMF Signal de Mont 92.04 42** *eP* P **03 59 41.7 -1.1**
SMF pmax pmax
comp=Z,20nm,1.0s
**LOR Lormes 92.29 41** *eP* P **03 59 45.5 +1.5**
LOR pmax pmax
comp=Z,26nm,1.5s
**RES Resolute Bay 92.68 354** LR LR 04 46 18.8
comp=Z,72nm,18.3s,baz=259,slow=39
**ORIF Oris-en-Rattie 92.72 44** *eP* P **03 59 47.3 +1.2**
ORIF pmax pmax
comp=Z,33nm,1.3s
**BLWY Bulawayo 92.79 112** *i* P **03 59 48.0 +0.9**
BLWY IAmb IAmb 03 59 48.9
comp=Z,66nm,0.8s
**MSNA Messina 93.30 114** *eP* P **03 59 49.6 +0.3**
MSNA IAmb IAmb 03 59 52.0
comp=Z,16nm,0.9s
**CABF La Chapelle 93.47 42** *eP* P **03 59 50.6 +1.1**
CABF pmax pmax
comp=Z,42nm,1.6s
**LPL La Plagne 93.50 43** *eP* P **03 59 49.6 -0.2**
LPL pmax pmax
comp=Z,24nm,1.2s
**LPG La Plagne 93.51 43** *eP* P **03 59 49.9 -0.1**
LPG pmax pmax
comp=Z,14nm,1.0s
**GIVF Givet 93.95 39** *eP* P **03 59 50.4 -1.1**
GIVF pmax pmax
comp=Z,32nm,1.3s
**MOPA Mopani 94.09 116** *eP* P **03 59 53.8 +0.9**
MOPA IAmb IAmb 03 59 55.5
comp=Z,12nm,1.0s
**NEEM North Greenlan 94.90 4** *i* P P **03 59 56.4 +0.7**
NEEM IAmb IAmb 03 59 57.7
comp=Z,5.8nm,1.1s
**URZ Urewera 95.99 227** LR LR 04 35 46.2
comp=Z,104nm,18.4s,baz=74,slow=31
**DAVA Damuels 96.14 43** *i* P P **04 00 02.6 +0.7**
comp=Z,13nm,1.4s
**RETA Reutte 96.77 43** *i* P P **04 00 05.3 +0.7**
comp=Z,12nm,1.3s
**MOTA Moosalm 96.95 43** *eP* P **04 00 06.0 +0.6**
comp=Z,11nm,1.4s
**WATA Walderalm 97.26 43** *eP* Pdif 04 00 07.5 +0.5
comp=Z,15nm,1.6s
**WTTA Wattenberg 97.28 43** *eP* Pdif 04 00 08.0 +1.0
comp=Z,6.5nm,0.8s
**RPZ Rata Peaks 97.33 220** LR LR 04 36 30.0
comp=Z,48nm,18.1s,baz=61,slow=31
**ABTA Abfaltersbach 97.70 44** *eP* Pdif 04 00 09.6 +0.8
comp=Z,11nm,1.2s
**GEC2 GERESS Array S 99.05 42** IAmb IAmb 04 00 15.7
comp=Z,8.4nm,1.2s
**GERES GERESS Array B 99.05 42** P **Pdif** **04 00 15.2 +0.5**
comp=Z,1.4nm,0.8s,baz=248,slow=3.6,SNR=11
GERES pP **pP** **04 00 43.3 -0.7**
comp=Z,0.8nm,0.8s,baz=262,slow=4.7,SNR=2.5
**GERES GERESS Array B 99.05 42** P **Pdif** **04 00 13.7 -1.0**
**CLL Collm 99.26 39** *eP* **Pdif** **04 00 16.0 +0.5**
**CLL Collm 99.26 39** *eP*dif **Pdif** **04 00 16.0 +0.5**
**ILAR Eielson Array 99.36 335** PP **PP** **04 04 18.0 -2.3**
comp=Z,1.1nm,1.2s,baz=77,slow=5.3,SNR=5.1
**KONO Kongsberg 99.71 31** *i* P **Pdif** **04 00 19.1 +1.8**
KONO pmax pmax
comp=Z,10.0nm,1.2s
**MODS Modra-Piesok 101.23 43** *eP* **Pdif** **04 00 26.6 +2.2**
**MODS Modra-Piesok 101.23 43** *eP*DIFF **Pdif** **04 00 26.6 +2.2**
**OBN Obninsk 113.67 37** *i* PKIKP **PKiKP** **04 05 11.6 +0.2**
OBN pmax pmax
comp=Z,3.0nm,0.8s
**BILL Bilibino 117.63 339** *e*PKIKP **PKiKP** **04 05 20.9 +2.1**
BILL pmax pmax
comp=Z,15nm,4.0s
**SHA1 Shidzhatmaz 118.43 49** *i* PKIKP **PKiKP** **04 05 22.0 +0.6**
**KIV Kislovodsk 118.44 49** *i* PKIKP **PKiKP** **04 05 21.9 +0.7**
KIV pmax pmax
comp=Z,3.0nm,1.0s
KIV MLR MLR
comp=Z,109nm,22.0s
**KBZ Khabaz 118.60 49** PKP **PKiKP** **04 05 21.6 +0.3**
comp=Z,2.8nm,0.9s,baz=279,slow=4.6,SNR=5.3
**KBZ Khabaz 118.60 49** *i* PKIKP **PKiKP** **04 05 21.8 +0.4**
KBZ pmax pmax
comp=Z,3.0nm,0.9s
**KIRV Kirov 119.95 31** *i* PKIKP **PKiKP** **04 05 24.4 +0.9**
**SEY Seymchan 125.20 337** PKP **PKiKP** **04 05 35.0 +1.3**
comp=Z,1.3nm,0.8s,baz=43,slow=2.9,SNR=5.3
SEY pPKP **pPKPdf** **04 06 02.7 -0.3**
comp=Z,3.3nm,0.9s,baz=80,slow=4.1,SNR=5.4
**SEY Seymchan 125.20 337** *i* PKIKP **PKiKP** **04 05 34.3 +0.5**
**ARU Arti 125.33 32** *i* PKIKP **PKiKP** **04 05 34.8 +0.6**
ARU 04 07 26.5
ARU 04 12 35.8
ARU SS SS 04 24 13.2 -1.5
**NRIK Noril'sk 125.91 9** *i* PKIKP **PKPdf** **04 05 34.0 -0.6**
NRIK pmax pmax
comp=Z,1.0nm,1.0s
**ASAR Alice Springs 132.96 212** PKP **PKiKP** **04 05 50.3 -0.4**
comp=Z,1.1nm,0.8s,baz=129,slow=1.9,SNR=11
ASAR pPKP **pPKPdf** **04 06 18.5 -0.8**
comp=Z,1.4nm,0.6s,baz=133,slow=2.1,SNR=6.5
ASAR SKPbc **SKPbc** **04 09 07.5 -0.3**
comp=Z,1.2nm,0.9s,baz=136,slow=3.3,SNR=6.6
**WRA Warramunga Arr 135.79 215** PKP **PKiKP** **04 05 56.0 -0.5**
comp=Z,4.4nm,1.0s,baz=153,slow=2.3,SNR=19
WRA pPKP **pPKPdf** **04 06 24.6 0.0**
comp=Z,2.6nm,0.6s,baz=146,slow=1.5,SNR=6.9
WRA SKPbc **SKPbc** **04 09 16.9 -0.1**
comp=Z,2.8nm,1.0s,baz=148,slow=3.5,SNR=6.6
**KURK Kurchatov 138.38 29** *c i*PKIKP **PKiKP** **04 06 00.7 0.0**
KURK pmax pmax
comp=Z,3.0nm,0.8s
**ZALV Zalesovo Beam 138.50 22** PKhKP PKPpre 04 05 48.2
comp=Z,1.1nm,0.6s,baz=336,slow=3.3,SNR=5.8
ZALV PKP **PKPdf** **04 05 59.0 +0.2**
comp=Z,9.4nm,0.8s,baz=357,slow=3.0,SNR=3.9
ZALV pPKP pPKPdf 04 06 27.7 -0.7
comp=Z,6.0nm,0.7s,baz=293,slow=2.1,SNR=4.8
ZALV SKPbc **SKPbc** **04 09 24.9 +1.1**
comp=Z,5.4nm,0.9s,baz=304,slow=3.4,SNR=8.8
**ZALV Zalesovo Beam 138.50 22** PKPdf **PKPdf** **04 05 58.2 -0.5**
**GAR Garm 139.67 49** PKPdf **PKPdf** **04 06 00.7 -0.9**
**MAKZ Makanchi 142.68 31** PKIKP **PKPdf** **04 06 03.4 -3.2**
**MAKZ Makanchi 142.68 31** PKPdf **PKPdf** **04 06 03.4 -3.2**
**MK31 Makanchi Array 142.84 31** PKIKP **PKPdf** **04 06 03.9 -3.0**
**MK31 Makanchi Array 142.84 31** **PKPdf** **04 06 03.9 -3.0**
**MKAR Makanchi Array 142.84 31** PKhKP PKPpre 04 06 03.9
comp=Z,3.0nm,0.7s,baz=318,slow=3.3,SNR=30
MKAR SKPbc **SKiKP** **04 09 36.3 -0.4**
comp=Z,1.9nm,0.9s,baz=5.7,slow=2.4,SNR=4.4
**KLR Kul'dur 142.93 335** *c i*PKIKP **PKiKP** **04 06 09.1 -1.0**
KLR pmax pmax
comp=Z,2.0nm,1.2s
**KSH Kashi 143.43 45** PKP PKPbc 04 06 06.9 +1.1
KSH PP **PP** **04 09 23.8 +3.2**
**NIL Nilore 143.74 56** PKIKP PKPbc 04 06 07.2 +0.5
**NIL Nilore 143.74 56** PKPdf PKPbc 04 06 07.2 +0.5
**ZAK Zakamensk 146.30 7** *e*PKP2 **PKPab** **04 06 15.1 0.0**
ZAK pmax pmax
comp=Z,20nm,1.1s
**JYT Yasato 146.46 311** PKPbc **PKPbc** **04 06 15.5 +0.6**
**HIA Hailar 146.62 347** PKP2 **PKiKP** **04 06 17.4 -0.4**
**HIA Hailar 146.62 347** PKPbc **PKiKP** **04 06 17.4 -0.4**
**USRK Ussuriysk Ar. 146.68 329** PKPbc **PKPab** **04 06 16.9 +0.3**
comp=Z,4.4nm,0.6s,baz=35,slow=4.5,SNR=7.5
USRK pPKPbc pPKPbc 04 06 45.1 +0.5
comp=Z,18nm,0.9s,baz=43,slow=2.1,SNR=8.0
**USRK Ussuriysk Ar. 146.68 329** PKPbc **PKPbc** **04 06 16.0 +0.6**
**BNX BinXian 147.49 336** PKPbc **PKPdf** **04 06 15.6 +0.8**
**WMQ Urumqi 147.62 30** PKPbc **PKPdf** **04 06 13.0 -2.2**
WMQ PKPab **PKiKP** **04 06 19.5 -0.6**
WMQ sPKP 04 06 53.4
WMQ PP **PP** **04 09 44.4 -0.4**
WMQ AMB AMB
comp=Z,130nm,4.7s
**MJAR Matsushiro Arr 147.72 313** PKPbc **PKPbc** **04 06 19.0 +0.5**
comp=Z,18nm,0.9s,baz=329,slow=0.3,SNR=29
MJAR pPKPbc **pPKPbc** **04 06 47.0 -0.8**
comp=Z,39nm,0.9s,baz=54,slow=0.3,SNR=16
**MJAR Matsushiro Arr 147.72 313** PKP2 **PKPbc** **04 06 18.7 +0.2**
**MJAR Matsushiro Arr 147.72 313** PKPbc **PKPbc** **04 06 18.7 +0.2**
**MAJO Matsushiro 147.72 313** PKP2 **PKPbc** **04 06 19.2 +0.7**
**MAJO Matsushiro 147.72 313** PKPbc **PKPbc** **04 06 19.2 +0.7**
**MAT Matsushiro 147.72 313** PKP **PKPbc** **04 06 19.5 +1.0**
**KLRI Killari 148.95 83** *e*PKPab **PKPbc** **04 06 22.9 +0.6**
**SONM Songino Array 149.10 4** PKPbc **PKiKP** **04 06 22.8 -0.3**
comp=Z,7.8nm,0.6s,baz=289,slow=1.5,SNR=6.9
SONM pPKPbc **pPKPbc** **04 06 51.3 -0.4**
comp=Z,8.7nm,0.9s,baz=318,slow=1.2,SNR=5.0
**SONM Songino Array 149.10 4** PKPbc **PKPbc** **04 06 22.1 +0.2**
**ULN Ulaanbaatar 149.10 3** *c i*PKIKP **PKPdf** **04 06 18.6 +0.9**
ULN pmax pmax
comp=Z,27nm,2.5s
**ULN Ulaanbaatar 149.10 3** PKPbc **PKPbc** **04 06 22.1 +0.2**
**URV Uravakonda 149.28 89** *e*PKiKP **PKPdf** **04 06 20.4 +1.8**
URV *e* 04 06 23.6
**SOEI Soe 149.56 210** PKPbc **PKiKP** **04 06 25.0 0.0**
**FAKI Fak Fak 149.85 231** PKPbc **PKPbc** **04 06 24.7 +0.1**
**PALK Pallekele 150.61 106** PKPbc **PKiKP** **04 06 27.3 +0.3**
comp=Z,13nm,0.9s,baz=315,slow=1.4,SNR=6.5
**PALK Pallekele 150.61 106** **PKiKP** **04 06 27.8 +0.8**
**HYBB Hyderabad (bro 150.77 84** *e*PKPbc **PKPdf** **04 06 23.6 +2.6**
HYBB *e* 04 06 27.4
**RCLA Racherla 150.97 89** *e*PKPbc **PKPdf** **04 06 23.2 +1.9**
RCLA *e* 04 06 28.4
**SRLM Srisailam 150.98 87** *e*PKPbc **PKPdf** **04 06 23.0 +1.7**
SRLM *e* 04 06 28.4
**CUPL Choutuppal 151.11 85** *e*PKPbc **PKPdf** **04 06 23.9 +2.4**
CUPL *e* 04 06 28.5
**NJS Nagarjunasagar 151.42 86** *e*PKPbc **PKPdf** **04 06 24.5 +2.5**
**ADKI Addanki 151.99 88** *e*PKPbc **PKPdf** **04 06 25.9 +3.1**
ADKI *e* 04 06 29.6
**MYLAV Mylavaram 152.71 86** *e*PKPbc **PKPbc** **04 06 27.7 -3.3**
MYLAV *e* 04 06 32.2
**PVM Polavaram 153.69 85** *e*PKPbc **PKPbc** **04 06 29.8 -3.3**
**KSRS Korea Array 153.71 325** PKPbc **PKiKP** **04 06 33.4 +0.7**
comp=Z,2.7nm,1.0s,baz=15,slow=0.7,SNR=7.0
KSRS PKPab **PKPab** **04 06 45.6 -0.1**
comp=Z,1.9nm,0.7s,baz=32,slow=1.5,SNR=7.0
KSRS pPKPbc **pPKPbc** **04 07 02.5 +0.4**
comp=Z,4.4nm,1.0s,baz=78,slow=1.3,SNR=4.0
**CHLP Challavanipeta 156.04 82** *e*PKPab **PKPab** **04 06 52.6 -3.7**
**HHC Hu-ho-hao-te 156.08 355** *e*PKP **PKPdf** **04 06 26.9 -1.2**
**GTA Gaotai 156.17 18** *e*P PKPdf 04 06 39.3 +11
GTA pP PKPab 04 06 56.6 +0.3
GTA sP sPKPdf 04 07 06.0 -3.8
GTA pmax pmax
comp=Z,2.0nm,1.5s
GTA pmax pmax
comp=Z,29nm,4.3s
GTA LR LR
comp=N,150nm,16.0s
GTA LR LR
comp=E,240nm,17.8s
GTA LR LR
comp=Z,320nm,18.2s
**LZH Lanzhou 160.35 13** *e*P **PKPab** **04 07 15.9 +1.4**
LZH pP sPKPdf 04 07 22.3 +7.2
LZH pmax pmax
comp=Z,15nm,1.0s
LZH LR LR
comp=N,500nm,16.0s
LZH LR LR
comp=E,540nm,17.8s
LZH LR LR
comp=Z,590nm,18.2s
**NJ2 Nanjing 162.57 331** *e*PKP **PKPdf** **04 06 34.3 -1.3**
**RPSI Rantau Prapat 162.64 144** **PKPab** **04 07 26.0 +1.1**
**PSI Prapat 162.73 143** PKPab **PKPab** **04 07 26.0 +0.6**
comp=Z,1.0nm,0.3s,baz=302,slow=7.1,SNR=4.0
**CMAR Chiang Mai Arr 170.15 80** PKPab **PKPab** **04 07 57.8 -0.4**
comp=Z,1.9nm,0.5s,baz=272,slow=5.6,SNR=8.5
**CMAR Chiang Mai Arr 170.15 80** PKPdf **PKPdf** **04 06 41.2 -0.8**
CMAR **PKPab** **04 07 56.8 -1.4**
**GYA Guiyang 170.24 13** PKP **PKPdf** **04 06 39.8 -2.1**

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*JMA* ***13*** *03:48:04.0±0.3, 23°.53N×121°.57E, h23km±4km, M3.1*
*TAP* ***13*** *03:48:06.9, 23°.69N×121°.60E, h35km, ML3.4, C*
**ISC 13 03:48:07.1±0.9, 23°.69N±0°.02×121°.61E±0°.02, h33km±3km,**
**n96, σ0s82/163, 5C-10D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TEGC** | **Jichi Village** | **0.06** | **290** | *i* P | | **Pb** | **03 48 12.9** | **+0.2** |
| | baz=291 | | | | | | | |
| TEGC | | | | *i* S | | **Sb** | **03 48 17.3** | **+0.8** |
| | baz=291 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.18** | **358** | *i* P | | **Pb** | **03 48 14.1** | **+0.5** |
| | baz=6.0 | | | | | | | |
| TEYL | | | | *i* S | | **Sb** | **03 48 19.6** | **+1.7** |
| | baz=6.0 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ESL** | **Shilin** baz=304 | 0.20 | 309 | ⇓*i* | P | **Pn** | 03 48 13.4 | -0.1 |
| ESL | baz=304 | | | *i* | S | **Sb** | 03 48 18.2 | 0.0 |
| **HGSD** | **Ruisui** baz=231 | 0.26 | 221 | | P | **Pn** | 03 48 14.7 | +0.2 |
| HGSD | baz=231 | | | | S | **Sb** | 03 48 20.7 | +1.5 |
| **HWA** | **Hwalien** baz=7.0 | 0.29 | 360 | | P | **Pn** | 03 48 14.9 | -0.2 |
| HWA | baz=7.0 | | | | S | **Sb** | 03 48 21.6 | +1.6 |
| **ETM** | **Tongmen** baz=332 | 0.30 | 340 | ⇓*i* | P | **Pb** | 03 48 14.4 | -0.4 |
| ETM | baz=332 | | | | S | **Sb** | 03 48 20.5 | +0.4 |
| **EHY** | **Hungye** baz=241 | 0.32 | 235 | *e* | P | **Pb** | 03 48 14.4 | -0.7 |
| EHY | baz=241 | | | *e* | S | **Sn** | 03 48 19.6 | -1.2 |
| **TWD** | **Chiawan** baz=350 | 0.39 | 359 | ⇑*i* | P | **Pb** | 03 48 15.8 | -0.4 |
| TWD | baz=350 | | | | S | **Sn** | 03 48 22.9 | +0.1 |
| **ECBN** | **Changbin** baz=194 | 0.40 | 201 | | P | **Pb** | 03 48 16.5 | +0.3 |
| ECBN | baz=194 | | | | S | **Sn** | 03 48 23.6 | +0.8 |
| **YULB** | **Yu-li** baz=232 | 0.41 | 224 | ⇑*i* | P | **Pb** | 03 48 15.8 | -0.6 |
| **EYUL** | **Yuli** baz=228 | 0.43 | 218 | *e* | P | **Pb** | 03 48 16.2 | -0.4 |
| **TWF1** | **Yuli** baz=231 | 0.44 | 220 | ⇑*i* | P | **Pb** | 03 48 16.3 | -0.5 |
| TWF1 | baz=231 | | | | S | **Sb** | 03 48 21.6 | -1.8 |
| **ETL** | **Fush Village** baz=353 | 0.47 | 2 | | P | **Pb** | 03 48 16.8 | -0.5 |
| ETL | baz=353 | | | *e* | S | **Sb** | 03 48 23.9 | -0.4 |
| **NACB** | **Ninganchiao** baz=351 | 0.48 | 359 | | P | **Pb** | 03 48 16.7 | -0.8 |
| NACB | baz=351 | | | | S | **Sb** | 03 48 24.8 | +0.2 |
| **ETLH** | **Xiulin Townshi** baz=339 | 0.53 | 348 | | P | **Pb** | 03 48 17.3 | -1.0 |
| ETLH | baz=339 | | | | S | **Sb** | 03 48 24.4 | -1.6 |
| **WUSB** | **Renai** baz=304 | 0.54 | 304 | ⇓*i* | P | **Pn** | 03 48 18.1 | -0.6 |
| WUSB | baz=304 | | | | S | **Sb** | 03 48 24.7 | -1.6 |
| **CHGB** | **Renai** baz=321 | 0.54 | 313 | ⇓*i* | P | **Pn** | 03 48 18.2 | -0.5 |
| CHGB | baz=321 | | | *i* | S | **Sb** | 03 48 25.2 | -1.2 |
| **WHF** | **Hehuan Shan** baz=319 | 0.55 | 326 | ⇓*i* | P | **Pn** | 03 48 17.9 | -1.2 |
| WHF | baz=319 | | | | S | **Sb** | 03 48 25.8 | -1.1 |
| **FULB** | **Fuli** baz=221 | 0.56 | 211 | | P | **Pn** | 03 48 18.7 | -0.2 |
| **SSLB** | **Suanglung** baz=279 | 0.61 | 280 | | P | **Pn** | 03 48 18.7 | -0.7 |
| SSLB | baz=279 | | | | S | **Sn** | 03 48 26.4 | -1.8 |
| **CHKT** | **Chengkung** baz=189 | 0.62 | 201 | | P | **Pn** | 03 48 19.7 | 0.0 |
| CHKT | baz=189 | | | | S | **Sb** | 03 48 29.6 | +1.2 |
| **YUS** | **Yu-Shan** baz=252 | 0.63 | 252 | | P | **Pn** | 03 48 20.0 | -0.2 |
| YUS | baz=252 | | | *e* | S | **Sb** | 03 48 28.2 | -0.9 |
| **FUSS** | **Fushou** baz=328 | 0.65 | 329 | ⇓*i* | P | **Pn** | 03 48 19.7 | -0.5 |
| FUSS | baz=328 | | | | S | **Sn** | 03 48 29.1 | -0.4 |
| **SMLT** | **Sun Moon Lake** baz=286 | 0.68 | 287 | ⇓*i* | P | **Pn** | 03 48 20.2 | -0.3 |
| SMLT | baz=286 | | | | S | **Sn** | 03 48 29.3 | -0.7 |
| **WPL** | **Puli Township** baz=303 | 0.68 | 299 | *e* | P | **Pn** | 03 48 20.0 | -0.4 |
| **TWT** | **Tachien** baz=319 | 0.69 | 325 | | P | **Pn** | 03 48 20.6 | -0.2 |
| TWT | baz=319 | | | | S | **Sn** | 03 48 29.1 | -1.3 |
| **DPDB** | **Guoxing** baz=302 | 0.71 | 299 | *e* | P | **Pn** | 03 48 20.8 | -0.1 |
| DPDB | baz=302 | | | *e* | S | **Sn** | 03 48 29.9 | -1.0 |
| **TYC** | **Yuchr** baz=293 | 0.72 | 288 | ⇓*i* | P | **Pn** | 03 48 20.7 | -0.3 |
| TYC | baz=293 | | | | S | **Sn** | 03 48 29.9 | -1.0 |
| **ELDTW** | **Lidau** baz=227 | 0.73 | 228 | *e* | P | **Pn** | 03 48 20.2 | -1.1 |
| **WCS** | **Beigang Elemen** baz=308 | 0.73 | 300 | *e* | P | Pn | 03 48 18.9 | -2.3 |
| **ALS** | **Alishan** baz=265 | 0.76 | 257 | ⇑*i* | P | **Pn** | 03 48 22.0 | +0.2 |
| ALS | baz=265 | | | *i* | S | **Sn** | 03 48 31.7 | -0.5 |
| **EDH** | **Donghe** baz=190 | 0.76 | 201 | *e* | P | **Pn** | 03 48 21.0 | -0.6 |
| EDH | baz=190 | | | *e* | S | **Sb** | 03 48 33.4 | +1.3 |
| **NNSB** | **Datong** baz=351 | 0.77 | 345 | | P | **Pn** | 03 48 21.0 | -0.7 |
| NNSB | baz=351 | | | | S | **Sn** | 03 48 30.6 | -1.7 |
| **EWUT** | **Wuta** baz=358 | 0.77 | 12 | | P | **Pn** | 03 48 21.3 | -0.4 |
| EWUT | baz=358 | | | | S | **Sn** | 03 48 32.4 | +0.2 |
| **WJS** | **Zhushan** baz=279 | 0.82 | 280 | | P | **Pb** | 03 48 23.1 | +0.2 |
| WJS | baz=279 | | | | S | **Sb** | 03 48 34.6 | +0.9 |
| **LATG** | **Datong** baz=354 | 0.85 | 355 | ⇓*i* | P | **Pn** | 03 48 22.1 | -0.8 |
| LATG | baz=354 | | | | S | **Sn** | 03 48 33.3 | -0.9 |
| **CHN5** | **Tsauling** baz=265 | 0.86 | 264 | | P | **Pb** | 03 48 23.8 | +0.1 |
| CHN5 | baz=265 | | | | S | **Sb** | 03 48 35.7 | +0.8 |
| **WNT** | **Mingjian** baz=282 | 0.87 | 283 | | P | **Pb** | 03 48 23.9 | +0.1 |
| WNT | baz=282 | | | | S | **Sb** | 03 48 36.0 | +0.9 |
| **LONT** | **Longtian** baz=197 | 0.89 | 209 | *e* | P | **Pn** | 03 48 21.6 | -1.7 |
| **STYH** | **Taoyuan** baz=233 | 0.92 | 236 | *e* | P | **Pn** | 03 48 24.1 | +0.3 |
| STYH | baz=233 | | | *e* | S | **Sn** | 03 48 36.0 | +0.2 |
| **NDS** | **Dongshan** baz=354 | 0.95 | 6 | *e* | P | **Pn** | 03 48 23.9 | -0.3 |
| **ENTT** | **Nioudou** baz=358 | 0.95 | 358 | *e* | P | **Pn** | 03 48 23.7 | -0.5 |
| **TCU** | **Taichung** baz=297 | 0.97 | 298 | | P | **Pb** | 03 48 25.6 | +0.2 |
| TCU | baz=297 | | | | S | **Sb** | 03 48 38.8 | +0.9 |
| **TPUB** | **Ta-pu** baz=246 | 0.98 | 247 | | P | **Pn** | 03 48 25.0 | +0.4 |
| TPUB | baz=246 | | | | S | **Sb** | 03 48 38.5 | +0.3 |
| **WDLH** | **Douliu** baz=271 | 0.98 | 270 | *e* | P | **Pn** | 03 48 25.5 | +0.9 |
| WDLH | baz=271 | | | *e* | S | **Sb** | 03 48 38.5 | +0.2 |
| **CHN4** | **Tsaushan** baz=252 | 0.99 | 250 | | P | **Pb** | 03 48 25.7 | -0.1 |
| CHN4 | baz=252 | | | | S | **Sb** | 03 48 39.7 | +1.2 |
| **TWG** | **Pinlang** baz=197 | 0.99 | 210 | | P | **Pn** | 03 48 23.4 | -1.4 |
| **TWGBT** | **Beinan** baz=197 | 0.99 | 209 | *e* | P | **Pn** | 03 48 23.3 | -1.4 |
| **TWQ1** | **Liyutan** baz=322 | 1.01 | 311 | | P | **Pb** | 03 48 26.2 | +0.1 |
| TWQ1 | baz=322 | | | | S | **Sb** | 03 48 40.2 | +1.2 |
| **NSK** | **Sanguang** baz=357 | 1.01 | 347 | | P | **Pn** | 03 48 25.0 | -0.1 |
| **WTP** | **Ta-pu** baz=246 | 1.01 | 244 | *e* | P | **Pn** | 03 48 25.8 | +0.7 |
| WTP | baz=246 | | | *e* | S | **Sb** | 03 48 39.7 | +0.5 |
| **LDUT** | **Ludao** baz=180 | 1.02 | 187 | *e* | P | **Pn** | 03 48 23.4 | -1.7 |
| LDUT | baz=180 | | | *e* | S | **Sn** | 03 48 38.6 | +0.3 |
| **TWE** | **Neicheng** baz=354 | 1.03 | 3 | *e* | P | **Pn** | 03 48 25.0 | -0.3 |
| TWE | baz=354 | | | *e* | S | **Sn** | 03 48 38.9 | +0.3 |
| **WCHH** | **Zhanghua** baz=291 | 1.04 | 292 | *e* | P | **Pn** | 03 48 26.3 | +1.0 |
| WCHH | baz=291 | | | *e* | S | **Sb** | 03 48 41.2 | +1.3 |
| **NFF** | **Wufeng Townshi** baz=332 | 1.04 | 335 | | P | **Pn** | 03 48 25.9 | +0.3 |
| NFF | baz=332 | | | *e* | S | **Sn** | 03 48 38.7 | -0.3 |
| **NSY** | **Sanyi** baz=311 | 1.06 | 313 | | P | **Pb** | 03 48 27.0 | 0.0 |
| NSY | baz=311 | | | | S | **Sb** | 03 48 41.5 | +0.9 |
| **FUSB** | **Fushanzhiwuyua** baz=349 | 1.07 | 359 | | P | **Pn** | 03 48 25.6 | -0.3 |
| FUSB | baz=349 | | | *e* | S | **Sn** | 03 48 39.4 | -0.3 |
| **NWLT** | **Wulai** baz=5.0 | 1.09 | 355 | *e* | P | **Pn** | 03 48 26.3 | +0.2 |
| **LIOB** | **Emei** baz=328 | 1.10 | 331 | *i* | P | **Pb** | 03 48 27.5 | -0.1 |
| LIOB | baz=328 | | | | S | **Sb** | 03 48 41.8 | +0.2 |
| **CHY** | **Chiayi** baz=262 | 1.10 | 260 | *e* | P | **Pn** | 03 48 26.8 | +0.5 |
| CHY | baz=262 | | | *e* | S | **Sb** | 03 48 42.3 | +0.5 |
| **WDJ** | **Dajia District** baz=305 | 1.10 | 307 | | P | **Pb** | 03 48 27.5 | -0.2 |
| WDJ | baz=305 | | | *e* | S | **Sb** | 03 48 42.5 | +0.7 |
| **CHN1** | **Nanshi** baz=246 | 1.11 | 243 | ⇓*i* | P | **Pn** | 03 48 27.4 | +1.0 |
| CHN1 | baz=246 | | | | S | **Sb** | 03 48 42.6 | +0.6 |
| **TWK** | **Hsinying** baz=250 | 1.11 | 248 | | P | **Pb** | 03 48 27.6 | -0.2 |
| TWK | baz=250 | | | | S | **Sb** | 03 48 43.1 | +1.1 |
| **SNST** | **Tainan City** baz=248 | 1.12 | 246 | *e* | P | **Pn** | 03 48 27.6 | +1.0 |
| SNST | baz=248 | | | *e* | S | **Sb** | 03 48 43.1 | +0.8 |
| **NMLH** | **Miaoli** baz=316 | 1.13 | 319 | *e* | P | **Pn** | 03 48 27.6 | +0.9 |
| NMLH | baz=316 | | | *e* | S | **Sn** | 03 48 42.1 | +1.1 |
| **WRL** | **Guolierlin Hig** baz=281 | 1.15 | 281 | *e* | P | **Pn** | 03 48 27.9 | +1.0 |
| WRL | baz=281 | | | | S | **Sb** | 03 48 42.8 | -0.2 |
| **NTC** | **Toucheng** baz=358 | 1.18 | 10 | *e* | P | **Pn** | 03 48 26.9 | -0.5 |
| **ECL** | **Taimali** baz=200 | 1.24 | 209 | *e* | P | **Pn** | 03 48 26.5 | -1.7 |
| **ICHU** | **Yijhu** baz=258 | 1.26 | 255 | *e* | P | **Pn** | 03 48 29.4 | +1.0 |
| ICHU | baz=258 | | | *e* | S | **Sn** | 03 48 45.8 | +1.5 |
| **NHDH** | **Xindian Distri** baz=356 | 1.27 | 357 | *e* | P | **Pn** | 03 48 29.1 | +0.5 |
| **WSL** | **Shuilin Townsh** baz=265 | 1.27 | 263 | *e* | P | **Pn** | 03 48 29.6 | +1.0 |
| WSL | baz=265 | | | *e* | S | **Sb** | 03 48 46.4 | -0.3 |
| **TWA** | **Mucha** baz=359 | 1.29 | 359 | *e* | P | **Pn** | 03 48 29.1 | +0.3 |
| **TIPB** | **Shuangxi** baz=355 | 1.29 | 9 | *e* | P | **Pn** | 03 48 29.2 | +0.2 |
| **SSD** | **Sandimen** baz=226 | 1.30 | 224 | *e* | P | **Pn** | 03 48 29.5 | +0.5 |
| SSD | baz=226 | | | *e* | S | **Sb** | 03 48 47.2 | -0.1 |
| **TSMG** | **Majia** baz=222 | 1.32 | 222 | *e* | P | **Pb** | 03 48 30.7 | -0.6 |
| TSMG | baz=222 | | | *e* | S | **Sb** | 03 48 48.2 | +0.3 |
| **NWF** | **Wu-fen Shan** baz=6.0 | 1.39 | 7 | | P | **Pn** | 03 48 30.6 | +0.3 |
| **TWM1** | **Shoushan** baz=233 | 1.39 | 232 | *e* | P | **Pb** | 03 48 32.3 | -0.2 |
| **MASBT** | **Mashibuluo** baz=221 | 1.40 | 220 | *e* | P | **Pn** | 03 48 30.2 | -0.1 |
| **SXI1** | **Grass Mountain** baz=356 | 1.42 | 10 | *e* | P | **Pn** | 03 48 31.1 | +0.3 |
| **EAST** | **Anshuo** baz=200 | 1.47 | 208 | *e* | P | **Pn** | 03 48 30.5 | -0.9 |
| **TAWH** | **Dawu Township** baz=198 | 1.50 | 206 | *e* | P | **Pn** | 03 48 32.6 | +0.9 |
| **YOJ** | **Yonaguni jima** | 1.50 | 59 | | P | **Pn** | 03 48 32.0 | +0.2 |
| YOJ | | | | | S | **Sn** | 03 48 50.8 | +0.7 |
| **YOJ** | **Yonaguni jima** baz=59 | 1.50 | 59 | *e* | P | **Pn** | 03 48 31.9 | +0.2 |
| YOJ | baz=59 | | | *e* | S | **Sn** | 03 48 50.1 | 0.0 |
| **SCZT** | **Fangliau** baz=216 | 1.59 | 215 | *e* | P | **Pn** | 03 48 34.0 | +0.9 |
| **LAY** | **Lan-yu** baz=175 | 1.64 | 182 | *e* | P | **Pn** | 03 48 32.0 | -1.7 |
| **SLIU** | **Shizi** baz=198 | 1.64 | 207 | *e* | P | **Pn** | 03 48 34.8 | +1.0 |
| **LYUB** | **Lan-yu** baz=174 | 1.68 | 181 | *e* | P | Pn | 03 48 31.4 | -2.8 |
| LYUB | baz=174 | | | *e* | S | **Sn** | 03 48 52.3 | -2.3 |
| **PHUB** | **P'eng-hu** baz=256 | 1.87 | 265 | *e* | P | **Pn** | 03 48 37.1 | +0.2 |
| PHUB | baz=256 | | | *e* | S | **Sn** | 03 48 59.2 | -0.2 |
| **PNG** | **Penghu** baz=257 | 1.89 | 267 | *e* | P | **Pn** | 03 48 37.6 | +0.5 |
| PNG | baz=257 | | | *e* | S | **Sn** | 03 48 60.0 | +0.3 |
| **HATJ** | **Hateruma jima** | 2.05 | 79 | | P | **Pn** | 03 48 38.4 | -0.9 |
| HATJ | | | | | S | **Sn** | 03 49 03.9 | +0.2 |
| **IRIF** | **Iriomote-Funau** | 2.05 | 71 | | P | **Pn** | 03 48 40.4 | +1.1 |
| IRIF | | | | | S | **Sn** | 03 49 04.4 | +0.7 |
| **VCHM** | **Qimei** baz=261 | 2.06 | 257 | *e* | P | **Pn** | 03 48 39.8 | +0.5 |
| VCHM | baz=261 | | | *e* | S | **Sn** | 03 49 04.2 | +0.3 |
| **JKRS** | **Kuro-shima** | 2.27 | 76 | | P | **Pn** | 03 48 43.7 | +1.4 |
| JKRS | | | | | S | **Sn** | 03 49 10.1 | +1.0 |
| **JIJ** | **Ishigaki jima** | 2.42 | 73 | | P | **Pn** | 03 48 44.6 | +0.3 |
| JIJ | | | | | S | **Sn** | 03 49 12.1 | -0.7 |
| **JISG** | **Ishigakijimahi** | 2.63 | 70 | | P | **Pn** | 03 48 47.3 | 0.0 |
| JISG | | | | | S | **Sn** | 03 49 17.3 | -0.7 |
| **JTJ** | **Tarama** | 2.98 | 71 | | P | **Pn** | 03 48 52.5 | +0.4 |
| JTJ | | | | | S | **Sn** | 03 49 26.8 | 0.0 |

**IDC 13 03:52:29.0±2.2, 7°28S×126°48E, h0km, mb3.3/1, mb1 3.5/4, mb1mx2.9/41, mbtmp3.3/4, ML2.9/3, Error ellipse: s-maj=108.8km s-min=29.8km az=70.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** 0.1nm,0.3s,baz=13,slow=14,SNR=1.7 | 10.79 | 184 | Pn | Pn | Pn | 03 55 04.2 | -0.6 |
| FITZ | 0.1nm,0.3s,baz=19,slow=21,SNR=1.6 | | | Sn | | Sn | 03 56 55.8 | -10 |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=325,slow=15,SNR=2.4 | 14.72 | 150 | Pn | | Pn | 03 55 57.7 | -0.9 |
| WRA | 0.0nm,0.3s,baz=309,slow=16,SNR=2.1 | | | Sn | | Sn | 03 58 28.6 | -14 |
| **ASAR** | **Alice Springs** 0.0nm,0.3s,baz=336,slow=11,SNR=1.8 | 17.79 | 157 | P | | P | 03 56 38.9 | -0.1 |
| **MKAR** | **Makanchi Array** 0.1nm,0.5s,baz=131,slow=8.3,SNR=2.4 | 66.59 | 329 | P | | P | 04 03 21.2 | +0.1 |

*IDC 13 04:03:25.1±1.1, 55°.01N×162°.03E, h0km, mb3.8/20, mb1 3.9/21, mb1mx3.8/59, mbtmp3.8/21, ML2.6/1, MS4.0/2, Ms1 3.9/2, ms1mx2.8/98, Error ellipse: s-maj=28.6km s-min=16.1km az=159.0*
*KRSC 13 04:03:27.7±0.8, 54°.60N×162°.45E, h48km±11km, ML4.1*
*NEIC 13 04:03:30.1±1.3, 55°.0N±0°.1×162°.0E±0°.3, h34km±8km, mb4.0/8, Error ellipse: s-maj=27.2km s-min=13.5km az=135.0*

**ISC 13 04:03:28.9±0.9, 54°66N±0°.03×162°41E±0°.04, h40km±9km, n82, σ1992/94, mb3.9/23, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | 0.41 | 256 | *e*P | | **Pn** | **04 03 38.8** | **+0.4** |
| MKZ | | | | *e*S | | **Sn** | **04 03 45.4** | **+0.4** |
| **TUMD** | **Tumrok D** | 1.28 | 296 | *e*P | | **Pn** | **04 03 50.8** | **+0.5** |
| TUMD | | | | *e*S | | **Sn** | **04 04 07.5** | **+1.2** |
| **TUMR** | **Tumrok** | 1.45 | 297 | *e*P | | **Pn** | **04 03 53.7** | **+1.0** |
| **KBTR** | **Krutoberegovo** | 1.57 | 8 | *e*P | | **Pn** | **04 03 55.8** | **+1.5** |
| **KBG** | **Krutoberegovo** | 1.61 | 6 | *e*P | | **Pn** | **04 03 56.3** | **+1.5** |
| KBG | | | | *e*S | | **Sn** | **04 04 16.9** | **+2.6** |
| **BZGR** | **Bezymyannyi-Gr** | 1.62 | 323 | *e*P | | **Pn** | **04 03 56.5** | **+1.5** |
| BZGR | | | | *e*S | | **Sn** | **04 04 17.5** | **+2.9** |
| **ZLN** | **Zelenaya** | 1.64 | 327 | *e*P | | **Pn** | **04 03 57.2** | **+1.8** |
| ZLN | | | | *e*S | | **Sn** | **04 04 19.0** | **+3.7** |
| **KMNR** | **Kamenistaya** | 1.66 | 312 | *e*P | | **Pn** | **04 03 57.0** | **+1.4** |
| KMNR | | | | *e*S | | **Sn** | **04 04 17.5** | **+1.7** |
| **BZWR** | **Bezymyannyi-We** | 1.71 | 321 | *e*P | | **Pn** | **04 03 57.7** | **+1.4** |
| BZWR | | | | *e*S | | **Sn** | **04 04 18.9** | **+2.0** |
| **LGNR** | **Loginova** | 1.73 | 326 | *e*P | | **Pn** | **04 03 59.0** | **+2.2** |
| **CIRR** | **Tsirk** | 1.74 | 328 | *e*P | | **Pn** | **04 03 58.6** | **+1.8** |
| **KIRR** | **Kirishev** | 1.75 | 319 | *e*P | | **Pn** | **04 03 58.9** | **+1.9** |
| **KPT** | **Kopyto** | 1.81 | 317 | *e*P | | **Pn** | **04 03 59.4** | **+1.7** |
| **KII** | **Karymskiy** | 1.84 | 251 | *e*P | | **Pn** | **04 03 59.6** | **+1.6** |
| KII | | | | *e*S | | **Sn** | **04 04 22.0** | **+1.9** |
| **KRSR** | **Krestovskiy** | 1.88 | 327 | *e*P | | **Pn** | **04 04 00.1** | **+1.4** |
| KRSR | | | | *e*S | | **Sn** | **04 04 23.6** | **+2.4** |
| **KLY** | **Klyuchi** | 1.94 | 330 | *e*P | | **Pn** | **04 04 00.5** | **+1.2** |
| KLY | | | | *e*S | | **Sn** | **04 04 23.7** | **+1.3** |
| **SMKR** | **Semkarok** | 2.00 | 345 | *e*P | | **Pn** | **04 04 02.5** | **+2.2** |
| **BDR** | **Baidarnaya** | 2.03 | 341 | *e*P | | **Pn** | **04 04 02.8** | **+2.1** |
| **SPN** | **Mys Shipunski** | 2.10 | 223 | *e*P | | **Pn** | **04 04 01.9** | **+0.3** |
| SPN | | | | *e*S | | **Sn** | **04 04 26.3** | **-0.2** |
| **SRKR** | **Sorokina** | 2.12 | 341 | *e*P | | **Pn** | **04 04 04.2** | **+2.3** |
| **BKI** | **Bering** | 2.13 | 74 | *e*P | | **Pn** | **04 04 03.7** | **+1.8** |
| BKI | | | | *e*S | | **Sn** | **04 04 28.6** | **+1.5** |
| **NLC** | **Nalytchevo** | 2.34 | 232 | *e*P | | **Pn** | **04 04 06.1** | **+1.2** |
| **ESO** | **Esso** | 2.47 | 302 | *e*P | | **Pn** | **04 04 08.8** | **+2.1** |
| **SDLR** | **Sedlovina** | 2.50 | 238 | *e*P | | **Pn** | **04 04 09.2** | **+2.1** |
| SDLR | | | | *e*S | | **Sn** | **04 04 38.5** | **+2.1** |
| **SMAR** | **Somma** | 2.55 | 238 | *e*P | | **Pn** | **04 04 09.8** | **+1.9** |
| SMAR | | | | *e*S | | **Sn** | **04 04 39.4** | **+1.7** |
| **KRER** | **Koryakskii** | 2.55 | 239 | *e*P | | **Pn** | **04 04 10.4** | **+2.5** |
| KRER | | | | *e*S | | **Sn** | **04 04 40.8** | **+3.0** |
| **UGLR** | **Uglovaya** | 2.57 | 237 | *e*P | | **Pn** | **04 04 10.2** | **+2.1** |
| UGLR | | | | *e*S | | **Sn** | **04 04 40.5** | **+2.4** |
| **AVH** | **Avacha** | 2.58 | 239 | *e*P | | **Pn** | **04 04 10.7** | **+2.5** |
| AVH | | | | *e*S | | **Sn** | **04 04 40.5** | **+2.2** |
| **KOK** | **Koryaka** | 2.61 | 240 | *e*P | | **Pn** | **04 04 11.1** | **+2.4** |
| **DALK** | **Dalny** | 2.71 | 235 | *e*P | | **Pn** | **04 04 11.6** | **+1.7** |
| DALK | | | | *e*S | | **Sn** | **04 04 43.1** | **+1.7** |
| **PET** | **Petropavlovsk** | 2.76 | 235 | Pn | | **Pn** | **04 04 12.4** | **+1.8** |
| **PET** | **Petropavlovsk** | 2.76 | 235 | *e*P | | **Pn** | **04 04 12.7** | **+2.1** |
| PET | | | | *e*S | | **Sn** | **04 04 44.3** | **+1.6** |
| **GNL** | **Ganaly** | 2.80 | 252 | *e*P | | **Pn** | **04 04 13.6** | **+2.4** |
| **KRMR** | **Karymshinskiy** | 3.13 | 236 | *e*P | | **Pn** | **04 04 18.1** | **+2.4** |
| KRMR | | | | *e*S | | **Sn** | **04 04 55.7** | **+3.9** |
| **PEA0B** | **Petropavlovsk-** | 3.19 | 243 | Pn | | **Pn** | **04 04 18.5** | **+2.0** |
| **PETK** | **Petropavlovsk-** 3.6nm,0.3s,baz=70,slow=17,SNR=60 | 3.19 | 243 | Pn | | **Pn** | **04 04 17.9** | **+1.4** |
| PETK | 5.6nm,0.3s,baz=336,slow=6.8,SNR=9.8 | | | Sn | | **Sn** | **04 04 57.0** | **+3.7** |
| PETK | comp=Z,56nm,21.4s,baz=52,slow=42 | | | LR | | LR | 04 05 39.3 | |
| **PETK** | **Petropavlovsk-** | 3.19 | 243 | Pn | | **Pn** | **04 04 18.1** | **+1.6** |
| **RUS** | **Russkaya** | 3.22 | 228 | *e*P | | **Pn** | **04 04 18.1** | **+1.2** |
| RUS | | | | *e*S | | **Sn** | **04 04 53.7** | **-0.2** |
| **MTVR** | **Mutnovka** | 3.33 | 231 | *e*P | | **Pn** | **04 04 20.7** | **+2.1** |
| MTVR | | | | *e*S | | **Sn** | **04 04 59.3** | **+2.4** |
| **GRL** | **Gorelyy** | 3.33 | 233 | *e*P | | **Pn** | **04 04 21.3** | **+2.7** |
| **APC** | **Apacha** | 3.56 | 243 | *e*P | | **Pn** | **04 04 24.3** | **+2.7** |
| **KDTR** | **Khodutka, Kamc** | 3.86 | 224 | *e*P | | **Pn** | **04 04 27.0** | **+1.3** |
| KDTR | | | | *e*S | | **Sn** | **04 05 09.1** | **-0.7** |
| **BILL** | **Bilibino** | 13.55 | 6 | Pn | | **Pn** | **04 06 33.5** | **-4.8** |
| **BILL** | **Bilibino** | 13.55 | 6 | *e* | | | 04 06 33.0 | |
| **TIXI** | **Tiksi** 1.4nm,0.3s,baz=92,slow=23,SNR=2.7 | 22.28 | 333 | P | | **P** | **04 08 20.2** | **-1.9** |
| **KTH** | **Kantishna Hill** | 25.01 | 50 | P | | **P** | **04 08 48.9** | **+0.2** |
| **IL31** | | 26.74 | 47 | P | | **P** | **04 09 06.0** | **+1.7** |
| IL31 | comp=Z,5.4nm,1.5s | | | IAmb | | IAmb | 04 09 07.5 | |
| **ILAR** | **Eielson Array** comp=Z,0.1nm,0.5s,baz=264,slow=9.0,SNR=1.9 | 26.74 | 47 | P | | **P** | **04 09 05.5** | **+1.2** |
| **KSRS** | **Korea Array** comp=Z,0.4nm,0.3s,baz=359,slow=11,SNR=2.1 | 29.07 | 248 | P | | **P** | **04 09 26.9** | **+1.6** |
| **INK** | **Inuvik** comp=Z,0.4nm,0.4s,baz=282,slow=3.8,SNR=3.6 | 31.79 | 39 | P | | **P** | **04 09 50.1** | **+1.1** |
| **INK** | **Inuvik** comp=Z,1.9nm,1.3s | 31.79 | 39 | IAmb | | IAmb | 04 09 58.0 | |
| **H11N2** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=55 | 35.03 | 173 | T | | T | 04 47 39.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=49 | 35.05 | 173 | T | | T | 04 47 44.5 | |
| **H11N1** | **WAKE ISLAND Hy** baz=355,slow=76,SNR=50 | 35.05 | 173 | T | | T | 04 47 43.0 | |
| **H11S1** | **WAKE ISLAND Hy** baz=352 | 36.23 | 173 | T | | T | 04 49 11.3 | |
| **H11S3** | **WAKE ISLAND Hy** baz=352 | 36.24 | 173 | T | | T | 04 49 18.2 | |
| **H11S2** | **WAKE ISLAND Hy** baz=352 | 36.25 | 173 | T | | T | 04 49 29.1 | |
| **YKA** | **Yellowknife Ar** comp=Z,0.5nm,0.6s,baz=298,slow=8.1,SNR=5.2 | 41.08 | 45 | P | | **P** | **04 11 10.2** | **+2.0** |
| **SPITS** | **Spitsbergen Ar** comp=Z,4.9nm,0.8s,baz=121,slow=8.9,SNR=7.2 | 45.81 | 351 | P | | **P** | **04 11 44.8** | **-1.3** |
| **KURK** | **Kurchatov** | 48.07 | 302 | P | | **P** | **04 12 02.6** | **-1.4** |
| **KURK** | **Kurchatov** comp=Z,2.0nm,0.8s | 48.07 | 302 | IAmb | | IAmb | 04 12 06.6 | |
| **KURBB** | **Kurchatov Arra** comp=Z,1.0nm,0.9s,baz=56,slow=8.0,SNR=4.9 | 48.17 | 302 | P | | **P** | **04 12 02.6** | **-2.2** |
| **MK31** | **Makanchi Array** | 48.71 | 296 | P | | **P** | **04 12 07.6** | **-1.5** |
| MK31 | comp=Z,1.9nm,1.4s | | | IAmb | | IAmb | 04 12 17.1 | |
| **MKAR** | **Makanchi Array** comp=Z,0.5nm,0.9s,baz=51,slow=7.1,SNR=3.2 | 48.71 | 296 | P | | **P** | **04 12 07.1** | **-2.0** |
| **BVAR** | **Borovoye Array** comp=Z,0.3nm,0.3s,baz=53,slow=17,SNR=2.3 | 50.49 | 309 | P | | **P** | **04 12 20.9** | **-1.6** |
| **PDAR** | **Pinedale Array** comp=Z,0.2nm,0.7s,baz=316,slow=3.8,SNR=2.0 | 55.58 | 63 | P | | **P** | **04 13 01.5** | **+1.1** |
| **ULM** | **Lac du Bonnet** comp=Z,121nm,21.4s,baz=290,slow=37 | 56.75 | 49 | LR | | LR | 04 38 02.6 | |
| **FINES** | **FINESS Array B** comp=Z,2.9nm,0.7s,baz=28,slow=8.0,SNR=18 | 59.22 | 337 | P | | **P** | **04 13 24.4** | **-0.9** |
| **NB2** | **NORSAR Subarra** comp=Z,0.5nm,0.5s,baz=19,slow=6.9 | 62.41 | 345 | P | | **P** | **04 13 46.8** | **-0.4** |
| **NOA** | **NORSAR Array B** comp=Z,0.4nm,0.4s,baz=18,slow=7.0,SNR=5.9 | 62.41 | 345 | P | | **P** | **04 13 46.4** | **-0.7** |
| **HFS** | **Hagfors** comp=Z,1.2nm,0.4s,baz=46,slow=4.3,SNR=13 | 62.87 | 343 | P | | **P** | **04 13 49.2** | **-1.0** |
| **AKASG** | **Malin Array Be** comp=Z,0.6nm,0.3s,baz=29,slow=6.5,SNR=5.7 | 67.96 | 330 | P | | **P** | **04 14 22.5** | **-0.7** |
| **AKASG** | **Malin Array Be** comp=Z,1.3nm,1.3s | 67.96 | 330 | IAmb | | IAmb | 04 14 30.5 | |
| **SADO** | **Sadowa** comp=Z,111nm,19.2s,baz=334,slow=39 | 68.03 | 42 | LR | | LR | 04 47 09.3 | |
| **TXAR** | **Lajitas Array** comp=Z,0.5nm,0.9s,baz=307,slow=4.4,SNR=4.4 | 68.78 | 69 | P | | **P** | **04 14 30.8** | **+1.9** |
| **KVAR** | **Kislovodsk Arr** comp=Z,1.3nm,0.4s,baz=6.7,slow=17,SNR=1.4 | 69.21 | 318 | P | | **P** | **04 14 32.0** | **+0.7** |
| **EKA** | **Eskdalemuir Ar** comp=Z,0.5nm,0.4s,baz=18,slow=6.1,SNR=5.3 | 69.73 | 351 | P | | **P** | **04 14 33.9** | **-0.3** |
| **BURAR** | **Bucovina Array** comp=Z,1.1nm,0.8s | 71.89 | 331 | P | | **P** | **04 14 46.8** | **-0.8** |
| BURAR | | | | IAmb | | IAmb | 04 14 48.3 | |
| **GEC2** | **GERESS Array S** comp=Z,2.2nm,1.2s | 73.56 | 339 | P | | **P** | **04 14 55.2** | **-2.2** |
| GEC2 | | | | IAmb | | IAmb | 04 15 07.9 | |
| **GERES** | **GERESS Array B** comp=Z,0.4nm,0.6s,baz=50,slow=8.9,SNR=3.7 | 73.56 | 339 | P | | **P** | **04 14 57.1** | **-0.3** |
| **BRTR** | **Keskin Array B** comp=Z,0.6nm,0.5s,baz=17,slow=4.1,SNR=4.8 | 76.26 | 322 | P | | **P** | **04 15 13.2** | **-0.1** |
| **ESDC** | **Sonseca Array** comp=Z,0.6nm,0.7s,baz=300,slow=4.5,SNR=2.0 | 85.31 | 349 | P | | **P** | **04 16 01.3** | **-0.2** |

*INET* ***13*** *04:20:40.3±1.5, 9.42N×84.34W, h4km±7km, ML3.1*
*UCR* ***13*** *04:20:40.4±1.8, 9.34N×84.41W, h12km±4km, MW3.5*

**ISC 13 04:20:39.4±1.2, 9.38N±0.05×84.42W±0.03, h17km±9km, n29, σ0.60/42, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JACO** | **JACO, Garabito** | **0.37** | **321** | *eP* | **Pb** | **04 20 47.9** | **+0.4** |
| JACO | | | | *eS* | **Sb** | **04 20 54.4** | **+1.5** |
| **LCR2** | **La Lucha 2** | **0.55** | **49** | *eP* | **Pb** | **04 20 50.9** | **+0.2** |
| LCR2 | | | | *eS* | **Sb** | **04 20 59.1** | **+0.7** |
| **EDDO** | **Dominical** | **0.57** | **103** | *eP* | **Pb** | **04 20 51.0** | **+0.1** |
| **LAFE** | **Finca La Fe, P** | **0.64** | **312** | *eP* | **Pn** | **04 20 53.2** | **-0.6** |
| **LAFE** | **Finca La Fe, P** | **0.64** | **312** | *eP* | **Pn** | **04 20 53.2** | **-0.6** |
| LAFE | | | | *eS* | **Sn** | **04 21 03.6** | **0.0** |
| LAFE | | | | IAML | | 04 21 04.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **CDM** | **Cerro de Muert** | **0.67** | **75** | *eP* | **Pb** | **04 20 53.0** | **-0.1** |
| CDM | | | | *eS* | **Sb** | **04 21 02.9** | **+0.7** |
| CDM | | | | IAML | | 04 21 06.8 | |
| | comp=E,667nm,0.4s | | | | | | |
| **RIMA** | **Rio Macho** | **0.67** | **55** | *eP* | **Pb** | **04 20 52.9** | **0.0** |
| **RIMA** | **Rio Macho** | **0.67** | **55** | *eP* | **Pb** | **04 20 52.8** | **-0.1** |
| **HDC** | **Heredia** | **0.69** | **26** | *eP* | **Pb** | **04 20 53.5** | **+0.4** |
| HDC | | | | *eS* | **Sn** | **04 21 03.7** | **-1.3** |
| **HDC3** | **Heredia 3** | **0.69** | **26** | *eP* | **Pb** | **04 20 53.6** | **+0.4** |
| HDC3 | | | | *eS* | **Sb** | **04 21 02.5** | **0.0** |
| HDC3 | | | | IAML | | 04 21 07.7 | |
| | comp=N,710nm,0.5s | | | | | | |
| **SRA1** | **San Ramn** | **0.70** | **356** | *eP* | **Pg** | **04 20 53.6** | **+0.3** |
| **PEZE** | **Perez Zeledon,** | **0.74** | **90** | *eP* | **Pb** | **04 20 53.5** | **-0.4** |
| **PEZE** | **Perez Zeledon,** | **0.74** | **90** | *eP* | **Pb** | **04 20 53.5** | **-0.4** |
| PEZE | | | | *eS* | **Sg** | **04 21 04.2** | **+0.5** |
| PEZE | | | | IAML | | 04 21 07.4 | |
| | comp=N,1μm,0.3s | | | | | | |
| **CAO2** | **Cobano, Puntar** | **0.74** | **295** | *eP* | **Pg** | **04 20 54.1** | **+0.2** |
| **EDPN** | **Palmar Norte** | **1.04** | **113** | *eP* | **Pn** | **04 20 59.2** | **0.0** |
| EDPN | | | | *eS* | **Sn** | **04 21 14.6** | **+1.2** |
| **JTS** | **Las Juntas de** | **1.05** | **330** | *eP* | **Pn** | **04 20 59.1** | **-0.3** |
| **SRBA** | **San Rafael, Bu** | **1.06** | **98** | *eP* | **Pb** | **04 20 59.1** | **-0.3** |
| **EDBA** | **Buenos Aires** | **1.15** | **101** | *eP* | **Pn** | **04 21 00.4** | **-0.4** |
| EDBA | | | | *eS* | **Sg** | **04 21 17.6** | **+0.7** |
| **DUNO** | **Dulce Nombre,** | **1.26** | **304** | *eP* | **Pg** | **04 21 03.9** | **0.0** |
| DUNO | | | | IAML | | 04 21 29.0 | |
| | comp=E,806nm,0.3s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **1.33** | **1** | *eP* | **Pg** | **04 21 04.7** | **-0.5** |
| **ACAL** | **Aguas Claras** | **1.39** | **334** | *eP* | **Pg** | **04 21 05.4** | **-0.8** |
| ACAL | | | | *i* S | **Sg** | **04 21 24.8** | **+0.5** |
| **GUAI** | **GUAI** | **1.39** | **310** | *i* P | **Pg** | **04 21 05.5** | **-0.7** |
| GUAI | | | | *i* S | **Sg** | **04 21 25.6** | **+1.2** |
| **ORTG** | **Ortega, Santa** | **1.41** | **314** | *eP* | **Pb** | **04 21 05.3** | **-0.2** |
| ORTG | | | | *eS* | **Sg** | **04 21 25.5** | **+0.3** |
| ORTG | | | | IAML | | 04 21 28.1 | |
| | comp=N,123nm,0.5s | | | | | | |
| **PTEN** | **Parque Tenorio** | **1.44** | **337** | *i* P | **Pb** | **04 21 06.2** | **+0.3** |
| **CUI** | **Cuipilapa** | **1.47** | **330** | *i* P | **Pb** | **04 21 06.5** | **+0.2** |
| CUI | | | | *i* S | **Sg** | **04 21 26.6** | **-0.2** |
| **EDSV** | **San Vito** | **1.54** | **111** | *eP* | **Pb** | **04 21 06.8** | **-0.7** |
| **VMAR** | **Armenia, Volca** | **1.58** | **334** | *eP* | **Pb** | **04 21 08.5** | **+0.2** |
| **HZTE** | **Horizontes, Gu** | **1.76** | **319** | *eP* | **Pb** | **04 21 10.8** | **-0.5** |
| HZTE | | | | *eS* | **Sg** | **04 21 35.3** | **-0.9** |
| **ACON** | **Acoyapa** | **2.68** | **344** | IAML | | 04 22 03.5 | |
| | comp=N,74nm,0.7s | | | | | | |

*PGC* ***13*** *04:21:31.2±37.0, 49.96N×130.27W, h10km, MLSn3.0/18, Mw3.6/19, Mw3.6/18, 218km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC* ***13*** *04:21:33.7±1.8, 50.10N×129.93W, h0km, mb3.7/2, mb1 3.7/10, mb1mx3.3/67, mbtmp3.5/10, ML3.2/6, MS3.8/2, Ms1 3.8/2, ms1mx2.8/94, Error ellipse: s-maj=25.5km s-min=14.1km az=65.0*

**ISC 13 04:21:32.1±1.1, 49.98N±0.07×130.14W±0.07, h10km, n53, σ1.9/91/56, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.45** | **62** | P | **Pn** | **04 21 56.4** | **-2.0** |
| **BPBC** | **Brooks Peninsu** | **1.54** | **83** | P | **Pn** | **04 21 57.4** | **-2.2** |
| **PACB** | **Port Alice, BC** | **1.76** | **74** | Pn | **Pn** | **04 22 00.2** | **-2.3** |
| PACB | | | | Sn | **Sn** | **04 22 19.4** | **-5.6** |
| **PHC** | **Port Hardy** | **1.88** | **66** | Pn | **Pn** | **04 22 02.6** | **-1.6** |
| PHC | | | | Sn | **Sn** | **04 22 25.2** | **-2.8** |
| **MAYB** | **Maynard** | **1.95** | **76** | Pn | **Pn** | **04 22 03.4** | **-2.0** |
| **TLCB** | **Telegraph Cove** | **2.19** | **74** | Pn | **Pn** | **04 22 07.4** | **-1.2** |
| TLCB | | | | Sn | **Sn** | **04 22 33.8** | **-1.9** |
| **WOSB** | **Woss** | **2.31** | **84** | Pn | **Pn** | **04 22 09.2** | **-1.0** |
| **HG4B** | **Hotspring** | **2.41** | **344** | Pn | **Pn** | **04 22 08.8** | **-2.7** |
| **BBB** | **Bella Bella** | **2.55** | **29** | Pn | **Pn** | **04 22 13.0** | **-0.4** |
| | 8.3nm,0.3s,baz=218,slow=6.3,SNR=53 | | | | | | |
| BBB | | | | Sn | **Sn** | **04 22 40.5** | **-4.0** |
| | 17nm,0.3s,baz=319,slow=21,SNR=10 | | | | | | |
| **BBB** | **Bella Bella** | **2.55** | **29** | Pn | **Pn** | **04 22 12.4** | **-1.0** |
| BBB | | | | Sn | **Sn** | **04 22 41.2** | **-3.3** |
| **NCRB** | **Newcastle Ridg** | **2.66** | **79** | Pn | **Pn** | **04 22 14.2** | **-0.9** |
| **BNB** | **Barry Inlet** | **2.79** | **339** | Pn | **Pn** | **04 22 13.9** | **-2.8** |
| **SPLB** | **Strathcona Par** | **2.90** | **90** | Pn | **Pn** | **04 22 17.1** | **-1.1** |
| **BTB** | **Buttle Lake** | **3.04** | **98** | Pn | **Pn** | **04 22 18.7** | **-1.6** |
| **CBB** | **Campbell River** | **3.08** | **87** | Pn | **Pn** | **04 22 19.6** | **-1.1** |
| CBB | | | | Sn | **Sn** | **04 22 55.1** | **-2.5** |
| **BUTB** | **Butedale** | **3.26** | **18** | Pn | **Pn** | **04 22 22.9** | **-0.3** |
| BUTB | | | | Sn | **Sn** | **04 23 00.2** | **-1.9** |
| **BNKB** | **Banks Island** | **3.36** | **2** | Pn | **Pn** | **04 22 23.1** | **-1.5** |
| **MOBC** | **Moresby Island** | **3.37** | **341** | Pn | **Pn** | **04 22 24.1** | **-0.6** |
| **DIB** | **Dawson Inlet,** | **3.54** | **337** | Pn | **Pn** | **04 22 25.9** | **-1.1** |
| **H02S1** | **DAWSON INLET T** | **3.54** | **337** | Pn | **Pn** | **04 22 24.8** | **-2.2** |
| | SNR=10 | | | | | | |
| **HWKB** | **Hawksbury Isla** | **3.67** | **9** | Pn | **Pn** | **04 22 28.4** | **-0.6** |
| HWKB | | | | Sn | **Sn** | **04 23 10.7** | **-1.6** |
| **MGB** | **Mount Grey** | **3.68** | **103** | Pn | **Pn** | **04 22 29.7** | **+0.5** |
| **TXB** | **Texada** | **3.70** | **92** | Pn | **Pn** | **04 22 29.6** | **+0.3** |
| **SHB** | **Sechelt** | **4.08** | **93** | Pn | **Pn** | **04 22 35.2** | **+0.7** |
| **KITB** | **Kitimat** | **4.21** | **12** | Pn | **Pn** | **04 22 35.7** | **-0.5** |
| **GOBB** | **Galiano Island** | **4.44** | **101** | Pn | **Pn** | **04 22 40.2** | **+0.8** |
| **BIB** | **Bowen Island** | **4.47** | **95** | Pn | **Pn** | **04 22 41.2** | **+1.3** |
| **UBRB** | **Upper Baezaeko** | **4.78** | **50** | Pn | **Pn** | **04 22 45.7** | **+1.5** |
| UBRB | | | | Sn | **Sn** | **04 23 40.0** | **+0.4** |
| **VDB** | **Vedder Mountai** | **5.32** | **97** | Pn | **Pn** | **04 22 52.9** | **+1.4** |
| **MBW** | **Mount Baker** | **5.51** | **99** | Pn | **Pn** | **04 22 56.2** | **+1.8** |
| **FSJB** | **Fort St James** | **5.74** | **36** | Pn | **Pn** | **04 22 58.1** | **+0.7** |
| **FSB** | **Fort Saint Jam** | **5.74** | **36** | Pn | **Pn** | **04 22 58.0** | **+0.6** |
| **FMW** | **Mount Fremont** | **6.40** | **115** | Pn | **Pn** | **04 23 08.4** | **+1.8** |
| **LTY** | **Liberty** | **6.84** | **110** | Pn | **Pn** | **04 23 14.4** | **+1.9** |
| **B08A** | **Colville Reser** | **7.27** | **99** | Pn | **Pn** | **04 23 20.5** | **+2.2** |
| **BMBC** | **Bull Mountain** | **7.75** | **35** | Pn | **Pn** | **04 23 26.4** | **+1.4** |
| **DLBC** | **Dease Lake** | **8.47** | **0** | Pn | **Pn** | **04 23 37.1** | **+2.3** |
| | 0.1nm,0.3s,baz=230,slow=13,SNR=2.2 | | | | | | |
| **NEW** | **Newport** | **8.71** | **96** | Pn | **Pn** | **04 23 38.7** | **+0.6** |
| | 0.1nm,0.3s,baz=291,slow=16,SNR=5.2 | | | | | | |
| **NBC5** | **NorthernBC 5** | **8.75** | **27** | Pn | **Pn** | **04 23 41.5** | **+2.9** |
| NBC5 | | | | Sn | **Sn** | **04 25 15.5** | **-1.7** |
| **NVAR** | **Mina Array Bea** | **14.31** | **139** | Pn | **P** | **04 25 02.4** | **+0.3** |
| | baz=320,slow=9.7,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **15.16** | **28** | Pn | **Pn** | **04 25 04.9** | **-1.1** |
| | 0.0nm,0.3s,baz=219,slow=12,SNR=8.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **15.90** | **109** | Pn | **P** | **04 25 19.5** | **-0.3** |
| | 0.1nm,0.3s,baz=316,slow=10,SNR=8.5 | | | | | | |
| **ILAR** | **Eielson Array** | **17.26** | **335** | P | **P** | **04 25 35.7** | **+1.2** |
| | baz=149,slow=13,SNR=7.0 | | | | | | |
| **INK** | **Inuvik** | **18.46** | **356** | P | **Pn** | **04 25 50.4** | **+2.8** |
| | 0.0nm,0.3s,baz=152,slow=10,SNR=5.3 | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.86** | **76** | P | **P** | **04 26 26.2** | **+1.5** |
| | 6.0nm,0.7s,baz=290,slow=10,SNR=6.5 | | | | | | |
| **TKL** | **Tuckaleechee C** | **36.29** | **95** | LR | LR | 04 44 05.8 | |
| | comp=Z,167nm,21.1s,baz=274,slow=37 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **57.81** | **263** | T | T | 05 34 06.2 | |
| | baz=42,slow=76,SNR=27 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **57.81** | **262** | T | T | 05 33 53.6 | |
| | baz=42,slow=76,SNR=24 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **57.83** | **262** | T | T | 05 34 08.2 | |
| | baz=42,slow=76,SNR=16 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **58.83** | **262** | T | T | 05 35 30.3 | |
| | baz=46 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **58.84** | **262** | T | T | 05 35 27.0 | |
| | baz=46 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **58.85** | **262** | T | T | 05 35 18.2 | |
| | baz=46 | | | | | | |
| **MKAR** | **Makanchi Array** | **79.60** | **338** | P | **P** | **04 33 40.2** | **+1.1** |
| | 0.2nm,0.5s,baz=6.7,slow=3.6,SNR=2.2 | | | | | | |
| MKAR | | | | LR | LR | 05 11 28.5 | |
| | comp=Z,42nm,18.3s,baz=330,slow=38 | | | | | | |

**TAP 13 04:42:21.2, 22.47N×120.61E, h22km, ML1.8, 1C, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SSPT** | **Xinbi** | **0.04** | **296** | P | Pb | 04 42 25.9 | +0.8 |
| | baz=304 | | | | | | |
| SSPT | | | | *eS* | Sb | 04 42 30.0 | +2.3 |
| | baz=304 | | | | | | |
| **SCZT** | **Fangliau** | **0.09** | **174** | P | Pb | 04 42 25.7 | +0.3 |
| | baz=169 | | | | | | |
| SCZT | | | | S | Sb | 04 42 28.9 | +0.7 |
| | baz=169 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.15** | **9** | *iP* | Pb | 04 42 26.6 | +0.3 |
| | baz=16 | | | | | | |
| MASBT | | | | S | Sb | 04 42 30.3 | +0.5 |
| | baz=16 | | | | | | |
| **EAST** | **Anshuo** | **0.24** | **110** | P | Pb | 04 42 28.0 | +0.9 |
| | baz=104 | | | | | | |
| **WLCH** | **Liuqiu** | **0.24** | **242** | *eP* | Pb | 04 42 29.1 | +1.9 |
| | baz=232 | | | | | | |
| WLCH | | | | *eS* | Sb | 04 42 36.9 | +5.7 |
| | baz=232 | | | | | | |
| **TSMG** | **Majia** | **0.24** | **8** | P | Pb | 04 42 27.7 | +0.5 |
| | baz=14 | | | | | | |
| TSMG | | | | *eS* | Sb | 04 42 32.3 | +1.0 |
| | baz=14 | | | | | | |
| **SSD** | **Sandimen** | **0.28** | **4** | P | Pb | 04 42 28.3 | +0.5 |
| | baz=6.0 | | | | | | |
| SSD | | | | *eS* | Sb | 04 42 33.0 | +0.8 |
| | baz=6.0 | | | | | | |
| **TAW** | **Tawu** | **0.29** | **112** | *eP* | Pb | 04 42 28.6 | +0.9 |
| | baz=107 | | | | | | |
| **TAWH** | **Dawu Township** | **0.29** | **116** | P | Pb | 04 42 28.4 | +0.6 |
| | baz=106 | | | | | | |
| TAWH | | | | *eS* | Sb | 04 42 33.9 | +1.6 |
| | baz=106 | | | | | | |
| **SLIU** | **Shizi** | **0.30** | **145** | P | Pb | 04 42 28.5 | +0.5 |
| | baz=144 | | | | | | |
| SLIU | | | | *eS* | Sb | 04 42 33.9 | +1.1 |
| | baz=144 | | | | | | |
| **ECL** | **Taimali** | **0.34** | **68** | P | Pb | 04 42 29.5 | +0.8 |
| | baz=75 | | | | | | |
| ECL | | | | *eS* | Sn | 04 42 35.9 | -1.2 |
| | baz=75 | | | | | | |
| **TWG** | **Pinlang** | **0.56** | **50** | *eP* | Pb | 04 42 32.8 | +0.5 |
| | baz=56 | | | | | | |
| **TWG** | **Pinlang** | **0.56** | **50** | *eP* | Pn | 04 42 33.0 | -0.7 |
| | baz=232 | | | | | | |
| TWG | | | | *eS* | Sn | 04 42 41.7 | -0.6 |
| | baz=232 | | | | | | |
| **TWGBT** | **Beinan** | **0.56** | **51** | *eP* | Pb | 04 42 32.9 | +0.6 |
| | baz=56 | | | | | | |
| **TWGBT** | **Beinan** | **0.56** | **51** | *eP* | Pb | 04 42 33.0 | +0.6 |
| | baz=219 | | | | | | |
| **STYH** | **Taoyuan** | **0.72** | **12** | *eP* | Pn | 04 42 36.6 | +0.5 |
| | baz=359 | | | | | | |
| **CHN1** | **Nanshi** | **0.72** | **354** | *eP* | Pn | 04 42 37.0 | +1.0 |
| | baz=354 | | | | | | |
| **TWK** | **Hsinying** | **0.81** | **352** | *eP* | Pn | 04 42 38.1 | +0.9 |
| | baz=353 | | | | | | |

**TAP 13 04:42:22.1, 23.25N×121.48E, h16km, ML1.8, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ECBN** | **Changbin** | **0.07** | **336** | *eP* | Pg | 04 42 25.4 | +0.2 |
| | baz=335 | | | | | | |
| ECBN | | | | *eS* | Sg | 04 42 27.9 | +0.7 |
| | baz=335 | | | | | | |
| **FULB** | **Fuli** | **0.18** | **254** | *eP* | Pb | 04 42 27.0 | -0.1 |
| | baz=247 | | | | | | |
| FULB | | | | S | Sb | 04 42 30.9 | +0.4 |
| | baz=247 | | | | | | |
| **YULB** | **Yu-li** | **0.22** | **310** | *eP* | Pg | 04 42 26.6 | -0.6 |
| | baz=309 | | | | | | |
| YULB | | | | *eS* | Sb | 04 42 31.8 | +0.1 |
| | baz=309 | | | | | | |
| **HGSD** | **Ruisui** | **0.25** | **347** | *eP* | Pb | 04 42 28.1 | -0.1 |
| | baz=352 | | | | | | |
| HGSD | | | | *eS* | Sb | 04 42 32.7 | +0.3 |
| | baz=352 | | | | | | |
| **EDH** | **Donghe** | **0.32** | **211** | *eP* | Pb | 04 42 29.3 | -0.2 |
| | baz=217 | | | | | | |
| **ELDTW** | **Lidau** | **0.43** | **262** | *eP* | Pg | 04 42 30.4 | -0.5 |
| | baz=254 | | | | | | |

*UPP* ***13*** *05:03:28.2±0.1, 58.82N×15.11E, h0km, ML2.4, Explosion*
*DNK* ***13*** *05:03:29.4±2.7, 58.87N×15.17E, h0km, Mc2.9, ML2.1(UPP), Explosion*
*IDC* ***13*** *05:03:30.1±1.9, 58.75N×14.95E, h0km, mb1 3.6/2, mb1mx2.8/71, mbtmp3.5/2, ML1.8/3, Error ellipse: s-maj=16.7km s-min=8.5km az=20.0*

**ISC 13 05:03:28.4±0.8, 58.83N±0.03×15.13E±0.03, h0km, n34, σ1.9/11/44, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASKU** | **Askersund** | **0.17** | **293** | P | **Pg** | **05 03 31.6** | **-0.1** |
| **ASKU** | **Askersund** | **0.17** | **293** | P | **Pg** | **05 03 31.6** | **-0.1** |
| **LNKU** | **Linkoeping** | **0.64** | **162** | P | **Pg** | **05 03 40.2** | **-0.4** |
| **LNKU** | **Linkoeping** | **0.64** | **162** | P | **Pg** | **05 03 40.2** | **-0.4** |
| **NRAU** | **Nora** | **0.75** | **357** | P | **Pg** | **05 03 42.5** | **-0.2** |
| **NRAU** | **Nora** | **0.75** | **357** | P | **Pg** | **05 03 42.5** | **-0.2** |
| **ESKU** | **Eskilstuna** | **0.77** | **58** | P | **Pg** | **05 03 42.9** | **-0.2** |
| **ESKU** | **Eskilstuna** | **0.77** | **58** | P | **Pg** | **05 03 42.9** | **-0.2** |
| **VIKU** | **Vikbolandet** | **0.88** | **111** | P | **Pg** | **05 03 45.0** | **-0.3** |
| **VIKU** | **Vikbolandet** | **0.88** | **111** | P | **Pg** | **05 03 45.0** | **-0.3** |
| **NASU** | **Vaermlandsnaes** | **1.01** | **277** | P | **Pg** | **05 03 46.8** | **-1.0** |
| **NASU** | **Vaermlandsnaes** | **1.01** | **277** | P | **Pg** | **05 03 46.8** | **-1.0** |
| **EKSU** | **Eksjoe** | **1.26** | **176** | P | **Pg** | **05 03 51.3** | **-1.2** |
| **EKSU** | **Eksjoe** | **1.26** | **176** | P | **Pg** | **05 03 51.3** | **-1.2** |
| **VSTU** | **Vaestervik** | **1.39** | **147** | P | **Pg** | **05 03 53.8** | **-1.1** |
| **VSTU** | **Vaestervik** | **1.39** | **147** | P | **Pg** | **05 03 53.8** | **-1.1** |
| **BACU** | **Backbrunna** | **1.45** | **44** | P | **Pn** | **05 03 55.1** | **-0.6** |
| **BACU** | **Backbrunna** | **1.45** | **44** | P | **Pn** | **05 03 55.1** | **-0.6** |
| **FINU** | **Finntorp** | **1.48** | **294** | P | **Pn** | **05 03 55.5** | **-0.8** |
| **FINU** | **Finntorp** | **1.48** | **294** | P | **Pn** | **05 03 55.5** | **-0.8** |
| **HFS** | **Hagfors** | **1.50** | **331** | Pg | **Pn** | **05 03 55.9** | **-0.7** |
| | 1.1nm,0.3s,baz=156,slow=18,SNR=46 | | | | | | |
| HFS | | | | Lg | Lg | 05 04 18.5 | |
| | 1.0nm,0.3s,baz=157,slow=33,SNR=12 | | | | | | |
| **NYNU** | **Nynaeshamn** | **1.50** | **82** | P | **Pn** | **05 03 55.4** | **-1.2** |
| **NYNU** | **Nynaeshamn** | **1.50** | **82** | P | **Pn** | **05 03 55.4** | **-1.2** |
| **BORU** | **Boraas** | **1.73** | **227** | *i* P | **Pn** | **05 03 59.5** | **-0.1** |
| BORU | | | | *i* P | **Pb** | **05 04 01.2** | **+0.2** |
| **TJOU** | **Tjoern** | **2.01** | **248** | *i* P | **Pb** | **05 04 05.0** | **-0.8** |
| TJOU | | | | *i* S | **Sb** | **05 04 31.3** | **+0.1** |
| **STRU** | **Stroemstad** | **2.06** | **277** | *i* P | **Pn** | **05 04 03.9** | **-0.2** |
| STRU | | | | *i* S | **Sb** | **05 04 32.4** | **-0.3** |
| **ONAU** | **Onsala** | **2.23** | **231** | *i* P | **Pn** | **05 04 07.9** | **+1.4** |
| ONAU | | | | *i* S | **Sb** | **05 04 37.3** | **-0.2** |
| **FABU** | **Falkenberg** | **2.24** | **216** | *i* P | **Pn** | **05 04 07.7** | **+1.0** |
| FABU | | | | *i* S | **Sb** | **05 04 38.7** | **+0.9** |
| **DEL** | **Delary** | **2.46** | **197** | *i* P | **Pb** | **05 04 12.0** | **-1.4** |
| DEL | | | | *i* S | **Sb** | **05 04 45.2** | **+1.0** |
| **BLEU** | **Blekinge** | **2.56** | **171** | *i* P | **Pn** | **05 04 12.7** | **+1.7** |
| BLEU | | | | *i* S | **Sb** | **05 04 45.9** | **-1.1** |
| **NOA** | **NORSAR Array B** | **2.97** | **320** | Pn | **Pn** | **05 04 17.6** | **+0.9** |
| | 0.0nm,0.3s,baz=136,slow=14,SNR=9.3 | | | | | | |
| NOA | | | | Sn | **Sn** | **05 04 53.3** | **+0.3** |
| | 0.0nm,0.3s,baz=141,slow=13,SNR=2.1 | | | | | | |
| NOA | | | | Lg | Lg | 05 05 02.5 | |
| | 0.0nm,0.3s,baz=135,slow=26,SNR=1.4 | | | | | | |
| **LUNU** | **Lund** | **3.33** | **197** | *i* P | **Pn** | **05 04 23.9** | **+2.2** |
| LUNU | | | | *i* S | **Sn** | **05 05 01.5** | **-0.4** |
| **FINES** | **FINESS Array B** | **6.07** | **60** | Pn | **Pn** | **05 05 02.5** | **+3.3** |
| | 0.1nm,0.3s,baz=243,slow=12,SNR=5.2 | | | | | | |
| FINES | | | | Sn | **Sn** | **05 06 11.8** | **+2.6** |
| | 0.2nm,0.3s,baz=249,slow=19,SNR=1.0 | | | | | | |
| FINES | | | | Lg | Lg | 05 06 41.6 | |
| | 0.3nm,0.3s,baz=249,slow=24,SNR=1.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **11.63** | **18** | Pn | **Pn** | **05 06 14.0** | **-1.4** |
| | baz=204,slow=13,SNR=1.9 | | | | | | |

**UPP 13 05:03:31.5±0.1, 58.83N×15.00E, h0km, ML2.1, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASKU** | **Askersund** | **0.11** | **307** | P | Pg | 05 03 33.9 | +0.3 |
| ASKU | | | | S | Sg | 05 03 35.6 | +0.6 |
| **ASKU** | **Askersund** | **0.11** | **307** | S | Sg | 05 03 33.8 | -1.3 |
| **ASKU** | **Askersund** | **0.11** | **307** | P | Pg | 05 03 33.9 | +0.3 |
| **ASKU** | **Askersund** | **0.11** | **307** | S | Sg | 05 03 35.6 | +0.6 |
| **ASKU** | **Askersund** | **0.11** | **307** | S | Sg | 05 03 33.8 | -1.3 |
| **LNKU** | **Linkoeping** | **0.66** | **156** | P | Pg | 05 03 44.1 | -0.1 |
| **LNKU** | **Linkoeping** | **0.66** | **156** | P | Pg | 05 03 44.1 | -0.1 |
| **NRAU** | **Nora** | **0.74** | **2** | P | Pg | 05 03 45.6 | -0.2 |
| **NRAU** | **Nora** | **0.74** | **2** | P | Pg | 05 03 45.6 | -0.2 |
| **ESKU** | **Eskilstuna** | **0.83** | **60** | P | Pg | 05 03 47.0 | -0.3 |
| **ESKU** | **Eskilstuna** | **0.83** | **60** | P | Pg | 05 03 47.0 | -0.3 |
| **NASU** | **Vaermlandsnaes** | **0.95** | **277** | P | Pg | 05 03 49.5 | -0.1 |
| **NASU** | **Vaermlandsnaes** | **0.95** | **277** | P | Pg | 05 03 49.5 | -0.1 |
| **FKPU** | **Falk** | **0.95** | **225** | P | Pg | 05 03 49.1 | -0.5 |
| **FKPU** | **Falk** | **0.95** | **225** | P | Pg | 05 03 49.1 | -0.5 |
| FKPU | | | | S | Sg | 05 04 02.4 | +0.5 |
| **FKPU** | **Falk** | **0.95** | **225** | S | Sg | 05 04 02.4 | +0.5 |
| **FINU** | **Finntorp** | **1.42** | **295** | P | Pn | 05 03 57.6 | -0.9 |
| **FINU** | **Finntorp** | **1.42** | **295** | P | Pn | 05 03 57.6 | -0.9 |

*JMA* ***13*** *05:11:20.7±0.2, 43.67N×143.17E, h192km±2km, M3.2*
*IDC* ***13*** *05:11:21.0±1.1, 43.77N×143.13E, h188km±2km, mb3.4/15, mb1 3.4/20, mb1mx3.3/55, mbtmp3.9/20, Error ellipse: s-maj=25.6km s-min=12.5km az=161.0*

**ISC 13 05:11:20.3±0.7, 43.62N±0.06×143.20E±0.05, h193km±5km, n39, σ0.67/51, mb3.6/15, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JMP** | **Maruseppu** | **0.40** | **16** | P | **Pn** | **05 11 46.6** | **+0.4** |
| JMP | | | | *eS* | **Sn** | **05 12 05.8** | **-0.6** |
| **JKK2** | **Kamakawa 2** | **0.41** | **307** | P | **Pn** | **05 11 46.8** | **+0.6** |
| JKK2 | | | | *eS* | **Sn** | **05 12 06.4** | **+0.1** |
| **JAR** | **Ashorobuto** | **0.53** | **128** | P | **Pn** | **05 11 47.3** | **+0.7** |
| JAR | | | | *eS* | **Sn** | **05 12 07.5** | **+0.6** |
| **JTKR** | **Abashiri--Toko** | **0.62** | **55** | P | **Pn** | **05 11 47.5** | **+0.5** |
| JTKR | | | | *eS* | **Sn** | **05 12 07.5** | **-0.2** |
| **JFR** | **Furan** | **0.64** | **224** | P | **Pn** | **05 11 47.9** | **+0.7** |
| **ASAJ** | **Asahikawa** | **0.66** | **319** | P | **Pn** | **05 11 47.7** | **+0.5** |
| | 46nm,0.3s,baz=231,slow=4.3,SNR=136 | | | | | | |
| ASAJ | | | | S | **Sn** | **05 12 07.8** | **-0.4** |
| | 5.8nm,0.3s,baz=17,slow=29,SNR=32 | | | | | | |
| **ASAJ** | **Asahikawa** | **0.66** | **319** | P | **Pn** | **05 11 47.6** | **+0.4** |
| ASAJ | | | | *eS* | **Sn** | **05 12 07.7** | **-0.4** |
| **JCH** | **Churui** | **1.01** | **173** | P | **Pn** | **05 11 49.5** | **+0.1** |
| JCH | | | | *eS* | **Sn** | **05 12 10.9** | **-0.9** |
| **JHR** | **Hokuryu** | **1.08** | **277** | P | **Pn** | **05 11 50.2** | **+0.4** |
| JHR | | | | *eS* | **Sn** | **05 12 12.2** | **-0.4** |
| **JAK** | **Akkeshi** | **1.26** | **119** | P | **Pn** | **05 11 51.3** | **+0.1** |
| JAK | | | | *eS* | **Sn** | **05 12 14.6** | **-0.5** |
| **JSE** | **Soyaes** | **1.41** | **342** | P | **Pn** | **05 11 52.1** | **-0.3** |
| **JRA** | **Rausu** | **1.43** | **77** | P | **Pn** | **05 11 53.6** | **+1.0** |
| **JEW** | **Eniwo** | **1.50** | **239** | P | **Pn** | **05 11 54.0** | **+0.7** |
| JEW | | | | *eS* | **Sn** | **05 12 18.5** | **-0.4** |
| **JYG** | **Yagishiri** | **1.51** | **303** | P | **Pn** | **05 11 52.9** | **-0.4** |
| **NEM2** | **Nemuro 2** | **1.87** | **97** | P | **Pn** | **05 11 56.6** | **-0.2** |
| NEM2 | | | | *eS* | **Sn** | **05 12 23.3** | **-1.9** |
| **JWK2** | **Keihoku** | **1.93** | **332** | P | **Pn** | **05 11 57.6** | **+0.2** |
| **JSK** | **Shakotan** | **2.00** | **263** | P | **Pn** | **05 11 58.4** | **+0.2** |
| **JKB** | **Kayabe** | **2.36** | **223** | P | **Pn** | **05 12 03.3** | **+0.2** |
| JKB | | | | *eS* | **Sn** | **05 12 32.8** | **-1.8** |
| **JRBN** | **Rebuntou** | **2.36** | **320** | P | **Pn** | **05 12 00.9** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **8.04** | **210** | P | **Pn** | **05 13 15.0** | **+0.9** |
| | 0.1nm,0.3s,baz=28,slow=11,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.12** | **278** | P | **Pn** | **05 13 14.6** | **-0.3** |
| | baz=90,slow=16,SNR=5.0 | | | | | | |
| **KLR** | **Kul'dur** | **9.69** | **309** | P | **Pn** | **05 13 34.5** | **-0.9** |
| | 0.1nm,0.3s,baz=124,slow=15,SNR=4.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **13.50** | **40** | P | **Pn** | **05 14 23.9** | **-0.1** |
| | 0.1nm,0.3s,baz=208,slow=17,SNR=1.8 | | | | | | |
| **SEY** | **Seymchan** | **20.07** | **12** | P | **P** | **05 15 37.2** | **-1.3** |
| | 0.5nm,0.3s,baz=196,slow=7.8,SNR=19 | | | | | | |
| **SONM** | **Songino Array** | **25.87** | **292** | P | **P** | **05 16 34.9** | **+0.7** |
| | 0.5nm,0.6s,baz=88,slow=8.6,SNR=4.1 | | | | | | |
| **TIXI** | **Tiksi** | **28.96** | **351** | P | **P** | **05 17 01.2** | **0.0** |
| | 1.4nm,0.4s,baz=89,slow=24,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.78** | **307** | P | **P** | **05 18 26.2** | **+0.4** |
| | 0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HFC2 | | | | | *e*S | | **Sn** | **05 29 00.3** | **-0.1** |
| **KEF** | **Keuruu** | **3.32** | **88** | *e*P | | | **Pn** | **05 28 32.1** | **+0.7** |
| KEF | | | | *e*S | | | **Sn** | **05 29 11.3** | **+0.1** |
| KEF | | | | MSG | | | | 05 29 21.8 | |
| | comp=Z,2.0nm,0.2s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **3.35** | **252** | Pn | | | **Pn** | **05 28 32.8** | **+0.8** |
| | comp=Z,0.0nm,0.3s,baz=97,slow=13,SNR=1.9 | | | | | | | | |
| NOA | | | | Sn | | | **Sn** | **05 29 12.5** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=319,slow=25,SNR=0.9 | | | | | | | | |
| NOA | | | | Lg | | | Lg | 05 29 23.3 | |
| | comp=Z,0.1nm,0.3s,baz=78,slow=17,SNR=9.6 | | | | | | | | |
| **OBF7** | **Kamusenper, K** | **3.45** | **52** | *e*P | | | **Pn** | **05 28 33.5** | **+0.2** |
| OBF7 | | | | *e*SG | | | **Sb** | **05 29 24.8** | **+2.1** |
| OBF7 | | | | MSG | | | | 05 29 25.2 | |
| | comp=Z,1.1nm,0.1s | | | | | | | | |
| **NAO01** | **NORSAR Array S** | **3.58** | **250** | *e*P | | | **Pn** | **05 28 35.2** | **+0.1** |
| NAO01 | | | | *e*SG | | | **Sb** | **05 29 29.4** | **+3.0** |
| **OBF6** | **Kekajrvi, Yli** | **3.63** | **55** | *e*P | | | **Pn** | **05 28 36.0** | **+0.4** |
| OBF6 | | | | *e*S | | | **Sn** | **05 29 18.5** | **-0.3** |
| OBF6 | | | | MSG | | | | 05 29 33.3 | |
| | comp=Z,1.8nm,0.2s | | | | | | | | |
| **MEF** | **Metsahovi** | **3.77** | **119** | *e*P | | | **Pn** | **05 28 38.1** | **+0.5** |
| MEF | | | | *e*SG | | | **Sb** | **05 29 34.6** | **+2.9** |
| MEF | | | | MSG | | | | 05 29 36.7 | |
| | comp=Z,1.2nm,0.1s | | | | | | | | |
| **FINES** | **FINESS Array B** | **4.00** | **97** | Pn | | | **Pn** | **05 28 42.3** | **+1.5** |
| | comp=Z,0.1nm,0.3s,baz=288,slow=11,SNR=5.5 | | | | | | | | |
| FINES | | | | Sn | | | **Sn** | **05 29 28.8** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=289,slow=24,SNR=5.5 | | | | | | | | |
| FINES | | | | Lg | | | Lg | 05 29 41.5 | |
| | comp=Z,0.8nm,0.3s,baz=289,slow=30,SNR=11 | | | | | | | | |
| **GOTU** | **Gotland** | **4.56** | **175** | *e*SG | | | **Sb** | **05 29 58.5** | **+4.0** |
| **ARCES** | **ARCESS Array B** | **7.99** | **20** | Pn | | | **Pn** | **05 29 34.0** | **-1.5** |
| | baz=207,slow=13,SNR=1.5 | | | | | | | | |
| ARCES | | | | Sn | | | **Sn** | **05 30 59.9** | **-6.3** |
| | baz=205,slow=23,SNR=2.3 | | | | | | | | |

*IDC* ***13*** *05:42:04.2±4.4, 7.66S×156.13E, h142km±50km, mb3.6/7, mb1 3.7/8, mb1mx3.3/43, mbtmp4.0/8, MS3.2/1, Ms1 3.1/1, ms1mx2.5/48, Error ellipse: s-maj=46.6km s-min=22.6km az=141.0*

**ISC 13 05:42:04.9±0.9, 7.7S±0.2×156.1E±0.1, h150km, n9, σ0.8s78/10, mb3.8/7, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.14** | **115** | P | | **Pn** | **05 43 07.7** | **+0.6** |
| | 18nm,0.3s,baz=297,slow=10.0,SNR=1.6 | | | | | | | |
| HNR | | | | S | | **Sn** | **05 43 54.8** | **-0.6** |
| | 24nm,0.3s,baz=37,slow=22,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.39** | **238** | P | | **P** | **05 47 09.9** | **+0.4** |
| | 0.8nm,0.5s,baz=66,slow=9.5,SNR=11 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **05 50 45.8** | **+0.8** |
| | 0.5nm,1.0s,baz=67,slow=2.5,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.59** | **231** | P | | **P** | **05 47 28.4** | **-1.0** |
| | 0.2nm,0.5s,baz=61,slow=8.8,SNR=1.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.62** | **207** | LR | | LR | 05 57 35.2 | |
| | comp=Z,42nm,18.4s,baz=205,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **70.53** | **327** | P | | **P** | **05 53 04.0** | **+0.3** |
| | 1.6nm,0.8s,baz=137,slow=7.1,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **84.67** | **318** | P | | **P** | **05 54 22.4** | **+0.4** |
| | 4.2nm,0.8s,baz=106,slow=5.7,SNR=42 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **85.39** | **326** | P | | **P** | **05 54 24.9** | **-0.4** |
| | 2.1nm,0.5s,baz=108,slow=6.3,SNR=13 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **88.11** | **322** | P | | **P** | **05 54 37.5** | **-1.0** |
| | 0.6nm,0.6s,baz=105,slow=4.0,SNR=8.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.41** | **28** | P | | **P** | **05 55 16.3** | **-0.3** |
| | 0.2nm,0.8s,baz=260,slow=4.2,SNR=2.4 | | | | | | | |

*IDC* ***13*** *05:42:44.9±1.1, 29.34N×70.24E, h0km, mb3.7/14, mb1 3.8/16, mb1mx3.6/59, mbtmp3.7/16, ML3.5/2, Error ellipse: s-maj=25.3km s-min=20.9km az=55.0*

**ISC 13 05:42:50.8±0.9, 29.5N±0.1×70.48E±0.07, h35km, n25, σ1.9s33/30, mb3.7/14, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PYUN** | **Piuthan** | **11.07** | **94** | *e*Pn | | **Pn** | **05 45 27.5** | **+0.7** |
| PYUN | | | | *e*Sn | | **Sn** | **05 47 28.8** | **-0.7** |
| | 28nm,0.6s | | | | | | | |
| **KOLN** | **Koldanda** | **11.66** | **96** | *e*Pg | | **Pn** | **05 45 35.6** | **+0.7** |
| **DANN** | **Dangsing** | **11.70** | **93** | *e*Pn | | **Pn** | **05 45 36.5** | **+1.0** |
| DANN | | | | *e*Sn | | **Sn** | **05 47 43.8** | **-1.2** |
| | 13nm,0.4s | | | | | | | |
| **GKN** | **Gorkha** | **12.52** | **94** | *e*Pn | | **Pn** | **05 45 48.0** | **+1.4** |
| GKN | | | | *e*Sn | | **Sn** | **05 48 03.4** | **-1.5** |
| | 11nm,0.3s | | | | | | | |
| **KKN** | **Kakani** | **13.12** | **94** | *e*Sn | | **Sn** | **05 48 17.3** | **-2.3** |
| | 16nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **13.27** | **95** | *e*Sn | | **Sn** | **05 48 22.0** | **-1.6** |
| | 20nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **13.46** | **13** | Pn | | **Pn** | **05 45 59.4** | **0.0** |
| | 0.5nm,0.3s,baz=148,slow=5.2,SNR=9.7 | | | | | | | |
| AAK | | | | Sn | | **Sn** | **05 48 25.6** | **-2.3** |
| | 0.0nm,0.3s,baz=183,slow=19,SNR=1.5 | | | | | | | |
| **GUN** | **Gumba** | **13.61** | **93** | *e*Pn | | **Pn** | **05 46 00.9** | **-0.9** |
| GUN | | | | *e*Sn | | **Sn** | **05 48 30.3** | **-1.7** |
| **JIRN** | **Jiri** | **13.93** | **94** | *e*Pn | | **Pn** | **05 46 06.9** | **+0.8** |
| **MKAR** | **Makanchi Array** | **19.53** | **25** | P | | **Pn** | **05 47 16.2** | **-0.4** |
| | 0.1nm,0.3s,baz=209,slow=11,SNR=6.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.91** | **14** | P | | **P** | **05 47 40.7** | **-0.2** |
| | 1.0nm,0.7s,baz=207,slow=9.4,SNR=9.9 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.89** | **339** | P | | **P** | **05 47 52.0** | **+0.7** |
| | 1.0nm,0.5s,baz=147,slow=7.1,SNR=5.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **23.46** | **360** | P | | **P** | **05 47 57.6** | **+0.6** |
| | 0.5nm,0.5s,baz=131,slow=10,SNR=4.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.53** | **19** | P | | **P** | **05 48 26.9** | **+2.0** |
| | 0.7nm,0.3s,baz=202,slow=11,SNR=4.3 | | | | | | | |
| **SONM** | **Songino Array** | **33.07** | **46** | P | | **P** | **05 49 26.1** | **+2.9** |
| | 0.4nm,0.5s,baz=258,slow=8.7,SNR=4.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **37.33** | **316** | P | | **P** | **05 49 57.9** | **-1.7** |
| | 0.7nm,0.4s,baz=92,slow=6.1,SNR=8.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **43.17** | **331** | P | | **P** | **05 50 47.5** | **-0.3** |
| | 1.1nm,0.8s,baz=130,slow=13,SNR=1.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **47.47** | **340** | P | | **P** | **05 51 22.4** | **+0.7** |
| | 3.2nm,0.8s,baz=122,slow=7.6,SNR=13 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **49.81** | **327** | P | | **P** | **05 51 39.4** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=104,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **49.81** | **327** | P | | **P** | **05 51 39.5** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=105,slow=7.8,SNR=5.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.29** | **272** | P | | **P** | **05 53 28.0** | **-1.6** |
| | comp=Z,0.3nm,0.6s,baz=56,slow=5.3,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **78.77** | **121** | P | | **P** | **05 54 50.7** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=319,slow=5.3,SNR=2.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **80.70** | **124** | P | | **P** | **05 54 59.5** | **-1.1** |
| | comp=Z,0.4nm,0.6s,baz=312,slow=5.9,SNR=5.4 | | | | | | | |
| **INK** | **Inuvik** | **80.83** | **9** | P | | **P** | **05 55 01.5** | **+1.0** |
| | comp=Z,0.5nm,0.4s,baz=336,slow=3.4,SNR=4.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.20** | **2** | P | | **P** | **05 55 38.8** | **+0.9** |
| | comp=Z,0.5nm,0.7s,baz=349,slow=4.7,SNR=9.4 | | | | | | | |

*NOU* ***13*** *05:56:57.8, 21.04S×177.66W, h443km, mb4.3/35, Fiji Islands Region*

*NEIC* ***13*** *05:56:57.5±2.0, 21.3S±0.1×177.92W±0.09, h403km±5km, mb4.3/19, Error ellipse: s-maj=17.0km s-min=10.8km az=160.0*

*IDC* ***13*** *05:56:58.8±1.5, 21.36S×178.02W, h419km±15km, mb3.6/12, mb1 3.8/15, mb1mx3.6/31, mbtmp4.5/15, Error ellipse: s-maj=18.7km s-min=13.3km az=161.0*

**ISC 13 05:56:57.8±0.5, 21.32S±0.09×177.90W±0.08, h412km, n77, σ1.9s04/80, mb4.2/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TAVE** | **Taveuni** | **4.97** | **337** | P | | **P** | **05 58 21.5** | **+1.5** |
| **MSVF** | **Nonsavu** | **5.23** | **312** | P | | **P** | **05 58 23.8** | **+1.1** |
| | 8.9nm,0.3s,baz=138,slow=7.1,SNR=43 | | | | | | | |
| **MSVF** | **Nonsavu** | **5.23** | **312** | P | | **P** | **05 58 24.1** | **+1.3** |
| **DGTI** | **Dogotuki** | **5.47** | **335** | P | | **P** | **05 58 26.6** | **+1.4** |
| **NIUE** | **Niue** | **7.81** | **75** | P | | **P** | **05 58 49.4** | **-1.8** |
| **RAO** | **Raoul Island** | **7.90** | **180** | P | | **P** | **05 58 51.8** | **-0.1** |
| | 50nm,0.3s,baz=268,slow=22,SNR=1.6 | | | | | | | |
| **AFI** | **Afiamalu** | **9.40** | **39** | P | | **P** | **05 59 06.2** | **-2.6** |
| | 3.3nm,0.3s,baz=238,slow=15,SNR=2.0 | | | | | | | |
| AFI | | | | S | | S | 06 00 46.6 | -10 |
| | 5.0nm,0.3s,baz=93,slow=22,SNR=5.9 | | | | | | | |
| **PINNC** | **Pines Island,** | **13.66** | **262** | P | | **P** | **05 59 56.1** | **+0.7** |
| **YATNC** | **Mamie plateau,** | **14.16** | **264** | P | | **P** | **06 00 02.3** | **+1.4** |
| **OUENC** | **Ouen Island, N** | **14.21** | **263** | P | | **P** | **06 00 00.7** | **-0.8** |
| **OUENC** | **Ouen Island, N** | **14.21** | **263** | P | | **P** | **06 00 03.7** | **+2.2** |
| **DZM** | **Mont Dzumac** | **14.58** | **264** | P | | **P** | **06 00 06.8** | **+1.3** |
| | 2.3nm,0.3s,baz=76,slow=22,SNR=21 | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.58** | **264** | P | | **P** | **06 00 03.9** | **-1.6** |
| **DZM** | **Mont Dzumac** | **14.58** | **264** | P | | **P** | **06 00 07.1** | **+1.6** |
| **URZ** | **Urewera** | **17.42** | **193** | P | | **P** | **06 00 36.1** | **+0.4** |
| | 2.3nm,0.3s,baz=290,slow=3.7,SNR=12 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.43** | **194** | P | | **P** | **06 00 47.6** | **+1.3** |
| **BFZ** | **Birch Farm** | **19.93** | **193** | P | | **P** | **06 01 02.2** | **+1.5** |
| **QRZ** | **Quartz Range** | **21.07** | **201** | P | | **P** | **06 01 12.5** | **+1.4** |
| **THZ** | **Tophouse** | **21.81** | **199** | P | | **P** | **06 01 18.4** | **+0.5** |
| THZ | | | | IAmb | | IAmb | 06 01 22.9 | |
| | comp=Z,7.1nm,0.6s | | | | | | | |
| **KHZ** | **Kahutara** | **22.23** | **197** | P | | **P** | **06 01 23.5** | **+1.9** |
| **LTZ** | **Lake Taylor** | **22.93** | **199** | P | | **P** | **06 01 28.6** | **+0.5** |
| **RPZ** | **Rata Peaks** | **24.15** | **200** | P | | **P** | **06 01 40.3** | **+1.4** |
| **PPT** | **Papeete** | **26.95** | **87** | P | | **P** | **06 02 05.2** | **+1.1** |
| | comp=Z,18nm,0.8s,baz=50,slow=22,SNR=2.5 | | | | | | | |
| **EIDS** | **Eidsvold** | **28.73** | **256** | P | | **P** | **06 02 19.1** | **-0.6** |
| EIDS | | | | IAmb | | IAmb | 06 02 24.1 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **ARMA** | **Armidale** | **28.81** | **245** | P | | **P** | **06 02 21.1** | **+0.6** |
| ARMA | | | | IAmb | | IAmb | 06 02 39.7 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **MGCD** | **Mangrove Creek** | **29.88** | **240** | P | | **P** | **06 02 31.3** | **+1.6** |
| | comp=Z,12nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **32.14** | **237** | P | | **P** | **06 02 50.0** | **+0.7** |
| **CAN** | **Canberra** | **32.14** | **237** | P | | **P** | **06 02 50.3** | **+1.0** |
| **CTA** | **Charters Tower** | **33.52** | **266** | P | | **P** | **06 03 00.9** | **-0.3** |
| | comp=Z,6.2nm,0.7s,baz=98,slow=10.0,SNR=9.7 | | | | | | | |
| **CTA** | **Charters Tower** | **33.52** | **266** | P | | **P** | **06 03 01.0** | **-0.3** |
| **CTAO** | **Charters Tower** | **33.52** | **266** | P | | **P** | **06 03 00.3** | **-0.9** |
| CTAO | | | | IAmb | | IAmb | 06 03 01.8 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.52** | **266** | P | | **P** | **06 03 00.9** | **-0.3** |
| **TOO** | **Toolangi** | **35.50** | **235** | P | | **P** | **06 03 18.0** | **+0.2** |
| TOO | | | | IAmb | | IAmb | 06 03 19.4 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **TOO** | **Toolangi** | **35.50** | **235** | P | | **P** | **06 03 18.3** | **+0.5** |
| **PMG** | **Port Moresby** | **35.63** | **284** | P | | **P** | **06 03 18.8** | **-0.3** |
| | comp=Z,9.4nm,0.5s,baz=141,slow=16,SNR=1.7 | | | | | | | |
| **GEXS** | **Deakin Univers** | **36.59** | **234** | P | | **P** | **06 03 27.4** | **+0.6** |
| **BRAT** | **Ballarat** | **36.68** | **235** | P | | **P** | **06 03 28.7** | **+1.1** |
| **STKA** | **Stephens Creek** | **37.53** | **245** | P | | **P** | **06 03 34.0** | **-0.8** |
| | comp=Z,4.6nm,0.9s,baz=99,slow=9.7,SNR=9.0 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.53** | **245** | IAmb | | IAmb | 06 03 37.3 | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **COEN** | **Coen** | **37.74** | **275** | P | | **P** | **06 03 36.2** | **-0.5** |
| **COEN** | **Coen** | **37.74** | **275** | P | | **P** | **06 03 36.6** | **-0.1** |
| **ARPS** | **Mount Arapiles** | **38.12** | **237** | P | | **P** | **06 03 39.8** | **+0.2** |
| **HTT** | **Hallett** | **39.94** | **243** | P | | **P** | **06 03 54.8** | **+0.3** |
| **LCRK** | **Leigh Creek** | **40.31** | **248** | P | | **P** | **06 03 57.5** | **0.0** |
| **GHSS** | **Government Hou** | **40.38** | **241** | P | | **P** | **06 03 58.6** | **+0.6** |
| **BBOO** | **Buckleboo** | **42.28** | **244** | P | | **P** | **06 04 12.2** | **-1.1** |
| **BBOO** | **Buckleboo** | **42.28** | **244** | P | | **P** | **06 04 12.2** | **-1.1** |
| **OOD** | **Oodnadatta** | **42.51** | **252** | P | | **P** | **06 04 15.4** | **+0.2** |
| **MULG** | **Mulgathing** | **43.90** | **248** | P | | **P** | **06 04 25.4** | **-0.7** |
| **JAY** | **Jayapura** | **44.40** | **289** | P | | **P** | **06 04 29.5** | **-0.8** |
| | comp=Z,14nm,0.5s,baz=121,slow=5.4,SNR=6.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.43** | **258** | P | | **P** | **06 04 29.6** | **-0.9** |
| | comp=Z,4.8nm,0.8s,baz=97,slow=8.0,SNR=44 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **06 06 05.5** | **-0.3** |
| | comp=Z,1.0nm,0.6s,baz=104,slow=4.1,SNR=7.2 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **06 09 17.3** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=123,slow=3.4,SNR=2.9 | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.57** | **263** | P | | **P** | **06 04 29.9** | **-1.6** |
| WB0 | | | | IAmb | | IAmb | 06 04 30.7 | |
| | comp=Z,7.1nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.58** | **263** | P | | **P** | **06 04 30.1** | **-1.5** |
| **WRA** | **Warramunga Arr** | **44.59** | **263** | P | | **P** | **06 04 30.3** | **-1.3** |
| | comp=Z,3.1nm,0.6s,baz=76,slow=5.1,SNR=27 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **06 06 06.0** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=100,slow=3.9,SNR=1.7 | | | | | | | |
| **FORT** | **Forrest** | **49.06** | **247** | P | | **P** | **06 05 04.8** | **-0.8** |
| **WRKA** | **Warakurna** | **49.34** | **255** | P | | **P** | **06 05 06.8** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **57.58** | **257** | P | | **P** | **06 06 05.7** | **-1.2** |
| PSA00 | | | | IAmb | | IAmb | 06 06 06.9 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **MEEK** | **Meekatharra** | **57.75** | **251** | P | | **P** | **06 06 07.3** | **-0.7** |
| **MBWA** | **Marble Bar** | **57.77** | **258** | P | | **P** | **06 06 06.5** | **-1.7** |
| MBWA | | | | IAmb | | IAmb | 06 06 08.2 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **57.77** | **258** | P | | **P** | **06 06 07.3** | **-0.9** |
| **BLDU** | **Balliduu** | **58.81** | **246** | P | | **P** | **06 06 14.4** | **-0.8** |
| **PEA0B** | **Petropavlovsk-** | **77.09** | **345** | P | | **P** | **06 08 07.0** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **77.09** | **345** | P | | **P** | **06 08 06.8** | **0.0** |
| | comp=Z,2.2nm,0.7s,baz=156,slow=5.8,SNR=5.7 | | | | | | | |
| **BELA** | **Belgrano 2** | **78.73** | **173** | P | | **P** | **06 08 15.5** | **0.0** |
| BELA | | | | IAmb | | IAmb | 06 08 18.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.55** | **43** | P | | **P** | **06 08 32.7** | **+1.4** |
| | comp=Z,0.4nm,0.7s,baz=227,slow=12,SNR=3.2 | | | | | | | |
| **P18K** | **Big Mountain,** | **82.55** | **11** | P | | **P** | **06 08 35.6** | **-0.1** |
| P18K | | | | IAmb | | IAmb | 06 08 48.7 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **GAMB** | **Gambell** | **84.95** | **3** | P | | **P** | **06 08 49.0** | **+1.5** |
| **CAST** | **Castle Rocks** | **86.86** | **11** | P | | **P** | **06 08 56.1** | **-0.6** |
| CAST | | | | IAmb | | IAmb | 06 08 57.3 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.42** | **57** | P | | **P** | **06 09 01.9** | **+1.6** |
| | comp=Z,0.4nm,0.8s,baz=218,slow=5.7,SNR=4.7 | | | | | | | |
| **ILAR** | **Eielson Array** | **89.09** | **13** | P | | **P** | **06 09 07.2** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=218,slow=5.3,SNR=9.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.48** | **290** | P | | **P** | **06 09 15.6** | **+0.9** |
| | comp=Z,1.7nm,0.3s,baz=140,slow=4.7,SNR=13 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.74** | **350** | PKP | | **PKPdf** | **06 15 17.7** | **-0.6** |
| | comp=Z,3.2nm,1.0s,baz=28,slow=4.1,SNR=3.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.59** | **343** | PKP | | **PKPdf** | **06 15 31.4** | **+0.1** |
| | comp=Z,2.8nm,1.0s,baz=29,slow=3.2,SNR=3.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.78** | **331** | PKP | | PKPbc | 06 15 42.3 | -0.8 |
| | comp=Z,3.0nm,0.7s,baz=43,slow=4.3,SNR=44 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.46** | **311** | PKPbc | | **PKPbc** | **06 15 54.1** | **-0.4** |
| | comp=Z,1.9nm,0.6s,baz=131,slow=4.6,SNR=13 | | | | | | | |
| **CLL** | **Collm** | **148.88** | **347** | *e*PKPbc | | **PKiKP** | **06 15 58.0** | **-0.7** |
| **GERES** | **GERESS Array B** | **151.01** | **344** | PKP | | **PKPdf** | **06 15 57.0** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=262,slow=40,SNR=1.4 | | | | | | | |
| GERES | | | | PKPbc | | **PKiKP** | **06 16 02.7** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=20,slow=3.1,SNR=6.3 | | | | | | | |
| GERES | | | | PKPab | | **PKPab** | **06 16 11.8** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=51,slow=2.6,SNR=3.9 | | | | | | | |

*JMA* ***13*** *05:57:34.1±0.3, 24.92N×122.95E, h118km±3km, M2.3*
*TAP* ***13*** *05:57:34.5, 24.87N×122.95E, h115km, ML3.0, D*

**ISC 13 05:57:34.3±2.2, 24.83N±0.08×122.94E±0.04, h121km±15km, n37, σ0.6s61/71, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **0.37** | **170** | *e*P | | **Pn** | **05 57 51.8** | **+0.1** |
| | baz=173 | | | | | | | |
| YOJ | | | | *e*S | | **Sn** | **05 58 05.7** | **+0.9** |
| | baz=173 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.87** | **124** | P | | **Pn** | **05 57 55.1** | **-0.1** |
| IRIF | | | | *e*S | | **Sn** | **05 58 11.1** | **+0.1** |
| **TWC** | **Suao** | **1.02** | **258** | *e*P | | **Pn** | **05 57 56.9** | **+0.3** |
| | baz=254 | | | | | | | |
| TWC | | | | *e*S | | **Sn** | **05 58 13.1** | **-0.3** |
| | baz=254 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.02** | **278** | *e*P | | **Pn** | **05 57 55.2** | **-1.5** |
| | baz=268 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **05 58 13.8** | **+0.2** |
| | baz=268 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.10** | **134** | P | | **Pn** | **05 57 57.9** | **+0.4** |
| HATJ | | | | *e*S | | **Sn** | **05 58 15.7** | **+0.7** |
| **NDS** | **Dongshan** | **1.13** | **260** | *e*P | | **Pn** | **05 57 58.4** | **+0.7** |
| | baz=261 | | | | | | | |
| NDS | | | | *e*S | | **Sn** | **05 58 15.4** | **-0.1** |
| | baz=261 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.14** | **121** | P | | **Pn** | **05 57 58.3** | **+0.5** |
| JKRS | | | | S | | **Sn** | **05 58 15.8** | **+0.2** |
| **JIJ** | **Ishigaki jima** | **1.19** | **113** | P | | **Pn** | **05 57 58.3** | **-0.1** |
| JIJ | | | | *e*S | | **Sn** | **05 58 15.7** | **-0.9** |
| **FUSB** | **Fushanzhiwuyua** | **1.23** | **267** | *e*P | | **Pn** | **05 57 59.5** | **+0.6** |
| | baz=259 | | | | | | | |
| FUSB | | | | *e*S | | **Sn** | **05 58 17.2** | **-0.4** |
| | baz=259 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.27** | **101** | P | | **Pn** | **05 57 58.9** | **-0.3** |
| JISG | | | | *e*S | | **Sn** | **05 58 17.7** | **-0.4** |
| **NWLT** | **Wulai** | **1.31** | **268** | *e*S | | **Sn** | **05 58 18.8** | **-0.2** |
| | baz=266 | | | | | | | |
| **LATG** | **Datong** | **1.32** | **257** | P | | **Pn** | **05 58 00.8** | **+0.9** |
| | baz=249 | | | | | | | |
| LATG | | | | S | | **Sn** | **05 58 19.0** | **-0.3** |
| | baz=249 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.39** | **242** | *e*P | | **Pn** | **05 57 60.0** | **-0.6** |
| | baz=241 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **05 58 19.5** | **-1.0** |
| | baz=241 | | | | | | | |
| **YHNB** | **Yeheng** | **1.43** | **264** | *e*P | | **Pn** | **05 58 01.8** | **+0.7** |
| | baz=262 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **05 58 21.8** | **+0.3** |
| | baz=262 | | | | | | | |
| **TWD** | **Chiawan** | **1.44** | **239** | *e*P | | **Pn** | **05 58 00.8** | **-0.2** |
| | baz=231 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **05 58 21.4** | **0.0** |
| | baz=231 | | | | | | | |
| **NSK** | **Sanguang** | **1.45** | **264** | *e*P | | **Pn** | **05 58 01.6** | **+0.3** |
| | baz=266 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **05 58 21.9** | **+0.1** |
| | baz=266 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.47** | **245** | *e*P | | **Pn** | **05 58 02.0** | **+0.4** |
| | baz=244 | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | **05 58 22.0** | **-0.3** |
| | baz=244 | | | | | | | |
| **FUSS** | **Fushou** | **1.65** | **250** | *e*P | | **Pn** | **05 58 04.7** | **+0.9** |
| | baz=242 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **05 58 26.2** | **-0.1** |
| | baz=242 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.67** | **264** | *e*P | | **Pn** | **05 58 04.4** | **+0.5** |
| | baz=262 | | | | | | | |
| NFF | | | | *e*S | | **Sn** | **05 58 25.8** | **-0.7** |
| | baz=262 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.67** | **246** | *e*P | | **Pn** | **05 58 04.6** | **+0.3** |
| | baz=245 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **05 58 26.1** | **-1.0** |
| | baz=245 | | | | | | | |
| **LIOB** | **Emei** | **1.76** | **264** | *e*P | | **Pn** | **05 58 05.4** | **+0.5** |
| | baz=263 | | | | | | | |
| LIOB | | | | *e*S | | **Sn** | **05 58 27.8** | **-0.5** |
| | baz=263 | | | | | | | |
| **CHGB** | **Renai** | **1.78** | **245** | P | | **Pn** | **05 58 06.0** | **+0.5** |
| | baz=238 | | | | | | | |
| CHGB | | | | S | | **Sn** | **05 58 28.8** | **-0.3** |
| | baz=238 | | | | | | | |
| **WUSB** | **Renai** | **1.86** | **244** | P | | **Pn** | **05 58 07.1** | **+0.8** |
| | baz=238 | | | | | | | |
| WUSB | | | | S | | **Sn** | **05 58 30.3** | **-0.3** |
| | baz=238 | | | | | | | |
| **HGSD** | **Ruisui** | **1.92** | **226** | *e*P | | **Pn** | **05 58 06.6** | **-0.3** |
| | baz=224 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **05 58 31.4** | **-0.4** |
| | baz=224 | | | | | | | |
| **WCS** | **Beigang Elemen** | **2.00** | **248** | *e*P | | **Pn** | **05 58 09.0** | **+1.2** |
| | baz=246 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **05 58 33.7** | **+0.2** |
| | baz=246 | | | | | | | |
| **YULB** | **Yu-li** | **2.07** | **227** | *e*P | | **Pn** | **05 58 08.5** | **-0.3** |
| | baz=232 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | **05 58 33.5** | **-1.6** |
| | baz=232 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.09** | **244** | *e*P | | **Pn** | **05 58 09.5** | **+0.4** |
| | baz=237 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | **05 58 35.3** | **-0.3** |
| | baz=237 | | | | | | | |
| **SSLB** | **Suanglung** | **2.09** | **241** | *e*P | | **Pn** | **05 58 09.6** | **+0.6** |
| | baz=236 | | | | | | | |
| SSLB | | | | *e*S | | **Sn** | **05 58 35.4** | **-0.1** |
| | baz=236 | | | | | | | |
| **EYUL** | **Yuli** | **2.09** | **225** | *e*P | | **Pn** | **05 58 09.7** | **+0.7** |
| | baz=232 | | | | | | | |
| EYUL | | | | *e*S | | **Sn** | **05 58 35.7** | **+0.1** |
| | baz=232 | | | | | | | |
| **TYC** | **Yuchr** | **2.11** | **245** | *e*P | | **Pn** | **05 58 10.1** | **+0.8** |
| | baz=238 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **05 58 35.9** | **-0.1** |
| | baz=238 | | | | | | | |
| **FULB** | **Fuli** | **2.21** | **223** | *e*P | | **Pn** | **05 58 11.2** |

**NOU 13 06:16:35.2, 14°50′S×167°45′E, h143km, mb4.1/7, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SANVU | **Saraoutou** | **0.97** | **194** | P | Pn | 06 16 58.7 | -0.4 |
| KOUNC | **Koumac, New Ca** | **6.73** | **206** | P | Pn | 06 18 11.9 | +0.3 |
| YATNC | **Mamie plateau,** | **7.54** | **184** | P | Pn | 06 18 22.3 | -0.1 |
| DZM | **Mont Dzumac** | **7.59** | **187** | P | Pn | 06 18 23.0 | -0.2 |

*JMA **13** 07:13:06.3±0.1, 30°.03N×139°.22E, h468km, M3.9*
*IDC **13** 07:13:09.0±0.8, 30°.03N×138°.75E, h422km±8km, mb3.4/21, mb1 3.5/27, mb1mx3.3/51, mbtmp4.2/27, Error ellipse: s-maj=13.4km s-min=8.0km az=92.0*
*NEIC **13** 07:13:08.8±1.7, 30°.03N±0°.10×138°.7E±0°.1, h419km±9km, mb4.2/20, Error ellipse: s-maj=16.8km s-min=11.8km az=130.0*

**ISC 13 07:13:09.6±0.6, 30°.05N±0°.06×138°.97E±0°.08, h450km, n85, σ2s°07/83, mb4.0/31, 4C-3D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **3.10** | **13** | **P** | **P** | **07 14 15.8** | **-1.5** |
| **JHJ2** | **Mitsune** | **3.14** | **13** | **P** | **P** | **07 14 16.1** | **-1.5** |
| **JHJ** | **Hachijo jima 2** | **3.14** | **13** | **P** | **P** | **07 14 16.2** | **-1.4** |
| | 110nm,0.3s,baz=83,slow=22,SNR=15 | | | | | | |
| JHJ | | | | S | **S** | **07 15 08.6** | **-4.4** |
| | 82nm,0.3s,baz=237,slow=23,SNR=6.7 | | | | | | |
| **CBIJ** | **Chichi jima** | **4.08** | **135** | **P** | **P** | **07 14 22.5** | **-3.0** |
| CBIJ | | | | S | **S** | **07 15 21.8** | **-5.4** |
| **JCJ** | **Chichijima** | **4.08** | **135** | **P** | **P** | **07 14 23.0** | **-2.5** |
| **JTNC** | **Tanabenakahech** | **4.72** | **324** | **P** | **P** | **07 14 30.6** | **-0.7** |
| **JIE** | **Ise** | **4.74** | **337** | **P** | **P** | **07 14 31.8** | **+0.4** |
| **BSO1** | **Boso 1** | **4.90** | **20** | **P** | **P** | **07 14 30.7** | **-1.6** |
| BSO1 | | | | S | **S** | **07 15 36.9** | **-3.0** |
| **JOD2** | **Odawara 2** | **5.20** | **1** | **P** | **P** | **07 14 33.3** | **-2.0** |
| JOD2 | | | | S | **S** | **07 15 42.3** | **-4.0** |
| **INU** | **Inuyama** | **5.54** | **343** | **P** | **P** | **07 14 37.5** | **-1.7** |
| **JMN** | **Monobe** | **5.68** | **312** | **P** | **P** | **07 14 37.7** | **-2.9** |
| **JRY** | **Ryogami san** | **5.96** | **359** | **P** | **P** | **07 14 42.0** | **-1.4** |
| JRY | | | | S | **S** | **07 15 55.3** | **-4.8** |
| **MJAR** | **Matsushiro Arr** | **6.51** | **355** | **P** | **P** | **07 14 47.1** | **-2.0** |
| | 0.4nm,0.3s,baz=129,slow=16,SNR=7.9 | | | | | | |
| MJAR | | | | S | **S** | **07 16 06.3** | **-4.2** |
| | 0.3nm,0.3s,baz=69,slow=41,SNR=3.2 | | | | | | |
| **MAJO** | **Matsushiro** | **6.51** | **355** | **P** | **P** | **07 14 46.9** | **-2.2** |
| **MAT** | **Matsushiro** | **6.51** | **355** | **P** | **P** | **07 14 47.5** | **-1.6** |
| MAT | | | | S | **S** | **07 16 05.2** | **-5.3** |
| **MJB9** | **Matsu-Tunnel** | **6.51** | **355** | **P** | **P** | **07 14 46.4** | **-2.7** |
| **JHS** | **Saijyo** | **6.99** | **316** | **P** | **P** | **07 14 54.1** | **-0.1** |
| **JHS** | **Saijyo** | **6.99** | **316** | **P** | **P** | **07 14 50.7** | **-3.4** |
| **JSU** | **Suzuyama** | **7.47** | **283** | **P** | **P** | **07 14 55.6** | **-3.8** |
| **JMM** | **Marumori** | **7.95** | **10** | **P** | **P** | **07 15 02.9** | **-1.4** |
| **JSD** | **Sado** | **7.99** | **356** | **P** | **P** | **07 15 03.2** | **-1.6** |
| **JSJ** | **Shimokoshiki** | **8.12** | **284** | **P** | **P** | **07 15 05.7** | **-0.6** |
| **JMK** | **Ichinoseki** | **9.08** | **11** | **P** | **P** | **07 15 16.7** | **+0.2** |
| **JTM** | **Tenmabayashi** | **10.85** | **8** | **P** | **P** | **07 15 37.0** | **+1.1** |
| **KSRS** | **Korea Array** | **11.79** | **312** | **P** | **P** | **07 15 46.1** | **+0.1** |
| | 0.2nm,0.3s,baz=124,slow=11,SNR=5.0 | | | | | | |
| **ERM** | **Erimo** | **12.41** | **15** | **P** | P | 07 15 54.4 | +1.7 |
| **JEW** | **Eniwo** | **12.92** | **8** | **P** | **P** | **07 15 59.5** | **+1.3** |
| **ASAJ** | **Asahikawa** | **14.34** | **11** | **P** | **P** | **07 16 13.7** | **+0.2** |
| | 0.8nm,0.3s,baz=277,slow=31,SNR=1.6 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **14.34** | **11** | **P** | **P** | **07 16 13.7** | **+0.2** |
| **USRK** | **Usuriysk Ar.** | **15.18** | **340** | **P** | **P** | **07 16 21.8** | **-0.6** |
| | baz=155,slow=7.8,SNR=3.8 | | | | | | |
| **NACB** | **Ninganchiao** | **16.53** | **253** | **P** | **P** | **07 16 33.3** | **-3.8** |
| **YULB** | **Yu-li** | **17.11** | **251** | **P** | **P** | **07 16 40.4** | **-2.8** |
| **SSLB** | **Suanglung** | **17.23** | **253** | **P** | **P** | **07 16 42.5** | **-1.9** |
| **TPUB** | **Ta-pu** | **17.70** | **252** | **P** | **P** | **07 16 49.2** | **-0.2** |
| TPUB | | | | IAmb | IAmb | 07 17 05.4 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **19.93** | **346** | **P** | **P** | **07 17 11.5** | **+1.4** |
| | comp=Z,0.3nm,0.3s,baz=154,slow=14,SNR=5.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **26.81** | **25** | **P** | **P** | **07 18 14.8** | **+3.0** |
| | comp=Z,2.4nm,0.7s,baz=226,slow=3.8,SNR=10 | | | | | | |
| **MA2** | **Magadan** | **30.59** | **12** | **P** | P | 07 18 46.3 | +1.5 |
| MA2 | | | | IAmb | IAmb | 07 18 48.5 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **30.64** | **315** | **P** | **P** | **07 18 46.0** | **+0.5** |
| | comp=Z,0.8nm,0.4s,baz=118,slow=9.1,SNR=8.4 | | | | | | |
| SONM | | | | PcP | **PcP** | **07 21 31.5** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=80,slow=1.8,SNR=2.5 | | | | | | |
| **SEY** | **Seymchan** | **34.02** | **11** | **P** | P | 07 19 16.6 | +2.5 |
| | comp=Z,0.7nm,0.4s,baz=254,slow=21,SNR=6.7 | | | | | | |
| **CHTO** | **Chiang Mai** | **37.94** | **262** | **P** | **P** | **07 19 46.2** | **-1.2** |
| CHTO | | | | IAmb | IAmb | 07 19 48.4 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.10** | **262** | **P** | **P** | **07 19 49.2** | **+0.6** |
| | comp=Z,1.4nm,0.3s,baz=45,slow=8.3,SNR=5.0 | | | | | | |
| **ODAN** | **Odare** | **45.15** | **279** | ***eP*** | **P** | **07 20 45.4** | **+0.3** |
| | comp=Z,23nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.41** | **318** | **P** | **P** | **07 20 46.8** | **+0.5** |
| | comp=Z,1.9nm,0.4s,baz=102,slow=9.0,SNR=11 | | | | | | |
| ZALV | | | | PcP | **pwP** | **07 22 17.6** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=105,slow=3.1,SNR=4.1 | | | | | | |
| ZALV | | | | ScP | **ScP** | **07 25 27.8** | **+2.1** |
| | comp=Z,0.9nm,0.6s,baz=108,slow=4.8,SNR=4.4 | | | | | | |
| **RAMN** | **Ramite** | **45.80** | **280** | ***eP*** | **P** | **07 20 50.4** | **+0.3** |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **45.95** | **281** | ***eP*** | **P** | **07 20 51.9** | **+0.5** |
| | comp=Z,26nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.43** | **308** | **P** | **P** | **07 20 54.7** | **+0.4** |
| | comp=Z,1.9nm,0.6s,baz=92,slow=9.0,SNR=21 | | | | | | |
| MKAR | | | | PcP | **pwP** | **07 22 21.8** | **-3.6** |
| | comp=Z,0.8nm,0.5s,baz=81,slow=15,SNR=7.3 | | | | | | |
| MKAR | | | | ScP | **ScP** | **07 25 32.9** | **+2.7** |
| | comp=Z,0.8nm,0.8s,baz=92,slow=3.8,SNR=4.9 | | | | | | |
| **DANN** | **Dangsing** | **47.83** | **282** | ***eP*** | **P** | **07 21 06.3** | **+0.8** |
| **KOLN** | **Koldanda** | **48.13** | **282** | ***eP*** | **P** | **07 21 07.9** | **+0.2** |
| **PYUN** | **Piuthan** | **48.55** | **282** | ***eP*** | **P** | **07 21 11.6** | **+0.7** |
| | comp=Z,40nm,0.4s | | | | | | |
| **GSI** | **Gunungsitoli** | **48.58** | **242** | **P** | **P** | **07 21 09.8** | **-1.1** |
| **KURK** | **Kurchatov** | **48.91** | **313** | **P** | **P** | **07 21 12.6** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **49.56** | **197** | **P** | **P** | **07 21 18.9** | **+0.9** |
| | comp=Z,3.7nm,0.7s,baz=351,slow=8.4,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.90** | **186** | **P** | **P** | **07 21 21.5** | **+0.9** |
| | comp=Z,7.2nm,0.5s,baz=1.5,slow=7.4,SNR=122 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 22 35.5** | **+2.4** |
| | comp=Z,0.5nm,0.4s,baz=0.8,slow=4.3,SNR=2.4 | | | | | | |
| **K20K** | **Telida** | **53.30** | **31** | **P** | P | 07 21 47.8 | +3.1 |
| K20K | | | | IAmb | IAmb | 07 21 49.5 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **53.35** | **30** | **P** | P | 07 21 48.3 | +3.2 |
| **AS31** | **Alice Springs** | **53.62** | **186** | **P** | **P** | **07 21 48.1** | **+0.5** |
| **ASAR** | **Alice Springs** | **53.63** | **186** | **P** | **P** | **07 21 48.8** | **+1.1** |
| | comp=Z,3.7nm,0.5s,baz=359,slow=5.8,SNR=95 | | | | | | |
| **BRVK** | **Borovoye** | **54.03** | **316** | **P** | **P** | **07 21 49.6** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 07 21 51.6 | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **56.52** | **30** | **P** | P | 07 22 09.4 | +2.0 |
| | comp=Z,0.7nm,0.5s,baz=263,slow=4.9,SNR=13 | | | | | | |
| **CHGR** | **Chuyangaron** | **57.03** | **299** | **P** | **P** | **07 22 11.6** | **0.0** |
| **DOT** | **Dot Lake** | **57.79** | **31** | **P** | P | 07 22 18.1 | +1.9 |
| **ARU** | **Arti** | **60.37** | **321** | **P** | **P** | **07 22 33.8** | **+0.1** |
| ARU | | | | IAmb | IAmb | 07 22 35.0 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **61.02** | **313** | **P** | **P** | **07 22 38.1** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 07 22 39.4 | |
| | comp=Z,5.5nm,0.5s | | | | | | |
| **INK** | **Inuvik** | **61.54** | **25** | **P** | P | 07 22 43.8 | +2.6 |
| | comp=Z,0.7nm,0.4s,baz=306,slow=8.2,SNR=10 | | | | | | |
| **INK** | **Inuvik** | **61.54** | **25** | IAmb | IAmb | 07 22 44.8 | |
| | comp=P,11nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **61.63** | **177** | **P** | P | 07 22 44.2 | +1.9 |
| | comp=Z,2.5nm,0.5s,baz=342,slow=6.7,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **61.63** | **177** | IAmb | IAmb | 07 22 44.8 | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.82** | **340** | **P** | **P** | **07 23 35.1** | **+1.8** |
| | comp=Z,1.7nm,0.5s,baz=72,slow=8.4,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **70.89** | **28** | **P** | P | 07 23 42.0 | +2.3 |
| | comp=Z,0.6nm,0.4s,baz=296,slow=6.1,SNR=14 | | | | | | |
| **KBZ** | **Khabaz** | **73.94** | **311** | **P** | **P** | **07 23 59.2** | **+1.4** |
| | comp=Z,1.7nm,0.5s,baz=92,slow=3.9,SNR=7.1 | | | | | | |
| **FINES** | **FINESS Array B** | **74.05** | **333** | **P** | **P** | **07 23 59.2** | **+1.2** |
| | comp=Z,1.7nm,0.3s,baz=67,slow=4.9,SNR=26 | | | | | | |
| **AKASG** | **Malin Array Be** | **78.57** | **322** | **P** | **P** | **07 24 24.1** | **+0.8** |
| | comp=Z,1.2nm,0.4s,baz=50,slow=5.3,SNR=9.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **79.82** | **337** | **P** | **P** | **07 24 31.0** | **+1.2** |
| | comp=Z,0.8nm,0.5s,baz=47,slow=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **79.82** | **337** | **P** | **P** | **07 24 31.1** | **+1.2** |
| | comp=Z,0.5nm,0.5s,baz=54,slow=6.8,SNR=8.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.89** | **51** | **P** | P | 07 24 39.8 | +3.7 |
| | comp=Z,0.5nm,0.6s,baz=300,slow=6.3,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **81.94** | **311** | **P** | **P** | **07 24 42.8** | **+1.4** |
| | comp=Z,3.2nm,0.9s,baz=102,slow=3.1,SNR=13 | | | | | | |
| **TESR** | **Tescani** | **82.37** | **320** | ***ℓP*** | **P** | **07 24 44.6** | **+1.3** |
| **BURAR** | **Bucovina Array** | **82.50** | **321** | ***ℓP*** | **P** | **07 24 45.6** | **+1.6** |
| **VRI** | **Vrincioaia** | **82.70** | **319** | ***ℓP*** | **P** | 07 24 47.5 | +2.5 |
| **PLOR** | **Plostina** | **82.75** | **319** | ***ℓP*** | **P** | **07 24 47.5** | **+2.1** |
| **DOPR** | **Dopca** | **83.39** | **320** | ***ℓP*** | P | 07 24 50.8 | +2.3 |
| **VOIR** | | **83.90** | **320** | ***ℓP*** | **P** | **07 24 52.7** | **+1.5** |
| **ARR** | **Arges** | **84.18** | **320** | ***ℓP*** | **P** | **07 24 54.3** | **+1.8** |
| **GERES** | **GERESS Array B** | **87.52** | **327** | **P** | **P** | **07 25 09.2** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=35,slow=4.9,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.53** | **310** | PKP | **PKiKP** | **07 31 10.9** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=59,slow=1.1,SNR=4.2 | | | | | | |

*NNC **13** 07:32:08.4±0.4, 50°.01N×78°.62E, h0km, mb3.5, mpv3.1, Error ellipse: s-maj=7.6km s-min=2.1km az=85.0, Suspected Mining explosion.*
*IDC **13** 07:32:09.8±1.1, 50°.07N×78°.81E, h0km, mb1 3.0/3, mb1mx2.9/36, mbtmp3.0/3, ML2.8/3, Error ellipse: s-maj=10.1km s-min=7.6km az=51.0*

**ISC 13 07:32:08.3±0.8, 49°.91N±0°.03×78°.54E±0°.06, h0km, n21, σ2s°22/24, 10C-3D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **0.72** | **359** | Pg | **Pg** | **07 32 20.5** | **-1.5** |
| | 3.5nm,0.3s,baz=166,slow=19,SNR=212 | | | | | | |
| KURBB | | | | Lg | Lg | 07 32 29.2 | |
| | 4.7nm,0.3s,baz=162,slow=34,SNR=28 | | | | | | |
| KURBB | **Kurchatov Arra** | **0.72** | **359** | ⇓P | **Pg** | **07 32 20.5** | **-1.5** |
| | 14nm,0.3s | | | | | | |
| KURBB | | | | ⇑S | **Sg** | **07 32 29.4** | **-2.0** |
| | 143nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **0.81** | **3** | ⇑P | **Pg** | **07 32 21.9** | **-1.9** |
| | 5.4nm,0.3s | | | | | | |
| KURK | | | | ⇓S | **Sg** | **07 32 32.1** | **-2.3** |
| | 83nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **3.85** | **142** | ⇓Pn | **Pn** | **07 33 11.3** | **+2.4** |
| | 0.3nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Pg | **Pb** | **07 33 17.7** | **+0.5** |
| | 1.0nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 07 34 09.6 | |
| | 6.3nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **3.99** | **140** | Pn | **Pn** | **07 33 12.8** | **+2.0** |
| | 0.3nm,0.3s,baz=322,slow=10.0,SNR=30 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **07 33 20.8** | **+1.2** |
| | 0.6nm,0.3s,baz=322,slow=14,SNR=19 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 34 15.5 | |
| | 6.0nm,0.5s,baz=328,slow=26,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **3.99** | **140** | Pn | **Pn** | **07 33 12.7** | **+1.9** |
| | 0.6nm,0.3s,baz=330,slow=12,SNR=41 | | | | | | |
| MKAR | | | | Lg | Lg | 07 34 12.8 | |
| | 2.2nm,0.3s,baz=325,slow=27,SNR=16 | | | | | | |
| **OTUK** | **Ortayu** | **4.41** | **250** | ⇑Pn | **Pn** | **07 33 19.4** | **+3.0** |
| | 0.9nm,0.2s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 07 34 27.6 | |
| | 11nm,0.5s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.66** | **173** | Pg | **Pg** | **07 33 36.1** | **-1.4** |
| | 2.1nm,0.4s | | | | | | |
| KAPS | | | | Lg | Lg | 07 34 38.6 | |
| | 13nm,0.6s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.61** | **41** | *i* | | 08 04 00.0 | |
| | baz=224,slow=331,SNR=1.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.61** | **41** | Pn | **Pn** | **07 33 33.3** | **+0.4** |
| | 1.0nm,0.3s,baz=226,slow=14,SNR=8.8 | | | | | | |
| ZALV | | | | Lg | Lg | 07 35 01.9 | |
| | 0.4nm,0.3s,baz=230,slow=25,SNR=3.1 | | | | | | |
| **DJR** | **Jarkent** | **5.64** | **171** | Pg | **Pg** | **07 33 54.0** | **-2.5** |
| | 2.2nm,0.6s | | | | | | |
| DJR | | | | Lg | Lg | 07 35 09.2 | |
| | 3.5nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **5.74** | **214** | Pg | **Pg** | **07 33 55.8** | **-2.5** |
| | 1.7nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 07 35 12.3 | |
| | 3.5nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **5.81** | **180** | Pg | **Pg** | **07 33 57.0** | **-2.7** |
| | 2.9nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 07 35 14.2 | |
| | 11nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **5.97** | **305** | Pn | **Pn** | **07 33 40.7** | **+2.7** |
| | 0.5nm,0.3s,baz=82,slow=23,SNR=3.0 | | | | | | |
| BVAR | | | | Sn | **Sn** | **07 34 48.1** | **+1.0** |
| | 1.4nm,0.3s,baz=95,slow=31,SNR=6.4 | | | | | | |
| BVAR | | | | Lg | Lg | 07 35 20.0 | |
| | 0.7nm,0.3s,baz=112,slow=33,SNR=4.0 | | | | | | |
| **BRVK** | **Borovoye** | **6.05** | **305** | ⇑Sn | **Sn** | **07 34 47.6** | **-1.2** |
| | 1.6nm,0.5s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 07 35 18.4 | |
| | 2.5nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **6.20** | **195** | Pg | **Pg** | **07 34 04.4** | **-2.8** |
| | 1.3nm,0.6s | | | | | | |
| KUU | | | | Lg | Lg | 07 35 26.4 | |
| | 7.8nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **6.33** | **192** | Pg | **Pg** | **07 34 07.4** | **-2.1** |
| | 1.2nm,1.0s | | | | | | |
| KTBS | | | | Lg | Lg | 07 35 31.7 | |
| | 9.0nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **6.52** | **199** | Pg | **Pg** | **07 34 11.0** | **-2.1** |
| | 1.1nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 07 35 37.9 | |
| | 6.4nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **6.94** | **197** | Pg | **Pg** | **07 34 18.2** | **-3.0** |
| | 4.4nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 07 35 50.5 | |
| | 21nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **7.00** | **192** | Pg | **Pg** | **07 34 20.2** | **-2.2** |
| | 2.3nm,0.5s | | | | | | |
| IZV | | | | Lg | Lg | 07 35 54.0 | |
| | 5.3nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **7.79** | **203** | Lg | Lg | 07 36 20.0 | |
| | 0.1nm,0.3s,baz=356,slow=2.6,SNR=3.9 | | | | | | |

*IDC **13** 07:41:14.9±1.3, 10°.18S×161°.10E, h0km, mb3.5/6, mb1 3.7/7, mb1mx3.6/28, mbtmp3.5/7, ML3.0/1, Error ellipse: s-maj=30.2km s-min=24.3km az=35.0*

**ISC 13 07:41:22.4±0.9, 10°.3S±0°.1×160°.9E±0°.2, h62km, n8, σ1s89°/9, mb3.3/6, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.28** | **310** | Pn | **Pn** | **07 41 41.8** | **-2.4** |
| | 150nm,0.3s,baz=28,slow=1.8,SNR=24 | | | | | | |
| HNR | | | | Sn | **Sn** | **07 41 59.5** | **-1.0** |
| | 331nm,0.3s,baz=55,slow=22,SNR=14 | | | | | | |
| HNR | | | | LR | LR | 07 42 13.5 | |
| | comp=Z,92nm,18.8s,baz=352,slow=43 | | | | | | |
| **DZM** | **Mont Dzumac** | **12.87** | **156** | Pn | **Pn** | **07 44 20.8** | **-1.9** |
| | 0.1nm,0.3s,baz=173,slow=23,SNR=0.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.39** | **246** | P | **P** | **07 47 02.9** | **+0.7** |
| | 0.3nm,0.8s,baz=75,slow=9.1,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **29.02** | **239** | P | **P** | **07 47 18.7** | **+1.9** |
| | 0.1nm,0.3s,baz=61,slow=9.6,SNR=1.7 | | | | | | |
| **SONM** | **Songino Array** | **75.30** | **325** | P | **P** | **07 53 01.5** | **+2.5** |
| | 0.5nm,0.6s,baz=120,slow=5.0,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **84.33** | **20** | P | **P** | **07 53 47.4** | **+0.1** |
| | 0.1nm,0.4s,baz=236,slow=4.5,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **89.74** | **318** | P | **P** | **07 54 14.5** | **+0.5** |
| | 0.1nm,0.5s,baz=111,slow=5.7,SNR=1.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.47** | **28** | P | **P** | **07 54 44.5** | **-0.1** |
| | 0.1nm,0.5s,baz=258,slow=5.6,SNR=2.3 | | | | | | |

*RSPR **13** 07:49:47.2, 19°.29N×67°.48W, h61km±9km, MD4.0/12*
*NEIC **13** 07:49:49.2±1.4, 19°.16N±0°.03×67°.29W±0°.04, h30km±10km, Error ellipse: s-maj=5.0km s-min=4.0km az=113.0*

**ISC 13 07:49:46.9±1.1, 19°.35N±0°.09×67°.39W±0°.05, h35km, n61, σ1s30/71, 8C-8D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AGPR** | **Aguadilla, PR** | **0.91** | **163** | ⇑*eP* | **Pn** | **07 50 02.8** | **-0.5** |
| **AGPR** | **Aguadilla, PR** | **0.91** | **163** | *eS* | **Sn** | **07 50 13.7** | **-1.5** |
| **AGPR** | **Aguadilla, PR** | **0.91** | **163** | | **Pn** | **07 50 02.8** | **-0.5** |
| AGPR | | | | | **Sn** | **07 50 13.7** | **-1.5** |
| **IDE** | **Isla Desecheo** | **0.96** | **185** | ⇑*eP* | **Pn** | **07 50 03.9** | **0.0** |
| **IDE** | **Isla Desecheo** | **0.96** | **185** | *eS* | **Sn** | **07 50 15.3** | **-1.1** |
| **PRSN** | **Puerto Rico Se** | **1.15** | **168** | | **Pn** | **07 50 05.8** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **1.16** | **149** | ⇑*eP* | **Pn** | **07 50 06.1** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **1.16** | **149** | | **Pn** | **07 50 06.1** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **1.16** | **149** | *eP* | **Pn** | **07 50 06.0** | **-0.7** |
| **EMPR** | **Esperanza - Ma** | **1.19** | **137** | ⇑*eP* | **Pn** | **07 50 07.2** | **+0.2** |
| **EMPR** | **Esperanza - Ma** | **1.19** | **137** | | **Pn** | **07 50 07.2** | **+0.2** |
| **EMPR** | **Esperanza - Ma** | **1.19** | **137** | IAML | | 07 50 33.3 | |
| | comp=N,2μm,0.8s | | | | | | |
| **LSP** | **Las Mesas** | **1.20** | **166** | ⇓*eP* | **Pn** | **07 50 06.9** | **-0.4** |
| **LSP** | **Las Mesas** | **1.20** | **166** | *eS* | **Sn** | **07 50 22.3** | **0.0** |
| **PCDR** | **Punta Cana, DR** | **1.25** | **229** | Pn | **Pn** | **07 50 10.4** | **+2.5** |
| PCDR | | | | IAML | | 07 50 36.7 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.36** | **169** | ⇓*eP* | **Pn** | **07 50 09.2** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.36** | **169** | *eS* | **Sn** | **07 50 25.8** | **-0.4** |
| **CRPR** | **Cabo Rojo, PR** | **1.36** | **169** | | **Pn** | **07 50 09.2** | **-0.3** |
| CRPR | | | | | **Sn** | **07 50 25.8** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **1.41** | **167** | ⇓*eP* | **Pn** | **07 50 08.8** | **-1.3** |
| **MLPR** | **Magueyes Islan** | **1.41** | **167** | *eS* | **Sn** | **07 50 25.9** | **-1.5** |
| **MLPR** | **Magueyes Islan** | **1.41** | **167** | | **Pn** | **07 50 08.8** | **-1.3** |
| MLPR | | | | | **Sn** | **07 50 25.9** | **-1.5** |
| **MLPR** | **Magueyes Islan** | **1.41** | **167** | IAML | | 07 50 29.9 | |
| | comp=E,1μm,0.6s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **1.45** | **160** | ⇑*eP* | **Pn** | **07 50 10.9** | **+0.3** |
| **CELP** | **Cerrillos** | **1.48** | **149** | ⇓*eP* | **Pn** | **07 50 10.9** | **-0.1** |
| **CELP** | **Cerrillos** | **1.48** | **149** | *eS* | **Sn** | **07 50 29.6** | **+0.4** |
| **CELP** | **Cerrillos** | **1.48** | **149** | | **Pn** | **07 50 10.9** | **-0.1** |
| CELP | | | | | **Sn** | **07 50 29.6** | **+0.4** |
| **CELP** | **Cerrillos** | **1.48** | **149** | IAML | | 07 50 35.6 | |
| | comp=E,825nm,0.6s | | | | | | |
| CELP | | | | IAML | | 07 50 35.7 | |
| | comp=N,1μm,0.8s | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.49** | **150** | ⇓*eP* | **Pn** | **07 50 10.2** | **-1.1** |
| **OBIP** | **Obispado Ponce** | **1.49** | **150** | *eS* | **Sn** | **07 50 29.4** | **-0.1** |
| **OBIP** | **Obispado Ponce** | **1.49** | **150** | | **Pn** | **07 50 10.2** | **-1.1** |
| OBIP | | | | | **Sn** | **07 50 29.4** | **-0.1** |
| **OBIP** | **Obispado Ponce** | **1.49** | **150** | IAML | | 07 50 33.3 | |
| | comp=N,711nm,0.6s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.61** | **130** | ⇑*eP* | **Pn** | **07 50 13.0** | **+0.2** |
| **GCPR** | **Guaynabo City** | **1.61** | **130** | | **Pn** | **07 50 13.0** | **+0.2** |
| **ICMP** | **Isla Caja de M** | **1.67** | **151** | ⇑*eP* | **Pn** | **07 50 13.2** | **-0.4** |
| **ICMP** | **Isla Caja de M** | **1.67** | **151** | *eS* | **Sn** | **07 50 33.9** | **+0.1** |
| **ICMP** | **Isla Caja de M** | **1.67** | **151** | | **Pn** | **07 50 13.2** | **-0.4** |
| ICMP | | | | | **Sn** | **07 50 33.9** | **+0.1** |
| **ICMP** | **Isla Caja de M** | **1.67** | **151** | IAML | | 07 50 45.3 | |
| | comp=N,575nm,0.8s | | | | | | |
| **SJG** | **San Juan** | **1.70** | **136** | | **Pn** | **07 50 14.9** | **+0.8** |
| SJG | | | | IAML | | 07 50 46.8 | |
| | comp=N,740nm,0.5s | | | | | | |
| SJG | | | | IAML | | 07 50 50.6 | |
| | comp=N,641nm,0.6s | | | | | | |
| **IGPR** | **InterUniversit** | **1.83** | **138** | ⇓*eP* | **Pn** | **07 50 16.1** | **+0.1** |
| **IGPR** | **InterUniversit** | **1.83** | **138** | *eS* | **Sn** | **07 50 38.0** | **+0.1** |
| **IGPR** | **InterUniversit** | **1.83** | **138** | | **Sn** | **07 50 38.0** | **+0.1** |
| **PDPR** | **Patillas Dam,** | **1.85** | **135** | Pn | **Pn** | **07 50 16.0** | **-0.2** |
| PDPR | | | | IAML | | 07 50 42.1 | |
| | comp=E,376nm,0.5s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.89** | **129** | | **Pn** | **07 50 16.7** | **0.0** |
| HUMP | | | | IAML | | 07 50 57.3 | |
| | comp=N,432nm,0.5s | | | | | | |
| **CUPR** | **Culebra, Puert** | **2.25** | **117** | ⇓*eP* | **Pn** | **07 50 21.9** | **+0.3** |
| **CUPR** | **Culebra, Puert** | **2.25** | **117** | *eS* | **Sn** | **07 50 49.0** | **+0.8** |
| **CUPR** | **Culebra, Puert** | **2.25** | **117** | | **Pn** | **07 50 21.9** | **+0.3** |
| CUPR | | | | | **Sn** | **07 50 49.0** | **+0.8** |
| **STVI** | **Saint Thomas** | **2.51** | **113** | ⇓*eP* | **Pn** | **07 50 25.7** | **+0.4** |
| **STVI** | **Saint Thomas** | **2.51** | **113** | *eS* | **Sn** | **07 50 56.8** | **+2.1** |
| **STVI** | **Saint Thomas** | **2.51** | **113** | | **Pn** | **07 50 25.7** | **+0.4

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRZF** | **Crozet Islands** | **9.89** | **105** | Pn | **Pn** | **09 01 01.4** | **-0.9** |
| **SUR** | **Sutherland** | **18.14** | **307** | P | **Pn** | **09 02 51.7** | **-0.6** |
| | 0.3nm,0.3s,baz=123,slow=14,SNR=5.6 | | | | | | |
| SUR | | | | LR | LR | 09 08 36.5 | |
| | comp=Z,128nm,18.1s,baz=150,slow=33 | | | | | | |
| **SUR** | **Sutherland** | **18.14** | **307** | IAmb | IAmb | 09 02 52.3 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **18.94** | **323** | LR | LR | 09 08 56.4 | |
| | comp=Z,162nm,19.6s,baz=188,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **18.94** | **323** | P | **P** | **09 03 00.7** | **-0.7** |
| **LBTB** | **Lobatse** | **22.01** | **329** | P | **P** | **09 03 34.6** | **0.0** |
| | comp=Z,2.9nm,0.7s,baz=149,slow=9.6,SNR=3.8 | | | | | | |
| LBTB | | | | LR | LR | 09 10 29.8 | |
| | comp=Z,136nm,21.3s,baz=155,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **22.01** | **329** | IAmb | IAmb | 09 03 37.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **VOI** | **Vohitsoka** | **23.79** | **21** | P | **P** | **09 03 51.9** | **-1.2** |
| VOI | | | | IAmb | IAmb | 09 04 12.3 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **LSZ** | **Lusaka** | **30.42** | **341** | LR | LR | 09 15 32.7 | |
| | comp=Z,108nm,19.2s,baz=164,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **30.42** | **341** | P | **P** | **09 04 52.7** | **0.0** |
| LSZ | | | | IAmb | IAmb | 09 04 54.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **TSUM** | **Tsumeb** | **30.54** | **320** | LR | LR | 09 15 46.8 | |
| | comp=Z,82nm,21.3s,baz=146,slow=34 | | | | | | |
| **TSUM** | **Tsumeb** | **30.54** | **320** | P | **P** | **09 04 53.3** | **-0.5** |
| **MSEY** | **Mahe Island** | **42.65** | **26** | P | **P** | **09 06 37.9** | **+1.0** |
| **BELA** | **Belgrano 2** | **43.17** | **197** | P | **P** | **09 06 41.2** | **+0.7** |
| BELA | | | | IAmb | IAmb | 09 06 43.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **MBAR** | **Mbarara** | **44.31** | **350** | LR | LR | 09 24 29.3 | |
| | comp=Z,108nm,18.6s,baz=134,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **45.59** | **180** | P | **P** | **09 06 59.8** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=253,slow=0.9,SNR=7.2 | | | | | | |
| QSPA | | | | LR | LR | 09 23 52.7 | |
| | comp=Z,171nm,19.6s,baz=222,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **45.59** | **180** | IAmb | IAmb | 09 07 05.1 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **53.36** | **167** | LR | LR | 09 28 32.4 | |
| | comp=Z,93nm,20.6s,baz=204,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.28** | **321** | P | **P** | **09 09 29.4** | **+0.8** |
| | comp=Z,2.2nm,0.9s,baz=154,slow=5.1,SNR=9.6 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **69.50** | **100** | P | **P** | **09 09 49.2** | **+0.2** |
| **WSAR** | **Wadi Sarin** | **70.12** | **20** | LR | LR | 09 36 28.1 | |
| | comp=Z,17nm,19.5s,baz=208,slow=32 | | | | | | |
| **LL01** | **San Ignacio de** | **73.41** | **226** | P | **P** | **09 10 11.4** | **-0.8** |
| **STKA** | **Stephens Creek** | **76.99** | **122** | P | **P** | **09 10 32.6** | **-0.5** |
| **MMAI** | **Mount Meron Ar** | **77.31** | **358** | LR | LR | 09 43 54.0 | |
| | comp=Z,22nm,18.8s,baz=38,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **77.75** | **111** | P | **P** | **09 10 37.7** | **+0.2** |
| | comp=Z,0.7nm,0.9s,baz=224,slow=6.1,SNR=4.2 | | | | | | |
| **AS31** | **Alice Springs** | **77.75** | **111** | P | **P** | **09 10 36.9** | **-0.6** |
| **IDI** | **Anoyia** | **80.43** | **349** | LR | LR | 09 46 40.2 | |
| | comp=Z,22nm,20.0s,baz=130,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.60** | **109** | P | **P** | **09 10 55.1** | **+2.0** |
| | comp=Z,0.9nm,1.0s,baz=211,slow=4.1,SNR=4.3 | | | | | | |
| **KEST** | **Kesra** | **84.10** | **337** | LR | LR | 09 50 22.6 | |
| | comp=Z,75nm,18.3s,baz=236,slow=37 | | | | | | |
| **ESDC** | **Sonseca Array** | **92.03** | **329** | LR | LR | 09 53 07.1 | |
| | comp=Z,77nm,18.1s,baz=322,slow=36 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **94.35** | **341** | LR | LR | 09 55 29.3 | |
| | comp=Z,60nm,18.0s,baz=263,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **95.49** | **344** | LR | LR | 09 59 45.3 | |
| | comp=Z,42nm,18.3s,baz=292,slow=38 | | | | | | |
| **T35A** | **Sooner Cattle** | **145.08** | **273** | PKPbc | **PKPab** | **09 18 17.1** | **+0.1** |
| **ABTX** | **Abilene, Hawle** | **145.18** | **265** | PKPbc | **PKPbc** | **09 18 16.2** | **-1.1** |
| **TXAR** | **Lajitas Array** | **146.13** | **256** | PKPbc | **PKPab** | **09 18 21.7** | **+0.5** |
| | comp=Z,1.4nm,0.9s,baz=137,slow=5.7,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **156.12** | **328** | PKP | **PKPdf** | **09 18 34.8** | **+1.2** |
| | comp=Z,0.1nm,0.5s,baz=72,slow=2.0,SNR=2.8 | | | | | | |
| YKA | | | | PKPab | **PKPab** | **09 19 01.9** | **+0.6** |
| | comp=Z,1.0nm,0.9s,baz=47,slow=4.9,SNR=12 | | | | | | |

**VAO 13 09:02:52.6**±0.4,**10°64S**×**49°96W, h0**km**, mbR2.6, Brazil**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNDB** | **Serra Nova Dou** | **1.86** | **225** | *e*P | Pn | 09 03 25.6 | -0.2 |
| SNDB | | | | *e*S | Sn | 09 03 50.6 | +0.5 |
| **SNDB** | **Serra Nova Dou** | **1.86** | **225** | *e*P | Pn | 09 03 25.3 | -0.5 |
| SNDB | | | | *e*S | Sb | 09 03 51.1 | -0.3 |
| **PEXB** | **Peixe** | **2.18** | **132** | *e*P | Pn | 09 03 29.7 | -0.5 |
| **PEXB** | **Peixe** | **2.18** | **132** | *e*P | Pn | 09 03 30.8 | +0.6 |
| **SMTB** | **Santa Maria do** | **2.93** | **53** | *e*P | Pn | 09 03 40.5 | 0.0 |
| **PRPB** | **Parauapebas** | **4.45** | **2** | *e*P | Pn | 09 04 01.6 | +0.2 |
| **SDBA** | **SAO DESIDERIO** | **5.25** | **110** | *e*P | Pn | 09 04 12.5 | 0.0 |
| **ARAG** | **Araguaiana, MT** | **5.35** | **200** | *e*P | Pn | 09 04 13.5 | -0.2 |
| **ARAG** | **Araguaiana, MT** | **5.35** | **200** | *e*P | Pn | 09 04 14.1 | +0.3 |
| **CLDB** | **Colider** | **5.74** | **267** | *e*P | Pn | 09 04 18.4 | -0.8 |
| **CLDB** | **Colider** | **5.74** | **267** | *e*P | Pn | 09 04 16.3 | -2.9 |
| **NPGB** | **Novo Progresso** | **6.42** | **303** | *e*P | Pn | 09 04 23.9 | -4.7 |
| **PDRB** | **Porto dos Gac** | **6.71** | **261** | *e*P | Pn | 09 04 28.9 | -3.7 |
| PDRB | | | | *e*S | Sn | 09 05 46.6 | -3.2 |

*MOS* ***13*** *09:50:42.4±0.0, 42°.51N×46°.61E, h10km, MPVA4.6*
*NORS* ***13*** *09:50:42.9±0.0, 42°.52N×46°.65E, h10km, MPVA4.6*
*TIF* ***13*** *09:50:42.6, 42°.52N×46°.61E, h5km, 2km*
*IASPEI* ***13*** *09:50:43.8±0.9, 42°.51N±0°.02×46°.60E±0°.02, h7km±6km, mb3.8/12, Error ellipse: s-maj=3.0km s-min=2.8km az=66.3, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*IDC* ***13*** *09:50:43.4±0.7, 42°.56N×46°.34E, h0km, mb3.8/10, mb1 3.9/18, mb1mx3.7/55, mbtmp3.9/18, ML3.3/8, Error ellipse: s-maj=10.7km s-min=8.9km az=158.0*
*DRS* ***13*** *09:50:43.4±0.0, 42°.51N×46°.58E, h10km*
*AZER* ***13*** *09:50:44.3±0.1, 42°.39N×46°.51E, h11km, Error ellipse: s-maj=0.8km s-min=0.4km az=321.0*

**ISC 13 09:50:43.8**±0.7,**42°.53N**±0°.01×**46°.61E**±0°.01,**h9**km±4km, **n175,** σ1**§68/**295**, mb3.8**/12**, 11C-11D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **XNZR** | **Khunzakh** | **0.07** | **77** | *e*Pg | **Pg** | **09 50 45.7** | **-0.4** |
| XNZR | | | | *e*S | **Sg** | **09 50 48.2** | **+0.5** |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,9μm,0.3s | | | | | | |
| XNZR | | | | smax | smax | | |
| | comp=N,60μm,0.2s | | | | | | |
| **XNZR** | **Khunzakh** | **0.07** | **77** | *i* Pg | **Pg** | **09 50 45.7** | **-0.4** |
| XNZR | | | | *e*Sg | **Sg** | **09 50 47.5** | **-0.2** |
| **UNCR** | **Uncukul** | **0.23** | **36** | *d*iPG | **Pg** | **09 50 48.8** | **+0.2** |
| UNCR | | | | *i* | | 09 50 53.1 | |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,3μm,0.5s | | | | | | |
| **UNCR** | **Uncukul** | **0.23** | **36** | *e*Pg | **Pg** | **09 50 48.9** | **+0.4** |
| UNCR | | | | *e*Sg | **Sg** | **09 50 52.7** | **+1.0** |
| **ARKR** | **Arakani** | **0.30** | **75** | ⇓*i*PG | **Pg** | **09 50 50.1** | **+0.4** |
| ARKR | | | | *i* | | 09 50 55.6 | |
| ARKR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| ARKR | | | | smax | smax | | |
| | comp=N,10μm,0.3s | | | | | | |
| **ARKR** | **Arakani** | **0.30** | **75** | *e*Pg | **Pg** | **09 50 50.1** | **+0.4** |
| ARKR | | | | *e*Sg | **Sb** | **09 50 55.0** | **-1.5** |
| **GNBR** | **Gunib** | **0.30** | **117** | ⇑*i*PG | **Pg** | **09 50 50.0** | **+0.3** |
| GNBR | | | | *i* | | 09 50 54.6 | |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,3μm,0.7s | | | | | | |
| **GNBR** | **Gunib** | **0.30** | **117** | *i* Pg | **Pg** | **09 50 50.0** | **+0.3** |
| GNBR | | | | *e*Sg | **Sg** | **09 50 54.7** | **+1.0** |
| **BTLR** | **Botlikh** | **0.32** | **296** | *e*PG | **Pg** | **09 50 50.3** | **+0.2** |
| BTLR | | | | *e*S | **Sg** | **09 50 55.5** | **+1.1** |
| **BTLR** | **Botlikh** | **0.32** | **296** | *e*Pg | **Pg** | **09 50 50.3** | **+0.2** |
| BTLR | | | | *e*Sg | **Sg** | **09 50 54.7** | **+0.3** |
| **KRNR** | **Karanay** | **0.37** | **36** | *e*PG | **Pg** | **09 50 51.5** | **+0.3** |
| KRNR | | | | *e*S | **Sg** | **09 50 57.3** | **+1.2** |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=E,4μm,0.4s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | |
| KRNR | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | |
| **KRNR** | **Karanay** | **0.37** | **36** | *e*Pg | **Pg** | **09 50 51.6** | **+0.3** |
| KRNR | | | | *e*Sg | **Sg** | **09 50 56.8** | **+0.7** |
| **BUJR** | **Buynaksk** | **0.47** | **51** | *e*PG | **Pb** | **09 50 54.2** | **-0.2** |
| BUJR | | | | *e*S | **Sb** | **09 51 01.8** | **+0.3** |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,8μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,5μm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=N,7μm,0.5s | | | | | | |
| **BUJR** | **Buynaksk** | **0.47** | **51** | *e*Pg | **Pb** | **09 50 54.2** | **-0.2** |
| BUJR | | | | *e*Sg | **Sb** | **09 51 01.8** | **+0.3** |
| **DBC** | **Dubki** | **0.52** | **18** | ⇓*i*PG | **Pg** | **09 50 54.1** | **+0.2** |
| DBC | | | | *i* | | 09 51 03.6 | |
| DBC | | | | pmax | pmax | | |
| | comp=Z,691nm,0.6s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| **DBC** | **Dubki** | **0.52** | **18** | *e*Pg | **Pg** | **09 50 54.4** | **+0.4** |
| DBC | | | | *e*Sg | **Sb** | **09 51 02.8** | **-0.2** |
| **KMKR** | **Kumukh** | **0.54** | **137** | ⇓*i*PG | **Pg** | **09 50 54.3** | **+0.1** |
| KMKR | | | | *i* | | 09 51 01.7 | |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.2s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,9μm,0.5s | | | | | | |
| **KMKR** | **Kumukh** | **0.54** | **137** | *e*Pg | **Pg** | **09 50 54.4** | **+0.2** |
| KMKR | | | | *e*Sg | **Sg** | **09 51 01.8** | **+0.4** |
| **DLMR** | **Dylym** | **0.55** | **2** | *e*PG | **Pb** | **09 50 55.4** | **-0.2** |
| DLMR | | | | *e*S | **Sb** | **09 51 04.2** | **+0.7** |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.5s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=N,6μm,1.0s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=E,6μm,0.3s | | | | | | |
| DLMR | | | | smax | smax | | |
| | comp=N,7μm,0.5s | | | | | | |
| **DLMR** | **Dylym** | **0.55** | **2** | *e*Pg | **Pb** | **09 50 55.4** | **-0.2** |
| DLMR | | | | *e*Sg | **Sb** | **09 51 04.3** | **+0.7** |
| **DVE** | **Vedeno** | **0.56** | **321** | *e*PG | **Pb** | **09 50 55.4** | **-0.5** |
| DVE | | | | *e*S | **Sb** | **09 51 04.2** | **+0.2** |
| **DVE** | **Vedeno** | **0.56** | **321** | *e*Pg | **Pg** | **09 50 55.3** | **+0.6** |
| DVE | | | | *e*Sg | **Sb** | **09 51 04.2** | **+0.2** |
| **LGD** | **Lagodekhi** | **0.74** | **202** | P | **Pg** | **09 50 57.5** | **-0.6** |
| LGD | | | | S | **Sg** | **09 51 07.4** | **-0.4** |
| **LGD** | **Lagodekhi** | **0.74** | **202** | PG | **Pg** | **09 50 57.5** | **-0.6** |
| LGD | | | | S | **Sg** | **09 51 07.4** | **-0.4** |
| **MAK** | **Makhachkala** | **0.79** | **56** | *e*PG | **Pn** | **09 51 01.1** | **-0.1** |
| MAK | | | | *e* | | 09 51 13.8 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,470nm,0.3s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | |
| **MAK** | **Makhachkala** | **0.79** | **56** | *e*Pg | **Pn** | **09 51 01.3** | **+0.1** |
| MAK | | | | *e*Sg | **Sn** | **09 51 14.0** | **+0.8** |
| **URKR** | **Urkarakh** | **0.84** | **115** | *e*PG | **Pb** | **09 51 00.3** | **-0.4** |
| URKR | | | | *e*S | **Sn** | **09 51 13.4** | **-1.2** |
| URKR | | | | pmax | pmax | | |
| | comp=Z,687nm,0.3s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=E,1μm,0.6s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=E,2μm,0.5s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=N,1μm,0.6s | | | | | | |
| **URKR** | **Urkarakh** | **0.84** | **115** | *e*Pg | **Pb** | **09 51 00.3** | **-0.4** |
| URKR | | | | *e*Sg | **Sn** | **09 51 13.4** | **-1.2** |
| **ZKTA** | **Zakatala** | **0.89** | **179** | PG | **Pg** | **09 51 00.6** | **-0.3** |
| **ZKTA** | **Zakatala** | **0.89** | **179** | P | **Pg** | **09 51 00.6** | **-0.3** |
| | SNR=171 | | | | | | |
| ZKTA | | | | S | **Sg** | **09 51 12.4** | **0.0** |
| **GROC** | **Groznyy** | **0.90** | **319** | *e*PG | **Pn** | **09 51 02.5** | **-0.2** |
| GROC | | | | *e* | | 09 51 16.3 | |
| GROC | | | | pmax | pmax | | |
| | comp=Z,193nm,0.4s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=N,702nm,0.5s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| **GROC** | **Groznyy** | **0.90** | **319** | *e*Pg | **Pn** | **09 51 02.8** | **+0.1** |
| GROC | | | | *e*Sg | **Sn** | **09 51 17.0** | **+1.1** |
| **KANR** | **Karaman** | **0.93** | **44** | *e*PG | **Pn** | **09 51 03.9** | **+0.8** |
| KANR | | | | *e*S | **Sn** | **09 51 18.9** | **+2.3** |
| KANR | | | | pmax | pmax | | |
| | comp=Z,931nm,0.4s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| KANR | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | |
| **KANR** | **Karaman** | **0.93** | **44** | *e*Pg | **Pn** | **09 51 04.0** | **+0.8** |
| KANR | | | | *e*Sg | **Sn** | **09 51 18.9** | **+2.3** |
| **DDFL** | **Dedoflistskaro** | **1.14** | **199** | P | **Pn** | **09 51 07.0** | **+0.9** |
| DDFL | | | | S | **Sn** | **09 51 28.1** | **+6.3** |
| **DDFL** | **Dedoflistskaro** | **1.14** | **199** | PG | **Pn** | **09 51 07.0** | **+0.9** |
| DDFL | | | | S | **Sn** | **09 51 28.1** | **+6.3** |
| **AKT** | **Akhty** | **1.34** | **141** | *e*PG | **Pn** | **09 51 08.6** | **-0.2** |
| AKT | | | | *e*S | **Sg** | **09 51 28.5** | **+1.7** |
| AKT | | | | pmax | pmax | | |
| | comp=Z,487nm,0.2s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=E,1μm,0.2s | | | | | | |
| **AKT** | **Akhty** | **1.34** | **141** | *e*Pg | **Pn** | **09 51 08.6** | **-0.2** |
| AKT | | | | *e*Sg | **Sg** | **09 51 27.4** | **+0.6** |
| **DRN** | **Derbent** | **1.37** | **111** | *de*PG | **Pg** | **09 51 10.0** | **-0.1** |
| **DRN** | **Derbent** | **1.37** | **111** | *e*Pg | **Pb** | **09 51 09.5** | **-0.1** |
| DRN | | | | *e*Sg | **Sg** | **09 51 28.8** | **+0.9** |
| **SEKA** | **Sheki** | **1.39** | **161** | PG | **Pb** | **09 51 09.8** | **-0.2** |
| **SEKA** | **Sheki** | **1.39** | **161** | P | **Pb** | **09 51 09.8** | **-0.1** |
| | SNR=39 | | | | | | |
| SEKA | | | | S | **Sg** | **09 51 30.0** | **+1.6** |
| **KMGR** | **Komgaron** | **1.39** | **293** | *e*PG | **Pg** | **09 51 11.4** | **+0.9** |
| KMGR | | | | *e*S | **Sg** | **09 51 32.0** | **+3.5** |
| **KMGR** | **Komgaron** | **1.39** | **293** | *e*Pg | **Pg** | **09 51 10.9** | **+0.4** |
| KMGR | | | | *e*Sg | **Sg** | **09 51 29.5** | **+1.0** |
| **DGRG** | **David-gareji** | **1.42** | **221** | P | **Pg** | **09 51 11.5** | **+0.5** |
| DGRG | | | | S | **Sg** | **09 51 31.4** | **+2.1** |
| **DGRG** | **David-gareji** | **1.42** | **221** | PG | **Pg** | **09 51 11.5** | **+0.5** |
| DGRG | | | | S | **Sg** | **09 51 31.4** | **+2.1** |
| **KSMR** | **Kasumkent** | **1.46** | **129** | *e*PG | **Pb** | **09 51 10.6** | **-0.6** |
| KSMR | | | | *e*S | **Sg** | **09 51 31.0** | **+0.3** |
| KSMR | | | | pmax | pmax | | |
| | comp=Z,123nm,0.2s | | | | | | |
| KSMR | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| **KSMR** | **Kasumkent** | **1.46** | **129** | *e*Pg | **Pg** | **09 51 11.3** | **-0.5** |
| KSMR | | | | *e*Sg | **Sg** | **09 51 31.2** | **+0.5** |
| **PNSH** | **Pansheti** | **1.48** | **275** | P | **Pn** | **09 51 10.9** | **+0.1** |
| PNSH | | | | S | **Sn** | **09 51 29.8** | **-0.5** |
| **PNSH** | **Pansheti** | **1.48** | **275** | PG | **Pn** | **09 51 10.9** | **+0.1** |
| **VLKR** | **Vladikavkaz** | **1.51** | **291** | *e*PG | **Pg** | **09 51 14.3** | **+1.4** |
| VLKR | | | | *e*S | **Sg** | **09 51 33.8** | **+1.3** |
| **VLKR** | **Vladikavkaz** | **1.51** | **291** | *e*Pg | **Pg** | **09 51 12.5** | **-0.4** |
| VLKR | | | | *e*Sg | **Sg** | **09 51 33.7** | **+1.2** |
| **SEAG** | **Tbilisi Sea** | **1.54** | **241** | P | **Pb** | **09 51 12.6** | **0.0** |
| **SEAG** | **Tbilisi Sea** | **1.54** | **241** | PG | **Pb** | **09 51 12.6** | **0.0** |
| **BTNK** | **Botanikuri** | **1.59** | **239** | P | **Pn** | **09 51 10.8** | **-1.4** |
| BTNK | | | | S | **Sn** | **09 51 32.1** | **-0.7** |
| **BTNK** | **Botanikuri** | **1.59** | **239** | PN | **Pn** | **09 51 10.7** | **-1.4** |
| **QSAR** | **Qusar** | **1.59** | **129** | P | **Pg** | **09 51 13.9** | **-0.5** |
| | SNR=30 | | | | | | |
| QSAR | | | | S | **Sg** | **09 51 38.5** | **+3.4** |
| **LACR** | **Lac** | **1.73** | **281** | ⇓*i*PN | **Pb** | **09 51 15.9** | **0.0** |
| LACR | | | | *e*S | **Sg** | **09 51 39.2** | **-0.2** |
| **LACR** | **Lac** | **1.73** | **281** | *e*Pg | **Pb** | **09 51 15.5** | **-0.4** |
| LACR | | | | *e*Sg | **Sg** | **09 51 39.2** | **-0.2** |
| **QZX** | **Qazax, Azerbai** | **1.73** | **213** | P | **Pb** | **09 51 15.1** | **-0.8** |
| | SNR=86 | | | | | | |
| QZX | | | | S | **Sg** | **09 51 39.2** | **-0.3** |
| **XNQ** | **Khinaliq** | **1.77** | **139** | P | **Pb** | **09 51 16.8** | **+0.2** |
| | SNR=47 | | | | | | |
| XNQ | | | | S | **Sg** | **09 51 42.3** | **+1.5** |
| **MNGR** | **Mingechevir, A** | **1.79** | **168** | PN | **Pb** | **09 51 16.9** | **+0.2** |
| **MNGR** | **Mingechevir, A** | **1.79** | **168** | P | **Pg** | **09 51 17.4** | **-0.7** |
| | SNR=9.2 | | | | | | |
| MNGR | | | | S | **Sg** | **09 51 40.4** | **-0.8** |
| **TRKR** | **Terskaya** | **1.82** | **312** | *e*PN | **Pg** | **09 51 19.2** | **+0.5** |
| TRKR | | | | *e*S | **Sg** | **09 51 44.3** | **+1.9** |
| **TRKR** | **Terskaya** | **1.82** | **312** | *e*Pg | **Pg** | **09 51 18.3** | **-0.5** |
| TRKR | | | | *e*Sg | **Sg** | **09 51 43.4** | **+1.1** |
| **QBL** | **Gabala** | **1.83** | **149** | P | **Pg** | **09 51 19.2** | **+0.4** |
| | SNR=30 | | | | | | |
| QBL | | | | S | **Sg** | **09 51 42.9** | **+0.4** |
| **QUBA** | **Quba, Azerbaij** | **1.83** | **129** | P | **Pg** | **09 51 18.5** | **-0.4** |
| | SNR=10 | | | | | | |
| QUBA | | | | S | **Sg** | **09 51 45.3** | **+2.7** |
| **ARNR** | **Ardon** | **1.83** | **292** | *e*PN | **Pg** | **09 51 19.2** | **+0.3** |
| ARNR | | | | *e*S | **Sg** | **09 51 45.4** | **+2.8** |
| **GANJ** | **Ganja** | **1.89** | **187** | PN | **Pb** | **09 51 17.2** | **-1.3** |
| **GANJ** | **Ganja** | **1.89** | **187** | P | **Pb** | **09 51 17.5** | **-1.0** |
| | SNR=41 | | | | | | |
| GANJ | | | | S | **Sb** | **09 51 42.8** | **+0.5** |
| **GDB** | **GEDABAY** | **1.91** | **200** | P | **Pn** | **09 51 17.4** | **+0.6** |
| | SNR=144 | | | | | | |
| GDB | | | | S | **Sb** | **09 51 42.8** | **-0.3** |
| **KORR** | **Kora** | **1.95** | **288** | *e*PN | **Pg** | **09 51 20.7** | **-0.5** |
| KORR | | | | *e*S | **Sg** | **09 51 48.1** | **+1.6** |
| **KORR** | **Kora** | **1.95** | **288** | *e*Pg | **Pb** | **09 51 20.3** | **+0.7** |
| KORR | | | | *e*Sg | **Sg** | **09 51 46.3** | **-0.3** |
| **KZRT** | **Kazreti** | **2.00** | **236** | P | **Pb** | **09 51 19.3** | **-1.1** |
| KZRT | | | | S | **Sg** | **09 51 46.8** | **-1.4** |
| **KZRT** | **Kazreti** | **2.00** | **236** | PN | **Pb** | **09 51 19.3** | **-1.1** |
| **ZEI** | **Tsey** | **2.01** | **278** | *e*PN | **Pb** | **09 51 20.4** | **-0.3** |
| ZEI | | | | *e*S | **Sg** | **09 51 48.7** | **+0.2** |
| **ZEI** | **Tsey** | **2.01** | **278** | *e*Pg | **Pb** | **09 51 19.8** | **-0.9** |
| ZEI | | | | *e*Sg | **Sg** | **09 51 48.6** | **0.0** |
| **STDR** | **Stavd-Durt** | **2.05** | **295** | *e*PN | **Pg** | **09 51 23.1** | **0.0** |
| STDR | | | | *e*S | **Sg** | **09 51 49.7** | **0.0** |
| **STDR** | **Stavd-Durt** | **2.05** | **295** | *e*Pg | **Pb** | **09 51 21.1** | **-0.1** |
| STDR | | | | *e*Sg | **Sg** | **09 51 49.1** | **-0.5** |
| **IML** | **Ismayilli** | **2.09** | **145** | P | **Pb** | **09 51 22.6** | **+0.6** |
| | SNR=30 | | | | | | |
| IML | | | | S | **Sg** | **09 51 49.9** | **-1.2** |
| **PRTR** | **Priterechnaya** | **2.10** | **307** | *e*PN | **Pg** | **09 51 23.7** | **-0.3** |
| PRTR | | | | *e*S | **Sg** | **09 51 53.4** | **+2.2** |
| **PRTR** | **Priterechnaya** | **2.10** | **307** | *e*Pg | **Pb** | **09 51 22.4** | **+0.4** |
| PRTR | | | | *e*Sg | **Sg** | **09 51 52.7** | **+1.4** |
| **TRLG** | **Trialeti** | **2.11** | **243** | P | **Pb** | **09 51 21.4** | **-0.9** |
| TRLG | | | | S | **Sb** | **09 51 49.7** | **+0.9** |
| **DMNI** | **Dmanisi** | **2.16** | **237** | P | **Pb** | **09 51 21.6** | **-1.6** |
| DMNI | | | | S | **Sb** | **09 51 50.4** | **+0.2** |
| **DMNI** | **Dmanisi** | **2.16** | **237** | PN | **Pb** | **09 51 21.6** | **-1.6** |
| DMNI | | | | S | **Sb** | **09 51 50.4** | **+0.2** |
| **LSNR** | **Lesken** | **2.18** | **291** | *e*PN | **Pg** | **09 51 24.8** | **-0.8** |
| LSNR | | | | *e*S | **Sg** | **09 51 55.3** | **+1.5** |
| **LSNR** | **Lesken** | **2.18** | **291** | *e*Pg | **Pg** | **09 51 24.5** | **-1.1** |
| LSNR | | | | *e*Sg | **Sg** | **09 51 52.3** | **-1.5** |
| **SIZA** | **Siyzn** | **2.24** | **129** | P | **Pb** | **09 51 23.9** | **-0.6** |
| | SNR=8.4 | | | | | | |
| SIZA | | | | S | **Sg** | **09 51 54.8** | **-1.0** |
| **BRNG** | **Burnasheti** | **2.26** | **247** | P | **Pb** | **09 51 24.4** | **-0.5** |
| BRNG | | | | S | **Sb** | **09 51 53.0** | **0.0** |
| **DIGR** | **Digorskoe uzhe** | **2.26** | **281** | *e*PN | **Pb** | **09 51 23.9** | **-1.1** |
| DIGR | | | | *e*S | **Sb** | **09 51 53.4** | **+0.2** |
| DIGR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | |
| **DIGR** | **Digorskoe uzhe** | **2.26** | **281** | *e*Pn | **Pb** | **09 51 23.9** | **-1.1** |
| DIGR | | | | *e*Sn | **Sb** | **09 51 52.3** | **-0.9** |
| **PQL** | **Pirkuli** | **2.29** | **139** | P | **Pb** | **09 51 25.4** | **+0.1** |
| | SNR=30 | | | | | | |
| PQL | | | | S | **Sg** | **09 51 55.8** | **-1.4** |
| **BRDA** | **Brd** | **2.30** | **169** | P | **Pb** | **09 51 23.9** | **-1.6** |
| | SNR=9.7 | | | | | | |
| BRDA | | | | S | **Sb** | **09 51 53.7** | **-0.3** |
| **ONI** | **Oni** | **2.33** | **273** | P | **Pb** | **09 51 26.3** | **+0.2** |
| ONI | | | | S | **Sg** | **09 51 58.8** | **0.0** |
| **ONI** | **Oni** | **2.33** | **273** | *e*PN | **Pb** | **09 51 26.0** | **-0.1** |
| ONI | | | | *e*S | **Sg** | **09 51 57.4** | **-1.3** |
| **ONI** | **Oni** | **2.33** | **273** | *e*Pn | **Pb** | **09 51 25.9** | **-0.1** |
| ONI | | | | *e*Sn | **Sb** | **09 51 56.2** | **+1.2** |
| **ZRD** | **Zardab** | **2.39** | **160** | P | **Pb** | **09 51 25.9** | **-1.0** |
| ZRD | | | | S | **Sb** | **09 51 56.3** | **-0.2** |
| **ATGJ** | **Altiaghaj** | **2.41** | **133** | P | **Pb** | **09 51 25.8** | **-1.7** |
| | SNR=13 | | | | | | |
| ATGJ | | | | S | **Sb** | **09 51 57.3** | **0.0** |
| **NCK** | **Nalchik** | **2.41** | **295** | *de*PN | **Pn** | **09 51 24.8** | **+1.3** |
| **AGDM** | **Agdam** | **2.44** | **171** | P | **Pb** | **09 51 26.4** | **-1.6** |
| | SNR=18 | | | | | | |
| AGDM | | | | S | **Sb** | **09 51 58.0** | **-0.2** |
| **KDMR** | **Kurdemir** | **2.45** | **151** | P | **Pb** | **09 51 27.2** | **-0.8** |
| | SNR=7.5 | | | | | | |
| KDMR | | | | S | **Sb** | **09 51 58.2** | **-0.2** |
| **BGD** | **Bogdanovka** | **2.58** | **242** | P | **Pb** | **09 51 29.1** | **-1.2** |
| BGD | | | | S | **Sb** | **09 52 03.5** | **+1.3** |
| **BGD** | **Bogdanovka** | **2.58** | **242** | PN | **Pb** | **09 51 29.1** | **-1.2** |
| BGD | | | | S | **Sb** | **09 52 03.5** | **+1.3** |
| **AKH** | **Akhalkalaki** | **2.58** | **245** | P | **Pb** | **09 51 28.9** | **-1.4** |
| AKH | | | | S | **Sb** | **09 52 02.1** | **-0.1** |
| **AKH** | **Akhalkalaki** | **2.58** | **245** | PN | **Pb

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GOF** | **Gofitskoye** | **3.62** | **316** | ⇑ | *e*Pn | **Pn** | **09 51 40.6** | **+0.6** |
| GOF | | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **GOF** | **Gofitskoye** | **3.62** | **316** | | *e*Pn | **Pb** | **09 51 44.6** | **-3.3** |
| GOF | | | | | *e*Sn | **Sn** | **09 52 25.4** | **+2.5** |
| **ORD** | **Ordubad** | **3.62** | **188** | | P | **Pn** | **09 51 41.2** | **+1.0** |
| | SNR=15 | | | | | | | |
| ORD | | | | | S | **Sn** | **09 52 24.8** | **+1.6** |
| **YRD** | **Yardimli** | **3.81** | **160** | | P | **Pn** | **09 51 45.0** | **+2.1** |
| | SNR=7.1 | | | | | | | |
| YRD | | | | | S | **Sn** | **09 52 29.9** | **+1.9** |
| **ARXR** | **Arkhyz** | **4.04** | **287** | | *e*PN | **Pg** | **09 52 03.2** | **+1.9** |
| ARXR | | | | | *e*S | **Sb** | **09 52 43.1** | **-1.3** |
| **LRK** | **Lerik** | **4.10** | **161** | | P | **Pn** | **09 51 49.0** | **+2.2** |
| | SNR=7.7 | | | | | | | |
| LRK | | | | | S | **Sn** | **09 52 37.7** | **+2.7** |
| **ASTR** | **Astara** | **4.30** | **157** | | P | **Pn** | **09 51 51.7** | **+2.4** |
| ASTR | | | | | S | **Sn** | **09 52 41.6** | **+2.0** |
| **RPOR** | **Krasnaya Polya** | **4.79** | **286** | ⇓ | *e*PN | **Pn** | **09 51 54.0** | **-2.2** |
| **GUZR** | **Guzeripl'** | **4.96** | **289** | | *e*PN | **Pb** | **09 52 10.1** | **-0.8** |
| GUZR | | | | | *e*S | **Sn** | **09 53 02.3** | **+6.2** |
| **BELG** | **Belogornoye** | **9.90** | **4** | | Pn | **Pn** | **09 53 06.7** | **+0.6** |
| | comp=Z,1.6nm,0.3s,baz=199,slow=22,SNR=6.3 | | | | | | | |
| BELG | | | | | Sn | **Sn** | **09 54 53.3** | **-4.0** |
| | comp=Z,0.4nm,0.3s,baz=239,slow=8.7,SNR=2.7 | | | | | | | |
| **BELG** | **Belogornoye** | **9.90** | **4** | ⇑ | *e*P | **Pn** | **09 53 07.3** | **+1.1** |
| BELG | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **GEYT** | **Alibeck** | **9.92** | **114** | | Pn | **Pn** | **09 53 08.6** | **+1.9** |
| | comp=Z,1.1nm,0.3s,baz=317,slow=13,SNR=5.3 | | | | | | | |
| **BR131** | **Keskin Array S** | **10.18** | **258** | ⇓ | *e*P | **Pn** | **09 53 09.3** | **-0.9** |
| **AKTO** | **Aktyubinsk** | **11.14** | **41** | | Pn | **Pn** | **09 53 24.7** | **+1.4** |
| | comp=Z,0.9nm,0.3s,baz=226,slow=9.4,SNR=11 | | | | | | | |
| AKTO | | | | | Sn | **Sn** | **09 55 19.8** | **-8.2** |
| | comp=Z,0.2nm,0.3s,baz=70,slow=20,SNR=2.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **14.45** | **310** | | Pn | **Pn** | **09 54 07.2** | **-1.3** |
| | comp=Z,0.7nm,0.3s,baz=113,slow=13,SNR=2.9 | | | | | | | |
| **ARU** | **Arti** | **15.90** | **25** | | Pn | **Pn** | **09 54 25.1** | **-2.6** |
| | comp=Z,0.0nm,0.3s,baz=222,slow=11,SNR=7.5 | | | | | | | |
| ARU | | | | | Sn | **Sn** | **09 57 14.6** | **-9.3** |
| | comp=Z,0.0nm,0.3s,baz=179,slow=24,SNR=6.4 | | | | | | | |
| **ARU** | **Arti** | **15.90** | **25** | | P | **Pn** | **09 54 26.6** | **-1.1** |
| ARU | | | | | S | **Sn** | **09 57 22.8** | **-1.1** |
| **SVE** | **Sverdlovsk** | **16.90** | **27** | | *e*P | **Pn** | **09 54 38.9** | **-1.5** |
| SVE | | | | | *e*S | **Sn** | **09 57 41.6** | **-6.5** |
| SVE | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **KLMR** | **Klimovskoe** | **18.85** | **349** | | *e*P | **Pn** | **09 55 04.2** | **-0.2** |
| KLMR | | | | | *e* | | 09 58 40.4 | |
| KLMR | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **KLMR** | **Klimovskoe** | **18.85** | **349** | | *e*Pn | **Pn** | **09 55 04.2** | **-0.2** |
| KLMR | | | | | AMP | | 09 55 16.9 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| KLMR | | | | | *e*Sn | **S** | **09 58 40.5** | **+2.3** |
| KLMR | | | | | *e*Sn | **S** | **09 58 40.5** | **+2.3** |
| **BRVK** | **Borovoye** | **18.99** | **48** | ⇓ | *i*P | **Pn** | **09 55 06.7** | **+0.5** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **19.03** | **48** | | P | **Pn** | **09 55 07.9** | **+1.2** |
| | comp=Z,0.6nm,0.3s,baz=297,slow=7.4,SNR=12 | | | | | | | |
| BVAR | | | | | S | **Sn** | **09 58 32.9** | **-7.0** |
| | comp=Z,0.2nm,0.3s,baz=235,slow=14,SNR=4.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **20.50** | **80** | | P | Pn | 09 55 24.3 | -0.2 |
| | comp=Z,3.0nm,0.6s,baz=272,slow=10.0,SNR=5.5 | | | | | | | |
| **AAK** | **Ala-Archa** | **20.50** | **80** | ⇑ | *i*P | Pn | 09 55 24.0 | -0.4 |
| AAK | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **22.59** | **334** | | | **P** | **09 55 44.4** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=145,slow=10,SNR=7.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **22.59** | **334** | | *i* P | **P** | **09 55 46.7** | **+2.3** |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.25** | **59** | | P | **P** | **09 55 54.5** | **+3.2** |
| | comp=Z,1.5nm,0.6s,baz=270,slow=10,SNR=11 | | | | | | | |
| **KURK** | **Kurchatov** | **23.32** | **58** | ⇑ | *e*P | **P** | **09 55 53.3** | **+1.3** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **25.59** | **68** | | P | **P** | **09 56 14.6** | **+1.3** |
| | comp=Z,2.4nm,0.8s,baz=279,slow=7.8,SNR=21 | | | | | | | |
| **HFS** | **Hagfors** | **26.67** | **323** | | P | **P** | **09 56 22.5** | **-0.3** |
| | comp=Z,2.1nm,0.8s,baz=132,slow=12,SNR=1.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **27.56** | **52** | | P | **P** | **09 56 33.0** | **+2.1** |
| | comp=Z,0.8nm,0.5s,baz=263,slow=12,SNR=3.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **27.56** | **52** | | *i* P | **P** | **09 56 33.5** | **+2.7** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **28.16** | **323** | | P | **P** | **09 56 36.1** | **-0.2** |
| | comp=Z,0.9nm,0.9s,baz=102,slow=10,SNR=2.5 | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **28.91** | **61** | ⇑ | *e*P | **P** | **09 56 44.8** | **+1.7** |
| DGZ | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **29.19** | **345** | | P | **P** | **09 56 46.1** | **+0.8** |
| | comp=Z,2.1nm,0.9s,baz=155,slow=11,SNR=1.9 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **41.98** | **61** | ⇑ | *e*P | **P** | **09 58 36.7** | **+1.5** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.53** | **247** | | P | **P** | **09 59 27.0** | **-0.4** |
| | comp=Z,0.6nm,0.7s,baz=26,slow=8.7,SNR=2.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.25** | **351** | | P | **P** | **10 02 20.2** | **-0.5** |
| | comp=Z,0.2nm,0.5s,baz=11,slow=6.1,SNR=6.3 | | | | | | | |

*IDC* ***13*** *09:53:54.6±2.4, 34.°61N×23.°39E, h0km, mb3.7/3, mb1 3.5/7, mb1mx3.3/46, mbtmp3.4/7, ML3.4/4, Error ellipse: s-maj=40.6km s-min=19.2km az=176.0*
*ATH* ***13*** *09:54:00.5, 34.°98N×23.°53E, h11km±6km, ML3.3/5, Error ellipse: s-maj=6.9km s-min=2.1km az=48.0*
*THE* ***13*** *09:54:01.4, 35.°00N×23.°62E, h0km±2km, ML3.2/8, Error ellipse: s-maj=2.4km s-min=0.7km az=229.0*
**ISC 13 09:54:00.8±1.3, 34.°98N±0.°05×23.°57E±0.°05, h14km±8km, n27, σ1°837/39, mb3.6/3, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KNDR** | **Palaiochora Ch** | **0.28** | **21** | P | | **Pg** | **09 54 06.0** | **-0.6** |
| KNDR | | | | S | | **Sg** | **09 54 10.1** | **-0.4** |
| | 6μm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **0.45** | **108** | P | | **Pg** | **09 54 09.3** | **-0.4** |
| GVD | | | | S | | **Sg** | **09 54 16.2** | **+0.5** |
| | 11μm,0.2s | | | | | | | |
| **GVD** | **Gavdhos** | **0.45** | **108** | P | | **Pg** | **09 54 09.1** | **-0.6** |
| GVD | | | | S | | **Sg** | **09 54 17.5** | **+1.8** |
| GVD | | | | AML | | AML | 09 54 19.6 | |
| | comp=N,22749μm,0.3s | | | | | | | |
| GVD | | | | AML | | AML | 09 54 19.8 | |
| | comp=E,21112μm,0.2s | | | | | | | |
| **GVDS** | **Gavdos** | **0.45** | **107** | P | | **Pg** | **09 54 08.9** | **-0.8** |
| GVDS | | | | S | | **Sg** | **09 54 16.0** | **+0.2** |
| | comp=E,6μm,0.1s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.59** | **35** | P | | **Pg** | **09 54 11.7** | **-0.7** |
| IMMV | | | | S | | **Sg** | **09 54 20.1** | **-0.1** |
| | comp=E,4μm,0.4s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.59** | **35** | P | | **Pg** | **09 54 11.3** | **-1.0** |
| IMMV | | | | S | | **Sg** | **09 54 20.3** | **+0.1** |
| IMMV | | | | AML | | AML | 09 54 22.0 | |
| | comp=E,10868μm,0.5s | | | | | | | |
| IMMV | | | | AML | | AML | 09 54 23.2 | |
| | comp=N,6759μm,0.3s | | | | | | | |
| **VAM** | **Vamos** | **0.67** | **50** | P | | **Pg** | **09 54 13.2** | **-0.8** |
| VAM | | | | S | | **Sg** | **09 54 23.6** | **+0.8** |
| | comp=N,6μm,0.5s | | | | | | | |
| **VAM** | **Vamos** | **0.67** | **50** | P | | **Pg** | **09 54 13.1** | **-0.8** |
| VAM | | | | S | | **Sg** | **09 54 23.6** | **+0.8** |
| VAM | | | | AML | | AML | 09 54 24.6 | |
| | comp=E,8615μm,0.3s | | | | | | | |
| VAM | | | | AML | | AML | 09 54 24.8 | |
| | comp=N,15056μm,0.6s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **0.86** | **63** | P | | **Pg** | **09 54 15.5** | **-1.9** |
| PRNS | | | | S | | **Sg** | **09 54 26.6** | **-2.1** |
| | comp=N,762nm,0.3s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.92** | **346** | P | | **Pb** | **09 54 18.6** | **+0.2** |
| ANKY | | | | S | | **Sb** | **09 54 32.5** | **+2.0** |
| | comp=N,955nm,0.6s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.92** | **346** | P | | **Pg** | **09 54 17.8** | **-0.7** |
| ANKY | | | | AML | | AML | 09 54 39.9 | |
| | comp=N,1661μm,0.6s | | | | | | | |
| ANKY | | | | AML | | AML | 09 54 46.9 | |
| | comp=E,2298μm,0.6s | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **74** | Pg | | **Pg** | **09 54 21.3** | **-1.2** |
| | comp=E,11nm,0.3s,baz=235,slow=16,SNR=35 | | | | | | | |
| IDI | | | | Lg | | Lg | 09 54 39.5 | |
| | comp=E,72nm,0.3s,baz=354,slow=16,SNR=17 | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **74** | P | | **Pg** | **09 54 21.1** | **-1.4** |
| IDI | | | | S | | **Sg** | **09 54 37.2** | **0.0** |
| | comp=E,552nm,0.4s | | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **74** | P | | **Pg** | **09 54 21.2** | **-1.3** |
| IDI | | | | S | | **Sb** | **09 54 38.5** | **+1.9** |
| IDI | | | | AML | | AML | 09 54 43.1 | |
| | comp=N,1184μm,0.5s | | | | | | | |
| IDI | | | | AML | | AML | 09 54 45.3 | |
| | comp=E,1021μm,0.3s | | | | | | | |
| **KTHA** | **Kythira Island** | **1.34** | **342** | P | | **Pg** | **09 54 26.0** | **-0.6** |
| **KTHA** | **Kythira Island** | **1.34** | **342** | P | | **Pb** | **09 54 26.2** | **+0.5** |
| **KTHR** | **Kythira** | **1.36** | **340** | P | | **Pn** | **09 54 26.4** | **+1.0** |
| **NPS** | **Neapolis** | **1.70** | **80** | P | | **Pn** | **09 54 31.6** | **+1.6** |
| **NPS** | **Neapolis** | **1.70** | **80** | P | | **Pb** | **09 54 32.7** | **+0.9** |
| **VLI** | **Veliai** | **1.81** | **344** | P | | **Pn** | **09 54 32.5** | **+0.9** |
| **BRTR** | **Keskin Array B** | **9.31** | **56** | Pn | | **Pn** | **09 56 17.5** | **+2.8** |
| | comp=E,0.0nm,0.3s,baz=233,slow=16,SNR=2.4 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **10.02** | **98** | Pn | | **Pn** | **09 56 22.4** | **-1.9** |
| | comp=E,0.6nm,0.3s,baz=292,slow=12,SNR=1.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **15.66** | **335** | Pn | | **Pn** | **09 57 43.9** | **+2.9** |
| | comp=E,0.1nm,0.3s,baz=153,slow=9.6,SNR=5.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **16.25** | **13** | Pn | | **Pn** | **09 57 49.1** | **+0.6** |
| | comp=E,0.3nm,0.3s,baz=203,slow=9.1,SNR=3.1 | | | | | | | |
| **HFS** | **Hagfors** | **25.98** | **349** | P | | **P** | **09 59 30.5** | **-2.2** |
| | comp=E,1.0nm,0.5s,baz=173,slow=13,SNR=5.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.25** | **51** | P | | **P** | **10 01 51.9** | **-1.5** |
| | comp=E,0.5nm,0.5s,baz=277,slow=8.7,SNR=5.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.96** | **56** | P | | **P** | **10 02 13.9** | **-1.4** |
| | comp=E,0.7nm,0.9s,baz=270,slow=8.5,SNR=6.1 | | | | | | | |

*TUL* ***13*** *10:01:32.2±0.8, 36.°26N±0.°01×96.°74W±0.°02, h5km±6km, ML2.7, mb_Lg2.6/34(NEIC), Error ellipse: s-maj=2.1km s-min=1.8km az=72.0*
**NEIC 13 10:01:32.4±0.8, 36.°274N±0.°010×96.°73W±0.°01, h7km±5km, Error ellipse: s-maj=1.9km s-min=0.8km az=134.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.67** | **16** | Pg | | Pg | 10 01 45.5 | +0.3 |
| T35A | | | | Sg | | Sg | 10 01 54.0 | +0.1 |
| **TUL1** | **Leonard** | **0.84** | **115** | Pg | | Pg | 10 01 48.6 | 0.0 |
| TUL1 | | | | Sg | | Sg | 10 01 59.7 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.04** | **214** | | | Pg | 10 01 51.0 | -1.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.04** | **214** | | | Pg | 10 01 51.2 | -1.1 |
| **W35A** | **Tecumseh** | **1.12** | **186** | | | Pg | 10 01 52.8 | -1.2 |
| **FNO** | **Franklin** | **1.15** | **208** | | | Pg | 10 01 53.2 | -1.3 |
| **X34A** | **Smith Ranch, M** | **1.90** | **209** | | | Pb | 10 02 06.5 | -0.8 |
| **U38A** | **Gravette** | **1.90** | **84** | | | Pb | 10 02 06.8 | -0.6 |
| **X37A** | **Clayton** | **2.02** | **146** | Pn | | Pn | 10 02 07.9 | +1.0 |
| X37A | | | | IAmb_Lg | | | 10 02 37.5 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **HHAR** | **Hobbs** | **2.26** | **89** | | | Pn | 10 02 10.2 | 0.0 |
| **WMOK** | **Wichita Mounta** | **2.27** | **228** | IAmb_Lg | | | 10 02 43.8 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **W39A** | **Magazine** | **2.63** | **113** | | | Pn | 10 02 16.1 | +0.8 |
| **KSU1** | **Kansas State U** | **2.82** | **2** | IAmb_Lg | | | 10 03 02.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **S39A** | **Bolivar** | **3.08** | **62** | IAmb_Lg | | | 10 03 16.9 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.10** | **123** | Pn | | Pn | 10 02 22.8 | +1.0 |
| **U40A** | **Yellville** | **3.13** | **87** | IAmb_Lg | | | 10 03 18.6 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.33** | **154** | IAmb_Lg | | | 10 03 17.9 | |
| | comp=Z,9.6nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.65** | **118** | | | Pn | 10 02 29.4 | +0.1 |
| **MGMO** | **Mountain Grove** | **3.69** | **75** | Pn | | Pn | 10 02 29.4 | -0.6 |
| MGMO | | | | IAmb_Lg | | | 10 03 31.0 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **WHAR** | **Woolly Hollow** | **3.75** | **104** | Pn | | Pn | 10 02 30.9 | +0.3 |
| **R40A** | **Maddox Statio** | **4.09** | **59** | IAmb_Lg | | | 10 03 50.8 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **P38A** | **Dawn** | **4.19** | **36** | IAmb_Lg | | | 10 03 45.6 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **AMTX** | **Amarillo** | **4.26** | **252** | IAmb_Lg | | | 10 03 52.4 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **T42A** | **Van Buren** | **4.60** | **79** | IAmb_Lg | | | 10 04 07.4 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **4.93** | **47** | IAmb_Lg | | | 10 04 17.0 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **FVM** | **French Village** | **5.32** | **69** | IAmb_Lg | | | 10 04 21.3 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.69** | **3** | IAmb_Lg | | | 10 04 45.8 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **SCIA** | **State Center** | **6.25** | **25** | IAmb_Lg | | | 10 04 55.3 | |
| | comp=Z,12nm,0.7s | | | | | | | |

*IDC* ***13*** *10:12:58.4±1.7, 31.°27S×72.°06W, h0km, mb3.8/2, mb1 3.9/6, mb1mx3.7/25, mbtmp3.7/6, ML3.6/4, Error ellipse: s-maj=47.3km s-min=30.4km az=100.0*
*GUC* ***13*** *10:13:01.5±0.5, 31.°40S×72.°43W, h21km±8km, ML3.5*
**ISC 13 10:12:56.7±1.6, 31.°37S±0.°04×72.°53W±0.°05, h2km±11km, n25, σ1°80/33, 5C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **1.03** | **48** | ⇑ | *i*P | **Pn** | **10 13 19.0** | **+0.7** |
| **CO02** | **Combarbal** | **1.32** | **83** | ⇑ | *i*P | **Pg** | **10 13 24.4** | **+2.4** |
| CO02 | | | | | *i* S | **Sg** | **10 13 40.6** | **+1.5** |
| CO02 | | | | | IAML | | 10 13 43.0 | |
| | comp=N,4μm,0.2s | | | | | | | |
| **VA06** | **Catapilco** | **1.58** | **139** | ⇑ | *i*P | **Pg** | **10 13 28.5** | **+1.4** |
| VA06 | | | | | *i* S | **Sb** | **10 13 46.9** | **-0.3** |
| VA06 | | | | | IAML | | 10 13 48.4 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **1.67** | **72** | | *i* P | **Pg** | **10 13 28.9** | **+0.3** |
| CO03 | | | | | *i* S | **Sg** | **10 13 49.7** | **-0.5** |
| CO03 | | | | | IAML | | 10 13 51.7 | |
| | comp=E,603nm,0.6s | | | | | | | |
| **VA01** | **Torpederas** | **1.81** | **156** | | *e*P | **Pg** | **10 13 31.1** | **-0.3** |
| VA01 | | | | | IAML | | 10 13 56.2 | |
| | comp=E,309nm,0.1s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.91** | **52** | | *e*P | **Pg** | **10 13 32.4** | **-0.9** |
| GO04 | | | | | IAML | | 10 13 57.3 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **ROCH** | **El Roble** | **2.05** | **142** | | *e*P | **Pg** | **10 13 35.4** | **-0.7** |
| ROCH | | | | | IAML | | 10 14 03.2 | |
| | comp=N,466nm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.18** | **130** | ⇑ | *i*P | **Pb** | **10 13 37.4** | **+0.4** |
| VA03 | | | | | *i* S | **Sb** | **10 14 03.8** | **-0.7** |
| VA03 | | | | | IAML | | 10 14 07.2 | |
| | comp=E,576nm,0.4s | | | | | | | |
| **MT02** | **Curacav** | **2.22** | **148** | | *e*P | **Pb** | **10 13 37.7** | **+0.1** |
| MT02 | | | | | IAML | | 10 14 04.8 | |
| | comp=N,186nm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **2.36** | **139** | | *e*P | **Pb** | **10 13 39.9** | **-0.1** |
| PEL | | | | | *i* S | **Sb** | **10 14 07.1** | **-2.5** |
| PEL | | | | | IAML | | 10 14 14.7 | |
| | comp=E,208nm,0.2s | | | | | | | |
| **VA05** | **Santo Domingo** | **2.41** | **162** | ⇑ | *i*P | **Pb** | **10 13 39.8** | **-1.0** |
| VA05 | | | | | IAML | | 10 14 09.7 | |
| | comp=N,603nm,0.2s | | | | | | | |
| **MT05** | **Renca** | **2.52** | **144** | | *e*P | **Pb** | **10 13 42.2** | **-0.5** |
| MT05 | | | | | *i* S | **Sb** | **10 14 11.7** | **-2.6** |
| MT05 | | | | | IAML | | 10 14 18.4 | |
| | comp=E,355nm,0.2s | | | | | | | |
| **MT01** | **Popeta** | **2.71** | **157** | | *e*P | **Pb** | **10 13 44.1** | **-1.9** |
| MT01 | | | | | *e*S | **Sn** | **10 14 14.5** | **-0.2** |
| MT01 | | | | | IAML | | 10 14 16.3 | |
| | comp=E,134nm,0.3s | | | | | | | |
| **MT09** | **Talagante** | **2.73** | **152** | | *e*P | **Pb** | **10 13 45.2** | **-1.2** |
| MT09 | | | | | IAML | | 10 14 24.9 | |
| | comp=N,241nm,0.2s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **3.72** | **157** | | *e*P | **Pb** | **10 13 58.7** | **-4.4** |
| BO02 | | | | | *i* S | **Sn** | **10 14 40.7** | **+1.1** |
| **H03N1** | **Juan Fernandez** | **5.78** | **247** | Pn | | **Pn** | **10 14 24.6** | **+1.4** |
| | baz=113,slow=18,SNR=19 | | | | | | | |
| H03N1 | | | | T | | T | 10 21 34.9 | |
| | baz=76,slow=72,SNR=40 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.79** | **247** | Pn | | **Pn** | **10 14 24.4** | **+1.0** |
| | baz=113,slow=18,SNR=14 | | | | | | | |
| H03N3 | | | | T | | T | 10 21 27.5 | |
| | baz=76,slow=72,SNR=33 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.79** | **247** | Pn | | **Pn** | **10 14 25.3** | **+1.8** |
| | baz=113,slow=18,SNR=14 | | | | | | | |
| H03N2 | | | | T | | T | 10 21 31.4 | |
| | baz=76,slow=72,SNR=4.4 | | | | | | | |
| **LVC** | **Limon Verde** | **9.30** | **21** | Pn | | **Pn** | **10 15 11.1** | **-1.1** |
| | comp=N,0.2nm,0.3s,baz=210,slow=14,SNR=1.7 | | | | | | | |
| **PLCA** | **Paso Flores** | **9.48** | **171** | Pn | | **Pn** | **10 15 17.2** | **+2.9** |
| | comp=N,0.2nm,0.3s,baz=338,slow=12,SNR=6.5 | | | | | | | |
| **LPAZ** | **La Paz** | **15.54** | **16** | Pn | | **P** | **10 16 39.0** | **-3.1** |
| | comp=N,0.1nm,0.3s,baz=198,slow=6.4,SNR=7.0 | | | | | | | |
| **SIV** | **San Ignacio** | **18.54** | **37** | P | | **P** | **10 17 12.9** | **-1.8** |
| | comp=N,0.1nm,0.3s,baz=215,slow=10,SNR=2.8 | | | | | | | |
| **BDFB** | **Brasilia** | **27.30** | **61** | P | | **P** | **10 18 40.5** | **-2.5** |
| | comp=N,1.6nm,0.4s,baz=241,slow=11,SNR=2.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **67.24** | **331** | P | | **P** | **10 23 54.8** | **+2.1** |
| | comp=N,0.3nm,0.9s,baz=153,slow=12,SNR=2.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.18** | **29** | PKPbc | | **PKiKP** | **10 32 55.4** | **+1.7** |
| | comp=N,0.4nm,0.4s,baz=315,slow=0.2,SNR=1.9 | | | | | | | |

*IDC* ***13*** *10:17:58.3±1.8, 51.°31N×98.°36E, h0km, mb3.5/2, mb1 3.3/8, mb1mx3.1/44, mbtmp3.2/8, ML2.8/6, MS3.3/2, Ms1 3.3/2, ms1mx2.4/73, Error ellipse: s-maj=53.0km s-min=14.2km az=20.0*
*ASRS* ***13*** *10:17:58.7±0.2, 51.°N±2.°×98.°E±.°, h3km, MLh4.8/11, Error ellipse: s-maj=3.4km s-min=2.3km az=1.2, confirmed*
*MOS* ***13*** *10:18:03.3±2.1, 51.°28N×97.°53E, h10km, mb4.0/2, Error ellipse: s-maj=15.0km s-min=9.7km az=160.9*
*NNC* ***13*** *10:18:18.2±3.9, 49.°76N×96.°92E, h0km, mb3.6, mpv3.1, Error ellipse: s-maj=36.2km s-min=33.0km az=102.0*
**ISC 13 10:17:59.9±0.6, 51.°07N±0.°03×97.°91E±0.°02, h10km, n54, σ2°24/63, mb3.6/3, 11C-10D, Tuva-Buryatia-Mongolia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KNGR** | **Kungurtug, Tuv** | **0.53** | **208** | ⇓ | Pg | **Pg** | **10 18 10.5** | **+0.3** |
| KNGR | | | | | Sg | **Sg** | **10 18 17.1** | **0.0** |
| **ORL** | **Orlik** | **1.89** | **38** | ⇓ | *i*PN | **Pg** | **10 18 37.5** | **+1.5** |
| ORL | | | | | *e* | | 10 19 04.5 | |
| ORL | | | | | pmax | pmax | | |
| | comp=Z,305nm,0.2s | | | | | | | |
| ORL | | | | | smax | smax | | |
| | comp=E,849nm,0.8s | | | | | | | |
| **MOY** | **Mondy** | **2.02** | **72** | ⇓ | *i*PN | **Pg** | **10 18 37.9** | **-0.7** |
| MOY | | | | | *e* | | 10 19 04.7 | |
| MOY | | | | | pmax | pmax | | |
| | comp=Z,447nm,0.3s | | | | | | | |
| MOY | | | | | smax | smax | | |
| | comp=N,3μm,0.8s | | | | | | | |
| **MOY** | **Mondy** | **2.02** | **72** | | Pg | **Pg** | **10 18 38.0** | **-0.7** |
| MOY | | | | | Sg | **Sg** | **10 19 05.1** | **+0.3** |
| **KZLR** | **Kyzyl** | **2.26** | **288** | *de* | PN | **Pg** | **10 18 39.8** | **-3.3** |
| KZLR | | | | | *i* | | 10 18 43.8 | |
| **KZLR** | **Kyzyl** | **2.26** | **288** | | Pg | **Pg** | **10 18 44.0** | **+0.9** |
| KZLR | | | | | Sg | **Sg** | **10 19 16.7** | **+4.3** |
| **ARS** | **Arshan** | **2.94** | **71** | *e* | PN | **Pb** | **10 18 50.1** | **-2.4** |
| ARS | | | | | *e* | | 10 19 32.9 | |
| ARS | | | | | pmax | pmax | | |
| | comp=Z,223nm,0.5s | | | | | | | |
| ARS | | | | | smax | smax | | |
| | comp=E,2μm,0.8s | | | | | | | |
| **ZAK** | **Zakamensk** | **3.48** | **99** | *e* | PN | **Pn** | **10 18 55.3** | **+1.2** |
| ZAK | | | | | *e* | | 10 19 46.1 | |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,236nm,1.2s | | | | | | | |
| ZAK | | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | | |
| **ZAK** | **Zakamensk** | **3.48** | **99** | | Pn | **Pn** | **10 18 55.0** | **+0.8** |
| ZAK | | | | | Pg | **Pg** | **10 19 01.7** | **+0.1** |
| ZAK | | | | | Sg | **Sb** | **10 19 46.3** | **+2.3** |
| **IRK** | **Irkutsk** | **4.13** | **71** | *e* | PN | **Pb** | **10 19 14.3** | **+1.7** |
| IRK | | | | | *e* | | 10 20 07.9 | |
| IRK | | | | | pmax | pmax | | |
| | comp=Z,201nm,0.2s | | | | | | | |
| IRK | | | | | smax | smax | | |
| | comp=E,1μm,0.5s | | | | | | | |
| **IRK** | **Irkutsk** | **4.13** | **71** | | Pg | **Pg** | **10 19 15.4** | **-3.5** |
| IRK | | | | | Sg | **Sg** | **10 20 09.3** | **-3.1** |
| **DJOS** | **Djoyskaya Sosn** | **4.39** | **296** | | Pg | **Pg** | **10 19 23.7** | **-0.1** |
| DJOS | | | | | Sg | **Sg** | **10 20 24.8** | **+4.2** |
| **CERR** | **Cheremushki** | **4.40** | **296** | | Pg | **Pg** | **10 19 25.8** | **+1.8** |
| CERR | | | | | Sg | **Sg** | **10 20 23.3** | **+2.3** |
| **MINR** | **Mina** | **4.44** | **331** | | Pg | **Pg** | **10 19 26.2** | **+1.2** |
| MINR | | | | | Sg | **Sg** | **10 20 26.9** | **+4.5** |
| **ABNR** | **Abakan** | **4.78** | **306** | ⇓ | *e*PN | **Pn** | **10 19 14.0** | **+2.2** |
| **TRG** | **Tyrgan** | **5.49** | **69** | *e* | PN | **Pg** | **10 19 40.4** | **-4.5** |
| TRG | | | | | *e* | | 10 20 50.5 | |
| TRG | | | | | pmax | pmax | | |
| | comp=Z,26nm,0.6s | | | | | | | |
| TRG | | | | | smax | smax | | |
| | comp=N,286nm,0.7s | | | | | | | |
| **SHRR** | **Shira** | **5.82** | **309** | | Sg | **Sg** | **10 21 06.9** | **+0.3** |
| **SHTK** | **Zheleznogorsk-** | **5.86** | **336** | | Pg | **Pg** | **10 19 48.0** | **-4.0** |
| SHTK | | | | | Sg | **Sg** | **10 21 07.5** | **-0.3** |
| **LUZB** | **Luzhba, Kemero** | **6.10** | **299** | | Pg | **Pg** | **10 19 52.7** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,75nm,4.9s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,58nm,6.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,140nm,6.1s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,36nm,6.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **17.00** | **287** | P | **P** | **10 22 00.2** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=81,slow=20,SNR=3.0 | | | | | | |
| **BRVK** | **Borovoye** | **17.07** | **287**⇑ | *eP* | **P** | **10 21 58.9** | **-1.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **18.04** | **251** | P | **P** | **10 22 13.9** | **+2.8** |
| | comp=Z,0.2nm,0.3s,baz=36,slow=17,SNR=1.7 | | | | | | |
| **YAK** | **Yakutsk** | **20.43** | **45**⇓ | *eP* | Pn | 10 22 39.6 | +0.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **TIXI** | **Tiksi** | **24.87** | **23**⇓ | *eP* | **P** | **10 23 26.4** | **+4.3** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.04** | **284** | P | **P** | **10 23 25.3** | **+1.3** |
| | comp=Z,0.7nm,0.5s,baz=90,slow=7.1,SNR=2.4 | | | | | | |
| **BELG** | **Belogornoye** | **30.67** | **292** | LR | LR | 10 37 05.2 | |
| | comp=Z,54nm,20.7s,baz=131,slow=37 | | | | | | |
| **WSAR** | **Wadi Sarin** | **41.10** | **242** | LR | LR | 10 43 00.3 | |
| | comp=Z,33nm,20.2s,baz=134,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **77.61** | **145** | P | **P** | **10 29 56.5** | **+0.4** |
| | comp=Z,0.3nm,0.8s,baz=347,slow=6.4,SNR=2.0 | | | | | | |

*GUC **13** 10:21:27.0±0.6, 19.89S×70.95W, h35km±2km, ML3.5*
*IDC **13** 10:21:36.2±4.5, 20.09S×70.06W, h81km±28km, mb3.5/1, mb1 3.3/4, mb1mx3.1/33, mbtmp3.5/4, MS2.6/1, Ms1 2.6/1, ms1mx2.3/32, Error ellipse: s-maj=85.0km s-min=28.5km az=97.0*

**ISC 13 10:21:23.1±1.8, 19°91S±0.03×71°03W±0.08, h13km±10km, n30, σ1≤34/39, 5C-5D, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TA02** | **Huaiquique** | **0.92** | **113** | *i* P | **Pg** | **10 21 41.6** | **+0.7** |
| TA02 | | | | *i* S | **Sg** | **10 21 53.2** | **+0.4** |
| TA02 | | | | IAML | | 10 21 55.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **1.03** | **130**⇓ | *i* P | **Pn** | **10 21 44.0** | **+0.6** |
| TA01 | | | | *i* S | **Sg** | **10 21 56.8** | **+0.3** |
| TA01 | | | | IAML | | 10 21 59.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **1.13** | **109**⇓ | *i* P | **Pg** | **10 21 45.0** | **0.0** |
| HMBC | | | | *i* S | **Sg** | **10 21 59.5** | **-0.3** |
| HMBC | | | | IAML | | 10 22 02.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| **PATCX** | **Punta Patache** | **1.23** | **138**⇓ | *i* P | **Pg** | **10 21 46.7** | **0.0** |
| PATCX | | | | *i* S | **Sg** | **10 22 02.0** | **-0.7** |
| PATCX | | | | IAML | | 10 22 08.0 | |
| | comp=N,975nm,0.5s | | | | | | |
| **PB11** | **IPOC Station P** | **1.30** | **84**⇓ | *i* P | **Pn** | **10 21 47.3** | **+0.2** |
| PB11 | | | | *i* S | **Sb** | **10 22 01.8** | **-2.4** |
| PB11 | | | | IAML | | 10 22 03.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **PB12** | **IPOC Station P** | **1.45** | **27**⇑ | *i* P | **Pb** | **10 21 50.1** | **+0.2** |
| PB12 | | | | *i* S | **Sn** | **10 22 08.4** | **+0.4** |
| PB12 | | | | IAML | | 10 22 12.1 | |
| | comp=N,1μm,0.4s | | | | | | |
| **AP01** | **Chacalluta** | **1.66** | **23** | *eP* | **Pn** | **10 21 51.4** | **-0.6** |
| AP01 | | | | *i* S | **Sn** | **10 22 14.3** | **+1.2** |
| AP01 | | | | IAML | | 10 22 20.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PB02** | **IPOC Station P** | **1.76** | **143**⇑ | *i* P | **Pb** | **10 21 54.9** | **-0.5** |
| PB02 | | | | *i* S | **Sn** | **10 22 14.2** | **-1.6** |
| PB02 | | | | IAML | | 10 22 25.3 | |
| | comp=N,1μm,0.7s | | | | | | |
| **PB08** | **IPOC Station P** | **1.78** | **98**⇑ | *i* P | **Pn** | **10 21 54.9** | **+1.0** |
| PB08 | | | | *i* S | **Sn** | **10 22 17.1** | **+0.5** |
| PB08 | | | | IAML | | 10 22 19.0 | |
| | comp=N,413nm,0.5s | | | | | | |
| **PB01** | **IPOC Station P** | **1.83** | **128**⇑ | *i* P | **Pn** | **10 21 55.9** | **+1.4** |
| PB01 | | | | *i* S | **Sn** | **10 22 18.1** | **+0.5** |
| PB01 | | | | IAML | | 10 22 24.8 | |
| | comp=E,654nm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **2.10** | **150** | *i* P | **Pb** | **10 21 59.6** | **-1.7** |
| PB07 | | | | *i* S | **Sn** | **10 22 23.6** | **-0.8** |
| PB07 | | | | IAML | | 10 22 37.4 | |
| | comp=E,507nm,0.5s | | | | | | |
| **PB16** | **IPOC Station P** | **2.12** | **43** | *eP* | **Pn** | **10 22 00.3** | **+1.5** |
| PB16 | | | | *i* S | **Sn** | **10 22 27.1** | **+1.7** |
| PB16 | | | | IAML | | 10 22 35.8 | |
| | comp=N,379nm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **2.44** | **151** | *i* P | **Pn** | **10 22 04.3** | **+1.4** |
| PB03 | | | | IAML | | 10 22 48.6 | |
| | comp=E,288nm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **2.52** | **139**⇑ | *i* P | **Pn** | **10 22 05.8** | **+1.9** |
| PB09 | | | | *i* S | **Sn** | **10 22 36.2** | **+1.6** |
| PB09 | | | | IAML | | 10 22 48.1 | |
| | comp=E,603nm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **2.55** | **161** | *eP* | **Pn** | **10 22 05.6** | **+1.2** |
| PB04 | | | | IAML | | 10 22 52.5 | |
| | comp=N,257nm,0.4s | | | | | | |
| **PB06** | **IPOC Station P** | **3.10** | **154** | *eP* | **Pn** | **10 22 12.9** | **+1.0** |
| PB06 | | | | IAML | | 10 23 05.6 | |
| | comp=E,142nm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **3.34** | **144** | P | **Pn** | **10 22 18.4** | **+3.0** |
| | comp=E,3.8nm,0.3s,baz=316,slow=9.8,SNR=24 | | | | | | |
| LVC | | | | S | **Sn** | **10 22 56.5** | **+1.4** |
| | comp=E,6.2nm,0.3s,baz=87,slow=20,SNR=2.3 | | | | | | |
| LVC | | | | LR | LR | 10 23 54.4 | |
| | comp=E,104nm,20.5s,baz=311,slow=51 | | | | | | |
| **LVC** | **Limon Verde** | **3.34** | **144** | *eP* | **Pn** | **10 22 17.5** | **+2.1** |
| LVC | | | | *eS* | **Sn** | **10 22 56.7** | **+1.5** |
| **PB15** | **IPOC Station P** | **3.59** | **156** | *eP* | **Pn** | **10 22 20.9** | **+2.2** |
| **PB10** | **IPOC Station P** | **3.62** | **173**⇓ | *eP* | **Pn** | **10 22 19.6** | **+0.6** |
| **LPAZ** | **La Paz** | **4.53** | **38** | P | Pb | 10 22 38.8 | -4.1 |
| | comp=E,0.7nm,0.3s,baz=232,slow=7.4,SNR=15 | | | | | | |
| LPAZ | | | | S | **Sb** | **10 23 37.6** | **-0.2** |
| | baz=324,slow=7.2,SNR=1.2 | | | | | | |
| **SIV** | **San Ignacio** | **10.24** | **69** | P | **Pn** | **10 23 49.1** | **-0.8** |
| | comp=E,0.2nm,0.3s,baz=260,slow=12,SNR=3.0 | | | | | | |
| **H03N1** | **Juan Fernandez** | **15.20** | **206** | T | T | 10 40 50.4 | |
| | baz=32,slow=72,SNR=14 | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.21** | **206** | T | T | 10 40 44.8 | |
| | baz=32,slow=72,SNR=14 | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.22** | **206** | T | T | 10 40 59.7 | |
| | baz=32,slow=72,SNR=9.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.71** | **72** | P | **P** | **10 33 26.0** | **+0.2** |
| | comp=E,0.8nm,0.9s,baz=262,slow=5.1,SNR=2.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.69** | **279** | T | T | 12 59 48.2 | |
| | baz=101 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.70** | **279** | T | T | 12 59 45.4 | |
| | baz=101 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.71** | **279** | T | T | 12 59 46.0 | |
| | baz=101 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.45** | **33** | PKPbc | **PKiKP** | **10 41 03.0** | **-2.0** |
| | comp=E,0.2nm,0.7s,baz=320,slow=5.0,SNR=2.8 | | | | | | |

**IDC 13 10:27:46.3±1.7, 29°68N×88°24E, h0km, mb3.6/4, mb1 3.7/5, mb1mx3.4/55, mbtmp3.5/5, ML2.8/1, Error ellipse: s-maj=58.9km s-min=26.8km az=67.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **17.70** | **346** | P | Pn | 10 31 54.4 | +0.2 |
| | 0.0nm,0.3s,baz=151,slow=11,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **22.90** | **33** | P | P | 10 32 51.8 | +0.1 |
| | 0.5nm,0.8s,baz=212,slow=9.2,SNR=4.4 | | | | | | |
| **FINES** | **FINESS Array B** | **51.15** | **327** | P | P | 10 36 50.4 | -0.3 |
| | 2.1nm,0.8s,baz=110,slow=11,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.38** | **132** | P | P | 10 38 37.3 | 0.0 |
| | 1.0nm,1.0s,baz=321,slow=6.9,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **68.84** | **135** | P | P | 10 38 52.9 | +0.1 |
| | 0.6nm,0.7s,baz=325,slow=7.9,SNR=2.7 | | | | | | |

*IDC **13** 10:38:09.8±0.6, 18.03N×120.44E, h0km, mb3.8/12, mb1 4.0/12, mb1mx3.8/48, mbtmp3.8/12, Error ellipse: s-maj=30.5km s-min=12.7km az=73.0*
*MAN **13** 10:38:15.9, 18.18N×120.14E, h47km, mb5.0, ML4.0, MS4.0*

**ISC 13 10:38:15.5±0.7, 18°18N±0.10×120°18E±0.10, h32km, n18, σ1≤60/21, mb3.7/10, 4C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIPP** | **Brgy, Tapao** | **0.37** | **134**⇑ | *eP* | **Pb** | **10 38 23.8** | **-0.3** |
| **APYP** | **Conner** | **1.06** | **107**⇑ | *eP* | **Pb** | **10 38 35.1** | **-0.2** |
| APYP | | | | *i* S | **Sb** | **10 38 50.0** | **+1.2** |
| **PCPH** | **Palayan** | **2.75** | **161**⇑ | *eP* | **Pn** | **10 38 59.7** | **+2.4** |
| **TGY** | **Tagaytay City** | **4.12** | **170** | Pg | Pb | 10 39 22.2 | -5.1 |
| | 108nm,0.3s,baz=228,slow=7.5,SNR=4.7 | | | | | | |
| TGY | | | | Lg | Lg | 10 40 15.2 | |
| | 77nm,0.3s,baz=148,slow=9.1,SNR=1.6 | | | | | | |
| **LQP** | **Lukban** | **4.25** | **162**⇑ | *eP* | **Pn** | **10 39 20.9** | **+2.8** |
| **CMAR** | **Chiang Mai Arr** | **20.16** | **274** | P | Pn | 10 42 49.0 | -0.5 |
| | 0.4nm,0.4s,baz=90,slow=9.0,SNR=1.2 | | | | | | |
| **KSRS** | **Korea Array** | **20.37** | **18** | P | **P** | **10 42 48.5** | **-0.9** |
| | 2.1nm,0.7s,baz=200,slow=12,SNR=8.0 | | | | | | |
| **SONM** | **Songino Array** | **31.66** | **342** | P | **P** | **10 44 37.1** | **+1.2** |
| | 0.1nm,0.3s,baz=152,slow=9.6,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.35** | **159** | P | **P** | **10 45 46.5** | **-3.9** |
| | 1.1nm,0.6s,baz=342,slow=9.1,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **10 47 52.2** | **-1.3** |
| | 0.4nm,0.6s,baz=349,slow=3.3,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.20** | **321** | P | **P** | **10 46 06.8** | **+1.4** |
| | 0.6nm,0.6s,baz=126,slow=7.9,SNR=9.5 | | | | | | |
| MKAR | | | | PcP | **PcP** | **10 47 59.0** | **-0.2** |
| | 0.8nm,0.7s,baz=104,slow=3.9,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.69** | **162** | P | **P** | **10 46 15.2** | **-2.5** |
| | 3.8nm,0.4s,baz=338,slow=6.9,SNR=82 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 48 04.1** | **-0.4** |
| | 0.2nm,0.5s,baz=344,slow=3.6,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.90** | **331** | P | **P** | **10 46 26.8** | **-0.1** |
| | 0.4nm,0.4s,baz=111,slow=7.9,SNR=3.0 | | | | | | |
| **KURBB** | **Kurchatov Array** | **46.25** | **324** | P | **P** | **10 46 38.6** | **+1.0** |
| | 1.5nm,0.5s,baz=123,slow=7.9,SNR=12 | | | | | | |
| **BVAR** | **Borovoye Array** | **51.84** | **324** | P | **P** | **10 47 21.6** | **+1.1** |
| | 0.3nm,0.3s,baz=95,slow=18,SNR=2.6 | | | | | | |
| BVAR | | | | PcP | **PcP** | **10 48 32.7** | **-0.4** |
| | 0.7nm,0.6s,baz=69,slow=8.1,SNR=3.9 | | | | | | |
| **ILAR** | **Eielson Array** | **74.97** | **26** | P | **P** | **10 49 52.8** | **-0.5** |
| | 0.4nm,0.8s,baz=282,slow=5.3,SNR=5.2 | | | | | | |
| **HFS** | **Hagfors** | **82.33** | **331** | P | **P** | **10 50 34.7** | **+0.8** |
| | 3.2nm,1.0s,baz=57,slow=10,SNR=2.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.85** | **22** | P | **P** | **10 51 06.1** | **-0.1** |
| | 0.4nm,0.5s,baz=309,slow=4.5,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **116.59** | **43** | PKP | **PKPdf** | **10 56 56.1** | **-0.9** |
| | 0.1nm,0.5s,baz=224,slow=3.8,SNR=3.6 | | | | | | |

**IDC 13 10:43:58.7±337.0, 54°25N×42°22E, h0km, Error ellipse: s-maj=144.7km s-min=79.1km az=137.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **3.77** | **313** | *i* | | 11 08 10.0 | |
| | baz=130,slow=328,SNR=1.5 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.41** | **105** | *i* | | 11 44 50.0 | |
| | baz=299,slow=327,SNR=8.7 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.71** | **73** | *i* | | 13 16 20.0 | |
| | baz=292,slow=334,SNR=1.6 | | | | | | |

*IDC **13** 10:44:58.4±1.2, 39.24N×22.03E, h0km, mb3.5/6, mb1 3.6/9, mb1mx3.3/49, mbtmp3.5/9, ML3.2/3, MS2.9/1, Ms1 2.9/1, ms1mx2.1/71, Error ellipse: s-maj=24.1km s-min=20.5km az=79.0*
*ATH **13** 10:45:00.8, 39.20N×22.33E, h14km±4km, ML3.1/7, Error ellipse: s-maj=4.2km s-min=0.9km az=238.0*
*THE **13** 10:45:01.1, 39.20N×22.32E, h16km, ML3.3/15, Error ellipse: s-maj=0.9km s-min=0.5km az=265.0*

**ISC 13 10:45:00.7±0.8, 39°20N±0.02×22°31E±0.02, h15km±6km, n71, σ1≤38/104, mb3.5/6, 8C-9D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AGG** | **Agios Georgios** | **0.18** | **174** | P | **Pg** | **10 45 04.8** | **-0.2** |
| AGG | | | | S | **Sb** | **10 45 08.9** | **-0.2** |
| | 16μm,0.3s | | | | | | |
| **AGG** | **Agios Georgios** | **0.18** | **174** | P | **Pg** | **10 45 04.8** | **-0.2** |
| AGG | | | | S | **Sg** | **10 45 07.4** | **-0.5** |
| AGG | | | | AML | AML | 10 45 10.5 | |
| | comp=N,31764μm,0.3s | | | | | | |
| AGG | | | | AML | AML | 10 45 10.8 | |
| | comp=E,32567μm,0.3s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.23** | **216** | P | **Pg** | **10 45 06.0** | **+0.1** |
| MAKR | | | | S | **Sb** | **10 45 10.9** | **+0.3** |
| | comp=E,20μm,0.4s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.23** | **216** | P | **Pg** | **10 45 05.9** | **+0.1** |
| MAKR | | | | S | **Sb** | **10 45 10.4** | **-0.2** |
| MAKR | | | | AML | AML | 10 45 13.7 | |
| | comp=E,11940μm,0.3s | | | | | | |
| MAKR | | | | AML | AML | 10 45 13.8 | |
| | comp=N,10096μm,0.3s | | | | | | |
| **THL** | **Klokotos Trika** | **0.43** | **328** | P | **Pg** | **10 45 09.2** | **-0.1** |
| THL | | | | S | **Sb** | **10 45 15.9** | **-0.4** |
| | comp=N,3μm,0.4s | | | | | | |
| **THL** | **Klokotos Trika** | **0.43** | **328** | P | **Pg** | **10 45 09.1** | **-0.2** |
| THL | | | | S | **Sb** | **10 45 15.9** | **-0.4** |
| THL | | | | AML | AML | 10 45 16.9 | |
| | comp=N,5805μm,0.3s | | | | | | |
| THL | | | | AML | AML | 10 45 17.0 | |
| | comp=E,5333μm,0.5s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.48** | **8** | P | **Pg** | **10 45 10.1** | **-0.1** |
| LRSO | | | | S | **Sb** | **10 45 18.0** | **+0.3** |
| | comp=E,5μm,0.5s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.48** | **8** | P | **Pg** | **10 45 10.1** | **-0.1** |
| LRSO | | | | S | **Sg** | **10 45 16.3** | **-0.3** |
| LRSO | | | | AML | AML | 10 45 18.3 | |
| | comp=N,9090μm,0.7s | | | | | | |
| LRSO | | | | AML | AML | 10 45 21.5 | |
| | comp=E,8904μm,0.3s | | | | | | |
| **EVR** | **Evrytania** | **0.48** | **234** | P | **Pg** | **10 45 10.3** | **0.0** |
| EVR | | | | S | **Sb** | **10 45 18.5** | **+0.7** |
| | comp=E,2μm,0.3s | | | | | | |
| **EVR** | **Evrytania** | **0.48** | **234** | P | **Pg** | **10 45 10.2** | **0.0** |
| EVR | | | | S | **Sb** | **10 45 18.3** | **+0.5** |
| EVR | | | | AML | AML | 10 45 19.4 | |
| | comp=N,3287μm,0.6s | | | | | | |
| EVR | | | | AML | AML | 10 45 21.8 | |
| | comp=E,3173μm,0.4s | | | | | | |
| **XOR** | **Xorichti** | **0.71** | **76** | P | **Pb** | **10 45 14.8** | **0.0** |
| XOR | | | | S | **Sb** | **10 45 24.5** | **+0.1** |
| | comp=E,4μm,0.6s | | | | | | |
| **XOR** | **Xorichti** | **0.71** | **76** | P | **Pb** | **10 45 14.7** | **-0.1** |
| **NEO** | **Neokhori** | **0.72** | **81** | P | **Pg** | **10 45 14.7** | **-0.1** |
| NEO | | | | S | **Sn** | **10 45 26.0** | **-1.2** |
| | comp=E,4μm,0.3s | | | | | | |
| **NEO** | **Neokhori** | **0.72** | **81** | P | **Pg** | **10 45 14.5** | **-0.3** |
| NEO | | | | S | **Sb** | **10 45 25.1** | **+0.4** |
| NEO | | | | AML | AML | 10 45 28.5 | |
| | comp=N,9256μm,0.3s | | | | | | |
| NEO | | | | AML | AML | 10 45 29.8 | |
| | comp=E,4944μm,0.3s | | | | | | |
| **DLFA** | **Delphi** | **0.73** | **168** | P | **Pg** | **10 45 14.7** | **-0.3** |
| **ATAL** | **Atalanti** | **0.75** | **132** | P | **Pg** | **10 45 14.9** | **-0.5** |
| ATAL | | | | S | **Sb** | **10 45 25.9** | **+0.2** |
| | comp=E,1μm,0.7s | | | | | | |
| **ATAL** | **Atalanti** | **0.75** | **132** | P | **Pg** | **10 45 14.9** | **-0.5** |
| ATAL | | | | S | **Sb** | **10 45 25.8** | **+0.2** |
| **LKR** | **Lokris** | **0.77** | **135** | P | **Pg** | **10 45 15.1** | **-0.6** |
| LKR | | | | S | **Sb** | **10 45 26.5** | **+0.4** |
| | comp=E,632nm,0.2s | | | | | | |
| **LKR** | **Lokris** | **0.77** | **135** | P | **Pg** | **10 45 15.0** | **-0.7** |
| LKR | | | | S | **Sg** | **10 45 25.6** | **-0.2** |
| LKR | | | | AML | AML | 10 45 30.8 | |
| | comp=N,1320μm,0.2s | | | | | | |
| LKR | | | | AML | AML | 10 45 31.8 | |
| | comp=E,1310μm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.83** | **202** | P | **Pg** | **10 45 17.0** | **+0.2** |
| EFP | | | | S | **Sn** | **10 45 29.9** | **0.0** |
| | comp=E,2μm,0.3s | | | | | | |
| **EFP** | **Efpalio** | **0.83** | **202** | P | **Pg** | **10 45 15.8** | **-1.0** |
| **LIT** | **Litokhoron** | **0.91** | **9** | P | **Pb** | **10 45 17.6** | **-0.7** |
| LIT | | | | S | **Sn** | **10 45 31.9** | **-0.1** |
| | comp=E,3μm,0.4s | | | | | | |
| **LAKA** | **Lakka** | **0.99** | **195** | P | **Pb** | **10 45 19.4** | **-0.2** |
| LAKA | | | | S | **Sn** | **10 45 34.1** | **+0.2** |
| | comp=E,2μm,0.5s | | | | | | |
| **LAKA** | **Lakka** | **0.99** | **195** | P | **Pb** | **10 45 19.5** | **-0.1** |
| **KPRO** | **Kipourio** | **1.05** | **316** | P | **Pb** | **10 45 20.7** | **+0.1** |
| KPRO | | | | S | **Sg** | **10 45 34.9** | **+0.2** |
| | comp=E,2μm,0.8s | | | | | | |
| **KZN** | **Kozani** | **1.18** | **340** | P | **Pn** | **10 45 22.4** | **-0.4** |
| KZN | | | | S | **Sb** | **10 45 37.9** | **-0.1** |
| | comp=E,1μm,0.5s | | | | | | |
| **KZN** | **Kozani** | **1.18** | **340** | P | **Pn** | **10 45 22.7** | **-0.1** |
| **THAL** | **Thalero** | **1.19** | **166** | P | **Pb** | **10 45 23.1** | **+0.1** |
| THAL | | | | S | **Sb** | **10 45 38.0** | **-0.3** |
| | comp=E,1μm,0.5s | | | | | | |
| **THAL** | **Thalero** | **1.19** | **166** | P | **Pg** | **10 45 23.8** | **+0.1** |
| **JAN** | **Janina** | **1.22** | **293** | P | **Pg** | **10 45 24.4** | **+0.3** |
| **VIL2** | **Platees** | **1.24** | **142** | P | **Pg** | **10 45 25.0** | **+0.5** |
| **KYMI** | **Kymi, Euboea I** | **1.51** | **111** | P | **Pn** | **10 45 27.7** | **+0.5** |
| **VAY** | **Valandovo** | **2.13** | **5** | *i* Pn | **Pb** | **10 45 37.9** | **-1.1** |
| VAY | | | | *i* Sn | **Sg** | **10 46 10.7** | **+1.5** |
| **OHR** | **Ohrid** | **2.23** | **329** | *i* Pn | **Pg** | **10 45 42.6** | **-0.9** |
| OHR | | | | *i* Sn | **Sb** | **10 46 09.8** | **+1.5** |
| **MMB** | **Musomiste** | **2.62** | **24** | *i* P | **Pn** | **10 45 43.8** | **+1.2** |
| **KKB** | **Krupnik** | **2.73** | **12** | *i* P | **Pn** | **10 45 45.8** | **+1.8** |
| **SKO** | **Skopje** | **2.85** | **347** | *i* Pn | **Pb** | **10 45 50.8** | **-0.5** |
| **RZN** | **Rozhen** | **3.09** | **36** | *i* P | **Pn** | **10 45 45.5** | **-3.7** |
| **VTS** | **Vitosha** | **3.49** | **11**⇑ | P | **Pn** | **10 45 56.1** | **+1.5** |
| VTS | | | | ⇓S | **Sn** | **10 46 37.8** | **+2.1** |
| **VTS** | **Vitosha** | **3.49** | **11** | *i* P | **Pn** | **10 45 57.3** | **+2.7** |
| **PDG** | **Podgorica** | **3.97** | **325**⇓ | P | **Pn** | **10 46 03.4** | **+2.3** |
| PDG | | | | ⇑S | **Sn** | **10 46 48.7** | **+1.3** |
| **TIP** | **Timpagrande** | **4.31** | **271**⇑ | P | **Pn** | **10 46 07.7** | **+1.9** |
| TIP | | | | ⇓S | **Sn** | **10 46 58.3** | **+2.5** |
| **IDI** | **Anoyia** | **4.42** | **151** | Pn | **Pn** | **10 46 09.4** | **+2.1** |
| | comp=E,1.0nm,0.3s,baz=333,slow=14,SNR=6.8 | | | | | | |
| IDI | | | | Sn | **Sn** | **10 46 59.1** | **+0.7** |
| | comp=E,1.1nm,0.3s,baz=258,slow=20,SNR=1.9 | | | | | | |
| **BLKB** | **Belogradchik** | **4.43** | **3**⇓ | S | **Sn** | **10 47 00.5** | **+1.7** |
| **MATE** | **Matera** | **4.54** | **290**⇑ | P | **Pn** | **10 46 10.8** | **+1.9** |
| **STON** | **Ston** | **5.06** | **318** | *e*Pn | **Pn** | **10 46 17.5** | **+1.5** |
| **LSTV** | **Lastovo** | **5.43** | **313** | *e*Pn | **Pn** | **10 46 21.4** | **+0.3** |
| LSTV | | | | Sn | **Sn** | **10 47 19.1** | **-4.3** |
| **MAKA** | **Makarska** | **5.71** | **317** | *e*Pn | **Pn** | **10 46 25.3** | **+0.4** |
| **RICI** | **Ricice** | **5.79** | **319** | *e*Pn | **Pn** | **10 46 26.9** | **+0.8** |
| RICI | | | | Sn | **Sn** | **10 47 29.9** | **-2.4** |
| **HVAR** | **Hvar** | **5.94** | **314** | *e*Pn | **Pn** | **10 46 28.4** | **+0.3** |
| **FRGS** | **Fruska Gora** | **6.24** | **344**⇓ | P | **Pn** | **10 46 33.3** | **+1.1** |
| **ARR** | **Arges** | **6.40** | **15**⇑ | P | **Pn** | **10 46 35.9** | **+1.4** |
| **BZS** | **Buzias** | **6.43** | **356**⇑ | P | **Pn** | **10 46 37.5** | **+2.6** |
| **KIJV** | **Kijevo** | **6.53** | **319** | *e*Pn | **Pn** | **10 46 37.1** | **+0.9** |
| KIJV | | | | Sn | **Sn** | **10 47 48.8** | **-1.6** |
| **VOIR** | | **6.56** | **17**⇑ | P | **Pn** | **10 46 38.7** | **+2.0** |
| **ZIRJ** | **Zirje** | **6.70** | **314** | *e*Pn | **Pn** | **10 46 39.9** | **+1.4** |
| **MORI** | **Morici** | **6.80** | **315** | *e*Pn | **Pn** | **10 46 40.9** | **+1.0** |
| MORI | | | | Sn | **Sn** | **10 47 52.9** | **-4.2** |
| **MLR** | **Muntele Rosu** | **6.84** | **22**⇓ | P | **Pn** | **10 46 43.8** | **+3.2** |
| **MLR** | **Muntele Rosu** | **6.84** | **22** | Pn | **Pn** | **10 46 41.1** | **+0.5** |
| | comp=E,0.2nm,0.3s,baz=196,slow=22,SNR=1.2 | | | | | | |
| MLR | | | | LR | LR | 10 49 23.8 | |
| | comp=E,93nm,19.9s,baz=271,slow=38 | | | | | | |
| **PLOR** | **Plostina** | **7.38** | **24**⇓ | P | **Pn** | **10 46 51.0** | **+3.0** |
| **VRI** | **Vrincioaia** | **7.42** | **25**⇑ | P | **Pn** | **10 46 51.5** | **+3.1** |
| **MORH** | **Mrgy, Hungar** | **7.51** | **340**⇓ | P | **Pn** | **10 46 51.3** | **+1.6** |
| **NVLJ** | **Novalja** | **7.71** | **316** | *e*Pn | **Pn** | **10 46 52.5** | **+0.2** |
| **PSZ** | **Piszkesteto** | **8.89** | **349**⇓ | P | **Pn** | **10 47 11.2** | **+2.6** |
| **GERES** | **GERESS Array B** | **11.45** | **330** | Pn | **Pn** | **10 47 42.1** | **-1.7** |
| | comp=E,0.1nm,0.3s,baz=156,slow=12,SNR=1.4 | | | | | | |
| **HFS** | **Hagfors** | **21.65** | **348** | P | **P** | **10 49 49.8** | **-0.5** |
| | comp=E,2.5nm,1.0s,baz=143,slow=12,SNR=1.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.45** | **322** | P | **P** | **10 50 07.8** | **-1.4** |
| | comp=E,1.6nm,0.6s,baz=119,slow=9.9,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.71** | **221** | P | **P** | **10 51 22.3** | **-1.7** |
| | comp=E,0.5nm,0.9s,baz=37,slow=9.5,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.58** | **60** | P | **P** | **10 53 05.3** | **+1.3** |
| | comp=E,0.5nm,0.6s,baz=275,slow=7.8,SNR=9.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.97** | **49** | P | **P** | **10 53 08.1** | **+1.0** |
| | comp=E,0.4nm,0.4s,baz=269,slow=8.6,SNR=2.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.90** | **341** | P | **P** | **10 56 28.2** | **-0.6** |
| | comp=E,0.2nm,0.7s,baz=24,slow=6.1,SNR=2.5 | | | | | | |

*MAN **13** 11:00:47.2, 8.58N×125.77E, h15km, mb5.0, ML4.0, MS4.0*
*MAN INTENSITY IV - TALACOGON, AGUSAN DEL SUR; INTENSITY III - BAYUGAN CITY; PROSPERIDAD, AGUSAN DEL SUR.*
*NEIC **13** 11:00:51.5±0.9, 8.42N±0.09×125.8E±0.1, h40km±6km, mb4.5/21, Error ellipse: s-maj=18.4km s-min=10.9km az=65.0*
*IDC **13** 11:00:52.1±2.1, 8.39N×125.71E, h60km±20km, mb3.7/16, mb1 3.9/18, mb1mx3.7/46, mbtmp4.1/18, ML4.8/2, MS3.2/18, Ms1 3.2/18, ms1mx3.1/80, Error ellipse: s-maj=28.7km s-min=12.4km az=78.0*
*DJA **13** 11:01:08.8±0.5, 7°N±4°×12°5E±°, h10km, M4.5/7, mb4.4/7, MLv4.5/7*

**ISC 13 11:00:49.1±1.2, 8°52N±0.05×125°79E±0.04, h29km±9km, n80, σ1≤35/73, mb4.3/27, MS3.1/16, 5C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BIPH** | **Bislig** | **0.66** | **120**⇓ | *i* P | **Pb** | **11 01 01.6** | **-0.5** |
| BIPH | | | | *i* S | **Sb** | **11 01 11.3** | **+0.4** |
| **BUKP** | **Musuan** | **0.96** | **229** | *i* P | **Pn** | **11 01 05.4** | **-1.3** |
| BUKP | | | | *i* S | **Sb** | **11 01 20.1** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **29.51** | **163** | P | **P** | **11 06 49.5** | **-1.6** |
| | comp=Z,0.8nm,0.7s,baz=345,slow=10,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 11 19 03.5 | |
| | comp=Z,49nm,21.1s,baz=1.0,slow=37 | | | | | | |
| **WB2** | **Warramunga Arr** | **29.51** | **163** | P | **P** | **11 06 50.0** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 11 07 00.3 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **29.58** | **163** | P | **P** | **11 06 51.1** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **30.10** | **20** | LR | LR | 11 18 20.1 | |
| | comp=Z,44nm,20.0s,baz=191,slow=35 | | | | | | |
| **AS31** | **Alice Springs** | **32.95** | **166** | P | **P** | **11 07 20.5** | **-0.9** |
| **ASAR** | **Alice Springs** | **32.95** | **166** | P | **P** | **11 07 20.6** | **-0.8** |
| | comp=Z,1.2nm,0.6s,baz=347,slow=7.7,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 10 04.9** | **-0.5** |
| | comp=Z,0.4nm,0.7s,baz=340,slow=2.5,SNR=2.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.96** | **8** | P | **P** | **11 07 49.5** | **+2.3** |
| | comp=Z,4.1nm,0.7s,baz=195,slow=9.0,SNR=6.2 | | | | | | |
| USRK | | | | LR | LR | 11 20 55.0 | |
| | comp=Z,38nm,21.8s,baz=189,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **38.37** | **20** | LR | LR | 11 24 55.0 | |
| | comp=Z,31nm,20.0s,baz=174,slow=38 | | | | | | |
| **HNR** | **Honiara** | **38.41** | **117** | LR | LR | 11 23 50.3 | |
| | comp=Z,36nm,18.4s,baz=42,slow=36 | | | | | | |
| **FORT** | **Forrest** | **39.13** | **177** | P | **P** | **11 08 14.1** | **-0.1** |
| **KLR** | **Kul'dur** | **40.89** | **6** | P | **P** | **11 08 27.9** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=173,slow=8.1,SNR=1.8 | | | | | | |
| KLR | | | | LR | LR | 11 25 34.8 | |
| | comp=Z,15nm,21.7s,baz=203,slow=36 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.90** | **72** | T | T | 11 51 21.1 | |
| | baz=265,slow=73,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.91** | **72** | T | T | 11 51 31.0 | |
| | baz=265,slow=73,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.91** | **72** | T | T | 11 51 26.5 | |
| | baz=265,slow=73,SNR=8.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.28** | **70** | T | T | 11 52 13.1 | |
| | baz=264,slow=74,SNR=6.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.29** | **70** | T | T | 11 52 09.9 | |
| | baz=264,slow=74,SNR=7.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.30** | **70** | T | T | 11 52 11.2 | |
| | baz=264,slow=74,SNR=6.1 | | | | | | |
| **BBOO** | **Buckleboo** | **42.24** | **167** | P | **P** | **11 08 39.9** | **0.0** |
| BBOO | | | | IAmb | IAmb | 11 08 41.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **42.50** | **341** | P | **P** | **11 08 42.6** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=154,slow=8.0,SNR=1.7 | | | | | | |
| **STKA** | **Stephens Creek** | **42.91** | **160** | P | **P** | **11 08 44.8** | **-0.6** |
| | comp=Z,2.2nm,0.7s,baz=336,slow=9.3,SNR=5.4 | | | | | | |
| **STKA** | **Stephens Creek** | **42.91** | **160** | P | **P** | **11 08 45.7** | **+0.3** |
| **PALK** | **Paliekele** | **44.66** | **272** | LR | LR | 11 30 23.7 | |
| | comp=Z,39nm,18.4s,baz=203,slow=40 | | | | | | |
| **PETK** | **Petropavlovsk-** | **51.42** | **24** | P | **P** | **11 09 52.1** | **+0.6** |
| | comp=Z,4.8nm,1.0s,baz=217,slow=6.2,SNR=2.3 | | | | | | |
| PETK | | | | LR | LR | 11 29 20.0 | |
| | comp=Z,17nm,21.9s,baz=159,slow=33 | | | | | | |
| **MK31** | **Makanchi Array** | **53.14** | **324** | P | **P** | **11 10 05.2** | **+0.8** |
| **MKAR** | **Makanchi Array** | **53.14** | **324** | P | **P** | **11 10 04.4** | **+0.1** |
| | comp=Z,1.5nm,0.8s,baz=126,slow=8.0,SNR=16 | | | | | | |
| MKAR | | | | PcP | **PcP** | **11 11 11.8** | **-0.4** |
| | comp=Z,1.1nm,0.7s,baz=116,slow=4.2,SNR=4.7 | | | | | | |
| **MAKZ** | **Makanchi** | **53.33** | **324** | P | **P** | **11 10 07.0** | **+1.3** |
| MAKZ | | | | IAmb | IAmb | 11 10 11.8 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **YAK** | **Yakutsk** | **53.49** | **2** | LR | LR | 11 34 38.2 | |
| | comp=Z,31nm,18.7s,baz=214,slow=38 | | | | | | |
| **NIL** | **Nilore** | **54.34** | **305** | P | **P** | **11 10 14.5** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **55.94** | **332** | P | **P** | **11 10 25.1** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=89,slow=7.4,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **57.24** | **326** | P | **P** | **11 10 35.4** | **+1.6** |
| KURK | | | | IAmb | IAmb | 11 10 59.1 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **GAR** | **Garm** | **58.06** | **311** | P | **P** | **11 10 40.8** | **+0.9** |
| **WSAR** | **Wadi Sarin** | **65.74** | **292** | LR | LR | 11 46 24.7 | |
| | comp=Z,13nm,18.1s,baz=120,slow=42 | | | | | | |
| **THZ** | **Tophouse** | **66.05** | **143** | P | **P** | **11 11 33.5** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **66.77** | **139** | P | **P** | **11 11 37.7** | **-0.3** |
| **ABKAR** | **Akbulak array** | **67.89** | **320** | P | **P** | **11 11 46.0** | **+1.0** |
| ABKAR | | | | IAmb | IAmb | 11 11 47.5 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.37** | **321** | LR | LR | 11 42 34.2 | |
| | comp=Z,48nm,18.0s,baz=93,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.38** | **33** | LR | LR | 11 48 53.8 | |
| | comp=Z,22nm,19.9s,baz=137,slow=37 | | | | | | |
| **H21K** | **Melozitna Rive** | **78.75** | **25** | P | **P** | **11 12 48.3** | **-0.3** |
| **ILAR** | **Eielson Array** | **81.22** | **26** | P | **P** | **11 13 00.7** | **-1.4** |
| | comp=Z,0.2nm,0.7s,baz=210,slow=5.0,SNR=4.2 | | | | | | |
| **DAWY** | **Dawson** | **84.52** | **26** | P | **P** | **11 13 19.1** | **-0.1** |
| DAWY | | | | IAmb | IAmb | 11 13 43.9 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.66** | **340** | P | **P** | **11 13 23.7** | **-1.1** |
| | comp=Z,2.6nm,0.9s,baz=86,slow=7.3,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **87.20** | **332** | P | **P** | **11 13 30.8** | **-1.7** |
| | comp=Z,2.0nm,0.9s,baz=92,slow=4.7,SNR=1.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **94.11** | **334** | LR | LR | 12 00 06.0 | |
| | comp=Z,40nm,18.5s,baz=30,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.54** | **24** | P | **P** | **11 14 10.3** | **-1.0** |
| | comp=Z,0.2nm,0.6s,baz=305,slow=4.5,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **119.32** | **50** | PKP | **PKPdf** | **11 19 35.5** | **-1.0** |
| | comp=Z,0.1nm,0.8s,baz=0.0,slow=1.1,SNR=1.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.45** | **291** | PKP | **PKPdf** | **11 19 37.2** | **-1.7** |
| | comp=Z,0.5nm,0.8s,baz=60,slow=1.3,SNR=2.6 | | | | | | |

**IDC 13 11:21:11.5±3.5, 3°55N×31°24W, h0km, mb3.6/5, mb1 3.8/5, mb1mx3.6/39, mbtmp3.6/5, MS3.6/12, Ms1 3.6/12, ms1mx3.2/82, Error ellipse: s-maj=107.5km s-min=34.8km az=2.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **20.17** | **124** | T | T | 11 45 57.6 | |
| | baz=302,slow=74,SNR=47 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **20.18** | **124** | T | T | 11 46 09.8 | |
| | baz=302,slow=74,SNR=83 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **20.19** | **124** | T | T | 11 45 59.1 | |
| | baz=302,slow=74,SNR=127 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **20.67** | **127** | T | T | 11 46 46.4 | |
| | baz=280,slow=74,SNR=28 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **20.69** | **127** | T | T | 11 46 35.2 | |
| | baz=300,slow=74,SNR=14 | | | | | | |
| **DBIC** | **Dimbokro** | **26.46** | **82** | LR | LR | 11 35 17.9 | |
| | comp=Z,178nm,18.4s,baz=306,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **29.03** | **262** | LR | LR | 11 37 34.2 | |
| | comp=Z,62nm,19.4s,baz=80,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.91** | **72** | P | P | 11 27 56.4 | -0.2 |
| | 0.5nm,0.8s,baz=263,slow=9.3,SNR=4.0 | | | | | | |
| **SIV** | **San Ignacio** | **35.32** | **236** | LR | LR | 11 42 10.1 | |
| | comp=Z,116nm,19.5s,baz=122,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **38.98** | **219** | LR | LR | 11 43 39.1 | |
| | comp=Z,46nm,19.6s,baz=79,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **41.45** | **241** | LR | LR | 11 45 44.2 | |
| | comp=Z,117nm,19.1s,baz=60,slow=36 | | | | | | |
| **ROSC** | **El Rosal** | **42.98** | **273** | LR | LR | 11 46 38.5 | |
| | comp=Z,102nm,18.2s,baz=92,slow=36 | | | | | | |
| **LVC** | **Limon Verde** | **45.05** | **233** | LR | LR | 11 49 06.3 | |
| | comp=Z,56nm,18.1s,baz=124,slow=37 | | | | | | |
| **NNA** | **Nana** | **47.89** | **250** | LR | LR | 11 49 06.6 | |
| | comp=Z,55nm,18.9s,baz=75,slow=35 | | | | | | |
| **ATAH** | **Atahualpa** | **48.24** | **257** | LR | LR | 11 50 03.5 | |
| | comp=Z,59nm,19.3s,baz=74,slow=36 | | | | | | |
| **TSUM** | **Tsumeb** | **53.06** | **117** | LR | LR | 11 48 26.1 | |
| | comp=Z,67nm,18.8s,baz=160,slow=31 | | | | | | |
| **SCHQ** | **Schefferville** | **58.68** | **337** | P | P | 11 31 10.4 | -0.4 |
| | 1.7nm,0.8s,baz=287,slow=14,SNR=1.2 | | | | | | |
| **LBTB** | **Lobatse** | **62.00** | **121** | LR | LR | 11 55 03.5 | |
| | comp=Z,41nm,18.2s,baz=203,slow=33 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.66** | **21** | P | P | 11 31 57.6 | +0.1 |
| | 0.4nm,0.5s,baz=230,slow=6.9,SNR=1.2 | | | | | | |
| **EIL** | **Elat** | **67.61** | **59** | LR | LR | 12 02 14.7 | |
| | comp=Z,34nm,18.7s,baz=307,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **72.96** | **299** | P | P | 11 32 43.4 | -0.1 |
| | 0.3nm,0.7s,baz=115,slow=6.0,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.80** | **332** | P | P | 11 33 43.0 | +0.4 |
| | 0.7nm,1.0s,baz=100,slow=5.1,SNR=4.7 | | | | | | |

*IDC **13** 12:06:32.0±3.1, 36°54N×70°65E, h247km±30km, mb3.2/11, mb1 3.2/17, mb1mx3.0/74, mbtmp3.8/17, Error ellipse: s-maj=21.5km s-min=15.7km az=27.0*

*NEIC **13** 12:06:34.1±0.5, 36°71N±0°09×70°71E±0°07, h261km±7km, mb4.0/8, Error ellipse: s-maj=13.1km s-min=7.9km az=178.0*

**ISC 13 12:06:33.1±0.6, 36°73N±0°06×70°64E±0°08, h250km, n52, σ1§44/55, mb3.5/14, 5C, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHGR** | **Chuyangaron** | **2.25** | **329** | Pn | **Pn** | **12 07 20.2** | **+2.2** |
| **GAR** | **Garm** | **2.28** | **354** | Pn | **Pn** | **12 07 20.6** | **+2.3** |
| **KBL** | **Kabul** | **2.54** | **211** | Pn | **Pn** | **12 07 22.8** | **+1.8** |
| **CEP** | **Cherat** | **3.08** | **160** | ⇑P | **Pn** | **12 07 27.6** | **+1.0** |
| **NIL** | **Nilore** | **3.75** | **144** | Pn | **Pn** | **12 07 34.9** | **+0.9** |
| **THW** | **Thamme Wali** | **4.03** | **167** | P | **Pn** | **12 07 37.8** | **+0.5** |
| **SARP** | **Sargodha** | **5.08** | **160** | P | **Pn** | **12 07 50.9** | **+1.0** |
| **KK08** | **Karatay Array** | **6.37** | **359** | ⇑P | **Pn** | **12 08 05.7** | **0.0** |
| | 6.8nm,0.5s,baz=183,slow=13 | | | | | | |
| KK08 | | | | ⇑S | **S** | **12 09 12.9** | **-7.0** |
| | 7.2nm,0.9s,baz=189,slow=27 | | | | | | |
| **AAK** | **Ala-Archa** | **6.61** | **26** | P | **Pn** | **12 08 09.7** | **+0.8** |
| | 1.4nm,0.3s,baz=186,slow=5.7,SNR=14 | | | | | | |
| AAK | | | | S | **S** | **12 09 25.2** | **-0.5** |
| | 1.8nm,0.3s,baz=205,slow=5.2,SNR=3.2 | | | | | | |
| **AAK** | **Ala-Archa** | **6.61** | **26** | | **Pn** | **12 08 09.9** | **+1.0** |
| **AAK** | **Ala-Archa** | **6.61** | **26** | ⇑P | **Pn** | **12 08 11.8** | **+2.9** |
| | 3.3nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **S** | **12 09 26.9** | **+1.2** |
| | 15nm,0.7s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **7.47** | **46** | Pn | **Pn** | **12 08 20.0** | **0.0** |
| **MK31** | **Makanchi Array** | **13.28** | **37** | | **Pn** | **12 09 33.7** | **+1.4** |
| **MKAR** | **Makanchi Array** | **13.28** | **37** | P | **P** | **12 09 34.0** | **+0.2** |
| | 0.2nm,0.3s,baz=214,slow=9.7,SNR=10 | | | | | | |
| **PYUN** | **Piuthan** | **13.52** | **126** | *e*P | **Pn** | **12 09 34.0** | **-1.5** |
| | 18nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **13.86** | **123** | *e*P | **Pn** | **12 09 38.6** | **-1.2** |
| | 23nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **14.13** | **126** | *e*P | **Pn** | **12 09 42.1** | **-1.0** |
| | 9.9nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **14.67** | **122** | *e*P | **Pn** | **12 09 48.9** | **-0.6** |
| | 30nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **14.74** | **331** | P | **P** | **12 09 50.0** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **15.00** | **20** | P | **P** | **12 09 53.1** | **+0.4** |
| | 0.1nm,0.3s,baz=211,slow=9.9,SNR=8.0 | | | | | | |
| **DMN** | **Daman** | **15.24** | **122** | *e*P | **P** | **12 09 56.1** | **+0.2** |
| | 14nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **15.25** | **122** | *e*P | **P** | **12 09 55.8** | **-0.1** |
| **PKIN** | **Phulchoki** | **15.46** | **122** | *e*P | **P** | **12 09 58.3** | **0.0** |
| | 14nm,0.3s | | | | | | |
| **PKI** | **Pulchoki** | **15.47** | **122** | *e*P | **P** | **12 09 58.9** | **+0.4** |
| | 10nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **15.59** | **120** | *e*P | **P** | **12 10 00.2** | **+0.5** |
| | 11nm,0.3s | | | | | | |
| **JIRN** | **Jiri** | **15.96** | **120** | *e*P | **P** | **12 10 04.5** | **+0.7** |
| | 12nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.30** | **359** | P | **P** | **12 10 08.1** | **+1.2** |
| | 0.4nm,0.3s,baz=130,slow=14,SNR=6.6 | | | | | | |
| **BRVK** | **Borovoye** | **16.33** | **359** | P | **P** | **12 10 08.9** | **+1.6** |
| BRVK | | | | IAmb | IAmb | 12 10 13.0 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.44** | **330** | P | **P** | **12 10 09.7** | **+1.2** |
| | comp=Z,0.8nm,0.3s,baz=138,slow=10,SNR=20 | | | | | | |
| **RAMN** | **Ramite** | **16.68** | **121** | *e*P | **P** | **12 10 12.1** | **+0.4** |
| | comp=Z,3.2nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **17.21** | **118** | *e*P | **P** | **12 10 18.2** | **+0.7** |
| | comp=Z,5.6nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **17.29** | **120** | *e*P | **P** | **12 10 18.7** | **+0.5** |
| | comp=Z,8.3nm,0.3s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.83** | **25** | P | **P** | **12 10 44.9** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **19.83** | **25** | P | **P** | **12 10 45.2** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=215,slow=10,SNR=8.2 | | | | | | |
| **ARU** | **Arti** | **21.32** | **341** | P | **P** | **12 11 01.6** | **+1.1** |
| | comp=Z,1.3nm,0.5s,baz=141,slow=8.0,SNR=8.0 | | | | | | |
| **ARU** | **Arti** | **21.32** | **341** | P | **P** | **12 11 01.9** | **+1.5** |
| **BRTR** | **Keskin Array B** | **29.09** | **287** | P | **P** | **12 12 11.0** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=92,slow=9.7,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.82** | **119** | P | **P** | **12 12 25.2** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=305,slow=6.5,SNR=4.7 | | | | | | |
| **FINES** | **FINESS Array B** | **37.13** | **326** | P | **P** | **12 13 20.0** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=101,slow=8.0,SNR=6.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.82** | **338** | P | **P** | **12 13 51.1** | **+1.1** |
| | comp=Z,2.6nm,0.7s,baz=72,slow=7.8,SNR=13 | | | | | | |
| **HFS** | **Hagfors** | **42.71** | **322** | P | **P** | **12 14 05.3** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=96,slow=12,SNR=10 | | | | | | |
| **NC303** | **NORSAR Array S** | **43.97** | **323** | P | **P** | **12 14 16.6** | **+1.3** |
| NC303 | | | | IAmb | IAmb | 12 14 35.8 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.02** | **323** | P | **P** | **12 14 16.0** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=94,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.02** | **323** | P | **P** | **12 14 16.3** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=7.8,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.43** | **268** | P | **P** | **12 16 48.5** | **-1.0** |
| | comp=Z,2.5nm,0.5s,baz=48,slow=5.9,SNR=28 | | | | | | |
| **KOWA** | **Kowa** | **69.26** | **273** | P | **P** | **12 17 13.0** | **-0.5** |
| **TOLK** | **Toolik Lake Re** | **70.78** | **15** | P | **P** | **12 17 21.8** | **-0.1** |
| TOLK | | | | IAmb | IAmb | 12 17 41.8 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **C36M** | **Paulatuk** | **73.68** | **5** | P | **P** | **12 17 38.7** | **-0.2** |
| C36M | | | | IAmb | IAmb | 12 17 39.1 | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **73.73** | **9** | P | **P** | **12 17 40.2** | **+1.0** |
| | comp=Z,0.6nm,0.5s,baz=14,slow=5.6,SNR=4.5 | | | | | | |
| **INK** | **Inuvik** | **73.73** | **9** | P | **P** | **12 17 39.8** | **+0.6** |
| **YKA** | **Yellowknife Ar** | **81.03** | **2** | P | **P** | **12 18 19.9** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=351,slow=5.4,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **84.63** | **125** | P | **P** | **12 18 36.4** | **-2.3** |
| | comp=Z,0.2nm,0.5s,baz=306,slow=3.8,SNR=2.2 | | | | | | |

**IDC 13 12:08:32.2±11.0, 10°01N×93°94E, h156km±90km, mb2.9/4, mb1 3.2/5, mb1mx2.6/71, mbtmp3.4/5, MS2.4/1, Ms1 2.4/1, ms1mx2.1/6, Error ellipse: s-maj=114.3km s-min=20.1km az=60.0, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **8.71** | **145** | LR | LR | 12 14 01.5 | |
| | comp=Z,24nm,21.7s,baz=172,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **9.70** | **29** | P | Pn | 12 10 48.3 | +0.1 |
| | 0.2nm,0.3s,baz=221,slow=15,SNR=21 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.63** | **231** | T | T | 12 41 38.2 | |
| | baz=50,slow=75,SNR=7.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.64** | **231** | T | T | 12 41 34.2 | |
| | baz=50,slow=75,SNR=8.4 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.65** | **231** | T | T | 12 41 39.5 | |
| | baz=50,slow=75,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **37.97** | **347** | P | P | 12 15 35.4 | +0.5 |
| | 0.2nm,0.3s,baz=160,slow=9.7,SNR=9.0 | | | | | | |
| **SONM** | **Songino Array** | **39.14** | **13** | P | P | 12 15 43.3 | -1.4 |
| | 0.3nm,0.7s,baz=187,slow=10,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.68** | **127** | P | P | 12 17 08.7 | +0.2 |
| | 0.4nm,0.5s,baz=303,slow=8.8,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **51.45** | **131** | P | P | 12 17 21.4 | -0.4 |
| | 0.3nm,0.5s,baz=302,slow=7.5,SNR=6.0 | | | | | | |

**IDC 13 12:17:21.1±2.2, 2°94N×127°57E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.3/37, mbtmp3.3/3, Error ellipse: s-maj=151.4km s-min=27.9km az=67.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.69** | **164** | P | P | 12 22 34.7 | 0.0 |
| | 1.2nm,0.6s,baz=344,slow=10,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **27.15** | **167** | P | P | 12 23 06.2 | -0.2 |
| | 0.2nm,0.5s,baz=349,slow=7.5,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.68** | **325** | P | P | 12 27 20.7 | +0.1 |
| | 0.1nm,0.4s,baz=126,slow=8.4,SNR=2.2 | | | | | | |

*TEH **13** 12:26:09.4, 28°25N×57°39E, h9km, ML3.3*

*OMAN **13** 12:26:13.0±0.1, 28°00N×57°49E, h10km, ml3.4/11, Error ellipse: s-maj=2.5km s-min=2.1km az=310.0*

**ISC 13 12:26:11.4±2.0, 28°14N±0°04×57°42E±0°04, h17km±15km, n29, σ1§57/44, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHNJ** | **Kahnooj** | **0.32** | **127** | *e*Pg | **Pb** | **12 26 18.1** | **-0.7** |
| KHNJ | | | | *e* | | 12 26 18.5 | |
| | comp=Z,24μm,0.4s | | | | | | |
| KHNJ | | | | *e*Sg | **Sb** | **12 26 24.0** | **+0.3** |
| **GENO** | **Geno** | **1.33** | **236** | *e*Pg | **Pn** | **12 26 35.5** | **+0.1** |
| GENO | | | | *e*Sg | **Sg** | **12 26 55.0** | **+0.6** |
| GENO | | | | *e* | | 12 26 57.8 | |
| | comp=Z,17μm,0.2s | | | | | | |
| **BNDS** | **Bandar-Abbas** | **1.33** | **236** | *e*Pn | **Pn** | **12 26 35.7** | **+0.3** |
| **KBAM** | **BAM** | **1.34** | **42** | *e*Pg | **Pn** | **12 26 34.3** | **-1.3** |
| KBAM | | | | *e* | | 12 26 39.2 | |
| | comp=Z,4μm,0.2s | | | | | | |
| KBAM | | | | *e*Sg | **Sb** | **12 26 51.8** | **-1.5** |
| **NGRK** | **Negar Kerman** | **1.61** | **338** | *e*Pg | **Pn** | **12 26 38.7** | **-0.8** |
| NGRK | | | | *e* | | 12 27 06.3 | |
| | comp=Z,7μm,0.3s | | | | | | |
| **CHMN** | **Cheshme madani** | **1.71** | **4** | *e*Pg | **Pn** | **12 26 40.2** | **-0.7** |
| CHMN | | | | *e* | | 12 26 48.3 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **KRBR** | **Kerman** | **1.92** | **343** | *e*Pn | **Pn** | **12 26 45.0** | **+1.3** |
| **KHGB** | **Koh Gabri** | **2.37** | **340** | *e*Pn | **Pn** | **12 26 49.0** | **-0.8** |
| KHGB | | | | *e* | | 12 26 54.5 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **SHME** | **Shamm** | **2.38** | **209** | P | **Pn** | **12 26 49.6** | **-0.1** |
| | SNR=8.8 | | | | | | |
| SHME | | | | S | **Sn** | **12 27 19.5** | **+1.1** |
| | SNR=6.0 | | | | | | |
| **BANOM** | **Banah** | **2.42** | **204** | P | **Pn** | **12 26 50.8** | **+0.4** |
| | SNR=50 | | | | | | |
| BANOM | | | | S | **Sn** | **12 27 21.0** | **+1.3** |
| | SNR=7.2 | | | | | | |
| **MASF** | **Masafi** | **2.98** | **202** | P | **Pn** | **12 26 59.3** | **+1.3** |
| MASF | | | | S | **Sb** | **12 27 37.9** | **-2.5** |
| **UMQ** | **Umm Al-Quwin** | **3.04** | **211** | P | **Pn** | **12 26 60.0** | **+1.2** |
| UMQ | | | | S | **Sn** | **12 27 37.5** | **+2.6** |
| **ZHDN** | **Zahedan** | **3.23** | **66** | *e*Pn | **Pn** | **12 27 02.8** | **+1.2** |
| **ZHSF** | **Zahedan** | **3.29** | **63** | *e*Pn | **Pn** | **12 27 05.7** | **+3.3** |
| **UOSS** | **Minazif** | **3.37** | **199** | P | **Pn** | **12 27 03.9** | **+0.6** |
| UOSS | | | | S | **Sn** | **12 27 44.3** | **+1.4** |
| **ASHO** | **Ashiyiah** | **3.65** | **200** | P | **Pn** | **12 27 08.2** | **+0.9** |
| ASHO | | | | S | **Sn** | **12 27 53.6** | **+3.5** |
| **FAQ** | **Al Faqa, Dubai** | **3.76** | **206** | P | **Pn** | **12 27 08.8** | **+0.1** |
| FAQ | | | | S | **Sn** | **12 27 53.1** | **+0.5** |
| **GHIR** | **Ghir-Karzin** | **3.91** | **273** | *e*Pn | **Pn** | **12 27 12.0** | **+1.1** |
| **SOHO** | **SOHO** | **4.07** | **191** | P | **Pn** | **12 27 11.2** | **-1.7** |
| **BSRN** | **Basiran** | **4.09** | **21** | *e*Pn | **Pn** | **12 27 15.3** | **+2.0** |
| **ARQ** | **Araqi** | **4.85** | **190** | P | **Pn** | **12 27 25.0** | **+1.2** |
| | SNR=12 | | | | | | |
| ARQ | | | | S | **Sn** | **12 28 20.9** | **+1.3** |
| **YZKH** | **Yazd** | **4.89** | **331** | *e*Pn | **Pn** | **12 27 25.9** | **+1.6** |
| **WSAR** | **Wadi Sarin** | **5.00** | **167** | P | **Pn** | **12 27 26.3** | **+0.5** |
| | SNR=21 | | | | | | |
| WSAR | | | | S | **Sn** | **12 28 19.8** | **-3.6** |
| **SMDO** | **Samad** | **5.09** | **173** | P | **Pn** | **12 27 28.0** | **+0.9** |
| SMDO | | | | S | **Sn** | **12 28 24.5** | **-1.2** |
| **BSY** | **Bisya** | **5.38** | **182** | P | **Pn** | **12 27 32.1** | **+1.1** |
| BSY | | | | S | **Sn** | **12 28 32.9** | **+0.2** |
| **MZWR** | **Madinat Zayed** | **5.40** | **217** | P | **Pn** | **12 27 30.3** | **-1.0** |
| MZWR | | | | S | **Sn** | **12 28 30.5** | **-2.6** |
| **WBK** | **Wadi Bani Khal** | **5.69** | **165** | P | **Pn** | **12 27 35.1** | **-0.1** |
| | SNR=6.6 | | | | | | |
| **KLNJ** | **Kolanjah** | **5.82** | **301** | *e*Pn | **Pn** | **12 27 37.7** | **+0.3** |
| KLNJ | | | | *e* | | 12 28 48.8 | |
| | comp=Z,238nm,0.3s | | | | | | |
| **SHRT** | **Shahrakht** | **6.01** | **24** | *e*Pn | **Pn** | **12 27 42.1** | **+2.3** |

**IDC 13 12:34:58.1±21.0, 28°21N×139°29E, h503km±263km, mb2.4/5, mb1 2.6/5, mb1mx2.5/52, mbtmp3.3/5, Error ellipse: s-maj=83.7km s-min=20.9km az=81.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **32.14** | **317** | P | P | 12 40 43.5 | -0.1 |
| | 0.2nm,0.5s,baz=120,slow=8.5,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.78** | **309** | P | P | 12 42 49.1 | 0.0 |
| | 0.2nm,0.7s,baz=90,slow=8.4,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.11** | **186** | P | P | 12 42 51.7 | -0.2 |
| | 0.4nm,0.9s,baz=1.9,slow=7.8,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **51.84** | **186** | P | P | 12 43 19.1 | -0.1 |
| | 0.4nm,1.0s,baz=356,slow=5.6,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.37** | **28** | P | P | 12 45 32.2 | 0.0 |
| | 0.3nm,0.6s,baz=300,slow=5.9,SNR=5.0 | | | | | | |

**WEL 13 12:59:52.3±1.2, 32°S±24°×18°0E±4°8, h433km±34km, M4.2/5, mB4.1/2, MLv4.2/5, Mw(mB)3.1/2, Error ellipse: s-maj=0.1km s-min=0.0km az=113.9, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **5.62** | **192** | P | P | 13 01 23.2 | +1.3 |
| WMGZ

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **41.99** | **109** | LR | LR | 13 42 14.8 | | |
| | comp=Z,103nm,18.5s,baz=272,slow=30 | | | | | | | |
| **LPAZ** | **La Paz** | **42.62** | **99** | P | **P** | **13 29 08.2** | **+0.2** | |
| | 1.6nm,0.9s,baz=299,slow=10,SNR=4.6 | | | | | | | |
| LPAZ | | | | LR | LR | 13 42 43.9 | | |
| | comp=Z,78nm,20.0s,baz=254,slow=30 | | | | | | | |
| **TXAR** | **Lajitas Array** | **43.52** | **11** | P | **P** | **13 29 14.4** | **+0.1** | |
| | 0.7nm,1.1s,baz=195,slow=10,SNR=2.9 | | | | | | | |
| TXAR | | | | LR | LR | 13 43 54.7 | | |
| | comp=Z,74nm,19.4s,baz=210,slow=32 | | | | | | | |
| **PLCA** | **Paso Flores** | **45.24** | **135** | LR | LR | 13 43 44.8 | | |
| | comp=Z,329nm,18.4s,baz=284,slow=30 | | | | | | | |
| **RAR** | **Rarotonga** | **45.85** | **254** | LR | LR | 13 43 57.5 | | |
| | comp=Z,144nm,18.3s,baz=114,slow=30 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **47.16** | **355** | LR | LR | 13 44 27.8 | | |
| | comp=Z,125nm,19.7s,baz=173,slow=30 | | | | | | | |
| **ANMO** | **Albuquerque** | **48.63** | **6** | LR | LR | 13 45 33.1 | | |
| | comp=Z,114nm,20.0s,baz=202,slow=30 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **52.11** | **354** | P | **P** | **13 30 21.3** | **+0.3** | |
| | 0.9nm,0.8s,baz=182,slow=11,SNR=7.7 | | | | | | | |
| NVAR | | | | LR | LR | 13 47 11.2 | | |
| | comp=Z,132nm,19.7s,baz=188,slow=30 | | | | | | | |
| **CPUP** | **Villa Florida** | **52.76** | **113** | LR | LR | 13 48 21.6 | | |
| | comp=Z,130nm,21.5s,baz=242,slow=31 | | | | | | | |
| **USHA** | **Ushuaia** | **53.33** | **150** | LR | LR | 13 47 41.2 | | |
| | comp=Z,414nm,21.7s,baz=276,slow=30 | | | | | | | |
| **ELK** | **Elko** | **54.18** | **357** | LR | LR | 13 48 55.0 | | |
| | comp=Z,178nm,19.0s,baz=197,slow=31 | | | | | | | |
| **SJG** | **San Juan** | **55.32** | **56** | LR | LR | 13 49 39.1 | | |
| | comp=Z,54nm,21.1s,baz=244,slow=31 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **55.94** | **28** | LR | LR | 13 52 55.3 | | |
| | comp=Z,42nm,20.7s,baz=242,slow=34 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **55.94** | **351** | LR | LR | 13 49 43.9 | | |
| | comp=Z,139nm,21.9s,baz=180,slow=31 | | | | | | | |
| **PDAR** | **Pinedale Array** | **56.19** | **2** | P | P | 13 30 48.2 | -2.4 | |
| | 0.5nm,0.8s,baz=141,slow=5.8,SNR=3.6 | | | | | | | |
| PDAR | | | | LR | LR | 13 51 54.0 | | |
| | comp=Z,101nm,18.0s,baz=201,slow=33 | | | | | | | |
| **PMSA** | **Palmer Station** | **60.69** | **159** | LR | LR | 13 50 28.6 | | |
| | comp=Z,199nm,19.8s,baz=20,slow=29 | | | | | | | |
| **NEW** | **Newport** | **61.78** | **356** | LR | LR | 13 52 52.4 | | |
| | comp=Z,61nm,20.9s,baz=203,slow=31 | | | | | | | |
| **MDP** | **Montagnes des** | **61.99** | **77** | LR | LR | 13 58 26.0 | | |
| | comp=Z,35nm,18.3s,baz=176,slow=36 | | | | | | | |
| **SADO** | **Sadowa** | **65.44** | **22** | LR | LR | 13 59 32.0 | | |
| | comp=Z,93nm,18.2s,baz=151,slow=35 | | | | | | | |
| **RPZ** | **Rata Peaks** | **71.14** | **228** | LR | LR | 13 56 33.9 | | |
| | comp=Z,126nm,19.7s,baz=75,slow=30 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.92** | **359** | P | **P** | **13 32 56.8** | **0.0** | |
| | 0.7nm,0.9s,baz=174,slow=5.7,SNR=3.5 | | | | | | | |
| YKA | | | | LR | LR | 14 03 17.5 | | |
| | comp=Z,128nm,18.6s,baz=332,slow=33 | | | | | | | |
| **SCHQ** | **Schefferville** | **78.24** | **25** | P | **P** | **13 33 10.3** | **+0.2** | |
| | 3.2nm,0.8s,baz=277,slow=11,SNR=1.4 | | | | | | | |
| SCHQ | | | | LR | LR | 14 07 09.1 | | |
| | comp=Z,47nm,18.1s,baz=99,slow=35 | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.53** | **339** | LR | LR | 13 59 51.4 | | |
| | comp=Z,106nm,18.4s,baz=178,slow=30 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.48** | **346** | P | **P** | **13 33 32.2** | **-0.4** | |
| | 0.2nm,0.8s,baz=141,slow=5.8,SNR=0.9 | | | | | | | |
| **FRB** | **Frobisher Bay** | **84.10** | **18** | LR | LR | 14 09 20.2 | | |
| | comp=Z,58nm,18.4s,baz=240,slow=34 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **86.03** | **290** | T | T | 15 08 50.4 | | |
| | baz=106,slow=74,SNR=22 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **86.03** | **290** | T | T | 15 08 52.2 | | |
| | baz=106,slow=74,SNR=15 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **86.04** | **290** | T | T | 15 08 52.9 | | |
| | baz=106,slow=74,SNR=17 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **86.17** | **291** | T | T | 15 09 10.4 | | |
| | baz=107 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **86.19** | **291** | T | T | 15 09 09.6 | | |
| | baz=107 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **86.19** | **291** | T | T | 15 09 10.8 | | |
| | baz=107 | | | | | | | |
| **RES** | **Resolute Bay** | **88.82** | **5** | LR | LR | 14 10 35.1 | | |
| | comp=Z,90nm,19.0s,baz=89,slow=34 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **91.14** | **324** | LR | LR | 14 06 44.2 | | |
| | comp=Z,67nm,21.3s,baz=96,slow=30 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **91.94** | **20** | LR | LR | 14 13 46.6 | | |
| | comp=Z,88nm,19.6s,baz=192,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **133.23** | **325** | PKP | **PKPdf** | **13 40 26.8** | **0.0** | |
| | 0.3nm,0.9s,baz=81,slow=10,SNR=1.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **137.60** | **345** | PKP | **PKPdf** | **13 40 33.3** | **-1.2** | |
| | 0.3nm,0.5s,baz=5.2,slow=1.6,SNR=1.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **140.33** | **43** | PKP | **PKPdf** | **13 40 38.8** | **-1.4** | |
| | 0.3nm,0.4s,baz=211,slow=9.5,SNR=2.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **140.66** | **358** | PKP | **PKPdf** | **13 40 39.7** | **-0.5** | |
| | 0.2nm,0.4s,baz=17,slow=1.5,SNR=2.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **142.10** | **349** | PKP | **PKPdf** | **13 40 41.5** | **-1.2** | |
| | 0.2nm,0.6s,baz=358,slow=2.2,SNR=4.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.78** | **343** | PKP | **PKPab** | **13 40 46.0** | **-0.6** | |
| | 0.2nm,0.7s,baz=76,slow=6.1,SNR=1.5 | | | | | | | |
| **GNI** | **Garni** | **146.75** | **33** | PKPbc | **PKPbc** | **13 40 54.5** | **+1.4** | |
| | 6.7nm,0.8s,baz=56,slow=1.9,SNR=4.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.69** | **283** | PKPbc | **PKPbc** | **13 41 01.9** | **+0.5** | |
| | 0.8nm,0.3s,baz=72,slow=2.9,SNR=1.6 | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **13 41 07.8** | **+1.3** | |
| | 0.8nm,0.4s,baz=48,slow=1.8,SNR=9.6 | | | | | | | |

*IDC **13** 13:27:58.9±1.2,38.4°S×176.3°E,h161km±10km,mb3.2/3, mb1 3.4/3,mb1mx3.0/28,mbtmp3.7/3,Error ellipse: s-maj=99.7km s-min=28.1km az=6.0*

*WEL **13** 13:28:00.6±0.8,39.3°S±5.1°×17.6°E±7.1°,h120km±7km,M3.5/47, ML3.4/30,MLv3.5/47,Error ellipse: s-maj=0.0km s-min=0.0km az=121.5*

**ISC 13 13:27:58.2±0.8,38.72S±0.05°×175.79E±0.05°,h149km±5km, n160,σ0.96 9/167,mb3.7/3,North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WATZ** | **Wairara** | **0.05** | **287** | P | | P | **Pn** | **13 28 18.3** | **0.0** |
| **WHTZ** | **Whakaora** | **0.14** | **67** | P | | P | **Pn** | **13 28 18.5** | **+0.1** |
| **RATZ** | **Rangitukua** | **0.14** | **186** | P | | P | **Pn** | **13 28 18.4** | **0.0** |
| **KUTZ** | **Kaahu Road** | **0.23** | **6** | P | | P | **Pn** | **13 28 18.4** | **-0.1** |
| **RITZ** | **Rihia Road** | **0.26** | **168** | P | | P | **Pn** | **13 28 18.9** | **+0.4** |
| **KATZ** | **Kakaramea** | **0.26** | **197** | P | | P | **Pn** | **13 28 18.9** | **+0.1** |
| **HATZ** | **Hinemaiaia** | **0.29** | **126** | P | | P | **Pn** | **13 28 18.6** | **-0.1** |
| HATZ | | | | S | | S | **Sn** | **13 28 32.6** | **-1.7** |
| **WPRZ** | **Whakapapataran** | **0.35** | **55** | P | | P | **Pn** | **13 28 18.6** | **-0.3** |
| **NTVZ** | **North Tongarir** | **0.39** | **193** | P | | P | **Pn** | **13 28 19.4** | **+0.3** |
| **KRVZ** | **Karewarewa** | **0.39** | **197** | P | | P | **Pn** | **13 28 19.4** | **+0.2** |
| **TMVZ** | **Te Maari** | **0.40** | **190** | P | | P | **Pn** | **13 28 19.6** | **+0.4** |
| TMVZ | | | | S | | S | **Sn** | **13 28 34.7** | **-0.5** |
| **ETVZ** | **East Tongariro** | **0.42** | **189** | P | | P | **Pn** | **13 28 19.7** | **+0.4** |
| **WTVZ** | **West Tongariro** | **0.42** | **202** | P | | P | **Pn** | **13 28 19.6** | **+0.3** |
| **NNVZ** | **North Ngauruho** | **0.43** | **198** | P | | P | **Pn** | **13 28 19.7** | **+0.3** |
| **TLZ** | **Tolley Road** | **0.44** | **333** | P | | P | **Pn** | **13 28 19.1** | **-0.1** |
| TLZ | | | | S | | S | **Sn** | **13 28 33.8** | **-1.4** |
| **TWVZ** | **Taurewa** | **0.45** | **218** | P | | P | **Pn** | **13 28 19.8** | **+0.4** |
| **GRRZ** | **Galatos Road** | **0.45** | **34** | P | | P | **Pn** | **13 28 19.0** | **-0.3** |
| **OTVZ** | **Oturere** | **0.45** | **193** | P | | P | **Pn** | **13 28 19.8** | **+0.3** |
| **ALRZ** | **Allen Road** | **0.46** | **70** | P | | P | **Pn** | **13 28 18.8** | **-0.5** |
| ALRZ | | | | S | | S | **Sn** | **13 28 33.8** | **-1.5** |
| **NGZ** | **Ngauruhoe** | **0.48** | **198** | P | | P | **Pn** | **13 28 19.8** | **+0.2** |
| **SNVZ** | **South Ngauruho** | **0.48** | **194** | P | | P | **Pn** | **13 28 19.9** | **+0.3** |
| **MRHZ** | **Matea Rd** | **0.50** | **103** | P | | P | **Pn** | **13 28 19.3** | **-0.2** |
| MRHZ | | | | S | | S | **Sn** | **13 28 33.8** | **-1.9** |
| **HRRZ** | **Handcock Road** | **0.51** | **50** | P | | P | **Pn** | **13 28 19.2** | **-0.4** |
| **PRRZ** | **Plateau Road** | **0.52** | **65** | P | | P | **Pn** | **13 28 19.0** | **-0.6** |
| PRRZ | | | | S | | S | **Sn** | **13 28 34.7** | **-1.1** |
| **HSRZ** | **Hossack Road** | **0.54** | **41** | P | | P | **Pn** | **13 28 19.4** | **-0.4** |
| **TUVZ** | **Tukino** | **0.56** | **191** | P | | P | **Pn** | **13 28 20.5** | **+0.6** |
| **FWVZ** | **Far West T-bar** | **0.56** | **199** | P | | P | **Pn** | **13 28 20.5** | **+0.3** |
| **DRZ** | **Dome Shelter** | **0.58** | **198** | P | | P | **Pn** | **13 28 20.8** | **+0.5** |
| **WHVZ** | **Whangaehu Hut** | **0.58** | **196** | P | | P | **Pn** | **13 28 20.6** | **+0.4** |
| **TRVZ** | **Turoa** | **0.61** | **198** | P | | P | **Pn** | **13 28 20.9** | **+0.5** |
| **WNVZ** | **Wahianoa** | **0.62** | **194** | P | | P | **Pn** | **13 28 21.1** | **+0.7** |
| **UTU** | **Utuhina** | **0.63** | **30** | P | | P | **Pn** | **13 28 19.9** | **-0.3** |
| **HLRZ** | **Highlands Stat** | **0.64** | **43** | P | | P | **Pn** | **13 28 20.4** | **+0.1** |
| **PKVZ** | **Pokaka** | **0.66** | **211** | P | | P | **Pn** | **13 28 21.2** | **+0.7** |
| **RRRZ** | **Republican Roa** | **0.68** | **56** | P | | P | **Pn** | **13 28 20.1** | **-0.5** |
| **MOVZ** | **Moawhango** | **0.69** | **183** | P | | P | **Pn** | **13 28 21.1** | **+0.5** |
| **NGRZ** | **Ngongotaha** | **0.69** | **27** | P | | P | **Pn** | **13 28 20.2** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **0.70** | **25** | P | | P | **Pn** | **13 28 21.1** | **+0.3** |
| **MTVZ** | **Mangatetei** | **0.71** | **201** | P | | P | **Pn** | **13 28 21.5** | **+0.8** |
| **TARZ** | **Mount Tarawera** | **0.74** | **49** | P | | P | **Pn** | **13 28 20.6** | **-0.5** |
| **HIZ** | **Hauiti** | **0.76** | **286** | P | | P | **Pn** | **13 28 21.3** | **+0.2** |
| **OMRZ** | **Omania** | **0.77** | **37** | P | | P | **Pn** | **13 28 20.6** | **-0.6** |
| **KARZ** | **Kaharoa** | **0.79** | **27** | P | | P | **Pn** | **13 28 20.7** | **-0.6** |
| **MKRZ** | **Makatiti** | **0.79** | **43** | P | | P | **Pn** | **13 28 21.3** | **-0.1** |
| **BHHZ** | **Black Hill Sta** | **0.80** | **165** | P | | P | **Pn** | **13 28 21.9** | **+0.5** |
| **MUGZ** | **Murupara** | **0.81** | **73** | P | | P | **Pn** | **13 28 20.7** | **-0.7** |
| **MTHZ** | **Maungataniwha** | **0.83** | **99** | P | | P | **Pn** | **13 28 21.7** | **+0.1** |
| **LIRZ** | **Lichensteins R** | **0.85** | **33** | P | | P | **Pn** | **13 28 21.0** | **-0.8** |
| **KWHZ** | **Kaweka Forest** | **0.86** | **145** | P | | P | **Pn** | **13 28 22.6** | **+0.8** |
| **NMHZ** | **Naumai** | **0.88** | **116** | P | | P | **Pn** | **13 28 23.1** | **+1.1** |
| **KMRZ** | **Kaimai** | **0.88** | **8** | P | | P | **Pn** | **13 28 21.5** | **-0.5** |
| **VRZ** | **Vera Road** | **0.90** | **243** | P | | P | **Pn** | **13 28 23.0** | **+0.9** |
| **RTZ** | **Ruatahuna** | **0.94** | **84** | P | | P | **Pn** | **13 28 22.2** | **-0.3** |
| **EDRZ** | **Edgecumbe** | **0.96** | **51** | P | | P | **Pn** | **13 28 21.9** | **-0.8** |
| **MCHZ** | **McNeill Hill** | **1.01** | **136** | P | | P | **Pn** | **13 28 24.5** | **+1.6** |
| **MARZ** | **Manawahe** | **1.01** | **44** | P | | P | **Pn** | **13 28 22.4** | **-0.6** |
| **TOZ** | **Tahuroa Road** | **1.01** | **347** | P | | P | **Pn** | **13 28 22.8** | **-0.2** |
| **KRHZ** | **Kereru** | **1.02** | **154** | P | | P | **Pn** | **13 28 24.2** | **+1.1** |
| **RAHZ** | **Arahi** | **1.03** | **101** | P | | P | **Pn** | **13 28 23.9** | **+0.7** |
| **TGRZ** | **Tauranga** | **1.06** | **21** | P | | P | **Pn** | **13 28 22.9** | **-0.6** |
| **OPRZ** | **Ohinepanea** | **1.06** | **97** | P | | P | **Pn** | **13 28 22.7** | **-0.8** |
| **ARHZ** | **Arohaonanui** | **1.08** | **120** | P | | P | **Pn** | **13 28 24.7** | **+1.1** |
| **URZ** | **Urewera** | **1.13** | **66** | P | | P | **Pn** | **13 28 22.8** | **-1.3** |
| | 112nm,0.3s,baz=255,slow=3.9,SNR=1164 | | | | | | | | |
| URZ | | | | | S | | **Sn** | **13 28 41.0** | **-2.8** |
| | 154nm,0.3s,baz=8.9,slow=19,SNR=8.3 | | | | | | | | |
| **URZ** | **Urewera** | **1.13** | **66** | P | | P | **Pn** | **13 28 23.2** | **-0.9** |
| **MHEZ** | **Mangahewa** | **1.20** | **252** | P | | P | **Pn** | **13 28 26.0** | **+1.3** |
| **WAZ** | **Wanganui** | **1.21** | **211** | P | | P | **Pn** | **13 28 26.0** | **+1.2** |
| **SNGZ** | **Shannon Statio** | **1.21** | **93** | P | | P | **Pn** | **13 28 25.4** | **+0.6** |
| **PNHZ** | **Pukenui** | **1.23** | **165** | P | | P | **Pn** | **13 28 26.0** | **+0.9** |
| **WHRZ** | **Whale Island** | **1.27** | **47** | P | | P | **Pn** | **13 28 25.6** | **+0.2** |
| **RAGZ** | **Rawiri** | **1.29** | **80** | P | | P | **Pn** | **13 28 25.5** | **-0.2** |
| **LREZ** | **Lake Rotokare** | **1.31** | **235** | P | | P | **Pn** | **13 28 27.3** | **+1.5** |
| **DREZ** | **Durham Road** | **1.32** | **249** | P | | P | **Pn** | **13 28 27.2** | **+1.3** |
| **KAHZ** | **Kahuranaki** | **1.36** | **142** | P | | P | **Pn** | **13 28 27.6** | **+1.3** |
| **CKHZ** | **Cape Kidnapper** | **1.37** | **133** | P | | P | **Pn** | **13 28 27.6** | **+1.3** |
| **PREZ** | **Palmer Road** | **1.41** | **244** | P | | P | **Pn** | **13 28 28.3** | **+1.4** |
| **MWZ** | **Matawai** | **1.42** | **75** | P | | P | **Pn** | **13 28 26.3** | **-0.5** |
| **NEZ** | **North Egmont** | **1.43** | **247** | P | | P | **Pn** | **13 28 28.5** | **+1.4** |
| **WPHZ** | **Waipukurau** | **1.43** | **160** | P | | P | **Pn** | **13 28 28.1** | **+1.1** |
| **MYRZ** | **Mayor Island** | **1.48** | **14** | P | | P | **Pn** | **13 28 27.3** | **-0.3** |
| **PKE** | **Pukeiti** | **1.48** | **251** | P | | P | **Pn** | **13 28 28.7** | **+1.2** |
| **KHEZ** | **Kahui Hut** | **1.50** | **247** | P | | P | **Pn** | **13 28 29.0** | **+1.2** |
| **KNZ** | **Kokohu** | **1.50** | **102** | P | | P | **Pn** | **13 28 28.0** | **+0.4** |
| **RIGZ** | **Rimuhau** | **1.54** | **90** | P | | P | **Pn** | **13 28 28.6** | **+0.4** |
| **PXZ** | **Pawanui** | **1.55** | **148** | P | | P | **Pn** | **13 28 29.2** | **+1.0** |
| **NBEZ** | **Newall Road No** | **1.59** | **249** | P | | P | **Pn** | **13 28 29.8** | **+1.1** |
| **DVHZ** | **Dannevirke** | **1.60** | **170** | P | | P | **Pn** | **13 28 29.5** | **+0.7** |
| **TKGZ** | **Te Karaka** | **1.64** | **81** | P | | P | **Pn** | **13 28 29.6** | **+0.4** |
| **NMEZ** | **Namu Road** | **1.64** | **245** | P | | P | **Pn** | **13 28 30.5** | **+1.3** |
| **PRGZ** | **Paritu Road** | **1.65** | **98** | P | | P | **Pn** | **13 28 29.7** | **+0.4** |
| **RUGZ** | **Raukumara Rang** | **1.66** | **64** | P | | P | **Pn** | **13 28 28.1** | **-1.5** |
| **POWZ** | **Post Office Ro** | **1.67** | **181** | P | | P | **Pn** | **13 28 30.2** | **+0.7** |
| **PRHZ** | **Porangahau** | **1.68** | **157** | P | | P | **Pn** | **13 28 30.6** | **+1.0** |
| **MHGZ** | **Mahia Peninsul** | **1.71** | **105** | P | | P | **Pn** | **13 28 30.6** | **+0.7** |
| **TWGZ** | **Tauwhareparae** | **1.80** | **73** | P | | P | **Pn** | **13 28 31.3** | **+0.3** |
| **ANWZ** | **Angora Road** | **1.81** | **163** | P | | P | **Pn** | **13 28 32.2** | **+1.1** |
| **PRWZ** | **Pori Road** | **1.84** | **176** | P | | P | **Pn** | **13 28 32.3** | **+0.9** |
| **HAZ** | **Te Kaha** | **1.84** | **59** | P | | P | **Pn** | **13 28 30.1** | **-1.4** |
| **AWAZ** | **Awhitu Peninsu** | **1.89** | **331** | P | | P | **Pn** | **13 28 31.9** | **-0.1** |
| **ETAZ** | **East Tamaki Re** | **1.89** | **339** | P | | P | **Pn** | **13 28 31.7** | **-0.3** |
| **MRZ** | **Mangatainoka R** | **1.94** | **185** | P | | P | **Pn** | **13 28 33.1** | **+0.5** |
| **KUZ** | **Kuaotunu** | **1.97** | **358** | P | | P | **Pn** | **13 28 32.4** | **-0.6** |
| **PKGZ** | **Pakihiroa** | **1.98** | **66** | P | | P | **Pn** | **13 28 32.8** | **-0.3** |
| **BFZ** | **Birch Farm** | **1.99** | **170** | P | | P | **Pn** | **13 28 33.7** | **+0.6** |
| **WIAZ** | **Waiheke Island** | **2.00** | **345** | P | | P | **Pn** | **13 28 32.9** | **-0.3** |
| **EPAZ** | **Eden Park BICE** | **2.02** | **335** | P | | P | **Pn** | **13 28 33.3** | **-0.2** |
| **WTAZ** | **Waiatarua** | **2.03** | **331** | P | | P | **Pn** | **13 28 33.8** | **+0.1** |
| **PUZ** | **Puketiti** | **2.04** | **72** | P | | P | **Pn** | **13 28 33.4** | **-0.5** |
| **HBAZ** | **Herne Bay Bore** | **2.05** | **335** | P | | P | **Pn** | **13 28 33.7** | **-0.2** |
| **TIWZ** | **Tintock** | **2.05** | **178** | P | | P | **Pn** | **13 28 34.4** | **+0.5** |
| **MBAZ** | **Motutapu North** | **2.07** | **340** | P | | P | **Pn** | **13 28 33.8** | **-0.4** |
| **OGWZ** | **Otaki Gorge** | **2.15** | **193** | P | | P | **Pn** | **13 28 35.5** | **+0.5** |
| **RVAZ** | **Riverhead Bore** | **2.17** | **333** | P | | P | **Pn** | **13 28 35.0** | **-0.3** |
| **HOWZ** | **Holdsworth Sta** | **2.18** | **186** | P | | P | **Pn** | **13 28 35.6** | **+0.2** |
| **CPWZ** | **Castlepoint** | **2.21** | **172** | P | | P | **Pn** | **13 28 36.6** | **+0.9** |
| **KIW** | **Kapiti Island** | **2.24** | **197** | P | | P | **Pn** | **13 28 36.2** | **+0.1** |
| **ABAZ** | **Army Bay** | **2.25** | **340** | P | | P | **Pn** | **13 28 36.1** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **2.25** | **67** | P | | P | **Pn** | **13 28 35.6** | **-0.7** |
| **MXZ** | **Matakaoa Point** | **2.30** | **61** | P | | P | **Pn** | **13 28 36.6** | **-0.2** |
| **TMWZ** | **Te Maipa** | **2.38** | **178** | P | | P | **Pn** | **13 28 37.9** | **+0.1** |
| **MTW** | **Mount Morrison** | **2.44** | **185** | P | | P | **Pn** | **13 28 38.4** | **-0.2** |
| **CAW** | **Cannon Point** | **2.45** | **193** | P | | P | **Pn** | **13 28 38.6** | **0.0** |
| **GRZ** | **Great Barrier** | **2.48** | **354** | P | | P | **Pn** | **13 28 38.7** | **-0.4** |
| **DUWZ** | **D'Urville Isla** | **2.53** | **214** | P | | P | **Pn** | **13 28 39.4** | **-0.2** |
| **PAWZ** | **Paruwai Farm** | **2.67** | **186** | P | | P | **Pn** | **13 28 41.1** | **-0.3** |
| **TRWZ** | **Traveller** | **2.67** | **182** | P | | P | **Pn** | **13 28 41.2** | **-0.2** |
| **WELZ** | **Wellington** | **2.68** | **197** | P | | P | **Pn** | **13 28 41.1** | **-0.3** |
| **MSWZ** | **Moikau Station** | **2.72** | **189** | P | | P | **Pn** | **13 28 41.6** | **-0.4** |
| **TCW** | **Tory Channel** | **2.75** | **205** | P | | P | **Pn** | **13 28 42.0** | **-0.3** |
| **BHW** | **Baring Head** | **2.77** | **194** | P | | P | **Pn** | **13 28 42.2** | **-0.4** |
| **PLWZ** | **Palliser** | **2.87** | **188** | P | | P | **Pn** | **13 28 43.3** | **-0.6** |
| **WCZ** | **Waipu Caves** | **3.01** | **337** | P | | P | **Pn** | **13 28 45.6** | **0.0** |
| **TUWZ** | **Tuamarina** | **3.05** | **207** | P | | P | **Pn** | **13 28 45.4** | **-0.7** |
| **NNZ** | **Nelson** | **3.11** | **216** | P | | P | **Pn** | **13 28 46.1** | **-0.7** |
| **CMWZ** | **Cape Campbell** | **3.26** | **201** | P | | P | **Pn** | **13 28 48.8** | **+0.1** |
| **QRZ** | **Quartz Range** | **3.28** | **229** | P | | P | **Pn** | **13 28 48.1** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **3.33** | **206** | P | | P | **Pn** | **13 28 49.0** | **-0.7** |
| **MRNZ** | **Matariki Terra** | **3.54** | **220** | P | | P | **Pn** | **13 28 51.5** | **-0.9** |
| **THZ** | **Tophouse** | **3.75** | **215** | P | | P | **Pn** | **13 28 54.2** | **-1.0** |
| **KHZ** | **Kahutara** | **4.07** | **204** | P | | P | **Pn** | **13 28 58.4** | **-0.9** |
| **DSZ** | **Denniston Nort** | **4.29** | **224** | P | | P | **Pn** | **13 29 00.5** | **-1.8** |
| **GVZ** | **Greta Valley S** | **4.73** | **205** | P | | P | **Pn** | **13 29 06.4** | **-1.5** |
| **LTZ** | **Lake Taylor** | **4.86** | **212** | P | | P | **Pn** | **13 29 07.6** | **-2.1** |
| **AMCZ** | **Amberley** | **5.04** | **207** | P | | P | **Pn** | **13 29 10.3** | **-1.9** |
| **INZ** | **Inchbonnie** | **5.19** | **218** | P | | P | **Pn** | **13 29 11.8** | **-2.2** |
| **OKCZ** | **Okains Bay** | **5.41** | **202** | P | | P | **Pn** | **13 29 15.0** | **-1.9** |
| **AKCZ** | **Akaroa Harbour** | **5.58** | **202** | P | | P | **Pn** | **13 29 17.1** | **-2.2** |
| **MHCZ** | **Mount Hutt** | **5.77** | **212** | P | | P | **Pn** | **13 29 19.4** | **-2.4** |
| **CTZ** | **Chatham Island** | **7.60** | **134** | P | | P | **Pn** | **13 29 47.0** | **+0.9** |
| **HHSZ** | **Highcliff Hill** | **8.12** | **207** | P | | P | **Pn** | **13 29 51.6** | **-1.6** |
| **TUZ** | **Tuapeka** | **8.54** | **210** | P | | P | **Pn** | **13 29 57.4** | **-1.3** |
| **MLZ** | **Mavora Lakes** | **8.75** | **218** | P | | P | **Pn** | **13 29 59.1** | **-2.4** |
| **SYZ** | **Scrubby Hill** | **9.22** | **210** | P | | P | **Pn** | **13 30 06.3** | **-1.3** |
| **ASAR** | **Alice Springs** | **38.50** | **280** | P | | P | **P** | **13 35 08.3** | **+2.3** |
| | 0.9nm,0.6s,baz=113,slow=6.3,SNR=19 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.29** | **286** | P | | P | **P** | **13 35 22.4** | **+1.6** |
| | 0.2nm,0.5s,baz=123,slow=7.9,SNR=6.4 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.00** | **281** | P | | P | **P** | **13 36 25.1** | **+2.9** |
| | 1.3nm,0.8s,baz=104,slow=8.3,SNR=1.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **119.04** | **308** | PKP | | | **PKPdf** | **13 46 27.6** | **-1.1** |
| | 0.2nm,0.6s,baz=48,slow=2.1,SNR=2.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **120.69** | **317** | PKP | | | **PKPdf** | **13 46 30.2** | **-1.3** |
| | 0.5nm,0.7s,baz=191,slow=6.8,SNR=1.9 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **122.90** | **311** | PKP | | | **PKPdf** | **13 46 35.1** | **-0.8** |
| | 0.2nm,0.5s,baz=124,slow=2.1,SNR=2.3 | | | | | | | | |
| **FINES** | **FINESS Array B** | **150.57** | **330** | PKPbc | | | **PKPbc** | **13 47 30.6** | **-0.7** |
| | 0.4nm,0.6s,baz=58,slow=4.7,SNR=5.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **154.00** | **193** | PKPbc | | | **PKPbc** | **13 47 40.4** | **-0.1** |
| | 0.4nm,0.6s,baz=172,slow=1.7,SNR=2.3 | | | | | | | | |

*SOME **13** 13:38:39.1,44.2°N×74.5°E*
*KNET **13** 13:38:41.2±0.5,44.3°N×74.3°E,h15km±5km,ml1.7,Error ellipse: s-maj=4.6km s-min=4.1km az=146.0*

**NNC 13 13:38:39.4±0.6,44.42N×74.33E,h0km,mb3.2,mpv2.9, 12C-4D,Error ellipse: s-maj=5.2km s-min=3.4km az=67.0,Suspected Mining explosion.,Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BTLS** | **Baital** | **0.65** | **342** | P | | P | Pg | 13 38 51.6 | -0.2 |
| | 1.1nm,0.1s | | | | | | | | |
| BTLS | | | | S | | S | Sg | 13 39 00.6 | +0.3 |
| | 9.6nm,0.4s | | | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **167** | P | | P | Pg | 13 38 57.7 | -0.8 |
| | 2.1nm,0.3s | | | | | | | | |
| SGDS | | | | S | | S | Sg | 13 39 10.6 | -0.7 |
| | 4.4nm,0.3s | | | | | | | | |
| **USP** | **Ospenovka** | **1.16** | **174** | ⇑P | | P | Pg | 13 39 00.8 | -0.9 |
| | 2.3nm,0.1s,SNR=20 | | | | | | | | |
| USP | | | | ⇑S | | S | Sg | 13 39 16.0 | -0.7 |
| | 7.3nm,0.3s | | | | | | | | |
| **KRBS** | **Karabastau** | **1.21** | **126** | P | | P | Pg | 13 39 01.8 | -0.9 |
| | 1.9nm,0.1s | | | | | | | | |
| KRBS | | | | S | | S | Sg | 13 39 17.9 | -0.5 |
| | 8.8nm,0.3s | | | | | | | | |
| **CHMS** | **Chumysh** | **1.46** | **168** | ⇑P | | Pn | | 13 39 06.1 | -0.9 |
| | 2.5nm,0.1s | | | | | | | | |
| CHMS | | | | ⇑S | | S | Sg | 13 39 25.3 | -0.8 |
| | 6.6nm,0.3s | | | | | | | | |
| **KUU** | **Kurty** | **1.54** | **109** | P | | Pn | | 13 39 08.4 | +0.2 |
| | 4.0nm,0.2s | | | | | | | | |
| KUU | | | | S | | Sb | | 13 39 29.5 | +0.6 |
| | 25nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **1.58** | **138** | P | | Pn | | 13 39 09.0 | +0.3 |
| | 14nm,0.3s | | | | | | | | |
| DGS | | | | S | | Sg | | 13 39 30.6 | +0.5 |
| | 22nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.76** | **148** | ⇑P | | Pn | | 13 39 11.5 | +0.2 |
| | 2.7nm,0.1s,SNR=11 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.76** | **148** | ⇓P | | Pn | | 13 39 11.1 | -0.3 |
| | 2.5nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑S | | Sn | | 13 39 34.4 | -0.2 |
| | 3.0nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **1.79** | **176** | ⇑P | | Pn | | 13 39 12.4 | +0.7 |
| | 4.5nm,0.2s,SNR=9.6 | | | | | | | | |
| AAK | | | | ⇓S | | Sb | | 13 39 36.1 | -0.1 |
| | 7.7nm,0.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **1.79** | **176** | P | | Pb | | 13 39 12.5 | -0.7 |
| | 3.5nm,0.4s | | | | | | | | |
| AA

comp=N,2μm,0.7s
**MOY Mondy 2.08 69** ⇓Pg **Pn** **14 01 07.4 +1.3**
MOY Sg **Sb** **14 01 34.2 -0.6**
**KZLR Kyzyl 2.27 290** *c i*PN **Pb** **14 01 13.5 +1.3**
**KZLR Kyzyl 2.27 290** ⇑Pg **Pb** **14 01 13.7 +1.5**
KZLR Sg **Sg** **14 01 45.7 +1.6**
**ARS Arshan 3.00 70** *e*PN **Pn** **14 01 19.6 +0.8**
ARS *e* 14 01 23.5
ARS *e* 14 02 01.8
ARS pmax pmax
comp=Z,115nm,0.3s
ARS smax smax
comp=N,2μm,0.9s
**ARDR Aradan 3.20 302** Pg **Pb** **14 01 29.8 +1.7**
ARDR Sg **Sg** **14 02 14.5 +0.7**
**ZAK Zakamensk 3.49 98** *e*PN **Pn** **14 01 24.4 -1.1**
ZAK *e* 14 01 30.3
ZAK *e* 14 02 15.3
ZAK pmax pmax
comp=Z,255nm,0.9s
ZAK smax smax
comp=N,1μm,0.5s
**ZAK Zakamensk 3.49 98** Pn **Pn** **14 01 24.7 -0.7**
ZAK Pg **Pb** **14 01 34.1 +1.1**
ZAK Sg **Sb** **14 02 15.8 +0.4**
**TLY Talaya 3.69 77** *e*PN **Pb** **14 01 34.2 -2.1**
TLY *e* 14 02 21.6
TLY pmax pmax
comp=Z,48nm,0.6s
TLY smax smax
comp=N,396nm,0.8s
**IRK Irkutsk 4.18 70** *e*PN **Pb** **14 01 44.3 -0.5**
IRK *e* 14 02 36.5
IRK pmax pmax
comp=Z,171nm,0.1s
IRK smax smax
comp=N,1μm,0.4s
**IRK Irkutsk 4.18 70** Pg **Pb** **14 01 44.8 0.0**
IRK Sg **Sb** **14 02 37.8 +2.5**
**DJOS Djoyskaya Sosn 4.41 297** Pn **Pb** **14 01 46.2 -2.5**
DJOS Pg **Pg** **14 01 56.5 +1.0**
DJOS Sg **Sg** **14 02 53.6 +0.9**
**CERR Cheremushki 4.42 298** Pn **Pn** **14 01 42.7 +4.4**
CERR Pg **Pg** **14 01 55.7 -0.1**
CERR Sg **Sg** **14 02 53.6 +0.5**
**LSTR Listvyanka 4.44 76** *e*PN **Pn** **14 01 38.9 +0.3**
LSTR *e* 14 01 48.5
LSTR *e* 14 02 43.6
LSTR pmax pmax
comp=Z,30nm,0.7s
LSTR smax smax
comp=N,228nm,0.7s
**MINR Mina 4.52 332** Pn Pn 14 01 45.0 +5.4
MINR Pg **Pg** **14 01 55.4 -2.3**
MINR Sg **Sg** **14 02 57.1 +0.8**
**TRG Tyrgan 5.55 68** *e*PN **Pn** **14 01 53.4 -0.3**
TRG *e* 14 02 09.7
TRG *e* 14 03 19.3
TRG pmax pmax
comp=Z,25nm,0.6s
TRG smax smax
comp=N,275nm,0.8s
**TRG Tyrgan 5.55 68** Pg **Pb** **14 02 11.2 +3.3**
TRG Sg **Sg** **14 03 20.5 -8.5**
**SHRR Shira 5.87 310** Sg **Sg** **14 03 36.3 -3.0**
**GZL Zheleznogorsk 5.90 336** Sg **Sg** **14 03 38.8 -1.5**
**SHTK Zheleznogorsk- 5.94 336** Sg **Sg** **14 03 36.6 -5.1**
**LUZB Luzhba, Kemero 6.13 300** Pg **Pb** **14 02 22.0 +4.1**
LUZB Sg **Sg** **14 03 43.1 -4.6**
**CUR Chagan-Uzun 6.14 266** Pn **Pn** **14 02 04.9 +3.0**
CUR Pg Pb 14 02 26.6 +8.4
CUR Sg **Sg** **14 03 45.1 -2.9**
**ULGR Ulagan, Altay 6.30 271** Pn Pn 14 02 09.0 +4.9
ULGR Pg **Pg** **14 02 31.3 -0.3**
ULGR Sg **Sg** **14 03 54.8 +1.6**
**SONM Songino Array 6.38 116** Pn **Pn** **14 02 02.7 -2.6**
comp=N,0.4nm,0.3s,baz=298,slow=14,SNR=11
SONM Pg **Pb** **14 02 21.2 -1.1**
comp=N,7.4nm,0.3s,baz=299,slow=18,SNR=47
SONM Lg Lg 14 03 47.3
comp=N,9.9nm,0.3s,baz=300,slow=27,SNR=11
**TASR Tashtagol 6.45 290** Pn Pn 14 02 10.7 +4.6
TASR Sg **Sg** **14 03 54.9 -3.0**
**OGRR Ongureny 6.53 62** *e*PN **Pn** **14 02 10.4 +3.2**
OGRR *e* 14 02 30.1
OGRR *e* 14 03 51.5
OGRR pmax pmax
comp=Z,26nm,0.9s
OGRR smax smax
comp=E,455nm,1.7s
**AKAR Aktash 6.56 268** Pn Pn 14 02 15.7 +8.0
AKAR Pg **Pg** **14 02 35.9 -0.7**
AKAR Sg **Sg** **14 03 57.6 -3.9**
**CHBI Chibit, Altay 6.63 268** Pn Pn 14 02 17.0 +8.3
CHBI Pg **Pg** **14 02 39.5 +1.4**
CHBI Sg **Sg** **14 04 01.6 -2.3**
**ARTR Artybash 6.69 281** Pn Pn 14 02 16.8 +7.4
ARTR Pg **Pg** **14 02 37.6 -1.5**
ARTR Sg **Sg** **14 04 01.4 -4.2**
**ULN Ulaanbaatar 6.74 114** ⇓*e*PN **Pn** **14 02 07.4 -2.9**
**DGZ Jazzator, Alta 6.81 263** *de*PN **Pn** **14 02 13.4 +2.3**
**DGZ Jazzator, Alta 6.81 263** Pn **Pn** **14 02 13.4 +2.3**
DGZ Pg Pg 14 02 39.2 -2.2
DGZ Sg **Sg** **14 04 05.6 -3.9**
**MALIN Malinovka, Kuz 6.96 295** Sg **Sg** **14 04 13.8 -0.6**
**TAIL Tailep, Kuzbas 7.02 295** Sg **Sg** **14 04 13.8 -2.3**
**ERU Erunakovo, Kuz 7.14 300** Sg **Sg** **14 04 16.0 -4.2**
**BRCR Berchikul' 7.39 313** Pn **Pn** **14 02 22.0 +3.0**
BRCR Pg Pb 14 02 45.0 +5.6
BRCR Sg **Sg** **14 04 25.4 -2.7**
**ELT Eltsovka 7.53 292** Pn Pn 14 02 27.6 +6.8
ELT Pg **Pg** **14 02 53.2 -1.9**
ELT Sg **Sg** **14 04 30.6 -1.9**
**VCHU Verkh-Chumysh, 7.60 298** Sg **Sg** **14 04 32.9 -1.9**
**SALR Pechorkino, Sa 8.16 300** Sg **Sg** **14 04 50.7 -2.1**
**UKR Ust'-Kan 8.28 275** Pn Pn 14 02 38.4 +7.2
UKR Pg **Pg** **14 03 07.8 -1.7**
UKR Sg **Sg** **14 04 52.0 -4.6**
**ZAA0 Zalesovo Array 8.52 296** ⇑Pg Pg 14 03 01.6 -12
comp=E,0.9nm,1.2s
ZAA0 ⇓Lg Lg 14 04 48.5
comp=E,6.1nm,0.9s
**ZALV Zalesovo Beam 8.52 296** Pn **Pn** **14 02 32.5 -1.9**
comp=E,0.1nm,0.3s,baz=100,slow=13,SNR=1.4
ZALV Pg Pg 14 03 00.6 -13
comp=E,0.4nm,0.3s,baz=109,slow=13,SNR=7.0
ZALV Lg Lg 14 05 00.4
comp=E,1.1nm,0.3s,baz=108,slow=24,SNR=6.8
**NVSII Novosibirsk 9.66 299** Sg Sn 14 05 39.8 +61
**BSTK Bystrovka, Nov 9.90 297** Sg Sn 14 05 45.3 +61
**MK31 Makanchi Array 11.08 254** P Pn 14 03 16.7 +7.2
**MK31 Makanchi Array 11.08 254** ⇑Pn Pn 14 03 16.7 +7.2
comp=E,0.2nm,0.5s,baz=73,slow=14,SNR=4.2
MK31 ⇑Pg 14 03 57.8
comp=E,1.7nm,0.7s,baz=78,slow=18,SNR=3.6
MK31 ⇑Lg Lg 14 06 25.7
comp=E,16nm,1.1s,baz=72,slow=23,SNR=5.6
**MKAR Makanchi Array 11.08 254** Pn **Pn** **14 03 10.0 +0.5**
comp=E,0.0nm,0.3s,baz=66,slow=13,SNR=2.1
MKAR Pg 14 03 47.3
comp=E,0.2nm,0.3s,baz=60,slow=12,SNR=5.8
MKAR Lg Lg 14 06 19.0
comp=E,0.3nm,0.3s,baz=60,slow=23,SNR=8.4
**MAKZ Makanchi 11.26 254** P Pn 14 03 23.5 +11
**MAKZ Makanchi 11.26 254** ⇑Pn Pn 14 03 23.5 +11
comp=E,0.8nm,0.7s
MAKZ ⇑Pg 14 04 01.1
comp=E,1.9nm,0.7s
MAKZ ⇑Lg Lg 14 06 33.0
comp=E,34nm,1.4s
**KURK Kurchatov 12.18 276** ⇑*i*P **Pn** **14 03 26.8 +2.3**
KURK pmax pmax
comp=Z,11nm,3.9s
**KURK Kurchatov 12.18 276** ⇑Pn **Pn** **14 03 26.6 +2.1**
comp=Z,18nm,3.7s
KURK ⇑Lg Lg 14 06 52.5
comp=Z,9.1nm,0.9s
**KURBB Kurchatov Arra 12.25 276** Pn Pn 14 03 21.9 -3.5
comp=Z,0.0nm,0.3s,baz=84,slow=14,SNR=1.4
KURBB Lg Lg 14 06 58.3
comp=Z,0.0nm,0.3s,baz=79,slow=37,SNR=3.4
**KURBB Kurchatov Arra 12.25 276** P **Pn** **14 03 25.5 0.0**
**KURBB Kurchatov Arra 12.25 276** ⇑Pn **Pn** **14 03 25.5 0.0**
comp=Z,1.7nm,0.8s
KURBB ⇑Lg Lg 14 06 56.7
comp=Z,38nm,0.8s
**HIA Hailar 14.12 88** ⇑*e*P **Pn** **14 03 47.9 -3.2**
HIA pmax pmax
comp=Z,4.0nm,0.7s
**BVAR Borovoye Array 17.01 288** Pn **Pn** **14 04 25.3 -3.7**
comp=Z,0.1nm,0.3s,baz=79,slow=37,SNR=3.7
**BRVK Borovoye 17.08 288** ⇓*e*P **Pn** **14 04 30.5 +0.8**
BRVK pmax pmax
comp=Z,2.0nm,0.9s
**AAK Ala-Archa 17.99 251** Pn **Pn** **14 04 39.9 -1.4**
comp=Z,0.1nm,0.3s,baz=45,slow=11,SNR=1.6
AAK Lg Lg 14 10 03.4
comp=Z,0.1nm,0.3s,baz=19,slow=22,SNR=1.5
**AAK Ala-Archa 17.99 251** ⇓*e*P **Pn** **14 04 43.8 +2.5**
AAK pmax pmax
comp=Z,1.0nm,1.2s
**NRIK Noril'sk 19.08 349** Lg Lg 14 10 35.6
comp=Z,0.2nm,0.3s,baz=161,slow=20,SNR=1.1
**NRIK Noril'sk 19.08 349** ⇑*e*P **Pn** **14 04 54.9 +0.7**
NRIK pmax pmax
comp=Z,2.0nm,0.9s
**YAK Yakutsk 20.52 45** ⇑*e*P **P** **14 05 09.1 0.0**
YAK pmax pmax
comp=Z,2.0nm,0.8s
**KLR Kul'dur 21.69 81** ⇑*i*P **P** **14 05 19.6 -2.3**
KLR pmax pmax
comp=Z,7.0nm,2.0s
**ARU Arti 23.66 299** ⇓*e*P **P** **14 05 42.7 +0.3**
ARU pmax pmax
comp=Z,5.0nm,2.0s
**TIXI Tiksi 24.97 23** ⇑*e*P **P** **14 05 55.9 +1.6**
TIXI pmax pmax
comp=Z,1.0nm,0.8s

*IDC* ***13*** *14:19:24.0±1.5, 47.99N×148.08E, h393km±19km, mb2.7/10, mb1 2.9/15, mb1mx2.8/61, mbtmp3.5/15, Error ellipse: s-maj=24.0km s-min=14.9km az=151.0*
**ISC 13 14:19:20.2±0.7, 47.80N±0.09×148.3E±0.1, h350km, n28, σ2.39/32, mb3.2/10, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEM2** | **Nemuro 2** | **4.78** | **203** | P | **Pn** | **14 20 39.2** | **+1.8** |
| NEM2 | | | | *e*S | **S** | **14 21 40.2** | **+0.4** |
| **JNK** | **Nakash** | **4.89** | **212** | P | **Pn** | **14 20 42.1** | **+3.4** |
| **ASAJ** | **Asahikawa** | **5.40** | **229** | P | Pn | 14 20 49.4 | +5.1 |
| | 0.3nm,0.3s,baz=25,slow=9.7,SNR=5.6 | | | | | | |
| **JAK** | **Akkeshi** | **5.42** | **209** | P | **Pn** | **14 20 46.4** | **+1.9** |
| JAK | | | | *e*S | **S** | **14 21 52.9** | **+0.2** |
| **JAR** | **Ashorobuto** | **5.50** | **217** | P | **Pn** | **14 20 48.8** | **+3.4** |
| **JOB** | **Onbets** | **5.81** | **214** | P | **Pn** | **14 20 51.7** | **+2.4** |
| JOB | | | | *e*S | **S** | **14 22 00.7** | **0.0** |
| **JCH** | **Churui** | **6.24** | **216** | P | **Pn** | **14 20 55.4** | **+1.7** |
| JCH | | | | *e*S | **S** | **14 22 06.8** | **-2.8** |
| **JBT2** | **Biratori 2** | **6.52** | **222** | *e*S | **S** | **14 22 14.9** | **-0.7** |
| **JNBK** | **Urakawa-nobuka** | **6.76** | **217** | P | **Pn** | **14 21 00.9** | **+1.1** |
| **JNB** | **Noboribetsu** | **7.38** | **226** | *e*S | **S** | **14 22 33.6** | **-0.4** |
| **JSH** | **Shimam** | **7.76** | **231** | P | **Pn** | **14 21 15.3** | **+3.8** |
| **JKB** | **Kayabe** | **7.83** | **224** | P | **Pn** | **14 21 13.4** | **+1.1** |
| JKB | | | | *e*S | **S** | **14 22 38.9** | **-4.8** |
| **JYM2** | **Yakumo 2** | **7.98** | **227** | P | **Pn** | **14 21 16.7** | **+2.7** |
| **PETK** | **Petropavlovsk-** | **8.02** | **45** | P | **P** | **14 21 17.8** | **+0.3** |
| | 0.2nm,0.3s,baz=225,slow=6.6,SNR=13 | | | | | | |
| PETK | | | | S | S | 14 22 35.9 | -12 |
| | 0.1nm,0.3s,baz=299,slow=9.7,SNR=2.4 | | | | | | |
| **JTM** | **Tenmabayashi** | **8.71** | **219** | *e*S | **S** | **14 22 56.2** | **-6.6** |
| **KLR** | **Kul'dur** | **11.05** | **284** | P | **P** | **14 21 53.4** | **+2.3** |
| | 0.2nm,0.3s,baz=82,slow=7.5,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.88** | **258** | P | **P** | **14 22 01.5** | **+1.2** |
| | baz=58,slow=12,SNR=2.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.48** | **217** | P | **Pn** | **14 22 20.2** | **+0.7** |
| | 0.1nm,0.3s,baz=28,slow=9.9,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **27.87** | **286** | P | **P** | **14 24 39.5** | **+0.7** |
| | 0.1nm,0.4s,baz=90,slow=7.2,SNR=1.6 | | | | | | |
| **ILAR** | **Eielson Array** | **37.80** | **39** | P | **P** | **14 26 03.7** | **0.0** |
| | 0.3nm,0.5s,baz=246,slow=5.9,SNR=6.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.03** | **36** | P | **P** | **14 27 53.8** | **-0.6** |
| | 0.3nm,0.6s,baz=261,slow=5.3,SNR=3.9 | | | | | | |
| **FINES** | **FINESS Array B** | **61.63** | **332** | P | **P** | **14 28 58.4** | **-2.8** |
| | 0.6nm,0.5s,baz=51,slow=10.0,SNR=4.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **64.82** | **60** | P | **P** | **14 29 23.2** | **+0.5** |
| | 0.2nm,0.4s,baz=284,slow=3.6,SNR=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **66.11** | **339** | P | **P** | **14 29 28.1** | **-2.1** |
| | 0.5nm,0.5s,baz=26,slow=6.4,SNR=2.0 | | | | | | |
| **HFS** | **Hagfors** | **66.26** | **337** | P | **P** | **14 29 28.5** | **-2.6** |
| | 1.9nm,0.9s,baz=63,slow=14,SNR=1.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **66.73** | **52** | P | **P** | **14 29 34.7** | **0.0** |
| | 0.3nm,0.6s,baz=165,slow=2.9,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **72.30** | **194** | P | **P** | **14 30 08.5** | **+0.2** |
| | 0.2nm,0.8s,baz=11,slow=5.7,SNR=1.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **79.78** | **58** | P | **P** | **14 30 50.1** | **-0.3** |
| | 0.2nm,0.5s,baz=319,slow=3.6,SNR=2.7 | | | | | | |

*IDC* ***13*** *14:37:14.0±0.7, 27.63N×85.50E, h0km, mb3.8/16, mb1 3.9/18, mb1mx3.7/44, mbtmp3.8/18, ML3.6/2, MS3.4/1, Ms1 3.4/1, ms1mx2.5/88, Error ellipse: s-maj=24.8km s-min=14.7km az=50.0*
**ISC 13 14:37:18.8±0.5, 27.63N±0.06×85.48E±0.07, h35km, n40, σ1.9/38/41, mb3.8/17, 1C, Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOK** | **Bokaro** | **3.84** | **174** | *e*P | **Pn** | **14 38 16.0** | **+0.5** |
| BOK | | | | *e*S | **Sn** | **14 38 58.0** | **-1.4** |
| **CHLP** | **Challavanipeta** | **9.18** | **188** | *e*P | **Pn** | **14 39 31.5** | **+2.7** |
| **RPR** | **Rampur** | **10.42** | **214** | *e*P | **Pn** | **14 39 47.2** | **+1.4** |
| **SRSP** | **Sriramsagar** | **10.87** | **219** | *e*P | **Pn** | **14 39 52.4** | **+0.5** |
| SRSP | | | | *e*S | **Sn** | **14 41 52.6** | **+0.3** |
| **PVM** | **Polavaram** | **10.93** | **200** | *e*P | **Pn** | **14 39 54.3** | **+1.5** |
| **MYLAV** | **Mylavaram** | **11.72** | **203** | *e*P | **Pn** | **14 40 06.2** | **+2.6** |
| **CUPL** | **Choutuppal** | **11.94** | **212** | *e*P | **Pn** | **14 40 07.0** | **+0.4** |
| **HYBB** | **Hyderabad (bro** | **12.01** | **214** | *e*P | **Pn** | **14 40 07.3** | **-0.3** |
| **NJS** | **Nagarjunasagar** | **12.42** | **209** | *e*P | **Pn** | **14 40 13.5** | **+0.3** |
| **KLRI** | **Killari** | **12.55** | **223** | *e*P | **Pn** | **14 40 14.8** | **-0.2** |
| **ADKI** | **Addanki** | **12.80** | **205** | *e*P | **Pn** | **14 40 17.4** | **-0.9** |
| **THW** | **Thamme Wali** | **12.94** | **297** | ⇑P | **Pn** | **14 40 18.9** | **-1.4** |
| **SRLM** | **Srisailam** | **13.00** | **209** | *e*P | **Pn** | **14 40 20.5** | **-0.7** |
| **CEP** | **Cherat** | **13.20** | **301** | P | **Pn** | **14 40 21.0** | **-2.9** |
| **RCLA** | **Racherla** | **13.55** | **208** | *e*P | **Pn** | **14 40 27.8** | **-0.8** |
| **URV** | **Uravakonda** | **14.76** | **213** | *e*P | **Pn** | **14 40 43.8** | **-1.3** |
| **SKHT** | **Srikalahasti** | **14.84** | **202** | *e*P | **Pn** | **14 40 46.0** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **15.38** | **124** | Pn | **Pn** | **14 40 49.8** | **-3.5** |
| | 0.1nm,0.3s,baz=302,slow=8.4,SNR=2.3 | | | | | | |
| **WMQ** | **Urumqi** | **16.25** | **6** | *e*P | **P** | **14 41 10.5** | **+3.4** |
| **GTA** | **Gaotai** | **16.73** | **42** | *e*P | **Pn** | **14 41 10.6** | **0.0** |
| GTA | | | | pP | pP | 14 41 21.6 | -0.5 |
| GTA | | | | sP | sP | 14 41 26.6 | -0.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **17.43** | **332** | P | **Pn** | **14 41 17.6** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=198,slow=18,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.29** | **353** | P | **P** | **14 41 40.6** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=174,slow=12,SNR=20 | | | | | | |
| **XAN** | **Xi'an** | **21.09** | **67** | P | **P** | **14 41 59.0** | **-1.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.56** | **349** | P | **P** | **14 42 26.3** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=170,slow=10,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **25.93** | **33** | P | **P** | **14 42 47.6** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=220,slow=9.7,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.29** | **359** | P | **P** | **14 42 51.5** | **+0.6** |
| | comp=Z,2.6nm,0.8s,baz=179,slow=8.9,SNR=9.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **27.73** | **340** | P | **P** | **14 43 05.4** | **+1.5** |
| | comp=Z,0.4nm,0.4s,baz=152,slow=9.9,SNR=1.9 | | | | | | |
| **KSRS** | **Korea Array** | **36.83** | **64** | P | **P** | **14 44 22.9** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=262,slow=8.4,SNR=1.1 | | | | | | |
| **ASF** | **Jabal al Asfar** | **42.08** | **288** | P | **P** | **14 45 07.2** | **-0.4** |
| | comp=Z,2.7nm,0.5s,baz=24,slow=12,SNR=6.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **45.07** | **65** | LR | LR | 15 06 08.7 | |
| | comp=Z,40nm,18.6s,baz=140,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **47.97** | **315** | P | **P** | **14 45 54.0** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=82,slow=7.0,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **51.57** | **328** | P | **P** | **14 46 22.0** | **+0.8** |
| | comp=Z,3.3nm,0.8s,baz=127,slow=12,SNR=3.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.98** | **338** | P | **P** | **14 46 39.9** | **+1.0** |
| | comp=Z,3.2nm,0.9s,baz=101,slow=7.7,SNR=1.6 | | | | | | |
| **GERES** | **GERESS Array B** | **58.02** | **312** | P | **P** | **14 47 09.1** | **+0.9** |
| | comp=Z,0.2nm,0.4s,baz=80,slow=9.6,SNR=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **58.66** | **327** | P | **P** | **14 47 12.8** | **+0.4** |
| | comp=Z,0.8nm,0.9s,baz=85,slow=5.0,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.88** | **130** | P | **P** | **14 48 08.3** | **+0.6** |
| | comp=Z,1.1nm,0.6s,baz=314,slow=5.6,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **69.17** | **133** | P | **P** | **14 48 22.7** | **+0.7** |
| | comp=Z,1.0nm,0.7s,baz=314,slow=6.3,SNR=21 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.59** | **279** | P | **P** | **14 49 18.5** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=86,slow=3.5,SNR=2.0 | | | | | | |
| **STKA** | **Stephens Creek** | **79.73** | **134** | P | **P** | **14 49 23.7** | **+0.6** |
| | comp=Z,1.3nm,0.9s,baz=342,slow=3.2,SNR=2.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.75** | **9** | P | **P** | **14 50 08.1** | **-0.4** |
| | comp=Z,0.1nm,0.4s,baz=260,slow=6.8,SNR=2.1 | | | | | | |

**KRSC 13 15:01:21.7±0.7, 52.76N×159.30E, h81km±5km, ML3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NLC** | **Nalytchevo** | **0.41** | **4** | P | Pn | 15 01 35.8 | +1.1 |
| NLC | | | | S | Sn | 15 01 45.6 | +1.2 |
| **DALK** | **Dalny** | **0.43** | **309** | P | Pn | 15 01 35.7 | +0.8 |
| DALK | | | | S | Sn | 15 01 45.2 | +0.6 |
| **PET** | **Petropavlovsk** | **0.47** | **304** | P | Pn | 15 01 36.1 | +0.9 |
| PET | | | | S | Sn | 15 01 45.7 | +0.5 |
| **UGLR** | **Uglovaya** | **0.53** | **327** | P | Pn | 15 01 37.2 | +1.3 |
| UGLR | | | | S | Sn | 15 01 47.9 | +1.5 |
| **SPN** | **Mys Shipunski** | **0.55** | **52** | P | Pn | 15 01 37.1 | +1.2 |
| SPN | | | | S | Sn | 15 01 48.0 | +1.5 |
| **SDLR** | **Sedlovina** | **0.57** | **334** | P | Pn | 15 01 37.4 | +1.1 |
| SDLR | | | | S | Sn | 15 01 48.4 | +1.3 |
| **RUS** | **Russkaya** | **0.58** | **236** | P | Pn | 15 01 37.4 | +1.2 |
| RUS | | | | S | Sn | 15 01 48.1 | +1.1 |
| **SMAR** | **Somma** | **0.58** | **329** | P | Pn | 15 01 37.5 | +1.0 |
| SMAR | | | | S | Sn | 15 01 48.3 | +0.8 |
| **AVH** | **Avacha** | **0.61** | **326** | P | Pn | 15 01 37.9 | +1.4 |
| AVH | | | | S | Sn | 15 01 49.5 | +1.9 |
| **KRER** | **Koryakskii** | **0.64** | **329** | P | Pn | 15 01 38.3 | +1.3 |
| KRER | | | | S | Sn | 15 01 50.1 | +1.8 |
| **KOK** | **Koryaka** | **0.66** | **323** | P | Pn | 15 01 38.4 | +1.3 |
| KOK | | | | S | Sn | 15 01 50.3 | +1.7 |
| **KRMR** | **Karymshinskiy** | **0.71** | **276** | P | Pn | 15 01 38.0 | +0.5 |
| KRMR | | | | S | Sn | 15 01 50.0 | +0.7 |
| **MTVR** | **Mutnovka** | **0.74** | **248** | P | Pn | 15 01 39.4 | +1.5 |
| MTVR | | | | S | Sn | 15 01 51.9 | +1.9 |
| **GRL** | **Gorelyy** | **0.78** | **255** | P | Pn | 15 01 40.1 | +1.8 |
| GRL | | | | S | Sn | 15 01 53.2 | +2.5 |
| **KDTR** | **Khodutka, Kamc** | **1.22** | **219** | P | Pn | 15 01 44.7 | +1.3 |
| KDTR | | | | S | Sn | 15 02 01.1 | +1.5 |
| **GNL** | **Ganaly** | **1.24** | **319** | P | Pn | 15 01 44.3 | +0.5 |
| **KII** | **Karymskiy** | **1.28** | **4** | P | Pn | 15 01 46.0 | +1.8 |
| KII | | | | S | Sn | 15 02 03.6 | +2.4 |
| **APC** | **Apacha** | **1.31** | **278** | P | Pn | 15 01 45.6 | +1.1 |
| APC | | | | S | Sn | 15 02 03.2 | +1.5 |
| **MKZ** | **Mys Kozlova** | **2.31** | **38** | P | Pn | 15 01 58.6 | +1.0 |
| MKZ | | | | S | Sn | 15 02 25.5 | +0.4 |
| **TUMD** | **Tumrok D** | **2.53** | **14** | P | Pn | 15 02 02.7 | +2.1 |
| TUMD | | | | S | Sn | 15 02 32.7 | +2.2 |
| **TUMR** | **Tumrok** | **2.57** | **11** | P | Pn | 15 02 03.5 | +2.2 |
| **KMNR** | **Kamenistaya** | **3.05** | **10** | P | Pn | 15 02 10.2 | +2.5 |
| **KBTR** | **Krutoberegovo** | **4.01** | **29** | P | Pn | 15 02 22.5 | +1.8 |

**IDC 13 15:07:12.3±3.4, 7.82S×124.30E, h504km±51km, mb2.3/1, mb1 2.6/4, mb1mx2.4/45, mbtmp3.3/4, Error ellipse: s-maj=188.0km s-min=26.3km az=53.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **2.45** | **195** | P | P | 15 08 21.8 | +1.5 |
| | 12nm,0.3s,baz=89,slow=5.1,SNR=13 | | | | | | |
| BATI | | | | S | S | 15 09 15.3 | -0.1 |
| | 3.6nm,0.3s,baz=108,slow=9.6,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.48** | **142** | P | P | 15 10 25.6 | -1.9 |
| | 0.2nm,0.3s,baz=309,slow=12,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **18.25** | **151** | P | P | 15 10 55.5 | +0.7 |
| | 0.2nm,0.3s,baz=329,slow=8.9,SNR=27 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.95** | **330** | P | P | 15 17 07.8 | -0.3 |
| | 0.1nm,0.4s,baz=133,slow=7.9,SNR=1.8 | | | | | | |

**IDC 13 15:13:23.5±2.3, 6.46S×129.56E, h0km, mb3.4/1, mb1 3.5/3, mb1mx3.3/35, mbtmp3.3/3, ML3.5/2, MS3.6/2, Ms1 3.6/2, ms1mx2.5/34, Error ellipse: s-maj=113.7km s-min=32.9km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.19** | **161** | Pn | Pn | 15 16 46.4 | +0.5 |
| | 0.2nm,0.3s,baz=340,slow=10,SNR=13 | | | | | | |
| WRA | | | | Sn | Sn | 15 19 05.8 | -18 |
| | 0.2nm,0.3s,baz=333,slow=22,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **17.61** | **167** | P | Pn | 15 17 30.4 | -0.2 |
| | 0.1nm,0.3s,baz=344,slow=13,SNR=14 | | | | | | |
| ASAR | | | | S | Sn | 15 20 27.2 | -20 |
| | 0.1nm,0.3s,baz=353,slow=26,SNR=1.8 | | | | | | |
| **CTA** | **Charters Tower** | **21.13** | **131** | LR | LR | 15 26 27.6 | |
| | comp=Z,117nm,18.9s,baz=141,slow=37 | | | | | | |
| **HNR** | **Honiara** | **30.23** | **98** | LR | LR | 15 32 41.6 | |
| | comp=Z,121nm,18.1s,baz=22,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.53** | **327** | P | P | 15 24 21.7 | 0.0 |
| | 0.4nm,0.9s,baz=126,slow=6.2,SNR=1.6 | | | | | | |

*TUL* ***13*** *15:18:43±0.8, 36.51N±0.02×98.72W±0.02, h7km±6km, ML2.6, mb_Lg3.0/4(NEIC), Error ellipse: s-maj=3.1km s-min=1.1km az=140.0*
**NEIC 13 15:18:43.1±0.8, 36.50N±0.02×98.69W±0.03, h11km±5km, Error ellipse: s-maj=3.5km s-min=1.6km az=53.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.28** | **245** | Pg | Pg | 15 18 48.4 | -0.3 |
| **FNO** | **Franklin** | **1.62** | **139** | Pn | Pn | 15 19 11.4 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.76** | **182** | Pn | Pn | 15 19 14.2 | +0.8 |
| **T35A** | **Sooner Cattle** | **1.80** | **76** | Pn | Pb | 15 19 15.1 | -0.9 |
| **W35A** | **Tecumseh** | **1.99** | **132** | Pn | Pn | 15 19 17.2 | +0.6 |
| **U40A** | **Yellville** | **4.71** | **90** | IAmb_Lg | | 15 21 16.6 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **HBAR** | **Harrisburg** | **6.58** | **96** | IAmb_Lg | | 15 22 30.4 | |
| | comp=Z,59nm,0.7s | | | | | | |

*NEIC* ***13*** *15:23:17.9±1.0, 7.28S±0.08×108.48E±0.06, h123km±8km, mb4.3/15, Error ellipse: s-maj=12.6km s-min=7.1km az=207.0*
*IDC* ***13*** *15:23:21.0±0.2, 7.16S×108.76E, h150km±5km, mb3.7/14, mb1 3.9/16, mb1mx3.5/50, mbtmp4.2/16, Error ellipse: s-maj=16.4km s-min=9.0km az=42.0*
*DJA* ***13*** *15:23:20.6±0.2, 8°S±4°×10°9E±°, h123km±3km, M4.1/18, mb4.4/8, mB5.2/3, MLv3.9/18, Mw(mB)4.6/3*
**ISC 13 15:23:20.2±0.6, 7.47S±0.07×108.69E±0.05, h145km±4km, n62, σ1.9/44/76, mb4.2/21, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KPJI** | **Karang Pucung** | **0.27** | **61** | P | **Pn** | **15 23 38.6** | **-1.5** |
| **CMJI** | **Cimerak**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **STKI** | **Sintang** | **7.98** | **21** | P | | **Pn** | **15 25 15.7 +2.2** |
| | 0.2nm8.3nm,0.4s | | | | | | |
| **BATI** | **Baumata** | **15.04** | **102** | P | | **Pn** | **15 26 44.0 -1.5** |
| | 2.8nm,0.3s,baz=287,slow=14,SNR=1.9 | | | | | | |
| **SOEI** | **Soe** | **15.57** | **100** | | | **P** | **15 26 54.8 +1.5** |
| SOEI | | | | IAmb | | IAmb | 15 27 02.1 |
| | comp=Z,16nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.60** | **124** | P | | **Pn** | **15 27 39.0 -1.1** |
| | comp=Z,0.9nm,0.3s,baz=307,slow=6.3,SNR=42 | | | | | | |
| **KNRA** | **Kununurra** | **21.28** | **114** | P | | **P** | **15 27 55.6 +0.2** |
| **MTN** | **Manton Dam** | **22.72** | **105** | P | | **P** | **15 28 09.8 -0.2** |
| MTN | | | | IAmb | | IAmb | 15 28 24.9 |
| | comp=Z,16nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.50** | **340** | P | | **P** | **15 28 49.7 -3.5** |
| | comp=Z,0.2nm,0.4s,baz=173,slow=7.5,SNR=1.3 | | | | | | |
| CMAR | | | | pP | | **pP** | **15 29 24.2 +0.4** |
| | comp=Z,1.5nm,0.9s,baz=181,slow=9.2,SNR=5.4 | | | | | | |
| CMAR | | | | ScP | | **ScP** | **15 35 33.5 -1.6** |
| | comp=Z,1.2nm,0.9s,baz=198,slow=3.8,SNR=8.7 | | | | | | |
| **WB0** | **Warramunga Arr** | **27.76** | **119** | P | | **P** | **15 28 56.9 +1.3** |
| WB0 | | | | IAmb | | IAmb | 15 28 57.2 |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.78** | **119** | P | | **P** | **15 28 56.4 +0.6** |
| | comp=Z,5.3nm,0.9s,baz=285,slow=9.4,SNR=24 | | | | | | |
| WRA | | | | PcP | | **PcP** | **15 32 08.9 +0.2** |
| | comp=Z,0.7nm,0.7s,baz=271,slow=1.7,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.78** | **119** | P | | **P** | **15 28 56.7 +0.9** |
| WRA | | | | | | **PcP** | **15 32 09.4 +0.7** |
| **WRAB** | **Tennant Creek** | **27.79** | **119** | P | | **P** | **15 28 57.0 +1.2** |
| WRAB | | | | IAmb | | IAmb | 15 28 58.0 |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **27.79** | **119** | P | | **P** | **15 28 56.8 +0.9** |
| WB2 | | | | IAmb | | IAmb | 15 28 57.5 |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **27.96** | **119** | P | | **P** | **15 28 58.5 +1.1** |
| WR0 | | | | IAmb | | IAmb | 15 28 58.8 |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **29.06** | **126** | P | | **P** | **15 29 07.9 +0.8** |
| | comp=Z,6.1nm,0.7s,baz=304,slow=8.9,SNR=109 | | | | | | |
| ASAR | | | | pP | | **pP** | **15 29 38.8 +1.1** |
| | comp=Z,0.7nm,0.7s,baz=308,slow=10.0,SNR=1.6 | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15 32 12.7 +0.8** |
| | comp=Z,0.9nm,0.5s,baz=307,slow=2.1,SNR=13 | | | | | | |
| ASAR | | | | ScP | | **ScP** | **15 35 40.1 +0.1** |
| | comp=Z,0.5nm,0.7s,baz=317,slow=2.2,SNR=5.4 | | | | | | |
| **AS31** | **Alice Springs** | **29.06** | **126** | P | | **P** | **15 29 07.9 +0.8** |
| AS31 | | | | IAmb | | IAmb | 15 29 09.1 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **COEN** | **Coen** | **34.46** | **104** | P | | **P** | **15 29 54.0 -0.5** |
| COEN | | | | IAmb | | IAmb | 15 29 55.3 |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **35.79** | **139** | P | | **P** | **15 30 06.5 +1.0** |
| **CTA** | **Charters Tower** | **38.48** | **113** | P | | **P** | **15 30 29.6 +1.2** |
| | comp=Z,3.7nm,0.8s,baz=310,slow=7.9,SNR=4.2 | | | | | | |
| **STKA** | **Stephens Creek** | **39.09** | **133** | P | | **P** | **15 30 35.1 +1.7** |
| | comp=Z,17nm,0.6s,baz=308,slow=9.0,SNR=42 | | | | | | |
| STKA | | | | PcP | | **PcP** | **15 32 41.0 +0.6** |
| | comp=Z,1.5nm,0.5s,baz=322,slow=6.2,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **39.09** | **133** | P | | **P** | **15 30 35.0 +1.7** |
| STKA | | | | IAmb | | IAmb | 15 30 35.9 |
| | comp=Z,3.8nm,0.7s | | | | | | |
| STKA | | | | PcP | | **PcP** | **15 32 41.0 +0.6** |
| **SONM** | **Songino Array** | **55.10** | **358** | P | | **P** | **15 32 36.3 -0.9** |
| | comp=Z,0.8nm,0.5s,baz=177,slow=8.4,SNR=12 | | | | | | |
| SONM | | | | pP | | **pP** | **15 33 11.6 +0.5** |
| | comp=Z,1.7nm,1.2s,baz=179,slow=7.6,SNR=3.7 | | | | | | |
| SONM | | | | PcP | | **PcP** | **15 33 34.5 -2.3** |
| | comp=Z,0.3nm,0.5s,baz=172,slow=3.9,SNR=1.7 | | | | | | |
| SONM | | | | ScP | | **ScP** | **15 37 21.0 -0.9** |
| | comp=Z,0.2nm,0.6s,baz=168,slow=1.7,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **55.10** | **358** | P | | **P** | **15 32 35.3 -1.9** |
| SONM | | | | PcP | | **PcP** | **15 33 35.9 -0.9** |
| **MK31** | **Makanchi Array** | **58.90** | **339** | P | | **P** | **15 33 02.0 -1.9** |
| **MKAR** | **Makanchi Array** | **58.90** | **339** | P | | **P** | **15 33 01.9 -2.0** |
| | comp=Z,0.3nm,0.4s,baz=151,slow=7.8,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.90** | **339** | P | | **P** | **15 33 01.9 -2.1** |
| **KLR** | **Kul'dur** | **59.96** | **17** | P | | **P** | **15 33 08.8 -2.3** |
| | comp=Z,0.7nm,0.5s,baz=157,slow=4.7,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.47** | **339** | P | | **P** | **15 33 32.5 -2.0** |
| | comp=Z,0.2nm,0.3s,baz=155,slow=6.5,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.41** | **345** | P | | **P** | **15 33 37.8 -2.8** |
| | comp=Z,0.4nm,0.3s,baz=155,slow=6.5,SNR=4.4 | | | | | | |
| **BOSA** | **Boshof** | **80.72** | **242** | P | | **P** | **15 35 19.1 +1.2** |
| | comp=Z,1.6nm,0.8s,baz=23,slow=7.6,SNR=1.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **82.53** | **180** | P | | **P** | **15 35 28.6 +1.9** |
| | comp=Z,5.9nm,0.9s,baz=324,slow=2.2,SNR=11 | | | | | | |
| **QSPA** | **South Pole Qui** | **82.53** | **180** | P | | **P** | **15 35 28.5 +1.9** |
| **BRTR** | **Keskin Array B** | **83.39** | **311** | P | | **P** | **15 35 31.7 +0.2** |
| | comp=Z,0.2nm,0.3s,baz=142,slow=7.3,SNR=1.8 | | | | | | |
| **SNAA** | **Sanae** | **89.58** | **197** | P | | **P** | **15 36 03.8 +2.7** |
| | comp=Z,3.1nm,1.0s,baz=88,slow=2.7,SNR=4.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **116.71** | **21** | PKP | | **PKiKP** | **15 41 47.0 +0.1** |
| | comp=Z,0.2nm,0.5s,baz=334,slow=1.9,SNR=2.3 | | | | | | |
| YKA | | | | SKP | | **SKPdf** | **15 45 08.4 -0.5** |
| | comp=Z,0.3nm,0.7s,baz=333,slow=2.0,SNR=4.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **131.36** | **37** | SKPbc | | **SKPbc** | **15 45 26.6 -1.1** |
| | comp=Z,1.3nm,0.9s,baz=288,slow=1.4,SNR=9.2 | | | | | | |
| **SCHQ** | **Schefferville** | **132.63** | **356** | SKPbc | | **SKPbc** | **15 45 30.4 -1.1** |
| | comp=Z,2.1nm,0.6s,baz=1,8,slow=4.5,SNR=6.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **142.59** | **50** | SKPbc | | **SKPbc** | **15 46 01.2 -0.2** |
| | comp=Z,0.8nm,0.7s,baz=235,slow=0.7,SNR=10 | | | | | | |
| **CPUP** | **Villa Florida** | **143.77** | **202** | PKP | | **PKPdf** | **15 42 38.6 -0.2** |
| | comp=Z,3.2nm,0.8s,baz=89,slow=5.4,SNR=5.0 | | | | | | |
| **BDFB** | **Brasilia** | **147.45** | **225** | PKPbc | | **PKPdf** | **15 42 46.3 +0.8** |
| | comp=Z,2.2nm,0.6s,baz=96,slow=7.1,SNR=2.4 | | | | | | |

**IDC 13 15:28:22.9±7.0,7°45S×128°25E,h100km±74km,mb2.7/1, mb1 3.0/5,mb1mx2.8/40,mbtmp3.3/5,ML3.0/4,MS3.3/1, Ms1 3.3/1,ms1mx2.5/10,Error ellipse: s-maj=68.9km s-min=29.9km az=46.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.30** | **239** | P | Pn | 15 29 38.5 | -1.2 |
| | 1.6nm,0.3s,baz=68,slow=19,SNR=1.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.89** | **193** | P | Pn | 15 30 57.0 | +1.3 |
| | 0.1nm,0.3s,baz=23,slow=12,SNR=1.6 | | | | | | |
| FITZ | | | | S | Sn | 15 32 55.1 | -0.5 |
| | 0.2nm,0.3s,baz=82,slow=19,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.75** | **155** | P | Pn | 15 31 34.8 | +1.0 |
| | 0.0nm,0.3s,baz=344,slow=12,SNR=1.1 | | | | | | |
| WRA | | | | S | Sn | 15 34 00.3 | -4.8 |
| | 0.1nm,0.3s,baz=328,slow=24,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **17.01** | **162** | P | P | 15 32 16.6 | +1.5 |
| | 0.0nm,0.3s,baz=339,slow=9.9,SNR=2.2 | | | | | | |
| **LEM** | **Lembang** | **20.48** | **270** | LR | LR | 15 43 40.9 | |
| | comp=Z,72nm,18.6s,baz=137,slow=45 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.66** | **328** | P | P | 15 39 09.3 | -0.1 |
| | 0.1nm,0.3s,baz=113,slow=6.2,SNR=2.0 | | | | | | |

*TEH 13 15:35:50.1,35°29N×46°51E,h8km,ML3.0*
*ISN 13 15:35:50.9±1.2,35°30N×46°50E,h25km±16km,ML3.0*
**ISC 13 15:35:50.1±1.3,35°26N±0.04×46°55E±0.04,h7km±12km, n24,σ1°s24/29,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.58** | **194** | *e*Pg | **Pg** | **15 36 01.5** | **+0.2** |
| IDHR | | | | *e*Sg | **Sb** | **15 36 10.5** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.93** | **179** | *e* | | 15 36 24.9 | |
| | comp=Z,4μm,0.8s | | | | | | |
| IGHG | | | | *e*Pg | **Pg** | **15 36 08.1** | **+0.1** |
| **KER** | **Kermanshah** | **0.99** | **151** | *e*Sg | **Sn** | **15 36 24.3** | **-0.7** |
| KER | | | | *e*Pg | **Pg** | **15 36 09.6** | **+0.4** |
| **KCHF** | **Cheshme Sefid,** | **1.06** | **158** | *e*Pg | **Pg** | **15 36 10.7** | **+0.2** |
| KCHF | | | | *e*Sg | **Sn** | **15 36 26.2** | **-0.5** |
| KCHF | | | | *e* | | 15 36 28.9 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **IBZA** | **Bozab** | **1.33** | **126** | *e*Pg | **Pg** | **15 36 16.0** | **+0.3** |
| IBZA | | | | *e* | | 15 36 43.7 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IALM** | **Almabolaq** | **1.38** | **106** | *e*Pg | **Pb** | **15 36 16.4** | **-0.1** |
| **MAHB** | **Mahabad** | **1.65** | **336** | *e*Pg | **Pn** | **15 36 19.5** | **-0.2** |
| MAHB | | | | *e*Sg | **Sg** | **15 36 43.4** | **+0.1** |
| MAHB | | | | *e* | | 15 36 46.1 | |
| | comp=Z,4μm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.81** | **275** | *e*Pg | **Pb** | **15 36 23.0** | **-0.7** |
| | baz=93 | | | | | | |
| IKRK | | | | *e*Sg | **Sb** | **15 36 46.0** | **-0.6** |
| IKRK | | | | AML | AML | 15 36 50.2 | |
| | comp=N,198nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 15 36 50.3 | |
| | comp=E,150nm,0.3s | | | | | | |
| **HSAM** | **Samen** | **1.99** | **121** | *e*Pn | **Pb** | **15 36 26.4** | **-0.3** |
| **IKFM** | **Kafar-mosalman** | **2.04** | **148** | *e*Pn | **Pb** | **15 36 27.8** | **+0.4** |
| IKFM | | | | *e* | | 15 37 05.5 | |
| | comp=Z,3μm,0.8s | | | | | | |
| **HAGD** | **Aghdareh** | **2.17** | **101** | *e*Pn | **Pb** | **15 36 29.0** | **-0.8** |
| HAGD | | | | *e* | | 15 36 42.0 | |
| | comp=Z,494nm,0.3s | | | | | | |
| **IBDR** | **Badra** | **2.21** | **194** | *e*Pn | **Pn** | **15 36 28.0** | **+0.9** |
| IBDR | | | | *e*Sn | **Sn** | **15 36 55.0** | **+0.3** |
| **ZNJK** | **Zanjan** | **2.23** | **50** | *e*Pn | **Pb** | **15 36 30.1** | **-0.8** |
| **IBST** | **Bostanabad** | **2.45** | **6** | *e*Pn | **Pn** | **15 36 32.1** | **+1.4** |
| **IAZR** | **Azarshahr** | **2.46** | **349** | *e*Pn | **Pn** | **15 36 31.9** | **+1.0** |
| IAZR | | | | *e* | | 15 37 22.6 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **2.51** | **79** | *e*Pn | **Pb** | **15 36 34.0** | **-1.7** |
| **ISRB** | **Sarab** | **2.71** | **19** | *e*Pn | **Pn** | **15 36 35.6** | **+1.3** |
| ISRB | | | | *e* | | 15 37 19.7 | |
| | comp=Z,327nm,0.3s | | | | | | |
| **IRAZ** | **Razeghan** | **2.76** | **86** | *e* | Sg | 15 37 30.8 | +12 |
| | comp=Z,423nm,0.7s | | | | | | |
| **ASAO** | **Ashtian** | **2.94** | **103** | *e*Pn | **Pb** | **15 36 40.8** | **-2.2** |
| **ITBZ** | **Tabriz** | **2.98** | **354** | *e*Pn | **Pn** | **15 36 39.1** | **+1.1** |
| ITBZ | | | | *e* | | 15 37 30.4 | |
| | comp=Z,263nm,0.7s | | | | | | |
| **IHRS** | **Heris** | **3.08** | **7** | *e*Pn | **Pn** | **15 36 41.6** | **+2.2** |
| IHRS | | | | *e* | | 15 37 44.8 | |
| | comp=Z,175nm,0.5s | | | | | | |
| **ISHB** | **Shabestar** | **3.11** | **346** | *e*Pn | **Pn** | **15 36 41.0** | **+1.2** |
| ISHB | | | | *e* | | 15 37 33.6 | |
| | comp=Z,429nm,0.4s | | | | | | |
| **KHMZ** | **Khomeyn** | **3.20** | **117** | *e*Pn | **Pb** | **15 36 44.3** | **-3.1** |
| **GHVR** | **GHOM** | **3.98** | **100** | *e*Pn | **Pn** | **15 36 53.7** | **+2.1** |

*NOU 13 15:37:30.5,37°54S×176°46E,h258km,MLv3.7/9,North Island, New Zealand*
*WEL 13 15:37:37.8±1.1,38°S±6°×17°6E±°,h191km±9km,M2.4/22, ML1.8/8,MLv2.4/22,Error ellipse: s-maj=0.0km s-min=0.0km az=15.7*
**ISC 13 15:37:31.1±1.9,37°63S±0°07×176°37E±0°06, h245km±11km,n136,σ1970/146,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TGRZ** | **Tauranga** | **0.13** | **220** | P | **Pn** | **15 38 03.7** | **+1.0** |
| **OPRZ** | **Ohinepanea** | **0.26** | **145** | P | **Pn** | **15 38 03.6** | **+0.7** |
| **KMRZ** | **Kaimai** | **0.40** | **237** | P | **Pn** | **15 38 04.3** | **+1.1** |
| **MARZ** | **Manawahe** | **0.43** | **145** | P | **Pn** | **15 38 04.6** | **+1.3** |
| **OMRZ** | **Omania** | **0.47** | **179** | P | **Pn** | **15 38 04.8** | **+1.4** |
| **NGRZ** | **Ngongotaha** | **0.49** | **197** | P | **Pn** | **15 38 05.1** | **+1.7** |
| **TARZ** | **Mount Tarawera** | **0.61** | **170** | P | **Pn** | **15 38 05.3** | **+1.4** |
| **HSRZ** | **Hossack Road** | **0.69** | **188** | P | **Pn** | **15 38 06.0** | **+1.9** |
| **TOZ** | **Tahuroa Road** | **0.69** | **261** | P | **Pn** | **15 38 05.5** | **+1.4** |
| **RRRZ** | **Republican Roa** | **0.72** | **171** | P | **Pn** | **15 38 05.7** | **+1.5** |
| **HRRZ** | **Hardcock Road** | **0.76** | **185** | P | **Pn** | **15 38 06.2** | **+1.8** |
| **URZ** | **Urewera** | **0.86** | **137** | P | **Pn** | **15 38 05.7** | **+0.9** |
| URZ | | | | S | S | 15 38 28.2 | -3.2 |
| **URZ** | **Urewera** | **0.86** | **137** | P | **Pn** | **15 38 05.7** | **+0.9** |
| **PRRZ** | **Plateau Road** | **0.87** | **179** | P | **Pn** | **15 38 06.4** | **+1.5** |
| **WPRZ** | **Whakapapataran** | **0.90** | **190** | P | **Pn** | **15 38 06.9** | **+1.8** |
| **MUGZ** | **Murupara** | **0.90** | **159** | P | **Pn** | **15 38 06.2** | **+1.1** |
| MUGZ | | | | S | S | 15 38 28.5 | -3.3 |
| **ALRZ** | **Allen Road** | **0.93** | **181** | P | **Pn** | **15 38 06.9** | **+1.7** |
| **TLZ** | **Tolley Road** | **0.96** | **223** | P | **Pn** | **15 38 05.5** | **+0.1** |
| **KUZ** | **Kuaotunu** | **1.02** | **330** | P | **Pn** | **15 38 06.6** | **+0.8** |
| **WHTZ** | **Whakaora** | **1.08** | **197** | P | **Pn** | **15 38 08.4** | **+2.3** |
| **RUGZ** | **Raukumara Rang** | **1.09** | **108** | P | **Pn** | **15 38 06.7** | **+0.4** |
| RUGZ | | | | S | S | 15 38 29.7 | -4.2 |
| **RTZ** | **Ruatahuna** | **1.10** | **154** | P | **Pn** | **15 38 07.5** | **+1.3** |
| RTZ | | | | S | S | **15 38 31.6** | **-2.3** |
| **HAZ** | **Te Kaha** | **1.13** | **97** | P | **Pn** | **15 38 07.2** | **+0.9** |
| HAZ | | | | S | S | **15 38 31.1** | **-2.9** |
| **MWZ** | **Matawai** | **1.16** | **128** | P | **Pn** | **15 38 07.7** | **+1.1** |
| MWZ | | | | S | S | **15 38 31.4** | **-3.1** |
| **WATZ** | **Wairara** | **1.19** | **205** | P | **Pn** | **15 38 08.9** | **+2.1** |
| **RAGZ** | **Rawiri** | **1.20** | **136** | P | **Pn** | **15 38 08.6** | **+1.7** |
| RAGZ | | | | S | S | **15 38 33.5** | **-1.5** |
| **MRHZ** | **Matea Rd** | **1.20** | **178** | P | **Pn** | **15 38 08.3** | **+1.5** |
| MRHZ | | | | S | S | **15 38 33.4** | **-1.7** |
| **HATZ** | **Hinemaiaia** | **1.28** | **190** | P | **Pn** | **15 38 08.8** | **+1.5** |
| **MTHZ** | **Maungataniwha** | **1.28** | **163** | P | **Pn** | **15 38 09.2** | **+1.8** |
| MTHZ | | | | S | S | **15 38 34.3** | **-1.7** |
| **WIAZ** | **Waiheke Island** | **1.29** | **310** | P | **Pn** | **15 38 08.8** | **+1.3** |
| **RATZ** | **Rangitukua** | **1.32** | **201** | P | **Pn** | **15 38 09.5** | **+1.9** |
| **ETAZ** | **East Tamaki Re** | **1.33** | **300** | P | **Pn** | **15 38 09.2** | **+1.5** |
| **PKGZ** | **Pakihiroa** | **1.38** | **101** | P | **Pn** | **15 38 10.1** | **+2.0** |
| PKGZ | | | | S | S | **15 38 36.1** | **-1.1** |
| **SNGZ** | **Shannon Statio** | **1.38** | **147** | P | **Pn** | **15 38 10.1** | **+2.0** |
| SNGZ | | | | S | S | **15 38 35.5** | **-1.7** |
| **TWGZ** | **Tauwhareparae** | **1.39** | **114** | P | **Pn** | **15 38 10.1** | **+2.0** |
| TWGZ | | | | S | S | **15 38 37.8** | **+0.5** |
| **RITZ** | **Rihia Road** | **1.40** | **196** | P | **Pn** | **15 38 10.4** | **+2.2** |
| **RAHZ** | **Arahi** | **1.40** | **156** | P | **Pn** | **15 38 10.3** | **+2.1** |
| RAHZ | | | | S | S | **15 38 36.7** | **-0.8** |
| **TKGZ** | **Te Karaka** | **1.42** | **125** | P | **Pn** | **15 38 10.2** | **+1.9** |
| TKGZ | | | | S | S | **15 38 36.2** | **-1.4** |
| **KATZ** | **Kakaramea** | **1.44** | **201** | P | **Pn** | **15 38 10.5** | **+1.9** |
| **MBAZ** | **Motutapu North** | **1.45** | **306** | P | **Pn** | **15 38 10.2** | **+1.6** |
| **HIZ** | **Hauiti** | **1.48** | **233** | P | **Pn** | **15 38 10.8** | **+2.0** |
| **HIZ** | **Hauiti** | **1.48** | **233** | P | **Pn** | **15 38 10.9** | **+2.1** |
| **AWAZ** | **Awhitu Peninsu** | **1.48** | **292** | P | **Pn** | **15 38 09.9** | **+1.0** |
| **NMHZ** | **Naumai** | **1.50** | **167** | P | **Pn** | **15 38 11.5** | **+2.5** |
| **BKZ** | **Black Stump Fm** | **1.54** | **176** | P | **Pn** | **15 38 10.7** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **1.54** | **176** | P | **Pn** | **15 38 10.8** | **+1.5** |
| **RIGZ** | **Rimuhau** | **1.54** | **135** | P | **Pn** | **15 38 11.5** | **+2.3** |
| **MXZ** | **Matakaoa Point** | **1.54** | **88** | P | **Pn** | **15 38 11.1** | **+1.9** |
| MXZ | | | | S | S | **15 38 37.7** | **-1.6** |
| **PUZ** | **Puketiti** | **1.56** | **107** | P | **Pn** | **15 38 11.2** | **+1.8** |
| **NTVZ** | **North Tongarir** | **1.56** | **200** | P | **Pn** | **15 38 11.6** | **+2.1** |
| **KRVZ** | **Karewarewa** | **1.57** | **201** | P | **Pn** | **15 38 11.5** | **+1.9** |
| **TMVZ** | **Te Maari** | **1.57** | **199** | P | **Pn** | **15 38 11.3** | **+1.7** |
| **ETVZ** | **East Tongariro** | **1.59** | **199** | P | **Pn** | **15 38 11.7** | **+1.9** |
| **WTAZ** | **Waiatarua** | **1.59** | **295** | P | **Pn** | **15 38 11.4** | **+1.7** |
| **ABAZ** | **Army Bay** | **1.60** | **310** | P | **Pn** | **15 38 11.5** | **+1.7** |
| **WTVZ** | **West Tongariro** | **1.60** | **202** | P | **Pn** | **15 38 11.7** | **+1.9** |
| **NNVZ** | **North Ngauruho** | **1.61** | **201** | P | **Pn** | **15 38 12.1** | **+2.2** |
| **TWVZ** | **Taurewa** | **1.61** | **207** | P | **Pn** | **15 38 11.8** | **+1.9** |
| **OTVZ** | **Oturere** | **1.63** | **200** | P | **Pn** | **15 38 12.1** | **+2.0** |
| **WMGZ** | **Waiomatatini S** | **1.64** | **97** | P | **Pn** | **15 38 12.1** | **+2.1** |
| **SNVZ** | **South Ngauruho** | **1.65** | **200** | P | **Pn** | **15 38 12.3** | **+1.9** |
| **NGZ** | **Ngauruhoe** | **1.66** | **201** | P | **Pn** | **15 38 12.6** | **+2.2** |
| **RVAZ** | **Riverhead Bore** | **1.67** | **301** | P | **Pn** | **15 38 11.8** | **+1.5** |
| **ARHZ** | **Aropaoanui** | **1.70** | **163** | P | **Pn** | **15 38 13.0** | **+2.5** |
| **TUVZ** | **Tukino** | **1.73** | **199** | P | **Pn** | **15 38 12.8** | **+1.9** |
| **KNZ** | **Kokohu** | **1.73** | **144** | P | **Pn** | **15 38 12.9** | **+2.2** |
| **FWVZ** | **Far West T-bar** | **1.74** | **201** | P | **Pn** | **15 38 13.1** | **+1.9** |
| **PRGZ** | **Paritu Road** | **1.76** | **138** | P | **Pn** | **15 38 13.3** | **+2.3** |
| **WHVZ** | **Whangaehu Hut** | **1.76** | **200** | P | **Pn** | **15 38 13.1** | **+1.8** |
| **TRVZ** | **Turoa** | **1.79** | **201** | P | **Pn** | **15 38 13.4** | **+2.0** |
| **KWHZ** | **Kaweka Forest** | **1.79** | **179** | P | **Pn** | **15 38 13.3** | **+2.0** |
| **WNVZ** | **Wahianoa** | **1.80** | **199** | P | **Pn** | **15 38 13.3** | **+1.8** |
| **MCHZ** | **McNeill Hill** | **1.83** | **172** | P | **Pn** | **15 38 14.1** | **+2.5** |
| **MOVZ** | **Moawhango** | **1.84** | **195** | P | **Pn** | **15 38 13.1** | **+1.4** |
| **PKVZ** | **Pokaka** | **1.84** | **205** | P | **Pn** | **15 38 13.8** | **+2.0** |
| **BHHZ** | **Black Hill Sta** | **1.87** | **187** | P | **Pn** | **15 38 13.6** | **+1.5** |
| **MTVZ** | **Mangateitei** | **1.89** | **202** | P | **Pn** | **15 38 14.1** | **+1.9** |
| **MHGZ** | **Mahia Peninsul** | **1.94** | **142** | P | **Pn** | **15 38 15.1** | **+2.5** |
| **VRZ** | **Vera Road** | **1.95** | **220** | P | **Pn** | **15 38 15.5** | **+2.8** |
| **KRHZ** | **Kereru** | **2.01** | **180** | P | **Pn** | **15 38 15.2** | **+2.0** |
| **CKHZ** | **Cape Kidnapper** | **2.10** | **165** | P | **Pn** | **15 38 16.6** | **+2.6** |
| **KAHZ** | **Kahuranaki** | **2.20** | **170** | P | **Pn** | **15 38 17.4** | **+2.4** |
| **PNHZ** | **Pukenui** | **2.28** | **183** | P | **Pn** | **15 38 17.5** | **+1.7** |
| **WCZ** | **Waipu Caves** | **2.34** | **316** | P | **Pn** | **15 38 18.6** | **+2.1** |
| **WAZ** | **Wanganui** | **2.38** | **207** | P | **Pn** | **15 38 18.8** | **+2.0** |
| **LREZ** | **Lake Rotokare** | **2.39** | **220** | P | **Pn** | **15 38 19.9** | **+3.1** |
| **NEZ** | **North Egmont** | **2.42** | **227** | P | **Pn** | **15 38 20.8** | **+3.5** |
| **PXZ** | **Pawanui** | **2.43** | **171** | P | **Pn** | **15 38 19.2** | **+2.1** |
| **WPHZ** | **Waipukurau** | **2.43** | **179** | P | **Pn** | **15 38 19.1** | **+1.9** |
| **PKE** | **Pukeiti** | **2.44** | **229** | P | **Pn** | **15 38 20.7** | **+3.4** |
| **PRHZ** | **Porangahau** | **2.64** | **176** | P | **Pn** | **15 38 21.4** | **+2.0** |
| **DVHZ** | **Dannevirke** | **2.67** | **183** | P | **Pn** | **15 38 21.3** | **+1.6** |
| **POWZ** | **Post Office Ro** | **2.80** | **189** | P | **Pn** | **15 38 22.5** | **+1.5** |
| **ANWZ** | **Angora Road** | **2.83** | **178** | P | **Pn** | **15 38 23.4** | **+2.1** |
| **PRWZ** | **Pori Road** | **2.94** | **186** | P | **Pn** | **15 38 24.3** | **+1.8** |
| **BFZ** | **Birch Farm** | **3.05** | **182** | P | **Pn** | **15 38 25.4** | **+1.6** |
| **BFZ** | **Birch Farm** | **3.05** | **182** | P | **Pn** | **15 38 25.3** | **+1.6** |
| **MRZ** | **Mangatainoka R** | **3.09** | **191** | P | **Pn** | **15 38 25.3** | **+1.1** |
| **TIWZ** | **Tintock** | **3.16** | **187** | P | **Pn** | **15 38 26.5** | **+1.5** |
| **OGWZ** | **Otaki Gorge** | **3.31** | **196** | P | **Pn** | **15 38 27.9** | **+1.3** |
| **HOWZ** | **Holdsworth Sta** | **3.33** | **191** | P | **Pn** | **15 38 27.8** | **+1.0** |
| **KIW** | **Kapiti Island** | **3.42** | **199** | P | **Pn** | **15 38 28.7** | **+0.9** |
| **TMWZ** | **Te Maipa** | **3.49** | **186** | P | **Pn** | **15 38 30.0** | **+1.3** |
| **MTW** | **Mount Morrison** | **3.58** | **190** | P | **Pn** | **15 38 30.5** | **+0.7** |
| **CAW** | **Cannon Point** | **3.62** | **196** | P | **Pn** | **15 38 31.0** | **+0.9** |
| **DUWZ** | **D'Urville Isla** | **3.69** | **210** | P | **Pn** | **15 38 31.8** | **+0.8** |
| **TRWZ** | **Traveller** | **3.80** | **188** | P | **Pn** | **15 38 33.4** | **+1.2** |
| **PAWZ** | **Paruwai Farm** | **3.82** | **191** | P | **Pn** | **15 38 33.4** | **+1.0** |
| **WEL** | **Wellington** | **3.85** | **198** | P | **Pn** | **15 38 33.8** | **+1.0** |
| **MSWZ** | **Moikau Station** | **3.88** | **193** | P | **Pn** | **15 38 33.7** | **+0.6** |
| **SNZO** | **South Karori** | **3.89** | **199** | P | **Pn** | **15 38 34.1** | **+0.8** |
| **TCW** | **Tory Channel** | **3.92** | **204** | P | **Pn** | **15 38 34.5** | **+0.9** |
| **BHW** | **Baring Head** | **3.94** | **197** | P | **Pn** | **15 38 34.5** | **+0.6** |
| **PLWZ** | **Palliser** | **4.03** | **192** | P | **Pn** | **15 38 35.6** | **+0.7** |
| **TUWZ** | **Tuamarina** | **4.23** | **206** | P | **Pn** | **15 38 37.9** | **+0.6** |
| **NNZ** | **Nelson** | **4.26** | **212** | P | **Pn** | **15 38 38.2** | **+0.5** |
| **KHZ** | **Kahutara** | **5.25** | **204** | P | **Pn** | **15 38 50.6** | **+1.0** |
| **KHZ** | **Kahutara** | **5.25** | **204** | P | **Pn** | **15 38 50.6** | **+1.0** |
| **DSZ** | **Denniston Nort** | **5.41** | **219** | P | **Pn** | **15 38 51.8** | **+0.1** |
| **GVZ** | **Greta Valley S** | **5.91** | **204** | P | **Pn** | **15 38 58.4** | **+0.6** |
| **LTZ** | **Lake Taylor** | **6.02** | **210** | P | **Pn** | **15 38 59.5** | **+0.1** |
| **INZ** | **Inchbonnie** | **6.33** | **215** | P | **Pn** | **15 39 03.9** | **+0.8** |
| **OXZ** | **Oxford** | **6.58** | **209** | P | **Pn** | **15 39 06.2** | **0.0** |
| **OKCZ** | **Okains Bay** | **6.58** | **201** | P | **Pn** | **15 39 07.4** | **+1.0** |
| **MQZ** | **McQueen's Vall** | **6.69** | **204** | P | **Pn** | **15 39 07.5** | **-0.2** |
| **AKCZ** | **Akaroa Harbour** | **6.76** | **202** | P | **Pn** | **15 39 09.2** | **+0.6** |
| **WACZ** | **Wakanui South** | **7.18** | **207** | P | **Pn** | **15 39 14.3** | **+0.5** |
| **RPZ** | **Rata Peaks** | **7.29** | **212** | P | **Pn** | **15 39 15.9** | **+0.6** |
| **TMZ** | **Timaru** | **7.87** | **209** | P | **Pn** | **15 39 23.0** | **+0.4** |
| **ODZ** | **Otahua Downs** | **8.56** | **208** | P | **Pn** | 15 39 33.0 | +1.6 |
| **ODZ** | **Otahua Downs** | **8.56** | **208** | P | Pn | 15 39 33.1 | +1.7 |

*IDC 13 15:38:44.0±4.3,21°41S×70°16W,h0km,mb4.0/1, mb1 3.8/2,mb1mx3.5/18,mbtmp3.8/2,ML3.5/1,Error ellipse: s-maj=136.9km s-min=62.9km az=93.0*
*GUC 13 15:38:47.9±0.8,20°58S×70°77W,h30km±3km,ML3.4*
*NEIC 13 15:38:49.2±1.6,20°64S±0°05×70°69

$\sigma_2$9**41**/32, **mb4.4/7, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BASI** | **Baing, Sumba** | **0.34** | **0** | P | **Pb** | **15 46 56.2** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **1.48** | **308** | P | **Pn** | **15 47 12.3** | **-0.8** |
| WBSI | | | | S | **Sn** | **15 47 29.9** | **-1.6** |
| **MMRI** | **Maumere** | **2.52** | **41** | P | **Pn** | **15 47 30.3** | **+2.9** |
| **BATI** | **Baumata** | **3.06** | **84** | Pn | **Pb** | **15 47 38.8** | **-3.6** |
| | 13nm,0.3s,baz=300,slow=2.3,SNR=12 | | | | | | |
| BATI | | | | Sn | **Sb** | **15 48 19.8** | **+0.4** |
| | 15nm,0.3s,baz=107,slow=22,SNR=25 | | | | | | |
| **BATI** | **Baumata** | **3.06** | **84** | P | **Pb** | **15 47 41.3** | **-1.1** |
| **PLAI** | **Plampang** | **3.25** | **302** | P | **Pn** | **15 47 38.3** | **+0.8** |
| **SOEI** | **Soe** | **3.72** | **78** | P | **Pb** | **15 47 51.7** | **-2.0** |
| **BSSI** | **Bau Bau, Buton** | **4.39** | **359** | P | **Pn** | **15 47 54.3** | **+1.2** |
| **BKSI** | **Bulukumba** | **5.22** | **355** | P | **Pn** | **15 48 05.7** | **+1.1** |
| | 0.3nm717nm80nm,0.7s | | | | | | |
| **BBSI** | **Bau Bau** | **5.41** | **22** | P | **Pn** | **15 48 09.4** | **+2.2** |
| | 0.0nm12nm,0.9s | | | | | | |
| **IGBI** | **Denpasar** | **5.62** | **287** | P | **Pn** | **15 48 11.5** | **+1.4** |
| **BNSI** | **Bone** | **6.14** | **356** | P | **Pn** | **15 48 18.7** | **+1.5** |
| | 0.1nm28nm,0.5s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.60** | **353** | P | **Pn** | **15 48 26.5** | **+3.0** |
| | 0.1nm17nm,0.8s | | | | | | |
| **GMJI** | **Gumukmas** | **7.39** | **287** | P | **Pn** | **15 48 35.6** | **+1.2** |
| | 0.1nm23nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.96** | **147** | Pn | **Pn** | **15 48 59.9** | **+4.0** |
| | 0.7nm,0.3s,baz=339,slow=7.9,SNR=69 | | | | | | |
| FITZ | | | | Sn | **Sn** | **15 50 35.2** | **-0.6** |
| | 0.4nm,0.3s,baz=339,slow=24,SNR=1.8 | | | | | | |
| FITZ | | | | LR | LR | 15 53 58.1 | |
| | comp=Z,114nm,19.0s,baz=238,slow=47 | | | | | | |
| **SIJI** | **Sorong** | **14.34** | **49** | Pn | **Pn** | **15 50 10.9** | **+1.4** |
| | 1.1nm,0.3s,baz=179,slow=7.6,SNR=11 | | | | | | |
| SIJI | | | | Sn | **Sn** | **15 52 44.0** | **-3.7** |
| | 0.1nm,0.3s,baz=209,slow=23,SNR=1.4 | | | | | | |
| SIJI | | | | LR | LR | 15 56 06.5 | |
| | comp=Z,64nm,18.7s,baz=112,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.22** | **127** | Pn | **P** | **15 50 37.6** | **+0.4** |
| | 0.3nm,0.3s,baz=290,slow=14,SNR=18 | | | | | | |
| WRA | | | | Sn | **Sn** | **15 53 28.7** | **-4.7** |
| | 0.2nm,0.3s,baz=304,slow=22,SNR=6.3 | | | | | | |
| WRA | | | | LR | LR | 15 57 24.7 | |
| | comp=Z,122nm,19.3s,baz=310,slow=39 | | | | | | |
| **ASAR** | **Alice Springs** | **18.20** | **137** | P | **P** | **15 51 02.7** | **+3.6** |
| | 0.3nm,0.3s,baz=314,slow=13,SNR=27 | | | | | | |
| ASAR | | | | S | **Sn** | **15 54 16.0** | **-5.6** |
| | 0.1nm,0.3s,baz=311,slow=23,SNR=5.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 55 34.6** | **+3.3** |
| | baz=332,slow=1.3,SNR=1.3 | | | | | | |
| **DAV** | **Davao City (W)** | **18.21** | **16** | LR | LR | 15 58 51.5 | |
| | comp=Z,38nm,18.0s,baz=25,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **35.87** | **323** | P | **P** | **15 53 45.9** | **-0.1** |
| | 0.5nm,0.5s,baz=144,slow=7.8,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 16 09 53.9 | |
| | comp=Z,36nm,19.7s,baz=230,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **57.98** | **19** | P | **P** | **15 56 38.8** | **+0.6** |
| | 3.2nm,0.8s,baz=227,slow=16,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **59.48** | **349** | P | **P** | **15 56 48.3** | **-0.5** |
| | 3.3nm,0.9s,baz=166,slow=8.4,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.55** | **332** | P | **P** | **15 57 35.0** | **-0.7** |
| | 2.5nm,0.9s,baz=144,slow=7.2,SNR=21 | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.89** | **23** | P | **P** | **15 58 02.4** | **-0.1** |
| | 5.3nm,1.1s,baz=229,slow=6.6,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.05** | **339** | P | **P** | **15 58 02.3** | **-1.1** |
| | 1.1nm,0.3s,baz=144,slow=5.3,SNR=9.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **94.32** | **309** | P | **P** | **16 00 03.2** | **-2.3** |
| | 0.2nm,0.3s,baz=111,slow=3.2,SNR=2.6 | | | | | | |

*NOU **13** 15:50:06.2, 39°.39S×174°.29E, h240km, MLv3.5/9, North Island, New Zealand*
*WEL **13** 15:50:11.0±0.8, 40°.8S×17°.4E±°, h199km±5km, M2.5/24, ML2.4/8, MLv2.5/24, Error ellipse: s-maj=0.0km s-min=0.0km az=169.2*

**ISC 13 15:50:04.2**±1.6, **39°.43S**±0°.06×**174°.31E**±0°.05, **h244**km±9km, **n139,** $\sigma_2$**9**13/174, **North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LREZ** | **Lake Rotokare** | **0.07** | **111** | P | **Pn** | **15 50 37.7** | **+2.2** |
| LREZ | | | | S | **S** | **15 50 59.1** | **-1.1** |
| **PREZ** | **Palmer Road** | **0.15** | **307** | P | **Pn** | **15 50 37.8** | **+2.1** |
| **NEZ** | **North Egmont** | **0.24** | **314** | P | **Pn** | **15 50 38.2** | **+2.2** |
| NEZ | | | | S | **S** | **15 51 00.0** | **-0.7** |
| **KHEZ** | **Kahui Hut** | **0.27** | **301** | P | **Pn** | **15 50 38.2** | **+2.3** |
| **PKE** | **Pukeiti** | **0.35** | **313** | P | **Pn** | **15 50 38.5** | **+2.4** |
| **VRZ** | **Vera Road** | **0.46** | **48** | P | **Pn** | **15 50 37.7** | **+1.4** |
| VRZ | | | | S | **S** | **15 51 00.1** | **-1.3** |
| **WAZ** | **Wanganui** | **0.61** | **122** | P | **Pn** | **15 50 39.1** | **+2.4** |
| WAZ | | | | S | **S** | **15 51 01.7** | **-0.5** |
| **PKVZ** | **Pokaka** | **0.81** | **80** | P | **Pn** | **15 50 39.4** | **+1.7** |
| PKVZ | | | | S | **S** | **15 51 02.1** | **-1.8** |
| **MTVZ** | **Mangateitei** | **0.90** | **87** | P | **Pn** | **15 50 40.0** | **+1.9** |
| MTVZ | | | | S | **S** | **15 51 02.5** | **-2.1** |
| **TWVZ** | **Taurewa** | **0.94** | **68** | P | **Pn** | **15 50 40.0** | **+1.6** |
| **TRVZ** | **Turoa** | **0.97** | **82** | P | **Pn** | **15 50 40.5** | **+1.9** |
| TRVZ | | | | S | **S** | **15 51 03.3** | **-2.3** |
| **FWVZ** | **Far West T-bar** | **0.98** | **80** | P | **Pn** | **15 50 40.6** | **+1.9** |
| FWVZ | | | | S | **S** | **15 51 03.2** | **-2.5** |
| **WHVZ** | **Whangaehu Hut** | **1.00** | **82** | P | **Pn** | **15 50 40.8** | **+2.0** |
| **WNVZ** | **Wahianoa** | **1.00** | **84** | P | **Pn** | **15 50 40.7** | **+2.0** |
| WNVZ | | | | S | **S** | **15 51 03.5** | **-2.3** |
| **HIZ** | **Hauiti** | **1.01** | **25** | P | **Pn** | **15 50 40.3** | **+1.6** |
| HIZ | | | | S | **S** | **15 51 03.9** | **-1.8** |
| **HIZ** | **Hauiti** | **1.01** | **25** | P | **Pn** | **15 50 40.2** | **+1.6** |
| **NGZ** | **Ngauruhoe** | **1.03** | **76** | P | **Pn** | **15 50 40.8** | **+1.9** |
| NGZ | | | | S | **S** | **15 51 03.6** | **-2.5** |
| **WTVZ** | **West Tongariro** | **1.04** | **73** | P | **Pn** | **15 50 40.9** | **+1.9** |
| **TUVZ** | **Tukino** | **1.05** | **81** | P | **Pn** | **15 50 41.2** | **+2.2** |
| TUVZ | | | | S | **S** | **15 51 03.8** | **-2.5** |
| **NNVZ** | **North Ngauruho** | **1.05** | **74** | P | **Pn** | **15 50 41.0** | **+2.0** |
| **SNVZ** | **South Ngauruho** | **1.06** | **77** | P | **Pn** | **15 50 41.2** | **+2.1** |
| **OTVZ** | **Oturere** | **1.08** | **76** | P | **Pn** | **15 50 41.3** | **+2.0** |
| **KRVZ** | **Karewarewa** | **1.08** | **72** | P | **Pn** | **15 50 41.2** | **+2.0** |
| KRVZ | | | | S | **S** | **15 51 04.5** | **-2.2** |
| **NTVZ** | **North Tongarir** | **1.11** | **73** | P | **Pn** | **15 50 41.4** | **+2.1** |
| **MOVZ** | **Moawhango** | **1.11** | **89** | P | **Pn** | **15 50 41.0** | **+1.6** |
| MOVZ | | | | S | **S** | **15 51 03.7** | **-3.1** |
| **ETVZ** | **East Tongariro** | **1.12** | **75** | P | **Pn** | **15 50 41.4** | **+2.0** |
| **TMVZ** | **Te Maari** | **1.12** | **74** | P | **Pn** | **15 50 41.7** | **+2.2** |
| **KATZ** | **Kakaramea** | **1.17** | **67** | P | **Pn** | **15 50 41.7** | **+2.0** |
| KATZ | | | | S | **S** | **15 51 05.8** | **-1.7** |
| **RATZ** | **Rangitukua** | **1.27** | **64** | P | **Pn** | **15 50 42.2** | **+1.9** |
| **RITZ** | **Rihia Road** | **1.28** | **70** | P | **Pn** | **15 50 42.5** | **+2.1** |
| RITZ | | | | S | **S** | **15 51 07.7** | **-1.1** |
| **WATZ** | **Wairara** | **1.32** | **57** | P | **Pn** | **15 50 42.9** | **+2.2** |
| **BHHZ** | **Black Hill Sta** | **1.35** | **93** | P | **Pn** | **15 50 42.5** | **+1.6** |
| BHHZ | | | | S | **S** | **15 51 06.5** | **-3.2** |
| **DUWZ** | **D'Urville Isla** | **1.40** | **192** | P | **Pn** | **15 50 43.3** | **+2.2** |
| **TLZ** | **Tolley Road** | **1.46** | **41** | P | **Pn** | **15 50 43.4** | **+1.7** |
| **POWZ** | **Post Office Ro** | **1.47** | **131** | P | **Pn** | **15 50 43.7** | **+2.1** |
| **HATZ** | **Hinemaiaia** | **1.48** | **69** | P | **Pn** | **15 50 43.4** | **+1.5** |
| HATZ | | | | S | **S** | **15 51 08.4** | **-2.9** |
| **KIW** | **Kapiti Island** | **1.50** | **162** | P | **Pn** | **15 50 43.8** | **+2.0** |
| **KUTZ** | **Kaahu Road** | **1.51** | **52** | P | **Pn** | **15 50 44.4** | **+2.3** |
| **OGWZ** | **Otaki Gorge** | **1.53** | **155** | P | **Pn** | **15 50 44.2** | **+2.2** |
| **PNHZ** | **Pukenui** | **1.53** | **109** | P | **Pn** | **15 50 44.3** | **+2.2** |
| **MRZ** | **Mangatainoka R** | **1.56** | **142** | P | **Pn** | **15 50 44.3** | **+1.9** |
| **KRHZ** | **Kereru** | **1.60** | **98** | P | **Pn** | **15 50 45.0** | **+2.3** |
| **KWHZ** | **Kaweka Forest** | **1.63** | **90** | P | **Pn** | **15 50 45.0** | **+2.0** |
| **DVHZ** | **Dannevirke** | **1.67** | **122** | P | **Pn** | **15 50 45.3** | **+2.1** |
| **PRWZ** | **Pori Road** | **1.69** | **132** | P | **Pn** | **15 50 45.8** | **+2.3** |
| **WPRZ** | **Whakapapatarin** | **1.71** | **58** | P | **Pn** | **15 50 45.5** | **+1.9** |
| **BKZ** | **Black Stump Fm** | **1.71** | **82** | P | **Pn** | **15 50 45.5** | **+1.8** |
| **BKZ** | **Black Stump Fm** | **1.71** | **82** | P | **Pn** | **15 50 45.5** | **+1.8** |
| **HOWZ** | **Holdsworth Sta** | **1.73** | **148** | P | **Pn** | **15 50 45.6** | **+1.9** |
| **MRHZ** | **Matea Rd** | **1.74** | **71** | P | **Pn** | **15 50 45.4** | **+1.4** |
| **WPHZ** | **Waipukurau** | **1.76** | **112** | P | **Pn** | **15 50 46.4** | **+2.4** |
| **CAW** | **Cannon Point** | **1.77** | **161** | P | **Pn** | **15 50 46.0** | **+2.0** |
| **TCW** | **Tory Channel** | **1.77** | **181** | P | **Pn** | **15 50 46.4** | **+2.4** |
| **TIWZ** | **Tintock** | **1.80** | **139** | P | **Pn** | **15 50 46.4** | **+2.1** |
| **MCHZ** | **McNeill Hill** | **1.84** | **91** | P | **Pn** | **15 50 47.7** | **+3.0** |
| **HSRZ** | **Hossack Road** | **1.88** | **54** | P | **Pn** | **15 50 46.9** | **+1.8** |
| **WEL** | **Wellington** | **1.88** | **170** | P | **Pn** | **15 50 47.1** | **+2.1** |
| **SNZO** | **South Karori** | **1.90** | **171** | P | **Pn** | **15 50 47.1** | **+2.0** |
| **NNZ** | **Nelson** | **1.92** | **202** | P | **Pn** | **15 50 47.7** | **+2.4** |
| **BFZ** | **Birch Farm** | **1.94** | **131** | P | **Pn** | **15 50 47.5** | **+2.1** |
| **BFZ** | **Birch Farm** | **1.94** | **131** | P | **Pn** | **15 50 47.6** | **+2.1** |
| **TOZ** | **Tahuroa Road** | **1.94** | **29** | P | **Pn** | **15 50 47.8** | **+2.2** |
| **MTW** | **Mount Morrison** | **1.95** | **153** | P | **Pn** | **15 50 47.5** | **+1.9** |
| **QRZ** | **Quartz Range** | **1.95** | **224** | P | **Pn** | **15 50 47.4** | **+1.8** |
| **QRZ** | **Quartz Range** | **1.95** | **224** | P | **Pn** | **15 50 47.4** | **+1.8** |
| **ANWZ** | **Angora Road** | **1.95** | **122** | P | **Pn** | **15 50 48.1** | **+2.5** |
| **NMHZ** | **Naumai** | **1.96** | **81** | P | **Pn** | **15 50 48.8** | **+2.9** |
| **PRHZ** | **Porangahau** | **1.97** | **116** | P | **Pn** | **15 50 48.4** | **+2.5** |
| **KAHZ** | **Kahuranaki** | **2.01** | **101** | P | **Pn** | **15 50 49.0** | **+2.7** |
| **TUWZ** | **Tuamarina** | **2.01** | **188** | P | **Pn** | **15 50 48.4** | **+2.2** |
| **BHW** | **Baring Head** | **2.02** | **168** | P | **Pn** | **15 50 48.0** | **+1.8** |
| **KMRZ** | **Kaimai** | **2.04** | **39** | P | **Pn** | **15 50 48.8** | **+2.3** |
| **RRRZ** | **Republican Roa** | **2.04** | **58** | P | **Pn** | **15 50 48.5** | **+2.0** |
| **MTHZ** | **Maungataniwha** | **2.05** | **74** | P | **Pn** | **15 50 48.5** | **+1.8** |
| **PXZ** | **Pawanui** | **2.05** | **108** | P | **Pn** | **15 50 49.1** | **+2.5** |
| **TMWZ** | **Te Maipa** | **2.06** | **145** | P | **Pn** | **15 50 48.7** | **+2.0** |
| **CPWZ** | **Castlepoint** | **2.06** | **136** | P | **Pn** | **15 50 49.3** | **+2.6** |
| **OMRZ** | **Omania** | **2.08** | **51** | P | **Pn** | **15 50 49.2** | **+2.2** |
| **ARHZ** | **Aropaoanui** | **2.09** | **86** | P | **Pn** | **15 50 49.6** | **+2.7** |
| **TARZ** | **Mount Tarawera** | **2.09** | **56** | P | **Pn** | **15 50 48.6** | **+1.5** |
| **MSWZ** | **Moikau Station** | **2.10** | **160** | P | **Pn** | **15 50 48.9** | **+1.8** |
| **PAWZ** | **Paruwai Farm** | **2.12** | **157** | P | **Pn** | **15 50 49.1** | **+1.9** |
| **MUGZ** | **Murupara** | **2.14** | **64** | P | **Pn** | **15 50 49.0** | **+1.5** |
| **CKHZ** | **Cape Kidnapper** | **2.15** | **97** | P | **Pn** | **15 50 50.4** | **+2.9** |
| **RAHZ** | **Arahi** | **2.22** | **77** | P | **Pn** | **15 50 50.6** | **+2.4** |
| **TRWZ** | **Traveller** | **2.23** | **152** | P | **Pn** | **15 50 50.3** | **+2.1** |
| **RTZ** | **Ruatahuna** | **2.23** | **69** | P | **Pn** | **15 50 50.1** | **+1.7** |
| **PLWZ** | **Palliser** | **2.25** | **162** | P | **Pn** | **15 50 50.2** | **+1.7** |
| **TGRZ** | **Tauranga** | **2.29** | **42** | P | **Pn** | **15 50 51.3** | **+2.4** |
| **MRNZ** | **Matariki Terra** | **2.29** | **211** | P | **Pn** | **15 50 51.1** | **+2.2** |
| **BSWZ** | **Blackbirch Sta** | **2.30** | **188** | P | **Pn** | **15 50 51.4** | **+2.4** |
| **CMWZ** | **Cape Campbell** | **2.31** | **182** | P | **Pn** | **15 50 51.9** | **+2.9** |
| **SNGZ** | **Shannon Statio** | **2.44** | **75** | P | **Pn** | **15 50 52.7** | **+2.3** |
| SNGZ | | | | S | **S** | **15 51 25.2** | **-1.6** |
| **URZ** | **Urewera** | **2.48** | **63** | P | **Pn** | **15 50 52.1** | **+1.4** |
| URZ | | | | S | **S** | **15 51 24.1** | **-3.3** |
| **URZ** | **Urewera** | **2.48** | **63** | P | **Pn** | **15 50 52.2** | **+1.4** |
| **THZ** | **Tophouse** | **2.56** | **204** | P | **Pn** | **15 50 54.0** | **+2.3** |
| THZ | | | | S | **S** | **15 51 28.2** | **-0.9** |
| **RAGZ** | **Rawiri** | **2.59** | **70** | P | **Pn** | **15 50 54.2** | **+2.1** |
| RAGZ | | | | S | **S** | **15 51 28.6** | **-1.1** |
| **KNZ** | **Kokohu** | **2.64** | **82** | P | **Pn** | **15 50 54.7** | **+2.3** |
| KNZ | | | | S | **S** | **15 51 28.2** | **-2.1** |
| **MWZ** | **Matawai** | **2.74** | **67** | P | **Pn** | **15 50 55.2** | **+1.7** |
| **RIGZ** | **Rimuhau** | **2.78** | **76** | P | **Pn** | **15 50 56.3** | **+2.4** |
| RIGZ | | | | S | **S** | **15 51 31.1** | **-2.1** |
| **MHGZ** | **Mahia Peninsul** | **2.80** | **85** | P | **Pn** | **15 50 56.9** | **+2.7** |
| MHGZ | | | | S | **S** | **15 51 31.4** | **-2.1** |
| **PRGZ** | **Paritu Road** | **2.82** | **81** | P | **Pn** | **15 50 56.8** | **+2.5** |
| PRGZ | | | | S | **S** | **15 51 32.5** | **-1.5** |
| **TKGZ** | **Te Karaka** | **2.93** | **71** | P | **Pn** | **15 50 57.9** | **+2.4** |
| TKGZ | | | | S | **S** | **15 51 34.2** | **-1.7** |
| **DSZ** | **Denniston Nort** | **3.00** | **219** | P | **Pn** | **15 50 58.4** | **+2.1** |
| DSZ | | | | S | **S** | **15 51 35.0** | **-2.3** |
| **RUGZ** | **Raukumara Rang** | **3.01** | **62** | P | **Pn** | **15 50 57.5** | **+0.9** |
| **KHZ** | **Kahutara** | **3.04** | **191** | P | **Pn** | **15 50 58.8** | **+2.2** |
| KHZ | | | | S | **S** | **15 51 36.0** | **-2.0** |
| **KHZ** | **Kahutara** | **3.04** | **191** | P | **Pn** | **15 50 58.8** | **+2.2** |
| **TWGZ** | **Tauwhareparae** | **3.13** | **67** | P | **Pn** | **15 51 00.1** | **+2.4** |
| TWGZ | | | | S | **S** | **15 51 38.5** | **-1.5** |
| **HAZ** | **Te Kaha** | **3.19** | **59** | P | **Pn** | **15 50 59.4** | **+1.0** |
| **PKGZ** | **Pakihiroa** | **3.33** | **64** | P | **Pn** | **15 51 02.1** | **+2.1** |
| **PUZ** | **Puketiti** | **3.37** | **67** | P | **Pn** | **15 51 02.2** | **+1.7** |
| PUZ | | | | S | **S** | **15 51 41.4** | **-3.5** |
| **WMGZ** | **Waiomatatini S** | **3.59** | **65** | P | **Pn** | **15 51 04.7** | **+1.7** |
| WMGZ | | | | S | **S** | **15 51 46.5** | **-2.9** |
| **MXZ** | **Matakaoa Point** | **3.65** | **60** | P | **Pn** | **15 51 05.5** | **+1.9** |
| **GVZ** | **Greta Valley S** | **3.66** | **195** | P | **Pn** | **15 51 05.5** | **+1.8** |
| **LTZ** | **Lake Taylor** | **3.68** | **204** | P | **Pn** | **15 51 06.2** | **+2.3** |
| LTZ | | | | S | **S** | **15 51 48.8** | **-2.6** |
| **INZ** | **Inchbonnie** | **3.94** | **212** | P | **Pn** | **15 51 08.9** | **+2.0** |
| INZ | | | | S | **S** | **15 51 52.9** | **-3.8** |
| **AMCZ** | **Amberley** | **3.94** | **198** | P | **Pn** | **15 51 09.5** | **+2.6** |
| **OXZ** | **Oxford** | **4.25** | **203** | P | **Pn** | **15 51 12.3** | **+1.7** |
| OXZ | | | | S | **S** | **15 51 59.5** | **-3.8** |
| **OKCZ** | **Okains Bay** | **4.39** | **192** | P | **Pn** | **15 51 14.2** | **+2.0** |
| **MQZ** | **McQueen's Vall** | **4.45** | **196** | P | **Pn** | **15 51 14.2** | **+1.3** |
| **WVZ** | **Waitaha Valley** | **4.53** | **215** | P | **Pn** | **15 51 16.4** | **+2.5** |
| **AKCZ** | **Akaroa Harbour** | **4.56** | **193** | P | **Pn** | **15 51 16.0** | **+1.8** |
| **MHCZ** | **Mount Hutt** | **4.58** | **206** | P | **Pn** | **15 51 16.4** | **+1.8** |
| **RACZ** | **Rakaia** | **4.59** | **200** | P | **Pn** | **15 51 16.4** | **+1.8** |
| **WACZ** | **Wakanui South** | **4.87** | **202** | P | **Pn** | **15 51 20.0** | **+2.0** |
| **GCSZ** | **Gaunt Creek Bo** | **4.90** | **216** | P | **Pn** | **15 51 20.1** | **+1.6** |
| **RPZ** | **Rata Peaks** | **4.93** | **209** | P | **Pn** | **15 51 20.7** | **+1.8** |
| **RPZ** | **Rata Peaks** | **4.93** | **209** | P | **Pn** | **15 51 20.6** | **+1.8** |
| **ARCZ** | **Arundel** | **5.08** | **206** | P | **Pn** | **15 51 22.5** | **+1.7** |
| **FOZ** | **Fox Glacier** | **5.31** | **218** | P | **Pn** | **15 51 25.0** | **+1.6** |
| **TMZ** | **Timaru** | **5.53** | **205** | P | **Pn** | **15 51 28.3** | **+2.1** |
| **LBZ** | **Lake Benmore** | **5.83** | **211** | P | **Pn** | **15 51 31.6** | **+1.8** |
| **JCZ** | **Jackson Bay** | **6.21** | **220** | P | **Pn** | **15 51 36.2** | **+1.4** |
| **ODZ** | **Otahua Downs** | **6.23** | **205** | P | **Pn** | **15 51 37.4** | **+2.4** |
| **ODZ** | **Otahua Downs** | **6.23** | **205** | P | **Pn** | **15 51 37.7** | **+2.7** |
| **WKZ** | **Wanaka** | **6.67** | **214** | P | **Pn** | **15 51 41.3** | **+0.7** |
| **EAZ** | **Earnscleugh** | **6.88** | **211** | P | **Pn** | **15 51 44.9** | **+1.8** |
| **MLZ** | **Mavora Lakes** | **7.49** | **216** | P | **Pn** | **15 51 52.9** | **+2.0** |
| **WHZ** | **Wether Hill Ro** | **7.98** | **214** | P | **Pn** | **15 51 57.8** | **+0.8** |

*IDC **13** 16:10:48.2±4.9, 20°.41S×177°.89W, h503km±37km, mb2.7/4, mb1 3.0/5, mb1mx2.8/28, mbtmp3.5/5, Error ellipse: s-maj=111.3km s-min=28.3km az=152.0*

**ISC 13 16:10:51.3**±1.6, **19°.1S**±0°.4×**178°.0W**±0°.2, **h532**km, **n9,** $\sigma_2$**5**47/10, **mb3.1**/4, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.02** | **290** | P | **P** | **16 12 12.6** | **+0.4** |
| | 3.4nm,0.3s,baz=238,slow=23,SNR=5.2 | | | | | | |
| **AFI** | **Afiamalu** | **7.90** | **50** | P | **P** | **16 12 46.0** | **-1.7** |
| | 1.7nm,0.3s,baz=27,slow=5.8,SNR=4.2 | | | | | | |
| AFI | | | | S | **S** | **16 14 21.5** | **-1.5** |
| | 1.2nm,0.3s,baz=245,slow=20,SNR=1.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.82** | **261** | P | **P** | **16 18 15.3** | **-2.9** |
| | 0.5nm,1.1s,baz=96,slow=7.8,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **44.86** | **255** | P | **P** | **16 18 15.8** | **-2.7** |
| | 0.3nm,0.6s,baz=89,slow=7.9,SNR=9.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 19 47.8** | **-1.1** |
| | 0.2nm,0.5s,baz=111,slow=3.8,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.31** | **57** | P | **P** | **16 22 40.0** | **+2.7** |
| | 0.3nm,0.6s,baz=201,slow=6.7,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.67** | **290** | P | **P** | **16 22 56.6** | **+3.5** |
| | 0.3nm,0.7s,baz=83,slow=2.8,SNR=2.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **141.83** | **332** | PKhKP | PKPpre | 16 29 20.2 | |
| | 1.1nm,0.4s,baz=43,slow=4.3,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.92** | **314** | PKPbc | **PKPab** | **16 29 32.9** | **-0.7** |
| | 0.6nm,0.6s,baz=132,slow=3.7,SNR=2.9 | | | | | | |
| **GERES** | **GERESS Array B** | **148.89** | **345** | PKPbc | **PKiKP** | **16 29 41.0** | **+0.9** |
| | 0.2nm,0.5s,baz=45,slow=2.1,SNR=4.6 | | | | | | |

*PRE **13** 16:21:52.7±1.2, 28°.87S×28°.86E, h5km, ML2.2*
*EAF **13** 16:22:01.0±2.9, 27°.26S×28°.70E, h0km±33km, MD3.4*

**ISC 13 16:21:52.7**±1.9, **28°.9S**±0°.1×**28°.83E**±0°.05, **h10**km, **n14,** $\sigma_1$**9**05/14, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NWCL** | **Newcastle** | **1.48** | **40** | *e*P | **Pg** | **16 22 21.0** | **-0.2** |
| NWCL | | | | *e*S | **Sg** | **16 22 39.9** | **-0.5** |
| NWCL | | | | IAML | | 16 22 46.5 | |
| | comp=Z,17nm,0.3s | | | | | | |
| **PRYS** | **Parys** | **2.35** | **326** | *e*P | **Pn** | **16 22 32.9** | **+1.4** |
| PRYS | | | | *e*S | **Sb** | **16 23 02.6** | **-1.7** |
| PRYS | | | | IAML | | 16 23 24.3 | |
| | comp=Z,16nm,2.4s | | | | | | |
| **BOSA** | **Boshof** | **3.15** | **274** | *i* P | **Pg** | **16 22 52.4** | **-0.7** |
| **BOSA** | **Boshof** | **3.15** | **274** | *i* P | **Pg** | **16 22 52.4** | **-0.7** |
| **SWZ** | **Schweizer** | **3.53** | **298** | *e*P | **Pn** | **16 22 48.6** | **+0.9** |
| SWZ | | | | *e*S | **Sn** | **16 23 30.5** | **+0.9** |
| SWZ | | | | IAML | | 16 23 49.2 | |
| | comp=Z,21nm,2.0s | | | | | | |
| **CNG** | **Changalane** | **3.95** | **50** | *i* P | **Pn** | **16 22 53.7** | **+0.3** |
| **CNG** | **Changalane** | **3.95** | **50** | *i* P | **Pn** | **16 22 53.7** | **+0.3** |
| **LBTB** | **Lobatse** | **4.81** | **322** | *e*P | **Pn** | **16 23 06.8** | **+1.4** |
| LBTB | | | | *e*S | **Sn** | **16 24 00.3** | **-1.0** |
| LBTB | | | | IAML | | 16 24 14.0 | |
| | comp=Z,13nm,3.6s | | | | | | |
| **LBTB** | **Lobatse** | **4.81** | **322** | *i* P | Pn | 16 22 59.6 | -5.8 |
| **LBTB** | **Lobatse** | **4.81** | **322** | *i* P | Pn | 16 22 59.6 | -5.8 |
| **MOPA** | **Mopani** | **5.82** | **24** | *i* P | Pn | 16 23 08.3 | -11 |
| MOPA | | | | *i* S | Sn | 16 23 58.8 | -27 |
| **MOPA** | **Mopani** | **5.82** | **24** | *i* P | Pn | 16 23 08.3 | -11 |
| MOPA | | | | *i* S | Sn | 16 23 58.8 | -27 |
| **MATP** | **Matopo** | **8.43** | **358** | *i* Sg | **Sn** | **16 25 31.2** | **+0.8** |
| **MATP** | **Matopo** | **8.43** | **358** | *i* Sg | **Sn** | **16 25 31.2** | **+0.8** |

*IDC **13** 16:33:40.9±1.9, 51°.52N×16°.23E, h0km±150km, Mc3.3*
*IDC **13** 16:33:42.7±0.9, 51°.42N×16°.20E, h0km, mb1 3.5/5, mb1mx3.1/64, mbtmp3.4/5, ML2.5/5, Error ellipse: s-maj=19.1km s-min=8.6km az=103.0*
*PRU **13** 16:33:42.7±0.0, 51°.43N×16°.18E, h0km*
*VIE **13** 16:33:43.0±0.6, 51°.37N×16°.26E, h0km, mb2.2/1, ml2.5/3, Error ellipse: s-maj=6.0km s-min=3.8km az=76.0 61 km WNW of Wroclaw Suspected Mining induced.*
*UPP **13** 16:33:46.3±3.4, 51°.77N×15°.60E, h0km, ML2.0, Suspected explosion*

**ISC 13 16:33:40.4**±0.8, **51°.53N**±0°.03×**16°.20E**±0°.03, **h0**km, **n36,** $\sigma_1$**9**04/67, **Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.69** | **175** | *e*Pg | **Pg** | **16 33 53.8** | **+0.1** |
| KSP | | | | *e*Sg | **Sg** | **16 34 01.7** | **-0.8** |
| **CHVC** | **Chvalec** | **0.95** | **185** | *e*PG | **Pg** | **16 33 58.7** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **16 34 10.5** | **-0.3** |
| **OSTC** | **Ostas** | **0.97** | **179** | *e*PG | **Pg** | **16 33 59.3** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | **16 34 10.2** | **-1.5** |
| **UPC** | **Upice** | **1.03** | **187** | *e*PG | **Pg** | **16 34 00.0** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | **16 34 12.9** | **-0.6** |
| | comp=Z,77nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **176** | *e*PG | **Pg** | **16 34 02.8** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **16 34 17.6** | **-0.8** |
| | comp=Z,26nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.44** | **226** | *e*PG | **Pg** | **16 34 08.2** | **+0.3** |
| PVCC | | | | *e*SG | **Sn** | **16 34 27.4** | **+0.2** |
| | comp=Z,117nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.50** | **165** | *e*PG | **Pn** | **16 34 08.4** | **-0.3** |
| KRLC | | | | *e*SG | **Sg** | **16 34 27.0** | **-1.7** |
| | comp=Z,12nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.56** | **246** | Pg | **Pg** | **16 34 10.8** | **+0.5** |
| BRG | | | | Sg | **Sn** | **16 34 30.7** | **+0.3** |
| BRG | | | | Amp | | 16 34 33.7 | |
| | comp=Z,27nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.87** | **215** | *e*PG | **Pb** | **16 34 15.4** | **0.0** |
| PRU | | | | *e*SG | **Sn** | **16 34 38.6** | **+0.7** |
| | comp=Z,18nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.95** | **153** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **7.77** | **72** | Pn | **Pn** | **16 37 41.9** | **+3.2** |
| **FAKI** | **Fak Fak** | **7.87** | **281** | Pn | **Pn** | **16 37 42.3** | **+2.2** |
| **FAKI** | **Fak Fak** | **7.87** | **281** | P | **Pn** | **16 37 42.2** | **+2.2** |
| | 41nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **8.63** | **125** | P | Pn | 16 37 55.8 | +5.3 |
| | 1.0nm,0.3s,baz=346,slow=10,SNR=2.7 | | | | | | |
| PMG | | | | S | **Sn** | **16 39 25.5** | **-1.6** |
| | 0.3nm,0.3s,baz=214,slow=17,SNR=1.9 | | | | | | |
| **PMG** | **Port Moresby** | **8.63** | **125** | | **Pn** | **16 37 54.3** | **+3.8** |
| **SIJI** | **Sorong** | **9.42** | **292** | P | **Pn** | **16 38 05.1** | **+3.9** |
| | 4.6nm,0.3s,baz=88,slow=12,SNR=24 | | | | | | |
| SIJI | | | | S | **Sn** | **16 39 45.3** | **-1.1** |
| | 0.0nm,0.3s,baz=165,slow=24,SNR=1.6 | | | | | | |
| **SWI** | **Sorong** | **9.43** | **292** | P | **Pn** | **16 38 05.1** | **+3.7** |
| | 48nm,0.7s | | | | | | |
| **COEN** | **Coen** | **9.91** | **162** | | Pn | 16 38 13.4 | +5.4 |
| **MTN** | **Manton Dam** | **12.04** | **226** | Pn | **Pn** | **16 38 40.1** | **+3.0** |
| **LBMI** | **Labuha** | **13.04** | **287** | P | **Pn** | **16 38 54.9** | **+4.1** |
| | 12nm,1.8s | | | | | | |
| **KNRA** | **Kununurra** | **15.64** | **224** | | **Pn** | **16 39 27.7** | **+1.7** |
| **WB0** | **Warramunga Arr** | **16.12** | **199** | Pn | **Pn** | **16 39 33.7** | **+1.6** |
| WB0 | | | | IAmb | IAmb | 16 39 56.9 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **16.25** | **199** | | **Pn** | **16 39 35.3** | **+1.6** |
| WR0 | | | | IAmb | IAmb | 16 39 49.2 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **16.29** | **199** | | **Pn** | **16 39 36.0** | **+1.8** |
| WRAB | | | | IAmb | IAmb | 16 39 58.5 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **16.29** | **199** | Pn | **Pn** | **16 39 36.1** | **+1.8** |
| WB2 | | | | IAmb | IAmb | 16 39 57.3 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.30** | **199** | P | **Pn** | **16 39 36.1** | **+1.7** |
| | comp=Z,1.9nm,0.3s,baz=21,slow=13,SNR=46 | | | | | | |
| WRA | | | | S | **Sn** | **16 42 30.6** | **-4.0** |
| | comp=Z,1.4nm,0.3s,baz=17,slow=20,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.30** | **199** | | **Pn** | **16 39 35.4** | **+1.0** |
| **SOEI** | **Soe** | **16.43** | **251** | P | **Pn** | **16 39 38.7** | **+2.5** |
| **SOEI** | **Soe** | **16.43** | **251** | P | **P** | **16 39 39.4** | **+0.6** |
| | comp=Z,48nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **16.65** | **159** | P | **P** | **16 39 43.0** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=343,slow=15,SNR=1.7 | | | | | | |
| **CTAO** | **Charters Tower** | **16.65** | **159** | P | **P** | **16 39 43.4** | **+2.3** |
| **BATI** | **Baumata** | **17.14** | **250** | P | **Pn** | **16 39 46.5** | **+1.5** |
| | comp=Z,6.1nm,0.3s,baz=120,slow=2.0,SNR=11 | | | | | | |
| BATI | | | | S | **Sn** | **16 42 54.4** | **-0.5** |
| | comp=Z,1.0nm,0.3s,baz=90,slow=20,SNR=2.3 | | | | | | |
| **BATI** | **Baumata** | **17.14** | **250** | P | **P** | **16 39 48.0** | **+1.5** |
| | comp=Z,22nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **17.70** | **286** | P | **P** | **16 39 56.6** | **+3.9** |
| **MMRI** | **Maumere** | **18.09** | **256** | P | **Pn** | **16 39 56.6** | **-0.2** |
| MMRI | | | | IAmb | IAmb | 16 40 02.3 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.47** | **225** | P | **P** | **16 40 13.7** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=34,slow=9.7,SNR=16 | | | | | | |
| FITZ | | | | S | **S** | **16 43 43.8** | **-7.1** |
| | comp=Z,1.3nm,0.3s,baz=61,slow=16,SNR=6.3 | | | | | | |
| **AS31** | **Alice Springs** | **19.93** | **197** | P | **Pn** | **16 40 19.5** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 16 40 44.4 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **19.93** | **197** | P | **Pn** | **16 40 19.6** | **+0.6** |
| | comp=Z,16nm,0.6s,baz=29,slow=9.3,SNR=238 | | | | | | |
| ASAR | | | | S | **S** | **16 43 57.3** | **-3.0** |
| | comp=Z,2.7nm,0.7s,baz=14,slow=28,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **19.93** | **197** | P | **P** | **16 40 18.7** | **+1.5** |
| **TOLI2** | **Tolitoli** | **19.97** | **286** | P | **P** | **16 40 16.6** | **-1.1** |
| **EIDS** | **Eidsvold** | **23.33** | **154** | P | **P** | **16 40 53.1** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 16 41 12.9 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.87** | **227** | P | **P** | **16 41 15.6** | **-1.3** |
| **STKA** | **Stephens Creek** | **27.27** | **177** | P | **P** | **16 41 29.4** | **0.0** |
| | comp=Z,0.8nm,0.4s,baz=337,slow=15,SNR=1.9 | | | | | | |
| **BBOO** | **Buckleboo** | **28.40** | **187** | P | **P** | **16 41 39.7** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 16 41 43.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **46.43** | **301** | P | P | 16 44 07.7 | -4.3 |
| | comp=Z,0.4nm,0.4s,baz=120,slow=6.4,SNR=8.4 | | | | | | |
| **KLR** | **Kul'dur** | **53.99** | **353** | P | P | 16 45 04.2 | -4.6 |
| | comp=Z,0.4nm,0.4s,baz=174,slow=3.3,SNR=6.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **71.97** | **322** | P | **P** | **16 47 04.6** | **-3.9** |
| | comp=Z,1.3nm,0.7s,baz=106,slow=8.1,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **74.11** | **330** | P | **P** | **16 47 17.1** | **-3.9** |
| | comp=Z,0.2nm,0.4s,baz=164,slow=2.6,SNR=1.8 | | | | | | |
| **ILAR** | **Eielson Array** | **86.94** | **24** | P | P | 16 48 22.7 | -6.8 |
| | comp=Z,0.2nm,0.5s,baz=257,slow=4.0,SNR=5.2 | | | | | | |
| **DBIC** | **Dimbokro** | **144.94** | **275** | PKPbc | **PKPbc** | **16 55 18.2** | **-4.1** |
| | comp=Z,7.1nm,0.9s,baz=130,slow=2.7,SNR=7.2 | | | | | | |
| **LPAZ** | **La Paz** | **145.37** | **127** | PKPbc | **PKPbc** | **16 55 21.4** | **-3.0** |
| | comp=Z,1.6nm,0.7s,baz=230,slow=1.9,SNR=7.1 | | | | | | |

**GUC 13 16:37:51.2±0.6, 30.°15S×72.°12W, h38km±2km, ML3.7, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.67** | **142** | *eP* | Pn | 16 38 03.6 | -0.6 |
| CO06 | | | | IAML | | 16 38 15.3 | |
| | comp=E,3μm,0.1s | | | | | | |
| **CO05** | **La Serena** | **0.80** | **73** | *eP* | Pn | 16 38 06.2 | +0.4 |
| CO05 | | | | *i* S | Sn | 16 38 16.8 | +0.3 |
| CO05 | | | | IAML | | 16 38 20.6 | |
| | comp=E,3μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **1.14** | **91** | *eP* | Pn | 16 38 11.7 | +0.8 |
| GO04 | | | | *i* S | Sn | 16 38 26.8 | +1.4 |
| GO04 | | | | IAML | | 16 38 35.5 | |
| | comp=N,5μm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **1.41** | **119** | *eP* | Pn | 16 38 15.6 | +1.2 |
| CO03 | | | | *i* S | Sn | 16 38 34.5 | +2.7 |
| CO03 | | | | IAML | | 16 38 36.0 | |
| | comp=E,3μm,0.1s | | | | | | |
| **CO02** | **Combarbal** | **1.42** | **138** | *eP* | Pn | 16 38 16.4 | +1.7 |
| CO02 | | | | *i* S | Sn | 16 38 35.0 | +2.9 |
| CO02 | | | | IAML | | 16 38 41.0 | |
| | comp=N,3μm,0.4s | | | | | | |
| **LCO** | **Las Campanas** | **1.68** | **48** | *eP* | Pn | 16 38 20.2 | +2.0 |
| LCO | | | | *i* S | Sn | 16 38 42.0 | +3.4 |
| **AC04** | **Llanos de Chal** | **2.14** | **25** | *eP* | Pn | 16 38 25.9 | +1.5 |
| **VA06** | **Catapilco** | **2.50** | **164** | *eP* | Pn | 16 38 31.1 | +1.8 |
| VA06 | | | | *i* S | Sn | 16 39 00.6 | +2.0 |
| VA06 | | | | IAML | | 16 39 19.4 | |
| | comp=E,481nm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **2.93** | **153** | *eP* | Pn | 16 38 38.5 | +3.2 |
| VA03 | | | | *i* S | Sn | 16 39 12.0 | +2.8 |
| VA03 | | | | IAML | | 16 39 28.5 | |
| | comp=E,447nm,0.7s | | | | | | |
| **ROCH** | **El Roble** | **2.96** | **162** | *eP* | Pn | 16 38 38.0 | +2.0 |
| ROCH | | | | *i* S | Sn | 16 39 12.9 | +2.5 |
| ROCH | | | | IAML | | 16 39 27.9 | |
| | comp=N,181nm,0.5s | | | | | | |
| ROCH | | | | IAML | | 16 39 29.3 | |
| | comp=N,266nm,0.3s | | | | | | |
| **MT02** | **Curacav** | **3.21** | **165** | *eP* | Pn | 16 38 40.8 | +1.8 |
| MT02 | | | | *i* S | Sn | 16 39 18.3 | +2.2 |
| **PEL** | **Peldehue** | **3.22** | **158** | *i* S | Sn | 16 39 19.1 | +2.7 |
| **MT09** | **Talagante** | **3.74** | **165** | *eP* | Pn | 16 38 48.2 | +1.7 |
| MT09 | | | | *i* S | Sn | 16 39 31.1 | +1.8 |
| MT09 | | | | IAML | | 16 39 54.7 | |
| | comp=N,83nm,0.5s | | | | | | |
| **BO01** | **Tunca** | **4.32** | **169** | *eP* | Pn | 16 38 56.2 | +1.9 |
| BO01 | | | | *i* S | Sn | 16 39 45.2 | +1.8 |

*THE **13** 16:44:43.9, 38.°47N×20.°54E, h7km±1km, ML2.9/8, Error ellipse: s-maj=1.4km s-min=0.3km az=106.0*
*ATH **13** 16:44:43.7, 38.°46N×20.°58E, h9km±4km, ML2.2/4, Error ellipse: s-maj=4.4km s-min=0.6km az=287.0*
**ISC 13 16:44:43.7±0.9, 38.°47N±0.°02×20.°57E±0.°04, h11km±5km, n29, σ0.°54/52, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.01** | **230** | P | **Pg** | **16 44 45.3** | **-0.3** |
| FSK | | | | S | **Sg** | **16 44 46.0** | **-0.9** |
| | 88μm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.17** | **23** | P | **Pg** | **16 44 47.6** | **+0.1** |
| EVGI | | | | S | **Sg** | **16 44 50.7** | **+0.6** |
| | 11μm,0.1s | | | | | | |
| **EVGI** | **Lefkada island** | **0.17** | **23** | P | **Pg** | **16 44 47.6** | **+0.1** |
| EVGI | | | | S | **Sg** | **16 44 50.5** | **+0.4** |
| **DRAG** | **Dragano-Lefkad** | **0.22** | **1** | P | **Pg** | **16 44 48.2** | **-0.2** |
| DRAG | | | | S | **Sg** | **16 44 51.8** | **+0.3** |
| | 2μm,0.2s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.22** | **1** | P | **Pg** | **16 44 48.1** | **-0.2** |
| DRAG | | | | S | **Sg** | **16 44 51.8** | **+0.3** |
| **KEF4** | **Livadi, Kephal** | **0.24** | **209** | P | **Pg** | **16 44 48.5** | **-0.1** |
| KEF4 | | | | S | **Sg** | **16 44 52.6** | **+0.7** |
| | 31μm,0.2s | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.24** | **209** | P | **Pg** | **16 44 48.3** | **-0.3** |
| KEF4 | | | | S | **Sg** | **16 44 51.8** | **-0.1** |
| **NYDR** | **Nydri-Lefkada** | **0.27** | **22** | P | **Pg** | **16 44 49.2** | **0.0** |
| NYDR | | | | S | **Sg** | **16 44 53.1** | **+0.2** |
| **NYDR** | **Nydri-Lefkada** | **0.27** | **22** | P | **Pg** | **16 44 49.2** | **0.0** |
| NYDR | | | | S | **Sg** | **16 44 52.4** | **-0.4** |
| **DMLN** | **Damoulianata-K** | **0.27** | **215** | P | **Pg** | **16 44 49.1** | **-0.2** |
| DMLN | | | | S | **Sg** | **16 44 53.3** | **+0.2** |
| | 2μm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.27** | **215** | P | **Pg** | **16 44 49.1** | **-0.2** |
| DMLN | | | | S | **Sg** | **16 44 53.4** | **+0.3** |
| **LXRA** | **Lixouri, Kepha** | **0.28** | **202** | P | **Pg** | **16 44 49.3** | **-0.2** |
| LXRA | | | | S | **Sg** | **16 44 54.2** | **+0.9** |
| **VLS** | **Valsamata** | **0.29** | **177** | P | **Pg** | **16 44 49.4** | **-0.2** |
| VLS | | | | S | **Sg** | **16 44 54.2** | **+0.7** |
| | 2μm,0.2s | | | | | | |
| **VLS** | **Valsamata** | **0.29** | **177** | P | **Pg** | **16 44 49.4** | **-0.2** |
| VLS | | | | S | **Sg** | **16 44 53.4** | **-0.1** |
| VLS | | | | AML | AML | 16 44 54.6 | |
| | comp=N,6171μm,0.2s | | | | | | |
| VLS | | | | AML | AML | 16 44 55.3 | |
| | comp=E,2977μm,0.1s | | | | | | |
| **ARGA** | **Argostoli. Kep** | **0.30** | **194** | P | **Pg** | **16 44 50.3** | **+0.6** |
| ARGA | | | | S | **Sb** | **16 44 55.0** | **-0.9** |
| **KEF3** | **Kipouria, Keph** | **0.32** | **214** | P | **Pg** | **16 44 49.3** | **-0.7** |
| KEF3 | | | | S | **Sg** | **16 44 54.0** | **-0.3** |
| | comp=E,8μm,0.2s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.32** | **214** | P | **Pg** | **16 44 49.2** | **-0.9** |
| KEF3 | | | | S | **Sg** | **16 44 53.9** | **-0.4** |
| **LKD2** | **Lefkada island** | **0.33** | **12** | P | **Pg** | **16 44 50.3** | **-0.1** |
| LKD2 | | | | S | **Sg** | **16 44 55.1** | **+0.3** |
| | comp=E,518nm,0.3s | | | | | | |
| **LKD2** | **Lefkada island** | **0.33** | **12** | P | **Pg** | **16 44 50.2** | **-0.1** |
| LKD2 | | | | S | **Sg** | **16 44 54.5** | **-0.3** |
| LKD2 | | | | AML | AML | 16 45 04.6 | |
| | comp=E,1142μm,0.3s | | | | | | |
| LKD2 | | | | AML | AML | 16 45 05.6 | |
| | comp=N,919μm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.35** | **178** | P | **Pg** | **16 44 50.6** | **-0.1** |
| PSDA | | | | S | **Sg** | **16 44 56.3** | **+0.9** |
| **PSDA** | **Pessada-Kefalo** | **0.35** | **178** | P | **Pg** | **16 44 50.5** | **-0.1** |
| PSDA | | | | S | **Sg** | **16 44 56.2** | **+0.9** |
| **RLS** | **Riolos of Patr** | **0.81** | **120** | P | **Pg** | **16 44 59.0** | **-0.5** |
| RLS | | | | AML | AML | 16 45 14.5 | |
| | comp=N,257μm,0.2s | | | | | | |
| RLS | | | | AML | AML | 16 45 22.0 | |
| | comp=E,305μm,0.3s | | | | | | |
| **EVR** | **Evrytania** | **1.07** | **65** | P | **Pg** | **16 45 03.0** | **-1.2** |
| **IGT** | **Igoumenitsa** | **1.08** | **350** | P | **Pg** | **16 45 04.5** | **0.0** |
| IGT | | | | S | **Sn** | **16 45 19.9** | **0.0** |
| **LAKA** | **Lakka** | **1.13** | **101** | P | **Pg** | **16 45 04.3** | **-1.1** |
| LAKA | | | | S | **Sb** | **16 45 20.8** | **+0.8** |
| **KLV** | **Kalavryta, Ach** | **1.31** | **108** | P | **Pn** | **16 45 07.5** | **-0.6** |
| **THL** | **Klokotos Trika** | **1.57** | **45** | P | **Pb** | **16 45 13.6** | **+0.8** |
| THL | | | | AML | AML | 16 45 43.6 | |
| | comp=E,125μm,0.6s | | | | | | |
| THL | | | | AML | AML | 16 45 44.9 | |
| | comp=N,122μm,0.7s | | | | | | |
| **ITM** | **Ithomi** | **1.67** | **140** | P | **Pg** | **16 45 16.0** | **+0.2** |
| **ATAL** | **Atalanti** | **1.93** | **82** | P | **Pb** | **16 45 19.6** | **+0.6** |

*TUL **13** 17:06:04.9±2.2, 36.°50N±0.°03×98.°73W±0.°04, h13km±6km, ML2.7, ML2.5/17(NEIC), Error ellipse: s-maj=5.1km s-min=4.5km az=138.0*
**NEIC 13 17:06:04.4±1.5, 36.°47N±0.°02×98.°72W±0.°02, h4km±7km, Error ellipse: s-maj=4.0km s-min=2.3km az=146.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **1.47** | **135** | Pn | Pn | 17 06 31.4 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **135** | Pn | Pn | 17 06 31.6 | -0.3 |
| **FNO** | **Franklin** | **1.62** | **138** | Pn | Pn | 17 06 34.0 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | Pn | Pn | 17 06 35.6 | +0.4 |
| **T35A** | **Sooner Cattle** | **1.83** | **75** | | Pb | 17 06 37.7 | -0.7 |
| **R32A** | **Long Quarter,** | **1.95** | **0** | Pn | Pn | 17 06 38.2 | -0.1 |
| **W35A** | **Tecumseh** | **1.99** | **131** | | Pn | 17 06 39.4 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | | Pn | 17 06 40.0 | +1.1 |
| **TUL1** | **Leonard** | **2.44** | **102** | Pn | Pn | 17 06 44.8 | -0.2 |
| **CBKS** | **Cedar Bluff** | **2.48** | **341** | Pn | Pn | 17 06 45.6 | 0.0 |
| **AMTX** | **Amarillo** | **2.88** | **238** | Pn | Pn | 17 06 50.0 | -1.1 |
| **X37A** | **Clayton** | **3.31** | **123** | | Pn | 17 06 56.4 | -0.6 |
| **Z35A** | **Perchaven, San** | **3.35** | **158** | Pn | Pn | 17 06 56.0 | -1.6 |
| **HHAR** | **Hobbs** | **3.86** | **91** | Pn | Pn | 17 07 05.1 | +0.5 |
| **W39A** | **Magazine** | **4.21** | **106** | Pn | Pn | 17 07 09.5 | +0.2 |
| **S39A** | **Bolivar** | **4.49** | **73** | Pn | Pn | 17 07 13.0 | -0.2 |
| **T25A** | **Trinidad** | **4.61** | **280** | Pn | Pn | 17 07 15.5 | +0.4 |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | Pn | Pn | 17 07 24.8 | -0.2 |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | | Pn | 17 07 25.9 | 0.0 |
| **SDCO** | **Great Sand Dun** | **5.57** | **285** | Pn | Pn | 17 07 27.6 | -0.7 |

*MOS **13** 17:07:03.6±1.8, 36.°44N×98.°75W, h10km, mb5.1/32, MS4.8/9, Error ellipse: s-maj=5.1km s-min=4.2km az=25.8*
*BJI **13** 17:07:04.0±0.0, 36.°60N×98.°70W, h10km, mB5.7/8, mb5.1/9, Ms5.4/13, Ms7 5.1/13*
*IDC **13** 17:07:06.6±0.3, 36.°47N×98.°72W, h0km, mb4.7/45, mb1 4.8/55, mb1mx4.7/73, mbtmp4.7/55, ML4.3/9, MS4.6/82, Ms1 4.6/82, ms1mx4.6/90, Error ellipse: s-maj=9.2km s-min=8.5km az=126.0*
*NEIC **13** 17:07:06.6, 36.°49N×98.°70W, h8km, Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr-1.22; Mθθ5.09; Mφφ-3.86; Mrθ0.19; Mφθ0.09; Mφr-1.89; Fault plane solution: Mo4.98000×10^16^ NP1:φs310.98000°, δ72.15000°, λ-21.42000°. NP2:φs47.84000°, δ69.66000°, λ-160.91000°. Principal axes: T 5.0939, Plg2.0000°, Azm360.0000°; N -0.2418, Plg62.0000°, Azm93.0000°; P -4.8520, Plg28.0000°, Azm269.0000°;*
*ANF **13** 17:07:06.6±0.1, 36.°50N×98.°67W, h8km, ML6.3/17 Error ellipse: s-maj=2.1km s-min=1.1km az=177.0*
*TUL **13** 17:07:06.6±1.5, 36.°49N±0.°02×98.°74W±0.°04, h3km±4km, Error ellipse: s-maj=4.8km s-min=2.7km az=90.0*
*NEIC **13** 17:07:06.3±2.2, 36.°490N±0.°009×98.°71W±0.°04, h8km±3km, mb4.9/210, mb_Lg5.4/131, Mwr5.1/103, Mww5.1, ML5.2(TUL), Error ellipse: s-maj=4.8km s-min=1.2km az=80.0*
*NEIC **13** 17:07:08, 36.°57N×98.°67W, h12km, Moment Tensor Solution. Duration: 2s0 Moment tensor: Scale 10^16^Nm; Mrr-1.28; Mθθ6.06; Mφφ-4.78; Mrθ0.82; Mφθ0.48; Mφr-2.54; Fault plane solution: Mo6.16000×10^16^ NP1:φs46.00000°, δ66.00000°, λ-163.00000°. NP2:φs309.00000°, δ75.00000°, λ-24.00000°. Principal axes: T 6.1497, Plg6.0000°, Azm359.0000°; N 0.0181, Plg61.0000°, Azm100.0000°; P -6.1678, Plg28.0000°, Azm266.0000°;*
*GCMT **13** 17:07:09.3±0.1, 36.°64N±0.°01×98.°64W±0.°01, h14km, MW5.1/139, Moment Tensor Solution. s72,c94; s139,c227; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-1.52±.11; Mθθ7.20±.14; Mφφ-5.68±.12; Mrθ-0.72±.23; Mφθ0.50±.10; Mφr-0.61±.24; Best double couple: Mo6.53000×10^16^ NP1:φs313.00000°, δ81.00000°, λ-2.00000°. NP2:φs43.00000°, δ88.00000°, λ-171.00000°. Principal axes: T 7.2810, Plg5.0000°, Azm178.0000°; N -1.5020, Plg81.0000°, Azm56.0000°; P -5.7790, Plg8.0000°, Azm268.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 13 17:07:06.9±0.2, 36.°46N±0.°03×98.°75W±0.°03, h10km, n1059, σ2.°17/1028, mb4.9/124, MS4.8/94, 98C-83D, Fault plane solution: NP1:φs119.44974°, δ88.82919°, λ15.18264°. NP2:φs29.13204°, δ74.82060°, λ178.78687°. Principal axes: T Plg11.5135°, Azm345.3077°; N Plg74.7733°, Azm123.7558°; P Plg9.8286°, Azm253.2853°; Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.22** | **248** | Pg | **Pg** | **17 07 11.2** | **-0.3** |
| U32A | | | | Sg | **Sg** | **17 07 15.2** | **+0.6** |
| **OK009** | **Oakdale Elemen** | **1.39** | **129** | | **Pn** | **17 07 31.7** | **-0.7** |
| OK009 | | | | Sn | **Sg** | **17 07 51.2** | **-0.4** |
| **OKCFA** | **Oklahoma City** | **1.48** | **134** | | **Pn** | **17 07 33.6** | **0.0** |
| **OK005** | **Luther M Schoo** | **1.50** | **122** | | **Pn** | **17 07 33.7** | **-0.1** |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **134** | Pn | **Pn** | **17 07 33.9** | **0.0** |
| **FNO** | **Franklin** | **1.63** | **137** | | **Pb** | **17 07 36.0** | **-1.0** |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | P | **Pn** | **17 07 37.0** | **0.0** |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | P | **Pn** | **17 07 37.0** | **0.0** |
| | baz=2.0,SNR=621 | | | | | | |
| WMOK | | | | S | **Sb** | **17 08 00.8** | **+0.4** |
| | baz=2.0 | | | | | | |
| **T35A** | **Sooner Cattle** | **1.85** | **75** | | **Pb** | **17 07 39.0** | **-1.9** |
| T35A | | | | IAmb_Lg | | 17 08 06.0 | |
| | comp=Z,17μm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **1.96** | **1** | | **Pb** | **17 07 40.7** | **-1.9** |
| R32A | | | | IAmb_Lg | | 17 08 10.9 | |
| | comp=Z,20μm,1.2s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | **Pb** | **17 07 42.0** | **-1.4** |
| X34A | | | | IAmb_Lg | | 17 08 15.1 | |
| | comp=Z,17μm,0.7s | | | | | | |
| **W35A** | **Tecumseh** | **2.01** | **130** | | **Pn** | **17 07 41.3** | **+0.4** |
| **TUL1** | **Leonard** | **2.46** | **102** | Pn | **Pn** | **17 07 47.3** | **+0.2** |
| TUL1 | | | | IAmb_Lg | | 17 08 25.6 | |
| | comp=Z,19μm,0.9s | | | | | | |
| **TUL1** | **Leonard** | **2.46** | **102** | P | **Pn** | **17 07 47.1** | **+0.1** |
| | baz=285,SNR=864 | | | | | | |
| TUL1 | | | | Sb | **Sb** | **17 08 21.2** | **-0.3** |
| | baz=285 | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | P | **Pn** | **17 07 47.9** | **+0.6** |
| CBKS | | | | pmax | pmax | | |
| | comp=Z,9μm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | Pn | **Pn** | **17 07 47.9** | **+0.6** |
| CBKS | | | | IAmb_Lg | | 17 08 28.9 | |
| | comp=Z,9μm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | P | **Pn** | **17 07 47.9** | **+0.6** |
| | baz=160,SNR=375 | | | | | | |
| CBKS | | | | Sb | **Sg** | **17 08 23.9** | **-2.5** |
| | baz=160 | | | | | | |
| **AMTX** | **Amarillo** | **2.86** | **237** | | **Pn** | **17 07 54.3** | **+1.6** |
| **AMTX** | **Amarillo** | **2.86** | **237** | P | **Pn** | **17 07 54.4** | **+1.7** |
| | baz=56 | | | | | | |
| AMTX | | | | Sb | **Sg** | **17 08 36.8** | **-2.0** |
| | baz=56 | | | | | | |
| **KSU1** | **Kansas State U** | **3.13** | **32** | Pn | **Pn** | **17 07 56.9** | **+0.5** |
| **KSU1** | **Kansas State U** | **3.13** | **32** | IAmb_Lg | | 17 08 52.2 | |
| | comp=Z,1.0μm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.13** | **32** | P | **Pn** | **17 07 57.1** | **+0.8** |
| | baz=213,SNR=326 | | | | | | |
| **X37A** | **Clayton** | **3.33** | **123** | IAmb_Lg | | 17 08 56.6 | |
| | comp=Z,8μm,0.8s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.36** | **158** | | **Pn** | **17 08 00.1** | **+0.7** |
| Z35A | | | | IAmb_Lg | | 17 09 00.4 | |
| | comp=Z,4μm,0.9s | | | | | | |
| **U38A** | **Gravette** | **3.52** | **89** | IAmb_Lg | | 17 09 04.5 | |
| | comp=Z,16μm,1.1s | | | | | | |
| **HHAR** | **Hobbs** | **3.88** | **91** | | **Pn** | **17 08 04.5** | **-2.2** |
| HHAR | | | | IAmb_Lg | | 17 09 09.4 | |
| | comp=Z,8μm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **191** | Pn | **Pn** | **17 08 07.2** | **+0.3** |
| ABTX | | | | IAmb_Lg | | 17 09 13.6 | |
| | comp=Z,4μm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **191** | P | **Pn** | **17 08 07.5** | **+0.5** |
| | baz=11,SNR=210 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | | **Pn** | **17 08 08.8** | **+0.6** |
| KSCO | | | | IAmb_Lg | | 17 09 23.6 | |
| | comp=Z,16μm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | P | **Pn** | **17 08 09.0** | **+0.7** |
| | baz=128,SNR=42 | | | | | | |
| KSCO | | | | S | **Sn** | **17 08 56.3** | **+1.1** |
| | baz=128 | | | | | | |
| **MSTX** | **Muleshoe** | **4.13** | **234** | | **Pn** | **17 08 10.9** | **+0.7** |
| MSTX | | | | IAmb_Lg | | 17 09 22.2 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **MSTX** | **Muleshoe** | **4.13** | **234** | P | **Pn** | **17 08 11.2** | **+1.0** |
| | baz=52,SNR=39 | | | | | | |
| **W39A** | **Magazine** | **4.23** | **106** | | **Pn** | **17 08 10.8** | **-0.6** |
| W39A | | | | IAmb_Lg | | 17 09 23.4 | |
| | comp=Z,12μm,0.7s | | | | | | |
| **W39A** | **Magazine** | **4.23** | **106** | P | **Pn** | **17 08 10.8** | **-0.6** |
| | baz=289,SNR=186 | | | | | | |
| W39A | | | | S | **Sn** | **17 09 00.4** | **-0.3** |
| | baz=289 | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.39** | **13** | | **Pn** | **17 08 12.8** | **-0.8** |
| **Z38A** | **Mt. Pleasant** | **4.45** | **135** | | **Pn** | **17 08 14.1** | **-0.3** |
| Z38A | | | | IAmb_Lg | | 17 09 31.2 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **S39A** | **Bolivar** | **4.51** | **73** | | **Pn** | **17 08 14.5** | **-0.7** |
| S39A | | | | IAmb_Lg | | 17 09 28.9 | |
| | comp=Z,12μm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.59** | **166** | | **Pn** | **17 08 16.5** | **+0.2** |
| **WHTX** | **Lake Whitney,** | **4.59** | **166** | P | **Pn** | **17 08 16.7** | **+0.3** |
| | baz=347,SNR=82 | | | | | | |
| **T25A** | **Trinidad** | **4.59** | **280** | | **Pn** | **17 08 17.4** | **+0.8** |
| T25A | | | | IAmb_Lg | | 17 09 37.1 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **4.59** | **280** | P | **Pn** | **17 08 17.3** | **+0.7** |
| | baz=96,SNR=211 | | | | | | |
| T25A | | | | Sb | **Sg** | **17 09 29.3** | **-5.1** |
| | baz=96 | | | | | | |
| **MIAR** | **Mount Ida** | **4.63** | **113** | P | **Pn** | **17 08 16.3** | **-0.7** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,12μm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **4.63** | **113** | | **Pn** | **17 08 16.3** | **-0.7** |
| MIAR | | | | IAmb_Lg | | 17 09 42.4 | |
| | comp=Z,12μm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **4.63** | **113** | P | **Pn** | **17 08 16.9** | **-0.1** |
| | baz=296,SNR=249 | | | | | | |
| **U40A** | **Yellville** | **4.76** | **90** | | **Pn** | **17 08 17.7** | **-1.0** |
| U40A | | | | IAmb_Lg | | 17 09 35.3 | |
| | comp=Z,10μ

Z41A IAmb_Lg 17 10 24.5
comp=Z,7µm,0.9s
**Z41A Richland Creek 5.84 121** P **Pn** **17 08 32.7 -0.8**
baz=305,SNR=30
**JCT Junction City 6.03 189** P **Pn** **17 08 34.7 -1.5**
JCT pmax pmax
comp=Z,5µm,1.1s
**JCT Junction City 6.03 189** **Pn** **17 08 34.7 -1.5**
JCT IAmb_Lg 17 10 25.9
comp=Z,5µm,1.1s
**JCT Junction City 6.03 189** P **Pn** **17 08 35.3 -1.0**
baz=8.3,SNR=68
**N38A Joes South For 6.11 43** **Pn** **17 08 36.4 -0.8**
**P40A Paris 6.11 58** **Pn** **17 08 37.0 -0.3**
**LCAR Lake Charles 6.15 91** **Pn** **17 08 37.0 -0.7**
LCAR IAmb_Lg 17 10 24.4
comp=Z,5µm,0.8s
**K31A O'Neill 6.15 360** Pn **Pn** **17 08 37.3 -0.5**
K31A IAmb_Lg 17 10 26.7
comp=Z,7µm,0.7s
**T42A Van Buren 6.17 82** **Pn** **17 08 37.1 -1.0**
T42A IAmb_Lg 17 10 30.4
comp=Z,4µm,0.9s
**CCM Cathedral Cave 6.19 73** P **Pn** **17 08 37.2 -1.2**
CCM pmax pmax
comp=Z,8µm,0.7s
**CCM Cathedral Cave 6.19 73** **Pn** **17 08 37.2 -1.2**
CCM IAmb_Lg 17 10 22.0
comp=Z,8µm,0.7s
**CCM Cathedral Cave 6.19 73** P **Pn** **17 08 37.5 -0.9**
baz=258
**CCAR Cane Creek 6.25 112** IAmb_Lg 17 10 35.5
comp=Z,8µm,0.9s
**ISCO Idaho Springs 6.35 304** P **Pn** **17 08 41.1 +0.2**
ISCO pmax pmax
comp=Z,4µm,0.8s
**ISCO Idaho Springs 6.35 304** **Pn** **17 08 41.0 +0.2**
ISCO IAmb_Lg 17 10 42.0
comp=Z,4µm,0.8s
**ISCO Idaho Springs 6.35 304** P **Pn** **17 08 41.2 +0.3**
baz=119,SNR=62
**ANMO Albuquerque 6.45 259** Pn **Pn** **17 08 43.1 +1.0**
comp=Z,8.4nm,0.3s,baz=87,slow=14,SNR=112
ANMO Pg Pg 17 09 05.1 -5.4
comp=Z,57nm,0.3s,baz=82,slow=19,SNR=10
ANMO Lg Lg 17 10 29.6
comp=Z,134nm,0.3s,baz=351,slow=13,SNR=5.3
ANMO LR LR 17 11 18.8
comp=Z,10µm,18.5s,baz=74,slow=39
**ANMO Albuquerque 6.45 259** **Pn** **17 08 42.4 +0.2**
**ANMO Albuquerque 6.45 259** P **Pn** **17 08 43.4 +1.2**
baz=74
**S22A 4UR Ranch, Cre 6.58 284** **Pn** **17 08 44.6 +0.6**
**S22A 4UR Ranch, Cre 6.58 284** P **Pn** **17 08 45.3 +1.3**
baz=98,SNR=56
**HBAR Harrisburg 6.62 95** **Pn** **17 08 43.1 -1.2**
**PBMO Poplar Bluff 6.70 85** **Pn** **17 08 44.3 -1.0**
**FVM French Village 6.81 75** P **Pn** **17 08 45.5 -1.4**
FVM pmax pmax
comp=Z,5µm,0.8s
**FVM French Village 6.81 75** **Pn** **17 08 45.5 -1.4**
FVM IAmb_Lg 17 10 49.3
comp=Z,5µm,0.8s
**BNM Barren Site 6.84 253** **Pn** **17 08 47.7 +0.2**
**SCIA State Center 6.93 37** Pn **Pn** **17 08 47.5 -1.1**
SCIA IAmb_Lg 17 10 53.7
comp=Z,8µm,0.7s
**SCIA State Center 6.93 37** P **Pn** **17 08 47.4 -1.1**
baz=220,SNR=40
**HKT Hockley 6.94 159** **Pn** **17 08 48.0 -0.6**
HKT pmax pmax
comp=Z,25nm,1.0s
**HKT Hockley 6.94 159** **Pn** **17 08 46.8 -1.8**
**SMCO Snowmass 7.05 295** **Pn** **17 08 49.7 -0.8**
**SLM Saint Louis 7.10 70** P **Pn** **17 08 49.7 -1.2**
SLM pmax pmax
comp=Z,9µm,0.8s
**SLM Saint Louis 7.10 70** **Pn** **17 08 49.7 -1.2**
**LENM Lemitar 7.10 254** **Pn** **17 08 52.9 +1.8**
**PHWY Pilot Hill 7.12 315** **Pn** **17 08 51.3 -0.1**
PHWY IAmb_Lg 17 10 54.6
comp=Z,6µm,0.9s
**143A Socs Landing, 7.12 120** **Pn** **17 08 51.0 -0.1**
143A IAmb_Lg 17 11 02.4
comp=Z,5µm,0.9s
**N23A Red Feather La 7.16 310** Pn **Pn** **17 08 51.6 -0.3**
**N23A Red Feather La 7.16 310** P **Pn** **17 08 52.8 +0.9**
baz=126,SNR=53
**MNTX Cornudas Mount 7.27 231** **Pn** **17 08 53.4 +0.1**
MNTX IAmb_Lg 17 10 57.2
comp=Z,2µm,0.8s
**MNTX Cornudas Mount 7.27 231** P **Pn** **17 08 53.6 +0.4**
baz=47,SNR=88
**MET Memphis--Engin 7.29 98** IAmb_Lg 17 11 11.0
comp=Z,7µm,0.7s
**441A DeRidder 7.34 139** Pn **Pn** **17 08 54.4 +0.2**
**342A Flagon Creek P 7.37 132** Pn **Pn** **17 08 53.6 -0.9**
342A IAmb_Lg 17 11 00.0
comp=Z,2µm,1.1s
**ECSD EROS Data Cent 7.44 12** **Pn** **17 08 53.5 -2.1**
ECSD IAmb_Lg 17 11 09.2
comp=Z,3µm,0.9s
**ECSD EROS Data Cent 7.44 12** P **Pn** **17 08 53.8 -1.8**
baz=193,SNR=430
**N41A Harden Midland 7.49 53** **Pn** **17 08 55.7 -0.6**
**735A Kenedy 7.63 174** **Pn** **17 08 57.3 -0.8**
735A IAmb_Lg 17 11 17.1
comp=Z,3µm,1.1s
**HICK Hickman 7.67 87** **Pn** **17 08 57.7 -0.9**
**S44A Carbondale 7.69 78** **Pn** **17 08 57.0 -1.9**
S44A IAmb_Lg 17 11 29.0
comp=Z,5µm,0.8s
**K38A Parkersburg 7.71 35** **Pn** **17 08 56.6 -2.6**
**MVCO Mesa Verde 7.85 278** **Pn** **17 09 03.4 +2.0**
MVCO IAmb_Lg 17 11 25.6
comp=Z,2µm,1.0s
**MVCO Mesa Verde 7.85 278** P **Pn** **17 09 03.4 +2.0**
baz=92,SNR=44
**OXF Oxford 7.86 102** P **Pn** **17 08 59.8 -1.5**
OXF pmax pmax
comp=Z,6µm,1.0s
**OXF Oxford 7.86 102** **Pn** **17 08 59.8 -1.5**
OXF IAmb_Lg 17 11 28.2
comp=Z,6µm,1.0s
**OXF Oxford 7.86 102** P **Pn** **17 09 00.6 -0.7**
baz=287,SNR=170
**P43A Skaggs, Pawnee 7.94 64** Pn **Pn** **17 09 01.6 -0.7**
**PV15 Paradox Valley 7.97 287** **Pn** **17 09 03.5 +0.5**
**Y45A Yeager Farm, C 7.97 106** Pn **Pn** **17 09 01.1 -1.7**
Y45A IAmb_Lg 17 11 28.3
comp=Z,4µm,0.8s
**SUSD Miller 7.97 359** **Pn** **17 09 01.6 -1.2**
SUSD IAmb_Lg 17 11 33.4
comp=Z,4µm,0.7s
**SUSD Miller 7.97 359** P **Pn** **17 09 02.1 -0.7**
baz=179,SNR=38
**VBMS Vicksburg 8.02 120** **Pn** **17 09 02.3 -1.1**
VBMS IAmb_Lg 17 11 41.0
comp=Z,2µm,0.9s
**VBMS Vicksburg 8.02 120** P **Pn** **17 09 03.8 +0.4**
baz=305
**L40A Anamosa 8.08 44** **Pn** **17 09 02.8 -1.5**
**Q44A Meyer Farm, Va 8.09 70** **Pn** **17 09 03.2 -1.2**
**PV07 Paradox Valley 8.12 287** Pn **Pn** **17 09 04.8 -0.2**
**T45A Paducah 8.13 83** **Pn** **17 09 03.6 -1.3**
**833A Chaparral WMA, 8.13 184** **Pn** **17 09 04.7 -0.4**
**833A Chaparral WMA, 8.13 184** P **Pn** **17 09 05.4 +0.3**
baz=3.9,SNR=45
**PV13 Radium Mtn., P 8.20 285** **Pn** **17 09 06.1 -0.1**
**TX31 Lajitas Ar. Si 8.22 212** **Pn** **17 09 05.2 -1.2**
**TX32 Lajitas Array 8.22 212** **Pn** **17 09 05.5 -0.9**
**TXAR Lajitas Array 8.22 212** Pn **Pn** **17 09 05.8 -0.6**
comp=Z,23nm,0.3s,baz=39,slow=10.0,SNR=431
TXAR Pg **Pb** **17 09 33.7 +4.2**
comp=Z,37nm,0.3s,baz=41,slow=14,SNR=4.5
TXAR Lg Lg 17 11 27.1
comp=Z,110nm,0.3s,baz=36,slow=24,SNR=9.2
TXAR LR LR 17 12 55.0
comp=Z,2µm,19.8s,baz=28,slow=42
**TXAR Lajitas Array 8.22 212** P **Pn** **17 09 05.5 -0.9**
**TXAR Lajitas Array 8.22 212** **Pn** **17 09 05.5 -0.9**
**PV11 David Mesa, Pa 8.27 286** **Pn** **17 09 07.7 +0.7**
**O20A White River Ci 8.31 299** P **Pn** **17 09 09.0 +1.3**
baz=113
**344A Westbrook Farm 8.32 125** Pn **Pn** **17 09 06.9 -0.8**

**RWWY Rawlins 8.40 311** **Pn** **17 09 09.1 +0.2**
RWWY IAmb_Lg 17 11 36.2
comp=Z,6µm,1.2s
**PV23 Carpenter Ridg 8.40 287** **Pn** **17 09 10.5 +1.5**
**PV10 Paradox Valley 8.41 286** **Pn** **17 09 09.3 +0.3**
**121A Cookes Peak, D 8.43 245** Pn **Pn** **17 09 09.6 +0.4**
121A IAmb_Lg 17 11 55.5
comp=Z,1µm,1.1s
**121A Cookes Peak, D 8.43 245** P **Pn** **17 09 09.2 0.0**
baz=60,SNR=32
**HDIL Hopedale 8.46 58** Pn **Pn** **17 09 07.7 -1.8**
**HDIL Hopedale 8.46 58** P **Pn** **17 09 08.4 -1.1**
baz=244,SNR=441
**I37A Lemond, Waseca 8.58 27** IAmb_Lg 17 12 00.4
comp=Z,4µm,0.8s
**K22A Casper 8.61 318** Pn **Pn** **17 09 11.8 0.0**
K22A IAmb_Lg 17 11 58.0
comp=Z,6µm,0.9s
**K22A Casper 8.61 318** P **Pn** **17 09 11.7 0.0**
baz=133,SNR=53
**RSSD Black Hills 8.65 334** P **Pn** **17 09 12.4 +0.1**
RSSD pmax pmax
comp=Z,5µm,1.2s
**RSSD Black Hills 8.65 334** Pn **Pn** **17 09 12.4 +0.1**
RSSD IAmb_Lg 17 11 46.5
comp=Z,5µm,1.1s
**RSSD Black Hills 8.65 334** P **Pn** **17 09 12.6 +0.3**
baz=150
**OLIL Olney 8.75 72** Pn **Pn** **17 09 12.7 -0.8**
**PLAL Pickwick Lake 8.80 97** Pn **Pn** **17 09 13.2 -1.1**
**WVT Waverly 8.82 89** P **Pn** **17 09 13.7 -0.8**
**WVT Waverly 8.82 89** Pn **Pn** **17 09 13.7 -0.8**
**WVT Waverly 8.82 89** P **Pn** **17 09 13.6 -0.8**
baz=276
**146A Union 8.86 113** **Pn** **17 09 15.1 +0.1**
146A IAmb_Lg 17 11 55.4
comp=Z,2µm,0.9s
**O44A Mansfield 8.88 62** **Pn** **17 09 14.3 -0.9**
**L42A Oliver, Polo 8.96 49** Pn **Pn** **17 09 14.8 -1.5**
**USIN University of 8.97 77** Pn **Pn** **17 09 15.0 -1.4**
**W18A Petrified Fore 9.03 265** P **Pn** **17 09 19.0 +1.5**
baz=78
**JFWS Jewell Farm 9.19 43** P **Pn** **17 09 18.0 -1.4**
JFWS pmax pmax
comp=Z,5µm,0.9s
**JFWS Jewell Farm 9.19 43** Pn **Pn** **17 09 18.0 -1.4**
JFWS IAmb_Lg 17 12 09.5
comp=Z,5µm,0.8s
**JFWS Jewell Farm 9.19 43** P **Pn** **17 09 18.5 -1.0**
baz=228,SNR=123
**T47A Sharon Grove 9.36 83** **Pn** **17 09 20.5 -1.4**
**Z47A Carrollton 9.36 107** **Pn** **17 09 20.6 -1.3**
**RDMU Red Mountain 9.42 299** Pn **Pn** **17 09 22.7 -0.1**
**F33A 5 Mile Ranch, 9.55 10** IAmb_Lg 17 12 14.2
comp=Z,4µm,1.1s
**P18A Preston Nutter 9.60 293** **Pn** **17 09 26.5 +1.1**
**P46A Rosedale 9.63 67** **Pn** **17 09 24.1 -1.5**
**I40A Norwalk 9.68 37** Pn **Pn** **17 09 24.8 -1.4**
I40A IAmb_Lg 17 12 22.1
comp=Z,4µm,1.0s
**M44A Midewin, Midew 9.68 56** **Pn** **17 09 25.1 -1.2**
**V48A Smith Brothers 9.68 91** **Pn** **17 09 24.6 -1.6**
**SRU San Rafael Swe 9.69 289** P **Pn** **17 09 26.5 0.0**
**SRU San Rafael Swe 9.69 289** **Pn** **17 09 26.5 0.0**
**X48A Hartselle 9.76 98** **Pn** **17 09 27.0 -0.3**
**SPMN Marine on St. 9.84 25** IAmb_Lg 17 12 30.0
comp=Z,3µm,1.0s
**SPMN Marine on St. 9.84 25** P **Pn** **17 09 26.4 -2.0**
baz=209,SNR=88
**P17A Butcher Ranch, 9.93 291** **Pn** **17 09 30.2 +0.4**
**SFIN Lafayette 9.94 63** **Pn** **17 09 28.5 -1.3**
**SFIN Lafayette 9.94 63** P **Pn** **17 09 28.4 -1.4**
baz=250,SNR=60
**CLTN Cedars of Leba 10.03 88** **Pn** **17 09 29.7 -1.4**
**BLO Bloomington 10.04 71** P **Pn** **17 09 30.0 -1.2**
**BLO Bloomington 10.04 71** **Pn** **17 09 29.9 -1.2**
**WCI Wyandotte Cave 10.07 76** P **Pn** **17 09 30.2 -1.4**
**WCI Wyandotte Cave 10.07 76** Pn **Pn** **17 09 30.2 -1.4**
**WCI Wyandotte Cave 10.07 76** P **Pn** **17 09 30.4 -1.2**
baz=264
**319A Douglas 10.11 243** Pn **Pn** **17 09 32.1 -0.2**
**Q16A Castle Valley 10.15 288** **Pn** **17 09 33.4 +0.5**
**L44A Lake County Fo 10.15 52** **Pn** **17 09 31.3 -1.3**
**L44A Lake County Fo 10.15 52** P **Pn** **17 09 31.7 -1.0**
baz=239,SNR=26
**K43A Burlington 10.17 49** **Pn** **17 09 30.6 -2.3**
**E28A Huff 10.21 352** **Pn** **17 09 32.2 -1.2**
**TMUT Trail Mountain 10.25 290** Pn **Pn** **17 09 35.7 +1.4**
**LRAL Lakeview Retre 10.25 106** Pn **Pn** **17 09 32.5 -1.6**
**LRAL Lakeview Retre 10.25 106** P **Pn** **17 09 33.2 -0.9**
baz=293,SNR=40
**WUAZ Wupatki 10.28 268** Pn **Pn** **17 09 34.0 -0.6**
**WUAZ Wupatki 10.28 268** P **Pn** **17 09 34.2 -0.3**
baz=81,SNR=70
**Y49A Blount Mountai 10.43 101** Pn **Pn** **17 09 35.6 -0.9**
**BW06 Boulder Array 10.44 310** **Pn** **17 09 36.5 -0.4**
**BW06 Boulder Array 10.44 310** P **Pn** **17 09 36.0 -0.9**
baz=123,SNR=124
**PD31 Pinedale Array 10.44 310** **Pn** **17 09 36.5 -0.3**
**PDAR Pinedale Array 10.44 310** Pn **Pn** **17 09 36.6 -0.3**
comp=Z,4.5nm,0.3s,baz=131,slow=13,SNR=89
PDAR Pg 17 10 17.8
comp=Z,14nm,0.3s,baz=110,slow=15,SNR=6.9
PDAR Lg Lg 17 12 36.0
comp=Z,34nm,0.3s,baz=119,slow=28,SNR=9.9
PDAR LR LR 17 13 18.6
comp=Z,2µm,18.4s,baz=124,slow=36
**U49A Red Boiling Sp 10.44 86** **Pn** **17 09 35.9 -0.8**
**SWET Sewanee 10.48 93** **Pn** **17 09 37.1 -0.2**
**I42A Draeger Farm, 10.56 42** Pn **Pn** **17 09 36.6 -1.7**
**D32A Dogwood Acres, 10.74 6** **Pn** **17 09 38.3 -2.4**
**TUC Tucson 10.77 251** P **Pn** **17 09 40.1 -1.2**
**TUC Tucson 10.77 251** Pn **Pn** **17 09 40.1 -1.2**
**TUC Tucson 10.77 251** P **Pn** **17 09 41.4 +0.1**
baz=64
**MTPU Mount Pierson 10.83 282** **Pn** **17 09 40.9 -1.3**
**MSU Marysvale 10.87 285** P **Pn** **17 09 42.0 -0.7**
**MSU Marysvale 10.87 285** Pn **Pn** **17 09 42.0 -0.7**
**FPAL Fort Paine 10.88 96** Pn **Pn** **17 09 41.8 -1.0**
**PKCU Pink Cliffs 10.90 279** **Pn** **17 09 42.9 -0.3**
**U15A North Rim 10.91 274** Pn **Pn** **17 09 43.1 -0.2**
**P48A Milroy 10.94 70** Pn **Pn** **17 09 41.4 -2.0**
**R49A Shelbyville 10.96 76** **Pn** **17 09 42.6 -1.1**
**W50A Signal Mountai 10.98 93** **Pn** **17 09 43.1 -1.0**
**NLU North Lily Min 11.05 292** **Pn** **17 09 43.8 -1.4**
**BRAL Brewton 11.07 115** **Pn** **17 09 43.9 -1.3**
**BRAL Brewton 11.07 115** P **Pn** **17 09 44.8 -0.4**
baz=302,SNR=8.0
**N47A Urbana 11.12 63** Pn **Pn** **17 09 43.2 -2.7**
**L46A Eue Claire 11.13 56** **Pn** **17 09 44.9 -1.1**
**HPIG 11.17 214** **Pn** **17 09 45.6 -1.3**
**T50A Nancy 11.18 83** **Pn** **17 09 45.6 -1.1**
**250A Grady 11.26 110** **Pn** **17 09 46.5 -1.3**
**KNB Kanab 11.31 277** P **Pn** **17 09 46.6 -2.1**
**KNB Kanab 11.31 277** **Pn** **17 09 46.6 -2.1**
**O48B Farmland 11.32 66** P **Pn** **17 09 45.9 -2.8**
baz=255,SNR=83
**MDND Maddock 11.39 357** P **Pn** **17 09 46.6 -3.0**
baz=176,SNR=19
**AHID Auburn Hatcher 11.41 307** **Pn** **17 09 47.6 -2.6**
**X51A Calhoun 11.48 95** **Pn** **17 09 48.8 -2.1**
**P49A Miami Univ. Ec 11.49 70** **Pn** **17 09 48.3 -2.7**
**P49A Miami Univ. Ec 11.49 70** P **Pn** **17 09 48.5 -2.4**
baz=259,SNR=78
**LOHW Long Hollow 11.55 312** **Pn** **17 09 51.0 -1.1**
**SNOW Snow King Moun 11.56 311** **Pn** **17 09 50.1 -2.0**
**H43A Windswept, Lux 11.56 43** Pn **Pn** **17 09 49.7 -2.3**
**REDW Red Top Meadow 11.56 310** **Pn** **17 09 49.5 -2.7**
**CPCT Cooper Cave 11.58 91** Pn **Pn** **17 09 50.9 -1.3**
**Z51A Franklin 11.58 102** **Pn** **17 09 51.5 -0.7**
**R50A Paris 11.62 77** **Pn** **17 09 50.7 -2.1**
**LAO LASA Array 11.64 334** Pn **Pn** **17 09 50.7 -2.4**
**LAO LASA Array 11.64 334** P **Pn** **17 09 52.4 -0.7**
baz=149,SNR=157
**LCMT Little Creek M 11.65 277** **Pn** **17 09 51.9 -1.4**
**DUG Dugway, Tooele 11.66 293** P **Pn** **17 09 51.3 -2.1**
**DUG Dugway, Tooele 11.66 293** **Pn** **17 09 51.3 -2.1**
**DUG Dugway, Tooele 11.66 293** P **Pn** **17 09 53.3 -0.2**
baz=104
**V51A Loudon 11.66 89** **Pn** **17 09 52.8 -0.6**
**TPAW Teton Pass 11.69 311** **Pn** **17 09 51.5 -2.5**
**MOOW Moose Ponds 11.71 312** **Pn** **17 09 52.2 -2.0**
**ECR Eagle Creek 11.73 308** **Pn** **17 09 52.3 -2.2**

**CCUT Cedar City 11.74 280** Pn **Pn** **17 09 53.4 -1.3**
**RLMT Red Lodge 11.75 321** Pn **Pn** **17 09 52.8 -2.0**
**RLMT Red Lodge 11.75 321** P **Pn** **17 09 54.9 +0.1**
baz=134,SNR=23
**FLWY Flagg Ranch 11.88 314** **Pn** **17 09 54.2 -2.2**
**O49A Covington 11.91 67** **Pn** **17 09 54.6 -2.3**
**H17A Grant Village 11.99 315** **Pn** **17 09 55.5 -2.6**
**H17A Grant Village 11.99 315** P **Pn** **17 09 57.9 -0.2**
baz=127
**BGU Big Grassy Mou 12.01 296** Pn **Pn** **17 09 56.4 -2.0**
**AGMN Agassiz Nation 12.02 9** P **Pn** **17 09 53.6 -4.6**
baz=191,SNR=45
**COWI Conover 12.03 34** **Pn** **17 09 55.1 -3.2**
**HVU Hansel Valley 12.11 300** P **Pn** **17 09 57.2 -2.5**
**HVU Hansel Valley 12.11 300** **Pn** **17 09 57.1 -2.5**
**W52A Murphy 12.12 92** **Pn** **17 09 58.2 -1.5**
**TKL Tuckaleechee C 12.15 89** Pn **Pn** **17 09 58.7 -1.3**
comp=Z,11nm,0.3s,baz=245,slow=9.7,SNR=88
TKL Sn **Sn** **17 12 14.8 -0.7**
comp=Z,9.2nm,0.3s,baz=251,slow=23,SNR=2.0
TKL Lg Lg 17 13 24.5
comp=Z,44nm,0.3s,baz=355,slow=22,SNR=5.6
TKL LR LR 17 14 53.8
comp=Z,3µm,18.6s,baz=268,slow=38
**TKL Tuckaleechee C 12.15 89** P **Pn** **17 09 57.7 -2.3**
**TKL Tuckaleechee C 12.15 89** Pn **Pn** **17 09 57.7 -2.3**
**152A Waverly Hall 12.17 104** **Pn** **17 09 57.8 -2.5**
**S51A Beattyville 12.17 80** **Pn** **17 09 57.4 -2.9**
**I45A Fountain 12.18 48** **Pn** **17 09 57.8 -2.6**
**N49A Columbus Grove 12.22 64** Pn **Pn** **17 09 58.0 -2.9**
**TZTN Tazewell 12.23 85** **Pn** **17 09 58.6 -2.6**
**TZTN Tazewell 12.23 85** P **Pn** **17 09 59.4 -1.8**
baz=274,SNR=49
**V52A Sevierville 12.27 88** **Pn** **17 09 59.9 -1.8**
**V52A Lilburn 12.30 98** **Pn** **17 09 59.8 -2.3**
**L48A N Adams 12.38 59** **Pn** **17 10 00.7 -2.4**
**YHH Holmes Hill 12.38 316** Pn **Pn** **17 10 00.8 -2.7**
**GCMT Greycliff 12.42 322** **Pn** **17 10 02.3 -1.6**
**Q51A Peebles 12.46 74** **Pn** **17 10 01.6 -2.7**
**214A Organ Pipe Nat 12.48 253** Pn **Pn** **17 10 02.8 -1.7**
**214A Organ Pipe Nat 12.48 253** P **Pn** **17 10 05.0 +0.4**
baz=65
**352A Blakely 12.50 109** **Pn** **17 10 03.1 -1.8**
**DGMT Dagmar 12.65 343** Pn **Pn** **17 10 04.5 -2.3**
**DGMT Dagmar 12.65 343** P **Pn** **17 10 04.7 -2.1**
baz=159,SNR=80
**J47A Sunmer 12.65 53** **Pn** **17 10 05.0 -1.9**
**EYMN Ely 12.66 23** P **Pn** **17 10 02.5 -4.5**
baz=208,SNR=57
**QLMT Earthquake Lak 12.74 315** **Pn** **17 10 06.8 -1.4**
**P51A Williamsport 12.74 72** **Pn** **17 10 05.1 -3.0**
**PDMCI Parker Dam,Lak 12.75 265** P **Pn** **17 10 09.6 +1.4**
baz=76
**GOGA Godfrey 12.90 99** P **Pn** **17 10 08.5 -1.9**
**GOGA Godfrey 12.90 99** **Pn** **17 10 08.4 -1.9**
**GOGA Godfrey 12.90 99** P **Pn** **17 10 09.5 -0.8**
baz=288,SNR=10
**113A Mohawk Valley, 12.91 258** Pn **Pn** **17 10 09.2 -1.2**
**V53A Saluda 12.92 89** **Pn** **17 10 07.9 -2.7**
**ACSO Alum Creek Sta 12.94 68** P **Pn** **17 10 07.7 -3.1**
baz=258,SNR=80
**BG3 Lake Jocassee 12.94 92** **Pn** **17 10 08.0 -2.8**
**AAM Ann Arbor 13.04 59** P **Pn** **17 10 08.9 -3.3**
**AAM Ann Arbor 13.04 59** Pn **Pn** **17 10 08.9 -3.3**
**AAM Ann Arbor 13.04 59** P **Pn** **17 10 09.2 -3.0**
baz=248,SNR=54
**G45A Suttons Bay 13.10 45** Pn **Pn** **17 10 09.5 -3.5**
**M50A Fremont 13.18 63** **Pn** **17 10 10.8 -3.3**
**E43A Lone Tree Farm 13.25 38** Pn **Pn** **17 10 11.8 -3.2**
**Q52A Bidwell 13.29 74** **Pn** **17 10 12.8 -2.8**
**BOZ Bozeman (W) 13.32 317** P **Pn** **17 10 13.7 -2.4**
**BOZ Bozeman (W) 13.32 317** **Pn** **17 10 13.7 -2.4**
**BOZ Bozeman (W) 13.32 317** P **Pn** **17 10 17.1 +1.0**
baz=129
**154A Montrose 13.45 102** **Pn** **17 10 15.5 -2.4**
**P52A Corning 13.47 71** Pn **Pn** **17 10 14.6 -3.5**
**P52A Corning 13.47 71** P **Pn** **17 10 14.4 -3.7**
baz=262,SNR=126
**R53A Hurricane 13.49 77** **Pn** **17 10 14.8 -3.5**
**R11A Troy Canyon, C 13.52 283** Pn **Pn** **17 10 19.1 +0.2**
**R11A Troy Canyon, C 13.52 283** P **Pn** **17 10 20.6 +1.6**
baz=93
**N51A Ashland 13.54 66** Pn **Pn** **17 10 15.4 -3.6**
**TIGA Tifton 13.54 107** **Pn** **17 10 17.4 -1.7**
**TIGA Tifton 13.54 107** P **Pn** **17 10 16.9 -2.2**
baz=296
**MCMT McKenzie Canyo 13.57 312** **Pn** **17 10 16.7 -2.9**
**GLMI Grayling 13.58 48** P **Pn** **17 10 16.3 -3.3**
baz=237,SNR=79
**ELK Elko 13.59 293** Pn **Pn** **17 10 19.2 -0.6**
comp=Z,0.1nm,0.3s,baz=90,slow=13,SNR=2.8
ELK Pg Pg 17 11 22.3
comp=Z,0.3nm,0.3s,baz=127,slow=3.5,SNR=6.6
ELK Lg Lg 17 14 15.7
comp=Z,0.2nm,0.3s,baz=21,slow=20,SNR=3.0
ELK LR LR 17 16 14.4
comp=Z,794nm,21.1s,baz=98,slow=40
**ELK Elko 13.59 293** P **Pn** **17 10 17.7 -2.1**
**ELK Elko 13.59 293** Pn **Pn** **17 10 17.7 -2.1**
**IRM Iron Mountain 13.59 265** P **Pn** **17 10 21.2 +1.4**
baz=75,SNR=11
**U54A Nelsons Funny 13.62 85** **Pn** **17 10 17.9 -2.4**
**HODGE Hodges 13.65 95** **Pn** **17 10 17.9 -2.6**
**GLA Glamis 13.65 260** P **Pn** **17 10 20.3 -0.3**
**GLA Glamis 13.65 260** **Pn** **17 10 20.3 -0.3**
**GLA Glamis 13.65 260** P **Pn** **17 10 21.5 +0.9**
baz=71
**DLMT Dillon 13.72 315** **Pn** **17 10 18.4 -3.2**
**O52A Adamsville 13.78 70** **Pn** **17 10 17.9 -4.3**
**GMRC Granite Mounta 13.86 268** P **Pn** **17 10 25.3 +1.8**
baz=78,SNR=24
**PAULI Pauline 13.87 92** Pn **Pn** **17 10 18.4 -5.2**
**K50A Casco 13.93 58** **Pn** **17 10 19.2 -5.1**
**HLID Hailey 13.93 305** Pn **Pn** **17 10 20.9 -3.6**
**HLID Hailey 13.93 305** P **Pn** **17 10 25.5 +1.0**
baz=115,SNR=13
**ULM Lac du Bonnet 13.94 8** Pn **Pn** **17 10 18.8 -5.5**
comp=Z,9.1nm,0.3s,baz=187,slow=12,SNR=38
ULM Sn **Sn** **17 12 45.8 -13**
comp=Z,12nm,0.3s,baz=215,slow=9.2,SNR=3.9
ULM Lg Lg 17 14 23.5
comp=Z,22nm,0.3s,baz=281,slow=15,SNR=6.1
ULM LR LR 17 15 58.8
comp=Z,4µm,18.5s,baz=194,slow=38
**TUQ Turquoise Moun 13.96 271** P **Pn** **17 10 26.0 +1.1**
baz=81,SNR=10
**BC3 Big Chuckawall 13.97 263** P **Pn** **17 10 26.0 +1.0**
baz=74
**S54A Dingess, Beckl 13.98 79** **Pn** **17 10 21.6 -3.5**
**ZAIG Zacatecas 14.04 195** Pn **Pn** **17 10 25.1 -1.2**
**TPNV Topopah Spring 14.05 277** P **Pn** **17 10 27.4 +1.2**
**TPNV Topopah Spring 14.05 277** **Pn** **17 10 27.4 +1.2**
**TPNV Topopah Spring 14.05 277** P **Pn** **17 10 26.2 0.0**
baz=87,SNR=7.1
**EGMT Eagleton 14.12 328** Pn **Pn** **17 10 24.2 -2.8**
**EGMT Eagleton 14.12 328** P **Pn** **17 10 25.2 -1.8**
baz=141,SNR=45
**HRY Holter Researc 14.15 320** **Pn** **17 10 24.4 -3.0**
**V55A Taylorsville 14.18 87** **Pn** **17 10 24.9 -2.9**
**KMSC Kings Mountain 14.20 90** **Pn** **17 10 25.4 -2.7**
**KMSC Kings Mountain 14.20 90** P **Pn** **17 10 25.7 -2.4**
baz=280,SNR=23
**255A Hazlehurst 14.21 104** Pn **Pn** **17 10 25.4 -2.7**
**I49A Point Hope 14.26 54** Pn **Pn** **17 10 24.3 -4.6**
**O53A New Philadelph 14.27 69** P **Pn** **17 10 25.5 -3.5**
baz=260,SNR=39
**BELC Belle Mtn. Jos 14.31 265** P **Pn** **17 10 30.6 +0.8**
baz=75
**HEC Hector,Ludlow 14.40 269** P **Pn** **17 10 31.3 +0.5**
baz=78
**Q54A Coxs Mills 14.40 75** **Pn** **17 10 26.9 -3.9**
**JSC Jenkinsville 14.44 94** P **Pn** **17 10 27.5 -3.8**
**JSC Jenkinsville 14.44 94** **Pn** **17 10 27.5 -3.8**
**SFX San Felipe 14.44 253** Pn **Pn** **17 10 28.0 -3.3**
**GWY Greenwater Val 14.45 274** Pn **Pn** **17 10 30.4 -1.3**
**FURC Furnace Creek, 14.58 275** P **Pn** **17 10 34.8 +1.5**
baz=84,SNR=8.7
**SRIG Santa Rosalia 14.63 235** P **Pn** **17 10 30.4 -3.6**
**QSM Queen of Sheba 14.64 273** Pn **Pn** **17 10 31.8 -2.3**
**E46A Sault Ste Mari 14.65 43** Pn **Pn** **17 10 29.5 -4.6**
**N53A Lisbon 14.65 67** **Pn** **17 10 29.6 -4.6**
**YUH Yuha Desert 14.65 260** **Pn** **17 10 33.1 -1.2**
**GSC Goldstone, Bar 14.69 271** P **Pn** **17 10 32.3 -2.5**
**GSC Goldstone, Bar 14.69 271** Pn **Pn** **17 10 32.3 -2.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BLA | Blacksburg | 14.70 | 82 | P | Pn | 17 10 31.9 | -3.0 | | |
| BLA | Blacksburg | 14.70 | 82 | Pn | Pn | 17 10 31.9 | -3.0 | | |
| BLA | Blacksburg | 14.70 | 82 | P | Pn | 17 10 33.1 | -1.8 | | |
| | baz=273,SNR=72 | | | | | | | | |
| PFO | Pinyon Flats O | 14.79 | 264 | Pn | P | 17 10 42.1 | -0.1 | | |
| | comp=Z,0.1nm,0.3s,baz=66,slow=19,SNR=1.7 | | | | | | | | |
| PFO | | | | Lg | Lg | 17 14 49.3 | | | |
| | comp=Z,0.2nm,0.3s,baz=32,slow=7.5,SNR=5.2 | | | | | | | | |
| PFO | | | | LR | LR | 17 16 45.7 | | | |
| | comp=Z,3µm,19.3s,baz=42,slow=39 | | | | | | | | |
| PFO | Pinyon Flats O | 14.79 | 264 | P | Pn | 17 10 36.5 | +0.3 | | |
| PFO | Pinyon Flats O | 14.79 | 264 | | Pn | 17 10 36.5 | +0.3 | | |
| RMX | La Rumorosa | 14.79 | 260 | | Pn | 17 10 33.3 | -3.0 | | |
| U56A | King | 14.79 | 85 | | Pn | 17 10 33.5 | -2.6 | | |
| Q09A | Carvers | 14.79 | 285 | | Pn | 17 10 35.1 | -1.2 | | |
| TPH | Tonopah | 14.80 | 282 | P | Pn | 17 10 34.9 | -1.5 | | |
| TPH | Tonopah | 14.80 | 282 | | Pn | 17 10 34.9 | -1.5 | | |
| IKP | In-Ko-Pah, Jac | 14.80 | 260 | P | Pn | 17 10 36.3 | 0.0 | | |
| | baz=70 | | | | | | | | |
| MFID | Camas Ranch | 14.81 | 303 | Pn | Pn | 17 10 34.8 | -1.7 | | |
| O54A | Avella | 14.89 | 70 | | Pn | 17 10 34.5 | -2.9 | | |
| M53A | WI Miller and | 14.91 | 65 | P | Pn | 17 10 33.3 | -4.4 | | |
| M53A | WI Miller and | 14.91 | 65 | P | Pn | 17 10 34.4 | -3.3 | | |
| | baz=256,SNR=34 | | | | | | | | |
| RRX | Edison Barstow | 14.92 | 269 | P | Pn | 17 10 38.7 | +0.7 | | |
| | baz=78 | | | | | | | | |
| R55A | Marlinton | 14.93 | 77 | | Pn | 17 10 34.1 | -3.9 | | |
| GRAC | Grapevine Rang | 14.94 | 278 | P | Pn | 17 10 39.2 | +1.0 | | |
| | baz=86 | | | | | | | | |
| MONP2 | Monument Peak | 14.97 | 261 | P | Pn | 17 10 38.8 | 0.0 | | |
| | baz=71 | | | | | | | | |
| BBRC | Big Bear Solar | 14.99 | 267 | P | Pn | 17 10 39.5 | +0.5 | | |
| | baz=76 | | | | | | | | |
| BIRD | Birdtown, Kers | 15.00 | 92 | Pn | Pn | 17 10 35.6 | -3.4 | | |
| BMN | Battle Mountai | 15.01 | 291 | P | Pn | 17 10 35.3 | -3.8 | | |
| BMN | | | | pmax | pmax | | | | |
| | comp=Z,49nm,1.5s | | | | | | | | |
| BMN | Battle Mountai | 15.01 | 291 | | Pn | 17 10 35.3 | -3.8 | | |
| BMN | | | | IAmb | IAmb | 17 10 48.4 | | | |
| | comp=Z,49nm,1.5s | | | | | | | | |
| 456A | Hilliard | 15.06 | 108 | | Pn | 17 10 37.8 | -2.0 | | |
| MPMC | Manual Prospec | 15.13 | 274 | P | Pn | 17 10 41.6 | +0.8 | | |
| | baz=83,SNR=21 | | | | | | | | |
| LCH | Last Change Ra | 15.15 | 279 | | Pn | 17 10 41.0 | -0.1 | | |
| LCH | | | | IAmb | IAmb | 17 10 50.5 | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| Y57A | Sumter | 15.20 | 94 | | Pn | 17 10 37.8 | -3.8 | | |
| TKX | Tecate | 15.22 | 260 | | Pn | 17 10 38.6 | -3.4 | | |
| TKX | | | | IAmb | IAmb | 17 10 51.3 | | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| MCWV | Mont Chateau | 15.23 | 72 | | Pn | 17 10 38.3 | -3.7 | | |
| MCWV | Mont Chateau | 15.23 | 72 | P | Pn | 17 10 39.3 | -2.7 | | |
| | baz=264,SNR=6.6 | | | | | | | | |
| BAR | Barrett | 15.24 | 261 | | Pn | 17 10 38.8 | -3.4 | | |
| W57A | Gilead | 15.28 | 89 | | Pn | 17 10 37.1 | -5.5 | | |
| N54A | Moraine State | 15.31 | 67 | | Pn | 17 10 37.4 | -5.7 | | |
| N54A | Moraine State | 15.31 | 67 | P | Pn | 17 10 39.2 | -3.9 | | |
| | baz=259,SNR=62 | | | | | | | | |
| 656A | Willston | 15.33 | 113 | | Pn | 17 10 41.0 | -2.4 | | |
| MSO | Missoula | 15.34 | 317 | Pn | Pn | 17 10 39.8 | -3.8 | | |
| MSO | Missoula | 15.34 | 317 | P | Pn | 17 10 43.1 | -0.5 | | |
| | baz=127,SNR=26 | | | | | | | | |
| ALLY | Alegheny Colle | 15.35 | 65 | | Pn | 17 10 38.2 | -5.3 | | |
| CBX | Cerro Bola | 15.36 | 260 | | Pn | 17 10 40.7 | -3.2 | | |
| LRMC | Laurel Mtn Rad | 15.37 | 272 | P | Pn | 17 10 43.6 | -0.3 | | |
| | baz=81,SNR=8.0 | | | | | | | | |
| MURC | Murrieta | 15.38 | 265 | P | Pn | 17 10 42.9 | -1.2 | | |
| | baz=74 | | | | | | | | |
| 109C | Camp Elliot, M | 15.52 | 262 | Pn | Pn | 17 10 41.2 | -4.6 | | |
| 109C | | | | IAmb | IAmb | 17 10 53.7 | | | |
| | comp=Z,54nm,1.3s | | | | | | | | |
| 109C | Camp Elliot, M | 15.52 | 262 | P | Pn | 17 10 47.0 | +1.2 | | |
| | baz=72 | | | | | | | | |
| CCX | Cicese | 15.52 | 258 | | Pn | 17 10 42.2 | -3.6 | | |
| CCX | | | | IAmb | IAmb | 17 11 34.1 | | | |
| | comp=Z,49nm,1.3s | | | | | | | | |
| KVN | Kaiserville | 15.52 | 285 | P | Pn | 17 10 42.7 | -3.4 | | |
| KVN | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| KVN | Kaiserville | 15.52 | 285 | P | Pn | 17 10 42.7 | -3.4 | | |
| NV11 | Mina Array Sit | 15.54 | 283 | Pn | Pn | 17 10 42.2 | -4.1 | | |
| NV11 | | | | IAmb | IAmb | 17 10 54.6 | | | |
| | comp=Z,50nm,1.4s | | | | | | | | |
| ELS | Elsinore Mount | 15.55 | 265 | P | Pn | 17 10 43.4 | -3.0 | | |
| CWC | Cottonwood Cre | 15.56 | 276 | P | Pn | 17 10 46.8 | +0.3 | | |
| | baz=84 | | | | | | | | |
| ERPA | Erie | 15.57 | 63 | | Pn | 17 10 41.1 | -5.4 | | |
| ERPA | Erie | 15.57 | 63 | P | Pn | 17 10 44.0 | -2.5 | | |
| | baz=255,SNR=5.8 | | | | | | | | |
| NHSC | New Hope | 15.62 | 97 | Pn | Pn | 17 10 45.1 | -2.1 | | |
| NHSC | New Hope | 15.62 | 97 | P | Pn | 17 10 45.8 | -1.3 | | |
| | baz=288 | | | | | | | | |
| PLID | Pearl Lake | 15.63 | 309 | Pn | Pn | 17 10 43.9 | -3.6 | | |
| T57A | Hurt | 15.64 | 82 | | Pn | 17 10 43.0 | -4.5 | | |
| NVAR | Mina Array Bea | 15.66 | 283 | Pn | P | 17 10 49.6 | -2.4 | | |
| | comp=Z,0.2nm,0.3s,baz=94,slow=12,SNR=36 | | | | | | | | |
| NVAR | | | | Lg | Lg | 17 15 19.3 | | | |
| | comp=Z,0.2nm,0.3s,baz=100,slow=10,SNR=0.9 | | | | | | | | |
| NVAR | | | | LR | LR | 17 17 26.7 | | | |
| | comp=Z,3µm,19.2s,baz=90,slow=40 | | | | | | | | |
| NVAR | Mina Array Bea | 15.66 | 283 | Pn | Pn | 17 10 44.2 | -3.7 | | |
| M54A | Oil Creek Stat | 15.66 | 65 | | Pn | 17 10 43.4 | -4.3 | | |
| M54A | Oil Creek Stat | 15.66 | 65 | P | Pn | 17 10 44.2 | -3.5 | | |
| | baz=258,SNR=23 | | | | | | | | |
| Q56A | Snyder Ridge, | 15.69 | 75 | | Pn | 17 10 42.7 | -5.3 | | |
| CCAC | Calif City Air | 15.69 | 271 | | Pn | 17 10 44.0 | -4.1 | | |
| CCAC | | | | IAmb | IAmb | 17 11 02.6 | | | |
| | comp=Z,53nm,1.2s | | | | | | | | |
| EDW2 | Edwards Air Fo | 15.72 | 270 | P | Pn | 17 10 49.2 | +0.6 | | |
| | baz=78 | | | | | | | | |
| Y58A | Scranton | 15.81 | 94 | | Pn | 17 10 44.2 | -5.4 | | |
| LHV | Little Huntoon | 15.81 | 282 | | Pn | 17 10 46.5 | -3.1 | | |
| RYN | Ryan | 15.83 | 284 | | Pn | 17 10 46.5 | -3.5 | | |
| LPIG | La Paz | 15.84 | 222 | Pn | P | 17 10 53.1 | -0.7 | | |
| | comp=Z,23nm,0.3s,baz=24,slow=14,SNR=5.8 | | | | | | | | |
| LPIG | | | | LR | LR | 17 17 06.7 | | | |
| | comp=Z,2µm,18.1s,baz=38,slow=38 | | | | | | | | |
| S57A | Dark Hollow, R | 15.85 | 79 | | Pn | 17 10 45.9 | -4.1 | | |
| X58A | Rowland | 15.92 | 91 | | Pn | 17 10 48.0 | -3.1 | | |
| X58A | | | | IAmb | IAmb | 17 10 59.8 | | | |
| | comp=Z,133nm,1.1s | | | | | | | | |
| ISA | Isabella, Lake | 15.97 | 273 | P | Pn | 17 10 47.2 | -4.6 | | |
| ISA | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| ISA | Isabella, Lake | 15.97 | 273 | Pn | Pn | 17 10 47.2 | -4.6 | | |
| ISA | Isabella, Lake | 15.97 | 273 | P | Pn | 17 10 51.3 | -0.5 | | |
| | baz=81 | | | | | | | | |
| SLBS | Sierra La Lagu | 15.98 | 220 | | Pn | 17 10 47.7 | -4.2 | | |
| PASC | Pasadena Art C | 16.03 | 268 | Pn | Pn | 17 10 49.1 | -3.4 | | |
| MLAC | Mammoth, Mammot | 16.08 | 280 | P | Pn | 17 10 53.8 | +0.5 | | |
| | baz=88 | | | | | | | | |
| JTMT | Jette | 16.09 | 319 | P | Pn | 17 10 49.9 | -3.4 | | |
| O56A | Blue Knob Stat | 16.27 | 70 | P | Pn | 17 10 51.3 | -4.2 | | |
| O56A | | | | IAmb | IAmb | 17 11 27.4 | | | |
| | comp=Z,83nm,0.9s | | | | | | | | |
| O56A | Blue Knob Stat | 16.27 | 70 | P | Pn | 17 10 52.6 | -3.0 | | |
| | baz=263,SNR=13 | | | | | | | | |
| M55A | Ridgway | 16.32 | 66 | P | Pn | 17 10 51.0 | -5.2 | | |
| BMO | Blue Mountains | 16.36 | 307 | P | Pn | 17 10 51.7 | -5.0 | | |
| BMO | | | | pmax | pmax | | | | |
| | comp=Z,70nm,1.6s | | | | | | | | |
| BMO | Blue Mountains | 16.36 | 307 | | Pn | 17 10 51.7 | -5.0 | | |
| YERR | Yerington | 16.41 | 285 | P | Pn | 17 10 53.5 | -4.0 | | |
| CIS | Catalina Islan | 16.41 | 265 | P | Pn | 17 10 56.8 | -0.6 | | |
| | baz=74 | | | | | | | | |
| Y59A | Loris | 16.43 | 93 | P | Pn | 17 10 53.3 | -4.2 | | |
| WVOR | Wild Horse Val | 16.46 | 297 | P | Pn | 17 10 54.3 | -3.8 | | |
| WVOR | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| WVOR | Wild Horse Val | 16.46 | 297 | P | Pn | 17 10 54.3 | -3.8 | | |
| PAHR | Pah Rah Range | 16.56 | 288 | | Pn | 17 10 56.2 | -3.2 | | |
| PAHR | | | | IAmb | IAmb | 17 11 08.8 | | | |
| | comp=Z,87nm,1.7s | | | | | | | | |
| J08A | Circle Bar Ran | 16.61 | 301 | P | Pn | 17 10 56.6 | -3.3 | | |
| P57A | Homestead Farm | 16.62 | 73 | Pn | Pn | 17 10 56.1 | -3.9 | | |
| P57A | | | | IAmb | IAmb | 17 11 11.7 | | | |
| | comp=Z,62nm,0.9s | | | | | | | | |
| WVNY | West Valley, N | 16.64 | 63 | Pn | Pn | 17 10 56.0 | -4.3 | | |
| WVNY | | | | IAmb | IAmb | 17 11 20.6 | | | |
| | comp=Z,178nm,1.1s | | | | | | | | |
| SCI2 | San Clemente I | 16.64 | 264 | P | Pn | 17 11 00.1 | -0.2 | | |
| | baz=72 | | | | | | | | |
| PNTR | Pine Nut | 16.69 | 285 | P | Pn | 17 10 59.3 | -1.8 | | |
| PNTR | | | | IAmb | IAmb | 17 11 07.2 | | | |
| | comp=Z,99nm,1.8s | | | | | | | | |
| R58B | Mineral | 16.69 | 79 | P | Pn | 17 10 57.1 | -3.7 | | |
| R58B | | | | IAmb | IAmb | 17 11 12.3 | | | |
| | comp=Z,134nm,0.9s | | | | | | | | |
| JSRW | J. Sargeant Re | 16.70 | 80 | P | Pn | 17 10 58.8 | -2.2 | | |
| VCNR | Virginia City | 16.74 | 286 | P | Pn | 17 10 59.0 | -2.7 | | |
| WALA | Waterton Lakes | 16.76 | 323 | | Pn | 17 10 58.1 | -3.8 | | |
| F10A | Beach Ranch, E | 16.80 | 310 | P | Pn | 17 10 59.0 | -3.3 | | |
| F10A | | | | IAmb | IAmb | 17 11 43.2 | | | |
| | comp=Z,59nm,1.1s | | | | | | | | |
| DWPF | Disney Wildern | 16.83 | 115 | P | Pn | 17 11 01.1 | -1.5 | | |
| | baz=304 | | | | | | | | |
| SSPA | Standing Stone | 16.84 | 69 | | Pn | 17 10 57.3 | -5.4 | | |
| SSPA | | | | IAmb | IAmb | 17 11 01.2 | | | |
| | comp=Z,150nm,1.1s | | | | | | | | |
| SSPA | Standing Stone | 16.84 | 69 | P | Pn | 17 10 59.3 | -3.3 | | |
| | baz=262 | | | | | | | | |
| J54A | Appleton | 16.85 | 60 | | Pn | 17 10 57.7 | -5.1 | | |
| BCW | Bitter Crk WRg | 16.86 | 271 | P | Pn | 17 10 59.8 | -3.3 | | |
| MOIG | Morelia | 16.86 | 188 | P | Pn | 17 11 00.7 | -2.6 | | |
| MOIG | | | | IAmb | IAmb | 17 11 13.9 | | | |
| | comp=Z,117nm,0.9s | | | | | | | | |
| U59A | Littleton | 16.87 | 84 | P | Pn | 17 10 59.0 | -4.1 | | |
| U59A | | | | IAmb | IAmb | 17 11 07.7 | | | |
| | comp=Z,176nm,1.2s | | | | | | | | |
| MEDO | Medina | 16.95 | 61 | P | Pn | 17 10 59.6 | -4.4 | | |
| Y60A | Bolivia | 16.95 | 92 | P | Pn | 17 10 59.4 | -4.8 | | |
| Y60A | | | | IAmb | IAmb | 17 11 04.1 | | | |
| | comp=Z,137nm,1.0s | | | | | | | | |
| CNNC | Cliffs of the | 16.96 | 88 | P | Pn | 17 10 59.5 | -4.7 | | |
| CNNC | Cliffs of the | 16.96 | 88 | P | Pn | 17 11 02.9 | -1.3 | | |
| | baz=280 | | | | | | | | |
| T59A | Double "B" Far | 17.00 | 82 | | Pn | 17 11 00.5 | -4.3 | | |
| T59A | | | | IAmb | IAmb | 17 11 15.9 | | | |
| | comp=Z,201nm,1.4s | | | | | | | | |
| SADO | Sadowa | 17.01 | 55 | Pn | Pn | 17 11 02.3 | -2.6 | | |
| | comp=Z,3.2nm,0.3s,baz=268,slow=12,SNR=18 | | | | | | | | |
| SADO | | | | Lg | Lg | 17 15 55.3 | | | |
| | comp=Z,11nm,0.3s,baz=131,slow=9.1,SNR=6.5 | | | | | | | | |
| SADO | | | | LR | LR | 17 17 12.8 | | | |
| | comp=Z,1µm,18.8s,baz=244,slow=36 | | | | | | | | |
| SADO | Sadowa | 17.01 | 55 | | Pn | 17 11 00.6 | -4.3 | | |
| SADO | | | | IAmb | IAmb | 17 11 25.4 | | | |
| | comp=Z,100nm,0.8s | | | | | | | | |
| MPK | Martis Peak | 17.04 | 286 | P | Pn | 17 11 01.5 | -4.0 | | |
| EMB | Emerald Bay | 17.08 | 285 | P | Pn | 17 11 02.9 | -3.1 | | |
| CBN | Corbin Frederi | 17.09 | 78 | P | Pn | 17 11 00.9 | -4.9 | | |
| CBN | Corbin Frederi | 17.09 | 78 | P | Pn | 17 11 04.2 | -1.6 | | |
| | baz=271 | | | | | | | | |
| RUBR | Rubicon Trail | 17.12 | 285 | P | Pn | 17 11 05.2 | -1.3 | | |
| PKM | Mcpherson Peak | 17.19 | 271 | P | Pn | 17 11 06.8 | -0.5 | | |
| | baz=78 | | | | | | | | |
| SBC | Santa Barbara | 17.20 | 269 | P | Pn | 17 11 06.9 | -0.4 | | |
| | baz=77 | | | | | | | | |
| MMNY | Mt. Morris Dam | 17.22 | 62 | P | Pn | 17 11 04.1 | -3.4 | | |
| MMNY | | | | IAmb | IAmb | 17 11 29.4 | | | |
| | comp=Z,81nm,0.8s | | | | | | | | |
| SMMC | Simmler | 17.26 | 272 | P | Pn | 17 11 08.1 | +0.1 | | |
| | baz=80 | | | | | | | | |
| CMB | Columbia Colle | 17.30 | 282 | P | Pn | 17 11 06.0 | -2.5 | | |
| CMB | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| CMB | Columbia Colle | 17.30 | 282 | P | Pn | 17 11 06.0 | -2.5 | | |
| BEKR | Beckworth | 17.32 | 288 | P | Pn | 17 11 06.7 | -2.3 | | |
| L56A | Greenwood | 17.34 | 64 | P | Pn | 17 11 05.0 | -3.9 | | |
| L56A | | | | IAmb | IAmb | 17 11 33.2 | | | |
| | comp=Z,107nm,0.6s | | | | | | | | |
| SNCC | San Nicolas Is | 17.35 | 265 | P | Pn | 17 11 08.9 | -0.2 | | |
| | baz=73 | | | | | | | | |
| PAGB | Antelope Grade | 17.39 | 274 | P | Pn | 17 11 07.3 | -2.5 | | |
| J55A | Hilton | 17.42 | 61 | | Pn | 17 11 05.5 | -4.5 | | |
| J55A | | | | IAmb | IAmb | 17 11 38.5 | | | |
| | comp=Z,132nm,0.7s | | | | | | | | |
| M57A | Sunshine Farm, | 17.51 | 67 | | Pn | 17 11 06.5 | -4.5 | | |
| M57A | | | | IAmb | IAmb | 17 11 36.6 | | | |
| | comp=Z,99nm,0.9s | | | | | | | | |
| SDMD | Scelier's Deli | 17.53 | 74 | P | Pn | 17 11 05.6 | -5.7 | | |
| I07A | Izee | 17.54 | 302 | P | Pn | 17 11 08.2 | -3.4 | | |
| MOD | Modoc Plateau | 17.55 | 295 | | Pn | 17 11 08.0 | -3.9 | | |
| G08A | Pilot Rock | 17.61 | 306 | P | Pn | 17 11 10.9 | -1.5 | | |
| E09A | Wood Farm, Sta | 17.62 | 311 | P | Pn | 17 11 11.0 | -1.4 | | |
| T60A | Surry | 17.64 | 81 | P | Pn | 17 11 11.1 | -1.7 | | |
| PAGS | Pennsylvania G | 17.67 | 71 | | Pn | 17 11 10.0 | -3.2 | | |
| PAGS | | | | IAmb | IAmb | 17 11 54.8 | | | |
| | comp=Z,124nm,0.9s | | | | | | | | |
| N58A | Sunbury | 17.74 | 69 | P | Pn | 17 11 10.5 | -3.5 | | |
| N58A | | | | IAmb | IAmb | 17 11 17.8 | | | |
| | comp=Z,115nm,0.9s | | | | | | | | |
| PMPB | Monarch Peak | 17.77 | 276 | P | Pn | 17 11 12.3 | -2.1 | | |
| PMPB | | | | IAmb | IAmb | 17 11 21.3 | | | |
| | comp=Z,58nm,0.9s | | | | | | | | |
| V61A | Roper | 17.92 | 86 | P | Pn | 17 11 13.9 | -2.3 | | |
| NEW | Newport | 17.93 | 317 | P | P | 17 11 17.6 | +0.7 | | |
| | comp=Z,0.7nm,0.3s,baz=139,slow=9.1,SNR=23 | | | | | | | | |
| NEW | | | | Lg | Lg | 17 16 26.7 | | | |
| | comp=Z,0.2nm,0.3s,baz=320,slow=15,SNR=2.2 | | | | | | | | |
| NEW | | | | LR | LR | 17 18 24.6 | | | |
| | comp=Z,2µm,18.7s,baz=121,slow=38 | | | | | | | | |
| NEW | Newport | 17.93 | 317 | P | Pn | 17 11 14.3 | -2.0 | | |
| NEW | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| NEW | Newport | 17.93 | 317 | P | Pn | 17 11 14.3 | -2.0 | | |
| NEW | Newport | 17.93 | 317 | P | Pn | 17 11 15.2 | -1.1 | | |
| | baz=124,SNR=21 | | | | | | | | |
| MVL | Millersville | 17.94 | 72 | | Pn | 17 11 13.0 | -3.4 | | |
| MVL | | | | IAmb | IAmb | 17 11 20.5 | | | |
| | comp=Z,55nm,0.8s | | | | | | | | |
| DELO | Deloro Mine | 17.94 | 57 | P | Pn | 17 11 11.0 | -5.4 | | |
| DELO | | | | IAmb | IAmb | 17 11 45.8 | | | |
| | comp=Z,48nm,0.8s | | | | | | | | |
| J56A | Wolcott | 18.10 | 61 | P | Pn | 17 11 14.6 | -3.7 | | |
| J56A | | | | IAmb | IAmb | 17 11 47.4 | | | |
| | comp=Z,101nm,0.7s | | | | | | | | |
| K05A | Summer Lake | 18.15 | 297 | P | Pn | 17 11 16.1 | -3.1 | | |
| K05A | | | | IAmb | IAmb | 17 11 30.4 | | | |
| | comp=Z,77nm,1.1s | | | | | | | | |
| E08A | Dider Farm, El | 18.17 | 310 | P | Pn | 17 11 15.7 | -3.5 | | |
| ORV | Oroville | 18.18 | 287 | P | Pn | 17 11 15.1 | -4.4 | | |
| ORV | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| ORV | Oroville | 18.18 | 287 | P | Pn | 17 11 15.1 | -4.4 | | |
| PECO | Prince Edward | 18.19 | 59 | | Pn | 17 11 13.3 | -6.1 | | |
| PECO | | | | IAmb | IAmb | 17 11 21.9 | | | |
| | comp=Z,164nm,1.0s | | | | | | | | |
| K57A | Scipio Center | 18.22 | 63 | P | Pn | 17 11 15.2 | -4.6 | | |
| SAO | San Andreas Ge | 18.22 | 278 | P | Pn | 17 11 16.4 | -3.5 | | |
| SAO | | | | pmax | pmax | | | | |
| | comp=Z,29nm,0.9s | | | | | | | | |
| SAO | San Andreas Ge | 18.22 | 278 | P | Pn | 17 11 16.4 | -3.5 | | |
| C09A | Chrisman Ranch | 18.33 | 314 | | Pn | 17 11 17.7 | -3.5 | | |
| C09A | | | | IAmb | IAmb | 17 11 31.6 | | | |
| | comp=Z,45nm,0.8s | | | | | | | | |
| D08A | Wollman Farm, | 18.35 | 311 | P | Pn | 17 11 17.9 | -3.5 | | |
| FFC | Flin Flon | 18.40 | 354 | eP | Pn | 17 11 19.2 | -2.7 | | |
| FFC | Flin Flon | 18.40 | 354 | | Pn | 17 11 17.2 | -4.8 | | |
| FFC | | | | IAmb | IAmb | 17 11 25.5 | | | |
| | comp=Z,277nm,1.6s | | | | | | | | |
| HAWA | Hanford | 18.43 | 309 | | P | 17 11 18.9 | -3.4 | | |
| HAWA | | | | IAmb | IAmb | 17 11 27.9 | | | |
| | comp=Z,59nm,1.2s | | | | | | | | |
| PINE | Pine Mountain | 18.45 | 300 | | P | 17 11 18.2 | -4.6 | | |
| S61A | Accomac | 18.45 | 79 | P | P | 17 11 18.6 | -4.1 | | |
| N59A | State Game Lan | 18.46 | 69 | P | P | 17 11 18.1 | -4.7 | | |
| N59A | | | | IAmb | IAmb | 17 11 26.0 | | | |
| | comp=Z,157nm,1.1s | | | | | | | | |
| N59A | State Game Lan | 18.46 | 69 | P | P | 17 11 21.0 | -1.9 | | |
| | baz=264,SNR=24 | | | | | | | | |
| F07A | Phinny Hill Vi | 18.47 | 307 | P | P | 17 11 18.9 | -3.9 | | |
| BINY | Binghamton | 18.50 | 65 | P | P | 17 11 18.3 | -4.9 | | |
| BINY | | | | IAmb | IAmb | 17 11 25.8 | | | |
| | comp=Z,123nm,0.9s | | | | | | | | |
| BINY | Binghamton | 18.50 | 65 | P | P | 17 11 20.4 | -2.7 | | |
| | baz=260,SNR=22 | | | | | | | | |
| WUPA | West Chester U | 18.50 | 72 | | P | 17 11 18.6 | -4.6 | | |
| WUPA | | | | IAmb | IAmb | 17 11 46.4 | | | |
| | comp=Z,90nm,1.0s | | | | | | | | |
| J05D | Fort Rock, OR | 18.53 | 298 | P | Pn | 17 11 24.3 | +0.5 | | |
| | baz=104,SNR=9.7 | | | | | | | | |
| KSPA | Keystone Colle | 18.55 | 67 | P | P | 17 11 18.9 | -4.8 | | |
| KSPA | | | | IAmb | IAmb | 17 11 27.0 | | | |
| | comp=Z,140nm,1.1s | | | | | | | | |
| M04C | Macdoel | 18.66 | 294 | P | P | 17 11 21.6 | -3.5 | | |
| M04C | | | | IAmb | IAmb | 17 11 29.2 | | | |
| | comp=Z,45nm,0.9s | | | | | | | | |
| M04C | Macdoel | 18.66 | 294 | P | P | 17 11 24.6 | -0.6 | | |
| | baz=99,SNR=18 | | | | | | | | |
| E07A | Sunnyside | 18.70 | 309 | P | P | 17 11 22.5 | -2.9 | | |
| LUPA | Lehigh Univers | 18.73 | 70 | P | P | 17 11 22.3 | -3.4 | | |
| LUPA | | | | IAmb | IAmb | 17 11 30.6 | | | |
| | comp=Z,124nm,1.1s | | | | | | | | |
| J57A | Williamstown | 18.74 | 61 | | P | 17 11 21.7 | -4.1 | | |
| J57A | | | | IAmb | IAmb | 17 11 29.9 | | | |
| | comp=Z,91nm,0.7s | | | | | | | | |
| K04D | Chiloquin, OR | 18.75 | 296 | P | Pn | 17 11 26.1 | -0.4 | | |
| | baz=101 | | | | | | | | |
| I05D | Terrebonne, OR | 18.88 | 302 | P | P | 17 11 26.6 | -0.7 | | |
| | baz=107,SNR=11 | | | | | | | | |
| WDC | Whiskeytown Da | 19.05 | 290 | P | P | 17 11 25.4 | -3.8 | | |
| WDC | | | | pmax | pmax | | | | |
| | comp=Z,87nm,1.3s | | | | | | | | |
| WDC | Whiskeytown Da | 19.05 | 290 | P | P | 17 11 25.4 | -3.8 | | |
| WDC | | | | IAmb | IAmb | 17 11 34.5 | | | |
| | comp=Z,87nm,1.3s | | | | | | | | |
| L04D | Klamath Falls | 19.08 | 295 | P | P | 17 11 26.0 | -3.7 | | |
| L04D | Klamath Falls | 19.08 | 295 | P | Pn | 17 11 30.7 | +0.2 | | |
| | baz=100 | | | | | | | | |
| J04D | Umpqua Nationa | 19.14 | 298 | P | P | 17 11 27.4 | -3.0 | | |
| J04D | | | | IAmb | IAmb | 17 11 39.0 | | | |
| | comp=Z,47nm,0.8s | | | | | | | | |
| J04D | Umpqua Nationa | 19.14 | 298 | P | Pn | 17 11 31.3 | +0.1 | | |
| | baz=103 | | | | | | | | |
| G05D | Wamic, OR | 19.14 | 304 | P | Pn | 17 11 30.8 | -0.3 | | |
| | baz=109 | | | | | | | | |
| L59A | Walton | 19.18 | 65 | P | P | 17 11 28.0 | -2.7 | | |
| L59A | | | | IAmb | IAmb | 17 11 35.8 | | | |
| | comp=Z,115nm,0.9s | | | | | | | | |
| N02D | Trinity Center | 19.21 | 291 | P | P | 17 11 27.7 | -3.3 | | |
| N02D | | | | IAmb | IAmb | 17 11 36.1 | | | |
| | comp=Z,74nm,1.1s | | | | | | | | |
| N02D | Trinity Center | 19.21 | 291 | P | Pn | 17 11 31.3 | -0.7 | | |
| | baz=96 | | | | | | | | |
| B08A | Colville Reser | 19.23 | 315 | P | P | 17 11 28.7 | -2.5 | | |
| J58A | Remsen | 19.24 | 62 | P | P | 17 11 27.7 | -3.6 | | |
| SOR | Soroa | 19.27 | 131 | P | P | 17 11 29.0 | -2.8 | | |
| SOR | | | | pmax | pmax | | | | |
| | comp=Z,48nm,1.1s | | | | | | | | |
| SOR | Soroa | 19.27 | 131 | | P | 17 11 28.9 | -2.8 | | |
| SOR | | | | IAmb | IAmb | 17 11 34.4 | | | |
| | comp=Z,48nm,1.1s | | | | | | | | |
| YBH | Yreka Blue Hor | 19.30 | 293 | P | Pn | 17 11 33.0 | -0.1 | | |
| | comp=Z,1.4nm,0.3s,baz=85,slow=5.9,SNR=55 | | | | | | | | |
| YBH | | | | LR | LR | 17 19 27.1 | | | |
| | comp=Z,806nm,20.3s,baz=98,slow=38 | | | | | | | | |
| YBH | Yreka Blue Hor | 19.30 | 293 | P | P | 17 11 29.2 | -2.9 | | |
| YBH | | | | pmax | pmax | | | | |
| | comp=Z,90nm,1.0s | | | | | | | | |
| YBH | Yreka Blue Hor | 19.30 | 293 | P | P | 17 11 29.2 | -2.9 | | |
| YBH | | | | IAmb | IAmb | 17 11 37.0 | | | |
| | comp=Z,90nm,0.9s | | | | | | | | |
| ODNJ | Ogdensburg | 19.36 | 69 | P | P | 17 11 28.9 | -3.7 | | |
| M02C | Callahan | 19.37 | 292 | P | P | 17 11 30.0 | -2.7 | | |
| M02C | | | | IAmb | IAmb | 17 11 37.7 | | | |
| | comp=Z,63nm,1.0s | | | | | | | | |
| M02C | Callahan | 19.37 | 292 | P | P | 17 11 32.6 | -0.2 | | |
| | baz=97,SNR=31 | | | | | | | | |
| HOPS | Hopland Field | 19.39 | 285 | | P | 17 11 31.5 | -1.5 | | |
| HOPS | | | | IAmb | IAmb | 17 11 38.3 | | | |
| | comp=Z,91nm,1.3s | | | | | | | | |
| HOOD | Mount Hood Mea | 19.39 | 304 | P | P | 17 11 30.1 | -3.0 | | |
| F05D | White Salmon | 19.46 | 306 | P | P | 17 11 31.6 | -2.1 | | |
| F05D | White Salmon | 19.46 | 306 | P | Pn | 17 11 35.1 | +0.2 | | |
| | baz=111,SNR=6.5 | | | | | | | | |
| I04A | Tendick Farm, | 19.48 | 299 | P | P | 17 11 33.4 | -0.5 | | |
| | baz=104,SNR=8.4 | | | | | | | | |
| LTY | Liberty | 19.50 | 310 | P | P | 17 11 32.5 | -1.7 | | |
| VLDQ | Val d'Or | 19.52 | 47 | P | P | 17 11 28.1 | -6.2 | | |
| VLDQ | | | | IAmb | IAmb | 17 11 35.4 | | | |
| | comp=Z,66nm,1.1s | | | | | | | | |
| H04A | Detroit Lake | 19.56 | 302 | P | P | 17 11 33.1 | -1.7 | | |
| H04A | | | | IAmb | IAmb | 17 11 38.8 | | | |
| | comp=Z,44nm,1.2s | | | | | | | | |
| CMIG | Matias Romero | 19.60 | 169 | P | Pn | 17 11 36.5 | -0.1 | | |
| | comp=Z,1.0nm,0.3s,baz=5.6,slow=10,SNR=9.0 | | | | | | | | |
| CMIG | | | | LR | LR | 17 22 15.8 | | | |
| | comp=Z,806nm,20.2s,baz=5.0,slow=46 | | | | | | | | |
| HUMO | Hull Mountain | 19.62 | 296 | P | P | 17 11 31.8 | -3.7 | | |
| EDM | Edmonton | 19.63 | 333 | P | P | 17 11 32.9 | -2.6 | | |
| EDM | | | | pmax | pmax | | | | |
| | comp=Z,250nm,1.4s | | | | | | | | |
| EDM | Edmonton | 19.63 | 333 | | P | 17 11 32.9 | -2.6 | | |
| TRNY | Table Rock, Ra | 19.65 | 69 | P | P | 17 11 31.3 | -4.5 | | |
| TRNY | | | | IAmb | IAmb | 17 11 39.8 | | | |
| | comp=Z,72nm,0.8s | | | | | | | | |
| J59A | Piesco | 19.82 | 62 | P | P | 17 11 32.5 | -5.1 | | |
| J59A | | | | IAmb | IAmb | 17 11 40.7 | | | |
| | comp=Z,52nm,0.8s | | | | | | | | |
| CPNY | Central Park | 19.82 | 70 | P | P | 17 11 34.3 | -3.3 | | |
| PAL | Palisades | 19.88 | 69 | P | P | 17 11 33.2 | -5.0 | | |
| PAL | | | | pmax | pmax | | | | |
| | comp=Z,146nm,1.1s | | | | | | | | |
| PAL | Palisades | 19.88 | 69 | | P | 17 11 33.2 | -5.0 | | |
| PAL | Palisades | 19.88 | 69 | P | P | 17 11 37.0 | -1.2 | | |
| | baz=265,SNR=

**M63A Gales Ferry 21.31 68 P P 17 11 50.8 -2.9**
**HNH Hanover 21.44 62 P P 17 11 53.4 -1.8**
HNH IAmb IAmb 17 11 58.2
comp=Z,130nm,1.5s
**BRYW Bryant College 21.73 67 P P 17 11 56.7 -1.7**
BRYW IAmb IAmb 17 12 05.0
comp=Z,71nm,0.9s
**HRV Adam Dziewonsk 21.79 66 P P 17 11 57.4 -1.5**
baz=263
**LBNH Lisbon 21.80 61 P P 17 11 57.2 -1.8**
LBNH pmax pmax
comp=Z,90nm,1.2s
**LBNH Lisbon 21.80 61 P P 17 11 57.2 -1.8**
LBNH IAmb IAmb 17 12 01.9
comp=Z,90nm,1.2s
**LBNH Lisbon 21.80 61 P P 17 11 57.6 -1.4**
baz=258
**LLLB Lillooet 21.81 318 P P 17 11 57.0 -2.2**
LLLB IAmb IAmb 17 12 09.7
comp=Z,69nm,1.2s
**WES Weston 21.94 66 P P 17 11 57.4 -3.1**
WES pmax pmax
comp=Z,156nm,1.3s
**WES Weston 21.94 66 P P 17 11 57.4 -3.1**
**BCX Boston College 22.05 66 P P 17 12 00.2 -1.5**
**H62A Milan 22.41 60 P P 17 12 02.6 -2.9**
**FCC Fort Churchill 22.52 6 P P 17 12 05.1 -1.4**
FCC pmax pmax
comp=Z,62nm,1.0s
**FCC Fort Churchill 22.52 6 P P 17 12 05.1 -1.4**
FCC IAmb IAmb 17 12 13.1
comp=Z,62nm,0.9s
**APG El Apazote 22.61 159 P P 17 12 08.8 +0.6**
comp=Z,4.0nm,0.4s,baz=333,slow=10,SNR=4.6
APG LR LR 17 21 44.6
comp=Z,287nm,21.1s,baz=341,slow=39
**I63A Otisfield 22.72 62 P P 17 12 07.3 -1.6**
**CBB Campbell River 23.51 314 P P 17 12 15.6 -1.3**
**LMQ La Malbaie 23.72 53 P P 17 12 18.6 -0.3**
**PKME Peaks-Kenny Pk 23.84 59 P P 17 12 19.1 -1.0**
baz=259
**F64A Sherman 24.61 58 P P 17 12 26.6 -0.6**
**BBB Bella Bella 26.00 316 LR LR 17 24 01.3**
comp=Z,2µm,19.3s,baz=120,slow=39
**YKA Yellowknife Ar 27.86 344 P P 17 12 56.4 +0.1**
comp=Z,8.4nm,0.7s,baz=147,slow=8.8,SNR=71
YKA Lg Lg 17 21 37.0
comp=Z,13nm,0.9s,baz=155,slow=24,SNR=1.8
YKA LR LR 17 24 19.2
comp=Z,4µm,18.4s,baz=149,slow=37
**YKA Yellowknife Ar 27.86 344 P P 17 12 55.7 -0.6**
**YKA Yellowknife Ar 27.86 344 P P 17 12 55.7 -0.6**
**SCHQ Schefferville 28.53 40 P P 17 13 03.5 +1.0**
comp=Z,18nm,0.7s,baz=246,slow=10,SNR=39
SCHQ LR LR 17 23 16.5
comp=Z,1µm,19.7s,baz=250,slow=34
**SCHQ Schefferville 28.53 40 P P 17 13 01.2 -1.3**
SCHQ IAmb IAmb 17 13 26.3
comp=Z,33nm,1.1s
**JTS Las Juntas de 28.90 151 LR LR 17 27 12.2**
comp=Z,686nm,21.2s,baz=49,slow=42
**DLBC Dease Lake 30.04 327 P P 17 13 18.2 +2.3**
comp=Z,5.1nm,0.8s,baz=113,slow=6.8,SNR=9.9
DLBC LR LR 17 26 15.2
comp=Z,1µm,21.8s,baz=127,slow=38
**CRAG Craig 30.08 320 P P 17 13 15.6 -0.6**
baz=115
**WRAK Wrangell Islan 30.11 322 P P 17 13 15.7 -0.7**
baz=117
**WTLY Watson Lake, Y 30.50 330 P P 17 13 18.1 -1.8**
baz=127
**SIT Sitka 31.86 322 P P 17 13 31.6 -0.3**
baz=114
**P33M Teslin, Yukon 32.21 328 P P 17 13 33.9 -1.1**
baz=122,SNR=6.0
**FRB Frobisher Bay 32.88 24 P P 17 13 42.1 +1.5**
comp=Z,12nm,0.6s,baz=226,slow=10.0,SNR=24
FRB LR LR 17 27 11.2
comp=Z,3µm,18.8s,baz=230,slow=37
**SKAG Skagway 32.93 326 P P 17 13 41.1 -0.1**
baz=118
**MMPY Sheldon Lake, 32.97 333 P P 17 13 41.3 -0.3**
baz=127,SNR=9.6
**FARO Faro, Yukon 33.53 331 P P 17 13 47.1 +0.6**
baz=124
**M31M Drury Creek, Y 33.92 331 P P 17 13 50.0 +0.1**
baz=123,SNR=5.8
**SJG San Juan 34.03 114 LR LR 17 27 34.8**
comp=Z,446nm,20.5s,baz=270,slow=36
**HYT Haines Junctio 34.53 327 P P 17 13 55.5 +0.2**
baz=117
**PNL Peninsula 34.89 325 P P 17 13 58.5 +0.2**
baz=113
**M30M Minto, Yukon 35.07 330 P P 17 13 59.6 -0.3**
baz=120,SNR=5.7
**C36M Paulatuk 35.73 345 P P 17 14 05.2 -0.1**
C36M IAmb IAmb 17 15 06.2
comp=Z,38nm,1.9s
**C36M Paulatuk 35.73 345 P P 17 14 05.9 +0.5**
baz=144,SNR=5.6
**YUK3 Moose Creek 36.23 328 P P 17 14 10.6 +0.6**
baz=115
**DAWY Dawson 36.83 331 P P 17 14 16.2 +1.3**
baz=119
**M27K Edge Creek, AK 37.08 328 P P 17 14 16.7 -0.5**
baz=114
**I29M Ogilvie Camp, 37.08 334 P P 17 14 17.1 +0.1**
baz=122
**EPYK Eagle Plains 37.09 336 P P 17 14 16.2 -0.9**
baz=125,SNR=11
**INK Inuvik 37.30 340 P P 17 14 19.9 +1.2**
comp=Z,12nm,0.9s,baz=117,slow=8.0,SNR=26
INK LR LR 17 30 38.1
comp=Z,1µm,20.6s,baz=127,slow=38
**INK Inuvik 37.30 340 P P 17 14 18.7 0.0**
INK pmax pmax
comp=Z,26nm,1.1s
**INK Inuvik 37.30 340 P P 17 14 18.7 0.0**
INK IAmb IAmb 17 14 22.3
comp=Z,26nm,1.1s
**INK Inuvik 37.30 340 P P 17 14 17.9 -0.8**
baz=131,SNR=17
**BCAR Beaver Creek A 37.33 329 P P 17 14 19.2 0.0**
**L27K Beaver Creek, 37.35 329 P P 17 14 19.2 -0.1**
baz=115,SNR=8.2
**SDV Santo Domingo 37.50 130 P P 17 14 23.2 +2.0**
comp=Z,2.5nm,0.3s,baz=22,slow=5.4,SNR=4.6
SDV LR LR 17 32 55.4
comp=Z,340nm,18.4s,baz=334,slow=41
**SDV Santo Domingo 37.50 130 eP P 17 14 22.7 +1.5**
**M26K Nabesna, AK 37.57 328 P P 17 14 21.5 +0.3**
baz=113
**BMRM Bremner River 37.77 325 P P 17 14 23.7 +0.8**
baz=109
**EGAK Eagle 37.84 332 P P 17 14 23.2 -0.2**
baz=118,SNR=13
**L26K Log Cabin Wild 37.97 329 P P 17 14 24.6 +0.1**
baz=113
**A36M Sachs Harbour 38.11 347 P P 17 14 25.4 -0.2**
A36M IAmb IAmb 17 14 30.1
comp=Z,21nm,0.8s
**A36M Sachs Harbour 38.11 347 P P 17 14 26.0 +0.4**
baz=144,SNR=17
**RES Resolute Bay 38.35 2 P P 17 14 28.1 +0.5**
comp=Z,1.9nm,0.6s,baz=187,slow=11,SNR=7.8
RES LR LR 17 30 39.5
comp=Z,3µm,18.9s,baz=202,slow=37
**RES Resolute Bay 38.35 2 P P 17 14 27.2 -0.4**
RES pmax pmax
comp=Z,17nm,1.5s
**RES Resolute Bay 38.35 2 P P 17 14 27.2 -0.4**
**KLU Klutina 38.55 326 P P 17 14 30.7 +1.2**
baz=108
**SCRK Sand Creek 38.61 330 P P 17 14 30.8 +0.8**
baz=113
**ROSC El Rosal 38.65 139 P P 17 14 33.9 +2.8**
comp=Z,5.6nm,0.3s,baz=188,slow=7.5,SNR=3.5
**J26L Joseph Creek 38.65 331 P P 17 14 31.3 +0.9**
baz=114
**PAX Paxson 38.84 328 P P 17 14 32.1 +0.1**
baz=111
**M24K Tolsona, Glenn 38.86 326 P P 17 14 31.3 -0.7**
baz=109
**RIDG Independent Ri 38.87 329 P P 17 14 31.7 -0.4**
baz=112,SNR=7.0
**BAUV El Baul 39.09 127 P P 17 14 33.5 -0.9**
BAUV IAmb IAmb 17 14 39.2
comp=Z,47nm,1.4s
**J25K Salcha River, 39.41 330 P P 17 14 37.5 +0.8**
baz=113,SNR=7.3
**KNK Knik Glacier 39.69 325 P P 17 14 39.8 +0.8**
baz=106
**WAT6 Susitna Watana 39.70 327 P P 17 14 39.7 +0.5**
baz=108
**SML Sawmill 39.74 326 P P 17 14 38.7 -0.7**
baz=106,SNR=5.4
**PRP Porcupine Dome 39.83 332 P P 17 14 40.9 +0.7**
PRP IAmb IAmb 17 14 44.3
comp=Z,22nm,1.4s
**PRP Porcupine Dome 39.83 332 P P 17 14 41.5 +1.3**
baz=114,SNR=6.8
**SEW Seward 39.84 323 P P 17 14 40.5 +0.3**
baz=103
**HDA Harding Lake 39.97 330 P P 17 14 42.5 +1.3**
baz=111,SNR=7.1
**PMR Palmer 40.05 325 P P 17 14 43.4 +1.5**
baz=105
**IL31 40.08 330 P P 17 14 41.8 -0.2**
IL31 IAmb IAmb 17 14 46.5
comp=Z,54nm,1.4s
**ILAR Eielson Array 40.08 330 P P 17 14 43.6 +1.5**
comp=Z,20nm,0.9s,baz=111,slow=7.4,SNR=62
ILAR LR LR 17 32 49.5
comp=Z,1µm,19.6s,baz=119,slow=38
**ILAR Eielson Array 40.08 330 P P 17 14 42.5 +0.4**
**ILAR Eielson Array 40.08 330 P P 17 14 42.5 +0.4**
**BMAR Burnt Mountain 40.30 335 P P 17 14 44.3 +0.4**
**CCB Clear Creek Bu 40.40 330 P P 17 14 44.2 -0.6**
CCB IAmb IAmb 17 14 49.1
comp=Z,34nm,1.2s
**POKR Poker Flat Res 40.42 331 P P 17 14 45.2 +0.3**
baz=111,SNR=6.8
**WRH Wood River Hil 40.46 330 P P 17 14 45.6 +0.3**
WRH IAmb IAmb 17 14 49.7
comp=Z,30nm,1.4s
**COLA College 40.50 330** *c iP P 17 14 47.1 +1.5*
COLA pmax pmax
comp=Z,30nm,1.2s
**COLA College 40.50 330 P P 17 14 46.0 +0.5**
baz=110
**TCOL CIGO, UAF Yank 40.50 330 P P 17 14 45.9 +0.3**
baz=110
**M22K Willow 40.55 325 P P 17 14 46.3 +0.3**
baz=104
**MCK McKinley 40.57 328 P P 17 14 46.7 +0.5**
baz=108
**OTAV Otavalo 40.67 148** *eP* **P 17 14 48.4 +0.3**
**CUT Chulitna 40.78 326 P P 17 14 48.7 +0.7**
baz=105
**H24K Noodor Dome 40.85 332 P P 17 14 49.0 +0.4**
baz=111
**NEA2 Nenana 40.90 330 P P 17 14 48.8 -0.1**
baz=109
**SFJD Kangerlussuaq 40.92 27 LR LR 17 31 41.9**
comp=Z,1µm,18.9s,baz=244,slow=36
**KDAK Kodiak Island 41.02 319 LR LR 17 31 13.4**
comp=Z,1µm,18.5s,baz=117,slow=35
**TRF Thorofare Moun 41.07 328 P P 17 14 50.4 -0.2**
baz=106
**I23K Minto, Yukon-K 41.20 330 P P 17 14 52.3 +1.0**
baz=109,SNR=6.9
**OHAK Old Harbor 41.33 318 P P 17 14 53.1 +0.6**
baz=96
**H23K Yukon River 41.49 331 P P 17 14 54.0 +0.2**
baz=109
**BPAW Bear Paw Mtn. 41.55 328 P P 17 14 55.1 +0.8**
baz=106,SNR=6.6
**MLY Manley 41.71 330 P P 17 14 56.5 +0.8**
MLY IAmb IAmb 17 15 00.3
comp=Z,16nm,1.0s
**MLY Manley 41.71 330 P P 17 14 56.1 +0.4**
baz=107
**SII Sitkinak Islan 41.76 317 P P 17 14 56.1 0.0**
baz=94
**PPLA Purkeypile 41.76 326 P P 17 14 56.9 +0.8**
baz=104
**CAST Castle Rocks 41.84 327 P P 17 14 56.8 +0.1**
CAST IAmb IAmb 17 15 00.9
comp=Z,35nm,1.2s
**CAST Castle Rocks 41.84 327 P P 17 14 57.7 +1.0**
baz=104,SNR=17
**CHUM Lake Minchumin 42.05 328 P P 17 14 58.1 -0.3**
baz=104,SNR=6.4
**COLD Coldfoot 42.22 333 P P 17 15 00.5 +0.8**
baz=110
**O19K Port Alsworth 42.24 322 P P 17 15 00.0 0.0**
O19K IAmb IAmb 17 15 04.4
comp=Z,13nm,0.7s
**O19K Port Alsworth 42.24 322 P P 17 15 00.9 +0.9**
baz=98
**I21K Tanana 42.26 330 P P 17 14 59.2 -0.9**
I21K IAmb IAmb 17 15 04.6
comp=Z,35nm,1.1s
**I21K Tanana 42.26 330 P P 17 15 01.1 +1.1**
baz=106
**TULEG Thule 42.36 10** *i P P 17 15 02.8 +2.1*
TULEG IAmb IAmb 17 15 05.4
comp=Z,6.5nm,0.7s
**TULEG Thule 42.36 10 P P 17 15 00.7 0.0**
TULEG IAmb IAmb 17 15 04.2
comp=Z,39nm,1.6s
**N19K Bonanza Creek 42.42 323 P P 17 15 01.7 +0.2**
baz=99
**L20K Farewell, AK 42.43 326 P P 17 15 01.4 -0.2**
baz=101
**TOLK Toolik Lake Re 42.51 335 P P 17 15 02.2 +0.1**
baz=112
**M19K Big River Lodg 42.56 325 P P 17 15 02.2 -0.4**
baz=100
**K20K Telida 42.70 327 P P 17 15 04.0 +0.3**
baz=102
**H21K Melozitna Rive 42.72 330 P P 17 15 03.8 0.0**
H21K IAmb IAmb 17 15 08.1
comp=Z,20nm,1.1s
**H21K Melozitna Rive 42.72 330 P P 17 15 04.3 +0.4**
baz=106
**L19K White Mountain 42.82 325 P P 17 15 04.5 -0.2**
L19K IAmb IAmb 17 15 11.6
comp=Z,48nm,1.6s
**L19K White Mountain 42.82 325 P P 17 15 03.8 -0.9**
baz=100,SNR=5.9
**J20K Nowinta River 42.91 328 P P 17 15 05.3 0.0**
J20K IAmb IAmb 17 15 08.9
comp=Z,33nm,1.5s
**J20K Nowinta River 42.91 328 P P 17 15 05.5 +0.2**
baz=103
**IMAR Indian Mountai 43.19 331 P P 17 15 07.6 0.0**
**TTA Tatalina 43.48 326 P P 17 15 10.4 +0.3**
TTA pmax pmax
comp=Z,8.0nm,0.8s
**TTA Tatalina 43.48 326 P P 17 15 10.4 +0.3**
**TTA Tatalina 43.48 326 P P 17 15 10.1 0.0**
baz=100
**GCSA Gates City Sc 44.18 328 P P 17 15 15.0 -0.6**
baz=101
**NEEM North Greenlan 45.88 13** *i P P 17 15 30.3 +1.0*
NEEM IAmb IAmb 17 15 34.2
comp=Z,17nm,0.8s
**SUMG Summit 46.80 21 P P 17 15 35.0 -1.7**
SUMG pmax pmax
comp=Z,25nm,1.1s
**SUMG Summit 46.80 21** *i P P 17 15 38.1 +1.4*
SUMG IAmb IAmb 17 15 40.7
comp=Z,8.9nm,1.5s
**SUMG Summit 46.80 21 P P 17 15 35.0 -1.7**
**ATAH Atahualpa 47.39 152 LR LR 17 36 42.3**
comp=Z,469nm,21.9s,baz=327,slow=38
**TBTG Tabatinga, AM 48.59 140** *eP* **P 17 15 51.7 +0.9**
**BOAV Boa Vista 48.91 125** *eP* **P 17 15 53.1 -0.2**
**CZSB Cruzeiro do Su 50.30 146** *eP* **P 17 16 05.0 +1.2**
**PTGA Pitinga 51.62 127 LR LR 17 39 40.5**
comp=Z,407nm,19.5s,baz=346,slow=38
**SCO Scoresbysund 51.74 25 P P 17 16 13.4 -0.6**
SCO pmax pmax
comp=Z,21nm,0.9s
**SCO Scoresbysund 51.74 25** *i P P 17 16 15.1 +1.0*
SCO IAmb IAmb 17 16 17.0
comp=Z,11nm,0.7s
**SCO Scoresbysund 51.74 25** *i P P 17 16 15.0 +1.0*
**SCO Scoresbysund 51.74 25 P P 17 16 13.4 -0.6**
SCO IAmb IAmb 17 16 18.0
comp=Z,22nm,0.9s
**BORG Borgarnes 52.42 32 LR LR 17 36 40.6**
comp=Z,1µm,18.1s,baz=273,slow=34
**DAG Danmarks Havn 52.57 17 P P 17 16 20.9 +0.8**
**DAG Danmarks Havn 52.57 17** *i P P 17 16 20.0 -0.1*
DAG IAmb IAmb 17 16 23.8
comp=Z,11nm,0.8s
**NOR Nord 53.01 11** *i P P 17 16 25.2 +1.9*
**KIP Kipapa 53.22 271⇑** *eP P 17 16 26.9 +1.3*
KIP pmax pmax
comp=Z,41nm,1.2s
**ETMB Extrema 55.28 140** *eP* **P 17 16 39.1 -1.5**
**JMIC Jan Mayen 56.09 23 LR LR 17 39 46.8**
comp=Z,461nm,18.2s,baz=266,slow=35
**MALB Monte Alegre 56.23 123** *eP* **P 17 16 47.9 +0.3**
**MCPB Macapa, AP 56.69 119** *eP* **P 17 16 51.7 +0.9**
**ITTB Itaituba 57.11 126** *eP* **P 17 16 52.2 -1.5**
**KBS Kingsbay 58.30 12** *eP* **P 17 17 02.8 +1.5**
**BILL Bilibino 58.54 334** *ceP* **P 17 17 03.8 +0.7**
BILL *e* 17 19 12.5
BILL *eS* **S 17 25 05.5 -1.0**
BILL pmax pmax
comp=Z,23nm,1.3s
BILL MLR MLR
comp=Z,612nm,15.0s
**BILL Bilibino 58.54 334 P P 17 17 01.6 -1.5**
BILL IAmb IAmb 17 17 06.6
comp=Z,21nm,1.2s
**NPGB Novo Progresso 59.38 128** *eP* **P 17 17 09.0 -0.7**
**SPA0 Spitsbergen Ar 59.44 13** *eP* **P 17 17 10.3 +1.0**
**SPITS Spitsbergen Ar 59.44 13 P P 17 17 10.8 +1.5**
comp=Z,10nm,0.9s,baz=185,slow=5.9,SNR=21
SPITS LR LR 17 43 03.3
comp=Z,873nm,18.9s,baz=352,slow=36
**TAOE Nuku Hiva Isla 59.53 229** *eLR* **LR 17 34 36.5**
comp=Z,390nm,22.7s
**HSPB Hornsund (broa 59.91 14** *eP* **P 17 17 12.6 +0.1**
**LPAZ La Paz 59.91 146 P P 17 17 14.1 +0.2**
comp=Z,1.6nm,0.8s,baz=334,slow=7.1,SNR=4.7
**LPAZ La Paz 59.91 146 P P 17 17 12.0 -1.9**
LPAZ pmax pmax
comp=Z,7.0nm,0.8s
**LPAZ La Paz 59.91 146 P P 17 17 12.0 -1.9**
LPAZ IAmb IAmb 17 18 11.1
comp=Z,6.7nm,0.8s
**LPAZ La Paz 59.91 146** *eP* **P 17 17 14.7 +0.8**
**SHEM Shemya Is, Ala 60.39 316 LR LR 17 42 31.8**
comp=Z,211nm,18.4s,baz=83,slow=35
**VILB Vilhena 61.13 136** *eP* **P 17 17 23.2 +1.7**
**HOPEN Hopen 61.96 13** *eP* **P 17 17 26.9 +0.5**
**CLDB Colider 62.05 131** *eP* **P 17 17 28.8 +1.0**
**PDRB Porto dos Gac 62.07 132** *eP* **P 17 17 28.6 +0.7**
**PRPB Parauapebas 62.40 122** *eP* **P 17 17 31.4 +1.2**
**SIV San Ignacio 63.15 139 LR LR 17 47 16.4**
comp=Z,169nm,21.5s,baz=307,slow=38
**PTLB Pontes e Lacer 63.75 137** *eP* **P 17 17 40.2 +1.1**
**EKA Eskdalemuir Ar 63.85 39 P P 17 17 40.1 +0.8**
comp=Z,14nm,0.6s,baz=294,slow=5.7,SNR=31
EKA LR LR 17 43 29.3
comp=Z,810nm,18.8s,baz=300,slow=34
**EKA Eskdalemuir Ar 63.85 39 P P 17 17 39.9 +0.6**
**RPN Rapa Nui 64.03 190 LR LR 17 41 42.0**
comp=Z,671nm,18.8s,baz=44,slow=32
**ROSB Rosrio 64.12 115** *eP* **P 17 17 43.0 +1.4**
**LOF Lofoten 64.27 23** *eP* **P 17 17 42.4 +0.6**
**PB03 IPOC Station P 64.32 150 P P 17 17 41.0 -2.0**
**STEI Steigen 64.91 22** *eP* **P 17 17 47.9 +1.8**
**TRO Tromso 64.96 20** *eP* **P 17 17 47.3 +1.0**
**KONS Konsvik 65.06 24** *eP* **P 17 17 47.8 +0.8**
**LVC Limon Verde 65.17 150 LR LR 17 49 13.8**
comp=Z,120nm,21.2s,baz=346,slow=39
**AKN Aaknes 65.17 30** *esP* **sP 17 17 50.8 -1.8**
**MOL Molde 65.19 29** *eP* **P 17 17 47.1 -0.8**
**FAUS Fauske 65.25 23** *eP* **P 17 17 50.1 +1.8**
**BER Bergen 65.41 32** *esP* **sP 17 17 51.9 -2.1**
**JETT Jettan, Norway 65.42 20** *eP* **P 17 17 51.3 +1.9**
**HAMF Hammerfest 65.56 18** *eP* **P 17 17 50.4 +0.1**
**MOR8 Moi Rana 65.69 24** *eP* **P 17 17 51.9 +0.8**
**SNDB Serra Nova Dou 65.71 128** *eP* **P 17 17 53.4 +1.5**
**NSS Namsos 65.78 26** *eP* **P 17 17 52.0 +0.3**
**SMTB Santa Maria do 65.86 122** *eP* **P 17 17 53.9 +1.0**
**SEY Seymchan 65.99 332 LR LR 17 47 00.4**
comp=Z,983nm,21.4s,baz=52,slow=36
**SEY Seymchan 65.99 332⇓** *eP* **P 17 17 54.1 +1.0**
**KTK1 Kautokeino 66.54 19** *eP* **P 17 17 56.7 +0.2**
**ARA0 ARCESS Array S 66.78 18** *eP* **P 17 17 59.4 +1.3**
**ARCES ARCESS Array B 66.78 18 P P 17 17 58.5 +0.4**
comp=Z,8.1nm,0.7s,baz=315,slow=6.4,SNR=39
ARCES LR LR 17 47 13.2
comp=Z,572nm,18.7s,baz=306,slow=36
**ARCES ARCESS Array B 66.78 18 P P 17 17 57.9 -0.1**
ARCES pmax pmax
comp=Z,104nm,2.0s
**ARCES ARCESS Array B 66.78 18 P P 17 17 57.9 -0.1**
**KEV Kevo 67.00 18 P P 17 17 59.6 +0.2**
KEV pmax pmax
comp=Z,198nm,2.0s
**KEV Kevo 67.00 18 P P 17 17 59.6 +0.2**
**KEV Kevo 67.00 18** *eP* **P 17 17 59.2 -0.2**
**HEF Hetta 67.06 20** *eP* **P 17 18 01.1 +1.2**
**NBPS Pedro II - PI 67.10 114** *eP* **P 17 18 02.8 +1.9**
**TIXI Tiksi 67.10 345 LR LR 17 48 09.9**
comp=Z,692nm,21.9s,baz=4.0,slow=37
**TIXI Tiksi 67.10 345⇑** *iP* **P 17 18 00.5 +0.5**
TIXI pmax pmax
comp=Z,7.0nm,2.1s
TIXI MLR MLR
comp=Z,789nm,23.0s
**NC204 NORSAR Array S 67.17 30 P P 17 17 58.6 -2.1**
**NBMO Morrinhos-CE 67.41 112** *eP* **P 17 18 04.3 +1.5**
**NB2 NORSAR Subarra 67.48 30 P P 17 18 03.9 +1.2**
comp=Z,14nm,1.1s,baz=303,slow=6.5
**NB2 NORSAR Subarra 67.48 30 P P 17 18 03.9 +1.2**
baz=303,slow=6.5
**NOA NORSAR Array B 67.48 30 P P 17 18 03.8 +1.0**
comp=Z,3.1nm,0.7s,baz=304,slow=6.5,SNR=10
NOA LR LR 17 46 21.5
comp=Z,477nm,18.8s,baz=305,slow=35
**PEXB Peixe 67.74 125** *eP* **P 17 18 06.3 +1.3**
**PP1B Ponte de Pedra 67.89 134** *eP* **P 17 18 07.8 +2.1**
**ARAG Araguaiana, MT 68.22 131** *eP* **P 17 18 09.3 +1.4**
**MA2 Magadan 68.54 329⇑** *eP* **P 17 18 11.5 +2.1**
MA2 pmax pmax
comp=Z,25nm,3.1s
**MA2 Magadan 68.54 329 P P 17 18 08.5 -0.9**
MA2 IAmb IAmb 17 18 13.0
comp=Z,11nm,1.3s
**PET Petropavlovsk 68.57 321⇑** *eP* **P 17 18 08.6 -1.0**
PET pmax pmax
comp=Z,16nm,1.1s
**PNCL Nicolau / Gran 68.82 58** *eP* **P 17 18 13.4 +1.9**
comp=Z,70nm,1.6s
**PMRV Marv??o 68.93 56** *eP* **P 17 18 14.1 +1.9**
comp=Z,52nm,1.7s
**PTEO Sao Teotonio 68.97 58** *eP* **P 17 18 12.1 -0.3**
comp=Z,116nm,1.6s
**HFS Hagfors 69.01 30 P P 17 18 13.8 +1.5**
comp=Z,6.9nm,0.7s,baz=290,slow=4.4,SNR=15
HFS LR LR 17 47 17.9
comp=Z,499nm,18.2s,baz=300,slow=35
**PETK Petropavlovsk- 69.01 321 P P 17 18 12.4 0.0**
comp=Z,9.9nm,1.0s,baz=64,slow=8.8,SNR=12
PETK LR LR 17 49 31.0
comp=Z,344nm,19.3s,baz=52,slow=37
**PESTR Estremoz 69.08 57** *eP* **P 17 18 15.3 +2.2**
**MORF Marmelete 69.14 59** *eP* **P 17 18 16.1 +2.5**
comp=Z,98nm,1.5s
**MESJ Messejana 69.17 58** *eP* **P 17 18 16.4 +2.8**
**NBPB Pedra_Branca-C 69.24 114** *eP* **P 17 18 15.8 +1.4**
**MUD Monsted U'grnd 69.24 34** *i P* **P 17 18 16.0 +2.3**
**PBEJ Beja 69.32 58** *eP* **P 17 18 16.4 +1.8**
comp=Z,38nm,1.7s
**NBCL Cascavel-CE 69.32 112** *eP* **P 17 18 17.1 +2.3**
**PCVE Castro Verde 69.40 58** *eP* **P 17 18 17.3 +2.2**
**AQDB Aquidauana 69.72 137 P P 17 18 17.4 +0.2**
AQDB IAmb IAmb 17 18 20.1
comp=Z,7.5nm,0.9s
**AQDB Aquidauana 69.72 137** *eP* **P 17 18 18.6 +1.5**
**PVAQ Vaqueiros 69.74 58** *eP* **P 17 18 19.1 +2.0**
comp=Z,63nm,1.6s
**SDBA SAO DESIDERIO 70.23 123** *eP* **P 17 18 21.7 +1.3**
**BMRD Maredsous 70.54 41** *dPcP* **PcP 17 18 41.5 -1.5**
**BDFB Brasilia 70.55 128 P P 17 18 23.3 +0.9**
comp=Z,2.4nm,0.4s,baz=320,slow=7.7,SNR=5.4
**DOU Dourbes 70.56 42** *dPcP* **PcP 17 18 40.6 -2.5**
**BGES Gesves 70.66 41** *dx* **P 17 18 25.3 +2.8**
BGES *dPcP* **PcP 17 18 41.4 -2.2**

**UPP Uppsala 70.72 29** *eP* **P 17 18 21.8 -0.9**
**BSTI Sart Tilman 70.80 41** *dx* **P 17 18 25.3 +1.9**
**RCHB Rochefort 70.86 41** *dx* **P 17 18 25.7 +1.9**
**MEM Membach 71.02 41** *dx* **P 17 18 26.7 +2.0**
MEM *dPcP* **PcP 17 18 40.4 -4.7**
**NBMA Muriti-CE 71.06 115** *eP* **P 17 18 27.6 +2.1**
**ESDC Sonseca Array 71.07 54** P **P 17 18 26.8 +1.5**
comp=Z,7.3nm,1.1s,baz=295,slow=6.6,SNR=9.8
ESDC LR LR 17 47 42.8
comp=Z,464nm,18.1s,baz=299,slow=34
**BTNL Ternell 71.10 41** *dx* **P 17 18 27.1 +1.8**
**VIKU Vikbolandet 71.23 30** *eP* **P 17 18 25.2 -0.6**
**WLF Walferdange 71.63 41** *dx* **P 17 18 31.6 +3.1**
**PPT Papeete 72.05 231** LR LR 17 46 16.5
comp=Z,143nm,18.7s,baz=78,slow=33
**PPT2 Papeete2 72.06 231** *eLR* LR 17 40 23.5
comp=Z,170nm,22.2s
**IPMB Ipameri, GO 72.18 129** *eP* **P 17 18 33.3 +1.1**
**ITRB Iturama 72.18 132** *eP* **P 17 18 33.9 +1.8**
**NBPN Ponto Novo - B 72.39 118** *eP* **P 17 18 34.4 +0.9**
**JANB Januaria 72.53 125** *eP* **P 17 18 36.5 +2.2**
**FIA1 FINESS Array S 72.68 24** P **P 17 18 34.3 -0.2**
**FINES FINESS Array B 72.68 24** P **P 17 18 36.4 +1.9**
comp=Z,10nm,0.6s,baz=320,slow=3.5,SNR=24
FINES LR LR 17 47 45.9
comp=Z,728nm,19.1s,baz=316,slow=34
**FINES FINESS Array B 72.68 24** P **P 17 18 34.0 -0.5**
**FINES FINESS Array B 72.68 24** P **P 17 18 34.0 -0.5**
**PCMB Pacaembu 73.12 134** *eP* **P 17 18 39.5 +1.9**
**ZON Zonda 73.29 153** P **P 17 18 38.2 -0.3**
ZON pmax pmax
comp=Z,32nm,1.6s
**ZON Zonda 73.29 153** P **P 17 18 38.2 -0.3**
ZON IAmb IAmb 17 18 41.7
comp=Z,32nm,1.6s
**CPUP Villa Florida 73.65 142** P **P 17 18 41.2 +0.6**
comp=Z,6.6nm,1.0s,baz=344,slow=8.1,SNR=6.1
CPUP LR LR 17 55 48.0
comp=Z,211nm,18.6s,baz=331,slow=40
**CPUP Villa Florida 73.65 142** P **P 17 18 39.2 -1.4**
CPUP pmax pmax
comp=Z,14nm,1.3s
**CPUP Villa Florida 73.65 142** P **P 17 18 39.2 -1.4**
CPUP IAmb IAmb 17 18 43.1
comp=Z,14nm,1.2s
**CPUP Villa Florida 73.65 142** *eP* **P 17 18 42.4 +1.8**
**CLL Collm 74.15 37** *i* P **P 17 18 45.7 +2.3**
CLL pmax pmax
comp=Z,18nm,1.4s
CLL MLR MLR
comp=Z,300nm,18.3s
**CLL Collm 74.15 37** *i* P **P 17 18 45.7 +2.3**
comp=Z,18nm,1.4s
CLL *eS* **S 17 28 24.0 +7.6**
CLL *e*(SSS) 17 36 42.0
CLL LmV 17 51 00.0
comp=Z,300nm,18.3s
**CLL Collm 74.15 37** P **P 17 18 42.0 -1.3**
CLL IAmb IAmb 17 18 47.6
comp=Z,23nm,1.5s
**NBLA Lagarto - SE 74.21 117** *eP* **P 17 18 46.2 +2.0**
**GRF Grafenberg Arr 74.27 39** *eP* **P 17 18 46.6 +2.5**
comp=Z,14nm,1.3s,baz=308,slow=5.6
**MDT Midelt 74.33 61** LR LR 17 49 10.0
comp=Z,434nm,19.1s,baz=344,slow=34
**YAK Yakutsk 74.36 339** LR LR 17 55 33.6
comp=Z,530nm,19.1s,baz=64,slow=39
**YAK Yakutsk 74.36 339**⇑ *iP* **P 17 18 46.0 +1.6**
YAK pmax pmax
comp=Z,12nm,1.5s
**NRIK Noril'sk 74.41 358** P **P 17 18 46.1 +1.5**
comp=Z,1.0nm,0.3s,baz=28,slow=7.4,SNR=3.7
NRIK LR LR 17 52 31.3
comp=Z,468nm,19.6s,baz=25,slow=37
**NRIK Noril'sk 74.41 358**⇓ *iP* **P 17 18 46.1 +1.5**
NRIK pmax pmax
comp=Z,6.0nm,1.4s
**NBAN Anadia - AL 74.42 115** *eP* **P 17 18 47.4 +1.9**
**GDU01 Guandu, BA 74.81 120** *eP* **P 17 18 50.0 +2.4**
**BRG Berggiesshubel 74.88 37** *eP* **P 17 18 51.2 +3.5**
BRG Amp 17 18 52.8
comp=Z,23nm,1.5s
**BRG Berggiesshubel 74.88 37** *eP* **P 17 18 51.1 +3.5**
BRG pmax pmax
comp=Z,23nm,1.5s
**VSU Vasula 75.08 26** *deP* **P 17 18 51.5 +2.9**
VSU pmax pmax
comp=Z,34nm,0.8s
**VSU Vasula 75.08 26** *eP* **P 17 18 47.6 -1.0**
**KLNR Kaliningrad 75.28 32** *d iP* **P 17 18 53.0 +3.2**
KLNR pmax pmax
comp=Z,66nm,1.1s
**DIAM Diamantina, MG 75.30 126** *eP* **P 17 18 52.5 +1.9**
**DAVOX Davos/Dischmat 75.35 42** LR LR 17 51 30.4
comp=Z,709nm,18.3s,baz=300,slow=35
**PVCC Panska Ves 75.41 37** AMS AMS 17 50 00.0
comp=Z,600nm,18.6s
**PRU Pruhonice 75.75 38** *eP* **P 17 18 55.0 +2.4**
PRU AMS AMS 17 54 40.0
comp=Z,700nm,22.8s
**SQTA Sankt Quirin 75.79 41** *eP* **P 17 18 55.2 +2.0**
comp=Z,12nm,1.4s
**KHC Kasperske Hory 75.82 39**⇑ *iP* **P 17 18 53.7 +0.6**
KHC pmax pmax
comp=Z,22nm,1.6s
**KHC Kasperske Hory 75.82 39** *eP* **P 17 18 54.2 +1.1**
KHC AMS AMS 17 51 00.0
comp=Z,900nm,21.2s
**WTTA Wattenberg 75.99 41** *eP* **P 17 18 57.7 +3.4**
comp=Z,20nm,1.9s
**GERES GERESS Array B 76.06 39** P **P 17 18 56.0 +1.4**
comp=Z,2.2nm,0.7s,baz=331,slow=4.3,SNR=17
GERES LR LR 17 49 47.2
comp=Z,648nm,21.3s,baz=295,slow=34
**CHVC Chvalec 76.09 37** *eP* **P 17 18 57.0 +2.4**
CHVC AMS AMS 17 49 00.0
comp=Z,500nm,16.1s
**UPC Upice 76.12 37** AMS AMS 17 49 00.0
comp=Z,600nm,18.9s
**OSTC Ostas 76.19 37** *eP* **P 17 18 57.5 +2.3**
**DPC Dobruska-Polom 76.38 37** *eP* **P 17 18 58.4 +2.1**
DPC AMS AMS 17 48 50.0
comp=Z,600nm,19.1s
**CKRC Cesky Krumlov 76.39 39** AMS AMS 17 51 10.0
comp=Z,700nm,18.5s
**KRLC Kraliky 76.78 37** *eP* **P 17 19 01.6 +3.0**
KRLC AMS AMS 17 51 40.0
comp=Z,600nm,15.7s
**ABTA Abfaltersbach 76.78 41** *eP* **P 17 19 01.6 +2.9**
comp=Z,22nm,1.7s,SNR=4.8
**SUW Suwalki 76.94 31** *eP* **P 17 19 01.7 +2.4**
SUW *eL* L 17 47 49.3
comp=Z,635nm,28.2s
**SUW Suwalki 76.94 31** *eP* **P 17 18 58.3 -1.0**
**MOA Molln 76.99 40** *eP* **P 17 19 02.7 +2.9**
comp=Z,9.8nm,1.4s
**KBA Koelnbreinsper 77.01 41** *eP* **P 17 19 03.3 +3.2**
comp=Z,16nm,1.4s
**ITAB Concordia 77.08 138** *eP* **P 17 19 03.0 +2.6**
**IIGN Ignalina 77.18 29** *eP* **P 17 18 59.3 -1.4**
**VRAC Vranov 77.20 37**⇓ P **P 17 19 03.0 +2.1**
**VRAC Vranov 77.20 37** P **P 17 19 03.0 +2.1**
comp=Z,5.8nm,0.8s,baz=310,slow=6.8,SNR=8.1
VRAC LR LR 17 52 27.3
comp=Z,427nm,18.1s,baz=310,slow=35
**VRAC Vranov 77.20 37** *eP* **P 17 19 03.1 +2.1**
**KLMR Klimovskoe 77.20 20** *eP* **P 17 19 01.7 +1.1**
KLMR pmax pmax
comp=Z,21nm,1.4s
**KLMR Klimovskoe 77.20 20** *eP* **P 17 19 01.8 +1.1**
KLMR AMP 17 19 03.3
comp=Z,21nm,1.4s
KLMR LQ LQ 17 44 36.3
KLMR LQ LQ 17 44 36.3
KLMR LR LR 17 47 17.4
**SJMB Sao Joao De Ma 77.22 125** *eP* **P 17 19 03.9 +2.6**
**KRUC Moravsky 77.27 38** *eP* **P 17 19 02.4 +1.1**
**MORC Moravsky Berou 77.35 37**⇑ P **P 17 19 04.4 +2.7**
**MORC Moravsky Berou 77.35 37** *eP* **P 17 19 04.1 +2.3**
**IDID Didziasalis 77.41 28** *eP* **P 17 19 00.9 -1.1**
**OKC Ostrava-Krasne 77.59 36** AMS AMS 17 53 50.0
comp=Z,500nm,19.8s
**NACGM Naroch 77.73 29** *i* P **P 17 19 07.0 +3.3**
**CONA Conrad Observa 77.75 39** *eP* **P 17 19 06.4 +2.2**
comp=Z,6.6nm,0.8s,SNR=5.2

**OBKA Obir 78.01 40** *eP* **P 17 19 07.3 +1.7**
comp=Z,21nm,0.9s,SNR=7.4
**PRGR Permogore 78.06 17** *eP* **P 17 19 05.9 +0.5**
PRGR pmax pmax
comp=Z,13nm,0.9s
**SOKA Soboth 78.15 40** *eP* **P 17 19 08.1 +1.8**
comp=Z,9.3nm,0.8s,SNR=14
**MODS Modra-Piesok 78.16 38** *eP* P 17 19 12.6 +6.3
**MODS Modra-Piesok 78.16 38** *eP* P 17 19 12.6 +6.3
**MNK Minsk 78.46 29** *i* P **P 17 19 07.7 0.0**
MNK *i* 17 19 17.3
MNK *i* 17 22 05.2
MNK *i* PPP PPP 17 23 53.3
MNK *i* S **S 17 29 05.8 +2.2**
MNK *i* SS **SS 17 34 10.3 +4.9**
MNK pmax pmax
comp=E,3.0nm,0.9s
MNK pmax pmax
comp=Z,25nm,0.9s
MNK pmax pmax
comp=N,9.0nm,0.9s
MNK MLR MLR
comp=Z,437nm,20.0s
MNK MLR MLR
comp=N,623nm,20.0s
MNK MLR MLR
comp=E,120nm,20.0s
**MNK Minsk 78.46 29** *i* P **P 17 19 07.8 0.0**
comp=E,3.0nm,0.9s
MNK *i* P **P 17 19 07.8 0.0**
comp=N,9.0nm,0.9s
MNK *i* P **P 17 19 07.8 0.0**
comp=Z,25nm,0.9s,baz=319
MNK *i* PP **PP 17 22 05.2 +0.8**
MNK *i* PPP PPP 17 23 53.4
MNK *i* S **S 17 29 05.8 +2.2**
MNK *i* SS **SS 17 34 10.4 +4.9**
MNK *i* SSS SSS 17 37 35.3
MNK *i* LQ LQ 17 47 26.0
MNK *i* LR LR 17 50 50.4
MNK *i* LRM MLR 17 55 20.0
comp=Z,437nm,19.8s
MNK *i* LRM MLR 17 56 15.7
comp=N,623nm,19.8s
MNK *i* LRM MLR 17 56 17.8
comp=E,120nm,19.9s
**KOLL Kolacno 78.57 37** *eP* **P 17 19 12.2 +3.7**
**LANS Liptovska Anna 78.69 36** *eP* P 17 19 13.3 +4.0
**LANS Liptovska Anna 78.69 36** *eP* P 17 19 13.3 +4.0
**MORH Mrgy, Hungar 80.31 39**⇓ P **P 17 19 19.2 +1.1**
**LVV L'vov 80.32 34** *eP* **P 17 19 21.2 +3.1**
**YSS Yuzh-Sakhalins 80.35 322** *eP* **P 17 19 19.7 +1.5**
YSS pmax pmax
comp=Z,10.0nm,0.8s
**UZH Uzhgorod 80.39 35** *eP* **P 17 19 20.8 +2.4**
UZH *i* 17 19 27.8
**TRPA Tarpa 80.86 35**⇓ P **P 17 19 23.6 +2.7**
**PLCA Paso Flores 81.07 159** P **P 17 19 22.9 +0.9**
comp=Z,2.7nm,0.9s,baz=349,slow=4.6,SNR=3.3
PLCA LR LR 17 51 58.8
comp=Z,124nm,20.9s,baz=354,slow=33
**OBN Obninsk 81.08 24** P **P 17 19 23.5 +1.5**
comp=Z,4.4nm,0.7s,baz=333,slow=22,SNR=6.3
OBN LR LR 17 54 19.5
comp=Z,166nm,21.9s,baz=346,slow=35
**OBN Obninsk 81.08 24**⇓ *eP* **P 17 19 23.3 +1.3**
OBN *eS* **S 17 29 35.6 +4.3**
OBN pmax pmax
comp=Z,33nm,1.0s
**RAR Rarotonga 81.28 236** LR LR 17 49 01.9
comp=Z,267nm,19.8s,baz=130,slow=31
**FRGS Fruska Gora 81.63 39**⇑ P **P 17 19 26.9 +1.7**
**KIRV Kirov 81.64 16** P **P 17 19 26.0 +1.1**
comp=Z,11nm,0.8s,baz=144,slow=5.1,SNR=5.2
KIRV LR LR 17 55 00.3
comp=Z,428nm,20.4s,baz=335,slow=35
**KIRV Kirov 81.64 16** *eP* **P 17 19 26.2 +1.3**
**ZEA Zeya 81.76 334** *eP* **P 17 19 28.1 +2.5**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**AKASG Malin Array Be 81.88 30** P **P 17 19 27.7 +1.4**
comp=Z,4.7nm,0.6s,baz=308,slow=4.2,SNR=33
AKASG LR LR 17 55 09.7
comp=Z,495nm,20.2s,baz=321,slow=35
**AKASG Malin Array Be 81.88 30** P **P 17 19 26.2 -0.1**
**AKBB Malin Array Si 81.88 30** *deP* **P 17 19 28.0 +1.7**
**AKBB Malin Array Si 81.88 30** P **P 17 19 26.0 -0.3**
**DRGR 81.90 36**⇓ P **P 17 19 28.1 +1.5**
**KEST Kesra 81.93 51** P **P 17 19 29.2 +2.2**
comp=Z,25nm,1.0s,baz=242,slow=1.1,SNR=13
KEST LR LR 17 54 15.9
comp=Z,406nm,20.6s,baz=288,slow=34
**BOD Bodaibo 82.12 343** *eP* **P 17 19 29.1 +1.6**
BOD pmax pmax
comp=Z,11nm,1.4s
**BZS Buzias 82.21 38**⇓ P **P 17 19 30.6 +2.5**
**ASAJ Asahikawa 82.41 320** P **P 17 19 31.0 +1.8**
comp=Z,6.1nm,1.1s,baz=282,slow=27,SNR=3.7
ASAJ LR LR 17 56 22.1
comp=Z,242nm,21.1s,baz=9.0,slow=36
**BUR08 Bucovina Ar. S 82.44 34** P **P 17 19 28.1 -1.4**
BUR08 IAmb IAmb 17 19 34.0
comp=Z,15nm,1.1s
**BURAR Bucovina Array 82.47 34**⇑ P **P 17 19 32.8 +3.1**
**GZR Gura Zlata 82.94 37**⇑ P **P 17 19 34.3 +2.2**
**HERR Herculane 83.13 38**⇑ P **P 17 19 34.9 +1.9**
**LOT Lotru 83.38 37**⇑ P **P 17 19 36.0 +1.6**
**SORM Soroca 83.48 33**⇑ P **P 17 19 36.3 +1.7**
**KLR Kul'dur 83.64 329** P **P 17 19 37.1 +1.6**
comp=Z,3.8nm,0.9s,baz=17,slow=5.9,SNR=9.1
KLR LR LR 18 00 29.1
comp=Z,340nm,18.3s,baz=42,slow=38
**KLR Kul'dur 83.64 329**⇑ *iP* **P 17 19 38.0 +2.5**
KLR pmax pmax
comp=Z,8.0nm,1.4s
**BOVS Bovan 83.67 39**⇓ P **P 17 19 38.1 +2.4**
**PUNG Punghina 83.83 38**⇑ P **P 17 19 39.1 +2.5**
**ARR Arges 83.86 36**⇑ P **P 17 19 39.1 +2.3**
**VAE Valguarnera 83.90 47** LR LR 17 55 31.6
comp=Z,264nm,18.7s,baz=113,slow=35
**LPSR Galich'ya Gora 83.95 24** *eP* **P 17 19 39.3 +2.3**
LPSR pmax pmax
comp=Z,20nm,1.5s
**VOIR 84.00 36**⇓ P **P 17 19 39.4 +1.9**
**COVR Voineasa-Covas 84.24 35**⇑ P **P 17 19 42.2 +3.5**
**MLR Muntele Rosu 84.39 36**⇑ P **P 17 19 41.9 +2.3**
**MLR Muntele Rosu 84.39 36** P **P 17 19 40.9 +1.3**
comp=Z,6.6nm,0.8s,baz=284,slow=3.8,SNR=8.2
MLR LR LR 17 57 03.9
comp=Z,586nm,19.5s,baz=302,slow=36
**MLR Muntele Rosu 84.39 36** P **P 17 19 38.2 -1.4**
MLR pmax pmax
comp=Z,9.0nm,0.9s
**MLR Muntele Rosu 84.39 36** P **P 17 19 38.2 -1.4**
MLR IAmb IAmb 17 19 44.4
comp=Z,9.0nm,0.9s
**PLOR Plostina 84.44 35**⇓ P P 17 19 43.9 +4.2
**VRI Vrincioaia 84.47 35**⇓ P **P 17 19 39.7 -0.1**
**MILM Milestii Mici 84.61 33**⇑ P **P 17 19 42.9 +2.5**
**HUMR Humele 84.64 37**⇑ P **P 17 19 42.8 +2.1**
**VORR Voronezh 84.83 25** *eP* **P 17 19 44.2 +2.7**
VORR pmax pmax
comp=Z,50nm,0.4s
**AFI Afiamalu 85.00 249** LR LR 17 50 02.9
comp=Z,239nm,19.4s,baz=86,slow=30
**VSR Storozhevoye 85.19 25** *eP* **P 17 19 45.2 +1.9**
VSR pmax pmax
comp=Z,40nm,1.7s
**VORD Divnogorie 85.45 25** *eP* **P 17 19 47.4 +2.8**
VORD pmax pmax
comp=Z,9.0nm,0.6s
**ARU Arti 85.48 12** P **P 17 19 45.7 +1.0**
comp=Z,1.6nm,0.7s,baz=320,slow=8.7,SNR=8.4
ARU LR LR 18 02 02.7
comp=Z,306nm,18.0s,baz=336,slow=39
**ARU Arti 85.48 12** *c iP* **P 17 19 46.4 +1.7**
ARU 17 22 56.1
ARU S **S 17 30 11.3 -4.5**
ARU SS **SS 17 35 57.4 +7.9**
ARU pmax pmax
comp=Z,9.0nm,1.0s
**CFR Carcaliu 85.64 35**⇑ P **P 17 19 45.7 0.0**
**VRH Novokhopyorsk 86.06 24** *eP* **P 17 19 49.9 +2.3**
VRH pmax pmax
comp=Z,20nm,1.6s

**BELG Belogornoye 86.78 20** P **P 17 19 52.1 +1.1**
comp=Z,8.7nm,0.9s,baz=160,slow=19,SNR=4.1
BELG LR LR 17 57 09.8
comp=Z,393nm,19.8s,baz=339,slow=35
**BELG Belogornoye 86.78 20**⇓ *eP* **P 17 19 52.6 +1.5**
BELG pmax pmax
comp=Z,2.0nm,1.0s
**USRK Ussuriysk Ar. 87.47 326** P **P 17 19 56.0 +1.3**
comp=Z,1.6nm,0.7s,baz=53,slow=20,SNR=3.1
USRK LR LR 18 01 03.3
comp=Z,434nm,18.1s,baz=28,slow=37
**BNX BinXian 88.21 330**⇓ P **P 17 19 59.3 +1.1**
BNX pmax pmax
comp=Z,24nm,1.1s
**TIC Toumodi 89.09 82** *eP* **P 17 20 04.2 +1.3**
**DBIC Dimbokro 89.20 82** P **P 17 20 04.3 +1.0**
comp=Z,9.2nm,0.7s,baz=317,slow=5.1,SNR=9.6
DBIC LR LR 17 54 04.8
comp=Z,299nm,20.4s,baz=320,slow=32
**DBIC Dimbokro 89.20 82** P **P 17 20 01.8 -1.6**
DBIC pmax pmax
comp=Z,18nm,1.1s
**DBIC Dimbokro 89.20 82** P **P 17 20 01.8 -1.6**
**LIC Lamto 89.33 83** *eP* **P 17 20 05.4 +1.4**
comp=Z,29nm,0.9s
**KIC Kosan Boka 89.48 83** *eP* **P 17 20 06.0 +1.3**
comp=Z,7.4nm,0.8s
**ZAA0 Zalesovo Array 89.90 358** P **P 17 20 05.9 0.0**
ZAA0 IAmb IAmb 17 20 12.6
comp=Z,5.7nm,1.1s
**ZALV Zalesovo Beam 89.90 358** P **P 17 20 06.5 +0.6**
comp=Z,5.0nm,1.0s,baz=352,slow=6.2,SNR=9.3
ZALV LR LR 18 01 27.8
comp=Z,201nm,21.7s,baz=6.5,slow=36
**ZALV Zalesovo Beam 89.90 358** *i* P **P 17 20 07.8 +1.8**
ZALV pmax pmax
comp=Z,5.0nm,1.0s
**ZALV Zalesovo Beam 89.90 358** P **P 17 20 05.1 -0.9**
**MJAR Matsushiro Arr 90.18 318** LR LR 18 00 38.5
comp=Z,133nm,20.3s,baz=39,slow=36
**BRVK Borovoye 90.34 7**⇓ *eP* **P 17 20 09.7 +1.7**
BRVK pmax pmax
comp=Z,5.0nm,1.3s
**BVAR Borovoye Array 90.38 7** P **P 17 20 09.9 +1.6**
comp=Z,1.1nm,0.6s,baz=77,slow=7.8,SNR=5.4
**TORD Torodi Ar. Bea 90.49 73** P **P 17 20 10.9 +1.5**
comp=Z,5.1nm,1.0s,baz=295,slow=6.5,SNR=17
TORD PP **PP 17 23 42.3 -1.5**
comp=Z,1.4nm,1.1s,baz=276,slow=10,SNR=3.8
**TORD Torodi Ar. Bea 90.49 73** P **P 17 20 08.4 -1.0**
TORD IAmb IAmb 17 20 12.3
comp=Z,6.0nm,1.0s
**AKTO Aktyubinsk 91.08 15** P **P 17 20 13.8 +2.3**
comp=Z,1.5nm,0.6s,baz=345,slow=4.4,SNR=4.7
AKTO LR LR 18 04 35.2
comp=Z,352nm,18.7s,baz=339,slow=38
**ZAK Zakamensk 91.37 346** *eP* **P 17 20 12.0 -1.0**
ZAK pmax pmax
comp=Z,5.0nm,1.4s
**IDI Anoyia 91.43 43** LR LR 18 01 43.6
comp=Z,117nm,18.4s,baz=300,slow=36
**SOC Sochi 91.83 29** *eP* **P 17 20 17.6 +2.5**
SOC *e* 17 23 57.1
SOC *e*PPP PPP 17 25 53.9
SOC *e*SS SS 17 37 26.0 +3.6
SOC MLR MLR
comp=Z,546nm,17.0s
**BR131 Keskin Array S 92.43 35**⇑ *eP* **P 17 20 19.2 +1.0**
**BR131 Keskin Array S 92.43 35** P **P 17 20 15.7 -2.5**
BR131 IAmb IAmb 17 23 42.4
comp=Z,13nm,1.6s
**BRTR Keskin Array B 92.43 35** P **P 17 20 19.0 +0.8**
comp=Z,1.9nm,0.7s,baz=338,slow=2.0,SNR=11
BRTR LR LR 18 01 43.4
comp=Z,300nm,21.4s,baz=326,slow=36
**BRTR Keskin Array B 92.43 35** *ceP* **P 17 20 20.5 +2.3**
BRTR pmax pmax
comp=Z,2.0nm,0.7s
**KIV Kislovodsk 92.63 27** *eP* **P 17 20 21.7 +2.7**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,466nm,20.0s
**KBZ Khabaz 92.91 27** P **P 17 20 22.3 +2.2**
comp=Z,6.0nm,1.1s,baz=281,slow=3.4,SNR=7.0
KBZ LR LR 18 01 01.6
comp=Z,774nm,20.6s,baz=321,slow=35
**KBZ Khabaz 92.91 27**⇓ *iP* **P 17 20 22.5 +2.4**
KBZ pmax pmax
comp=Z,8.0nm,1.1s
**ULN Ulaanbaatar 92.94 343**⇑ *eP* **P 17 20 22.5 +2.1**
ULN pmax pmax
comp=Z,6.0nm,1.3s
**SONM Songino Array 93.12 343** P **P 17 20 22.8 +1.6**
comp=Z,1.1nm,1.0s,baz=7.2,slow=3.5,SNR=8.8
SONM LR LR 18 08 34.8
comp=Z,385nm,18.2s,baz=8.0,slow=40
**KURBB Kurchatov Arra 93.25 2** P **P 17 20 24.3 +2.8**
comp=Z,0.4nm,0.2s,baz=354,slow=4.7,SNR=5.2
KURBB LR LR 18 07 09.8
comp=Z,446nm,18.4s,baz=332,slow=39
**DGZ Jazzator, Alta 94.03 356**⇑ *eP* **P 17 20 26.1 +0.7**
DGZ pmax pmax
comp=Z,13nm,4.0s
**USHA Ushuaia 94.59 163** LR LR 18 00 07.0
comp=Z,153nm,19.3s,baz=14,slow=34
**KSRS Korea Array 94.70 324** LR LR 18 07 14.0
comp=Z,253nm,19.0s,baz=40,slow=38
**MSVF Nonsavu 95.06 252** LR LR 17 56 39.6
comp=Z,256nm,18.6s,baz=53,slow=31
**MAK Makhachkala 95.18 24** *eP* P 17 20 24.8 -5.7
MAK *e* 17 24 14.5
MAK *e* 17 30 58.1
MAK *e*SSS SSS 17 41 49.9
MAK MLR MLR
comp=Z,348nm,16.0s
**GNI Garni 96.70 27** LR LR 18 04 15.7
comp=Z,371nm,21.5s,baz=336,slow=36
**MKAR Makanchi Array 97.11 359** P Pdif 17 20 39.2 -0.2
comp=Z,1.3nm,0.9s,baz=8.6,slow=3.9,SNR=9.9
MKAR LR LR 18 08 50.7
comp=Z,222nm,20.1s,baz=341,slow=38
**MKAR Makanchi Array 97.11 359** *ceP* Pdif 17 20 40.7 +1.3
MKAR pmax pmax
comp=Z,2.0nm,0.9s
**HHC Hu-ho-hao-te 98.19 337** *eP* **P 17 20 41.8 -2.6**
HHC pmax pmax
comp=Z,7.0nm,1.1s
HHC LR LR
comp=Z,700nm,17.1s
HHC LR LR
comp=Z,1μm,19.0s
HHC LR LR
comp=Z,810nm,18.4s
**MMAI Mount Meron Ar 98.68 38** LR LR 18 09 35.2
comp=Z,97nm,18.5s,baz=122,slow=38
**WMQ Urumqi 99.88 355** *eP* **Pdif 17 20 53.3 +1.5**
WMQ pP sP 17 20 56.3 -0.3
WMQ sP pP 17 21 00.5 +5.1
WMQ pmax pmax
comp=Z,11nm,0.7s
WMQ LR LR
comp=Z,500nm,18.9s
WMQ LR LR
comp=Z,320nm,21.3s
WMQ LR LR
comp=Z,390nm,21.3s
**HNS HongShan 100.24 334** *eP* **Pdif 17 20 51.3 -2.1**
HNS S **Sdif 17 32 23.3 -5.8**
HNS LR LR
comp=Z,420nm,20.6s
HNS LR LR
comp=Z,720nm,21.7s
HNS LR LR
comp=Z,620nm,21.7s
**DZM Mont Dzumac 106.48 255** *eLR* LR 17 56 23.7
comp=Z,140nm,23.4s
**PZH PanZhiHua 114.46 340** PKP **PKiKP 17 25 46.1 -1.5**
PZH PP **PP 17 26 43.3 +0.7**
PZH AMB AMB
comp=Z,70nm,5.8s
PZH LR LR
comp=Z,620nm,20.2s
PZH LR LR
comp=Z,730nm,19.4s
PZH LR LR

comp=Z,660nm,20.4s
**KMI Kunming 115.47 338** ⇑PKP **PKiKP 17 25 47.4 -2.3**
KMI LR LR
comp=Z,490nm,18.3s
KMI LR LR
comp=Z,310nm,17.2s
KMI LR LR
comp=Z,550nm,23.5s
**QIZ Qiongzhong 118.55 329** PKP **PKPdf 17 25 54.4 -1.1**
QIZ PP **PP 17 27 10.4 -0.9**
QIZ LR LR
comp=Z,290nm,12.8s
QIZ LR LR
comp=Z,320nm,20.6s
QIZ LR LR
comp=Z,380nm,18.1s
**CMAR Chiang Mai Arr 122.87 340** PKP **PKiKP 17 26 04.2 +0.2**
comp=Z,0.6nm,0.8s,baz=325,slow=2.5,SNR=7.9
**WRA Warramunga Arr 131.00 275** PKP **PKiKP 17 26 21.0 +0.9**
comp=Z,0.3nm,0.6s,baz=59,slow=2.5,SNR=2.2
**ASAR Alice Springs 133.20 271** PKP **PKiKP 17 26 24.1 -0.4**
comp=Z,1.2nm,1.1s,baz=75,slow=2.5,SNR=6.4

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*JMA* ***13*** *17:07:49.5±0.1,24.˚19N×121.˚13E,h0km,M3.5*
*NIED* ***13*** *17:07:49.6,24.˚19N×121.˚13E,h0km,MW3.9,Moment Tensor Solution. s2 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-0.13; $M_{\theta\theta}$3.93; $M_{\phi\phi}$-3.80; $M_{r\theta}$5.17; $M_{\theta\phi}$-5.25; $M_{\phi r}$2.48; Fault plane solution: $M_o$8.66000×$10^{14}$ NP1: $\phi_s$252.00000°,$\delta$88.00000°,$\lambda$-139.00000°. NP2: $\phi_s$160.00000°,$\delta$49.00000°,$\lambda$-2.00000°.*
*TAP* ***13*** *17:07:50.5,24.˚24N×121.˚16E,h6km,ML4.1,B*
*IASPEI* ***13*** *17:07:51.2±0.8,24.˚24N±0.˚01×121.˚16E±0.˚02,h5km±5km, mb3.4/5,Error ellipse: s-maj=2.4km s-min=1.6km az=121.0,GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*IDC* ***13*** *17:07:51.7±1.8,24.˚17N×121.˚23E,h0km,mb3.4/5, mb1 3.5/5,mb1mx3.3/63,mbtmp3.4/5,Error ellipse: s-maj=158.5km s-min=21.9km az=65.0*
**ISC 13 17:07:51.2±0.8,24.˚25N±0.˚01×121.˚16E±0.˚01,h3km±5km, n146,σ1§16/250,mb3.4/5,47C-13D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **TWT** | **Tachien** baz=354 | **0.02** | **63** | ⇑*i*P | | **Pg** | **17 07 52.2** | **0.0** |
| TWT | | | | *i* S | | **Sg** | **17 07 53.1** | **+0.2** |
| **FUSS** | **Fushou** baz=86 | **0.08** | **89** | ⇓*i*P | | **Pg** | **17 07 53.2** | **+0.2** |
| FUSS | | | | S | | **Sg** | **17 07 54.5** | **+0.3** |
| **WHF** | **Hehuan Shan** baz=135 | **0.14** | **136** | ⇓*i*P | | **Pg** | **17 07 54.5** | **+0.4** |
| WHF | | | | *i* S | | **Sg** | **17 07 57.4** | **+1.3** |
| **CHGB** | **Renai** baz=178 | **0.18** | **176** | ⇑*i*P | | **Pg** | **17 07 54.9** | **-0.1** |
| CHGB | | | | *i* S | | **Sg** | **17 07 57.3** | **0.0** |
| **WHP** | **Taichung City** baz=281 | **0.20** | **279** | ⇓*i*P | | **Pg** | **17 07 55.5** | **+0.4** |
| WHP | | | | S | | **Sg** | **17 07 58.6** | **+0.8** |
| **WUSB** | **Renai** baz=192 | **0.26** | **189** | ⇑*i*P | | **Pg** | **17 07 55.8** | **-0.4** |
| WUSB | | | | S | | **Sg** | **17 07 59.2** | **-0.4** |
| **NNSB** | **Datong** baz=47 | **0.27** | **48** | ⇑*i*P | | **Pg** | **17 07 56.4** | **-0.2** |
| NNSB | | | | S | | **Sg** | **17 08 01.2** | **+1.0** |
| **NNS** | **Nan Shan** baz=45 | **0.27** | **45** | ⇑*i*P | | **Pg** | **17 07 56.5** | **-0.1** |
| NNS | | | | S | | **Sg** | **17 08 00.1** | **-0.1** |
| **WCS** | **Beigang Elemen** baz=242 | **0.29** | **230** | ⇑*i*P | | **Pg** | **17 07 54.8** | **-2.1** |
| WCS | | | | S | | **Sg** | **17 07 59.1** | **-1.6** |
| **ETLH** | **Xiulin Townshi** baz=97 | **0.30** | **97** | ⇓*i*P | | **Pb** | **17 07 57.5** | **-1.8** |
| ETLH | | | | *i* S | | **Sg** | **17 08 01.6** | **+0.7** |
| **WPL** | **Puli Township** baz=230 | **0.30** | **219** | ⇑*i*P | | **Pg** | **17 07 56.8** | **-0.2** |
| WPL | | | | S | | **Sg** | **17 08 00.3** | **-0.6** |
| **DPDB** | **Guoxing** baz=236 | **0.30** | **225** | ⇑*i*P | | **Pg** | **17 07 57.0** | **-0.1** |
| DPDB | | | | *e*S | | **Sg** | **17 08 01.1** | **+0.1** |
| **TWQ1** | **Liyutan** baz=287 | **0.37** | **286** | ⇓*i*P | | **Pb** | **17 07 59.2** | **-1.2** |
| TWQ1 | | | | S | | **Sb** | **17 08 04.4** | **-2.2** |
| **NFF** | **Wufeng Townshi** baz=3.0 | **0.39** | **354** | P | | **Pg** | **17 07 58.9** | **+0.2** |
| NFF | | | | S | | **Sg** | **17 08 03.8** | **0.0** |
| **NSY** | **Sanyi** baz=295 | **0.40** | **295** | ⇓*i*P | | **Pb** | **17 08 00.3** | **-0.7** |
| NSY | | | | S | | **Sb** | **17 08 06.4** | **-1.2** |
| **NACB** | **Ninganchiao** baz=100 | **0.40** | **100** | ⇓*i*P | | **Pb** | **17 07 59.3** | **-1.7** |
| NACB | | | | S | | **Sg** | **17 08 04.7** | **+0.5** |
| **ETM** | **Tongmen** baz=140 | **0.41** | **132** | ⇓*i*P | | **Pb** | **17 07 59.3** | **-1.8** |
| ETM | | | | *e*S | | **Sg** | **17 08 03.5** | **-1.0** |
| **LIOB** | **Emei** baz=340 | **0.42** | **342** | ⇑*i*P | | **Pb** | **17 08 00.1** | **-1.2** |
| LIOB | | | | *i* S | | **Sb** | **17 08 06.2** | **-1.8** |
| **TWD** | **Chiawan** baz=102 | **0.43** | **112** | ⇓*i*P | | **Pb** | **17 07 59.8** | **-1.7** |
| TWD | | | | *i* S | | **Sg** | **17 08 05.7** | **+0.5** |
| **ETL** | **Fush Village** baz=101 | **0.43** | **101** | ⇓*i*P | | **Pb** | **17 07 59.8** | **-1.7** |
| ETL | | | | S | | **Sg** | **17 08 05.7** | **+0.5** |
| **SMLT** | **Sun Moon Lake** baz=213 | **0.43** | **213** | ⇑*i*P | | **Pg** | **17 07 59.3** | **-0.3** |
| **TYC** | **Yuchr** baz=221 | **0.44** | **219** | ⇑*i*P | | **Pg** | **17 07 59.4** | **-0.3** |
| TYC | | | | S | | **Sg** | **17 08 04.0** | **-1.3** |
| **LATG** | **Datong** baz=34 | **0.44** | **49** | ⇑*i*P | | **Pg** | **17 07 59.4** | **-0.4** |
| LATG | | | | S | | **Sg** | **17 08 05.4** | **-0.1** |
| **NMLH** | **Miaoli** baz=310 | **0.44** | **311** | *e*P | | **Pb** | **17 08 01.2** | **-0.6** |
| NMLH | | | | *e*S | | **Sb** | **17 08 07.6** | **-1.2** |
| **TCU** | **Taichung** baz=259 | **0.45** | **258** | *e*P | | **Pb** | **17 08 01.4** | **-0.4** |
| TCU | | | | S | | **Sb** | **17 08 08.3** | **-0.7** |
| **NSK** | **Sanguang** baz=9.0 | **0.47** | **23** | ⇑*i*P | | **Pg** | **17 08 00.1** | **-0.1** |
| NSK | | | | *i* S | | **Sg** | **17 08 06.2** | **-0.1** |
| **YHNB** | **Yeheng** baz=22 | **0.47** | **25** | ⇑*i*P | | **Pg** | **17 08 00.1** | **-0.1** |
| YHNB | | | | S | | **Sg** | **17 08 05.8** | **-0.6** |
| **YHNB** | **Yeheng** | **0.47** | **25** | P | | **Pg** | **17 08 00.3** | **+0.1** |
| **NDT** | **Datong Townshi** baz=28 | **0.48** | **42** | ⇑*i*P | | **Pg** | **17 08 00.1** | **-0.4** |
| NDT | | | | *e*S | | **Sb** | **17 08 08.6** | **-1.1** |
| **WDJ** | **Dajia District** baz=281 | **0.48** | **282** | ⇓*i*P | | **Pb** | **17 08 02.2** | **-0.2** |
| **HWA** | **Hwalien** baz=123 | **0.49** | **123** | P | | **Pb** | **17 08 01.3** | **-1.2** |
| HWA | | | | *e*S | | **Sb** | **17 08 08.3** | **-1.6** |
| **SSLB** | **Suanglung** baz=205 | **0.49** | **202** | ⇑*i*P | | **Pg** | **17 07 59.8** | **-1.0** |
| SSLB | | | | S | | **Sg** | **17 08 05.5** | **-1.7** |
| **SSLB** | **Suanglung** baz=205 | **0.49** | **202** | P | | **Pg** | **17 08 00.1** | **-0.6** |
| **ESL** | **Shilin** baz=150 | **0.50** | **150** | ⇓*i*P | | **Pb** | **17 08 01.0** | **-1.6** |
| ESL | | | | *i* S | | **Sg** | **17 08 06.7** | **-0.6** |
| **ENTT** | **Nioudou** baz=31 | **0.54** | **43** | ⇑*i*P | | **Pg** | **17 08 01.3** | **-0.4** |
| ENTT | | | | *e*S | | **Sg** | **17 08 08.8** | **+0.2** |
| **ENA** | **Nanau** baz=70 | **0.56** | **71** | ⇑*i*P | | **Pg** | **17 08 01.9** | **-0.1** |
| ENA | | | | *i* S | | **Sg** | **17 08 08.8** | **-0.5** |
| **SBCB** | **Hsinchu** baz=351 | **0.57** | **344** | ⇑*i*P | | **Pb** | **17 08 03.4** | **-0.4** |
| SBCB | | | | S | | **Sb** | **17 08 11.9** | **-0.4** |
| **WNT** | **Mingjian** baz=225 | **0.57** | **230** | ⇑*i*P | | **Pb** | **17 08 03.1** | **-0.7** |
| WNT | | | | *i* S | | **Sb** | **17 08 12.2** | **-0.1** |
| **WCHH** | **Zhanghua** baz=254 | **0.57** | **253** | P | | **Pb** | **17 08 03.9** | **0.0** |
| WCHH | | | | S | | **Sb** | **17 08 12.5** | **+0.1** |
| **WJS** | **Zhushan** baz=219 | **0.58** | **223** | *e*P | | **Pb** | **17 08 02.9** | **-1.1** |
| WJS | | | | *e*S | | **Sb** | **17 08 12.1** | **-0.5** |
| **EWUT** | **Wuta** baz=69 | **0.60** | **70** | P | | **Pg** | **17 08 02.5** | **-0.2** |
| EWUT | | | | S | | **Sg** | **17 08 09.7** | **-0.8** |
| **NWLT** | **Wulai** baz=29 | **0.61** | **30** | ⇑*i*P | | **Pg** | **17 08 02.7** | **-0.3** |
| NWLT | | | | S | | **Sg** | **17 08 09.3** | **-1.7** |
| **NDS** | **Dongshan** baz=51 | **0.64** | **53** | ⇑*i*P | | **Pg** | **17 08 03.1** | **-0.4** |
| NDS | | | | S | | **Sb** | **17 08 12.6** | **-1.7** |
| **FUSB** | **Fushanzhiwuyua** baz=26 | **0.64** | **37** | ⇑*i*P | | **Pg** | **17 08 03.0** | **-0.6** |
| FUSB | | | | S | | **Sg** | **17 08 10.4** | **-1.5** |
| **TWE** | **Neicheng** baz=37 | **0.66** | **44** | ⇑*i*P | | **Pg** | **17 08 03.7** | **-0.2** |
| TWE | | | | S | | **Sb** | **17 08 14.4** | **-0.5** |
| **NCUH** | **Zhongli** baz=359 | **0.72** | **2** | P | | **Pn** | **17 08 06.5** | **-1.8** |
| NCUH | | | | S | | **Sb** | **17 08 16.7** | **+0.1** |
| **NCU** | **National Centr** baz=360 | **0.72** | **2** | ⇑*i*P | | **Pn** | **17 08 06.5** | **-1.8** |
| NCU | | | | S | | **Sn** | **17 08 17.4** | **-2.5** |
| **TWC** | **Suao** baz=59 | **0.72** | **60** | ⇑*i*P | | **Pg** | **17 08 04.6** | **-0.5** |
| TWC | | | | S | | **Sb** | **17 08 15.2** | **-1.6** |
| **ILA** | **Ilan** baz=44 | **0.74** | **46** | P | | **Pg** | **17 08 05.2** | **-0.3** |
| ILA | | | | S | | **Sn** | **17 08 18.3** | **-2.2** |
| **EHY** | **Hungye** baz=170 | **0.75** | **169** | ⇑*i*P | | **Pg** | **17 08 05.2** | **-0.5** |
| EHY | | | | S | | **Sg** | **17 08 15.0** | **-0.4** |
| **CHN5** | **Tsauling** baz=217 | **0.78** | **214** | ⇑*i*P | | **Pb** | **17 08 06.7** | **-0.9** |
| CHN5 | | | | S | | **Sb** | **17 08 18.8** | **+0.2** |
| **HGSD** | **Ruisui** baz=172 | **0.79** | **162** | P | | **Pb** | **17 08 06.5** | **-1.1** |
| HGSD | | | | S | | **Sg** | **17 08 16.1** | **-0.5** |
| **NHDH** | **Xindian Distri** baz=31 | **0.79** | **25** | P | | **Pb** | **17 08 06.4** | **-1.2** |
| NHDH | | | | S | | **Sb** | **17 08 17.5** | **-1.1** |
| **WRL** | **Guolierlin Hig** baz=244 | **0.79** | **245** | *e*P | | **Pb** | **17 08 07.0** | **-0.6** |
| **WDLH** | **Douliu** baz=229 | **0.79** | **226** | P | | **Pb** | **17 08 07.2** | **-0.5** |
| WDLH | | | | *e*S | | **Sb** | **17 08 18.8** | **0.0** |
| **ALS** | **Alishan** baz=198 | **0.80** | **204** | ⇑*i*P | | **Pg** | **17 08 06.0** | **-0.6** |
| ALS | | | | S | | **Sb** | **17 08 19.2** | **-0.1** |
| **TWA** | **Mucha** baz=34 | **0.83** | **28** | ⇑*i*P | | **Pb** | **17 08 07.3** | **-1.0** |
| TWA | | | | S | | **Sg** | **17 08 17.6** | **-0.3** |
| **YULB** | **Yu-li** baz=173 | **0.86** | **172** | ⇑*i*P | | **Pg** | **17 08 06.8** | **-0.9** |
| YULB | | | | S | | **Sg** | **17 08 18.0** | **-0.9** |
| **NTC** | **Toucheng** baz=30 | **0.86** | **45** | *e*P | | **Pg** | **17 08 06.9** | **-0.8** |
| NTC | | | | *e*S | | **Sb** | **17 08 20.6** | **-0.1** |
| **TWS1** | **Kuangyinshan** baz=25 | **0.88** | **15** | ⇑*i*P | | **Pn** | **17 08 09.8** | **-0.7** |
| TWS1 | | | | S | | **Sn** | **17 08 22.3** | **-1.5** |
| **WTCT** | **Ta-ch'eng** baz=247 | **0.89** | **245** | P | | **Pb** | **17 08 08.8** | **-0.5** |
| WTCT | | | | S | | **Sn** | **17 08 21.8** | **-2.2** |
| **WTK** | **Tuku** baz=235 | **0.90** | **232** | ⇓*i*P | | **Pn** | **17 08 09.1** | **-1.6** |
| WTK | | | | S | | **Sn** | **17 08 21.9** | **-2.3** |
| **EYUL** | **Yuli** baz=172 | **0.91** | **171** | P | | **Pg** | **17 08 08.0** | **-0.6** |
| EYUL | | | | S | | **Sg** | **17 08 19.6** | **-0.8** |
| **EGS** | baz=37 | **0.92** | **50** | *e*P | | **Pb** | **17 08 09.2** | **-0.6** |
| **TIPB** | **Shuangxi** baz=40 | **0.94** | **40** | P | | **Pg** | **17 08 08.7** | **-0.7** |
| **NTST** | **Danshui** baz=32 | **0.95** | **16** | P | | **Pn** | **17 08 10.8** | **-0.7** |
| **YM01** | **YM01** baz=35 | **0.97** | **23** | ⇑*i*P | | **Pn** | **17 08 10.5** | **-1.3** |
| YM01 | | | | S | | **Sn** | **17 08 24.3** | **-1.8** |
| **ANP** | **Anpu** baz=28 | **0.99** | **19** | ⇑*i*P | | **Pn** | **17 08 11.0** | **-1.1** |
| ANP | | | | S | | **Sn** | **17 08 25.4** | **-1.3** |
| **NWF** | **Wu-fen Shan** baz=47 | **1.00** | **34** | ⇑*i*P | | **Pb** | **17 08 10.2** | **-1.0** |
| **CHY** | **Chiayi** baz=225 | **1.00** | **222** | P | | **Pb** | **17 08 10.6** | **-0.7** |
| CHY | | | | S | | **Sn** | **17 08 25.2** | **-1.6** |
| **FULB** | **Fuli** baz=175 | **1.05** | **173** | P | | **Pb** | **17 08 11.2** | **-0.9** |
| FULB | | | | S | | **Sb** | **17 08 25.8** | **-0.4** |
| **WSF** | **Szhu** baz=237 | **1.05** | **235** | ⇑*i*P | | **Pn** | **17 08 11.4** | **-1.4** |
| WSF | | | | *i* S | | **Sn** | **17 08 26.2** | **-1.7** |
| **TPUB** | **Ta-pu** baz=211 | **1.06** | **207** | P | | **Pb** | **17 08 11.2** | **-1.0** |
| TPUB | | | | S | | **Sn** | **17 08 27.0** | **-1.2** |
| **TPUB** | **Ta-pu** | **1.06** | **207** | P | | **Pn** | **17 08 11.8** | **-1.2** |
| **ELDTW** | **Lidau** baz=182 | **1.06** | **187** | ⇑*i*P | | **Pg** | **17 08 09.5** | **-2.1** |
| ELDTW | | | | S | | **Sg** | **17 08 24.9** | **-0.5** |
| **SXI1** | **Grass Mountain** baz=38 | **1.07** | **37** | ⇑*i*P | | **Pb** | **17 08 11.3** | **-1.1** |
| **TWB1** | **Santiao Chiao** baz=34 | **1.07** | **45** | ⇑*i*P | | **Pg** | **17 08 10.9** | **-0.9** |
| TWB1 | | | | *e*S | | **Sb** | **17 08 26.3** | **-0.5** |
| **TWY** | **Chenhua** baz=37 | **1.10** | **21** | *e*P | | **Pn** | **17 08 12.9** | **-0.6** |
| **WTP** | **Ta-pu** baz=208 | **1.11** | **207** | ⇑*i*P | | **Pb** | **17 08 12.3** | **-0.9** |
| WTP | | | | S | | **Sn** | **17 08 29.4** | **-0.2** |
| **WSL** | **Shuilin Townsh** baz=233 | **1.12** | **230** | P | | **Pb** | **17 08 12.4** | **-0.7** |
| WSL | | | | *e*S | | **Sn** | **17 08 28.6** | **-1.0** |
| **STYH** | **Taoyuan** baz=198 | **1.13** | **198** | P | | **Pg** | **17 08 11.3** | **-1.6** |
| **TWK** | **Hsinying** baz=215 | **1.15** | **212** | ⇑*i*P | | **Pn** | **17 08 13.1** | **-1.2** |
| TWK | | | | S | | **Sn** | **17 08 30.1** | **-0.5** |
| **CHKT** | **Chengkung** baz=153 | **1.16** | **171** | *e*P | | **Pb** | **17 08 12.7** | **-1.1** |
| CHKT | | | | *e*S | | **Sn** | **17 08 29.2** | **-1.4** |
| **SNST** | **Tainan City** baz=210 | **1.19** | **211** | *e*P | | **Pn** | **17 08 13.8** | **-0.9** |
| **ICHU** | **Yijhu** baz=226 | **1.20** | **223** | P | | **Pn** | **17 08 13.9** | **-0.9** |
| ICHU | | | | S | | **Sn** | **17 08 32.1** | **+0.6** |
| **CHN1** | **Nanshi** baz=212 | **1.20** | **209** | ⇑*i*P | | **Pb** | **17 08 13.8** | **-0.9** |
| CHN1 | | | | S | | **Sn** | **17 08 31.7** | **-0.1** |
| **CHN8** | **Yiju** baz=228 | **1.25** | **224** | ⇑*i*P | | **Pn** | **17 08 14.7** | **-0.8** |
| CHN8 | | | | *i* S | | **Sn** | **17 08 34.3** | **+1.4** |
| **EDH** | **Donghe** baz=176 | **1.27** | **174** | *e*P | | **Pg** | **17 08 15.2** | **-0.5** |
| EDH | | | | *e*S | | **Sn** | **17 08 32.3** | **-1.2** |
| **SGST** | **Jiashian** baz=220 | **1.27** | **205** | P | | **Pn** | **17 08 14.3** | **-1.6** |
| SGST | | | | S | | **Sn** | **17 08 32.9** | **-0.6** |
| **LONT** | **Longtian** baz=184 | **1.33** | **181** | *e*P | | **Pn** | **17 08 15.4** | **-1.3** |
| LONT | | | | *e*S | | **Sn** | **17 08 34.2** | **-0.7** |
| **SSHA** | **Shanhua** baz=220 | **1.36** | **216** | *e*P | | **Pg** | **17 08 17.1** | **-0.3** |
| SSHA | | | | *e*S | | **Sn** | **17 08 37.7** | **+2.1** |
| **CHN3** | **Shinhua** baz=231 | **1.37** | **212** | *e*P | | **Pg** | **17 08 17.8** | **+0.2** |
| CHN3 | | | | *e*S | | **Sn** | **17 08 38.8** | **+2.9** |
| **SCLT** | **Jiali** baz=223 | **1.39** | **220** | P | | **Pg** | **17 08 17.1** | **-0.7** |
| SCLT | | | | S | | **Sn** | **17 08 37.9** | **+1.7** |
| **TWG** | **Pinlang** baz=186 | **1.42** | **183** | ⇑*i*P | | **Pn** | **17 08 17.0** | **-0.9** |
| TWG | | | | *e*S | | **Sg** | **17 08 37.3** | **+0.4** |
| **TWGBT** | **Beinan** baz=186 | **1.42** | **183** | P | | **Pn** | **17 08 16.7** | **-1.3** |
| TWGBT | | | | *e*S | | **Sg** | **17 08 37.9** | **+0.8** |
| **SHHT** | **Tainan City** baz=230 | **1.43** | **212** | P | | **Pg** | **17 08 18.9** | **+0.3** |
| SHHT | | | | *e*S | | **Sg** | **17 08 39.8** | **+2.6** |
| **TAI1** | **Yung-k'ang** baz=219 | **1.47** | **216** | *e*P | | **Pg** | **17 08 19.0** | **-0.5** |
| TAI1 | | | | *e*S | | **Sg** | **17 08 40.9** | **+2.2** |
| **TTN** | **Taitung** baz=167 | **1.48** | **180** | *e*P | | **Pg** | **17 08 20.4** | **+0.7** |
| **TWM1** | **Shoushan** baz=203 | **1.57** | **206** | ⇑*i*P | | **Pg** | **17 08 21.0** | **-0.3** |
| **SSD** | **Sandimen** baz=203 | **1.57** | **198** | ⇑P | | **Pb** | **17 08 20.1** | **-0.8** |
| SSD | | | | *e*S | | **Sg** | **17 08 42.5** | **+0.8** |
| **LDUT** | **Ludao** baz=172 | **1.59** | **170** | *e*P | | **Pn** | **17 08 19.1** | **-1.2** |
| **TSMG** | **Majia** baz=201 | **1.60** | **197** | *e*P | | **Pb** | **17 08 20.7** | **-0.8** |
| TSMG | | | | *e*S | | **Sg** | **17 08 43.0** | **+0.2** |
| **PCYT** | **Pengchaiyu** baz=31 | **1.61** | **31** | *e*P | | **Pn** | **17 08 19.9** | **-0.6** |
| **PNG** | **Penghu** baz=248 | **1.62** | **246** | P | | **Pb** | **17 08 20.4** | **-1.3** |
| PNG | | | | S | | **Sb** | **17 08 41.7** | **-0.8** |
| **PHUB** | **P'eng-hu** baz=247 | **1.63** | **244** | *e*P | | **Pn** | **17 08 19.3** | **-1.4** |
| PHUB | | | | *e*S | | **Sb** | **17 08 42.2** | **-0.6** |
| **SGLT** | **Jiouru** baz=207 | **1.63** | **202** | *e*P | | **Pg** | **17 08 21.8** | **-0.8** |
| SGLT | | | | *e*S | | **Sg** | **17 08 47.5** | **+3.8** |
| **JYNG** | **Yonagunijimaku** | **1.64** | **82** | P | | **Pb** | **17 08 21.3** | **-0.8** |
| JYNG | | | | S | | **Sb** | **17 08 42.4** | **-0.8** |
| **ECL** | **Taimali** baz=173 | **1.65** | **187** | *e*P | | **Pb** | **17 08 21.1** | **-1.2** |
| ECL | | | | *e*S | | **Sg** | **17 08 43.1** | **-1.3** |
| **SNJT** | **Kaohsiung City** baz=205 | **1.67** | **207** | *e*P | | **Pg** | **17 08 22.4** | **-0.9** |
| **WDGT** | **Dungji** baz=249 | **1.69** | **235** | ⇑*i*P | | **Pb** | **17 08 21.4** | **-1.5** |
| WDGT | | | | *i* S | | **Sb** | **17 08 43.9** | **-0.7** |
| **MASBT** | **Mashibuluo** baz=202 | **1.70** | **197** | P | | **Pb** | **17 08 22.1** | **-1.0** |
| MASBT | | | | *e*S | | **Sg** | **17 08 44.4** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **1.70** | **82** | P | | **Pb** | **17 08 22.0** | **-1.2** |
| YOJ | | | | S | | **Sb** | **17 08 44.2** | **-0.7** |
| **YOJ** | **Yonaguni jima** baz=80 | **1.70** | **82** | *e*P | | **Pb** | **17 08 22.3** | **-0.8** |
| YOJ | | | | *e*S | | **Sb** | **17 08 44.1** | **-0.9** |
| **YOJ** | **Yonaguni jima** | **1.70** | **82** | P | | **Pb** | **17 08 22.6** | **-0.6** |
| **SSPT** | **Xinbi** baz=194 | **1.84** | **197** | *e*P | | **Pb** | **17 08 24.6** | **-0.8** |
| **EAST** | **Anshuo** baz=180 | **1.88** | **189** | *e*P | | **Pb** | **17 08 25.1** | **-1.1** |
| **VCHM** | **Qimei** baz=242 | **1.89** | **237** | *e*P | | **Pn** | **17 08 23.2** | **-1.2** |
| VCHM | | | | *e*S | | **Sb** | **17 08 49.2** | **-1.2** |
| **TAW** | **Tawu** baz=179 | **1.90** | **187** | *e*P | | **Pb** | **17 08 25.8** | **-0.7** |
| **TAWH** | **Dawu Township** baz=207 | **1.91** | **188** | P | | **Pb** | **17 08 25.8** | **-1.0** |
| TAWH | | | | *e*S | | **Sg** | **17 08 51.9** | **-0.9** |
| **SCZT** | **Fangliau** baz=217 | **1.93** | **195** | P | | **Pb** | **17 08 25.2** | **-1.9** |
| SCZT | | | | *e*S | | **Sg** | **17 08 51.4** | **-1.9** |
| **PTMZ** | **Houxiangcun** baz=293 | **2.02** | **293** | *e*P | | **Pn** | **17 08 24.2** | **-1.9** |
| **WLCH** | **Liuqiu** baz=197 | **2.02** | **201** | *e*P | | **Pb** | **17 08 26.9** | **-1.6** |
| **SLIU** | **Shizi** baz=213 | **2.05** | **189** | P | | **Pb** | **17 08 27.6** | **-1.5** |
| SLIU | | | | *e*S | | **Sg** | **17 08 55.3** | **-1.8** |
| **MATB** | **Ma-tsu** baz=329 | **2.19** | **330** | *e*P | | **Pn** | **17 08 27.1** | **-1.5** |
| **HEN** | **Hengchun** baz=187 | **2.26** | **190** | *e*P | | **Pg** | **17 08 32.9** | **-1.7** |
| **LYUB** | **Lan-yu** baz=175 | **2.27** | **170** | *e*P | | **Pn** | **17 08 28.0** | **-1.5** |
| **IRIF** | **Iriomote-Funau** | **2.35** | **87** | P | | **Pn** | **17 08 30.6** | **-0.1** |
| IRIF | | | | S | | **Sn** | **17 08 59.2** | **-0.8** |
| **TSEB** | **Hengchuen, Pin** baz=179 | **2.35** | **186** | *e*P | | **Pg** | **17 08 35.5** | **-0.8** |
| **HATJ** | **Hateruma jima** | **2.42** | **94** | P | | **Pn** | **17 08 32.0** | **+0.3** |
| HATJ | | | | *e*S | | **Sn** | **17 09 02.5** | **+0.6** |
| **QZH** | **Quanzhou** | **2.44** | **287** | Pn | | **Pn** | **17 08 30.0** | **-1.9** |
| QZH | | | | Sn | | **Sn** | **17 08 59.1** | **-3.1** |
| QZH | comp=N,240nm,0.5s | | | smax | smax | | | |
| QZH | comp=E,160nm,0.5s | | | smax | smax | | | |
| **KNM** | **Kinmen** baz=273 | **2.49** | **274** | *e*P | | **Pb** | **17 08 35.3** | **-1.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JKRS | Kuro-shima | 2.60 | 90 | P | Pn | 17 08 34.8 | +0.6 |
| JKRS | | | | eS | Sn | 17 09 07.3 | +1.1 |
| LYJJ | Jianjiangzhen | 2.62 | 331 | eP | Pn | 17 08 32.8 | -1.6 |
| | baz=331 | | | | | | |
| MHZQ | Yeshan | 2.67 | 314 | eP | Pn | 17 08 36.0 | +0.8 |
| | baz=313 | | | | | | |
| JIJ | Ishigaki jima | 2.72 | 87 | P | Pn | 17 08 35.5 | -0.4 |
| JIJ | | | | S | Sn | 17 09 08.6 | -0.7 |
| XPSS | Dashiqiu | 2.81 | 342 | eP | Pn | 17 08 35.2 | -1.9 |
| | baz=342 | | | | | | |
| JISG | Ishigakijimahi | 2.89 | 83 | P | Pn | 17 08 38.2 | 0.0 |
| JISG | | | | eS | Sn | 17 09 14.2 | +0.8 |
| AXDP | Jialang | 2.98 | 283 | eP | Pn | 17 08 37.9 | -1.4 |
| | baz=282 | | | | | | |
| ZPLA | Ao Xicun | 3.13 | 265 | eP | Pn | 17 08 41.1 | -0.4 |
| | baz=264 | | | | | | |
| JTJ | Tarama | 3.25 | 82 | eS | Sn | 17 09 23.1 | +0.8 |
| XAN | Xi'an | 14.46 | 315 | P | P | 17 11 27.3 | +3.4 |
| SONM | Songino Array | 26.30 | 337 | P | P | 17 13 29.9 | +1.8 |
| | comp=E,0.3nm,0.8s,baz=145,slow=9.5,SNR=4.8 | | | | | | |
| MKAR | Makanchi Array | 38.28 | 316 | P | P | 17 15 14.1 | +1.3 |
| | comp=E,0.3nm,0.7s,baz=107,slow=9.8,SNR=4.2 | | | | | | |
| ZALV | Zalesovo Beam | 40.18 | 327 | P | P | 17 15 30.8 | +2.3 |
| | comp=E,0.9nm,0.8s,baz=116,slow=9.8,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 45.76 | 163 | P | P | 17 16 12.8 | -1.3 |
| | comp=E,0.3nm,0.7s,baz=345,slow=8.7,SNR=2.0 | | | | | | |
| ASAR | Alice Springs | 49.21 | 165 | P | P | 17 16 42.4 | +1.4 |
| | comp=E,0.3nm,0.8s,baz=338,slow=6.9,SNR=4.5 | | | | | | |

*NOU **13** 17:09:30.3, 17°.95S×177°.95W, h604km, mb4.4/37, Fiji Islands Region*

*NEIC **13** 17:09:32.7±2.1, 18°.0S±0°.1×178°.5W±0°.1, h602km±7km, mb4.5/93, Error ellipse: s-maj=17.1km s-min=13.8km az=139.0*

*IDC **13** 17:09:35.4±1.0, 17°.96S×178°.62W, h627km±9km, mb3.7/13, mb1 3.8/15, mb1mx3.6/49, mbtmp4.6/15, Error ellipse: s-maj=18.7km s-min=12.1km az=143.0*

**ISC 13 17:09:32.9±0.7, 18°.02S±0°.08×178°.42W±0°.07, h610km±7km, n162, σ1°35/168, mb4.5/59, 4C-4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TAVE | Taveuni | 1.92 | 312 | P | P | 17 10 43.8 | -4.1 |
| MSVF | Nonsavu | 3.37 | 274 | P | P | 17 10 56.5 | +1.3 |
| | 15nm,0.3s,baz=149,slow=4.3,SNR=90 | | | | | | |
| MSVF | | | | S | S | 17 12 05.9 | +3.8 |
| | baz=54,slow=9.7,SNR=5.6 | | | | | | |
| MSVF | Nonsavu | 3.37 | 274 | P | P | 17 10 54.9 | -0.2 |
| MSVF | Nonsavu | 3.37 | 274 | P | P | 17 10 56.7 | +1.5 |
| AFI | Afiamalu | 7.58 | 58 | P | P | 17 11 27.8 | -1.0 |
| | 2.2nm,0.3s,baz=54,slow=23,SNR=5.3 | | | | | | |
| AFI | Afiamalu | 7.58 | 58 | P | P | 17 11 27.3 | -1.6 |
| NIUE | Niue | 8.13 | 99 | P | P | 17 11 33.1 | -0.7 |
| LIFNC | LIFOU | 13.80 | 256 | P | P | 17 12 28.2 | -1.4 |
| LIFNC | LIFOU | 13.80 | 256 | P | P | 17 12 28.5 | -1.2 |
| SANVU | Saraoutou | 14.01 | 278 | P | P | 17 12 30.6 | -1.0 |
| SANVU | Saraoutou | 14.01 | 278 | P | P | 17 12 32.5 | +0.8 |
| PINNC | Pines Island, | 14.02 | 249 | P | P | 17 12 30.7 | -1.0 |
| OUENC | Ouen Island, N | 14.51 | 250 | P | P | 17 12 35.4 | -0.9 |
| DZM | Mont Dzumac | 14.78 | 252 | P | P | 17 12 39.6 | +0.7 |
| | 0.6nm,0.3s,baz=97,slow=21,SNR=7.9 | | | | | | |
| DZM | Mont Dzumac | 14.78 | 252 | P | P | 17 12 40.5 | +1.6 |
| ONTNC | Ouen Toro | 14.83 | 251 | P | P | 17 12 39.4 | +0.2 |
| NOUC | Port Laguerre | 14.91 | 252 | P | P | 17 12 42.3 | +2.3 |
| KOUNC | Koumac, New Ca | 16.52 | 258 | P | P | 17 12 57.2 | +2.5 |
| URZ | Urewera | 20.54 | 190 | P | P | 17 13 27.8 | -3.2 |
| URZ | | | | IAmb | IAmb | 17 13 42.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| BKZ | Black Stump Fm | 21.53 | 191 | P | P | 17 13 36.7 | -3.1 |
| BKZ | | | | IAmb | IAmb | 17 13 55.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| QRZ | Quartz Range | 24.03 | 197 | P | P | 17 14 02.6 | +0.7 |
| THZ | Tophouse | 24.80 | 196 | P | P | 17 14 07.9 | -0.9 |
| THZ | | | | IAmb | IAmb | 17 14 19.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| KHZ | Kahutara | 25.27 | 194 | P | P | 17 14 12.4 | -0.3 |
| KHZ | | | | IAmb | IAmb | 17 14 30.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| LTZ | Lake Taylor | 25.92 | 196 | P | P | 17 14 16.4 | -2.2 |
| LTZ | | | | IAmb | IAmb | 17 14 20.4 | |
| | comp=Z,20nm,1.7s | | | | | | |
| OXZ | Oxford | 26.49 | 196 | P | P | 17 14 22.6 | -1.0 |
| OXZ | | | | IAmb | IAmb | 17 14 38.6 | |
| | comp=Z,12nm,1.5s | | | | | | |
| MQZ | McQueen's Vall | 26.70 | 195 | P | P | 17 14 22.6 | -2.7 |
| MQZ | | | | IAmb | IAmb | 17 14 38.7 | |
| | comp=Z,27nm,1.5s | | | | | | |
| FOZ | Fox Glacier | 27.31 | 199 | P | P | 17 14 28.4 | -2.3 |
| FOZ | | | | IAmb | IAmb | 17 14 49.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| EIDS | Eidsvold | 29.22 | 250 | P | P | 17 14 47.2 | -0.4 |
| EIDS | | | | IAmb | IAmb | 17 15 01.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| MLZ | Mavora Lakes | 29.49 | 199 | P | P | 17 14 48.8 | -0.8 |
| MLZ | | | | IAmb | IAmb | 17 14 50.3 | |
| | comp=Z,19nm,1.3s | | | | | | |
| ARMA | Armidale | 29.88 | 240 | P | P | 17 14 53.2 | 0.0 |
| ARMA | | | | IAmb | IAmb | 17 15 10.9 | |
| | comp=Z,24nm,1.6s | | | | | | |
| WHZ | Wether Hill Ro | 30.02 | 199 | P | P | 17 14 55.1 | +1.0 |
| RMQ | Roma | 31.45 | 249 | P | P | 17 15 08.4 | +1.8 |
| RABL | Rabaul | 31.89 | 292 | P | P | 17 15 08.9 | -1.6 |
| CTA | Charters Tower | 33.42 | 261 | P | P | 17 15 24.1 | +0.8 |
| CTAO | Charters Tower | 33.42 | 261 | P | P | 17 15 22.1 | -1.2 |
| CTAO | | | | IAmb | IAmb | 17 15 24.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| CTAO | Charters Tower | 33.42 | 261 | P | P | 17 15 24.2 | +0.9 |
| CAN | Canberra | 33.63 | 233 | P | P | 17 15 23.2 | -1.7 |
| PMG | Port Moresby | 34.47 | 280 | P | P | 17 15 31.1 | -0.9 |
| PMG | Port Moresby | 34.47 | 280 | P | P | 17 15 34.1 | +2.0 |
| CMSA | Cobar Meteorol | 35.09 | 241 | P | P | 17 15 38.6 | +1.6 |
| MTSU | Mount Surprise | 35.38 | 264 | P | P | 17 15 40.8 | +1.1 |
| JOHN | Johnston Islan | 35.62 | 15 | P | P | 17 15 41.6 | +0.1 |
| TOO | Toolangi | 37.09 | 231 | P | P | 17 15 53.6 | +0.2 |
| TOO | | | | IAmb | IAmb | 17 15 55.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| COEN | Coen | 37.09 | 271 | P | P | 17 15 53.2 | -0.5 |
| STKA | Stephens Creek | 38.57 | 241 | P | P | 17 16 07.1 | +1.7 |
| | comp=Z,11nm,0.9s,baz=60,slow=5.4,SNR=14 | | | | | | |
| STKA | Stephens Creek | 38.57 | 241 | P | P | 17 16 06.7 | +1.3 |
| STKA | Stephens Creek | 38.57 | 241 | P | P | 17 16 07.3 | +1.9 |
| QIS | Mount Isa | 39.62 | 259 | P | P | 17 16 15.1 | +1.1 |
| | comp=Z,6.4nm,1.6s | | | | | | |
| HTT | Hallett | 41.08 | 240 | P | P | 17 16 27.1 | +1.7 |
| TWOA | Tennyson Woods | 41.69 | 237 | P | P | 17 16 31.6 | +1.5 |
| BBOO | Buckleboo | 43.34 | 241 | P | P | 17 16 44.0 | +0.9 |
| BBOO | | | | IAmb | IAmb | 17 16 44.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| BBOO | Buckleboo | 43.34 | 241 | P | P | 17 16 43.9 | +0.9 |
| HMH | Humu'ula Sheep | 43.64 | 32 | P | P | 17 16 46.5 | +0.7 |
| KEKH | Kekaha | 43.77 | 25 | P | P | 17 16 46.7 | +0.4 |
| WR0 | Warramunga Arr | 44.41 | 260 | P | P | 17 16 50.2 | -1.3 |
| WR0 | | | | IAmb | IAmb | 17 17 01.1 | |
| | comp=Z,13nm,1.3s | | | | | | |
| WB0 | Warramunga Arr | 44.57 | 260 | P | P | 17 16 51.1 | -1.6 |
| WB0 | | | | IAmb | IAmb | 17 16 53.5 | |
| | comp=Z,12nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 44.59 | 260 | P | P | 17 16 50.7 | -2.2 |
| WB2 | | | | IAmb | IAmb | 17 16 53.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 44.59 | 260 | P | P | 17 16 51.0 | -1.8 |
| WRAB | | | | IAmb | IAmb | 17 16 53.6 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 44.59 | 260 | P | P | 17 16 51.9 | -0.9 |
| WRA | Warramunga Arr | 44.60 | 260 | P | P | 17 16 51.5 | -1.4 |
| | comp=Z,5.2nm,0.3s,baz=96,slow=7.4,SNR=118 | | | | | | |
| WRA | Warramunga Arr | 44.60 | 260 | P | P | 17 16 51.0 | -1.9 |
| WRA | | | | PcP | PcP | 17 18 23.0 | +0.7 |
| AS31 | Alice Springs | 44.75 | 254 | P | P | 17 16 53.1 | -1.0 |
| AS31 | | | | IAmb | IAmb | 17 16 55.7 | |
| | comp=Z,12nm,0.6s | | | | | | |
| AS31 | | | | PcP | PcP | 17 18 23.8 | +1.1 |
| ASAR | Alice Springs | 44.75 | 254 | P | P | 17 16 53.0 | -1.0 |
| | comp=Z,37nm,0.6s,baz=87,slow=8.6,SNR=412 | | | | | | |
| ASAR | | | | PcP | PcP | 17 18 23.7 | +0.9 |
| | comp=Z,1.6nm,0.4s,baz=104,slow=3.9,SNR=5.8 | | | | | | |
| ASAR | | | | S | S | 17 22 46.2 | -1.9 |
| | comp=Z,1.5nm,0.9s,baz=90,slow=16,SNR=8.4 | | | | | | |
| ASAR | Alice Springs | 44.75 | 254 | P | P | 17 16 52.9 | -1.2 |
| ASAR | | | | PcP | PcP | 17 18 23.5 | +0.8 |
| KDU | Kakadu | 47.54 | 269 | P | P | 17 17 15.9 | +0.8 |
| MTN | Manton Dam | 48.78 | 269 | P | P | 17 17 22.6 | -1.7 |
| MTN | | | | IAmb | IAmb | 17 17 25.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| MTN | Manton Dam | 48.78 | 269 | P | P | 17 17 24.6 | +0.3 |
| DRS | Darwin Rock St | 49.10 | 269 | P | P | 17 17 27.2 | +0.6 |
| WRKA | Warakurna | 49.80 | 252 | P | P | 17 17 32.8 | +1.1 |
| FORT | Forrest | 49.95 | 245 | P | P | 17 17 32.5 | -0.1 |
| FORT | | | | PcP | PcP | 17 18 41.2 | -0.3 |
| FORT | Forrest | 49.95 | 245 | P | P | 17 17 32.9 | +0.2 |
| KNRA | Kununurra | 50.47 | 264 | P | P | 17 17 35.7 | -0.9 |
| KNRA | | | | IAmb | IAmb | 17 17 37.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| KNRA | Kununurra | 50.47 | 264 | P | P | 17 17 37.2 | +0.6 |
| FAKI | Fak Fak | 50.59 | 281 | P | P | 17 17 33.8 | -3.8 |
| FAKI | | | | IAmb | IAmb | 17 18 01.8 | |
| | comp=Z,12nm,0.9s | | | | | | |
| FAKI | Fak Fak | 50.59 | 281 | P | P | 17 17 38.5 | +1.0 |
| SIJI | Sorong | 52.25 | 283 | P | P | 17 17 50.3 | +0.8 |
| | comp=Z,54nm,1.0s,baz=122,slow=5.5,SNR=23 | | | | | | |
| SOEI | Soe | 56.06 | 270 | P | P | 17 18 14.8 | -1.5 |
| SOEI | | | | IAmb | IAmb | 17 18 19.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| SOEI | Soe | 56.06 | 270 | P | P | 17 18 18.5 | +2.2 |
| TNTI | Ternate | 56.47 | 283 | P | P | 17 18 18.4 | -0.6 |
| PSA00 | Pilbara Seismi | 57.87 | 255 | P | P | 17 18 27.8 | -0.6 |
| PSA00 | Pilbara Seismi | 57.87 | 255 | P | P | 17 18 27.9 | -0.5 |
| PSA00 | | | | IAmb | IAmb | 17 18 28.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| PSA00 | Pilbara Seismi | 57.87 | 255 | P | P | 17 18 28.8 | +0.4 |
| MBWA | Marble Bar | 58.04 | 256 | P | P | 17 18 29.1 | -0.4 |
| MBWA | | | | IAmb | IAmb | 17 18 46.3 | |
| | comp=Z,19nm,1.2s | | | | | | |
| MBWA | Marble Bar | 58.04 | 256 | P | P | 17 18 29.9 | +0.4 |
| MEEK | Meekatharra | 58.38 | 249 | P | P | 17 18 31.9 | +0.1 |
| PLAI | Plampang | 62.48 | 269 | P | P | 17 18 59.5 | +0.7 |
| TOLI2 | Tolitoli | 62.72 | 281 | P | P | 17 19 00.1 | -0.3 |
| TOLI2 | Tolitoli | 62.72 | 281 | P | P | 17 19 03.0 | +2.6 |
| GIRL | Girilia | 62.85 | 253 | P | P | 17 19 02.3 | +1.3 |
| JAGI | Jajag, Banyuwa | 66.03 | 269 | P | P | 17 19 20.1 | -1.1 |
| JAGI | | | | IAmb | IAmb | 17 19 22.1 | |
| | comp=Z,22nm,0.9s | | | | | | |
| JAGI | Jajag, Banyuwa | 66.03 | 269 | P | P | 17 19 20.8 | -0.4 |
| MJAR | Matsushiro Arr | 67.99 | 323 | P | P | 17 19 32.4 | -0.3 |
| | comp=Z,3.3nm,0.6s,baz=160,slow=5.5,SNR=8.9 | | | | | | |
| MJAR | Matsushiro Arr | 67.99 | 323 | P | P | 17 19 30.9 | -1.8 |
| MAJO | Matsushiro | 67.99 | 323 | P | P | 17 19 31.1 | -1.7 |
| MAJO | | | | IAmb | IAmb | 17 19 37.9 | |
| | comp=Z,28nm,1.5s | | | | | | |
| MJB9 | Matsu-Tunnel | 67.99 | 323 | P | P | 17 19 31.1 | -1.6 |
| MJB9 | | | | IAmb | IAmb | 17 19 37.9 | |
| | comp=Z,28nm,1.5s | | | | | | |
| KKM | Kota Kinabalu | 68.76 | 284 | P | P | 17 19 38.1 | +0.2 |
| JSD | Sado | 69.02 | 325 | P | P | 17 19 38.6 | -0.3 |
| UGM | Wanagama | 69.63 | 268 | P | P | 17 19 41.8 | -1.3 |
| UGM | Wanagama | 69.63 | 268 | P | P | 17 19 43.9 | +0.8 |
| JHS | Saijyo | 69.97 | 319 | P | P | 17 19 44.4 | -0.3 |
| JHS | | | | IAmb | IAmb | 17 19 54.6 | |
| | comp=Z,30nm,1.2s | | | | | | |
| SBUM | Sibu | 71.21 | 279 | P | P | 17 19 52.0 | -0.4 |
| ASAJ | Asahikawa | 71.37 | 331 | P | P | 17 19 54.2 | +1.6 |
| | comp=Z,5.2nm,0.9s,baz=116,slow=5.4,SNR=4.6 | | | | | | |
| TWG | Pinlang | 71.72 | 302 | P | P | 17 19 54.1 | -1.0 |
| YULB | Yu-li | 71.82 | 303 | P | P | 17 19 54.8 | -0.9 |
| QSPA | South Pole Qui | 72.04 | 180 | P | P | 17 19 57.7 | +1.4 |
| | comp=Z,4.7nm,1.0s,baz=31,slow=1.0,SNR=19 | | | | | | |
| QSPA | South Pole Qui | 72.04 | 180 | P | P | 17 19 57.2 | +0.9 |
| SSLB | Suanglung | 72.28 | 303 | P | P | 17 19 57.8 | -0.5 |
| SSLB | | | | IAmb | IAmb | 17 19 58.7 | |
| | comp=Z,9.9nm,0.4s | | | | | | |
| UNV | Unalaska Valle | 72.30 | 7 | P | P | 17 19 57.2 | -0.5 |
| TPUB | Ta-pu | 72.31 | 302 | P | P | 17 19 57.9 | -0.6 |
| TPUB | | | | IAmb | IAmb | 17 19 59.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| KSM | Kuching | 72.69 | 277 | P | P | 17 20 00.8 | 0.0 |
| KSM | | | | IAmb | IAmb | 17 20 03.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| PETK | Petropavlovsk- | 73.78 | 345 | P | P | 17 20 06.0 | -0.1 |
| | comp=Z,5.0nm,0.9s,baz=102,slow=14,SNR=3.6 | | | | | | |
| CMB | Columbia Colle | 77.93 | 43 | P | P | 17 20 29.7 | +0.3 |
| YBH | Yreka Blue Hor | 78.61 | 39 | P | P | 17 20 34.9 | +1.8 |
| | comp=Z,5.0nm,0.9s,baz=217,slow=10,SNR=7.5 | | | | | | |
| YBH | Yreka Blue Hor | 78.61 | 39 | IAmb | IAmb | 17 20 35.5 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| MPK | Martis Peak | 78.87 | 42 | P | P | 17 20 36.3 | +1.6 |
| BEKR | Beckworth | 78.98 | 42 | P | P | 17 20 36.4 | +1.3 |
| HUMO | Hull Mountain | 78.99 | 38 | P | P | 17 20 37.2 | +2.3 |
| L04D | Klamath Falls | 79.15 | 39 | P | P | 17 20 37.7 | +1.7 |
| L04D | | | | IAmb | IAmb | 17 20 38.2 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| YERR | Yerington | 79.20 | 43 | P | P | 17 20 37.4 | +1.0 |
| LHV | Little Huntoon | 79.28 | 44 | P | P | 17 20 38.1 | +1.6 |
| LHV | | | | IAmb | IAmb | 17 20 44.0 | |
| | comp=Z,46nm,1.7s | | | | | | |
| LCH | Last Change Ra | 79.31 | 45 | P | P | 17 20 37.9 | +1.0 |
| NVAR | Mina Array Bea | 79.51 | 44 | P | P | 17 20 39.7 | +1.7 |
| | comp=Z,3.0nm,0.8s,baz=223,slow=8.9,SNR=7.6 | | | | | | |
| O18K | Koktuh Hills | 79.86 | 12 | P | P | 17 20 39.4 | +0.3 |
| O18K | | | | IAmb | IAmb | 17 20 40.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| J04D | Umpqua Nationa | 79.87 | 38 | P | P | 17 20 41.8 | +2.0 |
| J04D | | | | IAmb | IAmb | 17 20 42.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| KVN | Kaiserville | 79.98 | 43 | P | P | 17 20 41.6 | +1.2 |
| TPNV | Topopah Spring | 80.10 | 46 | P | P | 17 20 41.8 | +0.7 |
| K05A | Summer Lake | 80.29 | 39 | P | P | 17 20 43.6 | +1.7 |
| K05A | | | | IAmb | IAmb | 17 21 07.1 | |
| | comp=Z,27nm,1.5s | | | | | | |
| BRLK | Bradley Lake | 80.68 | 14 | P | P | 17 20 44.2 | +0.9 |
| H04A | Detroit Lake | 80.69 | 37 | P | P | 17 20 44.8 | +1.1 |
| PINE | Pine Mountain | 80.88 | 38 | P | P | 17 20 46.4 | +1.4 |
| E03A | Lebam | 81.05 | 35 | P | P | 17 20 47.3 | +1.8 |
| I07A | Izee | 81.90 | 39 | P | P | 17 20 50.9 | +0.9 |
| I07A | | | | IAmb | IAmb | 17 21 08.0 | |
| | comp=Z,38nm,1.5s | | | | | | |
| UBPT | Khong Chiam | 81.95 | 289 | P | P | 17 20 51.9 | +1.2 |
| BELA | Belgrano 2 | 82.06 | 173 | P | P | 17 20 51.2 | +1.0 |
| IPM | Ipoh | 82.42 | 277 | P | P | 17 20 53.6 | +0.4 |
| IPM | | | | IAmb | IAmb | 17 21 18.5 | |
| | comp=Z,12nm,1.2s | | | | | | |
| TTA | Tatalina | 82.58 | 10 | P | P | 17 20 53.5 | +0.5 |
| G08A | Pilot Rock | 82.90 | 38 | P | P | 17 20 56.7 | +1.6 |
| G08A | | | | IAmb | IAmb | 17 21 22.1 | |
| | comp=Z,22nm,1.3s | | | | | | |
| GHO | Glory Hole Cre | 82.92 | 14 | P | P | 17 20 55.0 | +0.3 |
| GHO | | | | IAmb | IAmb | 17 21 18.8 | |
| | comp=Z,43nm,1.7s | | | | | | |
| CUT | Chulitna | 83.19 | 13 | P | P | 17 20 55.9 | 0.0 |
| BMRM | Bremner River | 83.26 | 16 | P | P | 17 20 56.9 | +0.5 |
| BMRM | | | | IAmb | IAmb | 17 21 06.2 | |
| | comp=Z,31nm,1.3s | | | | | | |
| K20K | Telida | 83.31 | 11 | P | P | 17 20 56.9 | +0.4 |
| SCM | Sheep Creek Mo | 83.33 | 14 | P | P | 17 20 57.1 | +0.4 |
| SCM | | | | IAmb | IAmb | 17 21 00.5 | |
| | comp=Z,33nm,1.5s | | | | | | |
| MTPU | Mount Pierson | 83.45 | 47 | P | P | 17 20 57.7 | -0.6 |
| CAST | Castle Rocks | 83.74 | 12 | P | P | 17 20 57.1 | -1.5 |
| VRDI | Verde Repeater | 83.79 | 16 | P | P | 17 20 58.5 | -0.6 |
| VRDI | | | | IAmb | IAmb | 17 21 13.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| N25K | Chitina, Valde | 83.81 | 16 | P | P | 17 20 59.3 | +0.2 |
| N25K | | | | IAmb | IAmb | 17 20 59.8 | |
| | comp=Z,24nm,1.5s | | | | | | |
| GLB | Gilahina Butte | 83.87 | 16 | P | P | 17 20 59.7 | +0.3 |
| GLB | | | | IAmb | IAmb | 17 21 08.2 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| PSI | Prapat | 83.88 | 275 | P | P | 17 21 00.0 | -0.6 |
| | comp=Z,3.3nm,0.5s,baz=162,slow=8.1,SNR=5.1 | | | | | | |
| GSI | Gunungsitoli | 84.70 | 273 | P | P | 17 21 05.6 | +1.1 |
| GSI | | | | IAmb | IAmb | 17 21 06.8 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| ILAR | Eielson Array | 85.99 | 13 | P | P | 17 21 09.1 | -0.4 |
| | comp=Z,0.6nm,0.4s,baz=221,slow=4.7,SNR=10 | | | | | | |
| CMAR | Chiang Mai Arr | 88.91 | 290 | P | P | 17 21 25.1 | +1.0 |
| | comp=Z,1.1nm,0.8s,baz=99,slow=2.9,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 109.20 | 314 | PKiKP | PKiKP | 17 26 52.4 | -2.3 |
| | comp=Z,0.8nm,1.1s,baz=90,slow=1.6,SNR=5.5 | | | | | | |
| SORM | Soroca | 142.88 | 330 | ⇑P | PKPdf | 17 27 54.8 | -3.3 |
| BURAR | Bucovina Array | 144.70 | 332 | ⇓P | PKPab | 17 28 03.3 | +0.5 |
| BRTR | Keskin Array B | 144.85 | 315 | PKP | PKPab | 17 28 03.3 | -0.5 |
| | comp=Z,1.6nm,0.6s,baz=105,slow=2.6,SNR=12 | | | | | | |
| TRPA | Tarpa | 145.44 | 335 | ⇑P | PKPdf | 17 28 02.7 | +0.2 |
| DOPR | Dopca | 145.84 | 330 | ⇓P | PKPab | 17 28 06.8 | -0.5 |
| DRGR | | 146.43 | 333 | ⇑P | PKPbc | 17 28 07.7 | +0.7 |
| ARR | Arges | 146.64 | 330 | ⇓P | PKiKP | 17 28 08.7 | -0.8 |
| GERES | GERESS Array B | 147.71 | 345 | PKPbc | PKPbc | 17 28 09.2 | -1.0 |
| | comp=Z,0.8nm,0.5s,baz=28,slow=3.0,SNR=7.8 | | | | | | |
| BZS | Buzias | 147.82 | 333 | ⇓P | PKPbc | 17 28 10.8 | +0.3 |
| HERR | Herculane | 148.04 | 331 | ⇑P | PKPbc | 17 28 11.5 | +0.5 |

*NEIC **13** 17:17:39.0±1.5, 36°.49N±0°.01×98°.75W±0°.04, h12km±4km, Error ellipse: s-maj=4.7km s-min=0.5km az=67.0*

*IDC **13** 17:17:39.2±1.2, 36°.60N×98°.82W, h0km, mb4.0/3, mb1 4.2/6, mb1mx3.8/49, mbtmp4.0/6, ML4.0/2, Error ellipse: s-maj=20.3km s-min=13.7km az=109.0*

*TUL **13** 17:17:39.1±1.9, 36°.48N±0°.02×98°.74W±0°.05, h5km±5km, ML4.0, mb_Lg3.9/53(NEIC), Error ellipse: s-maj=5.2km s-min=3.1km az=92.0*

**ISC 13 17:17:39.0±0.8, 36°.48N±0°.07×98°.73W±0°.06, h10km, n111, σ1°15/111, mb4.2/3, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| U32A | Winter Ranch, | 0.24 | 245 | Pg | Pg | 17 17 43.8 | -0.1 |
| U32A | | | | Sg | Sg | 17 17 47.5 | +0.3 |
| OK009 | Oakdale Elemen | 1.39 | 130 | Pn | Pn | 17 18 04.0 | -0.5 |
| OK001 | Jones High Sch | 1.49 | 128 | Pn | Pn | 17 18 06.0 | +0.2 |
| OKCFA | Oklahoma City | 1.49 | 135 | Pn | Pn | 17 18 06.1 | +0.2 |
| OK005 | Luther M Schoo | 1.50 | 123 | Pn | Pn | 17 18 05.8 | -0.1 |
| OKCSW | OKLAHOMA CITY | 1.50 | 135 | | Pn | 17 18 05.8 | -0.2 |
| FNO | Franklin | 1.63 | 138 | | Pn | 17 18 08.1 | +0.3 |
| WMOK | Wichita Mounta | 1.74 | 181 | Pn | Pn | 17 18 09.6 | +0.3 |
| T35A | Sooner Cattle | 1.84 | 76 | Pn | Pn | 17 18 11.3 | +0.6 |
| T35A | | | | lAmb_Lg | | 17 18 38.4 | |
| | comp=Z,781nm,0.7s | | | | | | |
| R32A | Long Quarter, | 1.94 | 0 | Pn | Pn | 17 18 12.3 | +0.3 |
| W35A | Tecumseh | 2.01 | 131 | Pn | Pn | 17 18 12.5 | -0.5 |
| X34A | Smith Ranch, M | 2.02 | 158 | Pn | Pn | 17 18 12.9 | -0.2 |
| X34A | | | | lAmb_Lg | | 17 18 43.7 | |
| | comp=Z,477nm,0.9s | | | | | | |
| TUL1 | Leonard | 2.45 | 103 | Pn | Pn | 17 18 19.2 | +0.2 |
| TUL1 | | | | lAmb_Lg | | 17 18 57.2 | |
| | comp=Z,415nm,0.8s | | | | | | |
| CBKS | Cedar Bluff | 2.46 | 341 | Pn | Pn | 17 18 19.1 | -0.2 |
| AMTX | Amarillo | 2.88 | 237 | Pn | Pn | 17 18 25.1 | 0.0 |
| KSU1 | Kansas State U | 3.11 | 32 | Pn | Pn | 17 18 28.3 | +0.2 |
| KSU1 | | | | lAmb_Lg | | 17 19 19.9 | |
| | comp=Z,284nm,0.9s | | | | | | |
| X37A | Clayton | 3.33 | 124 | Pn | Pn | 17 18 31.2 | +0.1 |
| Z35A | Perchaven, San | 3.37 | 158 | Pn | Pn | 17 18 32.5 | +0.8 |
| U38A | Gravette | 3.50 | 89 | Pn | Pn | 17 18 33.1 | -0.5 |
| HHAR | Hobbs | 3.87 | 92 | Pn | Pn | 17 18 35.8 | -2.8 |
| ABTX | Abilene, Hawle | 3.92 | 191 | Pn | Pn | 17 18 37.8 | -1.5 |
| ABTX | | | | lAmb_Lg | | 17 19 45.3 | |
| | comp=Z,318nm,1.1s | | | | | | |
| KSCO | Kaye Shedlock' | 3.99 | 310 | Pn | Pn | 17 18 39.3 | -1.1 |
| KSCO | | | | lAmb_Lg | | 17 19 55.0 | |
| | comp=Z,313nm,0.8s | | | | | | |
| MSTX | Muleshoe | 4.15 | 234 | Pn | Pn | 17 18 41.3 | -1.2 |
| MSTX | | | | lAmb_Lg | | 17 19 53.4 | |
| | comp=Z,334nm,0.9s | | | | | | |
| W39A | Magazine | 4.22 | 106 | Pn | Pn | 17 18 43.4 | 0.0 |
| N33A | J Bar K, Exete | 4.37 | 13 | Pn | Pn | 17 18 44.4 | -1.0 |
| N33A | | | | lAmb_Lg | | 17 20 09.5 | |
| | comp=Z,323nm,0.9s | | | | | | |
| Z38A | Mt. Pleasant | 4.45 | 135 | Pn | Pn | 17 18 45.7 | -0.9 |
| Z38A | | | | lAmb_Lg | | 17 20 02.8 | |
| | comp=Z,226nm,0.8s | | | | | | |
| S39A | Bolivar | 4.49 | 73 | Pn | Pn | 17 18 45.5 | -1.6 |
| S39A | | | | lAmb_Lg | | 17 20 05.6 | |
| | comp=Z,228nm,0.9s | | | | | | |
| T25A | Trinidad | 4.60 | 280 | Pn | Pn | 17 18 48.6 | -0.2 |
| T25A | | | | lAmb_Lg | | 17 20 07.1 | |
| | comp=Z,324nm,0.9s | | | | | | |
| WHTX | Lake Whitney, | 4.60 | 166 | Pn | Pn | 17 18 47.9 | -0.7 |
| MIAR | Mount Ida | 4.63 | 113 | Pn | Pn | 17 18 47.9 | -1.1 |
| U40A | Yellville | 4.74 | 90 | Pn | Pn | 17 18 50.3 | -0.3 |
| U40A | | | | lAmb_Lg | | 17 20 11.4 | |
| | comp=Z,289nm,0.8s | | | | | | |
| BGNE | Belgrade | 4.94 | 5 | Pn | Pn | 17 18 53.4 | +0.1 |
| N35A | Tabor | 5.00 | 28 | Pn | Pn | 17 18 54.6 | +0.6 |
| 237A | Washetta, Mont | 5.08 | 151 | Pn | Pn | 17 18 53.4 | -1.8 |
| OGNE | Ogallala | 5.15 | 331 | | Pn | 17 18 57.8 | +1.6 |
| P38A | Dawn | 5.17 | 51 | Pn | Pn | 17 18 57.3 | +0.9 |
| P38A | | | | lAmb_Lg | | 17 20 31.0 | |
| | comp=Z,256nm,1.1s | | | | | | |
| X40A | Basin Creek Fa | 5.21 | 111 | Pn | Pn | 17 18 58.6 | +1.7 |
| X40A | | | | lAmb_Lg | | 17 20 31.1 | |
| | comp=Z,261nm,0.8s | | | | | | |
| MGMO | Mountain Grove | 5.23 | 81 | Pn | Pn | 17 18 57.2 | 0.0 |
| WHAR | Wooly Hollow | 5.37 | 101 | Pn | Pn | 17 18 59.4 | +0.3 |
| FCAR | Ozark Folk Cen | 5.38 | 94 | Pn | Pn | 17 18 59.4 | +0.1 |
| FCAR | | | | lAmb_Lg | | 17 20 43.5 | |
| | comp=Z,224nm,0.9s | | | | | | |
| WLAR | White Oak Lake | 5.38 | 120 | Pn | Pn | 17 18 58.5 | -0.9 |
| W41B | Gary Mavity, V | 5.43 | 102 | Pn | Pn | 17 19 00.5 | +0.5 |
| R40A | Maddies Statio | 5.45 | 69 | Pn | Pn | 17 18 59.6 | -0.7 |
| R40A | | | | lAmb_Lg | | 17 20 33.4 | |
| | comp=Z,197n

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TXAR | | | | Lg | | Lg | 17 21 57.0 | | |
| | comp=Z,6.8nm,0.3s,baz=44,slow=28,SNR=4.8 | | | | | | | | |
| **PV11** | **David Mesa, Pa** | **8.27** | **286** | Pn | | **Pn** | **17 19 39.0** | **-0.2** | |
| **O20A** | **White River Ci** | **8.32** | **299** | Pn | | **Pn** | **17 19 40.6** | **+0.8** | |
| **PV23** | **Carpenter Ridg** | **8.41** | **287** | Pn | | **Pn** | **17 19 41.0** | **-0.2** | |
| **HDIL** | **Hopedale** | **8.44** | **58** | Pn | | **Pn** | **17 19 41.2** | **-0.1** | |
| **I37A** | **Lemond, Waseca** | **8.55** | **27** | Pn | | **Pn** | **17 19 41.4** | **-1.5** | |
| **WVT** | **Waverly** | **8.81** | **89** | Pn | | **Pn** | **17 19 46.1** | **-0.3** | |
| **JFWS** | **Jewell Farm** | **9.16** | **43** | Pn | | **Pn** | **17 19 51.9** | **+0.7** | |
| **346A** | **Big Creek Wild** | **9.22** | **121** | Pn | | **Pn** | **17 19 51.9** | **-0.1** | |
| **T47A** | **Sharon Grove** | **9.35** | **83** | Pn | | **Pn** | **17 19 54.1** | **+0.3** | |
| **F33A** | **5 Mile Ranch,** | **9.53** | **10** | Pn | | **Pn** | **17 19 55.7** | **-0.5** | |
| **P18A** | **Preston Nutter** | **9.61** | **293** | Pn | | **Pn** | **17 19 56.1** | **-1.5** | |
| **I40A** | **Norwalk** | **9.65** | **37** | Pn | | **Pn** | **17 19 57.7** | **-0.2** | |
| **M44A** | **Midewin, Midew** | **9.66** | **56** | Pn | | **Pn** | **17 19 56.8** | **-1.2** | |
| **BLO** | **Bloomington** | **10.03** | **71** | Pn | | **Pn** | **17 20 02.7** | **-0.3** | |
| **K43A** | **Burlington** | **10.14** | **49** | Pn | | **Pn** | **17 20 03.2** | **-1.4** | |
| **BW06** | **Boulder Array** | **10.44** | **310** | Pn | | **Pn** | **17 20 08.1** | **-0.8** | |
| **PD31** | **Pinedale Array** | **10.44** | **310** | Pn | | **Pn** | **17 20 08.0** | **-0.9** | |
| **PDAR** | **Pinedale Array** baz=114,slow=16,SNR=1.0 | **10.44** | **310** | Pn | | **Pn** | **17 20 10.3** | **+1.4** | |
| PDAR | | | | Lg | | Lg | 17 22 58.8 | | |
| | comp=Z,1.1nm,0.3s,baz=110,slow=21,SNR=2.2 | | | | | | | | |
| **G40A** | **Rib Lake** | **10.89** | **34** | Pn | | **Pn** | **17 20 13.9** | **-1.0** | |
| **P48A** | **Milroy** | **10.92** | **70** | Pn | | **Pn** | **17 20 13.7** | **-1.6** | |
| **R49A** | **Shelbyville** | **10.94** | **76** | Pn | | **Pn** | **17 20 13.5** | **-2.1** | |
| **N47A** | **Urbana** | **11.10** | **63** | Pn | | **Pn** | **17 20 16.1** | **-1.6** | |
| **E38A** | **The Farm, Brul** | **11.45** | **26** | Pn | | **Pn** | **17 20 21.2** | **-1.3** | |
| **P49A** | **Miami Univ. Ec** | **11.47** | **70** | Pn | | **Pn** | **17 20 22.6** | **-0.3** | |
| **TKL** | **Tuckaleechee C** | **12.13** | **89** | Lg | | Lg | 17 23 52.8 | | |
| | comp=Z,1.0nm,0.3s,baz=280,slow=3.3,SNR=1.2 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **19.31** | **293** | P | | **Pn** | **17 22 06.9** | **+1.6** | |
| | comp=Z,0.1nm,0.3s,baz=104,slow=5.4,SNR=3.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **40.07** | **330** | P | | **P** | **17 25 15.3** | **+1.2** | |
| | comp=Z,0.5nm,0.8s,baz=90,slow=7.2,SNR=1.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **66.75** | **18** | P | | **P** | **17 28 30.0** | **0.0** | |
| | comp=Z,3.6nm,0.9s,baz=310,slow=7.0,SNR=3.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **72.66** | **24** | P | | **P** | **17 29 08.9** | **+2.4** | |
| | comp=Z,2.1nm,1.0s,baz=311,slow=9.1,SNR=3.6 | | | | | | | | |

*TUL **13** 17:22:10.3±2.1,36°.47N±0°.02×98°.77W±0°.02,h8km±6km, ML2.8,ML2.7/36(NEIC),Error ellipse: s-maj=2.8km s-min=2.3km az=149.0*

**NEIC 13 17:22:09.9±0.5,36°.47N±0°.03×98°.77W±0°.06,h18km±3km, Error ellipse: s-maj=7.6km s-min=2.6km az=67.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.21** | **244** | Pg | Pg | 17 22 14.9 | -0.1 |
| U32A | | | | Sg | Sb | 17 22 18.4 | 0.0 |
| U32A | | | | IAML | | 17 22 18.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **OKCFA** | **Oklahoma City** | **1.50** | **134** | Pn | Pn | 17 22 35.9 | -0.1 |
| **FNO** | **Franklin** | **1.64** | **137** | Pn | Pn | 17 22 38.1 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.73** | **180** | Pn | Pn | 17 22 38.5 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.87** | **76** | Pn | Pn | 17 22 42.0 | +0.9 |
| **R32A** | **Long Quarter,** | **1.95** | **1** | Pn | Pn | 17 22 42.1 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.02** | **157** | Pn | Pn | 17 22 43.3 | +0.3 |
| **W35A** | **Tecumseh** | **2.03** | **130** | Pn | Pn | 17 22 43.3 | +0.1 |

*TUL **13** 17:25:52.5±1.8,36°.877N±0°.010×97°.79W±0°.01,h3km±5km, ML3.1,mb_Lg2.8/16(NEIC),Error ellipse: s-maj=1.6km s-min=1.3km az=110.0*

**NEIC 13 17:25:52.5±1.1,36°.865N±0°.010×97°.78W±0°.01,h7km±2km, Error ellipse: s-maj=1.7km s-min=1.4km az=106.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.02** | **87** | Pg | Pg | 17 26 11.7 | -0.3 |
| T35A | | | | Sg | Sg | 17 26 25.4 | +0.1 |
| **U32A** | **Winter Ranch,** | **1.09** | **244** | Sg | Sg | 17 26 24.8 | -2.9 |
| **OKCFA** | **Oklahoma City** | **1.47** | **169** | | Pn | 17 26 19.1 | -0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **169** | | Pb | 17 26 20.1 | -0.3 |
| **FNO** | **Franklin** | **1.63** | **169** | | Pn | 17 26 22.3 | +0.6 |
| **R32A** | **Long Quarter,** | **1.72** | **335** | | Pb | 17 26 23.8 | -0.7 |
| **W35A** | **Tecumseh** | **1.86** | **156** | Pn | Pn | 17 26 25.6 | +0.8 |
| **TUL1** | **Leonard** | **1.87** | **120** | | Pb | 17 26 26.9 | -0.1 |
| TUL1 | | | | IAmb_Lg | | 17 26 54.0 | |
| | comp=Z,72nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.26** | **181** | Pn | Pn | 17 26 31.2 | +0.9 |
| **WMOK** | **Wichita Mounta** | **2.27** | **201** | Pn | Pn | 17 26 30.5 | 0.0 |
| WMOK | | | | IAmb_Lg | | 17 27 07.0 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **KSU1** | **Kansas State U** | **2.42** | **22** | | Pn | 17 26 31.6 | -0.9 |
| KSU1 | | | | IAmb_Lg | | 17 27 11.7 | |
| | comp=Z,45nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.49** | **322** | Pn | Pn | 17 26 32.8 | -0.7 |
| CBKS | | | | IAmb_Lg | | 17 27 15.4 | |
| | comp=Z,46nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **2.76** | **98** | Pn | Pn | 17 26 36.7 | -0.5 |
| U38A | | | | IAmb_Lg | | 17 27 24.2 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.00** | **138** | Pn | Pn | 17 26 40.1 | -0.4 |
| **HHAR** | **Hobbs** | **3.15** | **100** | Pn | Pn | 17 26 43.3 | +0.7 |
| HHAR | | | | IAmb_Lg | | 17 27 34.0 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **3.64** | **116** | Pn | Pn | 17 26 48.9 | -0.4 |
| **S39A** | **Bolivar** | **3.65** | **76** | Pn | Pn | 17 26 50.2 | +0.8 |
| S39A | | | | IAmb_Lg | | 17 27 47.3 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.73** | **239** | Pn | Pn | 17 26 49.5 | -1.2 |
| **U40A** | **Yellville** | **4.00** | **96** | Pn | Pn | 17 26 50.6 | -3.6 |
| U40A | | | | IAmb_Lg | | 17 28 10.7 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.27** | **147** | Pn | Pn | 17 26 53.1 | -4.8 |
| **N35A** | **Tabor** | **4.33** | **22** | Pn | Pn | 17 26 57.0 | -1.7 |
| **P38A** | **Dawn** | **4.33** | **49** | Pn | Pn | 17 26 56.6 | -2.2 |
| **X40A** | **Basin Creek Fa** | **4.67** | **119** | Pn | Pn | 17 27 01.4 | -2.1 |
| **P40A** | **Paris** | **5.24** | **58** | Pn | Pn | 17 27 09.1 | -2.1 |

*IDC **13** 17:32:19.5±1.9,13°.24N×124°.87E,h0km,mb3.4/4, mb1 3.5/4,mb1mx3.3/37,mbtmp3.4/4,MS3.8/1,Ms1 3.8/1, ms1mx2.5/39,Error ellipse: s-maj=188.0km s-min=22.8km az=68.0*

**ISC 13 17:32:23.8±1.3,13°.34N±0°.09×125°.1E±0°.1,h33km,n13, σ0$47/8,mb3.5/4,1C,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCNP** | **Jose Panganiba** | **2.56** | **292** | *e*P | **Pn** | **17 33 02.3** | **-0.7** |
| JCNP | | | | *e*S | **Sn** | **17 33 33.7** | **+0.7** |
| **RCP** | **Roxas** | **2.94** | **233** | ⇑*e*P | **Pn** | **17 33 08.1** | **-0.1** |
| RCP | | | | *e*S | **Sn** | **17 33 42.3** | **-0.1** |
| **WRA** | **Warramunga Arr** 0.9nm,1.2s,baz=345,slow=9.9,SNR=2.4 | **34.29** | **165** | P | **P** | **17 39 07.2** | **-0.1** |
| **ASAR** | **Alice Springs** 0.2nm,0.5s,baz=344,slow=6.9,SNR=9.3 | **37.77** | **167** | P | **P** | **17 39 37.1** | **+0.1** |
| **SONM** | **Songino Array B** 0.3nm,0.6s,baz=168,slow=7.4,SNR=2.0 | **37.77** | **339** | P | **P** | **17 39 37.1** | **+0.2** |
| **H11S3** | **WAKE ISLAND Hy** baz=272 | **40.21** | **77** | T | T | 18 23 27.0 | |
| **H11S1** | **WAKE ISLAND Hy** baz=272 | **40.23** | **77** | T | T | 18 23 30.4 | |
| **H11S2** | **WAKE ISLAND Hy** baz=272 | **40.23** | **77** | T | T | 18 23 29.7 | |
| **H11N1** | **WAKE ISLAND Hy** baz=268 | **40.44** | **75** | T | T | 18 23 58.2 | |
| **H11N2** | **WAKE ISLAND Hy** baz=268 | **40.45** | **75** | T | T | 18 24 01.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=268 | **40.46** | **75** | T | T | 18 23 54.3 | |
| **MKAR** | **Makanchi Array** 0.4nm,0.7s,baz=120,slow=8.7,SNR=5.4 | **48.94** | **322** | P | **P** | **17 41 07.0** | **0.0** |
| **DZM** | **Mont Dzumac** comp=Z,96nm,20.4s,baz=44,slow=34 | **53.66** | **131** | LR | LR | 18 02 42.1 | |

*TUL **13** 17:36:47.3±1.0,36°.48N±0°.02×98°.75W±0°.02,h7km±7km, ML2.6,ML2.4/30(NEIC),Error ellipse: s-maj=3.1km s-min=1.4km az=150.0*

**NEIC 13 17:36:47.3±1.3,36°.46N±0°.02×98°.73W±0°.02,h11km±1km, Error ellipse: s-maj=3.1km s-min=2.4km az=140.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.24** | **250** | Pg | Pg | 17 36 51.8 | -0.4 |
| U32A | | | | Sg | Sg | 17 36 55.8 | +0.2 |
| U32A | | | | IAML | | 17 36 56.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| **FNO** | **Franklin** | **1.61** | **138** | Pn | Pn | 17 37 15.9 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.72** | **182** | Pn | Pn | 17 37 17.3 | +0.2 |
| **T35A** | **Sooner Cattle** | **1.84** | **75** | Pn | Pn | 17 37 19.3 | +0.5 |
| **R32A** | **Long Quarter,** | **1.96** | **0** | Pn | Pn | 17 37 20.8 | +0.3 |
| **W35A** | **Tecumseh** | **1.99** | **130** | Pn | Pn | 17 37 21.2 | +0.3 |
| **X34A** | **Smith Ranch, M** | **1.99** | **158** | Pn | Pn | 17 37 21.0 | +0.1 |
| **AMTX** | **Amarillo** | **2.87** | **238** | Pn | Pn | 17 37 32.0 | -1.1 |
| **KSU1** | **Kansas State U** | **3.12** | **32** | Pn | Pn | 17 37 36.2 | -0.3 |

*TUL **13** 17:41:06.8±1.8,36°.47N±0°.03×98°.74W±0°.05,h4km±7km, ML2.7,mb_Lg2.6/15(NEIC),Error ellipse: s-maj=5.5km s-min=3.6km az=110.0*

**NEIC 13 17:41:06.8±1.7,36°.48N±0°.02×98°.73W±0°.02,h5km±2km, Error ellipse: s-maj=4.2km s-min=3.1km az=207.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.24** | **246** | Pg | Pg | 17 41 11.6 | 0.0 |
| U32A | | | | Sg | Sg | 17 41 15.2 | +0.4 |
| **OKCFA** | **Oklahoma City** | **1.48** | **135** | Pn | Pn | 17 41 33.6 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **135** | Pn | Pn | 17 41 33.5 | -0.9 |
| **FNO** | **Franklin** | **1.63** | **138** | Pn | Pn | 17 41 36.1 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.74** | **181** | Pn | Pn | 17 41 37.0 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.83** | **76** | Pn | Pn | 17 41 39.3 | +0.3 |
| **R32A** | **Long Quarter,** | **1.94** | **0** | | Pn | 17 41 40.5 | 0.0 |
| **W35A** | **Tecumseh** | **2.00** | **131** | | Pn | 17 41 42.1 | +0.8 |
| **X34A** | **Smith Ranch, M** | **2.01** | **158** | Pn | Pn | 17 41 42.4 | +1.0 |
| X34A | | | | IAmb_Lg | | 17 42 12.9 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.44** | **103** | Pn | Pn | 17 41 47.6 | +0.3 |
| **CBKS** | **Cedar Bluff** | **2.47** | **341** | Pn | Pn | 17 41 47.4 | -0.3 |
| **KSU1** | **Kansas State U** | **3.11** | **32** | Pn | Pn | 17 41 56.5 | -0.1 |
| **X37A** | **Clayton** | **3.32** | **124** | Pn | Pn | 17 41 59.6 | +0.1 |
| **U38A** | **Gravette** | **3.50** | **89** | | Pn | 17 42 00.3 | -1.6 |
| U38A | | | | IAmb_Lg | | 17 43 04.0 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.87** | **91** | | Pn | 17 42 05.4 | -1.6 |
| **ABTX** | **Abilene, Hawle** | **3.92** | **191** | Pn | Pn | 17 42 06.3 | -1.4 |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **310** | Pn | Pn | 17 42 06.3 | -2.5 |
| KSCO | | | | IAmb_Lg | | 17 43 11.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | Pn | Pn | 17 42 12.7 | +1.0 |
| **N33A** | **J Bar K, Exete** | **4.37** | **13** | Pn | Pn | 17 42 13.1 | -0.7 |
| **S39A** | **Bolivar** | **4.49** | **73** | Pn | Pn | 17 42 12.5 | -3.0 |
| **WHTX** | **Lake Whitney,** | **4.60** | **166** | Pn | Pn | 17 42 14.4 | -2.6 |
| **T25A** | **Trinidad** | **4.61** | **280** | Pn | Pn | 17 42 15.0 | -2.4 |
| **MIAR** | **Mount Ida** | **4.62** | **113** | Pn | Pn | 17 42 14.6 | -2.7 |
| **U40A** | **Yellville** | **4.74** | **90** | Pn | Pn | 17 42 16.2 | -2.7 |
| U40A | | | | IAmb_Lg | | 17 43 35.1 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.16** | **331** | IAmb_Lg | | 17 44 02.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.20** | **111** | Pn | Pn | 17 42 24.5 | -0.8 |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | Pn | Pn | 17 42 26.9 | -0.5 |
| **FCAR** | **Ozark Folk Cen** | **5.37** | **94** | Pn | Pn | 17 42 26.7 | -1.0 |
| FCAR | | | | IAmb_Lg | | 17 44 03.5 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | Pn | Pn | 17 42 26.1 | -2.2 |
| **R40A** | **Maddies Statio** | **5.45** | **69** | IAmb_Lg | | 17 44 03.9 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.56** | **285** | Pn | Pn | 17 42 28.4 | -2.1 |
| **P40A** | **Paris** | **6.09** | **58** | Pn | Pn | 17 42 33.9 | -3.6 |
| **T42A** | **Van Buren** | **6.15** | **83** | Pn | Pn | 17 42 35.8 | -2.5 |
| T42A | | | | IAmb_Lg | | 17 44 28.9 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.17** | **73** | Pn | Pn | 17 42 36.3 | -2.3 |
| CCM | | | | IAmb_Lg | | 17 44 25.3 | |
| | comp=Z,12nm,1.0s | | | | | | |

*TUL **13** 17:44:18.4±1.6,36°.50N±0°.03×98°.72W±0°.04,h8km±4km, ML3.4,mb_Lg3.1/72(NEIC),Error ellipse: s-maj=4.7km s-min=3.7km az=121.0*

**NEIC 13 17:44:18.9±1.8,36°.51N±0°.02×98°.67W±0°.04,h13km±3km, Error ellipse: s-maj=4.8km s-min=2.2km az=85.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.30** | **244** | Pg | Pg | 17 44 23.3 | -1.7 |
| U32A | | | | | Sg | 17 44 27.9 | -1.2 |
| **OKCFA** | **Oklahoma City** | **1.48** | **138** | Pn | Pn | 17 44 45.3 | +0.1 |
| OKCFA | | | | Sn | Sb | 17 45 05.5 | +0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **137** | Pn | Pn | 17 44 45.5 | +0.1 |
| OKCSW | | | | Sn | Sn | 17 45 03.6 | -1.2 |
| **FNO** | **Franklin** | **1.62** | **140** | | Pb | 17 44 48.1 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.77** | **183** | Pn | Pn | 17 44 49.3 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.78** | **76** | | Pn | 17 44 50.4 | +1.0 |
| T35A | | | | IAmb_Lg | | 17 45 17.6 | |
| | comp=Z,78nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **1.91** | **359** | Pn | Pb | 17 44 52.9 | -0.7 |
| **W35A** | **Tecumseh** | **1.99** | **132** | | Pn | 17 44 52.9 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.03** | **160** | | Pb | 17 44 54.3 | -1.0 |
| **TUL1** | **Leonard** | **2.41** | **104** | | Pn | 17 44 58.8 | +0.8 |
| TUL1 | | | | IAmb_Lg | | 17 45 33.9 | |
| | comp=Z,71nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.45** | **340** | | Pb | 17 45 01.4 | -1.4 |
| CBKS | | | | IAmb_Lg | | 17 45 41.7 | |
| | comp=Z,101nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **2.94** | **237** | | Pn | 17 45 06.2 | +0.7 |
| **KSU1** | **Kansas State U** | **3.06** | **32** | | Pn | 17 45 06.3 | -0.7 |
| **X37A** | **Clayton** | **3.31** | **125** | Pn | Pn | 17 45 09.9 | -0.4 |
| **Z35A** | **Perchaven, San** | **3.38** | **159** | Pn | Pn | 17 45 11.5 | +0.1 |
| **U38A** | **Gravette** | **3.46** | **90** | | Pn | 17 45 13.8 | +1.4 |
| U38A | | | | IAmb_Lg | | 17 46 16.3 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.82** | **92** | | Pn | 17 45 13.8 | -3.8 |
| **ABTX** | **Abilene, Hawle** | **3.96** | **192** | Pn | Pn | 17 45 17.3 | -2.1 |
| **KSCO** | **Kaye Shedlock'** | **4.01** | **310** | Pn | Pn | 17 45 16.1 | -4.1 |
| **W39A** | **Magazine** | **4.18** | **107** | | Pn | 17 45 21.0 | -1.5 |
| **MSTX** | **Muleshoe** | **4.21** | **234** | | Pn | 17 45 22.1 | -0.8 |
| MSTX | | | | IAmb_Lg | | 17 46 36.1 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.33** | **12** | Pn | Pn | 17 45 24.3 | -0.2 |
| N33A | | | | IAmb_Lg | | 17 46 43.8 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.43** | **73** | Pn | Pn | 17 45 25.3 | -0.7 |
| **Z38A** | **Mt. Pleasant** | **4.44** | **136** | Pn | Pn | 17 45 24.9 | -1.1 |
| Z38A | | | | IAmb_Lg | | 17 46 42.8 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **4.59** | **114** | Pn | Pn | 17 45 27.7 | -0.4 |
| MIAR | | | | IAmb_Lg | | 17 46 55.6 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.62** | **167** | Pn | Pn | 17 45 28.7 | +0.2 |
| **T25A** | **Trinidad** | **4.65** | **279** | | Pn | 17 45 28.4 | -0.7 |
| T25A | | | | IAmb_Lg | | 17 46 50.0 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.69** | **90** | Pn | Pn | 17 45 30.5 | +1.0 |
| U40A | | | | IAmb_Lg | | 17 46 58.2 | |
| | comp=Z,49nm,0.9s | | | | | | |
| **BGNE** | **Belgrade** | **4.91** | **5** | Pn | Pn | 17 45 33.1 | +0.7 |
| BGNE | | | | IAmb_Lg | | 17 47 02.9 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **4.95** | **28** | Pn | Pn | 17 45 31.9 | -1.1 |
| **P38A** | **Dawn** | **5.11** | **51** | | Pn | 17 45 34.3 | -0.9 |
| P38A | | | | IAmb_Lg | | 17 47 04.5 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.15** | **330** | Pn | Pn | 17 45 36.3 | +0.5 |
| **X40A** | **Basin Creek Fa** | **5.17** | **111** | Pn | Pn | 17 45 34.2 | -1.9 |
| X40A | | | | IAmb_Lg | | 17 47 12.3 | |
| | comp=Z,46nm,1.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.18** | **81** | Pn | Pn | 17 45 36.4 | +0.3 |
| MGMO | | | | IAmb_Lg | | 17 47 07.3 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.32** | **101** | Pn | Pn | 17 45 37.0 | -1.1 |
| WHAR | | | | IAmb_Lg | | 17 47 18.8 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.33** | **95** | | Pn | 17 45 36.6 | -1.6 |
| **WLAR** | **White Oak Lake** | **5.36** | **120** | Pn | Pn | 17 45 38.4 | -0.2 |
| WLAR | | | | IAmb_Lg | | 17 47 23.2 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.39** | **102** | Pn | Pn | 17 45 36.9 | -2.0 |
| W41B | | | | IAmb_Lg | | 17 47 23.3 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.40** | **69** | Pn | Pn | 17 45 37.3 | -1.9 |
| R40A | | | | IAmb_Lg | | 17 47 13.9 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.59** | **285** | Pn | Pn | 17 45 42.3 | +0.2 |
| **Q24A** | **Divide** | **5.69** | **297** | | Pn | 17 45 44.5 | +1.1 |
| Q24A | | | | IAmb_Lg | | 17 47 25.1 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.73** | **17** | Pn | Pn | 17 45 43.2 | -0.5 |
| **435B** | **Jarrell** | **5.79** | **171** | IAmb_Lg | | 17 47 28.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **NATX** | **Nacogdoches** | **5.79** | **144** | IAmb_Lg | | 17 47 38.1 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **5.81** | **122** | IAmb_Lg | | 17 47 31.0 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **N38A** | **Joes South For** | **6.03** | **43** | Pn | Pn | 17 45 46.7 | -1.1 |
| **P40A** | **Paris** | **6.03** | **58** | Pn | Pn | 17 45 46.3 | -1.6 |
| **LCAR** | **Lake Charles** | **6.09** | **92** | Pn | Pn | 17 45 46.9 | -1.7 |
| **JCT** | **Junction City** | **6.09** | **189** | | Pn | 17 45 48.4 | -0.3 |
| JCT | | | | IAmb_Lg | | 17 47 38.7 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **6.11** | **83** | Pn | Pn | 17 45 47.1 | -1.8 |
| **CCM** | **Cathedral Cave** | **6.12** | **73** | | Pn | 17 45 46.1 | -2.9 |
| CCM | | | | IAmb_Lg | | 17 47 41.1 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.38** | **303** | Pn | Pn | 17 45 50.3 | -2.6 |
| **ANMO** | **Albuquerque** | **6.52** | **258** | Pn | Pn | 17 45 54.6 | -0.2 |
| **PBMO** | **Poplar Bluff** | **6.63** | **85** | IAmb_Lg | | 17 47 57.3 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.63** | **283** | Pn | Pn | 17 45 57.2 | +0.8 |
| **FVM** | **French Village** | **6.74** | **75** | IAmb_Lg | | 17 47 50.8 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **SCIA** | **State Center** | **6.85** | **37** | IAmb_Lg | | 17 47 55.9 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **BNM** | **Barren Site** | **6.92** | **252** | Pn | Pn | 17 45 57.2 | -3.0 |
| **SLM** | **Saint Louis** | **7.03** | **70** | IAmb_Lg | | 17 48 20.8 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.13** | **314** | IAmb_Lg | | 17 48 03.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.62** | **78** | IAmb_Lg | | 17 48 20.2 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **L40A** | **Anamosa** | **8.00** | **44** | IAmb_Lg | | 17 48 54.1 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **RWWY** | **Rawlins** | **8.41** | **311** | IAmb_Lg | | 17 49 01.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **K22A** | **Casper** | **8.62** | **318** | IAmb_Lg | | 17 48 56.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **8.63** | **333** | IAmb_Lg | | 17 49 01.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.11** | **43** | IAmb_Lg | | 17 49 23.2 | |
| | comp=Z,20nm,0.7s | | | | | | |

*JMA **13** 17:49:20.2±0.1,24°.36N×121°.82E,h45km±2km,M2.3 TAP **13** 17:49:20.6,24°.45N×121°.89E,h23km,ML3.0,B*

**ISC 13 17:49:19.7±0.9,24°.40N±0°.02×122°.02E±0°.02,h13km±7km, n74,σ0$93/137,1C-2D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** baz=271 | **0.23** | **283** | ⇓*i*P | **Pg** | **17 49 25.1** | **+0.6** |
| EWUT | | | | S | **Sg** | **17 49 28.0** | **+0.2** |
| | baz=271 | | | | | | |
| **ENA** | **Nanau** baz=262 | **0.26** | **277** | ⇓*i*P | **Pg** | **17 49 25.4** | **+0.3** |
| ENA | | | | *i* S | **Sg** | **17 49 28.5** | **-0.2** |
| | baz=262 | | | | | | |
| **TWC** | **Suao** baz=349 | **0.26** | **324** | *i* P | **Pg** | **17 49 25.9** | **+0.7** |
| TWC | | | | *i* S | **Sg** | **17 49 29.1** | **+0.1** |
| | baz=349 | | | | | | |
| **NDS** | **Dongshan** baz=319 | **0.36** | **311** | *i* P | **Pg** | **17 49 27.1** | **+0.1** |
| NDS | | | | *i* S | **Sg** | **17 49 31.2** | **-0.7** |
| | baz=319 | | | | | | |
| **ETL** | **Fush Village** baz=226 | **0.43** | **237** | P | **Pb** | **17 49 28.7** | **-0.4** |
| ETL | | | | S | **Sb** | **17 49 34.8** | **-0.8** |
| | baz=226 | | | | | | |
| **ILA** | **Ilan** baz=331 | **0.44** | **326** | P | **Pg** | **17 49 28.7** | **+0.3** |
| ILA | | | | S | **Sg** | **17 49 34.5** | **0.0** |
| | baz=331 | | | | | | |
| **NACB** | **Ninganchiao** baz=226 | **0.45** | **240** | P | **Pb** | **17 49 28.7** | **-0.7** |
| NACB | | | | S | **Sg** | **17 49 34.9** | **+0.4** |
| | baz=226 | | | | | | |
| **EGS** | baz=9.0 | **0.45** | **350** | P | **Pg** | **17 49 29.5** | **+0.8** |
| EGS | | | | *e*S | **Sg** | **17 49 35.1** | **+0.3** |
| | baz=9.0 | | | | | | |
| **TWE** | **Neicheng** baz=325 | **0.46** | **315** | *i* P | **Pg** | **17 49 28.4** | **-0.3** |
| TWE | | | | S | **Sg** | **17 49 33.7** | **-1.1** |
| | baz=325 | | | | | | |
| **LATG** | **Datong** baz=286 | **0.47** | **287** | P | **Pg** | **17 49 28.7** | **-0.3** |
| LATG | | | | S | **Sg** | **17 49 33.9** | **-1.4** |
| | baz=286 | | | | | | |
| **ENTT** | **Nioudou** baz=304 | **0.48** | **301** | P | **Pg** | **17 49 28.8** | **-0.3** |
| ENTT | | | | S | **Sg** | **17 49 34.2** | **-1.4** |
| | baz=304 | | | | | | |
| **NTC** | **Toucheng** | **0.49** | **339** | *e*P | **Pg** | **17 49 30.1** | **+0.8** |
| NTC | | | | *e*S | **Sg** | **17 49 36.1** | **+0.3** |
| **TWD** | **Chiawan** baz=217 | **0.50** | **231** | P | **Pb** | **17 49 30.1** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WHF | | | | S | | Sg | 17 49 43.2 | -0.5 |
| | baz=250 | | | | | | | |
| **ESL** | **Shilin** | **0.79** | **223** | *eP* | | **Pn** | **17 49 35.5** | **-1.0** |
| | baz=219 | | | | | | | |
| **TAP** | **Taipei** | **0.79** | **324** | *eS* | | **Sg** | **17 49 44.4** | **-1.0** |
| | baz=323 | | | | | | | |
| **CHGB** | **Renai** | **0.84** | **247** | P | | **Pg** | **17 49 35.9** | **-0.1** |
| | baz=247 | | | | | | | |
| CHGB | | | | *eS* | | **Sg** | **17 49 46.9** | **-0.2** |
| | baz=247 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.85** | **86** | P | | **Pn** | **17 49 38.5** | **+1.3** |
| JYNG | | | | *eS* | | **Sn** | **17 49 51.5** | **+2.0** |
| **YM01** | **YM01** | **0.85** | **331** | P | | **Pg** | **17 49 36.1** | **0.0** |
| | baz=331 | | | | | | | |
| YM01 | | | | *eS* | | **Sg** | **17 49 45.9** | **-1.5** |
| | baz=331 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.85** | **286** | *eP* | | **Pg** | **17 49 35.9** | **-0.4** |
| | baz=290 | | | | | | | |
| NFF | | | | *eS* | | **Sg** | **17 49 45.4** | **-2.1** |
| | baz=290 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.89** | **322** | P | | **Pb** | **17 49 36.8** | **-0.1** |
| | baz=323 | | | | | | | |
| TWS1 | | | | *eS* | | **Sb** | **17 49 48.0** | **-0.7** |
| | baz=323 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.91** | **86** | P | | **Pn** | **17 49 39.6** | **+1.5** |
| YOJ | | | | *eS* | | **Sn** | **17 49 53.0** | **+2.0** |
| **YOJ** | **Yonaguni jima** | **0.91** | **86** | P | | **Pn** | **17 49 39.4** | **+1.4** |
| | baz=80 | | | | | | | |
| YOJ | | | | S | | **Sn** | **17 49 52.9** | **+1.9** |
| | baz=80 | | | | | | | |
| **WUSB** | **Renai** | **0.92** | **244** | P | | **Pg** | **17 49 37.5** | **+0.1** |
| | baz=244 | | | | | | | |
| WUSB | | | | S | | **Sb** | **17 49 50.0** | **+0.3** |
| | baz=244 | | | | | | | |
| **NTST** | **Danshui** | **0.92** | **326** | *eP* | | **Pb** | **17 49 37.8** | **+0.3** |
| | baz=341 | | | | | | | |
| NTST | | | | *eS* | | **Sb** | **17 49 50.0** | **+0.3** |
| | baz=341 | | | | | | | |
| **LIOB** | **Emei** | **0.95** | **285** | P | | **Pb** | **17 49 38.2** | **+0.2** |
| | baz=288 | | | | | | | |
| **NCU** | **National Centr** | **0.95** | **307** | *eP* | | **Pb** | **17 49 37.8** | **-0.2** |
| | baz=315 | | | | | | | |
| NCU | | | | *eS* | | **Sb** | **17 49 49.6** | **-0.9** |
| | baz=315 | | | | | | | |
| **NCUH** | **Zhongli** | **0.95** | **307** | P | | **Pb** | **17 49 37.6** | **-0.3** |
| | baz=315 | | | | | | | |
| NCUH | | | | *eS* | | **Sb** | **17 49 50.1** | **-0.3** |
| | baz=315 | | | | | | | |
| **TWY** | **Chenhua** | **0.95** | **337** | P | | **Pb** | **17 49 38.1** | **0.0** |
| | baz=342 | | | | | | | |
| TWY | | | | *eS* | | **Sb** | **17 49 49.6** | **-1.0** |
| | baz=342 | | | | | | | |
| **WHP** | **Taichung City** | **0.99** | **263** | *eP* | | **Pg** | **17 49 38.9** | **+0.2** |
| | baz=260 | | | | | | | |
| WHP | | | | *eS* | | **Sb** | **17 49 49.6** | **-2.0** |
| | baz=260 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.02** | **293** | P | | **Pb** | **17 49 39.3** | **+0.1** |
| | baz=284 | | | | | | | |
| SBCB | | | | S | | **Sb** | **17 49 52.7** | **+0.2** |
| | baz=284 | | | | | | | |
| **HGSD** | **Ruisui** | **1.05** | **211** | *eP* | | **Pn** | **17 49 41.1** | **+1.0** |
| | baz=194 | | | | | | | |
| HGSD | | | | *eS* | | **Sn** | **17 49 56.5** | **+1.9** |
| | baz=194 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.07** | **252** | *eP* | | **Pg** | **17 49 40.2** | **0.0** |
| | baz=253 | | | | | | | |
| **EHY** | **Hungye** | **1.09** | **216** | *eP* | | **Pg** | **17 49 41.0** | **+0.3** |
| | baz=209 | | | | | | | |
| **NMLH** | **Miaoli** | **1.13** | **277** | *eP* | | **Pg** | **17 49 41.8** | **+0.4** |
| | baz=276 | | | | | | | |
| NMLH | | | | *eS* | | **Sb** | **17 49 55.7** | **+0.1** |
| | baz=276 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.14** | **268** | P | | **Pg** | **17 49 42.2** | **+0.7** |
| | baz=266 | | | | | | | |
| TWQ1 | | | | *eS* | | **Sb** | **17 49 56.2** | **+0.4** |
| | baz=266 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.14** | **244** | *eP* | | **Pg** | **17 49 41.7** | **-0.1** |
| | baz=248 | | | | | | | |
| SMLT | | | | *eS* | | **Sn** | **17 49 57.8** | **+0.8** |
| | baz=248 | | | | | | | |
| **SSLB** | **Suanglung** | **1.15** | **238** | P | | **Pn** | **17 49 41.2** | **-0.2** |
| | baz=234 | | | | | | | |
| SSLB | | | | *eS* | | **Sn** | **17 49 57.4** | **+0.4** |
| | baz=234 | | | | | | | |
| **TYC** | **Yuchr** | **1.17** | **245** | *eP* | | **Pb** | **17 49 41.7** | **0.0** |
| | baz=250 | | | | | | | |
| TYC | | | | *eS* | | **Sg** | **17 49 57.9** | **+0.4** |
| | baz=250 | | | | | | | |
| **YULB** | **Yu-li** | **1.20** | **214** | *eP* | | **Pg** | **17 49 42.8** | **+0.1** |
| | baz=207 | | | | | | | |
| YULB | | | | *eS* | | **Sg** | **17 49 58.6** | **+0.2** |
| | baz=207 | | | | | | | |
| **EYUL** | **Yuli** | **1.23** | **212** | *eP* | | **Pg** | **17 49 43.7** | **+0.4** |
| | baz=219 | | | | | | | |
| **WDJ** | **Dajia District** | **1.26** | **268** | *eP* | | **Pg** | **17 49 44.2** | **+0.3** |
| | baz=261 | | | | | | | |
| WDJ | | | | *eS* | | **Sn** | **17 49 59.8** | **+0.1** |
| | baz=261 | | | | | | | |
| **WJS** | **Zhushan** | **1.31** | **244** | *eP* | | **Pg** | **17 49 44.9** | **0.0** |
| | baz=243 | | | | | | | |
| WJS | | | | *eS* | | **Sg** | **17 50 03.5** | **+1.5** |
| | baz=243 | | | | | | | |
| **WNT** | **Mingjian** | **1.32** | **247** | *eP* | | **Pg** | **17 49 46.1** | **+1.0** |
| | baz=243 | | | | | | | |
| WNT | | | | *eS* | | **Sg** | **17 50 03.9** | **+1.5** |
| | baz=243 | | | | | | | |
| **FULB** | **Fuli** | **1.36** | **209** | *eP* | | **Pg** | **17 49 45.8** | **-0.1** |
| | baz=219 | | | | | | | |
| **ALS** | **Alishan** | **1.42** | **232** | *eP* | | **Pg** | **17 49 46.9** | **-0.1** |
| | baz=216 | | | | | | | |
| **CHN5** | **Tsauling** | **1.46** | **237** | *eP* | | **Pg** | **17 49 48.3** | **+0.5** |
| | baz=233 | | | | | | | |
| CHN5 | | | | *eS* | | **Sg** | **17 50 07.9** | **+1.1** |
| | baz=233 | | | | | | | |
| **ELDTW** | **Lidau** | **1.51** | **218** | *eP* | | **Pg** | **17 49 47.7** | **-1.1** |
| | baz=200 | | | | | | | |
| **WDLH** | **Douliu** | **1.53** | **243** | *eP* | | **Pg** | **17 49 48.3** | **-0.7** |
| | baz=225 | | | | | | | |
| WDLH | | | | *eS* | | **Sg** | **17 50 08.0** | **-0.9** |
| | baz=225 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.56** | **92** | P | | **Pg** | **17 49 48.6** | **-1.1** |
| IRIF | | | | *eS* | | **Sg** | **17 50 08.7** | **-1.3** |
| **STYH** | **Taoyuan** | **1.67** | **223** | *eP* | | **Pb** | **17 49 50.1** | **-0.2** |
| | baz=220 | | | | | | | |
| STYH | | | | *eS* | | **Sg** | **17 50 13.1** | **-0.4** |
| | baz=220 | | | | | | | |
| **WTP** | **Ta-pu** | **1.72** | **229** | *eP* | | **Pg** | **17 49 52.5** | **-0.3** |
| | baz=225 | | | | | | | |
| WTP | | | | *eS* | | **Sg** | **17 50 14.9** | **-0.3** |
| | baz=225 | | | | | | | |
| **CHN1** | **Nanshi** | **1.82** | **229** | *eS* | | **Sg** | **17 50 17.3** | **-1.0** |
| | baz=225 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.82** | **95** | P | | **Pg** | **17 49 53.9** | **-0.8** |
| JKRS | | | | S | | **Sg** | **17 50 16.7** | **-1.6** |
| **WSL** | **Shuilin Townsh** | **1.85** | **242** | *eP* | | **Pn** | **17 49 51.6** | **+0.5** |
| | baz=239 | | | | | | | |
| WSL | | | | *eS* | | **Sb** | **17 50 17.4** | **+0.9** |
| | baz=239 | | | | | | | |
| **SGST** | **Jiashian** | **1.86** | **225** | *eP* | | **Pb** | **17 49 52.1** | **-1.4** |
| | baz=222 | | | | | | | |
| SGST | | | | *eS* | | **Sg** | **17 50 17.6** | **-1.7** |
| | baz=222 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.94** | **91** | S | | **Sb** | **17 50 17.4** | **-1.5** |
| **JISG** | **Ishigakijimahi** | **2.10** | **84** | P | | **Pb** | **17 49 56.3** | **-1.2** |
| JISG | | | | *eS* | | **Sb** | **17 50 21.9** | **-1.6** |
| **MASBT** | **Mashibuluo** | **2.19** | **216** | *eP* | | **Pb** | **17 49 59.0** | **-0.1** |
| | baz=212 | | | | | | | |
| MASBT | | | | *eS* | | **Sb** | **17 50 26.4** | **+0.4** |
| | baz=212 | | | | | | | |

*TUL* ***13*** *17:56:14.1±1.3,36.°51N±0.°01×98.°71W±0.°04, h8km±4km, ML2.4, mb_Lg2.4/8(NEIC), Error ellipse: s-maj=4.2km s-min=1.8km az=93.0*

**NEIC 13 17:56:14.3±1.8, 36.°50N±0.°01×98.°66W±0.°02, h5km±1km, Error ellipse: s-maj=3.7km s-min=3.0km az=52.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **1.46** | **138** | Pn | Pn | 17 56 40.7 | -0.7 |
| OKCFA | | | | Sn | Sg | 17 57 01.7 | +0.3 |
| **FNO** | **Franklin** | **1.61** | **140** | Pn | Pn | 17 56 43.9 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.76** | **183** | Pn | Pn | 17 56 44.9 | -0.7 |
| **WMOK** | **Wichita Mounta** | **1.76** | **183** | | Pn | 17 56 45.1 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.77** | **76** | | Pb | 17 56 46.5 | -0.8 |
| **R32A** | **Long Quarter,** | **1.92** | **359** | | Pn | 17 56 48.5 | +0.8 |
| **W35A** | **Tecumseh** | **1.98** | **132** | Pn | Pn | 17 56 48.4 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.01** | **160** | Pn | Pb | 17 56 50.4 | -1.0 |
| X34A | | | | lAmb_Lg | | 17 57 21.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.39** | **103** | Pn | Pn | 17 56 55.9 | +1.6 |
| **CBKS** | **Cedar Bluff** | **2.46** | **340** | Pn | Pn | 17 56 53.8 | -1.3 |
| **AMTX** | **Amarillo** | **2.94** | **238** | Pn | Pn | 17 57 01.4 | -0.5 |
| AMTX | | | | lAmb_Lg | | 17 57 46.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.29** | **124** | Pn | Pn | 17 57 06.5 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **310** | lAmb_Lg | | 17 58 23.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.16** | **111** | Pn | Pn | 17 57 28.9 | -3.3 |
| **WHAR** | **Wooly Hollow** | **5.31** | **101** | Pn | Pn | 17 57 32.2 | -2.2 |
| **R40A** | **Maddies Statio** | **5.39** | **69** | Pn | Pn | 17 57 34.2 | -1.2 |

*TUL* ***13*** *18:11:32.1±1.4,36.°46N±0.°02×98.°75W±0.°04, h6km±7km, ML2.7, mb_Lg2.5/16(NEIC), Error ellipse: s-maj=4.1km s-min=2.5km az=89.0*

**NEIC 13 18:11:31.7±1.7, 36.°47N±0.°02×98.°73W±0.°04, h5km±2km, Error ellipse: s-maj=5.4km s-min=3.1km az=260.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **1.48** | **135** | Pn | Pn | 18 11 58.8 | -0.2 |
| **FNO** | **Franklin** | **1.62** | **138** | | Pn | 18 12 00.6 | -0.3 |
| **WMOK** | **Wichita Mounta** | **1.73** | **181** | | Pn | 18 12 01.5 | -0.9 |
| **T35A** | **Sooner Cattle** | **1.84** | **75** | | Pn | 18 12 03.7 | -0.2 |
| **R32A** | **Long Quarter,** | **1.95** | **0** | | Pn | 18 12 06.1 | +0.6 |
| **W35A** | **Tecumseh** | **2.00** | **131** | Pn | Pn | 18 12 06.7 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | Pb | 18 12 07.5 | -1.1 |
| X34A | | | | lAmb_Lg | | 18 12 37.2 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.44** | **102** | Pn | Pn | 18 12 11.3 | -0.9 |
| **CBKS** | **Cedar Bluff** | **2.47** | **341** | Pn | Pn | 18 12 12.1 | -0.6 |
| **AMTX** | **Amarillo** | **2.88** | **237** | Pn | Pn | 18 12 18.5 | +0.2 |
| **KSU1** | **Kansas State U** | **3.12** | **32** | Pn | Pn | 18 12 18.5 | -3.0 |
| KSU1 | | | | lAmb_Lg | | 18 13 16.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.32** | **123** | Pn | Pn | 18 12 25.5 | +1.2 |
| **U38A** | **Gravette** | **3.50** | **89** | lAmb_Lg | | 18 13 30.5 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **HHAR** | **Hobbs** | **3.87** | **91** | | Pn | 18 12 31.8 | -0.1 |
| **ABTX** | **Abilene, Hawle** | **3.91** | **191** | Pn | Pn | 18 12 33.7 | +1.3 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **311** | Pn | Pn | 18 12 31.8 | -2.0 |
| KSCO | | | | lAmb_Lg | | 18 13 48.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | Pn | Pn | 18 12 36.1 | -0.5 |
| **T25A** | **Trinidad** | **4.61** | **280** | lAmb_Lg | | 18 14 01.9 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.20** | **111** | lAmb_Lg | | 18 14 26.9 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.23** | **81** | Pn | Pn | 18 12 49.4 | -1.1 |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | Pn | Pn | 18 12 51.7 | -0.6 |
| **R40A** | **Maddies Statio** | **5.46** | **69** | Pn | Pn | 18 12 50.6 | -3.1 |
| **SDCO** | **Great Sand Dun** | **5.56** | **285** | Pn | Pn | 18 12 54.4 | -1.0 |
| **L40A** | **Anamosa** | **8.07** | **44** | lAmb_Lg | | 18 15 58.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **K22A** | **Casper** | **8.62** | **318** | lAmb_Lg | | 18 16 21.7 | |
| | comp=Z,4.8nm,0.9s | | | | | | |

*TAP* ***13*** *18:15:42.0,21.°37N×121.°19E, h43km, ML3.2, D*
*JMA* ***13*** *18:15:43.9±0.7, 21.°64N×121.°36E, h0km, M3.6*

**ISC 13 18:15:46.8±1.8, 21.°68N±0.°08×121.°21E±0.°03, h16km±8km, n48, σ0.°92/82, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSEB** | **Hengchuen, Pin** | **0.36** | **307** | *i* P | **Pg** | **18 15 55.0** | **+0.6** |
| | baz=322 | | | | | | |
| TSEB | | | | S | **Sn** | **18 16 04.2** | **0.0** |
| | baz=322 | | | | | | |
| **LYUB** | **Lan-yu** | **0.47** | **47** | *i* P | **Pg** | **18 15 55.9** | **-0.4** |
| | baz=30 | | | | | | |
| LYUB | | | | S | **Sn** | **18 16 06.3** | **-0.6** |
| | baz=30 | | | | | | |
| **LAY** | **Lan-yu** | **0.47** | **41** | P | **Pg** | **18 15 56.7** | **+0.3** |
| | baz=27 | | | | | | |
| LAY | | | | S | **Sn** | **18 16 07.4** | **+0.3** |
| | baz=27 | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.48** | **314** | *eP* | **Pg** | **18 15 56.8** | **+0.2** |
| | baz=326 | | | | | | |
| SMST | | | | *eS* | **Sn** | **18 16 07.3** | **0.0** |
| | baz=326 | | | | | | |
| **HEN** | **Hengchun** | **0.55** | **306** | P | **Pg** | **18 15 57.4** | **-0.3** |
| | baz=327 | | | | | | |
| HEN | | | | *eS* | **Sn** | **18 16 08.2** | **-0.6** |
| | baz=327 | | | | | | |
| **SLIU** | **Shizi** | **0.66** | **324** | P | **Pg** | **18 15 59.4** | **-0.3** |
| | baz=326 | | | | | | |
| SLIU | | | | *i* S | **Sn** | **18 16 12.8** | **+1.2** |
| | baz=326 | | | | | | |
| **TAWH** | **Dawu Township** | **0.72** | **335** | *eP* | **Pb** | **18 16 01.3** | **+0.2** |
| | baz=354 | | | | | | |
| TAWH | | | | *eS* | **Sn** | **18 16 14.3** | **+1.2** |
| | baz=354 | | | | | | |
| **TAW** | **Tawu** | **0.73** | **336** | P | **Pb** | **18 16 00.7** | **-0.6** |
| | baz=355 | | | | | | |
| TAW | | | | S | **Sn** | **18 16 14.7** | **+1.3** |
| | baz=355 | | | | | | |
| **EAST** | **Anshuo** | **0.78** | **334** | P | **Pb** | **18 16 01.3** | **-0.7** |
| | baz=356 | | | | | | |
| EAST | | | | S | **Sn** | **18 16 15.5** | **+1.0** |
| | baz=356 | | | | | | |
| **SCZT** | **Fangliau** | **0.88** | **321** | P | **Pb** | **18 16 03.2** | **-0.5** |
| | baz=322 | | | | | | |
| SCZT | | | | *eS* | **Sn** | **18 16 17.5** | **+0.4** |
| | baz=322 | | | | | | |
| **ECL** | **Taimali** | **0.94** | **345** | *eP* | **Pb** | **18 16 03.7** | **-1.1** |
| | baz=357 | | | | | | |
| ECL | | | | S | **Sn** | **18 16 18.8** | **+0.2** |
| | baz=357 | | | | | | |
| **SSPT** | **Xinbi** | **1.00** | **323** | *eP* | **Pb** | **18 16 05.4** | **-0.4** |
| | baz=333 | | | | | | |
| SSPT | | | | *eS* | **Sn** | **18 16 21.0** | **+1.1** |
| | baz=333 | | | | | | |
| **LDUT** | **Ludao** | **1.02** | **14** | *eP* | **Pb** | **18 16 05.2** | **-0.8** |
| | baz=21 | | | | | | |
| LDUT | | | | *eS* | **Sn** | **18 16 21.9** | **+1.5** |
| | baz=21 | | | | | | |
| **WLCH** | **Liuqiu** | **1.02** | **311** | *eS* | **Sn** | **18 16 22.4** | **+1.9** |
| | baz=323 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.07** | **330** | *eP* | **Pb** | **18 16 06.1** | **-0.9** |
| | baz=338 | | | | | | |
| MASBT | | | | *eS* | **Sg** | **18 16 23.1** | **+1.5** |
| | baz=338 | | | | | | |
| **TWGBT** | **Beinan** | **1.14** | **354** | *eP* | **Pn** | **18 16 06.3** | **-1.8** |
| | baz=356 | | | | | | |
| **TWG** | **Pinlang** | **1.14** | **353** | P | **Pn** | **18 16 06.5** | **-1.7** |
| | baz=356 | | | | | | |
| TWG | | | | *eS* | **Sn** | **18 16 23.7** | **+0.2** |
| | baz=356 | | | | | | |
| **TSMG** | **Majia** | **1.15** | **333** | *eP* | **Pn** | **18 16 08.0** | **-0.2** |
| | baz=350 | | | | | | |
| **SSD** | **Sandimen** | **1.19** | **333** | *eP* | **Pn** | **18 16 08.2** | **-0.6** |
| | baz=350 | | | | | | |
| **LONT** | **Longtian** | **1.22** | **356** | *eP* | **Pn** | **18 16 07.6** | **-1.7** |
| | baz=350 | | | | | | |
| LONT | | | | *eS* | **Sg** | **18 16 26.6** | **+0.1** |
| | baz=350 | | | | | | |
| **EDH** | **Donghe** | **1.29** | **4** | *eP* | **Pn** | **18 16 09.1** | **-1.1** |
| | baz=354 | | | | | | |
| EDH | | | | *eS* | **Sg** | **18 16 28.4** | **-0.2** |
| | baz=354 | | | | | | |
| **TWM1** | **Shoushan** | **1.35** | **327** | *eP* | **Pn** | **18 16 09.8** | **-1.3** |
| | baz=320 | | | | | | |
| **CHKT** | **Chengkung** | **1.42** | **6** | *eP* | **Pn** | **18 16 12.0** | **0.0** |
| | baz=355 | | | | | | |
| CHKT | | | | *eS* | **Sb** | **18 16 31.9** | **+1.1** |
| | baz=355 | | | | | | |
| **SGST** | **Jiashian** | **1.51** | **337** | *eP* | **Pn** | **18 16 13.7** | **+0.4** |
| | baz=329 | | | | | | |
| **ELDTW** | **Lidau** | **1.51** | **353** | *eP* | **Pn** | **18 16 12.1** | **-1.3** |
| | baz=3.0 | | | | | | |
| ELDTW | | | | *eS* | **Sb** | **18 16 33.4** | **-0.3** |
| | baz=3.0 | | | | | | |
| **FULB** | **Fuli** | **1.51** | **3** | *eP* | **Pn** | **18 16 11.6** | **-1.7** |
| | baz=353 | | | | | | |
| FULB | | | | *eS* | **Sb** | **18 16 33.5** | **0.0** |
| | baz=353 | | | | | | |
| **STYH** | **Taoyuan** | **1.54** | **345** | *eP* | **Pn** | **18 16 12.8** | **-0.8** |
| | baz=348 | | | | | | |
| **CHN1** | **Nanshi** | **1.62** | **337** | *eP* | **Pn** | **18 16 13.5** | **-1.4** |
| | baz=330 | | | | | | |
| **WTP** | **Ta-pu** | **1.65** | **341** | *eP* | **Pn** | **18 16 15.5** | **+0.2** |
| | baz=345 | | | | | | |
| **EYUL** | **Yuli** | **1.66** | **3** | *eP* | **Pn** | **18 16 14.0** | **-1.3** |
| | baz=355 | | | | | | |
| EYUL | | | | *eS* | **Sb** | **18 16 38.1** | **+0.3** |
| | baz=355 | | | | | | |
| **TPUB** | **Ta-pu** | **1.70** | **342** | *eP* | **Pn** | **18 16 15.8** | **-0.1** |
| | baz=345 | | | | | | |
| **YULB** | **Yu-li** | **1.71** | **3** | *eP* | **Pn** | **18 16 13.9** | **-2.0** |
| | baz=356 | | | | | | |
| YULB | | | | *eS* | **Sb** | **18 16 38.6** | **-0.5** |
| | baz=356 | | | | | | |
| **TWK** | **Hsinying** | **1.71** | **337** | *eP* | **Pn** | **18 16 16.9** | **+0.7** |
| | baz=342 | | | | | | |
| **HGSD** | **Ruisui** | **1.81** | **6** | *eP* | **Pn** | **18 16 16.9** | **-0.5** |
| | baz=15 | | | | | | |
| HGSD | | | | *eS* | **Sb** | **18 16 42.9** | **+0.7** |
| | baz=15 | | | | | | |
| **EHY** | **Hungye** | **1.82** | **3** | *eP* | **Pn** | **18 16 16.7** | **-0.8** |
| | baz=358 | | | | | | |
| **ALS** | **Alishan** | **1.86** | **348** | *eP* | **Pn** | **18 16 18.8** | **+0.4** |
| | baz=351 | | | | | | |
| ALS | | | | *eS* | **Sb** | **18 16 42.8** | **-1.0** |
| | baz=351 | | | | | | |
| **CHN5** | **Tsauling** | **1.97** | **346** | P | **Pn** | **18 16 19.1** | **-0.6** |
| | baz=348 | | | | | | |
| **SSLB** | **Suanglung** | **2.11** | **354** | *eP* | **Pn** | **18 16 21.0** | **-0.6** |
| | baz=355 | | | | | | |
| SSLB | | | | *eS* | **Sn** | **18 16 47.5** | **0.0** |
| | baz=355 | | | | | | |
| **WUSB** | **Renai** | **2.30** | **358** | P | **Pn** | **18 16 23.1** | **-1.2** |
| | baz=359 | | | | | | |
| WUSB | | | | S | **Sn** | **18 16 52.8** | **+0.5** |
| | baz=359 | | | | | | |
| **CHGB** | **Renai** | **2.37** | **359** | P | **Pn** | **18 16 24.4** | **-0.9** |
| | baz=347 | | | | | | |
| CHGB | | | | S | **Sn** | **18 16 54.7** | **+0.6** |
| | baz=347 | | | | | | |
| **WHF** | **Hehuan Shan** | **2.45** | **1** | *eP* | **Pn** | **18 16 26.8** | **+0.2** |
| | baz=10.0 | | | | | | |
| **NACB** | **Ninganchiao** | **2.51** | **8** | *eP* | **Pn** | **18 16 26.2** | **-0.8** |
| | baz=1.0 | | | | | | |
| NACB | | | | *eS* | **Sn** | **18 16 59.2** | **+2.0** |
| | baz=1.0 | | | | | | |
| **HATJ** | **Hateruma jima** | **3.36** | **45** | P | **Pn** | **18 16 38.5** | **-0.2** |
| HATJ | | | | *eS* | **Sn** | **18 17 18.6** | **+0.3** |
| **IRIF** | **Iriomote-Funau** | **3.52** | **41** | P | **Pn** | **18 16 40.6** | **-0.2** |
| IRIF | | | | *eS* | **Sn** | **18 17 22.8** | **+0.7** |
| **JKRS** | **Kuro-shima** | **3.62** | **45** | P | **Pn** | **18 16 42.9** | **+0.6** |
| JKRS | | | | *eS* | **Sn** | **18 17 25.6** | **+0.9** |
| **JIJ** | **Ishigaki jima** | **3.80** | **45** | P | **Pn** | **18 16 45.4** | **+0.7** |
| JIJ | | | | *eS* | **Sn** | **18 17 29.9** | **+0.8** |
| **JISG** | **Ishigakijimahi** | **4.06** | **44** | P | **Pn** | **18 16 47.4** | **-0.9** |
| JISG | | | | S | **Sn** | **18 17 36.2** | **+0.6** |
| **JTJ** | **Tarama** | **4.36** | **47** | P | **Pn** | **18 16 53.0** | **+0.6** |
| JTJ | | | | *eS* | **Sn** | **18 17 44.5** | **+1.6** |

*TUL* ***13*** *18:21:20.2±1.4,36.°52N±0.°02×98.°70W±0.°04, h4km±7km, ML3.7, mb_Lg3.5/96(NEIC), Error ellipse: s-maj=5.2km s-min=2.7km az=104.0*

**NEIC 13 18:21:20.8±1.6, 36.°50N±0.°02×98.°61W±0.°03, h5km±2km, Error ellipse: s-maj=5.5km s-min=3.0km az=302.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.34** | **249** | Pg | Pg | 18 21 26.0 | -1.3 |
| U32A | | | | Sg | Sg | 18 21 30.5 | -1.4 |
| **OKCFA** | **Oklahoma City** | **1.44** | **139** | | Pn | 18 21 47.5 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **1.45** | **139** | | Pn | 18 21 47.6 | 0.0 |
| **FNO** | **Franklin** | **1.58** | **141** | Pn | Pn | 18 21 49.9 | +0.4 |
| **T35A** | **Sooner Cattle** | **1.74** | **76** | Pn | Pn | 18 21 52.0 | +0.4 |
| T35A | | | | lAmb_Lg | | 18 22 19.9 | |
| | comp=Z,194nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.77** | **185** | Pn | Pn | 18 21 51.2 | -0.8 |
| **R32A** | **Long Quarter,** | **1.92** | **358** | Pn | Pn | 18 21 54.3 | +0.2 |
| **W35A** | **Tecumseh** | **1.95** | **133** | Pn | Pn | 18 21 55.1 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.00** | **161** | Pn | Pn | 18 21 55.5 | +0.3 |
| X34A | | | | lAmb_Lg | | 18 22 27.8 | |
| | comp=Z,266nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.35** | **104** | | Pn | 18 21 60.0 | -0.2 |
| TUL1 | | | | lAmb_Lg | | 18 22 39.4 | |
| | comp=Z,198nm,1.1s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **339** | Pn | Pn | 18 22 02.6 | +0.7 |
| **AMTX** | **Amarillo** | **2.98** | **238** | Pn | Pn | 18 22 09.4 | +0.7 |
| **KSU1** | **Kansas State U** | **3.04** | **31** | Pn | Pn | 18 22 10.0 | +0.5 |
| KSU1 | | | | lAmb_Lg | | 18 23 00.9 | |
| | comp=Z,99nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.26** | **125** | Pn | Pn | 18 22 13.0 | +0.5 |
| **Z35A** | **Perchaven, San** | **3.35** | **160** | | Pn | 18 22 14.2 | +0.3 |
| **U38A** | **Gravette** | **3.41** | **90** | | Pn | 18 22 14.4 | -0.2 |
| U38A | | | | lAmb_Lg | | 18 23 14.5 | |
| | comp=Z,100nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.77** | **92** | | Pn | 18 22 19.7 | 0.0 |
| **ABTX** | **Abilene, Hawle** | **3.96** | **193** | | Pn | 18 22 22.2 | 0.0 |
| ABTX | | | | lAmb_Lg | | 18 23 32.6 | |
| | comp=Z,105nm,1.2s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.05** | **309** | | Pn | 18 22 24.1 | +0.5 |
| **W39A** | **Magazine** | **4.13** | **107** | | Pn | 18 22 25.3 | +0.8 |
| W39A | | | | lAmb_Lg | | 18 23 38.5 | |
| | comp=Z,126nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.24** | **235** | | Pn | 18 22 26.2 | +0.1 |
| MSTX | | | | lAmb_Lg | | 18 23 39.7 | |
| | comp=Z,132nm,0.9s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.33** | **12** | | Pn | 18 22 26.0 | -1.3 |
| **S39A** | **Bolivar** | **4.39** | **73** | Pn | Pn | 18 22 28.6 | +0.4 |
| S39A | | | | lAmb_Lg | | 18 23 41.4 | |
| | comp=Z,84nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.40** | **136** | | Pn | 18 22 28.7 | +0.5 |
| Z38A | | | | lAmb_Lg | | 18 23 43.4 | |
| | comp=Z,125nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **4.55** | **114** | Pn | Pn | 18 22 30.0 | -0.3 |
| MIAR | | | | lAmb_Lg | | 18 23 57.0 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.60** | **168** | | Pn | 18 22 31.0 | 0.0 |
| **U40A** | **Yellville** | **4.64** | **90** | | Pn | 18 22 31.2 | -0.4 |
| U40A | | | | lAmb_Lg | | 18 23 55.6 | |
| | comp=Z,71nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.70** | **279** | Pn | Pn | 18 22 31.7 | -0.9 |
| **BGNE** | **Belgrade** | **4.91** | **4** | Pn | Pn | 18 22 34.7 | -0.6 |
| BGNE | | | | lAmb_Lg | | 18 24 06.6 | |
| | comp=Z,113nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **4.93** | **27** | | Pn | 18 22 34.4 | -1.1 |
| **237A** | **Washetta, Mont** | **5.05** | **152** | lAmb_Lg | | 18 24 13.5 | |
| | comp=Z,62nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.08** | **51** | | Pn | 18 22 37.0 | -0.6 |
| P38A | | | | lAmb_Lg | | 18 24 13.0 | |
| | comp=Z,72nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.12** | **111** | Pn | Pn | 18 22 37.9 | -0.3 |
| **MGMO** | **Mountain Grove** | **5.13** | **81** | Pn | Pn | 18 22 37.9 | -0.3 |
| **OGNE** | **Ogallala** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CCM | | | | IAmb_Lg | | 18 24 35.3 | | |
| | comp=Z,69nm,0.8s | | | | | | | |
| **JCT** | **Junction City** | **6.09** | **190** | | Pn | 18 22 50.1 | -1.4 | |
| JCT | | | | IAmb_Lg | | 18 24 42.8 | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **K31A** | **O'Neill** | **6.11** | **359** | Pn | Pn | 18 22 49.9 | -1.9 | |
| **ISCO** | **Idaho Springs** | **6.42** | **303** | | Pn | 18 22 54.8 | -1.6 | |
| ISCO | | | | IAmb_Lg | | 18 24 48.6 | | |
| | comp=Z,50nm,0.7s | | | | | | | |
| **HBAR** | **Harrisburg** | **6.51** | **96** | | Pn | 18 22 55.4 | -1.9 | |
| **ANMO** | **Albuquerque** | **6.57** | **259** | Pn | Pn | 18 22 56.4 | -1.9 | |
| **PBMO** | **Poplar Bluff** | **6.58** | **85** | | Pn | 18 22 56.9 | -1.3 | |
| PBMO | | | | IAmb_Lg | | 18 24 52.8 | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.68** | **283** | | Pn | 18 22 58.5 | -1.4 | |
| **FVM** | **French Village** | **6.69** | **75** | | Pn | 18 22 57.7 | -2.1 | |
| FVM | | | | IAmb_Lg | | 18 24 56.5 | | |
| | comp=Z,68nm,0.8s | | | | | | | |
| **SCIA** | **State Center** | **6.83** | **36** | IAmb_Lg | | 18 25 06.1 | | |
| | comp=Z,83nm,0.8s | | | | | | | |
| **BNM** | **Barren Site** | **6.96** | **253** | Pn | Pn | 18 23 02.3 | -1.3 | |
| **SLM** | **Saint Louis** | **6.98** | **70** | IAmb_Lg | | 18 25 18.2 | | |
| | comp=Z,64nm,1.1s | | | | | | | |
| **PEBM** | **Pemiscott Bayo** | **7.07** | **91** | IAmb_Lg | | 18 25 16.2 | | |
| | comp=Z,77nm,0.8s | | | | | | | |
| **PARMO** | **Parma** | **7.13** | **86** | IAmb_Lg | | 18 25 11.3 | | |
| | comp=Z,73nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.17** | **314** | Pn | Pn | 18 23 04.7 | -1.9 | |
| PHWY | | | | IAmb_Lg | | 18 25 13.0 | | |
| | comp=Z,48nm,0.8s | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.21** | **253** | IAmb_Lg | | 18 25 16.5 | | |
| | comp=Z,56nm,0.7s | | | | | | | |
| **N41A** | **Harden Midland** | **7.38** | **53** | | Pn | 18 23 07.9 | -1.2 | |
| **ECSD** | **EROS Data Cent** | **7.38** | **11** | Pn | Pn | 18 23 07.3 | -1.8 | |
| ECSD | | | | IAmb_Lg | | 18 25 27.1 | | |
| | comp=Z,44nm,1.1s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.38** | **231** | | Pn | 18 23 08.0 | -1.3 | |
| MNTX | | | | IAmb_Lg | | 18 25 11.7 | | |
| | comp=Z,39nm,0.7s | | | | | | | |
| **HICK** | **Hickman** | **7.55** | **87** | Pn | Pn | 18 23 10.8 | -0.8 | |
| **S44A** | **Carbondale** | **7.57** | **78** | Pn | Pn | 18 23 11.3 | -0.5 | |
| S44A | | | | IAmb_Lg | | 18 25 35.3 | | |
| | comp=Z,51nm,0.7s | | | | | | | |
| **K38A** | **Parkersburg** | **7.61** | **35** | Pn | Pn | 18 23 11.9 | -0.4 | |
| **735A** | **Kenedy** | **7.66** | **175** | IAmb_Lg | | 18 25 40.1 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| **OXF** | **Oxford** | **7.76** | **102** | IAmb_Lg | | 18 25 44.8 | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **W45A** | **Hickory Valley** | **7.77** | **97** | IAmb_Lg | | 18 25 34.3 | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.82** | **64** | Pn | Pn | 18 23 14.4 | -0.8 | |
| **SUSD** | **Miller** | **7.94** | **358** | IAmb_Lg | | 18 25 39.4 | | |
| | comp=Z,49nm,0.8s | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.97** | **70** | Pn | Pn | 18 23 15.0 | -2.2 | |
| **L40A** | **Anamosa** | **7.98** | **44** | Pn | Pn | 18 23 16.3 | -1.0 | |
| **T45A** | **Paducah** | **8.02** | **83** | | Pn | 18 23 16.2 | -1.7 | |
| **TX31** | **Lajitas Ar. Si** | **8.31** | **212** | Pn | Pn | 18 23 20.8 | -1.4 | |
| **TX32** | **Lajitas Array** | **8.32** | **212** | | Pn | 18 23 21.3 | -0.8 | |
| **RWWY** | **Rawlins** | **8.46** | **310** | IAmb_Lg | | 18 25 49.3 | | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.49** | **26** | IAmb_Lg | | 18 25 57.7 | | |
| | comp=Z,32nm,0.8s | | | | | | | |
| **K22A** | **Casper** | **8.66** | **318** | IAmb_Lg | | 18 26 13.6 | | |
| | comp=Z,99nm,0.9s | | | | | | | |
| **L42A** | **Oliver, Polo** | **8.85** | **49** | IAmb_Lg | | 18 26 02.2 | | |
| | comp=Z,45nm,0.9s | | | | | | | |
| **JFWS** | **Jewell Farm** | **9.08** | **43** | IAmb_Lg | | 18 26 33.1 | | |
| | comp=Z,41nm,0.8s | | | | | | | |
| **I40A** | **Norwalk** | **9.58** | **37** | IAmb_Lg | | 18 26 29.4 | | |
| | comp=Z,25nm,0.8s | | | | | | | |

*IDC* ***13*** *18:31:58.7±3.5,41.°73N×43.°11E,h0km,mb3.4/2, mb1 3.5/2,mb1mx2.7/41,mbtmp3.4/2,Error ellipse: s-maj=62.8km s-min=21.8km az=69.0*

*AZER* ***13*** *18:32:07.1±0.9,43.°77N×45.°15E,h10km,Error ellipse: s-maj=6.3km s-min=4.2km az=167.0*

*TIF* ***13*** *18:32:08.5,43.°39N×45.°52E,h10km±1km*

*NORS* ***13*** *18:32:09.6±0.0,43.°30N×45.°05E,h21km,MPVA3.7*

*MOS* ***13*** *18:32:09.8±0.0,43.°30N×45.°03E,h19km,MPVA3.8*

*DRS* ***13*** *18:32:10.6±0.0,43.°23N×44.°84E,h18km*

**ISC 13 18:32:10.2**±1.0,**43.°30N**±0.°02×**45.°04E**±0.°01,**h20**km±4km, **n67**,σ**1°89**/122,**Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMGR** | **Komgaron** | **0.28** | **208** | *e*Pg | **Pb** | **18 32 16.4** | **-0.1** |
| KMGR | | | | *e*Sg | **Sn** | **18 32 22.6** | **-2.3** |
| **VLKR** | **Vladikavkaz** | **0.37** | **227** | *e*Pg | **Pb** | **18 32 18.3** | **+0.1** |
| VLKR | | | | *e*Sg | **Sb** | **18 32 24.8** | **+1.2** |
| **TRKR** | **Terskaya** | **0.48** | **332** | *e*Pg | **Pb** | **18 32 20.1** | **+0.1** |
| TRKR | | | | *e*Sg | **Sn** | **18 32 28.9** | **-1.0** |
| **GROC** | **Groznyy** | **0.56** | **100** | *e*Pg | **Pn** | **18 32 23.1** | **0.0** |
| GROC | | | | *e*Sg | **Sn** | **18 32 32.2** | **+0.4** |
| **ARNR** | **Ardon** | **0.57** | **258** | *e*Pg | **Pn** | **18 32 22.4** | **-0.8** |
| ARNR | | | | *e*Sg | **Sn** | **18 32 30.6** | **-1.4** |
| **PRTR** | **Priterechnaya** | **0.71** | **309** | *e*Pg | **Pn** | **18 32 24.5** | **-0.7** |
| PRTR | | | | *e*Sg | **Sn** | **18 32 36.8** | **+1.2** |
| **STDR** | **Stavd-Durt** | **0.72** | **276** | *e*Pg | **Pn** | **18 32 25.8** | **+0.5** |
| STDR | | | | *e*Sg | **Sn** | **18 32 38.0** | **+2.2** |
| **LACR** | **Lac** | **0.72** | **229** | *e*Pg | **Pn** | **18 32 24.7** | **-0.8** |
| LACR | | | | *e*Sg | **Sn** | **18 32 37.1** | **+1.1** |
| **PNSH** | **Pansheti** | **0.74** | **205** | P | **Pn** | **18 32 24.9** | **-0.8** |
| **KORR** | **Kora** | **0.74** | **254** | *e*Pg | **Pn** | **18 32 25.1** | **-0.6** |
| KORR | | | | *e*Sg | **Sn** | **18 32 36.0** | **-0.4** |
| **DVE** | **Vedeno** | **0.86** | **113** | *e*Pg | **Pn** | **18 32 27.1** | **-0.3** |
| DVE | | | | *e*Sg | **Sn** | **18 32 39.5** | **0.0** |
| **LSNR** | **Lesken** | **0.89** | **269** | *e*Pg | **Pn** | **18 32 28.6** | **+0.9** |
| LSNR | | | | *e*Sg | **Sn** | **18 32 42.5** | **+2.5** |
| **ZEI** | **Tsey** | **0.98** | **239** | *e*Pg | **Pg** | **18 32 28.8** | **-0.6** |
| ZEI | | | | *e*Sg | **Sn** | **18 32 44.1** | **+1.5** |
| **NCK** | **Nalchik** | **1.07** | **281** | *e*Pg | **Pg** | **18 32 31.2** | **+0.1** |
| NCK | | | | *e*Sg | **Sg** | **18 32 47.1** | **+1.9** |
| **BTLR** | **Botlikh** | **1.07** | **126** | *e*Pg | **Pg** | **18 32 31.2** | **+0.1** |
| BTLR | | | | *e*Sg | **Sg** | **18 32 46.3** | **+1.0** |
| **DIGR** | **Digorskoe uzhe** | **1.14** | **250** | *e*Pg | **Pb** | **18 32 31.3** | **-0.1** |
| DIGR | | | | *e*Sg | **Sg** | **18 32 48.3** | **+0.8** |
| **DLMR** | **Dylym** | **1.18** | **101** | *e*Pg | **Pg** | **18 32 33.2** | **0.0** |
| DLMR | | | | *e*Sg | **Sn** | **18 32 47.4** | **+0.1** |
| **KBTC** | **Kuba-Taba** | **1.29** | **294** | *e*Pg | **Pb** | **18 32 34.1** | **+0.1** |
| KBTC | | | | *e*Sg | **Sg** | **18 32 52.1** | **-0.1** |
| **DBC** | **Dubki** | **1.34** | **102** | *e*Pg | **Pg** | **18 32 35.7** | **-0.4** |
| DBC | | | | *e*Sg | **Sg** | **18 32 54.7** | **+1.1** |
| **ONI** | **Oni** | **1.37** | **239** | P | **Pg** | **18 32 35.5** | **-1.2** |
| ONI | | | | S | **Sg** | **18 32 55.8** | **+1.3** |
| **ONI** | **Oni** | **1.37** | **239** | *i* Pg | **Pg** | **18 32 35.6** | **-1.0** |
| ONI | | | | *e*Sg | **Sg** | **18 32 55.8** | **+1.3** |
| **UNCR** | **Uncukul** | **1.41** | **114** | *e*Pg | **Pb** | **18 32 36.3** | **+0.3** |
| UNCR | | | | *e*Sg | **Sg** | **18 32 56.3** | **+0.3** |
| **XNZR** | **Khunzakh** | **1.44** | **121** | *e*Pg | **Pb** | **18 32 36.7** | **+0.2** |
| XNZR | | | | *e*Sg | **Sg** | **18 32 57.6** | **+0.8** |
| **KRNR** | **Karanay** | **1.45** | **108** | *e*Pg | **Pb** | **18 32 36.9** | **+0.3** |
| KRNR | | | | *e*Sg | **Sg** | **18 32 56.8** | **-0.3** |
| **SEAG** | **Tbilisi Sea** | **1.55** | **187** | P | **Pg** | **18 32 39.4** | **-0.6** |
| **BUJR** | **Buynaksk** | **1.59** | **107** | *e*Pg | **Pg** | **18 32 40.6** | **-0.2** |
| BUJR | | | | *e*Sg | **Sg** | **18 33 03.0** | **+1.5** |
| **ARKR** | **Arakani** | **1.59** | **115** | *e*Pg | **Pg** | **18 32 39.9** | **-1.1** |
| ARKR | | | | *e*Sg | **Sg** | **18 33 00.6** | **-1.1** |
| **PYA1** | **Pyatigorsk** | **1.60** | **299** | *e*Pg | **Pb** | **18 32 38.2** | **-1.0** |
| PYA1 | | | | *e*Sg | **Sb** | **18 32 59.6** | **+0.5** |
| **KBZ** | **Khabaz** | **1.62** | **286** | Pg | **Pn** | **18 32 38.0** | **+0.3** |
| | 2.0nm,0.3s,baz=124,slow=4.7,SNR=64 | | | | | | |
| KBZ | | | | Lg | Lg | 18 33 00.4 | |
| | 9.8nm,0.3s,baz=157,slow=7.6,SNR=8.6 | | | | | | |
| **KBZ** | **Khabaz** | **1.62** | **286** | *e*Pg | **Pb** | **18 32 38.5** | **-0.9** |
| KBZ | | | | *e*Sg | **Sb** | **18 33 00.4** | **+1.1** |
| **GNBR** | **Gunib** | **1.68** | **122** | *e*Pg | **Pb** | **18 32 41.0** | **+0.5** |
| GNBR | | | | *e*Sg | **Sg** | **18 33 04.1** | **-0.4** |
| **NEY** | **Neytrino** | **1.69** | **269** | *e*Pg | **Pb** | **18 32 40.2** | **-0.7** |
| NEY | | | | *e*Sg | **Sb** | **18 33 02.3** | **+0.5** |
| **LGD** | **Lagodekhi** | **1.71** | **148** | P | **Pb** | **18 32 41.7** | **+0.6** |
| **BEYR** | **Belyy Ugol+** | **1.77** | **295** | *e*Pg | **Pn** | **18 32 40.5** | **+0.8** |
| BEYR | | | | *e*Sg | **Sb** | **18 33 03.9** | **+0.2** |
| **SHA1** | **Shidzhatmaz** | **1.79** | **285** | *e*Pg | **Pb** | **18 32 42.0** | **-0.5** |
| SHA1 | | | | *e*Sg | **Sg** | **18 33 06.7** | **-1.4** |
| **KIV0** | **Kislovodsk Arr** | **1.83** | **292** | *e*Pg | **Pb** | **18 32 41.8** | **-1.3** |
| KIV0 | | | | *e*Sg | **Sb** | **18 33 05.2** | **-0.3** |
| **KIV** | **Kislovodsk** | **1.83** | **292** | *e*Pg | **Pb** | **18 32 41.8** | **-1.3** |
| KIV | | | | *e*Sg | **Sb** | **18 33 04.8** | **-0.8** |
| **DGRG** | **David-gareji** | **1.86** | **172** | P | **Pb** | **18 32 44.2** | **+0.6** |
| **TRLG** | **Trialeti** | **1.89** | **202** | P | **Pb** | **18 32 44.0** | **-0.2** |
| TRLG | | | | S | **Sg** | **18 33 10.3** | **-1.0** |
| **KMKR** | **Kumukh** | **1.91** | **127** | *e*Pg | **Pb** | **18 32 44.3** | **-0.3** |
| KMKR | | | | *e*Sg | **Sg** | **18 33 11.6** | **-0.4** |
| **DDFL** | **Dedoflistskaro** | **2.02** | **156** | P | **Pg** | **18 32 48.7** | **-0.3** |
| **ZKTA** | **Zakatala** | **2.03** | **144** | P | **Pb** | **18 32 46.7** | **+0.2** |
| | SNR=10 | | | | | | |
| ZKTA | | | | S | **Sg** | **18 33 15.2** | **-0.5** |
| **DMNI** | **Dmanisi** | **2.07** | **198** | P | **Pb** | **18 32 46.0** | **-1.2** |
| **ALER** | **Alexandrovskoy** | **2.12** | **314** | *e*Pg | **Pn** | **18 32 46.0** | **+1.4** |
| ALER | | | | *e*Sg | **Sb** | **18 33 12.5** | **-1.4** |
| **QZX** | **Qazax, Azerbai** | **2.25** | **174** | P | **Pb** | **18 32 50.6** | **+0.3** |
| QZX | | | | S | **Sg** | **18 33 24.2** | **+1.3** |
| **GDB** | **GEDABAY** | **2.63** | **168** | P | **Pb** | **18 32 55.8** | **-1.0** |
| | SNR=2.8 | | | | | | |
| GDB | | | | S | **Sg** | **18 33 32.5** | **-2.4** |
| **SEKA** | **Sheki** | **2.63** | **142** | P | **Pb** | **18 32 54.7** | **-2.1** |
| | SNR=6.3 | | | | | | |
| SEKA | | | | S | **Sb** | **18 33 30.1** | **+1.4** |
| **GANJ** | **Ganja** | **2.82** | **160** | P | **Pb** | **18 32 57.3** | **-2.7** |
| GANJ | | | | S | **Sb** | **18 33 37.1** | **+3.0** |
| **QSAR** | **Qusar** | **2.98** | **126** | P | **Pn** | **18 32 58.5** | **+2.1** |
| QSAR | | | | S | **Sb** | **18 33 38.2** | **-0.4** |
| **XNQ** | **Khinaliq** | **3.13** | **132** | P | **Pn** | **18 33 00.3** | **+1.6** |
| XNQ | | | | S | **Sb** | **18 33 41.7** | **-1.5** |
| **QBL** | **Gabala** | **3.14** | **138** | P | **Pn** | **18 33 01.8** | **+3.1** |
| QBL | | | | S | **Sb** | **18 33 42.9** | **-0.4** |
| **QUBA** | **Quba, Azerbaij** | **3.21** | **126** | P | **Pn** | **18 33 01.8** | **+2.1** |
| QUBA | | | | S | **Sb** | **18 33 43.7** | **-1.7** |
| **IML** | **Ismayilli** | **3.43** | **136** | P | **Pn** | **18 33 05.5** | **+2.9** |
| IML | | | | S | **Sb** | **18 33 49.5** | **-2.1** |
| **AGDM** | **Agdam** | **3.54** | **153** | P | **Pn** | **18 33 08.0** | **+3.8** |
| AGDM | | | | S | **Sb** | **18 33 54.9** | **0.0** |
| **SIZA** | **Siyzn** | **3.63** | **127** | P | **Pn** | **18 33 07.0** | **+1.6** |
| SIZA | | | | S | **Sn** | **18 33 52.1** | **+4.5** |
| **GUZR** | **Guzeripl'** | **3.64** | **283** | *e*Pn | **Pn** | **18 33 06.7** | **+1.2** |
| GUZR | | | | *e*Sn | **Sn** | **18 33 46.6** | **-1.3** |
| **PQL** | **Pirkuli** | **3.65** | **132** | P | **Pn** | **18 33 08.4** | **+2.7** |
| PQL | | | | S | **Sb** | **18 33 55.2** | **-2.8** |
| **ATGJ** | **Altiaghaj** | **3.79** | **129** | P | **Pn** | **18 33 09.6** | **+2.0** |
| ATGJ | | | | S | **Sb** | **18 33 57.7** | **-4.3** |
| **SBZ** | **Shahbuz** | **3.92** | **174** | P | **Pn** | **18 33 13.6** | **+4.2** |
| | SNR=7.6 | | | | | | |
| SBZ | | | | S | **Sb** | **18 34 05.4** | **-0.4** |
| **GBS** | **Qobustan** | **4.01** | **132** | P | **Pn** | **18 33 12.9** | **+2.2** |
| GBS | | | | S | **Sb** | **18 34 04.6** | **-3.9** |
| **NAX** | **Nakhchivan** | **4.14** | **175** | P | **Pn** | **18 33 16.0** | **+3.7** |
| NAX | | | | S | **Sb** | **18 34 12.8** | **+0.8** |
| **ORD** | **Ordubad** | **4.43** | **170** | P | Pn | 18 33 21.1 | +4.7 |
| **GLBA** | **Clilabad** | **4.78** | **147** | P | **Pn** | **18 33 24.8** | **+3.7** |
| GLBA | | | | S | **Sb** | **18 34 24.9** | **-5.4** |
| **YRD** | **Yardimli** | **5.00** | **150** | P | **Pn** | **18 33 26.7** | **+2.4** |
| YRD | | | | S | **Sb** | **18 34 30.0** | **-7.0** |
| **LRK** | **Lerik** | **5.28** | **151** | P | **Pn** | **18 33 32.3** | **+4.1** |
| LRK | | | | S | **Sb** | **18 34 38.5** | **-6.4** |
| **FINES** | **FINESS Array B** | **21.40** | **335** | P | **P** | **18 36 55.7** | **-0.7** |
| | 1.4nm,0.9s,baz=139,slow=11,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **26.39** | **69** | P | P | 18 37 53.5 | +8.3 |
| | 0.2nm,0.6s,baz=290,slow=6.2,SNR=2.2 | | | | | | |

**DJA 13 18:41:27.2**±0.2,**7°S**±2°×**11°2E**±°,**h10**km,**M3.3**/15, **MLv3.3**/15,**Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PWJI** | **Pagerwojo** | **0.59** | **183** | P | Pg | 18 41 39.0 | +0.3 |
| PWJI | | | | S | Sb | 18 41 48.4 | +0.4 |
| **PWJI** | **Pagerwojo** | **0.59** | **183** | S | Sb | 18 41 48.4 | +0.4 |
| **TBJI** | **Tambak Boyo** | **0.61** | **2** | P | Pb | 18 41 39.9 | 0.0 |
| **GRJI** | **Gresik** | **0.82** | **52** | P | Pg | 18 41 42.8 | -0.3 |
| **PCJI** | **Pacitan** | **1.00** | **220** | P | Pg | 18 41 45.8 | -0.6 |
| **UWJI** | **Ujung Watu** | **1.33** | **319** | P | Pn | 18 41 50.8 | -1.1 |
| **UGM** | **Wanagama** | **1.38** | **250** | P | Pn | 18 41 52.1 | -0.5 |
| **SMRI** | **Semarang** | **1.43** | **285** | P | Pn | 18 41 52.4 | -0.8 |
| **YOGI** | **Yogyakarta** | **1.57** | **256** | P | Pn | 18 41 55.2 | 0.0 |
| **BWJI** | **Bawean** | **1.77** | **28** | P | Pn | 18 41 58.6 | +0.7 |
| **BLJI** | **Banyuglugur** | **1.78** | **100** | P | Pn | 18 41 58.2 | +0.2 |
| **GMJI** | **Gumukmas** | **1.81** | **118** | P | Pn | 18 41 58.6 | +0.2 |
| **KMMI** | **Kalianget** | **2.15** | **80** | P | Pn | 18 42 02.6 | -0.6 |
| **ABJI** | **Asem Bagus** | **2.41** | **99** | P | Pn | 18 42 06.4 | -0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.52** | **114** | P | Pn | 18 42 08.0 | -0.3 |
| **KPJI** | **Karang Pucung** | **2.88** | **272** | P | Pn | 18 42 12.9 | -0.2 |
| **CMJI** | **Cimerak** | **3.37** | **264** | P | Pn | 18 42 19.7 | -0.2 |

*IDC* ***13*** *18:43:47.5±1.8,11.°05S×119.°50E,h0km,mb3.5/2, mb1 3.6/6,mb1mx3.3/29,mbtmp3.5/6,ML3.4/4,Error ellipse: s-maj=60.8km s-min=23.2km az=47.0*

**ISC 13 18:43:52.4**±1.3,**11.°23S**±0.°09×**119.°7E**±0.°1,**h35**km,**n6**, σ**3°83**/10,**South of Sumba**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **4.01** | **76** | Pn | **Pn** | **18 44 53.2** | **+1.8** |
| | 3.9nm,0.3s,baz=264,slow=1.6,SNR=10 | | | | | | |
| BATI | | | | Sn | **Sn** | **18 45 39.1** | **+1.8** |
| | 2.8nm,0.3s,baz=330,slow=18,SNR=1.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.91** | **141** | Pn | **Pn** | **18 46 00.8** | **+2.0** |
| | 0.3nm,0.3s,baz=340,slow=11,SNR=26 | | | | | | |
| FITZ | | | | Sn | **Sn** | **18 47 37.6** | **-0.4** |
| | 0.9nm,0.3s,baz=169,slow=21,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.52** | **123** | Pn | **Pn** | **18 47 42.7** | **+1.1** |
| | 0.1nm,0.3s,baz=301,slow=14,SNR=6.9 | | | | | | |
| WRA | | | | Sn | **Sn** | **18 50 35.8** | **-8.3** |
| | 0.1nm,0.3s,baz=287,slow=25,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.31** | **134** | P | **Pn** | **18 48 07.4** | **+3.6** |
| | 0.1nm,0.3s,baz=322,slow=14,SNR=7.9 | | | | | | |
| ASAR | | | | S | **Sn** | **18 51 24.9** | **-2.6** |
| | 0.1nm,0.3s,baz=302,slow=22,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **59.98** | **350** | P | **P** | **18 53 54.6** | **-0.9** |
| | 0.4nm,0.9s,baz=167,slow=6.9,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.75** | **333** | P | **P** | **18 54 38.8** | **-1.3** |
| | 0.4nm,0.8s,baz=148,slow=7.1,SNR=5.0 | | | | | | |

*TUL* ***13*** *18:50:58.3±1.8,36.°51N±0.°02×98.°72W±0.°02,h8km±7km, ML2.5,mb_Lg2.3/6(NEIC),Error ellipse: s-maj=3.5km s-min=2.4km az=158.0*

**NEIC 13 18:50:57.9**±2.0,**36.°530N**±0.°010×**98.°70W**±0.°02,**h5**km±2km, **Error ellipse: s-maj=3.2km s-min=2.9km az=284.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.29** | **239** | Pg | Pg | 18 51 03.4 | -0.1 |
| U32A | | | | Sg | Sg | 18 51 08.0 | +0.6 |
| **FNO** | **Franklin** | **1.65** | **140** | Pn | Pn | 18 51 26.4 | -1.2 |
| **WMOK** | **Wichita Mounta** | **1.79** | **182** | Pn | Pn | 18 51 28.9 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.80** | **77** | Pn | Pb | 18 51 32.3 | -0.3 |
| **R32A** | **Long Quarter,** | **1.89** | **360** | Pn | Pb | 18 51 32.3 | +0.7 |
| **W35A** | **Tecumseh** | **2.02** | **132** | Pn | Pn | 18 51 33.3 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.05** | **160** | | Pn | 18 51 33.4 | +0.3 |
| X34A | | | | IAmb_Lg | | 18 52 02.1 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.93** | **237** | IAmb_Lg | | 18 52 31.0 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **U38A** | **Gravette** | **3.48** | **90** | Pn | Pn | 18 51 51.9 | -0.8 |
| **HHAR** | **Hobbs** | **3.85** | **92** | IAmb_Lg | | 18 53 05.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.45** | **73** | Pn | Pn | 18 52 04.4 | -1.6 |
| **SMCO** | **Snowmass** | **7.06** | **294** | IAmb_Lg | | 18 54 43.7 | |
| | comp=Z,14nm,0.8s | | | | | | |

**DJA 13 18:52:32.0**±1.0,**7°S**±8°×**11°2E**±°,**h20**km±8km,**M2.4**/7, **MLv2.4**/7,**Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PWJI** | **Pagerwojo** | **0.61** | **199** | P | Pn | 18 52 45.1 | -0.5 |
| **PCJI** | **Pacitan** | **1.11** | **228** | P | Pn | 18 52 52.2 | -0.3 |
| **UWJI** | **Ujung Watu** | **1.46** | **314** | P | Pn | 18 52 57.5 | +0.2 |
| **UGM** | **Wanagama** | **1.55** | **252** | P | Pn | 18 52 58.8 | +0.3 |
| **SMRI** | **Semarang** | **1.60** | **284** | P | Pn | 18 52 58.9 | -0.3 |
| **GMJI** | **Gumukmas** | **1.64** | **120** | P | Pn | 18 52 59.8 | 0.0 |

**IDC 13 19:06:45.8**±7.1,**1.°57N**×**128.°03E**,**h141**km±50km,**mb3.1**/3, **mb1 3.2**/5,**mb1mx3.0**/46,**mbtmp3.5**/5,**Error ellipse: s-maj=78.7km s-min=58.1km az=22.0**,**Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.04** | **127** | P | Pn | 19 07 46.9 | +0.5 |
| | 0.8nm,0.3s,baz=321,slow=18,SNR=5.8 | | | | | | |
| SIJI | | | | S | Sn | 19 08 33.6 | +0.2 |
| | 1.1nm,0.3s,baz=192,slow=23,SNR=5.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.68** | **187** | P | P | 19 11 03.9 | -0.2 |
| | 0.1nm,0.3s,baz=26,slow=12,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.25** | **164** | P | P | 19 11 32.2 | +0.8 |
| | 0.6nm,0.4s,baz=343,slow=11,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **25.73** | **168** | P | P | 19 12 03.3 | 0.0 |
| | 0.3nm,0.8s,baz=354,slow=7.5,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **35.66** | **160** | P | P | 19 13 29.7 | -0.8 |
| | 1.5nm,0.7s,baz=325,slow=9.6,SNR=3.1 | | | | | | |

*TUL* ***13*** *19:07:14.7±0.5,36.°48N±0.°02×98.°76W±0.°03,h8km±5km, ML2.6,mb_Lg2.3/11(NEIC),Error ellipse: s-maj=3.8km s-min=1.8km az=114.0*

**NEIC 13 19:07:14.9**±0.9,**36.°48N**±0.°04×**98.°79W**±0.°02,**h12**km±7km, **Error ellipse: s-maj=5.1km s-min=2.9km az=184.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.20** | **240** | Sg | Sg | 19 07 22.8 | +0.6 |
| **OKCFA** | **Oklahoma City** | **1.52** | **134** | | Pn | 19 07 41.8 | -0.2 |
| **FNO** | **Franklin** | **1.66** | **137** | Pn | Pn | 19 07 44.1 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.74** | **180** | Pn | Pn | 19 07 45.0 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.88** | **76** | | Pn | 19 07 47.6 | +0.6 |
| T35A | | | | IAmb_Lg | | 19 08 15.8 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **1.94** | **2** | | Pb | 19 07 49.4 | -1.0 |
| **X34A** | **Smith Ranch, M** | **2.03** | **157** | | Pb | 19 07 50.6 | -1.2 |
| **W35A** | **Tecumseh** | **2.04** | **130** | Pn | Pn | 19 07 49.9 | +0.7 |
| **TUL1** | **Leonard** | **2.49** | **102** | Pn | Pn | 19 07 55.4 | 0.0 |
| **AMTX** | **Amarillo** | **2.84** | **237** | IAmb_Lg | | 19 08 50.6 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.91** | **191** | IAmb_Lg | | 19 09 25.2 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.95** | **311** | IAmb_Lg | | 19 09 22.6 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.56** | **280** | IAmb_Lg | | 19 09 43.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **OGNE** | **Ogallala** | **5.13** | **331** | IAmb_Lg | | 19 10 06.1 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.25** | **111** | IAmb_Lg | | 19 10 04.6 | |
| | comp=Z,7.4nm,1.1s | | | | | | |

*IDC* ***13*** *19:12:19.0±0.8,42.°58N×79.°98E,h0km,mb3.7/7, mb1 3.7/13,mb1mx3.6/55,mbtmp3.6/13,ML3.0/6,MS3.0/2, Ms1 3.0/2,ms1mx2.5/88,Error ellipse: s-maj=13.7km s-min=11.7km az=140.0*

*BJI* ***13*** *19:12:19.0±0.0,42.°69N×79.°79E,h6km,mb3.6/4,mB4.4/2, ML3.8/8,Ms3.7/1*

*SOME* ***13*** *19:12:22.0,42.°73N×79.°80E,h5km,MS2.8*

*KRNET* ***13*** *19:12:23.2±0.1,42.°75N×79.°83E,mb4.0*

*NNC* ***13*** *19:12:24.2±0.8,42.°85N×79.°87E,h0km,mb4.6,mpv4.2, Error ellipse: s-maj=9.0km s-min=2.7km az=146.0*

**ISC 13 19:12:22.5**±1.3,**42.°70N**±0.°04×**79.°83E**±0.°03,**h11**km±8km, **n86**,σ**2°03**/124,**mb3.7**/**7**,**22C-12D**,**Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UZB** | **Uzynbulak** | **0.74** | **307** | *e*P | **Pb** | **19 12 38.2** | **+0.7** |
| | 53nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sn** | **19 12 49.7** | **-0.7** |
| | 536nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **0.74** | **307** | *e*P | **Pb** | **19 12 38.0** | **+0.5** |
| | baz=304 | | | | | | |
| **KTMS** | **Ketmen** | **0.83** | **27** | *e*P | **Pg** | **19 12 38.4** | **-0.2** |
| | 284nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **19 12 50.1** | **-0.3** |
| | 994nm,0.3s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.08** | **259** | ⇓*i*P | **Pg** | **

KAPS *e*S **Sb** **19 13 41.3 +0.1**
263nm,0.6s
**ULHL** **Ulahol** **2.70 261** ⇓*e*P **Pn** **19 13 08.5 +2.6**
baz=61
ULHL ⇓*i*S **Sn** **19 13 42.2 +3.6**
baz=61
**KUU** **Kurty** **2.81 296** *e*P **Pb** **19 13 13.7 +0.9**
15nm,0.5s
KUU *e*S **Sg** **19 13 51.7 -1.2**
189nm,0.6s
**KUU** **Kurty** **2.81 296** *e*Pn **Pn** **19 13 07.7 +0.3**
baz=295
KUU *e*Pg **Pb** **19 13 13.1 +0.4**
baz=295
**KST** **Kastek** **2.87 278** *e*P **Pb** **19 13 12.2 -1.5**
203nm,0.5s
KST *e*S **Sb** **19 13 49.0 +0.3**
279nm,0.5s
**BOOM** **Boomskoye usch** **2.88 267** ⇓*e*P **Pn** **19 13 10.9 +2.4**
baz=66
BOOM ⇓*i*S **Sn** **19 13 47.0 +3.8**
baz=66
**DGS** **Degeres** **3.03 282** *e*P **Pb** **19 13 17.4 +0.9**
90nm,0.3s
DGS *e*S **Sg** **19 13 57.6 -2.1**
691nm,0.5s
**TKM2** **Tokmak 2** **3.12 275** P **Pn** **19 13 15.2 +3.4**
SNR=127
**TKM2** **Tokmak 2** **3.12 275** ⇑Pn **Pn** **19 13 15.1 +3.2**
37nm,0.5s
TKM2 ⇑Lg Lg 19 14 02.8
245nm,0.6s
**TKM2** **Tokmak 2** **3.12 275** ⇑*i*P **Pn** **19 13 14.7 +2.9**
baz=75
TKM2 ⇑*i*S **Sn** **19 13 52.5 +3.3**
baz=75
**KRBS** **Karabastau** **3.20 289** *e*P **Pb** **19 13 21.0 +1.7**
23nm,0.4s
KRBS *e*S **Sg** **19 14 03.6 -1.6**
161nm,0.5s
**KBK** **Karagaybulak** **3.60 271** P **Pn** **19 13 21.5 +3.1**
SNR=100
**CHMS** **Chumysh** **3.75 276** P **Pn** **19 13 23.2 +2.9**
SNR=12
**FRU1** **Bishkek** **3.83 273** ⇑*i*P **Pn** **19 13 24.2 +2.8**
baz=73
FRU1 ⇑*i*S **Sn** **19 14 09.5 +3.0**
baz=73
**SGDS** **Sogindy** **3.88 283** *e*P **Pb** **19 13 32.1 +1.2**
7.3nm,0.3s
SGDS *e*S **Sg** **19 14 22.5 -4.6**
50nm,0.8s
**SGDS** **Sogindy** **3.88 283** *e*Pn **Pn** **19 13 22.5 +0.3**
baz=282
SGDS *e*Pg **Pb** **19 13 33.7 +2.7**
baz=282
**AAK** **Ala-Archa** **3.94 271** Pn **Pn** **19 13 25.7 +2.8**
5.4nm,0.3s,baz=112,slow=8.5,SNR=75
AAK Lg Lg 19 14 26.6
19nm,0.3s,baz=235,slow=22,SNR=9.6
AAK LR LR 19 14 36.4
comp=Z,25nm,19.0s,baz=66,slow=34
**AAK** **Ala-Archa** **3.94 271** P **Pn** **19 13 25.8 +2.8**
SNR=27
**AAK** **Ala-Archa** **3.94 271** ⇑Pn **Pn** **19 13 25.4 +2.4**
17nm,0.7s
AAK ⇓Lg Lg 19 14 29.7
93nm,0.6s
**USP** **Ospenovka** **3.95 280** P **Pn** **19 13 25.7 +2.6**
SNR=33
**UCH** **Uchtor** **3.96 265** P **Pn** **19 13 26.7 +3.1**
SNR=47
**ARLS** **Aral** **4.17 260** ⇑*e*P **Pn** **19 13 28.9 +2.7**
baz=60
ARLS ⇑*i*S **Sn** **19 14 17.4 +2.4**
baz=60
**KSH** **Kashi** **4.32 224** Pg **Pb** **19 13 38.5 +0.1**
KSH smax smax
comp=N,59nm,0.9s
KSH smax smax
comp=E,90nm,0.8s
**MAKZ** **Makanchi** **4.38 20** ⇓Pn **Pn** **19 13 30.4 +1.5**
11nm,0.2s
MAKZ ⇓Sn **Sn** **19 14 20.6 +0.7**
22nm,0.3s
MAKZ ⇑Lg Lg 19 14 38.9
39nm,0.8s
**MK31** **Makanchi Array** **4.45 22** Pn **Pn** **19 13 31.1 +1.2**
5.3nm,0.2s,baz=201,slow=13,SNR=878
MK31 ⇓Sn **Sn** **19 14 23.1 +1.5**
19nm,0.4s,baz=202,slow=23,SNR=7.2
MK31 ⇑Lg Lg 19 14 39.5
8.6nm,0.3s,baz=200,slow=27,SNR=7.5
**MKAR** **Makanchi Array** **4.45 22** Pn **Pn** **19 13 31.3 +1.4**
14nm,0.3s,baz=203,slow=13,SNR=1001
MKAR Sn **Sn** **19 14 22.6 +1.0**
21nm,0.3s,baz=202,slow=24,SNR=11
MKAR Lg Lg 19 14 40.8
12nm,0.3s,baz=204,slow=31,SNR=4.9
**EKS2** **Erkin-Say** **4.46 272** P **Pn** **19 13 33.1 +2.9**
SNR=9.4
**AML** **Almayashu** **4.58 265** P **Pn** **19 13 35.6 +3.6**
SNR=11
**BTLS** **Baital** **4.79 301** *e*P **Pb** **19 13 47.1 +0.7**
2.4nm,0.4s
BTLS *e*S **Sb** **19 14 48.2 +4.2**
12nm,0.5s
**BTLS** **Baital** **4.79 301** *e*Pn **Pn** **19 13 35.1 +0.5**
baz=301
BTLS *i* Pg **Pb** **19 13 49.8 +3.4**
baz=301
**MRKS** **Merke** **4.87 273** *e*P **Pb** **19 13 51.6 +3.8**
18nm,0.4s
MRKS *e*S **Sg** **19 14 56.3 -2.4**
84nm,0.5s
**WMQ** **Urumqi** **5.85 76** *e*Pn **Pn** **19 13 48.5 -0.6**
WMQ Sn **Sn** **19 14 56.5 +0.4**
WMQ smax smax
comp=N,50nm,1.1s
WMQ smax smax
comp=E,37nm,1.1s
**ZSN** **Zaisan** **5.93 35** *e*P **Pb** **19 14 06.8 +0.9**
11nm,0.3s
ZSN *e*S **Sb** **19 15 22.6 +5.7**
56nm,0.8s
**ZSN** **Zaisan** **5.93 35** *e*Pn **Pn** **19 13 50.4 +0.2**
baz=36
ZSN *e*Pg Pb 19 14 10.8 +4.9
baz=36
**DZA** **Taraz** **6.26 275** *e*Pg Pg 19 14 17.2 -5.0
baz=274
**KK02** **Karatay Array** **6.86 276** ⇑Pg **Pg** **19 14 30.1 -3.6**
5.0nm,0.5s
KK02 ⇓Lg Lg 19 16 00.9
18nm,0.6s
**IUG** **Iuzhnay** **7.28 269** *e*P Pg 19 14 36.7 -5.0
79nm,0.6s
IUG *e*S **Sg** **19 16 14.1 -1.8**
51nm,1.0s
**IUG** **Iuzhnay** **7.28 269** *e*Pg Pg 19 14 36.5 -5.2
baz=268
**BRLS** **Borolday** **7.35 276** *e*Pn **Pn** **19 14 11.4 +1.7**
baz=274
BRLS *e*Pg **Pg** **19 14 39.7 -3.5**
baz=274
**OTUK** **Ortayu** **7.64 319** ⇑Pn **Pn** **19 14 14.4 +0.7**
2.9nm,0.5s
OTUK ⇑Lg Lg 19 16 23.4
27nm,0.7s
**KURBB** **Kurchatov Arra** **7.97 354** Pn **Pn** **19 14 17.4 -0.8**
0.0nm,0.3s,baz=181,slow=11,SNR=4.6
KURBB Lg Lg 19 16 32.3
0.6nm,0.3s,baz=178,slow=29,SNR=5.2
**KURBB** **Kurchatov Arra** **7.97 354** ⇑Lg Lg 19 16 33.9
136nm,0.6s
**BRZS** **Berezniki** **8.80 328** *e*P **Pn** **19 14 30.8 +1.2**
baz=328
**ZALV** **Zalesovo Beam** **11.73 15** Pn **Pn** **19 15 09.9 +0.4**
0.5nm,0.3s,baz=200,slow=12,SNR=9.7
ZALV Sn **Sn** **19 17 14.2 -6.1**
2.0nm,0.3s,baz=202,slow=24,SNR=12
ZALV Lg Lg 19 18 30.5
baz=200,slow=25,SNR=1.3
ZALV LR LR 19 20 05.3
comp=Z,59nm,19.3s,baz=338,slow=40
**BVAR** **Borovoye Array** **12.11 332** Pn **Pn** **19 15 14.7 0.0**
0.2nm,0.3s,baz=241,slow=27,SNR=1.8
BVAR Lg Lg 19 18 41.1
0.3nm,0.3s,baz=131,slow=24,SNR=3.8
**GOMU** **GeErMu** **13.27 114** P Pn 19 15 25.6 -5.4
GOMU pP P 19 15 29.0 -12
GOMU sP 19 15 33.1
GOMU pmax pmax
comp=Z,2.0nm,0.6s
GOMU pmax pmax
comp=Z,58nm,5.5s
**GTA** **Gaotai** **15.43 96** *e*P **P** **19 16 11.3 +6.7**
GTA pP sP 19 16 14.5 +4.2
GTA sP pP 19 16 17.5 +9.0
GTA pmax pmax
comp=Z,2.0nm,1.0s
**SONM** **Songino Array** **19.34 65** P **P** **19 16 46.7 -1.1**
comp=Z,0.1nm,0.3s,baz=264,slow=11,SNR=6.3
SONM LR LR 19 24 44.5
comp=Z,60nm,19.8s,baz=192,slow=39
**ARU** **Arti** **19.36 323** P **P** **19 16 48.0 +0.3**
comp=Z,0.0nm,0.3s,baz=137,slow=9.2,SNR=5.4
**CMAR** **Chiang Mai Arr** **29.10 140** P **P** **19 18 21.6 -1.5**
comp=Z,0.3nm,0.8s,baz=322,slow=8.4,SNR=3.4
**BRTR** **Keskin Array B** **34.55 281** P **P** **19 19 11.6 +0.6**
comp=Z,0.9nm,0.8s,baz=86,slow=8.8,SNR=5.9
**ARCES** **ARCESS Array B** **38.39 333** P **P** **19 19 42.2 -1.1**
comp=Z,0.8nm,0.5s,baz=103,slow=8.8,SNR=7.4
**NB2** **NORSAR Subarra** **43.85 319** P **P** **19 20 28.3 0.0**
comp=Z,0.2nm,0.4s,baz=78,slow=7.9
**NOA** **NORSAR Array B** **43.85 319** P **P** **19 20 27.2 -1.1**
comp=Z,0.4nm,0.9s,baz=87,slow=7.1,SNR=1.5
**TORD** **Torodi Ar. Bea** **72.52 272** P **P** **19 23 47.1 -2.4**
comp=Z,0.6nm,0.4s,baz=48,slow=5.7,SNR=8.3
**WRA** **Warramunga Arr** **80.01 129** P P 19 24 28.3 -3.6
comp=Z,0.6nm,0.9s,baz=318,slow=5.8,SNR=2.8
**ASAR** **Alice Springs** **82.71 132** P **P** **19 24 43.4 -2.8**
comp=Z,0.3nm,0.4s,baz=328,slow=5.4,SNR=9.9

*IDC **13** 19:19:51.3≤0.6,64.°63N×134.°54W,h0km,mb3.4/9, mb1 3.8/14,mb1mx3.6/46,mbtmp3.6/14,ML4.0/5,MS2.2/1, Ms1 2.2/1,ms1mx2.1/61,Error ellipse: s-maj=12.1km s-min=8.6km az=44.0*
*PGC **13** 19:19:52.8≤0.5,64.°51N×134.°53W,h5km,ML3.6/17, ML3.6/17,241km east of Dawson, Yt Southern Yukon Territory, Canada*
*ANF **13** 19:19:52.1≤0.2,64.°47N×134.°49W,h5km,ML4.5/25,Error ellipse: s-maj=2.6km s-min=1.9km az=50.0*
**ISC 13 19:19:50.9≤0.5,64.°56N≤0.°02×134.°50W≤0.°02,h10km, n109,σ3$04/186,mb3.4/9,Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MAYO** | **Mayo, Yukon** | **1.14** | **213** | P | **Pb** | **19 20 12.6** | **-0.2** |
| MAYO | | | | S | **Sb** | **19 20 26.1** | **-1.5** |
| **MAYO** | **Mayo, Yukon** | **1.14** | **213** | P | **Pb** | **19 20 12.6** | **-0.2** |
| | baz=32,SNR=60 | | | | | | |
| MAYO | | | | S | **Sb** | **19 20 26.4** | **-1.3** |
| | baz=32 | | | | | | |
| **J29M** | **Klondike Camp** | **1.61** | **268** | P | **Pb** | **19 20 20.8** | **0.0** |
| | baz=86,SNR=749 | | | | | | |
| J29M | | | | S | **Sg** | **19 20 42.9** | **+0.2** |
| | baz=86 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **1.81** | **298** | P | **Pb** | **19 20 24.1** | **-0.1** |
| | baz=116,SNR=618 | | | | | | |
| I29M | | | | S | **Sg** | **19 20 49.4** | **+0.3** |
| | baz=116 | | | | | | |
| **EPYK** | **Eagle Plains** | **2.04** | **334** | Pn | **Pb** | **19 20 27.9** | **-0.2** |
| EPYK | | | | Sg | **Sg** | **19 20 56.9** | **+0.4** |
| **EPYK** | **Eagle Plains** | **2.04** | **334** | P | **Pb** | **19 20 27.9** | **-0.2** |
| | baz=153,SNR=293 | | | | | | |
| **DAWY** | **Dawson** | **2.19** | **259** | Pn | **Pb** | **19 20 28.7** | **-1.9** |
| DAWY | | | | Pg | **Pg** | **19 20 31.4** | **-1.4** |
| DAWY | | | | Sg | **Sb** | **19 20 59.1** | **+1.3** |
| **DAWY** | **Dawson** | **2.19** | **259** | Pn | **Pn** | **19 20 28.3** | **+0.9** |
| | baz=76,SNR=526 | | | | | | |
| DAWY | | | | Pb | **Pg** | **19 20 31.6** | **-1.3** |
| | baz=76 | | | | | | |
| DAWY | | | | Sb | **Sg** | **19 20 59.5** | **-1.6** |
| | baz=76 | | | | | | |
| **M30M** | **Minto, Yukon** | **2.24** | **208** | Pn | **Pn** | **19 20 28.3** | **+0.3** |
| | baz=26,SNR=489 | | | | | | |
| M30M | | | | Pg | **Pg** | **19 20 33.1** | **-0.7** |
| | baz=26 | | | | | | |
| M30M | | | | Sb | **Sb** | **19 20 59.1** | **-0.1** |
| | baz=26 | | | | | | |
| **M31M** | **Drury Creek, Y** | **2.36** | **179** | Pn | **Pn** | **19 20 30.6** | **+0.9** |
| | baz=358,SNR=133 | | | | | | |
| M31M | | | | Pg | **Pg** | **19 20 35.5** | **-0.7** |
| | baz=358 | | | | | | |
| M31M | | | | Sb | **Sb** | **19 21 03.8** | **+1.0** |
| | baz=358 | | | | | | |
| **FARO** | **Faro, Yukon** | **2.39** | **167** | Pn | **Pn** | **19 20 30.8** | **+0.6** |
| FARO | | | | Pg | **Pg** | **19 20 35.8** | **-0.9** |
| FARO | | | | Sg | **Sb** | **19 21 04.7** | **+1.0** |
| **FARO** | **Faro, Yukon** | **2.39** | **167** | Pn | **Pn** | **19 20 30.9** | **+0.8** |
| | baz=348,SNR=172 | | | | | | |
| FARO | | | | Pg | **Pg** | **19 20 35.9** | **-0.9** |
| | baz=348 | | | | | | |
| FARO | | | | Sb | **Sb** | **19 21 04.6** | **+1.0** |
| | baz=348 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **2.42** | **142** | Pn | **Pb** | **19 20 32.1** | **-2.5** |
| MMPY | | | | Pg | **Pg** | **19 20 36.4** | **-0.8** |
| MMPY | | | | Sg | **Sb** | **19 21 05.6** | **+1.1** |
| **MMPY** | **Sheldon Lake,** | **2.42** | **142** | Pn | **Pb** | **19 20 32.1** | **-2.5** |
| | baz=324,SNR=430 | | | | | | |
| MMPY | | | | Pg | **Pg** | **19 20 36.5** | **-0.8** |
| | baz=324 | | | | | | |
| MMPY | | | | Sb | **Sb** | **19 21 05.6** | **+1.1** |
| | baz=324 | | | | | | |
| **EGAK** | **Eagle** | **2.87** | **277** | P | **Pb** | **19 20 39.1** | **-3.1** |
| | baz=92,SNR=128 | | | | | | |
| **BVCY** | **Beaver Creek** | **3.57** | **236** | Pn | **Pn** | **19 20 47.5** | **+1.2** |
| BVCY | | | | Sg | **Sg** | **19 21 41.8** | **-3.7** |
| **BVCY** | **Beaver Creek** | **3.57** | **236** | P | **Pn** | **19 20 47.6** | **+1.2** |
| | baz=51,SNR=42 | | | | | | |
| BVCY | | | | Sb | **Sg** | **19 21 42.1** | **-3.5** |
| | baz=51 | | | | | | |
| **L27K** | **Beaver Creek,** | **3.58** | **249** | P | **Pn** | **19 20 47.4** | **+0.9** |
| | baz=62 | | | | | | |
| L27K | | | | Sb | **Sb** | **19 21 41.6** | **+3.9** |
| | baz=62 | | | | | | |
| **YUK4** | **Talbot Arm** | **3.74** | **212** | Pn | **Pn** | **19 20 48.2** | **-0.6** |
| YUK4 | | | | Sg | **Sb** | **19 21 42.5** | **0.0** |
| **YUK4** | **Talbot Arm** | **3.74** | **212** | P | **Pn** | **19 20 48.4** | **-0.4** |
| | baz=29,SNR=39 | | | | | | |
| YUK4 | | | | Sb | **Sb** | **19 21 42.7** | **+0.2** |
| | baz=29 | | | | | | |
| **YUK5** | **Granite Creek** | **3.77** | **206** | Pn | **Pn** | **19 20 50.2** | **+1.1** |
| YUK5 | | | | Pg | **Pg** | **19 21 00.5** | **-2.5** |
| YUK5 | | | | Sg | **Sb** | **19 21 45.2** | **+1.9** |
| **INK** | **Inuvik** | **3.79** | **5** | Pn | **Pn** | **19 20 50.6** | **+1.3** |
| | 1.2nm,0.3s,baz=184,slow=17,SNR=67 | | | | | | |
| INK | | | | Pg | **Pb** | **19 20 59.1** | **+1.4** |
| | 5.4nm,0.3s,baz=179,slow=18,SNR=19 | | | | | | |
| INK | | | | Lg | Lg | 19 21 42.0 | |
| | 12nm,0.3s,baz=176,slow=6.1,SNR=4.6 | | | | | | |
| INK | | | | LR | LR | 19 22 15.5 | |
| | comp=Z,30nm,20.4s,baz=146,slow=39 | | | | | | |
| **INK** | **Inuvik** | **3.79** | **5** | Pn | **Pn** | **19 20 50.3** | **+1.1** |
| **INK** | **Inuvik** | **3.79** | **5** | P | **Pn** | **19 20 50.8** | **+1.5** |
| | baz=186,SNR=11 | | | | | | |
| **YUK3** | **Moose Creek** | **3.88** | **227** | Pn | **Pn** | **19 20 51.7** | **+0.9** |
| YUK3 | | | | Sg | **Sb** | **19 21 49.8** | **+3.1** |
| **YUK3** | **Moose Creek** | **3.88** | **227** | P | **Pn** | **19 20 51.8** | **+1.0** |
| | baz=42,SNR=14 | | | | | | |
| YUK3 | | | | Sb | **Sb** | **19 21 49.5** | **+2.8** |
| | baz=42 | | | | | | |
| **WHY** | **Whitehorse** | **3.92** | **183** | Pn | **Pn** | **19 20 51.8** | **+0.7** |
| WHY | | | | Pg | **Pg** | **19 21 03.7** | **-2.1** |
| WHY | | | | Sg | **Sb** | **19 21 50.6** | **+3.1** |
| **WHY** | **Whitehorse** | **3.92** | **183** | Pn | **Pn** | **19 20 52.1** | **+1.0** |
| | baz=2.3 | | | | | | |
| WHY | | | | Pg | **Pg** | **19 21 03.9** | **-2.0** |
| | baz=2.3 | | | | | | |
| WHY | | | | Sb | **Sb** | **19 21 51.0** | **+3.6** |
| | baz=2.3 | | | | | | |
| **J26L** | **Joseph Creek** | **3.92** | **273** | P | **Pn** | **19 20 52.3** | **+1.1** |
| | baz=86 | | | | | | |
| J26L | | | | Sb | **Sb** | **19 21 50.9** | **+3.4** |
| | baz=86 | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.98** | **240** | P | **Pn** | **19 20 52.8** | **+0.7** |
| | baz=54,SNR=31 | | | | | | |
| M27K | | | | Sb | **Sb** | **19 21 53.6** | **+4.2** |
| | baz=54 | | | | | | |
| **HYT** | **Haines Junctio** | **3.99** | **202** | Pn | **Pn** | **19 20 53.3** | **+1.0** |
| HYT | | | | Sn | **Sn** | **19 21 37.0** | **-2.1** |
| HYT | | | | Sg | **Sb** | **19 21 51.5** | **+1.8** |
| **HYT** | **Haines Junctio** | **3.99** | **202** | Pn | **Pn** | **19 20 53.6** | **+1.4** |
| | baz=19,SNR=24 | | | | | | |
| HYT | | | | Pg | **Pg** | **19 21 05.8** | **-1.5** |
| | baz=19 | | | | | | |
| HYT | | | | Sb | **Sb** | **19 21 52.1** | **+2.4** |
| | baz=19 | | | | | | |
| **YUK2** | **White River** | **4.00** | **229** | Pn | **Pn** | **19 20 53.2** | **+0.9** |
| YUK2 | | | | Sn | **Sn** | **19 21 38.9** | **-0.3** |
| YUK2 | | | | Sg | **Sb** | **19 21 53.0** | **+3.1** |
| **YUK6** | **Outpost Mounta** | **4.04** | **208** | Pn | **Pn** | **19 20 54.0** | **+1.1** |
| YUK6 | | | | Pg | **Pg** | **19 21 06.4** | **-1.9** |
| YUK6 | | | | Sg | **Sb** | **19 21 55.5** | **+4.4** |
| **YUK6** | **Outpost Mounta** | **4.04** | **208** | Pn | **Pn** | **19 20 54.0** | **+1.1** |
| | baz=24,SNR=15 | | | | | | |
| YUK6 | | | | Pg | **Pg** | **19 21 06.3** | **-1.9** |
| | baz=24 | | | | | | |
| YUK6 | | | | Sb | **Sb** | **19 21 55.3** | **+4.2** |
| | baz=24 | | | | | | |
| **YUK8** | **Steele Glacier** | **4.07** | **219** | Pn | **Pn** | **19 20 54.3** | **+0.9** |
| YUK8 | | | | Sg | **Sb** | **19 21 56.6** | **+4.5** |
| **SCRK** | **Sand Creek** | **4.18** | **266** | P | **Pn** | **19 20 56.1** | **+1.3** |
| | baz=78,SNR=27 | | | | | | |
| SCRK | | | | Sb | **Sb** | **19 21 59.7** | **+4.6** |
| | baz=78 | | | | | | |
| **L26K** | **Log Cabin Wild** | **4.22** | **253** | Sb | **Sb** | **19 22 01.0** | **+5.0** |
| | baz=65 | | | | | | |
| **DOT** | **Dot Lake** | **4.29** | **262** | Pn | **Pn** | **19 20 56.9** | **+0.7** |
| DOT | | | | Sg | **Sg** | **19 22 04.2** | **-4.4** |
| **YUK7** | **Dusty Glacier** | **4.38** | **204** | Pn | **Pn** | **19 20 58.7** | **+1.1** |
| YUK7 | | | | Sg | **Sb** | **19 22 04.7** | **+3.9** |
| **M26K** | **Nabesna, AK** | **4.38** | **244** | P | **Pn** | **19 20 58.4** | **+0.9** |
| | baz=57 | | | | | | |
| M26K | | | | Sb | **Sb** | **19 22 06.1** | **+5.3** |
| | baz=57 | | | | | | |
| **P33M** | **Teslin, Yukon** | **4.43** | **169** | P | **Pn** | **19 20 58.6** | **+0.4** |
| | baz=350,SNR=24 | | | | | | |
| P33M | | | | Sb | **Sb** | **19 22 07.4** | **+5.1** |
| | baz=350 | | | | | | |
| **RIDG** | **Independent Ri** | **4.61** | **264** | P | **Pn** | **19 21 01.6** | **+1.1** |
| | baz=76 | | | | | | |
| RIDG | | | | Sb | **Sg** | **19 22 14.4** | **-4.2** |
| | baz=76 | | | | | | |
| **J25K** | **Salcha River,** | **4.69** | **276** | P | **Pn** | **19 21 03.0** | **+1.3** |
| | baz=86,SNR=7.4 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.77** | **287** | P | **Pn** | **19 21 04.4** | **+1.4** |
| | baz=97,SNR=20 | | | | | | |
| PRP | | | | S | **Sn** | **19 21 58.9** | **+0.6** |
| | baz=97 | | | | | | |
| **BALM** | **Baldy** | **5.04** | **229** | Pn | **Pn** | **19 21 08.7** | **+2.1** |
| BALM | | | | Sg | **Sg** | **19 22 26.8** | **-5.8** |
| **WRGLY** | **Wrigley** | **5.05** | **100** | P | **Pn** | **19 21 10.1** | **+3.4** |
| | baz=290,SNR=12 | | | | | | |
| WRGLY | | | | S | **Sn** | **19 22 06.0** | **+1.0** |
| | baz=290 | | | | | | |
| **PAX** | **Paxson** | **5.12** | **257** | P | **Pn** | **19 21 09.5** | **+1.8** |
| | baz=68,SNR=13 | | | | | | |
| PAX | | | | Sb | **Sg** | **19 22 28.9** | **-6.3** |
| | baz=68 | | | | | | |
| **SKAG** | **Skagway** | **5.13** | **185** | Sb | **Sb** | **19 22 27.5** | **+5.3** |
| | baz=3.9 | | | | | | |
| **KIAG** | **Kiagna River** | **5.13** | **228** | Pn | **Pn** | **19 21 10.0** | **+2.1** |
| KIAG | | | | Sn | **Sn** | **19 22 07.5** | **+0.3** |
| **TABL** | **Table Mountain** | **5.15** | **220** | Pn | **Pn** | **19 21 10.7** | **+2.5** |
| TABL | | | | Sn | **Sn** | **19 22 07.2** | **-0.5** |
| **WTLY** | **Watson Lake, Y** | **5.19** | **147** | Pn | **Pn** | **19 21 09.7** | **+1.2** |
| WTLY | | | | Pg | **Pg** | **19 21 27.2** | **-3.0** |
| WTLY | | | | Sg | **Sg** | **19 22 31.9** | **-5.5** |
| **WTLY** | **Watson Lake, Y** | **5.19** | **147** | P | **Pn** | **19 21 09.9** | **+1.4** |
| | baz=331 | | | | | | |
| **PCA** | **Pinnacle** | **5.22** | **214** | Pn | **Pn** | **19 21 11.4** | **+2.4** |
| PCA | | | | Sg | **Sg** | **19 22 34.0** | **-4.2** |
| **PINM** | **Pinnacle** | **5.22** | **214** | P | **Pn** | **19 21 12.3** | **+3.4** |
| | baz=29 | | | | | | |
| **HARP** | **HAARP** | **5.25** | **250** | Sb | **Sb** | **19 22 30.5** | **+4.9** |
| | baz=61 | | | | | | |
| **SAMH** | **Samovar Hills** | **5.32** | **216** | Pn | **Pn** | **19 21 14.4** | **+4.0** |
| SAMH | | | | Sg | **Sg** | **19 22 38.4** | **-3.1** |
| **ILAR** | **Eielson Array** | **5.33** | **278** | Pn | **Pn** | **19 21 11.1** | **+0.6** |
| | 1.0nm,0.3s,baz=101,slow=11,SNR=59 | | | | | | |
| ILAR | | | | Lg | Lg | 19 22 34.9 | |
| | 12nm,0.3s,baz=78,slow=29,SNR=6.5 | | | | | | |
| **HDA** | **Harding Lake** | **5.39** | **274** | P | **Pn** | **19 21 13.4** | **+2.2** |
| | baz=83 | | | | | | |
| **PNL** | **Peninsula** | **5.42** | **207** | Pn | **Pn** | **19 21 14.0** | **+2.3** |
| **N25K** | **Chitina, Valde** | **5.46** | **242** | P | **Pn** | **19 21 13.7** | **+1.4** |
| | baz=53 | | | | | | |
| **MESA** | **MESA** | **5.59** | **222** | Pn | **Pn** | **19 21 17.6** | **+3.4** |
| **H24K** | **Noodor Dome** | **5.78** | **289** | P | **Pn** | **19 21 18.4** | **+1.8** |
| | baz=97 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **5.80** | **250** | Sb | **Sg** | **19 22 50.7** | **-6.3** |
| | baz=60 | | | | | | |
| **BMRM** | **Bremner River** | **5.87** | **237** | P | **Pn** | **19 21 20.0** | **+2.0** |
| | baz=48 | | | | | | |
| **DHY** | **Denali Highway** | **5.89** | **261** | P | **Pn** | **19 21 20.3** | **+2.0** |
| | baz=70 | | | | | | |
| DHY | | | | Sb | **Sg** | **19 22 54.1** | **-5.7** |
| | baz=70 | | | | | | |
| **BESE** | **Bessie Mountai** | **6.00** | **182** | Pn | **Pn** | **19 21 21.1** | **+1.3** |
| BESE | | | | Sg | **Sb** | **19 22 55.0** | **+7.6** |
| **KLU** | **Klutina** | **6.04** | **245** | P | **Pn** | **19 21 23.8** | **+3.6** |
| | baz=55 | | | | | | |
| **DIV** | **Divide** | **6.20** | **241** | Pn | **Pn** | **19 21 25.5** | **+3.0** |
| **WAT6** | **Susitna Watana** | **6.24** | **258** | P | **Pn** | **19 21 25.6** | **+2.5** |
| | baz=66 | | | | | | |
| WAT6 | | | | Sb | **Sg** | **19 23 03.1** | **-7.8** |
| | baz=66 | | | | | | |
| **NEA2** | **Nenana** | **6.28** | **277** | P | **Pn** | **19 21 25.8** | **+2.3** |
| | baz=84 | | | | | | |
| NEA2 | | | | Sb | **Sg** | **19 23 05.2** | **-7.0** |
| | baz=84 | | | | | | |
| **C36M** | **Paulatuk** | **6.31** | **36** | Pn | **Pn** | **19 21 24.5** | **+0.7** |
| C36M | | | | Sn | **Sn** | **19 22 33.1** | **-2.7** |
| **C36M** | **Paulatuk** | **6.31** | **36** | P | **Pn** | **19 21 25.1** | **+1.3** |
| | baz=225,SNR=20 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **6.36** | **282** | Sb | **Sg** | **19 23 07.2** | **-7.8** |
| | baz=89 | | | | | | |
| **MCK** | **McKinley** | **6.37** | **269** | P | **Pn** | **19 21 27.2** | **+2.4** |
| | baz=76 | | | | | | |
| MCK | | | | Sb | **Sg** | **19 23 08.3** | **-6.8** |
| | baz=76 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **6.41** | **251** | Sb | **Sg** | **19 23 08.3** | **-8.3** |
| | baz=60 | | | | | | |
| **H23K** | **Yukon River** | **6.46** | **288** | P | **Pn** | **19 21 26.3** | **+0.3** |
| | baz=95 | | | | | | |
| **DLBC** | **Dease Lake** | **6.50** | **159** | Pn | **Pn** | **19 21 27.6** | **+1.0** |
| | 4.8nm,0.3s,baz=354,slow=16,SNR=98 | | | | | | |
| DLBC | | | | Pg | **Pb** | **19 21 44.8** | **+0.7** |
| | 3.2nm,0.3s,baz=7.1,slow=9.1,SNR=6.1 | | | | | | |
| DLBC | | | | Sn | **Sn** | **19 22 40.6** | **-0.2** |
| | 4.3nm,0.3s,baz=111,slow=27,SNR=3.0 | | | | | | |
| DLBC | | | | Lg | Lg | 19 23 10.4 | |
| | 7.0nm,0.3s,baz=211,slow=12,SNR=4.2 | | | | | | |
| **DLBC** | **Dease Lake** | **6.50** | **159** | Pn | **Pn** | **19 21 27.3** | **+0.7** |
| DLBC | | | | Sg | **Sb** | **19 23 09.8** | **+8.1** |
| **SML** | **Sawmill** | **6.84** | **253** | P | **Pn** | **19 21 33.9** | **+2.7** |
| | baz=60 | | | | | | |
| **COLD** | **Coldfoot** | **6.96** | **300** | Pn | **Pn** | **19 21 34.9** | **+2.0** |
| COLD | | | | Sn | **Sn** | **19 22 50.7** | **-1.2** |
| **COLD** | **Coldfoot** | **6.96** | **300** | P | **Pn** | **19 21 35.2** | **+2.3** |
| | baz=106,SNR=21 | | | | | | |
| **TRF** | **Thorofare Moun** | **7.03** | **268** | P | **Pn** | **19 21 36.0** | **+2.1** |
| | baz=74,SNR=15 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **7.18** | **274** | P | **Pn** | **19 21 37.3** | **+1.5** |
| | baz=79 | | | | | | |
| BPAW | | | | Sb | **Sg** | **19 23 33.6** | **-7.4** |
| | baz=79 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **7.26** | **311** | P | Pn | **19 21 40.9** | **+4.0** |
| | baz=118,SNR=14 | | | | | | |
| **FNBB** | **Fort Nelson** | **7.87** | **131** | P | **Pn** | **19 21 47.0** | **+1.7** |
| **PPLA** | **Purkeypile** | **8.02** | **266** | Sb | Sg | **19 23 58.9** | **-9.1** |
| | baz=70 | | | | | | |
| **A36M** | **Sachs Harbour** | **8.20** | **21** | P | **Pn** | **19 21 50.6** | **+0.8** |
| **A36M** | **Sachs Harbour** | **8.20** | **21** | P | **Pn** | **19 21 51.5** | **+1.7** |
| | baz=209,SNR=21 | | | | | | |
| **KUKN** | **Kugluktuk,NWT** | **8.49** | **59** | P | **Pn** | **19 21 54.5** | **+0.8** |
| KUKN | | | | S | **Sn** | **19 23 24.4** | **-5.0** |
| **J20K** | **Nowinta River** | **8.52** | **276** | P | **Pn** | **19 21 56.5** | **+2.3** |
| | baz=79 | | | | | | |
| **NBC6** | **NorthernBC 6** | **8.66** | **128** | P | **Pn** | **19 21 57.3** | **+1.1** |
| **NBC5** | **NorthernBC 5** | **9.07** | **136** | P | **Pn** | **19 22 03.2** | **+1.2** |
| **YKA** | **Yellowknife Ar** | **9.11** | **94** | Pn | **Pn** | **19 22 02.1** | **-0.2** |
| | 2.7nm,0.3s,baz=288,slow=13,SNR=89 | | | | | | |
| YKA | | | | Sn | **Sn** | **19 23 40.2** | **-4.6** |
| | 3.5nm,0.3s,baz=288,slow=23,SNR=12 | | | | | | |
| **NBC4** | **NorthernBC 4** | **11.23** | **136** | P | **Pn** | **19 22 32.9** | **+1.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DIB | Dawson Inlet, | 11.44 | 174 | P | Pn | 19 22 37.1 | +3.0 |
| MNB | Mounoet Dainar | 14.93 | 138 | P | Pn | 19 23 24.1 | +2.1 |
| RES | Resolute Bay | 16.68 | 36 | Pn | Pn | 19 23 43.5 | -0.9 |
| | 0.6nm,0.3s,baz=248,slow=9.1,SNR=16 | | | | | | |
| RES | | | | Sn | Sn | 19 26 38.9 | -10 |
| | 0.3nm,0.3s,baz=142,slow=20,SNR=2.9 | | | | | | |
| RES | Resolute Bay | 16.68 | 36 | P | Pn | 19 23 42.0 | -2.3 |
| RES | | | | S | Sn | 19 26 39.2 | -10 |
| FCC | Fort Churchill | 19.75 | 88 | P | Pn | 19 24 21.5 | -0.6 |
| FCC | | | | S | S | 19 27 44.0 | -19 |
| PDAR | Pinedale Array | 26.02 | 135 | P | P | 19 25 25.8 | +1.7 |
| | 0.7nm,0.9s,baz=353,slow=4.5,SNR=4.2 | | | | | | |
| NVAR | Mina Array Bea | 27.86 | 152 | P | P | 19 25 44.2 | +3.5 |
| | 0.4nm,0.7s,baz=335,slow=7.9,SNR=4.2 | | | | | | |
| TXAR | Lajitas Array | 40.23 | 136 | P | P | 19 27 29.4 | +1.9 |
| | 0.2nm,0.7s,baz=359,slow=9.2,SNR=3.2 | | | | | | |
| NOA | NORSAR Array B | 52.11 | 20 | P | P | 19 29 01.7 | +1.1 |
| | 0.2nm,0.6s,baz=335,slow=5.3,SNR=2.0 | | | | | | |
| FINES | FINESS Array B | 53.47 | 11 | P | P | 19 29 11.6 | +1.0 |
| | 1.3nm,0.9s,baz=359,slow=7.6,SNR=3.4 | | | | | | |
| SONM | Songino Array | 58.34 | 316 | P | P | 19 29 48.3 | +2.5 |
| | 0.4nm,0.8s,baz=33,slow=8.6,SNR=2.6 | | | | | | |
| KURBB | Kurchatov Arra | 62.32 | 337 | P | P | 19 30 14.1 | +1.3 |
| | 0.2nm,0.8s,baz=19,slow=5.7,SNR=2.3 | | | | | | |
| AKASG | Malin Array Be | 64.38 | 11 | P | P | 19 30 27.6 | +1.1 |
| | 0.3nm,0.5s,baz=355,slow=6.9,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 65.32 | 333 | P | P | 19 30 33.3 | +0.7 |
| | 0.2nm,0.7s,baz=12,slow=7.4,SNR=2.2 | | | | | | |

*TUL* ***13*** *19:20:38.5±1.4,36°.51N±0°.03×98°.70W±0°.04, h7km±7km, ML2.7, mb_Lg2.4/8(NEIC), Error ellipse: s-maj=4.6km s-min=3.1km az=57.0*

**NEIC 13 19:20:38.7±1.4,36°.51N±0°.03×98°.71W±0°.04, h9km±6km, Error ellipse: s-maj=4.7km s-min=3.2km az=57.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKCFA | Oklahoma City | 1.49 | 136 | Pn | Pn | 19 21 05.4 | -0.4 |
| FNO | Franklin | 1.64 | 139 | Pn | Pn | 19 21 08.0 | +0.3 |
| WMOK | Wichita Mounta | 1.77 | 182 | Pn | Pn | 19 21 09.7 | +0.2 |
| T35A | Sooner Cattle | 1.81 | 76 | | Pn | 19 21 11.0 | +0.8 |
| T35A | | | | IAmb_Lg | | 19 21 36.6 | |
| | comp=Z,17nm,0.9s | | | | | | |
| R32A | Long Quarter, | 1.91 | 360 | | Pn | 19 21 12.7 | +1.1 |
| W35A | Tecumseh | 2.01 | 132 | | Pn | 19 21 13.8 | +0.9 |
| X34A | Smith Ranch, M | 2.03 | 159 | | Pn | 19 21 14.5 | +1.3 |
| TUL1 | Leonard | 2.43 | 103 | IAmb_Lg | | 19 21 57.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| AMTX | Amarillo | 2.91 | 237 | Pn | Pn | 19 21 26.6 | +1.3 |
| AMTX | | | | IAmb_Lg | | 19 22 12.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| X37A | Clayton | 3.33 | 124 | Pn | Pn | 19 21 30.8 | -0.1 |
| Z35A | Perchaven, San | 3.39 | 159 | Pn | Pn | 19 21 32.9 | +1.1 |
| U38A | Gravette | 3.49 | 90 | Pn | Pn | 19 21 34.5 | +1.4 |
| KSCO | Kaye Shedlock' | 3.99 | 310 | Pn | Pn | 19 21 40.3 | +0.1 |
| S39A | Bolivar | 4.47 | 73 | Pn | Pn | 19 21 47.4 | +0.8 |
| P38A | Dawn | 5.14 | 51 | Pn | Pn | 19 21 56.4 | +0.6 |

*IDC* ***13*** *19:25:23.6±7.3,27°.97N×87°.63E, h111km±68km, mb3.0/4, mb1 3.0/6, mb1mx2.6/49, mbtmp3.2/6, Error ellipse: s-maj=65.1km s-min=21.4km az=67.0*

**ISC 13 19:25:18.6±2.3,27°.9N±0°.3×87°.4E±0°.5, h68km, n6, σ0s90/6, mb3.2/4, Nepal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 14.21 | 129 | P | Pn | 19 28 37.3 | +0.8 |
| | 0.1nm,0.3s,baz=307,slow=12,SNR=1.8 | | | | | | |
| MKAR | Makanchi Array | 19.27 | 349 | P | Pn | 19 29 39.6 | +0.4 |
| | 0.1nm,0.3s,baz=176,slow=9.9,SNR=5.1 | | | | | | |
| KURBB | Kurchatov Arra | 23.65 | 346 | P | P | 19 30 24.1 | +0.5 |
| | 0.4nm,0.7s,baz=168,slow=8.4,SNR=5.5 | | | | | | |
| SONM | Songino Array | 24.82 | 32 | P | P | 19 30 33.8 | -0.6 |
| | 0.4nm,0.4s,baz=221,slow=10,SNR=10 | | | | | | |
| WRA | Warramunga Arr | 65.79 | 131 | P | P | 19 35 55.8 | -1.0 |
| | 0.1nm,0.3s,baz=327,slow=6.2,SNR=1.2 | | | | | | |
| ASAR | Alice Springs | 68.15 | 134 | P | P | 19 36 11.5 | -0.3 |
| | 0.2nm,0.6s,baz=322,slow=6.5,SNR=6.0 | | | | | | |

*TUL* ***13*** *19:26:15.4±1.2,36°.48N±0°.02×98°.75W±0°.02, h8km±6km, ML2.6, mb_Lg2.3/10(NEIC), Error ellipse: s-maj=3.2km s-min=1.0km az=151.0*

**NEIC 13 19:26:15.7±1.1,36°.460N±0°.005×98°.73W±0°.02, h2km±7km, Error ellipse: s-maj=2.0km s-min=0.8km az=87.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| U32A | Winter Ranch, | 0.24 | 250 | Pg | Pg | 19 26 20.2 | 0.0 |
| U32A | | | | Sg | Sg | 19 26 23.9 | +0.7 |
| FNO | Franklin | 1.61 | 138 | Pn | Pn | 19 26 44.9 | -0.3 |
| WMOK | Wichita Mounta | 1.72 | 181 | Pn | Pn | 19 26 45.8 | -0.9 |
| T35A | Sooner Cattle | 1.84 | 75 | Pn | Pn | 19 26 48.5 | +0.3 |
| T35A | | | | IAmb_Lg | | 19 27 16.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| R32A | Long Quarter, | 1.96 | 0 | | Pn | 19 26 50.3 | +0.3 |
| W35A | Tecumseh | 1.99 | 130 | Pn | Pn | 19 26 50.3 | -0.1 |
| X34A | Smith Ranch, M | 1.99 | 158 | Pn | Pn | 19 26 51.3 | +0.9 |
| X34A | | | | IAmb_Lg | | 19 27 19.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| TUL1 | Leonard | 2.44 | 102 | Pn | Pn | 19 26 56.6 | +0.1 |
| CBKS | Cedar Bluff | 2.48 | 341 | IAmb_Lg | | 19 27 37.5 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| AMTX | Amarillo | 2.87 | 238 | Pn | Pn | 19 27 02.4 | -0.3 |
| AMTX | | | | IAmb_Lg | | 19 27 46.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| U38A | Gravette | 3.50 | 89 | Pn | Pn | 19 27 11.4 | +0.2 |
| KSCO | Kaye Shedlock' | 4.01 | 311 | IAmb_Lg | | 19 28 32.7 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| T25A | Trinidad | 4.61 | 280 | IAmb_Lg | | 19 28 39.7 | |
| | comp=Z,5.3nm,0.8s | | | | | | |

*TUL* ***13*** *19:33:14.2±1.2,36°.486N±0°.010×98°.72W±0°.05, h2km±7km, ML2.5, mb_Lg2.4/7(NEIC), Error ellipse: s-maj=5.2km s-min=1.3km az=84.0*

**NEIC 13 19:33:15.1±1.7,36°.51N±0°.02×98°.68W±0°.04, h10km±7km, Error ellipse: s-maj=5.4km s-min=1.5km az=112.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKCFA | Oklahoma City | 1.48 | 137 | Pn | Pn | 19 33 41.6 | -0.2 |
| FNO | Franklin | 1.63 | 140 | | Pn | 19 33 44.1 | +0.2 |
| WMOK | Wichita Mounta | 1.77 | 183 | Pn | Pn | 19 33 45.9 | 0.0 |
| T35A | Sooner Cattle | 1.79 | 76 | | Pn | 19 33 46.6 | +0.5 |
| T35A | | | | IAmb_Lg | | 19 34 11.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| R32A | Long Quarter, | 1.91 | 359 | Pn | Pn | 19 33 48.7 | +0.9 |
| W35A | Tecumseh | 2.00 | 132 | | Pn | 19 33 49.5 | +0.5 |
| X34A | Smith Ranch, M | 2.03 | 160 | Pn | Pn | 19 33 50.3 | +0.9 |
| X34A | | | | IAmb_Lg | | 19 34 17.5 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| TUL1 | Leonard | 2.41 | 104 | Pn | Pn | 19 33 54.6 | -0.1 |
| X37A | Clayton | 3.31 | 124 | Pn | Pn | 19 34 06.2 | -0.8 |
| U38A | Gravette | 3.46 | 90 | Pn | Pn | 19 34 09.4 | +0.3 |
| HHAR | Hobbs | 3.83 | 92 | IAmb_Lg | | 19 35 24.3 | |
| | comp=Z,8.9nm,1.3s | | | | | | |

*DJA* ***13*** *19:36:11.9±0.2,7°.S±3°×11°.2E±°, h10km, M3.7/18, MLv3.7/18*

*IDC* ***13*** *19:36:27.6±4.6,9°.21S×111°.46E, h101km±77km, mb3.4/3, mb1 3.5/5, mb1mx3.0/53, mbtmp3.7/5, ML3.2/2, MS2.5/1, Ms1 2.5/1, ms1mx2.3/38, Error ellipse: s-maj=138.5km s-min=40.5km az=30.0*

**ISC 13 19:36:11.3±0.9,7°.41S±0°.05×111°.82E±0°.03, h10km, n24, σ1s11/24, mb3.6/3, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PWJI | Pagerwojo | 0.61 | 182 | P | Pg | 19 36 23.5 | +0.4 |
| GRJI | Gresik | 0.82 | 53 | P | Pg | 19 36 27.8 | +0.7 |
| PCJI | Pacitan | 1.01 | 219 | P | Pg | 19 36 30.9 | +0.2 |
| UWJI | Ujung Watu | 1.31 | 319 | P | Pn | 19 36 35.8 | +0.1 |
| UGM | Wanagama | 1.38 | 249 | P | Pn | 19 36 36.8 | +0.1 |
| SMRI | Semarang | 1.42 | 285 | P | Pn | 19 36 36.8 | -0.4 |
| YOGI | Yogyakarta | 1.56 | 255 | P | Pn | 19 36 39.8 | +0.6 |
| BWJI | Bawean | 1.76 | 28 | P | Pn | 19 36 41.7 | -0.2 |
| BLJI | Banyuglugur | 1.79 | 101 | P | Pn | 19 36 42.7 | +0.4 |
| GMJI | Gumukmas | 1.82 | 118 | P | Pn | 19 36 43.4 | +0.6 |
| KMMI | Kalianget | 2.16 | 81 | P | Pn | 19 36 46.7 | -0.7 |
| ABJI | Asem Bagus | 2.42 | 99 | P | Pn | 19 36 51.4 | +0.4 |
| JAGI | Jajag, Banyuwa | 2.54 | 115 | P | Pn | 19 36 52.9 | +0.3 |
| KPJI | Karang Pucung | 2.87 | 271 | P | Pn | 19 36 57.6 | +0.5 |
| CMJI | Cimerak | 3.36 | 263 | P | Pn | 19 37 04.2 | +0.2 |
| SRBI | Singaraja | 3.43 | 101 | P | Pn | 19 37 07.5 | +2.7 |
| IGBI | Denpasar | 3.58 | 113 | P | Pn | 19 37 08.2 | +1.3 |
| LEM | Lembang | 4.21 | 278 | P | Pg | 19 37 34.8 | +2.7 |
| | 2.5nm,0.3s,baz=111,slow=13,SNR=4.6 | | | | | | |
| LEM | | | | S | Sg | 19 38 24.6 | -2.0 |
| | 3.0nm,0.3s,baz=2.1,slow=19,SNR=1.8 | | | | | | |
| LEM | | | | LR | LR | 19 39 39.5 | |
| | comp=Z,57nm,20.5s,baz=112,slow=43 | | | | | | |
| CNJI | Cibinong | 4.65 | 271 | P | Pn | 19 37 22.7 | +1.0 |
| LWLI | Liwa | 8.07 | 287 | P | Pb | 19 38 24.2 | -7.3 |
| FITZ | Fitzroy Crossi | 17.15 | 130 | P | Pn | 19 40 11.3 | +0.1 |
| | 0.0nm,0.3s,baz=275,slow=12,SNR=1.0 | | | | | | |
| WRA | Warramunga Arr | 25.13 | 122 | P | P | 19 41 36.3 | -0.5 |
| | 0.8nm,0.6s,baz=282,slow=11,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 26.65 | 130 | P | P | 19 41 50.1 | -0.5 |
| | 0.7nm,0.5s,baz=303,slow=8.1,SNR=33 | | | | | | |
| STKA | Stephens Creek | 36.90 | 135 | P | P | 19 43 19.3 | -1.1 |
| | 0.8nm,0.4s,baz=322,slow=12,SNR=5.2 | | | | | | |

*UCR* ***13*** *19:38:56.4±1.0, 13°.64N×91°.19W, h14km±6km, ML3.4*
*SNET* ***13*** *19:38:56.4±0.9, 13°.64N×91°.19W, h15km±6km, ML3.5*
*GCG* ***13*** *19:38:56.3±0.3, 13°.78N×91°.53W, h64km±31km, MD3.7*

**ISC 13 19:38:52.7±3.5, 13°.4N±0°.2×91°.5W±0°.1, h35km, n18, σ1s06/25, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FUG | Fuego 3 | 1.23 | 31 | eP | Pn | 19 39 14.3 | +0.8 |
| STG3 | Santiaguito 3, | 1.31 | 357 | eP | Pn | 19 39 14.3 | -0.4 |
| NBG | Las Nubes | 1.63 | 43 | eP | Pn | 19 39 20.7 | +1.5 |
| NBG | | | | eS | Sn | 19 39 39.8 | +0.7 |
| NUBE | Las Nubes | 1.75 | 73 | eP | Pn | 19 39 20.4 | -0.3 |
| NUBE | | | | eS | Sn | 19 39 39.8 | -2.1 |
| LOAL | Lomas de Alarc | 1.78 | 70 | eP | Pn | 19 39 21.4 | +0.4 |
| LOAL | Lomas de Alarc | 1.78 | 70 | eP | Pn | 19 39 21.4 | +0.4 |
| SLOZ | Alcaldia de Sa | 1.79 | 69 | eP | Pn | 19 39 21.1 | 0.0 |
| RTR | El Retiro | 1.87 | 74 | eP | Pn | 19 39 23.6 | +1.2 |
| RTR | El Retiro | 1.87 | 74 | eP | Pn | 19 39 23.6 | +1.2 |
| SBLS | San Blas | 1.88 | 76 | eP | Pn | 19 39 23.2 | +0.7 |
| SBLS | | | | eS | Sn | 19 39 44.4 | -0.9 |
| SBLS | San Blas | 1.88 | 76 | eP | Pn | 19 39 23.2 | +0.7 |
| SBLS | | | | eS | Sn | 19 39 44.4 | -0.9 |
| JAYA | Jayaque - finc | 2.02 | 82 | eP | Pn | 19 39 25.2 | +0.8 |
| JAYA | | | | eS | Sn | 19 39 47.8 | -0.6 |
| JAYA | | | | IAML | | 19 39 56.9 | |
| | comp=Z,476nm,0.2s | | | | | | |
| JAYA | Jayaque - finc | 2.02 | 82 | eP | Pn | 19 39 25.2 | +0.8 |
| JAYA | | | | eS | Sn | 19 39 47.8 | -0.6 |
| JAYA | | | | IAML | | 19 39 56.9 | |
| | comp=Z,476nm,0.2s | | | | | | |
| PMON | Piamonte | 2.15 | 81 | eP | Pn | 19 39 27.3 | +1.1 |
| PMON | Piamonte | 2.15 | 81 | eP | Pn | 19 39 27.3 | +1.1 |
| MTO3 | Montecristo | 2.31 | 64 | eP | Pn | 19 39 29.5 | +1.1 |
| MTO3 | Montecristo | 2.31 | 64 | eP | Pn | 19 39 29.5 | +1.1 |

*IDC* ***13*** *19:40:17.4±1.8,36°.53N×71°.57E, h123km±17km, mb4.0/36, mb1 4.1/44, mb1mx3.9/70, mbtmp4.4/44, MS4.3/2, Ms1 4.3/2, ms1mx2.7/84, Error ellipse: s-maj=10.3km s-min=8.6km az=12.0*
*MOS* ***13*** *19:40:17.0±1.1,36°.67N×71°.60E, h125km, mb4.5/32, Error ellipse: s-maj=5.3km s-min=3.4km az=107.8*
*NNC* ***13*** *19:40:19.4±2.1,37°.21N×71°.01E, h0km, mb5.0, mpv5.0, Error ellipse: s-maj=19.9km s-min=10.9km az=155.0*
*BJI* ***13*** *19:40:20.0±0.0,36°.75N×71°.62E, h134km, mb4.5/23, mB4.7/13*
*NEIC* ***13*** *19:40:20.8±2.0,36°.70N±0°.05×71°.42E±0°.07, h147km±4km, mb4.5/83, Error ellipse: s-maj=8.3km s-min=7.9km az=113.0*

**ISC 13 19:40:19.2±0.4,36°.67N±0°.03×71°.46E±0°.03, h137km±4km, h137km:pP-P, n482, σ1s86/534, mb4.5/128, 48C-22D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GAR | Garm | 2.49 | 339 | Pn | Pn | 19 41 00.8 | +1.1 |
| GAR | | | | Sn | Sn | 19 41 29.7 | -1.2 |
| CHGR | Chuyangaron | 2.69 | 318 | PN | Pn | 19 41 02.6 | +0.4 |
| CHGR | Chuyangaron | 2.69 | 318 | Pn | Pn | 19 41 02.6 | +0.4 |
| CHGR | | | | Sn | Sn | 19 41 33.8 | -1.6 |
| CEP | Cherat | 2.87 | 172 | P | Pn | 19 41 06.0 | +1.5 |
| KBL | Kabul | 2.90 | 223 | PN | Pn | 19 41 06.1 | +1.2 |
| KBL | Kabul | 2.90 | 223 | Pn | Pn | 19 41 06.1 | +1.2 |
| KBL | Kabul | 2.90 | 223 | P | Pn | 19 41 06.3 | +1.4 |
| | SNR=245 | | | | | | |
| KBL | | | | S | Sn | 19 41 41.3 | +1.2 |
| NIL | Nilore | 3.35 | 153 | PN | Pn | 19 41 12.6 | +1.9 |
| NIL | Nilore | 3.35 | 153 | Pn | Pn | 19 41 12.6 | +1.9 |
| NIL | Nilore | 3.35 | 153 | P | Pn | 19 41 12.8 | +2.2 |
| KSH | Kashi | 4.56 | 50 | P | Pn | 19 41 23.4 | -3.1 |
| KSH | | | | S | Sn | 19 42 07.1 | -12 |
| KSH | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,1μm,0.5s | | | | | | |
| JMU | Jammu | 4.86 | 143 | eP | Pn | 19 41 30.0 | -0.5 |
| JMU | | | | eP | Pn | 19 41 31.5 | +1.0 |
| JMU | | | | eS | Sn | 19 42 22.5 | -3.4 |
| JMU | | | | eS | Sn | 19 42 23.3 | -2.6 |
| TAS | Tashkent | 4.94 | 341 | PN | Pn | 19 41 32.0 | +0.4 |
| TAS | Tashkent | 4.94 | 341 | Pn | Pn | 19 41 32.0 | +0.4 |
| THN | Thein Dam | 5.50 | 139 | eP | Pn | 19 41 40.0 | +1.0 |
| THN | | | | eS | Sn | 19 42 39.6 | -1.6 |
| IUG | luzhnay | 5.58 | 349 | ePN | Pn | 19 41 39.9 | -0.2 |
| IUG | luzhnay | 5.58 | 349 | eP | Pn | 19 41 40.0 | -0.2 |
| | baz=348 | | | | | | |
| AML | Almayashu | 5.72 | 17 | P | Pn | 19 41 42.8 | +0.5 |
| | SNR=354 | | | | | | |
| AML | Almayashu | 5.72 | 17 | P | Pn | 19 41 42.9 | +0.6 |
| AML | | | | S | Sn | 19 42 41.8 | -5.3 |
| UCH | Uchtor | 6.03 | 22 | P | Pn | 19 41 47.1 | +0.5 |
| | SNR=271 | | | | | | |
| DZA | Taraz | 6.21 | 359 | ePN | Pn | 19 41 48.2 | -0.4 |
| DZA | Taraz | 6.21 | 359 | eP | Pn | 19 41 48.2 | -0.4 |
| | baz=358 | | | | | | |
| EKS2 | Erkin-Say | 6.25 | 16 | P | Pn | 19 41 49.7 | +0.6 |
| | SNR=196 | | | | | | |
| AAK | Ala-Archa | 6.40 | 21 | P | Pn | 19 41 52.0 | +0.8 |
| | 59nm,0.3s,baz=188,slow=5.5,SNR=566 | | | | | | |
| AAK | | | | S | Sn | 19 43 01.6 | -1.5 |
| | 28nm,0.3s,baz=329,slow=23,SNR=23 | | | | | | |
| AAK | Ala-Archa | 6.40 | 21 | P | Pn | 19 41 52.1 | +0.9 |
| | SNR=286 | | | | | | |
| AAK | Ala-Archa | 6.40 | 21 | *d* iPN | Pn | 19 41 51.9 | +0.8 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,77nm,0.6s | | | | | | |
| AAK | Ala-Archa | 6.40 | 21 | P | Pn | 19 41 52.1 | +0.8 |
| AAK | | | | S | Sn | 19 43 01.4 | -1.8 |
| AAK | Ala-Archa | 6.40 | 21 | ⇑P | Pn | 19 41 51.6 | +0.4 |
| | comp=Z,63nm,0.3s | | | | | | |
| AAK | | | | ⇑S | Sn | 19 43 01.7 | -1.5 |
| | comp=Z,262nm,0.6s | | | | | | |
| KK02 | Karatay Array | 6.47 | 354 | ⇓P | Pn | 19 41 51.6 | -0.4 |
| | comp=Z,96nm,0.5s | | | | | | |
| KK02 | | | | ⇓S | Sn | 19 42 58.8 | -5.7 |
| | comp=Z,471nm,0.7s | | | | | | |
| KKAR | Karatay Array | 6.47 | 354 | PN | Pn | 19 41 52.1 | +0.2 |
| KKAR | Karatay Array | 6.47 | 354 | Pn | Pn | 19 41 52.1 | +0.2 |
| BRLS | Borolday | 6.47 | 349 | ePN | Pn | 19 41 48.3 | -3.7 |
| BRLS | Borolday | 6.47 | 349 | eP | Pn | 19 41 48.3 | -3.7 |
| | baz=347 | | | | | | |
| KBK | Karagaybulak | 6.56 | 23 | P | Pn | 19 41 54.1 | +0.8 |
| | SNR=63 | | | | | | |
| BHK | Bhakra | 6.66 | 140 | eP | Pn | 19 41 55.1 | +0.4 |
| BHK | | | | eS | Sn | 19 43 03.7 | -5.6 |
| CHMS | Chumysh | 6.81 | 21 | P | Pn | 19 41 57.0 | +0.4 |
| | SNR=86 | | | | | | |
| USP | Ospenovka | 6.99 | 19 | P | Pn | 19 41 59.7 | +0.7 |
| | SNR=58 | | | | | | |
| TKM2 | Tokmak 2 | 7.01 | 26 | P | Pn | 19 41 60.0 | +0.6 |
| | SNR=56 | | | | | | |
| TKM2 | Tokmak 2 | 7.01 | 26 | PN | Pn | 19 41 59.5 | +0.1 |
| TKM2 | Tokmak 2 | 7.01 | 26 | ⇑P | Pn | 19 41 59.5 | +0.1 |
| | comp=Z,37nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | Sn | 19 43 15.9 | -1.9 |
| | comp=Z,72nm,0.7s | | | | | | |
| TARG | Taragay, Kyrgy | 7.06 | 42 | | Pn | 19 42 00.5 | +0.2 |
| SGDS | Sogindy | 7.20 | 19 | eP | Pn | 19 42 00.7 | -1.1 |
| | comp=Z,5.6nm,0.5s,baz=19 | | | | | | |
| SGDS | | | | eS | Sn | 19 43 19.1 | -3.1 |
| | baz=19 | | | | | | |
| SMLA | Simla | 7.29 | 138 | eP | Pn | 19 42 02.5 | -0.5 |
| SMLA | | | | eS | Sn | 19 43 18.8 | -5.5 |
| SMLA | | | | IAML | | 19 43 22.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| TNSS | Tian-Shan | 7.63 | 32 | eP | Pn | 19 42 06.8 | -1.2 |
| | baz=32 | | | | | | |
| AAA | Alma-Ata | 7.76 | 31 | ePN | Pn | 19 42 09.3 | 0.0 |
| AAA | Alma-Ata | 7.76 | 31 | eP | Pn | 19 42 09.3 | 0.0 |
| | baz=31 | | | | | | |
| MDOK | Medeo | 7.78 | 32 | ePN | Pn | 19 42 08.7 | -0.9 |
| MDOK | Medeo | 7.78 | 32 | eP | Pn | 19 42 08.8 | -0.9 |
| | baz=32 | | | | | | |
| MDOK | Medeo | 7.78 | 32 | ⇓P | Pn | 19 42 09.7 | 0.0 |
| | comp=E,37nm,0.6s | | | | | | |
| MDOK | | | | ⇓S | Sn | 19 43 35.5 | -0.8 |
| | comp=E,90nm,1.0s | | | | | | |
| KNDC | Almaty | 7.79 | 31 | PN | Pn | 19 42 11.0 | +1.3 |
| KNDC | | | | S | Sn | 19 43 38.9 | +2.5 |
| KNDC | Almaty | 7.79 | 31 | ⇑P | Pn | 19 42 11.1 | +1.3 |
| | comp=E,115nm,0.6s | | | | | | |
| KNDC | | | | ⇓S | Sn | 19 43 38.9 | +2.5 |
| | comp=E,58nm,0.5s | | | | | | |
| HRA | Herat | 7.85 | 256 | Pn | Pn | 19 42 10.9 | +0.2 |
| KUU | Kurty | 8.12 | 26 | ePN | Pn | 19 42 12.8 | -1.3 |
| KUU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| KUU | Kurty | 8.12 | 26 | eP | Pn | 19 42 12.8 | -1.3 |
| | comp=Z,3.3nm,0.5s,baz=26 | | | | | | |
| SATY | Saty | 8.32 | 38 | ePN | Pn | 19 42 15.9 | -1.0 |
| SATY | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| SATY | Saty | 8.32 | 38 | eP | Pn | 19 42 15.9 | -1.0 |
| | comp=Z,13nm,0.9s,baz=38 | | | | | | |
| CHKK | Chushkaly | 8.33 | 29 | eP | Pn | 19 42 15.7 | -1.3 |
| | baz=29 | | | | | | |
| DDI | Dehra Dun | 8.39 | 137 | eP | Pn | 19 42 17.3 | -0.7 |
| DDI | | | | eS | Sn | 19 43 44.7 | -6.4 |
| DDI | | | | IAML | | 19 43 50.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| ZHN | Zhinishke | 8.41 | 37 | ePN | Pn | 19 42 16.9 | -1.3 |
| ZHN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| ZHN | Zhinishke | 8.41 | 37 | eP | Pn | 19 42 16.9 | -1.3 |
| | comp=Z,5.3nm,0.7s,baz=38 | | | | | | |
| BTLS | Baital | 8.59 | 12 | ePN | Pn | 19 42 19.0 | -1.4 |
| BTLS | Baital | 8.59 | 12 | eP | Pn | 19 42 19.0 | -1.4 |
| | baz=12 | | | | | | |
| UZB | Uzynbulak | 8.69 | 40 | ePN | Pn | 19 42 20.6 | -1.4 |
| UZB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| UZB | Uzynbulak | 8.69 | 40 | eP | Pn | 19 42 20.6 | -1.4 |
| | comp=Z,7.3nm,0.6s,baz=40 | | | | | | |
| NDI | New Delhi | 9.32 | 147 | eP | Pn | 19 42 28.6 | -1.8 |
| NDI | | | | eP | Pn | 19 42 33.0 | +2.6 |
| NDI | | | | eS | Sn | 19 44 04.1 | -10 |
| NDI | | | | eS | Sn | 19 44 06.0 | -7.6 |
| KUDL | Kundal | 9.50 | 152 | eP | Pn | 19 42 30.2 | -2.6 |
| KUDL | | | | eS | Sn | 19 44 09.3 | -8.6 |
| SONA | Sohna | 9.65 | 149 | eP | Pn | 19 42 35.1 | +0.4 |
| SONA | | | | eS | Sn | 19 44 11.1 | -10 |
| TDK | Taldyqorghan | 9.84 | 30 | eP | Pn | 19 42 35.7 | -1.5 |
| TDK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| TDK | Taldyqorghan | 9.84 | 30 | eP | Pn | 19 42 35.8 | -1.5 |
| | comp=Z,13nm,0.8s,baz=30 | | | | | | |
| PTH | Pithoragarh | 10.21 | 132 | eP | Pn | 19 42 40.0 | -2.5 |
| PTH | | | | eS | Sn | 19 44 25.2 | -10 |
| LGTI | Lohaghat | 10.30 | 132 | ⇑eP | Pn | 19 42 40.3 | -3.1 |
| LGTI | | | | eP | Pn | 19 42 40.4 | -3.0 |
| LGTI | | | | eS | Sn | 19 44 27.1 | -10 |
| AJM | Ajmer | 10.52 | 164 | eP | Pn | 19 42 46.5 | +0.1 |
| AJM | | | | eS | Sn | 19 44 30.6 | -12 |
| GEYT | Alibeck | 10.70 | 281 | P | Pn | 19 42 47.3 | -1.5 |
| | comp=Z,2.5nm,0.3s,baz=191,slow=6.0,SNR=17 | | | | | | |
| GEYT | | | | S | Sn | 19 44 43.9 | -3.0 |
| | comp=Z,1.8nm,0.3s,baz=80,slow=18,SNR=3.6 | | | | | | |
| GEYT | Alibeck | 10.70 | 281 | Pn | Pn | 19 42 46.4 | -2.3 |
| GYA0 | ALIBECK ARRAY | 10.70 | 281 | P | Pn | 19 42 47.1 | -1.6 |
| GYA0 | | | | S | Sn | 19 44 43.1 | -3.7 |
| GYA0B | ALIBECK ARRAY | 10.70 | 281 | Pn | Pn | 19 42 46.2 | -2.6 |
| GYA0B | ALIBECK ARRAY | 10.70 | 281 | ⇓P | Pn | 19 42 47.1 | -1.6 |
| GYA0B | | | | ⇓S | Sn | 19 44 43.2 | -3.6 |
| OTUK | Ortayu | 11.59 | 3 | P | Pn | 19 42 57.7 | -2.6 |
| OTUK | | | | S | Sn | 19 45 01.7 | -6.2 |
| OTUK | Ortayu | 11.59 | 3 | ⇑P | Pn | 19 42 57.8 | -2.6 |
| | comp=Z,6.5nm,0.7s | | | | | | |
| OTUK | | | | ⇓S | Sn | 19 45 01.8 | -6.2 |
| | comp=Z,50nm,0.8s | | | | | | |
| JHNI | Jhansi | 12.71 | 150 | eP | Pn | 19 43 11.9 | -3.1 |
| JHNI | | | | eS | Sn | 19 45 22.5 | -13 |
| MAKZ | Makanchi | 12.80 | 34 | P | P | 19 43 19.3 | -2.5 |
| MAKZ | Makanchi | 12.80 | 34 | | Pn | 19 43 15.2 | -1.0 |
| MAKZ | Makanchi | 12.80 | 34 | ⇓P | P | 19 43 19.3 | -2.5 |
| | comp=Z,6.4nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 12.94 | 35 | eP | P | 19 43 21.4 | -1.9 |
| MK31 | Makanchi Array | 12.94 | 35 | | Pn | 19 43 17.4 | -0.5 |
| MK31 | Makanchi Array | 12.94 | 35 | ⇑P | P | 19 43 21.4 | -1.9 |
| | comp=Z,2.1nm,0.5s,baz=211,slow=11,SNR=17 | | | | | | |
| MKAR | Makanchi Array | 12.94 | 35 | P | Pn | 19 43 16.9 | -1.0 |
| | comp=Z,0.3nm,0.3s,baz=223,slow=13,SNR=41 | | | | | | |
| MKAR | Makanchi Array | 12.94 | 35 | P | P | 19 43 17.3 | -0.6 |
| MKAR | Makanchi Array | 12.94 | 35 | Pn | Pn | 19 43 17.3 | -0.6 |
| PYUN | Piuthan | 12.95 | 128 | eP | Pn | 19 43 15.5 | -3.0 |
| | comp=Z,131nm,0.3s | | | | | | |
| DANN | Dangsing | 13.28 | 125 | eP | Pn | 19 43 20.1 | -2.6 |
| | comp=Z,89nm,0.3s | | | | | | |
| BHUJ | Bhuj | 13.46 | 187 | ⇑eP | Pn | 19 43 22.5 | -2.2 |
| BHUJ | | | | IAmb | IAmb | 19 43 24.1 | |
| | comp=Z,51nm,0.5s | | | | | | |
| BHUJ | | | | eS | Sn | 19 45 38.9 | -15 |
| KOLN | Koldanda | 13.57 | 127 | eP | P

comp=Z,237nm,0.4s
**RAMN Ramite 16.09 123** *e*P **Pn** **19 43 56.1 -1.9**
comp=Z,19nm,0.4s
**BVAR Borovoye Array 16.37 358** P **Pn** **19 44 00.3 -0.6**
comp=Z,2.6nm,0.3s,baz=106,slow=16,SNR=23
BVAR S **Sn** **19 46 54.8 -8.2**
comp=Z,1.2nm,0.3s,baz=150,slow=22,SNR=11
**BRVK Borovoye 16.41 357** *de*P **Pn** **19 43 59.4 -1.9**
BRVK pmax pmax
comp=Z,17nm,0.8s
**BRVK Borovoye 16.41 357** **Pn** **19 44 00.6 -0.7**
BRVK IAmb IAmb 19 44 04.6
comp=Z,16nm,0.7s
**BRVK Borovoye 16.41 357** P **Pn** **19 44 01.2 -0.2**
BRVK S **Sn** **19 46 55.6 -8.3**
**TAPN Taplejung 16.61 119** *e*P **Pn** **19 44 03.3 -1.0**
comp=Z,100nm,0.4s
**AKL Akola 16.64 162** *e*P **Pn** **19 44 03.2 -1.1**
**ODAN Odare 16.69 121** *e*P **Pn** **19 44 04.4 -0.9**
comp=Z,78nm,0.5s
**BANOM Banah 16.79 235** P **P** **19 44 05.4 -0.7**
BANOM S **Sn** **19 47 11.0 -2.5**
**SHME Shamm 16.81 235** P **Pn** **19 44 06.5 +0.1**
**AKTO Aktyubinsk 16.82 329** P **Pn** **19 44 07.2 +0.8**
comp=Z,7.2nm,0.3s,baz=138,slow=11,SNR=78
AKTO S Sn 19 47 02.0 -12
comp=Z,0.6nm,0.3s,baz=176,slow=19,SNR=3.5
**AKTO Aktyubinsk 16.82 329** ⇓P **Pn** **19 44 06.5 +0.1**
comp=Z,22nm,0.7s
AKTO ⇑S **Sn** **19 47 08.5 -5.3**
comp=Z,18nm,0.7s
**WSAR Wadi Sarin 17.37 223** P **P** **19 44 11.6 -1.0**
comp=Z,0.3nm,0.3s,baz=85,slow=12,SNR=5.3
**WSAR Wadi Sarin 17.37 223** P **Pn** **19 44 13.2 -0.1**
**DGZ Jazzator, Alta 17.42 37** *de*P **P** **19 44 13.0 -0.1**
**UOSS Minazif 17.53 232** P **P** **19 44 14.1 -0.2**
**UOSS Minazif 17.53 232** P **Pn** **19 44 14.9 -0.3**
**HATD Hatta, Dubai 17.66 232** P **Pn** **19 44 18.7 +1.9**
**WBK Wadi Bani Khal 17.70 221** P **Pn** **19 44 19.7 +2.5**
**ASHO Ashiyiah 17.81 232** P **P** **19 44 17.8 +0.5**
**JLN Jalan Bani Buh 17.85 219** P **Pn** **19 44 19.8 +0.8**
JLN S **S** **19 47 32.9 -3.1**
**BOK Bokaro 17.86 132** *e*P **Pn** **19 44 19.4 +0.2**
BOK IAmb IAmb 19 44 23.9
comp=Z,13nm,0.6s
**LSA Lhasa 17.87 107** P **Pn** **19 44 21.0 +1.3**
LSA pmax pmax
comp=Z,28nm,0.6s
**LKRN Lenkeran, Azer 18.06 283** P **Pn** **19 44 23.8 +2.5**
**SRSP Sriramsagar 18.68 159** *e*P **P** **19 44 27.2 +0.3**
SRSP *es*P sP 19 45 21.9 +13
**GOMU GeErMu 18.80 84** P **Pn** **19 44 30.3 -0.2**
GOMU pmax pmax
comp=Z,66nm,5.4s
**RPR Rampur 19.04 157** *e*P **P** **19 44 31.4 +0.7**
RPR *ep*P **pP** **19 44 56.3 +0.5**
**KLRI Killari 19.08 165** *e*P **P** **19 44 31.6 +0.4**
KLRI *es*P **sP** **19 45 17.5 +4.2**
KLRI *e*S **S** **19 48 00.6 +0.1**
**SEKA Sheki 19.39 291** P **Pn** **19 44 35.8 -1.2**
**MNGR Mingechevir, A 19.43 290** P **Pn** **19 44 37.4 0.0**
**ZAA0 Zalesovo Array 19.61 24** P **P** **19 44 36.6 -0.1**
ZAA0 IAmb IAmb 19 44 37.8
comp=Z,16nm,0.7s
**ZALV Zalesovo Beam 19.61 24** P **P** **19 44 36.5 -0.1**
comp=Z,5.4nm,0.3s,baz=216,slow=10,SNR=104
**ZKTA Zakatala 19.86 292** P **Pn** **19 44 41.4 -1.1**
**GANJ Ganja 20.00 289** P Pn 19 44 43.5 -0.7
**LGD Lagodekhi 20.16 293** P Pn 19 44 44.6 -1.4
**HYBB Hyderabad (bro 20.18 160** *e*P **P** **19 44 43.1 0.0**
HYBB *e*S **S** **19 48 21.4 -0.8**
**DDFL Dedoflistskaro 20.22 291** P Pn 19 44 46.8 +0.1
**CUPL Choutuppal 20.40 159** *e*P **P** **19 44 45.6 +0.1**
CUPL *es*P **sP** **19 45 31.7 +3.5**
CUPL *e* 19 48 22.4
CUPL *e*S **S** **19 48 26.9 +0.3**
**NAX Nakhchivan 20.61 285** P Pn 19 44 50.8 -0.6
**SHL Shillong 20.65 117** P **P** **19 44 49.2 +0.9**
SHL pmax pmax
comp=Z,8.0nm,0.7s
**SHL Shillong 20.65 117** P **P** **19 44 49.2 +0.9**
SHL IAmb IAmb 19 44 54.5
comp=Z,7.9nm,0.7s
**GROC Groznyy 20.68 296** *e*P **P** **19 44 49.9 +1.6**
GROC *e**PP **pP** **19 45 16.1 +2.9**
GROC pmax pmax
comp=Z,44nm,0.7s
**GNI Garni 21.19 288** P **P** **19 44 55.7 +1.7**
comp=Z,20nm,0.8s,baz=74,slow=2.7,SNR=10.0
**GNI Garni 21.19 288** *de*P **P** **19 44 57.4 +3.4**
GNI pmax pmax
comp=Z,55nm,1.7s
**GNI Garni 21.19 288** P **P** **19 44 54.8 +0.8**
GNI IAmb IAmb 19 45 02.6
comp=Z,23nm,0.8s
**CHLP Challavanipeta 21.23 145** *e*P **P** **19 44 55.8 +1.6**
CHLP *es*P **sP** **19 45 39.9 +2.4**
CHLP *e*S **S** **19 48 44.5 +2.1**
**PVM Polavaram 21.34 152** *e*P **P** **19 44 56.0 +0.5**
PVM *es*P **sP** **19 45 42.3 +3.7**
**SVE Sverdlovsk 21.43 344**⇑ *e*P **P** **19 44 56.8 +0.6**
SVE *e*S **S** **19 48 53.1 +7.6**
SVE pmax pmax
comp=Z,20nm,1.2s
**MYLAV Mylavaram 21.45 155** *e*P **P** **19 44 59.1 +2.4**
**SRLM Srisailam 21.53 160** *e*P **P** **19 44 58.0 +0.4**
SRLM *es*P **sP** **19 45 43.8 +3.6**
**ARU Arti 21.59 340** P **P** **19 44 58.6 +0.7**
comp=Z,2.4nm,0.5s,baz=147,slow=9.0,SNR=19
ARU S **S** **19 48 54.0 +5.6**
comp=Z,2.3nm,0.6s,baz=156,slow=22,SNR=7.4
**ARU Arti 21.59 340** *c i*P **P** **19 44 58.1 +0.2**
ARU *PP **pP** **19 45 26.6 +2.9**
ARU 19 45 39.7
ARU S **S** **19 48 48.9 +0.5**
ARU pmax pmax
comp=Z,35nm,1.1s
**ARU Arti 21.59 340** P **P** **19 44 57.9 0.0**
ARU IAmb IAmb 19 45 01.8
comp=Z,45nm,1.3s
**ZEI Tsey 22.00 295** *e*P **P** **19 45 03.7 +1.2**
ZEI pmax pmax
comp=Z,10.0nm,1.0s
**ADKI Addanki 22.08 158** *e*P **P** **19 45 03.4 +0.1**
ADKI *es*P **sP** **19 45 49.2 +3.0**
**BGD Bogdanovka 22.10 291** P **P** **19 45 08.2 +4.7**
**RCLA Racherla 22.16 161** *e*P **P** **19 45 03.9 -0.2**
RCLA *ep*Pn pPn 19 45 33.6 +1.6
RCLA *es*P **sP** **19 45 52.7 +5.6**
**AKH Akhalkalaki 22.18 291**⇑P **P** **19 45 07.3 +2.9**
**AKH Akhalkalaki 22.18 291** P **P** **19 45 07.3 +2.9**
**URV Uravakonda 22.25 165** *e*P **P** **19 45 04.9 -0.1**
URV *es*P **sP** **19 45 50.4 +2.3**
**ONI Oni 22.31 294** P **P** **19 45 07.4 +1.9**
ONI pmax pmax
comp=Z,10.0nm,0.9s
**ONI Oni 22.31 294** P **P** **19 45 07.4 +1.9**
ONI IAmb IAmb 19 45 09.8
comp=Z,9.6nm,0.9s
**NCK Nalchik 22.32 296**⇓ *e*P **P** **19 45 07.2 +1.7**
NCK pmax pmax
comp=Z,25nm,1.0s
**GTA Gaotai 22.46 74** *e*P **P** **19 45 08.3 +1.2**
GTA pP pP 19 45 38.8 +5.1
GTA sP sP 19 45 55.4 +4.0
GTA pmax pmax
comp=Z,4.0nm,1.0s
**KARS Kars 22.47 289** P **P** **19 45 08.0 +0.9**
KARS pmax pmax
comp=Z,40nm,1.1s
**KARS Kars 22.47 289** P **P** **19 45 08.0 +0.9**
KARS IAmb IAmb 19 45 11.7
comp=Z,40nm,1.1s
**KBZ Khabaz 22.85 297** P **P** **19 45 11.2 +0.6**
comp=Z,5.1nm,0.8s,baz=104,slow=13,SNR=12
**KBZ Khabaz 22.85 297** *c i*P **P** **19 45 11.5 +1.0**
KBZ pmax pmax
comp=Z,6.0nm,0.9s
**GOF Gofitskoye 22.97 300**⇑ *e*P **P** **19 45 13.4 +1.7**
GOF pmax pmax
comp=Z,20nm,0.7s
**BELG Belogornoye 22.99 321** P **P** **19 45 12.4 +0.7**
comp=Z,21nm,0.5s,baz=293,slow=2.8,SNR=21
**BELG Belogornoye 22.99 321** *c i*P **P** **19 45 12.4 +0.7**
BELG pmax pmax
comp=Z,10.0nm,1.3s
**KIV Kislovodsk 23.03 297**⇑P **P** **19 45 14.4 +2.0**
**KIV Kislovodsk 23.03 297** *e*P **P** **19 45 14.0 +1.6**
KIV *e*S **S** **19 49 14.1 +1.4**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**KIV Kislovodsk 23.03 297** P **P** **19 45 13.1 +0.7**
KIV IAmb IAmb 19 45 36.9
comp=Z,14nm,1.2s
**CHVG Ch'k'valeri 23.32 294**⇑P **P** **19 45 17.6 +2.6**
**DMTO DMTO 23.85 222** P **P** **19 45 21.0 +1.0**
SNR=6.0
**SKHT Srikalahasti 24.00 160** *e*P **P** **19 45 20.5 -0.8**
SKHT *es*P **sP** **19 46 12.7 +5.6**
**WHFO Wadi Hawf 24.34 225** P **P** **19 45 24.1 -0.3**
**ABTO Aybut 25.06 225** P **P** **19 45 30.5 -0.5**
**VRH Novokhopyorsk 25.65 314** *e*P **P** **19 45 35.3 -0.7**
VRH pmax pmax
comp=Z,10.0nm,1.0s
**RAYN Ar Rayn 25.90 247** P **P** **19 45 41.1 +2.5**
RAYN pmax pmax
comp=Z,5.0nm,1.2s
**RAYN Ar Rayn 25.90 247** P **P** **19 45 41.1 +2.5**
**RAYN Ar Rayn 25.90 247** P **P** **19 45 38.2 -0.3**
**KIRV Kirov 26.25 334** P **P** **19 45 42.5 +1.3**
comp=Z,12nm,0.8s,baz=244,slow=23,SNR=5.7
**KIRV Kirov 26.25 334** *c i*P **P** **19 45 42.1 +0.9**
**VSR Storozhevoye 27.16 313** *e*P **P** **19 45 48.7 -0.8**
VSR pmax pmax
comp=Z,10.0nm,0.8s
**VORR Voronezh 27.29 314** *e*P **P** **19 45 50.4 -0.2**
VORR pmax pmax
comp=Z,20nm,0.4s
**PZH PanZhiHua 27.62 103** P **P** **19 45 57.1 +3.1**
PZH pmax pmax
comp=Z,8.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,4.6s
**LPSR Galich'ya Gora 27.79 315** *e*P **P** **19 45 55.1 0.0**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**SONM Songino Array 27.94 55** P **P** **19 45 56.4 -0.3**
comp=Z,0.9nm,0.9s,baz=258,slow=9.2,SNR=7.9
**SONM Songino Array 27.94 55** P **P** **19 45 57.9 +1.2**
SONM pmax pmax
comp=Z,2.0nm,1.3s
**SONM Songino Array 27.94 55** P **P** **19 45 57.9 +1.2**
**BR131 Keskin Array S 29.73 288** *ce*P **P** **19 46 14.7 +2.0**
**BR131 Keskin Array S 29.73 288** P **P** **19 46 14.3 +1.6**
**BRTR Keskin Array B 29.73 288** P **P** **19 46 14.7 +2.0**
comp=Z,1.4nm,0.6s,baz=98,slow=9.2,SNR=11
**BRTR Keskin Array B 29.73 288** P **P** **19 46 14.2 +1.6**
**PRGR Permogore 29.77 335** *e*P **P** **19 46 12.4 -0.1**
PRGR pmax pmax
comp=Z,13nm,0.8s
**OBN Obninsk 30.05 319** P **P** **19 46 15.8 +0.8**
comp=Z,1.7nm,0.4s,baz=279,slow=22,SNR=4.8
**OBN Obninsk 30.05 319** *de*P **P** **19 46 16.1 +1.1**
OBN *i* *PP **pP** **19 46 44.7 -0.4**
OBN pmax pmax
comp=Z,60nm,2.5s
**OBN Obninsk 30.05 319** P **P** **19 46 15.4 +0.4**
**CMAR Chiang Mai Arr 30.22 119** P **P** **19 46 16.9 -0.1**
comp=Z,0.4nm,0.6s,baz=309,slow=9.6,SNR=2.4
**HHC Hu-ho-hao-te 31.36 70** *e*P **P** **19 46 30.1 +3.2**
**KLMR Klimovskoe 31.51 330** *e*P **P** **19 46 25.7 -2.2**
KLMR pmax pmax
comp=Z,12nm,0.9s
**KLMR Klimovskoe 31.51 330** *e*P **P** **19 46 25.7 -2.2**
KLMR AMP 19 46 28.8
comp=Z,12nm,0.9s
**ELL Elmali 33.12 283** P **P** **19 46 42.3 -0.1**
ELL pmax pmax
comp=Z,57nm,1.2s
**ELL Elmali 33.12 283** P **P** **19 46 42.3 -0.1**
**AKASG Malin Array Be 33.13 309** P **P** **19 46 42.6 +0.6**
comp=Z,4.1nm,0.6s,baz=80,slow=7.1,SNR=34
**AKASG Malin Array Be 33.13 309** P **P** **19 46 42.5 +0.5**
**AKBB Malin Array Si 33.13 309** *de*P **P** **19 46 42.9 +0.8**
**AKBB Malin Array Si 33.13 309** P **P** **19 46 41.8 -0.3**
AKBB IAmb IAmb 19 46 43.5
comp=Z,6.9nm,0.7s
**SORM Soroca 33.41 304**⇑P **P** **19 46 45.3 +0.7**
**CFR Carcaliu 33.48 298** P **P** **19 46 46.6 +1.4**
**VLDR Vladesti 33.52 300**⇑P **P** **19 46 47.5 +1.9**
**NRIK Noril'sk 33.89 10** P **P** **19 46 49.6 +1.1**
comp=Z,3.0nm,0.5s,baz=28,slow=20,SNR=5.4
**NRIK Noril'sk 33.89 10** *de*P **P** **19 46 49.6 +1.1**
NRIK pmax pmax
comp=Z,9.0nm,1.2s
**NRIK Noril'sk 33.89 10** P **P** **19 46 49.1 +0.6**
NRIK IAmb IAmb 19 46 50.6
comp=Z,8.7nm,1.2s
**VRI Vrincioaia 34.46 300**⇑P **P** **19 46 54.4 +0.6**
**TESR Tescani 34.51 301**⇑P **P** **19 46 55.6 +1.5**
**PLOR Plostina 34.52 300**⇑P **P** **19 46 56.2 +2.0**
**GIRR Girov 34.62 302** P **P** **19 46 56.6 +1.5**
**COVR Voineasa-Covas 34.83 300**⇑P **P** **19 46 59.1 +2.2**
**MLR Muntele Rosu 35.02 299**⇑P **P** **19 47 01.1 +2.5**
**MLR Muntele Rosu 35.02 299** P **P** **19 47 01.1 +2.5**
comp=Z,14nm,0.8s,baz=354,slow=0.9,SNR=24
**MLR Muntele Rosu 35.02 299** P **P** **19 47 00.6 +1.9**
MLR pmax pmax
comp=Z,16nm,0.8s
**MLR Muntele Rosu 35.02 299** P **P** **19 47 00.6 +1.9**
**NACGM Naroch 35.35 315** *i*P **P** **19 47 02.4 +1.2**
**IDID Didziasalis 35.46 316** *e*P **P** **19 47 03.3 +1.2**
**BURAR Bucovina Array 35.50 303**⇑P **P** **19 47 04.1 +1.4**
**BURAR Bucovina Array 35.50 303** P **P** **19 47 03.6 +0.9**
BURAR pmax pmax
comp=Z,4.0nm,0.8s
**BURAR Bucovina Array 35.50 303** P **P** **19 47 03.6 +0.9**
**BUR08 Bucovina Ar. S 35.51 303** P **P** **19 47 04.1 +1.3**
**COPA Copaceanca 35.61 297**⇑P **P** **19 47 05.0 +1.5**
**VOIR 35.65 299**⇑P **P** **19 47 05.6 +1.6**
**VOIR 35.65 299** P **P** **19 47 06.0 +2.0**
VOIR pmax pmax
comp=Z,5.0nm,0.8s
**IIGN Ignalina 35.76 316** *e*P **P** **19 47 06.4 +1.7**
**ARR Arges 35.95 299**⇑P **P** **19 47 08.2 +1.7**
**ARCR ARCALIA 36.09 302**⇑P **P** **19 47 10.5 +2.8**
**VSU Vasula 36.28 321**⇑ *e*P **P** **19 47 09.7 +0.7**
VSU pmax pmax
comp=Z,62nm,0.9s
**VSU Vasula 36.28 321** *e*P **P** **19 47 09.9 +0.9**
**LVV L'vov 36.35 306** *e*P **P** **19 47 11.2 +1.4**
**LOT Lotru 36.55 299**⇑P **P** **19 47 14.0 +2.3**
**PABE Paberze 37.05 316** P **P** **19 47 17.0 +1.4**
PABE IAmb IAmb 19 47 18.9
comp=Z,9.3nm,0.7s
**PABE Paberze 37.05 316** *e*P **P** **19 47 16.7 +1.1**
**DEV Deva 37.13 300** P **P** **19 47 17.8 +1.4**
DEV pmax pmax
comp=Z,11nm,0.9s
**VTS Vitosha 37.20 294** P **P** **19 47 19.2 +2.0**
**VTS Vitosha 37.20 294** P **P** **19 47 18.1 +0.9**
VTS pmax pmax
comp=Z,3.0nm,0.8s
**VTS Vitosha 37.20 294** P **P** **19 47 18.1 +0.9**
**DRGR 37.22 301**⇑P **P** **19 47 19.5 +2.3**
**DRGR 37.22 301** P **P** **19 47 19.6 +2.3**
DRGR pmax pmax
comp=Z,9.0nm,1.9s
**GZR Gura Zlata 37.25 299**⇑P **P** **19 47 19.2 +1.6**
**TRPA Tarpa 37.30 304**⇑P **P** **19 47 19.9 +2.0**
**TRPA Tarpa 37.30 304** P **P** **19 47 20.3 +2.4**
**LVZ Lovozero 37.44 338** P **P** **19 47 19.6 +0.8**
LVZ pmax pmax
comp=Z,41nm,1.5s
**LVZ Lovozero 37.44 338** P **P** **19 47 19.6 +0.8**
**FIA1 FINESS Array S 37.55 326** P **P** **19 47 20.2 +0.5**
FIA1 IAmb IAmb 19 47 21.8
comp=Z,13nm,0.8s
**FINES FINESS Array B 37.55 326** P **P** **19 47 20.7 +1.0**
comp=Z,9.2nm,0.7s,baz=105,slow=9.1,SNR=32
**FINES FINESS Array B 37.55 326** P **P** **19 47 20.4 +0.7**
**MTSE Matsula 37.82 321** *e*P **P** **19 47 22.8 +0.7**
**BZS Buzias 38.05 300**⇑P **P** **19 47 26.1 +1.9**
**MDVR Moldovita 38.05 298** P **P** **19 47 26.0 +1.7**
**NIE Niedzica 38.77 306** *e*P **P** **19 47 33.1 +2.9**
**OUL Oulu 39.00 331** P **P** **19 47 32.5 +0.7**
OUL pmax pmax
comp=Z,27nm,1.7s
**NJ2 Nanjing 39.09 82** *e*P **P** **19 47 34.3 +1.3**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
**OJC Ojcow 39.09 307** P **P** **19 47 33.2 +0.3**
OJC pmax pmax
comp=Z,13nm,1.0s
**OJC Ojcow 39.09 307** P **P** **19 47 33.2 +0.3**
OJC IAmb IAmb 19 47 34.9
comp=Z,13nm,1.0s
**LANS Liptovska Anna 39.32 305** *e*P **P** **19 47 37.2 +2.4**
**LANS Liptovska Anna 39.32 305** *e*P **P** **19 47 37.2 +2.4**
**KOLL Kolacno 40.05 304** *e*P **P** **19 47 42.8 +2.0**
**MORH Mrgy, Hungar 40.06 301**⇑P **P** **19 47 42.2 +1.3**
**MORH Mrgy, Hungar 40.06 301** P **P** **19 47 40.3 -0.6**
**SRO Srobarova 40.15 303** *e*P **P** **19 47 44.2 +2.6**
**SRO Srobarova 40.15 303** *e*P **P** **19 47 44.2 +2.6**
**KOVH Kovagotottos 40.45 301** P **P** **19 47 42.9 -1.2**
**JAVC Velka Javorina 40.52 305** *e*P **P** **19 47 46.3 +1.6**
**MORC Moravsky Berou 40.56 306**⇑P **P** **19 47 47.3 +2.3**
**MORC Moravsky Berou 40.56 306** P **P** **19 47 46.2 +1.2**
MORC pmax pmax
comp=Z,6.0nm,0.7s
**MORC Moravsky Berou 40.56 306** P **P** **19 47 46.2 +1.2**
MORC IAmb IAmb 19 47 47.5
comp=Z,5.9nm,0.7s
**MORC Moravsky Berou 40.56 306** *e*P **P** **19 47 46.4 +1.4**
**SMOL Smolenice 40.70 304** *e*P **P** **19 47 48.2 +2.1**
**SMOL Smolenice 40.70 304** *e*P **P** **19 47 48.2 +2.1**
**KEV Kevo 40.78 338** P **P** **19 47 46.6 +0.2**
KEV pmax pmax
comp=Z,38nm,1.4s
**KEV Kevo 40.78 338** P **P** **19 47 46.6 +0.2**
**KRLC Kraliky 41.04 307** P **P** **19 47 47.1 -1.8**
KRLC pmax pmax
comp=Z,11nm,2.4s
**KRLC Kraliky 41.04 307** *e*P **P** **19 47 50.5 +1.6**
**ARAG ARCESS Array S 41.13 337** *e*P **P** **19 47 50.7 +1.3**
**ARCES ARCESS Array B 41.13 337** P **P** **19 47 50.5 +1.1**
comp=Z,8.4nm,0.6s,baz=110,slow=8.1,SNR=60
**ARCES ARCESS Array B 41.13 337** P **P** **19 47 50.4 +1.1**
ARCES IAmb IAmb 19 47 51.5
comp=Z,13nm,0.8s
**UPP Uppsala 41.16 322** *e*P **P** **19 47 50.2 +0.5**
**VRAC Vranov 41.20 306**⇑P **P** **19 47 51.7 +1.6**
**VRAC Vranov 41.20 306** P **P** **19 47 52.2 +2.0**
VRAC pmax pmax
comp=Z,13nm,0.8s
**VRAC Vranov 41.20 306** *e*P **P** **19 47 51.8 +1.6**
**DPC Dobruska-Polom 41.32 307** P **P** **19 47 53.5 +2.3**
DPC pmax pmax
comp=Z,11nm,0.8s
**DPC Dobruska-Polom 41.32 307** *e*P **P** **19 47 52.6 +1.4**
**KSP Ksiaz 41.32 308** P **P** **19 47 51.8 +0.6**
KSP pmax pmax
comp=Z,9.0nm,2.6s
**KRUC Moravsky 41.34 305** *e*P **P** **19 47 52.7 +1.3**
**SOP Sopron 41.34 303** P **P** **19 47 51.6 +0.2**
**OSTC Ostas 41.38 308** *e*P **P** **19 47 54.0 +2.3**
**VIKU Vikbolandet 41.44 320** *e*P **P** **19 47 52.2 +0.2**
**UPC Upice 41.51 307** P **P** **19 47 54.8 +2.1**
UPC pmax pmax
comp=Z,20nm,2.4s
**UPC Upice 41.51 307** *e*P **P** **19 47 54.5 +1.8**
**KTK1 Kautokeino 41.61 336** *e*P **P** **19 47 54.0 +0.8**
**CONA Conrad Observa 41.79 304** *e*P **P** **19 47 56.4 +1.2**
comp=Z,7.1nm,0.7s,SNR=9.7
**IPM Ipoh 41.99 133** P **P** **19 47 57.0 0.0**
IPM IAmb IAmb 19 48 12.7
comp=Z,7.7nm,1.1s
**PSI Prapat 42.15 137** P **P** **19 47 57.7 -0.7**
comp=Z,1.5nm,0.6s,baz=346,slow=12,SNR=1.8
**HAMF Hammerfest 42.20 338** *e*P **P** **19 47 59.1 +1.1**
**PRU Pruhonice 42.48 307** P **P** **19 48 02.7 +2.1**
PRU pmax pmax
comp=Z,11nm,2.3s
**PRU Pruhonice 42.48 307** *e*P **P** **19 48 01.6 +1.0**
**SOKA Soboth 42.49 302** *i*P **P** **19 48 02.3 +1.5**
comp=Z,8.2nm,0.6s
**GSI Gunungsitoli 42.68 140** P **P** **19 48 03.0 +0.4**
GSI IAmb IAmb 19 48 05.3
comp=Z,8.0nm,0.8s
**CKRC Cesky Krumlov 42.73 305** *e*P **P** **19 48 04.5 +1.8**
**JETT Jettan, Norway 42.75 336** *e*P **P** **19 48 03.9 +1.3**
**DEL Delary 42.79 316** *e*P **P** **19 48 04.4 +1.4**
**BRG Berggiesshubel 42.81 308** *i*P **P** **19 48 04.9 +1.7**
BRG Amp 19 48 05.6
comp=Z,10nm,0.8s
**BRG Berggiesshubel 42.81 308** *i*P **P** **19 48 04.9 +1.7**
BRG pmax pmax
comp=Z,10.0nm,0.8s
**MOA Molln 42.87 304** *e*P **P** **19 48 04.9 +1.1**
comp=Z,7.5nm,0.9s,SNR=7.3
**GERES GERESS Array B 43.13 305** P **P** **19 48 07.1 +1.1**
comp=Z,0.9nm,0.5s,baz=90,slow=8.0,SNR=10
**GERES GERESS Array B 43.13 305** P **P** **19 48 06.8 +0.9**
**HFS Hagfors 43.16 322** P **P** **19 48 06.7 +0.8**
comp=Z,25nm,0.6s,baz=98,slow=11,SNR=106
**KHC Kasperske Hory 43.18 306** P **P** **19 48 07.6 +1.3**
KHC pmax pmax
comp=Z,7.0nm,1.3s
**KHC Kasperske Hory 43.18 306** *e*P **P** **19 48 08.2 +1.9**
**KHC Kasperske Hory 43.18 306** P **P** **19 48 07.5 +1.3**
**TRO Tromso 43.26 336** *e*P **P** **19 48 07.4 +0.8**
**CLL Collm 43.37 309** *e*P **P** **19 48 08.0 +0.3**
CLL pmax pmax
comp=Z,4.0nm,0.8s
**CLL Collm 43.37 309** *e*P **P** **19 48 08.0 +0.3**
comp=Z,4.0nm,0.8s
**KBA Koelnbreinsper 43.58 303** *e*P **P** **19 48 10.7 +0.9**
comp=Z,2.8nm,0.6s
**YAK Yakutsk 43.61 36** P **P** **19 48 09.5 0.0**
comp=Z,6.1nm,0.7s,baz=60,slow=1.0,SNR=10
**YAK Yakutsk 43.61 36** *e*P **P** **19 48 09.0 -0.5**
YAK pmax pmax
comp=Z,9.0nm,0.7s
**YAK Yakutsk 43.61 36** P **P** **19 48 09.1 -0.5**
YAK IAmb IAmb 19 48 10.7
comp=Z,12nm,0.8s
**FAUS Fauske 43.82 332** *e*P **P** **19 48 12.2 +1.2**
**MOR8 Moi Rana 43.85 331** *e*P **P** **19 48 11.7 +0.3**
**STEI Steigen 43.99 333** *e*P **P** **19 48 13.1 +0.7**
**STAL STALIGIAL 44.14 302** P **P** **19 48 14.4 +0.4**
STAL IAmb IAmb 19 48 15.3
comp=Z,9.1nm,0.9s
**ABTA Abfaltersbach 44.20 302** *e*P **P** **19 48 14.9 +0.3**
comp=Z,4.7nm,1.1s
**NC405 NORSAR Array S 44.23 323** P **P** **19 48 14.9 +0.4**
**NC602 NORSAR Array S 44.28 322** *e*P **P** **19 48 15.0 +0.2**
**NORES NORESS Array B 44.28 322** P **P** **19 48 15.3 +0.5**
**KONS Konsvik 44.44 331** *e*P **P** **19 48 17.1 +1.1**
**NB2 NORSAR Subarra 44.47 323** P **P** **19 48 16.5 +0.1**
comp=Z,12nm,0.6s,baz=94,slow=7.9
**NB2 NORSAR Subarra 44.47 323** P **P** **19 48 16.5 +0.1**
baz=94,slow=7.9
**NOA NORSAR Array B 44.47 323** P **P** **19 48 16.8 +0.4**
comp=Z,15nm,0.7s,baz=96,slow=7.8,SNR=90
**KSRS Korea Array 44.48 71** P **P** **19 48 16.6 -0.1**
comp=Z,0.8nm,0.8s,baz=284,slow=7.7,SNR=1.4
**LOF Lofoten 44.66 333** *e*P **P** **19 48 18.7 +1.0**
**WTTA Wattenberg 44.71 303** *i*P **P** **19 48 19.2 +0.6**
comp=Z,5.8nm,0.8s
**WATA Walderalm 44.74 303** *i*P **P** **19 48 19.1 +0.2**
comp=Z,4.2nm,0.9s
**KLR Kul'dur 44.75 54** P **P** **19 48 18.9 +0.2**
comp=Z,1.0nm,0.5s,baz=288,slow=9.6,SNR=4.5
**KLR Kul'dur 44.75 54**⇑ *e*P **P** **19 48 19.6 +0.9**
KLR pmax pmax
comp=Z,3.0nm,1.2s
**CTI Castel Tesino 44.90 301** P **P** **19 48 20.3 +0.2**
CTI pmax pmax
comp=Z,8.0nm,0.6s
**CTI Castel Tesino 44.90 301** P **P** **19 48 20.3 +0.2**
CTI IAmb IAmb 19 48 21.6
comp=Z,8.1nm,0.6s
**HOPEN Hopen 44.92 346** *e*P **P** **19 48 19.3 -0.4**
**SQTA Sankt Quirin 45.00 303** *i*P **P** **19 48 21.0 +0.1**
comp=Z,3.9nm,0.6s
**MOTA Moosalm 45.05 303** *e*P **P** **19 48 21.3 -0.1**
comp=Z,4.1nm,0.7s,SNR=4.1
**KONO Kongsberg 45.19 321** *de*P **P** **19 48 22.5 +0.5**
KONO pmax pmax
comp=Z,15nm,1.3s
**KONO Kongsberg 45.19 321** P **P** **19 48 22.2 +0.2**
**KONO Kongsberg 45.19 321** *e*P **P** **19 48 22.7 +0.7**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FETA** | **Feichten** | **45.36** | **303** | *e*P | | **P** | **19 48 24.1** | **+0.3** |
| | comp=Z,4.0nm,0.6s,SNR=4.4 | | | | | | | |
| **TIXI** | **Tiksi** | **45.48** | **22** | P | | **P** | **19 48 24.6** | **+0.4** |
| | comp=Z,3.0nm,0.3s,baz=91,slow=22,SNR=17 | | | | | | | |
| **TIXI** | **Tiksi** | **45.48** | **22‖** | *e*P | | **P** | **19 48 24.5** | **+0.4** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **TIXI** | **Tiksi** | **45.48** | **22** | P | | **P** | **19 48 24.5** | **+0.3** |
| **SKAR** | **Skarslia** | **45.87** | **322** | *e*P | | **P** | **19 48 28.9** | **+1.4** |
| **DAVA** | **Damuels** | **45.89** | **303** | *e*P | | **P** | **19 48 28.5** | **+0.6** |
| | comp=Z,14nm,0.5s,SNR=13 | | | | | | | |
| **TUE** | **Stuetta** | **46.39** | **302** | P | | **P** | **19 48 32.4** | **+0.4** |
| **ODD1** | **Odda** | **46.69** | **321** | *e*P | | **P** | **19 48 34.9** | **+1.1** |
| **BER** | **Bergen** | **47.33** | **322** | *e*P | | **P** | **19 48 40.1** | **+1.4** |
| **ASK** | **Askoy** | **47.40** | **322** | *e*P | | **P** | **19 48 40.5** | **+1.2** |
| **SPB2** | **Spitsbergen Ar** | **47.41** | **347** | P | | **P** | **19 48 40.9** | **+1.7** |
| **SPA0** | **Spitsbergen Ar** | **47.41** | **347** | *e*P | | **P** | **19 48 40.8** | **+1.5** |
| **SPITS** | **Spitsbergen Ar** | **47.41** | **347** | P | | **P** | **19 48 40.7** | **+1.5** |
| SPITS | | | | | pmax | pmax | | |
| | comp=Z,53nm,1.3s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **47.80** | **303** | P | | **P** | **19 48 43.3** | **+0.4** |
| SENIN | | | | | IAmb | IAmb | 19 48 45.3 | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **WLF** | **Walferdange** | **47.91** | **307** | P | | **P** | **19 48 44.9** | **+1.5** |
| WLF | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **WLF** | **Walferdange** | **47.91** | **307** | P | | **P** | **19 48 44.9** | **+1.5** |
| **BNI** | **Bardonecchia** | **48.52** | **301** | P | | **P** | **19 48 49.0** | **+0.6** |
| BNI | | | | | pmax | pmax | | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **BNI** | **Bardonecchia** | **48.52** | **301** | P | | **P** | **19 48 49.0** | **+0.6** |
| BNI | | | | | IAmb | IAmb | 19 48 51.5 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **KBS** | **Kingsbay** | **48.53** | **347** | P | | **P** | **19 48 49.0** | **+1.2** |
| KBS | | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **KBS** | **Kingsbay** | **48.53** | **347** | P | | **P** | **19 48 49.0** | **+1.2** |
| **KBS** | **Kingsbay** | **48.53** | **347** | *e*P | | **P** | **19 48 48.9** | **+1.2** |
| **KMBO** | **Kilima Mbogo** | **49.22** | **228** | P | | **P** | **19 48 54.5** | **+0.5** |
| | comp=Z,0.8nm,0.4s,baz=45,slow=11,SNR=5.1 | | | | | | | |
| KMBO | | | | | LR | LR | 20 12 44.7 | |
| | comp=Z,862nm,18.7s,baz=59,slow=40 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.22** | **228** | P | | **P** | **19 48 55.0** | **+0.9** |
| KMBO | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.22** | **228** | P | | **P** | **19 48 55.0** | **+0.9** |
| **SSB** | **Saint Sauveur** | **49.93** | **302** | P | | **P** | **19 48 59.6** | **+0.6** |
| SSB | | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **SSB** | **Saint Sauveur** | **49.93** | **302** | P | | **P** | **19 48 59.6** | **+0.6** |
| SSB | | | | | IAmb | IAmb | 19 49 00.1 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **LRW** | **Lerwick** | **50.59** | **322** | *e*P | | **P** | **19 49 02.9** | **-0.6** |
| LRW | | | | | IAmb | IAmb | 19 49 06.7 | |
| | comp=Z,57nm,1.1s | | | | | | | |
| **MCD** | **Coleburn Disti** | **52.03** | **319** | *e*P | | **P** | **19 49 15.4** | **+1.0** |
| **EKA** | **Eskdalemuir Ar** | **52.42** | **316** | P | | **P** | **19 49 17.6** | **+0.4** |
| | comp=Z,7.6nm,0.8s,baz=94,slow=7.1,SNR=17 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.55** | **69** | P | | **P** | **19 49 18.7** | **+0.2** |
| | comp=Z,2.1nm,0.8s,baz=283,slow=10,SNR=4.1 | | | | | | | |
| **MBAR** | **Mbarara** | **52.91** | **235** | P | | **P** | **19 49 21.2** | **-0.3** |
| | comp=Z,1.9nm,0.6s,baz=345,slow=9.6,SNR=4.3 | | | | | | | |
| **PGBU** | **Glenifferbraes** | **53.05** | **317** | *e*P | | **P** | **19 49 22.5** | **+0.6** |
| PGBU | | | | | IAmb | IAmb | 19 49 24.8 | |
| | comp=Z,165nm,1.6s | | | | | | | |
| **NEWG** | **New Galloway** | **53.06** | **316** | *e*P | | **P** | **19 49 22.6** | **+0.6** |
| NEWG | | | | | IAmb | IAmb | 19 49 23.6 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **MCH1** | **Michaelchurch** | **53.09** | **312** | *e*P | | **P** | **19 49 21.5** | **-0.8** |
| MCH1 | | | | | IAmb | IAmb | 19 49 23.8 | |
| | comp=Z,23nm,0.7s | | | | | | | |
| **KAC** | **Achnashellach** | **53.13** | **319** | *e*P | | **P** | **19 49 23.3** | **+0.8** |
| **LLW** | **Llanuwchllyn** | **53.27** | **313** | *e*P | | **P** | **19 49 23.9** | **+0.3** |
| **KPL** | **Plockton** | **53.35** | **319** | *e*P | | **P** | **19 49 24.5** | **+0.4** |
| KPL | | | | | IAmb | IAmb | 19 49 27.1 | |
| | comp=Z,174nm,1.9s | | | | | | | |
| **LAWE** | **Loch Awe, Argy** | **53.45** | **317** | *e*P | | **P** | **19 49 24.6** | **-0.2** |
| LAWE | | | | | IAmb | IAmb | 19 49 27.4 | |
| | comp=Z,71nm,1.5s | | | | | | | |
| **NOR** | **Nord** | **53.70** | **349** | *i* P | | **P** | **19 49 25.8** | **-0.5** |
| **MA2** | **Magadan** | **54.00** | **38‖** | *e*P | | **P** | **19 49 29.2** | **+0.4** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,19nm,4.0s | | | | | | | |
| **SEY** | **Seymchan** | **54.07** | **34‖** | *e*P | | **P** | **19 49 29.5** | **+0.3** |
| **DAG** | **Danmarks Havn** | **54.67** | **344** | P | | **P** | **19 49 34.2** | **+0.9** |
| **DAG** | **Danmarks Havn** | **54.67** | **344** | *i* P | | **P** | **19 49 33.0** | **-0.3** |
| DAG | | | | | IAmb | IAmb | 19 49 34.5 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **SCO** | **Scoresbysund** | **57.04** | **336** | P | | **P** | **19 49 51.7** | **+1.4** |
| SCO | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **SCO** | **Scoresbysund** | **57.04** | **336** | P | | **P** | **19 49 51.7** | **+1.4** |
| SCO | | | | | IAmb | IAmb | 19 50 17.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **ESBB** | **Sonseca Array** | **57.70** | **298** | P | | **P** | **19 49 55.4** | **-0.1** |
| **ESDC** | **Sonseca Array** | **57.70** | **298** | P | | **P** | **19 49 56.1** | **+0.6** |
| | comp=Z,1.9nm,0.7s,baz=54,slow=6.9,SNR=13 | | | | | | | |
| **ESDC** | **Sonseca Array** | **57.70** | **298** | P | | **P** | **19 49 55.8** | **+0.3** |
| **BILL** | **Bilibino** | **58.29** | **26 ‖** | *i* P | | **P** | **19 49 59.9** | **+0.8** |
| BILL | | | | *e* | | | 19 52 06.4 | |
| BILL | | | | *e*S | | S | 19 57 40.0 | -10 |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.5s | | | | | | | |
| **BORG** | **Borgarnes** | **58.64** | **330** | P | | **P** | **19 50 04.1** | **+2.5** |
| | comp=Z,11nm,0.8s,baz=97,slow=4.7,SNR=1.4 | | | | | | | |
| **BORG** | **Borgarnes** | **58.64** | **330** | P | | **P** | **19 50 03.5** | **+2.0** |
| BORG | | | | | pmax | pmax | | |
| | comp=Z,54nm,1.4s | | | | | | | |
| **BORG** | **Borgarnes** | **58.64** | **330** | P | | **P** | **19 50 03.5** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **59.59** | **44** | P | | **P** | **19 50 08.5** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **59.59** | **44** | P | | **P** | **19 50 08.5** | **+0.2** |
| **NEEM** | **North Greenlan** | **60.94** | **348** | *i* P | | **P** | **19 50 17.3** | **-0.2** |
| NEEM | | | | | IAmb | IAmb | 19 50 18.6 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **SUMG** | **Summit** | **61.02** | **341** | P | | **P** | **19 50 19.3** | **+1.1** |
| SUMG | | | | | pmax | pmax | | |
| | comp=Z,24nm,0.7s | | | | | | | |
| **SUMG** | **Summit** | **61.02** | **341** | *i* P | | **P** | **19 50 18.0** | **-0.2** |
| SUMG | | | | | IAmb | IAmb | 19 50 20.0 | |
| | comp=Z,21nm,0.6s | | | | | | | |
| **SUMG** | **Summit** | **61.02** | **341** | P | | **P** | **19 50 19.2** | **+1.1** |
| **VOI** | **Vohitsoka** | **62.74** | **206** | P | | **P** | **19 50 30.3** | **+0.4** |
| **ICESG** | **Greenland Ices** | **63.19** | **338** | *i* P | | **P** | **19 50 33.3** | **+0.7** |
| ICESG | | | | | IAmb | IAmb | 19 50 34.2 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **64.42** | **334** | P | | **P** | **19 50 40.6** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **66.09** | **269** | P | | **P** | **19 50 50.2** | **-1.6** |
| | comp=Z,2.0nm,0.5s,baz=48,slow=5.8,SNR=19 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.09** | **269** | P | | **P** | **19 50 49.7** | **-2.1** |
| **ILULI** | **Ilulissat** | **66.36** | **341** | P | | **P** | **19 50 53.4** | **+0.7** |
| ILULI | | | | | pmax | pmax | | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **ILULI** | **Ilulissat** | **66.36** | **341** | *i* P | | **P** | **19 50 53.3** | **+0.6** |
| ILULI | | | | | IAmb | IAmb | 19 50 53.8 | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **ILULI** | **Ilulissat** | **66.36** | **341** | P | | **P** | **19 50 53.4** | **+0.7** |
| **SIJI** | **Sorong** | **66.72** | **110** | LR | | LR | 20 23 32.5 | |
| | comp=Z,84nm,18.3s,baz=240,slow=39 | | | | | | | |
| **DY2G** | **Dye2** | **66.77** | **337** | *i* P | | **P** | **19 50 56.2** | **+0.6** |
| DY2G | | | | | IAmb | IAmb | 19 50 57.0 | |
| | comp=Z,21nm,0.4s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **67.73** | **339** | P | | **P** | **19 51 01.8** | **+0.4** |
| SFJD | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **67.73** | **339** | P | | **P** | **19 51 01.8** | **+0.4** |
| SFJD | | | | | IAmb | IAmb | 19 51 05.2 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **ANM** | **Nome** | **69.73** | **23** | P | | **P** | **19 51 14.5** | **+0.6** |
| ANM | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ANM** | **Nome** | **69.73** | **23** | P | | **P** | **19 51 14.5** | **+0.6** |
| ANM | | | | | IAmb | IAmb | 19 51 15.4 | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **70.66** | **15** | P | | **P** | **19 51 20.0** | **+0.5** |
| TOLK | | | | | IAmb | IAmb | 19 51 20.7 | |
| | comp=Z,7.4nm,0.7s | | | | | | | |
| **IVI** | **Ivigtut** | **70.86** | **334** | P | | **P** | **19 51 21.2** | **+0.4** |
| **A36M** | **Sachs Harbour** | **71.00** | **5** | P | | **P** | **19 51 21.8** | **+0.4** |
| A36M | | | | | IAmb | IAmb | 19 51 23.2 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **IMAR** | **Indian Mountai** | **71.90** | **18** | P | | **P** | **19 51 26.6** | **-0.3** |
| **H21K** | **Melozitna Rive** | **72.39** | **18** | P | | **P** | **19 51 29.7** | **-0.2** |
| **BMAR** | **Burnt Mountain** | **72.69** | **14** | P | | **P** | **19 51 32.5** | **+0.8** |
| **H23K** | **Yukon River** | **73.02** | **16** | P | | **P** | **19 51 34.3** | **+0.7** |
| H23K | | | | | IAmb | IAmb | 19 51 35.1 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **H24K** | **Noodor Dome** | **73.38** | **16** | P | | **P** | **19 51 36.1** | **+0.3** |
| **MLY** | **Manley** | **73.41** | **17** | P | | **P** | **19 51 36.0** | **+0.1** |
| **C36M** | **Paulatuk** | **73.67** | **6** | P | | **P** | **19 51 37.3** | **0.0** |
| **INK** | **Inuvik** | **73.68** | **9** | P | | **P** | **19 51 37.8** | **+0.5** |
| | comp=Z,5.6nm,0.7s,baz=353,slow=6.4,SNR=20 | | | | | | | |
| **INK** | **Inuvik** | **73.68** | **9** | P | | **P** | **19 51 37.8** | **+0.5** |
| INK | | | | | IAmb | IAmb | 19 51 38.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **TTA** | **Tatalina** | **73.73** | **21** | P | | **P** | **19 51 38.3** | **+0.4** |
| TTA | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **TTA** | **Tatalina** | **73.73** | **21** | P | | **P** | **19 51 38.2** | **+0.4** |
| **K20K** | **Telida** | **73.93** | **20** | P | | **P** | **19 51 39.3** | **+0.3** |
| K20K | | | | | IAmb | IAmb | 19 51 40.1 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **74.12** | **18** | P | | **P** | **19 51 39.9** | **-0.1** |
| BPAW | | | | | IAmb | IAmb | 19 51 40.6 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **74.17** | **17** | P | | **P** | **19 51 40.1** | **-0.2** |
| NEA2 | | | | | IAmb | IAmb | 19 51 41.0 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **CAST** | **Castle Rocks** | **74.40** | **19** | P | | **P** | **19 51 41.9** | **+0.2** |
| CAST | | | | | IAmb | IAmb | 19 51 43.2 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **74.51** | **16** | P | | **P** | **19 51 41.7** | **-0.6** |
| | comp=Z,2.0nm,0.8s,baz=316,slow=4.5,SNR=19 | | | | | | | |
| **KTH** | **Kantishna Hill** | **74.59** | **18** | P | | **P** | **19 51 43.0** | **+0.2** |
| KTH | | | | | IAmb | IAmb | 19 51 43.9 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **DHY** | **Denali Highway** | **75.86** | **17** | P | | **P** | **19 51 49.9** | **-0.4** |
| DHY | | | | | IAmb | IAmb | 19 51 50.9 | |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **O18K** | **Koktuh Hills** | **76.42** | **22** | P | | **P** | **19 51 54.1** | **+0.8** |
| **L27K** | **Beaver Creek,** | **77.10** | **15** | P | | **P** | **19 51 57.5** | **+0.5** |
| L27K | | | | | IAmb | IAmb | 19 52 04.7 | |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **77.10** | **15** | P | | **P** | **19 51 57.8** | **+0.7** |
| **KDAK** | **Kodiak Island** | **78.90** | **22** | P | | **P** | **19 52 06.9** | **-0.1** |
| | comp=Z,6.3nm,0.7s,baz=348,slow=9.3,SNR=2.0 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **79.28** | **12** | P | | **P** | **19 52 09.7** | **+0.6** |
| **HYT** | **Haines Junctio** | **80.00** | **14** | P | | **P** | **19 52 13.6** | **+0.7** |
| HYT | | | | | IAmb | IAmb | 19 52 14.6 | |
| | comp=Z,6.7nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.06** | **3** | P | | **P** | **19 52 18.6** | **+0.1** |
| | comp=Z,5.3nm,0.6s,baz=349,slow=5.4,SNR=105 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.06** | **3** | P | | **P** | **19 52 18.4** | **-0.1** |
| **WRA** | **Warramunga Arr** | **81.77** | **122** | P | | **P** | **19 52 21.6** | **-1.3** |
| | comp=Z,0.9nm,0.4s,baz=326,slow=4.6,SNR=9.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.77** | **122** | P | | **P** | **19 52 21.6** | **-1.3** |
| **WRAB** | **Tennant Creek** | **81.77** | **122** | P | | **P** | **19 52 21.4** | **-1.5** |
| WRAB | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.77** | **122** | P | | **P** | **19 52 21.4** | **-1.5** |
| WRAB | | | | | IAmb | IAmb | 19 52 45.9 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **SCHQ** | **Schefferville** | **82.08** | **337** | P | | **P** | **19 52 24.4** | **+0.2** |
| | comp=Z,3.7nm,0.8s,baz=43,slow=1.5,SNR=6.6 | | | | | | | |
| **SCHQ** | **Schefferville** | **82.08** | **337** | P | | **P** | **19 52 23.9** | **-0.2** |
| SCHQ | | | | | IAmb | IAmb | 19 52 25.6 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **DLBC** | **Dease Lake** | **83.56** | **11** | P | | **P** | **19 52 32.2** | **+0.5** |
| | comp=Z,2.2nm,1.0s,baz=315,slow=2.9,SNR=2.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **84.05** | **125** | P | | **P** | **19 52 33.4** | **-1.3** |
| | comp=Z,1.4nm,0.7s,baz=310,slow=5.1,SNR=20 | | | | | | | |
| **ASAR** | **Alice Springs** | **84.05** | **125** | P | | **P** | **19 52 33.6** | **-1.0** |
| **ASAR** | **Alice Springs** | **84.05** | **125** | P | | **P** | **19 52 33.6** | **-1.0** |
| **FCC** | **Fort Churchill** | **84.16** | **352** | P | | **P** | **19 52 33.6** | **-1.0** |
| FCC | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **FCC** | **Fort Churchill** | **84.16** | **352** | P | | **P** | **19 52 33.6** | **-1.0** |
| FCC | | | | | IAmb | IAmb | 19 52 36.0 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |

*ATH* ***13*** *19:43:05.9,38°.39N×20°.46E,h17km±2km, ML2.2/3, Error ellipse: s-maj=2.3km s-min=0.6km az=266.0*
*THE* ***13*** *19:43:06.4,38°.39N×20°.46E,h11km±1km, ML2.6/8, Error ellipse: s-maj=1.5km s-min=0.3km az=156.0*
**ISC 13 19:43:05.3±0.9, 38°.40N±0°.02×20°.37E±0°.03, h18km±2km, n33, σ0°96/61, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KEF4** | **Livadi, Kephal** | **0.15** | **164** | P | | **Pg** | **19 43 09.6** | **+0.1** |
| KEF4 | | | | S | | **Sg** | **19 43 12.2** | **-0.2** |
| | 61μm,0.2s | | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.15** | **164** | P | | **Pg** | **19 43 09.6** | **+0.1** |
| KEF4 | | | | S | | **Sg** | **19 43 12.1** | **-0.2** |
| **FSK** | **Fiskardo** | **0.16** | **69** | P | | **Pb** | **19 43 09.3** | **+0.3** |
| FSK | | | | S | | **Sb** | **19 43 11.1** | **-0.2** |
| | 4μm,0.1s | | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.16** | **179** | P | | **Pg** | **19 43 10.1** | **+0.4** |
| DMLN | | | | S | | **Sg** | **19 43 12.8** | **0.0** |
| | 5μm,0.3s | | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.16** | **179** | P | | **Pg** | **19 43 10.1** | **+0.4** |
| DMLN | | | | S | | **Sg** | **19 43 13.1** | **+0.3** |
| **KEF3** | **Kipouria, Keph** | **0.20** | **185** | P | | **Pb** | **19 43 10.3** | **+0.3** |
| KEF3 | | | | S | | **Sg** | **19 43 13.7** | **+0.1** |
| | 11μm,0.1s | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.20** | **185** | P | | **Pb** | **19 43 10.3** | **+0.3** |
| KEF3 | | | | S | | **Sb** | **19 43 13.4** | **+0.4** |
| **LXRA** | **Lixouri, Kepha** | **0.21** | **165** | P | | **Pb** | **19 43 10.7** | **+0.5** |
| LXRA | | | | S | | **Sb** | **19 43 14.1** | **+0.8** |
| **ARGA** | **Argostoli. Kep** | **0.24** | **159** | P | | **Pg** | **19 43 11.8** | **+1.0** |
| ARGA | | | | S | | **Sb** | **19 43 14.6** | **0.0** |
| **VLS** | **Valsamata** | **0.28** | **142** | P | | **Pg** | **19 43 11.1** | **-0.5** |
| VLS | | | | S | | **Sg** | **19 43 14.6** | **-1.3** |
| | 2μm,0.1s | | | | | | | |
| **VLS** | **Valsamata** | **0.28** | **142** | P | | **Pg** | **19 43 11.1** | **-0.5** |
| VLS | | | | S | | **Sg** | **19 43 15.0** | **-0.9** |
| VLS | | | | AML | | AML | 19 43 16.3 | |
| | comp=E,4775μm,0.1s | | | | | | | |
| VLS | | | | AML | | AML | 19 43 16.4 | |
| | comp=N,3310μm,0.2s | | | | | | | |
| **EVGI** | **Lefkada island** | **0.31** | **46** | P | | **Pg** | **19 43 12.1** | **0.0** |
| EVGI | | | | S | | **Sg** | **19 43 16.8** | **+0.1** |
| | comp=N,2μm,0.1s | | | | | | | |
| **EVGI** | **Lefkada island** | **0.31** | **46** | P | | **Pg** | **19 43 12.1** | **0.0** |
| EVGI | | | | S | | **Sg** | **19 43 16.8** | **+0.1** |
| **DRAG** | **Dragano-Lefkad** | **0.32** | **30** | P | | **Pg** | **19 43 12.6** | **+0.3** |
| DRAG | | | | S | | **Sg** | **19 43 17.8** | **+0.8** |
| | comp=N,3μm,0.2s | | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.32** | **30** | P | | **Pg** | **19 43 12.5** | **+0.2** |
| DRAG | | | | S | | **Sg** | **19 43 17.2** | **+0.2** |
| **PSDA** | **Pessada-Kefalo** | **0.33** | **150** | P | | **Pg** | **19 43 12.2** | **-0.2** |
| PSDA | | | | S | | **Sg** | **19 43 17.0** | **-0.3** |
| **PSDA** | **Pessada-Kefalo** | **0.33** | **150** | P | | **Pg** | **19 43 12.2** | **-0.2** |
| PSDA | | | | S | | **Sg** | **19 43 16.9** | **-0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.40** | **39** | P | | **Pg** | **19 43 13.7** | **0.0** |
| NYDR | | | | S | | **Sg** | **19 43 19.3** | **0.0** |
| **NYDR** | **Nydri-Lefkada** | **0.40** | **39** | P | | **Pg** | **19 43 13.6** | **0.0** |
| NYDR | | | | S | | **Sg** | **19 43 19.2** | **0.0** |
| **LKD2** | **Lefkada island** | **0.45** | **30** | P | | **Pg** | **19 43 14.7** | **+0.2** |
| LKD2 | | | | S | | **Sg** | **19 43 21.2** | **+0.6** |
| | comp=N,325nm,0.2s | | | | | | | |
| **LKD2** | **Lefkada island** | **0.45** | **30** | P | | **Pg** | **19 43 14.6** | **+0.2** |
| LKD2 | | | | S | | **Sg** | **19 43 21.1** | **+0.5** |
| LKD2 | | | | AML | | AML | 19 43 23.7 | |
| | comp=E,620μm,0.2s | | | | | | | |
| LKD2 | | | | AML | | AML | 19 43 27.8 | |
| | comp=N,680μm,0.3s | | | | | | | |
| **RLS** | **Riolos of Patr** | **0.93** | **111** | P | | **Pb** | **19 43 22.2** | **-0.6** |
| RLS | | | | AML | | AML | 19 43 41.0 | |
| | comp=N,183μm,0.4s | | | | | | | |
| RLS | | | | AML | | AML | 19 43 44.3 | |
| | comp=E,147μm,0.4s | | | | | | | |
| **IGT** | **Igoumenitsa** | **1.13** | **359** | P | | **Pg** | **19 43 27.4** | **+0.2** |
| **EVR** | **Evrytania** | **1.24** | **65** | P | | **Pn** | **19 43 27.9** | **+0.1** |
| **LAKA** | **Lakka** | **1.27** | **97** | P | | **Pn** | **19 43 28.2** | **0.0** |
| LAKA | | | | S | | **Sn** | **19 43 45.4** | **+0.5** |
| **KLV** | **Kalavryta, Ach** | **1.45** | **104** | P | | **Pn** | **19 43 31.2** | **+0.6** |
| KLV | | | | S | | **Sb** | **19 43 50.9** | **+1.1** |
| **AGG** | **Agios Georgios** | **1.65** | **67** | P | | **Pb** | **19 43 35.6** | **+0.4** |
| **ITM** | **Ithomi** | **1.73** | **134** | P | | **Pb** | **19 43 37.1** | **+0.5** |
| **STON** | **Ston** | **4.91** | **336** | *e*Pn | | **Pn** | **19 44 19.4** | **+1.3** |
| STON | | | | | Sn | **Sn** | **19 45 11.7** | **-2.6** |
| **LSTV** | **Lastovo** | **5.10** | **330** | *e*Pn | | **Pn** | **19 44 21.8** | **+1.0** |
| LSTV | | | | | Sn | **Sn** | **19 45 16.1** | **-3.1** |
| **HVAR** | **Hvar** | **5.62** | **329** | *e*Pn | | **Pn** | **19 44 28.2** | **+0.3** |
| HVAR | | | | | Sn | **Sn** | **19 45 29.5** | **-2.5** |
| **KIJV** | **Kijevo** | **6.34** | **333** | *e*Pn | | **Pn** | **19 44 39.7** | **+1.8** |
| KIJV | | | | | Sn | **Sn** | **19 45 48.1** | **-1.7** |
| **MORI** | **Morici** | **6.49** | **329** | *e*Pn | | **Pn** | **19 44 41.6** | **+1.7** |
| MORI | | | | | Sn | **Sn** | **19 45 50.7** | **-2.7** |

*GCG* ***13*** *19:47:02.3±1.1, 13°.28N×92°.02W, h35km±999km, MD4.4*
*UCR* ***13*** *19:47:10.6±0.9, 13°.71N×91°.23W, h15km±5km, ML3.6, mb4.5(NEIC)*
*SNET* ***13*** *19:47:10.5±0.9, 13°.70N×91°.24W, h15km±9km, ML3.7*
*NEIC* ***13*** *19:47:12.2±2.5, 13°.66N±0°.07×91°.31W±0°.08, h35km±2km, mb4.5/71, Error ellipse: s-maj=16.2km s-min=7.8km az=229.0*
*IDC* ***13*** *19:47:17.9±2.0, 13°.95N×90°.88W, h91km±16km, mb3.9/16, mb1 4.1/19, mb1mx3.9/53, mbtmp4.3/19, MS3.6/12, Ms1 3.6/12, ms1mx3.2/62, Error ellipse: s-maj=33.2km s-min=14.5km az=50.0*
**ISC 13 19:47:11.7±1.2, 13°.58N±0°.07×91°.34W±0°.05, h47km±10km, n144, σ1°23/145, mb4.4/43, MS3.5/11, 1C, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FUG** | **Fuego 3** | **0.99** | **29‖** | *e*P | | **Pn** | **19 47 29.2** | **-0.2** |
| **RTAL** | **Retalhuleu** | **1.00** | **340** | | | **Pn** | **19 47 27.9** | **-1.6** |
| RTAL | | | | | Sn | **Sn** | **19 47 40.2** | **-2.1** |
| **RTAL** | **Retalhuleu** | **1.00** | **340** | *e*P | | **Pn** | **19 47 27.8** | **-1.6** |
| RTAL | | | | *e*S | | **Sn** | **19 47 39.8** | **-2.5** |
| **PCG** | **Pacaya** | **1.07** | **41** | *e*P | | **Pn** | **19 47 30.6** | **-0.1** |
| **NBG** | **Las Nubes** | **1.39** | **44** | *e*P | | **Pn** | **19 47 35.9** | **+0.9** |
| NBG | | | | *e*S | | **Sn** | **19 47 56.9** | **+4.6** |
| **NUBE** | **Las Nubes** | **1.55** | **78** | *e*P | | **Pn** | **19 47 35.4** | **-1.6** |
| NUBE | | | | *e*S | | **Sn** | **19 47 54.8** | **-1.3** |
| **NUBE** | **Las Nubes** | **1.55** | **78** | *e*P | | **Pn** | **19 47 35.4** | **-1.6** |
| NUBE | | | | *e*S | | **Sn** | **19 47 54.8** | **-1.3** |
| **SLOZ** | **Alcaldia de Sa** | **1.57** | **74** | *e*P | | **Pn** | **19 47 36.1** | **-1.2** |
| SLOZ | | | | *e*S | | **Sn** | **19 47 56.1** | **-0.4** |
| SLOZ | | | | IAML | | | 19 48 08.9 | |
| | comp=Z,690nm,0.5s | | | | | | | |
| **APG** | **El Apazote** | **1.65** | **31** | P | | **Pn** | **19 47 39.0** | **+0.5** |
| | baz=172,slow=15 | | | | | | | |
| APG | | | | S | | **Sn** | **19 48 02.0** | **+3.5** |
| | baz=254,slow=20 | | | | | | | |
| **SBLS** | **San Blas** | **1.69** | **81** | *e*P | | **Pn** | **19 47 37.8** | **-1.2** |
| **SBLS** | **San Blas** | **1.69** | **81** | *e*P | | **Pn** | **19 47 37.8** | **-1.2** |
| **SNJE** | **San Jose** | **1.71** | **80** | *e*P | | **Pn** | **19 47 38.3** | **-1.0** |
| **SNJE** | **San Jose** | **1.71** | **80** | *e*P | | **Pn** | **19 47 38.3** | **-1.0** |
| **HUEH** | **Huehuetenango** | **1.73** | **355** | Pn | | **Pn** | **19 47 39.6** | **0.0** |
| **JAYA** | **Jayaque - finc** | **1.84** | **88** | *e*P | | **Pn** | **19 47 39.7** | **-1.3** |
| JAYA | | | | IAML | | | 19 48 10.9 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.84** | **88** | *e*P | | **Pn** | **19 47 39.7** | **-1.3** |
| JAYA | | | | IAML | | | 19 48 10.9 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **TACO** | **Tacachico** | **1.97** | **78** | *e*P | | **Pn** | **19 47 42.0** | **-0.6** |
| **TACO** | **Tacachico** | **1.97** | **78** | *e*P | | **Pn** | **19 47 42.0** | **-0.6** |
| **SNET** | **Serv Nac Est T** | **2.05** | **87** | Pn | | **Pn** | **19 47 43.4** | **-0.5** |
| **MTO3** | **Montecristo** | **2.09** | **67** | Pn | | **Pn** | **19 47 44.1** | **-0.3** |
| **ESQI** | **Esquipulas** | **2.17** | **63** | Pn | | **Pn** | **19 47 45.6** | **+0.1** |
| **MRL** | **Marmol** | **2.19** | **47** | *e*P | | **Pn** | **19 47 47.4** | **+1.5** |
| **LFRS** | **El Faro** | **2.22** | **89** | *e*P | | **Pn** | **19 47 45.3** | **-0.8** |
| **LFRS** | **El Faro** | **2.22** | **89** | *e*P | | **Pn** | **19 47 45.3** | **-0.8** |
| **CCIG** | **Comitan** | **2.79** | **344** | | | **Pn** | **19 47 55.4** | **+1.4** |
| **PETF** | **Flores** | **3.61** | **23** | Pn | | **Pn** | **19 48 06.0** | **+0.9** |
| **TGUH** | **Tegucigalpa,Un** | **3.98** | **83** | | | **Pn** | **19 48 12.1** | **+1.8** |
| **CRIN** | **San Cristobal** | **4.27** | **101** | | | **Pn** | **19 48 16.4** | **+2.1** |
| **CMIG** | **Matias Romero** | **4.88** | **316** | P | | **Pn** | **19 48 23.3** | **+0.6** |
| | comp=Z,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WCI** | **Wyandotte Cave** | **24.95** | **9** | P | | **P** | **19 52 29.6** | **-1.1** |
| WCI | | | | IAmb | | IAmb | 19 52 30.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ANMO** | **Albuquerque** | **25.28** | **330** | P | | **P** | **19 52 36.4** | **+2.4** |
| | comp=Z,3.7nm,0.6s,baz=145,slow=12,SNR=8.5 | | | | | | | |
| **ANMO** | **Albuquerque** | **25.28** | **330** | P | | **P** | **19 52 34.6** | **+0.7** |
| **TUC** | **Tucson** | **25.77** | **320** | P | | **P** | **19 52 39.4** | **+1.2** |
| **X18A** | **Snowflake** | **26.81** | **324** | P | | **P** | **19 52 47.7** | **-0.1** |
| **214A** | **Organ Pipe Nat** | **26.86** | **316** | P | | **P** | **19 52 48.4** | **+0.3** |
| **W18A** | **Petrified Fore** | **27.12** | **325** | P | | **P** | **19 52 51.7** | **+1.2** |
| W18A | | | | IAmb | | IAmb | 19 52 57.0 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MVCO** | **Mesa Verde** | **28.08** | **330** | P | | **P** | **19 53 00.1** | **+0.9** |
| **Y14A** | **Wickenburg** | **28.24** | **320** | P | | **P** | **19 53 00.9** | **+0.5** |
| **WUAZ** | **Wupatki** | **28.33** | **324** | P | | **P** | **19 53 02.9** | **+1.5** |
| WUAZ | | | | IAmb | | IAmb | 19 53 06.0 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **29.12** | **321** | P | | **P** | **19 53 09.7** | **+1.3** |
| PV11 | | | | IAmb | | IAmb | 19 53 19.6 | |
| | comp=Z,7.7nm,0.9s | | | | | | | |
| **NNA** | **Nana** | **29.19** | **150** | LR | | LR | 20 02 27.7 | |
| | comp=Z,74nm,21.1s,baz=304,slow=31 | | | | | | | |
| **U15A** | **North Rim** | **29.50** | **324** | P | | **P** | **19 53 13.0** | **+1.1** |
| **KNB** | **Kanab** | **30.22** | **324** | P | | **P** | **19 53 19.8** | **+1.7** |
| KNB | | | | IAmb | | IAmb | 19 53 22.5 | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| **MTPU** | **Mount Pierson** | **30.60** | **327** | P | | **P** | **19 53 23.7** | **+2.0** |
| MTPU | | | | IAmb | | IAmb | 19 53 27.9 | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.07** | **335** | P | | **P** | **19 53 43.3** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=129,slow=11,SNR=6.2 | | | | | | | |
| PDAR | | | | LR | | LR | 20 09 22.8 | |
| | comp=Z,48nm,19.0s,baz=162,slow=40 | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.07** | **335** | P | | **P** | **19 53 43.5** | **+0.3** |
| **SNOW** | **Snow King Moun** | **34.13** | **334** | P | | **P** | **19 53 53.3** | **+0.8** |
| **ELK** | **Elko** | **34.19** | **327** | P | | **P** | **19 53 55.4** | **+2.4** |
| | comp=Z,4.3nm,0.8s,baz=136,slow=6.9,SNR=6.2 | | | | | | | |
| **ELK** | **Elko** | **34.19** | **327** | P | | **P** | **19 53 54.5** | **+1.6** |
| ELK | | | | IAmb | | IAmb | 19 53 57.6 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.40** | **321** | P | | **P** | **19 53 56.9** | **+2.1** |
| | comp=Z,5.6nm,0.8s,baz=134,slow=9.1,SNR=13 | | | | | | | |
| NVAR | | | | PcP | | **PcP** | **19 56 30.8** | **+1.1** |
| | comp=Z,1.0nm,0.8s,baz=115,slow=4.1,SNR=4.7 | | | | | | | |
| **BMN** | **Battle Mountai** | **35.06** | **325** | P | | **P** | **19 54 02.0** | **+1.7** |
| BMN | | | | IAmb | | IAmb | 19 54 04.1 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **HLID** | **Hailey** | **35.85** | **331** | P | | **P** | **19 54 08.7** | **+1.5** |
| **ULM** | **Lac du Bonnet** | **36.75** | **355** | P | | **P** | **19 54 12.4** | **-2.1** |
| | comp=Z,2.8nm,0.6s,baz=162,slow=6.5,SNR=4.1 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **37.20** | **326** | P | | **P** | **19 54 20.4** | **+1.8** |
| **LPAZ** | **La Paz** | **37.51** | **142** | LR | | LR | 20 09 39.9 | |
| | comp=Z,52nm,18.3s,baz=304,slow=36 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **37.74** | **327** | P | | **P** | **19 54 24.9** | **+1.8** |
| **PLID** | **Pearl Lake** | **37.75** | **331** | P | | **P** | **19 54 23.6** | **+0.3** |
| PLID | | | | IAmb | | IAmb | 19 54 25.1 | |
| | comp=Z,6.7nm,0.9s | | | | | | | |
| **MOD** | **Modoc Plateau** | **37.78** | **324** | P | | **P** | **19 54 24.5** | **+0.9** |
| MOD | | | | IAmb | | IAmb | 19 54 29.9 | |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **MSO** | **Missoula** | **38.18** | **335** | P | | **P** | **19 54 26.9** | **0.0** |
| MSO | | | | IAmb | | IAmb | 19 54 28.4 | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| **BMO** | **Blue Mountains** | **38.20** | **330** | P | | **P** | **19 54 27.9** | **+0.9** |
| **YBH** | **Yreka Blue Hor** | **39.09** | **322** | P | | **P** | **19 54 34.4** | **-0.1** |
| | comp=Z,1.2nm,0.7s,baz=136,slow=5.6,SNR=3.9 | | | | | | | |
| **PINE** | **Pine Mountain** | **39.36** | **326** | P | | **P** | **19 54 37.7** | **+0.9** |
| PINE | | | | IAmb | | IAmb | 19 54 39.3 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **H04A** | **Detroit Lake** | **40.62** | **326** | P | | **P** | **19 54 48.3** | **+1.2** |
| **NEW** | **Newport** | **40.65** | **334** | P | | **P** | **19 54 47.8** | **+0.5** |
| | comp=Z,1.7nm,0.6s,baz=153,slow=16,SNR=3.9 | | | | | | | |
| **NEW** | **Newport** | **40.65** | **334** | P | | **P** | **19 54 47.4** | **+0.1** |
| **SIV** | **San Ignacio** | **41.94** | **134** | P | | **P** | **19 54 58.4** | **+0.2** |
| | comp=Z,2.2nm,0.9s,baz=272,slow=8.9,SNR=6.0 | | | | | | | |
| **LVC** | **Limon Verde** | **42.15** | **148** | LR | | LR | 20 11 18.6 | |
| | comp=Z,61nm,18.7s,baz=232,slow=34 | | | | | | | |
| **SCHQ** | **Schefferville** | **45.39** | **20** | P | | **P** | **19 55 23.2** | **-2.3** |
| | comp=Z,7.5nm,0.9s,baz=205,slow=5.0,SNR=9.0 | | | | | | | |
| SCHQ | | | | LR | | LR | 20 15 10.7 | |
| | comp=Z,123nm,18.5s,baz=238,slow=37 | | | | | | | |
| **SCHQ** | **Schefferville** | **45.39** | **20** | P | | **P** | **19 55 23.6** | **-1.8** |
| **YKA** | **Yellowknife Ar** | **51.58** | **346** | P | | **P** | **19 56 12.3** | **-0.6** |
| | comp=Z,3.0nm,0.7s,baz=149,slow=7.6,SNR=44 | | | | | | | |
| **FRB** | **Frobisher Bay** | **52.58** | **13** | LR | | LR | 20 19 32.6 | |
| | comp=Z,60nm,18.9s,baz=226,slow=37 | | | | | | | |
| **DLBC** | **Dease Lake** | **53.30** | **336** | P | | **P** | **19 56 27.6** | **+1.8** |
| | comp=Z,9.0nm,0.8s,baz=153,slow=4.9,SNR=15 | | | | | | | |
| **DLBC** | **Dease Lake** | **53.30** | **336** | P | | **P** | **19 56 27.4** | **+1.6** |
| **PLCA** | **Paso Flores** | **57.37** | **161** | LR | | LR | 20 15 39.6 | |
| | comp=Z,51nm,21.7s,baz=173,slow=30 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **60.68** | **336** | P | | **P** | **19 57 18.5** | **+0.5** |
| **L27K** | **Beaver Creek,** | **60.69** | **336** | P | | **P** | **19 57 18.7** | **+0.7** |
| **INK** | **Inuvik** | **61.02** | **343** | P | | **P** | **19 57 19.7** | **-0.3** |
| | comp=Z,2.8nm,0.7s,baz=128,slow=7.3,SNR=12 | | | | | | | |
| **INK** | **Inuvik** | **61.02** | **343** | P | | **P** | **19 57 19.8** | **-0.3** |
| INK | | | | IAmb | | IAmb | 19 57 20.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **RES** | **Resolute Bay** | **61.13** | **359** | P | | **P** | **19 57 18.6** | **-2.1** |
| | comp=Z,2.3nm,0.7s,baz=181,slow=8.6,SNR=13 | | | | | | | |
| **RES** | **Resolute Bay** | **61.13** | **359** | P | | **P** | **19 57 19.1** | **-1.6** |
| RES | | | | IAmb | | IAmb | 19 57 19.5 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **63.06** | **333** | P | | **P** | **19 57 34.7** | **+0.7** |
| **IL31** | | **63.47** | **337** | P | | **P** | **19 57 36.7** | **+0.2** |
| IL31 | | | | IAmb | | IAmb | 19 57 38.2 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **63.47** | **337** | P | | **P** | **19 57 36.5** | **-0.1** |
| | comp=Z,2.6nm,0.9s,baz=130,slow=4.6,SNR=18 | | | | | | | |
| **ILAR** | **Eielson Array** | **63.47** | **337** | P | | **P** | **19 57 36.6** | **0.0** |
| **RND** | **Reindeer** | **63.68** | **335** | P | | **P** | **19 57 38.6** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **63.90** | **340** | P | | **P** | **19 57 39.6** | **+0.2** |
| **TRF** | **Thorofare Moun** | **64.29** | **335** | P | | **P** | **19 57 42.5** | **+0.3** |
| **RSO** | **Redoubt South** | **64.33** | **331** | P | | **P** | **19 57 43.3** | **+0.8** |
| **I23K** | **Minto, Yukon-K** | **64.59** | **337** | P | | **P** | **19 57 44.2** | **+0.4** |
| **KTH** | **Kantishna Hill** | **64.59** | **335** | P | | **P** | **19 57 44.0** | **-0.1** |
| **MLY** | **Manley** | **65.08** | **336** | P | | **P** | **19 57 47.7** | **+0.6** |
| **K20K** | **Telida** | **65.85** | **334** | P | | **P** | **19 57 52.1** | **-0.1** |
| **EUNU** | **Eureka** | **66.53** | **1** | P | | **P** | **19 57 55.2** | **-1.1** |
| EUNU | | | | IAmb | | IAmb | 19 57 57.7 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **IMAR** | **Indian Mountai** | **66.59** | **337** | P | | **P** | **19 57 56.4** | **-0.4** |
| **BORG** | **Borgarnes** | **69.31** | **26** | LR | | LR | 20 26 24.6 | |
| | comp=Z,25nm,18.2s,baz=271,slow=34 | | | | | | | |
| **BILL** | **Bilibino** | **82.08** | **338** | P | | **P** | **19 59 27.3** | **+0.4** |
| BILL | | | | IAmb | | IAmb | 19 59 30.5 | |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **89.39** | **336** | P | | **P** | **20 00 03.9** | **+0.8** |
| | comp=Z,1.8nm,0.9s,baz=95,slow=4.1,SNR=8.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.59** | **342** | PKPbc | | **PKPbc** | **20 06 49.5** | **+0.5** |
| | comp=Z,5.2nm,0.8s,baz=341,slow=3.6,SNR=30 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.59** | **342** | | | **PKPdf** | **20 06 48.8** | **+1.3** |

*TUL* ***13*** *19:48:26.4±1.0,36˚48N±0˚01×98˚75W±0˚03,h8km±6km, ML2.6,mb_Lg2.2/15(NEIC),Error ellipse: s-maj=4.2km s-min=1.1km az=69.0*

**NEIC 13 19:48:26.6±1.6,36˚48N±0˚03×98˚75W±0˚04,h16km±3km, Error ellipse: s-maj=5.3km s-min=3.8km az=102.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **1.50** | **135** | Pn | Pb | 19 48 53.5 | -0.5 |
| **FNO** | **Franklin** | **1.64** | **138** | Pn | Pb | 19 48 56.0 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.74** | **181** | | Pn | 19 48 56.9 | +0.7 |
| **WMOK** | **Wichita Mounta** | **1.74** | **181** | Pn | Pn | 19 48 56.7 | +0.6 |
| **T35A** | **Sooner Cattle** | **1.85** | **76** | Pn | Pn | 19 48 58.5 | +0.8 |
| T35A | | | | IAmb_Lg | | 19 49 28.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.94** | **1** | | Pb | 19 49 00.6 | -1.0 |
| **X34A** | **Smith Ranch, M** | **2.02** | **158** | Pn | Pb | 19 49 02.1 | -0.8 |
| X34A | | | | IAmb_Lg | | 19 49 35.6 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **W35A** | **Tecumseh** | **2.02** | **130** | Pn | Pn | 19 49 00.5 | +0.4 |
| W35A | | | | IAmb_Lg | | 19 49 35.8 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.46** | **102** | Pn | Pn | 19 49 07.4 | +1.3 |
| **HHAR** | **Hobbs** | **3.89** | **91** | IAmb_Lg | | 19 50 27.6 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.98** | **311** | IAmb_Lg | | 19 50 39.7 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.51** | **73** | Pn | Pn | 19 49 36.2 | +2.0 |
| S39A | | | | IAmb_Lg | | 19 50 55.1 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.34** | **304** | IAmb_Lg | | 19 52 00.2 | |
| | comp=Z,2.4nm,0.9s | | | | | | |

*TUL* ***13*** *19:50:51.1±1.4,36˚46N±0˚01×98˚76W±0˚02,h5km±7km, ML2.6,mb_Lg2.2/13(NEIC),Error ellipse: s-maj=2.7km s-min=1.5km az=99.0*

**NEIC 13 19:50:51.0±1.1,36˚48N±0˚04×98˚80W±0˚03,h16km±4km, Error ellipse: s-maj=5.7km s-min=3.0km az=172.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.19** | **238** | Pg | Pg | 19 50 55.6 | -0.2 |
| U32A | | | | Sg | Sg | 19 50 58.6 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.53** | **134** | Pn | Pn | 19 51 18.0 | +0.4 |
| **FNO** | **Franklin** | **1.67** | **137** | Pn | Pb | 19 51 20.6 | -0.7 |
| **WMOK** | **Wichita Mounta** | **1.74** | **180** | Pn | Pn | 19 51 21.3 | +0.7 |
| **T35A** | **Sooner Cattle** | **1.89** | **76** | Pn | Pb | 19 51 24.4 | -0.7 |
| T35A | | | | IAmb_Lg | | 19 51 50.3 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.94** | **2** | Pn | Pb | 19 51 26.1 | +0.2 |
| R32A | | | | IAmb_Lg | | 19 51 52.3 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.04** | **157** | Pn | Pb | 19 51 26.8 | -0.8 |
| **W35A** | **Tecumseh** | **2.05** | **130** | Pn | Pb | 19 51 26.6 | -1.3 |
| **TUL1** | **Leonard** | **2.50** | **102** | Pn | Pn | 19 51 32.6 | +1.7 |
| TUL1 | | | | IAmb_Lg | | 19 52 08.0 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.84** | **237** | IAmb_Lg | | 19 52 19.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.37** | **123** | Pn | Pn | 19 51 42.5 | -0.5 |
| **KSCO** | **Kaye Shedlock'** | **3.95** | **311** | IAmb_Lg | | 19 53 08.5 | |
| | comp=Z,9.4nm,0.8s | | | | | | |

*IDC* ***13*** *19:59:17.8±1.0,5˚45N×126˚44E,h93km±8km, mb4.2/35, mb1 4.3/37,mb1mx4.2/58,mbtmp4.5/37,MS3.2/6, Ms1 3.2/6,ms1mx2.8/77,Error ellipse: s-maj=15.9km s-min=7.6km az=70.0*

*DJA* ***13*** *19:59:17.6±0.4,6˚N±3˚×12˚7E±˚,h87km±3km, M4.5/45, mb4.7/45,mB5.1/16,MLv4.9/13,Mw(mB)4.4/16*

*NEIC* ***13*** *19:59:17.6±1.6,5˚43N±0˚06×126˚49E±0˚08,h86km±6km, mb4.6/86,Error ellipse: s-maj=12.9km s-min=7.9km az=67.0*

*MAN* ***13*** *19:59:17.0,5˚27N×126˚44E,h43km,mb5.0,ML4.0,MS4.0*

**ISC 13 19:59:17.8±0.7,5˚42N±0˚04×126˚54E±0˚05,h93km±6km, n230,σ1°45/234,mb4.6/93,22C-12D,Fault plane solution: NP1:ϕ209.01128°,δ74.47998°,λ-77.03823°. NP2:ϕ348.30948°,δ20.11803°,λ-128.92804°. Principal axes:** T Plg28.3437°, Azm288.6294°; N Plg12.4814°, Azm25.4871°; P Plg58.5579°, Azm136.7124°; **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.71** | **293** | ⇓*i*P | **Pn** | **19 59 44.4** | **-2.1** |
| GSPH | | | | *i* S | **Sn** | **20 00 06.0** | **-2.4** |
| **DAV** | **Davao City (W)** | **1.90** | **330** | P | **Pn** | **19 59 49.0** | **+0.3** |
| | 81nm,0.3s,baz=127,slow=0.8,SNR=9.7 | | | | | | |
| DAV | | | | S | **Sn** | **20 00 11.3** | **-1.0** |
| | 257nm,0.3s,baz=299,slow=21,SNR=5.6 | | | | | | |
| **DAV** | **Davao City (W)** | **1.90** | **330** | Pn | **Pn** | **19 59 47.9** | **-0.9** |
| DAV | | | | Sn | **Sn** | **20 00 10.0** | **-2.3** |
| **SGSI** | **Sangihe** | **2.00** | **210** | P | **Pn** | **19 59 51.6** | **+1.5** |
| **KCP** | **Kidapawan** | **2.13** | **318** | ⇓*i*P | **Pn** | **19 59 51.8** | **-0.1** |
| KCP | | | | *i* S | **Sn** | **20 00 18.4** | **+0.4** |
| **BIPH** | **Bislig** | **2.75** | **356** | ⇑*e*P | **Pn** | 20 00 05.2 | +5.2 |
| BIPH | | | | *e*S | **Sn** | **20 00 36.6** | **+4.1** |
| **CTBH** | **Cotabato--PC H** | **2.90** | **308** | ⇑*i*P | **Pn** | **20 00 01.8** | **-0.2** |
| CTBH | | | | *i* S | **Sn** | **20 00 38.5** | **+2.5** |
| **ZCP** | **Zamboanga City** | **4.68** | **289** | ⇑*e*P | **Pn** | **20 00 26.5** | **+0.4** |
| ZCP | | | | *e*S | **Sn** | **20 01 19.8** | **+0.5** |
| **TNTI** | **Ternate** | **4.69** | **170** | Pn | **Pn** | **20 00 25.9** | **-0.4** |
| **TNTI** | **Ternate** | **4.69** | **170** | P | **Pn** | **20 00 26.3** | **0.0** |
| **TNTI** | **Ternate** | **4.69** | **170** | P | **Pn** | **20 00 26.7** | **+0.4** |
| **TBP** | **Tagbilaran** | **5.00** | **328** | *e*P | **Pn** | **20 00 32.2** | **+1.7** |
| TBP | | | | *i* S | **Sn** | **20 01 30.6** | **+3.6** |
| **SNPH** | **Sibulan** | **5.09** | **320** | *e*P | Pn | 20 00 36.5 | +4.8 |
| **KMSI** | **Cibinong** | **5.45** | **208** | P | **Pn** | **20 00 39.4** | **+2.8** |
| | 1.1nm2μm191nm,0.7s | | | | | | |
| **LLP** | **Lapu-Lapu** | **5.49** | **333** | *e*P | **Pn** | **20 00 39.6** | **+2.4** |
| LLP | | | | *e*S | **Sn** | **20 01 45.6** | **+6.6** |
| **GTOI** | **Gorontalo** | **5.92** | **217** | P | **Pn** | **20 00 43.6** | **+0.7** |
| | 0.2nm552nm51nm,0.8s | | | | | | |
| **LBMI** | **Labuha** | **6.10** | **171** | P | **Pn** | **20 00 46.2** | **+0.8** |
| | 0.7nm1μm100nm,0.8s | | | | | | |
| **MRSI** | **Marisa** | **6.72** | **223** | P | **Pn** | **20 00 55.1** | **+1.2** |
| | 0.9nm2μm169nm,0.6s | | | | | | |
| **RCP** | **Roxas** | **7.16** | **329** | ⇓*e*P | **Pn** | **20 01 03.6** | **+3.7** |
| **TOLI2** | **Tolitoli** | **7.17** | **234** | Pn | **Pn** | **20 00 59.5** | **-0.5** |
| **TOLI2** | **Tolitoli** | **7.17** | **234** | P | **Pn** | **20 00 59.9** | **-0.1** |
| | 51nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **7.44** | **184** | P | **Pn** | **20 01 00.7** | **-3.0** |
| **SWI** | **Sorong** | **7.82** | **143** | P | **Pn** | **20 01 10.5** | **+1.6** |
| | 0.2nm44nm,0.7s | | | | | | |
| **SIJI** | **Sorong** | **7.83** | **143** | P | **Pn** | **20 01 08.9** | **-0.2** |
| | 4.8nm,0.3s,baz=322,slow=20,SNR=22 | | | | | | |
| SIJI | | | | S | **Sn** | **20 02 35.6** | **-0.6** |
| | 2.1nm,0.3s,baz=170,slow=23,SNR=2.5 | | | | | | |
| **APSI** | **Ampana** | **7.96** | **218** | P | Pn | 20 01 15.3 | +4.5 |
| | 0.3nm733nm58nm,1.1s | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.01** | **269** | Pn | **Pn** | **20 01 11.3** | **-0.1** |
| **MPSI** | **Mapaga** | **8.33** | **233** | P | Pn | 20 01 21.5 | +5.6 |
| | 0.1nm380nm21nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **10.06** | **145** | Pn | **Pn** | **20 01 37.5** | **-2.0** |
| **FAKI** | **Fak Fak** | **10.06** | **145** | P | **Pn** | **20 01 38.3** | **-1.1** |
| | 23nm,0.8s | | | | | | |
| **TTSI** | **Tana Toraja** | **10.76** | **219** | P | **Pn** | **20 01 51.7** | **+2.8** |
| | 511nm37nm,1.5s | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.52** | **216** | P | **Pn** | **20 02 00.0** | **+0.8** |
| | 26nm,0.8s | | | | | | |
| **BNSI** | **Bone** | **11.68** | **213** | P | Pn | 20 02 06.7 | +5.3 |
| | 22nm,0.9s | | | | | | |
| **SRPI** | **Serui, Papua** | **12.10** | **127** | P | **P** | **20 02 12.1** | **-3.8** |
| **KBKI** | **Kotabaru** | **13.50** | **230** | P | **P** | **20 02 31.9** | **+0.4** |
| | 16nm,0.9s | | | | | | |
| **SBUM** | **Sibu** | **14.58** | **259** | | **P** | **20 02 41.4** | **-2.1** |
| **BBKI** | **Banjar Baru** | **14.64** | **233** | P | **P** | **20 02 48.2** | **+4.0** |
| **SOEI** | **Soe** | **15.25** | **189** | | **Pn** | **20 02 46.5** | **-1.6** |
| SOEI | | | | IAmb | IAmb | 20 03 06.4 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **15.25** | **189** | P | **P** | **20 02 56.7** | **+5.7** |
| **SOEI** | **Soe** | **15.25** | **189** | P | **P** | **20 02 50.9** | **-0.1** |
| | comp=Z,42nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **15.79** | **190** | P | **P** | **20 02 56.1** | **-0.7** |
| | comp=Z,7.0nm,0.3s,baz=65,slow=1.2,SNR=12 | | | | | | |
| BATI | | | | S | **Sn** | **20 05 51.7** | **+2.2** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=20,SNR=2.3 | | | | | | |
| **BATI** | **Baumata** | **15.79** | **190** | P | **P** | **20 03 00.6** | **+3.7** |
| | comp=Z,44nm,0.7s | | | | | | |
| **STKI** | **Sintang** | **15.95** | **251** | P | **P** | **20 03 00.0** | **+1.3** |
| | comp=Z,3μmcomp=Z,18nm,1.5s | | | | | | |
| **PLAI** | **Plampang** | **16.63** | **212** | P | **P** | **20 03 09.6** | **+3.4** |
| | comp=Z,76nm,0.8s | | | | | | |
| **PLAI** | **Plampang** | **16.63** | **212** | P | **P** | **20 03 07.1** | **+0.9** |
| | comp=Z,76nm,0.8s | | | | | | |
| **KSM** | **Kuching** | **16.66** | **257** | Pn | **P** | **20 03 08.2** | **+1.5** |
| KSM | | | | IAmb | IAmb | 20 03 11.6 | |
| | comp=Z,31nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **16.66** | **257** | P | **P** | **20 03 08.8** | **+2.2** |
| | comp=Z,44nm,0.9s | | | | | | |
| **KMMI** | **Kalianget** | **17.63** | **225** | P | **Pn** | **20 03 18.0** | **+0.4** |
| | comp=Z,1μmcomp=Z,36nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **18.26** | **166** | P | **Pn** | **20 03 26.5** | **+1.4** |
| | comp=Z,22nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.52** | **222** | P | **P** | **20 03 26.2** | **-0.9** |
| JAGI | | | | IAmb | IAmb | 20 03 31.6 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.52** | **222** | P | **Pn** | **20 03 30.0** | **+1.7** |
| | comp=Z,36nm,0.8s | | | | | | |
| **YULB** | **Yu-li** | **18.57** | **345** | P | **P** | **20 03 27.3** | **-0.2** |
| YULB | | | | IAmb | IAmb | 20 03 54.2 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **TPUB** | **Ta-pu** | **18.67** | **343** | P | **P** | **20 03 28.3** | **-0.3** |
| | comp=Z,19nm,1.8s | | | | | | |
| **MTN** | **Manton Dam** | **18.71** | **166** | P | **P** | **20 03 28.5** | **-0.6** |
| **MTN** | **Manton Dam** | **18.71** | **166** | P | **P** | **20 03 29.0** | **-0.1** |
| | comp=Z,16nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **18.93** | **162** | P | **Pn** | **20 03 33.2** | **+0.1** |
| | comp=Z,17nm,1.6s | | | | | | |
| **UWJI** | **Ujung Watu** | **19.51** | **233** | P | **Pn** | **20 03 42.7** | **+2.8** |
| | comp=Z,3μmcomp=Z,64nm,1.0s | | | | | | |
| **YHNB** | **Yeheng** | **19.77** | **346** | P | **P** | **20 03 41.0** | **+0.4** |
| YHNB | | | | IAmb | IAmb | 20 03 46.5 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **GUMO** | **Guam** | **19.80** | **65** | LR | LR | 20 11 38.1 | |
| | comp=Z,36nm,18.9s,baz=76,slow=37 | | | | | | |
| **SMRI** | **Semarang** | **20.29** | **233** | P | Pn | 20 03 52.1 | +3.1 |
| | comp=Z,78nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **21.08** | **174** | P | **P** | **20 03 54.6** | **-0.1** |
| **JOW** | **Kunigami** | **21.36** | **4** | LR | LR | 20 13 07.4 | |
| | comp=Z,28nm,19.4s,baz=159,slow=39 | | | | | | |
| **KPJI** | **Karang Pucung** | **21.66** | **234** | P | **P** | **20 04 03.8** | **+2.8** |
| | comp=Z,23nm,0.9s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **21.73** | **250** | P | **P** | **20 04 01.9** | **+0.2** |
| **TPRI** | **Tanjung Pinang** | **22.42** | **259** | P | P | 20 04 17.3 | +8.2 |
| **LEM** | **Lembang** | **22.46** | **237** | P | **P** | **20 04 10.6** | **+0.9** |
| | comp=Z,30nm,0.9s,baz=60,slow=10,SNR=7.7 | | | | | | |
| LEM | | | | LR | LR | 20 12 28.8 | |
| | comp=Z,40nm,21.5s,baz=21,slow=35 | | | | | | |
| **DSRI** | **Dabo** | **22.70** | **256** | P | **P** | **20 04 13.3** | **+1.3** |
| | comp=Z,382nmcomp=Z,20nm,0.9s | | | | | | |
| **UBPT** | **Khong Chiam** | **22.90** | **297** | P | **P** | **20 04 12.3** | **-1.6** |
| **CBJI** | **Citeko** | **22.90** | **239** | P | **P** | **20 04 15.8** | **+1.8** |
| | comp=Z,52nm,1.3s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **22.93** | **262** | P | **P** | **20 04 14.1** | **-0.1** |
| MYKOM | | | | IAmb | IAmb | 20 04 15.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **PMBI** | **Palembang** | **23.27** | **250** | P | **P** | **20 04 17.9** | **+0.5** |
| **PMBI** | **Palembang** | **23.27** | **250** | P | **P** | **20 04 19.9** | **+2.4** |
| | comp=Z,250nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.39** | **182** | P | **P** | **20 04 18.2** | **-0.2** |
| | comp=Z,4.9nm,0.4s,baz=6.2,slow=8.2,SNR=48 | | | | | | |
| FITZ | | | | LR | LR | 20 13 56.9 | |
| | comp=Z,31nm,18.4s,baz=107,slow=38 | | | | | | |
| **KLSI** | | **23.98** | **246** | P | **P** | **20 04 26.1** | **+2.2** |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **MDSI** | **Maura Dua** | **24.40** | **247** | P | **P** | **20 04 29.6** | **+1.9** |
| | comp=Z,11nm,1.2s | | | | | | |
| **LWLI** | **Liwa** | **24.73** | **246** | P | **P** | **20 04 34.6** | **+3.8** |
| | comp=Z,44nm,0.9s | | | | | | |
| **RGRI** | **Rengat** | **24.84** | **257** | P | **P** | **20 04 35.7** | **+4.0** |
| | comp=Z,387nm,0.4s | | | | | | |
| **COEN** | **Coen** | **25.36** | **140** | P | **P** | **20 04 36.1** | **-0.3** |
| **IPM** | **Ipoh** | **25.43** | **269** | P | **P** | **20 04 36.8** | **-0.4** |
| IPM | | | | IAmb | IAmb | 20 04 39.5 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **MASI** | **Maura Aman, Be** | **25.72** | **251** | P | **P** | **20 04 41.9** | **+2.1** |
| | comp=Z,1μmcomp=Z,64nm,0.8s | | | | | | |
| **KULM** | **Kulim** | **25.77** | **271** | P | **P** | **20 04 39.8** | **-0.5** |
| KULM | | | | IAmb | IAmb | 20 04 42.9 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **BKNI** | **Bangkinang** | **25.96** | **260** | P | **P** | **20 04 41.4** | **-0.5** |
| **JCJ** | **Chichijima** | **26.21** | **33** | P | **P** | **20 04 42.0** | **-1.9** |
| **WRAB** | **Tennant Creek** | **26.34** | **163** | P | **P** | **20 04 45.5** | **+0.3** |
| WRAB | | | | IAmb | IAmb | 20 04 52.3 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.35** | **163** | P | **P** | **20 04 46.7** | **+1.4** |
| | comp=Z,7.7nm,0.6s,baz=348,slow=10,SNR=29 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 08 09.5** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=333,slow=2.4,SNR=3.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **20 11 42.4** | **+1.6** |
| | comp=Z,0.6nm,0.7s,baz=338,slow=3.0,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.35** | **163** | P | **P** | **20 04 45.2** | **-0.1** |
| **WB2** | **Warramunga Arr** | **26.35** | **163** | P | **P** | **20 04 45.7** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 20 04 52.4 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **26.42** | **163** | P | **P** | **20 04 46.8** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 20 04 52.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **27.25** | **194** | P | **P**

SONM **Songino Array** 45.65 341 P P 20 07 29.1 0.0
comp=Z,2.6nm,0.6s,baz=161,slow=9.4,SNR=23
SONM PcP PcP 20 09 05.4 -0.5
comp=Z,1.3nm,0.7s,baz=152,slow=3.4,SNR=5.9
**SONM Songino Array** 45.65 341 P P 20 07 28.8 -0.4
**GKN Gorkha** 45.65 304 *eP* P 20 07 28.5 -1.0
comp=Z,5.1nm,0.4s
**KOLN Koldanda** 46.42 304 *eP* P 20 07 35.2 -0.4
comp=Z,45nm,0.6s
**DANN Dangsing** 46.49 304 *eP* P 20 07 35.6 -0.7
comp=Z,57nm,0.6s
**PYUN Piuthan** 47.04 304 *eP* P 20 07 40.1 -0.4
**DZM Mont Dzumac** 47.67 126 P P 20 07 45.4 0.0
comp=Z,7.1nm,0.8s,baz=140,slow=23,SNR=6.5
**DZM Mont Dzumac** 47.67 126 P P 20 07 45.3 0.0
DZM IAmb IAmb 20 08 02.3
comp=Z,20nm,1.5s
**OUENC Ouen Island, N** 48.17 127 P P 20 07 48.1 -0.8
**WMQ Urumqi** 51.24 324 *eP* P 20 08 14.4 +2.3
**PETK Petropavlovsk-** 53.95 23 P P 20 08 32.4 +0.5
comp=Z,2.9nm,0.8s,baz=214,slow=2.3,SNR=4.2
**PETK Petropavlovsk-** 53.95 23 P P 20 08 31.7 -0.2
**MK31 Makanchi Array** 56.07 325 P P 20 08 46.3 -0.9
MK31 IAmb IAmb 20 08 47.8
comp=Z,3.3nm,0.5s
**MKAR Makanchi Array** 56.07 325 P P 20 08 46.6 -0.6
comp=Z,5.0nm,0.6s,baz=122,slow=8.3,SNR=82
MKAR PcP PcP 20 09 44.5 +0.1
comp=Z,4.9nm,0.6s,baz=122,slow=3.1,SNR=13
MKAR ScP ScP 20 13 35.9 +0.6
comp=Z,0.5nm,0.8s,baz=119,slow=4.2,SNR=4.5
**MAKZ Makanchi** 56.26 325 P P 20 08 47.7 -0.9
MAKZ IAmb IAmb 20 08 49.5
comp=Z,3.2nm,0.6s
**TARG Taragay, Kyrgy** 56.38 317 P P 20 08 49.4 -0.6
**YAK Yakutsk** 56.53 2 P P 20 08 50.5 +0.4
**KSH Kashi** 56.72 314 P P 20 08 52.3 +0.1
KSH pmax pmax
comp=Z,5.0nm,0.7s
**NIL Nilore** 56.75 307 P P 20 08 51.2 -1.2
**AAK Ala-Archa** 58.99 317 P P 20 09 07.3 -0.7
**ZAA0 Zalesovo Array** 59.01 333 P P 20 09 07.0 -0.6
ZAA0 IAmb IAmb 20 09 11.8
comp=Z,5.0nm,1.0s
**ZALV Zalesovo Beam** 59.01 333 P P 20 09 06.3 -1.4
comp=Z,2.0nm,0.5s,baz=128,slow=5.9,SNR=13
ZALV PcP PcP 20 09 54.8 -0.9
comp=Z,2.2nm,0.6s,baz=178,slow=4.4,SNR=5.5
**ZALV Zalesovo Beam** 59.01 333 P P 20 09 06.8 -0.8
**KURBB Kurchatov Arra** 60.22 327 P P 20 09 15.2 -0.9
comp=Z,4.4nm,0.6s,baz=125,slow=6.4,SNR=55
**KURK Kurchatov** 60.22 327 P P 20 09 15.4 -0.6
**KBL Kabul** 60.35 307 P P 20 09 16.2 -1.4
KBL IAmb IAmb 20 09 17.2
comp=Z,5.0nm,0.7s
**GAR Garm** 60.65 312 P P 20 09 18.4 -1.1
**CHGR Chuyangaron** 61.41 311 P P 20 09 23.7 -0.8
CHGR IAmb IAmb 20 09 25.5
comp=Z,6.1nm,0.6s
**KKAR Karatay Array** 61.88 316 P P 20 09 26.6 -0.9
**THZ Tophouse** 63.15 143 P P 20 09 36.4 +0.5
THZ IAmb IAmb 20 09 38.7
comp=Z,7.5nm,0.9s
**RPZ Rata Peaks** 63.25 145 P P 20 09 38.1 +1.5
RPZ IAmb IAmb 20 10 03.9
comp=Z,12nm,1.1s
**TUWZ Tuamarina** 63.59 142 P P 20 09 39.2 +0.4
**BVAR Borovoye Array** 65.81 327 P P 20 09 52.5 -0.6
comp=Z,3.1nm,0.8s,baz=83,slow=12,SNR=19
**BRVK Borovoye** 65.88 327 P P 20 09 52.9 -0.6
BRVK IAmb IAmb 20 09 58.4
comp=Z,5.1nm,0.7s
**TIXI Tiksi** 66.16 1 P P 20 09 55.2 +0.3
**NRIK Noril'sk** 68.75 346 P P 20 10 12.0 +0.7
comp=Z,14nm,0.6s,baz=129,slow=6.7,SNR=21
**NRIK Noril'sk** 68.75 346 P P 20 10 11.7 +0.4
**GEYT Alibeck** 69.70 308 P P 20 10 17.6 -0.2
**GYA0B ALIBECK ARRAY** 69.70 308 P P 20 10 17.4 -0.5
GYA0B IAmb IAmb 20 10 39.6
comp=Z,4.2nm,0.7s
**ABKAR Akbulak array** 70.73 320 P P 20 10 22.8 -1.0
**ABKAR Akbulak array** 70.73 320 P P 20 10 22.9 -0.9
ABKAR IAmb IAmb 20 10 25.0
comp=Z,4.9nm,0.7s
**AKTO Aktyubinsk** 72.22 321 P P 20 10 32.2 -0.6
comp=Z,4.5nm,0.5s,baz=104,slow=8.9,SNR=16
**CASY Casey** 72.46 187 P P 20 10 34.1 +0.2
CASY IAmb IAmb 20 10 55.2
comp=Z,21nm,1.2s
**ARU Arti** 73.41 327 P P 20 10 39.0 -0.7
comp=Z,2.0nm,0.6s,baz=133,slow=3.4,SNR=13
**ARU Arti** 73.41 327 P P 20 10 38.7 -1.0
ARU IAmb IAmb 20 10 43.9
comp=Z,5.6nm,0.6s
**KIRV Kirov** 78.69 329 P P 20 11 08.8 -0.8
comp=Z,8.7nm,0.6s,baz=34,slow=3.6,SNR=3.2
**BELG Belogornoye** 78.96 322 P P 20 11 09.9 -1.3
comp=Z,7.8nm,0.6s,baz=317,slow=6.0,SNR=7.6
**RAYN Ar Rayn** 79.65 293 P P 20 11 13.9 -1.7
**L19K White Mountain** 79.91 28 P P 20 11 17.3 +1.0
L19K IAmb IAmb 20 11 31.2
comp=Z,8.2nm,1.3s
**M19K Big River Lodg** 80.09 28 P P 20 11 18.6 +1.3
M19K IAmb IAmb 20 11 39.9
comp=Z,11nm,1.4s
**GNI Garni** 80.26 310 P P 20 11 17.7 -1.1
comp=Z,1.1nm,0.4s,baz=146,slow=19,SNR=1.6
**J20K Nowinta River** 80.49 26 P P 20 11 20.3 +1.0
J20K IAmb IAmb 20 11 31.2
comp=Z,8.7nm,1.4s
**IMAR Indian Mountai** 80.89 24 P P 20 11 22.4 +1.1
**ONI Oni** 81.27 312 P P 20 11 22.8 -1.2
**CAST Castle Rocks** 81.32 27 P P 20 11 25.0 +1.2
**I21K Tanana** 81.53 25 P P 20 11 26.0 +1.3
I21K IAmb IAmb 20 11 27.8
comp=Z,16nm,1.4s
**GEVA Gevas** 81.55 308 P P 20 11 25.6 -0.2
**KBZ Khabaz** 81.69 313 P P 20 11 25.0 -1.0
comp=Z,1.8nm,0.9s,baz=135,slow=2.9,SNR=2.6
**ABPO Ambohimpanom** 81.70 250 P P 20 11 26.5 -0.3
ABPO IAmb IAmb 20 11 54.5
comp=Z,5.8nm,1.1s
**MLY Manley** 82.04 25 P P 20 11 28.6 +1.1
MLY IAmb IAmb 20 11 30.3
comp=Z,6.7nm,1.2s
**COLD Coldfoot** 82.42 23 P P 20 11 31.1 +1.7
**VOI Vohitsoka** 82.54 247 P P 20 11 30.8 -0.3
VOI IAmb IAmb 20 11 31.2
comp=Z,7.1nm,0.7s
**I23K Minto, Yukon-K** 82.63 25 P P 20 11 31.6 +1.1
I23K IAmb IAmb 20 11 32.8
comp=Z,12nm,1.4s
**H24K Noodor Dome** 83.28 24 P P 20 11 35.4 +1.4
H24K IAmb IAmb 20 11 37.2
comp=Z,4.7nm,0.8s
**IL31** 83.67 25 P P 20 11 35.5 -0.4
IL31 IAmb IAmb 20 11 55.2
comp=Z,8.6nm,1.4s
**ILAR Eielson Array** 83.67 25 P P 20 11 35.7 -0.2
comp=Z,1.2nm,0.5s,baz=251,slow=5.4,SNR=21
**ILAR Eielson Array** 83.67 25 P P 20 11 35.4 -0.5
**BMAR Burnt Mountain** 84.60 23 P P 20 11 42.2 +1.6
**VNDA Vanda** 85.12 173 P P 20 11 43.4 +0.5
VNDA IAmb IAmb 20 12 08.9
comp=Z,16nm,1.1s
**MAW Mawson** 85.27 200 LR LR 20 47 41.5
comp=Z,96nm,18.3s,baz=64,slow=34
**BCAR Beaver Creek A** 85.97 27 P P 20 11 48.8 +1.3
**EGAK Eagle** 86.12 25 P P 20 11 48.9 +0.7
EGAK IAmb IAmb 20 12 07.2
comp=Z,6.7nm,1.5s
**KEV Kevo** 88.25 340 P P 20 11 58.2 -0.1
**SPITS Spitsbergen Ar** 88.79 349 P P 20 12 01.0 +0.2
comp=Z,12nm,0.9s,baz=125,slow=8.7,SNR=9.2
SPITS LR LR 20 56 10.7
comp=Z,295nm,19.1s,baz=239,slow=38
**BR131 Keskin Array S** 88.80 310 P P 20 11 59.5 -2.3
BR131 IAmb IAmb 20 12 00.6
comp=Z,5.6nm,1.2s
**BRTR Keskin Array B** 88.80 310 P P 20 12 00.1 -1.8
comp=Z,1.1nm,0.7s,baz=118,slow=5.0,SNR=9.1
**BRTR Keskin Array B** 88.80 310 P P 20 11 59.9 -1.9
**ARCES ARCESS Array B** 88.81 340 P P 20 12 00.5 -0.5
comp=Z,10.0nm,0.8s,baz=76,slow=6.2,SNR=23
**ARCES ARCESS Array B** 88.81 340 P P 20 12 00.5 -0.5

**FINES FINESS Array B** 90.26 332 P P 20 12 07.1 -0.8
comp=Z,1.6nm,0.5s,baz=99,slow=5.6,SNR=12
**FINES FINESS Array B** 90.26 332 P P 20 12 06.9 -1.0
**AKASG Malin Array Be** 90.47 321 P P 20 12 07.5 -1.6
comp=Z,0.6nm,0.5s,baz=67,slow=4.3,SNR=4.7
**MLR Muntele Rosu** 93.56 316 P P 20 12 23.0 -0.7
comp=Z,1.3nm,0.6s,baz=0.0,slow=1.0,SNR=3.9
**QSPA South Pole Qui** 95.32 180 P P 20 12 31.4 +0.2
comp=Z,1.5nm,1.0s,baz=309,slow=3.7,SNR=2.2
**HFS Hagfors** 96.44 332 P P 20 12 35.3 -1.1
comp=Z,2.3nm,0.7s,baz=128,slow=2.4,SNR=6.9
**NB2 NORSAR Subarra** 97.20 334 P P 20 12 38.9 -0.9
comp=Z,1.3nm,0.7s,baz=65,slow=4.6
**NB2 NORSAR Subarra** 97.20 334 P P 20 12 38.2 -1.6
comp=Z,2.6nm,0.7s,baz=68,slow=4.6
**NOA NORSAR Array B** 97.20 334 P P 20 12 38.6 -1.2
comp=Z,1.6nm,0.7s,baz=66,slow=4.5,SNR=11
**YKA Yellowknife Ar** 98.05 24 P P 20 12 43.8 +0.3
comp=Z,0.4nm,0.8s,baz=299,slow=4.4,SNR=5.3
**SCHQ Schefferville** 118.94 9 PKP PKPdf 20 17 55.1 -0.4
comp=Z,1.9nm,0.7s,baz=246,slow=5.6,SNR=4.2
**SCHQ Schefferville** 118.94 9 PKPdf 20 17 55.3 -0.3
**TXAR Lajitas Array** 120.71 51 PKP PKiKP 20 18 00.5 +0.6
comp=Z,0.1nm,0.5s,baz=232,slow=1.0,SNR=1.9
**TORD Torodi Ar. Bea** 122.20 289 PKP PKPdf 20 18 02.3 -0.5
comp=Z,1.1nm,0.7s,baz=56,slow=2.3,SNR=7.2
**PLCA Paso Flores** 141.65 159 PKP PKPdf 20 18 38.8 -0.1
comp=Z,2.0nm,0.9s,baz=247,slow=5.2,SNR=2.0

*IDC* ***13*** *20:07:54.3±0.9, 30.41S×177.70W, h0km, mb4.2/6, mb1 4.3/8, mb1mx3.9/47, mbtmp4.1/8, ML3.4/2, MS3.9/2, Ms1 3.9/2, ms1mx3.0/57 Error ellipse: s-maj=23.8km s-min=20.2km az=123.0*
*NEIC* ***13*** *20:07:56.1±1.5, 30.37S±0.06×177.6W±0.2, h13km±5km, mb4.5/10, Error ellipse: s-maj=29.8km s-min=8.7km az=87.0*
**ISC 13 20:07:55.8**±0.8,**30.43S**±0.05×**177.8W**±0.1,**h10**km,**n32,** σ1**53**/34,**mb4.3**/9,**Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.18** | **354** | Pn | **Pn** | **20 08 18.6** | **+0.3** |
| | 285nm,0.3s,baz=2.6,slow=24,SNR=9.6 | | | | | | |
| RAO | | | | Sn | **Sg** | **20 08 33.5** | **-0.4** |
| | 1μm,0.3s,baz=64,slow=20,SNR=9.2 | | | | | | |
| **RAO** | **Raoul Island** | **1.18** | **354** | | **Pb** | **20 08 17.8** | **-0.5** |
| RAO | | | | Sn | **Sb** | **20 08 31.6** | **-2.0** |
| **URZ** | **Urewera** | **8.87** | **207** | Pn | **Pn** | **20 10 02.6** | **-1.4** |
| | 0.6nm,0.3s,baz=114,slow=13,SNR=1.7 | | | | | | |
| URZ | | | | Sn | **Sn** | **20 11 39.4** | **-4.6** |
| | 1.2nm,0.3s,baz=147,slow=4.0,SNR=2.4 | | | | | | |
| **TUWZ** | **Tuamarina** | **12.85** | **209** | Pn | **Pn** | **20 10 58.6** | **+0.1** |
| **MSVF** | **Nonsavu** | **13.20** | **342** | LR | LR | 20 14 32.6 | |
| | comp=Z,73nm,18.5s,baz=353,slow=30 | | | | | | |
| **LTZ** | **Lake Taylor** | **14.67** | **210** | Pn | **Pn** | **20 11 25.4** | **+2.0** |
| **DZM** | **Mont Dzumac** | **16.41** | **297** | Pn | **Pn** | **20 11 45.1** | **-1.2** |
| | 0.1nm,0.3s,baz=133,slow=19,SNR=2.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.41** | **297** | | **P** | **20 11 51.0** | **+1.9** |
| DZM | | | | IAmb | IAmb | 20 11 58.4 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **CTA** | **Charters Tower** | **33.99** | **279** | P | **P** | **20 14 41.9** | **+2.0** |
| | comp=Z,4.1nm,0.6s,baz=97,slow=9.0,SNR=7.4 | | | | | | |
| **CTAO** | **Charters Tower** | **33.99** | **279** | P | **P** | **20 14 40.7** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 20 14 45.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.66** | **257** | P | **P** | **20 14 47.9** | **+2.4** |
| | comp=Z,4.2nm,0.7s,baz=98,slow=12,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **34.66** | **257** | P | **P** | **20 14 47.7** | **+2.2** |
| STKA | | | | IAmb | IAmb | 20 15 02.8 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **39.14** | **254** | P | **P** | **20 15 24.7** | **+1.0** |
| BBOO | | | | IAmb | IAmb | 20 15 40.5 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **43.30** | **267** | P | **P** | **20 15 58.3** | **+0.3** |
| **ASAR** | **Alice Springs** | **43.30** | **267** | P | **P** | **20 15 59.1** | **+1.2** |
| | comp=Z,1.1nm,0.5s,baz=104,slow=7.2,SNR=25 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 17 48.5** | **+1.5** |
| | comp=Z,0.6nm,0.8s,baz=116,slow=3.8,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **43.30** | **267** | P | **P** | **20 15 58.4** | **+0.4** |
| **WR0** | **Warramunga Arr** | **44.11** | **272** | P | **P** | **20 16 04.4** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 20 16 06.7 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.29** | **272** | P | **P** | **20 16 05.7** | **-0.3** |
| | comp=Z,1.7nm,0.5s,baz=106,slow=7.9,SNR=51 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.29** | **272** | P | **P** | **20 16 05.1** | **-0.8** |
| **KNRA** | **Kununurra** | **50.90** | **274** | P | **P** | **20 16 57.3** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **52.55** | **270** | P | **P** | **20 17 09.3** | **-0.4** |
| | comp=Z,3.0nm,1.1s,baz=112,slow=3.6,SNR=7.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.68** | **180** | P | **P** | **20 18 00.9** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=290,slow=1.6,SNR=7.4 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.68** | **180** | P | **P** | **20 18 00.2** | **+0.1** |
| QSPA | | | | IAmb | IAmb | 20 18 15.2 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **MMRI** | **Maumere** | **59.84** | **278** | P | **P** | **20 18 01.3** | **-0.6** |
| **LPIG** | **La Paz** | **84.39** | **58** | P | **P** | **20 20 30.3** | **+1.7** |
| | comp=Z,62nm,0.4s,baz=342,slow=1.7,SNR=5.7 | | | | | | |
| **PSI** | **Prapat** | **95.63** | **276** | LR | LR | 21 01 35.2 | |
| | comp=Z,304nm,18.4s,baz=140,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **145.24** | **340** | PKPbc | **PKPbc** | **20 27 31.5** | **-1.1** |
| | comp=Z,1.5nm,0.4s,baz=51,slow=4.1,SNR=5.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.81** | **352** | PKPbc | **PKPbc** | **20 27 41.5** | **-1.4** |
| | comp=Z,1.0nm,0.7s,baz=16,slow=4.2,SNR=4.7 | | | | | | |
| **HFS** | **Hagfors** | **149.31** | **349** | PKPbc | **PKPbc** | **20 27 42.6** | **-1.6** |
| | comp=Z,2.1nm,0.8s,baz=259,slow=3.7,SNR=2.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.44** | **323** | PKPbc | **PKPbc** | **20 27 48.4** | **-1.1** |
| | comp=Z,0.6nm,0.4s,baz=54,slow=3.0,SNR=4.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.44** | **323** | | **PKPdf** | **20 27 42.9** | **-0.5** |
| **BRTR** | **Keskin Array B** | **152.78** | **298** | PKPbc | **PKPbc** | **20 27 51.7** | **-1.5** |
| | comp=Z,0.5nm,0.6s,baz=122,slow=2.6,SNR=2.1 | | | | | | |

*BJI* ***13*** *20:14:32.5±0.0, 10.34N×125.16E, h221km, mb4.2/41, mB4.7/22*
*GCMT* ***13*** *20:14:33.2±0.4, 10.56N±0.02×125.25E±0.03, h221km±3km, MW5.0/64, Moment Tensor Solution. s24,c29; s64,c80; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=0.65±.17; Mθθ2.58±.16; Mφφ-1.93±.16; Mrθ-0.45±.14; Mrφ 1.70±.18; Mθφ-2.61±.17; Best double couple: M=3.88400×10^16 NP1:φs291.00000°, δ49.00000°, λ-12.00000°. NP2:φs29.00000°, δ81.00000°, λ-139.00000°. Principal axes: T 3.6150, Plg20.0000°, Azm153.0000°; N 0.5400, Plg48.0000°, Azm39.0000°; P -4.1530, Plg35.0000°, Azm258.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MAN* ***13*** *20:14:33.3, 10.51N×125.22E, h211km, mb5.4, ML4.4, MS4.7*
*IDC* ***13*** *20:14:34.4±0.8, 10.51N×125.15E, h220km±7km, mb4.2/43, mb1 4.3/47, mb1mx4.0/65, mbtmp4.8/47, Error ellipse: s-maj=10.3km s-min=5.6km az=65.0*
*DJA* ***13*** *20:14:34.7±0.4, 11.3N×125.5E, h216km±4km, M4.8/93, mB5.3/51, mb5.1/93, MLv5.5/3, Mw(mB)4.7/51, MwMwp5.8/1, Mwp5.9/1*
*NEIC* ***13*** *20:14:35.2±1.7, 10.54N±0.07×125.19E±0.09, h223km±4km, mb4.9/109, Error ellipse: s-maj=13.2km s-min=8.7km az=63.0*
**ISC 13 20:14:34.6**±0.5,**10.52N**±0.03×**125.18E**±0.05,**h221**km±4km, **n389,** σ1**9**28/422,**mb4.8**/134,**48C-27D,Fault plane solution: NP1:**φs287.86826°,δ55.06307°,λ6.56694°. **NP2:**φs194.09644°,δ84.62042°,λ144.88580°. **Principal axes:** T Plg28.1145°, Azm145.0766°; N Plg54.5285°, Azm6.5021°; P Plg19.7945°, Azm246.1633°; **Leyte**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSLP** | **Maasin** | **0.49** | **220** | *i* P | **Pn** | **20 15 03.4** | **-0.7** |
| MSLP | | | | *i* S | **S** | **20 15 22.7** | **-4.5** |
| **LLP** | **Lapu-Lapu** | **1.21** | **261** | *e* P | **Pn** | **20 15 06.8** | **-1.0** |
| LLP | | | | *i* S | **S** | **20 15 31.4** | **-2.3** |
| **TBP** | **Tagbilaran** | **1.53** | **238** | *e* P | **Pn** | **20 15 09.1** | **-1.4** |
| TBP | | | | *i* S | **S** | **20 15 35.0** | **-3.2** |
| **SNPH** | **Sibulan** | **2.24** | **239** | *i* P | **Pn** | **20 15 16.5** | **-0.6** |
| SNPH | | | | *i* S | **S** | **20 15 49.3** | **-0.9** |
| **CNOP** | **Candoni, Negro** | **2.59** | **255** | *i* P | **Pn** | **20 15 19.6** | **-1.1** |
| CNOP | | | | *i* S | **S** | **20 15 54.2** | **-2.4** |
| **BIPH** | **Bislig** | **2.59** | **153** | *i* P | **Pn** | **20 15 24.2** | **+3.4** |
| BIPH | | | | *i* S | **S** | **20 15 56.7** | **-0.2** |
| **RCP** | **Roxas** | **2.60** | **294** | *e* P | **Pn** | **20 15 20.6** | **-0.3** |
| **DCPH** | **Dipolog City** | **2.63** | **223** | *e* P | **Pn** | **20 15 19.8** | **-1.4** |
| DCPH | | | | *i* S | **S** | **20 15 55.3** | **-2.2** |

**JAP San Jose, Anti** 3.18 274 *eP* Pn 20 15 27.2 -0.2
**CTBH Cotabato--PC H** 3.40 196 *eP* Pn 20 15 29.6 -0.4
**DAV Davao City (W)** 3.45 173 P Pn 20 15 30.7 +0.2
206nm,0.3s,baz=26,slow=3.0,SNR=119
DAV S S 20 16 12.4 -2.0
baz=30,slow=20,SNR=1.3
**DAV Davao City (W)** 3.45 173 P Pn 20 15 30.9 +0.3
**KCP Kidapawan** 3.48 181 *i* P Pn 20 15 30.4 -0.6
KCP *i* S S 20 16 16.4 +1.3
**GQP Guinayangan** 4.30 322 *i* P Pn 20 15 39.9 -0.9
**GSPH General Santos** 4.41 183 *eP* Pn 20 15 43.0 +0.7
**JCNP Jose Panganiba** 4.46 327 *i* P Pn 20 15 40.8 -2.1
JCNP *eS* S 20 16 34.7 -1.9
**LQP Lukban** 5.04 316 *i* P Pn 20 15 49.9 -0.3
**PGP Puerto Galera** 5.09 306 *eP* Pn 20 15 50.3 -0.4
**TGY Tagaytay City** 5.47 311 P Pn 20 15 56.0 +0.6
88nm,0.3s,baz=151,slow=2.6,SNR=37
**LUBP Lubang** 5.79 304 *i* P Pn 20 15 59.0 -0.5
LUBP *eS* S 20 17 06.0 -0.7
**SGSI Sangihe** 6.79 177 P Pn 20 16 11.2 -1.2
2.8nm7μm915nm,0.7s
**MYLDM Lahad Datu** 8.47 232 Pn Pn 20 16 36.9 +2.9
**KKM Kota Kinabalu** 9.92 244 Pn Pn 20 16 52.4 -0.3
**TNTI Ternate** 9.92 167 Pn Pn 20 16 50.3 -2.3
**TNTI Ternate** 9.92 167 P Pn 20 16 51.6 -1.0
5μm616nm,0.7s
**TNTI Ternate** 9.92 167 P Pn 20 16 51.8 -0.8
**KMSI Cibinong** 9.95 187 P Pn 20 16 55.9 +3.0
3μm480nm,0.8s
**GTOI Gorontalo** 10.05 193 P Pn 20 16 55.4 +1.2
742nm89nm,1.1s
**TOLI2 Tolitoli** 10.31 205 Pn Pn 20 16 58.1 +0.6
**TOLI2 Tolitoli** 10.31 205 P Pn 20 16 58.2 +0.6
**MRSI Marisa** 10.48 198 P Pn 20 17 01.9 +2.2
832nm88nm,0.6s
**LBMI Labua** 11.32 168 P Pn 20 17 09.6 -0.8
3μm299nm,1.2s
**MPSI Mapaga** 11.39 208 P P 20 17 16.1 -0.1
**APSI Ampana** 11.88 197 P Pn 20 17 17.2 -0.3
1μm93nm,0.6s
**SANI Sanana** 12.51 176 P Pn 20 17 21.6 -3.8
**SWI Sorong** 12.82 151 P Pn 20 17 30.0 +0.7
1μm120nm,0.9s
**SIJI Sorong** 12.83 151 P Pn 20 17 29.6 +0.2
1.6nm,0.3s,baz=318,slow=10.0,SNR=14
SIJI S S 20 19 40.6 -11
0.5nm,0.3s,baz=279,slow=23,SNR=2.0
**YULB Yu-li** 13.33 344 Pn Pn 20 17 34.4 -1.1
**TPUB Ta-pu** 13.44 342 Pn Pn 20 17 35.2 -1.6
**TPUB Ta-pu** 13.44 342 P Pn 20 17 37.3 +0.5
**SMKI Samarinda** 13.47 217 P P 20 17 43.0 +3.7
**SSLB Suanglung** 13.80 344 Pn Pn 20 17 40.1 -1.2
**SSLB Suanglung** 13.80 344 P P 20 17 43.4 +0.5
**MSAI Masohi** 14.27 165 P P 20 17 48.4 +0.2
4μm399nm,0.6s
**AAI Ambon** 14.43 168 P Pn 20 17 48.6 -0.5
3μm416nm,0.9s
**TTSI Tana Toraja** 14.49 202 P P 20 17 51.8 +1.2
2μm200nm,0.7s
**YHNB Yeheng** 14.53 346 Pn Pn 20 17 50.1 -0.3
**FAKI Fak Fak** 15.09 152 P P 20 17 57.9 +0.7
**FAKI Fak Fak** 15.09 152 P P 20 17 58.9 +1.6
2μm124nm,0.8s
**FAKI Fak Fak** 15.09 152 P P 20 17 58.2 +0.9
**SBUM Sibu** 15.15 239 P P 20 17 58.5 +0.5
**MTKI Muara Teweh, K** 15.30 223 P Pn 20 18 01.6 +1.9
2μm90nm,0.8s
**SPSI Sidrap Palu** 15.36 201 P Pn 20 18 02.8 +2.4
3μm482nm,0.9s
**BNSI Bone** 15.65 199 P Pn 20 18 07.3 +3.4
4μm478nm,1.0s
**QZH Quanzhou** 15.65 337 P Pn 20 18 04.8 +1.0
QZH S S 20 20 56.1 -0.5
**BNDI Bandanaira** 15.66 162 P Pn 20 18 04.5 +0.5
**HKPS Hong Kong Po S** 15.76 319 Pn 20 18 04.9 -0.3
**BBSI Bau Bau** 16.11 189 P Pn 20 18 14.7 +5.3
**KBKI Kotabaru** 16.39 214 P Pn 20 18 14.5 +1.7
703nm56nm,0.8s
**JOW Kunigami** 16.49 10 P Pn 20 18 13.0 -0.8
2.1nm,0.3s,baz=140,slow=16,SNR=10
**JOW Kunigami** 16.49 10 Pn 20 18 12.7 -1.2
**SRPI Serui, Papua** 16.51 138 P Pn 20 18 14.2 0.0
129nm,0.8s
**BKSI Bulukumba** 16.52 198 P Pn 20 18 17.0 +2.8
2μm187nm,0.9s
**QIZ Qiongzhong** 17.06 302 Pn 20 18 20.3 -0.3
QIZ IAmb IAmb 20 18 22.2
comp=Z,36nm,0.9s
**QIZ Qiongzhong** 17.06 302 P P 20 18 19.8 +0.9
QIZ sP **sP** 20 19 22.5 +0.2
QIZ S S 20 21 26.3 +0.9
QIZ pmax pmax
comp=Z,26nm,0.9s
**QIZ Qiongzhong** 17.06 302 P Pn 20 18 20.7 +0.1
**STKI Sintang** 17.13 234 P Pn 20 18 21.7 +0.2
comp=Z,3μmcomp=Z,159nm,1.1s
**BBKI Banjar Baru** 17.28 217 P P 20 18 22.3 +0.9
comp=Z,66nm,1.0s
**KSM Kuching** 17.29 240 P P 20 18 22.6 +1.1
**KSM Kuching** 17.29 240 P Pn 20 18 22.9 -0.5
**SMPI Sarmi** 18.32 132 P Pn 20 18 34.4 -1.1
comp=Z,2μmcomp=Z,242nm,1.3s
**PBKI Pangkalan Bun** 18.80 226 P P 20 18 38.8 +1.0
comp=Z,18μmcomp=Z,7μmcomp=Z,888nm,1.1s
**MMRI Maumere** 19.25 189 P P 20 18 42.8 +0.2
MMRI IAmb IAmb 20 18 49.4
comp=Z,52nm,0.7s
**MMRI Maumere** 19.25 189 P Pn 20 18 45.0 -1.4
comp=Z,79nm,0.8s
**MMRI Maumere** 19.25 189 P P 20 18 43.6 +1.0
**SAUI Saumlaki** 19.36 161 P P 20 18 43.2 -0.6
**SAUI Saumlaki** 19.36 161 P P 20 18 45.0 +1.2
comp=Z,7μmcomp=Z,781nm,0.6s
**SAUI Saumlaki** 19.36 161 P P 20 18 44.4 +0.6
**UBPT Khong Chiam** 19.78 286 P P 20 18 47.6 -0.7
UBPT IAmb IAmb 20 18 49.4
comp=Z,48nm,1.0s
**GENI Genyem** 19.80 130 P Pn 20 18 51.9 -1.2
comp=Z,4μmcomp=Z,387nm,1.0s
**GENI Genyem** 19.80 130 P P 20 18 49.1 +0.5
**SOEI Soe** 20.16 183 P P 20 18 51.4 -1.1
**SOEI Soe** 20.16 183 P P 20 18 54.6 +2.1
comp=Z,1μmcomp=Z,111nm,0.8s
**SOEI Soe** 20.16 183 P P 20 18 52.5 0.0
**JAY Jayapura** 20.16 129 P P 20 18 52.8 +0.3
comp=Z,97nm,0.8s,baz=246,slow=2.2,SNR=23
**JAY Jayapura** 20.16 129 P P 20 18 54.1 +1.6
comp=Z,69nm,0.8s
**BWJI Bawean** 20.49 218 P P 20 18 58.9 +3.0
comp=Z,2μmcomp=Z,124nm,1.0s
**BATI Baumata** 20.64 184 P P 20 18 57.0 -0.5
comp=Z,83nm,0.4s,baz=62,slow=2.6,SNR=24
BATI ScP **ScP** 20 26 13.8 -0.3
comp=Z,25nm,0.8s,baz=243,slow=3.7,SNR=5.6
**BATI Baumata** 20.64 184 P P 20 18 59.2 +1.6
comp=Z,68nm,0.6s
**KMMI Kalianget** 20.71 213 P P 20 18 58.4 +0.1
comp=Z,83nm,0.8s
**GRJI Gresik** 21.44 217 P P 20 19 07.2 +1.4
comp=Z,2μmcomp=Z,126nm,0.6s
**BLJI Banyuglugur** 21.49 213 P P 20 19 06.3 0.0
comp=Z,36nm,0.6s
**JAGI Jajag, Banyuwa** 21.82 211 P P 20 19 08.8 -0.7
**JAGI Jajag, Banyuwa** 21.82 211 P P 20 19 11.3 +1.8
comp=Z,1μmcomp=Z,114nm,1.1s
**JAGI Jajag, Banyuwa** 21.82 211 P P 20 19 09.4 -0.1
**UWJI Ujung Watu** 22.00 221 P P 20 19 12.1 +1.0
comp=Z,2μmcomp=Z,133nm,0.7s
**NJ2 Nanjing** 22.22 346 *eP* P 20 19 14.3 +1.3
NJ2 pmax pmax
comp=Z,4.0nm,0.6s
**TPRI Tanjung Pinang** 22.63 246 P P 20 19 17.9 +0.9
comp=Z,150nm,1.2s
**PWJI Pagerwojo** 22.72 216 P P 20 19 19.7 +1.9
comp=Z,51nm,0.8s
**PPBI Pangkal Pinang** 22.75 237 P P 20 19 18.7 +0.6
comp=Z,5μmcomp=Z,132nm,1.1s
**SMRI Semarang** 22.80 221 P P 20 19 19.7 +1.2
SMRI IAmb IAmb 20 19 27.4
comp=Z,54nm,0.8s
**SMRI Semarang** 22.80 221 P P 20 19 22.3 +3.8
comp=Z,55nm,0.9s
**SMRI Semarang** 22.80 221 P P 20 19 19.1 +0.6
**MYKOM Kota Tinggi** 22.89 249 P P 20 19 19.8 +0.4
**DSRI Dabo** 23.22 243 P P 20 19 23.2 +0.9

comp=Z,964nmcomp=Z,74nm,0.9s
**PCJI Pacitan 23.23 217** P **P** **20 19 26.1 +3.7**
comp=Z,98nm,0.8s
**UGM Wanagama 23.41 219** P **P** **20 19 23.4 -0.6**
**DRS Darwin Rock St 23.49 166** P **P** **20 19 24.6 -0.1**
**MTN Manton Dam 23.95 166** P **P** **20 19 28.4 -0.6**
**MTN Manton Dam 23.95 166** P **P** **20 19 28.3 -0.6**
**KPJI Karang Pucung 24.00 223** P **P** **20 19 30.9 +1.5**
comp=Z,75nm,0.8s
**KDU Kakadu 24.16 162** P **P** **20 19 30.1 -0.7**
**PMBI Palembang 24.31 238** P **P** **20 19 32.1 -0.1**
**PMBI Palembang 24.31 238** P **P** **20 19 35.5 +3.3**
comp=Z,252nm,1.1s
**LEM Lembang 24.55 226** P **P** **20 19 35.9 +1.4**
comp=Z,70nm,0.7s,baz=127,slow=19,SNR=20
**JMBI JAMBI 24.59 242** P **P** **20 19 39.1 +4.3**
comp=Z,139nm,0.9s
**IPM Ipoh 24.67 258** P **P** **20 19 35.5 -0.1**
**IPM Ipoh 24.67 258** P **P** **20 19 35.6 0.0**
**CBJI Citeko 24.82 228** P **P** **20 19 39.0 +2.2**
comp=Z,121nm,0.6s
**KULM Kulim 24.83 260** P **P** **20 19 37.1 +0.1**
KULM IAmb IAmb 20 19 40.1
comp=Z,73nm,1.0s
**DBJI Dramaga 24.98 228** P **P** **20 19 40.2 +1.9**
comp=Z,35nm,0.9s
**CNJI Cibinong 25.23 226** P **P** **20 19 40.5 0.0**
comp=Z,71nm,0.8s
**SRIT Nakonsritamara 25.29 268** P **P** **20 19 40.8 -0.3**
SRIT IAmb IAmb 20 19 44.6
comp=Z,54nm,0.8s
**KLSI 25.35 234** P **P** **20 19 42.0 +0.3**
comp=Z,18nm,1.4s
**BLSI Bandar Lampung 25.36 232** P **P** **20 19 42.8 +1.1**
comp=Z,105nm,0.8s
**MDSI Maura Dua 25.68 236** P **P** **20 19 44.1 -0.5**
**KMI Kunming 25.77 307** ⇑P **P** **20 19 46.5 +0.9**
KMI pP pP 20 20 32.1 +2.8
KMI pmax pmax
comp=Z,4.0nm,0.6s
KMI LR LR
comp=Z,360nm,8.1s
KMI LR LR
comp=Z,870nm,10.7s
KMI LR LR
comp=Z,310nm,9.9s
**CGJI Cibinong 25.81 230** P **P** **20 19 45.4 -0.3**
comp=Z,1μmcomp=Z,71nm,0.4s
**LHSI Lahat 25.84 238** P **P** **20 19 52.2 +6.1**
**KASI Kota Agung 26.04 233** P **P** **20 19 47.2 -0.6**
comp=Z,78nm,0.8s
**BKNI Bangkinang 26.05 249** P **P** **20 19 47.6 -0.3**
**BKNI Bangkinang 26.05 249** P **P** **20 19 50.7 +2.8**
comp=Z,1μmcomp=Z,75nm,0.8s
**BKNI Bangkinang 26.05 249** P **P** **20 19 49.2 +1.3**
comp=Z,76nm,1.0s
**LWLI Liwa 26.08 235** P **P** **20 19 48.1 -0.3**
comp=Z,239nm,0.8s
**KNRA Kununurra 26.26 172** P **P** **20 19 49.8 0.0**
**KNRA Kununurra 26.26 172** P **P** **20 19 49.7 0.0**
**KSI Kapahiang 26.53 239** P **P** **20 19 52.3 0.0**
comp=Z,55nm,0.8s
**MASI Maura Aman, Be 26.56 240** P **P** **20 19 53.7 +1.1**
comp=Z,100nm,0.8s
**CM31 Chiang Mai Arr 26.57 290** P **P** **20 19 52.6 0.0**
CM31 IAmb IAmb 20 19 54.3
comp=Z,24nm,0.8s
**CMAR Chiang Mai Arr 26.57 290** P **P** **20 19 53.0 +0.4**
comp=Z,12nm,0.8s,baz=102,slow=7.2,SNR=112
CMAR ScP **ScP** **20 26 29.8 -0.4**
comp=Z,1.3nm,0.6s,baz=86,slow=1.2,SNR=10
**CMAR Chiang Mai Arr 26.57 290** P **P** **20 19 52.8 +0.2**
**LYN LuoYang 26.60 336** ⇑P **P** **20 19 58.1 +5.5**
LYN pP pP 20 20 38.8 +2.2
**CHTO Chiang Mai 26.66 291** P **P** **20 19 53.3 0.0**
comp=Z,9.0nm,1.2s
**KRJI Kerinci 26.72 243** P **P** **20 19 54.9 +0.9**
comp=Z,2μmcomp=Z,187nm,0.7s
**KSRS Korea Array 26.94 5** P **P** **20 19 56.8 +1.2**
comp=Z,0.8nm,0.7s,baz=178,slow=9.8,SNR=1.5
**PSI Prapat 27.16 255** P **P** **20 19 58.3 +0.3**
comp=Z,13nm,0.8s,baz=63,slow=5.4,SNR=13
PSI ScP **ScP** **20 26 31.4 -0.8**
comp=Z,1.5nm,0.3s,baz=279,slow=4.5,SNR=3.8
**MNSI Mandailing Nat 27.21 251** P **P** **20 19 58.2 -0.1**
comp=Z,1μmcomp=Z,138nm,0.7s
**PZH PanZhiHua 27.25 309** P **P** **20 20 00.8 +2.2**
PZH pP **pP** **20 20 43.8 +1.1**
PZH PP **PnPn** **20 21 00.4 +4.2**
PZH S **S** **20 24 19.3 -2.2**
PZH pmax pmax
comp=Z,6.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,6.2s
PZH LR LR
comp=Z,760nm,17.8s
PZH LR LR
comp=Z,880nm,17.1s
PZH LR LR
comp=Z,1μm,18.3s
**TSI Tuntungan 27.30 257** P **P** **20 20 04.5 +5.4**
**XAN Xi'an 27.75 330** P **P** **20 20 02.3 -0.6**
XAN pmax pmax
comp=Z,5.0nm,1.2s
**KCSI Kotacane, Aceh 28.05 258** P **P** **20 20 05.2 -0.6**
comp=Z,51nm,0.8s
**HNS HongShan 28.38 342** *e*P **P** **20 20 08.5 +0.1**
**CD2 Chengdu 28.41 319** P **P** **20 20 11.3 +2.5**
CD2 pmax pmax
comp=Z,10.0nm,1.0s
**FITZ Fitzroy Crossi 28.43 179** P **P** **20 20 08.6 -0.5**
comp=Z,14nm,0.4s,baz=10.0,slow=7.0,SNR=128
FITZ ScP **ScP** **20 26 34.7 -1.0**
comp=Z,2.9nm,0.9s,baz=303,slow=6.4,SNR=3.1
**LHMI Lhok Sumawe 28.44 262** P **P** **20 20 10.4 +1.2**
**LHMI Lhok Sumawe 28.44 262** P **P** **20 20 11.0 +1.7**
comp=Z,3μmcomp=Z,379nm,0.8s
**LHMI Lhok Sumawe 28.44 262** P **P** **20 20 10.9 +1.7**
**SISI Saibi 28.50 247** P **P** **20 20 08.6 -1.1**
comp=Z,50nm,0.8s
**GSI Gunungsitoli 28.91 253** P **P** **20 20 12.6 -0.8**
**GSI Gunungsitoli 28.91 253** P **P** **20 20 12.6 -0.8**
comp=Z,77nm,0.9s
**GSI Gunungsitoli 28.91 253** P **P** **20 20 12.9 -0.5**
**PMG Port Moresby 29.50 131** P **P** **20 20 18.0 -0.5**
comp=Z,19nm,0.6s,baz=54,slow=4.2,SNR=9.4
**PMG Port Moresby 29.50 131** P **P** **20 20 17.8 -0.7**
PMG IAmb IAmb 20 20 18.1
comp=Z,21nm,0.8s
**COEN Coen 30.16 143** P **P** **20 20 23.1 -1.3**
COEN IAmb IAmb 20 20 24.2
comp=Z,40nm,1.1s
**COEN Coen 30.16 143** P **P** **20 20 23.3 -1.1**
**BJI Beijing 30.47 346** P **P** **20 20 27.4 +0.6**
BJI pP **pP** **20 21 11.3 0.0**
BJI pmax pmax
comp=Z,6.0nm,1.1s
**WRAB Tennant Creek 31.58 163** P **P** **20 20 35.5 -1.2**
WRAB IAmb IAmb 20 20 36.1
comp=Z,22nm,0.7s
**WRAB Tennant Creek 31.58 163** P **P** **20 20 35.6 -1.1**
**WRA Warramunga Arr 31.58 163** P **P** **20 20 35.6 -1.2**
comp=Z,12nm,0.6s,baz=346,slow=9.4,SNR=107
WRA ScP **ScP** **20 26 44.0 -2.0**
comp=Z,2.4nm,0.6s,baz=343,slow=3.5,SNR=5.2
**WRA Warramunga Arr 31.58 163** P **P** **20 20 35.6 -1.2**
**WB2 Warramunga Arr 31.59 163** P **P** **20 20 35.6 -1.2**
WB2 IAmb IAmb 20 20 36.2
comp=Z,24nm,0.7s
**WR0 Warramunga Arr 31.66 163** P **P** **20 20 36.1 -1.3**
WR0 IAmb IAmb 20 20 37.3
comp=Z,48nm,1.2s
**MBWA Marble Bar 31.93 190** P **P** **20 20 38.5 -1.2**
MBWA IAmb IAmb 20 20 39.6
comp=Z,11nm,0.7s
**LZH Lanzhou 31.97 326** *e*P **P** **20 20 41.1 +0.9**
LZH pmax pmax
comp=Z,7.0nm,1.1s
**PSA00 Pilbara Seismi 32.31 189** P **P** **20 20 42.2 -0.9**
PSA00 IAmb IAmb 20 21 39.4
comp=Z,39nm,1.6s
**HHC Hu-ho-hao-te 32.52 341** *e*P **P** **20 20 49.0 +4.2**
**QIS Mount Isa 33.98 155** P **P** **20 20 57.0 -0.6**
**USRK Ussuriysk Ar. 34.08 9** P **P** **20 20 58.0 -0.1**
comp=Z,1.9nm,0.7s,baz=182,slow=7.0,SNR=4.1
**MTSU Mount Surprise 34.17 146** P **P** **20 20 59.1 -0.1**

**GIRL Giralia 34.65 198** P **P** **20 21 03.6 +0.4**
**SHL Shillong 34.89 300** P **P** **20 21 05.2 -0.3**
**AS31 Alice Springs 35.03 166** P **P** **20 21 06.3 -0.2**
AS31 IAmb IAmb 20 21 07.8
comp=Z,19nm,0.4s
**ASAR Alice Springs 35.03 166** P **P** **20 21 06.3 -0.2**
comp=Z,21nm,0.5s,baz=351,slow=7.6,SNR=435
ASAR PcP **PcP** **20 23 32.4 -1.0**
comp=Z,1.2nm,0.5s,baz=358,slow=5.0,SNR=1.1
ASAR ScP **ScP** **20 26 56.5 -1.6**
comp=Z,3.0nm,0.6s,baz=347,slow=3.8,SNR=5.6
ASAR ScS **ScS** **20 30 59.2 -3.4**
comp=Z,0.4nm,0.8s,baz=336,slow=6.2,SNR=4.6
**WRKA Warakurna 35.47 175** P **P** **20 21 10.6 +0.4**
**GTA Gaotai 36.58 326** *e*P **P** **20 21 19.4 -0.2**
GTA pP pP 20 22 05.8 +0.7
GTA sP sP 20 22 29.8 -0.6
GTA PcP **PcP** **20 23 38.8 +0.8**
GTA pmax pmax
comp=Z,2.0nm,0.7s
**CTA Charters Tower 36.81 146** P **P** **20 21 21.8 +0.1**
comp=Z,18nm,0.6s,baz=326,slow=9.5,SNR=29
CTA ScP **ScP** **20 27 04.7 0.0**
comp=Z,1.0nm,0.3s,baz=344,slow=6.4,SNR=3.8
**CTA Charters Tower 36.81 146** P **P** **20 21 22.0 +0.4**
**CTAO Charters Tower 36.81 146** P **P** **20 21 21.7 0.0**
CTAO IAmb IAmb 20 21 22.8
comp=Z,21nm,0.8s
**CTAO Charters Tower 36.81 146** P **P** **20 21 22.1 +0.4**
**GOMU GeErMu 37.54 318** P **P** **20 21 26.8 -1.2**
GOMU pmax pmax
comp=Z,2.0nm,0.9s
GOMU pmax pmax
comp=Z,85nm,4.8s
**KLR Kul'dur 38.98 7** P **P** **20 21 39.4 -0.1**
comp=Z,1.2nm,0.5s,baz=185,slow=9.7,SNR=7.1
KLR PcP **PcP** **20 23 45.0 -0.1**
comp=Z,1.5nm,0.7s,baz=242,slow=6.8,SNR=4.3
**TAPN Taplejung 39.00 301** *e*P **P** **20 21 40.6 +0.3**
comp=Z,21nm,0.4s
**ODAN Odare 39.12 300** *e*P **P** **20 21 41.4 +0.2**
**OOD Oodnadatta 39.42 165** P **P** **20 21 43.6 +0.3**
**RAMN Ramite 39.83 300** *e*P **P** **20 21 47.5 +0.5**
**ULN Ulaanbaatar 40.24 341** P **P** **20 21 49.8 -0.2**
**JIRN Jiri 40.38 301** *e*P **P** **20 21 52.0 +0.3**
comp=Z,39nm,0.4s
**SONM Songino Array 40.42 340** P **P** **20 21 51.7 +0.2**
comp=Z,0.4nm,0.5s,baz=155,slow=10.0,SNR=3.1
SONM PcP **PcP** **20 23 49.6 -0.3**
comp=Z,2.0nm,0.9s,baz=160,slow=2.2,SNR=6.0
SONM ScP **ScP** **20 27 18.4 +0.2**
comp=Z,0.8nm,0.9s,baz=145,slow=5.8,SNR=4.0
**CHLP Challavanipeta 40.52 286** *e*P **P** **20 21 53.2 +0.7**
CHLP IVmB_BB 20 21 54.2
comp=Z,330nm,0.9s
**GUN Gumba 40.72 301** *e*P **P** **20 21 54.6 +0.1**
comp=Z,64nm,0.8s
**INKA Innaminka 40.91 159** P **P** **20 21 56.1 +0.6**
**PKI Pulchoki 41.02 300** *e*P **P** **20 21 56.0 -0.9**
**PKIN Phulchoki 41.03 300** *e*P **P** **20 21 56.2 -0.7**
**FORT Forrest 41.15 176** P **P** **20 21 57.7 +0.3**
**FORT Forrest 41.15 176** P **P** **20 21 57.8 +0.3**
**KKN Kakani 41.19 300** *e*P **P** **20 21 57.3 -0.9**
**QLP Quilpie 41.26 154** P **P** **20 21 57.9 -0.5**
**DMN Daman 41.29 300** *e*P **P** **20 21 58.6 -0.4**
**MULG Mulgathing 41.45 168** P **P** **20 22 00.3 +0.4**
**GKN Gonoka 41.80 300** *e*P **P** **20 22 02.4 -0.6**
comp=Z,12nm,0.4s
**RK1H Rockhampton Ha 41.82 144** P **P** **20 22 03.3 +0.3**
**LCRK Leigh Creek 42.61 163** P **P** **20 22 09.9 +0.7**
**KOLN Koldanda 42.62 300** *e*P **P** **20 22 09.6 -0.1**
**DANN Dangsing 42.64 301** *e*P **P** **20 22 09.5 -0.4**
**PVM Polavaram 42.73 284** *e*P **P** **20 22 11.1 +0.6**
PVM IVmB_BB 20 22 11.8
comp=Z,236nm,0.7s
**PYUN Piuthan 43.22 300** *e*P **P** **20 22 14.6 +0.1**
**RMQ Roma 43.34 149** P **P** **20 22 15.0 -0.1**
**MYLAV Mylavaram 43.66 283** *e*P **P** **20 22 18.6 +0.7**
MYLAV IVmB_BB 20 22 19.4
comp=Z,198nm,0.8s
**EIDS Eidsvold 43.70 145** P **P** **20 22 17.1 -0.9**
EIDS IAmb IAmb 20 23 25.3
comp=Z,59nm,1.8s
**NWAO Narrogin (SRO) 43.86 190** P **P** **20 22 18.4 -0.8**
NWAO IAmb IAmb 20 22 59.6
comp=Z,112nm,1.8s
**PALK Pallekele 44.03 270** P **P** **20 22 20.8 -0.1**
comp=Z,7.9nm,0.8s,baz=164,slow=5.5,SNR=5.6
**PALK Pallekele 44.03 270** P **P** **20 22 20.5 -0.4**
**ADKI Addanki 44.27 282** *e*P **P** **20 22 23.2 +0.5**
ADKI IVmB_BB 20 22 24.2
comp=Z,198nm,1.0s
**BBOO Buckleboo 44.32 167** P **P** **20 22 23.3 +0.4**
**BBOO Buckleboo 44.32 167** P **P** **20 22 23.2 +0.4**
**SKHT Srikalahasti 44.52 279** *e*P **P** **20 22 25.4 +0.7**
SKHT IVmB_BB 20 22 26.2
comp=Z,328nm,1.0s
**WHYH Whyalla 44.89 165** P **P** **20 22 28.0 +0.7**
**NJS Nagarjunasagar 44.92 283** *e*P **P** **20 22 28.6 +0.7**
NJS IVmB_BB 20 22 28.9
comp=Z,283nm,0.8s
**STKA Stephens Creek 44.99 160** P **P** **20 22 28.7 +0.6**
comp=Z,38nm,0.6s,baz=335,slow=8.2,SNR=156
**STKA Stephens Creek 44.99 160** P **P** **20 22 28.5 +0.4**
**STKA Stephens Creek 44.99 160** P **P** **20 22 28.7 +0.6**
**RPR Rampur 45.05 286** *e*P **P** **20 22 29.3 +0.4**
RPR IVmB_BB 20 22 29.9
comp=Z,309nm,0.8s
**NAPP Napperby 45.18 165** P **P** **20 22 30.7 +1.1**
**RCLA Racherla 45.24 281** *e*P **P** **20 22 30.9 +0.4**
RCLA IVmB_BB 20 22 31.3
comp=Z,444nm,0.8s
**SRLM Srisailam 45.31 282** *e*P **P** **20 22 31.4 +0.4**
SRLM IVmB_BB 20 22 31.8
comp=Z,210nm,0.8s
**CUPL Choutuppal 45.32 284** *e*P **P** **20 22 31.6 +0.6**
CUPL IVmB_BB 20 22 31.9
comp=Z,252nm,0.8s
**HTT Hallett 45.62 164** P **P** **20 22 34.0 +0.9**
**HYBB Hyderabad (bro 45.67 284** *e*P **P** **20 22 34.2 +0.4**
HYBB IVmB_BB 20 22 34.6
comp=Z,266nm,0.7s
**SRSP Sriramsagar 45.95 286** *e*P **P** **20 22 36.4 +0.4**
SRSP IVmB_BB 20 22 37.1
comp=Z,152nm,1.2s
**CMSA Cobar Meteorol 46.20 156** P **P** **20 22 38.8 +1.2**
**WMQ Urumqi 46.37 323** *e*P **P** **20 22 43.0 +4.1**
WMQ pmax pmax
comp=Z,10.0nm,0.7s
**URV Uravakonda 46.88 281** *e*P **P** **20 22 43.6 +0.4**
URV IVmB_BB 20 22 43.9
comp=Z,145nm,0.9s
**GHSS Government Hou 46.94 165** P **P** **20 22 44.5 +1.2**
comp=Z,137nm,0.8s
**TWOA Tennyson Woods 47.04 165** P **P** **20 22 45.0 +0.9**
**KLRI Killari 47.56 285** *e*P **P** **20 22 48.7 +0.2**
KLRI IVmB_BB 20 22 49.1
comp=Z,595nm,0.7s
**ARMA Armidale 47.99 149** P **P** **20 22 52.2 +0.6**
ARMA IAmb IAmb 20 22 54.3
comp=Z,36nm,0.9s
**ARMA Armidale 47.99 149** P **P** **20 22 52.5 +0.9**
**ARPS Mount Arapiles 49.58 162** P **P** **20 23 04.0 +0.6**
**PETK Petropavlovsk- 49.87 25** P **P** **20 23 06.7 +1.3**
comp=Z,2.7nm,0.8s,baz=192,slow=4.5,SNR=2.1
**PETK Petropavlovsk- 49.87 25** P **P** **20 23 06.4 +1.0**
**MGCD Mangrove Creek 50.01 151** P **P** **20 23 08.5 +1.8**
**SYDH Sydney Hard Ro 50.30 152** P **P** **20 23 10.8 +2.0**
**CAN Canberra 50.85 155** P **P** **20 23 14.3 +1.2**
**CAN Canberra 50.85 155** P **P** **20 23 14.6 +1.6**
**BRAT Ballarat 50.94 161** P **P** **20 23 14.9 +1.3**
**CNB Canberra Magne 51.00 154** P **P** **20 23 15.4 +1.2**
**MK31 Makanchi Array 51.19 323** P **P** **20 23 14.9 -0.4**
**MKAR Makanchi Array 51.19 323** P **P** **20 23 15.6 +0.2**
comp=Z,5.2nm,0.5s,baz=126,slow=7.8,SNR=91
MKAR PcP **PcP** **20 24 27.4 -0.2**
comp=Z,4.8nm,0.8s,baz=113,slow=3.6,SNR=7.4
**MKAR Makanchi Array 51.19 323** P **P** **20 23 15.4 0.0**
**MAKZ Makanchi 51.38 323** P **P** **20 23 16.8 0.0**
**TOO Toolangi 51.49 159** P **P** **20 23 18.9 +1.2**
TOO IAmb IAmb 20 23 20.0
comp=Z,46nm,0.8s
**TOO Toolangi 51.49 159** P **P** **20 23 19.1 +1.4**
**YAK Yakutsk 51.53 3** P **P** **20 23 17.3 -0.3**
comp=Z,1.6nm,0.3s,baz=153,slow=1.8,SNR=5.1
**YAK Yakutsk 51.53 3** P **P** **20 23 17.3 -0.3**
**LIFNC LIFOU 51.74 127** P **P** **20 23 20.1 +0.3**
**TARG Taragay, Kyrgy 51.77 315** P **P** **20 23 20.9 +0.6**
**DZM Mont Dzumac 51.84 129** P **P** **20 23 21.3 +0.7**
comp=Z,21nm,0.9s,baz=265,slow=7.6,SNR=12
**DZM Mont Dzumac 51.84 129** P **P** **20 23 21.1 +0.5**
DZM IAmb IAmb 20 24 54.3
comp=Z,129nm,1.8s
**KSH Kashi 52.27 312** P **P** **20 23 25.8 +2.1**
KSH pmax pmax
comp=Z,9.0nm,1.1s
KSH LR LR
comp=Z,450nm,11.7s
KSH LR LR
comp=Z,360nm,13.4s
KSH LR LR
comp=Z,910nm,10.6s
**NIL Nilore 52.71 304** P **P** **20 23 26.7 -0.1**
NIL IAmb IAmb 20 23 28.0
comp=Z,41nm,0.8s
**KAAM Kaadhehdhoo 52.81 263** P **P** **20 23 28.4 +0.5**
KAAM IAmb IAmb 20 23 29.6
comp=Z,67nm,0.8s
**TKM2 Tokmak 2 53.74 316** P **P** **20 23 35.0 +0.5**
SNR=5.6
**ZAA0 Zalesovo Array 53.90 332** P **P** **20 23 33.8 -1.3**
**ZALV Zalesovo Beam 53.90 332** P **P** **20 23 34.1 -0.9**
comp=Z,1.2nm,0.4s,baz=114,slow=7.5,SNR=8.9
ZALV PcP **PcP** **20 24 36.1 -1.4**
comp=Z,2.1nm,0.7s,baz=150,slow=3.7,SNR=5.6
**ZALV Zalesovo Beam 53.90 332** P **P** **20 23 33.9 -1.1**
**KBK Karagaybulak 54.09 316** P **P** **20 23 37.8 +0.9**
SNR=9.1
**UCH Uchtor 54.24 315** P **P** **20 23 39.4 +1.0**
SNR=20
**CHMS Chumysh 54.35 316** P **P** **20 23 38.8 +0.2**
SNR=7.8
**AAK Ala-Archa 54.40 315** P **P** **20 23 38.1 -1.0**
comp=Z,2.2nm,0.5s,baz=163,slow=7.3,SNR=11
**AAK Ala-Archa 54.40 315** P **P** **20 23 37.8 -1.3**
**AAK Ala-Archa 54.40 315** P **P** **20 23 39.9 +0.8**
**USP Ospenovka 54.62 316** P **P** **20 23 40.6 +0.1**
SNR=8.2
**AML Almayashu 54.78 315** P **P** **20 23 43.0 +0.9**
SNR=16
**AML Almayashu 54.78 315** *i* P **P** **20 23 43.1 +0.9**
SNR=16
**EKS2 Erkin-Say 54.90 315** P **P** **20 23 43.4 +0.8**
SNR=14
**KURK Kurchatov 55.26 326** P **P** **20 23 44.8 -0.1**
**KURBB Kurchatov Arra 55.26 326** P **P** **20 23 44.8 -0.1**
comp=Z,2.9nm,0.6s,baz=123,slow=7.3,SNR=37
**KBL Kabul 56.31 305** P **P** **20 23 52.0 -0.9**
KBL IAmb IAmb 20 23 53.8
comp=Z,19nm,0.7s
**GAR Garm 56.31 310** P **P** **20 23 52.8 0.0**
**TAU Tasmania Unive 56.89 161** P **P** **20 23 56.8 +0.4**
**CHGR Chuyangaron 57.10 309** P **P** **20 23 57.9 -0.4**
CHGR IAmb IAmb 20 23 59.9
comp=Z,31nm,0.6s
**KKAR Karatay Array 57.32 315** P **P** **20 23 59.3 -0.3**
**BVAR Borovoye Array 60.86 326** P **P** **20 24 23.8 +0.1**
comp=Z,3.9nm,0.8s,baz=91,slow=15,SNR=26
**BRVK Borovoye 60.93 326** P **P** **20 24 24.2 +0.1**
**TIXI Tiksi 61.13 1** P **P** **20 24 24.9 -0.3**
comp=Z,0.9nm,0.3s,baz=270,slow=22,SNR=8.2
**HRA Herat 61.84 303** P **P** **20 24 30.2 -0.6**
HRA IAmb IAmb 20 24 31.6
comp=Z,43nm,1.8s
**GEYT Alibeck 65.54 307** P **P** **20 24 54.8 +0.1**
comp=Z,6.9nm,0.8s,baz=233,slow=15,SNR=8.0
**GEYT Alibeck 65.54 307** P **P** **20 24 54.9 +0.1**
**GYA0B ALIBECK ARRAY 65.54 307** P **P** **20 24 55.0 +0.2**
GYA0B IAmb IAmb 20 24 56.4
comp=Z,12nm,0.8s
**ABKAR Akbulak array 65.99 319** P **P** **20 24 56.6 -0.8**
**ABKAR Akbulak array 65.99 319** P **P** **20 24 56.7 -0.6**
ABKAR IAmb IAmb 20 24 57.9
comp=Z,6.0nm,0.7s
**BANOM Banah 66.55 294** *i* P **P** **20 25 01.7 +0.3**
SNR=6.1
**UOSS Minazif 66.65 293** P **P** **20 25 01.5 -0.5**
UOSS IAmb IAmb 20 25 02.0
comp=Z,8.2nm,0.7s
**UOSS Minazif 66.65 293** P **P** **20 25 01.2 -0.8**
**SHME Shamm 66.69 294** P **P** **20 25 01.9 -0.3**
**HATD Hatta, Dubai 66.72 293** *i* P **P** **20 25 02.3 -0.1**
SNR=9.9
**ASHO Ashiyiah 66.79 292** *i* P **P** **20 25 02.7 -0.2**
SNR=9.5
**ALNE Al Ain 67.08 292** *i* P **P** **20 25 04.7 0.0**
SNR=8.6
**QRZ Quartz Range 67.20 143** P **P** **20 25 05.8 +0.8**
QRZ IAmb IAmb 20 25 07.1
comp=Z,16nm,0.9s
**FAQ Al Faqa, Dubai 67.21 292** P **P** **20 25 04.9 -0.6**
**DCZ Deep Cove 67.31 149** P **P** **20 25 06.2 +0.6**
DCZ IAmb IAmb 20 27 13.4
comp=Z,43nm,1.4s
**AKTO Aktyubinsk 67.45 320** P **P** **20 25 06.5 -0.1**
comp=Z,4.9nm,0.7s,baz=96,slow=7.2,SNR=18
**ASUD Al Ashush, Dub 67.45 292** P **P** **20 25 07.1 +0.1**
**THZ Tophouse 68.00 143** P **P** **20 25 09.9 -0.2**
THZ IAmb IAmb 20 25 11.2
comp=Z,14nm,0.9s
**LBZ Lake Benmore 68.15 147** P **P** **20 25 11.6 +0.7**
LBZ IAmb IAmb 20 25 12.7
comp=Z,22nm,0.8s
**RPZ Rata Peaks 68.19 146** P **P** **20 25 11.2 0.0**
RPZ IAmb IAmb 20 25 12.3
comp=Z,13nm,0.7s
**ARU Arti 68.43 327** P **P** **20 25 11.9 -0.6**
comp=Z,3.8nm,0.6s,baz=105,slow=2.1,SNR=29
**ARU Arti 68.43 327** P **P** **20 25 12.1 -0.5**
ARU IAmb IAmb 20 25 12.5
comp=Z,10nm,0.6s
**BKZ Black Stump Fm 68.67 139** P **P** **20 25 15.1 +0.8**
BKZ IAmb IAmb 20 25 16.2
comp=Z,26nm,0.9s
**MZR Muzera 69.21 291** *i* P **P** **20 25 18.0 0.0**
SNR=10
**SOCY Socotra 69.63 279** P **P** **20 25 19.5 -1.3**
SOCY IAmb IAmb 20 27 28.4
comp=Z,62nm,1.3s
**MSEY Mahe Island 71.01 261** P **P** **20 25 29.3 +0.2**
MSEY IAmb IAmb 20 27 36.7
comp=Z,34nm,1.2s
**MSEY Mahe Island 71.01 261** P **P** **20 25 28.8 -0.3**
**ANM Nome 71.78 25** P **P** **20 25 33.3 +0.6**
**KIRV Kirov 73.67 328** P **P** **20 25 43.3 -0.6**
comp=Z,19nm,0.7s,baz=269,slow=1.1,SNR=7.5
**BELG Belogornoye 74.15 322** P **P** **20 25 46.2 -0.5**
comp=Z,27nm,0.8s,baz=336,slow=1.7,SNR=21
**O18K Koktuh Hills 75.76 31** P **P** **20 25 57.0 +1.2**
O18K IAmb IAmb 20 26 13.9
comp=Z,18nm,1.1s
**GNI Garni 76.01 309** P **P** **20 25 58.7 +0.8**
comp=Z,4.1nm,0.8s,baz=151,slow=17,SNR=2.9
**GNI Garni 76.01 309** P **P** **20 25 58.2 +0.2**
**GNI Garni 76.01 309** P **P** **20 25 58.8 +0.8**
**RAYN Ar Rayn 76.48 292** P **P** **20 25 60.0 -0.8**
RAYN IAmb IAmb 20 26 01.4
comp=Z,22nm,0.9s
**RAYN Ar Rayn 76.48 292** *i* P **P** **20 26 00.5 -0.3**
SNR=26
**IMAR Indian Mountai 76.83 25** P **P** **20 26 02.7 +1.0**
**ONI Oni 76.89 311** P **P** **20 26 03.2 +0.5**
**RSO Redoubt South 77.01 30** P **P** **20 26 02.4 -0.7**
**KBZ Khabaz 77.25 313** P **P** **20 26 04.3 -0.2**
comp=Z,7.6nm,1.0s,baz=90,slow=1.9,SNR=11
**KARS Kars 77.26 309** P **P** **20 26 05.1 +0.2**
KARS IAmb IAmb 20 26 06.6
comp=Z,33nm,0.8s
**CASY Casey 77.34 186** P **P** **20 26 04.0 -0.4**
CASY IAmb IAmb 20 26 56.0
comp=Z,26nm,1.1s
**KVAR Kislovodsk Arr 77.39 313** P **P** **20 26 06.2 +0.8**
comp=Z,4.8nm,0.8s,baz=337,slow=15,SNR=3.3
**KIV Kislovodsk 77.39 313** P **P** **20 26 04.9 -0.6**
KIV IAmb IAmb 20 26 07.0
comp=Z,15nm,0.8s
**KIV Kislovodsk 77.39 313** P **P** **20 26 05.9 +0.4**
**GEVA Gevas 77.41 307** P **P** **20 26 05.7 -0.1**
**SIRT Sirnak 77.95 306** P **P** **20 26 08.7 0.0**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GURO** | **Guroymak-BITLI** | **78.20** | **307** | P | **P** | **20 26 10.2** | **+0.1** |
| GURO | | | | IAmb | IAmb | 20 26 11.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **78.55** | **22** | P | **P** | **20 26 12.0** | **+0.7** |
| **KLMR** | **Klimovskoe** | **78.78** | **330** | *e*P | **P** | **20 26 10.7** | **-1.9** |
| KLMR | | | | AMP | | 20 26 12.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MARD** | **Mardin** | **79.28** | **306** | P | **P** | **20 26 15.9** | **-0.1** |
| MARD | | | | IAmb | IAmb | 20 26 17.1 | |
| | comp=Z,9,3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **79.69** | **26** | P | **P** | **20 26 17.1** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=240,slow=5.0,SNR=8.0 | | | | | | |
| **ILAR** | **Eielson Array** | **79.69** | **26** | P | **P** | **20 26 17.0** | **-0.4** |
| **BMAR** | **Burnt Mountain** | **80.47** | **23** | P | **P** | **20 26 23.1** | **+1.5** |
| **ABPO** | **Ambohimpanom** | **82.21** | **249** | P | **P** | **20 26 30.5** | **-1.3** |
| ABPO | | | | IAmb | IAmb | 20 28 12.2 | |
| | comp=Z,30nm,1.8s | | | | | | |
| **VOI** | **Vohitsoka** | **83.30** | **246** | P | **P** | **20 26 36.2** | **-1.2** |
| VOI | | | | IAmb | IAmb | 20 28 10.8 | |
| | comp=Z,39nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.59** | **340** | P | **P** | **20 26 37.1** | **-0.6** |
| | comp=Z,2.1nm,0.5s,baz=77,slow=6.3,SNR=19 | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.59** | **340** | P | **P** | **20 26 37.3** | **-0.5** |
| ARCES | | | | IAmb | IAmb | 20 28 15.7 | |
| | comp=Z,102nm,2.0s | | | | | | |
| **GHAJ** | **Ghor Haditha** | **84.29** | **301** | P | **P** | **20 26 41.7** | **-0.3** |
| GHAJ | | | | IAmb | IAmb | 20 26 43.5 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **84.45** | **21** | P | **P** | **20 26 42.4** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=292,slow=3.5,SNR=7.9 | | | | | | |
| **INK** | **Inuvik** | **84.45** | **21** | P | **P** | **20 26 42.5** | **+0.5** |
| **BR131** | **Keskin Array S** | **84.55** | **309** | P | **P** | **20 26 42.2** | **-1.2** |
| **BRTR** | **Keskin Array B** | **84.55** | **309** | P | **P** | **20 26 42.4** | **-1.0** |
| | comp=Z,3.1nm,0.7s,baz=106,slow=4.4,SNR=21 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.55** | **309** | P | **P** | **20 26 42.1** | **-1.3** |
| **FIA1** | **FINESS Array S** | **85.17** | **332** | P | **P** | **20 26 44.9** | **-0.8** |
| FIA1 | | | | IAmb | IAmb | 20 28 10.4 | |
| | comp=Z,90nm,2.0s | | | | | | |
| **FINES** | **FINESS Array B** | **85.17** | **332** | P | **P** | **20 26 45.2** | **-0.5** |
| | comp=Z,6.0nm,0.5s,baz=62,slow=5.1,SNR=58 | | | | | | |
| **FINES** | **FINESS Array B** | **85.17** | **332** | P | **P** | **20 26 45.0** | **-0.7** |
| **CSS** | **Mathiatis** | **85.56** | **305** | P | **P** | **20 26 47.7** | **-0.6** |
| CSS | | | | IAmb | IAmb | 20 26 49.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **85.69** | **321** | P | **P** | **20 26 47.5** | **-1.1** |
| | comp=Z,3.0nm,0.6s,baz=67,slow=4.6,SNR=25 | | | | | | |
| **AKASG** | **Malin Array Be** | **85.69** | **321** | P | **P** | **20 26 47.9** | **-0.7** |
| **AKBB** | **Malin Array Si** | **85.69** | **321** | P | **P** | **20 26 47.6** | **-1.0** |
| **A36M** | **Sachs Harbour** | **86.00** | **17** | P | **P** | **20 26 49.9** | **+0.3** |
| **KIBK** | **Kibwezi** | **87.60** | **267** | P | **P** | **20 26 58.9** | **+0.2** |
| KIBK | | | | IAmb | IAmb | 20 27 00.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.16** | **269** | P | **P** | **20 27 02.1** | **+0.6** |
| | comp=Z,8.0nm,0.9s,baz=49,slow=8.3,SNR=16 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.16** | **269** | P | **P** | **20 27 01.6** | **+0.1** |
| KMBO | | | | IAmb | IAmb | 20 27 03.0 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.16** | **269** | *i* P | **P** | **20 27 02.1** | **+0.6** |
| | SNR=7.8 | | | | | | |
| **DLBC** | **Dease Lake** | **88.73** | **31** | P | **P** | **20 27 04.3** | **+1.2** |
| | comp=Z,2.8nm,0.9s,baz=263,slow=12,SNR=3.3 | | | | | | |
| **DLBC** | **Dease Lake** | **88.73** | **31** | P | **P** | **20 27 03.4** | **+0.3** |
| DLBC | | | | IAmb | IAmb | 20 28 15.4 | |
| | comp=Z,20nm,1.6s | | | | | | |
| **BURAR** | **Bucovina Array** | **88.94** | **318** | P | **P** | **20 27 04.2** | **-0.2** |
| **BUR08** | **Bucovina Ar. S** | **88.95** | **318** | P | **P** | **20 27 04.1** | **-0.3** |
| BUR08 | | | | IAmb | IAmb | 20 29 18.2 | |
| | comp=Z,25nm,2.0s | | | | | | |
| **LODK** | **Lodwar** | **89.20** | **273** | P | **P** | **20 27 06.2** | **0.0** |
| **CRVS** | **Cervenica-Dubn** | **91.01** | **320** | *e*P | **P** | **20 27 14.1** | **+0.3** |
| **HFS** | **Hagfors** | **91.33** | **332** | P | **P** | **20 27 13.2** | **-1.9** |
| | comp=Z,3.8nm,0.7s,baz=186,slow=1.5,SNR=7.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **92.06** | **334** | P | **P** | **20 27 16.5** | **-2.0** |
| | comp=Z,1.9nm,0.7s,baz=67,slow=4.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **92.06** | **334** | P | **P** | **20 27 16.5** | **-2.0** |
| | baz=67,slow=4.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **92.06** | **334** | P | **P** | **20 27 17.0** | **-1.4** |
| | comp=Z,1.5nm,0.7s,baz=66,slow=4.6,SNR=11 | | | | | | |
| **VRAC** | **Vranov** | **93.90** | **322** | P | **P** | **20 27 27.0** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=68,slow=5.4,SNR=2.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.97** | **24** | P | **P** | **20 27 27.6** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=303,slow=4.9,SNR=9.0 | | | | | | |
| **GERES** | **GERESS Array B** | **95.84** | **322** | P | **P** | **20 27 35.9** | **-0.2** |
| | comp=Z,1.0nm,0.6s,baz=72,slow=4.3,SNR=11 | | | | | | |
| **TXAR** | **Lajitas Array** | **118.47** | **48** | PKP | **PKiKP** | **20 32 56.8** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=288,slow=0.6,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.18** | **291** | PKP | **PKPdf** | **20 32 57.0** | **-1.3** |
| | comp=Z,1.0nm,0.8s,baz=53,slow=2.3,SNR=6.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.18** | **291** | | **PKPdf** | **20 32 56.7** | **-1.6** |
| **PLCA** | **Paso Flores** | **146.85** | **158** | PKPbc | **PKPbc** | **20 33 51.2** | **0.0** |
| | comp=Z,1.6nm,0.6s,baz=252,slow=3.2,SNR=8.4 | | | | | | |

*TUL* ***13*** *20:18:05.3±0.9, 36.47N±0.02×98.76W±0.05, h8km±8km, ML3.0, mb_Lg2.9/48(NEIC) Error ellipse: s-maj=6.1km s-min=1.4km az=110.0*

**NEIC 13 20:18:06.2±1.3, 36.45N±0.02×98.74W±0.04, h11km±8km, Error ellipse: s-maj=4.4km s-min=3.4km az=105.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.22** | **253** | Pg | Pg | 20 18 09.7 | -1.3 |
| U32A | | | | Sg | Sg | 20 18 13.1 | -1.1 |
| **OK009** | **Oakdale Elemen** | **1.37** | **129** | | Pn | 20 18 30.4 | -0.9 |
| **OKCFA** | **Oklahoma City** | **1.46** | **134** | | Pn | 20 18 32.0 | -0.5 |
| **OK001** | **Jones High Sch** | **1.47** | **127** | | Pn | 20 18 32.1 | -0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **134** | | Pn | 20 18 32.3 | -0.4 |
| **FNO** | **Franklin** | **1.61** | **137** | | Pn | 20 18 34.4 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.71** | **181** | Pn | Pn | 20 18 35.1 | -0.8 |
| **T35A** | **Sooner Cattle** | **1.85** | **75** | | Pn | 20 18 37.7 | -0.1 |
| **R32A** | **Long Quarter,** | **1.97** | **1** | Pn | Pn | 20 18 39.9 | +0.3 |
| **X34A** | **Smith Ranch, M** | **1.98** | **158** | Pn | Pn | 20 18 40.8 | +1.2 |
| X34A | | | | IAmb_Lg | | 20 19 11.9 | |
| | comp=Z,83nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.44** | **102** | | Pn | 20 18 46.3 | +0.3 |
| TUL1 | | | | IAmb_Lg | | 20 19 21.0 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.49** | **342** | Pn | Pn | 20 18 47.4 | +0.7 |
| **AMTX** | **Amarillo** | **2.86** | **238** | | Pn | 20 18 52.4 | +0.6 |
| AMTX | | | | IAmb_Lg | | 20 19 37.4 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.14** | **32** | Pn | Pn | 20 18 55.3 | -0.3 |
| **X37A** | **Clayton** | **3.31** | **123** | | Pn | 20 18 57.2 | -0.7 |
| **Z35A** | **Perchaven, San** | **3.34** | **158** | Pn | Pn | 20 18 58.5 | +0.2 |
| **U38A** | **Gravette** | **3.51** | **89** | | Pn | 20 19 00.8 | +0.2 |
| U38A | | | | IAmb_Lg | | 20 20 03.6 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.89** | **191** | | Pn | 20 19 05.8 | -0.1 |
| **MSTX** | **Muleshoe** | **4.13** | **234** | IAmb_Lg | | 20 20 23.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | | Pn | 20 19 11.8 | +1.4 |
| W39A | | | | IAmb_Lg | | 20 20 25.7 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.50** | **72** | IAmb_Lg | | 20 20 27.7 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.57** | **166** | | Pn | 20 19 15.0 | -0.2 |
| **T25A** | **Trinidad** | **4.61** | **280** | | Pn | 20 19 15.3 | -0.7 |
| T25A | | | | IAmb_Lg | | 20 20 30.0 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **4.62** | **113** | Pn | Pn | 20 19 16.4 | +0.5 |
| MIAR | | | | IAmb_Lg | | 20 20 42.7 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.75** | **89** | | Pn | 20 19 17.8 | +0.1 |
| U40A | | | | IAmb_Lg | | 20 20 45.6 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.98** | **5** | IAmb_Lg | | 20 20 45.6 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **237A** | **Washetta, Mont** | **5.05** | **150** | Pn | Pn | 20 19 20.9 | -1.0 |
| **P38A** | **Dawn** | **5.19** | **51** | Pn | Pn | 20 19 23.1 | -0.7 |
| **X40A** | **Basin Creek Fa** | **5.20** | **110** | Pn | Pn | 20 19 23.6 | -0.3 |
| X40A | | | | IAmb_Lg | | 20 20 59.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.24** | **80** | Pn | Pn | 20 19 24.2 | -0.2 |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | IAmb_Lg | | 20 20 58.2 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.38** | **94** | | Pn | 20 19 26.9 | +0.6 |
| FCAR | | | | IAmb_Lg | | 20 21 09.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | Pn | Pn | 20 19 26.3 | -0.7 |
| **R40A** | **Maddies Statio** | **5.47** | **68** | | Pn | 20 19 26.9 | -0.7 |
| **SDCO** | **Great Sand Dun** | **5.56** | **286** | Pn | Pn | 20 19 29.6 | +0.5 |
| **Q24A** | **Divide** | **5.67** | **298** | IAmb_Lg | | 20 21 04.0 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **5.82** | **121** | IAmb_Lg | | 20 21 24.9 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.02** | **189** | IAmb_Lg | | 20 21 33.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **P40A** | **Paris** | **6.11** | **58** | Pn | Pn | 20 19 37.4 | +1.0 |
| **LCAR** | **Lake Charles** | **6.14** | **91** | Pn | Pn | 20 19 37.4 | +0.6 |
| **T42A** | **Van Buren** | **6.17** | **82** | Pn | Pn | 20 19 37.1 | -0.1 |
| **ISCO** | **Idaho Springs** | **6.37** | **304** | Pn | Pn | 20 19 40.0 | -0.3 |
| **PBMO** | **Poplar Bluff** | **6.69** | **85** | IAmb_Lg | | 20 21 46.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.81** | **74** | IAmb_Lg | | 20 21 44.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.14** | **315** | IAmb_Lg | | 20 21 51.5 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **N23A** | **Red Feather La** | **7.18** | **310** | IAmb_Lg | | 20 22 02.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.68** | **78** | IAmb_Lg | | 20 22 10.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **L40A** | **Anamosa** | **8.09** | **44** | IAmb_Lg | | 20 22 31.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **K22A** | **Casper** | **8.63** | **318** | IAmb_Lg | | 20 22 47.5 | |
| | comp=Z,12nm,0.9s | | | | | | |

*TUL* ***13*** *20:28:15.3±0.9, 36.47N±0.02×98.76W±0.02, h8km±3km, ML2.4, mb_Lg1.8/3(NEIC), Error ellipse: s-maj=2.7km s-min=1.9km az=143.0*

**NEIC 13 20:28:16.2±1.0, 36.46ºN±0.010×98.74ºW±0.02, h6km±4km, Error ellipse: s-maj=2.5km s-min=1.4km az=90.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.22** | **249** | Pg | Pg | 20 28 20.0 | -0.7 |
| U32A | | | | Sg | Sg | 20 28 23.5 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | Pn | Pn | 20 28 45.7 | -1.1 |
| **T35A** | **Sooner Cattle** | **1.85** | **75** | Pn | Pn | 20 28 48.6 | +0.1 |
| **R32A** | **Long Quarter,** | **1.96** | **1** | Pn | Pn | 20 28 50.4 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | Pn | 20 28 51.4 | +0.8 |
| **TUL1** | **Leonard** | **2.45** | **102** | IAmb_Lg | | 20 29 34.6 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.86** | **238** | IAmb_Lg | | 20 29 44.0 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **3.32** | **123** | Pn | Pn | 20 29 08.2 | -0.5 |

*BJI* ***13*** *20:31:41.8±0.0, 56.40N×112.32E, h11km, mb4.5/52, mB4.7/26, Ms4.8/49, Ms7 4.6/46*

*IDC* ***13*** *20:31:44.5±0.4, 56.00N×112.08E, h0km, mb4.5/30, mb1 4.6/35, mb1mx4.4/47, mbtmp4.5/35, ML4.1/4, MS4.1/47, Ms1 4.1/47, ms1mx3.9/88, Error ellipse: s-maj=11.4km s-min=8.7km az=157.0*

*MOS* ***13*** *20:31:45.2±1.1, 56.07N×112.06E, h18km, mb5.0/52, MS4.4/18, Error ellipse: s-maj=5.0km s-min=4.1km az=93.1*

*MOS Felt (IV) at Kumora, Novyy Uoyan; (III) at Ust'-Kut.*

*GCMT* ***13*** *20:31:45.6±0.4, 56.10N±0.03×112.41E±0.08, h29km, MW4.9/68, Moment Tensor Solution. s30,c32; s68,c82; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=2.40±.19; Mθθ 1.47±.12; Mφφ 0.92±.14; Mrθ -0.61±.16; Mrφ 0.94±.07; Mθφ -0.73±.21; Best double couple: Mo2.47700×10^16 NP1:φs237.00000°, δ34.00000°, λ-83.00000°. NP2: φs48.00000°, δ56.00000°, λ-95.00000°. Principal axes: T 2.3560, Plg11.0000°, Azm142.0000°; N 0.2360, Plg4.0000°, Azm51.0000°; P -2.5990, Plg78.0000°, Azm302.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***13*** *20:31:46.6±1.7, 56.17N±0.06×112.1E±0.1, h16km±4km, mb5.0/174 Error ellipse: s-maj=10.1km s-min=8.6km az=89.0*

*BYKL* ***13*** *20:31:46.9±0.1, 56.01N×112.16E, h21km±2km, Mw4.6/20(IEC), #STATIONS BILL MAJO SSE TATO QIZ ENH XAN KMI AAK GNI KIV ARU GRFO LVZ KONO KEV SCO DBG NOR ALE FELT I=IV MSK at Novyj Uojan, Kumora; III at Ust'-Kut.*

*BGR* ***13*** *20:31:54.6±0.0, 57.22N×112.67E, h33km, mb5.0*

**ISC 13 20:31:46.3±0.6, 56.19N±0.02×112.21E±0.02, h14km±3km, n728, σ1°93°/795, mb4.9/203, MS4.2/64, 58C-90D, Fault plane solution: NP1:φs265.09515°, δ35.89221°, λ-62.19881°. NP2:φs52.03709°, δ58.76223°, λ-108.65079°. Principal axes: T Plg11.8964°, Azm155.3987°; N Plg15.8688°, Azm61.9654°; P Plg69.9747°, Azm280.7094°; Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YOA** | **Uoyan** | **0.28** | **259** | ⇓*i* PG | **Pb** | **20 31 53.3** | **+0.3** |
| YOA | | | | *i* S | **Sb** | **20 31 57.6** | **0.0** |
| **YOA** | **Uoyan** | **0.28** | **259** | ⇓*i* Pg | **Pb** | **20 31 53.3** | **+0.3** |
| YOA | | | | Pmax | | 20 31 53.7 | |
| | 220μm,0.5s | | | | | | |
| YOA | | | | *e*Sg | **Sb** | **20 31 57.1** | **-0.5** |
| YOA | | | | Smax | | 20 32 01.4 | |
| | 1022μm,0.6s | | | | | | |
| **YOA** | **Uoyan** | **0.28** | **259** | | **Pb** | **20 31 53.3** | **+0.3** |
| **KMO** | **Kumora** | **0.64** | **242** | ⇓*i* PG | **Pg** | **20 31 57.9** | **-0.9** |
| KMO | | | | *e* | | 20 32 03.8 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,90μm,0.5s | | | | | | |
| **KMO** | **Kumora** | **0.64** | **242** | ⇓*i* Pg | **Pg** | **20 31 57.7** | **-1.1** |
| KMO | | | | Pmax | | 20 31 59.1 | |
| | comp=N,3μm,0.2s | | | | | | |
| KMO | | | | *e*Sg | **Sg** | **20 32 05.7** | **-1.5** |
| KMO | | | | Smax | | 20 32 08.7 | |
| | comp=N,92μm,0.7s | | | | | | |
| **KMO** | **Kumora** | **0.64** | **242** | | **Pg** | **20 31 57.9** | **-0.9** |
| **SVKR** | **Severomuysk** | **0.76** | **95** | *e*PG | **Pg** | **20 32 01.9** | **+0.8** |
| SVKR | | | | *e* | | 20 32 12.7 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,7μm,0.6s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,62μm,1.3s | | | | | | |
| **SVKR** | **Severomuysk** | **0.76** | **95** | *e*Pg | **Pg** | **20 32 01.8** | **+0.7** |
| SVKR | | | | Pmax | | 20 32 02.6 | |
| | comp=N,5μm,0.3s | | | | | | |
| SVKR | | | | *e*Sg | **Sb** | **20 32 12.5** | **+0.9** |
| SVKR | | | | Smax | | 20 32 14.1 | |
| | comp=N,63μm,0.8s | | | | | | |
| **SVKR** | **Severomuysk** | **0.76** | **95** | | **Pg** | **20 32 01.9** | **+0.8** |
| **UKT** | **Uakit** | **1.06** | **130** | *e*PG | **Pb** | **20 32 07.1** | **+0.6** |
| **UKT** | **Uakit** | **1.06** | **130** | ⇓*i* Pg | **Pb** | **20 32 04.9** | **-1.6** |
| UKT | comp=N,9μm,0.9s | | | ⇑*i* Pg | **Pb** | **20 32 04.9** | **-1.6** |
| UKT | comp=N,10μm,0.9s | | | ⇑*i* Pg | **Pb** | **20 32 04.9** | **-1.6** |
| UKT | comp=N,10μm,0.9s | | | Pmax | | 20 32 06.2 | |
| UKT | comp=N,13μm,0.8s | | | *e*Sg | **Sb** | **20 32 17.7** | **-2.6** |
| UKT | | | | Smax | | 20 32 18.8 | |
| | comp=N,31μm,0.4s | | | | | | |
| UKT | | | | *e*Sb | **Sg** | **20 32 21.9** | **+1.2** |
| **YLYR** | **Ulyunkhan** | **1.44** | **205** | ⇑*i* PG | **Pn** | **20 32 10.3** | **-1.7** |
| YLYR | | | | *e* | | 20 32 27.7 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,8μm,0.4s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=N,110μm,0.4s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.44** | **205** | ⇑*i* Pg | **Pn** | **20 32 10.3** | **-1.7** |
| YLYR | | | | Pmax | | 20 32 10.6 | |
| | comp=N,8μm,0.5s | | | | | | |
| YLYR | | | | *e*Sg | **Sn** | **20 32 27.7** | **-3.0** |
| YLYR | | | | *e*Sb | **Sb** | **20 32 31.0** | **-0.1** |
| YLYR | | | | max | | 20 32 31.9 | |
| | comp=N,111μm,0.5s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **1.55** | **256** | ⇑*i* PN | **Pb** | **20 32 14.3** | **-0.5** |
| NIZ | | | | *e* | | 20 32 35.0 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,6μm,1.0s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,7μm,0.6s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **1.55** | **256** | ⇑*i* Pg | **Pb** | **20 32 14.4** | **-0.4** |
| NIZ | | | | Pmax | | 20 32 15.6 | |
| | comp=N,6μm,0.7s | | | | | | |
| NIZ | | | | *e*Sg | **Sb** | **20 32 34.5** | **+0.2** |
| NIZ | | | | Smax | | 20 32 37.4 | |
| | comp=N,52μm,0.7s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BOD** | **Bodaibo** | **1.91** | **30** | ⇓*i* PN | **Pb** | **20 32 21.5** | **+0.7** |
| BOD | | | | *e* | | 20 32 24.4 | |
| BOD | | | | *e* | | 20 32 50.0 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,840nm,0.3s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=N,14μm,0.4s | | | | | | |
| **BOD** | **Bodaibo** | **1.91** | **30** | ⇓*i* Pn | **Pb** | **20 32 21.6** | **+0.7** |
| BOD | | | | *e*Pg | **Pg** | **20 32 24.3** | **+1.4** |
| BOD | | | | *e* | | 20 32 30.2 | |
| BOD | | | | max | | 20 32 30.8 | |
| | comp=N,3μm,1.2s | | | | | | |
| BOD | | | | *e*Sn | **Sg** | **20 32 47.2** | **-0.5** |
| BOD | | | | *e*Sg | **Sb** | **20 32 50.5** | **+5.9** |
| BOD | | | | Smax | | 20 32 55.6 | |
| | comp=N,11μm,0.8s | | | | | | |
| **NLYR** | **Nelyaty** | **1.97** | **80** | *e*PN | **Pb** | **20 32 22.6** | **+0.6** |
| NLYR | | | | *e* | | 20 32 49.6 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,3μm,0.6s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,18μm,1.3s | | | | | | |
| **NLYR** | **Nelyaty** | **1.97** | **80** | ⇓*i* Pn | **Pn** | **20 32 21.0** | **+1.7** |
| NLYR | | | | *e*Pg | **Pb** | **20 32 23.3** | **+1.3** |
| NLYR | | | | Pmax | | 20 32 33.7 | |
| | comp=N,3μm,0.6s | | | | | | |
| NLYR | | | | *e*Sg | **Sg** | **20 32 50.4** | **+0.8** |
| NLYR | | | | Smax | | 20 32 51.9 | |
| | comp=N,18μm,1.1s | | | | | | |
| **SYVR** | **Suvo** | **2.84** | **208** | *e*PN | **Pn** | **20 32 30.3** | **-0.9** |
| SYVR | | | | *e* | | 20 32 33.7 | |
| SYVR | | | | *e* | | 20 33 09.7 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=N,30μm,0.7s | | | | | | |
| **SYVR** | **Suvo** | **2.84** | **208** | *e*Pn | **Pn** | **20 32 30.0** | **-1.2** |
| SYVR | | | | *e*Pg | **Pb** | **20 32 34.3** | **-2.4** |
| SYVR | | | | *e*PgPg | **PbPb** | **20 32 39.5** | **-0.3** |
| SYVR | | | | max | | 20 32 40.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| SYVR | | | | *e* | | 20 33 03.4 | |
| SYVR | | | | *e*Sg | **Sb** | **20 33 09.5** | **-1.7** |
| SYVR | | | | Smax | | 20 33 11.0 | |
| | comp=N,30μm,0.7s | | | | | | |
| **VTMR** | **Vitim** | **3.27** | **3** | *e*Pn | **Pn** | **20 32 39.2** | **+2.1** |
| VTMR | | | | *e*Pg | **Pg** | **20 32 48.5** | **-0.4** |
| VTMR | | | | *e*Sn | **Sb** | **20 33 20.2** | **-3.4** |
| VTMR | | | | *e*Sg | **Sg** | **20 33 33.9** | **+2.7** |
| **CRS** | **Chara** | **3.43** | **75** | *e*PN | **Pn** | **20 32 41.4** | **+2.0** |
| CRS | | | | *e* | | 20 32 51.8 | |
| CRS | | | | *e* | | 20 33 34.7 | |
| CRS | | | | pmax | pmax | | |
| | comp=Z,1μm,1.2s | | | | | | |
| CRS | | | | smax | smax | | |
| | comp=E,8μm,1.6s | | | | | | |
| **CRS** | **Chara** | **3.43** | **75** | ⇓*i* Pn | **Pn** | **20 32 41.4** | **+2.0** |
| CRS | | | | *e* | | 20 32 51.8 | |
| CRS | | | | max | | 20 33 04.4 | |
| | comp=E,2μm,0.9s | | | | | | |
| CRS | | | | *e*Sn | **Sn** | **20 33 21.0** | **+1.2** |
| CRS | | | | *e*Sg | **Sg** | **20 33 36.0** | **-0.4** |
| CRS | | | | Smax | | 20 33 44.2 | |
| | comp=E,13μm,1.6s | | | | | | |
| **MXMB** | **Maximikha** | **3.55** | **216** | *e*Pn | **Pn** | **20 32 40.2** | **-0.8** |
| MXMB | | | | *e*Pg | **Pb** | **20 32 47.6** | **-1.3** |
| MXMB | | | | *e*Sn | **Sn** | **20 33 18.6** | **-4.1** |
| MXMB | | | | *e*Sg | **Sb** | **20 33 31.8** | **0.0** |
| MXMB | | | | *e*SgSg | **SbSb** | **20 33 37.7** | **+0.8** |
| **OGRR** | **Ongureny** | **3.68** | **228** | ⇓*i* PN | **Pn** | **20 32 44.6** | **+1.8** |
| OGRR | | | | *e* | | 20 32 52.6 | |
| OGRR | | | | *e* | | 20 33 37.9 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,1μm,1.0s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,5μm,1.1s | | | | | | |
| **KELR** | **Kotokel** | **4.19** | **217** | *e*Pn | **Pn** | **20 32 48.8** | **-1.0** |
| KELR | | | | *e*Pg | **Pb** | **20 33 00.0** | **+0.2** |
| KELR | | | | *e*Sg | **Sb** | **20 33 52.1** | **+1.9** |
| **CIT** | **Chita** | **4.25** | **169** | *e*PN | **Pn** | **20 32 48.4** | **-2.2** |
| CIT | | | | *e* | | 20 33 00.4 | |
| CIT | | | | *e* | | 20 33 53.7 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,2μm,1.4s | | | | | | |
| CIT | | | | smax | smax | | |
| | comp=N,12μm,1.7s | | | | | | |
| **CIT** | **Chita** | **4.25** | **169** | *e*Pn | **Pn** | **20 32 48.8** | **-1.8** |
| CIT | | | | *e*Pg | **Pb** | **20 33 00.0** | **-0.8** |
| CIT | | | | Pmax | | 20 33 02.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| CIT | | | | *e*Sn | **Sn** | **20 33 34.4** | **-5.6** |
| CIT | | | | *e*Sg | **Sb** | **20 33 53.4** | **+1.5** |
| CIT | | | | Smax | | 20 34 02.0 | |
| | comp=N,12μm,1.0s | | | | | | |
| **KHNR** | **Khani** | **4.37** | **77** | *e*Pn | **Pn** | **20 32 54.5** | **+2.3** |
| KHNR | | | | *e*Pg | **Pb** | **20 33 06.1** | **+3.4** |
| KHNR | | | | *e* | | 20 33 47.1 | |
| KHNR | | | | *e*Sg | **Sg** | **20 34 04.0** | **-2.3** |
| **ZRHB** | **Zarechye** | **4.69** | **221** | *e*Pn | **Pn** | **20 32 55.9** | **-0.7** |
| ZRHB | | | | *e*Pg | **Pb** | **20 33 08.9** | **+0.7** |
| ZRHB | | | | Pmax | | 20 33 23.8 | |
| | comp=N,2μm,1.1s | | | | | | |
| ZRHB | | | | *e*Sn | **Sn** | **20 33 45.9** | **-4.8** |
| ZRHB | | | | *e*Sg | **Sb** | **20 34 08.3** | **+3.8** |
| ZRHB | | | | Smax | | 20 34 31.3 | |
| | comp=N,14μm,0.9s | | | | | | |
| **TUP** | **Tupik** | **4.77** | **109** | *e*PN | **Pn** | **20 32 57.4** | **-0.2** |
| TUP | | | | *e* | | 20 33 10.9 | |
| TUP | | | | *e*S | **Sn** | **20 33 49.7** | **-3.0** |
| TUP | | | | *e* | | 20 34 13.6 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,683nm,0.8s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,7μm,1.3s | | | | | | |
| **TUP** | **Tupik** | **4.77** | **109** | *e*Pn | **Pn** | **20 32 57.5** | **-0.2** |
| TUP | | | | *e*Pg | **Pb** | **20 33 11.4** | **+1.8** |
| TUP | | | | Pmax | | 20 33 18.2 | |
| | comp=N,774nm,1.1s | | | | | | |
| TUP | | | | *e*Sn | **Sn** | **20 33 49.6** | **-3.1** |
| TUP | | | | *e*Sg | **Sb** | **20 34 12.9** | **+6.1** |
| TUP | | | | Smax | |

BGT eSg Sb 20 34 40.8 +5.5
BGT Smax 20 34 52.5
comp=N,2µm,0.9s
**IRK Irkutsk 6.10 233** ePN Pn **20 33 13.7 -2.3**
IRK e 20 33 34.4
IRK e 20 34 50.3
IRK pmax pmax
comp=Z,477nm,0.6s
IRK smax smax
comp=N,7µm,1.2s
**IRK Irkutsk 6.10 233** ePn Pn **20 33 14.5 -1.5**
IRK e 20 33 40.2
IRK max 20 33 50.6
comp=N,481nm,0.5s
IRK eSn Sn **20 34 19.5 -6.1**
IRK eSg Sb **20 34 50.8 +5.6**
IRK Smax 20 34 56.0
comp=N,6µm,0.8s
**LSTR Listvyanka 6.13 228**⇓ *i*Pn Pn **20 33 15.0 -1.4**
LSTR e 20 33 42.7
LSTR max 20 33 51.6
comp=N,163nm,0.7s
LSTR eSn Sn **20 34 20.7 -5.5**
LSTR eSg Sb **20 34 51.4 +5.5**
LSTR Smax 20 35 08.0
comp=N,2µm,1.3s
**IVK Ivanovka 6.36 230** ePn Pn **20 33 17.9 -1.6**
IVK e 20 33 41.8
IVK max 20 33 48.9
comp=N,174nm,0.8s
IVK eSn Sn **20 34 25.3 -6.5**
IVK eSg Sb **20 34 59.5 +7.1**
IVK Smax 20 35 06.2
comp=N,2µm,1.1s
**KPC Khapcheranga 6.50 179**⇑ *i*PN Pn **20 33 18.9 -2.6**
KPC e 20 33 39.2
KPC e 20 35 01.1
KPC pmax pmax
comp=Z,260nm,0.9s
KPC smax smax
comp=E,8µm,1.5s
**KPC Khapcheranga 6.50 179** ePn Pn **20 33 18.9 -2.6**
KPC ePg Pb **20 33 40.9 +1.9**
KPC Pmax 20 33 53.2
comp=E,335nm,1.0s
KPC eSg Sb **20 35 02.8 +6.3**
KPC Smax 20 35 07.6
comp=E,8µm,1.5s
**TLY Talaya 6.77 232** ePG Pb **20 33 47.5 +3.7**
TLY e 20 35 10.3
TLY pmax pmax
comp=Z,161nm,0.7s
TLY smax smax
comp=E,2µm,0.9s
**TLY Talaya 6.77 232** ePn Pn **20 33 23.5 -1.7**
TLY ePg Pb **20 33 47.1 +3.3**
TLY Pmax 20 34 14.0
comp=E,222nm,0.6s
TLY eSn Sn **20 34 36.3 -5.8**
TLY eSg Sb **20 35 12.6 +8.1**
TLY Smax 20 35 18.5
comp=E,2µm,0.9s
**CLNS Chul'man 7.05 79** ePn Pn **20 33 30.2 +1.1**
CLNS ePg Pb 20 33 54.9 +6.4
CLNS e 20 34 44.8
CLNS eSg Sg **20 35 27.0 -5.4**
**IENR Iengra 7.06 84** ePn Pn **20 33 30.3 +1.1**
IENR ePg Pb 20 33 55.5 +6.9
IENR e 20 34 00.1
IENR eSg Sg **20 35 27.3 -5.3**
**ARS Arshan 7.17 237** ePN Pn **20 33 28.9 -1.8**
ARS eS Sb 20 35 25.6 +10
ARS smax smax
comp=N,8µm,0.8s
**ARS Arshan 7.17 237** ePn Pn **20 33 28.8 -1.9**
ARS e 20 34 01.0
ARS max 20 34 09.6
comp=N,623nm,0.6s
ARS eSn Sn **20 34 47.1 -4.8**
ARS eSg Sb **20 35 24.3 +8.5**
ARS Smax 20 35 33.7
comp=N,8µm,0.8s
**ZAK Zakamensk 7.89 226** ePN Pn **20 33 39.7 -1.0**
ZAK e 20 35 46.4
ZAK pmax pmax
comp=Z,154nm,1.1s
ZAK smax smax
comp=N,2µm,1.3s
**ZAK Zakamensk 7.89 226** ePn Pn **20 33 40.1 -0.6**
ZAK ePg Pb **20 34 06.5 +3.6**
ZAK Pmax 20 34 20.2
comp=N,172nm,0.8s
ZAK eSg Sb 20 35 46.7 +10
ZAK Smax 20 36 00.5
comp=N,2µm,1.3s
**MOY Mondy 8.02 240** ePN Pn **20 33 42.0 -0.3**
MOY eS Sn **20 35 07.1 -5.7**
MOY e 20 35 49.7
**MOY Mondy 8.02 240** ePn Pn **20 33 42.5 +0.2**
MOY e 20 33 49.8
MOY ePg Pb **20 34 09.0 +4.1**
MOY Pmax 20 34 20.5
comp=N,568nm,1.0s
MOY eSn Sn **20 35 07.4 -5.4**
MOY eSg Sg 20 35 52.0 -11
MOY Smax 20 36 13.8
comp=N,3µm,1.1s
**ORL Orlik 8.11 248** ePN Pn **20 33 43.5 -0.1**
ORL e 20 34 10.9
ORL eS Sn **20 35 10.7 -4.3**
ORL e 20 35 55.6
ORL pmax pmax
comp=Z,324nm,0.7s
ORL smax smax
comp=N,2µm,1.6s
**ORL Orlik 8.11 248**⇑ *i*Pn Pn **20 33 43.6 -0.1**
ORL e 20 33 50.9
ORL Pmax 20 33 54.1
comp=N,339nm,1.2s
ORL ePg Pb **20 34 10.8 +4.3**
ORL eSn Sn **20 35 08.9 -6.1**
ORL eSg Sg 20 35 56.0 -10
ORL Smax 20 36 04.8
comp=N,2µm,1.4s
**HIA Hailar 8.30 143** *d i*PN Pn **20 33 42.5 -3.7**
**HIA Hailar 8.30 143** Pn Pn **20 33 42.4 -3.8**
**ULN Ulaanbaatar 8.91 203** *de*PN Pn **20 33 54.4 -0.3**
**ULN Ulaanbaatar 8.91 203** Pn Pn **20 33 53.4 -1.3**
**ZEA Zeya 9.00 100** eP Pn **20 33 56.4 +0.7**
ZEA eS Sn **20 35 33.0 -3.7**
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=Z,20nm,0.5s
ZEA smax smax
comp=N,200nm,4.2s
ZEA MLR MLR
comp=E,2µm,6.0s
ZEA MLR MLR
comp=Z,2µm,7.0s
**SONM Songino Array 9.10 206** Pn Pn **20 33 56.3 -0.9**
comp=Z,1.6nm,0.3s,baz=14,slow=14,SNR=66
SONM Lg Lg 20 36 27.3
comp=Z,46nm,0.3s,baz=0.0,slow=17,SNR=11
SONM LR LR 20 37 49.6
comp=Z,1µm,21.9s,baz=22,slow=41
**YAK Yakutsk 10.70 50** Pn Pn **20 34 18.6 -0.3**
comp=Z,0.1nm,0.3s,baz=83,slow=0.7,SNR=11
YAK Sn Sn **20 36 15.0 -3.4**
comp=Z,0.4nm,0.3s,baz=198,slow=19,SNR=1.4
YAK Lg Lg 20 37 17.2
comp=Z,0.3nm,0.3s,baz=158,slow=23,SNR=4.1
YAK LR LR 20 38 35.4
comp=Z,943nm,18.4s,baz=254,slow=38
**YAK Yakutsk 10.70 50** eP Pn **20 34 18.2 -0.7**
YAK eS Sn **20 36 18.8 +0.4**
YAK pmax pmax
comp=Z,13nm,0.8s
YAK pmax pmax
comp=N,2.0nm,0.8s
YAK pmax pmax
comp=E,4.0nm,0.9s
YAK smax smax
comp=N,107nm,1.0s
YAK smax smax
comp=E,62nm,0.8s
YAK MLR MLR
comp=Z,735nm,13.0s
YAK MLR MLR
comp=E,526nm,14.0s
**YAK Yakutsk 10.70 50** Pn Pn **20 34 18.2 -0.7**
**KZLR Kyzyl 11.37 254**⇓ *e*P Pn **20 34 28.3 +0.1**
**ABNR Abakan 12.18 267** *de*P Pn **20 34 38.4 -0.8**
**XLT XiLinHaoTe 12.55 167** eP Pn **20 34 46.6 +2.3**
XLT sP P 20 34 55.3 -0.7
XLT S Sn **20 37 07.8 +4.0**
XLT SS SnSn **20 37 27.3 +12**
XLT pmax pmax
comp=E,14nm,1.4s
XLT pmax pmax
comp=E,210nm,3.6s
XLT LR LR
comp=E,5µm,7.8s
XLT LR LR
comp=E,2µm,8.4s
XLT LR LR
comp=E,5µm,9.5s
**KLR Kul'dur 13.71 112** Pn Pn **20 34 58.7 -1.4**
comp=E,1.0nm,0.3s,baz=310,slow=14,SNR=22
KLR Lg Lg 20 38 55.7
comp=E,1.9nm,0.3s,baz=235,slow=18,SNR=18
KLR LR LR 20 40 41.8
comp=E,1µm,18.2s,baz=303,slow=39
**KLR Kul'dur 13.71 112** *de*P Pn **20 34 59.9 -0.2**
**BNX BinXian 14.14 131** ⇓P Pn **20 35 02.8 -3.2**
**CN2 Changchun 15.00 140** eP Pn **20 35 19.8 +2.1**
CN2 S Sn **20 38 07.8 +4.2**
CN2 pmax pmax
comp=E,10.0nm,0.6s
CN2 pmax pmax
comp=E,200nm,4.0s
CN2 LR LR
comp=E,2µm,9.0s
CN2 LR LR
comp=E,2µm,9.0s
CN2 LR LR
comp=E,3µm,10.0s
**HHC Hu-ho-hao-te 15.36 182** eP P **20 35 27.8 +0.6**
HHC pmax pmax
comp=E,14nm,1.1s
**GRNR Gornyy 15.36 100**⇓ *i*P P **20 35 28.0 +0.9**
GRNR pmax pmax
comp=Z,1.0nm,0.9s
GRNR MLR MLR
comp=E,780nm,12.0s
GRNR MLR MLR
comp=Z,980nm,15.0s
**BTO Baotou 15.66 186** eP Pn **20 35 24.1 -2.4**
BTO LR LR
comp=Z,5µm,6.9s
BTO LR LR
comp=Z,7µm,6.5s
**ZAA0 Zalesovo Array 15.80 273** Pn Pn **20 35 25.5 -2.7**
**ZALV Zalesovo Beam 15.80 273** Pn Pn **20 35 27.2 -0.9**
comp=Z,0.6nm,0.3s,baz=66,slow=9.3,SNR=37
ZALV Lg Lg 20 40 01.0
comp=Z,0.6nm,0.3s,baz=76,slow=26,SNR=7.1
ZALV LR LR 20 41 11.8
comp=Z,110nm,20.5s,baz=69,slow=36
**ZALV Zalesovo Beam 15.80 273** *i* P Pn **20 35 27.2 -0.9**
ZALV pmax pmax
comp=Z,10.0nm,0.8s
**ZALV Zalesovo Beam 15.80 273** Pn Pn **20 35 26.8 -1.4**
**MDJ Mudanjiang 15.97 129** Pn Pn **20 35 31.7 +1.3**
**DGZ Jazzator, Alta 16.23 257**⇓ *e*P Pn **20 35 33.7 -0.1**
DGZ pmax pmax
comp=Z,17nm,0.9s
**BJI Beijing 16.37 169** P P **20 35 43.3 +5.0**
BJI pmax pmax
comp=Z,38nm,1.0s
**BJT Baijiatuau 16.39 169** P Pn **20 35 34.3 -1.4**
BJT pmax pmax
comp=Z,36nm,1.0s
**BJT Baijiatuau 16.39 169** Pn Pn **20 35 34.3 -1.4**
**TIXI Tiksi 17.05 18** P Pn **20 35 40.8 -3.0**
comp=Z,4.3nm,0.3s,baz=249,slow=14,SNR=70
TIXI S Sn 20 38 39.7 -13
comp=Z,1.5nm,0.3s,baz=88,slow=23,SNR=11
TIXI Lg Lg 20 40 39.8
comp=Z,2.3nm,0.3s,baz=271,slow=21,SNR=3.8
**TIXI Tiksi 17.05 18** *d i*P Pn **20 35 41.0 -2.8**
**TIXI Tiksi 17.05 18** Pn Pn **20 35 39.9 -3.9**
TIXI IAmb IAmb 20 35 53.8
comp=Z,81nm,0.8s
**NRIK Noril'sk 17.16 330** P Pn **20 35 42.2 -3.1**
comp=Z,2.1nm,0.3s,baz=134,slow=10,SNR=10
NRIK S Sn 20 38 43.8 -12
comp=Z,1.4nm,0.3s,baz=61,slow=8.2,SNR=6.1
NRIK Lg Lg 20 40 50.3
comp=Z,1.8nm,0.3s,baz=73,slow=20,SNR=4.6
NRIK LR LR 20 42 58.6
comp=Z,1µm,20.1s,baz=146,slow=39
**NRIK Noril'sk 17.16 330**⇑ *e*P Pn **20 35 42.8 -2.5**
**NRIK Noril'sk 17.16 330** Pn Pn **20 35 41.4 -3.9**
**USRK Ussuriysk Ar. 17.37 125** P Pn **20 35 48.8 +0.8**
baz=311,slow=11,SNR=2.3
USRK Lg Lg 20 40 47.3
baz=322,slow=24,SNR=6.0
USRK LR LR 20 43 03.4
comp=Z,758nm,18.4s,baz=313,slow=39
**OKH Okha 17.80 86** *de*P Pn 20 35 44.8 -8.6
OKH MLR MLR
comp=E,2µm,13.0s
OKH MLR MLR
comp=Z,1µm,13.0s
OKH MLR MLR
comp=N,800nm,11.0s
**TIY Taiyuan 18.48 179** eP Pn 20 36 10.6 +8.7
TIY pmax pmax
comp=Z,24nm,1.2s
TIY LR LR
comp=N,1µm,10.3s
TIY LR LR
comp=E,750nm,9.3s
TIY LR LR
comp=Z,2µm,9.6s
**GTA Gaotai 18.68 211** eP P **20 36 03.5 -0.5**
GTA pP pP 20 36 08.6 +0.5
GTA sP sP 20 36 12.8 +2.8
GTA pmax pmax
comp=Z,10.0nm,1.0s
GTA pmax pmax
comp=Z,130nm,6.2s
GTA LR LR
comp=Z,2µm,10.5s
GTA LR LR
comp=Z,3µm,9.8s
GTA LR LR
comp=Z,2µm,10.9s
**TYV Tymovskoe 18.77 94** eP Pn **20 36 06.7 +1.5**
TYV e 20 39 42.4
TYV pmax pmax
comp=Z,9.0nm,1.0s
TYV pmax pmax
comp=Z,100nm,5.4s
TYV MLR MLR
comp=Z,2µm,13.0s
**HNS HongShan 18.87 174** ⇓P Pn **20 36 09.3 +2.8**
HNS S S **20 39 44.4 +4.5**
HNS PcP PcP **20 40 36.1 +4.2**
HNS pmax pmax
comp=Z,27nm,1.2s
HNS LR LR
comp=Z,2µm,12.5s
HNS LR LR
comp=Z,690nm,10.3s
HNS LR LR
comp=Z,2µm,15.3s
**ZSN Zaisan 18.92 254** eP P **20 36 04.7 -1.7**
**ZSN Zaisan 18.92 254** eP P **20 36 04.8 -1.7**
baz=254
**UGL Uglegorsk 19.36 99** P Pn 20 36 19.8 +7.5
UGL S Sn **20 39 40.0 -8.9**
UGL MLR MLR
comp=E,1µm,11.0s
**SEM Semipalatinsk 19.83 267** eP P **20 36 14.8 -1.8**
**SEM Semipalatinsk 19.83 267** eP P **20 36 14.8 -1.8**
baz=266
**WMQ Urumqi 19.90 242** eP Pn **20 36 18.4 -0.5**
WMQ pP sP 20 36 24.9 +1.7
WMQ S Sn **20 40 03.0 +0.7**
WMQ pmax pmax
comp=E,39nm,1.1s
WMQ pmax pmax
comp=E,110nm,3.9s
WMQ LR LR
comp=E,820nm,12.5s
WMQ LR LR
comp=E,640nm,11.3s
WMQ LR LR
comp=E,430nm,18.1s
**TIA Tai'an 20.26 168**⇓P Pn 20 36 26.3 +3.2
TIA pmax pmax
comp=E,9.0nm,0.8s
**MA2 Magadan 20.58 65**⇑ *e*P P **20 36 26.2 +1.8**
MA2 pmax pmax
comp=Z,22nm,1.3s
**MA2 Magadan 20.58 65** P P **20 36 23.9 -0.5**
**KURK Kurchatov 20.59 269** *d i*P P **20 36 24.3 -0.3**
KURK pmax pmax
comp=Z,101nm,1.0s
**KURK Kurchatov 20.59 269** P P **20 36 22.5 -2.1**
KURK IAmb IAmb 20 36 29.3
comp=Z,86nm,0.8s
**KURBB Kurchatov Arra 20.69 269** P P **20 36 25.8 +0.1**
comp=Z,73nm,0.8s,baz=68,slow=12,SNR=121
KURBB Lg Lg 20 42 34.0
comp=Z,6.5nm,1.0s,baz=60,slow=30,SNR=2.7
KURBB LR LR 20 44 46.6
comp=Z,600nm,19.6s,baz=42,slow=38
**MK31 Makanchi Array 20.71 256** P P **20 36 24.4 -1.6**
MK31 pmax pmax
comp=Z,44nm,1.1s
**MK31 Makanchi Array 20.71 256** P P **20 36 24.4 -1.6**
MK31 IAmb IAmb 20 36 31.2
comp=Z,44nm,1.1s
**MKAR Makanchi Array 20.71 256** P P **20 36 25.5 -0.5**
comp=Z,23nm,0.7s,baz=60,slow=9.8,SNR=283
MKAR Lg Lg 20 42 31.6
comp=Z,6.3nm,1.0s,baz=43,slow=26,SNR=3.5
MKAR LR LR 20 44 50.3
comp=Z,1µm,20.2s,baz=40,slow=38
**MKAR Makanchi Array 20.71 256** *i* P P **20 36 25.5 -0.5**
MKAR pmax pmax
comp=Z,24nm,0.7s
**MKAR Makanchi Array 20.71 256** P P **20 36 24.8 -1.2**
**MAKZ Makanchi 20.87 256** P P **20 36 25.7 -2.0**
MAKZ pmax pmax
comp=Z,44nm,0.9s
**MAKZ Makanchi 20.87 256** P P **20 36 25.7 -2.0**
MAKZ IAmb IAmb 20 36 28.1
comp=Z,44nm,0.8s
**LZH Lanzhou 20.89 199** eP P **20 36 28.3 +0.1**
LZH pP sP 20 36 33.8 -0.4
LZH sP pP 20 36 35.8 +3.5
LZH S S **20 40 24.0 +3.3**
LZH pmax pmax
comp=Z,36nm,1.2s
LZH pmax pmax
comp=Z,150nm,4.3s
LZH LR LR
comp=Z,1µm,8.1s
LZH LR LR
comp=Z,3µm,11.4s
LZH LR LR
comp=Z,2µm,11.4s
**YSS Yuzh-Sakhalins 20.96 103** eP Pn 20 36 34.3 +3.1
YSS pmax pmax
comp=Z,20nm,1.0s
YSS MLR MLR
comp=Z,1µm,13.0s
YSS MLR MLR
comp=E,1µm,15.0s
**SEY Seymchan 21.14 55** P P **20 36 33.4 +2.9**
comp=E,19nm,1.1s,baz=278,slow=8.0,SNR=22
SEY Lg Lg 20 42 49.0
comp=E,21nm,1.2s,baz=2.6,slow=18,SNR=6.7
**SEY Seymchan 21.14 55**⇓ *i*P P **20 36 32.6 +2.1**
**KSAR Wonju Array Be 21.51 144** P P **20 36 33.4 -1.2**
**KSAR Wonju Array Be 21.51 144** P P **20 36 33.4 -1.2**
**KSRS Korea Array 21.51 144** P P **20 36 35.0 +0.4**
comp=E,3.0nm,1.1s,baz=337,slow=8.0,SNR=3.4
KSRS Lg Lg 20 43 03.5
comp=E,4.3nm,1.1s,baz=190,slow=38,SNR=2.3
KSRS LR LR 20 46 03.5
comp=E,448nm,18.2s,baz=340,slow=40
**KSRS Korea Array 21.51 144** P P **20 36 35.0 +0.4**
**LYN LuoYang 21.64 179**⇑ P P **20 36 39.4 +3.4**
LYN sP sP 20 36 45.1 +3.1
LYN LR LR
comp=E,2µm,9.6s
LYN LR LR
comp=E,2µm,9.8s
**XAN Xi'an 22.26 187** P P **20 36 41.4 -1.4**
XAN pP pP 20 36 46.5 -0.4
XAN sP sP 20 36 50.1 +1.3
XAN pmax pmax
comp=E,18nm,1.4s
XAN LR LR
comp=E,2µm,13.1s
XAN LR LR
comp=E,1µm,10.3s
XAN LR LR
comp=E,3µm,12.4s
**ASAJ Asahikawa 22.70 109** LR LR 20 46 10.2
comp=E,417nm,21.9s,baz=336,slow=38
**GOMU GeErMu 23.21 218** P P **20 36 51.1 -2.0**
GOMU sP sP 20 36 58.5 -0.6
GOMU pmax pmax
comp=E,9.0nm,1.2s
GOMU LR LR
comp=E,670nm,15.5s
GOMU LR LR
comp=E,460nm,14.5s
GOMU LR LR
comp=E,750nm,15.5s
**TDK Taldyqorghan 23.95 256** eP P **20 36 58.3 -1.5**
TDK pmax pmax
comp=Z,71nm,0.8s
**TDK Taldyqorghan 23.95 256** eP P **20 36 58.3 -1.5**
comp=Z,71nm,0.8s,baz=256
**BVAR Borovoye Array 24.15 280** P P **20 37 01.7 0.0**
comp=Z,15nm,0.7s,baz=59,slow=17,SNR=117
**BRVK Borovoye 24.20 280** *d i*P P **20 37 02.1 0.0**
BRVK pmax pmax
comp=Z,45nm,0.8s
**BRVK Borovoye 24.20 280** P P **20 37 01.8 -0.2**
BRVK IAmb IAmb 20 37 37.7
comp=Z,45nm,0.8s
**BRZS Berezniki 24.27 272** eP P **20 37 01.3 -1.5**
BRZS pmax pmax
comp=Z,27nm,1.0s
**BRZS Berezniki 24.27 272** eP P **20 37 01.4 -1.5**
comp=Z,27nm,1.0s,baz=272
**JTM Tenmabayashi 24.31 117** P P **20 37 01.5 -1.7**
JTM IAmb IAmb 20 37 10.7
comp=Z,49nm,1.2s
**NJ2 Nanjing 24.57 166** eP P **20 37 06.8 +1.2**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
NJ2 LR LR
comp=Z,2µm,10.6s
NJ2 LR LR
comp=Z,790nm,9.0s
NJ2 LR LR
comp=Z,2µm,11.5s
**KPKS Kokpek 24.81 253** eP P **20 37 06.7 -1.1**
KPKS pmax pmax
comp=Z,18nm,1.0s
**KPKS Kokpek 24.81 253** eP P **20 37 06.8 -1.1**
comp=Z,18nm,1.0s,baz=253
**UZB Uzynbulak 24.85 252** eP P **20 37 07.1 -1.1**
UZB pmax pmax
comp=Z,21nm,1.0s
**UZB Uzynbulak 24.85 252** eP P **20 37 07.2 -1.1**
comp=Z,21nm,1.0s,baz=252
**ZHN Zhinishke 25.15 253** eP P **20 37 09.5 -1.4**
**ZHN Zhinishke 25.15 253** eP P **20 37 09.5 -1.4**
baz=253
**SATY Saty 25.24 253** eP P **20 37 10.6 -1.1**
**SATY Saty 25.24 253** eP P **20 37 10.6 -1.1**
baz=253
**KUU Kurty 25.79 257** eP P **20 37 15.4 -1.2**
KUU pmax pmax
comp=Z,30nm,1.1s

**KUU Kurty 25.79 257** *e*P **P 20 37 15.4 -1.2**
comp=Z,30nm,1.1s,baz=257
**MDOK Medeo 25.89 255** *e*P **P 20 37 16.3 -1.4**
**MDOK Medeo 25.89 255** *e*P **P 20 37 16.4 -1.4**
baz=255
**CD2 Chengdu 25.96 197** P **P 20 37 17.8 -0.4**
CD2 S **S 20 41 49.8 +1.7**
CD2 pmax pmax
comp=Z,40nm,1.0s
CD2 LR LR
comp=Z,1μm,9.4s
CD2 LR LR
comp=Z,980nm,11.6s
**ENH Enshi 25.98 185** P **P 20 37 17.2 -1.2**
**TNSS Tian-Shan 26.03 255** *e*P **P 20 37 17.9 -1.4**
baz=254
**PEA0B Petropavlovsk- 26.13 77**⇑ *e*P **P 20 37 20.4 +0.8**
**PEA0B Petropavlovsk- 26.13 77** P **P 20 37 18.6 -1.0**
**PETK Petropavlovsk- 26.13 77** P **P 20 37 20.8 +1.2**
comp=Z,5.6nm,0.8s,baz=328,slow=5.3,SNR=7.3
PETK LR LR 20 48 04.1
comp=Z,380nm,20.1s,baz=288,slow=37
**PETK Petropavlovsk- 26.13 77** P **P 20 37 18.6 -1.0**
**BTLS Baital 26.31 261** *e*P **P 20 37 19.8 -1.5**
BTLS pmax pmax
comp=Z,16nm,0.8s
**BTLS Baital 26.31 261** *e*P **P 20 37 19.8 -1.5**
comp=Z,16nm,0.8s,baz=261
**TARG Taragay, Kyrgy 26.48 252** P **P 20 37 22.9 -0.5**
**PET Petropavlovsk 26.69 77** *e*P **P 20 37 27.9 +3.3**
PET *e*S **S 20 41 57.7 -1.5**
PET MLR MLR
comp=Z,600nm,19.0s
**TKM2 Tokmak 2 26.84 256** P **P 20 37 27.6 +1.3**
SNR=26
**BILL Bilibino 26.92 42** *ce*P **P 20 37 28.7 +2.1**
BILL *i* 20 37 33.6
BILL *e* 20 38 08.9
BILL *i* S **S 20 42 11.9 +9.2**
BILL pmax pmax
comp=Z,27nm,1.7s
BILL MLR MLR
comp=Z,246nm,15.0s
**BILL Bilibino 26.92 42** P **P 20 37 26.6 0.0**
**SGDS Sogindy 27.02 258** *e*P **P 20 37 28.6 +0.9**
SGDS pmax pmax
comp=Z,6.0nm,0.9s
**SGDS Sogindy 27.02 258** *e*P **P 20 37 26.4 -1.3**
baz=258
**USP Ospenovka 27.21 258** P **P 20 37 30.4 +1.0**
SNR=12
**USP Ospenovka 27.21 258** P **P 20 37 30.6 +1.1**
USP pmax pmax
comp=Z,14nm,1.0s
**CHMS Chumysh 27.25 257** P **P 20 37 30.6 +0.8**
SNR=15
**KBK Karagaybulak 27.37 256** P **P 20 37 31.9 +0.8**
SNR=10.0
**KBK Karagaybulak 27.37 256** P **P 20 37 32.4 +1.3**
KBK pmax pmax
comp=Z,22nm,0.9s
**AAK Ala-Archa 27.63 257** P **P 20 37 34.4 +1.0**
comp=Z,12nm,0.8s,baz=80,slow=5.9,SNR=46
AAK LR LR 20 49 01.1
comp=Z,860nm,18.9s,baz=40,slow=38
**AAK Ala-Archa 27.63 257** P **P 20 37 34.5 +1.0**
SNR=20
**AAK Ala-Archa 27.63 257** *d i*P **P 20 37 34.3 +1.0**
AAK pmax pmax
comp=Z,15nm,0.8s
**AAK Ala-Archa 27.63 257** P **P 20 37 32.7 -0.7**
AAK IAmb IAmb 20 37 42.0
comp=Z,26nm,0.9s
**UCH Uchtor 27.90 256** P **P 20 37 38.9 +2.8**
UCH pmax pmax
comp=Z,11nm,0.8s
**SVE Sverdlovsk 27.92 293** *e*P **P 20 37 36.6 +1.0**
SVE pmax pmax
comp=Z,65nm,1.0s
SVE MLR MLR
comp=Z,1μm,15.0s
**EKS2 Erkin-Say 28.01 258** P **P 20 37 37.9 +1.2**
SNR=24
**EKS2 Erkin-Say 28.01 258** P **P 20 37 38.1 +1.4**
EKS2 pmax pmax
comp=Z,18nm,0.8s
**KSH Kashi 29.04 250** P P 20 37 51.1 +5.2
KSH sP sP 20 38 01.8 +10
KSH S **S 20 42 44.4 +7.7**
KSH pmax pmax
comp=Z,10.0nm,1.1s
KSH LR LR
comp=Z,440nm,11.0s
KSH LR LR
comp=Z,350nm,11.7s
KSH LR LR
comp=Z,910nm,11.3s
**ARU Arti 29.13 293** P **P 20 37 46.6 +0.2**
comp=Z,1.5nm,0.7s,baz=72,slow=4.4,SNR=9.2
ARU LR LR 20 51 14.2
comp=Z,896nm,18.5s,baz=62,slow=40
**ARU Arti 29.13 293** *c i*P **P 20 37 46.3 -0.1**
ARU 20 38 37.0
ARU 20 40 54.0
ARU S **S 20 42 40.7 +3.1**
ARU SS **SnSn 20 44 03.8 +2.2**
ARU SSS SSS 20 44 33.2
ARU pmax pmax
comp=Z,7.0nm,0.9s
ARU MLR MLR
comp=Z,1μm,15.0s
**ARU Arti 29.13 293** P **P 20 37 45.2 -1.1**
ARU IAmb IAmb 20 38 38.1
comp=Z,18nm,0.9s
**DZA Taraz 29.20 260** *e*P **P 20 37 45.7 -1.4**
**DZA Taraz 29.20 260** *e*P **P 20 37 45.8 -1.4**
baz=260
**KKAR Karatay Array 29.51 262** P **P 20 37 49.2 -0.7**
**KKAR Karatay Array 29.51 262** P **P 20 37 49.2 -0.7**
**BRLS Boroldaу 29.93 262** *e*P **P 20 37 55.1 +1.4**
**BRLS Boroldaу 29.93 262** *e*P **P 20 37 55.1 +1.4**
baz=262
**GYA Guiyang 29.97 190** ⇓P **P 20 37 57.3 +3.1**
GYA S **S 20 42 52.0 +0.5**
GYA pmax pmax
comp=Z,12nm,1.7s
GYA LR LR
comp=Z,200nm,4.8s
GYA LR LR
comp=Z,430nm,7.3s
GYA LR LR
comp=Z,250nm,4.8s
**IUG luzhnay 30.41 261** *e*P **P 20 37 57.0 -1.0**
**IUG luzhnay 30.41 261** *e*P **P 20 37 57.0 -1.0**
baz=260
**PZH PanZhiHua 30.61 199** P **P 20 38 02.1 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,130nm,6.2s
**TAS Tashkent 31.37 260** P **P 20 38 05.7 -0.6**
TAS pmax pmax
comp=Z,43nm,1.0s
**TAS Tashkent 31.37 260** P **P 20 38 05.7 -0.6**
**JOW Kunigami 31.54 152** LR LR 20 52 30.5
comp=Z,456nm,18.8s,baz=324,slow=40
**ABKAR Akbulak array 31.73 280** P **P 20 38 08.7 -0.7**
**ABKAR Akbulak array 31.73 280** P **P 20 38 08.8 -0.5**
ABKAR IAmb IAmb 20 38 10.5
comp=Z,12nm,0.8s
**KMI Kunming 31.79 196** ⇓P **P 20 38 13.8 +3.4**
KMI pP sP 20 38 17.6 +0.9
KMI pmax pmax
comp=Z,9.0nm,1.1s
KMI LR LR
comp=Z,660nm,13.0s
KMI LR LR
comp=Z,500nm,10.2s
KMI LR LR
comp=Z,800nm,13.8s
**AKTO Aktyubinsk 32.16 283** LR LR 20 52 21.0
comp=Z,288nm,19.0s,baz=47,slow=38
**GAR Garm 32.44 256** P **P 20 38 14.7 -1.2**
**KIRV Kirov 32.84 301** LR LR 20 53 03.7
comp=Z,202nm,20.8s,baz=56,slow=39
**KIRV Kirov 32.84 301** *de*P **P 20 38 19.1 +0.1**

**SSLB Suanglung 32.99 165** P **P 20 38 19.8 -0.9**
SSLB IAmb IAmb 20 39 31.3
comp=Z,46nm,1.8s
**CHGR Chuyangaron 33.31 257** P **P 20 38 22.1 -1.4**
CHGR pmax pmax
comp=Z,40nm,0.9s
**CHGR Chuyangaron 33.31 257** P **P 20 38 22.1 -1.4**
**PRGR Permogore 33.43 307** *e*P **P 20 38 23.0 -1.1**
PRGR *e* 20 39 35.6
PRGR pmax pmax
comp=Z,24nm,0.7s
**TAPN Taplejung 33.76 222** *e*P **P 20 38 27.5 -0.2**
comp=Z,56nm,1.2s
**GUN Gumba 33.95 225** *e*P **P 20 38 29.8 +0.4**
comp=Z,40nm,0.9s
**SHL Shillong 33.96 214** P **P 20 38 28.0 -1.4**
SHL pmax pmax
comp=Z,13nm,1.0s
**SHL Shillong 33.96 214** P **P 20 38 28.0 -1.4**
SHL IAmb IAmb 20 39 38.0
comp=Z,13nm,1.0s
**JIRN Jiri 34.05 224** *e*P **P 20 38 30.8 +0.5**
**KKN Kakani 34.30 225** *e*P **P 20 38 32.8 +0.5**
comp=Z,79nm,0.8s
**ODAN Odare 34.32 222** *e*P **P 20 38 32.4 -0.1**
comp=Z,87nm,0.8s
**GKN Gorkha 34.36 226** *e*P **P 20 38 33.2 +0.4**
comp=Z,75nm,1.0s
**DANN Dangsing 34.42 228** *e*P **P 20 38 33.7 +0.3**
comp=Z,27nm,0.8s
**PKIN Phulchoki 34.44 225** *e*P **P 20 38 33.2 -0.4**
comp=Z,23nm,1.0s
**PKI Pulchoki 34.44 225** *e*P **P 20 38 33.8 +0.2**
comp=Z,59nm,1.4s
**DMN Daman 34.52 225** *e*P **P 20 38 34.9 +0.6**
comp=Z,50nm,0.9s
**RAMN Ramite 34.53 223** *e*P **P 20 38 33.8 -0.6**
**NIL Nilore 34.92 246** P **P 20 38 36.5 -0.9**
NIL pmax pmax
comp=Z,25nm,1.0s
**NIL Nilore 34.92 246** P **P 20 38 36.5 -0.9**
NIL IAmb IAmb 20 38 39.3
comp=Z,25nm,0.9s
**PYUN Piuthan 34.96 229** *e*P **P 20 38 38.3 +0.3**
comp=Z,44nm,0.8s
**KOLN Koldanda 34.99 228** *e*P **P 20 38 38.8 +0.5**
comp=Z,31nm,0.7s
**SHEM Shemya Is, Ala 35.08 69** LR LR 20 53 50.3
comp=Z,126nm,18.5s,baz=284,slow=38
**LVZ Lovozero 35.60 321** P **P 20 38 42.2 -0.8**
LVZ pmax pmax
comp=Z,242nm,2.0s
**LVZ Lovozero 35.60 321** P **P 20 38 42.2 -0.8**
**APA Apatity 36.17 320** ⇓*i*P P 20 38 53.2 +5.5
APA pmax pmax
comp=Z,14nm,0.9s
APA MLR MLR
comp=Z,800nm,14.0s
**KBL Kabul 36.43 252** P **P 20 38 48.2 -2.4**
KBL pmax pmax
comp=Z,8.0nm,0.9s
**KBL Kabul 36.43 252** P **P 20 38 48.2 -2.4**
**KLMR Klimovskoe 36.45 308** *e*P **P 20 38 48.6 -1.5**
KLMR pmax pmax
comp=Z,23nm,0.9s
**KLMR Klimovskoe 36.45 308** *e*P **P 20 38 48.7 -1.4**
KLMR AMP 20 38 51.6
comp=Z,23nm,0.9s
**GAMB Gambell 36.63 46** P **P 20 38 53.4 +1.8**
baz=295
**BELG Belogornoye 36.65 292** LR LR 20 55 25.7
comp=Z,284nm,21.4s,baz=45,slow=39
**BELG Belogornoye 36.65 292** *d i*P **P 20 38 52.1 +0.1**
BELG pmax pmax
comp=Z,12nm,1.0s
**SPB2 Spitsbergen Ar 36.91 340** P **P 20 38 51.4 -2.6**
**SPITS Spitsbergen Ar 36.91 340** P **P 20 38 52.2 -1.8**
SPITS pmax pmax
comp=Z,183nm,1.7s
**QIZ Qiongzhong 37.14 184** P **P 20 38 55.1 -1.3**
QIZ S **S 20 44 45.1 +2.8**
QIZ LR LR
comp=Z,530nm,13.1s
QIZ LR LR
comp=Z,570nm,17.2s
QIZ LR LR
comp=Z,630nm,10.8s
**TNA Tin City 37.36 42** P **P 20 38 58.3 +0.5**
TNA IAmb IAmb 20 39 01.4
comp=Z,20nm,0.8s
**TNA Tin City 37.36 42** P **P 20 39 00.5 +2.7**
baz=295,SNR=18
**KEV Kevo 37.48 325** P **P 20 38 58.2 -0.6**
KEV pmax pmax
comp=Z,33nm,1.1s
**KEV Kevo 37.48 325** P **P 20 38 58.2 -0.6**
KEV IAmb IAmb 20 39 11.9
comp=Z,33nm,1.1s
**ARCES ARCESS Array B 38.05 325** P **P 20 39 04.0 +0.3**
comp=Z,8.6nm,0.9s,baz=74,slow=8.7,SNR=20
ARCES PcP **PcP 20 41 19.0 +0.4**
comp=Z,2.7nm,0.7s,baz=65,slow=4.5,SNR=3.9
**ARCES ARCESS Array B 38.05 325** P **P 20 39 03.8 +0.1**
ARCES pmax pmax
comp=Z,77nm,1.7s
**ARCES ARCESS Array B 38.05 325** P **P 20 39 03.8 +0.1**
**CHTO Chiang Mai 38.63 200** P **P 20 39 07.2 -1.8**
CHTO pmax pmax
comp=Z,14nm,1.9s
**CHTO Chiang Mai 38.63 200** P **P 20 39 07.2 -1.8**
**SGF Sodankyl 38.63 322** P **P 20 39 09.8 +1.2**
SGF pmax pmax
comp=Z,27nm,1.0s
**ANM Nome 38.77 43** P **P 20 39 07.9 -1.9**
ANM pmax pmax
comp=Z,10.0nm,0.9s
**ANM Nome 38.77 43** P **P 20 39 07.8 -1.9**
**ANM Nome 38.77 43** P **P 20 39 12.3 +2.5**
baz=298
**CMAR Chiang Mai Arr 38.97 200** P **P 20 39 10.2 -1.7**
comp=Z,0.3nm,0.5s,baz=7.8,slow=8.1,SNR=6.1
CMAR PcP **PcP 20 41 22.2 +0.1**
comp=Z,0.5nm,0.3s,baz=317,slow=2.4,SNR=4.6
**CMAR Chiang Mai Arr 38.97 200** P **P 20 39 10.8 -1.1**
**CMAR Chiang Mai Arr 38.97 200** P **P 20 39 10.8 -1.1**
**NOR Nord 39.78 350** P **P 20 39 17.7 -0.3**
NOR pmax pmax
comp=Z,13nm,0.8s
**NOR Nord 39.78 350** *i* P **P 20 39 16.0 -2.0**
NOR IAmb IAmb 20 39 19.1
comp=Z,5.7nm,0.8s
**MOS Moscow 39.84 302** *e*P **P 20 39 16.6 -2.2**
MOS *e* 20 39 22.5
MOS *e*S **S 20 45 20.0 -2.4**
MOS pmax pmax
comp=Z,48nm,1.1s
**GEYT Alibeck 39.93 266** P **P 20 39 20.3 +0.5**
comp=Z,10nm,0.9s,baz=338,slow=3.5,SNR=9.6
**GEYT Alibeck 39.93 266** P **P 20 39 18.9 -0.9**
**GYA0B ALIBECK ARRAY 39.93 266** P **P 20 39 19.1 -0.8**
**OUL Oulu 39.98 319** P **P 20 39 20.8 +1.0**
OUL pmax pmax
comp=Z,22nm,2.0s
**HRA Herat 40.22 259** P **P 20 39 21.7 -0.8**
**VRH Novokhopyorsk 40.36 294** *e*P **P 20 39 22.5 -0.7**
VRH pmax pmax
comp=Z,50nm,0.8s
VRH MLR MLR
comp=Z,890nm,16.0s
**OBN Obninsk 40.69 301** ⇓*e*P **P 20 39 25.1 -0.7**
OBN *e* 20 40 58.6
OBN pmax pmax
comp=Z,14nm,1.3s
OBN MLR MLR
comp=Z,346nm,15.0s
**LPSR Galich'ya Gora 40.96 297** *e*P **P 20 39 27.3 -0.8**
LPSR pmax pmax
comp=Z,30nm,0.8s
LPSR MLR MLR
comp=Z,610nm,23.0s
**UBPT Khong Chiam 41.15 190** P **P 20 39 29.8 -0.2**
**VORR Voronezh 41.36 296** *e*P **P 20 39 33.3 +1.9**
VORR pmax pmax
comp=Z,30nm,0.4s
**VSR Storozhevoye 41.65 295** *e*P **P 20 39 33.0 -0.8**
VSR pmax pmax
comp=Z,30nm,0.9s
VSR MLR MLR
comp=Z,800nm,14.0s
**VORD Divnogorie 41.74 295** *e*P **P 20 39 34.1 -0.4**
VORD pmax pmax
comp=Z,20nm,0.7s
**FIA1 FINESS Array S 41.82 314** P **P 20 39 34.6 -0.4**
FIA1 IAmb IAmb 20 39 42.9
comp=Z,28nm,0.8s
**FINES FINESS Array B 41.82 314** P **P 20 39 35.7 +0.7**
comp=Z,19nm,0.8s,baz=59,slow=8.9,SNR=57
**FINES FINESS Array B 41.82 314** P **P 20 39 34.3 -0.7**
**GCSA Galena City Sc 41.83 40** P **P 20 39 37.6 +2.5**
baz=303
**TOLK Toolik Lake Re 42.08 33** P **P 20 39 37.5 +0.3**
**TOLK Toolik Lake Re 42.08 33** P **P 20 39 38.7 +1.6**
baz=304
**IMAR Indian Mountai 42.24 37** P **P 20 39 38.3 -0.1**
**MAK Makhachkala 42.41 280** *e*P P 20 39 34.1 -5.9
MAK *e*S S 20 45 51.6 -9.2
MAK *e*SSS SSS 20 49 36.8
MAK pmax pmax
comp=Z,345nm,1.4s
MAK MLR MLR
comp=Z,256nm,16.0s
**COLD Coldfoot 42.70 35** P **P 20 39 41.8 -0.3**
**COLD Coldfoot 42.70 35** P **P 20 39 44.0 +1.8**
baz=305
**H21K Melozitna Rive 42.74 37** P **P 20 39 41.5 -1.1**
**H21K Melozitna Rive 42.74 37** P **P 20 39 44.5 +1.9**
baz=305
**J20K Nowinta River 43.13 40** P **P 20 39 48.3 +2.6**
baz=305
**CHLP Challavanipeta 43.17 221** *e*P **P 20 39 46.2 -0.3**
**TTA Tatalina 43.17 42** P **P 20 39 45.6 -0.6**
TTA pmax pmax
comp=Z,26nm,1.9s
**TTA Tatalina 43.17 42** P **P 20 39 45.6 -0.6**
**TTA Tatalina 43.17 42** P **P 20 39 48.1 +2.0**
baz=305
**VSU Vasula 43.23 310** *de*P **P 20 39 46.3 -0.3**
VSU pmax pmax
comp=Z,92nm,1.9s
**VSU Vasula 43.23 310** *e*P **P 20 39 48.0 +1.4**
**I21K Tanana 43.30 38** P **P 20 39 47.3 +0.2**
**I21K Tanana 43.30 38** P **P 20 39 49.1 +2.1**
baz=306
**GOF Gofitskoye 43.46 286**⇑ *i*P **P 20 39 49.9 +1.3**
GOF pmax pmax
comp=Z,41nm,0.8s
**K20K Telida 43.64 41** P **P 20 39 52.0 +2.1**
baz=306
**DAG Danmarks Havn 43.73 345** P **P 20 39 52.0 +1.6**
DAG pmax pmax
comp=Z,12nm,1.3s
**DAG Danmarks Havn 43.73 345** *i* P **P 20 39 49.0 -1.4**
DAG IAmb IAmb 20 40 02.3
comp=Z,5.0nm,0.7s
**DAG Danmarks Havn 43.73 345** IAML 20 40 02.3
comp=Z,5.0nm,0.7s
**DAG Danmarks Havn 43.73 345** *i* S **P 20 39 49.5 -0.9**
**H23K Yukon River 43.74 36** P **P 20 39 51.5 +0.9**
**H23K Yukon River 43.74 36** P **P 20 39 52.7 +2.1**
baz=307
**MLY Manley 43.82 37** P **P 20 39 50.0 -1.3**
**MLY Manley 43.82 37** P **P 20 39 53.3 +2.0**
baz=307
**CHUM Lake Minchumin 43.96 39** P **P 20 39 54.7 +2.4**
baz=307
**DDFL Dedoflistskaro 44.19 280** P **P 20 39 58.6 +4.1**
**NCK Nalchik 44.19 284**⇑ *e*P **P 20 39 55.6 +1.1**
NCK pmax pmax
comp=Z,7.0nm,1.0s
**I23K Minto, Yukon-K 44.21 37** P **P 20 39 53.8 -0.5**
**I23K Minto, Yukon-K 44.21 37** P **P 20 39 56.5 +2.2**
baz=308,SNR=5.0
**H24K Noodor Dome 44.28 36** P **P 20 39 56.5 +1.6**
baz=308
**BPAW Bear Paw Mtn. 44.29 39** P **P 20 39 56.6 +1.6**
baz=307
**BMAR Burnt Mountain 44.31 33** P **P 20 39 54.5 -0.8**
**MTSE Matsula 44.32 312** *e*P **P 20 39 56.3 +1.1**
**CAST Castle Rocks 44.32 40** P **P 20 39 55.6 +0.3**
**CAST Castle Rocks 44.32 40** P **P 20 39 57.4 +2.1**
baz=307
**KVAR Kislovodsk Arr 44.37 285** LR LR 21 02 14.9
comp=Z,184nm,18.1s,baz=156,slow=41
**KIV Kislovodsk 44.38 285** ⇓P **P 20 39 57.3 +1.2**
**KIV Kislovodsk 44.38 285** *e*P **P 20 39 57.2 +1.2**
KIV pmax pmax
comp=Z,31nm,1.1s
**KIV Kislovodsk 44.38 285** P **P 20 39 55.4 -0.7**
KIV IAmb IAmb 20 39 58.4
comp=Z,24nm,0.9s
**KBZ Khabaz 44.41 284** P **P 20 39 57.3 +1.1**
comp=Z,3.4nm,0.9s,baz=76,slow=8.8,SNR=6.0
KBZ PcP **PP 20 41 39.7 +0.1**
comp=Z,6.2nm,0.8s,baz=65,slow=4.0,SNR=4.2
KBZ LR LR 21 02 42.2
comp=Z,203nm,18.0s,baz=22,slow=42
**KBZ Khabaz 44.41 284**⇑ *e*P **P 20 39 56.9 +0.7**
KBZ pmax pmax
comp=Z,5.0nm,0.9s
**ZEI Tsey 44.49 283** *e*P **P 20 39 55.5 -1.7**
ZEI pmax pmax
comp=Z,6.0nm,1.1s
**FYU Fort Yukon 44.66 34** P **P 20 39 57.9 0.0**
FYU IAmb IAmb 20 40 01.3
comp=Z,32nm,1.4s
**RPR Rampur 44.70 227** *e*P **P 20 39 58.8 +0.1**
**MDM Murphy Dome 44.70 37** P **P 20 39 56.9 -1.5**
**NEY Neytrino 44.83 284**⇓ *e*P **P 20 39 59.7 -0.1**
NEY pmax pmax
comp=Z,3.0nm,0.8s
**ONI Oni 44.87 283** P **P 20 40 00.2 +0.2**
ONI pmax pmax
comp=Z,6.0nm,0.9s
**ONI Oni 44.87 283** P **P 20 40 00.2 +0.2**
**COLA College 44.88 37**⇑ *e*P **P 20 40 01.3 +1.6**
COLA pmax pmax
comp=Z,6.0nm,0.8s
**TRF Thorofare Moun 44.94 39** P **P 20 40 02.7 +2.3**
baz=308
**SRSP Sriramsagar 45.02 228** *e*P **P 20 40 00.4 -0.9**
**MNK Minsk 45.11 305** *i* P **P 20 40 00.9 -0.7**
MNK *i* 20 41 38.1
MNK *i* PPP PPP 20 42 24.4
MNK *i* S **S 20 46 40.7 +0.6**
MNK pmax pmax
comp=E,2.0nm,0.9s
MNK pmax pmax
comp=Z,19nm,0.9s
MNK pmax pmax
comp=N,11nm,0.9s
MNK MLR MLR
comp=N,262nm,17.0s
MNK MLR MLR
comp=E,74nm,17.0s
MNK MLR MLR
comp=Z,460nm,17.0s
**MNK Minsk 45.11 305** *i* P **P 20 40 00.9 -0.7**
comp=E,2.0nm,0.9s
MNK *i* P **P 20 40 00.9 -0.7**
comp=N,11nm,0.9s
MNK *i* P **P 20 40 00.9 -0.7**
comp=Z,19nm,0.9s,baz=52
MNK *i* PcP PcP 20 41 30.6 -11
MNK *i* PP PP 20 41 38.2 -8.6
MNK *i* PPP PPP 20 42 24.4
MNK *i* S **S 20 46 40.7 +0.6**
MNK *i* SS **SS 20 50 04.3 +2.5**
MNK *i* SSS SSS 20 51 37.6
MNK *i* LQ LQ 20 56 24.6
MNK *i* LR LR 20 57 17.5
MNK *i* LRM MLR 21 00 47.6
comp=E,74nm,17.1s
MNK *i* LRM MLR 21 00 47.6
comp=N,262nm,17.1s
MNK *i* LRM MLR 21 00 47.6
comp=Z,460nm,17.1s
**IDID Didziasalis 45.13 306** *e*P **P 20 40 02.9 +1.2**
**PVM Polavaram 45.23 223** *e*P **P 20 40 02.6 -0.4**
**MCK McKinley 45.23 38** P **P 20 40 04.7 +2.1**
baz=309

**PRP Porcupine Dome 45.24 35** P **P** **20 40 02.9 +0.1**
**PRP Porcupine Dome 45.24 35** P **P** **20 40 04.9 +2.2**
baz=310
**IL31 45.27 36** P **P** **20 40 00.9 -1.8**
IL31 IAmb IAmb 20 40 29.8
comp=Z,20nm,1.4s
**ILAR Eielson Array 45.27 36** P **P** **20 40 04.4 +1.6**
comp=Z,4.4nm,0.9s,baz=302,slow=7.6,SNR=40
ILAR PcP **PcP** **20 41 43.2 +0.9**
comp=Z,3.2nm,0.8s,baz=308,slow=4.1,SNR=5.0
**ILAR Eielson Array 45.27 36** P **P** **20 40 01.1 -1.7**
**IIGN Ignalina 45.34 307** *e*P **P** **20 40 04.4 +1.0**
**NACGM Naroch 45.36 306** *i* P **P** **20 40 02.6 -1.0**
**HDA Harding Lake 45.48 37** P **P** **20 40 05.8 +1.3**
baz=310
**AKH Akhalkalaki 45.65 281** ⇑P **P** **20 40 05.4 -1.0**
**AKH Akhalkalaki 45.65 281** P **P** **20 40 05.3 -1.0**
**GNI Garni 45.83 279** ⇑*e*P **P** **20 40 09.4 +1.6**
GNI pmax pmax
comp=Z,14nm,1.5s
**GNI Garni 45.83 279** P **P** **20 40 07.0 -0.8**
GNI IAmb IAmb 20 40 43.1
comp=Z,40nm,1.6s
**A36M Sachs Harbour 46.02 21** P **P** **20 40 08.5 -0.2**
A36M IAmb IAmb 20 40 10.4
comp=Z,12nm,1.1s
**A36M Sachs Harbour 46.02 21** P **P** **20 40 09.2 +0.5**
baz=319,SNR=7.4
**MYLAV Mylavaram 46.06 224** *e*P **P** **20 40 08.5 -1.0**
**UPP Uppsala 46.11 316** *e*P **P** **20 40 09.7 +0.3**
**DHY Denali Highway 46.20 38** P **P** **20 40 09.7 -0.7**
**DHY Denali Highway 46.20 38** P **P** **20 40 11.7 +1.3**
baz=310
**NEEM North Greenlan 46.22 355** *i* P **P** **20 40 09.3 -1.2**
NEEM IAmb IAmb 20 40 11.4
comp=Z,5.4nm,0.8s
**NEEM North Greenlan 46.22 355** IAML 20 40 11.3
comp=Z,5.4nm,0.8s
**NEEM North Greenlan 46.22 355** *i* S **P** **20 40 09.6 -0.9**
**SOC Sochi 46.23 286** *e*P **P** **20 40 10.4 -0.2**
SOC *e* 20 41 56.5
SOC *e*PPP PPP 20 42 36.5
SOC *e*S **S** **20 46 57.9 +1.5**
SOC *e*SS **SS** **20 50 20.1 -1.2**
SOC *e*SSS SSS 20 51 18.5
SOC MLR MLR
comp=Z,424nm,16.0s
**CUPL Choutuppal 46.25 227** *e*P **P** **20 40 11.2 +0.2**
**HYBB Hyderabad (bro 46.29 227** *e*P **P** **20 40 11.1 -0.3**
**WAT6 Susitna Watana 46.39 39** P **P** **20 40 13.1 +1.2**
baz=311
**KARS Kars 46.42 281** P **P** **20 40 11.7 -0.6**
KARS pmax pmax
comp=Z,62nm,1.2s
**KARS Kars 46.42 281** P **P** **20 40 11.7 -0.6**
**KLRI Killari 46.53 230** *e*P **P** **20 40 12.5 -0.8**
**J26L Joseph Creek 46.53 35** P **P** **20 40 13.7 +0.8**
baz=312
**RIDG Independent Ri 46.62 37** P **P** **20 40 13.5 -0.1**
baz=312
**NJS Nagarjunasagar 46.77 226** *e*P **P** **20 40 14.6 -0.5**
**INK Inuvik 46.82 28** LR LR 21 02 54.9
comp=Z,135nm,21.6s,baz=320,slow=40
**INK Inuvik 46.82 28** P **P** **20 40 13.9 -1.1**
INK pmax pmax
comp=Z,14nm,1.3s
**INK Inuvik 46.82 28** P **P** **20 40 13.9 -1.1**
INK IAmb IAmb 20 40 17.3
comp=Z,14nm,1.3s
**INK Inuvik 46.82 28** P **P** **20 40 16.3 +1.4**
baz=316,SNR=8.7
**AKASG Malin Array Be 46.90 300** P **P** **20 40 15.7 -0.1**
comp=Z,4.6nm,0.7s,baz=44,slow=8.8,SNR=28
AKASG LR LR 21 02 03.0
comp=Z,268nm,18.1s,baz=40,slow=39
**AKASG Malin Array Be 46.90 300** *i* P **P** **20 40 15.6 -0.1**
AKASG pmax pmax
comp=Z,6.0nm,0.7s
**AKASG Malin Array Be 46.90 300** P **P** **20 40 15.0 -0.7**
**AKBB Malin Array Si 46.90 300***d i*P **P** **20 40 15.6 -0.2**
**AKBB Malin Array Si 46.90 300** P **P** **20 40 15.0 -0.7**
AKBB IAmb IAmb 20 40 23.6
comp=Z,13nm,1.1s
**KIEV Kiev 46.91 300** P **P** **20 40 14.0 -1.8**
**DOT Dot Lake 46.94 36** P **P** **20 40 15.5 -0.6**
DOT IAmb IAmb 20 40 34.3
comp=Z,9.7nm,0.8s
**EGAK Eagle 47.11 34** P **P** **20 40 14.9 -2.4**
EGAK IAmb IAmb 20 40 42.8
comp=Z,8.0nm,0.9s
**EGAK Eagle 47.11 34** P **P** **20 40 19.2 +1.9**
baz=313,SNR=6.4
**ADKI Addanki 47.15 224** *e*P **P** **20 40 17.6 -0.4**
**SRLM Srisailam 47.34 226** *e*P **P** **20 40 18.3 -1.3**
**NC405 NORSAR Array S 47.52 320** P **P** **20 40 20.5 0.0**
**NC303 NORSAR Array S 47.57 320** P **P** **20 40 19.6 -1.2**
**KDAK Kodiak Island 47.71 46** LR LR 21 03 22.7
comp=Z,160nm,18.8s,baz=342,slow=40
**NB201 NORSAR Array S 47.71 320** P **P** **20 40 21.2 -0.9**
**NB2 NORSAR Subarra 47.75 320** P **P** **20 40 22.4 +0.1**
comp=Z,25nm,0.8s,baz=48,slow=7.9
**NB2 NORSAR Subarra 47.75 320** P **P** **20 40 22.4 +0.1**
baz=48,slow=7.9
**NOA NORSAR Array B 47.75 320** P **P** **20 40 22.7 +0.4**
comp=Z,17nm,0.8s,baz=48,slow=7.5,SNR=87
NOA LR LR 21 02 12.5
comp=Z,287nm,18.1s,baz=40,slow=38
**NC204 NORSAR Array S 47.75 320** P **P** **20 40 22.8 +0.4**
**KLU Klutina 47.76 39** P **P** **20 40 24.4 +2.0**
baz=312
**NC602 NORSAR Array S 47.83 319** P **P** **20 40 22.3 -0.7**
**NORES NORESS Array B 47.83 319** P **P** **20 40 25.8 +2.9**
**RCLA Racherla 47.90 225** *e*P **P** **20 40 23.4 -0.6**
**L27K Beaver Creek, 48.08 36** P **P** **20 40 26.8 +1.9**
baz=314
**BCAR Beaver Creek A 48.09 36** P **P** **20 40 25.0 0.0**
**N25K Chitina, Valde 48.15 39** P **P** **20 40 27.6 +2.1**
baz=313
**DAWY Dawson 48.16 34** P **P** **20 40 24.2 -1.3**
**DAWY Dawson 48.16 34** P **P** **20 40 26.8 +1.3**
baz=315
**RES Resolute Bay 48.16 9** LR LR 21 02 34.3
comp=Z,191nm,18.3s,baz=6.5,slow=38
**RES Resolute Bay 48.16 9** P **P** **20 40 24.7 -0.6**
RES pmax pmax
comp=Z,28nm,2.0s
**RES Resolute Bay 48.16 9** P **P** **20 40 24.7 -0.6**
RES IAmb IAmb 20 40 35.9
comp=Z,28nm,2.0s
**C36M Paulatuk 48.31 23** P **P** **20 40 25.4 -1.1**
C36M IAmb IAmb 20 40 27.6
comp=Z,26nm,1.2s
**C36M Paulatuk 48.31 23** P **P** **20 40 26.6 +0.2**
baz=322,SNR=18
**GURO Guroymak-BITLI 48.45 280** P **P** **20 40 27.3 -0.9**
**M27K Edge Creek, AK 48.55 37** P **P** **20 40 28.3 -0.4**
M27K IAmb IAmb 20 41 34.3
comp=Z,26nm,1.6s
**M27K Edge Creek, AK 48.55 37** P **P** **20 40 30.5 +1.9**
baz=314
**SIRT Sirnak 48.98 278** P **P** **20 40 31.7 -0.5**
**SORM Soroca 49.03 298** ⇑P **P** **20 40 32.2 -0.1**
**SORM Soroca 49.03 298** P **P** **20 40 32.2 -0.1**
**URV Uravakonda 49.04 227** *e*P **P** **20 40 31.8 -0.9**
**HORU Horodok 49.24 300** P **P** **20 40 33.7 -0.2**
**KONO Kongsberg 49.29 319***ce*P **P** **20 40 34.9 +0.8**
KONO pmax pmax
comp=Z,14nm,1.7s
**KONO Kongsberg 49.29 319** P **P** **20 40 33.6 -0.5**
KONO IAmb IAmb 20 40 35.7
comp=Z,15nm,1.0s
**GUMO Guam 49.37 136** LR LR 20 59 56.8
comp=Z,115nm,21.6s,baz=120,slow=34
**SCO Scoresbysund 49.46 342** P **P** **20 40 35.0 -0.3**
SCO pmax pmax
comp=Z,57nm,1.9s
**SCO Scoresbysund 49.46 342** P **P** **20 40 35.0 -0.3**
**BARN Barnard Glacie 49.54 38** P **P** **20 40 35.3 -1.0**
BARN IAmb IAmb 20 41 01.5
comp=Z,18nm,1.0s
**MILM Milestii Mici 49.63 297** ⇑P **P** **20 40 36.7 -0.2**
**MILM Milestii Mici 49.63 297** P **P** **20 40 36.6 -0.2**
**DEL Delary 49.85 314** *e*P **P** **20 40 38.7 +0.3**
**SUMG Summit 49.93 349** P **P** **20 40 38.3 -1.0**
SUMG pmax pmax
comp=Z,28nm,1.5s
**SUMG Summit 49.93 349** *i* P **P** **20 40 40.0 +0.7**
SUMG IAmb IAmb 20 40 48.9
comp=Z,2.5nm,0.7s
**SUMG Summit 49.93 349** P **P** **20 40 38.3 -1.0**
SUMG IAmb IAmb 20 40 41.6
comp=Z,28nm,1.5s
**LVV L'vov 49.97 302** *e*P **P** **20 40 40.4 +0.9**
**KSV Kosov 50.51 300** P **P** **20 40 44.6 +1.0**
**PRAR RASCA 50.60 299** ⇑P **P** **20 40 45.1 +0.8**
**KWP Kalwaria Pacla 50.72 303** P **P** **20 40 44.4 -0.8**
KWP pmax pmax
comp=Z,244nm,1.3s
**KWP Kalwaria Pacla 50.72 303** P **P** **20 40 44.4 -0.8**
**VLDR Vladesti 50.73 296** ⇑P **P** **20 40 46.4 +1.1**
**GIRR Girov 50.75 298** ⇑P **P** **20 40 46.2 +0.8**
**UOSS Minazif 50.84 256** P **P** **20 40 45.3 -1.0**
UOSS IAmb IAmb 20 40 53.0
comp=Z,13nm,1.1s
**BUR08 Bucovina Ar. S 50.91 300** P **P** **20 40 46.1 -0.6**
BUR08 IAmb IAmb 20 41 00.6
comp=Z,12nm,1.0s
**BURAR Bucovina Array 50.92 299** ⇓P **P** **20 40 47.3 +0.5**
**BURAR Bucovina Array 50.92 299** P **P** **20 40 45.1 -1.7**
BURAR pmax pmax
comp=Z,11nm,1.0s
**BURAR Bucovina Array 50.92 299** P **P** **20 40 46.6 -0.2**
**TESR Tescani 50.98 298** ⇑P **P** **20 40 47.9 +0.7**
**M31M Drury Creek, Y 51.08 34** P **P** **20 40 47.5 -0.2**
M31M IAmb IAmb 20 40 50.5
comp=Z,12nm,1.1s
**M31M Drury Creek, Y 51.08 34** P **P** **20 40 49.5 +1.8**
baz=319,SNR=9.1
**MYLDM Lahad Datu 51.11 172** P **P** **20 40 48.4 0.0**
**FARO Faro, Yukon 51.38 33** P **P** **20 40 51.6 +1.6**
baz=319
**VRI Vrincioaia 51.40 297** ⇑P **P** **20 40 49.7 -0.7**
**VRI Vrincioaia 51.40 297** P **P** **20 40 49.6 -0.7**
**PLOR Plostina 51.45 297** ⇓P P 20 40 55.8 +5.0
**UZH Uzhgorod 51.61 302** *e*P **P** **20 40 56.5 +4.7**
UZH *e* 20 41 02.0
**BNN Bunyan 51.62 285** P **P** **20 40 52.3 +0.1**
BNN IAmb IAmb 20 42 07.7
comp=Z,24nm,1.0s
**TRSU Trosnyk 51.67 301** P **P** **20 40 53.5 +1.2**
**MMPY Sheldon Lake, 51.70 32** P **P** **20 40 53.9 +1.5**
baz=320
**ARCR ARCALIA 51.71 300** ⇓P **P** **20 40 54.8 +2.1**
**BMR Baia Mare 51.71 301** ⇑P **P** **20 40 54.3 +1.7**
**BMR Baia Mare 51.71 301** P **P** **20 40 54.5 +1.9**
BMR pmax pmax
comp=Z,22nm,0.8s
**CRVS Cervenica-Dubn 51.81 303** *e*P **P** **20 40 54.2 +0.8**
**CRVS Cervenica-Dubn 51.81 303** *e*P **P** **20 40 54.2 +0.8**
**TRPA Tarpa 51.85 302** ⇑P **P** **20 40 54.9 +1.3**
**DOPR Dopca 51.99 298** ⇓P **P** **20 40 56.5 +1.7**
**MLR Muntele Rosu 52.05 297** ⇑P **P** **20 40 56.9 +1.6**
**MLR Muntele Rosu 52.05 297** LR LR 21 05 09.7
comp=Z,350nm,18.7s,baz=46,slow=38
**MLR Muntele Rosu 52.05 297** P **P** **20 40 55.1 -0.2**
MLR pmax pmax
comp=Z,42nm,1.8s
**MLR Muntele Rosu 52.05 297** P **P** **20 40 55.1 -0.2**
MLR IAmb IAmb 20 41 04.0
comp=Z,42nm,1.8s
**BR131 Keskin Array S 52.17 287***d i*P **P** **20 40 57.1 +0.7**
**BR131 Keskin Array S 52.17 287** P **P** **20 40 55.8 -0.6**
**BRTR Keskin Array B 52.17 287** P **P** **20 40 57.4 +1.0**
comp=Z,4.5nm,0.8s,baz=74,slow=4.0,SNR=23
**BRTR Keskin Array B 52.17 287** P **P** **20 40 56.0 -0.4**
**VOIR 52.53 298** ⇑P **P** **20 41 00.4 +1.5**
**VOIR 52.53 298** P **P** **20 41 00.3 +1.5**
**LANS Liptovska Anna 52.57 304** *e*P **P** **20 41 00.9 +1.9**
**LANS Liptovska Anna 52.57 304** *e*P **P** **20 41 00.9 +1.9**
**OKC Ostrava-Krasne 52.68 306** AMS AMS 21 05 10.0
comp=Z,600nm,16.4s
**DRGR 52.71 300** ⇑P **P** **20 41 00.9 +0.8**
**DRGR 52.71 300** P **P** **20 41 01.0 +0.8**
DRGR pmax pmax
comp=Z,6.0nm,0.9s
**ARR Arges 52.79 298** ⇑P **P** **20 41 02.7 +2.0**
**KSP Ksiaz 52.80 308** P **P** **20 41 02.3 +1.7**
KSP pmax pmax
comp=Z,14nm,1.0s
**MORC Moravsky Berou 53.00 306** ⇓P **P** **20 41 03.3 +1.0**
**MORC Moravsky Berou 53.00 306** P **P** **20 41 01.8 -0.4**
MORC pmax pmax
comp=Z,8.0nm,1.2s
**MORC Moravsky Berou 53.00 306** P **P** **20 41 01.8 -0.4**
**MORC Moravsky Berou 53.00 306** *e*P **P** **20 41 03.0 +0.8**
**OSTC Ostas 53.03 307** *e*P **P** **20 41 06.8 +4.4**
**CHVC Chvalec 53.08 308** *e*P **P** **20 41 03.7 +0.9**
**P33M Teslin, Yukon 53.09 34** P **P** **20 41 02.8 0.0**
**P33M Teslin, Yukon 53.09 34** P **P** **20 41 04.4 +1.6**
baz=321,SNR=6.1
**KRLC Kraliky 53.13 307** *e*P **P** **20 41 04.3 +1.1**
**DPC Dobruska-Polom 53.14 307** P **P** **20 41 04.7 +1.5**
DPC pmax pmax
comp=Z,15nm,1.0s
**DPC Dobruska-Polom 53.14 307** *e*P **P** **20 41 04.7 +1.5**
**UPC Upice 53.16 308** *e*P **P** **20 41 04.4 +1.1**
**PSZ Piszkesteto 53.25 303** ⇑P **P** **20 41 04.9 +0.8**
**PSZ Piszkesteto 53.25 303** P **P** **20 41 03.2 -0.9**
PSZ pmax pmax
comp=Z,16nm,1.3s
**PSZ Piszkesteto 53.25 303** P **P** **20 41 03.2 -0.9**
PSZ IAmb IAmb 20 41 06.8
comp=Z,16nm,1.3s
**VYHS Vyhne 53.33 304** *e*P **P** **20 41 06.2 +1.6**
**VYHS Vyhne 53.33 304** *e*P **P** **20 41 06.2 +1.6**
**JAVC Velka Javorina 53.60 305** *e*P **P** **20 41 08.5 +1.8**
**GZR Gura Zlata 53.68 299** ⇑P **P** **20 41 07.8 +0.5**
**VRAC Vranov 53.77 306** ⇑P **P** **20 41 08.1 +0.3**
**VRAC Vranov 53.77 306** LR LR 21 06 10.1
comp=Z,264nm,21.2s,baz=46,slow=38
**VRAC Vranov 53.77 306** P **P** **20 41 08.1 +0.3**
**VRAC Vranov 53.77 306** *e*P **P** **20 41 08.8 +1.0**
**BRG Berggiesshubel 53.80 309** *e*P **P** **20 41 08.8 +0.8**
BRG Amp 20 41 10.0
comp=Z,9.4nm,1.0s
BRG *ex* x 20 41 21.1
BRG Amp 20 41 22.5
comp=Z,7.4nm,1.0s
BRG Amp 21 06 19.0
comp=N,0.4nm,15.3s
BRG Amp 21 06 23.0
comp=Z,0.7nm,11.1s
BRG Amp 21 06 27.0
comp=E,0.5nm,15.3s
**BRG Berggiesshubel 53.80 309** *e*P **P** **20 41 08.8 +0.8**
BRG *e* 20 41 21.1
BRG pmax pmax
comp=Z,9.0nm,1.0s
BRG MLR MLR
comp=N,420nm,15.3s
BRG MLR MLR
comp=Z,700nm,11.1s
BRG MLR MLR
comp=E,460nm,15.3s
**CLL Collm 53.89 310** ⇓*i*P **P** **20 41 08.8 +0.1**
CLL *i* 20 41 18.0
CLL pmax pmax
comp=Z,10.0nm,1.0s
**CLL Collm 53.89 310** ⇓*i*P **P** **20 41 08.8 +0.1**
comp=Z,10.0nm,1.0s
CLL *i* (sP) **sP** **20 41 18.0 +3.0**
CLL *e*(SS) 20 52 54.0
**SMOL Smolenice 53.96 305** *e*P **P** **20 41 11.0 +1.8**
**SMOL Smolenice 53.96 305** *e*P **P** **20 41 11.0 +1.8**
**KRUC Moravsky 54.03 306** *e*P **P** **20 41 10.9 +1.1**
**BZS Buzias 54.09 300** ⇓P **P** **20 41 11.0 +0.8**
**BZS Buzias 54.09 300** P **P** **20 41 10.9 +0.8**
**PRU Pruhonice 54.19 308** *e*P **P** **20 41 11.9 +1.1**
PRU AMS AMS 21 06 20.0
comp=Z,500nm,16.6s
**HERR Herculane 54.23 299** ⇓P **P** **20 41 12.3 +1.1**
**BORG Borgarnes 54.28 337** LR LR 21 06 21.9
comp=Z,130nm,18.7s,baz=32,slow=38
**PUNG Punghina 54.41 298** ⇓P **P** **20 41 14.1 +1.6**
**NKC Novy Kostel 54.92 309** *e*P **P** **20 41 17.4 +1.2**
**MORH Mrgy, Hungar 55.07 302** ⇓P **P** **20 41 17.8 +0.5**
**CONA Conrad Observa 55.11 305** *i* P **P** **20 41 19.4 +1.8**
comp=Z,10nm,1.3s
**CKRC Cesky Krumlov 55.15 307** *e*P **P** **20 41 18.6 +0.7**
**KHC Kasperske Hory 55.24 308** P **P** **20 41 18.2 -0.4**
KHC pmax pmax
comp=Z,10.0nm,1.0s
**KHC Kasperske Hory 55.24 308** *e*P **P** **20 41 19.9 +1.3**
KHC *ep*P **sP** **20 41 28.2 +3.3**
**KHC Kasperske Hory 55.24 308** P **P** **20 41 17.8 -0.7**
KHC IAmb IAmb 20 41 20.4
comp=Z,9.6nm,1.0s
**FRGS Fruska Gora 55.29 301** ⇓P **P** **20 41 18.5 -0.4**
**TOLI2 Tolitoli 55.34 170** P **P** **20 41 19.2 -0.3**
**GEC2 GERESS Array S 55.40 307** P **P** **20 41 18.9 -0.9**
**GERES GERESS Array B 55.40 307** P **P** **20 41 20.6 +0.8**
comp=Z,3.1nm,0.8s,baz=50,slow=7.3,SNR=22
**GERES GERESS Array B 55.40 307** P **P** **20 41 19.7 -0.1**
**VTS Vitosha 55.48 296** ⇓P **P** **20 41 20.3 -0.1**
**VTS Vitosha 55.48 296** P **P** **20 41 20.0 -0.5**
VTS pmax pmax
comp=Z,12nm,0.9s
**VTS Vitosha 55.48 296** P **P** **20 41 20.0 -0.5**
VTS IAmb IAmb 20 41 22.4
comp=Z,12nm,0.9s
**ARSA Arzberg 55.76 305** *i* P **P** **20 41 24.2 +1.8**
comp=Z,8.1nm,1.1s
**CSS Mathiatis 55.84 283** P **P** **20 41 21.6 -1.4**
CSS IAmb IAmb 20 41 26.6
comp=Z,19nm,1.0s
**GRF Grafenberg Arr 55.85 310** *e*P **P** **20 41 24.0 +1.1**
comp=Z,19nm,1.3s,baz=36,slow=6.2
**MOA Molln 55.89 306** *e*P **P** **20 41 24.6 +1.4**
comp=Z,9.2nm,1.0s,SNR=5.3
**GSI Gunungsitoli 55.98 198** P **P** **20 41 22.9 -1.2**
GSI IAmb IAmb 20 41 24.4
comp=Z,14nm,1.0s
**MRSI Marisa 56.09 168** P P 20 41 30.3 +5.4
comp=Z,20nm,0.9s
**MMAI Mount Meron Ar 56.16 280** LR LR 21 06 41.5
comp=Z,70nm,18.8s,baz=218,slow=37
**YKA Yellowknife Ar 56.17 24** P **P** **20 41 24.9 -0.1**
comp=Z,3.4nm,0.9s,baz=330,slow=7.1,SNR=31
**YKA Yellowknife Ar 56.17 24** P **P** **20 41 24.3 -0.7**
**SOKA Soboth 56.41 305** *i* P **P** **20 41 28.1 +1.1**
comp=Z,14nm,1.3s
**BKNI Bangkinang 56.41 193** P **P** **20 41 26.5 -0.7**
**SFJD Kangerlussuaq 56.46 352** LR LR 21 04 55.1
comp=Z,87nm,21.4s,baz=11,slow=35
**DY2G Dye2 56.59 350** *i* P **P** **20 41 27.2 -1.0**
DY2G IAML 20 42 14.7
comp=Z,6.0nm,0.6s
**OBKA Obir 56.76 305** *e*P **P** **20 41 31.1 +1.6**
comp=Z,19nm,0.8s,SNR=14
**KBA Koelnbreinsper 56.88 306** *e*P **P** **20 41 32.2 +1.8**
comp=Z,14nm,0.9s,SNR=10
**EKA Eskdalemuir Ar 57.07 322** LR LR 21 08 59.6
comp=Z,199nm,18.8s,baz=3.0,slow=39
**EKA Eskdalemuir Ar 57.07 322** P **P** **20 41 31.7 +0.2**
**MYKA Terra Mystica 57.08 306** *e*P **P** **20 41 33.2 +1.4**
comp=Z,13nm,0.7s,SNR=4.5
**ESK Eskdalemuir 57.10 322** P **P** **20 41 31.4 -0.3**
ESK pmax pmax
comp=Z,178nm,2.0s
**ESK Eskdalemuir 57.10 322** P **P** **20 41 31.4 -0.3**
**GHAJ Ghor Haditha 57.37 279** P **P** **20 41 33.3 -0.6**
GHAJ IAmb IAmb 20 41 35.2
comp=Z,8.3nm,0.7s
**WATA Walderalm 57.48 308** *e*P **P** **20 41 35.8 +1.2**
comp=Z,15nm,1.2s,SNR=5.0
**ABTA Abfaltersbach 57.50 307** *e*P **P** **20 41 35.9 +1.1**
comp=Z,5.1nm,0.9s
**WTTA Wattenberg 57.50 307** *e*P **P** **20 41 36.3 +1.4**
comp=Z,15nm,1.0s,SNR=8.1
**MOTA Moosalm 57.68 308** *i* P **P** **20 41 37.5 +1.4**
comp=Z,15nm,1.3s,SNR=6.0
**SQTA Sankt Quirin 57.73 308** *i* P **P** **20 41 37.8 +1.4**
comp=Z,19nm,1.5s
**STAL STALIGIAL 57.78 306** P **P** **20 41 36.0 -0.7**
STAL IAmb IAmb 20 41 37.8
comp=Z,19nm,0.9s
**RAYN Ar Rayn 57.86 265** P **P** **20 41 37.0 -0.5**
RAYN pmax pmax
comp=Z,14nm,0.9s
**RAYN Ar Rayn 57.86 265** P **P** **20 41 37.0 -0.5**
RAYN IAmb IAmb 20 41 38.5
comp=Z,14nm,0.9s
**FETA Feichten 58.09 308** *i* P **P** **20 41 40.6 +1.6**
comp=Z,13nm,1.2s
**CTI Castel Tesino 58.42 307** P **P** **20 41 41.0 -0.3**
CTI pmax pmax
comp=Z,12nm,0.9s
**CTI Castel Tesino 58.42 307** P **P** **20 41 41.0 -0.3**
CTI IAmb IAmb 20 41 42.3
comp=Z,12nm,0.9s
**DAVOX Davos/Dischmat 58.65 308** LR LR 21 08 21.6
comp=Z,186nm,18.5s,baz=46,slow=37
**SIJI Sorong 58.94 158** LR LR 21 07 10.3
comp=Z,157nm,20.1s,baz=298,slow=36
**EIL Elat 58.96 278** LR LR 21 09 51.9
comp=Z,61nm,18.4s,baz=333,slow=39
**TUE Stuetta 59.12 308** P **P** **20 41 46.2 0.0**
**MASI Maura Aman, Be 59.69 192** P **P** **20 41 50.7 +0.5**
comp=Z,67nm,1.3s
**FRB Frobisher Bay 60.40 0** LR LR 21 08 44.7
comp=Z,108nm,18.2s,baz=326,slow=37
**AQU L'Aquila 60.45 303** P **P** **20 41 55.1 -0.2**
AQU pmax pmax
comp=Z,40nm,0.8s
**AQU L'Aquila 60.45 303** P **P** **20 41 55.1 -0.2**
**OSSC Osservatorio P 60.55 305** P **P** **20 41 55.4 -0.5**
**BNI Bardonecchia 61.40 309** P **P** **20 42 01.1 -0.6**
BNI pmax pmax
comp=Z,48nm,1.6s
**BNI Bardonecchia 61.40 309** P **P** **20 42 01.1 -0.6**
**FCC Fort Churchill 63.49 15** P **P** **20 42 15.1 -0.1**
FCC pmax pmax
comp=Z,36nm,1.8s
**FCC Fort Churchill 63.49 15** P **P** **20 42 15.1 -0.1**
**LLLB Lillooet 64.53 35** P **P** **20 42 21.9 -0.4**
LLLB IAmb IAmb 20 42 26.0
comp=Z,22nm,1.3s
**FFC Flin Flon 65.98 21** P **P** **20 42 31.9 +0.3**
FFC pmax pmax
comp=Z,4.0nm,0.9s
**FFC Flin Flon 65.98 21** P **P** **20 42 31.9 +0.3**
**B05A Bryant 66.49 36** P **P** **20 42 37.2 +2.2**
baz=330
**B08A Colville Reser 67.30 34** P **P** **20 42 40.0 -0.3**
B08A IAmb IAmb 20 42 42.8
comp=Z,12nm,1.1s
**KEST Kesra 67.62 301** LR LR 21 15 55.1
comp=Z,146nm,18.0s,baz=225,slow=39
**NEW Newport 68.08 33** LR LR 21 16 04.9
comp=Z,199nm,19.5s,baz=338,slow=39
**HAWA Hanford 68.97 36** P **P** **20 42 50.9 +0.2**
**SCHQ Schefferville 69.34 359** P **P** **20 42 53.5 +0.6**
comp=Z,11nm,0.8s,baz=18,slow=6.5,SNR=22
**SCHQ Schefferville 69.34 359** P **P** **20 42 53.1 +0.3**
SCHQ IAmb IAmb 20 42 54.2
comp=Z,9.7nm,0.8s
**I05D Terrebonne, OR 70.18 38** P **P** **20 43 00.4 +2.2**
baz=332
**I04A Tendick Farm, 70.28 39** P **P** **20 43 00.7 +1.8**
baz=331
**ESDC Sonseca Array 70.31 313** P **P** **20 42 59.8 +0.7**
comp=Z,4.9nm,0.8s,baz=29,slow=6.6,SNR=18
ESDC LR LR 21 17 35.3
comp=Z,241nm,19.7s,baz=321,slow=39
**ESDC Sonseca Array 70.31 313** P **P** **20 42 58.0 -1.2**
ESDC IAmb IAmb 20 43 01.3
comp=Z,8.8nm,1.1s
**MSO Missoula 70.32 32** P **P** **20 42 58.7 -0.4**
**MSO Missoula 70.32 32** P **P** **20 43 01.6 +2.4**
baz=335,SNR=11
**PINE Pine Mountain 70.80 38** P **P** **20 43 02.9 +0.7**
**J04D Umpqua Nationa 70.87 39** P **P** **20 43 03.5 +0.9**
**J04D Umpqua Nationa 70.87 39** P **P** **20 43 05.1 +2.4**
baz=331,SNR=8.0
**BMO Blue Mountains 71.06 35** P **P** **20 43 04.5 +0.8**
BMO pmax pmax
comp=Z,28nm,1.0s
**BMO Blue Mountains 71.06 35** P **P** **20 43 04.5 +0.8**
**J05D Fort Rock, OR 71.14 38** P **P** **20 43 07.0 +2.8**
baz=332,SNR=7.2
**PLID Pearl Lake 71.26 34** P **P** **20 43 06.3 +1.3**
**ULM Lac du Bonnet 71.40 19** LR LR 21 17 10.3
comp=Z,110nm,18.1s,baz=318,slow=38
**PMG Port Moresby 71.49 143** LR LR 21 14 52.3
comp=Z,152nm,19.9s,baz=324,slow=36

| | | | | | | |
|---|---|---|---|---|---|---|
| L04D | Klamath Falls | 71.70 | 40 | P | P | 20 43 08.9 +1.3 |
| L04D | Klamath Falls | 71.70 | 40 | P | P | 20 43 09.5 +1.9 |
| | baz=332,SNR=10 | | | | | |
| DLMT | Dillon | 72.04 | 31 | P | P | 20 43 10.9 +1.2 |
| DLMT | | | | IAmb | IAmb | 20 43 12.5 |
| | comp=Z,17nm,1.0s | | | | | |
| BOZ | Bozeman (W) | 72.11 | 31 | P | P | 20 43 10.9 +0.9 |
| BOZ | | | | pmax | pmax | |
| | comp=Z,5.0nm,1.0s | | | | | |
| BOZ | Bozeman (W) | 72.11 | 31 | P | P | 20 43 10.9 +0.9 |
| BOZ | Bozeman (W) | 72.11 | 31 | P | P | 20 43 11.9 +1.8 |
| | baz=336,SNR=5.6 | | | | | |
| M02C | Callahan | 72.23 | 40 | P | P | 20 43 12.3 +1.6 |
| M02C | Callahan | 72.23 | 40 | P | P | 20 43 13.3 +2.6 |
| | baz=331,SNR=7.0 | | | | | |
| M04C | Macdoel | 72.25 | 39 | P | P | 20 43 12.8 +1.8 |
| | baz=332,SNR=7.0 | | | | | |
| N02D | Trinity Center | 72.65 | 40 | P | P | 20 43 14.6 +1.4 |
| N02D | | | | IAmb | IAmb | 20 43 16.5 |
| | comp=Z,18nm,0.8s | | | | | |
| N02D | Trinity Center | 72.65 | 40 | P | P | 20 43 15.5 +2.3 |
| | baz=332,SNR=9.6 | | | | | |
| MOD | Modoc Plateau | 72.68 | 38 | P | P | 20 43 14.9 +1.4 |
| WVOR | Wild Horse Val | 72.78 | 37 | P | P | 20 43 15.3 +1.2 |
| WVOR | | | | pmax | pmax | |
| | comp=Z,12nm,1.0s | | | | | |
| WVOR | Wild Horse Val | 72.78 | 37 | P | P | 20 43 15.3 +1.2 |
| WVOR | | | | IAmb | IAmb | 20 43 17.3 |
| | comp=Z,12nm,1.0s | | | | | |
| MFID | Camas Ranch | 72.82 | 35 | P | P | 20 43 15.7 +1.4 |
| MFID | | | | IAmb | IAmb | 20 43 17.3 |
| | comp=Z,23nm,1.1s | | | | | |
| HLID | Hailey | 73.13 | 34 | P | P | 20 43 17.3 +1.1 |
| HLID | | | | IAmb | IAmb | 20 43 19.0 |
| | comp=Z,12nm,1.3s | | | | | |
| HLID | Hailey | 73.13 | 34 | P | P | 20 43 18.3 +2.1 |
| | baz=335,SNR=7.8 | | | | | |
| H17A | Grant Village | 73.51 | 31 | P | P | 20 43 22.0 +3.5 |
| | baz=337 | | | | | |
| ORV | Oroville | 74.33 | 40 | P | P | 20 43 23.2 +0.1 |
| ORV | | | | pmax | pmax | |
| | comp=Z,10.0nm,1.1s | | | | | |
| ORV | Oroville | 74.33 | 40 | P | P | 20 43 23.2 +0.1 |
| ORV | | | | IAmb | IAmb | 20 43 25.0 |
| | comp=Z,10.0nm,1.1s | | | | | |
| EYMN | Ely | 74.36 | 16 | P | P | 20 43 21.4 -1.7 |
| | baz=347 | | | | | |
| BEKR | Beckworth | 74.47 | 39 | P | P | 20 43 24.9 +0.8 |
| BEKR | | | | IAmb | IAmb | 20 43 26.8 |
| | comp=Z,22nm,1.2s | | | | | |
| DRLN | Deer Lake | 74.58 | 353 | P | P | 20 43 24.3 0.0 |
| FITZ | Fitzroy Crossi | 74.86 | 167 | P | P | 20 43 25.1 -1.1 |
| | comp=Z,2.7nm,0.8s,baz=126,slow=4.9,SNR=3.4 | | | | | |
| BMN | Battle Mountai | 75.05 | 37 | P | P | 20 43 28.8 +1.4 |
| BMN | | | | pmax | pmax | |
| | comp=Z,22nm,1.3s | | | | | |
| BMN | Battle Mountai | 75.05 | 37 | P | P | 20 43 28.8 +1.4 |
| BMN | | | | IAmb | IAmb | 20 43 30.7 |
| | comp=Z,22nm,1.3s | | | | | |
| PD31 | Pinedale Array | 75.29 | 30 | P | P | 20 43 28.9 0.0 |
| PDAR | Pinedale Array | 75.29 | 30 | P | P | 20 43 29.8 +0.9 |
| | comp=Z,2.0nm,0.7s,baz=1.1,slow=2.7,SNR=14 | | | | | |
| PDAR | | | | LR | LR | 21 20 51.9 |
| | comp=Z,92nm,21.7s,baz=342,slow=39 | | | | | |
| PDAR | Pinedale Array | 75.29 | 30 | P | P | 20 43 29.0 +0.2 |
| ELK | Elko | 75.42 | 35 | LR | LR | 21 20 14.4 |
| | comp=Z,153nm,21.1s,baz=329,slow=38 | | | | | |
| ELK | Elko | 75.42 | 35 | P | P | 20 43 31.0 +1.4 |
| ELK | | | | pmax | pmax | |
| | comp=Z,18nm,1.1s | | | | | |
| ELK | Elko | 75.42 | 35 | P | P | 20 43 31.0 +1.4 |
| ELK | | | | IAmb | IAmb | 20 43 32.9 |
| | comp=Z,18nm,1.1s | | | | | |
| RSSD | Black Hills | 75.50 | 26 | P | P | 20 43 31.7 +1.7 |
| RSSD | | | | pmax | pmax | |
| | comp=Z,7.0nm,0.8s | | | | | |
| F36A | Milaca | 76.05 | 18 | P | P | 20 43 32.7 -0.1 |
| CMB | Columbia Colle | 76.08 | 40 | P | P | 20 43 33.8 +0.6 |
| CMB | | | | pmax | pmax | |
| | comp=Z,31nm,1.8s | | | | | |
| CMB | Columbia Colle | 76.08 | 40 | P | P | 20 43 33.8 +0.6 |
| CMB | | | | IAmb | IAmb | 20 43 36.0 |
| | comp=Z,31nm,1.8s | | | | | |
| NVAR | Mina Array Bea | 76.47 | 39 | P | P | 20 43 37.5 +1.9 |
| | comp=Z,9.3nm,0.8s,baz=307,slow=4.1,SNR=53 | | | | | |
| NVAR | Mina Array Bea | 76.47 | 39 | P | P | 20 43 37.1 +1.5 |
| NV11 | Mina Array Sit | 76.52 | 38 | P | P | 20 43 37.1 +1.3 |
| NV11 | | | | IAmb | IAmb | 20 43 38.6 |
| | comp=Z,12nm,1.1s | | | | | |
| DUG | Dugway, Tooele | 76.69 | 34 | P | P | 20 43 38.3 +1.6 |
| DUG | | | | pmax | pmax | |
| | comp=Z,19nm,1.1s | | | | | |
| DUG | Dugway, Tooele | 76.69 | 34 | P | P | 20 43 38.3 +1.6 |
| DUG | | | | IAmb | IAmb | 20 43 39.9 |
| | comp=Z,19nm,1.1s | | | | | |
| DUG | Dugway, Tooele | 76.69 | 34 | P | P | 20 43 38.8 +2.1 |
| | baz=336,SNR=15 | | | | | |
| NLU | North Lily Min | 77.13 | 33 | P | P | 20 43 40.7 +1.3 |
| NLU | | | | IAmb | IAmb | 20 43 42.2 |
| | comp=Z,18nm,1.0s | | | | | |
| R11A | Troy Canyon, C | 77.47 | 37 | P | P | 20 43 42.6 +1.4 |
| R11A | | | | IAmb | IAmb | 20 43 44.0 |
| | comp=Z,12nm,1.1s | | | | | |
| R11A | Troy Canyon, C | 77.47 | 37 | P | P | 20 43 42.9 +1.6 |
| | baz=335,SNR=16 | | | | | |
| PQI | Presque Isle | 77.51 | 0 | P | P | 20 43 41.6 +0.5 |
| WB0 | Warramunga Arr | 77.95 | 159 | P | P | 20 43 42.4 -1.3 |
| WB0 | | | | IAmb | IAmb | 20 46 03.4 |
| | comp=Z,19nm,1.4s | | | | | |
| GRAC | Grapevine Rang | 78.08 | 39 | P | P | 20 43 47.1 +2.7 |
| | baz=334 | | | | | |
| O20A | White River Ci | 78.10 | 31 | P | P | 20 43 46.4 +1.7 |
| | baz=338,SNR=10 | | | | | |
| WRA | Warramunga Arr | 78.11 | 159 | P | P | 20 43 43.1 -1.4 |
| | comp=Z,3.0nm,0.7s,baz=351,slow=7.2,SNR=14 | | | | | |
| WRA | Warramunga Arr | 78.11 | 159 | P | P | 20 43 43.4 -1.2 |
| WRA | Warramunga Arr | 78.11 | 159 | P | P | 20 43 43.4 -1.2 |
| WB2 | Warramunga Arr | 78.11 | 159 | P | P | 20 43 43.2 -1.3 |
| WB2 | | | | IAmb | IAmb | 20 43 49.8 |
| | comp=Z,12nm,1.0s | | | | | |
| CWC | Cottonwood Cre | 78.33 | 39 | P | P | 20 43 47.6 +1.6 |
| | baz=334 | | | | | |
| TPNV | Topopah Spring | 78.51 | 38 | P | P | 20 43 48.3 +1.3 |
| | baz=335 | | | | | |
| FURC | Furnace Creek, | 78.73 | 38 | P | P | 20 43 50.1 +2.1 |
| | baz=335 | | | | | |
| MPMC | Manual Prospec | 78.88 | 39 | P | P | 20 43 50.9 +1.8 |
| | baz=334,SNR=8.1 | | | | | |
| ISA | Isabella, Lake | 78.89 | 40 | P | P | 20 43 49.7 +0.8 |
| | baz=334 | | | | | |
| SADO | Sadowa | 78.96 | 8 | LR | LR | 21 21 16.5 |
| | comp=Z,84nm,18.0s,baz=346,slow=38 | | | | | |
| ISCO | Idaho Springs | 79.14 | 29 | P | P | 20 43 51.5 +0.9 |
| ISCO | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.8s | | | | | |
| ISCO | Idaho Springs | 79.14 | 29 | P | P | 20 43 51.5 +0.9 |
| ISCO | Idaho Springs | 79.14 | 29 | P | P | 20 43 52.3 +1.7 |
| | baz=340 | | | | | |
| LRMC | Laurel Mtn Rad | 79.33 | 39 | P | P | 20 43 53.3 +1.8 |
| | baz=334,SNR=9.8 | | | | | |
| CCAC | Calif City Air | 79.51 | 40 | P | P | 20 43 53.2 +0.8 |
| CCAC | | | | IAmb | IAmb | 20 43 55.0 |
| | comp=Z,15nm,0.9s | | | | | |
| PV07 | Paradox Valley | 79.56 | 31 | P | P | 20 43 53.6 +0.9 |
| PV07 | | | | IAmb | IAmb | 20 43 56.9 |
| | comp=Z,11nm,0.7s | | | | | |
| EDW2 | Edwards Air Fo | 79.76 | 40 | P | P | 20 43 55.5 +1.8 |
| | baz=334,SNR=6.9 | | | | | |
| GSC | Goldstone, Bar | 79.80 | 39 | P | P | 20 43 55.9 +1.9 |
| | baz=335,SNR=6.0 | | | | | |
| LODK | Lodwar | 79.85 | 261 | P | P | 20 43 53.9 -0.5 |
| TUQ | Turquoise Moun | 79.99 | 38 | P | P | 20 43 56.9 +1.8 |
| | baz=335,SNR=8.9 | | | | | |
| U15A | North Rim | 80.30 | 35 | P | P | 20 43 57.4 +0.5 |
| HEC | Hector,Ludlow | 80.39 | 39 | P | P | 20 43 59.2 +2.0 |
| | baz=335,SNR=11 | | | | | |
| GMRC | Granite Mounta | 80.67 | 38 | P | P | 20 44 00.3 +1.5 |
| | baz=335,SNR=5.6 | | | | | |
| S22A | 4UR Ranch, Cre | 80.72 | 30 | P | P | 20 44 00.1 +0.8 |
| S22A | | | | IAmb | IAmb | 20 44 02.1 |
| | comp=Z,13nm,1.1s | | | | | |
| S22A | 4UR Ranch, Cre | 80.72 | 30 | P | P | 20 44 00.7 +1.5 |
| | baz=339,SNR=9.3 | | | | | |
| W13A | Hualapai Mount | 80.99 | 37 | P | P | 20 44 02.0 +1.5 |
| W13A | | | | IAmb | IAmb | 20 44 03.3 |
| | comp=Z,10nm,1.0s | | | | | |
| SDCO | Great Sand Dun | 81.10 | 29 | P | P | 20 44 02.0 +0.8 |
| SDCO | | | | IAmb | IAmb | 20 44 03.6 |
| | comp=Z,17nm,1.1s | | | | | |
| SDCO | Great Sand Dun | 81.10 | 29 | P | P | 20 44 02.8 +1.6 |
| | baz=340,SNR=14 | | | | | |
| CTA | Charters Tower | 81.24 | 148 | P | P | 20 44 00.8 -0.8 |
| | comp=Z,2.5nm,0.8s,baz=311,slow=9.3,SNR=3.0 | | | | | |
| BELC | Belle Mtn. Jos | 81.26 | 39 | P | P | 20 44 03.3 +1.4 |
| | baz=335,SNR=5.7 | | | | | |
| IRM | Iron Mountain | 81.42 | 38 | P | P | 20 44 04.6 +2.0 |
| | baz=336,SNR=21 | | | | | |
| WUAZ | Wupatki | 81.42 | 35 | P | P | 20 44 04.0 +1.2 |
| WUAZ | | | | IAmb | IAmb | 20 44 06.4 |
| | comp=Z,22nm,1.2s | | | | | |
| WUAZ | Wupatki | 81.42 | 35 | P | P | 20 44 05.1 +2.3 |
| | baz=337,SNR=9.9 | | | | | |
| PFO | Pinyon Flats O | 81.45 | 39 | LR | LR | 21 21 16.6 |
| | comp=Z,126nm,18.1s,baz=174,slow=36 | | | | | |
| PFO | Pinyon Flats O | 81.45 | 39 | P | P | 20 44 03.0 +0.1 |
| PFO | | | | pmax | pmax | |
| | comp=Z,11nm,1.1s | | | | | |
| PFO | Pinyon Flats O | 81.45 | 39 | P | P | 20 44 03.0 +0.1 |
| PFO | | | | IAmb | IAmb | 20 44 05.4 |
| | comp=Z,11nm,1.1s | | | | | |
| PFO | Pinyon Flats O | 81.45 | 39 | P | P | 20 44 03.9 +1.0 |
| | baz=335 | | | | | |
| PDMC | Parker Dam,Lak | 81.62 | 37 | P | P | 20 44 05.4 +1.8 |
| | baz=336,SNR=6.5 | | | | | |
| ASAR | Alice Springs | 81.64 | 160 | P | P | 20 44 02.5 -1.1 |
| | comp=Z,1.7nm,0.8s,baz=351,slow=5.1,SNR=7.5 | | | | | |
| ASAR | Alice Springs | 81.64 | 160 | P | P | 20 44 02.4 -1.2 |
| BC3 | Big Chuckawall | 81.76 | 39 | P | P | 20 44 06.4 +1.9 |
| | baz=335,SNR=8.9 | | | | | |
| T25A | Trinidad | 81.96 | 29 | P | P | 20 44 05.9 +0.2 |
| T25A | | | | IAmb | IAmb | 20 44 07.6 |
| | comp=Z,13nm,1.2s | | | | | |
| T25A | Trinidad | 81.96 | 29 | P | P | 20 44 06.5 +0.8 |
| | baz=340 | | | | | |
| BLYC | Blythe | 82.00 | 38 | P | P | 20 44 06.6 +1.0 |
| BLYC | | | | IAmb | IAmb | 20 44 08.6 |
| | comp=Z,18nm,0.9s | | | | | |
| MONP2 | Monument Peak | 82.11 | 40 | P | P | 20 44 08.1 +1.6 |
| | baz=335 | | | | | |
| W18A | Petrified Fore | 82.31 | 34 | P | P | 20 44 09.4 +2.0 |
| | baz=338 | | | | | |
| IKP | In-Ko-Pah, Jac | 82.44 | 39 | P | P | 20 44 09.7 +1.7 |
| | baz=335 | | | | | |
| GLA | Glamis | 82.53 | 38 | P | P | 20 44 10.1 +1.6 |
| | baz=336 | | | | | |
| KMBO | Kilima Mbogo | 82.59 | 257 | P | P | 20 44 09.9 +0.7 |
| | comp=Z,6.1nm,0.9s,baz=24,slow=8.2,SNR=12 | | | | | |
| KMBO | Kilima Mbogo | 82.59 | 257 | P | P | 20 44 08.9 -0.4 |
| KMBO | | | | IAmb | IAmb | 20 44 11.2 |
| | comp=Z,15nm,1.2s | | | | | |
| 113A | Mohawk Valley, | 83.15 | 38 | P | P | 20 44 12.6 +1.0 |
| 113A | | | | IAmb | IAmb | 20 44 14.3 |
| | comp=Z,11nm,1.1s | | | | | |
| KIBK | Kibwezi | 83.17 | 255 | P | P | 20 44 12.7 +0.7 |
| KIBK | | | | IAmb | IAmb | 20 44 14.2 |
| | comp=Z,10nm,1.0s | | | | | |
| ANMO | Albuquerque | 83.44 | 31 | P | P | 20 44 14.6 +1.2 |
| ANMO | | | | pmax | pmax | |
| | comp=Z,17nm,1.1s | | | | | |
| ANMO | Albuquerque | 83.44 | 31 | P | P | 20 44 14.6 +1.2 |
| ANMO | | | | IAmb | IAmb | 20 44 16.4 |
| | comp=Z,18nm,1.1s | | | | | |
| ANMO | Albuquerque | 83.44 | 31 | P | P | 20 44 15.5 +2.1 |
| | baz=340 | | | | | |
| P52A | Corning | 83.77 | 11 | P | P | 20 44 14.4 -0.3 |
| | baz=352 | | | | | |
| BNM | Barren Site | 84.14 | 32 | P | P | 20 44 18.1 +1.1 |
| 214A | Organ Pipe Nat | 84.22 | 37 | P | P | 20 44 18.9 +1.7 |
| | baz=337,SNR=6.3 | | | | | |
| TUC | Tucson | 84.56 | 35 | P | P | 20 44 21.7 +2.7 |
| TUC | Tucson | 84.56 | 35 | P | P | 20 44 20.3 +1.4 |
| | baz=338 | | | | | |
| WCI | Wyandotte Cave | 84.64 | 15 | P | P | 20 44 19.8 +0.6 |
| WCI | | | | pmax | pmax | |
| | comp=Z,11nm,0.8s | | | | | |
| WCI | Wyandotte Cave | 84.64 | 15 | P | P | 20 44 19.5 +0.4 |
| | baz=350 | | | | | |
| 121A | Cookes Peak, D | 85.30 | 33 | P | P | 20 44 23.9 +1.0 |
| 121A | | | | IAmb | IAmb | 20 44 25.9 |
| | comp=Z,14nm,0.9s | | | | | |
| 121A | Cookes Peak, D | 85.30 | 33 | P | P | 20 44 24.8 +2.0 |
| | baz=339,SNR=7.4 | | | | | |
| MSTX | Muleshoe | 85.39 | 29 | P | P | 20 44 23.8 +0.7 |
| MSTX | | | | IAmb | IAmb | 20 44 26.3 |
| | comp=Z,9.4nm,0.9s | | | | | |
| MSTX | Muleshoe | 85.39 | 29 | P | P | 20 44 24.1 +0.9 |
| | baz=341 | | | | | |
| WMOK | Wichita Mounta | 85.67 | 25 | P | P | 20 44 26.1 +1.7 |
| | baz=343 | | | | | |
| MBAR | Mbarara | 85.74 | 263 | P | P | 20 44 25.3 +0.1 |
| MBAR | | | | pmax | pmax | |
| | comp=Z,12nm,1.0s | | | | | |
| MBAR | Mbarara | 85.74 | 263 | P | P | 20 44 25.3 +0.1 |
| MBAR | | | | IAmb | IAmb | 20 44 26.9 |
| | comp=Z,12nm,1.0s | | | | | |
| 319A | Douglas | 85.91 | 35 | P | P | 20 44 27.2 +1.4 |
| WVT | Waverly | 86.47 | 16 | P | P | 20 44 28.3 0.0 |
| WVT | | | | pmax | pmax | |
| | comp=Z,8.0nm,0.9s | | | | | |
| WVT | Waverly | 86.47 | 16 | P | P | 20 44 28.3 0.0 |
| WVT | | | | IAmb | IAmb | 20 44 29.6 |
| | comp=Z,7.9nm,0.8s | | | | | |
| WVT | Waverly | 86.47 | 16 | P | P | 20 44 29.0 +0.7 |
| | baz=349 | | | | | |
| MNTX | Cornudas Mount | 86.80 | 31 | P | P | 20 44 31.1 +1.1 |
| MNTX | | | | IAmb | IAmb | 20 44 32.7 |
| | comp=Z,5.8nm,0.9s | | | | | |
| MNTX | Cornudas Mount | 86.80 | 31 | P | P | 20 44 31.6 +1.6 |
| | baz=340,SNR=8.8 | | | | | |
| TKL | Tuckaleechee C | 87.51 | 13 | LR | LR | 21 25 28.8 |
| | comp=Z,91nm,19.7s,baz=348,slow=37 | | | | | |
| TX31 | Lajitas Ar. Si | 89.51 | 31 | P | P | 20 44 43.9 +0.8 |
| TXAR | Lajitas Array | 89.51 | 31 | P | P | 20 44 45.5 +2.4 |
| | comp=Z,3.2nm,0.9s,baz=318,slow=1.7,SNR=16 | | | | | |
| TXAR | Lajitas Array | 89.51 | 31 | P | P | 20 44 44.0 +0.9 |
| TORD | Torodi Ar. Bea | 90.20 | 294 | P | P | 20 44 46.4 +0.1 |
| | comp=Z,6.8nm,0.8s,baz=33,slow=4.7,SNR=36 | | | | | |
| TORD | Torodi Ar. Bea | 90.20 | 294 | P | P | 20 44 46.0 -0.4 |
| TORD | | | | IAmb | IAmb | 20 44 47.5 |
| | comp=Z,9.2nm,1.0s | | | | | |
| KOWA | Kowa | 91.89 | 300 | P | P | 20 44 53.4 -0.8 |
| KOWA | | | | IAmb | IAmb | 20 44 55.3 |
| | comp=Z,9.3nm,1.1s | | | | | |
| DBIC | Dimbokro | 99.03 | 296 | LR | LR | 21 35 53.9 |
| | comp=Z,70nm,18.1s,baz=106,slow=39 | | | | | |
| SYO | Syowa Base | 135.50 | 209 | *e*Pdiff | Pdif | 20 48 08.0 +0.6 |
| SYO | Syowa Base | 135.50 | 209 | *i*PPdiff | pPdif | 20 48 13.4 +1.1 |
| LPAZ | La Paz | 140.18 | | PKP | PKPdf | 20 51 15.2 0.0 |
| | comp=Z,1.2nm,0.6s,baz=14,slow=3.6,SNR=5.3 | | | | | |
| CPUP | Villa Florida | 149.22 | 341 | PKPbc | PKPbc | 20 51 33.5 -0.5 |
| | comp=Z,9.3nm,0.8s,baz=26,slow=2.2,SNR=16 | | | | | |
| SNAA | Sanae | 149.47 | 214 | PKPdf | PKPbc | 20 51 31.9 -1.5 |
| VNA2 | Neumayer--Watz | 150.90 | 216 | PKPdf | PKPbc | 20 51 36.5 -0.3 |
| | baz=61,slow=2.9 | | | | | |
| VNA1 | Neumayer--Stat | 151.19 | 217 | PKPdf | PKPbc | 20 51 37.2 -0.1 |
| VNA3 | Neumayer Olymp | 151.65 | 215 | PKPdf | PKPbc | 20 51 37.8 -0.7 |

**IDC 13 20:37:36.8±3.6, 4°07'S×135°40'E, h0km, mb3.9/1, mb1 3.6/3, mb1mx3.4/39, mbtmp3.5/3, ML3.2/2 Error ellipse: s-maj=158.9km s-min=33.5km az=80.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 15.81 | 184 | Pn | Pn | 20 41 21.4 | +0.3 |
| | 0.1nm,0.3s,baz=4.0,slow=13,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 19.54 | 184 | P | P | 20 42 06.0 | -0.2 |
| | 0.1nm,0.3s,baz=3.6,slow=9.9,SNR=8.7 | | | | | | |
| MKAR | Makanchi Array | 68.89 | 324 | P | P | 20 48 43.6 | +0.1 |
| | 1.1nm,0.9s,baz=111,slow=8.1,SNR=3.0 | | | | | | |

**DNK 13 20:38:04.6±3.4, 80°38N×29°52W, h36km±55km, ML1.8, Near north coast of Kalaallit Nunaat**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NOR | Nord | 2.36 | 53 | *i* P | Pn | 20 38 42.1 | +1.4 |
| NOR | | | | *i* S | Sn | 20 39 04.2 | -4.1 |

**IDC 13 20:42:10.9±2.6, 4°49S×133°83E, h0km, mb3.5/1, mb1 3.8/5, mb1mx3.4/51, mbtmp3.6/5, ML3.5/3, MS3.1/3, Ms1 3.1/3, ms1mx2.8/46, Error ellipse: s-maj=91.9km s-min=25.7km az=78.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.42 | 325 | Pn | Pn | 20 43 20.5 | +1.3 |
| | baz=225,slow=20 | | | | | | |
| SIJI | | | | Sn | Sn | 20 44 09.7 | -1.7 |
| | 1.3nm,0.3s,baz=302,slow=24,SNR=1.6 | | | | | | |
| SIJI | | | | LR | LR | 20 45 48.7 | |
| | comp=Z,193nm,19.5s,baz=196,slow=49 | | | | | | |
| JAY | Jayapura | 7.14 | 74 | LR | LR | 20 47 33.5 | |
| | comp=Z,99nm,20.3s,baz=106,slow=45 | | | | | | |
| PMG | Port Moresby | 14.10 | 111 | LR | LR | 20 53 13.5 | |
| | comp=Z,161nm,18.4s,baz=230,slow=47 | | | | | | |
| WRA | Warramunga Arr | 15.36 | 178 | Pn | Pn | 20 45 49.5 | +0.3 |
| | 0.2nm,0.3s,baz=357,slow=12,SNR=5.4 | | | | | | |
| WRA | | | | Sn | Sn | 20 48 25.5 | -15 |
| | 0.1nm,0.3s,baz=0.6,slow=26,SNR=2.0 | | | | | | |
| FITZ | Fitzroy Crossi | 15.71 | 210 | Pn | Pn | 20 45 52.5 | -1.3 |
| | 0.2nm,0.3s,baz=25,slow=12,SNR=8.5 | | | | | | |
| FITZ | | | | Sn | Sn | 20 48 36.3 | -12 |
| | 0.2nm,0.3s,baz=77,slow=20,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 19.06 | 180 | P | Pn | 20 46 35.8 | +0.1 |
| | 0.2nm,0.3s,baz=8.9,slow=10,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 68.31 | 325 | P | P | 20 53 13.7 | -0.4 |
| | 0.3nm,0.6s,baz=113,slow=7.5,SNR=7.2 | | | | | | |

*THE **13** 20:42:34.9, 38°46N×20°50E, h3km±4km, ML2.9/7, Error ellipse: s-maj=4.2km s-min=0.3km az=106.0*
*ATH **13** 20:42:34.1, 38°47N×20°51E, h18km±1km, ML2.5/6, Error ellipse: s-maj=2.2km s-min=0.7km az=283.0*

**ISC 13 20:42:33.6±0.9, 38°47N±0'02×20°48E±0'03, h18km±2km, n40, σ1°21/64, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FSK | Fiskardo | 0.07 | 96 | P | Pg | 20 42 36.1 | -0.9 |
| FSK | | | | S | Sg | 20 42 36.9 | -2.4 |
| | 54μm,0.2s | | | | | | |
| EVGI | Lefkada island | 0.21 | 42 | P | Pg | 20 42 38.7 | 0.0 |
| EVGI | | | | S | Sg | 20 42 42.1 | -0.1 |
| | 4μm,0.2s | | | | | | |
| EVGI | Lefkada island | 0.21 | 42 | P | Pg | 20 42 38.7 | 0.0 |
| EVGI | | | | S | Sg | 20 42 42.0 | -0.1 |
| KEF4 | Livadi, Kephal | 0.21 | 191 | P | Pb | 20 42 39.1 | +0.6 |
| KEF4 | | | | S | Sg | 20 42 42.9 | +0.7 |
| | 34μm,0.2s | | | | | | |
| KEF4 | Livadi, Kephal | 0.21 | 191 | P | Pb | 20 42 39.1 | +0.6 |
| KEF4 | | | | S | Sg | 20 42 43.4 | +1.2 |
| DRAG | Dragano-Lefkad | 0.23 | 19 | P | Pg | 20 42 39.1 | +0.1 |
| DRAG | | | | S | Sg | 20 42 43.3 | +0.5 |
| | 4μm,0.3s | | | | | | |
| DRAG | Dragano-Lefkad | 0.23 | 19 | P | Pg | 20 42 39.1 | +0.1 |
| DRAG | | | | S | Sg | 20 42 43.4 | +0.6 |
| DMLN | Damoulianata-K | 0.24 | 200 | P | Pb | 20 42 39.7 | +0.4 |
| DMLN | | | | S | Sg | 20 42 43.5 | +0.5 |
| | 3μm,0.4s | | | | | | |
| DMLN | Damoulianata-K | 0.24 | 200 | P | Pb | 20 42 39.6 | +0.4 |
| DMLN | | | | S | Sg | 20 42 44.5 | +1.4 |
| LXRA | Lixouri, Kepha | 0.27 | 187 | P | Pb | 20 42 40.2 | +0.4 |
| LXRA | | | | S | Sg | 20 42 44.8 | +1.2 |
| KEF3 | Kipouria, Keph | 0.28 | 201 | P | Pb | 20 42 40.0 | 0.0 |
| KEF3 | | | | S | Sb | 20 42 44.4 | +0.1 |
| | 5μm,0.3s | | | | | | |
| KEF3 | Kipouria, Keph | 0.28 | 201 | P | Pb | 20 42 39.8 | -0.2 |
| KEF3 | | | | S | Sb | 20 42 43.6 | -0.7 |
| ARGA | Argostoli. Kep | 0.29 | 180 | P | Pb | 20 42 41.3 | +1.1 |
| ARGA | | | | S | Sb | 20 42 46.0 | +1.4 |
| NYDR | Nydri-Lefkada | 0.30 | 35 | P | Pg | 20 42 40.4 | +0.2 |
| NYDR | | | | S | Sg | 20 42 45.4 | +0.7 |
| NYDR | Nydri-Lefkada | 0.30 | 35 | P | Pg | 20 42 40.3 | +0.1 |
| NYDR | | | | S | Sg | 20 42 45.2 | +0.6 |
| VLS | Valsamata | 0.30 | 163 | P | Pb | 20 42 40.5 | +0.1 |
| VLS | | | | S | Sb | 20 42 45.0 | 0.0 |
| | 3μm,0.2s | | | | | | |
| VLS | Valsamata | 0.30 | 163 | P | Pb | 20 42 40.3 | -0.1 |
| VLS | | | | S | Sb | 20 42 45.0 | 0.0 |
| VLS | | | | AML | AML | 20 42 45.5 | |
| VLS | comp=E,6090μm,0.1s | | | AML | AML | 20 42 46.0 | |
| | comp=N,4833μm,0.2s | | | | | | |
| LKD2 | Lefkada island | 0.35 | 24 | P | Pg | 20 42 41.3 | +0.2 |
| LKD2 | | | | S | Sg | 20 42 46.5 | +0.4 |
| LKD2 | Lefkada island | 0.35 | 24 | P | Pg | 20 42 41.1 | 0.0 |
| LKD2 | | | | AML | AML | 20 42 49.4 | |
| LKD2 | comp=E,2058μm,0.6s | | | AML | AML | 20 42 54.1 | |
| | comp=N,2541μm,0.7s | | | | | | |
| PSDA | Pessada-Kefalo | 0.36 | 167 | P | Pb | 20 42 41.5 | 0.0 |
| PSDA | | | | S | Sb | 20 42 47.3 | +0.5 |
| PSDA | Pessada-Kefalo | 0.36 | 167 | P | Pb | 20 42 41.4 | 0.0 |
| PSDA | | | | S | Sb | 20 42 46.9 | +0.1 |
| RLS | Riolos of Patr | 0.88 | 117 | P | Pb | 20 42 50.7 | +0.4 |
| RLS | | | | AML | AML | 20 43 13.3 | |
| RLS | comp=N,278μm,0.5s | | | AML | AML | 20 43 20.2 | |
| | comp=E,336μm,0.7s | | | | | | |
| IGT | Igoumenitsa | 1.07 | 354 | P | Pb | 20 42 54.1 | +0.5 |
| EVR | Evrytania | 1.14 | 66 | P | Pn | 20 42 55.6 | +1.0 |
| EVR | | | | AML | AML | 20 43 19.8 | |
| EVR | comp=N,189μm,0.4s | | | AML | AML | 20 43 20.8 | |
| | comp=E,216μm,0.8s | | | | | | |
| LAKA | Lakka | 1.20 | 100 | P | Pn | 20 42 55.8 | +0.4 |
| JAN | Janina | 1.22 | 14 | P | Pg | 20 42 58.0 | +0.7 |
| JAN | | | | AML | AML | 20 43 19.3 | |
| JAN | comp=E,884μm,0.4s | | | AML | AML | 20 43 20.2 | |
| | comp=N,487μm,0.5s | | | | | | |
| KEK | Kerkira | 1.35 | 337 | P | Pg | 20 43 00.2 | +0.5 |
| KLV | Kalavryta, Ach | 1.38 | 107 | P | Pn | 20 42 58.9 | +0.9 |
| MAKR | Makrakomi, Fth | 1.40 | 67 | P | Pg | 20 43 00.8 | +0.2 |
| AGG | Agios Georgios | 1.55 | 68 | P | Pb | 20 43 02.7 | +1.0 |
| THL | Klokotos Trika | 1.62 | 47 | P | Pb | 20 43 04.4 | +1.4 |
| THL | | | | AML | AML | 20 43 36.5 | |
| THL | comp=E,507μm,0.7s | | | AML | AML | 20 43 37.8 | |
| | comp=N,349μm,0.8s | | | | | | |
| ITM | Ithomi | 1.72 | 138 | P | Pb | 20 43 04.6 | 0.0 |
| STON | Ston | 4.88 | 335 | *e*Pn | Pn | 20 43 47.2 | +1.2 |
| STON | | | | Sn | Sn | 20 48 38.4 | -3.6 |
| LSTV | Lastovo | 5.09 | 329 | *e*Pn | Pn | 20 43 49.8 | +0.9 |
| HVAR | Hvar | 5.61 | 328 | *e*Pn | Pn | 20 43 57.6 | +1.6 |
| RICI | Ricice | 5.62 | 334 | *e*Pn | Pn | 20 43 57.3 | +1.0 |
| RICI | | | | Sn | Sn | 20 44 57.4 | -3.0 |
| KIJV | Kijevo | 6.33 | 332 | *e*Pn | Pn | 20 44 07.3 | +1.4 |
| KIJV | | | | Sn | Sn | 20 45 15.1 | -2.6 |
| ZIRJ | Zirje | 6.34 | 326 | *e*Pn | Pn | 20 44 06.7 | +0.7 |
| MORI | Morici | 6.48 | 328 | *e*Pn | Pn | 20 44 09.7 | +1.7 |
| MORI | | | | Sn | Sn | 20 45 17.1 | -4.4 |
| NVLJ | Novalja | 7.40 | 327 | *e*Pn | Pn | 20 44 22.3 | +1.7 |

*BJI **13** 20:45:34.7±0.0, 9°77S×108°50E, h29km, mb4.9/54, mB5.1/35, Ms4.6/27, Ms7 4.4/27*
*NEIC **13** 20:45:34.7±1.8, 9°46S±0°04×108°57E±0°04, h8km±3km, mb5.1/76, Error ellipse: s-maj=8.0km s-min=1.3km az=51.0*
*DJA **13** 20:45:40.2±0.4, 9°S±2'×107°9E±', h33km±4km, M4.7/52, mb5.0/52, mB5.3/29, MLv4.9/29, Mw(mB)4.7/29*
*IDC **13** 20:45:41.4±2.4, 9°22S×108°80E, h43km±22km, mb4.4/39, mb1 4.4/43, mb1mx4.2/68, mbtmp4.6/43, ML4.4/4, MS3.9/20, Ms1 3.9/20, ms1mx3.6/71, Error ellipse: s-ma

UGM Wanagama 2.42 51 P Pn 20 46 17.5 +1.7
CNJI Cibinong 2.58 325 P Pn 20 46 17.9 -0.1
LEM Lembang 2.78 339 P Pn 20 46 22.9 +2.0
137nm,0.3s,baz=146,slow=14,SNR=125
LEM LR LR 20 47 57.0
comp=Z,4µm,18.2s,baz=170,slow=51
PCJI Pacitan 2.82 64 P Pn 20 46 21.4 +0.2
SMRI Semarang 2.99 37 Pn Pn 20 46 26.2 +2.6
SMRI Semarang 2.99 37 P Pn 20 46 26.5 +2.9
SMRI Semarang 2.99 37 P Pb 20 46 27.6 -2.9
XMI Christmas Isla 3.05 251 P Pn 20 46 24.1 -0.4
XMIS Christmas Isla 3.10 250 Pn Pn 20 46 23.1 -2.0
XMIS Christmas Isla 3.10 250 P Pn 20 46 24.4 -0.7
SKJI Sukabumi 3.17 320 P Pn 20 46 26.5 +0.5
DBJI Dramaga 3.42 327 P Pn 20 46 31.7 +2.2
PWJI Pagerwojo 3.45 66 P Pn 20 46 31.9 +1.9
UWJI Ujung Watu 3.79 38 P Pn 20 46 36.4 +1.8
CGJI Cibinong 4.04 314 P Pn 20 46 37.7 -0.3
GRJI Gresik 4.58 57 P Pn 20 46 48.3 +2.9
GMJI Gumukmas 4.91 77 P Pn 20 46 51.7 +1.7
0.6nm3µm120nm,0.7s
BLJI Banyuglugur 5.20 71 P Pn 20 46 56.8 +2.7
1.0nm6µm152nm,0.4s
BLSI Bandar Lampung 5.25 320 P Pn 20 46 56.8 +2.1
0.4nm78nm,1.0s
BWJI Bawean 5.37 49 P Pn 20 46 57.9 +1.6
1.2nm4µm339nm,0.8s
JAGI Jajag, Banyuwa 5.55 80 Pn Pn 20 46 58.7 -0.2
JAGI Jajag, Banyuwa 5.55 80 P Pn 20 47 00.1 +1.2
1.2nm6µm313nm,0.8s
JAGI Jajag, Banyuwa 5.55 80 P Pn 20 47 01.0 +2.1
KASI Kota Agung 5.64 313 P Pn 20 47 01.9 +1.8
0.5nm1µm68nm,1.1s
ABJI Asem Bagus 5.79 74 P Pn 20 47 05.7 +3.6
1.5nm5µm460nm,0.6s
KMMI Kalianget 5.80 66 P Pn 20 47 03.5 +1.2
0.3nm54nm,0.9s
KLI Kotabumi 5.88 320 P Pb 20 47 19.2 -0.7
KLSI 6.10 321 P Pn 20 47 08.8 +2.4
0.2nm536nm34nm,1.0s
LWLI Liwa 6.31 314 P Pb 20 47 23.7 -3.4
DNP Denpasar 6.56 84 P Pb 20 47 29.1 -2.2
MDSI Maura Dua 6.61 318 P Pn 20 47 16.2 +2.8
0.1nm690nm28nm,1.1s
SRBI Singaraja 6.66 79 P Pn 20 47 16.7 +2.6
1.1nm4µm282nm,0.6s
PBKI Pangkalan Bun 7.35 25 P Pn 20 47 34.1 +11
PMBI Palembang 7.52 329 Pn Pn 20 47 25.6 -0.2
PMBI Palembang 7.52 329 P Pb 20 47 39.7 -8.0
LHSI Lahat 7.53 317 P Pb 20 47 40.1 -7.8
PPBI Pangkal Pinang 7.64 341 P Pn 20 47 31.0 +3.4
0.5nm66nm,1.2s
KSI Kapahiang 8.30 313 P Pn 20 47 37.7 +1.0
132nm,0.6s
BBKI Banjar Baru 8.57 47 P Pn 20 47 50.2 +10
MASI Maura Aman, Be 8.91 314 P Pn 20 47 47.0 +2.0
0.7nm149nm,1.2s
PLAI Plampang 9.07 87 P Pn 20 47 48.4 +1.3
2µm347nm,0.8s
PLAI Plampang 9.07 87 P Pn 20 47 48.6 +1.5
KBKI Kotabaru 9.67 51 P Pn 20 47 59.4 +4.0
1µm132nm,1.0s
DSRI Dabo 9.77 335 P Pn 20 48 09.9 +13
STKI Sintang 9.87 17 P Pn 20 48 11.6 +13
KRJI Kerinci 10.20 315 P Pn 20 48 04.9 +2.2
69nm,1.0s
MTKI Muara Teweh, K 10.51 37 P Pn 20 48 19.6 +13
WBSI Waikabubak, Su 10.63 92 P Pn 20 48 22.5 +14
KSM Kuching 10.97 9 Pn Pn 20 48 12.3 -1.0
BKSI Bulukumba 12.12 71 P Pn 20 48 32.8 +3.8
564nm51nm,0.8s
BSSI Bau Bau, Buton 12.21 75 P Pn 20 48 33.0 +2.8
873nm81nm,1.0s
BKNI Bangkinang 12.29 322 Pn Pn 20 48 28.6 -2.7
BKNI Bangkinang 12.29 322 P P 20 48 41.6 -1.7
SPSI Sidrap Palu 12.34 65 P Pn 20 48 34.7 +2.7
46nm,1.1s
SISI Saibi 12.44 310 P Pn 20 48 31.4 -2.0
35nm,1.5s
BNSI Bone 12.46 67 P Pn 20 48 39.6 +6.0
826nm56nm,1.6s
TTSI Tana Toraja 12.82 61 P Pn 20 48 43.3 +4.8
778nm76nm,1.0s
MMRI Maumere 13.48 88 Pn Pn 20 48 45.6 -1.9
MMRI Maumere 13.48 88 P P 20 48 56.6 +0.1
MMRI Maumere 13.48 88 P Pn 20 48 48.5 +1.0
MNSI Mandailing Nat 13.58 318 P P 20 48 54.4 -3.3
25nm,0.6s
GIRL Giralia 14.19 158 P Pn 20 48 53.2 -3.9
baz=14,SNR=7.3
GIRL S Sn 20 51 20.6 -13
baz=14
GIRL Giralia 14.19 158 Pn Pn 20 48 53.4 -3.8
BATI Baumata 14.85 94 P Pn 20 49 04.9 -1.3
10.0nm,0.3s,baz=20,slow=1.8,SNR=22
BATI S Sn 20 51 36.1 -14
0.8nm,0.3s,baz=82,slow=12,SNR=1.3
BATI Baumata 14.85 94 P P 20 49 15.0 +3.2
MPSI Mapaga 14.85 50 P P 20 49 10.2 -1.6
952nm106nm,1.1s
GSI Gunungsitoli 15.33 314 Pn Pn 20 49 06.5 -6.1
GSI IAmb IAmb 20 49 32.1
comp=Z,54nm,0.9s
GSI Gunungsitoli 15.33 314 P Pn 20 49 12.2 -0.4
comp=Z,63nm,0.7s
SOEI Soe 15.44 92 Pn Pn 20 49 12.4 -1.7
SOEI IAmb IAmb 20 49 35.1
comp=Z,166nm,1.1s
SOEI Soe 15.44 92 P Pn 20 49 15.0 +0.9
comp=Z,1µmcomp=Z,143nm,1.0s
RPSI Rantau Prapat 15.45 321 P Pn 20 49 17.2 +3.0
APSI Ampana 15.49 58 P P 20 49 20.5 +1.6
comp=Z,867nmcomp=Z,92nm,1.0s
PSI Prapat 15.53 321 P Pn 20 49 17.2 +1.8
comp=Z,0.3nm,0.3s,baz=150,slow=11,SNR=3.8
IPM Ipoh 15.77 331 Pn Pn 20 49 16.0 -2.3
MBWA Marble Bar 15.82 139 Pn Pn 20 49 15.4 -3.6
TOLI2 Tolitoli 16.02 50 Pn Pn 20 49 21.8 +0.2
TOLI2 IAmb IAmb 20 49 38.0
comp=Z,128nm,1.0s
TOLI2 Tolitoli 16.02 50 P P 20 49 24.4 -0.4
PSA00 Pilbara Seismi 16.19 139 Pn Pn 20 49 20.6 -3.1
PSA00 Pilbara Seismi 16.19 139 Pn Pn 20 49 20.0 -3.7
PSA00 IAmb IAmb 20 49 40.1
comp=Z,24nm,0.9s
MRSI Marisa 16.53 54 P P 20 49 30.2 -0.2
comp=Z,1µmcomp=Z,192nm,1.1s
KULM Kulim 16.65 331 Pn Pn 20 49 25.7 -3.8
KKM Kota Kinabalu 17.15 26 Pn Pn 20 49 34.0 -1.9
KKM IAmb IAmb 20 49 53.7
comp=Z,116nm,1.3s
KKM Kota Kinabalu 17.15 26 P P 20 49 37.8 +0.4
GTOI Gorontalo 17.48 56 P P 20 49 41.3 +0.3
comp=Z,484nmcomp=Z,56nm,0.9s
MYLDM Lahad Datu 17.55 35 P Pn 20 49 40.8 0.0
MYLDM IAmb IAmb 20 50 22.8
comp=Z,103nm,1.2s
KMSI Cibinong 18.25 58 P P 20 50 03.8 +14
FITZ Fitzroy Crossi 18.62 119 P P 20 49 55.2 +1.6
comp=Z,0.6nm,0.3s,baz=288,slow=7.0,SNR=9.9
FITZ S Sn 20 53 06.7 -15
comp=Z,0.4nm,0.3s,baz=153,slow=24,SNR=2.2
FITZ LR LR 20 58 16.4
comp=Z,404nm,19.1s,baz=308,slow=41
FITZ Fitzroy Crossi 18.62 119 P P 20 49 55.4 +1.8
baz=19,SNR=6.5
SANI Sanana 18.77 68 P Pn 20 49 57.7 +1.9
comp=Z,34nm,0.9s
MEEK Meekatharra 19.55 152 P P 20 50 06.1 +2.5
baz=20,SNR=7.9
MEEK Meekatharra 19.55 152 P P 20 50 03.5 -0.2
SRIT Nakonsritamara 20.04 333 P P 20 50 07.8 -1.3
AAI Ambon 20.27 75 P P 20 50 12.7 +1.1
comp=Z,1µmcomp=Z,120nm,1.1s
KNRA Kununurra 20.61 110 P P 20 50 16.4 +1.1
baz=21,SNR=7.4
KNRA Kununurra 20.61 110 P P 20 50 14.7 -0.6
KNRA IAmb IAmb 20 50 30.3
comp=Z,155nm,1.6s
KNRA Kununurra 20.61 110 P P 20 50 16.6 +1.3
LBMI Labuha 20.73 66 P P 20 50 17.6 +1.0
comp=Z,1µmcomp=Z,160nm,1.0s
TNTI Ternate 21.25 62 P P 20 50 20.6 -1.6
TNTI IAmb IAmb 20 50 37.4
comp=Z,134nm,1.4s

TNTI Ternate 21.25 62 P P 20 50 26.6 +4.4
comp=Z,1µmcomp=Z,68nm,1.8s
DRS Darwin Rock St 22.08 100 P P 20 50 33.1 +2.0
MTN Manton Dam 22.34 101 P P 20 50 35.3 +1.3
baz=22,SNR=3.9
MTN Manton Dam 22.34 101 P P 20 50 33.5 -0.5
MTN IAmb IAmb 20 51 05.0
comp=Z,85nm,1.6s
KDU Kakadu 23.63 100 P P 20 50 48.1 +1.0
baz=24,SNR=3.4
SWI Sorong 24.09 71 P P 20 50 50.6 -0.9
comp=Z,47nm,1.0s
SIJI Sorong 24.09 71 P P 20 50 49.9 -1.7
comp=Z,12nm,1.0s,baz=294,slow=6.2,SNR=7.5
WRKA Warakurna 24.31 132 P P 20 50 55.6 +2.1
baz=24,SNR=5.1
WRKA Warakurna 24.31 132 P P 20 50 55.5 +2.0
FAKI Fak Fak 24.36 76 P P 20 50 51.9 -2.1
FAKI IAmb IAmb 20 51 06.2
comp=Z,52nm,1.1s
FAKI Fak Fak 24.36 76 P P 20 51 11.7 +18
NWAO Narrogin (SRO) 24.69 162 P P 20 50 54.1 -2.7
NWAO IAmb IAmb 20 51 07.3
comp=Z,42nm,1.3s
NWAO Narrogin (SRO) 24.69 162 P P 20 50 58.0 +1.2
UBPT Khong Chiam 24.76 353 P P 20 50 56.5 -1.0
WRA Warramunga Arr 26.94 116 P P 20 51 18.6 +1.2
comp=Z,8.8nm,1.0s,baz=284,slow=11,SNR=18
WRA PcP PcP 20 54 40.7 +1.6
comp=Z,1.2nm,0.5s,baz=336,slow=1.1,SNR=4.1
WRA LR LR 21 03 37.8
comp=Z,140nm,18.6s,baz=317,slow=40
WRA Warramunga Arr 26.94 116 P P 20 51 18.0 +0.6
WRAB Tennant Creek 26.95 116 P P 20 51 19.1 +1.7
WB2 Warramunga Arr 26.95 116 P P 20 51 17.2 -0.3
ASAR Alice Springs 27.99 123 P P 20 51 28.0 +1.2
comp=Z,1.8nm,0.5s,baz=300,slow=8.7,SNR=15
ASAR PcP PcP 20 54 43.3 +1.7
comp=Z,2.3nm,0.6s,baz=304,slow=2.2,SNR=13
ASAR LR LR 21 04 12.5
comp=Z,252nm,19.1s,baz=301,slow=40
ASAR Alice Springs 27.99 123 P P 20 51 26.9 +0.2
AS31 Alice Springs 27.99 123 P P 20 51 26.0 -0.8
CM31 Chiang Mai Arr 29.32 341 P P 20 51 36.9 -1.6
CMAR Chiang Mai Arr 29.32 341 P P 20 51 39.4 +0.9
comp=Z,4.6nm,0.8s,baz=176,slow=8.5,SNR=37
CMAR PcP PcP 20 54 46.9 +2.0
comp=Z,0.6nm,0.4s,baz=201,slow=3.7,SNR=5.1
CMAR Chiang Mai Arr 29.32 341 P P 20 51 36.8 -1.8
CHTO Chiang Mai 29.66 341 P P 20 51 40.3 -1.2
CHTO Chiang Mai 29.66 341 P P 20 51 42.7 +1.2
OOD Oodnadatta 31.36 129 P P 20 51 57.8 +1.3
MULG Mulgathing 31.52 135 P P 20 52 00.0 +2.1
QIS Mount Isa 31.84 114 P P 20 52 02.2 +1.3
baz=32,SNR=3.1
COEN Coen 34.11 101 P P 20 52 20.3 -0.5
COEN IAmb IAmb 20 52 38.9
comp=Z,16nm,1.1s
COEN Coen 34.11 101 P P 20 52 21.7 +0.9
BBOO Buckleboo 34.38 137 P P 20 52 22.4 -0.5
BBOO IAmb IAmb 20 53 04.9
comp=Z,51nm,1.8s
BBOO Buckleboo 34.38 137 P P 20 52 23.0 +0.1
KMI Kunming 34.83 351 ⇑P P 20 52 29.6 +2.5
KMI pP sP 20 52 39.3 +2.0
KMI pmax pmax
comp=Z,5.0nm,0.8s
KMI LR LR
comp=Z,420nm,17.5s
KMI LR LR
comp=Z,630nm,14.8s
KMI LR LR
comp=Z,500nm,16.9s
SSLB Suanglung 35.16 20 P P 20 52 27.3 -2.4
SSLB IAmb IAmb 20 52 42.0
comp=Z,38nm,0.8s
MTSU Mount Surprise 35.67 108 P P 20 52 34.9 +0.7
baz=36,SNR=6.3
NACB Ninganchiao 35.74 21 P P 20 52 32.5 -2.1
NACB IAmb IAmb 20 52 47.7
comp=Z,40nm,1.3s
GYA Guiyang 35.74 357 ⇓P P 20 52 36.6 +1.9
GYA pmax pmax
comp=Z,8.0nm,0.8s
H08S2 Diego Garcia H 35.76 270 T T 21 30 21.3
baz=95,slow=74,SNR=8.0
H08S3 Diego Garcia H 35.77 270 T T 21 30 24.6
baz=95,slow=74,SNR=12
H08S1 Diego Garcia H 35.78 270 T T 21 30 25.9
baz=95,slow=74,SNR=6.5
NAPP Napperby 36.03 135 P P 20 52 39.1 +2.0
YHNB Yeheng 36.12 20 P P 20 52 36.9 -1.0
YHNB IAmb IAmb 20 53 46.1
comp=Z,71nm,1.6s
PZH PanZhiHua 36.35 350 ⇑P P 20 52 40.9 +0.9
PZH pP sP 20 52 51.5 +1.3
PZH PP PP 20 52 10.9 +7.8
PZH S S 20 58 17.8 -1.9
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,140nm,5.8s
PZH LR LR
comp=Z,1µm,17.5s
PZH LR LR
comp=Z,890nm,17.8s
PZH LR LR
comp=Z,970nm,18.6s
YOJ Yonaguni jima 36.51 22 P P 20 52 39.4 -1.8
SKHT Srikalahasti 36.79 308 eP P 20 52 42.8 -0.9
CHLP Challavanipeta 36.86 319 eP P 20 52 42.8 -1.5
PVM Polavaram 37.62 315 eP P 20 52 51.5 +0.7
CTA Charters Tower 37.81 111 P P 20 52 54.2 +1.8
comp=Z,4.8nm,0.6s,baz=287,slow=8.3,SNR=5.2
CTA LR LR 21 10 13.6
comp=Z,116nm,19.2s,baz=280,slow=39
CTAO Charters Tower 37.81 111 P P 20 52 51.3 -1.2
STKA Stephens Creek 37.83 131 P P 20 52 54.1 +1.7
comp=Z,12nm,0.5s,baz=303,slow=8.4,SNR=20
STKA LR LR 21 11 08.9
comp=Z,129nm,18.7s,baz=275,slow=40
STKA Stephens Creek 37.83 131 P P 20 52 54.0 +1.5
baz=38,SNR=13
STKA Stephens Creek 37.83 131 P P 20 52 51.4 -1.1
STKA Stephens Creek 37.83 131 P P 20 52 54.0 +1.5
ADKI Addanki 37.90 311 eP P 20 52 52.5 -0.6
MYLAV Mylavaram 37.99 313 eP P 20 52 53.1 -0.8
RCLA Racherla 38.41 310 eP P 20 52 57.6 +0.1
SHL Shillong 38.42 335 P P 20 52 56.5 -1.2
SHL IAmb IAmb 20 53 09.3
comp=Z,29nm,1.0s
SRLM Srisailam 38.86 311 eP P 20 53 00.6 -0.7
URV Uravakonda 39.41 308 eP P 20 53 06.3 +0.4
ENH Enshi 39.49 1 P P 20 53 05.7 -0.7
CUPL Choutuppal 39.59 312 eP P 20 53 06.0 -1.3
HYBB Hyderabad (bro 39.94 312 eP P 20 53 10.0 -0.3
CD2 Chengdu 40.39 354 P P 20 53 14.3 +0.5
CD2 pP pwP 20 53 24.9 +0.7
CD2 S S 20 59 23.3 +2.7
CD2 pmax pmax
comp=Z,20nm,0.9s
CD2 LR LR
comp=Z,530nm,14.5s
CD2 LR LR
comp=Z,280nm,14.9s
JOW Kunigami 40.80 27 LR LR 21 13 10.2
comp=Z,130nm,18.4s,baz=240,slow=41
JOW Kunigami 40.80 27 P P 20 53 16.6 -0.6
CMSA Cobar Meteorol 40.80 128 P P 20 53 19.6 +2.3
baz=41,SNR=11
CMSA Cobar Meteorol 40.80 128 P P 20 53 19.5 +2.3
SRSP Sriramsagar 41.06 313 eP P 20 53 19.2 -0.3
ODAN Odare 41.55 331 eP P 20 53 23.9 +0.2
KLRI Killari 41.80 311 eP P 20 53 25.0 -0.6
TAPN Taplejung 41.81 332 eP P 20 53 26.0 +0.1
comp=Z,12nm,0.4s
LSA Lhasa 42.40 337 P P 20 53 31.3 +0.5
NJ2 Nanjing 42.41 13 eP P 20 53 31.3 +1.0
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
PKI Pulchoki 43.12 329 eP P 20 53 36.4 -0.2
PKIN Phulchoki 43.13 329 eP P 20 53 36.4 -0.2
GUN Gumba 43.17 330 eP P 20 53 37.1 +0.1
XAN Xi'an 43.24 0 P P 20 53 36.6 -0.5
XAN pP pwP 20 53 47.5 0.0

XAN sP sP 20 53 54.8 +7.4
XAN pmax pmax
comp=Z,19nm,1.0s
XAN LR LR
comp=Z,350nm,11.7s
XAN LR LR
comp=Z,270nm,11.7s
XAN LR LR
comp=Z,550nm,15.1s
DMN Daman 43.31 329 eP P 20 53 38.2 +0.2
comp=Z,54nm,1.0s
KKN Kakani 43.37 329 eP P 20 53 38.6 +0.2
LYN LuoYang 43.91 5 ⇑P P 20 53 43.0 +0.6
LYN pP sP 20 53 53.9 +1.2
LYN pmax pmax
comp=Z,10.0nm,1.2s
LYN LR LR
comp=Z,300nm,12.4s
LYN LR LR
comp=Z,250nm,15.1s
KOLN Koldanda 44.22 327 eP P 20 53 45.7 +0.4
LZH Lanzhou 45.51 355 eP P 20 53 56.6 +1.3
LZH pP pwP 20 54 07.3 +1.5
LZH sP sP 20 54 11.6 +5.9
LZH pmax pmax
comp=Z,27nm,1.2s
LZH LR LR
comp=Z,400nm,11.9s
LZH LR LR
comp=Z,220nm,11.9s
LZH LR LR
comp=Z,440nm,14.1s
TIA Tai'an 46.11 10 P P 20 53 59.3 -0.6
TIA pmax pmax
comp=Z,10.0nm,0.9s
HNS HongShan 46.94 7 ⇑P P 20 54 06.3 -0.1
HNS pmax pmax
comp=Z,10.0nm,1.2s
TIY Taiyuan 47.05 4 P P 20 54 07.4 +0.1
TIY pmax pmax
comp=Z,12nm,1.1s
GOMU GeErMu 47.22 345 P P 20 54 09.8 +0.7
GOMU pmax pmax
comp=Z,4.0nm,1.0s
GOMU pmax pmax
comp=Z,61nm,4.5s
GOMU LR LR
comp=Z,220nm,17.8s
GOMU LR LR
comp=Z,170nm,18.6s
GOMU LR LR
comp=Z,220nm,17.4s
GTA Gaotai 49.29 351 ⇓P P 20 54 25.6 +0.9
GTA pP pP 20 54 32.8 +0.7
GTA sP pwP 20 54 36.6 +1.0
GTA pmax pmax
comp=Z,11nm,1.3s
GTA pmax pmax
comp=Z,130nm,5.8s
GTA LR LR
comp=Z,230nm,13.5s
GTA LR LR
comp=Z,310nm,14.9s
GTA LR LR
comp=Z,300nm,16.0s
BJT Baijiatuan 49.71 8 P P 20 54 26.6 -1.0
BJT IAmb IAmb 20 54 39.5
comp=Z,34nm,1.0s
BJI Beijing 49.73 8 P P 20 54 27.4 -0.4
BJI pP sP 20 54 38.3 +0.1
BJI sP pwP 20 54 40.5 +1.7
BJI S S 21 01 31.6 -3.6
BJI pmax pmax
comp=Z,19nm,1.1s
BJI pmax pmax
comp=Z,190nm,3.6s
BTO Baotou 49.81 1 eP P 20 54 29.0 +0.4
JHS Saijyo 49.91 26 P P 20 54 27.6 -1.8
KSAR Wonju Array Be 50.01 20 P P 20 54 29.0 -1.0
KSRS Korea Array 50.04 20 P P 20 54 29.7 -0.5
comp=Z,4.6nm,1.1s,baz=246,slow=7.8,SNR=4.4
HHC Hu-ho-hao-te 50.12 3 eP P 20 54 31.5 +0.6
HHC pmax pmax
comp=Z,9.0nm,1.0s
HHC pmax pmax
comp=Z,160nm,5.5s
HHC LR LR
comp=Z,290nm,14.0s
HHC LR LR
comp=Z,250nm,14.6s
HHC LR LR
comp=Z,260nm,14.6s
XLT XiLinHaoTe 53.52 7 eP P 20 54 56.3 0.0
XLT pP sP 20 55 06.8 +0.1
XLT pmax pmax
comp=Z,20nm,1.2s
XLT pmax pmax
comp=Z,150nm,4.2s
MAJO Matsushiro 53.54 30 P P 20 54 54.7 -1.7
MAJO IAmb IAmb 20 55 12.2
comp=Z,27nm,1.4s
MAT Matsushiro 53.54 30 P P 20 54 54.5 -1.9
MJAR Matsushiro Arr 53.54 30 P P 20 54 54.0 -2.5
comp=Z,5.2nm,0.9s,baz=199,slow=7.9,SNR=5.9
MJAR LR LR 21 19 01.8
comp=Z,87nm,19.8s,baz=216,slow=38
MJAR Matsushiro Arr 53.54 30 P P 20 54 54.7 -1.7
NIL Nilore 54.46 324 P P 20 55 01.5 -1.8
NIL IAmb IAmb 20 55 04.5
comp=Z,30nm,1.1s
JMM Marumori 55.85 31 P P 20 55 11.6 -1.5
WMQ Urumqi 56.32 342 eP P 20 55 17.0 +0.5
WMQ pP sP 20 55 28.0 +1.0
WMQ PP PP 20 57 21.8 -0.4
WMQ pmax pmax
comp=Z,21nm,1.3s
SONM Songino Array 57.06 358 P P 20 55 22.5 +0.8
comp=Z,5.2nm,0.4s,baz=177,slow=9.1,SNR=80
SONM LR LR 21 21 24.0
comp=Z,148nm,20.8s,baz=167,slow=38
SONM Songino Array 57.06 358 P P 20 55 21.9 +0.2
SONM IAmb IAmb 20 55 34.3
comp=Z,17nm,0.9s
ULN Ulaanbaatar 57.07 359 P P 20 55 21.6 -0.2
ULN IAmb IAmb 20 55 34.7
comp=Z,23nm,1.0s
KSH Kashi 57.36 330 P P 20 55 33.3 +9.2
KSH pmax pmax
comp=Z,13nm,0.8s
USRK Ussuriysk Ar. 57.44 20 P P 20 55 24.0 -0.4
comp=Z,2.8nm,0.6s,baz=169,slow=2.9,SNR=8.6
USRK Ussuriysk Ar. 57.44 20 P P 20 55 23.3 -1.0
BNX BinXian 57.47 16 ⇓P P 20 55 24.3 -0.2
BNX pmax pmax
comp=Z,32nm,1.0s
BNX pmax pmax
comp=Z,450nm,3.6s
KBL Kabul 57.60 321 P P 20 55 24.3 -1.7
TARG Taragay, Kyrgy 58.25 333 P P 20 55 29.3 -1.3
TARG IAmb IAmb 20 55 50.7
comp=Z,15nm,0.9s
SOCY Socotra 58.38 291 P P 20 55 30.0 -1.6
WSAR Wadi Sarin 58.70 304 LR LR 21 19 44.4
comp=Z,128nm,20.6s,baz=126,slow=35
UZB Uzynbulak 58.88 335 eP P 20 55 34.6 -0.1
comp=Z,6.1nm,1.1s,baz=335
SATY Saty 59.07 335 eP P 20 55 36.0 0.0
baz=334
ZHN Zhinishke 59.15 335 eP P 20 55 36.3 -0.1
baz=335
KPKS Kokpek 59.28 335 eP P 20 55 37.2 -0.2
baz=335
TNSS Tian-Shan 59.68 334 eP P 20 55 40.0 -0.5
baz=334
MDOK Medeo 59.74 334 eP P 20 55 40.4 -0.2
baz=334
AAA Alma-Ata 59.83 334 eP P 20 55 41.1 0.0
comp=Z,7.0nm,0.7s,baz=334
GAR Garm 59.92 326 P P 20 55 40.2 -1.7
OPO Ambohidratompo 60.05 254 P P 20 55 46.5 +3.2
comp=Z,2.8nm,0.8s,baz=333,slow=2.3,SNR=2.8
CHKK Chushkaly 60.32 334 eP P 20 55 44.1 -0.2
baz=334
CHGR Chuyangaron 60.33 325 P P 20 55 42.8 -1.9
CHGR IAmb IAmb 20 55 46.0
comp=Z,23nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **60.45** | **342** | *eP* | **P** | **20 55 45.4 +0.2** |
| | comp=Z,7.2nm,1.0s,baz=342 | | | | | |
| **KUU** | **Kurty** | **60.63** | **344** | *eP* | **P** | **20 55 45.9 -0.6** |
| | comp=Z,20nm,1.2s,baz=334 | | | | | |
| **TDK** | **Taldyqorghan** | **60.66** | **336** | *eP* | **P** | **20 55 46.4 -0.3** |
| | comp=Z,11nm,1.0s,baz=336 | | | | | |
| **MK31** | **Makanchi Array** | **60.72** | **340** | P | **P** | **20 55 47.0 -0.1** |
| **MKAR** | **Makanchi Array** | **60.72** | **340** | P | **P** | **20 55 47.4 +0.3** |
| | comp=Z,7.5nm,0.4s,baz=150,slow=8.1,SNR=113 | | | | | |
| **MKAR** | **Makanchi Array** | **60.72** | **340** | P | **P** | **20 55 46.5 -0.5** |
| **MAKZ** | **Makanchi** | **60.84** | **339** | P | **P** | **20 55 47.1 -0.8** |
| MAKZ | | | | IAmb | IAmb | 20 56 00.2 |
| | comp=Z,22nm,1.1s | | | | | |
| **SGDS** | **Sogindy** | **61.05** | **332** | *eP* | **P** | **20 55 48.9 -0.6** |
| | baz=332 | | | | | |
| **ASAJ** | **Asahikawa** | **61.56** | **27** | P | **P** | **20 55 52.1 -0.6** |
| | comp=Z,2.4nm,0.6s,baz=343,slow=20,SNR=1.5 | | | | | |
| ASAJ | | | | LR | LR | 21 23 32.2 |
| | comp=Z,47nm,20.1s,baz=232,slow=37 | | | | | |
| **KLR** | **Kul'dur** | **61.86** | **17** | P | **P** | **20 55 54.1 -0.5** |
| | comp=Z,4.5nm,0.4s,baz=200,slow=5.2,SNR=43 | | | | | |
| **IUG** | **Iuzhnay** | **62.32** | **328** | *eP* | **P** | **20 55 57.8 -0.3** |
| | baz=328 | | | | | |
| **KKAR** | **Karatay Array** | **62.77** | **329** | P | **P** | **20 55 59.9 -1.0** |
| **BRLS** | **Borolday** | **63.05** | **329** | *eP* | **P** | **20 56 02.5 -0.3** |
| | baz=329 | | | | | |
| **RPZ** | **Rata Peaks** | **63.69** | **134** | LR | LR | 21 22 02.8 |
| | comp=Z,158nm,21.9s,baz=242,slow=34 | | | | | |
| **RPZ** | **Rata Peaks** | **63.69** | **134** | P | **P** | **20 56 06.1 -1.1** |
| RPZ | | | | IAmb | IAmb | 20 56 22.9 |
| | comp=Z,20nm,1.0s | | | | | |
| **QRZ** | **Quartz Range** | **64.19** | **131** | P | **P** | **20 56 09.0 -1.5** |
| **OXZ** | **Oxford** | **64.30** | **134** | P | **P** | **20 56 09.3 -1.9** |
| **SEM** | **Semipalatinsk** | **64.52** | **340** | *eP* | **P** | **20 56 11.8 -0.8** |
| | comp=Z,4.4nm,0.8s,baz=340 | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.28** | **339** | P | **P** | **20 56 17.9 +0.7** |
| | comp=Z,9.1nm,0.8s,baz=156,slow=5.3,SNR=49 | | | | | |
| **KURK** | **Kurchatov** | **65.33** | **340** | P | **P** | **20 56 17.1 -0.4** |
| **ZAA0** | **Zalesovo Array** | **66.29** | **345** | P | **P** | **20 56 22.9 -0.7** |
| ZAA0 | | | | IAmb | IAmb | 20 56 35.0 |
| | comp=Z,18nm,1.0s | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.29** | **345** | P | **P** | **20 56 23.6 -0.1** |
| | comp=Z,4.4nm,0.4s,baz=152,slow=6.1,SNR=24 | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.29** | **345** | P | **P** | **20 56 23.1 -0.5** |
| **GEYT** | **Alibeck** | **66.64** | **318** | LR | LR | 21 27 54.5 |
| | comp=Z,75nm,21.8s,baz=147,slow=38 | | | | | |
| **BKZ** | **Black Stump Fm** | **66.96** | **129** | P | **P** | **20 56 27.7 -0.8** |
| BKZ | | | | IAmb | IAmb | 20 56 42.1 |
| | comp=Z,18nm,0.9s | | | | | |
| **BRZS** | **Berezniki** | **66.97** | **336** | *eP* | **P** | **20 56 28.0 -0.2** |
| | comp=Z,7.8nm,1.2s,baz=336 | | | | | |
| **URZ** | **Urewera** | **67.34** | **127** | LR | LR | 21 26 57.1 |
| | comp=Z,182nm,19.4s,baz=282,slow=37 | | | | | |
| **RAYN** | **Ar Rayn** | **69.83** | **299** | P | **P** | **20 56 45.6 -1.1** |
| RAYN | | | | IAmb | IAmb | 20 56 59.0 |
| | comp=Z,11nm,1.1s | | | | | |
| **BVAR** | **Borovoye Array** | **70.23** | **337** | P | **P** | **20 56 49.0 +0.6** |
| | comp=Z,9.2nm,0.9s,baz=102,slow=11,SNR=19 | | | | | |
| **BRVK** | **Borovoye** | **70.30** | **337** | P | **P** | **20 56 48.2 -0.6** |
| BRVK | | | | IAmb | IAmb | 20 57 01.3 |
| | comp=Z,13nm,0.8s | | | | | |
| **KMBO** | **Kilima Mbogo** | **71.43** | **272** | P | **P** | **20 56 59.4 +2.5** |
| | comp=Z,2.6nm,0.9s,baz=51,slow=14,SNR=2.7 | | | | | |
| **FURI** | **Furi** | **71.98** | **283** | P | **P** | **20 56 58.5 -1.7** |
| FURI | | | | IAmb | IAmb | 20 57 17.2 |
| | comp=Z,14nm,0.7s | | | | | |
| **ABKAR** | **Akbulak array** | **72.32** | **329** | P | **P** | **20 57 00.9 -0.2** |
| ABKAR | | | | IAmb | IAmb | 20 57 15.1 |
| | comp=Z,23nm,0.8s | | | | | |
| **ABKAR** | **Akbulak array** | **72.32** | **329** | P | **P** | **20 57 00.9 -0.2** |
| **YAK** | **Yakutsk** | **73.12** | **10** | P | **P** | **20 57 05.1 -0.5** |
| | comp=Z,14nm,0.8s,baz=7.1,slow=3.7,SNR=19 | | | | | |
| **YAK** | **Yakutsk** | **73.12** | **10** | P | **P** | **20 57 03.9 -1.7** |
| **VNDA** | **Vanda** | **73.29** | **170** | P | **P** | **20 57 08.3 +1.8** |
| | comp=Z,3.7nm,0.8s,baz=335,slow=6.7,SNR=1.6 | | | | | |
| **AKTO** | **Aktyubinsk** | **74.03** | **329** | P | **P** | **20 57 11.3 +0.1** |
| | comp=Z,1.4nm,0.5s,baz=105,slow=10,SNR=3.9 | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.96** | **28** | P | **P** | **20 57 16.4 -0.2** |
| **PETK** | **Petropavlovsk-** | **74.96** | **28** | P | **P** | **20 57 16.2 -0.4** |
| | comp=Z,7.9nm,0.9s,baz=168,slow=1.3,SNR=10 | | | | | |
| PETK | | | | LR | LR | 21 33 15.1 |
| | comp=Z,40nm,18.9s,baz=184,slow=38 | | | | | |
| **PETK** | **Petropavlovsk-** | **74.96** | **28** | P | **P** | **20 57 15.6 -1.0** |
| **MA2** | **Magadan** | **76.59** | **21** | P | **P** | **20 57 25.2 -0.5** |
| MA2 | | | | IAmb | IAmb | 20 57 38.2 |
| | comp=Z,16nm,0.8s | | | | | |
| **GNI** | **Garni** | **76.80** | **315** | P | **P** | **20 57 28.5 +0.9** |
| | comp=Z,3.3nm,0.8s,baz=134,slow=13,SNR=2.8 | | | | | |
| GNI | | | | LR | LR | 21 33 49.9 |
| | comp=Z,45nm,21.5s,baz=64,slow=38 | | | | | |
| **GEVA** | **Gevas** | **77.26** | **313** | P | **P** | **20 57 28.8 -1.5** |
| GEVA | | | | IAmb | IAmb | 20 57 43.0 |
| | comp=Z,7.9nm,0.9s | | | | | |
| **ARU** | **Arti** | **77.50** | **334** | P | **P** | **20 57 31.9 +1.0** |
| | comp=Z,0.5nm,0.3s,baz=161,slow=7.6,SNR=5.3 | | | | | |
| **ARU** | **Arti** | **77.50** | **334** | P | **P** | **20 57 30.6 -0.3** |
| ARU | | | | IAmb | IAmb | 20 57 44.6 |
| | comp=Z,13nm,0.9s | | | | | |
| **MBAR** | **Mbarara** | **77.94** | **271** | P | **P** | **20 57 36.7 +2.1** |
| | comp=Z,1.7nm,0.3s,baz=84,slow=6.1,SNR=7.3 | | | | | |
| **MBAR** | **Mbarara** | **77.94** | **271** | | **P** | **20 57 34.4 -0.2** |
| MBAR | | | | IAmb | IAmb | 20 57 49.6 |
| | comp=Z,9.9nm,0.9s | | | | | |
| **GURO** | **Guroymak-BITLI** | **78.10** | **313** | P | **P** | **20 57 35.0 +0.1** |
| GURO | | | | IAmb | IAmb | 20 57 47.8 |
| | comp=Z,8.7nm,1.0s | | | | | |
| **KARS** | **Kars** | **78.16** | **315** | P | **P** | **20 57 34.6 -0.6** |
| **LSZ** | **Lusaka** | **78.40** | **256** | P | **P** | **20 57 39.0 +2.0** |
| | comp=Z,3.9nm,0.7s,baz=87,slow=5.3,SNR=8.7 | | | | | |
| LSZ | | | | LR | LR | 21 26 16.4 |
| | comp=Z,81nm,20.4s,baz=120,slow=31 | | | | | |
| **MARD** | **Mardin** | **78.56** | **311** | P | **P** | **20 57 37.4 -0.1** |
| MARD | | | | IAmb | IAmb | 20 57 50.2 |
| | comp=Z,14nm,0.9s | | | | | |
| **KBZ** | **Khabaz** | **79.52** | **318** | P | **P** | **20 57 43.9 +1.6** |
| | comp=Z,13nm,1.0s,baz=187,slow=6.7,SNR=15 | | | | | |
| **SEY** | **Seymchan** | **79.57** | **19** | P | **P** | **20 57 42.6 +0.4** |
| | comp=Z,5.7nm,0.9s,baz=242,slow=5.1,SNR=18 | | | | | |
| **BOSA** | **Boshof** | **79.75** | **243** | LR | LR | 21 26 58.5 |
| | comp=Z,115nm,18.8s,baz=162,slow=31 | | | | | |
| **KIV** | **Kislovodsk** | **79.75** | **318** | P | **P** | **20 57 42.9 -0.9** |
| **ASF** | **Jabal al Asfar** | **79.86** | **305** | P | **P** | **20 57 46.3 +1.7** |
| | comp=Z,9.7nm,1.0s,baz=7.7,slow=1.8,SNR=7.8 | | | | | |
| **NRIK** | **Noril'sk** | **79.96** | **353** | P | **P** | **20 57 44.5 +0.3** |
| | comp=Z,3.4nm,0.7s,baz=143,slow=3.2,SNR=7.2 | | | | | |
| **NRIK** | **Noril'sk** | **79.96** | **353** | P | **P** | **20 57 43.9 -0.3** |
| **BELG** | **Belogornoye** | **80.54** | **327** | P | **P** | **20 57 48.4 +0.8** |
| | comp=Z,16nm,0.8s,baz=301,slow=11,SNR=3.6 | | | | | |
| **QSPA** | **South Pole Qui** | **80.56** | **180** | P | **P** | **20 57 48.7 +0.9** |
| QSPA | | | | IAmb | IAmb | 20 58 01.9 |
| | comp=Z,45nm,1.6s | | | | | |
| **EIL** | **Elat** | **80.72** | **302** | P | **P** | **20 57 50.8 +1.6** |
| | comp=Z,2.5nm,0.7s,baz=150,slow=8.1,SNR=3.0 | | | | | |
| EIL | | | | LR | LR | 21 34 32.2 |
| | comp=Z,55nm,18.6s,baz=96,slow=36 | | | | | |
| **MMAI** | **Mount Meron Ar** | **81.31** | **306** | P | **P** | **20 57 54.5 +2.1** |
| | comp=Z,5.8nm,0.8s,baz=98,slow=6.3,SNR=13 | | | | | |
| MMAI | | | | LR | LR | 21 34 20.4 |
| | comp=Z,86nm,21.4s,baz=248,slow=36 | | | | | |
| **TIXI** | **Tiksi** | **82.03** | **6** | P | **P** | **20 57 54.7 -0.5** |
| | comp=Z,21nm,1.0s,baz=92,slow=23,SNR=48 | | | | | |
| **TIXI** | **Tiksi** | **82.03** | **6** | P | **P** | **20 57 54.3 -0.8** |
| **BNN** | **Bunyan** | **82.74** | **311** | P | **P** | **20 58 00.0 +0.2** |
| **KIRV** | **Kirov** | **82.78** | **333** | P | **P** | **20 58 00.1 +0.9** |
| | comp=Z,9.3nm,0.8s,baz=186,slow=8.3,SNR=2.8 | | | | | |
| **CSS** | **Mathiatis** | **83.52** | **307** | P | **P** | **20 58 03.6 -0.2** |
| **BRTR** | **Keskin Array B** | **84.64** | **312** | P | **P** | **20 58 10.1 +0.5** |
| | comp=Z,9.1nm,0.9s,baz=126,slow=6.3,SNR=35 | | | | | |
| **BRTR** | **Keskin Array B** | **84.64** | **312** | P | **P** | **20 58 09.7 +0.2** |
| **BR131** | **Keskin Array S** | **84.64** | **312** | P | **P** | **20 58 09.4 -0.2** |
| **OBN** | **Obninsk** | **87.63** | **327** | P | **P** | **20 58 23.1 -0.6** |
| **KLMR** | **Klimovskoe** | **88.27** | **333** | *eP* | **P** | **20 58 25.5 -1.1** |
| KLMR | | | | AMP | | 20 58 29.1 |
| | comp=Z,35nm,1.1s | | | | | |
| **AKASG** | **Malin Array Be** | **90.59** | **321** | P | **P** | **20 58 38.4 +0.6** |
| | comp=Z,0.3nm,0.3s,baz=92,slow=4.2,SNR=7.2 | | | | | |
| **FINES** | **FINESS Array B** | **94.67** | **331** | P | **P** | **20 58 57.2 +0.9** |
| | comp=Z,3.7nm,1.0s,baz=50,slow=2.2,SNR=2.9 | | | | | |
| **ARCES** | **ARCESS Array B** | **96.37** | **339** | P | **P** | **20 59 05.7 +1.7** |
| | comp=Z,4.4nm,1.0s,baz=111,slow=4.9,SNR=3.0 | | | | | |
| **YKA** | **Yellowknife Ar** | **118.57** | **21** | PKP | **PKPdf** | **21 04 23.4 +0.4** |
| | comp=Z,0.8nm,0.6s,baz=335,slow=1.7,SNR=12 | | | | | |
| **NVAR** | **Mina Array Bea** | **129.06** | **48** | PKP | **PKiKP** | **21 04 46.6 +1.7** |
| | comp=Z,0.6nm,0.8s,baz=325,slow=1.8,SNR=4.8 | | | | | |
| **TXAR** | **Lajitas Array** | **143.88** | **52** | PKP | PKPbc | 21 05 11.3 +1.9 |
| | comp=Z,0.4nm,0.5s,baz=251,slow=2.8,SNR=1.7 | | | | | |
| **J47A** | **Sunmer** | **144.35** | **17** | | **PKPab** | **21 05 10.2 +0.3** |
| **BDFB** | **Brasilia** | **145.99** | **223** | PKPbc | **PKPdf** | **21 05 16.4 +0.7** |
| | comp=Z,2.4nm,0.5s,baz=170,slow=3.5,SNR=4.2 | | | | | |
| **BDFB** | **Brasilia** | **145.99** | **223** | | **PKPdf** | **21 05 14.3 -1.3** |
| **LCAR** | **Lake Charles** | **147.97** | **31** | | **PKPbc** | **21 05 21.5 +0.2** |
| **SSPA** | **Standing Stone** | **148.40** | **9** | | **PKPbc** | **21 05 23.0 +0.7** |
| **P52A** | **Corning** | **148.44** | **16** | | **PKPbc** | **21 05 22.5 0.0** |
| **LPAZ** | **La Paz** | **154.23** | **187** | PKPbc | **PKPbc** | **21 05 38.9 +1.6** |
| | comp=Z,1.4nm,0.7s,baz=119,slow=1.8,SNR=4.0 | | | | | |

*IDC **13** 20:50:21.5±4.0, 36°.29N×70°.81E, h177km±36km, mb3.5/10, mb1 3.6/15, mb1mx3.2/72, mbtmp4.0/15, Error ellipse: s-maj=27.7km s-min=15.5km az=35.0*
*NEIC **13** 20:50:25.7±1.4, 36°.58N±0°.06×70°.82E±0°.09, h211km±5km, mb4.1/15, Error ellipse: s-maj=10.4km s-min=8.9km az=95.0*
*NNC **13** 20:50:25.7±11.0, 37°.06N×70°.34E, h0km, mb4.8, mpv4.5, Error ellipse: s-maj=90.7km s-min=76.2km az=172.0*
**ISC 13 20:50:24.6±0.5, 36°.56N±0°.05×70°.93E±0°.07, h200km, n73, σ1s17/81, mb3.9/15, 1C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GAR** | **Garm** | **2.48** | **349** | | **Pn** | **20 51 10.0** | **+1.6** |
| **CHGR** | **Chuyangaron** | **2.52** | **327** | Pn | **Pn** | **20 51 10.0** | **+1.2** |
| **KBL** | **Kabul** | **2.54** | **218** | Pn | **Pn** | **20 51 10.4** | **+1.2** |
| **CEP** | **Cherat** | **2.85** | **163** | P | **Pn** | **20 51 14.6** | **+1.9** |
| CEP | | | | S | **Sn** | **20 51 50.0** | **-0.1** |
| **NIL** | **Nilore** | **3.47** | **146** | Pn | **Pn** | **20 51 22.1** | **+2.1** |
| **THW** | **Thamme Wali** | **3.82** | **170** | P | **Pn** | **20 51 25.7** | **+1.5** |
| **TAS** | **Tashkent** | **4.92** | **345** | Pn | **Pn** | **20 51 39.4** | **+1.4** |
| **JMU** | **Jammu** | **5.04** | **138** | *eP* | **Pn** | **20 51 40.0** | **+0.4** |
| JMU | | | | *eS* | **Sn** | **20 52 36.6** | **-2.0** |
| **THN** | **Thein Dam** | **5.71** | **135** | *eP* | **Pn** | **20 51 49.5** | **+1.4** |
| THN | | | | *eS* | **Sn** | **20 52 53.4** | **-0.6** |
| **AML** | **Almayashu** | **5.96** | **20** | P | **Pn** | **20 51 52.8** | **+1.1** |
| | SNR=191 | | | | | | |
| **UCH** | **Uchtor** | **6.30** | **25** | P | **Pn** | **20 51 57.4** | **+1.3** |
| | SNR=52 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **19** | P | **Pn** | **20 51 59.5** | **+1.4** |
| | SNR=19 | | | | | | |
| **KKAR** | **Karatay Array** | **6.54** | **357** | Pn | **Pn** | **20 51 59.2** | **+0.4** |
| **KK09** | **Karatay Array** | **6.56** | **357** | ⇓P | **Pn** | **20 51 58.9** | **-0.1** |
| | 23nm,0.5s,baz=182,slow=15 | | | | | | |
| KK09 | | | | ⇑S | **Sn** | **20 53 09.2** | **-4.8** |
| | 18nm,0.3s,baz=188,slow=24 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **23** | P | **Pn** | **20 52 01.7** | **+1.2** |
| | 5.7nm,0.3s,baz=191,slow=7.2,SNR=117 | | | | | | |
| AAK | | | | S | **Sn** | **20 53 16.3** | **-0.3** |
| | 3.2nm,0.3s,baz=159,slow=22,SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **23** | P | **Pn** | **20 52 01.8** | **+1.3** |
| | SNR=29 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **23** | Pn | **Pn** | **20 52 01.6** | **+1.1** |
| **AAK** | **Ala-Archa** | **6.66** | **23** | P | **Pn** | **20 52 01.6** | **+1.2** |
| | 16nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **20 53 15.7** | **-0.8** |
| | 34nm,0.9s | | | | | | |
| **KBK** | **Karagaybulak** | **6.83** | **26** | P | **Pn** | **20 52 04.2** | **+1.5** |
| | SNR=14 | | | | | | |
| **BHK** | **Bhakra** | **6.86** | **137** | *eP* | **Pn** | **20 52 03.4** | **+0.3** |
| **CHMS** | **Chumysh** | **7.07** | **23** | P | **Pn** | **20 52 07.1** | **+1.4** |
| | SNR=7.1 | | | | | | |
| **USP** | **Ospenovka** | **7.24** | **21** | P | **Pn** | **20 52 08.1** | **+0.3** |
| | SNR=27 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.30** | **28** | P | **Pn** | **20 52 09.7** | **+0.9** |
| | SNR=35 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.30** | **28** | ⇓P | **Pn** | **20 52 09.7** | **+0.9** |
| | 38nm,0.9s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **20 53 32.3** | **+0.7** |
| | 13nm,1.0s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **7.42** | **44** | Pn | **Pn** | **20 52 11.4** | **+0.7** |
| **SMLA** | **Simla** | **7.50** | **134** | *eP* | **Pn** | **20 52 10.8** | **-0.6** |
| SMLA | | | | *eS* | **Sn** | **20 53 34.4** | **-1.8** |
| SMLA | | | | IAML | | 20 53 35.8 | |
| | comp=N,51nm,0.3s | | | | | | |
| SMLA | | | | IAML | | 20 53 36.0 | |
| | comp=E,83nm,0.3s | | | | | | |
| **NDI** | **New Delhi** | **9.47** | **144** | *eP* | **Pn** | **20 52 37.0** | **-0.1** |
| **KUDL** | **Kundal** | **9.62** | **149** | *eP* | **Pn** | **20 52 37.8** | **-1.1** |
| KUDL | | | | *eS* | Sn | 20 54 19.3 | -7.3 |
| **SONA** | **Sohna** | **9.78** | **146** | *eP* | **Pn** | **20 52 41.0** | **-0.1** |
| **PTH** | **Pithoragarh** | **10.46** | **129** | *eP* | **Pn** | **20 52 48.7** | **-1.4** |
| **AJM** | **Ajmer** | **10.54** | **161** | *eP* | **Pn** | **20 52 50.4** | **-0.4** |
| **LGTI** | **Lohaghat** | **10.55** | **130** | *eP* | **Pn** | **20 52 49.3** | **-1.7** |
| **JHNI** | **Jhansi** | **12.84** | **147** | *eP* | **Pn** | **20 53 19.6** | **-0.5** |
| **MAKZ** | **Makanchi** | **13.14** | **35** | Pn | **Pn** | **20 53 23.9** | **+0.2** |
| **MK31** | **Makanchi Array** | **13.27** | **36** | | **Pn** | **20 53 26.1** | **+0.7** |
| **MKAR** | **Makanchi Array** | **13.27** | **36** | P | **Pn** | **20 53 26.5** | **+1.1** |
| | comp=E,0.2nm,0.3s,baz=208,slow=11,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.27** | **36** | Pn | **Pn** | **20 53 26.1** | **+0.7** |
| **BHPL** | **Bhopal** | **14.41** | **155** | *eP* | **P** | **20 53 42.5** | **+1.5** |
| **ABKAR** | **Akbulak array** | **15.00** | **331** | P | **Pn** | **20 53 45.9** | **-0.8** |
| **ABKAR** | **Akbulak array** | **15.00** | **331** | | **Pn** | **20 53 45.6** | **-1.1** |
| **KURBB** | **Kurchatov Arra** | **15.08** | **19** | P | **Pn** | **20 53 47.3** | **-0.3** |
| | comp=E,0.1nm,0.3s,baz=208,slow=12,SNR=6.8 | | | | | | |
| **KURK** | **Kurchatov** | **15.19** | **19** | | **Pn** | **20 53 47.7** | **-1.2** |
| **BVAR** | **Borovoye Array** | **16.47** | **359** | P | **Pn** | **20 54 05.1** | **+0.8** |
| | comp=E,1.6nm,0.3s,baz=304,slow=45,SNR=6.4 | | | | | | |
| **BRVK** | **Borovoye** | **16.50** | **359** | P | **P** | **20 54 03.3** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 20 54 09.0 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.70** | **330** | P | **Pn** | **20 54 07.5** | **+0.4** |
| | comp=Z,1.2nm,0.3s,baz=138,slow=10,SNR=23 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.88** | **25** | P | **P** | **20 54 40.3** | **-0.2** |
| ZAA0 | | | | IAmb | IAmb | 20 54 46.5 | |
| | comp=Z,4.5nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.88** | **25** | P | **P** | **20 54 41.3** | **+0.9** |
| | comp=Z,1.8nm,0.3s,baz=213,slow=11,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.88** | **25** | P | **P** | **20 54 40.0** | **-0.5** |
| **ARU** | **Arti** | **21.55** | **341** | P | **P** | **20 54 58.8** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=74,slow=6.5,SNR=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **37.40** | **326** | P | **P** | **20 57 17.8** | **-0.1** |
| | comp=Z,3.5nm,1.1s,baz=122,slow=2.9,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.07** | **338** | P | **P** | **20 57 49.5** | **+1.4** |
| | comp=Z,2.9nm,0.9s,baz=117,slow=8.3,SNR=13 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.07** | **338** | P | **P** | **20 57 48.9** | **+0.8** |
| ARCES | | | | IAmb | IAmb | 20 57 52.2 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **GSI** | **Gunungsitoli** | **42.88** | **139** | P | **P** | **20 58 03.9** | **+0.5** |
| GSI | | | | IAmb | IAmb | 20 58 15.4 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **NC303** | **NORSAR Array S** | **44.24** | **323** | P | **P** | **20 58 13.4** | **-0.3** |
| NC303 | | | | IAmb | IAmb | 20 58 23.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.30** | **323** | P | **P** | **20 58 14.5** | **+0.2** |
| | comp=Z,0.3nm,0.5s,baz=97,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.30** | **323** | P | **P** | **20 58 14.4** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=97,slow=7.8,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.66** | **269** | P | **P** | **21 00 46.0** | **-1.8** |
| | comp=Z,0.5nm,0.4s,baz=54,slow=5.8,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.66** | **269** | P | **P** | **21 00 45.9** | **-1.8** |
| **KOWA** | **Kowa** | **69.51** | **273** | P | **P** | **21 01 10.7** | **-1.2** |
| KOWA | | | | IAmb | IAmb | 21 01 14.2 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **C36M** | **Paulatuk** | **73.82** | **5** | P | **P** | **21 01 37.0** | **+0.4** |
| C36M | | | | IAmb | IAmb | 21 01 37.9 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **K20K** | **Telida** | **74.17** | **19** | P | **P** | **21 01 39.8** | **+1.0** |
| K20K | | | | IAmb | IAmb | 21 01 55.6 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **74.69** | **222** | P | **P** | **21 01 42.5** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **74.97** | **127** | P | **P** | **21 01 43.9** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=326,slow=3.9,SNR=1.7 | | | | | | |
| **KNRA** | **Kununurra** | **75.31** | **123** | P | **P** | **21 01 45.6** | **-0.3** |
| **BOSA** | **Boshof** | **77.76** | **220** | P | **P** | **21 01 59.2** | **-0.4** |
| **YKA** | **Yellowknife Ar** | **81.19** | **3** | P | **P** | **21 02 18.3** | **+0.8** |
| | comp=Z,1.1nm,0.4s,baz=351,slow=5.4,SNR=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.19** | **3** | P | **P** | **21 02 18.1** | **+0.6** |
| **WRA** | **Warramunga Arr** | **82.07** | **122** | P | **P** | **21 02 21.7** | **-1.1** |
| | comp=Z,0.9nm,0.4s,baz=321,slow=4.5,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.07** | **122** | P | **P** | **21 02 21.4** | **-1.3** |
| **WRAB** | **Tennant Creek** | **82.07** | **122** | P | **P** | **21 02 21.7** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 21 02 25.3 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **84.34** | **125** | P | **P** | **21 02 33.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **84.34** | **125** | P | **P** | **21 02 33.2** | **-1.1** |
| | comp=Z,1.4nm,0.5s,baz=309,slow=4.9,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **84.34** | **125** | P | **P** | **21 02 33.1** | **-1.2** |

*PRE **13** 20:50:54.3±1.0, 26°.42S×27°.56E, h2km, ML2.4*
*BUL **13** 20:50:56.5±2.7, 26°.44S×27°.56E, h0km±17km, MD3.5*

*EAF **13** 20:50:56.5±2.6, 26°.44S×27°.56E, h0km±16km, MD3.4*
**ISC 13 20:50:58.9±2.4, 26°.25S±0°.05×27°.62E±0°.03, h8km±17km, n18, σ2s18/28, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSR** | **Koster** | **0.77** | **301** | *eP* | Pg | 20 51 10.9 | -2.8 |
| KSR | | | | *eS* | **Sg** | **20 51 22.4** | **-1.3** |
| KSR | | | | IAML | | 20 51 32.4 | |
| | comp=Z,176nm,0.1s | | | | | | |
| **CRLN** | **Carolina, Mapu** | **2.17** | **84** | *eP* | Pn | 20 51 33.0 | -2.6 |
| CRLN | | | | *eS* | **Sn** | **20 52 00.6** | **-2.2** |
| CRLN | | | | IAML | | 20 52 05.8 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **LBTB** | **Lobatse** | **2.21** | **304** | *eP* | **Pn** | **20 51 34.6** | **-1.3** |
| LBTB | | | | *eS* | **Sn** | **20 52 02.2** | **-1.2** |
| LBTB | | | | IAML | | 20 52 07.3 | |
| | comp=Z,47nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **2.21** | **304** | *i* Sg | **Sn** | **20 52 06.4** | **+3.0** |
| **LBTB** | **Lobatse** | **2.21** | **304** | *i* Sg | **Sn** | **20 52 06.4** | **+3.0** |
| **SWZ** | **Schweizer** | **2.25** | **245** | *eP* | Pn | 20 51 32.4 | -4.2 |
| SWZ | | | | *eS* | **Sn** | **20 51 59.5** | **-5.1** |
| SWZ | | | | IAML | | 20 52 05.3 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **BOSA** | **Boshof** | **3.16** | **221** | *i* P | Pn | 20 51 45.3 | -3.7 |
| BOSA | | | | *i* Sg | **Sn** | **20 52 28.1** | **+1.1** |
| **BOSA** | **Boshof** | **3.16** | **221** | *i* P | Pn | 20 51 45.3 | -3.7 |
| BOSA | | | | *i* Sg | **Sn** | **20 52 28.1** | **+1.1** |
| **POGA** | **Pongola** | **3.81** | **108** | *eP* | Pn | 20 51 54.0 | -3.9 |
| POGA | | | | *eS* | **Sn** | **20 52 38.9** | **-4.0** |
| POGA | | | | IAML | | 20 52 56.4 | |
| | comp=Z,21nm,4.1s | | | | | | |
| **CNG** | **Changalane** | **4.10** | **92** | *i* P | **Pn** | **20 52 02.6** | **+0.7** |
| CNG | | | | *i* Sg | **Sb** | **20 53 03.5** | **+2.4** |
| **CNG** | **Changalane** | **4.10** | **92** | *i* P | **Pn** | **20 52 02.6** | **+0.7** |
| CNG | | | | *i* Sg | **Sb** | **20 53 03.5** | **+2.4** |
| **MOPA** | **Mopani** | **4.38** | **52** | *eP* | **Pn** | **20 52 04.6** | **-1.2** |
| MOPA | | | | *eS* | **Sn** | **20 52 54.8** | **-2.2** |
| MOPA | | | | IAML | | 20 53 15.4 | |
| | comp=Z,10nm,3.0s | | | | | | |
| **MOPA** | **Mopani** | **4.38** | **52** | *i* P | **Pn** | **20 52 06.9** | **+1.2** |
| MOPA | | | | *i* S | **Sn** | **20 52 56.1** | **-0.9** |
| **MOPA** | **Mopani** | **4.38** | **52** | *i* P | **Pn** | **20 52 06.9** | **+1.2** |
| MOPA | | | | *i* S | **Sn** | **20 52 56.1** | **-0.9** |
| **MSNA** | **Messina** | **4.46** | **30** | *i* P | **Pn** | **20 52 08.9** | **+2.0** |
| MSNA | | | | *i* S | **Sn** | **20 52 58.1** | **-1.0** |
| **MSNA** | **Messina** | **4.46** | **30** | *i* P | **Pn** | **20 52 08.9** | **+2.0** |
| MSNA | | | | *i* S | **Sn** | **20 52 58.1** | **-1.0** |
| **MATP** | **Matopo** | **5.86** | **8** | *i* P | **Pn** | **20 52 25.8** | **-0.4** |
| MATP | | | | *i* S | **Sn** | **20 53 31.5** | **-2.1** |
| **MATP** | **Matopo** | **5.86** | **8** | *i* P | **Pn** | **20 52 25.8** | **-0.4** |
| MATP | | | | *i* S | **Sn** | **20 53 31.5** | **-2.1** |

*TUL **13** 20:55:32.1±0.9, 36°.52N±0°.02×98°.70W±0°.05, h8km±7km, ML3.3, mb_Lg3.2/76(NEIC), Error ellipse: s-maj=5.6km s-min=2.5km az=97.0*
**NEIC 13 20:55:33.0±0.9, 36°.53N±0°.02×98°.70W±0°.04, h9km±7km, Error ellipse: s-maj=5.3km s-min=1.2km az=110.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.29** | **238** | Pg | Pg | 20 55 37.9 | -0.8 |
| U

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,23nm,1.0s | | | | | | | |
| **RWWY** | **Rawlins** | **8.38** | **310** | IAmb_Lg | | | 21 00 14.1 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **K22A** | **Casper** | **8.59** | **318** | IAmb_Lg | | | 21 00 13.3 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **JFWS** | **Jewell Farm** | **9.11** | **43** | IAmb_Lg | | | 21 00 29.6 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **I40A** | **Norwalk** | **9.60** | **38** | IAmb_Lg | | | 21 00 40.8 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **SPMN** | **Marine on St.** | **9.76** | **25** | IAmb_Lg | | | 21 00 49.3 | |
| | comp=Z,13nm,1.1s | | | | | | | |

*TUL* ***13*** *20:58:44.9±1.4, 36°.06N±0°.01×97°.48W±0°.02, h5km±7km, ML3.2, mb_Lg3.1/60(NEIC), Error ellipse: s-maj=2.2km s-min=1.7km az=125.0*

**NEIC 13 20:58:45.0±0.8, 36°.07N±0°.01×97°.50W±0°.02, h5km±7km, Error ellipse: s-maj=2.3km s-min=1.8km az=114.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **0.66** | **177** | | Pg | 20 58 57.4 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.67** | **176** | Pg | Pg | 20 58 57.6 | -0.1 |
| **FNO** | **Franklin** | **0.82** | **174** | Pg | Pg | 20 59 00.3 | -0.4 |
| **W35A** | **Tecumseh** | **1.05** | **151** | Pg | Pg | 20 59 04.0 | -1.1 |
| **T35A** | **Sooner Cattle** | **1.16** | **43** | Pg | Pg | 20 59 06.6 | -0.6 |
| **TUL1** | **Leonard** | **1.39** | **96** | Pn | Pn | 20 59 09.9 | -1.1 |
| TUL1 | | | | IAmb_Lg | | 20 59 31.9 | |
| | comp=Z,112nm,1.1s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.49** | **191** | | Pn | 20 59 12.6 | +0.1 |
| X34A | | | | IAmb_Lg | | 20 59 33.7 | |
| | comp=Z,73nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.70** | **219** | Pn | Pn | 20 59 15.3 | +0.1 |
| **X37A** | **Clayton** | **2.28** | **130** | Pn | Pn | 20 59 24.0 | +0.7 |
| **R32A** | **Long Quarter,** | **2.54** | **338** | Pn | Pn | 20 59 27.8 | +1.0 |
| **U38A** | **Gravette** | **2.54** | **81** | Pn | Pn | 20 59 27.5 | +0.6 |
| U38A | | | | IAmb_Lg | | 21 00 08.2 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.74** | **176** | Pn | Pn | 20 59 29.8 | +0.1 |
| **HHAR** | **Hobbs** | **2.89** | **85** | Pn | Pn | 20 59 31.6 | 0.0 |
| **KSU1** | **Kansas State U** | **3.10** | **13** | | Pn | 20 59 34.8 | +0.1 |
| KSU1 | | | | IAmb_Lg | | 21 00 28.4 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **3.15** | **105** | Pn | Pn | 20 59 35.6 | +0.4 |
| **CBKS** | **Cedar Bluff** | **3.27** | **328** | Pn | Pn | 20 59 36.5 | -0.4 |
| **Z38A** | **Mt. Pleasant** | **3.49** | **143** | IAmb_Lg | | 21 00 44.6 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.55** | **114** | Pn | Pn | 20 59 41.5 | +0.8 |
| **AMTX** | **Amarillo** | **3.61** | **252** | | Pn | 20 59 42.7 | +1.0 |
| AMTX | | | | IAmb_Lg | | 21 00 47.2 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.72** | **63** | Pn | Pn | 20 59 43.3 | +0.3 |
| S39A | | | | IAmb_Lg | | 21 00 44.6 | |
| | comp=Z,61nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **3.77** | **84** | Pn | Pn | 20 59 43.7 | -0.1 |
| U40A | | | | IAmb_Lg | | 21 00 44.8 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.87** | **208** | IAmb_Lg | | 21 00 48.9 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.07** | **180** | Pn | Pn | 20 59 48.0 | +0.1 |
| **X40A** | **Basin Creek Fa** | **4.13** | **111** | Pn | Pn | 20 59 49.1 | +0.4 |
| X40A | | | | IAmb_Lg | | 21 00 56.8 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.31** | **99** | Pn | Pn | 20 59 50.9 | -0.3 |
| WHAR | | | | IAmb_Lg | | 21 01 01.5 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.32** | **122** | IAmb_Lg | | 21 01 03.8 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.34** | **74** | IAmb_Lg | | 21 01 10.3 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.36** | **91** | Pn | Pn | 20 59 52.1 | +0.2 |
| FCAR | | | | IAmb_Lg | | 21 01 13.8 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.37** | **100** | IAmb_Lg | | 21 01 03.2 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.73** | **40** | IAmb_Lg | | 21 01 21.1 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **4.78** | **125** | IAmb_Lg | | 21 01 22.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.02** | **307** | IAmb_Lg | | 21 01 35.4 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.28** | **181** | IAmb_Lg | | 21 01 34.4 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.38** | **67** | IAmb_Lg | | 21 01 42.4 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **5.66** | **283** | IAmb_Lg | | 21 01 56.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.95** | **8** | IAmb_Lg | | 21 01 56.3 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.97** | **69** | IAmb_Lg | | 21 01 55.5 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.03** | **325** | IAmb_Lg | | 21 02 07.9 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.61** | **352** | IAmb_Lg | | 21 02 19.3 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.63** | **287** | IAmb_Lg | | 21 02 17.6 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **S44A** | **Carbondale** | **6.80** | **74** | IAmb_Lg | | 21 02 25.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **8.12** | **312** | IAmb_Lg | | 21 03 08.0 | |
| | comp=Z,23nm,0.9s | | | | | | |

*TUL* ***13*** *21:18:19.1±1.2, 36°.45N±0°.03×98°.78W±0°.04, h7km±7km, ML2.5, mb_Lg2.3/8(NEIC), Error ellipse: s-maj=4.9km s-min=2.7km az=53.0*

**NEIC 13 21:18:20.6±1.3, 36°.49N±0°.03×98°.63W±0°.06, h13km±4km, Error ellipse: s-maj=6.9km s-min=3.4km az=73.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **1.44** | **138** | Pn | Pn | 21 18 45.3 | -0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **1.45** | **138** | Pn | Pn | 21 18 45.9 | -0.6 |
| **FNO** | **Franklin** | **1.58** | **141** | Pn | Pn | 21 18 48.5 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.75** | **184** | Pn | Pn | 21 18 49.0 | -1.6 |
| **T35A** | **Sooner Cattle** | **1.76** | **75** | | Pb | 21 18 52.1 | -0.5 |
| **R32A** | **Long Quarter,** | **1.93** | **358** | Pn | Pn | 21 18 53.0 | -0.1 |
| **W35A** | **Tecumseh** | **1.95** | **133** | | Pn | 21 18 53.8 | +0.4 |
| **X34A** | **Smith Ranch, M** | **1.99** | **161** | Pn | Pn | 21 18 54.3 | +0.4 |
| X34A | | | | IAmb_Lg | | 21 19 25.6 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.37** | **103** | Pn | Pn | 21 19 00.1 | +1.0 |
| **AMTX** | **Amarillo** | **2.95** | **238** | IAmb_Lg | | 21 19 53.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.27** | **125** | Pn | Pn | 21 19 12.6 | +1.2 |
| **KSCO** | **Kaye Shedlock'** | **4.05** | **310** | IAmb_Lg | | 21 20 32.9 | |
| | comp=Z,8.3nm,0.9s | | | | | | |

*INET* ***13*** *21:20:58.4±2.3, 8°.67N×82°.88W, h1km±182km, ML3.8, MW3.9*

*UPA* ***13*** *21:20:59.7±1.5, 8°.68N×82°.79W, h7km±3km, MW4.3, Fault plane solution: NP1:ϕ±28.00000°, δ69.00000°, λ-179.00000°.*

*UCR* ***13*** *21:21:00.6±1.7, 8°.64N×82°.83W, h15km±3km, MW5.1*

**ISC 13 21:21:00.4±0.9, 8°.68N±0°.02×82°.82W±0°.02, h18km±3km, n75, σ1§26/100, 10C-9D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CDITO** | **Canoas** | **0.12** | **206⇑** | *eP* | **Pg** | **21 21 03.7** | **-0.6** |
| CDITO | | | | *eS* | **Sg** | **21 21 06.0** | **-0.9** |
| **BRU2** | **Volcan** | **0.17** | **48** | *eP* | **Pg** | **21 21 04.8** | **-0.4** |
| BRU2 | | | | *eS* | **Sg** | **21 21 08.5** | **+0.2** |
| **BRU2** | **Volcan** | **0.17** | **48⇓** | *iP* | **Pg** | **21 21 04.8** | **-0.4** |
| BRU2 | | | | *eS* | **Sg** | **21 21 06.6** | **-1.7** |
| **EDSV** | **San Vito** | **0.20** | **313** | *eP* | **Pg** | **21 21 06.1** | **+0.6** |
| EDSV | | | | *eS* | **Sg** | **21 21 11.5** | **+2.4** |
| **LESP3** | **La Esperanza,** | **0.27** | **174⇑** | *eP* | **Pg** | **21 21 05.8** | **-0.8** |
| **CCOL** | **Caracol de Cor** | **0.31** | **209** | *eP* | **Pb** | **21 21 06.7** | **-0.8** |
| CCOL | | | | *eS* | **Sb** | **21 21 12.7** | **+0.6** |
| **LNBQ3** | **Los Naranjos,** | **0.39** | **73⇓** | *eP* | **Pg** | **21 21 07.6** | **-1.1** |
| **DVD** | **David** | **0.44** | **123⇓** | *eP* | **Pg** | **21 21 08.4** | **-1.0** |
| DVD | | | | *eS* | **Sg** | **21 21 15.0** | **-0.4** |
| **PTPM** | **Petroterminale** | **0.47** | **187⇑** | *eP* | **Pg** | **21 21 09.1** | **-0.9** |
| PTPM | | | | *eS* | **Sb** | **21 21 17.7** | **+0.8** |
| **LOMA3** | **La Lomas, Chi** | **0.49** | **120⇑** | *eP* | **Pg** | **21 21 09.3** | **-1.1** |
| **PTJ1** | **Puerto Jimnez** | **0.50** | **253** | *eP* | **Pg** | **21 21 09.8** | **-0.7** |
| **PTJ1** | **Puerto Jimnez** | **0.50** | **253** | *eP* | **Pg** | **21 21 09.7** | **-0.7** |
| PTJ1 | | | | *⇓iP* | **Pg** | **21 21 09.8** | **-0.7** |
| PTJ1 | | | | *eS* | **Sb** | **21 21 17.9** | **+0.3** |
| **CHIR3** | **Chiriqui UPA,** | **0.56** | **120⇑** | *eP* | **Pg** | **21 21 10.5** | **-1.2** |
| **PIRO** | **Carate, Puerto** | **0.58** | **242** | *eP* | **Pg** | **21 21 10.8** | **-1.2** |
| **PIRO** | **Carate, Puerto** | **0.58** | **242⇓** | *eP* | **Pg** | **21 21 10.8** | **-1.2** |
| PIRO | | | | *eS* | **Sb** | **21 21 20.3** | **+0.5** |
| **PIRO** | **Carate, Puerto** | **0.58** | **242** | *eP* | **Pg** | **21 21 10.8** | **-1.2** |
| PIRO | | | | IAML | | 21 21 43.7 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **EDBA** | **Buenos Aires** | **0.66** | **317** | *eP* | **Pb** | **21 21 13.8** | **+0.4** |
| **EDPN** | **Palmar Norte** | **0.69** | **294** | *eP* | **Pg** | **21 21 13.1** | **-0.9** |
| **CHGR2** | **Aguacate** | **0.72** | **69⇓** | *eP* | **Pg** | **21 21 12.6** | **-1.9** |
| CHGR2 | | | | *eS* | **Sg** | **21 21 22.7** | **-1.4** |
| **SRBA** | **San Rafael, Bu** | **0.77** | **316** | *eP* | **Pg** | **21 21 14.7** | **-0.8** |
| **CNI2** | **El Empalme, Bo** | **0.82** | **25⇑** | *eP* | **Pg** | **21 21 15.1** | **-1.4** |
| CNI2 | | | | *eS* | **Sg** | **21 21 26.8** | **-0.5** |
| **RGM0** | **Gandoca** | **0.93** | **13** | *eP* | **Pb** | **21 21 18.5** | **+0.5** |
| **RGM0** | **Gandoca** | **0.93** | **13⇑** | *eP* | **Pb** | **21 21 18.4** | **+0.3** |
| RGM0 | | | | *eS* | **Sn** | **21 21 34.3** | **+2.8** |
| **RGM0** | **Gandoca** | **0.93** | **13** | *eP* | **Pb** | **21 21 18.7** | **+0.7** |
| RGM0 | | | | IAML | | 21 21 58.6 | |
| | comp=Z,3μm,0.9s | | | | | | |
| **PEZE** | **Perez Zeledon,** | **1.10** | **310** | *eP* | **Pg** | **21 21 19.7** | **-2.0** |
| **PEZE** | **Perez Zeledon,** | **1.10** | **310** | *eP* | **Pg** | **21 21 19.9** | **-1.8** |
| PEZE | | | | IAML | | 21 21 42.2 | |
| | comp=E,14μm,0.3s | | | | | | |
| PEZE | | | | IAML | | 21 22 01.8 | |
| | comp=Z,1μm,1.4s | | | | | | |
| **EDDO** | **Dominical** | **1.18** | **299** | *eP* | **Pg** | **21 21 22.1** | **-1.2** |
| **CDM** | **Cerro de Muert** | **1.27** | **313** | *eP* | **Pg** | **21 21 22.8** | **-2.4** |
| **CDM** | **Cerro de Muert** | **1.27** | **313** | *eP* | **Pg** | **21 21 22.8** | **-2.4** |
| CDM | | | | IAML | | 21 22 10.0 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **MRVA** | **Moravia de Chi** | **1.29** | **332** | *eP* | **Pn** | **21 21 23.5** | **-0.2** |
| **RIMA** | **Rio Macho** | **1.49** | **316** | *eP* | **Pn** | **21 21 25.9** | **-0.7** |
| **RIMA** | **Rio Macho** | **1.49** | **316** | *eP* | **Pn** | **21 21 26.0** | **-0.5** |
| RIMA | | | | IAML | | 21 22 14.2 | |
| | comp=Z,721nm,1.1s | | | | | | |
| **BATAN** | **Batan** | **1.51** | **339⇑** | *eP* | **Pb** | **21 21 28.1** | **+0.1** |
| BATAN | | | | *eS* | **Sn** | **21 21 44.5** | **-1.4** |
| **VTCV** | **VTCV, Calle Va** | **1.57** | **325** | *eP* | **Pn** | **21 21 28.0** | **+0.4** |
| **LCR2** | **La Lucha 2** | **1.57** | **312** | *eP* | **Pn** | **21 21 26.9** | **-0.8** |
| **RAFA** | **San Farael, Vo** | **1.60** | **323** | *eP* | **Pb** | **21 21 29.7** | **-0.1** |
| **CVTR** | **Volcan Turrial** | **1.62** | **325** | *eP* | **Pn** | **21 21 29.0** | **+0.5** |
| **VTRT** | **Volcan Turrial** | **1.63** | **324** | *eP* | **Pn** | **21 21 28.9** | **+0.4** |
| **VTUC** | **Crater, Volcan** | **1.63** | **325** | *eP* | **Pn** | **21 21 28.9** | **+0.3** |
| **OCM** | **Ochomogo** | **1.65** | **317** | *eP* | **Pn** | **21 21 28.7** | **0.0** |
| **RSUS3** | **Rio de Jesus,** | **1.78** | **113⇓** | *eP* | **Pn** | **21 21 29.3** | **-1.0** |
| **GMAL** | **Guarumal, Vera** | **1.82** | **120** | *eS* | **Sn** | **21 21 53.0** | **-0.4** |
| **HDC3** | **Heredia 3** | **1.83** | **316** | *eP* | **Pn** | **21 21 31.6** | **+0.5** |
| **HDC3** | **Heredia 3** | **1.83** | **316** | *eP* | **Pn** | **21 21 31.9** | **+0.7** |
| HDC3 | | | | IAML | | 21 22 34.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.83** | **316** | *eP* | **Pn** | **21 21 31.5** | **+0.3** |
| **HDC** | **Heredia** | **1.83** | **316** | *⇑iP* | **Pn** | **21 21 31.6** | **+0.4** |
| HDC | | | | *eS* | **Sg** | **21 21 58.0** | **-1.6** |
| **RIFO** | **Rio Frio, Sara** | **1.96** | **326** | *eP* | **Pn** | **21 21 33.6** | **+0.9** |
| **CALO3** | **Calobre, Verag** | **1.99** | **100** | *eS* | **Sn** | **21 22 00.2** | **+2.5** |
| **CRPO** | **Crater poas** | **2.05** | **317** | *eP* | **Pn** | **21 21 34.8** | **+0.5** |
| **JACO** | **JACO, Garabito** | **2.06** | **298** | *eP* | **Pn** | **21 21 34.7** | **+0.5** |
| **MARI3** | **Mariato, Verag** | **2.08** | **119** | *eP* | **Pn** | **21 21 35.3** | **+0.8** |
| MARI3 | | | | *eS* | **Sg** | **21 22 09.5** | **+2.0** |
| **CRIS3** | **El Cristo, Coc** | **2.22** | **101** | *eS* | **Sn** | **21 22 04.5** | **+1.2** |
| **PESE3** | **Pese, Herrera** | **2.31** | **109** | *eS* | **Sb** | **21 22 09.4** | **-0.5** |
| **CACAO** | **El Cacao, Vera** | **2.35** | **124** | *eP* | **Pn** | **21 21 38.8** | **+0.6** |
| CACAO | | | | *eS* | **Sn** | **21 22 04.4** | **-2.1** |
| **PNME** | **Penonome** | **2.47** | **94** | *eP* | **Pn** | **21 21 40.8** | **+0.9** |
| PNME | | | | *eS* | **Sn** | **21 22 12.3** | **+2.7** |
| **CHIT3** | **Chitre** | **2.48** | **107** | *eP* | **Pn** | **21 21 40.8** | **+0.8** |
| CHIT3 | | | | *eS* | **Sn** | **21 22 11.7** | **+1.8** |
| **ARE1** | **Arenal 1** | **2.58** | **314** | *eP* | **Pn** | **21 21 42.1** | **+0.8** |
| **JTS** | **Las Juntas de** | **2.64** | **307** | *eP* | **Pn** | **21 21 43.7** | **+1.4** |
| **JTS** | **Las Juntas de** | **2.64** | **307⇑** | *eP* | **Pn** | **21 21 43.1** | **+0.9** |
| JTS | | | | *eS* | **Sn** | **21 22 16.3** | **+2.4** |
| **JTS** | **Las Juntas de** | **2.64** | **307** | *eP* | **Pn** | **21 21 43.5** | **+1.2** |
| JTS | | | | IAML | | 21 22 46.6 | |
| | comp=Z,148nm,0.7s | | | | | | |
| **AZU** | **Azuero** | **2.67** | **109** | *eP* | **Pn** | **21 21 43.2** | **+0.7** |
| **AZU** | **Azuero** | **2.67** | **109⇓** | *eP* | **Pn** | **21 21 43.8** | **+1.3** |
| AZU | | | | *eS* | **Sn** | **21 22 14.1** | **-0.3** |
| **VTON** | **El Valle, Cocl** | **2.68** | **91** | *eS* | **Sn** | **21 22 16.6** | **+1.8** |
| **ZANG** | **Zanguenga, Cho** | **2.93** | **84** | *eS* | **Sn** | **21 22 22.1** | **+1.1** |
| **BCIP** | **Isla Barro Col** | **2.99** | **80** | *eP* | **Pn** | **21 21 47.2** | **+0.3** |
| BCIP | | | | *eS* | **Sn** | **21 22 22.3** | **0.0** |
| **BCIP** | **Isla Barro Col** | **2.99** | **80** | *eP* | **Pn** | **21 21 47.5** | **+0.6** |
| BCIP | | | | *eS* | **Sn** | **21 22 19.9** | **-2.4** |
| **BCIP** | **Isla Barro Col** | **2.99** | **80** | *eP* | **Pn** | **21 21 47.6** | **+0.6** |
| BCIP | | | | IAML | | 21 22 50.6 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **FRIJ** | **El Hiral** | **3.10** | **80** | *eS* | **Sn** | **21 22 25.2** | **0.0** |
| **GAMB1** | **Gamboa** | **3.10** | **82** | *eS* | **Sn** | **21 22 26.5** | **+1.3** |
| **UPA** | **Univ. de Panam** | **3.26** | **84** | *eP* | **Pn** | **21 21 51.7** | **+1.0** |
| UPA | | | | *eS* | **Sn** | **21 22 28.7** | **-0.4** |
| **CHPO** | **Chepo, Panama** | **3.69** | **82** | *eS* | **Sn** | **21 22 39.6** | **-0.1** |
| **ESPN** | **Las Esperanzas** | **3.79** | **338** | *eP* | **Pn** | **21 21 58.7** | **+0.8** |
| **UPD2** | **Meteti** | **4.75** | **91⇓** | *eP* | **Pn** | **21 22 12.2** | **+1.0** |
| UPD2 | | | | *eS* | **Sn** | **21 23 08.8** | **+2.9** |
| **PRVC** | **Isla de Provid** | **4.88** | **17** | *eP* | Pn | 21 22 06.6 | -6.4 |
| PRVC | | | | *e* | | 21 23 07.7 | |
| **SJCC** | **San Jacinto, C** | **7.64** | **80** | *eP* | **Pn** | **21 22 51.6** | **+0.7** |
| SJCC | | | | *eS* | **Sn** | **21 24 13.7** | **-3.4** |

*DNK* ***13*** *21:30:55.0±4.7, 81°.68N×3°.83W, h9km±39km, ML1.9*

*NEIC* ***13*** *21:30:55.9±2.8, 81°.72N±0°.09×4°.4W±0°.5, h10km±1km, mb4.3/19, Error ellipse: s-maj=16.2km s-min=11.7km az=24.0*

*IDC* ***13*** *21:30:57.4±0.6, 81°.50N×4°.50W, h0km, mb3.8/19, mb1 3.9/21, mb1mx3.8/45, mbtmp3.8/21, ML3.9/2, MS3.6/38, Ms1 3.6/38, ms1mx3.4/94, Error ellipse: s-maj=16.5km s-min=12.3km az=23.0*

*BER* ***13*** *21:30:59.4±4.5, 81°.66N×3°.87W, h24km±49km, ML2.4, MW2.8, ML3.4(NAO), Confirmed Earthquake*

*IEPN* ***13*** *21:31:00.0, 81°.53N×3°.23W, h10km*

**ISC 13 21:30:56.3±0.4, 81°.53N±0°.05×4°.74W±0°.03, h10km, n123, σ2§92/128, mb4.0/25, MS3.5/36, 1C, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOR** | **Nord** | **1.76** | **278** | Pn | **Pb** | **21 31 28.4** | **-0.3** |
| NOR | | | | Sn | **Sb** | **21 31 49.6** | **-1.1** |
| **NOR** | **Nord** | **1.76** | **278** | *i* P | **Pb** | **21 31 28.0** | **-0.7** |
| NOR | | | | *i* S | **Sb** | **21 31 49.6** | **-1.1** |
| NOR | | | | IAML | | 21 31 50.1 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **NOR** | **Nord** | **1.76** | **278** | *eP* | **Pb** | **21 31 28.1** | **-0.5** |
| NOR | | | | *eS* | **Sb** | **21 31 49.7** | **-1.1** |
| **KBS** | **Kingsbay** | **3.85** | **124** | Pn | **Pn** | **21 31 54.6** | **-0.8** |
| KBS | | | | Sn | **Sn** | **21 32 34.7** | **-5.9** |
| **KBS** | **Kingsbay** | **3.85** | **124** | *i* P | **Pn** | **21 31 54.1** | **-1.3** |
| KBS | | | | *i* S | **Sn** | **21 32 36.5** | **-4.1** |
| **KBS** | **Kingsbay** | **3.85** | **124** | | **Pn** | **21 31 54.8** | **-0.6** |
| **KBS** | **Kingsbay** | **3.85** | **124** | *eP* | **Pn** | **21 31 54.6** | **-0.8** |
| KBS | | | | *eS* | **Sn** | **21 32 35.3** | **-5.3** |
| KBS | | | | IAML | | 21 32 39.6 | |
| | comp=Z,22nm,0.3s | | | | | | |
| **KBS** | **Kingsbay** | **3.85** | **124** | *eP* | **Pn** | **21 31 54.5** | **-1.0** |
| KBS | | | | *eS* | **Sn** | **21 32 34.1** | **-6.5** |
| **BRBB** | **Barentsburg B** | **4.79** | **126** | Pn | **Pn** | **21 32 08.6** | **+0.2** |
| BRBB | | | | Sn | **Sn** | **21 32 57.9** | **-5.8** |
| **BRBB** | **Barentsburg B** | **4.79** | **126** | *eP* | **Pn** | **21 32 08.9** | **+0.6** |
| BRBB | | | | *eS* | **Sn** | **21 32 58.3** | **-5.5** |
| **BRBA** | **Barentsburg A** | **4.82** | **126** | Pn | **Pn** | **21 32 09.4** | **+0.6** |
| BRBA | | | | Sn | **Sn** | **21 33 00.0** | **-4.5** |
| **BRBA** | **Barentsburg A** | **4.82** | **126** | *eP* | **Pn** | **21 32 09.0** | **+0.3** |
| BRBA | | | | *eS* | **Sn** | **21 32 60.0** | **-4.5** |
| BRBA | | | | IAML | | 21 33 06.4 | |
| | comp=Z,9.7nm,0.4s | | | | | | |
| BRBA | | | | IAML | | 21 33 07.3 | |
| | comp=Z,9.1nm,0.3s | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **4.99** | **121** | Pn | **Pn** | **21 32 10.5** | **-0.6** |
| | baz=354,slow=12 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **21 33 03.0** | **-5.7** |
| | baz=340,slow=22 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **4.99** | **121** | Pn | **Pn** | **21 32 10.5** | **-0.6** |
| | baz=354,slow=12 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **21 33 03.0** | **-5.7** |
| | baz=340,slow=22 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **4.99** | **121** | *⇑iP* | **Pn** | **21 32 10.2** | **-0.9** |
| SPA0 | | | | *eS* | **Sn** | **21 33 03.1** | **-5.7** |
| **SPITS** | **Spitsbergen Ar** | **4.99** | **121** | Pn | **Pn** | **21 32 10.2** | **-0.9** |
| | baz=344,slow=12,SNR=439 | | | | | | |
| SPITS | | | | Sn | **Sn** | **21 33 02.0** | **-6.7** |
| | baz=263,slow=1.3,SNR=1.1 | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **4.99** | **121** | | **Pn** | **21 32 10.5** | **-0.7** |
| **DAG** | **Danmarks Havn** | **5.43** | **216** | *i* P | **Pn** | **21 32 19.0** | **+1.8** |
| DAG | | | | *i* S | **Sn** | **21 33 17.0** | **-2.6** |
| DAG | | | | IAML | | 21 33 22.2 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **DAG** | **Danmarks Havn** | **5.43** | **216** | *eP* | **Pn** | **21 32 18.9** | **+1.8** |
| DAG | | | | *eS* | **Sn** | **21 33 18.1** | **-1.6** |
| **HSPB** | **Hornsund (broa** | **5.87** | **130** | Pn | **Pn** | **21 32 23.6** | **+0.4** |
| **HSPB** | **Hornsund (broa** | **5.87** | **130** | *eP* | **Pn** | **21 32 23.5** | **+0.4** |
| HSPB | | | | *eS* | **Sn** | **21 33 23.2** | **-7.1** |
| HSPB | | | | IAML | | 21 33 28.7 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| HSPB | | | | IAML | | 21 34 00.4 | |
| | comp=Z,9.3nm,0.6s | | | | | | |
| **HSPB** | **Hornsund (broa** | **5.87** | **130** | *eP* | **Pn** | **21 32 23.1** | **0.0** |
| HSPB | | | | *eS* | **Sn** | **21 33 24.2** | **-6.1** |
| **HOPEN** | **Hopen** | **7.46** | **116** | Pn | **Pn** | **21 32 44.0** | **-1.0** |
| HOPEN | | | | Sn | **Sn** | **21 34 02.1** | **-7.4** |
| **HOPEN** | **Hopen** | **7.46** | **116** | *eP* | **Pn** | **21 32 44.0** | **-1.0** |
| HOPEN | | | | *eS* | Sn | 21 34 01.2 | -8.3 |
| HOPEN | | | | IAML | | 21 34 04.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **HOPEN** | **Hopen** | **7.46** | **116** | *eP* | **Pn** | **21 32 43.7** | **-1.3** |
| HOPEN | | | | *eS* | Sn | 21 34 00.8 | -8.7 |
| **ZFI2** | **Zemlya Franca-** | **7.85** | **69** | *eP* | **Pn** | **21 32 48.1** | **-2.2** |
| ZFI2 | | | | *eS* | Sn | 21 34 08.2 | -11 |
| **ZFI** | **Zemlya Franca-** | **7.85** | **69** | *eP* | **Pn** | **21 32 48.1** | **-2.2** |
| ZFI | | | | *eS* | Sn | 21 34 07.8 | -11 |
| | comp=Z,58nm,1.8s | | | | | | |
| **DBG** | **Daneborg** | **7.90** | **212** | Pn | **Pn** | **21 32 51.9** | **+0.8** |
| DBG | | | | Sn | **Sn** | **21 34 18.1** | **-2.3** |
| **DBG** | **Daneborg** | **7.90** | **212** | *i* P | **Pn** | **21 32 52.0** | **+1.0** |
| DBG | | | | *i* S | **Sn** | **21 34 15.7** | **-4.6** |
| DBG | | | | IAML | | 21 34 25.1 | |
| | comp=Z,3.0nm,0.1s | | | | | | |
| **DBG** | **Daneborg** | **7.90** | **212** | *eP* | **Pn** | **21 32 52.1** | **+1.0** |
| DBG | | | | *eS* | **Sn** | **21 34 15.6** | **-4.8** |
| **BJO1** | **Bjornoya** | **8.50** | **133** | *eP* | **Pn** | **21 32 56.7** | **-2.5** |
| **NEEM** | **North Greenlan** | **9.11** | **268** | *i* P | **Pn** | **21 33 05.7** | **-2.1** |
| NEEM | | | | *i* S | **Sn** | **21 34 45.0** | **-5.3** |
| NEEM | | | | IAML | | 21 34 49.3 | |
| | comp=Z,3.0nm,0.1s | | | | | | |
| **SUMG** | **Summit** | **11.44** | **238** | *i* P | **Pn** | **21 33 37.2** | **-2.5** |
| SUMG | | | | *i* S | **Sn** | **21 35 39.0** | **-8.4** |
| SUMG | | | | IAML | | 21 35 50.3 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **SUMG** | **Summit** | **11.44** | **238** | | **Pn** | **21 33 39.6** | **-0.1** |
| **SCO** | **Scoresbysund** | **11.76** | **209** | Pn | **Pn** | **21 33 45.9** | **+2.1** |
| **EUNU** | **Eureka** | **12.14** | **305** | | **Pn** | **21 33 47.7** | **-1.4** |
| **TULEG** | **Thule** | **12.42** | **281** | | **Pn** | **21 33 50.0** | **-2.8** |
| **UPNV** | **Upernavik** | **13.68** | **260** | *i* P | **Pn** | **21 34 07.1** | **-2.9** |
| UPNV | | | | IAML | | 21 36 33.5 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| **ARA0** | **ARCESS Array S** | **13.88** | **132** | Pn | **Pn** | **21 34 11.2** | **-1.5** |
| | baz=341,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **13.88** | **132** | Pn | **Pn** | **21 34 11.2** | **-1.5** |
| | baz=341,slow=12 | | | | | | |
| **ARCES** | **ARCESS Array B** | **13.88** | **132** | Pn | **Pn** | **21 34 12.9** | **+0.2** |
| | baz=341,slow=9.9,SNR=11 | | | | | | |
| ARCES | | | | LR | LR | 21 39 18.7 | |
| | comp=Z,120nm,20.3s,baz=346,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **13.88** | **132** | | **Pn** | **21 34 13.5** | **+0.8** |
| **KIF** | **Kilpisjarvi** | **13.90** | **140** | Pn | **Pn** | **21 34 13.4** | **+0.4** |
| **KIF** | **Kilpisjarvi** | **13.90** | **140** | Pn | **Pn** | **21 34 13.4** | **+0.4** |
| **RES** | **Resolute Bay** | **17.58** | **298** | Pn | **Pn** | **21 34 57.5** | **-3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AKTO | **Aktyubinsk** | **36.52** | **107** | LR | LR | 21 55 57.2 | |
| | comp=Z,79nm,18.6s,baz=345,slow=41 | | | | | | |
| ZALV | **Zalesovo Beam** | **37.03** | **79** | P | **P** | **21 38 07.8** | **+2.2** |
| | comp=Z,0.7nm,0.7s,baz=348,slow=6.7,SNR=4.2 | | | | | | |
| ZALV | | | | LR | LR | 21 56 52.9 | |
| | comp=Z,46nm,18.8s,baz=333,slow=42 | | | | | | |
| ZALV | **Zalesovo Beam** | **37.03** | **79** | P | **P** | **21 38 05.1** | **-0.5** |
| SEW | **Seward** | **37.32** | **331** | P | **P** | **21 38 07.6** | **-0.4** |
| MLR | **Muntele Rosu** | **37.57** | **144** | LR | LR | 21 52 23.9 | |
| | comp=Z,96nm,20.4s,baz=14,slow=34 | | | | | | |
| ABKAR | **Akbulak array** | **37.94** | **106** | P | **P** | **21 38 11.5** | **-1.9** |
| ABKAR | **Akbulak array** | **37.94** | **106** | P | **P** | **21 38 11.2** | **-2.2** |
| ABKAR | | | | IAmb | IAmb | 21 38 26.2 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| KURBB | **Kurchatov Arra** | **39.34** | **86** | P | **P** | **21 38 27.4** | **+2.3** |
| | comp=Z,3.0nm,1.0s | | | | | | |
| KURBB | | | | PcP | **PcP** | **21 40 35.3** | **+2.0** |
| | comp=Z,0.5nm,1.0s,baz=340,slow=3.9,SNR=4.8 | | | | | | |
| KURBB | | | | LR | LR | 21 58 20.0 | |
| | comp=Z,103nm,19.3s,baz=306,slow=42 | | | | | | |
| ULM | **Lac du Bonnet** | **40.85** | **281** | LR | LR | 21 55 43.4 | |
| | comp=Z,128nm,20.6s,baz=30,slow=36 | | | | | | |
| KBZ | **Khabaz** | **41.09** | **125** | P | **P** | **21 38 43.8** | **+4.1** |
| | comp=Z,1.9nm,0.9s,baz=318,slow=7.4,SNR=4.1 | | | | | | |
| BBB | **Bella Bella** | **43.19** | **311** | LR | LR | 21 58 39.0 | |
| | comp=Z,75nm,18.7s,baz=294,slow=38 | | | | | | |
| MK31 | **Makanchi Array** | **43.63** | **84** | P | **P** | **21 38 58.5** | **-1.9** |
| MKAR | **Makanchi Array** | **43.63** | **84** | P | **P** | **21 39 02.8** | **+2.4** |
| | comp=Z,0.7nm,0.6s,baz=349,slow=7.8,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 22 00 20.8 | |
| | comp=Z,51nm,19.4s,baz=336,slow=40 | | | | | | |
| MKAR | **Makanchi Array** | **43.63** | **84** | P | **P** | **21 38 58.5** | **-1.9** |
| SADO | **Sadowa** | **43.74** | **263** | LR | LR | 21 57 47.1 | |
| | comp=Z,103nm,19.5s,baz=326,slow=37 | | | | | | |
| BRTR | **Keskin Array B** | **44.02** | **136** | LR | LR | 21 59 00.3 | |
| | comp=Z,61nm,18.1s,baz=24,slow=38 | | | | | | |
| GNI | **Garni** | **44.85** | **124** | LR | LR | 21 58 30.2 | |
| | comp=Z,36nm,18.9s,baz=29,slow=37 | | | | | | |
| KKAR | **Karatay Array** | **45.49** | **97** | P | **P** | **21 39 13.2** | **-2.0** |
| NEW | **Newport** | **45.73** | **300** | LR | LR | 21 58 37.7 | |
| | comp=Z,133nm,20.6s,baz=26,slow=36 | | | | | | |
| SONM | **Songino Array** | **45.99** | **61** | P | **P** | **21 39 21.5** | **+2.2** |
| | comp=Z,1.3nm,0.9s,baz=333,slow=8.2,SNR=9.6 | | | | | | |
| SONM | | | | LR | LR | 22 00 10.3 | |
| | comp=Z,54nm,18.1s,baz=288,slow=38 | | | | | | |
| SONM | **Songino Array** | **45.99** | **61** | P | **P** | **21 39 18.2** | **-1.1** |
| SONM | | | | IAmb | IAmb | 21 39 22.6 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| AAK | **Ala-Archa** | **46.54** | **93** | P | **P** | **21 39 25.8** | **+2.1** |
| | comp=Z,1.5nm,0.7s,baz=308,slow=4.7,SNR=6.7 | | | | | | |
| AAK | | | | LR | LR | 22 02 04.6 | |
| | comp=Z,93nm,18.3s,baz=3.5,slow=40 | | | | | | |
| AAK | **Ala-Archa** | **46.54** | **93** | P | **P** | **21 39 24.5** | **+0.8** |
| AAK | | | | IAmb | IAmb | 21 39 36.4 | |
| | comp=Z,4.2nm,1.2s | | | | | | |
| IDI | **Anoyia** | **47.61** | **147** | LR | LR | 21 59 05.4 | |
| | comp=Z,23nm,18.7s,baz=272,slow=36 | | | | | | |
| GEYT | **Alibeck** | **48.79** | **111** | LR | LR | 22 03 10.3 | |
| | comp=Z,39nm,18.2s,baz=353,slow=40 | | | | | | |
| CHGR | **Chuyangaron** | **49.65** | **99** | P | **P** | **21 39 47.6** | **-0.2** |
| PDAR | **Pinedale Array** | **50.12** | **292** | LR | LR | 22 01 22.8 | |
| | comp=Z,158nm,19.5s,baz=355,slow=36 | | | | | | |
| YBH | **Yreka Blue Hor** | **52.86** | **304** | LR | LR | 22 01 38.2 | |
| | comp=Z,83nm,19.1s,baz=346,slow=35 | | | | | | |
| ELK | **Elko** | **52.88** | **297** | LR | LR | 22 03 12.4 | |
| | comp=Z,153nm,19.6s,baz=318,slow=37 | | | | | | |
| NVAR | **Mina Array Bea** | **55.56** | **299** | LR | LR | 22 06 14.1 | |
| | comp=Z,169nm,21.4s,baz=0.5,slow=38 | | | | | | |
| ANMO | **Albuquerque** | **57.37** | **287** | LR | LR | 22 05 04.0 | |
| | comp=Z,91nm,19.1s,baz=11,slow=36 | | | | | | |
| PFO | **Pinyon Flats O** | **60.06** | **297** | LR | LR | 22 09 09.1 | |
| | comp=Z,104nm,18.7s,baz=212,slow=38 | | | | | | |
| TXAR | **Lajitas Array** | **62.49** | **283** | P | **P** | **21 41 22.5** | **+2.9** |
| | comp=Z,0.3nm,0.7s,baz=51,slow=5.5,SNR=4.4 | | | | | | |
| TXAR | | | | LR | LR | 22 06 50.1 | |
| | comp=Z,24nm,18.2s,baz=254,slow=34 | | | | | | |
| TXAR | **Lajitas Array** | **62.49** | **283** | P | **P** | **21 41 17.4** | **-2.2** |
| TORD | **Torodi Ar. Bea** | **68.47** | **173** | P | **P** | **21 42 00.7** | **+2.4** |
| | comp=Z,0.4nm,0.6s,baz=358,slow=5.9,SNR=4.7 | | | | | | |
| TORD | **Torodi Ar. Bea** | **68.47** | **173** | P | **P** | **21 42 00.1** | **+1.9** |
| TORD | | | | IAmb | IAmb | 21 42 19.0 | |
| | comp=Z,3.1nm,1.4s | | | | | | |
| CMAR | **Chiang Mai Arr** | **73.86** | **74** | LR | LR | 22 17 21.7 | |
| | comp=Z,14nm,20.8s,baz=195,slow=38 | | | | | | |
| PALK | **Pallekele** | **82.18** | **93** | LR | LR | 22 23 41.1 | |
| | comp=Z,64nm,19.1s,baz=115,slow=38 | | | | | | |
| ROSC | **El Rosal** | **82.28** | **250** | LR | LR | 22 21 20.7 | |
| | comp=Z,42nm,19.4s,baz=197,slow=37 | | | | | | |

*IDC* ***13*** *21:37:52.0±1.7,27°.44N×89°.11E, h0km, mb3.5/7, mb1 3.7/9, mb1mx3.5/44, mbtmp3.6/9, ML3.7/2, MS2.5/1, Ms1 2.7/1, ms1mx2.3/79, Error ellipse: s-maj=57.5km s-min=22.0km az=55.0*

*BJI* ***13*** *21:37:52.2±0.0, 27°.10N×89°.51E, h9km, mb4.0/5, mB4.3/2, ML3.7/1, Ms3.6/2, Ms7 3.2/1*

*NDI* ***13*** *21:37:53.6±2.6, 27°.22N×89°.34E, h20km, ML3.7, mb3.7(NEIC)*

*NEIC* ***13*** *21:37:54.1±1.9, 27°.0N±0°.2×89°.2E±0°.1, h50km±9km, mb3.7/13, Error ellipse: s-maj=35.4km s-min=8.3km az=207.0*

**ISC 13 21:37:53.8±1.8, 27°.20N±0°.05×89°.32E±0°.04, h32km±14km, n34, σ2s06/42, mb3.7/9, Bhutan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| GTK | **Tadong** | **0.65** | **280** | *eP* | | **Pn** | **Pn** | **21 38 07.6** | **+0.7** |
| GTK | | | | *eS* | | **Sb** | **Sb** | **21 38 15.1** | **-0.7** |
| GTK | | | | IAML | | | | 21 38 19.8 | |
| | comp=N,893nm,0.1s | | | | | | | | |
| TURI | **Tura** | **1.88** | **151** | *eP* | | **Pn** | **Pn** | **21 38 24.4** | **+0.6** |
| TURI | | | | *eS* | | **Sn** | **Sn** | **21 38 46.5** | **+0.1** |
| TURI | | | | IAML | | | | 21 38 49.0 | |
| | comp=E,7µm,0.4s | | | | | | | | |
| GUWA | **GUWAHATI** | **2.35** | **115** | *eP* | | **Pn** | **Pn** | **21 38 31.2** | **+1.0** |
| GUWA | | | | *eS* | | **Sn** | **Sn** | **21 38 58.9** | **+1.0** |
| GUWA | | | | IAML | | | | 21 38 60.0 | |
| | comp=N,950nm,0.3s | | | | | | | | |
| SHL | **Shillong** | **2.82** | **125** | Pn | | **Pn** | **Pn** | **21 38 36.6** | **-0.2** |
| SHL | | | | Sn | | **Sn** | **Sn** | **21 39 08.9** | **-0.9** |
| LSA | **Lhasa** | **2.96** | **33** | Pn | | **Pn** | **Pn** | **21 38 42.4** | **+3.3** |
| LSA | | | | Sn | | **Sb** | **Sb** | **21 39 20.4** | **-1.9** |
| LSA | | | | smax | | smax | smax | | |
| | comp=N,260nm,1.1s | | | | | | | | |
| LSA | | | | smax | | smax | smax | | |
| | comp=N,390nm,0.7s | | | | | | | | |
| AGT | **Agartala** | **3.74** | **152** | *eS* | | **Sn** | **Sn** | **21 39 32.8** | **+0.6** |
| BELO | **BELONIA** | **4.38** | **153** | *eS* | | **Sn** | **Sn** | **21 39 46.0** | **-2.1** |
| KOHI | **KOHIMA** | **4.54** | **108** | *eP* | | **Pn** | **Pn** | **21 39 00.4** | **0.0** |
| KOHI | | | | *eS* | | **Sn** | **Sn** | **21 39 49.5** | **-2.7** |
| KOHI | | | | IAML | | | | 21 40 16.0 | |
| | comp=E,402nm,0.5s | | | | | | | | |
| KOHI | | | | IAML | | | | 21 40 16.9 | |
| | comp=N,323nm,0.4s | | | | | | | | |
| MOKO | **MOKOCHONG** | **4.73** | **100** | *eP* | | **Pn** | **Pn** | **21 39 05.1** | **+2.1** |
| MOKO | | | | *eS* | | **Sn** | **Sn** | **21 39 52.6** | **-4.2** |
| MOKO | | | | IAML | | | | 21 40 06.0 | |
| | comp=E,172nm,0.5s | | | | | | | | |
| IMP | **Imphal** | **4.79** | **119** | *eP* | | **Pn** | **Pn** | **21 39 06.5** | **+2.7** |
| IMP | | | | *eS* | | **Sn** | **Sn** | **21 39 57.4** | **-0.8** |
| IMP | | | | IAML | | | | 21 40 27.0 | |
| | comp=E,81nm,0.4s | | | | | | | | |
| IMP | | | | IAML | | | | 21 40 29.1 | |
| | comp=N,74nm,0.6s | | | | | | | | |
| LKP | **Lekhapani** | **5.81** | **87** | *eP* | | **Pn** | **Pn** | **21 39 18.4** | **+0.6** |
| LKP | | | | IAML | | | | 21 40 19.0 | |
| | comp=E,100nm,0.4s | | | | | | | | |
| LKP | | | | *eS* | | **Sn** | **Sn** | **21 40 19.1** | **-4.2** |
| LKP | | | | IAML | | | | 21 40 20.8 | |
| | comp=N,123nm,0.3s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **12.42** | **132** | Pn | | **Pn** | **Pn** | **21 40 52.7** | **+4.2** |
| CMAR | | | | LR | | LR | LR | 21 45 48.4 | |
| | comp=N,21nm,20.5s,baz=170,slow=38 | | | | | | | | |
| NIL | **Nilore** | **15.27** | **299** | Pn | | **Pn** | **Pn** | **21 41 25.6** | **-1.5** |
| WMQ | **Urumqi** | **16.63** | **356** | *eP* | | **P** | **P** | **21 41 52.4** | **+5.7** |
| TARG | **Taragay, Kyrgy** | **17.30** | **330** | | | **Pn** | **Pn** | **21 41 53.0** | **-0.3** |
| KBL | **Kabul** | **18.86** | **298** | P | | **P** | **P** | **21 42 10.3** | **-1.2** |
| KBL | | | | IAmb | | IAmb | IAmb | 21 42 17.1 | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| AAK | **Ala-Archa** | **19.57** | **326** | P | | **P** | **P** | **21 42 18.7** | **-0.5** |
| | comp=Z,0.0nm,0.3s,baz=149,slow=13,SNR=2.7 | | | | | | | | |
| GAR | **Garm** | **19.75** | **311** | P | | **P** | **P** | **21 42 21.4** | **+0.2** |
| GAR | | | | IAmb | | IAmb | IAmb | 21 42 47.0 | |
| | comp=Z,8.7nm,1.1s | | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MK31 | **Makanchi Array** | **20.33** | **346** | P | **P** | **21 42 27.0** | **-0.2** |
| MKAR | **Makanchi Array** | **20.33** | **346** | P | **P** | **21 42 27.4** | **+0.1** |
| | comp=Z,0.6nm,0.4s,baz=166,slow=11,SNR=16 | | | | | | |
| MKAR | **Makanchi Array** | **20.33** | **346** | P | **P** | **21 42 27.7** | **+0.5** |
| CHGR | **Chuyangaron** | **20.37** | **309** | P | **P** | **21 42 27.4** | **-0.5** |
| KKAR | **Karatay Array** | **22.02** | **321** | P | **P** | **21 42 44.8** | **-0.6** |
| SONM | **Songino Array** | **24.55** | **28** | P | **P** | **21 43 12.2** | **+1.6** |
| | comp=Z,0.5nm,0.7s,baz=206,slow=9.9,SNR=5.0 | | | | | | |
| SONM | **Songino Array** | **24.55** | **28** | P | **P** | **21 43 10.8** | **+0.1** |
| SONM | | | | IAmb | IAmb | 21 43 13.5 | |
| | comp=Z,2.5nm,1.4s | | | | | | |
| KURBB | **Kurchatov Arra** | **24.79** | **343** | P | **P** | **21 43 12.7** | **0.0** |
| | comp=Z,0.6nm,0.9s,baz=161,slow=9.2,SNR=5.2 | | | | | | |
| ULN | **Ulaanbaatar** | **24.85** | **29** | P | **P** | **21 43 14.4** | **+0.9** |
| ULN | | | | IAmb | IAmb | 21 43 28.0 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| ZAA0 | **Zalesovo Array** | **26.92** | **354** | P | **P** | **21 43 30.2** | **-1.7** |
| ZAA0 | | | | IAmb | IAmb | 21 43 33.7 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| ZALV | **Zalesovo Beam** | **26.92** | **354** | P | **P** | **21 43 32.4** | **+0.5** |
| | comp=Z,0.9nm,0.3s,baz=179,slow=8.4,SNR=8.6 | | | | | | |
| ZALV | **Zalesovo Beam** | **26.92** | **354** | P | **P** | **21 43 29.9** | **-2.1** |
| BVAR | **Borovoye Array** | **29.39** | **336** | P | **P** | **21 43 54.6** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=233,slow=31,SNR=1.9 | | | | | | |
| ABKAR | **Akbulak array** | **31.57** | **322** | P | **P** | **21 44 09.3** | **-3.9** |
| ABKAR | | | | IAmb | IAmb | 21 44 13.9 | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| FINES | **FINESS Array B** | **53.74** | **328** | P | **P** | **21 47 12.7** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=120,slow=7.3,SNR=6.4 | | | | | | |
| WRA | **Warramunga Arr** | **64.02** | **132** | P | P | 21 48 30.2 | +5.7 |
| | comp=Z,0.5nm,0.9s,baz=323,slow=6.7,SNR=2.8 | | | | | | |

**IDC 13 21:51:20.3±4.3, 28°.20S×177°.96W, h0km, mb3.6/2, mb1 3.8/2, mb1mx3.7/23, mbtmp3.6/2, Error ellipse: s-maj=89.1km s-min=23.2km az=66.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| RAO | **Raoul Island** | **1.05** | **178** | | | Pn | Pn | 21 51 42.3 | 0.0 |
| | 98nm,0.3s,baz=270,slow=22,SNR=2.0 | | | | | | | | |
| RAO | | | | | | Sn | Sn | 21 51 58.1 | +0.4 |
| | 383nm,0.3s,baz=23,slow=23,SNR=6.4 | | | | | | | | |
| ASAR | **Alice Springs** | **43.30** | **265** | P | | P | P | 21 59 23.3 | -0.9 |
| | 0.2nm,0.3s,baz=104,slow=7.6,SNR=6.0 | | | | | | | | |
| WRA | **Warramunga Arr** | **44.09** | **270** | P | | P | P | 21 59 30.9 | +0.4 |
| | 0.4nm,0.3s,baz=105,slow=7.8,SNR=17 | | | | | | | | |
| FINES | **FINESS Array B** | **143.09** | **341** | PKP | | | PKPdf | 22 10 55.6 | +0.1 |
| | 2.2nm,0.9s,baz=54,slow=5.1,SNR=7.5 | | | | | | | | |

*TUL* ***13*** *21:59:03.7±1.4, 36°.47N±0°.03×98°.76W±0°.04, h7km±7km, ML3.0, mb_Lg2.8/39(NEIC), Error ellipse: s-maj=5.0km s-min=3.7km az=224.0*

**NEIC 13 21:59:04.3±2.2, 36°.47N±0°.03×98°.74W±0°.03, h12km±7km, Error ellipse: s-maj=5.0km s-min=2.3km az=139.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| U32A | **Winter Ranch,** | **0.23** | **247** | | Pg | | Pg | 21 59 08.4 | -0.9 |
| U32A | | | | | Sg | | Sg | 21 59 11.9 | -0.7 |
| OKCFA | **Oklahoma City** | **1.48** | **135** | | Pn | | Pn | 21 59 30.7 | -0.2 |
| OKCSW | **OKLAHOMA CITY** | **1.50** | **135** | | Pn | | Pn | 21 59 31.2 | +0.1 |
| FNO | **Franklin** | **1.63** | **138** | | Pn | | Pn | 21 59 33.3 | +0.5 |
| WMOK | **Wichita Mounta** | **1.73** | **181** | | | | Pn | 21 59 34.0 | -0.2 |
| T35A | **Sooner Cattle** | **1.85** | **75** | | | | Pn | 21 59 36.6 | +0.8 |
| R32A | **Long Quarter,** | **1.95** | **1** | | | | Pn | 21 59 38.5 | +1.2 |
| X34A | **Smith Ranch, M** | **2.01** | **158** | | | | Pb | 21 59 39.4 | -1.3 |
| X34A | | | | | IAmb_Lg | | | 22 00 09.2 | |
| | comp=Z,48nm,0.8s | | | | | | | | |
| W35A | **Tecumseh** | **2.01** | **130** | Pn | | | Pn | 21 59 38.4 | +0.4 |
| TUL1 | **Leonard** | **2.45** | **102** | | | | Pn | 21 59 45.2 | +1.1 |
| CBKS | **Cedar Bluff** | **2.47** | **342** | | | | Pn | 21 59 45.2 | +0.8 |
| KSU1 | **Kansas State U** | **3.12** | **32** | | | | Pn | 21 59 53.4 | 0.0 |
| X37A | **Clayton** | **3.33** | **123** | | | | Pn | 21 59 56.2 | 0.0 |
| X37A | | | | | IAmb_Lg | | | 22 00 53.9 | |
| | comp=Z,34nm,0.8s | | | | | | | | |
| Z35A | **Perchaven, San** | **3.36** | **158** | Pn | | | Pn | 21 59 57.5 | +0.9 |
| U38A | **Gravette** | **3.51** | **89** | | | | Pn | 21 59 59.6 | +0.9 |
| U38A | | | | | IAmb_Lg | | | 22 00 55.7 | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| HHAR | **Hobbs** | **3.88** | **91** | | | | Pn | 22 00 05.1 | +1.3 |
| ABTX | **Abilene, Hawle** | **3.91** | **191** | | | | Pn | 22 00 04.5 | +0.3 |
| KSCO | **Kaye Shedlock'** | **3.99** | **311** | Pn | | | Pn | 22 00 04.8 | -0.6 |
| KSCO | | | | | IAmb_Lg | | | 22 01 16.0 | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| MSTX | **Muleshoe** | **4.14** | **234** | | IAmb_Lg | | | 22 01 19.7 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| W39A | **Magazine** | **4.22** | **106** | | | | Pn | 22 00 08.4 | -0.1 |
| W39A | | | | | IAmb_Lg | | | 22 01 18.4 | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| Z38A | **Mt. Pleasant** | **4.45** | **135** | | IAmb_Lg | | | 22 01 28.2 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| WHTX | **Lake Whitney,** | **4.59** | **166** | Pn | | | Pn | 22 00 13.8 | +0.3 |
| T25A | **Trinidad** | **4.60** | **280** | | | | Pn | 22 00 14.1 | +0.2 |
| T25A | | | | | IAmb_Lg | | | 22 01 28.5 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| MIAR | **Mount Ida** | **4.63** | **113** | Pn | | | Pn | 22 00 15.0 | +1.0 |
| U40A | **Yellville** | **4.75** | **90** | | IAmb_Lg | | | 22 01 31.3 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| P38A | **Dawn** | **5.18** | **51** | | IAmb_Lg | | | 22 01 58.2 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| MGMO | **Mountain Grove** | **5.24** | **81** | | IAmb_Lg | | | 22 01 50.9 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| FCAR | **Ozark Folk Cen** | **5.38** | **94** | Pn | | | Pn | 22 00 24.4 | 0.0 |
| FCAR | | | | | IAmb_Lg | | | 22 01 57.8 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| W41B | **Gary Mavity, V** | **5.43** | **102** | | IAmb_Lg | | | 22 02 01.3 | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| R40A | **Maddies Statio** | **5.46** | **69** | Pn | | | Pn | 22 00 26.3 | +0.7 |
| Q24A | **Divide** | **5.66** | **298** | | IAmb_Lg | | | 22 02 09.2 | |
| | comp=Z,9.5nm,0.8s | | | | | | | | |
| 435B | **Jarrell** | **5.75** | **170** | | IAmb_Lg | | | 22 02 18.3 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| JCT | **Junction City** | **6.04** | **189** | | IAmb_Lg | | | 22 02 24.5 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| CCM | **Cathedral Cave** | **6.18** | **73** | | IAmb_Lg | | | 22 02 22.2 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| PBMO | **Poplar Bluff** | **6.69** | **85** | | IAmb_Lg | | | 22 02 48.3 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| FVM | **French Village** | **6.80** | **75** | | IAmb_Lg | | | 22 02 40.4 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| N23A | **Red Feather La** | **7.16** | **310** | | IAmb_Lg | | | 22 02 55.3 | |
| | comp=Z,15nm,0.9s | | | | | | | | |

*GII* ***13*** *22:06:28.9±0.0, 33°.35N×35°.48E, h1km, MD2.3/4, Mm2.4/6*

*GRAL* ***13*** *22:06:29.8±0.3, 33°.35N×35°.46E, h2km±18km, MD3.1*

**ISC 13 22:06:29.5±1.1, 33°.37N±0°.03×35°.47E±0°.04, h10km±10km, n21, σ0s63/36, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| GEM | **Giv'at Ha'Em** | **0.23** | **133** | | Pg | | **Pg** | **22 06 33.9** | **-0.3** |
| GEM | | | | | Sg | | **Sg** | **22 06 37.7** | **+0.4** |
| SHBL | **Chebaa** | **0.23** | **94** | *eP* | | | **Pg** | **22 06 34.1** | **-0.3** |
| SHBL | | | | *eS* | | | **Sg** | **22 06 37.4** | **-0.3** |
| NATI | **Neve Ativ** | **0.25** | **115** | Pg | | | **Pg** | **22 06 34.0** | **-0.6** |
| NATI | | | | Sg | | | **Sg** | **22 06 38.6** | **+0.7** |
| QRWL | **Qaraoun** | **0.26** | **45** | *eP* | | | **Pg** | **22 06 34.6** | **-0.2** |
| RCY | **Rachaya** | **0.33** | **67** | *eP* | | | **Pg** | **22 06 36.0** | **-0.2** |
| RCY | | | | *eS* | | | **Sg** | **22 06 40.6** | **-0.1** |
| DQRL | **Deir Qamar** | **0.35** | **14** | *eP* | | | **Pg** | **22 06 36.3** | **-0.2** |
| DQRL | | | | *eS* | | | **Sg** | **22 06 41.2** | **+0.1** |
| MMC7 | **Mount Meron ar** | **0.35** | **190** | Pg | | | **Pg** | **22 06 36.2** | **-0.3** |
| MMA0B | **Mount Meron ar** | **0.35** | **189** | Pg | | | **Pg** | **22 06 36.2** | **-0.4** |
| MMA0B | | | | Sg | | | **Sb** | **22 06 42.3** | **-1.3** |
| HNTI | **Hanita** | **0.38** | **221** | Pg | | | **Pg** | **22 06 36.8** | **-0.1** |
| HNTI | | | | Sg | | | **Sb** | **22 06 42.9** | **-1.3** |
| BEYL | **Beirut** | **0.50** | **2** | *eP* | | | **Pg** | **22 06 38.8** | **-0.5** |
| BHL | **Bhannes** | **0.56** | **16** | *eP* | | | **Pg** | **22 06 40.1** | **-0.3** |
| BLGI | **Bet Lehem HaGe** | **0.67** | **200** | Pg | | | **Pg** | **22 06 42.4** | **-0.1** |
| BLGI | | | | Sg | | | **Sb** | **22 06 52.3** | **-0.4** |
| OFRI | **`Ofer** | **0.85** | **209** | Pg | | | **Pg** | **22 06 45.4** | **-0.4** |
| OFRI | | | | Sg | | | **Sb** | **22 06 58.5** | **+0.7** |
| MMLI | **Mount Malkishu** | **0.93** | **182** | Pg | | | **Pg** | **22 06 46.5** | **-0.9** |
| MMLI | | | | Sg | | | **Sb** | **22 06 59.8** | **-0.3** |
| HWQ | **Hawqa** | **0.99** | **24** | *eP* | | | **Pg** | **22 06 48.0** | **-0.7** |
| HMDT | **Nahal Hemdat** | **1.11** | **177** | Pg | | | **Pg** | **22 06 49.8** | **-1.1** |
| HMDT | | | | Sg | | | **Sb** | **22 07 05.9** | **+0.5** |
| SLTI | **Sal'it** | **1.18** | **198** | Pg | | | **Pg** | **22 06 51.6** | **-0.6** |
| SLTI | | | | Sg | | | **Sb** | **22 07 08.3** | **+1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DSI | **Dead Sea** | **1.79** | **182** | Pn | **Pn** | **22 07 00.7** | **+0.2** |
| DSI | | | | Sn | **Sb** | **22 07 25.0** | **0.0** |
| AMAZ | **Amatzia** | **1.89** | **194** | Pn | **Pn** | **22 07 02.8** | **+0.9** |
| AMAZ | | | | Sn | **Sb** | **22 07 28.7** | **+1.0** |
| YTIR | **Yattir** | **2.02** | **189** | Pn | **Pn** | **22 07 04.4** | **+0.7** |
| YTIR | | | | Sn | **Sb** | **22 07 31.3** | **-0.3** |
| GHAJ | **Ghor Haditha** | **2.06** | **178** | Pn | **Pn** | **22 07 04.3** | **+0.1** |

*NEIC* ***13*** *22:08:22±0.8, 20°.21S±0°.04×70°.90W±0°.03, h15km±5km, mb4.1/3, Mwr3.8/34, ML3.7(GUC), Error ellipse: s-maj=7.4km s-min=1.6km az=212.0*

*NEIC* ***13*** *22:08:22.2, 20°.22S×70°.89W, h21km, Moment Tensor Solution. Moment tensor: Scale 10^14 Nm; Mrr 6.19; Mθθ 0.34; Mϕϕ -6.53; Mrθ -0.82; Mθϕ 1.91; Mϕr -1.34; Fault plane solution: M0 6.83000×10^14 NP1: ϕ=334.20000°, δ=41.45000°, λ=73.01000°. NP2: ϕ=176.38000°, δ=50.72000°, λ=104.47000°. Principal axes: T 6.5049, Plg=78.0000°, Azm=144.0000°; N 0.6116, Plg=11.0000°, Azm=347.0000°; P -7.1165, Plg=5.0000°, Azm=256.0000°;*

*GUC* ***13*** *22:08:23.7±0.8, 20°.16S×70°.84W, h37km±3km, ML3.7*

*IDC* ***13*** *22:08:29.3±3.7, 20°.16S×70°.50W, h69km±28km, mb3.8/2, mb1 3.9/5, mb1mx3.5/28, mbtmp3.9/5, MS3.0/5, Ms1 3.0/5, ms1mx2.8/61, Error ellipse: s-maj=52.1km s-min=18.6km az=84.0*

**ISC 13 22:08:22.8±0.8, 20°.20S±0°.03×70°.81W±0°.06, h21km±5km, n48, σ1s11/63, mb3.9/3, 8C-5D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| TA02 | **Huaiquique** | **0.64** | **96** | | | | **Pn** | **22 08 35.6** | **-1.1** |
| TA02 | **Huaiquique** | **0.64** | **96** | ⇓*iP* | | | **Pn** | **22 08 35.6** | **-1.1** |
| TA02 | | | | *iS* | | | **Sn** | **22 08 45.0** | **-1.3** |
| TA02 | | | | IAML | | | | 22 08 45.3 | |
| | comp=N,9µm,0.2s | | | | | | | | |
| TA01 | **Diego Aracena** | **0.69** | **122** | | | | **Pn** | **22 08 36.8** | **-0.6** |
| TA01 | **Diego Aracena** | **0.69** | **122** | ⇓*iP* | | | **Pn** | **22 08 36.8** | **-0.6** |
| TA01 | | | | *iS* | | | **Sn** | **22 08 46.7** | **-0.8** |
| TA01 | | | | IAML | | | | 22 08 48.5 | |
| | comp=N,4µm,0.3s | | | | | | | | |
| HMBC | **Humberstone** | **0.87** | **95** | ⇓*iP* | | | **Pn** | **22 08 39.2** | **-0.7** |
| HMBC | | | | *iS* | | | **Sn** | **22 08 50.8** | **-1.2** |
| HMBC | | | | IAML | | | | 22 08 57.1 | |
| | comp=N,3µm,0.3s | | | | | | | | |
| PATCX | **Punta Patache** | **0.87** | **135** | | | | **Pn** | **22 08 39.8** | **-0.1** |
| PATCX | **Punta Patache** | **0.87** | **135** | ⇓*iP* | | | **Pn** | **22 08 39.8** | **-0.1** |
| PATCX | | | | *iS* | | | **Sn** | **22 08 52.2** | **+0.2** |
| PATCX | | | | IAML | | | | 22 08 56.7 | |
| | comp=N,2µm,0.4s | | | | | | | | |
| PB11 | **IPOC Station P** | **1.17** | **68** | Pn | | | **Pn** | **22 08 43.6** | **-0.4** |
| PB11 | **IPOC Station P** | **1.17** | **68** | ⇓*iP* | | | **Pn** | **22 08 43.7** | **-0.4** |
| PB11 | | | | *eS* | | | **Sn** | **22 08 59.0** | **-0.5** |
| PB11 | | | | IAML | | | | 22 09 01.2 | |
| | comp=N,2µm,0.2s | | | | | | | | |
| PB02 | **IPOC Station P** | **1.40** | **143** | Pn | | | **Pn** | **22 08 47.9** | **+0.6** |
| PB02 | **IPOC Station P** | **1.40** | **143** | ⇑*iP* | | | **Pn** | **22 08 48.0** | **+0.6** |
| PB02 | | | | *eS* | | | **Sn** | **22 09 06.0** | **+0.7** |
| PB02 | | | | IAML | | | | 22 09 10.4 | |
| | comp=E,4µm,0.4s | | | | | | | | |
| PB01 | **IPOC Station P** | **1.50** | **124** | Pn | | | **Pn** | **22 08 49.6** | **+1.0** |
| PB01 | **IPOC Station P** | **1.50** | **124** | ⇑*iP* | | | **Pn** | **22 08 49.5** | **+1.0** |
| PB01 | | | | *eS* | | | **Sn** | **22 09 08.4** | **+0.9** |
| PB01 | | | | IAML | | | | 22 09 15.7 | |
| | comp=N,1µm,0.5s | | | | | | | | |
| PB08 | **IPOC Station P** | **1.56** | **88** | Pn | | | **Pn** | **22 08 50.5** | **+0.8** |
| PB08 | **IPOC Station P** | **1.56** | **88** | ⇑*iP* | | | **Pn** | **22 08 50.4** | **+0.8** |
| PB08 | | | | *eS* | | | **Sn** | **22 09 10.8** | **+1.4** |
| GO01 | **Chusmiza** | **1.61** | **71** | Pn | | | **Pn** | **22 08 51.3** | **+0.8** |
| GO01 | **Chusmiza** | **1.61** | **71** | ⇑*eP* | | | **Pn** | **22 08 50.9** | **+0.5** |
| GO01 | | | | *eS* | | | **Sn** | **22 09 12.2** | **+1.4** |
| GO01 | | | | IAML | | | | 22 09 13.6 | |
| | comp=N,4µm,0.2s | | | | | | | | |
| PB12 | **IPOC Station P** | **1.64** | **16** | Pn | | | **Pn** | **22 08 49.9** | **-0.6** |
| PB12 | **IPOC Station P** | **1.64** | **16** | ⇑*eP* | | | **Pn** | **22 08 49.8** | **-0.7** |
| PB12 | | | | *eS* |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3μm,0.2s | | | | | | | |
| **GVD** | **Gavdhos** | **0.24** | **143** | P | **Pn** | **22 28 02.2** | **-0.7** |
| GVD | | | | S | **Sb** | **22 28 09.2** | **+0.9** |
| GVD | | | | AML | AML | 22 28 10.3 | |
| | comp=N,8862μm,0.3s | | | | | | |
| GVD | | | | AML | AML | 22 28 11.1 | |
| | comp=E,3488μm,0.2s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.43** | **8** | P | **Pb** | **22 28 05.3** | **-0.5** |
| IMMV | | | | S | **Sb** | **22 28 12.8** | **+0.4** |
| | comp=E,460nm,0.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.43** | **8** | P | **Pb** | **22 28 05.3** | **-0.5** |
| IMMV | | | | S | **Sn** | **22 28 14.3** | **+1.7** |
| IMMV | | | | AML | AML | 22 28 17.2 | |
| | comp=E,1064μm,0.4s | | | | | | |
| IMMV | | | | AML | AML | 22 28 19.4 | |
| | comp=N,764μm,0.6s | | | | | | |
| **VAM** | **Vamos** | **0.44** | **33** | P | **Pb** | **22 28 05.6** | **-0.4** |
| **VAM** | **Vamos** | **0.44** | **33** | P | **Pb** | **22 28 05.5** | **-0.4** |
| VAM | | | | S | **Sb** | **22 28 14.0** | **+1.3** |
| VAM | | | | AML | AML | 22 28 16.6 | |
| | comp=N,761μm,0.5s | | | | | | |
| VAM | | | | AML | AML | 22 28 17.9 | |
| | comp=E,848μm,0.4s | | | | | | |
| **SIVA** | **Sivas** | **0.74** | **91** | P | **Pn** | **22 28 09.1** | **-1.1** |
| SIVA | | | | S | **Sb** | **22 28 21.8** | **+1.2** |
| **IDI** | **Anoyia** | **0.84** | **72** | P | **Pn** | **22 28 10.8** | **-0.9** |
| **IDI** | **Anoyia** | **0.84** | **72** | P | **Pn** | **22 28 10.8** | **-0.9** |
| **ANKY** | **Antikythira Is** | **0.97** | **329** | P | **Pn** | **22 28 12.7** | **-0.7** |
| **KTHA** | **Kythira Island** | **1.40** | **331** | P | **Pn** | **22 28 18.6** | **-0.7** |
| **NPS** | **Neapolis** | **1.41** | **80** | P | **Pn** | **22 28 19.0** | **-0.6** |
| **SNT5** | **Nea Kammeni, S** | **1.82** | **41** | P | **Pn** | **22 28 23.7** | **-1.4** |
| **VLI** | **Veliai** | **1.85** | **335** | P | **Pn** | **22 28 25.1** | **-0.5** |
| **ZKR** | **Zakros** | **1.90** | **87** | P | **Pn** | **22 28 25.4** | **-0.7** |

*TUL* ***13*** *22:35:20.5±1.3,36°.47N±0°.01×98°.75W±0°.02,h7km±7km, ML2.3,ML2.2/18(NEIC),Error ellipse: s-maj=2.0km s-min=1.6km az=70.0*

**NEIC 13 22:35:20.9**±1.7,**36°.44N**±0°.01×**98°.71W**±0°.02,**h9**km±7km, **Error ellipse: s-maj=2.3km s-min=1.5km az=45.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.24** | **256** | Pg | Pg | 22 35 25.2 | -0.5 |
| U32A | | | | IAML | | 22 35 29.2 | |
| | comp=N,507nm,0.2s | | | | | | |
| U32A | | | | IAML | | 22 35 29.4 | |
| | comp=E,370nm,0.3s | | | | | | |
| U32A | | | | Sg | Sg | 22 35 29.0 | 0.0 |
| **FNO** | **Franklin** | **1.59** | **137** | Pn | Pb | 22 35 50.3 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.70** | **182** | Pn | Pn | 22 35 50.9 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.83** | **74** | Pn | Pn | 22 35 53.2 | +0.5 |
| **X34A** | **Smith Ranch, M** | **1.97** | **158** | Pn | Pb | 22 35 56.2 | -0.7 |
| **R32A** | **Long Quarter,** | **1.98** | **0** | Pn | Pn | 22 35 55.3 | +0.6 |
| **CBKS** | **Cedar Bluff** | **2.51** | **341** | Pn | Pn | 22 36 02.6 | +0.6 |

*MOS* ***13*** *22:57:41.4±1.0,43°.66N×147°.61E,h47km,mb4.4/6,Error ellipse: s-maj=9.0km s-min=7.4km az=86.8*

*JMA* ***13*** *22:57:41.6±0.3,43°.48N×147°.42E,h16km±4km,M4.3*

*NEIC* ***13*** *22:57:41.9±2.0,43°.61N±0°.09×147°.7E±0°.1,h35km±2km, mb4.3/28,Error ellipse: s-maj=17.9km s-min=13.0km az=133.0*

*NIED* ***13*** *22:57:41.6,43°.48N×147°.42E,h16km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr7.02; Mθθ2.42; Mφφ-9.44; Mrθ-0.68; Mθφ-1.98; Mφr0.54; Fault plane solution: M₀8.47000×10¹⁴ NP1: φs360.00000°,δ47.00000°,λ77.00000°. NP2: φs199.00000°,δ44.00000°,λ104.00000°.*

*SKHL* ***13*** *22:57:41.6±0.3,43°.50N×147°.60E,h58km±5km,mb5.2/5*

*IDC* ***13*** *22:57:47.7±2.6,43°.57N×147°.55E,h88km±23km,mb3.5/14, mb1 3.8/16,mb1mx3.6/32,mbtmp3.8/16,MS2.9/4, Ms1 2.9/4,ms1mx2.6/85,Error ellipse: s-maj=19.0km s-min=16.4km az=146.0*

**ISC 13 22:57:42.4**±1.3,**43°.59N**±0°.06×**147°.58E**±0°.06,**h41**km±11km, **n136,σ1s17**/150,**mb4.1**/33,**4C-8D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.61** | **297** | *d* iPN | **Pn** | **22 57 54.0** | **-0.6** |
| SHO | | | | *i* S | **Sn** | **22 58 03.1** | **-0.2** |
| SHO | | | | pmax | pmax | | |
| | comp=N,1μm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,2μm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,793nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,6μm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,7μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **0.61** | **297** | *i* P | **Pn** | **22 57 54.0** | **-0.6** |
| SHO | | | | AMB | AMB | 22 57 55.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 22 57 55.9 | |
| | comp=E,790nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 22 57 55.9 | |
| | comp=E,2μm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **22 58 03.1** | **-0.2** |
| SHO | | | | A | A | 22 58 04.8 | |
| | comp=E,6μm,0.3s | | | | | | |
| SHO | | | | A | A | 22 58 04.8 | |
| | comp=E,7μm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.32** | **290** | ⇓*i* PN | **Pn** | **22 58 04.0** | **-0.3** |
| YUK | | | | *i* S | **Sn** | **22 58 20.5** | **-0.1** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,8μm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,5μm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.32** | **290** | *i* P | **Pn** | **22 58 04.0** | **-0.3** |
| YUK | | | | AMB | AMB | 22 58 06.2 | |
| | comp=E,2μm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **22 58 20.6** | **-0.1** |
| YUK | | | | A | A | 22 58 24.4 | |
| | comp=E,8μm,0.5s | | | | | | |
| YUK | | | | A | A | 22 58 24.4 | |
| | comp=E,5μm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.35** | **261** | P | **Pn** | **22 58 03.9** | **-0.9** |
| NEM2 | | | | *e*S | **Sn** | **22 58 20.3** | **-1.2** |
| **NMR** | **Nemuro--Hokkai** | **1.36** | **261** | ⇑*i* PN | **Pn** | **22 58 04.6** | **-0.3** |
| NMR | | | | *i* S | **Sn** | **22 58 21.6** | **-0.2** |
| **NMR** | **Nemuro--Hokkai** | **1.36** | **261** | *i* P | **Pn** | **22 58 04.2** | **-0.7** |
| NMR | | | | *i* S | **Sn** | **22 58 21.0** | **-0.8** |
| **GLVR** | **Golovnino** | **1.50** | **276** | *e*PN | **Pn** | **22 58 06.7** | **-0.1** |
| GLVR | | | | *i* S | **Sn** | **22 58 25.7** | **+0.6** |
| GLVR | | | | pmax | pmax | | |
| | comp=N,228nm,0.2s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.2s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=E,199nm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,5μm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,9μm,0.3s | | | | | | |
| **GLVR** | **Golovnino** | **1.50** | **276** | *e*P | **Pn** | **22 58 06.7** | **-0.1** |
| GLVR | | | | AMB | AMB | 22 58 08.6 | |
| | comp=E,230nm,0.2s | | | | | | |
| GLVR | | | | AMB | AMB | 22 58 08.6 | |
| | comp=E,200nm,0.2s | | | | | | |
| GLVR | | | | AMB | AMB | 22 58 08.6 | |
| | comp=E,1μm,0.2s | | | | | | |
| GLVR | | | | *i* S | **Sn** | **22 58 25.7** | **+0.6** |
| GLVR | | | | A | A | 22 58 28.8 | |
| | comp=E,5μm,0.3s | | | | | | |
| GLVR | | | | A | A | 22 58 28.8 | |
| | comp=E,9μm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **1.66** | **7** | *e*PN | **Pn** | **22 58 08.7** | **-0.2** |
| KUR | | | | *i* S | **Sn** | **22 58 29.1** | **+0.2** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,348nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,254nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,173nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,397nm,0.2s | | | | | | |
| **KUR** | **Kuril'sk** | **1.66** | **7** | *i* P | **Pn** | **22 58 08.8** | **-0.2** |
| KUR | | | | AMB | AMB | 22 58 15.4 | |
| | comp=E,250nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 22 58 15.4 | |
| | comp=E,170nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 22 58 15.4 | |
| | comp=E,350nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **22 58 29.5** | **+0.6** |
| KUR | | | | A | A | 22 58 33.4 | |
| | comp=E,1μm,0.2s | | | | | | |
| KUR | | | | A | A | 22 58 33.4 | |
| | comp=E,400nm,0.2s | | | | | | |
| **RUSJ** | **Misakicho** | **1.76** | **288** | *e*PN | **Pn** | **22 58 10.8** | **+0.4** |
| RUSJ | | | | *e*S | **Sn** | **22 58 34.3** | **+2.7** |
| **JRA** | **Rausu** | **1.81** | **282** | P | **Pn** | **22 58 11.3** | **+0.2** |
| **JKHN** | **Kushirohamanak** | **1.83** | **255** | P | **Pn** | **22 58 11.3** | **-0.1** |
| **JNSB** | **Nemuroshibetsu** | **1.88** | **277** | P | **Pn** | **22 58 12.4** | **+0.4** |
| JNSB | | | | *e*S | **Sn** | **22 58 34.5** | **+0.1** |
| **JNK** | **Nakash** | **2.08** | **271** | P | **Pn** | **22 58 14.4** | **-0.3** |
| JNK | | | | *e*S | **Sn** | **22 58 39.0** | **-0.4** |
| **AKK** | **Akkeshi** | **2.08** | **255** | *e*P | **Pn** | **22 58 14.7** | **0.0** |
| AKK | | | | *i* S | **Sn** | **22 58 38.7** | **-0.7** |
| **JAK** | **Akkeshi** | **2.19** | **255** | P | **Pn** | **22 58 16.0** | **-0.2** |
| JAK | | | | *e*S | **Sn** | **22 58 41.5** | **-0.5** |
| **JTKR** | **Abashiri--Toko** | **2.69** | **279** | P | **Pn** | **22 58 24.2** | **+1.1** |
| **JAR** | **Ashorobuto** | **2.79** | **265** | P | **Pn** | **22 58 25.2** | **+0.7** |
| JAR | | | | *e*S | **Sn** | **22 58 57.4** | **+0.5** |
| **JOB** | **Onbets** | **2.82** | **257** | P | **Pn** | **22 58 25.5** | **+0.6** |
| JOB | | | | *e*S | **Sn** | **22 58 57.6** | **-0.1** |
| **JMP** | **Maruseppu** | **3.08** | **279** | P | **Pn** | **22 58 29.8** | **+1.2** |
| **JCH** | **Churui** | **3.24** | **254** | P | **Pn** | **22 58 30.7** | **0.0** |
| JCH | | | | *e*S | **Sn** | **22 59 07.5** | **-0.5** |
| **JKK2** | **Kamakawa 2** | **3.51** | **276** | P | **Pn** | **22 58 36.4** | **+1.9** |
| **ERM** | **Erimo** | **3.61** | **246** | *de*PN | **Pn** | **22 58 37.9** | **+2.1** |
| **ERM** | **Erimo** | **3.61** | **246** | | **Pn** | **22 58 37.6** | **+1.8** |
| **JEM** | **Erimo** | **3.61** | **246** | | **Pn** | **22 58 38.0** | **+2.2** |
| **JKA** | **Kamikawa-asahi** | **3.64** | **280** | | **Pn** | **22 58 36.2** | **0.0** |
| **JKA** | **Kamikawa-asahi** | **3.64** | **280** | *e*P | **Pn** | **22 58 39.4** | **+3.2** |
| **ASAJ** | **Asahikawa** | **3.64** | **280** | P | **Pn** | **22 58 39.4** | **+3.2** |
| | comp=E,6.9nm,0.3s,baz=161,slow=32,SNR=31 | | | | | | |
| ASAJ | | | | S | **Sn** | **22 59 25.5** | **+7.6** |
| | comp=E,2.5nm,0.3s,baz=317,slow=22,SNR=3.5 | | | | | | |
| ASAJ | | | | LR | LR | 23 00 11.1 | |
| | comp=E,171nm,19.1s,baz=352,slow=40 | | | | | | |
| **JFR** | **Furan** | **3.66** | **265** | P | **Pn** | **22 58 38.2** | **+1.7** |
| **JNBK** | **Urakawa-nobuka** | **3.78** | **251** | P | **Pn** | **22 58 38.3** | **+0.2** |
| **JSE** | **Soyaes** | **3.84** | **293** | P | **Pn** | **22 58 40.4** | **+1.5** |
| **JEW** | **Eniwo** | **4.54** | **263** | | **Pn** | **22 58 51.0** | **+2.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.78** | **316** | *e*PN | **Pn** | **22 58 52.8** | **+0.9** |
| YSS | | | | *e*S | **Sn** | **22 59 45.5** | **-0.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,30nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.78** | **316** | *e*P | **Pn** | **22 58 52.8** | **+0.9** |
| YSS | | | | AMB | AMB | 22 58 53.9 | |
| | comp=E,10.0nm,0.7s | | | | | | |
| YSS | | | | *e*S | **Sn** | **22 59 45.5** | **-0.5** |
| YSS | | | | A | A | 22 59 47.2 | |
| | comp=E,10.0nm,0.5s | | | | | | |
| YSS | | | | A | A | 22 59 47.2 | |
| | comp=E,30nm,0.5s | | | | | | |
| **JMM** | **Marumori** | **7.70** | **224** | Pn | **Pn** | **22 59 30.6** | **-1.3** |
| **TYV** | **Tymovskoe** | **8.01** | **337** | *e*P | **Pn** | **22 59 38.0** | **+1.9** |
| TYV | | | | AMB | AMB | 22 59 38.9 | |
| | comp=E,10.0nm,0.4s | | | | | | |
| **JSD** | **Sado** | **8.98** | **235** | Pn | **Pn** | **22 59 49.2** | **-0.3** |
| **JYT** | **Yasato** | **9.28** | **220** | Pn | **Pn** | **22 59 55.8** | **+2.2** |
| **MJAR** | **Matsushiro Arr** | **10.05** | **229** | P | **Pn** | **23 00 07.1** | **+2.9** |
| | comp=E,0.1nm,0.3s,baz=28,slow=16,SNR=2.3 | | | | | | |
| MJAR | | | | LR | LR | 23 03 36.0 | |
| | comp=E,65nm,18.2s,baz=68,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **10.05** | **229** | Pn | **Pn** | **23 00 05.5** | **+1.3** |
| **GRNR** | **Gornyy** | **10.44** | **317** | *e*P | **Pn** | **23 00 08.6** | **-0.9** |
| GRNR | | | | AMB | AMB | 23 00 11.5 | |
| **NKL** | **Nikolayevsk** | **10.60** | **337** | *e*P | **Pn** | **23 00 12.9** | **+1.3** |
| **PEA0B** | **Petropavlovsk-** | **11.65** | **32** | PN | **Pn** | **23 00 25.6** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **11.65** | **32** | Pn | **Pn** | **23 00 25.6** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **11.65** | **32** | P | **Pn** | **23 00 26.0** | **+0.1** |
| | comp=E,0.2nm,0.3s,baz=201,slow=10,SNR=9.1 | | | | | | |
| PETK | | | | LR | LR | 23 04 43.0 | |
| | comp=E,40nm,20.5s,baz=154,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **11.65** | **32** | PN | **Pn** | **23 00 25.1** | **-0.8** |
| **PETK** | **Petropavlovsk-** | **11.65** | **32** | | **Pn** | **23 00 25.1** | **-0.8** |
| **KLR** | **Kul'dur** | **12.29** | **303** | LR | LR | 23 05 53.4 | |
| | comp=E,75nm,19.3s,baz=102,slow=40 | | | | | | |
| **MA2** | **Magadan** | **16.13** | **6** | ⇓*i* P | **Pn** | **23 01 26.1** | **+0.2** |
| **MA2** | **Magadan** | **16.13** | **6** | *i* P | **Pn** | **23 01 26.1** | **+0.2** |
| **SEY** | **Seymchan** | **19.58** | **7** | P | **P** | **23 02 05.7** | **-1.0** |
| | comp=E,0.1nm,0.3s,baz=186,slow=12,SNR=14 | | | | | | |
| **SEY** | **Seymchan** | **19.58** | **7** | ⇓*e*P | **P** | **23 02 05.5** | **-1.1** |
| **ULN** | **Ulaanbaatar** | **28.38** | **293** | P | **P** | **23 03 32.7** | **-0.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.38** | **293** | P | **P** | **23 03 32.7** | **-0.1** |
| **ULN** | **Ulaanbaatar** | **28.38** | **293** | *e*P | **P** | **23 03 32.7** | **-0.1** |
| **H11N2** | **WAKE ISLAND Hy** | **28.78** | **140** | T | T | 23 34 18.4 | |
| | baz=331,slow=76,SNR=237 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.79** | **140** | T | T | 23 34 17.6 | |
| | baz=331,slow=76,SNR=190 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.80** | **140** | T | T | 23 34 23.0 | |
| | baz=331,slow=76,SNR=182 | | | | | | |
| **SONM** | **Songino Array** | **28.82** | **293** | P | **P** | **23 03 37.1** | **+0.5** |
| | comp=Z,0.3nm,0.5s,baz=85,slow=6.1,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | **28.82** | **293** | P | **P** | **23 03 36.3** | **-0.4** |
| **H11S1** | **WAKE ISLAND Hy** | **29.75** | **141** | T | T | 23 35 28.9 | |
| | baz=332,slow=76,SNR=463 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.75** | **141** | T | T | 23 35 34.4 | |
| | baz=332,slow=76,SNR=292 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.77** | **141** | T | T | 23 35 30.2 | |
| | baz=332,slow=76,SNR=189 | | | | | | |
| **ANM** | **Nome** | **33.54** | **35** | P | **P** | **23 04 17.7** | **-0.1** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **ANM** | **Nome** | **33.54** | **35** | P | **P** | **23 04 17.7** | **-0.1** |
| ANM | | | | IAmb | IAmb | 23 04 34.8 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **TTA** | **Tatalina** | **37.36** | **39** | P | **P** | **23 04 51.4** | **+0.7** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **TTA** | **Tatalina** | **37.36** | **39** | P | **P** | **23 04 51.4** | **+0.7** |
| TTA | | | | IAmb | IAmb | 23 05 10.4 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **38.28** | **37** | P | **P** | **23 04 59.1** | **+0.7** |
| J20K | | | | IAmb | IAmb | 23 05 14.6 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **38.60** | **34** | P | **P** | **23 05 01.7** | **+0.6** |
| **H21K** | **Melozitna Rive** | **38.96** | **35** | P | **P** | **23 05 04.7** | **+0.5** |
| H21K | | | | IAmb | IAmb | 23 05 05.8 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **MLY** | **Manley** | **39.79** | **36** | P | **P** | **23 05 12.6** | **+1.5** |
| **COLD** | **Coldfoot** | **40.12** | **32** | P | **P** | **23 05 14.2** | **+0.5** |
| COLD | | | | IAmb | IAmb | 23 05 17.2 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **H23K** | **Yukon River** | **40.31** | **35** | P | **P** | **23 05 16.3** | **+0.9** |
| H23K | | | | IAmb | IAmb | 23 05 18.0 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **40.77** | **300** | ⇑*e*P | **P** | **23 05 16.3** | **-3.2** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.3s | | | | | | |
| **COLA** | **College** | **41.02** | **36** | ⇓*e*P | **P** | **23 05 22.0** | **+0.9** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **41.43** | **36** | P | **P** | **23 05 24.9** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=281,slow=7.8,SNR=8.6 | | | | | | |
| **ILAR** | **Eielson Array** | **41.43** | **36** | *e*P | **P** | **23 05 27.0** | **+2.4** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **42.30** | **32** | P | **P** | **23 05 33.5** | **+1.8** |
| **BCAR** | **Beaver Creek A** | **43.83** | **38** | P | **P** | **23 05 45.4** | **+1.3** |
| **MK31** | **Makanchi Array** | **44.93** | **298** | P | **P** | **23 05 52.6** | **-0.5** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **44.93** | **298** | P | **P** | **23 05 52.6** | **-0.5** |
| **MKAR** | **Makanchi Array** | **44.93** | **298** | P | **P** | **23 05 53.5** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=79,slow=7.3,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.93** | **298** | P | **P** | **23 05 53.2** | **+0.1** |
| **KURK** | **Kurchatov** | **45.88** | **304** | P | **P** | **23 06 00.1** | **-0.3** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **45.88** | **304** | P | **P** | **23 06 00.1** | **-0.3** |
| **KURK** | **Kurchatov** | **45.88** | **304** | *e*P | **P** | **23 06 00.1** | **-0.3** |
| **HYT** | **Haines Junctio** | **46.24** | **41** | P | **P** | **23 06 04.7** | **+1.3** |
| **INK** | **Inuvik** | **46.38** | **30** | P | **P** | **23 06 05.3** | **+1.2** |
| | comp=Z,2.7nm,0.6s,baz=304,slow=5.6,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **46.38** | **30** | P | **P** | **23 06 05.1** | **+1.0** |
| INK | | | | IAmb | IAmb | 23 06 06.2 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **C36M** | **Paulatuk** | **49.47** | **28** | P | **P** | **23 06 28.8** | **+0.7** |
| **BRVK** | **Borovoye** | **49.89** | **310** | ⇓*e*P | **P** | **23 06 30.8** | **-0.7** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **49.89** | **310** | P | **P** | **23 06 32.4** | **+0.9** |
| BRVK | | | | IAmb | IAmb | 23 06 32.5 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **49.89** | **310** | *e*P | **P** | **23 06 30.8** | **-0.7** |
| **AAK** | **Ala-Archa** | **51.70** | **296** | P | **P** | **23 06 44.9** | **-0.6** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **51.70** | **296** | P | **P** | **23 06 44.9** | **-0.6** |
| **AAK** | **Ala-Archa** | **51.70** | **296** | *e*P | **P** | **23 06 44.9** | **-0.6** |
| **KKAR** | **Karatay Array** | **54.06** | **298** | P | **P** | **23 07 02.7** | **0.0** |
| **KKAR** | **Karatay Array** | **54.06** | **298** | P | **P** | **23 07 02.6** | **0.0** |
| **RES** | **Resolute Bay** | **55.03** | **17** | P | **P** | **23 07 08.7** | **-0.5** |
| RES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **RES** | **Resolute Bay** | **55.03** | **17** | P | **P** | **23 07 08.7** | **-0.5** |
| RES | | | | IAmb | IAmb | 23 07 09.9 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **55.76** | **34** | P | **P** | **23 07 15.0** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=297,slow=6.7,SNR=15 | | | | | | |
| **YKA** | **Yellowknife Ar** | **55.76** | **34** | P | **P** | **23 07 13.5** | **-1.2** |
| **CHGR** | **Chuyangaron** | **57.21** | **294** | P | **P** | **23 07 25.1** | **-0.3** |
| CHGR | | | | IAmb | IAmb | 23 07 28.6 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.41** | **309** | P | **P** | **23 07 26.5** | **-0.1** |
| ABKAR | | | | IAmb | IAmb | 23 07 27.4 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.41** | **309** | P | **P** | **23 07 26.4** | **-0.1** |
| **WB0** | **Warramunga Arr** | **64.20** | **194** | P | **P** | **23 08 12.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **64.38** | **194** | P | **P** | **23 08 13.9** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=13,slow=5.8,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.38** | **194** | *e*P | **P** | **23 08 14.1** | **0.0** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **64.38** | **194** | P | **P** | **23 08 13.8** | **-0.3** |
| **FIA1** | **FINESS Array S** | **65.16** | **333** | P | **P** | **23 08 18.1** | **-0.6** |
| **FINES** | **FINESS Array B** | **65.16** | **333** | P | **P** | **23 08 17.8** | **-1.0** |
| | comp=Z,1.7nm,0.6s,baz=42,slow=6.2,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **65.16** | **333** | *e*P | **P** | **23 08 18.3** | **-0.4** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **FCC** | **Fort Churchill** | **66.00** | **30** | P | **P** | **23 08 24.2** | **0.0** |
| FCC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **FCC** | **Fort Churchill** | **66.00** | **30** | P | **P** | **23 08 24.2** | **0.0** |
| FCC | | | | IAmb | IAmb | 23 08 44.3 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **67.40** | **58** | P | **P** | **23 08 34.0** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=271,slow=7.3,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **68.09** | **194** | P | **P** | **23 08 38.0** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=15,slow=5.3,SNR=4.5 | | | | | | |
| **NC300** | **NORSAR Array S** | **69.62** | **339** | P | **P** | **23 08 46.6** | **-0.3** |
| **PDAR** | **Pinedale Array** | **69.77** | **50** | P | **P** | **23 08 49.1** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=205,slow=24,SNR=2.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **69.77** | **50** | P | **P** | **23 08 48.6** | **0.0** |
| **NB2** | **NORSAR Subarra** | **69.86** | **339** | P | **P** | **23 08 47.9** | **-0.6** |
| | comp=Z,0.3nm,0.4s,baz=31,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.86** | **339** | P | **P** | **23 08 48.1** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=32,slow=6.6,SNR=11 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.86** | **339** | *e*P | **P** | **23 08 47.5** | **-1.0** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NORES** | **NORESS Array B** | **70.03** | **339** | P | **P** | **23 08 49.2** | **-0.3** |
| **KIV** | **Kislovodsk** | **70.10** | **312** | *e*P | **P** | **23 08 49.6** | **-0.7** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **KIV** | **Kislovodsk** | **70.10** | **312** | P | **P** | **23 08 49.8** | **-0.6** |
| KIV | | | | IAmb | IAmb | 23 08 56.4 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **70.10** | **312** | *e*P | **P** | **23 08 49.6** | **-0.7** |
| **KBZ** | **Khabaz** | **70.14** | **312** | P | **P** | **23 08 51.4** | **+1.0** |
| | comp=Z,1.7nm,0.9s,baz=219,slow=6.5,SNR=2.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.89** | **324** | P | **P** | **23 09 00.7** | **-0.2** |
| | comp=Z,0.9nm,0.5s,baz=40,slow=6.2,SNR=8.2 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **75.93** | **324** | P | **P** | **23 09 24.6** | **-0.1** |
| BUR08 | | | | IAmb | IAmb | 23 09 32.4 | |
| | comp=Z,6.2nm,1.3s | | | | | | |
| **BURAR** | **Bucovina Array** | **75.95** | **324** | ⇑P | **P** | **23 09 25.3** | **+0.5** |
| **BURAR** | **Bucovina Array** | **75.95** | **324** | P | **P** | **23 09 25.2** | **+0.3** |
| **TESR** | **Tescani** | **76.17** | **322** | ⇓P | P | 23 09 31.0 | +5.0 |
| **TRPA** | **Tarpa** | **76.67** | **326** | ⇑P | **P** | **23 09 29.6** | **+0.9** |
| **TXAR** | **Lajitas Array** | **82.48** | **57** | P | **P** | **23 10 02.0** | **+1.2** |
| | comp=Z,0.5nm,0.8s,baz=306,slow=4.2,SNR=4.7 | | | | | | |

**IDC 13 23:25:28.2**±2.8,**5°.71S**×**128°.71E**,**h281**km±38km,**mb2.7**/1, **mb1 3.1**/5,**mb1mx2.7**/33,**mbtmp3.7**/5,**Error ellipse: s-maj=68.0km s-min=18.5km az=86.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.44** | **28** | P | Pn | 23 26 50.4 | 0.0 |
| | 1.9nm,0.3s,baz=206,slow=23,SNR=27 | | | | | | |
| SIJI | | | | S | S | 23 27 51.2 | -5.2 |
| | 1.4nm,0.3s,baz=240,slow=23,SNR=2.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.68** | **193** | P | Pn | 23 28 19.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S39A | Bolivar | 4.46 | 73 | Pn | Pn | 23 55 09.2 | -0.3 |
| T25A | Trinidad | 4.62 | 279 | IAmb_Lg | | 23 56 26.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| MIAR | Mount Ida | 4.63 | 114 | Pn | Pn | 23 55 11.0 | -0.7 |
| U40A | Yellville | 4.72 | 90 | Pn | Pn | 23 55 13.2 | +0.1 |
| X40A | Basin Creek Fa | 5.20 | 111 | Pn | Pn | 23 55 18.6 | -1.1 |
| W41B | Gary Mavity, V | 5.42 | 102 | Pn | Pn | 23 55 22.4 | -0.2 |

*WEL* ***14*** *00:13:00, 43.˙50S×172.˙76E, h4km, ML5.7, Mw5.8, Moment Tensor Solution. s18 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$2.00; $M_{\theta\theta}$2.69; $M_{\phi\phi}$-4.69; $M_{r\theta}$1.86; $M_{\theta\phi}$-2.44; $M_{\phi r}$-0.18; Fault plane solution: $M_0$5.06000×$10^{17}$ NP1: $\phi_s$157.00000°, δ64.00000°, λ24.00000°. NP2:$\phi_s$56.00000°, δ69.00000°, λ152.00000°. Principal axes: T -54378.4900, Plg34.0000°, Azm15.0000°; N 46837.7900, Plg55.0000°, Azm202.0000°; P 7540.7000, Plg3.0000°, Azm107.0000°;*

*BJI* ***14*** *00:13:42.6±0.0, 43.˙28S×173.˙11E, h5km, mb5.5/35, mB6.0/31, Ms5.7/48, Ms7 5.5/47*

*BGR* ***14*** *00:13:42.0±0.0, 43.˙62S×173.˙83E, h10km, Ms5.9*

*IDC* ***14*** *00:13:43.6±0.3, 43.˙30S×172.˙71E, h0km, mb5.3/30, mb1 5.3/31, mb1mx5.1/47, mbtmp5.3/31, ML5.1/1, MS5.4/47, Ms1 5.5/47, ms1mx5.4/48, Error ellipse: s-maj=13.4km s-min=10.4km az=62.0*

*WEL* ***14*** *00:13:44.0±0.5, 43.˚S±3.˚×17.˚3E±.˚, h8km, M5.7/7, ML6.0/7, MLv5.7/7, Error ellipse: s-maj=0.0km s-min=0.0km az=65.0*

*NOU* ***14*** *00:13:44.2, 43.˙56S×173.˙05E, h0km, MLv6.4/100, Off E. Coast of S. Island, N.Z.*

*NEIC* ***14*** *00:13:44.0±1.8, 43.˚48S±0.˚04×172.˚77E±0.˚05, h8km±2km, mb5.9/94, Ms_20 5.7/326, Mwb5.7/26, Mwr5.7/39, Mww5.8, Error ellipse: s-maj=6.5km s-min=3.6km az=136.0*

*MOS* ***14*** *00:13:44.2±1.2, 43.˙36S×172.˙58E, h10km, mb5.7/22, MS5.6/12, Error ellipse: s-maj=12.4km s-min=8.9km az=120.8*

*NEIC* ***14*** *00:13:44.3, 43.˚48S×172.˚76E, h13km, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.19; $M_{\theta\theta}$2.39; $M_{\phi\phi}$-2.20; $M_{r\theta}$0.32; $M_{\theta\phi}$-2.80; $M_{\phi r}$-2.01; Fault plane solution: $M_0$4.16000×$10^{17}$ NP1:$\phi_s$339.37000°, δ85.49000°, λ-28.80000°. NP2:$\phi_s$71.84000°, δ61.30000°, λ-174.86000°. Principal axes: T 4.0601, Plg16.0000°, Azm29.0000°; N 0.1924, Plg61.0000°, Azm151.0000°; P -4.2525, Plg23.0000°, Azm292.0000°;*

*NEIC* ***14*** *00:13:44.3, 43.˚48S×172.˚76E, h8km, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.40; $M_{\theta\theta}$3.81; $M_{\phi\phi}$-4.22; $M_{r\theta}$-0.14; $M_{\theta\phi}$-2.34; $M_{\phi r}$-0.59; Fault plane solution: $M_0$4.70000×$10^{17}$ NP1:$\phi_s$329.92000°, δ85.57000°, λ-4.78000°. NP2:$\phi_s$60.29000°, δ85.23000°, λ-175.55000°. Principal axes: T 4.4439, Plg0.0000°, Azm15.0000°; N 0.4713, Plg83.0000°, Azm107.0000°; P -4.9152, Plg7.0000°, Azm285.0000°;*

*NEIC* ***14*** *00:13:45, 43.˙50S×172.˙84E, h12km, Moment Tensor Solution. Duration: 4.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$2.26; $M_{\theta\theta}$3.34; $M_{\phi\phi}$-5.60; $M_{r\theta}$1.46; $M_{\theta\phi}$-2.43; $M_{\phi r}$1.71; Fault plane solution: $M_0$5.90000×$10^{17}$ NP1: $\phi_s$150.00000°, δ61.00000°, λ12.00000°. NP2:$\phi_s$54.00000°, δ80.00000°, λ150.00000°. Principal axes: T 4.4915, Plg28.0000°, Azm8.0000°; N 2.1841, Plg59.0000°, Azm217.0000°; P -6.6756, Plg13.0000°, Azm105.0000°;*

*GCMT* ***14*** *00:13:48.0±0.1, 43.˚48S±0.˚01×172.˚54E±0.˚01, h12km, MW5.7/151, Moment Tensor Solution. s136,c245; s151,c405; Duration: 1s7 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$1.73±.04; $M_{\theta\theta}$2.54±.04; $M_{\phi\phi}$-4.27±.03; $M_{r\theta}$0.41±.10; $M_{\theta\phi}$-2.35±.03; $M_{\phi r}$-0.74±.09; Best double couple: $M_0$4.27000×$10^{17}$ NP1:$\phi_s$61.00000°, δ73.00000°, λ169.00000°. NP2:$\phi_s$154.00000°, δ80.00000°, λ18.00000°. Principal axes: T 3.4870, Plg19.0000°, Azm19.0000°; N 1.5650, Plg70.0000°, Azm183.0000°; P -5.0530, Plg5.0000°, Azm287.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 00:13:44.4±0.4, 43.˙47S±0.˙02×172.˙81E±0.˙02, h6km±2km, h7km:pP-P, n1226, σ1s74/1151, mb5.7/134, MS5.7/232, 69C-92D, Fault plane solution: NP1:**$\phi_s$356.95801°, δ89.71184°, λ-26.41820°. **NP2:**$\phi_s$87.10117°, δ63.58216°, λ-179.67824°. **Principal axes:** T Plg18.1222°, Azm45.1746°; N Plg63.5803°, Azm176.3780°; P Plg18.5516°, Azm308.8688°; **South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MQZ** | **McQueen's Vall** | **0.26** | **206** | Pg | **Pg** | **00 13 48.8** | **-0.8** |
| MQZ | | | | Sg | **Sg** | **00 13 52.2** | **-0.9** |
| **MQZ** | **McQueen's Vall** | **0.26** | **206** | P | **Pg** | **00 13 48.8** | **-0.8** |
| MQZ | | | | S | **Sg** | **00 13 52.4** | **-0.7** |
| **OKCZ** | **Okains Bay** | **0.31** | **145** | P | **Pg** | **00 13 51.2** | **+0.7** |
| OKCZ | | | | S | **Sb** | **00 13 56.1** | **-1.6** |
| **AMCZ** | **Amberley** | **0.32** | **338** | P | **Pg** | **00 13 51.1** | **+0.4** |
| AMCZ | | | | S | **Sb** | **00 13 56.6** | **-1.3** |
| **AKCZ** | **Akaroa Harbour** | **0.41** | **170** | P | **Pg** | **00 13 52.4** | **0.0** |
| AKCZ | | | | S | **Sg** | **00 13 58.5** | **+0.8** |
| **GVZ** | **Greta Valley S** | **0.53** | **18** | P | **Pg** | **00 13 55.8** | **-1.3** |
| **RACZ** | **Rakaia** | **0.55** | **242** | P | **Pg** | **00 13 54.2** | **-0.9** |
| **OXZ** | **Oxford** | **0.58** | **284** | | **Pg** | **00 13 54.5** | **-1.1** |
| **OXZ** | **Oxford** | **0.58** | **284** | P | **Pg** | **00 13 54.6** | **-1.1** |
| OXZ | | | | S | **Sg** | **00 14 02.9** | **-0.3** |
| **LTZ** | **Lake Taylor** | **0.80** | **330** | Pg | **Pg** | **00 13 59.5** | **-0.2** |
| **WACZ** | **Wakanui South** | **0.85** | **236** | P | **Pg** | **00 13 59.9** | **-0.8** |
| WACZ | | | | S | **Sb** | **00 14 12.2** | **-1.0** |
| **MHCZ** | **Mount Hutt** | **0.91** | **266** | P | **Pg** | **00 14 00.6** | **-1.3** |
| MHCZ | | | | S | **Sb** | **00 14 14.7** | **-0.3** |
| **KHZ** | **Kahutara** | **1.18** | **27** | | **Pg** | **00 14 05.4** | **-1.7** |
| **KHZ** | **Kahutara** | **1.18** | **27** | ⇑P | **Pg** | **00 14 05.4** | **-1.7** |
| **KHZ** | **Kahutara** | **1.18** | **27** | P | **Pg** | **00 14 05.4** | **-1.7** |
| **KHZ** | **Kahutara** | **1.18** | **27** | P | **Pg** | **00 14 06.3** | **-0.8** |
| **INZ** | **Inchbonnie** | **1.25** | **306** | P | **Pn** | **00 14 05.8** | **-2.6** |
| **ARCZ** | **Arundel** | **1.28** | **248** | P | **Pn** | **00 14 05.9** | **-2.9** |
| **RPZ** | **Rata Peaks** | **1.30** | **259** | | **Pn** | **00 14 06.4** | **-2.8** |
| RPZ | | | | Sn | **Sb** | **00 14 24.7** | **-1.6** |
| **RPZ** | **Rata Peaks** | **1.30** | **259** | P | **Pn** | **00 14 06.3** | **-2.8** |
| **WVZ** | **Waitaha Valley** | **1.57** | **284** | P | **Pn** | **00 14 10.7** | **-2.0** |
| **TMZ** | **Timaru** | **1.59** | **234** | P | **Pn** | **00 14 10.4** | **-2.8** |
| **THZ** | **Tophouse** | **1.71** | **2** | | **Pn** | **00 14 13.1** | **-1.7** |
| **THZ** | **Tophouse** | **1.71** | **2** | P | **Pn** | **00 14 13.1** | **-1.7** |
| **GCSZ** | **Gaunt Creek Bo** | **1.82** | **274** | P | **Pn** | **00 14 14.7** | **-1.6** |
| **DSZ** | **Denniston Nort** | **1.88** | **336** | P | **Pn** | **00 14 15.3** | **-1.8** |
| **BSWZ** | **Blackbirch Sta** | **1.92** | **24** | Pn | **Pn** | **00 14 16.2** | **-1.4** |
| **BSWZ** | **Blackbirch Sta** | **1.92** | **24** | P | **Pn** | **00 14 16.3** | **-1.4** |
| **CMWZ** | **Cape Campbell** | **2.01** | **31** | | **Pn** | **00 14 17.6** | **-1.2** |
| **CMWZ** | **Cape Campbell** | **2.01** | **31** | P | **Pn** | **00 14 18.1** | **-0.7** |
| **MRNZ** | **Matariki Terra** | **2.07** | **359** | P | **Pn** | **00 14 18.7** | **-1.0** |
| **LBZ** | **Lake Benmore** | **2.11** | **243** | Pn | **Pn** | **00 14 17.4** | **-2.9** |
| **LBZ** | **Lake Benmore** | **2.11** | **243** | P | **Pn** | **00 14 17.8** | **-2.5** |
| **FOZ** | **Fox Glacier** | **2.18** | **267** | | **Pn** | **00 14 19.8** | **-1.4** |
| **FOZ** | **Fox Glacier** | **2.18** | **267** | P | **Pn** | **00 14 19.9** | **-1.3** |
| **TUWZ** | **Tuamarina** | **2.21** | **23** | | **Pn** | **00 14 19.6** | **-2.0** |
| **TUWZ** | **Tuamarina** | **2.21** | **23** | P | **Pn** | **00 14 19.9** | **-1.6** |
| **ODZ** | **Otahua Downs** | **2.21** | **224** | | **Pn** | **00 14 18.8** | **-2.9** |
| **ODZ** | **Otahua Downs** | **2.21** | **224** | ⇓P | **Pn** | **00 14 18.9** | **-2.8** |
| **ODZ** | **Otahua Downs** | **2.21** | **224** | P | **Pn** | **00 14 18.9** | **-2.8** |
| **ODZ** | **Otahua Downs** | **2.21** | **224** | P | **Pn** | **00 14 22.9** | **+1.2** |
| **NNZ** | **Nelson** | **2.29** | **11** | | **Pn** | **00 14 21.3** | **-1.4** |
| **NNZ** | **Nelson** | **2.29** | **11** | P | **Pn** | **00 14 21.6** | **-1.1** |
| **TCW** | **Tory Channel** | **2.51** | **26** | P | **Pn** | **00 14 23.7** | **-2.0** |
| **BHW** | **Baring Head** | **2.56** | **37** | | **Pn** | **00 14 24.1** | **-2.3** |
| **BHW** | **Baring Head** | **2.56** | **37** | P | **Pn** | **00 14 24.7** | **-1.8** |
| **SNZO** | **South Karori** | **2.58** | **34** | Pn | **Pn** | **00 14 24.4** | **-2.2** |
| **SNZO** | **South Karori** | **2.58** | **34** | ⇑P | **Pn** | **00 14 24.4** | **-2.2** |
| **SNZO** | **South Karori** | **2.58** | **34** | P | **Pn** | **00 14 26.5** | **-0.1** |
| **PLWZ** | **Palliser** | **2.62** | **44** | Pn | **Pn** | **00 14 24.3** | **-3.0** |
| **PLWZ** | **Palliser** | **2.62** | **44** | P | **Pn** | **00 14 25.2** | **-2.1** |
| **WEL** | **Wellington** | **2.62** | **34** | P | **Pn** | **00 14 25.7** | **-1.6** |
| **QRZ** | **Quartz Range** | **2.65** | **355** | Pn | **Pn** | **00 14 25.8** | **-2.0** |
| **QRZ** | **Quartz Range** | **2.65** | **355** | P | **Pn** | **00 14 26.0** | **-1.7** |
| **QRZ** | **Quartz Range** | **2.65** | **355** | P | **Pn** | **00 14 28.7** | **+1.0** |
| **MSWZ** | **Moikau Station** | **2.73** | **42** | | **Pn** | **00 14 26.0** | **-2.8** |
| **MSWZ** | **Moikau Station** | **2.73** | **42** | P | **Pn** | **00 14 26.6** | **-2.2** |
| **DUWZ** | **D'Urville Isla** | **2.79** | **18** | P | **Pn** | **00 14 28.1** | **-1.6** |
| **PAWZ** | **Paruwai Farm** | **2.85** | **44** | P | **Pn** | **00 14 28.1** | **-2.3** |
| **HHSZ** | **Highcliff Hill** | **2.88** | **212** | P | **Pn** | **00 14 28.3** | **-2.6** |
| **CAW** | **Cannon Point** | **2.90** | **36** | P | **Pn** | **00 14 28.9** | **-2.2** |
| **TRWZ** | **Traveller** | **2.97** | **47** | P | **Pn** | **00 14 29.9** | **-2.1** |
| **JCZ** | **Jackson Bay** | **2.98** | **257** | P | **Pn** | **00 14 29.9** | **-2.4** |
| **KIW** | **Kapiti Island** | **3.04** | **32** | P | **Pn** | **00 14 31.0** | **-2.0** |
| **WKZ** | **Wanaka** | **3.05** | **242** | | **Pn** | **00 14 30.3** | **-2.9** |
| **WKZ** | **Wanaka** | **3.05** | **242** | P | **Pn** | **00 14 30.7** | **-2.5** |
| **MTW** | **Mount Morrison** | **3.05** | **42** | P | **Pn** | **00 14 30.6** | **-2.6** |
| **EAZ** | **Earnscleugh** | **3.07** | **234** | P | **Pn** | **00 14 30.7** | **-2.7** |
| **OGWZ** | **Otaki Gorge** | **3.18** | **34** | P | **Pn** | **00 14 32.7** | **-2.2** |
| **HOWZ** | **Holdsworth Sta** | **3.26** | **39** | P | **Pn** | **00 14 33.7** | **-2.4** |
| **TMWZ** | **Te Maipa** | **3.29** | **45** | P | **Pn** | **00 14 34.1** | **-2.3** |
| **TUZ** | **Tuapeka** | **3.36** | **221** | P | **Pn** | **00 14 35.1** | **-2.3** |
| **MRZ** | **Mangatainoka R** | **3.48** | **37** | P | **Pn** | **00 14 36.5** | **-2.6** |
| **TIWZ** | **Tintock** | **3.53** | **41** | P | **Pn** | **00 14 37.9** | **-1.9** |
| **CPWZ** | **Castlepoint** | **3.59** | **46** | P | **Pn** | **00 14 38.7** | **-1.9** |
| **MSZ** | **Milford Sound** | **3.72** | **249** | P | **Pn** | **00 14 41.2** | **-1.1** |
| **PRWZ** | **Pori Road** | **3.75** | **40** | P | **Pn** | **00 14 40.7** | **-2.1** |
| **BFZ** | **Birch Farm** | **3.78** | **44** | | **Pn** | **00 14 40.0** | **-3.2** |
| **BFZ** | **Birch Farm** | **3.78** | **44** | P | **Pn** | **00 14 40.6** | **-2.6** |
| **BFZ** | **Birch Farm** | **3.78** | **44** | P | **Pn** | **00 14 41.8** | **-1.4** |
| **POWZ** | **Post Office Ro** | **3.79** | **37** | P | **Pn** | **00 14 41.1** | **-2.2** |
| **MLZ** | **Mavora Lakes** | **3.86** | **239** | | **Pn** | **00 14 41.0** | **-3.4** |
| **MLZ** | **Mavora Lakes** | **3.86** | **239** | P | **Pn** | **00 14 41.4** | **-2.9** |
| MLZ | | | | | P | **Pn** | **00 14 41.5** | **-2.9** |
| **SYZ** | **Scrubby Hill** | **4.02** | **219** | P | **Pn** | **00 14 44.2** | **-2.3** |
| **DVHZ** | **Dannevirke** | **4.04** | **39** | P | **Pn** | **00 14 43.7** | **-3.1** |
| **WAZ** | **Wanganui** | **4.06** | **24** | P | **Pn** | **00 14 46.8** | **-0.2** |
| **ANWZ** | **Angora Road** | **4.06** | **43** | P | **Pn** | **00 14 44.8** | **-2.3** |
| **NMEZ** | **Namu Road** | **4.13** | **12** | P | **Pn** | **00 14 48.2** | **+0.2** |
| **LREZ** | **Lake Rotokare** | **4.18** | **17** | P | **Pn** | **00 14 51.1** | **+2.4** |
| **WHZ** | **Wether Hill Ro** | **4.23** | **233** | | **Pn** | **00 14 45.6** | **-3.7** |
| **WHZ** | **Wether Hill Ro** | **4.23** | **233** | P | **Pn** | **00 14 45.9** | **-3.5** |
| **PREZ** | **Palmer Road** | **4.25** | **14** | P | **Pn** | **00 14 50.1** | **+0.4** |
| **KHEZ** | **Kahui Hut** | **4.27** | **13** | P | **Pn** | **00 14 49.5** | **-0.5** |
| **NBEZ** | **Newall Road No** | **4.28** | **11** | P | **Pn** | **00 14 49.7** | **-0.3** |
| **PRHZ** | **Porangahau** | **4.29** | **43** | P | **Pn** | **00 14 47.5** | **-2.7** |
| **NEZ** | **North Egmont** | **4.31** | **13** | P | **Pn** | **00 14 50.5** | **0.0** |
| **WPHZ** | **Waipukurau** | **4.35** | **40** | P | **Pn** | **00 14 48.5** | **-2.6** |
| **PKE** | **Pukeiti** | **4.37** | **12** | P | **Pn** | **00 14 51.0** | **-0.3** |
| **PNHZ** | **Pukenui** | **4.37** | **37** | P | **Pn** | **00 14 48.3** | **-3.0** |
| **DREZ** | **Durham Road** | **4.41** | **14** | P | **Pn** | **00 14 52.0** | **+0.2** |
| **DCZ** | **Deep Cove** | **4.51** | **242** | | **Pn** | **00 14 50.2** | **-3.1** |
| **DCZ** | **Deep Cove** | **4.51** | **242** | P | **Pn** | **00 14 50.6** | **-2.7** |
| **MHEZ** | **Mangahewa** | **4.54** | **15** | P | **Pn** | **00 14 54.0** | **+0.4** |
| **MTVZ** | **Mangateitei** | **4.55** | **27** | P | **Pn** | **00 14 52.7** | **-1.1** |
| **PXZ** | **Pawanui** | **4.58** | **43** | P | **Pn** | **00 14 51.7** | **-2.5** |
| **VRZ** | **Vera Road** | **4.58** | **19** | P | **Pn** | **00 14 54.0** | **-0.2** |
| **PKVZ** | **Pokaka** | **4.59** | **25** | P | **Pn** | **00 14 53.6** | **-0.8** |
| **MOVZ** | **Moawhango** | **4.62** | **30** | P | **Pn** | **00 14 52.9** | **-2.0** |
| **WNVZ** | **Wahianoa** | **4.64** | **28** | P | **Pn** | **00 14 53.9** | **-1.3** |
| **TRVZ** | **Turoa** | **4.65** | **27** | P | **Pn** | **00 14 54.0** | **-1.4** |
| **KRHZ** | **Kereru** | **4.66** | **36** | P | **Pn** | **00 14 52.1** | **-3.3** |
| **BHHZ** | **Black Hill Sta** | **4.67** | **33** | P | **Pn** | **00 14 53.3** | **-2.2** |
| **DRZ** | **Donne Shelter** | **4.68** | **27** | P | **Pn** | **00 14 55.8** | **0.0** |
| **WHVZ** | **Whangaehu Hut** | **4.68** | **27** | P | **Pn** | **00 14 54.8** | **-1.0** |
| **FWVZ** | **Far West T-bar** | **4.69** | **27** | P | **Pn** | **00 14 54.5** | **-1.5** |
| **KAHZ** | **Kahuranaki** | **4.77** | **41** | P | **Pn** | **00 14 54.2** | **-2.7** |
| **NGZ** | **Ngauruhoe** | **4.78** | **27** | P | **Pn** | **00 14 55.7** | **-1.4** |
| **SNVZ** | **South Ngauruho** | **4.78** | **27** | P | **Pn** | **00 14 55.8** | **-1.3** |
| **APZ** | **The Paps** | **4.79** | **224** | P | **Pn** | **00 14 54.2** | **-2.9** |
| **OTVZ** | **Oturere** | **4.81** | **27** | P | **Pn** | **00 14 56.0** | **-1.6** |
| **TWVZ** | **Taurewa** | **4.82** | **25** | P | **Pn** | **00 14 56.6** | **-1.0** |
| **NNVZ** | **North Ngauruho** | **4.82** | **27** | P | **Pn** | **00 14 56.4** | **-1.3** |
| **WTVZ** | **West Tongariro** | **4.83** | **27** | P | **Pn** | **00 14 56.1** | **-1.6** |
| **ETVZ** | **East Tongariro** | **4.85** | **28** | P | **Pn** | **00 14 56.4** | **-1.7** |
| **KRVZ** | **Karewarewa** | **4.87** | **27** | P | **Pn** | **00 14 58.0** | **-0.2** |
| **TMVZ** | **Te Maari** | **4.87** | **28** | P | **Pn** | **00 14 56.6** | **-1.6** |
| **KWHZ** | **Kaweka Forest** | **4.87** | **35** | P | **Pn** | **00 14 55.8** | **-2.5** |
| **NTVZ** | **North Tongariro** | **4.87** | **27** | P | **Pn** | **00 14 57.0** | **-1.4** |
| **MCHZ** | **McNeil Hill** | **4.97** | **37** | P | **Pn** | **00 14 56.7** | **-2.9** |
| **CKHZ** | **Cape Kidnapper** | **4.97** | **41** | P | **Pn** | **00 14 58.2** | **-1.4** |
| **KATZ** | **Kakaramea** | **4.99** | **27** | P | **Pn** | **00 14 59.1** | **-0.9** |
| **RITZ** | **Rihia Road** | **5.04** | **28** | P | **Pn** | **00 14 59.6** | **-1.0** |
| **RATZ** | **Rangitukua** | **5.11** | **27** | P | **Pn** | **00 15 00.8** | **-0.8** |
| **BKZ** | **Black Stump Fm** | **5.12** | **34** | Pn | **Pn** | **00 14 59.0** | **-2.6** |
| **BKZ** | **Black Stump Fm** | **5.12** | **34** | P | **Pn** | **00 14 58.1** | **-3.5** |
| **BKZ** | **Black Stump Fm** | **5.12** | **34** | P | **Pn** | **00 15 00.9** | **-0.7** |
| **PYZ** | **Puysegur Point** | **5.13** | **236** | | **Pn** | **00 14 58.1** | **-3.6** |
| **PYZ** | **Puysegur Point** | **5.13** | **236** | P | **Pn** | **00 14 58.2** | **-3.5** |
| **HIZ** | **Hauiti** | **5.19** | **18** | Pn | **Pn** | **00 15 00.5** | **-2.0** |
| **HIZ** | **Hauiti** | **5.19** | **18** | P | **Pn** | **00 15 01.4** | **-1.1** |
| **HIZ** | **Hauiti** | **5.19** | **18** | P | **Pn** | **00 15 03.0** | **+0.4** |
| **HATZ** | **Hinemaiaia** | **5.20** | **29** | P | **Pn** | **00 15 01.2** | **-1.5** |
| **ARHZ** | **Aropaoanui** | **5.25** | **38** | P | **Pn** | **00 15 01.4** | **-2.0** |
| **NMHZ** | **Naumai** | **5.30** | **36** | P | **Pn** | **00 15 01.7** | **-2.6** |
| **WHTZ** | **Whakaora** | **5.36** | **27** | P | **Pn** | **00 15 04.3** | **-0.7** |
| **MRHZ** | **Matea Rd** | **5.37** | **32** | P | **Pn** | **00 15 01.8** | **-3.4** |
| **KUTZ** | **Kuripuni Road** | **5.47** | **26** | P | **Pn** | **00 15 05.7** | **-1.4** |
| **WHNZ** | **Waihua** | **5.51** | **39** | P | **Pn** | **00 15 08.4** | **+1.4** |
| **MTHZ** | **Maungataniwha** | **5.53** | **35** | P | **Pn** | **00 15 04.6** | **-2.6** |
| **TLZ** | **Tolley Road** | **5.54** | **23** | P | **Pn** | **00 15 06.2** | **-1.2** |
| **WPRZ** | **Whakapapatarin** | **5.56** | **28** | P | **Pn** | **00 15 05.8** | **-1.9** |
| **RAHZ** | **Arahi** | **5.58** | **37** | P | **Pn** | **00 15 05.5** | **-2.4** |
| **ALRZ** | **Allen Road** | **5.58** | **30** | P | **Pn** | **00 15 05.5** | **-2.5** |
| **PRRZ** | **Plateau Road** | **5.66** | **30** | P | **Pn** | **00 15 06.9** | **-2.1** |
| **GRRZ** | **Galatos Road** | **5.69** | **27** | P | **Pn** | **00 15 08.0** | **-1.5** |
| **HRRZ** | **Handcock Road** | **5.72** | **29** | P | **Pn** | **00 15 08.2** | **-1.6** |
| **KNZ** | **Kokohu** | **5.76** | **41** | P | **Pn** | **00 15 07.3** | **-3.1** |
| **MHGZ** | **Mahia Peninsul** | **5.77** | **43** | P | **Pn** | **00 15 08.6** | **-2.0** |
| **HSRZ** | **Hossack Road** | **5.77** | **28** | P | **Pn** | **00 15 09.2** | **-1.4** |
| **RTZ** | **Ruatahuna** | **5.78** | **34** | P | **Pn** | **00 15 07.9** | **-3.0** |
| **SNGZ** | **Shannon Statio** | **5.80** | **38** | P | **Pn** | **00 15 08.2** | **-2.7** |
| **MUGZ** | **Murupara** | **5.82** | **32** | P | **Pn** | **00 15 08.8** | **-2.5** |
| **RRRZ** | **Republican Roa** | **5.84** | **30** | P | **Pn** | **00 15 09.6** | **-2.0** |
| **HLRZ** | **Highlands Stat** | **5.86** | **28** | P | **Pn** | **00 15 10.1** | **-1.3** |
| **UTUZ** | **Utuhina** | **5.88** | **27** | P | **Pn** | **00 15 10.6** | **-1.5** |
| **TARZ** | **Mount Tarawera** | **5.93** | **29** | P | **Pn** | **00 15 10.9** | **-2.0** |
| **PRGZ** | **Paritu Road** | **5.94** | **42** | P | **Pn** | **00 15 09.6** | **-3.3** |
| **NGRZ** | **Ngongotaha** | **5.94** | **27** | P | **Pn** | **00 15 12.3** | **-0.7** |
| **OMRZ** | **Omania** | **6.00** | **28** | P | **Pn** | **00 15 11.6** | **-2.2** |
| **KARZ** | **Kaharoa** | **6.04** | **27** | P | **Pn** | **00 15 13.0** | **-1.2** |
| **RIGZ** | **Rimuhau** | **6.05** | **40** | P | **Pn** | **00 15 11.0** | **-3.5** |
| **RAGZ** | **Rawiri** | **6.07** | **37** | P | **Pn** | **00 15 11.4** | **-3.3** |
| **TOZ** | **Tahuroa Road** | **6.09** | **21** | P | **Pn** | **00 15 13.5** | **-1.4** |
| **EDRZ** | **Edgecumbe** | **6.13** | **30** | P | **Pn** | **00 15 12.9** | **-2.7** |
| **URZ** | **Urewera** | **6.14** | **33** | Pn | **Pn** | **00 15 12.9** | **-2.8** |
| | 44nm,0.3s,baz=236,slow=7.8,SNR=161 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 16 20.6** | **-5.6** |
| | 80nm,0.3s,baz=200,slow=10.0,SNR=1.9 | | | | | | |
| URZ | | | | LR | LR | 00 17 11.5 | |
| | comp=Z,7μm,19.2s,baz=247,slow=34 | | | | | | |
| **URZ** | **Urewera** | **6.14** | **33** | Pn | **Pn** | **00 15 11.9** | **-3.7** |
| **URZ** | **Urewera** | **6.14** | **33** | ⇑P | **Pn** | **00 15 11.4** | **-4.2** |
| **URZ** | **Urewera** | **6.14** | **33** | P | **Pn** | **00 15 11.8** | **-3.8** |
| **URZ** | **Urewera** | **6.14** | **33** | P | **Pn** | **00 15 14.1** | **-1.5** |
| **MARZ** | **Manawahe** | **6.22** | **29** | P | **Pn** | **00 15 14.5** | **-2.2** |
| **MWZ** | **Matawai** | **6.25** | **36** | P | **Pn** | **00 15 12.8** | **-4.4** |
| **OPRZ** | **Ohinepanea** | **6.30** | **28** | P | **Pn** | **00 15 15.0** | **-2.8** |
| **TGRZ** | **Tauranga** | **6.31** | **26** | P | **Pn** | **00 15 16.0** | **-1.9** |
| **TKGZ** | **Te Karaka** | **6.31** | **39** | P | **Pn** | **00 15 14.4** | **-3.5** |
| **WHRZ** | **Whale Island** | **6.44** | **31** | P | **Pn** | **00 15 19.5** | **-0.3** |
| **AWAZ** | **Awhitu Peninsu** | **6.55** | **13** | P | **Pn** | **00 15 20.4** | **-0.9** |
| **TWGZ** | **Tauwhareparae** | **6.58** | **38** | P | **Pn** | **00 15 20.3** | **-1.4** |
| **RUGZ** | **Raukumara Rang** | **6.62** | **36** | P | **Pn** | **00 15 19.1** | **-3.3** |
| **WTAZ** | **Waiatarua** | **6.67** | **12** | P | **Pn** | **00 15 21.7** | **-0.2** |
| **ETAZ** | **East Taiaki Re** | **6.71** | **15** | P | **Pn** | **00 15 22.3** | **-1.1** |
| **MYRZ** | **Mayor Island** | **6.71** | **24** | P | **Pn** | **00 15 23.3** | **-0.3** |
| **EPAZ** | **Eden Park BICE** | **6.75** | **13** | P | **Pn** | **00 15 24.3** | **+0.2** |
| **HBAZ** | **Herne Bay Bore** | **6.78** | **13** | P | **Pn** | **00 15 24.6** | **+0.3** |
| **PUZ** | **Puketiti** | **6.79** | **39** | P | **Pn** | **00 15 21.1** | **-3.6** |
| **RVAZ** | **Riverhead Bore** | **6.83** | **12** | P | **Pn** | **00 15 24.7** | **-0.3** |
| **HAZ** | **Te Kaha** | **6.85** | **35** | P | **Pn** | **00 15 21.2** | **-4.1** |
| **PKGZ** | **Pakihiroa** | **6.86** | **37** | P | **Pn** | **00 15 22.4** | **-3.2** |
| **MBAZ** | **Motutapu North** | **6.88** | **14** | P | **Pn** | **00 15 25.7** | **-0.1** |
| **WIAZ** | **Waiheke Island** | **6.90** | **16** | P | **Pn** | **00 15 25.0** | **-1.1** |
| **ABAZ** | **Army Bay** | **7.04** | **13** | P | **Pn** | **00 15 27.5** | **-0.4** |
| **WMGZ** | **Waiomatatini S** | **7.07** | **39** | P | **Pn** | **00 15 25.4** | **-3.0** |
| **KUZ** | **Kuaotunu** | **7.08** | **19** | P | **Pn** | **00 15 26.7** | **-1.8** |
| **MXZ** | **Matakaoa Point** | **7.23** | **37** | | **Pn** | **00 15 26.8** | **-3.8** |
| **MXZ** | **Matakaoa Point** | **7.23** | **37** | P | **Pn** | **00 15 27.1** | **-3.5** |
| **GRZ** | **Great Barrier** | **7.49** | **17** | P | **Pn** | **00 15 33.7** | **-0.5** |
| **CTZ** | **Chatham Island** | **7.68** | **96** | P | **Pn** | **00 15 34.0** | **-2.7** |
| **OUZ** | **Omahuta** | **8.26** | **4** | Pn | **Pn** | **00 15 44.5** | **-0.3** |
| **MCQ** | **Macquarie Isla** | **14.27** | **215** | P | **Pn** | **00 17 07.2** | **+0.4** |
| | baz=14,SNR=5.4 | | | | | | |
| **RAO** | **Raoul Island** | **16.02** | **31** | LR | LR | 00 24 05.5 | |
| | comp=Z,28μm,18.0s,baz=190,slow=39 | | | | | | |
| **GLAD** | **Gladstone** | **18.52** | **269** | P | **Pn** | **00 18 04.6** | **+3.1** |
| **TAU** | **Tasmania Unive** | **18.58** | **263** | P | **P** | **00 18 00.7** | **-1.3** |
| TAU | | | | | pmax | pmax | |
| | comp=Z,537nm,1.9s | | | | | | |
| **TAU** | **Tasmania Unive** | **18.58** | **263** | P | **P** | **00 18 00.7** | **-1.3** |
| **TAU** | **Tasmania Unive** | **18.58** | **263** | P | **Pn** | **00 18 03.6** | **+1.4** |
| **CORO** | **Coronation Par** | **19.03** | **267** | P | **Pn** | **00 18 11.2** | **+3.6** |
| **MILA** | **Mila** | **19.13** | **282** | P | **P** | **00 18 07.5** | **-0.6** |
| | baz=19,SNR=5.5 | | | | | | |
| **MILA** | **Mila** | **19.13** | **282** | ⇓P | **Pn** | **00 18 09.9** | **+1.0** |
| **RIV** | **Riverview** | **19.41** | **292** | P | **P** | **00 18 10.6** | **-0.6** |
| | baz=19,SNR=7.1 | | | | | | |
| **RIV** | **Riverview** | **19.41** | **292** | ⇓P | **Pn** | **00 18 14.0** | **+1.7** |
| **MGCD** | **Mangrove Creek** | **19.82** | **294** | P | **P** | **00 18 15.2** | **-0.5** |
| | baz=20,SNR=5.0 | | | | | | |
| **MGCD** | **Mangrove Creek** | **19.82** | **294** | P | **Pn** | **00 18 19.2** | **+2.0** |
| **CNB** | **Canberra Magne** | **19.82** | **286** | P | **P** | **00 18 15.8** | **0.0** |
| | baz=20,SNR=10 | | | | | | |
| **CNB** | **Canberra Magne** | **19.82** | **286** | P | **Pn** | **00 18 18.9** | **+1.6** |
| **CAN** | **Canberra** | **20.08** | **286** | P | **P** | **00 18 17.2** | **-1.3** |
| CAN | | | | | pmax | pmax | |
| | comp=Z,134nm,1.3s | | | | | | |
| CAN | | | | | MLR | MLR | |
| | comp=Z,20μm,20.0s | | | | | | |
| **CAN** | **Canberra** | **20.08** | **286** | P | **P** | **00 18 17.

baz=35,SNR=31
**MTSU Mount Surprise 34.86 307** P **P** **00 20 37.6 +1.1**
**HNR Honiara 35.72 338** P **P** **00 20 42.7 -1.1**
comp=Z,279nm,0.9s,baz=169,slow=19,SNR=2.2
HNR LR LR 00 35 05.1
comp=Z,9μm,18.2s,baz=167,slow=36
**HNR Honiara 35.72 338** P **P** **00 20 41.7 -2.1**
**QIS Mount Isa 35.89 299** P **P** **00 20 46.3 +1.0**
baz=36,SNR=11
**QIS Mount Isa 35.89 299** P **P** **00 20 46.4 +1.1**
**FORT Forrest 37.44 275** P **P** **00 20 58.7 +0.3**
baz=37,SNR=16
**FORT Forrest 37.44 275** P **P** **00 20 56.7 -1.7**
FORT IAmb IAmb 00 21 01.8
comp=Z,319nm,1.3s
**FORT Forrest 37.44 275** ⇑P **P** **00 20 58.4 0.0**
**FORT Forrest 37.44 275** P **P** **00 21 00.6 +2.2**
**AS31 Alice Springs 37.53 289** P **P** **00 20 56.5 -2.8**
**ASAR Alice Springs 37.53 289** P **P** **00 20 57.1 -2.2**
comp=Z,59nm,0.8s,baz=130,slow=7.7,SNR=213
ASAR PKiKP **PKiKP** **00 30 33.5 -0.4**
comp=Z,1.0nm,0.9s,baz=139,slow=1.4,SNR=5.7
ASAR LR LR 00 35 32.6
comp=Z,14μm,20.5s,baz=138,slow=35
**ASAR Alice Springs 37.53 289** P **P** **00 20 56.8 -2.5**
**COEN Coen 38.87 310** P **P** **00 21 08.4 -2.2**
**COEN Coen 38.87 310** ⇓P **P** **00 21 11.0 +0.4**
**COEN Coen 38.87 310** P **P** **00 21 11.9 +1.4**
**WR0 Warramunga Arr 39.62 294** P **P** **00 21 14.1 -2.7**
**WB2 Warramunga Arr 39.76 294** P **P** **00 21 15.1 -2.9**
WB2 IAmb IAmb 00 21 19.3
comp=Z,370nm,1.6s
**WRAB Tennant Creek 39.77 294***ce*P **P** **00 21 16.0 -2.1**
WRAB pmax pmax
comp=Z,184nm,1.3s
**WRAB Tennant Creek 39.77 294** P **P** **00 21 15.4 -2.7**
WRAB IAmb IAmb 00 21 20.6
comp=Z,95nm,0.8s
**WRAB Tennant Creek 39.77 294** ⇑P **P** **00 21 16.0 -2.1**
**WRAB Tennant Creek 39.77 294** P **P** **00 21 17.0 -1.1**
**WRA Warramunga Arr 39.77 294** P **P** **00 21 16.1 -2.0**
comp=Z,57nm,0.6s,baz=137,slow=8.4,SNR=200
WRA LR LR 00 37 20.3
comp=Z,18μm,18.4s,baz=132,slow=36
**WRA Warramunga Arr 39.77 294** P **P** **00 21 15.9 -2.2**
**CASY Casey 40.19 214** P **P** **00 21 21.0 0.0**
CASY IAmb IAmb 00 21 26.6
comp=Z,462nm,1.9s
**WRKA Warakurna 40.59 282** P **P** **00 21 23.0 -1.8**
baz=41,SNR=56
**WRKA Warakurna 40.59 282** ⇓P **P** **00 21 23.1 -1.8**
**PMG Port Moresby 40.64 319** P **P** **00 21 25.4 +0.1**
comp=Z,163nm,0.9s,baz=148,slow=6.0,SNR=24
PMG LR LR 00 37 04.2
comp=Z,15μm,19.1s,baz=154,slow=35
**PMG Port Moresby 40.64 319***ce*P **P** **00 21 25.1 -0.2**
PMG pmax pmax
comp=Z,224nm,1.0s
**PMG Port Moresby 40.64 319** P **P** **00 21 24.5 -0.8**
PMG IAmb IAmb 00 21 28.4
comp=Z,312nm,1.1s
**PMG Port Moresby 40.64 319** ⇑P **P** **00 21 25.4 +0.1**
**PMG Port Moresby 40.64 319** P **P** **00 21 27.3 +2.0**
**PMG Port Moresby 40.64 319** P **P** **00 21 27.5 +2.2**
**PAE Paea 40.83 63** *eP* **P** **00 21 29.8 +2.9**
comp=Z,26nm,1.3s
**PAE Paea 40.83 63** *eT* T 01 04 01.7
comp=Z,84nm,0.4s
**PPT2 Papeete2 40.89 63** *eP* **P** **00 21 30.6 +3.2**
comp=Z,71nm,1.3s
PPT2 *eS* **S** **00 27 43.1 +3.8**
comp=Z,2μm,23.2s
PPT2 *e*LQ LQ 00 31 00.3
comp=Z,6μm,29.0s
PPT2 *e*LR LR 00 32 35.8
comp=Z,8μm,27.2s
**PPT2 Papeete2 40.89 63** *eT* T 01 04 01.3
comp=Z,40nm,0.3s
**PPT Papeete 40.90 63** P **P** **00 21 29.2 +1.7**
comp=Z,29nm,0.7s,baz=169,slow=3.3,SNR=4.4
PPT LR LR 00 34 04.5
comp=Z,3μm,21.0s,baz=236,slow=30
**TVO Taravao 40.96 63** *eP* **P** **00 21 31.2 +3.2**
comp=Z,61nm,1.3s
**TVO Taravao 40.96 63** *eT* T 01 04 10.4
comp=Z,14nm,0.3s
**TIAR Tiarei 41.06 63** *eP* **P** **00 21 31.8 +3.0**
comp=Z,0.8nm,0.9s
**TIAR Tiarei 41.06 63** *eT* T 01 04 08.7
comp=Z,3.7nm,0.3s
**MEH Mehetia 41.67 65** *eT* T 01 05 09.9
**RABL Rabaul 43.18 329** P **P** **00 21 44.7 -1.4**
**RABL Rabaul 43.18 329** ⇑P **P** **00 21 45.1 -1.0**
**RABL Rabaul 43.18 329** P **P** **00 21 46.9 +0.8**
comp=Z,835nm,1.1s
**VAH Vaihoa 43.88 62** *eP* **P** **00 21 54.2 +2.5**
comp=Z,101nm,1.1s
**VAH Vaihoa 43.88 62** *eT* T 01 07 58.0
comp=Z,24nm,0.2s
**PMOR Pomariorio Ree 43.88 62** *eP* **P** **00 21 54.6 +2.9**
comp=Z,231nm,1.1s
**NWAO Narrogin (SRO) 44.19 264** P **P** **00 21 52.2 -1.9**
NWAO pmax pmax
comp=Z,101nm,1.0s
**NWAO Narrogin (SRO) 44.19 264** P **P** **00 21 52.2 -1.9**
NWAO IAmb IAmb 00 21 57.5
comp=Z,101nm,1.0s
**NWAO Narrogin (SRO) 44.19 264** P **P** **00 21 56.6 +2.5**
**KLBR Kellerberrin 44.50 266** P **P** **00 21 57.1 +0.4**
baz=44,SNR=19
**KLBR Kellerberrin 44.50 266** P **P** **00 21 58.5 +1.9**
**MUN Mundaring 45.42 265** P **P** **00 22 04.6 +0.6**
baz=45,SNR=19
**MUN Mundaring 45.42 265** P **P** **00 22 06.7 +2.7**
**BLDU Ballidu 45.78 267** P **P** **00 22 07.3 +0.5**
baz=46,SNR=13
**BLDU Ballidu 45.78 267** P **P** **00 22 09.5 +2.7**
**KDU Kakadu 46.28 299** P **P** **00 22 10.0 -0.8**
baz=46,SNR=18
**KDU Kakadu 46.28 299** ⇑P **P** **00 22 10.8 -0.1**
**KDU Kakadu 46.28 299** P **P** **00 22 12.0 +1.2**
**KNRA Kununurra 46.52 293** P **P** **00 22 11.5 -1.2**
baz=47,SNR=24
**KNRA Kununurra 46.52 293** P **P** **00 22 10.5 -2.2**
KNRA IAmb IAmb 00 22 15.7
comp=Z,179nm,1.0s
**KNRA Kununurra 46.52 293** P **P** **00 22 14.0 +1.3**
**MEEK Meekatharra 46.62 273** P **P** **00 22 11.9 -1.5**
baz=47,SNR=55
**MEEK Meekatharra 46.62 273** P **P** **00 22 14.4 +0.9**
**QSPA South Pole Qui 46.66 180** P **P** **00 22 14.9 +1.5**
comp=Z,419nm,1.2s,baz=23,slow=3.0,SNR=212
QSPA LR LR 00 40 38.6
comp=Z,6μm,18.2s,baz=41,slow=34
**QSPA South Pole Qui 46.66 180** P **P** **00 22 14.5 +1.0**
**FITZ Fitzroy Crossi 46.97 287** P **P** **00 22 14.7 -1.5**
comp=Z,56nm,1.1s,baz=143,slow=6.2,SNR=32
FITZ LR LR 00 41 49.2
comp=Z,11μm,19.6s,baz=128,slow=36
**FITZ Fitzroy Crossi 46.97 287** P **P** **00 22 14.7 -1.5**
baz=47,SNR=26
**MTN Manton Dam 47.02 298** P **P** **00 22 15.1 -1.5**
baz=47,SNR=31
**MTN Manton Dam 47.02 298** P **P** **00 22 14.9 -1.8**
MTN IAmb IAmb 00 22 19.6
comp=Z,118nm,0.8s
**MTN Manton Dam 47.02 298** ⇑P **P** **00 22 15.1 -1.5**
**MTN Manton Dam 47.02 298** P **P** **00 22 17.7 +1.0**
**MANU Manus Island 47.06 324** P **P** **00 22 16.4 -0.5**
MANU IAmb IAmb 00 22 19.5
comp=Z,331nm,1.6s
**MORW Morawa 47.11 268** P **P** **00 22 16.9 -0.3**
baz=47,SNR=10
**MORW Morawa 47.11 268** P **P** **00 22 15.9 -1.4**
**MORW Morawa 47.11 268** ⇑P **P** **00 22 17.8 +0.5**
**MORW Morawa 47.11 268** P **P** **00 22 19.3 +2.0**
**DRS Darwin Rock St 47.48 298** P **P** **00 22 21.6 +1.4**
comp=Z,43nm,1.1s
**PSA00 Pilbara Seismi 48.80 279** P **P** **00 22 28.1 -2.3**
PSA00 IAmb IAmb 00 22 34.6
comp=Z,315nm,1.6s
**PSA00 Pilbara Seismi 48.80 279** P **P** **00 22 28.4 -1.9**
PSA00 IAmb IAmb 00 22 34.6
comp=Z,173nm,1.6s
**PSA00 Pilbara Seismi 48.80 279** P **P** **00 22 30.9 +0.5**
**MBWA Marble Bar 49.14 279** P **P** **00 22 31.4 -1.7**
MBWA IAmb IAmb 00 22 37.2
comp=Z,224nm,1.6s
**MBWA Marble Bar 49.14 279** P **P** **00 22 33.8 +0.8**
**PTCN Pitcairn Islan 49.64 88** IAMs_20 IAMs_20 00 45 18.3
comp=Z,7μm,18.0s
**JAY Jayapura 49.76 316** LR LR 00 44 49.9
comp=Z,9μm,18.2s,slow=38
**GENI Genyem 49.97 315** P **P** **00 22 41.5 +2.1**
comp=Z,4μmcomp=Z,146nm,1.0s
**GENI Genyem 49.97 315** P **P** **00 22 42.5 +3.1**
**GIRL Giralia 52.19 274** P **P** **00 22 55.7 -0.3**
baz=52,SNR=8.5
**GIRL Giralia 52.19 274** P **P** **00 22 55.7 -0.3**
**TAOE Nuku Hiva Isla 53.48 64** *eS* **S** **00 30 41.1 +2.2**
comp=Z,1μm,24.4s
TAOE *e*LR LR 00 38 32.2
comp=Z,5μm,23.6s
**SOEI Soe 53.81 294** P **P** **00 23 07.1 -1.1**
SOEI IAmb IAmb 00 23 21.9
comp=Z,282nm,1.3s
**SOEI Soe 53.81 294** ⇓P **P** **00 23 10.0 +1.8**
**SOEI Soe 53.81 294** P **P** **00 23 10.3 +2.1**
comp=Z,3μmcomp=Z,2μmcomp=Z,172nm,1.3s
**BATI Baumata 53.88 293** P **P** **00 23 09.3 +0.7**
comp=Z,45nm,0.9s,baz=204,slow=3.7,SNR=13
BATI LR LR 00 47 50.7
comp=Z,11μm,18.1s,baz=158,slow=38
**BATI Baumata 53.88 293** P **P** **00 23 10.8 +2.2**
comp=Z,2μmcomp=Z,2μmcomp=Z,40nm,1.1s
**FAKI Fak Fak 54.05 307** P **P** **00 23 07.2 -2.6**
FAKI IAmb IAmb 00 23 11.7
comp=Z,53nm,0.9s
**FAKI Fak Fak 54.05 307** ⇑P **P** **00 23 08.0 -1.8**
**FAKI Fak Fak 54.05 307** P **P** **00 23 11.0 +1.2**
comp=Z,1μmcomp=Z,65nm,0.8s
**FAKI Fak Fak 54.05 307** P **P** **00 23 11.0 +1.2**
comp=Z,66nm,1.2s
**BASI Baing, Sumba 55.97 290** P **P** **00 23 26.0 +2.4**
comp=Z,3μmcomp=Z,179nm,1.6s
**MMRI Maumere 55.98 293** P **P** **00 23 22.6 -1.1**
MMRI IAMs_20 IAMs_20 00 48 57.4
comp=Z,6μm,19.0s
**MMRI Maumere 55.98 293** P **P** **00 23 25.4 +1.6**
comp=Z,3μmcomp=Z,88nm,1.3s
**MMRI Maumere 55.98 293** P **P** **00 23 25.9 +2.1**
**SIJI Sorong 56.28 307** P **P** **00 23 24.4 -1.5**
comp=Z,59nm,0.8s,baz=102,slow=4.9,SNR=38
**WBSI Waikabubak, Su 57.19 290** P **P** **00 23 34.5 +2.1**
comp=Z,2μmcomp=Z,82nm,1.4s
**MAW Mawson 57.45 205** P **P** **00 23 34.9 +1.5**
comp=Z,79nm,1.1s,baz=110,slow=11,SNR=4.5
MAW LR LR 00 47 35.2
comp=Z,6μm,18.3s,baz=124,slow=35
**MAW Mawson 57.45 205** P **P** **00 23 32.8 -0.6**
baz=57,SNR=5.2
**MAW Mawson 57.45 205** P **P** **00 23 33.3 -0.2**
MAW IAmb IAmb 00 23 38.2
comp=Z,131nm,1.8s
**BELA Belgrano 2 57.76 173** P **P** **00 23 35.0 -0.6**
BELA IAmb IAmb 00 23 39.9
comp=Z,208nm,1.3s
**SANI Sanana 58.52 301** P **P** **00 23 42.7 +1.0**
comp=Z,2μmcomp=Z,2μmcomp=Z,60nm,1.0s
**SANI Sanana 58.52 301** P **P** **00 23 43.5 +1.8**
**PLAI Plampang 58.88 289** P **P** **00 23 45.1 +0.9**
comp=Z,2μmcomp=Z,2μmcomp=Z,94nm,1.3s
**PLAI Plampang 58.88 289** P **P** **00 23 44.2 0.0**
**BSSI Bau Bau, Buton 58.98 293** P **P** **00 23 45.1 +0.2**
comp=Z,1μmcomp=Z,52nm,1.2s
**BKSI Bukumba 59.83 294** P **P** **00 23 50.7 -0.1**
comp=Z,1μmcomp=Z,46nm,1.1s
**TNTI Ternate 59.90 305** P **P** **00 23 49.9 -1.4**
**BNSI Bone 60.52 294** P **P** **00 23 56.5 +1.0**
comp=Z,3μmcomp=Z,2μmcomp=Z,45nm,1.6s
**SPSI Sidrap Palu 61.07 294** P **P** **00 23 59.6 +0.3**
comp=Z,2μmcomp=Z,1μmcomp=Z,59nm,1.4s
**JAGI Jajag, Banyuwa 61.65 286** P **P** **00 24 02.1 -1.1**
JAGI IAmb IAmb 00 24 05.9
comp=Z,134nm,1.3s
JAGI IAMs_20 IAMs_20 00 50 25.4
comp=Z,5μm,19.0s
**JAGI Jajag, Banyuwa 61.65 286** P **P** **00 24 05.7 +2.5**
comp=Z,2μmcomp=Z,89nm,1.6s
**JAGI Jajag, Banyuwa 61.65 286** P **P** **00 24 05.6 +2.4**
**TTSI Tana Toraja 61.72 295** P **P** **00 24 04.5 +0.8**
comp=Z,2μmcomp=Z,2μmcomp=Z,43nm,1.4s
**KMSI Cibinong 61.81 301** P **P** **00 24 05.2 +0.9**
comp=Z,126nm,0.9s
**ABJI Asem Bagus 62.07 287** P **P** **00 24 07.4 +1.4**
comp=Z,3μmcomp=Z,157nm,1.1s
**APSI Ampana 62.14 298** P P 00 24 17.2 +11
**GUMO Guam 62.27 329** LR LR 00 49 48.5
comp=Z,1μm,20.0s,baz=153,slow=35
**GMJI Gumukmas 62.28 286** P **P** **00 24 08.2 +0.8**
comp=Z,2μmcomp=Z,152nm,1.4s
**GTOI Gorontalo 62.47 301** P **P** **00 24 11.0 +2.4**
comp=Z,693nmcomp=Z,19nm,2.7s
**BLJI Banyuglugur 62.55 286** P **P** **00 24 10.7 +1.5**
comp=Z,2μmcomp=Z,102nm,1.6s
**SYO Syowa Base 62.62 197**⇓*e*P **P** **00 24 08.6 -0.3**
**SYO Syowa Base 62.62 197**⇑*ep*P pP 00 24 10.0 -1.0
**SYO Syowa Base 62.62 197**⇑*e*PcP **PcP** **00 24 46.1 -1.7**
**MRSI Marisa 63.02 299** P **P** **00 24 12.4 +0.1**
comp=Z,1μmcomp=Z,1μmcomp=Z,45nm,1.4s
**PMSA Palmer Station 63.33 156** P **P** **00 24 14.5 +0.9**
comp=Z,58nm,1.0s,baz=313,slow=16,SNR=7.8
PMSA LR LR 00 46 38.1
comp=Z,3μm,20.3s,baz=234,slow=31
**PMSA Palmer Station 63.33 156** P **P** **00 24 14.1 +0.4**
**RPN Rapa Nui 63.42 103** LR LR 00 47 27.8
comp=Z,2μm,18.1s,baz=235,slow=32
**PWJI Pagerwojo 63.61 285** P **P** **00 24 17.4 +1.1**
comp=Z,2μmcomp=Z,71nm,0.5s
**GRJI Gresik 63.91 286** P **P** **00 24 21.3 +3.0**
comp=Z,1μmcomp=Z,99nm,0.8s
**PCJI Pacitan 63.93 284** P **P** **00 24 20.5 +2.1**
comp=Z,2μmcomp=Z,131nm,2.1s
**MPSI Mapaga 64.22 298** P **P** **00 24 20.6 +0.3**
comp=Z,5μmcomp=Z,2μmcomp=Z,52nm,1.7s
**TOLI2 Tolitoli 64.24 299** P **P** **00 24 18.6 -1.8**
TOLI2 IAmb IAmb 00 24 24.6
comp=Z,46nm,1.0s
**TOLI2 Tolitoli 64.24 299** P **P** **00 24 22.3 +1.9**
**BWJI Bawean 64.54 287** P **P** **00 24 23.9 +1.5**
comp=Z,5μmcomp=Z,168nm,1.4s
**UGM Wanagama 64.59 284** P **P** **00 24 21.2 -1.6**
**UGM Wanagama 64.59 284** P **P** **00 24 24.8 +2.0**
comp=Z,4μmcomp=Z,164nm,1.4s
**YOGI Yogyakarta 64.82 284** P **P** **00 24 27.6 +3.4**
comp=Z,2μmcomp=Z,103nm,1.3s
**BKB Balikpapan 64.98 294** P **P** **00 24 24.8 -0.5**
**SNAA Sanae 65.12 182** P **P** **00 24 26.0 +0.5**
**SNAA Sanae 65.12 182** P **P** **00 24 26.2 +0.7**
comp=Z,92nm,1.2s,baz=183,slow=6.0,SNR=32
SNAA LR LR 00 50 22.2
comp=Z,4μm,20.7s,baz=190,slow=34
**SNAA Sanae 65.12 182** P **P** **00 24 25.5 0.0**
**SNAA Sanae 65.12 182** ⇑P **P** **00 24 27.2 +1.7**
**NVL N'lazarevskaya 65.25 187** *eP* P 00 24 33.7 +7.5
NVL *i* 00 26 50.6
NVL pmax pmax
comp=Z,113nm,1.1s
**SMRI Semarang 65.25 284** P **P** **00 24 25.6 -1.4**
SMRI IAMs_20 IAMs_20 00 52 11.8
comp=Z,6μm,20.0s
**SMRI Semarang 65.25 284** P **P** **00 24 29.2 +2.1**
comp=Z,153nm,1.7s
**SMRI Semarang 65.25 284** P **P** **00 24 29.2 +2.1**
comp=Z,152nm,1.8s
**VNA3 Neumayer Olymp 65.58 179** P **P** **00 24 29.6 +1.2**
**VNA2 Neumayer--Watz 65.91 180** P **P** **00 24 30.9 +0.3**
baz=173,slow=6.7
**DAV Davao City (W) 66.00 307** LR LR 00 54 19.5
comp=Z,3μm,19.6s,baz=158,slow=37
**DAV Davao City (W) 66.00 307** P **P** **00 24 30.4 -1.4**
**DAV Davao City (W) 66.00 307** IAMs_20 IAMs_20 00 53 58.1
comp=Z,4μm,20.0s
**KPJI Karang Pucung 66.12 283** P **P** **00 24 33.0 +0.3**
comp=Z,2μmcomp=Z,219nm,1.3s
**CMJI Cimerak 66.15 282** P **P** **00 24 33.7 +0.9**
comp=Z,1μmcomp=Z,86nm,1.4s
**VNA1 Neumayer--Stat 66.19 180** P **P** **00 24 34.2 +1.9**
**XMI Christmas Isla 66.30 278** P **P** **00 24 35.5 +1.6**
comp=Z,236nm,1.2s
**XMIS Christmas Isla 66.31 278** P **P** **00 24 32.7 -1.2**
**XMIS Christmas Isla 66.31 278** P **P** **00 24 35.5 +1.6**
comp=Z,202nm,1.2s
**JCJI Jatiwangi 67.17 283** P **P** **00 24 41.1 +1.7**
comp=Z,7μmcomp=Z,325nm,1.4s
**LEM Lembang 67.41 282** LR LR 00 54 08.9
comp=Z,7μm,19.9s,baz=90,slow=36
**CNJI Cibinong 67.42 282** P **P** **00 24 41.5 +0.6**
comp=Z,5μmcomp=Z,363nm,1.4s
**SKJI Sukabumi 68.04 282** P **P** **00 24 48.1 +3.2**
comp=Z,224nm,1.1s
**DBJI Dramaga 68.21 282** P **P** **00 24 46.9 +0.9**
comp=Z,443nm,1.3s
**MYLDM Lahad Datu 68.81 300** P **P** **00 24 49.5 -0.2**
MYLDM IAmb IAmb 00 24 57.5
comp=Z,251nm,1.6s
**MYLDM Lahad Datu 68.81 300** ⇓P **P** **00 24 51.6 +2.0**
**CGJI Cibinong 68.92 281** P **P** **00 24 50.6 +0.2**
comp=Z,3μmcomp=Z,173nm,1.3s
**HLP Hilina Pali 68.98 32** P **P** **00 24 49.1 -1.5**
**MG03 Isla Dawson 69.00 145** P **P** **00 24 50.1 -0.2**
MG03 IAmb IAmb 00 25 16.5
comp=Z,245nm,1.8s
**KHLU Kahalu`u 69.02 32** P **P** **00 24 50.1 -0.8**
**SDHHI Sand Hill 69.07 32** P **P** **00 24 50.3 -0.9**
**RIM Rim 69.08 32** P **P** **00 24 50.3 -1.0**
**USHA Ushuaia 69.11 147** P **P** **00 24 53.7 +2.7**
comp=Z,14nm,0.9s,baz=236,slow=11,SNR=4.3
USHA LR LR 00 47 41.0
comp=Z,5μm,21.9s,baz=224,slow=29
**HATHI Halema'uma'u T 69.11 32** P **P** **00 24 51.2 -0.3**
**MG04 Isla Riesco 69.25 144** P **P** **00 24 51.9 +0.1**
MG04 IAmb IAmb 00 24 57.5
comp=Z,148nm,1.1s
**POHA Pohakuloa 69.31 32** P **P** **00 24 54.7 +1.9**
**HPAH Hawaii Prepara 69.50 32** P **P** **00 24 52.4 -1.4**
**MG05 Puerto Natales 69.69 143** P **P** **00 24 54.4 -0.2**
MG05 IAmb IAmb 00 24 58.5
comp=Z,184nm,1.7s
**KIP Kipapa 69.92 29**⇑*eP* **P** **00 24 53.6 -2.7**
KIP pmax pmax
comp=Z,89nm,2.9s
**SBUM Sibu 70.85 293** P **P** **00 25 00.3 -1.9**
**KKM Kota Kinabalu 70.92 299** IAMs_20 IAMs_20 00 56 55.5
comp=Z,4μm,21.0s
**KLSI 70.94 282** P **P** **00 25 02.5 -0.3**
comp=Z,1μmcomp=Z,67nm,2.2s
**KSM Kuching 71.43 291** P **P** **00 25 04.0 -1.7**
KSM IAmb IAmb 00 25 08.8
comp=Z,181nm,1.6s
KSM IAMs_20 IAMs_20 00 54 54.7
comp=Z,4μm,22.0s
**KSM Kuching 71.43 291** P **P** **00 25 06.2 +0.5**
**PMBI Palembang 72.14 283** P **P** **00 25 09.1 -1.0**
PMBI IAMs_20 IAMs_20 00 55 42.2
comp=Z,4μm,20.0s
**COYC Coyhaique 74.28 139** P **P** **00 25 22.1 -0.1**
**COYC Coyhaique 74.28 139** IAMs_20 IAMs_20 00 51 23.2
comp=Z,5μm,19.0s
**TGY Tagaytay City 74.33 308** LR LR 00 59 32.7
comp=Z,1μm,18.3s,baz=140,slow=37
**EFI East Falkland 75.50 150** P **P** **00 25 28.8 -0.4**
EFI pmax pmax
comp=Z,363nm,1.8s
**EFI East Falkland 75.50 150** P **P** **00 25 28.8 -0.4**
EFI IAmb IAmb 00 26 12.4
comp=Z,363nm,1.8s
**MYKOM Kota Tinggi 76.12 286** P **P** **00 25 32.2 -1.0**
MYKOM IAmb IAmb 00 25 37.0
comp=Z,221nm,1.4s
**MYKOM Kota Tinggi 76.12 286** ⇑P **P** **00 25 32.3 -1.0**
**LL02 Futaleuf 76.13 137** P **P** **00 25 32.6 -0.4**
LL02 IAmb IAmb 00 25 37.6
comp=Z,61nm,1.1s
**BKNI Bangkinang 77.07 283** P **P** **00 25 36.9 -1.8**
BKNI IAmb IAmb 00 25 40.6
comp=Z,263nm,1.4s
**BKNI Bangkinang 77.07 283** P **P** **00 25 39.1 +0.5**
comp=Z,3μmcomp=Z,84nm,0.5s
**BKNI Bangkinang 77.07 283** P **P** **00 25 39.8 +1.2**
**LL04 Puerto Octay 77.53 135** P **P** **00 25 40.0 -0.9**
**PLCA Paso Flores 78.60 136** P **P** **00 25 49.5 +2.5**
comp=Z,15nm,1.0s,baz=228,slow=6.9,SNR=12
PLCA LR LR 00 54 01.8
comp=Z,2μm,18.6s,baz=220,slow=31
**PLCA Paso Flores 78.60 136** P **P** **00 25 46.8 -0.2**
PLCA pmax pmax
comp=Z,50nm,1.3s
**PLCA Paso Flores 78.60 136** P **P** **00 25 46.8 -0.2**
**PLCA Paso Flores 78.60 136** ⇑P **P** **00 25 49.6 +2.7**
PLCA ⇑P **sP** **00 25 49.8 0.0**
**LC01 Cunco 79.29 134** P **P** **00 25 49.7 -1.0**
**H03N3 Juan Fernandez 79.31 126** T T 01 52 28.6
baz=228,slow=72,SNR=26
**H03N2 Juan Fernandez 79.32 126** T T 01 52 29.4
baz=228,slow=72,SNR=28
**H03N1 Juan Fernandez 79.33 126** T T 01 52 48.1
baz=228,slow=72,SNR=26
**HOPE Hope Point 79.45 163** P **P** **00 25 50.9 -0.3**
HOPE pmax pmax
comp=Z,280nm,1.1s
**HOPE Hope Point 79.45 163** P **P** **00 25 50.9 -0.3**
HOPE IAmb IAmb 00 25 55.4
comp=Z,280nm,1.1s
**IPM Ipoh 80.00 286** P **P** **00 25 53.4 -1.5**
IPM IAmb IAmb 00 25 59.0
comp=Z,210nm,1.9s
**IPM Ipoh 80.00 286** P **P** **00 25 56.1 +1.3**
**GSI Gunungsitoli 80.22 281** P **P** **00 25 55.0 -1.0**
GSI IAMs_20 IAMs_20 01 06 23.2
comp=Z,3μm,20.0s
**GSI Gunungsitoli 80.22 281** ⇓P **P** **00 25 56.1 +0.1**
**GSI Gunungsitoli 80.22 281** P **P** **00 25 57.1 +1.1**
comp=Z,6μmcomp=Z,221nm,1.5s
**GSI Gunungsitoli 80.22 281** P **P** **00 25 58.2 +2.2**
**PSI Prapat 80.30 283** P **P** **00 25 55.5 -1.1**
comp=Z,38nm,1.1s,baz=183,slow=8.9,SNR=23
PSI LR LR 01 00 45.0
comp=Z,5μm,21.8s,baz=136,slow=35
**KULM Kulim 80.84 286** P **P** **00 25 58.4 -0.9**
KULM IAmb IAmb 00 26 02.4
comp=Z,149nm,1.2s
**JOW Kunigami 81.03 321** LR LR 01 02 37.1
comp=Z,2μm,18.4s,baz=141,slow=36
**TWG Pinlang 81.28 313** P **P** **00 26 00.1 -1.3**
**YOJ Yonaguni jima 81.61 315** ⇓P **P** **00 26 04.8 +1.7**
**YOJ Yonaguni jima 81.61 315** P **P** **00 26 06.3 +3.2**
comp=Z,230nm,1.4s
**TPUB Ta-pu 81.91 313** P **P** **00 26 03.6 -1.1**
**TPUB Ta-pu 81.91 313** P **P** **00 26 05.6 +0.8**
**JHJ Hachijo jima 2 81.99 332** LR LR 00 57 13.0
comp=Z,2μm,21.6s,baz=81,slow=32
**SSLB Suanglung 82.13 313** P **P** **00 26 04.9 -1.1**
SSLB IAmb IAmb 00 26 08.5
comp=Z,68nm,1.3s
SSLB IAMs_20 IAMs_20 01 00 49.8
comp=Z,3μm,20.0s
**SSLB Suanglung 82.13 313** P **P** **00 26 06.3 +0.4**
comp=Z,37nm,1.4s
**YHNB Yeheng 82.63 314** P **P** **00 26 10.8 +2.2**
**TATO Taipei 82.82 314** IAMs_20 IAMs_20 01 00 04.1
comp=Z,3μm,20.0s
**LHMI Lhok Sumawe 83.40 284** P **P** **00 26 11.1 -1.6**
LHMI IAmb IAmb 00 26 19.4
comp=Z,102nm,1.1s
**LHMI Lhok Sumawe 83.40 284** P **P** **00 26 15.6 +2.9**
comp=Z,3μmcomp=Z,87nm,1.2s
**LHMI Lhok Sumawe 83.40 284** P **P** **00 26 15.3 +2.6**
**SRIT Nakonsritamara 83.91 288** P **P** **00 26 13.9 -1.4**
SRIT IAmb IAmb 00 26 20.3
comp=Z,140nm,1.7s
**LMEL Las Melosas 83.96 132** P **P** **00 26 14.9 -0.8**
LMEL IAmb IAmb 00 26 20.5
comp=Z,63nm,1.4s
**KNMB Chin-men Tao 84.05 312** P **P** **00 26 14.2 -1.5**
KNMB IAmb IAmb 00 26 19.6
comp=Z,125nm,1.6s
**QZH Quanzhou 84.33 312**⇑*i*P **P** **00 26 19.0 +1.8**
QZH S **S** **00 36 44.4 +1.1**
QZH LR LR
comp=Z,1μm,16.1s
QZH LR LR
comp=Z,1μm,18.3s
QZH LR LR
comp=Z,1μm,21.6s
**UBPT Khong Chiam 84.77 297** P **P** **00 26 18.7 -0.9**
**UBPT Khong Chiam 84.77 297** ⇑P **P** **00 26 18.7 -0.9**

UBPT ⇓P **pP** **00 26 20.7 -1.0**
**QIZ Qiongzhong 84.79 302** P **P** **00 26 19.1 -0.6**
QIZ IAmb IAmb 00 26 23.0
comp=Z,58nm,1.3s
**QIZ Qiongzhong 84.79 302** P **P** **00 26 19.3 -0.4**
QIZ PP **PP** **00 29 34.8 -1.4**
QIZ S **S** **00 36 49.8 +1.6**
QIZ SS **SS** **00 42 23.6 +2.8**
QIZ pmax pmax
comp=Z,26nm,1.3s
QIZ pmax pmax
comp=Z,460nm,3.4s
QIZ LR LR
comp=Z,990nm,22.1s
QIZ LR LR
comp=Z,1μm,21.6s
QIZ LR LR
comp=Z,2μm,19.6s
**QIZ Qiongzhong 84.79 302** P **P** **00 26 21.5 +1.8**
**JNU Nakatsue 85.32 326** P **P** **00 26 21.2 -0.8**
comp=Z,22nm,0.8s,baz=218,slow=1.1,SNR=5.4
JNU LR LR 00 59 53.5
comp=Z,550nm,20.5s,baz=164,slow=32
**JNU Nakatsue 85.32 326** P **P** **00 26 20.8 -1.3**
JNU IAmb IAmb 00 26 43.5
comp=Z,186nm,1.7s
**JNU Nakatsue 85.32 326** ⇑P **P** **00 26 22.8 +0.8**
**JNU Nakatsue 85.32 326** P **P** **00 26 23.2 +1.2**
**MJAR Matsushiro Arr 85.63 333** P **P** **00 26 23.1 -0.4**
comp=Z,2.0nm,0.4s,baz=119,slow=7.2,SNR=6.1
MJAR LR LR 01 00 37.7
comp=Z,760nm,21.9s,baz=151,slow=33
**MJAR Matsushiro Arr 85.63 333** P **P** **00 26 22.8 -0.7**
**MAJO Matsushiro 85.64 333** ⇓*e*P **P** **00 26 23.3 -0.2**
MAJO pmax pmax
comp=Z,37nm,1.7s
**MAT Matsushiro 85.64 333** P **P** **00 26 22.1 -1.4**
MAT *e*S **S** **00 36 54.4 -1.4**
**JHS Saijyo 86.08 328** P **P** **00 26 25.8 +0.1**
JHS IAmb IAmb 00 26 29.5
comp=Z,84nm,1.2s
**ZON Zonda 86.55 131** P **P** **00 26 27.9 -0.6**
ZON pmax pmax
comp=Z,87nm,1.7s
**ZON Zonda 86.55 131** P **P** **00 26 27.9 -0.6**
ZON IAmb IAmb 00 26 33.2
comp=Z,87nm,1.7s
**SSE Sheshan 87.97 318** P **P** **00 26 35.6 +0.6**
SSE S **S** **00 37 21.3 +2.6**
SSE pmax pmax
comp=Z,14nm,1.5s
SSE pmax pmax
comp=Z,520nm,5.9s
SSE LR LR
comp=Z,520nm,22.4s
SSE LR LR
comp=Z,450nm,22.9s
**ERM Erimo 89.18 338** IAMs_20 IAMs_20 01 05 47.7
comp=Z,4μm,20.0s
**GULI GuiLin 89.22 307** P **P** **00 26 44.8 +3.7**
**NJ2 Nanjing 89.91 317** ⇓P **P** **00 26 45.3 +1.2**
NJ2 S **S** **00 37 37.3 +0.5**
NJ2 sS **ScS** **00 37 43.6 +2.6**
NJ2 pmax pmax
comp=Z,41nm,1.1s
NJ2 pmax pmax
comp=Z,720nm,4.3s
NJ2 LR LR
comp=Z,2μm,22.7s
NJ2 LR LR
comp=Z,1μm,18.9s
NJ2 LR LR
comp=Z,3μm,19.6s
**KSRS Korea Array 90.27 326** P **P** **00 26 45.5 -0.1**
comp=Z,23nm,0.9s,baz=144,slow=5.7,SNR=23
KSRS LR LR 01 03 04.8
comp=Z,766nm,21.9s,baz=160,slow=33
**WHN Wuhan 91.04 313** P **P** **00 26 50.8 +1.4**
WHN S **S** **00 37 49.8 +2.5**
WHN LR LR
comp=Z,6μm,30.2s
**KUR Kuril'sk** *e*P **P** **00 26 48.1 -1.0**
KUR *e* 00 30 24.2
KUR *e*PPP PPP 00 32 22.6
KUR MLR MLR
comp=Z,1μm,18.0s
**ASAJ Asahikawa 91.29 339** P **P** **00 26 51.5 +1.3**
comp=Z,25nm,1.1s,baz=191,slow=13,SNR=4.6
ASAJ LR LR 01 03 23.1
comp=Z,2μm,21.4s,baz=173,slow=33
**CMAR Chiang Mai Arr 91.36 294** P **P** **00 26 51.1 -0.1**
comp=Z,14nm,1.0s,baz=153,slow=3.4,SNR=51
CMAR PKKPbc **PKKPbc** **00 44 15.2 +3.7**
comp=Z,2.1nm,0.3s,baz=284,slow=3.5,SNR=5.8
CMAR LR LR 01 10 55.2
comp=Z,1μm,20.1s,baz=135,slow=38
**CMAR Chiang Mai Arr 91.36 294** P **P** **00 26 50.0 -1.2**
**CHTO Chiang Mai 91.61 294** P **P** **00 26 53.6 +1.2**
**GYA Guiyang 92.29 305** ⇓P **P** **00 26 56.3 +0.8**
GYA sP sP 00 27 00.8 +2.5
GYA PP **PP** **00 30 36.1 -0.3**
GYA SKS **SKSac** **00 37 28.4 -0.9**
GYA S **ScS** **00 38 01.1 -0.3**
GYA pmax pmax
comp=Z,21nm,1.4s
GYA pmax pmax
comp=Z,400nm,3.5s
GYA LR LR
comp=Z,1μm,21.8s
GYA LR LR
comp=Z,920nm,21.6s
GYA LR LR
comp=Z,2μm,22.4s
**DGAR Diego Garcia 92.41 258** IAMs_20 IAMs_20 01 03 57.2
comp=Z,3μm,19.0s
**LVC Limon Verde 93.25 125** LR LR 00 59 51.2
comp=Z,2μm,21.2s,baz=218,slow=30
**ENH Enshi 93.51 309** P **P** **00 26 59.9 -1.0**
**KMI Kunming 93.70 301** ⇓P **P** **00 27 04.0 +1.8**
KMI pP sP 00 27 06.0 +1.0
KMI PP **PP** **00 30 47.8 +0.2**
KMI SKS **SKSac** **00 37 34.3 -3.1**
KMI S **S** **00 38 09.8 -2.1**
KMI SS **SS** **00 44 33.5 +2.9**
KMI pmax pmax
comp=Z,11nm,1.0s
KMI pmax pmax
comp=Z,340nm,4.3s
KMI LR LR
comp=Z,1μm,20.4s
KMI LR LR
comp=Z,1μm,21.5s
KMI LR LR
comp=Z,2μm,22.6s
**YSS Yuzh-Sakhalins 93.89 340** *e*P **P** **00 27 02.1 0.0**
YSS *e* 00 37 31.2
YSS *e*S **S** **00 38 11.3 -0.7**
YSS *e*PS **PS** **00 39 26.0 -1.2**
YSS *e*SS **SS** **00 44 31.8 -0.4**
YSS pmax pmax
comp=Z,400nm,5.1s
**TIA Tai'an 94.09 318** ⇓P **P** **00 27 04.8 +1.4**
TIA pmax pmax
comp=Z,18nm,0.9s
**USRK Ussuriysk Ar. 94.59 332** LR LR 01 08 37.1
comp=Z,728nm,19.2s,baz=147,slow=35
**LYN LuoYang 95.15 314** ⇓P **P** **00 27 09.3 +1.0**
LYN PP **PP** **00 30 59.1 +0.6**
LYN SKS **SKSac** **00 37 44.8 +0.5**
LYN S **ScS** **00 38 25.9 +1.3**
LYN sS sS 00 38 30.9 +3.8
LYN pmax pmax
comp=Z,10.0nm,0.8s
LYN pmax pmax
comp=Z,170nm,4.3s
LYN LR LR
comp=Z,1μm,24.3s
LYN LR LR
comp=Z,1μm,19.7s
LYN LR LR
comp=Z,2μm,22.2s
**PZH PanZhiHua 95.32 302** P **P** **00 27 09.8 +0.4**
PZH pP **pP** **00 27 11.9 +0.4**
PZH sP **sP** **00 27 13.6 +1.3**
PZH PP **PP** **00 30 58.8 -1.3**
PZH SKS **SKSac** **00 37 45.9 0.0**
PZH S **S** **00 38 24.3 -1.5**
PZH pmax pmax
comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,350nm,6.8s
PZH LR LR
comp=Z,4μm,20.5s
PZH LR LR
comp=Z,4μm,19.5s
PZH LR LR
comp=Z,3μm,19.6s
**SHEM Shemya Is, Ala 95.83 1** LR LR 01 06 52.7
comp=Z,2μm,19.9s,baz=150,slow=33
**NNA Nana 96.09 113** LR LR 01 01 46.1
comp=Z,5μm,19.4s,baz=220,slow=30
**HNS HongShan 96.22 317** *e*P P 00 27 18.3 +5.2
HNS PP **PP** **00 31 07.4 +0.6**
HNS S **S** **00 38 37.0 +4.3**
HNS LR LR
comp=Z,2μm,19.2s
HNS LR LR
comp=Z,620nm,23.5s
HNS LR LR
comp=Z,2μm,20.1s
**PALK Pallekele 96.48 274** P **P** **00 27 15.8 +0.8**
comp=Z,6.3nm,0.9s,baz=248,slow=7.4,SNR=4.2
PALK LR LR 01 10 36.8
comp=Z,2μm,18.2s,baz=238,slow=35
**PALK Pallekele 96.48 274** P **P** **00 27 13.7 -1.2**
PALK IAmb IAmb 00 27 18.3
comp=Z,29nm,1.4s
**PALK Pallekele 96.48 274** IAMs_20 IAMs_20 01 06 37.9
comp=Z,3μm,21.0s
**CN2 Changchun 96.65 328** *e*P **P** **00 27 15.5 +0.6**
CN2 S **S** **00 38 34.8 -1.4**
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,1μm,20.0s
CN2 LR LR
comp=Z,1μm,20.0s
CN2 LR LR
comp=Z,2μm,23.4s
**XAN Xi'an 96.66 311** P **P** **00 27 16.5 +1.2**
XAN pP sP 00 27 21.1 +3.0
XAN sP pP 00 27 24.4 +7.0
XAN S **S** **00 38 35.0 -1.9**
XAN SS **SS** **00 45 15.8 +3.6**
XAN pmax pmax
comp=Z,9.0nm,1.7s
XAN LR LR
comp=Z,1μm,18.5s
XAN LR LR
comp=Z,660nm,18.5s
XAN LR LR
comp=Z,2μm,19.9s
**CPUP Villa Florida 96.68 136** P **P** **00 27 17.3 +1.6**
comp=Z,2.2nm,0.8s,baz=200,slow=9.4,SNR=4.0
CPUP LR LR 01 05 05.4
comp=Z,2μm,18.8s,baz=210,slow=32
**CPUP Villa Florida 96.68 136** P **P** **00 27 15.1 -0.6**
CPUP pmax pmax
comp=Z,23nm,1.5s
**CPUP Villa Florida 96.68 136** P **P** **00 27 15.1 -0.6**
**PET Petropavlovsk 96.89 351** *e*P **P** **00 27 17.5 +1.8**
PET *e* 00 31 10.5
PET *e* 00 37 55.0
PET *e*S **S** **00 38 35.6 -2.1**
PET *e*PS **PS** **00 40 05.3 +5.3**
PET *e*PPS PPS 00 40 39.3
PET *e*SS **SS** **00 45 18.5 +3.9**
PET pmax pmax
comp=Z,100nm,13.5s
PET MLR MLR
comp=Z,2μm,19.0s
**PETK Petropavlovsk- 97.08 351** P Pdif 00 27 16.8 +0.1
comp=Z,4.2nm,0.9s,baz=224,slow=12,SNR=3.0
PETK LR LR 01 03 31.5
comp=Z,1μm,21.9s,baz=169,slow=31
**CD2 Chengdu 97.28 306** P Pdif 00 27 19.0 +0.7
CD2 S **S** **00 38 40.8 -1.6**
CD2 SS **SS** **00 45 23.8 +2.8**
CD2 pmax pmax
comp=Z,10.0nm,0.7s
CD2 pmax pmax
comp=Z,170nm,5.7s
CD2 LR LR
comp=Z,2μm,19.6s
CD2 LR LR
comp=Z,2μm,23.0s
**LPIG La Paz 97.32 64** LR LR 01 04 26.2
comp=Z,2μm,18.3s,baz=222,slow=31
**KAAM Kaadhehdhoo 97.47 264** IAMs_20 IAMs_20 01 06 05.6
comp=Z,2μm,20.0s
**VOI Vohitsoka 98.24 229** IAMs_20 IAMs_20 01 09 04.8
comp=Z,2μm,18.0s
**ATAH Atahualpa 98.52 108** LR LR 01 04 44.0
comp=Z,2μm,18.1s,baz=235,slow=31
**LPAZ La Paz 98.54 122** LR LR 01 01 56.5
comp=Z,2μm,21.2s,baz=197,slow=29
**KLR Kul'dur 99.08 334** LR LR 01 10 14.1
comp=Z,827nm,20.4s,baz=156,slow=34
**PASC Pasadena Art C 99.61 52** IAMs_20 IAMs_20 01 04 58.0
comp=Z,3μm,20.0s
**PFO Pinyon Flats O 100.21 53** IAMs_20 IAMs_20 01 12 16.7
comp=Z,3μm,21.0s
**HHC Hu-ho-hao-te 100.43 317** *e*P **Pdif** **00 27 31.8 -0.3**
HHC pP sP 00 27 37.5 +2.5
HHC SKS 00 38 12.0
HHC S **Sdif** **00 39 14.3 +5.7**
HHC pmax pmax
comp=Z,5.0nm,1.0s
HHC pmax pmax
comp=Z,180nm,7.5s
HHC LR LR
comp=Z,2μm,21.0s
HHC LR LR
comp=Z,1μm,22.2s
HHC LR LR
comp=Z,2μm,20.6s
**CNBA Chernabura Isl 100.70 16** IAMs_20 IAMs_20 01 07 08.0
comp=Z,2μm,20.0s
**LZH Lanzhou 100.98 310** *e*P **Pdif** **00 27 31.6 -3.1**
LZH pP sPdif 00 27 37.4 -0.2
LZH sP sP 00 27 41.5 +3.8
LZH S **Sdif** **00 39 14.4 +0.9**
LZH sS sS 00 39 21.3 +4.2
LZH pmax pmax
comp=Z,12nm,1.1s
LZH pmax pmax
comp=Z,270nm,4.3s
LZH LR LR
comp=Z,970nm,13.8s
LZH LR LR
comp=Z,1μm,15.4s
LZH LR LR
comp=Z,1μm,16.3s
**BTO Baotou 101.01 316** *e*P **Pdif** **00 27 35.9 +1.2**
BTO S **Sdif** **00 39 02.4 -11**
BTO LR LR
comp=Z,5μm,19.4s
BTO LR LR
comp=Z,3μm,23.9s
**CMB Columbia Colle 101.20 48** IAMs_20 IAMs_20 01 11 01.8
comp=Z,2μm,18.0s
**UNM Universidad Na 101.64 74** IAMs_20 IAMs_20 01 10 09.8
comp=Z,2μm,19.0s
**ORV Oroville 101.72 46** IAMs_20 IAMs_20 01 08 34.4
comp=Z,2μm,19.0s
**BOSA Boshof 102.33 209** P **Pdif** **00 27 41.7 +0.6**
comp=Z,3.4nm,0.9s,baz=130,slow=7.6,SNR=3.4
**M02C Callahan 102.38 44** IAMs_20 IAMs_20 01 07 36.1
comp=Z,3μm,20.0s
**L02E Cave Junction 102.57 43** IAMs_20 IAMs_20 01 09 11.9
comp=Z,2μm,20.0s
**NVAR Mina Array Bea 102.61 49** P **Pdif** **00 27 42.3 +0.3**
comp=Z,0.1nm,0.4s,baz=241,slow=5.6,SNR=1.3
NVAR PKiKP **PKiKP** **00 32 03.6 +0.7**
comp=Z,0.6nm,0.9s,baz=220,slow=2.4,SNR=2.0
**TUC Tucson 102.69 58** IAMs_20 IAMs_20 01 09 47.5
comp=Z,2μm,18.0s
**YBH Yreka Blue Hor 102.70 44** IAMs_20 IAMs_20 01 07 36.6
comp=Z,3μm,20.0s
**L04D Klamath Falls 103.26 44** IAMs_20 IAMs_20 01 07 54.5
comp=Z,3μm,18.0s
**SII Sitkinak Islan 103.47 18** IAMs_20 IAMs_20 01 12 07.6
comp=Z,3μm,20.0s
**MOD Modoc Plateau 104.05 45** IAMs_20 IAMs_20 01 08 23.2
comp=Z,2μm,21.0s
**WUAZ Wupatki 104.53 55** IAMs_20 IAMs_20 01 13 34.1
comp=Z,2μm,18.0s
**H04D Lebanon 104.74 42** IAMs_20 IAMs_20 01 18 09.6
comp=Z,2μm,20.0s
**KDAK Kodiak Island 104.94 18** IAMs_20 IAMs_20 01 13 02.7
comp=Z,3μm,20.0s
**EPT El Paso 105.00 60** IAMs_20 IAMs_20 01 15 31.5
comp=Z,2μm,18.0s
**MNTX Cornudas Mount 105.67 61** IAMs_20 IAMs_20 01 16 12.2
comp=Z,2μm,18.0s
**Q19K Cape Douglas, 105.75 17** IAMs_20 IAMs_20 01 13 17.0
comp=Z,3μm,20.0s
**ELK Elko 105.92 49** IAMs_20 IAMs_20 01 13 37.9
comp=Z,3μm,19.0s
**MSEY Mahe Island 106.12 247** IAMs_20 IAMs_20 01 06 19.7
comp=Z,2μm,20.0s
**MSEY Mahe Island 106.12 247** PKiKP **PKiKP** **00 32 07.9 -2.1**
**HDC Heredia 106.29 92** IAMs_20 IAMs_20 01 05 42.3
comp=Z,3μm,22.0s
**GOMU GeErMu 106.30 304** Pdif **Pdif** **00 27 59.8 +1.2**
GOMU SS SS 00 47 30.4 +3.8
GOMU LR LR
comp=Z,920nm,19.5s
GOMU LR LR
comp=Z,580nm,18.9s
GOMU LR LR
comp=Z,1μm,18.4s
**E04D Cinebar 106.31 41** IAMs_20 IAMs_20 01 11 09.0
comp=Z,2μm,18.0s
**NLWA Neilton Lookou 106.31 39** IAMs_20 IAMs_20 01 12 03.0
comp=Z,2μm,20.0s
**O19K Port Alsworth 106.76 16** IAMs_20 IAMs_20 01 18 00.7
comp=Z,2μm,19.0s
**HOM Homer 106.85 18** IAMs_20 IAMs_20 01 18 35.8
comp=Z,2μm,20.0s
**BRLK Bradley Lake 107.12 18** IAMs_20 IAMs_20 01 20 21.7
comp=Z,2μm,19.0s
**N19K Bonanza Creek 107.30 16** IAMs_20 IAMs_20 01 18 08.8
comp=Z,2μm,19.0s
**MVCO Mesa Verde 107.39 55** IAMs_20 IAMs_20 01 15 05.6
comp=Z,2μm,20.0s
**HAWA Hanford 107.65 42** IAMs_20 IAMs_20 01 11 01.7
comp=Z,2μm,20.0s
**KVTX Kingsville 107.90 69** IAMs_20 IAMs_20 01 15 42.8
comp=Z,2μm,18.0s
**O22K Cooper Landing 108.03 18** IAMs_20 IAMs_20 01 19 46.1
comp=Z,2μm,18.0s
**SONM Songino Array 108.08 319** Pdiff **Pdif** **00 28 07.4 +1.5**
comp=Z,0.4nm,0.7s,baz=96,slow=4.3,SNR=2.8
SONM PP **PP** **00 32 34.8 -1.2**
comp=Z,5.1nm,1.2s,baz=148,slow=7.3,SNR=11
SONM PKKPbc **PKKPbc** **00 43 28.5 +3.7**
comp=Z,2.2nm,0.9s,baz=278,slow=2.3,SNR=9.0
**HLID Hailey 108.30 47** IAMs_20 IAMs_20 01 15 16.7
comp=Z,2μm,20.0s
**JCT Junction City 108.50 65** IAMs_20 IAMs_20 01 16 35.6
comp=Z,2μm,18.0s
**FIS Fire Island 108.50 18** IAMs_20 IAMs_20 01 19 59.4
comp=Z,2μm,18.0s
**PWL Port Wells 108.68 19** IAMs_20 IAMs_20 01 09 43.5
comp=Z,2μm,21.0s
**GLI Glacier Island 109.00 19** IAMs_20 IAMs_20 01 09 37.8
comp=Z,2μm,22.0s
**ANM Nome 109.05 10** IAMs_20 IAMs_20 01 11 49.1
comp=Z,2μm,22.0s
**RAGM Ragged Mountai 109.18 21** IAMs_20 IAMs_20 01 14 13.6
comp=Z,2μm,20.0s
**HMT Hamilton 109.24 21** IAMs_20 IAMs_20 01 14 04.0
comp=Z,2μm,20.0s
**GHO Glory Hole Cre 109.35 18** IAMs_20 IAMs_20 01 10 31.0
comp=Z,2μm,22.0s
**BERG Berg Lake 109.44 21** IAMs_20 IAMs_20 01 14 09.4
comp=Z,2μm,20.0s
**SNH Sunshine Point 109.49 22** IAMs_20 IAMs_20 01 17 42.8
comp=Z,2μm,19.0s
**SML Sawmill 109.52 18** IAMs_20 IAMs_20 01 10 03.5
comp=Z,2μm,22.0s
**SDCO Great Sand Dun 109.54 56** IAMs_20 IAMs_20 01 16 13.6
comp=Z,2μm,18.0s
**SMCO Snowmass 109.58 54** IAMs_20 IAMs_20 01 15 06.9
comp=Z,2μm,19.0s
**CUT Chulitna 109.61 17** IAMs_20 IAMs_20 01 17 24.1
comp=Z,2μm,19.0s
**WAX Waxell Ridge 109.71 22** IAMs_20 IAMs_20 01 17 01.7
comp=Z,2μm,20.0s
**MESA MESA 109.73 22** IAMs_20 IAMs_20 01 21 46.9
comp=Z,2μm,18.0s
**KLU Klutina 109.81 20** IAMs_20 IAMs_20 01 10 02.2
comp=Z,2μm,22.0s
**YAH Yahtse 109.94 22** IAMs_20 IAMs_20 01 20 09.5
comp=Z,2μm,19.0s
**ISLE Juniper Island 109.98 22** IAMs_20 IAMs_20 01 13 08.8
comp=Z,2μm,20.0s
**AMTX Amarillo 110.08 61** IAMs_20 IAMs_20 01 12 15.2
comp=Z,2μm,21.0s
**CAST Castle Rocks 110.14 16** IAMs_20 IAMs_20 01 16 22.0
comp=Z,2μm,20.0s
**435B Jarrell 110.17 66** IAMs_20 IAMs_20 01 11 18.4
comp=Z,2μm,21.0s
**TABL Table Mountain 110.17 22** IAMs_20 IAMs_20 01 20 25.6
comp=Z,2μm,18.0s
**BCPM Bancas Point 110.19 23** IAMs_20 IAMs_20 01 11 55.5
comp=Z,2μm,20.0s
**M24K Tolsona, Glenn 110.28 19** IAMs_20 IAMs_20 01 10 29.8
comp=Z,2μm,22.0s
**BDFB Brasília 110.31 138** PKKPbc PKKPbc 00 43 18.5 +1.7
comp=Z,3.2nm,1.0s,baz=118,slow=6.5,SNR=3.4
**MOOW Moose Ponds 110.41 49** IAMs_20 IAMs_20 01 16 49.7
comp=Z,2μm,19.0s
**BW06 Boulder Array 110.42 50** IAMs_20 IAMs_20 01 19 05.1
comp=Z,2μm,18.0s
**PDAR Pinedale Array 110.42 50** PKiKP **PKiKP** **00 32 19.5 +2.1**
comp=Z,0.6nm,0.8s,baz=195,slow=2.9,SNR=3.8
PDAR PP **PP** **00 32 58.2 +4.9**
comp=Z,4.5nm,1.1s,baz=222,slow=3.6,SNR=6.3
PDAR PKKPbc **PKKPab** **00 43 26.7 +1.0**
comp=Z,1.5nm,1.1s,baz=357,slow=4.5,SNR=4.7
**KTH Kantishna Hill 110.50 16** IAMs_20 IAMs_20 01 20 18.4
comp=Z,2μm,19.0s
**TRF Thorofare Moun 110.54 17** IAMs_20 IAMs_20 01 20 41.2
comp=Z,3μm,20.0s
**BARN Barnard Glacie 110.55 22** IAMs_20 IAMs_20 01 20 38.8
comp=Z,2μm,18.0s
**FLWY Flagg Ranch 110.65 48** IAMs_20 IAMs_20 01 20 55.1
comp=Z,2μm,19.0s
**YAK Yakutsk 110.74 340** ⇓*i*PKiKP **PKiKP** **00 32 16.9 -0.1**
**ISCO Idaho Springs 110.79 55** IAMs_20 IAMs_20 01 15 11.8
comp=Z,2μm,19.0s
**RND Reindeer 110.81 17** IAMs_20 IAMs_20 01 18 09.3
comp=Z,2μm,19.0s
**HKT Hockley 110.82 68** IAMs_20 IAMs_20 01 19 14.8
comp=Z,2μm,18.0s
**DHY Denali Highway 110.84 18** IAMs_20 IAMs_20 01 11 16.6
comp=Z,2μm,22.0s
**BPAW Bear Paw Mtn. 110.97 16** IAMs_20 IAMs_20 01 20 34.0
comp=Z,2μm,19.0s
**BOZ Bozeman (W) 111.14 47** IAMs_20 IAMs_20 01 14 01.9
comp=Z,2μm,19.0s
**BILL Bilibino 111.30 357** ⇓*i*PKiKP **PKiKP** **00 32 18.1 +0.2**
BILL *e* 00 32 22.4
BILL *e* 00 33 02.8
BILL *e*PS **PS** **00 42 34.1 +4.5**
BILL *e*SS SS 00 48 37.2 +5.1
BILL pmax pmax
comp=Z,2.0nm,0.8s
BILL MLR MLR
comp=Z,1μm,19.0s
**ZAK Zakamensk 111.33 320** *e*PKiKP **PKiKP** **00 32 11.0 -7.6**
ZAK pmax pmax
comp=Z,7.0nm,1.6s
**I21K Tanana 111.74 15** IAMs_20 IAMs_20 01 23 51.3
comp=Z,2μm,20.0s
**L26K Log Cabin Wild 111.76 20** IAMs_20 IAMs_20 01 11 14.8
comp=Z,2μm,22.0s
**MLY Manley 111.85 16** IAMs_20 IAMs_20 01 23 13.9
comp=Z,2μm,18.0s
**H21K Melozitna Rive 112.02 15** IAMs_20 IAMs_20 01 15 19.5
comp=Z,2μm,20.0s
**DLBC Dease Lake 112.05 28** PKiKP **PKiKP** **00 32 20.4 +0.7**
comp=Z,2.3nm,0.8s,baz=207,slow=4.3,SNR=3.6
**HDA Harding Lake 112.10 18** IAMs_20 IAMs_20 01 17 54.7
comp=Z,2μm,19.0s
**CCB Clear Creek Bu 112.12 17** IAMs_20 IAMs_20 01 21 47.2
comp=Z,2μm,18.0s

**L27K** **Beaver Creek,** **112.17** **20** IAMs_20 IAMs_20 01 17 36.7
comp=Z,2µm,19.0s
**I23K** **Minto, Yukon-K** **112.23** **16** IAMs_20 IAMs_20 01 17 46.2
comp=Z,2µm,20.0s
**COLA** **College** **112.31** **17** ⇓*i* PKIKP **PKiKP** **00 32 20.6 +0.8**
**ILAR** **Eielson Array** **112.42** **17** PKiKP **PKiKP** **00 32 20.5 +0.4**
comp=Z,5.5nm,0.8s,baz=250,slow=2.8,SNR=20
ILAR PKKPbc **PKKPab** **00 43 18.9 +3.7**
comp=Z,6.6nm,1.0s,baz=19,slow=3.1,SNR=27
**P33M** **Teslin, Yukon** **112.47** **26** IAMs_20 IAMs_20 01 15 30.8
comp=Z,2µm,19.0s
**J25K** **Salcha River,** **112.62** **18** IAMs_20 IAMs_20 01 12 10.7
comp=Z,2µm,22.0s
**RDOG** **Red Dog Mine** **112.70** **10** IAMs_20 IAMs_20 01 12 55.5
comp=Z,2µm,21.0s
**NATX** **Nacogdoches** **112.73** **67** IAMs_20 IAMs_20 01 13 00.7
comp=Z,2µm,21.0s
**H23K** **Yukon River** **112.79** **16** IAMs_20 IAMs_20 01 19 32.0
comp=Z,2µm,19.0s
**M30M** **Minto, Yukon** **113.13** **23** IAMs_20 IAMs_20 01 14 11.1
comp=Z,2µm,20.0s
**H24K** **Noodor Dome** **113.14** **16** IAMs_20 IAMs_20 01 22 21.2
comp=Z,2µm,20.0s
**PRP** **Porcupine Dome** **113.36** **18** IAMs_20 IAMs_20 01 15 29.9
comp=Z,2µm,20.0s
**M31M** **Drury Creek, Y** **113.53** **24** IAMs_20 IAMs_20 01 11 12.7
comp=Z,2µm,22.0s
**OGNE** **Ogallala** **113.64** **55** IAMs_20 IAMs_20 01 19 38.0
comp=Z,2µm,18.0s
**EGMT** **Eagleton** **113.69** **46** IAMs_20 IAMs_20 01 19 09.5
comp=Z,2µm,18.0s
**CBKS** **Cedar Bluff** **113.74** **58** IAMs_20 IAMs_20 01 16 25.4
comp=Z,2µm,18.0s
**FYU** **Fort Yukon** **114.32** **17** IAMs_20 IAMs_20 01 23 57.2
comp=Z,1µm,19.0s
**RSSD** **Black Hills** **114.40** **52** IAMs_20 IAMs_20 01 14 40.3
comp=Z,2µm,20.0s
**LAO** **LASA Array** **114.74** **48** IAMs_20 IAMs_20 01 20 39.2
comp=Z,2µm,18.0s
**I29M** **Ogilvie Camp,** **114.94** **20** IAMs_20 IAMs_20 01 18 07.0
comp=Z,2µm,20.0s
**TOLK** **Toolik Lake Re** **115.25** **14** IAMs_20 IAMs_20 01 17 54.1
comp=Z,2µm,20.0s
**SDV** **Santo Domingo** **115.26** **102** IAMs_20 IAMs_20 01 11 55.4
comp=Z,2µm,21.0s
**WMQ** **Urumqi** **115.35** **307** *e*PKP **PKiKP** **00 32 26.8 +0.3**
WMQ PP **PP** **00 33 30.3 +2.1**
WMQ SKS **SKSdf** **00 39 36.8 -2.1**
WMQ AMB AMB
comp=Z,300nm,4.7s
WMQ LR LR
comp=Z,750nm,21.5s
WMQ LR LR
comp=Z,640nm,22.9s
WMQ LR LR
comp=Z,1µm,24.5s
**W39A** **Magazine** **115.39** **65** IAMs_20 IAMs_20 01 17 12.6
comp=Z,2µm,19.0s
**PTGA** **Pitinga** **115.57** **118** PKP **PKPdf** **00 32 27.6 -0.2**
comp=Z,1.1nm,0.3s,baz=278,slow=9.4,SNR=5.2
**X40A** **Basin Creek Fa** **115.60** **66** IAMs_20 IAMs_20 01 14 45.5
comp=Z,1µm,19.0s
**KSU1** **Kansas State U** **115.87** **60** IAMs_20 IAMs_20 01 20 21.3
comp=Z,2µm,19.0s
**EPYK** **Eagle Plains** **116.14** **20** **PKPdf** **00 32 26.6 -0.7**
**A21K** **Barrow** **116.56** **11** IAMs_20 IAMs_20 01 22 24.5
comp=Z,2µm,19.0s
**U40A** **Yellville** **116.68** **64** PKPdf **PKPdf** **00 32 28.3 -0.9**
U40A IAMs_20 IAMs_20 01 13 50.9
comp=Z,2µm,20.0s
**DGMT** **Dagmar** **116.91** **48** IAMs_20 IAMs_20 01 18 04.7
comp=Z,2µm,19.0s
**S39A** **Bolivar** **117.15** **63** PKPdf **PKPdf** **00 32 28.5 -1.6**
**INK** **Inuvik** **118.43** **20** PKP **PKPdf** **00 32 30.3 -1.2**
comp=Z,13nm,1.1s,baz=214,slow=1.8,SNR=24
**INK** **Inuvik** **118.43** **20** PKIKP **PKPdf** **00 32 30.6 -0.9**
**INK** **Inuvik** **118.43** **20** PKPdf **PKPdf** **00 32 30.6 -0.9**
**ECSD** **EROS Data Cent** **118.53** **56** PKPdf **PKPdf** **00 32 31.2 -1.3**
**ECSD** **EROS Data Cent** **118.53** **56** IAMs_20 IAMs_20 01 22 50.6
comp=Z,2µm,18.0s
**NIL** **Nilore** **118.62** **290** PKIKP **PKPdf** **00 32 31.9 -1.2**
NIL MLR MLR
comp=Z,1µm,22.0s
**NIL** **Nilore** **118.62** **290** PKPdf **PKPdf** **00 32 31.9 -1.2**
**NIL** **Nilore** **118.62** **290** PKiKP **PKiKP** **00 32 33.0 -0.1**
**CCM** **Cathedral Cave** **118.71** **64** IAMs_20 IAMs_20 01 17 21.5
comp=Z,2µm,20.0s
**DGZ** **Jazzator, Alta** **118.90** **312** *d* iPKIKP **PKPdf** **00 32 32.9 -0.3**
**TIXI** **Tiksi** **118.96** **345** PKP **PKPdf** **00 32 31.0 -1.4**
comp=Z,11nm,1.1s,baz=88,slow=22,SNR=15
**TIXI** **Tiksi** **118.96** **345** *c* iPKIKP **PKPdf** **00 32 31.8 -0.7**
TIXI pmax pmax
comp=Z,27nm,1.7s
**TIXI** **Tiksi** **118.96** **345** PKPdf **PKPdf** **00 32 30.6 -1.8**
TIXI IAMs_20 IAMs_20 01 17 10.8
comp=Z,2µm,22.0s
**ZSN** **Zaisan** **119.06** **309** *e*PKIKP **PKPdf** **00 32 32.0 -1.4**
**ZSN** **Zaisan** **119.06** **309** *e*PKP **PKPdf** **00 32 32.0 -1.4**
baz=309
**SOCY** **Socotra** **119.14** **259** IAMs_20 IAMs_20 01 16 54.7
comp=Z,2µm,18.0s
**GTBY** **Guantanamo Bay** **119.32** **90** IAMs_20 IAMs_20 01 16 22.6
comp=Z,2µm,19.0s
**DWPF** **Disney Wildern** **119.73** **78** IAMs_20 IAMs_20 01 19 14.0
comp=Z,2µm,18.0s
**WVT** **Waverly** **119.89** **67** PKIKP **PKPdf** **00 32 33.3 -2.1**
WVT MLR MLR
comp=Z,1µm,18.0s
**WVT** **Waverly** **119.89** **67** PKPdf **PKPdf** **00 32 33.3 -2.1**
WVT IAMs_20 IAMs_20 01 26 27.7
comp=Z,1µm,18.0s
**KSH** **Kashi** **120.10** **297** PKP **PKiKP** **00 32 37.0 +1.1**
KSH AMB AMB
comp=Z,210nm,5.5s
KSH LR LR
comp=Z,730nm,20.3s
KSH LR LR
comp=Z,900nm,21.6s
KSH LR LR
comp=Z,1µm,25.1s
**UZB** **Uzynbulak** **120.16** **302** *e*PKIKP **PKiKP** **00 32 36.3 +0.3**
UZB pmax pmax
comp=Z,27nm,1.7s
**UZB** **Uzynbulak** **120.16** **302** *e*PKP **PKPdf** **00 32 34.3 -1.6**
baz=302
**MK31** **Makanchi Array** **120.18** **307** *i* PKIKP **PKPdf** **00 32 33.5 -2.2**
**MK31** **Makanchi Array** **120.18** **307** **PKPdf** **00 32 33.4 -2.2**
**MKAR** **Makanchi Array** **120.18** **307** PKP **PKPdf** **00 32 33.6 -2.0**
comp=Z,33nm,1.3s,baz=106,slow=3.9,SNR=40
MKAR PKKPbc **PKKPbc** **00 42 46.0 +2.9**
comp=Z,1.9nm,0.9s,baz=296,slow=3.6,SNR=9.7
**MKAR** **Makanchi Array** **120.18** **307** PKPdf **PKPdf** **00 32 33.5 -2.1**
**MAKZ** **Makanchi** **120.37** **307** PKIKP **PKPdf** **00 32 35.1 -0.9**
**MAKZ** **Makanchi** **120.37** **307** PKPdf **PKPdf** **00 32 34.8 -1.2**
**YKA** **Yellowknife Ar** **120.40** **31** PKP **PKPdf** **00 32 34.0 -1.5**
comp=Z,15nm,0.8s,baz=228,slow=1.9,SNR=65
YKA PKKPbc **PKKPbc** **00 42 44.0 +1.4**
comp=Z,5.1nm,0.9s,baz=48,slow=4.7,SNR=27
YKA SKKPbc SKKPbc 00 46 37.2 +3.7
comp=Z,2.7nm,1.2s,baz=49,slow=4.4,SNR=5.3
**YKA** **Yellowknife Ar** **120.40** **31** PKPdf **PKPdf** **00 32 33.4 -2.1**
**KMBO** **Kilima Mbogo** **120.42** **234** PKP **PKiKP** **00 32 37.5 0.0**
comp=Z,6.9nm,1.1s,baz=83,slow=2.3,SNR=9.3
**KMBO** **Kilima Mbogo** **120.42** **234** *i* PKIKP **PKPdf** **00 32 37.2 -0.3**
**KMBO** **Kilima Mbogo** **120.42** **234** PKPdf **PKPdf** **00 32 36.0 -1.5**
**KMBO** **Kilima Mbogo** **120.42** **234** *i* P **PKiKP** **00 32 38.7 +1.2**
SNR=7.0
**SATY** **Saty** **120.49** **302** *e*PKIKP **PKPdf** **00 32 34.7 -1.8**
**SATY** **Saty** **120.49** **302** *e*PKP **PKPdf** **00 32 34.8 -1.8**
baz=302
**ZHN** **Zhinishke** **120.53** **302** *e*PKIKP **PKPdf** **00 32 34.7 -1.8**
**ZHN** **Zhinishke** **120.53** **302** *e*PKP **PKPdf** **00 32 34.8 -1.8**
baz=302
**KPKS** **Kokpek** **120.54** **303** *e*PKIKP **PKPdf** **00 32 35.1 -1.4**
**KPKS** **Kokpek** **120.54** **303** *e*PKP **PKPdf** **00 32 35.1 -1.4**
baz=303
**TNSS** **Tian-Shan** **121.38** **301** *e*PKP **PKPdf** **00 32 36.9 -1.7**
baz=301
**MDOK** **Medeo** **121.39** **301** *e*PKIKP **PKPdf** **00 32 37.0 -1.2**
**MDOK** **Medeo** **121.39** **301** *e*PKP **PKPdf** **00 32 37.1 -1.2**
baz=302
**AGMN** **Agassiz Nation** **121.44** **51** **PKPdf** **00 32 36.5 -1.5**
AGMN IAMs_20 IAMs_20 01 21 13.5
comp=Z,2µm,20.0s
**SDDR** **Presa de Saban** **121.50** **93** IAMs_20 IAMs_20 01 17 43.4
comp=Z,2µm,19.0s

**TDK** **Taldyqorghan** **121.52** **304** *e*PKIKP **PKPdf** **00 32 37.1 -1.1**
**TDK** **Taldyqorghan** **121.52** **304** *e*PKP **PKPdf** **00 32 37.1 -1.1**
baz=304
**F36A** **Milaca** **121.53** **55** PKPdf **PKPdf** **00 32 36.7 -1.5**
**FFC** **Flin Flon** **121.54** **43** PKIKP **PKPdf** **00 32 36.5 -1.4**
**FFC** **Flin Flon** **121.54** **43** PKPdf **PKPdf** **00 32 36.5 -1.4**
**FFC** **Flin Flon** **121.54** **43** IAMs_20 IAMs_20 01 33 01.1
comp=Z,1µm,18.0s
**C36M** **Paulatuk** **121.61** **22** PKPdf **PKPdf** **00 32 36.6 -1.0**
C36M IAMs_20 IAMs_20 01 27 51.3
comp=Z,1µm,18.0s
**JLN** **Jalan Bani Buh** **121.67** **271** pPKPdf **PKiKP** **00 32 39.5 +0.1**
**CHKK** **Chushkaly** **121.79** **302** *e*PKP **PKPdf** **00 32 37.7 -1.1**
baz=302
**JFWS** **Jewell Farm** **121.99** **59** IAMs_20 IAMs_20 01 21 14.6
comp=Z,2µm,19.0s
**KBL** **Kabul** **122.00** **289** pPKPdf **PKiKP** **00 32 40.5 +0.5**
SNR=26
**WCI** **Wyandotte Cave** **122.06** **66** PKIKP **PKPdf** **00 32 38.2 -1.3**
WCI MLR MLR
comp=Z,2µm,19.0s
**WCI** **Wyandotte Cave** **122.06** **66** PKPdf **PKPdf** **00 32 38.2 -1.3**
**WCI** **Wyandotte Cave** **122.06** **66** IAMs_20 IAMs_20 01 22 08.2
comp=Z,2µm,19.0s
**DMTO** **DMTO** **122.12** **264** pPKPdf **PKiKP** **00 32 40.2 -0.2**
**TKM2** **Tokmak 2** **122.17** **301** P **PKPdf** **00 32 39.6 -0.2**
SNR=7.1
**TKM2** **Tokmak 2** **122.17** **301** PKIKP **PKPdf** **00 32 38.9 -0.9**
**KUU** **Kurty** **122.21** **302** *e*PKIKP **PKPdf** **00 32 38.7 -0.9**
**KUU** **Kurty** **122.21** **302** *e*PKP **PKPdf** **00 32 38.7 -0.9**
baz=302
**WBK** **Wadi Bani Khal** **122.28** **272** PKPdf **PKPdf** **00 32 38.7 -1.7**
**ULM** **Lac du Bonnet** **122.43** **50** PKP **PKPdf** **00 32 38.5 -1.3**
comp=Z,23nm,0.8s,baz=211,slow=0.2,SNR=19
**ULM** **Lac du Bonnet** **122.43** **50** PKPdf **PKPdf** **00 32 37.6 -2.1**
**KBK** **Karagaybulak** **122.44** **300** P **PKiKP** **00 32 40.8 +0.3**
SNR=7.0
**UCH** **Uchtor** **122.49** **299** P **PKiKP** **00 32 41.6 +0.6**
SNR=27
**RBK** **Rabkut** **122.52** **263** pPKiKP **PKiKP** **00 32 42.4 +1.2**
**ZAA0** **Zalesovo Array** **122.54** **316** PKPdf **PKPdf** **00 32 38.6 -1.2**
**ZALV** **Zalesovo Beam** **122.54** **316** PKP **PKPdf** **00 32 39.1 -0.8**
comp=Z,2.1nm,0.7s,baz=174,slow=2.7,SNR=17
ZALV PP **PP** **00 34 22.2 +4.6**
comp=Z,1.6nm,0.8s,baz=92,slow=4.9,SNR=3.9
ZALV PKKPbc **PKKPbc** **00 42 38.0 +3.8**
comp=Z,0.9nm,0.6s,baz=294,slow=4.7,SNR=6.5
**ZALV** **Zalesovo Beam** **122.54** **316** PKPdf **PKPdf** **00 32 38.4 -1.4**
**B35A** **Bob, Littlefor** **122.69** **52** PKPdf **PKPdf** **00 32 38.5 -1.8**
**AAK** **Ala-Archa** **122.71** **300** PKP **PKPdf** **00 32 39.8 -1.0**
comp=Z,14nm,1.2s,baz=147,slow=2.2,SNR=18
**AAK** **Ala-Archa** **122.71** **300** P **PKiKP** **00 32 41.2 +0.1**
SNR=11
**AAK** **Ala-Archa** **122.71** **300** ⇑*i* PKIKP **PKiKP** **00 32 41.5 +0.5**
AAK pmax pmax
comp=Z,30nm,1.7s
**AAK** **Ala-Archa** **122.71** **300** IAMs_20 IAMs_20 01 26 17.3
comp=Z,2µm,22.0s
**AAK** **Ala-Archa** **122.71** **300** PKiKP **PKiKP** **00 32 41.3 +0.3**
**AAK** **Ala-Archa** **122.71** **300** *i* P **PKiKP** **00 32 41.2 +0.1**
SNR=15
**CHMS** **Chumysh** **122.74** **300** P **PKiKP** **00 32 40.9 0.0**
SNR=10.0
**JMDO** **Jabal Madar** **122.76** **271** pPKPdf **PKiKP** **00 32 41.8 +0.2**
**WSAR** **Wadi Sarin** **122.91** **272** PKP **PKPdf** **00 32 41.0 -0.6**
comp=Z,3.9nm,0.9s,baz=332,slow=4.6,SNR=3.6
**WSAR** **Wadi Sarin** **122.91** **272** pPKPdf **PKiKP** **00 32 42.5 +0.7**
**AML** **Almayashu** **122.96** **299** P **PKPdf** **00 32 40.6 -1.0**
SNR=21
**AML** **Almayashu** **122.96** **299** PKiKP **PKPdf** **00 32 41.1 -0.5**
**AML** **Almayashu** **122.96** **299** *i* P **PKPdf** **00 32 41.4 -0.2**
SNR=22
**A36M** **Sachs Harbour** **123.03** **19** PKPdf **PKPdf** **00 32 38.4 -1.9**
**USP** **Ospenovka** **123.03** **300** P **PKiKP** **00 32 41.5 0.0**
SNR=18
**SGDS** **Sogindy** **123.05** **301** *e*PKIKP **PKPdf** **00 32 41.2 -0.1**
SGDS pmax pmax
comp=Z,23nm,2.0s
**SGDS** **Sogindy** **123.05** **301** *e*PKP **PKPdf** **00 32 39.5 -1.8**
baz=301
**ABTO** **Aybut** **123.08** **263** pPKPdf **PKiKP** **00 32 42.5 +0.2**
**WHFO** **Wadi Hawf** **123.10** **264** PKiKP **PKPdf** **00 32 41.7 -0.4**
**EKS2** **Erkin-Say** **123.18** **299** P **PKiKP** **00 32 42.4 +0.5**
SNR=19
**SEM** **Semipalatinsk** **123.21** **310** *e*PKIKP **PKPdf** **00 32 39.7 -1.9**
**SEM** **Semipalatinsk** **123.21** **310** *e*PKP **PKPdf** **00 32 39.8 -1.9**
baz=310
**SMDO** **Samad** **123.22** **271** PKiKP **PKPdf** **00 32 41.9 -0.4**
**G40A** **Rib Lake** **123.22** **57** PKPdf **PKPdf** **00 32 40.6 -0.9**
**DOK** **Doka** **123.29** **264** pPKPdf **PKiKP** **00 32 43.0 +0.4**
**BIDO** **Bidbid** **123.45** **272** pPKiKP **PKiKP** **00 32 44.2 +1.4**
**NHSC** **New Hope** **123.47** **74** IAMs_20 IAMs_20 01 19 32.9
comp=Z,1µm,20.0s
**BSY** **Bisya** **123.65** **270** PKiKP **PKPdf** **00 32 42.6 -0.4**
**EYMN** **Ely** **123.78** **54** **PKPdf** **00 32 41.4 -1.1**
**EYMN** **Ely** **123.78** **54** IAMs_20 IAMs_20 01 21 57.5
comp=Z,2µm,20.0s
**P49A** **Miami Univ. Ec** **123.79** **65** IAMs_20 IAMs_20 01 19 41.1
comp=Z,2µm,20.0s
**HOQ** **Hoqain** **124.08** **271** PKiKP **PKiKP** **00 32 43.8 -0.3**
**BTLS** **Baital** **124.20** **302** *e*PKIKP **PKPdf** **00 32 42.1 -1.3**
**BTLS** **Baital** **124.20** **302** *e*PKP **PKPdf** **00 32 42.1 -1.3**
baz=302
**KURK** **Kurchatov** **124.27** **310** ⇑*i* PKIKP **PKPdf** **00 32 41.8 -1.5**
KURK pmax pmax
comp=Z,70nm,1.7s
**KURK** **Kurchatov** **124.27** **310** PKPdf **PKPdf** **00 32 41.6 -1.6**
**KURK** **Kurchatov** **124.27** **310** IAMs_20 IAMs_20 01 32 14.2
comp=Z,2µm,21.0s
**KURK** **Kurchatov** **124.27** **310** PKPdf **PKPdf** **00 32 41.6 -1.6**
**KURBB** **Kurchatov Arra** **124.27** **310** PKP **PKPdf** **00 32 42.0 -1.3**
comp=Z,7.9nm,0.8s,baz=135,slow=1.8,SNR=35
KURBB PKKPbc **PKKPbc** **00 42 31.6 +4.4**
comp=Z,0.6nm,0.3s,baz=295,slow=4.7,SNR=6.1
**KURBB** **Kurchatov Arra** **124.27** **310** PKIKP **PKPdf** **00 32 42.6 -0.7**
**COWI** **Conover** **124.29** **56** **PKPdf** **00 32 42.6 -0.9**
**RCBR** **Riachuelo** **124.48** **145** IAMs_20 IAMs_20 01 22 10.8
comp=Z,1µm,19.0s
**ARQ** **Araqi** **124.50** **271** pPKPdf **PKiKP** **00 32 45.1 +0.2**
**SJG** **San Juan** **124.67** **98** IAMs_20 IAMs_20 01 17 16.9
comp=Z,2µm,20.0s
**PDPR** **Patillas Dam,** **124.70** **98** PKPdf **PKPdf** **00 32 42.8 -2.3**
**DZA** **Taraz** **124.85** **299** *e*PKIKP **PKPdf** **00 32 43.5 -1.2**
**DZA** **Taraz** **124.85** **299** *e*PKP **PKPdf** **00 32 43.6 -1.2**
baz=299
**UMZA** **Um Al Zommool** **125.11** **269** PKiKP **PKiKP** **00 32 45.8 -0.3**
**ACSO** **Alum Creek Sta** **125.30** **65** IAMs_20 IAMs_20 01 20 48.3
comp=Z,2µm,20.0s
**IUG** **Iuzhnay** **125.32** **297** *e*PKIKP **PKPdf** **00 32 44.1 -1.7**
**IUG** **Iuzhnay** **125.32** **297** *e*PKP **PKPdf** **00 32 44.1 -1.7**
baz=297
**KKAR** **Karatay Array** **125.48** **299** PKIKP **PKPdf** **00 32 44.3 -1.6**
**KKAR** **Karatay Array** **125.48** **299** PKPdf **PKPdf** **00 32 44.3 -1.6**
**BLA** **Blacksburg** **125.48** **70** IAMs_20 IAMs_20 01 21 14.4
comp=Z,2µm,20.0s
**ALNE** **Al Ain** **125.50** **271** pPKPdf **PKiKP** **00 32 47.2 +0.2**
**ALNE** **Al Ain** **125.50** **271** P **PKPdf** **00 32 46.4 -0.1**
**P52A** **Corning** **125.56** **66** IAMs_20 IAMs_20 01 28 07.3
comp=Z,2µm,19.0s
**ASHO** **Ashiyiah** **125.65** **272** PKiKP **PKPdf** **00 32 46.8 0.0**
SNR=9.1
**ASHO** **Ashiyiah** **125.65** **272** *i* P **PKPdf** **00 32 45.4 -1.5**
SNR=11
**HATD** **Hatta, Dubai** **125.68** **272** PKiKP **PKiKP** **00 32 47.0 -0.3**
SNR=9.7
**HATD** **Hatta, Dubai** **125.68** **272** *i* P **PKPdf** **00 32 46.3 -0.6**
SNR=8.3
**UOSS** **Minazif** **125.70** **272** PKPdf **PKPdf** **00 32 45.7 -1.2**
**UOSS** **Minazif** **125.70** **272** PKiKP **PKPdf** **00 32 46.4 -0.5**
**UOSS** **Minazif** **125.70** **272** P **PKPdf** **00 32 46.4 -0.5**
**E43A** **Lone Tree Farm** **125.72** **57** PKPdf **PKPdf** **00 32 45.1 -1.1**
**BRLS** **Borolday** **125.88** **298** *e*PKIKP **PKPdf** **00 32 45.4 -1.3**
**BRLS** **Borolday** **125.88** **298** *e*PKP **PKPdf** **00 32 45.4 -1.3**
baz=298
**AAM** **Ann Arbor** **125.88** **63** IAMs_20 IAMs_20 01 19 15.3
comp=Z,2µm,21.0s
**MSFE** **Esma-Masafi** **125.98** **272** *i* P **PKPdf** **00 32 47.2 -0.2**
SNR=6.2
**MASF** **Masafi** **125.99** **272** pPKPdf **PKiKP** **00 32 48.0 +0.1**
SNR=6.4
**FDF** **Fort de France** **125.99** **105** IAMs_20 IAMs_20 01 27 09.7
comp=Z,1µm,18.0s
**FAQ** **Al Faqa, Dubai** **126.03** **271** PKPdf **PKPdf** **00 32 45.8 -1.7**
**NAZ** **Nazwa, Dubai** **126.12** **272** PKiKP **PKPdf** **00 32 46.9 -0.8**
**ASUD** **Al Ashush, Dub** **126.15** **271** PKiKP **PKPdf** **00 32 47.6 -0.1**

**T57A** **Hurt** **126.17** **71** **PKPdf** **00 32 46.5 -0.9**
**CNNC** **Cliffs of the** **126.21** **73** IAMs_20 IAMs_20 01 25 34.7
comp=Z,1µm,20.0s
**ILAM** **Ilet Lapin Mar** **126.21** **105** IAMs_20 IAMs_20 01 18 36.4
comp=Z,1µm,20.0s
**O53A** **New Philadelph** **126.48** **66** IAMs_20 IAMs_20 01 32 19.3
comp=Z,2µm,19.0s
**MZR** **Muzera** **126.51** **268** PKiKP **PKPdf** **00 32 47.7 -0.9**
**MZR** **Muzera** **126.51** **268** *i* P **PKPdf** **00 32 47.6 -0.9**
SNR=7.5
**SEUS** **St. Eustatius** **126.54** **101** IAMs_20 IAMs_20 01 24 16.4
comp=Z,2µm,19.0s
**OTUK** **Ortayu** **126.75** **305** PKIKP **PKPdf** **00 32 47.9 -0.3**
**FCC** **Fort Churchill** **127.27** **41** PKIKP **PKPdf** **00 32 47.1 -1.7**
**FCC** **Fort Churchill** **127.27** **41** PKPdf **PKPdf** **00 32 47.1 -1.7**
**BRZS** **Berezniki** **127.32** **307** *e*PKIKP **PKPdf** **00 32 48.1 -1.1**
**BRZS** **Berezniki** **127.32** **307** *e*PKP **PKPdf** **00 32 48.1 -1.1**
baz=307
**E46A** **Sault Ste Mari** **127.37** **58** PKPdf **PKPdf** **00 32 48.8 -0.6**
**NRIK** **Noril'sk** **128.29** **333** PKP **PKPdf** **00 32 49.9 -0.5**
comp=Z,8.3nm,0.6s,baz=141,slow=2.2,SNR=20
**NRIK** **Noril'sk** **128.29** **333** ⇑*i* PKIKP **PKiKP** **00 32 50.9 -0.1**
**NRIK** **Noril'sk** **128.29** **333** PKPdf **PKPdf** **00 32 50.1 -0.3**
**SSPA** **Standing Stone** **128.89** **67** IAMs_20 IAMs_20 01 22 23.1
comp=Z,2µm,22.0s
**BVAR** **Borovoye Array** **129.87** **310** PKP **PKPdf** **00 32 53.2 -0.7**
comp=Z,13nm,1.1s,baz=42,slow=14,SNR=10
**BRVK** **Borovoye** **129.94** **310** *d* iPKIKP **PKPdf** **00 32 53.4 -0.6**
BRVK pmax pmax
comp=Z,61nm,1.7s
**BRVK** **Borovoye** **129.94** **310** PKPdf **PKPdf** **00 32 53.2 -0.8**
**BRVK** **Borovoye** **129.94** **310** PKiKP **PKiKP** **00 32 54.4 -0.4**
**GEYT** **Alibeck** **131.31** **287** PKP **PKPdf** **00 32 57.2 0.0**
comp=Z,7.9nm,1.0s,baz=240,slow=32,SNR=11
**GEYT** **Alibeck** **131.31** **287** **PKPdf** **00 32 57.1 -0.1**
**PAL** **Palisades** **131.75** **69** IAMs_20 IAMs_20 01 25 04.7
comp=Z,2µm,20.0s
**RES** **Resolute Bay** **131.96** **21** PKP **PKPdf** **00 32 56.2 -1.0**
comp=Z,14nm,0.9s,baz=270,slow=4.0,SNR=17
**VLDQ** **Val d'Or** **132.34** **59** PKPdf **PKPdf** **00 32 58.1 -0.6**
**RAYN** **Ar Rayn** **132.62** **263** IAMs_20 IAMs_20 01 29 05.9
comp=Z,2µm,19.0s
**RAYN** **Ar Rayn** **132.62** **263** pPKPdf **PKiKP** **00 33 01.3 0.0**
**RAYN** **Ar Rayn** **132.62** **263** *i* P **PKiKP** **00 33 01.5 +0.2**
SNR=6.4
**AB31** **Akbulak array** **134.69** **302** *i* PKIKP **PKPdf** **00 33 03.3 +0.2**
**ABKAR** **Akbulak array** **134.69** **302** PKPdf **PKPdf** **00 33 03.0 -0.1**
**ABKAR** **Akbulak array** **134.69** **302** PKPdf **PKPdf** **00 33 03.0 -0.1**
**AKTO** **Aktyubinsk** **136.25** **303** PKP **PKPdf** **00 33 04.4 -1.6**
comp=Z,17nm,1.3s,baz=68,slow=3.9,SNR=11
**AKTO** **Aktyubinsk** **136.25** **303** PKIKP **PKPdf** **00 33 05.5 -0.5**
**SVE** **Sverdlovsk** **136.37** **312** *i* PKIKP **PKPdf** **00 33 06.6 +0.6**
SVE pmax pmax
comp=Z,49nm,1.5s
SVE MLR MLR
comp=E,2µm,25.0s
SVE MLR MLR
comp=Z,2µm,24.0s
**ARU** **Arti** **137.41** **312** PKhKP PKPpre 00 32 58.6
comp=Z,1.4nm,0.8s,baz=106,slow=2.5,SNR=8.2
ARU PKP **PKPdf** **00 33 06.9 -1.0**
comp=Z,4.6nm,1.0s,baz=104,slow=2.5,SNR=19
**ARU** **Arti** **137.41** **312** *i* PKIKP **PKPdf** **00 33 08.5 +0.5**
ARU 00 35 51.0
ARU MLR MLR
comp=Z,1µm,24.0s
**ARU** **Arti** **137.41** **312** PKPdf **PKPdf** **00 33 07.7 -0.3**
ARU IAMs_20 IAMs_20 01 33 13.7
comp=Z,1µm,22.0s
**TULEG** **Thule** **138.38** **18** *i* P **PKPdf** **00 33 09.2 0.0**
**FRB** **Frobisher Bay** **140.28** **38** PKhKP PKPpre 00 33 04.5
comp=Z,9.1nm,0.8s,baz=282,slow=3.5,SNR=5.5
**SCHQ** **Schefferville** **140.53** **52** PKhKP PKPpre 00 33 09.6
comp=Z,1.8nm,0.7s,baz=16,slow=8.3,SNR=4.0
**NOR** **Nord** **141.60** **2** *i* P **PKPdf** **00 33 12.3 -2.7**
**NEEM** **North Greenlan** **141.61** **14** *i* P **PKPdf** **00 33 08.2 -7.3**
**GNI** **Garni** **141.67** **283** PKP **PKPdf** **00 33 15.4 -1.1**
comp=Z,19nm,1.1s,baz=158,slow=2.9,SNR=18
**GNI** **Garni** **141.67** **283** *i* PKIKP **PKPdf** **00 33 16.7 +0.2**
**GNI** **Garni** **141.67** **283** pPKPdf pPKPdf 00 33 17.9 -0.8
**GROC** **Groznyy** **142.01** **288** *e*PKIKP **PKPdf** **00 33 16.3 -0.5**
GROC *e* 00 36 22.5
GROC pmax pmax
comp=Z,39nm,1.5s
**SIRT** **Sirnak** **142.25** **278** PKPdf **PKPdf** **00 33 16.5 -1.0**
**KIRV** **Kirov** **142.55** **314** PKhKP PKPpre 00 33 13.2
comp=Z,9.6nm,0.6s,baz=118,slow=2.0,SNR=7.5
**KIRV** **Kirov** **142.55** **314** *i* PKIKP **PKPdf** **00 33 12.6 -4.6**
**UPNV** **Upernavik** **142.83** **22** *i* P **PKPdf** **00 33 13.3 -4.0**
**LIC** **Lamto** **142.85** **184** *e*PKP1 **PKPdf** **00 33 16.7 -2.5**
comp=Z,84nm,0.9s
**GURO** **Guroymak-BITLI** **142.97** **280** PKPdf **PKPdf** **00 33 17.1 -1.7**
**KIC** **Kosan Boka** **142.97** **184** *e*PKP1 **PKPdf** **00 33 16.9 -2.5**
comp=Z,44nm,0.8s
**AKH** **Akhalkalaki** **143.01** **285** ⇑P **PKPdf** **00 33 19.2 +0.3**
**BELG** **Belogornoye** **143.02** **304** PKhKP PKPpre 00 33 13.3
comp=Z,53nm,0.9s,baz=57,slow=1.8,SNR=14
**BELG** **Belogornoye** **143.02** **304** *i* PKIKP **PKPbc** 00 33 15.0 -0.1
**ZEI** **Tsey** **143.19** **287** *i* PKIKP **PKPdf** **00 33 19.1 -0.1**
ZEI pmax pmax
comp=Z,16nm,1.2s
**TIC** **Toumodi** **143.27** **184** *e*PKP1 PKPbc 00 33 18.1 +1.2
**DBIC** **Dimbokro** **143.29** **184** PKP **PKPdf** **00 33 18.4 -1.6**
comp=Z,14nm,0.8s,baz=159,slow=4.6,SNR=13
**DBIC** **Dimbokro** **143.29** **184** PKPdf PKPbc 00 33 17.7 +0.8
**MARD** **Mardin** **143.37** **277** PKPbc 00 33 16.9 +0.2
**ONI** **Oni** **143.44** **287** PKIKP **PKPdf** **00 33 18.4 -1.1**
**ONI** **Oni** **143.44** **287** PKPdf **PKPdf** **00 33 18.4 -1.1**
**KBS** **Kingsbay** **143.67** **354** ⇑*e*PKIKP **PKPdf** **00 33 17.8 -0.9**
**KBS** **Kingsbay** **143.67** **354** *i* P PKPab 00 33 15.5 +0.1
**KBS** **Kingsbay** **143.67** **354** *e*PKPdf **PKPdf** **00 33 17.4 -1.3**
**ASF** **Jabal al Asfar** **143.78** **267** PKP PKPbc 00 33 17.9 -0.1
comp=Z,7.2nm,0.8s,baz=76,slow=1.0,SNR=11
**EIL** **Elat** **143.85** **262** PKP PKPbc 00 33 18.1 -0.1
comp=Z,18nm,0.9s,baz=150,slow=4.0,SNR=15
**SPA0** **Spitsbergen Ar** **143.94** **352** *e*PKPdf **PKPdf** **00 33 18.5 -0.8**
**SPITS** **Spitsbergen Ar** **143.94** **352** PKhKP PKPpre 00 33 15.4
comp=Z,32nm,0.8s,baz=112,slow=9.1,SNR=15
**SPITS** **Spitsbergen Ar** **143.94** **352** PKIKP PKPbc 00 33 17.7 +0.6
**SPB2** **Spitsbergen Ar** **143.94** **352** PKPbc 00 33 17.4 +0.3
**KBZ** **Khabaz** **144.18** **288** PKP PKPbc 00 33 18.6 -0.2
comp=Z,16nm,1.1s,baz=122,slow=0.8,SNR=14
KBZ PP **PP** **00 36 38.3 +2.3**
comp=Z,3.8nm,1.0s,baz=60,slow=3.5,SNR=4.3
**NUUG** **Nuugaatsiaq** **144.19** **23** *i* P PKPbc 00 33 18.5 +0.6
**GHAJ** **Ghor Haditha** **144.29** **265** IAMs_20 IAMs_20 01 36 19.3
comp=Z,2µm,20.0s
**PRGR** **Permogore** **144.34** **319** *e*PKHKP PKPpre 00 33 15.8
PRGR pmax pmax
comp=Z,96nm,0.9s
**KIV** **Kislovodsk** **144.40** **288** ⇑P **PKPab** **00 33 17.4 -1.8**
**KIV** **Kislovodsk** **144.40** **288** *i* PKIKP **PKPab** **00 33 18.8 -0.5**
KIV *e*SSS SSS 01 00 42.0
KIV pmax pmax
comp=Z,29nm,1.1s
**KIV** **Kislovodsk** **144.40** **288** PKPdf **PKPab** **00 33 19.0 -0

comp=Z,45nm,1.1s
**VRH Novokhopyorsk 146.50 301** *e*PKP2 **PKPdf 00 33 24.6 +0.3**
VRH pmax pmax
comp=Z,230nm,1.8s
**SFJD Kangerlussuaq 146.95 30** PKPbc **PKPdf 00 33 25.1 +0.5**
comp=Z,98nm,0.7s,baz=259,slow=1.6,SNR=27
**SFJD Kangerlussuaq 146.95 30** PKIKP **PKPdf 00 33 24.4 -0.2**
**SFJD Kangerlussuaq 146.95 30** *i* P **PKPdf 00 33 24.8 +0.2**
**SFJD Kangerlussuaq 146.95 30** **PKPdf 00 33 24.4 -0.2**
**LVZ Lovozero 147.12 332**‖ *e*PKIKP **PKPdf 00 33 25.0 +0.1**
**LVZ Lovozero 147.12 332** PKPdf **PKPdf 00 33 24.1 -0.9**
**SUMG Summit 147.27 17** PKIKP **PKPdf 00 33 25.4 -0.1**
**SUMG Summit 147.27 17** *i* P **PKPdf 00 33 25.7 +0.1**
**SUMG Summit 147.27 17** PKPdf **PKPdf 00 33 25.4 -0.1**
**KLMR Klimovskoe 147.37 319** *e*PKIKP **PKPdf 00 33 23.6 -1.9**
KLMR *e* 00 36 49.8
KLMR pmax pmax
comp=Z,825nm,1.2s
**KLMR Klimovskoe 147.37 319** *e*PKPdf **PKPdf 00 33 23.6 -1.9**
KLMR AMP 00 33 30.8
comp=Z,825nm,1.2s
KLMR *e*PP **PP 00 36 49.8 -4.6**
**NUUK Nuuk 147.52 35** *i* P **PKPdf 00 33 26.8 +1.2**
**BNN Bunyan 147.55 277** PKPdf **PKPdf 00 33 26.1 -0.5**
**APA Apatity 147.70 332**‖ *i*PKP2 **PKPbc 00 33 27.1 -1.5**
APA pmax pmax
comp=Z,122nm,0.8s
**CSS Mathiatis 147.74 269** IAMs_20 IAMs_20 01 38 32.7
comp=Z,2µm,21.0s
**VORD Divnogorie 148.01 300** *e*PKIKP **PKPdf 00 33 26.9 +0.1**
VORD pmax pmax
comp=Z,70nm,1.5s
**VSR Storozhevoye 148.11 301** *e*PKIKP **PKPdf 00 33 26.8 -0.2**
VSR pmax pmax
comp=Z,170nm,1.6s
**VORR Voronezh 148.11 301** *e*PKIKP **PKPdf 00 33 27.5 +0.5**
VORR pmax pmax
comp=Z,130nm,0.7s
**LEF Lefka 148.13 269** ⇓P **PKPbc 00 33 29.7 -1.1**
**LPSR Galich'ya Gora 148.33 303** *e*PKP2 **PKPdf 00 33 28.8 +1.5**
LPSR pmax pmax
comp=Z,110nm,1.1s
**KEV Kevo 148.46 338** PKIKP **PKPdf 00 33 27.4 +0.4**
**KEV Kevo 148.46 338** **PKPdf 00 33 27.4 +0.4**
KEV IAMs_20 IAMs_20 01 44 34.8
comp=Z,2µm,22.0s
**DBG Daneborg 148.51 7** *i* P **PKPdf 00 33 28.3 +1.3**
**HAMF Hammerfest 148.73 341** *e*pPKPdf pPKPdf 00 33 30.2 +0.6
**DY2G Dye2 148.73 29** *i* P **PKPdf 00 33 29.2 +1.4**
**TORD Torodi Ar. Bea 148.83 197** PKP **PKPdf 00 33 29.1 -0.2**
comp=Z,47nm,1.2s,baz=281,slow=0.4,SNR=48
TORD PKPbc **PKiKP 00 33 34.2 -0.4**
comp=Z,101nm,1.2s,baz=159,slow=1.3,SNR=38
TORD PP **PP 00 37 09.9 +7.6**
comp=Z,11nm,1.1s,baz=190,slow=4.3,SNR=3.5
**TORD Torodi Ar. Bea 148.83 197** **PKPdf 00 33 29.9 +0.6**
**ARAD ARCESS Array S 149.01 338** *e*pPKPdf pPKPdf 00 33 30.8 +0.6
**ARCES ARCESS Array B 149.01 338** PKPbc **PKPbc 00 33 30.8 -1.3**
comp=Z,38nm,0.7s,baz=77,slow=1.9,SNR=42
**ARCES ARCESS Array B 149.01 338** PKP2 **PKPbc 00 33 31.4 -0.7**
**ARCES ARCESS Array B 149.01 338** **PKPbc 00 33 31.4 -0.7**
**MOS Moscow 149.04 309** *e*PKIKP **PKPdf 00 33 27.8 -0.5**
MOS *e* 00 37 02.3
MOS pmax pmax
comp=Z,366nm,2.0s
**SNOP Sinop 149.07 282** **PKPbc 00 33 31.3 -1.7**
**ICESG Greenland Ices 149.36 22** *i* P **PKPdf 00 33 30.5 +1.6**
**BR131 Keskin Array S 149.46 277** pPKPdf **PKPdf 00 33 29.9 +0.1**
SNR=40
**BRTR Keskin Array B 149.46 277** PKP **PKPdf 00 33 28.8 -1.0**
comp=Z,4.9nm,0.7s,baz=147,slow=0.6,SNR=16
BRTR PKPbc **PKPbc 00 33 33.5 -0.7**
comp=Z,14nm,0.6s,baz=141,slow=5.4,SNR=25
**BRTR Keskin Array B 149.46 277** **PKPdf 00 33 30.1 +0.3**
**OBN Obninsk 149.68 308** ⇓P **PKiKP 00 33 34.8 -0.2**
**OBN Obninsk 149.68 308** PKP **PKPdf 00 33 28.6 -0.8**
comp=Z,1.5nm,0.4s,baz=349,slow=0.3,SNR=1.6
OBN PKPbc **PKPbc 00 33 33.8 -0.3**
comp=Z,30nm,1.1s,baz=23,slow=3.0,SNR=12
**OBN Obninsk 149.68 308***d* PKHKP PKPpre 00 33 28.8
OBN *i* 00 33 34.5
OBN PPP PPP 00 40 28.0
OBN *e* 00 40 37.2
OBN *e*SS SS 00 56 23.3 -0.1
OBN SSS SSS 01 02 00.0
OBN pmax pmax
comp=Z,72nm,1.4s
OBN pmax pmax
comp=Z,693nm,1.9s
**OBN Obninsk 149.68 308** PKPdf **PKPdf 00 33 28.8 -0.6**
OBN IAMs_20 IAMs_20 01 45 49.5
comp=Z,1µm,19.0s
**ILGA Ilgaz 149.84 280** **PKPdf 00 33 29.1 -1.4**
**BZK Bozkurt 149.91 282** ⇑P **PKiKP 00 33 36.3 +0.3**
**KTK1 Kautokeino 149.96 339** *e*pPKPdf pPKPdf 00 33 32.1 +0.5
**IVI Ivigtut 149.99 39** *i* P **PKPdf 00 33 31.8 +2.1**
**ANTO Ankara 150.12 277** PKIKP **PKPdf 00 33 28.4 -2.3**
**ANTO Ankara 150.12 277** **PKPdf 00 33 28.4 -2.3**
**JETT Jettan, Norway 150.29 341** *e*PKPbc **PKiKP 00 33 36.2 +0.1**
**TRO Tromso 150.58 342** *e*pPKPdf pPKPdf 00 33 32.7 +0.1
**SIM Simferopol' 150.58 287** *e*PKIKP **PKPbc 00 33 36.0 -0.6**
SIM pmax pmax
comp=Z,55nm,0.9s
**KOWA Kowa 151.00 186** PKPdf **PKPdf 00 33 30.8 -1.9**
**ISP Isparta 151.01 272** IAMs_20 IAMs_20 01 41 00.9
comp=Z,1µm,22.0s
**ELL Elmali 151.02 269** PKIKP **PKPbc 00 33 35.7 -2.4**
**ELL Elmali 151.02 269** **PKPbc 00 33 35.7 -2.4**
**NRS Narsarsuaq 151.27 39** *i* P **PKPdf 00 33 31.4 -0.3**
**MDUB Mudurnu 151.47 277** **PKPdf 00 33 34.7 +1.9**
**ISOG Isortoq, Green 151.75 28** *i* P **PKPbc 00 33 36.5 -2.1**
**SCO Scoresbysund 151.92 10** PKIKP **PKPdf 00 33 31.8 -0.6**
**SCO Scoresbysund 151.92 10** *i* P **PKPbc 00 33 37.2 -1.7**
**SCO Scoresbysund 151.92 10** *i* P **PKiKP 00 33 39.0 -0.3**
**SCO Scoresbysund 151.92 10** **PKPdf 00 33 31.8 -0.6**
**PUL Pulkovo 152.07 319***c i*PKIKP **PKiKP 00 33 40.8 +0.9**
PUL pmax pmax
comp=Z,286nm,1.7s
**SOEG Soedalen 152.13 19** *i* P **PKPbc 00 33 38.8 -0.7**
**ANGG Ammassalik, Gr 152.16 27** *i* P **PKPbc 00 33 32.2 -2.4**
**ANGG Ammassalik, Gr 152.16 27** **PKPdf 00 33 32.2 +0.3**
**STEI Steigen 152.75 342** *e*PKPbc **PKPbc 00 33 39.2 -1.6**
**LOF Lofoten 152.97 343** *e*PKPbc **PKPbc 00 33 39.0 -2.3**
**FAUS Fauske 153.18 341** *e*PKPbc **PKPbc 00 33 41.5 -0.2**
**FIA1 FINESS Array S 153.34 324** PKPdf **PKPdf 00 33 35.9 +1.1**
**FINES FINESS Array B 153.35 324** PKPbc **PKPbc 00 33 40.6 -1.7**
comp=Z,18nm,0.7s,baz=77,slow=3.4,SNR=52
**FINES FINESS Array B 153.35 324** PKIKP **PKPdf 00 33 35.2 +0.4**
**FINES FINESS Array B 153.35 324** **PKPdf 00 33 35.2 +0.4**
**PURM Purcari 153.77 290** ⇓P **PKPbc 00 33 43.4 -0.3**
**NBB30 Finnes 153.87 341** *e*PKPdf **PKPdf 00 33 34.4 -1.0**
**NBB17 Glomfjord B¥r 153.94 341** *e*PKPbc **PKiKP 00 33 43.9 +0.3**
**IDI Anoyia 154.02 263** ⇓P **PKPbc 00 33 44.0 -0.7**
**IDI Anoyia 154.02 263** PKPbc **PKPbc 00 33 44.2 -0.5**
comp=Z,12nm,0.9s,baz=317,slow=5.5,SNR=3.9
**IDI Anoyia 154.02 263** IAMs_20 IAMs_20 01 53 00.6
comp=Z,1µm,20.0s
**VSU Vasula 154.26 318** *e*P **PKiKP 00 33 44.5 +0.1**
**MOR8 Moi Rana 154.34 340** *e*PKPbc **PKPbc 00 33 43.0 -1.4**
**AKASG Malin Array Be 154.38 299** PKP **PKPdf 00 33 34.6 -1.9**
comp=Z,0.2nm,0.2s,baz=74,slow=1.1,SNR=17
AKASG PKPbc **PKiKP 00 33 45.3 +0.4**
comp=Z,5.9nm,0.8s,baz=71,slow=2.9,SNR=11
AKASG PP **PP 00 37 37.6 +2.6**
comp=Z,0.2nm,0.3s,baz=70,slow=5.1,SNR=4.3
**AKASG Malin Array Be 154.38 299** **PKPdf 00 33 35.0 -1.5**
AKASG PKPbc **PKiKP 00 33 45.7 +0.8**
**AKBB Malin Array Si 154.38 299** PKIKP **PKPdf 00 33 34.9 -1.7**
**AKBB Malin Array Si 154.38 299** PKPdf **PKPdf 00 33 34.9 -1.7**
AKBB **pPKPbc 00 33 46.6 -0.5**
**KONS Konsvik 154.40 341** *e*PKPbc **PKiKP 00 33 45.1 +0.7**
**MILM Milestii Mici 154.54 290***d i*PKIKP **PKiKP 00 33 46.0 +0.6**
MILM pmax pmax
comp=Z,280nm,2.3s
**MNK Minsk 154.74 308** *i* PKIKP **PKPdf 00 33 35.9 -1.1**
MNK *i* 00 37 34.2
MNK *i* 00 40 43.1
MNK *i* PPP PPP 00 41 05.4
MNK *i* SS SS 00 57 17.0 -2.1
MNK *i* SSS SSS 01 03 08.9
MNK pmax pmax
comp=Z,61nm,1.4s
**MNK Minsk 154.74 308** *i* PKP **PKPdf 00 33 35.9 -1.0**
comp=Z,61nm,1.4s,baz=78
MNK *i* PP **PP 00 37 34.3 -2.6**
MNK *i* SKS **SKSdf 00 40 43.1 -0.5**
MNK *i* PPP PPP 00 41 05.5
MNK *i* SKKS **SKKSdf 00 49 21.5 -0.6**
MNK *i* SS **SS 00 57 17.0 -2.1**
MNK *i* SSS SSS 01 03 08.9
MNK *i* LR LR 01 42 28.2
MNK *i* LRM MLR 01 45 21.2
comp=E,188nm,23.7s
MNK *i* LRM MLR 01 45 49.2
comp=Z,3µm,32.2s
MNK *i* LRM MLR 01 46 47.8
comp=N,1µm,23.8s
**SORM Soroca 154.94 293** ⇑P **PKPdf 00 33 36.7 -0.7**
**IDID Didziasalis 155.21 310** *e*P **PKPdf 00 33 41.7 +4.1**
**NACGM Naroch 155.28 309** *i* PKP **PKPdf 00 33 37.7 0.0**
**IIGN Ignalina 155.48 311** *e*P **PKPdf 00 33 41.1 +3.2**
**MTSE Matsula 155.57 319** *e*P **PKPdf 00 33 40.4 +2.5**
**TESR Tescani 155.99 289** ⇑P **PKPdf 00 33 38.3 -0.6**
**NEHR Nehoiu 156.11 286** ⇓P **PKPdf 00 33 40.2 +1.0**
**NSS Namsos 156.28 339** *e*PKPdf **PKPdf 00 33 35.0 -3.7**
**MLR Muntele Rosu 156.37 286** ⇓P **PKPdf 00 33 39.8 +0.1**
**MLR Muntele Rosu 156.37 286** PKP **PKPdf 00 33 38.3 -1.3**
comp=N,20nm,1.3s,baz=232,slow=5.4,SNR=8.9
MLR PKPab **PKPab 00 34 08.5 +0.4**
comp=N,18nm,1.2s,baz=223,slow=9.0,SNR=4.6
**MLR Muntele Rosu 156.37 286** PKIKP **PKPdf 00 33 38.2 -1.4**
**MLR Muntele Rosu 156.37 286** PKPdf **PKPdf 00 33 38.2 -1.4**
MLR IAMs_20 IAMs_20 01 55 52.1
comp=Z,1µm,21.0s
**PABE Paberze 156.67 312** *e*P **PKPdf 00 33 38.3 -1.2**
**SLIT Slitere, Latvi 156.76 318** *e*P **PKPdf 00 33 34.5 -5.0**
**DOPR Dopca 156.81 288** ⇑P **PKPdf 00 33 40.4 +0.3**
**VOIR 156.99 286** ⇑P **PKPdf 00 33 46.5 +6.1**
**BURAR Bucovina Array 157.03 292** ⇑P **PKPdf 00 33 41.9 +1.5**
**ARR Arges 157.27 286** ⇓P **PKPdf 00 33 41.3 +0.6**
**SUW Suwalki 157.54 309** *e*PKP **PKPdf 00 33 43.0 +2.3**
SUW *e*L L 01 47 09.4
comp=Z,1µm,21.6s
**SUW Suwalki 157.54 309** IAMs_20 IAMs_20 01 47 20.3
comp=Z,2µm,22.0s
**SUW Suwalki 157.54 309** *e*P **PKPdf 00 33 41.4 +0.7**
**UPP Uppsala 157.72 326** *e*P **PKPdf 00 33 41.4 +0.7**
**LVV L'vov 157.76 298** *i* PKIKP **PKPdf 00 33 43.7 +2.6**
LVV *e* 00 37 53.1
LVV *e*SS SS 00 57 54.6 +2.6
**LOT Lotru 157.88 286** ⇓P **PKPdf 00 33 41.2 -0.4**
**CJR Cluj-Napoca 158.10 289** ⇓P **PKPdf 00 33 40.4 -1.3**
**BMR Baia Mare 158.19 292** ⇑P **PKPdf 00 33 42.7 +1.0**
**DEV Deva 158.53 287** ⇑P **PKPdf 00 33 41.8 -0.3**
**GZR Gura Zlata 158.57 286** ⇑P **PKPdf 00 33 42.6 +0.3**
**KWP Kalwaria Pacla 158.63 297** *e*PKP **PKPdf 00 33 44.0 +1.9**
KWP *e*L L 01 44 06.6
comp=Z,1µm,27.5s
**DRGR 158.71 289** ⇑P **PKPdf 00 33 42.1 -0.4**
**HERR Herculane 158.77 284** ⇑P **PKPdf 00 33 42.8 +0.3**
**TRPA Tarpa 158.83 293** ⇑P **PKPdf 00 33 42.6 +0.2**
**VIKU Vikbolandet 158.90 324** *e*P **PKPdf 00 33 40.1 -2.0**
**UZH Uzhgorod 158.97 295**⇑ *i*PKIKP **PKPdf 00 33 42.0 -0.6**
UZH *i* 00 33 49.3
UZH *e* 00 38 01.6
UZH *e* 00 40 43.8
UZH *e* 00 41 37.8
**NC405 NORSAR Array S 159.03 334** PKPdf **PKPdf 00 33 41.0 -1.3**
NC405 PKPab **PKPab 00 34 18.1 -0.8**
**HFS Hagfors 159.06 330** PKPab **PKPab 00 34 18.2 -0.8**
comp=Z,37nm,1.2s,baz=29,slow=3.4,SNR=15
**BOVS Bovan 159.10 280** ⇑P **PKPdf 00 33 44.1 +1.2**
**NB2 NORSAR Subarra 159.24 334** P **PKPdf 00 33 42.7 +0.1**
comp=Z,108nm,2.5s,baz=44,slow=4.6
**NB2 NORSAR Subarra 159.24 334** P **PKPdf 00 33 42.7 +0.1**
baz=44,slow=4.6
**NOA NORSAR Array B 159.24 334** PKP **PKPdf 00 33 41.1 -1.4**
comp=Z,29nm,1.4s,baz=43,slow=1.2,SNR=11
NOA PKPab **PKPab 00 34 18.6 -1.3**
comp=Z,12nm,0.9s,baz=44,slow=4.5,SNR=19
**BZS Buzias 159.40 286** ⇓P **PKPdf 00 33 43.1 -0.1**
**AKN Aaknes 159.49 341** *e*pPKPdf pPKPdf 00 33 45.2 +0.2
**CRVS Cervenica-Dubn 159.50 295** *e*PKIKP **PKPdf 00 33 44.4 +1.2**
**CRVS Cervenica-Dubn 159.50 295** *e*PKP **PKPdf 00 33 44.4 +1.2**
**NIE Niedzica 160.21 297** *e*PKP **PKPdf 00 33 46.4 +2.3**
NIE *e*L L 01 51 43.5
comp=Z,852nm,21.5s
**DIVS Divibare 160.40 281** **PKPdf 00 33 42.6 -1.9**
**OJC Ojcow 160.42 300** PKIKP **PKPdf 00 33 42.4 -1.8**
**OJC Ojcow 160.42 300** PKPdf **PKPdf 00 33 42.4 -1.8**
**PSZ Piszkesteto 160.61 293** ⇑P **PKPdf 00 33 44.1 -0.5**
**PSZ Piszkesteto 160.61 293** PKIKP **PKPdf 00 33 43.7 -0.9**
**PSZ Piszkesteto 160.61 293** PKPdf **PKPdf 00 33 43.7 -0.9**
**FRGS Fruska Gora 160.64 284** ⇑P **PKPdf 00 33 43.6 -1.1**
**IZAB Izabela 160.69 295** *e*PKIKP **PKPdf 00 33 45.6 +1.0**
**LANS Liptovska Anna 160.79 296** *e*PKIKP **PKPdf 00 33 46.9 +2.2**
**LANS Liptovska Anna 160.79 296** *e*PKP **PKPdf 00 33 46.9 +2.2**
**GKP Gorka Klasztor 161.13 310** *e*PKP **PKPdf 00 33 43.9 -1.0**
GKP *e*L L 01 42 40.0
comp=Z,2µm,26.9s
**GKP Gorka Klasztor 161.13 310** *e*P **PKPdf 00 33 43.8 -1.1**
**VYHS Vyhne 161.27 295** *e*PKIKP **PKPdf 00 33 45.8 +0.6**
**VYHS Vyhne 161.27 295** *e*PKP **PKPdf 00 33 45.8 +0.6**
**DEL Delary 161.32 321** *i* P **PKPab 00 34 28.0 -1.0**
**DEL Delary 161.32 321** *e*P **PKPdf 00 33 45.0 +0.1**
**OKC Ostrava-Krasne 161.53 299** AMS AMS 01 51 40.0
comp=Z,1µm,19.2s
**KOLL Kolacno 161.55 295** *e*PKP **PKPdf 00 33 46.7 +1.2**
**BSD Bornholm Skovb 161.56 317** *e*P **PKPdf 00 33 44.7 -0.5**
**SRO Srobarova 161.68 293** *e*PKIKP **PKPdf 00 33 46.1 +0.5**
**SRO Srobarova 161.68 293** *e*PKP **PKPdf 00 33 46.1 +0.5**
**CSKK Cskako 161.75 291** PKPDF **PKPdf 00 33 43.3 -2.4**
**KOVH Kovagototos 161.88 287** PKPDF **PKPdf 00 33 45.8 0.0**
**MORC Moravsky Berou 161.93 299** ⇓P **PKPdf 00 33 46.3 +0.4**
**MORC Moravsky Berou 161.93 299** *e*PKP **PKPdf 00 33 46.0 +0.1**
MORC *e* 00 34 31.7
MORC *e*PP **PP 00 38 18.4 +1.9**
**JAVC Velka Javorina 162.00 296** *e*PKP **PKPdf 00 33 46.7 +0.7**
JAVC *e* 00 34 35.0
JAVC *e*PP **PP 00 38 19.0 +2.1**
**TIH Tihany 162.02 290** PKPDF **PKPdf 00 33 46.2 +0.2**
**SMOL Smolenice 162.20 295** *e*PKIKP **PKPdf 00 33 47.4 +1.2**
**SMOL Smolenice 162.20 295** *e*PKP **PKPdf 00 33 47.4 +1.2**
**MODS Modra-Piesok 162.32 295** *e*PKIKP **PKPdf 00 33 49.0 +2.7**
**MODS Modra-Piesok 162.32 295** *e*PKP **PKPdf 00 33 49.0 +2.7**
**KRLC Kraliky 162.35 300** *e*PKPDF **PKPdf 00 33 45.6 -0.7**
KRLC *e*PKPAB **PKPab 00 34 34.5 +0.6**
KRLC AMS AMS 01 45 30.0
comp=Z,2µm,25.2s
**EGYH Egyhazaskeszo 162.37 291** PKPDF **PKPdf 00 33 47.9 +1.5**
**DPC Dobruska-Polom 162.57 301** *e*PKPDF **PKPdf 00 33 44.0 -2.5**
DPC *e*PKPAB **PKPab 00 34 33.3 -1.5**
DPC AMS AMS 01 55 50.0
comp=Z,1µm,17.5s
**OSTC Ostas 162.59 302** *e*PKPDF **PKPdf 00 33 45.6 -0.9**
OSTC *ex* **PKPab 00 34 35.2 +0.4**
OSTC AMS AMS 01 51 40.0
comp=Z,2µm,19.8s
**VRAC Vranov 162.62 298** ⇑P **PKPdf 00 33 47.2 +0.7**
**VRAC Vranov 162.62 298** PKP **PKPdf 00 33 46.4 -0.1**
comp=Z,6.8nm,1.0s,baz=225,slow=2.4,SNR=9.7
**VRAC Vranov 162.62 298** *e*PKP **PKPdf 00 33 46.2 -0.4**
VRAC *e* 00 34 35.0
VRAC *e*PP **PP 00 38 19.0 -1.1**
**RGN Rugen 162.64 317** *e*PKPdf **PKPdf 00 33 46.0 -0.3**
baz=66,slow=0.9
**CHVC Chvalec 162.68 302** *e*PKPDF **PKPdf 00 33 46.0 -0.6**
CHVC *e*PKPAB **PKPab 00 34 29.6 -5.6**
CHVC AMS AMS 01 51 50.0
comp=Z,1µm,17.0s
**LNIZ Loecknitz 162.70 313** *e*PKPdf **PKPdf 00 33 46.3 -0.2**
baz=66,slow=0.9
LNIZ *e*PKPab **PKPab 00 34 35.8 +0.7**
baz=66,slow=0.9
**UPC Upice 162.72 302** *e*PKPDF **PKPdf 00 33 46.7 +0.1**
UPC AMS AMS 01 52 20.0
comp=Z,2µm,19.8s
**KRUC Moravsky 162.80 297** *e*PKP **PKPdf 00 33 46.2 -0.5**
KRUC *e*PP **PP 00 38 23.7 +2.7**
**CONA Conrad Observa 163.31 294** *e*P **PKPdf 00 33 45.8 -1.6**
comp=Z,18nm,1.7s
**TREC Trest 163.34 298** *e*PKPDF **PKPdf 00 33 47.7 +0.4**
TREC AMS AMS 01 53 20.0
comp=Z,2µm,21.7s
**RUE Ruedersdorf 163.37 310** *e*PKPdf **PKPdf 00 33 47.1 0.0**
baz=66,slow=0.9
RUE *e*PKPab **PKPab 00 34 38.3 +0.2**
baz=66,slow=0.9
**PVCC Panska Ves 163.60 303** *e*PKPDF **PKPdf 00 33 48.9 +1.5**
PVCC AMS AMS 01 51 10.0
comp=Z,2µm,21.4s
**ARSA Arzberg 163.61 291** *e*P **PKPdf 00 33 46.6 -1.0**
comp=Z,27nm,1.7s,SNR=5.7
ARSA *e*P **PKPab 00 34 39.7 +0.2**
comp=Z,16nm,1.4s
**PRU Pruhonice 163.77 301** *e*PKPDF **PKPdf 00 33 46.0 -1.6**
PRU *e*PKPAB **PKPab 00 34 40.7 +0.7**
PRU AMS AMS 01 53 00.0
comp=Z,2µm,17.5s
**BRG Berggiesshubel 163.87 305**‖ *e*PKPf 00 33 46.1
BRG Amp 00 33 51.6
comp=Z,148nm,2.2s
BRG *ex* x 00 33 57.7
BRG Amp 00 33 58.5
comp=Z,27nm,1.5s
BRG *e*PKPab **PKPab 00 34 41.0 +0.5**
BRG Amp 00 34 44.8
comp=Z,88nm,1.9s
BRG *ex* x 00 35 07.1
BRG Amp 00 35 16.6
comp=Z,22nm,1.5s
**BRG Berggiesshubel 163.87 305** *e*PKIKP **PKPdf 00 33 46.0 -1.7**
BRG pmax pmax
comp=Z,148nm,2.3s
**BRG Berggiesshubel 163.87 305** *e*PKPdf **PKPdf 00 33 46.8 -0.8**
baz=66,slow=0.9
BRG *e*PKPab **PKPab 00 34 40.3 -0.1**
baz=66,slow=0.9
**SOKA Soboth 163.99 289** *e*P **PKPdf 00 33 47.0 -1.1**
comp=Z,34nm,1.5s,SNR=6.5
**CKRC Cesky Krumlov 164.19 297** *e*PKPDF **PKPdf 00 33 47.4 -0.7**
CKRC *e*PKPAB **PKPab 00 34 41.1 -0.9**
**FBE Freiberg 164.21 305** *e*PKPab **PKPab 00 34 42.8 +0.9**
baz=66,slow=0.9
**CLL Collm 164.28 307** *i* PKIKP **PKPdf 00 33 47.1 -0.9**
CLL *i* 00 34 40.8
CLL pmax pmax
comp=Z,28nm,1.3s
CLL pmax pmax
comp=Z,49nm,1.5s
CLL MLR MLR
comp=Z,1µm,19.2s
**CLL Collm 164.28 307** *i* PKPdf **PKPdf 00 33 47.1 -0.9**
comp=Z,28nm,1.3s
CLL *i* PKPab **PKPab 00 34 40.8 -1.4**
comp=Z,49nm,1.5s
CLL *i* sPKPab **sPKPab 00 34 47.9 +2.9**
CLL *e*PP **PP 00 38 28.0 -0.6**
CLL *e*PPP PPP 00 42 19.0
CLL *e*PPPrev 00 45 59.0
CLL *e*PSKS 00 48 48.0
CLL *e*PPS PPS 00 52 00.0
CLL *e*SS SS 00 58 59.0 -0.9
CLL *e*PSPS 01 00 30.0
CLL *e*SSS SSS 01 05 20.0
CLL *e*SSSS 01 09 30.0
CLL LmV 01 59 00.0
comp=Z,1µm,19.2s
**CLL Collm 164.28 307** *e*PKPdf **PKPdf 00 33 48.8 +0.8**
baz=66,slow=0.9
CLL *e*PKPab **PKPab 00 34 43.1 +0.9**
baz=66,slow=0.9
**MOA Molln 164.39 294** *e*P **PKPdf 00 33 46.2 -2.1**
comp=Z,18nm,1.4s
MOA *e*P **pPKPab 00 34 44.7 -0.3**
comp=Z,22nm,1.9s
**BSEG Bad Segeberg 164.45 318** *e*PKPdf **PKPdf 00 33 48.5 +0.5**
baz=66,slow=0.9
BSEG *e*PKPab **PKPab 00 34 43.1 +0.3**
baz=66,slow=0.9
**GEC2 GERESS Array S 164.58 298** **PKPdf 00 33 47.0 -1.5**
**GEC2 GERESS Array S 164.58 298** *e*PKPdf **PKPdf 00 33 48.8 +0.3**
baz=66,slow=0.9
GEC2 *e*PKPab **PKPab 00 34 43.7 -0.1**
baz=66,slow=0.9
**GERES GERESS Array B 164.58 298** PKP **PKPdf 00 33 47.0 -1.5**
comp=Z,1.6nm,1.0s,baz=124,slow=0.5,SNR=11
GERES PKPab **PKPab 00 34 44.4 +0.7**
comp=Z,2.2nm,0.8s,baz=90,slow=4.0,SNR=7.0
GERES PP **PP 00 38 32.2 +1.7**
comp=Z,1.2nm,0.9s,baz=56,slow=5.5,SNR=4.9
**GERES GERESS Array B 164.58 298** PKIKP **PKPdf 00 33 47.0 -1.5**
**GERES GERESS Array B 164.58 298** **PKPdf 00 33 46.3 -2.2**
**KHC Kasperske Hory 164.59 299** *e*PKPDF **PKPdf 00 33 47.6 -0.8**
KHC *e*PKPAB **PKPab 00 34 44.0 +0.3**
KHC AMS AMS 01 53 40.0
comp=Z,2µm,19.4s
**FLTG Flechtingen 164.83 312** *e*PKPdf **PKPdf 00 33 48.2 -0.2**
baz=66,slow=0.9
FLTG *e*PKPab **PKPab 00 34 44.0 -0.6**
baz=66,slow=0.9
**TANN Tannenbergstha 164.92 304** *e*PKPdf **PKPdf 00 33 48.0 -0.7**
baz=66,slow=0.9
TANN *e*PKPab **PKPab 00 34 44.8 -0.3**
baz=66,slow=0.9
**MYKA Terra Mystica 164.95 289** *e*P **PKPdf 00 33 49.0 +0.1**
comp=Z,32nm,1.7s
**NKC Novy Kostel 164.99 304** *e*PKPDF **PKPdf 00 33 49.2 +0.5**
NKC AMS AMS 01 53 50.0
comp=Z,2µm,19.8s
**WERD Werda 165.00 304** *e*PKPdf **PKPdf 00 33 48.5 -0.2**
baz=66,slow=0.9
WERD *e*PKPab **PKPab 00 34 45.1 -0.3**
baz=66,slow=0.9
**WERN Wernitzgruen 165.01 304** *e*PKPdf **PKPdf 00 33 48.5 -0.2**
baz=66,slow=0.9
WERN *e*PKPab **PKPab 00 34 46.0 +0.4**
baz=66,slow=0.9
**GUNZ Gunzen 165.01 304** *e*PKPdf **PKPdf 00 33 48.5 -0.2**
baz=66,slow=0.9
GUNZ *e*PKPab **PKPab 00 34 46.0 +0.4**
baz=66,slow=0.9
**NEUB Neuenburg 165.03 308** *e*PKPab **PKPab 00 34 45.4 -0.1**
baz=66,slow=0.9
**WET Wettzell 165.04 299** *e*PKPdf **PKPdf 00 33 48.5 -0.3**
baz=66,slow=0.9
**PLN Plauen 165.07 305** *e*PKPdf **PKPdf 00 33 48.2 -0.5**
baz=66,slow=0.9
PLN *e*PKPab **PKPab 00 34 45.7 -0.1**
baz=66,slow=0.9
**KBA Koelnbreinsper 165.11 291** *e*P **PKPdf 00 33 47.5 -1.6**
comp=Z,18nm,1.2s
**KEST Kesra 165.11 244** PKP **PKPdf 00 33 49.8 +0.4**
comp=Z,10nm,1.1s,baz=158,slow=3.0,SNR=5.4
KEST PKPab **pPKPab 00 34 48.0 -0.5**
comp=Z,32nm,0.9s,baz=225,slow=2.2,SNR=16
KEST PP **PP 00 38 36.5 +3.1**
comp=Z,3.1nm,0.9s,baz=101,slow=5.3,SNR=4.3
**KEST Kesra 165.11 244** **PKPdf 00 33 48.2 -1.2**
**ASSE Asse, Remlinge 165.23 312** *e*PKPab **PKPab 00 34 46.0 -0.3**
baz=66,slow=0.9
**MANZ Manzenberg 165.27 303** *e*PKPdf **PKPdf 00 33 49.1 +0.1**
baz=66,slow=0.9
MANZ *e*PKPab **PKPab 00 34 46.5 -0.2**
baz=66,slow=0.9
**ROTZ Rotzenmuhle 165.28 302** *e*PKPab **PKPab 00 34 47.1 +0.4**
baz=66,slow=0.9
**MOX Moxa 165.34 306** *e*PKPab **PKPab 00 34 48.2 +1.3**
baz=66,slow=0.9
**NRDL Niedersach Rie 165.35 314** *e*PKPdf **PKPdf 00 33 49.1 +0.3**
baz=66,slow=0.9
NRDL *e*PKPab **pPKPab 00 34 47.9 -0.9**
baz=66,slow=0.9
**RJOB Jochberg 165.39 294** *e*PKPdf **PKPdf 00 33 49.1 -0.1**
baz=66,slow=0.9
**CLZ Clausthal 165.53 311** *e*PKPab **PKPab 00 34 47.7 -0.1**
baz=66,slow=0.9
**RETH Rethem/Aller, 165.60 316** *e*PKPdf **PKPdf 00 33 48.5 -0.5**
baz=66,slow=0.9
RETH *e*PKPab **PKPab 00 34 48.5 +0.6**
baz=66,slow=0.9
**ABTA Abfaltersbach 165.71 290** *e*P **PKPdf 00 33 48.0 -1.6**
comp=Z,42nm,1.5s,SNR=7.4
**GTTG Gottingen 165.90 311** *e*PKPab **PKPab 00 34 49.4 0.0**
baz=66,slow=0.9
**GRF Grafenberg Arr 165.91 303** *e*PKPdf **PKPdf 00 33 49.9 +0.4**
baz=66,slow=0.9
GRF *e*PKPab **pPKPab 00 34 50.5 -1.1**
baz=66,slow=0.9
GRF *e*L L 01 52 02.5
comp=Z,2µm,21.4s
**UBBA Unterbreizbach 166.21 308** *e*PKPab **PKPab 00 34 51.3 +0.8**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=66,slow=0.9 | | | | | | | | |
| **WTTA** | **Wattenberg** | **166.24** | **293** | *e*P | | **PKPdf** | **00 33 49.2** | **-0.8** |
| | comp=Z,79nm,1.6s,SNR=18 | | | | | | | | |
| **WATA** | **Walderalm** | **166.27** | **293** | *e*P | | **PKPdf** | **00 33 49.4** | **-0.6** |
| | comp=Z,36nm,1.4s,SNR=8.6 | | | | | | | | |
| WATA | | | | *e*P | | **PKPab** | **00 34 51.6** | **+0.3** |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **166.30** | **296** | *e*PKPdf | | **PKPdf** | **00 33 50.2** | **+0.3** |
| | baz=66,slow=0.9 | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **166.53** | **293** | *e*P | | **PKPdf** | **00 33 49.2** | **-1.0** |
| | comp=Z,48nm,1.5s | | | | | | | | |
| SQTA | | | | *e*P | | **PKPab** | **00 34 52.8** | **+0.3** |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **MOTA** | **Moosalm** | **166.58** | **293** | *e*P | | **PKPdf** | **00 33 48.9** | **-1.4** |
| | comp=Z,39nm,1.3s,SNR=7.3 | | | | | | | | |
| MOTA | | | | *e*P | | **PKPab** | **00 34 52.4** | **-0.4** |
| | comp=Z,25nm,1.5s | | | | | | | | |
| **IBBN** | **Ibbenburen** | **166.66** | **317** | *e*PKPdf | | **PKPdf** | **00 33 49.9** | **0.0** |
| | baz=66,slow=0.9 | | | | | | | | |
| IBBN | | | | *e*PKPab | | **PKPab** | **00 34 52.2** | **-0.4** |
| | baz=66,slow=0.9 | | | | | | | | |
| **RETA** | **Reutte** | **166.78** | **294** | *e*P | | **PKPdf** | **00 33 50.7** | **+0.4** |
| | comp=Z,30nm,1.5s,SNR=6.4 | | | | | | | | |
| **FETA** | **Feichten** | **166.89** | **292** | *e*P | | **PKPdf** | **00 33 49.6** | **-0.9** |
| | comp=Z,38nm,1.4s,SNR=13 | | | | | | | | |
| FETA | | | | *e*P | | **PKPab** | **00 34 54.4** | **+0.3** |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **KASTN** | **Kahler Asten** | **166.91** | **312** | *e*PKPdf | | **PKPdf** | **00 33 50.2** | **0.0** |
| | baz=66,slow=0.9 | | | | | | | | |
| **MILB** | **Miltenberg** | **167.03** | **305** | *e*PKPdf | | **PKPdf** | **00 33 50.8** | **+0.4** |
| | baz=66,slow=0.9 | | | | | | | | |
| MILB | | | | *e*PKPab | | **PKPab** | **00 34 54.7** | **+0.3** |
| | baz=66,slow=0.9 | | | | | | | | |
| **UBR** | **Ueberruh** | **167.18** | **295** | *e*PKPdf | | **PKPdf** | **00 33 49.4** | **-1.2** |
| | baz=66,slow=0.9 | | | | | | | | |
| **TNS** | **Taunus Mts** | **167.36** | **308** | *e*PKPab | | **PKPab** | **00 34 56.1** | **+0.2** |
| | baz=66,slow=0.9 | | | | | | | | |
| **BUG** | **Bochum--Univer** | **167.40** | **314** | *e*PKPdf | | **PKPdf** | **00 33 51.1** | **+0.6** |
| | baz=66,slow=0.9 | | | | | | | | |
| **DAVA** | **Damuels** | **167.41** | **294** | *e*P | | **PKPdf** | **00 33 50.0** | **-1.0** |
| | comp=Z,44nm,1.4s,SNR=6.4 | | | | | | | | |
| DAVA | | | | *e*P | | **pPKPab** | **00 34 57.9** | **-0.6** |
| | comp=Z,25nm,1.4s | | | | | | | | |
| **STU** | **Stuttgart** | **167.47** | **301** | *e*PKPdf | | **PKPdf** | **00 33 50.5** | **-0.2** |
| | baz=66,slow=0.9 | | | | | | | | |
| STU | | | | *e*PKPab | | **pPKPab** | **00 34 58.1** | **-0.4** |
| | baz=66,slow=0.9 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **167.50** | **291** | PKPab | | **PKPab** | **00 34 57.0** | **+0.1** |
| | comp=Z,5.7nm,0.6s,baz=241,slow=2.7,SNR=5.0 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **167.50** | **291** | PKP2 | | **PKPab** | **00 34 57.0** | **+0.1** |
| **EKA** | **Eskdalemuir Ar** | **167.84** | **349** | PKP | | **PKPdf** | **00 33 51.6** | **+0.9** |
| | comp=Z,3.9nm,0.9s,baz=27,slow=3.9,SNR=5.0 | | | | | | | | |
| **AHRW** | **Bad Neuenahr-A** | **167.98** | **311** | *e*PKPab | | **PKPab** | **00 34 59.8** | **+1.3** |
| | baz=66,slow=0.9 | | | | | | | | |
| **BTNL** | **Ternell** | **168.47** | **313** | *d*PKPdf | | **PKPdf** | **00 33 50.2** | **-1.2** |
| **MEM** | **Membach** | **168.52** | **313** | *d*PKPdf | | **PKPdf** | **00 33 50.9** | **-0.5** |
| **BHOU** | **Houvegnez** | **168.66** | **312** | *d*PKPdf | | **PKPdf** | **00 33 51.7** | **+0.2** |
| **BSTI** | **Sart Tilman** | **168.77** | **314** | *d*PKP | | **PKPdf** | **00 33 51.0** | **-0.5** |
| **WLF** | **Walferdange** | **168.93** | **309** | *d*PKPdf | | **PKPdf** | **00 33 51.5** | **-0.2** |
| **BCLA** | **Clavier** | **169.00** | **314** | *d*PKPdf | | **PKPdf** | **00 33 50.8** | **-0.8** |
| **BGES** | **Gesves** | **169.13** | **314** | *d*PKP | | **PKPdf** | **00 33 53.1** | **+1.4** |
| **MDT** | **Midelt** | **169.17** | **192** | PKPab | | **PKPab** | **00 35 04.5** | **+0.2** |
| | comp=Z,20nm,1.1s,baz=162,slow=2.2,SNR=9.2 | | | | | | | | |
| **RCHB** | **Rochefort** | **169.19** | **313** | *d*PKPdf | | **PKPdf** | **00 33 51.3** | **-0.4** |
| **BMRD** | **Maredsous** | **169.35** | **314** | *d*PKP | | **PKPdf** | **00 33 51.6** | **-0.3** |
| **SNF** | **Seneffe** | **169.48** | **316** | *d*PKPdf | | **PKPdf** | **00 33 51.7** | **-0.2** |
| **DOU** | **Dourbes** | **169.56** | **313** | *d*PKPdf | | **PKPdf** | **00 33 51.5** | **-0.5** |
| **ESDC** | **Sonseca Array** | **175.50** | **214** | PKP | | **PKPdf** | **00 33 55.5** | **+0.5** |
| | comp=Z,7.0nm,1.0s,baz=337,slow=1.7,SNR=13 | | | | | | | | |
| ESDC | | | | PKPab | | **PKPab** | **00 35 32.5** | **+0.3** |
| | comp=Z,3.7nm,1.0s,baz=160,slow=3.8,SNR=5.9 | | | | | | | | |

*NEIC* ***14*** *00:21:25.6±1.4, 19.°16S±0.°02×69.°43W±0.°06, h104km±5km Error ellipse: s-maj=9.1km s-min=3.0km az=78.0*
*GUC* ***14*** *00:21:25.7±0.6, 19.°14S×69.°45W, h105km±3km, ML4.4*
*IDC* ***14*** *00:21:26.4±0.9, 19.°13S×69.°20W, h104km±7km, mb3.7/4, mb1 3.9/7, mb1mx3.6/47, mbtmp4.2/7, MS2.5/1, Ms1 2.7/1, ms1mx2.5/62, Error ellipse: s-maj=27.4km s-min=22.0km az=109.0*
*VAO* ***14*** *00:21:27.3±0.9, 19.°17S×69.°10W, h104km±7km, mb4.3*
**ISC 14 00:21:25.0±0.6, 19°20S±0.°03×69°44W±0.°06, h106km±5km, n81, σ1°45/98, mb4.2/3, 4C-4D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **0.52** | **154** | | **Pn** | **00 21 42.8** | **+0.6** |
| GO01 | | | | Sn | **Sn** | **00 21 55.5** | **+0.5** |
| **GO01** | **Chusmiza** | **0.52** | **154** | ⇓*i*P | **Pn** | **00 21 42.9** | **+0.6** |
| GO01 | | | | *i* S | **Sn** | **00 21 55.8** | **+0.7** |
| GO01 | | | | IAML | | 00 21 57.0 | |
| | comp=N,51μm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **0.60** | **200** | | **Pn** | **00 21 42.0** | **-0.4** |
| PB11 | | | | Sn | **Sn** | **00 21 55.5** | **+0.1** |
| **PB16** | **IPOC Station P** | **0.86** | **355** | | **Pn** | **00 21 45.6** | **+0.4** |
| PB16 | | | | Sn | **Sn** | **00 22 00.3** | **+0.1** |
| **PB16** | **IPOC Station P** | **0.86** | **355** | ⇓*i*P | **Pn** | **00 21 45.8** | **+0.6** |
| PB16 | | | | *i* S | **Sn** | **00 22 00.4** | **+0.2** |
| PB16 | | | | IAML | | 00 22 01.7 | |
| | comp=E,6μm,0.4s | | | | | | |
| **PB08** | **IPOC Station P** | **0.97** | **164** | | **Pn** | **00 21 47.2** | **+1.2** |
| PB08 | | | | Sn | **Sn** | **00 22 03.0** | **+1.1** |
| **PB08** | **IPOC Station P** | **0.97** | **164** | ⇑*i*P | **Pn** | **00 21 47.3** | **+1.2** |
| PB08 | | | | *i* S | **Sn** | **00 22 03.2** | **+1.3** |
| PB08 | | | | IAML | | 00 22 04.4 | |
| | comp=E,13μm,0.2s | | | | | | |
| **PB12** | **IPOC Station P** | **1.03** | **304** | Pn | **Pn** | **00 21 46.0** | **-0.3** |
| PB12 | | | | Sn | **Sn** | **00 22 01.2** | **-1.2** |
| **PB12** | **IPOC Station P** | **1.03** | **304** | ⇑*i*P | **Pn** | **00 21 46.1** | **-0.2** |
| PB12 | | | | *i* S | **Sn** | **00 22 01.4** | **-1.0** |
| PB12 | | | | IAML | | 00 22 02.3 | |
| | comp=N,8μm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **1.16** | **202** | ⇑*i*P | **Pn** | **00 21 48.3** | **+0.5** |
| HMBC | | | | *i* S | **Sn** | **00 22 05.7** | **+0.8** |
| HMBC | | | | IAML | | 00 22 08.7 | |
| | comp=E,7μm,0.5s | | | | | | |
| **AP01** | **Chacalluta** | **1.19** | **314** | | **Pn** | **00 21 48.1** | **+0.1** |
| AP01 | | | | Sn | **Sn** | **00 22 05.0** | **-0.3** |
| **AP01** | **Chacalluta** | **1.19** | **314** | *e*P | **Pn** | **00 21 47.7** | **-0.2** |
| AP01 | | | | *e*S | **Sn** | **00 22 04.6** | **-0.7** |
| AP01 | | | | IAML | | 00 22 06.8 | |
| | comp=N,5μm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **1.25** | **211** | | **Pn** | **00 21 49.1** | **+0.4** |
| **TA02** | **Huaiquique** | **1.25** | **211** | *i* P | **Pn** | **00 21 48.9** | **+0.2** |
| TA02 | | | | IAML | | 00 22 10.5 | |
| | comp=E,14μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.53** | **207** | | **Pn** | **00 21 52.7** | **+0.7** |
| **TA01** | **Diego Aracena** | **1.53** | **207** | *e*P | **Pn** | **00 21 52.1** | **+0.1** |
| TA01 | | | | *e*S | **Sn** | **00 22 12.1** | **-0.4** |
| TA01 | | | | IAML | | 00 22 19.4 | |
| | comp=N,3μm,0.4s | | | | | | |
| **PATCX** | **Punta Patache** | **1.75** | **203** | Pn | **Pn** | **00 21 55.4** | **+0.6** |
| **PATCX** | **Punta Patache** | **1.75** | **203** | *i* P | **Pn** | **00 21 55.2** | **+0.4** |
| PATCX | | | | IAML | | 00 22 24.5 | |
| | comp=E,4μm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.84** | **182** | | **Pn** | **00 21 56.9** | **+1.1** |
| **PB01** | **IPOC Station P** | **1.84** | **182** | ⇑*i*P | **Pn** | **00 21 56.9** | **+1.1** |
| PB01 | | | | *i* S | **Sn** | **00 22 18.1** | **-1.3** |
| PB01 | | | | IAML | | 00 22 23.1 | |
| | comp=E,3μm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **2.15** | **192** | | **Pn** | **00 22 01.0** | **+1.0** |
| **PB02** | **IPOC Station P** | **2.15** | **192** | *e*P | **Pn** | **00 22 00.4** | **+0.5** |
| PB02 | | | | *e*S | **Sn** | **00 22 27.6** | **+0.9** |
| PB02 | | | | IAML | | 00 22 36.8 | |
| | comp=E,6μm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **2.55** | **189** | | **Pn** | **00 22 06.5** | **+1.3** |
| **PB07** | **IPOC Station P** | **2.55** | **189** | *e*P | **Pn** | **00 22 05.9** | **+0.7** |
| PB07 | | | | *e*S | **Sn** | **00 22 29.9** | **-6.1** |
| PB07 | | | | IAML | | 00 22 45.6 | |
| | comp=E,3μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.59** | **176** | | **Pn** | **00 22 06.6** | **+0.9** |
| **PB09** | **IPOC Station P** | **2.59** | **176** | *e*P | **Pn** | **00 22 07.3** | **+1.6** |
| PB09 | | | | *e*S | **Sn** | **00 22 29.9** | **-7.0** |
| **PB03** | **IPOC Station P** | **2.85** | **186** | | **Pn** | **00 22 10.3** | **+1.1** |
| **PB03** | **IPOC Station P** | **2.85** | **186** | ⇓*e*P | **Pn** | **00 22 09.9** | **+0.8** |
| PB03 | | | | IAML | | 00 22 56.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **3.15** | **23** | P | **Pn** | **00 22 14.2** | **+0.7** |
| | comp=E,8.9nm,0.3s,baz=200,slow=7.2,SNR=364 | | | | | | |
| LPAZ | | | | LR | LR | 00 23 09.6 | |
| | comp=E,93nm,21.6s,baz=233,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **3.15** | **23** | | **Pn** | **00 22 15.1** | **+1.5** |
| **PB04** | **IPOC Station P** | **3.19** | **192** | | **Pn** | **00 22 15.4** | **+1.8** |
| **PB04** | **IPOC Station P** | **3.19** | **192** | *e*P | **Pn** | **00 22 14.6** | **+0.9** |
| PB04 | | | | IAML | | 00 23 05.1 | |
| | comp=N,1μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **3.43** | **172** | P | **Pn** | **00 22 18.4** | **+1.4** |
| | comp=N,14nm,0.3s,baz=360,slow=12,SNR=75 | | | | | | |
| **LVC** | **Limon Verde** | **3.43** | **172** | | **Pn** | **00 22 18.6** | **+1.7** |
| **LVC** | **Limon Verde** | **3.43** | **172** | ⇓*e*P | **Pn** | **00 22 18.7** | **+1.7** |
| **LVC** | **Limon Verde** | **3.43** | **172** | *e*P | **Pn** | **00 22 19.0** | **+2.0** |
| **PB06** | **IPOC Station P** | **3.49** | **182** | | **Pn** | **00 22 18.7** | **+1.1** |
| **PB06** | **IPOC Station P** | **3.49** | **182** | *e*P | **Pn** | **00 22 18.9** | **+1.2** |
| PB06 | | | | IAML | | 00 23 14.0 | |
| | comp=N,627nm,0.6s | | | | | | |
| **PB15** | **IPOC Station P** | **3.99** | **180** | | **Pn** | **00 22 25.5** | **+1.1** |
| **PB10** | **IPOC Station P** | **4.42** | **193** | Pn | **Pn** | **00 22 30.1** | **+0.1** |
| **PB14** | **IPOC Station P** | **5.47** | **189** | Pn | **Pn** | **00 22 43.5** | **-1.0** |
| **AC02** | **Maricunga** | **7.61** | **178** | | **Pn** | **00 23 14.1** | **+0.5** |
| **SIV** | **San Ignacio** | **8.59** | **69** | P | **Pn** | **00 23 25.0** | **-1.6** |
| | comp=N,2.8nm,0.3s,baz=254,slow=11,SNR=70 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.52** | **71** | *e*P | **Pn** | **00 23 50.3** | **-2.5** |
| **VILB** | **Vilhena** | **10.83** | **56** | *e*P | **Pn** | **00 23 55.1** | **-2.0** |
| **CO03** | **El Pedregal** | **11.65** | **185** | Pn | **Pn** | **00 24 05.7** | **-2.2** |
| **SALV** | **Santo Antonio** | **13.51** | **78** | *e*P | **Pn** | **00 24 29.7** | **-2.7** |
| **MT02** | **Curacav** | **14.09** | **186** | Pn | **Pn** | **00 24 40.0** | **+0.2** |
| **PDRB** | **Porto dos Gac** | **14.38** | **60** | *e*P | **Pn** | **00 24 44.0** | **+0.3** |
| **MT01** | **Popeta** | **14.70** | **186** | Pn | **Pn** | **00 24 48.3** | **+0.7** |
| **CLDB** | **Colider** | **15.55** | **60** | *e*P | **P** | **00 24 58.0** | **-2.5** |
| **ITAB** | **Concordia** | **17.79** | **120** | P | **Pn** | **00 25 26.4** | **+0.5** |
| ITAB | | | | IAmb | IAmb | 00 25 39.6 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **NPGB** | **Novo Progresso** | **18.25** | **50** | *e*P | **P** | **00 25 29.2** | **-1.1** |
| **SNDB** | **Serra Nova Dou** | **18.88** | **70** | *e*P | **P** | **00 25 36.5** | **-0.8** |
| **PLTB** | **Pedras Altas** | **18.96** | **134** | P | **Pn** | **00 25 39.5** | **-0.3** |
| **ITTB** | **Itaituba** | **19.90** | **44** | *e*P | **P** | **00 25 47.2** | **-1.1** |
| **IPMB** | **Ipameri, GO** | **20.15** | **90** | *e*P | **P** | **00 25 50.5** | **-0.6** |
| **PTGA** | **Pitinga** | **20.57** | **28** | P | **P** | **00 25 53.5** | **-2.0** |
| | comp=Z,1.8nm,0.3s,baz=219,slow=20,SNR=6.6 | | | | | | |
| **BDFB** | **Brasilia** | **20.74** | **84** | P | **P** | **00 25 57.5** | **0.0** |
| | comp=Z,4.5nm,0.5s,baz=257,slow=9.6,SNR=11 | | | | | | |
| **BDFB** | **Brasilia** | **20.74** | **84** | P | **P** | **00 25 57.4** | **0.0** |
| BDFB | | | | IAmb | IAmb | 00 26 00.6 | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **BOAV** | **Boa Vista** | **23.18** | **23** | *e*P | **P** | **00 26 23.2** | **+0.6** |
| **SMTB** | **Santa Maria do** | **23.52** | **67** | *e*P | **P** | **00 26 26.4** | **+0.6** |
| **MAN01** | **Angra dos Reis** | **24.04** | **103** | *e*P | **P** | **00 26 30.6** | **+0.1** |
| **JANB** | **Januaria** | **24.35** | **84** | *e*P | **P** | **00 26 32.9** | **-0.4** |
| **SDBA** | **SAO DESIDERIO** | **24.53** | **78** | *e*P | **P** | **00 26 34.9** | **-0.1** |
| **MCPB** | **Macapa, AP** | **25.32** | **44** | *e*P | **P** | **00 26 43.1** | **+1.1** |
| **GDU01** | **Guandu, BA** | **29.12** | **84** | *e*P | **P** | **00 27 14.2** | **-2.0** |
| **NBPN** | **Ponto Novo - B** | **29.39** | **78** | *e*P | **P** | **00 27 17.7** | **-0.8** |
| **ROSB** | **Rosrio** | **29.58** | **60** | *e*P | **P** | **00 27 20.4** | **+0.3** |
| **NBLA** | **Lagarto - SE** | **31.58** | **80** | *e*P | **P** | **00 27 37.3** | **-0.5** |
| **NBAN** | **Anadia - AL** | **33.42** | **78** | *e*P | **P** | **00 27 53.1** | **-0.9** |
| **CELP** | **Cerrillos** | **37.15** | **5** | P | **P** | **00 28 26.0** | **+0.3** |
| **QSPA** | **South Pole Qui** | **70.98** | **180** | P | **P** | **00 32 33.7** | **+2.7** |
| QSPA | | | | IAmb | IAmb | 00 32 45.7 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.06** | **71** | P | **P** | **00 33 06.5** | **-0.6** |
| | comp=Z,2.4nm,0.6s,baz=252,slow=5.1,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.06** | **71** | P | **P** | **00 33 06.4** | **-0.7** |
| TORD | | | | IAmb | IAmb | 00 33 12.9 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.86** | **341** | P | **P** | **00 34 08.4** | **+1.7** |
| | comp=Z,2.3nm,0.9s,baz=135,slow=5.0,SNR=8.4 | | | | | | |
| YKA | | | | pP | **pP** | **00 34 35.4** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=134,slow=4.9,SNR=4.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **27.07** | **279** | T | T | 02 59 59.0 | |
| | baz=101,slow=74,SNR=49 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **27.08** | **279** | T | T | 02 59 57.0 | |
| | baz=101,slow=74,SNR=38 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **27.08** | **279** | T | T | 02 59 56.7 | |
| | baz=101,slow=74,SNR=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.65** | **212** | PKP | **PKiKP** | **00 40 33.5** | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=90,slow=1.0,SNR=4.6 | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **00 41 02.5** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=171,slow=4.5,SNR=2.2 | | | | | | |
| **SONM** | **Songino Array** | **151.24** | **6** | PKPbc | **PKiKP** | **00 41 08.2** | **+1.6** |
| | comp=Z,0.8nm,0.6s,baz=254,slow=1.6,SNR=5.7 | | | | | | |
| SONM | | | | pPKPbc | **pPKPbc** | **00 41 35.6** | **-0.6** |
| | comp=Z,2.0nm,0.8s,baz=325,slow=1.6,SNR=10 | | | | | | |

*TUL* ***14*** *00:32:16±0.9, 36.°46N±0.°03×98.°76W±0.°05, h6km±7km, ML3.7, mb_Lg3.7/103(NEIC), Error ellipse: s-maj=6.3km s-min=3.4km az=112.0*
*IDC* ***14*** *00:32:17.5±0.6, 36.°40N×99.°13W, h0km, mb3.2/1, mb1 3.8/5, mb1mx3.5/72, mbtmp3.5/5, ML4.2/2, Error ellipse: s-maj=6.9km s-min=2.3km az=72.0*
*NEIC* ***14*** *00:32:17.7±1.2, 36.°46N±0.°03×98.°70W±0.°05, h14km±7km, Error ellipse: s-maj=6.6km s-min=4.4km az=107.0*
**ISC 14 00:32:17.0±0.8, 36°46N±0.°06×98°73W±0.°06, h10km, n88, σ0°90/66, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.23** | **251** | Pg | **Pg** | **00 32 20.3** | **-1.4** |
| U32A | | | | Sg | **Sg** | **00 32 23.8** | **-1.1** |
| **OK009** | **Oakdale Elemen** | **1.38** | **129** | | **Pn** | **00 32 41.4** | **-0.9** |
| **OKCFA** | **Oklahoma City** | **1.47** | **135** | | **Pn** | **00 32 43.0** | **-0.5** |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **135** | | **Pn** | **00 32 43.3** | **-0.5** |
| **FNO** | **Franklin** | **1.61** | **138** | | **Pn** | **00 32 45.4** | **-0.1** |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | | **Pn** | **00 32 45.9** | **-1.0** |
| **T35A** | **Sooner Cattle** | **1.84** | **75** | Pn | **Pn** | **00 32 48.5** | **-0.2** |
| T35A | | | | IAmb_Lg | | 00 33 15.3 | |
| | comp=Z,354nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.96** | **0** | Pn | **Pn** | **00 32 50.8** | **+0.5** |
| **X34A** | **Smith Ranch, M** | **1.99** | **158** | | **Pn** | **00 32 51.5** | **+0.8** |
| **W35A** | **Tecumseh** | **1.99** | **130** | | **Pn** | **00 32 50.9** | **+0.1** |
| **TUL1** | **Leonard** | **2.44** | **102** | Pn | **Pn** | **00 32 56.3** | **-0.5** |
| TUL1 | | | | IAmb_Lg | | 00 33 34.8 | |
| | comp=Z,214nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.87** | **238** | Pn | **Pn** | **00 33 03.0** | **+0.2** |
| **KSU1** | **Kansas State U** | **3.13** | **32** | Pn | **Pn** | **00 33 06.4** | **+0.1** |
| **X37A** | **Clayton** | **3.31** | **123** | Pn | **Pn** | **00 33 08.6** | **-0.3** |
| **Z35A** | **Perchaven, San** | **3.35** | **158** | | **Pn** | **00 33 09.6** | **+0.2** |
| **U38A** | **Gravette** | **3.50** | **89** | Pn | **Pn** | **00 33 11.0** | **-0.5** |
| U38A | | | | IAmb_Lg | | 00 34 15.6 | |
| | comp=Z,161nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.87** | **91** | | **Pn** | **00 33 16.0** | **-0.6** |
| HHAR | | | | IAmb_Lg | | 00 34 22.0 | |
| | comp=Z,155nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **191** | | **Pn** | **00 33 16.3** | **-0.7** |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **311** | Pn | **Pn** | **00 33 17.9** | **-0.6** |
| KSCO | | | | IAmb_Lg | | 00 34 32.7 | |
| | comp=Z,263nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.13** | **234** | Pn | **Pn** | **00 33 19.1** | **-1.2** |
| MSTX | | | | IAmb_Lg | | 00 34 31.7 | |
| | comp=Z,221nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | | **Pn** | **00 33 20.9** | **-0.4** |
| W39A | | | | IAmb_Lg | | 00 34 32.7 | |
| | comp=Z,144nm,0.7s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.39** | **13** | | **Pn** | **00 33 22.8** | **-1.0** |
| N33A | | | | IAmb_Lg | | 00 34 47.7 | |
| | comp=Z,137nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.43** | **135** | IAmb_Lg | | 00 34 40.5 | |
| | comp=Z,198nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.50** | **72** | Pn | **Pn** | **00 33 24.8** | **-0.4** |
| S39A | | | | IAmb_Lg | | 00 34 40.5 | |
| | comp=Z,170nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.58** | **166** | | **Pn** | **00 33 25.6** | **-0.7** |
| **T25A** | **Trinidad** | **4.61** | **280** | Pn | **Pn** | **00 33 26.4** | **-0.4** |
| T25A | | | | IAmb_Lg | | 00 34 48.4 | |
| | comp=Z,228nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **4.62** | **113** | | **Pn** | **00 33 26.7** | **-0.1** |
| MIAR | | | | IAmb_Lg | | 00 34 53.9 | |
| | comp=Z,135nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.74** | **89** | Pn | **Pn** | **00 33 28.4** | **-0.2** |
| U40A | | | | IAmb_Lg | | 00 34 50.3 | |
| | comp=Z,172nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **4.96** | **5** | | **Pn** | **00 33 30.6** | **-1.0** |
| BGNE | | | | IAmb_Lg | | 00 35 02.4 | |
| | comp=Z,158nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **5.02** | **28** | | **Pn** | **00 33 32.5** | **+0.1** |
| **237A** | **Washetta, Mont** | **5.06** | **151** | | **Pn** | **00 33 31.7** | **-1.2** |
| 237A | | | | IAmb_Lg | | 00 35 06.4 | |
| | comp=Z,132nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **5.18** | **51** | Pn | **Pn** | **00 33 34.5** | **0.0** |
| **X40A** | **Basin Creek Fa** | **5.20** | **110** | | **Pn** | **00 33 35.2** | **+0.4** |
| X40A | | | | IAmb_Lg | | 00 35 07.3 | |
| | comp=Z,94nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.23** | **80** | Pn | **Pn** | **00 33 35.6** | **+0.3** |
| MGMO | | | | IAmb_Lg | | 00 35 03.3 | |
| | comp=Z,107nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | | **Pn** | **00 33 36.6** | **-0.4** |
| WHAR | | | | IAmb_Lg | | 00 35 10.5 | |
| | comp=Z,166nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.37** | **119** | IAmb_Lg | | 00 35 12.8 | |
| | comp=Z,110nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.38** | **94** | Pn | **Pn** | **00 33 36.7** | **-0.5** |
| FCAR | | | | IAmb_Lg | | 00 35 10.5 | |
| | comp=Z,106nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | | **Pn** | **00 33 36.9** | **-1.0** |
| W41B | | | | IAmb_Lg | | 00 35 09.3 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **5.46** | **68** | Pn | **Pn** | **00 33 38.5** | **+0.1** |
| R40A | | | | IAmb_Lg | | 00 35 11.7 | |
| | comp=Z,105nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.56** | **285** | | **Pn** | **00 33 39.3** | **-0.8** |
| SDCO | | | | IAmb_Lg | | 00 35 20.5 | |
| | comp=Z,79nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.67** | **298** | | **Pn** | **00 33 40.8** | **-0.8** |
| Q24A | | | | IAmb_Lg | | 00 35 27.3 | |
| | comp=Z,82nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.74** | **170** | Pn | **Pn** | **00 33 41.3** | **-1.0** |
| 435B | | | | IAmb_Lg | | 00 35 31.8 | |
| | comp=Z,131nm,0.9s | | | | | | |
| **NATX** | **Nacogdoches** | **5.78** | **143** | IAmb_Lg | | 00 35 32.9 | |
| | comp=Z,130nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **5.83** | **121** | IAmb_Lg | | 00 35 31.5 | |
| | comp=Z,120nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **189** | IAmb_Lg | | 00 35 38.8 | |
| | comp=Z,144nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **6.13** | **91** | Pn | **Pn** | **00 33 47.3** | **-0.3** |
| **K31A** | **O'Neill** | **6.16** | **360** | IAmb_Lg | | 00 35 38.0 | |
| | comp=Z,138nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.18** | **73** | Pn | **Pn** | **00 33 48.6** | **+0.3** |
| **CCAR** | **Cane Creek** | **6.24** | **112** | IAmb_Lg | | 00 35 52.7 | |
| | comp=Z,111nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.37** | **304** | | **Pn** | **00 33 50.1** | **-1.0** |
| **ANMO** | **Albuquerque** | **6.46** | **259** | | **Pn** | **00 33 51.9** | **-0.5** |
| **PBMO** | **Poplar Bluff** | **6.69** | **85** | IAmb_Lg | | 00 35 56.3 | |
| | comp=Z,81nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.80** | **75** | IAmb_Lg | | 00 35 53.7 | |
| | comp=Z,98nm,0.7s | | | | | | |
| **BNM** | **Barren Blte** | **6.85** | **253** | Pn | **Pn** | **00 33 57.0** | **-0.7** |
| **GNAR** | **Gosnell** | **7.06** | **91** | IAmb_Lg | | 00 36 00.8 | |
| | comp=Z,105nm,0.7s | | | | | | |
| **SLM** | **Saint Louis** | **7.09** | **70** | IAmb_Lg | | 00 36 01.3 | |
| | comp=Z,132nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.13** | **315** | | **Pn** | **00 34 01.3** | **-0.4** |
| PHWY | | | | IAmb_Lg | | 00 36 09.8 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.17** | **310** | | **Pn** | **00 34 01.9** | **-0.3** |
| N23A | | | | IAmb_Lg | | 00 36 07.2 | |
| | comp=Z,113nm,0.9s | | | | | | |
| **PEBM** | **Pemiscott Bayo** | **7.17** | **90** | IAmb_Lg | | 00 36 22.1 | |
| | comp=Z,144nm,0.8s | | | | | | |
| **MET** | **Memphis--Engin** | **7.27** | **98** | IAmb_Lg | | 00 36 16.2 | |
| | comp=Z,121nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.28** | **231** | Pn | **Pn** | **00 34 02.5** | **-0.9** |
| MNTX | | | | IAmb_Lg | | 00 36 15.7 | |
| | comp=Z,92nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.45** | **12** | Pn | **P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LLP | Lapu-Lapu | 2.12 | 36⇑ | eP | Pn | 00 43 21.9 | +1.1 |
| LLP | | | | eS | Sb | 00 43 49.5 | -1.6 |
| KCP | Kidapawan | 2.84 | 124⇑ | eP | Pb | 00 43 34.8 | -2.8 |
| RCP | Roxas | 2.95 | 11⇑ | eP | Pn | 00 43 34.0 | +1.8 |
| RCP | | | | eS | Sn | 00 44 08.4 | +1.8 |
| DAV | Davao City (W) | 3.23 | 118 | P | Pb | 00 43 42.9 | -1.2 |
| | 25nm,0.3s,baz=74,slow=1.3,SNR=4.3 | | | | | | |
| DAV | Davao City (W) | 3.23 | 118 | | Pb | 00 43 41.6 | -2.5 |
| MYLDM | Lahad Datu | 5.38 | 231 | | Pn | 00 44 06.3 | +0.6 |
| MYLDM | | | | | Sn | 00 45 05.7 | -0.9 |
| KKM | Kota Kinabalu | 6.92 | 249 | | Pn | 00 44 26.6 | -0.4 |
| TOLI2 | Tolitoli | 7.68 | 195 | | Pn | 00 44 37.9 | +0.6 |
| SBUM | Sibu | 12.09 | 240 | | Pn | 00 45 37.1 | +0.2 |
| SSLB | Suanglung | 15.20 | 354 | | Pn | 00 46 22.7 | +2.6 |
| CM31 | Chiang Mai Arr | 25.07 | 295 | P | P | 00 48 09.0 | -0.4 |
| CM31 | | | | IAmb | IAmb | 00 48 30.9 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 25.07 | 295 | P | P | 00 48 10.2 | +0.8 |
| | comp=Z,0.5nm,0.4s,baz=127,slow=9.0,SNR=5.2 | | | | | | |
| CMAR | Chiang Mai Arr | 25.07 | 295 | P | P | 00 48 08.2 | -1.3 |
| WRA | Warramunga Arr | 30.59 | 158 | P | P | 00 48 57.9 | -0.9 |
| | comp=Z,0.5nm,0.5s,baz=340,slow=9.5,SNR=3.1 | | | | | | |
| WRA | Warramunga Arr | 30.59 | 158 | P | P | 00 48 59.6 | +0.8 |
| WR0 | Warramunga Arr | 30.68 | 158 | P | P | 00 48 59.3 | -0.3 |
| WR0 | | | | IAmb | IAmb | 00 49 07.1 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| SHL | Shillong | 33.82 | 304 | P | P | 00 49 26.1 | -1.3 |
| AS31 | Alice Springs | 33.88 | 161 | P | P | 00 49 27.4 | -0.3 |
| ASAR | Alice Springs | 33.88 | 161 | P | P | 00 49 28.2 | +0.5 |
| | comp=Z,1.5nm,0.6s,baz=340,slow=7.1,SNR=14 | | | | | | |
| ASAR | Alice Springs | 33.88 | 161 | P | P | 00 49 27.3 | -0.4 |
| BBOO | Buckleboo | 43.10 | 163 | P | P | 00 50 44.3 | -0.7 |
| STKA | Stephens Creek | 44.11 | 157 | P | P | 00 50 53.8 | +0.6 |
| | comp=Z,1.2nm,0.3s,baz=337,slow=15,SNR=2.4 | | | | | | |
| ARMA | Armidale | 47.71 | 146 | P | P | 00 51 21.9 | +0.2 |
| MKAR | Makanchi Array | 51.30 | 325 | P | P | 00 51 49.0 | +0.2 |
| | comp=Z,0.3nm,0.5s,baz=123,slow=8.2,SNR=5.9 | | | | | | |
| MKAR | | | | PcP | PcP | 00 53 03.5 | -0.1 |
| | comp=Z,0.8nm,0.6s,baz=114,slow=5.1,SNR=6.8 | | | | | | |
| MKAR | Makanchi Array | 51.30 | 325 | P | P | 00 51 49.2 | +0.4 |
| ZALV | Zalesovo Beam | 54.47 | 334 | P | P | 00 52 11.5 | -0.6 |
| | comp=Z,0.3nm,0.4s,baz=134,slow=8.3,SNR=3.2 | | | | | | |
| ZALV | Zalesovo Beam | 54.47 | 334 | P | P | 00 52 11.3 | -0.7 |
| KURK | Kurchatov | 55.51 | 328 | P | P | 00 52 18.6 | -1.0 |
| KURK | | | | IAmb | IAmb | 00 52 36.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| GAR | Garm | 55.71 | 312 | P | P | 00 52 21.1 | -0.3 |
| GAR | | | | IAmb | IAmb | 00 52 35.5 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| KKAR | Karatay Array | 56.97 | 316 | P | P | 00 52 29.4 | -0.8 |
| ARU | Arti | 68.71 | 328 | P | P | 00 53 47.0 | -1.1 |
| ARU | | | | IAmb | IAmb | 00 54 02.4 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| BMAR | Burnt Mountain | 83.17 | 23 | P | P | 00 55 10.2 | -0.3 |
| BRTR | Keskin Array B | 83.86 | 309 | P | P | 00 55 16.4 | +1.7 |
| | comp=Z,0.3nm,0.8s,baz=38,slow=7.7,SNR=1.9 | | | | | | |

**IDC 14 00:44:20.3±4.4, 9°40'S×128°45'E, h207km±50km, mb2.9/1, mb1 3.0/5, mb1mx2.4/41, mbtmp3.5/5, Error ellipse: s-maj=56.1km s-min=21.4km az=48.0, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BATI | Baumata | 4.79 | 260 | P | Pn | 00 45 32.6 | +0.4 |
| | 3.4nm,0.3s,baz=125,slow=5.1,SNR=4.2 | | | | | | |
| FITZ | Fitzroy Crossi | 9.07 | 197 | P | Pn | 00 46 26.4 | -1.0 |
| | 0.2nm,0.3s,baz=17,slow=10,SNR=14 | | | | | | |
| FITZ | | | | S | S | 00 48 12.1 | +2.7 |
| | 0.4nm,0.3s,baz=332,slow=17,SNR=2.4 | | | | | | |
| WRA | Warramunga Arr | 11.93 | 152 | P | Pn | 00 47 02.3 | -1.9 |
| | 0.2nm,0.3s,baz=332,slow=13,SNR=18 | | | | | | |
| WRA | | | | S | S | 00 49 17.9 | +1.4 |
| | 0.2nm,0.3s,baz=325,slow=26,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 15.12 | 160 | P | P | 00 47 45.6 | +1.5 |
| | 0.2nm,0.3s,baz=338,slow=11,SNR=13 | | | | | | |
| MKAR | Makanchi Array | 69.41 | 328 | P | P | 00 55 05.9 | 0.0 |
| | 0.2nm,0.5s,baz=133,slow=7.0,SNR=4.9 | | | | | | |

**WEL 14 01:00:27.0±0.5, 44°S×174°E±°, h5km±2km, M3.6/7, ML2.5/8, MLv3.6/7, Error ellipse: s-maj=0.0km s-min=0.0km az=80.6, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MQZ | McQueen's Vall | 0.20 | 198 | P | Pg | 01 00 31.3 | +0.4 |
| MQZ | | | | S | Sg | 01 00 34.4 | +0.9 |
| OKCZ | Okains Bay | 0.31 | 131 | P | Pg | 01 00 33.5 | +0.4 |
| AMCZ | Amberley | 0.35 | 350 | P | Pg | 01 00 34.6 | +0.9 |
| AKCZ | Akaroa Harbour | 0.38 | 161 | P | Pg | 01 00 34.6 | +0.3 |
| RACZ | Rakaia | 0.48 | 244 | P | Pb | 01 00 37.4 | -0.6 |
| OXZ | Oxford | 0.54 | 290 | P | Pg | 01 00 38.0 | +0.5 |
| OXZ | | | | S | Sb | 01 00 46.8 | -0.4 |
| GVZ | Greta Valley S | 0.59 | 22 | P | Pg | 01 00 39.0 | +0.7 |
| GVZ | | | | S | Sb | 01 00 47.7 | -0.8 |
| WACZ | Wakanui South | 0.78 | 237 | P | Pb | 01 00 43.0 | 0.0 |
| LTZ | Lake Taylor | 0.81 | 335 | P | Pb | 01 00 43.2 | -0.5 |
| LTZ | | | | S | Sb | 01 00 54.7 | -0.2 |
| MHCZ | Mount Hutt | 0.85 | 269 | P | Pb | 01 00 44.1 | -0.2 |
| ARCZ | Arundel | 1.21 | 249 | P | Pg | 01 00 49.3 | -0.9 |
| INZ | Inchbonnie | 1.23 | 309 | P | Pg | 01 00 49.0 | -0.8 |
| RPZ | Rata Peaks | 1.24 | 260 | P | Pg | 01 00 48.8 | -0.9 |
| KHZ | Kahutara | 1.25 | 28 | P | Pg | 01 00 49.4 | -1.5 |
| TMZ | Timaru | 1.52 | 235 | P | Pn | 01 00 54.1 | -0.8 |
| THZ | Tophouse | 1.76 | 4 | P | Pn | 01 00 56.7 | -1.5 |
| DSZ | Denniston Nort | 1.90 | 338 | P | Pn | 01 00 59.3 | -0.8 |
| ODZ | Otahua Downs | 2.14 | 224 | P | Pg | 01 01 07.3 | -0.7 |
| ANWZ | Angora Road | 4.13 | 44 | P | Pn | 01 01 28.2 | -2.6 |
| WPHZ | Waipukurau | 4.42 | 40 | P | Pn | 01 01 36.4 | +1.6 |
| PKGZ | Pakihiroa | 6.93 | 38 | P | Pn | 01 02 12.0 | +2.7 |

*NOU 14 01:01:52.0, 43.61S×172.89E, h5km, ML4.2/8, South Island, New Zealand*
*WEL 14 01:01:52.9±0.4, 43°S±3°×17°3E±°, h10km±3km, M3.6/17, ML3.8/17, MLv3.6/17, Error ellipse: s-maj=0.0km s-min=0.0km az=108.8*
**ISC 14 01:01:53.4±0.9, 43.51S±0.03°×172.77E±0.04, h16km±8km, n70, σ0.83/73, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MQZ | McQueen's Vall | 0.21 | 203 | P | Pg | 01 01 58.2 | -0.1 |
| MQZ | | | | S | Sg | 01 02 01.7 | +0.1 |
| OKCZ | Okains Bay | 0.30 | 135 | P | Pg | 01 02 00.5 | +0.8 |
| AMCZ | Amberley | 0.34 | 346 | P | Pg | 01 02 00.1 | -0.4 |
| AMCZ | | | | S | Sg | 01 02 04.9 | -0.4 |
| AKCZ | Akaroa Harbour | 0.38 | 164 | P | Pb | 01 02 01.8 | +0.1 |
| RACZ | Rakaia | 0.50 | 244 | P | Pb | 01 02 03.7 | -0.2 |
| GVZ | Greta Valley S | 0.58 | 20 | P | Pb | 01 02 04.9 | -0.3 |
| GVZ | | | | S | Sb | 01 02 13.5 | +0.4 |
| MHCZ | Mount Hutt | 0.87 | 268 | P | Pg | 01 02 10.1 | -0.2 |
| ARCZ | Arundel | 1.23 | 249 | P | Pn | 01 02 15.5 | -0.5 |
| KHZ | Kahutara | 1.23 | 28 | P | Pn | 01 02 15.4 | -0.6 |
| KHZ | Kahutara | 1.23 | 28 | P | Pn | 01 02 15.7 | -0.2 |
| INZ | Inchbonnie | 1.25 | 309 | P | Pn | 01 02 15.4 | -0.8 |
| RPZ | Rata Peaks | 1.26 | 260 | P | Pn | 01 02 15.9 | -0.5 |
| RPZ | Rata Peaks | 1.26 | 260 | P | Pn | 01 02 16.4 | 0.0 |
| TMZ | Timaru | 1.54 | 235 | P | Pn | 01 02 20.2 | -0.1 |
| WVZ | Waitaha Valley | 1.54 | 286 | P | Pn | 01 02 20.3 | +0.1 |
| THZ | Tophouse | 1.75 | 3 | P | Pn | 01 02 22.6 | -0.5 |
| GCSZ | Gaunt Creek Bo | 1.79 | 275 | P | Pn | 01 02 24.2 | +0.6 |
| DSZ | Denniston Nort | 1.90 | 338 | P | Pn | 01 02 25.1 | -0.2 |
| BSWZ | Blackbirch Sta | 1.97 | 25 | P | Pn | 01 02 24.3 | -1.9 |
| LBZ | Lake Benmore | 2.06 | 244 | P | Pn | 01 02 27.6 | +0.3 |
| MRNZ | Matariki Terra | 2.11 | 360 | P | Pn | 01 02 28.3 | +0.3 |
| FOZ | Fox Glacier | 2.15 | 268 | P | Pn | 01 02 29.5 | +1.0 |
| ODZ | Otahua Downs | 2.16 | 224 | P | Pn | 01 02 28.5 | -0.2 |
| ODZ | Otahua Downs | 2.16 | 224 | P | Pn | 01 02 28.7 | 0.0 |
| NNZ | Nelson | 2.34 | 11 | P | Pn | 01 02 31.3 | +0.2 |
| TCW | Tory Channel | 2.56 | 26 | P | Pn | 01 02 33.4 | -0.7 |
| SNZO | South Karori | 2.63 | 34 | P | Pn | 01 02 35.3 | +0.2 |
| PLWZ | Palliser | 2.67 | 44 | P | Pn | 01 02 34.7 | -1.1 |
| QRZ | Quartz Range | 2.69 | 356 | P | Pn | 01 02 36.8 | +0.7 |
| QRZ | Quartz Range | 2.69 | 356 | P | Pn | 01 02 36.7 | +0.7 |
| MSWZ | Moikau Station | 2.79 | 42 | P | Pn | 01 02 36.5 | -0.8 |
| HHSZ | Highcliff Hill | 2.83 | 212 | P | Pn | 01 02 37.6 | -0.3 |
| DUWZ | D'Urville Isla | 2.84 | 18 | P | Pn | 01 02 38.8 | +0.7 |
| JCZ | Jackson Bay | 2.94 | 258 | P | Pn | 01 02 39.3 | -0.2 |
| CAW | Cannon Point | 2.95 | 36 | P | Pn | 01 02 38.8 | -0.8 |
| WKZ | Wanaka | 3.00 | 243 | P | Pn | 01 02 40.4 | 0.0 |
| EAZ | Earnscleugh | 3.02 | 234 | P | Pn | 01 02 40.3 | -0.3 |
| TRWZ | Traveller | 3.02 | 47 | P | Pn | 01 02 42.0 | +1.5 |
| KIW | Kapiti Island | 3.09 | 32 | P | Pn | 01 02 41.3 | -0.2 |
| MTW | Mount Morrison | 3.10 | 42 | P | Pn | 01 02 40.3 | -1.4 |
| OGWZ | Otaki Gorge | 3.23 | 34 | P | Pn | 01 02 42.4 | -1.0 |
| TUZ | Tuapeka | 3.31 | 221 | P | Pn | 01 02 44.4 | -0.1 |
| MRZ | Mangatainoka R | 3.53 | 37 | P | Pn | 01 02 46.5 | -1.1 |
| MLZ | Mavora Lakes | 3.81 | 239 | P | Pn | 01 02 50.7 | -0.8 |
| BFZ | Birch Farm | 3.83 | 44 | P | Pn | 01 02 50.2 | -1.5 |
| BFZ | Birch Farm | 3.83 | 44 | P | Pn | 01 02 51.1 | -0.6 |
| SYZ | Scrubby Hill | 3.97 | 219 | P | Pn | 01 02 53.5 | 0.0 |
| WHZ | Wether Hill Ro | 4.18 | 234 | P | Pn | 01 02 55.2 | -1.3 |
| PREZ | Palmer Road | 4.29 | 15 | P | Pn | 01 02 59.8 | +1.7 |
| KHEZ | Kahui Hut | 4.32 | 13 | P | Pn | 01 03 00.1 | +1.7 |
| NBEZ | Newall Road No | 4.32 | 11 | P | Pn | 01 02 58.6 | +0.2 |
| PKE | Pukeiti | 4.41 | 12 | P | Pn | 01 03 01.2 | +1.5 |
| DCZ | Deep Cove | 4.47 | 242 | P | Pn | 01 02 59.9 | -0.5 |
| VRZ | Vera Road | 4.63 | 20 | P | Pn | 01 03 04.8 | +2.1 |
| PXZ | Pawanui | 4.63 | 43 | P | Pn | 01 03 03.1 | +0.4 |
| PKVZ | Pokaka | 4.64 | 26 | P | Pn | 01 03 03.9 | +1.0 |
| WNVZ | Wahianoa | 4.69 | 28 | P | Pn | 01 03 04.2 | +0.6 |
| TRVZ | Turoa | 4.70 | 27 | P | Pn | 01 03 05.0 | +1.1 |
| APZ | The Paps | 4.74 | 224 | P | Pn | 01 03 03.4 | -0.7 |
| FWVZ | Far West T-bar | 4.74 | 27 | P | Pn | 01 03 05.5 | +1.1 |
| TUVZ | Tukino | 4.76 | 28 | P | Pn | 01 03 05.2 | +0.6 |
| NGZ | Ngauruhoe | 4.83 | 27 | P | Pn | 01 03 05.7 | +0.1 |
| OTVZ | Oturere | 4.86 | 28 | P | Pn | 01 03 06.5 | +0.5 |
| NNVZ | North Ngauruho | 4.87 | 27 | P | Pn | 01 03 06.7 | +0.5 |
| ETVZ | East Tongariro | 4.90 | 28 | P | Pn | 01 03 06.7 | +0.2 |
| TMVZ | Te Maari | 4.92 | 28 | P | Pn | 01 03 07.2 | +0.5 |
| NTVZ | North Tongarir | 4.92 | 27 | P | Pn | 01 03 07.4 | +0.6 |
| BKZ | Black Stump Fm | 5.17 | 34 | P | Pn | 01 03 10.9 | +0.8 |
| HIZ | Hauiti | 5.24 | 18 | P | Pn | 01 03 11.3 | +0.3 |
| HIZ | Hauiti | 5.24 | 18 | P | Pn | 01 03 12.8 | +1.8 |

*TUL 14 01:11:17.3±1.0, 36°47N±0°04×98°76W±0°05, h8km±7km, ML3.2, mb_Lg2.8/34(NEIC), Error ellipse: s-maj=6.8km s-min=5.6km az=139.0*
**NEIC 14 01:11:17.3±0.9, 36°47N±0°04×98°75W±0°05, h7km±7km, Error ellipse: s-maj=6.8km s-min=6.0km az=144.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| U32A | Winter Ranch, | 0.22 | 246 | Pg | Pg | 01 11 22.1 | +0.4 |
| OKCFA | Oklahoma City | 1.49 | 135 | | Pn | 01 11 44.1 | -0.4 |
| OKCSW | OKLAHOMA CITY | 1.50 | 135 | Pn | Pb | 01 11 45.3 | -0.2 |
| FNO | Franklin | 1.63 | 137 | | Pn | 01 11 46.9 | +0.4 |
| WMOK | Wichita Mounta | 1.73 | 181 | | Pn | 01 11 47.7 | -0.1 |
| T35A | Sooner Cattle | 1.85 | 75 | | Pn | 01 11 50.1 | +0.6 |
| R32A | Long Quarter, | 1.95 | 1 | Pn | Pn | 01 11 51.8 | +0.9 |
| X34A | Smith Ranch, M | 2.01 | 158 | | Pn | 01 11 52.6 | +0.9 |
| X34A | | | | IAmb_Lg | | 01 12 21.0 | |
| | comp=Z,37nm,0.8s | | | | | | |
| W35A | Tecumseh | 2.01 | 130 | | Pn | 01 11 52.4 | +0.6 |
| TUL1 | Leonard | 2.46 | 102 | Pn | Pn | 01 11 58.0 | +0.1 |
| TUL1 | | | | IAmb_Lg | | 01 12 35.9 | |
| | comp=Z,35nm,0.8s | | | | | | |
| AMTX | Amarillo | 2.86 | 237 | Pn | Pn | 01 12 03.3 | -0.2 |
| KSU1 | Kansas State U | 3.13 | 32 | | Pn | 01 12 07.2 | +0.1 |
| KSU1 | | | | IAmb_Lg | | 01 13 02.2 | |
| | comp=Z,24nm,0.7s | | | | | | |
| X37A | Clayton | 3.33 | 123 | | Pn | 01 12 10.1 | +0.2 |
| X37A | | | | IAmb_Lg | | 01 13 07.6 | |
| | comp=Z,35nm,0.8s | | | | | | |
| U38A | Gravette | 3.52 | 89 | Pn | Pn | 01 12 12.3 | -0.2 |
| U38A | | | | IAmb_Lg | | 01 13 07.9 | |
| | comp=Z,22nm,0.7s | | | | | | |
| HHAR | Hobbs | 3.88 | 91 | Pn | Pn | 01 12 17.1 | -0.4 |
| ABTX | Abilene, Hawle | 3.91 | 191 | Pn | Pn | 01 12 17.3 | -0.5 |
| KSCO | Kaye Shedlock' | 3.99 | 311 | Pn | Pn | 01 12 19.1 | +0.1 |
| MSTX | Muleshoe | 4.13 | 234 | Pn | Pn | 01 12 21.0 | 0.0 |
| MSTX | | | | IAmb_Lg | | 01 13 33.4 | |
| | comp=Z,33nm,0.9s | | | | | | |
| W39A | Magazine | 4.23 | 106 | Pn | Pn | 01 12 22.4 | +0.2 |
| W39A | | | | IAmb_Lg | | 01 13 37.7 | |
| | comp=Z,28nm,0.8s | | | | | | |
| Z38A | Mt. Pleasant | 4.45 | 135 | Pn | Pn | 01 12 25.6 | +0.3 |
| Z38A | | | | IAmb_Lg | | 01 13 39.6 | |
| | comp=Z,24nm,0.7s | | | | | | |
| S39A | Bolivar | 4.51 | 73 | Pn | Pn | 01 12 25.1 | -1.0 |
| T25A | Trinidad | 4.59 | 280 | Pn | Pn | 01 12 26.7 | -0.7 |
| T25A | | | | IAmb_Lg | | 01 13 41.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| U40A | Yellville | 4.76 | 90 | Pn | Pn | 01 12 29.3 | -0.2 |
| U40A | | | | IAmb_Lg | | 01 13 48.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| OGNE | Ogallala | 5.15 | 331 | IAmb_Lg | | 01 14 00.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| P38A | Dawn | 5.18 | 51 | Pn | Pn | 01 12 35.4 | +0.1 |
| P38A | | | | IAmb_Lg | | 01 14 11.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| X40A | Basin Creek Fa | 5.21 | 111 | Pn | Pn | 01 12 35.9 | +0.2 |
| WHAR | Wooly Hollow | 5.38 | 101 | Pn | Pn | 01 12 37.8 | -0.1 |
| FCAR | Ozark Folk Cen | 5.39 | 94 | Pn | Pn | 01 12 38.5 | +0.4 |
| FCAR | | | | IAmb_Lg | | 01 14 10.8 | |
| | comp=Z,16nm,1.0s | | | | | | |
| W41B | Gary Mavity, V | 5.44 | 102 | Pn | Pn | 01 12 38.4 | -0.4 |
| W41B | | | | IAmb_Lg | | 01 14 13.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| R40A | Maddies Statio | 5.47 | 69 | Pn | Pn | 01 12 38.8 | -0.4 |
| SDCO | Great Sand Dun | 5.54 | 285 | Pn | Pn | 01 12 40.6 | 0.0 |
| Q24A | Divide | 5.65 | 298 | Pn | Pn | 01 12 41.5 | -0.5 |
| 435B | Jarrell | 5.75 | 170 | IAmb_Lg | | 01 14 23.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| JCT | Junction City | 6.04 | 189 | IAmb_Lg | | 01 14 45.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| P40A | Paris | 6.11 | 58 | Pn | Pn | 01 12 47.9 | -0.2 |
| LCAR | Lake Charles | 6.15 | 91 | Pn | Pn | 01 12 48.4 | -0.1 |
| CCM | Cathedral Cave | 6.19 | 73 | Pn | Pn | 01 12 49.0 | -0.2 |
| ISCO | Idaho Springs | 6.35 | 304 | Pn | Pn | 01 12 51.6 | 0.0 |
| FVM | French Village | 6.81 | 75 | Pn | Pn | 01 12 57.5 | -0.2 |
| BNM | Barren Site | 6.84 | 253 | Pn | Pn | 01 12 58.0 | -0.4 |
| N23A | Red Feather La | 7.15 | 310 | IAmb_Lg | | 01 15 09.0 | |
| | comp=Z,20nm,0.9s | | | | | | |

*IDC 14 01:25:28.2±0.9, 27.45N×130.41E, h0km, mb3.5/9, mb1 3.8/12, mb1mx3.5/48, mbtmp3.6/12, ML3.6/2, Error ellipse: s-maj=25.6km s-min=17.5km az=94.0*
*JMA 14 01:25:29.7±0.1, 27.47N×130.43E, h74km, M3.7*
**ISC 14 01:25:28.6±1.7, 27.45N±0.04×130.42E±0.04, h5km±10km, n27, σ1.966/40, mb3.7/9, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JZK | Kikaishima | 0.95 | 335 | P | Pg | 01 25 48.2 | +1.4 |
| JZK | | | | eS | Sb | 01 26 02.0 | +1.6 |
| JAM | Amami Oshima | 1.20 | 323 | P | Pg | 01 25 50.7 | -0.9 |
| JTK | Tokunoshima | 1.35 | 285 | P | Pn | 01 25 53.5 | -0.5 |
| JTK | | | | S | Sg | 01 26 10.7 | -1.2 |
| JAMN | Amaminishikomi | 1.36 | 306 | P | Pn | 01 25 53.0 | -1.2 |
| JAMN | | | | eS | Sg | 01 26 09.9 | -2.3 |
| JOKE | Okinoerabujima | 1.65 | 267 | P | Pn | 01 25 57.8 | -0.4 |
| JOKE | | | | S | Sn | 01 26 17.4 | -2.3 |
| JKDJ | Kitadaitoujima | 1.69 | 152 | P | Pn | 01 25 57.9 | -0.8 |
| JKDJ | | | | S | Sn | 01 26 17.8 | -2.9 |
| JMZ | Minamidaito 2 | 1.78 | 156 | P | Pn | 01 25 58.8 | -1.1 |
| JMZ | | | | S | Sn | 01 26 20.0 | -2.9 |
| JYRO | Yoronjima | 1.80 | 257 | P | Pn | 01 25 59.9 | -0.4 |
| JYRO | | | | eS | Sn | 01 26 21.0 | -2.6 |
| JOW | Kunigami | 2.01 | 253 | Pn | Pn | 01 26 02.9 | -0.2 |
| | 34nm,0.3s,baz=106,slow=26,SNR=118 | | | | | | |
| JOW | | | | Sn | Sn | 01 26 26.5 | -2.1 |
| | 45nm,0.3s,baz=87,slow=25,SNR=12 | | | | | | |
| JOW | Kunigami | 2.01 | 253 | P | Pn | 01 26 02.8 | -0.4 |
| JOW | | | | eS | Sn | 01 26 27.5 | -1.1 |
| JIH | Iheya | 2.22 | 260 | P | Pn | 01 26 05.8 | -0.3 |
| JIH | | | | S | Sn | 01 26 31.6 | -2.3 |
| JNTH | Nagotoyohara | 2.33 | 247 | P | Pn | 01 26 07.6 | 0.0 |
| JJT3 | Tamagusuku3 | 2.69 | 242 | P | Pn | 01 26 12.6 | +0.1 |
| JJT3 | | | | S | Sn | 01 26 44.2 | -1.3 |
| JYAK | Yakushimahirau | 2.78 | 2 | P | Pn | 01 26 12.7 | -1.0 |
| JYAK | | | | S | Sn | 01 26 42.6 | -5.0 |
| JAGN | Aguni-jima | 2.96 | 254 | P | Pn | 01 26 16.1 | -0.1 |
| JAGN | | | | eS | Sn | 01 26 50.2 | -1.9 |
| JKE | Kume jima 2 | 3.43 | 252 | P | Pn | 01 26 22.3 | -0.4 |
| JNU | Nakatsue | 5.67 | 4 | Pn | Pn | 01 26 54.2 | +0.7 |
| | 1.8nm,0.3s,baz=172,slow=13,SNR=6.2 | | | | | | |
| MJAR | Matsushiro Arr | 11.21 | 34 | Pn | Pn | 01 28 12.1 | +2.5 |
| | 0.0nm,0.3s,baz=205,slow=17,SNR=2.2 | | | | | | |
| KLR | Kul'dur | 21.77 | 2 | P | P | 01 30 21.7 | +0.7 |
| | 0.8nm,0.6s,baz=166,slow=7.7,SNR=3.5 | | | | | | |
| SONM | Songino Array | 27.66 | 324 | P | P | 01 31 18.5 | +1.1 |
| | 0.2nm,0.4s,baz=106,slow=11,SNR=2.4 | | | | | | |
| CMAR | Chiang Mai Arr | 30.27 | 260 | P | P | 01 31 41.7 | +1.0 |
| | 0.5nm,0.3s,baz=56,slow=8.1,SNR=1.2 | | | | | | |
| MKAR | Makanchi Array | 42.21 | 310 | P | P | 01 33 22.7 | +0.2 |
| | 0.2nm,0.7s,baz=99,slow=8.9,SNR=2.5 | | | | | | |
| WRA | Warramunga Arr | 47.27 | 175 | P | P | 01 34 03.0 | +0.1 |
| | 0.9nm,0.8s,baz=355,slow=8.8,SNR=6.0 | | | | | | |
| BVAR | Borovoye Array | 50.69 | 317 | P | P | 01 34 29.4 | +0.5 |
| | 0.5nm,0.5s,baz=95,slow=16,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 50.93 | 176 | P | P | 01 34 31.8 | +0.8 |
| | 0.9nm,0.6s,baz=7.8,slow=14,SNR=17 | | | | | | |
| FINES | FINESS Array B | 72.76 | 331 | P | P | 01 36 57.5 | -0.1 |
| | 0.8nm,0.7s,baz=45,slow=4.3,SNR=4.1 | | | | | | |
| YKA | Yellowknife Ar | 76.59 | 26 | P | P | 01 37 19.5 | -0.3 |
| | 0.3nm,0.7s,baz=297,slow=6.0,SNR=5.4 | | | | | | |

**IDC 14 01:33:26.5±7.8, 38.53N×99.37E, h0km, mb3.2/1, mb1 3.4/5, mb1mx3.2/49, mbtmp3.4/5, ML3.1/4, Error ellipse: s-maj=107.9km s-min=36.2km az=147.0, Qinghai**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SONM | Songino Array | 10.62 | 27 | Pn | Pn | 01 36 00.6 | +0.7 |
| | 0.7nm,0.3s,baz=207,slow=15,SNR=25 | | | | | | |
| SONM | | | | Lg | Lg | 01 39 03.8 | |
| | 0.3nm,0.3s,baz=213,slow=32,SNR=8.6 | | | | | | |
| MKAR | Makanchi Array | 15.02 | 309 | Pn | Pn | 01 36 56.4 | -3.5 |
| | 0.0nm,0.3s,baz=115,slow=14,SNR=2.9 | | | | | | |
| ZALV | Zalesovo Beam | 18.36 | 332 | P | Pn | 01 37 41.3 | -1.0 |
| | 0.1nm,0.3s,baz=143,slow=12,SNR=4.5 | | | | | | |
| KURBB | Kurchatov Arra | 19.07 | 316 | P | P | 01 37 50.4 | +0.1 |
| | 0.1nm,0.3s,baz=121,slow=11,SNR=6.0 | | | | | | |
| BVAR | Borovoye Array | 24.66 | 315 | P | P | 01 38 48.3 | -0.4 |
| | 0.4nm,0.5s,baz=98,slow=18,SNR=2.9 | | | | | | |

*UPA 14 01:36:45.3±0.8, 8.90N×82.84W, h8km±2km, MW4.4, Fault plane solution: NP1:ϕ68.00000°, δ78.00000°, λ38.00000°.*
*UCR 14 01:36:46.2±1.0, 8.87N×82.89W, h24km±2km, MW4.0*
*INET 14 01:36:46.3±1.3, 8.91N×82.95W, h10km, ML2.5, MW3.0*
**ISC 14 01:36:44.9±1.0, 8.94N±0.02×82.87W±0.02, h15km±8km, n36, σ0.74/54, 4C-6D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| EDSV | San Vito | 0.16 | 222 | eP | Pb | 01 36 50.7 | +1.1 |
| EDSV | | | | eS | Sb | 01 36 54.9 | +2.2 |
| BRU2 | Volcan | 0.23 | 130⇑ | iP | Pb | 01 36 51.1 | +0.3 |
| BRU2 | | | | eS | Sg | 01 36 53.4 | -0.2 |
| LNBQ3 | Los Naranjos, | 0.45 | 109⇑ | eP | Pg | 01 36 54.2 | +0.3 |
| LNBQ3 | | | | eS | Sb | 01 37 00.7 | -0.3 |
| EDBA | Buenos Aires | 0.46 | 299⇑ | iP | Pb | 01 36 55.9 | +1.2 |
| EDBA | | | | eS | Sn | 01 37 03.7 | -1.2 |
| LESP3 | La Esperanza, | 0.54 | 172 | eP | Pb | 01 36 55.8 | -0.2 |
| SRBA | San Rafael, Bu | 0.57 | 301 | eP | Pb | 01 36 56.7 | +0.1 |
| EDPN | Palmar Norte | 0.58 | 272 | eP | Pb | 01 36 57.1 | +0.3 |
| EDPN | | | | eS | Sb | 01 37 06.0 | +1.2 |
| PTJ1 | Puerto Jimnez | 0.59 | 227⇓ | eP | Pb | 01 36 56.6 | -0.2 |
| PTJ1 | | | | eS | Sb | 01 37 05.7 | +0.7 |
| CNI2 | El Empalme, Bo | 0.62 | 39⇓ | iP | Pg | 01 36 57.3 | +0.2 |
| CNI2 | | | | eS | Sb | 01 37 06.5 | +0.6 |
| DVD | David | 0.65 | 141⇓ | eP | Pg | 01 36 57.7 | +0.1 |
| DVD | | | | eS | Sb | 01 37 06.7 | +0.1 |
| LOMA3 | Las Lomas, Chi | 0.69 | 137 | eP | Pb | 01 36 57.8 | -0.5 |
| RGM0 | Gandoca | 0.70 | 22 | eP | Pn | 01 37 00.5 | +0.4 |
| RGM0 | | | | eS | Sn | 01 37 10.5 | -0.2 |
| RGM0 | Gandoca | 0.70 | 22 | eP | Pn | 01 37 00.6 | +0.4 |
| RGM0 | | | | IAML | | 01 37 42.7 | |
| | comp=Z,279nm,0.5s | | | | | | |
| PIRO | Carate, Puerto | 0.71 | 221 | eP | Pg | 01 36 58.1 | -0.5 |
| PIRO | Carate, Puerto | 0.71 | 221 | iP | Pg | 01 36 58.2 | -0.5 |
| PIRO | | | | eS | Sb | 01 37 08.9 | +0.5 |
| PIRO | Carate, Puerto | 0.71 | 221 | eP | Pg | 01 36 58.2 | -0.5 |
| CHGR2 | Aguacate | 0.71 | 90 | eP | Pg | 01 36 58.5 | -0.3 |
| CHGR2 | | | | eS | Sb | 01 37 09.1 | +0.4 |
| PTPM | Petroterminale | 0.73 | 181⇓ | eP | Pb | 01 36 59.1 | -0.1 |
| PTPM | | | | eS | Sb | 01 37 10.1 | +1.1 |
| CHIR3 | Chiriqui UPA, | 0.76 | 136⇓ | eP | Pg | 01 36 59.5 | -0.1 |
| PEZE | Perez Zeledon, | 0.92 | 299 | eP | Pb | 01 37 02.5 | 0.0 |
| P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EGS | | | | S | | Sg | 01 39 58.1 | -0.9 | |
| | baz=318 | | | | | | | | |
| **LATG** | **Datong** | **0.98** | **306** | P | | Pn | 01 39 47.4 | +0.5 | |
| | baz=298 | | | | | | | | |
| LATG | | | | S | | Sn | 01 40 00.7 | -0.1 | |
| | baz=298 | | | | | | | | |
| **TWE** | **Neicheng** | **1.01** | **319** | *i* P | | Pn | 01 39 47.6 | +0.3 | |
| | baz=312 | | | | | | | | |
| TWE | | | | S | | Sb | 01 39 59.8 | -0.1 | |
| | baz=312 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.01** | **242** | P | | Pn | 01 39 48.2 | +0.9 | |
| | baz=236 | | | | | | | | |
| HGSD | | | | S | | Sn | 01 40 02.3 | +0.9 | |
| | baz=236 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.02** | **312** | P | | Pn | 01 39 47.7 | +0.3 | |
| | baz=292 | | | | | | | | |
| ENTT | | | | S | | Sn | 01 40 00.8 | -0.8 | |
| | baz=292 | | | | | | | | |
| **NTC** | **Toucheng** | **1.03** | **330** | P | | Pg | 01 39 47.0 | -0.3 | |
| | baz=324 | | | | | | | | |
| NTC | | | | S | | Sb | 01 40 00.2 | -0.2 | |
| | baz=324 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.03** | **308** | *i* P | | Pn | 01 39 48.9 | +1.3 | |
| | baz=301 | | | | | | | | |
| NDT | | | | S | | Sn | 01 40 01.6 | -0.3 | |
| | baz=301 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.05** | **297** | P | | Pn | 01 39 48.5 | +0.5 | |
| | baz=289 | | | | | | | | |
| NNS | | | | *e*S | | Sn | 01 40 02.6 | 0.0 | |
| | baz=289 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.05** | **280** | *i* P | | Pn | 01 39 48.9 | +0.6 | |
| | baz=262 | | | | | | | | |
| WHF | | | | S | | Sn | 01 40 02.6 | -0.5 | |
| | baz=262 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.08** | **317** | P | | Pn | 01 39 49.0 | +0.6 | |
| | baz=302 | | | | | | | | |
| FUSB | | | | S | | Sn | 01 40 02.8 | -0.5 | |
| | baz=302 | | | | | | | | |
| **EHY** | **Hungye** | **1.09** | **245** | P | | Pn | 01 39 50.3 | +1.9 | |
| | baz=253 | | | | | | | | |
| EHY | | | | S | | Sn | 01 40 04.0 | +0.6 | |
| | baz=253 | | | | | | | | |
| **FUSS** | **Fushou** | **1.09** | **285** | *i* P | | Pn | 01 39 49.5 | +0.8 | |
| | baz=277 | | | | | | | | |
| FUSS | | | | *e*S | | Sn | 01 40 04.5 | +0.7 | |
| | baz=277 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.10** | **340** | P | | Pg | 01 39 48.2 | -0.5 | |
| | baz=352 | | | | | | | | |
| TWB1 | | | | S | | Sb | 01 40 01.8 | -0.9 | |
| | baz=352 | | | | | | | | |
| **CHGB** | **Renai** | **1.13** | **275** | P | | Pn | 01 39 49.8 | +0.7 | |
| | baz=258 | | | | | | | | |
| CHGB | | | | S | | Sn | 01 40 04.6 | 0.0 | |
| | baz=258 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.13** | **333** | *i* P | | Pg | 01 39 49.4 | +0.1 | |
| | baz=327 | | | | | | | | |
| TIPB | | | | *i* S | | Sb | 01 40 02.3 | -1.3 | |
| | baz=327 | | | | | | | | |
| **NWLT** | **Wulai** | **1.15** | **315** | *i* P | | Pg | 01 39 49.9 | +0.3 | |
| | baz=308 | | | | | | | | |
| NWLT | | | | *i* S | | Sn | 01 40 04.6 | -0.3 | |
| | baz=308 | | | | | | | | |
| **YULB** | **Yu-li** | **1.16** | **241** | P | | Pg | 01 39 50.7 | +0.9 | |
| | baz=250 | | | | | | | | |
| YULB | | | | S | | Sn | 01 40 06.2 | +1.1 | |
| | baz=250 | | | | | | | | |
| **EYUL** | **Yuli** | **1.17** | **238** | *i* P | | Pg | 01 39 50.9 | +1.0 | |
| | baz=222 | | | | | | | | |
| EYUL | | | | *i* S | | Sn | 01 40 07.2 | +1.9 | |
| | baz=222 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.17** | **307** | P | | Pg | 01 39 50.5 | +0.5 | |
| | baz=288 | | | | | | | | |
| YHNB | | | | *e*S | | Sn | 01 40 05.5 | 0.0 | |
| | baz=288 | | | | | | | | |
| **WUSB** | **Renai** | **1.17** | **272** | P | | Pg | 01 39 51.1 | +1.1 | |
| | baz=265 | | | | | | | | |
| WUSB | | | | *e*S | | Sg | 01 40 04.8 | -0.6 | |
| | baz=265 | | | | | | | | |
| **NSK** | **Sanguang** | **1.19** | **307** | *i* P | | Pg | 01 39 50.6 | +0.3 | |
| | baz=287 | | | | | | | | |
| NSK | | | | S | | Sn | 01 40 05.5 | -0.3 | |
| | baz=287 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.22** | **337** | P | | Pn | 01 39 50.0 | -0.3 | |
| | baz=332 | | | | | | | | |
| SXI1 | | | | *e*S | | Sb | 01 40 05.8 | -0.4 | |
| | baz=332 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.24** | **333** | *i* P | | Pg | 01 39 50.6 | -0.6 | |
| | baz=328 | | | | | | | | |
| NWF | | | | S | | Sb | 01 40 06.5 | -0.2 | |
| | baz=328 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.27** | **73** | P | | Pg | 01 39 51.9 | +0.1 | |
| IRIF | | | | *e*S | | Sn | 01 40 08.1 | +0.4 | |
| **FULB** | **Fuli** | **1.27** | **233** | S | | Sg | 01 40 09.0 | +0.6 | |
| | baz=228 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.27** | **321** | P | | Pg | 01 39 52.5 | +0.5 | |
| | baz=330 | | | | | | | | |
| NHDH | | | | *i* S | | Sg | 01 40 08.4 | -0.1 | |
| | baz=330 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.28** | **228** | S | | Sg | 01 40 07.8 | -0.9 | |
| | baz=223 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.34** | **263** | P | | Pn | 01 39 51.3 | -0.5 | |
| | baz=257 | | | | | | | | |
| SSLB | | | | S | | Sg | 01 40 10.9 | +0.4 | |
| | baz=257 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.35** | **300** | P | | Pg | 01 39 53.5 | +0.2 | |
| | baz=293 | | | | | | | | |
| NFF | | | | S | | Sg | 01 40 11.7 | +0.8 | |
| | baz=293 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.36** | **274** | P | | Pg | 01 39 53.7 | 0.0 | |
| | baz=260 | | | | | | | | |
| WCS | | | | *e*S | | Sg | 01 40 10.9 | -0.5 | |
| | baz=260 | | | | | | | | |
| **WHP** | **Taichung City** | **1.37** | **283** | *i* P | | Pg | 01 39 54.8 | +1.1 | |
| | baz=268 | | | | | | | | |
| WHP | | | | S | | Sg | 01 40 11.3 | -0.2 | |
| | baz=268 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.38** | **267** | *i* P | | Pg | 01 39 54.7 | +0.8 | |
| | baz=261 | | | | | | | | |
| SMLT | | | | S | | Sg | 01 40 13.1 | +1.3 | |
| | baz=261 | | | | | | | | |
| **EDH** | **Donghe** | **1.41** | **226** | P | | Pg | 01 39 53.6 | -0.9 | |
| | baz=213 | | | | | | | | |
| EDH | | | | *i* S | | Sb | 01 40 10.9 | -0.6 | |
| | baz=213 | | | | | | | | |
| **TYC** | **Yuchr** | **1.41** | **268** | *i* P | | Pg | 01 39 54.3 | -0.3 | |
| | baz=262 | | | | | | | | |
| **LIOB** | **Emei** | **1.43** | **298** | *i* P | | Pg | 01 39 55.3 | +0.3 | |
| | baz=292 | | | | | | | | |
| LIOB | | | | *i* S | | Sg | 01 40 14.0 | +0.3 | |
| | baz=292 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.50** | **79** | P | | Pb | 01 39 55.3 | +0.3 | |
| JKRS | | | | S | | Sg | 01 40 15.4 | -0.2 | |
| **ALS** | **Alishan** | **1.53** | **253** | P | | Pg | 01 39 56.9 | 0.0 | |
| | baz=248 | | | | | | | | |
| **WJS** | **Zhushan** | **1.54** | **265** | *e*P | | Pg | 01 39 57.5 | +0.6 | |
| | baz=260 | | | | | | | | |
| WJS | | | | *e*S | | Sg | 01 40 18.6 | +1.7 | |
| | baz=260 | | | | | | | | |
| **LDUT** | **Ludao** | **1.54** | **214** | *i* P | | Pb | 01 39 55.7 | -0.2 | |
| | baz=210 | | | | | | | | |
| LDUT | | | | S | | Sb | 01 40 14.7 | -0.6 | |
| | baz=210 | | | | | | | | |
| **LONT** | **Longtian** | **1.57** | **228** | *e*S | | Sb | 01 40 15.8 | -0.3 | |
| | baz=236 | | | | | | | | |
| **WNT** | **Mingjian** | **1.57** | **267** | *e*S | | Sg | 01 40 18.6 | +0.6 | |
| | baz=262 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.64** | **76** | P | | Pb | 01 39 56.8 | -0.7 | |
| JIJ | | | | *e*S | | Sn | 01 40 16.7 | -0.2 | |
| **TWGBT** | **Beinan** | **1.67** | **227** | P | | Pb | 01 39 57.9 | -0.1 | |
| | baz=235 | | | | | | | | |
| TWGBT | | | | S | | Sb | 01 40 18.3 | -0.6 | |
| | baz=235 | | | | | | | | |
| **TWG** | **Pinlang** | **1.67** | **227** | P | | Pb | 01 39 57.6 | -0.4 | |
| | baz=235 | | | | | | | | |
| TWG | | | | S | | Sb | 01 40 18.9 | -0.1 | |
| | baz=235 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.69** | **242** | P | | Pg | 01 39 59.2 | -0.6 | |
| | baz=230 | | | | | | | | |
| STYH | | | | S | | Sg | 01 40 20.4 | -1.3 | |
| | baz=230 | | | | | | | | |
| **WDLH** | **Douliu** | **1.73** | **261** | *e*S | | Sg | 01 40 23.3 | +0.3 | |
| | baz=256 | | | | | | | | |
| **CHN4** | **Tsaushan** | **1.77** | **250** | *i* P | | Pg | 01 40 01.2 | -0.1 | |
| | baz=246 | | | | | | | | |
| CHN4 | | | | *i* S | | Sg | 01 40 25.3 | +1.0 | |
| | baz=246 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.79** | **247** | *i* P | | Pg | 01 40 01.6 | -0.1 | |
| | baz=243 | | | | | | | | |
| WTP | | | | *i* S | | Sg | 01 40 25.0 | +0.1 | |
| | baz=243 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.85** | **70** | *e*S | | Sn | 01 40 21.4 | -0.7 | |
| **WRL** | **Guolierlin Hig** | **1.85** | **268** | S | | Sg | 01 40 25.9 | -1.2 | |
| | baz=276 | | | | | | | | |
| **CHY** | **Chiayi** | **1.87** | **256** | P | | Pg | 01 40 02.5 | -0.8 | |
| | baz=251 | | | | | | | | |
| **TWK** | **Hsinying** | **1.89** | **249** | P | | Pg | 01 40 02.8 | -0.9 | |
| | baz=245 | | | | | | | | |
| TWK | | | | S | | Sg | 01 40 28.2 | +0.1 | |
| | baz=245 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.11** | **231** | P | | Pb | 01 40 04.4 | -1.1 | |
| | baz=224 | | | | | | | | |
| MASBT | | | | *e*S | | Sb | 01 40 31.5 | -0.2 | |
| | baz=224 | | | | | | | | |
| **EAST** | **Anshuo** | **2.13** | **223** | *e*P | | Pb | 01 40 04.7 | -1.1 | |
| | baz=219 | | | | | | | | |
| **TAWH** | **Dawu Township** | **2.13** | **221** | *e*P | | Pb | 01 40 05.0 | -0.9 | |
| | baz=227 | | | | | | | | |
| TAWH | | | | *e*S | | Sb | 01 40 30.9 | -1.5 | |
| | baz=227 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.28** | **226** | *e*P | | Pb | 01 40 08.2 | -0.2 | |
| | baz=218 | | | | | | | | |
| SCZT | | | | *e*S | | Sb | 01 40 35.4 | -1.2 | |
| | baz=218 | | | | | | | | |
| **SLIU** | **Shizi** | **2.28** | **221** | *e*P | | Pb | 01 40 07.2 | -1.2 | |
| | baz=226 | | | | | | | | |
| SLIU | | | | *e*S | | Sb | 01 40 34.5 | -2.1 | |
| | baz=226 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.63** | **261** | *e*P | | Pn | 01 40 11.2 | +1.6 | |
| | baz=271 | | | | | | | | |
| PHUB | | | | S | | Sn | 01 40 43.3 | +2.0 | |
| | baz=271 | | | | | | | | |

**IDC 14 01:46:10.0±31.0, 16°11S×175°20W, h0km, mb4.2/4, mb1 4.4/4, mb1mx3.8/29, mbtmp4.2/4, Error ellipse: s-maj=613.9km s-min=157.3km az=84.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **42.18** | **240** | P | P | 01 54 05.2 | +0.5 |
| | 2.4nm,0.5s,baz=104,slow=11,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.00** | **258** | P | P | 01 54 50.6 | -0.6 |
| | 0.7nm,0.5s,baz=95,slow=7.3,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **48.25** | **253** | P | P | 01 54 52.6 | -0.4 |
| | 9.8nm,0.6s,baz=88,slow=8.3,SNR=246 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.37** | **259** | P | P | 01 55 53.7 | +0.2 |
| | 1.3nm,0.9s,baz=90,slow=3.0,SNR=1.3 | | | | | | |

**KRSC 14 01:56:31.4±1.4, 49°44N×156°71E, h94km±34km, ML3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.30** | **343** | *e*P | Pn | 01 56 55.5 | +0.7 |
| SKR | | | | *e*S | Sn | 01 57 13.6 | +1.1 |
| **PAU** | **Pauzhetka** | **2.03** | **2** | *e*P | Pn | 01 57 04.5 | +0.4 |
| PAU | | | | *e*S | Sn | 01 57 30.2 | +1.2 |
| **KDTR** | **Khodutka, Kamc** | **2.52** | **20** | *e*P | Pn | 01 57 13.3 | +2.7 |
| KDTR | | | | *e*S | Sn | 01 57 43.7 | +3.0 |
| **MTVR** | **Mutnovka** | **3.18** | **16** | *e*P | Pn | 01 57 21.6 | +2.0 |
| MTVR | | | | *e*S | Sn | 01 57 59.2 | +2.5 |
| **RUS** | **Russkaya** | **3.21** | **20** | *e*P | Pn | 01 57 21.5 | +1.8 |
| RUS | | | | *e*S | Sn | 01 57 58.4 | +1.5 |
| **GRL** | **Gorelyy** | **3.23** | **15** | *e*P | Pn | 01 57 22.9 | +2.7 |
| GRL | | | | *e*S | Sn | 01 58 01.2 | +3.4 |
| **DALK** | **Dalny** | **3.82** | **19** | S | Sn | 01 58 12.8 | +1.1 |
| **UGLR** | **Uglovaya** | **4.00** | **19** | *e*P | Pn | 01 57 33.6 | +3.1 |
| **AVH** | **Avacha** | **4.03** | **18** | *e*P | Pn | 01 57 33.5 | +2.5 |
| AVH | | | | S | Sn | 01 58 19.7 | +2.6 |
| **KOK** | **Koryaka** | **4.04** | **17** | P | Pn | 01 57 33.8 | +2.7 |
| **SMAR** | **Somma** | **4.04** | **18** | P | Pn | 01 57 34.4 | +3.2 |
| **SDLR** | **Sedlovina** | **4.08** | **19** | P | Pn | 01 57 33.4 | +1.8 |
| **SPN** | **Mys Shipunski** | **4.21** | **28** | *e*P | Pn | 01 57 36.4 | +3.1 |
| SPN | | | | *e*S | Sn | 01 58 24.8 | +3.5 |
| **MKZ** | **Mys Kozlova** | **5.99** | **29** | *e*P | Pn | 01 57 58.9 | +1.6 |

*KNET **14** 01:58:25.7±0.7, 42°.58N×75°.26E, h14km±8km, ml2.2, Error ellipse: s-maj=4.7km s-min=2.6km az=141.0*
*KRNET **14** 01:58:26.4±0.1, 42°.57N×75°.25E, h19km, mb3.2*
*NNC **14** 01:58:26.1±0.2, 42°.58N×75°.25E, h2km±1km, mb3.7, mpv3.6, Error ellipse: s-maj=3.1km s-min=0.8km az=159.0*
*SOME **14** 01:58:26.3, 42°.58N×75°.23E, h15km*

**ISC 14 01:58:26.5±0.9, 42°.57N±0°.02×75°.25E±0°.01, h15km±7km, n94, σ1°03/165, 42C-24D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBK** | **Karagaybulak** | **0.24** | **291** | ⇑P | Pb | 01 58 32.3 | -0.4 |
| | 97nm,0.1s,SNR=464 | | | | | | |
| KBK | | | | ⇑S | Sb | 01 58 36.6 | -0.2 |
| | 411nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **0.24** | **291** | ⇑*i*P | Pg | 01 58 31.8 | -0.1 |
| | baz=91 | | | | | | |
| KBK | | | | ⇑*i*S | Sg | 01 58 35.5 | -0.2 |
| | baz=91 | | | | | | |
| **TKM2** | **Tokmak 2** | **0.43** | **36** | ⇓P | Pg | 01 58 35.2 | -0.1 |
| | 215nm,0.1s,SNR=896 | | | | | | |
| TKM2 | | | | ⇓S | Sg | 01 58 40.6 | -0.5 |
| | 752nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.43** | **36** | ⇑P | Pg | 01 58 35.1 | -0.1 |
| | 40nm,0.2s | | | | | | |
| TKM2 | | | | ⇑S | Sg | 01 58 40.8 | -0.4 |
| | 151nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.43** | **36** | ⇓*i*P | Pg | 01 58 35.1 | -0.1 |
| | baz=36 | | | | | | |
| TKM2 | | | | ⇓*i*S | Sb | 01 58 41.4 | -0.9 |
| | baz=36 | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.51** | **99** | ⇑*i*P | Pg | 01 58 36.5 | -0.2 |
| | baz=98 | | | | | | |
| BOOM | | | | ⇑*i*S | Sg | 01 58 43.7 | 0.0 |
| | baz=98 | | | | | | |
| **FRU1** | **Bishkek** | **0.52** | **298** | ⇑*i*P | Pb | 01 58 36.9 | -0.4 |
| | baz=0.0 | | | | | | |
| FRU1 | | | | ⇑*i*S | Sb | 01 58 44.6 | 0.0 |
| | baz=0.0 | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **277** | ⇑P | Pg | 01 58 37.3 | -0.4 |
| | 19nm,0.2s,SNR=22 | | | | | | |
| AAK | | | | ⇓S | Sg | 01 58 45.2 | 0.0 |
| | 93nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **277** | ⇓P | Pg | 01 58 37.3 | -0.4 |
| | 6.4nm,0.4s | | | | | | |
| AAK | | | | ⇑S | Sg | 01 58 45.2 | 0.0 |
| | 32nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **277** | ⇑*i*P | Pg | 01 58 37.3 | -0.4 |
| | baz=77 | | | | | | |
| AAK | | | | ⇑*i*S | Sg | 01 58 45.3 | 0.0 |
| | baz=77 | | | | | | |
| **CHMS** | **Chumysh** | **0.56** | **319** | ⇓P | Pg | 01 58 37.3 | -0.3 |
| | 15nm,0.1s,SNR=86 | | | | | | |
| CHMS | | | | ⇑S | Sg | 01 58 45.2 | 0.0 |
| | 239nm,0.1s | | | | | | |
| **CHMS** | **Chumysh** | **0.56** | **319** | ⇑*i*P | Pg | 01 58 37.3 | -0.3 |
| | baz=19 | | | | | | |
| CHMS | | | | ⇑*i*S | Sb | 01 58 45.4 | -0.5 |
| | baz=19 | | | | | | |
| **UCH** | **Uchtor** | **0.65** | **238** | ⇓P | Pg | 01 58 38.9 | -0.4 |
| | 53nm,0.1s,SNR=208 | | | | | | |
| UCH | | | | ⇑S | Sg | 01 58 47.8 | -0.2 |
| | 53nm,0.1s | | | | | | |
| **UCH** | **Uchtor** | **0.65** | **238** | ⇑*i*P | Pg | 01 58 38.9 | -0.4 |
| | baz=38 | | | | | | |
| UCH | | | | ⇑*i*S | Sg | 01 58 47.9 | -0.1 |
| | baz=38 | | | | | | |
| **KST** | **Kastek** | **0.70** | **48** | *e*P | Pg | 01 58 39.9 | -0.4 |
| | 151nm,0.2s | | | | | | |
| KST | | | | *e*S | Sb | 01 58 49.7 | -0.3 |
| | 303nm,0.2s | | | | | | |
| **KST** | **Kastek** | **0.70** | **48** | P | Pg | 01 58 39.9 | -0.4 |
| | 151nm,0.2s | | | | | | |
| KST | | | | S | Sb | 01 58 49.7 | -0.3 |
| | 303nm,0.2s | | | | | | |
| **KST** | **Kastek** | **0.70** | **48** | *e*P | Pg | 01 58 39.9 | -0.4 |
| | baz=48 | | | | | | |
| KST | | | | *e*S | Sb | 01 58 49.7 | -0.3 |
| | baz=48 | | | | | | |
| **DGS** | **Degeres** | **0.77** | **29** | *e*P | Pg | 01 58 41.2 | -0.3 |
| | 132nm,0.2s | | | | | | |
| DGS | | | | *e*S | Sb | 01 58 51.9 | 0.0 |
| | 602nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.77** | **29** | P | Pg | 01 58 41.2 | -0.3 |
| | 132nm,0.2s | | | | | | |
| DGS | | | | S | Sb | 01 58 51.9 | 0.0 |
| | 602nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.77** | **29** | *e*P | Pg | 01 58 41.2 | -0.3 |
| | baz=29 | | | | | | |
| DGS | | | | *e*S | Sb | 01 58 52.0 | 0.0 |
| | baz=29 | | | | | | |
| **ULHL** | **Ulahol** | **0.80** | **114** | ⇑*i*P | Pg | 01 58 41.3 | -0.8 |
| | baz=14 | | | | | | |
| ULHL | | | | ⇑*i*S | Sg | 01 58 52.4 | -0.3 |
| | baz=14 | | | | | | |
| **USP** | **Ospenovka** | **0.89** | **322** | P | Pb | 01 58 43.0 | -0.7 |
| | 11nm,0.1s,SNR=158 | | | | | | |
| USP | | | | ⇑S | Sg | 01 58 55.0 | -0.4 |
| | 76nm,0.1s | | | | | | |
| **USP** | **Ospenovka** | **0.89** | **322** | ⇑*i*P | Pb | 01 58 42.9 | -0.7 |
| | baz=22 | | | | | | |
| USP | | | | ⇑*i*S | Sg | 01 58 55.0 | -0.4 |
| | baz=22 | | | | | | |
| **ARLS** | **Aral** | **0.99** | **225** | ⇑*i*P | Pb | 01 58 44.8 | -0.6 |
| | baz=24 | | | | | | |
| ARLS | | | | ⇑*i*S | Sb | 01 58 58.1 | -0.2 |
| | baz=24 | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **333** | *e*P | Pb | 01 58 44.9 | -0.5 |
| | 43nm,0.1s | | | | | | |
| SGDS | | | | *e*S | Sg | 01 58 58.3 | -0.4 |
| | 87nm,0.1s | | | | | | |
| **SGDS** | **Sogindy** | **0.99** | **333** | P | Pb | 01 58 44.8 | -0.5 |
| | 43nm,0.1s | | | | | | |
| SGDS | | | | S | Sg | 01 58 58.3 | -0.4 |
| | 87nm,0.1s | | | | | | |
| **MTBS** | **Maitube** | **1.03** | **57** | *e*P | Pb | 01 58 45.4 | -0.6 |
| | 15nm,0.1s | | | | | | |
| MTBS | | | | *e*S | Sb | 01 58 59.3 | 0.0 |
| | 313nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.03** | **57** | P | Pb | 01 58 45.4 | -0.6 |
| | 15nm,0.1s | | | | | | |
| MTBS | | | | S | Sb | 01 58 59.3 | 0.0 |
| | 313nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.03** | **57** | *e*P | Pb | 01 58 45.4 | -0.6 |
| | baz=57 | | | | | | |
| MTBS | | | | *e*S | Sb | 01 58 59.3 | 0.0 |
| | baz=57 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.09** | **275** | ⇑P | Pn | 01 58 47.2 | -0.1 |
| | 9.9nm,0.1s,SNR=110 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.09** | **275** | ⇑*i*P | Pn | 01 58 47.2 | -0.1 |
| | baz=75 | | | | | | |
| EKS2 | | | | ⇑*i*S | Sg | 01 59 01.7 | -0.2 |
| | baz=75 | | | | | | |
| **KRBS** | **Karabastau** | **1.17** | **15** | *e*P | Pb | 01 58 48.0 | -0.3 |
| | 51nm,0.2s | | | | | | |
| KRBS | | | | *e*S | Sn | 01 59 03.6 | -0.3 |
| | 98nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **1.17** | **15** | P | Pb | 01 58 48.0 | -0.3 |
| | 51nm,0.2s | | | | | | |
| KRBS | | | | S | Sn | 01 59 03.6 | -0.3 |
| | 98nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **1.17** | **15** | *e*P | Pb | 01 58 48.1 | -0.3 |
| | baz=15 | | | | | | |
| KRBS | | | | *e*S | Sn | 01 59 03.7 | -0.3 |
| | baz=15 | | | | | | |
| **AML** | **Almayashu** | **1.24** | **250** | ⇓P | Pb | 01 58 49.6 | -0.2 |
| | 6.4nm,0.1s,SNR=10 | | | | | | |
| **TNSS** | **Tian-Shan** | **1.33** | **69** | ⇓*i*P | Pb | 01 58 50.9 | -0.4 |
| | 16nm,0.2s | | | | | | |
| TNSS | | | | *e*S | Sg | 01 59 08.8 | -0.7 |
| | 29nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.33** | **69** | P | Pb | 01 58 50.9 | -0.4 |
| | 16nm,0.2s | | | | | | |
| TNSS | | | | S | Sg | 01 59 08.8 | -0.7 |
| | 29nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.33** | **69** | ⇓*i*P | Pb | 01 58 50.9 | -0.4 |
| | baz=69 | | | | | | |
| TNSS | | | | ⇓*e*S | Sg | 01 59 08.8 | -0.7 |
| | baz=69 | | | | | | |
| **AAA** | **Alma-Ata** | **1.38** | **62** | *e*P | Pg | 01 58 52.2 | -0.7 |
| | 51nm,0.2s | | | | | | |
| AAA | | | | *e*S | Sg | 01 59 11.1 | +0.1 |
| | 146nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **1.38** | **62** | P | Pg | 01 58 52.2 | -0.7 |
| | 51nm,0.2s | | | | | | |
| AAA | | | | S | Sg | 01 59 11.1 | +0.1 |
| | 146nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **1.38** | **62** | *e*P | Pg | 01 58 52.3 | -0.7 |
| | baz=62 | | | | | | |
| AAA | | | | *e*S | Sg | 01 59 11.1 | +0.1 |
| | baz=62 | | | | | | |
| **KNDC** | **Almaty** | **1.41** | **62** | ⇑P | Pb | 01 58 52.7 | +0.2 |
| | 17nm,0.2s | | | | | | |
| KNDC | | | | ⇑S | Sg | 01 59 11.9 | -0.2 |
| | 37nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **1.45** | **65** | *e*P | Pb | 01 58 53.2 | 0.0 |
| | 19nm,0.1s | | | | | | |
| MDOK | | | | *e*S | Sg | 01 59 12.9 | -0.3 |
| | 65nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **1.45** | **65** | ⇑P | Pb | 01 58 52.9 | -0.3 |
| | 5.4nm,0.4s | | | | | | |
| MDOK | | | | ⇓S | Sg | 01 59 12.2 | -0.9 |
| | 18nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **1.45** | **65** | Pg | Pb | 01 58 53.2 | 0.0 |
| | 19nm,0.1s | | | | | | |
| MDOK | | | | Lg | Lg | 01 59 12.9 | |
| | 65nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **1.45** | **65** | *e*P | Pb | 01 58 53.2 | 0.0 |
| | baz=65 | | | | | | |
| MDOK | | | | *e*S | Sg | 01 59 12.9 | -0.3 |
| | baz=65 | | | | | | |
| **KDJ** | **Kajisay** | **1.50** | **107** | ⇑*i*P | Pb | 01 58 53.9 | -0.1 |
| | baz=6.0 | | | | | | |
| KDJ | | | | ⇑*i*S | Sg | 01 59 14.3 | -0.4 |
| | baz=6.0 | | | | | | |
| **MRKS** | **Merke** | **1.51** | **277** | *e*P | Pb | 01 58 54.1 | -0.1 |
| | 43nm,0.1s | | | | | | |
| MRKS | | | | *e*S | Sg | 01 59 14.6 | -0.5 |
| | 108nm,0.1s | | | | | | |
| **MRKS** | **Merke** | **1.51** | **277** | P | Pb | 01 58 54.1 | -0.1 |
| | 43nm,0.1s | | | | | | |
| MRKS | | | | S | Sg | 01 59 14.6 | -0.5 |
| | 108nm,0.1s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.52** | **64** | *e*P | Pb | 01 58 54.5 | +0.1 |
| | 28nm,0.1s | | | | | | |
| KOTS | | | | *e*S | Sg | 01 59 15.2 | -0.3 |
| | 94nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.52** | **64** | P | Pb | 01 58 54.5 | +0.1 |
| | 28nm,0.1s | | | | | | |
| KOTS | | | | S | Sg | 01 59 15.2 | -0.3 |
| | 94nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.54** | **31** | *e*P | Pb | 01 58 54.5 | -0.2 |
| | 45nm,0.2s | | | | | | |
| KUU | | | | *e*S | Sg | 01 59 14.9 | -1.2 |
| | 69nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.54** | **31** | P | Pb | 01 58 54.5 | -0.2 |
| | 45nm,0.2s | | | | | | |
| KUU | | | | S | Sg | 01 59 14.9 | -1.2 |
| | 69nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.54** | **31** | *e*P | Pb | 01 58 54.5 | -0.2 |
| | baz=31 | | | | | | |
| KUU | | | | *e*S | Sg | 01 59 14.9 | -1.2 |
| | baz=31 | | | | | | |
| **KTBS** | **Karatobe** | **1.55** | **42** | *e*P | Pb | 01 58 54.5 | -0.3 |
| | 20nm,0.1s | | | | | | |
| KTBS | | | | *e*S | Sg | 01 59 15.2 | -1.1 |
| | 87nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.55** | **42** | P | Pb | 01 58 54.5 | -0.3 |
| | 20nm,0.1s | | | | | | |
| KTBS | | | | S | Sg | 01 59 15.2 | -1.1 |
| | 87nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.55** | **42** | *e*P | Pb | 01 58 54.5 | -0.3 |
| | baz=42 | | | | | | |
| KTBS | | | | *e*S | Sg | 01 59 15.2 | -1.1 |
| | baz=42 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.79** | **82** | ⇑*i*P | Pb | 01 58 59.1 | 0.0 |
| | baz=82 | | | | | | |
| ANVS | | | | ⇑*i*S | Sb | 01 59 22.5 | +1.1 |
| | baz=82 | | | | | | |
| **CHKK** | **Chushkaly** | **1.80** | **44** | *e*P | Pb | 01 58 58.9 | -0.3 |
| | 28nm,0.3s | | | | | | |
| CHKK | | | | *e*S | Sb | 01 59 22.4 | +0.8 |
| | 87nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.80** | **44** | P | Pb | 01 58 58.9 | -0.3 |
| | 28nm,0.3s | | | | | | |
| CHKK | | | | S | Sb | 01 59 22.4 | +0.8 |
| | 87nm,0.2s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.08** | **113** | ⇓*i*P | Pb | 01 59 03.2 | -0.8 |
| | baz=13 | | | | | | |
| TARG | | | | ⇓*i*S | Sb | 01 59 29.7 | -0.1 |
| | baz=13 | | | | | | |
| **KURS** | **Kuram** | **2.33** | **66** | *e*P | Pb | 01 59 08.5 | +0.4 |
| | 5.3nm,0.3s | | | | | | |
| KURS | | | | *e*S | Sg | 01 59 39.5 | -1.8 |
| | 20nm,0.3s | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KURS** | **Kuram** | **2.33** | **66** | Pg | **Pb** | **01 59 08.5** | **+0.4** |
| | 5.3nm,0.3s | | | | | | |
| KURS | | | | Lg | Lg | 01 59 39.5 | |
| | 20nm,0.3s | | | | | | |
| **PRZ** | **Przheval'sk** | **2.33** | **91** | ⇓*i*P | **Pb** | **01 59 06.5** | **-1.7** |
| | baz=91 | | | | | | |
| PRZ | | | | ⇓*i*S | **Sb** | **01 59 35.8** | **-1.0** |
| | baz=91 | | | | | | |
| **SATY** | **Saty** | **2.37** | **77** | *e*P | **Pb** | **01 59 08.7** | **-0.2** |
| | 15nm,0.2s | | | | | | |
| SATY | | | | *e*S | **Sb** | **01 59 39.4** | **+1.4** |
| | 29nm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.37** | **77** | Pg | **Pb** | **01 59 08.7** | **-0.2** |
| | 15nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 01 59 39.4 | |
| | 29nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.41** | **75** | *e*P | **Pb** | **01 59 09.3** | **-0.3** |
| | 18nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **01 59 40.6** | **+1.4** |
| | 104nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.41** | **75** | Pg | **Pb** | **01 59 09.3** | **-0.3** |
| | 18nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 01 59 40.6 | |
| | 104nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **2.49** | **48** | *e*P | **Pb** | **01 59 10.8** | **-0.1** |
| | 0.2nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **01 59 43.0** | **+1.6** |
| | 35nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.49** | **48** | Pg | **Pb** | **01 59 10.8** | **-0.1** |
| | 0.2nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 01 59 43.0 | |
| | 35nm,0.3s | | | | | | |
| **ARK** | **Arkit** | **2.56** | **254** | ⇑*i*P | **Pb** | **01 59 09.8** | **-2.4** |
| | baz=54 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **01 59 41.3** | **-2.3** |
| | baz=54 | | | | | | |
| **BTLS** | **Baital** | **2.62** | **341** | *e*P | **Pb** | **01 59 13.5** | **+0.5** |
| | 3.6nm,0.2s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **01 59 47.5** | **-3.2** |
| | 32nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **2.62** | **341** | Pg | **Pb** | **01 59 13.5** | **+0.5** |
| | 3.6nm,0.2s | | | | | | |
| BTLS | | | | Lg | Lg | 01 59 47.5 | |
| | 32nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **2.67** | **69** | *e*P | **Pb** | **01 59 14.1** | **+0.1** |
| | 8.3nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **01 59 48.7** | **+2.1** |
| | 48nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **2.80** | **56** | *e*P | **Pb** | **01 59 16.1** | **-0.2** |
| | 10nm,0.3s | | | | | | |
| BLB | | | | *e*S | **Sb** | **01 59 52.2** | **+1.7** |
| | 42nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.80** | **56** | Pg | **Pb** | **01 59 16.1** | **-0.2** |
| | 10nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 01 59 52.2 | |
| | 42nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.83** | **77** | *e*P | **Pb** | **01 59 16.7** | **0.0** |
| | 11nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **01 59 53.1** | **+1.9** |
| | 28nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.83** | **77** | Pg | **Pb** | **01 59 16.7** | **0.0** |
| | 11nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 01 59 53.1 | |
| | 28nm,0.3s | | | | | | |
| **DZA** | **Taraz** | **2.91** | **278** | *e*P | **Pb** | **01 59 17.1** | **-0.9** |
| | 80nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sb** | **01 59 53.8** | **+0.4** |
| | 45nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **3.20** | **75** | Pg | **Pb** | **01 59 23.3** | **+0.3** |
| | 1.9nm,0.2s | | | | | | |
| PDGK | | | | Lg | Lg | 02 00 04.6 | |
| | 7.0nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **3.20** | **75** | ⇓Pg | **Pb** | **01 59 23.5** | **+0.5** |
| | 2.7nm,0.5s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 02 00 07.6 | |
| | 8.4nm,0.5s | | | | | | |
| **KK02** | **Karatay Array** | **3.53** | **280** | ⇓Pg | **Pb** | **01 59 29.4** | **+0.9** |
| | 1.4nm,0.3s | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 02 00 15.4 | |
| | 7.9nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.74** | **60** | *e*P | **Pb** | **01 59 34.2** | **+2.0** |
| | 3.7nm,0.4s | | | | | | |
| DJR | | | | *e*S | **Sg** | **02 00 23.0** | **-3.6** |
| | 7.8nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.74** | **60** | Pg | **Pb** | **01 59 34.2** | **+2.0** |
| | 3.7nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 02 00 23.0 | |
| | 7.8nm,0.4s | | | | | | |
| **IUG** | **Iuzhnay** | **3.89** | **265** | *e*P | **Pb** | **01 59 35.4** | **+0.6** |
| | 61nm,0.5s | | | | | | |
| IUG | | | | *e*S | **Sb** | **02 00 25.5** | **+3.7** |
| | 16nm,0.6s | | | | | | |
| **IUG** | **Iuzhnay** | **3.89** | **265** | Pg | **Pb** | **01 59 35.4** | **+0.6** |
| | 61nm,0.5s | | | | | | |
| IUG | | | | Lg | Lg | 02 00 25.5 | |
| | 16nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **4.01** | **278** | *e*P | **Pb** | **01 59 39.4** | **+2.6** |
| | 0.7nm,0.1s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **02 00 32.2** | **-3.1** |
| | 5.0nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.01** | **278** | Pg | **Pb** | **01 59 39.4** | **+2.6** |
| | 0.7nm,0.1s | | | | | | |
| BRLS | | | | Lg | Lg | 02 00 32.2 | |
| | 5.0nm,0.5s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.02** | **46** | *e*P | **Pb** | **01 59 38.5** | **+1.6** |
| | 2.8nm,0.4s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **02 00 30.8** | **-4.6** |
| | 6.9nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.02** | **46** | Pg | **Pb** | **01 59 38.5** | **+1.6** |
| | 2.8nm,0.4s | | | | | | |
| KAPS | | | | Lg | Lg | 02 00 30.8 | |
| | 6.9nm,0.3s | | | | | | |
| **OTUK** | **Ortayu** | **6.03** | **341** | ⇑Lg | Lg | 02 01 38.2 | |
| | 3.2nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **6.55** | **48** | ⇓Pn | **Pn** | **02 00 03.1** | **+0.9** |
| | 0.6nm,0.5s,baz=224,slow=14,SNR=7.9 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **02 01 19.7** | **+3.0** |
| | 0.4nm,0.5s,baz=225,slow=25,SNR=5.0 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 02 01 54.4 | |
| | 0.9nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.36** | **14** | ⇑Lg | Lg | 02 02 51.5 | |
| | 5.5nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **8.47** | **15** | ⇑Lg | Lg | 02 02 54.3 | |
| | 4.3nm,1.1s | | | | | | |

**WEL 14 02:02:09.2,39°S±7′×17°6E±1′0,h103km±15km, M2.2/21, mB4.7/2, ML1.9/9, MLv2.2/21, Mw(mB)3.9/2, Error ellipse: s-maj=0.0km s-min=0.0km az=107.7, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ETVZ** | **East Tongariro** | **0.28** | **164** | P | Pn | 02 02 25.5 | +1.2 |
| **OTVZ** | **Oturere** | **0.29** | **172** | P | Pn | 02 02 25.3 | +0.9 |
| **SNVZ** | **South Ngauruho** | **0.32** | **176** | P | Pn | 02 02 20.4 | -4.1 |
| **WNVZ** | **Wahianoa** | **0.46** | **181** | P | Pn | 02 02 26.1 | +0.8 |
| **PKVZ** | **Pokaka** | **0.47** | **206** | P | Pn | 02 02 25.7 | +0.4 |
| **TLZ** | **Tolley Road** | **0.54** | **354** | P | Pn | 02 02 25.0 | -0.8 |
| **MOVZ** | **Moawhango** | **0.55** | **169** | P | Pn | 02 02 26.0 | +0.2 |
| **MRHZ** | **Matea Rd** | **0.63** | **87** | P | Pn | 02 02 25.7 | -0.7 |
| **BHHZ** | **Black Hill Sta** | **0.71** | **151** | P | Pn | 02 02 27.4 | +0.2 |
| **VRZ** | **Vera Road** | **0.71** | **249** | P | Pn | 02 02 27.2 | +0.2 |
| **BKZ** | **Black Stump Fm** | **0.75** | **113** | P | Pn | 02 02 27.1 | -0.4 |
| **KWHZ** | **Kaweka Forest** | **0.84** | **131** | P | Pn | 02 02 30.6 | +2.2 |
| **NMHZ** | **Naumai** | **0.96** | **104** | P | Pn | 02 02 31.2 | +1.6 |
| **MTHZ** | **Maungataniwha** | **0.96** | **89** | P | Pn | 02 02 29.0 | -0.5 |
| **KRHZ** | **Kereru** | **0.97** | **143** | P | Pn | 02 02 30.5 | +0.9 |
| **WAZ** | **Wanganui** | **1.01** | **209** | P | Pn | 02 02 30.7 | +0.6 |
| **MCHZ** | **McNeill Hill** | **1.02** | **125** | P | Pn | 02 02 31.2 | +1.1 |
| **RTZ** | **Ruatahuna** | **1.10** | **77** | P | Pn | 02 02 30.6 | -0.5 |
| **LREZ** | **Lake Rotokare** | **1.11** | **238** | P | Pn | 02 02 37.5 | +6.4 |
| **PNHZ** | **Pukenui** | **1.14** | **157** | P | Pn | 02 02 31.9 | +0.4 |
| **ARHZ** | **Aropaoanui** | **1.15** | **110** | P | Pn | 02 02 33.4 | +1.9 |
| **RAHZ** | **Arahi** | **1.15** | **93** | P | Pn | 02 02 32.4 | +0.8 |
| **PKE** | **Pukeiti** | **1.31** | **255** | P | Pn | 02 02 33.2 | -0.2 |
| **KHEZ** | **Kahui Hut** | **1.31** | **251** | P | Pn | 02 02 33.6 | +0.1 |
| **URZ** | **Urewera** | **1.32** | **63** | P | Pn | 02 02 32.2 | -1.4 |
| **KAHZ** | **Kahuranaki** | **1.35** | **134** | P | Pn | 02 02 34.2 | +0.3 |
| **RAGZ** | **Rawiri** | **1.46** | **76** | P | Pn | 02 02 34.6 | -0.6 |
| **DVHZ** | **Dannevirke** | **1.49** | **163** | P | Pn | 02 02 35.2 | -0.3 |
| **MWZ** | **Matawai** | **1.59** | **71** | P | Pn | 02 02 36.0 | -0.9 |
| **ANWZ** | **Angora Road** | **1.72** | **158** | P | Pn | 02 02 38.1 | -0.2 |
| **MRZ** | **Mangatainoka R** | **1.79** | **181** | P | Pn | 02 02 38.5 | -0.8 |
| **RUGZ** | **Raukumara Rang** | **1.86** | **61** | P | Pn | 02 02 39.2 | -1.1 |
| **BFZ** | **Birch Farm** | **1.87** | **165** | P | Pn | 02 02 39.8 | -0.5 |
| **TIWZ** | **Tintock** | **1.91** | **174** | P | Pn | 02 02 40.0 | -0.8 |
| **OGWZ** | **Otaki Gorge** | **1.97** | **190** | P | Pn | 02 02 41.0 | -0.6 |
| **HOWZ** | **Holdsworth Sta** | **2.02** | **182** | P | Pn | 02 02 41.1 | -1.2 |
| **HAZ** | **Te Kaha** | **2.04** | **58** | P | Pn | 02 02 40.2 | -2.2 |
| **KIW** | **Kapiti Island** | **2.06** | **195** | P | Pn | 02 02 41.6 | -1.2 |
| **CAW** | **Cannon Point** | **2.27** | **190** | P | Pn | 02 02 44.3 | -1.2 |
| **MTW** | **Mount Morrison** | **2.29** | **182** | P | Pn | 02 02 43.9 | -1.7 |
| **PLWZ** | **Palliser** | **2.71** | **186** | P | Pn | 02 02 48.9 | -2.3 |
| **QRZ** | **Quartz Range** | **3.07** | **230** | P | Pn | 02 02 53.7 | -2.3 |
| **OKCZ** | **Okains Bay** | **5.21** | **201** | P | Pn | 02 03 26.5 | +1.6 |
| **MQZ** | **McQueen's Vall** | **5.32** | **204** | P | Pn | 02 03 24.1 | -2.1 |
| **AKCZ** | **Akaroa Harbour** | **5.39** | **201** | P | Pn | 02 03 27.9 | +0.7 |

*NEIC **14** 02:05:46.3±1.9, 19°.06N±0°.06×67°.44W±0°.04, h1km±9km, Error ellipse: s-maj=8.5km s-min=5.2km az=187.0*
*RSPR **14** 02:05:47.3, 19°.16N×67°.50W, h89km±7km, MD3.5/12*
**ISC 14 02:05:46.2±1.6, 19°.17N±0°.09×67°.35W±0°.05, h10km, n46, σ1§26/47, 3C-12D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDE** | **Isla Desecheo** | **0.79** | **188** | ⇓*e*P | **Pn** | **02 06 04.3** | **+0.8** |
| **PRSN** | **Puerto Rico Se** | **0.97** | **168** | | **Pn** | **02 06 06.3** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.00** | **145** | ⇓*e*P | **Pn** | **02 06 06.3** | **-0.1** |
| **AOPR** | **Arecibo Observ** | **1.00** | **145** | *e*S | **Sn** | **02 06 22.7** | **+2.2** |
| **AOPR** | **Arecibo Observ** | **1.00** | **145** | | **Pn** | **02 06 06.3** | **-0.1** |
| AOPR | | | | | **Sn** | **02 06 22.7** | **+2.2** |
| **LSP** | **Las Mesas** | **1.02** | **166** | ⇑*e*P | **Pn** | **02 06 07.3** | **+0.6** |
| **LSP** | **Las Mesas** | **1.02** | **166** | *e*S | **Sn** | **02 06 22.8** | **+1.6** |
| **EMPR** | **Esperanza - Ma** | **1.04** | **131** | ⇓*e*P | **Pn** | **02 06 07.8** | **+0.8** |
| **EMPR** | **Esperanza - Ma** | **1.04** | **131** | *e*S | **Sn** | **02 06 24.7** | **+3.2** |
| **EMPR** | **Esperanza - Ma** | **1.04** | **131** | | **Pn** | **02 06 07.8** | **+0.8** |
| EMPR | | | | | **Sn** | **02 06 24.7** | **+3.2** |
| **UUPR** | **Utuado, UPR, P** | **1.09** | **147** | ⇓*e*P | **Pn** | **02 06 07.8** | **+0.2** |
| **UUPR** | **Utuado, UPR, P** | **1.09** | **147** | | **Pn** | **02 06 07.8** | **+0.2** |
| **PCDR** | **Punta Cana, DR** | **1.18** | **236** | ⇑*e*P | **Pn** | **02 06 11.4** | **+2.6** |
| **PCDR** | **Punta Cana, DR** | **1.18** | **236** | | **Pn** | **02 06 11.4** | **+2.6** |
| **PCDR** | **Punta Cana, DR** | **1.18** | **236** | IAML | | 02 06 38.0 | |
| | comp=N,251nm,0.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **169** | ⇓*e*P | **Pn** | **02 06 09.5** | **+0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **169** | *e*S | **Sn** | **02 06 25.6** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **169** | | **Pn** | **02 06 09.5** | **+0.6** |
| CRPR | | | | | **Sn** | **02 06 25.6** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **169** | IAML | | 02 06 32.2 | |
| | comp=E,221nm,0.5s | | | | | | |
| CRPR | | | | IAML | | 02 06 32.4 | |
| | comp=N,226nm,0.5s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.23** | **166** | ⇓*e*P | **Pn** | **02 06 09.1** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **1.23** | **166** | *e*S | **Sn** | **02 06 26.0** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **1.23** | **166** | | **Pn** | **02 06 09.1** | **-0.4** |
| MLPR | | | | | **Sn** | **02 06 26.0** | **-0.2** |
| **GBPR** | **Guanica, Bosqu** | **1.27** | **159** | ⇑*e*P | **Pg** | **02 06 11.3** | **+0.6** |
| **CELP** | **Cerrillos** | **1.31** | **146** | ⇓*e*P | **Pg** | **02 06 11.2** | **-0.3** |
| **CELP** | **Cerrillos** | **1.31** | **146** | *e*S | **Sn** | **02 06 29.0** | **+0.7** |
| **CELP** | **Cerrillos** | **1.31** | **146** | | **Pg** | **02 06 11.2** | **-0.3** |
| CELP | | | | | **Sn** | **02 06 29.0** | **+0.7** |
| **CELP** | **Cerrillos** | **1.31** | **146** | IAML | | 02 06 37.1 | |
| | comp=E,130nm,0.4s | | | | | | |
| CELP | | | | IAML | | 02 06 37.3 | |
| | comp=N,160nm,0.3s | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.33** | **148** | ⇓*e*P | **Pb** | **02 06 10.4** | **-0.9** |
| **OBIP** | **Obispado Ponce** | **1.33** | **148** | | **Pb** | **02 06 10.4** | **-0.9** |
| **OBIP** | **Obispado Ponce** | **1.33** | **148** | IAML | | 02 06 33.8 | |
| | comp=N,130nm,0.5s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.48** | **125** | | **Pn** | **02 06 13.1** | **+0.2** |
| **ICMP** | **Isla Caja de M** | **1.50** | **148** | Pn | **Pn** | **02 06 12.8** | **-0.4** |
| ICMP | | | | IAML | | 02 06 39.2 | |
| | comp=N,116nm,0.5s | | | | | | |
| ICMP | | | | IAML | | 02 06 41.8 | |
| | comp=E,126nm,0.7s | | | | | | |
| **SJG** | **San Juan** | **1.55** | **133** | | **Pn** | **02 06 14.2** | **+0.2** |
| SJG | | | | IAML | | 02 06 43.2 | |
| | comp=E,103nm,0.5s | | | | | | |
| SJG | | | | IAML | | 02 06 47.1 | |
| | comp=E,123nm,0.4s | | | | | | |
| **IGPR** | **InterUniversit** | **1.69** | **135** | ⇓*e*P | **Pb** | **02 06 16.3** | **-1.0** |
| **IGPR** | **InterUniversit** | **1.69** | **135** | *e*S | **Sg** | **02 06 39.0** | **-1.5** |
| **IGPR** | **InterUniversit** | **1.69** | **135** | | **Sg** | **02 06 39.0** | **-1.5** |
| **PDPR** | **Patillas Dam,** | **1.71** | **132** | | **Pb** | **02 06 17.7** | **0.0** |
| PDPR | | | | IAML | | 02 06 42.4 | |
| | comp=E,93nm,0.6s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.75** | **126** | ⇓*e*P | **Pb** | **02 06 17.7** | **-0.8** |
| **HUMP** | **Col San Antoni** | **1.75** | **126** | *e*S | **Sb** | **02 06 40.8** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.75** | **126** | | **Pb** | **02 06 17.7** | **-0.8** |
| HUMP | | | | | **Sb** | **02 06 40.8** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.75** | **126** | IAML | | 02 06 43.3 | |
| | comp=N,94nm,0.3s | | | | | | |
| **CUPR** | **Culebra, Puert** | **2.14** | **113** | ⇓*e*P | **Pn** | **02 06 22.1** | **0.0** |
| **CUPR** | **Culebra, Puert** | **2.14** | **113** | | **Pn** | **02 06 22.1** | **0.0** |
| **STVI** | **Saint Thomas** | **2.42** | **109** | ⇓*e*P | **Pn** | **02 06 26.4** | **+0.6** |
| **STVI** | **Saint Thomas** | **2.42** | **109** | | **Pn** | **02 06 26.4** | **+0.6** |
| **BANI** | **BANI** | **2.95** | **255** | Pn | **Pn** | **02 06 30.4** | **-2.9** |

**IDC 14 02:09:40.2±5.2, 7°.63S×148°.17E, h49km±50km, mb2.9/2, mb1 3.3/4, mb1mx2.8/40, mbtmpb3.3/4, ML3.4/1, Error ellipse: s-maj=87.4km s-min=36.5km az=131.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **2.03** | **210** | P | Pn | 02 10 11.8 | -0.1 |
| | 17nm,0.3s,baz=41,slow=10,SNR=25 | | | | | | |
| PMG | | | | S | Sn | 02 10 36.6 | +0.6 |
| | 55nm,0.3s,baz=124,slow=20,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.15** | **226** | P | Pn | 02 13 49.3 | +0.5 |
| | 0.1nm,0.3s,baz=49,slow=11,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **21.01** | **219** | P | P | 02 14 18.9 | -0.9 |
| | 0.2nm,0.5s,baz=54,slow=9.1,SNR=4.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.27** | **242** | P | P | 02 14 53.1 | +0.1 |
| | 0.5nm,0.3s,baz=74,slow=7.4,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.60** | **282** | PKPbc | PKPbc | 02 29 17.2 | -0.3 |
| | 0.4nm,0.8s,baz=72,slow=3.4,SNR=1.6 | | | | | | |

*IDC **14** 02:15:46.5±1.2, 36°.92N×141°.54E, h0km, mb3.4/5, mb1 3.5/6, mb1mx3.1/50, mbtmpb3.3/6, ML2.1/1, Error ellipse: s-maj=28.4km s-min=19.6km az=168.0*
*JMA **14** 02:15:48.9±0.1, 36°.91N×141°.37E, h32km±1km, M3.3*
**ISC 14 02:15:48.5±1.9, 36°.91N±0°.04×141°.39E±0°.07, h15km±10km, n22, σ0§81/26, mb3.5/5, 3C-1D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **0.51** | **293** | ⇑P | **Pb** | **02 15 59.1** | **-0.1** |
| ONAJ | | | | S | **Sg** | **02 16 06.4** | **+1.0** |
| **JFK** | **Kawauchi** | **0.61** | **318** | ⇑P | **Pb** | **02 16 00.8** | **-0.2** |
| JFK | | | | S | **Sg** | **02 16 08.9** | **+0.2** |
| **JFFD** | **Fukushimafurud** | **0.69** | **286** | ⇓P | **Pg** | **02 16 01.7** | **-0.2** |
| JFFD | | | | S | **Sg** | **02 16 10.7** | **-0.2** |
| **JHO** | **Hitachi** | **0.72** | **246** | P | **Pb** | **02 16 02.4** | **-0.3** |
| JHO | | | | S | **Sg** | **02 16 12.5** | **+0.5** |
| **JFT** | **Otama** | **1.04** | **306** | ⇑P | **Pn** | **02 16 08.2** | **-0.3** |
| JFT | | | | S | **Sb** | **02 16 21.6** | **0.0** |
| **JMM** | **Marumori** | **1.07** | **334** | P | **Pb** | **02 16 08.0** | **-0.7** |
| JMM | | | | *e*S | **Sb** | **02 16 21.5** | **-0.9** |
| **JYT** | **Yasato** | **1.18** | **235** | P | **Pn** | **02 16 08.8** | **-1.6** |
| JYT | | | | *e*S | **Sb** | **02 16 24.1** | **-1.4** |
| **JFY** | **Yanaizu** | **1.43** | **291** | P | **Pn** | **02 16 14.1** | **+0.1** |
| JFY | | | | S | **Sn** | **02 16 32.7** | **+0.1** |
| **JIO** | **Ouri** | **1.54** | **359** | P | **Pn** | **02 16 15.0** | **-0.5** |
| JIO | | | | S | **Sn** | **02 16 33.5** | **-1.8** |
| **MJAR** | **Matsushiro Arr** | **2.58** | **263** | Pn | **Pn** | **02 16 30.2** | **+0.5** |
| | 0.3nm,0.3s,baz=88,slow=14,SNR=13 | | | | | | |
| MJAR | | | | Lg | Lg | 02 17 13.1 | |
| | 0.9nm,0.3s,baz=87,slow=27,SNR=8.9 | | | | | | |
| **MAT** | **Matsushiro** | **2.58** | **263** | P | **Pn** | **02 16 30.3** | **+0.6** |
| MAT | | | | S | **Sn** | **02 16 59.8** | **-1.1** |
| **H11N2** | **WAKE ISLAND Hy** | **28.10** | **121** | T | T | 02 51 05.0 | |
| | baz=313,slow=75,SNR=54 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.11** | **121** | T | T | 02 51 07.5 | |
| | baz=313,slow=75,SNR=55 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.12** | **121** | T | T | 02 51 07.0 | |
| | baz=313,slow=75,SNR=45 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.17** | **302** | P | **P** | **02 23 56.9** | **+0.3** |
| | 0.2nm,0.6s,baz=89,slow=10,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **49.61** | **32** | P | **P** | **02 24 39.9** | **+1.0** |
| | 0.3nm,0.7s,baz=273,slow=6.2,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.93** | **188** | P | **P** | **02 25 33.7** | **+0.5** |
| | 0.3nm,0.5s,baz=5.5,slow=7.5,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **60.66** | **188** | P | **P** | **02 25 59.6** | **+0.5** |
| | 0.3nm,0.8s,baz=2.5,slow=7.9,SNR=1.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.38** | **322** | P | **P** | **02 27 25.8** | **+0.3** |
| | 0.2nm,0.3s,baz=46,slow=6.0,SNR=4.8 | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.03** | **96** | T | T | 05 19 51.5 | |
| | baz=291,slow=76,SNR=14 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.04** | **96** | T | T | 05 19 51.8 | |
| | baz=291,slow=76,SNR=14 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.05** | **96** | T | T | 05 19 52.0 | |
| | baz=291,slow=76,SNR=19 | | | | | | |

*IDC **14** 02:19:23.5±0.6, 8°.06N×38°.95W, h0km, mb4.0/21, mb1 4.2/21, mb1mx4.0/48, mbtmp4.1/21, MS3.7/1, Ms1 3.7/1, ms1mx2.9/85, Error ellipse: s-maj=19.5km s-min=13.3km az=135.0*
*NEIC **14** 02:19:25.7±1.8, 8°.0N±0°.1×38°.9W±0°.1, h10km±1km, mb4.5/35, Error ellipse: s-maj=20.7km s-min=16.8km az=136.0*
**ISC 14 02:19:25.6±0.4, 8°.11N±0°.07×38°.93W±0°.08, h12km, n80, σ1§50/65, mb4.3/33, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBMO** | **Morrinhos-CE** | **11.39** | **186** | *e*P | **Pn** | **02 22 04.6** | **-3.7** |
| **ROSB** | **Rosrio** | **12.10** | **206** | *e*P | **Pn** | **02 22 15.9** | **-2.0** |
| **NBCL** | **Cascavel-CE** | **12.27** | **177** | *e*P | **Pn** | **02 22 18.2** | **-2.0** |
| **NBPS** | **Pedro II - PI** | **12.67** | **191** | *e*P | **Pn** | **02 22 24.1** | **-1.7** |
| **NBPB** | **Pedra_Branca-C** | **13.57** | **183** | *e*P | **Pn** | **02 22 37.5** | **-0.7** |
| **TMAB** | **Tom-Au,PA,Br** | **13.85** | **222** | *e*P | **Pn** | **02 22 39.1** | **-2.8** |
| **MDP** | **Montagnes des** | **13.94** | **258** | Pn | **Pn** | **02 22 39.1** | **-4.0** |
| | 0.8nm,0.3s,baz=62,slow=14,SNR=24 | | | | | | |
| MDP | | | | Sn | Sn | 02 24 57.7 | -20 |
| | 0.8nm,0.3s,baz=141,slow=19,SNR=6.3 | | | | | | |
| **RCBR** | **Riachuelo** | **14.17** | **168** | Pn | **Pn** | **02 22 45.7** | **-0.6** |
| **RCBR** | **Riachuelo** | **14.17** | **168** | *e*P | **Pn** | **02 22 47.8** | **+1.5** |
| **NBMA** | **Muriti-CE** | **15.37** | **179** | *e*P | **Pn** | **02 23 02.3** | **-0.2** |
| **MCPB** | **Macapa, AP** | **15.55** | **238** | *e*P | **Pn** | **02 23 03.3** | **-1.6** |
| **SACV** | **Santiago Islan** | **16.48** | **64** | Pn | **Pn** | **02 23 12.1** | **-4.8** |
| SACV | | | | IAmb | IAmb | 02 23 14.1 | |
| | comp=Z,54nm,0.9s | | | | | | |
| **NBAN** | **Anadia - AL** | **17.86** | **171** | *e*P | **P** | **02 23 36.7** | **+2.0** |
| **PRPB** | **Parauapebas** | **17.86** | **218** | *e*P | **Pn** | **02 23 32.6** | **-1.6** |
| **NBPN** | **Ponto Novo - B** | **18.87** | **184** | *e*P | **Pn** | **02 23 46.8** | **+0.3** |
| **SMTB** | **Santa Maria do** | **18.93** | **207** | *e*P | **P** | **02 23 45.8** | **-0.8** |
| **ITTB** | **Itaituba** | **20.84** | **234** | *e*P | **P** | **02 24 06.7** | **-0.7** |
| **SDBA** | **SAO DESIDERIO** | **21.23** | **196** | *e*P | **P** | **02 24 11.2** | **-0.5** |
| **GDU01** | **Guandu, BA** | **21.69** | **182** | *e*P | **P** | **02 24 18.2** | **+1.6** |
| **PEXB** | **Peixe** | **22.14** | **205** | *e*P | **P** | **02 24 21.5** | **+0.1** |
| **BOAV** | **Boa Vista** | **22.23** | **256** | *e*P | **P** | **02 24 21.5** | **-0.9** |
| **NPGB** | **Novo Progresso** | **22.24** | **228** | *e*P | **P** | **02 24 22.9** | **+0.3** |
| **PTGA** | **Pitinga** | **22.73** | **248** | P | **P** | **02 24 27.6** | **-0.2** |
| | comp=Z,5.0nm,0.8s,baz=90,slow=11,SNR=7.4 | | | | | | |
| **SNDB** | **Serra Nova Dou** | **23.43** | **212** | *e*P | **P** | **02 24 34.9** | **-0.1** |
| **JANB** | **Januaria** | **23.62** | **193** | *e*P | **P** | **02 24 38.0** | **+1.2** |
| **BDFB** | **Brasilia** | **25.25** | **201** | P | **P** | **02 24 51.8** | **-0.1** |
| | comp=Z,4.4nm,0.9s,baz=38,slow=7.7,SNR=6.6 | | | | | | |
| **BDFB** | **Brasilia** | **25.25** | **201** | IAmb | IAmb | 02 24 56.0 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **PDRB** | **Porto dos Gac** | **26.40** | **222** | *e*P | **P** | **02 25 03.6** | **+1.3** |
| **DIAM** | **Diamantina, MG** | **26.65** | **190** | *e*P | **P** | **02 25 06.6** | **+2.0** |
| **H10N3** | **ASCENSION HYDR** | **29.05** | **122** | T | T | 02 55 50.0 | |
| | baz=302,slow=75,SNR=26 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **29.06** | **122** | T | T | 02 55 50.3 | |
| | baz=302,slow=75,SNR=29 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **29.07** | **122** | T | T | 02 55 51.5 | |
| | baz=302,slow=75,SNR=45 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **30.80** | **221** | *e*P | **P** | **02 25 42.2** | **+0.7** |
| **SIV** | **San Ignacio** | **32.46** | **222** | P | **P** | **02 25 55.1** | **-1.1** |
| | comp=Z,3.7nm,1.0s,baz=68,slow=8.7,SNR=10 | | | | | | |
| **ETMB** | **Extrema** | **32.48** | **237** | *e*P | **P** | **02 25 56.0** | **-0.3** |
| **DBIC** | **Dimbokro** | **33.82** | **90** | P | **P** | **02 26 07.1** | **-0.9** |
| | comp=Z,3.3nm,0.8s,baz=292,slow=8.8,SNR=3.8 | | | | | | |
| **DBIC** | **Dimbokro** | **33.82** | **90** | IAmb | IAmb | 02 26 18.4 | |
| | comp=Z,9.4nm,1.3s | | | | | | |
| **KOWA** | **Kowa** | **34.79** | **76** | P | **P** | **02 26 16.4** | **-0

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.09** | **91** | **P** | **Pn** | **02 21 42.3** | **0.0** |
| JYNG | | | | S | Sn | 02 21 50.4 | +1.1 |
| **YOJ** | **Yonaguni jima** | **0.15** | **87** | **P** | **Pn** | **02 21 42.5** | **0.0** |
| YOJ | | | | *e*S | Sn | 02 21 50.4 | +0.8 |
| **YOJ** | **Yonaguni jima** | **0.15** | **87** | P | **Pn** | **02 21 42.5** | **0.0** |
| | baz=117 | | | | | | |
| YOJ | | | | *e*S | Sn | 02 21 50.3 | +0.7 |
| | baz=117 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.81** | **98** | P | **Pn** | 02 21 48.4 | -0.2 |
| IRIF | | | | S | Sn | 02 22 00.9 | +0.6 |
| **EGS** | | **0.92** | **295** | *e*P | **Pn** | 02 21 48.6 | -1.4 |
| | baz=283 | | | | | | |
| **TWC** | **Suao** | **0.93** | **280** | *i* P | **Pn** | 02 21 49.0 | -1.0 |
| | baz=282 | | | | | | |
| TWC | | | | *i* S | Sn | 02 22 01.7 | -1.1 |
| | baz=282 | | | | | | |
| **HATJ** | **Hateruma jima** | **0.96** | **114** | *e*S | **Sn** | 02 22 04.8 | +1.3 |
| **TWB1** | **Santiao Chiao** | **0.96** | **305** | *e*P | **Pn** | 02 21 48.8 | -1.7 |
| | baz=294 | | | | | | |
| **EWUT** | **Wuta** | **0.98** | **270** | P | **Pn** | 02 21 49.5 | -1.1 |
| | baz=269 | | | | | | |
| EWUT | | | | S | Sn | 02 22 04.6 | +0.6 |
| | baz=269 | | | | | | |
| **NTC** | **Toucheng** | **1.01** | **293** | *i* P | **Pn** | 02 21 50.4 | -0.6 |
| | baz=289 | | | | | | |
| NTC | | | | *i* S | Sn | 02 22 04.0 | -0.7 |
| | baz=289 | | | | | | |
| **ENA** | **Nanau** | **1.01** | **269** | *i* P | **Pn** | 02 21 50.7 | -0.4 |
| | baz=268 | | | | | | |
| ENA | | | | S | Sn | 02 22 04.9 | +0.2 |
| | baz=268 | | | | | | |
| **NDS** | **Dongshan** | **1.05** | **280** | *i* P | **Pn** | 02 21 51.0 | -0.6 |
| | baz=279 | | | | | | |
| NDS | | | | *i* S | Sn | 02 22 04.8 | -0.8 |
| | baz=279 | | | | | | |
| **TIPB** | **Shuangxi** | **1.07** | **299** | P | **Pn** | 02 21 50.9 | -0.9 |
| | baz=295 | | | | | | |
| TIPB | | | | *e*S | Sn | 02 22 04.8 | -1.3 |
| | baz=295 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.08** | **101** | P | **Pn** | 02 21 52.2 | +0.3 |
| JKRS | | | | S | Sn | 02 22 07.5 | +1.2 |
| **SXI1** | **Grass Mountain** | **1.09** | **306** | *e*P | **Pn** | 02 21 51.4 | -0.8 |
| | baz=299 | | | | | | |
| **TWE** | **Neicheng** | **1.11** | **284** | *i* P | **Pn** | 02 21 51.7 | -0.6 |
| | baz=284 | | | | | | |
| TWE | | | | *i* S | Sn | 02 22 06.4 | -0.6 |
| | baz=284 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.15** | **303** | *i* P | **Pn** | 02 21 52.2 | -0.8 |
| | baz=290 | | | | | | |
| NWF | | | | S | Sn | 02 22 07.4 | -0.7 |
| | baz=290 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.15** | **303** | P | **Pn** | 02 21 52.2 | -0.7 |
| | baz=290 | | | | | | |
| **ETL** | **Fush Village** | **1.16** | **256** | P | **Pn** | 02 21 52.7 | -0.3 |
| | baz=251 | | | | | | |
| ETL | | | | S | Sn | 02 22 08.0 | -0.2 |
| | baz=251 | | | | | | |
| **NACB** | **Ninganchiao** | **1.18** | **257** | P | **Pn** | 02 21 52.7 | -0.6 |
| | baz=252 | | | | | | |
| NACB | | | | *e*S | Sn | 02 22 07.8 | -0.9 |
| | baz=252 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.18** | **94** | P | **Pn** | 02 21 53.0 | -0.3 |
| JIJ | | | | S | Sn | 02 22 08.1 | -0.6 |
| **ENTT** | **Nioudou** | **1.18** | **279** | *i* P | **Pn** | 02 21 53.5 | +0.1 |
| | baz=275 | | | | | | |
| ENTT | | | | S | Sn | 02 22 09.6 | +0.8 |
| | baz=275 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.19** | **285** | P | **Pn** | 02 21 52.9 | -0.6 |
| | baz=281 | | | | | | |
| FUSB | | | | S | Sn | 02 22 08.4 | -0.6 |
| | baz=281 | | | | | | |
| **TNOU** | **National Taiwa** | **1.20** | **306** | P | **Pn** | 02 21 52.6 | -1.0 |
| | baz=294 | | | | | | |
| **TWD** | **Chiawan** | **1.20** | **252** | *i* P | **Pn** | 02 21 52.9 | -0.6 |
| | baz=248 | | | | | | |
| TWD | | | | S | Sn | 02 22 08.3 | -0.9 |
| | baz=248 | | | | | | |
| **LATG** | **Datong** | **1.21** | **274** | *e*P | **Pn** | 02 21 53.8 | 0.0 |
| | baz=260 | | | | | | |
| **NDT** | **Datong Townshi** | **1.23** | **277** | *i* P | **Pn** | 02 21 54.0 | +0.1 |
| | baz=279 | | | | | | |
| NDT | | | | *i* S | Sn | 02 22 10.3 | +0.6 |
| | baz=279 | | | | | | |
| **HWA** | **Hwalien** | **1.23** | **248** | *e*P | **Pn** | 02 21 54.2 | +0.3 |
| | baz=244 | | | | | | |
| HWA | | | | S | Sn | 02 22 10.7 | +0.9 |
| | baz=244 | | | | | | |
| **TWA** | **Mucha** | **1.27** | **295** | *e*P | **Pn** | 02 21 54.0 | -0.4 |
| | baz=291 | | | | | | |
| TWA | | | | S | Sn | 02 22 09.9 | -0.8 |
| | baz=291 | | | | | | |
| **NWLT** | **Wulai** | **1.27** | **285** | *i* P | **Pn** | 02 21 54.3 | -0.1 |
| | baz=281 | | | | | | |
| NWLT | | | | *i* S | Sn | 02 22 10.1 | -0.7 |
| | baz=281 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.27** | **259** | P | **Pn** | 02 21 54.1 | -0.5 |
| | baz=247 | | | | | | |
| ETLH | | | | S | Sn | 02 22 10.7 | -0.3 |
| | baz=247 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.31** | **293** | P | **Pn** | 02 21 53.8 | -1.1 |
| | baz=289 | | | | | | |
| NHDH | | | | S | Sn | 02 22 11.2 | -0.5 |
| | baz=289 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.34** | **84** | P | **Pn** | 02 21 54.8 | -0.5 |
| JISG | | | | *e*S | Sn | 02 22 12.0 | -0.3 |
| **NNSB** | **Datong** | **1.34** | **269** | *e*P | **Pn** | 02 21 54.6 | -0.8 |
| | baz=255 | | | | | | |
| NNSB | | | | *e*S | Sn | 02 22 12.2 | -0.4 |
| | baz=255 | | | | | | |
| **NNS** | **Nan Shan** | **1.35** | **270** | P | **Pn** | 02 21 55.6 | 0.0 |
| | baz=256 | | | | | | |
| NNS | | | | S | Sn | 02 22 13.6 | +0.8 |
| | baz=256 | | | | | | |
| **YM01** | **YM01** | **1.35** | **301** | P | **Pn** | 02 21 55.2 | -0.4 |
| | baz=297 | | | | | | |
| **YHNB** | **Yeheng** | **1.36** | **279** | P | **Pn** | 02 21 55.9 | +0.1 |
| | baz=275 | | | | | | |
| YHNB | | | | S | Sn | 02 22 13.7 | +0.7 |
| | baz=275 | | | | | | |
| **NSK** | **Sanguang** | **1.38** | **280** | *i* P | **Pn** | 02 21 55.9 | 0.0 |
| | baz=276 | | | | | | |
| NSK | | | | *i* S | Sn | 02 22 13.1 | -0.3 |
| | baz=276 | | | | | | |
| **ESL** | **Shilin** | **1.44** | **244** | *i* P | **Pn** | 02 21 56.2 | -0.5 |
| | baz=241 | | | | | | |
| ESL | | | | *i* S | Sn | 02 22 14.8 | 0.0 |
| | baz=241 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.45** | **297** | P | **Pn** | 02 21 57.3 | +0.5 |
| | baz=293 | | | | | | |
| TWS1 | | | | *e*S | Sn | 02 22 14.3 | -0.8 |
| | baz=293 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.48** | **258** | *i* P | **Pn** | 02 21 57.1 | -0.5 |
| | baz=255 | | | | | | |
| WHF | | | | *i* S | Sn | 02 22 15.1 | -1.2 |
| | baz=255 | | | | | | |
| **FUSS** | **Fushou** | **1.48** | **262** | *i* P | **Pn** | 02 21 57.7 | +0.3 |
| | baz=259 | | | | | | |
| FUSS | | | | *e*S | Sn | 02 22 15.6 | -0.5 |
| | baz=259 | | | | | | |
| **TWT** | **Tachien** | **1.54** | **263** | *i* P | **Pn** | 02 21 58.3 | +0.1 |
| | baz=259 | | | | | | |
| TWT | | | | *i* S | Sn | 02 22 17.4 | 0.0 |
| | baz=259 | | | | | | |
| **CHGB** | **Renai** | **1.58** | **256** | S | **Sn** | 02 22 18.2 | -0.2 |
| | baz=243 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.59** | **277** | P | **Pn** | 02 21 58.7 | 0.0 |
| | baz=273 | | | | | | |
| NFF | | | | S | Sn | 02 22 18.2 | -0.2 |
| | baz=273 | | | | | | |
| **HGSD** | **Ruisui** | **1.62** | **234** | P | **Pn** | 02 21 59.0 | -0.1 |
| | baz=225 | | | | | | |
| HGSD | | | | S | Sn | 02 22 19.1 | 0.0 |
| | baz=225 | | | | | | |
| **WUSB** | **Renai** | **1.65** | **254** | P | **Pn** | 02 21 59.4 | -0.2 |
| | baz=243 | | | | | | |
| WUSB | | | | S | Sn | 02 22 19.0 | -0.9 |
| | baz=243 | | | | | | |
| **LIOB** | **Emei** | **1.68** | **277** | *i* P | **Pn** | 02 22 00.6 | +0.6 |
| | baz=274 | | | | | | |
| LIOB | | | | S | Sn | 02 22 21.4 | +0.8 |
| | baz=274 | | | | | | |
| **EHY** | **Hungye** | **1.69** | **236** | *i* P | **Pn** | 02 21 59.5 | -0.5 |
| | baz=233 | | | | | | |
| EHY | | | | *i* S | Sn | 02 22 18.9 | -1.8 |
| | baz=233 | | | | | | |
| **JTJ** | **Tarama** | **1.70** | **83** | P | **Pn** | 02 21 59.8 | -0.3 |
| JTJ | | | | *e*S | Sn | 02 22 20.7 | -0.2 |
| **WHP** | **Taichung City** | **1.75** | **265** | *i* P | **Pn** | 02 22 01.4 | +0.5 |
| | baz=256 | | | | | | |
| WHP | | | | S | Sn | 02 22 23.3 | +1.1 |
| | baz=256 | | | | | | |
| **YULB** | **Yu-li** | **1.77** | **234** | P | **Pn** | 02 22 00.5 | -0.6 |
| | baz=241 | | | | | | |
| YULB | | | | S | Sn | 02 22 21.5 | -1.2 |
| | baz=241 | | | | | | |
| **EYUL** | **Yuli** | **1.78** | **232** | *i* P | **Pn** | 02 22 01.2 | -0.1 |
| | baz=223 | | | | | | |
| EYUL | | | | *i* S | Sn | 02 22 22.6 | -0.4 |
| | baz=223 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.81** | **258** | *i* P | **Pn** | 02 22 01.7 | 0.0 |
| | baz=248 | | | | | | |
| WCS | | | | *i* S | Sn | 02 22 25.1 | +1.4 |
| | baz=248 | | | | | | |
| **SSLB** | **Suanglung** | **1.85** | **249** | P | **Pn** | 02 22 02.2 | -0.1 |
| | baz=246 | | | | | | |
| SSLB | | | | S | Sn | 02 22 24.1 | -0.7 |
| | baz=246 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.87** | **253** | *i* P | **Pn** | 02 22 03.0 | +0.4 |
| | baz=243 | | | | | | |
| SMLT | | | | *i* S | Sn | 02 22 25.3 | +0.1 |
| | baz=243 | | | | | | |
| **FULB** | **Fuli** | **1.90** | **229** | *i* P | **Pn** | 02 22 02.2 | -0.6 |
| | baz=227 | | | | | | |
| FULB | | | | *i* S | Sn | 02 22 25.2 | -0.6 |
| | baz=227 | | | | | | |
| **TWQ1** | **Liyutan** | **1.90** | **267** | *e*P | **Pn** | 02 22 03.9 | +1.0 |
| | baz=264 | | | | | | |
| TWQ1 | | | | *e*S | Sn | 02 22 27.9 | +2.2 |
| | baz=264 | | | | | | |
| **TYC** | **Yuchr** | **1.90** | **254** | *i* P | **Pn** | 02 22 03.1 | +0.3 |
| | baz=244 | | | | | | |
| TYC | | | | *i* S | Sn | 02 22 26.5 | +0.6 |
| | baz=244 | | | | | | |
| **CHKT** | **Chengkung** | **1.92** | **226** | P | **Pn** | 02 22 02.5 | -0.6 |
| | baz=223 | | | | | | |
| CHKT | | | | *i* S | Sn | 02 22 24.4 | -1.7 |
| | baz=223 | | | | | | |
| **YUS** | **Yu-Shan** | **1.98** | **241** | *i* P | **Pn** | 02 22 04.5 | +0.1 |
| | baz=230 | | | | | | |
| YUS | | | | *i* S | Sn | 02 22 27.8 | -0.8 |
| | baz=230 | | | | | | |
| **TCU** | **Taichung** | **2.01** | **262** | S | **Sn** | 02 22 29.7 | +1.3 |
| | baz=270 | | | | | | |
| **WDJ** | **Dajia District** | **2.02** | **267** | *e*S | **Sn** | 02 22 29.1 | +0.4 |
| | baz=264 | | | | | | |
| **WJS** | **Zhushan** | **2.04** | **252** | *i* P | **Pn** | 02 22 06.3 | +1.5 |
| | baz=245 | | | | | | |
| WJS | | | | *i* S | Sn | 02 22 31.4 | +2.3 |
| | baz=245 | | | | | | |
| **EDH** | **Donghe** | **2.04** | **224** | *i* P | **Pn** | 02 22 03.7 | -1.1 |
| | baz=222 | | | | | | |
| EDH | | | | *i* S | Sn | 02 22 27.7 | -1.6 |
| | baz=222 | | | | | | |
| **WNT** | **Mingjian** | **2.06** | **254** | *e*P | **Pn** | 02 22 06.5 | +1.5 |
| | baz=251 | | | | | | |
| WNT | | | | S | Sn | 02 22 31.5 | +1.8 |
| | baz=251 | | | | | | |
| **ALS** | **Alishan** | **2.09** | **244** | *i* P | **Pn** | 02 22 06.5 | +0.8 |
| | baz=233 | | | | | | |
| ALS | | | | *i* S | Sn | 02 22 32.1 | +1.2 |
| | baz=233 | | | | | | |
| **ELDTW** | **Lidau** | **2.10** | **234** | S | **Sn** | 02 22 30.2 | -0.6 |
| | baz=224 | | | | | | |
| **CHN5** | **Tsauling** | **2.16** | **247** | *i* P | **Pn** | 02 22 07.7 | +1.2 |
| | baz=236 | | | | | | |
| CHN5 | | | | *i* S | Sn | 02 22 33.9 | +1.6 |
| | baz=236 | | | | | | |
| **LDUT** | **Ludao** | **2.18** | **216** | P | **Pn** | 02 22 05.8 | -0.8 |
| | baz=214 | | | | | | |
| LDUT | | | | *i* S | Sn | 02 22 30.6 | -2.0 |
| | baz=214 | | | | | | |
| **LONT** | **Longtian** | **2.20** | **226** | *i* P | **Pn** | 02 22 06.5 | -0.6 |
| | baz=232 | | | | | | |
| LONT | | | | *i* S | Sn | 02 22 32.3 | -1.0 |
| | baz=232 | | | | | | |
| **WDLH** | **Douliu** | **2.25** | **251** | *i* P | **Pn** | 02 22 08.8 | +1.3 |
| | baz=248 | | | | | | |
| WDLH | | | | *i* S | Sn | 02 22 36.7 | +2.5 |
| | baz=248 | | | | | | |
| **TWGBT** | **Beinan** | **2.30** | **225** | P | **Pn** | 02 22 07.7 | -0.7 |
| | baz=231 | | | | | | |
| TWGBT | | | | S | Sn | 02 22 34.9 | -0.7 |
| | baz=231 | | | | | | |
| **TWG** | **Pinlang** | **2.30** | **225** | *i* P | **Pn** | 02 22 07.5 | -0.9 |
| | baz=231 | | | | | | |
| TWG | | | | *i* S | Sn | 02 22 33.9 | -1.7 |
| | baz=231 | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.33** | **257** | *i* P | **Pn** | 02 22 08.9 | +0.2 |
| | baz=266 | | | | | | |
| WRL | | | | *i* S | Sn | 02 22 36.0 | -0.2 |
| | baz=266 | | | | | | |
| **TPUB** | **Ta-pu** | **2.33** | **241** | P | **Pn** | 02 22 10.5 | +1.7 |
| | baz=233 | | | | | | |
| TPUB | | | | S | Sn | 02 22 38.6 | +2.2 |
| | baz=233 | | | | | | |
| **CHN4** | **Tsaushan** | **2.34** | **242** | *i* P | **Pn** | 02 22 10.2 | +1.4 |
| | baz=233 | | | | | | |
| CHN4 | | | | *i* S | Sn | 02 22 39.0 | +2.5 |
| | baz=233 | | | | | | |
| **CHN2** | **Minshiung** | **2.36** | **248** | S | **Sn** | 02 22 40.8 | +3.8 |
| | baz=237 | | | | | | |
| **WTP** | **Ta-pu** | **2.37** | **240** | *i* P | **Pn** | 02 22 10.3 | +1.0 |
| | baz=237 | | | | | | |
| WTP | | | | *i* S | Sn | 02 22 40.3 | +2.9 |
| | baz=237 | | | | | | |
| **WTK** | **Tuku** | **2.38** | **252** | S | **Sn** | 02 22 39.5 | +2.1 |
| | baz=262 | | | | | | |
| **CHY** | **Chiayi** | **2.42** | **247** | *i* S | **Sn** | 02 22 41.2 | +2.9 |
| | baz=245 | | | | | | |
| **TWK** | **Hsinying** | **2.46** | **242** | *i* P | **Pn** | 02 22 11.9 | +1.3 |
| | baz=239 | | | | | | |
| TWK | | | | *i* S | Sn | 02 22 42.3 | +2.7 |
| | baz=239 | | | | | | |
| **CHN1** | **Nanshi** | **2.47** | **240** | *i* P | **Pn** | 02 22 12.0 | +1.3 |
| | baz=237 | | | | | | |
| CHN1 | | | | *i* S | Sn | 02 22 41.3 | +1.5 |
| | baz=237 | | | | | | |
| **SNST** | **Tainan City** | **2.48** | **241** | *i* S | **Sn** | 02 22 42.7 | +2.8 |
| | baz=238 | | | | | | |
| **SGST** | **Jiashian** | **2.49** | **237** | S | **Sn** | 02 22 42.0 | +1.9 |
| | baz=234 | | | | | | |
| **SLGT** | **Liugui** | **2.49** | **235** | P | **Pn** | 02 22 12.0 | +1.1 |
| | baz=232 | | | | | | |
| SLGT | | | | S | Sn | 02 22 41.9 | +1.7 |
| | baz=232 | | | | | | |
| **WSF** | **Szhu** | **2.54** | **252** | S | **Sn** | 02 22 43.0 | +1.7 |
| | baz=261 | | | | | | |
| **ECL** | **Taimali** | **2.54** | **224** | *i* P | **Pn** | 02 22 12.1 | +0.5 |
| | baz=229 | | | | | | |
| ECL | | | | *i* S | Sn | 02 22 39.8 | -1.5 |
| | baz=229 | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.57** | **249** | P | **Pn** | 02 22 12.6 | +0.6 |
| | baz=259 | | | | | | |
| WSL | | | | S | Sn | 02 22 43.8 | +1.6 |
| | baz=259 | | | | | | |
| **ICHU** | **Yijhu** | **2.59** | **246** | P | **Pn** | 02 22 12.3 | 0.0 |
| | baz=232 | | | | | | |
| ICHU | | | | S | Sn | 02 22 45.2 | +2.5 |
| | baz=232 | | | | | | |
| **SSD** | **Sandimen** | **2.65** | **231** | *i* P | **Pn** | 02 22 14.8 | +1.7 |
| | baz=226 | | | | | | |
| SSD | | | | *i* S | Sn | 02 22 44.5 | +0.4 |
| | baz=226 | | | | | | |
| **TSMG** | **Majia** | **2.67** | **230** | *i* P | **Pn** | 02 22 14.9 | +1.6 |
| | baz=226 | | | | | | |
| TSMG | | | | *i* S | Sn | 02 22 45.6 | +1.1 |
| | baz=226 | | | | | | |
| **LAY** | **Lan-yu** | **2.68** | **207** | S | **Sn** | 02 22 42.0 | -3.0 |
| | baz=199 | | | | | | |
| **LYUB** | **Lan-yu** | **2.70** | **206** | *e*S | **Sn** | 02 22 42.8 | -2.6 |
| | baz=197 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.74** | **228** | P | **Pn** | 02 22 14.8 | +0.6 |
| | baz=221 | | | | | | |
| MASBT | | | | S | Sn | 02 22 46.6 | +0.3 |
| | baz=221 | | | | | | |
| **TAW** | **Tawu** | **2.75** | **221** | S | **Sn** | 02 22 45.0 | -1.6 |
| | baz=225 | | | | | | |
| **EAST** | **Anshuo** | **2.76** | **222** | *i* P | **Pn** | 02 22 14.6 | -0.1 |
| | baz=225 | | | | | | |
| EAST | | | | *i* S | Sn | 02 22 45.4 | -1.5 |
| | baz=225 | | | | | | |
| **TAWH** | **Dawu Township** | **2.77** | **221** | P | **Pn** | 02 22 14.6 | -0.1 |
| | baz=225 | | | | | | |
| TAWH | | | | S | Sn | 02 22 44.9 | -2.2 |
| | baz=225 | | | | | | |
| **SSPT** | **Xinbi** | **2.87** | **227** | *e*P | **Pn** | 02 22 18.2 | +2.1 |
| | baz=223 | | | | | | |
| **SCZT** | **Fangliau** | **2.91** | **225** | *i* P | **Pn** | 02 22 17.9 | +1.3 |
| | baz=220 | | | | | | |
| SCZT | | | | S | Sn | 02 22 52.4 | +1.9 |
| | baz=220 | | | | | | |
| **SLIU** | **Shizi** | **2.92** | **221** | *i* P | **Pn** | 02 22 16.7 | 0.0 |
| | baz=225 | | | | | | |
| **PNG** | **Penghu** | **3.14** | **254** | *e*P | **Pn** | 02 22 20.1 | +0.3 |
| | baz=252 | | | | | | |
| PNG | | | | *e*S | Sn | 02 22 54.3 | -1.8 |
| | baz=252 | | | | | | |
| **PHUB** | **P'eng-hu** | **3.14** | **253** | *e*P | **Pn** | 02 22 19.1 | -0.7 |
| | baz=251 | | | | | | |
| PHUB | | | | S | Sn | 02 22 54.6 | -1.5 |
| | baz=251 | | | | | | |
| **WDGT** | **Dungji** | **3.15** | **249** | *i* P | **Pn** | 02 22 19.6 | -0.4 |
| | baz=246 | | | | | | |
| WDGT | | | | *i* S | Sn | 02 22 55.6 | -0.8 |
| | baz=246 | | | | | | |

*IDC **14** 02:36:52.5±2.8, 23°.64S×179°.99W, h495$^{km}$±31$^{km}$, mb3.4/6, mb1 3.7/7, mb1mx3.2/39, mbtmp4.3/7, Error ellipse: s-maj=51.8km s-min=19.3km az=161.0*

**ISC 14 02:36:52.9±0.8, 23°.66S±0°.08×179°.8E±0°.1, h500$^{km}$, n25, σ1$^{s}$75/32, mb3.8/6, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **5.93** | **161** | **P** | **P** | **02 38 30.2** | **+1.8** |
| GLKZ | | | | S | **S** | 02 39 48.2 | +1.6 |
| **WCZ** | **Waipu Caves** | **13.13** | **200** | P | **P** | 02 39 41.4 | -1.9 |
| **WIAZ** | **Waiheke Island** | **13.70** | **196** | P | P | 02 39 58.2 | +8.9 |
| **HAZ** | **Te Kaha** | **14.16** | **187** | P | **P** | 02 39 56.2 | +2.2 |
| HAZ | | | | S | **S** | 02 42 23.3 | -0.2 |
| **TWGZ** | **Tauwhareparae** | **14.56** | **186** | P | **P** | 02 39 57.7 | -0.6 |
| TWGZ | | | | S | **S** | 02 42 32.4 | +1.2 |
| **MKRZ** | **Makatiti** | **14.72** | **191** | P | **P** | 02 39 58.4 | -1.7 |
| **URZ** | **Urewera** | **14.74** | **188** | P | **P** | 02 40 00.1 | -0.1 |
| | 2.2nm,0.3s,baz=26,slow=1.2,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **14.74** | **188** | P | **P** | 02 40 00.3 | +0.2 |
| URZ | | | | S | **S** | 02 42 30.6 | -4.0 |
| **MWZ** | **Matawai** | **14.76** | **187** | P | **P** | 02 40 00.8 | +0.4 |
| MWZ | | | | S | **S** | 02 42 32.0 | -3.2 |
| **MTHZ** | **Maungataniwha** | **15.36** | **189** | P | **P** | 02 40 08.1 | +1.4 |
| MTHZ | | | | S | **S** | 02 42 44.9 | -1.7 |
| **NMHZ** | **Naumai** | **15.61** | **189** | P | **P** | 02 40 10.2 | +1.0 |
| **BKZ** | **Black Stump Fm** | **15.72** | **190** | P | **P** | 02 40 10.6 | +0.2 |
| BKZ | | | | S | **S** | 02 42 48.7 | -4.7 |
| **TMVZ** | **Te Maari** | **15.80** | **192** | P | **P** | 02 40 13.1 | +1.7 |
| **ETVZ** | **East Tongariro** | **15.82** | **192** | P | **P** | 02 40 13.1 | +1.4 |
| **OTVZ** | **Oturere** | **15.86** | **192** | P | **P** | 02 40 12.3 | +0.3 |
| **SNVZ** | **South Ngauruho** | **15.88** | **192** | P | **P** | 02 40 13.5 | +1.1 |
| **STKA** | **Stephens Creek** | **34.67** | **248** | P | **P** | 02 43 01.7 | +1.6 |
| | 1.3nm,0.4s,baz=100,slow=12,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **41.93** | **260** | P | **P** | 02 44 00.5 | +1.1 |
| | 6.0nm,0.6s,baz=95,slow=7.4,SNR=120 | | | | | | |
| ASAR | | | | ScP | **ScP** | 02 48 45.7 | -0.3 |
| | 1.7nm,0.7s,baz=109,slow=4.2,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.27** | **266** | P | **P** | 02 44 02.7 | +0.6 |
| | 8.5nm,0.4s,baz=92,slow=8.4,SNR=172 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.68** | **44** | P | **P** | 02 48 32.5 | -1.4 |
| | 0.3nm,0.5s,baz=227,slow=6.9,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.43** | **58** | P | **P** | 02 49 00.8 | -0.2 |
| | 0.9nm,0.7s,baz=214,slow=6.4,SNR=12 | | | | | | |
| **PDAR** | **Pinedale Array** | **92.62** | **44** | P | **P** | 02 49 09.3 | -1.6 |
| | 0.3nm,0.6s,baz=211,slow=2.6,SNR=3.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.69** | **327** | PKP | **PKPdf** | 02 55 31.1 | -0.9 |
| | 0.4nm,0.5s,baz=45,slow=4.1,SNR=6.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.31** | **307** | PKPbc | **PKiKP** | 02 55 42.0 | +0.1 |
| | 0.6nm,0.5s,baz=74,slow=0.6,SNR=6.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.47** | **295** | PKPbc | **PKPbc** | 02 55 40.6 | -0.1 |
| | 0.9nm,0.5s,baz=81,slow=5.2,SNR=6.3 | | | | | | |

*KRSC **14** 02:37:27.4±0.7, 54°.01N×161°.31E, h60$^{km}$±15$^{km}$, ML4.2*
*IDC **14** 02:37:29.6±1.5, 53°.71N×161°.43E, h48$^{km}$±21$^{km}$, mb3.2/4, mb1 3.6/5, mb1mx3.1/35, mbtmp3.5/5, ML3.0/1, MS3.6/1, Ms1 3.6/1, ms1mx2.8/25, Error ellipse: s-maj=54.0km s-min=13.6km az=150.0*

**ISC 14 02:37:29.6±1.0, 54°.01N±0°.04×161°.32E±0°.05, h50$^{km}$±11$^{km}$, n50, σ0$^{s}$67/64, mb3.4/4, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.59** | **24** | *i* P | **Pn** | **02 37 42.1** | **+0.2** |
| MKZ | | | | *e*S | Sn | 02 37 51.7 | +0.9 |
| **KII** | **Karymskiy** | **1.10** | **272** | *i* P | **Pn** | 02 37 48.2 | -0.5 |
| KII | | | | *e*S | Sn | 02 38 01.8 | -1.1 |
| **SPN** | **Mys Shipunski** | **1.20** | **221** | *i* P | **Pn** | 02 37 49.4 | -0.6 |
| SPN | | | | *e*S | Sn | 02 38 04.4 | -0.7 |
| **TUMD** | **Tumrok D** | **1.31** | **336** | *i* P | **Pn** | 02 37 50.6 | -0.8 |
| TUMD | | | | *e*S | Sn | 02 38 06.3 | -1.4 |
| **TUMR** | **Tumrok** | **1.44** | **332** | *i* P | **Pn** | 02 37 53.3 | -0.1 |
| TUMR | | | | *e*S | Sn | 02 38 11.1 | -0.1 |
| **NLC** | **Nalytchevo** | **1.45** | **235** | *i* P | **Pn** | 02 37 53.1 | -0.2 |
| NLC | | | | *e*S | Sn | 02 38 10.8 | -0.3 |
| **SDLR** | **Sedlovina** | **1.63** | **244** | *i* P | **Pn** | 02 37 56.3 | +0.4 |
| SDLR | | | | *e*S | Sn | 02 38 16.0 | +0.3 |
| **SMAR** | **Somma** | **1.68** | **244** | *e*P | **Pn** | 02 37 57.0 | +0.3 |
| SMAR | | | | *e*S | Sn | 02 38 17.1 | 0.0 |
| **KRER** | **Koryakskii** | **1.69** | **246** | *e*P | **Pn** | 02 37 57.5 | +0.7 |
| **UGLR** | **Uglovaya** | **1.69** | **243** | *e*P | **Pn** | 02 37 57.3 | +0.5 |
| **AVH** | **Avacha** | **1.71** | **245** | *i* P | **Pn** | 02 37 57.6 | +0.6 |
| AVH | | | | *e*S | Sn | 02 38 18.4 | +0.7 |
| **KOK** | **Koryaka** | **1.75** | **247** | *e*P | **Pn** | 02 37 58.1 | +0.5 |
| **DALK** | **Dalny** | **1.82** | **238** | *i* P | **Pn** | 02 37 58.6 | +0.2 |
| DALK | | | | *e*S | Sn | 02 38 20.2 | -0.1 |
| **KMNR** | **Kamenistaya** | **1.85** | **341** | *i* P | **Pn** | 02 37 59.7 | +0.7 |
| **PET** | **Petropavlovsk** | **1.88** | **239** | *e*P | **Pn** | 02 37 59.5 | +0.4 |
| PET | | | | *e*S | Sn | 02 38 21.6 | 0.0 |
| **BZGR** | **Bezymyannyi-Gr** | **1.96** | **350** | *e*P | **Pn** | 02 38 00.9 | +0.4 |
| **BZWR** | **Bezymyannyi-We** | **2.01** | **347** | *e*P | **Pn** | 02 38 02.1 | +0.9 |
| **KIRR** | **Kirishev** | **2.02** | **344** | *e*P | **Pn** | 02 38 01.9 | +0.6 |
| **GNL** | **Ganaly** | **2.03** | **262** | *e*P | **Pn** | 02 38 01.7 | +0.4 |
| **ZLN** | **Zelenaya** | **2.03** | **352** | *e*P | **Pn** | 02 38 02.1 | +0.7 |
| **KPT** | **Kopyto** | **2.06** | **343** | *e*P | **Pn** | 02 38 02.2 | +0.5 |
| **LGNR** | **Loginova** | **2.10** | **350** | *e*P | **Pn** | 02 38 03.6 | +1.0 |
| **CIRR** | **Tsirk** | **2.13** | **351** | *e*P | **Pn** | 02 38 03.5 | +0.7 |
| **KOZ** | **Kozyrevsk** | **2.21** | **338** | *e*P | **Pn** | 02 38 04.2 | +0.4 |
| **KRMR** | **Karymshinskiy** | **2.25** | **239** | *e*P | **Pn** | 02 38 04.8 | +0.6 |
| KRMR | | | | *e*S | Sn | 02 38 31.3 | +0.6 |
| **KRSR** | **Krestovskiy** | **2.25** | **349** | *e*P | **Pn** | 02 38 04.5 | +0.1 |
| **RUS** | **Russkaya** | **2.31** | **228** | *e*P | **Pn** | 02 38 05.0 | -0.1 |
| RUS | | | | *e*S | Sn | 02 38 31.8 | -0.6 |
| **KLY** | **Klyuchi** | **2.34** | **351** | *e*P | **Pn** | 02 38 05.5 | +0.1 |
| **PETK** | **Petropavlovsk-** | **2.34** | **249** | P | **Pn** | 02 38 05.2 | -0.3 |
| | 18nm,0.3s,baz=77,slow=17,SNR=243 | | | | | | |
| PETK | | | | S | Sn | 02 38 33.0 | -0.2 |
| | 6.4nm,0.3s,baz=89,slow=18,SNR=4.7 | | | | | | |
| **KBTR** | **Krutoberegovo** | **2.36** | **21** | *e*P | **Pn** | 02 38 06.2 | +0.4 |
| **KBG** | **Krutoberegovo** | **2.38** | **19** | *e*P | **Pn** | 02 38 06.5 | +0.4 |
| **MTVR** | **Mutnovka** | **2.43** | **232** | *e*P | **Pn** | 02 38 07.4 | +0.5 |
| MTVR | | | | *e*S | Sn | 02 38 36.0 | +0.6 |
| **GRL** | **Gorelyy** | **2.44** | **234** | *e*P | **Pn** | 02 38 07.9 | +0.9 |
| **ESO** | **Esso** | **2.44** | **323** | *e*P | **Pn** | 02 38 07.2 | +0.3 |
| ESO | | | | *e*S | Sn | 02 38 34.9 | -0.6 |
| **BDR** | **Baidarnaya** | **2.56** |

0.3nm,0.4s,baz=23,slow=6.3,SNR=1.7
**ASAR Alice Springs 80.90 205** P **P** **02 49 37.3 -0.9**
0.2nm,0.7s,baz=4.2,slow=5.1,SNR=4.1

*IDC* ***14*** *02:40:50.5±1.3,39.°43S×75.°27W,h0km,mb4.0/5, mb1 4.2/7,mb1mx4.0/23,mbtmp3.9/7,ML3.9/2,MS3.6/6, Ms1 3.5/6,ms1mx3.2/51,Error ellipse: s-maj=36.5km s-min=25.1km az=24.0*
*NEIC* ***14*** *02:40:51.6±1.5,39.°35S±0.°06×75.°2W±0.°1,h13km±4km, Error ellipse: s-maj=14.0km s-min=8.6km az=104.0*
*GUC* ***14*** *02:40:53.6±0.6,39.°45S×75.°10W,h27km±3km,ML3.9*
**ISC 14 02:40:50.8±4.8,39.°36S±0.°05×75.°22W±0.°07,h8km±29km, n63,σ1§39/65,mb4.0/7,MS3.8/5,3C-1D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LR04** | **Corral** | **1.48** | **111** | | **Pn** | **02 41 17.2** | **-0.4** |
| **LR04** | **Corral** | **1.48** | **111** | ⇑*i* P | **Pn** | **02 41 16.5** | **-1.1** |
| LR04 | | | | *i* S | **Sn** | **02 41 33.5** | **-3.7** |
| LR04 | | | | IAML | | 02 41 35.7 | |
| | comp=E,2μm,0.1s | | | | | | |
| **LC02** | **Puerto Saavedr** | **1.54** | **69** | | **Pn** | **02 41 18.0** | **-0.5** |
| **LC02** | **Puerto Saavedr** | **1.54** | **69** | *i* P | **Pn** | **02 41 18.3** | **-0.2** |
| LC02 | | | | *i* S | **Sn** | **02 41 36.8** | **-1.7** |
| **LR02** | **Universidad Au** | **1.58** | **107** | *e*P | **Pn** | **02 41 18.2** | **-0.9** |
| LR02 | | | | *e*S | **Sn** | **02 41 36.8** | **-3.0** |
| LR02 | | | | IAML | | 02 41 39.9 | |
| | comp=E,4μm,0.5s | | | | | | |
| **LR03** | **Panguipulli** | **2.24** | **98** | | **Pn** | **02 41 28.1** | **-0.1** |
| **LR03** | **Panguipulli** | **2.24** | **98** | ⇑*i* P | **Pn** | **02 41 28.7** | **+0.5** |
| LR03 | | | | *i* S | **Sn** | **02 41 54.7** | **-1.3** |
| LR03 | | | | IAML | | 02 42 02.5 | |
| | comp=E,3μm,0.6s | | | | | | |
| **LL05** | **Los Muermos** | **2.44** | **147** | | **Pn** | **02 41 31.1** | **+0.2** |
| **LL05** | **Los Muermos** | **2.44** | **147** | *e*P | **Pn** | **02 41 30.1** | **-0.8** |
| **LC01** | **Cunco** | **2.64** | **81** | | **Pn** | **02 41 33.4** | **-0.2** |
| **LC01** | **Cunco** | **2.64** | **81** | ⇑*i* P | **Pn** | **02 41 33.9** | **+0.2** |
| LC01 | | | | *i* S | **Sn** | **02 42 04.9** | **-1.0** |
| LC01 | | | | IAML | | 02 42 07.2 | |
| | comp=N,847nm,0.7s | | | | | | |
| **LL04** | **Puerto Octay** | **2.65** | **127** | *e*P | **Pn** | **02 41 33.5** | **-0.3** |
| LL04 | | | | IAML | | 02 42 06.5 | |
| | comp=E,701nm,0.2s | | | | | | |
| **LL03** | **Petrohue** | **2.79** | **130** | *e*P | **Pn** | **02 41 35.6** | **-0.1** |
| LL03 | | | | IAML | | 02 42 10.7 | |
| | comp=N,444nm,0.6s | | | | | | |
| **BI05** | **Punta Hualpn** | **3.06** | **32** | *e*P | **Pn** | **02 41 38.1** | **-1.3** |
| BI05 | | | | *e*S | **Sn** | **02 42 12.4** | **-3.8** |
| BI05 | | | | IAML | | 02 42 16.3 | |
| | comp=E,402nm,0.2s | | | | | | |
| **LL06** | **Loncomilla** | **3.10** | **158** | *e*P | **Pn** | **02 41 39.5** | **-0.5** |
| LL06 | | | | ⇓*e*S | **Sn** | **02 42 13.1** | **-4.0** |
| LL06 | | | | IAML | | 02 42 15.4 | |
| | comp=N,165nm,0.5s | | | | | | |
| **PLCA** | **Paso Flores** | **3.84** | **112** | Pn | **Pn** | **02 41 51.7** | **+1.5** |
| | comp=N,1.6nm,0.3s,baz=288,slow=11,SNR=49 | | | | | | |
| PLCA | | | | Sn | **Sn** | **02 42 38.6** | **+3.1** |
| | comp=N,4.5nm,0.3s,baz=193,slow=23,SNR=8.7 | | | | | | |
| PLCA | | | | LR | LR | 02 42 52.3 | |
| | comp=N,152nm,21.9s,baz=358,slow=32 | | | | | | |
| **PLCA** | **Paso Flores** | **3.84** | **112** | | **Pn** | **02 41 49.9** | **-0.2** |
| **LL02** | **Futaleuf** | **4.59** | **148** | Pn | **Pn** | **02 42 00.7** | **+0.2** |
| **ML02** | **Panimavida** | **4.69** | **41** | | **Pn** | **02 42 01.4** | **-0.4** |
| **GO05** | **Huala** | **5.07** | **32** | | **Pn** | **02 42 06.1** | **-1.0** |
| **BO02** | **Sierra Bellavi** | **5.77** | **39** | | **Pn** | **02 42 16.5** | **-0.3** |
| **BO01** | **Tunca** | **5.96** | **35** | | **Pn** | **02 42 18.6** | **-0.7** |
| **H03S1** | **Juan Fernandez** SNR=18 | **6.25** | **331** | Pn | **Pn** | **02 42 22.7** | **-0.4** |
| H03S1 | | | | T | T | 02 48 52.7 | |
| | baz=144,SNR=9.9 | | | | | | |
| **H03S2** | **Juan Fernandez** SNR=25 | **6.27** | **330** | Pn | **Pn** | **02 42 23.1** | **-0.1** |
| H03S2 | | | | T | T | 02 48 53.4 | |
| | baz=144,SNR=38 | | | | | | |
| **H03S3** | **Juan Fernandez** SNR=20 | **6.27** | **331** | Pn | **Pn** | **02 42 23.0** | **-0.3** |
| H03S3 | | | | T | T | 02 48 54.9 | |
| | baz=144,SNR=9.1 | | | | | | |
| **MT01** | **Popeta** | **6.34** | **31** | | **Pn** | **02 42 23.3** | **-1.2** |
| **BO04** | **La Punta** | **6.51** | **36** | | **Pn** | **02 42 27.5** | **+0.6** |
| **MT09** | **Talagante** | **6.53** | **33** | | **Pn** | **02 42 27.3** | **+0.1** |
| **H03N3** | **Juan Fernandez** baz=125,slow=72,SNR=38 | **6.61** | **332** | Pn | **Pn** | **02 42 27.9** | **0.0** |
| **H03N1** | **Juan Fernandez** baz=125,slow=72,SNR=40 | **6.61** | **332** | Pn | **Pn** | **02 42 27.7** | **-0.4** |
| **H03N2** | **Juan Fernandez** baz=125,slow=72,SNR=37 | **6.62** | **332** | Pn | **Pn** | **02 42 28.0** | **-0.2** |
| **COYC** | **Coyhaique** | **6.63** | **161** | | **Pn** | **02 42 27.2** | **-1.2** |
| **LMEL** | **Las Melosas** | **6.82** | **38** | | **Pn** | **02 42 30.9** | **-0.4** |
| **VA03** | **San Esteban** | **7.59** | **31** | | **Pn** | **02 42 40.7** | **-1.1** |
| **CPUP** | **Villa Florida** | **19.82** | **54** | P | **P** | **02 45 22.9** | **+1.1** |
| | comp=N,0.1nm,0.3s,baz=244,slow=12,SNR=5.3 | | | | | | |
| **CPUP** | **Villa Florida** | **19.82** | **54** | IAmb | IAmb | 02 45 37.4 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **GO01** | **Chusmiza** | **20.30** | **17** | P | **P** | **02 45 24.6** | **-3.0** |
| GO01 | | | | IAmb | IAmb | 02 46 12.8 | |
| | comp=Z,21nm,1.8s | | | | | | |
| **PB16** | **IPOC Station P** | **21.53** | **15** | P | **P** | **02 45 40.8** | **-0.2** |
| PB16 | | | | IAmb | IAmb | 02 45 48.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **23.81** | **17** | P | **P** | **02 46 06.9** | **+2.1** |
| | comp=Z,1.9nm,0.7s,baz=158,slow=3.5,SNR=9.1 | | | | | | |
| **LPAZ** | **La Paz** | **23.81** | **17** | P | **P** | **02 46 05.7** | **+0.9** |
| **AQDB** | **Aquidauana** | **25.21** | **47** | P | **P** | **02 46 16.8** | **-0.2** |
| AQDB | | | | IAmb | IAmb | 02 46 28.0 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **SIV** | **San Ignacio** | **26.37** | **32** | P | **P** | **02 46 29.1** | **+1.5** |
| | comp=Z,1.6nm,0.6s,baz=211,slow=11,SNR=8.4 | | | | | | |
| **NNA** | **Nana** | **27.30** | **357** | LR | LR | 02 53 55.1 | |
| | comp=Z,142nm,21.1s,baz=358,slow=29 | | | | | | |
| **RPN** | **Rapa Nui** | **30.85** | **283** | LR | LR | 02 56 45.0 | |
| | comp=Z,136nm,18.5s,baz=51,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **33.54** | **53** | P | **P** | **02 47 32.5** | **+1.3** |
| | comp=Z,2.5nm,0.8s,baz=239,slow=13,SNR=5.2 | | | | | | |
| **BDFB** | **Brasilia** | **33.54** | **53** | IAmb | IAmb | 02 47 40.7 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **73.30** | **334** | P | **P** | **02 52 24.6** | **+1.8** |
| | comp=Z,0.9nm,0.7s,baz=156,slow=8.4,SNR=12 | | | | | | |
| TXAR | | | | LR | LR | 03 18 38.6 | |
| | comp=Z,71nm,19.2s,baz=172,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **79.80** | **119** | LR | LR | 03 26 33.5 | |
| | comp=Z,37nm,18.4s,baz=184,slow=34 | | | | | | |
| **TSUM** | **Tsumeb** | **80.17** | **107** | LR | LR | 03 22 25.7 | |
| | comp=Z,53nm,21.4s,baz=137,slow=31 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.47** | **335** | P | **P** | **02 53 39.2** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=134,slow=6.4,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **126.53** | **65** | PKP | **PKPdf** | **02 59 55.0** | **+0.6** |
| | comp=Z,0.5nm,0.7s,baz=246,slow=1.2,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **126.53** | **65** | | **PKPdf** | **02 59 52.9** | **-1.5** |
| **AKASG** | **Malin Array Be** | **127.62** | **51** | PKP | **PKPdf** | **02 59 56.2** | **+0.4** |
| | comp=Z,0.1nm,0.2s,baz=270,slow=2.1,SNR=4.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **127.62** | **51** | | **PKPdf** | **02 59 55.0** | **-0.9** |
| **SEY** | **Seymchan** | **143.21** | **326** | PKP | **PKPdf** | **03 00 25.9** | **+1.5** |
| | comp=Z,0.6nm,0.4s,baz=70,slow=2.9,SNR=3.9 | | | | | | |
| **MA2** | **Magadan** | **144.87** | **320** | | **PKPab** | **03 00 26.1** | **-0.5** |
| **ARU** | **Arti** | **145.41** | **45** | PKPbc | **PKPdf** | **03 00 29.3** | **+0.9** |
| | comp=Z,1.3nm,0.5s,baz=291,slow=5.5,SNR=12 | | | | | | |
| **ARU** | **Arti** | **145.41** | **45** | | **PKPdf** | **03 00 27.9** | **-0.5** |
| **TIXI** | **Tiksi** | **145.42** | **347** | | **PKPdf** | **03 00 26.6** | **-1.4** |
| **AKTO** | **Aktyubinsk** | **145.61** | **56** | PKPbc | **PKPdf** | **03 00 29.6** | **+0.6** |
| | comp=Z,2.6nm,1.0s,baz=288,slow=3.5,SNR=7.0 | | | | | | |
| **ABKAR** | **Akbulak array** | **146.86** | **58** | PKPbc | **PKPdf** | **03 00 32.0** | **+0.8** |
| **ZALV** | **Zalesovo Beam** | **160.09** | **36** | PKPab | **PKPab** | **03 01 30.8** | **+1.0** |
| | comp=Z,0.7nm,0.7s,baz=331,slow=5.6,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **162.00** | **58** | PKPab | **PKPab** | **03 01 39.3** | **+0.8** |
| | comp=Z,0.4nm,0.8s,baz=270,slow=5.8,SNR=3.1 | | | | | | |

**IDC 14 02:49:36.1±2.2,2.°73S×129.°01E,h0km,mb3.4/2, mb1 3.6/4,mb1mx3.2/47,mbtmp3.4/4,ML3.2/2,Error ellipse: s-maj=108.3km s-min=27.6km az=72.0,Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **15.62** | **192** | Pn | Pn | 02 53 19.7 | +1.9 |
| | 0.1nm,0.3s,baz=11,slow=16,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.88** | **163** | P | Pn | 02 53 45.9 | -0.6 |
| | 0.1nm,0.3s,baz=341,slow=12,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **21.34** | **168** | P | P | 02 54 24.2 | -0.8 |
| | 0.6nm,0.4s,baz=344,slow=9.2,SNR=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.14** | **326** | P | P | 03 00 13.0 | +0.5 |
| | 0.3nm,0.9s,baz=112,slow=6.9,SNR=1.9 | | | | | | |

*VAO* ***14*** *03:17:09.0±1.8,20.°70S×69.°96W,h144km±8km,mb3.9*
*IDC* ***14*** *03:17:15.2±1.5,20.°86S×69.°06W,h113km±16km,mb3.4/4, mb1 3.4/6,mb1mx3.3/32,mbtmp3.6/6,MS3.6/2,Ms1 3.6/2, ms1mx2.8/21,Error ellipse: s-maj=29.1km s-min=17.5km az=93.0*
*GUC* ***14*** *03:17:15.0±0.5,20.°85S×69.°09W,h104km±2km,ML3.8*
**ISC 14 03:17:13.9±0.6,20.°81S±0.°03×69.°09W±0.°06,h112km±6km, n39,σ1§43/56,mb3.6/3,11C-3D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.44** | **238** | ⇑*i* P | **Pn** | **03 17 30.1** | **-0.6** |
| PB01 | | | | *i* S | **Sn** | **03 17 42.3** | **-1.1** |
| **PB08** | **IPOC Station P** | **0.67** | **354** | ⇓*i* P | **Pn** | **03 17 33.2** | **+0.5** |
| PB08 | | | | *i* S | **Sn** | **03 17 47.1** | **+0.4** |
| PB08 | | | | IAML | | 03 17 48.6 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PB02** | **IPOC Station P** | **0.91** | **236** | ⇑*i* P | **Pn** | **03 17 34.1** | **-0.4** |
| PB02 | | | | *i* S | **Sn** | **03 17 48.7** | **-1.4** |
| PB02 | | | | IAML | | 03 17 52.6 | |
| | comp=E,5μm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **0.92** | **305** | ⇑*i* P | **Pn** | **03 17 34.4** | **-0.2** |
| HMBC | | | | *i* S | **Sn** | **03 17 49.9** | **-0.3** |
| HMBC | | | | IAML | | 03 17 50.3 | |
| | comp=N,4μm,0.2s | | | | | | |
| HMBC | | | | IAML | | 03 17 50.9 | |
| | comp=N,4μm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **1.00** | **188** | ⇓*i* P | **Pn** | **03 17 35.4** | **-0.1** |
| PB09 | | | | *i* S | **Sn** | **03 17 51.0** | **-0.6** |
| PB09 | | | | IAML | | 03 17 53.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| **PATCX** | **Punta Patache** | **1.00** | **269** | ⇑*i* P | **Pn** | **03 17 35.1** | **-0.3** |
| PATCX | | | | *i* S | **Sn** | **03 17 50.8** | **-0.8** |
| PATCX | | | | IAML | | 03 17 54.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **1.05** | **283** | ⇑*i* P | **Pn** | **03 17 35.4** | **-0.4** |
| TA01 | | | | *i* S | **Sn** | **03 17 51.5** | **-0.9** |
| **TA02** | **Huaiquique** | **1.12** | **298** | ⇑*e*P | **Pn** | **03 17 36.3** | **-0.2** |
| TA02 | | | | *e*S | **Sn** | **03 17 53.2** | **-0.4** |
| TA02 | | | | IAML | | 03 17 57.2 | |
| | comp=N,3μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.14** | **355** | ⇓*i* P | **Pn** | **03 17 38.0** | **+0.7** |
| GO01 | | | | *i* S | **Sn** | **03 17 55.7** | **+0.8** |
| GO01 | | | | IAML | | 03 17 57.4 | |
| | comp=N,5μm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **1.17** | **333** | ⇑*i* P | **Pn** | **03 17 37.6** | **+0.3** |
| PB11 | | | | *i* S | **Sn** | **03 17 55.2** | **+0.3** |
| PB11 | | | | IAML | | 03 17 56.1 | |
| | comp=N,6μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.18** | **219** | ⇑*i* P | **Pn** | **03 17 37.0** | **-0.4** |
| PB07 | | | | *i* S | **Sn** | **03 17 53.6** | **-1.5** |
| PB07 | | | | IAML | | 03 17 54.8 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PB03** | **IPOC Station P** | **1.38** | **207** | ⇑*i* P | **Pn** | **03 17 39.3** | **-0.4** |
| PB03 | | | | *i* S | **Sn** | **03 17 57.6** | **-1.6** |
| PB03 | | | | IAML | | 03 17 58.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.80** | **175** | P | **Pn** | **03 17 45.5** | **+0.6** |
| | comp=E,17nm,0.3s,baz=38,slow=9.7,SNR=107 | | | | | | |
| LVC | | | | S | **Sn** | **03 18 08.5** | **+0.1** |
| | comp=E,46nm,0.3s,baz=281,slow=20,SNR=9.4 | | | | | | |
| **LVC** | **Limon Verde** | **1.80** | **175** | *e*P | **Pn** | **03 17 45.2** | **+0.3** |
| LVC | | | | *e*S | **Sn** | **03 18 08.5** | **+0.1** |
| **LVC** | **Limon Verde** | **1.80** | **175** | *e*P | **Pn** | **03 17 45.4** | **+0.5** |
| **PB04** | **IPOC Station P** | **1.81** | **213** | ⇑*i* P | **Pn** | **03 17 44.2** | **-0.7** |
| PB04 | | | | *i* S | **Sn** | **03 18 06.2** | **-2.2** |
| PB04 | | | | IAML | | 03 18 12.1 | |
| | comp=N,605nm,0.3s | | | | | | |
| **PB06** | **IPOC Station P** | **1.94** | **193** | *e*P | **Pn** | **03 17 46.2** | **-0.2** |
| PB06 | | | | *i* S | **Sn** | **03 18 09.7** | **-1.6** |
| PB06 | | | | IAML | | 03 18 16.7 | |
| | comp=N,464nm,0.3s | | | | | | |
| **PB15** | **IPOC Station P** | **2.42** | **188** | *e*P | **Pn** | **03 17 52.6** | **+0.1** |
| PB15 | | | | *e*S | **Sn** | **03 18 19.7** | **-2.5** |
| PB15 | | | | IAML | | 03 18 28.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| **PB12** | **IPOC Station P** | **2.48** | **332** | ⇑*i* P | **Pn** | **03 17 52.8** | **-0.5** |
| PB12 | | | | IAML | | 03 18 45.6 | |
| | comp=E,295nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **3.02** | **207** | *e*P | **Pn** | **03 17 58.8** | **-1.4** |
| PB10 | | | | IAML | | 03 18 31.3 | |
| | comp=N,88nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **4.58** | **12** | P | **Pn** | **03 18 23.9** | **+2.2** |
| | comp=N,0.9nm,0.3s,baz=178,slow=3.9,SNR=17 | | | | | | |
| LPAZ | | | | S | **Sn** | **03 19 07.3** | **-7.1** |
| | comp=N,0.9nm,0.3s,baz=183,slow=13,SNR=4.4 | | | | | | |
| **SIV** | **San Ignacio** | **8.99** | **59** | P | **Pn** | **03 19 18.9** | **-2.0** |
| | comp=N,1.7nm,0.3s,baz=249,slow=10.0,SNR=23 | | | | | | |
| **VILB** | **Vilhena** | **11.54** | **49** | *e*P | **Pn** | **03 19 55.9** | **+0.5** |
| **SALV** | **Santo Antonio** | **13.62** | **71** | *e*P | **P** | **03 20 27.1** | **-0.4** |
| **PTGB** | **Pitanga** | **16.17** | **107** | *e*P | **P** | **03 20 58.6** | **+2.7** |
| **IPMB** | **Ipameri, GO** | **19.89** | **85** | *e*P | **P** | **03 21 36.9** | **+0.3** |
| **PLCA** | **Paso Flores** | **19.90** | **183** | P | **Pn** | **03 21 38.9** | **-0.4** |
| | comp=N,0.1nm,0.3s,baz=32,slow=8.4,SNR=5.1 | | | | | | |
| **BDFB** | **Brasilia** | **20.66** | **79** | P | Pn | 03 21 47.5 | -0.8 |
| | comp=N,2.6nm,0.3s,baz=244,slow=6.3,SNR=10 | | | | | | |
| **ITTB** | **Itaituba** | **20.87** | **40** | *e*P | **P** | **03 21 45.5** | **-1.7** |
| **PEXB** | **Peixe** | **21.71** | **70** | *e*P | **P** | **03 21 55.9** | **-0.3** |
| **PTGA** | **Pitinga** | **21.85** | **25** | LR | LR | 03 31 10.5 | |
| | comp=N,53nm,19.7s,baz=184,slow=38 | | | | | | |
| **BSCB** | **Bom Sucesso** | **22.71** | **95** | *e*P | **P** | **03 22 06.1** | **-0.4** |
| **JANB** | **Januaria** | **24.24** | **80** | *e*P | **P** | **03 22 19.7** | **-0.9** |
| **GUA01** | **Guaratinga, BA** | **28.03** | **86** | *e*P | **P** | **03 22 54.5** | **-0.3** |
| **PMSA** | **Palmer Station** | **44.07** | **177** | LR | LR | 03 42 27.0 | |
| | comp=N,156nm,18.1s,baz=174,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **59.97** | **325** | P | **P** | **03 27 10.6** | **+1.8** |
| | comp=N,0.2nm,0.6s,baz=153,slow=8.1,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.28** | **71** | P | **P** | **03 28 56.5** | **0.0** |
| | comp=N,0.9nm,0.4s,baz=258,slow=5.2,SNR=12 | | | | | | |
| TORD | | | | pP | **pP** | **03 29 25.6** | **-0.6** |
| | comp=N,0.9nm,0.5s,baz=255,slow=5.4,SNR=8.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.48** | **341** | P | **P** | **03 30 03.3** | **+0.8** |
| | comp=N,0.3nm,0.6s,baz=132,slow=4.5,SNR=6.9 | | | | | | |
| YKA | | | | pP | **pP** | **03 30 33.0** | **+0.6** |
| | comp=N,0.1nm,0.4s,baz=133,slow=4.6,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.17** | **35** | PKPbc | **PKPdf** | **03 36 39.3** | **+1.0** |
| | comp=N,0.5nm,0.5s,baz=319,slow=3.8,SNR=7.7 | | | | | | |

*IGIL* ***14*** *03:22:03.2,37.°00N×10.°81W,h10km,ML1.8*
*INMG* ***14*** *03:22:03.1±1.0,36.°90N×10.°92W,h31km,ML2.0,Error ellipse: s-maj=7.0km s-min=3.6km az=84.0*
*CNRM* ***14*** *03:22:14.5,35.°28N×9.°77W,h379km,ml3.2*
**ISC 14 03:21:59.3±2.1,36.°85N±0.°05×11.°0W±0.°1,h35km,n23, σ1§77/35,1C,Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.76** | **80** | ⇑*e*Pn | **Pn** | **03 22 28.9** | **+1.6** |
| PFVI | | | | *e*Sn | **Sn** | **03 22 48.1** | **-0.5** |
| PFVI | | | | A | A | 03 22 55.7 | |
| | 15nm,1.0s | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **76** | *e*S | **Sn** | **03 22 52.7** | **-0.2** |
| MORF | | | | IAML | | 03 22 53.9 | |
| | comp=E,10nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **76** | *e*Pn | **Pn** | **03 22 31.2** | **+1.5** |
| MORF | | | | *e*Sn | **Sn** | **03 22 52.8** | **-0.1** |
| **PTEO** | **Sao Teotonio** | **1.95** | **68** | *e*Pn | **Pn** | **03 22 31.4** | **+1.6** |
| PTEO | | | | *e*Sn | **Sn** | **03 22 52.7** | **-0.4** |
| PTEO | | | | A | A | 03 22 56.6 | |
| | comp=E,14nm,0.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.33** | **57** | *e*Pn | **Pn** | **03 22 36.5** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **03 23 02.0** | **-0.7** |
| PNCL | | | | A | A | 03 23 03.8 | |
| | comp=E,6.0nm,0.5s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **2.37** | **37** | *e*Sn | **Sn** | **03 23 03.1** | **-0.4** |
| **MESJ** | **Messejana** | **2.43** | **65** | *e*P | **Pn** | **03 22 38.4** | **+2.0** |
| MESJ | | | | *e*S | **Sn** | **03 23 04.0** | **-0.8** |
| MESJ | | | | IAML | | 03 23 08.7 | |
| | comp=N,4.6nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.43** | **65** | *e*Pn | **Pn** | **03 22 38.5** | **+2.0** |
| MESJ | | | | *e*Sn | **Sn** | **03 23 04.1** | **-0.8** |
| MESJ | | | | A | A | 03 23 07.1 | |
| | comp=N,4.5nm,0.8s | | | | | | |
| **PCVE** | **Castro Verde** | **2.49** | **71** | *e*Pn | **Pn** | **03 22 39.6** | **+2.3** |
| PCVE | | | | *e*Sn | **Sn** | **03 23 05.2** | **-1.3** |
| **PMAFR** | **Mafra** | **2.50** | **32** | *e*Sn | **Sn** | **03 23 05.9** | **-0.9** |
| **PVAQ** | **Vaqueiros** | **2.68** | **77** | *e*Pn | **Pn** | **03 22 41.9** | **+1.9** |
| PVAQ | | | | *e*Sn | **Sn** | **03 23 10.5** | **-0.7** |
| **PBEJ** | **Beja** | **2.76** | **64** | *e*Sn | **Sn** | **03 23 12.3** | **-0.8** |
| **EVO** | **Evora** | **2.90** | **54** | *e*Pn | **Pn** | **03 22 44.3** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **03 23 15.3** | **-1.4** |
| EVO | | | | A | A | 03 23 18.1 | |
| | comp=N,6.6nm,0.7s | | | | | | |
| **PMTG** | **Montargil** | **3.12** | **44** | *e*Pn | **Pn** | **03 22 47.1** | **+1.2** |
| PMTG | | | | *e*Sn | **Sn** | **03 23 20.3** | **-1.7** |
| PMTG | | | | A | A | 03 23 21.8 | |
| | comp=N,3.8nm,0.6s | | | | | | |
| **PSBE** | **So Bento** | **3.18** | **33** | *e*Sn | **Sn** | **03 23 22.4** | **-1.1** |
| PSBE | | | | A | A | 03 23 24.0 | |
| | comp=N,4.5nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **3.37** | **52** | *e*Sn | **Sn** | **03 23 26.4** | **-1.8** |
| PESTR | | | | A | A | 03 23 28.4 | |
| | comp=N,2.0nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **3.84** | **47** | *e*Pn | **Pn** | **03 22 56.5** | **+0.6** |
| PMRV | | | | *e*Sn | **Sn** | **03 23 37.2** | **-2.5** |
| **PCBR** | **Castelo Branco** | **4.07** | **42** | *e*Sn | **Sn** | **03 23 42.8** | **-2.7** |
| **PVIS** | **Viseu** | **4.56** | **31** | *e*Sn | **Sn** | **03 23 54.5** | **-3.1** |
| **OUK** | **Oukaimeden** | **6.20** | **154** | P | **Pn** | **03 23 31.2** | **+2.5** |
| OUK | | | | S | **Sn** | **03 24 35.9** | **-2.6** |
| **MD31** | **MD31** | **6.49** | **126** | P | **Pn** | **03 23 33.6** | **+1.2** |
| MD31 | | | | S | **Sn** | **03 24 41.0** | **-4.3** |
| **TTIG** | **Tnine Tigouga,** | **6.64** | **161** | P | Pn | 03 23 31.4 | -3.1 |
| TTIG | | | | S | Sn | 03 24 37.6 | -11 |
| **OUZM** | **OUZ** | **6.90** | **148** | P | **Pn** | **03 23 38.6** | **+0.6** |
| OUZM | | | | S | Sn | 03 24 43.5 | -12 |

*NEIC* ***14*** *03:31:08.0±1.2,21.°3S±0.°1×170.°1E±0.°1,h46km±12km, mb4.2/9,Error ellipse: s-maj=18.7km s-min=13.9km az=130.0*
*NOU* ***14*** *03:31:08.7,21.°51S×169.°87E,h0km,MLv4.7/12, Southeast of Loyalty Islands*
*IDC* ***14*** *03:31:12.3±7.1,20.°92S×169.°67E,h76km±48km,mb3.8/3, mb1 4.0/4,mb1mx3.5/28,mbtmp4.1/4,ML4.2/1,MS3.3/1, Ms1 3.3/1,ms1mx2.6/53,Error ellipse: s-maj=117.1km s-min=47.9km az=151.0*
**ISC 14 03:31:05.6±1.6,21.°3S±0.°1×170.°2E±0.°1,h35km,n32, σ1§54/29,mb4.0/7,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIFNC** | **LIFOU** | **2.82** | **280** | Pn | **Pn** | **03 31 49.0** | **+0.7** |
| **LIFNC** | **LIFOU** | **2.82** | **280** | P | **Pn** | **03 31 50.8** | **+2.6** |
| **PINNC** | **Pines Island,** | **2.88** | **242** | | **Pn** | **03 31 50.0** | **+0.9** |
| **PINNC** | **Pines Island,** | **2.88** | **242** | P | **Pn** | **03 31 50.0** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **3.18** | **256** | P | **Pn** | **03 31 54.5** | **+1.3** |
| **OUENC** | **Ouen Island, N** | **3.33** | **250** | | **Pn** | **03 31 55.9** | **+0.7** |
| **OUENC** | **Ouen Island, N** | **3.33** | **250** | P | **Pn** | **03 31 57.1** | **+1.9** |
| **DZM** | **Mont Dzumac** | **3.59** | **257** | *e*Pn | **Pn** | **03 32 00.9** | **+2.0** |
| | 2μm,2.4s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **03 32 38.5** | **-1.6** |
| | 494nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **3.59** | **257** | P | **Pn** | **03 32 00.9** | **+2.0** |
| | 25nm,0.3s,baz=132,slow=8.5,SNR=152 | | | | | | |
| DZM | | | | S | **Sn** | **03 32 38.2** | **-1.9** |
| | 114nm,0.3s,baz=321,slow=23,SNR=16 | | | | | | |
| **DZM** | **Mont Dzumac** | **3.59** | **257** | | **Pn** | **03 31 59.9** | **+1.0** |
| **DZM** | **Mont Dzumac** | **3.59** | **257** | P | **Pn** | **03 32 01.3** | **+2.4** |
| **ONTNC** | **Ouen Toro** | **3.63** | **253** | | **Pn** | **03 31 59.5** | **+0.1** |
| **ONTNC** | **Ouen Toro** | **3.63** | **253** | P | **Pn** | **03 32 01.3** | **+1.9** |
| **NOUC** | **Port Laguerre** | **3.72** | **257** | P | **Pn** | **03 32 02.7** | **+2.1** |
| **RTV** | **Rentapao** | **3.87** | **334** | P | Pn | 03 32 11.2 | +8.6 |
| **DVP** | **Devils Point** | **4.03** | **331** | P | Pn | 03 32 11.7 | +6.9 |
| **KOUNC** | **Koumac, New Ca** | **5.59** | **277** | Pn | **Pn** | **03 32 28.6** | **+2.4** |
| **SANVU** | **Saraoutou** | **6.48** | **333** | Pn | **Pn** | **03 32 39.0** | **+0.5** |
| **MSVF** | **Nonsavu** | **8.20** | **66** | LR | LR | 03 36 31.6 | |
| | comp=Z,162nm,18.0s,baz=173,slow=38 | | | | | | |
| **ARMA** | **Armidale** | **19.01** | **238** | P | **P** | **03 35 26.0** | **+1.4** |
| ARMA | | | | IAmb | IAmb | 03 35 52.6 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **27.60** | **242** | P | **P** | **03 36 50.0** | **+0.3** |
| | comp=Z,2.0nm,0.9s,baz=70,slow=14,SNR=2.9 | | | | | | |
| **STKA** | **Stephens Creek** | **27.60** | **242** | IAmb | IAmb | 03 36 53.4 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.53** | **266** | P | **P** | **03 37 40.7** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 03 37 51.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **R40A** | **Maddies Statio** | **5.37** | **69** | | | **Pn** | **04 14 54.3** | **+0.9** |
| R40A | | | | IAmb_Lg | | | 04 16 25.2 | |
| | comp=Z,68nm,0.7s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.62** | **285** | | | **Pn** | **04 14 57.7** | **+0.7** |
| **N38A** | **Joes South For** | **6.01** | **43** | | | **Pn** | **04 15 03.4** | **+1.2** |
| **P40A** | **Paris** | **6.01** | **58** | | | **Pn** | **04 15 03.4** | **+1.3** |
| **CCM** | **Cathedral Cave** | **6.09** | **73** | Pn | | **Pn** | **04 15 03.9** | **+0.5** |
| CCM | | | | IAmb_Lg | | | 04 16 45.2 | |
| | comp=Z,101nm,0.9s | | | | | | | |
| **JCT** | **Junction City** | **6.10** | **189** | IAmb_Lg | | | 04 16 57.6 | |
| | comp=Z,74nm,0.8s | | | | | | | |
| **K31A** | **O'Neill** | **6.10** | **359** | IAmb_Lg | | | 04 16 58.2 | |
| | comp=Z,120nm,0.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.40** | **303** | | | **Pn** | **04 15 08.5** | **+0.8** |
| **ANMO** | **Albuquerque** | **6.55** | **258** | Pn | | **Pn** | **04 15 08.9** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=63,slow=13,SNR=5.4 | | | | | | | |
| ANMO | | | | Pg | | **Pb** | **04 15 30.5** | **+3.3** |
| | comp=Z,0.9nm,0.3s,baz=71,slow=17,SNR=12 | | | | | | | |
| ANMO | | | | Lg | | Lg | 04 16 56.7 | |
| | comp=Z,2.3nm,0.3s,baz=326,slow=14,SNR=3.7 | | | | | | | |
| **ANMO** | **Albuquerque** | **6.55** | **258** | Pn | | **Pn** | **04 15 10.5** | **+0.8** |
| **PBMO** | **Poplar Bluff** | **6.61** | **85** | IAmb_Lg | | | 04 17 11.2 | |
| | comp=Z,64nm,0.9s | | | | | | | |
| **FVM** | **French Village** | **6.71** | **75** | IAmb_Lg | | | 04 17 05.3 | |
| | comp=Z,85nm,0.8s | | | | | | | |
| **SCIA** | **State Center** | **6.83** | **36** | IAmb_Lg | | | 04 17 24.6 | |
| | comp=Z,76nm,0.8s | | | | | | | |
| **HKT** | **Hockley** | **6.96** | **159** | Pn | | **Pn** | **04 15 15.9** | **+0.8** |
| **SLM** | **Saint Louis** | **7.00** | **70** | IAmb_Lg | | | 04 17 15.7 | |
| | comp=Z,70nm,0.7s | | | | | | | |
| **143A** | **Socs Landing,** | **7.08** | **120** | IAmb_Lg | | | 04 17 27.6 | |
| | comp=Z,54nm,0.9s | | | | | | | |
| **SMCO** | **Snowmass** | **7.11** | **294** | Pn | | **Pn** | **04 15 19.9** | **+2.3** |
| **PHWY** | **Pilot Hill** | **7.14** | **314** | Pn | | **Pn** | **04 15 19.8** | **+1.8** |
| PHWY | | | | IAmb_Lg | | | 04 17 18.9 | |
| | comp=Z,91nm,0.9s | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.19** | **253** | Pn | | **Pn** | **04 15 19.7** | **+1.1** |
| **MNTX** | **Cornudas Mount** | **7.37** | **231** | Pn | | **Pn** | **04 15 20.7** | **-0.2** |
| MNTX | | | | IAmb_Lg | | | 04 17 34.5 | |
| | comp=Z,51nm,1.0s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.37** | **12** | | | **Pn** | **04 15 20.6** | **-0.2** |
| **N41A** | **Harden Midland** | **7.39** | **53** | Pn | | **Pn** | **04 15 22.2** | **+1.1** |
| **S44A** | **Carbondale** | **7.59** | **78** | Pn | | **Pn** | **04 15 24.1** | **+0.2** |
| S44A | | | | IAmb_Lg | | | 04 17 39.5 | |
| | comp=Z,69nm,0.8s | | | | | | | |
| **K38A** | **Parkersburg** | **7.62** | **35** | Pn | | **Pn** | **04 15 25.8** | **+1.6** |
| **P43A** | **Skaggs, Pawnee** | **7.84** | **64** | Pn | | **Pn** | **04 15 28.1** | **+0.9** |
| **UTMT** | **University of** | **7.88** | **88** | IAmb_Lg | | | 04 17 59.2 | |
| | comp=Z,82nm,0.7s | | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.90** | **107** | Pn | | **Pn** | **04 15 28.7** | **+0.5** |
| Y45A | | | | IAmb_Lg | | | 04 18 00.4 | |
| | comp=Z,56nm,1.0s | | | | | | | |
| **L40A** | **Anamosa** | **7.98** | **44** | Pn | | **Pn** | **04 15 30.2** | **+0.9** |
| L40A | | | | | | LR | 04 17 44.7 | |
| L40A | | | | IAmb_Lg | | | 04 17 54.1 | |
| | comp=Z,83nm,0.8s | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.99** | **70** | Pn | | **Pn** | **04 15 30.5** | **+1.1** |
| Q44A | | | | | | LR | 04 17 44.0 | |
| **TX31** | **Lajitas Ar. Si** | **8.31** | **212** | | | **Pn** | **04 15 34.0** | **+0.1** |
| **TXAR** | **Lajitas Array** | **8.31** | **212** | Pn | | **Pn** | **04 15 33.4** | **-0.5** |
| | comp=Z,0.5nm,0.3s,baz=36,slow=11,SNR=25 | | | | | | | |
| TXAR | | | | Lg | | Lg | 04 17 51.0 | |
| | comp=Z,1.3nm,0.3s,baz=24,slow=25,SNR=4.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **8.31** | **212** | Pn | | **Pn** | **04 15 34.0** | **+0.1** |
| **TX32** | **Lajitas Array** | **8.31** | **212** | | | **Pn** | **04 15 33.7** | **-0.2** |
| **HDIL** | **Hopedale** | **8.36** | **58** | Pn | | **Pn** | **04 15 35.2** | **+0.8** |
| **RWWY** | **Rawlins** | **8.43** | **310** | IAmb_Lg | | | 04 18 04.0 | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.49** | **27** | IAmb_Lg | | | 04 18 22.5 | |
| | comp=Z,59nm,1.1s | | | | | | | |
| **RSSD** | **Black Hills** | **8.64** | **333** | IAmb_Lg | | | 04 18 24.6 | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **WVT** | **Waverly** | **8.74** | **89** | Pn | | **Pn** | **04 15 40.2** | **+0.6** |
| **O44A** | **Mansfield** | **8.78** | **63** | Pn | | **Pn** | **04 15 41.0** | **+0.8** |
| **146A** | **Union** | **8.80** | **113** | IAmb_Lg | | | 04 18 23.6 | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **JFWS** | **Jewell Farm** | **9.09** | **43** | | | **Pn** | **04 15 44.5** | **+0.2** |
| JFWS | | | | IAmb_Lg | | | 04 18 29.6 | |
| | comp=Z,49nm,0.8s | | | | | | | |
| **T47A** | **Sharon Grove** | **9.27** | **84** | Pn | | **Pn** | **04 15 48.1** | **+1.2** |
| **F33A** | **5 Mile Ranch,** | **9.48** | **10** | IAmb_Lg | | | 04 18 38.3 | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **M44A** | **Midewin, Midew** | **9.58** | **56** | Pn | | **Pn** | **04 15 51.1** | **0.0** |
| **I40A** | **Norwalk** | **9.58** | **37** | Pn | | **Pn** | **04 15 51.1** | **-0.1** |
| I40A | | | | IAmb_Lg | | | 04 18 46.3 | |
| | comp=Z,43nm,1.1s | | | | | | | |
| **SRU** | **San Rafael Swe** | **9.75** | **289** | Pn | | **Pn** | **04 15 53.2** | **-0.5** |
| **F36A** | **Milaca** | **10.10** | **21** | Pn | | **Pn** | **04 15 57.7** | **-0.5** |
| **LRAL** | **Lakeview Retre** | **10.19** | **107** | Pn | | **Pn** | **04 15 59.2** | **-0.3** |
| **Q16A** | **Castle Valley** | **10.21** | **287** | Pn | | **Pn** | **04 15 59.5** | **-0.5** |
| **U49A** | **Red Boiling Sp** | **10.35** | **86** | Pn | | **Pn** | **04 16 02.1** | **+0.4** |
| **I42A** | **Draeger Farm,** | **10.46** | **42** | Pn | | **Pn** | **04 16 03.3** | **+0.1** |
| **PD31** | **Pinedale Array** | **10.47** | **310** | Pn | | **Pn** | **04 16 02.8** | **-0.8** |
| **PDAR** | **Pinedale Array** | **10.47** | **310** | Pn | | **Pn** | **04 16 01.6** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=131,slow=13,SNR=2.3 | | | | | | | |
| PDAR | | | | Lg | | Lg | 04 18 54.9 | |
| | comp=Z,0.5nm,0.3s,baz=116,slow=31,SNR=5.2 | | | | | | | |
| **P48A** | **Milroy** | **10.84** | **70** | Pn | | **Pn** | **04 16 09.2** | **+0.8** |
| **V51A** | **Loudon** | **11.58** | **89** | | | **Pn** | **04 16 17.6** | **-0.8** |
| **TKL** | **Tuckaleechee C** | **12.06** | **90** | Pn | | **Pn** | **04 16 24.7** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=220,slow=5.3,SNR=7.0 | | | | | | | |
| TKL | | | | Lg | | Lg | 04 19 47.2 | |
| | comp=Z,0.8nm,0.3s,baz=166,slow=21,SNR=4.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.83** | **344** | P | | **P** | **04 19 21.8** | **-0.5** |
| | comp=Z,0.1nm,0.5s,baz=148,slow=9.3,SNR=2.0 | | | | | | | |

*IDC **14** 04:19:34.0±3.0, 26°.25N×140°.66E, h512km±34km, mb3.0/12, mb1 3.2/14, mb1mx3.0/37, mbtmp3.9/14, Error ellipse: s-maj=23.3km s-min=22.3km az=110.0*

**ISC 14 04:19:32.9±1.0, 26°.2N±0°.2×140°.7E±0°.1, h500km, n15, σ0.96/15, mb3.4/12, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOW** | **Kunigami** | **11.18** | **276** | P | **P** | **04 22 03.0** | **+0.3** |
| | 2.3nm,0.3s,baz=106,slow=25,SNR=8.9 | | | | | | |
| **KSRS** | **Korea Array** | **15.60** | **319** | P | **P** | **04 22 50.9** | **+1.7** |
| | 0.2nm,0.3s,baz=146,slow=9.8,SNR=2.1 | | | | | | |
| **KLR** | **Kul'dur** | **24.01** | **345** | P | **P** | **04 24 07.2** | **-0.2** |
| | 0.7nm,0.5s,baz=178,slow=8.9,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.30** | **188** | P | **P** | **04 27 13.2** | **-0.1** |
| | 0.2nm,0.3s,baz=6,slow=7.7,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.31** | **320** | P | **P** | **04 27 34.4** | **-1.0** |
| | 0.7nm,0.3s,baz=100,slow=6.2,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.04** | **310** | P | **P** | **04 27 41.0** | **0.0** |
| | 0.4nm,0.7s,baz=90,slow=11,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **59.10** | **28** | P | **P** | **04 28 43.8** | **-0.5** |
| | 0.4nm,0.6s,baz=242,slow=6.0,SNR=9.3 | | | | | | |
| **INK** | **Inuvik** | **64.36** | **24** | P | **P** | **04 29 18.2** | **-0.3** |
| | 0.4nm,0.4s,baz=278,slow=3.3,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **73.52** | **28** | P | **P** | **04 30 14.2** | **+0.3** |
| | 0.8nm,0.6s,baz=294,slow=5.6,SNR=11 | | | | | | |
| **ARCES** | **ARCESS Array B** | **73.94** | **341** | P | **P** | **04 30 16.3** | **0.0** |
| | 3.5nm,0.9s,baz=80,slow=8.3,SNR=7.8 | | | | | | |
| **FINES** | **FINESS Array B** | **78.16** | **334** | P | **P** | **04 30 39.5** | **-0.2** |
| | 1.2nm,0.3s,baz=64,slow=4.3,SNR=28 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.08** | **51** | P | **P** | **04 31 02.4** | **+1.3** |
| | 0.4nm,0.6s,baz=286,slow=5.7,SNR=4.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **82.55** | **323** | P | **P** | **04 31 02.5** | **-0.3** |
| | 0.4nm,0.3s,baz=53,slow=4.9,SNR=7.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **83.94** | **338** | P | **P** | **04 31 08.5** | **-1.1** |
| | comp=Z,0.3nm,0.6s,baz=46,slow=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **83.94** | **338** | P | **P** | **04 31 07.8** | **-1.9** |
| | comp=Z,0.6nm,0.6s,baz=47,slow=4.5,SNR=3.5 | | | | | | |

*IDC **14** 04:19:57.1±1.4, 1°.14N×125°.02E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.3/35, mbtmp3.2/3, Error ellipse: s-maj=177.6km s-min=14.9km az=63.0*

*DJA **14** 04:20:16.1±0.5, 0°.5±4°×12°.4E±°, h94km±11km, M3.6/6, mb3.9/1, MLv3.5/6*

**ISC 14 04:20:16.2±1.2, 0°.31S±0°.09×123°.61E±0°.07, h100km, n8, σ2.34/11, mb3.2/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **1.11** | **327** | P | **Pn** | **04 20 39.2** | **+1.3** |
| GTOI | | | | S | **Sn** | **04 20 57.8** | **+3.6** |
| **MRSI** | **Marisa** | **1.84** | **295** | P | **Pn** | **04 20 45.0** | **-1.8** |
| MRSI | | | | S | **Sn** | **04 21 07.4** | **-2.7** |
| **APSI** | **Ampana** | **2.05** | **253** | P | **Pn** | **04 20 51.1** | **+1.6** |
| APSI | | | | S | **Sn** | **04 21 17.9** | **+3.0** |
| **SANI** | **Sanana** | **2.94** | **126** | P | **Pn** | **04 21 02.3** | **+1.1** |
| SANI | | | | S | **Sn** | **04 21 35.0** | **-0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MPSI** | **Mapaga** | **3.77** | **280** | P | | **Pn** | **04 21 11.4** | **-0.9** |
| **WRA** | **Warramunga Arr** | **22.16** | **152** | P | | **P** | **04 25 02.3** | **-1.9** |
| | 0.6nm,0.5s,baz=335,slow=10,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.28** | **157** | P | | **P** | **04 25 32.6** | **-0.8** |
| | 0.2nm,0.3s,baz=349,slow=14,SNR=2.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.19** | **328** | P | | P | 04 29 57.0 | -10 |
| | 0.1nm,0.3s,baz=131,slow=8.3,SNR=2.2 | | | | | | | |

**OTT 14 04:25:21.7±0.3, 78°.45N×103°.92W, h18km, ML3.6/2, 39km south from Isachsen, Nu Sverdrup Seismic Zone., Queen Elizabeth Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EUNU** | **Eureka** | **3.64** | **55** | PN | Pn | 04 26 17.0 | -0.1 |
| EUNU | | | | SN | Sn | 04 26 57.2 | -2.3 |
| EUNU | | | | Trac | | 04 27 03.8 | |
| | comp=Z,351nm,4.0s | | | | | | |
| **RES** | **Resolute Bay** | **4.32** | **146** | PN | Pn | 04 26 25.7 | -0.6 |
| RES | | | | SN | Sn | 04 27 13.6 | -2.5 |
| RES | | | | Trac | | 04 27 27.8 | |
| | comp=Z,80nm,1.6s | | | | | | |
| **A36M** | **Sachs Harbour** | **8.40** | **231** | PN | Pn | 04 27 23.0 | +0.9 |
| A36M | | | | SN | Sn | 04 28 50.6 | -5.6 |
| A36M | | | | Trac | | 04 29 01.0 | |
| | comp=Z,160nm,3.1s | | | | | | |
| **CB31** | **Cambridge Bay** | **9.38** | **183** | PN | Pn | 04 27 34.5 | -1.1 |
| CB31 | | | | SN | Sn | 04 29 11.9 | -8.4 |
| CB31 | | | | Trac | | 04 29 30.6 | |
| | comp=Z,3.2nm,0.3s | | | | | | |
| **INK** | **Inuvik** | **12.99** | **235** | PN | Pn | 04 28 24.4 | -0.5 |
| INK | | | | SN | Sn | 04 30 41.6 | -7.0 |
| INK | | | | Trac | | 04 30 53.1 | |
| | comp=Z,178nm,4.2s | | | | | | |

*IDC **14** 04:43:49.9±0.8, 46°.23N×53°.16E, h0km, mb3.1/3, mb1 3.5/4, mb1mx3.2/27, mbtmp3.3/4, ML3.2/1, MS3.1/1, Ms1 3.1/1, ms1mx2.2/38, Error ellipse: s-maj=11.7km s-min=5.4km az=128.0*

*NNC **14** 04:43:51.4±2.4, 46°.02N×53°.52E, h0km, mb3.4, mpv2.9, Error ellipse: s-maj=25.6km s-min=15.1km az=110.0*

**ISC 14 04:43:49.8±1.0, 45°.9N±0°.1×53°.22E±0°.08, h10km, n8, σ1.32/11, 2C-4D, Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKTO** | **Aktyubinsk** | **5.54** | **34** | ⇑Pn | **Pn** | **04 45 11.8** | **-0.4** |
| AKTO | 0.6nm,0.3s | | | ⇓Sn | **Sn** | **04 46 15.5** | **-0.4** |
| | 2.2nm,0.6s | | | | | | |
| AKTO | | | | Lg | Lg | 04 46 40.1 | |
| **AB31** | **Akbulak array** | **5.64** | **51** | Pn | **Pn** | **04 45 14.5** | **+0.9** |
| | 0.2nm,0.2s,baz=232,slow=12,SNR=28 | | | | | | |
| AB31 | | | | ⇓Pg | **Pb** | **04 45 29.4** | **+1.2** |
| | 1.5nm,0.6s,baz=240,slow=14,SNR=7.1 | | | | | | |
| AB31 | | | | ⇓Sn | **Sn** | **04 46 17.9** | **-0.4** |
| | 1.6nm,0.6s,baz=236,slow=25 | | | | | | |
| AB31 | | | | ⇑Lg | Lg | 04 46 42.1 | |
| | 2.9nm,0.8s,baz=236,slow=24,SNR=6.3 | | | | | | |
| **KBZ** | **Khabaz** | **7.66** | **257** | Pn | **Pn** | **04 45 43.2** | **+1.9** |
| | 0.4nm,0.3s,baz=75,slow=15,SNR=13 | | | | | | |
| KBZ | | | | Sn | **Sn** | **04 47 06.6** | **-1.6** |
| | 0.2nm,0.3s,baz=150,slow=23,SNR=2.1 | | | | | | |
| **KK02** | **Karatay Array** | **12.66** | **97** | ⇓Pn | **Pn** | **04 46 48.8** | **-1.1** |
| | 1.3nm,0.8s,baz=305,slow=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **20.04** | **77** | P | **Pn** | **04 48 23.4** | **-1.2** |
| | 0.1nm,0.4s,baz=271,slow=11,SNR=2.5 | | | | | | |
| **EIL** | **Elat** | **21.64** | **228** | LR | LR | 04 58 21.8 | |
| | comp=Z,50nm,20.4s,baz=229,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.72** | **57** | P | **P** | **04 48 41.8** | **+1.0** |
| | 0.5nm,0.4s,baz=261,slow=9.5,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **22.11** | **324** | P | **P** | **04 48 43.6** | **-1.4** |
| | 0.9nm,0.4s,baz=134,slow=12,SNR=15 | | | | | | |

*WEL **14** 04:44:46.3±0.7, 43°.5±2°×17°.3E±°, h5km±3km, M3.7/8, ML4.0/8, MLv3.7/8, Error ellipse: s-maj=0.0km s-min=0.0km az=103.6*

*NOU **14** 04:44:46.6, 43°.53S×172°.88E, h72km, MLv4.1/9, South Island, New Zealand*

**ISC 14 04:44:45.1±1.2, 43°.53S±0°.03×172°.84E±0°.04, h20km±2km, n96, σ1.9⁄17/103, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MQZ** | **McQueen's Vall** | **0.22** | **216** | P | **Pb** | **04 44 51.2** | **+0.3** |
| MQZ | | | | S | **Sb** | **04 44 54.9** | **0.0** |
| **OKCZ** | **Okains Bay** | **0.26** | **141** | P | **Pn** | **04 44 53.5** | **-0.2** |
| **AKCZ** | **Akaroa Harbour** | **0.35** | **171** | P | **Pn** | **04 44 54.8** | **-0.2** |
| **AMCZ** | **Amberley** | **0.37** | **339** | P | **Pb** | **04 44 52.5** | **-0.4** |
| AMCZ | | | | S | **Sb** | **04 44 57.0** | **-1.2** |
| **RACZ** | **Rakaia** | **0.55** | **248** | P | **Pb** | **04 44 56.4** | **+0.4** |
| RACZ | | | | S | **Sb** | **04 45 04.0** | **+0.7** |
| **GVZ** | **Greta Valley S** | **0.58** | **15** | P | **Pn** | **04 44 57.3** | **-0.7** |
| GVZ | | | | S | **Sn** | **04 45 05.7** | **-1.2** |
| **OXZ** | **Oxford** | **0.61** | **289** | P | **Pb** | **04 44 56.4** | **-0.8** |
| OXZ | | | | S | **Sb** | **04 45 03.9** | **-1.6** |
| **WACZ** | **Wakanui South** | **0.83** | **240** | P | **Pn** | **04 45 02.1** | **+0.5** |
| WACZ | | | | S | **Sn** | **04 45 13.6** | **+0.3** |
| **LTZ** | **Lake Taylor** | **0.85** | **331** | P | **Pb** | **04 45 01.1** | **0.0** |
| LTZ | | | | S | **Sb** | **04 45 11.8** | **-0.3** |
| **MHCZ** | **Mount Hutt** | **0.92** | **269** | P | **Pb** | **04 45 02.6** | **+0.3** |
| **KHZ** | **Kahutara** | **1.22** | **25** | P | **Pb** | **04 45 07.2** | **-0.2** |
| **KHZ** | **Kahutara** | **1.22** | **25** | P | **Pb** | **04 45 07.7** | **+0.3** |
| **ARCZ** | **Arundel** | **1.27** | **250** | P | **Pn** | **04 45 08.0** | **+0.3** |
| **INZ** | **Inchbonnie** | **1.30** | **308** | P | **Pn** | **04 45 07.8** | **-0.2** |
| **RPZ** | **Rata Peaks** | **1.31** | **261** | P | **Pn** | **04 45 08.3** | **+0.2** |
| **RPZ** | **Rata Peaks** | **1.31** | **261** | P | **Pb** | **04 45 09.7** | **+0.8** |
| **TMZ** | **Timaru** | **1.58** | **236** | P | **Pb** | **04 45 12.7** | **-0.8** |
| **WVZ** | **Waitaha Valley** | **1.60** | **286** | P | **Pb** | **04 45 13.2** | **-0.6** |
| **THZ** | **Tophouse** | **1.76** | **2** | P | **Pn** | **04 45 14.9** | **+0.5** |
| **GCSZ** | **Gaunt Creek Bo** | **1.84** | **276** | P | **Pb** | **04 45 16.9** | **-1.1** |
| **DSZ** | **Dennistion Nort** | **1.94** | **336** | P | **Pn** | **04 45 17.2** | **+0.4** |
| **BSWZ** | **Blackbirch Sta** | **1.96** | **23** | P | **Pn** | **04 45 18.2** | **+1.0** |
| **LBZ** | **Lake Benmore** | **2.10** | **245** | P | **Pn** | **04 45 20.1** | **+1.1** |
| **MRNZ** | **Matariki Terra** | **2.12** | **358** | P | **Pn** | **04 45 20.6** | **+1.2** |
| **ODZ** | **Otahua Downs** | **2.19** | **225** | P | **Pn** | **04 45 21.2** | **+1.0** |
| **ODZ** | **Otahua Downs** | **2.19** | **225** | P | **Pn** | **04 45 20.8** | **+0.6** |
| **FOZ** | **Fox Glacier** | **2.20** | **269** | P | **Pb** | **04 45 22.2** | **-1.9** |
| **TUWZ** | **Tuamarina** | **2.25** | **22** | P | **Pn** | **04 45 21.6** | **+0.5** |
| **NNZ** | **Nelson** | **2.34** | **10** | P | **Pn** | **04 45 23.4** | **+1.0** |
| **TCW** | **Tory Channel** | **2.55** | **25** | P | **Pn** | **04 45 25.3** | **+0.1** |
| **BHW** | **Baring Head** | **2.60** | **36** | P | **Pn** | **04 45 26.2** | **+0.3** |
| **SNZO** | **South Karori** | **2.61** | **33** | P | **Pn** | **04 45 26.5** | **+0.5** |
| **PLWZ** | **Palliser** | **2.65** | **43** | P | **Pn** | **04 45 26.9** | **+0.2** |
| **WEL** | **Wellington** | **2.66** | **33** | P | **Pn** | **04 45 27.1** | **+0.4** |
| **QRZ** | **Quartz Range** | **2.71** | **355** | P | **Pn** | **04 45 28.0** | **+0.6** |
| **QRZ** | **Quartz Range** | **2.71** | **355** | P | **Pn** | **04 45 27.7** | **+0.3** |
| **MSWZ** | **Moikau Station** | **2.76** | **41** | P | **Pn** | **04 45 28.2** | **0.0** |
| **DUWZ** | **D'Urville Isla** | **2.84** | **17** | P | **Pn** | **04 45 30.5** | **+1.2** |
| **HHSZ** | **Highcliff Hill** | **2.85** | **213** | P | **Pn** | **04 45 30.5** | **+1.2** |
| **PAWZ** | **Paruwai Farm** | **2.88** | **43** | P | **Pn** | **04 45 29.9** | **+0.2** |
| **CAW** | **Cannon Point** | **2.93** | **35** | P | **Pn** | **04 45 30.6** | **+0.2** |
| **JCZ** | **Jackson Bay** | **2.98** | **258** | P | **Pn** | **04 45 32.1** | **+0.8** |
| **WKZ** | **Wanaka** | **3.04** | **243** | P | **Pn** | **04 45 30.6** | **-1.4** |
| **EAZ** | **Earnscleugh** | **3.05** | **235** | P | **Pn** | **04 45 32.9** | **+0.8** |
| **KIW** | **Kapiti Island** | **3.08** | **31** | P | **Pn** | **04 45 32.9** | **+0.4** |
| **MTW** | **Mount Morrison** | **3.08** | **41** | P | **Pn** | **04 45 32.5** | **0.0** |
| **OGWZ** | **Otaki Gorge** | **3.21** | **33** | P | **Pn** | **04 45 34.4** | **+0.1** |
| **HOWZ** | **Holdsworth Sta** | **3.29** | **38** | P | **Pn** | **04 45 36.5** | **+1.0** |
| **TUZ** | **Tuapeka** | **3.33** | **222** | P | **Pn** | **04 45 37.0** | **+1.1** |
| **MRZ** | **Mangatainoka R** | **3.52** | **36** | P | **Pn** | **04 45 38.3** | **-0.2** |
| **TIWZ** | **Tintock** | **3.56** | **41** | P | **Pn** | **04 45 40.1** | **+0.9** |
| **PRWZ** | **Pori Road** | **3.78** | **39** | P | **Pn** | **04 45 43.0** | **+0.9** |
| **BFZ** | **Birch Farm** | **3.81** | **43** | P | **Pn** | **04 45 42.5** | **0.0** |
| **BFZ** | **Birch Farm** | **3.81** | **43** | P | **Pn** | **04 45 43.7** | **+1.2** |
| **MLZ** | **Mavora Lakes** | **3.85** | **240** | P | **Pn** | **04 45 43.6** | **+0.5** |
| **SYZ** | **Scrubby Hill** | **3.99** | **220** | P | **Pn** | **04 45 46.4** | **+1.4** |
| **WAZ** | **Wanganui** | **4.10** | **24** | P | **Pn** | **04 45 48.8** | **+2.3** |
| **PREZ** | **Palmer Road** | **4.30** | **14** | P | **Pn** | **04 45 52.3** | **+3.0** |
| **KHEZ** | **Kahui Hut** | **4.32** | **12** | P | **Pn** | **04 45 52.1** | **+2.5** |
| **NBEZ** | **Newall Road No** | **4.32** | **11** | P | **Pn** | **04 45 51.7** | **+2.1** |
| **NEZ** | **North Egmont** | **4.36** | **13** | P | **Pn** | **04 45 52.3** | **+2.2** |
| **PNHZ** | **Pukenui** | **4.40** | **36** | P | **Pn** | **04 45 51.0** | **+0.3** |
| **PKE** | **Pukeiti** | **4.41** | **12** | P | **Pn** | **04 45 53.3** | **+2.4** |
| **MTVZ** | **Mangateitei** | **4.59** | **26** | P | **Pn** | **04 45 54.8** | **+1.6** |
| **VRZ** | **Vera Road** | **4.63** | **19** | P | **Pn** | **04 45 56.4** | **+2.6** |
| **PKVZ** | **Pokaka** | **4.63** | **25** | P | **Pn** | **04 45 56.4** | **+2.5** |
| **MOVZ** | **Moawhango** | **4.66** | **29** | P | **Pn** | **04 45 54.1** | **-0.2** |
| **WNVZ** | **Wahianoa** | **4.68** | **27** | P | **Pn** | **04 45 55.8** | **+1.2** |
| **TRVZ** | **Turoa** | **4.69** | **27** | P | **Pn** | **04 45 56.9** | **+2.0** |
| **KRHZ** | **Kereru** | **4.70** | **36** | P | **Pn** | **04 45 54.5** | **-0.3** |
| **BHHZ** | **Black Hill Sta** | **4.70** | **32** | P | **Pn** | **04 45 54.8** | **-0.1** |
| **WHVZ** | **Whangaehu Hut** | **4.72** | **27** | P | **Pn** | **04 45 57.2** | **+2.0** |
| **FWVZ** | **Far West T-bar** | **4.73** | **27** | P | **Pn** | **04 45 57.3** | **+1.9** |
| **TUVZ** | **Tukino** | **4.75** | **27** | P | **Pn** | **04 45 57.7** | **+2.1** |
| **APZ** | **The Paps** | **4.76** | **224** | P | **Pn** | **04 45 56.7** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **4.82** | **27** | P | **Pn** | **04 45 57.9** | **+1.4** |
| **SNVZ** | **South Ngauruho** | **4.82** | **27** | P | **Pn** | **04 45 58.4** | **+1.8** |
| **OTVZ** | **Oturere** | **4.85** | **27** | P | **Pn** | **04 45 57.7** | **+0.7** |
| **NNVZ** | **North Ngauruho** | **4.86** | **26** | P | **Pn** | **04 45 58.5** | **+1.4** |
| **WTVZ** | **West Tongariro** | **4.87** | **26** | P | **Pn** | **04 45 58.6** | **+1.4** |
| **ETVZ** | **East Tongariro** | **4.89** | **27** | P | **Pn** | **04 45 58.4** | **+0.9** |
| **KWHZ** | **Kaweka Forest** | **4.90** | **35** | P | **Pn** | **04 45 57.8** | **+0.2** |
| **TMVZ** | **Te Maari** | **4.91** | **27** | P | **Pn** | **04 45 58.6** | **+0.9** |
| **NTVZ** | **North Tongarir** | **4.91** | **27** | P | **Pn** | **04 45 58.7** | **+0.9** |
| **RITZ** | **Rihia Road** | **5.08** | **28** | P | **Pn** | **04 46 01.6** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **5.15** | **34** | P | **Pn** | **04 46 00.5** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **5.15** | **34** | P | **Pn** | **04 46 00.2** | **-0.8** |
| **HIZ** | **Hauiti** | **5.24** | **18** | P | **Pn** | **04 46 03.1** | **+1.0** |
| **HIZ** | **Hauiti** | **5.24** | **18** | P | **Pn** | **04 46 03.2** | **+1.0** |
| **MRHZ** | **Matea Rd** | **5.41** | **31** | P | **Pn** | **04 46 04.5** | **0.0** |
| **MTHZ** | **Maungataniwha** | **5.56** | **34** | P | **Pn** | **04 46 07.0** | **+0.4** |
| **TLZ** | **Tolley Road** | **5.58** | **22** | P | **Pn** | **04 46 09.6** | **+2.7** |
| **URZ** | **Urewera** | **6.18** | **33** | P | **Pn** | **04 46 14.1** | **-0.9** |
| **TWGZ** | **Tauwhareparae** | **6.61** | **38** | P | **Pn** | **04 46 21.3** | **+0.2** |
| **RUGZ** | **Raukumara Rang** | **6.66** | **35** | P | **Pn** | **04 46 20.7** | **-1.1** |
| **HAZ** | **Te Kaha** | **6.88** | **35** | P | **Pn** | **04 46 23.3** | **-1.3** |

*IDC **14** 04:57:58.4±21.0, 22°.45S×177°.25W, h194km±138km, mb3.6/3, mb1 3.8/4, mb1mx3.5/28, mbtmp4.1/4, MS3.6/4, Ms1 3.6/4, ms1mx3.0/50, Error ellipse: s-maj=249.2km s-min=38.1km az=134.0*

**ISC 14 04:57:54.7±2.1, 22°.6S±0°.3×176°.9W±0°.3, h179km, n9, σ1.75/6, mb3.6/3, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **6.77** | **315** | P | **Pn** | **04 59 31.7** | **-0.2** |
| | 1.4nm,0.3s,baz=141,slow=6.7,SNR=7.6 | | | | | | |
| **HNR** | **Honiara** | **25.76** | **297** | LR | LR | 05 11 59.9 | |
| | comp=Z,90nm,18.8s,baz=70,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **37.84** | **247** | LR | LR | 05 19 57.2 | |
| | comp=Z,73nm,18.9s,baz=197,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **45.06** | **259** | P | **P** | **05 05 52.8** | **-0.4** |
| | 1.3nm,0.9s,baz=94,slow=6.3,SNR=10 | | | | | | |
| ASAR | | | | LR | LR | 05 24 53.7 | |
| | comp=Z,50nm,18.4s,baz=95,slow=36 | | | | | | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 12.67 | 159 | P | Pn | 05 21 29.8 | 0.0 | |
| | 0.3nm,0.3s,baz=21,slow=7.8,SNR=15 | | | | | | | |
| SONM | Songino Array | 75.61 | 325 | P | P | 05 30 08.0 | +0.4 | |
| | 0.9nm,0.8s,baz=139,slow=5.1,SNR=6.3 | | | | | | | |
| MKAR | Makanchi Array | 90.12 | 318 | P | P | 05 31 22.1 | -0.3 | |
| | 0.2nm,0.4s,baz=87,slow=7.5,SNR=3.9 | | | | | | | |
| YKA | Yellowknife Ar | 96.18 | 28 | P | P | 05 31 49.5 | -0.4 | |
| | 0.2nm,0.5s,baz=262,slow=4.9,SNR=5.6 | | | | | | | |

*WEL* **14** *05:27:00, 43.53S×172.76E, h4km, ML4.3, Mw4.0, Moment Tensor Solution. s7 Moment tensor: Scale $10^{15}$ Nm; $M_{rr}$-0.06; $M_{\theta\theta}$0.19; $M_{\phi\phi}$-0.13; $M_{r\theta}$-0.30; $M_{\theta\phi}$-1.24; $M_{\phi r}$-0.13; Fault plane solution: $M_0$1.29000×$10^{15}$ NP1: $\phi_s$356.00000°,δ76.00000°,λ-5.00000°. NP2:$\phi_s$87.00000°, δ85.00000°,λ-166.00000°. Principal axes: T 129.6800, Plg6.0000°, Azm221.0000°; N -129.0000, Plg75.0000°, Azm106.0000°; P -0.6900, Plg13.0000°, Azm313.0000°;*

*IDC* **14** *05:27:51.0±1.7, 43.03S×172.74E, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.7/25, mbtmp3.6/3, ML3.6/1, MS3.4/4, Ms1 3.4/4, ms1mx3.0/27 Error ellipse: s-maj=49.1km s-min=29.9km az=152.0*

*WEL* **14** *05:27:50.6±0.4, 44.S±2.×17.3E±., h5km±2km, M4.3/8, ML4.6/8, MLv4.3/8, Error ellipse: s-maj=0.0km s-min=0.0km az=70.1*

*NOU* **14** *05:27:50.2, 43.57S×172.91E, h16km, MLv4.3/7, South Island, New Zealand*

**ISC 14 05:27:50.4±0.9, 43.52S±0.03×172.82E±0.03, h13km±7km, n127,σ1$^{s}$28/131, MS3.5/3, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.22 | 213 | P | Pg | 05 27 54.8 | -0.3 |
| MQZ | | | | S | Sg | 05 27 57.8 | -0.5 |
| OKCZ | Okains Bay | 0.27 | 139 | P | Pg | 05 27 56.5 | +0.5 |
| OKCZ | | | | S | Sb | 05 28 01.9 | +0.3 |
| AKCZ | Akaroa Harbour | 0.36 | 169 | P | Pg | 05 27 57.9 | +0.4 |
| AKCZ | | | | S | Sg | 05 28 03.2 | +0.8 |
| AMCZ | Amberley | 0.37 | 341 | P | Pb | 05 27 58.6 | -0.1 |
| RACZ | Rakaia | 0.53 | 247 | P | Pb | 05 28 01.1 | -0.5 |
| RACZ | | | | S | Sb | 05 28 08.5 | -0.6 |
| GVZ | Greta Valley S | 0.58 | 16 | P | Pb | 05 28 02.9 | +0.5 |
| OXZ | Oxford | 0.60 | 289 | P | Pg | 05 28 02.0 | 0.0 |
| WACZ | Wakanui South | 0.82 | 239 | P | Pb | 05 28 06.6 | +0.1 |
| LTZ | Lake Taylor | 0.84 | 332 | P | Pb | 05 28 07.2 | +0.4 |
| LTZ | | | | S | Sb | 05 28 19.0 | +0.9 |
| MHCZ | Mount Hutt | 0.91 | 269 | P | Pb | 05 28 07.9 | -0.1 |
| KHZ | Kahutara | 1.23 | 26 | P | Pg | 05 28 12.6 | -1.3 |
| KHZ | Kahutara | 1.23 | 26 | P | Pg | 05 28 12.9 | -1.0 |
| ARCZ | Arundel | 1.26 | 250 | P | Pg | 05 28 13.0 | -1.6 |
| ARCZ | | | | S | Sg | 05 28 30.1 | -0.9 |
| INZ | Inchbonnie | 1.28 | 308 | P | Pg | 05 28 13.6 | -1.4 |
| RPZ | Rata Peaks | 1.29 | 261 | P | Pg | 05 28 13.6 | -1.6 |
| RPZ | Rata Peaks | 1.29 | 261 | P | Pg | 05 28 13.9 | -1.3 |
| TMZ | Timaru | 1.56 | 236 | P | Pn | 05 28 17.2 | -0.7 |
| WVZ | Waitaha Valley | 1.58 | 286 | P | Pn | 05 28 18.2 | +0.1 |
| THZ | Tophouse | 1.76 | 2 | P | Pn | 05 28 20.4 | -0.2 |
| GCSZ | Gaunt Creek Bo | 1.82 | 276 | P | Pn | 05 28 22.0 | +0.6 |
| DSZ | Denniston Nort | 1.93 | 337 | P | Pn | 05 28 23.1 | +0.2 |
| BSWZ | Blackbirch Sta | 1.97 | 24 | P | Pn | 05 28 23.5 | 0.0 |
| LBZ | Lake Benmore | 2.09 | 245 | P | Pn | 05 28 24.9 | -0.1 |
| MRNZ | Matariki Terra | 2.12 | 359 | P | Pn | 05 28 26.1 | +0.6 |
| ODZ | Otahua Downs | 2.18 | 225 | P | Pn | 05 28 25.4 | -0.9 |
| ODZ | Otahua Downs | 2.18 | 225 | P | Pn | 05 28 26.3 | 0.0 |
| FOZ | Fox Glacier | 2.18 | 269 | P | Pn | 05 28 27.6 | +1.3 |
| TUWZ | Tuamarina | 2.25 | 22 | P | Pn | 05 28 27.1 | -0.1 |
| NNZ | Nelson | 2.34 | 10 | P | Pn | 05 28 29.0 | +0.4 |
| TCW | Tory Channel | 2.55 | 26 | P | Pn | 05 28 31.2 | -0.2 |
| BHW | Baring Head | 2.60 | 36 | P | Pn | 05 28 31.5 | -0.6 |
| SNZO | South Karori | 2.62 | 33 | P | Pn | 05 28 31.4 | -0.9 |
| PLWZ | Palliser | 2.66 | 44 | P | Pn | 05 28 32.0 | -0.9 |
| WEL | Wellington | 2.66 | 34 | P | Pn | 05 28 32.9 | -0.1 |
| QRZ | Quartz Range | 2.70 | 355 | P | Pn | 05 28 33.7 | +0.1 |
| QRZ | Quartz Range | 2.70 | 355 | P | Pn | 05 28 33.8 | +0.3 |
| MSWZ | Moikau Station | 2.77 | 41 | P | Pn | 05 28 33.3 | -1.2 |
| DUWZ | D'Urville Isla | 2.84 | 17 | P | Pn | 05 28 36.0 | +0.6 |
| HHSZ | Highcliff Hill | 2.84 | 213 | P | Pn | 05 28 34.5 | -1.0 |
| PAWZ | Paruwai Farm | 2.88 | 43 | P | Pn | 05 28 34.9 | -1.1 |
| CAW | Cannon Point | 2.93 | 35 | P | Pn | 05 28 36.0 | -0.7 |
| JCZ | Jackson Bay | 2.97 | 258 | P | Pn | 05 28 36.9 | -0.3 |
| TRWZ | Traveller | 3.00 | 46 | P | Pn | 05 28 36.6 | -1.1 |
| WKZ | Wanaka | 3.03 | 245 | P | Pn | 05 28 37.8 | -0.3 |
| EAZ | Earnscleugh | 3.04 | 235 | P | Pn | 05 28 37.6 | -0.6 |
| KIW | Kapiti Island | 3.08 | 31 | P | Pn | 05 28 38.4 | -0.4 |
| MTW | Mount Morrison | 3.09 | 41 | P | Pn | 05 28 37.4 | -1.4 |
| OGWZ | Otaki Gorge | 3.22 | 34 | P | Pn | 05 28 40.2 | -0.5 |
| HOWZ | Holdsworth Sta | 3.30 | 38 | P | Pn | 05 28 40.8 | -0.9 |
| TMWZ | Te Maipa | 3.32 | 44 | P | Pn | 05 28 42.4 | +0.4 |
| TUZ | Tuapeka | 3.33 | 222 | P | Pn | 05 28 41.7 | -0.3 |
| MRZ | Mangatainoka R | 3.52 | 37 | P | Pn | 05 28 43.6 | -1.2 |
| TIWZ | Tintock | 3.57 | 41 | P | Pn | 05 28 45.7 | +0.3 |
| MSZ | Milford Sound | 3.71 | 250 | P | Pn | 05 28 47.1 | -0.2 |
| PRWZ | Pori Road | 3.78 | 39 | P | Pn | 05 28 48.0 | -0.4 |
| BFZ | Birch Farm | 3.82 | 43 | P | Pn | 05 28 47.1 | -1.8 |
| BFZ | Birch Farm | 3.82 | 43 | P | Pn | 05 28 47.6 | -1.2 |
| MLZ | Mavora Lakes | 3.84 | 240 | P | Pn | 05 28 48.3 | -0.8 |
| SYZ | Scrubby Hill | 3.98 | 220 | P | Pn | 05 28 50.7 | -0.4 |
| DVHZ | Dannevirke | 4.08 | 39 | P | Pn | 05 28 51.2 | -1.2 |
| ANWZ | Angora Road | 4.10 | 43 | P | Pn | 05 28 51.9 | -0.8 |
| WAZ | Wanganui | 4.10 | 25 | P | Pn | 05 28 55.9 | +2.5 |
| NMEZ | Namu Road | 4.18 | 11 | P | Pn | 05 28 57.4 | +3.5 |
| WHZ | Wether Hill Ro | 4.20 | 234 | P | Pn | 05 28 52.5 | -1.6 |
| PREZ | Palmer Road | 4.30 | 14 | P | Pn | 05 28 57.7 | +2.2 |
| KHEZ | Kahui Hut | 4.32 | 12 | P | Pn | 05 28 58.1 | +2.3 |
| NBEZ | Newall Road No | 4.32 | 11 | P | Pn | 05 28 58.7 | +2.9 |
| NEZ | North Egmont | 4.36 | 13 | P | Pn | 05 28 58.7 | +2.4 |
| WPHZ | Waipukurau | 4.39 | 39 | P | Pn | 05 28 56.9 | +0.1 |
| PNHZ | Pukenui | 4.41 | 36 | P | Pn | 05 28 58.3 | +1.4 |
| PKE | Pukeiti | 4.41 | 12 | P | Pn | 05 28 58.9 | +1.9 |
| DREZ | Durham Road | 4.45 | 14 | P | Pn | 05 28 59.5 | +1.9 |
| DCZ | Deep Cove | 4.49 | 242 | P | Pn | 05 28 57.7 | -0.4 |
| MHEZ | Mangahewa | 4.58 | 15 | P | Pn | 05 29 03.6 | +4.2 |
| MTVZ | Mangateitei | 4.59 | 27 | P | Pn | 05 29 01.1 | +1.5 |
| VRZ | Vera Road | 4.63 | 19 | P | Pn | 05 29 01.9 | +1.9 |
| PKVZ | Pokaka | 4.64 | 25 | P | Pn | 05 29 01.7 | +1.5 |
| MOVZ | Moawhango | 4.67 | 29 | P | Pn | 05 29 01.1 | +0.5 |
| WNVZ | Wahianoa | 4.68 | 27 | P | Pn | 05 29 01.1 | +0.2 |
| TRVZ | Turoa | 4.69 | 27 | P | Pn | 05 29 02.4 | +1.4 |
| KRHZ | Kereru | 4.70 | 36 | P | Pn | 05 29 00.2 | -0.8 |
| BHHZ | Black Hill Sta | 4.71 | 32 | P | Pn | 05 29 01.1 | -0.1 |
| FWVZ | Far West T-bar | 4.73 | 27 | P | Pn | 05 29 03.2 | +1.5 |
| APZ | The Paps | 4.75 | 224 | P | Pn | 05 29 00.9 | -0.9 |
| TUVZ | Tukino | 4.76 | 28 | P | Pn | 05 29 02.8 | +1.0 |
| KAHZ | Kahuranaki | 4.81 | 41 | P | Pn | 05 29 01.9 | -0.6 |
| NGZ | Ngauruhoe | 4.82 | 27 | P | Pn | 05 29 03.8 | +1.0 |
| SNVZ | South Ngauruho | 4.83 | 27 | P | Pn | 05 29 03.9 | +1.1 |
| OTVZ | Oturere | 4.85 | 27 | P | Pn | 05 29 03.4 | +0.1 |
| NNVZ | North Ngauruho | 4.87 | 27 | P | Pn | 05 29 04.4 | +1.0 |
| TWVZ | Taurewa | 4.87 | 25 | P | Pn | 05 29 04.3 | +1.0 |
| WTVZ | West Tongariro | 4.87 | 26 | P | Pn | 05 29 04.3 | +0.8 |
| ETVZ | East Tongariro | 4.89 | 27 | P | Pn | 05 29 04.1 | +0.3 |
| KWHZ | Kaweka Forest | 4.91 | 35 | P | Pn | 05 29 03.6 | -0.3 |
| TMVZ | Te Maari | 4.91 | 27 | P | Pn | 05 29 04.4 | +0.4 |
| NTVZ | North Tongarir | 4.92 | 27 | P | Pn | 05 29 04.8 | +0.7 |
| MCHZ | McNeill Hill | 5.01 | 37 | P | Pn | 05 29 05.8 | +0.6 |
| PYZ | Puysegur Point | 5.10 | 237 | P | Pn | 05 29 06.2 | -0.3 |
| BKZ | Black Stump Fm | 5.16 | 34 | P | Pn | 05 29 06.1 | -1.2 |
| BKZ | Black Stump Fm | 5.16 | 34 | P | Pn | 05 29 07.1 | -0.2 |
| HIZ | Hauiti | 5.24 | 18 | P | Pn | 05 29 09.5 | +1.1 |
| NMHZ | Naumai | 5.34 | 36 | P | Pn | 05 29 10.4 | +0.5 |
| MTHZ | Maungataniwha | 5.57 | 34 | P | Pn | 05 29 12.8 | -0.1 |
| TLZ | Tolley Road | 5.58 | 23 | P | Pn | 05 29 13.9 | +0.7 |
| KNZ | Kokohu | 5.80 | 41 | P | Pn | 05 29 14.1 | -1.9 |
| RIGZ | Rimuhau | 6.09 | 39 | P | Pn | 05 29 19.5 | -0.6 |
| RAGZ | Rawiri | 6.11 | 36 | P | Pn | 05 29 20.1 | -0.3 |
| TOZ | Tahuroa Road | 6.13 | 20 | P | Pn | 05 29 20.3 | -0.3 |
| URZ | Urewera | 6.18 | 33 | Pn | Pn | 05 29 18.1 | -3.2 |
| | 1.6nm,0.3s,baz=240,slow=4.0,SNR=11 | | | | | | |
| URZ | | | | Sn | Sn | 05 30 26.9 | -4.9 |
| | 2.8nm,0.3s,baz=53,slow=18,SNR=6.5 | | | | | | |
| URZ | | | | LR | LR | 05 31 36.6 | |
| | comp=Z,98nm,18.7s,baz=194,slow=39 | | | | | | |
| URZ | Urewera | 6.18 | 33 | P | Pn | 05 29 19.9 | -1.5 |
| MWZ | Matawai | 6.29 | 36 | P | Pn | 05 29 21.9 | -1.0 |
| AWAZ | Awhitu Peninsu | 6.60 | 13 | P | Pn | 05 29 27.3 | +0.2 |
| TWGZ | Tauwhareparae | 6.62 | 38 | P | Pn | 05 29 28.5 | +1.1 |
| RUGZ | Raukumara Rang | 6.67 | 35 | P | Pn | 05 29 27.1 | -1.0 |
| WTAZ | Waiatarua | 6.72 | 12 | P | Pn | 05 29 32.4 | +3.7 |
| ETAZ | East Tamaki Re | 6.76 | 15 | P | Pn | 05 29 30.2 | +0.9 |
| HAZ | Te Kaha | 6.89 | 35 | P | Pn | 05 29 29.6 | -1.3 |
| PKGZ | Pakihiroa | 6.90 | 37 | P | Pn | 05 29 30.3 | -1.0 |
| WIAZ | Waiheke Island | 6.95 | 16 | P | Pn | 05 29 32.9 | +1.0 |
| CTA | Charters Tower | 32.24 | 308 | LR | LR | 05 45 42.3 | |
| | comp=Z,80nm,18.4s,baz=82,slow=34 | | | | | | |
| HNR | Honiara | 35.77 | 338 | LR | LR | 05 47 25.6 | |
| | comp=Z,77nm,18.2s,baz=64,slow=33 | | | | | | |
| ASAR | Alice Springs | 37.55 | 289 | P | P | 05 35 04.6 | +0.3 |
| | 0.4nm,0.6s,baz=126,slow=7.8,SNR=9.3 | | | | | | |
| WRA | Warramunga Arr | 39.79 | 294 | P | P | 05 35 23.9 | +0.7 |
| | 0.6nm,0.5s,baz=139,slow=8.7,SNR=8.6 | | | | | | |
| PMG | Port Moresby | 40.68 | 319 | LR | LR | 05 51 00.5 | |
| | comp=Z,71nm,18.7s,baz=293,slow=34 | | | | | | |
| TORD | Torodi Ar. Bea | 148.78 | 197 | PKPbc | PKiKP | 05 47 40.9 | +1.6 |
| | 0.6nm,0.9s,baz=161,slow=1.4,SNR=2.5 | | | | | | |
| BRTR | Keskin Array B | 149.47 | 277 | PKPbc | PKiKP | 05 47 41.3 | +1.1 |
| | 0.6nm,0.7s,baz=121,slow=5.8,SNR=5.1 | | | | | | |
| FINES | FINESS Array B | 153.39 | 324 | PKPbc | PKiKP | 05 47 49.3 | +2.0 |
| | 3.3nm,1.0s,baz=64,slow=3.2,SNR=2.0 | | | | | | |

**IDC 14 05:45:25.1±1.6, 3.41S×135.53E, h0km, mb3.5/3, mb1 3.9/5, mb1mx3.5/30, mbtmp3.6/5, ML3.5/2, Error ellipse: s-maj=66.4km s-min=26.2km az=92.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 16.47 | 184 | Pn | Pn | 05 49 15.8 | -2.0 |
| | 0.1nm,0.3s,baz=2.5,slow=13,SNR=7.6 | | | | | | |
| FITZ | Fitzroy Crossi | 17.52 | 213 | P | Pn | 05 49 29.0 | -1.9 |
| | 0.2nm,0.3s,baz=31,slow=8.4,SNR=22 | | | | | | |
| ASAR | Alice Springs | 20.20 | 184 | P | Pn | 05 50 03.5 | 0.0 |
| | 2.1nm,0.7s,baz=8.8,slow=12,SNR=27 | | | | | | |
| MKAR | Makanchi Array | 68.44 | 324 | P | P | 05 56 29.5 | +0.5 |
| | 0.2nm,0.3s,baz=116,slow=7.6,SNR=6.5 | | | | | | |
| ILAR | Eielson Array | 87.79 | 25 | P | P | 05 58 14.9 | -0.9 |
| | 0.3nm,0.8s,baz=263,slow=4.2,SNR=1.9 | | | | | | |

**IDC 14 05:50:02.0±4.2, 2.24S×99.78E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.2/40, mbtmp3.3/4, Error ellipse: s-maj=176.8km s-min=25.5km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S2 | Diego Garcia H | 27.70 | 258 | T | T | 06 24 37.5 | |
| | baz=224,slow=74,SNR=3.6 | | | | | | |
| H08S3 | Diego Garcia R | 27.71 | 258 | T | T | 06 24 37.5 | |
| | baz=81,slow=74,SNR=4.1 | | | | | | |
| H08S1 | Diego Carcia H | 27.72 | 258 | T | T | 06 24 38.0 | |
| WRA | Warramunga Arr | 38.06 | 120 | P | P | 05 57 21.4 | -1.3 |
| | 0.3nm,0.5s,baz=293,slow=8.5,SNR=2.3 | | | | | | |
| ASAR | Alice Springs | 39.28 | 126 | P | P | 05 57 33.6 | +0.6 |
| | 0.2nm,0.5s,baz=302,slow=8.0,SNR=6.0 | | | | | | |
| SONM | Songino Array | 50.21 | 6 | P | P | 05 58 59.0 | -0.8 |
| | 0.2nm,0.6s,baz=176,slow=7.4,SNR=1.9 | | | | | | |
| MKAR | Makanchi Array | 51.20 | 345 | P | P | 05 59 07.4 | +0.2 |
| | 0.3nm,0.4s,baz=159,slow=9.4,SNR=8.2 | | | | | | |
| TXAR | Lajitas Array | 145.03 | 37 | PKPbc | PKPbc | 06 09 41.0 | -0.5 |
| | 0.2nm,0.5s,baz=180,slow=0.5,SNR=4.7 | | | | | | |

*DDA* **14** *05:55:07.8±0.0, 36.17N×36.08E, h14km±1km, ML3.4*
*ISK* **14** *05:55:07.7, 36.15N×36.07E, h16km, ML3.2/21*
*GII* **14** *05:55:09.3±0.0, 36.08N×35.91E, h8km, Mm3.3/1*

**ISC 14 05:55:07.6±0.9, 36.15N±0.02×36.07E±0.02, h13km±7km, n67,σ1$^{s}$08/102, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YAYL | Yayladag | 0.12 | 164 | PG | Pg | 05 55 11.6 | +0.7 |
| YAYL | | | | SG | Sb | 05 55 14.6 | -0.1 |
| YAYL | Yayladag | 0.12 | 164 | P | Pg | 05 55 11.7 | +0.7 |
| YAYL | | | | S | Sb | 05 55 14.3 | -0.4 |
| TAHT | Tahtakopru-Hat | 0.24 | 23 | PG | Pg | 05 55 13.3 | +0.5 |
| TAHT | | | | SG | Sb | 05 55 17.7 | -0.5 |
| ASUZ | Hatay-Arsuz | 0.27 | 302 | P | Pg | 05 55 13.6 | +0.4 |
| ASUZ | | | | S | Sb | 05 55 18.1 | -0.8 |
| KRTD | Karatas-Adana | 0.69 | 310 | PG | Pb | 05 55 21.6 | +0.1 |
| YURE | YUREGIR | 0.76 | 333 | P | Pb | 05 55 23.2 | +0.4 |
| YURE | | | | S | Sb | 05 55 33.2 | +0.2 |
| CEYT | Ceyhan | 0.90 | 343 | PG | Pg | 05 55 25.5 | +0.6 |
| KUZU | Kuzuini | 1.02 | 52 | P | Pb | 05 55 27.2 | 0.0 |
| KUZU | | | | S | Sg | 05 55 40.9 | +0.1 |
| KUZU | | | | *i* AML | AML | 05 55 42.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| KUZU | | | | *i* AML | AML | 05 55 43.0 | |
| | comp=Z,2μm,0.2s | | | | | | |
| KUZU | | | | *i* AML | AML | 05 55 43.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| KAMA | Osmaniye | 1.14 | 25 | P | Pb | 05 55 29.0 | -0.3 |
| KAMA | | | | S | Sb | 05 55 43.8 | -0.3 |
| DED | Mersin | 1.30 | 309 | P | Pn | 05 55 31.4 | -0.2 |
| DED | | | | S | Sn | 05 55 49.1 | +0.2 |
| KOZT | Kozan | 1.34 | 352 | PN | Pn | 05 55 32.1 | 0.0 |
| KARA | Karaisali | 1.38 | 324 | PN | Pn | 05 55 32.4 | -0.2 |
| MERS | Mersin | 1.44 | 300 | PN | Pn | 05 55 33.5 | 0.0 |
| ANDN | Andirin | 1.45 | 9 | P | Pn | 05 55 32.9 | -0.7 |
| ANDN | | | | S | Sn | 05 55 52.1 | -0.4 |
| KAHM | Kahramanmaras, | 1.55 | 28 | P | Pn | 05 55 34.6 | -0.4 |
| KAHM | | | | S | Sn | 05 55 53.7 | -1.4 |
| KIZK | Mersin | 1.59 | 283 | PN | Pn | 05 55 35.9 | +0.4 |
| KIZK | Mersin | 1.59 | 283 | P | Pn | 05 55 35.1 | -0.3 |
| KIZK | | | | S | Sn | 05 55 56.2 | +0.4 |
| EREN | Erenkoy | 1.66 | 249 | PN | Pn | 05 55 37.0 | +0.5 |
| EREN | Erenkoy | 1.66 | 249 | P | Pb | 05 55 37.6 | -0.5 |
| EREN | | | | S | Sb | 05 55 58.5 | -0.4 |
| GZT | Gaziantep | 1.70 | 45 | P | Pn | 05 55 36.4 | -0.8 |
| GZT | | | | S | Sn | 05 55 58.3 | -0.7 |
| SLFK | Silifke-Mersin | 1.73 | 279 | PN | Pn | 05 55 37.6 | +0.2 |
| SLFK | | | | SN | Sb | 05 56 00.1 | -0.8 |
| CMRD | Camardi-Nigde | 1.74 | 331 | PN | Pn | 05 55 38.1 | +0.4 |
| SILI | Silifke-Mersin | 1.75 | 278 | PN | Pn | 05 55 38.2 | +0.6 |
| SAIM | ADANA | 1.82 | 0 | P | Pn | 05 55 39.0 | +0.1 |
| SAIM | | | | S | Sn | 05 56 02.3 | +0.4 |
| HWQ | Hawqa | 1.87 | 183 | *e*P | Pn | 05 55 39.5 | 0.0 |
| KARG | Kargicak-Mersi | 1.91 | 272 | PN | Pn | 05 55 40.5 | +0.6 |
| KEBE | Keben-Mersin | 1.92 | 280 | PN | Pn | 05 55 40.9 | +0.7 |
| IKL | Isikli | 1.93 | 273 | PN | Pn | 05 55 40.7 | +0.6 |
| TISA | Tisan-Mersin | 1.93 | 271 | PN | Pn | 05 55 40.5 | +0.3 |
| YESI | Yesilovacik-Me | 1.96 | 272 | PN | Pn | 05 55 41.3 | +0.7 |
| KERG | Konya-Eregli | 2.00 | 310 | P | Pn | 05 55 42.7 | +1.3 |
| KERG | | | | S | Sb | 05 56 08.7 | -0.3 |
| YAHY | KAYSERI_Yahyal | 2.02 | 344 | P | Pn | 05 55 41.8 | +0.3 |
| YAHY | | | | S | Sb | 05 56 08.9 | -0.5 |
| AKKU | Akkuyu-Mersin | 2.04 | 271 | PN | Pn | 05 55 42.1 | +0.5 |
| GULN | MERSIN_Gulnar | 2.04 | 272 | P | Pn | 05 55 41.2 | -0.5 |
| GULN | | | | S | Sn | 05 56 06.4 | -0.7 |
| NIDE | Nigde/Merkez-G | 2.12 | 331 | P | Pn | 05 55 44.1 | +1.2 |
| NIDE | | | | S | Sb | 05 56 11.9 | -0.2 |
| TEVE | Tevekalti-Mers | 2.14 | 278 | PN | Pn | 05 55 43.9 | +0.8 |
| SURC | SANLIURFA_SURC | 2.18 | 70 | P | Pn | 05 55 43.1 | -0.5 |
| SURC | | | | S | Sb | 05 56 14.0 | +0.2 |
| SURC | | | | *i* AML | AML | 05 56 16.0 | |
| | comp=Z,218nm,0.2s | | | | | | |
| SURC | | | | *i* AML | AML | 05 56 17.0 | |
| | comp=E,284nm,0.5s | | | | | | |
| SURC | | | | *i* AML | AML | 05 56 20.0 | |
| | comp=N,305nm,0.3s | | | | | | |
| ATAB | Bozova | 2.22 | 53 | P | Pn | 05 55 43.8 | -0.4 |
| ATAB | | | | S | Sb | 05 56 16.8 | +1.6 |
| ATAB | | | | *i* AML | AML | 05 56 21.0 | |
| | comp=N,232nm,0.5s | | | | | | |
| LFK | Lefkose | 2.24 | 248 | PN | Pn | 05 55 44.9 | +0.4 |
| BHL | Bhannes | 2.27 | 189 | *e*P | Pn | 05 55 43.8 | -1.1 |
| SARI | SarD1z-Kayseri | 2.27 | 7 | PN | Pn | 05 55 45.8 | +0.8 |
| BERE | Bereket-Mersin | 2.31 | 276 | PN | Pn | 05 55 46.4 | +0.9 |
| TEKE | Tekeli-Mersin | 2.39 | 271 | PN | Pn | 05 55 47.2 | +0.7 |
| DQRL | Deir Qamar | 2.47 | 190 | *e*P | Pn | 05 55 46.4 | -1.4 |
| YESY | Yesilyurt | 2.47 | 312 | PN | Pn | 05 55 48.7 | +0.9 |
| CSS | Mathiatis | 2.53 | 243 | Pn | Pn | 05 55 48.5 | +0.1 |
| ERMK | Ermenek | 2.59 | 282 | P | Pn | 05 55 51.5 | +2.0 |
| ERMK | | | | S | Sb | 05 56 24.3 | -1.6 |
| AKCD | Akcadag | 2.60 | 34 | P | Pn | 05 55 49.7 | +0.1 |
| AKCD | | | | S | Sg | 05 56 29.8 | -1.5 |
| QRWL | Qaraoun | 2.62 | 187 | *e*P | Pn | 05 55 48.4 | -1.3 |
| GULA | Gulagac | 2.63 | 327 | PN | Pn | 05 55 51.0 | +1.0 |
| RCY | Rachaya | 2.65 | 184 | *e*P | Pn | 05 55 49.2 | -1.1 |
| DARE | Darende-Malaty | 2.67 | 25 | PN | Pn | 05 55 51.0 | +0.6 |
| BNN | Bunyan | 2.70 | 356 | PN | Pn | 05 55 51.7 | +0.7 |
| KKBE | Karaman, Kazim | 2.73 | 294 | P | Pn | 05 55 52.6 | +1.4 |
| KKBE | | | | S | Sn | 05 56 25.8 | +1.6 |
| CUGUR | Gurin_SVAS | 2.74 | 20 | P | Pn | 05 55 52.6 | +1.1 |
| CUGUR | | | | S | Sb | 05 56 29.2 | -1.0 |
| GEM | Giv'at Ha'Em | 2.95 | 187 | Pn | Pn | 05 55 54.4 | +0.2 |
| GAZI | Gazipasa | 3.04 | 273 | P | Pn | 05 55 56.1 | +0.7 |
| GAZI | | | | S | Sn | 05 56 31.9 | +0.3 |
| MMB4 | Mount Meron ar | 3.17 | 190 | Pn | Pn | 05 55 58.6 | +1.3 |
| MMA1 | Mount Meron ar | 3.17 | 190 | Pn | Pn | 05 55 58.6 | +1.3 |
| MMA1 | | | | Sn | Sn | 05 56 35.1 | 0.0 |
| MMA0B | Mount Meron ar | 3.17 | 190 | Pn | Pn | 05 55 58.5 | +1.1 |
| MMA0B | | | | Sn | Sn | 05 56 35.8 | +0.6 |
| ELZG | Elazig | 3.30 | 44 | P | Pn | 05 55 59.2 | 0.0 |
| ELZG | | | | S | Sb | 05 56 49.9 | +3.5 |
| CUKAN | kangal_SIVAS | 3.35 | 19 | P | Pn | 05 56 00.1 | +0.3 |
| CUKAN | | | | S | Sg | 05 56 51.8 | -3.4 |
| KEMA | Kemaliye | 3.66 | 31 | P | Pn | 05 56 03.5 | -0.6 |
| KEMA | | | | S | Sb | 05 57 00.2 | +3.6 |
| KEPZ | Antalya-Kepez | 3.67 | 283 | P | Pn | 05 56 06.0 | +1.9 |
| KEPZ | | | | S | Sn | 05 56 48.3 | +1.0 |
| SEDI | Konya, Seydise | 3.70 | 292 | P | Pn | 05 56 06.6 | +2.0 |
| SEDI | | | | S | Sb | 05 56 54.1 | -3.5 |
| MMLI | Mount Malkishu | 3.74 | 188 | Pn | Pn | 05 56 06.5 | +1.4 |
| MMLI | | | | Sn | Sn | 05 56 50.1 | +1.0 |
| MARD | Mardin | 3.96 | 72 | P | Pn | 05 56 07.9 | -0.3 |
| MARD | | | | S | Sb | 05 57 04.6 | -0.7 |
| MARD | | | | *i* AML | AML | 05 57 15.0 | |
| | comp=Z,77nm,0.4s | | | | | | |
| MARD | | | | *i* AML | AML | 05 57 18.0 | |
| | comp=N,137nm,0.7s | | | | | | |
| MARD | | | | *i* AML | AML | 05 57 19.0 | |
| | comp=E,86nm,0.5s | | | | | | |

*IDC* **14** *06:29:16.9±0.6, 37.42N×141.07E, h64km±4km, mb3.7/17, mb1 3.9/22, mb1mx3.7/50, mbtmp4.0/22, Error ellipse: s-maj=14.2km s-min=12.0km az=124.0*

*NIED* **14** *06:29:17.0, 37.40N×141.15E, h65km, MW4.0, Moment Tension Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$1.14; $M_{\theta\theta}$-0.17; $M_{\phi\phi}$-0.96; $M_{r\theta}$-0.15; $M_{\theta\phi}$0.02; $M_{\phi r}$0.22; Fault plane solution: $M_0$1.08000×$10^{15}$ NP1: $\phi_s$352.00000°,δ51.00000°,λ82.00000°. NP2: $\phi_s$184.00000°,δ39.00000°,λ100.00000°.*

*JMA* **14** *06:29:16.9, 37.40N×141.15E, h65km±1km, M4.0 Broadband fault plane solution: P waves. NP1: $\phi_s$346.00000°,δ30.00000°,λ44.00000°. NP2: $\phi_s$216.00000°,δ69.00000°,λ113.00000°. Principal axes: T Plg59.0000°, Azm158.0000°; N Plg21.0000°, Azm28.0000°; P Plg21.0000°, Azm289.0000°;*

*JMA Felt II J1.*

*NEIC* **14** *06:29:17.2±2.4, 37.36N±0.05×141.2E±0.1, h57km±6km, mb4.4/28 Error ellipse: s-maj=12.1km s-min=6.7km az=99.0*

**ISC 14 06:29:16.9±0.5, 37.38N±0.03×141.22E±0.05, h62km±4km, n94,σ1$^{s}$05/111, mb4.2/31, 8C-2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JFK | Kawauchi | 0.28 | 267 | ⇑P | Pn | 06 29 27.0 | -0.1 |
| JFK | | | | S | Sn | 06 29 34.2 | -0.4 |
| JMST | Minamisoumatoc | 0.43 | 323 | ⇑P | Pn | 06 29 28.3 | -0.1 |
| JMST | | | | S | Sn | 06 29 36.5 | -0.2 |
| ONAJ | Iwakimizuishiy | 0.44 | 231 | ⇑P | Pn | 06 29 28.4 | -0.1 |
| ONAJ | | | | S | Sn | 06 29 36.7 | -0.2 |
| JMM | Marumori | 0.59 | 325 | ⇑P | Pn | 06 29 29.8 | -0.3 |
| JMM | | | | S | Sn | 06 29 39.3 | -0.3 |
| JMM | Marumori | 0.59 | 325 | | Pn | 06 29 29.8 | -0.3 |
| JFFD | Fukushimafurud | 0.60 | 241 | ⇑P | Pn | 06 29 30.0 | -0.2 |
| JFFD | | | | S | Sn | 06 29 39.3 | -0.5 |
| JFT | Otama | 0.72 | 281 | ⇓P | Pn | 06 29 31.4 | -0.1 |
| JFT | | | | S | Sn | 06 29 41.7 | -0.5 |
| JIO | Ouri | 1.08 | 5 | ⇑P | Pn | 06 29 35.9 | -0.1 |
| JIO | | | | S | Sn | 06 29 49.8 | -0.4 |
| JOU | Okura | 1.08 | 336 | ⇑P | Pn | 06 29 35.6 | -0.5 |
| JOU | | | | S | Sn | 06 29 50.0 | -0.3 |
| JFY | Yanaizu | 1.21 | 272 | ⇓P | Pn | 06 29 37.3 | -0.5 |
| JFY | | | | S | Sn | 06 29 52.4 | -1.0 |
| JYS | Shirataka | 1.24 | 313 | P | Pn | 06 29 38.2 | 0.0 |
| JYS | | | | S | Sn | 06 29 54.0 | -0.1 |
| JYT |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **L27K** | **Beaver Creek,** | **51.68** | **34** | P | **P** | **06 38 18.7** | **+1.5** |
| L27K | | | | IAmb | IAmb | 06 38 19.7 | |
| | comp=Z,4.1nm,1.2s | | | | | | |
| **BCAR** | **Beaver Creek A** | **51.70** | **34** | P | **P** | **06 38 19.0** | **+1.6** |
| **KKAR** | **Karatay Array** | **52.82** | **300** | P | **P** | **06 38 27.6** | **+1.7** |
| **GSI** | **Gunungsitoli** | **53.85** | **239** | P | **P** | **06 38 33.7** | **0.0** |
| **INK** | **Inuvik** | **54.15** | **27** | P | **P** | **06 38 35.4** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=296,slow=7.3,SNR=13 | | | | | | |
| INK | | | | pP | **pP** | **06 38 52.9** | **+1.5** |
| | comp=Z,1.0nm,0.6s,baz=294,slow=8.4,SNR=3.8 | | | | | | |
| **INK** | **Inuvik** | **54.15** | **27** | P | **P** | **06 38 36.1** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **57.10** | **198** | P | **P** | **06 38 57.4** | **+0.5** |
| | comp=Z,1.9nm,1.1s,baz=29,slow=13,SNR=1.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **57.20** | **188** | P | **P** | **06 38 56.7** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 06 39 15.9 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **57.38** | **187** | P | **P** | **06 38 58.0** | **-0.9** |
| **WB2** | **Warramunga Arr** | **57.38** | **188** | P | **P** | **06 38 58.0** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 06 38 58.4 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.38** | **188** | P | **P** | **06 38 58.2** | **-0.8** |
| | comp=Z,2.3nm,0.6s,baz=7.8,slow=7.7,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.38** | **188** | P | **P** | **06 38 58.1** | **-0.8** |
| **ABKAR** | **Akbulak array** | **57.60** | **310** | P | **P** | **06 38 59.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **61.11** | **188** | P | **P** | **06 39 24.2** | **-0.4** |
| | comp=Z,1.3nm,0.7s,baz=12,slow=6.5,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **61.11** | **188** | P | **P** | **06 39 24.5** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **63.59** | **30** | P | **P** | **06 39 40.2** | **-0.5** |
| | comp=Z,0.4nm,0.7s,baz=303,slow=6.8,SNR=8.9 | | | | | | |
| YKA | | | | pP | **pP** | **06 39 57.4** | **0.0** |
| | comp=Z,0.2nm,0.5s,baz=298,slow=5.1,SNR=3.4 | | | | | | |
| YKA | | | | PcP | **PcP** | **06 40 16.2** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=300,slow=4.2,SNR=5.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.59** | **30** | P | **P** | **06 39 40.8** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **63.62** | **339** | P | **P** | **06 39 40.0** | **-0.9** |
| | comp=Z,3.0nm,0.9s,baz=60,slow=8.3,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **68.44** | **332** | P | **P** | **06 40 10.7** | **-1.2** |
| | comp=Z,2.0nm,0.7s,baz=61,slow=6.8,SNR=4.7 | | | | | | |
| FINES | | | | pP | **pP** | **06 40 26.6** | **-2.1** |
| | comp=Z,1.6nm,0.7s,baz=38,slow=9.6,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **68.44** | **332** | P | **P** | **06 40 11.4** | **-0.4** |
| **FORT** | **Forrest** | **68.92** | **192** | P | **P** | **06 40 14.9** | **-0.2** |
| **PINE** | **Pine Mountain** | **70.23** | **50** | P | **P** | **06 40 25.6** | **+2.0** |
| PINE | | | | IAmb | IAmb | 06 40 26.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **I07A** | **Izee** | **70.94** | **49** | P | **P** | **06 40 28.9** | **+1.1** |
| I07A | | | | IAmb | IAmb | 06 40 35.5 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **ORV** | **Oroville** | **72.22** | **54** | P | **P** | **06 40 35.9** | **+0.5** |
| ORV | | | | IAmb | IAmb | 06 40 39.1 | |
| | comp=Z,4.6nm,1.5s | | | | | | |
| **BEKR** | **Beckworth** | **72.77** | **53** | P | **P** | **06 40 39.8** | **+0.9** |
| **NC405** | **NORSAR Array S** | **73.60** | **337** | P | **P** | **06 40 42.5** | **-0.6** |
| **FCC** | **Fort Churchill** | **73.76** | **27** | P | **P** | **06 40 43.9** | **-0.2** |
| **NOA** | **NORSAR Array B** | **73.81** | **337** | P | **P** | **06 40 43.2** | **-1.2** |
| | comp=Z,1.1nm,0.9s,baz=39,slow=5.8,SNR=3.5 | | | | | | |
| NOA | | | | pP | **PcP** | **06 41 00.1** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=39,slow=6.0,SNR=1.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.93** | **322** | P | **P** | **06 40 44.0** | **-1.3** |
| | comp=Z,0.9nm,0.5s,baz=47,slow=6.3,SNR=9.2 | | | | | | |
| AKASG | | | | pP | **PcP** | **06 41 00.2** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=51,slow=6.0,SNR=2.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.90** | **53** | P | **P** | **06 40 51.9** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=288,slow=5.7,SNR=10 | | | | | | |
| **BW06** | **Boulder Array** | **77.53** | **45** | P | **P** | **06 41 06.4** | **+0.1** |
| BW06 | | | | IAmb | IAmb | 06 41 25.4 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.53** | **45** | P | **P** | **06 41 06.7** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=280,slow=1.2,SNR=10 | | | | | | |
| PDAR | | | | pP | **pP** | **06 41 24.9** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=249,slow=2.5,SNR=3.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.53** | **45** | P | **P** | **06 41 06.9** | **+0.6** |
| **GERES** | **GERESS Array B** | **82.34** | **328** | P | **P** | **06 41 30.6** | **-1.3** |
| | comp=Z,0.3nm,0.4s,baz=72,slow=7.4,SNR=2.1 | | | | | | |
| **Q24A** | **Divide** | **82.55** | **46** | IAmb | IAmb | 06 41 36.7 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.03** | **52** | P | **P** | **06 42 10.6** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=299,slow=3.3,SNR=15 | | | | | | |
| TXAR | | | | pP | **pP** | **06 42 28.6** | **+1.1** |
| | comp=Z,0.5nm,0.8s,baz=297,slow=4.2,SNR=3.9 | | | | | | |
| **LPAZ** | **La Paz** | **146.65** | **59** | PKPbc | **PKPbc** | **06 48 52.5** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=4.5,slow=6.2,SNR=8.7 | | | | | | |
| **LPAZ** | **La Paz** | **146.65** | **59** | | **PKPbc** | **06 48 52.6** | **-0.1** |
| **H03N2** | **Juan Fernandez** | **147.21** | **95** | T | T | 09 33 57.9 | |
| | baz=289,slow=74,SNR=3.0 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.22** | **95** | T | T | 09 33 59.7 | |
| | baz=218,slow=74,SNR=11 | | | | | | |

*TUL **14** 06:47:53.3±0.8, 36°.47N±0°.02×98°.75W±0°.04, h6km±7km, ML2.7, mb_Lg2.3/5(NEIC), Error ellipse: s-maj=5.0km s-min=2.5km az=70.0*

**NEIC 14 06:47:53.6±0.8, 36°.46N±0°.03×98°.74W±0°.04, h5km±2km, Error ellipse: s-maj=6.0km s-min=4.2km az=73.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **1.48** | **134** | Pn | Pn | 06 48 20.6 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **134** | Pn | Pn | 06 48 21.2 | +0.1 |
| **FNO** | **Franklin** | **1.62** | **137** | Pn | Pn | 06 48 23.1 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | | Pn | 06 48 24.2 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | IAmb_Lg | | 06 48 50.5 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.85** | **75** | | Pn | 06 48 26.1 | +0.1 |
| T35A | | | | IAmb_Lg | | 06 48 55.5 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **1.96** | **1** | | Pn | 06 48 28.1 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | | Pn | 06 48 29.2 | +1.2 |
| **TUL1** | **Leonard** | **2.45** | **102** | Pn | Pn | 06 48 34.1 | 0.0 |
| **X37A** | **Clayton** | **3.32** | **123** | Pn | Pn | 06 48 46.1 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **311** | IAmb_Lg | | 06 50 09.4 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.50** | **73** | Pn | Pn | 06 49 02.5 | 0.0 |

*KRSC **14** 07:09:00.6±1.8, 50°.61N×152°.93E, h597km±26km, ML4.2*
*IDC **14** 07:09:01.0±1.4, 51°.44N×150°.88E, h515km±21km, mb2.7/10, mb1 2.9/14, mb1mx2.8/45, mbtmp3.7/14, Error ellipse: s-maj=26.1km s-min=12.8km az=154.0*

**ISC 14 07:09:00.3±0.7, 51°.5N±0°.1×151°.02E±0°.08, h500km, n34, σ2833/38, mb3.2/10, Sea of Okhotsk**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAU** | **Pauzhetka** | **3.62** | **88** | *eP* | **P** | **07 10 18.2** | **+2.5** |
| **APC** | **Apacha** | **4.05** | **66** | *eP* | **P** | **07 10 21.8** | **+2.8** |
| **KDTR** | **Khodutka, Kamc** | **4.41** | **83** | *eP* | **P** | **07 10 22.9** | **+0.9** |
| KDTR | | | | *eS* | **S** | **07 11 27.7** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **4.42** | **65** | P | **P** | **07 10 24.4** | **+2.3** |
| | 1.9nm,0.3s,baz=224,slow=7.5,SNR=6.5 | | | | | | |
| **MTVR** | **Mutnovka** | **4.55** | **74** | *eP* | **P** | **07 10 26.2** | **+2.8** |
| **KRMR** | **Karymshinskiy** | **4.59** | **70** | *eP* | **P** | **07 10 26.0** | **+2.5** |
| **RUS** | **Russkaya** | **4.74** | **75** | *eP* | **P** | **07 10 26.2** | **+1.4** |
| RUS | | | | *eS* | **S** | **07 11 33.8** | **-0.1** |
| **GNL** | **Ganaly** | **4.78** | **59** | *eP* | **P** | **07 10 28.6** | **+3.3** |
| **PET** | **Petropavlovsk** | **4.95** | **69** | *eP* | **P** | **07 10 29.3** | **+2.7** |
| **DALK** | **Dalny** | **5.01** | **69** | *eP* | **P** | **07 10 29.6** | **+2.4** |
| **KOK** | **Koryaka** | **5.02** | **66** | *eP* | **P** | **07 10 30.6** | **+3.2** |
| **AVH** | **Avacha** | **5.07** | **66** | *eP* | **P** | **07 10 30.5** | **+2.7** |
| **KRER** | **Koryakskii** | **5.08** | **66** | *eP* | **P** | **07 10 31.4** | **+3.3** |
| **UGLR** | **Uglovaya** | **5.10** | **67** | *eP* | **P** | **07 10 31.6** | **+3.4** |
| **SDLR** | **Sedlovina** | **5.15** | **66** | *eP* | **P** | **07 10 32.2** | **+3.5** |
| **SPN** | **Mys Shipunski** | **5.77** | **70** | *eP* | **P** | **07 10 34.8** | **+0.6** |
| SPN | | | | *eS* | **S** | **07 11 48.8** | **-2.4** |
| **TUMR** | **Tumrok** | **6.67** | **51** | *eP* | **P** | **07 10 47.8** | **+4.7** |
| **TUMD** | **Tumrok D** | **6.75** | **53** | *eP* | **P** | **07 10 47.5** | **+3.6** |
| **KMNR** | **Kamenistaya** | **6.97** | **48** | *eP* | **P** | **07 10 49.8** | **+3.7** |
| **MKZ** | **Mys Kozlova** | **7.17** | **60** | *eP* | **P** | **07 10 48.6** | **+0.6** |
| MKZ | | | | *eS* | **S** | **07 12 12.7** | **-3.6** |
| **KBTR** | **Krutoberegovo** | **8.44** | **51** | *eP* | **P** | **07 11 00.9** | **-0.2** |
| **ASAJ** | **Asahikawa** | **9.27** | **221** | P | **P** | **07 11 10.4** | **+0.4** |
| | 0.5nm,0.3s,baz=17,slow=19,SNR=4.6 | | | | | | |
| **KLR** | **Kul'dur** | **12.51** | **267** | P | **P** | **07 11 44.9** | **+0.7** |
| | 0.4nm,0.3s,baz=94,slow=9.0,SNR=7.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.49** | **216** | P | **P** | **07 12 34.4** | **-1.6** |
| | 0.1nm,0.3s,baz=15,slow=10,SNR=12 | | | | | | |
| **KSRS** | **Korea Array** | **21.50** | **238** | P | **P** | **07 13 12.4** | **-0.1** |
| | 1.8nm,0.7s,baz=45,slow=9.2,SNR=2.2 | | | | | | |
| **SONM** | **Songino Array** | **28.78** | **281** | P | **P** | **07 14 16.2** | **-0.8** |
| | 0.5nm,0.6s,baz=72,slow=7.4,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **33.87** | **43** | P | **P** | **07 15 00.5** | **+0.3** |
| | 0.3nm,0.8s,baz=276,slow=8.1,SNR=2.6 | | | | | | |
| **INK** | **Inuvik** | **38.50** | **35** | P | **P** | **07 15 38.0** | **-0.4** |
| | 0.5nm,0.5s,baz=235,slow=2.1,SNR=1.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.88** | **300** | P | **P** | **07 15 40.7** | **-1.0** |
| | 0.6nm,0.4s,baz=92,slow=8.7,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.71** | **292** | P | **P** | **07 16 19.3** | **-1.0** |
| | 0.4nm,0.4s,baz=64,slow=9.3,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.03** | **39** | P | **P** | **07 16 52.8** | **-0.1** |
| | 0.2nm,0.4s,baz=304,slow=7.1,SNR=4.4 | | | | | | |
| **FINES** | **FINESS Array B** | **59.20** | **333** | P | **P** | **07 18 11.3** | **-0.9** |
| | 3.5nm,1.0s,baz=46,slow=8.2,SNR=10.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **63.11** | **55** | P | **P** | **07 18 38.6** | **+0.1** |
| | 0.3nm,0.6s,baz=308,slow=2.1,SNR=2.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **76.35** | **60** | P | **P** | **07 19 58.2** | **+0.5** |
| | 0.1nm,0.5s,baz=298,slow=5.3,SNR=3.6 | | | | | | |

*IDC **14** 07:10:41.2±0.4, 17°.27S×171°.96W, h0km, mb4.8/21, mb1 5.0/21, mb1mx4.6/44, mbtmp4.8/21, MS4.3/50, Ms1 4.3/50, ms1mx4.3/63, Error ellipse: s-maj=19.6km s-min=12.7km az=143.0*
*NOU **14** 07:10:41.6, 17°.22S×171°.62W, h15km, mb5.4/28, Tonga Islands Region*
*BJI **14** 07:10:42.0±0.0, 17°.50S×171°.80W, h10km, mb4.9/26, mB5.7/14, Ms5.0/5, Ms7 4.6/4*
*GCMT **14** 07:10:45.9±0.1, 17°.37S±0°.01×171°.66W±0°.01, h12km, MW5.2/114, Moment Tensor Solution. s65,c99; s114,c199; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=5.01±.13; $M_{\theta\theta}$-2.18±.15; $M_{\phi\phi}$7.19±.10; $M_{r\theta}$1.98±.36; $M_{r\phi}$1.35±.09; $M_{\theta\phi}$2.97±.28; Best double couple: $M_0$7.27100×$10^{16}$ NP1:$\phi_s$345.00000°, δ35.00000°, λ-125.00000°. NP2:$\phi_s$206.00000°, δ62.00000°, λ-68.00000°. Principal axes: T 8.1790, Plg14.0000°, Azm280.0000°; N -1.8180, Plg20.0000°, Azm15.0000°; P -6.3620, Plg66.0000°, Azm157.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MOS **14** 07:10:45.4±1.1, 17°.40S×171°.93W, h34km, mb5.4/26 Error ellipse: s-maj=12.6km s-min=8.8km az=147.7*
*NEIC **14** 07:10:45.9±1.6, 17°.42S±0°.07×171°.89W±0°.07, h23km±3km, mb5.3/249, Error ellipse: s-maj=11.1km s-min=8.8km az=48.0*

**ISC 14 07:10:43.8±0.3, 17°.45S±0°.05×171°.81W±0°.05, h15km, h15km:pP-P, n637, σ2809/543, mb5.3/171, MS4.4/51, 29C-29D, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **2.41** | **132** | Pn | **Pn** | **07 11 19.7** | **-3.1** |
| **NIUE** | **Niue** | **2.41** | **132** | P | **Pn** | **07 11 19.8** | **-3.0** |
| **AFI** | **Afiamalu** | **3.52** | **1** | Pn | Pn | 07 11 30.6 | -7.5 |
| | 15nm,0.3s,baz=299,slow=2.5,SNR=46 | | | | | | |
| AFI | | | | Sn | Sn | 07 12 07.3 | -12 |
| | 218nm,0.3s,baz=149,slow=22,SNR=14 | | | | | | |
| AFI | | | | LR | LR | 07 12 42.1 | |
| | comp=Z,2μm,19.3s,baz=210,slow=36 | | | | | | |
| **AFI** | **Afiamalu** | **3.52** | **1** | Pn | Pn | 07 11 32.6 | -5.5 |
| **AFI** | **Afiamalu** | **3.52** | **1** | P | Pn | 07 11 32.6 | -5.5 |
| **MSVF** | **Nonsavu** | **9.67** | **267** | Pn | **Pn** | **07 13 03.0** | **+0.4** |
| | 1.4nm,0.3s,baz=99,slow=20,SNR=16 | | | | | | |
| MSVF | | | | LR | LR | 07 16 15.9 | |
| | comp=Z,7μm,18.4s,baz=78,slow=35 | | | | | | |
| **MSVF** | **Nonsavu** | **9.67** | **267** | *i* P | **Pn** | **07 13 04.2** | **+1.5** |
| **MSVF** | **Nonsavu** | **9.67** | **267** | Pn | **Pn** | **07 13 03.1** | **+0.4** |
| **RAR** | **Rarotonga** | **11.96** | **110** | Pn | Pn | 07 13 30.0 | -3.9 |
| | 8.7nm,0.3s,baz=250,slow=8.2,SNR=20 | | | | | | |
| RAR | | | | LR | LR | 07 17 02.7 | |
| | comp=Z,2μm,20.5s,baz=254,slow=31 | | | | | | |
| **RAR** | **Rarotonga** | **11.96** | **110** | Pn | **Pn** | **07 13 31.0** | **-2.9** |
| **RAR** | **Rarotonga** | **11.96** | **110** | P | **Pn** | **07 13 31.4** | **-2.5** |
| **RAO** | **Raoul Island** | **13.01** | **204** | LR | LR | 07 18 44.2 | |
| | comp=Z,548nm,21.0s,baz=55,slow=37 | | | | | | |
| **GLKZ** | **Green Lake** | **13.02** | **204** | P | **Pn** | **07 13 45.7** | **-2.7** |
| **GLKZ** | **Green Lake** | **13.02** | **204** | P | **Pn** | **07 13 46.4** | **-2.0** |
| **PINNC** | **Pines Island,** | **20.15** | **252** | P | **P** | **07 15 17.2** | **-0.5** |
| PINNC | | | | IAmb | IAmb | 07 16 12.3 | |
| | comp=Z,292nm,1.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.97** | **254** | *eP* | **P** | **07 15 22.9** | **-3.8** |
| | comp=Z,75nm,1.2s | | | | | | |
| DZM | | | | *eS* | **S** | **07 19 10.8** | **-9.3** |
| | comp=Z,458nm,27.0s | | | | | | |
| DZM | | | | *eLR* | LR | 07 20 18.3 | |
| | comp=Z,4μm,27.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.97** | **254** | P | **P** | **07 15 25.6** | **-1.1** |
| | comp=Z,6.6nm,0.9s,baz=105,slow=22,SNR=9.2 | | | | | | |
| DZM | | | | LR | LR | 07 22 06.3 | |
| | comp=Z,2μm,21.9s,baz=86,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.97** | **254** | P | **P** | **07 15 24.5** | **-2.2** |
| DZM | | | | IAmb | IAmb | 07 15 48.5 | |
| | comp=Z,210nm,1.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.97** | **254** | P | **P** | **07 15 27.2** | **+0.5** |
| **NOUC** | **Port Laguerre** | **21.10** | **254** | P | **P** | **07 15 28.9** | **+0.9** |
| **PAE** | **Paea** | **21.20** | **94** | *eP* | **P** | **07 15 29.0** | **0.0** |
| | comp=Z,24nm,1.2s | | | | | | |
| **PPT2** | **Papeete2** | **21.20** | **94** | *eP* | **P** | **07 15 29.5** | **+0.3** |
| | comp=Z,166nm,1.3s | | | | | | |
| PPT2 | | | | *eLQ* | LQ | 07 19 35.8 | |
| | comp=Z,1μm,24.0s | | | | | | |
| PPT2 | | | | *eLR* | LR | 07 20 23.5 | |
| | comp=Z,4μm,26.2s | | | | | | |
| **PPT** | **Papeete** | **21.21** | **94** | P | **P** | **07 15 30.5** | **+1.3** |
| | comp=Z,94nm,1.0s,baz=224,slow=11,SNR=5.8 | | | | | | |
| PPT | | | | LR | LR | 07 21 16.9 | |
| | comp=Z,902nm,20.6s,baz=259,slow=30 | | | | | | |
| **TVO** | **Taravao** | **21.50** | **94** | *eP* | **P** | **07 15 32.4** | **0.0** |
| | comp=Z,88nm,1.4s | | | | | | |
| **WMGZ** | **Waiomatatini S** | **22.04** | **201** | P | P | 07 15 46.5 | +8.6 |
| **KUZ** | **Kuautunu** | **22.16** | **207** | P | **P** | **07 15 45.4** | **+6.3** |
| **HAZ** | **Te Kaha** | **22.20** | **202** | P | **P** | **07 15 41.9** | **+2.2** |
| HAZ | | | | S | **S** | **07 19 37.4** | **-6.3** |
| **RUGZ** | **Raukumara Rang** | **22.43** | **202** | P | **P** | **07 15 44.6** | **+2.4** |
| RUGZ | | | | S | **S** | **07 19 38.4** | **-10** |
| **MWZ** | **Matawai** | **22.81** | **202** | P | **P** | **07 15 48.5** | **+2.3** |
| MWZ | | | | S | **S** | **07 19 47.3** | **-7.6** |
| **URZ** | **Urewera** | **22.89** | **203** | P | **P** | **07 15 49.3** | **+2.4** |
| | comp=Z,51nm,0.6s,baz=76,slow=2.9,SNR=19 | | | | | | |
| URZ | | | | LR | LR | 07 24 46.2 | |
| | comp=Z,352nm,21.7s,baz=25,slow=37 | | | | | | |
| **URZ** | **Urewera** | **22.89** | **203** | P | **P** | **07 15 51.1** | **+4.1** |
| URZ | | | | S | **S** | **07 19 51.6** | **-4.7** |
| **RAGZ** | **Rawiri** | **22.99** | **202** | P | P | 07 15 55.8 | +7.7 |
| RAGZ | | | | S | **S** | **07 19 57.1** | **-1.1** |
| **OMRZ** | **Omania** | **23.04** | **204** | P | **P** | **07 15 51.8** | **+3.2** |
| **RIGZ** | **Rimuhau** | **23.06** | **201** | P | P | 07 15 55.8 | +7.0 |
| RIGZ | | | | S | **S** | **07 19 57.9** | **-1.3** |
| **TOZ** | **Tahuroa Road** | **23.08** | **206** | P | **P** | **07 15 54.2** | **+5.3** |
| **PMOR** | **Pomariorio Ree** | **23.09** | **87** | *eP* | **P** | **07 15 48.2** | **-1.0** |
| | comp=Z,116nm,1.2s | | | | | | |
| **SNGZ** | **Shannon Statio** | **23.27** | **202** | P | P | 07 16 00.0 | +9.1 |
| SNGZ | | | | S | **S** | **07 20 01.3** | **-1.4** |
| **KNZ** | **Kokohu** | **23.37** | **201** | P | P | 07 16 00.5 | +8.7 |
| KNZ | | | | S | **S** | **07 20 03.5** | **-0.7** |
| **MTHZ** | **Maungataniwha** | **23.51** | **203** | P | **P** | **07 15 58.9** | **+5.5** |
| MTHZ | | | | S | **S** | **07 20 03.5** | **-3.2** |
| **TLZ** | **Tolley Road** | **23.57** | **206** | P | **P** | **07 16 00.1** | **+6.2** |
| **NMHZ** | **Naumai** | **23.74** | **202** | P | **P** | **07 16 01.4** | **+5.8** |
| NMHZ | | | | S | **S** | **07 20 10.3** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **23.92** | **203** | P | **P** | **07 16 01.8** | **+4.5** |
| BKZ | | | | S | **S** | **07 20 16.6** | **+3.3** |
| **KWHZ** | **Kaweka Forest** | **24.17** | **203** | P | **P** | **07 15 57.6** | **-2.1** |
| KWHZ | | | | S | **S** | **07 20 22.5** | **+5.2** |
| **NTVZ** | **North Tongarir** | **24.17** | **204** | P | **P** | **07 16 03.8** | **+4.1** |
| **TMVZ** | **Te Maari** | **24.18** | **204** | P | **P** | **07 16 04.4** | **+4.6** |
| **ETVZ** | **East Tongariro** | **24.19** | **204** | P | **P** | **07 16 03.9** | **+4.0** |
| **WTVZ** | **West Tongariro** | **24.22** | **204** | P | **P** | **07 16 04.1** | **+4.0** |
| **NNVZ** | **North Ngauruho** | **24.23** | **204** | P | **P** | **07 16 05.6** | **+5.3** |
| **OTVZ** | **Oturere** | **24.23** | **204** | P | **P** | **07 16 02.3** | **+2.0** |
| OTVZ | | | | S | **S** | **07 20 25.6** | **+7.1** |
| **SNVZ** | **South Ngauruho** | **24.26** | **204** | P | **P** | **07 16 04.8** | **+4.2** |
| **NGZ** | **Ngauruhoe** | **24.27** | **204** | P | **P** | **07 16 05.1** | **+4.5** |
| **KAHZ** | **Kahuranaki** | **24.34** | **202** | P | P | 07 16 08.4 | +7.3 |
| KAHZ | | | | S | **S** | **07 20 21.6** | **+1.7** |
| **BHHZ** | **Black Hill Sta** | **24.36** | **203** | P | **P** | **07 15 57.7** | **-3.7** |
| BHHZ | | | | S | **S** | **07 20 23.5** | **+3.2** |
| **KRHZ** | **Kereru** | **24.38** | **203** | P | **P** | **07 16 07.0** | **+5.5** |
| KRHZ | | | | S | **S** | **07 20 21.8** | **+1.2** |
| **TRVZ** | **Turoa** | **24.39** | **204** | P | **P** | **07 16 06.2** | **+4.3** |
| TRVZ | | | | S | **S** | **07 20 31.2** | **+10** |
| **WNVZ** | **Wahianoa** | **24.40** | **204** | P | **P** | **07 16 05.9** | **+4.0** |
| WNVZ | | | | S | **S** | **07 20 24.9** | **+3.8** |
| **VRZ** | **Vera Road** | **24.57** | **206** | P | **P** | **07 16 09.9** | **+6.7** |
| **WPHZ** | **Waipukurau** | **24.73** | **202** | P | P | 07 16 16.2 | +12 |
| WPHZ | | | | S | **S** | **07 20 28.7** | **+2.5** |
| **DREZ** | **Durham Road** | **24.85** | **207** | P | P | 07 16 13.2 | +7.5 |
| **PKE** | **Pukeiti** | **24.95** | **207** | P | **P** | **07 16 13.6** | **+6.9** |
| **NEZ** | **North Egmont** | **24.97** | **207** | P | P | 07 16 14.3 | +7.4 |
| **DVHZ** | **Dannevirke** | **25.04** | **202** | P | **P** | **07 16 08.3** | **+0.9** |
| DVHZ | | | | S | **S** | **07 20 33.5** | **+2.4** |
| **ANWZ** | **Angora Road** | **25.07** | **201** | P | **P** | **07 16 10.2** | **+2.5** |
| ANWZ | | | | S | **S** | **07 20 40.2** | **+8.7** |
| **ANWZ** | **Angora Road** | **25.07** | **201** | P | **P** | **07 16 12.4** | **+4.7** |
| ANWZ | | | | S | **S** | **07 20 39.3** | **+7.8** |
| **PRWZ** | **Pori Road** | **25.33** | **202** | P | **P** | **07 16 16.1** | **+6.1** |
| PRWZ | | | | S | **S** | **07 20 43.1** | **+7.3** |
| **BFZ** | **Birch Farm** | **25.34** | **202** | P | **P** | **07 16 11.3** | **+1.1** |
| BFZ | | | | IAmb | IAmb | 07 16 18.1 | |
| | comp=Z,112nm,1.4s | | | | | | |
| **BFZ** | **Birch Farm** | **25.34** | **202** | P | **P** | **07 16 10.8** | **+0.6** |
| BFZ | | | | S | **S** | **07 20 45.1** | **+9.1** |
| **BFZ** | **Birch Farm** | **25.34** | **202** | P | **P** | **07 16 11.3** | **+1.1** |
| BFZ | | | | S | **S** | **07 20 38.2** | **+2.2** |
| **BFZ** | **Birch Farm** | **25.34** | **202** | P | **P** | **07 16 11.7** | **+1.5** |
| **MRZ** | **Mangatainoka R** | **25.57** | **203** | P | **P** | **07 16 11.0** | **-1.3** |
| MRZ | | | | S | **S** | **07 20 44.3** | **+4.8** |
| **MRZ** | **Mangatainoka R** | **25.57** | **203** | P | **P** | **07 16 09.0** | **-3.2** |
| MRZ | | | | S | **S** | **07 20 47.0** | **+7.5** |
| **HOWZ** | **Holdsworth Sta** | **25.80** | **202** | P | **P** | **07 16 18.9** | **+4.6** |
| HOWZ | | | | S | **S** | **07 20 47.6** | **+4.4** |
| **MTW** | **Mount Morrison** | **26.03** | **202** | P | **P** | **07 16 22.3** | **+5.9** |
| MTW | | | | S | **S** | **07 20 56.1** | **+9.2** |
| **CAW** | **Cannon Point** | **26.14** | **203** | P | **P** | **07 16 16.5** | **-0.9** |
| CAW | | | | S | **S** | **07 21 00.5** | **+12** |
| **PAWZ** | **Paruwai Farm** | **26.25** | **202** | P | **P** | **07 16 22.8** | **+4.3** |
| PAWZ | | | | S | **S** | **07 20 59.1** | **+8.7** |
| **PLWZ** | **Palliser** | **26.48** | **202** | P | **P** | **07 16 26.4** | **+5.8** |
| **TCW** | **Tory Channel** | **26.53** | **204** | P | **P** | **07 16 20.9** | **-0.1** |
| TCW | | | | S | S | 07 21 05.7 | +11 |
| **HNR** | **Honiara** | **28.57** | **283** | LR | LR | 07 26 19.8 | |
| | comp=Z,1μm,21.8s,baz=111,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.93** | **205** | LR | LR | 07 27 33.0 | |
| | comp=Z,287nm,21.9s,baz=42,slow=34 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **31.95** | **79** | *e*LR | LR | 07 25 15.0 | |
| | comp=Z,2μm,27.5s | | | | | | |
| **EIDS** | **Eidsvold** | **35.34** | **251** | P | **P** | **07 17 34.8** | **-4.0** |
| | baz=35,SNR=3.2 | | | | | | |
| **ARMA** | **Armidale** | **35.66** | **242** | P | **P** | **07 17 40.0** | **-1.7** |
| | baz=36,SNR=5.3 | | | | | | |
| **ARMA** | **Armidale** | **35.66** | **242** | P | **P** | **07 17 41.2** | **-0.5** |
| **ARMA** | **Armidale** | **35.66** | **242** | P | **P** | **07 17 42.4** | **+0.7** |
| | comp=Z,14nm,2.9s | | | | | | |
| **RMQ** | **Roma** | **37.53** | **249** | P | **P** | **07 17 53.8** | **-3.8** |
| | baz=37,SNR=8.6 | | | | | | |
| **RMQ** | **Roma** | **37.53** | **249** | P | **P** | **07 17 56.4** | **-1.2** |
| **CNB** | **Canberra Magne** | **38.77** | **235** | P | **P** | **07 18 07.8** | **-0.2** |
| | baz=39,SNR=4.4 | | | | | | |
| **CNB** | **Canberra Magne** | **38.77** | **235** | P | **P** | **07 18 07.8** | **-0.2** |
| **CTA** | **Charters Tower** | **39.72** | **259** | P | **P** | **07 18 13.8** | **-2.3** |
| | comp=Z,20nm,0.7s,baz=101,slow=9.7,SNR=38 | | | | | | |
| CTA | | | | LR | LR | 07 32 27.9 | |
| | comp=Z,1μm,21.0s,baz=90,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **39.72** | **259** | P | **P** | **07 18 15.1** | **-1.0** |
| **CTAO** | **Charters Tower** | **39.72** | **259** | P | **P** | **07 18 15.2** | **-0.9** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| **CTA

baz=59,SNR=16
SBA Scott Base 61.35 185 P P 07 20 59.5 +1.0
SBA pmax pmax
comp=Z,305nm,2.0s
SBA Scott Base 61.35 185 P P 07 20 59.5 +1.0
VNDA Vanda 61.51 186 P P 07 21 00.6 +0.9
comp=Z,3.9nm,0.8s,baz=5.2,slow=6.1,SNR=5.5
VNDA LR LR 07 43 03.4
comp=Z,67nm,19.5s,baz=2.5,slow=32
VNDA Vanda 61.51 186 P P 07 21 00.6 +0.9
SOEI Soe 62.37 268 P P 07 21 07.5 +0.9
SOEI Soe 62.37 268 P P 07 21 07.8 +1.2
comp=Z,2µmcomp=Z,199nm,0.7s
SANI Sanana 62.90 277 P P 07 21 09.6 -0.4
comp=Z,47nm,0.8s
PSA00 Pilbara Seismi 64.10 254 P P 07 21 17.2 -0.7
PSA00 Pilbara Seismi 64.10 254 P P 07 21 17.1 -0.7
PSA00 IAmb IAmb 07 21 18.5
comp=Z,53nm,1.4s
MBWA Marble Bar 64.27 255 P P 07 21 18.2 -0.8
MEEK Meekatharra 64.47 248 P P 07 21 19.2 -1.0
baz=64,SNR=7.5
MMRI Maumere 64.59 269 P P 07 21 19.8 -1.4
MMRI Maumere 64.59 269 P P 07 21 20.0 -1.2
comp=Z,4µmcomp=Z,108nm,0.7s
KLBR Kellerberrin 64.65 243 P P 07 21 20.1 -1.2
baz=64,SNR=7.2
NWAO Narrogin (SRO) 64.96 241 P P 07 21 22.7 -0.7
NWAO pmax pmax
comp=Z,203nm,2.0s
NWAO Narrogin (SRO) 64.96 241 P P 07 21 22.7 -0.7
BLDU Ballidu 65.64 244 P P 07 21 27.1 -0.7
baz=65,SNR=11
MUN Mundaring 65.92 242 P P 07 21 29.1 -0.4
baz=66,SNR=7.1
MORW Morawa 66.41 245 P P 07 21 33.2 +0.4
baz=66,SNR=4.6
MORW Morawa 66.41 245 P P 07 21 32.3 -0.5
MORW IAmb IAmb 07 21 33.4
comp=Z,35nm,1.1s
DAV Davao City (W) 66.46 286 LR LR 07 48 48.6
comp=Z,139nm,18.6s,baz=141,slow=34
GTOI Gorontalo 66.58 278 P P 07 21 35.6 +1.5
comp=Z,239nmcomp=Z,9.3nm,1.5s
WBSI Waikabubak, Su 67.05 267 P P 07 21 36.9 -0.2
comp=Z,50nm,0.8s
MRSI Marisa 67.54 278 P P 07 21 42.3 +2.1
comp=Z,20nm,0.7s
BNSI Bone 67.79 272 P P 07 21 42.3 +0.6
comp=Z,30nm,1.2s
TOLI2 Tolitoli 68.84 278 P P 07 21 47.2 -1.2
TOLI2 IAmb IAmb 07 21 58.5
comp=Z,49nm,1.4s
GIRL Giralia 69.03 252 P P 07 21 48.7 -0.7
MPSI Mapaga 69.43 277 P P 07 21 52.1 +0.1
comp=Z,3µmcomp=Z,13nm,0.9s
SHEM Shemya Is, Ala 70.94 351 LR LR 07 46 58.9
comp=Z,281nm,21.1s,baz=145,slow=31
MJAR Matsushiro Arr 71.48 319 LR LR 07 46 44.4
comp=Z,117nm,21.2s,baz=121,slow=30
BCW Bitter Crk WRg 72.03 43 P P 07 22 08.8 +1.3
JAGI Jajag, Banyuwa 72.34 266 P P 07 22 08.4 -1.3
JAGI IAmb IAmb 07 22 09.3
comp=Z,26nm,0.8s
ARVC Arvin 72.52 43 P P 07 22 11.1 +0.8
baz=233
ELS Elsinore Mount 72.58 45 P P 07 22 11.7 +0.9
ELS IAmb IAmb 07 22 14.9
comp=Z,63nm,1.6s
QSPA South Pole Qui 72.61 180 LR LR 07 50 18.9
comp=Z,164nm,18.7s,baz=26,slow=33
QSPA South Pole Qui 72.61 180 P P 07 22 11.1 +0.6
MURC Murrieta 72.71 45 P P 07 22 12.0 +0.5
baz=234
KMRM Mail Ridge 72.76 37 P P 07 22 12.5 +0.8
VES Vestal, Richgr 72.78 43 P P 07 22 12.3 +0.5
baz=233,SNR=13
LPIG La Paz 72.83 57 LR LR 07 45 19.3
comp=Z,224nm,21.2s,baz=237,slow=28
MONP2 Monument Peak 72.84 46 P P 07 22 13.2 +0.7
baz=235,SNR=6.2
RMX La Rumorosa 72.91 47 P P 07 22 13.7 +0.8
JOW Kunigami 72.92 306 LR LR 07 48 29.1
comp=Z,119nm,20.6s,baz=125,slow=31
IKP In-Ko-Pah, Jac 72.92 47 P P 07 22 13.3 +0.5
baz=236
EDW2 Edwards Air Fo 72.92 44 P P 07 22 13.3 +0.6
baz=234,SNR=13
YUH Yuha Desert 73.05 47 P P 07 22 13.9 +0.4
CCAC Calif City Air 73.07 44 P P 07 22 14.0 +0.4
CCAC IAmb IAmb 07 22 18.0
comp=Z,27nm,1.2s
ISA Isabella, Lake 73.07 43 P P 07 22 13.5 -0.2
ISA pmax pmax
comp=Z,35nm,1.3s
ISA Isabella, Lake 73.07 43 P P 07 22 13.5 -0.2
ISA IAmb IAmb 07 22 18.1
comp=Z,35nm,1.3s
ISA Isabella, Lake 73.07 43 P P 07 22 14.4 +0.7
baz=233
PFO Pinyon Flats O 73.22 46 P P 07 22 14.6 0.0
comp=Z,9.4nm,1.0s,baz=270,slow=6.0,SNR=10
PFO LR LR 07 46 37.5
comp=Z,180nm,20.4s,baz=236,slow=30
PFO Pinyon Flats O 73.22 46 eP P 07 22 15.3 +0.7
PFO Pinyon Flats O 73.22 46 P P 07 22 14.9 +0.2
PFO IAmb IAmb 07 22 18.8
comp=Z,45nm,1.6s
PFO Pinyon Flats O 73.22 46 P P 07 22 14.8 +0.2
baz=235
SWSC Sam W. Stewart 73.30 47 P P 07 22 18.5 +3.5
baz=236
CMB Columbia Colle 73.31 40 P P 07 22 14.9 -0.1
CMB pmax pmax
comp=Z,32nm,1.5s
CMB Columbia Colle 73.31 40 P 07 22 14.9 -0.1
CMB IAmb IAmb 07 22 19.0
comp=Z,32nm,1.4s
LRMC Laurel Mtn Rad 73.48 44 P P 07 22 16.5 +0.4
baz=234,SNR=6.7
ORV Oroville 73.61 38 P P 07 22 16.9 +0.3
ORV pmax pmax
comp=Z,32nm,1.6s
ORV Oroville 73.61 38 P P 07 22 16.9 +0.3
WDC Whiskeytown Da 73.66 37 P P 07 22 17.5 +0.6
WDC pmax pmax
comp=Z,30nm,1.3s
WDC Whiskeytown Da 73.66 37 P 07 22 17.5 +0.6
WDC IAmb IAmb 07 22 21.2
comp=Z,30nm,1.3s
BELC Belle Mtn. Jos 73.76 46 P P 07 22 18.6 +0.8
baz=235,SNR=6.7
CWC Cottonwood Cre 73.79 43 P P 07 22 18.2 +0.2
baz=233
N02D Trinity Center 73.83 37 IAmb IAmb 07 22 23.4
comp=Z,42nm,1.5s
BC3 Big Chuckawall 73.94 46 P P 07 22 19.6 +0.8
baz=236,SNR=5.6
MPMC Manual Prospec 73.95 43 P P 07 22 19.5 +0.5
baz=234,SNR=26
GSC Goldstone, Bar 73.96 44 P P 07 22 19.4 +0.5
GSC pmax pmax
comp=Z,82nm,1.9s
GSC Goldstone, Bar 73.96 44 P P 07 22 19.4 +0.5
GSC IAmb IAmb 07 22 22.9
comp=Z,82nm,1.9s
GSC Goldstone, Bar 73.96 44 P P 07 22 19.4 +0.5
baz=234,SNR=12
HEC Hector,Ludlow 74.00 45 P P 07 22 19.4 +0.3
baz=235,SNR=6.2
M02C Callahan 74.02 36 IAmb IAmb 07 22 25.6
comp=Z,86nm,2.0s
M02C Callahan 74.02 36 P P 07 22 20.0 +0.9
baz=228
GLA Glamis 74.04 47 P P 07 22 19.8 +0.5
GLA pmax pmax
comp=Z,29nm,1.1s
GLA Glamis 74.04 47 P P 07 22 19.8 +0.5
GLA IAmb IAmb 07 22 24.6
comp=Z,29nm,1.1s
GLA Glamis 74.04 47 P P 07 22 20.3 +0.9
baz=236
EMB Emerald Bay 74.08 40 IAmb IAmb 07 22 24.8
comp=Z,80nm,2.0s
ASAJ Asahikawa 74.08 328 P P 07 22 18.8 -0.5
comp=Z,13nm,0.9s,baz=233,slow=16,SNR=4.1
ASAJ LR LR 07 52 09.6
comp=Z,57nm,18.6s,baz=66,slow=34
QSM Queen of Sheba 74.30 44 P 07 22 21.1 +0.3
QSM IAmb IAmb 07 22 25.5
comp=Z,66nm,1.4s
MPK Martis Peak 74.32 39 IAmb IAmb 07 22 26.1
comp=Z,51nm,1.3s
YBH Yreka Blue Hor 74.33 36 LR LR 07 49 29.7
comp=Z,334nm,19.6s,baz=235,slow=31
YBH Yreka Blue Hor 74.33 36 P P 07 22 21.2 +0.3
YBH pmax pmax
comp=Z,21nm,1.0s
YBH Yreka Blue Hor 74.33 36 P 07 22 21.2 +0.3
IRM Iron Mountain 74.43 46 P P 07 22 22.0 +0.4
baz=236,SNR=18
GMRC Granite Mounta 74.43 45 P P 07 22 21.8 +0.1
baz=235,SNR=15
BEKR Beckworth 74.48 39 IAmb IAmb 07 22 26.8
comp=Z,52nm,1.6s
VCNR Virginia City 74.55 39 IAmb IAmb 07 22 26.6
comp=Z,52nm,1.6s
GWY Greenwater Val 74.56 44 P 07 22 22.4 -0.1
GWY IAmb IAmb 07 22 27.2
comp=Z,53nm,1.6s
GRAC Grapevine Rang 74.58 43 P P 07 22 23.2 +0.8
baz=234
FURC Furnace Creek, 74.60 43 P P 07 22 22.8 +0.4
baz=234,SNR=10
YERR Yerington 74.61 40 IAmb IAmb 07 22 26.8
comp=Z,78nm,1.8s
LHV Little Huntoon 74.61 41 IAmb IAmb 07 22 27.2
comp=Z,55nm,1.5s
TUQ Turquoise Moun 74.62 45 P P 07 22 23.3 +0.4
baz=235
113A Mohawk Valley, 74.63 48 IAmb IAmb 07 22 27.0
comp=Z,32nm,1.3s
BLYC Blythe 74.63 47 IAmb IAmb 07 22 27.1
comp=Z,28nm,1.3s
PET Petropavlovsk 74.68 342 eP P 07 22 25.7 +3.2
PET eS S 07 31 58.8 +0.9
PET pmax pmax
comp=Z,300nm,11.3s
PET Petropavlovsk 74.68 342 P P 07 22 21.9 -0.6
PET IAmb IAmb 07 22 23.9
comp=Z,42nm,1.2s
HUMO Hull Mountain 74.77 35 P P 07 22 24.3 +1.0
NVAR Mina Array Bea 74.85 41 P P 07 22 24.1 0.0
comp=Z,12nm,0.7s,baz=228,slow=8.3,SNR=51
NVAR LR LR 07 47 46.3
comp=Z,209nm,21.5s,baz=226,slow=30
M04C Macdoel 74.85 36 IAmb IAmb 07 22 27.4
comp=Z,74nm,1.8s
M04C Macdoel 74.85 36 P P 07 22 24.6 +0.6
baz=229,SNR=5.2
214A Organ Pipe Nat 74.87 49 IAmb IAmb 07 22 28.7
comp=Z,45nm,1.6s
214A Organ Pipe Nat 74.87 49 P P 07 22 24.5 +0.3
baz=238,SNR=12
L04D Klamath Falls 74.88 36 IAmb IAmb 07 22 28.2
comp=Z,44nm,1.2s
L04D Klamath Falls 74.88 36 P P 07 22 24.2 +0.1
baz=229
NV11 Mina Array Sit 74.94 41 IAmb IAmb 07 22 29.6
comp=Z,54nm,1.4s
PETK Petropavlovsk- 75.04 342 P P 07 22 23.8 -0.9
comp=Z,5.2nm,0.8s,baz=159,slow=8.7,SNR=6.9
PDMCI Parker Dam,Lak 75.20 46 P P 07 22 26.6 +0.6
baz=236,SNR=10
PCJI Pacitan 75.25 266 P P 07 22 27.1 +0.3
comp=Z,83nm,0.8s
TPNV Topopah Spring 75.28 43 P P 07 22 27.0 +0.4
baz=234,SNR=9.4
SHPR Sheep Range 75.74 44 IAmb IAmb 07 22 33.8
comp=Z,48nm,1.5s
W13A Hualapai Mount 75.82 46 P P 07 22 30.0 +0.2
K05A Summer Lake 76.00 36 P P 07 22 31.2 +0.6
S11A Rachel 76.01 43 IAmb IAmb 07 22 35.0
comp=Z,35nm,1.4s
YSS Yuzh-Sakhalins 76.01 330 eP P 07 22 30.4 +0.1
YSS pmax pmax
comp=Z,20nm,1.0s
J05D Fort Rock, OR 76.17 36 P P 07 22 32.2 +0.6
baz=229
PRN Pahroc Range 76.33 43 IAmb IAmb 07 22 38.1
comp=Z,53nm,1.4s
R11A Troy Canyon, C 76.52 42 P P 07 22 35.9 +2.2
baz=235,SNR=16
TUC Tucson 76.53 50 P P 07 22 34.2 +0.5
TUC pmax pmax
comp=Z,52nm,1.6s
TUC Tucson 76.53 50 P P 07 22 34.2 +0.5
TUC IAmb IAmb 07 22 38.6
comp=Z,52nm,1.6s
TUC Tucson 76.53 50 P P 07 22 34.8 +1.1
baz=239
KDAK Kodiak Island 76.63 10 LR LR 07 53 43.8
comp=Z,227nm,18.3s,baz=221,slow=34
BMN Battle Mountai 76.72 40 P P 07 22 35.0 +0.2
BMN pmax pmax
comp=Z,24nm,1.2s
BMN Battle Mountai 76.72 40 P P 07 22 35.0 +0.2
I05D Terrebonne, OR 76.80 35 P P 07 22 36.8 +1.8
baz=229
WVOR Wild Horse Val 77.10 37 IAmb IAmb 07 22 40.9
comp=Z,35nm,1.4s
X16A Lo Mia Camp, P 77.15 47 IAmb IAmb 07 22 42.1
comp=Z,56nm,1.5s
319A Douglas 77.16 51 IAmb IAmb 07 22 42.9
comp=Z,25nm,1.0s
LCMT Little Creek M 77.30 44 IAmb IAmb 07 22 42.6
comp=Z,31nm,1.3s
CCUT Cedar City 77.52 44 IAmb IAmb 07 22 45.0
comp=Z,43nm,1.5s
KNB Kanab 77.59 45 IAmb IAmb 07 22 45.4
comp=Z,65nm,1.6s
U15A North Rim 77.63 45 IAmb IAmb 07 22 44.9
comp=Z,15nm,1.1s
KPJI Karang Pucung 77.63 266 P P 07 22 40.6 +0.4
comp=Z,26nm,0.9s
SZCU Shurtz Canyon 77.73 44 IAmb IAmb 07 22 46.0
comp=Z,58nm,1.6s
J08A Circle Bar Ran 77.77 37 IAmb IAmb 07 22 44.5
comp=Z,46nm,1.5s
WUAZ Wupatki 77.77 47 IAmb IAmb 07 22 45.5
comp=Z,92nm,2.0s
WUAZ Wupatki 77.77 47 P P 07 22 41.6 +0.8
baz=238,SNR=6.4
ELK Elko 78.13 40 LR LR 07 50 52.9
comp=Z,176nm,20.6s,baz=244,slow=31
PKCU Pink Cliffs 78.16 44 IAmb IAmb 07 22 48.6
comp=Z,52nm,1.2s
X18A Snowflake 78.26 48 IAmb IAmb 07 22 48.3
comp=Z,81nm,2.0s
KSRS Korea Array 78.68 315 LR LR 07 51 35.8
comp=Z,32nm,21.9s,baz=120,slow=31
TCRU Three Creeks R 78.70 43 IAmb IAmb 07 22 50.9
comp=Z,44nm,1.4s
G08A Pilot Rock 78.71 35 IAmb IAmb 07 22 49.5
comp=Z,44nm,1.5s
W18A Petrified Fore 78.71 48 IAmb IAmb 07 22 50.7
comp=Z,37nm,1.4s
W18A Petrified Fore 78.71 48 P P 07 22 47.0 +1.0
baz=239
121A Cookes Peak, D 78.83 51 IAmb IAmb 07 22 51.8
comp=Z,77nm,1.7s
121A Cookes Peak, D 78.83 51 P P 07 22 48.0 +1.3
baz=241
KSM Kuching 78.89 275 IAmb IAmb 07 22 51.7
comp=Z,36nm,1.1s
E07A Sunnyside 79.03 34 IAmb IAmb 07 22 51.1
comp=Z,65nm,1.9s
SMAI San Martin Ant 79.31 158 P P 07 22 49.2 +0.7
DUG Dugway, Tooele 79.34 42 P P 07 22 49.2 -0.1
baz=236,SNR=6.2
BGU Big Grassy Mou 79.61 41 IAmb IAmb 07 22 54.8
comp=Z,42nm,1.9s
D08A Wollman Farm, 79.85 34 IAmb IAmb 07 22 55.5
comp=Z,50nm,1.6s
TPI Tanjungpandan 80.15 270 P P 07 22 55.5 +1.4
comp=Z,298nmcomp=Z,9.6nm,2.3s
Y22D IRIS PASSCAL I 80.21 50 IAmb IAmb 07 23 00.0
comp=Z,35nm,0.9s
MNTX Cornudas Mount 80.24 52 IAmb IAmb 07 22 58.9
comp=Z,35nm,1.4s
MNTX Cornudas Mount 80.24 52 P P 07 22 55.0 +0.8
baz=243
HLID Hailey 80.26 38 P P 07 22 54.7 +0.5
baz=235
P17A Butcher Ranch, 80.29 43 IAmb IAmb 07 22 59.1
comp=Z,58nm,1.7s
TX32 Lajitas Array 80.50 55 IAmb IAmb 07 23 00.8
comp=Z,57nm,1.4s
TXAR Lajitas Array 80.50 55 P P 07 22 56.6 +0.8
comp=Z,5.6nm,0.9s,baz=220,slow=8.8,SNR=56
TXAR LR LR 07 53 46.0
comp=Z,119nm,18.6s,baz=230,slow=32
TXAR Lajitas Array 80.50 55 P P 07 22 57.0 +1.2
TXAR Lajitas Array 80.50 55 P P 07 22 57.0 +1.2
MVCO Mesa Verde 80.63 46 P P 07 22 57.0 +0.5
baz=240
C09A Chrisman Ranch 80.66 33 IAmb IAmb 07 22 59.4
comp=Z,60nm,1.9s
PV23 Carpenter Ridg 80.91 45 IAmb IAmb 07 23 02.4
comp=Z,25nm,1.0s
CGJI Cibinong 80.91 266 P P 07 22 59.4 +1.2
ANMO Albuquerque 80.96 49 LR LR 07 55 30.0
comp=Z,165nm,18.6s,baz=242,slow=33
ANMO Albuquerque 80.96 49 ceP P 07 22 58.9 +0.6
ANMO pmax pmax
comp=Z,15nm,0.9s
ANMO Albuquerque 80.96 49 P P 07 22 58.6 +0.3
ANMO Albuquerque 80.96 49 P P 07 22 58.8 +0.6
baz=241
TTA Tatalina 81.07 7 IAmb IAmb 07 23 01.3
comp=Z,38nm,1.6s
NEW Newport 81.55 33 LR LR 07 54 00.9
comp=Z,458nm,18.7s,baz=236,slow=32
PMSA Palmer Station 81.69 156 LR LR 07 55 46.0
comp=Z,172nm,18.2s,baz=249,slow=33
K20K Telida 81.73 8 IAmb IAmb 07 23 05.2
comp=Z,46nm,1.9s
BELA Belgrano 2 81.76 172 P P 07 23 00.9 -0.7
AHID Auburn Hatcher 81.82 40 P P 07 23 02.4 -0.2
ANM Nome 81.90 3 P P 07 23 01.8 -0.5
baz=186
S22A 4UR Ranch, Cre 82.05 46 IAmb IAmb 07 23 08.9
comp=Z,29nm,0.9s
S22A 4UR Ranch, Cre 82.05 46 P P 07 23 04.9 +0.8
baz=241,SNR=38
O20A White River Ci 82.28 44 IAmb IAmb 07 23 08.5
comp=Z,84nm,2.0s
O20A White River Ci 82.28 44 P P 07 23 05.7 +0.6
baz=240
REDW Red Top Meadow 82.30 40 IAmb IAmb 07 23 10.0
comp=Z,52nm,1.6s
TPAW Teton Pass 82.31 40 IAmb IAmb 07 23 08.4
comp=Z,42nm,1.7s
DLMT Dillon 82.35 38 IAmb IAmb 07 23 09.3
comp=Z,38nm,1.6s
KTH Kantishna Hill 82.36 9 IAmb IAmb 07 26 12.6
comp=Z,17nm,0.7s
TRF Thorofare Moun 82.37 10 IAmb IAmb 07 26 05.3
comp=Z,24nm,0.7s
SNOW Snow King Moun 82.41 40 IAmb IAmb 07 23 12.4
comp=Z,61nm,1.8s
MSO Missoula 82.42 36 IAmb IAmb 07 23 09.5
comp=Z,68nm,2.0s
MSO Missoula 82.42 36 P P 07 23 06.5 +0.9
baz=235
J20K Nowinta River 82.50 8 P P 07 23 04.7 -0.7
baz=197
RND Reindeer 82.56 10 IAmb IAmb 07 25 55.3
comp=Z,31nm,1.0s
MOOW Moose Ponds 82.57 40 IAmb IAmb 07 23 11.4
comp=Z,52nm,2.0s
MA2 Magadan 82.57 342 ceP P 07 23 05.2 -0.7
MA2 pmax pmax
comp=Z,15nm,1.4s
MA2 Magadan 82.57 342 P P 07 23 05.4 -0.5
NJ2 Nanjing 82.61 307 eP P 07 23 08.8 +2.1
NJ2 pmax pmax
comp=Z,10.0nm,0.6s
SMCO Snowmass 82.65 45 IAmb IAmb 07 23 12.5
comp=Z,55nm,1.4s
LRM Limekiln Ridge 82.69 37 P P 07 23 06.4 -0.8
M26K Nabesna, AK 82.77 13 P P 07 23 06.1 -0.9
baz=208
BW06 Boulder Array 82.78 41 P P 07 23 07.4 -0.3
baz=238
PDAR Pinedale Array 82.78 41 P P 07 23 07.0 -0.7
comp=Z,2.3nm,0.7s,baz=211,slow=3.2,SNR=26
TNA Tin City 82.81 2 IAmb IAmb 07 23 11.4
comp=Z,50nm,1.6s
TNA Tin City 82.81 2 P P 07 23 06.2 -0.8
baz=184
MCK McKinley 82.85 10 IAmb IAmb 07 26 07.8
comp=Z,20nm,0.7s
MCK McKinley 82.85 10 P P 07 23 05.4 -1.9
baz=202
YMR Madison River 82.93 39 IAmb IAmb 07 23 13.1
comp=Z,28nm,1.1s
SDCO Great Sand Dun 82.97 47 P P 07 23 09.2 +0.3
baz=242,SNR=15
M27K Edge Creek, AK 82.98 14 IAmb IAmb 07 23 11.4
comp=Z,49nm,1.6s
M27K Edge Creek, AK 82.98 14 P P 07 23 07.6 -0.5
baz=209
H17A Grant Village 83.02 39 P P 07 23 10.4 +1.5
baz=237
BOZ Bozeman (W) 83.05 38 P P 07 23 09.0 +0.1
baz=236
YHH Holmes Hill 83.07 39 IAmb IAmb 07 23 14.7
comp=Z,31nm,1.3s
YNR Norris Junctio 83.13 39 IAmb IAmb 07 23 14.5
comp=Z,50nm,1.6s
CMIG Matias Romero 83.14 70 LR LR 07 54 13.2
comp=Z,269nm,18.2s,baz=254,slow=31
LKWY Lake 83.22 39 IAmb IAmb 07 23 15.9
comp=Z,48nm,1.6s
MSTX Muleshoe 83.22 51 P P 07 23 10.5 +0.5
baz=244
L26K Log Cabin Wild 83.25 13 IAmb IAmb 07 23 12.7
comp=Z,41nm,1.9s
BVCY Beaver Creek 83.26 14 P P 07 23 08.9 -0.6
baz=210
USHA Ushuaia 83.38 145 LR LR 07 53 39.6
comp=Z,139nm,18.5s,baz=233,slow=31
T25A Trinidad 83.46 48 P P 07 23 11.6 +0.3
baz=242,SNR=8.0
BNX BinXian 83.48 322 ⇑P P 07 23 10.8 -0.1
BNX pmax pmax
comp=Z,18nm,1.0s
833A Chaparral WMA, 83.48 58 P P 07 23 11.4 +0.1
baz=246
P33M Teslin, Yukon 83.56 18 IAmb IAmb 07 23 14.4
comp=Z,42nm,1.9s
RIDG Independent Ri 83.59 12 IAmb IAmb 07 26 22.7
comp=Z,18nm,0.6s
L27K Beaver Creek, 83.61 13 IAmb IAmb 07 23 14.6
comp=Z,35nm,1.9s
L27K Beaver Creek, 83.61 13 P P 07 23 11.8 +0.6
baz=209
DOT Dot Lake 83.67 12 IAmb IAmb 07 23 14.2
comp=Z,57nm,1.9s
WRH Wood River Hil 83.68 10 IAmb IAmb 07 23 14.1
comp=Z,35nm,1.3s
I21K Tanana 83.75 8 P P 07 23 13.4 +1.6
baz=199
MLY Manley 83.79 9 IAmb IAmb 07 23 15.1
comp=Z,27nm,1.7s
MLY Manley 83.79 9 P P 07 23 10.3 -1.8
baz=200
Q24A Divide 83.79 46 IAmb IAmb 07 23 18.1
comp=Z,29nm,1.1s
Q24A Divide 83.79 46 P P 07 23 13.8 +0.7
baz=242,SNR=9.9
HDA Harding Lake 83.82 11 P P 07 23 10.6 -1.6
baz=204
ISCO Idaho Springs 83.87 45 IAmb IAmb 07 23 17.8
comp=Z,18nm,1.1s
ISCO Idaho Springs 83.87 45 P P 07 23 13.6 +0.1
baz=241
CCB Clear Creek Bu 83.89 10 IAmb IAmb 07 23 15.9
comp=Z,23nm,1.2s
SCRK Sand Creek 83.98 12 IAmb IAmb 07 23 16.3
comp=Z,42nm,2.0s
SCRK Sand Creek 83.98 12 P P 07 23 11.6 -1.6
baz=207
TCOL CIGO, UAF Yank 84.09 10 IAmb IAmb 07 23 17.0
comp=Z,15nm,0.9s
COLA College 84.09 10 iP P 07 23 12.6 -1.0
COLA pmax pmax
comp=Z,35nm,2.0s
COLA College 84.09 10 P P 07 23 12.4 -1.2
COLA IAmb IAmb 07 23 17.0
comp=Z,15nm,0.9s

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|---|---|---|---|---|---|---|---|---|
| **H21K** | **Melozitna Rive** | **84.09** | **8** | IAmb | IAmb | 07 23 18.0 | | |
| | comp=Z,27nm,1.7s | | | | | | | |
| **H21K** | **Melozitna Rive** | **84.09** | **8** | P | **P** | **07 23 15.0** | **+1.3** | |
| | baz=198 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **84.10** | **9** | P | **P** | **07 23 12.7** | **-0.9** | |
| | baz=202 | | | | | | | |
| **IL31** | | **84.16** | **10** | IAmb | IAmb | 07 23 17.4 | | |
| | comp=Z,41nm,1.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.16** | **10** | P | **P** | **07 23 12.2** | **-1.7** | |
| | comp=Z,1.9nm,0.7s,baz=223,slow=5.4,SNR=22 | | | | | | | |
| ILAR | | | | LR | LR | 07 54 41.9 | | |
| | comp=Z,131nm,19.3s,baz=177,slow=31 | | | | | | | |
| **N23A** | **Red Feather La** | **84.17** | **44** | IAmb | IAmb | 07 23 19.8 | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **N23A** | **Red Feather La** | **84.17** | **44** | P | **P** | **07 23 15.3** | **+0.4** | |
| | baz=241 | | | | | | | |
| **J25K** | **Salcha River,** | **84.29** | **11** | P | **P** | **07 23 13.8** | **-0.9** | |
| | baz=205 | | | | | | | |
| **POKR** | **Poker Plat Res** | **84.39** | **10** | P | **P** | **07 23 13.8** | **-1.3** | |
| | baz=203 | | | | | | | |
| **AMTX** | **Amarillo** | **84.43** | **51** | P | **P** | **07 23 16.5** | **+0.3** | |
| | baz=244 | | | | | | | |
| **J26L** | **Joseph Creek** | **84.53** | **12** | P | **P** | **07 23 16.2** | **+0.3** | |
| | baz=207 | | | | | | | |
| **K22A** | **Casper** | **84.65** | **42** | IAmb | IAmb | 07 23 21.7 | | |
| | comp=Z,32nm,1.5s | | | | | | | |
| **K22A** | **Casper** | **84.65** | **42** | P | **P** | **07 23 19.3** | **+2.1** | |
| | baz=241 | | | | | | | |
| **H23K** | **Yukon River** | **84.71** | **9** | IAmb | IAmb | 07 23 20.3 | | |
| | comp=Z,27nm,1.9s | | | | | | | |
| **SEY** | **Seymchan** | **84.89** | **344** | P | **P** | **07 23 15.9** | **-1.7** | |
| | comp=Z,6.8nm,0.7s,baz=138,slow=6.1,SNR=42 | | | | | | | |
| **SEY** | **Seymchan** | **84.89** | **344** | *i* P | **P** | **07 23 16.3** | **-1.4** | |
| **ABTX** | **Abilene, Hawle** | **85.02** | **54** | P | **P** | **07 23 19.5** | **+0.3** | |
| | baz=246,SNR=8.4 | | | | | | | |
| **DAWY** | **Dawson** | **85.03** | **14** | P | **P** | **07 23 18.1** | **-0.4** | |
| | baz=211 | | | | | | | |
| **QIZ** | **Qiongzhong** | **85.08** | **292** | P | **P** | **07 23 20.8** | **+1.2** | |
| QIZ | | | | S | **S** | **07 33 48.1** | **-1.0** | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,190nm,16.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,280nm,25.3s | | | | | | | |
| **PRP** | **Porcupine Dome** | **85.08** | **11** | P | **P** | **07 23 17.8** | **-1.0** | |
| | baz=205 | | | | | | | |
| **EGAK** | **Eagle** | **85.26** | **13** | IAmb | IAmb | 07 23 22.7 | | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **EGAK** | **Eagle** | **85.26** | **13** | P | **P** | **07 23 18.7** | **-0.8** | |
| | baz=209 | | | | | | | |
| **EGMT** | **Eagleton** | **85.45** | **37** | P | **P** | **07 23 22.6** | **+1.6** | |
| | baz=238 | | | | | | | |
| **COLD** | **Coldfoot** | **85.93** | **8** | P | **P** | **07 23 24.0** | **+1.2** | |
| | baz=201 | | | | | | | |
| **MAW** | **Mawson** | **86.34** | **198** | LR | LR | 07 57 27.9 | | |
| | comp=Z,77nm,21.8s,baz=70,slow=32 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **86.38** | **13** | P | **P** | **07 23 24.1** | **-1.0** | |
| | baz=212 | | | | | | | |
| **APG** | **El Apazote** | **86.44** | **73** | LR | LR | 07 55 20.4 | | |
| | comp=Z,164nm,18.2s,baz=272,slow=31 | | | | | | | |
| **EDM** | **Edmonton** | **86.44** | **31** | P | **P** | **07 23 24.9** | **-0.8** | |
| EDM | | | | pmax | pmax | | | |
| | comp=Z,67nm,1.6s | | | | | | | |
| **EDM** | **Edmonton** | **86.44** | **31** | P | **P** | **07 23 24.9** | **-0.8** | |
| **WHTX** | **Lake Whitney,** | **86.47** | **55** | P | **P** | **07 23 28.1** | **+1.8** | |
| | baz=247 | | | | | | | |
| **LC01** | **Cunco** | **86.68** | **130** | P | **P** | **07 23 28.0** | **+0.6** | |
| LC01 | | | | IAmb | IAmb | 07 23 32.8 | | |
| | comp=Z,47nm,1.8s | | | | | | | |
| **BILL** | **Bilibino** | **86.73** | **352** | *c i* P | **P** | **07 23 25.4** | **-1.3** | |
| BILL | | | | *i* | | 07 23 35.9 | | |
| BILL | | | | SSS | SSS | 07 43 21.0 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,53nm,17.0s | | | | | | | |
| **BILL** | **Bilibino** | **86.73** | **352** | P | **P** | **07 23 25.9** | **-0.8** | |
| BILL | | | | IAmb | IAmb | 07 23 29.3 | | |
| | comp=Z,44nm,1.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **87.02** | **132** | P | **P** | **07 23 30.4** | **+1.4** | |
| | comp=Z,5.1nm,1.1s,baz=224,slow=3.6,SNR=4.1 | | | | | | | |
| PLCA | | | | LR | LR | 07 55 51.3 | | |
| | comp=Z,246nm,18.7s,baz=252,slow=31 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **87.34** | **8** | IAmb | IAmb | 07 23 33.0 | | |
| | comp=Z,36nm,1.9s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **87.34** | **8** | P | **P** | **07 23 29.6** | **-0.2** | |
| | baz=201 | | | | | | | |
| **EPYK** | **Eagle Plains** | **87.59** | **13** | IAmb | IAmb | 07 24 26.5 | | |
| | comp=Z,34nm,1.8s | | | | | | | |
| **EPYK** | **Eagle Plains** | **87.59** | **13** | P | **P** | **07 23 30.1** | **-0.9** | |
| | baz=213 | | | | | | | |
| **HNS** | **HongShan** | **87.94** | **310** | ⇑P | **P** | **07 23 34.4** | **+1.1** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.7s | | | | | | | |
| **BJI** | **Beijing** | **87.98** | **313** | P | **P** | **07 23 35.3** | **+1.9** | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.7s | | | | | | | |
| **R32A** | **Long Quarter,** | **88.08** | **49** | IAmb | IAmb | 07 23 38.1 | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **NATX** | **Nacogdoches** | **88.58** | **56** | P | **P** | **07 23 37.1** | **+0.6** | |
| **NATX** | **Nacogdoches** | **88.58** | **56** | P | **P** | **07 23 38.9** | **+2.4** | |
| | baz=249 | | | | | | | |
| **IPM** | **Ipoh** | **88.63** | **275** | IAmb | IAmb | 07 23 39.2 | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **89.89** | **13** | P | **P** | **07 23 40.2** | **-1.5** | |
| | comp=Z,3.2nm,0.7s,baz=208,slow=5.6,SNR=16 | | | | | | | |
| INK | | | | LR | LR | 08 01 09.7 | | |
| | comp=Z,222nm,18.3s,baz=200,slow=34 | | | | | | | |
| **INK** | **Inuvik** | **89.89** | **13** | P | **P** | **07 23 41.0** | **-0.7** | |
| INK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **89.89** | **13** | P | **P** | **07 23 41.0** | **-0.7** | |
| **INK** | **Inuvik** | **89.89** | **13** | P | **P** | **07 23 40.8** | **-0.9** | |
| | baz=216 | | | | | | | |
| **JTS** | **Las Juntas de** | **90.08** | **79** | LR | LR | 07 55 28.0 | | |
| | comp=Z,238nm,19.1s,baz=5.0,slow=30 | | | | | | | |
| **GYA** | **Guiyang** | **90.34** | **298** | ⇑P | **P** | **07 23 46.3** | **+1.3** | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.68** | **174** | P | **P** | **07 23 45.2** | **-0.4** | |
| **SNAA** | **Sanae** | **90.79** | **177** | P | **P** | **07 23 45.7** | **-0.5** | |
| **SNAA** | **Sanae** | **90.79** | **177** | P | **P** | **07 23 45.6** | **-0.5** | |
| | comp=Z,6.7nm,0.7s,baz=210,slow=5.2,SNR=3.6 | | | | | | | |
| **SNAA** | **Sanae** | **90.79** | **177** | *i* P | **P** | **07 23 45.4** | **-0.8** | |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **90.79** | **177** | P | **P** | **07 23 46.3** | **+0.1** | |
| **SYO** | **Syowa Base** | **90.89** | **191** | ⇑*e*PcP | **P** | **07 23 48.0** | **+1.4** | |
| **GSI** | **Gunungsitoli** | **90.97** | **271** | P | **P** | **07 23 49.9** | **+1.8** | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **XAN** | **Xi'an** | **91.06** | **305** | P | **P** | **07 23 49.3** | **+1.2** | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **NNA** | **Nana** | **91.11** | **103** | LR | LR | 07 56 08.7 | | |
| | comp=Z,178nm,19.1s,baz=243,slow=30 | | | | | | | |
| **ATAH** | **Atahualpa** | **91.13** | **98** | LR | LR | 07 54 24.6 | | |
| | comp=Z,354nm,20.9s,baz=242,slow=29 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.19** | **175** | P | **P** | **07 23 48.0** | **0.0** | |
| | baz=176,slow=4.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.37** | **23** | P | **P** | **07 23 47.1** | **-1.6** | |
| | comp=Z,1.6nm,1.0s,baz=232,slow=4.2,SNR=14 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.53** | **312** | *e*P | **P** | **07 23 51.8** | **+1.6** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,220nm,5.6s | | | | | | | |
| **YAK** | **Yakutsk** | **91.59** | **336** | *i* P | **P** | **07 23 51.6** | **+1.9** | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **91.63** | **45** | IAmb | IAmb | 07 23 55.1 | | |
| | comp=Z,22nm,1.6s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **91.63** | **45** | P | **P** | **07 23 53.1** | **+2.6** | |
| | baz=247 | | | | | | | |
| **BTO** | **Baotou** | **92.53** | **312** | *e*P | **P** | **07 23 58.4** | **+3.6** | |
| **FFC** | **Flin Flon** | **92.97** | **33** | *e*P | **P** | **07 23 57.1** | **+0.8** | |
| **FFC** | **Flin Flon** | **92.97** | **33** | P | **P** | **07 23 55.9** | **-0.4** | |
| FFC | | | | IAmb | IAmb | 07 23 59.6 | | |
| | comp=Z,22nm,1.8s | | | | | | | |
| **T42A** | **Van Buren** | **93.18** | **52** | IAmb | IAmb | 07 24 01.2 | | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **93.41** | **51** | P | **P** | **07 23 58.7** | **-0.1** | |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,37nm,1.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **93.41** | **51** | P | **P** | **07 23 58.7** | **-0.1** | |
| **PBMO** | **Poplar Bluff** | **93.60** | **53** | IAmb | IAmb | 07 24 03.3 | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **FVM** | **French Village** | **94.00** | **52** | IAmb | IAmb | 07 24 05.7 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **PZH** | **PanZhiHua** | **94.55** | **296** | P | **P** | **07 24 05.3** | **+0.9** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,110nm,5.2s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **94.56** | **39** | LR | LR | 08 02 36.6 | | |
| | comp=Z,362nm,18.9s,baz=274,slow=33 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.69** | **288** | P | **P** | **07 24 04.8** | **-0.3** | |
| | comp=Z,1.3nm,0.3s,baz=92,slow=2.8,SNR=9.7 | | | | | | | |
| CMAR | | | | LR | LR | 08 02 43.9 | | |
| | comp=Z,82nm,21.9s,baz=110,slow=33 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.69** | **288** | P | **P** | **07 24 06.0** | **+0.9** | |
| **LVC** | **Limon Verde** | **94.76** | **115** | LR | LR | 07 57 32.5 | | |
| | comp=Z,308nm,19.9s,baz=228,slow=30 | | | | | | | |
| **TIXI** | **Tiksi** | **97.38** | **344** | *ce*P | Pdif | 07 24 17.0 | +0.9 | |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,2.1s | | | | | | | |
| **LPAZ** | **La Paz** | **97.69** | **110** | LR | LR | 07 58 38.3 | | |
| | comp=Z,149nm,21.4s,baz=244,slow=29 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **98.42** | **55** | LR | LR | 08 08 15.4 | | |
| | comp=Z,93nm,18.3s,baz=266,slow=35 | | | | | | | |
| **ROSC** | **El Rosal** | **98.57** | **88** | LR | LR | 07 59 16.1 | | |
| | comp=Z,86nm,21.4s,baz=225,slow=30 | | | | | | | |
| **GTA** | **Gaotai** | **99.64** | **308** | *e*P | **Pdif** | **07 24 30.3** | **+3.1** | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **111.77** | **322** | PKiKP | **PKiKP** | **07 29 16.4** | **-1.5** | |
| | comp=Z,0.7nm,0.6s,baz=197,slow=1.5,SNR=4.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **113.34** | **314** | PKiKP | **PKiKP** | **07 29 19.6** | **-1.6** | |
| | comp=Z,0.7nm,0.7s,baz=65,slow=1.4,SNR=8.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **120.43** | **322** | PKP | **PKPdf** | **07 29 33.4** | **-1.1** | |
| | comp=Z,2.4nm,0.6s,baz=69,slow=9.7,SNR=14 | | | | | | | |
| **KBL** | **Kabul** | **123.50** | **300** | PKiKP | **PKPdf** | **07 29 41.2** | **-0.1** | |
| **KBL** | **Kabul** | **123.50** | **300** | PKPdf | **PKPdf** | **07 29 41.2** | **-0.1** | |
| **ARU** | **Arti** | **125.88** | **328** | PKP | **PKPdf** | **07 29 43.3** | **-1.6** | |
| | comp=Z,1.0nm,0.5s,baz=42,slow=1.6,SNR=7.2 | | | | | | | |
| **ARU** | **Arti** | **125.88** | **328** | *i* PKiKP | **PKPdf** | **07 29 44.1** | **-0.8** | |
| ARU | | | | | | 07 31 36.9 | | |
| ARU | | | | | | 07 36 55.4 | | |
| ARU | | | | SS | SS | 07 48 39.5 | +1.5 | |
| **ARCES** | **ARCESS Array B** | **126.83** | **352** | PKP | **PKPdf** | **07 29 45.3** | **-1.1** | |
| | comp=Z,2.5nm,0.8s,baz=29,slow=2.8,SNR=7.3 | | | | | | | |
| **ABKAR** | **Akbulak array** | **127.76** | **319** | | **PKPdf** | **07 29 47.5** | **-1.2** | |
| **FINES** | **FINESS Array B** | **134.25** | **348** | PKP | **PKPdf** | **07 30 00.6** | **-0.1** | |
| | comp=Z,2.8nm,0.8s,baz=132,slow=2.8,SNR=4.2 | | | | | | | |
| **NACGM** | **Naroch** | **139.98** | **343** | *i* PKP | **PKPdf** | **07 30 11.4** | **0.0** | |
| **KIV** | **Kislovodsk** | **140.74** | **320** | *i* PKiKP | **PKiKP** | **07 30 18.2** | **+2.3** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,71nm,24.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.80** | **338** | PKhKP | PKPpre | 07 30 11.1 | | |
| | comp=Z,1.3nm,0.7s,baz=35,slow=4.3,SNR=12 | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **143.77** | **312** | PKPdf | PKPbc | 07 30 16.8 | +0.3 | |
| **KIBK** | **Kibwezi** | **144.60** | **239** | PKPdf | PKPbc | 07 30 20.2 | +0.5 | |
| **RAYN** | **Ar Rayn** | **144.60** | **286** | PKiKP | PKPbc | 07 30 19.3 | -0.1 | |
| **RAYN** | **Ar Rayn** | **144.60** | **286** | PKPdf | PKPbc | 07 30 19.3 | -0.1 | |
| **SIM** | **Simferopol'** | **145.03** | **327** | *i* PKiKP | **PKiKP** | **07 30 24.7** | **+0.2** | |
| SIM | | | | *e*PPP | PPP | 07 36 54.0 | | |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,48nm,0.8s | | | | | | | |
| **SORM** | **Soroca** | **145.24** | **336** | ⇓P | **PKPbc** | **07 30 20.0** | **-0.5** | |
| **LVV** | **L'vov** | **145.27** | **342** | *e*PKiKP | **PKPdf** | **07 30 21.1** | **+0.1** | |
| **KMBO** | **Kilima Mbogo** | **145.93** | **240** | PKPbc | **PKPab** | **07 30 24.6** | **-0.1** | |
| | comp=Z,8.7nm,1.0s,baz=119,slow=5.4,SNR=22 | | | | | | | |
| **OJC** | **Ojcow** | **146.00** | **347** | *e*PKP | **PKPbc** | **07 30 22.7** | **-0.3** | |
| **OJC** | **Ojcow** | **146.00** | **347** | PKP2 | **PKPdf** | **07 30 22.3** | **+0.1** | |
| **OJC** | **Ojcow** | **146.00** | **347** | PKPdf | **PKPdf** | **07 30 22.3** | **+0.1** | |
| **CLL** | **Collm** | **146.00** | **355** | PKP2 | **PKPdf** | **07 30 22.3** | **+0.1** | |
| **CLL** | **Collm** | **146.00** | **355** | *i* PKPbc | **PKPdf** | **07 30 22.0** | **-0.2** | |
| | comp=Z,17nm,1.1s | | | | | | | |
| CLL | | | | *i* PKPab | **PKPab** | **07 30 23.6** | **+0.2** | |
| | comp=Z,66nm,1.6s | | | | | | | |
| **CLL** | **Collm** | **146.00** | **355** | PKPdf | **PKPdf** | **07 30 22.3** | **+0.1** | |
| **KSP** | **Ksiaz** | **146.06** | **351** | *e*PKP | **PKPdf** | **07 30 22.6** | **+0.4** | |
| **BRG** | **Berggiesshubel** | **146.34** | **353** | *e*PKP | **PKPdf** | **07 30 23.2** | **+0.5** | |
| BRG | | | | Amp | | 07 30 28.2 | | |
| | comp=Z,35nm,1.3s | | | | | | | |
| BRG | | | | *ex* | x | 07 30 32.7 | | |
| BRG | | | | Amp | | 07 30 34.5 | | |
| | comp=Z,33nm,1.5s | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.34** | **353** | *e*PKP2 | **PKPdf** | **07 30 23.2** | **+0.5** | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,35nm,1.3s | | | | | | | |
| **CHVC** | **Chvalec** | **146.34** | **351** | *e*PKP | **PKPbc** | **07 30 23.8** | **-0.2** | |
| **OSTC** | **Ostas** | **146.35** | **351** | *e*PKP | **PKPbc** | **07 30 23.8** | **-0.2** | |
| **UPC** | **Upice** | **146.43** | **351** | *e*PKP | **PKPbc** | **07 30 24.0** | **-0.2** | |
| **DPC** | **Dobruska-Polom** | **146.53** | **351** | *e*PKP | **PKPbc** | **07 30 24.2** | **-0.4** | |
| **UCC** | **Uccle** | **146.59** | **4** | *d*PKPdf | **PKPdf** | **07 30 23.2** | **0.0** | |
| **PVCC** | **Panska Ves** | **146.60** | **353** | *e*PKP | **PKPdf** | **07 30 23.8** | **+0.6** | |
| **NIE** | **Niedzica** | **146.64** | **346** | *e*PKP | **PKPab** | **07 30 25.9** | **-0.1** | |
| **KRLC** | **Kraliky** | **146.72** | **350** | *e*PKP | **PKPdf** | **07 30 24.0** | **+0.5** | |
| **BUR08** | **Bucovina Ar. S** | **146.80** | **339** | PKPdf | **PKPdf** | **07 30 24.1** | **+0.3** | |
| BUR08 | | | | PKPbc | **PKPab** | **07 30 26.8** | **0.0** | |
| **BURAR** | **Bucovina Array** | **146.82** | **339** | ⇑P | **PKPdf** | **07 30 24.3** | **+0.5** | |
| **BURAR** | **Bucovina Array** | **146.82** | **339** | PKPdf | **PKPdf** | **07 30 22.9** | **-1.0** | |
| BURAR | | | | PKPbc | **PKPab** | **07 30 26.3** | **-0.6** | |
| **CRVS** | **Cervenica-Dubn** | **146.82** | **344** | *e*PKP2 | **PKPab** | **07 30 27.0** | **+0.3** | |
| **CRVS** | **Cervenica-Dubn** | **146.82** | **344** | *e*PKP | **PKPab** | **07 30 27.0** | **+0.3** | |
| **UZH** | **Uzhgorod** | **146.84** | **343** | *e*PKP2 | **PKPdf** | **07 30 23.7** | **0.0** | |
| **SNF** | **Seneffe** | **146.87** | **5** | *d*PKPdf | **PKPdf** | **07 30 23.7** | **+0.1** | |
| SNF | | | | *d*PKPbc | **PKPbc** | **07 30 24.9** | **-0.5** | |
| SNF | | | | *d*PKPab | **PKPab** | **07 30 26.1** | **-0.7** | |
| SNF | | | | *d*PKiKP | **pPKPdf** | **07 30 27.5** | **+0.4** | |
| **BSTI** | **Sart Tilman** | **146.88** | **3** | *d*PKPbc | **PKPbc** | **07 30 25.1** | **-0.4** | |
| **MORC** | **Moravsky Berou** | **146.88** | **349** | ⇑P | **PKPbc** | **07 30 25.6** | **-0.1** | |
| **MORC** | **Moravsky Berou** | **146.88** | **349** | PKiKP | **PKPdf** | **07 30 23.5** | **-0.3** | |
| **MORC** | **Moravsky Berou** | **146.88** | **349** | PKPdf | **PKPdf** | **07 30 23.5** | **-0.3** | |
| **MORC** | **Moravsky Berou** | **146.88** | **349** | *e*PKP | **PKPbc** | **07 30 25.0** | **-0.6** | |
| **BTNL** | **Ternell** | **146.90** | **2** | *d*PKPbc | **PKPbc** | **07 30 25.2** | **-0.4** | |
| **BCLA** | **Clavier** | **147.03** | **3** | *d*PKPbc | **PKPbc** | **07 30 25.3** | **-0.7** | |
| **BGES** | **Gesves** | **147.05** | **4** | *d*PKPbc | **PKPbc** | **07 30 25.2** | **-0.9** | |
| BGES | | | | *d*PKPab | **pPKPdf** | **07 30 26.3** | **-1.0** | |
| **LANS** | **Liptovska Anna** | **147.08** | **346** | *e*PKP2 | **PKPbc** | **07 30 26.6** | **+0.4** | |
| **LANS** | **Liptovska Anna** | **147.08** | **346** | *e*PKP | **PKPbc** | **07 30 26.6** | **+0.4** | |
| **BMRD** | **Maredsous** | **147.11** | **4** | *d*PKPdf | **PKPdf** | **07 30 23.8** | **-0.3** | |
| BMRD | | | | *d*PKPbc | **PKPbc** | **07 30 25.5** | **-0.6** | |
| **NKC** | **Novy Kostel** | **147.12** | **355** | *e*PKP | **PKPbc** | **07 30 26.2** | **-0.1** | |
| **BHOU** | **Houvegnez** | **147.13** | **3** | *d*PKPab | **PKPab** | **07 30 27.2** | **-0.6** | |
| BHOU | | | | *d*PKiKP | **sPKPdf** | **07 30 28.6** | **-0.1** | |
| **PRU** | **Pruhonice** | **147.14** | **352** | *e*PKP | **PKPbc** | **07 30 25.7** | **-0.6** | |
| **TRPA** | **Tarpa** | **147.22** | **342** | ⇓P | **PKPbc** | **07 30 25.8** | **-0.7** | |
| **TRPA** | **Tarpa** | **147.22** | **342** | PKPDF | **PKPbc** | **07 30 25.8** | **-0.4** | |
| **TESR** | **Tescani** | **147.23** | **336** | ⇓P | **PKPbc** | **07 30 25.6** | **-1.1** | |
| **RCHB** | **Rochefort** | **147.28** | **4** | *d*PKPbc | **PKPbc** | **07 30 26.1** | **-0.6** | |
| **GHRR** | | **147.30** | **335** | ⇓P | **PKPbc** | **07 30 27.3** | **+0.5** | |
| **DOU** | **Dourbes** | **147.30** | **4** | *d*PKPdf | **PKPdf** | **07 30 24.6** | **+0.2** | |
| **TLCR** | | **147.40** | **332** | ⇓P | **PKPbc** | **07 30 26.4** | **-0.8** | |
| **KECS** | **Kecovo** | **147.46** | **345** | *e*PKP2 | **PKPab** | **07 30 29.1** | **-0.1** | |
| **KECS** | **Kecovo** | **147.46** | **345** | *e*PKP | **PKPab** | **07 30 29.1** | **-0.1** | |
| **VRAC** | **Vranov** | **147.50** | **350** | ⇑P | **PKPbc** | **07 30 26.8** | **-0.6** | |
| **VRAC** | **Vranov** | **147.50** | **350** | *e*PKP | **PKPbc** | **07 30 26.5** | **-0.8** | |
| **IZAB** | **Izabela** | **147.57** | **346** | *e*PKP2 | **PKiKP** | **07 30 29.7** | **0.0** | |
| **ARCR** | **ARCALIA** | **147.57** | **339** | ⇑P | **PKPbc** | **07 30 27.7** | **+0.1** | |
| **CFR** | **Carcaliu** | **147.71** | **333** | ⇑P | **PKPbc** | **07 30 27.3** | **-0.6** | |
| **VRI** | **Vrincioaia** | **147.73** | **335** | ⇑P | **PKPbc** | **07 30 27.2** | **-0.8** | |
| **JAVC** | **Velka Javorina** | **147.73** | **348** | *e*PKP | **PKPbc** | **07 30 28.6** | **+0.5** | |
| **GRF** | **Grafenberg Arr** | **147.74** | **356** | *e*PKP | **PKPbc** | **07 30 26.9** | **-1.1** | |
| | baz=5.4,slow=2.2 | | | | | | | |
| **KRUC** | **Moravsky** | **147.77** | **350** | *e*PKP | **PKPbc** | **07 30 27.5** | **-0.6** | |
| **PLOR** | **Plostina** | **147.78** | **335** | ⇓P | **PKPbc** | **07 30 27.4** | **-0.9** | |
| **BNN** | **Bunyan** | **147.82** | **317** | PKPdf | **PKPdf** | **07 30 25.5** | **-0.4** | |
| **WLF** | **Walferdange** | **147.82** | **2** | PKP2 | **PKiKP** | **07 30 29.3** | **-0.8** | |
| **WLF** | **Walferdange** | **147.82** | **2** | | **PKiKP** | **07 30 29.3** | **-0.8** | |
| **WLF** | **Walferdange** | **147.82** | **2** | *d*PKPbc | **PKPbc** | **07 30 28.4** | **+0.2** | |
| **TPGR** | **Topolog** | **147.84** | **332** | ⇓P | **PKPdf** | **07 30 25.1** | **-0.4** | |
| **VYHS** | **Vyhne** | **147.84** | **347** | *e*PKP2 | **PKPbc** | **07 30 28.3** | **0.0** | |
| **VYHS** | **Vyhne** | **147.84** | **347** | *e*PKP | **PKPbc** | **07 30 28.3** | **0.0** | |
| **COVR** | **Voineasa-Covas** | **147.96** | **336** | ⇓P | **PKPbc** | **07 30 27.9** | **-0.8** | |
| **KHC** | **Kasperske Hory** | **148.10** | **353** | PKP2 | **PKiKP** | **07 30 29.9** | **-0.9** | |
| **KHC** | **Kasperske Hory** | **148.10** | **353** | *e*PKP | **PKPbc** | **07 30 28.4** | **-0.6** | |
| KHC | | | | *ep*PKP | **sPKPab** | **07 30 38.5** | **+2.3** | |
| **KHC** | **Kasperske Hory** | **148.10** | **353** | | **PKPdf** | **07 30 26.8** | **+1.0** | |
| KHC | | | | | **PKiKP** | **07 30 29.9** | **-0.9** | |
| **SMOL** | **Smolenice** | **148.11** | **348** | *e*PKP2 | **PKPbc** | **07 30 29.5** | **+0.5** | |
| **SMOL** | **Smolenice** | **148.11** | **348** | *e*PKP | **PKPbc** | **07 30 29.5** | **+0.5** | |
| **PSZ** | **Piszkesteto** | **148.13** | **345** | ⇑P | **PKPdf** | **07 30 26.0** | **+0.1** | |
| **PSZ** | **Piszkesteto** | **148.13** | **345** | PKiKP | **PKPdf** | **07 30 25.9** | **-0.1** | |
| **PSZ** | **Piszkesteto** | **148.13** | **345** | PKPdf | **PKPdf** | **07 30 25.9** | **-0.1** | |
| **PSZ** | **Piszkesteto** | **148.13** | **345** | PKPDF | **PKPbc** | **07 30 27.9** | **-1.3** | |
| **PSZ** | **Piszkesteto** | **148.13** | **345** | ⇑PKP | **PKiKP** | **07 30 30.8** | **-0.1** | |
| **DOPR** | **Dopca** | **148.16** | **337** | ⇑P | **PKPbc** | **07 30 29.5** | **+0.3** | |
| **MODS** | **Modra-Piesok** | **148.28** | **348** | *e*PKP2 | **PKPab** | **07 30 32.2** | **-0.3** | |
| **MODS** | **Modra-Piesok** | **148.28** | **348** | *e*PKP | **PKPab** | **07 30 32.2** | **-0.3** | |
| **CKRC** | **Cesky Krumlov** | **148.31** | **352** | *e*PKP | **PKPdf** | **07 30 27.5** | **+1.3** | |
| **MLR** | **Muntele Rosu** | **148.35** | **336** | ⇓P | **PKPbc** | **07 30 29.7** | **-0.2** | |
| **MLR** | **Muntele Rosu** | **148.35** | **336** | PKPbc | **PKPbc** | **07 30 29.4** | **-0.5** | |
| | comp=Z,7.8nm,0.8s,baz=346,slow=4.7,SNR=8.4 | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.35** | **336** | PKP2 | **PKPbc** | **07 30 29.9** | **0.0** | |
| **MLR** | **Muntele Rosu** | **148.35** | **336** | | **PKPbc** | **07 30 29.9** | **0.0** | |
| **GEC2** | **GERESS Array S** | **148.36** | **353** | | **PKPbc** | **07 30 29.7** | **-0.1** | |
| **GERES** | **GERESS Array B** | **148.36** | **353** | PKPbc | **PKPbc** | **07 30 29.5** | **-0.3** | |
| | comp=Z,5.5nm,0.8s,baz=29,slow=3.0,SNR=27 | | | | | | | |
| **DRGR** | | **148.37** | **341** | ⇓P | **PKPbc** | **07 30 29.1** | **-0.8** | |
| **SRO** | **Srobarova** | **148.60** | **347** | *e*PKP2 | **PKiKP** | **07 30 31.5** | **-0.3** | |
| **SRO** | **Srobarova** | **148.60** | **347** | *e*PKP | **PKiKP** | **07 30 31.5** | **-0.3** | |
| **BR131** | **Keskin Array S** | **148.70** | **320** | PKP2 | **PKPbc** | **07 30 30.6** | **-0.4** | |
| **BR131** | **Keskin Array S** | **148.70** | **320** | | **PKPbc** | **07 30 30.6** | **-0.4** | |
| **BRTR** | **Keskin Array B** | **148.70** | **320** | PKPbc | **PKPbc** | **07 30 30.2** | **-0.8** | |
| | comp=Z,6.4nm,1.0s,baz=144,slow=2.7,SNR=19 | | | | | | | |
| **BRTR** | **Keskin Array B** | **148.70** | **320** | PKiKP | **PKPdf** | **07 30 26.9** | **-0.3** | |
| **BRTR** | **Keskin Array B** | **148.70** | **320** | PKPdf | **PKPdf** | **07 30 26.9** | **-0.3** | |
| **VOIR** | | **148.74** | **337** | ⇑P | **PKPbc** | **07 30 29.3** | **-1.5** | |
| **STU** | **Stuttgart** | **148.75** | **359** | PKP2 | **PKPbc** | **07 30 30.3** | **-0.3** | |
| **STU** | **Stuttgart** | **148.75** | **359** | | **PKPbc** | **07 30 30.3** | **-0.3** | |
| **ARR** | **Arges** | **148.96** | **337** | ⇑P | **PKPdf** | **07 30 27.2** | **-0.2** | |
| **CONA** | **Conrad Observa** | **148.96** | **350** | *e*P | **PKPbc** | **07 30 30.8** | **-0.5** | |
| | comp=Z,45nm,1.3s,SNR=14 | | | | | | | |
| **CSKK** | **Cskako** | **149.03** | **347** | ⇑PKP | **PKPab** | **07 30 34.7** | **-0.8** | |
| **SOP** | **Sopron** | **149.07** | **349** | PKPDF | **PKPbc** | **07 30 31.0** | **-0.5** | |
| **SOP** | **Sopron** | **149.07** | **349** | ⇑PKP | **PKiKP** | **07 30 32.7** | **-0.1** | |
| **DEV** | **Deva** | **149.11** | **340** | ⇑P | **PKPbc** | **07 30 31.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 6.1nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.71** | **42** | Pn | | **Pn** | **07 13 15.6** | **+1.0** |
| | 0.5nm,0.3s,baz=237,slow=14,SNR=8.8 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 14 42.0 | |
| | 0.1nm,0.3s,baz=241,slow=15,SNR=2.1 | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.71** | **42** | *i* | | | 07 42 50.0 | |
| | baz=225,slow=334,SNR=3.3 | | | | | | | |
| **BLB** | **Baldybastay** | **5.81** | **179** | Pg | | **Pg** | **07 13 38.5** | **-1.5** |
| | 3.4nm,0.3s | | | | | | | |
| BLB | | | | Lg | | Lg | 07 14 55.9 | |
| | 7.3nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | **6.16** | **193** | Pg | | **Pg** | **07 13 45.6** | **-1.1** |
| | 1.0nm,0.3s | | | | | | | |
| KUU | | | | Lg | | Lg | 07 15 08.2 | |
| | 6.6nm,0.3s | | | | | | | |
| **KTBS** | **Karatobe** | **6.29** | **191** | Pg | | **Pg** | **07 13 49.6** | **+0.5** |
| | 0.5nm,0.4s | | | | | | | |
| KTBS | | | | Lg | | Lg | 07 15 14.9 | |
| | 8.3nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **6.42** | **181** | Pg | | **Pg** | **07 13 51.0** | **-0.5** |
| | 1.7nm,0.4s | | | | | | | |
| KURS | | | | Lg | | Lg | 07 15 17.4 | |
| | 5.0nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **6.63** | **173** | Pg | | **Pg** | **07 13 54.5** | **-1.1** |
| | 1.1nm,0.8s | | | | | | | |
| PDGK | | | | Lg | | Lg | 07 15 23.3 | |
| | 1.7nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **6.78** | **176** | Pg | | **Pg** | **07 13 58.1** | **-0.3** |
| | 4.1nm,0.3s | | | | | | | |
| UZB | | | | Lg | | Lg | 07 15 29.6 | |
| | 2.7nm,0.7s | | | | | | | |

*CNRM* ***14*** *07:16:58.1, 35˚.45N×3˚.86W, h13km, ml3.2*
*SFS* ***14*** *07:17:00.0, 35˚.50N×3˚.80W, h31km, ML3.2, ALBORAN W.*
*INMG* ***14*** *07:17:00.9±0.8, 35˚.48N×4˚.03W, h0km, ML2.5, Error ellipse: s-maj=7.1km s-min=3.4km az=65.0*
*IGIL* ***14*** *07:17:01.8, 35˚.38N×4˚.04W, h10km*
**ISC 14 07:16:58.2**±1.2**, 35˚.44N**±0˚.03×**3˚.82W**±0˚.04**, h13**km±8km, n27,σ1s81/41, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.24** | **204** | P | | **Pg** | **07 17 02.6** | **-0.8** |
| PALE | | | | S | | **Sg** | **07 17 06.4** | **-0.5** |
| **AKLM** | **AKL** | **0.93** | **182** | P | | **Pb** | **07 17 16.9** | **+0.6** |
| **CHAS** | **Isla Isabel II** | **1.17** | **102** | P | | **Pn** | **07 17 19.7** | **-0.5** |
| CHAS | | | | S | | **Sb** | **07 17 33.2** | **-2.0** |
| **TAF** | **Taforalt** | **1.31** | **118** | P | | **Pn** | **07 17 21.9** | **-0.4** |
| TAF | | | | S | | **Sn** | **07 17 41.5** | **+1.8** |
| **CEU** | **Ceuta** | **1.34** | **290** | P | | Pn | 07 17 19.1 | -3.5 |
| CEU | | | | S | | **Sn** | **07 17 33.2** | **-7.2** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **340** | P | | **Pn** | **07 17 23.2** | **-0.4** |
| EMAL | | | | S | | **Sn** | **07 17 39.6** | **-2.4** |
| **JBK** | **JBK** | **1.51** | **137** | P | | **Pn** | **07 17 24.3** | **-0.8** |
| **LIJA** | **Lijar** | **1.94** | **319** | P | | **Pg** | **07 17 36.7** | **+1.1** |
| LIJA | | | | S | | **Sb** | **07 17 59.0** | **+1.2** |
| **LCRM** | **LCR** | **1.95** | **206** | P | | **Pn** | **07 17 32.8** | **+1.7** |
| LCRM | | | | S | | **Sb** | **07 17 59.1** | **+1.2** |
| **IFR** | **Ifrane** | **2.20** | **210** | P | | **Pn** | **07 17 36.0** | **+1.3** |
| IFR | | | | S | | **Sn** | **07 18 01.3** | **-0.5** |
| **MD31** | **MD31** | **2.68** | **197** | P | | **Pn** | **07 17 41.9** | **+0.7** |
| **TDRA** | **Tendrara** | **2.82** | **148** | P | | **Pn** | **07 17 44.4** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **3.70** | **303** | *e*Pn | | **Pn** | **07 17 55.8** | **+0.7** |
| PVAQ | | | | *e*Sn | | **Sn** | **07 18 37.1** | **-1.5** |
| PVAQ | | | | A | | A | 07 18 42.1 | |
| | 8.9nm,0.5s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.04** | **304** | *e*Pn | | **Pn** | **07 18 01.4** | **+1.6** |
| **MESJ** | **Messejana** | **4.27** | **305** | *e*P | | **P** | **07 18 03.6** | **+0.7** |
| **MESJ** | **Messejana** | **4.27** | **305** | *e*Pn | | **Pn** | **07 18 03.9** | **+0.9** |
| MESJ | | | | *e*Sn | | **Sn** | **07 18 51.6** | **-1.1** |
| MESJ | | | | A | | A | 07 18 58.5 | |
| | 6.3nm,0.7s | | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **320** | *e*Pn | | **Pn** | **07 18 08.4** | **+1.5** |
| PESTR | | | | *e*Sn | | **Sn** | **07 18 58.2** | **-1.5** |
| **EVO** | **Evora** | **4.56** | **314** | P | | **Pn** | **07 18 08.7** | **+1.8** |
| EVO | | | | S | | **Sn** | **07 18 57.0** | **-2.7** |
| **EVO** | **Evora** | **4.56** | **314** | *e*Pn | | **Pn** | **07 18 07.8** | **+0.9** |
| EVO | | | | *e*Sn | | **Sn** | **07 18 58.7** | **-1.1** |
| EVO | | | | A | | A | 07 19 02.9 | |
| | 6.4nm,0.6s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **307** | *e*Pn | | **Pn** | **07 18 08.4** | **+0.6** |
| PNCL | | | | *e*Sn | | **Sn** | **07 18 59.4** | **-2.0** |
| PNCL | | | | A | | A | 07 19 04.8 | |
| | 3.9nm,0.6s | | | | | | | |
| **UCM** | **Universidad Co** | **4.88** | **5** | S | | **Sn** | **07 19 09.3** | **+1.5** |
| **PMRV** | **Marv??o** | **4.89** | **326** | *e*Pn | | **Pn** | **07 18 12.8** | **+1.3** |
| **PMTG** | **Montargil** | **5.05** | **317** | *e*Pn | | **Pn** | **07 18 14.4** | **+0.8** |
| PMTG | | | | *e*Sn | | **Sn** | **07 19 10.4** | **-1.4** |
| PMTG | | | | A | | A | 07 19 11.7 | |
| | 8.3nm,0.5s | | | | | | | |
| **OUZM** | **OUZ** | **5.14** | **209** | P | | **Pn** | **07 18 15.7** | **+0.6** |
| **PCBR** | **Castelo Branco** | **5.26** | **328** | *e*Pn | | **Pn** | **07 18 18.5** | **+1.9** |
| **OUK** | **Oukaimeden** | **5.41** | **220** | P | | **Pn** | **07 18 19.7** | **+0.8** |
| **PSBE** | **So Bento** | **5.67** | **317** | *e*Pn | | **Pn** | **07 18 23.7** | **+1.5** |

*KRSC* ***14*** *07:31:18.9±0.7, 53˚.82N×159˚.04E, h178km±7km, ML4.4*
*MOS* ***14*** *07:31:19.6±0.8, 53˚.92N×158˚.69E, h176km, mb4.3/5, Error ellipse: s-maj=12.3km s-min=4.4km az=79.6*
*IDC* ***14*** *07:31:20.6±0.8, 54˚.04N×158˚.56E, h164km±6km, mb3.7/26, mb1 3.8/29, mb1mx3.7/72, mbtmp4.2/29, MS4.1/2, Ms1 4.0/2, ms1mx2.7/93, Error ellipse: s-maj=15.7km s-min=12.2km az=103.0*
*NEIC* ***14*** *07:31:20.6±1.0, 54˚.0N±0˚.1×158˚.6E±0˚.2, h163km±6km, mb4.5/14, Error ellipse: s-maj=22.9km s-min=13.7km az=124.0*
**ISC 14 07:31:20.2**±0.5**, 53˚.87N**±0˚.03×**158˚.94E**±0˚.05**, h173**km±5km, n163,σ0s90/201, mb4.1/47, 1D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KII** | **Karymskiy** | **0.35** | **60** | *e*P | | **Pn** | **07 31 43.9** | **+0.2** |
| **KRER** | **Koryakskii** | **0.57** | **191** | PN | | **Pn** | **07 31 45.3** | **+0.5** |
| KRER | | | | S | | **Sn** | **07 32 04.7** | **+1.1** |
| **KRER** | **Koryakskii** | **0.57** | **191** | *e*P | | **Pn** | **07 31 45.3** | **+0.5** |
| KRER | | | | *e*S | | **Sn** | **07 32 04.7** | **+1.1** |
| **SDLR** | **Sedlovina** | **0.59** | **183** | *e*P | | **Pn** | **07 31 45.2** | **+0.4** |
| **KOK** | **Koryaka** | **0.60** | **197** | PN | | **Pn** | **07 31 45.6** | **+0.8** |
| **KOK** | **Koryaka** | **0.60** | **197** | *e*P | | **Pn** | **07 31 45.6** | **+0.8** |
| **SMAR** | **Somma** | **0.61** | **188** | PN | | **Pn** | **07 31 45.6** | **+0.6** |
| SMAR | | | | S | | **Sn** | **07 32 04.6** | **+0.6** |
| **SMAR** | **Somma** | **0.61** | **188** | *e*P | | **Pn** | **07 31 45.6** | **+0.6** |
| SMAR | | | | *e*S | | **Sn** | **07 32 04.6** | **+0.6** |
| **AVH** | **Avacha** | **0.61** | **191** | PN | | **Pn** | **07 31 45.6** | **+0.7** |
| AVH | | | | S | | **Sn** | **07 32 04.7** | **+1.0** |
| **AVH** | **Avacha** | **0.61** | **191** | *e*P | | **Pn** | **07 31 45.6** | **+0.7** |
| AVH | | | | *e*S | | **Sn** | **07 32 04.8** | **+1.0** |
| **GNL** | **Ganaly** | **0.61** | **254** | PN | | **Pn** | **07 31 44.9** | **0.0** |
| GNL | | | | S | | **Sn** | **07 32 03.4** | **-0.4** |
| **GNL** | **Ganaly** | **0.61** | **254** | *e*P | | **Pn** | **07 31 44.9** | **0.0** |
| GNL | | | | *e*S | | **Sn** | **07 32 03.4** | **-0.4** |
| **UGLR** | **Uglovaya** | **0.66** | **186** | *i* P | | **Pn** | **07 31 45.8** | **+0.6** |
| UGLR | | | | *e*S | | **Sn** | **07 32 05.2** | **+0.9** |
| **NLC** | **Nalytchevo** | **0.74** | **160** | PN | | **Pn** | **07 31 45.6** | **+0.2** |
| NLC | | | | S | | **Sn** | **07 32 04.8** | **+0.1** |
| **NLC** | **Nalytchevo** | **0.74** | **160** | *i* P | | **Pn** | **07 31 45.6** | **+0.2** |
| NLC | | | | *e*S | | **Sn** | **07 32 04.8** | **+0.1** |
| **DALK** | **Dalny** | **0.84** | **187** | PN | | **Pn** | **07 31 46.4** | **+0.3** |
| DALK | | | | S | | **Sn** | **07 32 06.0** | **+0.1** |
| **DALK** | **Dalny** | **0.84** | **187** | *i* P | | **Pn** | **07 31 46.4** | **+0.3** |
| DALK | | | | *e*S | | **Sn** | **07 32 06.0** | **+0.1** |
| **PET** | **Petropavlovsk** | **0.86** | **191** | *e*PN | | **Pn** | **07 31 46.2** | **0.0** |
| PET | | | | *e*S | | **Sn** | **07 32 06.4** | **+0.2** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,700nm,0.5s | | | | | | | |
| PET | | | | pmax | | pmax | | |
| | comp=Z,791nm,0.5s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=N,2μm,0.7s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=E,1μm,0.5s | | | | | | | |
| **PET** | **Petropavlovsk** | **0.86** | **191** | | | **Pn** | **07 31 46.7** | **+0.4** |
| PET | | | | | Sn | **Sn** | **07 32 06.4** | **+0.2** |
| **PET** | **Petropavlovsk** | **0.86** | **191** | *i* P | | **Pn** | **07 31 46.6** | **+0.4** |
| PET | | | | *e*S | | **Sn** | **07 32 06.7** | **+0.5** |
| **SPN** | **Mys Shipunski** | **1.01** | **139** | PN | | **Pn** | **07 31 46.8** | **-0.5** |
| SPN | | | | S | | **Sn** | **07 32 06.7** | **-1.3** |
| **SPN** | **Mys Shipunski** | **1.01** | **139** | *i* P | | **Pn** | **07 31 46.8** | **-0.5** |
| SPN | | | | *e*S | | **Sn** | **07 32 06.7** | **-1.3** |
| **PEA0B** | **Petropavlovsk-** | **1.06** | **225** | PN | | **Pn** | **07 31 47.6** | **-0.1** |
| **PEA0B** | **Petropavlovsk-** | **1.06** | **225** | | | **Pn** | **07 31 47.6** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **1.06** | **225** | LR | | LR | 07 31 43.9 | |
| | comp=E,35nm,21.4s,baz=179,slow=22 | | | | | | | |
| PETK | | | | P | | **Pn** | **07 31 46.9** | **-0.8** |
| | comp=E,58nm,0.3s,baz=64,slow=8.0,SNR=475 | | | | | | | |
| PETK | | | | S | | **Sn** | **07 32 07.7** | **-1.1** |
| | comp=E,9.7nm,0.3s,baz=267,slow=19,SNR=4.8 | | | | | | | |
| **KRMR** | **Karymshinskiy** | **1.14** | **205** | PN | | **Pn** | **07 31 48.7** | **+0.3** |
| KRMR | | | | S | | **Sn** | **07 32 10.2** | **+0.2** |
| **KRMR** | **Karymshinskiy** | **1.14** | **205** | *i* P | | **Pn** | **07 31 48.7** | **+0.3** |
| KRMR | | | | *e*S | | **Sn** | **07 32 10.2** | **+0.2** |
| **GRL** | **Gorelyy** | **1.42** | **202** | PN | | **Pn** | **07 31 51.9** | **+1.0** |
| GRL | | | | S | | **Sn** | **07 32 14.7** | **+0.1** |
| **GRL** | **Gorelyy** | **1.42** | **202** | *e*P | | **Pn** | **07 31 51.9** | **+1.0** |
| GRL | | | | *e*S | | **Sn** | **07 32 14.7** | **+0.1** |
| **APC** | **Apacha** | **1.42** | **229** | PN | | **Pn** | **07 31 51.4** | **+0.6** |
| APC | | | | S | | **Sn** | **07 32 14.7** | **+0.3** |
| **APC** | **Apacha** | **1.42** | **229** | *e*P | | **Pn** | **07 31 51.4** | **+0.6** |
| APC | | | | *e*S | | **Sn** | **07 32 14.7** | **+0.3** |
| **MTVR** | **Mutnovka** | **1.46** | **198** | PN | | **Pn** | **07 31 52.3** | **+1.0** |
| **MTVR** | **Mutnovka** | **1.46** | **198** | *e*P | | **Pn** | **07 31 52.3** | **+1.0** |
| **RUS** | **Russkaya** | **1.46** | **190** | PN | | **Pn** | **07 31 51.1** | **-0.1** |
| RUS | | | | S | | **Sn** | **07 32 14.3** | **-0.7** |
| **RUS** | **Russkaya** | **1.46** | **190** | *i* P | | **Pn** | **07 31 51.1** | **-0.1** |
| RUS | | | | *e*S | | **Sn** | **07 32 14.3** | **-0.7** |
| **TUMR** | **Tumrok** | **1.59** | **26** | PN | | **Pn** | **07 31 53.6** | **+1.1** |
| TUMR | | | | S | | **Sn** | **07 32 18.9** | **+1.3** |
| **TUMR** | **Tumrok** | **1.59** | **26** | *e*P | | **Pn** | **07 31 53.6** | **+1.1** |
| TUMR | | | | *e*S | | **Sn** | **07 32 18.9** | **+1.3** |
| **TUMD** | **Tumrok D** | **1.59** | **32** | *e*P | | **Pn** | **07 31 53.1** | **+0.7** |
| TUMD | | | | *e*S | | **Sn** | **07 32 18.0** | **+0.5** |
| **MKZ** | **Mys Kozlova** | **1.78** | **66** | PN | | **Pn** | **07 31 54.4** | **+0.1** |
| MKZ | | | | S | | **Sn** | **07 32 18.8** | **-2.0** |
| **MKZ** | **Mys Kozlova** | **1.78** | **66** | *i* P | | **Pn** | **07 31 54.4** | **+0.1** |
| MKZ | | | | *e*S | | **Sn** | **07 32 18.8** | **-2.0** |
| **KMNR** | **Kamenistaya** | **2.04** | **21** | PN | | **Pn** | **07 31 58.1** | **+0.9** |
| **KMNR** | **Kamenistaya** | **2.04** | **21** | *e*P | | **Pn** | **07 31 58.1** | **+0.9** |
| **ESO** | **Esso** | **2.07** | **356** | PN | | **Pn** | **07 31 58.1** | **+0.6** |
| ESO | | | | S | | **Sn** | **07 32 27.2** | **+0.7** |
| **ESO** | **Esso** | **2.07** | **356** | *i* P | | **Pn** | **07 31 58.1** | **+0.6** |
| ESO | | | | *e*S | | **Sn** | **07 32 27.2** | **+0.7** |
| **KPT** | **Kopyto** | **2.23** | **19** | PN | | **Pn** | **07 31 59.7** | **+0.3** |
| **KPT** | **Kopyto** | **2.23** | **19** | *e*P | | **Pn** | **07 31 59.7** | **+0.3** |
| **KIRR** | **Kirishev** | **2.24** | **21** | PN | | **Pn** | **07 32 00.0** | **+0.4** |
| **KIRR** | **Kirishev** | **2.24** | **21** | *e*P | | **Pn** | **07 32 00.0** | **+0.4** |
| **KOZ** | **Kozyrevsk** | **2.26** | **13** | PN | | **Pn** | **07 32 00.0** | **+0.3** |
| **KOZ** | **Kozyrevsk** | **2.26** | **13** | *e*P | | **Pn** | **07 32 00.0** | **+0.3** |
| **BZWR** | **Bezymyannyi-We** | **2.29** | **23** | PN | | **Pn** | **07 32 01.0** | **+0.9** |
| **BZWR** | **Bezymyannyi-We** | **2.29** | **23** | *e*P | | **Pn** | **07 32 01.0** | **+0.9** |
| **BZGR** | **Bezymyannyi-Gr** | **2.31** | **25** | PN | | **Pn** | **07 32 01.4** | **+1.0** |
| **BZGR** | **Bezymyannyi-Gr** | **2.31** | **25** | *e*P | | **Pn** | **07 32 01.4** | **+1.0** |
| **ZLN** | **Zelenaya** | **2.41** | **26** | PN | | **Pn** | **07 32 02.8** | **+1.3** |
| **ZLN** | **Zelenaya** | **2.41** | **26** | *e*P | | **Pn** | **07 32 02.8** | **+1.3** |
| **LGNR** | **Loginova** | **2.44** | **24** | PN | | **Pn** | **07 32 02.8** | **+0.8** |
| **LGNR** | **Loginova** | **2.44** | **24** | *e*P | | **Pn** | **07 32 02.8** | **+0.8** |
| **CIRR** | **Tsirk** | **2.48** | **24** | PN | | **Pn** | **07 32 03.6** | **+1.2** |
| **CIRR** | **Tsirk** | **2.48** | **24** | *e*P | | **Pn** | **07 32 03.6** | **+1.2** |
| **KRSR** | **Krestovskiy** | **2.54** | **21** | PN | | **Pn** | **07 32 03.4** | **+0.5** |
| **KRSR** | **Krestovskiy** | **2.54** | **21** | *i* P | | **Pn** | **07 32 03.4** | **+0.5** |
| **KLY** | **Klyuchi** | **2.64** | **21** | PN | | **Pn** | **07 32 05.5** | **+1.4** |
| **KLY** | **Klyuchi** | **2.64** | **21** | *e*P | | **Pn** | **07 32 05.5** | **+1.4** |
| **PAU** | **Pauzhetka** | **2.73** | **209** | PN | | **Pn** | **07 32 06.0** | **+0.8** |
| **PAU** | **Pauzhetka** | **2.73** | **209** | *e*P | | **Pn** | **07 32 06.0** | **+0.8** |
| **BDR** | **Baidarnaya** | **3.00** | **25** | PN | | **Pn** | **07 32 09.7** | **+1.1** |
| **BDR** | **Baidarnaya** | **3.00** | **25** | *e*P | | **Pn** | **07 32 09.7** | **+1.1** |
| **SRKR** | **Sorokina** | **3.07** | **24** | PN | | **Pn** | **07 32 10.4** | **+1.0** |
| **SRKR** | **Sorokina** | **3.07** | **24** | *e*P | | **Pn** | **07 32 10.4** | **+1.0** |
| **SMKR** | **Semkarok** | **3.08** | **27** | PN | | **Pn** | **07 32 10.7** | **+1.2** |
| **SMKR** | **Semkarok** | **3.08** | **27** | *e*P | | **Pn** | **07 32 10.7** | **+1.2** |
| **KBG** | **Krutoberegovo** | **3.23** | **41** | PN | | **Pn** | **07 32 11.4** | **+0.2** |
| **KBG** | **Krutoberegovo** | **3.23** | **41** | *e*P | | **Pn** | **07 32 11.4** | **+0.2** |
| **KBTR** | **Krutoberegovo** | **3.24** | **42** | PN | | **Pn** | **07 32 11.4** | **0.0** |
| KBTR | | | | S | | **Sn** | **07 32 49.2** | **-2.2** |
| **KBTR** | **Krutoberegovo** | **3.24** | **42** | *e*P | | **Pn** | **07 32 11.4** | **0.0** |
| KBTR | | | | *e*S | | **Sn** | **07 32 49.2** | **-2.2** |
| **SKR** | **Severo-Kuril's** | **3.63** | **210** | PN | | **Pn** | **07 32 16.8** | **+0.5** |
| SKR | | | | S | | **Sn** | **07 33 00.1** | **+0.1** |
| **SKR** | **Severo-Kuril's** | **3.63** | **210** | *e*P | | **Pn** | **07 32 16.8** | **+0.5** |
| SKR | | | | *e*S | | **Sn** | **07 33 00.1** | **+0.1** |
| **PALN** | **Palana** | **5.27** | **6** | PN | | **Pn** | **07 32 37.8** | **+0.5** |
| **PALN** | **Palana** | **5.27** | **6** | *e*P | | **Pn** | **07 32 37.8** | **+0.5** |
| **OSSR** | **Ossora** | **5.86** | **21** | PN | | **Pn** | **07 32 44.2** | **-0.8** |
| **OSSR** | **Ossora** | **5.86** | **21** | *e*P | | **Pn** | **07 32 44.2** | **-0.8** |
| **JKA** | **Kamikawa-asahi** | **14.46** | **234** | | | **Pn** | **07 34 36.9** | **+0.1** |
| **ASAJ** | **Asahikawa** | **14.46** | **234** | P | | **P** | **07 34 38.1** | **-0.6** |
| | comp=E,0.6nm,0.3s,baz=119,slow=19,SNR=1.9 | | | | | | | |
| **ASAJ** | **Asahikawa** | **14.46** | **234** | P | | **Pn** | **07 34 36.9** | **+0.1** |
| **BILL** | **Bilibino** | **14.64** | **11** | *i* P | | **P** | **07 34 39.4** | **-1.1** |
| BILL | | | | S | | **S** | **07 37 26.0** | **+1.0** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,43nm,16.0s | | | | | | | |
| **BILL** | **Bilibino** | **14.64** | **11** | | | **P** | **07 34 39.9** | **-0.5** |
| **ERM** | **Erimo** | **15.84** | **228** | P | | **Pn** | **07 34 52.6** | **-1.1** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,45nm,1.1s | | | | | | | |
| **ERM** | **Erimo** | **15.84** | **228** | | | **Pn** | **07 34 52.6** | **-1.1** |
| **YAK** | **Yakutsk** | **17.41** | **310** | P | | **Pn** | **07 35 10.0** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=137,slow=1.3,SNR=6.3 | | | | | | | |
| **YAK** | **Yakutsk** | **17.41** | **310** | *e*P | | **Pn** | **07 35 10.2** | **-2.1** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,9.0nm,1.1s | | | | | | | |
| **KLR** | **Kul'dur** | **17.48** | **266** | P | | **Pn** | **07 35 12.7** | **-0.5** |
| | comp=E,0.4nm,0.3s,baz=66,slow=9.8,SNR=14 | | | | | | | |
| **JMM** | **Marumori** | **20.29** | **225** | P | | **P** | **07 35 43.3** | **+0.9** |
| JMM | | | | IAmb | | IAmb | 07 35 52.6 | |
| | comp=Z,35nm,1.1s | | | | | | | |
| **TIXI** | **Tiksi** | **22.09** | **335** | P | | **P** | **07 36 01.4** | **+0.6** |
| | comp=Z,2.2nm,0.4s,baz=92,slow=22,SNR=5.6 | | | | | | | |
| **MJAR** | **Mashiro Arr** | **22.52** | **228** | P | | **P** | **07 36 07.0** | **+1.7** |
| | comp=Z,2.2nm,0.6s,baz=12,slow=11,SNR=5.6 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **22.82** | **37** | P | | **P** | **07 36 09.9** | **+2.1** |
| **INU** | **Inuyama** | **24.04** | **229** | P | | **P** | **07 36 19.3** | **+0.2** |
| INU | | | | IAmb | | IAmb | 07 36 28.7 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **KSRS** | **Korea Array** | **26.89** | **245** | P | | **P** | **07 36 45.8** | **+1.0** |
| | comp=Z,2.1nm,0.7s,baz=39,slow=10,SNR=4.5 | | | | | | | |
| **SONM** | **Songino Array** | **33.06** | **281** | P | | **P** | **07 37 38.9** | **-0.2** |
| | comp=Z,1.0nm,0.4s,baz=57,slow=8.4,SNR=10.0 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **07 40 18.8** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=83,slow=2.1,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.78** | **301** | P | | **P** | **07 38 50.8** | **-1.3** |
| | comp=Z,1.1nm,0.4s,baz=57,slow=8.1,SNR=7.9 | | | | | | | |
| **ENH** | **Enshi** | **42.50** | **257** | P | | **P** | **07 38 57.1** | **-1.2** |
| ENH | | | | IAmb | | IAmb | 07 38 59.1 | |
| | comp=Z,9.1nm,0.4s | | | | | | | |
| **RES** | **Resolute Bay** | **42.87** | **22** | P | | **P** | **07 39 01.7** | **+1.1** |
| | comp=Z,0.5nm,0.3s,baz=336,slow=4.2,SNR=5.6 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.26** | **350** | P | | **P** | **07 39 26.9** | **-0.4** |
| | comp=Z,4.6nm,0.8s,baz=96,slow=7.6,SNR=5.9 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.26** | **350** | P | | **P** | **07 39 27.0** | **-0.4** |
| **KURK** | **Kurchatov** | **46.74** | **301** | P | | **P** | **07 39 31.2** | **-0.3** |
| **KURK** | **Kurchatov** | **46.74** | **301** | P | | **P** | **07 39 30.6** | **-0.9** |
| **KURBB** | **Kurchatov Arra** | **46.84** | **301** | P | | **P** | **07 39 31.2** | **-1.0** |
| | comp=Z,7.2nm,0.5s,baz=58,slow=7.8,SNR=51 | | | | | | | |
| **MK31** | **Makanchi Array** | **47.20** | **294** | P | | **P** | **07 39 34.2** | **-0.9** |
| MK31 | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **47.20** | **294** | P | | **P** | **07 39 34.2** | **-0.9** |
| MK31 | | | | IAmb | | IAmb | 07 39 34.6 | |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.20** | **294** | P | | **P** | **07 39 34.1** | **-1.0** |
| | comp=Z,4.8nm,0.5s,baz=54,slow=6.9,SNR=87 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.20** | **294** | P | | **P** | **07 39 34.3** | **-0.9** |
| **MKAR** | **Makanchi Array** | **47.20** | **294** | P | | **P** | **07 39 34.3** | **-0.9** |
| **MAKZ** | **Makanchi** | **47.36** | **295** | P | | **P** | **07 39 35.5** | **-0.9** |
| MAKZ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **MAKZ** | **Makanchi** | **47.36** | **295** | P | | **P** | **07 39 35.5** | **-0.9** |
| MAKZ | | | | IAmb | | IAmb | 07 39 36.1 | |
| | comp=Z,7.1nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.37** | **307** | P | | **P** | **07 39 50.6** | **-1.0** |
| | comp=Z,4.0nm,0.5s,baz=57,slow=17,SNR=22 | | | | | | | |
| **BRVK** | **Borovoye** | **49.40** | **307** | P | | **P** | **07 39 51.1** | **-0.7** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **49.40** | **307** | P | | **P** | **07 39 51.1** | **-0.7** |
| BRVK | | | | IAmb | | IAmb | 07 39 51.4 | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **54.12** | **295** | P | | **P** | **07 40 26.6** | **-0.4** |
| | comp=Z,2.6nm,0.4s,baz=131,slow=4.9,SNR=13 | | | | | | | |
| **AAK** | **Ala-Archa** | **54.12** | **295** | P | | **P** | **07 40 26.2** | **-0.9** |
| AAK | | | | IAmb | | IAmb | 07 40 27.6 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.91** | **298** | P | | **P** | **07 40 38.8** | **-0.9** |
| **KKAR** | **Karatay Array** | **55.91** | **298** | P | | **P** | **07 40 38.8** | **-0.9** |
| **ABKAR** | **Akbulak array** | **56.77** | **309** | P | | **P** | **07 40 45.1** | **-0.5** |
| **TAPN** | **Taplejung** | **57.47** | **273** | *e*P | | **P** | **07 40 50.4** | **-0.9** |
| | comp=Z,8.3nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **57.75** | **61** | P | | **P** | **07 40 56.0** | **+3.1** |
| | comp=Z,1.7nm,0.5s,baz=5.5,slow=3.0,SNR=5.7 | | | | | | | |
| **GUN** | **Gumba** | **58.13** | **275** | *e*P | | **P** | **07 40 54.8** | **-1.2** |
| | comp=Z,9.6nm,0.4s | | | | | | | |
| **JIRN** | **Jiri** | **58.14** | **274** | *e*P | | **P** | **07 40 54.9** | **-1.1** |
| | comp=Z,6.2nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **58.42** | **273** | *e*P | | **P** | **07 40 57.3** | **-0.5** |
| | comp=Z,5.1nm,0.3s | | | | | | | |
| **PKI** | **Pulchoki** | **58.66** | **275** | *e*P | | **P** | **07 40 58.6** | **-1.0** |
| | comp=Z,6.4nm,0.4s | | | | | | | |
| **DANN** | **Dangsing** | **59.06** | **277** | *e*P | | **P** | **07 41 02.3** | **0.0** |
| | comp=Z,6.5nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **59.13** | **336** | P | | **P** | **07 41 01.8** | **-0.1** |
| | comp=Z,2.9nm,0.9s,baz=39,slow=7.5,SNR=20 | | | | | | | |
| **KOLN** | **Koldanda** | **59.58** | **276** | *e*P | | **P** | **07 41 05.6** | **-0.2** |
| **PYUN** | **Piuthan** | **59.70** | **277** | *e*P | | **P** | **07 41 06.4** | **-0.1** |
| | comp=Z,9.5nm,0.3s | | | | | | | |
| **NIL** | **Nilore** | **61.21** | **288** | P | | **P** | **07 41 16.3** | **-0.2** |
| NIL | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **NIL** | **Nilore** | **61.21** | **288** | P | | **P** | **07 41 16.3** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **62.60** | **343** | P | | **P** | **07 41 24.9** | **-0.5** |
| | comp=Z,0.8nm,0.5s,baz=29,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **62.60** | **343** | P | | **P** | **07 41 25.1** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=28,slow=6.0,SNR=5.0 | | | | | | | |
| **HFS** | **Hagfors** | **63.00** | **341** | P | | **P** | **07 41 26.9** | **-1.0** |
| | comp=Z,1.0nm,0.6s,baz=95,slow=1.6,SNR=5.8 | | | | | | | |
| **SCHQ** | **Schefferville** | **65.28** | **27** | LR | | LR | 08 13 38.9 | |
| | comp=Z,121nm,18.6s,baz=260,slow=39 | | | | | | | |
| **AKASG** | **Malin Array Be** | **67.59** | **328** | P | | **P** | **07 41 55.9** | **-1.7** |
| | comp=Z,0.6nm,0.3s,baz=29,slow=6.9,SNR=6.1 | | | | | | | |
| **KBZ** | **Khabaz** | **68.50** | **316** | P | | **P** | **07 42 02.6** | **-0.7** |
| | comp=Z,3.2nm,0.9s,baz=69,slow=10,SNR=4.5 | | | | | | | |
| **CLL** | **Collm** | **71.38** | **338** | *i* P | | **P** | **07 42 20.4** | **-0.4** |
| **MLR** | **Muntele Rosu** | **73.22** | **327** | P | | **P** | **07 42 32.4** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=297,slow=11,SNR=3.6 | | | | | | | |
| **MLR** | **Muntele Rosu** | **73.22** | **327** | P | | **P** | **07 42 33.0** | **+1.0** |
| MLR | | | | pmax | | pmax | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,24µm,0.6s | | | | | | | | |
| **SII** | **Sitkinak Islan** | **1.34** | **95** | P | | **Pn** | **07 34 11.1** | **-0.1** |
| | baz=274,SNR=246 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **1.34** | **95** | P | | **Pn** | **07 34 11.3** | **+0.1** |
| **VNHG** | **Veniaminof 1** | **1.51** | **252** | | | **Pn** | **07 34 15.7** | **+2.2** |
| **CAHL** | **Cahill** | **1.52** | **27** | | | **Pn** | **07 34 15.7** | **+2.0** |
| **ANCK** | **Angle Creek** | **1.61** | **21** | | | **Pn** | **07 34 17.1** | **+2.2** |
| **ACHA** | **Angle Creek He** | **1.66** | **24** | | | **Pn** | **07 34 17.7** | **+2.1** |
| ACHA | | | | | | **Sn** | **07 34 37.1** | **+1.2** |
| **VNFG** | **Fog Glacier, M** | **1.70** | **257** | | | **Pn** | **07 34 18.3** | **+2.2** |
| **KELA** | **Mount Kelaz** | **1.80** | **14** | | | **Pn** | **07 34 19.6** | **+2.1** |
| **KDAK** | **Kodiak Island** | **2.43** | **62** | P | | **Pn** | **07 34 26.1** | **+0.1** |
| | comp=E,533nm,0.3s,baz=205,slow=4.4,SNR=5620 | | | | | | | | |
| KDAK | | | | S | | **Sn** | **07 34 53.1** | **-1.4** |
| | comp=E,217nm,0.3s,baz=275,slow=9.9,SNR=10 | | | | | | | | |
| KDAK | | | | LR | | LR | 07 35 27.5 | | |
| | comp=E,594nm,20.0s,baz=292,slow=41 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.43** | **62** | P | | **Pn** | **07 34 26.4** | **+0.4** |
| **KDAK** | **Kodiak Island** | **2.43** | **62** | | | **Pn** | **07 34 26.4** | **+0.4** |
| **KDAK** | **Kodiak Island** | **2.43** | **62** | IAML | | | 07 34 54.4 | | |
| | comp=E,5µm,0.5s | | | | | | | | |
| KDAK | | | | IAML | | | 07 34 55.1 | | |
| | comp=E,2µm,0.5s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.43** | **62** | P | | **Pn** | **07 34 26.4** | **+0.4** |
| | baz=242 | | | | | | | | |
| **CHNA** | **Chernabura Isl** | **2.53** | **223** | P | | **Pn** | **07 34 27.1** | **-0.2** |
| | baz=44,SNR=29 | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **2.54** | **223** | | | **Pn** | **07 34 27.2** | **-0.2** |
| CNBA | | | | | | **Sn** | **07 34 57.6** | **+0.5** |
| **SDPT** | **Sand Point** | **2.57** | **240** | Pn | | **Pn** | **07 34 29.1** | **+1.3** |
| SDPT | | | | IAML | | | 07 35 04.7 | | |
| | comp=N,2µm,0.9s | | | | | | | | |
| SDPT | | | | IAML | | | 07 35 05.1 | | |
| | comp=E,3µm,0.7s | | | | | | | | |
| **SDPT** | **Sand Point** | **2.57** | **240** | P | | **Pn** | **07 34 29.1** | **+1.3** |
| | baz=59,SNR=108 | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **2.73** | **34** | | | **Pn** | **07 34 31.6** | **+1.5** |
| Q19K | | | | IAML | | | 07 35 11.9 | | |
| | comp=N,2µm,0.8s | | | | | | | | |
| Q19K | | | | IAML | | | 07 35 20.0 | | |
| | comp=E,3µm,0.9s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **2.73** | **34** | P | | **Pn** | **07 34 31.6** | **+1.5** |
| | baz=214,SNR=21 | | | | | | | | |
| **P18K** | **Big Mountain,** | **2.79** | **14** | | | **Pn** | **07 34 32.6** | **+1.7** |
| **P18K** | **Big Mountain,** | **2.79** | **14** | P | | **Pn** | **07 34 32.8** | **+1.9** |
| | baz=193 | | | | | | | | |
| **AUQ** | **Augustine Qik'** | **3.15** | **31** | | | **Pn** | **07 34 38.1** | **+2.3** |
| **PS1A** | **Pavlof South-1** | **3.16** | **248** | | | **Pn** | **07 34 38.3** | **+2.4** |
| **AUL** | **Augustine Lava** | **3.17** | **31** | | | **Pn** | **07 34 38.6** | **+2.6** |
| **PVV** | **Pavlof Volcano** | **3.21** | **248** | | | **Pn** | **07 34 38.7** | **+2.1** |
| **BLHA** | **Black Hill** | **3.22** | **254** | | | **Pn** | **07 34 38.5** | **+1.8** |
| **O18K** | **Koktuh Hills** | **3.24** | **12** | | | **Pn** | **07 34 39.4** | **+2.3** |
| **O18K** | **Koktuh Hills** | **3.24** | **12** | P | | **Pn** | **07 34 39.1** | **+2.0** |
| | baz=192,SNR=43 | | | | | | | | |
| **PS4A** | **Pavlof South-4** | **3.25** | **247** | | | **Pn** | **07 34 39.2** | **+2.0** |
| **HAG** | **Hague Volcano** | **3.29** | **247** | P | | **Pn** | **07 34 39.8** | **+2.1** |
| **HAG** | **Hague Volcano** | **3.29** | **247** | | | **Pn** | **07 34 39.8** | **+2.1** |
| **O19K** | **Port Alsworth** | **3.70** | **18** | | | **Pn** | **07 34 45.6** | **+2.3** |
| O19K | | | | IAML | | | 07 35 46.7 | | |
| | comp=N,2µm,0.5s | | | | | | | | |
| **O19K** | **Port Alsworth** | **3.70** | **18** | P | | **Pn** | **07 34 45.5** | **+2.2** |
| | baz=198,SNR=48 | | | | | | | | |
| **BALA** | **Baldy Mountain** | **3.80** | **249** | | | **Pn** | **07 34 47.0** | **+2.4** |
| **HOM** | **Homer** | **3.95** | **39** | | | **Pn** | **07 34 48.3** | **+1.5** |
| **HOM** | **Homer** | **3.95** | **39** | P | | **Pn** | **07 34 48.4** | **+1.6** |
| | baz=222 | | | | | | | | |
| **O20K** | **Slope Mountain** | **3.98** | **30** | | | **Pn** | **07 34 49.4** | **+2.2** |
| **O20K** | **Slope Mountain** | **3.98** | **30** | P | | **Pn** | **07 34 49.4** | **+2.2** |
| | baz=212,SNR=14 | | | | | | | | |
| **CNPM** | **China Poot** | **4.01** | **43** | | | **Pn** | **07 34 48.5** | **+1.0** |
| **CNPM** | **China Poot** | **4.01** | **43** | IAML | | | 07 35 38.1 | | |
| | comp=E,617nm,0.5s | | | | | | | | |
| CNPM | | | | IAML | | | 07 35 47.5 | | |
| | comp=N,660nm,0.7s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **4.27** | **14** | | | **Pn** | **07 34 53.7** | **+2.6** |
| N19K | | | | IAML | | | 07 35 58.0 | | |
| | comp=N,512nm,0.6s | | | | | | | | |
| N19K | | | | IAML | | | 07 36 23.7 | | |
| | comp=E,443nm,1.0s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **4.27** | **14** | P | | **Pn** | **07 34 53.6** | **+2.5** |
| | baz=194 | | | | | | | | |
| **RSO** | **Redoubt South** | **4.27** | **26** | | | **Pn** | **07 34 53.3** | **+2.0** |
| **FALS** | **False Pass** | **4.28** | **247** | | | **Pn** | **07 34 53.0** | **+1.8** |
| **FALS** | **False Pass** | **4.28** | **247** | P | | **Pn** | **07 34 52.8** | **+1.6** |
| | baz=63,SNR=18 | | | | | | | | |
| **FALS** | **False Pass** | **4.28** | **247** | P | | **Pn** | **07 34 53.2** | **+2.0** |
| **BRLK** | **Bradley Lake** | **4.30** | **42** | | | **Pn** | **07 34 51.8** | **+0.3** |
| BRLK | | | | IAML | | | 07 35 38.1 | | |
| | comp=N,902nm,0.4s | | | | | | | | |
| BRLK | | | | IAML | | | 07 35 39.6 | | |
| | comp=E,1µm,0.5s | | | | | | | | |
| **NCT** | **North Crescent** | **4.32** | **25** | | | **Pn** | **07 34 54.0** | **+2.2** |
| **BRSE** | **Bradley Lake S** | **4.34** | **43** | | | **Pn** | **07 34 52.6** | **+0.6** |
| **BRSE** | **Bradley Lake S** | **4.34** | **43** | P | | **Pn** | **07 34 52.6** | **+0.6** |
| | baz=226,SNR=38 | | | | | | | | |
| **DFR** | **Drift River** | **4.40** | **26** | | | **Pn** | **07 34 55.1** | **+2.1** |
| **RDT** | **Redoubt** | **4.46** | **28** | | | **Pn** | **07 34 55.6** | **+1.9** |
| **ISNN** | **Isanotski Nort** | **4.47** | **248** | | | **Pn** | **07 34 56.0** | **+2.1** |
| **ISLZ** | **Isanotski Laza** | **4.49** | **247** | | | **Pn** | **07 34 56.0** | **+1.9** |
| **BRPK** | **Brown Peak** | **4.54** | **246** | | | **Pn** | **07 34 56.7** | **+1.8** |
| **SSLN** | **Shishaldin Nor** | **4.59** | **249** | | | **Pn** | **07 34 57.5** | **+1.9** |
| **SSLS** | **Shishaldin Sou** | **4.64** | **248** | | | **Pn** | **07 34 58.1** | **+1.9** |
| **CAPN** | **Captain Cook N** | **4.96** | **33** | Pn | | **Pn** | **07 35 02.9** | **+2.4** |
| **CAPN** | **Captain Cook N** | **4.96** | **33** | P | | **Pn** | **07 35 03.4** | **+2.8** |
| | baz=216 | | | | | | | | |
| **CKT** | **Bend** | **5.05** | **25** | | | **Pn** | **07 35 03.7** | **+1.9** |
| **WESE** | **West Dahl East** | **5.06** | **247** | | | **Pn** | **07 35 04.4** | **+2.4** |
| **SLKM** | **Skilak Lake** | **5.06** | **38** | | | **Pn** | **07 35 02.5** | **+0.5** |
| **SPU** | **Mount Spurr** | **5.07** | **26** | | | **Pn** | **07 35 04.0** | **+2.0** |
| **SEW** | **Seward** | **5.07** | **45** | | | **Pn** | **07 35 01.6** | **-0.4** |
| **SEW** | **Seward** | **5.07** | **45** | P | | **Pn** | **07 35 01.6** | **-0.4** |
| | baz=229,SNR=12 | | | | | | | | |
| **SPCN** | **Chakachatna No** | **5.08** | **25** | | | **Pn** | **07 35 04.0** | **+1.8** |
| **SPNN** | **North Nagishla** | **5.09** | **22** | | | **Pn** | **07 35 04.8** | **+2.3** |
| **WECS** | **Westdahl Cape** | **5.13** | **248** | | | **Pn** | **07 35 04.8** | **+1.9** |
| **SPCG** | **Spurr Capps Gl** | **5.17** | **25** | | | **Pn** | **07 35 05.6** | **+2.0** |
| **O22K** | **Cooper Landing** | **5.22** | **41** | | | **Pn** | **07 35 04.5** | **+0.5** |
| **O22K** | **Cooper Landing** | **5.22** | **41** | P | | **Pn** | **07 35 04.5** | **+0.5** |
| | baz=225,SNR=15 | | | | | | | | |
| **M19K** | **Big River Lodg** | **5.34** | **11** | Pn | | **Pn** | **07 35 08.2** | **+2.5** |
| **M19K** | **Big River Lodg** | **5.34** | **11** | P | | **Pn** | **07 35 08.1** | **+2.3** |
| | baz=192,SNR=70 | | | | | | | | |
| **STLK** | **Strandline Lak** | **5.40** | **25** | | | **Pn** | **07 35 08.2** | **+1.6** |
| **L19K** | **White Mountain** | **5.57** | **8** | | | **Pn** | **07 35 11.2** | **+2.3** |
| **L19K** | **White Mountain** | **5.57** | **8** | P | | **Pn** | **07 35 11.1** | **+2.2** |
| | baz=189,SNR=108 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **5.65** | **36** | | | **Pn** | **07 35 10.6** | **+0.6** |
| **RC01** | **Rabbit Creek A** | **5.65** | **36** | P | | **Pn** | **07 35 10.6** | **+0.6** |
| | baz=221,SNR=13 | | | | | | | | |
| **AKSA** | **Akutan Strait** | **5.79** | **247** | | | **Pn** | **07 35 14.1** | **+2.1** |
| **AKSA** | **Akutan Strait** | **5.79** | **247** | | | **Pn** | **07 35 14.0** | **+2.1** |
| **AKGG** | **Akutan Green G** | **5.91** | **249** | | | **Pn** | **07 35 15.3** | **+1.7** |
| **L20K** | **Farewell, AK** | **5.96** | **12** | | | **Pn** | **07 35 16.5** | **+2.3** |
| **L20K** | **Farewell, AK** | **5.96** | **12** | P | | **Pn** | **07 35 16.8** | **+2.6** |
| | baz=194,SNR=19 | | | | | | | | |
| **ZRO** | **Akutan Zero** | **5.96** | **248** | | | **Pn** | **07 35 16.0** | **+1.8** |
| **AKMO** | **Akutan Morgan** | **5.97** | **248** | | | **Pn** | **07 35 16.4** | **+2.0** |
| **PWL** | **Port Wells** | **5.98** | **42** | | | **Pn** | **07 35 14.3** | **-0.2** |
| **PWL** | **Port Wells** | **5.98** | **42** | P | | **Pn** | **07 35 14.3** | **-0.2** |
| | baz=228,SNR=82 | | | | | | | | |
| **M22K** | **Willow** | **6.05** | **31** | | | **Pn** | **07 35 16.7** | **+1.3** |
| **M22K** | **Willow** | **6.05** | **31** | P | | **Pn** | **07 35 16.5** | **+1.1** |
| | baz=215,SNR=15 | | | | | | | | |
| **Q23K** | **Middleton Isla** | **6.08** | **59** | Pn | | **Pn** | **07 35 16.4** | **+0.5** |
| **Q23K** | **Middleton Isla** | **6.08** | **59** | P | | **Pn** | **07 35 16.4** | **+0.5** |
| | baz=247 | | | | | | | | |
| **PMR** | **Palmer** | **6.22** | **35** | P | | **Pn** | **07 35 17.9** | **+0.1** |
| **PMR** | **Palmer** | **6.22** | **35** | | | **Pn** | **07 35 17.9** | **+0.1** |
| **PMR** | **Palmer** | **6.22** | **35** | P | | **Pn** | **07 35 17.9** | **+0.1** |
| | baz=220,SNR=10 | | | | | | | | |
| **TT01** | **Tatalina** | **6.23** | **2** | | | **Pn** | **07 35 20.1** | **+2.1** |
| **TTA** | **Tatalina** | **6.25** | **2** | P | | **Pn** | **07 35 20.2** | **+1.9** |
| **TTA** | **Tatalina** | **6.25** | **2** | Pn | | **Pn** | **07 35 20.2** | **+1.9** |
| **TTA** | **Tatalina** | **6.25** | **2** | P | | **Pn** | **07 35 20.2** | **+1.9** |
| | baz=182,SNR=52 | | | | | | | | |
| **KNK** | **Knik Glacier** | **6.31** | **38** | | | **Pn** | **07 35 19.0** | **-0.1** |
| **KNK** | **Knik Glacier** | **6.31** | **38** | P | | **Pn** | **07 35 19.0** | **-0.1** |
| | baz=224,SNR=12 | | | | | | | | |
| **UNV** | **Unalaska Valle** | **6.35** | **247** | Pn | | **Pn** | **07 35 20.9** | **+1.4** |
| **UNV** | **Unalaska Valle** | **6.35** | **247** | P | | **Pn** | **07 35 19.9** | **+0.4** |
| | baz=60 | | | | | | | | |
| **UNV** | **Unalaska Valle** | **6.35** | **247** | P | | **Pn** | **07 35 20.4** | **+0.9** |
| **MTBL** | **Makushin Table** | **6.38** | **249** | | | **Pn** | **07 35 21.5** | **+1.5** |
| **GHO** | **Glory Hole Cre** | **6.42** | **35** | | | **Pn** | **07 35 21.1** | **+0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MSW** | **Makushin Switc** | **6.46** | **249** | | | **Pn** | **07 35 22.8** | **+1.7** |
| **GLI** | **Glacier Island** | **6.47** | **46** | Pn | | **Pn** | **07 35 20.1** | **-1.1** |
| **GLI** | **Glacier Island** | **6.47** | **46** | P | | **Pn** | **07 35 20.1** | **-1.1** |
| | baz=233,SNR=8.1 | | | | | | | | |
| **MREP** | **Makushin Rep't** | **6.49** | **248** | | | **Pn** | **07 35 23.5** | **+2.0** |
| **CUT** | **Chulitna** | **6.56** | **27** | | | **Pn** | **07 35 23.7** | **+1.3** |
| **CUT** | **Chulitna** | **6.56** | **27** | P | | **Pn** | **07 35 23.6** | **+1.3** |
| | baz=211,SNR=11 | | | | | | | | |
| **PPLA** | **Purkeypile** | **6.60** | **18** | | | **Pn** | **07 35 25.4** | **+2.4** |
| **PPLA** | **Purkeypile** | **6.60** | **18** | P | | **Pn** | **07 35 26.1** | **+3.0** |
| | baz=201,SNR=11 | | | | | | | | |
| **SML** | **Sawmill** | **6.64** | **36** | P | | **Pn** | **07 35 24.1** | **+0.5** |
| **SML** | **Sawmill** | **6.64** | **36** | Pn | | **Pn** | **07 35 24.1** | **+0.5** |
| **SML** | **Sawmill** | **6.64** | **36** | P | | **Pn** | **07 35 23.7** | **+0.1** |
| | baz=222,SNR=8.3 | | | | | | | | |
| **JPK** | **Jack Peak** | **6.77** | **46** | | | **Pn** | **07 35 25.2** | **-0.2** |
| **K20K** | **Telida** | **6.79** | **10** | | | **Pn** | **07 35 27.6** | **+2.0** |
| **K20K** | **Telida** | **6.79** | **10** | P | | **Pn** | **07 35 27.9** | **+2.2** |
| | baz=191 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **6.84** | **51** | | | **Pn** | **07 35 25.9** | **-0.4** |
| **EYAK** | **Cordova Ski Ar** | **6.84** | **51** | P | | **Pn** | **07 35 25.7** | **-0.6** |
| | baz=238,SNR=25 | | | | | | | | |
| **VMT** | **TAPS Tl Valdez** | **6.88** | **46** | | | **Pn** | **07 35 27.1** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **7.00** | **39** | P | | **Pn** | **07 35 29.0** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **7.00** | **39** | Pn | | **Pn** | **07 35 29.0** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **7.00** | **39** | P | | **Pn** | **07 35 28.6** | **+0.2** |
| | baz=226,SNR=28 | | | | | | | | |
| **CAST** | **Castle Rocks** | **7.10** | **17** | Pn | | **Pn** | **07 35 32.4** | **+2.5** |
| **CAST** | **Castle Rocks** | **7.10** | **17** | P | | **Pn** | **07 35 32.0** | **+2.1** |
| | baz=200,SNR=41 | | | | | | | | |
| **DIV** | **Divide** | **7.14** | **47** | Pn | | **Pn** | **07 35 30.1** | **-0.4** |
| **KAIM** | **Kayak Island** | **7.18** | **58** | Pn | | **Pn** | **07 35 31.9** | **+1.1** |
| **KAIM** | **Kayak Island** | **7.18** | **58** | P | | **Pn** | **07 35 31.9** | **+1.1** |
| | baz=248,SNR=8.0 | | | | | | | | |
| **OKFG** | **Magazine Ridge** | **7.29** | **248** | | | **Pn** | **07 35 33.5** | **+1.0** |
| **KLU** | **Klutina** | **7.29** | **44** | | | **Pn** | **07 35 32.4** | **-0.2** |
| **KLU** | **Klutina** | **7.29** | **44** | P | | **Pn** | **07 35 32.3** | **-0.2** |
| | baz=232,SNR=100 | | | | | | | | |
| **GOAT** | **Goat Mountain** | **7.31** | **53** | | | **Pn** | **07 35 32.6** | **-0.1** |
| **WAT6** | **Susitna Watana** | **7.40** | **34** | | | **Pn** | **07 35 33.7** | **-0.4** |
| **WAT6** | **Susitna Watana** | **7.40** | **34** | P | | **Pn** | **07 35 33.7** | **-0.4** |
| | baz=220,SNR=11 | | | | | | | | |
| **HMT** | **Hamilton** | **7.41** | **55** | | | **Pn** | **07 35 33.9** | **-0.1** |
| **KTH** | **Kantishna Hill** | **7.43** | **20** | | | **Pn** | **07 35 35.5** | **+1.1** |
| **TRF** | **Thorofare Moun** | **7.46** | **22** | Pn | | **Pn** | **07 35 36.5** | **+1.6** |
| **TRF** | **Thorofare Moun** | **7.46** | **22** | P | | **Pn** | **07 35 35.2** | **+0.3** |
| | baz=241,SNR=14 | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.49** | **279** | | | **Pn** | **07 35 38.5** | **+3.4** |
| **SPIA** | **Saint Paul Isl** | **7.49** | **279** | P | | **Pn** | **07 35 38.7** | **+3.6** |
| | baz=88 | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.49** | **279** | P | | **Pn** | **07 35 39.3** | **+4.2** |
| **NICHA** | **Nichawak Mount** | **7.50** | **57** | | | **Pn** | **07 35 35.2** | **-0.2** |
| **CHUM** | **Lake Minchumin** | **7.51** | **15** | | | **Pn** | **07 35 37.6** | **+2.2** |
| **CHUM** | **Lake Minchumin** | **7.51** | **15** | P | | **Pn** | **07 35 38.2** | **+2.8** |
| | baz=198,SNR=25 | | | | | | | | |
| **SUCK** | **Suckling Hills** | **7.53** | **58** | Pn | | **Pn** | **07 35 37.5** | **+1.7** |
| **BMRM** | **Bremner River** | **7.54** | **51** | | | **Pn** | **07 35 35.5** | **-0.4** |
| **BMRM** | **Bremner River** | **7.54** | **51** | P | | **Pn** | **07 35 35.4** | **-0.5** |
| | baz=240,SNR=20 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **7.58** | **40** | Pn | | **Pn** | **07 35 37.2** | **+0.7** |
| **M24K** | **Tolsona, Glenn** | **7.58** | **40** | P | | **Pn** | **07 35 36.7** | **+0.2** |
| | baz=228,SNR=20 | | | | | | | | |
| **PS12** | **TAPS Pump St12** | **7.59** | **46** | | | **Pn** | **07 35 36.7** | **+0.2** |
| **J20K** | **Nowinta River** | **7.59** | **8** | | | **Pn** | **07 35 38.5** | **+2.0** |
| **J20K** | **Nowinta River** | **7.59** | **8** | P | | **Pn** | **07 35 38.6** | **+2.0** |
| | baz=189 | | | | | | | | |
| **BERG** | **Berg Lake** | **7.69** | **56** | | | **Pn** | **07 35 37.3** | **-0.5** |
| **RND** | **Reindeer** | **7.75** | **27** | P | | **Pn** | **07 35 38.6** | **-0.2** |
| **RND** | **Reindeer** | **7.75** | **27** | Pn | | **Pn** | **07 35 38.6** | **-0.2** |
| **GRIN** | **Grindle Hills** | **7.82** | **57** | | | **Pn** | **07 35 39.6** | **-0.1** |
| **PS11** | **TAPS Pump St11** | **7.82** | **42** | | | **Pn** | **07 35 40.3** | **+0.7** |
| **N25K** | **Chitina, Valde** | **7.88** | **46** | Pn | | **Pn** | **07 35 40.6** | **+0.1** |
| **N25K** | **Chitina, Valde** | **7.88** | **46** | P | | **Pn** | **07 35 40.6** | **+0.1** |
| | baz=236,SNR=17 | | | | | | | | |
| **DHY** | **Denali Highway** | **7.89** | **32** | Pn | | **Pn** | **07 35 40.3** | **-0.4** |
| **DHY** | **Denali Highway** | **7.89** | **32** | P | | **Pn** | **07 35 40.3** | **-0.4** |
| | baz=219,SNR=6.3 | | | | | | | | |
| **KHIT** | **Khitrov Hills** | **7.91** | **56** | | | **Pn** | **07 35 40.7** | **-0.4** |
| **BPAW** | **Bear Paw Mtn.** | **7.92** | **18** | Pn | | **Pn** | **07 35 42.0** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | **7.92** | **18** | P | | **Pn** | **07 35 41.7** | **+0.7** |
| | baz=202,SNR=13 | | | | | | | | |
| **NIKH** | **Nikolski High** | **8.01** | **247** | Pn | | **Pn** | **07 35 43.3** | **+1.1** |
| **NIKH** | **Nikolski High** | **8.01** | **247** | P | | **Pn** | **07 35 43.2** | **+1.1** |
| | baz=58 | | | | | | | | |
| **MCK** | **McKinley** | **8.01** | **25** | P | | **Pn** | **07 35 42.6** | **+0.3** |
| **MCK** | **McKinley** | **8.01** | **25** | | | **Pn** | **07 35 42.5** | **+0.3** |
| **MCK** | **McKinley** | **8.01** | **25** | P | | **Pn** | **07 35 42.3** | **0.0** |
| | baz=211 | | | | | | | | |
| **SNH** | **Sunshine Point** | **8.01** | **59** | Pn | | **Pn** | **07 35 42.6** | **+0.3** |
| **GCSA** | **Galena City Sc** | **8.07** | **359** | | | **Pn** | **07 35 45.1** | **+2.0** |
| **GCSA** | **Galena City Sc** | **8.07** | **359** | P | | **Pn** | **07 35 45.4** | **+2.3** |
| | baz=178,SNR=41 | | | | | | | | |
| **WAX** | **Waxell Ridge** | **8.10** | **57** | | | **Pn** | **07 35 43.2** | **-0.4** |
| **GLB** | **Gilahina Butte** | **8.11** | **49** | | | **Pn** | **07 35 43.7** | **0.0** |
| **HARP** | **HAARP** | **8.14** | **41** | | | **Pn** | **07 35 44.8** | **+0.8** |
| **HARP** | **HAARP** | **8.14** | **41** | P | | **Pn** | **07 35 45.0** | **+0.9** |
| | baz=230,SNR=26 | | | | | | | | |
| **VRDI** | **Verde Repeater** | **8.16** | **51** | Pn | | **Pn** | **07 35 44.3** | **-0.2** |
| **BWN** | **Browne** | **8.27** | **22** | Pn | | **Pn** | **07 35 45.9** | **+0.1** |
| **ISLE** | **Juniper Island** | **8.39** | **56** | Pn | | **Pn** | **07 35 47.9** | **+0.3** |
| **PAX** | **Paxson** | **8.41** | **37** | P | | **Pn** | **07 35 47.8** | **0.0** |
| **PAX** | **Paxson** | **8.41** | **37** | | | **Pn** | **07 35 47.8** | **0.0** |
| **PAX** | **Paxson** | **8.41** | **37** | P | | **Pn** | **07 35 48.5** | **+0.7** |
| | baz=226,SNR=38 | | | | | | | | |
| **MESA** | **MESA** | **8.43** | **60** | Pn | | **Pn** | **07 35 48.0** | **-0.1** |
| **MESA** | **MESA** | **8.43** | **60** | P | | **Pn** | **07 35 48.2** | **+0.1** |
| | baz=251,SNR=11 | | | | | | | | |
| **BAGL** | **Bagley Icefiel** | **8.46** | **57** | | | **Pn** | **07 35 48.5** | **+0.1** |
| **KIAG** | **Kiagna River** | **8.51** | **54** | | | **Pn** | **07 35 48.5** | **-0.7** |
| **BALM** | **Baldy** | **8.56** | **54** | | | **Pn** | **07 35 49.5** | **-0.3** |
| **YAH** | **Yahtse** | **8.58** | **59** | | | **Pn** | **07 35 50.0** | **-0.3** |
| **PS10** | **TAPS Pump St10** | **8.63** | **34** | | | **Pn** | **07 35 51.2** | **+0.4** |
| **NEA2** | **Nenana** | **8.73** | **22** | | | **Pn** | **07 35 51.3** | **-0.7** |
| **NEA2** | **Nenana** | **8.73** | **22** | P | | **Pn** | **07 35 51.2** | **-0.9** |
| | baz=208,SNR=14 | | | | | | | | |
| **I21K** | **Tanana** | **8.79** | **13** | | | **Pn** | **07 35 54.5** | **+1.6** |
| **I21K** | **Tanana** | **8.79** | **13** | P | | **Pn** | **07 35 54.5** | **+1.6** |
| | baz=196 | | | | | | | | |
| **MLY** | **Manley** | **8.82** | **16** | | | **Pn** | **07 35 54.6** | **+1.1** |
| **MLY** | **Manley** | **8.82** | **16** | P | | **Pn** | **07 35 53.8** | **+0.4** |
| | baz=201 | | | | | | | | |
| **WRH** | **Wood River Hil** | **8.84** | **25** | | | **Pn** | **07 35 52.4** | **-1.1** |
| **BARN** | **Barnard Glacie** | **8.87** | **54** | | | **Pn** | **07 35 54.2** | **0.0** |
| **TABL** | **Table Mountain** | **8.89** | **59** | | | **Pn** | **07 35 54.5** | **0.0** |
| **M26K** | **Nabesna, AK** | **8.95** | **45** | | | **Pn** | **07 35 55.7** | **+0.6** |
| **M26K** | **Nabesna, AK** | **8.95** | **45** | P | | **Pn** | **07 35 55.4** | **+0.3** |
| | baz=236 | | | | | | | | |
| **SAMH** | **Samovar Hills** | **8.97** | **61** | | | **Pn** | **07 35 55.4** | **-0.2** |
| **ANM** | **Nome** | **8.98** | **335** | P | | **Pn** | **07 35 58.4** | **+2.9** |
| **ANM** | **Nome** | **8.98** | **335** | | | **Pn** | **07 35 58.4** | **+2.9** |
| **ANM** | **Nome** | **8.98** | **335** | P | | **Pn** | **07 35 59.0** | **+3.5** |
| | baz=147 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **9.05** | **25** | Pn | | **Pn** | **07 35 55.1** | **-1.4** |
| **HDA** | **Harding Lake** | **9.06** | **28** | | | **Pn** | **07 35 55.8** | **-0.8** |
| **HDA** | **Harding Lake** | **9.06** | **28** | P | | **Pn** | **07 35 55.8** | **-0.8** |
| | baz=215,SNR=20 | | | | | | | | |
| **RIDG** | **Independent Ri** | **9.15** | **35** | | | **Pn** | **07 35 58.5** | **+0.6** |
| **RIDG** | **Independent Ri** | **9.15** | **35** | P | | **Pn** | **07 35 58.2** | **+0.3** |
| | baz=224,SNR=23 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **9.17** | **10** | | | **Pn** | **07 35 59.8** | **+1.8** |
| **H21K** | **Melozitna Rive** | **9.17** | **10** | P | | **Pn** | **07 36 00.3** | **+2.3** |
| | baz=192 | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **9.17** | **19** | | | **Pn** | **07 35 57.9** | **-0.2** |
| **I23K** | **Minto, Yukon-K** | **9.17** | **19** | P | | **Pn** | **07 35 57.7** | **-0.3** |
| | baz=205,SNR=21 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **9.18** | **41** | | | **Pn** | **07 35 59.8** | **+1.5** |
| **L26K** | **Log Cabin Wild** | **9.18** | **41** | P | | **Pn** | **07 35 59.5** | **+1.2** |
| | baz=232,SNR=86 | | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **9.20** | **27** | | | **Pn** | **07 35 57.9** | **-0.6** |
| **PCA** | **Pinnacle** | **9.22** | **62** | | | **Pn** | **07 35 59.1** | **+0.3** |
| **PINM** | **Pinnacle** | **9.22** | **62** | P | | **Pn** | **07 35 58.7** | **-0.2** |
| | baz=255,SNR=15 | | | | | | | | |
| **MDM** | **Murphy Dome** | **9.22** | **23** | | | **Pn** | **07 35 58.4** | **-0.5** |
| **TCOL** | **CIGO, UAF Yank** | **9.23** | **24** | | | **Pn** | **07 35 58.2** | **-0.7** |
| **TCOL** | **CIGO, UAF Yank** | **9.23** | **24** | P | | **Pn** | **07 35 58.1** | **-0.8** |
| | baz=211,SNR=14 | | | | | | | | |
| **COLA** | **College** | **9.23** | **24** | *i* P | | **Pn** | **07 35 57.7** | **-1.2** |
| **COLA** | **College** | **9.23** | **24** | | | **Pn** | **07 35 58.2** | **-0.7** |
| **DOT** | **Dot Lake** | **9.34** | **37** | | | **Pn** | **07 36 00.7** | **+0.3** |
| **M27K** | **Edge Creek, AK** | **9.37** | **47** | | | **Pn** | **07 36 01.0** | **0.0** |
| **M27K** | **Edge Creek, AK** | **9.37** | **47** | P | | **Pn** | **07 36 01.2** | **+0.3** |
| | baz=239 | | | | | | | | |
| **IL31** | | **9.37** | **26** | | | **Pn** | **07 35 59.7** | **-1.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **9.37** | **26** | P | | **Pn** | **07 35 59.3** | **-1.6** |
| | comp=E,2.8nm,0.3s,baz=215,slow=13,SNR=98 | | | | | | | | |
| ILAR | | | | S | | **Sn** | **07 37 37.3** | **-7.3** |
| | comp=E,3.7nm,0.3s,baz=229,slow=17,SNR=4.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **9.37** | **26** | P | | **Pn** | **07 35 59.9** | **-1.0** |
| **ILAR** | **Eielson Array** | **9.37** | **26** | Pn | | **Pn** | **07 35 59.9** | **-1.0** |
| **IMAR** | **Indian Mountai** | **9.41** | **7** | | | **Pn** | **07 36 03.3** | **+1.9** |
| **BCPM** | **Bancas Point** | **9.49** | **63** | | | **Pn** | **07 36 02.7** | **+0.2** |
| **POKR** | **Poker Plat Res** | **9.53** | **24** | | | **Pn** | **07 36 01.7** | **-1.4** |
| **POKR** | **Poker Plat Res** | **9.53** | **24** | P | | **Pn** | **07 36 02.3** | **-0.8** |
| | baz=211,SNR=12 | | | | | | | | |
| **PNL** | **Peninsula** | **9.55** | **65** | | | **Pn** | **07 36 02.7** | **-0.6** |
| **PNL** | **Peninsula** | **9.55** | **65** | P | | **Pn** | **07 36 02.9** | **-0.5** |
| | baz=259,SNR=16 | | | | | | | | |
| **SCRK** | **Sand Creek** | **9.59** | **35** | | | **Pn** | **07 36 03.1** | **-0.8** |
| **SCRK** | **Sand Creek** | **9.59** | **35** | P | | **Pn** | **07 36 03.4** | **-0.5** |
| | baz=226,SNR=7.2 | | | | | | | | |
| **J25K** | **Salcha River,** | **9.64** | **30** | | | **Pn** | **07 36 04.2** | **-0.4** |
| **J25K** | **Salcha River,** | **9.64** | **30** | P | | **Pn** | **07 36 03.3** | **-1.3** |
| | baz=219,SNR=47 | | | | | | | | |
| **YUK3** | **Moose Creek** | **9.69** | **52** | P | | **Pn** | **07 36 06.2** | **+0.8** |
| | baz=245,SNR=88 | | | | | | | | |
| **H23K** | **Yukon River** | **9.75** | **17** | | | **Pn** | **07 36 06.6** | **+0.5** |
| **H23K** | **Yukon River** | **9.75** | **17** | P | | **Pn** | **07 36 06.6** | **+0.5** |
| | baz=203 | | | | | | | | |
| **L27K** | **Beaver Creek,** | **9.76** | **43** | | | **Pn** | **07 36 06.8** | **+0.5** |
| **L27K** | **Beaver Creek,** | **9.76** | **43** | P | | **Pn** | **07 36 06.5** | **+0.3** |
| | baz=235,SNR=22 | | | | | | | | |
| **BC03** | | **9.78** | **43** | | | **Pn**

comp=Z,22nm,0.9s
**DBO Dodson Butte 25.11 108** P **P** **07 39 10.3 +2.4**
DBO IAmb IAmb 07 39 32.4
comp=Z,46nm,1.4s
**NEW Newport 25.16 93** P **P** **07 39 09.2 +1.0**
comp=Z,18nm,0.9s,baz=308,slow=7.7,SNR=38
**NEW Newport 25.16 93** P **P** **07 39 10.0 +1.7**
NEW pmax pmax
comp=Z,21nm,0.9s
**NEW Newport 25.16 93** P **P** **07 39 10.0 +1.7**
NEW IAmb IAmb 07 39 10.6
comp=Z,21nm,0.9s
**NEW Newport 25.16 93** P **P** **07 39 09.7 +1.4**
baz=304
**HUMO Hull Mountain 25.62 109** P **P** **07 39 14.2 +1.8**
**J04D Umpqua Nationa 25.62 107** P **P** **07 39 13.0 +0.3**
J04D IAmb IAmb 07 39 34.3
comp=Z,61nm,1.2s
**J04D Umpqua Nationa 25.62 107** P **P** **07 39 15.8 +3.1**
baz=314
**E09A Wood Farm, Sta 25.63 97** P **P** **07 39 13.1 +0.6**
E09A IAmb IAmb 07 39 14.8
comp=Z,30nm,0.9s
**PET Petropavlovsk 25.67 281** *ij* P **P** **07 39 12.7 0.0**
PET pmax pmax
comp=Z,159nm,1.0s
**PET Petropavlovsk 25.67 281** P **P** **07 39 13.0 +0.3**
**SEY Seymchan 25.79 305** P **P** **07 39 12.8 -1.0**
comp=Z,17nm,0.7s,baz=92,slow=9.1,SNR=66
SEY PcP **PcP** **07 42 42.2 +0.6**
comp=Z,1.2nm,0.5s,baz=102,slow=3.6,SNR=4.0
**SEY Seymchan 25.79 305** *e*P **P** **07 39 12.9 -0.8**
**G08A Pilot Rock 25.95 100** P **P** **07 39 15.9 +0.4**
**J05D Fort Rock, OR 26.06 106** P **P** **07 39 19.2 +2.6**
baz=313,SNR=6.7
**PEA0B Petropavlovsk- 26.14 282** *ce*P **P** **07 39 16.6 -0.5**
**PEA0B Petropavlovsk- 26.14 282** P **P** **07 39 17.4 +0.3**
**PETK Petropavlovsk- 26.14 282** P **P** **07 39 15.9 -1.1**
comp=Z,16nm,0.5s,baz=75,slow=11,SNR=53
**PETK Petropavlovsk- 26.14 282** P **P** **07 39 16.4 -0.7**
**PETK Petropavlovsk- 26.14 282** P **P** **07 39 16.4 -0.7**
**L04D Klamath Falls 26.24 109** P **P** **07 39 20.4 +2.2**
baz=315
**YBH Yreka Blue Hor 26.38 110** P **P** **07 39 21.0 +1.6**
comp=Z,5.6nm,1.0s,baz=326,slow=3.0,SNR=6.3
**YBH Yreka Blue Hor 26.38 110** P **P** **07 39 21.0 +1.6**
**I07A Izee 26.44 103** P **P** **07 39 22.3 +2.3**
**F10A Beach Ranch, E 26.46 97** P **P** **07 39 21.2 +1.0**
**M02C Callahan 26.55 111** P **P** **07 39 23.0 +2.1**
**M02C Callahan 26.55 111** P **P** **07 39 23.5 +2.6**
baz=317
**M04C Macdoel 26.79 109** P **P** **07 39 25.7 +2.6**
M04C IAmb IAmb 07 39 26.6
comp=Z,22nm,1.0s
**M04C Macdoel 26.79 109** P **P** **07 39 25.8 +2.6**
baz=316,SNR=5.7
**N02D Trinity Center 26.93 111** P **P** **07 39 26.2 +1.9**
**N02D Trinity Center 26.93 111** P **P** **07 39 27.2 +2.8**
baz=317,SNR=5.4
**JTMT Jette 27.02 91** P **P** **07 39 26.5 +1.3**
**BMO Blue Mountains 27.13 99** P **P** **07 39 28.5 +2.4**
BMO pmax pmax
comp=Z,5.0nm,0.9s
**BMO Blue Mountains 27.13 99** P **P** **07 39 28.5 +2.4**
**WDC Whiskeytown Da 27.30 112** P **P** **07 39 29.2 +1.6**
WDC pmax pmax
comp=Z,8.0nm,1.0s
**WDC Whiskeytown Da 27.30 112** P **P** **07 39 29.1 +1.6**
**MA2 Magadan 27.33 298** *ce*P **P** **07 39 26.6 -1.1**
MA2 pmax pmax
comp=Z,20nm,1.0s
**MA2 Magadan 27.33 298** P **P** **07 39 27.6 -0.1**
MA2 IAmb IAmb 07 39 29.3
comp=Z,18nm,1.0s
**MOD Modoc Plateau 27.51 107** P **P** **07 39 31.4 +1.8**
**PLID Pearl Lake 27.69 97** P **P** **07 39 31.3 0.0**
**MSO Missoula 27.75 92** P **P** **07 39 32.3 +0.6**
**MSO Missoula 27.75 92** P **P** **07 39 32.4 +0.7**
baz=307,SNR=5.5
**WVOR Wild Horse Val 28.03 104** P **P** **07 39 36.4 +2.2**
WVOR pmax pmax
comp=Z,8.0nm,1.0s
**WVOR Wild Horse Val 28.03 104** P **P** **07 39 36.4 +2.2**
**ORV Oroville 28.60 112** P **P** **07 39 40.4 +1.2**
ORV pmax pmax
comp=Z,8.0nm,0.7s
**ORV Oroville 28.60 112** P **P** **07 39 40.4 +1.2**
**MFID Camas Ranch 28.88 100** P **P** **07 39 42.2 +0.5**
**BEKR Beckworth 28.95 110** P **P** **07 39 44.2 +1.7**
**HRY Holter Researc 28.98 91** P **P** **07 39 44.1 +1.5**
**RES Resolute Bay 29.11 29** P **P** **07 39 43.2 -0.1**
comp=Z,4.4nm,0.6s,baz=253,slow=11,SNR=18
**RES Resolute Bay 29.11 29** P **P** **07 39 43.5 +0.2**
RES pmax pmax
comp=Z,6.0nm,0.8s
**RES Resolute Bay 29.11 29** P **P** **07 39 43.5 +0.2**
**LRM Limekiln Ridge 29.18 93** P **P** **07 39 45.5 +0.9**
**EGMT Eagleton 29.36 87** P **P** **07 39 46.3 +0.3**
**EGMT Eagleton 29.36 87** P **P** **07 39 46.4 +0.5**
baz=305,SNR=8.1
**DLMT Dillon 29.39 94** P **P** **07 39 46.7 +0.4**
**HLID Hailey 29.55 98** P **P** **07 39 49.0 +1.3**
**HLID Hailey 29.55 98** P **P** **07 39 49.4 +1.7**
baz=311,SNR=13
**MPK Martis Peak 29.55 110** P **P** **07 39 49.6 +1.6**
MPK IAmb IAmb 07 39 50.4
comp=Z,14nm,0.7s
**PAHR Pah Rah Range 29.58 109** P **P** **07 39 49.5 +1.5**
PAHR IAmb IAmb 07 39 50.9
comp=Z,20nm,1.1s
**MCMT McKenzie Canyo 29.59 95** P **P** **07 39 49.4 +1.3**
**BCYI Bear Canyon 29.61 96** P **P** **07 39 49.5 +1.1**
**VCNR Virginia City 29.75 110** P **P** **07 39 49.3 -0.2**
**EMB Emerald Bay 29.75 111** P **P** **07 39 51.6 +1.9**
**BOZ Bozeman (W) 29.77 92** P **P** **07 39 50.4 +0.7**
BOZ pmax pmax
comp=Z,8.0nm,0.8s
**BOZ Bozeman (W) 29.77 92** P **P** **07 39 50.4 +0.7**
**PNTR Pine Nut 29.93 110** P **P** **07 39 53.2 +2.1**
PNTR IAmb IAmb 07 39 54.3
comp=Z,23nm,0.9s
**YERR Yerington 30.19 110** P **P** **07 39 54.6 +1.2**
YERR IAmb IAmb 07 39 56.5
comp=Z,17nm,1.0s
**CMB Columbia Colle 30.32 112** P **P** **07 39 55.7 +1.3**
CMB pmax pmax
comp=Z,11nm,1.5s
**CMB Columbia Colle 30.32 112** P **P** **07 39 55.7 +1.3**
**QLMT Earthquake Lak 30.36 94** P **P** **07 39 56.3 +1.3**
**YHH Holmes Hill 30.71 93** P **P** **07 39 58.4 +0.3**
YHH IAmb IAmb 07 40 00.5
comp=Z,22nm,0.8s
**YMR Madison River 30.72 93** P **P** **07 39 59.6 +1.4**
**KVN Kaiserville 30.73 109** P **P** **07 39 59.6 +1.3**
KVN pmax pmax
comp=Z,9.0nm,1.0s
**KVN Kaiserville 30.73 109** P **P** **07 39 59.6 +1.3**
**RYN Ryan 30.83 110** P **P** **07 40 00.7 +1.6**
**YNR Norris Junctio 30.85 93** P **P** **07 40 00.8 +1.4**
YNR IAmb IAmb 07 40 02.9
comp=Z,37nm,1.4s
**NVAR Mina Array Bea 31.09 110** P **P** **07 40 03.4 +1.9**
comp=Z,7.8nm,0.8s,baz=303,slow=8.6,SNR=60
NVAR pP **pP** **07 40 18.8 +2.9**
comp=Z,3.6nm,0.7s,baz=304,slow=9.0,SNR=8.2
NVAR PcP **PcP** **07 42 55.8 +0.2**
comp=Z,0.8nm,0.9s,baz=310,slow=2.7,SNR=4.4
NVAR pPcP 07 43 15.2
comp=Z,1.0nm,0.8s,baz=303,slow=1.6,SNR=4.2
**NVAR Mina Array Bea 31.09 110** P **P** **07 40 02.4 +1.0**
**LKWY Lake 31.10 93** P **P** **07 40 02.8 +1.3**
LKWY pmax pmax
comp=Z,14nm,0.9s
**LKWY Lake 31.10 93** P **P** **07 40 02.8 +1.3**
LKWY IAmb IAmb 07 40 05.2
comp=Z,14nm,0.8s
**H17A Grant Village 31.11 93** P **P** **07 40 03.7 +2.1**
H17A IAmb IAmb 07 40 05.5
comp=Z,21nm,0.8s
**H17A Grant Village 31.11 93** P **P** **07 40 04.8 +3.1**
baz=310,SNR=18
**LHV Little Huntoon 31.12 110** P **P** **07 40 03.6 +2.2**
LHV IAmb IAmb 07 40 04.9
comp=Z,26nm,1.3s
**NV11 Mina Array Sit 31.17 109** P **P** **07 40 03.6 +1.6**

**FLWY Flagg Ranch 31.24 94** P **P** **07 40 04.3 +1.6**
FLWY IAmb IAmb 07 40 05.9
comp=Z,29nm,0.8s
**RLMT Red Lodge 31.37 91** P **P** **07 40 04.7 +0.8**
**RLMT Red Lodge 31.37 91** P **P** **07 40 05.6 +1.8**
baz=309
**MLAC Mammoth, Mammo 31.42 111** P **P** **07 40 07.4 +3.1**
baz=320,SNR=5.3
**MOOW Moose Ponds 31.44 95** P **P** **07 40 05.9 +1.4**
**TPAW Teton Pass 31.49 95** P **P** **07 40 05.4 +0.4**
**LOHW Long Hollow 31.60 95** P **P** **07 40 07.1 +1.2**
**SNOW Snow King Moun 31.62 95** P **P** **07 40 07.6 +1.5**
**REDW Red Top Meadow 31.63 95** P **P** **07 40 08.0 +1.8**
**HVU Hansel Valley 31.64 99** P **P** **07 40 07.9 +1.7**
HVU pmax pmax
comp=Z,11nm,0.9s
**HVU Hansel Valley 31.64 99** P **P** **07 40 07.9 +1.7**
HVU IAmb IAmb 07 40 09.1
comp=Z,11nm,0.9s
**AHID Auburn Hatcher 31.89 96** P **P** **07 40 08.8 +0.3**
**TPH Tonopah 31.92 109** P **P** **07 40 09.9 +1.2**
TPH pmax pmax
comp=Z,54nm,1.0s
**TPH Tonopah 31.92 109** P **P** **07 40 09.9 +1.2**
**BGU Big Grassy Mou 32.09 101** P **P** **07 40 11.3 +1.2**
**DGMT Dagmar 32.16 82** P **P** **07 40 11.1 +0.6**
baz=305
**LCH Last Change Ra 32.34 110** P **P** **07 40 13.8 +1.5**
LCH IAmb IAmb 07 40 34.4
comp=Z,15nm,1.3s
**FCC Fort Churchill 32.37 60** P **P** **07 40 12.4 +0.2**
FCC pmax pmax
comp=Z,13nm,1.2s
**FCC Fort Churchill 32.37 60** P **P** **07 40 12.4 +0.2**
FCC IAmb IAmb 07 40 38.6
comp=Z,13nm,1.2s
**R11A Troy Canyon, C 32.58 107** P **P** **07 40 15.6 +1.2**
**R11A Troy Canyon, C 32.58 107** P **P** **07 40 15.8 +1.4**
baz=318,SNR=16
**VES Vestal, Richgr 32.67 114** P **P** **07 40 16.7 +1.6**
baz=322
**CWC Cottonwood Cre 32.72 112** P **P** **07 40 17.8 +2.1**
baz=321
**DUG Dugway, Tooele 32.72 101** P **P** **07 40 17.0 +1.3**
DUG pmax pmax
comp=Z,5.0nm,0.8s
**DUG Dugway, Tooele 32.72 101** P **P** **07 40 17.0 +1.3**
**DUG Dugway, Tooele 32.72 101** P **P** **07 40 17.1 +1.5**
baz=315
**BW06 Boulder Array 32.73 95** P **P** **07 40 16.5 +0.6**
BW06 IAmb IAmb 07 40 17.6
comp=Z,11nm,0.7s
**BW06 Boulder Array 32.73 95** P **P** **07 40 16.8 +1.0**
baz=312,SNR=15
**PD31 Pinedale Array 32.73 95** P **P** **07 40 16.3 +0.5**
PD31 IAmb IAmb 07 40 17.6
comp=Z,9.6nm,0.7s
**PDAR Pinedale Array 32.73 95** P **P** **07 40 16.9 +1.0**
comp=Z,9.8nm,0.6s,baz=311,slow=5.0,SNR=108
PDAR pP **pP** **07 40 33.3 +3.0**
comp=Z,2.6nm,0.6s,baz=300,slow=4.6,SNR=4.6
**PDAR Pinedale Array 32.73 95** P **P** **07 40 16.3 +0.5**
**CTU Camp Tracy 32.95 100** P **P** **07 40 18.3 +0.6**
**S11A Rachel 33.01 108** P **P** **07 40 19.3 +1.1**
S11A IAmb IAmb 07 40 42.1
comp=Z,26nm,1.2s
**TIXI Tiksi 33.10 326** P **P** **07 40 17.9 -0.5**
comp=Z,11nm,0.7s,baz=270,slow=22,SNR=18
**TIXI Tiksi 33.10 326** *ce*P **P** **07 40 17.7 -0.7**
TIXI pmax pmax
comp=Z,20nm,1.1s
**TIXI Tiksi 33.10 326** P **P** **07 40 17.9 -0.5**
TIXI IAmb IAmb 07 40 18.5
comp=Z,17nm,1.0s
**ISA Isabella, Lake 33.12 113** P **P** **07 40 19.3 +0.2**
ISA pmax pmax
comp=Z,10.0nm,0.8s
**ISA Isabella, Lake 33.12 113** P **P** **07 40 19.3 +0.2**
ISA IAmb IAmb 07 40 21.4
comp=Z,9.5nm,0.8s
**ISA Isabella, Lake 33.12 113** P **P** **07 40 20.6 +1.5**
baz=322,SNR=8.3
**TPNV Topopah Spring 33.27 109** P **P** **07 40 21.6 +1.1**
TPNV pmax pmax
comp=Z,9.0nm,0.8s
**TPNV Topopah Spring 33.27 109** P **P** **07 40 21.6 +1.1**
TPNV IAmb IAmb 07 40 23.6
comp=Z,9.3nm,0.8s
**TPNV Topopah Spring 33.27 109** P **P** **07 40 22.5 +1.9**
baz=319,SNR=15
**NLU North Lily Min 33.29 101** P **P** **07 40 21.1 +0.4**
**MPMC Manual Prospec 33.32 112** P **P** **07 40 22.9 +2.0**
baz=321,SNR=13
**FURC Furnace Creek, 33.32 110** P **P** **07 40 23.0 +2.3**
baz=320,SNR=7.7
**PRN Pahroc Range 33.56 107** P **P** **07 40 24.6 +1.6**
PRN IAmb IAmb 07 40 26.0
comp=Z,22nm,1.1s
**GWY Greenwater Val 33.64 110** P **P** **07 40 24.2 +0.5**
GWY IAmb IAmb 07 40 26.4
comp=Z,11nm,0.7s
**LRMC Laurel Mtn Rad 33.67 112** P **P** **07 40 25.6 +1.6**
baz=321,SNR=11
**QSM Queen of Sheba 33.71 111** P **P** **07 40 24.8 +0.7**
QSM IAmb IAmb 07 40 26.9
comp=Z,11nm,0.7s
**EDW2 Edwards Air Fo 33.98 113** P **P** **07 40 27.7 +1.2**
baz=322
**TCRU Three Creeks R 34.06 103** P **P** **07 40 28.6 +1.2**
TCRU IAmb IAmb 07 40 30.6
comp=Z,11nm,0.8s
**SHPR Sheep Range 34.18 108** P **P** **07 40 28.4 0.0**
**RDMU Red Mountain 34.22 98** P **P** **07 40 29.8 +1.0**
RDMU IAmb IAmb 07 40 31.2
comp=Z,8.6nm,0.8s
**TMUT Trail Mountain 34.23 101** P **P** **07 40 30.3 +1.3**
TMUT IAmb IAmb 07 40 31.5
comp=Z,8.9nm,0.7s
**GSC Goldstone, Bar 34.25 112** P **P** **07 40 30.2 +1.3**
GSC pmax pmax
comp=Z,17nm,1.4s
**GSC Goldstone, Bar 34.25 112** P **P** **07 40 30.2 +1.3**
GSC IAmb IAmb 07 40 50.6
comp=Z,16nm,1.4s
**GSC Goldstone, Bar 34.25 112** P **P** **07 40 30.7 +1.7**
baz=321
**MSU Marysvale 34.27 103** P **P** **07 40 31.2 +1.9**
**MSU Marysvale 34.27 103** P **P** **07 40 31.2 +1.9**
**CCUT Cedar City 34.35 105** P **P** **07 40 30.9 +1.0**
**P17A Butcher Ranch, 34.36 100** P **P** **07 40 31.2 +1.3**
P17A IAmb IAmb 07 40 31.9
comp=Z,7.1nm,0.7s
**SZCU Shurtz Canyon 34.46 105** P **P** **07 40 31.5 +0.6**
**K22A Casper 34.48 92** P **P** **07 40 31.6 +0.6**
K22A IAmb IAmb 07 40 32.7
comp=Z,18nm,1.2s
**K22A Casper 34.48 92** P **P** **07 40 32.1 +1.1**
baz=312
**P18A Preston Nutter 34.52 100** P **P** **07 40 32.3 +0.9**
**Q16A Castle Valley 34.52 101** P **P** **07 40 32.1 +0.7**
Q16A IAmb IAmb 07 40 34.3
comp=Z,14nm,0.8s
**MTPU Mount Pierson 34.61 103** P **P** **07 40 34.4 +2.0**
**SRU San Rafael Swe 34.73 100** P **P** **07 40 34.8 +1.6**
SRU pmax pmax
comp=Z,49nm,0.7s
**SRU San Rafael Swe 34.73 100** P **P** **07 40 34.8 +1.6**
**RWWY Rawlins 34.75 94** P **P** **07 40 33.9 +0.5**
**LCMT Little Creek M 34.81 106** P **P** **07 40 34.4 +0.6**
**RSSD Black Hills 34.89 88** P **P** **07 40 34.8 +0.2**
RSSD pmax pmax
comp=Z,16nm,0.7s
**RSSD Black Hills 34.89 88** P **P** **07 40 34.8 +0.2**
RSSD IAmb IAmb 07 40 36.4
comp=Z,16nm,0.7s
**RSSD Black Hills 34.89 88** P **P** **07 40 35.7 +1.1**
baz=310
**PKCU Pink Cliffs 34.98 104** P **P** **07 40 35.2 -0.3**
PKCU IAmb IAmb 07 40 38.8
comp=Z,15nm,0.9s
**MDND Maddock 35.02 80** P **P** **07 40 36.2 +0.9**
**MDND Maddock 35.02 80** P **P** **07 40 36.6 +1.2**
baz=306,SNR=5.1
**KNB Kanab 35.03 105** P **P** **07 40 35.6 -0.1**
KNB pmax pmax
comp=Z,6.0nm,0.9s
**KNB Kanab 35.03 105** P **P** **07 40 35.6 -0.1**
**GMRC Granite Mounta 35.24 111** P **P** **07 40 39.3 +1.7**
baz=321,SNR=7.8
**O20A White River Ci 35.25 97** P **P** **07 40 38.3 +0.6**
**O20A White River Ci 35.25 97** P **P** **07 40 38.8 +1.2**
baz=314,SNR=19
**TYV Tymovskoe 35.31 287** *e*P **P** **07 40 38.0 +0.2**
TYV *e*S **S** **07 46 11.4 +4.0**
TYV pmax pmax
comp=Z,31nm,1.2s
TYV pmax pmax
comp=Z,200nm,4.1s
TYV smax smax
comp=N,300nm,5.2s
TYV smax smax
comp=E,200nm,5.2s
**TULEG Thule 35.32 24** *i* P **P** **07 40 35.5 -2.0**
TULEG IAmb IAmb 07 40 43.1
comp=Z,4.0nm,0.5s
**ULM Lac du Bonnet 35.63 74** P **P** **07 40 40.9 +0.3**
comp=Z,5.8nm,0.5s,baz=310,slow=8.0,SNR=8.8
**ULM Lac du Bonnet 35.63 74** P **P** **07 40 40.5 -0.1**
ULM IAmb IAmb 07 40 41.3
comp=Z,7.7nm,0.6s
**BELC Belle Mtn. Jos 35.68 112** P **P** **07 40 42.8 +1.5**
baz=322,SNR=8.8
**U15A North Rim 35.75 105** P **P** **07 40 43.5 +1.4**
U15A IAmb IAmb 07 40 45.0
comp=Z,11nm,1.2s
**PFO Pinyon Flats O 35.76 113** P **P** **07 40 42.5 +0.6**
PFO pmax pmax
comp=Z,8.0nm,1.1s
**PFO Pinyon Flats O 35.76 113** P **P** **07 40 42.5 +0.6**
**PFO Pinyon Flats O 35.76 113** P **P** **07 40 43.2 +1.2**
baz=323
**NEE2 Needles Airpor 35.80 110** P **P** **07 40 44.2 +2.1**
baz=321
**W13A Hualapai Mount 35.92 109** P **P** **07 40 44.6 +1.2**
W13A IAmb IAmb 07 40 46.3
comp=Z,11nm,1.1s
**N23A Red Feather La 35.99 94** P **P** **07 40 45.0 +1.0**
N23A IAmb IAmb 07 40 46.0
comp=Z,11nm,1.2s
**N23A Red Feather La 35.99 94** P **P** **07 40 45.9 +1.8**
baz=313
**IRM Iron Mountain 36.00 111** P **P** **07 40 45.9 +2.0**
baz=322,SNR=21
**PV23 Carpenter Ridg 36.03 100** P **P** **07 40 44.9 +0.5**
PV23 IAmb IAmb 07 40 46.5
comp=Z,13nm,0.7s
**YAK Yakutsk 36.05 310** *e*P **P** **07 40 42.5 -1.5**
YAK *e**PP **pP** **07 40 53.6 -5.1**
YAK *e* 07 42 05.0
YAK *e* 07 43 08.9
YAK *e*S **S** **07 46 18.7 +0.2**
YAK *e**SS **sS** **07 46 37.1 -6.2**
YAK *e*SS **SnSn** **07 48 48.0 +0.4**
YAK *e* 07 50 54.1
YAK pmax pmax
comp=Z,52nm,0.9s
YAK pmax pmax
comp=E,13nm,1.1s
YAK pmax pmax
comp=N,9.0nm,1.2s
YAK pmax pmax
comp=Z,144nm,4.5s
YAK pmax pmax
comp=E,90nm,4.4s
YAK pmax pmax
comp=N,100nm,4.1s
YAK smax smax
comp=E,144nm,4.8s
YAK smax smax
comp=N,81nm,5.1s
**YAK Yakutsk 36.05 310** P **P** **07 40 42.7 -1.3**
**PV11 David Mesa, Pa 36.22 100** P **P** **07 40 46.8 +0.9**
PV11 IAmb IAmb 07 40 48.1
comp=Z,14nm,0.7s
**BC3 Big Chuckawall 36.23 112** P **P** **07 40 47.3 +1.3**
baz=322
**PV07 Paradox Valley 36.24 99** P **P** **07 40 46.3 +0.2**
PV07 IAmb IAmb 07 40 48.1
comp=Z,16nm,1.0s
**MONP2 Monument Peak 36.34 114** P **P** **07 40 49.1 +2.0**
baz=323
**PV13 Radium Mtn., P 36.34 100** P **P** **07 40 47.9 +0.8**
**PV15 Paradox Valley 36.40 99** P **P** **07 40 47.9 +0.4**
**PDMCI Parker Dam,Lak 36.40 110** P **P** **07 40 49.0 +1.7**
baz=321
**SWSC Sam W. Stewart 36.62 113** P **P** **07 40 50.9 +1.8**
baz=323
**SMCO Snowmass 36.62 97** P **P** **07 40 49.6 0.0**
**BLYC Blythe 36.64 111** P **P** **07 40 50.0 +0.7**
BLYC IAmb IAmb 07 40 52.1
comp=Z,17nm,0.8s
**UGL Uglegorsk 36.64 285** *e*P **P** **07 40 49.2 0.0**
UGL *e*S **S** **07 46 28.2 +0.4**
UGL pmax pmax
comp=Z,160nm,1.1s
**AGMN Agassiz Nation 36.77 77** P **P** **07 40 50.3 0.0**
AGMN IAmb IAmb 07 41 09.3
comp=Z,18nm,0.9s
**AGMN Agassiz Nation 36.77 77** P **P** **07 40 50.3 0.0**
baz=306,SNR=6.2
**WUAZ Wupatki 36.93 105** P **P** **07 40 53.1 +1.1**
WUAZ IAmb IAmb 07 40 54.8
comp=Z,10nm,0.9s
**WUAZ Wupatki 36.93 105** P **P** **07 40 53.9 +2.0**
baz=319,SNR=6.9
**MVCO Mesa Verde 37.21 101** P **P** **07 40 54.1 -0.3**
MVCO IAmb IAmb 07 40 56.1
comp=Z,7.4nm,0.8s
**MVCO Mesa Verde 37.21 101** P **P** **07 40 55.2 +0.8**
baz=317,SNR=8.2
**Y14A Wickenburg 37.28 109** P **P** **07 40 55.1 +0.3**
Y14A IAmb IAmb 07 40 57.5
comp=Z,12nm,1.1s
**SUSD Miller 37.48 84** P **P** **07 40 56.6 +0.2**
**YSS Yuzh-Sakhalins 37.55 282** *e*P **P** **07 40 56.2 -0.7**
YSS pmax pmax
comp=Z,20nm,1.1s
**S22A 4UR Ranch, Cre 37.73 99** P **P** **07 41 00.4 +1.5**
baz=316
**X16A Lo Mia Camp, P 37.73 107** P **P** **07 41 00.4 +1.6**
X16A IAmb IAmb 07 41 02.0
comp=Z,14nm,0.9s
**113A Mohawk Valley, 37.80 111** P **P** **07 40 59.9 +0.7**
113A IAmb IAmb 07 41 01.5
comp=Z,14nm,1.2s
**B35A Bob, Littlefor 37.88 75** P **P** **07 40 59.2 -0.5**
B35A IAmb IAmb 07 41 18.6
comp=Z,9.6nm,0.9s
**W18A Petrified Fore 38.10 104** P **P** **07 41 03.8 +1.9**
baz=319
**X18A Snowflake 38.44 105** P **P** **07 41 04.6 -0.1**
X18A IAmb IAmb 07 41 07.6
comp=Z,9.4nm,0.7s
**SDCO Great Sand Dun 38.45 97** P **P** **07 41 05.4 +0.4**
**SDCO Great Sand Dun 38.45 97** P **P** **07 41 06.3 +1.3**
baz=316,SNR=6.4
**NEEM North Greenlan 38.59 20** *i* P **P** **07 41 03.7 -2.0**
NEEM IAmb IAmb 07 41 05.5
comp=Z,22nm,0.8s
**K31A O'Neill 38.78 86** P **P** **07 41 06.9 -0.5**
K31A IAmb IAmb 07 41 11.1
comp=Z,17nm,1.0s
**214A Organ Pipe Nat 38.93 111** P **P** **07 41 09.2 +0.4**
214A IAmb IAmb 07 41 29.0
comp=Z,15nm,1.1s
**214A Organ Pipe Nat 38.93 111** P **P** **07 41 10.4 +1.7**
baz=323,SNR=13
**ECSD EROS Data Cent 39.22 83** P **P** **07 41 10.8 -0.3**
**ECSD EROS Data Cent 39.22 83** P **P** **07 41 10.5 -0.6**
baz=311
**EYMN Ely 39.32 74** P **P** **07 41 11.8 0.0**
EYMN IAmb IAmb 07 41 12.8
comp=Z,20nm,0.8s
**EYMN Ely 39.32 74** P **P** **07 41 11.9 +0.2**
baz=308,SNR=8.1
**ASAJ Asahikawa 39.43 278** P **P** **07 41 12.2 -0.5**
comp=Z,44nm,0.8s,baz=14,slow=5.1,SNR=16
**T25A Trinidad 39.49 97** P **P** **07 41 14.8 +1.2**
baz=317
**F36A Milaca 39.53 78** P **P** **07 41 13.2 -0.3**
**TUC Tucson 39.71 108** P **P** **07 41 14.8 -0.4**

TUC pmax pmax
comp=Z,17nm,1.5s
**TUC Tucson 39.71 108** P **P** **07 41 14.8 -0.4**
TUC IAmb IAmb 07 41 37.3
comp=Z,17nm,1.4s
**TUC Tucson 39.71 108** P **P** **07 41 17.2 +1.9**
baz=322
**UPNV Upernavik 39.96 27** *i* P **P** **07 41 15.7 -1.1**
UPNV IAmb IAmb 07 41 16.9
comp=Z,15nm,0.7s
**ANMO Albuquerque 40.00 101** *ce* P **P** **07 41 19.0 +1.3**
ANMO pmax pmax
comp=Z,4.0nm,1.3s
**ANMO Albuquerque 40.00 101** P **P** **07 41 17.4 -0.4**
**ANMO Albuquerque 40.00 101** P **P** **07 41 18.8 +1.1**
baz=319
**E38A The Farm, Brul 40.12 76** P **P** **07 41 18.1 -0.3**
E38A IAmb IAmb 07 41 37.0
comp=Z,29nm,1.1s
**NOR Nord 40.27 8** P **P** **07 41 19.4 +0.2**
NOR pmax pmax
comp=Z,17nm,2.1s
**NOR Nord 40.27 8** *i* P **P** **07 41 16.5 -2.7**
NOR IAmb IAmb 07 41 19.8
comp=Z,3.2nm,0.8s
**SPMN Marine on St. 40.33 78** P **P** **07 41 20.3 +0.1**
SPMN IAmb IAmb 07 41 39.4
comp=Z,15nm,0.7s
**SPMN Marine on St. 40.33 78** P **P** **07 41 20.5 +0.3**
baz=310,SNR=5.6
**BNM Barren Site 40.50 102** P **P** **07 41 23.1 +1.1**
**ERM Erimo 40.52 275** *ce* P **P** **07 41 21.4 -0.3**
ERM pmax pmax
comp=Z,80nm,1.3s
**L34A Svendsen Farm, 40.53 85** P **P** **07 41 21.6 -0.3**
**N33A J Bar K, Exete 40.78 87** P **P** **07 41 24.4 +0.5**
**I37A Lemond, Waseca 40.79 80** P **P** **07 41 24.5 +0.5**
**CBKS Cedar Bluff 40.86 91** P **P** **07 41 25.8 +1.1**
baz=315
**121A Cookes Peak, D 41.12 105** P **P** **07 41 26.2 -0.8**
**121A Cookes Peak, D 41.12 105** P **P** **07 41 28.6 +1.5**
baz=321
**319A Douglas 41.23 107** P **P** **07 41 28.6 +0.8**
**ZEA Zeya 41.46 299** *eP* **P** **07 41 28.2 -1.2**
ZEA pmax pmax
comp=Z,10.0nm,0.7s
**N35A Tabor 41.69 85** P **P** **07 41 31.8 +0.4**
**R32A Long Quarter, 41.70 91** P **P** **07 41 31.8 +0.3**
**KLR Kul'dur 41.95 291** P **P** **07 41 33.3 -0.1**
comp=Z,16nm,0.6s,baz=66,slow=6.6,SNR=83
**KLR Kul'dur 41.95 291** *ce* P **P** **07 41 32.9 -0.5**
KLR pmax pmax
comp=Z,49nm,1.3s
**KSU1 Kansas State U 42.38 88** P **P** **07 41 37.0 -0.1**
KSU1 IAmb IAmb 07 41 38.7
comp=Z,12nm,0.7s
**KSU1 Kansas State U 42.38 88** P **P** **07 41 37.5 +0.5**
baz=315
**I40A Norwalk 42.38 78** P **P** **07 41 36.8 -0.2**
I40A IAmb IAmb 07 41 55.8
comp=Z,20nm,0.6s
**MNTX Cornudas Mount 43.05 103** P **P** **07 41 43.5 +0.9**
**MNTX Cornudas Mount 43.05 103** P **P** **07 41 44.0 +1.4**
baz=321,SNR=15
**N38A Joes South For 43.06 84** P **P** **07 41 42.6 +0.2**
N38A IAmb IAmb 07 41 43.7
comp=Z,26nm,0.9s
**JFWS Jewell Farm 43.24 79** P **P** **07 41 42.8 -1.1**
JFWS pmax pmax
comp=Z,14nm,0.7s
**JFWS Jewell Farm 43.24 79** P **P** **07 41 42.8 -1.1**
JFWS IAmb IAmb 07 42 02.3
comp=Z,14nm,0.7s
**JFWS Jewell Farm 43.24 79** P **P** **07 41 43.2 -0.7**
baz=312
**L40A Anamosa 43.29 81** P **P** **07 41 43.7 -0.6**
L40A IAmb IAmb 07 42 02.8
comp=Z,18nm,0.8s
**P38A Dawn 43.71 85** P **P** **07 41 47.3 -0.4**
P38A IAmb IAmb 07 41 48.7
comp=Z,29nm,0.8s
**DAG Danmarks Havn 44.16 13** P **P** **07 41 50.3 -0.6**
DAG pmax pmax
comp=Z,124nm,0.7s
**DAG Danmarks Havn 44.16 13** *i* P **P** **07 41 49.0 -1.9**
DAG IAmb IAmb 07 41 50.6
comp=Z,67nm,0.6s
**SUMG Summit 44.19 22** P **P** **07 41 52.1 +0.4**
SUMG pmax pmax
comp=Z,18nm,0.7s
**SUMG Summit 44.19 22** *i* P **P** **07 41 50.0 -1.6**
SUMG IAmb IAmb 07 41 52.0
comp=Z,14nm,0.8s
**SUMG Summit 44.19 22** P **P** **07 41 52.0 +0.4**
SUMG IAmb IAmb 07 41 52.6
comp=Z,18nm,0.7s
**WMOK Wichita Mounta 44.34 94** P **P** **07 41 53.1 +0.2**
WMOK pmax pmax
comp=Z,6.0nm,0.7s
**WMOK Wichita Mounta 44.34 94** P **P** **07 41 53.1 +0.2**
**WMOK Wichita Mounta 44.34 94** P **P** **07 41 53.4 +0.5**
baz=318,SNR=5.9
**K43A Burlington 44.42 78** P **P** **07 41 52.8 -0.5**
K43A IAmb IAmb 07 42 12.1
comp=Z,24nm,0.9s
**N41A Harden Midland 44.42 82** P **P** **07 41 52.6 -0.7**
N41A IAmb IAmb 07 42 11.9
comp=Z,21nm,0.8s
**P40A Paris 44.59 84** P **P** **07 41 54.4 -0.4**
P40A IAmb IAmb 07 41 55.0
comp=Z,14nm,0.7s
**BOD Bodaibo 44.95 311** *eP* **P** **07 41 55.8 -1.6**
BOD pmax pmax
comp=Z,14nm,1.2s
**USRK Ussuriysk Ar. 45.10 286** P **P** **07 41 57.9 -0.8**
comp=Z,2.7nm,0.6s,baz=45,slow=9.1,SNR=5.4
**SPITS Spitsbergen Ar 45.30 2** P **P** **07 41 59.1 -0.9**
comp=Z,10nm,0.6s,baz=107,slow=2.8,SNR=25
SPITS PcP **PcP** **07 43 38.3 -0.3**
comp=Z,42nm,1.3s,baz=185,slow=5.4,SNR=4.7
**R40A Maddies Statio 45.35 85** P **P** **07 42 00.1 -0.7**
R40A IAmb IAmb 07 42 00.4
comp=Z,13nm,0.7s
**HDIL Hopedale 45.38 81** P **P** **07 42 00.4 -0.6**
**HDIL Hopedale 45.38 81** P **P** **07 42 00.6 -0.4**
baz=314,SNR=8.9
**ABTX Abilene, Hawle 45.46 97** P **P** **07 42 02.1 +0.4**
ABTX IAmb IAmb 07 42 02.9
comp=Z,9.4nm,0.7s
**ABTX Abilene, Hawle 45.46 97** P **P** **07 42 02.2 +0.4**
baz=320
**U38A Gravette 45.52 89** P **P** **07 42 01.3 -0.9**
U38A IAmb IAmb 07 42 02.8
comp=Z,9.0nm,0.9s
**TX31 Lajitas Ar. Si 45.82 104** P **P** **07 42 05.2 +0.4**
TX31 IAmb IAmb 07 42 07.0
comp=Z,26nm,1.0s
**TX32 Lajitas Array 45.82 104** P **P** **07 42 05.2 +0.4**
**TXAR Lajitas Array 45.82 104** P **P** **07 42 05.6 +0.8**
comp=Z,4.3nm,0.8s,baz=309,slow=5.9,SNR=49
TXAR pP **pP** **07 42 22.4 +2.7**
comp=Z,3.9nm,0.8s,baz=294,slow=4.5,SNR=8.7
TXAR pPcP 07 44 01.4
comp=Z,0.8nm,0.6s,baz=278,slow=1.6,SNR=3.7
**P43A Skaggs, Pawnee 45.89 82** P **P** **07 42 04.8 -0.3**
P43A IAmb IAmb 07 42 05.3
comp=Z,18nm,0.7s
**NRIK Noril'sk 46.02 334** P **P** **07 42 05.4 -0.3**
comp=Z,32nm,0.8s,baz=56,slow=6.5,SNR=77
**NRIK Noril'sk 46.02 334** *ce* P **P** **07 42 05.2 -0.5**
NRIK pmax pmax
comp=Z,47nm,1.0s
**NRIK Noril'sk 46.02 334** P **P** **07 42 05.3 -0.3**
**DBG Daneborg 46.05 15** *i* P **P** **07 42 03.7 -2.2**
DBG IAmb IAmb 07 42 05.6
comp=Z,34nm,0.6s
**CCM Cathedral Cave 46.08 85** P **P** **07 42 05.4 -1.2**
CCM pmax pmax
comp=Z,8.0nm,0.9s
**CCM Cathedral Cave 46.08 85** P **P** **07 42 05.4 -1.2**
CCM IAmb IAmb 07 42 06.3
comp=Z,7.6nm,0.8s
**CCM Cathedral Cave 46.08 85** P **P** **07 42 05.6 -1.0**
baz=316
**MGMO Mountain Grove 46.16 87** P **P** **07 42 06.0 -1.3**
MGMO IAmb IAmb 07 42 06.6
comp=Z,8.7nm,0.9s
**BNX BinXian 46.46 290** ⇓P **P** **07 42 09.0 -0.5**
BNX pmax pmax
comp=Z,52nm,1.2s
BNX pmax pmax
comp=Z,270nm,4.2s
**ICESG Greenland Ices 46.46 26** *i* P **P** **07 42 07.8 -1.8**
ICESG IAmb IAmb 07 42 10.3
comp=Z,16nm,0.6s
**FVM French Village 46.58 84** P **P** **07 42 09.9 -0.6**
FVM pmax pmax
comp=Z,24nm,1.3s
**FVM French Village 46.58 84** P **P** **07 42 09.8 -0.6**
FVM IAmb IAmb 07 42 10.7
comp=Z,24nm,1.3s
**DY2G Dye2 46.60 31** *i* P **P** **07 42 10.3 -0.2**
DY2G IAmb IAmb 07 42 11.3
comp=Z,4.3nm,0.7s
**SFIN Lafayette 46.69 79** P **P** **07 42 11.1 -0.3**
baz=315
**W39A Magazine 46.76 90** P **P** **07 42 11.6 -0.4**
W39A IAmb IAmb 07 42 12.4
comp=Z,22nm,1.2s
**W39A Magazine 46.76 90** P **P** **07 42 11.5 -0.4**
baz=318
**JCT Junction City 47.02 99** P **P** **07 42 13.9 -0.1**
JCT pmax pmax
comp=Z,20nm,0.8s
**JCT Junction City 47.02 99** P **P** **07 42 13.9 -0.1**
JCT IAmb IAmb 07 42 33.4
comp=Z,20nm,0.8s
**JCT Junction City 47.02 99** P **P** **07 42 14.7 +0.7**
baz=321,SNR=9.0
**SCHQ Schefferville 47.02 52** P **P** **07 42 13.7 0.0**
comp=Z,2.0nm,0.5s,baz=317,slow=7.1,SNR=8.0
SCHQ pP **pP** **07 42 31.5 +2.7**
comp=Z,3.7nm,0.6s,baz=313,slow=7.1,SNR=3.3
**MJAR Matsushiro Arr 47.09 274** P **P** **07 42 14.4 -0.1**
comp=Z,3.0nm,0.4s,baz=31,slow=6.0,SNR=10
**MJAR Matsushiro Arr 47.09 274** P **P** **07 42 15.0 +0.5**
MJAR pmax pmax
comp=Z,9.0nm,1.3s
**MJAR Matsushiro Arr 47.09 274** P **P** **07 42 15.0 +0.5**
**N47A Urbana 47.10 78** P **P** **07 42 13.0 -1.5**
**FCAR Ozark Folk Cen 47.16 88** P **P** **07 42 13.6 -1.5**
**OLIL Olney 47.32 82** P **P** **07 42 15.9 -0.3**
**MIAR Mount Ida 47.35 90** P **P** **07 42 16.5 0.0**
MIAR pmax pmax
comp=Z,12nm,0.9s
**MIAR Mount Ida 47.35 90** P **P** **07 42 16.5 0.0**
MIAR IAmb IAmb 07 42 17.3
comp=Z,12nm,0.9s
**MIAR Mount Ida 47.35 90** P **P** **07 42 16.6 0.0**
baz=318,SNR=6.8
**S44A Carbondale 47.43 84** P **P** **07 42 16.8 -0.4**
S44A IAmb IAmb 07 42 17.3
comp=Z,10nm,0.7s
**PBMO Poplar Bluff 47.45 85** P **P** **07 42 16.2 -1.1**
PBMO IAmb IAmb 07 42 18.0
comp=Z,21nm,1.4s
**O48B Farmland 47.83 78** P **P** **07 42 18.9 -1.3**
baz=315
**BLO Bloomington 47.86 80** P **P** **07 42 20.3 -0.2**
BLO pmax pmax
comp=Z,12nm,0.7s
**BLO Bloomington 47.86 80** P **P** **07 42 20.3 -0.2**
BLO IAmb IAmb 07 42 20.3
comp=Z,12nm,0.7s
**PARMO Parma 47.90 85** P **P** **07 42 20.4 -0.4**
**435B Jarrell 47.99 97** P **P** **07 42 22.1 +0.5**
435B IAmb IAmb 07 42 41.2
comp=Z,16nm,0.9s
**435B Jarrell 47.99 97** P **P** **07 42 22.4 +0.9**
baz=320
**USIN University of 48.10 82** P **P** **07 42 21.9 -0.5**
**P48A Milroy 48.25 79** P **P** **07 42 22.2 -1.2**
**T45A Paducah 48.25 84** P **P** **07 42 23.3 -0.2**
**CN2 Changchun 48.81 290** *eP* **P** **07 42 27.1 -0.6**
CN2 pmax pmax
comp=Z,40nm,0.8s
**BJO1 Bjornoya 49.04 2** *eP* **P** **07 42 29.2 +0.2**
**SCO Scoresbysund 49.05 18** P **P** **07 42 29.3 +0.1**
SCO pmax pmax
comp=Z,21nm,1.3s
**SCO Scoresbysund 49.05 18** *i* P **P** **07 42 27.9 -1.3**
SCO IAmb IAmb 07 42 30.1
comp=Z,5.8nm,0.5s
**SCO Scoresbysund 49.05 18** P **P** **07 42 29.3 +0.1**
SCO IAmb IAmb 07 42 30.0
comp=Z,21nm,1.3s
**SOEG Soedalen 49.08 24** *i* P **P** **07 42 28.1 -1.3**
SOEG IAmb IAmb 07 42 30.2
comp=Z,14nm,0.5s
**T47A Sharon Grove 49.12 83** P **P** **07 42 29.8 -0.3**
T47A IAmb IAmb 07 42 30.5
comp=Z,11nm,1.0s
**WVT Waverly 49.35 84** P **P** **07 42 31.6 -0.3**
WVT pmax pmax
comp=Z,14nm,0.9s
**WVT Waverly 49.35 84** P **P** **07 42 31.6 -0.3**
WVT IAmb IAmb 07 42 32.6
comp=Z,14nm,0.8s
**WVT Waverly 49.35 84** P **P** **07 42 31.5 -0.4**
baz=317
**OXF Oxford 49.68 87** P **P** **07 42 33.9 -0.5**
OXF pmax pmax
comp=Z,53nm,1.2s
**OXF Oxford 49.68 87** P **P** **07 42 33.9 -0.5**
**OXF Oxford 49.68 87** P **P** **07 42 34.3 -0.1**
baz=318,SNR=6.9
**R50A Paris 49.69 79** P **P** **07 42 34.4 -0.2**
R50A IAmb IAmb 07 42 34.4
comp=Z,12nm,0.7s
**PLAL Pickwick Lake 50.06 85** P **P** **07 42 36.5 -0.8**
**V48A Smith Brothers 50.19 84** P **P** **07 42 37.8 -0.5**
V48A IAmb IAmb 07 42 38.8
comp=Z,6.4nm,0.7s
**CLTN Cedars of Leba 50.20 83** P **P** **07 42 38.4 +0.1**
CLTN IAmb IAmb 07 42 39.3
comp=Z,14nm,0.7s
**146A Union 51.28 88** P **P** **07 42 46.6 +0.1**
**Z47A Carrollton 51.40 87** P **P** **07 42 46.8 -0.5**
**W50A Signal Mountai 51.42 83** P **P** **07 42 46.5 -1.1**
W50A IAmb IAmb 07 42 48.2
comp=Z,7.5nm,0.8s
**KSRS Korea Array 52.04 282** P **P** **07 42 52.4 +0.3**
comp=Z,14nm,0.7s,baz=40,slow=7.4,SNR=32
KSRS pP **pP** **07 43 11.0 +3.5**
comp=Z,8.8nm,1.0s,baz=56,slow=6.7,SNR=4.9
**KSAR Wonju Array Be 52.07 282** P **P** **07 42 51.7 -0.6**
**KSAR Wonju Array Be 52.07 282** P **P** **07 42 51.7 -0.6**
**HAMF Hammerfest 52.95 360** *eP* **P** **07 42 57.4 -1.0**
**XLT XiLinHaoTe 53.49 296** *eP* **P** **07 43 03.0 +0.1**
XLT pmax pmax
comp=Z,32nm,1.1s
XLT pmax pmax
comp=Z,280nm,4.6s
**KEV Kevo 53.82 358** P **P** **07 43 04.1 -0.6**
KEV pmax pmax
comp=Z,30nm,0.6s
**KEV Kevo 53.82 358** P **P** **07 43 04.1 -0.6**
**TRO Tromso 53.93 2** ⇑*iP* **P** **07 43 05.3 -0.2**
**JETT Jettan, Norway 54.03 1** *eP* **P** **07 43 07.2 +0.9**
**ARA0 ARCESS Array S 54.06 359** ⇑*iP* **P** **07 43 05.6 -0.9**
**ARCES ARCESS Array B 54.06 359** P **P** **07 43 05.7 -0.9**
comp=Z,11nm,0.5s,baz=16,slow=7.9,SNR=112
**ARCES ARCESS Array B 54.06 359** P **P** **07 43 05.5 -1.1**
ARCES IAmb IAmb 07 43 07.0
comp=Z,21nm,1.1s
**KTK1 Kautokeino 54.59 0** *eP* **P** **07 43 09.7 -0.7**
**ZAK Zakamensk 54.64 309** *eP* **P** **07 43 09.6 -1.6**
ZAK pmax pmax
comp=Z,6.0nm,1.0s
**ULN Ulaanbaatar 54.86 305** *ce* P **P** **07 43 12.6 -0.3**
ULN pmax pmax
comp=Z,6.0nm,0.6s
**ULN Ulaanbaatar 54.86 305** P **P** **07 43 12.8 -0.1**
ULN IAmb IAmb 07 43 13.5
comp=Z,9.1nm,0.6s
**SONM Songino Array 55.18 305** P **P** **07 43 15.0 -0.2**
comp=Z,19nm,0.6s,baz=45,slow=6.6,SNR=150
SONM PcP **PcP** **07 44 16.3 +0.8**
comp=Z,12nm,0.9s,baz=112,slow=2.3,SNR=11
SONM LR LR 08 09 16.0
comp=Z,124nm,19.7s,baz=76,slow=39
**SONM Songino Array 55.18 305** P **P** **07 43 15.5 +0.4**
SONM pmax pmax
comp=Z,22nm,0.6s
**SONM Songino Array 55.18 305** P **P** **07 43 15.5 +0.4**
**LOF Lofoten 55.26 4** *eP* **P** **07 43 15.2 0.0**
**LVZ Lovozero 55.43 355** *ce* P **P** **07 43 16.1 -0.4**
LVZ pmax pmax
comp=Z,102nm,2.5s
**STEI Steigen 55.53 4** *eP* **P** **07 43 16.7 -0.4**
**FAUS Fauske 56.08 4** ⇑*iP* **P** **07 43 20.7 -0.4**
**SGF Sodankyl 56.15 359** P **P** **07 43 21.6 0.0**
SGF pmax pmax
comp=Z,99nm,0.7s
**BJI Beijing 56.30 293** P **P** **07 43 23.3 +0.3**
BJI pmax pmax
comp=Z,23nm,0.7s
**BJT Baijiatuan 56.31 293** P **P** **07 43 22.6 -0.6**
BJT pmax pmax
comp=Z,17nm,0.7s
**BJT Baijiatuan 56.31 293** P **P** **07 43 22.6 -0.6**
**KONS Konsvik 56.87 5** *eP* **P** **07 43 26.8 +0.1**
**MOR8 Moi Rana 57.26 4** *eP* **P** **07 43 28.1 -1.4**
**HHC Hu-ho-hao-te 57.99 297** *eP* **P** **07 43 35.4 +0.2**
HHC pmax pmax
comp=Z,42nm,1.2s
HHC pmax pmax
comp=Z,210nm,4.7s
**OUL Oulu 58.52 359** P **P** **07 43 38.0 -0.3**
OUL pmax pmax
comp=Z,62nm,0.7s
**NSS Namsos 58.78 6** ⇑*iP* **P** **07 43 39.8 -0.3**
**ZAA0 Zalesovo Array 58.88 323** P **P** **07 43 40.5 -0.5**
ZAA0 IAmb IAmb 07 43 41.6
comp=Z,12nm,0.8s
**ZALV Zalesovo Beam 58.88 323** P **P** **07 43 40.7 -0.3**
comp=Z,13nm,0.8s,baz=39,slow=7.5,SNR=39
ZALV PcP **PcP** **07 44 30.0 +0.2**
comp=Z,4.6nm,0.7s,baz=37,slow=3.7,SNR=6.7
**ZALV Zalesovo Beam 58.88 323** P **P** **07 43 40.5 -0.5**
**BTO Baotou 58.94 297** *eP* **P** **07 43 40.8 -0.9**
**HNS HongShan 59.04 292** ⇑P **P** **07 43 42.5 +0.2**
HNS pmax pmax
comp=Z,59nm,0.8s
**MOL Molde 60.42 8** *eP* **P** **07 43 51.7 +0.3**
**PRGR Permogore 60.72 348** *eP* **P** **07 43 51.5 -2.0**
PRGR pmax pmax
comp=Z,12nm,0.4s
**AKN Aaknes 60.77 9** ⇑*iP* **P** **07 43 54.3 +0.5**
**NJ2 Nanjing 60.99 285** *eP* **P** **07 43 57.8 +2.0**
NJ2 pmax pmax
comp=Z,8.0nm,0.9s
**DGZ Jazzator, Alta 61.48 318** *i* P **P** **07 43 59.0 0.0**
DGZ pmax pmax
comp=Z,16nm,1.6s
**NC204 NORSAR Array S 61.94 7** P **P** **07 44 02.1 +0.3**
**KLMR Klimovskoe 62.10 351** *eP* **P** **07 44 00.9 -1.9**
KLMR pmax pmax
comp=Z,33nm,0.9s
**KLMR Klimovskoe 62.10 351** *eP* **P** **07 44 00.9 -1.9**
KLMR AMP 07 44 03.0
comp=Z,33nm,0.9s
**NC405 NORSAR Array S 62.16 6** P **P** **07 44 03.2 -0.1**
**FIA1 FINESS Array S 62.17 359** P **P** **07 44 02.8 -0.5**
**FINES FINESS Array B 62.17 359** P **P** **07 44 02.7 -0.6**
comp=Z,20nm,0.7s,baz=9.4,slow=7.9,SNR=49
**FINES FINESS Array B 62.17 359** P **P** **07 44 02.9 -0.4**
**FINES FINESS Array B 62.17 359** P **P** **07 44 02.9 -0.4**
**NBO00 NORSAR Array S 62.19 7** P **P** **07 44 03.3 -0.1**
**NB201 NORSAR Array S 62.20 7** P **P** **07 44 03.4 -0.1**
**NB2 NORSAR Subarra 62.21 7** P **P** **07 44 03.1 -0.5**
comp=Z,10nm,0.6s,baz=353,slow=6.9
**NB2 NORSAR Subarra 62.21 7** P **P** **07 44 03.1 -0.5**
baz=353,slow=6.9
**NOA NORSAR Array B 62.21 7** P **P** **07 44 03.3 -0.3**
comp=Z,13nm,0.7s,baz=353,slow=6.8,SNR=98
**ASK Askoy 62.27 10** ⇑*eP* **P** **07 44 04.1 +0.2**
**SKAR Skarslia 62.35 8** ⇑*iP* **P** **07 44 04.8 +0.2**
**NAO01 NORSAR Array S 62.38 7** P **P** **07 44 04.3 -0.4**
**BER Bergen 62.38 10** *eP* **P** **07 44 03.5 -1.2**
**LYN LuoYang 62.39 291** ⇑P **P** **07 44 05.4 +0.2**
LYN pmax pmax
comp=Z,40nm,0.7s
**NC602 NORSAR Array S 62.53 7** ⇑*iP* **P** **07 44 05.3 -0.3**
**NORES NORESS Array B 62.53 7** P **P** **07 44 05.3 -0.4**
**ODD1 Odda 62.97 9** *eP* **P** **07 44 09.0 +0.3**
**KIRV Kirov 63.20 345** *ce* P **P** **07 44 09.0 -1.1**
**HFS Hagfors 63.25 5** P **P** **07 44 10.1 -0.4**
comp=Z,14nm,0.5s,baz=20,slow=4.9,SNR=69
**OSL Oslo 63.27 7** *eP* **P** **07 44 11.0 +0.4**
**BLS5 Blasjo 63.44 10** *eP* **P** **07 44 12.0 +0.2**
**KONO Kongsberg 63.48 8** *ceP* **P** **07 44 12.9 +0.9**
KONO pmax pmax
comp=Z,49nm,2.5s
**KONO Kongsberg 63.48 8** P **P** **07 44 12.1 +0.1**
**KONO Kongsberg 63.48 8** ⇑*iP* **P** **07 44 12.4 +0.4**
**KURK Kurchatov 63.65 324** *ce* P **P** **07 44 12.7 -0.6**
KURK pmax pmax
comp=Z,15nm,0.9s
**KURK Kurchatov 63.65 324** P **P** **07 44 12.8 -0.4**
KURK IAmb IAmb 07 44 13.8
comp=Z,14nm,0.9s
**UPP Uppsala 63.69 3** *eP* **P** **07 44 13.2 -0.2**
**ARU Arti 63.70 339** *ci* P **P** **07 44 12.5 -1.0**
ARU *PP **pP** **07 44 27.4 -1.9**
ARU 07 44 47.2
ARU S **S** **07 52 44.0 +0.9**
ARU SS **SS** **07 56 49.5 -1.0**
ARU pmax pmax
comp=Z,41nm,1.5s
**ARU Arti 63.70 339** P **P** **07 44 12.4 -1.1**
**KURBB Kurchatov Arra 63.76 324** P **P** **07 44 13.5 -0.5**
comp=Z,5.2nm,0.4s,baz=28,slow=6.8,SNR=35
KURBB PcP **PcP** **07 44 49.4 -0.1**
comp=Z,3.2nm,0.5s,baz=26,slow=4.0,SNR=7.1
KURBB LR LR 08 15 59.2
comp=Z,58nm,18.1s,baz=67,slow=40
**BRVK Borovoye 64.06 331** *ce* P **P** **07 44 15.2 -0.7**
BRVK pmax pmax
comp=Z,15nm,0.6s
**BRVK Borovoye 64.06 331** P **P** **07 44 15.3 -0.6**
BRVK IAmb IAmb 07 44 16.2
comp=Z,19nm,0.8s
**ZSN Zaisan 64.30 319** *eP* **P** **07 44 16.6 -1.0**
ZSN pmax pmax
comp=Z,13nm,1.2s
**ZSN Zaisan 64.30 319** *eP* **P** **07 44 16.6 -1.0**
comp=Z,13nm,1.2s,baz=318
**SNART Snartemo 64.58 9** *eP* **P** **07 44 19.7 +0.5**
**XAN Xi'an 64.60 294** P **P** **07 44 19.3 -0.5**
XAN pP pP 07 44 38.4 +2.8
XAN sP sP 07 44 47.8 +5.6
XAN PcP **PcP** **07 44 52.1 -1.2**
XAN pmax pmax
comp=Z,39nm,0.8s
**GTA Gaotai 64.72 304** *eP* **P** **07 44 20.3 -0.4**
GTA pP pP 07 44 38.4 +1.9
GTA sP sP 07 44 45.9 +2.9
GTA pmax pmax
comp=Z,25nm,1.1s
**HOMB Homborsund 64.76 9** *eP* **P** **07 44 21.2 +0.9**
**MTSE Matsula 64.93 360** *eP* **P** **07 44 20.4 -1.1**
**VIKU Vikbolandet 65.02 4** *eP* **P** **07 44 22.3 +0.2**
**VSU Vasula 65.15 358** *eP* **P** **07 44 23.1 +0.2**
**LZH Lanzhou 65.49 299** *eP* **P** **07 44 25.6 -0.1**
LZH pmax pmax
comp=Z,58nm,1.0s
LZH pmax pmax
comp=Z,160nm,4.3s
**MK31 Makanchi Array 65.78 320** P **P** **07 44 26.1 -1.2**
MK31 pmax pmax
comp=Z,6.0nm,0.9s
**MK31 Makanchi Array 65.78 320** P **P** **07 44 26.1 -1.2**
**MKAR Makanchi Array 65.78 320** P **P** **07 44 26.4 -0.9**
comp=Z,6.2nm,0.7s,baz=41,slow=6.3,SNR=69
MKAR LR LR 08 12 39.5
comp=Z,52nm,18.1s,baz=98,slow=36
**MKAR Makanchi Array 65.78 320** P **P** **07 44 26.6 -0.6**
**MKAR Makanchi Array 65.78 320** P **P** **07 44 26.6 -0.6**
**MAKZ Makanchi 65.88 320** P **P** **07 44 26.7 -1.2**
MAKZ pmax pmax
comp=Z,10.0nm,1.1s
**MAKZ Makanchi 65.88 320** P **P** **07 44 26.6 -1.2**
MAKZ IAmb IAmb 07 44 28.0

comp=Z,10nm,1.1s
**SLIT Slitere, Latvi 66.02 1** *e*P **P** **07 44 28.5 0.0**
**BRZS Berezniki 66.13 328** *e*P **P** **07 44 27.7 -1.7**
**BRZS Berezniki 66.13 328** *e*P **P** **07 44 27.7 -1.7**
baz=328
**WMQ Urumqi 66.28 315** *e*P **P** **07 44 31.4 +0.9**
WMQ pmax pmax
comp=Z,16nm,0.9s
**MUD Monsted U'grnd 66.61 9** *i* P **P** **07 44 31.9 -0.5**
MUD lAmb lAmb 07 44 34.3
comp=Z,11nm,1.1s
**DEL Delary 66.92 6** *e*P **P** **07 44 33.5 -0.8**
**ENH Enshi 67.31 291** P **P** **07 44 36.6 -0.6**
**OBN Obninsk 68.03 352** *de*P **P** **07 44 40.1 -1.2**
OBN *e* 07 45 03.9
OBN pmax pmax
comp=Z,38nm,1.1s
OBN MLR MLR
comp=Z,49nm,15.0s
**PABE Paberze 68.15 360** P **P** **07 44 42.0 0.0**
**PABE Paberze 68.15 360** *e*P **P** **07 44 42.3 +0.3**
**IGN Ignalina 68.28 358** *e*P **P** **07 44 43.3 +0.4**
**IDID Didziasalis 68.31 358** *e*P **P** **07 44 42.9 -0.1**
**TDK Taldyqorghan 68.69 321** *e*P **P** **07 44 44.9 -0.7**
TDK pmax pmax
comp=Z,9.0nm,0.7s
**TDK Taldyqorghan 68.69 321** *e*P **P** **07 44 45.0 -0.7**
comp=Z,8.6nm,0.7s,baz=321
**NACGM Naroch 68.72 358** *i* P **P** **07 44 45.5 -0.1**
**KLNR Kaliningrad 69.02 2** *i* P **P** **07 44 48.0 +0.5**
**MNK Minsk 69.09 357** *i* P **P** **07 44 46.0 -2.0**
MNK *i* *PP **pP** **07 45 02.3 -1.6**
MNK *i* 07 47 18.7
MNK *i* PPP PPP 07 49 00.6
MNK *i* SS **S** **07 45 47.2 -1.2**
MNK *i* *SS **sS** **07 54 15.3 -0.1**
MNK *i* SS **SS** **07 58 15.7 +1.8**
MNK pmax pmax
comp=N,24nm,1.0s
MNK pmax pmax
comp=Z,31nm,0.9s
MNK pmax pmax
comp=E,4.0nm,1.3s
MNK MLR MLR
comp=Z,83nm,16.0s
MNK MLR MLR
comp=E,75nm,20.0s
MNK MLR MLR
comp=N,354nm,21.0s
**MNK Minsk 69.09 357** *i* P **P** **07 44 46.1 -1.9**
comp=E,4.0nm,1.3s
MNK *i* P **P** **07 44 46.1 -1.9**
comp=N,24nm,1.0s
MNK *i* P **P** **07 44 46.1 -1.9**
comp=Z,31nm,0.9s,baz=183
MNK *i* pP **pP** **07 45 02.3 -1.6**
MNK *i* PP **PP** **07 47 18.7 -1.7**
MNK *i* PPP PPP 07 49 00.7
MNK *i* S **S** **07 53 47.2 -1.1**
MNK *i* sS **sS** **07 54 15.4 0.0**
MNK *i* SS **SS** **07 58 15.8 +1.8**
MNK *i* SSS SSS 08 01 32.5
MNK *i* LQ LQ 08 10 38.9
MNK *i* LR LR 08 15 14.7
MNK *i* LRM MLR 08 18 41.6
comp=Z,83nm,16.1s
MNK *i* LRM MLR 08 19 04.8
comp=E,75nm,20.0s
MNK *i* LRM MLR 08 19 06.1
comp=N,354nm,21.3s
**BSEG Bad Segeberg 69.20 8** P **P** **07 44 49.9 +1.3**
BSEG pmax pmax
comp=Z,23nm,1.5s
**BELG Belogornoye 69.46 344** *c* *i*P **P** **07 44 49.3 -0.9**
BELG pmax pmax
comp=Z,9.0nm,1.3s
**GOMU GeErMu 69.62 305** P **P** **07 44 51.6 -0.4**
GOMU pmax pmax
comp=Z,10.0nm,0.9s
GOMU pmax pmax
comp=Z,74nm,4.8s
**SUW Suwalki 69.64 0** *e*P **P** **07 44 50.6 -0.8**
**SUW Suwalki 69.64 0** P **P** **07 44 50.7 -0.6**
SUW pmax pmax
comp=Z,74nm,1.2s
**SUW Suwalki 69.64 0** P **P** **07 44 50.7 -0.6**
**SUW Suwalki 69.64 0** *e*P **P** **07 44 51.0 -0.4**
**CD2 Chengdu 69.70 295** ⇑P **P** **07 44 52.0 -0.2**
CD2 pmax pmax
comp=Z,40nm,0.9s
**KPKS Kokpek 69.94 320** *e*P **P** **07 44 52.4 -1.1**
KPKS pmax pmax
comp=Z,10.0nm,0.7s
**KPKS Kokpek 69.94 320** *e*P **P** **07 44 52.4 -1.1**
comp=Z,9.9nm,0.7s,baz=320
**BTLS Baital 70.11 324** *e*P **P** **07 44 53.1 -1.3**
BTLS pmax pmax
comp=Z,11nm,0.5s
**BTLS Baital 70.11 324** *e*P **P** **07 44 53.1 -1.3**
comp=Z,11nm,0.5s,baz=324
**ABKAR Akbulak array 70.14 336** P **P** **07 44 54.1 -0.4**
ABKAR lAmb lAmb 07 44 54.9
comp=Z,23nm,1.1s
**CHKK Chushkaly 70.19 322** *e*P **P** **07 44 53.6 -1.4**
baz=322
**KUU Kurty 70.37 322** *e*P **P** **07 44 54.8 -1.3**
KUU pmax pmax
comp=Z,7.0nm,0.7s
**KUU Kurty 70.37 322** *e*P **P** **07 44 54.8 -1.3**
comp=Z,7.2nm,0.7s,baz=322
**SATY Saty 70.39 320** *e*P **P** **07 44 55.0 -1.3**
**SATY Saty 70.39 320** *e*P **P** **07 44 55.1 -1.3**
baz=320
**MDOK Medeo 70.77 321** *e*P **P** **07 44 57.3 -1.4**
**MDOK Medeo 70.77 321** *e*P **P** **07 44 57.3 -1.4**
baz=321
**AAA Alma-Ata 70.78 322** *e*P **P** **07 44 57.7 -0.9**
AAA pmax pmax
comp=Z,14nm,0.5s
**AAA Alma-Ata 70.78 322** *e*P **P** **07 44 57.7 -0.9**
comp=Z,14nm,0.5s,baz=322
**GULI GuiLin 70.86 287** P **P** **07 45 01.0 +1.7**
**RUE Ruedersdorf 70.89 6** *e*P **P** **07 44 59.8 +0.8**
**TNSS Tian-Shan 70.92 321** *e*P **P** **07 44 58.7 -1.2**
baz=321
**SGDS Sogindy 71.33 323** *e*P **P** **07 45 01.6 -0.3**
baz=323
**BUG Bochum--Univer 71.40 11** P **P** **07 45 02.6 +0.5**
BUG pmax pmax
comp=Z,48nm,0.9s
**TKM2 Tokmak 2 71.48 322** P **P** **07 45 03.4 +0.4**
SNR=14
**USP Ospenovka 71.54 323** P **P** **07 45 03.6 +0.4**
SNR=12
**CHMS Chumysh 71.70 323** P **P** **07 45 04.6 +0.4**
SNR=14
**TARG Taragay, Kyrgy 71.77 320** P **P** **07 45 06.2 +1.1**
TARG pmax pmax
comp=Z,10.0nm,0.7s
**TARG Taragay, Kyrgy 71.77 320** P **P** **07 45 06.2 +1.1**
TARG lAmb lAmb 07 45 07.3
comp=Z,9.8nm,0.7s
**GYA Guiyang 71.85 290** ⇓P **P** **07 45 05.8 +0.5**
GYA pmax pmax
comp=Z,52nm,0.7s
**KBK Karagaybulak 71.94 323** P **P** **07 45 06.4 +0.7**
SNR=16
**SNF Seneffe 71.99 13** *d*P **P** **07 45 06.2 +0.6**
SNF *ds*P **sP** **07 45 28.8 +0.6**
**CLL Collm 72.01 7** P **P** **07 45 06.1 +0.3**
CLL pmax pmax
comp=Z,14nm,0.8s
**CLL Collm 72.01 7** *i* P **P** **07 45 05.8 0.0**
comp=Z,15nm,0.8s
**CLL Collm 72.01 7** P **P** **07 45 06.1 +0.3**
CLL lAmb lAmb 07 45 06.8
comp=Z,14nm,0.8s
**BSTI Sart Tilman 72.06 12** *d*P **P** **07 45 06.8 +0.7**
**MEM Membach 72.09 12** *d*P **P** **07 45 06.9 +0.7**
MEM *d*PcP **PcP** **07 45 25.1 +0.7**
**AAK Ala-Archa 72.11 323** P **P** **07 45 07.2 +0.5**
comp=Z,20nm,0.8s,baz=127,slow=2.4,SNR=44
AAK LR LR 08 17 35.0
comp=Z,74nm,21.0s,baz=80,slow=36
**AAK Ala-Archa 72.11 323** P **P** **07 45 07.0 +0.3**
SNR=16
**AAK Ala-Archa 72.11 323** *ce*P **P** **07 45 07.2 +0.5**
AAK pmax pmax
comp=Z,19nm,0.8s
**AAK Ala-Archa 72.11 323** P **P** **07 45 07.2 +0.5**
AAK lAmb lAmb 07 45 08.0
comp=Z,18nm,0.8s
**BTNL Ternell 72.12 11** *d*P **P** **07 45 07.2 +0.6**
**BCLA Clavier 72.19 12** *d*P **P** **07 45 07.4 +0.5**
BCLA *d*PcP **PcP** **07 45 25.2 +0.3**
**BMRD Maredsous 72.25 12** *d*P **P** **07 45 07.7 +0.5**
comp=Z,13nm,1.1s
BMRD *d*pP **pP** **07 45 24.0 +0.7**
BMRD *d*PcP **PcP** **07 45 26.4 +1.3**
**EKS2 Erkin-Say 72.32 323** P **P** **07 45 08.5 +0.6**
SNR=21
**BAIF Baives 72.42 13** *e*P **P** **07 45 08.0 -0.2**
BAIF pmax pmax
comp=Z,47nm,1.2s
**DOU Dourbes 72.43 13** *d*P **P** **07 45 08.8 +0.5**
comp=Z,8.9nm,1.1s
DOU *d*PcP **PcP** **07 45 27.5 +1.6**
**RCHB Rochefort 72.45 12** *d*P **P** **07 45 08.3 -0.1**
comp=Z,9.2nm,1.1s
RCHB *d*pP **pP** **07 45 24.3 -0.1**
**GIVF Givet 72.45 12** *e*P **P** **07 45 08.5 +0.1**
GIVF pmax pmax
comp=Z,28nm,1.2s
**BRG Berggiesshubel 72.50 6** *i* P **P** **07 45 09.0 +0.3**
BRG Amp 07 45 10.7
comp=Z,17nm,1.0s
**BRG Berggiesshubel 72.50 6** *i* P **P** **07 45 09.0 +0.3**
BRG pmax pmax
comp=Z,17nm,1.0s
**MOX Moxa 72.57 8** P **P** **07 45 09.9 +0.7**
MOX pmax pmax
comp=Z,33nm,1.0s
**KSP Ksiaz 72.66 5** *e*P **P** **07 45 10.0 +0.3**
**KSP Ksiaz 72.66 5** P **P** **07 45 10.0 +0.3**
KSP pmax pmax
comp=Z,19nm,1.0s
**TNS Taunus Mts 72.72 10** P **P** **07 45 08.9 -1.2**
TNS pmax pmax
comp=Z,33nm,0.9s
**AML Almayashu 72.82 323** P **P** **07 45 12.0 +0.7**
SNR=21
**AKASG Malin Array Be 72.85 356** P **P** **07 45 09.9 -0.9**
comp=Z,11nm,0.5s,baz=8.2,slow=5.9,SNR=131
**AKASG Malin Array Be 72.85 356** P **P** **07 45 09.9 -0.9**
AKASG pmax pmax
comp=Z,4.0nm,0.5s
**AKASG Malin Array Be 72.85 356** P **P** **07 45 09.8 -0.9**
AKASG lAmb lAmb 07 45 10.6
comp=Z,4.1nm,0.5s
**PVCC Panska Ves 72.88 6** P **P** **07 45 11.6 +0.6**
PVCC pmax pmax
comp=Z,54nm,0.8s
**PVCC Panska Ves 72.88 6** *e*P **P** **07 45 11.3 +0.3**
**DZA Taraz 72.90 325** *e*P **P** **07 45 09.8 -1.4**
**DZA Taraz 72.90 325** *e*P **P** **07 45 09.9 -1.4**
baz=325
**CHVC Chvalec 72.90 5** *e*P **P** **07 45 11.3 +0.2**
**OSTC Ostas 72.94 5** *e*P **P** **07 45 11.5 +0.1**
**KKAR Karatay Array 72.97 326** P **P** **07 45 11.5 -0.1**
**KKAR Karatay Array 72.97 326** P **P** **07 45 11.5 -0.1**
**UPC Upice 72.98 5** P **P** **07 45 12.4 +0.8**
UPC pmax pmax
comp=Z,22nm,1.3s
**UPC Upice 72.98 5** *e*P **P** **07 45 11.6 0.0**
**ROSF Rostrenen 72.99 18** *e*P **P** **07 45 12.3 +0.6**
ROSF pmax pmax
comp=Z,457nm,2.2s
**WLF Walferdange 73.03 12** *d*P **P** **07 45 13.0 +1.1**
**FLN La Foliniere 73.04 16** *e*P **P** **07 45 11.7 -0.2**
FLN pmax pmax
comp=Z,68nm,1.6s
**NKC Novy Kostel 73.04 7** P **P** **07 45 12.3 +0.3**
NKC pmax pmax
comp=Z,26nm,1.1s
**NKC Novy Kostel 73.04 7** *e*P **P** **07 45 12.0 0.0**
**DPC Dobruska-Polom 73.15 5** P **P** **07 45 13.4 +0.8**
DPC pmax pmax
comp=Z,24nm,1.3s
**DPC Dobruska-Polom 73.15 5** *e*P **P** **07 45 12.9 +0.2**
**SGMF Saint Gilles 73.20 18** *e*P **P** **07 45 13.1 +0.2**
SGMF pmax pmax
comp=Z,278nm,2.2s
**BRLS Boroldav 73.24 326** *e*P **P** **07 45 14.1 +0.9**
**BRLS Boroldav 73.24 326** *e*P **P** **07 45 14.2 +0.9**
baz=326
**LDF La Druitiere 73.26 16** *e*P **P** **07 45 13.1 -0.1**
LDF pmax pmax
comp=Z,80nm,1.8s
**GRR Gorron 73.34 17** *e*P **P** **07 45 13.1 -0.6**
GRR pmax pmax
comp=Z,17nm,0.8s
**OJC Ojcow 73.40 2** P **P** **07 45 14.1 0.0**
OJC pmax pmax
comp=Z,6.0nm,0.7s
**OJC Ojcow 73.40 2** P **P** **07 45 14.1 0.0**
OJC lAmb lAmb 07 45 15.9
comp=Z,6.3nm,0.7s
**QUIF Quistinic 73.42 18** *e*P **P** **07 45 14.4 +0.2**
QUIF pmax pmax
comp=Z,51nm,1.2s
**PRU Pruhonice 73.42 6** P **P** **07 45 14.2 0.0**
**PRU Pruhonice 73.42 6** *e*P **P** **07 45 14.4 +0.2**
**KRLC Kraliky 73.45 4** P **P** **07 45 15.0 +0.6**
KRLC pmax pmax
comp=Z,29nm,0.8s
**KRLC Kraliky 73.45 4** *e*P **P** **07 45 14.1 -0.3**
**GRF Grafenberg Arr 73.49 8** *e*P **P** **07 45 15.1 +0.5**
comp=Z,17nm,1.0s,baz=350,slow=5.3
**OKC Ostrava-Krasne 73.74 4** P **P** **07 45 16.0 0.0**
**OKC Ostrava-Krasne 73.74 4** *e*P **P** **07 45 16.3 +0.3**
**MORC Moravsky Berou 73.78 4** ⇓P **P** **07 45 15.4 -1.0**
**MORC Moravsky Berou 73.78 4** P **P** **07 45 16.7 +0.4**
MORC pmax pmax
comp=Z,11nm,0.8s
**MORC Moravsky Berou 73.78 4** P **P** **07 45 16.7 +0.4**
MORC lAmb lAmb 07 45 17.4
comp=Z,11nm,0.8s
**MORC Moravsky Berou 73.78 4** *e*P **P** **07 45 16.4 +0.1**
**LVV L'vov 73.84 360** *e*P **P** **07 45 14.5 -2.2**
**IUG luzhnay 73.98 326** *e*P **P** **07 45 17.2 -0.5**
**IUG luzhnay 73.98 326** *e*P **P** **07 45 17.2 -0.5**
baz=326
**WET Wettzell 74.16 7** P **P** **07 45 19.6 +1.1**
WET pmax pmax
comp=Z,12nm,1.1s
**TREC Trest 74.16 5** P **P** **07 45 18.9 +0.3**
TREC pmax pmax
comp=Z,13nm,0.9s
**TREC Trest 74.16 5** *e*P **P** **07 45 19.1 +0.5**
**VRAC Vranov 74.20 5** ⇑P **P** **07 45 18.1 -0.6**
**VRAC Vranov 74.20 5** P **P** **07 45 19.2 +0.4**
comp=Z,10nm,0.7s,baz=4.5,slow=4.8,SNR=19
**VRAC Vranov 74.20 5** *e*P **P** **07 45 18.9 +0.1**
**KHC Kasperske Hory 74.22 7** ⇓*e*P **P** **07 45 19.6 +0.7**
KHC pmax pmax
comp=Z,51nm,0.8s
**KHC Kasperske Hory 74.22 7** *e*P **P** **07 45 19.2 +0.3**
**KHC Kasperske Hory 74.22 7** P **P** **07 45 19.9 +1.0**
KHC lAmb lAmb 07 45 20.7
comp=Z,21nm,0.8s
**PZH PanZhiHua 74.32 294** P **P** **07 45 21.4 +1.4**
PZH pmax pmax
comp=Z,6.0nm,0.7s
PZH pmax pmax
comp=Z,100nm,5.5s
**KSH Kashi 74.38 320** P **P** **07 45 23.9 +3.8**
KSH PcP **pP** **07 45 38.3 +2.1**
KSH pP sP 07 45 40.0 -2.7
KSH pmax pmax
comp=Z,35nm,0.8s
**CDF Champ du Feu 74.39 11** *e*P **P** **07 45 20.0 0.0**
CDF pmax pmax
comp=Z,9.0nm,0.8s
**KRUC Moravsky 74.44 5** P **P** **07 45 20.5 +0.4**
KRUC pmax pmax
comp=Z,12nm,1.1s
**KRUC Moravsky 74.44 5** *e*P **P** **07 45 20.2 +0.1**
**LANS Liptovska Anna 74.46 3** *e*P **P** **07 45 21.5 +1.2**
LANS pmax pmax
comp=Z,10.0nm,0.8s
**LANS Liptovska Anna 74.46 3** *e*P **P** **07 45 21.5 +1.2**
**GEC2 GERESS Array S 74.51 7** P **P** **07 45 20.9 +0.3**
GEC2 lAmb lAmb 07 45 21.9
comp=Z,14nm,0.8s
**GERES GERESS Array B 74.51 7** P **P** **07 45 20.9 +0.3**
comp=Z,11nm,0.7s,baz=0.0,slow=4.4,SNR=61
**GERES GERESS Array B 74.51 7** P **P** **07 45 21.1 +0.4**
**GERES GERESS Array B 74.51 7** P **P** **07 45 21.1 +0.4**
**CKRC Cesky Krumlov 74.57 6** *e*P **P** **07 45 20.6 -0.3**
**ECH Echery 74.58 11** P **P** **07 45 21.7 +0.7**
ECH pmax pmax
comp=Z,17nm,0.9s
**ECH Echery 74.58 11** P **P** **07 45 21.7 +0.7**
ECH lAmb lAmb 07 45 21.9
comp=Z,17nm,0.9s
**HAU Haudompre 74.69 12** *e*P **P** **07 45 21.2 -0.5**
HAU pmax pmax
comp=Z,12nm,0.7s
**JAVC Velka Javorina 74.70 4** *e*P **P** **07 45 23.0 +1.3**
**CRVS Cervenica-Dubn 74.75 1** *e*P **P** **07 45 22.2 +0.2**
CRVS pmax pmax
comp=Z,12nm,1.0s
**CRVS Cervenica-Dubn 74.75 1** *e*P **P** **07 45 22.2 +0.2**
**HINF Hinteralfeld 74.94 11** *e*P **P** **07 45 22.4 -0.7**
HINF pmax pmax
comp=Z,12nm,1.1s
**KMI Kunming 74.95 293** ⇑P **P** **07 45 23.3 -0.5**
KMI pP pP 07 45 42.4 +2.5
KMI pmax pmax
comp=Z,13nm,0.6s
**FUR Furstenfeldbru 75.01 8** P **P** **07 45 24.1 +0.6**
FUR pmax pmax
comp=Z,38nm,0.8s
**UZH Uzhgorod 75.03 1** ⇑*i*P **P** **07 45 23.9 +0.4**
UZH *e* 07 45 36.5
**SMOL Smolenice 75.03 4** *e*P **P** **07 45 24.5 +0.9**
SMOL pmax pmax
comp=Z,6.0nm,0.8s
**SMOL Smolenice 75.03 4** *e*P **P** **07 45 24.5 +0.9**
**IZAB Izabela 75.05 3** *e*P **P** **07 45 24.4 +0.7**
**VYHS Vyhne 75.10 3** *e*P **P** **07 45 24.4 +0.4**
VYHS pmax pmax
comp=Z,15nm,0.9s
**VYHS Vyhne 75.10 3** *e*P **P** **07 45 24.4 +0.4**
**LOR Lormes 75.12 14** *e*P **P** **07 45 23.6 -0.5**
LOR pmax pmax
comp=Z,38nm,1.2s
**KECS Kecovo 75.15 2** *e*P **P** **07 45 25.4 +1.1**
**KECS Kecovo 75.15 2** *e*P **P** **07 45 25.4 +1.1**
**MODS Modra-Piesok 75.17 4** *e*P **P** **07 45 27.6 +3.2**
MODS pmax pmax
comp=Z,20nm,1.0s
**MODS Modra-Piesok 75.17 4** *e*PP PP 07 48 12.1 -0.3
**MODS Modra-Piesok 75.17 4** *e*P **P** **07 45 27.6 +3.2**
**MFF Saint Martin d 75.19 17** *e*P **P** **07 45 24.2 -0.3**
MFF pmax pmax
comp=Z,15nm,0.6s
**SSF Saint Saulge 75.27 14** *e*P **P** **07 45 24.6 -0.4**
SSF pmax pmax
comp=Z,23nm,0.7s
**ZST Bratislava 75.34 4** *e*P **P** **07 45 26.3 +1.0**
ZST pmax pmax
comp=Z,44nm,0.9s
**ZST Bratislava 75.34 4** *e*P **P** **07 45 26.3 +1.0**
**SORM Soroca 75.45 357** ⇑P **P** **07 45 25.0 -0.9**
**SORM Soroca 75.45 357** P **P** **07 45 25.0 -0.9**
**AVF Avril sur Loir 75.52 14** *e*P **P** **07 45 25.7 -0.7**
AVF pmax pmax
comp=Z,17nm,0.6s
**TRPA Tarpa 75.53 1** ⇑P **P** **07 45 26.2 -0.2**
**MOA Molln 75.54 6** *e*P **P** **07 45 26.9 +0.4**
comp=Z,6.5nm,1.0s
**CONA Conrad Observa 75.55 5** *i* P **P** **07 45 27.2 +0.6**
comp=Z,14nm,0.7s,SNR=5.6
**BGF Bois d'Agland 75.68 14** *e*P **P** **07 45 26.8 -0.5**
BGF pmax pmax
comp=Z,20nm,0.7s
**PSZ Piszkesteto 75.71 2** ⇑P **P** **07 45 27.8 +0.3**
**PSZ Piszkesteto 75.71 2** P **P** **07 45 28.3 +0.7**
PSZ pmax pmax
comp=Z,11nm,0.9s
**PSZ Piszkesteto 75.71 2** P **P** **07 45 28.3 +0.7**
PSZ lAmb lAmb 07 45 29.3
comp=Z,11nm,0.9s
**SMF Signal de Mont 75.73 14** *e*P **P** **07 45 26.9 -0.7**
SMF pmax pmax
comp=Z,23nm,1.0s
**SRO Srobarova 75.77 4** *e*P **P** **07 45 28.8 +1.0**
**SRO Srobarova 75.77 4** *e*P **P** **07 45 28.8 +1.0**
**MOTA Moosalm 75.81 9** *e*P **P** **07 45 28.5 +0.2**
comp=Z,15nm,1.0s,SNR=5.9
**SOP Sopron 75.83 5** P **P** **07 45 29.3 +1.2**
SOP pmax pmax
comp=Z,11nm,1.4s
**TCF Toulx Ste Croi 75.85 15** *e*P **P** **07 45 27.7 -0.7**
TCF pmax pmax
comp=Z,13nm,0.7s
**WATA Walderalm 75.86 8** *i* P **P** **07 45 28.9 +0.4**
comp=Z,26nm,1.1s,SNR=6.3
**WTTA Wattenberg 75.94 8** *i* P **P** **07 45 29.6 +0.5**
comp=Z,26nm,0.8s,SNR=8.7
**WTTA Wattenberg 75.94 8** P **P** **07 45 29.5 +0.5**
WTTA pmax pmax
comp=Z,33nm,1.0s
**BUR08 Bucovina Ar. S 76.01 359** P **P** **07 45 29.1 -0.2**
**CABF La Chapelle 76.04 12** *e*P **P** **07 45 29.3 -0.2**
CABF pmax pmax
comp=Z,15nm,0.7s
**BURAR Bucovina Array 76.04 359** ⇑P **P** **07 45 29.6 0.0**
**BURAR Bucovina Array 76.04 359** P **P** **07 45 29.5 0.0**
**BURAR Bucovina Array 76.04 359** P **P** **07 45 29.5 0.0**
BURAR lAmb lAmb 07 45 30.3
comp=Z,7.6nm,0.8s
**FETA Feichten 76.10 9** *i* P **P** **07 45 30.5 +0.6**
comp=Z,16nm,0.9s
**ARSA Arzberg 76.21 6** *i* P **P** **07 45 31.0 +0.7**
comp=Z,9.1nm,0.8s
**KBA Koelnbreinsper 76.25 7** *i* P **P** **07 45 31.6 +0.8**
comp=Z,20nm,0.6s,SNR=10
**KBA Koelnbreinsper 76.25 7** P **P** **07 45 31.8 +1.0**
KBA pmax pmax
comp=Z,39nm,1.0s
**DAVOX Davos/Dischmat 76.27 10** P **P** **07 45 31.5 +0.6**
comp=Z,9.6nm,0.7s
**ABTA Abfaltersbach 76.52 8** *i* P **P** **07 45 32.7 +0.6**
comp=Z,15nm,1.2s
**TUE Stuetta 76.52 10** P **P** **07 45 33.2 +0.9**
TUE lAmb lAmb 07 45 34.3
comp=Z,14nm,0.8s
**MYKA Terra Mystica 76.71 7** *e*P **P** **07 45 33.4 +0.1**
comp=Z,11nm,0.8s
**RJF Les Rejaudoux 76.72 16** *e*P **P** **07 45 33.6 +0.4**
RJF pmax pmax
comp=Z,239nm,2.5s
**LSA Lhasa 76.74 304** P **P** **07 45 34.8 +0.6**
LSA pmax pmax
comp=Z,76nm,0.9s
**SOKA Soboth 76.75 6** *i* P **P** **07 45 34.1 +0.6**
comp=Z,9.4nm,0.6s,SNR=7.6
**PERS Pernice 76.80 6** *i* P **P** **07 45 34.1 +0.4**
**DRGR 76.87 0** ⇑P **P** **07 45 33.9 -0.2**
**DRGR 76.87 0** P **P** **07 45 34.2 0.0**
DRGR pmax pmax
comp=Z,9.0nm,0.9s
**OBKA Obir 76.89 6** *i* P **P** **07 45 34.7 +0.4**
comp=Z,38nm,0.6s,SNR=15
**LFF La Frestale 76.95 16** *e*P **P** **07 45 34.3 -0.2**
LFF pmax pmax
comp=Z,34nm,0.6s
**CADS Cadrg 77.12 7** *i* P **P** **07 45 35.0 -0.5**
**CTI Castel Tesino 77.14 8** P **P** **07 45 35.5 -0.2**
CTI pmax pmax
comp=Z,16nm,1.3s
**CTI Castel Tesino 77.14 8** P **P** **07 45 35.5 -0.2**
CTI lAmb lAmb 07 45 37.5
comp=Z,16nm,1.3s
**CAF Calviac 77.17 15** *e*P **P** **07 45 35.4 -0.4**
CAF pmax pmax
comp=Z,9.0nm,0.6s
**LPL La Plagne 77.19 12** *e*P **P** **07 45 37.1 +0.9**
LPL pmax pmax
comp=Z,5.0nm,0.7s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LPG | La Plagne | 77.21 | 12 | *e*P | | P | | 07 45 37.2 | +0.8 |
| LPG | | | | pmax | | pmax | | | |
| | comp=Z,62nm,2.0s | | | | | | | | |
| GOF | Gofitskoye | 77.28 | 346⇑ | *e*P | | P | | 07 45 36.3 | -0.1 |
| CRNS | Crni Vrh | 77.30 | 7 | *i* P | | P | | 07 45 36.0 | -0.5 |
| DAV | Davao City (W) | 77.44 | 264 | LR | | LR | | 08 17 02.6 | |
| | comp=Z,13nm,20.2s,baz=9.5,slow=34 | | | | | | | | |
| VIVF | Saint-Julien-l | 77.59 | 14 | *e*P | | P | | 07 45 37.9 | -0.3 |
| VIVF | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| BNI | Bardonecchia | 77.64 | 12 | P | | P | | 07 45 39.9 | +1.3 |
| BNI | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| BNI | Bardonecchia | 77.64 | 12 | P | | P | | 07 45 39.9 | +1.3 |
| BNI | | | | IAmb | | IAmb | | 07 45 41.1 | |
| | comp=Z,8.7nm,0.7s | | | | | | | | |
| ORIF | Oris-en-Rattie | 77.68 | 13 | *e*P | | P | | 07 45 38.5 | -0.3 |
| ORIF | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | |
| DOPR | Dopca | 77.69 | 359 | ⇑P | | P | | 07 45 39.1 | +0.5 |
| VRI | Vrincioaia | 77.76 | 358 | ⇓P | | P | | 07 45 38.9 | -0.3 |
| VRI | Vrincioaia | 77.76 | 358 | P | | P | | 07 45 38.8 | -0.3 |
| PLOR | Plostina | 77.78 | 358 | ⇑P | | P | | 07 45 39.2 | 0.0 |
| PLOR | Plostina | 77.78 | 358 | P | | P | | 07 45 39.2 | 0.0 |
| COVR | Voineasa-Covas | 77.79 | 358 | ⇑P | | P | | 07 45 40.1 | +0.8 |
| TEOL | Teolo | 77.83 | 8 | P | | P | | 07 45 39.6 | +0.2 |
| GBRS | Gornja Briga | 77.88 | 6 | *i* P | | P | | 07 45 39.7 | -0.1 |
| MBDF | Montbardon | 77.98 | 12 | *e*P | | P | | 07 45 40.8 | +0.3 |
| MBDF | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| BZS | Buzias | 78.04 | 1 | ⇓P | | P | | 07 45 40.6 | 0.0 |
| BZS | Buzias | 78.04 | 1 | P | | P | | 07 45 40.6 | 0.0 |
| BZS | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| MLR | Muntele Rosu | 78.15 | 358 | ⇓P | | P | | 07 45 41.2 | -0.2 |
| MLR | Muntele Rosu | 78.15 | 358 | P | | P | | 07 45 41.8 | +0.4 |
| | comp=Z,4.6nm,0.6s,baz=294,slow=3.8,SNR=14 | | | | | | | | |
| MLR | Muntele Rosu | 78.15 | 358 | P | | P | | 07 45 42.2 | +0.8 |
| MLR | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| MLR | Muntele Rosu | 78.15 | 358 | P | | P | | 07 45 42.2 | +0.8 |
| MLR | | | | IAmb | | IAmb | | 07 45 46.5 | |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| VOIR | | 78.22 | 359 | ⇑P | | P | | 07 45 42.0 | +0.3 |
| VOIR | | 78.22 | 359 | P | | P | | 07 45 42.4 | +0.7 |
| VOIR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| GZR | Gura Zlata | 78.27 | 0 | ⇓P | | P | | 07 45 41.9 | -0.1 |
| ARR | Arges | 78.29 | 359 | ⇑P | | P | | 07 45 42.1 | -0.1 |
| KIV | Kislovodsk | 78.41 | 346 | *e*P | | P | | 07 45 42.9 | +0.1 |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| KIV | Kislovodsk | 78.41 | 346 | P | | P | | 07 45 43.3 | +0.5 |
| KIV | | | | IAmb | | IAmb | | 07 45 43.8 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| CFR | Carcaliu | 78.41 | 357 | ⇑P | | P | | 07 45 42.2 | -0.4 |
| CFR | Carcaliu | 78.41 | 357 | P | | P | | 07 45 42.2 | -0.4 |
| FRGS | Fruska Gora | 78.46 | 3 | ⇓P | | P | | 07 45 41.9 | -1.1 |
| KBZ | Khabaz | 78.60 | 346 | P | | P | | 07 45 44.5 | +0.8 |
| | comp=Z,9.5nm,0.9s,baz=322,slow=5.6,SNR=14 | | | | | | | | |
| KBZ | Khabaz | 78.60 | 346 | *ce*P | | P | | 07 45 44.3 | +0.6 |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| TPGR | Topolog | 78.72 | 356 | ⇑P | | P | | 07 45 44.6 | +0.2 |
| ETSF | Etsaut | 78.73 | 18 | P | | P | | 07 45 45.4 | +0.8 |
| ETSF | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| NCK | Nalchik | 78.73 | 345 | *i* P | | P | | 07 45 44.8 | +0.3 |
| NCK | | | | pmax | | pmax | | | |
| | comp=Z,35nm,0.7s | | | | | | | | |
| MTLF | Montolieu | 78.74 | 16 | *e*P | | P | | 07 45 44.2 | -0.3 |
| MTLF | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| EPF | Esparros | 78.75 | 17 | *e*P | | P | | 07 45 44.7 | 0.0 |
| EPF | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.5s | | | | | | | | |
| HERR | Herculane | 78.78 | 1 | ⇑P | | P | | 07 45 43.9 | -0.8 |
| SBF | Sospel | 78.91 | 12 | *e*P | | P | | 07 45 45.5 | 0.0 |
| SBF | | | | pmax | | pmax | | | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| TLBR | Topalu | 79.05 | 357 | ⇓P | | P | | 07 45 45.9 | -0.2 |
| FRF | La Foret Royal | 79.11 | 12 | *e*P | | P | | 07 45 46.1 | -0.5 |
| FRF | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| TIRR | Tirgusor | 79.12 | 356 | ⇑P | | P | | 07 45 46.1 | -0.5 |
| TIRR | Tirgusor | 79.12 | 356 | P | | P | | 07 45 47.0 | +0.5 |
| TIRR | | | | pmax | | pmax | | | |
| | comp=Z,45nm,0.7s | | | | | | | | |
| TIRR | Tirgusor | 79.12 | 356 | P | | P | | 07 45 47.0 | +0.5 |
| ZEI | Tsey | 79.38 | 345 | *e*P | | P | | 07 45 47.6 | -0.7 |
| ZEI | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| SGRR | Singureni | 79.42 | 358 | ⇑P | | P | | 07 45 47.5 | -0.7 |
| DIVS | Divibare | 79.53 | 3 | P | | P | | 07 45 49.5 | +0.6 |
| DIVS | | | | IAmb | | IAmb | | 07 45 49.9 | |
| | comp=Z,7.3nm,0.7s | | | | | | | | |
| OSSC | Osservatorio P | 79.62 | 9 | P | | P | | 07 45 49.4 | +0.1 |
| SHL | Shillong | 79.91 | 301 | P | | P | | 07 45 50.3 | -1.1 |
| SHL | | | | pmax | | pmax | | | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| SHL | Shillong | 79.91 | 301 | P | | P | | 07 45 50.3 | -1.1 |
| SHL | | | | IAmb | | IAmb | | 07 45 50.8 | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| MURB | Monte Urbino | 79.98 | 8 | P | | P | | 07 45 52.2 | +0.9 |
| BOVS | Bovan | 80.02 | 1 | ⇓P | | P | | 07 45 50.8 | -0.6 |
| TAPN | Taplejung | 80.30 | 306 | *e*P | | P | | 07 45 53.2 | -0.4 |
| | comp=Z,32nm,0.7s | | | | | | | | |
| PGF | Pioggiola | 80.37 | 11 | *e*P | | P | | 07 45 53.7 | +0.2 |
| PGF | | | | pmax | | pmax | | | |
| | comp=Z,150nm,1.9s | | | | | | | | |
| NRCA | Norcia | 80.45 | 8 | P | | P | | 07 45 55.2 | +1.3 |
| NRCA | | | | IAmb | | IAmb | | 07 45 55.4 | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| NIL | Nilore | 80.60 | 320 | P | | P | | 07 45 56.0 | +1.2 |
| NIL | | | | pmax | | pmax | | | |
| | comp=Z,49nm,0.8s | | | | | | | | |
| NIL | Nilore | 80.60 | 320 | P | | P | | 07 45 56.0 | +1.2 |
| GUN | Gumba | 80.63 | 307 | *e*P | | P | | 07 45 55.4 | -0.1 |
| | comp=Z,25nm,0.7s | | | | | | | | |
| JIRN | Jiri | 80.71 | 307 | *e*P | | P | | 07 45 56.2 | +0.3 |
| ODAN | Odare | 80.87 | 306 | *e*P | | P | | 07 45 56.3 | -0.3 |
| KKN | Kakani | 81.00 | 308 | *e*P | | P | | 07 45 57.0 | -0.2 |
| VTS | Vitosha | 81.05 | 0 | ⇑P | | P | | 07 45 57.0 | -0.2 |
| VTS | Vitosha | 81.05 | 0 | P | | P | | 07 45 57.3 | +0.1 |
| VTS | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| VTS | Vitosha | 81.05 | 0 | P | | P | | 07 45 57.3 | +0.1 |
| VTS | | | | IAmb | | IAmb | | 07 45 57.9 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| GKN | Gorkha | 81.09 | 308 | *e*P | | P | | 07 45 57.5 | -0.2 |
| PKI | Pulchoki | 81.13 | 308 | *e*P | | P | | 07 45 57.8 | -0.3 |
| PKIN | Phulchoki | 81.13 | 308 | *e*P | | P | | 07 45 57.5 | -0.5 |
| RAMN | Ramite | 81.14 | 306 | *e*P | | P | | 07 45 57.8 | -0.3 |
| DANN | Dangsing | 81.17 | 309 | *e*P | | P | | 07 45 58.5 | +0.3 |
| | comp=Z,194nm,0.8s | | | | | | | | |
| PDG | Podgorica | 81.17 | 3 | ⇑P | | P | | 07 45 57.3 | -0.4 |
| PDG | Podgorica | 81.17 | 3 | P | | P | | 07 45 58.0 | +0.3 |
| DMN | Daman | 81.23 | 308 | *e*P | | P | | 07 45 58.4 | -0.1 |
| KBL | Kabul | 81.23 | 323 | P | | P | | 07 45 57.0 | -1.4 |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| KBL | Kabul | 81.23 | 323 | P | | P | | 07 45 57.0 | -1.4 |
| KBL | | | | IAmb | | IAmb | | 07 45 58.0 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| ESBB | Sonseca Array | 81.23 | 21 | P | | P | | 07 45 59.6 | +1.5 |
| ESBB | | | | IAmb | | IAmb | | 07 45 60.0 | |
| | comp=Z,7.8nm,0.8s | | | | | | | | |
| ESDC | Sonseca Array | 81.23 | 21 | P | | P | | 07 45 59.2 | +1.1 |
| | comp=Z,7.0nm,0.7s,baz=342,slow=5.1,SNR=34 | | | | | | | | |
| ESDC | Sonseca Array | 81.23 | 21 | P | | P | | 07 45 59.5 | +1.4 |
| KARS | Kars | 81.62 | 345 | P | | P | | 07 46 01.8 | +1.5 |
| KARS | | | | pmax | | pmax | | | |
| | comp=Z,45nm,0.7s | | | | | | | | |
| KARS | Kars | 81.62 | 345 | P | | P | | 07 46 01.8 | +1.5 |
| UBPT | Khong Chiam | 81.67 | 285 | P | | P | | 07 46 01.1 | +0.4 |
| PYUN | Piuthan | 81.71 | 310 | *e*P | | P | | 07 46 00.9 | -0.1 |
| | comp=Z,125nm,0.9s | | | | | | | | |
| KOLN | Koldanda | 81.74 | 309 | *e*P | | P | | 07 46 01.1 | -0.1 |
| | comp=Z,68nm,1.0s | | | | | | | | |
| GNI | Garni | 81.84 | 344 | P | | P | | 07 46 02.0 | +0.6 |
| | comp=Z,7.0nm,0.7s,baz=202,slow=2.6,SNR=5.1 | | | | | | | | |
| GNI | Garni | 81.84 | 344 | P | | P | | 07 46 02.6 | +1.2 |
| GNI | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| GNI | Garni | 81.84 | 344 | P | | P | | 07 46 02.6 | +1.2 |
| GNI | | | | IAmb | | IAmb | | 07 46 03.1 | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| CHTO | Chiang Mai | 82.13 | 292 | P | | P | | 07 46 02.4 | -0.7 |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| CHTO | Chiang Mai | 82.13 | 292 | P | | P | | 07 46 02.4 | -0.7 |
| CHTO | | | | IAmb | | IAmb | | 07 46 03.2 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| FAKI | Fak Fak | 82.20 | 253 | P | | P | | 07 46 03.3 | -0.1 |
| CM31 | Chiang Mai Arr | 82.43 | 292 | P | | P | | 07 46 04.8 | +0.2 |
| CMAR | Chiang Mai Arr | 82.43 | 292 | P | | P | | 07 46 04.4 | -0.2 |
| | comp=Z,28nm,0.7s,baz=10,slow=5.6,SNR=105 | | | | | | | | |
| CMAR | Chiang Mai Arr | 82.43 | 292 | P | | P | | 07 46 04.7 | 0.0 |
| CMAR | Chiang Mai Arr | 82.43 | 292 | P | | P | | 07 46 04.7 | 0.0 |
| KOPT | Kop Dagi | 82.57 | 347 | P | | P | | 07 46 06.8 | +1.4 |
| KOPT | | | | IAmb | | IAmb | | 07 46 09.6 | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| FNA | Florina | 82.86 | 2 | P | | P | | 07 46 06.4 | -0.2 |
| FNA | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| FNA | Florina | 82.86 | 2 | P | | P | | 07 46 06.4 | -0.2 |
| FNA | | | | IAmb | | IAmb | | 07 46 07.4 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| MDUB | Mudurnu | 82.97 | 354 | P | | P | | 07 46 08.0 | +0.7 |
| ANTO | Ankara | 83.47 | 353 | P | | P | | 07 46 10.8 | +1.0 |
| ANTO | Ankara | 83.47 | 353 | P | | P | | 07 46 10.8 | +1.0 |
| HRA | Herat | 83.48 | 329 | P | | P | | 07 46 10.7 | +0.6 |
| HRA | | | | IAmb | | IAmb | | 07 46 11.4 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| BR231 | Keskin MP Arra | 83.50 | 353 | P | | P | | 07 46 11.0 | +1.0 |
| BR131 | Keskin Array S | 83.55 | 352 | P | | P | | 07 46 10.7 | +0.4 |
| BR131 | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| BR131 | Keskin Array S | 83.55 | 352 | P | | P | | 07 46 10.7 | +0.4 |
| BRTR | Keskin Array B | 83.55 | 352 | P | | P | | 07 46 10.6 | +0.3 |
| | comp=Z,9.5nm,0.8s,baz=30,slow=2.6,SNR=58 | | | | | | | | |
| BRTR | Keskin Array B | 83.55 | 352 | P | | P | | 07 46 10.7 | +0.4 |
| LIT | Litokhoron | 83.56 | 1 | P | | P | | 07 46 10.1 | -0.1 |
| LIT | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| LIT | Litokhoron | 83.56 | 1 | P | | P | | 07 46 10.1 | -0.1 |
| BORA | Eskisehir | 83.60 | 355 | P | | P | | 07 46 11.1 | +0.6 |
| GURO | Guroymak-BITLI | 83.81 | 345 | P | | P | | 07 46 12.9 | +1.3 |
| GEVA | Gevas | 83.89 | 345 | P | | P | | 07 46 13.2 | +1.1 |
| GEVA | | | | IAmb | | IAmb | | 07 46 13.9 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| BNN | Bunyan | 84.23 | 350 | P | | P | | 07 46 15.0 | +1.2 |
| TIP | Timpagrande | 84.32 | 5 | ⇑P | | P | | 07 46 14.1 | 0.0 |
| AGG | Agios Georgios | 84.64 | 1 | P | | P | | 07 46 15.5 | -0.2 |
| AGG | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| AGG | Agios Georgios | 84.64 | 1 | P | | P | | 07 46 15.5 | -0.2 |
| MARD | Mardin | 85.19 | 346 | P | | P | | 07 46 19.7 | +1.1 |
| ISP | Isparta | 85.64 | 354 | P | | P | | 07 46 20.7 | -0.1 |
| ISP | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| ISP | Isparta | 85.64 | 354 | P | | P | | 07 46 20.7 | -0.1 |
| MPSI | Mapaga | 86.15 | 265 | P | | P | | 07 46 22.9 | -0.5 |
| | comp=Z,20nm,0.7s | | | | | | | | |
| KEST | Kesra | 87.15 | 11 | P | | P | | 07 46 29.2 | +1.0 |
| | comp=Z,6.8nm,0.7s,baz=62,slow=5.8,SNR=7.4 | | | | | | | | |
| LEF | Lefka | 88.18 | 352 | ⇑P | | P | | 07 46 33.6 | +0.6 |
| CSS | Mathiatis | 88.30 | 352 | P | | P | | 07 46 34.3 | +0.6 |
| IDI | Anoyia | 88.36 | 359 | P | | P | | 07 46 32.6 | -1.4 |
| | comp=Z,8.2nm,0.8s,baz=11,slow=13,SNR=5.4 | | | | | | | | |
| ATAH | Atahualpa | 89.48 | 104 | LR | | LR | | 08 25 16.4 | |
| | comp=Z,28nm,18.1s,baz=351,slow=34 | | | | | | | | |
| MMAI | Mount Meron Ar | 90.06 | 350 | P | | P | | 07 46 41.3 | -0.7 |
| | comp=Z,1.3nm,0.4s,baz=358,slow=6.8,SNR=7.8 | | | | | | | | |
| ASF | Jabal al Asfar | 90.74 | 349 | P | | P | | 07 46 44.6 | -0.6 |
| | comp=Z,6.1nm,0.8s,baz=21,slow=13,SNR=4.0 | | | | | | | | |
| WRA | Warramunga Arr | 95.59 | 242 | P | | P | | 07 47 06.5 | -0.9 |
| | comp=Z,1.4nm,0.9s,baz=39,slow=5.2,SNR=5.4 | | | | | | | | |
| RAYN | Ar Rayn | 97.94 | 340 | P | | Pdif | | 07 47 18.3 | 0.0 |
| RAYN | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| ASAR | Alice Springs | 98.97 | 240 | P | | Pdif | | 07 47 22.2 | -0.4 |
| | comp=Z,0.4nm,0.8s,baz=32,slow=4.5,SNR=4.3 | | | | | | | | |
| KMBO | Kilima Mbogo | 123.49 | 343 | PKP | | PKiKP | | 07 52 40.0 | 0.0 |
| | comp=Z,3.8nm,0.7s,baz=17,slow=4.9,SNR=9.5 | | | | | | | | |
| KMBO | Kilima Mbogo | 123.49 | 343 | PKIKP | | PKiKP | | 07 52 40.0 | 0.0 |
| MSNA | Messina | 145.34 | 349 | *i* P | | PKPab | | 07 53 20.0 | +0.2 |
| MSNA | Messina | 145.34 | 349 | *i* P | | PKPab | | 07 53 20.0 | +0.2 |
| MOPA | Mopani | 146.34 | 347 | *i* P | | PKPdf | | 07 53 21.5 | +0.2 |
| MOPA | Mopani | 146.34 | 347 | *i* P | | PKPdf | | 07 53 21.5 | +0.2 |
| LBTB | Lobatse | 148.30 | 356 | *i* P | | PKPbc | | 07 53 27.4 | -0.6 |
| LBTB | Lobatse | 148.30 | 356 | *i* P | | PKPbc | | 07 53 27.4 | -0.6 |
| CNG | Changalane | 148.96 | 345 | *i* P | | PKPdf | | 07 53 26.7 | +1.2 |
| CNG | Changalane | 148.96 | 345 | *i* P | | PKPdf | | 07 53 26.7 | +1.2 |
| BOSA | Boshof | 151.90 | 357 | PKPbc | | PKPbc | | 07 53 36.5 | -0.2 |
| | comp=Z,6.1nm,0.5s,baz=16,slow=1.8,SNR=24 | | | | | | | | |
| BOSA | Boshof | 151.90 | 357 | | | PKPbc | | 07 53 36.8 | +0.1 |
| BOSA | | | | PKPab | | PKPab | | 07 53 46.5 | +0.5 |
| BOSA | Boshof | 151.90 | 357 | *i* P | | PKPbc | | 07 53 35.1 | -1.6 |
| BOSA | Boshof | 151.90 | 357 | *i* P | | PKPbc | | 07 53 35.1 | -1.6 |

*WEL* ***14*** *07:34:58.5±0.6,44°S±4°×17°3E±°, h7km±6km, M3.9/12, ML4.0/12, MLv3.9/12, Error ellipse: s-maj=0.0km s-min=0.0km az=143.1*

*NOU* ***14*** *07:34:59.4, 43.58S×172.93E, h54km, ML4.5/8, South Island, New Zealand*

**ISC 14 07:34:58.4±1.1, 43.55S±0.04×172.84E±0.04, h27km, n107, σ1.9 21/110, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.21 | 221 | P | Pb | 07 35 03.1 | -1.3 |
| MQZ | | | | S | Sb | 07 35 06.3 | -2.1 |
| OKCZ | Okains Bay | 0.23 | 138 | P | Pb | 07 35 05.1 | +0.3 |
| AKCZ | Akaroa Harbour | 0.33 | 171 | P | Pb | 07 35 06.5 | +0.5 |
| AMCZ | Amberley | 0.40 | 340 | P | Pb | 07 35 05.9 | -1.2 |
| RACZ | Rakaia | 0.54 | 251 | P | Pb | 07 35 09.0 | -0.4 |
| RACZ | | | | S | Sb | 07 35 16.0 | -0.9 |
| GVZ | Greta Valley S | 0.60 | 14 | P | Pb | 07 35 10.4 | 0.0 |
| OXZ | Oxford | 0.63 | 291 | P | Pb | 07 35 09.5 | -1.3 |
| WACZ | Wakanui South | 0.83 | 241 | P | Pn | 07 35 14.7 | +0.4 |
| LTZ | Lake Taylor | 0.87 | 331 | P | Pn | 07 35 14.6 | -0.4 |
| MHCZ | Mount Hutt | 0.93 | 271 | P | Pn | 07 35 15.6 | -0.1 |
| MHCZ | | | | S | Sb | 07 35 28.3 | +0.5 |
| KHZ | Kahutara | 1.24 | 25 | P | Pb | 07 35 20.7 | -0.5 |
| KHZ | Kahutara | 1.24 | 25 | P | Pb | 07 35 20.8 | -0.5 |
| ARCZ | Arundel | 1.27 | 251 | P | Pn | 07 35 20.9 | +0.5 |
| RPZ | Rata Peaks | 1.31 | 262 | P | Pn | 07 35 21.3 | +0.4 |
| RPZ | Rata Peaks | 1.31 | 262 | P | Pn | 07 35 21.6 | +0.7 |
| INZ | Inchbonnie | 1.31 | 308 | P | Pn | 07 35 21.1 | +0.1 |
| TMZ | Timaru | 1.57 | 237 | P | Pn | 07 35 25.4 | +0.9 |
| WVZ | Waitaha Valley | 1.61 | 286 | P | Pn | 07 35 25.9 | +0.8 |
| THZ | Tophouse | 1.79 | 2 | P | Pn | 07 35 28.1 | +0.5 |
| GCSZ | Gaunt Creek Bo | 1.85 | 276 | P | Pn | 07 35 30.0 | +1.7 |
| BSWZ | Blackbirch Sta | 1.99 | 23 | P | Pn | 07 35 31.2 | +1.0 |
| LBZ | Lake Benmore | 2.09 | 246 | P | Pn | 07 35 32.8 | +1.1 |
| MRNZ | Matariki Terra | 2.15 | 358 | P | Pn | 07 35 33.8 | +1.3 |
| ODZ | Otahua Downs | 2.17 | 226 | P | Pn | 07 35 33.8 | +1.0 |
| ODZ | Otahua Downs | 2.17 | 226 | P | Pn | 07 35 34.0 | +1.2 |
| FOZ | Fox Glacier | 2.20 | 269 | P | Pn | 07 35 35.2 | +2.0 |
| TUWZ | Tuamarina | 2.27 | 21 | P | Pn | 07 35 34.9 | +0.8 |
| NNZ | Nelson | 2.37 | 10 | P | Pn | 07 35 36.5 | +1.1 |
| TCW | Tory Channel | 2.57 | 25 | P | Pn | 07 35 38.4 | +0.1 |
| BHW | Baring Head | 2.61 | 36 | P | Pn | 07 35 39.1 | +0.3 |
| PLWZ | Palliser | 2.66 | 43 | P | Pn | 07 35 39.7 | +0.1 |
| QRZ | Quartz Range | 2.73 | 355 | P | Pn | 07 35 41.0 | +0.5 |
| QRZ | Quartz Range | 2.73 | 355 | P | Pn | 07 35 41.2 | +0.7 |
| MSWZ | Moeka Station | 2.78 | 41 | P | Pn | 07 35 41.1 | 0.0 |
| HHSZ | Highcliff Hill | 2.83 | 214 | P | Pn | 07 35 43.0 | +1.2 |
| DUWZ | D'Urville Isla | 2.86 | 17 | P | Pn | 07 35 42.8 | +0.5 |
| PAWZ | Paruwai Farm | 2.89 | 42 | P | Pn | 07 35 42.7 | 0.0 |
| CAW | Cannon Point | 2.95 | 35 | P | Pn | 07 35 43.6 | +0.1 |
| JCZ | Jackson Bay | 2.98 | 259 | P | Pn | 07 35 44.9 | +0.9 |
| TRWZ | Traveller | 3.01 | 45 | P | Pn | 07 35 44.5 | +0.1 |
| WKZ | Wanaka | 3.03 | 244 | P | Pn | 07 35 45.3 | +0.7 |
| EAZ | Earnscleugh | 3.04 | 235 | P | Pn | 07 35 45.7 | +0.9 |
| KIW | Kapiti Island | 3.10 | 30 | P | Pn | 07 35 45.9 | +0.4 |
| MTW | Mount Morrison | 3.10 | 40 | P | Pn | 07 35 45.4 | -0.2 |
| OGWZ | Otaki Gorge | 3.23 | 33 | P | Pn | 07 35 47.4 | 0.0 |
| HOWZ | Holdsworth Sta | 3.31 | 38 | P | Pn | 07 35 48.7 | +0.2 |
| TUZ | Tuapeka | 3.32 | 222 | P | Pn | 07 35 49.7 | +1.2 |
| MRZ | Mangatainoka R | 3.53 | 36 | P | Pn | 07 35 51.2 | -0.3 |
| MSZ | Milford Sound | 3.71 | 251 | P | Pn | 07 35 54.7 | +0.7 |
| PRWZ | Pori Road | 3.79 | 39 | P | Pn | 07 35 55.0 | -0.1 |
| BFZ | Birch Farm | 3.82 | 43 | P | Pn | 07 35 55.1 | -0.4 |
| MLZ | Mavora Lakes | 3.84 | 240 | P | Pn | 07 35 56.2 | +0.5 |
| SYZ | Scrubby Hill | 3.98 | 220 | P | Pn | 07 35 59.1 | +1.5 |
| DVHZ | Dannevirke | 4.09 | 38 | P | Pn | 07 35 58.4 | -0.7 |
| WAZ | Wanganui | 4.12 | 24 | P | Pn | 07 36 02.3 | +2.8 |
| WHZ | Wether Hill Ro | 4.20 | 234 | P | Pn | 07 36 00.7 | 0.0 |
| NMEZ | Namu Road | 4.21 | 11 | P | Pn | 07 36 03.8 | +3.1 |
| PREZ | Palmer Road | 4.32 | 14 | P | Pn | 07 36 04.9 | +2.6 |
| KHEZ | Kahui Hut | 4.34 | 12 | P | Pn | 07 36 04.9 | +2.2 |
| NBEZ | Newall Road No | 4.35 | 11 | P | Pn | 07 36 04.8 | +2.1 |
| NEZ | North Egmont | 4.38 | 13 | P | Pn | 07 36 05.4 | +2.2 |
| PNHZ | Pukenui | 4.42 | 36 | P | Pn | 07 36 03.3 | -0.4 |
| PKE | Pukeiti | 4.44 | 12 | P | Pn | 07 36 06.2 | +2.2 |
| DREZ | Durham Road | 4.47 | 14 | P | Pn | 07 36 06.7 | +2.2 |
| DCZ | Deep Cove | 4.50 | 243 | P | Pn | 07 36 05.7 | +0.9 |
| MTVZ | Mangateitei | 4.61 | 26 | P | Pn | 07 36 08.7 | +2.3 |
| VRZ | Vera Road | 4.65 | 19 | P | Pn | 07 36 09.7 | +2.8 |
| PKVZ | Pokaka | 4.65 | 25 | P | Pn | 07 36 09.0 | +2.0 |
| MOVZ | Moawhango | 4.68 | 29 | P | Pn | 07 36 08.1 | +0.7 |
| WNVZ | Wahianoa | 4.70 | 27 | P | Pn | 07 36 09.1 | +1.4 |
| TRVZ | Turoa | 4.71 | 27 | P | Pn | 07 36 09.6 | +1.7 |
| BHHZ | Black Hill Sta | 4.72 | 32 | P | Pn | 07 36 08.2 | +0.3 |
| WHVZ | Whangaehu Hut | 4.74 | 27 | P | Pn | 07 36 10.3 | +2.0 |
| APZ | The Paps | 4.75 | 225 | P | Pn | 07 36 08.7 | +0.5 |
| FWVZ | Far West T-bar | 4.75 | 26 | P | Pn | 07 36 10.2 | +1.7 |
| TUVZ | Tukino | 4.77 | 27 | P | Pn | 07 36 10.7 | +2.0 |
| KAHZ | Kahuranaki | 4.82 | 40 | P | Pn | 07 36 09.5 | +0.3 |
| NGZ | Ngauruhoe | 4.84 | 26 | P | Pn | 07 36 11.0 | +1.4 |
| SNVZ | South Ngauruho | 4.84 | 27 | P | Pn | 07 36 11.3 | +1.6 |
| OTVZ | Oturere | 4.87 | 27 | P | Pn | 07 36 10.8 | +0.8 |
| NNVZ | North Ngauruho | 4.88 | 26 | P | Pn | 07 36 11.7 | +1.4 |
| WTVZ | West Tongariro | 4.89 | 26 | P | Pn | 07 36 11.6 | +1.4 |
| ETVZ | East Tongariro | 4.91 | 27 | P | Pn | 07 36 11.8 | +1.2 |
| KWHZ | Kaweka Forest | 4.92 | 34 | P | Pn | 07 36 10.4 | -0.3 |
| KRVZ | Karewarewa | 4.92 | 26 | P | Pn | 07 36 12.0 | +1.2 |
| TMVZ | Te Maari | 4.93 | 27 | P | Pn | 07 36 11.4 | +0.6 |
| NTVZ | North Tongarir | 4.93 | 27 | P | Pn | 07 36 12.3 | +1.4 |
| KATZ | Kakaramea | 5.05 | 26 | P | Pn | 07 36 14.3 | +1.8 |
| BKZ | Black Stump Fm | 5.17 | 33 | P | Pn | 07 36 13.8 | -0.3 |
| BKZ | Black Stump Fm | 5.17 | 33 | P | Pn | 07 36 13.9 | -0.2 |
| HIZ | Hauiti | 5.26 | 18 | P | Pn | 07 36 16.3 | +1.2 |
| HIZ | Hauiti | 5.26 | 18 | P | Pn | 07 36 16.4 | +1.2 |
| MTHZ | Maungataniwha | 5.58 | 34 | P | Pn | 07 36 19.3 | -0.4 |
| TLZ | Tolley Road | 5.60 | 22 | P | Pn | 07 36 20.7 | +0.7 |
| ALRZ | Allen Road | 5.64 | 29 | P | Pn | 07 36 20.4 | -0.1 |
| RTZ | Ruatahuna | 5.84 | 34 | P | Pn | 07 36 23.1 | -0.1 |
| TOZ | Tahuroa Road | 6.15 | 20 | P | Pn | 07 36 28.2 | +0.7 |
| URZ | Urewera | 6.20 | 33 | P | Pn | 07 36 27.1 | -0.9 |
| URZ | Urewera | 6.20 | 33 | P | Pn | 07 36 27.2 | -0.9 |
| MWZ | Matawai | 6.30 | 36 | P | Pn | 07 36 28.5 | -1.1 |
| AWAZ | Awhitu Peninsu | 6.62 | 13 | P | Pn | 07 36 35.3 | +1.4 |
| TWGZ | Tauwhareparae | 6.63 | 38 | P | Pn | 07 36 35.3 | +1.2 |
| RUGZ | Raukumara Rang | 6.68 | 35 | P | Pn | 07 36 33.7 | -1.1 |
| ETAZ | East Tamaki Re | 6.78 | 14 | P | Pn | 07 36 37.4 | +1.3 |
| HAZ | Te Kaha | 6.90 | 35 | P | Pn | 07 36 36.4 | -1.3 |
| WIAZ | Waiheke Island | 6.97 | 15 | P | Pn | 07 36 40.3 | +1.5 |

**LDG 14 07:42:54.1±0.1, 44.48N×6.94E, h2km, Md1.2/2, Ml1.3/5, Error ellipse: s-maj=2.8km s-min=1.2km az=61.0, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MBDF | Montbardon | 0.27 | 335 | *e*Pg | Pg | 07 42 59.7 | +0.3 |
| MBDF | | | | *e*Sg | Sg | 07 43 03.7 | +0.7 |
| | 3.1nm,0.3s | | | | | | |
| SBF | Sospel | 0.71 | 150 | *e*Pg | Pg | 07 43 08.0 | +0.2 |
| SBF | | | | *e*Sg | Sg | 07 43 16.9 | -0.1 |
| ORIF | Oris-en-Rattie | 0.87 | 301 | *e*Pg | Pg | 07 43 10.6 | -0.2 |
| ORIF | | | | *e*Sg | Sg | 07 43 21.3 | -0.8 |
| | 0.3nm,0.2s | | | | | | |
| FRF | La Foret Royal | 0.94 | 193 | *e*Pg | Pg | 07 43 11.5 | -0.6 |
| FRF | | | | *e*Sg | Sg | 07 43 24.0 | -0.3

comp=E,2755µm,0.5s
**FSK Fiskardo 1.20 327** P **Pg** 07 53 47.8 **-0.5**
**ANX Ano Chora 1.22 20** P **Pg** 07 53 47.8 **-0.8**
**ANX Ano Chora 1.22 20** P **Pg** 07 53 48.1 **-0.5**
ANX AML AML 07 54 14.3
comp=E,1282µm,0.6s
ANX AML AML 07 54 19.2
comp=N,891µm,0.7s
**EVGI Lefkada island 1.30 334** P **Pg** 07 53 49.9 **-0.4**
**DLFA Delphi 1.35 40** P **Pb** 07 53 50.9 **+0.3**
**NYDR Nydri-Lefkada 1.37 337** P **Pn** 07 53 51.0 **+0.5**
**NYDR Nydri-Lefkada 1.37 337** P **Pn** 07 53 50.4 **-0.1**
**EPID Epidavros 1.39 83** P **Pn** 07 53 50.4 **-0.3**
**DRAG Dragano-Lefkad 1.39 333** P **Pn** 07 53 51.0 **+0.3**
DRAG S **Sn** 07 54 10.7 **+1.5**
comp=N,650nm,0.4s
**DRAG Dragano-Lefkad 1.39 333** P **Pn** 07 53 50.4 **-0.4**
**VLI Veliai 1.44 120** P **Pb** 07 53 52.3 **+0.1**
**VLI Veliai 1.44 120** P **Pn** 07 53 51.6 **+0.2**
VLI AML AML 07 54 13.7
comp=E,461µm,0.5s
VLI AML AML 07 54 23.6
comp=N,446µm,0.6s
**LKD2 Lefkada island 1.45 337** P **Pb** 07 53 52.7 **+0.2**
LKD2 S **Sn** 07 54 13.4 **+2.6**
comp=N,908nm,0.4s
**LKD2 Lefkada island 1.45 337** P **Pn** 07 53 52.1 **+0.4**
**EVR Evrytania 1.50 13** P **Pg** 07 53 53.9 **-0.2**
**EVR Evrytania 1.50 13** P **Pn** 07 53 52.8 **+0.5**
EVR AML AML 07 54 20.0
comp=E,613µm,0.5s
EVR AML AML 07 54 32.3
comp=N,515µm,0.8s
**MAKR Makrakomi, Fth 1.67 20** P **Pb** 07 53 56.4 **+0.3**
**VILL Villia 1.68 64** P **Pn** 07 53 54.2 **-0.6**
**AGG Agios Georgios 1.73 25** P **Pn** 07 53 56.7 **+1.2**
**AGG Agios Georgios 1.73 25** P **Pn** 07 53 56.3 **+0.8**
AGG AML AML 07 54 24.1
comp=N,248µm,0.3s
AGG AML AML 07 54 30.3
comp=E,278µm,0.4s
**LKR Lokris 1.75 46** P **Pn** 07 53 55.8 **+0.1**
**LKR Lokris 1.75 46** P **Pn** 07 53 55.2 **-0.5**
LKR AML AML 07 54 26.4
comp=E,384µm,0.3s
LKR AML AML 07 54 30.7
comp=N,367µm,0.7s
**ATAL Atalanti 1.79 46** P **Pn** 07 53 56.8 **+0.6**
**THL Klokotos Trika 2.17 13** P **Pn** 07 54 01.7 **+0.3**
**NEO Neokhori 2.35 37** P **Pn** 07 54 04.1 **+0.1**
**XOR Xorichti 2.38 36** P **Pn** 07 54 04.6 **+0.2**
**AKASG Malin Array Be 14.38 20** Pn **Pn** 07 56 52.2 **+3.4**
comp=N,0.3nm,0.3s,baz=207,slow=8.8,SNR=4.3
**FINES FINESS Array B 24.20 6** P **P** 07 58 37.7 **-4.0**
comp=N,3.4nm,0.9s,baz=177,slow=11,SNR=5.8
**ARCES ARCESS Array B 32.22 3** P **P** 07 59 49.5 **-3.8**
comp=N,2.8nm,0.9s,baz=188,slow=11,SNR=1.7
**MKAR Makanchi Array 45.10 58** P P 08 01 37.0 -4.6
comp=N,0.1nm,0.3s,baz=269,slow=8.3,SNR=4.6
**TSUM Tsumeb 56.46 184** LR LR 08 28 11.2
comp=N,144nm,19.1s,baz=154,slow=38

*IDC **14** 07:59:37.9±0.7,21°.87S×68°.13W,h125km±9km, mb3.5/5, mb1 3.8/8, mb1mx3.6/24, mbtmp4.0/8, Error ellipse: s-maj=23.3km s-min=17.1km az=155.0*
*GUC **14** 07:59:38.8±0.5,21°.78S×68°.42W,h139km±3km, ML3.9*
*NEIC **14** 07:59:38.4±1.7,21°.80S±0°.03×68°.42W±0°.09,h137km±9km, mb4.1/6, ML3.9(GUC), Error ellipse: s-maj=12.9km s-min=3.0km az=73.0*
*VAO **14** 07:59:39.0±0.4,21°.75S×68°.22W,h130km±4km, mb4.3*
**ISC 14 07:59:38.1±0.6,21°.77S±0°.03×68°.26W±0°.05,h128km±6km, n112,σ1§32/133,mb3.7/4,12C-2D,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.91** | **268** | | | **Pn** | **08 00 00.7** | **+0.6** |
| PB09 | | | | Sn | | **Sn** | **08 00 17.3** | **+0.3** |
| **PB09** | **IPOC Station P** | **0.91** | **268** | ⇑*P* | | **Pn** | **08 00 00.8** | **+0.6** |
| PB09 | | | | *i* S | | **Sn** | **08 00 17.1** | **+0.2** |
| PB09 | | | | IAML | | | 08 00 20.3 | |
| comp=E,2µm,0.4s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.03** | **215** | P | | **Pn** | **08 00 01.8** | **+0.3** |
| comp=E,106nm,0.3s,baz=36,slow=8.4,SNR=746 | | | | | | | | |
| LVC | | | | S | | **Sn** | **08 00 18.7** | **-0.6** |
| comp=E,169nm,0.3s,baz=241,slow=21,SNR=136 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.03** | **215** | ⇓*P* | | **Pn** | **08 00 01.8** | **+0.3** |
| LVC | | | | *i* S | | **Sn** | **08 00 19.1** | **-0.2** |
| **LVC** | **Limon Verde** | **1.03** | **215** | *eP* | | **Pn** | **08 00 01.8** | **+0.3** |
| **PB01** | **IPOC Station P** | **1.35** | **302** | | | **Pn** | **08 00 04.4** | **-0.1** |
| PB01 | | | | Sn | | **Sn** | **08 00 24.2** | **-0.4** |
| **PB01** | **IPOC Station P** | **1.35** | **302** | ⇑*P* | | **Pn** | **08 00 04.5** | **+0.1** |
| PB01 | | | | *i* S | | **Sn** | **08 00 23.8** | **-0.8** |
| PB01 | | | | IAML | | | 08 00 25.9 | |
| comp=N,1µm,0.3s | | | | | | | | |
| **PB03** | **IPOC Station P** | **1.41** | **258** | | | **Pn** | **08 00 05.2** | **0.0** |
| PB03 | | | | Sn | | **Sn** | **08 00 24.7** | **-1.2** |
| **PB03** | **IPOC Station P** | **1.41** | **258** | ⇑*P* | | **Pn** | **08 00 05.0** | **-0.2** |
| PB03 | | | | *i* S | | **Sn** | **08 00 24.6** | **-1.2** |
| PB03 | | | | IAML | | | 08 00 26.4 | |
| comp=E,4µm,0.4s | | | | | | | | |
| **PB07** | **IPOC Station P** | **1.51** | **271** | | | **Pn** | **08 00 06.0** | **-0.4** |
| **PB07** | **IPOC Station P** | **1.51** | **271** | ⇑*P* | | **Pn** | **08 00 06.0** | **-0.4** |
| PB07 | | | | *i* S | | **Sn** | **08 00 26.6** | **-1.2** |
| PB07 | | | | IAML | | | 08 00 27.9 | |
| comp=N,2µm,0.2s | | | | | | | | |
| **PB06** | **IPOC Station P** | **1.53** | **232** | | | **Pn** | **08 00 06.7** | **+0.1** |
| **PB06** | **IPOC Station P** | **1.53** | **232** | ⇑*P* | | **Pn** | **08 00 06.6** | **+0.1** |
| PB06 | | | | *i* S | | **Sn** | **08 00 27.5** | **-0.7** |
| PB06 | | | | IAML | | | 08 00 29.2 | |
| comp=N,3µm,0.5s | | | | | | | | |
| **PB02** | **IPOC Station P** | **1.58** | **286** | | | **Pn** | **08 00 05.7** | **-1.4** |
| **PB02** | **IPOC Station P** | **1.58** | **286** | ⇑*P* | | **Pn** | **08 00 06.8** | **-0.3** |
| PB02 | | | | *i* S | | **Sn** | **08 00 28.0** | **-1.3** |
| PB02 | | | | IAML | | | 08 00 30.5 | |
| comp=E,2µm,0.3s | | | | | | | | |
| **PB15** | **IPOC Station P** | **1.82** | **218** | | | **Pn** | **08 00 10.1** | **+0.1** |
| **PB15** | **IPOC Station P** | **1.82** | **218** | *eP* | | **Pn** | **08 00 10.3** | **+0.4** |
| PB15 | | | | *i* S | | **Sn** | **08 00 34.1** | **-0.2** |
| **PB08** | **IPOC Station P** | **1.82** | **333** | | | **Pn** | **08 00 11.6** | **+1.4** |
| **PB08** | **IPOC Station P** | **1.82** | **333** | ⇑*P* | | **Pn** | **08 00 11.6** | **+1.4** |
| PB08 | | | | *i* S | | **Sn** | **08 00 35.8** | **+1.1** |
| PB08 | | | | IAML | | | 08 00 38.4 | |
| comp=E,542nm,0.3s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.84** | **252** | | | **Pn** | **08 00 09.7** | **-0.5** |
| **PB04** | **IPOC Station P** | **1.84** | **252** | ⇑*P* | | **Pn** | **08 00 09.6** | **-0.5** |
| PB04 | | | | *i* S | | **Sn** | **08 00 32.9** | **-1.8** |
| PB04 | | | | IAML | | | 08 00 35.7 | |
| comp=E,2µm,0.5s | | | | | | | | |
| **PATCX** | **Punta Patache** | **2.00** | **298** | Pn | | **Pn** | **08 00 11.6** | **-0.4** |
| **PATCX** | **Punta Patache** | **2.00** | **298** | ⇑*P* | | **Pn** | **08 00 11.5** | **-0.5** |
| PATCX | | | | *i* S | | **Sn** | **08 00 36.4** | **-1.6** |
| PATCX | | | | IAML | | | 08 00 38.8 | |
| comp=N,1µm,0.3s | | | | | | | | |
| **HMBC** | **Humberstone** | **2.12** | **314** | ⇑*P* | | **Pn** | **08 00 12.9** | **-0.7** |
| HMBC | | | | *e*S | | **Sn** | **08 00 39.4** | **-1.4** |
| HMBC | | | | IAML | | | 08 00 41.7 | |
| comp=E,889nm,0.4s | | | | | | | | |
| **TA01** | **Diego Aracena** | **2.15** | **303** | Pn | | **Pn** | **08 00 13.3** | **-0.5** |
| **TA01** | **Diego Aracena** | **2.15** | **303** | ⇑*P* | | **Pn** | **08 00 13.0** | **-0.8** |
| TA01 | | | | *i* S | | **Sn** | **08 00 39.0** | **-2.2** |
| TA01 | | | | IAML | | | 08 00 41.3 | |
| comp=E,607nm,0.3s | | | | | | | | |
| **GO01** | **Chusmiza** | **2.26** | **337** | | | **Pn** | **08 00 16.8** | **+1.1** |
| **GO01** | **Chusmiza** | **2.26** | **337** | ⇓*P* | | **Pn** | **08 00 16.6** | **+0.8** |
| GO01 | | | | IAML | | | 08 00 49.1 | |
| comp=N,805nm,0.2s | | | | | | | | |
| **TA02** | **Huaiquique** | **2.29** | **310** | | | **Pn** | **08 00 14.6** | **-1.1** |
| **TA02** | **Huaiquique** | **2.29** | **310** | *eP* | | **Pn** | **08 00 14.2** | **-1.4** |
| **PB11** | **IPOC Station P** | **2.38** | **327** | | | **Pn** | **08 00 16.8** | **-0.1** |
| **PB11** | **IPOC Station P** | **2.38** | **327** | ⇑*P* | | **Pn** | **08 00 16.8** | **-0.1** |
| PB11 | | | | *i* S | | **Sn** | **08 00 46.1** | **-0.7** |
| PB11 | | | | IAML | | | 08 00 48.3 | |
| comp=N,788nm,0.4s | | | | | | | | |
| **PB10** | **IPOC Station P** | **2.74** | **230** | Pn | | **Pn** | **08 00 20.1** | **-1.1** |
| **PB10** | **IPOC Station P** | **2.74** | **230** | *eP* | | **Pn** | **08 00 19.9** | **-1.3** |
| PB10 | | | | *e*S | | **Sn** | **08 00 49.9** | **-4.6** |
| PB10 | | | | IAML | | | 08 00 52.6 | |
| comp=E,554nm,0.4s | | | | | | | | |
| **PB14** | **IPOC Station P** | **3.46** | **214** | Pn | | **Pn** | **08 00 30.1** | **-0.8** |
| **PB14** | **IPOC Station P** | **3.46** | **214** | *eP* | | **Pn** | **08 00 30.0** | **-1.0** |
| PB14 | | | | IAML | | | 08 01 10.1 | |
| comp=E,324nm,0.5s | | | | | | | | |
| **PB16** | **IPOC Station P** | **3.61** | **341** | | | **Pn** | **08 00 34.2** | **+1.1** |
| **PB16** | **IPOC Station P** | **3.61** | **341** | *eP* | | **Pn** | **08 00 34.3** | **+1.1** |
| PB16 | | | | *e*S | | **Sn** | **08 01 09.8** | **-6.0** |
| PB16 | | | | IAML | | | 08 01 21.0 | |
| comp=E,45nm,0.4s | | | | | | | | |
| **PB12** | **IPOC Station P** | **3.69** | **328** | Pn | | **Pn** | **08 00 32.6** | **-1.2** |
| **PB12** | **IPOC Station P** | **3.69** | **328** | *eP* | | **Pn** | **08 00 32.0** | **-1.8** |
| PB12 | | | | *e*S | | **Sn** | **08 01 13.9** | **-3.0** |
| PB12 | | | | IAML | | | 08 01 21.4 | |
| comp=N,106nm,0.3s | | | | | | | | |
| **AC02** | **Maricunga** | **5.11** | **189** | Pn | | **Pn** | **08 00 52.7** | **-0.3** |
| **LPAZ** | **La Paz** | **5.45** | **1** | P | | **Pn** | **08 01 00.5** | **+2.6** |
| comp=N,2.7nm,0.3s,baz=210,slow=5.6,SNR=82 | | | | | | | | |
| **LPAZ** | **La Paz** | **5.45** | **1** | Pn | | **Pn** | **08 01 00.1** | **+2.3** |
| **LPAZ** | **La Paz** | **5.45** | **1** | *eP* | | **Pn** | **08 00 59.9** | **+2.1** |
| **AC04** | **Llanos de Chal** | **6.90** | **201** | Pn | | **Pn** | **08 01 12.2** | **-4.4** |
| **SIV** | **San Ignacio** | **8.91** | **51** | P | | **Pn** | **08 01 42.1** | **-1.7** |
| comp=N,9.6nm,0.3s,baz=224,slow=12,SNR=182 | | | | | | | | |
| SIV | | | | S | | **Sn** | **08 03 16.8** | **-5.8** |
| comp=N,0.4nm,0.3s,baz=300,slow=20,SNR=2.1 | | | | | | | | |
| **CO03** | **El Pedregal** | **9.29** | **193** | Pn | | **Pn** | 08 01 43.8 | -5.2 |
| **PTLB** | **Pontes e Lacer** | **10.69** | **56** | *eP* | | **Pn** | **08 02 06.0** | **-1.8** |
| **CPUP** | **Villa Florida** | **10.97** | **117** | P | | **Pn** | **08 02 11.0** | **-0.4** |
| comp=N,0.2nm,0.3s,baz=296,slow=11,SNR=3.2 | | | | | | | | |
| **CPUP** | **Villa Florida** | **10.97** | **117** | | | **Pn** | **08 02 11.4** | **-0.1** |
| **CPUP** | **Villa Florida** | **10.97** | **117** | *eP* | | **Pn** | **08 02 11.9** | **+0.5** |
| **VILB** | **Vilhena** | **11.66** | **43** | *eP* | | **Pn** | **08 02 20.6** | **-0.1** |
| **AQDB** | **Aquidauana** | **11.80** | **86** | Pn | | **Pn** | **08 02 21.8** | **-0.6** |
| **AQDB** | **Aquidauana** | **11.80** | **86** | *eP* | | **Pn** | **08 02 21.3** | **-1.1** |
| **ETMB** | **Extrema** | **12.05** | **10** | *eP* | | **Pn** | **08 02 25.3** | **-0.4** |
| **SALV** | **Santo Antonio** | **13.25** | **66** | *eP* | | **Pn** | **08 02 40.4** | **-0.9** |
| **PP1B** | **Ponte de Pedra** | **13.27** | **74** | *eP* | | **Pn** | **08 02 44.0** | **+2.4** |
| **CZSB** | **Cruzeiro do Su** | **14.60** | **342** | *eP* | | **Pn** | **08 02 59.4** | **+0.9** |
| **PDRB** | **Porto dos Gac** | **14.96** | **49** | *eP* | | **Pn** | **08 03 03.8** | **+0.7** |
| **PTGB** | **Pitanga** | **15.18** | **104** | *eP* | | **P** | **08 03 07.7** | **-0.1** |
| **ITAB** | **Concordia** | **15.65** | **114** | | | **P** | **08 03 13.5** | **+0.4** |
| ITAB | | | | IAmb | | IAmb | 08 03 14.7 | |
| comp=Z,13nm,0.7s | | | | | | | | |
| **ITAB** | **Concordia** | **15.65** | **114** | *eP* | | **P** | **08 03 12.8** | **-0.2** |
| **PCMB** | **Pacaembu** | **15.81** | **93** | *eP* | | **Pn** | **08 03 14.2** | **+0.6** |
| **CPSB** | **Cacapava Do Su** | **15.84** | **126** | *eP* | | **Pn** | **08 03 13.6** | **-0.3** |
| **CLDB** | **Colider** | **16.13** | **50** | *eP* | | **Pn** | **08 03 18.6** | **+1.0** |
| **PLTB** | **Pedras Altas** | **16.43** | **130** | | | **P** | **08 03 21.5** | **-0.1** |
| PLTB | | | | IAmb | | IAmb | 08 03 25.8 | |
| comp=Z,19nm,1.3s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **16.43** | **130** | *eP* | | **P** | **08 03 21.8** | **+0.2** |
| **ARAG** | **Araguaiana, MT** | **16.70** | **72** | *eP* | | **P** | **08 03 25.7** | **+1.0** |
| **ITRB** | **Iturama** | **16.88** | **86** | *eP* | | **P** | **08 03 27.6** | **+1.0** |
| **FRTB** | **Fartura** | **17.35** | **99** | *eP* | | **Pn** | **08 03 32.5** | **+0.1** |
| **TBTG** | **Tabatinga, AM** | **17.55** | **355** | *eP* | | **P** | **08 03 35.7** | **+1.6** |
| **BB19B** | **Bebedouro** | **18.39** | **91** | *eP* | | **Pn** | **08 03 44.7** | **-0.2** |
| **TER01** | **Tubaro-SC** | **18.57** | **115** | *eP* | | **P** | **08 03 45.8** | **+0.6** |
| **SNDB** | **Serra Nova Dou** | **18.92** | **62** | *eP* | | **P** | **08 03 49.1** | **+0.1** |
| **RCLB** | **Rio Claro- Sao** | **19.22** | **96** | *eP* | | **P** | **08 03 53.2** | **+0.8** |
| **NPGB** | **Novo Progresso** | **19.23** | **42** | *eP* | | **P** | **08 03 51.2** | **-1.2** |
| **IPMB** | **Ipameri, GO** | **19.23** | **82** | *eP* | | **P** | **08 03 53.4** | **+1.0** |
| **PET01** | **Itanhaem-SP** | **19.48** | **101** | *eP* | | **P** | **08 03 55.0** | **0.0** |
| **VAO** | **Valinhos** | **19.73** | **98** | *eP* | | **P** | **08 03 58.2** | **+0.3** |
| **MACA** | **Manacapuru-AM** | **19.91** | **23** | *eP* | | **P** | **08 03 59.3** | **-0.5** |
| **BDFB** | **Brasilia** | **20.12** | **76** | P | | **P** | **08 04 00.8** | **-1.3** |
| comp=Z,3.0nm,0.5s,baz=242,slow=8.2,SNR=10 | | | | | | | | |
| **BDFB** | **Brasilia** | **20.12** | **76** | P | | **P** | **08 04 02.1** | **0.0** |
| BDFB | | | | IAmb | | IAmb | 08 04 04.2 | |
| comp=Z,8.4nm,1.1s | | | | | | | | |
| **PARB** | **Paraibuna** | **20.97** | **99** | *eP* | | **P** | **08 04 11.8** | **+0.7** |
| **ITTB** | **Itaituba** | **21.14** | **37** | *eP* | | **P** | **08 04 11.9** | **-1.1** |
| **PEXB** | **Peixe** | **21.36** | **66** | *eP* | | **P** | **08 04 14.7** | **-0.7** |
| **BSCB** | **Bom Sucesso** | **21.89** | **92** | *eP* | | **P** | **08 04 20.8** | **-0.2** |
| **MAN01** | **Angra dos Reis** | **22.50** | **97** | *eP* | | **P** | **08 04 27.8** | **+0.6** |
| **DIAM** | **Diamantina, MG** | **23.35** | **86** | *eP* | | **P** | **08 04 36.1** | **+0.7** |
| **MC01** | **Montes Claros** | **23.50** | **82** | *eP* | | **P** | **08 04 36.1** | **-0.5** |
| **PRPB** | **Parauapebas** | **23.64** | **52** | *eP* | | **P** | **08 04 37.6** | **-0.2** |
| **JANB** | **Januaria** | **23.67** | **78** | *eP* | | **P** | **08 04 37.4** | **-0.7** |
| **SMTB** | **Santa Maria do** | **23.67** | **60** | *eP* | | **P** | **08 04 38.8** | **+0.7** |
| **OTAV** | **Otavalo** | **24.03** | **334** | *eP* | | **P** | **08 04 42.5** | **+0.7** |
| **MALB** | **Monte Alegre** | **24.03** | **36** | *eP* | | **P** | **08 04 42.2** | **+0.9** |
| **SDBA** | **SAO DESIDERIO** | **24.16** | **71** | *eP* | | **P** | **08 04 43.1** | **+0.5** |
| **BOAV** | **Boa Vista** | **25.18** | **18** | *eP* | | **P** | **08 04 52.5** | **+0.8** |
| **RIB01** | **Linhares ES** | **26.20** | **90** | *eP* | | **P** | **08 05 01.2** | **+0.3** |
| **MCPB** | **Macapa, AP** | **26.51** | **39** | *eP* | | **P** | **08 05 04.0** | **+0.2** |
| **NAN01** | **Guarapari, ES** | **26.74** | **87** | *eP* | | **P** | **08 05 06.0** | **+0.1** |
| **GUA01** | **Guaratinga, BA** | **27.35** | **84** | *eP* | | **P** | **08 05 11.4** | **+0.2** |
| **NBIT** | **Itapeh - BA** | **28.16** | **81** | *eP* | | **P** | **08 05 19.1** | **+0.6** |
| **GDU01** | **Guandu, BA** | **28.43** | **78** | *eP* | | **P** | **08 05 20.3** | **-0.7** |
| **NBLA** | **Lagarto - SE** | **31.08** | **75** | *eP* | | **P** | **08 05 44.1** | **-0.2** |
| **TXAR** | **Lajitas Array** | **61.19** | **325** | P | | **P** | **08 09 39.8** | **+0.4** |
| comp=Z,0.3nm,0.8s,baz=146,slow=9.8,SNR=2.9 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.08** | **322** | P | | **P** | **08 11 13.3** | **+1.5** |
| comp=Z,0.5nm,0.8s,baz=134,slow=8.5,SNR=3.7 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.88** | **70** | P | | **P** | **08 11 15.8** | **-0.7** |
| comp=Z,1.4nm,0.4s,baz=256,slow=5.6,SNR=15 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.88** | **70** | P | | **P** | **08 11 17.0** | **+0.5** |
| TORD | | | | IAmb | | IAmb | 08 11 22.8 | |
| comp=Z,1.9nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.64** | **340** | P | | **P** | **08 12 30.7** | **+0.6** |
| comp=Z,1.3nm,0.7s,baz=134,slow=4.5,SNR=26 | | | | | | | | |
| **ASAR** | **Alice Springs** | **129.95** | **207** | PKP | | **PKPdf** | **08 18 33.5** | **+0.2** |
| comp=Z,0.2nm,0.8s,baz=146,slow=2.6,SNR=4.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.02** | **210** | PKP | | **PKPdf** | **08 18 39.4** | **+0.3** |
| comp=Z,0.6nm,0.8s,baz=187,slow=2.1,SNR=2.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **141.94** | **26** | PKP | | **PKPdf** | **08 18 55.7** | **+1.3** |
| comp=Z,0.7nm,0.5s,baz=306,slow=4.6,SNR=3.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.49** | **37** | PKPbc | | **PKPdf** | **08 19 01.8** | **+0.8** |
| comp=Z,0.3nm,0.7s,baz=324,slow=6.0,SNR=4.8 | | | | | | | | |

*IDC **14** 08:18:58.9±0.9,14°.40N×90°.17W,h174km±3km, mb3.6/7, mb1 3.6/9, mb1mx3.3/42, mbtmp4.0/9, Error ellipse: s-maj=27.4km s-min=12.5km az=51.0*
*GCG **14** 08:18:58.0±2.1,15°.83N×91°.08W,h110km±254km, MD3.8*
*NEIC **14** 08:18:59.5±2.1,14°.35N±0°.08×90°.30W±0°.06,h167km±7km, mb4.6/35, Error ellipse: s-maj=12.4km s-min=7.5km az=203.0*
**ISC 14 08:18:59.6±0.7,14°.35N±0°.06×90°.32W±0°.06,h186km±5km, n68,σ1§72/78,mb4.6/23,2C,Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NBG** | **Las Nubes** | **0.24** | **355** | *eP* | | **Pn** | **08 19 23.9** | **-0.8** |
| NBG | | | | *e*S | | **Sn** | **08 19 43.9** | **+2.6** |
| **PCG** | **Pacaya** | **0.28** | **278** | *eP* | | **Pn** | **08 19 22.4** | **-2.3** |
| PCG | | | | *e*S | | **Sn** | **08 19 50.3** | **+6.4** |
| **FUG** | **Fuego 3** | **0.51** | **281** | ⇑*eP* | | **Pn** | **08 19 24.2** | **-1.1** |
| FUG | | | | *e*S | | **Sn** | **08 19 44.8** | **-0.3** |
| **APG** | **El Apazote** | **0.66** | **348** | P | | **Pn** | **08 19 24.6** | **-1.5** |
| 29nm,0.3s,baz=153,slow=9.0,SNR=167 | | | | | | | | |
| APG | | | | S | | **Sn** | **08 19 44.4** | **-2.2** |
| 6.2nm,0.3s,baz=294,slow=22,SNR=18 | | | | | | | | |
| **MTO3** | **Montecristo** | **0.94** | **87** | | | **Pn** | **08 19 25.5** | **-2.2** |
| MTO3 | | | | Sn | | **Sn** | **08 19 46.3** | **-3.0** |
| **MRL** | **Marmol** | **0.95** | **40** | ⇑*iP* | | **Pn** | **08 19 27.5** | **-0.4** |
| MRL | | | | *e*S | | **Sn** | **08 19 47.6** | **-2.1** |
| **ESQI** | **Esquipulas** | **0.97** | **78** | | | **Pn** | **08 19 26.1** | **-1.7** |
| ESQI | | | | Sn | | **Sn** | **08 19 47.8** | **-1.8** |
| **SNET** | **Serv Nac Est T** | **1.25** | **122** | Pn | | **Pn** | **08 19 27.7** | **-2.3** |
| **RTAL** | **Retalhuleu** | **1.34** | **278** | Pn | | **Pn** | **08 19 28.7** | **-1.9** |
| RTAL | | | | Sn | | **Sn** | **08 19 52.9** | **-1.6** |
| **PETF** | **Flores** | **2.59** | **10** | | | **Pn** | **08 19 43.4** | **-0.2** |
| **CCIG** | **Comitan** | **2.60** | **318** | | | **Pn** | **08 19 43.9** | **0.0** |
| **TGUH** | **Tegucigalpa,Un** | **2.97** | **95** | Pn | | **Pn** | **08 19 47.0** | **-1.4** |
| **CRIN** | **San Cristobal** | **3.58** | **117** | Pn | | **Pn** | **08 19 55.5** | **-0.3** |
| **BOAB** | **BOACO BROADBAN** | **3.91** | **112** | Pn | | **Pn** | **08 20 11.3** | **-1.3** |
| **CMIG** | **Matias Romero** | **5.17** | **302** | P | | **Pn** | **08 20 14.9** | **-1.0** |
| 0.2nm,0.3s,baz=153,slow=7.9,SNR=11 | | | | | | | | |
| CMIG | | | | S | | **Sn** | **08 21 08.8** | **-7.1** |
| 1.0nm,0.3s,baz=143,slow=12,SNR=7.5 | | | | | | | | |
| **ACON** | **Acoyapa** | **5.55** | **115** | Pn | | **Pn** | **08 20 20.0** | **-0.8** |
| **HZTE** | **Horizontes, Gu** | **5.86** | **128** | Pn | | **Pn** | **08 20 24.8** | **-0.1** |
| **ORTG** | **Ortega, Santa** | **6.19** | **129** | Pn | | **Pn** | **08 20 29.0** | **-0.3** |
| **JTS** | **Las Juntas de** | **6.62** | **127** | P | | **Pn** | **08 20 34.0** | **-0.8** |
| 3.4nm,0.3s,baz=0.0,slow=14,SNR=9.6 | | | | | | | | |
| JTS | | | | S | | **Sn** | **08 21 45.1** | **-5.0** |
| 2.7nm,0.3s,baz=285,slow=16,SNR=3.2 | | | | | | | | |
| **JTS** | **Las Juntas de** | **6.62** | **127** | Pn | | **Pn** | **08 20 34.8** | **-0.1** |
| **CAO2** | **Cobano, Puntar** | **6.89** | **132** | Pn | | **Pn** | **08 20 38.7** | **+0.3** |
| **JACO** | **JACO, Garabito** | **7.24** | **129** | Pn | | **Pn** | **08 20 43.1** | **+0.2** |
| **RIMA** | **Rio Macho** | **7.79** | **125** | Pn | | **Pn** | **08 20 50.2** | **-0.2** |
| **PEZE** | **Perez Zeledon,** | **8.17** | **126** | Pn | | **Pn** | **08 20 55.3** | **+0.1** |
| **SRBA** | **San Rafael, Bu** | **8.51** | **126** | Pn | | **Pn** | **08 20 59.8** | **+0.1** |
| **WHTX** | **Lake Whitney,** | **18.73** | **341** | P | | **P** | **08 23 04.0** | **-0.4** |
| **TXAR** | **Lajitas Array** | **19.36** | **323** | P | | **Pn** | **08 23 13.5** | **-1.0** |
| 0.1nm,0.3s,baz=140,slow=10.0,SNR=11 | | | | | | | | |
| **SWET** | **Sewanee** | **21.15** | **10** | P | | **P** | **08 23 30.5** | **+0.2** |
| **W50A** | **Signal Mountai** | **21.25** | **11** | P | | **P** | **08 23 32.7** | **+1.5** |
| W50A | | | | IAmb | | IAmb | 08 23 36.7 | |
| comp=Z,39nm,1.8s | | | | | | | | |
| **JSC** | **Jenkinsville** | **21.47** | **21** | P | | **P** | **08 23 35.8** | **+2.2** |
| JSC | | | | IAmb | | IAmb | 08 24 17.7 | |
| comp=Z,44nm,1.7s | | | | | | | | |
| **V48A** | **Smith Brothers** | **21.53** | **8** | P | | **P** | **08 23 35.5** | **+1.3** |
| **CPCT** | **Cooper Cave** | **21.65** | **13** | P | | **P** | **08 23 36.3** | **+0.9** |
| CPCT | | | | IAmb | | IAmb | 08 23 37.1 | |
| comp=Z,56nm,1.9s | | | | | | | | |
| **FNO** | **Franklin** | **21.77** | **344** | P | | **P** | **08 23 36.3** | **-0.4** |
| FNO | | | | IAmb | | IAmb | 08 23 37.0 | |
| comp=Z,13nm,0.7s | | | | | | | | |
| **WVT** | **Waverly** | **21.80** | **5** | P | | **P** | **08 23 37.9** | **+0.9** |
| **TKL** | **Tuckaleechee C** | **22.02** | **14** | P | | **P** | **08 23 39.9** | **+0.7** |
| comp=Z,4.2nm,0.7s,baz=179,slow=14,SNR=7.8 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.02** | **14** | P | | **P** | **08 23 40.3** | **+1.2** |
| **U49A** | **Red Boiling Sp** | **22.44** | **10** | P | | **P** | **08 23 44.0** | **+0.9** |
| U49A | | | | IAmb | | IAmb | 08 23 51.1 | |
| comp=Z,25nm,1.8s | | | | | | | | |
| **T47A** | **Sharon Grove** | **22.73** | **7** | P | | **P** | **08 23 46.6** | **+1.0** |
| T47A | | | | IAmb | | IAmb | 08 23 46.9 | |
| comp=Z,8.3nm,0.5s | | | | | | | | |
| **TZTN** | **Tazewell** | **22.92** | **14** | P | | **P** | **08 23 48.2** | **+0.8** |
| TZTN | | | | IAmb | | IAmb | 08 24 13.3 | |
| comp=Z,31nm,1.5s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **24.05** | **8** | P | | **P** | **08 23 59.0** | **+1.3** |
| WCI | | | | IAmb | | IAmb | 08 23 59.6 | |
| comp=Z,12nm,0.9s | | | | | | | | |
| **R49A** | **Shelbyville** | **24.28** | **10** | P | | **P** | **08 24 00.2** | **+0.5** |
| R49A | | | | IAmb | | IAmb | 08 24 46.0 | |
| comp=Z,23nm,1.4s | | | | | | | | |
| **LENM** | **Lemitar** | **24.82** | **326** | P | | **P** | **08 24 04.5** | **-0.5** |
| **Q51A** | **Peebles** | **25.34** | **13** | P | | **P** | **08 24 10.1** | **+0.7** |
| Q51A | | | | IAmb | | IAmb | 08 24 22.5 | |
| comp=Z,28nm,1.6s | | | | | | | | |
| **P48A** | **Milroy** | **25.38** | **9** | P | | **P** | **08 24 10.2** | **+0.5** |
| P48A | | | | IAmb | | IAmb | 08 24 24.2 | |
| comp=Z,48nm,1.9s | | | | | | | | |
| **HDIL** | **Hopedale** | **26.12** | **2** | P | | **P** | **08 24 18.1** | **+1.7** |
| HDIL | | | | IAmb | | IAmb | 08 24 43.6 | |
| comp=Z,52nm,2.0s | | | | | | | | |
| **O49A** | **Covington** | **26.27** | **10** | P | | **P** | **08 24 17.9** | **+0.2** |
| O49A | | | | IAmb | | IAmb | 08 25 02.9 | |
| comp=Z,27nm,1.6s | | | | | | | | |
| **N53A** | **Lisbon** | **27.63** | **16** | P | | **P** | **08 24 30.3** | **+0.5** |
| **N59A** | **State Game Lan** | **29.35** | **23** | P | | **P** | **08 24 45.6** | **+0.4** |
| **NNA** | **Nana** | **29.38** | **152** | P | | **P** | **08 24 46.6** | **+0.9** |
| comp=Z,2.4nm,0.3s,baz=264,slow=10,SNR=1.7 | | | | | | | | |
| **NNA** | **Nana** | **29.38** | **152** | P | | **P** | **08 24 46.6** | **+0.9** |
| **SPMN** | **Marine on St.** | **30.84** | **357** | P | | **P** | **08 24 58.5** | **+0.3** |
| **SADO** | **Sadowa** | **31.77** | **15** | P | | **P** | **08 25 06.1** | **-0.3** |
| comp=Z,16nm,1.2s,baz=259,slow=11,SNR=4.6 | | | | | | | | |
| **SADO** | **Sadowa** | **31.77** | **15** | P | | **P** | **08 25 06.3** | **0.0** |
| **E43A** | **Lone Tree Farm** | **32.05** | **4** | P | | **P** | **08 25 08.6** | **-0.1** |
| **E46A** | **Sault Ste Mari** | **32

L19K Sb 08 46 43.2 +0.3
L19K IAML 08 46 43.9
comp=N,571nm,0.7s
L19K IAML 08 46 45.7
comp=E,546nm,0.3s
**L19K White Mountain 1.26 200** P Pn 08 46 26.4 +0.4
baz=19
L19K S Sb 08 46 43.2 +0.3
baz=19
**KTH Kantishna Hill 1.36 81** Pn 08 46 27.4 0.0
KTH Sb 08 46 45.7 -0.2
KTH IAML 08 46 46.7
comp=N,278nm,0.8s
KTH IAML 08 46 47.5
comp=E,292nm,0.6s
**M19K Big River Lodg 1.48 189** Pn 08 46 28.8 -0.1
**M19K Big River Lodg 1.48 189** P Pn 08 46 28.4 -0.5
baz=8.1
**BPAW Bear Paw Mtn. 1.50 59** Pn 08 46 28.8 -0.5
BPAW IAML 08 46 52.7
comp=E,298nm,0.3s
BPAW IAML 08 46 53.6
comp=N,273nm,0.5s
**BPAW Bear Paw Mtn. 1.50 59** P Pn 08 46 28.9 -0.3
baz=242
**TRF Thorofare Moun 1.64 85** Pn 08 46 30.9 -0.4
TRF IAML 08 46 55.5
comp=E,224nm,0.8s
TRF IAML 08 46 55.6
comp=N,214nm,1.1s
**TRF Thorofare Moun 1.64 85** P Pn 08 46 31.5 +0.2
baz=269
**GCSA Galena City Sc 1.90 318** Pn 08 46 35.7 +1.0
**GCSA Galena City Sc 1.90 318** P Pn 08 46 35.7 +1.0
baz=136
**CUT Chulitna 1.93 118** Pn 08 46 35.6 +0.5
**CUT Chulitna 1.93 118** P Pn 08 46 35.9 +0.8
baz=302
**I21K Tanana 2.01 24** Pn 08 46 36.6 +0.4
I21K IAML 08 47 11.6
comp=N,242nm,0.6s
I21K IAML 08 47 14.4
comp=E,228nm,0.7s
**I21K Tanana 2.01 24** P Pn 08 46 36.9 +0.7
baz=206
**SPNN North Nagishla 2.08 164** Pn 08 46 37.9 +0.5
**STLK Strandline Lak 2.11 152** Pn 08 46 38.2 +0.5
**BWN Browne 2.14 66** Pn 08 46 38.5 +0.5
**MLY Manley 2.18 38** Pn 08 46 38.5 -0.1
MLY IAML 08 47 17.1
comp=N,102nm,0.5s
**MLY Manley 2.18 38** P Pn 08 46 38.5 -0.1
baz=221
**SPCG Spurr Capps Gl 2.26 156** Pn 08 46 40.1 +0.4
**MCK McKinley 2.27 78** Pn 08 46 40.0 +0.2
MCK IAML 08 47 22.0
comp=N,96nm,1.1s
**MCK McKinley 2.27 78** P Pn 08 46 40.2 +0.5
baz=263
**RND Reindeer 2.29 87** Pn 08 46 40.2 +0.1
**CKL Chakachamna La 2.30 160** Pn 08 46 41.0 +0.7
**H21K Melozitna Rive 2.35 11** Pn 08 46 41.5 +0.6
H21K IAML 08 47 20.6
comp=N,167nm,0.6s
H21K IAML 08 47 21.8
comp=E,148nm,0.7s
**H21K Melozitna Rive 2.35 11** P Pn 08 46 41.6 +0.7
baz=192
**SPU Mount Spurr 2.36 157** Pn 08 46 42.0 +1.0
**M22K Willow 2.39 131** Pn Pn 08 46 42.1 +0.7
M22K IAML 08 47 23.1
comp=N,132nm,0.9s
M22K IAML 08 47 27.1
comp=E,142nm,0.4s
**NEA2 Nenana 2.47 58** Pn 08 46 41.5 -1.0
**NEA2 Nenana 2.47 58** P Pn 08 46 42.5 0.0
baz=242
**N19K Bonanza Creek 2.57 186** Pn 08 46 43.8 -0.3
N19K IAML 08 47 24.5
comp=E,142nm,0.5s
N19K IAML 08 47 26.2
comp=N,118nm,0.3s
**N19K Bonanza Creek 2.57 186** P Pn 08 46 44.1 +0.1
baz=5.6
**IM03 2.63 2** Pn 08 46 45.5 +0.9
**IMAR Indian Mountai 2.63 2** Pn 08 46 44.7 -0.1
**I23K Minto, Yukon-K 2.68 46** Pn 08 46 45.2 -0.1
I23K IAML 08 47 31.5
comp=N,67nm,0.6s
I23K IAML 08 47 38.0
comp=E,86nm,0.7s
**I23K Minto, Yukon-K 2.68 46** P Pn 08 46 45.1 -0.3
baz=230
**WRH Wood River Hil 2.81 64** Pn Pn 08 46 46.3 -0.9
**GHO Glory Hole Cre 2.81 122** Pn 08 46 47.1 -0.2
GHO IAML 08 47 34.6
comp=N,79nm,0.6s
**DFR Drift River 2.84 168** Pn 08 46 47.5 -0.2
**PMR Palmer 2.85 126** P Pn 08 46 47.9 +0.2
baz=311
**NCT North Crescent 2.85 170** Pn 08 46 48.2 +0.3
**MDM Murphy Dome 2.96 55** Pn Pn 08 46 48.5 -0.8
MDM IAML 08 47 40.1
comp=N,67nm,0.6s
**RSO Redoubt South 2.96 169** Pn 08 46 50.8 +1.3
**DHY Denali Highway 2.98 93** Pn 08 46 49.6 -0.1
DHY IAML 08 47 37.0
comp=E,76nm,0.5s
**DHY Denali Highway 2.98 93** P Pn 08 46 49.9 +0.3
baz=278
**CCB Clear Creek Bu 2.99 62** Pn 08 46 48.8 -0.8
CCB IAML 08 47 42.6
comp=E,52nm,0.6s
**RC01 Rabbit Creek A 3.01 137** Pn 08 46 50.0 +0.1
**RC01 Rabbit Creek A 3.01 137** P Pn 08 46 50.4 +0.5
baz=321
**SML Sawmill 3.02 119** Pn 08 46 49.9 -0.3
SML IAML 08 47 39.0
comp=E,69nm,1.0s
SML IAML 08 47 41.1
comp=N,89nm,0.9s
**SML Sawmill 3.02 119** P Pn 08 46 50.8 +0.6
baz=304
**H23K Yukon River 3.11 35** Pn 08 46 51.4 +0.1
H23K IAML 08 47 46.5
comp=E,66nm,0.8s
**H23K Yukon River 3.11 35** P Pn 08 46 51.4 +0.1
baz=219
**O19K Port Alsworth 3.19 184** P Pn 08 46 52.6 +0.3
baz=3.2
**POKR Poker Plat Res 3.34 55** Pn 08 46 54.1 -0.3
POKR IAML 08 47 56.2
comp=E,37nm,0.5s
**POKR Poker Plat Res 3.34 55** P Pn 08 46 54.5 0.0
baz=241
**PS08 TAPS Pump Stn8 3.35 66** Pn 08 46 55.0 +0.4
**SLKM Skilak Lake 3.36 147** Pn 08 46 55.8 +1.1
**IL31 3.40 62** Pn 08 46 55.7 +0.5
**ILAR Eielson Array 3.40 62** Pn 08 46 56.5 +1.2
**O22K Cooper Landing 3.51 144** Pn Pn 08 46 57.0 +0.3
**O18K Koktuh Hills 3.58 190** Pn 08 46 57.7 -0.1
**O18K Koktuh Hills 3.58 190** P Pn 08 46 57.6 -0.2
baz=9.3
**H24K Noodor Dome 3.60 44** Pn 08 46 57.6 -0.4
**H24K Noodor Dome 3.60 44** P Pn 08 46 57.6 -0.4
baz=229
**PWL Port Wells 3.64 131** Pn Pn 08 46 59.0 +0.5
PWL IAML 08 49 13.2
comp=E,39nm,0.2s
PWL IAML 08 49 13.3
comp=N,37nm,0.3s
**J25K Salcha River, 3.97 68** P Pn 08 47 03.2 0.0
baz=256
**CNPM China Poot 4.06 160** Pn Pn 08 47 02.9 -1.6
**RIDG Independent Ri 4.08 81** Pn Pn 08 47 04.5 -0.2
RIDG IAML 08 48 26.4
comp=E,37nm,2.2s
RIDG IAML 08 48 28.7
comp=N,22nm,0.8s
**KLU Klutina 4.17 113** Pn Pn 08 47 03.3 -2.6
KLU IAML 08 48 15.9
comp=N,25nm,2.3s
KLU IAML 08 49 31.7
comp=E,23nm,3.0s
**COLD Coldfoot 4.18 20** Pn Pn 08 47 06.2 +0.2
**PRP Porcupine Dome 4.23 56** Pn Pn 08 47 06.4 -0.5
PRP IAML 08 48 17.1
comp=E,18nm,0.6s
PRP IAML 08 48 19.0
comp=N,19nm,0.6s
**FYU Fort Yukon 4.89 45** Pn 08 47 15.9 +0.1
**GLB Gilahina Butte 5.08 108** Pn Pn 08 47 17.8 -0.6
**ANM Nome 5.18 289** Pn Pn 08 47 19.8 0.0
**L27K Beaver Creek, 5.48 88** Pn Pn 08 47 24.9 +1.0
**TOLK Toolik Lake Re 5.59 17** Pn Pn 08 47 24.5 -0.9
**M27K Edge Creek, AK 5.61 95** Pn Pn 08 47 25.4 -0.3
**BMAR Burnt Mountain 5.64 40** Pn Pn 08 47 25.9 -0.2
**DAWY Dawson 6.50 77** Pn Pn 08 47 37.6 -0.2

*NEIC* ***14*** *08:46:07.7±1.5, 15°.1S±0°.1×178°.3W±0°.1, h432km±8km, mb4.3/35, Error ellipse: s-maj=24.5km s-min=15.8km az=140.0*
*IDC* ***14*** *08:46:07.3±1.2, 14°.87S×178°.62W, h430km±13km, mb3.5/9, mb1 3.8/11, mb1mx3.4/29, mbtmp4.3/11, Error ellipse: s-maj=38.3km s-min=12.8km az=144.0*
**ISC 14 08:46:04.6±0.5, 14°.9S±0°.1×178°.4W±0°.1, h400km, n78, σ1°69/80, mb4.2/28, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **MSVF** | **Nonsavu** | **4.42** | **229** | P | **Pn** | **08 47 24.2** | **+3.4** |
| | 13nm,0.3s,baz=84,slow=10,SNR=30 | | | | | | |
| MSVF | | | | S | **S** | **08 48 28.0** | **+5.3** |
| | baz=9.7,slow=23,SNR=6.8 | | | | | | |
| **MSVF** | **Nonsavu** | **4.42** | **229** | | **Pn** | **08 47 24.5** | **+3.7** |
| **AFI** | **Afiamalu** | **6.52** | **82** | P | **Pn** | **08 47 43.3** | **+0.3** |
| | 2.3nm,0.3s,baz=359,slow=10,SNR=8.6 | | | | | | |
| **LIFNC** | **LIFOU** | **14.85** | **245** | P | **P** | **08 49 16.1** | **+0.7** |
| **PINNC** | **Pines Island,** | **15.43** | **238** | P | **P** | **08 49 23.0** | **+1.3** |
| **YATNC** | **Mamie plateau,** | **15.65** | **241** | P | **P** | **08 49 24.2** | **+0.1** |
| **OUENC** | **Ouen Island, N** | **15.84** | **240** | P | **P** | **08 49 25.9** | **-0.3** |
| **OUENC** | **Ouen Island, N** | **15.84** | **240** | P | **P** | **08 49 28.3** | **+2.1** |
| **DZM** | **Mont Dzumac** | **16.03** | **241** | P | **P** | **08 49 29.0** | **+0.6** |
| | 2.3nm,0.3s,baz=39,slow=12,SNR=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.03** | **241** | P | **P** | **08 49 29.3** | **+1.0** |
| **DZM** | **Mont Dzumac** | **16.03** | **241** | P | **P** | **08 49 30.4** | **+2.1** |
| **ONTNC** | **Ouen Toro** | **16.12** | **240** | P | **P** | **08 49 32.0** | **+2.9** |
| **ONTNC** | **Ouen Toro** | **16.12** | **240** | P | **P** | **08 49 32.0** | **+2.9** |
| **NOUC** | **Port Laguerre** | **16.16** | **241** | P | **P** | **08 49 31.9** | **+2.3** |
| **QRZ** | **Quartz Range** | **27.04** | **195** | P | **P** | **08 51 10.1** | **-2.0** |
| QRZ | | | | IAmb | IAmb | 08 51 15.9 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **31.54** | **236** | P | **P** | **08 51 53.2** | **+1.3** |
| ARMA | | | | IAmb | IAmb | 08 51 53.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MLZ** | **Mavora Lakes** | **32.46** | **198** | P | **P** | **08 51 57.4** | **-2.1** |
| MLZ | | | | IAmb | IAmb | 08 52 04.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **34.04** | **256** | P | **P** | **08 52 12.9** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 08 52 13.7 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| **COEN** | **Coen** | **37.17** | **266** | P | **P** | **08 52 40.3** | **+0.7** |
| COEN | | | | IAmb | IAmb | 08 52 41.9 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **40.14** | **238** | P | **P** | **08 53 02.3** | **-1.5** |
| | comp=Z,14nm,0.8s,baz=73,slow=9.0,SNR=16 | | | | | | |
| **STKA** | **Stephens Creek** | **40.14** | **238** | P | **P** | **08 53 02.8** | **-1.1** |
| **BBOO** | **Buckleboo** | **44.92** | **238** | P | **P** | **08 53 40.3** | **-1.4** |
| BBOO | | | | IAmb | IAmb | 08 53 43.2 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.05** | **257** | P | **P** | **08 53 41.5** | **-1.5** |
| **WB0** | **Warramunga Arr** | **45.19** | **257** | P | **P** | **08 53 42.6** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 08 53 43.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.23** | **257** | P | **P** | **08 53 43.0** | **-1.3** |
| **WRA** | **Warramunga Arr** | **45.24** | **257** | P | **P** | **08 53 42.8** | **-1.7** |
| | comp=Z,1.7nm,0.3s,baz=76,slow=6.0,SNR=107 | | | | | | |
| WRA | | | | ScP | **ScP** | **08 58 29.0** | **-1.6** |
| | comp=Z,1.2nm,1.1s,baz=92,slow=4.3,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.24** | **257** | P | P | 08 53 41.6 | -2.9 |
| **AS31** | **Alice Springs** | **45.66** | **251** | P | **P** | **08 53 46.9** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.66** | **251** | P | **P** | **08 53 46.6** | **-1.1** |
| | comp=Z,41nm,0.4s,baz=84,slow=8.6,SNR=1527 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 58 30.9** | **-1.4** |
| | comp=Z,0.4nm,0.7s,baz=98,slow=4.0,SNR=4.6 | | | | | | |
| ASAR | | | | S | **S** | **08 59 54.6** | **-5.6** |
| | comp=Z,0.8nm,0.9s,baz=84,slow=14,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **45.66** | **251** | P | **P** | **08 53 46.9** | **-0.8** |
| **MTN** | **Manton Dam** | **48.93** | **266** | P | **P** | **08 54 12.4** | **-0.2** |
| **KNRA** | **Kununurra** | **50.84** | **262** | P | **P** | **08 54 25.8** | **-1.0** |
| **FORT** | **Forrest** | **51.34** | **242** | P | **P** | **08 54 28.3** | **-1.9** |
| FORT | | | | IAmb | IAmb | 08 54 44.0 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.75** | **345** | P | **P** | **08 56 38.9** | **+0.4** |
| | comp=Z,4.3nm,1.0s,baz=101,slow=7.5,SNR=5.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.75** | **345** | P | **P** | **08 56 39.7** | **+1.2** |
| **QSPA** | **South Pole Qui** | **75.17** | **180** | P | **P** | **08 57 02.7** | **-1.5** |
| **YBH** | **Yreka Blue Hor** | **76.20** | **40** | P | **P** | **08 57 12.2** | **+1.9** |
| YBH | | | | IAmb | IAmb | 08 57 12.4 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **MPK** | **Martis Peak** | **76.57** | **43** | P | **P** | **08 57 14.0** | **+1.4** |
| MPK | | | | IAmb | IAmb | 08 57 14.2 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **PNTR** | **Pine Nut** | **76.74** | **43** | P | **P** | **08 57 15.0** | **+1.5** |
| PNTR | | | | IAmb | IAmb | 08 57 16.5 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **O18K** | **Koktuh Hills** | **76.80** | **12** | P | **P** | **08 57 13.9** | **+0.8** |
| O18K | | | | IAmb | IAmb | 08 57 14.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.27** | **44** | P | **P** | **08 57 17.2** | **+0.8** |
| | comp=Z,2.2nm,0.7s,baz=225,slow=9.0,SNR=18 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.27** | **44** | P | **P** | **08 57 17.6** | **+1.2** |
| **K05A** | **Summer Lake** | **77.87** | **39** | P | **P** | **08 57 20.9** | **+1.3** |
| **M19K** | **Big River Lodg** | **78.84** | **11** | P | **P** | **08 57 24.9** | **+0.7** |
| M19K | | | | IAmb | IAmb | 08 57 34.5 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **GHO** | **Glory Hole Cre** | **79.87** | **14** | P | **P** | **08 57 30.0** | **+0.2** |
| GHO | | | | IAmb | IAmb | 08 57 42.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **80.82** | **347** | P | **P** | **08 57 34.9** | **+0.3** |
| | comp=Z,1.9nm,0.6s,baz=125,slow=4.2,SNR=10.0 | | | | | | |
| **HLID** | **Hailey** | **82.36** | **41** | P | **P** | **08 57 44.5** | **+1.2** |
| HLID | | | | IAmb | IAmb | 08 57 45.5 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **MLY** | **Manley** | **82.38** | **11** | P | **P** | **08 57 42.7** | **0.0** |
| **IMAR** | **Indian Mountai** | **82.70** | **10** | P | **P** | **08 57 45.2** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **82.74** | **16** | P | **P** | **08 57 45.5** | **+0.9** |
| **MDM** | **Murphy Dome** | **82.82** | **12** | P | **P** | **08 57 44.8** | **-0.1** |
| MDM | | | | IAmb | IAmb | 08 57 45.5 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **IL31** | | **82.94** | **13** | P | **P** | **08 57 45.8** | **+0.3** |
| IL31 | | | | IAmb | IAmb | 08 57 51.8 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **82.94** | **13** | P | **P** | **08 57 45.5** | **-0.1** |
| | comp=Z,1.9nm,0.6s,baz=235,slow=5.9,SNR=26 | | | | | | |
| **J25K** | **Salcha River,** | **83.15** | **14** | P | **P** | **08 57 47.1** | **+0.4** |
| J25K | | | | IAmb | IAmb | 08 57 47.8 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **DAWY** | **Dawson** | **84.19** | **16** | P | **P** | **08 57 52.6** | **+0.8** |
| **EGAK** | **Eagle** | **84.30** | **15** | P | **P** | **08 57 53.2** | **+0.9** |
| **TXAR** | **Lajitas Array** | **84.40** | **58** | P | **P** | **08 57 54.7** | **+1.0** |
| | comp=Z,1.7nm,0.8s,baz=224,slow=6.4,SNR=24 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.17** | **44** | P | **P** | **08 57 57.8** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=214,slow=2.6,SNR=14 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.17** | **44** | P | **P** | **08 57 57.9** | **+0.4** |
| **YMP** | **Mirror Lake Pl** | **85.63** | **42** | P | **P** | **08 57 58.5** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **85.71** | **12** | P | **P** | **08 58 00.1** | **+0.9** |
| **YKA** | **Yellowknife Ar** | **91.59** | **25** | P | **P** | **08 58 26.4** | **-0.5** |
| | comp=Z,0.2nm,0.5s,baz=244,slow=4.5,SNR=5.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **123.33** | **350** | PKP | **PKPdf** | **09 04 13.2** | **-1.0** |
| | comp=Z,2.8nm,0.8s,baz=29,slow=2.1,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **123.33** | **350** | PKP | **PKPdf** | **09 04 13.7** | **-0.5** |
| **NOA** | **NORSAR Array B** | **133.37** | **354** | PKP | **PKPdf** | **09 04 32.7** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=13,slow=3.8,SNR=2.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **142.58** | **318** | PKP | **PKPdf** | **09 04 48.0** | **-3.2** |
| | comp=Z,1.2nm,0.9s,baz=27,slow=1.4,SNR=5.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **142.58** | **318** | | **PKPdf** | **09 04 48.5** | **-2.7** |
| **KHC** | **Kasperske Hory** | **144.44** | **346** | *e*PKP | PKPbc | 09 04 53.7 | +0.2 |
| **CKRC** | **Cesky Krumlov** | **144.56** | **345** | *e*PKP | **PKPdf** | **09 04 54.0** | **-0.2** |
| **GERES** | **GERESS Array B** | **144.68** | **346** | PKP | **PKPdf** | **09 04 53.8** | **-0.7** |
| | comp=Z,1.0nm,0.5s,baz=8.5,slow=3.2,SNR=8.9 | | | | | | |
| **GERES** | **GERESS Array B** | **144.68** | **346** | | **PKPdf** | **09 04 53.1** | **-1.5** |
| **CONA** | **Conrad Observa** | **144.97** | **343** | *i* P | **PKPdf** | **09 04 55.8** | **+0.7** |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **MOA** | **Molln** | **145.47** | **345** | *i* P | **PKPdf** | **09 04 56.8** | **+0.9** |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **146.41** | **345** | *i* P | **PKPdf** | **09 04 59.0** | **+1.3** |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **146.57** | **348** | *i* P | **PKPdf** | **09 04 59.8** | **+1.9** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **146.59** | **349** | *i* P | **PKPdf** | **09 04 59.6** | **+1.8** |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **146.63** | **348** | *i* P | **PKPdf** | **09 04 59.8** | **+1.8** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **146.92** | **346** | *i* P | **PKPdf** | **09 05 00.1** | **+1.7** |
| | comp=Z,1.9nm,0.6s | | | | | | |

*NEIC* ***14*** *08:48:39.4±0.9, 61°.32N±0°.03×151°.95W±0°.07, h103km±3km, Error ellipse: s-maj=5.1km s-min=3.2km az=62.0*
**AEIC 14 08:48:40±0.9, 61°.33N±0°.04×151°.96W±0°.08, h104km±3km, ML2.5, ML2.8/116(NEIC), Error ellipse: s-maj=5.8km s-min=5.0km az=138.0, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **CGLM** | **Capps Glacier** | **0.03** | **234** | | Pn | 08 48 53.7 | -0.8 |
| **SPCG** | **Spurr Capps Gl** | **0.04** | **222** | | Pn | 08 48 53.6 | -1.0 |
| SPCG | | | | | Sn | 08 49 04.2 | -1.3 |
| **SPCN** | **Chakachatna No** | **0.15** | **227** | | Pn | 08 48 54.1 | -0.6 |
| SPCN | | | | | Sn | 08 49 05.3 | -0.3 |
| **SPU** | **Mount Spurr** | **0.15** | **198** | | Pn | 08 48 53.7 | -1.0 |
| **STLK** | **Strandline Lak** | **0.18** | **19** | | Pn | 08 48 53.6 | -1.2 |
| **SPNN** | **North Nagishla** | **0.36** | **277** | | Pn | 08 48 54.9 | -0.7 |
| SPNN | | | | | Sn | 08 49 06.7 | -0.6 |
| **CAPN** | **Captain Cook N** | **0.68** | **145** | | Pn | 08 48 58.5 | +0.9 |
| CAPN | | | | IAML | | 08 49 14.3 | |
| | comp=N,575nm,0.5s | | | | | | |
| **RDT** | **Redoubt** | **0.79** | **196** | | Pn | 08 48 57.8 | -0.8 |
| **DFR** | **Drift River** | **0.82** | **206** | | Pn | 08 48 58.3 | -0.7 |
| DFR | | | | | Sn | 08 49 12.5 | -0.8 |
| **FIS** | **Fire Island** | **0.86** | **101** | Pn | Pn | 08 48 59.7 | +0.4 |
| FIS | | | | IAML | | 08 49 16.7 | |
| | comp=N,249nm,0.5s | | | | | | |
| FIS | | | | IAML | | 08 49 19.3 | |
| | comp=E,230nm,0.5s | | | | | | |
| **NCT** | **North Crescent** | **0.90** | **212** | | Pn | 08 48 59.4 | -0.4 |
| NCT | | | | | Sn | 08 49 14.5 | -0.3 |
| **RSO** | **Redoubt South** | **0.95** | **205** | Pn | Pn | 08 48 59.7 | -0.7 |
| **M22K** | **Willow** | **0.98** | **63** | | Pn | 08 49 00.3 | -0.2 |
| M22K | | | | | Sn | 08 49 15.9 | +0.1 |
| **RC01** | **Rabbit Creek A** | **1.10** | **101** | | Pn | 08 49 01.5 | -0.3 |
| RC01 | | | | IAML | | 08 49 19.4 | |
| | comp=E,124nm,0.1s | | | | | | |
| RC01 | | | | IAML | | 08 49 19.6 | |
| | comp=N,155nm,0.2s | | | | | | |
| **SLKM** | **Skilak Lake** | **1.18** | **133** | | Pn | 08 49 02.0 | -0.8 |
| **O20K** | **Slope Mountain** | **1.29** | **195** | | Pn | 08 49 03.8 | -0.2 |
| **M19K** | **Big River Lodg** | **1.30** | **298** | | Pn | 08 49 03.5 | -0.5 |
| M19K | | | | | Sn | 08 49 22.1 | -0.3 |
| **N19K** | **Bonanza Creek** | **1.33** | **248** | | Pn | 08 49 04.1 | -0.5 |
| **CUT** | **Chulitna** | **1.35** | **36** | | Pn | 08 49 04.3 | -0.3 |
| CUT | | | | | Sn | 08 49 22.9 | -0.3 |
| **O22K** | **Cooper Landing** | **1.38** | **127** | | Pn | 08 49 04.6 | -0.4 |
| **PMR** | **Palmer** | **1.38** | **78** | | Pn | 08 49 03.9 | -1.1 |
| PMR | | | | IAML | | 08 49 23.3 | |
| | comp=E,120nm,0.2s | | | | | | |
| PMR | | | | IAML | | 08 49 23.3 | |
| | comp=N,163nm,0.2s | | | | | | |
| **L20K** | **Farewell, AK** | **1.47** | **323** | | Pn | 08 49 05.2 | -0.9 |
| **GHO** | **Glory Hole Cre** | **1.52** | **72** | | Pn | 08 49 05.9 | -0.9 |
| GHO | | | | IAML | | 08 49 26.7 | |
| | comp=E,177nm,0.5s | | | | | | |
| GHO | | | | IAML | | 08 49 27.6 | |
| | comp=N,159nm,0.2s | | | | | | |
| **PPLA** | **Purkeypile** | **1.58** | **356** | | Pn | 08 49 07.0 | -0.6 |
| **O19K** | **Port Alsworth** | **1.62** | **227** | | Pn | 08 49 07.7 | -0.2 |
| **L19K** | **White Mountain** | **1.62** | **303** | | Pn | 08 49 07.6 | -0.4 |
| **BRLK** | **Bradley Lake** | **1.65** | **161** | | Pn | 08 49 07.8 | -0.6 |
| BRLK | | | | IAML | | 08 49 33.9 | |
| | comp=N,87nm,0.5s | | | | | | |
| BRLK | | | | IAML | | 08 49 35.9 | |
| | comp=E,67nm,1.5s | | | | | | |
| **KNK** | **Knik Glacier** | **1.69** | **85** | | Pn | 08 49 07.8 | -1.0 |
| KNK | | | | IAML | | 08 49 30.6 | |
| | comp=N,126nm,0.4s | | | | | | |
| KNK | | | | IAML | | 08 49 31.1 | |
| | comp=E,118nm,0.4s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.70** | **159** | | Pn | 08 49 08.1 | -0.8 |
| **SEW** | **Seward** | **1.74** | **134** | | Pn | 08 49 08.3 | -1.1 |
| **SML** | **Sawmill** | **1.80** | **73** | | Pn | 08 49 09.0 | -1.2 |
| SML | | | | IAML | | 08 49 33.4 | |
| | comp=N,93nm,0.3s | | | | | | |
| SML | | | | IAML | | 08 49 34.9 | |
| | comp=E,82nm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **1.82** | **103** | | Pn | 08 49 09.0 | -1.5 |
| PWL | | | | IAML | | 08 49 32.7 | |
| | comp=N,95nm,0.5s | | | | | | |
| PWL | | | | IAML | | 08 49 33.0 | |
| | comp=E,130nm,0.4s | | | | | | |
| **CNPM** | **China Poot** | **1.84** | **168** | | Pn | 08 49 10.1 | -0.6 |
| CNPM | | | | IAML | | 08 49 38.0 | |
| | comp=N,60nm,0.3s | | | | | | |
| CNPM | | | | IAML | | 08 50 17.8 | |
| | comp=E,79nm,2.8s | | | | | | |
| **CAST** | **Castle Rocks** | **2.10** | **358** | | Pn | 08 49 13.1 | -1.0 |
| **O18K** | **Koktuh Hills** | **2.18** | **229** | | Pn | 08 49 14.7 | -0.3 |
| **K20K** | **Telida** | **2.27** | **335** | | Pn | 08 49 15.4 | -0.7 |
| **TRF** | **Thorofare Moun** | **2.27** | **19** | | Pn | 08 49 15.6 | -0.8 |
| TRF | | | | IAML | | 08 49 45.3 | |
| | comp=E,46nm,0.6s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **2.27** | **75** | | Pn | 08 49 15.2 | -1.1 |
| SCM | | | | IAML | | 08 49 45.5 | |
| | comp=N,68nm,0.4s | | | | | | |
| **KTH** | **Kantishna Hill** | **2.29** | **12** | | Pn | 08 49 15.8 | -0.7 |
| **WAT6** | **Susitna Watana** | **2.36** | **56** | | Pn | 08 49 16.6 | -0.9 |
| **GLI** | **Glacier Island** | **2.40** | **99** | | Pn | 08 49 15.7 | -2.2 |
| **TT01** | **Tatalina** | **2.48** | **312** | | Pn | 08 49 18.1 | -0.9 |
| **TTA** | **Tatalina** | **2.49** | **312** | Pn | Pn | 08 49 18.2 | -0.9 |
| **P18K** | **Big Mountain,** | **2.53** | **221** | | Pn | 08 49 19.4 | -0.2 |
| P18K | | | | IAML | | 08 49 56.4 | |
| | comp=E,26nm,3.2s | | | | | | |
| P18K | | | | IAML | | 08 50 57.9 | |
| | comp=N,33nm,3.0s | | | | | | |
| **RND** | **Reindeer** | **2.54** | **33** | | Pn | 08 49 18.9 | -0.8 |
| **CHUM** | **Lake Minchumin** | **2.57** | **356** | | Pn | 08 49 19.4 | -0.7 |
| **JPK** | **Jack Peak** | **2.61** | **94** | | Pn | 08 49 18.9 | -1.7 |
| **DHY** | **Denali Highway** | **2.77** | **49** | | Pn | 08 49 22.2 | -0.7 |
| DHY | | | | IAML | | 08 49 55.8 | |
| | comp=N,44nm,0.5s | | | | | | |
| DHY | | | | IAML | | 08 49 56.6 | |
| | comp=E,38nm,0.3s | | | | | | |
| **MCK** | **McKinley** | **2.79** | **29** | | Pn | 08 49 22.7 | -0.3 |
| MCK | | | | IAML | | 08 49 57.3 | |
| | comp=E,20nm,1.0s | | | | | | |
| MCK | | | | IAML | | 08 49 58.3 | |
| | comp=N,21nm,2.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **2.82** | **9** | | Pn | 08 49 22.1 | -1.3 |
| **M24K** | **Tolsona, Glenn** | **2.86** | **72** | | Pn | 08 49 23.1 | -0.9 |
| **KLU** | **Klutina** | **2.91** | **84** | | Pn | 08 49 23.0 | -1.6 |
| KLU | | | | IAML | | 08 49 59.3 | |
| | comp=E,39nm,0.3s | | | | | | |
| **DIV** | **Divide** | **3.00** | **91** | | Pn | 08 49 24.1 | -1.8 |
| **J20K** | **Nowinta River** | **3.03** | **342** | Pn | Pn | 08 49 25.9 | -0.3 |
| **BWN** | **Browne** | **3.08** | **21** | Pn | Pn | 08 49 26.8 | 0.0 |
| BWN | | | | IAML | | 08 50 07.5 | |
| | comp=E,36nm,3.4s | | | | | | |
| BWN | | | | IAML | | 08 50 14.1 | |
| | comp=N,38nm,3.1s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.13** | **102** | | Pn | 08 49 25.1 | -2.3 |
| **HARP** | **HAARP** | **3.40** | **69** | | Pn | 08 49 30.7 | -0.4 |
| **PAX** | **Paxson** | **3.46** | **59** | | Pn | 08 49 31.5 | -0.5 |
| **NEA2** | **Nenana** | **3.54** | **21** | | Pn | 08 49 31.5 | -1.4 |
| NEA2 | | | | IAML | | 08 50 11.0 | |
| | comp=E,16nm,3.8s | | | | | | |
| **BMRM** | **Bremner River** | **3.58** | **93** | Pn | Pn | 08 49 31.6 | -2.0 |
| BMRM | | | | IAML | | 08 49 59.6 | |
| | comp=N,27nm,2.5s | | | | | | |
| BMRM | | | | IAML | | 08 51 38.6 | |
| | comp=E,26nm,3.5s | | | | | | |
| **WRH** | **Wood River Hil** | **3.62** | **28** | | Pn | 08 49 32.6 | -1.4 |
| WRH | | | | IAML | | 08 50 20.0 | |
| | comp=E,14nm,3.1s | | | | | | |
| WRH | | | | IAML | | 08 50 22.4 | |
| | comp=N,13nm,3.6s | | | | | | |
| **MLY** | **Manley** | **3.76** | **8** | Pn | Pn | 08 49 35.5 | -0.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HDA | | | | IAML | | 08 50 21.9 | | |
| | comp=N,17nm,0.5s | | | | | | | |
| HDA | | | | IAML | | 08 50 22.4 | | |
| | comp=E,13nm,0.8s | | | | | | | |
| **GLB** | **Gilahina Butte** | **3.92** | **85** | Pn | Pn | 08 49 36.8 | -1.3 | |
| GLB | | | | IAML | | 08 50 32.7 | | |
| | comp=N,22nm,3.1s | | | | | | | |
| GLB | | | | IAML | | 08 50 32.9 | | |
| | comp=E,18nm,3.9s | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **3.99** | **34** | | Pn | 08 49 38.1 | -0.9 | |
| **TCOL** | **CIGO, UAF Yank** | **4.02** | **26** | Pn | Pn | 08 49 38.6 | -0.8 | |
| TCOL | | | | IAML | | 08 50 58.6 | | |
| | comp=E,21nm,0.5s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.02** | **23** | Pn | Pn | 08 49 38.2 | -1.2 | |
| MDM | | | | IAML | | 08 50 52.6 | | |
| | comp=N,9.2nm,3.6s | | | | | | | |
| MDM | | | | IAML | | 08 51 48.0 | | |
| | comp=E,11nm,4.5s | | | | | | | |
| **COLA** | **College** | **4.02** | **26** | Pn | Pn | 08 49 38.4 | -0.9 | |
| **RIDG** | **Independent Ri** | **4.09** | **51** | | Pn | 08 49 40.3 | -0.1 | |
| RIDG | | | | IAML | | 08 51 33.8 | | |
| | comp=N,20nm,3.5s | | | | | | | |
| **VRDI** | **Verde Repeater** | **4.11** | **88** | Pn | Pn | 08 49 39.3 | -1.4 | |
| VRDI | | | | IAML | | 08 50 37.4 | | |
| | comp=E,17nm,3.5s | | | | | | | |
| **IL31** | | **4.16** | **32** | | Pn | 08 49 39.9 | -1.3 | |
| **ILAR** | **Eielson Array** | **4.16** | **32** | Pn | Pn | 08 49 39.3 | -1.9 | |
| **POKR** | **Poker Plat Res** | **4.32** | **26** | Pn | Pn | 08 49 43.0 | -0.4 | |
| POKR | | | | IAML | | 08 51 03.5 | | |
| | comp=E,13nm,4.2s | | | | | | | |
| POKR | | | | IAML | | 08 52 30.7 | | |
| | comp=N,12nm,3.5s | | | | | | | |
| **DOT** | **Dot Lake** | **4.34** | **54** | Pn | Pn | 08 49 43.1 | -0.6 | |
| **H21K** | **Melozitna Rive** | **4.37** | **355** | Pn | Pn | 08 49 43.5 | -0.5 | |
| H21K | | | | IAML | | 08 51 02.6 | | |
| | comp=E,7.9nm,4.3s | | | | | | | |
| H21K | | | | IAML | | 08 51 05.4 | | |
| | comp=N,8.8nm,3.5s | | | | | | | |
| **M26K** | **Nabesna, AK** | **4.38** | **72** | Pn | Pn | 08 49 43.7 | -0.6 | |
| M26K | | | | IAML | | 08 50 53.9 | | |
| | comp=E,12nm,2.6s | | | | | | | |
| M26K | | | | IAML | | 08 51 37.9 | | |
| | comp=N,12nm,4.0s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **4.38** | **63** | Pn | Pn | 08 49 44.3 | 0.0 | |
| **J25K** | **Salcha River,** | **4.46** | **39** | | Pn | 08 49 45.1 | -0.3 | |
| J25K | | | | IAML | | 08 50 44.8 | | |
| | comp=N,10nm,2.8s | | | | | | | |
| J25K | | | | IAML | | 08 50 46.4 | | |
| | comp=E,9.2nm,0.8s | | | | | | | |
| **SCRK** | **Sand Creek** | **4.54** | **51** | Pn | Pn | 08 49 45.7 | -0.8 | |
| SCRK | | | | IAML | | 08 50 21.7 | | |
| | comp=N,11nm,4.0s | | | | | | | |
| SCRK | | | | IAML | | 08 52 48.8 | | |
| | comp=E,11nm,4.7s | | | | | | | |
| **ISLE** | **Juniper Island** | **4.74** | **95** | Pn | Pn | 08 49 48.9 | -0.4 | |
| **IMAR** | **Indian Mountai** | **4.75** | **351** | Pn | Pn | 08 49 48.5 | -0.7 | |
| **BARN** | **Barnard Glacie** | **4.99** | **89** | Pn | Pn | 08 49 52.1 | -0.6 | |
| **PRP** | **Porcupine Dome** | **5.10** | **32** | | Pn | 08 49 53.9 | -0.2 | |
| PRP | | | | IAML | | 08 50 46.7 | | |
| | comp=E,9.1nm,4.4s | | | | | | | |
| PRP | | | | IAML | | 08 51 14.4 | | |
| | comp=N,9.1nm,3.7s | | | | | | | |
| **TABL** | **Table Mountain** | **5.36** | **95** | Pn | Pn | 08 49 57.1 | -0.6 | |
| **PCA** | **Pinnacle** | **5.88** | **97** | Pn | Pn | 08 50 04.4 | -0.2 | |
| **EGAK** | **Eagle** | **6.01** | **50** | Pn | Pn | 08 50 05.2 | -1.0 | |
| **DAWY** | **Dawson** | **6.40** | **59** | Pn | Pn | 08 50 10.9 | -0.7 | |

*ANF **14** 09:01:08.8±0.2, 33°.89N×117°.12W, h18$^{km}$±1$^{km}$, ML3.4/34, Error ellipse: s-maj=1.2km s-min=1.0km az=86.0*
*PAS **14** 09:01:09.7±2.0, 33°.89N±0°.01×117°.12W±0°.01, h14$^{km}$±3$^{km}$, ML3.4/257, ML3.2/68(NEIC), Error ellipse: s-maj=2.2km s-min=1.5km az=216.0*
*NEIC **14** 09:01:09.6±1.9, 33°.88N±0°.02×117°.10W±0°.02, h18$^{km}$±1$^{km}$, Error ellipse: s-maj=3.1km s-min=2.5km az=215.0*

**ISC 14 09:01:09.3±0.9, 33°.87N±0°.02×117°.12W±0°.02, h18$^{km}$±3km, n104, σ1$^{s}$21/139, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSBC** | **Riverside Bore** | **0.20** | **301** | | **Pb** | **09 01 13.9** | **-0.4** |
| RSBC | | | | | **Sb** | **09 01 16.9** | **-0.6** |
| **CFSC** | **Central Fire S** | **0.27** | **330** | | **Pg** | **09 01 15.2** | **-0.2** |
| CFSC | | | | | **Sg** | **09 01 19.3** | **-0.2** |
| **MURC** | **Murrieta** | **0.28** | **193** | P | **Pg** | **09 01 15.8** | **+0.3** |
| | baz=12,SNR=1000 | | | | | | |
| MURC | | | | S | **Sg** | **09 01 20.1** | **+0.5** |
| | baz=12 | | | | | | |
| **ELS** | **Elsinore Mount** | **0.34** | **229** | | **Pg** | **09 01 16.8** | **+0.2** |
| ELS | | | | IAML | | 09 01 22.4 | |
| | comp=E,4μm,0.2s | | | | | | |
| **GVDA** | **Garner Valley** | **0.42** | **118** | | **Pg** | **09 01 17.8** | **-0.2** |
| GVDA | | | | | **Sg** | **09 01 23.8** | **-0.1** |
| **BBRC** | **Big Bear Solar** | **0.42** | **23** | P | **Pg** | **09 01 17.5** | **-0.6** |
| | baz=204,SNR=287 | | | | | | |
| BBRC | | | | S | **Sg** | **09 01 23.2** | **-0.9** |
| | baz=204 | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.61** | **115** | Pg | **Pb** | **09 01 20.9** | **-0.5** |
| PFO | | | | IAML | | 09 01 29.7 | |
| | comp=E,1μm,0.1s | | | | | | |
| PFO | | | | IAML | | 09 01 31.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.61** | **115** | P | **Pb** | **09 01 20.9** | **-0.5** |
| | baz=297,SNR=52 | | | | | | |
| PFO | | | | S | **Sb** | **09 01 29.0** | **-0.7** |
| | baz=297 | | | | | | |
| **PASC** | **Pasadena Art C** | **0.94** | **289** | | **Pb** | **09 01 26.0** | **-1.0** |
| PASC | | | | IAML | | 09 01 39.1 | |
| | comp=N,573nm,0.4s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **0.94** | **82** | P | **Pb** | **09 01 27.0** | **-0.2** |
| | baz=264,SNR=399 | | | | | | |
| BELC | | | | S | **Sg** | **09 01 39.6** | **-0.5** |
| | baz=264 | | | | | | |
| **109C** | **Camp Elliot, M** | **0.98** | **179** | | **Pb** | **09 01 27.2** | **-0.5** |
| **109C** | **Camp Elliot, M** | **0.98** | **179** | P | **Pb** | **09 01 27.3** | **-0.5** |
| | baz=359,SNR=80 | | | | | | |
| 109C | | | | S | **Sb** | **09 01 40.3** | **0.0** |
| | baz=359 | | | | | | |
| **FMP** | **Fort Macarthur** | **0.99** | **261** | P | **Pb** | **09 01 27.5** | **-0.5** |
| | baz=79,SNR=8.2 | | | | | | |
| FMP | | | | S | **Sb** | **09 01 40.3** | **-0.4** |
| | baz=79 | | | | | | |
| **RRX** | **Edison Barstow** | **1.01** | **6** | P | **Pb** | **09 01 27.9** | **-0.3** |
| | baz=186,SNR=7.0 | | | | | | |
| RRX | | | | S | **Sb** | **09 01 41.3** | **+0.1** |
| | baz=186 | | | | | | |
| **GR2C** | **Griffith Obs.** | **1.01** | **284** | | **Pb** | **09 01 27.7** | **-0.7** |
| **DECC** | **Green Verdugo** | **1.08** | **291** | P | **Pb** | **09 01 28.8** | **-0.6** |
| | baz=109,SNR=63 | | | | | | |
| DECC | | | | S | **Sb** | **09 01 43.5** | **+0.2** |
| | baz=109 | | | | | | |
| **MONP2** | **Monument Peak** | **1.14** | **149** | P | **Pn** | **09 01 30.5** | **0.0** |
| | baz=330,SNR=67 | | | | | | |
| MONP2 | | | | S | **Sn** | **09 01 45.6** | **-0.1** |
| | baz=330 | | | | | | |
| **HEC** | **Hector,Ludlow** | **1.16** | **34** | P | **Pn** | **09 01 30.5** | **-0.2** |
| | baz=215,SNR=38 | | | | | | |
| HEC | | | | S | **Sb** | **09 01 45.5** | **0.0** |
| | baz=215 | | | | | | |
| **CIS** | **Catalina Islan** | **1.18** | **247** | Pn | Pn | **09 01 30.3** | **-0.6** |
| | baz=65,SNR=28 | | | | | | |
| CIS | | | | Pg | **Pb** | **09 01 31.6** | **+0.4** |
| | baz=65 | | | | | | |
| CIS | | | | S | **Sb** | **09 01 46.8** | **+0.7** |
| | baz=65 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **1.24** | **325** | Pb | Pn | **09 01 31.9** | **0.0** |
| | baz=144,SNR=66 | | | | | | |
| EDW2 | | | | S | **Sb** | **09 01 47.6** | **-0.3** |
| | baz=144 | | | | | | |
| **BAR** | **Barrett** | **1.24** | **162** | | Pn | **09 01 31.3** | **-0.5** |
| **TJX** | **Tijuana** | **1.36** | **178** | | Pn | **09 01 33.7** | **+0.4** |
| TJX | | | | IAML | | 09 02 03.1 | |
| | comp=E,544nm,0.7s | | | | | | |
| **TKX** | **Tecate** | **1.37** | **162** | | Pn | **09 01 33.6** | **+0.1** |
| **BC3** | **Big Chuckawall** | **1.40** | **98** | Pn | Pn | **09 01 33.6** | **-0.5** |
| | baz=280,SNR=104 | | | | | | |
| BC3 | | | | Pg | **Pb** | **09 01 35.5** | **+0.5** |
| | baz=280 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **1.44** | **130** | Pn | Pn | **09 01 33.8** | **-0.6** |
| | baz=311,SNR=45 | | | | | | |
| SWSC | | | | Pg | **Pg** | **09 01 36.9** | **-0.1** |
| | baz=311 | | | | | | |
| SWSC | | | | Sb | **Sg** | **09 01 55.3** | **-0.4** |
| | baz=311 | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.45** | **10** | | Pn | **09 01 34.7** | **0.0** |
| GSC | | | | IAML | | 09 01 55.7 | |
| | comp=E,441nm,0.3s | | | | | | |
| GSC | | | | IAML | | 09 01 57.0 | |
| | comp=N,396nm,0.5s | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.45** | **10** | Pb | **Pn** | **09 01 34.9** | **+0.1** |
| | baz=190,SNR=206 | | | | | | |
| **CCAC** | **Calif City Air** | **1.48** | **330** | | **Pn** | **09 01 35.0** | **-0.1** |
| **IKP** | **In-Ko-Pah, Jac** | **1.48** | **145** | Pn | **Pn** | **09 01 35.2** | **0.0** |
| | baz=326,SNR=30 | | | | | | |
| IKP | | | | Pb | **Pb** | **09 01 36.8** | **+0.4** |
| | baz=326 | | | | | | |
| IKP | | | | Sb | **Sb** | **09 01 56.0** | **+1.1** |
| | baz=326 | | | | | | |
| **SCI2** | **San Clemente I** | **1.49** | **234** | S | **Sn** | **09 01 54.7** | **+0.6** |
| | baz=52 | | | | | | |
| **GMRC** | **Granite Mounta** | **1.51** | **53** | P | **Pn** | **09 01 35.3** | **-0.4** |
| | baz=234 | | | | | | |
| GMRC | | | | Sb | **Sb** | **09 01 56.5** | **+0.6** |
| | baz=234 | | | | | | |
| **OSI** | **Osito Audit: C** | **1.52** | **300** | Pb | **Pn** | **09 01 36.1** | **+0.4** |
| | baz=118,SNR=22 | | | | | | |
| OSI | | | | S | **Sn** | **09 01 55.6** | **+0.5** |
| | baz=118 | | | | | | |
| **RMX** | **La Rumorosa** | **1.54** | **145** | | **Pg** | **09 01 38.8** | **-0.2** |
| RMX | | | | IAML | | 09 02 01.1 | |
| | comp=N,326nm,0.2s | | | | | | |
| **YUH** | **Yuha Desert** | **1.58** | **140** | | **Pb** | **09 01 38.6** | **+0.6** |
| YUH | | | | IAML | | 09 01 59.9 | |
| | comp=N,248nm,0.2s | | | | | | |
| YUH | | | | IAML | | 09 02 00.5 | |
| | comp=E,219nm,0.2s | | | | | | |
| **CBX** | **Cerro Bola** | **1.60** | **166** | | **Pn** | **09 01 37.5** | **+0.7** |
| CBX | | | | IAML | | 09 01 59.6 | |
| | comp=N,206nm,0.4s | | | | | | |
| CBX | | | | IAML | | 09 02 01.1 | |
| | comp=E,275nm,0.3s | | | | | | |
| **IRM** | **Iron Mountain** | **1.66** | **80** | Pn | **Pn** | **09 01 37.0** | **-0.6** |
| | baz=261,SNR=404 | | | | | | |
| IRM | | | | Pg | **Pb** | **09 01 40.1** | **+0.7** |
| | baz=261 | | | | | | |
| IRM | | | | Sb | **Sg** | **09 02 01.8** | **-1.2** |
| | baz=261 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.67** | **344** | P | **Pn** | **09 01 37.8** | **0.0** |
| | baz=164,SNR=141 | | | | | | |
| **TUQ** | **Turquoise Moun** | **1.85** | **32** | P | **Pn** | **09 01 40.3** | **+0.1** |
| | baz=213 | | | | | | |
| TUQ | | | | Sb | **Sb** | **09 02 06.7** | **+1.2** |
| | baz=213 | | | | | | |
| **ARVC** | **Arvin** | **1.89** | **312** | P | **Pn** | **09 01 41.1** | **+0.4** |
| | baz=131,SNR=20 | | | | | | |
| ARVC | | | | Sb | **Sb** | **09 02 07.1** | **+0.6** |
| | baz=131 | | | | | | |
| **CCX** | **Cicese** | **2.03** | **169** | | **Pb** | **09 01 44.7** | **-1.0** |
| CCX | | | | IAML | | 09 02 16.1 | |
| | comp=E,116nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **2.08** | **112** | | **Pn** | **09 01 43.7** | **+0.4** |
| GLA | | | | IAML | | 09 02 18.2 | |
| | comp=N,128nm,0.5s | | | | | | |
| GLA | | | | IAML | | 09 02 19.8 | |
| | comp=E,149nm,0.8s | | | | | | |
| **GLA** | **Glamis** | **2.08** | **112** | Pg | **Pg** | **09 01 48.3** | **-1.0** |
| | baz=294,SNR=13 | | | | | | |
| **QSM** | **Queen of Sheba** | **2.10** | **6** | | **Pn** | **09 01 43.9** | **+0.3** |
| QSM | | | | IAML | | 09 02 16.8 | |
| | comp=E,178nm,0.2s | | | | | | |
| QSM | | | | IAML | | 09 02 18.5 | |
| | comp=N,156nm,0.4s | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.10** | **254** | Pn | **Pn** | **09 01 44.0** | **+0.4** |
| SNCC | | | | IAML | | 09 02 23.5 | |
| | comp=N,111nm,2.3s | | | | | | |
| **ISA** | **Isabella, Lake** | **2.11** | **328** | | **Pn** | **09 01 43.9** | **+0.1** |
| ISA | | | | IAML | | 09 02 20.0 | |
| | comp=E,104nm,0.7s | | | | | | |
| **ISA** | **Isabella, Lake** | **2.11** | **328** | P | **Pn** | **09 01 43.9** | **+0.1** |
| | baz=147,SNR=39 | | | | | | |
| ISA | | | | Sb | **Sb** | **09 02 14.3** | **+1.4** |
| | baz=147 | | | | | | |
| **BLYC** | **Blythe** | **2.16** | **92** | Pn | **Pn** | **09 01 43.7** | **-0.7** |
| BLYC | | | | IAML | | 09 02 20.7 | |
| | comp=N,96nm,0.5s | | | | | | |
| BLYC | | | | IAML | | 09 02 22.2 | |
| | comp=E,94nm,0.6s | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.18** | **300** | | **Pn** | **09 01 45.9** | **+1.2** |
| BCW | | | | IAML | | 09 02 22.9 | |
| | comp=N,204nm,0.6s | | | | | | |
| **MPMC** | **Manual Prospec** | **2.20** | **352** | Pn | **Pn** | **09 01 45.3** | **+0.1** |
| | baz=172,SNR=88 | | | | | | |
| MPMC | | | | Pg | **Pb** | **09 01 50.2** | **+1.4** |
| | baz=172 | | | | | | |
| MPMC | | | | Sb | **Sb** | **09 02 18.1** | **+2.3** |
| | baz=172 | | | | | | |
| **NEE2** | **Needles Airpor** | **2.25** | **66** | Pn | **Pn** | **09 01 45.5** | **-0.2** |
| | baz=248 | | | | | | |
| NEE2 | | | | Pg | **Pb** | **09 01 50.6** | **+1.1** |
| | baz=248,SNR=74 | | | | | | |
| NEE2 | | | | Sb | **Sg** | **09 02 19.5** | **-2.4** |
| | baz=248 | | | | | | |
| **GWY** | **Greenwater Val** | **2.34** | **9** | | **Pn** | **09 01 47.3** | **+0.2** |
| GWY | | | | IAML | | 09 02 26.4 | |
| | comp=E,168nm,0.4s | | | | | | |
| GWY | | | | IAML | | 09 02 26.5 | |
| | comp=N,149nm,0.4s | | | | | | |
| **CWC** | **Cottonwood Cre** | **2.68** | **343** | Pn | **Pn** | **09 01 52.4** | **+0.6** |
| | baz=163 | | | | | | |
| CWC | | | | Pg | **Pb** | **09 01 58.8** | **+1.9** |
| | baz=163 | | | | | | |
| **W13A** | **Hualapai Mount** | **2.94** | **64** | | **Pn** | **09 01 55.5** | **+0.2** |
| W13A | | | | IAML | | 09 02 42.4 | |
| | comp=E,47nm,0.8s | | | | | | |
| W13A | | | | IAML | | 09 02 47.5 | |
| | comp=N,52nm,0.5s | | | | | | |
| **113A** | **Mohawk Valley,** | **3.01** | **110** | | **Pn** | **09 01 56.3** | **+0.2** |
| **SHPR** | **Sheep Range** | **3.08** | **31** | | **Pn** | **09 01 58.2** | **+1.0** |
| **GRAC** | **Grapevine Rang** | **3.13** | **356** | | **Pn** | **09 01 59.2** | **+1.5** |
| GRAC | | | | IAML | | 09 02 57.3 | |
| | comp=E,48nm,0.9s | | | | | | |
| GRAC | | | | IAML | | 09 02 58.2 | |
| | comp=N,54nm,0.7s | | | | | | |
| **GRAC** | **Grapevine Rang** | **3.13** | **356** | P | **Pn** | **09 01 59.1** | **+1.4** |
| | baz=176,SNR=5.7 | | | | | | |
| **TPNV** | **Topopah Spring** | **3.15** | **13** | | **Pn** | **09 01 59.1** | **+0.9** |
| TPNV | | | | IAML | | 09 02 50.6 | |
| | comp=N,78nm,0.6s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.15** | **13** | P | **Pn** | **09 01 59.3** | **+1.1** |
| | baz=193,SNR=14 | | | | | | |
| TPNV | | | | Sb | **Sg** | **09 02 47.5** | **-3.1** |
| | baz=193 | | | | | | |
| **PAGB** | **Antelope Grade** | **3.18** | **307** | Pn | **Pn** | **09 02 00.4** | **+2.0** |
| PAGB | | | | IAML | | 09 03 00.6 | |
| | comp=E,46nm,3.9s | | | | | | |
| PAGB | | | | IAML | | 09 03 19.8 | |
| | comp=N,41nm,3.8s | | | | | | |
| **TIN** | **Tinemaha, Big** | **3.30** | **344** | P | **Pn** | **09 02 01.7** | **+1.4** |
| | baz=164 | | | | | | |
| **LCH** | **Last Change Ra** | **3.38** | **353** | | **Pn** | **09 02 02.6** | **+1.2** |
| **SFX** | **San Felipe** | **3.41** | **145** | | **Pn** | **09 02 02.6** | **+1.0** |
| **Y14A** | **Wickenburg** | **3.42** | **88** | | **Pn** | **09 02 02.1** | **+0.3** |
| **PMPB** | **Monarch Peak** | **3.82** | **309** | Pn | **Pn** | **09 02 07.8** | **+0.5** |
| **PRN** | **Pahroc Range** | **3.91** | **25** | | **Pn** | **09 02 10.3** | **+1.7** |
| **S11A** | **Rachel** | **3.93** | **16** | | **Pn** | **09 02 10.8** | **+2.0** |
| **MLAC** | **Mammoth, Mammo** | **4.00** | **340** | Sb | **Sg** | **09 03 14.4** | **-3.5** |
| | baz=159 | | | | | | |
| **214A** | **Organ Pipe Nat** | **4.09** | **117** | | **Pn** | **09 02 12.3** | **+1.2** |
| **BBGB** | **Big Mountain B** | **4.20** | **311** | Pn | **Pn** | **09 02 12.9** | **+0.4** |
| **TPH** | **Tonopah** | **4.20** | **359** | | **Pn** | **09 02 14.3** | **+1.7** |
| **LCMT** | **Little Creek M** | **4.45** | **44** | | **Pn** | **09 02 17.5** | **+1.5** |
| **LHV** | **Little Huntoon** | **4.51** | **346** | | **Pn** | **09 02 19.1** | **+2.4** |
| **SAO** | **San Andreas Ge** | **4.57** | **310** | Pn | **Pn** | **09 02 17.2** | **-0.3** |
| **NV11** | **Mina Array Sit** | **4.63** | **350** | Pn | **Pn** | **09 02 20.4** | **+2.0** |
| **R11A** | **Troy Canyon, C** | **4.64** | **15** | | **Pn** | **09 02 19.8** | **+1.1** |
| **R11A** | **Troy Canyon, C** | **4.64** | **15** | P | **Pn** | **09 02 20.1** | **+1.5** |
| | baz=196 | | | | | | |
| R11A | | | | Sb | **Sg** | **09 03 32.4** | **-5.8** |
| | baz=196 | | | | | | |
| **NVAR** | **Mina Array Bea** | **4.65** | **348** | Pn | **Pn** | **09 02 20.8** | **+2.0** |
| **U15A** | **North Rim** | **4.71** | **56** | | **Pn** | **09 02 21.1** | **+1.5** |
| **KNB** | **Kanab** | **4.71** | **47** | | **Pn** | **09 02 21.2** | **+1.6** |
| **X16A** | **Lo Mia Camp, P** | **4.74** | **82** | | **Pn** | **09 02 20.9** | **+0.8** |
| **CCUT** | **Cedar City** | **4.78** | **39** | | **Pn** | **09 02 21.7** | **+1.1** |
| **RYN** | **Ryan** | **4.88** | **347** | | **Pn** | **09 02 24.6** | **+2.6** |
| **CMB** | **Columbia Colle** | **4.93** | **328** | Pn | **Pn** | **09 02 24.0** | **+1.5** |
| **SZCU** | **Shurtz Canyon** | **4.96** | **40** | | **Pn** | **09 02 24.8** | **+1.8** |
| **WUAZ** | **Wupatki** | **5.01** | **69** | Pn | **Pn** | **09 02 25.1** | **+1.4** |
| WUAZ | | | | IAML | | 09 03 49.2 | |
| | comp=N,17nm,0.3s | | | | | | |
| WUAZ | | | | IAML | | 09 04 18.2 | |
| | comp=N,17nm,5.0s | | | | | | |
| **WUAZ** | **Wupatki** | **5.01** | **69** | P | **Pn** | **09 02 25.6** | **+1.9** |
| | baz=253 | | | | | | |
| **KVN** | **Kaiserville** | **5.23** | **352** | | **Pn** | **09 02 28.9** | **+2.1** |
| **PKCU** | **Pink Cliffs** | **5.29** | **46** | | **Pn** | **09 02 29.5** | **+1.7** |
| **PSUT** | **Pine Spring** | **5.35** | **29** | Pn | **Pn** | **09 02 30.0** | **+1.5** |
| **YERR** | **Yerington** | **5.38** | **342** | | **Pn** | **09 02 30.4** | **+1.5** |
| **TUC** | **Tucson** | **5.54** | **105** | Pn | **Pn** | **09 02 30.6** | **-0.4** |
| **PNTR** | **Pine Nut** | **5.58** | **340** | | **Pn** | **09 02 32.9** | **+1.3** |
| **EMB** | **Emerald Bay** | **5.63** | **336** | | **Pn** | **09 02 32.0** | **-0.4** |
| **RUBR** | **Rubicon Trail** | **5.72** | **336** | | **Pn** | **09 02 33.1** | **-0.4** |
| **MTPU** | **Mount Pierson** | **5.77** | **42** | | **Pn** | **09 02 33.9** | **-0.5** |
| **VCNR** | **Virginia City** | **5.79** | **340** | | **Pn** | **09 02 34.0** | **-0.4** |
| **MPK** | **Martis Peak** | **5.90** | **337** | Pn | **Pn** | **09 02 36.2** | **+0.2** |
| **X18A** | **Snowflake** | **5.98** | **82** | | **Pn** | **09 02 38.0** | **+0.9** |
| **MSU** | **Marysvale** | **6.12** | **39** | | **Pn** | **09 02 40.5** | **+1.5** |
| **W18A** | **Petrified Fore** | **6.22** | **76** | Pn | **Pn** | **09 02 42.4** | **+2.0** |
| **ELK** | **Elko** | **7.02** | **12** | Pn | **Pn** | **09 02 53.4** | **+1.9** |
| **SRU** | **San Rafael Swe** | **7.45** | **44** | Pn | **Pn** | **09 02 58.5** | **+1.2** |
| **MVCO** | **Mesa Verde** | **7.78** | **62** | Pn | **Pn** | **09 03 03.0** | **+1.2** |

*IDC **14** 09:06:02.9±8.6, 17°.42S×168°.95E, h229$^{km}$±57$^{km}$, mb3.3/4, mb1 3.4/5, mb1mx2.9/36, mbtmp3.9/5, Error ellipse: s-maj=113.8km s-min=73.9km az=96.0*
*NEIC **14** 09:06:07.0±2.0, 17°.43S±0°.07×168°.2E±0°.2, h205$^{km}$±11$^{km}$, mb4.4/10, Error ellipse: s-maj=24.6km s-min=10.5km az=85.0*

**ISC 14 09:06:06.2±1.5, 17°.41S±0°.06×168°.2E±0°.2, h200$^{km}$, n21, σ1$^{s}$75/24, mb4.3/8, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **2.19** | **333** | Pn | **Pn** | **09 06 47.8** | **+1.0** |
| SANVU | | | | Sn | **Sn** | **09 07 21.6** | **+3.3** |
| **LIFNC** | **LIFOU** | **3.48** | **196** | Pn | **Pn** | **09 07 01.2** | **-0.4** |
| LIFNC | | | | Sn | **Sn** | **09 07 44.9** | **-0.2** |
| **DZM** | **Mont Dzumac** | **4.94** | **200** | P | **Pn** | **09 07 20.6** | **+0.7** |
| | 2.1nm,0.3s,baz=43,slow=19,SNR=25 | | | | | | |
| DZM | | | | S | **Sn** | **09 08 22.3** | **+4.3** |
| | 0.7nm,0.3s,baz=305,slow=18,SNR=1.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.94** | **200** | Pn | **Pn** | **09 07 20.2** | **+0.3** |
| **ONTNC** | **Quen Toro** | **5.15** | **199** | Pn | **Pn** | **09 07 23.4** | **+0.9** |
| **PINNC** | **Pines Island,** | **5.23** | **188** | Pn | **Pn** | **09 07 25.5** | **+2.0** |
| **CTA** | **Charters Tower** | **20.99** | **259** | P | **P** | **09 10 36.2** | **+2.0** |
| | 1.9nm,0.6s,baz=72,slow=10,SNR=2.2 | | | | | | |
| **CTAO** | **Charters Tower** | **20.99** | **259** | P | **P** | **09 10 33.4** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 09 10 39.6 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **28.08** | **234** | P | **P** | **09 11 38.8** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=32,slow=9.5,SNR=4.7 | | | | | | |
| **STKA** | **Stephens Creek** | **28.08** | **234** | P | **P** | **09 11 40.3** | **+1.0** |
| **WB0** | **Warramunga Arr** | **32.14** | **260** | P | **P** | **09 12 13.9** | **-1.3** |
| WB0 | | | | IAmb | IAmb | 09 12 19.4 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.19** | **260** | P | **P** | **09 12 13.9** | **-1.6** |
| | comp=Z,0.2nm,0.5s,baz=96,slow=8.3,SNR=2.1 | | | | | | |
| **AS31** | **Alice Springs** | **32.70** | **253** | P | **P** | **09 12 19.5** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 09 12 19.8 | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **32.70** | **253** | P | **P** | **09 12 19.4** | **-0.6** |
| | comp=Z,3.8nm,0.4s,baz=81,slow=8.9,SNR=104 | | | | | | |
| **ASAR** | **Alice Springs** | **32.70** | **253** | P | **P** | **09 12 18.9** | **-1.1** |
| **BBOO** | **Buckleboo** | **32.77** | **236** | P | **P** | **09 12 20.7** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 09 12 41.4 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **36.07** | **272** | P | **P** | **09 12 45.8** | **-3.2** |
| **KNRA** | **Kununurra** | **37.84** | **267** | P | **P** | **09 13 01.7** | **-2.1** |
| KNRA | | | | IAmb | IAmb | 09 13 03.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **38.81** | **242** | P | **P** | **09 13 11.8** | **0.0** |
| FORT | | | | IAmb | IAmb | 09 13 35.5 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.63** | **180** | P | **P** | **09 17 12.0** | **+0.3** |
| **SNAA** | **Sanae** | **90.93** | **183** | P | **P** | **09 18 45.8** | **-1.2** |

*IDC **14** 09:10:12.9±0.9, 20°.51S×67°.86W, h165$^{km}$±14$^{km}$, mb3.1/2, mb1 3.5/6, mb1mx3.3/35, mbtmp3.9/6, Error ellipse: s-maj=27.1km s-min=10.8km az=101.0*
*SCB **14** 09:10:15.0±3.1, 20°.56S×68°.05W, h126$^{km}$±27$^{km}$, ML3.3/4, Error ellipse: s-maj=9.8km s-min=6.0km az=1.0*

**ISC 14 09:10:12.1±0.9, 20°.51S±0°.05×68°.01W±0°.05, h163$^{km}$±10$^{km}$, n23, σ2$^{s}$57/32, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB08** | **IPOC Station P** | **1.14** | **288** | P | **Pn** | **09 10 41.8** | **+2.1** |
| PB08 | | | | S | **Sn** | **09 10 59.0** | **-1.8** |
| PB08 | | | | IAML | | 09 11 05.6 | |
| | 351nm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.48** | **249** | P | **Pn** | **09 10 44.5** | **+1.9** |
| **PB11** | **IPOC Station P** | **1.72** | **295** | P | **Pn** | **09 10 46.6** | **+1.5** |
| PB11 | | | | S | **Sn** | **09 11 08.2** | **-2.1** |
| **PB09** | **IPOC Station P** | **1.73** | **222** | P | **Pn** | **09 10 47.6** | **+2.4** |
| PB09 | | | | S | **Sn** | **09 11 08.5** | **-2.3** |
| PB09 | | | | IAML | | 09 11 15.7 | |
| | 167nm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **1.94** | **245** | P | **Pn** | **09 10 49.4** | **+1.9** |
| **PB07** | **IPOC Station P** | **2.13** | **235** | P | **Pn** | **09 10 51.8** | **+2.1** |
| **PB03** | **IPOC Station P** | **2.24** | **226** | P | **Pn** | **09 10 52.9** | **+2.0** |
| **LVC** | **Limon Verde** | **2.25** | **202** | P | **Pn** | **09 10 53.8** | **+2.5** |
| | 10nm,0.3s,baz=23,slow=8.9,SNR=119 | | | | | | |
| LVC | | | | S | **Sn** | **09 11 24.4** | **+2.6** |
| | 14nm,0.3s,baz=159,slow=17,SNR=8.7 | | | | | | |
| **LVC** | **Limon Verde** | **2.25** | **202** | P | **Pn** | **09 10 53.7** | **+2.4** |
| **MOCB** | **Mochara** | **2.34** | **109** | P | **Pn** | **09 10 55.3** | **+2.9** |
| MOCB | | | | S | **Sn** | **09 11 23.0** | **-0.5** |
| MOCB | | | | IAML | | 09 11 28.3 | |
| | 62nm,0.4s | | | | | | |
| **PB16** | **IPOC Station P** | **2.58** | **327** | P | **Pn** | **09 10 57.8** | **+2.3** |
| **PB06** | **IPOC Station P** | **2.63** | **213** | P | **Pn** | **09 10 57.5** | **+1.9** |
| PB06 | | | | S | **Sn** | **09 11 26.8** | **-2.5** |
| **PB04** | **IPOC Station P** | **2.70** | **227** | P | **Pn** | **09 10 58.3** | **+1.8** |
| PB04 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HUEH** | **Huehuetenango** | **1.78** | **18** | ℓ | eP | | **Pn** | **09 12 53.9** | **-0.8** |
| HUEH | | | | | IAML | | | 09 12 57.2 | |
| | comp=Z,830nm,0.3s | | | | | | | | |
| **HUEH** | **Huehuetenango** | **1.78** | **18** | ℓ | eP | | **Pn** | **09 12 53.9** | **-0.8** |
| HUEH | | | | | IAML | | | 09 12 57.2 | |
| | comp=Z,830nm,0.3s | | | | | | | | |
| **NBG** | **Las Nubes** | **1.92** | **60** | | eP | | **Pn** | **09 12 57.7** | **+1.1** |
| NBG | | | | | eS | | **Sn** | **09 13 24.5** | **+4.8** |
| **APG** | **El Apazote** | **2.07** | **48** | | Pn | | **Pn** | **09 12 58.6** | **-0.1** |
| | comp=Z,18nm,0.3s,baz=227,slow=12,SNR=362 | | | | | | | | |
| APG | | | | | Sn | | **Sn** | **09 13 26.9** | **+3.6** |
| | comp=Z,27nm,0.3s,baz=233,slow=10.0,SNR=15 | | | | | | | | |
| **NUBE** | **Las Nubes** | **2.23** | **82** | | eP | | **Pn** | **09 13 00.4** | **-0.4** |
| **NUBE** | **Las Nubes** | **2.23** | **82** | | eP | | **Pn** | **09 13 00.4** | **-0.4** |
| **RTR** | **El Retiro** | **2.36** | **83** | | eP | | **Pn** | **09 13 02.7** | **+0.1** |
| **RTR** | **El Retiro** | **2.36** | **83** | | eP | | **Pn** | **09 13 02.7** | **+0.1** |
| **SNJE** | **San Jose** | **2.40** | **84** | | eP | | **Pn** | **09 13 01.9** | **-1.2** |
| SNJE | | | | | IAML | | | 09 13 50.0 | |
| | comp=Z,244nm,0.6s | | | | | | | | |
| **SNJE** | **San Jose** | **2.40** | **84** | | eP | | **Pn** | **09 13 01.9** | **-1.2** |
| SNJE | | | | | IAML | | | 09 13 50.0 | |
| | comp=Z,244nm,0.6s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.54** | **89** | | eP | | **Pn** | **09 13 03.9** | **-1.1** |
| JAYA | | | | | IAML | | | 09 13 40.9 | |
| | comp=Z,381nm,0.3s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.54** | **89** | | eP | | **Pn** | **09 13 03.9** | **-1.1** |
| JAYA | | | | | IAML | | | 09 13 40.9 | |
| | comp=Z,381nm,0.3s | | | | | | | | |
| **CEDA** | **San Andres** | **2.59** | **86** | | eP | | **Pn** | **09 13 05.2** | **-0.5** |
| CEDA | | | | | IAML | | | 09 13 45.4 | |
| | comp=Z,371nm,0.4s | | | | | | | | |
| **CEDA** | **San Andres** | **2.59** | **86** | | eP | | **Pn** | **09 13 05.2** | **-0.5** |
| CEDA | | | | | IAML | | | 09 13 45.4 | |
| | comp=Z,371nm,0.4s | | | | | | | | |
| **TACO** | **Tacachico** | **2.65** | **82** | | eP | | **Pn** | **09 13 05.7** | **-0.8** |
| **TACO** | **Tacachico** | **2.65** | **82** | | eP | | **Pn** | **09 13 05.7** | **-0.8** |
| **CCIG** | **Comitan** | **2.65** | **358** | | Pn | | **Pn** | **09 13 07.9** | **+1.3** |
| **PMON** | **Piamonte** | **2.67** | **88** | | eP | | **Pn** | **09 13 06.2** | **-0.5** |
| **PMON** | **Piamonte** | **2.67** | **88** | | eP | | **Pn** | **09 13 06.2** | **-0.5** |
| **MRL** | **Marmol** | **2.72** | **57** | | eP | | **Pn** | **09 13 08.1** | **+0.5** |
| **MTO3** | **Montecristo** | **2.73** | **73** | | Pn | | **Pn** | **09 13 06.9** | **-0.9** |
| **MTO3** | **Montecristo** | **2.73** | **73** | | eP | | **Pn** | **09 13 06.8** | **-0.9** |
| **MTO3** | **Montecristo** | **2.73** | **73** | | eP | | **Pn** | **09 13 06.8** | **-0.9** |
| **SNET** | **Serv Nac Est T** | **2.75** | **88** | | Pn | | **Pn** | **09 13 06.8** | **-1.1** |
| **SNET** | **Serv Nac Est T** | **2.75** | **88** | | IAML | | | 09 13 51.3 | |
| | comp=Z,203nm,0.3s | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **2.75** | **88** | | IAML | | | 09 13 51.3 | |
| | comp=Z,203nm,0.3s | | | | | | | | |
| **ESQI** | **Esquipulas** | **2.80** | **70** | | Pn | | **Pn** | **09 13 08.7** | **+0.1** |
| **ESQI** | **Esquipulas** | **2.80** | **70** | | eP | | **Pn** | **09 13 07.9** | **-0.6** |
| ESQI | | | | | IAML | | | 09 13 47.2 | |
| | comp=Z,105nm,0.5s | | | | | | | | |
| **SJTE** | **Alcalda de S** | **2.97** | **90** | | eP | | **Pn** | **09 13 10.1** | **-0.8** |
| SJTE | | | | | eS | | **Sn** | **09 13 45.2** | **0.0** |
| **SJTE** | **Alcalda de S** | **2.97** | **90** | | eP | | **Pn** | **09 13 10.1** | **-0.8** |
| SJTE | | | | | eS | | **Sn** | **09 13 45.2** | **0.0** |
| **COEG** | **Centro de Oper** | **3.09** | **90** | | eP | | **Pn** | **09 13 12.3** | **-0.2** |
| COEG | | | | | eS | | **Sn** | **09 13 49.1** | **+0.9** |
| COEG | | | | | IAML | | | 09 13 60.0 | |
| | comp=Z,193nm,0.5s | | | | | | | | |
| **COEG** | **Centro de Oper** | **3.09** | **90** | | eP | | **Pn** | **09 13 12.3** | **-0.2** |
| COEG | | | | | eS | | **Sn** | **09 13 49.1** | **+0.9** |
| COEG | | | | | IAML | | | 09 13 60.0 | |
| | comp=Z,193nm,0.5s | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **3.24** | **88** | | eP | | **Pn** | **09 13 13.8** | **-0.8** |
| **SCLA** | **Alcaldia de Sa** | **3.24** | **88** | | eP | | **Pn** | **09 13 13.8** | **-0.8** |
| **PQSS** | **Presa 15 de Se** | **3.40** | **89** | | eP | | **Pn** | **09 13 16.0** | **-0.8** |
| **PQSS** | **Presa 15 de Se** | **3.40** | **89** | | eP | | **Pn** | **09 13 16.0** | **-0.8** |
| **COEB** | **Comit de Eme** | **3.43** | **92** | | eP | | **Pn** | **09 13 16.4** | **-0.9** |
| **COEB** | **Comit de Eme** | **3.43** | **92** | | eP | | **Pn** | **09 13 16.4** | **-0.9** |
| **PETF** | **Flores** | **3.90** | **33** | | Pn | | **Pn** | **09 13 24.6** | **+0.9** |
| **CMIG** | **Matias Romero** | **4.40** | **322** | | Pn | | **Pn** | **09 13 29.2** | **-1.3** |
| | comp=Z,1.6nm,0.3s,baz=143,slow=9.6,SNR=19 | | | | | | | | |
| CMIG | | | | | Sn | | **Sn** | **09 14 21.8** | **+1.2** |
| | comp=Z,3.5nm,0.3s,baz=117,slow=15,SNR=4.0 | | | | | | | | |
| CMIG | | | | | Lg | Lg | | 09 14 38.3 | |
| | comp=Z,11nm,0.3s,baz=221,slow=17,SNR=6.2 | | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **4.67** | **84** | | Pn | | **Pn** | **09 13 33.4** | **-0.9** |
| **CRIN** | **San Cristobal** | **4.96** | **100** | | Pn | | **Pn** | **09 13 38.1** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **5.33** | **100** | | Pn | | **Pn** | **09 13 55.2** | **-1.9** |
| **HZTE** | **Horizontes, Gu** | **6.95** | **114** | | Pn | | **Pn** | **09 14 06.7** | **+1.2** |
| **ORTG** | **Ortega, Santa** | **7.22** | **116** | | | | **Pn** | **09 14 11.0** | **+1.7** |
| **DUNO** | **Dulce Nombre,** | **7.32** | **118** | | Pn | | **Pn** | **09 14 12.2** | **+1.5** |
| **JTS** | **Las Juntas de** | **7.70** | **115** | | Pn | | **Pn** | **09 14 16.2** | **+0.3** |
| | comp=Z,1.0nm,0.3s,baz=356,slow=19,SNR=1.7 | | | | | | | | |
| JTS | | | | | Lg | Lg | | 09 16 26.5 | |
| | comp=Z,0.1nm,0.3s,baz=220,slow=12,SNR=7.6 | | | | | | | | |
| **JTS** | **Las Juntas de** | **7.70** | **115** | | Pn | | **Pn** | **09 14 18.0** | **+2.2** |
| **CAO2** | **Cobano, Puntar** | **7.85** | **119** | | Pn | | **Pn** | **09 14 19.8** | **+1.9** |
| **RIMA** | **Rio Macho** | **8.89** | **115** | | | | **Pn** | **09 14 34.7** | **+2.4** |
| **PEZE** | **Perez Zeledon,** | **9.23** | **116** | | Pn | | **Pn** | **09 14 39.8** | **+2.9** |
| **SRBA** | **San Rafael, Bu** | **9.57** | **116** | | | | **Pn** | **09 14 43.2** | **+1.5** |
| **TXAR** | **Lajitas Array** | **18.99** | **327** | | P | | **Pn** | **09 16 46.4** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=7.7,SNR=22 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **18.99** | **327** | | P | | **P** | **09 16 45.6** | **+0.9** |
| **SWET** | **Sewanee** | **22.21** | **13** | | P | | **P** | **09 17 17.4** | **-2.1** |
| SWET | | | | | IAmb | | IAmb | 09 17 19.4 | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **AMTX** | **Amarillo** | **22.89** | **339** | | P | | **P** | **09 17 26.7** | **-0.2** |
| **TKL** | **Tuckaleechee C** | **23.18** | **17** | | P | | **P** | **09 17 27.6** | **-2.0** |
| | comp=Z,3.2nm,0.9s,baz=197,slow=14,SNR=1.8 | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **23.49** | **13** | | P | | **P** | **09 17 30.4** | **-2.3** |
| U49A | | | | | IAmb | | IAmb | 09 17 58.5 | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| **ANMO** | **Albuquerque** | **24.91** | **331** | | P | | **P** | **09 17 46.8** | **+0.8** |
| | comp=Z,1.3nm,0.7s,baz=161,slow=11,SNR=8.2 | | | | | | | | |
| **ANMO** | **Albuquerque** | **24.91** | **331** | | P | | **P** | **09 17 46.8** | **+0.8** |
| **SJG** | **San Juan** | **25.31** | **76** | | LR | | LR | 09 28 40.3 | |
| | comp=Z,67nm,18.3s,baz=22,slow=39 | | | | | | | | |
| **MTPU** | **Mount Pierson** | **30.19** | **327** | | P | | **P** | **09 18 35.3** | **+1.8** |
| **PDAR** | **Pinedale Array** | **32.74** | **336** | | P | | **P** | **09 18 58.0** | **+2.2** |
| | comp=Z,0.2nm,0.5s,baz=143,slow=11,SNR=2.8 | | | | | | | | |
| **REDW** | **Red Top Meadow** | **33.77** | **335** | | P | | **P** | **09 19 05.4** | **+0.7** |
| REDW | | | | | IAmb | | IAmb | 09 19 06.4 | |
| | comp=Z,5.5nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.94** | **322** | | P | | **P** | **09 19 08.2** | **+2.0** |
| | comp=Z,1.0nm,0.7s,baz=134,slow=7.7,SNR=8.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.94** | **322** | | P | | **P** | **09 19 08.9** | **+2.6** |
| **PTGA** | **Pitinga** | **34.85** | **112** | | P | | **P** | **09 19 15.0** | **+0.8** |
| | comp=Z,4.0nm,0.8s,baz=304,slow=11,SNR=7.6 | | | | | | | | |
| **SIV** | **San Ignacio** | **42.47** | **133** | | P | | **P** | **09 20 17.7** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=284,slow=12,SNR=4.0 | | | | | | | | |
| **EDM** | **Edmonton** | **42.98** | **341** | | P | | **P** | **09 20 21.5** | **-0.3** |
| EDM | | | | | IAmb | | IAmb | 09 20 24.9 | |
| | comp=Z,8.1nm,1.3s | | | | | | | | |
| **SCHQ** | **Schefferville** | **45.60** | **20** | | P | | **P** | **09 20 39.4** | **-3.3** |
| | comp=Z,4.7nm,0.9s,baz=207,slow=9.9,SNR=4.9 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.38** | **347** | | P | | **P** | **09 21 25.9** | **-1.2** |
| | comp=Z,0.7nm,0.6s,baz=148,slow=7.4,SNR=17 | | | | | | | | |
| YKA | | | | | PcP | | **PcP** | **09 22 41.4** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=149,slow=3.8,SNR=7.8 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **60.37** | **336** | | P | | **P** | **09 22 32.4** | **+1.0** |
| **J25K** | **Salcha River,** | **62.52** | **337** | | P | | **P** | **09 22 47.0** | **+1.0** |
| J25K | | | | | IAmb | | IAmb | 09 23 13.6 | |
| | comp=Z,1.4nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **63.17** | **337** | | P | | **P** | **09 22 50.9** | **+0.6** |
| | comp=Z,1.5nm,1.1s,baz=161,slow=5.6,SNR=8.4 | | | | | | | | |
| **ILAR** | **Eielson Array** | **63.17** | **337** | | P | | **P** | **09 22 49.8** | **-0.4** |
| **BMAR** | **Burnt Mountain** | **63.63** | **340** | | P | | **P** | **09 22 54.5** | **+1.2** |
| **TOLK** | **Toolik Lake Re** | **65.86** | **340** | | P | | **P** | **09 23 08.6** | **+0.8** |
| **IMAR** | **Indian Mountai** | **66.29** | **337** | | P | | **P** | **09 23 10.7** | **+0.2** |
| **BORG** | **Borgarnes** | **69.58** | **26** | | LR | | LR | 09 54 22.3 | |
| | comp=Z,40nm,18.3s,baz=308,slow=36 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **90.52** | **76** | | P | | **P** | **09 25 24.0** | **-1.1** |
| TORD | | | | | IAmb | | IAmb | 09 25 50.9 | |
| | comp=Z,1.0nm,1.2s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.34** | **341** | | PKPbc | | **PKPbc** | **09 32 04.3** | **+0.3** |
| | comp=Z,1.3nm,0.4s,baz=335,slow=4.0,SNR=9.2 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.34** | **341** | | | | **PKPdf** | **09 32 02.6** | **-0.2** |

***IDC 14 09:28:13.0±1.6, 0°02'S×24°85'W, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.6/41, mbtmp3.8/4, MS3.6/29, Ms1 3.6/29, ms1mx3.4/74, Error ellipse: s-maj=62.8km s-min=37.8km az=165.0, Central Mid-Atlantic Ridge***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **12.91** | **127** | T | T | 09 44 36.9 | |
| | baz=306,slow=74,SNR=94 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **12.92** | **127** | T | T | 09 44 28.6 | |
| | baz=306,slow=74,SNR=85 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **12.94** | **127** | T | T | 09 44 33.8 | |
| | baz=306,slow=74,SNR=116 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **21.03** | **71** | | P | | P | 09 32 58.4 | -0.2 |
| | 9.0nm,1.1s,baz=264,slow=11,SNR=4.0 | | | | | | | | |
| DBIC | | | | | LR | | LR | 09 39 38.3 | |
| | comp=Z,121nm,18.3s,baz=272,slow=33 | | | | | | | | |
| **PTGA** | **Pitinga** | **35.12** | **269** | | LR | | LR | 09 48 15.4 | |
| | comp=Z,62nm,18.9s,baz=93,slow=34 | | | | | | | | |
| **MDT** | **Midelt** | **37.82** | **28** | | LR | | LR | 09 50 22.8 | |
| | comp=Z,67nm,18.8s,baz=350,slow=35 | | | | | | | | |
| **SIV** | **San Ignacio** | **39.10** | **244** | | LR | | LR | 09 50 59.5 | |
| | comp=Z,123nm,18.9s,baz=120,slow=35 | | | | | | | | |
| **CPUP** | **Villa Florida** | **40.78** | **228** | | LR | | LR | 09 52 06.1 | |
| | comp=Z,70nm,18.9s,baz=54,slow=35 | | | | | | | | |
| **SJG** | **San Juan** | **44.41** | **296** | | LR | | LR | 09 50 30.9 | |
| | comp=Z,31nm,19.4s,baz=102,slow=30 | | | | | | | | |
| **LPAZ** | **La Paz** | **45.63** | **247** | | LR | | LR | 09 55 30.0 | |
| | comp=Z,217nm,18.3s,baz=64,slow=36 | | | | | | | | |
| **TSUM** | **Tsumeb** | **45.77** | **117** | | LR | | LR | 09 52 23.8 | |
| | comp=Z,58nm,18.6s,baz=320,slow=32 | | | | | | | | |
| **SDV** | **Santo Domingo** | **46.44** | **282** | | LR | | LR | 09 56 57.7 | |
| | comp=Z,39nm,18.3s,baz=90,slow=37 | | | | | | | | |
| **KEST** | **Kesra** | **47.72** | **38** | | LR | | LR | 09 57 34.7 | |
| | comp=Z,191nm,19.3s,baz=330,slow=37 | | | | | | | | |
| **LVC** | **Limon Verde** | **48.38** | **239** | | LR | | LR | 09 57 27.8 | |
| | comp=Z,29nm,19.1s,baz=88,slow=36 | | | | | | | | |
| **ROSC** | **El Rosal** | **49.64** | **276** | | LR | | LR | 09 56 42.3 | |
| | comp=Z,88nm,19.8s,baz=70,slow=34 | | | | | | | | |
| **NNA** | **Nana** | **52.95** | **255** | | LR | | LR | 09 59 07.0 | |
| | comp=Z,51nm,19.3s,baz=46,slow=35 | | | | | | | | |
| **ATAH** | **Atahualpa** | **53.87** | **261** | | LR | | LR | 10 02 01.6 | |
| | comp=Z,62nm,18.2s,baz=79,slow=38 | | | | | | | | |
| **LSZ** | **Lusaka** | **54.52** | **109** | | LR | | LR | 09 58 30.6 | |
| | comp=Z,72nm,18.2s,baz=265,slow=33 | | | | | | | | |
| **LBTB** | **Lobatse** | **54.70** | **121** | | LR | | LR | 09 56 56.3 | |
| | comp=Z,56nm,19.8s,baz=237,slow=32 | | | | | | | | |
| **MBAR** | **Mbarara** | **55.59** | **91** | | LR | | LR | 09 59 31.8 | |
| | comp=Z,46nm,18.1s,baz=264,slow=34 | | | | | | | | |
| **BOSA** | **Boshof** | **55.66** | **125** | | LR | | LR | 09 57 36.6 | |
| | comp=Z,51nm,19.3s,baz=189,slow=32 | | | | | | | | |
| **PLCA** | **Paso Flores** | **57.93** | **220** | | LR | | LR | 10 00 58.9 | |
| | comp=Z,43nm,19.8s,baz=141,slow=34 | | | | | | | | |
| **IDI** | **Anoyia** | **58.09** | **47** | | LR | | LR | 10 03 59.0 | |
| | comp=Z,36nm,19.1s,baz=150,slow=37 | | | | | | | | |
| **EIL** | **Elat** | **64.05** | **57** | | LR | | LR | 10 08 02.7 | |
| | comp=Z,73nm,18.0s,baz=284,slow=37 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **65.16** | **310** | | LR | | LR | 10 02 06.4 | |
| | comp=Z,19nm,19.0s,baz=138,slow=31 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **65.37** | **53** | | LR | | LR | 10 10 07.2 | |
| | comp=Z,28nm,18.6s,baz=44,slow=38 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **66.24** | **46** | | P | | P | 09 39 03.7 | +0.4 |
| | 0.7nm,0.9s,baz=247,slow=6.4,SNR=4.3 | | | | | | | | |
| BRTR | | | | | LR | | LR | 10 08 49.8 | |
| | comp=Z,28nm,20.8s,baz=216,slow=37 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.11** | **34** | | P | | P | 09 39 14.4 | -0.3 |
| | 1.0nm,0.6s,baz=239,slow=6.5,SNR=4.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.26** | **300** | | P | | P | 09 40 26.3 | 0.0 |
| | 0.2nm,0.8s,baz=120,slow=5.4,SNR=1.9 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **84.01** | **67** | | LR | | LR | 10 19 47.8 | |
| | comp=Z,30nm,18.2s,baz=242,slow=37 | | | | | | | | |
| **RPN** | **Rapa Nui** | **85.08** | **243** | | LR | | LR | 10 15 01.0 | |
| | comp=Z,34nm,18.1s,baz=116,slow=33 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **85.46** | **40** | | LR | | LR | 10 21 13.2 | |
| | comp=Z,13nm,20.3s,baz=324,slow=37 | | | | | | | | |
| **ARU** | **Arti** | **86.36** | **34** | | LR | | LR | 10 22 12.2 | |
| | comp=Z,30nm,18.3s,baz=286,slow=38 | | | | | | | | |
| **AAK** | **Ala-Archa** | **96.89** | **47** | | LR | | LR | 10 29 32.2 | |
| | comp=Z,32nm,18.3s,baz=357,slow=38 | | | | | | | | |
| **ASAR** | **Alice Springs** | **148.70** | **140** | | PKPbc | | PKPbc | 09 48 02.6 | -0.6 |
| | 0.8nm,0.9s,baz=208,slow=2.9,SNR=7.3 | | | | | | | | |

*IDC 14 09:43:07.5±1.3, 2°51'N×128°30'E, h0km, mb3.7/5, mb1 3.9/5, mb1mx3.5/48, mbtmp3.7/5, MS3.2/1, Ms1 3.2/1, ms1mx2.4/67, Error ellipse: s-maj=72.1km s-min=21.9km az=78.0*

*DJA 14 09:44:31.9±1.1, 0°S±8'×12°3E±°, h68km±23km, M2.9/5, MLv2.9/5*

***ISC 14 09:43:12.6±1.1, 2°5'N±0'1×128°3'E±0'2, h35km, n9, σ0°91/7, mb3.7/5, Halmahera***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **6.62** | **253** | P | Pn | 09 44 54.1 | +6.7 |
| **APSI** | **Ampana** | **7.41** | **243** | P | **Pn** | **09 44 57.5** | **-0.8** |
| **SPSI** | **Sidrap Palu** | **10.62** | **233** | P | **Pn** | **09 45 43.3** | **+1.0** |
| **WRA** | **Warramunga Arr** | **23.05** | **165** | P | **P** | **09 48 15.9** | **+0.8** |
| | 0.6nm,0.3s,baz=346,slow=10,SNR=23 | | | | | | |
| **JOW** | **Kunigami** | **24.23** | **0** | LR | LR | 09 56 25.3 | |
| | comp=Z,61nm,19.6s,baz=318,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **26.54** | **168** | P | **P** | **09 48 47.6** | **+0.2** |
| | 0.3nm,0.5s,baz=350,slow=7.5,SNR=15 | | | | | | |
| **STKA** | **Stephens Creek** | **36.42** | **161** | P | **P** | **09 50 13.1** | **-1.0** |
| | 0.8nm,0.3s,baz=344,slow=8.1,SNR=5.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **56.04** | **21** | P | **P** | **09 52 48.1** | **+0.2** |
| | 1.7nm,0.9s,baz=217,slow=4.5,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.46** | **325** | P | **P** | **09 53 12.2** | **+0.1** |
| | 0.3nm,0.4s,baz=111,slow=9.7,SNR=2.9 | | | | | | |

*IDC 14 09:48:49.7±1.0, 0°09'N×24°91'W, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.6/39, mbtmp3.8/6, MS3.4/13, Ms1 3.5/13, ms1mx3.1/76, Error ellipse: s-maj=51.3km s-min=23.0km az=155.0*

***ISC 14 09:48:52.2±1.0, 0°0S±0'4×24°9W±0'2, h18km, n22, σ0°93/8, mb3.9/6, MS3.4/13, Central Mid-Atlantic Ridge***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **12.93** | **127** | T | T | 10 05 09.8 | |
| | baz=306,slow=74,SNR=74 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **12.93** | **127** | T | T | 10 05 09.4 | |
| | baz=306,slow=74,SNR=84 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **12.95** | **127** | T | T | 10 05 11.3 | |
| | baz=306,slow=74,SNR=78 | | | | | | |
| **DBIC** | **Dimbokro** | **21.06** | **71** | P | **P** | **09 53 37.1** | **+1.5** |
| | 4.8nm,1.0s,baz=242,slow=12,SNR=2.9 | | | | | | |
| DBIC | | | | LR | LR | 09 59 46.3 | |
| | comp=Z,98nm,21.2s,baz=226,slow=31 | | | | | | |
| **MDP** | **Montagnes des** | **28.19** | **281** | LR | LR | 10 03 27.1 | |
| | comp=Z,62nm,19.1s,baz=116,slow=31 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.41** | **63** | P | **P** | **09 54 54.8** | **-0.2** |
| | 0.8nm,0.8s,baz=254,slow=11,SNR=4.0 | | | | | | |
| **PTGA** | **Pitinga** | **35.09** | **266** | LR | LR | 10 07 08.6 | |
| | comp=Z,49nm,19.0s,baz=134,slow=31 | | | | | | |
| **SIV** | **San Ignacio** | **39.07** | **244** | LR | LR | 10 11 34.2 | |
| | comp=Z,55nm,18.0s,baz=120,slow=35 | | | | | | |
| **SJG** | **San Juan** | **44.39** | **296** | LR | LR | 10 11 11.5 | |
| | comp=Z,23nm,19.4s,baz=212,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **45.60** | **247** | P | **P** | **09 57 13.0** | **+0.4** |
| | 2.6nm,1.0s,baz=64,slow=9.3,SNR=5.9 | | | | | | |
| LPAZ | | | | LR | LR | 10 15 56.9 | |
| | comp=Z,91nm,18.7s,baz=58,slow=36 | | | | | | |
| **TSUM** | **Tsumeb** | **45.78** | **117** | LR | LR | 10 12 12.6 | |
| | comp=Z,55nm,18.2s,baz=298,slow=31 | | | | | | |
| **LVC** | **Limon Verde** | **48.35** | **239** | LR | LR | 10 20 23.5 | |
| | comp=Z,28nm,18.2s,baz=169,slow=39 | | | | | | |
| **ROSC** | **El Rosal** | **49.62** | **276** | LR | LR | 10 16 23.1 | |
| | comp=Z,70nm,18.9s,baz=128,slow=33 | | | | | | |
| **NNA** | **Nana** | **52.91** | **255** | LR | LR | 10 18 29.1 | |
| | comp=Z,43nm,21.3s,baz=53,slow=34 | | | | | | |
| **SUR** | **Sutherland** | **53.75** | **131** | LR | LR | 10 16 38.9 | |
| | comp=Z,37nm,20.9s,baz=182,slow=31 | | | | | | |
| **ATAH** | **Atahualpa** | **53.84** | **261** | LR | LR | 10 19 26.8 | |
| | comp=Z,40nm,20.2s,baz=78,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **55.62** | **91** | LR | LR | 10 20 12.1 | |
| | comp=Z,53nm,18.3s,baz=209,slow=34 | | | | | | |
| **BRTR** | **Keskin Array B** | **66.27** | **46** | P | **P** | **09 59 38.9** | **-0.9** |
| | 0.7nm,0.7s,baz=188,slow=5.8,SNR=4.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.13** | **34** | P | **P** | **09 59 51.3** | **+0.1** |
| | 0.5nm,0.5s,baz=238,slow=6.4,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.24** | **300** | P | **P** | **10 01 02.7** | **+0.3** |
| | 0.5nm,0.9s,baz=110,slow=7.8,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **148.70** | **140** | PKPbc | **PKiKP** | **10 08 40.0** | **-0.9** |
| | 1.0nm,0.8s,baz=216,slow=3.4,SNR=8.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **151.56** | **135** | PKPbc | **PKPbc** | **10 08 46.1** | **-0.3** |
| | 0.8nm,0.9s,baz=242,slow=1.7,SNR=3.5 | | | | | | |

*CNRM 14 09:52:23.7, 35°50'N×3°74'W, h24km, ml2.5*

***ISC 14 09:52:19.9±1.3, 35°50'N±0'06×3°83'W±0'08, h10km, n4, σ1°43/7, Strait of Gibraltar***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.29** | **197** | P | **Pn** | **09 52 29.8** | **-0.5** |
| PALE | | | | S | **Sb** | **09 52 34.7** | **+2.5** |
| **TAF** | **Taforalt** | **1.35** | **120** | P | **Pg** | **09 52 46.1** | **+0.3** |
| TAF | | | | S | **Sg** | **09 53 03.1** | **-0.2** |
| **EMAL** | **Malaga-Limoner** | **1.35** | **339** | P | Pg | 09 52 53.3 | +7.4 |
| EMAL | | | | S | **Sb** | **09 53 03.2** | **+0.5** |
| **MD31** | **MD31** | **2.73** | **197** | P | **Pb** | **09 53 08.6** | **-0.4** |
| MD31 | | | | S | **Sb** | **09 53 41.4** | **-1.1** |

*NIED 14 10:03:36.3, 39°99N×139°89E, h14km, MW3.5, Moment Tensor Solution. s1 Moment tensor: Scale 10¹⁴Nm; Mrr1.79; Mθθ0.30; Mϕϕ-2.09; Mrθ-0.75; Mθϕ-0.58; Mϕr-0.07; Fault plane solution: Mo2.17000×10¹⁴ NP1: ϕs214.00000°, δ53.00000°, λ120.00000°. NP2: ϕs351.00000°, δ46.00000°, λ57.00000°.*

*JMA 14 10:03:36.2±0.1, 39°99N×139°89E, h14km±1km, M3.5 Broadband fault plane solution: P waves. NP1: ϕs194.00000°, δ38.00000°, λ123.00000°. NP2: ϕs335.00000°, δ59.00000°, λ67.00000°. Principal axes: T Plg67.0000°, Azm199.0000°; N Plg20.0000°, Azm347.0000°; P Plg11.0000°, Azm81.0000°;*

*JMA Felt III J1.*

*IDC 14 10:03:41.6±2.5, 39°82N×139°30E, h42km±28km, mb3.2/5, mb1 3.5/8, mb1mx3.0/34, mbtmp3.4/8, ML2.9/3 Error ellipse: s-maj=49.0km s-min=17.1km az=105.0*

***ISC 14 10:03:38.3±0.7, 39°95N±0'04×139°95E±0'06, h17km, n15, σ2°43/19, mb3.6/5, 5D, Near west coast of eastern Honshu***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNTW** | **Noshirotokiwa** | **0.36** | **27** | ⇓P | **Pg** | **10 03 43.7** | **-2.0** |
| JNTW | | | | eS | **Sg** | **10 03 48.9** | **-1.9** |
| **JYW** | **Yuwa** | **0.46** | **154** | ⇓P | **Pg** | **10 03 46.2** | **-1.4** |
| JYW | | | | S | **Sb** | **10 03 54.5** | **+0.1** |
| **JAH** | **Hinai** | **0.57** | **66** | ⇓P | **Pg** | **10 03 47.7** | **-2.0** |
| JAH | | | | S | **Sg** | **10 03 56.0** | **-1.4** |
| **JIW** | **Iwasaki** | **0.64** | **4** | P | **Pg** | **10 03 47.9** | **-3.0** |
| **JOG3** | **Oga3** | **0.67** | **267** | ⇓P | Pg | 10 03 39.2 | -12 |
| JOG3 | | | | S | Sg | 10 03 41.5 | -19 |
| **JRG** | **Rokugo** | **0.77** | **136** | ⇓P | **Pb** | **10 03 51.6** | **-1.6** |
| JRG | | | | S | **Sb** | **10 04 02.9** | **-0.4** |
| **MJAR** | **Matsushiro Ar** | **3.67** | **202** | P | **Pn** | **10 04 33.7** | **-0.6** |
| | 0.3nm,0.3s,baz=5.3,slow=15,SNR=10 | | | | | | |
| MJAR | | | | S | **Sn** | **10 05 16.0** | **-1.3** |
| | 0.3nm,0.3s,baz=34,slow=20,SNR=4.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.60** | **24** | P | **Pn** | **10 04 51.3** | **+4.2** |
| | 1.1nm,0.3s,baz=172,slow=7.1,SNR=10 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.28** | **308** | P | **Pn** | **10 05 21.0** | **-2.9** |
| | baz=118,slow=14,SNR=13 | | | | | | |
| **KSRS** | **Korea Array** | **9.73** | **259** | P | **Pn** | **10 05 59.2** | **+1.8** |
| | 0.5nm,0.3s,baz=70,slow=14,SNR=5.0 | | | | | | |
| **SEY** | **Seymchan** | **24.19** | **14** | P | **P** | **10 08 56.0** | **+2.5** |
| | 0.8nm,0.7s,baz=140,slow=7.9,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **47.67** | **34** | P | **P** | **10 12 16.9** | **+3.4** |
| | 0.8nm,0.9s,baz=278,slow=6.9,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **59.81** | **186** | P | **P** | **10 13 40.4** | **-2.3** |
| | 0.2nm,0.4s,baz=4.1,slow=6.9,SNR=4.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **61.87** | **30** | P | **P** | **10 13 59.3** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AKTO** | **Aktyubinsk** | **16.76** | **330** | ⇑P | | **Pn** | **10 30 22.8** | **+0.1** |
| | 5.1nm,1.2s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.79** | **24** | P | | **P** | **10 30 56.0** | **+1.5** |
| | 0.2nm,0.3s,baz=190,slow=4.5,SNR=4.0 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **32.98** | **309** | P | | **P** | **10 32 56.2** | **+0.4** |
| | 0.2nm,0.3s,baz=86,slow=7.7,SNR=5.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.10** | **338** | P | | **P** | **10 34 04.8** | **+0.9** |
| | 3.7nm,1.0s,baz=118,slow=9.5,SNR=1.9 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.38** | **323** | P | | **P** | **10 34 30.3** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=97,slow=7.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.38** | **323** | P | | **P** | **10 34 30.4** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=107,slow=7.2,SNR=4.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.83** | **269** | P | | **P** | **10 37 02.8** | **-1.6** |
| | comp=Z,0.6nm,0.6s,baz=51,slow=6.6,SNR=4.5 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.15** | **3** | P | | **P** | **10 38 33.0** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=350,slow=5.3,SNR=13 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.92** | **122** | P | | **P** | **10 38 36.5** | **-1.3** |
| | comp=Z,0.3nm,0.6s,baz=328,slow=5.1,SNR=2.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **84.21** | **125** | P | | **P** | **10 38 48.5** | **-0.8** |
| | comp=Z,0.1nm,0.6s,baz=303,slow=4.7,SNR=4.3 | | | | | | | | |

*UCR **14** 10:38:03.4±1.5,8.26°N×83.01°W,h10km,MW3.8*
*UPA **14** 10:38:04.7±0.8,8.30°N×82.96°W,h11km±9km,MW3.9*
**ISC 14 10:38:03.2**±1.7,**8.26°N**±0.08°×**82.98°W**±0.04°,**h20**km±3km,
**n18**,σ0ˢ**95**/29,**2D,Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LESP3** | **La Esperanza,** | **0.24** | **51** | ⇓*iP* | **Pb** | **10 38 09.0** | **-0.1** |
| LESP3 | | | | *eS* | **Sb** | **10 38 13.3** | **+0.1** |
| **PIRO** | **Carate, Puerto** | **0.39** | **293** | *eP* | **Pb** | **10 38 09.8** | **-1.4** |
| **DVD** | **David** | **0.55** | **71** | *eP* | **Pb** | **10 38 14.7** | **+0.5** |
| DVD | | | | *eS* | **Sn** | **10 38 23.4** | **-1.0** |
| **EDSV** | **San Vito** | **0.56** | **1** | *eP* | **Pb** | **10 38 14.1** | **-0.4** |
| EDSV | | | | *eS* | **Sn** | **10 38 23.4** | **-1.5** |
| **BRU2** | **Volcan** | **0.60** | **28** | *eP* | **Pn** | **10 38 16.3** | **-0.5** |
| BRU2 | | | | *eS* | **Sn** | **10 38 25.0** | **-1.0** |
| **LOMA3** | **Las Lomas, Chi** | **0.60** | **73** | *eP* | **Pn** | **10 38 16.4** | **-0.2** |
| LOMA3 | | | | *eS* | **Sb** | **10 38 24.0** | **+0.6** |
| **CHIR3** | **Chiriqui UPA,** | **0.66** | **78** | *eP* | **Pn** | **10 38 17.2** | **-0.1** |
| CHIR3 | | | | *eS* | **Sn** | **10 38 26.4** | **-0.6** |
| **LNBQ3** | **Los Naranjos,** | **0.75** | **45** | *eP* | **Pn** | **10 38 19.2** | **+0.4** |
| **EDPN** | **Palmar Norte** | **0.85** | **326** | ⇓*iP* | **Pn** | **10 38 18.5** | **-0.7** |
| EDPN | | | | *eS* | **Sn** | **10 38 31.3** | **-0.5** |
| **EDBA** | **Buenos Aires** | **0.95** | **342** | *eP* | **Pb** | **10 38 20.6** | **-0.3** |
| EDBA | | | | *eS* | **Sn** | **10 38 34.4** | **0.0** |
| **SRBA** | **San Rafael, Bu** | **1.04** | **339** | *eP* | **Pb** | **10 38 21.6** | **-1.0** |
| **CHGR2** | **Aguacate** | **1.07** | **50** | *eP* | **Pb** | **10 38 22.5** | **-0.5** |
| CHGR2 | | | | *eS* | **Sn** | **10 38 37.6** | **+0.3** |
| **CNI2** | **El Empalme, Bo** | **1.26** | **23** | *eP* | **Pn** | **10 38 25.8** | **+0.1** |
| CNI2 | | | | *i* S | **Sb** | **10 38 42.7** | **+0.5** |
| **PEZE** | **Perez Zeledon,** | **1.32** | **328** | *eP* | **Pn** | **10 38 26.4** | **-0.1** |
| **RIMA** | **Rio Macho** | **1.74** | **330** | *eP* | **Pn** | **10 38 32.4** | **0.0** |
| **LCR2** | **La Lucha 2** | **1.79** | **326** | *eP* | **Pn** | **10 38 34.0** | **+0.8** |
| **HDC** | **Heredia** | **2.07** | **327** | *eP* | **Pb** | **10 38 39.0** | **-1.1** |
| HDC | | | | *eS* | **Sb** | **10 39 07.5** | **+2.1** |
| **JTS** | **Las Juntas de** | **2.81** | **316** | *eP* | **Pn** | **10 38 49.4** | **+2.4** |

*TUL **14** 10:41:54±1.4,36.47°N±0.03°×98.75°W±0.03°,h4km±7km,*
*ML3.1,mb_Lg2.8/33(NEIC),Error ellipse: s-maj=4.2km*
*s-min=3.3km az=151.0*
**NEIC 14 10:41:54.4**±1.1,**36.47N**±0.02°×**98.73W**±0.03°,**h5**km±2km,
**Error ellipse: s-maj=4.2km s-min=3.3km az=248.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.24** | **248** | Pg | Pg | 10 41 58.7 | -0.4 |
| U32A | | | | Sg | Sg | 10 42 01.9 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.48** | **135** | | Pn | 10 42 21.5 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **135** | | Pn | 10 42 21.6 | -0.3 |
| **FNO** | **Franklin** | **1.62** | **138** | | Pn | 10 42 23.4 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | | Pn | 10 42 24.6 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.83** | **75** | | Pn | 10 42 26.4 | -0.2 |
| **R32A** | **Long Quarter,** | **1.95** | **1** | Pn | Pn | 10 42 28.8 | +0.6 |
| **W35A** | **Tecumseh** | **2.00** | **131** | | Pb | 10 42 30.2 | -1.0 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | Pn | 10 42 29.8 | +0.9 |
| X34A | | | | IAmb_Lg | | 10 42 59.7 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.44** | **102** | | Pn | 10 42 35.9 | +1.0 |
| **CBKS** | **Cedar Bluff** | **2.47** | **341** | Pn | Pn | 10 42 36.2 | +0.8 |
| **AMTX** | **Amarillo** | **2.88** | **238** | Pn | Pn | 10 42 40.8 | -0.2 |
| AMTX | | | | IAmb_Lg | | 10 43 25.1 | |
| | comp=Z,45nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.12** | **32** | | Pn | 10 42 44.9 | +0.7 |
| **X37A** | **Clayton** | **3.32** | **123** | | Pn | 10 42 47.8 | +0.9 |
| X37A | | | | IAmb_Lg | | 10 43 44.4 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.50** | **89** | | Pn | 10 42 49.7 | +0.2 |
| **HHAR** | **Hobbs** | **3.87** | **91** | | Pn | 10 42 55.6 | +1.1 |
| **ABTX** | **Abilene, Hawle** | **3.91** | **191** | Pn | Pn | 10 42 53.9 | -1.3 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **311** | Pn | Pn | 10 42 55.2 | -1.3 |
| KSCO | | | | IAmb_Lg | | 10 44 06.5 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.15** | **234** | Pn | Pn | 10 42 59.3 | +0.8 |
| **W39A** | **Magazine** | **4.21** | **106** | | Pn | 10 42 58.3 | -0.9 |
| W39A | | | | IAmb_Lg | | 10 44 11.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.44** | **135** | Pn | Pn | 10 43 02.4 | +0.1 |
| Z38A | | | | IAmb_Lg | | 10 44 19.7 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.49** | **73** | | Pn | 10 43 04.3 | +1.3 |
| **WHTX** | **Lake Whitney,** | **4.59** | **166** | Pn | Pn | 10 43 03.9 | -0.5 |
| **T25A** | **Trinidad** | **4.61** | **280** | | Pn | 10 43 05.1 | +0.1 |
| **MIAR** | **Mount Ida** | **4.62** | **113** | Pn | Pn | 10 43 03.5 | -1.4 |
| **U40A** | **Yellville** | **4.74** | **90** | Pn | Pn | 10 43 06.8 | +0.4 |
| U40A | | | | IAmb_Lg | | 10 44 21.4 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **5.00** | **28** | Pn | Pn | 10 43 10.4 | +0.3 |
| **P38A** | **Dawn** | **5.17** | **51** | Pn | Pn | 10 43 11.7 | -0.7 |
| **X40A** | **Basin Creek Fa** | **5.20** | **111** | Pn | Pn | 10 43 13.6 | +0.8 |
| **MGMO** | **Mountain Grove** | **5.22** | **81** | Pn | Pn | 10 43 15.1 | +1.9 |
| **WHAR** | **Wooly Hollow** | **5.36** | **101** | Pn | Pn | 10 43 16.6 | +1.6 |
| WHAR | | | | IAmb_Lg | | 10 44 47.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.37** | **94** | Pn | Pn | 10 43 14.5 | -0.7 |
| FCAR | | | | IAmb_Lg | | 10 44 47.6 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.42** | **102** | Pn | Pn | 10 43 14.9 | -0.9 |
| W41B | | | | IAmb_Lg | | 10 44 46.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.45** | **69** | Pn | Pn | 10 43 14.8 | -1.5 |
| **SDCO** | **Great Sand Dun** | **5.56** | **285** | Pn | Pn | 10 43 19.2 | +1.1 |
| **Q24A** | **Divide** | **5.67** | **298** | Pn | Pn | 10 43 18.9 | -0.6 |
| Q24A | | | | IAmb_Lg | | 10 44 58.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.78** | **18** | IAmb_Lg | | 10 45 13.0 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **5.83** | **122** | Pn | Pn | 10 43 21.1 | -0.3 |
| **JCT** | **Junction City** | **6.04** | **189** | Pn | Pn | 10 43 22.9 | -1.5 |
| JCT | | | | IAmb_Lg | | 10 45 17.6 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **LCAR** | **Lake Charles** | **6.13** | **92** | Pn | Pn | 10 43 24.9 | -0.7 |
| **K31A** | **O'Neill** | **6.14** | **360** | IAmb_Lg | | 10 45 23.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **6.15** | **83** | Pn | Pn | 10 43 25.2 | -0.7 |
| **ISCO** | **Idaho Springs** | **6.37** | **304** | Pn | Pn | 10 43 28.7 | -0.4 |
| **ANMO** | **Albuquerque** | **6.47** | **259** | Pn | Pn | 10 43 30.6 | +0.1 |
| **S22A** | **4UR Ranch, Cre** | **6.60** | **284** | Pn | Pn | 10 43 32.1 | -0.2 |
| **PBMO** | **Poplar Bluff** | **6.68** | **85** | Pn | Pn | 10 43 33.5 | +0.4 |
| **FVM** | **French Village** | **6.79** | **75** | Pn | Pn | 10 43 35.3 | +0.6 |
| FVM | | | | IAmb_Lg | | 10 45 34.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BNM** | **Barren Site** | **6.86** | **253** | Pn | Pn | 10 43 35.7 | -0.2 |
| **HDBT** | **Hernando Brdge** | **7.16** | **98** | Pn | Pn | 10 43 40.2 | +0.4 |
| **N23A** | **Red Feather La** | **7.17** | **310** | Pn | Pn | 10 43 40.4 | +0.3 |
| N23A | | | | IAmb_Lg | | 10 45 52.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.29** | **231** | Pn | Pn | 10 43 40.9 | -0.6 |
| **ECSD** | **EROS Data Cent** | **7.43** | **12** | Pn | Pn | 10 43 42.0 | -1.5 |
| **N41A** | **Harden Midland** | **7.47** | **52** | Pn | Pn | 10 43 44.4 | +0.4 |
| **W45A** | **Hickory Valley** | **7.86** | **97** | Pn | Pn | 10 43 50.1 | +0.8 |
| **TX31** | **Lajitas Ar. Si** | **8.24** | **212** | Pn | Pn | 10 43 55.1 | +0.4 |
| **TX32** | **Lajitas Array** | **8.24** | **212** | Pn | Pn | 10 43 54.5 | -0.2 |
| **TXAR** | **Lajitas Array** | **8.24** | **212** | Pn | Pn | 10 43 54.0 | -0.6 |
| **K22A** | **Casper** | **8.62** | **318** | IAmb_Lg | | 10 46 36.7 | |
| | comp=Z,7.4nm,0.8s | | | | | | |

*OSPL **14** 10:42:25.5±1.6,18.87°N×64.20°W,h15km±132km,ML3.4*

*RSPR **14** 10:42:26.7,19.32°N×64.36°W,h33km±23km,MD3.6/10*
*NEIC **14** 10:42:27.8±1.8,19.17°N±0.08°×64.44°W±0.05,h36km±50km,*
*Error ellipse: s-maj=11.7km s-min=7.3km az=177.0*
**ISC 14 10:42:27.3**±1.9,**19.29N**±0.08°×**64.47W**±0.07,**h35**km,**n66,**
**s**σ1ˢ**30**/69,**11C-4D,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TBVI** | **Tortola** | **0.88** | **189** | *iP* | **Pn** | **10 42 42.4** | **-0.8** |
| **TBVI** | **Tortola** | **0.88** | **189** | *eS* | **Sn** | **10 42 53.4** | **-1.2** |
| **STVI** | **Saint Thomas** | **1.04** | **206** | ⇓*iP* | **Pn** | **10 42 44.5** | **-0.8** |
| **STVI** | **Saint Thomas** | **1.04** | **206** | *eS* | **Sn** | **10 42 56.2** | **-2.4** |
| **STVI** | **Saint Thomas** | **1.04** | **206** | | **Pn** | **10 42 44.5** | **-0.8** |
| STVI | | | | | **Sn** | **10 42 56.2** | **-2.4** |
| **CUPR** | **Culebra, Puert** | **1.24** | **218** | ⇓*eP* | **Pn** | **10 42 47.6** | **-0.5** |
| **CUPR** | **Culebra, Puert** | **1.24** | **218** | *eS* | **Sn** | **10 43 03.3** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **1.24** | **218** | | **Pn** | **10 42 47.6** | **-0.5** |
| CUPR | | | | | **Sn** | **10 43 03.3** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **1.24** | **218** | IAML | | 10 43 05.9 | |
| | comp=E,1μm,0.4s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.73** | **229** | ⇓*eP* | **Pn** | **10 42 54.6** | **-0.3** |
| **HUMP** | **Col San Antoni** | **1.73** | **229** | *eS* | **Sn** | **10 43 17.1** | **+1.3** |
| **HUMP** | **Col San Antoni** | **1.73** | **229** | | **Pn** | **10 42 54.6** | **-0.3** |
| HUMP | | | | | **Sn** | **10 43 17.1** | **+1.3** |
| **SMRT** | **St. Maarten** | **1.81** | **133** | | **Pn** | **10 42 56.0** | **0.0** |
| SMRT | | | | IAML | | 10 43 25.6 | |
| | comp=N,452nm,0.4s | | | | | | |
| SMRT | | | | IAML | | 10 43 37.7 | |
| | comp=E,482nm,0.4s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.81** | **238** | ⇓*eP* | **Pn** | **10 42 55.5** | **-0.5** |
| **GCPR** | **Guaynabo City** | **1.81** | **238** | *eS* | **Sn** | **10 43 18.8** | **+1.1** |
| **GCPR** | **Guaynabo City** | **1.81** | **238** | | **Pn** | **10 42 55.5** | **-0.5** |
| GCPR | | | | | **Sn** | **10 43 18.8** | **+1.1** |
| **PDPR** | **Patillas Dam,** | **1.94** | **230** | | **Pn** | **10 42 57.4** | **-0.3** |
| PDPR | | | | IAML | | 10 43 27.2 | |
| | comp=E,313nm,0.6s | | | | | | |
| **SJG** | **San Juan** | **1.98** | **234** | | **Pn** | **10 42 58.0** | **-0.2** |
| **IGPR** | **InterUniversit** | **2.03** | **230** | ⇑*eP* | **Pn** | **10 42 59.2** | **+0.2** |
| **IGPR** | **InterUniversit** | **2.03** | **230** | *eS* | **Sn** | **10 43 24.1** | **+0.9** |
| **IGPR** | **InterUniversit** | **2.03** | **230** | | **Sn** | **10 43 24.1** | **+0.9** |
| **EMPR** | **Esperanza - Ma** | **2.11** | **248** | ⇑*eP* | **Pn** | **10 43 00.1** | **+0.1** |
| **EMPR** | **Esperanza - Ma** | **2.11** | **248** | | **Pn** | **10 43 00.1** | **+0.1** |
| **EMPR** | **Esperanza - Ma** | **2.11** | **248** | IAML | | 10 43 35.0 | |
| | comp=E,514nm,0.9s | | | | | | |
| EMPR | | | | IAML | | 10 43 37.0 | |
| | comp=N,356nm,0.5s | | | | | | |
| **SEUS** | **St. Eustatius** | **2.28** | **141** | Pn | **Pn** | **10 43 02.0** | **-0.4** |
| SEUS | | | | IAML | | 10 43 31.8 | |
| | comp=E,455nm,0.1s | | | | | | |
| SEUS | | | | IAML | | 10 43 32.0 | |
| | comp=N,485nm,0.2s | | | | | | |
| **CELP** | **Cerrillos** | **2.33** | **239** | ⇑*eP* | **Pn** | **10 43 03.2** | **+0.1** |
| **CELP** | **Cerrillos** | **2.33** | **239** | *eS* | **Sn** | **10 43 32.1** | **+1.5** |
| **CELP** | **Cerrillos** | **2.33** | **239** | | **Pn** | **10 43 03.2** | **+0.1** |
| CELP | | | | | **Sn** | **10 43 32.1** | **+1.5** |
| **CELP** | **Cerrillos** | **2.33** | **239** | IAML | | 10 43 39.7 | |
| | comp=E,184nm,0.7s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.35** | **247** | ⇑*eP* | **Pn** | **10 43 03.5** | **0.0** |
| **AOPR** | **Arecibo Observ** | **2.35** | **247** | *eS* | **Sn** | **10 43 31.9** | **+0.7** |
| **AOPR** | **Arecibo Observ** | **2.35** | **247** | | **Pn** | **10 43 03.5** | **0.0** |
| AOPR | | | | | **Sn** | **10 43 31.9** | **+0.7** |
| **OBIP** | **Obispado Ponce** | **2.37** | **239** | ⇑*eP* | **Pn** | **10 43 02.8** | **-0.9** |
| **OBIP** | **Obispado Ponce** | **2.37** | **239** | | **Pn** | **10 43 02.8** | **-0.9** |
| **ICMP** | **Isla Caja de M** | **2.40** | **235** | | **Pn** | **10 43 04.6** | **+0.6** |
| ICMP | | | | IAML | | 10 43 47.4 | |
| | comp=E,208nm,0.5s | | | | | | |
| **LSP** | **Las Mesas** | **2.71** | **246** | ⇑*eP* | **Pn** | **10 43 09.1** | **+0.7** |
| **PRSN** | **Puerto Rico Se** | **2.75** | **248** | | **Pn** | **10 43 08.9** | **0.0** |
| **MLPR** | **Magueyes Islan** | **2.77** | **242** | ⇑*eP* | **Pn** | **10 43 08.6** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **2.77** | **242** | *eS* | **Sn** | **10 43 43.0** | **+1.6** |
| **MLPR** | **Magueyes Islan** | **2.77** | **242** | | **Pn** | **10 43 08.6** | **-0.5** |
| MLPR | | | | | **Sn** | **10 43 43.0** | **+1.6** |
| **CRPR** | **Cabo Rojo, PR** | **2.81** | **243** | ⇑*eP* | **Pn** | **10 43 10.1** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.81** | **243** | *eS* | **Sn** | **10 43 43.3** | **+1.0** |
| **CRPR** | **Cabo Rojo, PR** | **2.81** | **243** | | **Pn** | **10 43 10.1** | **+0.4** |
| CRPR | | | | | **Sn** | **10 43 43.3** | **+1.0** |
| **CRPR** | **Cabo Rojo, PR** | **2.81** | **243** | IAML | | 10 43 57.5 | |
| | comp=E,136nm,0.8s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.81** | **243** | *i* P | **Pn** | **10 43 09.9** | **+0.2** |
| CRPR | | | | IAML | | 10 43 57.3 | |
| | comp=Z,112nm,0.9s | | | | | | |
| **IDE** | **Isla Desecheo** | **2.98** | **253** | ⇑*eP* | **Pn** | **10 43 12.0** | **-0.1** |
| **PCDR** | **Punta Cana, DR** | **3.78** | **259** | ⇑*eP* | **Pn** | **10 43 23.5** | **+0.5** |
| **PCDR** | **Punta Cana, DR** | **3.78** | **259** | *eS* | **Sn** | **10 44 08.4** | **+2.1** |
| **PCDR** | **Punta Cana, DR** | **3.78** | **259** | | **Pn** | **10 43 23.5** | **+0.5** |
| **PCDR** | **Punta Cana, DR** | **3.78** | **259** | IAML | | 10 44 27.0 | |
| | comp=E,82nm,1.9s | | | | | | |
| PCDR | | | | IAML | | 10 44 36.4 | |
| | comp=N,147nm,1.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.78** | **259** | *i* P | **Pn** | **10 43 23.6** | **+0.6** |
| **GDHS** | **Morne Mazeau,** | **3.96** | **139** | Pn | **Pn** | **10 43 23.5** | **-2.0** |
| GDHS | | | | IAML | | 10 44 41.1 | |
| | comp=E,168nm,0.5s | | | | | | |
| GDHS | | | | IAML | | 10 44 51.1 | |
| | comp=N,168nm,0.6s | | | | | | |
| **CBE** | **Ff, Capester** | **4.21** | **139** | Pn | **Pn** | **10 43 27.8** | **-1.2** |
| **TDBA** | **Terre de Bas,** | **4.36** | **141** | Pn | **Pn** | **10 43 30.4** | **-0.7** |
| TDBA | | | | IAML | | 10 45 15.3 | |
| | comp=E,115nm,0.8s | | | | | | |
| **DR12** | **Loma Pena Alta** | **4.67** | **265** | ⇑*eP* | **Pn** | **10 43 35.0** | **-0.3** |
| **DR12** | **Loma Pena Alta** | **4.67** | **265** | | **Pn** | **10 43 35.1** | **-0.3** |
| **SC01** | **Santiago de lo** | **5.91** | **272** | Pn | **Pn** | **10 43 53.7** | **+1.4** |
| **SC01** | **Santiago de lo** | **5.91** | **272** | *i* P | **Pn** | **10 43 54.4** | **+2.1** |
| SC01 | | | | *eS* | **Sn** | **10 45 01.0** | **+2.1** |
| **LOBA2** | **Hotel Casa Bon** | **6.39** | **260** | *i* P | **Pn** | **10 43 59.9** | **+1.0** |
| **SDDR** | **Presa de Saban** | **6.45** | **268** | | **Pn** | **10 44 00.8** | **+0.9** |
| **SDDR** | **Presa de Saban** | **6.45** | **268** | *i* P | **Pn** | **10 44 00.7** | **+0.9** |
| SDDR | | | | *eS* | **Sn** | **10 45 10.9** | **-1.4** |
| **MASC** | **Masc** | **9.23** | **277** | *eP* | **Pn** | **10 44 35.0** | **-2.9** |
| MASC | | | | IAML | | 10 44 38.6 | |
| | comp=Z,5.1nm,0.2s | | | | | | |
| MASC | | | | *eS* | Sn | 10 46 12.5 | -8.1 |
| MASC | | | | IAML | | 10 46 14.8 | |
| | comp=E,1.3nm,0.1s | | | | | | |
| MASC | | | | IAML | | 10 46 16.8 | |
| | comp=N,2.0nm,0.2s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **10.05** | **275** | *eP* | **Pn** | **10 44 47.5** | **-1.7** |
| GTBY | | | | *eS* | **Sn** | **10 46 34.8** | **-5.8** |
| **RCC** | **Rio Carpintero** | **10.60** | **276** | *eP* | Pn | 10 44 47.3 | -9.4 |
| **LMGC** | **Las Mercedes** | **11.83** | **276** | *eP* | Pn | 10 45 09.6 | -4.0 |
| **CCCC** | **Cccc** | **12.62** | **281** | *eP* | Pn | 10 45 16.9 | -7.4 |
| CCCC | | | | IAML | | 10 45 17.3 | |
| | comp=Z,0.5nm,0.2s | | | | | | |
| CCCC | | | | *eS* | Sn | 10 47 26.6 | -17 |
| CCCC | | | | IAML | | 10 47 29.7 | |
| | comp=N,0.8nm,0.3s | | | | | | |
| CCCC | | | | IAML | | 10 47 37.1 | |
| | comp=E,0.8nm,0.4s | | | | | | |

*IDC **14** 11:04:14.9±0.8,6.48°N×73.35°W,h132km±12km,mb3.0/2,*
*mb1 3.6/4,mb1mx3.1/33,mbtmp3.8/4,Error ellipse:*
*s-maj=37.3km s-min=7.8km az=132.0*
*RSNC **14** 11:04:16.0±1.1,6.54°N×73.51°W,h110km±5km,ML3.2,*
*Mw3.6*
**ISC 14 11:04:14.2**±0.8,**6.55N**±0.03°×**73.50W**±0.03°,**h121**km±6km,
**n33**,σ1ˢ**35**/64,**2C-2D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.32** | **83** | ⇓*iP* | **Pn** | **11 04 32.5** | **+0.8** |
| BARC | | | | *eS* | **Sn** | **11 04 44.7** | **-0.2** |
| BARC | | | | *i* | | 11 04 46.7 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **RUSC** | **La Rusia** | **0.77** | **148** | ⇓*iP* | **Pn** | **11 04 35.4** | **+0.5** |
| RUSC | | | | *eS* | **Sn** | **11 04 49.6** | **-0.9** |
| RUSC | | | | *i* | | 11 04 53.5 | |
| | comp=Z,161nm,0.2s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **0.95** | **269** | ⇑*eP* | **Pn** | **11 04 35.2** | **-0.7** |
| PTBC | | | | *eS* | **Sn** | **11 04 50.2** | **-2.2** |
| PTBC | | | | *i* | | 11 04 51.5 | |
| | comp=Z,667nm,0.1s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.06** | **213** | *eP* | **Pn** | **11 04 37.2** | **+0.1** |
| SPBC | | | | *eS* | **Sn** | **11 04 53.3** | **-1.1** |
| SPBC | | | | *i* | | 11 04 55.0 | |
| | comp=Z,493nm,0.1s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **1.11** | **45** | *eP* | **Pn** | **11 04 39.1** | **+1.0** |
| PAMC | | | | *eS* | **Sn** | **11 04 56.4** | **+0.4** |
| PAMC | | | | *i* | | 11 04 58.6 | |
| | comp=Z,366nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.64** | **305** | *eP* | **Pn** | **11 04 44.4** | **+1.0** |
| ZARC | | | | *eS* | **Sn** | **11 05 06.7** | **+1.0** |
| ZARC | | | | *i* | | 11 05 09.1 | |
| | comp=Z,490nm,0.5s | | | | | | |
| **NORC** | **Norcasia** | **1.68** | **234** | ⇑*eP* | **Pn** | **11 04 43.9** | **-0.1** |
| NORC | | | | *eS* | **Sn** | **11 05 05.6** | **-0.9** |
| NORC | | | | *i* | | 11 05 07.7 | |
| | comp=Z,264nm,0.3s | | | | | | |
| **OCAC** | **Ocana** | **1.69** | **6** | *eP* | **Pn** | **11 04 44.6** | **+0.5** |
| OCAC | | | | *eS* | **Sn** | **11 05 06.5** | **-0.4** |
| OCAC | | | | *eS* | **Sn** | **11 05 07.2** | **+0.3** |
| OCAC | | | | *i* | | 11 05 13.1 | |
| | comp=Z,429nm,0.2s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.70** | **94** | *i* P | **Pn** | **11 04 45.2** | **+1.1** |
| TAMC | | | | *eS* | **Sn** | **11 05 06.2** | **-0.8** |
| TAMC | | | | *i* | | 11 05 13.4 | |
| | comp=Z,146nm,0.3s | | | | | | |
| **ROSC** | **El Rosal** | **1.89** | **206** | P | **Pn** | **11 04 48.8** | **+2.0** |
| | comp=Z,15nm,0.3s,baz=78,slow=19,SNR=23 | | | | | | |
| ROSC | | | | S | **Sn** | **11 05 13.7** | **+2.1** |
| | comp=Z,68nm,0.3s,baz=47,slow=19,SNR=11 | | | | | | |
| **ROSC** | **El Rosal** | **1.89** | **206** | *eP* | **Pn** | **11 04 48.6** | **+1.8** |
| ROSC | | | | *eS* | **Sn** | **11 05 13.4** | **+1.8** |
| ROSC | | | | *i* | | 11 05 18.9 | |
| | comp=Z,168nm,0.6s | | | | | | |
| **CHIC** | **Chingaza** | **1.92** | **187** | *eP* | **Pn** | **11 04 48.3** | **+1.0** |
| CHIC | | | | *eS* | **Sn** | **11 05 12.6** | **+0.2** |
| CHIC | | | | *i* | | 11 05 17.8 | |
| | comp=Z,53nm,0.3s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.28** | **235** | *eP* | **Pn** | **11 04 53.0** | **+1.3** |
| GUY2C | | | | *eS* | **Sn** | **11 05 21.3** | **+0.9** |
| GUY2C | | | | *i* | | 11 05 24.9 | |
| | comp=Z,148nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.34** | **301** | *eP* | **Pn** | **11 04 51.9** | **-0.2** |
| UREC | | | | *eS* | **Sn** | **11 05 19.9** | **-1.3** |
| UREC | | | | *i* | | 11 05 31.8 | |
| | comp=Z,128nm,0.2s | | | | | | |
| **VILC** | **Villavicencio,** | **2.43** | **185** | *eP* | **Pn** | **11 04 54.5** | **+1.1** |
| VILC | | | | *eS* | **Sn** | **11 05 23.4** | **0.0** |
| **CBOC** | **Ciudad Bolivar** | **2.59** | **255** | *eP* | **Pn** | **11 04 56.7** | **+1.2** |
| CBOC | | | | *eS* | **Sn** | **11 05 23.4** | **-3.6** |
| CBOC | | | | *i* | | 11 05 30.4 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.70** | **150** | *eP* | **Pn** | **11 04 56.9** | **+0.2** |
| PTGC | | | | *eS* | **Sn** | **11 05 28.4** | **-1.1** |
| PTGC | | | | *i* | | 11 05 34.5 | |
| | comp=Z,91nm,0.2s | | | | | | |
| **ANIL** | **Santa Ana** | **2.79** | **223** | *eP* | **Pn** | **11 04 59.3** | **+1.1** |
| ANIL | | | | *eS* | **Sn** | **11 05 32.8** | **+0.9** |
| ANIL | | | | *i* | | 11 05 41.3 | |
| | comp=Z,212nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.15** | **214** | *eP* | **Pn** | **11 05 03.8** | **+1.2** |
| ORTC | | | | *eS* | **Sn** | **11 05 40.6** | **+0.7** |
| ORTC | | | | *i* | | 11 05 47.1 | |
| | comp=Z,50nm,0.3s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **3.17** | **4** | *eP* | **Pn** | **11 05 04.3** | **+1.4** |
| LL6C | | | | *eS* | **Sn** | **11 05 40.5** | **+0.1** |
| LL6C | | | | *i* | | 11 05 49.3 | |
| | comp=Z,42nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.22** | **240** | *eP* | **Pn** | **11 05 04.5** | **+0.9** |
| PLMC | | | | *eS* | **Sn** | **11 05 40.9** | **-0.7** |
| PLMC | | | | *i* | | 11 05 48.1 | |
| | comp=Z,40nm,0.4s | | | | | | |
| **LCBC** | **Los crdobas,** | **3.65** | **309** | *eP* | **Pn** | **11 05 10.1** | **+0.9** |
| LCBC | | | | *eS* | **Sn** | **11 05 52.8** | **+1.0** |
| **SDV** | **Santo Domingo** | **3.67** | **51** | P | **Pn** | **11 05 10.7** | **+1.1** |
| | comp=Z,29nm,0.3s,baz=220,slow=7.5,SNR=66 | | | | | | |
| SDV | | | | S | **Sn** | **11 05 52.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 11nm,0.6s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **7.05** | **45** | Pg | Pn | 11 06 48.3 | +10 | | |
| | 1.7nm,0.3s | | | | | | | | |
| KOTS | | | | Lg | Lg | 11 08 08.2 | | | |
| | 8.5nm,0.7s | | | | | | | | |
| **KTBS** | **Karatobe** | **7.15** | **40** | Pg | Pb | 11 06 52.5 | -6.2 | | |
| | 1.5nm,0.5s | | | | | | | | |
| KTBS | | | | Lg | Lg | 11 08 16.8 | | | |
| | 6.0nm,0.6s | | | | | | | | |
| **AB31** | **Akbulak array** | **13.19** | **329** | ⇓Pn | **Pn** | **11 08 00.1** | **-1.7** | | |
| | 1.5nm,0.5s,baz=140,slow=14,SNR=46 | | | | | | | | |
| AB31 | | | | ⇓Sn | **Sn** | **11 10 23.8** | **-4.7** | | |
| | 3.2nm,0.7s,baz=154,slow=22,SNR=10 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.90** | **328** | ⇑Pn | **Pn** | **11 08 24.5** | **-0.5** | | |
| | 3.7nm,0.8s | | | | | | | | |
| AKTO | | | | ⇑Sn | **Sn** | **11 11 06.2** | **-3.8** | | |
| | 9.6nm,1.1s | | | | | | | | |

*IDC **14** 11:08:12.5±1.3,17°.78S×178°.72W,h583km±11km, mb3.3/10,mb1 3.5/11,mb1mx3.1/30,mbtmp4.1/11,Error ellipse: s-maj=27.6km s-min=16.0km az=132.0*
*NEIC **14** 11:08:14.3±1.5,17°.6S±0°.2×178°.99W±0°.10,h585km±8km, mb4.4/20,Error ellipse: s-maj=25.5km s-min=6.9km az=151.0*

**ISC 14 11:08:14.8**±0.5,**17°.7S**±0°.1×**179°.05W**±0°.09,**h600**km,**n59,** σ1§**87**/67,**mb3.8**/10,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.76** | **269** | P | **P** | **11 09 30.4** | **-2.4** |
| | 2.3nm,0.3s,baz=105,slow=3.4,SNR=15 | | | | | | |
| MSVF | | | | S | **S** | **11 10 35.6** | **-0.6** |
| | baz=69,slow=23,SNR=0.9 | | | | | | |
| **AFI** | **Afiamalu** | **7.95** | **63** | P | P | 11 10 03.8 | -10 |
| | 1.7nm,0.3s,baz=94,slow=22,SNR=1.3 | | | | | | |
| **NIUE** | **Niue** | **8.77** | **100** | P | **P** | **11 10 22.0** | **+0.5** |
| **DZM** | **Mont Dzumac** | **14.32** | **250** | P | **P** | **11 11 13.9** | **-2.9** |
| | 0.2nm,0.3s,baz=219,slow=11,SNR=1.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.32** | **250** | P | **P** | **11 11 16.2** | **-0.6** |
| **URZ** | **Urewera** | **20.76** | **189** | P | **P** | **11 12 12.2** | **-2.9** |
| | 3.8nm,0.5s,baz=42,slow=14,SNR=1.2 | | | | | | |
| **EIDS** | **Eidsvold** | **28.77** | **249** | P | **P** | **11 13 26.5** | **+0.5** |
| **ARMA** | **Armidale** | **29.52** | **239** | P | **P** | **11 13 33.5** | **+1.0** |
| **CTAO** | **Charters Tower** | **32.88** | **260** | P | **P** | **11 14 00.8** | **-0.3** |
| **COEN** | **Coen** | **36.49** | **270** | P | **P** | **11 14 31.7** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.20** | **241** | P | **P** | **11 14 46.1** | **+1.3** |
| | 3.0nm,0.5s,baz=85,slow=8.8,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **38.20** | **241** | P | **P** | **11 14 46.5** | **+1.7** |
| **BBOO** | **Buckleboo** | **42.97** | **241** | P | **P** | **11 15 23.5** | **+0.9** |
| **WR0** | **Warramunga Arr** | **43.88** | **259** | P | **P** | **11 15 30.4** | **+0.6** |
| **WB0** | **Warramunga Arr** | **44.03** | **260** | P | **P** | **11 15 31.9** | **+0.8** |
| **WB2** | **Warramunga Arr** | **44.06** | **259** | P | **P** | **11 15 30.8** | **-0.5** |
| **WRAB** | **Tennant Creek** | **44.06** | **259** | P | **P** | **11 15 31.3** | **+0.1** |
| **WRA** | **Warramunga Arr** | **44.07** | **259** | P | **P** | **11 15 31.8** | **+0.5** |
| | 1.4nm,0.5s,baz=89,slow=6.7,SNR=30 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 17 03.8** | **+0.6** |
| | 0.9nm,0.7s,baz=96,slow=3.5,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.07** | **259** | P | **P** | **11 15 30.8** | **-0.5** |
| **AS31** | **Alice Springs** | **44.26** | **254** | P | **P** | **11 15 33.5** | **+0.8** |
| **ASAR** | **Alice Springs** | **44.26** | **254** | P | **P** | **11 15 33.5** | **+0.7** |
| | 16nm,0.6s,baz=88,slow=8.1,SNR=402 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 17 04.3** | **+0.5** |
| | 0.7nm,0.5s,baz=91,slow=4.1,SNR=2.2 | | | | | | |
| **MTN** | **Manton Dam** | **48.19** | **268** | P | **P** | **11 16 02.9** | **+0.5** |
| **FORT** | **Forrest** | **49.54** | **244** | P | **P** | **11 16 13.0** | **+0.8** |
| **KNRA** | **Kununurra** | **49.90** | **264** | P | **P** | **11 16 15.1** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **57.37** | **255** | P | **P** | **11 17 08.0** | **+0.4** |
| **VNDA** | **Vanda** | **60.60** | **185** | P | **P** | **11 17 29.6** | **+1.5** |
| VNDA | | | | IAmb | IAmb | 11 17 43.2 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.38** | **324** | P | **P** | **11 18 11.3** | **-0.3** |
| | comp=Z,1.5nm,0.7s,baz=132,slow=5.1,SNR=1.9 | | | | | | |
| **UGM** | **Wanagama** | **69.04** | **268** | P | **P** | **11 18 22.4** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.35** | **180** | P | **P** | **11 18 41.3** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **73.33** | **346** | P | **P** | **11 18 46.4** | **+0.2** |
| | comp=Z,5.0nm,1.1s,baz=146,slow=9.0,SNR=2.2 | | | | | | |
| **SEY** | **Seymchan** | **83.44** | **347** | P | **P** | **11 19 39.4** | **-0.4** |
| | comp=Z,1.3nm,0.5s,baz=266,slow=23,SNR=11 | | | | | | |
| **IMAR** | **Indian Mountai** | **85.58** | **10** | P | **P** | **11 19 49.5** | **-0.7** |
| **ILAR** | **Eielson Array** | **85.83** | **13** | P | **P** | **11 19 49.8** | **-1.6** |
| | comp=Z,0.3nm,0.4s,baz=219,slow=5.2,SNR=6.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.40** | **58** | P | **P** | **11 19 53.9** | **-1.1** |
| | comp=Z,0.5nm,0.7s,baz=216,slow=5.9,SNR=6.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.40** | **58** | P | **P** | **11 19 55.5** | **+0.4** |
| **PDAR** | **Pinedale Array** | **87.62** | **44** | P | **P** | **11 19 59.0** | **-1.6** |
| | comp=Z,0.3nm,0.6s,baz=236,slow=3.9,SNR=3.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.62** | **44** | P | **P** | **11 19 59.7** | **-0.9** |
| **BMAR** | **Burnt Mountain** | **88.59** | **13** | P | **P** | **11 20 04.4** | **+0.1** |
| **SNAA** | **Sanae** | **90.82** | **179** | P | **P** | **11 20 15.7** | **+0.9** |
| **AKASG** | **Malin Array Be** | **140.09** | **333** | PKhKP | PKPpre | 11 26 27.2 | |
| | comp=Z,0.1nm,0.3s,baz=46,slow=3.8,SNR=2.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.20** | **315** | PKP | **PKPab** | **11 26 43.9** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=108,slow=4.0,SNR=8.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.20** | **315** | | **PKPab** | **11 26 44.4** | **+0.4** |
| **OSTC** | **Ostas** | **145.02** | **343** | *e*PKP | **PKPab** | **11 26 45.9** | **-0.7** |
| **CLL** | **Collm** | **145.12** | **347** | *i* PKP | **PKPbc** | **11 26 45.5** | **-0.2** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.17** | **343** | *e*PKP | **PKPab** | **11 26 46.2** | **-1.0** |
| **KHC** | **Kasperske Hory** | **147.02** | **345** | *e*PKP | **PKPbc** | **11 26 50.7** | **-0.4** |
| **CKRC** | **Cesky Krumlov** | **147.12** | **344** | *e*PKP | **PKPbc** | **11 26 51.5** | **+0.1** |
| **GERES** | **GERESS Array B** | **147.25** | **344** | PKPbc | **PKPbc** | **11 26 51.4** | **-0.4** |
| | comp=Z,1.1nm,0.5s,baz=26,slow=3.4,SNR=12 | | | | | | |
| **GERES** | **GERESS Array B** | **147.25** | **344** | | **PKiKP** | **11 26 52.1** | **-1.4** |
| **CONA** | **Conrad Observa** | **147.47** | **341** | *i* P | **PKiKP** | **11 26 53.0** | **-1.0** |
| | comp=Z,11nm,2.1s | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.97** | **343** | *e*P | **PKPab** | **11 27 07.5** | **+4.6** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **149.18** | **346** | *e*P | **PKPbc** | **11 26 56.5** | **-0.2** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| WATA | | | | *e*P | **PKPab** | **11 27 08.6** | **+4.9** |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **149.22** | **347** | *i* P | **PKiKP** | **11 26 56.6** | **-1.0** |
| | comp=Z,0.4nm,0.3s | | | | | | |
| RETA | | | | *i* P | **PKPab** | **11 27 08.7** | **+4.9** |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **149.23** | **346** | *i* P | **PKiKP** | **11 26 56.8** | **-0.9** |
| | comp=Z,1.9nm,0.3s | | | | | | |
| WTTA | | | | *i* P | **PKPab** | **11 27 09.0** | **+5.1** |
| | comp=Z,4.7nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **149.28** | **346** | *e*P | **PKiKP** | **11 26 57.0** | **-0.8** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| MOTA | | | | *e*P | **PKPab** | **11 27 08.8** | **+4.7** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.30** | **343** | *e*P | **PKPbc** | **11 26 56.2** | **-0.7** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| MYKA | | | | *e*P | **PKPab** | **11 27 08.0** | **+3.9** |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.50** | **344** | *e*P | **PKPbc** | **11 26 56.8** | **-0.7** |
| | comp=Z,1.7nm,0.5s | | | | | | |
| ABTA | | | | *e*P | **PKPbc** | **11 26 56.8** | **-0.7** |
| | comp=Z,2.2nm,0.9s | | | | | | |
| ABTA | | | | *i* P | **PKPab** | **11 27 08.8** | **+3.8** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **149.67** | **347** | *e*P | **PKPab** | **11 27 10.0** | **+4.2** |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.42** | **189** | PKP | **PKPdf** | **11 27 16.2** | **-1.4** |
| | comp=Z,0.5nm,0.9s,baz=270,slow=3.7,SNR=2.1 | | | | | | |

*NEIC **14** 11:08:23.5±2.0,17°.8S±0°.1×178°.6W±0°.1,h562km±7km, mb4.5/33,Error ellipse: s-maj=19.9km s-min=16.3km az=147.0*
*IDC **14** 11:08:24.4±1.1,17°.82S×178°.73W,h580km±9km,mb3.4/11, mb1 3.6/13,mb1mx3.3/30,mbtmp4.3/13,Error ellipse: s-maj=22.2km s-min=14.6km az=120.0*

**ISC 14 11:08:24.2**±0.5,**17°.79S**±0°.1×**178°.68W**±0°.08,**h579**km, **n75,** σ0§**94**/75,**mb4.4**/28,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.11** | **270** | P | **P** | **11 09 42.1** | **-0.4** |
| | 5.6nm,0.3s,baz=117,slow=3.7,SNR=24 | | | | | | |
| MSVF | | | | S | **S** | **11 10 47.0** | **+1.0** |
| | baz=18,slow=22,SNR=7.5 | | | | | | |
| **AFI** | **Afiamalu** | **7.68** | **61** | P | **P** | **11 10 17.3** | **-2.6** |
| | 3.8nm,0.3s,baz=118,slow=3.7,SNR=7.0 | | | | | | |
| **AFI** | **Afiamalu** | **7.68** | **61** | P | **P** | **11 10 18.0** | **-2.0** |
| **SANVU** | **Saraoutou** | **13.73** | **278** | P | **P** | **11 11 21.8** | **+1.1** |
| **DZM** | **Mont Dzumac** | **14.62** | **251** | P | **P** | **11 11 27.6** | **-1.9** |
| | 0.7nm,0.3s,baz=290,slow=23,SNR=8.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.62** | **251** | P | **P** | **11 11 30.4** | **+0.8** |
| **URZ** | **Urewera** | **20.73** | **189** | P | **P** | **11 12 23.9** | **-1.4** |
| | 6.2nm,0.3s,baz=259,slow=3.1,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **20.73** | **189** | P | **P** | **11 12 23.9** | **-1.4** |
| **BKZ** | **Black Stump Fm** | **21.71** | **190** | P | **P** | **11 12 32.6** | **-1.7** |
| BKZ | | | | IAmb | IAmb | 11 12 56.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **29.06** | **250** | P | **P** | **11 13 38.9** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 11 13 50.0 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **29.78** | **239** | P | **P** | **11 13 46.2** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 11 13 47.0 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **33.21** | **260** | P | **P** | **11 14 14.1** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 11 14 14.2 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **34.18** | **280** | P | **P** | **11 14 22.8** | **0.0** |
| **COEN** | **Coen** | **36.84** | **270** | P | **P** | **11 14 44.7** | **-0.1** |
| COEN | | | | IAmb | IAmb | 11 14 45.9 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **37.05** | **231** | P | **P** | **11 14 46.1** | **0.0** |
| TOO | | | | IAmb | IAmb | 11 14 57.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.46** | **241** | P | **P** | **11 14 58.0** | **+0.3** |
| | comp=Z,5.3nm,0.5s,baz=93,slow=11,SNR=17 | | | | | | |
| **STKA** | **Stephens Creek** | **38.46** | **241** | P | **P** | **11 14 58.6** | **+0.9** |
| **BBOO** | **Buckleboo** | **43.24** | **241** | P | **P** | **11 15 35.9** | **+0.4** |
| BBOO | | | | IAmb | IAmb | 11 15 36.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.21** | **259** | P | **P** | **11 15 42.0** | **-1.2** |
| **WB0** | **Warramunga Arr** | **44.36** | **260** | P | **P** | **11 15 43.6** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 11 15 44.0 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.39** | **259** | P | **P** | **11 15 43.1** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 11 15 44.2 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.39** | **259** | P | **P** | **11 15 42.8** | **-1.8** |
| WRAB | | | | IAmb | IAmb | 11 15 44.2 | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.40** | **259** | P | **P** | **11 15 43.4** | **-1.3** |
| | comp=Z,4.8nm,0.5s,baz=94,slow=6.9,SNR=46 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 17 16.0** | **+0.3** |
| | comp=Z,1.2nm,1.0s,baz=83,slow=3.1,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.40** | **259** | P | **P** | **11 15 43.3** | **-1.3** |
| **AS31** | **Alice Springs** | **44.57** | **254** | P | **P** | **11 15 45.3** | **-0.7** |
| AS31 | | | | IAmb | IAmb | 11 15 46.2 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.57** | **254** | P | **P** | **11 15 45.6** | **-0.4** |
| | comp=Z,49nm,0.6s,baz=89,slow=7.8,SNR=124 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 17 16.4** | **+0.1** |
| | comp=Z,1.8nm,0.4s,baz=102,slow=4.0,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **44.57** | **254** | P | **P** | **11 15 46.0** | **0.0** |
| **MTN** | **Manton Dam** | **48.54** | **268** | P | **P** | **11 16 15.1** | **-0.9** |
| MTN | | | | IAmb | IAmb | 11 16 42.9 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **49.82** | **245** | P | **P** | **11 16 24.6** | **-0.6** |
| **KNRA** | **Kununurra** | **50.24** | **264** | P | **P** | **11 16 28.4** | **0.0** |
| KNRA | | | | IAmb | IAmb | 11 16 28.4 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **50.30** | **281** | P | **P** | **11 16 27.6** | **-1.3** |
| FAKI | | | | IAmb | IAmb | 11 16 56.0 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **55.81** | **270** | P | **P** | **11 17 08.4** | **+0.3** |
| SOEI | | | | IAmb | IAmb | 11 17 18.9 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.69** | **255** | P | **P** | **11 17 20.4** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **57.69** | **255** | P | **P** | **11 17 19.8** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 11 17 20.8 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **57.85** | **256** | P | **P** | **11 17 20.9** | **-0.9** |
| **GIRL** | **Giralia** | **62.68** | **253** | P | **P** | **11 17 54.5** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **67.65** | **323** | P | **P** | **11 18 23.6** | **-0.9** |
| | comp=Z,3.2nm,0.6s,baz=155,slow=6.0,SNR=6.3 | | | | | | |
| **KKM** | **Kota Kinabalu** | **68.46** | **284** | P | **P** | **11 18 29.9** | **0.0** |
| **UGM** | **Wanagama** | **69.39** | **268** | P | **P** | **11 18 35.1** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.27** | **180** | P | **P** | **11 18 52.6** | **+1.1** |
| **KSM** | **Kuching** | **72.41** | **277** | P | **P** | **11 18 53.8** | **+0.7** |
| KSM | | | | IAmb | IAmb | 11 18 54.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.50** | **345** | P | **P** | **11 18 58.4** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=131,slow=8.7,SNR=5.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.50** | **345** | P | **P** | **11 18 59.1** | **+0.6** |
| **BELA** | **Belgrano 2** | **82.32** | **173** | P | **P** | **11 19 46.1** | **+0.6** |
| **SEY** | **Seymchan** | **83.60** | **347** | P | **P** | **11 19 51.3** | **-0.6** |
| | comp=Z,3.6nm,0.6s,baz=142,slow=5.8,SNR=20 | | | | | | |
| **GSI** | **Gunungsitoli** | **84.44** | **273** | P | **P** | **11 19 57.6** | **+0.4** |
| **IMAR** | **Indian Mountai** | **85.61** | **10** | P | **P** | **11 20 01.7** | **+0.1** |
| **ILAR** | **Eielson Array** | **85.83** | **13** | P | **P** | **11 20 02.0** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=230,slow=5.1,SNR=6.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.15** | **58** | P | **P** | **11 20 07.1** | **+1.9** |
| | comp=Z,0.5nm,0.7s,baz=217,slow=6.0,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.15** | **58** | P | **P** | **11 20 07.5** | **+2.3** |
| **PDAR** | **Pinedale Array** | **87.44** | **44** | P | **P** | **11 20 10.8** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=218,slow=4.3,SNR=3.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.44** | **44** | P | **P** | **11 20 11.7** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **88.60** | **13** | P | **P** | **11 20 16.2** | **+0.5** |
| **CMAR** | **Chiang Mai Ar** | **88.60** | **290** | P | **P** | **11 20 17.8** | **+1.0** |
| | comp=Z,2.6nm,0.3s,baz=112,slow=3.3,SNR=9.0 | | | | | | |
| **SNAA** | **Sanae** | **90.73** | **179** | P | **P** | **11 20 26.8** | **+1.1** |
| **SONM** | **Songino Array** | **93.29** | **319** | P | **P** | **11 20 37.1** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=103,slow=4.6,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **93.29** | **319** | P | **P** | **11 20 38.4** | **+0.5** |
| **AKASG** | **Malin Array Be** | **140.33** | **332** | PKhKP | PKPpre | 11 26 40.4 | |
| | comp=Z,0.3nm,0.4s,baz=44,slow=4.3,SNR=4.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.33** | **332** | | **PKPdf** | **11 26 48.8** | **+1.0** |
| **BNN** | **Bunyan** | **143.38** | **312** | | PKPbc | 11 26 52.5 | 0.0 |
| **BR131** | **Keskin Array S** | **144.51** | **315** | | **PKPdf** | **11 26 55.8** | **0.0** |
| **BRTR** | **Keskin Array B** | **144.51** | **315** | PKP | PKPbc | 11 26 56.0 | +0.1 |
| | comp=Z,3.6nm,0.9s,baz=120,slow=3.7,SNR=16 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.51** | **315** | | **PKPdf** | **11 26 55.8** | **0.0** |
| **OSTC** | **Ostas** | **145.20** | **343** | *ex* | **PKPdf** | **11 26 57.8** | **+1.4** |
| **CLL** | **Collm** | **145.29** | **347** | *i* PKPbc | **PKPbc** | **11 26 57.8** | **+0.1** |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **CLL** | **Collm** | **145.29** | **347** | | **PKPbc** | **11 26 57.3** | **-0.4** |
| **UPC** | **Upice** | **145.30** | **343** | *e*PKP | **PKPbc** | **11 26 58.2** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **145.36** | **343** | *ex* | **PKPbc** | **11 26 58.2** | **+0.2** |
| **PRU** | **Pruhonice** | **146.16** | **345** | *e*PKP | **PKPbc** | **11 27 00.5** | **+0.3** |
| **KHC** | **Kasperske Hory** | **147.19** | **345** | *ex* | **PKPbc** | **11 27 02.8** | **-0.3** |
| **CKRC** | **Cesky Krumlov** | **147.28** | **344** | *ex* | **PKPbc** | **11 27 02.8** | **-0.5** |
| **GERES** | **GERESS Array B** | **147.43** | **345** | PKPbc | **PKPbc** | **11 27 04.0** | **+0.3** |
| | comp=Z,2.6nm,0.5s,baz=28,slow=3.1,SNR=21 | | | | | | |
| **CONA** | **Conrad Observa** | **147.66** | **342** | *e*P | **PKPbc** | **11 27 05.0** | **+0.6** |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **MOA** | **Molln** | **148.19** | **343** | *e*P | **PKiKP** | **11 27 06.7** | **-0.2** |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.38** | **185** | PKP | **PKPdf** | **11 27 29.0** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=299,slow=2.8,SNR=3.0 | | | | | | |

*IDC **14** 11:17:58.1±1.2,22°.37S×66°.03W,h257km±16km,mb3.3/3, mb1 3.3/8,mb1mx3.2/43,mbtmp3.8/8,Error ellipse: s-maj=25.4km s-min=13.4km az=117.0*

**ISC 14 11:17:57.7**±0.8,**22°.44S**±0°.09×**65°.96W**±0°.10,**h251**km,**n10,** σ1§**14**/11,**mb3.7**/3,**Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.73** | **266** | P | **Pn** | **11 18 48.9** | **+1.1** |
| | 14nm,0.3s,baz=81,slow=6.8,SNR=331 | | | | | | |
| LVC | | | | S | **S** | **11 19 26.4** | **-0.9** |
| | 1.4nm,0.3s,baz=50,slow=23,SNR=1.5 | | | | | | |
| **LPAZ** | **La Paz** | **6.45** | **341** | P | **Pn** | **11 19 33.7** | **+1.5** |
| | 0.7nm,0.3s,baz=146,slow=6.4,SNR=12 | | | | | | |
| LPAZ | | | | S | **S** | **11 20 47.4** | **-0.3** |
| | 0.0nm,0.3s,baz=302,slow=16,SNR=11 | | | | | | |
| **SIV** | **San Ignacio** | **7.90** | **37** | P | **Pn** | **11 19 50.2** | **+0.3** |
| | 1.1nm,0.3s,baz=233,slow=10,SNR=12 | | | | | | |
| **BDFB** | **Brasilia** | **18.26** | **71** | P | **P** | **11 21 54.3** | **+1.0** |
| | 0.4nm,0.3s,baz=242,slow=13,SNR=4.3 | | | | | | |
| **PLCA** | **Paso Flores** | **18.65** | **191** | P | **P** | **11 21 57.3** | **+0.1** |
| | 0.1nm,0.3s,baz=18,slow=15,SNR=5.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **67.76** | **180** | P | **P** | **11 28 29.4** | **+1.2** |
| | 0.7nm,0.4s,baz=340,slow=2.8,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.12** | **69** | P | **P** | **11 29 11.8** | **-1.0** |
| | 0.9nm,0.5s,baz=256,slow=5.5,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.00** | **340** | P | **P** | **11 30 40.9** | **-1.2** |
| | 0.1nm,0.5s,baz=134,slow=4.0,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.44** | **207** | PKP | **PKiKP** | **11 36 45.1** | **-1.0** |
| | 0.6nm,1.0s,baz=155,slow=1.7,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **144.72** | **39** | PKP | PKPbc | 11 37 03.3 | -0.8 |
| | 0.3nm,0.6s,baz=318,slow=2.8,SNR=3.2 | | | | | | |

*IDC **14** 11:25:49.8±0.7,36°.37N×97°.69W,h0km,mb3.8/7, mb1 4.0/15,mb1mx3.6/60,mbtmp3.8/15,ML3.6/9,MS2.9/1, Ms1 2.9/1,ms1mx2.4/87,Error ellipse: s-maj=12.1km s-min=9.2km az=143.0*
*NEIC **14** 11:25:50.6±1.2,36°.28N±0°.01×97°.72W±0°.02,h4km±5km, Error ellipse: s-maj=2.5km s-min=1.6km az=63.0*
*ANF **14** 11:25:50.5±0.3,36°.32N×97°.65W,h5km,ML4.7/18,Error ellipse: s-maj=4.2km s-min=3.8km az=12.0*
*TUL **14** 11:25:50.6±1.4,36°.28N±0°.01×97°.71W±0°.02,h5km±6km, ML3.9,mb_Lg3.9/122(NEIC),Mwr3.5/13(SLM),Error ellipse: s-maj=2.4km s-min=1.6km az=60.0*
*NEIC **14** 11:25:50.6,36°.29N×97°.71W,h4km,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr-1.53; Mθθ 1.68; Mϕϕ-0.14; Mrθ 0.82; Mrϕ 0.26; Mθϕ-0.47; Fault plane solution: M₀1.88000×10¹⁴ NP1:ϕ₀64.00000°, δ36.00000°,λ-121.00000°. NP2:ϕ₀280.00000°, δ60.00000°,λ-70.00000°. Principal axes: T 1.8846, Plg13.0000°, Azm356.0000°; N -0.0017, Plg17.0000°, Azm90.0000°; P -1.8829, Plg68.0000°, Azm231.0000°;*

**ISC 14 11:25:49.8**±1.1,**36°.34N**±0°.03×**97°.67W**±0°.03,**h5**km±8km, **n197,** σ1§**70**/209,**mb3.8**/7,**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.79** | **165** | | **Pg** | **11 26 05.1** | **+0.2** |
| **OK005** | **Luther M Schoo** | **0.79** | **151** | Pg | **Pg** | **11 26 05.2** | **+0.3** |
| **OK001** | **Jones High Sch** | **0.84** | **159** | Pg | **Pg** | **11 26 06.1** | **+0.2** |
| **OKCFA** | **Oklahoma City** | **0.94** | **169** | | **Pg** | **11 26 07.5** | **-0.4** |
| OKCFA | | | | Sg | **Sg** | **11 26 19.4** | **-0.7** |
| **OKCSW** | **OKLAHOMA CITY** | **0.95** | **169** | Pg | **Pg** | **11 26 07.8** | **-0.3** |
| OKCSW | | | | Sg | **Sg** | **11 26 19.9** | **-0.6** |
| **U32A** | **Winter Ranch,** | **1.08** | **272** | | **Pg** | **11 26 10.3** | **-0.2** |
| U32A | | | | Sg | **Sg** | **11 26 23.8** | **-0.8** |
| **T35A** | **Sooner Cattle** | **1.09** | **58** | Pg | **Pb** | **11 26 12.4** | **+1.2** |
| **FNO** | **Franklin** | **1.10** | **169** | Pg | **Pg** | **11 26 10.4** | **-0.5** |
| FNO | | | | Sg | **Sg** | **11 26 23.6** | **-1.7** |
| **W35A** | **Tecumseh** | **1.35** | **151** | Pn | **Pn** | **11 26 14.8** | **-0.5** |
| **TUL1** | **Leonard** | **1.58** | **105** | Pn | **Pn** | **11 26 19.4** | **+0.9** |
| TUL1 | | | | IAmb_Lg | | 11 26 45.1 | |
| | comp=Z,653nm,0.9s | | | | | | |
| **TUL1** | **Leonard** | **1.58** | **105** | P | **Pn** | **11 26 19.4** | **+0.9** |
| | baz=284,SNR=320 | | | | | | |
| TUL1 | | | | S | **Sg** | **11 26 41.4** | **+0.9** |
| | baz=284 | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.74** | **185** | | **Pn** | **11 26 21.5** | **+0.7** |
| X34A | | | | IAmb_Lg | | 11 26 44.3 | |
| | comp=Z,692nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.84** | **210** | | **Pn** | **11 26 22.1** | **-0.1** |
| **WMOK** | **Wichita Mounta** | **1.84** | **210** | | **Pn** | **11 26 22.5** | **+0.4** |
| WMOK | | | | IAmb_Lg | | 11 26 47.9 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.84** | **210** | P | **Pn** | **11 26 22.1** | **-0.1** |
| | baz=29,SNR=680 | | | | | | |
| WMOK | | | | S | **Sn** | **11 26 46.2** | **+0.3** |
| | baz=29 | | | | | | |
| **R32A** | **Long Quarter,** | **2.24** | **338** | | **Pn** | **11 26 29.2** | **+1.6** |
| **X37A** | **Clayton** | **2.56** | **132** | Pn | **Pn** | **11 26 33.1** | **+1.1** |
| X37A | | | | IAmb_Lg | | 11 27 17.4 | |
| | comp=Z,357nm,0.9s | | | | | | |
| **U38A** | **Gravette** | **2.65** | **87** | Pn | **Pn** | **11 26 34.7** | **+1.5** |
| **KSU1** | **

baz=332
LCAR **Lake Charles** 5.27 91 Pn **11 27 10.5 +1.3**
LCAR IAmb_Lg 11 28 43.4
comp=Z,120nm,0.9s
T42A **Van Buren** 5.33 81 Pn **11 27 11.0 +1.0**
T42A IAmb_Lg 11 28 47.5
comp=Z,238nm,1.2s
CCAR **Cane Creek** 5.40 115 Pn Pn **11 27 12.8 +1.7**
CCAR IAmb_Lg 11 28 57.8
comp=Z,157nm,0.7s
CCM **Cathedral Cave** 5.40 70 Pn Pn **11 27 12.6 +1.5**
CCM IAmb_Lg 11 28 45.9
comp=Z,135nm,0.8s
CCM **Cathedral Cave** 5.40 70 P Pn **11 27 12.4 +1.3**
baz=253
P40A **Paris** 5.46 53 Pn **11 27 14.7 +2.8**
T25A **Trinidad** 5.48 280 Pn **11 27 13.7 +1.4**
T25A IAmb_Lg 11 28 50.6
comp=Z,165nm,0.8s
T25A **Trinidad** 5.48 280 P Pn **11 27 13.0 +0.8**
baz=97
T25A Sb Sb **11 28 38.5 +6.4**
baz=97
435B **Jarrell** 5.55 179 Pn **11 27 12.7 -0.4**
435B IAmb_Lg 11 28 54.9
comp=Z,204nm,0.9s
435B **Jarrell** 5.55 179 P Pn **11 27 12.8 -0.3**
baz=359
435B S Sn **11 28 14.6 -2.6**
baz=359
N38A **Joes South For** 5.64 37 Pn **11 27 16.2 +1.9**
L34A **Svendsen Farm,** 5.70 10 Pn **11 27 15.5 +0.3**
OGNE **Ogallala** 5.73 325 Pn **11 27 16.9 +1.3**
OGNE IAmb_Lg 11 28 53.9
comp=Z,237nm,0.8s
OGNE **Ogallala** 5.73 325 P Pn **11 27 17.5 +1.9**
baz=143
HBAR **Harrisburg** 5.74 96 Pn Pn **11 27 17.7 +2.0**
PBMO **Poplar Bluff** 5.84 84 Pn Pn **11 27 18.2 +1.1**
PBMO IAmb_Lg 11 28 58.5
comp=Z,272nm,0.7s
FVM **French Village** 6.01 72 Pn **11 27 20.9 +1.5**
FVM IAmb_Lg 11 29 06.9
comp=Z,116nm,0.8s
JCT **Junction City** 6.12 198 Pn Pn **11 27 20.8 -0.1**
JCT IAmb_Lg 11 29 08.9
comp=Z,225nm,0.8s
JCT **Junction City** 6.12 198 P Pn **11 27 20.6 -0.3**
baz=16
PEBM **Pemiscott Bayo** 6.31 90 IAmb_Lg 11 29 19.4
comp=Z,256nm,0.7s
143A **Socs Landing,** 6.32 123 Pn **11 27 25.0 +1.4**
143A IAmb_Lg 11 29 22.6
comp=Z,179nm,0.9s
K31A **O'Neill** 6.33 353 Pn **11 27 24.8 +1.0**
SLM **Saint Louis** 6.33 67 Pn Pn **11 27 26.5 +2.6**
SDCO **Great Sand Dun** 6.42 285 Pn **11 27 27.1 +1.8**
SDCO IAmb_Lg 11 29 18.0
comp=Z,154nm,1.3s
SDCO **Great Sand Dun** 6.42 285 P Pn **11 27 27.7 +2.4**
baz=101,SNR=6.3
SDCO Sb Sg **11 29 09.7 -6.4**
baz=101
PVMO **Portageville** 6.43 87 IAmb_Lg 11 29 29.4
comp=Z,212nm,0.8s
Q24A **Divide** 6.49 296 Pn Pn **11 27 28.8 +2.5**
Q24A IAmb_Lg 11 29 20.9
comp=Z,135nm,0.7s
Q24A **Divide** 6.49 296 P Pn **11 27 27.7 +1.4**
baz=112
SCIA **State Center** 6.54 31 Pn **11 27 29.8 +3.1**
SCIA **State Center** 6.54 31 S Sn **11 28 41.4 -0.3**
baz=213
HKT **Hockley** 6.56 166 Pn Pn **11 27 25.6 -1.3**
LNXT **Lenox** 6.61 90 IAmb_Lg 11 29 25.2
comp=Z,222nm,0.9s
342A **Flagon Creek P** 6.65 137 Pn **11 27 27.8 -0.5**
HALT **Halls** 6.75 91 Pn Pn **11 27 31.0 +1.5**
HALT IAmb_Lg 11 29 32.1
comp=Z,146nm,1.0s
GLAT **Glass** 6.76 88 Pn Pn **11 27 32.1 +2.4**
S44A **Carbondale** 6.86 76 Pn **11 27 32.0 +0.9**
S44A IAmb_Lg 11 29 37.0
comp=Z,132nm,0.8s
N41A **Harden Midland** 6.89 49 Pn Pn **11 27 34.0 +2.5**
OXF **Oxford** 6.98 103 Pn **11 27 32.9 +0.2**
OXF IAmb_Lg 11 29 49.7
comp=Z,100nm,0.8s
OXF **Oxford** 6.98 103 P Pn **11 27 32.4 -0.4**
baz=287,SNR=6.8
OXF S Sn **11 28 51.9 -0.7**
baz=287
W45A **Hickory Valley** 7.00 97 IAmb_Lg 11 29 41.4
comp=Z,152nm,0.8s
Y45A **Yeager Farm, C** 7.10 108 Pn Pn **11 27 34.7 +0.3**
Y45A IAmb_Lg 11 29 46.9
comp=Z,105nm,0.9s
UTMT **University of** 7.10 87 Pn Pn **11 27 36.4 +1.9**
ISCO **Idaho Springs** 7.16 301 Pn **11 27 37.2 +1.7**
ISCO **Idaho Springs** 7.16 301 P Pn **11 27 36.7 +1.2**
baz=117
P43A **Skaggs, Pawnee** 7.22 60 Pn **11 27 38.2 +2.1**
P43A IAmb_Lg 11 29 45.8
comp=Z,188nm,0.8s
T45A **Paducah** 7.28 82 Pn Pn **11 27 38.8 +2.0**
ANMO **Albuquerque** 7.29 262 Pn Pn **11 27 39.1 +1.9**
comp=Z,0.1nm,0.3s,baz=132,slow=22,SNR=1.7
ANMO Pg Pb **11 28 03.0 +6.0**
comp=Z,0.9nm,0.3s,baz=84,slow=16,SNR=6.1
ANMO Lg Lg 11 29 35.2
comp=Z,3.0nm,0.3s,baz=46,slow=11,SNR=2.8
Q44A **Meyer Farm, Va** 7.32 67 Pn **11 27 40.2 +2.8**
K38A **Parkersburg** 7.34 29 Pn Pn **11 27 39.0 +1.3**
ECSD **EROS Data Cent** 7.43 6 Pn **11 27 39.1 +0.3**
ECSD **EROS Data Cent** 7.43 6 P Pn **11 27 38.8 0.0**
baz=187,SNR=7.7
ECSD S Sn **11 29 01.4 -2.1**
baz=187
735A **Kenedy** 7.47 181 IAmb_Lg 11 30 04.4
comp=Z,98nm,0.9s
344A **Westbrook Farm** 7.55 128 Pn Pn **11 27 42.0 +1.5**
L40A **Anamosa** 7.59 39 Pn **11 27 42.9 +1.8**
L40A IAmb_Lg 11 29 60.0
comp=Z,171nm,0.7s
BNM **Barren Site** 7.65 256 Pn **11 27 42.6 +0.4**
HDIL **Hopedale** 7.80 55 Pn Pn **11 27 45.5 +1.6**
HDIL **Hopedale** 7.80 55 P Pn **11 27 46.3 +2.4**
baz=240
HDIL S Sn **11 29 10.3 -2.3**
baz=240
PHWY **Pilot Hill** 7.84 312 IAmb_Lg 11 30 13.2
comp=Z,155nm,1.0s
MNTX **Cornudas Mount** 7.90 236 Pn **11 27 44.8 -0.7**
MNTX **Cornudas Mount** 7.90 236 P Pn **11 27 45.2 -0.2**
baz=52
Y22D **IRIS PASSCAL I** 7.91 256 IAmb_Lg 11 30 14.1
comp=Z,132nm,1.0s
N23A **Red Feather La** 7.91 308 Pn **11 27 47.9 +2.1**
N23A IAmb_Lg 11 30 22.0
comp=Z,132nm,0.8s
N23A **Red Feather La** 7.91 308 P Pn **11 27 48.0 +2.2**
baz=123,SNR=9.3
WVT **Waverly** 7.95 89 P Pn **11 27 47.7 +1.7**
baz=274
OLIL **Olney** 7.96 70 Pn **11 27 47.7 +1.5**
146A **Union** 8.01 115 IAmb_Lg 11 30 15.1
comp=Z,76nm,1.0s
833A **Chaparral WMA,** 8.13 191 IAmb_Lg 11 30 20.0
comp=Z,75nm,0.9s
SUSD **Miller** 8.15 353 IAmb_Lg 11 30 20.8
comp=Z,122nm,0.8s
SUSD **Miller** 8.15 353 S Sn **11 29 19.1 -2.2**
baz=173
O44A **Mansfield** 8.17 60 Pn **11 27 50.9 +1.8**
O44A IAmb_Lg 11 30 17.6
comp=Z,169nm,0.8s
L42A **Oliver, Polo** 8.39 45 Pn **11 27 53.8 +1.6**
L42A IAmb_Lg 11 30 29.3
comp=Z,158nm,1.0s
T47A **Sharon Grove** 8.51 83 Pn **11 27 54.4 +0.7**
TX31 **Lajitas Ar. Si** 8.62 218 Pn **11 27 54.5 -0.8**
TX32 **Lajitas Array** 8.62 218 Pn **11 27 54.5 -0.8**
TXAR **Lajitas Array** 8.62 218 Pn Pn **11 27 54.3 -1.1**
comp=Z,0.6nm,0.3s,baz=36,slow=11,SNR=51
TXAR Pg Pg **11 28 24.9 -10**
comp=Z,1.4nm,0.3s,baz=46,slow=14,SNR=15
TXAR Lg Lg 11 30 18.1
comp=Z,3.0nm,0.3s,baz=45,slow=18,SNR=5.7
TXAR LR LR 11 31 27.5
comp=Z,85nm,21.0s,baz=165,slow=39
TXAR **Lajitas Array** 8.62 218 Pn **11 27 54.5 -0.8**
JFWS **Jewell Farm** 8.70 39 Pn Pn **11 27 58.5 +2.2**
JFWS **Jewell Farm** 8.70 39 P Pn **11 27 57.9 +1.5**
baz=223
JFWS S Sn **11 29 31.7 -3.2**
baz=223
MVCO **Mesa Verde** 8.74 279 Pn **11 27 55.7 -1.4**
MVCO **Mesa Verde** 8.74 279 Pg Pg **11 28 33.7 -3.4**
baz=93
P46A **Rosedale** 8.88 65 Pn **11 28 00.3 +1.5**
RWWY **Rawlins** 9.14 309 IAmb_Lg 11 31 03.3
comp=Z,55nm,0.8s
RSSD **Black Hills** 9.17 330 Pn **11 28 04.5 +1.6**
RSSD IAmb_Lg 11 30 53.7
comp=Z,69nm,0.9s
RSSD **Black Hills** 9.17 330 P Pn **11 28 04.7 +1.8**
baz=146
SFIN **Lafayette** 9.22 61 Pn **11 28 05.6 +2.1**
SFIN **Lafayette** 9.22 61 P Pn **11 28 05.3 +1.8**
baz=247
WCI **Wyandotte Cave** 9.26 75 Pn Pn **11 28 05.8 +1.8**
WCI **Wyandotte Cave** 9.26 75 P Pn **11 28 05.5 +1.6**
baz=261
BLO **Bloomington** 9.27 69 Pn **11 28 05.9 +1.9**
I40A **Norwalk** 9.27 33 Pn **11 28 05.3 +1.2**
I40A IAmb_Lg 11 30 47.5
comp=Z,79nm,0.8s
K22A **Casper** 9.30 315 Pn **11 28 06.3 +1.6**
K22A **Casper** 9.30 315 P Pn **11 28 06.6 +1.9**
baz=130
LRAL **Lakeview Retre** 9.38 107 P Pn **11 28 05.4 -0.3**
baz=293
F33A **5 Mile Ranch,** 9.54 6 Pn **11 28 08.6 +0.7**
F33A IAmb_Lg 11 30 58.7
comp=Z,62nm,1.1s
L44A **Lake County Fo** 9.54 49 S Sn **11 29 51.2 -4.2**
baz=235
U49A **Red Boiling Sp** 9.58 85 Pn **11 28 09.7 +1.3**
SPMN **Marine on St.** 9.61 21 Pn **11 28 11.0 +2.3**
SPMN IAmb_Lg 11 31 04.9
comp=Z,65nm,0.8s
F36A **Milaca** 10.01 17 Pn **11 28 16.9 +2.7**
P48A **Milroy** 10.16 68 Pn **11 28 17.2 +0.8**
O48B **Farmland** 10.58 65 P Pn **11 28 21.4 -0.7**
baz=252
P49A **Miami Univ. Ec** 10.71 69 P Pn **11 28 23.6 -0.3**
baz=256
O49A **Covington** 11.16 66 Pn Pn **11 28 31.3 +1.3**
BW06 **Boulder Array** 11.19 309 Pn Pn **11 28 30.9 +0.2**
PD31 **Pinedale Array** 11.19 309 Pn Pn **11 28 30.9 +0.2**
PDAR **Pinedale Array** 11.19 309 Pn Pn **11 28 30.9 +0.2**
comp=Z,0.4nm,0.3s,baz=119,slow=15,SNR=9.4
PDAR Pg **11 29 14.2**
comp=Z,1.0nm,0.3s,baz=121,slow=15,SNR=6.2
PDAR Lg Lg 11 31 43.2
comp=Z,1.5nm,0.3s,baz=112,slow=32,SNR=3.5
PDAR **Pinedale Array** 11.19 309 Pn **11 28 31.5 +0.8**
TKL **Tuckaleechee C** 11.28 89 Pn Pn **11 28 31.5 -0.1**
comp=Z,0.4nm,0.3s,baz=244,slow=6.9,SNR=6.6
TKL Lg Lg 11 31 40.7
comp=Z,2.6nm,0.3s,baz=12,slow=21,SNR=7.3
TKL **Tuckaleechee C** 11.28 89 Pn Pn **11 28 32.8 +1.2**
S51A **Beattyville** 11.33 79 Pn Pn **11 28 33.7 +1.4**
TZTN **Tazewell** 11.37 85 Pn Pn **11 28 35.1 +2.1**
V52A **Sevierville** 11.40 88 Pn Pn **11 28 34.3 +1.0**
COWI **Conover** 11.66 31 Pn **11 28 37.9 +1.0**
ACSO **Alum Creek Sta** 12.17 67 Pn **11 28 43.0 -0.9**
ACSO **Alum Creek Sta** 12.17 67 P Pn **11 28 42.8 -1.1**
baz=256
B35A **Bob, Littlefor** 12.36 12 Pn Pn **11 28 45.0 -1.3**
EYMN **Ely** 12.46 20 Pn **11 28 47.4 -0.3**
EYMN **Ely** 12.46 20 P Pn **11 28 47.4 -0.3**
baz=204
EYMN S Sn **11 31 00.0 -6.9**
baz=204
M50A **Fremont** 12.46 62 Pn **11 28 46.1 -1.7**
Q52A **Bidwell** 12.48 73 Pn **11 28 48.0 -0.1**
R53A **Hurricane** 12.66 76 Pn Pn **11 28 50.3 -0.3**
P52A **Corning** 12.69 70 P Pn **11 28 50.6 -0.3**
baz=260
P52A S Sn **11 31 08.6 -3.9**
baz=260
GLMI **Grayling** 13.03 45 P Pn **11 28 54.4 -1.2**
baz=234
ULM **Lac du Bonnet** 13.96 5 Pn Pn **11 29 03.4 -4.9**
comp=Z,0.6nm,0.3s,baz=176,slow=11,SNR=3.1
ULM Sn Sn 11 31 30.4 -13
comp=Z,0.6nm,0.3s,baz=234,slow=18,SNR=1.8
ULM Lg Lg 11 33 05.1
comp=Z,0.8nm,0.3s,baz=289,slow=19,SNR=1.7
SADO **Sadowa** 16.38 53 Pn Pn **11 29 38.9 -1.5**
comp=Z,0.2nm,0.3s,baz=273,slow=17,SNR=2.4
SADO Sn Sn 11 32 33.0 -9.4
comp=Z,0.4nm,0.3s,baz=290,slow=5.9,SNR=3.1
SADO Lg Lg 11 34 17.4
comp=Z,0.3nm,0.3s,baz=255,slow=13,SNR=1.8
NVAR **Mina Array Bea** 16.54 283 Pn Pn **11 29 44.3 +1.6**
comp=Z,0.1nm,0.3s,baz=84,slow=14,SNR=2.5
NEW **Newport** 18.62 316 P Pn **11 30 09.3 +0.9**
comp=Z,0.1nm,0.3s,baz=104,slow=7.6,SNR=4.2
NEW Lg Lg 11 35 26.0
comp=Z,0.1nm,0.3s,baz=44,slow=22,SNR=2.7
CMIG **Matias Romero** 19.33 172 P P **11 30 16.5 +0.4**
comp=Z,0.1nm,0.3s,baz=111,slow=24,SNR=1.5
SCHQ **Schefferville** 28.07 39 P P **11 31 42.3 +0.2**
comp=Z,1.3nm,0.4s,baz=234,slow=8.8,SNR=8.0
YKA **Yellowknife Ar** 28.21 343 P P **11 31 43.2 0.0**
comp=Z,0.2nm,0.4s,baz=148,slow=8.4,SNR=4.2
FRB **Frobisher Bay** 32.63 24 P P **11 32 23.4 +1.2**
comp=Z,1.4nm,0.7s,baz=217,slow=10,SNR=4.3
INK **Inuvik** 37.72 339 P P **11 33 08.0 +2.0**
comp=Z,0.5nm,0.7s,baz=176,slow=3.5,SNR=1.4
ILAR **Eielson Array** 40.62 330 P P **11 33 31.8 +1.5**
comp=Z,1.6nm,0.7s,baz=109,slow=6.6,SNR=18
FINES **FINESS Array B** 72.42 25 P P **11 37 16.2 -0.6**
comp=Z,2.9nm,1.0s,baz=330,slow=8.0,SNR=2.7
AKASG **Malin Array Be** 81.54 31 P P **11 38 07.6 -0.6**
comp=Z,0.3nm,0.4s,baz=324,slow=4.3,SNR=4.1
WRA **Warramunga Arr** 131.89 275 PKP PKPdf **11 45 05.0 +0.3**
comp=Z,0.3nm,0.8s,baz=48,slow=2.2,SNR=1.2
ASAR **Alice Springs** 134.08 271 PKP PKPdf **11 45 09.7 +1.0**
comp=Z,0.2nm,0.8s,baz=84,slow=2.5,SNR=5.2

**IDC 14 11:26:46.4±3.4, 34.71S×179.68W, h0km, mb3.4/2, mb1 3.7/3, mb1mx3.2/32, mbtmp3.4/3, ML3.3/1, Error ellipse: s-maj=74.0km s-min=47.6km az=117.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URZ | **Urewera** | 4.39 | 215 | Pn | Pn | 11 27 52.9 | -1.3 |
| | 1.5nm,0.3s,baz=257,slow=4.1,SNR=28 | | | | | | |
| URZ | | | | Sn | Sn | 11 28 38.4 | -7.6 |
| | 1.9nm,0.3s,baz=290,slow=23,SNR=6.1 | | | | | | |
| ASAR | **Alice Springs** | 41.67 | 273 | P | P | 11 34 37.0 | +0.1 |
| | 0.3nm,0.4s,baz=112,slow=7.7,SNR=14 | | | | | | |
| WRA | **Warramunga Arr** | 43.05 | 278 | P | P | 11 34 47.9 | -0.3 |
| | 0.3nm,0.5s,baz=112,slow=7.4,SNR=7.2 | | | | | | |
| FINES | **FINESS Array B** | 148.61 | 336 | PKPbc | PKPbc | 11 46 34.1 | -0.4 |
| | 2.8nm,1.1s,baz=38,slow=7.0,SNR=1.6 | | | | | | |

**KRSC 14 11:30:18.5±1.2, 50.54N×157.62E, h41km±18km, ML3.5, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | **Severo-Kuril's** | 0.97 | 279 | *i* P | Pn | 11 30 36.3 | +0.7 |
| SKR | | | | *e*S | Sn | 11 30 48.3 | +0.1 |
| PAU | **Pauzhetka** | 1.06 | 331 | *e*P | Pn | 11 30 38.8 | +1.9 |
| PAU | | | | *e*S | Sn | 11 30 52.6 | +2.1 |
| KDTR | **Khodutka, Kamc** | 1.31 | 12 | *e*P | Pn | 11 30 42.1 | +1.9 |
| KDTR | | | | *e*S | Sn | 11 30 58.6 | +2.1 |
| RUS | **Russkaya** | 1.98 | 16 | *e*P | Pn | 11 30 51.2 | +1.7 |
| RUS | | | | *e*S | Sn | 11 31 14.7 | +1.7 |
| MTVR | **Mutnovka** | 1.98 | 10 | *e*P | Pn | 11 30 52.3 | +2.6 |
| MTVR | | | | *e*S | Sn | 11 31 16.6 | +3.3 |
| GRL | **Gorelyy** | 2.04 | 8 | *e*P | Pn | 11 30 53.1 | +2.7 |
| GRL | | | | *e*S | Sn | 11 31 17.8 | +3.1 |
| KRMR | **Karymshinskiy** | 2.32 | 8 | *e*P | Pn | 11 30 57.2 | +3.1 |
| KRMR | | | | *e*S | Sn | 11 31 24.9 | +3.5 |
| APC | **Apacha** | 2.41 | 353 | *e*P | Pn | 11 30 58.5 | +3.1 |
| PET | **Petropavlovsk** | 2.57 | 14 | *e*S | Sn | 11 31 30.8 | +3.2 |
| DALK | **Dalny** | 2.60 | 15 | *e*P | Pn | 11 31 00.6 | +2.7 |
| DALK | | | | *e*S | Sn | 11 31 31.3 | +3.1 |
| UGLR | **Uglovaya** | 2.78 | 15 | *e*P | Pn | 11 31 04.2 | +3.6 |
| AVH | **Avacha** | 2.82 | 14 | *e*P | Pn | 11 31 04.8 | +3.7 |
| SMAR | **Somma** | 2.83 | 14 | *e*P | Pn | 11 31 04.9 | +3.6 |
| KOK | **Koryaka** | 2.83 | 12 | *e*P | Pn | 11 31 05.4 | +4.1 |
| SDLR | **Sedlovina** | 2.85 | 15 | *e*P | Pn | 11 31 04.1 | +2.5 |
| KRER | **Koryakskii** | 2.86 | 14 | *e*P | Pn | 11 31 05.7 | +3.9 |
| SPN | **Mys Shipunski** | 2.97 | 29 | *e*P | Pn | 11 31 05.8 | +2.8 |
| SPN | | | | *e*S | Sn | 11 31 40.8 | +3.5 |
| GNL | **Ganaly** | 3.17 | 3 | *e*P | Pn | 11 31 10.7 | +4.7 |
| MKZ | **Mys Kozlova** | 4.74 | 30 | *e*P | Pn | 11 31 30.1 | +2.7 |
| TUMD | **Tumrok D** | 4.97 | 19 | P | Pn | 11 31 35.7 | +5.2 |
| TUMR | **Tumrok** | 4.99 | 17 | P | Pn | 11 31 35.8 | +4.8 |
| KMNR | **Kamenistaya** | 5.46 | 16 | *e*P | Pn | 11 31 42.0 | +4.6 |

*IDC* **14** *12:24:36.6±0.5, 36.09N×136.92E, h271km±4km, mb3.4/19, mb1 3.7/21, mb1mx3.3/61, mbtmp4.1/21, Error ellipse: s-maj=13.3km s-min=10.7km az=87.0*
*JMA* **14** *12:24:36.8±0.2, 36.11N×137.01E, h277km±2km, M3.7*
*NIED* **14** *12:24:36.9, 36.11N×137.01E, h277km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-4.21; Mθθ7.21; Mφφ-3.00; Mrθ-3.94; Mθφ0.61; Mφr3.97; Fault plane solution: M₀8.43000×10¹⁴ NP1: φs119.00000°, δ71.00000°, λ-54.00000°. NP2: φs234.00000°, δ40.00000°, λ-149.00000°.*
*NEIC* **14** *12:24:37.6±1.8, 36.14N±0.07×136.93E±0.10, h273km±6km, mb4.0/55 Error ellipse: s-maj=12.1km s-min=9.7km az=125.0*

**ISC 14 12:24:37.0±0.6, 36.14N±0.05×136.95E±0.06, h271km±5km, n126, σθ92/136, mb4.0/48, 1C-7D, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JKG | **Kaga** | 0.52 | 286 | ⇓P | Pn | 12 25 13.1 | +0.8 |
| JKG | | | | S | S | 12 25 41.2 | +1.0 |
| JYTA | **Yamagatataniai** | 0.57 | 198 | ⇓P | Pn | 12 25 13.0 | +0.4 |
| JYTA | | | | S | S | 12 25 39.7 | -1.0 |
| JGF | **Kuroka** | 0.63 | 148 | Pn | Pn | 12 25 12.4 | -0.5 |
| INU | **Inuyama** | 0.79 | 176 | | Pn | 12 25 13.1 | -0.3 |
| MJB9 | **Matsu-Tunnel** | 1.09 | 68 | Pn | Pn | 12 25 14.5 | -0.3 |
| MAJO | **Matsushiro** | 1.09 | 68 | Pn | Pn | 12 25 15.3 | +0.6 |
| MAT | **Matsushiro** | 1.09 | 68 | P | Pn | 12 25 15.0 | +0.3 |
| MAT | | | | S | S | 12 25 44.2 | -0.5 |
| MAT | **Matsushiro** | 1.09 | 68 | P | Pn | 12 25 15.1 | +0.3 |
| MAT | | | | S | S | 12 25 45.0 | +0.3 |
| MJAR | **Matsushiro Arr** | 1.10 | 68 | P | Pn | 12 25 15.3 | +0.6 |
| | 3.1nm,0.3s,baz=252,slow=2.3,SNR=68 | | | | | | |
| MJAR | | | | S | S | 12 25 44.9 | +0.2 |
| | 0.3nm,0.3s,baz=46,slow=14,SNR=14 | | | | | | |
| MJAR | **Matsushiro Arr** | 1.10 | 68 | Pn | Pn | 12 25 15.6 | +0.8 |
| JYN | **Shimob** | 1.45 | 116 | P | Pn | 12 25 17.0 | -0.1 |
| JWT | **Wachi** | 1.52 | 236 | ⇓P | Pn | 12 25 18.0 | +0.5 |
| JRY | **Ryogami san** | 1.59 | 94 | P | Pn | 12 25 18.1 | +0.1 |
| JIE | **Ise** | 1.75 | 187 | ⇓P | Pn | 12 25 19.9 | +0.6 |
| JIE | | | | S | S | 12 25 52.9 | +0.1 |
| JSG | **Sagara** | 1.78 | 145 | Pn | Pn | 12 25 20.7 | +1.2 |
| JAG | **Ashikaga** | 2.04 | 81 | P | Pn | 12 25 21.0 | -0.6 |
| JSD | **Sado** | 2.17 | 29 | ⇑P | Pn | 12 25 23.1 | +0.5 |
| JSD | **Sado** | 2.17 | 29 | Pn | Pn | 12 25 22.7 | +0.1 |
| JWY | **Kouya** | 2.21 | 210 | ⇓P | Pn | 12 25 23.9 | +0.6 |
| JWY | | | | S | S | 12 25 59.9 | -0.1 |
| JTNC | **Tanabenakahech** | 2.56 | 206 | ⇓P | Pn | 12 25 26.7 | +0.2 |
| JTNC | | | | S | S | 12 26 05.7 | -0.1 |
| JYT | **Yasato** | 2.63 | 87 | | Pn | 12 25 26.3 | -0.7 |
| JHS | **Saijyo** | 3.32 | 251 | ⇓P | Pn | 12 25 34.8 | +0.5 |
| JHS | **Saijyo** | 3.32 | 251 | | Pn | 12 25 34.4 | +0.1 |
| JMN | **Monobe** | 3.48 | 227 | Pn | Pn | 12 25 36.0 | -0.1 |
| JMM | **Marumori** | 3.53 | 60 | | Pn | 12 25 36.0 | -0.3 |
| JHJ | **Hachijo jima 2** | 3.81 | 141 | S | S | 12 26 31.5 | +1.8 |
| | 8.8nm,0.3s,baz=118,slow=13,SNR=2.0 | | | | | | |
| JTM | **Tenmabayashi** | 5.66 | 34 | Pn | Pn | 12 26 00.9 | -0.3 |
| KSRS | **Korea Array** | 7.36 | 283 | P | Pn | 12 26 23.7 | +1.5 |
| | 0.1nm,0.3s,baz=93,slow=12,SNR=1.3 | | | | | | |
| JEW | **Eniwo** | 7.54 | 26 | Pn | Pn | 12 26 24.2 | -0.3 |
| ERM | **Erimo** | 7.60 | 38 | Pn | Pn | 12 26 22.5 | -2.7 |
| USA0B | **Ussuriysk Arra** | 8.90 | 336 | Pn | Pn | 12 26 42.6 | +1.2 |
| USRK | **Ussuriysk Ar.** | 8.90 | 336 | P | Pn | 12 26 42.7 | +1.2 |
| | baz=160,slow=12,SNR=15 | | | | | | |
| USRK | **Ussuriysk Ar.** | 8.90 | 336 | Pn | Pn | 12 26 42.8 | +1.4 |
| ASAJ | **Asahikawa** | 9.06 | 27 | P | Pn | 12 26 41.2 | -2.3 |
| | 12nm,0.3s,baz=231,slow=11,SNR=118 | | | | | | |
| ASAJ | | | | S | S | 12 28 16.7 | -9.5 |
| | 2.2nm,0.3s,baz=51,slow=27,SNR=6.0 | | | | | | |
| JKA | **Kamikawa-asahi** | 9.07 | 27 | Pn | Pn | 12 26 41.1 | -2.4 |
| MDJ | **Mudanjiang** | 10.15 | 329 | Pn | Pn | 12 26 58.2 | +1.1 |
| YSS | **Yuzh-Sakhalins** | 11.64 | 20 | Pn | Pn | 12 27 13.6 | -1.9 |
| KLR | **Kul'dur** | 13.63 | 345 | P | Pn | 12 27 38.2 | -1.5 |
| | 1.3nm,0.3s,baz=170,slow=8.4,SNR=34 | | | | | | |
| PETK | **Petropavlovsk-** | 22.36 | 34 | P | P | 12 29 11.8 | -0.4 |
| | 2.6nm,0.9s,baz=76,slow=41,SNR=2.4 | | | | | | |
| SONM | **Songino Array** | 25.37 | 307 | P | P | 12 29 39.6 | -0.1 |
| YAK | **Yakutsk** | 26.32 | 352 | P | P | 12 29 48.1 | +0.4 |
| YAK | | | | IAmb | IAmb | 12 29 51.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| ADK | **Adak** | 36.20 | 49 | P | P | 12 31 14.4 | +0.5 |
| CM31 | **Chiang Mai Arr** | 37.80 | 252 | P | P | 12 31 27.7 | 0.0 |
| CM31 | | | | IAmb | IAmb | 12 31 39.2 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| FAKI | **Fak Fak** | 39.10 | 187 | P | P | 12 31 38.2 | -0.4 |
| ZAA0 | **Zalesovo Array** | 39.88 | 313 | P | P | 12 31 45.2 | +0.7 |
| ZALV | **Zalesovo Beam** | 39.88 | 313 | P | P | 12 31 45.2 | +0.7 |
| | comp=Z,0.6nm,0.6s,baz=98,slow=10,SNR=1.7 | | | | | | |
| ZALV | | | | PcP | PcP | 12 33 43.9 | -0.3 |
| | comp=Z,0.7nm,0.4s,baz=108,slow=4.8,SNR=4.2 | | | | | | |
| ZALV | **Zalesovo Beam** | 39.88 | 313 | P | P | 12 31 44.3 | -0.2 |
| MKAR | **Makanchi Array** | 41.55 | 302 | P | P | 12 31 58.0 | -0.2 |
| | comp=Z,0.2nm,0.4s,baz=88,slow=9.2,SNR=6.7 | | | | | | |
| MKAR | | | | PcP | PcP | 12 33 48.6 | -1.4 |
| | comp=Z,0.2nm,0.6s,baz=96,slow=4.3,SNR=1.9 | | | | | | |
| MKAR | **Makanchi Array** | 41.55 | 302 | P | P | 12 31 58.7 | +0.4 |
| KURK | **Kurchatov** | 43.66 | 308 | P | P | 12 32 14.5 | -0.5 |
| KURBB | **Kurchatov Arra** | 43.72 | 308 | P | P | 12 32 15.8 | +0.3 |
| | comp=Z,1.2nm,0.2s,baz=86,slow=2.7,SNR=2.0 | | | | | | |
| ANM | **Nome** | 44.24 | 32 | P | P | 12 32 20.6 | +1.3 |
| TTA | **Tatalina** | 48.20 | 34 | P | P | 12 32 50.5 | +0.3 |
| O18K | **Koktuh Hills** | 48.63 | 39 | P | P | 12 32 55.4 | +2.0 |
| O18K | | | | IAmb | IAmb | 12 33 01.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| L19K | **White Mountain** | 48.73 | 35 | P | P | 12 32 55.4 | +1.2 |
| L19K | | | | IAmb | IAmb | 12 32 59.1 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| MTN | **Manton Dam** | 49.02 | 188 | P | P | 12 32 55.5 | -1.4 |
| K20K | **Telida** | 49.08 | 34 | P | P | 12 32 58.0 | +1.2 |
| IMAR | **Indian Mountai** | 49.25 | 30 | P | P | 12 32 58.4 | +0.4 |
| KDAK | **Kodiak Island** | 50.15 | 41 | P | P | 12 33 05.4 | +0.6 |
| COEN | **Coen** | 50.17 | 172 | P | P | 12 33 05.4 | 0.0 |
| COEN | | | | IAmb | IAmb | 12 33 24.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| COLD | **Coldfoot** | 50.67 | 29 | P | P | 12 33 09.9 | +1.3 |
| H23K | **Yukon River** | 50.97 | 31 | P | P | 12 33 12.3 | +1.4 |
| H23K | | | | IAmb | IAmb | 12 33 14.1 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| PMR | **Palmer** | 51.47 | 36 | P | P | 12 33 15.0 | +0.4 |
| PMR | | | | IAmb | IAmb | 12 33 15.3 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| MDM | **Murphy Dome** | 51.57 | 32 | P | P | 12 33 16.8 | +1.5 |
| MDM | | | | IAmb | IAmb | 12 33 17.7 | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| H24K | **Noodor Dome** | 51.66 | 30 | P | P | 12 33 17.9 | +1.9 |
| CCB | **Clear Creek Bu** | 51.78 | 32 | P | P | 12 33 17.5 | +0.7 |
| POKR | **Poker Flat Res** | 51.90 | 31 | P | P | 12 33 18.8 | +1.1 |
| POKR | | | | IAmb | IAmb | 12 33 20.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| KNRA | **Kununurra** | 52.11 | 190 | P | P | 12 33 19.5 | -0.3 |
| DHY | **Denali Highway** | 52.12 | 34 | P | P | 12 33 21.3 | +1.7 |
| DHY | | | | IAmb | IAmb | 12 33 40.8 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| IL31 | | 52.16 | 32 | P | P | 12 33 20.3 | +0.7 |
| IL31 | | | | IAmb | IAmb | 12 33 47.6 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| ILAR | **Eielson Array** | 52.16 | 32 | P | P | 12 33 19.6 | 0.0 |
| | comp=Z,0.9nm,0.6s,baz=254,slow=5.0,SNR=22 | | | | | | |
| ILAR | **Eielson Array** | 52.16 | 32 | P | P | 12 33 20.1 | +0.4 |
| PRP | **Porcupine Dome** | 52.66 | 31 | P | P | 12 33 24.7 | +1.3 |
| M24K | **Tolsona, Glenn** | 52.80 | 35 | P | P | 12 33 25.4 | +0.9 |
| BMAR | **Burnt Mountain** | 52.84 | 28 | P | P | 12 33 25.9 | +1.3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **M26K** | **Nabesna, AK** | **54.22** | **34** | P | **P** | **12 33 35.4** | **+0.7** |
| M26K | | | | IAmb | IAmb | 12 33 37.4 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **54.59** | **31** | P | **P** | **12 33 38.2** | **+1.0** |
| EGAK | | | | IAmb | IAmb | 12 34 04.2 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **L27K** | **Beaver Creek,** | **54.62** | **34** | P | **P** | **12 33 39.4** | **+1.9** |
| L27K | | | | IAmb | IAmb | 12 33 39.8 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **BCAR** | **Beaver Creek A** | **54.64** | **33** | P | **P** | **12 33 39.3** | **+1.6** |
| **M27K** | **Edge Creek, AK** | **54.74** | **34** | P | **P** | **12 33 40.2** | **+1.7** |
| M27K | | | | IAmb | IAmb | 12 33 41.1 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.99** | **193** | P | **P** | **12 33 39.8** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=0.0,slow=5.1,SNR=2.1 | | | | | | |
| **DAWY** | **Dawson** | **55.48** | **32** | P | **P** | **12 33 45.0** | **+1.4** |
| **WB0** | **Warramunga Arr** | **55.65** | **183** | P | **P** | **12 33 44.6** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 12 33 44.7 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **55.75** | **309** | P | **P** | **12 33 45.3** | **-0.4** |
| **WRAB** | **Tennant Creek** | **55.82** | **183** | P | **P** | **12 33 45.5** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 12 33 48.3 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **55.83** | **183** | P | **P** | **12 33 45.5** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 12 33 46.2 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.83** | **183** | P | **P** | **12 33 45.4** | **-1.1** |
| | comp=Z,3.3nm,0.3s,baz=359,slow=7.2,SNR=95 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.83** | **183** | P | **P** | **12 33 45.6** | **-1.0** |
| **WR0** | **Warramunga Arr** | **55.84** | **183** | P | **P** | **12 33 45.7** | **-0.8** |
| **EPYK** | **Eagle Plains** | **56.07** | **29** | P | **P** | **12 33 49.1** | **+1.4** |
| **INK** | **Inuvik** | **56.80** | **26** | P | **P** | **12 33 53.1** | **+0.4** |
| INK | | | | IAmb | IAmb | 12 33 54.4 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **A36M** | **Sachs Harbour** | **58.41** | **21** | P | **P** | **12 34 05.1** | **+1.2** |
| A36M | | | | IAmb | IAmb | 12 34 05.5 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **59.55** | **183** | P | **P** | **12 34 11.9** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 12 34 13.8 | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **59.55** | **183** | P | **P** | **12 34 11.7** | **-0.6** |
| | comp=Z,1.2nm,0.3s,baz=356,slow=5.4,SNR=76 | | | | | | |
| **ASAR** | **Alice Springs** | **59.55** | **183** | P | **P** | **12 34 11.5** | **-0.8** |
| **C36M** | **Paulatuk** | **59.73** | **24** | P | **P** | **12 34 13.4** | **+0.6** |
| **EUNU** | **Eureka** | **61.58** | **8** | P | **P** | **12 34 25.1** | **-0.2** |
| EUNU | | | | IAmb | IAmb | 12 34 25.6 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **63.54** | **339** | P | **P** | **12 34 37.4** | **-0.8** |
| | comp=Z,1.4nm,0.6s,baz=52,slow=7.1,SNR=7.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **63.54** | **339** | P | **P** | **12 34 38.7** | **+0.4** |
| **RES** | **Resolute Bay** | **64.33** | **13** | P | **P** | **12 34 43.3** | **+0.1** |
| RES | | | | IAmb | IAmb | 12 34 44.1 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **66.35** | **29** | P | **P** | **12 34 56.4** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=297,slow=6.5,SNR=22 | | | | | | |
| **YKA** | **Yellowknife Ar** | **66.35** | **29** | P | **P** | **12 34 56.1** | **-0.3** |
| **FORT** | **Forrest** | **67.09** | **188** | P | **P** | **12 35 01.5** | **+0.2** |
| **FIA1** | **FINESS Array S** | **67.89** | **331** | P | **P** | **12 35 06.1** | **+0.1** |
| **FINES** | **FINESS Array B** | **67.89** | **331** | P | **P** | **12 35 06.0** | **0.0** |
| | comp=Z,1.7nm,0.3s,baz=60,slow=6.2,SNR=23 | | | | | | |
| **SUMG** | **Summit** | **71.53** | **359** | P | **P** | **12 35 28.6** | **+0.1** |
| SUMG | | | | IAmb | IAmb | 12 35 57.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.76** | **321** | P | **P** | **12 35 34.2** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=47,slow=6.5,SNR=4.5 | | | | | | |
| **NC405** | **NORSAR Array S** | **73.35** | **336** | P | **P** | **12 35 38.7** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **73.57** | **336** | P | **P** | **12 35 40.3** | **+0.1** |
| | comp=Z,0.7nm,0.5s,baz=43,slow=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **73.57** | **336** | P | **P** | **12 35 40.1** | **-0.1** |
| | comp=Z,0.8nm,0.5s,baz=43,slow=5.7,SNR=6.4 | | | | | | |
| **BEKR** | **Beckworth** | **76.23** | **51** | P | **P** | **12 35 56.7** | **+0.8** |
| BEKR | | | | IAmb | IAmb | 12 35 57.4 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **FCC** | **Fort Churchill** | **76.36** | **25** | P | **P** | **12 35 56.3** | **+0.3** |
| **CMB** | **Columbia Colle** | **77.28** | **52** | P | **P** | **12 36 02.2** | **+0.5** |
| CMB | | | | IAmb | IAmb | 12 36 03.1 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **DLMT** | **Dillon** | **77.47** | **43** | P | **P** | **12 36 03.0** | **+0.3** |
| DLMT | | | | IAmb | IAmb | 12 36 04.8 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.37** | **51** | P | **P** | **12 36 09.0** | **+1.1** |
| | comp=Z,0.8nm,0.5s,baz=293,slow=5.9,SNR=8.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.37** | **51** | P | **P** | **12 36 08.1** | **+0.3** |
| **GCMT** | **Greycliff** | **78.77** | **41** | P | **P** | **12 36 08.2** | **-1.7** |
| **RLMT** | **Red Lodge** | **79.42** | **41** | P | **P** | **12 36 13.8** | **+0.4** |
| RLMT | | | | IAmb | IAmb | 12 36 16.0 | |
| | comp=Z,2.9nm,1.2s | | | | | | |
| **PDAR** | **Pinedale Array** | **80.82** | **43** | P | **P** | **12 36 20.8** | **-0.1** |
| | comp=Z,1.2nm,0.7s,baz=322,slow=0.6,SNR=9.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **80.82** | **43** | P | **P** | **12 36 21.4** | **+0.5** |
| **GERES** | **GERESS Array B** | **81.51** | **326** | P | **P** | **12 36 24.2** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=51,slow=7.0,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **81.51** | **326** | P | **P** | **12 36 24.8** | **+0.5** |
| **P18A** | **Preston Nutter** | **82.49** | **46** | P | **P** | **12 36 30.1** | **+0.3** |
| P18A | | | | IAmb | IAmb | 12 36 31.8 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **82.50** | **54** | P | **P** | **12 36 29.5** | **-0.2** |
| | comp=Z,2.9nm,1.0s,baz=11,slow=5.2,SNR=3.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **82.70** | **338** | P | **P** | **12 36 29.8** | **-0.3** |
| | comp=Z,0.7nm,0.4s,baz=40,slow=4.8,SNR=8.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.48** | **50** | P | **P** | **12 37 23.0** | **+0.8** |
| | comp=Z,1.2nm,0.6s,baz=289,slow=2.7,SNR=20 | | | | | | |

**KRSC 14 12:30:15.7±2.1, 55.34N×166.20E, h42km±15km, ML3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **0.18** | **224** | *eP* | Pn | 12 30 23.4 | +0.4 |
| BKI | | | | *eS* | Sn | 12 30 28.5 | +0.5 |
| **KBTR** | **Krutoberegovo** | **2.10** | **296** | *eP* | Pn | 12 30 48.3 | 0.0 |
| KBTR | | | | *eS* | Sn | 12 31 14.2 | +1.1 |
| **KBG** | **Krutoberegovo** | **2.18** | **296** | *eP* | Pn | 12 30 50.7 | +1.4 |
| KBG | | | | *eS* | Sn | 12 31 16.2 | +1.2 |
| **MKZ** | **Mys Kozlova** | **2.69** | **255** | *eP* | Pn | 12 30 59.6 | +3.2 |
| MKZ | | | | *eS* | Sn | 12 31 31.7 | +4.0 |
| **BDR** | **Baidarnaya** | **3.06** | **296** | *eP* | Pn | 12 31 04.7 | +3.1 |
| BDR | | | | *eS* | Sn | 12 31 40.9 | +3.8 |
| **ZLN** | **Zelenaya** | **3.13** | **285** | *eP* | Pn | 12 31 05.8 | +3.3 |
| **BZGR** | **Bezymyannyi-Gr** | **3.18** | **283** | *eP* | Pn | 12 31 06.9 | +3.7 |
| BZGR | | | | *eS* | Sn | 12 31 45.9 | +6.1 |
| **CIRR** | **Tsirk** | **3.18** | **286** | *eP* | Pn | 12 31 06.8 | +3.5 |
| **LGNR** | **Loginova** | **3.21** | **286** | *eP* | Pn | 12 31 07.3 | +3.6 |
| **BZWR** | **Bezymyannyi-We** | **3.29** | **283** | *eP* | Pn | 12 31 08.4 | +3.6 |
| BZWR | | | | *eS* | Sn | 12 31 48.6 | +5.8 |
| **KRSR** | **Krestovskiy** | **3.30** | **288** | *eP* | Pn | 12 31 07.7 | +2.8 |
| **TUMD** | **Tumrok D** | **3.32** | **270** | *eP* | Pn | 12 31 08.9 | +3.8 |
| TUMD | | | | *eS* | Sn | 12 31 49.0 | +5.8 |
| **KIRR** | **Kirishev** | **3.38** | **283** | *eP* | Pn | 12 31 08.8 | +2.9 |
| KIRR | | | | *S* | Sn | 12 31 48.8 | +4.0 |
| **KMNR** | **Kamenistaya** | **3.41** | **280** | *eP* | Pn | 12 31 10.4 | +4.0 |
| KMNR | | | | *S* | Sn | 12 31 51.6 | +6.0 |
| **KPT** | **Kopyto** | **3.44** | **283** | *eP* | Pn | 12 31 10.2 | +3.4 |
| **TUMR** | **Tumrok** | **3.46** | **272** | *eP* | Pn | 12 31 11.3 | +4.2 |
| TUMR | | | | *eS* | Sn | 12 31 52.9 | +6.1 |
| **KOZ** | **Kozyrevsk** | **3.65** | **284** | *P* | Pn | 12 31 14.1 | +4.5 |
| KOZ | | | | *S* | Sn | 12 31 58.5 | +7.1 |
| **SPN** | **Mys Shipunski** | **4.26** | **241** | *eP* | Pn | 12 31 21.6 | +3.6 |
| SPN | | | | *eS* | Sn | 12 32 09.3 | +2.9 |
| **ESO** | **Esso** | **4.29** | **281** | *eP* | Pn | 12 31 23.3 | +4.9 |
| **NLC** | **Nalytchevo** | **4.56** | **244** | *eP* | Pn | 12 31 26.5 | +4.4 |
| NLC | | | | *eS* | Sn | 12 32 17.7 | +3.9 |
| **SDLR** | **Sedlovina** | **4.75** | **247** | *eP* | Pn | 12 31 29.7 | +4.9 |
| **SMAR** | **Somma** | **4.80** | **247** | *eP* | Pn | 12 31 30.5 | +4.9 |
| **KRER** | **Koryakskii** | **4.81** | **248** | *eP* | Pn | 12 31 30.9 | +5.2 |
| KRER | | | | *eS* | Sn | 12 32 25.8 | +5.6 |
| **UGLR** | **Uglovaya** | **4.82** | **247** | *eP* | Pn | 12 31 30.8 | +5.1 |
| UGLR | | | | *eS* | Sn | 12 32 25.5 | +5.2 |
| **AVH** | **Avacha** | **4.84** | **248** | *eP* | Pn | 12 31 31.1 | +5.2 |
| AVH | | | | *eS* | Sn | 12 32 25.8 | +5.1 |
| **KOK** | **Koryaka** | **4.88** | **248** | *eP* | Pn | 12 31 31.7 | +5.2 |
| **DALK** | **Dalny** | **4.94** | **245** | *eP* | Pn | 12 31 31.8 | +4.5 |
| **PET** | **Petropavlovsk** | **5.00** | **246** | *eP* | Pn | 12 31 32.9 | +4.8 |
| PET | | | | *eS* | Sn | 12 32 27.8 | +3.3 |
| **GNL** | **Ganaly** | **5.08** | **255** | *eP* | Pn | 12 31 34.6 | +5.3 |
| **KRMR** | **Karymshinskiy** | **5.37** | **245** | *eP* | Pn | 12 31 38.5 | +5.3 |
| KRMR | | | | *eS* | Sn | 12 32 38.6 | +4.9 |
| **RUS** | **Russkaya** | **5.39** | **241** | *eP* | Pn | 12 31 37.9 | +4.4 |
| RUS | | | | *eS* | Sn | 12 32 36.7 | +2.5 |
| **MTVR** | **Mutnovka** | **5.53** | **242** | *eP* | Pn | 12 31 40.5 | +5.0 |
| MTVR | | | | *eS* | Sn | 12 32 41.7 | +3.8 |
| **GRL** | **Gorelyy** | **5.55** | **243** | *eP* | Pn | 12 31 41.2 | +5.4 |
| **KDTR** | **Khodutka, Kamc** | **5.99** | **237** | *P* | Pn | 12 31 45.7 | +4.1 |
| KDTR | | | | *eS* | Sn | 12 32 50.1 | +1.2 |

*TUL **14** 12:35:43.6±1.9, 36.88N±0.02×97.80W±0.02, h5km±6km, ML2.9, mb_Lg2.9/48(NEIC), Error ellipse: s-maj=2.8km s-min=1.8km az=52.0*

**NEIC 14 12:35:44.0±1.2, 36.86N±0.02×97.79W±0.02, h6km±6km, Error ellipse: s-maj=2.9km s-min=1.0km az=217.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **1.02** | **87** | | Pg | 12 36 03.2 | -0.4 |
| T35A | | | | Sg | Sg | 12 36 16.6 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.09** | **244** | | Pg | 12 36 04.3 | -0.7 |
| **OKCFA** | **Oklahoma City** | **1.47** | **169** | | Pn | 12 36 11.2 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **169** | | Pn | 12 36 11.5 | +0.2 |
| **FNO** | **Franklin** | **1.63** | **169** | | Pn | 12 36 13.6 | +0.2 |
| **R32A** | **Long Quarter,** | **1.72** | **335** | | Pn | 12 36 15.1 | +0.5 |
| **W35A** | **Tecumseh** | **1.86** | **156** | | Pn | 12 36 16.8 | +0.3 |
| **TUL1** | **Leonard** | **1.87** | **120** | | Pn | 12 36 17.5 | +0.9 |
| TUL1 | | | | IAmb_Lg | | 12 36 43.9 | |
| | comp=Z,69nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.26** | **181** | | Pn | 12 36 23.4 | +1.5 |
| X34A | | | | IAmb_Lg | | 12 37 00.9 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.27** | **201** | | Pn | 12 36 22.5 | +0.3 |
| WMOK | | | | IAmb_Lg | | 12 36 58.5 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.27** | **201** | | Pn | 12 36 22.4 | +0.2 |
| **KSU1** | **Kansas State U** | **2.42** | **22** | Pn | Pn | 12 36 24.9 | +0.8 |
| **CBKS** | **Cedar Bluff** | **2.49** | **322** | | Pn | 12 36 25.2 | +0.1 |
| **U38A** | **Gravette** | **2.77** | **98** | | Pn | 12 36 30.2 | +1.2 |
| **X37A** | **Clayton** | **3.00** | **138** | | Pn | 12 36 33.6 | +1.5 |
| X37A | | | | IAmb_Lg | | 12 37 27.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.15** | **99** | | Pn | 12 36 35.4 | +1.2 |
| HHAR | | | | IAmb_Lg | | 12 37 30.8 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.55** | **173** | Pn | Pn | 12 36 39.7 | -0.1 |
| **W39A** | **Magazine** | **3.65** | **116** | | Pn | 12 36 41.9 | +0.9 |
| **S39A** | **Bolivar** | **3.65** | **76** | | Pn | 12 36 42.5 | +1.4 |
| S39A | | | | IAmb_Lg | | 12 37 48.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.73** | **239** | | Pn | 12 36 42.0 | -0.2 |
| AMTX | | | | IAmb_Lg | | 12 37 47.8 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **N33A** | **J Bar K, Exete** | **3.88** | **4** | Pn | Pn | 12 36 43.2 | -1.0 |
| **U40A** | **Yellville** | **4.00** | **96** | | Pn | 12 36 45.6 | -0.3 |
| U40A | | | | IAmb_Lg | | 12 38 01.7 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.13** | **123** | | Pn | 12 36 50.1 | +2.4 |
| **Z38A** | **Mt. Pleasant** | **4.27** | **147** | Pn | Pn | 12 36 48.7 | -0.9 |
| **N35A** | **Tabor** | **4.33** | **22** | | Pn | 12 36 52.0 | +1.6 |
| **P38A** | **Dawn** | **4.34** | **49** | | Pn | 12 36 49.5 | -1.0 |
| P38A | | | | IAmb_Lg | | 12 38 05.0 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.39** | **301** | | Pn | 12 36 51.9 | +0.6 |
| **MGMO** | **Mountain Grove** | **4.42** | **85** | | Pn | 12 36 53.3 | +1.5 |
| **ABTX** | **Abilene, Hawle** | **4.50** | **200** | Pn | Pn | 12 36 52.6 | -0.2 |
| **BGNE** | **Belgrade** | **4.55** | **357** | | Pn | 12 36 53.5 | 0.0 |
| **R40A** | **Maddies Statio** | **4.61** | **70** | | Pn | 12 36 55.4 | +1.1 |
| R40A | | | | IAmb_Lg | | 12 38 11.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.67** | **100** | Pn | Pn | 12 36 55.5 | +0.4 |
| FCAR | | | | IAmb_Lg | | 12 38 11.5 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.68** | **119** | Pn | Pn | 12 36 55.0 | -0.2 |
| **WHAR** | **Wooly Hollow** | **4.72** | **108** | | Pn | 12 36 55.4 | -0.4 |
| WHAR | | | | IAmb_Lg | | 12 38 22.7 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.79** | **109** | Pn | Pn | 12 36 58.4 | +1.6 |
| **WLAR** | **White Oak Lake** | **4.96** | **128** | | Pn | 12 37 00.7 | +1.5 |
| WLAR | | | | IAmb_Lg | | 12 38 35.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MSTX** | **Muleshoe** | **4.99** | **236** | Pn | Pn | 12 36 57.5 | -2.1 |
| **237A** | **Washetta, Mont** | **5.12** | **161** | Pn | Pn | 12 37 00.8 | -0.5 |
| **L34A** | **Svendsen Farm,** | **5.21** | **12** | | Pn | 12 37 03.4 | +0.8 |
| **P40A** | **Paris** | **5.25** | **58** | Pn | Pn | 12 37 02.9 | -0.1 |
| P40A | | | | IAmb_Lg | | 12 38 33.0 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.25** | **322** | | Pn | 12 37 03.7 | +0.5 |
| **N38A** | **Joes South For** | **5.29** | **41** | | Pn | 12 37 04.7 | +1.0 |
| N38A | | | | IAmb_Lg | | 12 38 35.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.31** | **275** | Pn | Pn | 12 37 04.0 | -0.2 |
| **CCM** | **Cathedral Cave** | **5.34** | **75** | Pn | Pn | 12 37 04.3 | 0.0 |
| CCM | | | | IAmb_Lg | | 12 38 37.2 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **T42A** | **Van Buren** | **5.36** | **86** | Pn | Pn | 12 37 06.1 | +1.5 |
| **LCAR** | **Lake Charles** | **5.40** | **96** | Pn | Pn | 12 37 05.8 | +0.6 |
| **Z41A** | **Richland Creek** | **5.44** | **130** | Pn | Pn | 12 37 05.5 | -0.3 |
| **K31A** | **O'Neill** | **5.80** | **353** | Pn | Pn | 12 37 09.8 | -0.8 |
| **PBMO** | **Poplar Bluff** | **5.90** | **89** | | Pn | 12 37 11.2 | -0.8 |
| PBMO | | | | IAmb_Lg | | 12 38 56.9 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **FVM** | **French Village** | **5.96** | **77** | Pn | Pn | 12 37 12.6 | -0.3 |
| FVM | | | | IAmb_Lg | | 12 38 52.8 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **6.07** | **178** | IAmb_Lg | | 12 39 02.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **6.19** | **292** | Pn | Pn | 12 37 16.0 | -0.2 |
| **SDCO** | **Great Sand Dun** | **6.21** | **280** | Pn | Pn | 12 37 17.1 | +0.5 |
| **JCT** | **Junction City** | **6.58** | **195** | Pn | Pn | 12 37 21.1 | -0.4 |
| JCT | | | | IAmb_Lg | | 12 39 30.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.81** | **298** | Pn | Pn | 12 37 24.6 | -0.2 |
| **S44A** | **Carbondale** | **6.85** | **80** | Pn | Pn | 12 37 23.4 | -1.7 |
| S44A | | | | IAmb_Lg | | 12 39 24.3 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.92** | **7** | Pn | Pn | 12 37 26.8 | +0.7 |
| **P43A** | **Skaggs, Pawnee** | **7.07** | **64** | Pn | Pn | 12 37 29.3 | +1.2 |
| **OXF** | **Oxford** | **7.21** | **107** | Pn | Pn | 12 37 29.4 | -0.5 |
| **Q44A** | **Meyer Farm, Va** | **7.23** | **71** | Pn | Pn | 12 37 30.6 | +0.4 |
| **L40A** | **Anamosa** | **7.26** | **42** | Pn | Pn | 12 37 30.3 | -0.4 |
| **ANMO** | **Albuquerque** | **7.29** | **257** | Pn | Pn | 12 37 32.0 | +0.7 |
| **N23A** | **Red Feather La** | **7.53** | **305** | Pn | Pn | 12 37 32.9 | -1.7 |
| N23A | | | | IAmb_Lg | | 12 40 00.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **I40A** | **Norwalk** | **8.90** | **36** | IAmb_Lg | | 12 40 25.5 | |
| | comp=Z,12nm,1.1s | | | | | | |

*NEIC **14** 12:46:01.3±1.0, 16.46S±0.09×174.10W±0.1, h35km±1km, mb4.7/19, Error ellipse: s-maj=21.1km s-min=15.1km az=99.0*

*IDC **14** 12:46:02.1±4.9, 16.50S×173.93W, h53km±34km, mb3.4/6, mb1 3.7/6, mb1mx3.6/23, mbtmp3.6/6, ML4.9/1, MS2.8/1, Ms1 2.8/1, ms1mx2.5/18, Error ellipse: s-maj=114.5km s-min=20.7km az=148.0*

**ISC 14 12:46:00.8±0.5, 16.36S±0.08×174.00W±0.09, h35km, n52, σ1s11/53, mb4.5/17, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.25** | **42** | P | **Pn** | **12 46 51.9** | **+2.6** |
| | 123nm,0.3s,baz=201,slow=2.6,SNR=285 | | | | | | |
| AFI | | | | *S* | **Sn** | **12 47 24.8** | **-2.0** |
| | 81nm,0.3s,baz=73,slow=20,SNR=7.7 | | | | | | |
| AFI | | | | *LR* | LR | 12 48 11.1 | |
| | comp=Z,142nm,19.3s,baz=296,slow=39 | | | | | | |
| **NIUE** | **Niue** | **4.72** | **125** | | **Pn** | **12 47 11.4** | **+1.8** |
| **DZM** | **Mont Dzumac** | **19.32** | **250** | P | **Pn** | **12 50 26.4** | **+2.0** |
| | 0.2nm,0.3s,baz=126,slow=17,SNR=3.2 | | | | | | |
| **FOZ** | **Fox Glacier** | **30.38** | **204** | P | **P** | **12 52 08.7** | **-0.7** |
| FOZ | | | | IAmb | IAmb | 12 52 30.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **34.36** | **240** | P | **P** | **12 52 44.1** | **-0.6** |
| ARMA | | | | IAmb | IAmb | 12 53 07.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **41.42** | **231** | IAmb | IAmb | 12 53 42.8 | |
| | comp=Z,31nm,1.4s | | | | | | |
| TOO | | | | P | **P** | **12 53 43.1** | **-0.9** |
| **STKA** | **Stephens Creek** | **43.06** | **241** | P | **P** | **12 53 57.7** | **+0.2** |
| **BBOO** | **Buckleboo** | **47.84** | **240** | P | **P** | **12 54 34.9** | **-0.4** |
| **WR0** | **Warramunga Arr** | **48.88** | **258** | P | **P** | **12 54 43.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 12 54 57.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **49.04** | **258** | P | **P** | **12 54 44.0** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 12 54 54.3 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **49.06** | **258** | P | **P** | **12 54 45.1** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 12 55 12.0 | |
| | comp=Z,7.3nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **49.06** | **258** | P | **P** | **12 54 44.8** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 12 54 55.6 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.07** | **258** | P | **P** | **12 54 44.0** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=93,slow=7.4,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.07** | **258** | P | **P** | **12 54 44.3** | **-0.7** |
| **AS31** | **Alice Springs** | **49.27** | **253** | P | **P** | **12 54 46.7** | **+0.2** |
| **ASAR** | **Alice Springs** | **49.27** | **253** | P | **P** | **12 54 46.0** | **-0.6** |
| | comp=Z,1.2nm,0.5s,baz=88,slow=8.6,SNR=69 | | | | | | |
| **ASAR** | **Alice Springs** | **49.27** | **253** | P | **P** | **12 54 45.4** | **-1.1** |
| **MTN** | **Manton Dam** | **53.09** | **266** | P | **P** | **12 55 14.9** | **-0.3** |
| **KNRA** | **Kununurra** | **54.86** | **262** | P | **P** | **12 55 28.3** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 12 55 33.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **62.37** | **186** | P | **P** | **12 56 19.8** | **+0.4** |
| **TOLI2** | **Tolitoli** | **66.62** | **279** | P | **P** | **12 56 47.6** | **-0.6** |
| TOLI2 | | | | IAmb | IAmb | 12 56 48.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.37** | **343** | P | **P** | **12 57 29.6** | **+0.7** |
| PEA0B | | | | IAmb | IAmb | 12 57 36.5 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.69** | **180** | P | **P** | **12 57 30.7** | **-0.2** |
| **USA0B** | **Ussuriysk Arra** | **77.81** | **323** | P | **P** | **12 57 55.2** | **+0.8** |
| USA0B | | | | IAmb | IAmb | 12 58 05.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.81** | **323** | P | **P** | **12 57 55.2** | **+0.8** |
| **TXAR** | **Lajitas Array** | **81.62** | **56** | P | **P** | **12 58 15.4** | **-0.3** |
| | comp=Z,0.2nm,0.7s,baz=240,slow=8.2,SNR=2.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **83.36** | **42** | P | **P** | **12 58 23.6** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=200,slow=3.0,SNR=7.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **83.36** | **42** | P | **P** | **12 58 23.7** | **-0.9** |
| **ILAR** | **Eielson Array** | **83.50** | **11** | P | **P** | **12 58 23.7** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=211,slow=5.5,SNR=5.7 | | | | | | |
| **IMAR** | **Indian Mountai** | **83.50** | **8** | P | **P** | **12 58 25.2** | **+0.7** |
| **BMAR** | **Burnt Mountain** | **86.30** | **11** | P | **P** | **12 58 39.8** | **+1.2** |
| **YKA** | **Yellowknife Ar** | **91.20** | **24** | P | **P** | **12 59 00.6** | **-1.3** |
| | comp=Z,0.1nm,0.6s,baz=238,slow=4.5,SNR=3.1 | | | | | | |
| **SNAA** | **Sanae** | **91.98** | **177** | P | **P** | **12 59 05.4** | **-0.2** |
| **CHVC** | **Chvalec** | **144.91** | **349** | *e*PKP | **PKPbc** | **13 05 31.8** | **-1.6** |
| **OSTC** | **Ostas** | **144.91** | **349** | *e*PKP | **PKPbc** | **13 05 32.9** | **-0.4** |
| **UPC** | **Upice** | **145.00** | **349** | *e*PKP | **PKPbc** | **13 05 33.4** | **-0.2** |
| **DPC** | **Dobruska-Polom** | **145.09** | **348** | *e*PKP | PKPbc | 13 05 22.7 | -11 |
| DPC | | | | *ex* | **PKPbc** | **13 05 33.6** | **-0.4** |
| **KRLC** | **Kraliky** | **145.26** | **348** | *e*PKP | **PKPbc** | **13 05 33.9** | **-0.6** |
| **MORC** | **Moravsky Berou** | **145.38** | **347** | *e*PKP | **PKPdf** | **13 05 34.7** | **-0.3** |
| **PRU** | **Pruhonice** | **145.75** | **350** | *e*PKP | **PKPdf** | **13 05 35.7** | **+0.1** |
| **VRAC** | **Vranov** | **146.03** | **348** | *e*PKP | **PKPbc** | **13 05 38.0** | **+1.1** |
| **JAVC** | **Velka Javorina** | **146.22** | **346** | *e*PKP | **PKPbc** | **13 05 38.2** | **+0.6** |
| **KRUC** | **Moravsky** | **146.30** | **348** | *e*PKP | **PKPdf** | **13 05 37.2** | **+0.7** |
| **BRTR** | **Keskin Array B** | **146.53** | **320** | PKPbc | **PKPdf** | **13 05 38.5** | **+1.1** |
| | comp=Z,2.9nm,0.8s,baz=112,slow=3.0,SNR=18 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.53** | **320** | | **PKPdf** | **13 05 37.4** | **0.0** |
| **KHC** | **Kasperske Hory** | **146.74** | **351** | *e*PKP | **PKPdf** | **13 05 38.6** | **+1.3** |
| **CKRC** | **Cesky Krumlov** | **146.92** | **350** | *e*PKP | **PKPdf** | **13 05 33.6** | **-4.0** |
| **GERES** | **GERESS Array B** | **147.00** | **351** | PKPbc | **PKPdf** | **13 05 39.3** | **+1.5** |
| | comp=Z,1.1nm,0.6s,baz=29,slow=3.0,SNR=12 | | | | | | |
| **GERES** | **GERESS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SMRT** | **St. Maarten** | **1.79** | **129** | Pn | **Pn** | **13 32 46.0** | **+0.4** |
| SMRT | | | | IAML | | 13 33 16.2 | |
| | comp=N,537nm,0.8s | | | | | | |
| SMRT | | | | IAML | | 13 33 23.7 | |
| | comp=E,628nm,0.5s | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.83** | **231**⇓ | *e*P | **Pn** | **13 32 46.6** | **+0.4** |
| **PDPR** | **Patillas Dam,** | **1.83** | **231** | Pn | **Pn** | **13 32 46.1** | **-0.1** |
| PDPR | | | | IAML | | 13 33 19.8 | |
| | comp=E,338nm,0.4s | | | | | | |
| **SJG** | **San Juan** | **1.87** | **235** | | **Pn** | **13 32 46.3** | **-0.4** |
| **IGPR** | **InterUniversit** | **1.93** | **231**⇑ | *e*P | **Pn** | **13 32 47.9** | **+0.4** |
| **IGPR** | **InterUniversit** | **1.93** | **231** | *e*S | **Sn** | **13 33 11.4** | **+0.8** |
| **EMPR** | **Esperanza - Ma** | **2.02** | **250**⇑ | *e*P | **Pn** | **13 32 48.9** | **+0.1** |
| **EMPR** | **Esperanza - Ma** | **2.02** | **250** | *e*S | **Sn** | **13 33 12.6** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **2.02** | **250** | | **Pn** | **13 32 48.5** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **2.02** | **250** | | **Sn** | **13 33 12.6** | **-0.3** |
| **CELP** | **Cerrillos** | **2.24** | **240**⇑ | *i*P | **Pn** | **13 32 52.0** | **+0.2** |
| **CELP** | **Cerrillos** | **2.24** | **240** | | **Sn** | **13 33 18.3** | **+0.1** |
| **CELP** | **Cerrillos** | **2.24** | **240** | Pn | **Pn** | **13 32 51.7** | **0.0** |
| **CELP** | **Cerrillos** | **2.24** | **240** | IAML | | 13 33 22.9 | |
| | comp=E,207nm,0.4s | | | | | | |
| CELP | | | | IAML | | 13 33 24.4 | |
| | comp=N,330nm,0.4s | | | | | | |
| **CELP** | **Cerrillos** | **2.24** | **240**⇑ | *i*P | **Pn** | **13 32 52.0** | **+0.2** |
| CELP | | | | *e*S | **Sn** | **13 33 18.3** | **+0.1** |
| **AOPR** | **Arecibo Observ** | **2.27** | **249**⇑ | *e*P | **Pn** | **13 32 52.2** | **0.0** |
| **AOPR** | **Arecibo Observ** | **2.27** | **249** | Pn | **Pn** | **13 32 52.1** | **0.0** |
| **AOPR** | **Arecibo Observ** | **2.27** | **249**⇑ | *e*P | **Pn** | **13 32 52.2** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **2.27** | **246**⇑ | *e*P | **Pn** | **13 32 52.7** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **2.27** | **246** | | **Pn** | **13 32 52.7** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **2.28** | **240**⇑ | *e*P | **Pn** | **13 32 51.6** | **-0.7** |
| **OBIP** | **Obispado Ponce** | **2.28** | **240** | | **Sn** | **13 33 19.1** | **0.0** |
| **OBIP** | **Obispado Ponce** | **2.28** | **240** | Pn | **Pn** | **13 32 51.5** | **-0.7** |
| **OBIP** | **Obispado Ponce** | **2.28** | **240** | IAML | | 13 33 24.5 | |
| | comp=N,225nm,0.5s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.28** | **240**⇑ | *e*P | **Pn** | **13 32 51.6** | **-0.7** |
| OBIP | | | | *e*S | **Sn** | **13 33 19.1** | **0.0** |
| **ICMP** | **Isla Caja de M** | **2.30** | **236**⇑ | *e*P | **Pn** | **13 32 53.3** | **+0.7** |
| **ICMP** | **Isla Caja de M** | **2.30** | **236** | Pn | **Pn** | **13 32 53.6** | **+1.1** |
| ICMP | | | | IAML | | 13 33 30.9 | |
| | comp=E,376nm,0.6s | | | | | | |
| ICMP | | | | IAML | | 13 33 38.7 | |
| | comp=N,345nm,0.7s | | | | | | |
| **LSP** | **Las Mesas** | **2.62** | **248**⇑ | *e*P | **Pn** | **13 32 57.7** | **+0.6** |
| **LSP** | **Las Mesas** | **2.62** | **248**⇑ | *e*P | **Pn** | **13 32 57.7** | **+0.6** |
| **PRSN** | **Puerto Rico Se** | **2.66** | **249** | | **Pn** | **13 32 57.7** | **+0.1** |
| **MLPR** | **Magueyes Islan** | **2.68** | **243**⇑ | *e*P | **Pn** | **13 32 57.4** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.68** | **243** | *e*S | **Sn** | **13 33 29.1** | **+0.1** |
| **MLPR** | **Magueyes Islan** | **2.68** | **243** | | **Sn** | **13 33 29.1** | **+0.1** |
| **MLPR** | **Magueyes Islan** | **2.68** | **243** | Pn | **Pn** | **13 32 57.2** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **2.68** | **243** | IAML | | 13 33 34.5 | |
| | comp=E,179nm,0.5s | | | | | | |
| MLPR | | | | IAML | | 13 33 41.3 | |
| | comp=N,100nm,0.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245**⇑ | *e*P | **Pn** | **13 32 58.8** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245** | | **Sn** | **13 33 30.3** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245** | Pn | **Pn** | **13 32 58.7** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245** | IAML | | 13 33 44.7 | |
| | comp=N,188nm,0.7s | | | | | | |
| CRPR | | | | IAML | | 13 33 46.6 | |
| | comp=E,170nm,1.1s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245**⇑ | *e*P | **Pn** | **13 32 58.8** | **+0.5** |
| CRPR | | | | *e*S | **Sn** | **13 33 30.3** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.71** | **245** | *i*P | **Pn** | **13 32 58.7** | **+0.4** |
| CRPR | | | | IAML | | 13 33 44.1 | |
| | comp=Z,164nm,0.7s | | | | | | |
| **IDE** | **Isla Desecheo** | **2.90** | **254**⇑ | *e*P | **Pn** | **13 33 01.8** | **+1.0** |
| **IDE** | **Isla Desecheo** | **2.90** | **254**⇑ | *e*P | **Pn** | **13 33 01.8** | **+1.0** |
| **PCDR** | **Punta Cana, DR** | **3.71** | **260** | *e*S | **Sn** | **13 33 54.8** | **+0.4** |
| **PCDR** | **Punta Cana, DR** | **3.71** | **260** | | **Sn** | **13 33 54.8** | **+0.4** |
| **PCDR** | **Punta Cana, DR** | **3.71** | **260** | Pn | **Pn** | **13 33 11.7** | **-0.2** |
| **PCDR** | **Punta Cana, DR** | **3.71** | **260** | IAML | | 13 34 23.6 | |
| | comp=E,86nm,1.7s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.71** | **260** | *e*S | **Sn** | **13 33 54.8** | **+0.4** |
| **DR12** | **Loma Pena Alta** | **4.61** | **266**⇑ | *e*P | **Pn** | **13 33 23.7** | **-0.6** |
| **DR12** | **Loma Pena Alta** | **4.61** | **266** | | **Pn** | **13 33 23.8** | **-0.6** |
| **SVN** | **Savane Anatole** | **5.39** | **143** | Pn | **Pn** | **13 33 34.9** | **-0.3** |
| **BANI** | **BANI** | **5.58** | **263** | Pn | **Pn** | **13 33 38.3** | **+0.6** |
| **SC01** | **Santiago de lo** | **5.86** | **273** | Pn | **Pn** | **13 33 42.8** | **+1.4** |
| **LOBA2** | **Hotel Casa Bon** | **6.32** | **261** | *i*P | **Pn** | **13 33 49.6** | **+1.8** |
| LOBA2 | | | | *e*S | **Sn** | **13 34 55.2** | **-3.6** |
| **SDDR** | **Presa de Saban** | **6.39** | **269** | | **Pn** | **13 33 49.2** | **+0.3** |
| **SDDR** | **Presa de Saban** | **6.39** | **269** | *i*P | **Pn** | **13 33 49.4** | **+0.5** |
| SDDR | | | | IAML | | 13 35 10.9 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **LONE2** | **Loma La Sidra** | **6.60** | **266** | *i*P | **Pn** | **13 33 53.2** | **+1.3** |
| LONE2 | | | | IAML | | 13 35 16.6 | |
| | comp=Z,18nm,1.3s | | | | | | |

*EAF **14** 13:35:24.4±2.6,26°.09S×29°.13E,h11km±25km,MD3.7*
**BUL 14 13:35:27.9±0.8,26°.07S×29°.17E,h36km±8km,MD3.8,**
**South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.72** | **95** | *i*P | Pn | 13 36 09.3 | +0.3 |
| CNG | | | | *i*S | Sn | 13 36 38.5 | -2.2 |
| **CNG** | **Changalane** | **2.72** | **95** | *i*P | Pn | 13 36 09.3 | +0.3 |
| CNG | | | | *i*S | Sn | 13 36 38.5 | -2.2 |
| **MOPA** | **Mopani** | **3.25** | **39** | *i*P | Pn | 13 36 15.2 | -1.1 |
| **MOPA** | **Mopani** | **3.25** | **39** | *i*P | Pn | 13 36 15.2 | -1.1 |
| **LBTB** | **Lobatse** | **3.40** | **287** | *i*P | Pn | 13 36 17.7 | -0.7 |
| LBTB | | | | *i*Sg | Sn | 13 37 08.3 | +11 |
| **LBTB** | **Lobatse** | **3.40** | **287** | *i*P | Pn | 13 36 17.7 | -0.7 |
| LBTB | | | | *i*Sg | Sn | 13 37 08.3 | +11 |
| **MSNA** | **Messina** | **3.79** | **12** | *i*P | Pn | 13 36 23.1 | -0.8 |
| MSNA | | | | *i*S | Sn | 13 37 04.3 | -2.9 |
| **MSNA** | **Messina** | **3.79** | **12** | *i*P | Pn | 13 36 23.1 | -0.8 |
| MSNA | | | | *i*S | Sn | 13 37 04.3 | -2.9 |
| **BOSA** | **Boshof** | **4.30** | **233** | *i*P | Pn | 13 36 30.9 | -0.1 |
| BOSA | | | | *i*Sg | Sn | 13 37 35.1 | +15 |
| **BOSA** | **Boshof** | **4.30** | **233** | *i*P | Pn | 13 36 30.9 | -0.1 |
| BOSA | | | | *i*Sg | Sn | 13 37 35.1 | +15 |
| **MATP** | **Matopo** | **5.65** | **354** | *i*P | Pn | 13 36 49.2 | -0.3 |
| MATP | | | | *i*S | Sn | 13 37 48.7 | -4.6 |
| **MATP** | **Matopo** | **5.65** | **354** | *i*P | Pn | 13 36 49.2 | -0.3 |
| MATP | | | | *i*S | Sn | 13 37 48.7 | -4.6 |
| **BLWY** | **Bulawayo** | **5.93** | **355** | *i*P | Pn | 13 36 52.5 | -0.8 |
| BLWY | | | | *i*S | Sn | 13 37 54.5 | -5.6 |
| **BLWY** | **Bulawayo** | **5.93** | **355** | *i*P | Pn | 13 36 52.5 | -0.8 |
| BLWY | | | | *i*S | Sn | 13 37 54.5 | -5.6 |

*TUL **14** 13:35:33.2±0.9,36°.90N±0°.01×97°.66W±0°.01,h3km±7km,*
*ML2.5,mb_Lg2.0/5(NEIC),Error ellipse: s-maj=1.8km*
*s-min=1.4km az=196.0*
**NEIC 14 13:35:33.3±0.6,36°.89N±0°.01×97°.64W±0°.01,h5km±6km,**
**Error ellipse: s-maj=1.8km s-min=1.5km az=175.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.91** | **88** | Pg | Pg | 13 35 50.1 | -0.5 |
| T35A | | | | Sg | Sg | 13 36 02.1 | -0.2 |
| **OKCFA** | **Oklahoma City** | **1.48** | **174** | Pn | Pn | 13 36 00.8 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.49** | **174** | Pn | Pn | 13 36 01.0 | +0.2 |
| **FNO** | **Franklin** | **1.64** | **173** | | Pn | 13 36 03.2 | +0.4 |
| **TUL1** | **Leonard** | **1.78** | **123** | Pn | Pn | 13 36 05.0 | +0.2 |
| **W35A** | **Tecumseh** | **1.84** | **160** | | Pn | 13 36 05.8 | +0.3 |
| **WMOK** | **Wichita Mounta** | **2.34** | **204** | Pn | Pn | 13 36 12.2 | -0.2 |
| **KSU1** | **Kansas State U** | **2.35** | **20** | Pn | Pn | 13 36 12.6 | -0.1 |
| **X37A** | **Clayton** | **2.94** | **141** | Pn | Pn | 13 36 20.9 | +0.2 |
| **HHAR** | **Hobbs** | **3.04** | **100** | Pn | Pn | 13 36 21.9 | -0.1 |
| **S39A** | **Bolivar** | **3.54** | **76** | Pn | Pn | 13 36 29.1 | +0.2 |
| **AMTX** | **Amarillo** | **3.84** | **240** | IAmb_Lg | | 13 37 36.9 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.56** | **101** | IAmb_Lg | | 13 37 56.1 | |
| | comp=Z,13nm,1.1s | | | | | | |

*CNRM **14** 13:36:57.6,35°.32N×3°.70W,h24km,ml2.9*
*INMG **14** 13:36:58.4±0.6,35°.48N×3°.88W,h10km,ML2.3,Error*
*ellipse: s-maj=8.5km s-min=1.9km az=75.0*
*SFS **14** 13:36:59.1,35°.50N×4°.22W,h9km,ML3.0,ALBORAN W.*
**ISC 14 13:36:55.1±1.3,35°.45N±0°.03×3°.79W±0°.04,h15km±11km,**
**n13,σ1°80/23,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GOG** | **Mont Gurugu** | **0.69** | **109** | P | **Pg** | **13 37 08.8** | **+0.2** |
| GOG | | | | S | **Sg** | **13 37 17.3** | **-0.4** |
| **TAF** | **Taforalt** | **1.29** | **119** | P | **Pn** | **13 37 18.0** | **-0.8** |
| TAF | | | | S | **Sb** | **13 37 35.8** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.31** | **255** | P | **Pg** | **13 37 20.7** | **+0.3** |
| CHEFC | | | | S | **Sn** | **13 37 39.1** | **+2.9** |
| **CEU** | **Ceuta** | **1.36** | **290** | P | **Pn** | **13 37 18.1** | **-1.5** |
| CEU | | | | S | **Sb** | **13 37 32.8** | **-4.7** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **339** | P | **Pg** | **13 37 22.5** | **+0.3** |
| EMAL | | | | S | **Sb** | **13 37 37.7** | **-1.2** |
| **LCRM** | **LCR** | **1.96** | **207** | P | **Pg** | **13 37 32.3** | **-0.5** |
| LCRM | | | | S | **Sb** | **13 37 55.4** | **+0.3** |
| **IFR** | **Ifrane** | **2.22** | **210** | P | **Pn** | **13 37 32.9** | **+1.3** |
| IFR | | | | S | **Sn** | **13 37 59.4** | **+0.5** |
| **MD31** | **MD31** | **2.70** | **198** | P | **Pn** | **13 37 38.6** | **+0.5** |
| MD31 | | | | S | **Sn** | **13 38 08.9** | **-1.6** |
| **PVAQ** | **Vaqueiros** | **3.72** | **303** | *e*Sn | **Sn** | **13 38 35.3** | **-0.3** |
| PVAQ | | | | A | A | 13 38 40.8 | |
| | 5.7nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **305** | *e*Pn | **Pn** | **13 38 02.0** | **+2.2** |
| MESJ | | | | A | A | 13 38 54.5 | |
| | 4.8nm,1.0s | | | | | | |
| **PESTR** | **Estremoz** | **4.57** | **320** | *e*Sn | **Sn** | **13 38 56.4** | **-0.1** |
| PESTR | | | | A | A | 13 39 12.9 | |
| | 3.0nm,0.7s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64** | **306** | *e*Pn | **Pn** | **13 38 06.4** | **+1.8** |
| PNCL | | | | *e*Sn | **Sn** | **13 38 57.7** | **-0.5** |
| PNCL | | | | A | A | 13 39 00.1 | |
| | 5.6nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **5.06** | **317** | *e*Pn | **Pn** | **13 38 13.8** | **+3.4** |
| PMTG | | | | *e*Sn | **Sn** | **13 39 07.6** | **-0.9** |

*IDC **14** 13:52:33.3±1.1,15°.78S×176°.63W,h403km±25km,mb3.4/3,*
*mb1 3.6/6,mb1mx3.0/33,mbtmp4.3/6,Error ellipse:*
*s-maj=111.9km s-min=16.8km az=152.0*
**ISC 14 13:52:33.2±1.1,15°.9S±0°.5×176°.6W±0°.2,h400km,n6,**
**σ1°57/7,mb3.3/3,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.04** | **68** | P | **Pn** | **13 53 55.4** | **-0.4** |
| | 5.7nm,0.3s,baz=274,slow=19,SNR=14 | | | | | | |
| AFI | | | | S | **S** | **13 55 03.4** | **+0.6** |
| | 2.6nm,0.3s,baz=239,slow=21,SNR=1.5 | | | | | | |
| **MSVF** | **Nonsavu** | **5.47** | **249** | P | **Pn** | **13 54 02.3** | **+2.1** |
| | 11nm,0.3s,baz=320,slow=23,SNR=26 | | | | | | |
| **DZM** | **Mont Dzumac** | **17.19** | **246** | P | **P** | **13 56 07.3** | **-2.0** |
| | 0.1nm,0.3s,baz=53,slow=16,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.75** | **257** | P | **P** | **14 00 23.8** | **-0.9** |
| | 0.8nm,0.5s,baz=88,slow=9.2,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **47.05** | **252** | P | **P** | **14 00 27.0** | **0.0** |
| | 9.9nm,0.5s,baz=89,slow=7.5,SNR=243 | | | | | | |
| **ILAR** | **Eielson Array** | **83.53** | **12** | P | **P** | **14 04 17.1** | **+0.1** |
| | 0.3nm,0.6s,baz=228,slow=4.7,SNR=4.4 | | | | | | |

*SOME **14** 14:03:29.1,49°.30N×84°.43E,h5km*
*ASRS **14** 14:03:29.8±0.2,49°.N±1°×8°.5E±°,h10km,MLh3.4/10,Error*
*ellipse: s-maj=3.3km s-min=2.5km az=136.8,confirmed*
*NNC **14** 14:03:32.6±1.3,49°.38N×84°.58E,h0km,mb3.6,mpv3.4,*
*Error ellipse: s-maj=10.9km s-min=5.0km az=77.0*
**ISC 14 14:03:30.0±0.7,49°.51N±0°.03×84°.75E±0°.02,h10km,n31,**
**σ2°21/41,7C-3D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UKR** | **Ust'-Kan** | **1.43** | **1** | ⇓Pg | **Pb** | **14 03 56.7** | **-0.2** |
| UKR | | | | Sg | **Sb** | **14 04 16.0** | **+0.7** |
| **DGZ** | **Jazzator, Alta** | **1.76** | **83** | ⇑Pg | **Pb** | **14 04 02.3** | **-0.2** |
| DGZ | | | | Sg | **Sg** | **14 04 25.4** | **-1.2** |
| **CHBI** | **Chibit, Altay** | **1.96** | **65** | Pg | **Pg** | **14 04 06.5** | **-1.0** |
| CHBI | | | | Sg | **Sg** | **14 04 31.7** | **-1.2** |
| **AKAR** | **Aktash** | **2.03** | **65** | Pg | **Pb** | **14 04 06.8** | **-0.3** |
| AKAR | | | | Sg | **Sb** | **14 04 32.8** | **+0.4** |
| **ZSN** | **Zaisan** | **2.06** | **178** | *e*P | **Pb** | **14 04 05.7** | **-1.8** |
| | 39nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **14 04 33.4** | **+0.3** |
| | 125nm,0.6s | | | | | | |
| **ULGR** | **Ulagan, Altay** | **2.35** | **60** | Pg | **Pg** | **14 04 14.2** | **-0.9** |
| ULGR | | | | Sg | **Sg** | **14 04 44.6** | **-1.1** |
| **CUR** | **Chagan-Uzun** | **2.41** | **74** | Pg | **Pb** | **14 04 12.6** | **-1.0** |
| CUR | | | | Sg | **Sg** | **14 04 45.1** | **-2.3** |
| **ARTR** | **Artybash** | **2.81** | **34** | Pg | **Pb** | **14 04 21.6** | **+1.4** |
| ARTR | | | | Sg | **Sb** | **14 04 55.8** | **+1.2** |
| **SEM** | **Semipalatinsk** | **3.04** | **289** | *e*P | **Pb** | **14 04 23.3** | **-1.0** |
| | 2.0nm,0.1s | | | | | | |
| SEM | | | | *e*S | **Sb** | **14 05 03.4** | **+1.8** |
| | 10.0nm,0.1s | | | | | | |
| **MK31** | **Makanchi Array** | **3.17** | **212** | ⇑Pn | **Pn** | **14 04 21.5** | **+1.5** |
| | 2.2nm,0.5s,baz=32,slow=14,SNR=141 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **14 04 59.9** | **+2.0** |
| | 4.7nm,0.3s,baz=32,slow=25,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **3.17** | **212** | Pn | **Pn** | **14 04 21.6** | **+1.6** |
| MKAR | | | | Sg | **Sg** | **14 05 09.2** | **-2.7** |
| **MAKZ** | **Makanchi** | **3.27** | **216** | ⇓Pn | **Pn** | **14 04 22.6** | **+1.2** |
| | 2.1nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **14 05 02.0** | **+1.6** |
| | 21nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **3.27** | **216** | Pn | **Pn** | **14 04 23.0** | **+1.6** |
| MAKZ | | | | Sg | **Sb** | **14 05 09.0** | **+0.9** |
| **TASR** | **Tashtagol** | **3.81** | **30** | Pg | **Pb** | **14 04 39.2** | **+1.9** |
| TASR | | | | Sg | **Sb** | **14 05 26.9** | **+3.4** |
| **ELT** | **Eltsovka** | **3.88** | **13** | Pn | **Pn** | **14 04 30.7** | **+1.1** |
| ELT | | | | Sg | **Sg** | **14 05 32.4** | **-2.0** |
| **KURK** | **Kurchatov** | **4.12** | **289** | ⇑Pg | **Pg** | **14 04 47.2** | **-1.8** |
| | 1.9nm,0.5s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 14 05 40.6 | |
| | 18nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **4.12** | **289** | Sg | **Sg** | **14 05 39.6** | **-2.8** |
| **KURBB** | **Kurchatov Arra** | **4.16** | **288** | ⇑Pg | **Pg** | **14 04 48.1** | **-1.5** |
| | 2.1nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 14 05 40.8 | |
| | 18nm,0.5s | | | | | | |
| **LUZB** | **Luzhba, Kemero** | **4.90** | **30** | Sg | **Sg** | **14 06 01.1** | **-6.2** |
| **SALR** | **Pechorkino, Sa** | **4.95** | **6** | Sg | **Sg** | **14 06 08.4** | **-0.6** |
| **DJO** | **Djoy, Khakassi** | **5.23** | **49** | Sg | **Sg** | **14 06 14.3** | **-3.5** |
| **BSTK** | **Bystrovka, Nov** | **5.23** | **347** | Pg | **Pg** | **14 05 06.8** | **-3.3** |
| BSTK | | | | Sg | **Sg** | **14 06 16.5** | **-1.3** |
| **NVS** | **Novosibirsk** | **5.42** | **351** | Pg | **Pg** | **14 05 10.8** | **-3.0** |
| NVS | | | | Sg | **Sg** | **14 06 24.8** | **+0.8** |
| **KAPS** | **Kapalarasan** | **5.59** | **223** | *e*P | Pn | 14 04 58.0 | +4.8 |
| KAPS | | | | *e*S | **Sn** | **14 06 02.9** | **+5.5** |
| **KAPS** | **Kapalarasan** | **5.59** | **223** | Pg | Pg | 14 05 56.7 | +40 |
| | 6.7nm,0.5s | | | | | | |
| KAPS | | | | Lg | Lg | 14 06 25.5 | |
| | 5.7nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **6.19** | **215** | Pg | Pg | 14 06 08.3 | +40 |
| | 0.6nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 14 06 44.5 | |
| | 3.4nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **6.91** | **221** | Pg | Pg | 14 06 23.4 | +41 |
| BLB | | | | Lg | Lg | 14 07 10.5 | |
| **ARXS** | **Arharly** | **7.11** | **224** | Pg | Pg | 14 06 23.5 | +38 |
| ARXS | | | | Lg | Lg | 14 07 10.9 | |
| **PDGK** | **Podgornoye** | **7.17** | **212** | Pg | Pg | 14 06 26.8 | +40 |
| | 0.4nm,0.3s | | | | | | |
| PDGK | | | | Lg | Lg | 14 07 16.5 | |
| | 1.3nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **7.49** | **214** | Pg | Pg | 14 06 32.1 | +39 |
| | 3.6nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 14 07 25.1 | |
| | 2.6nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **7.54** | **219** | Pg | Pg | 14 06 33.5 | +39 |
| KURS | | | | Lg | Lg | 14 07 27.8 | |

*IDC **14** 14:12:32.5±2.0,0°.22S×124°.92E,h0km,mb3.1/3,*
*mb1 3.3/3,mb1mx3.2/40,mbtmp3.2/3,Error ellipse:*
*s-maj=212.1km s-min=27.9km az=63.0*
*DJA **14** 14:12:35.3±0.3,0°.S±3°×12°.5E±°,h10km,M3.5/6,MLv3.5/6*
**ISC 14 14:12:38.3±1.5,0°.1S±0°.2×125°.5E±0°.1,h50km,n8,**
**σ2°67/11,mb2.9/3,Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **1.69** | **293** | P | **Pn** | **14 13 02.7** | **-2.7** |
| KMSI | | | | S | **Sn** | **14 13 26.2** | **+0.3** |
| **SANI** | **Sanana** | **1.99** | **167** | P | **Pn** | **14 13 06.2** | **-3.3** |
| SANI | | | | Pg | **Pn** | **14 13 10.3** | **+0.8** |
| **GTOI** | **Gorontalo** | **2.62** | **286** | P | **Pn** | **14 13 19.1** | **+0.9** |
| GTOI | | | | S | **Sn** | **14 13 53.1** | **+4.2** |
| **MRSI** | **Marisa** | **3.63** | **279** | P | **Pn** | **14 13 29.7** | **-2.4** |
| **APSI** | **Ampana** | **3.96** | **258** | P | **Pn** | **14 13 33.8** | **-2.8** |
| **WRA** | **Warramunga Arr** | **21.52** | **157** | P | **P** | **14 17 23.9** | **+0.6** |
| | 0.4nm,0.8s,baz=333,slow=12,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **24.80** | **161** | P | **P** | **14 17 58.0** | **+2.2** |
| | 0.2nm,0.6s,baz=347,slow=8.9,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.05** | **327** | P | **P** | **14 22 39.6** | **-0.6** |
| | 0.3nm,0.6s,baz=121,slow=7.3,SNR=5.3 | | | | | | |

*IDC **14** 14:12:39.3±0.9,15°.48S×173°.17W,h0km,mb3.9/8,*
*mb1 4.2/9,mb1mx3.9/39,mbtmp3.9/9,ML4.9/1,MS3.7/17,*
*Ms1 3.7/17,ms1mx3.3/60,Error ellipse: s-maj=47.0km*
*s-min=17.3km az=139.0*
*NEIC **14** 14:12:42.4±1.3,15°.37S±0°.08×173°.2W±0°.1,h10km±1km,*
*mb4.5/62,Error ellipse: s-maj=22.3km s-min=11.6km*
*az=288.0*
**ISC 14 14:12:43.9±0.5,15°.44S±0°.08×173°.2W±0°.1,h29km,n95,**
**σ1°05/73,mb4.5/38,MS3.8/16,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **2.02** | **41** | Pn | **Pn** | **14 13 14.0** | **-2.1** |
| | 367nm,0.3s,baz=202,slow=2.9,SNR=1192 | | | | | | |
| AFI | | | | Sn | Sn | 14 13 33.9 | -6.6 |
| | 798nm,0.3s,baz=122,slow=18,SNR=20 | | | | | | |
| AFI | | | | LR | LR | 14 13 57.5 | |
| | comp=Z,659nm,21.4s,baz=154,slow=38 | | | | | | |
| **AFI** | **Afiamalu** | **2.02** | **41** | Pn | **Pn** | **14 13 14.1** | **-2.1** |
| **NIUE** | **Niue** | **4.75** | **140** | | **Pn** | **14 13 51.6** | **-2.0** |
| **MSVF** | **Nonsavu** | **8.74** | **254** | LR | LR | 14 17 54.5 | |
| | comp=Z,366nm,19.4s,baz=334,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.40** | **248** | *e*LR | LR | 14 22 17.2 | |
| | comp=Z,229nm,27.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.40** | **248** | P | **P** | **14 17 16.8** | **-2.0** |
| | 2.9nm,0.8s,baz=42,slow=23,SNR=3.8 | | | | | | |
| **PAE** | **Paea** | **22.70** | **99** | *e*T | T | 14 41 02.5 | |
| | 1.1nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **23.02** | **99** | *e*T | T | 14 41 23.5 | |
| | 1.9nm,0.4s | | | | | | |
| **URZ** | **Urewera** | **24.30** | **199** | P | **P** | **14 17 57.9** | **-1.0** |
| | 6.0nm,0.4s,baz=56,slow=5.2,SNR=7.7 | | | | | | |
| **URZ** | **Urewera** | **24.30** | **199** | IAmb | IAmb | 14 18 03.7 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **HIZ** | **Hauiti** | **25.30** | **202** | P | **P** | **14 18 08.0** | **0.0** |
| **HNR** | **Honiara** | **26.92** | **280** | LR | LR | 14 27 12.4 | |
| | comp=Z,87nm,18.3s,baz=58,slow=32 | | | | | | |
| **QRZ** | **Quartz Range** | **28.19** | **203** | P | **P** | **14 18 35.0** | **+1.1** |
| QRZ | | | | IAmb | IAmb | 14 18 43.4 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **NNZ** | **Nelson** | **28.21** | **202** | P | **P** | **14 18 35.2** | **+1.0** |
| **RPZ** | **Rata Peaks** | **31.23** | **202** | P | **P** | **14 19 01.4** | **+0.5** |
| RPZ | | | | IAmb | IAmb | 14 19 23.4 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **34.25** | **204** | P | **P** | **14 19 27.6** | **+0.3** |
| **UWB** | **Uwekahuna B** | **38.85** | **28** | P | **P** | **14 20 05.7** | **-1.2** |
| **H11S2** | **WAKE ISLAND Hy** | **39.12** | **329** | T | T | 15 00 59.0 | |
| | baz=146,slow=76,SNR=9.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.13** | **329** | T | T | 15 00 55.8 | |
| | baz=146,slow=76,SNR=7.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.14** | **329** | T | T | 15 01 00.4 | |
| | baz=146,slow=76,SNR=8.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.06** | **330** | T | T | 15 03 02.7 | |
| | baz=150,slow=76,SNR=5.7 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.07** | **330** | T | T | 15 03 03.0 | |
| | baz=150,slow=76,SNR=7.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.08** | **330** | T | T | 15 03 04.0 | |
| | baz=150,slow=76,SNR=7.3 | | | | | | |
| **BBOO** | **Buckleboo** | **49.00** | **240** | P | **P** | **14 21 27.5** | **-0.8** |
| **WB0** | **Warramunga Arr** | **50.03** | **257** | P | **P** | **14 21 36.1** | **-0.1** |
| **WB2** | **Warramunga Arr** | **50.05** | **257** | P | **P** | **14 21 36.5** | **0.0** |
| WB2 | | | | IAmb | IAmb | 14 21 37.0 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **50.06** | **257** | P | **P** | **14 21 36.4** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 14 21 39.4 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.07** | **257** | P | **P** | **14 21 35.9** | **-0.7** |
| | comp=Z,0.4nm,0.8s,baz=85,slow=6.6,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **50.33** | **252** | P | **P** | **14 21 37.8** | **-0.8** |
| | comp=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,6.8nm,1.4s | | | | | | |
| **PV13** | **Radium Mtn., P** | **80.42** | **46** | P | **P** | **14 24 54.1** | **+0.8** |
| PV13 | | | | IAmb | IAmb | 14 24 55.5 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.44** | **56** | P | **P** | **14 24 53.8** | **+0.4** |
| | comp=Z,1.4nm,1.0s,baz=227,slow=5.0,SNR=9.0 | | | | | | |
| TXAR | | | | LR | LR | 14 54 18.6 | |
| | comp=Z,46nm,19.1s,baz=200,slow=31 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.44** | **56** | P | **P** | **14 24 54.2** | **+0.8** |
| **ANMO** | **Albuquerque** | **80.64** | **50** | LR | LR | 14 51 38.9 | |
| | comp=Z,48nm,19.5s,baz=196,slow=29 | | | | | | |
| **J20K** | **Nowinta River** | **80.71** | **8** | P | **P** | **14 24 55.1** | **+1.2** |
| J20K | | | | IAmb | IAmb | 14 25 14.3 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **RND** | **Reindeer** | **80.83** | **11** | P | **P** | **14 24 55.0** | **+0.3** |
| RND | | | | IAmb | IAmb | 14 25 00.9 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **TNA** | **Tin City** | **80.85** | **2** | P | **P** | **14 24 54.5** | **-0.1** |
| TNA | | | | IAmb | IAmb | 14 25 19.7 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **81.62** | **47** | P | **P** | **14 25 00.8** | **+1.0** |
| S22A | | | | IAmb | IAmb | 14 25 02.4 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **MLY** | **Manley** | **82.02** | **9** | P | **P** | **14 25 02.0** | **+1.1** |
| **PDAR** | **Pinedale Array** | **82.14** | **42** | P | **P** | **14 25 02.6** | **+0.3** |
| | comp=Z,0.8nm,0.7s,baz=225,slow=4.4,SNR=6.9 | | | | | | |
| PDAR | | | | LR | LR | 14 53 17.6 | |
| | comp=Z,40nm,19.4s,baz=241,slow=30 | | | | | | |
| **BOZ** | **Bozeman (W)** | **82.27** | **39** | P | **P** | **14 25 02.8** | **-0.1** |
| BOZ | | | | IAmb | IAmb | 14 25 05.1 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **IL31** | | **82.44** | **11** | P | **P** | **14 25 03.7** | **+0.6** |
| **ILAR** | **Eielson Array** | **82.44** | **11** | P | **P** | **14 25 02.7** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=229,slow=6.4,SNR=15 | | | | | | |
| ILAR | | | | LR | LR | 14 53 32.7 | |
| | comp=Z,33nm,20.1s,baz=164,slow=30 | | | | | | |
| **ILAR** | **Eielson Array** | **82.44** | **11** | P | **P** | **14 25 03.1** | **0.0** |
| **J25K** | **Salcha River,** | **82.58** | **12** | P | **P** | **14 25 04.8** | **+0.9** |
| J25K | | | | IAmb | IAmb | 14 25 32.8 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **83.36** | **11** | P | **P** | **14 25 09.2** | **+1.1** |
| PRP | | | | IAmb | IAmb | 14 25 28.9 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **DAWY** | **Dawson** | **83.40** | **14** | P | **P** | **14 25 09.0** | **+0.8** |
| **BMAR** | **Burnt Mountain** | **85.25** | **11** | P | **P** | **14 25 19.1** | **+1.7** |
| **YKA** | **Yellowknife Ar** | **90.04** | **23** | P | **P** | **14 25 41.0** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=236,slow=4.3,SNR=7.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **93.81** | **39** | LR | LR | 15 01 45.9 | |
| | comp=Z,56nm,18.8s,baz=352,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **95.03** | **318** | LR | LR | 15 06 17.4 | |
| | comp=Z,22nm,19.8s,baz=198,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **146.22** | **352** | PKPbc | **PKPbc** | **14 32 21.8** | **+0.1** |
| | comp=Z,0.9nm,0.9s,baz=349,slow=2.0,SNR=4.6 | | | | | | |
| **GERES** | **GERESS Array B** | **146.22** | **352** | PKPdf | **PKPdf** | **14 32 21.3** | **+0.7** |
| **BRTR** | **Keskin Array B** | **146.34** | **321** | PKPbc | **PKPab** | **14 32 23.4** | **+0.2** |
| | comp=Z,1.5nm,1.0s,baz=346,slow=0.5,SNR=5.7 | | | | | | |

*NNC **14** 14:13:52.4±1.6,37.32N×71.79E,h147km±27km,mb2.9, mpv3.6,Error ellipse: s-maj=15.0km s-min=10.7km az=8.0*

**ISC 14 14:13:50.5±3.1,37.2N±0.2×71.8E±0.1,h150km,n13, σ1s01/16,4C-4D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.13** | **16** | P | **Pn** | **14 15 07.0** | **+1.0** |
| | SNR=17 | | | | | | |
| **UCH** | **Uchtor** | **5.43** | **21** | P | **Pn** | **14 15 10.7** | **+0.7** |
| | SNR=33 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.66** | **15** | P | **Pn** | **14 15 15.2** | **+2.5** |
| | SNR=5.1 | | | | | | |
| **AAK** | **Ala-Archa** | **5.81** | **20** | P | **Pn** | **14 15 15.7** | **+1.0** |
| | SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **5.81** | **20** | ⇓P | **Pn** | **14 15 15.6** | **+0.9** |
| | 6.9nm,0.7s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **14 16 20.4** | **-0.2** |
| | 17nm,0.6s | | | | | | |
| **KK02** | **Karatay Array** | **5.99** | **351** | ⇓P | **Pn** | **14 15 17.3** | **+0.3** |
| | 1.2nm,0.4s | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **14 16 23.9** | **-0.9** |
| | 14nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **6.21** | **20** | P | **Pn** | **14 15 20.9** | **+0.9** |
| | SNR=5.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **26** | P | **Pn** | **14 15 23.6** | **+0.9** |
| | SNR=6.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **26** | ⇓P | **Pn** | **14 15 22.8** | **+0.1** |
| | 2.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **14 16 35.0** | **0.0** |
| | 3.7nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **7.17** | **32** | P | **Pn** | **14 15 33.6** | **+0.7** |
| | 5.2nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **12.33** | **36** | P | **Pn** | **14 16 41.1** | **+0.1** |
| | 0.4nm,0.5s,baz=212,slow=11,SNR=4.3 | | | | | | |
| **KURK** | **Kurchatov** | **14.36** | **18** | ⇑P | **P** | **14 17 08.4** | **-1.0** |
| | 4.0nm,1.0s | | | | | | |
| **AB31** | **Akbulak array** | **14.83** | **328** | ⇑P | **Pn** | **14 17 12.5** | **-0.1** |
| | 0.3nm,0.5s,baz=146,slow=13,SNR=6.9 | | | | | | |

*IDC **14** 14:21:28.0±1.1,35.39N×3.60W,h0km,mb3.6/4,mb1 3.7/7, mb1mx3.3/59,mbtmp3.5/7,ML3.3/2,MS2.9/3,Ms1 3.0/3, ms1mx2.5/90,Error ellipse: s-maj=35.3km s-min=17.9km az=96.0*

*CNRM **14** 14:21:28.8,35.46N×3.73W,h17km,ml3.6*

*SFS **14** 14:21:29.0,35.45N×3.74W,ML3.2,ALBORAN SUR*

*MDD **14** 14:21:29.8±1.5,35.46N×3.75W,h0km,mbLg3.2/5,Error ellipse: s-maj=12.9km s-min=6.7km az=44.0*

*MDD EMS: II INTENSIDAD MAXIMA.*

*INMG **14** 14:21:31.0±1.3,35.50N×3.72W,h11km±7km,ML3.0,Error ellipse: s-maj=5.1km s-min=3.3km az=86.0*

**ISC 14 14:21:29.6±1.4,35.47N±0.03×3.76W±0.04,h13km±10km, n43,σ1s90/66,mb3.7/4,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOG** | **Mont Gurugu** | **0.67** | **112** | P | **Pg** | **14 21 41.3** | **-1.4** |
| GOG | | | | S | **Sg** | **14 21 50.8** | **-0.8** |
| **EMEL** | **Melilla** | **0.68** | **105** | Pg | **Pg** | **14 21 41.7** | **-1.1** |
| | 476nm,0.1s,SNR=7.9 | | | | | | |
| EMEL | | | | Lg | Lg | 14 21 51.5 | |
| | 2µm,0.1s,SNR=7.9 | | | | | | |
| **EALB** | **Alboran** | **0.75** | **52** | Pg | **Pg** | **14 21 43.8** | **-0.4** |
| | 272nm,0.3s,SNR=7.9 | | | | | | |
| EALB | | | | Lg | Lg | 14 21 53.7 | |
| | 579nm,0.2s,SNR=7.9 | | | | | | |
| **TAF** | **Taforalt** | **1.28** | **120** | P | **Pn** | **14 21 51.1** | **-2.2** |
| TAF | | | | S | **Sb** | **14 22 09.3** | **-0.8** |
| **CHEFC** | **Chefchaouen** | **1.34** | **255** | P | **Pn** | **14 21 53.7** | **-0.5** |
| **CEU** | **Ceuta** | **1.38** | **288** | P | **Pn** | **14 21 50.9** | **-3.6** |
| CEU | | | | S | **Sn** | **14 22 05.9** | **-6.7** |
| **EMAL** | **Malaga-Limoner** | **1.40** | **337** | P | **Pn** | **14 21 52.5** | **-2.3** |
| EMAL | | | | S | **Sn** | **14 22 09.9** | **-3.1** |
| **LCRM** | **LCR** | **2.00** | **207** | P | **Pn** | **14 22 04.7** | **+1.5** |
| LCRM | | | | S | **Sb** | **14 22 30.5** | **-0.3** |
| **IFR** | **Ifrane** | **2.25** | **210** | P | **Pn** | **14 22 06.4** | **-0.3** |
| IFR | | | | S | **Sn** | **14 22 34.5** | **0.0** |
| **MD31** | **MD31** | **2.73** | **198** | P | **Pn** | **14 22 13.4** | **+0.2** |
| **MDT** | **Midelt** | **2.74** | **195** | Pn | **Pn** | **14 22 13.4** | **0.0** |
| | 2.1nm,0.3s,baz=203,slow=5.4,SNR=9.2 | | | | | | |
| MDT | | | | Sn | **Sn** | **14 22 47.3** | **+0.8** |
| | 4.8nm,0.3s,baz=344,slow=21,SNR=4.3 | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | *e*Pn | **Pn** | **14 22 25.9** | **-0.9** |
| PVAQ | | | | *e*Sn | **Sn** | **14 23 08.5** | **-2.1** |
| PVAQ | | | | A | A | 14 23 18.8 | |
| | 33nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **4.06** | **303** | *e*Pn | **Pn** | **14 22 32.0** | **+0.6** |
| PCVE | | | | *e*Sn | **Sn** | **14 23 17.4** | **-1.5** |
| PCVE | | | | A | A | 14 23 26.4 | |
| | 24nm,0.7s | | | | | | |
| **PAB** | **San Pablo** | **4.09** | **354** | Pn | **Pn** | **14 22 32.3** | **+0.4** |
| | 5.1nm,0.3s,SNR=7.9 | | | | | | |
| PAB | | | | Sn | **Sn** | **14 23 18.2** | **-1.5** |
| | 6.0nm,0.4s,SNR=7.9 | | | | | | |
| PAB | | | | Lg | Lg | 14 23 35.7 | |
| | 39nm,0.6s,SNR=7.9 | | | | | | |
| **PBEJ** | **Beja** | **4.17** | **309** | *e*Pn | **Pn** | **14 22 33.2** | **+0.3** |
| PBEJ | | | | *e*Sn | **Sn** | **14 23 20.7** | **-0.7** |
| PBEJ | | | | A | A | 14 23 33.1 | |
| | 17nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.20** | **358** | Pn | **Pn** | **14 22 33.5** | **+0.2** |
| | 1.3nm,0.3s,baz=181,slow=12,SNR=34 | | | | | | |
| ESDC | | | | Pg | **Pb** | **14 22 46.6** | **+3.3** |
| | 1.5nm,0.3s,baz=178,slow=18,SNR=8.3 | | | | | | |
| ESDC | | | | Sn | **Sn** | **14 23 18.9** | **-3.4** |
| | 0.6nm,0.3s,baz=185,slow=12,SNR=1.4 | | | | | | |
| ESDC | | | | Lg | Lg | 14 23 36.8 | |
| | 1.1nm,0.3s,baz=180,slow=21,SNR=3.5 | | | | | | |
| ESDC | | | | LR | LR | 14 24 40.4 | |
| | comp=Z,166nm,18.0s,baz=348,slow=45 | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **305** | *e*Pn | **Pn** | **14 22 35.4** | **+0.8** |
| MESJ | | | | *e*Sn | **Sn** | **14 23 22.7** | **-1.8** |
| MESJ | | | | A | A | 14 23 29.4 | |
| | 17nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **319** | *e*Pn | **Pn** | **14 22 40.5** | **+2.2** |
| **EVO** | **Evora** | **4.57** | **313** | P | **Pn** | **14 22 39.2** | **+0.8** |
| EVO | | | | S | **Sn** | **14 23 27.1** | **-4.3** |
| **EVO** | **Evora** | **4.57** | **313** | *e*Pn | **Pn** | **14 22 39.6** | **+1.2** |
| EVO | | | | *e*Sn | **Sn** | **14 23 29.5** | **-1.9** |
| EVO | | | | A | A | 14 23 38.9 | |
| | 22nm,0.5s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.65** | **306** | *e*Pn | **Pn** | **14 22 39.1** | **-0.3** |
| PNCL | | | | *e*Sn | **Sn** | **14 23 30.6** | **-2.6** |
| PNCL | | | | A | A | 14 23 46.8 | |
| | 14nm,0.5s | | | | | | |
| **UCM** | **Universidad Co** | **4.84** | **5** | P | **Pn** | **14 22 43.3** | **+1.1** |
| UCM | | | | S | **Sn** | **14 23 37.9** | **-0.2** |
| **EPLA** | **Plasencia** | **4.94** | **339** | Pn | **Pn** | **14 22 45.0** | **+1.5** |
| | 2.7nm,0.2s,SNR=7.9 | | | | | | |
| EPLA | | | | Sn | **Sn** | **14 23 39.1** | **-1.3** |
| | 7.2nm,0.4s,SNR=7.9 | | | | | | |
| EPLA | | | | Lg | Lg | 14 23 58.2 | |
| | 20nm,0.7s,SNR=7.9 | | | | | | |
| **PMTG** | **Montargil** | **5.06** | **317** | *e*Pn | **Pn** | **14 22 45.5** | **+0.4** |
| PMTG | | | | *e*Sn | **Sn** | **14 23 41.8** | **-1.5** |
| PMTG | | | | A | A | 14 23 53.5 | |
| | 13nm,0.7s | | | | | | |
| **OUZM** | **OUZ** | **5.20** | **210** | P | **Pn** | **14 22 47.2** | **0.0** |
| **PCBR** | **Castelo Branco** | **5.26** | **327** | *e*Pn | **Pn** | **14 22 49.5** | **+1.6** |
| PCBR | | | | *e*Sn | **Sn** | **14 23 47.4** | **-1.0** |
| **OUK** | **Oukaimeden** | **5.47** | **220** | P | **Pn** | **14 22 49.0** | **-2.1** |
| **ETOR** | **Torete** | **5.50** | **14** | Pn | **Pn** | **14 22 52.2** | **+0.9** |
| | 2.5nm,0.3s,SNR=7.9 | | | | | | |
| ETOR | | | | Sn | **Sn** | **14 23 52.2** | **-2.2** |
| | 14nm,0.7s,SNR=7.9 | | | | | | |
| ETOR | | | | Lg | Lg | 14 24 25.4 | |
| | 24nm,0.7s,SNR=7.9 | | | | | | |
| **PSBE** | **So Bento** | **5.68** | **317** | *e*Pn | **Pn** | **14 22 55.3** | **+1.6** |
| **MTE** | **Manteigas** | **5.76** | **330** | *e*Pn | **Pn** | **14 22 56.6** | **+1.9** |
| MTE | | | | *e*Sn | **Sn** | **14 23 59.3** | **-1.4** |
| **PVIS** | **Viseu** | **6.17** | **329** | *e*Pn | **Pn** | **14 23 01.4** | **+1.0** |
| **MVO** | **Moncorvo** | **6.24** | **337** | *e*Pn | **Pn** | **14 23 03.4** | **+2.1** |
| **MVO** | **Moncorvo** | **6.24** | **337** | Pn | **Pn** | **14 23 02.8** | **+1.5** |
| | 17nm,0.3s,SNR=7.9 | | | | | | |
| MVO | | | | Sn | **Sn** | **14 24 09.5** | **-3.0** |
| | 21nm,0.4s,SNR=7.9 | | | | | | |
| **PVRL** | **Vila Real** | **6.57** | **333** | *e*Pn | **Pn** | **14 23 07.9** | **+1.9** |
| PVRL | | | | *e*Sn | **Sn** | **14 24 18.5** | **-2.3** |
| PVRL | | | | A | A | 14 24 28.1 | |
| | 19nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.69** | **333** | *e*Pn | **Pn** | **14 23 09.4** | **+1.8** |
| **PBRG** | **Braganca** | **6.74** | **341** | *e*Pn | **Pn** | **14 23 09.5** | **+1.3** |
| **GERES** | **GERESS Array B** | **18.54** | **39** | P | **P** | **14 25 45.9** | **0.0** |
| | baz=80,slow=41,SNR=1.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.77** | **166** | P | **P** | **14 26 30.4** | **-1.3** |
| | 0.6nm,0.8s,baz=348,slow=9.7,SNR=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **27.32** | **16** | LR | LR | 14 38 29.6 | |
| | comp=Z,19nm,18.8s,baz=10.0,slow=37 | | | | | | |
| **BORG** | **Borgarnes** | **31.16** | **346** | LR | LR | 14 39 26.3 | |
| | comp=Z,25nm,18.8s,baz=242,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.72** | **50** | P | **P** | **14 31 54.4** | **+0.2** |
| | 0.7nm,0.8s,baz=289,slow=3.7,SNR=7.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.86** | **332** | P | **P** | **14 32 29.3** | **+2.1** |
| | 1.1nm,0.9s,baz=59,slow=6.4,SNR=15 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.87** | **313** | P | **P** | **14 33 22.1** | **+0.5** |
| | 0.4nm,0.7s,baz=60,slow=8.8,SNR=3.9 | | | | | | |

*TUL **14** 14:24:53.1±1.3,36.49N±0.03×98.72W±0.04,h6km±7km, ML2.7,mb_Lg2.4/10(NEIC),Error ellipse: s-maj=5.0km s-min=3.5km az=100.0*

**NEIC 14 14:24:53.4±1.1,36.47N±0.02×98.69W±0.03,h5km±7km, Error ellipse: s-maj=4.3km s-min=3.1km az=118.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.27** | **251** | Pg | Pg | 14 24 58.3 | -0.3 |
| U32A | | | | Sg | Sg | 14 25 02.1 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.45** | **136** | Pn | Pn | 14 25 19.7 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **1.47** | **136** | Pn | Pn | 14 25 20.1 | -0.4 |
| **FNO** | **Franklin** | **1.60** | **139** | | Pn | 14 25 22.4 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | Pn | Pn | 14 25 23.5 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.81** | **75** | | Pn | 14 25 25.6 | +0.4 |
| T35A | | | | IAmb_Lg | | 14 25 53.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.95** | **360** | | Pn | 14 25 27.1 | -0.1 |
| **W35A** | **Tecumseh** | **1.97** | **131** | | Pn | 14 25 27.8 | +0.3 |
| **X34A** | **Smith Ranch, M** | **1.99** | **159** | IAmb_Lg | | 14 25 56.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **TUL1** | **Leonard** | **2.41** | **102** | Pn | Pn | 14 25 33.8 | +0.4 |
| **CBKS** | **Cedar Bluff** | **2.49** | **341** | Pn | Pn | 14 25 34.8 | +0.2 |
| **AMTX** | **Amarillo** | **2.90** | **238** | Pn | Pn | 14 25 39.8 | -0.6 |
| **KSU1** | **Kansas State U** | **3.10** | **31** | Pn | Pn | 14 25 43.6 | +0.5 |
| **X37A** | **Clayton** | **3.29** | **124** | Pn | Pn | 14 25 45.8 | +0.2 |
| **Z35A** | **Perchaven, San** | **3.34** | **159** | Pn | Pn | 14 25 46.4 | +0.1 |
| **U38A** | **Gravette** | **3.47** | **89** | Pn | Pn | 14 25 49.0 | +0.9 |
| **T25A** | **Trinidad** | **4.64** | **280** | IAmb_Lg | | 14 27 18.5 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.70** | **298** | IAmb_Lg | | 14 27 52.4 | |
| | comp=Z,4.6nm,0.8s | | | | | | |

**JMA 14 14:28:01.0±0.1,36.47N×140.53E,h58km±1km,M3.6, 4C-3D Broadband fault plane solution: P waves. NP1:**φs185.00000°,δ32.00000°,λ80.00000°. **NP2:** φs17.00000°,δ58.00000°,λ96.00000°. **Principal axes:** T Plg76.0000°, Azm305.0000°; N Plg5.0000°, Azm193.0000°; P Plg13.0000°, Azm102.0000°; **Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHYU** | **Hitachinakayam** | **0.14** | **160** | ⇑P | Pn | 14 28 10.0 | +0.1 |
| JHYU | | | | S | Sn | 14 28 16.5 | +0.2 |
| **JHO** | **Hitachi** | **0.14** | **13** | ⇑P | Pn | 14 28 09.9 | -0.1 |
| JHO | | | | S | Sn | 14 28 16.0 | -0.4 |
| **JYT** | **Yasato** | **0.36** | **228** | ⇑P | Pn | 14 28 11.6 | +0.2 |
| JYT | | | | S | Sn | 14 28 18.9 | 0.0 |
| **JAG** | **Ashikaga** | **0.87** | **267** | ⇓P | Pn | 14 28 17.4 | +0.1 |
| JAG | | | | S | Sn | 14 28 28.9 | -0.3 |
| **JFK** | **Kawauchi** | **0.94** | **17** | ⇑P | Pn | 14 28 17.5 | -0.7 |
| JFK | | | | S | Sn | 14 28 29.6 | -1.2 |
| **JFT** | **Otama** | **1.06** | **352** | ⇓P | Pn | 14 28 19.7 | 0.0 |
| JFT | | | | S | Sn | 14 28 33.3 | -0.3 |
| **JKT** | **Katashina** | **1.07** | **286** | P | Pn | 14 28 20.3 | +0.3 |
| JKT | | | | S | Sn | 14 28 34.5 | +0.4 |
| **JFY** | **Yanaizu** | **1.15** | **325** | ⇓P | Pn | 14 28 21.2 | +0.3 |
| JFY | | | | S | Sn | 14 28 36.2 | +0.5 |
| **MAT** | **Matsushiro** | **1.87** | **273** | P | Pn | 14 28 31.3 | +0.6 |
| MAT | | | | S | Sn | 14 28 56.8 | +3.5 |

*TUL **14** 14:30:09.2±0.9,36.47N±0.02×98.75W±0.02,h8km±6km, ML2.4,mb_Lg2.4/5(NEIC) Error ellipse: s-maj=3.0km s-min=2.0km az=174.0*

**NEIC 14 14:30:09.0±2.2,36.47N±0.03×98.73W±0.01,h15km±4km, Error ellipse: s-maj=4.1km s-min=1.5km az=166.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.23** | **248** | Pg | Pg | 14 30 13.5 | -0.7 |
| U32A | | | | Sg | Sg | 14 30 16.9 | -0.8 |
| **OKCFA** | **Oklahoma City** | **1.48** | **135** | Pn | Pb | 14 30 36.2 | 0.0 |
| **FNO** | **Franklin** | **1.62** | **138** | Pn | Pb | 14 30 38.5 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.73** | **181** | Pn | Pn | 14 30 39.4 | +0.8 |
| **T35A** | **Sooner Cattle** | **1.84** | **75** | | Pb | 14 30 42.0 | -0.4 |
| **R32A** | **Long Quarter,** | **1.95** | **0** | | Pb | 14 30 43.8 | -0.5 |
| **W35A** | **Tecumseh** | **2.00** | **130** | Pn | Pb | 14 30 43.8 | -1.4 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | Pb | 14 30 43.9 | -1.2 |
| **TUL1** | **Leonard** | **2.42** | **102** | Pn | Pn | 14 30 49.8 | +1.4 |
| **X37A** | **Clayton** | **3.32** | **123** | Pn | Pn | 14 31 01.7 | +1.3 |
| **T35A** | **Kenedy** | **7.63** | **174** | IAmb_Lg | | 14 34 10.6 | |
| | comp=Z,24nm,1.1s | | | | | | |

*IDC **14** 14:36:16.2±2.6,5.30S×150.46E,h199km±24km,mb3.7/7, mb1 3.8/9,mb1mx3.5/29,mbtmp4.2/9,Error ellipse: s-maj=22.4km s-min=18.0km az=118.0*

*NEIC **14** 14:36:16.2±1.2,5.23S±0.10×150.38E±0.09,h199km±8km, mb4.4/28,Error ellipse: s-maj=18.2km s-min=6.5km az=136.0*

**ISC 14 14:36:16.0±0.6,5.23S±0.08×150.41E±0.08,h200km,n77, σ0s99/78,mb4.3/18,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.03** | **59** | Pn | **Pn** | **14 36 55.0** | **+0.1** |
| **RABL** | **Rabaul** | **2.03** | **59** | P | **Pn** | **14 36 55.3** | **+0.4** |
| **PMG** | **Port Moresby** | **5.25** | **218** | P | **Pn** | **14 37 33.5** | **-0.1** |
| | 12nm,0.3s,baz=46,slow=5.0,SNR=40 | | | | | | |
| PMG | | | | S | **Sn** | **14 38 36.0** | **+1.0** |
| | 10nm,0.3s,baz=162,slow=22,SNR=4.8 | | | | | | |
| **PMG** | **Port Moresby** | **5.25** | **218** | | **Pn** | **14 37 33.3** | **-0.4** |
| **PMG** | **Port Moresby** | **5.25** | **218** | P | **Pn** | **14 37 33.9** | **+0.3** |
| **PMG** | **Port Moresby** | **5.25** | **218** | P | **Pn** | **14 37 33.8** | **+0.2** |
| **COEN** | **Coen** | **11.22** | **219** | Pn | **Pn** | **14 38 50.2** | **-0.8** |
| **COEN** | **Coen** | **11.22** | **219** | P | **Pn** | **14 38 52.7** | **+1.6** |
| **MTSU** | **Mount Surprise** | **14.14** | **204** | P | **P** | **14 39 32.0** | **+2.6** |
| | baz=14,SNR=7.2 | | | | | | |
| **MTSU** | **Mount Surprise** | **14.14** | **204** | P | **P** | **14 39 28.7** | **-0.7** |
| **CTA** | **Charters Tower** | **15.31** | **195** | P | **Pn** | **14 39 40.7** | **-1.3** |
| | 0.2nm,0.3s,baz=360,slow=12,SNR=3.4 | | | | | | |
| **CTA** | **Charters Tower** | **15.31** | **195** | P | **P** | **14 39 43.4** | **+1.0** |
| **CTAO** | **Charters Tower** | **15.31** | **195** | | **Pn** | **14 39 40.8** | **-1.3** |
| CTAO | | | | IAmb | IAmb | 14 39 50.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **15.31** | **195** | P | **P** | **14 39 43.4** | **+1.0** |
| **FAKI** | **Fak Fak** | **18.26** | **277** | P | **P** | **14 40 14.0** | **-0.8** |
| FAKI | | | | IAmb | IAmb | 14 40 35.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **18.50** | **214** | P | **P** | **14 40 18.5** | **+1.2** |
| | baz=19,SNR=8.9 | | | | | | |
| **QIS** | **Mount Isa** | **18.50** | **214** | P | **P** | **14 40 18.4** | **+1.0** |
| **KDU** | **Kakadu** | **19.19** | **246** | P | **P** | **14 40 25.5** | **+0.6** |
| | baz=19,SNR=49 | | | | | | |
| **KDU** | **Kakadu** | **19.19** | **246** | P | **P** | **14 40 25.3** | **+0.4** |
| **EIDS** | **Eidsvold** | **20.03** | **178** | P | **P** | **14 40 33.0** | **-0.8** |
| EIDS | | | | IAmb | IAmb | 14 40 56.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **20.47** | **247** | P | **P** | **14 40 39.6** | **+1.0** |
| | baz=20,SNR=13 | | | | | | |
| **MTN** | **Manton Dam** | **20.47** | **247** | P | **P** | **14 40 38.0** | **-0.6** |
| **MTN** | **Manton Dam** | **20.47** | **247** | P | **P** | **14 40 40.2** | **+1.6** |
| **DRS** | **Darwin Rock St** | **20.55** | **248** | P | **P** | **14 40 39.7** | **+0.3** |
| **RMQ** | **Roma** | **21.19** | **184** | P | **P** | **14 40 46.7** | **+0.6** |
| | baz=21,SNR=6.0 | | | | | | |
| **RMQ** | **Roma** | **21.19** | **184** | P | **P** | **14 40 47.3** | **+1.2** |
| **WB0** | **Warramunga Arr** | **21.26** | **226** | P | **P** | **14 40 46.4** | **-0.5** |
| **WR0** | **Warramunga Arr** | **21.28** | **225** | P | **P** | **14 40 46.5** | **-0.6** |
| **WRAB** | **Tennant Creek** | **21.39** | **226** | P | **P** | **14 40 47.6** | **-0.7** |
| **WRAB** | **Tennant Creek** | **21.39** | **226** | P | **P** | **14 40 48.2** | **-0.1** |
| **WB2** | **Warramunga Arr** | **21.40** | **226** | P | **P** | **14 40 47.7** | **-0.6** |
| **WRA** | **Warramunga Arr** | **21.41** | **226** | P | **P** | **14 40 47.6** | **-0.8** |
| | comp=Z,2.9nm,0.3s,baz=50,slow=10.0,SNR=55 | | | | | | |
| WRA | | | | S | **Sn** | **14 44 29.7** | **-3.6** |
| | comp=Z,3.1nm,1.0s,baz=49,slow=15,SNR=9.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.41** | **226** | P | **P** | **14 40 47.2** | **-1.2** |
| **QLP** | **Quilpie** | **22.03** | **195** | P | **P** | **14 40 55.3** | **+0.7** |
| | baz=22,SNR=6.8 | | | | | | |
| **QLP** | **Quilpie** | **22.03** | **195** | P | **P** | **14 40 55.3** | **+0.7** |
| **LIFNC** | **LIFOU** | **22.49** | **135** | P | **P** | **14 40 58.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **22.82** | **139** | P | **P** | **14 41 02.4** | **+0.4** |
| | comp=Z,6.7nm,0.6s,baz=288,slow=10,SNR=18 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.82** | **139** | P | **P** | **14 41 02.1** | **+0.1** |
| DZM | | | | IAmb | IAmb | 14 41 17.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.82** | **139** | P | **P** | **14 41 02.9** | **+0.9** |
| **KNRA** | **Kununurra** | **23.66** | **242** | P | **P** | **14 41 10.5** | **+1.0** |
| | baz=24,SNR=37 | | | | | | |
| **KNRA** | **Kununurra** | **23.66** | **242** | P | **P** | **14 41 10.0** | **+0.6** |
| **KNRA** | **Kununurra** | **23.66** | **242** | P | **P** | **14 41 10.7** | **+1.2** |
| **INKA** | **Innaminka** | **24.20** | **201** | P | **P** | **14 41 14.9** | **+0.6** |
| **AS31** | **Alice Springs** | **24.26** | **219** | P | **P** | **14 41 15.0** | **0.0** |
| AS31 | | | | IAmb | IAmb | 14 41 17.9 | |
| | comp=Z,4.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **24.27** | **219** | P | **P** | **14 41 15.6** | **+0.6** |
| | comp=Z,4.0nm,0.5s,baz=55,slow=8.7,SNR=41 | | | | | | |
| **ASAR** | **Alice Springs** | **24.27** | **219** | P | **P** | **14 41 15.1** | **0.0** |
| **ARMA** | **Armidale** | **25.08** | **178** | P | **P** | **14 41 22.2** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 14 41 42.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **25.08** | **178** | P | **P** | **14 41 22.8** | **+0.5** |
| **OOD** | **Oodnadatta** | **26.45** | **210** | P | **P** | **14 41 35.0** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **27.37** | **240** | P | **P** | **14 41 43.3** | **+0.4** |
| | comp=Z,2.0nm,0.3s,baz=53,slow=8.4,SNR=29 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.37** | **240** | P | **P**

*THE* ***14*** *14:51:30.9, 42˚.98N×17˚.23E, h31km±61km, ML3.9/4, Error ellipse: s-maj=61.8km s-min=3.5km az=0.0*
*MCSM* ***14*** *14:51:30.5±0.6, 43˚N±4˚×1˚7E±˚, h12km±3km, mb4.4/14, MLv4.5/17*
*MED_RC* ***14*** *14:51:30.0±0.7, 43˚.05N×17˚.42E, h25km±2km, MW4.1/8, Moment Tensor Solution.Mantle waves: s8,c10; Duration: 1!0 Moment tensor: Scale 10[15]Nm; Mr=1.55±.54; Mθθ=-1.99±.29; Mφφ0.44±.35; Mrθ=-0.94±.25; Mφθ=-0.23±.25; Mrφ0.36±.44; Best double couple: Mo2.06000×10[15] NP1:φs280.00000°, δ60.00000°, λ108.00000°. NP2: φs66.00000°, δ34.00000°, λ61.00000°. Principal axes: T 1.8900, Plg69.0000°, Azm228.0000°; N 0.3300, Plg16.0000°, Azm91.0000°; P -2.2300, Plg14.0000°, Azm357.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=30s.*
*BEO* ***14*** *14:51:30.2±0.4, 43˚.16N×17˚.47E, h0km, ML4.2/22*
*ROM* ***14*** *14:51:31.8, 43˚.00N×17˚.45E, h20km, mb4.5/11, Error ellipse: s-maj=1.6km s-min=0.1km az=58.0*

**ISC 14 14:51:28.8**±0.8, **43˚06N**±0˚.02×**17˚32E**±0˚.02, **h12**km±5km, **n541**,σ1§**79**/691, **mb4.3**/36, **MS3.3**/3, **48C-36D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | | |
| **MAKA** | **Makarska** | **0.32** | **316** | *e*Pg | | **Pg** | **14 51 35.4** | **+0.1** |
| MAKA | | | | Sg | | **Sg** | **14 51 40.2** | **+0.7** |
| **STON** | **Ston** | **0.34** | **124** | *e*Pg | | **Pg** | **14 51 35.4** | **-0.2** |
| STON | | | | *e*Sg | | **Sg** | **14 51 39.7** | **-0.4** |
| **STON** | **Ston** | **0.34** | **124** | ⇓*i*Pg | | **Pg** | **14 51 35.3** | **-0.3** |
| STON | | | | *e*Sg | | **Sg** | **14 51 40.3** | **+0.2** |
| **STON** | **Ston** | **0.34** | **124** | *e*Pg | | **Pg** | **14 51 35.0** | **-0.6** |
| STON | | | | Sg | | **Sg** | **14 51 39.2** | **-1.0** |
| **LSTV** | **Lastovo** | **0.43** | **227** | *e*Pg | | **Pg** | **14 51 37.4** | **+0.1** |
| LSTV | | | | Sg | | **Sb** | **14 51 45.1** | **+0.4** |
| **RICI** | **Ricice** | **0.45** | **343** | *e*Pg | | **Pg** | **14 51 37.1** | **-0.6** |
| RICI | | | | Sg | | **Sg** | **14 51 43.5** | **-0.3** |
| **HVAR** | **Hvar** | **0.65** | **281** | *e*Pg | | **Pg** | **14 51 41.6** | **+0.2** |
| HVAR | | | | Sg | | **Sb** | **14 51 50.6** | **+0.4** |
| **TREB** | **Trebinje** | **0.83** | **114** | *e*Pg | | **Pg** | **14 51 43.8** | **-1.1** |
| TREB | | | | *e*Sg | | **Sg** | **14 51 54.8** | **-1.0** |
| **TREB** | **Trebinje** | **0.83** | **114** | ⇑*i*Pg | | **Pg** | **14 51 43.2** | **-1.7** |
| TREB | | | | *e*Sg | | **Sg** | **14 51 56.0** | **+0.2** |
| **BRY** | **Bratogost** | **0.91** | **100** | ⇑*i*Pg | | **Pg** | **14 51 44.7** | **-1.7** |
| BRY | | | | *e*Sg | | **Sg** | **14 51 58.3** | **0.0** |
| **HCY** | **Herceg Novi** | **1.06** | **125** | P | | **Pb** | **14 51 48.2** | **-0.9** |
| **HCY** | **Herceg Novi** | **1.06** | **125** | *e*Pg | | **Pb** | **14 51 47.6** | **-1.5** |
| HCY | | | | *e*Sg | | **Sg** | **14 52 03.4** | **+0.4** |
| **HCY** | **Herceg Novi** | **1.06** | **125** | *e*Pg | | **Pb** | **14 51 47.5** | **-1.5** |
| HCY | | | | *i* Sg | | **Sg** | **14 52 03.2** | **+0.2** |
| **KIJV** | **Kijevo** | **1.15** | **325** | *e*Pg | | **Pb** | **14 51 49.5** | **-1.2** |
| KIJV | | | | Sg | | **Sn** | **14 52 06.5** | **0.0** |
| **UPM** | **Unac-Piva** | **1.17** | **83** | *e*Pg | | **Pb** | **14 51 49.0** | **-2.1** |
| UPM | | | | *e*Sg | | **Sb** | **14 52 04.9** | **-1.3** |
| **UPM** | **Unac-Piva** | **1.17** | **83** | *e*Pg | | **Pb** | **14 51 49.3** | **-1.8** |
| UPM | | | | *e*Sg | | **Sn** | **14 52 07.3** | **+0.2** |
| **NKME** | **Niksic** | **1.23** | **103** | *e*Pg | | **Pn** | **14 51 50.8** | **-1.1** |
| NKME | | | | *e*Sg | | **Sg** | **14 52 09.4** | **+0.8** |
| **NKY** | **Niksic** | **1.25** | **101** | P | | **Pg** | **14 51 53.4** | **+0.5** |
| **NKY** | **Niksic** | **1.25** | **101** | *e*Pg | | **Pn** | **14 51 51.3** | **-0.9** |
| NKY | | | | *e*Sg | | **Sg** | **14 52 09.8** | **+0.6** |
| **CEME** | **Cevo** | **1.28** | **113** | *e*Pg | | **Pn** | **14 51 51.3** | **-1.3** |
| CEME | | | | *e*Sg | | **Sg** | **14 52 10.7** | **+0.5** |
| **ZIRJ** | **Zirje** | **1.36** | **296** | *e*Pg | | **Pb** | **14 51 54.0** | **-0.1** |
| ZIRJ | | | | Sg | | **Sg** | **14 52 12.8** | **+0.3** |
| **MGRS** | **Mrkonjic Grad** | **1.36** | **353** | ⇑*i*Pg | | **Pn** | **14 51 53.3** | **-0.4** |
| MGRS | | | | *e*Sg | | **Sn** | **14 52 11.1** | **-0.7** |
| **BUM** | **Brajici-Budva** | **1.39** | **123** | *e*Pg | | **Pn** | **14 51 53.5** | **-0.5** |
| BUM | | | | *e*Sg | | **Sg** | **14 52 14.3** | **+0.8** |
| **MORI** | **Morici** | **1.42** | **305** | *e*Pg | | **Pn** | **14 51 54.9** | **+0.4** |
| MORI | | | | Sg | | **Sg** | **14 52 15.5** | **+0.9** |
| **PLE** | **Pljevlja** | **1.54** | **79** | P | | **Pb** | **14 51 57.3** | **0.0** |
| **PLE** | **Pljevlja** | **1.54** | **79** | ⇓*i*Pg | | **Pn** | **14 51 56.5** | **+0.3** |
| PLE | | | | *i* Sg | | **Sg** | **14 52 18.3** | **0.0** |
| **PDG** | **Podgorica** | **1.56** | **113** | ⇑P | | **Pg** | **14 51 58.5** | **-0.3** |
| PDG | | | | ⇑S | | **Sg** | **14 52 18.7** | **-0.2** |
| **PDG** | **Podgorica** | **1.56** | **113** | *e*Pn | | **Pb** | **14 51 57.8** | **+0.2** |
| PDG | | | | *e*Sg | | **Sg** | **14 52 19.0** | **0.0** |
| **PDG** | **Podgorica** | **1.56** | **113** | Pn | | **Pn** | **14 51 56.7** | **+0.4** |
| **PDG** | **Podgorica** | **1.56** | **113** | *e*Pn | | **Pn** | **14 51 56.5** | **+0.2** |
| PDG | | | | *e*Sn | | **Sb** | **14 52 17.5** | **+0.3** |
| **PDG** | **Podgorica** | **1.56** | **113** | ⇑P | | **Pn** | **14 51 56.2** | **-0.1** |
| **TTG** | **Podgorica** | **1.56** | **113** | *e*Pg | | **Pn** | **14 51 56.6** | **+0.2** |
| TTG | | | | *i* Sg | | **Sg** | **14 52 18.5** | **-0.5** |
| **RUDO** | **Rudo** | **1.60** | **69** | *e*Pn | | **Pn** | **14 51 55.8** | **-1.1** |
| RUDO | | | | *e*Sn | | **Sn** | **14 52 17.3** | **-0.1** |
| **KOME** | **Kolasin** | **1.62** | **97** | *e*Pg | | **Pb** | **14 51 58.2** | **-0.6** |
| KOME | | | | *i* Sg | | **Sb** | **14 52 20.2** | **+0.9** |
| **BLY** | **Banja Luka** | **1.69** | **357** | *e*Pn | | **Pb** | **14 52 00.0** | **+0.2** |
| BLY | | | | *e*Sn | | **Sg** | **14 52 23.1** | **0.0** |
| **BLY** | **Banja Luka** | **1.69** | **357** | *e*Pn | | **Pn** | **14 51 58.5** | **+0.4** |
| BLY | | | | Sn | | **Sn** | **14 52 20.2** | **+0.5** |
| **BLY** | **Banja Luka** | **1.69** | **357** | ⇑P | | **Pb** | **14 51 59.5** | **-0.3** |
| **BBLS** | **Lazići** | **1.72** | **61** | *e*Pn | | **Pb** | **14 51 59.7** | **-0.6** |
| BBLS | | | | *e*Sn | | **Sb** | **14 52 21.4** | **-0.5** |
| **BBLS** | **Lazići** | **1.72** | **61** | *e*Pn | | **Pn** | **14 51 59.1** | **+0.5** |
| BBLS | | | | *e*Sn | | **Sn** | **14 52 20.4** | **-0.1** |
| **DOB** | **Doboj** | **1.76** | **18** | *e*Pn | | **Pn** | **14 51 59.3** | **+0.2** |
| DOB | | | | *e*Sn | | **Sn** | **14 52 21.3** | **-0.2** |
| **ULC** | **Ulcinj** | **1.80** | **127** | P | | **Pb** | **14 52 01.5** | **-0.2** |
| **ULC** | **Ulcinj** | **1.80** | **127** | *e*Pn | | **Pn** | **14 52 00.1** | **+0.5** |
| ULC | | | | *i* Sn | | **Sb** | **14 52 24.4** | **+0.3** |
| **DUGI** | **Dugi Otok** | **1.89** | **300** | *e*Pn | | **Pb** | **14 52 02.9** | **-0.3** |
| DUGI | | | | Sn | | **Sb** | **14 52 27.0** | **+0.2** |
| **IVA** | **Berane** | **1.90** | **95** | *e*Pn | | **Pn** | **14 52 01.4** | **+0.3** |
| IVA | | | | *i* Sn | | **Sb** | **14 52 26.9** | **-0.2** |
| **SJES** | **Sjenica** | **1.95** | **83** | *e*Pn | | **Pb** | **14 52 03.5** | **-0.9** |
| SJES | | | | *e*Sn | | **Sb** | **14 52 27.9** | **-0.8** |
| **PRIJ** | **Prijedor** | **1.96** | **347** | *e*Pn | | **Pn** | **14 52 02.6** | **+0.7** |
| PRIJ | | | | *e*Sn | | **Sn** | **14 52 26.6** | **+0.2** |
| **MRAK** | **Mrakovica** | **1.97** | **351** | *e*Pn | | **Pn** | **14 52 02.3** | **+0.2** |
| MRAK | | | | *e*Sn | | **Sn** | **14 52 27.3** | **+0.5** |
| **PVY** | **Plav** | **2.00** | **103** | ⇑*i*Pn | | **Pn** | **14 52 02.8** | **+0.3** |
| PVY | | | | *i* Sn | | **Sb** | **14 52 29.3** | **-0.7** |
| **IVAS** | **Ivanjica** | **2.13** | **75** | *e*Pn | | **Pn** | **14 52 05.4** | **+1.1** |
| **MRVN** | **Minervino Murg** | **2.17** | **203** | ⇑P | | **Pn** | **14 52 04.6** | **-0.1** |
| **PLIT** | **Plitvice** | **2.19** | **327** | *e*Pn | | **Pb** | **14 52 07.3** | **-1.0** |
| PLIT | | | | Sn | | **Sb** | **14 52 35.3** | **-0.2** |
| **A251A** | **Rujevac** | **2.20** | **340** | *e*Pn | | **Pb** | **14 52 07.2** | **-1.3** |
| A251A | | | | Sn | | **Sb** | **14 52 35.0** | **-0.8** |
| **DIVS** | **Divibare** | **2.20** | **61** | *e*Pn | | **Pn** | **14 52 06.2** | **+0.9** |
| DIVS | | | | *e*Sn | | **Sn** | **14 52 32.8** | **+0.4** |
| **DIVS** | **Divibare** | **2.20** | **61** | | | **Pn** | **14 52 05.8** | **+0.5** |
| **DIVS** | **Divibare** | **2.20** | **61** | *e*Pn | | **Pn** | **14 52 05.7** | **+0.5** |
| DIVS | | | | *e*Sn | | **Sn** | **14 52 31.9** | **-0.5** |
| **DIVS** | **Divibare** | **2.20** | **61** | ⇓P | | **Pn** | **14 52 06.2** | **+0.9** |
| **DIVS** | **Divibare** | **2.20** | **61** | Pn | | **Pn** | **14 52 06.2** | **+0.9** |
| **BLJ** | **Bijeljina** | **2.22** | **39** | *e*Pn | | **Pn** | **14 52 04.5** | **-0.9** |
| BLJ | | | | *e*Sn | | **Sn** | **14 52 31.2** | **-1.6** |
| **NVLJ** | **Novalja** | **2.32** | **311** | *e*Pn | | **Pn** | **14 52 08.4** | **+1.6** |
| NVLJ | | | | Sn | | **Sb** | **14 52 38.6** | **-0.6** |
| **A252A** | **Venje** | **2.40** | **9** | *e*Pn | | **Pn** | **14 52 08.7** | **+0.8** |
| **MATE** | **Matera** | **2.45** | **191** | ⇓P | | **Pb** | **14 52 10.9** | **-1.9** |
| **MATE** | **Matera** | **2.45** | **191** | ⇑P | | **Pn** | **14 52 08.4** | **-0.2** |
| **RABC** | **Rab** | **2.49** | **313** | *e*Pn | | **Pn** | **14 52 10.6** | **+1.5** |
| RABC | | | | Sn | | **Sb** | **14 52 43.2** | **-0.9** |
| **TRUS** | **Trudelj** | **2.52** | **62** | *e*Pn | | **Pn** | **14 52 10.4** | **+0.8** |
| TRUS | | | | *e*Sn | | **Sn** | **14 52 40.6** | **+0.3** |
| **MOSL** | **Moslavina** | **2.58** | **351** | *e*Pn | | **Pn** | **14 52 11.4** | **+1.0** |
| **GRUS** | **Gruza** | **2.61** | **70** | *e*Pn | | **Pn** | **14 52 11.8** | **+1.1** |
| GRUS | | | | *e*Sn | | **Sn** | **14 52 42.1** | **-0.2** |
| **A250A** | **Rusevo Krmpots** | **2.67** | **320** | *e*Pn | | **Pn** | **14 52 13.9** | **+2.3** |
| A250A | | | | Sn | | **Sb** | **14 52 47.5** | **-1.8** |
| **FRGS** | **Fruska Gora** | **2.76** | **40** | ⇓P | | **Pn** | **14 52 12.2** | **-0.6** |
| FRGS | | | | ⇑S | | **Sn** | **14 52 47.3** | **+1.2** |
| **FRGS** | **Fruska Gora** | **2.76** | **40** | *e*Pn | | **Sn** | **14 52 12.1** | **-0.8** |
| FRGS | | | | *e*Sn | | **Sn** | **14 52 45.0** | **-1.1** |
| **FRGS** | **Fruska Gora** | **2.76** | **40** | *e*Pn | | **Pn** | **14 52 12.0** | **-0.8** |
| FRGS | | | | *e*Sn | | **Sn** | **14 52 44.8** | **-1.3** |
| **SELS** | **Selova** | **2.79** | **85** | *e*Pn | | **Pn** | **14 52 14.3** | **+1.1** |
| SELS | | | | *e*Sn | | **Sn** | **14 52 48.1** | **+1.3** |
| **BOJS** | **Bojanci** | **2.86** | **329** | *i* Pn | | **Sn** | **14 52 16.7** | **+2.5** |
| BOJS | | | | *e*Sn | | **Sn** | **14 52 51.3** | **+2.8** |
| BOJS | | | | IAML | | | 14 53 09.3 | |
| | comp=Z,482nm,0.6s | | | | | | | |
| **BEO** | **Beograd** | **2.87** | **51** | P | | **Pn** | **14 52 13.2** | **-1.1** |
| **OZLJ** | **Ozalj** | **2.88** | **333** | *e*Pn | | **Pn** | **14 52 16.3** | **+1.8** |
| **PAOL** | **Paolisi** | **2.88** | **226** | | | **Pn** | **14 52 16.4** | **+1.7** |
| **ZAG** | **Zagreb** | **2.92** | **341** | *e*P | | **Pn** | **14 52 17.0** | **+1.9** |
| **ZAG** | **Zagreb** | **2.92** | **341** | *e*Pn | | **Pn** | **14 52 16.1** | **+1.0** |
| ZAG | | | | *e*Sn | | **Sn** | **14 52 50.1** | **-0.1** |
| **ZAG** | **Zagreb** | **2.92** | **341** | *e*Pn | | **Pn** | **14 52 17.2** | **+2.1** |
| **AQU** | **L'Aquila** | **2.97** | **258** | P | | **Pb** | **14 52 18.7** | **-3.0** |
| **AQU** | **L'Aquila** | **2.97** | **258** | | | **Pb** | **14 52 18.7** | **-3.0** |
| **AQU** | **L'Aquila** | **2.97** | **258** | *e*Pn | | **Pn** | **14 52 17.6** | **+1.8** |
| AQU | | | | *e*Sn | | **Sn** | **14 52 53.9** | **+2.5** |
| **PTJ** | **Puntijarka** | **3.00** | **342** | P | | **Pn** | **14 52 18.1** | **+1.8** |
| **PTJ** | **Puntijarka** | **3.00** | **342** | *e*Pn | | **Pn** | **14 52 17.6** | **+1.3** |
| PTJ | | | | Sn | | **Sn** | **14 52 53.8** | **+1.5** |
| **SMRN** | **Sveta Marina** | **3.02** | **312** | *e*Pn | | **Pn** | **14 52 18.0** | **+1.6** |
| **RIV** | **Rijeka** | **3.05** | **319** | *e*Pn | | **Pn** | **14 52 17.6** | **+0.8** |
| RIV | | | | *e*Sn | | **Sn** | **14 52 53.5** | **+0.3** |
| **RIV** | **Rijeka** | **3.05** | **319** | *e*Pn | | **Pn** | **14 52 18.5** | **+1.7** |
| **CRES** | **Cresnjev** | **3.07** | **335** | *e*Pn | | **Pn** | **14 52 17.7** | **+0.6** |
| CRES | | | | *e*Sn | | **Sn** | **14 52 53.9** | **+0.2** |
| **SVIS** | **Svilajnac** | **3.07** | **66** | *e*Pn | | **Sn** | **14 52 18.4** | **+1.3** |
| SVIS | | | | *e*Sn | | **Sn** | **14 52 53.1** | **-0.7** |
| **KOVH** | **Kovagotottos** | **3.08** | **10** | PN | | **Pn** | **14 52 17.8** | **+0.6** |
| KOVH | | | | SN | | **Sn** | **14 52 51.7** | **-2.3** |
| **NRCA** | **Norcia** | **3.10** | **267** | | | **Pn** | **14 52 19.3** | **+1.7** |
| **KALN** | **Kalnik** | **3.13** | **349** | *e*Pn | | **Pn** | **14 52 19.4** | **+1.4** |
| **BRJN** | **Brijuni** | **3.17** | **307** | *e*Pn | | **Pn** | **14 52 20.0** | **+1.5** |
| **LOBO** | **Lobor** | **3.22** | **344** | *e*Pn | | **Pn** | **14 52 20.8** | **+1.6** |
| **SKO** | **Skopje** | **3.23** | **108** | *i* Pn | | **Pn** | **14 52 21.4** | **+2.0** |
| **OHR** | **Ohrid** | **3.24** | **126** | *i* Pn | | **Pn** | **14 52 21.4** | **+1.9** |
| **BOVS** | **Bovan** | **3.25** | **78** | ⇑P | | **Pn** | **14 52 20.4** | **+0.8** |
| BOVS | | | | ⇑S | | **Sn** | **14 52 58.9** | **+0.8** |
| **BOVS** | **Bovan** | **3.25** | **78** | *e*Pn | | **Pn** | **14 52 20.1** | **+0.5** |
| BOVS | | | | *e*Sn | | **Sn** | **14 52 57.2** | **-1.0** |
| **MORH** | **Mrgy, Hungar** | **3.29** | **16** | ⇓P | | **Pn** | **14 52 20.9** | **+0.7** |
| **MORH** | **Mrgy, Hungar** | **3.29** | **16** | *e*Pn | | **Pn** | **14 52 20.7** | **+0.6** |
| MORH | | | | *e*Sn | | **Sn** | **14 52 58.6** | **-0.6** |
| **MORH** | **Mrgy, Hungar** | **3.29** | **16** | PN | | **Pn** | **14 52 20.4** | **+0.3** |
| **BARS** | **Barje** | **3.31** | **93** | *e*Pn | | **Pn** | **14 52 22.1** | **+1.7** |
| **BARS** | **Barje** | **3.31** | **93** | *e*Pn | | **Pn** | **14 52 23.6** | **+3.2** |
| BARS | | | | *e*Sn | | **Sn** | **14 53 00.2** | **+0.5** |
| BARS | | | | *e*Sn | | **Sb** | **14 53 03.7** | **-4.0** |
| **CEY** | **Cerknica** | **3.38** | **323** | *e*Pn | | **Pn** | **14 52 21.7** | **+0.2** |
| CEY | | | | *e*Sn | | **Sn** | **14 53 01.6** | **0.0** |
| **BEHE** | **Becsehely** | **3.43** | **354** | *e*Pn | | **Pn** | **14 52 22.1** | **0.0** |
| BEHE | | | | *e*Sn | | **Sn** | **14 53 02.0** | **-0.6** |
| **BEHE** | **Becsehely** | **3.43** | **354** | PN | | **Pn** | **14 52 23.9** | **+1.8** |
| BEHE | | | | SN | | **Sn** | **14 53 03.5** | **+0.9** |
| **KUBS** | **Kucevo** | **3.43** | **65** | *e*Pn | | **Pn** | **14 52 21.7** | **-0.4** |
| KUBS | | | | *e*Sn | | **Sn** | **14 53 00.9** | **-1.8** |
| **SKDS** | **Skadanscina** | **3.44** | **317** | *e*Pn | | **Pn** | **14 52 23.1** | **+0.9** |
| SKDS | | | | *e*Sn | | **Sn** | **14 53 02.6** | **-0.2** |
| **KOGS** | **Kog** | **3.47** | **348** | *i* Pn | | **Pn** | **14 52 24.4** | **+1.8** |
| KOGS | | | | *e*Sn | | **Sn** | **14 53 04.3** | **+0.6** |
| **MURB** | **Monte Urbino** | **3.51** | **275** | | | **Pn** | **14 52 25.8** | **+2.5** |
| **PRVS** | **Prvonek** | **3.54** | **97** | *e*Pn | | **Pn** | **14 52 25.0** | **+1.3** |
| PRVS | | | | *e*Sn | | **Sn** | **14 53 06.5** | **+1.0** |
| **KBN** | **Korca** | **3.56** | **132** | P | | **Pn** | **14 52 25.2** | **+1.3** |
| **KBN** | **Korca** | **3.56** | **132** | | | **Pn** | **14 52 25.2** | **+1.3** |
| **LJU** | **Ljubljana** | **3.59** | **327** | *e*Pn | | **Pn** | **14 52 24.9** | **+0.7** |
| LJU | | | | *e*Sn | | **Sn** | **14 53 06.1** | **-0.4** |
| **MDVR** | **Moldovita** | **3.61** | **60** | ⇓P | | **Pn** | **14 52 25.3** | **+0.7** |
| **ZAGS** | **Zajecar** | **3.66** | **76** | *e*Pn | | **Pn** | **14 52 26.2** | **+1.0** |
| ZAGS | | | | *e*Sn | | **Sn** | **14 53 07.1** | **-1.1** |
| **TRI** | **Trieste** | **3.67** | **317** | P | | **Pn** | **14 52 27.0** | **+1.6** |
| **TRI** | **Trieste** | **3.67** | **317** | Pn | | **Pn** | **14 52 27.0** | **+1.6** |
| **TRI** | **Trieste** | **3.67** | **317** | ⇑P | | **Pb** | **14 52 30.0** | **-3.6** |
| **FNA** | **Florina** | **3.79** | **126** | P | | **Pn** | **14 52 28.7** | **+1.7** |
| FNA | | | | S | | **Sn** | **14 53 12.5** | **+1.0** |
| | comp=Z,725nm,0.3s | | | | | | | |
| **FNA** | **Florina** | **3.79** | **126** | P | | **Pn** | **14 52 27.7** | **+0.7** |
| **FNA** | **Florina** | **3.79** | **126** | | | **Pn** | **14 52 27.7** | **+0.7** |
| **FNA** | **Florina** | **3.79** | **126** | ⇑P | | **Pn** | **14 52 27.8** | **+0.8** |
| **KEK** | **Kerkira** | **3.83** | **150** | P | | **Pn** | **14 52 28.4** | **+0.9** |
| **KEK** | **Kerkira** | **3.83** | **150** | ⇓P | | **Pn** | **14 52 28.4** | **+0.9** |
| **BOSS** | **Bosilegrad** | **3.84** | **97** | *e*Pn | | **Pn** | **14 52 30.2** | **+2.5** |
| BOSS | | | | *e*Sn | | **Sn** | **14 53 12.8** | **0.0** |
| **VOJS** | **Vojsko** | **3.85** | **322** | *i* Pn | | **Pn** | **14 52 29.8** | **+1.8** |
| **STIP** | **Stip** | **3.85** | **109** | *i* Pn | | **Pn** | **14 52 31.1** | **+3.1** |
| **TIH** | **Tihany** | **3.86** | **6** | PN | | **Pn** | **14 52 28.0** | **+0.1** |
| **ZAPS** | **Zavoj** | **3.89** | **85** | *e*Pn | | **Pn** | **14 52 30.0** | **+1.5** |
| ZAPS | | | | *e*Sn | | **Sn** | **14 53 12.8** | **-1.3** |
| **PERS** | **Pernice** | **3.90** | **337** | *i* Pn | | **Pn** | **14 52 30.7** | **+2.1** |
| PERS | | | | *e*Sn | | **Sn** | **14 53 16.0** | **+1.6** |
| **TIP** | **Timpagrande** | **3.90** | **186** | ⇓P | | **Pn** | **14 52 31.7** | **+3.1** |
| **TIP** | **Timpagrande** | **3.90** | **186** | Pn | | **Pn** | **14 52 29.3** | **+0.7** |
| **TIP** | **Timpagrande** | **3.90** | **186** | ⇓P | | **Pn** | **14 52 29.3** | **+0.7** |
| **BLKB** | **Belogradchik** | **3.95** | **80** | ⇑S | | **Sn** | **14 53 16.8** | **+1.4** |
| **SOKA** | **Soboth** | **3.96** | **337** | *i* Pn | | **Pn** | **14 52 31.6** | **+2.1** |
| | comp=Z,26nm,0.3s,SNR=20 | | | | | | | |
| SOKA | | | | *e*Sn | | **Sn** | **14 53 17.7** | **+1.7** |
| | comp=Z,44nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **3.96** | **337** | | | **Pn** | **14 52 31.6** | **+2.1** |
| SOKA | | | | | | **Sn** | **14 53 17.7** | **+1.7** |
| **OBKA** | **Obir** | **3.97** | **331** | *e*Pn | | **Pn** | **14 52 31.8** | **+2.2** |
| | comp=Z,2.8nm,0.3s | | | | | | | |
| **OBKA** | **Obir** | **3.97** | **331** | | | **Pn** | **14 52 31.8** | **+2.2** |
| **OBKA** | **Obir** | **3.97** | **331** | *e*Pn | | **Pn** | **14 52 32.7** | **+3.1** |
| **BZS** | **Buzias** | **4.00** | **49** | ⇓P | | **Pn** | **14 52 30.1** | **+0.2** |
| **AMBH** | **Zimbrzfalva** | **4.09** | **35** | PN | | **Pn** | **14 52 35.9** | **+4.9** |
| **DJES** | **Djerdap** | **4.09** | **65** | ⇓P | | **Pn** | **14 52 32.1** | **+1.0** |
| DJES | | | | ⇓S | | **Sn** | **14 53 20.2** | **+1.4** |
| **HERR** | **Herculane** | **4.10** | **62** | ⇑P | | **Pn** | **14 52 32.5** | **+1.2** |
| **MPLH** | **Magyarpolny** | **4.11** | **2** | PN | | **Pn** | **14 52 32.9** | **+1.5** |
| **IGT** | **Igoumenitsa** | **4.19** | **146** | P | | **Pn** | **14 52 33.3** | **+0.7** |
| IGT | | | | S | | **Sn** | **14 53 21.6** | **+0.1** |
| | comp=Z,240nm,0.5s | | | | | | | |
| **IGT** | **Igoumenitsa** | **4.19** | **146** | P | | **Pn** | **14 52 33.3** | **+0.7** |
| IGT | | | | S | | **Sn** | **14 53 21.6** | **+0.1** |
| **PUNG** | **Punghina** | **4.25** | **71** | ⇓P | | **Pn** | **14 52 34.9** | **+1.5** |
| **VAY** | **Valandovo** | **4.27** | **112** | *e*Pn | | **Pn** | **14 52 34.8** | **+1.2** |
| **VAY** | **Valandovo** | **4.27** | **112** | P | | **Pn** | **14 52 34.5** | **+0.9** |
| **VAY** | **Valandovo** | **4.27** | **112** | *i* Pn | | **Pn** | **14 52 34.8** | **+1.2** |
| **JAN** | **Janina** | **4.32** | **141** | P | | **Pn** | **14 52 33.9** | **-0.4** |
| JAN | | | | S | | **Sn** | **14 53 24.1** | **-0.5** |
| | comp=Z,330nm,0.3s | | | | | | | |
| **JAN** | **Janina** | **4.32** | **141** | P | | **Pn** | **14 52 33.9** | **-0.4** |
| **KZN** | **Kozani** | **4.32** | **128** | P | | **Pn** | **14 52 35.4** | **+1.0** |
| KZN | | | | S | | **Sn** | **14 53 24.5** | **-0.3** |
| | comp=Z,270nm,0.5s | | | | | | | |
| **KZN** | **Kozani** | **4.32** | **128** | P | | **Pn** | **14 52 35.4** | **+1.0** |
| **GRG** | **Griva** | **4.33** | **117** | P | | **Pn** | **14 52 35.7** | **+1.2** |
| **GRG** | **Griva** | **4.33** | **117** | P | | **Pn** | **14 52 35.7** | **+1.2** |
| **CSKK** | **Cskako** | **4.35** | **8** | PN | | **Pn** | **14 52 35.8** | **+1.1** |
| **EGYH** | **Egyhazaskeszo** | **4.36** | **0** | PN | | **Pn** | **14 52 36.9** | **+2.2** |
| **VTS** | **Vitosha** | **4.37** | **94** | ⇑P | | **Pn** | **14 52 37.0** | **+1.8** |
| VTS | | | | ⇓S | | **Sn** | **14 53 27.4** | **+1.3** |
| **VTS** | **Vitosha** | **4.37** | **94** | *e*Pn | | **Pn** | **14 52 36.8** | **+1.6** |
| VTS | | | | *e*Sn | | **Sn** | **14 53 26.1** | **0.0** |
| **VTS** | **Vitosha** | **4.37** | **94** | P | | **Pn** | **14 52 34.9** | **-0.3** |
| **VTS** | **Vitosha** | **4.37** | **94** | Pn | | **Pn** | **14 52 34.9** | **-0.3** |
| **VTS** | **Vitosha** | **4.37** | **94** | ⇑P | | **Pn** | **14 52 36.9** | **+1.8** |
| **ARSA** | **Arzberg** | **4.38** | **344** | *i* Pn | | **Pn** | **14 52 36.8** | **+1.6** |
| | comp=Z,97nm,0.3s,SNR=86 | | | | | | | |
| ARSA | | | | *e*Sn | | **Sn** | **14 53 25.8** | **-0.2** |
| | comp=Z,22nm,0.4s | | | | | | | |
| **ARSA** | **Arzberg** | **4.38** | **344** | | | **Pn** | **14 52 36.8** | **+1.6** |
| ARSA | | | | | | **Sn** | **14 53 25.8** | **-0.2** |
| **ARSA** | **Arzberg** | **4.38** | **344** | *e*Pn | | **Pn** | **14 52 37.1** | **+2.0** |
| **PTCC** | **Patocco-Chiusa** | **4.38** | **321** | ⇑P | | **Pn** | **14 52 36.6** | **+1.5** |
| **MYKA** | **Terra Mystica** | **4.42** | **325** | *i* Pn | | **Pn** | **14 52 37.9** | **+2.1** |
| | comp=Z,7.2nm,0.4s | | | | | | | |
| **MYKA** | **Terra Mystica** | **4.42** | **325** | | | **Pn** | **14 52 37.9** | **+2.1** |
| **SIRR** | **Siria** | **4.46** | **43** | ⇑P | | **Pn** | **14 52 36.7** | **+0.5** |
| **BAIL** | **Bailesti** | **4.48** | **76** | ⇓S | | **Sn** | **14 53 30.1** | **+1.5** |
| **SRE** | **Strehaia** | **4.55** | **67** | ⇓P | | **Pn** | **14 52 39.2** | **+1.7** |
| **SRE** | **Strehaia** | **4.55** | **67** | P | | **Pn** | **14 52 39.1** | **+1.7** |
| **GZR** | **Gura Zlata** | **4.56** | **57** | ⇑P | | **Pn** | **14 52 38.6** | **+0.9** |
| **KNT** | **Kendrikon** | **4.56** | **113** | P | | **Pn** | **14 52 38.8** | **+1.1** |
| **KNT** | **Kendrikon** | **4.56** | **113** | P | | **Pn** | **14 52 38.8** | **+1.1** |
| **BUD** | **Budapest** | **4.58** | **15** | P | | **Pn** | **14 52 38.9** | **+1.0** |
| **BUD** | **Budapest** | **4.58** | **15** | PN | | **Pn** | **14 52 38.6** | **+0.7** |
| **STAL** | **STALIGIAL** | **4.59** | **316** | Pn | | **Pn** | **14 52 39.4** | **+1.5** |
| **SOP** | **Sopron** | **4.65** | **354** | P | | **Pn** | **14 52 40.8** | **+1.9** |
| **SOP** | **Sopron** | **4.65** | **354** | PN | | **Pn** | **14 52 40.7** | **+1.8** |
| SOP | | | | SN | | **Sn** | **14 53 31.6** | **-1.2** |
| **TEOL** | **Teolo** | **4.67** | **301** | Pn | | **Pn** | **14 52 40.7** | **+1.7** |
| **BSZH** | **Besenyszg** | **4.72** | **25** | PN | | **Pn** | **14 52 41.5** | **+1.7** |
| **SRO2** | **Moca** | **4.76** | **9** | *e*P | | **Pn** | **14 52 40.8** | **+0.5** |
| SRO2 | | | | *e* | | | 14 53 35.3 | |
| **SRO2** | **Moca** | **4.76** | **9** | *e*Pn | | **Pn** | **14 52 40.8** | **+0.5** |
| SRO2 | | | | *e*Sn | | **Sn** | **14 53 35.2** | **-0.2** |
| **ZCCA** | **Zocca** | **4.78** | **288** | Pn | | **Pn** | **14 52 43.4** | **+2.8** |
| **SRO** | **Srobarova** | **4.80** | **8** | P | | **Pn** | **14 52 42.7** | **+1.8** |
| **LIT** | **Litokhoron** | **4.88** | **126** | P | | **Pn** | **14 52 43.3** | **+1.3** |
| **LIT** | **Litokhoron** | **4.88** | **126** | P | | **Pn** | **14 52 42.2** | **+0.2** |
| **LIT** | **Litokhoron** | **4.88** | **126** | Pn | | **Pn** | **14 52 42.2** | **+0.2** |
| **LIT** | **Litokhoron** | **4.88** | **126** | ⇑P | | **Pn** | **14 52 42.5** | **+0.5** |
| **DEV** | **Deva** | **4.89** | **53** | ⇓P | | **Pn** | **14 52 43.0** | **+0.8** |
| **DEV** | **Deva** | **4.89** | **53** | P | | **Pn** | **14 52 42.9** | **+0.8** |
| **KBA** | **Koelnbreinsper** | **4.90** | **326** | *i* Pn | | **Pn** | **14 52 44.8** | **+2.3** |
| | comp=Z,3.2nm,0.3s | | | | | | | |
| KBA | | | | *e*Sn | | **Sn** | **14 53 40.8** | **+1.6** |
| | comp=Z,20nm,0.6s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.90** | **326** | P | | **Pn** | **14 52 46.7** | **+4.2** |
| **KBA** | **Koelnbreinsper** | **4.90** | **326** | | | **Pn** | **14 52 44.8** | **+2.3** |
| KBA | | |

comp=Z,5.0nm,0.3s,baz=155,slow=14,SNR=152
GERES Sn Sn 14 54 13.8 +0.1
comp=Z,5.0nm,0.3s,baz=145,slow=24,SNR=9.5
GERES LR LR 14 56 02.7
comp=Z,262nm,18.2s,baz=134,slow=43
**BMR Baia Mare 6.34 41** P Pn **14 53 06.5 +4.5**
BMR pmax pmax
comp=Z,24nm,0.8s
**TREC Trest 6.36 349** *e*PN Pn **14 53 04.6 +2.2**
TREC *e*SN Sn **14 54 14.9 0.0**
**SGRR Singureni 6.39 77** ⇑P Pn **14 53 04.5 +1.8**
**ARCR ARCALIA 6.40 49** ⇑P Pn **14 53 04.4 +1.5**
**RDO Rodhopi 6.41 105** P Pn **14 53 04.6 +1.6**
**RDO Rodhopi 6.41 105** ⇑P Pn **14 53 05.0 +2.0**
**RDO Rodhopi 6.41 105** Pn Pn **14 53 04.5 +1.6**
comp=Z,23nm,0.7s,comp=Z,0.2nm
**DAVOX Davos/Dischmat 6.46 308** Pn Pn **14 53 06.4 +2.5**
comp=Z,2.0nm,0.3s,baz=130,slow=13,SNR=31
DAVOX Sn Sn **14 54 17.2 -0.4**
baz=154,slow=23,SNR=1.3
**DOPR Dopca 6.46 61** ⇑P Pn **14 53 05.7 +2.0**
**CRVS Cervenica-Dubn 6.51 25** *e*P Pn **14 53 06.2 +1.8**
CRVS *e* 14 54 17.0
**CRVS Cervenica-Dubn 6.51 25** *e*PN Pn **14 53 06.2 +1.8**
CRVS *e*SN Sn **14 54 17.0 -1.6**
**UZH Uzhgorod 6.56 30** *e*P Pn **14 53 05.6 +0.5**
UZH *e*S Sn **14 54 19.6 -0.2**
UZH smax smax
comp=N,10.0nm,0.8s
UZH smax smax
comp=E,9.0nm,0.8s
**KHC Kasperske Hory 6.60 338** *i* P Pn **14 53 07.9 +2.2**
**KHC Kasperske Hory 6.60 338** *e*PN Pn **14 53 08.3 +2.6**
KHC *e*SN Sn **14 54 21.2 +0.3**
**KHC Kasperske Hory 6.60 338** Pn **14 53 07.1 +1.4**
**KHC Kasperske Hory 6.60 338** ⇑P Pn **14 53 08.2 +2.6**
**KHC Kasperske Hory 6.60 338** Pn Pn **14 53 08.1 +2.4**
comp=E,50nm,0.9s,comp=E,0.2nm
**TUE Stuetta 6.62 304** Pn Pn **14 53 08.8 +2.7**
**TUE Stuetta 6.62 304** ⇑P Pn **14 53 10.8 +4.8**
**MLR Muntele Rosu 6.65 66** ⇓P Pn **14 53 06.7 +0.3**
**MLR Muntele Rosu 6.65 66** Pn Pn **14 53 07.8 +1.4**
comp=E,1.4nm,0.3s,baz=278,slow=6.7,SNR=7.6
MLR Sn Sn **14 54 21.4 -0.7**
comp=E,1.6nm,0.3s,baz=276,slow=6.3,SNR=3.7
MLR LR LR 14 56 24.4
comp=E,164nm,19.8s,baz=266,slow=45
**MLR Muntele Rosu 6.65 66** Pn Pn **14 53 07.0 +0.5**
**SULR 6.66 73** ⇑P Pn **14 53 07.5 +1.1**
**NIE Niedzica 6.68 17** *e*P Pn **14 53 10.2 +3.4**
**NIE Niedzica 6.68 17** P Pn **14 53 10.1 +3.4**
**MORC Moravsky Berou 6.72 1** P Pn **14 53 08.4 +1.2**
**MORC Moravsky Berou 6.72 1** Pn Pn **14 53 08.4 +1.2**
**MORC Moravsky Berou 6.72 1** *e*Pn Pn **14 53 08.5 +1.2**
MORC *e*SN Sn **14 54 22.0 -1.7**
**MORC Moravsky Berou 6.72 1** ⇑P Pn **14 53 08.5 +1.2**
**MORC Moravsky Berou 6.72 1** Pn Pn **14 53 08.6 +1.3**
comp=E,31nm,0.9s,comp=E,0.2nm
**OZUR 6.76 60** ⇑P Pn **14 53 08.9 +1.0**
**OKC Ostrava-Krasne 6.80 5** *e*PN Pn **14 53 10.1 +1.8**
OKC *e*SN Sn **14 54 24.0 -1.7**
**WET Wettzell 6.82 335** P Pn **14 53 11.0 +2.4**
WET pmax pmax
comp=Z,36nm,0.8s
**WET Wettzell 6.82 335** *e*Pn Pn **14 53 10.4 +1.7**
**ALN Alexandroupoli 6.85 105** P Pn **14 53 10.4 +1.4**
**ALN Alexandroupoli 6.85 105** Pn Pn **14 53 10.4 +1.4**
**ITM Ithomi 6.85 147** Pn Pn **14 53 10.2 +1.1**
**STHS Stebnicka Huta 6.91 22** *e*P Pn **14 53 12.1 +2.2**
**STHS Stebnicka Huta 6.91 22** *e*PN Pn **14 53 12.1 +2.2**
**COVR Voineasa-Covas 6.94 63** ⇑P Pn **14 53 12.2 +1.9**
**MEZ Mezhgor'ye 6.96 36** Pn Pn **14 53 13.4 +2.8**
**VSL Villasalto 6.96 242** Pn Pn **14 53 13.3 +2.7**
**KRLC Kraliky 7.03 357** P Pn **14 53 15.2 +3.7**
**KRLC Kraliky 7.03 357** *e*PN Pn **14 53 13.3 +1.8**
KRLC *e*SN Sn **14 54 29.8 -1.5**
**EDRB Edirne 7.08 97** P Pn **14 53 13.7 +1.6**
**BISRR Bisoca 7.18 67** ⇓P Pn **14 53 15.4 +1.7**
BISRR ⇓S Sn **14 54 35.9 +0.8**
**BURAR Bucovina Array 7.19 48** ⇑P Pn **14 53 14.6 +0.8**
**BURAR Bucovina Array 7.19 48** P Pn **14 53 14.5 +0.8**
**BURAR Bucovina Array 7.19 48** Pn Pn **14 53 14.5 +0.8**
**BURAR Bucovina Array 7.19 48** Pn Pn **14 53 15.9 +2.1**
comp=Z,9.6nm,0.7s,comp=Z,0.1nm
**PRU Pruhonice 7.19 346** *e*PN Pn **14 53 16.4 +2.8**
**BUR08 Bucovina Ar. S 7.20 48** Pn Pn **14 53 14.8 +0.9**
**PLOR Plostina 7.23 64** ⇓P Pn **14 53 16.2 +1.8**
**PLOR Plostina 7.23 64** P Pn **14 53 16.1 +1.8**
**PLOR Plostina 7.23 64** Pn Pn **14 53 16.2 +1.8**
comp=Z,13nm,0.8s,comp=Z,0.2nm
**SBF Sospel 7.24 280** *e*Pn Pn **14 53 15.1 +0.7**
SBF *e*Sn Sn **14 54 33.8 -2.7**
comp=Z,12nm,0.5s
**VRI Vrincioaia 7.29 64** ⇑P Pn **14 53 16.1 +1.0**
**VRI Vrincioaia 7.29 64** P Pn **14 53 16.1 +1.0**
**DPC Dobruska-Polom 7.32 355** P Pn **14 53 18.5 +2.9**
DPC pmax pmax
comp=Z,9.0nm,0.6s
**DPC Dobruska-Polom 7.32 355** *e*PN Pn **14 53 17.4 +1.8**
DPC *e*SN Sn **14 54 36.8 -1.8**
**DPC Dobruska-Polom 7.32 355** Pn Pn **14 53 17.8 +2.2**
comp=Z,9.6nm,0.6s,comp=Z,0.1nm
**OJC Ojcow 7.36 13** P Pn **14 53 17.4 +1.4**
**OJC Ojcow 7.36 13** Pn Pn **14 53 17.4 +1.4**
**OJC Ojcow 7.36 13** ⇑P Pn **14 53 18.6 +2.6**
**OJC Ojcow 7.36 13** Pn Pn **14 53 18.0 +2.0**
comp=Z,14nm,0.8s,comp=Z,0.1nm
**UPC Upice 7.50 354** *e*PN Pn **14 53 19.9 +1.9**
UPC *e*SN Sn **14 54 40.0 -2.9**
**OSTC Ostas 7.54 355** *e*PN Pn **14 53 19.5 +1.1**
OSTC *e*SN Sn **14 54 42.3 -1.5**
**CHVC Chvalec 7.58 354** *e*PN Pn **14 53 21.7 +2.7**
CHVC *e*SN Sn **14 54 42.8 -2.0**
**PVCC Panska Ves 7.70 347** P Pn **14 53 26.5 +5.8**
PVCC pmax pmax
comp=Z,15nm,0.8s
**SLE Schleitheim 7.79 310** P Pn **14 53 27.8 +5.9**
SLE pmax pmax
comp=Z,25nm,0.6s
**MBDF Montbardon 7.80 286** *e*Pn Pn **14 53 22.8 +0.6**
**MBDF Montbardon 7.80 286** *e*P Pn **14 53 27.3 +5.1**
MBDF *e*Sn Sn **14 54 47.2 -3.3**
comp=Z,4.2nm,0.3s
**FRF La Foret Royal 7.80 277** *e*Pn Pn **14 53 22.7 +0.6**
FRF *e*Sn Sn **14 54 47.2 -3.1**
comp=Z,2.6nm,0.3s
**KSP Ksiaz 7.82 355** P Pn **14 53 25.3 +3.0**
KSP pmax pmax
comp=Z,11nm,0.8s
**KSP Ksiaz 7.82 355** Pn Pn **14 53 25.1 +2.8**
comp=Z,11nm,0.8s,comp=Z,0.1nm
**GRFO Grafenberg 7.86 330** P Pn **14 53 24.8 +2.0**
**GRFO Grafenberg 7.86 330** Pn Pn **14 53 24.8 +2.0**
**GRA1 Grafenberg Arr 7.86 330** Pn Pn **14 53 24.1 +1.3**
**GRF Grafenberg Arr 7.86 330** P Pn **14 53 24.1 +1.3**
**SENIN Lac Senin/Sane 7.86 298** Pn Pn **14 53 25.2 +2.1**
**LMR La Mourre 7.91 276** *e*Pn Pn **14 53 24.2 +0.7**
**LMR La Mourre 7.91 276** *e*P Pn **14 53 28.9 +5.4**
LMR *e*Sn Sn **14 54 49.8 -3.0**
comp=Z,0.9nm,0.2s
**NKC Novy Kostel 7.92 337** P Pn **14 53 26.9 +3.2**
NKC pmax pmax
comp=Z,17nm,0.8s
**NKC Novy Kostel 7.92 337** *e*PN Pn **14 53 26.3 +2.6**
**BNI Bardonecchia 7.92 288** P Pn **14 53 25.0 +1.2**
**BNI Bardonecchia 7.92 288** Pn Pn **14 53 25.0 +1.2**
**LPG La Plagne 7.96 291** *e*Pn Pn **14 53 25.0 +0.4**
LPG *e*Sn Sn **14 54 51.1 -3.6**
comp=Z,8.7nm,0.5s
**LPL La Plagne 7.98 292** *e*Pn Pn **14 53 25.9 +1.1**
**LPL La Plagne 7.98 292** *e*P Pn **14 53 30.1 +5.3**
LPL *e*Sn Sn **14 54 51.4 -3.7**
comp=Z,23nm,0.6s
**STU Stuttgart 8.04 318** P Pn **14 53 27.2 +1.8**
**STU Stuttgart 8.04 318** Pn Pn **14 53 27.1 +1.8**
**BRG Berggiesshubel 8.15 345** *i* P Pn **14 53 30.3 +3.5**
BRG Amp **14 53 31.3**
comp=Z,6.0nm,0.7s
BRG *e*x x 14 54 36.6
BRG *e*x x 14 55 10.5
BRG Amp 14 55 23.7
comp=Z,19nm,0.8s
**BRG Berggiesshubel 8.15 345** *i* P Pn **14 53 30.3 +3.5**
BRG *e* 14 55 10.5
BRG pmax pmax
comp=Z,6.0nm,0.7s
BRG pmax pmax
comp=Z,19nm,0.8s
**TIRR Tirgusor 8.15 76** P Pn **14 53 27.1 +0.3**
**TIRR Tirgusor 8.15 76** Pn Pn **14 53 27.1 +0.3**
**LVV L'vov 8.19 32** *e*P Pn **14 53 23.6 -3.8**
LVV *e*S Sn **14 54 55.7 -4.2**
LVV MLR MLR
comp=E,300nm,6.0s
LVV MLR MLR
comp=N,700nm,6.5s
LVV MLR MLR
comp=Z,500nm,9.8s
**BFO Black Forest 8.20 313** *e*P Pn **14 53 28.5 +0.9**
**BFO Black Forest 8.20 313** Pn Pn **14 53 28.5 +0.9**
**BFO Black Forest 8.20 313** *e*Pn Pn **14 53 28.2 +0.5**
**BFO Black Forest 8.20 313** P Pn **14 53 32.0 +4.3**
**TPGR Topolog 8.21 74** ⇑P Pn **14 53 28.4 +0.8**
**KMPD K-Podol'skiy 8.42 46** Pn Pn **14 53 32.3 +1.7**
comp=Z,9.0nm,1.0s
KMPD pP Pn **14 53 35.4 +4.8**
comp=Z,9.0nm,1.0s
**ORIF Oris-en-Rattie 8.46 287** *e*Pn Pn **14 53 31.5 +0.3**
**ORIF Oris-en-Rattie 8.46 287** *e*P Pn **14 53 36.8 +5.6**
ORIF *e*Sn Sn **14 55 02.7 -3.8**
comp=Z,10nm,0.7s
**MOX Moxa 8.53 335** P Pn **14 53 34.6 +2.5**
MOX pmax pmax
comp=Z,36nm,0.9s
**MOX Moxa 8.53 335** *e*Pn Pn **14 53 33.1 +1.1**
**SMRF Simiane la Rot 8.59 280** *e*Pn Pn **14 53 33.5 +0.6**
SMRF *e*Sn Sn **14 55 05.8 -3.8**
comp=Z,2.5nm,0.7s
**CABF La Chapelle 8.73 298** *e*Pn Pn **14 53 36.3 +1.3**
CABF *e*Sn Sn **14 55 09.1 -4.2**
comp=Z,4.5nm,0.6s
**CLL Collm 8.76 342** *e*P Pn **14 53 37.0 +1.9**
**CLL Collm 8.76 342** *e*Pn Pn **14 53 37.0 +1.9**
CLL *e*x x 14 53 45.0
CLL *e*Sn Sn **14 55 02.0 -12**
CLL *e*x x 14 55 22.0
CLL *e*Sb Sg **14 55 40.0 -30**
CLL *i* Sg Sg **14 56 11.5 +2.0**
comp=Z,40nm,1.2s
CLL *e*Sglp **14 56 17.0**
comp=E,200nm,17.5s
**CLL Collm 8.76 342** Pn Pn **14 53 36.3 +1.1**
**HINF Hinteralfeld 8.76 306** *e*Pn Pn **14 53 35.3 +0.1**
**HINF Hinteralfeld 8.76 306** *e*P Pn **14 53 41.1 +5.9**
HINF *e*Sn Sn **14 55 09.7 -4.2**
comp=E,13nm,0.8s
**ECH Echery 8.79 309** P Pn **14 53 37.2 +1.6**
**ECH Echery 8.79 309** Pn Pn **14 53 37.2 +1.6**
**ECH Echery 8.79 309** ⇑P Pn **14 53 40.3 +4.7**
**CDF Champ du Feu 8.83 311** *e*Pn Pn **14 53 36.5 +0.3**
**CDF Champ du Feu 8.83 311** *e*P Pn **14 53 41.0 +4.8**
CDF *e*Sn Sn **14 55 10.8 -4.8**
comp=E,1.9nm,0.3s
**HAU Haudompre 9.15 306** *e*Pn Pn **14 53 41.3 +0.7**
**HAU Haudompre 9.15 306** *e*P Pn **14 53 45.0 +4.4**
HAU *e*Sn Sn **14 55 19.4 -4.0**
comp=E,4.1nm,0.3s
**SANT Santorini 9.16 134** Pn Pn **14 53 41.4 +0.6**
**VIVF Saint-Julien-l 9.30 285** *e*Pn Pn **14 53 43.1 +0.5**
VIVF *e*Sn Sn **14 55 22.2 -4.9**
comp=E,1.7nm,0.4s
**TNS Taunus Mts 9.40 323** P Pn **14 53 49.6 +5.5**
TNS pmax pmax
comp=Z,20nm,0.7s
**KEST Kesra 9.57 223** Pn Pn **14 53 47.4 +1.0**
comp=Z,0.2nm,0.3s,baz=105,slow=20,SNR=1.0
**IDI Anoyia 9.73 140** Pn Pn **14 53 48.0 -0.6**
comp=Z,0.9nm,0.3s,baz=280,slow=13,SNR=2.0
IDI Sn Sn **14 55 27.5 -10**
comp=Z,3.1nm,0.3s,baz=116,slow=23,SNR=8.0
**PAGF Fort de Pagny 9.78 308** *e*P Pn **14 53 56.0 +6.8**
baz=123
PAGF *e*Sn Sn **14 55 33.5 -5.4**
comp=Z,4.2nm,0.6s
**LASF Ste Croix 9.83 281** *e*Pn Pn **14 53 50.4 +0.5**
LASF *e*Sn Sn **14 55 36.2 -3.9**
comp=Z,0.4nm,0.3s
**LUBAR Lubar, Ukraine 9.94 43** Pn Pn **14 53 53.5 +2.2**
**SFTF Sexfontaines 10.02 305** *e*Pn Pn **14 53 53.0 +0.5**
**SFTF Sexfontaines 10.02 305** *e*P Pn **14 53 57.5 +5.0**
baz=125
SFTF *e*Sn Sn **14 55 39.4 -5.3**
comp=Z,2.3nm,0.4s
**MEZF Maizieres J'vi 10.14 307** *e*P Pn **14 54 00.7 +6.5**
baz=127
MEZF *e*Sn Sn **14 55 42.1 -5.7**
comp=Z,1.4nm,0.3s
**WLF Walferdange 10.15 314** P Pn **14 53 56.1 +1.8**
**WLF Walferdange 10.15 314** Pn Pn **14 53 56.1 +1.8**
**SAVF Savonnieres en 10.16 307** *e*P Pn **14 53 59.1 +4.8**
SAVF *e*Sn Sn **14 55 42.6 -5.5**
comp=Z,2.4nm,0.4s
**SMF Signal de Mont 10.22 295** *e*Pn Pn **14 53 55.4 +0.2**
**SMF Signal de Mont 10.22 295** *e*P Pn **14 54 00.5 +5.3**
SMF *e*Sn Sn **14 55 44.5 -5.2**
comp=Z,8.1nm,0.6s
**BORA Eskisehir 10.36 103** Pn Pn **14 53 56.0 -1.2**
**LOR Lormes 10.39 298** *e*Pn Pn **14 53 58.8 +1.2**
baz=117
LOR *e*Sn Sn **14 55 49.3 -4.6**
comp=Z,4.9nm,0.3s
**SSF Saint Saulge 10.56 297** *e*Pn Pn **14 54 00.0 +0.2**
SSF *e*Sn Sn **14 55 52.8 -5.2**
comp=Z,7.2nm,0.6s
**AVF Avril sur Loir 10.58 295** *e*Pn Pn **14 54 00.3 +0.1**
AVF *e*Sn Sn **14 55 53.2 -5.3**
comp=Z,1.4nm,0.5s
**MEM Membach 10.81 318** *d*PbPb **PbPb** **14 54 39.3 +1.0**
**BGF Bois d'Agland 10.86 294** *e*Pn Pn **14 54 04.3 +0.3**
BGF *e*Sn Sn **14 56 00.0 -5.4**
comp=Z,7.2nm,0.4s
**RCHB Rochefort 10.92 315** *d*PbPb **PbPb** **14 54 40.8 +0.5**
**MTLF Montolieu 11.03 277** *e*Pn Pn **14 54 07.0 +0.6**
**BGES Gesves 11.13 315** *d*PnPn Pn **14 54 14.5 +6.8**
BGES *d*PbPb **PbPb** **14 54 44.2 +0.4**
**AKASG Malin Array Be 11.16 43** Pn Pn **14 54 08.0 0.0**
comp=Z,0.4nm,0.3s,baz=236,slow=13,SNR=11
**AKASG Malin Array Be 11.16 43** *i* P Pn **14 54 10.3 +2.3**
AKASG pmax pmax
comp=Z,3.0nm,0.8s
**AKBB Malin Array Si 11.16 43** *i* P Pn **14 54 09.8 +1.8**
**AKBB Malin Array Si 11.16 43** Pn Pn **14 54 09.0 +1.0**
**AKBB Malin Array Si 11.16 43** Pn Pn **14 54 10.1 +2.1**
**DOU Dourbes 11.22 313** *d*PbPb **PbPb** **14 54 46.7 +1.3**
DOU *d*PgPg **PgPg** **14 55 04.7 +1.0**
**TCF Toulx Ste Croi 11.23 292** *e*Pn Pn **14 54 09.3 +0.2**
TCF *e*Sn Sn **14 56 09.0 -5.6**
comp=Z,2.5nm,0.5s
**BAIF Baives 11.41 312** *e*Pn Pn **14 54 11.1 -0.4**
**BAIF Baives 11.41 312** *e*P Pn **14 54 18.2 +6.7**
**SUW Suwalki 11.62 17** P Pn **14 54 15.8 +1.5**
**SUW Suwalki 11.62 17** Pn Pn **14 54 15.8 +1.5**
**EPF Esparros 12.43 276** *e*Pn Pn **14 54 25.7 +0.2**
**EPF Esparros 12.43 276** *e*P P **14 54 31.5 -6.0**
**BRTR Keskin Array B 12.70 100** Pn Pn **14 54 26.6 -2.7**
comp=Z,0.1nm,0.3s,baz=251,slow=7.8,SNR=3.4
BRTR LR LR **14 59 56.2**
comp=Z,47nm,18.4s,baz=330,slow=40
**NACGM Naroch 13.36 24** *i* P Pn **14 54 39.9 +1.8**
**ESDC Sonseca Array 16.33 265** Pn Pn **14 55 16.9 -0.9**
comp=Z,0.1nm,0.3s,baz=21,slow=38,SNR=1.8
**VSU Vasula 16.50 18** *i* P P **14 55 21.5 -1.0**
VSU pmax pmax
comp=Z,23nm,0.6s
**HFS Hagfors 17.24 354** P Pn **14 55 28.8 -0.3**
comp=Z,0.1nm,0.3s,baz=164,slow=13,SNR=4.0
HFS LR LR **15 01 53.6**
comp=Z,54nm,20.1s,baz=221,slow=36
**OBN Obninsk 17.37 39** ⇓ *e*P P **14 55 32.8 +0.6**
OBN pmax pmax
comp=Z,30nm,1.9s
OBN MLR MLR
comp=Z,82nm,18.0s
**MMAI Mount Meron Ar 17.39 119** P Pn **14 55 28.7 -2.6**
comp=Z,0.7nm,0.3s,baz=300,slow=15,SNR=5.4
**EKA Eskdalemuir Ar 18.08 320** P P **14 55 40.4 +0.5**
baz=116,slow=9.6,SNR=2.8
**NAO01 NORSAR Array S 18.23 350** P P **14 55 42.3 +0.7**
NAO01 lAmb lAmb **14 55 54.4**
comp=Z,47nm,1.4s
**NB2 NORSAR Subarra 18.38 351** P P **14 55 43.5 +0.2**
comp=Z,2.3nm,0.9s,baz=166,slow=11
**NOA NORSAR Array B 18.38 351** P Pn **14 55 42.4 -0.9**
comp=Z,0.0nm,0.3s,baz=169,slow=11,SNR=2.3
NOA LR LR **15 03 27.3**
comp=Z,36nm,19.6s,baz=170,slow=39
**NC303 NORSAR Array S 18.54 351** P P **14 55 44.7 -0.3**
NC303 lAmb lAmb **14 56 12.9**
comp=Z,23nm,1.3s
**KBZ Khabaz 18.58 79** P P **14 55 45.1 -0.5**
comp=Z,0.1nm,0.3s,baz=141,slow=15,SNR=2.4
**FINES FINESS Array B 19.14 13** P P **14 55 51.4 -0.2**
comp=Z,0.3nm,0.3s,baz=187,slow=11,SNR=9.9
**FINES FINESS Array B 19.14 13** P P **14 55 51.3 -0.3**
**FIA1 FINESS Array S 19.14 13** P P **14 55 51.3 -0.3**
FIA1 lAmb lAmb **14 56 05.3**
comp=Z,17nm,1.3s
**ONI Oni 19.15 82** P Pn **14 55 53.1 +0.2**
ONI pmax pmax
comp=Z,5.0nm,0.9s
**ONI Oni 19.15 82** P Pn **14 55 53.1 +0.2**
**GEVA Gevas 20.05 95** P P **14 56 02.5 +0.5**
**GNI Garni 20.68 89** P P **14 56 06.6 -2.0**
comp=Z,5.1nm,0.5s,baz=176,slow=14,SNR=5.2
**GNI Garni 20.68 89** *i* P P **14 56 09.5 +0.8**
GNI pmax pmax
comp=Z,17nm,1.2s
**GNI Garni 20.68 89** P P **14 56 09.5 +0.8**
GNI lAmb lAmb **14 56 16.1**
comp=Z,16nm,1.1s
**KLMR Klimovskoe 22.27 29** *e*P P **14 56 25.5 +0.1**
KLMR pmax pmax
comp=Z,14nm,1.0s
**KLMR Klimovskoe 22.27 29** *e*P P **14 56 25.6 +0.1**
KLMR AMP **14 56 43.0**
comp=Z,14nm,1.0s
**BELG Belogornoye 22.27 55** P P **14 56 24.4 -1.1**
comp=Z,15nm,0.7s,baz=320,slow=4.4,SNR=8.7
**BELG Belogornoye 22.27 55** *i* P P **14 56 26.9 +1.4**
BELG pmax pmax
comp=Z,7.0nm,1.9s
**PRGR Permogore 25.06 32** *e*P P **14 56 51.5 -1.1**
PRGR pmax pmax
comp=Z,12nm,0.4s
**KIRV Kirov 25.21 41** LR LR **15 08 06.8**
comp=Z,88nm,18.8s,baz=332,slow=40
**KIRV Kirov 25.21 41** *i* P P **14 56 52.9 -1.1**
**ARCES ARCESS Array B 26.87 6** P P **14 57 07.4 -1.6**
comp=Z,9.6nm,1.2s,baz=193,slow=7.0,SNR=2.1
ARCES LR LR **15 09 06.0**
comp=Z,125nm,18.2s,baz=246,slow=39
**ARU Arti 29.33 48** P P **14 57 29.4 -1.7**
comp=Z,1.1nm,0.5s,baz=213,slow=10,SNR=5.5
ARU LR LR **15 10 36.0**
comp=Z,34nm,18.1s,baz=333,slow=39
**ARU Arti 29.33 48** *c i* P P **14 57 29.8 -1.2**
ARU S S **15 02 24.3 +0.4**
ARU SS SnSn **15 03 49.0 -0.6**
ARU pmax pmax
comp=Z,3.0nm,0.6s
**ARU Arti 29.33 48** P P **14 57 29.4 -1.7**
ARU lAmb lAmb **14 57 30.1**
comp=Z,3.6nm,0.7s
**ABKAR Akbulak array 29.85 63** P P **14 57 34.2 -1.6**
**TORD Torodi Ar. Bea 32.72 209** P P **14 58 00.5 -0.8**
comp=Z,0.4nm,0.5s,baz=22,slow=9.9,SNR=3.3
**BRVK Borovoye 36.01 55** *i* P P **14 58 29.2 -0.3**
BRVK pmax pmax
comp=Z,6.0nm,0.6s
**BRVK Borovoye 36.01 55** P P **14 58 28.5 -1.0**
BRVK lAmb lAmb **14 58 29.6**
comp=Z,7.1nm,0.6s
**BRVK Borovoye 36.01 55** ⇓P P **14 58 29.2 -0.3**
**KKAR Karatay Array 38.30 71** P P **14 58 48.4 -0.6**
**KKAR Karatay Array 38.30 71** P P **14 58 48.4 -0.6**
**SUMG Summit 39.38 337** P P **14 58 58.9 +0.7**
**SUMG Summit 39.38 337** P P **14 58 58.9 +0.7**
**AAK Ala-Archa 41.21 70** *i* P P **14 59 12.0 -1.5**
AAK pmax pmax
comp=Z,1.0nm,1.0s
**KURK Kurchatov 41.50 57** *i* P P **14 59 13.7 -1.9**
KURK pmax pmax
comp=Z,1.0nm,1.1s
**ZAA0 Zalesovo Array 44.39 51** P P **14 59 38.0 -0.9**
**ZALV Zalesovo Beam 44.39 51** P P **14 59 37.8 -1.1**
comp=Z,1.5nm,0.5s,baz=286,slow=9.3,SNR=7.1
**ZALV Zalesovo Beam 44.39 51** *i* P P **14 59 37.7 -1.3**
ZALV pmax pmax
comp=Z,2.0nm,0.5s
**ZALV Zalesovo Beam 44.39 51** P P **14 59 37.6 -1.3**
**SACV Santiago Islan 44.78 244** P P **14 59 42.6 +0.1**
**MK31 Makanchi Array 44.98 62** P P **14 59 42.3 -1.5**
MK31 pmax pmax
comp=Z,1.0nm,0.8s
**MK31 Makanchi Array 44.98 62** P P **14 59 42.3 -1.5**
**MKAR Makanchi Array 44.98 62** P P **14 59 42.6 -1.1**
comp=Z,1.0nm,0.5s,baz=274,slow=8.0,SNR=24
MKAR PcP **PcP** **15 01 24.1 -0.7**
comp=Z,0.6nm,0.7s,baz=284,slow=4.0,SNR=3.9
**MKAR Makanchi Array 44.98 62** P P **14 59 42.3 -1.5**
**DGZ Jazzator, Alta 47.21 56** *i* P P **15 00 00.6 -0.8**
DGZ pmax pmax
comp=Z,2.0nm,0.8s
**WMQ Urumqi 49.64 63** *e*P P **15 00 23.5 +3.4**
**SCHQ Schefferville 53.27 314** P P **15 00 47.0 0.0**
comp=Z,1.6nm,0.6s,baz=49,slow=9.3,SNR=4.5
**SCHQ Schefferville 53.27 314** P P **15 00 47.6 +0.5**
**TIXI Tiksi 55.94 21** *i* P P **15 01 06.4 +0.2**
TIXI pmax pmax
comp=Z,5.0nm,2.4s
**TIXI Tiksi 55.94 21** P P **15 01 06.3 +0.1**
TIXI lAmb lAmb **15 01 16.2**
comp=Z,2.3nm,1.2s
**PKME Peaks-Kenny Pk 59.19 305** P P **15 01 30.8 +1.4**
**SONM Songino Array 59.29 52** P P **15 01 29.7 -0.6**
comp=Z,0.9nm,0.8s,baz=286,slow=8.1,SNR=5.0
**SONM Songino Array 59.29 52** P P **15 01 29.8 -0.6**
**GTA Gaotai 59.71 63** *e*P P **15 01 33.3 0.0**
GTA pP pP **15 01 36.5 -0.7**
GTA sP sP **15 01 39.3 +0.6**
GTA pmax pmax
comp=Z,2.0nm,1.3s
**YAK Yakutsk 62.06 30** *i* P P **15 01 48.3 -0.4**
YAK pmax pmax
comp=Z,4.0nm,0.7s
**FCC Fort Churchill 63.82 327** P P **15 02 00.4 -0.1**
FCC pmax pmax
comp=Z,4.0nm,0.7s
**FCC Fort Churchill 63.82 327** P P **15 02 00.4 -0.1**
FCC lAmb lAmb **15 02 04.8**
comp=Z,3.8nm,0.7s
**HHC Hu-ho-hao-te 66.29 56** *e*P P **15 02 17.0 0.0**
HHC pmax pmax
comp=Z,4.0nm,1.0s
HHC pmax pmax
comp=Z,55nm,6.1s
**YKA Yellowknife Ar 67.96 338** P P **15 02 26.9 -0.2**
comp=Z,1.5nm,0.7s,baz=37,slow=5.4,SNR=11
**YKA Yellowknife Ar 67.96 338** *e*P P **15 02 27.8 +0.7**
**YKA Yellowknife Ar 67.96 338** P P **15 02 27.8 +0.7**
**LBTB Lobatse 68.17 172** P P **15 02 30.5 +1.6**
LBTB pmax pmax
comp=Z,6.0nm,1.5s
**LBTB Lobatse 68.17 172** P P **15 02 30.5 +1.6**
LBTB lAmb lAmb **15 02 55.2**
comp=Z,6.3nm,1.5s
**E43A Lone Tree Farm 68.56 314** P P **15 02 34.1 +2.9**
**XAN Xi'an 68.77 63** P P **15 02 34.6 +1.8**
XAN pmax pmax
comp=Z,7.0nm,1.5s
**BMAR Burnt Mountain 68.98 353** P P **15 02 34.1 +0.7**
**FFC Flin Flon 69.75 327** P P **15 02 41.2 +2.8**
FFC pmax pmax
comp=Z,4.0nm,0.7s
**FFC Flin Flon 69.75 327** P P **15 02 41.2 +2.8**
FFC lAmb lAmb **15 02 42.9**
comp=Z,4.1nm,0.7s
**IMAR Indian Mountai 71.07 356** P P **15 02 47.0 +0.8**
**CMAR Chiang Mai Arr 71.61 82** P P **15 02 49.3 -1.0**
comp=Z,0.9nm,0.8s,baz=308,slow=7.6,SNR=9.3
**CMAR Chiang Mai Arr 71.61 82** *i* P P **15 02 48.7 -1.6**
CMAR pmax pmax

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.0nm,0.6s | | | | | | |
| **DAWY** | **Dawson** | **71.64** | **349** | P | **P** | **15 02 50.0** | **+0.2** |
| DAWY | | | | IAmb | IAmb | 15 02 51.2 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **TNA** | **Tin City** | **71.64** | **2** | P | **P** | **15 02 49.8** | **+0.1** |
| TNA | | | | IAmb | IAmb | 15 03 12.9 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **71.69** | **173** | P | **P** | **15 02 47.9** | **-2.6** |
| | comp=Z,1.3nm,0.6s,baz=344,slow=5.3,SNR=1.5 | | | | | | |
| **BOSA** | **Boshof** | **71.69** | **173** | P | **P** | **15 02 51.4** | **+0.9** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **71.69** | **173** | P | **P** | **15 02 51.4** | **+0.9** |
| **ILAR** | **Eielson Array** | **71.79** | **353** | P | **P** | **15 02 51.1** | **+0.4** |
| | comp=Z,0.4nm,0.8s,baz=7.0,slow=6.0,SNR=6.7 | | | | | | |
| **BCAR** | **Beaver Creek A** | **72.91** | **350** | P | **P** | **15 02 58.2** | **+0.8** |
| **RND** | **Reindeer** | **73.31** | **354** | P | **P** | **15 02 59.3** | **-0.5** |
| RND | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **73.31** | **354** | P | **P** | **15 02 59.3** | **-0.5** |
| RND | | | | IAmb | IAmb | 15 03 25.7 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **DHY** | **Denali Highway** | **73.50** | **353** | P | **P** | **15 03 01.2** | **+0.1** |
| DHY | | | | IAmb | IAmb | 15 03 05.5 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **73.94** | **280** | P | **P** | **15 03 04.4** | **+0.3** |
| **PPLA** | **Purkeypile** | **74.06** | **355** | P | **P** | **15 03 04.3** | **0.0** |
| **P33M** | **Teslin, Yukon** | **74.21** | **345** | P | **P** | **15 03 06.1** | **+0.9** |
| P33M | | | | IAmb | IAmb | 15 03 22.0 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **HYT** | **Haines Junctio** | **74.45** | **348** | P | **P** | **15 03 07.4** | **+0.8** |
| HYT | | | | IAmb | IAmb | 15 03 36.2 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **NJ2** | **Nanjing** | **76.42** | **59** | *e*P | **P** | **15 03 18.0** | **-0.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **82.16** | **324** | P | **P** | **15 03 50.6** | **+0.8** |
| | comp=Z,0.8nm,0.8s,baz=64,slow=6.8,SNR=7.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.88** | **312** | P | **P** | **15 04 27.4** | **-0.5** |
| | comp=Z,0.2nm,0.5s,baz=72,slow=3.9,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **124.91** | **91** | PKP | **PKPdf** | **15 10 25.4** | **-3.4** |
| | comp=Z,0.3nm,1.0s,baz=11,slow=2.4,SNR=1.3 | | | | | | |

*IDC **14** 14:53:23.7±5.6,5.2°S×146.22°E,h96km±53km, mb3.4/4, mb1 3.5/6, mb1mx3.3/34, mbtmp3.7/6, Error ellipse: s-maj=45.9km s-min=28.9km az=139.0*

**ISC 14 14:53:21.3±1.5,5.4°S±0.1°×146.1°E±0.2,h69km,n7,σ1s55/8, mb3.7/4,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.15** | **165** | P | | **Pn** | | **14 54 24.3** | **+2.0** |
| | 1.7nm,0.3s,baz=301,slow=7.2,SNR=9.1 | | | | | | | | |
| PMG | | | | S | | **Sn** | | **14 55 07.9** | **-1.7** |
| | 4.3nm,0.3s,baz=296,slow=23,SNR=17 | | | | | | | | |
| **CTA** | **Charters Tower** | **14.64** | **179** | P | | **P** | | **14 56 49.5** | **+0.1** |
| | 0.2nm,0.3s,baz=330,slow=15,SNR=2.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.46** | **217** | P | | **P** | | **14 57 31.6** | **-0.1** |
| | 0.4nm,0.3s,baz=33,slow=10,SNR=20 | | | | | | | | |
| **ASAR** | **Alice Springs** | **21.66** | **212** | P | | **P** | | **14 58 07.2** | **+0.9** |
| | 0.7nm,0.6s,baz=57,slow=8.7,SNR=41 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.65** | **236** | P | | **P** | | **14 58 26.6** | **-0.1** |
| | 2.7nm,0.6s,baz=50,slow=8.6,SNR=12 | | | | | | | | |
| **STKA** | **Stephens Creek** | **26.71** | **189** | P | | **P** | | **14 58 52.2** | **-2.0** |
| | 0.9nm,0.3s,baz=6.7,slow=11,SNR=5.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.26** | **23** | P | | **P** | | **15 05 49.9** | **-0.3** |
| | 0.4nm,0.6s,baz=256,slow=5.8,SNR=5.5 | | | | | | | | |

**NOU 14 15:16:52.7,19.90S×170.09E,h259km,MLv4.2/14, Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LIFNC** | **LIFOU** | **2.81** | **251** | P | | Pn | | 15 17 42.5 | -1.2 |
| **DVP** | **Devils Point** | **2.82** | **320** | P | | Pn | | 15 17 44.1 | +0.3 |
| **PINNC** | **Pines Island,** | **3.66** | **222** | P | | Pn | | 15 17 53.1 | +0.2 |
| **YATNC** | **Mamie plateau,** | **3.68** | **234** | P | | Pn | | 15 17 52.5 | -0.7 |
| **OUENC** | **Ouen Island, N** | **3.93** | **230** | P | | Pn | | 15 17 56.5 | +0.4 |
| **DZM** | **Mont Dzumac** | **4.03** | **237** | P | | Pn | | 15 17 57.5 | +0.1 |
| **ONTNC** | **Ouen Toro** | **4.16** | **234** | P | | Pn | | 15 17 59.1 | +0.4 |
| **NOUC** | **Port Laguerre** | **4.18** | **238** | P | | Pn | | 15 17 58.9 | +0.1 |
| **SANVU** | **Saraoutou** | **5.21** | **328** | P | | Pn | | 15 18 10.7 | -0.7 |
| **KOUNC** | **Koumac, New Ca** | **5.49** | **262** | P | | Pn | | 15 18 15.8 | +1.1 |

*IDC **14** 15:26:25.9±0.6,1.15°S×13.71°W,h0km,mb4.3/18, mb1 4.4/18,mb1mx4.2/37,mbtmp4.3/18,MS4.0/63, Ms1 4.0/63,ms1mx3.9/83,Error ellipse: s-maj=18.3km s-min=16.3km az=151.0*

*NEIC **14** 15:26:28.0±1.5,1.09S±0.09°×13.7°W±0.1°,h10km±1km, mb4.9/46,Error ellipse: s-maj=18.9km s-min=13.6km az=128.0*

*GCMT **14** 15:26:31.0±0.3,0.80S±0.01°×13.60°W±0.02,h24km±1km, MW5.0/115,Moment Tensor Solution. s29,c31; s115,c146; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=0.69±.17; Mθθ 1.67±.14; Mϕϕ=0.98±.14; Mrθ=0.16±.16; Mθϕ=3.35±.11; Mϕr 0.55±.18; Best double couple: Mo3.64900×10^16^ NP1:ϕs259.00000°,δ81.00000°, λ=178.00000°. NP2:ϕs169.00000°,δ88.00000°, λ=9.00000°. Principal axes: T 3.9890, Plg5.0000°, Azm214.0000°; N -0.6800, Plg80.0000°, Azm338.0000°; P -3.3100, Plg8.0000°, Azm124.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 15:26:27.4±0.4,1.16S±0.08×13.65W±0.07,h13km,n176, σ1s44/124,mb4.7/45,MS4.1/63,1C-1D,North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **6.68** | **187** | T | | T | | 15 34 57.7 | |
| | baz=7.3,slow=74,SNR=146 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.70** | **187** | T | | T | | 15 35 02.4 | |
| | baz=7.3,slow=74,SNR=83 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.70** | **187** | T | | T | | 15 34 58.9 | |
| | baz=7.3,slow=74,SNR=137 | | | | | | | | |
| **ASCN** | **Ascension** | **6.77** | **186** | Pn | | **Pn** | | **15 28 05.6** | **-1.0** |
| **LIC** | **Lamto** | **11.30** | **49** | *e*PKP1 | | **Pn** | | **15 29 05.2** | **-3.6** |
| | 54nm,0.6s | | | | | | | | |
| **TIC** | **Toumodi** | **11.58** | **48** | *e*PKP1 | | Pn | | 15 29 06.6 | -6.0 |
| **KIC** | **Kosan Boka** | **11.61** | **50** | *e*PKP1 | | Pn | | 15 29 05.7 | -7.3 |
| | 33nm,0.6s | | | | | | | | |
| **DBIC** | **Dimbokro** | **11.72** | **48** | Pn | | Pn | | 15 29 10.0 | -4.5 |
| | 3.0nm,0.3s,baz=259,slow=12,SNR=26 | | | | | | | | |
| DBIC | | | | Sn | | Sn | | 15 31 09.6 | -16 |
| | 2.0nm,0.3s,baz=173,slow=20,SNR=1.8 | | | | | | | | |
| DBIC | | | | LR | | LR | | 15 32 56.5 | |
| | comp=Z,1μm,19.6s,baz=232,slow=33 | | | | | | | | |
| **KOWA** | **Kowa** | **18.24** | **31** | P | | **Pn** | | **15 30 34.3** | **-6.2** |
| KOWA | | | | IAmb | | IAmb | | 15 30 38.0 | |
| | comp=Z,45nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **20.82** | **46** | P | | **P** | | **15 31 06.8** | **-2.1** |
| | comp=Z,20nm,0.7s,baz=233,slow=11,SNR=120 | | | | | | | | |
| TORD | | | | S | | S | | 15 34 45.9 | -15 |
| | comp=Z,2.3nm,0.6s,baz=230,slow=23,SNR=2.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **20.82** | **46** | P | | **P** | | **15 31 06.2** | **-2.7** |
| **NBPV** | **Pedro Velho** | **22.21** | **256** | *e*P | | **P** | | **15 31 24.3** | **+0.3** |
| **NBRF** | **Rio Formoso -** | **22.66** | **250** | *e*P | | **P** | | **15 31 30.0** | **+1.3** |
| **RCBR** | **Riachuelo** | **22.69** | **258** | *e*P | | **P** | | **15 31 29.0** | **-0.1** |
| **NBAN** | **Anadia - AL** | **24.04** | **249** | *e*P | | **P** | | **15 31 41.6** | **-1.0** |
| **NBCL** | **Cascavel-CE** | **24.80** | **262** | *e*P | | **P** | | **15 31 49.5** | **0.0** |
| **NBMA** | **Muriti-CE** | **25.79** | **255** | *e*P | | **P** | | **15 31 59.9** | **+1.4** |
| **NBLA** | **Lagarto - SE** | **25.89** | **247** | *e*P | | **P** | | **15 31 59.9** | **+0.4** |
| **NBPB** | **Pedra_Branca-C** | **26.25** | **260** | *e*P | | **P** | | **15 32 03.0** | **+0.3** |
| **NBPS** | **Pedro II - PI** | **27.95** | **263** | *e*P | | **P** | | **15 32 17.6** | **-0.4** |
| **NBPN** | **Ponto Novo - B** | **28.08** | **249** | *e*P | | **P** | | **15 32 19.0** | **-0.1** |
| **ROSB** | **Rosrio** | **30.51** | **266** | *e*P | | **P** | | **15 32 39.6** | **-1.1** |
| **SDBA** | **SAO DESIDERIO** | **32.94** | **249** | *e*P | | **P** | | **15 33 02.0** | **-0.1** |
| **SMTB** | **Santa Maria do** | **34.64** | **256** | *e*P | | **P** | | **15 33 17.4** | **+0.4** |
| **MDT** | **Midelt** | **34.85** | **13** | LR | | LR | | 15 47 02.8 | |
| | comp=Z,326nm,19.7s,baz=154,slow=36 | | | | | | | | |
| **TSUM** | **Tsumeb** | **35.46** | **122** | P | | **P** | | **15 33 24.2** | **+0.1** |
| | comp=Z,5.6nm,0.8s,baz=307,slow=7.8,SNR=5.9 | | | | | | | | |
| TSUM | | | | LR | | LR | | 15 44 35.0 | |
| | comp=Z,258nm,21.7s,baz=324,slow=31 | | | | | | | | |
| **TSUM** | **Tsumeb** | **35.46** | **122** | P | | **P** | | **15 33 24.5** | **+0.5** |
| **PEXB** | **Peixe** | **36.05** | **251** | *e*P | | **P** | | **15 33 28.9** | **-0.1** |
| **BDFB** | **Brasilia** | **36.83** | **245** | P | | **P** | | **15 33 35.2** | **-0.5** |
| | comp=Z,14nm,1.1s,baz=59,slow=9.8,SNR=11 | | | | | | | | |
| BDFB | | | | LR | | LR | | 15 46 01.8 | |
| | comp=Z,116nm,20.2s,baz=74,slow=32 | | | | | | | | |
| **BDFB** | **Brasilia** | **36.83** | **245** | P | | **P** | | **15 33 35.0** | **-0.7** |
| **IPMB** | **Ipameri, GO** | **37.84** | **242** | *e*P | | **P** | | **15 33 43.8** | **-0.5** |
| **SNDB** | **Serra Nova Dou** | **38.85** | **252** | *e*P | | **P** | | **15 33 53.3** | **+0.5** |
| **MDP** | **Montagnes des** | **39.45** | **279** | LR | | LR | | 15 46 13.7 | |
| | comp=Z,114nm,20.4s,baz=96,slow=30 | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **40.32** | **247** | *e*P | | **P** | | **15 34 05.5** | **+0.5** |
| **ESDC** | **Sonseca Array** | **41.59** | **11** | LR | | LR | | 15 52 02.0 | |
| | comp=Z,118nm,18.5s,baz=168,slow=37 | | | | | | | | |
| **PCMB** | **Pacaembu** | **41.90** | **238** | *e*P | | **P** | | **15 34 18.7** | **+0.7** |
| **ITTB** | **Itaituba** | **42.15** | **265** | *e*P | | **P** | | **15 34 19.4** | **-0.8** |
| **KEST** | **Kesra** | **42.51** | **28** | P | | **P** | | **15 34 23.3** | **+0.6** |
| | comp=Z,9.4nm,1.1s,baz=192,slow=7.0,SNR=4.4 | | | | | | | | |
| KEST | | | | LR | | LR | | 15 53 22.6 | |
| | comp=Z,746nm,18.2s,baz=177,slow=38 | | | | | | | | |
| **KEST** | **Kesra** | **42.51** | **28** | P | | **P** | | **15 34 23.2** | **+0.4** |
| **CLDB** | **Colider** | **42.96** | **255** | *e*P | | **P** | | **15 34 25.7** | **-1.0** |
| **LSZ** | **Lusaka** | **43.60** | **111** | P | | **P** | | **15 34 32.8** | **+0.8** |
| | comp=Z,2.4nm,0.6s,baz=312,slow=6.3,SNR=6.1 | | | | | | | | |
| LSZ | | | | LR | | LR | | 15 49 37.3 | |
| | comp=Z,134nm,20.6s,baz=296,slow=32 | | | | | | | | |
| **PP1B** | **Ponte de Pedra** | **43.69** | **246** | *e*P | | **P** | | **15 34 33.7** | **+1.1** |
| **PDRB** | **Porto das Gac** | **43.99** | **254** | *e*P | | **P** | | **15 34 35.5** | **+0.5** |
| **MBAR** | **Mbarara** | **44.38** | **90** | LR | | LR | | 15 51 47.0 | |
| | comp=Z,184nm,18.1s,baz=242,slow=34 | | | | | | | | |
| **LBTB** | **Lobatse** | **44.69** | **125** | P | | **P** | | **15 34 41.6** | **+1.0** |
| | comp=Z,5.0nm,0.8s,baz=287,slow=7.0,SNR=4.7 | | | | | | | | |
| LBTB | | | | LR | | LR | | 15 50 34.2 | |
| | comp=Z,137nm,20.1s,baz=294,slow=32 | | | | | | | | |
| **LBTB** | **Lobatse** | **44.69** | **125** | P | | **P** | | **15 34 38.7** | **-1.8** |
| LBTB | | | | IAmb | | IAmb | | 15 34 44.8 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **SUR** | **Sutherland** | **44.91** | **137** | LR | | LR | | 15 49 07.8 | |
| | comp=Z,112nm,21.9s,baz=327,slow=30 | | | | | | | | |
| **SUR** | **Sutherland** | **44.91** | **137** | P | | **P** | | **15 34 41.5** | **-0.9** |
| SUR | | | | IAmb | | IAmb | | 15 34 45.0 | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| **AQDB** | **Aquidauana** | **45.33** | **242** | *e*P | | **P** | | **15 34 46.7** | **+1.1** |
| **BOSA** | **Boshof** | **46.08** | **130** | P | | **P** | | **15 34 52.6** | **+1.0** |
| | comp=Z,10nm,1.1s,baz=95,slow=16,SNR=5.3 | | | | | | | | |
| BOSA | | | | LR | | LR | | 15 50 16.6 | |
| | comp=Z,104nm,18.6s,baz=308,slow=31 | | | | | | | | |
| **BOSA** | **Boshof** | **46.08** | **130** | P | | **P** | | **15 34 52.2** | **+0.6** |
| BOSA | | | | IAmb | | IAmb | | 15 34 56.4 | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **RAFF** | **Raffo Rosso** | **46.17** | **31** | P | | **P** | | **15 34 51.2** | **-0.8** |
| **PTGA** | **Pitinga** | **46.32** | **270** | P | | **P** | | **15 34 52.8** | **-0.8** |
| | comp=Z,4.8nm,1.0s,baz=87,slow=11,SNR=2.9 | | | | | | | | |
| **VAE** | **Valguarnera** | **46.39** | **31** | LR | | LR | | 15 53 10.5 | |
| | comp=Z,100nm,19.0s,baz=152,slow=35 | | | | | | | | |
| **BOAV** | **Boa Vista** | **47.00** | **274** | *e*P | | **P** | | **15 34 58.1** | **-0.8** |
| **PLTB** | **Pedras Altas** | **48.45** | **227** | P | | **P** | | **15 35 10.6** | **+0.7** |
| PLTB | | | | IAmb | | IAmb | | 15 35 12.8 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **48.45** | **227** | *e*P | | **P** | | **15 35 11.2** | **+1.3** |
| **CPUP** | **Villa Florida** | **48.88** | **235** | P | | **P** | | **15 35 13.4** | **+0.2** |
| | comp=Z,7.4nm,1.1s,baz=65,slow=3.6,SNR=6.0 | | | | | | | | |
| CPUP | | | | LR | | LR | | 15 53 11.5 | |
| | comp=Z,152nm,20.8s,baz=73,slow=33 | | | | | | | | |
| **CPUP** | **Villa Florida** | **48.88** | **235** | P | | **P** | | **15 35 13.1** | **-0.1** |
| CPUP | | | | IAmb | | IAmb | | 15 35 14.5 | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **CPUP** | **Villa Florida** | **48.88** | **235** | *e*P | | **P** | | **15 35 14.2** | **+0.9** |
| **SIV** | **San Ignacio** | **49.00** | **250** | LR | | LR | | 15 54 57.5 | |
| | comp=Z,179nm,18.5s,baz=122,slow=35 | | | | | | | | |
| **PAOL** | **Paolisi** | **49.20** | **28** | P | | **P** | | **15 35 16.6** | **+1.1** |
| **ITQB** | **Itaqui** | **49.73** | **231** | P | | **P** | | **15 35 20.0** | **+0.4** |
| **ITQB** | **Itaqui** | **49.73** | **231** | *e*P | | **P** | | **15 35 21.4** | **+1.7** |
| **NRCA** | **Norcia** | **49.98** | **26** | P | | **P** | | **15 35 22.2** | **+0.8** |
| NRCA | | | | IAmb | | IAmb | | 15 35 37.8 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| **MURB** | **Monte Urbino** | **50.07** | **25** | P | | **P** | | **15 35 22.6** | **+0.4** |
| **ZCCA** | **Zocca** | **50.35** | **23** | P | | **P** | | **15 35 25.8** | **+1.6** |
| ZCCA | | | | IAmb | | IAmb | | 15 35 34.4 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **50.79** | **19** | P | | **P** | | **15 35 27.8** | **+0.1** |
| **KMBO** | **Kilima Mbogo** | **50.89** | **91** | P | | **P** | | **15 35 29.9** | **+0.8** |
| | comp=Z,2.7nm,0.9s,baz=316,slow=5.9,SNR=4.1 | | | | | | | | |
| KMBO | | | | LR | | LR | | 15 55 49.9 | |
| | comp=Z,242nm,18.4s,baz=315,slow=35 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **50.89** | **91** | P | | **P** | | **15 35 29.9** | **+0.8** |
| **TEOL** | **Teolo** | **51.47** | **23** | P | | **P** | | **15 35 31.1** | **-1.5** |
| TEOL | | | | IAmb | | IAmb | | 15 35 31.2 | |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **TUE** | **Stuetta** | **51.56** | **20** | P | | **P** | | **15 35 33.1** | **-0.4** |
| TUE | | | | IAmb | | IAmb | | 15 35 42.2 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **52.02** | **20** | LR | | LR | | 15 58 01.5 | |
| | comp=Z,241nm,19.6s,baz=266,slow=36 | | | | | | | | |
| **DAVA** | **Damuels** | **52.45** | **20** | *e*P | | **P** | | **15 35 40.1** | **0.0** |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **FNA** | **Florina** | **52.51** | **33** | P | | **P** | | **15 35 40.3** | **-0.2** |
| FNA | | | | IAmb | | IAmb | | 15 35 56.5 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **FETA** | **Feichten** | **52.52** | **21** | *e*P | | **P** | | **15 35 41.9** | **+1.3** |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **STAL** | **STALIGIAL** | **52.62** | **23** | P | | **P** | | **15 35 41.2** | **+0.1** |
| STAL | | | | IAmb | | IAmb | | 15 35 42.4 | |
| | comp=Z,25nm,1.4s | | | | | | | | |
| **LIT** | **Litokhoron** | **52.66** | **35** | P | | **P** | | **15 35 41.7** | **+0.1** |
| LIT | | | | IAmb | | IAmb | | 15 35 50.0 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **BFO** | **Black Forest** | **52.86** | **18** | P | | **P** | | **15 35 42.6** | **-0.3** |
| **MOTA** | **Moosalm** | **52.93** | **21** | *e*P | | **P** | | **15 35 43.3** | **-0.3** |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **52.95** | **22** | *e*P | | **P** | | **15 35 45.8** | **+2.1** |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| **ETMB** | **Extrema** | **52.97** | **259** | *e*P | | **P** | | **15 35 44.4** | **+0.1** |
| **WTTA** | **Wattenberg** | **53.05** | **21** | *e*P | | **P** | | **15 35 44.6** | **0.0** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **53.29** | **23** | *e*P | | **P** | | **15 35 48.3** | **+2.1** |
| | comp=Z,1.4nm,0.3s | | | | | | | | |
| **OBKA** | **Obir** | **53.55** | **24** | *e*P | | **P** | | **15 35 48.3** | **+0.1** |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **MOA** | **Molln** | **54.53** | **23** | *e*P | | **P** | | **15 35 56.2** | **+1.0** |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **ARSA** | **Arzberg** | **54.54** | **24** | *e*P | | **P** | | **15 35 56.5** | **+1.2** |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **VTS** | **Vitosha** | **54.77** | **33** | P | | **P** | | **15 35 57.6** | **+0.4** |
| VTS | | | | IAmb | | IAmb | | 15 36 01.2 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **SJG** | **San Juan** | **55.07** | **293** | LR | | LR | | 15 53 59.8 | |
| | comp=Z,74nm,21.6s,baz=90,slow=30 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **55.14** | **22** | P | | **P** | | **15 35 59.5** | **-0.2** |
| GEC2 | | | | IAmb | | IAmb | | 15 36 03.0 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **GERES** | **GERESS Array B** | **55.14** | **22** | P | | **P** | | **15 35 59.5** | **-0.2** |
| | comp=Z,4.0nm,0.9s,baz=208,slow=4.5,SNR=17 | | | | | | | | |
| GERES | | | | LR | | LR | | 16 00 13.7 | |
| | comp=Z,217nm,19.9s,baz=222,slow=37 | | | | | | | | |
| **GERES** | **GERESS Array B** | **55.14** | **22** | P | | **P** | | **15 35 58.9** | **-0.7** |
| **CONA** | **Conrad Observa** | **55.22** | **24** | *e*P | | **P** | | **15 36 00.9** | **+0.6** |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **55.33** | **21** | *e*P | | **P** | | **15 36 01.7** | **+0.8** |
| **CKRC** | **Cesky Krumlov** | **55.34** | **22** | *e*P | | **P** | | **15 36 00.8** | **-0.2** |
| **EIL** | **Elat** | **55.55** | **52** | LR | | LR | | 16 00 49.0 | |
| | comp=Z,338nm,18.5s,baz=275,slow=37 | | | | | | | | |
| **LPAZ** | **La Paz** | **55.71** | **251** | LR | | LR | | 15 58 39.9 | |
| | comp=Z,149nm,19.8s,baz=84,slow=35 | | | | | | | | |
| **LPAZ** | **La Paz** | **55.71** | **251** | *e*P | | **P** | | **15 36 04.6** | **-0.4** |
| **VRAC** | **Vranov** | **56.62** | **23** | LR | | LR | | 16 01 32.6 | |
| | comp=Z,149nm,18.1s,baz=218,slow=37 | | | | | | | | |
| **CLL** | **Collm** | **56.95** | **20** | *e*S | | **S** | | **15 44 13.0** | **+6.8** |
| CLL | | | | Lm | | MLR | | 15 59 00.0 | |
| | comp=N,100nm,19.4s | | | | | | | | |
| CLL | | | | Lm | | MLR | | 15 59 00.0 | |
| | comp=E,200nm,20.6s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **56.95** | **7** | LR | | LR | | 16 00 59.9 | |
| | comp=E,140nm,18.0s,baz=180,slow=36 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **57.34** | **49** | LR | | LR | | 16 02 38.5 | |
| | comp=E,54nm,18.1s,baz=60,slow=38 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **57.35** | **22** | *e*P | | **P** | | **15 36 17.0** | **+1.6** |
| **SDV** | **Santo Domingo** | **57.64** | **281** | LR | | LR | | 15 59 29.3 | |
| | comp=E,83nm,18.4s,baz=106,slow=34 | | | | | | | | |
| **SDV** | **Santo Domingo** | **57.64** | **281** | P | | **P** | | **15 36 17.4** | **-0.8** |
| SDV | | | | IAmb | | IAmb | | 15 36 20.9 | |
| | comp=Z,7.2nm,0.9s | | | | | | | | |
| **SDV** | **Santo Domingo** | **57.64** | **281** | *e*P | | **P** | | **15 36 16.8** | **-1.4** |
| **LVC** | **Limon Verde** | **57.72** | **244** | LR | | LR | | 15 59 56.9 | |
| | comp=Z,68nm,21.1s,baz=92,slow=35 | | | | | | | | |
| **PB09** | **IPOC Station P** | **57.83** | **245** | P | | **P** | | **15 36 17.8** | **-1.7** |
| **MDUB** | **Mudurnu** | **58.14** | **39** | P | | **P** | | **15 36 22.1** | **+0.9** |
| **MLR** | **Muntele Rosu** | **58.15** | **32** | LR | | LR | | 16 03 13.4 | |
| | comp=Z,274nm,20.4s,baz=236,slow=38 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **58.15** | **32** | P | | **P** | | **15 36 22.0** | **+0.9** |
| MLR | | | | IAmb | | IAmb | | 15 36 30.7 | |
| | comp=Z,9.5nm,1.1s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **59.20** | **30** | P | | **P** | | **15 36 30.1** | **+1.7** |
| **BUR08** | **Bucovina Ar. S** | **59.22** | **30** | P | | **P** | | **15 36 30.5** | **+1.9** |
| **BR131** | **Keskin Array S** | **59.31** | **41** | P | | **P** | | **15 36 29.9** | **+0.5** |
| BR131 | | | | IAmb | | IAmb | | 15 36 33.4 | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **59.31** | **41** | P | | **P** | | **15 36 30.7** | **+1.3** |
| | comp=Z,4.4nm,0.9s,baz=230,slow=6.5,SNR=21 | | | | | | | | |
| BRTR | | | | LR | | LR | | 16 05 01.8 | |
| | comp=Z,130nm,19.4s,baz=244,slow=39 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **59.31** | **41** | P | | **P** | | **15 36 29.9** | **+0.5** |
| **BNN** | **Bunyan** | **60.36** | **43** | P | | **P** | | **15 36 35.8** | **-0.8** |
| **ROSC** | **El Rosal** | **60.90** | **276** | LR | | LR | | 15 59 52.6 | |
| | comp=Z,159nm,20.9s,baz=106,slow=33 | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **61.65** | **279** | P | | **P** | | **15 36 43.6** | **-2.1** |
| ZARC | | | | IAmb | | IAmb | | 15 36 47.8 | |
| | comp=Z,9.5nm,0.9s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **62.22** | **282** | P | | **P** | | **15 36 48.7** | **-0.8** |
| **BO04** | **La Punta** | **62.35** | **232** | P | | **P** | | **15 36 50.2** | **+0.1** |
| **AKASG** | **Malin Array Be** | **63.22** | **29** | P | | **P** | | **15 36 56.0** | **+0.6** |
| | comp=Z,1.1nm,0.7s,baz=227,slow=6.6,SNR=9.5 | | | | | | | | |
| AKASG | | | | LR | | LR | | 16 05 21.6 | |
| | comp=Z,111nm,20.8s,baz=176,slow=37 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **63.22** | **29** | P | | **P** | | **15 36 56.0** | **+0.6** |
| **PLCA** | **Paso Flores** | **64.67** | **225** | LR | | LR | | 16 00 38.9 | |
| | comp=Z,142nm,21.8s,baz=80,slow=32 | | | | | | | | |
| **HFS** | **Hagfors** | **64.71** | **15** | LR | | LR | | 16 06 29.4 | |
| | comp=Z,205nm,18.3s,baz=230,slow=37 | | | | | | | | |
| **ATAH** | **Atahualpa** | **64.80** | **263** | LR | | LR | | 16 03 49.0 | |
| | comp=Z,91nm,21.7s,baz=115,slow=35 | | | | | | | | |
| **OTAV** | **Otavalo** | **64.82** | **271** | *e*P | | **P** | | **15 37 05.8** | **-1.5** |
| **NOA** | **NORSAR Array B** | **64.91** | **13** | P | | **P** | | **15 37 07.8** | **+1.3** |
| | comp=Z,0.7nm,0.8s,baz=195,slow=9.1,SNR=3.8 | | | | | | | | |
| NOA | | | | LR | | LR | | 16 05 19.8 | |
| | comp=Z,64nm,19.1s,baz=210,slow=36 | | | | | | | | |
| **BORG** | **Borgarnes** | **65.99** | **356** | LR | | LR | | 16 00 33.1 | |
| | comp=Z,70nm,21.8s,baz=170,slow=31 | | | | | | | | |
| **GNI** | **Garni** | **67.12** | **45** | LR | | LR | | 16 10 14.6 | |
| | comp=Z,29nm,18.9s,baz=270,slow=39 | | | | | | | | |
| **KBZ** | **Khabaz** | **67.31** | **41** | P | | **P** | | **15 37 23.4** | **+1.3** |
| | comp=Z,4.7nm,0.9s,baz=250,slow=2.8,SNR=8.7 | | | | | | | | |
| KBZ | | | | LR | | LR | | 16 10 45.4 | |
| | comp=Z,53nm,18.0s,baz=222,slow=40 | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.39** | **19** | P | | **P** | | **15 37 34.2** | **-0.6** |
| | comp=Z,2.0nm,0.7s,baz=253,slow=2.0,SNR=7.8 | | | | | | | | |
| FINES | | | | LR | | LR | | 16 10 02.9 | |
| | comp=Z,183nm,18.3s,baz=219,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.39** | **19** | P | | **P** | | **15 37 34.3** | **-0.5** |
| **OBN** | **Obninsk** | **69.44** | **28** | LR | | LR | | 16 08 42.0 | |
| | comp=Z,48nm,21.7s,baz=189,slow=36 | | | | | | | | |
| **USHA** | **Ushuaia** | **69.52** | **210** | LR | | LR | | 16 05 01.3 | |
| | comp=Z,209nm,18.4s,baz=62,slow=33 | | | | | | | | |
| **SCHQ** | **Schefferville** | **70.72** | **331** | LR | | LR | | 16 02 40.8 | |
| | comp=Z,48nm,19.7s,baz=130,slow=31 | | | | | | | | |
| **SNAA** | **Sanae** | **70.75** | **176** | LR | | LR | | 16 01 15.4 | |
| | comp=Z,115nm,19.0s,baz=1.5,slow=30 | | | | | | | | |
| **J57A** | **Williamstown** | **71.07

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **INZ** | **Inchbonnie** | **1.34** | **309** | P | | **Pn** | **15 33 49.8** | **-0.8** |
| **TMZ** | **Timaru** | **1.56** | **238** | P | | **Pn** | **15 33 53.7** | **+0.1** |
| TMZ | | | | S | | **Sg** | **15 34 16.0** | **-0.7** |
| **WVZ** | **Waitaha Valley** | **1.63** | **287** | P | | **Pn** | **15 33 55.1** | **+0.7** |
| **THZ** | **Tophouse** | **1.81** | **1** | P | | **Pn** | **15 33 56.7** | **-0.4** |
| **GCSZ** | **Gaunt Creek Bo** | **1.86** | **277** | P | | **Pn** | **15 33 58.4** | **+0.6** |
| **DSZ** | **Denniston Nort** | **1.99** | **337** | P | | **Pn** | **15 33 59.3** | **-0.3** |
| **BSWZ** | **Blackbirch Sta** | **2.01** | **22** | P | | **Pn** | **15 33 59.8** | **+0.1** |
| **LBZ** | **Lake Benmore** | **2.09** | **246** | P | | **Pn** | **15 34 01.1** | **+0.2** |
| **MRNZ** | **Matariki Terra** | **2.18** | **358** | P | | **Pn** | **15 34 02.4** | **+0.4** |
| **FOZ** | **Fox Glacier** | **2.21** | **270** | P | | **Pn** | **15 34 03.7** | **+1.2** |
| **TUWZ** | **Tuamarina** | **2.29** | **21** | P | | **Pn** | **15 34 03.5** | **-0.1** |
| **NNZ** | **Nelson** | **2.39** | **9** | P | | **Pn** | **15 34 05.2** | **+0.2** |
| **TCW** | **Tory Channel** | **2.59** | **24** | P | | **Pn** | **15 34 07.1** | **-0.6** |
| **BHW** | **Baring Head** | **2.63** | **35** | P | | **Pn** | **15 34 07.7** | **-0.5** |
| **SNZO** | **South Karori** | **2.65** | **32** | P | | **Pn** | **15 34 07.9** | **-0.6** |
| **PLWZ** | **Palliser** | **2.67** | **42** | P | | **Pn** | **15 34 08.3** | **-0.7** |
| **WEL** | **Wellington** | **2.69** | **32** | P | | **Pn** | **15 34 09.0** | **-0.2** |
| **QRZ** | **Quartz Range** | **2.76** | **355** | P | | **Pn** | **15 34 10.3** | **+0.3** |
| **QRZ** | **Quartz Range** | **2.76** | **355** | P | | **Pn** | **15 34 10.7** | **+0.6** |
| **MSWZ** | **Moikau Station** | **2.79** | **40** | P | | **Pn** | **15 34 09.8** | **-0.7** |
| **HHSZ** | **Highcliff Hill** | **2.81** | **214** | P | | **Pn** | **15 34 11.3** | **+0.4** |
| **DUWZ** | **D'Urville Isla** | **2.88** | **16** | P | | **Pn** | **15 34 12.5** | **+0.7** |
| **CAW** | **Cannon Point** | **2.96** | **34** | P | | **Pn** | **15 34 12.3** | **-0.6** |
| **JCZ** | **Jackson Bay** | **2.99** | **259** | P | | **Pn** | **15 34 13.5** | **+0.2** |
| **TRWZ** | **Traveller** | **3.02** | **45** | P | | **Pn** | **15 34 12.8** | **-0.8** |
| **WKZ** | **Wanaka** | **3.03** | **244** | P | | **Pn** | **15 34 14.0** | **+0.2** |
| **EAZ** | **Earnscleugh** | **3.03** | **236** | P | | **Pn** | **15 34 13.9** | **0.0** |
| **MTW** | **Mount Morrison** | **3.11** | **40** | P | | **Pn** | **15 34 13.8** | **-1.1** |
| **KIW** | **Kapiti Island** | **3.11** | **30** | P | | **Pn** | **15 34 15.1** | **+0.1** |
| **OGWZ** | **Otaki Gorge** | **3.25** | **33** | P | | **Pn** | **15 34 16.3** | **-0.5** |
| **TUZ** | **Tuapeka** | **3.31** | **223** | P | | **Pn** | **15 34 17.9** | **+0.3** |
| **MRZ** | **Mangatainoka R** | **3.55** | **36** | P | | **Pn** | **15 34 18.8** | **-1.1** |
| **BFZ** | **Birch Farm** | **3.84** | **42** | P | | **Pn** | **15 34 23.5** | **-1.4** |
| **BFZ** | **Birch Farm** | **3.84** | **42** | P | | **Pn** | **15 34 23.7** | **-1.2** |
| **MLZ** | **Mavora Lakes** | **3.84** | **241** | P | | **Pn** | **15 34 24.6** | **-0.3** |
| **SYZ** | **Scrubby Hill** | **3.96** | **220** | P | | **Pn** | **15 34 27.6** | **+1.0** |
| **WHZ** | **Wether Hill Ro** | **4.20** | **235** | P | | **Pn** | **15 34 28.9** | **-0.9** |
| **NEZ** | **North Egmont** | **4.40** | **13** | P | | **Pn** | **15 34 35.4** | **+2.7** |
| **MTVZ** | **Mangateitei** | **4.62** | **26** | P | | **Pn** | **15 34 37.5** | **+1.8** |
| **VRZ** | **Vera Road** | **4.67** | **18** | P | | **Pn** | **15 34 37.9** | **+1.5** |
| **WNVZ** | **Wahianoa** | **4.72** | **27** | P | | **Pn** | **15 34 38.2** | **+1.0** |
| **TRVZ** | **Turoa** | **4.73** | **26** | P | | **Pn** | **15 34 38.5** | **+1.2** |
| **APZ** | **The Paps** | **4.74** | **225** | P | | **Pn** | **15 34 38.3** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **4.86** | **26** | P | | **Pn** | **15 34 40.3** | **+1.2** |
| **OTVZ** | **Oturere** | **4.89** | **27** | P | | **Pn** | **15 34 39.9** | **+0.4** |
| **NNVZ** | **North Ngauruho** | **4.90** | **26** | P | | **Pn** | **15 34 40.3** | **+0.6** |
| **ETVZ** | **East Tongariro** | **4.93** | **27** | P | | **Pn** | **15 34 40.4** | **+0.4** |
| **TMVZ** | **Te Maari** | **4.95** | **27** | P | | **Pn** | **15 34 41.0** | **+0.8** |
| **HIZ** | **Hauiti** | **5.28** | **17** | P | | **Pn** | **15 34 45.2** | **+0.5** |
| **HIZ** | **Hauiti** | **5.28** | **17** | P | | **Pn** | **15 34 44.6** | **+0.1** |
| **TLZ** | **Tolley Road** | **5.62** | **22** | P | | **Pn** | **15 34 49.9** | **+0.5** |
| **TOZ** | **Tahuroa Road** | **6.17** | **20** | P | | **Pn** | **15 34 56.7** | **-0.3** |
| **MWZ** | **Matawai** | **6.32** | **36** | P | | **Pn** | **15 34 57.0** | **-2.0** |

**IDC 14 16:27:43.2**±2.3,**3°09**N×**128°81**E,**h0**km,**mb3.2**/4, **mb1 3.4**/4,**mb1mx2.8**/51,**mbtmp3.2**/4,**Error ellipse: s-maj=120.4km s-min=27.3km az=71.0,North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **21.29** | **188** | P | P | 16 32 31.7 | +0.2 |
| | 1.8nm,1.0s,baz=8.1,slow=7.1,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.53** | **167** | P | P | 16 32 55.6 | +0.4 |
| | 0.2nm,0.3s,baz=346,slow=10,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **27.06** | **170** | P | P | 16 33 26.7 | -0.8 |
| | 0.1nm,0.5s,baz=348,slow=7.3,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.27** | **325** | P | P | 16 37 47.0 | +0.3 |
| | 0.1nm,0.5s,baz=124,slow=8.9,SNR=1.8 | | | | | | |

*IDC **14** 16:33:19.1±1.2, 12°37N×87°83W,h0km,mb4.0/9, mb1 4.2/11,mb1mx3.9/39,mbtmp4.0/11,ML3.3/3,MS3.5/13, Ms1 3.6/13,ms1mx3.2/63,Error ellipse: s-maj=37.7km s-min=18.8km az=42.0*

*NEIC **14** 16:33:20.7±1.4, 12°12N±0°06×88°07W±0°06,h10km±1km, mb4.6/86,Error ellipse: s-maj=12.1km s-min=8.0km az=213.0*

*INET **14** 16:33:21.7±1.2, 11°98N×88°27W,h15km±20km,MW4.0*

*UCR **14** 16:33:22.7±1.1, 12°12N×88°31W,h16km±7km,ML3.4, mb4.6(NEIC)*

*SNET **14** 16:33:22.6±1.1, 12°12N×88°31W,h16km±8km,ML3.5*

**ISC 14 16:33:21.1**±1.1,**12°14N**±0°06×**88°05W**±0°05,**h19**km±3km, **n155**,σ0**96**/164,**mb4.5**/41,**MS3.4**/12,**Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **1.12** | **60** | Pn | **Pg** | **16 33 44.7** | **+1.8** |
| **CRIN** | **San Cristobal** | **1.12** | **60** | *eP* | **Pg** | **16 33 45.8** | **+2.8** |
| **CNCH** | **Conchagua** | **1.15** | **11** | *eP* | **Pg** | **16 33 44.5** | **+1.1** |
| **CNCH** | **Conchagua** | **1.15** | **11** | *eP* | **Pg** | **16 33 44.5** | **+1.1** |
| **PACA** | **Pacayal** | **1.34** | **349** | *eP* | **Pg** | **16 33 46.4** | **-0.8** |
| **PACA** | **Pacayal** | **1.34** | **349** | *eP* | **Pg** | **16 33 46.7** | **-0.5** |
| **PACA** | **Pacayal** | **1.34** | **349** | *eP* | **Pg** | **16 33 46.4** | **-0.8** |
| **CNGN** | **Cerro Negro** | **1.37** | **75** | Pn | **Pg** | **16 33 46.1** | **-1.5** |
| **CNGN** | **Cerro Negro** | **1.37** | **75** | *eP* | **Pg** | **16 33 49.4** | **+1.8** |
| **COEB** | **Comit de Eme** | **1.43** | **341** | *eP* | **Pb** | **16 33 47.0** | **-0.2** |
| COEB | | | | *eS* | **Sg** | **16 34 06.8** | **-0.6** |
| COEB | | | | IAML | | 16 34 14.1 | |
| | comp=Z,668nm,0.3s | | | | | | |
| **COEB** | **Comit de Eme** | **1.43** | **341** | *eP* | **Pb** | **16 33 47.0** | **-0.2** |
| COEB | | | | *eS* | **Sg** | **16 34 06.8** | **-0.6** |
| COEB | | | | IAML | | 16 34 14.1 | |
| | comp=Z,668nm,0.3s | | | | | | |
| **COPN** | **Copaltepe** | **1.43** | **88** | *eP* | **Pg** | **16 33 47.8** | **-0.9** |
| **MOMN** | **Momotombo** | **1.50** | **80** | *eP* | **Pg** | **16 33 49.6** | **-0.5** |
| **PQSS** | **Presa 15 de Se** | **1.55** | **341** | *eP* | **Pb** | **16 33 48.8** | **-0.5** |
| **PQSS** | **Presa 15 de Se** | **1.55** | **341** | *eP* | **Pb** | **16 33 48.8** | **-0.5** |
| **COEG** | **Centro de Oper** | **1.68** | **331** | *eP* | **Pn** | **16 33 50.1** | **+0.6** |
| COEG | | | | *eS* | **Sb** | **16 34 12.1** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.68** | **331** | *eP* | **Pn** | **16 33 50.1** | **+0.6** |
| COEG | | | | *eS* | **Sb** | **16 34 12.1** | **-0.2** |
| **SCLA** | **Alcaldia de Sa** | **1.68** | **337** | *eP* | **Pb** | **16 33 50.9** | **-0.7** |
| SCLA | | | | *eS* | **Sb** | **16 34 12.8** | **+0.4** |
| **SCLA** | **Alcaldia de Sa** | **1.68** | **337** | *eP* | **Pb** | **16 33 50.9** | **-0.7** |
| SCLA | | | | *eS* | **Sb** | **16 34 12.8** | **+0.4** |
| **SJTE** | **Alcalda de S** | **1.73** | **328** | *eP* | **Pn** | **16 33 50.5** | **+0.1** |
| SJTE | | | | *eS* | **Sn** | **16 34 11.6** | **-0.5** |
| **SJTE** | **Alcalda de S** | **1.73** | **328** | *eP* | **Pn** | **16 33 50.5** | **+0.1** |
| SJTE | | | | *eS* | **Sn** | **16 34 11.6** | **-0.5** |
| **TISN** | **Laguna Tiscapa** | **1.74** | **90** | *eP* | **Pb** | **16 33 52.2** | **-0.3** |
| **MGAN** | **Managua** | **1.76** | **90** | *eP* | **Pb** | **16 33 53.0** | **+0.1** |
| MGAN | | | | *eP* | **Pg** | **16 33 53.7** | **-1.4** |
| **PAVA** | **Las Pavas** | **1.78** | **331** | *eP* | **Pn** | **16 33 51.9** | **+0.8** |
| PAVA | | | | IAML | | 16 34 35.6 | |
| | comp=Z,583nm,0.5s | | | | | | |
| **PAVA** | **Las Pavas** | **1.78** | **331** | *eP* | **Pn** | **16 33 51.9** | **+0.8** |
| **PAVA** | **Las Pavas** | **1.78** | **331** | *eP* | **Pn** | **16 33 51.9** | **+0.8** |
| PAVA | | | | IAML | | 16 34 35.6 | |
| | comp=Z,583nm,0.5s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.92** | **323** | Pn | **Pn** | **16 33 52.2** | **-0.7** |
| **PMON** | **Piamonte** | **1.99** | **322** | *eP* | **Pn** | **16 33 53.7** | **-0.2** |
| PMON | | | | *eS* | **Sn** | **16 34 18.2** | **-0.2** |
| **PMON** | **Piamonte** | **1.99** | **322** | *eP* | **Pn** | **16 33 53.7** | **-0.2** |
| PMON | | | | *eS* | **Sn** | **16 34 18.2** | **-0.2** |
| **JAYA** | **Jayaque - finc** | **2.03** | **318** | *eP* | **Pn** | **16 33 54.2** | **-0.3** |
| JAYA | | | | *eS* | **Sn** | **16 34 18.1** | **-1.3** |
| JAYA | | | | IAML | | 16 34 25.4 | |
| | comp=Z,371nm,0.4s | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.03** | **318** | *eP* | **Pn** | **16 33 54.2** | **-0.3** |
| JAYA | | | | *eS* | **Sn** | **16 34 18.1** | **-1.3** |
| JAYA | | | | IAML | | 16 34 25.4 | |
| | comp=Z,371nm,0.4s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **2.05** | **22** | | **Pb** | **16 33 55.9** | **-1.9** |
| **TACO** | **Tacachico** | **2.21** | **325** | *eP* | **Pn** | **16 33 57.0** | **0.0** |
| TACO | | | | *eS* | **Sn** | **16 34 24.5** | **+0.6** |
| **TACO** | **Tacachico** | **2.21** | **325** | *eP* | **Pn** | **16 33 57.0** | **0.0** |
| TACO | | | | *eS* | **Sn** | **16 34 24.5** | **+0.6** |
| **MATN** | **Matagalpa** | **2.22** | **69** | Pn | **Pb** | **16 33 58.2** | **-2.5** |
| **MATN** | **Matagalpa** | **2.22** | **69** | *eP* | **Pg** | **16 34 02.6** | **-1.1** |
| **SBLS** | **San Blas** | **2.28** | **318** | *eP* | **Pn** | **16 33 57.5** | **-0.5** |
| **SBLS** | **San Blas** | **2.28** | **318** | *eP* | **Pn** | **16 33 57.5** | **-0.5** |
| **BOAB** | **BOACO BROADBAN** | **2.35** | **82** | | **Pb** | **16 34 00.1** | **-2.8** |
| **NUBE** | **Las Nubes** | **2.43** | **316** | *eP* | **Pn** | **16 33 59.2** | **-0.8** |
| **NUBE** | **Las Nubes** | **2.43** | **316** | *eP* | **Pn** | **16 33 59.2** | **-0.8** |
| **MTO3** | **Montecristo** | **2.58** | **330** | Pn | **Pn** | **16 34 01.6** | **-0.6** |
| **MTO3** | **Montecristo** | **2.58** | **330** | *eP* | **Pn** | **16 34 03.5** | **+1.3** |
| **MTO3** | **Montecristo** | **2.58** | **330** | *eP* | **Pn** | **16 34 03.5** | **+1.3** |
| **ESQI** | **Esquipulas** | **2.71** | **333** | Pn | **Pn** | **16 34 04.4** | **+0.5** |
| **HZTE** | **Horizontes, Gu** | **2.79** | **120** | | **Pn** | **16 34 05.3** | **+0.3** |
| **ACON** | **Acoyapa** | **2.82** | **93** | Pn | **Pn** | **16 34 06.2** | **+0.9** |
| **ORTG** | **Ortega, Santa** | **3.10** | **125** | Pn | **Pn** | **16 34 09.8** | **+0.6** |
| **JTS** | **Las Juntas de** | **3.55** | **121** | Pn | **Pn** | **16 34 16.7** | **+1.3** |
| | comp=Z,4.8nm,0.3s,baz=25,slow=17,SNR=12 | | | | | | |
| JTS | | | | | Sn | **Sn** | **16 34 58.8** | **+1.8** |
| | comp=Z,5.3nm,0.3s,baz=0.1,slow=4.2,SNR=5.3 | | | | | | |
| **JTS** | **Las Juntas de** | **3.55** | **121** | | | **Pn** | **16 34 15.4** | **0.0** |
| **ESPN** | **Las Esperanzas** | **3.67** | **89** | Pn | **Pn** | **16 34 17.6** | **+0.7** |
| **APG** | **El Apazote** | **3.69** | **321** | Pn | **Pn** | **16 34 19.4** | **+2.1** |
| | comp=Z,1.0nm,0.3s,baz=151,slow=2.5,SNR=5.4 | | | | | | |
| **JACO** | **JACO, Garabito** | **4.14** | **126** | Pn | **Pn** | **16 34 24.6** | **+1.1** |
| **PEZE** | **Perez Zeledon,** | **5.10** | **122** | Pn | **Pn** | **16 34 36.8** | **+0.1** |
| **CMIG** | **Matias Romero** | **8.24** | **307** | Pn | **Pn** | **16 35 21.2** | **+1.4** |
| | comp=Z,0.4nm,0.3s,baz=279,slow=16,SNR=2.5 | | | | | | |
| CMIG | | | | | Sn | **Sn** | **16 36 55.3** | **+2.8** |
| | comp=Z,0.3nm,0.3s,baz=245,slow=13,SNR=1.2 | | | | | | |
| **ROSC** | **El Rosal** | **15.39** | **117** | LR | LR | 16 43 53.5 | |
| | comp=Z,138nm,19.6s,baz=80,slow=42 | | | | | | |
| **833A** | **Chaparral WMA,** | **19.27** | **328** | P | **P** | **16 37 45.0** | **+0.1** |
| 833A | | | | IAmb | IAmb | 16 37 47.4 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **21.25** | **331** | P | **P** | **16 38 06.8** | **+0.5** |
| **BIRV** | **Birongo** | **21.42** | **92** | P | **P** | **16 38 08.3** | **+0.1** |
| BIRV | | | | IAmb | IAmb | 16 38 30.8 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **ATAH** | **Atahualpa** | **21.43** | **153** | LR | LR | 16 45 08.8 | |
| | comp=Z,123nm,18.5s,baz=356,slow=33 | | | | | | |
| **Z41A** | **Richland Creek** | **21.46** | **349** | P | **P** | **16 38 10.4** | **+1.9** |
| Z41A | | | | IAmb | IAmb | 16 38 13.7 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **GOGA** | **Godfrey** | **21.58** | **10** | P | **P** | **16 38 11.8** | **+2.0** |
| **Y49A** | **Blount Mountai** | **21.67** | **4** | P | **P** | **16 38 11.6** | **+0.9** |
| **TX31** | **Lajitas Ar. Si** | **22.45** | **322** | P | **P** | **16 38 20.1** | **+0.8** |
| TX31 | | | | IAmb | IAmb | 16 38 25.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **TX32** | **Lajitas Array** | **22.45** | **322** | P | **P** | **16 38 20.3** | **+1.0** |
| **TXAR** | **Lajitas Array** | **22.45** | **322** | P | **P** | **16 38 19.8** | **+0.5** |
| | comp=Z,4.9nm,0.9s,baz=140,slow=10,SNR=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **22.45** | **322** | P | **P** | **16 38 20.4** | **+1.1** |
| **HODGE** | **Hodges** | **22.61** | **13** | P | **P** | **16 38 22.4** | **+1.6** |
| **MIAR** | **Mount Ida** | **22.86** | **348** | P | **P** | **16 38 24.5** | **+1.0** |
| MIAR | | | | IAmb | IAmb | 16 38 26.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **22.99** | **334** | P | **P** | **16 38 24.7** | **-0.2** |
| **BG3** | **Lake Jocassee** | **23.22** | **11** | P | **P** | **16 38 28.7** | **+1.5** |
| **W41B** | **Gary Mavity, V** | **23.24** | **351** | P | **P** | **16 38 28.4** | **+1.0** |
| W41B | | | | IAmb | IAmb | 16 38 30.4 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **X37A** | **Clayton** | **23.32** | **345** | P | **P** | **16 38 28.5** | **+0.3** |
| **WHAR** | **Wooly Hollow** | **23.36** | **351** | P | **P** | **16 38 29.5** | **+0.9** |
| WHAR | | | | IAmb | IAmb | 16 38 30.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **CPCT** | **Cooper Cave** | **23.42** | **7** | P | **P** | **16 38 30.2** | **+1.0** |
| **BIRD** | **Birdtown, Kers** | **23.44** | **16** | P | **P** | **16 38 29.9** | **+0.6** |
| BIRD | | | | IAmb | IAmb | 16 38 39.2 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **V48A** | **Smith Brothers** | **23.52** | **3** | P | **P** | **16 38 31.1** | **+0.9** |
| **W39A** | **Magazine** | **23.53** | **348** | P | **P** | **16 38 31.2** | **+1.0** |
| W39A | | | | IAmb | IAmb | 16 38 33.6 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.73** | **9** | P | **P** | **16 38 31.7** | **-0.5** |
| | comp=Z,15nm,1.1s,baz=180,slow=11,SNR=7.2 | | | | | | |
| TKL | | | | | LR | LR | 16 47 03.4 | |
| | comp=Z,70nm,21.2s,baz=180,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.73** | **9** | P | **P** | **16 38 33.3** | **+1.1** |
| TKL | | | | IAmb | IAmb | 16 38 35.1 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **V53A** | **Saluda** | **23.90** | **11** | P | **P** | **16 38 34.7** | **+0.9** |
| **FCAR** | **Ozark Folk Cen** | **23.93** | **352** | P | **P** | **16 38 34.4** | **+0.4** |
| **LCAR** | **Lake Charles** | **23.98** | **354** | P | **P** | **16 38 34.3** | **-0.3** |
| **X34A** | **Smith Ranch, M** | **24.06** | **340** | P | **P** | **16 38 36.5** | **+1.1** |
| **W35A** | **Tecumseh** | **24.26** | **342** | P | **P** | **16 38 37.4** | **+0.1** |
| **U40A** | **Yellville** | **24.49** | **351** | P | **P** | **16 38 39.3** | **0.0** |
| U40A | | | | IAmb | IAmb | 16 38 42.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **24.52** | **338** | P | **P** | **16 38 38.8** | **-0.7** |
| WMOK | | | | IAmb | IAmb | 16 38 41.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **FNO** | **Franklin** | **24.52** | **341** | | | **P** | **16 38 39.2** | **-0.4** |
| **HHAR** | **Hobbs** | **24.61** | **349** | P | **P** | **16 38 40.9** | **+0.5** |
| **TZTN** | **Tazewell** | **24.63** | **9** | P | **P** | **16 38 41.2** | **+0.6** |
| TZTN | | | | IAmb | IAmb | 16 39 08.1 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **TUL1** | **Leonard** | **24.68** | **345** | | | **P** | **16 38 40.7** | **-0.3** |
| TUL1 | | | | IAmb | IAmb | 16 38 45.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **T47A** | **Sharon Grove** | **24.75** | **2** | P | **P** | **16 38 41.9** | **+0.3** |
| T47A | | | | IAmb | IAmb | 16 38 42.7 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **U38A** | **Gravette** | **24.86** | **348** | P | **P** | **16 38 43.0** | **+0.4** |
| U38A | | | | IAmb | IAmb | 16 38 45.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **U54A** | **Nelsons Funny** | **24.91** | **12** | P | **P** | **16 38 44.0** | **+0.8** |
| **T42A** | **Van Buren** | **24.93** | **354** | P | **P** | **16 38 43.4** | **+0.2** |
| **MNTX** | **Cornudas Mount** | **25.17** | **323** | P | **P** | **16 38 46.0** | **+0.5** |
| **MGMO** | **Mountain Grove** | **25.19** | **352** | P | **P** | **16 38 45.5** | **-0.1** |
| MGMO | | | | IAmb | IAmb | 16 38 47.3 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **25.46** | **358** | P | **P** | **16 38 48.0** | **-0.1** |
| S44A | | | | IAmb | IAmb | 16 38 56.5 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **MSTX** | **Muleshoe** | **25.54** | **331** | P | **P** | **16 38 49.3** | **+0.4** |
| MSTX | | | | IAmb | IAmb | 16 39 00.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **25.80** | **334** | P | **P** | **16 38 51.6** | **+0.4** |
| **S39A** | **Bolivar** | **25.87** | **350** | P | **P** | **16 38 51.6** | **-0.2** |
| **CCM** | **Cathedral Cave** | **25.96** | **354** | P | **P** | **16 38 52.4** | **-0.1** |
| **WCI** | **Wyandotte Cave** | **26.02** | **3** | P | **P** | **16 38 53.4** | **+0.3** |
| WCI | | | | IAmb | IAmb | 16 38 53.9 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **26.31** | **352** | P | **P** | **16 38 55.7** | **0.0** |
| R40A | | | | IAmb | IAmb | 16 39 04.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **Q54A** | **Coxs Mills** | **27.49** | **12** | P | **P** | **16 39 06.7** | **+0.4** |
| Q54A | | | | IAmb | IAmb | 16 39 25.2 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **P40A** | **Paris** | **27.50** | **353** | P | **P** | **16 39 06.8** | **+0.3** |
| P40A | | | | IAmb | IAmb | 16 39 07.5 | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **P53A** | **Whipple** | **27.86** | **11** | P | **P** | **16 39 10.6** | **+0.9** |
| P53A | | | | IAmb | IAmb | 16 39 12.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **O53A** | **New Philadelph** | **28.64** | **11** | P | **P** | **16 39 17.8** | **+1.2** |
| O53A | | | | IAmb | IAmb | 16 39 19.1 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **O54A** | **Avella** | **28.74** | **12** | P | **P** | **16 39 18.8** | **+1.3** |
| O54A | | | | IAmb | IAmb | 16 39 28.7 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **N49A** | **Columbus Grove** | **28.87** | **6** | P | **P** | **16 39 19.1** | **+0.4** |
| N49A | | | | IAmb | IAmb | 16 39 28.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **N33A** | **J Bar K, Exete** | **29.66** | **345** | P | **P** | **16 39 26.2** | **+0.5** |
| **SSPA** | **Standing Stone** | **29.76** | **16** | P | **P** | **16 39 27.5** | **+1.0** |
| SSPA | | | | IAmb | IAmb | 16 39 34.5 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **M54A** | **Oil Creek Stat** | **30.16** | **13** | P | **P** | **16 39 30.5** | **+0.4** |
| **N59A** | **State Game Lan** | **30.62** | **18** | P | **P** | **16 39 34.7** | **+0.5** |
| **WVNY** | **West Valley, N** | **31.25** | **14** | P | **P** | **16 39 40.6** | **+0.9** |
| **ECSD** | **EROS Data Cent** | **32.33** | **348** | P | **P** | **16 39 48.7** | **-0.5** |
| ECSD | | | | IAmb | IAmb | 16 39 50.0 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SPMN** | **Marine on St.** | **33.22** | **354** | P | **P** | **16 39 56.4** | **-0.5** |
| **SADO** | **Sadowa** | **33.40** | **12** | LR | LR | 16 53 56.2 | |
| | comp=Z,92nm,18.5s,baz=184,slow=37 | | | | | | |
| **SADO** | **Sadowa** | **33.40** | **12** | P | **P** | **16 39 58.0** | **-0.5** |
| **PFO** | **Pinyon Flats O** | **33.59** | **314** | LR | LR | 16 54 36.2 | |
| | comp=Z,145nm,18.9s,baz=167,slow=38 | | | | | | |
| **F36A** | **Milaca** | **33.92** | **353** | P | **P** | **16 40 02.3** | **-0.8** |
| F36A | | | | IAmb | IAmb | 16 40 03.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **34.31** | **350** | P | **P** | **16 40 05.8** | **-0.5** |
| **LPAZ** | **La Paz** | **34.44** | **145** | LR | LR | 16 54 01.8 | |
| | comp=Z,32nm,18.4s,baz=30,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **35.77** | **332** | P | **P** | **16 40 19.9** | **+0.6** |
| | comp=Z,0.2nm,0.6s,baz=132,slow=12,SNR=2.1 | | | | | | |
| PDAR | | | | | PcP | **PcP** | **16 42 47.8** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=134,slow=5.2,SNR=2.5 | | | | | | |
| PDAR | | | | | LR | LR | 16 59 12.4 | |
| | comp=Z,59nm,18.1s,baz=150,slow=44 | | | | | | |
| **EYMN** | **Ely** | **35.81** | **356** | P | **P** | **16 40 18.1** | **-1.1** |
| **AGMN** | **Agassiz Nation** | **36.63** | **351** | P | **P** | **16 40 25.4** | **-0.9** |
| AGMN | | | | IAmb | IAmb | 16 40 26.9 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **REDW** | **Red Top Meadow** | **36.82** | **332** | P | **P** | **16 40 29.2** | **+0.9** |
| **MDND** | **Maddock** | **36.88** | **347** | P | **P** | **16 40 28.3** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **37.55** | **320** | P | **P** | **16 40 36.3** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=143,slow=6.4,SNR=3.4 | | | | | | |
| NVAR | | | | | PcP | **PcP** | **16 42 53.8** | **+1.3** |
| | comp=Z,0.4nm,0.6s,baz=115,slow=3.2,SNR=4.0 | | | | | | |
| **LMQ** | **La Malbaie** | **38.30** | **19** | P | **P** | **16 40 41.1** | **+0.6** |
| LMQ | | | | IAmb | IAmb | 16 41 05.9 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **D62A** | **Allapoint, All** | **38.33** | **21** | P | **P** | **16 40 42.1** | **+1.4** |
| **ULM** | **Lac du Bonnet** | **38.54** | **352** | P | **P** | **16 40 40.8** | **-1.6** |
| | comp=Z,8.2nm,0.6s,baz=170,slow=8.1,SNR=11 | | | | | | |
| **ULM** | **Lac du Bonnet** | **38.54** | **352** | P | **P** | **16 40 41.0** | **-1.4** |
| ULM | | | | IAmb | IAmb | 16 40 41.8 | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **42.21** | **321** | LR | LR | 17 02 36.4 | |
| | comp=Z,48nm,19.3s,baz=176,slow=42 | | | | | | |
| **NEW** | **Newport** | **43.40** | **332** | LR | LR | 17 01 02.5 | |
| | comp=Z,48nm,18.6s,baz=141,slow=38 | | | | | | |
| **SCHQ** | **Schefferville** | **45.74** | **17** | P | **P** | **16 41 40.0** | **-1.1** |
| | comp=Z,5.9nm,0.6s,baz=218,slow=5.9,SNR=16 | | | | | | |
| **SCHQ** | **Schefferville** | **45.74** | **17** | P | **P** | **16 41 40.0** | **-1.1** |
| **FCC** | **Fort Churchill** | **46.75** | **356** | P | **P** | **16 41 48.0** | **-0.9** |
| FCC | | | | IAmb | IAmb | 16 41 48.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **48.53** | **142** | LR | LR | 17 04 00.4 | |
| | comp=Z,39nm,18.5s,baz=305,slow=38 | | | | | | |
| **FRB** | **Frobisher Bay** | **53.33** | **11** | LR | LR | 17 06 18.4 | |
| | comp=Z,136nm,19.8s,baz=256,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.75** | **345** | P | **P** | **16 42 41.4** | **-0.6** |
| | comp=Z,1.7nm,0.8s,baz=138,slow=7.8,SNR=26 | | | | | | |
| YKA | | | | | PcP | **PcP** | **16 43 48.4** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=147,slow=4.1,SNR=10 | | | | | | |
| **RES** | **Resolute Bay** | **62.64** | **358** | P | **P** | **16 43 43.2** | **-0.8** |
| **BCAR** | **Beaver Creek A** | **63.29** | **336** | P | **P** | **16 43 48.6** | **0.0** |
| **INK** | **Inuvik** | **63.32** | **343** | P | **P** | **16 43 48.4** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=127,slow=7.1,SNR=4.8 | | | | | | |
| **INK** | **Inuvik** | **63.32** | **343** | IAmb | IAmb | 16 43 49.8 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **66.06** | **336** | P | **P** | **16 44 06.1** | **-0.5** |
| | comp=Z,0.6nm,0.9s,baz=159,slow=3.9,SNR=3.5 | | | | | | |
| ILAR | | | | | LR | LR | 17 18 59.0 | |
| | comp=Z,54nm,18.2s,baz=233,slow=42 | | | | | | |
| **BMAR** | **Burnt Mountain** | **66.36** | **339** | P | **P** | **16 44 08.6** | **+0.1** |
| **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ROSC** | **El Rosal** | **7.54** | **188** | Pn | **Pn** | **16 39 04.2** | **+2.4** |
| | comp=Z,4.3nm,0.3s,baz=260,slow=16,SNR=3.6 | | | | | | |
| ROSC | | | | Sn | Sn | 16 40 38.2 | +11 |
| | comp=Z,6.9nm,0.3s,baz=24,slow=22,SNR=2.7 | | | | | | |
| **GTBY** | **Guantanamo Bay** | **7.72** | **347** | Pn | **Pn** | **16 39 05.6** | **+1.7** |
| **PCDR** | **Punta Cana, DR** | **7.76** | **37** | Pn | **Pn** | **16 39 05.3** | **+0.8** |
| **PLMC** | **San Jos del P** | **7.96** | **202** | *eP* | **Pn** | **16 39 08.2** | **+0.8** |
| PLMC | | | | *i* | | 16 41 19.3 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **ANIL** | **Santa Ana** | **8.08** | **195** | *eP* | **Pn** | **16 39 09.2** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **8.22** | **46** | Pn | **Pn** | **16 39 09.1** | **-1.8** |
| **MLPR** | **Magueyes Islan** | **8.24** | **47** | Pn | **Pn** | **16 39 09.7** | **-1.4** |
| **ORTC** | **Ortega, Tolima** | **8.61** | **193** | *eP* | **Pn** | **16 39 17.9** | **+1.6** |
| ORTC | | | | *eS* | **Sn** | **16 40 54.6** | **+1.9** |
| ORTC | | | | *i* | | 16 41 25.6 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **CELP** | **Cerrillos** | **8.64** | **48** | Pn | **Pn** | **16 39 14.5** | **-2.2** |
| **AOPR** | **Arecibo Observ** | **8.70** | **46** | Pn | **Pn** | **16 39 15.1** | **-2.4** |
| **PCRV** | **Puerto La Cruz** | **8.80** | **103** | Pn | **Pn** | **16 39 17.1** | **-1.8** |
| | comp=Z,1.4nm,0.3s,baz=289,slow=4.9,SNR=9.1 | | | | | | |
| PCRV | | | | Sn | **Sn** | **16 40 55.1** | **-2.4** |
| | comp=Z,0.5nm,0.3s,baz=3.1,slow=22,SNR=1.9 | | | | | | |
| **PLCV** | **Puerto La Cruz** | **8.85** | **103** | | **Pn** | **16 39 17.1** | **-2.4** |
| PLCV | | | | | **Sn** | **16 40 55.1** | **-3.5** |
| **SJG** | **San Juan** | **8.98** | **50** | Pn | **Pn** | **16 39 22.3** | **+0.9** |
| | comp=Z,1.2nm,0.3s,baz=22,slow=22,SNR=1.8 | | | | | | |
| SJG | | | | Sn | **Sn** | **16 40 57.5** | **-4.3** |
| | comp=Z,5.0nm,0.3s,baz=12,slow=18,SNR=7.8 | | | | | | |
| **PDPR** | **Patillas Dam,** | **9.02** | **51** | Pn | **Pn** | **16 39 23.1** | **+1.2** |
| **CUPR** | **Culebra, Puert** | **9.76** | **52** | Pn | **Pn** | **16 39 28.7** | **-3.3** |
| **SRBA** | **San Rafael, Bu** | **10.33** | **253** | Pn | **Pn** | **16 39 38.3** | **-1.7** |
| **TXAR** | **Lajitas Array** | **32.85** | **306** | P | **P** | **16 43 47.0** | **+1.7** |
| | comp=Z,0.2nm,0.8s,baz=134,slow=6.5,SNR=1.5 | | | | | | |
| **RCBR** | **Riachuelo** | **41.37** | **114** | P | **P** | **16 44 59.0** | **+1.3** |
| RCBR | | | | IAmb | IAmb | 16 45 07.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **MT09** | **Talagante** | **45.93** | **177** | P | **P** | **16 45 33.7** | **-0.5** |
| **BO01** | **Tunca** | **46.54** | **177** | P | **P** | **16 45 38.5** | **-0.3** |
| BO01 | | | | IAmb | IAmb | 16 45 52.4 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **46.95** | **177** | P | **P** | **16 45 42.4** | **+0.2** |
| **NV11** | **Mina Array Sit** | **47.47** | **311** | P | **P** | **16 45 45.4** | **-1.0** |
| **PLCA** | **Paso Flores** | **52.88** | **177** | P | **P** | **16 46 27.2** | **+0.1** |
| | comp=Z,4.2nm,0.8s,baz=352,slow=9.1,SNR=13 | | | | | | |
| **PLCA** | **Paso Flores** | **52.88** | **177** | P | **P** | **16 46 27.0** | **-0.1** |
| PLCA | | | | IAmb | IAmb | 16 46 27.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **58.04** | **339** | P | **P** | **16 47 04.6** | **+0.8** |
| | comp=Z,0.2nm,0.6s,baz=128,slow=8.0,SNR=3.1 | | | | | | |
| **J20K** | **Nowinta River** | **74.96** | **333** | P | **P** | **16 48 53.1** | **+1.1** |
| J20K | | | | IAmb | IAmb | 16 48 57.8 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **77.93** | **12** | LR | LR | 17 24 53.3 | |
| | comp=Z,37nm,18.1s,baz=24,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **151.82** | **243** | PKPbc | **PKiKP** | **16 57 07.3** | **+0.2** |
| | comp=Z,0.4nm,0.9s,baz=112,slow=2.6,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **151.82** | **243** | | **PKiKP** | **16 57 07.0** | **-0.1** |
| **WRA** | **Warramunga Arr** | **152.40** | **251** | PKPbc | **PKiKP** | **16 57 10.2** | **+1.8** |
| | comp=Z,0.3nm,0.7s,baz=97,slow=3.7,SNR=1.9 | | | | | | |

**IDC 14 16:41:30.2±1.3, 27.23N×100.51E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.2/37, mbtmp3.3/4, MS3.7/1, Ms1 3.7/1, ms1mx2.5/41, Error ellipse: s-maj=78.1km s-min=23.6km az=57.0, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **8.85** | **190** | Pg | Pg | 16 44 13.4 | -6.5 |
| | 0.1nm,0.3s,baz=359,slow=16,SNR=5.8 | | | | | | |
| CMAR | | | | Lg | Lg | 16 46 06.9 | |
| | 0.1nm,0.3s,baz=19,slow=32,SNR=8.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.24** | **328** | P | P | 16 46 50.3 | +1.4 |
| | 0.3nm,0.7s,baz=130,slow=11,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.21** | **141** | P | P | 16 51 19.0 | -0.5 |
| | 0.4nm,0.7s,baz=332,slow=7.5,SNR=4.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **57.80** | **315** | P | P | 16 51 22.0 | -1.3 |
| | 0.2nm,0.4s,baz=85,slow=5.5,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.53** | **337** | LR | LR | 17 21 44.1 | |
| | comp=Z,60nm,18.1s,baz=270,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **60.00** | **144** | P | P | 16 51 39.0 | +0.1 |
| | 0.3nm,0.7s,baz=327,slow=6.5,SNR=5.7 | | | | | | |

**IDC 14 16:49:37.3±2.3, 2.18N×128.29E, h0km, mb3.1/4, mb1 3.2/4, mb1mx2.8/35, mbtmp3.1/4, Error ellipse: s-maj=193.8km s-min=23.9km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.77** | **165** | P | P | 16 54 39.6 | -1.9 |
| | 0.3nm,0.8s,baz=344,slow=11,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **26.26** | **168** | P | P | 16 55 16.0 | +1.5 |
| | 0.2nm,0.9s,baz=356,slow=11,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.71** | **325** | P | P | 16 59 44.0 | +0.2 |
| | 0.2nm,0.4s,baz=119,slow=7.0,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.88** | **327** | P | P | 17 00 11.7 | -0.2 |
| | 0.3nm,0.6s,baz=131,slow=6.4,SNR=5.2 | | | | | | |

*IDC **14** 16:55:15.0±1.0, 56.78N×162.12E, h0km, mb3.5/8, mb1 3.7/10, mb1mx3.5/43, mbtmp3.6/10, ML2.9/2, Error ellipse: s-maj=31.9km s-min=18.6km az=142.0*
*KRSC **14** 16:55:15.3±0.7, 56.17N×162.84E, h34km±6km, ML4.5*
*MOS **14** 16:55:17.6±0.6, 56.21N×162.76E, h36km, mb4.0/4, Error ellipse: s-maj=8.6km s-min=4.6km az=67.0*

**ISC 14 16:55:17.7±0.7, 56.18N±0.03×162.74E±0.03, h29km±5km, n105, σ1 67/140, mb3.5/10, 1D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.05** | **62** | PN | **Pb** | **16 55 22.0** | **-0.7** |
| **KBTR** | **Krutoberegovo** | **0.05** | **62** | *i* P | **Pb** | **16 55 22.0** | **-0.7** |
| **KBG** | **Krutoberegovo** | **0.07** | **346** | PN | **Pb** | **16 55 21.8** | **-0.9** |
| **KBG** | **Krutoberegovo** | **0.07** | **346** | *eP* | **Pb** | **16 55 21.8** | **-0.9** |
| KBG | | | | *eS* | **Sb** | **16 55 25.7** | **-0.5** |
| **SMKR** | **Semkarok** | **0.81** | **300** | PN | **Pb** | **16 55 31.3** | **-2.0** |
| SMKR | | | | S | **Sb** | **16 55 43.1** | **-0.8** |
| **SMKR** | **Semkarok** | **0.81** | **300** | *eP* | **Pb** | **16 55 31.3** | **-2.0** |
| SMKR | | | | *eS* | **Sb** | **16 55 43.1** | **-0.8** |
| **BDR** | **Baidarnaya** | **0.93** | **295** | PN | **Pn** | **16 55 33.8** | **-1.1** |
| BDR | | | | S | **Sb** | **16 55 47.0** | **-0.4** |
| **BDR** | **Baidarnaya** | **0.93** | **295** | *i* P | **Pn** | **16 55 33.8** | **-1.1** |
| BDR | | | | *eS* | **Sb** | **16 55 47.0** | **-0.4** |
| **SRKR** | **Sorokina** | **0.99** | **299** | PN | **Pn** | **16 55 34.2** | **-1.4** |
| **SRKR** | **Sorokina** | **0.99** | **299** | *eP* | **Pn** | **16 55 34.2** | **-1.4** |
| **ZLN** | **Zelenaya** | **1.10** | **262** | PN | **Pn** | **16 55 36.9** | **-0.2** |
| ZLN | | | | S | **Sb** | **16 55 52.1** | **+0.1** |
| **ZLN** | **Zelenaya** | **1.10** | **262** | *i* P | **Pn** | **16 55 36.9** | **-0.2** |
| ZLN | | | | *eS* | **Sb** | **16 55 52.1** | **+0.1** |
| **CIRR** | **Tsirk** | **1.11** | **267** | PN | **Pn** | **16 55 37.2** | **-0.2** |
| CIRR | | | | S | **Sb** | **16 55 52.1** | **-0.5** |
| **CIRR** | **Tsirk** | **1.11** | **267** | *eP* | **Pn** | **16 55 37.2** | **-0.2** |
| CIRR | | | | *eS* | **Sb** | **16 55 52.1** | **-0.5** |
| **LGNR** | **Loginova** | **1.15** | **266** | PN | **Pn** | **16 55 37.9** | **-0.1** |
| **LGNR** | **Loginova** | **1.15** | **266** | *eP* | **Pn** | **16 55 37.9** | **-0.1** |
| **BZGR** | **Bezymyannyi-Gr** | **1.17** | **259** | PN | **Pn** | **16 55 37.9** | **-0.2** |
| BZGR | | | | S | **Sb** | **16 55 53.7** | **-0.4** |
| **BZGR** | **Bezymyannyi-Gr** | **1.17** | **259** | *i* P | **Pn** | **16 55 37.9** | **-0.2** |
| BZGR | | | | *eS* | **Sb** | **16 55 53.7** | **-0.4** |
| **KLY** | **Klyuchi** | **1.17** | **277** | PN | **Pn** | **16 55 35.6** | **-2.4** |
| KLY | | | | S | **Sn** | **16 55 49.8** | **-3.2** |
| **KLY** | **Klyuchi** | **1.17** | **277** | *eP* | **Pn** | **16 55 35.6** | **-2.4** |
| KLY | | | | *eS* | **Sn** | **16 55 49.8** | **-3.2** |
| **KRSR** | **Krestovskiy** | **1.21** | **272** | *eP* | **Pn** | **16 55 37.8** | **-0.9** |
| KRSR | | | | *eS* | **Sn** | **16 55 53.8** | **-0.4** |
| **BZWR** | **Bezymyannyi-We** | **1.27** | **261** | PN | **Pn** | **16 55 39.6** | **0.0** |
| BZWR | | | | S | **Sb** | **16 55 56.6** | **-0.6** |
| **BZWR** | **Bezymyannyi-We** | **1.27** | **261** | *eP* | **Pn** | **16 55 39.6** | **0.0** |
| BZWR | | | | *eS* | **Sb** | **16 55 56.6** | **-0.6** |
| **KIRR** | **Kirishev** | **1.36** | **261** | PN | **Pn** | **16 55 40.7** | **-0.1** |
| KIRR | | | | S | **Sb** | **16 55 58.5** | **-1.2** |
| **KIRR** | **Kirishev** | **1.36** | **261** | *eP* | **Pn** | **16 55 40.7** | **-0.1** |
| KIRR | | | | *eS* | **Sb** | **16 55 58.5** | **-1.2** |
| **KPT** | **Kopyto** | **1.43** | **262** | PN | **Pn** | **16 55 42.0** | **+0.4** |
| KPT | | | | S | **Sb** | **16 56 00.5** | **-0.9** |
| **KPT** | **Kopyto** | **1.43** | **262** | *eP* | **Pn** | **16 55 42.0** | **+0.4** |
| KPT | | | | *eS* | **Sb** | **16 56 00.5** | **-0.9** |
| **KMNR** | **Kamenistaya** | **1.47** | **254** | PN | **Pb** | **16 55 42.8** | **-1.6** |
| **KMNR** | **Kamenistaya** | **1.47** | **254** | *eP* | **Pb** | **16 55 42.8** | **-1.6** |
| **KOZ** | **Kozyrevsk** | **1.61** | **267** | PN | **Pb** | **16 55 44.9** | **-1.8** |
| KOZ | | | | S | **Sb** | **16 56 06.4** | **-0.2** |
| **KOZ** | **Kozyrevsk** | **1.61** | **267** | *eP* | **Pb** | **16 55 44.9** | **-1.8** |
| KOZ | | | | *eS* | **Sb** | **16 56 06.4** | **-0.2** |
| **TUMD** | **Tumrok D** | **1.65** | **234** | *eP* | **Pn** | **16 55 45.0** | **+0.4** |
| TUMD | | | | *eS* | **Sb** | **16 56 06.6** | **-1.1** |
| **TUMR** | **Tumrok** | **1.72** | **239** | PN | **Pb** | **16 55 46.6** | **-2.1** |
| **TUMR** | **Tumrok** | **1.72** | **239** | *eP* | **Pb** | **16 55 46.7** | **-2.0** |
| **MKZ** | **Mys Kozlova** | **1.73** | **200** | PN | **Pn** | **16 55 45.8** | **+0.1** |
| MKZ | | | | S | **Sb** | **16 56 08.4** | **-1.6** |
| **MKZ** | **Mys Kozlova** | **1.73** | **200** | *eP* | **Pn** | **16 55 45.8** | **+0.1** |
| MKZ | | | | *eS* | **Sb** | **16 56 08.4** | **-1.6** |
| **BKI** | **Bering** | **2.08** | **117** | PN | **Pn** | **16 55 50.6** | **+0.1** |
| BKI | | | | S | **Sb** | **16 56 16.3** | **-3.7** |
| **BKI** | **Bering** | **2.08** | **117** | *eP* | **Pn** | **16 55 50.6** | **+0.1** |
| BKI | | | | *eS* | **Sb** | **16 56 16.4** | **-3.6** |
| **ESO** | **Esso** | **2.28** | **265** | PN | **Pn** | **16 55 54.9** | **+1.6** |
| **ESO** | **Esso** | **2.28** | **265** | *eP* | **Pn** | **16 55 54.9** | **+1.6** |
| **KII** | **Karymskiy** | **2.86** | **223** | PN | **Pn** | **16 56 02.5** | **+1.1** |
| **KII** | **Karymskiy** | **2.86** | **223** | *eP* | **Pn** | **16 56 02.5** | **+1.1** |
| **OSSR** | **Ossora** | **3.08** | **3** | PN | **Pn** | **16 56 05.0** | **+0.8** |
| **OSSR** | **Ossora** | **3.08** | **3** | *eP* | **Pn** | **16 56 05.0** | **+0.8** |
| **PALN** | **Palana** | **3.27** | **334** | PN | **Pn** | **16 56 07.8** | **+0.9** |
| **PALN** | **Palana** | **3.27** | **334** | *eP* | **Pn** | **16 56 07.8** | **+0.9** |
| **SPN** | **Mys Shipunski** | **3.47** | **208** | PN | **Pn** | **16 56 09.8** | **+0.2** |
| SPN | | | | S | **Sn** | **16 56 49.9** | **+0.2** |
| **SPN** | **Mys Shipunski** | **3.47** | **208** | *eP* | **Pn** | **16 56 09.8** | **+0.2** |
| SPN | | | | *eS* | **Sn** | **16 56 49.9** | **+0.2** |
| **NLC** | **Nalytchevo** | **3.60** | **215** | PN | **Pn** | **16 56 13.0** | **+1.6** |
| NLC | | | | S | **Sn** | **16 56 55.5** | **+2.6** |
| **NLC** | **Nalytchevo** | **3.60** | **215** | *eP* | **Pn** | **16 56 13.0** | **+1.6** |
| NLC | | | | *eS* | **Sn** | **16 56 55.5** | **+2.6** |
| **SDLR** | **Sedlovina** | **3.67** | **219** | PN | **Pn** | **16 56 13.8** | **+1.3** |
| **SDLR** | **Sedlovina** | **3.67** | **219** | *eP* | **Pn** | **16 56 13.8** | **+1.3** |
| **KRER** | **Koryakskii** | **3.70** | **220** | PN | **Pn** | **16 56 15.1** | **+2.2** |
| **KRER** | **Koryakskii** | **3.70** | **220** | *eP* | **Pn** | **16 56 15.1** | **+2.2** |
| **SMAR** | **Somma** | **3.71** | **220** | PN | **Pn** | **16 56 14.7** | **+1.6** |
| **SMAR** | **Somma** | **3.71** | **220** | *eP* | **Pn** | **16 56 14.7** | **+1.6** |
| **GNL** | **Ganaly** | **3.72** | **230** | PN | **Pn** | **16 56 14.6** | **+1.4** |
| **GNL** | **Ganaly** | **3.72** | **230** | *eP* | **Pn** | **16 56 14.6** | **+1.4** |
| **AVH** | **Avacha** | **3.73** | **220** | PN | **Pn** | **16 56 15.2** | **+1.9** |
| **AVH** | **Avacha** | **3.73** | **220** | *eP* | **Pn** | **16 56 15.2** | **+1.9** |
| **UGLR** | **Uglovaya** | **3.75** | **219** | *eP* | **Pn** | **16 56 15.0** | **+1.5** |
| **KOK** | **Koryaka** | **3.75** | **221** | PN | **Pn** | **16 56 15.3** | **+1.8** |
| **KOK** | **Koryaka** | **3.75** | **221** | *eP* | **Pn** | **16 56 15.3** | **+1.8** |
| **DALK** | **Dalny** | **3.92** | **218** | PN | **Pn** | **16 56 16.7** | **+1.0** |
| DALK | | | | S | **Sn** | **16 57 03.7** | **+3.0** |
| **DALK** | **Dalny** | **3.92** | **218** | *eP* | **Pn** | **16 56 16.8** | **+1.0** |
| DALK | | | | *eS* | **Sn** | **16 57 03.7** | **+3.0** |
| **PET** | **Petropavlovsk** | **3.96** | **219** | *e*PN | **Pn** | **16 56 17.9** | **+1.6** |
| PET | | | | *eS* | **Sn** | **16 57 04.3** | **+2.6** |
| PET | | | | pmax | pmax | | |
| | comp=Z,114nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,232nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,198nm,0.8s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,200nm,16.0s | | | | | | |
| **PET** | **Petropavlovsk** | **3.96** | **219** | *eP* | **Pn** | **16 56 17.5** | **+1.2** |
| PET | | | | *eS* | **Sn** | **16 57 04.0** | **+2.3** |
| **PEA0B** | **Petropavlovsk-** | **4.25** | **226** | *i* PN | **Pn** | **16 56 21.7** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **4.25** | **226** | Pn | **Pn** | **16 56 21.9** | **+1.5** |
| | comp=Z,1.6nm,0.3s,baz=68,slow=15,SNR=66 | | | | | | |
| PETK | | | | Sn | **Sb** | **16 57 18.2** | **-4.2** |
| | comp=Z,0.9nm,0.3s,baz=87,slow=18,SNR=1.4 | | | | | | |
| **KRMR** | **Karymshinskiy** | **4.30** | **221** | PN | **Pn** | **16 56 22.9** | **+1.9** |
| KRMR | | | | S | **Sn** | **16 57 13.1** | **+3.0** |
| **KRMR** | **Karymshinskiy** | **4.30** | **221** | *eP* | **Pn** | **16 56 22.9** | **+1.9** |
| KRMR | | | | *eS* | **Sn** | **16 57 13.1** | **+3.0** |
| **RUS** | **Russkaya** | **4.50** | **215** | PN | **Pn** | **16 56 24.3** | **+0.6** |
| **RUS** | **Russkaya** | **4.50** | **215** | *eP* | **Pn** | **16 56 24.4** | **+0.7** |
| **GRL** | **Gorelyy** | **4.55** | **219** | PN | **Pn** | **16 56 26.8** | **+2.3** |
| **GRL** | **Gorelyy** | **4.55** | **219** | *eP* | **Pn** | **16 56 26.8** | **+2.3** |
| **MTVR** | **Mutnovka** | **4.56** | **218** | PN | **Pn** | **16 56 26.7** | **+1.9** |
| **MTVR** | **Mutnovka** | **4.56** | **218** | *eP* | **Pn** | **16 56 26.7** | **+1.9** |
| **APC** | **Apacha** | **4.60** | **227** | PN | **Pn** | **16 56 27.8** | **+2.6** |
| **APC** | **Apacha** | **4.60** | **227** | *eP* | **Pn** | **16 56 27.8** | **+2.6** |
| **TILK** | **Tilichiki** | **4.64** | **21** | PN | **Pn** | **16 56 27.3** | **+1.7** |
| **TILK** | **Tilichiki** | **4.64** | **21** | *eP* | **Pn** | **16 56 27.3** | **+1.7** |
| **KDTR** | **Khodutka, Kamc** | **5.17** | **214** | PN | **Pn** | **16 56 34.0** | **+1.0** |
| **KDTR** | **Khodutka, Kamc** | **5.17** | **214** | *eP* | **Pn** | **16 56 34.0** | **+1.0** |
| KDTR | | | | *eS* | **Sn** | **16 57 33.1** | **+1.5** |
| **KMSK** | **Kamenskaya** | **6.55** | **14** | PN | **Pn** | **16 56 53.9** | **+2.1** |
| **KMSK** | **Kamenskaya** | **6.55** | **14** | *eP* | **Pn** | **16 56 53.9** | **+2.1** |
| KMSK | | | | *eS* | **Sn** | **16 58 06.8** | **+1.4** |
| **BILL** | **Bilibino** | **12.01** | **6** | *i*ePN | **P** | **16 58 19.5** | **+0.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,23nm,15.0s | | | | | | |
| **ASAJ** | **Asahikawa** | **17.59** | **235** | P | **P** | **16 59 21.8** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=108,slow=22,SNR=1.7 | | | | | | |
| **YAK** | **Yakutsk** | **17.81** | **303** | *i* P | **P** | **16 59 23.7** | **+0.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **TIXI** | **Tiksi** | **21.02** | **331** | P | **P** | **16 59 59.0** | **+0.6** |
| | comp=Z,0.9nm,0.6s,baz=91,slow=23,SNR=6.3 | | | | | | |
| **TIXI** | **Tiksi** | **21.02** | **331** | *i* P | **P** | **16 59 59.9** | **+1.4** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **25.59** | **50** | P | **P** | **17 00 44.2** | **+0.4** |
| | comp=Z,1.6nm,1.1s,baz=255,slow=6.1,SNR=6.7 | | | | | | |
| **SONM** | **Songino Array** | **34.77** | **280** | P | **P** | **17 02 03.3** | **-2.0** |
| | comp=Z,0.4nm,0.6s,baz=33,slow=8.3,SNR=2.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.53** | **173** | T | T | 17 41 12.6 | |
| | baz=356,slow=76,SNR=123 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.54** | **173** | T | T | 17 41 12.3 | |
| | baz=356,slow=76,SNR=131 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.55** | **173** | T | T | 17 41 13.0 | |
| | baz=356,slow=76,SNR=132 | | | | | | |
| **YKA** | **Yellowknife Ar** | **39.87** | **46** | P | **P** | **17 02 48.6** | **+0.5** |
| | comp=Z,0.2nm,0.8s,baz=300,slow=7.8,SNR=2.6 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **43.73** | **295** | *i* P | **P** | **17 03 21.3** | **+1.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.23** | **295** | P | **P** | **17 03 53.2** | **-2.2** |
| | comp=Z,0.3nm,0.7s,baz=54,slow=7.3,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.23** | **295** | *i* P | **P** | **17 03 58.9** | **+3.6** |
| **FINES** | **FINESS Array B** | **57.88** | **337** | P | **P** | **17 05 01.6** | **-4.6** |
| | comp=Z,1.5nm,0.9s,baz=39,slow=9.1,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **57.88** | **337** | *i* P | **P** | **17 05 09.1** | **+3.0** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **66.73** | **330** | P | **P** | **17 06 03.7** | **-1.8** |
| | comp=Z,0.7nm,0.6s,baz=32,slow=6.8,SNR=2.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **68.07** | **70** | P | **P** | **17 06 16.7** | **+2.2** |
| | comp=Z,0.3nm,0.7s,baz=284,slow=3.6,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **83.21** | **206** | P | P | 17 07 46.0 | +5.1 |
| | comp=Z,0.2nm,0.7s,baz=14,slow=4.7,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **83.21** | **206** | *eP* | P | 17 07 47.3 | +6.5 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | |

*TUL **14** 16:56:14.1±1.1, 36.49N±0.02×98.73W±0.03, h8km±7km, ML2.7, mb_Lg2.4/11(NEIC), Error ellipse: s-maj=4.1km s-min=1.4km az=131.0*

**NEIC 14 16:56:14.2±0.9, 36.49N±0.03×98.71W±0.03, h7km±7km, Error ellipse: s-maj=4.4km s-min=2.5km az=145.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.26** | **245** | Pg | Pg | 16 56 19.3 | -0.1 |
| U32A | | | | Sg | Sg | 16 56 23.2 | +0.3 |
| **OKCFA** | **Oklahoma City** | **1.48** | **136** | Pn | Pn | 16 56 40.0 | -1.2 |
| **FNO** | **Franklin** | **1.63** | **139** | Pn | Pn | 16 56 43.7 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.75** | **182** | Pn | Pn | 16 56 44.6 | -0.4 |
| WMOK | | | | IAmb_Lg | | 16 57 13.7 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.81** | **76** | | Pn | 16 56 46.1 | +0.3 |
| **R32A** | **Long Quarter,** | **1.93** | **360** | | Pn | 16 56 47.6 | +0.2 |
| **W35A** | **Tecumseh** | **2.00** | **131** | Pn | Pn | 16 56 48.9 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.02** | **159** | Pn | Pn | 16 56 49.2 | +0.6 |
| **TUL1** | **Leonard** | **2.43** | **103** | Pn | Pn | 16 56 54.5 | +0.3 |
| TUL1 | | | | IAmb_Lg | | 16 57 33.7 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **2.91** | **237** | IAmb_Lg | | 16 57 47.1 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.37** | **159** | Pn | Pn | 16 57 07.0 | -0.2 |
| **HHAR** | **Hobbs** | **3.85** | **92** | Pn | Pn | 16 57 14.3 | +0.5 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **310** | IAmb_Lg | | 16 58 28.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.20** | **106** | IAmb_Lg | | 16 58 29.3 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **4.62** | **280** | IAmb_Lg | | 16 58 43.9 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **U40A** | **Yellville** | **4.72** | **90** | Pn | Pn | 16 57 26.2 | +0.4 |
| **X40A** | **Basin Creek Fa** | **5.19** | **111** | IAmb_Lg | | 16 59 10.3 | |
| | comp=Z,6.2nm,1.0s | | | | | | |

**TAP 14 16:58:17.2, 24.20N×121.71E, h10km, ML1.4, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETL** | **Fush Village** | **0.09** | **242** | *eP* | Pg | 16 58 20.6 | +0.8 |
| | baz=241 | | | | | | |
| ETL | | | | S | Sg | 16 58 22.7 | +1.0 |
| | baz=241 | | | | | | |
| **NACB** | **Ninganchiao** | **0.11** | **255** | P | Pb | 16 58 20.8 | -0.7 |
| | baz=254 | | | | | | |
| NACB | | | | S | Sg | 16 58 23.1 | +1.1 |
| | baz=254 | | | | | | |
| **TWD** | **Chiawan** | **0.16** | **221** | P | Pg | 16 58 21.4 | +0.6 |
| | baz=219 | | | | | | |
| TWD | | | | *eS* | Sg | 16 58 24.0 | +0.8 |
| | baz=219 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.21** | **271** | *eP* | Pb | 16 58 22.8 | -0.5 |
| | baz=271 | | | | | | |
| ETLH | | | | S | Sg | 16 58 26.3 | +1.6 |
| | baz=271 | | | | | | |
| **ENA** | **Nanau** | **0.23** | **6** | *eP* | Pb | 16 58 22.9 | -0.6 |
| | baz=8.0 | | | | | | |
| ENA | | | | S | Sg | 16 58 26.7 | +1.6 |
| | baz=8.0 | | | | | | |
| **EWUT** | **Wuta** | **0.25** | **14** | *eP* | Pb | 16 58 23.2 | -0.7 |
| | baz=13 | | | | | | |
| EWUT | | | | *eS* | Sg | 16 58 27.1 | +1.3 |
| | baz=13 | | | | | | |
| **ETM** | **Tongmen** | **0.31** | **220** | *eP* | Pg | 16 58 24.1 | +0.6 |
| | baz=220 | | | | | | |
| **LATG** | **Datong** | **0.37** | **333** | *eP* | Pb | 16 58 25.8 | -0.2 |
| | baz=332 | | | | | | |
| **NNSB** | **Datong** | **0.38** | **307** | *eP* | Pb | 16 58 25.8 | -0.4 |
| | baz=306 | | | | | | |
| NNSB | | | | *eS* | Sb | 16 58 31.8 | -0.2 |
| | baz=306 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **307** | *eP* | Pb | 16 58 26.1 | -0.2 |
| | baz=307 | | | | | | |
| NNS | | | | *eS* | Sb | 16 58 32.0 | -0.5 |
| | baz=307 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.41** | **262** | *eP* | Pb | 16 58 26.3 | -0.6 |
| | baz=261 | | | | | | |
| WHF | | | | *eS* | Sb | 16 58 32.6 | -0.8 |
| | baz=261 | | | | | | |
| **NDS** | **Dongshan** | **0.43** | **0** | *eP* | Pb | 16 58 26.8 | -0.1 |
| NDS | | | | *eS* | Sb | 16 58 33.3 | -0.2 |
| **FUSS** | **Fushou** | **0.43** | **276** | *eP* | Pb | 16 58 27.0 | -0.1 |
| | baz=275 | | | | | | |
| FUSS | | | | *eS* | Sb | 16 58 33.3 | -0.4 |
| | baz=275 | | | | | | |
| **ENTT** | **Nioudou** | **0.46** | **343** | *eP* | Pb | 16 58 27.3 | -0.1 |
| | baz=343 | | | | | | |
| ENTT | | | | *eS* | Sb | 16 58 34.3 | +0.1 |
| | baz=343 | | | | | | |
| **CHGB** | **Renai** | **0.51** | **254** | *eP* | Pb | 16 58 28.5 | +0.1 |
| | baz=253 | | | | | | |
| **TWE** | **Neicheng** | **0.52** | **355** | *eP* | Pb | 16 58 28.4 | 0.0 |
| | baz=356 | | | | | | |
| **YHNB** | **Yeheng** | **0.56** | **327** | *eP* | Pb | 16 58 29.3 | +0.1 |
| | baz=326 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.57** | **348** | *eP* | Pb | 16 58 29.5 | +0.2 |
| | baz=348 | | | | | | |
| **NSK** | **Sanguang** | **0.57** | **326** | *eP* | Pb | 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N41A | Harden Midland | 6.75 | 54 | IAmb_Lg | | 17 02 12.4 | |
| | comp=Z,17nm,0.8s | | | | | | |
| P43A | Skaggs, Pawnee | 7.21 | 65 | IAmb_Lg | | 17 02 27.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| Q44A | Meyer Farm, Va | 7.38 | 72 | IAmb_Lg | | 17 02 34.7 | |
| | comp=Z,21nm,1.0s | | | | | | |
| I40A | Norwalk | 8.96 | 37 | IAmb_Lg | | 17 03 05.7 | |
| | comp=Z,7.9nm,1.2s | | | | | | |

*DJA* ***14*** *17:01:40.9±1.6,9˚N±3˚×12˚7E±˚, h16km±13km, M4.8/13, mB5.1/3, mb4.5/13, MLv4.9/3, Mw(mB)4.5/3*
*MAN* ***14*** *17:01:47.0, 8˚39N×126˚79E, h25km, mb4.4, ML3.3, MS3.0*
*MAN INTENSITY II - BISLIG CITY.*
*NEIC* ***14*** *17:01:53.3±2.0, 8˚41N±0˚08×126˚5E±0˚1, h89km±9km, mb4.2/15, Error ellipse: s-maj=21.4km s-min=11.9km az=92.0*
*IDC* ***14*** *17:01:54.2±1.5, 8˚39N×126˚43E, h99km±15km, mb3.7/21, mb1 3.8/21, mb1mx3.8/36, mbtmp4.1/21, MS3.3/9, Ms1 3.3/9, ms1mx2.9/72, Error ellipse: s-maj=21.9km s-min=12.0km az=82.0*

**ISC 14 17:01:48.3±0.5, 8˚47N±0˚05×126˚75E±0˚07, h39km, n73, σ1§62/67, mb4.1/31, MS3.1/8, 3C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BIPH | **Bislig** | 0.48 | 234 | ⇓*iP* | Pn | 17 01 59.2 | +0.5 |
| BIPH | | | | *i* S | Sn | 17 02 04.7 | -1.3 |
| DAV | **Davao City (W)** | 1.81 | 220 | P | Pn | 17 02 19.6 | +2.6 |
| | 52nm,0.3s,baz=68,slow=3.7,SNR=18 | | | | | | |
| DAV | | | | S | Sn | 17 02 41.9 | +3.2 |
| | 135nm,0.3s,baz=84,slow=17,SNR=7.7 | | | | | | |
| DAV | | | | LR | LR | 17 03 00.4 | |
| | comp=Z,571nm,20.4s,baz=348,slow=42 | | | | | | |
| DAV | **Davao City (W)** | 1.81 | 220 | | Pn | 17 02 19.8 | +2.8 |
| KCP | **Kidapawan** | 2.19 | 229 | ⇑*eP* | Pn | 17 02 23.0 | +0.7 |
| KCP | | | | *i* S | Sn | 17 02 48.4 | +0.1 |
| CTBH | **Cotabato--PC H** | 2.78 | 244 | ⇑*iP* | Pn | 17 02 30.7 | +0.4 |
| CTBH | | | | *i* S | Sn | 17 03 03.7 | +1.2 |
| GSPH | **General Santos** | 2.96 | 217 | ⇑*eP* | Pn | 17 02 34.2 | +1.2 |
| GSPH | | | | *eS* | Sn | 17 03 04.8 | -2.6 |
| TBP | **Tagbilaran** | 3.10 | 293 | *eP* | Pn | 17 02 36.1 | +1.3 |
| TBP | | | | *i* S | Sn | 17 03 09.2 | -1.4 |
| LLP | **Lapu-Lapu** | 3.31 | 304 | ⇓*eP* | Pn | 17 02 39.0 | +1.4 |
| LLP | | | | *eS* | Sn | 17 03 19.9 | +4.2 |
| RCP | **Roxas** | 5.00 | 308 | ⇓*eP* | Pn | 17 03 03.0 | +2.1 |
| LQP | **Lukban** | 7.59 | 318 | ⇓*eP* | Pn | 17 03 36.8 | +0.2 |
| KMSI | **Cibinong** | 8.31 | 200 | P | Pn | 17 03 48.5 | +2.2 |
| | 918nm53nm,0.9s | | | | | | |
| GTOI | **Gorontalo** | 8.63 | 206 | P | Pn | 17 03 51.2 | +0.6 |
| | 13nm,0.6s | | | | | | |
| MRSI | **Marisa** | 9.27 | 211 | P | Pn | 17 04 01.4 | +1.9 |
| | 36nm,0.7s | | | | | | |
| TOLI2 | **Tolitoli** | 9.42 | 219 | Pn | Pn | 17 04 01.1 | -0.5 |
| SANI | **Sanana** | 10.47 | 184 | P | Pn | 17 04 15.1 | -0.9 |
| | 18nm,0.8s | | | | | | |
| MPSI | **Mapaga** | 10.58 | 221 | P | Pn | 17 04 06.9 | -10 |
| BAKI | **Biak** | 13.38 | 135 | P | Pn | 17 04 48.4 | -7.3 |
| BNSI | **Bone** | 14.40 | 208 | P | Pn | 17 05 12.2 | +2.6 |
| | 12nm,1.1s | | | | | | |
| YULB | **Yu-li** | 15.74 | 341 | P | P | 17 05 32.4 | +1.7 |
| YULB | | | | IAmb | IAmb | 17 05 51.0 | |
| | comp=Z,29nm,1.1s | | | | | | |
| TPUB | **Ta-pu** | 15.88 | 339 | Pn | Pn | 17 05 29.5 | +0.5 |
| SOEI | **Soe** | 18.27 | 188 | P | P | 17 05 58.8 | -0.1 |
| | comp=Z,17nm,0.8s | | | | | | |
| GUMO | **Guam** | 18.49 | 72 | LR | LR | 17 14 03.1 | |
| | comp=Z,36nm,18.8s,baz=243,slow=39 | | | | | | |
| MTN | **Manton Dam** | 21.61 | 168 | P | P | 17 06 35.2 | +0.1 |
| UBPT | **Khong Chiam** | 21.89 | 290 | P | P | 17 06 38.5 | +0.4 |
| UBPT | | | | IAmb | IAmb | 17 06 41.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| KNRA | **Kununurra** | 24.07 | 175 | P | P | 17 07 00.8 | +0.7 |
| FITZ | **Fitzroy Crossi** | 26.42 | 182 | P | P | 17 07 21.6 | +0.1 |
| | comp=Z,1.7nm,0.5s,baz=7.6,slow=9.3,SNR=15 | | | | | | |
| KSI | **Kapahiang** | 26.93 | 244 | P | P | 17 07 28.3 | +2.0 |
| | comp=Z,46nm,0.4s | | | | | | |
| COEN | **Coen** | 27.60 | 144 | P | P | 17 07 33.1 | +0.9 |
| COEN | | | | IAmb | IAmb | 17 07 46.7 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| CMAR | **Chiang Mai Arr** | 28.77 | 293 | P | P | 17 07 42.0 | -0.6 |
| | comp=Z,2.2nm,0.8s,baz=112,slow=7.0,SNR=18 | | | | | | |
| CMAR | | | | LR | LR | 17 19 36.8 | |
| | comp=Z,42nm,18.4s,baz=100,slow=37 | | | | | | |
| KSRS | **Korea Array** | 28.88 | 2 | P | P | 17 07 43.2 | -0.1 |
| | comp=Z,3.1nm,0.9s,baz=183,slow=10,SNR=5.0 | | | | | | |
| KSRS | | | | LR | LR | 17 21 37.9 | |
| | comp=Z,32nm,18.7s,baz=200,slow=41 | | | | | | |
| WB0 | **Warramunga Arr** | 29.05 | 165 | P | P | 17 07 44.3 | -0.7 |
| WB0 | | | | IAmb | IAmb | 17 08 12.1 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| WRA | **Warramunga Arr** | 29.20 | 165 | P | P | 17 07 45.6 | -0.8 |
| | comp=Z,0.3nm,0.5s,baz=347,slow=9.2,SNR=2.1 | | | | | | |
| WRA | **Warramunga Arr** | 29.20 | 165 | P | P | 17 07 46.4 | 0.0 |
| WR0 | **Warramunga Arr** | 29.27 | 165 | P | P | 17 07 46.6 | -0.4 |
| WR0 | | | | IAmb | IAmb | 17 08 01.3 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| MJAR | **Matsushiro Arr** | 29.83 | 19 | LR | LR | 17 19 48.1 | |
| | comp=Z,34nm,20.5s,baz=146,slow=36 | | | | | | |
| AS31 | **Alice Springs** | 32.69 | 168 | P | P | 17 08 17.0 | -0.2 |
| ASAR | **Alice Springs** | 32.69 | 168 | P | P | 17 08 16.8 | -0.4 |
| | comp=Z,0.4nm,0.3s,baz=344,slow=7.3,SNR=30 | | | | | | |
| ASAR | | | | LR | LR | 17 22 26.0 | |
| | comp=Z,38nm,20.6s,baz=64,slow=38 | | | | | | |
| ASAR | **Alice Springs** | 32.69 | 168 | P | P | 17 08 17.6 | +0.4 |
| USRK | **Ussuriysk Ar.** | 35.89 | 6 | P | P | 17 08 46.5 | +1.9 |
| | comp=Z,7.2nm,0.7s,baz=195,slow=10,SNR=7.6 | | | | | | |
| ASAJ | **Asahikawa** | 38.10 | 19 | P | P | 17 09 05.4 | +2.1 |
| | comp=Z,12nm,0.8s,baz=210,slow=3.1,SNR=5.6 | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | 40.01 | 71 | T | T | 17 52 29.0 | |
| | baz=246,slow=75,SNR=42 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | 40.02 | 71 | T | T | 17 52 29.1 | |
| | baz=246,slow=75,SNR=30 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | 40.02 | 71 | T | T | 17 52 33.0 | |
| | baz=246,slow=75,SNR=22 | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | 40.40 | 70 | T | T | 17 53 04.2 | |
| | baz=265,slow=74,SNR=21 | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | 40.41 | 70 | T | T | 17 53 08.4 | |
| | baz=265,slow=74,SNR=19 | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | 40.42 | 70 | T | T | 17 53 09.3 | |
| | baz=265,slow=74,SNR=27 | | | | | | |
| KLR | **Kul'dur** | 40.85 | 5 | P | P | 17 09 25.5 | -0.7 |
| | comp=Z,1.6nm,0.7s,baz=214,slow=6.7,SNR=4.9 | | | | | | |
| STKA | **Stephens Creek** | 42.55 | 161 | P | P | 17 09 40.9 | +0.6 |
| | comp=Z,0.7nm,0.4s,baz=315,slow=8.0,SNR=3.6 | | | | | | |
| STKA | | | | LR | LR | 17 30 25.4 | |
| | comp=Z,32nm,19.5s,baz=24,slow=40 | | | | | | |
| STKA | **Stephens Creek** | 42.55 | 161 | P | P | 17 09 39.4 | -0.9 |
| SONM | **Songino Array** | 42.87 | 340 | P | P | 17 09 44.0 | +1.1 |
| | comp=Z,0.4nm,0.6s,baz=171,slow=2.8,SNR=2.3 | | | | | | |
| PALK | **Pallekele** | 45.62 | 272 | LR | LR | 17 29 07.6 | |
| | comp=Z,27nm,20.3s,baz=217,slow=36 | | | | | | |
| PETK | **Petropavlovsk-** | 51.08 | 23 | P | P | 17 10 48.6 | +1.8 |
| | comp=Z,2.9nm,0.7s,baz=206,slow=4.5,SNR=5.9 | | | | | | |
| PETK | **Petropavlovsk-** | 51.08 | 23 | P | P | 17 10 47.3 | +0.5 |
| MK31 | **Makanchi Array** | 53.75 | 323 | P | P | 17 11 04.8 | -1.9 |
| MK31 | | | | IAmb | IAmb | 17 11 24.8 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| MKAR | **Makanchi Array** | 53.75 | 323 | P | P | 17 11 04.9 | -1.8 |
| | comp=Z,0.9nm,0.5s,baz=117,slow=7.4,SNR=20 | | | | | | |
| MKAR | **Makanchi Array** | 53.75 | 323 | P | P | 17 11 04.5 | -2.2 |
| ZALV | **Zalesovo Beam** | 56.43 | 332 | P | P | 17 11 23.1 | -2.7 |
| | comp=Z,1.7nm,0.7s,baz=89,slow=7.5,SNR=3.6 | | | | | | |
| AAK | **Ala-Archa** | 56.94 | 316 | LR | LR | 17 37 45.5 | |
| | comp=Z,82nm,20.8s,baz=84,slow=38 | | | | | | |
| KURK | **Kurchatov** | 57.82 | 326 | P | P | 17 11 33.4 | -2.3 |
| KURK | | | | IAmb | IAmb | 17 11 39.1 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| TIXI | **Tiksi** | 63.14 | 1 | P | P | 17 12 12.1 | +0.4 |
| TIXI | | | | IAmb | IAmb | 17 12 15.2 | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| NRIK | **Noril'sk** | 65.87 | 346 | P | P | 17 12 28.4 | -1.2 |
| | comp=Z,3.3nm,0.7s,baz=95,slow=3.3,SNR=9.1 | | | | | | |
| URZ | **Urewera** | 66.00 | 138 | LR | LR | 17 43 43.9 | |
| | comp=Z,46nm,18.2s,baz=2.5,slow=38 | | | | | | |
| ABKAR | **Akbulak array** | 68.55 | 320 | P | P | 17 12 45.2 | -1.8 |
| ABKAR | | | | IAmb | IAmb | 17 12 48.9 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| KDAK | **Kodiak Island** | 77.91 | 33 | P | P | 17 13 43.4 | +1.4 |
| | comp=Z,21nm,1.1s,baz=344,slow=5.6,SNR=3.7 | | | | | | |
| ILAR | **Eielson Array** | 80.85 | 26 | P | P | 17 13 58.2 | +0.3 |
| | comp=Z,0.5nm,0.8s,baz=237,slow=5.3,SNR=5.9 | | | | | | |
| INK | **Inuvik** | 85.78 | 22 | P | P | 17 14 23.7 | +0.5 |
| | comp=Z,0.3nm,0.4s,baz=126,slow=12,SNR=1.3 | | | | | | |
| ARCES | **ARCESS Array B** | 86.04 | 340 | P | P | 17 14 23.4 | -1.1 |
| | comp=Z,4.3nm,1.0s,baz=69,slow=4.0,SNR=6.9 | | | | | | |
| FINES | **FINESS Array B** | 87.70 | 332 | P | P | 17 14 30.8 | -1.9 |
| | comp=Z,1.4nm,0.5s,baz=74,slow=4.9,SNR=17 | | | | | | |
| FINES | **FINESS Array B** | 87.70 | 332 | P | P | 17 14 30.3 | -2.4 |
| AKASG | **Malin Array Be** | 88.26 | 321 | P | P | 17 14 33.2 | -2.4 |
| | comp=Z,0.5nm,0.6s,baz=70,slow=4.3,SNR=5.3 | | | | | | |
| NOA | **NORSAR Array B** | 94.58 | 334 | P | P | 17 15 01.7 | -3.1 |
| | comp=Z,0.4nm,0.6s,baz=66,slow=4.5,SNR=2.3 | | | | | | |
| YKA | **Yellowknife Ar** | 95.20 | 24 | P | P | 17 15 08.0 | +0.5 |
| | comp=Z,0.4nm,0.7s,baz=299,slow=4.4,SNR=9.1 | | | | | | |
| TORD | **Torodi Ar. Bea** | 121.36 | 291 | PKP | PKPdf | 17 20 36.4 | -2.0 |
| | comp=Z,0.3nm,0.3s,baz=43,slow=2.7,SNR=2.4 | | | | | | |

*IDC* ***14*** *17:11:21.6±0.6, 6˚71N×73˚49W, h123km±7km, mb3.7/5, mb1 3.8/8, mb1mx3.4/40, mbtmp4.1/8, MS3.6/3, Ms1 3.6/3, ms1mx2.8/60, Error ellipse: s-maj=22.6km s-min=7.3km az=124.0*
*RSNC* ***14*** *17:11:22.8±0.9, 6˚55N×73˚58W, h106km±4km, ML3.6, Mw4.0, Fault plane solution: NP1:φs38.00000°, δ13.00000°, λ-169.00000°.*

**ISC 14 17:11:20.8±0.7, 6˚56N±0˚03×73˚49W±0˚03, h122km±5km, n44, σ1§98/76, mb4.2/5, 7C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BARC | **Barichara** | 0.31 | 83 | ⇓*iP* | Pn | 17 11 38.9 | +0.5 |
| BARC | | | | *eS* | Sn | 17 11 51.1 | -0.5 |
| RUSC | **La Rusia** | 0.77 | 148 | ⇑*iP* | Pn | 17 11 41.8 | +0.2 |
| RUSC | | | | *eS* | Sn | 17 11 56.8 | -0.4 |
| RUSC | | | | *i* | | 17 11 58.8 | |
| | comp=Z,496nm,0.4s | | | | | | |
| PTBC | **PUERTO BERRIO,** | 0.96 | 269 | ⇑*iP* | Pn | 17 11 41.6 | -1.0 |
| PTBC | | | | *eS* | Sn | 17 11 56.5 | -2.7 |
| PTBC | | | | *i* | | 17 11 57.9 | |
| | comp=Z,999nm,0.3s | | | | | | |
| SPBC | **San Pablo de B** | 1.07 | 213 | ⇑*eP* | Pn | 17 11 43.7 | -0.2 |
| SPBC | | | | *eS* | Sn | 17 11 59.9 | -1.4 |
| SPBC | | | | *i* | | 17 12 03.7 | |
| | comp=Z,765nm,0.2s | | | | | | |
| PAMC | **Pamplona, Colo** | 1.11 | 45 | ⇓*iP* | Pn | 17 11 45.3 | +0.7 |
| PAMC | | | | *eS* | Sn | 17 12 03.2 | +0.6 |
| PAMC | | | | *i* | | 17 12 04.9 | |
| | comp=Z,485nm,0.2s | | | | | | |
| OCAC | **Ocana** | 1.68 | 6 | ⇓*iP* | Pn | 17 11 51.0 | +0.3 |
| OCAC | | | | *eS* | Sn | 17 12 14.3 | +0.8 |
| OCAC | | | | *i* | | 17 12 20.4 | |
| | comp=Z,2μm,0.4s | | | | | | |
| NORC | **Norcasia** | 1.69 | 234 | ⇑*iP* | Pn | 17 11 50.3 | -0.4 |
| NORC | | | | *eS* | Sn | 17 12 11.7 | -1.7 |
| NORC | | | | *i* | | 17 12 13.0 | |
| | comp=Z,388nm,0.4s | | | | | | |
| ROSC | **El Rosal** | 1.89 | 206 | P | Pn | 17 11 55.0 | +1.6 |
| | comp=Z,130nm,0.3s,baz=78,slow=4.9,SNR=71 | | | | | | |
| ROSC | | | | S | Sn | 17 12 23.3 | +4.9 |
| | comp=Z,92nm,0.3s,baz=212,slow=23,SNR=14 | | | | | | |
| ROSC | **El Rosal** | 1.89 | 206 | ⇑*iP* | Pn | 17 11 54.9 | +1.5 |
| ROSC | | | | *eS* | Sn | 17 12 17.7 | -0.7 |
| ROSC | | | | *i* | | 17 12 25.9 | |
| | comp=Z,325nm,0.4s | | | | | | |
| CHIC | **Chingaza** | 1.93 | 187 | *eP* | Pn | 17 11 54.1 | +0.1 |
| CHIC | | | | *eS* | Sn | 17 12 17.9 | -1.3 |
| CHIC | | | | *i* | | 17 12 28.4 | |
| | comp=Z,156nm,0.5s | | | | | | |
| GUY2C | **Guyana, Caldas** | 2.29 | 235 | *eP* | Pn | 17 11 59.1 | +0.7 |
| GUY2C | | | | *eS* | Sn | 17 12 26.6 | -0.6 |
| GUY2C | | | | *i* | | 17 12 32.4 | |
| | comp=Z,417nm,0.7s | | | | | | |
| UREC | **San Jos de Ur** | 2.35 | 301 | *eP* | Pn | 17 11 58.3 | -0.5 |
| UREC | | | | *eS* | Sn | 17 12 26.7 | -1.2 |
| UREC | | | | *i* | | 17 12 30.1 | |
| | comp=Z,312nm,0.3s | | | | | | |
| VILC | **Villavicencio,** | 2.44 | 185 | ⇑*eP* | Pn | 17 12 00.6 | +0.6 |
| VILC | | | | *eS* | Sn | 17 12 30.5 | +0.4 |
| CBOC | **Ciudad Bolivar** | 2.60 | 255 | *eP* | Pn | 17 12 03.2 | +1.1 |
| CBOC | | | | *eS* | Sn | 17 12 27.7 | -6.2 |
| CBOC | | | | *i* | | 17 12 37.1 | |
| | comp=Z,154nm,0.6s | | | | | | |
| PTGC | **Puerto Gaitan,** | 2.70 | 150 | ⇑*eP* | Pn | 17 12 03.2 | -0.2 |
| PTGC | | | | *eS* | Sn | 17 12 34.9 | -1.2 |
| PTGC | | | | *i* | | 17 12 40.9 | |
| | comp=Z,277nm,0.2s | | | | | | |
| DBBC | **Dabeiba** | 2.74 | 280 | *eP* | Pn | 17 12 04.5 | +0.7 |
| DBBC | | | | *eS* | Sn | 17 12 35.9 | -1.1 |
| DBBC | | | | *i* | | 17 12 42.0 | |
| | comp=Z,669nm,0.5s | | | | | | |
| ANIL | **Santa Ana** | 2.80 | 223 | *eP* | Pn | 17 12 06.1 | +1.3 |
| ANIL | | | | *eS* | Sn | 17 12 38.0 | -0.7 |
| ANIL | | | | *i* | | 17 12 43.5 | |
| | comp=Z,332nm,0.4s | | | | | | |
| LL1C | **La Loma 1 Cana** | 2.97 | 359 | *eP* | Pn | 17 12 09.7 | +2.9 |
| LL1C | | | | *eS* | Sn | 17 12 42.0 | -0.2 |
| ORTC | **Ortega, Tolima** | 3.16 | 214 | *eP* | Pn | 17 12 09.9 | +0.6 |
| ORTC | | | | *eS* | Sn | 17 12 46.9 | +0.1 |
| ORTC | | | | *i* | | 17 12 52.7 | |
| | comp=Z,91nm,0.2s | | | | | | |
| PLMC | **San Jos del P** | 3.23 | 240 | *eP* | Pn | 17 12 11.0 | +0.8 |
| PLMC | | | | *eS* | Sn | 17 12 46.6 | -1.7 |
| PLMC | | | | *i* | | 17 12 52.2 | |
| | comp=Z,138nm,0.4s | | | | | | |
| SDV | **Santo Domingo** | 3.66 | 51 | P | Pn | 17 12 17.1 | +1.1 |
| | comp=Z,14nm,0.3s,baz=159,slow=6.5,SNR=38 | | | | | | |
| SDV | | | | S | Sn | 17 12 57.8 | -1.0 |
| | comp=Z,37nm,0.3s,baz=303,slow=20,SNR=13 | | | | | | |
| SDV | **Santo Domingo** | 3.66 | 51 | *eP* | Pn | 17 12 17.1 | +1.1 |
| SDV | | | | *eS* | Sn | 17 12 57.5 | -1.3 |
| SDV | | | | *i* | | 17 13 01.8 | |
| | comp=Z,119nm,0.5s | | | | | | |
| SJCC | **San Jacinto, C** | 3.72 | 333 | *eP* | Pn | 17 12 16.2 | -0.5 |
| SJCC | | | | *eS* | Sn | 17 12 55.7 | -4.2 |
| SJCC | | | | *i* | | 17 13 14.7 | |
| | comp=Z,108nm,0.4s | | | | | | |
| ELOV | **Elorza** | 4.00 | 83 | *eP* | Pn | 17 12 20.6 | +0.1 |
| ELOV | | | | *eS* | Sn | 17 13 03.4 | -3.4 |
| GUVC | **San Jose del G** | 4.08 | 168 | *eP* | Pn | 17 12 21.4 | -0.1 |
| GUVC | | | | *eS* | Sn | 17 13 07.6 | -0.9 |
| GUVC | | | | *i* | | 17 13 11.4 | |
| | comp=Z,167nm,0.2s | | | | | | |
| BETC | **Betania** | 4.31 | 207 | *eP* | Pn | 17 12 23.3 | -1.3 |
| BETC | | | | *i* | | 17 13 18.3 | |
| | comp=Z,46nm,0.4s | | | | | | |
| MACC | **Macarena, Meta** | 4.40 | 185 | *eP* | Pn | 17 12 24.9 | -0.9 |
| MACC | | | | *eS* | Sn | 17 13 11.0 | -5.2 |
| MACC | | | | *i* | | 17 13 20.8 | |
| | comp=Z,88nm,0.6s | | | | | | |
| MARP | **Paez Belalcaza** | 4.43 | 214 | *eP* | Pn | 17 12 26.4 | 0.0 |
| MARP | | | | *eS* | Sn | 17 13 15.4 | -1.9 |
| CRJC | **Cerrejon, Guaj** | 4.48 | 8 | *eP* | Pn | 17 12 27.1 | +0.2 |
| CRJC | | | | *eS* | Sn | 17 13 17.6 | -0.6 |
| CRJC | | | | *i* | | 17 13 21.3 | |
| | comp=Z,200nm,0.3s | | | | | | |
| SMRC | **Santa Marta, M** | 4.63 | 351 | *eP* | Pn | 17 12 29.6 | +0.7 |
| SMRC | | | | *eS* | Sn | 17 13 20.1 | -1.8 |
| SMRC | | | | *i* | | 17 13 31.4 | |
| | comp=Z,55nm,0.5s | | | | | | |
| GARC | **Garzon, Huila** | 4.78 | 205 | *eP* | Pn | 17 12 30.6 | -0.5 |
| GARC | | | | *eS* | Sn | 17 13 24.7 | -1.0 |
| GARC | | | | *i* | | 17 13 28.0 | |
| | comp=Z,76nm,0.2s | | | | | | |
| PCON | **Cinco Dias** | 5.10 | 215 | *eP* | Pn | 17 12 37.3 | +1.6 |
| PCON | | | | *i* | | 17 13 42.7 | |
| | comp=Z,20nm,0.4s | | | | | | |
| FLOC | **Florencia** | 5.39 | 204 | *eP* | Pn | 17 12 39.6 | +0.5 |
| FLOC | | | | *eS* | Sn | 17 13 31.8 | -8.3 |
| FLOC | | | | *i* | | 17 13 41.9 | |
| | comp=Z,27nm,0.4s | | | | | | |
| PCRV | **Puerto La Cruz** | 9.47 | 67 | P | Pn | 17 13 35.3 | +1.1 |
| | comp=Z,0.7nm,0.3s,baz=214,slow=12,SNR=2.3 | | | | | | |
| PCRV | | | | S | Sn | 17 15 14.9 | -4.1 |
| | comp=Z,0.8nm,0.3s,baz=263,slow=6.0,SNR=2.2 | | | | | | |
| TXAR | **Lajitas Array** | 36.36 | 312 | LR | LR | 17 36 35.2 | |
| | comp=Z,56nm,18.1s,baz=146,slow=42 | | | | | | |
| PDAR | **Pinedale Array** | 48.08 | 324 | P | P | 17 19 48.9 | +0.7 |
| | comp=Z,0.2nm,0.3s,baz=99,slow=11,SNR=2.4 | | | | | | |
| SCHQ | **Schefferville** | 48.44 | 5 | P | P | 17 19 51.2 | +0.6 |
| | comp=Z,3.2nm,0.7s,baz=210,slow=6.1,SNR=4.8 | | | | | | |
| ELK | **Elko** | 50.44 | 319 | LR | LR | 17 44 02.9 | |
| | comp=Z,103nm,18.1s,baz=202,slow=39 | | | | | | |
| NEW | **Newport** | 55.60 | 326 | LR | LR | 17 49 44.8 | |
| | comp=Z,46nm,18.5s,baz=120,slow=42 | | | | | | |
| YKA | **Yellowknife Ar** | 63.38 | 340 | P | P | 17 21 37.2 | +0.4 |
| | comp=Z,1.5nm,0.5s,baz=133,slow=6.7,SNR=37 | | | | | | |
| YKA | | | | pP | pP | 17 22 07.0 | +0.3 |
| | comp=Z,0.3nm,0.6s,baz=132,slow=6.9,SNR=2.4 | | | | | | |
| INK | **Inuvik** | 73.15 | 340 | P | P | 17 22 37.1 | -0.6 |
| | comp=Z,1.4nm,0.8s,baz=77,slow=2.7,SNR=4.2 | | | | | | |
| ARCES | **ARCESS Array B** | 87.05 | 20 | P | P | 17 23 52.3 | +0.1 |
| | comp=Z,2.5nm,1.0s,baz=276,slow=4.4,SNR=1.4 | | | | | | |
| ASAR | **Alice Springs** | 148.66 | 234 | PKPbc | PKPdf | 17 30 53.7 | +3.0 |
| | comp=Z,0.2nm,0.4s,baz=119,slow=3.5,SNR=10 | | | | | | |
| ASAR | | | | pPKPbc | pPKPbc | 17 31 26.3 | -1.3 |
| | comp=Z,0.4nm,0.8s,baz=135,slow=3.5,SNR=3.2 | | | | | | |
| WRA | **Warramunga Arr** | 149.89 | 241 | PKPbc | PKPbc | 17 30 56.9 | -0.7 |
| | comp=Z,0.5nm,0.6s,baz=104,slow=3.4,SNR=6.0 | | | | | | |
| WRA | | | | pPKPbc | pPKPbc | 17 31 30.0 | -0.8 |
| | comp=Z,0.3nm,0.5s,baz=87,slow=2.1,SNR=1.9 | | | | | | |

*IDC* ***14*** *17:17:22.4±0.9, 12˚38N×87˚94W, h0km, mb4.2/12, mb1 4.4/14, mb1mx4.1/44, mbtmp4.2/14, ML3.5/3, MS3.6/17, Ms1 3.6/17, ms1mx3.3/62, Error ellipse: s-maj=32.3km s-min=13.8km az=46.0*
*SNET* ***14*** *17:17:23.9±1.2, 12˚03N×88˚40W, h15km±999km, ML3.9*
*INET* ***14*** *17:17:24.1±0.8, 11˚94N×88˚31W, h15km, MW4.1*
*NEIC* ***14*** *17:17:24.1±2.7, 12˚08N±0˚07×88˚16W±0˚08, h10km±2km, mb4.6/27, Md4.0(SNET), Error ellipse: s-maj=15.6km s-min=8.9km az=225.0*
*UCR* ***14*** *17:17:24.2±1.2, 11˚95N×88˚38W, h66km±68km, ML3.9, mb4.6(NEIC)*

**ISC 14 17:17:25.9±2.0, 12˚07N±0˚06×88˚27W±0˚05, h32km±13km, n170, σ1§17/174, mb4.5/25, MS3.6/17, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNCH | **Conchagua** | 1.27 | 20 | *eP* | Pn | 17 17 47.6 | 0.0 |
| CNCH | **Conchagua** | 1.27 | 20 | *eP* | Pn | 17 17 47.6 | 0.0 |
| LCY | **Lacayo** | 1.34 | 359 | *eP* | Pn | 17 17 48.7 | +0.2 |
| LCY | **Lacayo** | 1.34 | 359 | *eP* | Pn | 17 17 48.7 | +0.2 |
| CRIN | **San Cristobal** | 1.34 | 62 | | Pn | 17 17 48.4 | -0.2 |
| CRIN | **San Cristobal** | 1.34 | 62 | *eP* | Pn | 17 17 49.3 | +0.7 |
| VSM | **San Miguel** | 1.35 | 360 | *iP* | Pn | 17 17 49.1 | +0.4 |
| VSM | **San Miguel** | 1.35 | 360 | *iP* | Pn | 17 17 49.1 | +0.4 |
| PACA | **Pacayal** | 1.39 | 358 | *eP* | Pn | 17 17 49.8 | +0.6 |
| PACA | | | | *eS* | Sb | 17 18 09.0 | +0.3 |
| PACA | **Pacayal** | 1.39 | 358 | *eP* | Pn | 17 17 49.8 | +0.6 |
| PACA | **Pacayal** | 1.39 | 358 | *eP* | Pn | 17 17 49.8 | +0.6 |
| PACA | | | | *eS* | Sb | 17 18 09.0 | +0.3 |
| CNRM | **Centro Naciona** | 1.40 | 4 | *eS* | Sb | 17 18 09.0 | +0.2 |
| CNRM | **Centro Naciona** | 1.40 | 4 | *eS* | Sb | 17 18 09.0 | +0.2 |
| COEB | **Comit de Eme** | 1.44 | 350 | *eP* | Pn | 17 17 49.8 | -0.1 |
| COEB | | | | *eS* | Sb | 17 18 10.8 | +0.6 |
| COEB | | | | IAML | | 17 18 19.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| COEB | **Comit de Eme** | 1.44 | 350 | *eP* | Pn | 17 17 49.8 | -0.1 |
| COEB | | | | *eS* | Sb | 17 18 10.8 | +0.6 |
| COEB | | | | IAML | | 17 18 19.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| TECO | **Alcaldia de Te** | 1.54 | 341 | *eP* | Pn | 17 17 50.6 | -0.6 |
| TECO | | | | *eS* | Sn | 17 18 11.0 | +0.9 |
| TECO | **Alcaldia de Te** | 1.54 | 341 | *eP* | Pn | 17 17 50.6 | -0.6 |
| TECO | | | | *eS* | Sn | 17 18 11.0 | +0.9 |
| PQSS | **Presa 15 de Se** | 1.57 | 350 | *eP* | Pn | 17 17 51.7 | +0.1 |
| PQSS | | | | *eS* | Sb | 17 18 13.4 | -0.3 |
| PQSS | **Presa 15 de Se** | 1.57 | 350 | *eP* | Pn | 17 17 51.7 | +0.1 |
| PQSS | | | | *eS* | Sb | 17 18 13.4 | -0.3 |
| CNGN | **Cerro Negro** | 1.59 | 74 | | Pn | 17 17 51.7 | -0.3 |
| CNGN | **Cerro Negro** | 1.59 | 74 | *eP* | Pn | 17 17 51.7 | -0.3 |
| SNVI | **San Vicente** | 1.63 | 340 | *eP* | Pn | 17 17 51.5 | -1.0 |
| SNVI | **San Vicente** | 1.63 | 340 | *eP* | Pn | 17 17 51.5 | -1.0 |
| UESV | **Universidad de** | 1.63 | 342 | *eP* | Pn | 17 17 52.9 | +0.4 |
| UESV | **Universidad de** | 1.63 | 342 | *eP* | Pn | 17 17 52.9 | +0.4 |
| COPN | **Copaltepe** | 1.65 | 86 | *eP* | Pn | 17 17 51.1 | -1.5 |
| COEG | **Centro de Oper** | 1.65 | 339 | *eP* | Pn | 17 17 52.4 | -0.4 |
| COEG | **Centro de Oper** | 1.65 | 339 | *eP* | Pn | 17 17 52.4 | -0.4 |
| SCLA | **Alcaldia de Sa** | 1.68 | 345 | *eP* | Pn | 17 17 53.6 | +0.4 |
| SCLA | | | | *eS* | Sb | 17 18 15.8 | -1.2 |
| SCLA | **Alcaldia de Sa** | 1.68 | 345 | *eP* | Pn | 17 17 53.6 | +0.4 |
| SCLA | | | | *eS* | Sb | 17 18 15.8 | -1.2 |
| SJTE | **Alcalda de S** | 1.69 | 335 | *eP* | Pn | 17 17 52.1 | -1.2 |
| SJTE | **Alcalda de S** | 1.69 | 335 | *eP* | Pn | 17 17 52.1 | -1.2 |
| LFRS | **El Faro** | 1.72 | 333 | *eP* | Pn | 17 17 52.9 | -0.9 |
| LFRS | **El Faro** | 1.72 | 333 | *eP* | Pn | 17 17 52.9 | -0.9 |
| MOMN | **Momotombo** | 1.72 | 79 | *eP* | Pn | 17 17 52.9 | -0.9 |
| LALI | **Alcalda de L** | 1.74 | 324 | *eP* | Pn | 17 17 52.9 | -1.0 |
| LALI | **Alcalda de L** | 1.74 | 324 | *eP* | Pn | 17 17 52.9 | -1.0 |
| PAVA | **Las Pavas** | 1.75 | 338 | *eP* | Pn | 17 17 54.0 | -0.2 |
| PAVA | **Las Pavas** | 1.75 | 338 | *eP* | Pn | 17 17 54.0 | -0.2 |
| LBRS | **

comp=Z,13nm,0.8s
**JCT Junction City 21.20 332** P **P** **17 22 09.7 +0.7**
baz=147,SNR=6.5
**ATAH Atahualpa 21.46 152** LR LR 17 29 12.6
comp=Z,124nm,19.4s,baz=333,slow=33
**Z41A Richland Creek 21.49 350** P **P** **17 22 15.3 +3.3**
baz=167
**BIRV Birongo 21.63 92** P **P** **17 22 11.3 -2.5**
BIRV IAmb IAmb 17 23 03.6
comp=Z,42nm,1.5s
**GOGA Godfrey 21.69 11** P **P** **17 22 13.6 -0.5**
**GOGA Godfrey 21.69 11** P **P** **17 22 15.2 +1.0**
baz=192
**Y49A Blount Mountai 21.75 4** P **P** **17 22 14.2 -0.6**
Y49A IAmb IAmb 17 22 39.2
comp=Z,28nm,1.4s
**Y52A Lilburn 22.03 9** P **P** **17 22 18.0 +0.2**
**TXAR Lajitas Array 22.37 322** P **P** **17 22 23.1 +1.5**
comp=Z,3.8nm,0.6s,baz=142,slow=10,SNR=55
TXAR PcP **PcP** **17 26 20.1 +3.8**
comp=Z,0.3nm,0.7s,baz=76,slow=3.8,SNR=3.1
**TXAR Lajitas Array 22.37 322** P **P** **17 22 22.8 +1.1**
**TX31 Lajitas Ar. Si 22.37 322** P **P** **17 22 22.8 +1.1**
TX31 IAmb IAmb 17 22 24.3
comp=Z,23nm,0.9s
**TX32 Lajitas Array 22.37 322** P **P** **17 22 22.5 +0.9**
**HODGE Hodges 22.73 13** P **P** **17 22 21.4 -3.9**
HODGE IAmb IAmb 17 22 27.1
comp=Z,14nm,0.9s
**MIAR Mount Ida 22.89 349** P **P** **17 22 27.2 +0.3**
**MIAR Mount Ida 22.89 349** P **P** **17 22 27.6 +0.6**
baz=166,SNR=18
**ABTX Abilene, Hawle 22.96 335** P **P** **17 22 28.5 +0.7**
baz=150,SNR=5.0
**PCRV Puerto La Cruz 23.27 92** P **P** **17 22 30.4 -0.6**
comp=Z,6.1nm,0.7s,baz=204,slow=7.7,SNR=2.1
**W41B Gary Mavity, V 23.28 352** P **P** **17 22 30.5 -0.4**
W41B IAmb IAmb 17 22 32.0
comp=Z,17nm,0.9s
**W41B Gary Mavity, V 23.28 352** P **P** **17 22 31.4 +0.5**
baz=170,SNR=10.0
**WHAR Wooly Hollow 23.40 352** P **P** **17 22 30.0 -2.0**
WHAR IAmb IAmb 17 22 33.6
comp=Z,19nm,0.9s
**W39A Magazine 23.56 349** P **P** **17 22 34.3 +0.7**
baz=166,SNR=6.8
**KMSC Kings Mountain 23.81 14** P **P** **17 22 36.5 +0.4**
baz=196
**TKL Tuckaleechee C 23.83 9** P **P** **17 22 35.5 -0.7**
comp=Z,22nm,1.1s,baz=177,slow=10,SNR=11
TKL LR LR 17 31 29.7
comp=Z,74nm,18.1s,baz=176,slow=36
**TKL Tuckaleechee C 23.83 9** P **P** **17 22 34.5 -1.8**
TKL IAmb IAmb 17 22 38.0
comp=Z,22nm,1.0s
**FCAR Ozark Folk Cen 23.97 352** P **P** **17 22 36.3 -1.1**
**V53A Saluda 24.00 11** P **P** **17 22 35.9 -2.0**
V53A IAmb IAmb 17 22 40.2
comp=Z,8.3nm,0.8s
**LCAR Lake Charles 24.03 354** P **P** **17 22 35.8 -2.3**
**WMOK Wichita Mounta 24.50 339** P **P** **17 22 42.6 +0.2**
baz=154,SNR=7.1
**FNO Franklin 24.52 342** **P** **17 22 41.2 -1.4**
**U40A Yellville 24.53 351** P **P** **17 22 42.8 +0.2**
baz=169,SNR=10.0
**HHAR Hobbs 24.64 349** P **P** **17 22 43.1 -0.6**
HHAR IAmb IAmb 17 22 45.5
comp=Z,13nm,0.9s
**PBMO Poplar Bluff 24.68 356** P **P** **17 22 42.7 -1.2**
PBMO IAmb IAmb 17 22 48.2
comp=Z,14nm,1.1s
**TUL1 Leonard 24.69 345** P **P** **17 22 42.7 -1.4**
TUL1 IAmb IAmb 17 22 44.9
comp=Z,15nm,0.9s
**TUL1 Leonard 24.69 345** P **P** **17 22 44.3 +0.2**
baz=162
**MNTX Cornudas Mount 25.10 324** P **P** **17 22 49.0 +1.1**
**MNTX Cornudas Mount 25.10 324** P **P** **17 22 50.0 +2.0**
baz=137,SNR=6.3
**MSTX Muleshoe 25.50 331** P **P** **17 22 51.9 +0.3**
baz=145
**AMTX Amarillo 25.77 334** P **P** **17 22 54.0 0.0**
**AMTX Amarillo 25.77 334** P **P** **17 22 54.8 +0.8**
baz=148
**S39A Bolivar 25.91 351** P **P** **17 22 54.8 -0.4**
**CCM Cathedral Cave 26.01 355** P **P** **17 22 55.3 -0.8**
baz=173
**WCI Wyandotte Cave 26.11 4** P **P** **17 22 56.1 -0.8**
baz=184
**SDCO Great Sand Dun 29.85 332** P **P** **17 23 33.6 +2.8**
baz=144
**PTGA Pitinga 30.85 112** LR LR 17 38 12.2
comp=Z,70nm,18.3s,baz=94,slow=41
**ECSD EROS Data Cent 32.36 349** P **P** **17 23 49.9 -2.6**
ECSD IAmb IAmb 17 23 51.6
comp=Z,11nm,1.3s
**ECSD EROS Data Cent 32.36 349** P **P** **17 23 51.2 -1.2**
baz=164
**SPMN Marine on St. 33.26 354** P **P** **17 23 59.0 -1.3**
baz=172,SNR=6.7
**PFO Pinyon Flats O 33.49 314** LR LR 17 39 41.3
comp=Z,84nm,21.4s,baz=169,slow=40
**SADO Sadowa 33.51 12** LR LR 17 38 19.3
comp=Z,129nm,18.4s,baz=182,slow=38
**PDAR Pinedale Array 35.73 333** P **P** **17 24 22.9 +0.9**
comp=Z,0.5nm,0.5s,baz=128,slow=12,SNR=5.5
PDAR PcP **PcP** **17 26 50.5 +0.8**
comp=Z,0.3nm,0.5s,baz=131,slow=4.1,SNR=2.7
**AGMN Agassiz Nation 36.66 352** P **P** **17 24 28.3 -1.3**
baz=167,SNR=11
**MDND Maddock 36.91 347** P **P** **17 24 31.1 -0.6**
baz=161
**NVAR Mina Array Bea 37.46 320** P **P** **17 24 38.7 +1.9**
comp=Z,1.1nm,0.9s,baz=133,slow=10,SNR=6.2
NVAR PcP **PcP** **17 26 56.9 +1.9**
comp=Z,0.6nm,0.7s,baz=145,slow=3.3,SNR=3.9
**ULM Lac du Bonnet 38.58 352** P **P** **17 24 44.0 -1.7**
comp=Z,12nm,0.6s,baz=169,slow=8.7,SNR=14
ULM LR LR 17 41 47.1
comp=Z,90nm,18.8s,baz=124,slow=38
**ULM Lac du Bonnet 38.58 352** P **P** **17 24 43.5 -2.2**
**DGMT Dagmar 38.64 343** P **P** **17 24 46.9 +0.6**
baz=154
**SIV San Ignacio 38.75 135** P **P** **17 24 47.9 +0.2**
comp=Z,4.4nm,0.9s,baz=315,slow=9.1,SNR=5.9
SIV PcP **PcP** **17 27 02.3 +3.3**
comp=Z,1.3nm,0.6s,baz=294,slow=6.8,SNR=3.8
SIV LR LR 17 40 17.2
comp=Z,52nm,19.7s,baz=116,slow=36
**LVC Limon Verde 39.35 151** LR LR 17 39 42.7
comp=Z,41nm,18.7s,baz=220,slow=34
**SCHQ Schefferville 45.87 17** P **P** **17 25 43.3 -1.8**
comp=Z,7.4nm,0.7s,baz=218,slow=6.5,SNR=18
SCHQ LR LR 17 46 16.7
comp=Z,128nm,18.2s,baz=262,slow=38
**FCC Fort Churchill 46.80 356** P **P** **17 25 50.9 -1.4**
FCC IAmb IAmb 17 25 59.2
comp=Z,7.0nm,0.8s
**CPUP Villa Florida 48.61 142** LR LR 17 46 42.4
comp=Z,23nm,19.2s,baz=206,slow=36
**FRB Frobisher Bay 53.44 11** LR LR 17 50 21.1
comp=Z,122nm,19.3s,baz=212,slow=37
**YKA Yellowknife Ar 53.77 345** P **P** **17 26 44.1 -0.9**
comp=Z,2.0nm,0.8s,baz=139,slow=7.8,SNR=36
YKA PcP **PcP** **17 27 51.1 +0.4**
comp=Z,0.9nm,0.6s,baz=147,slow=4.1,SNR=12
**DLBC Dease Lake 55.91 335** P **P** **17 27 00.9 +0.2**
comp=Z,2.8nm,0.9s,baz=208,slow=17,SNR=2.1
**SFJD Kangerlussuaq 60.30 16** LR LR 17 52 56.6
comp=Z,63nm,18.5s,baz=182,slow=36
**RES Resolute Bay 62.70 358** LR LR 17 56 54.2
comp=Z,42nm,19.7s,baz=86,slow=38
**INK Inuvik 63.32 343** P **P** **17 27 49.8 -1.7**
comp=Z,2.2nm,0.9s,baz=104,slow=7.8,SNR=6.6
INK LR LR 17 57 13.5
comp=Z,38nm,20.9s,baz=88,slow=38
**INK Inuvik 63.32 343** P **P** **17 27 51.1 -0.3**
baz=129
**ILAR Eielson Array 66.04 336** P **P** **17 28 08.4 -0.9**
comp=Z,0.7nm,0.9s,baz=94,slow=3.3,SNR=4.8
ILAR PP **PP** **17 30 35.2 +0.4**
comp=Z,0.3nm,0.8s,baz=122,slow=8.6,SNR=4.3
ILAR LR LR 18 03 44.2
comp=Z,45nm,18.4s,baz=182,slow=42
**USHA Ushuaia 68.73 168** LR LR 17 52 56.8
comp=Z,59nm,19.5s,baz=296,slow=31
**MDT Midelt 78.29 59** LR LR 17 57 05.8

comp=Z,43nm,20.2s,baz=351,slow=31
**ASAR Alice Springs 138.39 248** PKP **PKiKP** **17 36 50.3 -0.8**
comp=Z,0.3nm,0.7s,baz=67,slow=2.4,SNR=2.2
**WRA Warramunga Arr 138.40 254** PKP **PKiKP** **17 36 50.4 -0.8**
comp=Z,0.2nm,0.5s,baz=95,slow=2.5,SNR=1.4
**PZH PanZhiHua 140.44 346** PKP **PKPdf** **17 36 50.3 -2.6**
**CMAR Chiang Mai Arr 148.84 347** PKPbc **PKPbc** **17 37 09.7 -1.6**
comp=Z,3.4nm,0.9s,baz=344,slow=3.6,SNR=23

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*KRNET **14** 17:24:21.4±0.1,41°.97N×75°.35E,h14km,mb3.2*
*SOME **14** 17:24:21.7,42°.03N×75°.38E,h5km*
*KNET **14** 17:24:22.4±0.6,42°.04N×75°.28E,h17km±3km,ml2.5,Error ellipse: s-maj=5.0km s-min=2.2km az=172.0*
*NNC **14** 17:24:22.2±0.6,42°.02N×75°.32E,h0km,mb3.6,mpv3.5,Error ellipse: s-maj=4.0km s-min=1.9km az=178.0*
**ISC 14 17:24:21.9±1.0,42°.00N±0°.03×75°.35E±0°.02,h16km±8km,**
**n77,σ1s24/140,32C-20D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BOOM** | **Boomskoye usch** | **0.66** | **42** | ⇑*i*P | | | **Pg** | **17 24 34.8** | **-0.1** |
| | baz=40 | | | | | | | | |
| BOOM | | | | ⇑*i*S | | | **Sb** | **17 24 44.1** | **0.0** |
| | baz=40 | | | | | | | | |
| **UCH** | **Uchtor** | **0.66** | **291** | ⇑P | | | **Pg** | **17 24 34.6** | **-0.5** |
| | 58nm,0.2s,SNR=235 | | | | | | | | |
| UCH | | | | ⇑S | | | **Sg** | **17 24 43.8** | **-0.2** |
| | 135nm,0.1s | | | | | | | | |
| **UCH** | **Uchtor** | **0.66** | **291** | ⇓*i*P | | | **Pg** | **17 24 34.5** | **-0.5** |
| | baz=93 | | | | | | | | |
| UCH | | | | ⇓*i*S | | | **Sg** | **17 24 43.6** | **-0.3** |
| | baz=93 | | | | | | | | |
| **ULHL** | **Ulahol** | **0.71** | **69** | ⇑*i*P | | | **Pg** | **17 24 35.0** | **-0.9** |
| | baz=67 | | | | | | | | |
| ULHL | | | | ⇑*i*S | | | **Sg** | **17 24 44.9** | **-0.4** |
| | baz=67 | | | | | | | | |
| **KBK** | **Karagaybulak** | **0.72** | **336** | ⇓P | | | **Pb** | **17 24 36.3** | **+0.1** |
| | 124nm,0.1s,SNR=348 | | | | | | | | |
| KBK | | | | ⇑S | | | **Sb** | **17 24 46.6** | **+0.6** |
| | 2μm,0.3s | | | | | | | | |
| **KBK** | **Karagaybulak** | **0.72** | **336** | ⇓*i*P | | | **Pg** | **17 24 35.8** | **-0.3** |
| | baz=37 | | | | | | | | |
| KBK | | | | ⇓*i*S | | | **Sb** | **17 24 46.0** | **+0.1** |
| | baz=37 | | | | | | | | |
| **ARLS** | **Aral** | **0.78** | **260** | ⇑*i*P | | | **Pg** | **17 24 35.9** | **-1.2** |
| | baz=62 | | | | | | | | |
| ARLS | | | | ⇑*i*S | | | **Sg** | **17 24 46.4** | **-1.0** |
| | baz=62 | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.90** | **316** | ⇓P | | | **Pg** | **17 24 39.1** | **-0.4** |
| | 24nm,0.1s,SNR=114 | | | | | | | | |
| AAK | | | | ⇑S | | | **Sb** | **17 24 51.1** | **+0.1** |
| | 92nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.90** | **316** | ⇑P | | | **Pg** | **17 24 39.0** | **-0.4** |
| | 13nm,0.3s | | | | | | | | |
| AAK | | | | ⇑S | | | **Sb** | **17 24 51.1** | **+0.1** |
| | 80nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.90** | **316** | ⇑*i*P | | | **Pg** | **17 24 39.0** | **-0.4** |
| | baz=17 | | | | | | | | |
| AAK | | | | ⇑*i*S | | | **Sb** | **17 24 51.3** | **+0.3** |
| | baz=17 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.94** | **11** | ⇓P | | | **Pb** | **17 24 40.0** | **0.0** |
| | 23nm,0.1s,SNR=115 | | | | | | | | |
| TKM2 | | | | ⇓S | | | **Sn** | **17 24 53.0** | **-0.8** |
| | 67nm,0.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.94** | **11** | ⇑P | | | **Pb** | **17 24 39.9** | **0.0** |
| | 9.1nm,0.2s | | | | | | | | |
| TKM2 | | | | ⇑S | | | **Sn** | **17 24 53.1** | **-0.8** |
| | 19nm,0.3s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.94** | **11** | ⇓*i*P | | | **Pb** | **17 24 40.0** | **0.0** |
| | baz=11 | | | | | | | | |
| TKM2 | | | | ⇓*i*S | | | **Sn** | **17 24 53.2** | **-0.7** |
| | baz=11 | | | | | | | | |
| **FRU1** | **Bishkek** | **0.97** | **327** | ⇑*i*P | | | **Pn** | **17 24 40.8** | **-0.1** |
| | baz=28 | | | | | | | | |
| FRU1 | | | | ⇑*i*S | | | **Sn** | **17 24 54.7** | **+0.3** |
| | baz=28 | | | | | | | | |
| **CHMS** | **Chumysh** | **1.09** | **336** | ⇑P | | | **Pn** | **17 24 42.7** | **+0.1** |
| | 11nm,0.1s,SNR=7.0 | | | | | | | | |
| CHMS | | | | ⇓S | | | **Sn** | **17 24 57.2** | **-0.2** |
| | 99nm,0.3s | | | | | | | | |
| **CHMS** | **Chumysh** | **1.09** | **336** | ⇓*i*P | | | **Pg** | **17 24 42.6** | **-0.5** |
| | baz=37 | | | | | | | | |
| CHMS | | | | ⇓*i*S | | | **Sn** | **17 24 57.9** | **+0.5** |
| | baz=37 | | | | | | | | |
| **KST** | **Kastek** | **1.14** | **23** | *e*P | | | **Pn** | **17 24 43.5** | **+0.2** |
| | 14nm,0.2s | | | | | | | | |
| KST | | | | *e*S | | | **Sn** | **17 24 59.4** | **+0.7** |
| | 92nm,0.2s | | | | | | | | |
| **KST** | **Kastek** | **1.14** | **23** | P | | | **Pn** | **17 24 43.5** | **+0.2** |
| | 14nm,0.2s | | | | | | | | |
| KST | | | | S | | | **Sn** | **17 24 59.4** | **+0.7** |
| | 92nm,0.2s | | | | | | | | |
| **KST** | **Kastek** | **1.14** | **23** | *e*P | | | **Pn** | **17 24 43.5** | **+0.2** |
| | baz=23 | | | | | | | | |
| KST | | | | *e*S | | | **Sn** | **17 24 59.4** | **+0.7** |
| | baz=23 | | | | | | | | |
| **AML** | **Almayashu** | **1.24** | **277** | P | | | **Pn** | **17 24 44.8** | **-0.1** |
| | 49nm,0.1s,SNR=38 | | | | | | | | |
| AML | | | | ⇑S | | | **Sb** | **17 25 01.2** | **+0.2** |
| | 87nm,0.2s | | | | | | | | |
| **DGS** | **Degeres** | **1.28** | **14** | *e*P | | | **Pg** | **17 24 46.4** | **-0.3** |
| | 28nm,0.2s | | | | | | | | |
| DGS | | | | *e*S | | | **Sg** | **17 25 04.2** | **+0.7** |
| | 68nm,0.2s | | | | | | | | |
| **DGS** | **Degeres** | **1.28** | **14** | P | | | **Pg** | **17 24 46.3** | **-0.3** |
| | 28nm,0.2s | | | | | | | | |
| DGS | | | | S | | | **Sg** | **17 25 04.1** | **+0.7** |
| | 68nm,0.2s | | | | | | | | |
| **DGS** | **Degeres** | **1.28** | **14** | *e*P | | | **Pg** | **17 24 46.4** | **-0.3** |
| | baz=14 | | | | | | | | |
| DGS | | | | *e*S | | | **Sg** | **17 25 04.2** | **+0.7** |
| | baz=14 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.34** | **300** | ⇑P | | | **Pb** | **17 24 47.0** | **+0.3** |
| | 33nm,0.2s,SNR=80 | | | | | | | | |
| EKS2 | | | | ⇑S | | | **Sg** | **17 25 05.2** | **-0.1** |
| | 45nm,0.2s | | | | | | | | |
| **KDJ** | **Kajisay** | **1.37** | **84** | ⇑*i*P | | | **Pn** | **17 24 47.1** | **+0.6** |
| | baz=83 | | | | | | | | |
| KDJ | | | | ⇑*i*S | | | **Sb** | **17 25 05.8** | **+1.2** |
| | baz=83 | | | | | | | | |
| **MTBS** | **Maitube** | **1.39** | **35** | *e*P | | | **Pg** | **17 24 47.9** | **-0.7** |
| | 28nm,0.2s | | | | | | | | |
| MTBS | | | | *e*S | | | **Sg** | **17 25 06.9** | **+0.2** |
| | 61nm,0.3s | | | | | | | | |
| **MTBS** | **Maitube** | **1.39** | **35** | P | | | **Pg** | **17 24 47.9** | **-0.7** |
| | 28nm,0.2s | | | | | | | | |
| MTBS | | | | S | | | **Sg** | **17 25 06.9** | **+0.2** |
| | 61nm,0.3s | | | | | | | | |
| **MTBS** | **Maitube** | **1.39** | **35** | *e*P | | | **Pg** | **17 24 47.9** | **-0.7** |
| | baz=34 | | | | | | | | |
| MTBS | | | | *e*S | | | **Sg** | **17 25 06.9** | **+0.2** |
| | baz=34 | | | | | | | | |
| **USP** | **Ospenovka** | **1.42** | **334** | ⇑P | | | **Pg** | **17 24 48.5** | **-0.7** |
| | 13nm,0.1s,SNR=26 | | | | | | | | |
| USP | | | | ⇑S | | | **Sg** | **17 25 07.2** | **-0.4** |
| | 44nm,0.1s | | | | | | | | |
| **USP** | **Ospenovka** | **1.42** | **334** | ⇓*i*P | | | **Pb** | **17 24 48.0** | **+0.1** |
| | baz=35 | | | | | | | | |
| USP | | | | ⇓*i*S | | | **Sg** | **17 25 07.4** | **-0.2** |
| | baz=35 | | | | | | | | |
| **SGDS** | **Sogindy** | **1.55** | **340** | *e*P | | | **Pg** | **17 24 50.9** | **-0.7** |
| | 37nm,0.2s | | | | | | | | |
| SGDS | | | | *e*S | | | **Sg** | **17 25 11.5** | **-0.3** |
| | 55nm,0.3s | | | | | | | | |
| **SGDS** | **Sogindy** | **1.55** | **340** | P | | | **Pg** | **17 24 50.9** | **-0.7** |
| | 37nm,0.2s | | | | | | | | |
| SGDS | | | | S | | | **Sg** | **17 25 11.5** | **-0.3** |
| | 55nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.57** | **48** | *e*P | | | **Pb** | **17 24 51.4** | **+0.5** |
| | 6.6nm,0.2s | | | | | | | | |
| TNSS | | | | *e*S | | | **Sg** | **17 25 12.9** | **+0.1** |
| | 26nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.57** | **48** | P | | | **Pb** | **17 24 51.4** | **+0.5** |
| | 6.6nm,0.2s | | | | | | | | |
| TNSS | | | | S | | | **Sg** | **17 25 12.9** | **+0.1** |
| | 26nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.57** | **48** | *e*P | | | **Pb** | **17 24 51.4** | **+0.5** |
| | baz=47 | | | | | | | | |
| TNSS | | | | *e*S | | | **Sg** | **17 25 12.9** | **+0.1** |
| | baz=47 | | | | | | | | |
| **KNDC** | **Almaty** | **1.71** | **44** | ⇑S | | | **Sg** | **17 25 17.2** | **+0.3** |
| | 74nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **1.71** | **47** | *e*P | | | **Pb** | **17 24 53.8** | **+0.7** |
| | 7.5nm,0.2s | | | | | | | | |
| MDOK | | | | *e*S | | | **Sg** | **17 25 16.8** | **-0.3** |
| | 32nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **1.71** | **47** | ⇓P | | | **Pb** | **17 24 53.4** | **+0.4** |
| | 8.4nm,0.7s | | | | | | | | |
| MDOK | | | | ⇓S | | | **Sg** | **17 25 16.8** | **-0.3** |
| | 21nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **1.71** | **47** | Pg | | | **Pb** | **17 24 53.8** | **+0.7** |
| | 7.5nm,0.2s | | | | | | | | |
| MDOK | | | | Lg | | | Lg | 17 25 16.8 | |
| | 32nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **1.71** | **8** | *e*P | | | **Pg** | **17 24 53.8** | **-1.1** |
| | 14nm,0.2s | | | | | | | | |
| KRBS | | | | *e*S | | | **Sg** | **17 25 16.7** | **-0.5** |
| | 74nm,0.4s | | | | | | | | |
| **KRBS** | **Karabastau** | **1.71** | **8** | P | | | **Pg** | **17 24 53.8** | **-1.1** |
| | 14nm,0.2s | | | | | | | | |
| KRBS | | | | S | | | **Sg** | **17 25 16.7** | **-0.5** |
| | 74nm,0.4s | | | | | | | | |
| **KRBS** | **Karabastau** | **1.71** | **8** | *e*P | | | **Pg** | **17 24 53.8** | **-1.1** |
| | baz=8.0 | | | | | | | | |
| KRBS | | | | *e*S | | | **Sg** | **17 25 16.7** | **-0.5** |
| | baz=8.0 | | | | | | | | |
| **MRKS** | **Merke** | **1.74** | **296** | *e*P | | | **Pb** | **17 24 54.5** | **+1.0** |
| | 24nm,0.3s | | | | | | | | |
| MRKS | | | | *e*S | | | **Sg** | **17 25 17.9** | **-0.1** |
| | 53nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **1.74** | **296** | P | | | **Pb** | **17 24 54.4** | **+1.0** |
| | 24nm,0.3s | | | | | | | | |
| MRKS | | | | S | | | **Sg** | **17 25 17.9** | **-0.1** |
| | 53nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **1.74** | **296** | *e*P | | | **Pb** | **17 24 54.5** | **+1.0** |
| | baz=97 | | | | | | | | |
| MRKS | | | | *e*S | | | **Sg** | **17 25 17.9** | **-0.1** |
| | baz=97 | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.79** | **46** | *e*P | | | **Pg** | **17 24 55.7** | **-0.7** |
| | 12nm,0.2s | | | | | | | | |
| KOTS | | | | *e*S | | | **Sg** | **17 25 20.2** | **+0.4** |
| | 52nm,0.3s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.79** | **46** | P | | | **Pg** | **17 24 55.7** | **-0.7** |
| | 12nm,0.2s | | | | | | | | |
| KOTS | | | | S | | | **Sg** | **17 25 20.2** | **+0.4** |
| | 52nm,0.3s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.79** | **46** | *e*P | | | **Pg** | **17 24 55.7** | **-0.7** |
| | baz=45 | | | | | | | | |
| KOTS | | | | *e*S | | | **Sg** | **17 25 20.2** | **+0.4** |
| | baz=45 | | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.89** | **65** | ⇑*i*P | | | **Pb** | **17 24 56.0** | **-0.1** |
| | baz=64 | | | | | | | | |
| ANVS | | | | ⇑*i*S | | | **Sg** | **17 25 21.8** | **-1.0** |
| | baz=64 | | | | | | | | |
| **KTBS** | **Karatobe** | **1.98** | **29** | *e*P | | | **Pb** | **17 24 58.2** | **+0.8** |
| | 14nm,0.3s | | | | | | | | |
| KTBS | | | | *e*S | | | **Sg** | **17 25 24.9** | **-0.5** |
| | 88nm,0.2s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.98** | **29** | Pg | | | **Pb** | **17 24 58.2** | **+0.8** |
| | 14nm,0.3s | | | | | | | | |
| KTBS | | | | Lg | | | Lg | 17 25 24.9 | |
| | 88nm,0.2s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.98** | **29** | *e*P | | | **Pb** | **17 24 58.3** | **+0.8** |
| | baz=29 | | | | | | | | |
| KTBS | | | | *e*S | | | **Sg** | **17 25 25.0** | **-0.5** |
| | baz=29 | | | | | | | | |
| **KUU** | **Kurty** | **2.03** | **21** | *e*P | | | **Pb** | **17 24 59.2** | **+0.9** |
| | 12nm,0.2s | | | | | | | | |
| KUU | | | | *e*S | | | **Sg** | **17 25 26.5** | **-0.7** |
| | 56nm,0.3s | | | | | | | | |
| **KUU** | **Kurty** | **2.03** | **21** | Pg | | | **Pb** | **17 24 59.2** | **+0.9** |
| | 12nm,0.2s | | | | | | | | |
| KUU | | | | Lg | | | Lg | 17 25 26.5 | |
| | 56nm,0.3s | | | | | | | | |
| **KUU** | **Kurty** | **2.03** | **21** | *e*P | | | **Pb** | **17 24 59.3** | **+0.9** |
| | baz=20 | | | | | | | | |
| KUU | | | | *e*S | | | **Sg** | **17 25 26.5** | **-0.7** |
| | baz=20 | | | | | | | | |
| **CHKK** | **Chushkaly** | **2.21** | **32** | *e*P | | | **Pb** | **17 25 02.4** | **+0.9** |
| | 22nm,0.4s | | | | | | | | |
| CHKK | | | | *e*S | | | **Sg** | **17 25 32.3** | **-0.7** |
| | 86nm,0.3s | | | | | | | | |
| **CHKK** | **Chushkaly** | **2.21** | **32** | Pg | | | **Pb** | **17 25 02.4** | **+0.9** |
| | 22nm,0.4s | | | | | | | | |
| CHKK | | | | Lg | | | Lg | 17 25 32.3 | |
| | 86nm,0.3s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.32** | **77** | ⇓*i*P | | | **Pb** | **17 25 02.5** | **-0.9** |
| | baz=76 | | | | | | | | |
| PRZ | | | | ⇓*i*S | | | **Sb** | **17 25 31.8** | **0.0** |
| | baz=76 | | | | | | | | |
| **SATY** | **Saty** | **2.50** | **64** | *e*P | | | **Pb** | **17 25 07.7** | **+1.3** |
| | 3.6nm,0.3s | | | | | | | | |
| SATY | | | | *e*S | | | **Sg** | **17 25 40.5** | **-1.7** |
| | 42nm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **2.50** | **64** | Pg | | | **Pb** | **17 25 07.7** | **+1.3** |
| | 3.6nm,0.3s | | | | | | | | |
| SATY | | | | Lg | | | Lg | 17 25 40.5 | |
| | 42nm,0.3s | | | | | | | | |
| **ARK** | **Arkit** | **2.54** | **267** | ⇑*i*P | | | **Pn** | **17 25 04.7** | **+2.2** |
| | baz=67 | | | | | | | | |
| ARK | | | | ⇑*i*S | | | **Sb** | **17 25 36.8** | **-1.2** |
| | baz=67 | | | | | | | | |
| **KPKS** | **Kokpek** | **2.86** | **58** | *e*P | | | **Pb** | **17 25 14.3** | **+1.7** |
| | 6.6nm,0.3s | | | | | | | | |
| KPKS | | | | *e*S | | | **Sg** | **17 25 51.8** | **-2.1** |
| | 28nm,0.3s | | | | | | | | |
| **ARXS** | **Arharly** | **2.86** | **39** | *e*P | | | **Pb** | **17 25 14.2** | **+1.5** |
| | 0.1nm,0.5s | | | | | | | | |
| ARXS | | | | *e*S | | | **Sg** | **17 25 51.6** | **-2.3** |
| | 52nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.86** | **39** | Pg | | | **Pb** | **17 25 14.2** | **+1.5** |
| | 0.1nm,0.5s | | | | | | | | |
| ARXS | | | | Lg | | | Lg | 17 25 51.6 | |
| | 52nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.95** | **66** | *e*P | | | **Pb** | **17 25 14.1** | **0.0** |
| | 4.3nm,0.2s | | | | | | | | |
| UZB | | | | *e*S | | | **Sb** | **17 25 52.1** | **+2.2** |
| | 18nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.95** | **66** | Pg | | | **Pb** | **17 25 14.1** | **0.0** |
| | 4.3nm,0.2s | | | | | | | | |
| UZB | | | | Lg | | | Lg | 17 25 52.5 | |
| | 18nm,0.4s | | | | | | | | |
| **BLB** | **Baldybastay** | **3.11** | **46** | *e*P | | | **Pb** | **17 25 18.5** | **+1.6** |
| | 6.6nm,0.3s | | | | | | | | |
| BLB | | | | *e*S | | | **Sg** | **17 25 59.0** | **-2.8** |
| | 50nm,0.6s | | | | | | | | |
| **BLB** | **Baldybastay** | **3.11** | **46** | Pg | | | **Pb** | **17 25 18.5** | **+1.6** |
| | 6.6nm,0.3s | | | | | | | | |
| BLB | | | | Lg | | | Lg | 17 25 59.0 | |
| | 50nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **3.19** | **343** | *e*P | | | **Pb** | **17 25 19.1** | **+1.0** |
| | 1.5nm,0.3s | | | | | | | | |
| BTLS | | | | *e*S | | | **Sg** | **17 26 00.1** | **-4.2** |
| | 39nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.33** | **65** | Pg | | | **Pb** | **17 25 21.8** | **+1.2** |
| | 1.6nm,0.4s | | | | | | | | |
| PDGK | | | | Lg | | | Lg | 17 26 04.9 | |
| | 5.3nm,0.6s | | | | | | | | |
| **KK02** | **Karatay Array** | **3.74** | **289** | ⇑Pg | | | **Pg** | **17 25 30.9** | **-2.7** |
| | 4.1nm,0.6s,baz=111,slow=14 | | | | | | | | |
| KK02 | | | | ⇓Lg | | | Lg | 17 26 19.0 | |
| | 5.2nm,0.5s,baz=110,slow=29 | | | | | | | | |
| **IUG** | **Iuzhnay** | **3.96** | **274** | *e*P | | | **Pb** | **17 25 34.1** | **+2.7** |
| | 46nm,0.2s | | | | | | | | |
| IUG | | | | *e*S | | | **Sg** | **17 26 25.8** | **-3.2** |
| | 23nm,0.3s | | | | | | | | |
| **IUG** | **Iuzhnay** | **3.96** | **274** | Pg | | | **Pb** | **17 25 34.1** | **+2.7** |
| | 46nm,0.2s | | | | | | | | |
| IUG | | | | Lg | | | Lg | 17 26 25.8 | |
| | 23nm,0.3s | | | | | | | | |
| **DJR** | **Jarkent** | **4.00** | **53** | *e*P | | | **Pb** | **17 25 34.1** | **+2.0** |
| | 0.9nm,0.3s | | | | | | | | |
| DJR | | | | *e*S | | | **Sg** | **17 26 25.7** | **-4.6** |
| | 11nm,0.5s | | | | | | | | |
| **DJR** | **Jarkent** | **4.00** | **53** | Pg | | | **Pb** | **17 25 34.1** | **+2.0** |
| | 0.9nm,0.3s | | | | | | | | |
| DJR | | | | Lg | | | Lg | 17 26 25.7 | |
| | 11nm,0.5s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.39** | **40** | *e*P | | | **Pb** | **17 25 40.7** | **+2.1** |
| | 0.6nm,0.0s | | | | | | | | |
| KAPS | | | | *e*S | | | **Sg** | **17 26 37.1** | **-5.7** |
| | 7.1nm,0.3s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.39** | **40** | Pg | | | **Pb** | **17 25 40.7** | **+2.1** |
| | 0.6nm,0.0s | | | | | | | | |
| KAPS | | | | Lg | | | Lg | 17 26 37.1 | |
| | 7.1nm,0.3s | | | | | | | | |

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*CNRM **14** 17:25:32.6,35°.62N×3°.75W,h18km,ml3.0*
*SFS **14** 17:25:36.1,35°.66N×4°.08W,h13km,ML2.7,ALBORAN W.*
**ISC 14 17:25:32.3±1.5,35°.63N±0°.04×3°.76W±0°.04,h14km±11km,**
**n12,σ1s36/20,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.44** | **200** | P | **Pg** | **17 25 40.9** | **-0.2** |
| PALE | | | | S | **Sb** | **17 25 47.7** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.74** | **123** | P | **Pg** | **17 25 46.8** | **0.0** |
| GOG | | | | S | **Sb** | **17 25 57.6** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.25** | **335** | P | **Pn** | **17 25 55.4** | **0.0** |
| EMAL | | | | S | **Sb** | **17 26 11.6** | **-0.1** |
| **CEU** | **Ceuta** | **1.34** | **282** | P | **Pb** | **17 25 57.0** | **-0.2** |
| CEU | | | | S | **Sn** | **17 26 10.3** | **-3.8** |
| **TAF** | **Taforalt** | **1.37** | **126** | P | **Pn** | **17 25 56.5** | **-0.6** |
| TAF | | | | S | **Sn** | **17 26 14.4** | **-0.7** |
| **SICH** | **Sidi Chahed** | **1.99** | **221** | P | **Pn** | **17 26 05.8** | **+0.2** |
| SICH | | | | S | **Sn** | **17 26 28.7** | **-1.6** |
| **IFR** | **Ifrane** | **2.39** | **209** | P | **Pn** | **17 26 12.7** | **+1.5** |
| IFR | | | | S | **Sn** | **17 26 40.0** | **-0.4** |
| **MD31** | **MD31** | **2.88** | **197** | P | **Pn** | **17 26 19.1** | **+1.2** |
| MD31 | | | | S | **Sn** | **17 26 53.8** | **+1.4** |
| **PVAQ** | **Vaqueiros** | **3.65** | **300** | *e*Sn | **Sn** | **17 27 10.6** | **-0.5** |
| PVAQ | | | | A | A | 17 27 18.7 | |
| | 8.0nm,1.0s | | | | | | |
| **MESJ** | **Messejana** | **4.21** | **303** | *e*Sn | **Sn** | **17 27 26.3** | **+1.4** |
| MESJ | | | | A | A | 17 27 28.5 | |
| | 5.6nm,0.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.55** | **304** | *e*Pn | **Pn** | **17 26 42.3** | **+1.5** |
| **PMTG** | **Montargil** | **4.94** | **315** | *e*Sn | **Sn** | **17 27 43.9** | **+0.8** |
| PMTG | | | | A | A | 17 27 51.2 | |
| | 3.4nm,0.8s | | | | | | |

*TUL* ***14*** *17:32:54±1.3, 36°.50N±0°.02×98°.71W±0°.04, h1*$^{km}_{\pm 7}$*, ML2.5, mb_Lg2.5/14(NEIC), Error ellipse: s-maj=5.0km s-min=3.3km az=107.0*

**NEIC 14 17:32:54.7±1.3, 36°.48N±0°.02×98°.68W±0°.04, h5**$^{km}_{\pm 2}$**, Error ellipse: s-maj=6.1km s-min=3.9km az=286.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.28** | **249** | Pg | Pg | 17 32 59.3 | -0.8 |
| **OKCFA** | **Oklahoma City** | **1.46** | **137** | | Pn | 17 33 21.2 | -0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **1.47** | **136** | Pn | Pn | 17 33 21.6 | -0.3 |
| **FNO** | **Franklin** | **1.60** | **139** | | Pn | 17 33 23.9 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.74** | **183** | Pn | Pn | 17 33 25.2 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.79** | **75** | Pn | Pn | 17 33 27.1 | +0.8 |
| **R32A** | **Long Quarter,** | **1.94** | **359** | Pn | Pn | 17 33 28.9 | +0.6 |
| **W35A** | **Tecumseh** | **1.98** | **132** | Pn | Pn | 17 33 29.4 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.00** | **160** | | Pb | 17 33 30.5 | -1.0 |
| **TUL1** | **Leonard** | **2.40** | **103** | Pn | Pn | 17 33 35.0 | +0.4 |
| TUL1 | | | | lAmb_Lg | | 17 34 14.4 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **340** | Pn | Pn | 17 33 37.3 | +1.6 |
| CBKS | | | | lAmb_Lg | | 17 34 18.6 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **AMTX** | **Amarillo** | **2.92** | **238** | | Pn | 17 33 41.5 | -0.3 |
| **X37A** | **Clayton** | **3.29** | **124** | Pn | Pn | 17 33 46.8 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **310** | lAmb_Lg | | 17 35 07.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.18** | **234** | | Pn | 17 33 59.3 | 0.0 |
| **MIAR** | **Mount Ida** | **4.59** | **113** | Pn | Pn | 17 34 05.6 | +0.9 |
| **T25A** | **Trinidad** | **4.65** | **280** | Pn | Pn | 17 34 05.5 | -0.2 |
| T25A | | | | lAmb_Lg | | 17 35 24.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **4.70** | **90** | lAmb_Lg | | 17 35 31.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.17** | **111** | lAmb_Lg | | 17 35 47.2 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.06** | **189** | lAmb_Lg | | 17 36 20.1 | |
| | comp=Z,7.1nm,0.7s | | | | | | |

**IDC 14 17:40:07.9±2.0, 8°.82S×127°.75E, h0**$^{km}$**, mb3.5/2, mb1 3.6/5, mb1mx3.3/29, mbtmp3.4/5, ML3.5/3, Error ellipse: s-maj=83.9km s-min=24.9km az=67.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **9.45** | **192** | Pn | Pn | 17 42 25.3 | -0.1 |
| | 0.2nm,0.3s,baz=16,slow=10,SNR=20 | | | | | | |
| FITZ | | | | Sn | Sn | 17 44 03.3 | -9.2 |
| | 0.6nm,0.3s,baz=57,slow=12,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.76** | **151** | Pn | Pn | 17 43 10.6 | -0.2 |
| | 0.5nm,0.3s,baz=329,slow=14,SNR=25 | | | | | | |
| WRA | | | | Sn | Sn | 17 45 26.8 | -6.9 |
| | 0.5nm,0.3s,baz=326,slow=22,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **15.89** | **159** | Pn | Pn | 17 43 53.7 | +0.5 |
| | 0.1nm,0.3s,baz=331,slow=9.6,SNR=12 | | | | | | |
| ASAR | | | | Sn | Sn | 17 46 43.4 | -6.8 |
| | 0.2nm,0.3s,baz=321,slow=16,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.28** | **314** | P | P | 17 47 38.8 | 0.0 |
| | 0.5nm,0.7s,baz=143,slow=6.9,SNR=7.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.56** | **328** | P | P | 17 51 12.3 | -0.2 |
| | 0.3nm,0.7s,baz=134,slow=6.2,SNR=3.3 | | | | | | |

*NOU* ***14*** *17:57:36.5, 21°.46S×170°.50E, h163km, mb4.6/35, Southeast of Loyalty Islands*

*IDC* ***14*** *17:57:38.5±3.9, 21°.52S×170°.40E, h181*$^{km}_{\pm 26}$*, mb3.8/6, mb1 4.0/7, mb1mx3.6/40, mbtmp4.3/7, Error ellipse: s-maj=38.6km s-min=26.8km az=47.0*

**ISC 14 17:57:32.8±1.0, 21°.58S±0°.09×170°.8E±0°.1, h134**$^{km}$**, n41, σ1s57/42, mb4.4/7, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **3.23** | **251** | P | **Pn** | **17 58 25.0** | **+2.5** |
| **LIFNC** | **LIFOU** | **3.37** | **283** | P | **Pn** | **17 58 24.6** | **+0.3** |
| **YATNC** | **Mamie plateau,** | **3.61** | **262** | P | **Pn** | **17 58 28.4** | **+0.8** |
| **OUENC** | **Ouen Island, N** | **3.72** | **256** | P | **Pn** | **17 58 31.3** | **+2.4** |
| **DZM** | **Mont Dzumac** | **4.03** | **262** | P | **Pn** | **17 58 34.8** | **+1.7** |
| | 11nm,0.3s,baz=93,slow=15,SNR=174 | | | | | | |
| DZM | | | | S | **Sn** | **17 59 22.6** | **+2.7** |
| | 12nm,0.3s,baz=190,slow=15,SNR=3.9 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.03** | **262** | P | **Pn** | **17 58 35.3** | **+2.2** |
| **ONTNC** | **Ouen Toro** | **4.05** | **259** | P | **Pn** | **17 58 35.2** | **+1.9** |
| **NOUC** | **Port Laguerre** | **4.16** | **262** | P | **Pn** | **17 58 36.7** | **+1.9** |
| **RTV** | **Rentapao** | **4.36** | **329** | P | **Pn** | **17 58 39.1** | **+1.7** |
| **DVP** | **Devils Point** | **4.53** | **327** | P | **Pn** | **17 58 42.8** | **+3.1** |
| **KOUNC** | **Koumac, New Ca** | **6.12** | **278** | P | **Pn** | **17 59 02.8** | **+1.8** |
| **EIDS** | **Eidsvold** | **18.43** | **254** | P | **P** | **18 01 37.5** | **-0.4** |
| **ARMA** | **Armidale** | **19.28** | **239** | P | **P** | **18 01 47.1** | **-0.3** |
| **BFZ** | **Birch Farm** | **19.61** | **167** | P | **Pn** | **18 01 54.3** | **+1.0** |
| | 28nm,1.0s | | | | | | |
| **RMQ** | **Roma** | **20.66** | **252** | P | **P** | **18 02 01.3** | **-0.8** |
| **CTA** | **Charters Tower** | **22.93** | **269** | P | **P** | **18 02 24.1** | **-1.4** |
| | 3.0nm,0.6s,baz=109,slow=8.7,SNR=8.7 | | | | | | |
| **CTA** | **Charters Tower** | **22.93** | **269** | P | **P** | **18 02 25.3** | **-0.3** |
| | 7.1nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **22.93** | **269** | P | **P** | **18 02 25.2** | **-0.3** |
| **CNB** | **Canberra Magne** | **23.19** | **229** | P | **P** | **18 02 28.9** | **+1.1** |
| **CMSA** | **Cobar Meteorol** | **24.45** | **241** | P | **P** | **18 02 39.5** | **+0.2** |
| **MTSU** | **Mount Surprise** | **25.08** | **273** | P | **P** | **18 02 44.8** | **-0.3** |
| **STKA** | **Stephens Creek** | **27.90** | **242** | P | **P** | **18 03 10.4** | **+0.1** |
| | 7.6nm,0.8s,baz=85,slow=9.5,SNR=14 | | | | | | |
| **LCRK** | **Leigh Creek** | **30.45** | **246** | P | **P** | **18 03 32.3** | **-0.6** |
| **HTT** | **Hallett** | **30.47** | **240** | P | **P** | **18 03 33.0** | **-0.1** |
| **OOD** | **Oodnadatta** | **32.37** | **252** | P | **P** | **18 03 49.7** | **-0.1** |
| **BBOO** | **Buckleboo** | **32.68** | **243** | P | **P** | **18 03 52.1** | **-0.3** |
| **MULG** | **Mulgathing** | **33.99** | **248** | P | **P** | **18 04 03.0** | **-0.8** |
| **ASAR** | **Alice Springs** | **34.01** | **259** | P | **P** | **18 04 02.0** | **-2.1** |
| | 5.8nm,0.8s,baz=80,slow=8.4,SNR=59 | | | | | | |
| **WRAB** | **Tennant Creek** | **34.02** | **266** | P | **P** | **18 04 01.6** | **-2.6** |
| **WRA** | **Warramunga Arr** | **34.03** | **266** | P | **P** | **18 04 01.5** | **-2.9** |
| | 5.5nm,0.8s,baz=89,slow=7.8,SNR=52 | | | | | | |
| **MTN** | **Manton Dam** | **38.73** | **276** | P | **P** | **18 04 42.6** | **-1.6** |
| **WRKA** | **Warakurna** | **39.02** | **257** | P | **P** | **18 04 45.2** | **-1.4** |
| **FORT** | **Forrest** | **39.19** | **247** | P | **P** | **18 04 46.7** | **-1.2** |
| **KNRA** | **Kununurra** | **40.12** | **271** | P | **P** | **18 04 54.8** | **-1.0** |
| **MBWA** | **Marble Bar** | **47.33** | **261** | P | **P** | **18 05 52.0** | **-1.4** |
| **MEEK** | **Meekatharra** | **47.59** | **253** | P | **P** | **18 05 54.0** | **-1.4** |
| **KLBR** | **Kellerberrin** | **48.03** | **246** | P | **P** | **18 05 57.1** | **-1.6** |
| **NWAO** | **Narrogin (SRO)** | **48.45** | **245** | P | **P** | **18 06 00.1** | **-1.7** |
| | 34nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.48** | **180** | P | **P** | **18 08 21.3** | **+0.9** |
| | 3.8nm,0.9s,baz=23,slow=1.6,SNR=9.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.75** | **294** | P | **P** | **18 09 31.7** | **0.0** |
| | 0.7nm,0.7s,baz=139,slow=4.7,SNR=7.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.21** | **332** | PKPbc | **PKPdf** | **18 16 59.3** | **+1.4** |
| | 1.4nm,0.6s,baz=34,slow=3.2,SNR=11 | | | | | | |

*NIED* ***14*** *18:09:24.7, 30°.31N×139°.12E, h438km, MW5.6, Moment Tensor Solution. s3 Moment tensor: Scale 10*$^{17}$*Nm; Mrr=2.56; Mθθ2.19; Mφφ0.37; Mrθ1.60; Mrφ0.84; Mθr-0.20; Fault plane solution: Mo3.00000×10*$^{17}$ *NP1: φs263.00000°, δ61.00000°, λ-76.00000°. NP2:φs56.00000°, δ32.00000°, λ-113.00000°.*

*JMA* ***14*** *18:09:24.6±0.1, 30°.31N×139°.12E, h438*$^{km}_{\pm 2}$*, M6.0*

*JMA Felt II J1.*

*MOS* ***14*** *18:09:25.4±0.9, 30°.34N×138°.66E, h414km, mb5.2/66, MS4.7/16, Error ellipse: s-maj=5.9km s-min=3.3km az=111.0*

*NEIC* ***14*** *18:09:25.9, 30°.29N×138°.84E, h410km, Moment Tension Solution. Moment tensor: Scale 10*$^{17}$*Nm; Mrr-4.31; Mθθ3.72; Mφφ0.59; Mrθ 1.99; Mrφ0.88; Mθr-1.26; Fault plane solution: Mo4.77000×10*$^{17}$ *NP1:φs273.85000°, δ58.43000°, λ-71.34000°. NP2:φs61.03000°, δ36.18000°, λ-117.51000°. Principal axes: T 4.2797, Plg12.0000°, Azm351.0000°; N 0.8559, Plg16.0000°, Azm84.0000°; P -5.1356, Plg70.0000°, Azm226.0000°;*

*BJI* ***14*** *18:09:25.3±0.0, 30°.37N×138°.68E, h412km, mb5.5/87, mB5.2/54*

*NEIC* ***14*** *18:09:26.3±2.0, 30°.30N±0°.07×138°.88E±0°.09, h410km±1km, mb5.4/256, Mwb5.7/33, Mww5.7, Error ellipse: s-maj=13.6km s-min=10.9km az=74.0*

*IDC* ***14*** *18:09:26.3±0.3, 30°.36N×138°.71E, h414km±2km, mb4.8/36, mb1 5.0/43, mb1mx4.8/45, mbtmp5.7/43, Error ellipse: s-maj=7.1km s-min=5.2km az=90.0*

*NEIC* ***14*** *18:09:27, 30°.30N×138°.85E, h430km, Moment Tensor Solution. Duration: 2s0 Moment tensor: Scale 10*$^{17}$*Nm; Mrr-3.47; Mθθ3.91; Mφφ-0.43; Mrθ2.62; Mθφ 1.48; Mθr-1.53; Fault plane solution: Mo5.02000×10*$^{17}$ *NP1:φs48.00000°, δ37.00000°, λ-134.00000°. NP2:φs279.00000°, δ65.00000°, λ-62.00000°. Principal axes: T 4.9284, Plg15.0000°, Azm349.0000°; N 0.1766, Plg25.0000°, Azm86.0000°; P -5.1049, Plg60.0000°, Azm231.0000°;*

*GCMT* ***14*** *18:09:27.3±0.1, 30°.43N±0°.01×138°.67E±0°.02, h422km, MW5.8/141, Moment Tensor Solution. s141,c267; Duration: 1s8 Moment tensor: Scale 10*$^{17}$ *Nm; Mrr-4.00±.06; Mθθ4.11±.10; Mφφ-0.11±.10; Mrθ2.93±.10; Mθφ1.38±.09; Mθr-1.29±.10; Best double couple: Mo5.34400×10*$^{17}$ *NP1:φs53.00000°, δ34.00000°, λ-128.00000°. NP2:φs275.00000°, δ64.00000°, λ-68.00000°. Principal axes: T 5.2230, Plg16.0000°, Azm349.0000°; N 0.2420, Plg20.0000°, Azm85.0000°; P -5.4650, Plg64.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. Triangular moment-rate function*

*KEA* ***14*** *18:09:28.9, 30°.25N×138°.26E, h411km, MS5.2/3*

*BGR* ***14*** *18:09:28.9±0.0, 31°.16N×139°.87E, h397km, mb5.4*

**ISC 14 18:09:26.6±0.2, 30°.34N±0°.02×138°.73E±0°.03, h420**$^{km}_{\pm 1}$**, h420km:pP-P, n1557, σ1s37/1982, mb5.4/354, 315C-268D, Fault plane solution: NP1:φs301.34418°, δ88.45891°, λ-56.33271°. NP2:φs33.65629°, δ33.69839°, λ-177.22160°. Principal axes:** T Plg34.6997°, Azm2.8677°; N Plg33.6535°, Azm120.3179°; P Plg37.3951°, Azm240.9092°; **Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAOM** | **Aogashimamukai** | **2.30** | **22** | P | **P** | **18 10 26.7** | **+0.6** |
| **JHCJ** | **Hachijojimakas** | **2.87** | **18** | ⇓P | **P** | **18 10 29.9** | **-0.2** |
| JHCJ | | | | *e*S | **S** | **18 11 20.2** | **-1.7** |
| **JHJ** | **Hachijo jima 2** | **2.91** | **18** | P | **P** | **18 10 30.7** | **+0.3** |
| | 5μm,0.3s,baz=159,slow=5.6,SNR=847 | | | | | | |
| JHJ | | | | S | **S** | **18 11 20.3** | **-2.1** |
| | 2μm,0.3s,baz=298,slow=20,SNR=17 | | | | | | |
| **JHJ2** | **Mitsune** | **2.92** | **18** | ⇓P | **P** | **18 10 30.2** | **-0.3** |
| JHJ2 | | | | *e*S | **S** | **18 11 20.9** | **-1.5** |
| **JHJ2** | **Mitsune** | **2.92** | **18** | Pn | **P** | **18 10 30.2** | **-0.3** |
| **JMKN** | **Mikurajimanish** | **3.62** | **11** | ⇓P | **P** | **18 10 36.0** | **-0.2** |
| **TTO1** | **TONANKAI O.B.S** | **3.67** | **334** | P | **P** | **18 10 38.9** | **+2.6** |
| **JKO** | **Kozu shima** | **3.85** | **5** | ⇓P | **P** | **18 10 38.8** | **+0.5** |
| **JMMH** | **Miemihama** | **4.16** | **327** | P | **P** | **18 10 43.5** | **+2.4** |
| **JSG** | **Sagara** | **4.35** | **354** | | **P** | **18 10 44.4** | **+1.6** |
| **JTNC** | **Tanabenakahech** | **4.36** | **323** | ⇓P | **P** | **18 10 45.3** | **+2.3** |
| JTNC | | | | *e*S | **S** | **18 11 47.1** | **+1.6** |
| **JIZS** | **Izushimoda** | **4.37** | **2** | P | **P** | **18 10 43.1** | **+0.1** |
| **JIE** | **Ise** | **4.39** | **338** | ⇑P | **P** | **18 10 44.8** | **+1.5** |
| JIE | | | | *e*S | **S** | **18 11 47.7** | **+1.8** |
| **JIM2** | **Oshima 3** | **4.41** | **8** | P | **P** | **18 10 43.1** | **-0.3** |
| **CBIJ** | **Chichi jima** | **4.43** | **136** | ⇑P | **P** | **18 10 41.1** | **-2.8** |
| CBIJ | | | | *e*S | **S** | **18 11 40.4** | **-6.5** |
| **JCJ** | **Chichijima** | **4.43** | **136** | Pn | **P** | **18 10 41.0** | **-2.9** |
| **JAA** | **Atsumi** | **4.49** | **343** | S | **S** | **18 11 48.2** | **+0.6** |
| **JWM** | **Minabe** | **4.52** | **322** | ⇓P | **P** | **18 10 47.2** | **+2.7** |
| **HMMJ** | **Hamamatsu 2** | **4.58** | **350** | S | **S** | **18 11 49.2** | **-0.1** |
| **JSSY** | **Shinshiroyabe** | **4.68** | **348** | ⇑P | **P** | **18 10 47.9** | **+1.9** |
| JSSY | | | | S | **S** | **18 11 51.2** | **+0.2** |
| **BSO1** | **Boso 1** | **4.70** | **23** | P | **P** | **18 10 45.1** | **-0.6** |
| **TSUJ** | **Tsu 2** | **4.78** | **336** | P | **P** | **18 10 49.3** | **+2.3** |
| **BSO4** | **Boso 4** | **4.83** | **16** | P | **P** | **18 10 46.6** | **-0.8** |
| **JOD2** | **Odawara 2** | **4.92** | **3** | P | **P** | **18 10 48.1** | **-0.3** |
| JOD2 | | | | *e*S | **S** | **18 11 53.8** | **-1.6** |
| **MRT2** | **Murotomisaki 2** | **4.94** | **309** | ⇑P | **P** | **18 10 51.5** | **+2.8** |
| **JAI** | **Aioi** | **5.00** | **315** | ⇑P | **P** | **18 10 52.1** | **+2.8** |
| **JNY** | **Yasuok** | **5.06** | **352** | P | **P** | **18 10 51.0** | **+1.1** |
| **JAO** | **Obara** | **5.07** | **346** | S | **S** | **18 11 58.5** | **+0.3** |
| **JICN** | **Ichinomiyachia** | **5.20** | **343** | P | **P** | **18 10 53.2** | **+2.0** |
| JICN | | | | S | **S** | **18 12 01.7** | **+1.2** |
| **INU** | **Inuyama** | **5.20** | **344** | Pn | **P** | **18 10 52.2** | **+0.9** |
| **INU** | **Inuyama** | **5.20** | **344** | P | **P** | **18 10 53.1** | **+1.9** |
| **JMN** | **Monobe** | **5.33** | **311** | Pn | **P** | **18 10 55.5** | **+2.9** |
| **JGF** | **Kuroka** | **5.37** | **348** | Pn | **P** | **18 10 53.6** | **+0.6** |
| **JSMT** | **Sammumatsuo** | **5.48** | **15** | S | **S** | **18 12 03.0** | **-2.8** |
| **JTO** | **Tosashimizu** | **5.65** | **298** | ⇑P | **P** | **18 10 58.7** | **+2.8** |
| JTO | | | | *e*S | **S** | **18 12 11.9** | **+2.9** |
| **JKU** | **Kubokawa** | **5.66** | **303** | ⇑P | **P** | **18 10 59.0** | **+3.0** |
| **JRY** | **Ryogami san** | **5.66** | **1** | ⇑P | **P** | **18 10 55.6** | **-0.4** |
| JRY | | | | *e*S | **S** | **18 12 07.5** | **-1.9** |
| **JKS** | **Kasai** | **5.67** | **326** | ⇑P | **P** | **18 10 58.4** | **+2.3** |
| **JJS** | **Sakaide** | **5.71** | **316** | P | **P** | **18 10 59.2** | **+2.6** |
| **JET** | **Tanbara** | **5.92** | **307** | ⇑P | **P** | **18 11 01.7** | **+3.0** |
| **UWA2** | **Uwa jima 2** | **5.94** | **300** | ⇑P | **P** | **18 11 02.0** | **+3.1** |
| **JAD** | **Aida** | **5.99** | **321** | ⇑P | **P** | **18 11 01.9** | **+2.5** |
| **JYT** | **Yasato** | **6.00** | **11** | Pn | **P** | **18 10 57.4** | **-2.1** |
| **JAG** | **Ashikaga** | **6.10** | **6** | ⇑P | **P** | **18 10 58.7** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **6.20** | **356** | P | **P** | **18 11 01.0** | **-0.7** |
| | 37nm,0.3s,baz=207,slow=8.4,SNR=922 | | | | | | |
| MJAR | | | | S | **S** | **18 12 17.2** | **-2.6** |
| | 12nm,0.3s,baz=174,slow=14,SNR=6.9 | | | | | | |
| MJAR | | | | ScP | **ScP** | **18 20 00.9** | **+1.1** |
| | 0.0nm,0.3s,baz=148,slow=7.7,SNR=4.7 | | | | | | |
| **MAJO** | **Matsushiro** | **6.20** | **356** | *c iP* | **P** | **18 11 01.6** | **-0.1** |
| **MAJO** | **Matsushiro** | **6.20** | **356** | Pn | **P** | **18 11 01.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **6.20** | **356** | P | **P** | **18 11 01.7** | **0.0** |
| **MAT** | **Matsushiro** | **6.20** | **356** | P | **P** | **18 11 01.2** | **-0.5** |
| MAT | | | | S | **S** | **18 12 17.2** | **-2.6** |
| **MAT** | **Matsushiro** | **6.20** | **356** | P | **P** | **18 11 01.2** | **-0.5** |
| **JNA** | **Nagahama** | **6.21** | **303** | ⇑P | **P** | **18 11 05.0** | **+3.2** |
| **MJB9** | **Matsu-Tunnel** | **6.21** | **356** | | **P** | **18 11 01.4** | **-0.3** |
| **JGK** | **Kuni** | **6.21** | **359** | ⇑P | **P** | **18 11 01.3** | **-0.5** |
| **JTT** | **Ttatey** | **6.36** | **350** | ⇑P | **P** | **18 11 04.3** | **+1.0** |
| **JJG** | **Jouge** | **6.37** | **314** | ⇑P | **P** | **18 11 06.2** | **+2.7** |
| **JHM** | **Kurahashi** | **6.47** | **307** | P | **P** | **18 11 07.6** | **+3.0** |
| **JKR** | **Kurayoshi** | **6.50** | **322** | P | **P** | **18 11 07.7** | **+2.3** |
| **JHS** | **Saijyo** | **6.63** | **316** | ⇑P | **P** | **18 11 09.0** | **+2.2** |
| JHS | | | | *e*S | **S** | **18 12 31.1** | **+2.8** |
| **JHS** | **Saijyo** | **6.63** | **316** | | **P** | **18 11 09.0** | **+2.2** |
| **JJN** | **Nakama** | **6.76** | **356** | ⇑P | **P** | **18 11 07.4** | **-0.8** |
| **JJH** | **Hakui** | **6.77** | **347** | ⇑P | **P** | **18 11 08.6** | **+0.4** |
| **JHT** | **Toyohira** | **6.85** | **311** | ⇑P | **P** | **18 11 11.0** | **+1.7** |
| **ONAJ** | **Iwakimizuishiy** | **6.96** | **14** | P | **P** | **18 11 08.8** | **-1.6** |
| **JNM** | **Ikuma** | **7.03** | **319** | ⇑P | **P** | **18 11 13.3** | **+2.2** |
| **JGT2** | **ShimaneMisato** | **7.05** | **314** | ⇑P | **P** | **18 11 13.3** | **+2.0** |
| **JFY** | **Yanaizu** | **7.10** | **6** | ⇑P | **P** | **18 11 10.3** | **-1.6** |
| **JHIK** | **Hikimi** | **7.11** | **308** | ⇑P | **P** | **18 11 13.9** | **+1.9** |
| **JSZ** | **Suzu** | **7.18** | **351** | ⇑P | **P** | **18 11 11.9** | **-0.8** |
| JSZ | | | | S | **S** | **18 12 35.1** | **-4.1** |
| **JSU** | **Suzuyama** | **7.20** | **281** | | **P** | **18 11 15.7** | **+2.6** |
| **JNU** | **Nakatsue** | **7.24** | **295** | P | **P** | **18 11 15.6** | **+2.1** |
| | 33nm,0.3s,baz=102,slow=5.4,SNR=93 | | | | | | |
| JNU | | | | S | **S** | **18 12 41.7** | **+1.1** |
| | 7.9nm,0.3s,baz=108,slow=20,SNR=1.7 | | | | | | |
| **JNU** | **Nakatsue** | **7.24** | **295** | ⇑P | **P** | **18 11 16.2** | **+2.7** |
| **JNU** | **Nakatsue** | **7.24** | **295** | P | **P** | **18 11 16.3** | **+2.8** |
| **JOI** | **OKI** | **7.50** | **324** | P | **P** | **18 11 17.4** | **+1.1** |
| **JTY** | **Toyota** | **7.58** | **303** | P | **P** | **18 11 19.6** | **+2.5** |
| **JSD** | **Sado** | **7.69** | **357** | P | **P** | **18 11 16.5** | **-1.8** |
| **JMM** | **Marumori** | **7.70** | **12** | P | **P** | **18 11 17.2** | **-1.2** |
| **JTI** | **Itaya** | **7.73** | **296** | ⇑P | **P** | **18 11 21.4** | **+2.5** |
| **JSJ** | **Shimokoshiki** | **7.85** | **282** | ⇑P | **P** | **18 11 22.5** | **+2.3** |
| **JKDJ** | **Kitadaitoujima** | **7.88** | **238** | ⇑P | **P** | **18 11 23.1** | **+2.5** |
| **JMZ** | **Minamidaito 2** | **8.01** | **238** | P | **P** | **18 11 24.2** | **+2.2** |
| **JAW** | **Awa shima** | **8.11** | **3** | ⇑P | **P** | **18 11 21.9** | **-0.9** |
| **JAMN** | **Amaminishikomi** | **8.60** | **258** | P | **P** | **18 11 30.4** | **+2.0** |
| JAMN | | | | *e*S | **S** | **18 13 10.9** | **+2.4** |
| **JYK** | **Kaneyama** | **8.66** | **8** | P | **P** | **18 11 28.8** | **-0.1** |
| **JMK** | **Ichinoseki** | **8.83** | **13** | P | **P** | **18 11 30.2** | **-0.6** |
| JMK | | | | *e*S | **S** | **18 13 09.2** | **-3.9** |
| **JTB** | **Tobi-shima** | **8.86** | **4** | P | **P** | **18 11 31.5** | **+0.4** |
| **JTU** | **Tsushima** | **8.92** | **300** | P | **P** | **18 11 34.2** | **+2.4** |
| JTU | | | | *e*S | **S** | **18 13 17.0** | **+2.0** |
| **JTU** | **Tsushima** | **8.92** | **300** | P | **P** | **18 11 33.4** | **+1.6** |
| **JOW** | **Kunigami** | **9.83** | **252** | P | **P** | **18 11 45.2** | **+3.3** |
| | 78nm,0.3s,baz=80,slow=5.6,SNR=78 | | | | | | |
| JOW | | | | S | **S** | **18 13 38.0** | **+4.2** |
| | 4.8nm,0.3s,baz=221,slow=26,SNR=5.7 | | | | | | |
| **JOW** | **Kunigami** | **9.83** | **252** | P | **P** | **18 11 44.8** | **+2.8** |
| **JOW** | **Kunigami** | **9.83** | **252** | P | **P** | **18 11 45.0** | **+3.0** |
| **JIH** | **Iheya** | **10.01** | **253** | P | **P** | **18 11 46.7** | **+2.8** |
| **JNTH** | **Nagotoyohara** | **10.16** | **251** | P | **P** | **18 11 48.6** | **+3.0** |
| **JHHS** | **Hirosakihyakuz** | **10.38** | **7** | P | **P** | **18 11 49.3** | **+1.5** |
| **JTM** | **Tenmabayashi** | **10.60** | **10** | P | **P** | **18 11 50.2** | **0.0** |
| **JOT** | **Ohata** | **11.18** | **9** | P | **P** | **18 11 56.6** | **0.0** |
| **JOT** | | | | *e*S | **S** | **18 13 57.2** | **-3.3** |
| **TJN** | **Taejon** | **11.24** | **305** | *c iP* | **P** | **18 11 59.1** | **+1.7** |
| **TJN** | **Taejon** | **11.24** | **305** | P | **P** | **18 11 58.8** | **+1.4** |
| **JKE** | **Kume jima 2** | **11.25** | **252** | P | **P** | **18 11 59.7** | **+2.0** |
| JKE | | | | *e*S | **S** | **18 14 04.0** | **+1.6** |
| **KSRS** | **Korea Array** | **11.44** | **311** | P | **P** | **18 12 01.2** | **+1.7** |
| | 75nm,0.3s,baz=123,slow=10,SNR=1074 | | | | | | |
| KSRS | | | | S | **S** | **18 14 08.2** | **+2.3** |
| | baz=349,slow=34,SNR=1.3 | | | | | | |
| KSRS | | | | ScP | **ScP** | **18 20 05.9** | **+0.4** |
| | 0.9nm,0.3s,baz=179,slow=1.0,SNR=18 | | | | | | |
| **KSAR** | **Wonju Array Be** | **11.46** | **311** | P | **P** | **18 12 00.2** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **11.46** | **311** | P | **P** | **18 12 00.1** | **+0.5** |
| **KS19** | **Wonju Array Si** | **11.50** | **311** | P | **P** | **18 12 01.4** | **+1.1** |
| **JKB** | **Kayabe** | **11.67** | **9** | P | **P** | **18 12 02.1** | **+0.1** |
| JKB | | | | *e*S | **S** | **18 14 07.2** | **-3.2** |
| **JOSM** | **Okushiri--Mats** | **11.73** | **3** | P | **P** | **18 12 03.5** | **+0.8** |
| JOSM | | | | *e*S | **S** | **18 14 09.6** | **-2.1** |
| **ERM** | **Erimo** | **12.19** | **16** | *c iP* | **P** | **18 12 09.1** | **+1.5** |
| **ERM** | **Erimo** | **12.19** | **16** | P | **P** | **18 12 08.6** | **+0.9** |
| **ERM** | **Erimo** | **12.19** | **16** | P | **P** | **18 12 09.0** | **+1.4** |
| **INCN** | **Inchon** | **12.31** | **309** | P | **P** | **18 12 09.7** | **+0.6** |
| **INCN** | **Inchon** | **12.31** | **309** | P | **P** | **18 12 09.7** | **+0.6** |
| **INCN** | **Inchon** | **12.31** | **309** | P | **P** | **18 12 10.0** | **+0.9** |
| INCN | | | | P | **P** | **18 12 10.0** | **+0.9** |
| **INCN** | **Inchon** | **12.31** | **309** | P | **P** | **18 12 09.8** | **+0.6** |
| **JEW** | **Eniwo** | **12.67** | **9** | P | **P** | **18 12 13.9** | **+1.0** |
| **JCH** | **Churui** | **12.80** | **16** | P | **P** | **18 12 14.6** | **+0.2** |
| **JOGS** | **Gusukube** | **13.06** | **248** | P | **P** | **18 12 20.2** | **+2.8** |
| **JMJ2** | **Miyako jima3** | **13.13** | **248** | P | **P** | **18 12 20.6** | **+2.4** |
| **HJU** | **Haeju** | **13.22** | **309** | P | **P** | **18 12 19.4** | **+0.4** |
| HJU | | | | pP | | 18 13 28.7 | |
| HJU |

SUJ S **S** **18 15 25.5 +5.6**
SUJ AMS AMS
comp=N,4μm,4.9s
SUJ AMS AMS
comp=E,2μm,2.7s
SUJ AMS AMS
comp=Z,1μm,1.8s
**MDJ Mudanjiang 15.97 336** P **P** **18 12 49.6 +1.0**
MDJ sP sP 18 14 29.0 -10
MDJ S **S** **18 15 37.9 +2.1**
MDJ ScP **ScP** **18 20 15.1 +2.0**
MDJ PcS **PcS** **18 20 55.6 +0.8**
MDJ ScS **ScS** **18 23 52.5 +0.5**
MDJ pmax pmax
comp=Z,1μm,1.1s
**MDJ Mudanjiang 15.97 336** P **P** **18 12 49.6 +1.0**
**TATO Taipei 16.18 255** P **P** **18 12 51.1 0.0**
**TATO Taipei 16.18 255** P **P** **18 12 51.4 +0.3**
**YHNB Yeheng 16.39 254** P **P** **18 12 52.5 -1.0**
YHNB IAmb IAmb 18 12 54.2
comp=Z,277nm,0.8s
**NACB Ninganchiao 16.42 252** P **P** **18 12 51.9 -1.8**
**DL2 Dalian 16.45 306** P **P** **18 12 53.8 0.0**
DL2 sP sP 18 14 29.3 -14
DL2 S **S** **18 15 43.4 -1.8**
DL2 ScP **ScP** **18 20 14.8 +0.7**
DL2 ScS **ScS** **18 23 50.9 -2.6**
DL2 pmax pmax
comp=Z,840nm,0.6s
DL2 pmax pmax
comp=Z,1μm,6.3s
**KUR Kuril'sk 16.51 23**⇓*iP* **P** **18 12 55.8 +1.5**
KUR pmax pmax
comp=N,99nm,0.5s
KUR pmax pmax
comp=E,77nm,0.5s
KUR pmax pmax
comp=Z,856nm,0.5s
**SNY Shenyang 16.75 317** ⇑P **P** **18 12 57.5 +0.6**
SNY sP sP 18 14 36.1 -11
SNY S **S** **18 15 49.3 -1.6**
SNY ScS **ScS** **18 23 53.5 -0.8**
**YSS Yuzh-Sakhalins 16.88 10**α*iP* **P** **18 12 59.3 +1.1**
YSS *eS* **S** **18 15 53.4 0.0**
YSS pmax pmax
comp=E,2μm,2.2s
YSS pmax pmax
comp=Z,7μm,2.2s
YSS pmax pmax
comp=N,5μm,2.3s
YSS pmax pmax
comp=N,1μm,0.7s
YSS pmax pmax
comp=Z,2μm,0.7s
YSS smax smax
comp=N,30nm,1.4s
YSS smax smax
comp=E,30nm,1.4s
YSS smax smax
comp=N,5μm,5.0s
YSS smax smax
comp=E,4μm,4.6s
YSS MLR MLR
comp=Z,2μm,13.0s
**YSS Yuzh-Sakhalins 16.88 10** P **P** **18 12 58.8 +0.5**
**YSS Yuzh-Sakhalins 16.88 10** P **P** **18 12 59.0 +0.8**
**YULB Yu-li 17.01 250** P **P** **18 12 59.0 -1.0**
**CN2 Changchun 17.08 326** *eP* **P** **18 13 00.4 -0.1**
CN2 sP sP 18 14 46.3 -4.9
CN2 S **S** **18 15 53.0 -4.4**
CN2 pmax pmax
comp=Z,200nm,1.3s
CN2 pmax pmax
comp=Z,2μm,5.5s
**NJ2 Nanjing 17.09 281** ⇓P **P** **18 13 00.4 -0.3**
NJ2 sP sP 18 14 40.9 -8.3
NJ2 S **S** **18 15 56.3 -1.6**
NJ2 PcP **PcP** **18 17 21.8 +0.7**
NJ2 ScP **ScP** **18 20 16.0 +0.4**
NJ2 PcS **PcS** **18 20 58.0 +0.5**
NJ2 ScS **ScS** **18 23 55.8 +0.1**
NJ2 pmax pmax
comp=E,160nm,1.0s
NJ2 pmax pmax
comp=Z,1μm,4.6s
**SSLB Suanglung 17.11 252** P **P** **18 13 00.6 -0.5**
**TWG Pinlang 17.47 249** P **P** **18 13 03.8 -1.1**
**TPUB Ta-pu 17.60 251** P **P** **18 13 05.7 -0.6**
**GUMO Guam 17.61 160** P **P** **18 13 06.8 +0.5**
comp=Z,78nm,0.3s,baz=167,slow=2.1,SNR=26
GUMO S **S** **18 16 09.6 +1.6**
comp=Z,22nm,0.3s,baz=226,slow=22,SNR=11
**GUMO Guam 17.61 160** P **P** **18 13 07.0 +0.6**
**BNX BinXian 17.75 333** ⇑P **P** **18 13 07.5 0.0**
BNX sP **sP** **18 14 53.1 -5.2**
BNX S **S** **18 16 09.9 0.0**
**QZH Quanzhou 18.62 258**⇓*iP* **P** **18 13 15.3 -1.5**
QZH S **S** **18 16 23.8 -2.0**
QZH pmax pmax
comp=Z,200nm,0.6s
QZH pmax pmax
comp=Z,2μm,4.1s
**UGL Uglegorsk 18.89 7**⇑*iP* **P** **18 13 20.2 +1.1**
UGL *eS* **S** **18 16 31.4 +1.8**
UGL pmax pmax
comp=Z,3μm,1.0s
UGL pmax pmax
comp=Z,10μm,1.8s
UGL smax smax
comp=N,5μm,6.0s
UGL smax smax
comp=E,8μm,4.6s
**KNMB Chin-men Tao 18.97 257** P **P** **18 13 18.9 -1.4**
**TIA Tai'an 18.98 294** ⇑P **P** **18 13 19.3 -0.9**
TIA sP **sP** **18 15 11.0 +1.0**
TIA S **S** **18 16 28.6 -2.8**
TIA pmax pmax
comp=E,200nm,0.7s
**KLR Kul'dur 19.60 346** P **P** **18 13 26.0 +0.1**
comp=E,123nm,0.3s,baz=168,slow=6.5,SNR=1400
KLR S **S** **18 16 42.8 +1.5**
comp=E,1.4nm,0.3s,baz=311,slow=20,SNR=1.7
**KLR Kul'dur 19.60 346***c iP* **P** **18 13 26.1 +0.3**
KLR pmax pmax
comp=Z,955nm,0.6s
**GRNR Gornyy 20.48 356**⇓*iP* **P** **18 13 35.8 +1.9**
GRNR *e* 18 15 24.0
GRNR *eS* **S** **18 16 59.0 +3.4**
GRNR pmax pmax
comp=E,40nm,0.5s
GRNR pmax pmax
comp=N,140nm,0.9s
GRNR pmax pmax
comp=Z,170nm,0.8s
GRNR smax smax
comp=N,9.0nm,0.7s
GRNR MLR MLR
comp=N,700nm,11.0s
GRNR MLR MLR
comp=E,600nm,11.0s
GRNR MLR MLR
comp=Z,910nm,14.0s
**TYV Tymovskoe 20.71 7** *eP* **P** **18 13 37.2 +1.3**
TYV *eS* **S** **18 16 59.7 +0.5**
TYV pmax pmax
comp=Z,3μm,4.5s
TYV pmax pmax
comp=Z,595nm,0.7s
TYV smax smax
comp=N,52nm,1.7s
TYV smax smax
comp=E,49nm,1.7s
TYV smax smax
comp=N,3μm,8.3s
TYV smax smax
comp=E,2μm,8.3s
**SIPP Brgy, Tapao 20.72 238**⇑*iP* **P** **18 13 36.5 +0.1**
**BJT Baijiatuan 20.77 304** P **P** **18 13 36.3 -0.3**
**BJI Beijing 20.77 304** P **P** **18 13 36.0 -0.6**
BJI sP **sP** **18 15 29.8 -0.3**
BJI S **S** **18 16 57.8 -2.6**
BJI ScP **ScP** **18 20 23.9 +0.2**
BJI pmax pmax
comp=E,180nm,1.6s
**WHN Wuhan 21.01 277**⇓*iP* **P** **18 13 39.8 +0.8**
WHN sP **sP** **18 15 35.8 +3.2**
WHN S **S** **18 17 07.5 +2.9**
WHN ScP **ScP** **18 20 25.1 +0.6**
WHN ScS **ScS** **18 24 08.3 -0.4**
WHN pmax pmax
comp=E,300nm,0.6s
WHN pmax pmax
comp=E,3μm,2.6s
**HNS HongShan 21.12 296** ⇑P **P** **18 13 39.9 +0.1**
HNS sP **sP** **18 15 35.4 +1.7**
HNS S **S** **18 17 04.9 -1.2**
HNS PcP **PcP** **18 17 26.4 -1.8**
HNS ScP **ScP** **18 20 24.9 +0.3**
HNS ScS **ScS** **18 24 07.0 -1.9**
HNS pmax pmax
comp=E,180nm,0.7s
**PCPH Palayan 21.86 232**⇓*eP* **P** **18 13 46.6 -0.3**
**GQP Guinayangan 22.20 226**⇓*eP* **P** **18 13 49.6 -0.3**
**XLT XiLinHaoTe 22.48 313**⇑*iP* **P** **18 13 51.9 -0.3**
XLT S **S** **18 17 27.3 -0.5**
XLT pmax pmax
comp=E,170nm,0.7s
XLT pmax pmax
comp=E,790nm,3.8s
**LYN LuoYang 22.53 288**⇓*iP* **P** **18 13 52.6 -0.1**
LYN sP sP 18 15 51.9 +1.4
LYN S **S** **18 17 27.8 -0.9**
LYN ScS **ScS** **18 24 16.1 +1.8**
LYN pmax pmax
comp=E,30nm,0.6s
LYN pmax pmax
comp=E,270nm,9.9s
**CNSH ChangSha 22.60 271** ⇓P **P** **18 13 46.3 -7.1**
CNSH S **S** **18 17 19.4 -10**
CNSH pmax pmax
comp=Z,140nm,1.1s
CNSH LR LR
comp=N,2μm,7.1s
CNSH LR LR
comp=E,4μm,5.9s
CNSH LR LR
comp=Z,2μm,9.6s
**LQP Lukban 22.62 228**⇓*eP* **P** **18 13 53.3 -0.7**
**NKL Nikolayevsk 22.84 3** *eP* **P** **18 13 54.3 -0.9**
NKL *eS* **S** **18 17 31.6 -1.4**
NKL pmax pmax
comp=E,2.0nm,0.9s
NKL pmax pmax
comp=N,392nm,1.1s
NKL pmax pmax
comp=Z,972nm,1.1s
**TIY Taiyuan 22.95 296** *eP* **P** **18 13 57.8 +1.2**
TIY sP **sP** **18 15 54.4 -1.5**
TIY S **S** **18 17 32.6 -2.8**
TIY pmax pmax
comp=Z,29nm,0.6s
**TGY Tagaytay City 23.02 229** P **P** **18 13 58.1 +0.7**
comp=Z,2μm,0.5s,baz=100,slow=0.4,SNR=37
**PGP Puerto Galera 23.45 228**⇓*eP* **P** **18 14 00.4 -0.9**
**HIA Hailar 23.76 328** P **P** **18 14 04.5 +0.9**
**RCP Roxas 23.86 222**⇓*eP* **P** **18 14 04.6 -0.2**
**SKR Severo-Kuril's 24.13 28** *eP* **P** **18 14 06.5 -0.3**
SKR pmax pmax
comp=Z,400nm,4.0s
SKR pmax pmax
comp=Z,350nm,0.5s
SKR MLR MLR
comp=Z,1μm,17.0s
**HHC Hu-ho-hao-te 24.36 303** *eP* **P** **18 14 09.6 +0.4**
HHC sP sP 18 16 11.8 +0.9
HHC S **S** **18 17 57.8 +0.1**
HHC ScS **ScS** **18 24 23.3 +1.7**
HHC pmax pmax
comp=Z,100nm,1.5s
HHC pmax pmax
comp=Z,180nm,5.2s
**TBP Tagbilaran 24.79 217**⇓*eP* **P** **18 14 12.3 -0.9**
**ZEA Zeya 24.82 344***c iP* **P** **18 14 13.9 +0.9**
ZEA *e**SP **sP** **18 16 13.3 -2.2**
ZEA *eS* **S** **18 18 03.6 -0.8**
ZEA pmax pmax
comp=E,90nm,0.4s
ZEA pmax pmax
comp=N,280nm,0.5s
ZEA pmax pmax
comp=E,300nm,2.0s
ZEA pmax pmax
comp=N,800nm,1.9s
ZEA pmax pmax
comp=Z,900nm,1.8s
ZEA smax smax
comp=E,400nm,8.8s
ZEA smax smax
comp=N,1μm,12.6s
ZEA MLR MLR
comp=E,1μm,10.0s
ZEA MLR MLR
comp=N,2μm,12.0s
ZEA MLR MLR
comp=Z,2μm,14.0s
**ENH Enshi 25.22 277** P **P** **18 14 16.7 -0.2**
**SNPH Sibulan 25.41 218**⇓*eP* **P** **18 14 16.1 -2.7**
**BTO Baotou 25.43 302** *eP* **P** **18 14 20.3 +1.6**
BTO S **S** **18 18 17.3 +2.9**
**XAN Xi'an 25.45 286** ⇓P **P** **18 14 18.8 -0.1**
XAN sP sP 18 16 20.8 -0.3
XAN PcP **PcP** **18 17 37.1 -0.6**
XAN S **S** **18 18 12.6 -2.3**
XAN ScP **ScP** **18 20 37.8 +1.3**
XAN PcS **PcS** **18 21 15.4 -3.4**
XAN ScS **ScS** **18 24 24.9 -1.4**
XAN pmax pmax
comp=Z,550nm,0.7s
XAN pmax pmax
comp=Z,840nm,3.6s
**XAN Xi'an 25.45 286** P **P** **18 14 19.2 +0.2**
**GULI GuiLin 25.55 266** P **P** **18 14 22.5 +2.6**
GULI S **S** **18 18 18.3 +1.8**
GULI pmax pmax
comp=Z,140nm,0.9s
**DAV Davao City (W) 26.23 211** P **P** **18 14 26.3 +0.3**
comp=Z,175nm,0.5s,baz=53,slow=3.0,SNR=29
DAV S **S** **18 18 25.4 -2.0**
comp=Z,55nm,0.3s,baz=82,slow=15,SNR=1.8
**DAV Davao City (W) 26.23 211** P **P** **18 14 26.0 0.0**
**KCP Kidapawan 26.51 212**⇓*eP* **P** **18 14 27.4 -1.1**
**PEA0B Petropavlovsk- 26.64 26***ceP* **P** **18 14 30.4 +1.3**
**PEA0B Petropavlovsk- 26.64 26** P **P** **18 14 29.7 +0.6**
PEA0B IAmb IAmb 18 14 31.4
comp=Z,324nm,1.4s
**PETK Petropavlovsk- 26.64 26** P **P** **18 14 29.4 +0.3**
comp=Z,56nm,0.8s,baz=206,slow=11,SNR=130
PETK ScP **ScP** **18 20 38.5 -1.1**
comp=Z,12nm,0.7s,baz=194,slow=5.5,SNR=7.9
PETK PKiKP **PKiKP** **18 25 16.8 -0.8**
comp=Z,2.0nm,0.5s,baz=120,slow=3.6,SNR=12
**PETK Petropavlovsk- 26.64 26** P **P** **18 14 28.7 -0.4**
**CTBH Cotabato--PC H 26.71 214**⇓*iP* **P** **18 14 30.8 +0.5**
**PET Petropavlovsk 26.94 27**α*iP* **P** **18 14 32.3 +0.6**
PET *e**SP **sP** **18 16 34.1 -0.2**
PET *e* 18 17 40.3
PET *eS* **S** **18 18 38.1 +0.6**
PET pmax pmax
comp=Z,365nm,1.2s
PET pmax pmax
comp=Z,300nm,13.0s
**PET Petropavlovsk 26.94 27** P **P** **18 14 32.1 +0.4**
PET IAmb IAmb 18 14 33.9
comp=Z,298nm,1.1s
**PET Petropavlovsk 26.94 27** P **P** **18 14 32.3 +0.6**
**GYA Guiyang 28.42 270** ⇑P **P** **18 14 45.9 +0.6**
GYA pP PP 18 16 00.0 -0.4
GYA PcP **PcP** **18 17 46.4 +1.3**
GYA S **S** **18 19 05.9 +4.2**
GYA pmax pmax
comp=Z,190nm,0.7s
GYA pmax pmax
comp=Z,840nm,3.5s
**QIZ Qiongzhong 28.48 253** P **P** **18 14 48.0 +2.2**
QIZ sP **sP** **18 16 48.1 +0.4**
QIZ S **S** **18 19 05.0 +2.5**
QIZ sS **SS** **18 21 23.0 -1.6**
QIZ pmax pmax
comp=Z,90nm,0.8s
**CIT Chita 28.52 327** *eP* **P** **18 14 47.4 +1.6**
CIT *e* 18 17 46.5
CIT *eS* **S** **18 19 04.5 +1.9**
CIT pmax pmax
comp=Z,835nm,1.7s
**SGSI Sangihe 29.30 208** P **P** **18 14 52.7 -0.3**
comp=Z,9μmcomp=Z,972nm,0.5s
**LZH Lanzhou 29.64 290** *eP* **P** **18 14 56.3 +0.3**
LZH pP pP 18 16 11.0 +1.1
LZH sP sP 18 16 59.3 +0.9
LZH PcP **PcP** **18 17 49.8 +1.7**
LZH S **S** **18 19 17.9 -2.7**
LZH ScP **ScP** **18 20 51.0 +1.4**
LZH SS **SS** **18 21 43.8 -4.3**
LZH pmax pmax
comp=Z,150nm,1.1s
LZH pmax pmax
comp=Z,460nm,4.9s
**ULN Ulaanbaatar 29.89 315***c iP* **P** **18 14 58.9 +0.9**
ULN pmax pmax
comp=Z,122nm,1.0s
**ULN Ulaanbaatar 29.89 315** P **P** **18 14 58.9 +0.9**
ULN PcP **PcP** **18 17 49.7 +1.2**
ULN ScP **ScP** **18 20 50.6 +0.4**
**ULN Ulaanbaatar 29.89 315** P **P** **18 14 59.0 +1.1**
**ULN Ulaanbaatar 29.89 315** P **P** **18 14 58.9 +0.9**
**CD2 Chengdu 30.03 280** ⇑P **P** **18 14 59.3 0.0**
CD2 sP sP 18 17 01.9 +0.1
CD2 S **S** **18 19 24.8 -1.7**
CD2 SS **SS** **18 21 55.3 -0.7**
CD2 pmax pmax
comp=Z,120nm,0.6s
CD2 pmax pmax
comp=Z,190nm,5.7s
**SONM Songino Array 30.28 314** P **P** **18 15 02.1 +0.8**
comp=Z,26nm,0.5s,baz=125,slow=8.8,SNR=280
SONM pP **pP** **18 16 15.3 -0.9**
comp=Z,15nm,0.8s,baz=128,slow=10,SNR=1.8
SONM PP **PP** **18 16 23.3 +3.2**
comp=Z,12nm,0.6s,baz=120,slow=12,SNR=3.8
SONM PcP **PcP** **18 17 50.3 +0.7**
comp=Z,16nm,0.6s,baz=85,slow=1.9,SNR=16
SONM ScP **ScP** **18 20 50.8 -0.6**
comp=Z,32nm,0.6s,baz=134,slow=3.0,SNR=20
SONM PKiKP **PKiKP** **18 25 19.4 -0.7**
comp=Z,1.9nm,0.6s,baz=192,slow=1.7,SNR=6.9
SONM P3KPbc 18 46 45.9
comp=Z,3.4nm,1.1s,baz=300,slow=3.2,SNR=11
SONM PKP2ab 18 50 42.9
comp=Z,0.3nm,0.6s,baz=305,slow=5.2,SNR=4.3
**SONM Songino Array 30.28 314** P **P** **18 15 01.9 +0.6**
SONM ScP **ScP** **18 20 51.6 +0.3**
**MA2 Magadan 30.35 12***c iP* **P** **18 15 02.4 +0.8**
MA2 pmax pmax
comp=Z,909nm,0.8s
**MA2 Magadan 30.35 12** P **P** **18 15 01.6 0.0**
**MA2 Magadan 30.35 12** P **P** **18 15 02.2 +0.6**
**TNTI Ternate 31.32 202** P **P** **18 15 10.0 -0.6**
**TNTI Ternate 31.32 202** P **P** **18 15 10.2 -0.4**
comp=Z,1μmcomp=Z,8μmcomp=Z,800nm,1.3s
**BAKI Biak 31.45 185** P **P** **18 15 11.4 -0.3**
**MYLDM Lahad Datu 31.46 221** P **P** **18 15 13.4 +1.7**
**KKM Kota Kinabalu 32.13 226** P **P** **18 15 18.6 +0.9**
KKM PcP **PcP** **18 17 56.1 +1.0**
**KMI Kunming 32.19 270** ⇓P **P** **18 15 18.8 +0.6**
KMI pP pP 18 16 32.3 -0.7
KMI PP **PP** **18 16 44.3 +2.7**
KMI PcP **PcP** **18 17 56.9 +1.6**
KMI S **S** **18 19 58.8 -1.5**
KMI ScS **ScS** **18 24 57.8 -1.0**
KMI pmax pmax
comp=Z,180nm,0.8s
KMI pmax pmax
comp=Z,700nm,3.5s
**KMI Kunming 32.19 270** P **P** **18 15 18.4 +0.1**
KMI pP **pP** **18 16 28.0 -5.1**
**YAK Yakutsk 32.25 352** P **P** **18 15 17.8 -0.2**
comp=Z,162nm,0.5s,baz=184,slow=0.2,SNR=124
YAK ScP **ScP** **18 20 56.5 -1.0**
comp=Z,47nm,0.8s,baz=246,slow=3.6,SNR=5.9
**YAK Yakutsk 32.25 352***c iP* **P** **18 15 17.6 -0.3**
YAK *e* 18 16 45.6
YAK *e* 18 17 54.0
YAK *eS* **S** **18 20 02.6 +2.8**
YAK *e**SS **sS** **18 22 20.3 +1.8**
YAK *eSS* **SS** **18 22 37.5 -2.5**
YAK *e* 18 24 52.8
YAK pmax pmax
comp=Z,386nm,1.1s
YAK pmax pmax
comp=N,203nm,1.2s
YAK pmax pmax
comp=E,17nm,1.0s
YAK pmax pmax
comp=Z,519nm,1.5s
YAK pmax pmax
comp=N,344nm,1.6s
YAK pmax pmax
comp=E,120nm,1.5s
YAK smax smax
comp=N,1μm,1.9s
YAK smax smax
comp=E,610nm,3.2s
**YAK Yakutsk 32.25 352** P **P** **18 15 17.7 -0.2**
**YAK Yakutsk 32.25 352** P **P** **18 15 17.7 -0.2**
YAK pP **pP** **18 16 29.1 -4.3**
**BOD Bodaibo 32.35 335** *eP* **P** **18 15 19.0 +0.1**
BOD pmax pmax
comp=Z,188nm,1.4s
**PZH PanZhiHua 32.66 273** ⇓P **P** **18 15 22.5 +0.3**
PZH sP **sP** **18 17 24.9 -0.3**
PZH PcP **PcP** **18 17 57.3 +0.9**
PZH S **S** **18 20 04.8 -2.6**
PZH SS **SS** **18 22 51.3 +1.7**
PZH ScS **ScS** **18 24 58.1 -2.9**
PZH pmax pmax
comp=Z,240nm,0.7s
PZH pmax pmax
comp=Z,380nm,5.7s
**KMSI Cibinong 32.75 208** P **P** **18 15 23.1 +0.2**
comp=Z,9μmcomp=Z,726nm,1.0s
**GENI Genyem 32.78 177** P **P** **18 15 24.3 +1.2**
comp=Z,7μmcomp=Z,501nm,1.3s
**GTA Gaotai 32.97 297** ⇓P **P** **18 15 25.1 +0.4**
GTA PcP **PcP** **18 17 57.3 +0.2**
GTA S **S** **18 20 08.8 -3.1**
GTA ScP **ScP** **18 21 01.1 +0.4**
GTA SS **SS** **18 22 55.3 -0.4**
GTA ScS **ScS** **18 24 59.0 -3.2**
GTA pmax pmax
comp=Z,200nm,6.1s
**GTOI Gorontalo 33.10 210** P **P** **18 15 25.1 -0.8**
comp=Z,4μmcomp=Z,321nm,1.3s
**ZAK Zakamensk 33.18 317** *eP* **P** **18 15 25.8 -0.4**
ZAK pmax pmax
comp=Z,110nm,1.1s
**MANU Manus Island 33.24 164** P **P** **18 15 26.4 -0.6**
**IRK Irkutsk 33.42 321** *eP* **P** **18 15 28.9 +0.8**
IRK *e* 18 16 49.1
IRK *eS* **S** **18 20 20.6 +2.5**
IRK pmax pmax
comp=Z,228nm,2.3s
**DLV T Lat 33.46 243** P **P** **18 15 29.6 +0.4**
**FAKI Fak Fak 33.65 192** P **P** **18 15 30.0 -0.5**
**FAKI Fak Fak 33.65 192** P **P** **18 15 30.0 -0.5**
comp=Z,2μmcomp=Z,7μmcomp=Z,460nm,0.7s
**TOLI2 Tolitoli 33.70 214** P **P** **18 15 30.5 -0.4**
TOLI2 IAmb IAmb 18 15 32.7
comp=Z,331nm,0.8s
**MRSI Marisa 33.72 211** P **P** **18 15 31.1 0.0**
comp=Z,3μmcomp=Z,18μmcomp=Z,2μm,1.4s
**SEY Seymchan 33.77 11** P **P** **18 15 32.0 +1.1**
comp=Z,154nm,0.7s,baz=201,slow=7.5,SNR=717
SEY ScP **ScP** **18 21 02.1 -0.8**
comp=Z,23nm,0.8s,baz=213,slow=3.6,SNR=5.6
**UBPT Khong Chiam 33.97 251** P **P** **18 15 34.3 +1.1**
UBPT PcP **PcP** **18 18 01.3 +1.2**
**SHEM Shemya Is, Ala 34.14 39** P **P** **18 15 35.0 +0.8**
comp=Z,173nm,0.5s,baz=359,slow=3.5,SNR=26
SHEM PcP **PcP** **18 18 00.3 +0.4**
comp=Z,20nm,0.4s,baz=45,slow=1.7,SNR=5.9
**SANI Sanana 34.43 203** P **P** **18 15 35.5 -1.6**
comp=Z,2μmcomp=Z,13μmcomp=Z,1μm,0.8s
**MPSI Mapaga 34.80 214** P **P** **18 15 39.7 -0.5**

comp=Z,4µmcomp=Z,293nm,1.3s
**MOY Mondy 35.01 318** *e*P **P** 18 15 42.1 +0.3
MOY *e* 18 17 11.4
MOY pmax pmax
comp=Z,121nm,2.7s
**APSI Ampana 35.08 211** P **P** 18 15 42.1 -0.5
comp=Z,21µmcomp=Z,2µm,0.9s
**RABL Rabaul 36.66 157** P **P** 18 15 54.2 -1.7
RABL IAmb IAmb 18 15 59.1
comp=Z,197nm,1.2s
**GOMU GeErMu 36.94 291** P **P** 18 15 59.3 +0.9
GOMU S **S** 18 21 12.8 +0.3
GOMU pmax pmax
comp=Z,62nm,1.0s
**SBUM Sibu 37.41 227** P **P** 18 16 02.5 +0.4
SBUM IAmb IAmb 18 16 05.0
comp=Z,173nm,1.1s
**CHTO Chiang Mai 37.78 262** P **P** 18 16 05.6 +0.5
CHTO 18 18 12.4
CHTO pmax pmax
comp=Z,373nm,0.8s
**CHTO Chiang Mai 37.78 262** P **P** 18 16 05.6 +0.5
CHTO PcP **PcP** 18 18 12.4 +0.8
**CHTO Chiang Mai 37.78 262** P **P** 18 16 06.0 +0.8
**CHTO Chiang Mai 37.78 262** P **P** 18 16 05.7 +0.6
**TTSI Tana Toraja 37.80 212** P **P** 18 16 04.4 -0.8
comp=Z,2µmcomp=Z,199nm,0.7s
**CM31 Chiang Mai Arr 37.93 261** P **P** 18 16 07.1 +0.7
CM31 IAmb IAmb 18 16 08.9
comp=Z,297nm,0.8s
**CM31 Chiang Mai Arr 37.93 261** P **P** 18 16 07.5 +1.1
SNR=164
**CMAR Chiang Mai Arr 37.93 261** P **P** 18 16 07.2 +0.8
comp=Z,138nm,0.6s,baz=58,slow=6.3,SNR=1097
CMAR PcP **PcP** 18 18 13.2 +1.1
comp=Z,22nm,0.5s,baz=36,slow=2.3,SNR=15
CMAR ScP **ScP** 18 21 19.6 +0.5
comp=Z,11nm,1.0s,baz=44,slow=2.7,SNR=7.6
CMAR PKiKP **PKiKP** 18 25 26.1 -0.3
comp=Z,2.2nm,0.6s,baz=280,slow=1.2,SNR=16
CMAR P3KPbc 18 46 10.8
comp=Z,0.7nm,0.3s,baz=346,slow=31,SNR=7.7
**CMAR Chiang Mai Arr 37.93 261** *i* P **P** 18 16 07.1 +0.7
CMAR pmax pmax
comp=Z,166nm,0.7s
**CMAR Chiang Mai Arr 37.93 261** P **P** 18 16 06.8 +0.4
CMAR PcP **PcP** 18 18 13.5 +1.3
CMAR ScP **ScP** 18 21 20.9 +1.8
**SPSI Sidrap Palu 38.63 211** P **P** 18 16 11.0 -1.1
comp=Z,4µmcomp=Z,405nm,1.1s
**SAUI Saumlaki 38.76 192** P **P** 18 16 13.7 +0.5
**SAUI Saumlaki 38.76 192** P **P** 18 16 14.0 +0.8
comp=Z,10µmcomp=Z,945nm,1.3s
**KIWB Kanaga Island 38.81 44** P **P** 18 16 13.7 +0.5
**BBSI Bau Bau 38.84 206** P **P** 18 16 13.5 -0.3
comp=Z,411nmcomp=Z,38nm,1.1s
**BNSI Bone 38.87 210** P **P** 18 16 14.0 0.0
comp=Z,9µmcomp=Z,824nm,1.1s
**ADK Adak 39.10 44** P **P** 18 16 15.6 +0.1
ADK 18 18 15.9
ADK pmax pmax
comp=Z,83nm,0.6s
**ADK Adak 39.10 44** P **P** 18 16 15.6 +0.1
ADK IAmb IAmb 18 16 17.1
comp=Z,83nm,0.6s
ADK PcP **PcP** 18 18 15.9 +0.7
**KSM Kuching 39.38 229** P **P** 18 16 18.9 +0.6
**BKSI Bulukumba 39.69 210** P **P** 18 16 20.2 -0.5
comp=Z,3µmcomp=Z,335nm,0.7s
**BSSI Bau Bau, Buton 40.27 209** P **P** 18 16 25.6 +0.2
comp=Z,2µmcomp=Z,263nm,0.6s
**PMG Port Moresby 40.34 167** *ce*P **P** 18 16 25.5 -0.4
PMG pmax pmax
comp=Z,63nm,1.3s
**PMG Port Moresby 40.34 167** P **P** 18 16 25.0 -0.9
PMG PcP **PcP** 18 18 20.7 +1.0
**LSA Lhasa 40.96 282** P **P** 18 16 32.6 +1.1
LSA pmax pmax
comp=Z,55nm,0.6s
**BILL Bilibino 41.06 15** *d* P **P** 18 16 31.7 +0.6
BILL *e**PP **pP** 18 17 56.5 +5.9
BILL *i* 18 18 17.9
BILL *e* 18 18 24.2
BILL *i* S **S** 18 22 11.7 0.0
BILL *SS **sS** 18 24 33.0 -2.0
BILL pmax pmax
comp=Z,444nm,0.8s
BILL MLR MLR
comp=Z,338nm,16.0s
**BILL Bilibino 41.06 15** P **P** 18 16 30.8 -0.3
BILL ScP **ScP** 18 21 29.9 -0.5
**BILL Bilibino 41.06 15** P **P** 18 16 31.6 +0.5
**SHL Shillong 41.43 275** P **P** 18 16 34.6 -0.3
SHL pmax pmax
comp=Z,183nm,0.6s
**SHL Shillong 41.43 275** P **P** 18 16 34.6 -0.3
SHL IAmb IAmb 18 16 36.2
comp=Z,183nm,0.6s
**SHL Shillong 41.43 275** P **P** 18 16 35.0 0.0
SNR=54
**TIXI Tiksi 41.71 355** P **P** 18 16 36.1 -0.2
comp=Z,209nm,0.5s,baz=92,slow=21,SNR=761
TIXI PcP **PcP** 18 18 23.4 +0.1
comp=Z,25nm,0.7s,baz=89,slow=24,SNR=6.6
TIXI S **S** 18 22 18.8 -2.2
comp=Z,14nm,0.8s,baz=272,slow=23,SNR=12
**TIXI Tiksi 41.71 355** *c* P **P** 18 16 36.0 -0.2
TIXI pmax pmax
comp=Z,149nm,0.5s
**TIXI Tiksi 41.71 355** P **P** 18 16 35.8 -0.4
TIXI IAmb IAmb 18 16 37.5
comp=Z,215nm,0.6s
**TIXI Tiksi 41.71 355** P **P** 18 16 35.9 -0.4
**MMRI Maumere 41.87 205** P **P** 18 16 37.7 -0.5
**MMRI Maumere 41.87 205** P **P** 18 16 37.8 -0.4
comp=Z,2µmcomp=Z,6µmcomp=Z,498nm,1.1s
**SOEI Soe 42.22 201** P **P** 18 16 40.4 -0.7
**SOEI Soe 42.22 201** P **P** 18 16 40.3 -0.9
comp=Z,2µmcomp=Z,8µmcomp=Z,882nm,0.9s
**WMQ Urumqi 42.24 303** ↑P **P** 18 16 42.8 +1.8
WMQ pP pP 18 18 02.5 +2.5
WMQ sP sP 18 18 47.6 +0.5
WMQ ScP **ScP** 18 21 35.9 +0.2
WMQ S **S** 18 22 29.8 +0.1
WMQ pmax pmax
comp=Z,87nm,0.7s
WMQ pmax pmax
comp=Z,350nm,4.9s
**WMQ Urumqi 42.24 303** P **P** 18 16 41.9 +0.9
WMQ pP **pP** 18 18 02.1 +2.1
**SRIT Nakonsritamara 42.45 248** P **P** 18 16 44.3 +1.3
**DGZ Jazzator, Alta 42.84 312** *c* P **P** 18 16 46.8 +1.0
DGZ pmax pmax
comp=Z,61nm,0.7s
**MTN Manton Dam 43.55 191** P **P** 18 16 50.7 -0.8
**KULM Kulim 43.64 243** P **P** 18 16 53.2 +0.9
**BWJI Bawean 43.81 219** P **P** 18 16 53.6 0.0
comp=Z,9µmcomp=Z,749nm,1.4s
**PLAI Plampang 43.84 211** P **P** 18 16 52.4 -1.4
comp=Z,12µmcomp=Z,975nm,0.5s
**IPM Ipoh 43.87 242** P **P** 18 16 53.9 -0.3
**WBSI Waikabubak, Su 43.88 208** P **P** 18 16 51.7 -2.5
comp=Z,2µmcomp=Z,286nm,0.6s
**BASI Baing, Sumba 43.94 206** P **P** 18 16 52.7 -1.9
comp=Z,1µmcomp=Z,3µmcomp=Z,248nm,0.5s
**NIKH Nikolski High 44.02 44** P **P** 18 16 54.5 -0.2
NIKH IAmb IAmb 18 16 55.7
comp=Z,258nm,1.0s
**NIKH Nikolski High 44.02 44** P **P** 18 16 54.5 -0.2
baz=260,SNR=8.0
**SPIA Saint Paul Isl 44.14 37** P **P** 18 16 56.7 +1.1
baz=255
**COEN Coen 44.25 174** P **P** 18 16 57.1 +0.1
**ZSN Zaisan 44.35 308** *eP* **P** 18 16 58.0 +0.6
**ZSN Zaisan 44.35 308** *eP* **P** 18 16 58.0 +0.6
baz=308
**TAPN Taplejung 44.49 279** *eP* **P** 18 16 59.8 +0.6
comp=Z,237nm,0.5s
**ABJI Asem Bagus 44.62 216** P **P** 18 17 00.1 +0.2
comp=Z,4µmcomp=Z,8µmcomp=Z,760nm,1.3s
**GRJI Gresik 44.79 219** P **P** 18 17 01.3 +0.1
comp=Z,8µmcomp=Z,894nm,0.7s
**BLJI Banyuglugur 44.90 217** P **P** 18 17 01.9 -0.2
comp=Z,4µmcomp=Z,209nm,0.5s
**ODAN Odare 44.90 279** *eP* **P** 18 17 03.0 +0.7
comp=Z,577nm,0.7s
**IGBI Denpasar 45.05 214** P **P** 18 17 01.7 -1.5
comp=Z,10µmcomp=Z,917nm,0.7s
**TBJI Tambak Boyo 45.05 219** P **P** 18 17 03.7 +0.4
comp=Z,2µmcomp=Z,10µmcomp=Z,819nm,1.4s
**ZAA0 Zalesovo Array 45.06 318** P **P** 18 17 02.6 -0.2
ZAA0 PcP **PcP** 18 18 35.5 +0.4
ZAA0 ScP **ScP** 18 21 45.9 -1.0
**ZALV Zalesovo Beam 45.06 318** P **P** 18 17 02.7 -0.1
comp=Z,26nm,0.5s,baz=97,slow=8.4,SNR=142
ZALV PcP **PcP** 18 18 34.9 -0.2
comp=Z,66nm,0.5s,baz=124,slow=3.7,SNR=28
ZALV ScP **ScP** 18 21 45.6 -1.3
comp=Z,70nm,0.7s,baz=109,slow=4.1,SNR=16
ZALV S **S** 18 23 07.8 -1.8
comp=Z,7.5nm,0.8s,baz=104,slow=12,SNR=3.6
**ZALV Zalesovo Beam 45.06 318** P **P** 18 17 02.5 -0.3
ZALV PcP **PcP** 18 18 35.8 +0.6
ZALV ScP **ScP** 18 21 46.6 -0.3
**UWJI Ujung Watu 45.23 221** P **P** 18 17 05.0 +0.4
comp=Z,10µmcomp=Z,932nm,0.7s
**JAGI Jajag, Banyuwa 45.23 215** P **P** 18 17 02.7 -2.0
**JAGI Jajag, Banyuwa 45.23 215** P **P** 18 17 02.9 -1.8
comp=Z,2µmcomp=Z,5µmcomp=Z,552nm,1.2s
**GMJI Gumukmas 45.43 216** P **P** 18 17 05.2 -0.9
comp=Z,3µmcomp=Z,208nm,1.3s
**UNV Unalaska Valle 45.54 43** P **P** 18 17 04.7 -1.8
**UNV Unalaska Valle 45.54 43** P **P** 18 17 05.7 -0.8
baz=262
**RAMN Ramite 45.55 279** *eP* **P** 18 17 08.0 +0.6
comp=Z,180nm,0.5s
**GAMB Gambell 45.62 28** P **P** 18 17 07.9 +0.9
**GAMB Gambell 45.62 28** P **P** 18 17 08.1 +1.1
baz=247,SNR=42
GAMB S **S** 18 23 20.2 +3.0
baz=247
**JIRN Jiri 45.69 280** *eP* **P** 18 17 09.8 +1.2
comp=Z,981nm,0.5s
**GUN Gumba 45.89 281** *eP* **P** 18 17 11.1 +1.0
comp=Z,1µm,0.7s
**SMRI Semarang 46.03 221** P **P** 18 17 11.3 +0.4
**SMRI Semarang 46.03 221** P **P** 18 17 11.2 +0.4
comp=Z,13µmcomp=Z,1µm,0.7s
**MK31 Makanchi Array 46.09 307** *i* P **P** 18 17 11.3 +0.4
MK31 pmax pmax
comp=Z,13nm,0.5s
**MK31 Makanchi Array 46.09 307** P **P** 18 17 11.1 +0.1
**MKAR Makanchi Array 46.09 307** P **P** 18 17 11.0 +0.1
comp=Z,20nm,0.6s,baz=86,slow=10,SNR=196
MKAR PcP **PcP** 18 18 39.4 +0.4
comp=Z,35nm,0.6s,baz=75,slow=13,SNR=22
MKAR ScP **ScP** 18 21 50.7 -0.8
comp=Z,26nm,0.6s,baz=77,slow=4.9,SNR=11
MKAR S **S** 18 23 22.3 -2.1
comp=Z,7.2nm,0.9s,baz=158,slow=4.5,SNR=1.4
MKAR PKiKP **PKiKP** 18 25 31.8 -1.4
comp=Z,1.3nm,0.4s,baz=155,slow=0.9,SNR=5.6
MKAR PKP2ab 18 49 33.1
comp=Z,1.4nm,1.1s,baz=267,slow=2.4,SNR=3.9
MKAR P4KPbc 18 54 50.5
comp=Z,1.1nm,0.6s,baz=84,slow=5.5,SNR=14
**MKAR Makanchi Array 46.09 307** P **P** 18 17 10.9 0.0
**MAKZ Makanchi 46.30 307** P **P** 18 17 13.0 +0.4
MAKZ pmax pmax
comp=Z,156nm,1.7s
**MAKZ Makanchi 46.30 307** P **P** 18 17 13.0 +0.4
**MAKZ Makanchi 46.30 307** P **P** 18 17 13.0 +0.4
MAKZ pP **pP** 18 18 33.6 +0.3
**PMBI Palembang 46.32 230** P **P** 18 17 14.8 +1.7
**PMBI Palembang 46.32 230** P **P** 18 17 14.7 +1.7
comp=Z,3µmcomp=Z,20µmcomp=Z,2µm,0.8s
**PKI Pulchoki 46.38 280** *eP* **P** 18 17 14.2 +0.3
comp=Z,126nm,0.6s
**PKIN Phulchoki 46.39 280** *eP* **P** 18 17 14.1 +0.2
comp=Z,123nm,0.5s
**PBA Port Blair 46.42 257** P **P** 18 17 15.0 +1.2
**KKN Kakani 46.43 281** *eP* **P** 18 17 14.7 +0.6
comp=Z,472nm,0.8s
**PCJI Pacitan 46.56 219** P **P** 18 17 13.2 -1.7
comp=Z,7µmcomp=Z,442nm,1.2s
**LHMI Lhok Sumawe 46.57 246** P **P** 18 17 16.6 +1.6
**LHMI Lhok Sumawe 46.57 246** P **P** 18 17 16.6 +1.6
comp=Z,4µmcomp=Z,11µmcomp=Z,1µm,0.7s
**BKNI Bangkinang 46.61 237** P **P** 18 17 16.1 +0.7
**BKNI Bangkinang 46.61 237** P **P** 18 17 16.0 +0.7
comp=Z,3µmcomp=Z,10µmcomp=Z,704nm,1.3s
**DMN Daman 46.63 281** *eP* **P** 18 17 16.3 +0.6
comp=Z,280nm,0.6s
**UGM Wanagama 46.69 220** P **P** 18 17 15.0 -0.9
**UGM Wanagama 46.69 220** P **P** 18 17 15.3 -0.6
comp=Z,4µmcomp=Z,28µmcomp=Z,2µm,0.9s
**YOGI Yogyakarta 46.74 220** P **P** 18 17 15.6 -0.6
comp=Z,17µmcomp=Z,1µm,1.1s
**KNRA Kununurra 46.74 193** P **P** 18 17 15.9 -0.2
**GKN Gorkha 46.92 281** *eP* **P** 18 17 18.3 +0.6
comp=Z,230nm,0.5s
**KPJI Karang Pucung 47.12 222** P **P** 18 17 18.7 -0.5
comp=Z,18µmcomp=Z,2µm,1.0s
**FALS False Pass 47.47 42** P **P** 18 17 20.5 -0.8
FALS IAmb IAmb 18 17 30.3
comp=Z,62nm,0.4s
**FALS False Pass 47.47 42** P **P** 18 17 20.5 -0.8
baz=263
**SEM Semipalatinsk 47.51 312** *eP* **P** 18 17 21.3 -0.7
**SEM Semipalatinsk 47.51 312** *eP* **P** 18 17 21.3 -0.7
baz=312
**DANN Dangsing 47.56 282** *eP* **P** 18 17 23.9 +1.1
comp=Z,388nm,0.6s
**TNG Tangerang 47.57 226** P P 18 17 23.9 +1.3
comp=Z,4µmcomp=Z,21µmcomp=Z,2µm,1.6s
TNG P **P** 18 17 23.0 +0.4
comp=Z,14µmcomp=Z,1µm,1.6s
**KLSI 47.66 229** P **P** 18 17 23.1 -0.2
comp=Z,13µmcomp=Z,1µm,0.7s
**CMJI Cimerak 47.77 222** P **P** 18 17 20.9 -3.1
comp=Z,3µmcomp=Z,312nm,0.6s
**TNA Tin City 47.80 27** P **P** 18 17 24.7 +1.2
**TNA Tin City 47.80 27** P **P** 18 17 24.8 +1.2
baz=249,SNR=89
TNA S **S** 18 23 50.5 +2.9
baz=249
**DBJI Dramaga 47.81 225** P **P** 18 17 23.9 -0.5
comp=Z,10µmcomp=Z,680nm,1.4s
**KOLN Koldanda 47.86 281** *eP* **P** 18 17 25.8 +0.8
comp=Z,866nm,0.8s
**CNJI Cibinong 48.17 224** P **P** 18 17 24.4 -2.7
comp=Z,2µmcomp=Z,5µmcomp=Z,390nm,0.6s
**PDGK Podgornoye 48.22 303** *i* P **P** 18 17 27.2 -0.1
PDGK pmax pmax
comp=Z,77nm,0.8s
**SKJI Sukabumi 48.28 225** P **P** 18 17 25.9 -2.0
comp=Z,5µmcomp=Z,499nm,0.5s
**PYUN Piuthan 48.28 282** *eP* **P** 18 17 29.1 +1.0
comp=Z,989nm,0.5s
**ANM Nome 48.50 29** P **P** 18 17 30.3 +1.4
baz=253
ANM S **S** 18 24 00.7 +3.3
baz=253
**CGJI Cibinong 48.51 226** P **P** 18 17 26.7 -2.9
comp=Z,7µmcomp=Z,726nm,0.6s
**NRIK Noril'sk 48.53 338** P **P** 18 17 29.0 0.0
comp=Z,93nm,0.5s,baz=111,slow=8.8,SNR=147
NRIK ScP **ScP** 18 22 00.8 -0.4
comp=Z,84nm,0.6s,baz=117,slow=4.1,SNR=21
NRIK S **S** 18 23 57.4 -0.3
comp=Z,8.3nm,0.8s,baz=6.3,slow=20,SNR=13
**NRIK Noril'sk 48.53 338** *c* P **P** 18 17 29.7 +0.7
**NRIK Noril'sk 48.53 338** P **P** 18 17 29.4 +0.3
NRIK IAmb IAmb 18 17 31.1
comp=Z,134nm,0.9s
**GSI Gunungsitoli 48.54 241** P **P** 18 17 29.5 -0.4
**GSI Gunungsitoli 48.54 241** P **P** 18 17 29.6 -0.4
comp=Z,23µmcomp=Z,2µm,1.4s
**KURK Kurchatov 48.56 313** *ce*P **P** 18 17 29.9 +0.3
KURK pmax pmax
comp=Z,33nm,0.7s
**KURK Kurchatov 48.56 313** P **P** 18 17 29.6 0.0
KURK PcP **PcP** 18 18 48.1 +0.3
KURK IAmb IAmb 18 19 00.7
comp=Z,120nm,1.1s
**KURK Kurchatov 48.56 313** P **P** 18 17 30.0 +0.5
**KURK Kurchatov 48.56 313** P **P** 18 17 29.7 +0.2
KURK pP **PcP** 18 18 43.6 -4.1
**UZB Uzunbulak 48.58 303** *eP* **P** 18 17 29.9 -0.1
**UZB Uzunbulak 48.58 303** *eP* **P** 18 17 29.9 -0.1
baz=303
**KURBB Kurchatov Arra 48.61 313** P **P** 18 17 30.1 +0.1
**KPKS Kokpek 48.79 303** *eP* **P** 18 17 31.1 -0.5
**KPKS Kokpek 48.79 303** *eP* **P** 18 17 31.1 -0.5
baz=303
**TDK Taldyqorghan 48.86 305** *eP* **P** 18 17 31.7 -0.3
**TDK Taldyqorghan 48.86 305** *eP* **P** 18 17 31.8 -0.3
baz=305
**ZHN Zhinishke 49.00 303** *eP* **P** 18 17 32.9 -0.3
**ZHN Zhinishke 49.00 303** *eP* **P** 18 17 32.9 -0.3
baz=303
**SATY Saty 49.03 303** *eP* **P** 18 17 33.3 -0.1
**SATY Saty 49.03 303** *eP* **P** 18 17 33.4 -0.1
baz=302
**SDPT Sand Point 49.20 41** P **P** 18 17 33.1 -1.2
SDPT IAmb IAmb 18 17 34.8
comp=Z,118nm,0.6s
**SDPT Sand Point 49.20 41** P **P** 18 17 33.5 -0.8
baz=265,SNR=11
**CHNA Chernabura Isl 49.67 42** P **P** 18 17 37.7 0.0
baz=267,SNR=12
**CNBA Chernabura Isl 49.67 42** P **P** 18 17 37.8 +0.1
CNBA IAmb IAmb 18 17 40.1
comp=Z,77nm,0.6s
**CHKK Chushkaly 49.98 304** *eP* **P** 18 17 40.3 0.0
baz=304
**MDOK Medeo 50.01 303** *eP* **P** 18 17 40.6 -0.1
MDOK *eS* **S** 18 24 19.1 0.0
**MDOK Medeo 50.01 303** *eP* **P** 18 17 40.6 -0.1
baz=303
MDOK *eS* **S** 18 24 19.2 +0.1
baz=303
**KNDC Almaty 50.06 303** P **P** 18 17 42.2 +1.2
**TNSS Tian-Shan 50.10 303** *eP* **P** 18 17 41.3 -0.4
baz=303
**AAA Alma-Ata 50.10 303** *eP* **P** 18 17 41.3 0.0
AAA pmax pmax
comp=Z,98nm,0.8s
**AAA Alma-Ata 50.10 303** *eP* **P** 18 17 41.4 0.0
comp=Z,98nm,0.8s,baz=303
**WRAB Tennant Creek 50.16 185** *ce*P **P** 18 17 41.2 -0.6
WRAB pmax pmax
comp=Z,510nm,1.7s
**WRAB Tennant Creek 50.16 185** P **P** 18 17 41.2 -0.6
WRAB IAmb IAmb 18 17 42.7
comp=Z,205nm,0.8s
**WRAB Tennant Creek 50.16 185** P **P** 18 17 41.3 -0.5
WRAB pP **PcP** 18 18 49.9 -4.2
**WB2 Warramunga Arr 50.17 185** P **P** 18 17 41.2 -0.6
WB2 IAmb IAmb 18 17 42.8
comp=Z,227nm,0.7s
**WRA Warramunga Arr 50.17 185** P **P** 18 17 41.4 -0.5
comp=Z,162nm,0.5s,baz=5.8,slow=7.9,SNR=2039
WRA PcP **PcP** 18 18 55.2 +1.1
comp=Z,40nm,0.4s,baz=0.3,slow=5.9,SNR=8.8
WRA ScP **ScP** 18 22 09.2 +0.2
comp=Z,14nm,0.8s,baz=0.0,slow=4.4,SNR=3.1
WRA S **S** 18 24 18.4 -3.0
comp=Z,17nm,0.8s,baz=359,slow=15,SNR=7.0
WRA PKiKP **PKiKP** 18 25 36.6 -1.3
comp=Z,1.1nm,0.4s,baz=333,slow=1.9,SNR=4.9
WRA P4KPbc 18 55 08.0
comp=Z,3.2nm,0.7s,baz=358,slow=5.2,SNR=26
**WRA Warramunga Arr 50.17 185** *i* P **P** 18 17 41.4 -0.5
WRA pmax pmax
comp=Z,157nm,0.5s
**WRA Warramunga Arr 50.17 185** P **P** 18 17 41.2 -0.7
WRA PcP **PcP** 18 18 55.2 +1.1
WRA ScP **ScP** 18 22 09.5 +0.5
**WR0 Warramunga Arr 50.17 185** P **P** 18 17 41.2 -0.7
WR0 IAmb IAmb 18 17 42.8
comp=Z,249nm,0.7s
**KUU Kurty 50.44 304** *eP* **P** 18 17 43.5 -0.2
KUU pmax pmax
comp=Z,61nm,0.7s
**KUU Kurty 50.44 304** *eP* **P** 18 17 43.5 -0.2
comp=Z,61nm,0.7s,baz=304
**RDOG Red Dog Mine 50.49 25** P **P** 18 17 44.3 +0.7
RDOG IAmb IAmb 18 17 46.4
comp=Z,124nm,1.0s
**RDOG Red Dog Mine 50.49 25** P **P** 18 17 45.0 +1.3
baz=252,SNR=35
RDOG S **S** 18 24 26.4 +1.8
baz=252
**CTAO Charters Tower 50.66 171** P **P** 18 17 45.2 -0.3
CTAO pmax pmax
comp=Z,150nm,1.2s
**CTAO Charters Tower 50.66 171** P **P** 18 17 45.2 -0.3
CTAO IAmb IAmb 18 17 46.8
comp=Z,150nm,1.1s
**CTAO Charters Tower 50.66 171** P **P** 18 17 44.7 -0.8
**CHLP Challavanipeta 50.73 270** *eP* **P** 18 17 47.5 +1.3
CHLP IVmB_BB 18 17 49.0
comp=Z,1µm,1.0s
CHLP *eS* **S** 18 24 29.8 +0.6
**TKM2 Tokmak 2 51.09 303** P **P** 18 17 49.4 +0.6
SNR=54
**TKM2 Tokmak 2 51.09 303** P **P** 18 17 49.8 +1.0
TKM2 pmax pmax
comp=Z,68nm,0.8s
**KSH Kashi 51.34 298** P **P** 18 17 54.8 +4.2
KSH PcP **PcP** 18 19 01.0 +2.5
KSH pP pwP 18 19 19.3 +0.4
KSH S **S** 18 24 43.5 +6.2
KSH ScS **ScS** 18 26 56.3 +0.3
KSH pmax pmax
comp=Z,98nm,0.7s
**XMIS Christmas Isla 51.56 223** P **P** 18 17 50.7 -1.5
**KBK Karagaybulak 51.60 302** P **P** 18 17 53.9 +1.4
SNR=14
**KBK Karagaybulak 51.60 302** P **P** 18 17 53.2 +0.7
KBK pmax pmax
comp=Z,129nm,0.8s
**CHMS Chumysh 51.70 303** P **P** 18 17 53.4 +0.4
SNR=30
**SGDS Sogindy 51.72 303** *eP* **P** 18 17 53.0 -0.2
baz=304
**USP Ospenovka 51.84 303** P **P** 18 17 54.4 +0.4
SNR=36
**USP Ospenovka 51.84 303** P **P** 18 17 54.4 +0.4
USP pmax pmax
comp=Z,52nm,0.7s
**BTLS Baital 51.94 306** *i* P **P** 18 17 54.3 -0.3
BTLS pmax pmax
comp=Z,30nm,1.0s
**BTLS Baital 51.94 306** *i* P **P** 18 17 54.3 -0.3
comp=Z,30nm,1.0s,baz=306
**AAK Ala-Archa 51.94 302** P **P** 18 17 56.2 +1.4
SNR=12
**AAK Ala-Archa 51.94 302** *ce*P **P** 18 17 55.4 +0.5
AAK pmax pmax
comp=Z,44nm,0.8s
**AAK Ala-Archa 51.94 302** P **P** 18 17 55.1 +0.2
AAK PcP **PcP** 18 19 01.5 +0.8
**AAK Ala-Archa 51.94 302** P **P** 18 17 55.3 +0.5
**AAK Ala-Archa 51.94 302** P **P** 18 17 55.1 +0.2
AAK pP **PcP** 18 19 01.6 +0.8
**AAK Ala-Archa 51.94 302** *i* P **P** 18 17 55.0 +0.2
SNR=5.5
**CHIR Chirikof Islan 51.97 41** P **P** 18 17 55.5 +0.8
baz=269,SNR=7.0
**UCH Uchtor 51.99 302** P **P** 18 17 57.1 +1.5
SNR=83
**UCH Uchtor 51.99 302** P **P** 18 17 56.8 +1.2
UCH pmax pmax
comp=Z,80nm,1.5s
**GCSA Galena City Sc 52.10 29** P **P** 18 17 55.9 +0.5
baz=261,SNR=26
**TTA Tatalina 52.23 32** P **P** 18 17 57.5 +0.9
baz=263,SNR=21
**P18K Big Mountain, 52.31 36** P **P** 18 17 57.4 +0.3
**P18K Big Mountain, 52.31 36** P **P** 18 17 57.8 +0.7
baz=267,SNR=16
**O18K Koktuh Hills 52.34 36** P **P** 18 17 58.4 +1.0
O18K IAmb IAmb 18 18 01.1
comp=Z,496nm,2.0s
**O18K Koktuh Hills 52.34 36** P **P** 18 17 58.6 +1.3
baz=266,SNR=14
**BRZS Berezniki 52.38 312** *eP* **P** 18 17 57.5 -0.2
**BRZS Berezniki 52.38 312** *eP* **P** 18 17 57.6 -0.2
baz=312
**EKS2 Erkin-Say 52.46 303** P **P** 18 17 59.6 +1.0
SNR=7.6
**EKS2 Erkin-Say 52.46 303** P **P** 18 17 59.1 +0.5
EKS2 pmax pmax
comp=Z,38nm,0.8s
**AML Almayashu 52.60 302** P **P** 18 18 01.8 +1.8

SNR=30
**AML Almayashu 52.60 302 P P 18 18 01.2 +1.2**
**AML Almayashu 52.60 302** *i* P **P 18 18 01.1 +1.1**
SNR=30
**L19K White Mountain 52.69 33 P P 18 18 01.0 +1.2**
**L19K White Mountain 52.69 33 P P 18 18 01.1 +1.3**
baz=265,SNR=32
**OTUK Ortayu 52.75 310 P P 18 18 01.0 +0.5**
**N19K Bonanza Creek 52.77 34 P P 18 18 01.9 +1.4**
**N19K Bonanza Creek 52.77 34 P P 18 18 01.8 +1.4**
baz=266
**SII Sitkinak Islan 52.78 40 P P 18 18 01.3 +0.7**
SII IAmb IAmb 18 18 02.4
comp=Z,138nm,0.6s
**SII Sitkinak Islan 52.78 40 P P 18 18 01.3 +0.7**
baz=270,SNR=6.4
**O19K Port Alsworth 52.81 35 P P 18 18 01.7 +1.1**
**O19K Port Alsworth 52.81 35 P P 18 18 01.9 +1.3**
baz=267,SNR=19
**M19K Big River Lodg 52.89 33 P P 18 18 02.7 +1.5**
baz=266
**NDI New Delhi 52.97 285** *e*P **P 18 18 02.0 -0.3**
NDI *e*S **S 18 24 57.0 -2.1**
**SANVU Saraoutou 53.14 145 P P 18 18 03.3 -0.3**
**SANVU Saraoutou 53.14 145 P P 18 18 03.7 +0.1**
**K20K Telida 53.16 31 P P 18 18 04.9 +1.7**
baz=265
K20K S **S 18 25 04.3 +3.6**
baz=265
**L20K Farewell, AK 53.17 32 P P 18 18 04.7 +1.5**
baz=266,SNR=26
**J20K Nowinta River 53.20 30 P P 18 18 05.0 +1.6**
baz=264
J20K S **S 18 25 02.5 +1.3**
baz=264
**PVM Polavaram 53.36 270** *e*P **P 18 18 06.3 +1.0**
PVM IVmB_BB 18 18 06.8
comp=Z,2µm,2.0s
PVM *e*S **S 18 25 05.7 +1.1**
**A21K Barrow 53.49 21 P P 18 18 06.5 +1.2**
baz=256
A21K S **S 18 25 07.3 +2.6**
baz=256
**IMAR Indian Mountai 53.57 28 P P 18 18 05.8 -0.3**
**RSO Redoubt South 53.60 35 P P 18 18 06.7 +0.1**
**BVAR Borovoye Array 53.61 316** P4KPbc 18 55 22.7
comp=Z,1.3nm,0.6s,baz=76,slow=12,SNR=8.7
**KDAK Kodiak Island 53.65 38 P P 18 18 07.0 +0.3**
comp=Z,40nm,0.3s,baz=264,slow=0.7,SNR=172
KDAK pP **pP 18 19 30.3 -0.7**
comp=Z,62nm,0.8s,baz=344,slow=5.5,SNR=5.2
**KDAK Kodiak Island 53.65 38 P P 18 18 07.1 +0.4**
KDAK pmax pmax
comp=Z,287nm,1.4s
**KDAK Kodiak Island 53.65 38 P P 18 18 07.1 +0.4**
KDAK IAmb IAmb 18 18 08.9
comp=Z,287nm,1.4s
**KDAK Kodiak Island 53.65 38 P P 18 18 07.0 +0.3**
baz=270
**KDAK Kodiak Island 53.65 38 P P 18 18 07.0 +0.3**
KDAK pP **pP 18 19 26.0 -5.0**
**O20K Slope Mountain 53.65 35 P P 18 18 07.4 +0.6**
baz=268,SNR=6.4
**BRVK Borovoye 53.67 316** *ce*P **P 18 18 07.7 +0.7**
BRVK pmax pmax
comp=Z,55nm,1.2s
**BRVK Borovoye 53.67 316 P P 18 18 07.6 +0.6**
BRVK PcP **PcP 18 19 07.7 +0.8**
BRVK ScP **ScP 18 22 23.6 -0.2**
**BRVK Borovoye 53.67 316 P P 18 18 08.1 +1.1**
**BRVK Borovoye 53.67 316 P P 18 18 06.7 -0.3**
BRVK pP **PcP 18 19 06.8 -0.2**
**AS31 Alice Springs 53.90 185 P P 18 18 08.4 -0.5**
AS31 IAmb IAmb 18 18 11.0
comp=Z,97nm,0.5s
**ASAR Alice Springs 53.90 185 P P 18 18 08.6 -0.4**
comp=Z,111nm,0.5s,baz=0.8,slow=6.2,SNR=3316
ASAR PcP **PcP 18 19 09.3 +1.2**
comp=Z,20nm,0.6s,baz=5.1,slow=3.9,SNR=9.0
ASAR ScP **ScP 18 22 25.2 0.0**
comp=Z,4.3nm,0.7s,baz=356,slow=5.2,SNR=1.8
ASAR S **S 18 25 10.2 -1.2**
comp=Z,5.8nm,0.6s,baz=17,slow=20,SNR=8.2
ASAR PKP2bc 18 48 31.0
comp=Z,1.3nm,0.7s,baz=167,slow=2.2,SNR=8.2
ASAR P4KPbc 18 55 25.3
comp=Z,1.3nm,0.6s,baz=1.8,slow=4.8,SNR=25
**ASAR Alice Springs 53.90 185 P P 18 18 14.8 +5.9**
**ASAR Alice Springs 53.90 185 P P 18 18 08.4 -0.6**
**H21K Melozitna Rive 53.92 28 P P 18 18 10.0 +1.4**
baz=264
H21K S **S 18 25 13.4 +2.6**
baz=264
**SPU Mount Spurr 53.97 34 P P 18 18 09.5 +0.5**
**PPLA Purkeypile 53.97 32 P P 18 18 10.5 +1.4**
PPLA IAmb IAmb 18 18 12.6
comp=Z,749nm,1.8s
**PPLA Purkeypile 53.97 32 P P 18 18 10.7 +1.5**
baz=267,SNR=34
PPLA S **S 18 25 14.8 +3.0**
baz=267
**CHUM Lake Minchumin 53.98 31 P P 18 18 10.5 +1.6**
baz=266,SNR=46
CHUM S **S 18 25 15.1 +3.5**
baz=266
**CAST Castle Rocks 54.05 31 P P 18 18 10.8 +1.3**
CAST IAmb IAmb 18 18 12.9
comp=Z,122nm,0.8s
**CAST Castle Rocks 54.05 31 P P 18 18 10.9 +1.3**
baz=266,SNR=88
**DZA Taraz 54.20 303** *e*P **P 18 18 10.8 -0.1**
**DZA Taraz 54.20 303** *e*P **P 18 18 10.8 -0.1**
baz=303
**I21K Tanana 54.22 29 P P 18 18 12.3 +1.6**
baz=265
I21K S **S 18 25 16.1 +1.4**
baz=265
**CNPM China Poot 54.35 36 P P 18 18 11.6 -0.2**
CNPM IAmb IAmb 18 18 14.5
comp=Z,95nm,0.6s
**MBWA Marble Bar 54.36 202 P P 18 18 12.2 -0.1**
MBWA IAmb IAmb 18 18 14.2
comp=Z,223nm,0.8s
MBWA PcP **PcP 18 19 10.3 +0.3**
**MBWA Marble Bar 54.36 202 P P 18 18 12.0 -0.3**
MBWA pP **pwP 18 19 41.4 -0.9**
**MYLAV Mylavaram 54.43 270** *e*P **P 18 18 14.1 +1.2**
MYLAV IVmB_BB 18 18 14.7
comp=Z,1µm,2.0s
MYLAV *e*S **S 18 25 20.0 +1.3**
**BPAW Bear Paw Mtn. 54.58 30 P P 18 18 14.3 +1.1**
BPAW IAmb IAmb 18 18 16.0
comp=Z,237nm,1.5s
**BPAW Bear Paw Mtn. 54.58 30 P P 18 18 14.4 +1.1**
baz=267,SNR=26
BPAW S **S 18 25 21.6 +2.1**
baz=267
**BRSE Bradley Lake S 54.60 36 P P 18 18 13.7 +0.2**
baz=270,SNR=10
**RPR Rampur 54.70 273** *e*P **P 18 18 15.2 +0.4**
RPR IVmBBB 18 18 16.7
comp=Z,848nm,0.8s
RPR *e*S **S 18 25 23.1 +0.7**
**PSA00 Pilbara Seismi 54.71 202 P P 18 18 14.2 -0.5**
PSA00 IAmb IAmb 18 18 16.0
comp=Z,321nm,1.1s
**MLY Manley 54.73 29 P P 18 18 15.4 +1.0**
**MLY Manley 54.73 29 P P 18 18 15.7 +1.3**
baz=266,SNR=62
MLY S **S 18 25 23.7 +2.1**
baz=266
**KKAR Karatay Array 54.75 304 P P 18 18 14.8 0.0**
KKAR PcP **PcP 18 19 11.9 +0.5**
KKAR ScP **ScP 18 22 28.3 -0.5**
**NIL Nilore 54.79 292 P P 18 18 16.0 +0.6**
NIL pmax pmax
comp=Z,210nm,0.6s
**NIL Nilore 54.79 292 P P 18 18 15.9 +0.6**
NIL IAmb IAmb 18 18 18.8
comp=Z,210nm,0.6s
**NIL Nilore 54.79 292 P P 18 18 16.3 +1.0**
**CUT Chulitna 54.84 33 P P 18 18 15.2 +0.1**
CUT IAmb IAmb 18 18 16.6
comp=Z,351nm,1.6s
**CUT Chulitna 54.84 33 P P 18 18 15.4 +0.3**
baz=269,SNR=16

**FIS Fire Island 54.85 34 P P 18 18 16.1 +0.9**
FIS IAmb IAmb 18 18 17.9
comp=Z,246nm,0.8s
**TRF Thorofare Moun 54.86 31 P P 18 18 16.4 +0.9**
**TRF Thorofare Moun 54.86 31 P P 18 18 15.8 +0.4**
baz=268,SNR=22
TRF S **S 18 25 25.1 +1.6**
baz=268
**M22K Willow 54.90 33 P P 18 18 15.3 -0.2**
M22K IAmb IAmb 18 18 16.7
comp=Z,122nm,0.7s
**M22K Willow 54.90 33 P P 18 18 15.6 0.0**
baz=269,SNR=17
**RC01 Rabbit Creek A 55.09 34 P P 18 18 17.5 +0.6**
RC01 IAmb IAmb 18 18 19.0
comp=Z,157nm,1.2s
**RC01 Rabbit Creek A 55.09 34 P P 18 18 16.9 0.0**
baz=270,SNR=13
**O22K Cooper Landing 55.10 35 P P 18 18 16.8 -0.1**
O22K IAmb IAmb 18 18 25.5
comp=Z,201nm,0.6s
**O22K Cooper Landing 55.10 35 P P 18 18 17.0 0.0**
baz=271,SNR=13
**COLD Coldfoot 55.10 27 P P 18 18 17.9 +1.0**
**COLD Coldfoot 55.10 27 P P 18 18 18.2 +1.3**
baz=266,SNR=18
COLD S **S 18 25 27.2 +0.9**
baz=266
**SEW Seward 55.24 35 P P 18 18 18.2 +0.2**
baz=271,SNR=9.7
**BWN Browne 55.25 30 P P 18 18 19.2 +1.3**
BWN IAmb IAmb 18 19 52.0
comp=Z,242nm,1.2s
**BRLS Borolday 55.25 304** *e*P **P 18 18 19.6 +1.2**
BRLS *e*S **S 18 25 30.7 +1.7**
**BRLS Borolday 55.25 304** *e*P **P 18 18 19.7 +1.2**
baz=303
BRLS *e*S **S 18 25 30.8 +1.7**
baz=303
**H23K Yukon River 55.28 28 P P 18 18 19.9 +1.7**
baz=267
H23K S **S 18 25 32.9 +4.3**
baz=267
**IUG Iuzhnay 55.28 303** *e*P **P 18 18 19.0 +0.3**
**IUG Iuzhnay 55.28 303** *e*P **P 18 18 19.1 +0.3**
baz=303
**I23K Minto, Yukon-K 55.32 29 P P 18 18 19.5 +1.1**
baz=268,SNR=30
**PMR Palmer 55.38 34 P P 18 18 18.9 0.0**
baz=270,SNR=22
PMR S **S 18 25 29.9 0.0**
baz=270
**ADKI Addanki 55.40 269** *e*P **P 18 18 20.9 +1.2**
ADKI IVmBBB 18 18 22.4
comp=Z,727nm,1.2s
ADKI *e*S **S 18 25 33.6 +2.1**
**NEA2 Nenana 55.43 30 P P 18 18 20.1 +0.9**
baz=268,SNR=67
NEA2 S **S 18 25 32.9 +2.3**
baz=268
**TOLK Toolik Lake Re 55.45 25 P P 18 18 20.4 +1.1**
baz=265,SNR=41
TOLK S **S 18 25 31.5 +0.6**
baz=265
**MCK McKinley 55.47 31 P P 18 18 20.0 +0.4**
baz=269,SNR=68
MCK S **S 18 25 32.3 +1.0**
baz=269
**SRSP Sriramsagar 55.50 273** *e*P **P 18 18 20.7 +0.3**
SRSP IVmB_BB 18 18 22.0
comp=Z,646nm,0.8s
SRSP *e*S **S 18 25 33.7 +0.8**
**RND Reindeer 55.51 31 P P 18 18 20.1 +0.2**
RND pmax pmax
comp=Z,164nm,1.0s
**RND Reindeer 55.51 31 P P 18 18 20.1 +0.2**
RND IAmb IAmb 18 18 21.5
comp=Z,164nm,1.0s
**NJS Nagarjunasagar 55.66 270** *e*P **P 18 18 22.2 +0.6**
NJS IVmB_BB 18 18 22.8
comp=Z,1µm,2.1s
NJS *e*S **S 18 25 35.6 +0.7**
**CUPL Choutuppal 55.68 271** *e*P **P 18 18 22.0 +0.3**
CUPL IVmB_BB 18 18 22.6
comp=Z,814nm,2.1s
CUPL *e*S **S 18 25 34.3 -1.0**
**KNK Knik Glacier 55.70 34 P P 18 18 21.7 +0.5**
KNK IAmb IAmb 18 18 23.1
comp=Z,133nm,0.7s
**KNK Knik Glacier 55.70 34 P P 18 18 21.7 +0.5**
baz=271,SNR=32
**SML Sawmill 55.75 33 P P 18 18 22.4 +0.7**
SML IAmb IAmb 18 18 24.1
comp=Z,124nm,0.7s
**SML Sawmill 55.75 33 P P 18 18 22.1 +0.5**
baz=271,SNR=29
**PWL Port Wells 55.78 34 P P 18 18 21.8 0.0**
PWL IAmb IAmb 18 18 23.4
comp=Z,122nm,0.6s
**PWL Port Wells 55.78 34 P P 18 18 22.0 +0.2**
baz=272,SNR=14
**MDM Murphy Dome 55.80 29 P P 18 18 22.4 +0.6**
MDM IAmb IAmb 18 18 25.0
comp=Z,113nm,1.0s
**WRH Wood River Hil 55.85 30 P P 18 18 22.4 +0.2**
**HYBB Hyderabad (bro 55.94 271** *e*P **P 18 18 23.8 +0.2**
HYBB IVmB_BB 18 18 24.4
comp=Z,1µm,1.9s
HYBB *e*PcP **PcP 18 19 16.4 -0.1**
HYBB *e*PP **PP 18 20 35.1 +1.2**
HYBB *e*ScP **ScP 18 22 35.5 +1.0**
HYBB *e*S **S 18 25 38.2 -0.6**
HYBB *e*sS **sS 18 28 10.1 -1.1**
**TCOL CIGO, UAF Yank 55.95 30 P P 18 18 23.7 +0.8**
**TCOL CIGO, UAF Yank 55.95 30 P P 18 18 23.8 +1.0**
baz=269,SNR=18
**COLA College 55.96 30** *e*P **P 18 18 23.5 +0.6**
COLA pmax pmax
comp=Z,41nm,0.9s
**COLA College 55.96 30 P P 18 18 23.6 +0.8**
**COLA College 55.96 30 P P 18 18 23.8 +0.9**
COLA pP pP 18 19 39.3 -9.2
**H24K Noodor Dome 55.96 28 P P 18 18 24.4 +1.4**
baz=269
**CCB Clear Creek Bu 55.98 30 P P 18 18 23.4 +0.4**
**TAS Tashkent 55.99 302 P P 18 18 25.5 +1.9**
TAS pmax pmax
comp=Z,147nm,0.7s
**WAT6 Susitna Watana 56.02 32 P P 18 18 24.0 +0.4**
baz=271,SNR=42
**POKR Poker Plat Res 56.14 29 P P 18 18 24.7 +0.5**
**POKR Poker Plat Res 56.14 29 P P 18 18 24.8 +0.6**
baz=270,SNR=24
**DHY Denali Highway 56.17 32 P P 18 18 24.8 +0.1**
**DHY Denali Highway 56.17 32 P P 18 18 25.2 +0.5**
baz=271,SNR=26
**SRLM Srisailam 56.22 270** *e*P **P 18 18 25.9 +0.4**
SRLM IVmB_BB 18 18 26.4
comp=Z,1µm,2.1s
SRLM *e*S **S 18 25 43.0 +0.7**
**SCM Sheep Creek Mo 56.23 33 P P 18 18 25.8 +0.8**
SCM pmax pmax
comp=Z,159nm,0.7s
**SCM Sheep Creek Mo 56.23 33 P P 18 18 25.8 +0.8**
SCM IAmb IAmb 18 18 27.7
comp=Z,159nm,0.7s
**SCM Sheep Creek Mo 56.23 33 P P 18 18 25.7 +0.8**
baz=272,SNR=30
**HDA Harding Lake 56.35 30 P P 18 18 25.2 -0.4**
**HDA Harding Lake 56.35 30 P P 18 18 25.5 -0.2**
baz=270,SNR=51
**IL31 56.37 30 P P 18 18 25.3 -0.5**
**ILAR Eielson Array 56.37 30 P P 18 18 25.4 -0.5**
comp=Z,24nm,0.7s,baz=266,slow=4.6,SNR=348
ILAR pP **pP 18 19 50.9 -0.7**
comp=Z,47nm,1.0s,baz=270,slow=6.1,SNR=11
ILAR PKPPKP **P'P'df 18 48 14.3 -5.1**
comp=Z,1.4nm,1.0s,baz=204,slow=1.5,SNR=4.0
**ILAR Eielson Array 56.37 30 P P 18 18 25.6 -0.2**
**ILAR Eielson Array 56.37 30 P P 18 18 25.6 -0.2**
**GLI Glacier Island 56.38 34 P P 18 18 26.3 +0.4**
GLI IAmb IAmb 18 18 28.2
comp=Z,115nm,0.7s
**GLI Glacier Island 56.38 34 P P 18 18 26.4 +0.4**
baz=273,SNR=10
**RCLA Racherla 56.44 269** *e*P **P 18 18 27.5 +0.5**

RCLA IVmBBB 18 18 29.1
comp=Z,1µm,1.2s
RCLA *e*S **S 18 25 45.7 +0.5**
**SKHT Srikalahasti 56.56 267** *e*P **P 18 18 29.0 +1.1**
SKHT IVmB_BB 18 18 29.6
comp=Z,1µm,2.1s
**EIDS Eidsvold 56.64 167 P P 18 18 28.2 0.0**
EIDS IAmb IAmb 18 18 29.6
comp=Z,105nm,0.8s
**FID Port Fidalgo 56.69 35 P P 18 18 28.4 +0.3**
FID IAmb IAmb 18 18 30.1
comp=Z,136nm,1.2s
**M24K Tolsona, Glenn 56.76 33 P P 18 18 29.6 +0.9**
M24K IAmb IAmb 18 18 31.3
comp=Z,113nm,0.7s
**M24K Tolsona, Glenn 56.76 33 P P 18 18 29.9 +1.2**
baz=273,SNR=17
**KLU Klutina 56.91 34 P P 18 18 30.4 +0.6**
**KLU Klutina 56.91 34 P P 18 18 30.6 +0.9**
baz=273,SNR=18
KLU S **S 18 25 51.7 +1.5**
baz=273
**PRP Porcupine Dome 56.94 29 P P 18 18 29.5 -0.4**
**PRP Porcupine Dome 56.94 29 P P 18 18 29.5 -0.4**
baz=271,SNR=30
PRP S **S 18 25 50.3 -0.2**
baz=271
**J25K Salcha River, 57.02 30 P P 18 18 29.3 -1.1**
**J25K Salcha River, 57.02 30 P P 18 18 29.4 -1.1**
baz=272,SNR=34
J25K S **S 18 25 50.3 -1.2**
baz=272
**FYU Fort Yukon 57.04 28 P P 18 18 31.7 +1.3**
FYU IAmb IAmb 18 18 34.4
comp=Z,164nm,1.3s
**PAX Paxson 57.05 32 P P 18 18 31.1 +0.5**
PAX pmax pmax
comp=Z,66nm,0.8s
**PAX Paxson 57.05 32 P P 18 18 31.1 +0.5**
**PAX Paxson 57.05 32 P P 18 18 31.3 +0.6**
baz=273,SNR=52
PAX S **S 18 25 52.4 +0.6**
baz=273
**EYAK Cordova Ski Ar 57.06 35 P P 18 18 31.5 +0.9**
baz=274
**HARP HAARP 57.22 33 P P 18 18 33.1 +1.3**
baz=273,SNR=45
**BMAR Burnt Mountain 57.28 27 P P 18 18 33.5 +1.4**
**RIDG Independent Ri 57.29 31 P P 18 18 32.3 0.0**
RIDG IAmb IAmb 18 18 35.0
comp=Z,74nm,0.7s
**RIDG Independent Ri 57.29 31 P P 18 18 32.3 0.0**
baz=273,SNR=50
RIDG S **S 18 25 55.2 +0.3**
baz=273
**KLRI Killari 57.36 273** *e*P **P 18 18 33.4 0.0**
KLRI IVmB_BB 18 18 34.4
comp=Z,2µm,0.6s
KLRI *e*S **S 18 25 55.4 -1.7**
**N25K Chitina, Valde 57.54 33 P P 18 18 35.0 +1.0**
**N25K Chitina, Valde 57.54 33 P P 18 18 35.1 +1.0**
baz=274,SNR=18
N25K S **S 18 26 00.9 +2.6**
baz=274
**BMRM Bremner River 57.59 34 P P 18 18 35.2 +0.8**
BMRM IAmb IAmb 18 20 16.3
comp=Z,110nm,1.0s
**BMRM Bremner River 57.59 34 P P 18 18 35.4 +1.0**
baz=275,SNR=20
BMRM S **S 18 26 00.1 +1.3**
baz=275
**DOT Dot Lake 57.64 31 P P 18 18 34.8 +0.1**
DOT IAmb IAmb 18 18 36.4
comp=Z,118nm,0.9s
**SCRK Sand Creek 57.66 31 P P 18 18 35.0 +0.1**
SCRK IAmb IAmb 18 18 36.6
comp=Z,116nm,0.6s
**SCRK Sand Creek 57.66 31 P P 18 18 35.1 +0.3**
baz=273,SNR=145
**J26L Joseph Creek 57.81 30 P P 18 18 35.8 0.0**
baz=273,SNR=161
J26L S **S 18 26 02.0 +0.4**
baz=273
**KBL Kabul 57.90 294 P P 18 18 37.2 0.0**
KBL pmax pmax
comp=Z,68nm,0.8s
**KBL Kabul 57.90 294 P P 18 18 37.2 0.0**
**KBL Kabul 57.90 294 P P 18 18 37.5 +0.3**
SNR=35
KBL P **P 18 18 37.5 +0.3**
SNR=35
**KBL Kabul 57.90 294 P P 18 18 37.1 0.0**
KBL pP **pP 18 19 59.1 -3.5**
**GLB Gilahina Butte 57.93 34 P P 18 18 37.6 +0.9**
**L26K Log Cabin Wild 58.01 32 P P 18 18 38.3 +1.1**
**L26K Log Cabin Wild 58.01 32 P P 18 18 38.5 +1.3**
baz=274,SNR=37
L26K S **S 18 26 07.0 +2.9**
baz=274
**BERG Berg Lake 58.09 35 P P 18 18 38.5 +0.8**
BERG IAmb IAmb 18 18 40.3
comp=Z,123nm,0.4s
**VRDI Verde Repeater 58.12 34 P P 18 18 38.9 +0.7**
**URV Uravakonda 58.13 269** *e*P **P 18 18 39.1 +0.4**
URV IVmB_BB 18 18 39.7
comp=Z,1µm,1.9s
URV *e*S **S 18 26 06.7 -0.3**
**M26K Nabesna, AK 58.23 32 P P 18 18 39.8 +1.1**
baz=275
M26K S **S 18 26 09.4 +2.4**
baz=275
**COCO West Island 58.41 230 P P 18 18 40.8 +0.3**
COCO pmax pmax
comp=Z,2µm,1.7s
**COCO West Island 58.41 230 P P 18 18 40.8 +0.3**
**WAX Waxell Ridge 58.50 35 P P 18 18 41.4 +0.8**
**DZM Mont Dzumac 58.52 150** *e*P **P 18 18 42.7 +1.4**
comp=Z,699nm,1.4s
**DZM Mont Dzumac 58.52 150 P P 18 18 42.5 +1.2**
**L27K Beaver Creek, 58.70 32 P P 18 18 43.0 +1.1**
baz=276
L27K S **S 18 26 15.7 +2.7**
baz=276
**BCAR Beaver Creek A 58.72 32 P P 18 18 43.1 +1.1**
**ISLE Juniper Island 58.73 35 P P 18 18 42.8 +0.5**
ISLE IAmb IAmb 18 18 44.0
comp=Z,88nm,0.4s
**M27K Edge Creek, AK 58.75 32 P P 18 18 43.4 +1.1**
baz=276
M27K S **S 18 26 15.6 +1.8**
baz=276
**EGAK Eagle 58.82 30 P P 18 18 42.7 0.0**
**EGAK Eagle 58.82 30 P P 18 18 42.9 +0.3**
baz=275,SNR=62
**PALK Pallekele 58.84 260 P P 18 18 44.0 +0.4**
PALK pmax pmax
comp=Z,132nm,0.8s
**PALK Pallekele 58.84 260 P P 18 18 44.0 +0.4**
PALK IAmb IAmb 18 18 45.8
comp=Z,132nm,0.8s
**PALK Pallekele 58.84 260 P P 18 18 44.4 +0.8**
PALK P **P 18 18 44.4 +0.8**
**PALK Pallekele 58.84 260 P P 18 18 44.2 +0.6**
**MESA MESA 58.98 35 P P 18 18 45.0 +1.0**
baz=277
**OUENC Ouen Island, N 59.00 149 P P 18 18 45.1 +0.8**
OUENC IAmb IAmb 18 18 47.2
comp=Z,318nm,1.4s
**BARN Barnard Glacie 59.01 34 P P 18 18 44.9 +0.7**
**BVCY Beaver Creek 59.21 32 P P 18 18 46.6 +1.2**
baz=277,SNR=6.8
BVCY S **S 18 26 21.5 +2.0**
baz=277
**YUK3 Moose Creek 59.48 33 P P 18 18 48.3 +0.9**
baz=278,SNR=18
YUK3 S **S 18 26 24.8 +1.5**
baz=278
**DAWY Dawson 59.66 30 P P 18 18 49.0 +0.6**
**DAWY Dawson 59.66 30 P P 18 18 49.2 +0.9**
baz=277,SNR=23
**PCA Pinnacle 59.83 35 P P 18 18 50.4 +0.8**
**PINM Pinnacle 59.83 35 P P 18 18 50.5 +0.9**
baz=279
**I29M Ogilvie Camp, 59.95 29 P P 18 18 51.0 +0.8**
**I29M Ogilvie Camp, 59.95 29 P P 18 18 51.3 +1.0**
baz=278,SNR=12

I29M S S 18 26 30.5 +1.8
baz=278
**ARU Arti 60.01 321** *c i*P P 18 18 50.6 -0.1
ARU 18 19 31.0
ARU *PP **pP** 18 20 15.5 -1.4
ARU 18 21 09.7
ARU S S 18 26 28.6 -1.0
ARU 18 27 52.6
ARU SSS SSS 18 33 31.7
ARU pmax pmax
comp=Z,37nm,0.5s
ARU MLR MLR
comp=Z,488nm,14.0s
**ARU Arti 60.01 321** P P 18 18 50.4 -0.4
ARU IAmb IAmb 18 18 51.8
comp=Z,54nm,0.6s
**ARU Arti 60.01 321** P P 18 18 50.4 -0.4
**J29M Klondike Camp 60.12 30** P P 18 18 53.0 +1.6
baz=278,SNR=19
J29M S S 18 26 37.9 +2.8
baz=278
**PNL Peninsula 60.33 35** P P 18 18 53.9 +1.0
baz=280
**EPYK Eagle Plains 60.46 27** P P 18 18 54.6 +0.9
**EPYK Eagle Plains 60.46 27** P P 18 18 54.9 +1.2
baz=278,SNR=154
EPYK S S 18 26 37.9 +2.8
baz=278
**YUK6 Outpost Mounta 60.61 34** P P 18 18 56.6 +1.6
baz=280,SNR=7.9
YUK6 S S 18 26 40.6 +3.1
baz=280
**AB31 Akbulak array 60.67 313** P P 18 18 54.9 -0.4
**ABKAR Akbulak array 60.67 313** P P 18 18 55.1 -0.2
**ABKAR Akbulak array 60.67 313** P P 18 18 54.9 -0.4
ABKAR IAmb IAmb 18 18 57.0
comp=Z,52nm,0.8s
**MSVF Nonsavu 60.97 136** *i*P P P 18 18 59.1 +1.3
MSVF pmax pmax
comp=Z,179nm,1.3s
**HYT Haines Junctio 61.05 34** P P 18 18 59.4 +1.6
baz=281,SNR=16
**M30M Minto, Yukon 61.05 32** P P 18 18 59.1 +1.4
baz=280
M30M S S 18 26 45.3 +2.7
baz=280
**MAYO Mayo, Yukon 61.27 31** P P 18 19 00.4 +1.3
baz=281,SNR=11
**INK Inuvik 61.37 25** P P 18 18 59.9 +0.4
INK pmax pmax
comp=Z,36nm,0.5s
**INK Inuvik 61.37 25** P P 18 18 59.9 +0.4
INK IAmb IAmb 18 19 01.4
comp=Z,36nm,0.5s
**INK Inuvik 61.37 25** P P 18 19 00.0 +0.4
baz=280,SNR=44
**FORT Forrest 61.62 190** P P 18 19 01.8 +0.1
**ARMA Armidale 61.66 167** P P 18 19 02.4 +0.3
ARMA IAmb IAmb 18 19 03.9
comp=Z,64nm,0.8s
**STKA Stephens Creek 61.94 177** P P 18 19 03.8 -0.1
comp=Z,99nm,0.6s,baz=347,slow=7.2,SNR=324
STKA S S 18 26 54.4 +0.2
comp=Z,2.6nm,0.7s,baz=259,slow=24,SNR=5.4
**STKA Stephens Creek 61.94 177** P P 18 19 03.7 -0.1
**M31M Drury Creek, Y 62.23 32** P P 18 19 06.4 +1.0
M31M IAmb IAmb 18 19 07.4
comp=Z,57nm,0.5s
**M31M Drury Creek, Y 62.23 32** P P 18 19 06.5 +1.0
baz=283,SNR=54
M31M S S 18 26 59.5 +2.3
baz=283
**WHY Whitehorse 62.34 34** P P 18 19 07.4 +1.1
**WHY Whitehorse 62.34 34** P P 18 19 07.6 +1.4
baz=283,SNR=18
WHY S S 18 27 01.6 +2.8
baz=283
**SKAG Skagway 62.40 35** P P 18 19 07.5 +1.1
SKAG IAmb IAmb 18 20 43.6
comp=Z,86nm,1.2s
**SKAG Skagway 62.40 35** P P 18 19 07.8 +1.4
baz=283,SNR=17
**FARO Faro, Yukon 62.70 32** P P 18 19 09.5 +1.1
baz=283,SNR=35
FARO S S 18 27 04.8 +1.8
baz=283
**BESE Bessie Mountai 62.84 36** P P 18 19 10.8 +1.3
**BBOO Buckleboo 62.86 183** P P 18 19 09.7 -0.1
BBOO IAmb IAmb 18 19 11.2
comp=Z,166nm,0.8s
**MORW Morawa 62.91 202** P P 18 19 10.0 -0.3
**HRA Herat 63.28 296** P P 18 19 13.4 +0.4
HRA IAmb IAmb 18 19 15.2
comp=Z,83nm,1.0s
**A36M Sachs Harbour 63.29 20** P P 18 19 12.7 +0.7
A36M IAmb IAmb 18 19 15.0
comp=Z,73nm,0.7s
**A36M Sachs Harbour 63.29 20** P P 18 19 13.1 +1.0
baz=286,SNR=91
A36M S S 18 27 11.6 +1.7
baz=286
**P33M Teslin, Yukon 63.44 34** P P 18 19 14.4 +1.0
baz=285,SNR=16
P33M S S 18 27 14.2 +1.9
baz=285
**MMPY Sheldon Lake, 63.54 31** P P 18 19 15.3 +1.4
baz=285,SNR=18
MMPY S S 18 27 16.8 +3.5
baz=285
**KIRV Kirov 64.31 324** *d i*P P 18 19 19.7 +0.9
**C36M Paulatuk 64.44 23** P P 18 19 19.7 +0.3
C36M IAmb IAmb 18 19 20.9
comp=Z,57nm,0.5s
**C36M Paulatuk 64.44 23** P P 18 19 19.8 +0.3
baz=288,SNR=61
C36M S S 18 27 23.4 -0.5
baz=288
**AFI Afiamalu 64.83 125** P P 18 19 24.4 +1.5
AFI pmax pmax
comp=Z,175nm,1.5s
**PRGR Permogore 65.21 328** *e*P P 18 19 24.4 -0.1
PRGR *e* 18 19 50.4
PRGR *PP **pP** 18 20 53.3 +0.8
PRGR *e*S S 18 27 32.9 -0.5
PRGR *e* 18 28 32.9
PRGR pmax pmax
comp=Z,40nm,0.6s
**HOPEN Hopen 65.99 346** *e*P P 18 19 30.0 +0.8
**CAN Canberra 66.02 171** P P 18 19 30.3 +0.3
**CAN Canberra 66.02 171** P P 18 19 30.3 +0.3
CAN IAmb IAmb 18 19 32.2
comp=Z,84nm,0.8s
**NWAO Narrogin (SRO) 66.13 200** P P 18 19 30.5 -0.2
NWAO pmax pmax
comp=Z,358nm,0.7s
**NWAO Narrogin (SRO) 66.13 200** P P 18 19 30.5 -0.2
**NWAO Narrogin (SRO) 66.13 200** P P 18 19 30.9 +0.3
**SPA0 Spitsbergen Ar 66.65 349** *e*P P 18 19 34.0 +0.7
**WRGLY Wrigley 66.74 29** P P 18 19 35.0 +0.8
baz=291,SNR=10
WRGLY S S 18 27 53.0 +1.4
baz=291
**KBS Kingsbay 66.86 350** *i*P P 18 19 34.0 -0.7
**KBS Kingsbay 66.86 350** *e*P P 18 19 35.5 +0.9
**ALE Alert 66.90 3** P P 18 19 36.1 +1.2
**EUNU Eureka 67.11 8** P P 18 19 36.6 +0.3
EUNU IAmb IAmb 18 19 38.3
comp=Z,61nm,0.7s
**BELG Belogornoye 67.23 318** *de*P P 18 19 37.3 -0.1
BELG pmax pmax
comp=Z,38nm,1.3s
**HSPB Hornsund (broa 67.52 348** *e*P P 18 19 39.4 +0.7
**NOR Nord 67.57 356** *i*P P 18 19 38.6 -0.4
NOR IAmb IAmb 18 19 43.2
comp=Z,6.2nm,0.8s
**TOO Toolangi 67.85 174** P P 18 19 42.1 +0.8
TOO pmax pmax
comp=Z,122nm,0.8s
**TOO Toolangi 67.85 174** P P 18 19 42.0 +0.8
TOO IAmb IAmb 18 19 43.5
comp=Z,122nm,0.8s
**APA Apatity 67.89 336** ⇓*i*P P 18 19 41.3 +0.2
APA *i* *PP **pwP** 18 21 16.2 +0.8
APA *i* 18 22 19.8
APA *i* S S 18 28 03.0 -2.0

APA pmax pmax
comp=Z,41nm,0.6s
**KLMR Klimovskoe 68.25 329** *e*P P 18 19 42.7 -0.8
KLMR *e**PP **pP** 18 21 12.1 -0.4
KLMR *e*S S 18 28 05.5 -3.9
KLMR pmax pmax
comp=Z,29nm,0.7s
**KLMR Klimovskoe 68.25 329** *e*P P 18 19 42.7 -0.8
KLMR AMP 18 19 44.4
comp=Z,29nm,0.7s
KLMR *e*pP **pP** 18 21 12.2 -0.3
KLMR *e*S S 18 28 05.6 -3.9
KLMR *e*S S 18 28 05.6 -3.9
**BJO1 Bjornoya 68.36 345** *e*P P 18 19 45.0 +1.1
**KEV Kevo 68.91 340** P P 18 19 48.5 +1.1
**KAAM Kaadhehdhoo 68.93 258** P P 18 19 49.5 +1.1
**HAMF Hammerfest 69.40 341** *e*P P 18 19 51.0 +0.7
**ARA0 ARCESS Array S 69.48 340** *e*P P 18 19 51.5 +0.7
**ARCES ARCESS Array B 69.48 340** P P 18 19 51.5 +0.7
comp=Z,46nm,0.5s,baz=70,slow=8.8,SNR=376
ARCES *e*pP **pwP** 18 21 23.8 -1.7
comp=Z,40nm,1.1s,baz=62,slow=8.4,SNR=3.8
ARCES PKPPKP P'P'df 18 47 49.4 -8.9
comp=Z,3.0nm,0.7s,baz=256,slow=0.5,SNR=7.5
**ARCES ARCESS Array B 69.48 340** P P 18 19 51.5 +0.7
ARCES IAmb IAmb 18 19 52.8
comp=Z,47nm,0.6s
**RES Resolute Bay 69.62 13** P P 18 19 51.9 +0.3
baz=322,slow=8.3
**RES Resolute Bay 69.62 13** P P 18 19 51.9 +0.3
RES IAmb IAmb 18 21 38.3
comp=Z,90nm,1.4s
**JLN Jalan Bani Buh 70.31 285** P P 18 19 58.0 +1.3
SNR=13
**KTK1 Kautokeino 70.44 340** *e*P P 18 19 57.3 +0.7
**WBK Wadi Bani Khal 70.48 285** P P 18 19 59.0 +1.3
SNR=17
**YKA Yellowknife Ar 70.73 28** P P 18 19 58.5 +0.1
comp=Z,21nm,0.6s,baz=297,slow=6.3,SNR=350
YKA *e*P **pP** 18 21 26.9 -2.2
comp=Z,4.0nm,0.6s,baz=294,slow=6.1,SNR=3.0
YKA PKiKP **PKiKP** 18 26 01.3 -1.3
comp=Z,0.8nm,0.5s,baz=306,slow=1.5,SNR=5.6
YKA S S 18 28 38.7 +0.7
comp=Z,0.3nm,0.8s,baz=18,slow=1.4,SNR=1.3
YKA PKPPKP P'P'df 18 47 46.2 -10
comp=Z,8.2nm,1.2s,baz=113,slow=3.3,SNR=12
**YKA Yellowknife Ar 70.73 28** P P 18 19 58.2 -0.2
**BIDO Bidbid 70.79 286** P P 18 20 00.5 +1.0
SNR=19
**MAK Makhachkala 70.87 309** *e*P P 18 19 58.3 -1.3
MAK *e**PP **pP** 18 21 28.9 -0.4
MAK *e**SP **sP** 18 22 15.4 +2.0
MAK *e* 18 22 44.1
MAK *e*PPP PPP 18 24 28.9
MAK *e*S S 18 28 39.4 -0.8
MAK *e*SS SS 18 33 20.7 -1.6
MAK pmax pmax
comp=Z,345nm,1.5s
MAK MLR MLR
comp=Z,595nm,14.0s
**JETT Jettan, Norway 70.95 341** *e*P P 18 20 01.1 +1.4
**SMDO Samad 71.05 286** P P 18 20 01.6 +0.4
SNR=15
**VRH Novokhopyorsk 71.08 319** *e*P P 18 20 00.4 -0.3
VRH *e**PP **pP** 18 21 29.5 -0.9
VRH *e*S S 18 28 38.8 -3.5
VRH pmax pmax
comp=Z,70nm,0.9s
VRH smax smax
comp=E,670nm,1.8s
**BANOM Banah 71.27 290** P P 18 20 03.2 +0.9
SNR=21
**BANOM Banah 71.27 290** *i*P P 18 20 02.8 +0.5
SNR=49
**JMDO Jabal Madar 71.31 285** P P 18 20 02.6 0.0
SNR=14
**TRO Tromso 71.31 341** *e*P P 18 20 02.5 +0.8
**MOS Moscow 71.32 324** *e*P P 18 19 59.7 -2.3
MOS *e* 18 20 17.2
MOS *e**PP **pP** 18 21 30.6 -1.3
MOS *e*S S 18 28 41.4 -3.5
MOS *e* 18 29 20.6
MOS pmax pmax
comp=Z,101nm,1.2s
MOS pmax pmax
comp=Z,200nm,1.5s
MOS smax smax
comp=N,2μm,3.5s
MOS smax smax
comp=E,1μm,3.5s
**HOQ Hoqain 71.44 287** P P 18 20 04.0 +0.6
SNR=38
**UOSS Minazif 71.77 289** P P 18 20 05.2 0.0
UOSS IAmb IAmb 18 20 06.9
comp=Z,319nm,1.9s
**UOSS Minazif 71.77 289** P P 18 20 05.3 0.0
**UOSS Minazif 71.77 289** P P 18 20 04.8 -0.4
**UOSS Minazif 71.77 289** *i*P P 18 20 04.7 -0.6
SNR=27
**HATD Hatta, Dubai 71.88 289** P P 18 20 06.7 +0.8
SNR=33
**HATD Hatta, Dubai 71.88 289** *i*P P 18 20 05.9 -0.1
SNR=77
**BSY Bisya 71.89 286** P P 18 20 06.6 +0.5
SNR=27
**GROC Groznyy 71.91 310** *e*P P 18 20 05.2 -0.6
GROC *e* 18 20 21.3
GROC *e**PP **pP** 18 21 36.3 +0.5
GROC *e**SP **sP** 18 22 21.4 +1.5
GROC *e* 18 22 50.7
GROC *e*S S 18 28 50.7 -1.4
GROC pmax pmax
comp=Z,64nm,0.7s
**ASHO Ashiyiah 72.00 288** P P 18 20 07.1 +0.5
SNR=29
**ASHO Ashiyiah 72.00 288** *i*P P 18 20 06.7 0.0
SNR=70
**TULEG Thule 72.00 7** *i*P P 18 20 05.0 -0.7
TULEG IAmb IAmb 18 20 07.5
comp=Z,20nm,0.5s
**TULEG Thule 72.00 7** P P 18 20 05.9 +0.2
**LPSR Galich'ya Gora 72.03 321** *e*P P 18 20 06.5 +0.2
LPSR *e**PP **pP** 18 21 37.1 +0.8
LPSR *e*S S 18 28 47.9 -5.1
LPSR pmax pmax
comp=Z,100nm,1.2s
LPSR smax smax
comp=N,650nm,2.6s
**OBN Obninsk 72.14 324** *de*P P 18 20 07.3 +0.5
OBN 18 20 17.0
OBN *i* *PP **pP** 18 21 36.2 -0.7
OBN 18 22 49.0
OBN *e*PPP PPP 18 24 44.7
OBN *i*S S 18 28 51.5 -2.6
OBN *i* 18 29 26.6
OBN *i*SS SS 18 33 47.4 +6.5
OBN *i*SSS SSS 18 37 04.8
OBN pmax pmax
comp=Z,97nm,1.2s
OBN MLR MLR
comp=Z,1μm,16.0s
**LGD Lagodekhi 72.19 308** P P 18 20 07.5 +0.1
**NAZ Nazwa, Dubai 72.19 289** P P 18 20 08.4 +0.7
SNR=15
**NAZ Nazwa, Dubai 72.19 289** *i*P P 18 20 07.6 -0.1
SNR=11
**ARQ Araqi 72.20 287** P P 18 20 08.3 +0.5
SNR=39
**DAG Danmarks Havn 72.22 355** P P 18 20 07.6 +0.6
DAG pmax pmax
comp=Z,43nm,1.5s
**DAG Danmarks Havn 72.22 355** *i*P P 18 20 07.0 0.0
DAG IAmb IAmb 18 20 08.7
comp=Z,14nm,0.5s
**NEEM North Greenlan 72.30 2** *i*P P 18 20 07.5 -0.4
NEEM IAmb IAmb 18 20 09.2
comp=Z,61nm,0.6s
**FAQ Al Faqa, Dubai 72.35 289** P P 18 20 09.0 +0.3
SNR=13
**FAQ Al Faqa, Dubai 72.35 289** *i*P P 18 20 08.1 -0.5
SNR=13
**DDFL Dedoflistskaro 72.43 308** P P 18 20 11.0 +2.0
**VSR Storozhevoye 72.52 319** *e*P P 18 20 09.3 +0.2
VSR *e**PP **pP** 18 21 39.5 +0.2

VSR *e*S **SKiKP** 18 28 54.0 -4.5
VSR pmax pmax
comp=Z,120nm,1.1s
VSR smax smax
comp=E,1μm,3.0s
**VORD Divnogorie 72.56 319** *e*P P 18 20 09.0 -0.4
VORD *e**PP **pP** 18 21 40.5 +0.9
VORD *e*S **SKiKP** 18 28 56.2 -2.3
VORD pmax pmax
comp=Z,50nm,1.0s
VORD smax smax
comp=N,560nm,2.6s
**ASUD Al Ashush, Dub 72.62 289** P P 18 20 10.9 +0.7
SNR=8.2
**ASUD Al Ashush, Dub 72.62 289** *i*P P 18 20 10.3 +0.1
SNR=23
**PUL Pulkovo 72.82 330** *ce*P P 18 20 12.4 +1.7
PUL pmax pmax
comp=Z,54nm,0.6s
**SEAG Tbilisi Sea 73.19 309** P P 18 20 15.4 +2.1
**NCK Nalchik 73.24 311** *i*P P 18 20 13.9 +0.4
NCK pmax pmax
comp=Z,58nm,0.8s
**TAU Tasmania Unive 73.32 173** P P 18 20 15.3 +1.7
TAU pmax pmax
comp=Z,228nm,1.2s
**ZEI Tsey 73.34 310** *e*P P 18 20 12.4 -2.0
ZEI pmax pmax
comp=Z,51nm,0.6s
**D03D Eldon 73.37 44** P P 18 20 16.1 +2.0
baz=297,SNR=7.8
**STEI Steigen 73.44 341** *e*P P 18 20 14.6 +0.5
**KBZ Khabaz 73.59 311** P P 18 20 16.1 +0.7
comp=Z,99nm,0.8s,baz=91,slow=4.4,SNR=180
KBZ pP **pP** 18 21 46.1 +0.1
comp=Z,28nm,1.0s,baz=110,slow=3.6,SNR=3.6
KBZ S S 18 29 11.0 +0.3
comp=Z,7.5nm,1.1s,baz=64,slow=21,SNR=16
**KBZ Khabaz 73.59 311** *ce*P P 18 20 16.1 +0.7
KBZ pmax pmax
comp=Z,127nm,0.8s
**UMZA Um Al Zommool 73.60 287** P P 18 20 15.5 -0.4
**KIV Kislovodsk 73.63 312** *e*P P 18 20 16.5 +0.7
KIV *e**PP **pP** 18 21 47.0 +0.6
KIV *e* 18 23 07.4
KIV *e*PPP PPP 18 24 54.7
KIV *e*S S 18 29 10.6 -0.8
KIV *e*SSS SSS 18 37 31.5
KIV pmax pmax
comp=Z,104nm,1.0s
KIV MLR MLR
comp=Z,351nm,18.0s
**KIV Kislovodsk 73.63 312** P P 18 20 16.4 +0.5
KIV IAmb IAmb 18 21 58.3
comp=Z,135nm,1.1s
**KIV Kislovodsk 73.63 312** P P 18 20 16.7 +0.8
**KIV Kislovodsk 73.63 312** P P 18 20 16.4 +0.5
**KIV Kislovodsk 73.63 312** *i*P P 18 20 16.2 +0.3
SNR=15
**B05A Bryant 73.63 43** P P 18 20 16.9 +1.3
baz=297
**FIA1 FINESS Array S 73.69 332** P P 18 20 15.8 +0.1
FIA1 IAmb IAmb 18 21 56.9
comp=Z,60nm,0.9s
**FINES FINESS Array B 73.69 332** P P 18 20 15.3 -0.4
comp=Z,29nm,0.5s,baz=66,slow=5.4,SNR=318
FINES pP **pP** 18 21 48.2 +1.9
comp=Z,17nm,0.9s,baz=55,slow=7.3,SNR=1.9
FINES S S 18 29 08.7 -2.6
comp=Z,5.0nm,0.7s,baz=21,slow=18,SNR=6.8
**FINES FINESS Array B 73.69 332** P P 18 20 15.9 +0.2
**ONI Oni 73.73 310** P P 18 20 17.5 +1.1
ONI pmax pmax
comp=Z,104nm,1.3s
**ONI Oni 73.73 310** P P 18 20 17.4 +1.1
ONI IAmb IAmb 18 20 19.7
comp=Z,104nm,1.3s
**LOF Lofoten 73.78 341** *e*P P 18 20 17.3 +1.2
**FAUS Fauske 73.79 340** *e*P P 18 20 16.8 +0.7
**NEY Neytrino 73.92 311** ⇑*i*P P 18 20 19.4 +1.8
NEY pmax pmax
comp=Z,16nm,1.5s
**GNI Garni 73.94 307** *d i*P P 18 20 19.1 +1.3
GNI pmax pmax
comp=Z,180nm,1.4s
**GNI Garni 73.94 307** P P 18 20 18.7 +0.9
GNI IAmb IAmb 18 20 21.2
comp=Z,229nm,1.4s
**GNI Garni 73.94 307** P P 18 20 18.8 +1.1
**GNI Garni 73.94 307** P P 18 20 18.9 +1.1
**E04D Cinebar 74.13 45** P P 18 20 20.5 +2.0
baz=297
**MZWR Madinat Zayed 74.19 288** P P 18 20 18.9 -0.4
**BGD Bogdanovka 74.22 309** P P 18 20 20.6 +1.2
**AKH Akhalkalaki 74.23 309** ⇓P P 18 20 20.6 +1.2
**AKH Akhalkalaki 74.23 309** P P 18 20 20.6 +1.2
**CHVG Ch'k'valeri 74.57 311** ⇑P P 18 20 22.3 +1.2
**CHVG Ch'k'valeri 74.57 311** P P 18 20 22.3 +1.2
**DBQ Daneborg 74.69 354** *i*P P 18 20 19.8 -1.4
**KARS Kars 74.86 308** P P 18 20 25.2 +2.2
KARS pmax pmax
comp=Z,218nm,1.4s
**GHWR Ruwais 74.92 289** P P 18 20 23.0 -0.4
**I03D Drain, OR 74.96 48** P P 18 20 25.4 +2.2
baz=298
**H04D Lebanon 74.96 47** P P 18 20 25.3 +2.0
baz=298
**KONS Konsvik 75.02 340** *e*P P 18 20 24.6 +1.4
**VSU Vasula 75.08 330** *i*P P 18 20 24.4 +0.7
VSU pmax pmax
comp=Z,105nm,0.7s
**VSU Vasula 75.08 330** *e*P P 18 20 24.3 +0.7
**STOK Stokkvaagen 75.16 340** *e*P P 18 20 24.6 +0.7
**KUZ Kuaotunu 75.21 150** P P 18 20 25.9 +1.4
**K02D Willamette Mer 75.21 49** P P 18 20 26.3 +1.4
baz=298
**B08A Colville Reser 75.22 42** P P 18 20 25.4 +0.7
B08A IAmb IAmb 18 22 01.7
comp=Z,150nm,1.2s
**KHOR Al-Khor Airpor 75.28 291** P P 18 20 24.7 -0.7
**DBO Dodson Butte 75.29 49** P P 18 20 26.4 +1.1
DBO IAmb IAmb 18 21 15.3
comp=Z,217nm,2.0s
**SHAO Shalim 75.33 282** P P 18 20 25.9 +0.1
SNR=7.7
**SHAO Shalim 75.33 282** *i*P P 18 20 25.7 -0.1
SNR=31
**BATM Batumi 75.34 310** ⇓P P 18 20 26.0 +0.4
**BATM Batumi 75.34 310** P P 18 20 25.9 +0.4
**L02E Cave Junction 75.50 50** P P 18 20 28.1 +1.7
baz=298
**I04A Tendick Farm, 75.51 48** P P 18 20 28.0 +1.5
baz=298,SNR=7.1
**SHMA Al-Shehemyia 75.62 292** P P 18 20 26.9 -0.4
**SOC Sochi 75.71 312** *e*P P 18 20 25.8 -1.7
SOC *e**PP **pP** 18 21 58.7 +0.1
SOC *e**SP **sP** 18 22 45.8 +3.4
SOC *e* 18 23 20.5
SOC *e*PPP PPP 18 25 11.3
SOC *e*S S 18 29 31.9 -2.0
SOC *e* 18 29 54.9
SOC pmax pmax
comp=Z,103nm,0.7s
**SLWR Sila 75.84 290** P P 18 20 28.3 -0.3
**TRNA Turayna 75.92 291** P P 18 20 28.4 -0.6
**GEVA Gevas 75.93 306** P P 18 20 29.8 +0.7
GEVA IAmb IAmb 18 20 31.9
comp=Z,170nm,1.4s
**I05D Terrebonne, OR 75.93 47** P P 18 20 30.3 +1.5
baz=299
**TOZ Tahuroa Road 75.95 151** P P 18 20 30.3 +1.7
**J04D Umpqua Nationa 75.97 48** P P 18 20 31.1 +1.8
baz=298,SNR=7.4
**DMTO DMTO 76.04 282** P P 18 20 29.6 -0.2
SNR=8.6
**HAWA Hanford 76.05 44** P P 18 20 28.0 -1.4
HAWA IAmb IAmb 18 22 06.9
comp=Z,141nm,1.4s
**D08A Wollman Farm, 76.09 43** P P 18 20 30.2 +0.6
D08A IAmb IAmb 18 22 06.2
comp=Z,84nm,1.1s
**MTSE Matsula 76.19 331** *e*P P 18 20 30.8 +1.0
**KMRZ Kaimai 76.23 150** P P 18 20 33.0 +2.7
**TGRZ Tauranga 76.27 150** P P 18 20 32.5 +2.0

**YBH Yreka Blue Hor 76.29 50** P **P** **18 20 31.6 +0.7**
comp=Z,14nm,0.9s,baz=346,slow=3.1,SNR=14
YBH pP **pP** **18 22 02.8 -0.3**
baz=299,slow=4.0
**DOK Doka 76.31 284** P **P** **18 20 30.9 -0.4**
SNR=14
**L04D Klamath Falls 76.33 49** P **P** **18 20 32.7 +1.5**
baz=298,SNR=7.2
**HIZ Hauiti 76.34 152** P **P** **18 20 32.5 +1.6**
**HIZ Hauiti 76.34 152** P **P** **18 20 32.6 +1.7**
**M02C Callahan 76.36 50** P **P** **18 20 32.5 +1.2**
**M02C Callahan 76.36 50** P **P** **18 20 33.2 +1.9**
baz=298,SNR=6.8
**PINE Pine Mountain 76.45 47** P **P** **18 20 33.4 +1.5**
PINE lAmb lAmb 18 22 10.0
comp=Z,215nm,1.2s
**TLZ Tolley Road 76.47 151** P **P** **18 20 33.5 +1.8**
**K04D Chiloquin, OR 76.49 48** P **P** **18 20 34.0 +2.0**
baz=299,SNR=5.7
**OPRZ Ohinepanea 76.49 150** P **P** **18 20 33.3 +1.6**
**J05D Fort Rock, OR 76.51 48** P **P** **18 20 34.0 +1.8**
baz=299,SNR=17
**KARZ Kaharoa 76.51 150** P **P** **18 20 33.8 +2.0**
**GURO Guroymak-BITLI 76.53 307** P **P** **18 20 33.6 +1.2**
**NEW Newport 76.54 42** P **P** **18 20 33.0 +0.9**
NEW pmax pmax
comp=Z,179nm,1.6s
**NEW Newport 76.54 42** P **P** **18 20 33.0 +0.9**
NEW lAmb lAmb 18 22 09.5
comp=Z,179nm,1.6s
**NEW Newport 76.54 42** P **P** **18 20 33.1 +1.0**
baz=300,SNR=25
**OMRZ Omania 76.63 150** P **P** **18 20 34.1 +1.6**
**UPNV Upernavik 76.65 5** *i* P **P** **18 20 30.6 -1.5**
**N02D Trinity Center 76.66 50** P **P** **18 20 34.8 +1.8**
baz=298,SNR=8.9
**KHEZ Kahui Hut 76.67 153** P **P** **18 20 35.2 +2.4**
**GRRZ Galatos Road 76.73 151** P **P** **18 20 34.6 +1.5**
**NSS Namsos 76.73 339** *e*P **P** **18 20 33.3 +0.5**
**SIRT Sirnak 76.74 306** P **P** **18 20 32.9 -0.6**
**RBK Rabkut 76.76 283** P **P** **18 20 33.4 -0.5**
SNR=15
**MNK Minsk 76.77 326** *i* P **P** **18 20 32.1 -1.1**
MNK *i* *PP **pwP** **18 22 09.3 -0.7**
MNK *i* 18 23 30.3
MNK *i* PPP PPP 18 25 20.0
MNK *i* S **S** **18 29 43.8 -1.1**
MNK *i* SS **SS** **18 34 51.4 +0.7**
MNK *i* SSS SSS 18 38 18.1
MNK pmax pmax
comp=N,26nm,1.2s
MNK pmax pmax
comp=E,7.0nm,1.2s
MNK pmax pmax
comp=Z,94nm,1.2s
MNK MLR MLR
comp=Z,1µm,18.0s
MNK MLR MLR
comp=E,138nm,18.0s
MNK MLR MLR
comp=N,432nm,15.0s
**MNK Minsk 76.77 326** *i* P **P** **18 20 32.1 -1.1**
comp=E,7.0nm,1.2s
MNK *i* P **P** **18 20 32.1 -1.1**
comp=N,26nm,1.2s
MNK *i* P **P** **18 20 32.1 -1.1**
comp=Z,94nm,1.2s,baz=56
MNK *i* pP **pwP** **18 22 09.3 -0.7**
MNK *i* PP **PP** **18 23 30.3 -1.9**
MNK *i* PPP PPP 18 25 20.0
MNK *i* S **S** **18 29 43.9 -1.1**
MNK *i* sS **sS** **18 32 30.5 0.0**
MNK *i* SS **SS** **18 34 51.5 +0.7**
MNK *i* SSS SSS 18 38 18.2
MNK *i* LR LR 18 52 19.3
MNK *i* LRM MLR 18 57 28.6
comp=Z,1µm,18.1s
MNK *i* LRM MLR 18 57 31.7
comp=E,138nm,18.1s
MNK *i* LRM MLR 18 57 49.5
comp=N,432nm,14.6s
**TARZ Mount Tarawera 76.80 150** P **P** **18 20 36.6 +3.1**
**VRZ Vera Road 76.82 152** P **P** **18 20 35.0 +1.5**
**HRRZ Handcock Road 76.83 151** P **P** **18 20 34.3 +0.6**
**M04C Macdoel 76.84 49** P **P** **18 20 35.6 +1.6**
baz=299,SNR=8.2
**IDID Didziasalis 76.86 327** *e*P **P** **18 20 34.7 +1.0**
**WATZ Wairara 76.87 151** P **P** **18 20 35.0 +1.2**
**KOPT Kop Dagi 76.89 309** P **P** **18 20 36.2 +1.7**
KOPT lAmb lAmb 18 20 37.9
comp=Z,121nm,1.4s
**KTUT Trabzon 76.91 310** ⇑P **P** **18 20 34.9 +0.6**
**WHFO Wadi Hawf 76.94 283** P **P** **18 20 33.9 -0.9**
SNR=8.4
**WDC Whiskeytown Da 76.95 51** P **P** **18 20 35.6 +1.1**
WDC pmax pmax
comp=Z,37nm,1.3s
**WDC Whiskeytown Da 76.95 51** P **P** **18 20 35.6 +1.1**
**HAZ Te Kaha 76.96 149** P **P** **18 20 33.9 -0.3**
**PRRZ Plateau Road 76.97 151** P **P** **18 20 35.3 +0.9**
**K05A Summer Lake 77.00 48** P **P** **18 20 36.3 +1.4**
**RATZ Rangitukua 77.02 151** P **P** **18 20 36.1 +1.4**
**MXZ Matakaoa Point 77.03 149** P **P** **18 20 34.5 -0.2**
**TWVZ Taurewa 77.05 151** P **P** **18 20 36.3 +1.4**
**NACGM Naroch 77.07 327** *i* P **P** **18 20 35.8 +1.0**
**KATZ Kakaramea 77.08 151** P **P** **18 20 36.8 +1.7**
**URZ Urewera 77.08 150** S **S** **18 29 46.4 -2.1**
comp=Z,8.3nm,0.9s,baz=360,slow=19,SNR=2.1
**URZ Urewera 77.08 150** P **P** **18 20 34.2 -0.7**
URZ lAmb lAmb 18 20 35.4
comp=Z,222nm,1.2s
**URZ Urewera 77.08 150** P **P** **18 20 34.6 -0.4**
**IIGN Ignalina 77.08 327** *e*P **P** **18 20 35.7 +0.8**
**RUGZ Raukumara Rang 77.08 149** P **P** **18 20 34.2 -0.9**
**RITZ Rihia Road 77.15 151** P **P** **18 20 36.8 +1.4**
**WTVZ West Tongariro 77.16 151** P **P** **18 20 36.5 +1.0**
**NTVZ North Tongarir 77.18 151** P **P** **18 20 36.6 +1.0**
**NNVZ North Ngauruho 77.18 151** P **P** **18 20 36.6 +0.9**
**PKGZ Pakihiroa 77.20 149** P **P** **18 20 35.6 -0.1**
**PKVZ Pokaka 77.20 152** P **P** **18 20 36.6 +0.9**
**TMVZ Te Maari 77.20 151** P **P** **18 20 36.8 +1.0**
**NGZ Ngauruhoe 77.21 151** P **P** **18 20 36.7 +0.8**
**ETVZ East Tongariro 77.22 151** P **P** **18 20 36.8 +0.9**
**OTVZ Oturere 77.23 151** P **P** **18 20 36.8 +0.9**
**SNVZ South Ngauruho 77.24 151** P **P** **18 20 37.0 +1.0**
**FWVZ Far West T-bar 77.26 152** P **P** **18 20 36.8 +0.6**
**WMGZ Waiomatatini S 77.29 149** P **P** **18 20 36.6 +0.5**
**TRVZ Turoa 77.29 152** P **P** **18 20 37.2 +0.8**
**WHVZ Whangaehu Hut 77.30 151** P **P** **18 20 37.3 +0.9**
**TUVZ Tukino 77.31 151** P **P** **18 20 37.4 +1.0**
**RTZ Ruatahuna 77.32 150** P **P** **18 20 35.9 -0.4**
**MWZ Matawai 77.32 150** P **P** **18 20 35.8 -0.5**
**MTVZ Mangateitei 77.33 152** P **P** **18 20 37.3 +0.9**
**WNVZ Wahianoa 77.34 152** P **P** **18 20 37.4 +0.8**
**SUMG Summit 77.34 359** P **P** **18 20 37.7 +1.2**
SUMG pmax pmax
comp=Z,148nm,1.2s
**SUMG Summit 77.34 359** *i* P **P** **18 20 37.0 +0.5**
**SUMG Summit 77.34 359** P **P** **18 20 37.6 +1.2**
SUMG lAmb lAmb 18 22 12.8
comp=Z,148nm,1.2s
**RAGZ Rawiri 77.41 150** P **P** **18 20 36.8 -0.1**
**QRZ Quartz Range 77.42 154** P **P** **18 20 37.2 +0.5**
QRZ lAmb lAmb 18 20 38.4
comp=Z,118nm,0.9s
**PUZ Puketiti 77.43 149** P **P** **18 20 36.7 -0.2**
**WAZ Wanganui 77.45 152** P **P** **18 20 38.1 +1.1**
**MTHZ Maungataniwha 77.46 150** P **P** **18 20 37.2 +0.1**
**MOVZ Moawhango 77.47 151** P **P** **18 20 37.4 +0.3**
**SLIT Slitere, Latvi 77.49 330** *e*P **P** **18 20 37.5 +0.5**
**BKZ Black Stump Fm 77.57 151** P **P** **18 20 37.4 -0.3**
**BKZ Black Stump Fm 77.57 151** P **P** **18 20 37.6 -0.1**
**ABTO Aybut 77.60 283** P **P** **18 20 38.0 -0.4**
SNR=11
**SNGZ Shannon Statio 77.61 150** P **P** **18 20 38.1 +0.1**
**NMHZ Naumai 77.65 151** P **P** **18 20 39.0 +0.8**
**BHHZ Black Hill Sta 77.67 151** P **P** **18 20 38.3 +0.1**
**RIGZ Rimuhau 77.73 150** P **P** **18 20 38.9 +0.3**
**CNGZ Carnagh Statio 77.75 149** P **P** **18 20 38.3 -0.3**
**KWHZ Kaweka Forest 77.76 151** P **P** **18 20 39.2 +0.4**
**MOD Modoc Plateau 77.78 49** P **P** **18 20 39.5 +0.3**
**ARHZ Aropaoanui 77.87 151** P **P** **18 20 39.9 +0.6**
**MCHZ McNeill Hill 77.89 151** P **P** **18 20 40.7 +1.3**

**KRHZ Kereru 77.92 151** P **P** **18 20 39.5 -0.1**
**WALA Waterton Lakes 77.94 40** P **P** **18 20 40.8 +0.9**
WALA lAmb lAmb 18 22 26.6
comp=Z,42nm,0.8s
**KNZ Kokohu 77.96 150** P **P** **18 20 39.3 -0.4**
**UPP Uppsala 77.97 334** *e*P **P** **18 20 40.4 +0.8**
**PRGZ Paritu Road 77.97 150** P **P** **18 20 40.5 +0.7**
**MARD Mardin 77.99 306** P **P** **18 20 41.1 +0.8**
MARD lAmb lAmb 18 20 42.4
comp=Z,127nm,0.7s
**PABE Paberze 78.03 328** P **P** **18 20 40.8 +0.8**
PABE lAmb lAmb 18 20 41.8
comp=Z,60nm,0.8s
**PABE Paberze 78.03 328** *e*P **P** **18 20 40.8 +0.8**
**NNZ Nelson 78.08 154** P **P** **18 20 40.2 -0.1**
**PNHZ Pukenui 78.08 151** P **P** **18 20 40.6 +0.1**
**BMO Blue Mountains 78.18 45** P **P** **18 20 41.7 +0.5**
BMO pmax pmax
comp=Z,115nm,1.2s
**BMO Blue Mountains 78.18 45** P **P** **18 20 41.7 +0.5**
BMO lAmb lAmb 18 22 18.5
comp=Z,115nm,1.2s
**TBLU Trondheim 78.18 339** *e*P **P** **18 20 40.2 -0.5**
**AKASG Malin Array Be 78.21 322** P **P** **18 20 40.4 -0.7**
comp=Z,17nm,0.3s,baz=51,slow=5.6,SNR=203
AKASG pP **pP** **18 22 13.3 +0.4**
comp=Z,9.1nm,0.8s,baz=49,slow=5.9,SNR=2.5
AKASG S **S** **18 29 57.3 -3.1**
comp=Z,3.7nm,0.9s,baz=51,slow=10,SNR=11
AKASG PKKPbc **PKKPbc** **18 39 33.4 -2.7**
comp=Z,2.0nm,0.4s,baz=248,slow=2.4,SNR=24
**AKBB Malin Array Si 78.21 322** P **P** **18 20 40.6 -0.5**
AKBB pmax pmax
comp=Z,71nm,0.9s
**AKBB Malin Array Si 78.21 322** P **P** **18 20 40.6 -0.5**
AKBB lAmb lAmb 18 20 42.3
comp=Z,71nm,0.8s
**J08A Circle Bar Ran 78.22 47** P **P** **18 20 42.5 +1.0**
J08A lAmb lAmb 18 22 19.8
comp=Z,300nm,1.7s
**KAHZ Kahuranaki 78.26 151** P **P** **18 20 42.1 +0.7**
**WPHZ Waipukurau 78.31 151** P **P** **18 20 41.7 +0.1**
**POWZ Post Office Ro 78.31 152** P **P** **18 20 41.9 +0.3**
**THZ Tophouse 78.37 155** P **P** **18 20 41.9 -0.1**
THZ lAmb lAmb 18 20 42.4
comp=Z,136nm,1.2s
**DVHZ Dannevirke 78.39 152** P **P** **18 20 42.1 0.0**
**JTMT Jette 78.44 41** P **P** **18 20 43.6 +0.9**
JTMT lAmb lAmb 18 22 20.0
comp=Z,62nm,1.0s
**PXZ Pawanui 78.45 151** P **P** **18 20 43.2 +0.9**
**MRZ Mangatainoka R 78.46 152** P **P** **18 20 42.4 0.0**
**TUWZ Tuamarina 78.47 154** P **P** **18 20 42.0 -0.5**
**SCO Scoresbysund 78.51 353** P **P** **18 20 44.2 +1.9**
SCO pmax pmax
comp=Z,62nm,1.1s
**SCO Scoresbysund 78.51 353** *i* P **P** **18 20 42.5 +0.2**
SCO lAmb lAmb 18 20 44.1
comp=Z,11nm,0.7s
**SCO Scoresbysund 78.51 353** P **P** **18 20 44.2 +1.9**
SCO lAmb lAmb 18 22 21.1
comp=Z,62nm,1.1s
**SIM Simferopol' 78.52 315** *e*P **P** **18 20 42.5 -0.4**
SIM *e**PP **pwP** **18 22 17.6 -2.7**
SIM *e*PPP PPP 18 25 38.0
SIM pmax pmax
comp=Z,121nm,0.8s
**PRWZ Pori Road 78.53 152** P **P** **18 20 43.1 +0.3**
**PRHZ Porangahau 78.56 151** P **P** **18 20 43.5 +0.6**
**PBUR Paburge 78.64 329** *e*P **P** **18 20 43.9 +0.6**
**ANWZ Angora Road 78.65 152** P **P** **18 20 43.8 +0.3**
**SNZO South Karori 78.67 153** P **P** **18 20 42.7 -0.8**
SNZO lAmb lAmb 18 20 43.9
comp=Z,114nm,0.8s
**TIWZ Tintock 78.68 152** P **P** **18 20 43.9 +0.2**
**BSWZ Blackbirch Sta 78.69 154** P **P** **18 20 42.7 -1.0**
**BFZ Birch Farm 78.75 152** P **P** **18 20 44.1 +0.1**
**PLID Pearl Lake 78.85 44** P **P** **18 20 45.4 +0.4**
**MSO Missoula 79.13 42** P **P** **18 20 46.7 +0.4**
baz=303,SNR=8.4
**VIKU Vikbolandet 79.22 333** *e*P **P** **18 20 46.6 +0.3**
**HFS Hagfors 79.24 335** PKKPbc PKKPbc 18 39 31.4 -2.8
comp=Z,3.2nm,0.4s,baz=197,slow=3.1,SNR=28
**SUW Suwalki 79.30 327** *e*P **P** **18 20 46.7 -0.1**
SUW *e*S **S** **18 30 10.4 -1.2**
**SUW Suwalki 79.30 327** *e*P **P** **18 20 47.0 +0.1**
**RUBR Rubicon Trail 79.31 51** P **P** **18 20 47.7 +0.2**
RUBR lAmb lAmb 18 22 25.1
comp=Z,52nm,0.8s
**KVT Kavak 79.31 311** P **P** **18 20 48.2 +0.9**
**SNOP Sinop 79.36 313** P **P** **18 20 48.2 +0.7**
SNOP lAmb lAmb 18 20 49.3
comp=Z,79nm,0.7s
**OXZ Oxford 79.42 156** P **P** **18 20 47.2 -0.3**
OXZ lAmb lAmb 18 20 48.6
comp=Z,106nm,0.6s
**NB201 NORSAR Array S 79.43 337** P **P** **18 20 47.4 -0.1**
**NC204 NORSAR Array S 79.45 337** P **P** **18 20 48.0 +0.4**
NC204 lAmb lAmb 18 20 49.7
comp=Z,93nm,0.9s
**SOCY Socotra 79.46 278** P **P** **18 20 47.0 -1.5**
**SOCY Socotra 79.46 278** P **P** **18 20 47.2 -1.4**
SNR=5.9
**NB2 NORSAR Subarra 79.47 337** P **P** **18 20 47.1 -0.6**
comp=Z,26nm,0.7s,baz=43,slow=5.3
**NB2 NORSAR Subarra 79.47 337** P **P** **18 20 47.1 -0.6**
baz=43,slow=5.3
**NOA NORSAR Array B 79.47 337** P **P** **18 20 47.2 -0.6**
comp=Z,22nm,0.8s,baz=45,slow=5.2,SNR=78
NOA pP **pP** **18 22 21.6 +1.7**
comp=Z,25nm,1.1s,baz=43,slow=5.5,SNR=4.5
NOA PP **PP** **18 23 53.4 -0.9**
comp=Z,5.9nm,0.8s,baz=42,slow=7.8,SNR=10.0
NOA S **S** **18 30 07.4 -5.8**
comp=Z,1.0nm,0.8s,baz=49,slow=10.0,SNR=3.5
NOA PKKPbc **PKKPbc** **18 39 32.7 -1.1**
comp=Z,0.4nm,0.6s,baz=202,slow=13,SNR=7.7
**PAHR Pah Rah Range 79.49 50** P **P** **18 20 48.7 +0.3**
**MOL Molde 79.52 339** *e*P **P** **18 20 48.5 +0.6**
**NC602 NORSAR Array S 79.57 337** *e*P **P** **18 20 47.9 -0.3**
**NORES NORESS Array B 79.57 337** P **P** **18 20 48.0 -0.2**
**CMB Columbia Colle 79.66 52** P **P** **18 20 50.1 +0.8**
CMB pmax pmax
comp=Z,41nm,0.9s
**CMB Columbia Colle 79.66 52** P **P** **18 20 50.1 +0.8**
**NAO01 NORSAR Array S 79.72 337** P **P** **18 20 49.5 +0.5**
NAO01 lAmb lAmb 18 20 50.2
comp=Z,74nm,1.1s
**AKN Aaknes 79.99 339** *e*P **P** **18 20 51.5 +1.1**
**SORM Soroca 80.12 320** ⇓P **P** **18 20 51.1 -0.3**
**SORM Soroca 80.12 320** ⇑P **PKKPbc** **18 39 31.2 -0.6**
**SORM Soroca 80.12 320** P **P** **18 20 51.0 -0.3**
**BZK Bozkurt 80.16 313** ⇓P **P** **18 20 52.2 +0.5**
**BZK Bozkurt 80.16 313** P **P** **18 20 52.5 +0.9**
**PURM Purcari 80.17 318** ⇑P **P** **18 20 52.7 +1.1**
**KLNR Kaliningrad 80.29 329** *i* P **P** **18 20 52.0 -0.1**
KLNR pmax pmax
comp=Z,43nm,0.9s
**OSL Oslo 80.43 336** *e*P **P** **18 20 53.5 +0.8**
**KIS Kishinev 80.51 319** *e*P **P** **18 20 53.0 -0.4**
comp=Z,50nm,0.5s
KIS *epP **pwP** **18 22 32.0 +1.1**
KIS *eS **S** **18 30 20.0 -4.4**
KIS LRM MLR 18 58 58.0
comp=Z,400nm,15.0s
**KIS Kishinev 80.51 319** *e*P **P** **18 20 53.0 -0.4**
KIS *e**PP **pwP** **18 22 32.0 +1.1**
KIS *eS **S** **18 30 20.0 -4.4**
KIS *e* 18 30 33.0
KIS pmax pmax
comp=Z,50nm,0.5s
KIS MLR MLR
comp=Z,400nm,15.0s
**MILM Milestii Mici 80.56 319** ⇑P **P** **18 20 53.7 0.0**
**MILM Milestii Mici 80.56 319** ⇑P **PKKPbc** **18 39 30.1 -0.7**
**MILM Milestii Mici 80.56 319** *e*P **P** **18 20 53.0 -0.7**
MILM *e**PP **pwP** **18 22 32.0 +0.8**
MILM *i*S **S** **18 30 20.0 -4.9**
MILM *i* 18 30 22.0
MILM pmax pmax
comp=Z,40nm,0.7s
MILM pmax pmax
comp=N,2µm,8.1s
MILM pmax pmax
comp=E,3µm,10.7s
MILM MLR MLR
comp=Z,700nm,14.0s
**FFC Flin Flon 80.56 31** P **P** **18 20 53.2 -0.3**
FFC pmax pmax
comp=Z,103nm,1.4s
**FFC Flin Flon 80.56 31** P **P** **18 20 53.2 -0.3**
FFC lAmb lAmb 18 22 41.8
comp=Z,103nm,1.4s
**BNN Bunyan 80.59 310** P **P** **18 20 54.5 +0.3**
**RYN Ryan 80.62 51** P **P** **18 20 54.8 +0.3**
**HLID Hailey 80.63 45** P **P** **18 20 55.9 +1.5**
baz=303,SNR=20
**SKAR Skarslia 80.70 338** *e*P **P** **18 20 55.2 +1.0**
**EGMT Eagleton 80.81 39** P **P** **18 20 56.1 +0.9**
baz=305,SNR=5.9
**ICESG Greenland Ices 80.86 359** *i* P **P** **18 20 55.4 +0.1**
ICESG lAmb lAmb 18 20 57.0
comp=Z,41nm,0.6s
**NVAR Mina Array Bea 80.87 51** P **P** **18 20 56.6 +0.9**
comp=Z,16nm,0.8s,baz=280,slow=5.5,SNR=74
NVAR pP **pP** **18 22 28.8 -0.4**
comp=Z,28nm,0.8s,baz=281,slow=4.8,SNR=8.4
NVAR PKKPbc **PKKPbc** **18 39 29.9 -0.3**
comp=Z,1.7nm,0.6s,baz=130,slow=1.9,SNR=11
**NVAR Mina Array Bea 80.87 51** P **P** **18 20 57.1 +1.3**
**MLAC Mammoth, Mammo 80.92 52** P **P** **18 20 58.3 +2.1**
baz=301
**NV11 Mina Array Sit 80.97 51** P **P** **18 20 55.8 -0.5**
**FCC Fort Churchill 80.99 25** P **P** **18 20 55.8 +0.1**
FCC pmax pmax
comp=Z,93nm,1.4s
**FCC Fort Churchill 80.99 25** P **P** **18 20 55.8 +0.1**
FCC lAmb lAmb 18 22 44.5
comp=Z,93nm,1.4s
**FOO Floro 81.03 340** *e*P **P** **18 20 56.8 +1.0**
**KONO Kongsberg 81.03 336** P **P** **18 20 55.6 -0.3**
KONO pmax pmax
comp=Z,17nm,0.9s
**KONO Kongsberg 81.03 336** P **P** **18 20 55.6 -0.3**
**KONO Kongsberg 81.03 336** *e*P **P** **18 20 56.4 +0.5**
**RAYN Ar Rayn 81.09 292** P **P** **18 20 57.5 +0.5**
RAYN pmax pmax
comp=Z,146nm,0.8s
**RAYN Ar Rayn 81.09 292** P **P** **18 20 57.5 +0.5**
**RAYN Ar Rayn 81.09 292** P **P** **18 20 57.1 +0.2**
**RAYN Ar Rayn 81.09 292** *i* P **P** **18 20 57.2 +0.2**
SNR=179
**IAS Iasi 81.10 320** ⇑P **P** **18 20 57.0 +0.4**
**IAS Iasi 81.10 320** ⇑P **PKKPbc** **18 39 28.6 -0.9**
**IAS Iasi 81.10 320** P **P** **18 20 56.9 +0.4**
**BOZ Bozeman (W) 81.15 42** P **P** **18 20 57.5 +0.4**
BOZ pmax pmax
comp=Z,54nm,1.1s
**BOZ Bozeman (W) 81.15 42** P **P** **18 20 57.5 +0.4**
BOZ lAmb lAmb 18 22 35.4
comp=Z,54nm,1.1s
**BOZ Bozeman (W) 81.15 42** P **P** **18 20 58.3 +1.2**
baz=304,SNR=18
**VASR Vaslui 81.29 319** ⇓P **P** **18 20 58.2 +0.7**
**SMMC Simmler 81.32 54** P **P** **18 20 59.9 +1.9**
baz=301
**LVV L'vov 81.44 323** *e*P **P** **18 20 58.1 -0.1**
LVV *e*PP **pP** **18 22 32.4 +1.5**
LVV *eS **S** **18 30 32.2 -1.6**
LVV *ePS 18 31 20.4
LVV *eSS **SS** **18 36 00.3 +0.2**
LVV *eSSS SSS 18 39 31.8
LVV pmax pmax
comp=Z,200nm,1.5s
LVV MLR MLR
comp=E,800nm,16.0s
LVV MLR MLR
comp=N,400nm,15.0s
LVV MLR MLR
comp=Z,900nm,16.0s
**SOEG Soedalen 81.48 356** *i* P **P** **18 20 57.5 -0.6**
**SUE Sulen 81.54 339** *e*P **P** **18 20 59.7 +1.3**
**TLCR 81.54 318** ⇓P **P** **18 21 00.3 +1.5**
**TLCR 81.54 318** P **P** **18 21 00.3 +1.5**
**BR131 Keskin Array S 81.58 311** P **P** **18 20 59.5 +0.1**
BR131 pmax pmax
comp=Z,163nm,0.8s
**BR131 Keskin Array S 81.58 311** P **P** **18 20 59.5 +0.1**
**BR131 Keskin Array S 81.58 311** P **P** **18 20 59.8 +0.4**
SNR=63
**BRTR Keskin Array B 81.58 311** P **P** **18 20 59.6 +0.3**
comp=Z,87nm,0.7s,baz=101,slow=3.6,SNR=296
BRTR pP **pP** **18 22 32.8 +0.7**
comp=Z,20nm,0.9s,baz=104,slow=4.2,SNR=7.3
BRTR S **S** **18 30 37.8 +1.8**
comp=Z,0.5nm,0.7s,baz=130,slow=17,SNR=2.0
BRTR PKKPbc **PKKPbc** **18 39 28.4 -0.1**
comp=Z,4.2nm,0.4s,baz=220,slow=3.3,SNR=51
**BRTR Keskin Array B 81.58 311** P **P** **18 20 59.8 +0.4**
**VLDR Vladesti 81.59 319** ⇓P **P** **18 20 59.8 +0.7**
**VLDR Vladesti 81.59 319** ⇓P **PKKPbc** **18 39 28.7 +0.2**
**BIR Birlad 81.60 319** ⇑P **P** **18 21 00.4 +1.3**
**BIR Birlad 81.60 319** P **P** **18 21 00.4 +1.3**
**TIN Tinemaha, Big 81.64 52** P **P** **18 21 01.1 +1.4**
baz=302
**ELK Elko 81.64 48** P **P** **18 21 00.2 +0.5**
comp=Z,11nm,1.0s,baz=319,slow=3.7,SNR=22
ELK S **S** **18 30 37.0 +0.3**
comp=Z,0.4nm,0.5s,baz=116,slow=20,SNR=9.6
ELK PKKPbc **PKKPbc** **18 39 28.5 0.0**
comp=Z,2.8nm,0.5s,baz=177,slow=3.0,SNR=12
**ELK Elko 81.64 48** P **P** **18 21 00.5 +0.7**
**PKM Mcpherson Peak 81.66 55** P **P** **18 21 01.9 +1.9**
baz=301
**VES Vestal, Richgr 81.68 53** P **P** **18 21 00.3 +0.5**
baz=301,SNR=11
**VARL Varlezi 81.69 319** ⇓P **P** **18 20 59.9 +0.3**
**DEL Delary 81.73 333** *e*P **P** **18 21 00.1 +0.5**
**SCTR Scanteiesti 81.73 319** ⇓P **P** **18 21 01.1 +1.3**
**PRAR RASCA 81.74 321** ⇓P **P** **18 20 59.8 -0.1**
**JURR Jurilovca 81.74 317** ⇑P **P** **18 21 00.6 +0.8**
**TATR Tatarca 81.75 318** ⇑P **P** **18 21 00.8 +0.9**
**BEL Belsk 81.79 326** *e*P **P** **18 21 00.2 +0.2**
BEL *eS **S** **18 30 37.5 +0.3**
**BEL Belsk 81.79 326** P **P** **18 21 01.5 +1.5**
BEL pmax pmax
comp=Z,235nm,0.8s
**ODD1 Odda 81.83 338** *e*P **P** **18 21 01.0 +0.9**
**GHRR 81.84 319** ⇓P **P** **18 21 01.4 +1.0**
**ASK Askoy 81.85 339** *e*P **P** **18 21 00.2 +0.1**
**BER Bergen 81.88 339** *e*P **P** **18 21 00.7 +0.5**
**SLCR Slobozia Conac 81.91 319** ⇓P **P** **18 21 01.5 +0.8**
**SCHL Schela 81.93 318** ⇓P **P** **18 21 02.2 +1.4**
**CFR Carcaliu 81.94 318** ⇑P **P** **18 21 00.9 0.0**
**CFR Carcaliu 81.94 318** ⇓P **PKKPbc** **18 39 27.2 -0.4**
**CFR Carcaliu 81.94 318** P **P** **18 21 00.8 0.0**
**IZVR Izvoarele 81.94 318** ⇑P **P** **18 21 01.9 +1.0**
**TPGR Topolog 81.96 318** ⇓P **P** **18 21 01.7 +0.6**
**TESR Tescani 82.01 320** ⇓P **P** **18 21 01.5 +0.2**
**TESR Tescani 82.01 320** ⇑P **PKKPbc** **18 39 26.4 -1.2**
**ANTO Ankara 82.06 312** P **P** **18 21 02.5 +0.8**
ANTO pmax pmax
comp=Z,137nm,0.8s
**ANTO Ankara 82.06 312** P **P** **18 21 02.5 +0.8**
**CWC Cottonwood Cre 82.06 52** P **P** **18 21 02.6 +0.7**
baz=302
**PANC Panciu 82.10 319** ⇑P **P** **18 21 02.8 +1.1**
**KDZE Karadeniz Ereo 82.12 313** ⇑P **P** **18 21 02.2 +0.3**
**BUR08 Bucovina Ar. S 82.13 321** P **P** **18 21 02.6 +0.6**
BUR08 lAmb lAmb 18 21 04.0
comp=Z,46nm,0.9s
**BUR01 Bucovina Ar. S 82.14 321** ⇑P **P** **18 21 02.4 +0.3**
**BURAR Bucovina Array 82.14 321** ⇓P **PKKPbc** **18 39 28.0 +0.5**
**BURAR Bucovina Array 82.14 321** P **P** **18 21 02.6 +0.5**
BURAR lAmb lAmb 18 21 04.4
comp=Z,66nm,0.9s
**TIRR Tirgusor 82.19 317** ⇑P **P** **18 21 02.9 +0.7**
**TIRR Tirgusor 82.19 317** ⇑P **PKKPbc** **18 39 26.9 -0.2**
**TIRR Tirgusor 82.19 317** P **P** **18 21 02.1 -0.1**
TIRR pmax pmax
comp=Z,203nm,1.0s
**TIRR Tirgusor 82.19 317** P **P** **18 21 02.1 -0.1**
**ISA Isabella, Lake 82.20 53** P **P** **18 21 02.6 0.0**
baz=302,SNR=7.5
**ODBI Odobesti 82.22 319** ⇓P **P** **18 21 03.2 +0.9**
**KWP Kalwaria Pacla 82.23 324** *e*P **P** **18 21 03.7 +1.4**
KWP *epP **pwP** **18 22 42.8 +2.1**
KWP *eS **S** **18 30 40.9 -0.9**

KWP Kalwaria Pacla 82.23 324 P P 18 21 02.8 +0.5
ARVC Arvin 82.23 54 P P 18 21 03.8 +1.2
baz=302
BSD Bornholm Skovb 82.24 331 eP P 18 21 02.6 +0.4
BLS5 Blasjo 82.26 338 eP P 18 21 03.3 +1.0
EFOR EFORIE 82.28 317 ⇑P P 18 21 03.8 +1.2
HARR Harsova 82.34 318 ⇓P P 18 21 03.4 +0.5
HARR Harsova 82.34 318 ⇓P PKKPbc 18 39 26.1 -0.6
HARR Harsova 82.34 318 P P 18 21 03.4 +0.5
VRI Vrincioaia 82.34 319 ⇑P P 18 21 04.0 +1.0
VRI Vrincioaia 82.34 319 ⇓P PKKPbc 18 39 26.7 -0.1
VRI Vrincioaia 82.34 319 P P 18 21 04.0 +1.0
MFTR Murfatlar 82.35 317 ⇓P P 18 21 03.4 +0.8
TLBR Topalu 82.36 318 ⇑P P 18 21 03.9 +0.8
PLOR Plostina 82.40 319 ⇓P P 18 21 03.9 +0.6
PLOR Plostina 82.40 319 ⇑P PKKPbc 18 39 25.7 -1.1
PLOR Plostina 82.40 319 P P 18 21 03.9 +0.6
HOMB Homborsund 82.44 336 eP P 18 21 03.7 +0.6
H17A Grant Village 82.45 43 P P 18 21 07.2 +3.3
baz=305,SNR=40
GRER 82.49 319 ⇑P P 18 21 04.8 +1.1
GKP Gorka Klasztor 82.50 329 eP P 18 21 04.3 +0.7
GKP eS S 18 30 41.5 -2.8
GKP Gorka Klasztor 82.50 329 P P 18 21 05.3 +1.7
GKP Gorka Klasztor 82.50 329 eP P 18 21 04.7 +1.2
BISRR Bisoca 82.54 319 ⇑P P 18 21 04.8 +0.7
BISRR Bisoca 82.54 319 ⇓P PKKPbc 18 39 26.6 +0.2
COVR Voineasa-Covas 82.65 319 ⇑P P 18 21 04.9 +0.3
COVR Voineasa-Covas 82.65 319 ⇓P PKKPbc 18 39 22.3 -3.9
MPMC Manual Prospec 82.67 53 P P 18 21 05.7 +0.6
baz=302,SNR=21
SFJD Kangerlussuaq 82.71 4 P P 18 21 04.6 +0.2
comp=Z,15nm,0.7s,baz=0.7,slow=6.5,SNR=6.9
SFJD pP pP 18 22 37.3 -0.8
comp=Z,16nm,0.8s,baz=354,slow=6.7,SNR=4.4
SFJD PKKPbc PKKPbc 18 39 24.0 -2.7
comp=Z,6.3nm,0.5s,baz=135,slow=3.3,SNR=9.9
R11A Troy Canyon, C 82.72 50 P P 18 21 06.2 +0.9
R11A Troy Canyon, C 82.72 50 P P 18 21 06.1 +0.9
baz=303,SNR=40
AMRR Amara 82.73 318 ⇓P P 18 21 06.1 +1.1
OZUR 82.74 320 ⇓P P 18 21 06.1 +1.1
MDUB Mudurnu 82.75 313 P P 18 21 05.5 +0.2
ICOR Ion Corvin 82.75 317 ⇑P P 18 21 06.4 +1.4
ICOR Ion Corvin 82.75 317 ⇑P PKKPbc 18 39 26.4 +0.6
PGOR Pogoanele 82.76 318 ⇓P P 18 21 05.8 +0.7
PSN Preselentsi 82.77 317 P P 18 21 04.5 -0.7
RLMT Red Lodge 82.78 41 P P 18 21 06.8 +1.3
RLMT IAmb IAmb 18 22 44.1
comp=Z,134nm,1.4s
RLMT Red Lodge 82.78 41 P P 18 21 07.0 +1.5
baz=306,SNR=8.9
KALB Balgarevo 82.80 316 ⇓P P 18 21 04.9 -0.4
KMY Karmoy 82.82 338 eP P 18 21 06.2 +1.1
SNART Snartemo 82.83 337 eP P 18 21 05.3 +0.2
LRMC Laurel Mtn Rad 82.84 53 P P 18 21 06.6 +0.7
baz=302,SNR=16
NEHR Nehoiu 82.85 319 ⇑P P 18 21 06.4 +0.9
FURC Furnace Creek, 82.88 52 P P 18 21 07.2 +1.4
baz=302,SNR=18
ISR Istrita 82.89 319 ⇑P P 18 21 06.5 +0.6
ISR Istrita 82.89 319 P P 18 21 06.4 +0.6
HWQ Hawqa 82.91 306 eP P 18 21 06.1 -0.2
ARCR ARCALIA 82.93 321 ⇓P P 18 21 07.0 +1.1
ARCR ARCALIA 82.93 321 ⇑P PKKPbc 18 39 25.8 +0.3
EDW2 Edwards Air Fo 82.94 54 P P 18 21 07.4 +1.1
baz=302,SNR=19
MLR Muntele Rosu 83.01 319 ⇑P P 18 21 07.1 +0.6
MLR Muntele Rosu 83.01 319 ⇓P PKKPbc 18 39 22.6 -2.8
MLR Muntele Rosu 83.01 319 PKKPbc PKKPbc 18 39 22.9 -2.6
comp=Z,7.3nm,0.8s,baz=190,slow=5.3,SNR=11
MLR Muntele Rosu 83.01 319 P P 18 21 07.3 +0.8
MLR pmax pmax
comp=Z,46nm,0.9s
MLR Muntele Rosu 83.01 319 P P 18 21 07.3 +0.8
MLR IAmb IAmb 18 21 29.2
comp=Z,46nm,0.9s
BMR Baia Mare 83.03 322 ⇓P P 18 21 07.3 +0.9
BMR Baia Mare 83.03 322 P P 18 21 07.3 +0.9
TPNV Topopah Spring 83.03 51 P P 18 21 07.9 +1.0
TPNV pmax pmax
comp=Z,30nm,0.9s
TPNV Topopah Spring 83.03 51 P P 18 21 07.9 +1.0
TPNV Topopah Spring 83.03 51 P P 18 21 07.9 +1.0
baz=303,SNR=29
DECC Green Verdugo 83.03 54 P P 18 21 07.9 +1.2
baz=302
DOPR Dopca 83.03 320 ⇑P P 18 21 07.4 +0.8
UZH Uzhgorod 83.06 323 ⇑ iP P 18 21 06.2 -0.3
UZH i 18 22 39.4
UZH i S S 18 30 48.3 -1.8
UZH MLR MLR
comp=N,100nm,16.0s
UZH MLR MLR
comp=E,200nm,16.0s
UZH MLR MLR
comp=Z,100nm,16.0s
RASA Rasa 83.07 318 ⇑P P 18 21 07.8 +1.1
LEHL Lehliu 83.11 318 ⇑P P 18 21 08.1 +1.3
TRPA Tarpa 83.25 323 ⇓P PKKPbc 18 39 25.0 +0.2
OJC Ojcow 83.31 326 eP P 18 21 07.8 +0.1
OJC eS S 18 30 50.4 -2.2
OJC Ojcow 83.31 326 P P 18 21 08.5 +0.7
OJC pmax pmax
comp=Z,57nm,1.4s
SULR 83.31 318 ⇓P P 18 21 08.6 +0.8
BHL Bhannes 83.32 305 eP P 18 21 08.2 0.0
CRVS Cervenica-Dubn 83.32 324 eP P 18 21 08.4 +0.5
CRVS pmax pmax
comp=Z,177nm,1.6s
CRVS Cervenica-Dubn 83.32 324 eP P 18 21 08.4 +0.5
CRVS epP pwP 18 22 49.3 +3.5
RCY Rachaya 83.40 305 eP P 18 21 09.0 +0.2
DY2G Dye2 83.42 2 iP P 18 21 07.2 -1.0
CIS Catalina Islan 83.43 55 P P 18 21 09.2 +0.5
baz=302
DQRL Deir Qamar 83.48 305 eP P 18 21 09.4 +0.3
QRWL Qaraoun 83.48 305 eP P 18 21 09.2 +0.1
DUG Dugway, Tooele 83.49 47 P P 18 21 10.5 +1.4
baz=304,SNR=51
DGMT Dagmar 83.50 37 P P 18 21 09.3 +0.5
baz=309,SNR=6.0
INCR INCERC-Sediu C 83.51 318 ⇓P PKKPbc 18 39 30.1 +6.0
PRD Provadia 83.52 317 P P 18 21 09.0 +0.1
LAO LASA Array 83.54 39 P P 18 21 10.2 +1.1
baz=308
GSC Goldstone, Bar 83.54 53 P P 18 21 10.1 +0.7
baz=303,SNR=28
VOIR 83.54 320 ⇓P P 18 21 10.1 +0.9
VOIR 83.54 320 P P 18 21 10.0 +0.9
SHBL Chebaa 83.55 305 eP P 18 21 09.6 +0.1
BORA Eskisehir 83.55 313 P P 18 21 09.6 +0.3
BORA IAmb IAmb 18 21 10.7
comp=Z,252nm,1.7s
MUD Monsted U'grnd 83.55 334 iP P 18 21 08.3 -0.5
MUD IAmb IAmb 18 21 09.3
comp=Z,15nm,1.0s
CJR Cluj-Napoca 83.57 321 ⇑P PKKPbc 18 39 24.1 0.0
NIE Niedzica 83.58 325 eP P 18 21 10.4 +1.2
PMOR Pomariorio Ree 83.70 111 eP P 18 21 11.5 +1.3
comp=Z,176nm,1.2s
FRB Frobisher Bay 83.78 12 P P 18 21 09.8 0.0
comp=Z,25nm,0.4s,baz=330,slow=5.2,SNR=109
PPT Papeete 83.79 114 P P 18 21 11.2 +0.5
comp=Z,45nm,0.8s,baz=275,slow=12,SNR=3.2
PPT pP pP 18 22 44.8 +0.3
comp=Z,48nm,0.7s,baz=52,slow=13,SNR=3.6
PPT2 Papeete2 83.80 114 eP P 18 21 12.6 +1.8
comp=Z,94nm,1.2s
ARR Arges 83.82 320 ⇑P P 18 21 11.4 +0.9
ARR Arges 83.82 320 ⇓ 18 39 23.1
RAZG Razgrad 83.83 317 ⇑P P 18 21 10.6 0.0
PAE Paea 83.84 114 eP P 18 21 12.5 +1.7
comp=Z,12nm,1.2s
SOFL Sornfelli, Far 83.85 345 eP P 18 21 11.0 +0.7
TIAR Tiarei 83.96 114 eP P 18 21 13.0 +1.5
MMAI Mount Meron Ar 83.97 305 PKKPbc PKKPbc 18 39 23.1 +0.4
comp=Z,0.8nm,0.4s,baz=5.7,slow=3.4,SNR=7.5
DRGR 84.00 322 ⇓P PKKPbc 18 39 23.4 +0.2
BW06 Boulder Array 84.00 43 P P 18 21 12.3 +0.6
baz=306,SNR=5.2
PDAR Pinedale Array 84.00 43 P P 18 21 11.9 +0.2
comp=Z,13nm,0.9s,baz=318,slow=2.0,SNR=42
PDAR pP pP 18 22 45.0 -0.9
comp=Z,36nm,1.1s,baz=283,slow=2.6,SNR=11
PDAR PKKPbc PKKPbc 18 39 22.4 -0.9
comp=Z,0.7nm,0.4s,baz=122,slow=5.3,SNR=11
BBRC Big Bear Solar 84.02 54 P P 18 21 13.4 +1.4
baz=303,SNR=5.0
TUQ Turquoise Moun 84.07 52 P P 18 21 13.1 +1.0
baz=303
KECS Kecovo 84.09 324 epP pP 18 22 53.4 +8.2
HEC Hector,Ludlow 84.12 53 P P 18 21 13.0 +0.8
baz=303,SNR=35
HUMR Humele 84.13 319 ⇑P P 18 21 12.2 +0.2
LANS Liptovska Anna 84.17 325 eP P 18 21 13.7 +1.6
LANS pmax pmax
comp=Z,30nm,1.7s
LANS Liptovska Anna 84.17 325 eP P 18 21 13.7 +1.6
LANS epP pwP 18 22 53.7 +2.9
MURC Murrieta 84.18 54 P P 18 21 13.2 +0.7
baz=303,SNR=14
COPA Copaceanca 84.24 318 ⇑P P 18 21 12.4 -0.1
LOT Lotru 84.25 320 ⇓P P 18 21 12.7 0.0
ANGG Ammassalik, Gr 84.32 358 i P P 18 21 12.4 0.0
OKC Ostrava-Krasne 84.36 326 P P 18 21 14.2 +1.2
OKC Ostrava-Krasne 84.36 326 ex x 18 22 54.1
ISOG Isortoq, Green 84.41 359 i P P 18 21 11.9 -1.0
IZAB Izabela 84.42 324 eP P 18 21 14.3 +0.9
JMB Yambol 84.44 316 P P 18 21 13.0 -0.5
RUE Ruedersdorf 84.56 330 eP P 18 21 14.2 +0.3
KSP Ksiaz 84.57 327 eP P 18 21 14.0 0.0
KSP Ksiaz 84.57 327 P P 18 21 14.0 0.0
GMRC Granite Mounta 84.61 53 P P 18 21 15.5 +0.8
baz=303,SNR=31
109C Camp Elliot, M 84.63 55 P P 18 21 15.6 +0.9
baz=303
ISP Isparta 84.66 311 P P 18 21 15.4 +0.5
ISP pmax pmax
comp=Z,26nm,0.7s
PFO Pinyon Flats O 84.69 54 P P 18 21 15.5 +0.4
comp=Z,53nm,0.9s,baz=301,slow=4.2,SNR=60
PFO pP pP 18 22 49.3 -0.1
comp=Z,17nm,0.9s,baz=310,slow=5.2,SNR=4.9
PFO Pinyon Flats O 84.69 54 P P 18 21 15.8 +0.6
PFO IAmb IAmb 18 21 17.0
comp=Z,63nm,0.9s
PFO Pinyon Flats O 84.69 54 P P 18 21 15.8 +0.6
baz=303,SNR=35
MORC Moravsky Berou 84.70 326 ⇓P P 18 21 14.5 -0.3
MORC Moravsky Berou 84.70 326 ⇑P PKKPbc 18 39 21.1 -0.6
MORC Moravsky Berou 84.70 326 P P 18 21 14.7 -0.1
MORC pmax pmax
comp=Z,168nm,1.4s
MORC Moravsky Berou 84.70 326 P P 18 21 14.7 -0.1
MORC IAmb IAmb 18 22 57.3
comp=Z,168nm,1.4s
MORC Moravsky Berou 84.70 326 eP P 18 21 15.0 +0.3
MORC epP pP 18 22 47.8 -0.5
PSZ Piszkesteto 84.75 324 ⇑P P 18 21 15.4 +0.3
PSZ Piszkesteto 84.75 324 P P 18 21 16.0 +0.9
PSZ pmax pmax
comp=Z,44nm,1.5s
GHAJ Ghor Haditha 84.76 303 P P 18 21 15.4 +0.1
GHAJ IAmb IAmb 18 21 16.8
comp=Z,81nm,0.8s
VLAD Vladila 84.78 319 ⇑P P 18 21 15.2 0.0
OSTC Ostas 84.80 327 eP P 18 21 15.0 -0.2
OSTC ex x 18 22 55.3
BELC Belle Mtn. Jos 84.80 54 P P 18 21 16.4 +0.7
baz=303,SNR=14
GZR Gura Zlata 84.83 320 ⇓P PKKPbc 18 39 20.8 -0.4
CHVC Chvalec 84.85 327 eP P 18 21 15.4 -0.1
CHVC ex x 18 22 55.5
KRLC Kraliky 84.86 327 eP P 18 21 14.9 -0.6
KRLC ex x 18 22 54.9
DPC Dobruska-Polom 84.89 327 eP P 18 21 15.2 -0.5
DPC ex x 18 22 55.9
VYHS Vyhne 84.91 325 eP P 18 21 16.4 +0.6
VYHS pmax pmax
comp=Z,48nm,1.2s
VYHS Vyhne 84.91 325 eP P 18 21 16.3 +0.5
VYHS epP pwP 18 22 56.7 +1.9
UPC Upice 84.93 327 eP P 18 21 15.0 -0.8
UPC ex x 18 22 56.9
SRE Strehaia 85.05 320 ⇓P P 18 21 17.4 +0.8
SRE Strehaia 85.05 320 ⇓P PKKPbc 18 39 21.3 +0.7
SRE Strehaia 85.05 320 P P 18 21 17.3 +0.8
MONP2 Monument Peak 85.11 55 P P 18 21 18.2 +0.9
baz=303,SNR=15
JAVC Velka Javorina 85.25 325 eP P 18 21 18.7 +1.2
JAVC epP pP 18 22 51.8 +0.4
IRM Iron Mountain 85.31 53 P P 18 21 19.1 +1.1
baz=304,SNR=22
BZS Buzias 85.33 321 ⇑P PKKPbc 18 39 19.1 -0.9
BZS Buzias 85.33 321 P P 18 21 17.4 -0.5
HERR Herculane 85.35 320 ⇑P P 18 21 17.7 -0.3
HERR Herculane 85.35 320 ⇑P PKKPbc 18 39 19.6 -0.3
BC3 Big Chuckawall 85.37 54 P P 18 21 19.4 +0.9
baz=304,SNR=12
PUNG Punghina 85.44 320 ⇑P P 18 21 18.2 -0.2
IKP In-Ko-Pah, Jac 85.46 55 P P 18 21 19.5 +0.6
baz=303,SNR=10
VRAC Vranov 85.47 326 eP P 18 21 18.7 +0.2
VRAC epP pP 18 22 51.9 -0.6
SWSC Sam W. Stewart 85.52 54 P P 18 21 20.0 +1.0
baz=303,SNR=6.6
SRU San Rafael Swe 85.56 47 P P 18 21 19.8 +0.4
SRU pmax pmax
comp=Z,46nm,0.9s
SRU San Rafael Swe 85.56 47 P P 18 21 19.8 +0.4
SRU IAmb IAmb 18 22 57.7
comp=Z,46nm,0.9s
PVCC Panska Ves 85.58 328 eP P 18 21 18.7 -0.3
PVCC ex x 18 22 58.9
SMOL Smolenice 85.60 325 eP P 18 21 19.9 +0.8
SMOL pmax pmax
comp=Z,25nm,1.4s
SMOL Smolenice 85.60 325 eP P 18 21 19.9 +0.8
SMOL epP pwP 18 23 01.1 +3.3
BRG Berggiesshubel 85.62 329 eP P 18 21 18.9 -0.3
BRG Amp 18 21 20.4
comp=Z,44nm,1.3s
BRG pP pP 18 22 53.6 +0.6
BRG Amp 18 23 01.1
comp=Z,87nm,1.1s
BRG Berggiesshubel 85.62 329 SP SPn 18 32 11.0 -2.8
BRG Berggiesshubel 85.62 329 sS sS 18 34 01.0 -3.4
BRG Berggiesshubel 85.62 329 SS SS 18 36 59.0 -2.2
BRG Amp 19 03 47.0
comp=Z,1.0nm,10.6s
BRG Amp 19 03 50.0
comp=N,0.6nm,11.2s
BRG Amp 19 03 56.0
comp=E,0.4nm,11.2s
BRG Berggiesshubel 85.62 329 eP P 18 21 18.8 -0.3
BRG 18 22 53.6
BRG S SKSac 18 31 02.0 -1.7
BRG S S 18 31 14.0 -1.1
BRG S SPn 18 32 11.0 -2.8
BRG pmax pmax
comp=Z,45nm,1.3s
BRG pmax pmax
comp=Z,87nm,1.1s
BRG MLR MLR
comp=N,603nm,11.2s
BRG MLR MLR
comp=E,424nm,11.2s
SRO Srobarova 85.63 324 eP P 18 21 19.1 -0.1
SRO Srobarova 85.63 324 eP P 18 21 19.1 -0.1
SRO epP pwP 18 23 01.0 +2.9
ELL Elmali 85.68 310 P P 18 21 19.8 -0.1
ELL pmax pmax
comp=Z,565nm,1.5s
ELL Elmali 85.68 310 P P 18 21 19.8 -0.1
KRUC Moravsky 85.73 326 eP P 18 21 19.8 0.0
KRUC epP pP 18 22 53.0 -0.8
CLL Collm 85.73 329 i P P 18 21 19.8 -0.8
CLL e*PP pP 18 22 52.0 -1.6
CLL eS SKSac 18 31 00.0 -4.3
CLL pmax pmax
comp=Z,38nm,1.0s
CLL Collm 85.73 329 i P P 18 21 19.8 -0.8
comp=Z,38nm,1.0s
CLL epP pP 18 22 52.0 -1.6
CLL i pPmax 18 22 59.4
comp=Z,259nm,1.4s
CLL ePP PP 18 24 42.0 -3.2
CLL ePPP PPP 18 26 48.0
CLL eSKSac SKSac 18 31 03.0 -1.3
CLL eS SKKSac 18 31 14.0 +1.2
comp=N,800nm,18.4s
CLL eS SKKSac 18 31 14.0 +1.2
comp=E,200nm,30.3s
CLL eS SKKSac 18 31 14.0 +1.2
comp=Z,400nm,20.9s
CLL eSP SPn 18 32 14.0 -1.1
CLL epSKSac pSKSac 18 33 18.0 +0.9
CLL eSSP 18 34 53.0
CLL eSS SS 18 37 01.0 -1.8
CLL esSS 18 39 30.0
CLL eSSS SSS 18 40 36.0
CLL eSSSS 18 43 54.0
CLL Lm MLR 19 03 00.0
comp=Z,700nm,18.6s
CLL Collm 85.73 329 P P 18 21 19.3 -0.4
MODS Modra-Piesok 85.77 325 eP P 18 21 23.0 +3.0
MODS pmax pmax
comp=Z,87nm,1.6s
MODS Modra-Piesok 85.77 325 eP P 18 21 23.0 +3.0
MODS epP pwP 18 23 03.4 +4.7
MDVR Moldovita 85.80 320 ⇓P PKKPbc 18 39 41.1 +22
K22A Casper 85.86 42 P P 18 21 21.9 +1.2
baz=308
PDMCI Parker Dam,Lak 85.92 52 P P 18 21 22.0 +1.1
baz=304,SNR=7.7
PRU Pruhonice 85.97 328 eP P 18 21 19.0 -1.9
PRU epP pP 18 22 53.6 -1.2
ZST Bratislava 85.97 325 epP pP 18 23 02.3 +7.3
TREC Trest 86.01 327 eP P 18 21 20.5 -0.6
TREC ex x 18 23 01.2
GLA Glamis 86.14 54 P P 18 21 23.4 +1.3
baz=304,SNR=8.5
MDND Maddock 86.23 35 P P 18 21 23.2 +1.0
baz=312,SNR=14
VTS Vitosha 86.31 318 ⇓P P 18 21 23.0 +0.1
VTS Vitosha 86.31 318 P P 18 21 22.8 -0.1
VTS pmax pmax
comp=Z,136nm,1.4s
VTS Vitosha 86.31 318 P P 18 21 22.8 -0.1
VTS IAmb IAmb 18 23 07.5
comp=Z,136nm,1.4s
VTS Vitosha 86.31 318 P P 18 21 22.0 -0.9
ULM Lac du Bonnet 86.34 32 P P 18 21 22.0 -0.6
comp=Z,9.0nm,0.8s,baz=307,slow=4.5,SNR=8.7
ULM pP pP 18 22 56.8 -0.7
comp=Z,18nm,1.1s,baz=313,slow=4.3,SNR=6.7
RSSD Black Hills 86.35 40 P P 18 21 24.3 +1.2
baz=310
O20A White River Ci 86.36 45 P P 18 21 24.0 +0.8
baz=307,SNR=13
MORH Mrgy, Hungar 86.52 323 ⇓P P 18 21 22.9 -0.7
MORH Mrgy, Hungar 86.52 323 ⇑P PKKPbc 18 39 17.5 +0.3
MSEY Mahe Island 86.53 263 P P 18 21 24.7 +0.5
MSEY pmax pmax
comp=Z,82nm,0.9s
MSEY Mahe Island 86.53 263 P P 18 21 24.7 +0.5
MSEY IAmb IAmb 18 21 26.1
comp=Z,82nm,0.9s
MSEY Mahe Island 86.53 263 P P 18 21 24.8 +0.5
MSEY Mahe Island 86.53 263 iP P 18 21 23.9 -0.3
SNR=6.1
BOVS Bovan 86.54 320 ⇓P P 18 21 23.4 -0.3
FRGS Fruska Gora 86.60 322 ⇓P P 18 21 23.5 -0.5
MMB Musomiste 86.66 317 P P 18 21 23.0 -1.4
NKC Novy Kostel 86.75 329 eP P 18 21 24.3 -0.3
NKC epP pP 18 23 00.2 +1.3
CONA Conrad Observa 86.77 326 eP P 18 21 25.1 +0.2
comp=Z,9.7nm,0.8s,SNR=8.1
CONA eP pP 18 22 58.9 -0.2
comp=Z,16nm,0.9s,SNR=7.7
CONA eP PKKPbc 18 39 15.8 -1.0
comp=Z,1.4nm,0.4s
LINV Loch Inver, As 86.82 342 eP P 18 21 25.6 +0.9
LINV IAmb IAmb 18 21 26.1
comp=Z,78nm,1.1s
CKRC Cesky Krumlov 86.89 327 eP P 18 21 24.3 -1.0
CKRC ex x 18 22 58.2
KHC Kasperske Hory 87.02 327 P P 18 21 25.5 -0.5
KHC pmax pmax
comp=Z,76nm,1.4s
KHC Kasperske Hory 87.02 327 eP P 18 21 24.7 -1.3
KHC ex x 18 21 35.5
KHC epP pP 18 23 02.0 +1.8
KHC Kasperske Hory 87.02 327 P P 18 21 25.5 -0.5
KHC IAmb IAmb 18 23 08.5
comp=Z,76nm,1.4s
WUAZ Wupatki 87.10 50 P P 18 21 28.1 +1.3
baz=306,SNR=12
GERES GERESS Array B 87.16 327 P P 18 21 25.4 -1.3
comp=Z,8.1nm,0.6s,baz=46,slow=5.4,SNR=72
GERES pP pP 18 23 01.7 +0.7
comp=Z,9.9nm,1.2s,baz=45,slow=5.8,SNR=3.3
GERES PKKPbc PKKPbc 18 39 14.7 -1.3
comp=Z,2.2nm,0.7s,baz=218,slow=1.7,SNR=13
GERES GERESS Array B 87.16 327 P P 18 21 26.0 -0.7
GERES GERESS Array B 87.16 327 P P 18 21 26.0 -0.7
MDO Dochfour 87.19 341 eP P 18 21 26.8 +0.2
N23A Red Feather La 87.28 43 P P 18 21 29.3 +1.7
baz=308,SNR=13
ARSA Arzberg 87.40 325 eP P 18 21 27.5 -0.2
comp=Z,3.5nm,0.7s
ARSA eP pP 18 23 03.0 +0.8
comp=Z,5.9nm,0.9s,SNR=8.0
ARSA eP PKKPbc 18 39 14.8 -0.5
comp=Z,1.3nm,0.3s
KAC Achnashellach 87.40 341 eP P 18 21 27.6 +0.1
MOA Molln 87.59 326 eP P 18 21 28.6 -0.1
comp=Z,4.9nm,0.8s,SNR=5.7
MOA eP pP 18 23 03.9 +0.8
comp=Z,7.5nm,1.0s,SNR=10
MOA eS SKSac 18 31 15.4 -0.4
comp=Z,8.7nm,1.3s
MOA i P PKKPbc 18 39 13.9 -0.9
comp=Z,1.9nm,0.6s
KPL Plockton 87.64 342 eP P 18 21 29.0 +0.4
KPL IAmb IAmb 18 21 30.1
comp=Z,78nm,0.8s
GRF Grafenberg Arr 87.69 329 eP P 18 21 28.8 -0.3
comp=Z,37nm,1.3s,baz=50,slow=4.3
GRF epP pP 18 22 59.9 -3.5
AGMN Agassiz Nation 87.73 33 P P 18 21 29.6 +0.4
baz=315,SNR=7.4
MVCO Mesa Verde 87.97 47 P P 18 21 31.6 +0.7
baz=307,SNR=6.7
SOKA Soboth 88.04 325 eP P 18 21 30.0 -0.8
comp=Z,4.5nm,0.5s,SNR=8.2
SOKA eP pP 18 23 06.8 +1.4
comp=Z,15nm,0.9s,SNR=8.1
ISCO Idaho Springs 88.16 44 P P 18 21 32.8 +0.9
ISCO pmax pmax
comp=Z,26nm,1.0s
ISCO Idaho Springs 88.16 44 P P 18 21 32.8 +0.9
ISCO Idaho Springs 88.16 44 P P 18 21 33.2 +1.3
baz=309,SNR=12
ISCO S S 18 31 41.4 +1.1
baz=309
214A Organ Pipe Nat 88.17 54 P P 18 21 32.8 +1.1
baz=305,SNR=9.2
OBKA Obir 88.39 325 eP P 18 21 32.3 -0.3
comp=Z,6.4nm,0.8s
OBKA eP pP 18 23 08.7 +1.5
comp=Z,7.0nm,0.8s
OBKA eP PKKPbc 18 39 12.4 -0.6
comp=Z,2.5nm,0.5s
LAWE Loch Awe, Argy 88.50 341 eP P 18 21 32.9 +0.2
LAWE IAmb IAmb 18 21 34.4
comp=Z,67nm,1.2s
FNA Florina 88.54 318 P P 18 21 32.5 -0.8
FNA pmax pmax
comp=Z,63nm,1.7s
FNA Florina 88.54 318 P P 18 21 32.5 -0.8
FNA IAmb IAmb 18 21 33.3
comp=Z,63nm,1.7s
KBA Koelnbreinsper 88.58 326 eP P 18 21 32.6 -0.9
comp=Z,6.0nm,0.8s
KBA eP pP 18 23 10.3 +2.3
comp=Z,5.0nm,0.8s
KBA eS SKSac 18 31 22.9 +0.8
comp=Z,17nm,1.1s
IVI Ivigtut 88.61 3 P P 18 21 32.5 -0.6
IVI IAmb IAmb 18 24 48.8

comp=Z,174nm,1.7s
**PGBU Glenifferbraes 88.62 340** *e*P **P** **18 21 34.1 +0.9**
PGBU IAmb IAmb 18 21 35.7
comp=Z,153nm,1.2s
**EKA Eskdalemuir Ar 88.64 339** PKKPbc PKKPbc 18 39 10.9 -1.7
comp=Z,2.3nm,0.5s,baz=244,slow=2.8,SNR=14
**EKA Eskdalemuir Ar 88.64 339** P **P** **18 21 33.3 0.0**
**S22A 4UR Ranch, Cre 88.69 46** P **P** **18 21 35.7 +1.3**
baz=308,SNR=16
**MYKA Terra Mystica 88.75 326** *e*P **P** **18 21 33.0 -1.2**
comp=Z,11nm,0.5s
MYKA *i* P **PKKPbc** **18 39 11.5 -0.6**
comp=Z,3.9nm,0.5s
**SUSD Miller 88.87 37** P **P** **18 21 35.4 +0.7**
baz=313,SNR=5.3
**Q24A Divide 88.97 44** P **P** **18 21 37.0 +1.4**
baz=309,SNR=8.4
**AGG Agios Georgios 89.10 316** P **P** **18 21 33.9 -2.0**
AGG pmax pmax
comp=Z,28nm,0.9s
**AGG Agios Georgios 89.10 316** P **P** **18 21 33.9 -2.0**
**NEWG New Galloway 89.14 340** *e*P **P** **18 21 35.6 -0.1**
NEWG IAmb IAmb 18 21 36.6
comp=Z,42nm,1.0s
**BTNL Ternell 89.19 332** *d*pP pP 18 23 16.2 +5.4
**ABTA Abfaltersbach 89.22 326** *i*P **P** **18 21 34.8 -1.6**
comp=Z,11nm,0.5s,SNR=8.2
ABTA *e*P **pP** **18 23 11.7 +0.6**
comp=Z,17nm,0.9s,SNR=6.6
ABTA *e*S **SKSac** **18 31 25.6 0.0**
comp=Z,5.9nm,0.7s
**MEM Membach 89.22 332** *d*P **P** **18 21 36.0 -0.1**
**WATA Walderalm 89.24 327** *i*P **P** **18 21 35.1 -1.4**
comp=Z,9.3nm,0.6s
WATA *e*P **pP** **18 23 12.8 +1.5**
comp=Z,7.9nm,0.8s
WATA *e*S **SKSac** **18 31 24.4 -1.4**
comp=Z,1.7nm,0.5s
**WTTA Wattenberg 89.26 327** *e*P **P** **18 21 36.0 -0.7**
comp=Z,5.8nm,0.5s,SNR=6.6
WTTA *e*P **pwP** **18 23 14.3 -2.3**
comp=Z,10nm,1.0s
WTTA *e*S **SKSac** **18 31 24.8 -1.2**
comp=Z,1.3nm,0.4s
WTTA *e*P **PKKPbc** **18 39 10.5 -0.5**
comp=Z,1.9nm,0.5s
**STU Stuttgart 89.27 329** P **P** **18 21 37.3 +0.9**
STU pmax pmax
comp=Z,13nm,1.5s
**HPK Haverah Park 89.31 338** *e*P **P** **18 21 36.7 +0.2**
**TUC Tucson 89.36 52** P **P** **18 21 38.9 +1.6**
TUC pmax pmax
comp=Z,13nm,1.9s
**TUC Tucson 89.36 52** P **P** **18 21 38.7 +1.4**
baz=306
**BSTI Sart Tilman 89.42 332** *d*P **P** **18 21 36.7 -0.4**
BSTI *d*pP **pwP** **18 23 19.1 +2.1**
**BHOU Houvegnez 89.42 332** *d*pP pP 18 23 15.5 +3.6
**MOTA Moosalm 89.45 327** *i*P **P** **18 21 36.5 -1.0**
comp=Z,5.5nm,0.5s,SNR=5.4
MOTA *e*P **pP** **18 23 12.4 +0.2**
comp=Z,8.9nm,0.8s
MOTA *e*S **SKSac** **18 31 27.9 +0.9**
comp=Z,2.2nm,0.7s
**STAL STALIGIAL 89.47 326** P **P** **18 21 36.0 -1.4**
STAL IAmb IAmb 18 21 37.0
comp=Z,40nm,0.8s
**GAL1 Galloway 89.50 340** *e*P **P** **18 21 37.0 -0.3**
GAL1 IAmb IAmb 18 21 38.2
comp=Z,102nm,1.1s
**RETA Reutte 89.51 328** *e*P **P** **18 21 37.3 -0.4**
comp=Z,4.6nm,0.4s,SNR=6.2
RETA *e*P **pP** **18 23 14.0 +1.6**
comp=Z,11nm,0.7s,SNR=7.6
**SDCO Great Sand Dun 89.52 46** P **P** **18 21 39.1 +0.9**
baz=309,SNR=19
**OGNE Ogallala 89.53 41** P **P** **18 21 38.2 +0.3**
baz=311,SNR=7.2
**BCLA Clavier 89.65 332** *b*P **P** **18 21 37.7 -0.4**
BCLA *d*pP **pwP** **18 23 19.1 +0.9**
**CLGH Cloghs, Cushen 89.72 341** *e*P **P** **18 21 39.1 +0.7**
**BGES Gesves 89.76 332** *d*P **P** **18 21 38.7 0.0**
BGES *d*pP **pwP** **18 23 19.9 +1.1**
**IDI Anoyia 89.82 312** PKKPbc PKKPbc 18 39 09.2 +0.2
comp=Z,8.0nm,0.5s,baz=347,slow=1.1,SNR=18
**FETA Feichten 89.86 327** *i*P **P** **18 21 38.8 -0.7**
comp=Z,12nm,0.7s,SNR=6.0
FETA *e*P **pP** **18 23 15.5 +1.3**
comp=Z,16nm,0.8s,SNR=7.6
FETA *e*S **SKSac** **18 31 26.2 -3.3**
comp=Z,3.0nm,0.9s
FETA *i*P **PKKPbc** **18 39 09.1 -0.5**
comp=Z,12nm,1.5s
**RCHB Rochefort 89.88 332** *d*P **P** **18 21 38.6 -0.6**
RCHB *d*pP **pwP** **18 23 19.4 +0.1**
**WLF Walferdange 89.89 331** *d*P **P** **18 21 38.8 -0.5**
WLF *d*pP **pwP** **18 23 20.9 +1.6**
**BMRD Maredsous 89.95 333** *d*P **P** **18 21 39.6 0.0**
BMRD *d*pP **pwP** **18 23 20.9 +1.3**
**BFO Black Forest 89.98 329** P **P** **18 21 39.2 -0.6**
BFO pmax pmax
comp=Z,40nm,1.1s
**BFO Black Forest 89.98 329** P **P** **18 21 39.2 -0.6**
BFO IAmb IAmb 18 21 41.2
comp=Z,40nm,1.1s
**IOMK Kirk Michael 89.98 339** *e*P **P** **18 21 39.4 -0.2**
**SNF Seneffe 89.98 333** *d*P **P** **18 21 39.5 -0.2**
SNF *d*pP **pwP** **18 23 19.8 0.0**
**EYMN Ely 89.99 31** P **P** **18 21 40.4 +0.6**
baz=318,SNR=5.2
**DAVA Damuels 90.06 328** *e*P **P** **18 21 39.9 -0.4**
comp=Z,22nm,0.7s,SNR=7.2
DAVA *e*P **pP** **18 23 16.4 +1.3**
comp=Z,21nm,0.8s,SNR=8.4
DAVA *e*P **PKKPbc** **18 39 08.1 -1.0**
comp=Z,1.7nm,0.4s
**DOU Dourbes 90.19 332** *d*P **P** **18 21 40.5 -0.1**
**DAVOX Davos/Dischmat 90.44 328** PKKPbc PKKPbc 18 39 07.8 -0.3
comp=Z,2.8nm,0.4s,baz=229,slow=6.4,SNR=12
**KSCO Kaye Shedlock' 90.45 43** P **P** **18 21 43.4 +1.1**
baz=311
**ITM Ithomi 90.51 315** P **P** **18 21 41.1 -1.4**
ITM IAmb IAmb 18 21 43.0
comp=Z,127nm,1.2s
**T25A Trinidad 90.57 45** P **P** **18 21 44.3 +1.2**
baz=310,SNR=15
**ECH Echery 90.57 330** P **P** **18 21 43.1 +0.6**
ECH pmax pmax
comp=Z,177nm,1.3s
**ECSD EROS Data Cent 90.58 37** P **P** **18 21 43.1 +0.4**
baz=315,SNR=8.1
**ANMO Albuquerque 90.66 48** P **P** **18 21 44.2 +0.7**
comp=Z,26nm,1.0s,baz=291,slow=5.0,SNR=41
ANMO pP **pP** **18 23 19.5 +0.1**
comp=Z,2.9nm,0.9s,baz=332,slow=1.5,SNR=3.1
**ANMO Albuquerque 90.66 48** P **P** **18 21 44.8 +1.3**
baz=308
**FOEL Foel Wylfa 90.72 338** *e*P **P** **18 21 43.1 +0.1**
FOEL IAmb IAmb 18 21 44.2
comp=Z,84nm,1.0s
**WLF1 Llynfaes 90.76 339** *e*P **P** **18 21 43.4 +0.2**
WLF1 IAmb IAmb 18 21 44.2
comp=Z,94nm,1.0s
**YLL Llanberis 90.82 339** *e*P **P** **18 21 44.2 +0.7**
**TUE Stuetta 90.91 328** P **P** **18 21 44.1 -0.2**
**121A Cookes Peak, D 91.26 51** P **P** **18 21 47.9 +1.7**
baz=308,SNR=16
**STRD Stroud 91.32 337** IAmb IAmb 18 21 46.4
comp=Z,620nm,1.8s
STRD *e*P **P** **18 21 46.5 +0.7**
**BGNE Belgrade 91.39 39** P **P** **18 21 46.7 +0.3**
baz=314
**SPMN Marine on St. 91.40 34** P **P** **18 21 47.5 +1.1**
baz=317
**MCH1 Michaelchurch 91.41 337** *e*P **P** **18 21 46.0 -0.3**
MCH1 IAmb IAmb 18 21 47.2
comp=Z,69nm,0.7s
**MONM Monmouth 91.48 337** *e*P **P** **18 21 46.4 -0.1**
MONM IAmb IAmb 18 21 47.9
comp=Z,53nm,0.8s
**SENIN Lac Senin/Sane 91.92 329** P **P** **18 21 48.0 -1.1**
SENIN IAmb IAmb 18 23 30.7
comp=Z,44nm,1.3s
**CBKS Cedar Bluff 92.26 42** P **P** **18 21 51.2 +0.6**
baz=312
**TIP Timpagrande 92.27 319** P **P** **18 21 49.3 -1.3**

TIP IAmb IAmb 18 23 32.8
comp=Z,37nm,1.3s
**SCHQ Schefferville 92.37 14** P **P** **18 21 51.1 +0.4**
comp=Z,4.8nm,0.8s,baz=303,slow=4.2,SNR=8.0
SCHQ *e*P **pP** **18 23 26.7 +0.3**
comp=Z,8.7nm,1.0s,baz=16,slow=7.0,SNR=5.1
**BNI Bardonecchia 93.21 328** P **P** **18 21 53.5 -1.4**
BNI pmax pmax
comp=Z,27nm,1.1s
**BNI Bardonecchia 93.21 328** P **P** **18 21 53.5 -1.4**
BNI IAmb IAmb 18 23 42.7
comp=Z,27nm,1.1s
**MNTX Cornudas Mount 93.38 50** P **P** **18 21 56.6 +0.9**
baz=309,SNR=18
**MSTX Muleshoe 93.63 47** P **P** **18 21 57.0 0.0**
baz=310
**AMTX Amarillo 93.72 46** P **P** **18 21 58.3 +1.0**
baz=311
**KSU1 Kansas State U 93.83 40** P **P** **18 21 57.9 +0.2**
baz=315,SNR=15
**WMOK Wichita Mounta 95.59 44** P **P** **18 22 06.2 +0.4**
baz=313
**TXAR Lajitas Array 96.02 51** P **P** **18 22 08.1 +0.2**
comp=Z,4.2nm,0.7s,baz=289,slow=2.8,SNR=45
TXAR *e*P **pP** **18 23 42.8 -1.3**
comp=Z,54nm,1.0s,baz=293,slow=3.5,SNR=15
TXAR PKKP **PKiKP** **18 26 44.5 +0.4**
comp=Z,0.6nm,0.5s,baz=250,slow=0.9,SNR=8.2
TXAR PKKP **PKKPdf** **18 38 52.8 +0.4**
comp=Z,0.8nm,0.6s,baz=136,slow=6.0,SNR=7.0
**CCM Cathedral Cave 97.49 38** Pdiff Pdif 18 22 14.6 +0.4
baz=318
**SADO Sadowa 97.66 26** PKKP 18 38 47.5
comp=Z,5.7nm,0.5s,baz=141,slow=1.2,SNR=14
**U40A Yellville 97.88 40** Pdiff Pdif 18 22 16.6 +0.5
baz=317
**MIAR Mount Ida 98.78 41** Pdiff **P** **18 22 20.7 +0.6**
baz=316
**KEST Kesra 98.86 320** PKKPbc PKKPbc 18 38 45.2 -0.6
comp=Z,2.1nm,0.7s,baz=168,slow=0.8,SNR=4.2
**KMBO Kilima Mbogo 100.47 275** P **Pdif** **18 22 27.4 -0.8**
comp=Z,2.8nm,0.6s,baz=46,slow=7.6,SNR=8.6
**KMBO Kilima Mbogo 100.47 275** *i*P **Pdif** **18 22 29.1 +0.9**
KMBO pmax pmax
comp=Z,3.0nm,0.6s
**ESDC Sonseca Array 102.19 331** PKKPbc PKKPbc 18 38 36.0 -0.6
comp=Z,1.9nm,0.5s,baz=248,slow=2.1,SNR=16
**VNDA Vanda 108.52 175** PKiKP **PKiKP** **18 27 05.0 -0.1**
comp=Z,5.0nm,0.7s,baz=314,slow=5.2,SNR=12
**CMIG Matias Romero 110.10 55** PKiKP **PKiKP** **18 27 10.1 +0.2**
comp=Z,1.0nm,0.4s,baz=0.0,slow=2.0,SNR=1.8
**MAW Mawson 112.54 204** PKiKP **PKiKP** **18 27 13.1 +0.2**
comp=Z,17nm,0.7s,baz=150,slow=8.1,SNR=1.8
**APG El Apazote 114.62 54** PKP **PKiKP** **18 27 18.2 -0.7**
comp=Z,2.3nm,0.4s,baz=264,slow=23,SNR=5.3
**LSZ Lusaka 115.11 266** PKP **PKPdf** **18 27 19.6 0.0**
comp=Z,17nm,0.6s,baz=19,slow=3.1,SNR=38
**MOPA Mopani 115.84 257** *i*P **PKiKP** **18 27 21.6 +0.9**
**MOPA Mopani 115.84 257** *i*P **PKiKP** **18 27 21.6 +0.9**
**CNG Changalane 116.25 254** *i*P **PKPdf** **18 27 20.9 -0.4**
**CNG Changalane 116.25 254** *i*P **PKPdf** **18 27 20.9 -0.4**
**MSNA Messina 116.53 259** *i*P **PKiKP** **18 27 22.7 +0.6**
**MSNA Messina 116.53 259** *i*P **PKiKP** **18 27 22.7 +0.6**
**BLWY Bulawayo 116.84 261** *i*P **PKiKP** **18 27 23.0 +0.1**
**BLWY Bulawayo 116.84 261** *i*P **PKiKP** **18 27 23.0 +0.1**
**MATP Matopo 117.05 261** PKP **PKPdf** **18 27 23.1 -0.1**
comp=Z,7.4nm,0.5s,baz=67,slow=2.1,SNR=19
**MATP Matopo 117.05 261** *i*P **PKiKP** **18 27 23.7 +0.4**
**MATP Matopo 117.05 261** *i*P **PKiKP** **18 27 23.7 +0.4**
**TORD Torodi Ar. Bea 120.18 310** PKP **PKPdf** **18 27 28.4 -0.9**
comp=Z,24nm,0.5s,baz=33,slow=1.2,SNR=206
TORD PKKPbc **PKKPbc** **18 37 36.7 -1.0**
comp=Z,5.2nm,0.5s,baz=228,slow=3.1,SNR=44
**TORD Torodi Ar. Bea 120.18 310** **PKPdf** **18 27 28.7 -0.6**
**SYO Syowa Base 121.22 205** *i*epPdiff pPdif 18 25 36.0 +1.8
**SYO Syowa Base 121.22 205** *i*esPdiff 18 26 17.0
**LBTB Lobatse 121.30 258** PKP **PKiKP** **18 27 31.4 0.0**
comp=Z,68nm,0.6s,baz=111,slow=2.0,SNR=124
**LBTB Lobatse 121.30 258** PKiKP **PKiKP** **18 27 31.8 +0.4**
**LBTB Lobatse 121.30 258** PKPdf **PKiKP** **18 27 31.8 +0.4**
**LBTB Lobatse 121.30 258** *i*P **PKPdf** **18 27 31.2 -0.1**
**LBTB Lobatse 121.30 258** *i*P **PKPdf** **18 27 31.2 -0.1**
**KOWA Kowa 122.78 316** PKPdf **PKiKP** **18 27 34.7 +0.1**
**BOSA Boshof 122.83 254** PKP **PKPdf** **18 27 34.2 0.0**
comp=Z,34nm,0.6s,baz=79,slow=1.8,SNR=83
BOSA PKKPab **PKKPab** **18 37 28.4 +0.3**
comp=Z,2.2nm,0.6s,baz=258,slow=3.8,SNR=8.8
**BOSA Boshof 122.83 254** PKiKP **PKiKP** **18 27 34.7 +0.3**
**BOSA Boshof 122.83 254** PKPdf **PKiKP** **18 27 34.7 +0.3**
**BOSA Boshof 122.83 254** *i*P **PKiKP** **18 27 34.6 +0.3**
**BOSA Boshof 122.83 254** *i*P **PKiKP** **18 27 34.6 +0.3**
**TSUM Tsumeb 125.94 267** PKP **PKPdf** **18 27 40.5 +0.2**
comp=Z,22nm,0.8s,baz=53,slow=3.3,SNR=22
**CELP Cerillos 126.05 30** PKPdf **PKiKP** **18 27 40.9 -0.1**
**DBIC Dimbokro 129.28 310** PKP **PKPdf** **18 27 46.6 -0.2**
comp=Z,28nm,0.5s,baz=40,slow=2.1,SNR=57
DBIC SKPbc SKPab 18 30 27.9 -0.1
comp=Z,28nm,0.6s,baz=44,slow=5.5,SNR=17
**DBIC Dimbokro 129.28 310** PKiKP **PKiKP** **18 27 47.3 -0.2**
**DBIC Dimbokro 129.28 310** PKPdf **PKiKP** **18 27 47.3 -0.2**
**TIC Toumodi 129.40 311** *e*PKiKP **PKPdf** **18 27 47.2 +0.2**
**KIC Kosan Boka 129.43 310** *e*PKiKP **PKPdf** **18 27 47.3 +0.2**
comp=Z,73nm,0.5s
**LIC Lamto 129.72 310** *e*PKiKP **PKPdf** **18 27 47.8 +0.2**
comp=Z,156nm,0.9s
**UREC San Jos de Ur 129.85 47** *e*P **PKPdf** **18 27 47.6 -0.3**
**DBBC Dabeiba 129.98 48** *e*P **PKPdf** **18 27 48.7 -0.5**
**ZARC Zaragoza, Cauc 130.47 46** *e*P **PKPdf** **18 27 49.2 +0.2**
**OCAC Ocana 130.83 44** *e*P PKPdf 18 27 37.3 -13
**CBOC Ciudad Bolivar 130.98 49** *e*P **PKPdf** **18 27 47.0 -3.2**
**PTBC PUERTO BERRIO 131.45 47** *e*P **PKPdf** **18 27 50.4 -0.6**
**SDV Santo Domingo 131.87 41** SKPbc **SKPbc** **18 30 37.4 -0.5**
comp=Z,26nm,0.8s,baz=350,slow=2.5,SNR=5.2
**SDV Santo Domingo 131.87 41** PKPdf **PKiKP** **18 27 52.6 -0.4**
**SDV Santo Domingo 131.87 41** *e*P **PKPdf** **18 27 51.6 -0.3**
**SDV Santo Domingo 131.87 41** *e*P **PKPdf** **18 27 51.9 0.0**
**PAMC Pamplona, Colo 131.91 44** *e*P **PKPdf** **18 27 45.7 -6.7**
**NORC Norcasia 131.94 48** *e*P **PKPdf** **18 27 44.1 -7.7**
**YOTC Yotoco, Valle 132.16 51** *e*P **PKPdf** **18 27 51.4 -1.0**
**BARC Barichara 132.20 45** *e*P **PKPdf** **18 27 50.6 -2.0**
**SPBC San Pablo de B 132.38 47** *e*P **PKPdf** **18 27 52.9 +0.1**
**ROSC El Rosal 132.84 48** PKP **PKPdf** **18 27 54.1 +0.1**
comp=Z,9.2nm,0.4s,baz=64,slow=5.7,SNR=13
**ORTC Ortega, Tolima 132.94 50** *e*P PKPdf 18 27 39.4 -14
**OTAV Otavalo 133.37 56** *e*P **PKPdf** **18 27 52.7 -2.4**
**CHIC Chingaza 133.38 47** *e*P PKPdf 18 27 42.8 -12
**GCUF Volcan Galeras 133.47 54** *e*P **PKPdf** **18 27 55.3 0.0**
**SNAA Sanae 133.71 196** PKP **PKPdf** **18 27 53.1 -0.4**
comp=Z,12nm,0.4s,baz=229,slow=4.7,SNR=23
SNAA SKPbc **SKPbc** **18 30 42.1 0.0**
comp=Z,32nm,0.9s,baz=102,slow=2.2,SNR=9.1
**SNAA Sanae 133.71 196** PKiKP **PKPdf** **18 27 54.0 +0.5**
**SNAA Sanae 133.71 196** **PKPdf** **18 27 54.0 +0.5**
**ELOV Elorza 134.06 41** *e*P **PKPdf** **18 27 56.3 +0.5**
**ATAH Atahualpa 138.25 64** PKhKP PKPpre 18 27 58.2
comp=Z,5.7nm,0.5s,baz=7.6,slow=6.7,SNR=6.3
ATAH PKP **PKPdf** **18 28 04.4 +0.3**
comp=Z,18nm,0.9s,baz=300,slow=2.2,SNR=14
ATAH SKPbc **SKPbc** **18 30 59.0 +0.8**
comp=Z,10nm,0.8s,baz=342,slow=2.7,SNR=7.4
**NNA Nana 142.35 69** PKhKP PKPpre 18 28 06.6
comp=Z,69nm,0.3s,baz=23,slow=4.4,SNR=61
**BOAV Boa Vista 142.62 33** *e*P **PKPdf** **18 28 08.6 -2.9**
**PMSA Palmer Station 142.72 164** PKhKP PKPpre 18 28 06.2
comp=Z,27nm,0.5s,baz=240,slow=1.1,SNR=9.8
**PMSA Palmer Station 142.72 164** **PKPdf** **18 28 07.4 -2.5**
**PMSA Palmer Station 142.72 164** *e*P **PKPdf** **18 28 08.4 -1.5**
**MDP Montagnes des 143.12 19** PKP **PKPdf** **18 28 11.3 -1.0**
comp=Z,21nm,0.6s,baz=306,slow=2.1,SNR=16
**SHEL Horse Pasture 144.50 286** PKiKP **PKPdf** **18 28 15.6 +1.0**
**SHEL Horse Pasture 144.50 286** PKPbc **PKPdf** **18 28 15.6 +1.0**
**PTGA Pitinga 145.61 35** PKPbc **PKPbc** **18 28 18.0 +0.2**
comp=Z,96nm,0.6s,baz=336,slow=4.5,SNR=164
**MACA Manacapuru-AM 147.32 38** *e*P **PKPdf** **18 28 19.8 +0.3**
**MG03 Isla Dawson 148.44 146** PKPbc **PKiKP** **18 28 25.1 -0.3**
**MCPB Macapa, AP 148.47 21** *e*P **PKPdf** **18 28 21.7 +0.3**
**USHA Ushuaia 148.75 149** PKPbc **PKiKP** **18 28 25.5 -0.5**
comp=Z,205nm,0.7s,baz=231,slow=3.0,SNR=5.2
**ETMB Extrema 149.06 54** *e*P **PKPdf** **18 28 22.0 -0.2**
**MALB Monte Alegre 149.10 26** *e*P **PKPdf** **18 28 22.9 +0.5**
**MG02 Cerro Sombrero 149.67 146** PKPbc **PKiKP** **18 28 28.2 +0.3**
**GO08 Villa O'Higgin 150.09 136** PKPbc **PKiKP** **18 28 29.8 +0.8**
**ITTB Itaituba 150.78 31** *e*P **PKPdf** **18 28 25.4 +0.4**
**TMAB Tom-Au,PA,Br 151.44 14** *e*P **PKPdf** **18 28 26.7 +0.7**
**LPAZ La Paz 151.74 66** PKP **PKPdf** **18 28 27.7 +0.6**

comp=Z,12nm,0.7s,baz=325,slow=1.8,SNR=32
LPAZ PKPbc **PKiKP** **18 28 35.2 +1.1**
comp=Z,69nm,0.6s,baz=336,slow=3.4,SNR=53
**LPAZ La Paz 151.74 66** *e*P **PKPdf** **18 28 27.9 +0.8**
**LPAZ La Paz 151.74 66** *e*P **PKPdf** **18 28 26.7 -0.4**
**TA02 Huaiquique 152.12 76** PKPbc **PKiKP** **18 28 35.0 +1.0**
**ROSB Rosrio 152.57 6** *e*P **PKPdf** **18 28 28.3 +0.6**
**NBMO Morrinhos-CE 153.09 357** *e*P **PKPdf** **18 28 28.8 +0.4**
**NPGB Novo Progresso 153.32 33** *e*P **PKPdf** **18 28 28.9 +0.1**
**NBCL Cascavel-CE 153.87 353** *e*P **PKPdf** **18 28 30.8 +1.2**
**PLCA Paso Flores 154.12 122** PKP **PKPdf** **18 28 29.7 +0.5**
comp=Z,3.8nm,0.7s,baz=243,slow=1.4,SNR=14
PLCA PKPbc **PKiKP** **18 28 38.4 +0.7**
comp=Z,22nm,0.6s,baz=232,slow=2.7,SNR=22
PLCA PKPab **PKPab** **18 28 54.8 +1.3**
comp=Z,32nm,0.8s,baz=274,slow=6.9,SNR=6.1
**PLCA Paso Flores 154.12 122** PKPbc **PKiKP** **18 28 37.8 +0.1**
**PLCA Paso Flores 154.12 122** *e*P **PKPdf** **18 28 29.1 -0.1**
**LVC Limon Verde 154.14 79** PKP **PKPdf** **18 28 30.2 +0.1**
comp=Z,5.2nm,0.8s,baz=198,slow=2.0,SNR=6.6
LVC PKPbc **PKiKP** **18 28 39.3 +0.7**
comp=Z,21nm,0.6s,baz=303,slow=1.7,SNR=31
LVC PKPab **PKPab** **18 28 55.4 +1.1**
comp=Z,25nm,0.6s,baz=298,slow=4.0,SNR=9.4
**LVC Limon Verde 154.14 79** *e*P **PKPdf** **18 28 30.0 -0.1**
**NBPS Pedro II - PI 154.19 0** *e*P **PKPdf** **18 28 30.5 +0.4**
**MT02 Curacav 154.49 104** PKPbc **PKPbc** **18 28 39.1 +0.5**
**PRPB Parauapebas 154.65 20** *e*P **PKPdf** **18 28 30.5 -0.1**
**RCBR Riachuelo 155.10 347** *e*P **PKPdf** **18 28 30.8 -0.4**
**NBPB Pedra_Branca-C 155.28 356** *e*P **PKPdf** **18 28 30.8 -0.7**
**VILB Vilhena 155.39 49** *e*P **PKPdf** **18 28 31.1 -0.4**
**NBPV Pedro Velho 155.55 346** *e*P **PKPdf** **18 28 31.4 -0.4**
**CLDB Colider 156.38 38** *e*P **PKPdf** **18 28 33.0 +0.1**
**SIV San Ignacio 156.92 56** PKP **PKPdf** **18 28 33.9 +0.4**
comp=Z,17nm,1.0s,baz=325,slow=1.1,SNR=24
SIV PKPab **PKPab** **18 29 04.9 -1.1**
comp=Z,19nm,0.6s,baz=293,slow=4.0,SNR=14
**NBMA Muriti-CE 157.03 354** *e*P **PKPdf** **18 28 33.6 -0.2**
**NBRF Rio Formoso - 157.70 344** *e*P **PKPdf** **18 28 34.3 -0.2**
**SMTB Santa Maria do 157.83 17** *e*P **PKPdf** **18 28 34.2 -0.5**
**PTLB Pontes e Lacer 157.90 52** *e*P **PKPdf** **18 28 35.0 +0.4**
**NBAN Anadia - AL 158.91 346** *e*P **PKPdf** **18 28 35.6 -0.3**
**SNDB Serra Nova Dou 159.50 29** *e*P **PKPdf** **18 28 37.1 +0.5**
**SALV Santo Antonio 160.47 46** *e*P **PKPdf** **18 28 36.9 -0.7**
**NBLA Lagarto - SE 160.48 350** *e*P **PKPdf** **18 28 36.9 -0.8**
**PEXB Peixe 160.72 21** *e*P **PKPdf** **18 28 38.5 +0.6**
**SDBA SAO DESIDERIO 161.84 11** *e*P **PKPdf** **18 28 38.8 -0.3**
**ARAG Araguaiana, MT 162.52 36** *e*P **PKPdf** **18 28 40.7 +1.0**
**GDU01 Guandu, BA 163.39 354** *e*P **PKPdf** **18 28 40.6 0.0**
**BDFB Brasilia 164.12 24** PKP **PKPdf** **18 28 41.4 0.0**
comp=Z,13nm,0.9s,baz=336,slow=3.5,SNR=15
BDFB PKPab **PKPab** **18 29 37.5 +0.1**
comp=Z,8.1nm,0.6s,baz=263,slow=3.0,SNR=8.0
**JANB Januaria 164.54 11** *e*P **PKPdf** **18 28 41.6 -0.1**
**NBIT Itapeh - BA 164.57 353** *e*P **PKPdf** **18 28 41.9 +0.3**
**CMC01 Camacan, BA 165.00 353** *e*P **PKPdf** **18 28 41.9 -0.1**
**CPUP Villa Florida 165.31 78** PKP **PKPdf** **18 28 42.2 +0.2**
comp=Z,25nm,1.1s,baz=356,slow=2.1,SNR=20
CPUP PKPab **PKPab** **18 29 42.5 -0.1**
comp=Z,5.3nm,0.6s,baz=299,slow=3.4,SNR=5.8
CPUP PP **PP** **18 33 29.6 -1.3**
comp=Z,9.7nm,1.2s,baz=258,slow=6.3,SNR=3.1
**CPUP Villa Florida 165.31 78** *e*P **PKPdf** **18 28 41.6 -0.4**
**IPMB Ipameri, GO 166.17 29** *e*P **PKPdf** **18 28 42.9 -0.1**
**GUA01 Guaratinga, BA 166.24 354** *e*P **PKPdf** **18 28 43.5 +0.5**
**ITRB Iturama 166.59 40** *e*P **PKPdf** **18 28 42.6 -0.6**
**ITQB Itaqui 166.68 91** *e*P **PKPdf** **18 28 42.6 -0.4**
**PCMB Pacaembu 167.50 48** *e*P **PKPdf** **18 28 43.1 -0.7**
**NAN01 Guarapari, ES 167.52 355** *e*P **PKPdf** **18 28 43.4 -0.5**
**DIAM Diamantina, MG 167.81 11** *e*P **PKPdf** **18 28 43.5 -0.8**
**SJMB Sao Joao De Ma 168.41 360** *e*P **PKPdf** **18 28 44.0 -0.5**
**BB19B Bebedouro 168.69 37** *e*P **PKPdf** **18 28 44.4 -0.3**
**RIB01 Linhares ES 168.99 356** *e*P **PKPdf** **18 28 44.4 -0.4**
**PLTB Pedras Altas 169.33 101** *e*P **PKPdf** **18 28 44.2 -0.6**
**CPSB Cacapava Do Su 169.49 93** *e*P **PKPdf** **18 28 44.2 -0.7**
**BSCB Bom Sucesso 170.18 20** *e*P **PKPdf** **18 28 45.1 -0.6**
**ALF01 Guarapari-ES 170.31 357** *e*P **PKPdf** **18 28 45.4 -0.2**
**RCLB Rio Claro- Sao 170.32 37** *e*P **PKPdf** **18 28 45.1 -0.5**
**VAO Valinhos 171.09 36** *e*P **PKPdf** **18 28 45.5 -0.5**
**CAM01 Campos-RJ 171.51 2** *e*P **PKPdf** **18 28 45.9 -0.3**
**TIJ01 Guaruva-PR 171.53 56** *e*P **PKPdf** **18 28 45.6 -0.7**
**DUB01 Friburgo-RJ 171.72 7** *e*P **PKPdf** **18 28 45.8 -0.5**
**PET01 Itanhaem-SP 171.95 43** *e*P **PKPdf** **18 28 46.4 +0.1**
**PARB Paraibuna 172.02 30** *e*P **PKPdf** **18 28 46.7 +0.3**
**MAN01 Angra dos Reis 172.18 19** *e*P **PKPdf** **18 28 45.9 -0.7**
**TER01 Tubaro-SC 172.91 77** *e*P **PKPdf** **18 28 45.9 -0.7**

*GII* **14** *18:36:56.0±0.0,32°.51N×47°.99E, h10km*
*IDC* **14** *18:36:57.6±0.8,32°.54N×47°.87E, h0km, mb4.0/22, mb1 4.1/31,mb1mx3.9/66,mbtmp4.0/31,ML4.0/7, MS3.6/3, Ms1 3.6/3,ms1mx2.9/80,Error ellipse: s-maj=16.5km s-min=11.7km az=169.0*
*MOS* **14** *18:36:57.5±1.2,32°.39N×47°.91E, h14km, mb4.4/10, Error ellipse: s-maj=9.4km s-min=5.8km az=107.1*
*ISN* **14** *18:36:58.7±0.8,32°.49N×48°.03E, h9km±13km, ML4.1*
*NEIC* **14** *18:36:59.7±1.7,32°.40N±0°.08×47°.9E±0°.1, h10km±1km, mb4.4/25, mb_Lg4.1(TEH), Error ellipse: s-maj=15.6km s-min=12.5km az=54.0*
*TEH* **14** *18:37:00.7,32°.51N×47°.96E, h8km, ML4.1*
*SGS* **14** *18:37:00.2,32°.76N×48°.08E, h20km, Ml4.8*
**ISC 14 18:36:59.9±0.4,32°.46N±0°.04×47°.81E±0°.03, h15km, n243, s170/246, mb4.2/47, MS3.8/3, 14C-13D, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IKFM** | **Kafar-mosalman** | **1.06** | **2** | *e*Pg | | **Pb** | **18 37 19.1** | **-0.9** |
| IKFM | | | | *e*Sg | | **Sb** | **18 37 35.6** | **+1.8** |
| IKFM | | | | *e* | | | 18 37 45.2 | |
| | comp=Z,77μm,0.6s | | | | | | | |
| **AHWZ** | **Ahwaz** | **1.33** | **148** | *e*Pg | | **Pg** | **18 37 25.4** | **-0.2** |
| **IDOB** | **Doab** | **1.36** | **13** | *e*Pg | | **Pn** | **18 37 25.0** | **+0.4** |
| **BMDN** | **Meydan** | **1.48** | **35** | *e*Pg | | **Pn** | **18 37 26.8** | **+0.6** |
| BMDN | | | | *e* | | | 18 37 55.9 | |
| | comp=Z,19μm,0.7s | | | | | | | |
| **AMIS** | **Naft Sefid** | **1.48** | **122** | *e*Pg | | **Pb** | **18 37 26.8** | **-0.4** |
| AMIS | | | | *e*Sg | | **Sg** | **18 37 48.6** | **+0.8** |
| **RAFI** | **Al-Rafai** | **1.62** | **243** | *i*P | | **Pg** | **18 37 31.2** | **+0.2** |
| RAFI | | | | IAML | | | 18 38 07.3 | |
| | comp=E,3μm,0.6s | | | | | | | |
| RAFI | | | | IAML | | | 18 38 07.3 | |
| | comp=N,2μm,0.8s | | | | | | | |
| **IBDR** | **Badra** | **1.71** | **293** | *i*P | | **Pb** | **18 37 32.7** | **+1.6** |
| IBDR | | | | IAML | | | 18 38 00.7 | |
| | comp=N,2μm,0.7s | | | | | | | |
| IBDR | | | | IAML | | | 18 38 13.7 | |
| | comp=E,2μm,0.9s | | | | | | | |
| **HSAM** | **Samen** | **1.87** | **21** | *e*Pn | | **Pn** | **18 37 33.0** | **+1.3** |
| HSAM | | | | *e* | | | 18 38 12.2 | |
| | comp=Z,15μm,0.8s | | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.92** | **341** | *e*Pn | | **Pn** | **18 37 34.9** | **+2.6** |
| KCHF | | | | *e* | | | 18 38 14.2 | |
| | comp=Z,29μm,0.6s | | | | | | | |
| **KER** | **Kermanshah** | **2.00** | **344** | P | | **Pn** | **18 37 35.8** | **+2.4** |
| **KER** | **Kermanshah** | **2.00** | **344** | *e*Pn | | **Pn** | **18 37 36.0** | **+2.6** |
| **IBZA** | **Bozab** | **2.00** | **1** | *e*Pn | | **Pn** | **18 37 35.6** | **+2.1** |
| IBZA | | | | *e* | | | 18 38 12.4 | |
| | comp=Z,26μm,0.7s | | | | | | | |
| **IGHG** | **Ghaleghazi** | **2.13** | **331** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,1µm,0.6s | | | | | | | | |
| BHD | | | | | IAML | | | 18 38 53.0 | |
| | comp=N,1µm,0.4s | | | | | | | | |
| QJF1 | **Jafarie** | 3.22 | 44 | *e*Pn | | Pn | | 18 37 51.9 | +1.8 |
| QAMS | **Qamsar** | 3.27 | 66 | *e*Pn | | Pn | | 18 37 52.5 | +1.6 |
| QAMS | | | | *e* | | | | 18 38 49.5 | |
| | comp=E,5µm,0.4s | | | | | | | | |
| IKLH | **Kolahrood** | 3.29 | 74 | *e*Pn | | Pn | | 18 37 52.3 | +1.2 |
| IKLH | | | | *e* | | | | 18 39 02.3 | |
| | comp=E,3µm,0.5s | | | | | | | | |
| IRAZ | **Razeghan** | 3.42 | 30 | *e*Pn | | Pn | | 18 37 54.7 | +1.7 |
| IRAZ | | | | *e* | | | | 18 39 04.8 | |
| | comp=E,6µm,0.8s | | | | | | | | |
| KLNJ | **Kolanjah** | 3.53 | 113 | *e*Pn | | Pn | | 18 37 55.4 | +0.8 |
| KLNJ | | | | *e* | | | | 18 39 16.2 | |
| | comp=E,4µm,0.7s | | | | | | | | |
| GHVR | **GHOM** | 3.54 | 54 | *e*Pn | | Pn | | 18 37 57.1 | +2.6 |
| QABG | **Abgarm-Qazvin** | 3.56 | 24 | *e*Pn | | Pn | | 18 37 56.0 | +1.1 |
| IGAR | **Gharneh** | 3.58 | 90 | *e*Pn | | Pn | | 18 37 56.1 | +1.0 |
| IQOM | **Qom** | 3.61 | 48 | *e*Pn | | Pn | | 18 37 56.6 | +1.0 |
| IZEF | **Zefreh** | 3.84 | 82 | *e*Pn | | Pn | | 18 37 59.2 | +0.5 |
| IZEF | | | | *e* | | | | 18 38 01.5 | |
| | comp=E,1µm,0.4s | | | | | | | | |
| KRSH | **Karshahi** | 3.93 | 66 | *e*Pn | | Pn | | 18 38 01.0 | +1.1 |
| KRSH | | | | *e* | | | | 18 38 25.8 | |
| | comp=E,2µm,0.6s | | | | | | | | |
| IRAM | **Ramesheh** | 3.93 | 98 | *e*Pn | | Pn | | 18 38 00.3 | +0.3 |
| IRAM | | | | *e* | | | | 18 39 36.5 | |
| | comp=E,2µm,1.2s | | | | | | | | |
| IMHD | **Mahdasht** | 4.00 | 36 | *e*Pn | | Pn | | 18 38 02.6 | +1.8 |
| IKRK | **Kirkuk** | 4.11 | 316 | *i* P | | Pn | | 18 38 05.0 | +2.7 |
| IKRK | | | | IAML | | | | 18 39 34.3 | |
| | comp=N,400nm,0.7s | | | | | | | | |
| IKRK | | | | IAML | | | | 18 39 43.9 | |
| | comp=E,470nm,0.8s | | | | | | | | |
| IVRN | **Varamin** | 4.13 | 51 | *e*Pn | | Pn | | 18 38 04.2 | +1.6 |
| IHSB | **Hasanabad** | 4.14 | 43 | *e*Pn | | Pn | | 18 38 04.0 | +1.3 |
| ISFB | **Sefidab** | 4.16 | 62 | *e*Pn | | Pn | | 18 38 03.8 | +0.8 |
| NASN | **Na'in** | 4.23 | 84 | *e*Pn | | Pn | | 18 38 05.4 | +1.2 |
| ZNJK | **Zanjan** | 4.26 | 10 | *e*Pn | | Pn | | 18 38 06.9 | +2.4 |
| THKV | **Tehran--Karaj** | 4.28 | 36 | *e*Pn | | Pn | | 18 38 03.8 | -1.0 |
| SRFHA | **Rafha** | 4.39 | 220 | P | | Pn | | 18 38 09.1 | +3.0 |
| SRFHA | **Rafha** | 4.39 | 220 | S | | Sn | | 18 39 01.3 | +4.4 |
| IGZV | **Ghazvin** | 4.39 | 26 | *e*Pn | | Pn | | 18 38 08.1 | +1.8 |
| CHTH | **Charan** | 4.40 | 38 | *e*Pn | | Pn | | 18 38 08.2 | +1.7 |
| JIR1 | **Jirandeh** | 4.54 | 21 | *e*Pn | | Pn | | 18 38 10.4 | +2.0 |
| QALM | **Alamut, Qazvin** | 4.60 | 30 | *e*Pn | | Pn | | 18 38 10.4 | +1.2 |
| MAHB | **Mahabad** | 4.63 | 339 | *e*Pn | | Pn | | 18 38 12.4 | +2.8 |
| QYSM | **Um Kedad** | 4.66 | 190 | P | | Pn | | 18 38 12.2 | +2.4 |
| QYSM | **Um Kedad** | 4.66 | 190 | S | | Sn | | 18 39 07.3 | +3.6 |
| AHBU | **AHRAM** | 4.67 | 139 | *e*Pn | | Pn | | 18 38 10.9 | +0.9 |
| DAMV | **Damavand** | 4.68 | 46 | *e*Pn | | Pn | | 18 38 11.7 | +1.4 |
| ISAD | **Sadrabad** | 5.01 | 95 | *e*Pn | | Pn | | 18 38 15.5 | +0.6 |
| ANAR | **Anarak** | 5.04 | 80 | *e*Pn | | Pn | | 18 38 15.9 | +0.8 |
| ILAS | **Lasjerd** | 5.18 | 54 | *e*Pn | | Pn | | 18 38 18.1 | +1.0 |
| IBST | **Bostanabad** | 5.28 | 352 | *e*Pn | | Pn | | 18 38 20.0 | +1.4 |
| IPRN | **Peran** | 5.32 | 44 | *e*Pn | | Pn | | 18 38 20.9 | +2.0 |
| ISRB | **Sarab** | 5.36 | 359 | *e*Pn | | Pn | | 18 38 22.0 | +2.5 |
| IAZR | **Azarshahr** | 5.42 | 344 | *e*Pn | | Pn | | 18 38 23.3 | +2.9 |
| SARAR | **Arar** | 5.43 | 249 | P | | Pn | | 18 38 22.8 | +2.3 |
| ICHK | **Chekchek** | 5.59 | 90 | *e*Pn | | Pn | | 18 38 23.8 | +1.1 |
| ISHM | **Shahmirzad** | 5.64 | 52 | *e*Pn | | Pn | | 18 38 24.9 | +1.4 |
| YZKH | **Yazd** | 5.74 | 89 | *e*Pn | | Pn | | 18 38 25.1 | +0.4 |
| IHRS | **Heris** | 5.88 | 354 | *e*Pn | | Pn | | 18 38 29.1 | +2.3 |
| IMEH | **Mehriz** | 5.88 | 99 | *e*Pn | | Pn | | 18 38 27.3 | +0.5 |
| IANJ | **Anjilo** | 5.89 | 58 | *e*Pn | | Pn | | 18 38 27.4 | +0.5 |
| ITBZ | **Tabriz** | 5.92 | 347 | *e*Pn | | Pn | | 18 38 31.0 | +3.8 |
| ISHB | **Shabestar** | 6.08 | 343 | *e*Pn | | Pn | | 18 38 31.3 | +1.8 |
| GHIR | **Ghir-Karzin** | 6.11 | 132 | *e*Pn | | Pn | | 18 38 30.1 | +0.3 |
| NARAR | **Arar** | 6.15 | 259 | P | | Pn | | 18 38 32.5 | +2.1 |
| SMAN | **Sihmah** | 6.26 | 178 | S | | Sn | | 18 39 45.5 | +2.3 |
| SMAN | | | | P | | Pn | | 18 38 32.7 | +0.9 |
| GRMI | **Germi** | 6.33 | 1 | *e*Pn | | Pn | | 18 38 35.7 | +2.8 |
| IGLO | **Ghaloghah** | 6.40 | 49 | *e*Pn | | Pn | | 18 38 36.1 | +2.2 |
| IMRD | **Marand** | 6.47 | 345 | *e*Pn | | Pn | | 18 38 38.4 | +3.6 |
| IBAF | **Bafgh** | 6.64 | 95 | *e*Pn | | Pn | | 18 38 37.5 | +0.3 |
| NSKAK | **NSKAK** | 6.67 | 255 | P | | Pn | | 18 38 38.7 | +1.3 |
| NSKAK | **NSKAK** | 6.67 | 255 | S | | Sn | | 18 39 52.8 | -0.5 |
| SIRT | **Sirnak** | 6.69 | 320 | Pn | | Pn | | 18 38 38.8 | +1.1 |
| GEVA | **Gevas** | 7.01 | 328 | Pn | | Pn | | 18 38 44.4 | +2.1 |
| RMAH | **Rumah** | 7.13 | 187 | S | | Sn | | 18 40 03.8 | -0.9 |
| RMAH | | | | P | | Pn | | 18 38 46.2 | +2.1 |
| MAKU | **Maku** | 7.33 | 341 | *e*Pn | | Pn | | 18 38 49.7 | +3.0 |
| TPRV | **Parvadeh(Tabas** | 7.50 | 83 | *e*Pn | | Pn | | 18 38 49.7 | +0.8 |
| TNSJ | **Nastanj** | 7.53 | 76 | *e*Pn | | Pn | | 18 38 50.1 | +0.9 |
| MARD | **Mardin** | 7.54 | 312 | | | Pn | | 18 38 49.3 | -0.1 |
| SHRO | **Shahrood** | 7.65 | 60 | *e*Pn | | Pn | | 18 38 52.4 | +1.4 |
| GURO | **Guroymak-BITLI** | 7.69 | 324 | | | Pn | | 18 38 53.3 | +1.8 |
| NHRD | **Haradh** | 7.78 | 172 | P | | Pn | | 18 38 53.4 | +0.7 |
| TKDS | **Koohdasht(Taba** | 7.90 | 79 | *e*Pn | | Pn | | 18 38 55.3 | +0.8 |
| TABS | **Tabas** | 7.91 | 79 | *e*Pn | | Pn | | 18 38 55.5 | +1.0 |
| GNI | **Garni** | 8.06 | 343 | Pn | | Pn | | 18 38 56.6 | -0.1 |
| | comp=E,0.4nm,0.3s,baz=43,slow=5.7,SNR=3.4 | | | | | | | | |
| GNI | | | | Lg | | Lg | | 18 41 14.8 | |
| | comp=E,0.1nm,0.3s,baz=174,slow=18,SNR=1.3 | | | | | | | | |
| GNI | | | | LR | | LR | | 18 42 43.4 | |
| | comp=E,294nm,21.9s,baz=51,slow=43 | | | | | | | | |
| GNI | **Garni** | 8.06 | 343 | | | Pn | | 18 38 56.1 | -0.6 |
| MRVT | **Maraveh tapeh** | 8.54 | 50 | *e*Pn | | Pn | | 18 39 05.1 | +2.0 |
| BNDS | **Bandar-Abbas** | 8.83 | 123 | *e*Pn | | Pn | | 18 39 06.0 | -1.3 |
| SBZV | **Sabzevar** | 8.99 | 61 | *e*Pn | | Pn | | 18 39 10.9 | +1.4 |
| RAYN | **Ar Rayn** | 9.13 | 193 | P | | Pn | | 18 39 10.7 | -0.6 |
| RAYN | **Ar Rayn** | 9.13 | 193 | Pn | | Pn | | 18 39 10.7 | -0.6 |
| ASF | **Jabal al Asfar** | 9.24 | 271 | Pn | | Pn | | 18 39 12.8 | +0.1 |
| | comp=E,1.6nm,0.3s,baz=114,slow=8.5,SNR=15 | | | | | | | | |
| ASF | | | | Sn | | Sn | | 18 40 50.7 | -5.9 |
| | comp=E,0.3nm,0.3s,baz=90,slow=2.2,SNR=1.8 | | | | | | | | |
| ASF | | | | Lg | | Lg | | 18 41 57.8 | |
| | comp=E,0.9nm,0.3s,baz=267,slow=16,SNR=4.5 | | | | | | | | |
| AFRZ | **Afriz** | 9.47 | 81 | *e*Pn | | Pn | | 18 39 17.0 | +1.1 |
| BSRN | **Basiran** | 9.60 | 90 | *e*Pn | | Pn | | 18 39 17.6 | -0.2 |
| KBAM | **BAM** | 9.73 | 107 | *e*Pn | | Pn | | 18 39 20.1 | +0.6 |
| IMON | **Monand** | 10.01 | 83 | *e*Pn | | Pn | | 18 39 24.4 | +1.0 |
| KSHT | **Keshet** | 10.12 | 276 | Pn | | Pn | | 18 39 23.8 | -1.0 |
| GEM | **Giv'at Ha'Em** | 10.25 | 277 | Pn | | Pn | | 18 39 25.3 | -1.2 |
| MMAI | **Mount Meron Ar** | 10.46 | 276 | Pn | | Pn | | 18 39 30.1 | +0.6 |
| | comp=E,0.9nm,0.3s,baz=88,slow=18,SNR=12 | | | | | | | | |
| MMAI | | | | Sn | | Sn | | 18 41 21.4 | -5.2 |
| | comp=E,0.3nm,0.3s,baz=102,slow=38,SNR=1.7 | | | | | | | | |
| MMAI | | | | Lg | | Lg | | 18 42 26.3 | |
| | comp=E,1.4nm,0.3s,baz=121,slow=36,SNR=3.0 | | | | | | | | |
| MMLI | **Mount Malkishu** | 10.47 | 273 | Pn | | Pn | | 18 39 29.1 | -0.4 |
| UOSS | **Minazif** | 10.50 | 133 | | | Pn | | 18 39 28.0 | -2.0 |
| SHRT | **Shahrakht** | 10.54 | 80 | *e*Pn | | Pn | | 18 39 32.0 | +1.4 |
| MBH | **Mount Berech** | 11.37 | 260 | Pn | | Pn | | 18 39 40.1 | -1.8 |
| EIL | **Elat** | 11.37 | 259 | Pn | | Pn | | 18 39 43.3 | +1.4 |
| | comp=E,0.3nm,0.3s,baz=49,slow=12,SNR=2.2 | | | | | | | | |
| EIL | | | | Lg | | Lg | | 18 43 01.8 | |
| | comp=E,0.5nm,0.3s,baz=0.0,slow=20,SNR=1.5 | | | | | | | | |
| EIL | **Elat** | 11.37 | 259 | Pn | | Pn | | 18 39 41.3 | -0.6 |
| KZIT | **Kziot** | 11.53 | 266 | Pn | | Pn | | 18 39 42.7 | -1.4 |
| CSS | **Mathiatis** | 12.31 | 286 | Pn | | Pn | | 18 39 54.0 | -0.8 |
| WSAR | **Wadi Sarin** | 13.26 | 131 | Pn | | Pn | | 18 40 06.0 | -1.6 |
| | comp=E,0.9nm,0.3s,baz=345,slow=8.8,SNR=17 | | | | | | | | |
| WSAR | | | | Sn | | Sn | | 18 42 22.8 | -12 |
| | comp=E,0.4nm,0.3s,baz=328,slow=19,SNR=1.2 | | | | | | | | |
| BRTR | **Keskin Array B** | 13.55 | 306 | Pn | | Pn | | 18 40 14.3 | +2.6 |
| | baz=134,slow=14,SNR=6.5 | | | | | | | | |
| ELL | **Elmali** | 15.35 | 291 | P | | P | | 18 40 41.9 | +1.1 |
| ELL | | | | pmax | | pmax | | | |
| | comp=E,74nm,1.1s | | | | | | | | |
| ELL | **Elmali** | 15.35 | 291 | P | | P | | 18 40 41.9 | +1.1 |
| ABKAR | **Akbulak array** | 19.08 | 25 | P | | P | | 18 41 22.2 | +0.4 |
| IDI | **Anoyia** | 19.23 | 285 | P | | Pn | | 18 41 25.1 | +0.4 |
| | comp=E,1.0nm,0.3s,baz=86,slow=13,SNR=16 | | | | | | | | |
| IDI | **Anoyia** | 19.23 | 285 | P | | Pn | | 18 41 25.3 | +0.6 |
| IDI | | | | IAmb | | IAmb | | 18 41 32.5 | |
| | comp=E,22nm,0.9s | | | | | | | | |
| TIRR | **Tirgusor** | 19.29 | 314 | P | | P | | 18 41 25.1 | +1.0 |
| TIRR | | | | pmax | | pmax | | | |
| | comp=E,19nm,0.9s | | | | | | | | |
| TIRR | **Tirgusor** | 19.29 | 314 | P | | P | | 18 41 25.1 | +1.0 |
| TIRR | | | | IAmb | | IAmb | | 18 41 30.0 | |
| | comp=E,19nm,0.9s | | | | | | | | |
| AKTO | **Aktyubinsk** | 19.49 | 20 | P | | P | | 18 41 26.2 | -0.1 |
| | comp=E,0.4nm,0.3s,baz=217,slow=9.8,SNR=6.7 | | | | | | | | |
| HARR | **Harsova** | 19.70 | 314 | ⇑P | | P | | 18 41 30.4 | +1.7 |
| CFR | **Carcaliu** | 19.84 | 315 | ⇓P | | P | | 18 41 30.7 | +0.6 |
| BELG | **Belogornoye** | 19.92 | 360 | P | | P | | 18 41 31.7 | +0.7 |
| | comp=E,1.4nm,0.3s,baz=330,slow=4.5,SNR=3.5 | | | | | | | | |
| PLD | **Plovdiv** | 20.70 | 304 | P | | Pn | | 18 41 45.4 | +3.5 |
| PLD | | | | pmax | | pmax | | | |
| | comp=E,41nm,1.4s | | | | | | | | |
| SULR | | 20.73 | 312 | ⇑P | | P | | 18 41 41.3 | +1.5 |
| GHRR | | 20.75 | 317 | ⇑P | | P | | 18 41 40.6 | +0.5 |
| ISR | **Istrita** | 20.77 | 314 | ⇓P | | Pn | | 18 41 43.5 | +0.7 |
| KKAR | **Karatay Array** | 20.79 | 53 | P | | P | | 18 41 40.7 | +0.2 |
| KKAR | **Karatay Array** | 20.79 | 53 | | | P | | 18 41 40.7 | +0.2 |
| BISRR | **Bisoca** | 20.89 | 315 | ⇓P | | P | | 18 41 51.9 | +7.8 |
| VRI | **Vrincioaia** | 21.05 | 316 | ⇓P | | P | | 18 41 45.3 | +2.0 |
| NEHR | **Nehoiu** | 21.08 | 314 | ⇓P | | P | | 18 41 46.6 | +3.0 |
| PLOR | **Plostina** | 21.09 | 315 | ⇓P | | P | | 18 41 45.5 | +1.7 |
| COPA | **Copaceanca** | 21.15 | 310 | ⇓P | | P | | 18 41 46.5 | +2.2 |
| MLR | **Muntele Rosu** | 21.32 | 314 | ⇑P | | P | | 18 41 49.2 | +2.8 |
| MLR | **Muntele Rosu** | 21.32 | 314 | P | | P | | 18 41 49.6 | +3.2 |
| | comp=E,10nm,0.7s,baz=146,slow=11 | | | | | | | | |
| MLR | **Muntele Rosu** | 21.32 | 314 | P | | P | | 18 41 47.5 | +1.1 |
| MLR | | | | pmax | | pmax | | | |
| | comp=E,14nm,0.7s | | | | | | | | |
| MLR | **Muntele Rosu** | 21.32 | 314 | P | | P | | 18 41 47.5 | +1.1 |
| MLR | | | | IAmb | | IAmb | | 18 41 58.2 | |
| | comp=E,14nm,0.7s | | | | | | | | |
| TESR | **Tescani** | 21.44 | 317 | ⇓P | | P | | 18 41 48.7 | +1.1 |
| HUMR | **Humele** | 21.47 | 311 | ⇑P | | P | | 18 41 49.8 | +2.0 |
| SORM | **Soroca** | 21.48 | 322 | ⇓P | | P | | 18 41 47.3 | -0.6 |
| AGG | **Agios Georgios** | 21.66 | 295 | P | | P | | 18 41 51.3 | +1.4 |
| AGG | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,0.9s | | | | | | | | |
| AGG | **Agios Georgios** | 21.66 | 295 | P | | P | | 18 41 51.3 | +1.4 |
| AGG | | | | IAmb | | IAmb | | 18 41 56.8 | |
| | comp=E,10nm,0.9s | | | | | | | | |
| ITM | **Ithomi** | 21.74 | 290 | P | | P | | 18 41 51.7 | +0.9 |
| ITM | | | | IAmb | | IAmb | | 18 41 57.9 | |
| | comp=E,24nm,0.9s | | | | | | | | |
| LIT | **Litokhoron** | 21.74 | 298 | P | | P | | 18 41 51.8 | +1.0 |
| LIT | | | | pmax | | pmax | | | |
| | comp=E,9.0nm,0.9s | | | | | | | | |
| LIT | **Litokhoron** | 21.74 | 298 | P | | P | | 18 41 51.8 | +1.0 |
| LIT | | | | IAmb | | IAmb | | 18 41 57.0 | |
| | comp=E,8.6nm,0.9s | | | | | | | | |
| VOIR | | 21.85 | 313 | ⇑P | | P | | 18 41 54.4 | +2.5 |
| VTS | **Vitosha** | 21.90 | 305 | ⇑P | | P | | 18 41 51.6 | -1.0 |
| VTS | **Vitosha** | 21.90 | 305 | P | | P | | 18 41 53.6 | +1.0 |
| VTS | | | | pmax | | pmax | | | |
| | comp=E,4.0nm,0.6s | | | | | | | | |
| VTS | **Vitosha** | 21.90 | 305 | P | | P | | 18 41 53.6 | +1.0 |
| DOPR | **Dopca** | 21.90 | 315 | ⇑P | | P | | 18 41 55.1 | +2.6 |
| ARR | **Arges** | 22.07 | 312 | ⇑P | | P | | 18 41 56.3 | +1.9 |
| SRE | **Strehaia** | 22.68 | 310 | ⇑P | | P | | 18 42 02.5 | +1.7 |
| AKASG | **Malin Array Be** | 22.81 | 328 | P | | P | | 18 42 00.7 | -1.4 |
| | comp=E,1.5nm,0.5s,baz=140,slow=9.0,SNR=18 | | | | | | | | |
| AKASG | **Malin Array Be** | 22.81 | 328 | P | | P | | 18 42 00.9 | -1.2 |
| AKASG | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,1.1s | | | | | | | | |
| AKASG | **Malin Array Be** | 22.81 | 328 | P | | P | | 18 42 00.9 | -1.2 |
| AKBB | **Malin Array Si** | 22.81 | 328 | P | | P | | 18 42 01.2 | -0.9 |
| AKBB | | | | pmax | | pmax | | | |
| | comp=E,13nm,1.3s | | | | | | | | |
| AKBB | **Malin Array Si** | 22.81 | 328 | P | | P | | 18 42 01.1 | -0.9 |
| AKBB | | | | IAmb | | IAmb | | 18 42 08.0 | |
| | comp=E,13nm,1.2s | | | | | | | | |
| BURAR | **Bucovina Array** | 22.87 | 318 | ⇑P | | P | | 18 41 56.0 | -6.8 |
| BURAR | **Bucovina Array** | 22.87 | 318 | P | | P | | 18 42 03.4 | +0.6 |
| BURAR | **Bucovina Ar. S** | 22.89 | 318 | P | | P | | 18 42 04.8 | +1.7 |
| ARCR | **ARCALIA** | 23.08 | 316 | ⇑P | | P | | 18 42 06.2 | +1.3 |
| GZR | **Gura Zlata** | 23.26 | 311 | ⇓P | | P | | 18 42 07.2 | +0.4 |
| HERR | **Herculane** | 23.28 | 310 | ⇑P | | P | | 18 42 08.2 | +1.2 |
| BOVS | **Bovan** | 23.29 | 306 | ⇑P | | P | | 18 42 09.2 | +2.1 |
| AAK | **Ala-Archa** | 23.38 | 57 | P | | P | | 18 42 07.7 | -0.5 |
| | comp=E,0.3nm,0.5s,baz=211,slow=12,SNR=1.6 | | | | | | | | |
| KSH | **Kashi** | 23.79 | 65 | P | | P | | 18 42 16.3 | +4.1 |
| KSH | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,1.2s | | | | | | | | |
| DRGR | | 23.92 | 314 | ⇓P | | P | | 18 42 15.1 | +1.8 |
| DRGR | | 23.92 | 314 | P | | P | | 18 42 14.9 | +1.6 |
| DRGR | | | | pmax | | pmax | | | |
| | comp=E,9.0nm,1.1s | | | | | | | | |
| OBN | **Obninsk** | 24.00 | 344 | ⇓*e*P | | P | | 18 42 12.7 | -1.1 |
| OBN | | | | PPP | | PPP | | 18 42 52.0 | |
| OBN | | | | S | | **S** | | 18 46 33.0 | +3.0 |
| OBN | | | | SSS | | SSS | | 18 47 40.0 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=E,35nm,2.4s | | | | | | | | |
| DIVS | **Divibare** | 24.62 | 306 | P | | P | | 18 42 20.9 | +1.2 |
| DIVS | | | | IAmb | | IAmb | | 18 42 34.0 | |
| | comp=E,19nm,1.5s | | | | | | | | |
| ARU | **Arti** | 25.10 | 14 | P | | P | | 18 42 23.4 | -0.5 |
| | comp=E,1.1nm,0.7s,baz=228,slow=12,SNR=3.6 | | | | | | | | |
| ARU | **Arti** | 25.10 | 14 | P | | P | | 18 42 25.4 | +1.5 |
| CRVS | **Cervenica-Dubn** | 25.68 | 317 | *e*P | | P | | 18 42 32.4 | +3.2 |
| CRVS | **Cervenica-Dubn** | 25.68 | 317 | *e*P | | P | | 18 42 32.4 | +3.2 |
| TIP | **Timpagrande** | 25.97 | 294 | P | | P | | 18 42 33.0 | +1.0 |
| KECS | **Kecovo** | 26.04 | 316 | *e*P | | P | | 18 42 37.1 | +4.6 |
| KECS | **Kecovo** | 26.04 | 316 | *e*P | | P | | 18 42 37.1 | +4.6 |
| PSZ | **Piszkesteto** | 26.14 | 314 | P | | P | | 18 42 35.6 | +2.1 |
| PSZ | | | | pmax | | pmax | | | |
| | comp=E,13nm,0.9s | | | | | | | | |
| PSZ | **Piszkesteto** | 26.14 | 314 | P | | P | | 18 42 35.5 | +2.1 |
| PSZ | | | | IAmb | | IAmb | | 18 42 41.8 | |
| | comp=E,13nm,0.9s | | | | | | | | |
| PSZ | **Piszkesteto** | 26.14 | 314 | P | | P | | 18 42 36.5 | +3.0 |
| KIRV | **Kirov** | 26.15 | 2 | P | | P | | 18 42 32.7 | -0.6 |
| | comp=E,3.1nm,0.4s,baz=151,slow=1.7,SNR=2.1 | | | | | | | | |
| BVAR | **Borovoye Array** | 26.21 | 32 | P | | P | | 18 42 33.3 | -0.7 |
| | comp=E,1.2nm,0.6s,baz=325,slow=15,SNR=5.4 | | | | | | | | |
| MORH | **Mrgy, Hungar** | 26.24 | 310 | P | | P | | 18 42 35.4 | +1.1 |
| NACGM | **Naroch** | 26.90 | 333 | *i* P | | P | | 18 42 43.5 | +3.3 |
| LANS | **Liptovska Anna** | 26.95 | 317 | *e*P | | P | | 18 42 43.3 | +2.6 |
| LANS | **Liptovska Anna** | 26.95 | 317 | *e*P | | P | | 18 42 43.3 | +2.6 |
| KURBB | **Kurchatov Arra** | 28.99 | 42 | P | | P | | 18 42 59.0 | +0.1 |
| | comp=E,1.0nm,0.7s,baz=244,slow=9.3,SNR=5.9 | | | | | | | | |
| KURK | **Kurchatov** | 29.09 | 42 | P | | P | | 18 42 59.0 | -0.7 |
| MOA | **Molln** | 29.61 | 311 | *i* P | | P | | 18 43 06.2 | +1.7 |
| | comp=E,1.9nm,0.6s | | | | | | | | |
| MK31 | **Makanchi Array** | 29.90 | 51 | P | | P | | 18 43 07.3 | +0.2 |
| MK31 | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,0.8s | | | | | | | | |
| MK31 | **Makanchi Array** | 29.90 | 51 | P | | P | | 18 43 07.3 | +0.2 |
| MKAR | **Makanchi Array** | 29.90 | 51 | P | | P | | 18 43 06.7 | -0.4 |
| | comp=E,1.7nm,0.7s,baz=247,slow=8.1,SNR=18 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | 18 46 08.6 | -1.1 |
| | comp=E,0.3nm,0.6s,baz=234,slow=2.8,SNR=2.8 | | | | | | | | |
| MKAR | **Makanchi Array** | 29.90 | 51 | P | | P | | 18 43 07.5 | +0.4 |
| MKAR | **Makanchi Array** | 29.90 | 51 | P | | P | | 18 43 07.5 | +0.4 |
| KBA | **Kobreinsper** | 29.97 | 309 | *e*P | | P | | 18 43 08.9 | +1.1 |
| | comp=E,3.0nm,0.8s | | | | | | | | |
| GERES | **GERESS Array B** | 30.30 | 313 | P | | P | | 18 43 11.0 | +0.3 |
| | comp=E,0.8nm,0.7s,baz=99,slow=8.2,SNR=5.8 | | | | | | | | |
| GERES | | | | PcP | | **PcP** | | 18 46 11.1 | +0.4 |
| | comp=E,0.3nm,0.7s,baz=105,slow=5.6,SNR=2.2 | | | | | | | | |
| WTTA | **Wattenberg** | 31.14 | 309 | *e*P | | P | | 18 43 18.8 | +0.6 |
| | comp=E,2.6nm,0.7s | | | | | | | | |
| VLC | **Villacollemand** | 31.35 | 303 | P | | P | | 18 43 21.3 | +1.4 |
| MOTA | **Moosalm** | 31.51 | 309 | *e*P | | P | | 18 43 21.9 | +0.5 |
| | comp=E,2.0nm,0.6s | | | | | | | | |
| CLL | **Collm** | 31.62 | 317 | *e*P | | P | | 18 43 25.0 | +2.8 |
| CLL | **Collm** | 31.62 | 317 | *e*P | | P | | 18 43 25.0 | +2.8 |
| FETA | **Feichten** | 31.68 | 308 | *e*P | | P | | 18 43 23.6 | +0.7 |
| | comp=E,2.3nm,0.5s | | | | | | | | |
| FIA1 | **FINESS Array S** | 32.24 | 341 | P | | P | | 18 43 27.2 | -0.3 |
| FIA1 | | | | IAmb | | IAmb | | 18 43 36.3 | |
| | comp=E,11nm,1.2s | | | | | | | | |
| FINES | **FINESS Array B** | 32.24 | 341 | P | | P | | 18 43 26.4 | -1.1 |
| | comp=E,1.7nm,0.6s,baz=143,slow=9.0,SNR=15 | | | | | | | | |
| FINES | **FINESS Array B** | 32.24 | 341 | P | | P | | 18 43 27.4 | -0.1 |
| FINES | **FINESS Array B** | 32.24 | 341 | P | | P | | 18 43 27.4 | -0.1 |
| DAVA | **Damuels** | 32.31 | 308 | *e*P | | P | | 18 43 28.8 | +0.4 |
| | comp=E,3.6nm,0.6s | | | | | | | | |
| SENIN | **Lac Senin/Sane** | 33.86 | 306 | P | | P | | 18 43 42.9 | +0.8 |
| SENIN | | | | IAmb | | IAmb | | 18 43 47.2 | |
| | comp=E,8.9nm,1.2s | | | | | | | | |
| ZALV | **Zalesovo Beam** | 33.91 | 40 | P | | P | | 18 43 41.3 | -0.9 |
| | comp=E,1.5nm,0.4s,baz=234,slow=7.6,SNR=9.2 | | | | | | | | |
| ZALV | **Zalesovo Beam** | 33.91 | 40 | P | | P | | 18 43 41.0 | -1.2 |
| BNI | **Bardonecchia** | 34.09 | 304 | P | | P | | 18 43 44.4 | +0.4 |
| BNI | | | | pmax | | pmax | | | |
| | comp=E,12nm,0.8s | | | | | | | | |
| BNI | **Bardonecchia** | 34.09 | 304 | P | | P | | 18 43 44.4 | +0.4 |
| KMBO | **Kilima Mbogo** | 34.87 | 199 | LR | | LR | | 18 58 43.8 | |
| | comp=E,92nm,20.7s,baz=88,slow=37 | | | | | | | | |
| HFS | **Hagfors** | 35.64 | 331 | P | | P | | 18 43 56.6 | -0.4 |
| | comp=E,3.2nm,0.7s,baz=135,slow=9.8,SNR=10 | | | | | | | | |
| NC405 | **NORSAR Array S** | 37.00 | 332 | P | | P | | 18 44 06.9 | -1.7 |
| NB2 | **NORSAR Subarra** | 37.16 | 331 | P | | P | | 18 44 09.4 | -0.6 |
| | comp=E,1.3nm,0.8s,baz=124,slow=8.6 | | | | | | | | |
| NOA | **NORSAR Array B** | 37.16 | 331 | P | | P | | 18 44 09.2 | -0.8 |
| | comp=E,0.5nm,0.6s,baz=123,slow=8.5,SNR=4.6 | | | | | | | | |
| ARCES | **ARCESS Array B** | 39.19 | 348 | P | | P | | 18 44 26.5 | -0.5 |
| | comp=E,3.3nm,1.0s,baz=144,slow=7.8,SNR=1.9 | | | | | | | | |
| ESDC | **Sonseca Array** | 41.98 | 295 | P | | P | | 18 44 51.2 | +0.7 |
| | comp=E,1.3nm,0.6s,baz=77,slow=8.5,SNR=15 | | | | | | | | |
| ESDC | **Sonseca Array** | 41.98 | 295 | P | | P | | 18 44 50.8 | +0.3 |
| EKA | **Eskdalemuir Ar** | 42.05 | 318 | P | | P | | 18 44 50.5 | -0.3 |
| | comp=E,2.6nm,0.6s,baz=103,slow=9.2,SNR=11 | | | | | | | | |
| GTA | **Gaotai** | 42.19 | 65 | *e*P | | P | | 18 44 52.8 | +0.5 |
| GTA | | | | pP | | sP | | 18 45 03.8 | +4.9 |
| GTA | | | | sP | | pP | | 18 45 08.6 | +12 |
| GTA | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,0.8s | | | | | | | | |
| LZH | **Lanzhou** | 45.91 | 69 | *e*P | | P | | 18 45 11.6 | -11 |
| LZH | | | | pP | | pP | | 18 45 22.8 | -4.2 |
| LZH | | | | sP | | sP | | 18 45 27.6 | -1.3 |
| LZH | | | | pmax | | pmax | | | |
| | comp=E,6.0nm,1.1s | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 46.24 | 256 | P | | P | | 18 45 24.6 | -0.2 |
| | comp=E,1.5nm,0.7s,baz=61,slow=8.0,SNR=9.5 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 46.24 | 256 | P | | P | | 18 45 24.2 | -0.6 |
| TORD | | | | IAmb | | IAmb | | 18 45 45.5 | |
| | comp=E,4.6nm,1.4s | | | | | | | | |
| SONM | **Songino Array** | 46.24 | 53 | P | | P | | 18 45 24.4 | -0.3 |
| | comp=E,0.3nm,0.6s,baz=280,slow=8.6,SNR=1.7 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | 47.81 | 94 | P | | P | | 18 45 35.7 | -1.3 |
| | comp=E,0.6nm,0.4s,baz=292,slow=7.8,SNR=6.8 | | | | | | | | |
| SPITS | **Spitsbergen Ar** | 47.83 | 352 | P | | P | | 18 45 34.4 | -2.1 |
| | comp=E,5.4nm,0.8s,baz=155,slow=14,SNR=13 | | | | | | | | |
| IPM | **Ipoh** | 56.90 | 108 | P | | P | | 18 46 42.5 | -2.1 |
| SUMG | **Summit** | 58.27 | 339 | P | | P | | 18 46 53.9 | 0.0 |
| SUMG | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,1.1s | | | | | | | | |
| SUMG | **Summit** | 58.27 | 339 | *i* P | | P | | 18 46 54.0 | 0.0 |
| SUMG | **Summit** | 58.27 | 339 | P | | P | | 18 46 53.9 | 0.0 |
| SUMG | | | | IAmb | | IAmb | | 18 47 16.9 | |
| | comp=E,2.4nm,1.1s | | | | | | | | |
| BOSA | **Boshof** | 64.41 | 202 | P | | P | | 18 47 36.8 | +1.2 |
| | comp=E,2.7nm,0.8s,baz=18,slow=4.9,SNR=5.0 | | | | | | | | |
| SEY | **Seymchan** | 67.81 | 29 | P | | P | | 18 47 56.5 | -0.4 |
| | comp=E,3.1nm,0.6s,baz=280,slow=7.8,SNR=8.6 | | | | | | | | |
| BILL | **Bilibino** | 69.92 | 21 | ⇓*e*P | | P | | 18 48 10.0 | 0.0 |
| BILL | | | | *e* | | | | 18 48 18.1 | |
| BILL | | | | | | | |

comp=N,84nm,1.2s
**FLWY Flagg Ranch 3.97 278 Pn 18 39 44.8 +0.4**
FLWY IAML 18 41 07.7
comp=N,145nm,2.1s
**MOOW Moose Ponds 3.99 273 Pn Pn 18 39 46.0 +1.3**
**SNOW Snow King Moun 4.01 269 Pn Pn 18 39 46.7 +1.6**
**YNR Norris Junctio 4.05 287 Pn Pn 18 39 45.0 -0.5**
YNR IAML 18 41 13.2
comp=E,51nm,2.6s
**REDW Red Top Meadow 4.09 268 Pn 18 39 46.3 +0.2**
REDW IAML 18 41 00.8
comp=E,130nm,2.6s
**TPAW Teton Pass 4.15 270 Pn Pn 18 39 48.4 +1.4**
TPAW IAML 18 41 12.9
comp=E,64nm,1.6s
TPAW IAML 18 41 25.0
comp=E,116nm,2.5s
**O20A White River Ci 4.18 213 Pn Pn 18 39 48.0 +0.8**
**YHH Holmes Hill 4.19 288 Pn Pn 18 39 48.3 +0.9**
YHH IAML 18 41 09.0
comp=N,64nm,1.3s
**YMR Madison River 4.24 286 Pn Pn 18 39 49.9 +1.8**
YMR IAML 18 41 26.3
comp=E,99nm,1.1s
**AHID Auburn Hatcher 4.38 260 Pn Pn 18 39 50.6 +0.6**
AHID IAML 18 41 09.3
comp=E,90nm,1.3s
AHID IAML 18 41 11.6
comp=E,66nm,1.2s
**RDMU Red Mountain 4.46 228 Pn Pn 18 39 50.2 -1.0**
RDMU IAML 18 41 21.6
comp=N,74nm,1.1s
RDMU IAML 18 41 21.0
comp=E,74nm,1.0s
**ECR Eagle Creek 4.51 264 Pn Pn 18 39 52.6 +0.7**
**Q24A Divide 4.69 179 Pn Pn 18 39 54.7 +0.3**
Q24A IAML 18 41 14.2
comp=E,44nm,0.8s
Q24A IAML 18 42 22.6
comp=N,35nm,4.3s
**DGMT Dagmar 4.86 8 Pn 18 39 57.2 +0.7**
**BOZ Bozeman (W) 4.95 295 Pn Pn 18 39 58.5 +0.6**
BOZ IAML 18 41 33.6
comp=N,43nm,1.3s
BOZ IAML 18 43 12.1
comp=N,34nm,4.5s
**KSCO Kaye Shedlock' 5.04 156 Pn Pn 18 39 58.3 -0.8**
**P18A Preston Nutter 5.50 225 Pn 18 40 06.4 +0.9**
**JLU Jordanelle 5.54 239 Pn Pn 18 40 06.1 +0.1**
**HRY Holter Researc 5.57 305 Pn Pn 18 40 07.1 +0.8**
**LRM Limekiln Ridge 5.57 295 Pn Pn 18 40 05.6 -0.9**
**MCMT McKenzie Canyo 5.59 285 Pn Pn 18 40 06.1 -0.5**
**CTU Camp Tracy 5.67 241 Pn Pn 18 40 07.5 -0.3**
**BGNE Belgrade 5.70 111 Pn Pn 18 40 08.7 +0.7**
**MDND Maddock 5.75 41 Pn Pn 18 40 08.1 -0.6**
**PV07 Paradox Valley 5.82 207 Pn Pn 18 40 08.5 -1.3**
**PV21 Cone Mtn., Par 5.82 210 Pn Pn 18 40 09.4 -0.5**
**HVU Hansel Valley 5.86 254 Pn Pn 18 40 09.9 -0.4**
**P17A Butcher Ranch, 5.88 226 Pn Pn 18 40 11.3 +0.7**
**SDCO Great Sand Dun 5.91 182 Pn Pn 18 40 11.3 +0.1**
**PV23 Carpenter Ridg 5.93 210 Pn Pn 18 40 11.8 +0.4**
**PV10 Paradox Valley 6.01 210 Pn Pn 18 40 15.9 +3.5**
**PV11 David Mesa, Pa 6.02 208 Pn Pn 18 40 13.6 +1.1**
**S22A 4UR Ranch, Cre 6.03 192 Pn Pn 18 40 12.8 0.0**
**SRU San Rafael Swe 6.04 223 Pn Pn 18 40 13.2 +0.4**
**PV13 Radium Mtn., P 6.13 207 Pn Pn 18 40 14.7 +0.6**
**TMUT Trail Mountain 6.25 228 Pn Pn 18 40 16.5 +0.7**
**ECSD EROS Data Cent 6.25 86 Pn Pn 18 40 16.1 +0.6**
**Q16A Castle Valley 6.51 225 Pn Pn 18 40 19.9 +0.6**
**T25A Trinidad 6.55 174 Pn Pn 18 40 20.9 +1.1**
**DUG Dugway, Tooele 6.62 241 Pn Pn 18 40 20.8 0.0**
**HLID Hailey 6.66 272 Pn Pn 18 40 21.7 +0.4**
**MVCO Mesa Verde 6.91 202 Pn Pn 18 40 24.9 +0.2**
**MSU Marysvale 7.34 228 Pn Pn 18 40 32.0 +1.3**
**JTMT Jette 7.53 306 Pn Pn 18 40 35.6 +2.4**
**MTPU Mount Pierson 7.69 225 Pn Pn 18 40 36.3 +0.7**
**PLID Pearl Lake 7.84 284 Pn Pn 18 40 39.2 +1.6**
**ELK Elko 7.97 252 Pn Pn 18 40 39.6 +0.2**
comp=N,0.2nm,0.3s,baz=86,slow=14,SNR=2.0
ELK Lg Lg 18 42 50.1
comp=N,0.1nm,0.3s,baz=180,slow=6.1,SNR=1.3
**CCUT Cedar City 8.68 228 Pn Pn 18 40 50.4 +1.3**
**I10CA LAC DU BONNET 9.08 41** *i* 19 38 30.0
baz=221,slow=324,SNR=3.5
**ULM Lac du Bonnet 9.18 41 Pn Pn 18 40 55.8 +0.1**
comp=N,0.7nm,0.3s,baz=234,slow=13,SNR=3.3
ULM Lg Lg 18 43 27.3
comp=N,0.4nm,0.3s,baz=316,slow=10,SNR=3.5
**NEW Newport 9.47 303 Pn Pn 18 40 59.3 -0.3**
comp=N,0.1nm,0.3s,baz=120,slow=14,SNR=1.7
NEW Lg Lg 18 43 39.0
comp=N,0.1nm,0.3s,baz=31,slow=18,SNR=1.3
**NVAR Mina Array Bea 11.16 247 Pn Pn 18 41 23.1 +0.1**
comp=N,0.1nm,0.3s,baz=68,slow=16,SNR=2.1
**YKA Yellowknife Ar 19.65 347 P Pn 18 43 13.3 0.0**
comp=N,0.1nm,0.3s,baz=155,slow=12,SNR=4.6

**NOU 14 18:43:32.2, 17.39S×167.06E, h61km, MLv4.4/12,**
**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **1.13** | **107** | P | | Pn | 18 43 51.9 | 0.0 |
| **RTV** | **Rentapao** | **1.36** | **107** | P | | Pn | 18 43 55.2 | +0.1 |
| **SANVU** | **Saraoutou** | **1.94** | **4** | P | | Pn | 18 44 01.8 | -1.0 |
| **KOUNC** | **Koumac, New Ca** | **4.10** | **219** | P | | Pn | 18 44 32.9 | +0.6 |
| **YATNC** | **Mamie plateau,** | **4.65** | **182** | P | | Pn | 18 44 38.5 | -1.4 |
| **DZM** | **Mont Dzumac** | **4.69** | **187** | P | | Pn | 18 44 40.5 | -0.1 |
| **ONTNC** | **Ouen Toro** | **4.92** | **187** | P | | Pn | 18 44 44.2 | +0.5 |
| **OUENC** | **Ouen Island, N** | **5.01** | **182** | P | | Pn | 18 44 45.2 | +0.4 |

*JMA **14** 19:01:21.7, 24.31N×122.03E, h47km, M2.7*
*TAP **14** 19:01:22.4, 24.43N×122.02E, h20km, ML3.0, C*
**ISC 14 19:01:22.0±1.0, 24.43N±0.03×122.01E±0.03, h33km±2km,**
**n27, σ0.946/48, 3C-3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.21** | **274** | P | | **Pn** | **19 01 28.0** | **-0.3** |
| | baz=280 | | | | | | | |
| EWUT | | | | S | | **Sn** | **19 01 31.9** | **+0.9** |
| | baz=280 | | | | | | | |
| **TWC** | **Suao** | **0.23** | **320** | ⇓*iP* | | **Pn** | **19 01 28.2** | **-0.5** |
| | baz=321 | | | | | | | |
| TWC | | | | *i*S | | **Sn** | **19 01 31.8** | **0.0** |
| | baz=321 | | | | | | | |
| **ENA** | **Nanau** | **0.25** | **269** | ⇓*iP* | | **Pn** | **19 01 28.4** | **-0.6** |
| | baz=275 | | | | | | | |
| ENA | | | | S | | **Sn** | **19 01 32.6** | **0.0** |
| | baz=275 | | | | | | | |
| **NDS** | **Dongshan** | **0.34** | **307** | P | | **Pb** | **19 01 30.2** | **0.0** |
| | baz=303 | | | | | | | |
| NDS | | | | S | | **Sb** | **19 01 35.2** | **-0.6** |
| | baz=303 | | | | | | | |
| **ILA** | **Ilan** | **0.41** | **324** | ⇑*iP* | | **Pn** | **19 01 31.7** | **0.0** |
| | baz=322 | | | | | | | |
| ILA | | | | *i*S | | **Sn** | **19 01 37.9** | **-0.1** |
| | baz=322 | | | | | | | |
| **TWE** | **Neicheng** | **0.43** | **313** | ⇑*iP* | | **Pn** | **19 01 31.7** | **-0.1** |
| | baz=314 | | | | | | | |
| TWE | | | | S | | **Sb** | **19 01 37.8** | **-0.2** |
| | baz=314 | | | | | | | |
| **ETL** | **Fush Village** | **0.45** | **233** | P | | **Pb** | **19 01 31.7** | **-0.1** |
| | baz=236 | | | | | | | |
| ETL | | | | *e*S | | **Sn** | **19 01 38.6** | **-0.4** |
| | baz=236 | | | | | | | |
| **NTC** | **Toucheng** | **0.45** | **339** | *e*P | | **Pb** | **19 01 30.4** | **-1.5** |
| | baz=344 | | | | | | | |
| **LATG** | **Datong** | **0.45** | **283** | P | | **Pn** | **19 01 32.1** | **-0.2** |
| | baz=284 | | | | | | | |
| LATG | | | | S | | **Sb** | **19 01 38.6** | **-0.3** |
| | baz=284 | | | | | | | |
| **ENTT** | **Nioudou** | **0.46** | **297** | P | | **Pn** | **19 01 32.2** | **0.0** |
| | baz=298 | | | | | | | |
| ENTT | | | | S | | **Sb** | **19 01 38.8** | **0.0** |
| | baz=298 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.46** | **236** | ⇓*iP* | | **Pb** | **19 01 31.7** | **-0.3** |
| | baz=236 | | | | | | | |
| NACB | | | | S | | **Sn** | **19 01 39.2** | **-0.1** |
| | baz=236 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.48** | **291** | P | | **Pn** | **19 01 32.9** | **+0.3** |
| | baz=292 | | | | | | | |
| NDT | | | | *e*S | | **Sb** | **19 01 39.5** | **0.0** |
| | baz=292 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **310** | *e*P | | **Pn** | **19 01 33.6** | **+0.6** |
| | baz=312 | | | | | | | |
| FUSB | | | | *e*S | | **Sb** | **19 01 39.7** | **-0.5** |
| | baz=312 | | | | | | | |
| **TWD** | **Chiawan** | **0.52** | **227** | P | | **Pn** | **19 01 32.9** | **-0.1** |
| | baz=229 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **19 01 40.6** | **-0.1** |
| | baz=229 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.53** | **245** | P | | **Pn** | **19 01 33.3** | **-0.1** |
| | baz=251 | | | | | | | |
| ETLH | | | | S | | **Sn** | **19 01 41.7** | **+0.5** |
| | baz=251 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **343** | ⇑*iP* | | **Pb** | **19 01 34.0** | **+0.4** |
| | baz=343 | | | | | | | |
| TIPB | | | | S | | **Sn** | **19 01 42.0** | **+0.1** |
| | baz=343 | | | | | | | |
| **NNSB** | **Datong** | **0.57** | **270** | P | | **Pb** | **19 01 34.2** | **+0.3** |
| | baz=275 | | | | | | | |
| NNSB | | | | *e*S | | **Sb** | **19 01 41.3** | **-0.7** |
| | baz=275 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.57** | **358** | P | | **Pb** | **19 01 34.0** | **+0.3** |
| | baz=351 | | | | | | | |
| TWB1 | | | | *e*S | | **Sn** | **19 01 42.1** | **0.0** |
| | baz=351 | | | | | | | |
| **NWLT** | **Wulai** | **0.58** | **307** | *e*P | | **Pb** | **19 01 34.9** | **+1.0** |
| | baz=302 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **19 01 42.2** | **0.0** |
| | baz=302 | | | | | | | |
| **NNS** | **Nan Shan** | **0.58** | **271** | P | | **Pb** | **19 01 34.5** | **+0.5** |
| | baz=276 | | | | | | | |
| NNS | | | | S | | **Sb** | **19 01 42.0** | **-0.2** |
| | baz=276 | | | | | | | |
| **YHNB** | **Yeheng** | **0.62** | **292** | P | | **Pb** | **19 01 35.5** | **+0.8** |
| | baz=293 | | | | | | | |
| YHNB | | | | S | | **Sn** | **19 01 43.7** | **+0.2** |
| | baz=293 | | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **292** | *i*P | | **Pb** | **19 01 35.7** | **+0.7** |
| | baz=293 | | | | | | | |
| NSK | | | | *i*S | | **Sn** | **19 01 44.1** | **+0.2** |
| | baz=293 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.91** | **88** | P | | **Pn** | **19 01 38.2** | **-0.3** |
| **IRIF** | **Iriomote-Funau** | **1.57** | **93** | P | | **Pn** | **19 01 47.6** | **+0.1** |
| **JKRS** | **Kuro-shima** | **1.83** | **96** | P | | **Pn** | **19 01 51.9** | **+0.8** |
| **JIJ** | **Ishigaki jima** | **1.94** | **92** | P | | **Pn** | **19 01 52.7** | **0.0** |
| **JISG** | **Ishigakijimahi** | **2.10** | **85** | P | | **Pn** | **19 01 55.0** | **+0.2** |

**TAP 14 19:01:47.9, 24.43N×122.02E, h21km, ML3.5, 6C-9D, C,**
**Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.22** | **274** | ⇓*iP* | | Pb | 19 01 53.5 | -0.3 |
| | baz=280 | | | | | | | |
| EWUT | | | | *i*S | | Sb | 19 01 57.4 | -0.7 |
| | baz=280 | | | | | | | |
| **TWC** | **Suao** | **0.23** | **319** | ⇓*iP* | | Pb | 19 01 53.8 | -0.2 |
| | baz=321 | | | | | | | |
| TWC | | | | *i*S | | Sb | 19 01 57.4 | -0.8 |
| | baz=321 | | | | | | | |
| **ENA** | **Nanau** | **0.25** | **269** | ⇓*iP* | | Pb | 19 01 53.9 | -0.2 |
| | baz=275 | | | | | | | |
| ENA | | | | S | | Sb | 19 01 58.2 | -0.1 |
| | baz=275 | | | | | | | |
| **EHP** | **Heping Village** | **0.28** | **245** | P | | Pb | 19 01 54.4 | 0.0 |
| | baz=248 | | | | | | | |
| EHP | | | | S | | Sb | 19 01 59.6 | +0.8 |
| | baz=248 | | | | | | | |
| **NDS** | **Dongshan** | **0.34** | **306** | P | | Pb | 19 01 55.7 | +0.4 |
| | baz=303 | | | | | | | |
| NDS | | | | S | | Sb | 19 02 00.9 | +0.7 |
| | baz=303 | | | | | | | |
| **ILA** | **Ilan** | **0.41** | **324** | ⇑*iP* | | Pb | 19 01 57.2 | +0.8 |
| | baz=322 | | | | | | | |
| ILA | | | | *i*S | | Sb | 19 02 03.2 | +1.0 |
| | baz=322 | | | | | | | |
| **EGS** | | **0.42** | **349** | P | | Pb | 19 01 57.0 | +0.5 |
| | baz=348 | | | | | | | |
| EGS | | | | S | | Sb | 19 02 03.1 | +0.8 |
| | baz=348 | | | | | | | |
| **TWE** | **Neicheng** | **0.43** | **312** | ⇑*iP* | | Pb | 19 01 57.3 | +0.6 |
| | baz=314 | | | | | | | |
| TWE | | | | *i*S | | Sb | 19 02 03.4 | +0.6 |
| | baz=314 | | | | | | | |
| **ETL** | **Fush Village** | **0.45** | **233** | ⇓*iP* | | Pb | 19 01 57.3 | +0.2 |
| | baz=235 | | | | | | | |
| ETL | | | | S | | Sb | 19 02 04.9 | +1.5 |
| | baz=235 | | | | | | | |
| **NTC** | **Toucheng** | **0.46** | **338** | *i*P | | Pb | 19 01 57.6 | +0.4 |
| | baz=340 | | | | | | | |
| NTC | | | | S | | Sb | 19 02 03.5 | +0.1 |
| | baz=340 | | | | | | | |
| **LATG** | **Datong** | **0.46** | **283** | ⇓*iP* | | Pb | 19 01 57.7 | +0.3 |
| | baz=284 | | | | | | | |
| LATG | | | | S | | Sb | 19 02 04.1 | +0.3 |
| | baz=284 | | | | | | | |
| **ENTT** | **Nioudou** | **0.46** | **297** | ⇓*iP* | | Pb | 19 01 57.8 | +0.5 |
| | baz=298 | | | | | | | |
| ENTT | | | | S | | Sb | 19 02 04.1 | +0.4 |
| | baz=298 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.46** | **237** | ⇓*iP* | | Pb | 19 01 57.3 | 0.0 |
| | baz=239 | | | | | | | |
| NACB | | | | S | | Sb | 19 02 04.3 | +0.6 |
| | baz=239 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.49** | **290** | ⇓*iP* | | Pb | 19 01 58.4 | +0.6 |
| | baz=292 | | | | | | | |
| NDT | | | | S | | Sb | 19 02 04.8 | +0.2 |
| | baz=292 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **310** | P | | Pb | 19 01 58.9 | +0.7 |
| | baz=312 | | | | | | | |
| FUSB | | | | S | | Sb | 19 02 05.5 | +0.2 |
| | baz=312 | | | | | | | |
| **TWD** | **Chiawan** | **0.52** | **228** | ⇓*iP* | | Pb | 19 01 58.5 | +0.1 |
| | baz=229 | | | | | | | |
| TWD | | | | S | | Sb | 19 02 06.5 | +1.0 |
| | baz=229 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.54** | **246** | P | | Pb | 19 01 58.8 | 0.0 |
| | baz=250 | | | | | | | |
| ETLH | | | | *e*S | | Sb | 19 02 06.5 | +0.4 |
| | baz=250 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.57** | **342** | ⇑*iP* | | Pb | 19 01 59.6 | +0.3 |
| | baz=343 | | | | | | | |
| TIPB | | | | S | | Sb | 19 02 07.2 | +0.2 |
| | baz=343 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.57** | **357** | ⇑*iP* | | Pb | 19 01 59.6 | +0.2 |
| | baz=351 | | | | | | | |
| TWB1 | | | | S | | Sb | 19 02 06.9 | -0.3 |
| | baz=351 | | | | | | | |
| **NNSB** | **Datong** | **0.58** | **270** | P | | Pb | 19 01 59.7 | +0.1 |
| | baz=275 | | | | | | | |
| NNSB | | | | S | | Sb | 19 02 07.5 | +0.1 |
| | baz=275 | | | | | | | |
| **NWLT** | **Wulai** | **0.58** | **306** | P | | Pb | 19 02 00.2 | +0.7 |
| | baz=302 | | | | | | | |
| NWLT | | | | S | | Sb | 19 02 07.8 | +0.3 |
| | baz=302 | | | | | | | |
| **HWA** | **Hwalien** | **0.59** | **220** | *e*P | | Pn | 19 02 00.8 | -0.2 |
| | baz=223 | | | | | | | |
| HWA | | | | *e*S | | Sn | 19 02 13.0 | +3.0 |
| | baz=223 | | | | | | | |
| **NNS** | **Nan Shan** | **0.59** | **271** | P | | Pb | 19 01 59.9 | +0.1 |
| | baz=276 | | | | | | | |
| NNS | | | | S | | Sb | 19 02 07.7 | 0.0 |
| | baz=276 | | | | | | | |
| **YHNB** | **Yeheng** | **0.63** | **292** | *i*P | | Pb | 19 02 01.0 | +0.6 |
| | baz=295 | | | | | | | |
| YHNB | | | | S | | Sb | 19 02 09.3 | +0.4 |
| | baz=295 | | | | | | | |
| **NSK** | **Sanguang** | **0.65** | **292** | ⇑*iP* | | Pb | 19 02 01.3 | +0.6 |
| | baz=295 | | | | | | | |
| NSK | | | | *i*S | | Sb | 19 02 09.7 | +0.3 |
| | baz=295 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.67** | **341** | P | | Pn | 19 02 01.7 | -0.6 |
| | baz=334 | | | | | | | |
| NWF | | | | S | | Sb | 19 02 11.1 | +1.1 |
| | baz=334 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.67** | **349** | *e*P | | Pb | 19 02 01.5 | +0.4 |
| | baz=354 | | | | | | | |
| SXI1 | | | | *e*S | | Sb | 19 02 10.1 | 0.0 |
| | baz=354 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.67** | **341** | *e*P | | Pn | 19 02 01.8 | -0.5 |
| | baz=334 | | | | | | | |
| WFSB | | | | *e*S | | Sb | 19 02 10.5 | +0.5 |
| | baz=334 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.69** | **320** | P | | Pn | 19 02 02.7 | +0.2 |
| | baz=312 | | | | | | | |
| NHDH | | | | S | | Sb | 19 02 11.5 | +0.9 |
| | baz=312 | | | | | | | |
| **FUSS** | **Fushou** | **0.73** | **256** | *e*P | | Pb | 19 02 02.5 | +0.4 |
| | baz=260 | | | | | | | |
| FUSS | | | | *e*S | | Sb | 19 02 12.4 | +0.7 |
| | baz=260 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.74** | **248** | P | | Pb | 19 02 02.7 | +0.3 |
| | baz=253 | | | | | | | |
| WHF | | | | S | | Sb | 19 02 13.4 | +1.1 |
| | baz=253 | | | | | | | |
| **ESL** | **Shilin** | **0.81** | **221** | P | | Pn | 19 02 04.0 | -0.2 |
| | baz=236 | | | | | | | |
| ESL | | | | *e*S | | Sn | 19 02 17.1 | +1.5 |
| | baz=236 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.84** | **284** | *e*P | | Pn | 19 02 05.8 | +1.1 |
| | baz=290 | | | | | | | |
| NFF | | | | *e*S | | Sn | 19 02 16.1 | -0.3 |
| | baz=290 | | | | | | | |
| **CHGB** | **Renai** | **0.85** | **245** | *e*P | | Pn | 19 02 04.7 | -0.2 |
| | baz=247 | | | | | | | |
| CHGB | | | | *e*S | | Sb | 19 02 15.8 | +0.5 |
| | baz=247 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.86** | **321** | ⇑*iP* | | Pn | 19 02 05.7 | +0.9 |
| | baz=315 | | | | | | | |
| TWS1 | | | | *e*S | | Sn | 19 02 17.6 | +0.8 |
| | baz=315 | | | | | | | |
| **ANP** | **Anpu** | **0.88** | **329** | *e*P | | Pn | 19 02 05.7 | +0.6 |
| | baz=336 | | | | | | | |
| ANP | | | | *e*S | | Sn | 19 02 18.5 | +1.2 |
| | baz=336 | | | | | | | |
| **NTST** | **Danshui** | **0.90** | **325** | P | | Pn | 19 02 06.2 | +0.9 |
| | baz=331 | | | | | | | |
| NTST | | | | *e*S | | Sn | 19 02 19.6 | +2.0 |
| | baz=331 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.90** | **88** | *e*P | | Pb | 19 02 03.1 | -1.7 |
| | baz=80 | | | | | | | |
| **NCU** | **National Centr** | **0.93** | **306** | *e*P | | Pn | 19 02 07.3 | +1.6 |
| | baz=314 | | | | | | | |
| NCU | | | | *e*S | | Sn | 19 02 20.7 | +2.3 |
| | baz=314 | | | | | | | |
| **NCUH** | **Zhongli** | **0.93** | **305** | *e*P | | Pn | 19 02 06.8 | +1.1 |
| | baz=313 | | | | | | | |
| NCUH | | | | *e*S | | Sn | 19 02 20.4 | +1.9 |
| | baz=313 | | | | | | | |
| **WUSB** | **Renai** | **0.93** | **242** | *e*P | | Pn | 19 02 06.1 | +0.2 |
| | baz=245 | | | | | | | |
| WUSB | | | | *e*S | | Sn | 19 02 20.0 | +1.3 |
| | baz=245 | | | | | | | |
| **LIOB** | **Emei** | **0.94** | **283** | *e*P | | Pn | 19 02 07.7 | +1.9 |
| | baz=288 | | | | | | | |
| LIOB | | | | *e*S | | Sn | 19 02 20.7 | +2.0 |
| | baz=288 | | | | | | | |
| **WHP** | **Taichung City** | **0.99** | **261** | *e*P | | Pn | 19 02 08.1 | +1.4 |
| | baz=268 | | | | | | | |
| WHP | | | | *e*S | | Sn | 19 02 20.4 | +0.4 |
| | baz=268 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.01** | **291** | P | | Pn | 19 02 09.0 | +2.2 |
| | baz=287 | | | | | | | |
| SBCB | | | | S | | Sn | 19 02 23.8 | +3.4 |
| | baz=287 | | | | | | | |
| **HSN** | **Hsinchu** | **1.02** | **291** | *e*P | | Pn | 19 02 08.9 | +1.8 |
| | baz=291 | | | | | | | |
| HSN | | | | *e*S | | Sn | 19 02 22.8 | +2.0 |
| | baz=291 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.08** | **250** | *e*P | | Pn | 19 02 07.4 | -0.4 |
| | baz=256 | | | | | | | |
| **HGSD** | **Ruisui** | **1.08** | **210** | *e*P | | Pb | 19 02 09.6 | +1.7 |
| | baz=196 | | | | | | | |
| **EHY** | **Hungye** | **1.12** | **215** | *e*P | | Pn | 19 02 09.5 | +0.9 |
| | baz=213 | | | | | | | |
| **NMLH** | **Miaoli** | **1.12** | **276** | *e*P | | Pb | 19 02 10.9 | +2.3 |
| | baz=276 | | | | | | | |
| NMLH | | | | *e*S | | Sn | 19 02 27.2 | +3.9 |
| | baz=276 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.14** | **266** | *e*P | | Pb | 19 02 11.8 | +2.9 |
| | baz=272 | | | | | | | |
| TWQ1 | | | | *e*S | | Sn | 19 02 28.8 | +5.2 |
| | baz=272 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.16** | **242** | *e*P | | Pb | 19 02 10.5 | +1.2 |
| | baz=229 | | | | | | | |
| **SSLB** | **Suanglung** | **1.17** | **237** | *e*P | | Pb | 19 02 10.3 | +0.9 |
| | baz=235 | | | | | | | |
| SSLB | | | | *e*S | | Sn | 19 02 28.1 | +3.8 |
| | baz=235 | | | | | | | |
| **YULB** | **Yu-li** | **1.23** | **213** | *e*P | | Pb | 19 02 11.5 | +1.1 |
| | baz=212 | | | | | | | |
| **EYUL** | **Yuli** | **1.25** | **211** | *e*P | | Pb | 19 02 12.1 | +1.2 |
| | baz=224 | | | | | | | |
| **TCU** | **Taichung** | **1.26** | **257** | *e*P | | Pb | 19 02 12.7 | +1.8 |
| | baz=256 | | | | | | | |
| **WDJ** | **Dajia District** | **1.26** | **267** | *e*P | | Pb | 19 02 13.4 | +2.5 |
| | baz=272 | | | | | | | |
| **TWF1** | **Yuli** | **1.26** | **212** | *e*P | | Pb | 19 02 11.5 | +0.5 |
| | baz=224 | | | | | | | |
| **WJS** | **Zhushan** | **1.33** | **243** | *e*P | | Pb | 19 02 14.3 | +2.2 |
| | baz=233 | | | | | | | |
| **WNT** | **Mingjian** | **1.34** | **246** | *e*P | | Pb | 19 02 14.7 | +2.4 |
| | baz=245 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.38** | **256** | *e*P | | Pb | 19 02 14.2 | +1.3 |
| | baz=254 | | | | | | | |
| **ALS** | **Alishan** | **1.44** | **231** | *e*P | | Pb | 19 02 16.1 | +1.8 |
| | baz=229 | | | | | | | |
| **CHN5** | **Tsauling** | **1.48** | **236** | *e*P | | Pb | 19 02 15.9 | +1.2 |
| | baz=235 | | | | | | | |
| **ELDTW** | **Lidau** | **1.54** | **217** | *e*P | | Pb | 19 02 16.9 | +1.1 |
| | baz=203 | | | | | | | |
| **WDLH** | **Douliu** | **1.54** | **242** | *e*P | | Pb | 19 02 16.7 | +1.0 |
| | baz=240 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.59** | **251** | *e*P | | Pb | 19 02 17.1 | +0.6 |
| | baz=251 | | | | | | | |
| WRL | | | | *e*S | | Sb | 19 02 39.4 | +3.1 |
| | baz=251 | | | | | | | |
| **WTK** | **Tuku** | **1.66** | **244** | *e*P | | Pb | 19 02 19.8 | +2.0 |
| | baz=244 | | | | | | | |
| WTK | | | | *e*S | | Sb | 19 02 43.0 | +4.6 |
| | baz=244 | | | | | | | |
| **STYH** | **Taoyuan** | **1.69** | **222** | *e*P | | Pb | 19 02 19.4 | +1.0 |
| | baz=209 | | | | | | | |
| STYH | | | | *e*S | | Sb | 19 02 41.0 | +1.8 |
| | baz=209 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.70** | **229** | *e*P | | Pb | 19 02 19.8 | +1.4 |
| | baz=228 | | | | | | | |
| TPUB | | | | *e*S | | Sb | 19 02 43.5 | +4.1 |
| | baz=228 | | | | | | | |
| **CHY** | **Chiayi** | **1.73** | **238** | *e*P | | Pb | 19 02 20.9 | +1.9 |
| | baz=237 | | | | | | | |
| CHY | | | | *e*S | | Sb | 19 02 44.7 | +4.4 |
| | baz=237 | | | | | | | |
| **WTP** | **Ta-pu** | **1.75** | **228** | *e*P | | Pb | 19 02 20.5 | +1.2 |
| | baz=214 | | | | | | | |
| WTP | | | | *e*S | | Sb | 19 02 45.3 | +4.5 |
| | baz=214 | | | | | | | |
| **TWK** | **Hsinying** | **1.82** | **231** | *e*P | | Pb | 19 02 21.0 | +0.5 |
| | baz=230 | | | | | | | |
| TWK | | | | *e*S | | Sb | 19 02 46.8 | +4.0 |
| | baz=230 | | | | | | | |
| **CHN1** | **Nanshi** | **1.84** | **228** | P | | Pb | 19 02 22.4 | +1.4 |
| | baz=227 | | | | | | | |
| CHN1 | | | | *e*S | | Sb | 19 02 47.1 | +3.6 |
| | baz=227 | | | | | | | |
| **SGST** | **Jiashian** | **1.88** | **225** | *e*P | | Pb | 19 02 22.1 | +0.5 |
| | baz=210 | | | | | | | |
| SGST | | | | *e*S | | Sb | 19 02 46.6 | +2.0 |
| | baz=210 | | | | | | | |
| **ICHU** | **Yijhu** | **1.92** | **237** | *e*P | | Pb | 19 02 22.5 | +0.4 |
| | baz=235 | | | | | | | |
| **SSD** | **Sandimen** | **2.10** | **217** | *e*P | | Pb | 19 02 25.3 | 0.0 |
| | baz=200 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.21** | **215** | *e*P | | Pb | 19 02 25.4 | -1.8 |
| | baz=214 | | | | | | | |
| **EAST** | **Anshuo** | **2.31** | **208** | *e*P | | Pn | 19 02 25.4 | +0.7 |
| | baz=194 | | | | | | | |

**JMA 14 19:01:49.9±0.2, 24.99N×123.55E, h22km, M2.7,**
**Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.67** | **166** | P | | Pb | 19 02 02.6 | -0.4 |
| IRIF | | | | S | | Sb | 19 02 11.9 | 0.0 |
| **YOJ** | **Yonaguni jima** | **0.72** | **223** | P | | Pb | 19 02 03.8 | +0.1 |
| **JISG** | **Ishigakijimahi** | **0.80** | **120** | P | | Pb | 19 02 05.0 | -0.1 |
| JISG | | | | *e*S | | Sb | 19 02 15.3 | -0.2 |
| **JIJ** | **Ishigaki jima** | **0.82** | **139** | P | | Pb | 19 02 05.0 | -0.5 |
| JIJ | | | | *e*S | | Sb | 19 02 15.6 | -0.6 |
| **JKRS** | **Kuro-shima** | **0.86** | **151** | P | | Pb | 19 02 05.9 | -0.2 |
| JKRS | | | | *e*S | | Sb | 19 02 17.5 | +0.3 |
| **HATJ** | **Hateruma jima** | **0.96** | **166** | P | | Pb | 19 02 07.5 | -0.3 |

*SOME **14** 19:04:32.8,44.05N×81.30E,h0km*
*NNC **14** 19:04:33.4±0.7,44.02N×81.40E,h0km,mb3.2,mpv3.2,*
*Error ellipse: s-maj=6.7km s-min=3.3km az=132.0*
**ISC 14 19:04:33.4**±1.1,**43.96N**±0.04×**81.40E**±0.05,**h10**km,**n46,**
**σ1s58/70,5C-4D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **0.92** | **236** | *eP* | **Pn** | **19 04 52.3** | **-0.2** |
| KTMS | 58nm,0.1s | | | *eS* | **Sn** | **19 05 06.1** | **+0.3** |
| **KTMS** | **Ketmen** | **0.92** | **236** | P | **Pn** | **19 04 52.3** | **-0.2** |
| KTMS | 58nm,0.1s | | | S | **Sn** | **19 05 06.2** | **+0.5** |
| **DJR** | **Jarkent** | **1.22** | **288** | *eP* | **Pg** | **19 04 57.2** | **+0.4** |
| DJR | 14nm,0.1s | | | *eS* | **Sn** | **19 05 14.8** | **+1.6** |
| **DJR** | **Jarkent** | **1.22** | **288** | P | **Pg** | **19 04 57.2** | **+0.4** |
| DJR | 14nm,0.1s | | | S | **Sn** | **19 05 14.8** | **+1.6** |
| **PDGK** | **Podgornoye** | **1.52** | **246** | P | **Pg** | **19 05 02.3** | **-0.3** |
| PDGK | 6.7nm,0.1s | | | S | **Sg** | **19 05 23.7** | **+1.3** |
| **PDGK** | **Podgornoye** | **1.52** | **246** | ⇑P | **Pg** | **19 05 02.1** | **-0.5** |
| KAPS | 9.4nm,0.5s | | | *eP* | **Pg** | **19 05 08.4** | **0.0** |
| **UZB** | **Uzynbulak** | **1.91** | **246** | *eP* | **Pb** | **19 05 08.4** | **0.0** |
| UZB | 11nm,0.3s | | | *eS* | **Sg** | **19 05 34.5** | **-0.3** |
| **UZB** | **Uzynbulak** | **1.91** | **246** | Pg | **Pb** | **19 05 08.4** | **0.0** |
| UZB | 11nm,0.3s | | | Lg | Lg | 19 05 34.5 | |
| **KAPS** | **Kapalarasan** | **1.97** | **313** | *eP* | **Pg** | **19 05 09.6** | **-1.6** |
| KAPS | 5.5nm,0.3s | | | *eS* | **Sg** | **19 05 36.0** | **-0.7** |
| **KAPS** | **Kapalarasan** | **1.97** | **313** | Pg | **Pg** | **19 05 09.6** | **-1.6** |
| KAPS | 5.5nm,0.3s | | | Lg | Lg | 19 05 36.0 | |
| **KPKS** | **Kokpek** | **2.03** | **257** | *eP* | **Pb** | **19 05 09.9** | **-0.5** |
| KPKS | 23nm,0.1s | | | *eS* | **Sg** | **19 05 37.0** | **-1.6** |
| **BLB** | **Baldybastay** | **2.11** | **275** | *eP* | **Pg** | **19 05 12.3** | **-1.6** |
| BLB | 7.7nm,0.2s | | | *eS* | **Sg** | **19 05 41.3** | **0.0** |
| **BLB** | **Baldybastay** | **2.11** | **275** | Pg | **Pg** | **19 05 12.3** | **-1.6** |
| BLB | 7.7nm,0.2s | | | Lg | Lg | 19 05 41.3 | |
| **ZHN** | **Zhinishke** | **2.30** | **251** | *eP* | **Pb** | **19 05 15.4** | **+0.5** |
| ZHN | 13nm,0.2s | | | *eS* | **Sg** | **19 05 45.9** | **-1.2** |
| **SATY** | **Saty** | **2.36** | **249** | *eP* | **Pb** | **19 05 16.0** | **0.0** |
| SATY | 5.1nm,0.1s | | | *eS* | **Sg** | **19 05 47.6** | **-1.5** |
| **SATY** | **Saty** | **2.36** | **249** | Pg | **Pb** | **19 05 16.0** | **0.0** |
| SATY | 5.1nm,0.1s | | | Lg | Lg | 19 05 47.6 | |
| **TDK** | **Taldyqorghan** | **2.38** | **297** | *eP* | **Pb** | **19 05 16.9** | **+0.5** |
| TDK | 4.9nm,0.1s | | | *eS* | **Sg** | **19 05 48.4** | **-1.5** |
| **TDK** | **Taldyqorghan** | **2.38** | **297** | Pg | **Pb** | **19 05 16.9** | **+0.5** |
| TDK | 4.9nm,0.1s | | | Lg | Lg | 19 05 48.4 | |
| **KURS** | **Kuram** | **2.39** | **260** | *eP* | **Pb** | **19 05 16.7** | **+0.2** |
| KURS | 0.9nm,0.2s | | | *eS* | **Sg** | **19 05 48.5** | **-1.6** |
| **KURS** | **Kuram** | **2.39** | **260** | Pg | **Pb** | **19 05 16.7** | **+0.2** |
| KURS | 0.9nm,0.2s | | | Lg | Lg | 19 05 48.5 | |
| **ARXS** | **Arharly** | **2.59** | **277** | *eP* | **Pb** | **19 05 20.5** | **+0.7** |
| ARXS | 1.0nm,0.1s | | | *eS* | **Sg** | **19 05 54.9** | **-1.6** |
| **ARXS** | **Arharly** | **2.59** | **277** | Pg | **Pb** | **19 05 20.5** | **+0.7** |
| ARXS | 1.0nm,0.1s | | | Lg | Lg | 19 05 54.9 | |
| **MAKZ** | **Makanchi** | **2.88** | **8** | ⇑Pn | **Pn** | **19 05 19.6** | **+0.3** |
| MAKZ | 0.4nm,0.4s | | | ⇑Pg | **Pb** | **19 05 24.6** | **-0.2** |
| MAKZ | 2.5nm,0.6s | | | ⇑Lg | Lg | 19 06 02.2 | |
| **MK31** | **Makanchi Array** | **2.90** | **12** | ⇓Pn | **Pn** | **19 05 19.9** | **+0.2** |
| MK31 | 0.6nm,0.3s,baz=202,slow=13,SNR=14 | | | ⇓Pg | **Pb** | **19 05 24.6** | **-0.6** |
| MK31 | 2.4nm,0.3s,baz=194,slow=29,SNR=6.4 | | | ⇓Lg | Lg | 19 06 02.7 | |
| **CHKK** | **Chushkaly** | **3.19** | **270** | *eP* | **Pb** | **19 05 30.6** | **+0.4** |
| CHKK | 1.1nm,0.2s | | | *eS* | **Sg** | **19 06 12.0** | **-3.8** |
| **CHKK** | **Chushkaly** | **3.19** | **270** | Pg | **Pb** | **19 05 30.6** | **+0.4** |
| CHKK | 1.1nm,0.2s | | | Lg | Lg | 19 06 12.0 | |
| **KOTS** | **Kotyrbulak** | **3.20** | **258** | *eP* | **Pb** | **19 05 31.3** | **+0.9** |
| KOTS | 2.8nm,0.2s | | | *eS* | **Sg** | **19 06 13.1** | **-3.0** |
| **KOTS** | **Kotyrbulak** | **3.20** | **258** | Pg | **Pb** | **19 05 31.3** | **+0.9** |
| KOTS | 2.8nm,0.2s | | | Lg | Lg | 19 06 13.1 | |
| **MDOK** | **Medeo** | **3.26** | **257** | *eP* | **Pb** | **19 05 32.4** | **+0.9** |
| MDOK | 2.3nm,0.5s | | | *eS* | **Sg** | **19 06 15.0** | **-3.1** |
| **MDOK** | **Medeo** | **3.26** | **257** | Pg | **Pb** | **19 05 32.3** | **+0.9** |
| MDOK | 2.3nm,0.5s | | | Lg | Lg | 19 06 15.0 | |
| **TNSS** | **Tian-Shan** | **3.37** | **256** | *eP* | **Pb** | **19 05 34.6** | **+1.2** |
| TNSS | 1.0nm,0.3s | | | *eS* | **Sg** | **19 06 19.3** | **-2.3** |
| **TNSS** | **Tian-Shan** | **3.37** | **256** | Pg | **Pb** | **19 05 34.6** | **+1.2** |
| TNSS | 1.0nm,0.3s | | | Lg | Lg | 19 06 19.3 | |
| **KTBS** | **Karatobe** | **3.42** | **267** | *eP* | **Pb** | **19 05 34.6** | **+0.5** |
| KTBS | 1.1nm,0.6s | | | *eS* | **Sg** | **19 06 18.9** | **-4.3** |
| **KTBS** | **Karatobe** | **3.42** | **267** | Pg | **Pb** | **19 05 34.6** | **+0.5** |
| KTBS | 1.1nm,0.6s | | | Lg | Lg | 19 06 18.9 | |
| **KUU** | **Kurty** | **3.66** | **271** | *eP* | **Pb** | **19 05 38.4** | **+0.3** |
| KUU | 0.9nm,0.7s | | | *eS* | **Sb** | **19 06 25.6** | **+3.1** |
| **KUU** | **Kurty** | **3.66** | **271** | Pg | **Pb** | **19 05 38.4** | **+0.3** |
| KUU | 0.9nm,0.7s | | | Lg | Lg | 19 06 25.6 | |
| **MTBS** | **Maitube** | **3.71** | **259** | *eP* | **Pb** | **19 05 39.6** | **+0.6** |
| MTBS | 0.8nm,0.2s | | | *eS* | **Sb** | **19 06 27.4** | **+3.4** |
| **MTBS** | **Maitube** | **3.71** | **259** | Pg | **Pb** | **19 05 39.6** | **+0.6** |
| MTBS | 0.8nm,0.2s | | | Lg | Lg | 19 06 27.4 | |
| **DGS** | **Degeres** | **4.15** | **262** | *eP* | **Pg** | **19 05 50.2** | **-2.6** |
| DGS | 3.0nm,0.4s | | | *eS* | **Sg** | **19 06 45.5** | **-1.1** |
| **DGS** | **Degeres** | **4.15** | **262** | Pg | **Pg** | **19 05 50.2** | **-2.6** |
| DGS | 3.0nm,0.4s | | | Lg | Lg | 19 06 45.5 | |
| **KRBS** | **Karabastau** | **4.15** | **268** | *eP* | **Pb** | **19 05 48.3** | **+1.8** |
| KRBS | 0.9nm,0.3s | | | *eS* | **Sg** | **19 06 42.5** | **-4.1** |
| **KRBS** | **Karabastau** | **4.15** | **268** | Pg | **Pb** | **19 05 48.3** | **+1.8** |
| KRBS | 0.9nm,0.3s | | | Lg | Lg | 19 06 42.5 | |
| **ZSN** | **Zaisan** | **4.25** | **34** | *eP* | **Pb** | **19 05 48.2** | **0.0** |
| ZSN | 2.1nm,0.6s | | | *eS* | **Sb** | **19 06 42.1** | **+2.5** |
| **ZSN** | **Zaisan** | **4.25** | **34** | Pg | **Pb** | **19 05 48.2** | **0.0** |
| ZSN | 2.1nm,0.6s | | | Lg | Lg | 19 06 42.1 | |
| **KURBB** | **Kurchatov Arra** | **6.95** | **345** | ⇓Lg | Lg | 19 08 12.9 | |
| **KURK** | **Kurchatov** | **7.02** | **345** | ⇑Lg | Lg | 19 08 14.2 | |

*IDC **14** 19:04:56.5±1.6,38.38N×73.12E,h0km,mb3.7/8,*
*mb1 3.8/13,mb1mx3.6/51,mbtmp3.8/13,ML3.3/4,Error*
*ellipse: s-maj=25.6km s-min=18.9km az=159.0*
*NNC **14** 19:05:01.6±1.2,38.64N×73.28E,h12km±5km,mb4.6,*
*mpv4.2,Error ellipse: s-maj=8.6km s-min=5.8km az=175.0*
**ISC 14 19:04:57.1**±0.8,**38.26N**±0.07×**72.95E**±0.07,**h10**km,**n54,**
**σ2s15/56,mb3.7/7,11C-8D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **3.91** | **8** | P | **Pn** | **19 05 58.5** | **+1.0** |
| **UCH** | SNR=19 **Uchtor** | **4.14** | **16** | P | **Pn** | **19 06 01.7** | **+1.0** |
| **EKS2** | SNR=30 **Erkin-Say** | **4.44** | **8** | P | **Pn** | **19 06 06.2** | **+1.6** |
| **IUG** | SNR=13 **Iuzhnay** | **4.48** | **331** | Pg | **Pg** | **19 06 20.1** | **-2.7** |
| IUG | 2μm,0.7s | | | Lg | Lg | 19 07 18.8 | |
| **MRKS** | **Merke** | **4.48** | **3** | Pg | **Pb** | **19 06 14.9** | **-1.1** |
| MRKS | 17nm,0.4s | | | Lg | Lg | 19 07 09.6 | |
| **AAK** | 52nm,0.6s **Ala-Archa** | **4.53** | **15** | Pn | **Pn** | **19 06 07.4** | **+1.6** |
| AAK | 3.9nm,0.3s,baz=172,slow=5.6,SNR=22 | | | Sn | **Sn** | **19 07 01.9** | **+3.3** |
| AAK | 1.1nm,0.3s,baz=336,slow=20,SNR=1.6 | | | Lg | Lg | 19 07 13.6 | |
| **AAK** | 4.9nm,0.3s,baz=30,slow=18,SNR=3.7 **Ala-Archa** | **4.53** | **15** | P | **Pn** | **19 06 07.3** | **+1.4** |
| **AAK** | SNR=25 **Ala-Archa** | **4.53** | **15** | ⇑Pn | **Pn** | **19 06 04.4** | **-1.5** |
| AAK | 75nm,1.1s | | | ⇑Lg | Lg | 19 07 09.9 | |
| **KBK** | 48nm,0.7s **Karagaybulak** | **4.65** | **19** | P | **Pn** | **19 06 11.2** | **+3.7** |
| **DZA** | SNR=7.8 **Taraz** | **4.79** | **346** | Pg | **Pb** | **19 06 22.3** | **+1.2** |
| DZA | 75nm,0.4s | | | Lg | Lg | 19 07 22.4 | |
| **CHMS** | 153nm,0.8s **Chumysh** | **4.93** | **16** | P | **Pn** | **19 06 12.3** | **+1.1** |
| **TKM2** | SNR=5.4 **Tokmak 2** | **5.07** | **23** | ⇑Pg | **Pb** | **19 06 25.1** | **-1.0** |
| TKM2 | 123nm,1.4s | | | ⇓Lg | Lg | 19 07 28.1 | |
| **USP** | **Ospenovka** | **5.14** | **13** | P | **Pn** | **19 06 18.8** | **+4.7** |
| **KK02** | SNR=6.6 **Karatay Array** | **5.18** | **340** | ⇓Pn | **Pn** | **19 06 15.7** | **+1.1** |
| KK02 | 8.3nm,0.4s | | | ⇓Pg | **Pb** | **19 06 29.7** | **+1.9** |
| KK02 | 15nm,0.5s | | | ⇑Sn | **Sn** | **19 07 13.8** | **-0.7** |
| KK02 | 29nm,0.5s | | | ⇑Lg | Lg | 19 07 37.2 | |
| **KST** | 50nm,0.8s **Kastek** | **5.30** | **25** | Pg | **Pb** | **19 06 31.0** | **+1.2** |
| KST | 17nm,0.5s | | | Lg | Lg | 19 07 37.3 | |
| **BRLS** | 38nm,0.7s **Boroldav** | **5.32** | **335** | Pg | **Pb** | **19 06 32.0** | **+1.9** |
| BRLS | 19nm,0.6s | | | Lg | Lg | 19 07 38.8 | |
| **SGDS** | 53nm,1.0s **Sogindy** | **5.34** | **13** | Pg | **Pb** | **19 06 30.2** | **-0.3** |
| SGDS | 9.5nm,0.8s | | | Lg | Lg | 19 07 36.2 | |
| **DGS** | 32nm,0.7s **Degeres** | **5.42** | **22** | Pg | **Pb** | **19 06 32.7** | **+0.9** |
| DGS | 30nm,0.7s | | | Lg | Lg | 19 07 40.4 | |
| **MTBS** | 57nm,0.8s **Maitube** | **5.54** | **27** | Pg | **Pb** | **19 06 35.1** | **+1.3** |
| MTBS | 15nm,0.4s | | | Lg | Lg | 19 07 44.0 | |
| **TNSS** | 28nm,0.9s **Tian-Shan** | **5.66** | **31** | Pg | **Pb** | **19 06 37.5** | **+1.4** |
| TNSS | 11nm,0.5s | | | Lg | Lg | 19 07 48.5 | |
| **MDOK** | 20nm,1.3s **Medeo** | **5.80** | **31** | ⇓Pg | **Pb** | **19 06 38.9** | **+0.4** |
| MDOK | 14nm,0.6s | | | ⇓Lg | Lg | 19 07 52.8 | |
| **MDOK** | 46nm,0.8s **Medeo** | **5.80** | **31** | Pg | **Pb** | **19 06 39.3** | **+0.9** |
| MDOK | 15nm,0.7s | | | Lg | Lg | 19 07 51.8 | |
| **KRBS** | 37nm,1.0s **Karabastau** | **5.81** | **20** | Pg | **Pb** | **19 06 38.9** | **+0.5** |
| KRBS | 9.8nm,0.6s | | | Lg | Lg | 19 07 50.6 | |
| **KNDC** | 24nm,0.7s **Almaty** | **5.81** | **30** | ⇑Pg | **Pb** | **19 06 39.8** | **+1.3** |
| KNDC | 59nm,0.8s | | | ⇑Lg | Lg | 19 07 50.3 | |
| **KOTS** | 114nm,0.8s **Kotyrbulak** | **5.89** | **31** | Pg | **Pb** | **19 06 40.9** | **+1.0** |
| KOTS | 23nm,0.9s | | | Lg | Lg | 19 07 54.8 | |
| **KTBS** | 62nm,0.8s **Karatobe** | **6.13** | **26** | Pg | **Pb** | **19 06 45.3** | **+1.3** |
| KTBS | 13nm,0.6s | | | Lg | Lg | 19 08 02.4 | |
| **KUU** | 51nm,0.8s **Kurty** | **6.18** | **23** | Pg | **Pb** | **19 06 46.4** | **+1.6** |
| KUU | 9.5nm,0.5s | | | Lg | Lg | 19 08 04.5 | |
| **OTUK** | 49nm,1.1s **Ortayu** | **9.99** | **358** | ⇑Pn | **Pn** | **19 07 19.3** | **-1.4** |
| OTUK | 2.2nm,0.9s | | | ⇓Lg | Lg | 19 10 06.0 | |
| **MKAR** | 32nm,1.2s **Makanchi Array** | **10.96** | **36** | Pn | **Pn** | **19 07 35.0** | **+1.1** |
| MKAR | baz=220,slow=13,SNR=2.6 | | | Lg | Lg | 19 10 31.2 | |
| **KURBB** | 0.0nm,0.3s,baz=227,slow=27,SNR=2.3 **Kurchatov Arra** | **12.98** | **16** | Pn | **Pn** | **19 07 58.4** | **-3.1** |
| KURBB | 0.1nm,0.3s,baz=204,slow=12,SNR=3.3 | | | Lg | Lg | 19 11 38.2 | |
| **KURBB** | 0.0nm,0.3s,baz=204,slow=29,SNR=5.7 **Kurchatov Arra** | **12.98** | **16** | ⇑Lg | Lg | 19 11 38.4 | |
| **KURK** | 14nm,1.1s **Kurchatov** | **13.09** | **16** | ⇓Lg | Lg | 19 11 43.7 | |
| **PYUN** | 22nm,1.3s **Piuthan** | **13.16** | **137** | *eP* | **Pn** | **19 08 03.5** | **-0.7** |
| **DANN** | 9.2nm,0.4s **Dangsing** | **13.38** | **134** | *eP* | **Pn** | **19 08 05.5** | **-1.9** |
| **KOLN** | 12nm,0.6s **Koldanda** | **13.75** | **136** | *eP* | **Pn** | **19 08 11.7** | **-0.6** |
| **GKN** | 4.8nm,0.4s **Gorkha** | **14.15** | **133** | *eP* | **Pn** | **19 08 15.5** | **-2.2** |
| **AB31** | 6.7nm,0.4s **Akbulak array** | **14.44** | **324** | ⇑Pn | **Pn** | **19 08 20.9** | **-0.5** |
| **BVAR** | 1.2nm,0.4s,baz=140,slow=8.9,SNR=66 **Borovoye Array** | **14.87** | **354** | Pn | **Pn** | **19 08 26.7** | **-0.6** |
| **BRVK** | 0.2nm,0.3s,baz=110,slow=12,SNR=4.4 **Borovoye** | **14.91** | **354** | ⇓Pn | **Pn** | **19 08 26.3** | **-1.6** |
| **JIRN** | 3.8nm,0.6s **Jiri** | **15.32** | **130** | *eP* | **Pn** | **19 08 29.8** | **-4.0** |
| **RAMN** | 7.4nm,0.5s **Ramite** | **16.09** | **131** | *eP* | **Pn** | **19 08 40.0** | **-3.6** |
| **AKTO** | 1.3nm,0.4s **Aktyubinsk** | **16.15** | **324** | Pn | **Pn** | **19 08 44.0** | **-0.1** |
| AKTO | 0.3nm,0.3s,baz=128,slow=16,SNR=4.2 | | | Sn | **Sn** | **19 11 36.2** | **-7.0** |
| **AKTO** | 0.1nm,0.3s,baz=71,slow=20,SNR=2.1 **Aktyubinsk** | **16.15** | **324** | ⇑Pn | **Pn** | **19 08 45.8** | **+1.7** |
| **TAPN** | 7.5nm,0.7s **Taplejung** | **16.48** | **127** | *eP* | **Pn** | **19 08 44.1** | **-4.6** |
| **ZALV** | 3.6nm,0.5s **Zalesovo Beam** | **17.68** | **24** | P | **Pn** | **19 09 01.1** | **-2.1** |
| **ARU** | 0.5nm,0.3s,baz=215,slow=9.8,SNR=13 **Arti** | **20.55** | **337** | P | **P** | **19 09 36.6** | **+1.1** |
| **BELG** | 1.5nm,0.8s,baz=131,slow=6.4,SNR=7.8 **Belogornoye** | **22.58** | **317** | P | **P** | **19 09 58.2** | **+0.8** |
| **SONM** | 11nm,0.8s,baz=120,slow=1.6,SNR=5.5 **Songino Array** | **26.07** | **58** | P | **P** | **19 10 31.5** | **+0.7** |
| **FINES** | 1.0nm,0.6s,baz=255,slow=11,SNR=8.0 **FINESS Array B** | **36.93** | **324** | P | **P** | **19 12 06.0** | **+0.1** |
| **ARCES** | 0.7nm,0.5s,baz=115,slow=9.6,SNR=5.0 **ARCESS Array B** | **40.13** | **336** | P | **P** | **19 12 32.4** | **-0.3** |
| **NB2** | 1.8nm,0.7s,baz=108,slow=8.6,SNR=2.1 **NORSAR Subarra** | **43.93** | **322** | P | **P** | **19 13 07.8** | **+3.9** |
| **NOA** | comp=Z,0.5nm,0.6s,baz=81,slow=8.6 **NORSAR Array B** | **43.93** | **322** | P | **P** | **19 13 04.6** | **+0.7** |
| **TORD** | comp=Z,0.6nm,0.7s,baz=94,slow=7.7,SNR=3.5 **Torodi Ar. Bea** | **67.31** | **269** | P | **P** | **19 15 53.9** | **+1.5** |
| **YKA** | comp=Z,0.2nm,0.5s,baz=44,slow=4.7,SNR=1.6 **Yellowknife Ar** | **79.41** | **4** | P | **P** | **19 17 02.5** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=349,slow=5.5,SNR=5.7 | | | | | | |

*JMA **14** 19:12:16.5±0.1,25.00N×123.54E,h13km±3km,M4.6*
*NIED **14** 19:12:16.6,25.00N×123.54E,h13km,MW4.5,Moment*
*Tensor Solution. s2 Moment tensor: Scale 10^15Nm;*
*Mrr=5.81; Mθθ5.84; Mφφ-0.03; Mrθ1.68; Mθφ0.70; Mφr0.12;*
*Fault plane solution: M06.11000×10^15 NP1:*
*φs264.00000°,δ53.00000°,λ-89.00000°. NP2:φs82.00000°,*
*δ37.00000°,λ-91.00000°.*
*BJI **14** 19:12:17.7±0.0,24.40N×123.70E,h46km,mb4.1/53,*
*mB4.8/32,ML4.5/3,Ms4.5/47,Ms7 4.3/45*
*NEIC **14** 19:12:18.8±1.8,24.91N±0.07×123.48E±0.10,h21km±6km,*
*mb4.7/15,Error ellipse: s-maj=15.6km s-min=3.9km*
*az=51.0*
*MOS **14** 19:12:20.0±1.8,24.71N×123.27E,h37km,mb4.9/23,Error*
*ellipse: s-maj=13.6km s-min=7.9km az=111.4*
*IDC **14** 19:12:28.3±4.2,24.87N×123.37E,h106km±40km,*
*mb3.7/21,mb1 3.8/23,mb1mx3.7/39,mbtmp4.1/23,*
*MS3.8/36,Ms1 3.8/36,ms1mx3.6/83,Error ellipse:*
*s-maj=17.2km s-min=11.7km az=71.0*
**ISC 14 19:12:20.9**±0.5,**24.76N**±0.03×**123.53E**±0.03,**h33**km±2km,
**h34km:pP-P,n150,σ2s50/154,mb4.6/62,MS3.9/41,7C-5D,**
**Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.46** | **156** | P | **Pb** | **19 12 29.6** | **-1.3** |
| IRIF | | | | *eS* | **Sn** | **19 12 38.6** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.55** | **238** | P | **Pb** | **19 12 30.2** | **-2.0** |
| YOJ | | | | S | **Sb** | **19 12 39.8** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.55** | **238** | P | **Pb** | **19 12 30.3** | **-2.0** |
| **YOJ** | **Yonaguni jima** | **0.55** | **238** | | **Pb** | **19 12 30.2** | **-2.0** |
| **JYNG** | **Yonagunijimaku** | **0.61** | **240** | P | **Pn** | **19 12 31.1** | **-2.1** |
| JYNG | | | | S | **Sb** | **19 12 41.6** | **-0.1** |
| **JKRS** | **Kuro-shima** | **0.68** | **139** | P | **Pn** | **19 12 32.9** | **-1.3** |
| JKRS | | | | *eS* | **Sn** | **19 12 44.6** | **+1.0** |
| **JIJ** | **Ishigaki jima** | **0.69** | **125** | P | **Pn** | **19 12 31.9** | **-2.3** |
| JIJ | | | | S | **Sb** | **19 12 43.0** | **-0.8** |
| **JISG** | **Ishigakijimahi** | **0.73** | **103** | P | **Pn** | **19 12 32.0** | **-2.9** |
| JISG | | | | S | **Sn** | **19 12 42.6** | **-2.4** |
| **HATJ** | **Hateruma jima** | **0.74** | **160** | P | **Pn** | **19 12 34.5** | **-0.5** |
| HATJ | | | | *eS* | **Sb** | **19 12 47.6** | **+2.3** |
| **JTJ** | **Tarama** | **1.08** | **96** | P | **Pn** | **19 12 37.4** | **-2.2** |
| JTJ | | | | *eS* | **Sn** | **19 12 52.0** | **-1.4** |
| **JIRB** | **Irabujima** | **1.50** | **87** | P | **Pn** | **19 12 43.0** | **-2.5** |
| **JIKM** | **Ikemajima** | **1.57** | **84** | P | **Pn** | **19 12 44.1** | **-2.4** |
| JIKM | | | | *eS* | **Sn** | **19 13 04.4** | **-1.3** |
| **JMJ2** | **Miyako jima3** | **1.64** | **90** | P | **Pn** | **19 12 45.9** | **-1.5** |
| **NACB** | **Ninganchiao** | **1.85** | **252** | | **Pn** | **19 12 49.5** | **-0.8** |
| **YHNB** | **Yeheng** | **1.96** | **268** | Pn | **Pn** | **19 12 50.0** | **-1.8** |
| **SSLB** | **Suanglung** | **2.54** | **248** | | **Pn** | **19 12 59.7** | **-0.1** |
| **TWG** | **Pinlang** | **2.96** | **230** | | **Pn** | **19 13 04.7** | **-0.9** |
| **TPUB** | **Ta-pu** | **3.02** | **242** | Pn | **Pn** | **19 13 07.6** | **+1.2** |
| **SSE** | **Sheshan** | **6.64** | **342** | Pn | Pn | 19 13 50.1 | -6.1 |
| SSE | | | | Sn | **Sn** | **19 15 08.0** | **-2.7** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,220nm,6.8s | | | | | | |
| SSE | | | | smax | smax | | |
| | comp=N,67nm,1.2s | | | | | | |
| SSE | | | | smax | smax | | |
| | comp=E,72nm,1.2s | | | | | | |
| **NJ2** | **Nanjing** | **8.35** | **332** | *eP* | Pn | 19 14 14.1 | -5.5 |
| NJ2 | | | | S | Sn | 19 15 43.4 | -9.3 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| NJ2 | | | | smax | smax | | |
| | comp=N,170nm,1.1s | | | | | | |
| NJ2 | | | | smax | smax | | |
| | comp=E,180nm,1.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=N,2μm,9.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,2μm,7.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,9.5s | | | | | | |
| **WHN** | **Wuhan** | **9.97** | **307** | *eP* | Pn | 19 14 46.4 | +4.6 |
| WHN | | | | LR | LR | | |
| | comp=Z,4μm,12.8s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,3μm,9.4s | | | | | | |
| **LQP** | **Lukban** | **10.75** | **190** | ⇓*eP* | Pn | 19 15 06.2 | +13 |
| **KSRS** | **Korea Array** | **13.20** | **15** | P | **P** | **19 15 31.1** | **-4.4** |
| | comp=Z,0.2nm,0.3s,baz=192,slow=12,SNR=7.1 | | | | | | |
| KSRS | | | | LR | LR | 19 21 07.6 | |
| | comp=Z,291nm,18.8s,baz=200,slow=40 | | | | | | |
| **QIZ** | **Qiongzhong** | **13.92** | **248** | P | **Pn** | **19 15 35.5** | **-0.4** |
| QIZ | | | | S | **Sn** | **19 18 08.6** | **-0.7** |
| QIZ | | | | LR | LR | | |
| | comp=Z,560nm,9.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,530nm,10.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,380nm,9.2s | | | | | | |
| **HNS** | **HongShan** | **14.68** | **331** | ⇓P | **P** | **19 15 51.1** | **-0.8** |
| HNS | | | | *eS* | **Sn** | **19 18 34.5** | **+6.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,820nm,10.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,500nm,10.8s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,690nm,10.2s | | | | | | |
| **GYA** | **Guiyang** | **15.31** | **280** | ⇓P | **Pn** | **19 15 52.5** | **-2.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **15.72** | **309** | P | **P** | **19 16 02.3** | **-1.3** |
| XAN | | | | pP | pP | 19 16 12.5 | +0.8 |
| XAN | | | | sP | sP | 19 16 18.1 | +2.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,990nm,14.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,880nm,7.2s | | | | | | |
| **BJI** | **Beijing** | **16.44** | **340** | P | **P** | **19 16 13.0** | **+1.5** |
| BJI | | | | pP | **pwP** | **19 16 21.3** | **-1.0** |
| BJI | | | | sP | **sP** | **19 16 26.9** | **+3.0** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,510nm,13.4s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,490nm,11.1s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,640nm,10.9s | | | | | | |
| **BIPH** | **Bislig** | **16.70** | **170** | ⇓*i*P | **P** | **19 16 14.6** | **+0.1** |
| BIPH | | | | *i* S | **P** | **19 16 19.6** | **+5.1** |
| **MJAR** | **Matsushiro Arr** | **17.23** | **44** | P | **P** | **19 16 23.3** | **+3.0** |
| | comp=Z,0.0nm,0.3s,baz=218,slow=7.6,SNR=5.9 | | | | | | |
| **CD2** | **Chengdu** | **18.52** | **294** | P | **P** | **19 16 34.3** | **-0.2** |
| CD2 | | | | pP | pP | 19 16 40.5 | -2.2 |

CD2 pmax pmax
comp=Z,10.0nm,1.0s
**KMI Kunming 18.85 275 ⇑P Pn 19 16 40.3 +1.1**
KMI sP sP 19 16 54.4 +3.7
KMI S **Sn 19 20 02.3 -7.1**
KMI pmax pmax
comp=Z,7.0nm,0.8s
KMI LR LR
comp=Z,430nm,8.4s
KMI LR LR
comp=Z,730nm,10.6s
KMI LR LR
comp=Z,690nm,11.3s
**HHC Hu-ho-hao-te 18.91 331 eP Pn 19 16 40.0 +0.4**
HHC pmax pmax
comp=Z,8.0nm,1.3s
HHC pmax pmax
comp=Z,400nm,4.8s
HHC LR LR
comp=Z,440nm,10.6s
HHC LR LR
comp=Z,400nm,10.2s
HHC LR LR
comp=Z,560nm,11.0s
**CN2 Changchun 19.06 4 eP Pn 19 16 45.1 +3.8**
CN2 pmax pmax
comp=Z,10.0nm,0.9s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,1μm,12.0s
CN2 LR LR
comp=Z,1μm,12.0s
CN2 LR LR
comp=Z,900nm,15.1s
**BTO Baotou 19.43 328 eP Pn 19 16 48.3 +2.4**
BTO S **Sn 19 20 28.4 +5.5**
BTO LR LR
comp=Z,3μm,15.3s
BTO LR LR
comp=Z,2μm,12.6s
**PZH PanZhiHua 19.72 280 P P 19 16 48.4 +0.6**
PZH pP **pP 19 16 55.8 -0.3**
PZH S **S 19 20 19.5 -9.0**
PZH SS **SnSn 19 20 51.9 +7.4**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,210nm,5.3s
PZH LR LR
comp=Z,1μm,14.0s
PZH LR LR
comp=Z,930nm,14.6s
PZH LR LR
comp=Z,980nm,15.0s
**XLT XiLinHaoTe 20.04 344 eP Pn 19 16 54.9 +1.8**
XLT pP sP 19 17 05.6 +2.2
XLT sP pwP 19 17 08.8 +6.7
XLT S **S 19 20 35.0 +0.2**
XLT pmax pmax
comp=Z,38nm,1.2s
XLT LR LR
comp=Z,620nm,14.3s
XLT LR LR
comp=Z,820nm,16.5s
XLT LR LR
comp=Z,810nm,15.7s
**LZH Lanzhou 20.34 308 eP P 19 16 54.9 +0.3**
LZH eS Sn 19 20 46.1 +1.0
LZH sS pS 19 20 55.6 -1.2
LZH SS **SnSn 19 21 12.0 +12**
LZH pmax pmax
comp=Z,8.0nm,1.1s
LZH pmax pmax
comp=Z,170nm,4.9s
LZH LR LR
comp=Z,790nm,13.6s
LZH LR LR
comp=Z,430nm,13.8s
LZH LR LR
comp=Z,720nm,15.2s
**MDJ Mudanjiang 20.42 12 P P 19 16 54.4 -0.7**
MDJ pmax pmax
comp=Z,21nm,2.6s
MDJ pmax pmax
comp=Z,430nm,3.6s
**USRK Ussuriysk Ar. 20.59 18** P Pn 19 16 58.8 -0.6
comp=Z,6.1nm,0.7s,baz=200,slow=10,SNR=6.8
USRK LR LR 19 25 18.7
comp=Z,242nm,18.1s,baz=184,slow=38
**BNX BinXian 21.17 8 ⇑P P 19 17 02.5 -0.7**
BNX pmax pmax
comp=Z,40nm,1.1s
BNX pmax pmax
comp=Z,560nm,4.7s
**GUMO Guam 22.98 115** LR LR 19 24 29.0
comp=Z,81nm,20.9s,baz=344,slow=31
**CHTO Chiang Mai 23.56 260 P P 19 17 27.2 -1.4**
CHTO pmax pmax
comp=Z,18nm,1.1s
**CHTO Chiang Mai 23.56 260 P P 19 17 27.2 -1.4**
CHTO IAmb IAmb 19 17 37.2
comp=Z,18nm,1.1s
**ERM Erimo 23.68 39 *i* P P 19 17 30.4 +1.0**
**CMAR Chiang Mai Arr 23.68 259 P P 19 17 29.8 0.0**
comp=Z,4.2nm,1.0s,baz=60,slow=7.7,SNR=30
CMAR LR LR 19 27 52.3
comp=Z,105nm,20.4s,baz=75,slow=39
**GTOI Gorontalo 23.98 181 P P 19 17 31.3 -1.2**
comp=Z,247nmcomp=Z,17nm,0.8s
**TNTI Ternate 24.13 171 P P 19 17 36.5 +2.6**
comp=Z,747nmcomp=Z,43nm,1.1s
**MRSI Marisa 24.19 184 P P 19 17 35.9 +1.5**
comp=Z,1μmcomp=Z,66nm,1.4s
**MPSI Mapaga 24.53 189 P P 19 17 38.5 +1.0**
comp=Z,27nm,1.5s
**SBUM Sibu 24.72 208 P P 19 17 39.5 +0.3**
SBUM IAmb IAmb 19 17 47.8
comp=Z,35nm,1.3s
**GTA Gaotai 24.74 312 ⇑P P 19 17 38.3 -1.2**
GTA S **S 19 22 02.6 +3.0**
GTA pmax pmax
comp=Z,3.0nm,1.3s
GTA pmax pmax
comp=Z,110nm,5.2s
GTA LR LR
comp=Z,520nm,16.0s
GTA LR LR
comp=Z,330nm,15.3s
GTA LR LR
comp=Z,300nm,16.0s
**ASAJ Asahikawa 24.80 34 P P 19 17 40.9 +1.1**
comp=Z,14nm,0.7s,baz=119,slow=3.6,SNR=4.5
ASAJ LR LR 19 28 05.8
comp=Z,148nm,19.1s,baz=212,slow=38
**KLR Kul'dur 25.26 13 P P 19 17 42.8 -1.1**
comp=Z,3.3nm,0.8s,baz=226,slow=6.9,SNR=11
KLR LR LR 19 27 43.3
comp=Z,207nm,20.2s,baz=198,slow=36
**APSI Ampana 25.58 184 P P 19 17 48.9 +1.8**
comp=Z,645nmcomp=Z,62nm,1.3s
**ULN Ulaanbaatar 26.50 335 *i* P P 19 17 53.7 -1.6**
ULN pmax pmax
comp=Z,12nm,1.0s
**SONM Songino Array 26.73 334 P P 19 17 56.6 -0.9**
comp=Z,2.3nm,0.8s,baz=157,slow=8.4,SNR=8.7
SONM LR LR 19 28 35.9
comp=Z,202nm,21.2s,baz=139,slow=36
**SANI Sanana 26.75 175 P P 19 17 57.8 +0.1**
comp=Z,35nm,1.2s
**YSS Yuzh-Sakhalins 26.94 30 *i* P P 19 18 00.9 +1.8**
YSS pmax pmax
comp=Z,4.0nm,0.3s
**GOMU GeErMu 27.14 302 P P 19 18 01.3 -0.2**
GOMU S **S 19 22 31.6 -6.6**
GOMU pmax pmax
comp=Z,2.0nm,1.0s
GOMU pmax pmax
comp=Z,71nm,4.0s
GOMU LR LR
comp=Z,230nm,9.0s
GOMU LR LR
comp=Z,220nm,8.5s
GOMU LR LR
comp=Z,260nm,8.2s
**TTSI Tana Toraja 27.87 188 P P 19 18 09.1 +1.4**
comp=Z,12nm,0.9s

**SHL Shillong 28.62 278 P P 19 18 14.1 -0.5**
**ZEA Zeya 29.08 5 eP P 19 18 19.7 +1.6**
ZEA pmax pmax
comp=N,10.0nm,0.7s
ZEA pmax pmax
comp=Z,20nm,0.9s
ZEA MLR MLR
comp=N,400nm,15.0s
ZEA MLR MLR
comp=Z,300nm,14.0s
**TYV Tymovskoe 29.95 25 eP P** 19 18 35.4 +10
TYV pmax pmax
comp=Z,200nm,5.0s
TYV pmax pmax
comp=Z,6.0nm,1.1s
**ZAK Zakamensk 30.00 334 eP P 19 18 24.1 -2.4**
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**MOY Mondy 31.91 333 eP P** 19 18 48.1 +4.7
MOY pmax pmax
comp=Z,24nm,1.7s
**MMRI Maumere 33.21 182 P P 19 18 56.3 +1.4**
comp=Z,6μmcomp=Z,40nm,1.2s
**KLSI 34.51 215 P P 19 19 06.5 +0.3**
comp=Z,13nm,1.0s
**WMQ Urumqi 34.83 312 eP P 19 19 09.0 +0.2**
WMQ sP sP 19 19 24.4 +2.7
WMQ pmax pmax
comp=Z,14nm,0.9s
**KPJI Karang Pucung 34.92 206 P P 19 19 11.0 +1.3**
comp=Z,20nm,1.3s
**DBJI Dramaga 35.15 210 P P 19 19 13.6 +1.9**
comp=Z,2μmcomp=Z,18nm,0.8s
**DGZ Jazzator, Alta 37.46 321 *i* P P 19 19 29.8 -1.6**
DGZ pmax pmax
comp=Z,11nm,1.9s
**YAK Yakutsk 37.49 5** LR LR 19 34 45.5
comp=Z,98nm,19.8s,baz=264,slow=36
**YAK Yakutsk 37.49 5 eP P 19 19 35.0 +3.8**
YAK *e* 19 20 58.3
YAK *e* 19 21 53.7
YAK *eS* **S 19 25 25.2 +7.6**
YAK *eSS* **SnSn 19 27 56.6 -0.1**
YAK *e* 19 29 48.1
YAK pmax pmax
comp=Z,25nm,1.1s
YAK pmax pmax
comp=N,10.0nm,1.1s
YAK pmax pmax
comp=E,6.0nm,1.1s
YAK pmax pmax
comp=Z,89nm,3.1s
YAK pmax pmax
comp=N,61nm,3.2s
YAK pmax pmax
comp=E,74nm,3.9s
YAK smax smax
comp=E,24nm,2.9s
YAK smax smax
comp=N,14nm,2.8s
YAK MLR MLR
comp=Z,458nm,13.0s
YAK MLR MLR
comp=N,336nm,13.0s
YAK MLR MLR
comp=E,191nm,13.0s
**PETK Petropavlovsk- 38.21 33 P P 19 19 36.8 -0.7**
comp=E,0.4nm,0.5s,baz=197,slow=4.5,SNR=5.3
PETK LR LR 19 36 14.9
comp=E,72nm,18.3s,baz=248,slow=37
**MK31 Makanchi Array 39.44 315 P P 19 19 46.0 -1.8**
MK31 pmax pmax
comp=Z,11nm,1.0s
**MK31 Makanchi Array 39.44 315 P P 19 19 46.0 -1.8**
MK31 IAmb IAmb 19 19 53.7
comp=Z,11nm,0.9s
**MKAR Makanchi Array 39.44 315 P P 19 19 46.3 -1.5**
comp=Z,4.2nm,0.9s,baz=98,slow=11,SNR=30
MKAR LR LR 19 35 34.5
comp=Z,65nm,21.0s,baz=107,slow=35
**ZAA0 Zalesovo Array 40.95 326 P P 19 19 57.9 -2.3**
ZAA0 IAmb IAmb 19 20 05.2
comp=Z,13nm,0.8s
**ZALV Zalesovo Beam 40.95 326 P P 19 19 58.4 -1.8**
comp=Z,4.1nm,0.8s,baz=108,slow=8.9,SNR=6.7
ZALV LR LR 19 38 14.6
comp=Z,156nm,19.8s,baz=126,slow=38
**ZALV Zalesovo Beam 40.95 326 P P 19 19 58.6 -1.6**
**ZALV Zalesovo Beam 40.95 326 P P 19 19 58.6 -1.6**
**PMG Port Moresby 41.04 143** LR LR 19 34 29.4
comp=Z,90nm,20.6s,baz=344,slow=32
**KSH Kashi 42.39 302 P P 19 20 14.8 +2.4**
KSH pmax pmax
comp=Z,4.0nm,1.4s
**FITZ Fitzroy Crossi 42.65 177** LR LR 19 40 52.4
comp=Z,18nm,18.5s,baz=100,slow=40
**COEN Coen 42.99 151 P P 19 20 18.0 +0.7**
COEN IAmb IAmb 19 20 26.0
comp=Z,17nm,0.9s
**KURK Kurchatov 43.04 319 *i* P P 19 20 15.1 -2.2**
KURK pmax pmax
comp=Z,21nm,1.1s
**KURK Kurchatov 43.04 319 P P 19 20 14.5 -2.8**
KURK IAmb IAmb 19 20 22.9
comp=Z,15nm,0.9s
**KURBB Kurchatov Arra 43.06 319 P P 19 20 15.6 -1.9**
comp=Z,2.9nm,0.8s,baz=114,slow=9.1,SNR=30
**AAK Ala-Archa 43.87 306 P P 19 20 22.6 -1.7**
comp=Z,1.0nm,0.9s,baz=191,slow=5.2,SNR=1.6
AAK LR LR 19 39 03.5
comp=Z,163nm,18.4s,baz=100,slow=36
**AAK Ala-Archa 43.87 306 *i* P P 19 20 23.8 -0.5**
**WRAB Tennant Creek 45.65 166 *i* P P 19 20 38.9 +0.4**
WRAB pmax pmax
comp=Z,22nm,1.1s
**WRAB Tennant Creek 45.65 166 P P 19 20 38.5 0.0**
WRAB IAmb IAmb 19 20 47.2
comp=Z,22nm,1.1s
**WRA Warramunga Arr 45.66 166 P P 19 20 39.0 +0.5**
comp=Z,4.2nm,0.7s,baz=349,slow=8.7,SNR=35
**WRA Warramunga Arr 45.66 166 *i* P P 19 20 39.5 +0.9**
WRA pmax pmax
comp=Z,5.0nm,0.6s
**WRA Warramunga Arr 45.66 166 P P 19 20 39.4 +0.8**
**WB2 Warramunga Arr 45.66 166 P P 19 20 39.3 +0.7**
**WR0 Warramunga Arr 45.72 165 P P 19 20 39.7 +0.6**
WR0 IAmb IAmb 19 20 47.7
comp=Z,26nm,1.2s
**PSA00 Pilbara Seismi 46.19 185 P P 19 20 41.9 -0.8**
**KKAR Karatay Array 46.83 307 P P 19 20 45.3 -2.3**
**KKAR Karatay Array 46.83 307 P P 19 20 45.3 -2.3**
**TIXI Tiksi 47.02 2** LR LR 19 43 01.4
comp=Z,265nm,18.9s,baz=181,slow=39
**TIXI Tiksi 47.02 2 *i* P P 19 20 46.7 -1.9**
TIXI pmax pmax
comp=Z,21nm,1.1s
**TIXI Tiksi 47.02 2 P P 19 20 46.4 -2.2**
**BRVK Borovoye 48.67 320 *ce* P P 19 20 59.6 -2.1**
BRVK pmax pmax
comp=Z,6.0nm,1.3s
**AS31 Alice Springs 49.18 167 P P 19 21 05.6 -0.3**
**ASAR Alice Springs 49.18 167 P P 19 21 07.0 +1.1**
comp=Z,1.6nm,0.5s,baz=350,slow=7.3,SNR=48
ASAR PcP **PcP 19 22 27.0 -1.9**
comp=Z,0.9nm,0.9s,baz=341,slow=3.5,SNR=1.7
ASAR LR LR 19 47 33.7
comp=Z,29nm,18.0s,baz=283,slow=43
**ASAR Alice Springs 49.18 167 P P 19 21 05.7 -0.2**
**ASAR Alice Springs 49.18 167 P P 19 21 05.7 -0.2**
**NRIK Noril'sk 49.42 344 P P 19 21 05.3 -1.8**
comp=Z,1.2nm,0.4s,baz=153,slow=9.0,SNR=2.8
NRIK LR LR 19 44 08.4
comp=Z,294nm,18.4s,baz=176,slow=39
**NRIK Noril'sk 49.42 344 *ce* P P 19 21 08.0 +0.8**
NRIK pmax pmax
comp=Z,16nm,1.4s
**CTA Charters Tower 49.76 152** LR LR 19 39 53.0
comp=Z,69nm,21.5s,baz=336,slow=33
**BILL Bilibino 50.43 19 ⇑*e* P** 19 21 20.1 +5.2
BILL *SP sP 19 21 33.0 +5.0
BILL 19 22 35.0
BILL pmax pmax
comp=Z,1.0nm,0.8s
BILL MLR MLR
comp=Z,63nm,16.0s
**ABKAR Akbulak array 54.57 314 P P 19 21 44.0 -1.8**

**ABKAR Akbulak array 54.57 314 P P 19 21 43.8 -2.1**
ABKAR IAmb IAmb 19 21 51.6
comp=Z,4.6nm,0.7s
**ARU Arti 55.94 323** LR LR 19 46 27.8
comp=Z,64nm,18.9s,baz=90,slow=37
**ARU Arti 55.94 323 *c i* P P 19 21 56.9 +1.3**
ARU *PP **sP 19 22 07.9 -0.9**
ARU 19 23 57.8
ARU S **S 19 29 41.9 +0.7**
ARU SS **SS 19 33 24.5 -2.5**
ARU pmax pmax
comp=Z,3.0nm,0.6s
**STKA Stephens Creek 58.91 162 P P 19 22 17.3 +0.6**
comp=Z,2.6nm,0.6s,baz=353,slow=7.9,SNR=7.6
STKA LR LR 19 49 22.6
comp=Z,75nm,18.5s,baz=356,slow=38
**STKA Stephens Creek 58.91 162 P P 19 22 15.9 -0.8**
STKA pmax pmax
comp=Z,2.0nm,1.1s
**STKA Stephens Creek 58.91 162 P P 19 22 15.9 -0.8**
**KIRV Kirov 60.98 325** LR LR 19 51 16.9
comp=Z,243nm,18.0s,baz=88,slow=38
**DZM Mont Dzumac 62.48 135** LR LR 19 46 15.4
comp=Z,52nm,21.8s,baz=246,slow=32
**PRGR Permogore 62.81 328 eP P 19 22 46.4 +3.5**
PRGR pmax pmax
comp=Z,13nm,0.7s
**KLMR Klimovskoe 65.82 328 eP P 19 23 02.9 +0.3**
KLMR pmax pmax
comp=Z,19nm,1.4s
**KLMR Klimovskoe 65.82 328 eP P 19 23 02.9 +0.3**
KLMR AMP 19 23 15.6
comp=Z,19nm,1.4s
**GNI Garni 66.23 305 *i* P P 19 23 07.6 +1.7**
GNI pmax pmax
comp=Z,7.0nm,1.4s
**ZEI Tsey 66.27 308 eP P 19 23 07.7 +1.5**
ZEI pmax pmax
comp=Z,8.0nm,1.0s
**KBZ Khabaz 66.78 309 P P 19 23 08.0 -1.2**
comp=Z,4.9nm,0.9s,baz=99,slow=6.4,SNR=2.7
KBZ LR LR 19 54 42.9
comp=Z,48nm,19.5s,baz=68,slow=38
**KBZ Khabaz 66.78 309 *i* P P 19 23 10.7 +1.6**
KBZ pmax pmax
comp=Z,4.0nm,0.8s
**KIV Kislovodsk 66.88 309 eP P 19 23 09.6 -0.3**
KIV pmax pmax
comp=Z,14nm,1.1s
KIV MLR MLR
comp=Z,44nm,17.0s
**OBN Obninsk 68.37 322 ⇓eP P 19 23 20.5 +1.6**
OBN *e*PP **sP 19 23 31.3 -1.0**
OBN *SP **pwP 19 23 35.0 +3.9**
OBN *e* 19 23 43.0
OBN pmax pmax
comp=Z,4.0nm,0.8s
**SPITS Spitsbergen Ar 69.38 348** LR LR 19 57 07.7
comp=Z,88nm,21.2s,baz=252,slow=39
**ARCES ARCESS Array B 69.80 338** LR LR 20 00 59.7
comp=Z,76nm,18.9s,baz=90,slow=42
**INK Inuvik 71.89 22** LR LR 19 58 24.2
comp=Z,59nm,18.9s,baz=340,slow=38
**FINES FINESS Array B 72.02 330** P **P 19 23 39.3 -1.9**
comp=Z,3.9nm,0.9s,baz=107,slow=10,SNR=8.1
FINES LR LR 19 58 04.3
comp=Z,187nm,18.1s,baz=68,slow=38
**FINES FINESS Array B 72.02 330 *i* P P 19 23 43.0 +1.8**
FINES pmax pmax
comp=Z,5.0nm,0.8s
**AKASG Malin Array Be 73.86 319** P **P 19 23 50.0 -2.3**
comp=Z,0.1nm,0.2s,baz=65,slow=5.3,SNR=4.5
**BRTR Keskin Array B 74.54 307** P **P 19 23 55.0 -1.8**
comp=Z,0.3nm,0.7s,baz=84,slow=7.3,SNR=2.3
**MLR Muntele Rosu 77.78 314** LR LR 20 02 57.2
comp=Z,79nm,19.0s,baz=44,slow=39
**HFS Hagfors 78.10 331** LR LR 20 02 11.7
comp=Z,184nm,18.3s,baz=83,slow=38
**NB2 NORSAR Subarra 78.71 333** P **P 19 24 21.2 +1.5**
comp=Z,1.4nm,0.6s,baz=54,slow=6.2
**NOA NORSAR Array B 78.71 333** P **P 19 24 19.7 0.0**
comp=Z,2.1nm,0.8s,baz=54,slow=5.6,SNR=7.3
NOA LR LR 20 02 43.9
comp=Z,108nm,19.2s,baz=70,slow=38
**URZ Urewera 80.33 140** LR LR 19 59 16.8
comp=Z,48nm,18.8s,baz=331,slow=35
**RPZ Rata Peaks 80.89 147** LR LR 19 59 05.0
comp=Z,48nm,19.9s,baz=308,slow=34
**YKA Yellowknife Ar 81.61 23** P **P 19 24 33.9 -1.3**
comp=Z,2.6nm,0.9s,baz=311,slow=4.9,SNR=18
**YKA Yellowknife Ar 81.61 23 *i* P P 19 24 37.7 +2.5**
YKA pmax pmax
comp=Z,3.0nm,0.9s
**GERES GERESS Array B 83.74 321** P **P 19 24 44.9 -1.8**
comp=Z,0.2nm,0.3s,baz=57,slow=3.6,SNR=2.6
GERES LR LR 20 03 01.9
comp=Z,78nm,19.1s,baz=73,slow=36
**BORG Borgarnes 86.71 346** LR LR 20 07 25.9
comp=Z,54nm,19.1s,baz=34,slow=38
**DAVOX Davos/Dischmat 87.02 321** LR LR 20 07 32.8
comp=Z,125nm,19.8s,baz=68,slow=38
**FRB Frobisher Bay 91.28 5** LR LR 20 09 53.0
comp=Z,35nm,18.3s,baz=296,slow=38

**IDC 14 19:44:32.0±2.2, 2°44S×133°85E, h0km, mb3.2/2, mb1 3.6/4, mb1mx3.3/39, mbtmp3.4/4, ML3.4/2, MS3.3/1, Ms1 3.3/1, ms1mx2.5/18, Error ellipse: s-maj=67.5km s-min=22.2km az=99.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.40** | **178** | P | | Pn | 19 48 36.2 | -0.2 |
| | 0.2nm,0.3s,baz=359,slow=12,SNR=13 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.52** | **207** | P | | Pn | 19 48 36.5 | -1.4 |
| | 0.1nm,0.3s,baz=30,slow=12,SNR=1.3 | | | | | | | |
| FITZ | | | | S | | Sn | 19 51 55.2 | +1.4 |
| | 0.0nm,0.3s,baz=106,slow=19,SNR=1.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.10** | **180** | P | | P | 19 49 18.8 | +0.5 |
| | 0.4nm,0.5s,baz=8.7,slow=12,SNR=10 | | | | | | | |
| ASAR | | | | LR | | LR | 19 58 21.4 | |
| | comp=Z,73nm,18.2s,baz=228,slow=39 | | | | | | | |
| **SONM** | **Songino Array** | **55.52** | **338** | P | | P | 19 54 09.1 | 0.0 |
| | 0.3nm,0.7s,baz=126,slow=7.3,SNR=2.1 | | | | | | | |

*CNRM **14** 19:52:04.3, 35°.49N×3°.92W, h15km, ml2.6*

**ISC 14 19:52:04.4±1.2, 35°.48N±0°.04×3°.85W±0°.05, h10km±10km, n7, σ1°34/14, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.28** | **196** | P | | **Pg** | **19 52 08.9** | **-1.1** |
| PALE | | | | S | | **Sg** | **19 52 14.6** | **+0.9** |
| **SMIR** | **Smir Dam** | **1.26** | **279** | P | | **Pn** | **19 52 26.4** | **-1.8** |
| SMIR | | | | S | | **Sn** | **19 52 45.2** | **0.0** |
| **TAF** | **Taforalt** | **1.35** | **119** | P | | **Pn** | **19 52 28.5** | **-0.9** |
| TAF | | | | S | | **Sg** | **19 52 48.4** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **340** | P | | **Pb** | **19 52 30.7** | **+0.7** |
| EMAL | | | | S | | **Sg** | **19 52 49.7** | **+1.5** |
| **SICH** | **Sidi Chahed** | **1.83** | **222** | P | | **Pn** | **19 52 34.8** | **-1.2** |
| SICH | | | | S | | **Sn** | **19 52 57.7** | **-1.4** |
| **MD31** | **MD31** | **2.72** | **196** | P | | **Pn** | **19 52 49.9** | **+1.7** |
| MD31 | | | | S | | **Sn** | **19 53 21.9** | **+0.8** |
| **ZHG** | **ZHG** | **3.08** | **229** | P | | **Pn** | **19 52 54.6** | **+1.5** |
| ZHG | | | | S | | **Sn** | **19 53 29.6** | **-0.3** |

*CNRM **14** 19:53:43.6, 35°.49N×3°.76W, h24km, ml2.6*

**ISC 14 19:53:41.9±1.7, 35°.58N±0°.05×3°.69W±0°.05, h16km±12km, n8, σ1°93/16, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.41** | **210** | P | | **Pg** | **19 53 50.0** | **-0.3** |
| PALE | | | | S | | **Sb** | **19 53 55.8** | **-1.1** |
| **TAF** | **Taforalt** | **1.29** | **126** | P | | **Pn** | **19 54 05.7** | **+0.3** |
| TAF | | | | S | | **Sb** | **19 54 22.8** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.33** | **333** | P | | **Pn** | **19 54 05.6** | **-0.2** |
| EMAL | | | | S | | **Sb** | **19 54 22.7** | **-0.5** |
| **SMIR** | **Smir Dam** | **1.38** | **275** | P | | **Pn** | **19 54 07.8** | **+1.3** |
| SMIR | | | | S | | **Sb** | **19 54 25.7** | **+1.0** |
| **SICH** | **Sidi Chahed** | **1.99** | **223** | P | | **Pn** | **19 54 13.3** | **-1.6** |
| SICH | | | | S | | **Sn** | **19 54 35.2** | **-4.3** |
| **IFR** | **Ifrane** | **2.37** | **210** | P | | **Pn** | **19 54 20.3** | **-0.1** |
| IFR | | | | S | | **Sn** | **19 54 47.6** | **-1.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MD31** | **MD31** | **2.84** | **198** | P | **Pn** | **19 54 28.1** | **+1.3** |
| MD31 | | | | S | **Sn** | **19 55 02.9** | **+2.2** |
| **ZHG** | **ZHG** | **3.23** | **230** | P | **Pn** | **19 54 35.2** | **+3.0** |
| ZHG | | | | S | **Sn** | **19 55 11.4** | **+1.0** |

*IDC **14** 19:57:11.2±0.8,30°.17N×70°.10E, h0km, mb3.9/22, mb1 4.0/25,mb1mx3.9/60,mbtmp3.9/25,ML4.0/3,MS3.5/23, Ms1 3.5/23,ms1mx3.2/83,Error ellipse: s-maj=17.8km s-min=14.2km az=31.0*
*NDI **14** 19:57:15.5±3.9,30°.05N×70°.12E,h20km,ML4.0, mb4.1(NEIC)*
*NEIC **14** 19:57:15.7±1.8,30°.2N±0°.1×70°.2E±0°.1, h25km±8km, mb4.1/14,Error ellipse: s-maj=17.0km s-min=12.9km az=181.0*
*NNC **14** 19:57:21.0±4.5,30°.83N×70°.09E,h19km±44km,mb4.1, Error ellipse: s-maj=36.1km s-min=17.1km az=153.0*

**ISC 14 19:57:12.7±0.4,30°.17N±0°.04×70°.18E±0°.05,h12km,n117, σ1§70/123,mb3.9/30,MS3.5/20,4C-4D,Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SARP** | **Sargodha** | **2.76** | **50** | P | **Pn** | **19 57 59.0** | **+2.3** |
| **THW** | **Thamme Wali** | **2.93** | **27** | P | **Pn** | **19 58 01.8** | **+2.6** |
| **CEP** | **Cherat** | **3.92** | **21** | P | **Pn** | **19 58 15.0** | **+2.1** |
| **NIL** | **Nilore** | **4.34** | **36** | | **Pn** | **19 58 20.9** | **+2.4** |
| **KBL** | **Kabul** | **4.46** | **348** | Pn | **Pn** | **19 58 23.1** | **+2.8** |
| **JMU** | **Jammu** | **4.76** | **57** | *e*P | **Pn** | **19 58 27.5** | **+3.2** |
| JMU | | | | *e*S | **Sn** | **19 59 21.0** | **+1.6** |
| JMU | | | | *e*S | **Sn** | **19 59 22.1** | **+2.7** |
| **THN** | **Thein Dam** | **5.25** | **63** | *e*P | **Pn** | **19 58 34.5** | **+3.6** |
| THN | | | | *e*S | **Sn** | **19 59 34.9** | **+3.7** |
| **AJM** | **Ajmer** | **5.38** | **132** | *e*P | **Pn** | **19 58 34.9** | **+2.0** |
| **KUDL** | **Kundal** | **5.87** | **109** | *e*P | **Pn** | **19 58 40.7** | **+1.2** |
| KUDL | | | | *e*S | **Sn** | **19 59 45.4** | **-1.4** |
| **SMLA** | **Simla** | **6.09** | **79** | *e*P | **Pn** | **19 58 45.4** | **+2.9** |
| SMLA | | | | *e*S | **Sn** | **19 59 54.9** | **+2.7** |
| SMLA | | | | IAML | | 19 59 58.8 | |
| | comp=E,459nm,0.4s | | | | | | |
| **AYAN** | **Aya Nagar** | **6.29** | **104** | *e*P | **Pn** | **19 58 46.6** | **+1.3** |
| AYAN | | | | *e*S | **Sn** | **19 59 55.0** | **-2.1** |
| **NDI** | **New Delhi** | **6.31** | **102** | *e*P | **Pn** | **19 58 46.7** | **+1.1** |
| NDI | | | | *e*P | **Pn** | **19 58 47.5** | **+1.9** |
| NDI | | | | *e*S | **Sn** | **19 59 55.8** | **-1.9** |
| **SONA** | **Sohna** | **6.33** | **106** | *e*P | **Pn** | **19 58 44.2** | **-1.6** |
| SONA | | | | *e*S | **Sn** | **19 59 55.8** | **-2.1** |
| **DDI** | **Dehra Dun** | **6.81** | **87** | *e*P | **Pn** | **19 58 53.8** | **+1.3** |
| DDI | | | | *e*S | **Sn** | **20 00 10.7** | **+0.6** |
| DDI | | | | IAML | | 20 00 17.9 | |
| | comp=N,222nm,0.4s | | | | | | |
| **BHUJ** | **Bhuj** | **6.91** | **184** | *e*P | **Pn** | **19 58 56.1** | **+2.4** |
| BHUJ | | | | *e*S | **Sn** | **20 00 12.0** | **-0.3** |
| BHUJ | | | | IAML | | 20 00 20.8 | |
| | comp=E,101nm,0.7s | | | | | | |
| **PTH** | **Pithoragarh** | **8.73** | **92** | *e*P | **Pn** | **19 59 19.8** | **+0.8** |
| PTH | | | | *e*S | **Sn** | **20 00 53.8** | **-3.8** |
| **JHNI** | **Jhansi** | **8.76** | **120** | *e*P | **Pn** | **19 59 20.2** | **+1.0** |
| **BHPL** | **Bhopal** | **9.46** | **135** | *e*P | **Pn** | **19 59 29.9** | **+1.1** |
| BHPL | | | | IAML | | 20 01 17.0 | |
| | comp=E,44nm,0.3s | | | | | | |
| **AKL** | **Akola** | **11.27** | **145** | *e*P | **Pn** | **19 59 54.3** | **+0.7** |
| **ALBI** | **Allahabad** | **11.38** | **112** | *e*P | **Pn** | **19 59 53.9** | **-1.1** |
| **PYUN** | **Piuthan** | **11.39** | **97** | *e*P | **Pn** | **19 59 55.8** | **+0.4** |
| | comp=E,18nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **11.99** | **98** | *e*P | **Pn** | **20 00 03.3** | **-0.3** |
| | comp=E,47nm,0.5s | | | | | | |
| **DANN** | **Dangsing** | **11.99** | **95** | *e*P | **Pn** | **20 00 03.5** | **-0.3** |
| **AML** | **Almayashu** | **12.27** | **12** | P | **Pn** | **20 00 06.8** | **-0.7** |
| | SNR=59 | | | | | | |
| **WSAR** | **Wadi Sarin** | **12.42** | **239** | Pn | **Pn** | **20 00 07.9** | **-1.4** |
| | comp=E,0.5nm,0.3s,baz=77,slow=5.5,SNR=12 | | | | | | |
| WSAR | | | | Sn | Sn | 20 02 16.4 | -11 |
| | comp=E,0.6nm,0.3s,baz=306,slow=7.4,SNR=6.1 | | | | | | |
| WSAR | | | | LR | LR | 20 06 23.3 | |
| | comp=E,80nm,18.8s,baz=95,slow=45 | | | | | | |
| **UCH** | **Uchtor** | **12.53** | **15** | P | **Pn** | **20 00 10.0** | **-1.1** |
| | SNR=15 | | | | | | |
| **EKS2** | **Erkin-Say** | **12.79** | **12** | P | **Pn** | **20 00 14.6** | **+0.2** |
| | SNR=7.5 | | | | | | |
| **GKN** | **Gorkha** | **12.82** | **96** | *e*P | **Pn** | **20 00 13.3** | **-1.7** |
| | comp=E,21nm,0.3s | | | | | | |
| **KK02** | **Karatay Array** | **12.91** | **1** | ⇓P | **Pn** | **20 00 14.8** | **-1.2** |
| | comp=E,9.6nm,0.8s | | | | | | |
| KK02 | | | | ⇓S | Sn | 20 02 30.3 | -9.2 |
| | comp=E,3.3nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **12.91** | **1** | Pn | **Pn** | **20 00 14.8** | **-1.2** |
| **AAK** | **Ala-Archa** | **12.91** | **14** | Pn | **Pn** | **20 00 15.5** | **-0.6** |
| | comp=E,1.8nm,0.3s,baz=168,slow=5.1,SNR=30 | | | | | | |
| AAK | | | | Sn | **Sn** | **20 02 31.7** | **-8.1** |
| | comp=E,0.1nm,0.3s,baz=53,slow=20,SNR=2.1 | | | | | | |
| AAK | | | | LR | LR | 20 05 58.0 | |
| | comp=E,332nm,18.8s,baz=210,slow=41 | | | | | | |
| **AAK** | **Ala-Archa** | **12.91** | **14** | P | **Pn** | **20 00 15.1** | **-1.0** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **12.91** | **14** | Pn | **Pn** | **20 00 15.4** | **-0.7** |
| **AAK** | **Ala-Archa** | **12.91** | **14** | ⇓P | **Pn** | **20 00 14.8** | **-1.4** |
| | comp=E,7.8nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **20 02 34.3** | **-5.5** |
| | comp=E,5.4nm,0.7s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **13.07** | **26** | | **Pn** | **20 00 19.0** | **+0.5** |
| **DMN** | **Daman** | **13.32** | **97** | *e*P | **Pn** | **20 00 21.1** | **-0.8** |
| | comp=E,5.6nm,0.3s | | | | | | |
| **KLRI** | **Killari** | **13.39** | **153** | *e*P | **Pn** | **20 00 22.1** | **-0.6** |
| **SRSP** | **Sriramsagar** | **13.43** | **145** | *e*P | **Pn** | **20 00 22.6** | **-0.5** |
| **KKN** | **Kakani** | **13.43** | **96** | *e*P | **Pn** | **20 00 21.4** | **-1.9** |
| | comp=E,43nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **13.44** | **17** | P | **Pn** | **20 00 23.3** | **-0.1** |
| | SNR=7.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **13.44** | **17** | ⇓P | **Pn** | **20 00 22.8** | **-0.6** |
| | comp=E,4.9nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **13.58** | **97** | *e*P | **Pn** | **20 00 23.3** | **-2.1** |
| | comp=E,20nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **13.59** | **97** | *e*P | **Pn** | **20 00 23.4** | **-2.2** |
| | comp=E,21nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **13.92** | **95** | *e*P | **Pn** | **20 00 28.4** | **-1.7** |
| | comp=E,107nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **14.08** | **21** | ⇑P | **Pn** | **20 00 32.9** | **+0.9** |
| | comp=E,5.0nm,0.6s | | | | | | |
| **JIRN** | **Jiri** | **14.24** | **96** | *e*P | **Pn** | **20 00 32.8** | **-1.8** |
| | comp=E,35nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **14.78** | **99** | *e*P | **Pn** | **20 00 39.2** | **-2.6** |
| | comp=E,3.1nm,0.4s | | | | | | |
| **HYBB** | **Hyderabad (bro** | **14.82** | **147** | *e*P | **Pn** | **20 00 43.4** | **+1.2** |
| **HYB** | **Hyderabad** | **14.82** | **147** | *e*P | **Pn** | **20 00 42.0** | **-0.2** |
| HYB | | | | *e*S | **Sn** | **20 03 26.0** | **-0.4** |
| **CUPL** | **Choutuppal** | **15.10** | **146** | *e*P | **Pn** | **20 00 44.3** | **-1.6** |
| **ODAN** | **Odare** | **15.48** | **98** | *e*P | **Pn** | **20 00 47.8** | **-3.3** |
| | comp=E,26nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **15.63** | **96** | *e*P | **Pn** | **20 00 49.8** | **-3.3** |
| | comp=E,8.8nm,0.5s | | | | | | |
| **SRLM** | **Srisailam** | **16.12** | **148** | *e*P | **Pn** | **20 00 58.6** | **-0.7** |
| **MYLAV** | **Mylavaram** | **16.43** | **142** | *e*P | **Pn** | **20 01 02.9** | **-0.3** |
| **PVM** | **Polavaram** | **16.57** | **138** | *e*P | **Pn** | **20 01 05.3** | **+0.3** |
| **RCLA** | **Racherla** | **16.72** | **149** | *e*P | **Pn** | **20 01 07.3** | **+0.5** |
| **CHLP** | **Challavanipeta** | **17.15** | **129** | *e*P | **Pn** | **20 01 11.5** | **-0.7** |
| **OTUK** | **Ortayu** | **18.12** | **5** | P | **Pn** | **20 01 22.9** | **-1.3** |
| | comp=E,3.6nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **18.97** | **26** | P | **P** | **20 01 33.7** | **-0.1** |
| **MK31** | **Makanchi Array** | **19.07** | **26** | P | **P** | **20 01 35.2** | **+0.3** |
| **MK31** | **Makanchi Array** | **19.07** | **26** | P | **P** | **20 01 35.4** | **+0.5** |
| | comp=E,2.9nm,0.7s,baz=210,slow=12,SNR=28 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.07** | **26** | P | **P** | **20 01 34.9** | **-0.1** |
| | comp=E,0.3nm,0.3s,baz=211,slow=12,SNR=19 | | | | | | |
| MKAR | | | | LR | LR | 20 10 23.7 | |
| | comp=E,82nm,19.1s,baz=216,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.07** | **26** | | **P** | **20 01 35.2** | **+0.2** |
| **SHL** | **Shillong** | **19.72** | **98** | P | **P** | **20 01 42.4** | **+0.1** |
| SHL | | | | IAmb | IAmb | 20 01 49.5 | |
| | comp=E,5.2nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **20.59** | **341** | P | **P** | **20 01 51.9** | **+0.5** |
| | comp=E,6.7nm,0.6s,baz=147,slow=11,SNR=95 | | | | | | |
| **ABKAR** | **Akbulak array** | **20.59** | **341** | P | **P** | **20 01 51.3** | **-0.1** |
| ABKAR | | | | IAmb | IAmb | 20 01 55.5 | |
| | comp=E,9.1nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **20.59** | **341** | | **P** | **20 01 51.7** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **21.37** | **15** | P | **P** | **20 01 59.3** | **-0.5** |
| | comp=Z,2.6nm,0.8s,baz=209,slow=8.7,SNR=20 | | | | | | |
| KURBB | | | | LR | LR | 20 11 00.4 | |
| | comp=Z,215nm,18.1s,baz=192,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.37** | **15** | ⇑P | **P** | **20 02 00.9** | **+1.1** |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.21** | **339** | P | **P** | **20 02 09.1** | **+0.2** |
| | comp=Z,2.9nm,0.8s,baz=125,slow=8.7,SNR=8.4 | | | | | | |
| AKTO | | | | LR | LR | 20 12 45.6 | |
| | comp=Z,62nm,18.2s,baz=147,slow=42 | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.21** | **339** | ⇑P | **P** | **20 02 09.4** | **+0.6** |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **22.84** | **0** | P | **P** | **20 02 15.7** | **+0.3** |
| | comp=Z,4.8nm,0.7s,baz=123,slow=11,SNR=30 | | | | | | |
| **BRVK** | **Borovoye** | **22.87** | **0** | P | **P** | **20 02 15.2** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 20 02 29.4 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **22.87** | **0** | P | **P** | **20 02 15.9** | **+0.1** |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **RAYN** | **Ar Rayn** | **22.97** | **259** | P | **P** | **20 02 19.2** | **+2.0** |
| RAYN | | | | IAmb | IAmb | 20 02 32.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **GNI** | **Garni** | **22.99** | **303** | P | **P** | **20 02 17.9** | **+0.5** |
| | comp=Z,1.5nm,0.5s,baz=83,slow=19,SNR=1.7 | | | | | | |
| **PALK** | **Pallekele** | **24.83** | **154** | LR | LR | 20 13 27.8 | |
| | comp=Z,100nm,19.2s,baz=85,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **25.53** | **310** | P | **P** | **20 02 41.5** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=123,slow=12,SNR=6.1 | | | | | | |
| KBZ | | | | LR | LR | 20 15 45.0 | |
| | comp=Z,78nm,18.4s,baz=120,slow=44 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **26.02** | **20** | P | **P** | **20 02 46.2** | **+0.8** |
| ZAA0 | | | | IAmb | IAmb | 20 03 14.3 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.02** | **20** | P | **P** | **20 02 46.5** | **+1.1** |
| | comp=Z,2.7nm,0.5s,baz=215,slow=9.0,SNR=16 | | | | | | |
| ZALV | | | | LR | LR | 20 14 13.1 | |
| | comp=Z,79nm,18.3s,baz=217,slow=39 | | | | | | |
| **ARU** | **Arti** | **27.50** | **346** | P | **P** | **20 02 59.2** | **+0.5** |
| | comp=Z,0.6nm,0.5s,baz=214,slow=7.3,SNR=4.4 | | | | | | |
| **BELG** | **Belogornoye** | **27.72** | **330** | P | **P** | **20 03 01.2** | **+0.6** |
| | comp=Z,4.7nm,0.5s,baz=242,slow=1.4,SNR=4.8 | | | | | | |
| BELG | | | | LR | LR | 20 17 30.9 | |
| | comp=Z,100nm,18.1s,baz=351,slow=44 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.60** | **107** | P | **P** | **20 03 09.8** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=297,slow=9.6,SNR=9.3 | | | | | | |
| CMAR | | | | LR | LR | 20 17 29.5 | |
| | comp=Z,41nm,19.8s,baz=340,slow=42 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **29.68** | **285** | LR | LR | 20 17 15.7 | |
| | comp=Z,128nm,18.6s,baz=246,slow=41 | | | | | | |
| **BRTR** | **Keskin Array B** | **31.25** | **298** | P | **P** | **20 03 30.4** | **-2.0** |
| | comp=Z,0.6nm,0.6s,baz=118,slow=8.2,SNR=2.0 | | | | | | |
| BRTR | | | | LR | LR | 20 17 42.2 | |
| | comp=Z,77nm,19.2s,baz=115,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **32.83** | **47** | P | **P** | **20 03 48.0** | **+1.9** |
| | comp=Z,0.9nm,0.7s,baz=237,slow=7.8,SNR=2.0 | | | | | | |
| SONM | | | | LR | LR | 20 18 57.8 | |
| | comp=Z,108nm,18.7s,baz=235,slow=40 | | | | | | |
| **OBN** | **Obninsk** | **34.55** | **326** | LR | LR | 20 19 46.1 | |
| | comp=Z,29nm,20.8s,baz=153,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.70** | **316** | P | **P** | **20 04 19.4** | **0.0** |
| | comp=Z,0.7nm,0.6s,baz=93,slow=7.1,SNR=13 | | | | | | |
| AKASG | | | | LR | LR | 20 21 18.8 | |
| | comp=Z,95nm,20.2s,baz=162,slow=40 | | | | | | |
| **AKBB** | **Malin Array Si** | **36.70** | **316** | P | **P** | **20 04 18.9** | **-0.4** |
| AKBB | | | | IAmb | IAmb | 20 04 43.4 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **BURAR** | **Bucovina Array** | **38.48** | **310** | P | **P** | **20 04 35.5** | **+0.8** |
| BURAR | | | | IAmb | IAmb | 20 04 39.1 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **38.50** | **310** | P | **P** | **20 04 34.2** | **-0.6** |
| **IPM** | **Ipoh** | **38.73** | **125** | P | **P** | **20 04 37.9** | **+0.9** |
| **NRIK** | **Noril'sk** | **40.46** | **9** | P | **P** | **20 04 51.2** | **+0.5** |
| | comp=Z,1.1nm,0.3s,baz=184,slow=15,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **42.49** | **330** | P | **P** | **20 05 06.9** | **-0.6** |
| | comp=Z,1.7nm,0.7s,baz=116,slow=13,SNR=4.5 | | | | | | |
| FINES | | | | LR | LR | 20 25 03.1 | |
| | comp=Z,85nm,18.7s,baz=78,slow=39 | | | | | | |
| **FINES** | **FINESS Array B** | **42.49** | **330** | P | **P** | **20 05 06.2** | **-1.2** |
| **MOA** | **Molln** | **45.85** | **309** | *i* P | **P** | **20 05 34.2** | **-0.5** |
| | comp=Z,6.3nm,1.5s | | | | | | |
| **GERES** | **GERESS Array B** | **46.27** | **310** | P | **P** | **20 05 38.7** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=7.4,SNR=6.7 | | | | | | |
| **GERES** | **GERESS Array B** | **46.27** | **310** | P | **P** | **20 05 38.9** | **+0.9** |
| **ARCES** | **ARCESS Array B** | **46.79** | **340** | P | **P** | **20 05 40.5** | **-1.2** |
| | comp=Z,2.5nm,0.6s,baz=122,slow=15,SNR=22 | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.79** | **340** | P | **P** | **20 05 42.6** | **+0.9** |
| **STAL** | **STALIGIAL** | **46.91** | **307** | P | **P** | **20 05 42.8** | **-0.2** |
| **HFS** | **Hagfors** | **47.76** | **326** | LR | LR | 20 29 42.3 | |
| | comp=Z,132nm,18.5s,baz=94,slow=41 | | | | | | |
| **KSRS** | **Korea Array** | **47.88** | **65** | LR | LR | 20 28 06.6 | |
| | comp=Z,42nm,18.0s,baz=315,slow=39 | | | | | | |
| **MOTA** | **Moosalm** | **47.99** | **308** | *i* P | **P** | **20 05 51.1** | **-0.5** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **DAVA** | **Damuels** | **48.82** | **308** | *e*P | **P** | **20 05 57.9** | **-0.1** |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **49.15** | **327** | P | **P** | **20 06 00.0** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=104,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **49.15** | **327** | P | **P** | **20 06 00.0** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=105,slow=7.8,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 20 28 49.8 | |
| | comp=Z,72nm,20.6s,baz=110,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **49.59** | **32** | LR | LR | 20 28 28.5 | |
| | comp=Z,74nm,19.2s,baz=67,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **49.61** | **49** | LR | LR | 20 31 46.0 | |
| | comp=Z,29nm,18.4s,baz=162,slow=42 | | | | | | |
| **ESDC** | **Sonseca Array** | **59.96** | **301** | P | **P** | **20 07 19.0** | **0.0** |
| | comp=Z,1.3nm,1.0s,baz=62,slow=7.2,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.02** | **271** | P | **P** | **20 07 53.2** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=60,slow=5.9,SNR=6.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.02** | **271** | P | **P** | **20 07 53.5** | **+0.4** |
| TORD | | | | IAmb | IAmb | 20 08 17.1 | |
| | comp=Z,3.1nm,1.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.06** | **42** | LR | LR | 20 38 23.6 | |
| | comp=Z,51nm,18.8s,baz=73,slow=38 | | | | | | |
| **TSUM** | **Tsumeb** | **70.51** | **233** | LR | LR | 20 43 40.9 | |
| | comp=Z,21nm,20.3s,baz=97,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **79.31** | **120** | P | **P** | **20 09 19.1** | **+0.6** |
| | comp=Z,0.7nm,0.6s,baz=317,slow=5.6,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **81.26** | **124** | P | **P** | **20 09 29.6** | **+0.7** |
| | comp=Z,0.5nm,0.5s,baz=308,slow=5.3,SNR=15 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.58** | **2** | P | **P** | **20 10 01.5** | **+1.2** |
| | comp=Z,0.5nm,0.6s,baz=348,slow=4.8,SNR=12 | | | | | | |

*IDC **14** 20:08:01.9±1.4,24°.94N×123°.58E, h0km, mb3.4/8, mb1 3.6/8, mb1mx3.4/44, mbtmp3.5/8, Error ellipse: s-maj=53.8km s-min=19.1km az=63.0*
*JMA **14** 20:08:03.4±0.1,24°.99N×123°.55E, h25km±4km, M3.1*

**ISC 14 20:08:03.7±1.7,24°.94N±0°.07×123°.56E±0°.04,h12km±11km, n14,σ0§68/20,mb3.3/8,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.62** | **166** | P | **Pg** | **20 08 16.3** | **+0.4** |
| IRIF | | | | S | **Sb** | **20 08 25.4** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.69** | **226** | P | **Pg** | **20 08 16.9** | **-0.3** |
| YOJ | | | | *e*S | **Sg** | **20 08 26.3** | **+0.1** |
| **JISG** | **Ishigakijimahi** | **0.77** | **117** | P | **Pg** | **20 08 18.4** | **-0.2** |
| JISG | | | | *e*S | **Sg** | **20 08 29.3** | **+0.6** |
| **JIJ** | **Ishigaki jima** | **0.78** | **137** | P | **Pg** | **20 08 18.5** | **-0.4** |
| JIJ | | | | S | **Sg** | **20 08 29.0** | **-0.2** |
| **JKRS** | **Kuro-shima** | **0.81** | **150** | P | **Pg** | **20 08 19.4** | **-0.1** |
| JKRS | | | | S | **Sb** | **20 08 30.9** | **+0.1** |
| **HATJ** | **Hateruma jima** | **0.91** | **166** | P | **Pb** | **20 08 21.0** | **-0.5** |
| HATJ | | | | *e*S | **Sg** | **20 08 33.8** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** | **23.75** | **259** | P | **P** | **20 13 16.4** | **+0.2** |
| | 0.6nm,0.8s,baz=64,slow=8.5,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **26.58** | **334** | P | **P** | **20 13 43.5** | **+1.5** |
| | 0.2nm,0.5s,baz=150,slow=6.2,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.33** | **314** | P | **P** | **20 15 32.2** | **-0.6** |
| | 0.3nm,0.8s,baz=103,slow=8.5,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.81** | **326** | P | **P** | **20 15 44.3** | **-0.7** |
| | 0.4nm,0.4s,baz=114,slow=9.3,SNR=2.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.95** | **319** | P | **P** | **20 16 01.6** | **-1.0** |
| | 0.3nm,0.7s,baz=111,slow=8.1,SNR=4.0 | | | | | | |
| **AAK** | **Ala-Archa** | **43.78** | **306** | P | **P** | **20 16 10.7** | **+1.1** |
| | 0.7nm,0.5s,baz=194,slow=8.3,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.83** | **166** | P | **P** | **20 16 25.2** | **-0.7** |
| | 1.0nm,0.7s,baz=350,slow=8.7,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **49.35** | **167** | P | **P** | **20 16 53.5** | **+0.2** |
| | 0.2nm,0.5s,baz=350,slow=7.5,SNR=11 | | | | | | |

**TAP 14 20:18:10.8,23°.82N×121°.97E,h26km,ML2.4,4D,C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEYL** | **Yanliau Villag** | **0.34** | **278** | *e*P | Pb | 20 18 18.9 | +0.3 |
| | baz=283 | | | | | | |
| **HWA** | **Hwalien** | **0.37** | **295** | *i* P | Pb | 20 18 18.1 | -0.9 |
| | baz=295 | | | | | | |
| **TWD** | **Chiawan** | **0.43** | **307** | ⇓*i*P | Pb | 20 18 20.6 | +0.7 |
| | baz=307 | | | | | | |
| TWD | | | | *i* S | Sn | 20 18 27.5 | -0.8 |
| | baz=307 | | | | | | |
| **ETM** | **Tongmen** | **0.46** | **288** | P | Pb | 20 18 21.1 | +0.6 |
| | baz=288 | | | | | | |
| ETM | | | | *e*S | Sn | 20 18 28.7 | -0.4 |
| | baz=288 | | | | | | |
| **ETL** | **Fush Village** | **0.46** | **317** | P | Pb | 20 18 21.1 | +0.5 |
| | baz=316 | | | | | | |
| ETL | | | | S | Sn | 20 18 28.5 | -0.8 |
| | baz=316 | | | | | | |
| **ESL** | **Shilin** | **0.49** | **269** | ⇓*i*P | Pb | 20 18 21.5 | +0.5 |
| | baz=269 | | | | | | |
| ESL | | | | *i* S | Sn | 20 18 29.5 | -0.4 |
| | baz=269 | | | | | | |
| **NACB** | **Ninganchiao** | **0.49** | **316** | ⇓P | Pb | 20 18 21.3 | +0.3 |
| | baz=315 | | | | | | |
| NACB | | | | S | Sb | 20 18 28.8 | +0.9 |
| | baz=315 | | | | | | |
| **EHP** | **Heping Village** | **0.53** | **337** | *e*S | Sn | 20 18 30.7 | -0.2 |
| | baz=337 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.59** | **311** | P | Pb | 20 18 23.1 | +0.4 |
| | baz=310 | | | | | | |
| ETLH | | | | S | Sn | 20 18 32.8 | +0.3 |
| | baz=310 | | | | | | |
| **HGSD** | **Ruisui** | **0.60** | **237** | P | Pn | 20 18 24.6 | +1.0 |
| | baz=236 | | | | | | |
| HGSD | | | | S | Sn | 20 18 32.6 | +0.1 |
| | baz=236 | | | | | | |
| **ENA** | **Nanau** | **0.64** | **341** | ⇓*i*P | Pb | 20 18 23.6 | +0.2 |
| | baz=341 | | | | | | |
| ENA | | | | S | Sn | 20 18 33.3 | -0.2 |
| | baz=341 | | | | | | |
| **EWUT** | **Wuta** | **0.65** | **344** | P | Pb | 20 18 23.9 | +0.3 |
| | baz=344 | | | | | | |
| EWUT | | | | *e*S | Sn | 20 18 33.6 | -0.1 |
| | baz=344 | | | | | | |
| **EHY** | **Hungye** | **0.67** | **242** | P | Pb | 20 18 24.1 | +0.1 |
| | baz=241 | | | | | | |
| EHY | | | | S | Sn | 20 18 34.1 | -0.2 |
| | baz=241 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.72** | **297** | *i* P | Pb | 20 18 25.3 | +0.2 |
| | baz=296 | | | | | | |
| WHF | | | | S | Sb | 20 18 35.2 | +0.4 |
| | baz=296 | | | | | | |
| **YULB** | **Yu-li** | **0.75** | **236** | P | Pb | 20 18 25.3 | 0.0 |
| | baz=235 | | | | | | |
| YULB | | | | S | Sn | 20 18 36.2 | -0.1 |
| | baz=235 | | | | | | |
| **EYUL** | **Yuli** | **0.76** | **232** | *e*P | Pn | 20 18 25.7 | -0.2 |
| | baz=231 | | | | | | |
| EYUL | | | | *e*S | Sn | 20 18 36.6 | +0.1 |
| | baz=231 | | | | | | |
| **CHGB** | **Renai** | **0.77** | **288** | P | Pn | 20 18 26.0 | -0.2 |
| | baz=288 | | | | | | |
| CHGB | | | | S | Sb | 20 18 36.2 | +0.4 |
| | baz=288 | | | | | | |
| **FUSS** | **Fushou** | **0.79** | **303** | *e*P | Pn | 20 18 26.5 | 0.0 |
| | baz=302 | | | | | | |
| FUSS | | | | *e*S | Sn | 20 18 37.3 | -0.3 |
| | baz=302 | | | | | | |
| **TWC** | **Suao** | **0.79** | **352** | *i* P | Pn | 20 18 26.4 | 0.0 |
| | baz=352 | | | | | | |
| TWC | | | | *i* S | Sn | 20 18 37.6 | +0.2 |
| | baz=352 | | | | | | |
| **WUSB** | **Renai** | **0.80** | **283** | P | Pn | 20 18 26.8 | +0.2 |
| | baz=282 | | | | | | |
| WUSB | | | | S | Sn | 20 18 37.6 | -0.1 |
| | baz=282 | | | | | | |
| **NNSB** | **Datong** | **0.81** | **319** | P | Pb | 20 18 26.4 | 0.0 |
| | baz=318 | | | | | | |
| NNSB | | | | S | Sn | 20 18 37.8 | -0.1 |
| | baz=318 | | | | | | |
| **LATG** | **Datong** | **0.82** | **330** | P | Pb | 20 18 26.7 | +0.1 |
| | baz=330 | | | | | | |
| LATG | | | | S | Sn | 20 18 38.1 | 0.0 |
| | baz=330 | | | | | | |
| **NNS** | **Nan Shan** | **0.82** | **319** | *i* P | Pb | 20 18 26.5 | -0.2 |
| | baz=318 | | | | | | |
| NNS | | | | *i* S | Sn | 20 18 38.2 | 0.0 |
| | baz=318 | | | | | | |
| **NDS** | **Dongshan** | **0.84** | **344** | P | Pn | 20 18 27.3 | +0.3 |
| | baz=344 | | | | | | |
| NDS | | | | S | Sn | 20 18 38.9 | +0.3 |
| | baz=344 | | | | | | |
| **TWT** | **Tachien** | **0.84** | **301** | *e*S | Sn | 20 18 39.2 | +0.3 |
| | baz=300 | | | | | | |
| **FULB** | **Fuli** | **0.88** | **225** | *e*P | Pb | 20 18 27.2 | -0.2 |
| | baz=225 | | | | | | |
| FULB | | | | S | Sn | 20 18 39.3 | -0.1 |
| | baz=225 | | | | | | |
| **NDT** | **Datong Townshi** | **0.88** | **332** | *e*P | Pb | 20 18 27.4 | -0.2 |
| | baz=331 | | | | | | |
| NDT | | | | S | Sn | 20 18 40.5 | +0.9 |
| | baz=331 | | | | | | |
| **ENTT** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LONT** | **Longtian** | **1.19 220** | *e*P | Pn | 20 18 31.6 | -0.2 |
| | baz=220 | | | | | | |
| LONT | | | *e*S | Sn | 20 18 46.8 | -0.4 |
| | baz=220 | | | | | | |
| **LIOB** | **Emei** | **1.20 314** | P | Pb | 20 18 33.3 | +0.4 |
| | baz=313 | | | | | | |
| LIOB | | | *e*S | Sb | 20 18 49.2 | +1.2 |
| | baz=313 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.21 340** | *e*P | Pb | 20 18 32.8 | -0.3 |
| | baz=340 | | | | | | |
| NHDH | | | *e*S | Sn | 20 18 47.8 | +0.3 |
| | baz=340 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.26 352** | *e*P | Pb | 20 18 33.7 | -0.3 |
| | baz=352 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.27 356** | *e*P | Pn | 20 18 33.3 | +0.3 |
| | baz=356 | | | | | | |
| SXI1 | | | *e*S | Sn | 20 18 49.2 | 0.0 |
| | baz=356 | | | | | | |
| **STYH** | **Taoyuan** | **1.27 240** | *e*P | Pb | 20 18 34.0 | -0.2 |
| | baz=239 | | | | | | |
| STYH | | | *e*S | Sb | 20 18 49.7 | -0.4 |
| | baz=239 | | | | | | |
| **TWGBT** | **Beinan** | **1.29 220** | *e*S | Sn | 20 18 49.9 | +0.3 |
| | baz=219 | | | | | | |

**JMA 14 20:18:56.9±0.1, 24°.97N × 123°.55E, h20 km, M2.4, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.65** | **165** | P | Pb | 20 19 09.5 | -0.1 |
| IRIF | | | | S | Sb | 20 19 18.3 | 0.0 |
| **YOJ** | **Yonaguni jima** | **0.70** | **224** | P | Pb | 20 19 10.3 | -0.2 |
| YOJ | | | | *e*S | Sb | 20 19 19.5 | -0.3 |
| **JISG** | **Ishigakijimahi** | **0.79** | **119** | P | Pb | 20 19 11.7 | -0.2 |
| JISG | | | | S | Sb | 20 19 22.7 | +0.5 |
| **JIJ** | **Ishigaki jima** | **0.81** | **138** | P | Pb | 20 19 11.7 | -0.6 |
| JIJ | | | | S | Sb | 20 19 22.0 | -0.8 |
| **JKRS** | **Kuro-shima** | **0.84** | **150** | P | Pb | 20 19 12.7 | -0.1 |
| JKRS | | | | *e*S | Sb | 20 19 23.5 | -0.2 |
| **HATJ** | **Hateruma jima** | **0.94** | **166** | P | Pb | 20 19 14.3 | -0.2 |
| HATJ | | | | S | Sb | 20 19 26.7 | +0.2 |
| **JTJ** | **Tarama** | **1.10** | **107** | P | Pb | 20 19 17.3 | +0.1 |

*IDC **14** 20:27:00.1±2.9, 11°.91S × 166°.18E, h0 km, mb4.0/5, mb1 4.2/6, mb1mx3.8/28, mbtmp4.0/6, ML3.4/1, MS3.3/7, Ms1 3.3/7, ms1mx2.9/58, Error ellipse: s-maj=66.2km s-min=29.7km az=87.0*

**ISC 14 20:27:04.4±2.3, 11°.8S±0°.1 × 166°.3E±0°.4, h35 km, n12, σ1 93°/7, mb4.0/5, MS3.3/4, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **6.70** | **290** | LR | LR | 20 30 46.3 | |
| | comp=Z,64nm,18.6s,baz=193,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **10.18** | **179** | Pn | **Pn** | **20 29 26.2** | **-1.9** |
| | 0.3nm,0.3s,baz=85,slow=20,SNR=2.6 | | | | | | |
| DZM | | | | Sn | **Sn** | **20 31 23.8** | **+2.6** |
| | 0.4nm,0.3s,baz=305,slow=17,SNR=1.4 | | | | | | |
| **MSVF** | **Nonsavu** | **12.77** | **119** | LR | LR | 20 33 38.4 | |
| | comp=Z,193nm,19.4s,baz=337,slow=31 | | | | | | |
| **PMG** | **Port Moresby** | **18.98** | **275** | LR | LR | 20 38 10.3 | |
| | comp=Z,118nm,18.4s,baz=244,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **20.94** | **244** | LR | LR | 20 38 26.5 | |
| | comp=Z,68nm,20.8s,baz=70,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **30.26** | **225** | P | **P** | **20 33 12.2** | **0.0** |
| | 3.0nm,0.7s,baz=56,slow=9.0,SNR=7.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.74** | **251** | P | **P** | **20 33 25.1** | **-0.3** |
| | 0.8nm,0.9s,baz=84,slow=9.7,SNR=5.5 | | | | | | |
| WRA | | | | LR | LR | 20 45 00.8 | |
| | comp=Z,55nm,18.3s,baz=14,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **32.94** | **245** | P | **P** | **20 33 34.6** | **-1.3** |
| | 1.7nm,0.7s,baz=66,slow=10,SNR=24 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.72** | **256** | LR | LR | 20 49 30.8 | |
| | comp=Z,37nm,18.6s,baz=100,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.93** | **294** | P | **P** | **20 38 32.3** | **+1.6** |
| | 1.3nm,0.8s,baz=122,slow=5.0,SNR=7.8 | | | | | | |
| **PFO** | **Pinyon Flats O** | **86.09** | **55** | LR | LR | 21 14 48.8 | |
| | comp=Z,26nm,18.4s,baz=88,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.47** | **317** | P | **P** | **20 40 21.1** | **0.0** |
| | 0.5nm,0.8s,baz=100,slow=6.0,SNR=4.7 | | | | | | |

*IDC **14** 20:51:44.3±2.5, 5°.83S × 130°.16E, h0 km, mb3.3/1, mb1 3.6/3, mb1mx3.0/30, mbtmp3.4/3, ML3.5/2, Error ellipse: s-maj=145.9km s-min=32.7km az=70.0*

**ISC 14 20:51:45.0±1.3, 5°.72S±0°.09 × 130°.6E±0°.3, h10 km, n10, σ1 9°/24/6, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.35** | **331** | P | Pg | 20 52 22.4 | +11 |
| **SAUI** | **Saumlaki** | **2.37** | **162** | P | **Pg** | **20 52 31.2** | **+0.8** |
| **FAKI** | **Fak Fak** | **3.25** | **31** | P | **Pn** | **20 52 36.1** | **0.0** |
| **DRS** | **Darwin Rock St** | **6.68** | **177** | P | Pn | 20 53 28.7 | +5.5 |
| **MTN** | **Manton Dam** | **7.10** | **175** | P | Pn | 20 53 35.1 | +6.0 |
| **KNRA** | **Kununurra** | **10.05** | **190** | P | Pn | 20 54 15.5 | +6.0 |
| **WRAB** | **Tennant Creek** | **14.61** | **166** | P | **Pn** | **20 55 10.7** | **-1.2** |
| **WRA** | **Warramunga Arr** | **14.61** | **166** | Pn | **Pn** | **20 55 10.6** | **-1.3** |
| | 0.2nm,0.3s,baz=347,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 20 57 43.8 | -10 |
| | 0.1nm,0.3s,baz=354,slow=23,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **18.14** | **170** | P | **P** | **20 55 58.4** | **+0.9** |
| | 0.2nm,0.3s,baz=354,slow=12,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.46** | **326** | P | **P** | **21 02 41.2** | **+0.1** |
| | 0.3nm,0.8s,baz=124,slow=7.7,SNR=1.9 | | | | | | |

*NEIC **14** 21:04:44.6±0.8, 43°.89N±0°.04 × 105°.37W±0°.06, h0 km±1km, ML3.4/32, Error ellipse: s-maj=9.4km s-min=4.0km az=309.0*
*IDC **14** 21:04:45.8±0.8, 44°.04N × 105°.66W, h0 km, mb3.9/4, mb1 3.8/12, mb1mx3.5/55, mbtmp3.6/12, ML3.4/8, Error ellipse: s-maj=18.7km s-min=8.1km az=143.0*
*ANF **14** 21:04:46.0±0.4, 43°.69N × 105°.27W, h1 km, ML3.6/13, Error ellipse: s-maj=5.2km s-min=5.0km az=92.0*

**ISC 14 21:04:44.0±0.6, 43°.88N±0°.04 × 105°.34W±0°.03, h0 km, n90, σ1 9°38/96, mb4.0/4, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RSSD** | **Black Hills** | **0.97** | **75** | Pg | **Pb** | **21 05 03.7** | **-0.2** |
| **RSSD** | **Black Hills** | **0.97** | **75** | P | **Pb** | **21 05 03.9** | **0.0** |
| | baz=244 | | | | | | |
| **K22A** | **Casper** | **1.50** | **216** | Pn | **Pn** | **21 05 10.8** | **-1.4** |
| K22A | | | | IAML | | 21 05 39.7 | |
| | comp=E,507nm,0.6s | | | | | | |
| **K22A** | **Casper** | **1.50** | **216** | P | **Pn** | **21 05 10.9** | **-1.4** |
| | baz=41,SNR=279 | | | | | | |
| K22A | | | | S | **Sg** | **21 05 31.8** | **-0.2** |
| | baz=41 | | | | | | |
| **PHWY** | **Pilot Hill** | **2.57** | **182** | Pn | **Pn** | **21 05 26.7** | **-0.5** |
| PHWY | | | | IAML | | 21 06 07.3 | |
| | comp=E,129nm,0.7s | | | | | | |
| PHWY | | | | IAML | | 21 06 10.8 | |
| | comp=E,100nm,0.7s | | | | | | |
| **RWWY** | **Rawlins** | **2.58** | **213** | Pn | **Pn** | **21 05 28.5** | **+1.2** |
| RWWY | | | | IAML | | 21 06 06.2 | |
| | comp=E,266nm,0.6s | | | | | | |
| **LAO** | **LASA Array** | **2.88** | **348** | S | **Sg** | **21 06 17.2** | **+0.6** |
| | baz=167 | | | | | | |
| **N23A** | **Red Feather La** | **3.01** | **189** | Pn | **Pn** | **21 05 33.5** | **+0.4** |
| N23A | | | | IAML | | 21 06 17.2 | |
| | comp=N,160nm,0.7s | | | | | | |
| N23A | | | | IAML | | 21 06 20.1 | |
| | comp=E,151nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **3.01** | **189** | P | **Pn** | **21 05 33.7** | **+0.5** |
| | baz=10.0,SNR=82 | | | | | | |
| **RLMT** | **Red Lodge** | **3.07** | **295** | Pn | **Pn** | **21 05 36.4** | **+2.4** |
| | baz=115,SNR=19 | | | | | | |
| RLMT | | | | Pb | **Pg** | **21 05 42.8** | **-0.1** |
| | baz=115 | | | | | | |
| **PD31** | **Pinedale Array** | **3.27** | **252** | | **Pn** | **21 05 37.8** | **+1.1** |
| **PDAR** | **Pinedale Array** | **3.27** | **252** | Pn | **Pn** | **21 05 37.9** | **+1.2** |
| | comp=E,5.7nm,0.3s,baz=69,slow=16,SNR=135 | | | | | | |
| PDAR | | | | Lg | Lg | 21 06 23.1 | |
| | comp=E,10nm,0.3s,baz=95,slow=15,SNR=1.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.27** | **252** | Pn | **Pn** | **21 05 37.2** | **+0.5** |
| **BW06** | **Boulder Array** | **3.27** | **252** | | **Pn** | **21 05 37.8** | **+1.1** |
| BW06 | | | | IAML | | 21 06 26.2 | |
| | comp=E,78nm,0.4s | | | | | | |
| BW06 | | | | IAML | | 21 06 31.2 | |
| | comp=E,88nm,0.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BW06** | **Boulder Array** | **3.27** | **252** | Pn | **Pn** | **21 05 38.3** | **+1.6** |
| | baz=72,SNR=61 | | | | | | |
| BW06 | | | | Pb | **Pb** | **21 05 43.4** | **+0.3** |
| | baz=72 | | | | | | |
| BW06 | | | | S | **Sb** | **21 06 23.2** | **-0.2** |
| | baz=72 | | | | | | |
| **H17A** | **Grant Village** | **3.80** | **280** | P | **Pn** | **21 05 47.7** | **+3.6** |
| | baz=99,SNR=14 | | | | | | |
| **OGNE** | **Ogallala** | **3.82** | **139** | Pn | **Pn** | **21 05 44.6** | **+0.5** |
| **OGNE** | **Ogallala** | **3.82** | **139** | Pn | **Pn** | **21 05 44.9** | **+0.8** |
| | baz=320,SNR=5.8 | | | | | | |
| OGNE | | | | Pg | **Pb** | **21 05 54.5** | **+2.2** |
| | baz=320 | | | | | | |
| **LOHW** | **Long Hollow** | **3.82** | **268** | Pn | **Pn** | **21 05 43.6** | **-0.7** |
| **FLWY** | **Flagg Ranch** | **3.87** | **275** | Pn | **Pn** | **21 05 46.5** | **+1.5** |
| FLWY | | | | IAML | | 21 06 55.6 | |
| | comp=E,49nm,1.7s | | | | | | |
| FLWY | | | | IAML | | 21 07 00.5 | |
| | comp=E,62nm,1.1s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.91** | **270** | Pn | **Pn** | **21 05 47.9** | **+2.4** |
| **ISCO** | **Idaho Springs** | **4.08** | **183** | Pn | **Pn** | **21 05 48.4** | **+0.5** |
| **ISCO** | **Idaho Springs** | **4.08** | **183** | P | **Pn** | **21 05 48.5** | **+0.6** |
| | baz=3.7,SNR=13 | | | | | | |
| **TPAW** | **Teton Pass** | **4.09** | **267** | Pn | **Pn** | **21 05 47.9** | **-0.1** |
| TPAW | | | | IAML | | 21 07 09.4 | |
| | comp=E,38nm,0.9s | | | | | | |
| TPAW | | | | IAML | | 21 07 15.6 | |
| | comp=E,59nm,1.0s | | | | | | |
| **O20A** | **White River Ci** | **4.32** | **211** | Pn | **Pn** | **21 05 51.5** | **+0.4** |
| **O20A** | **White River Ci** | **4.32** | **211** | P | **Pn** | **21 05 51.9** | **+0.9** |
| | baz=31,SNR=21 | | | | | | |
| **DGMT** | **Dagmar** | **4.67** | **9** | Pn | **Pn** | **21 05 59.8** | **+4.1** |
| | baz=189 | | | | | | |
| DGMT | | | | Pb | **Pg** | **21 06 12.8** | **-0.6** |
| | baz=189 | | | | | | |
| DGMT | | | | Sb | **Sg** | **21 07 12.4** | **-1.4** |
| | baz=189 | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.80** | **293** | Pn | **Pn** | **21 05 56.4** | **-1.3** |
| BOZ | | | | IAML | | 21 07 17.7 | |
| | comp=E,25nm,0.7s | | | | | | |
| BOZ | | | | IAML | | 21 07 26.9 | |
| | comp=E,19nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.80** | **293** | Pb | **Pg** | **21 06 12.7** | **-3.3** |
| | baz=111 | | | | | | |
| BOZ | | | | Sb | **Sg** | **21 07 15.3** | **-2.8** |
| | baz=111 | | | | | | |
| **Q24A** | **Divide** | **4.91** | **178** | Pn | **Pn** | **21 05 59.0** | **-0.4** |
| Q24A | | | | IAML | | 21 07 18.7 | |
| | comp=E,39nm,0.6s | | | | | | |
| Q24A | | | | IAML | | 21 08 06.4 | |
| | comp=N,22nm,3.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.27** | **156** | Pn | **Pn** | **21 06 03.6** | **-0.4** |
| **KSCO** | **Kaye Shedlock'** | **5.27** | **156** | Pn | **Pn** | **21 06 03.7** | **-0.4** |
| | baz=338,SNR=7.6 | | | | | | |
| KSCO | | | | Pg | **Pg** | **21 06 23.2** | **-1.8** |
| | baz=338 | | | | | | |
| **LRM** | **Limekiln Ridge** | **5.42** | **294** | Pn | **Pn** | **21 06 05.3** | **-1.0** |
| **MCMT** | **McKenzie Canyo** | **5.47** | **283** | Pn | **Pn** | **21 06 06.8** | **-0.1** |
| **JLU** | **Jordanelle** | **5.59** | **236** | Pn | **Pn** | **21 06 09.4** | **+0.8** |
| **P18A** | **Preston Nutter** | **5.61** | **222** | Pn | **Pn** | **21 06 09.5** | **+0.6** |
| **MDND** | **Maddock** | **5.64** | **43** | Pb | **Pg** | **21 06 29.4** | **-2.7** |
| | baz=226 | | | | | | |
| **HVU** | **Hansel Valley** | **5.85** | **252** | Pn | **Pn** | **21 06 12.0** | **-0.2** |
| **P17A** | **Butcher Ranch,** | **5.97** | **224** | | **Pn** | **21 06 15.3** | **+1.5** |
| **PV21** | **Cone Mtn., Par** | **5.97** | **209** | Pn | **Pn** | **21 06 14.6** | **+0.7** |
| **PV07** | **Paradox Valley** | **5.98** | **206** | Pn | **Pn** | **21 06 14.3** | **+0.4** |
| **PV15** | **Paradox Valley** | **6.01** | **204** | Pn | **Pn** | **21 06 14.9** | **+0.5** |
| **PV04** | **Paradox Valley** | **6.10** | **207** | Pn | **Pn** | **21 06 16.0** | **+0.4** |
| **SDCO** | **Great Sand Dun** | **6.12** | **181** | Pn | **Pn** | **21 06 16.8** | **+0.8** |
| **SDCO** | **Great Sand Dun** | **6.12** | **181** | P | **Pn** | **21 06 16.6** | **+0.6** |
| | baz=1.6 | | | | | | |
| **PV12** | **Saucer Basin,** | **6.13** | **206** | Pn | **Pn** | **21 06 16.9** | **+0.9** |
| **SRU** | **San Rafael Swe** | **6.15** | **221** | Pn | **Pn** | **21 06 16.2** | **0.0** |
| **PV14** | **Lion Creek, Pa** | **6.16** | **208** | Pn | **Pn** | **21 06 16.8** | **+0.4** |
| **PV10** | **Paradox Valley** | **6.16** | **208** | Pn | **Pn** | **21 06 17.8** | **+1.3** |
| **PV20** | **West Nyswonger** | **6.17** | **208** | Pn | **Pn** | **21 06 17.0** | **+0.5** |
| **PV11** | **David Mesa, Pa** | **6.17** | **207** | Pn | **Pn** | **21 06 17.3** | **+0.7** |
| **PV16** | **Nyswonger Mesa** | **6.18** | **207** | Pn | **Pn** | **21 06 17.3** | **+0.7** |
| **PV19** | **Morning Glory** | **6.20** | **208** | Pn | **Pn** | **21 06 18.1** | **+1.1** |
| **PV03** | **Paradox Valley** | **6.21** | **206** | Pn | **Pn** | **21 06 17.7** | **+0.6** |
| **PV02** | **Paradox Valley** | **6.21** | **206** | Pn | **Pn** | **21 06 17.8** | **+0.6** |
| **PV17** | **East Wray Mesa** | **6.22** | **207** | Pn | **Pn** | **21 06 17.8** | **+0.6** |
| **PV01** | **Paradox Valley** | **6.23** | **204** | Pn | **Pn** | **21 06 18.1** | **+0.7** |
| **PV18** | **Skein Mesa, Pa** | **6.24** | **207** | Pn | **Pn** | **21 06 17.7** | **+0.2** |
| **PV13** | **Radium Mtn., P** | **6.29** | **206** | Pn | **Pn** | **21 06 18.5** | **+0.3** |
| **ECSD** | **EROS Data Cent** | **6.32** | **88** | Pn | **Pn** | **21 06 19.0** | **+0.6** |
| **ECSD** | **EROS Data Cent** | **6.32** | **88** | P | **Pn** | **21 06 19.4** | **+1.0** |
| | baz=273 | | | | | | |
| **NLU** | **North Lily Min** | **6.37** | **234** | Pn | **Pn** | **21 06 19.4** | **+0.1** |
| **PV05** | **Paradox Valley** | **6.45** | **207** | Pn | **Pn** | **21 06 19.2** | **-1.2** |
| **HLID** | **Hailey** | **6.58** | **270** | P | **Pn** | **21 06 25.8** | **+3.6** |
| | baz=86 | | | | | | |
| **CBKS** | **Cedar Bluff** | **6.58** | **138** | Pn | **Pn** | **21 06 20.9** | **-1.2** |
| **CBKS** | **Cedar Bluff** | **6.58** | **138** | Pg | **Pg** | **21 06 47.7** | **-2.4** |
| | baz=321 | | | | | | |
| **Q16A** | **Castle Valley** | **6.61** | **223** | | **Pn** | **21 06 23.3** | **+0.7** |
| **DUG** | **Dugway, Tooele** | **6.67** | **239** | Pn | **Pn** | **21 06 23.9** | **+0.6** |
| **DUG** | **Dugway, Tooele** | **6.67** | **239** | P | **Pn** | **21 06 24.1** | **+0.8** |
| | baz=56,SNR=7.9 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **6.72** | **70** | | **Pn** | **21 06 24.0** | **0.0** |
| **T25A** | **Trinidad** | **6.77** | **174** | Pg | Pb | 21 06 48.2 | +5.7 |
| | baz=355 | | | | | | |
| **MVCO** | **Mesa Verde** | **7.08** | **201** | Pn | **Pn** | **21 06 29.4** | **+0.4** |
| **MVCO** | **Mesa Verde** | **7.08** | **201** | P | **Pn** | **21 06 31.0** | **+2.0** |
| | baz=20 | | | | | | |
| **MSU** | **Marysvale** | **7.43** | **226** | Pn | **Pn** | **21 06 35.0** | **+1.1** |
| **MTPU** | **Mount Pierson** | **7.79** | **224** | Pn | **Pn** | **21 06 39.4** | **+0.5** |
| **WALA** | **Waterton Lakes** | **7.86** | **314** | Pn | **Pn** | **21 06 38.2** | **-1.4** |
| **ELK** | **Elko** | **7.97** | **250** | Pn | **Pn** | **21 06 43.5** | **+2.2** |
| | comp=N,0.8nm,0.3s,baz=64,slow=9.4,SNR=7.7 | | | | | | |
| **F36A** | **Milaca** | **8.63** | **73** | Pn | **Pn** | **21 06 49.2** | **-0.9** |
| **ANMO** | **Albuquerque** | **8.96** | **186** | Pn | Pn | 21 06 59.7 | +4.9 |
| | comp=N,0.1nm,0.3s,baz=330,slow=6.6,SNR=1.5 | | | | | | |
| **I10CA** | **LAC DU BONNET** | **8.97** | **42** | *i* | | 22 04 10.0 | |
| | baz=223,slow=326,SNR=3.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.07** | **42** | Pn | **Pn** | **21 06 56.2** | **0.0** |
| | comp=N,1.7nm,0.3s,baz=239,slow=11,SNR=7.6 | | | | | | |
| ULM | | | | Lg | Lg | 21 09 24.2 | |
| | comp=N,0.4nm,0.3s,baz=311,slow=17,SNR=2.2 | | | | | | |
| **U15A** | **North Rim** | **9.14** | **218** | Pn | **Pn** | **21 06 58.6** | **+1.3** |
| **NVAR** | **Mina Array Bea** | **11.18** | **245** | Pn | **Pn** | **21 07 27.5** | **+2.3** |
| | comp=N,0.3nm,0.3s,baz=48,slow=12,SNR=9.7 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **12.94** | **266** | Pn | **Pn** | **21 07 53.2** | **+4.1** |
| | comp=N,0.1nm,0.3s,baz=40,slow=10,SNR=5.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.57** | **174** | Pn | **P** | **21 08 17.9** | **-0.4** |
| | comp=N,0.1nm,0.3s,baz=9.8,slow=8.1,SNR=3.9 | | | | | | |
| TXAR | | | | Pg | | 21 09 13.6 | |
| | comp=N,0.1nm,0.3s,baz=356,slow=15,SNR=3.7 | | | | | | |
| TXAR | | | | Lg | Lg | 21 12 25.5 | |
| | comp=N,0.0nm,0.3s,baz=71,slow=16,SNR=3.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.42** | **347** | P | **P** | **21 09 11.7** | **+0.1** |
| | comp=N,0.1nm,0.3s,baz=161,slow=13,SNR=9.6 | | | | | | |
| **SEY** | **Seymchan** | **57.06** | **328** | P | **P** | **21 14 32.2** | **+0.9** |
| | comp=N,0.3nm,0.3s,baz=63,slow=11,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.17** | **354** | P | **P** | **21 17 07.0** | **+0.7** |
| | comp=N,1.0nm,0.5s,baz=345,slow=4.9,SNR=6.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **83.41** | **3** | P | **P** | **21 17 13.8** | **+0.9** |
| | comp=N,0.4nm,0.6s,baz=24,slow=15,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **89.46** | **355** | P | **P** | **21 17 43.7** | **+0.9** |
| | comp=N,0.8nm,0.6s,baz=11,slow=4.5,SNR=11 | | | | | | |

*IDC **14** 21:04:56.2±1.2, 3°.40N × 126°.93E, h0 km, mb3.8/9, mb1 3.9/9, mb1mx3.5/43, mbtmp3.8/9, Error ellipse: s-maj=81.6km s-min=16.4km az=66.0*
*NEIC **14** 21:05:05.0±0.9, 3°.2N±0°.1 × 126°.6E±0°.1, h64 km±5km, mb4.1/8, Error ellipse: s-maj=19.7km s-min=11.8km az=218.0*

**ISC 14 21:05:03.4±0.8, 3°.2N±0°.1 × 126°.62E±0°.09, h50 km, n22, σ1 9°06/25, mb4.0/13, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.56** | **163** | Pn | **Pn** | **21 05 44.0** | **+1.5** |
| **TOLI2** | **Tolitoli** | **6.20** | **250** | | **Pn** | **21 06 33.6** | **+1.1** |
| TOLI2 | | | | Sn | **Sn** | **21 07 40.6** | **-1.5** |
| **FAKI** | **Fak Fak** | **8.31** | **137** | Pn | **Pn** | **21 07 02.6** | **+1.2** |
| **MYLDM** | **Lahad Datu** | **8.32** | **284** | Pn | **Pn** | **21 07 01.9** | **+0.4** |
| **MTN** | **Manton Dam** | **16.60** | **164** | Pn | **Pn** | **21 08 52.5** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **21.23** | **183** | P | **P** | **21 09 45.3** | **0.0** |
| | 1.4nm,0.6s,baz=21,slow=9.5,SNR=2.1 | | | | | | |
| **COEN** | **Coen** | **23.70** | **137** | P | **P** | **21 10 08.9** | **-2.0** |
| COEN | | | | IAmb | IAmb | 21 10 25.3 | |
| | comp=Z,11nm,1.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WB0** | **Warramunga Arr** | **24.11** | **162** | P | **P** | **21 10 13.8** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 21 10 17.7 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.25** | **162** | P | **P** | **21 10 15.5** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 21 10 19.4 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.25** | **162** | P | **P** | **21 10 15.4** | **-0.6** |
| | comp=Z,2.9nm,0.8s,baz=342,slow=11,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 13 56.5** | **+1.1** |
| | comp=Z,0.2nm,0.6s,baz=337,slow=2.5,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.25** | **162** | P | **P** | **21 10 15.7** | **-0.3** |
| WRA | | | | | **PcP** | **21 13 55.4** | **0.0** |
| **WB2** | **Warramunga Arr** | **24.26** | **162** | P | **P** | **21 10 15.7** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 21 10 19.4 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.33** | **162** | P | **P** | **21 10 16.0** | **-0.7** |
| **ASAR** | **Alice Springs** | **27.67** | **166** | P | **P** | **21 10 46.5** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=344,slow=7.6,SNR=2.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.02** | **301** | P | **P** | **21 11 18.5** | **+1.8** |
| | comp=Z,0.2nm,0.4s,baz=60,slow=5.3,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **37.72** | **159** | P | **P** | **21 12 14.6** | **+0.2** |
| | comp=Z,2.3nm,0.7s,baz=324,slow=12,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.89** | **325** | P | **P** | **21 14 50.1** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=120,slow=7.4,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.97** | **333** | P | **P** | **21 15 10.1** | **-1.3** |
| | comp=Z,0.3nm,0.4s,baz=74,slow=17,SNR=2.0 | | | | | | |
| **KURBB** | **Kurchatov Array** | **62.09** | **328** | P | **P** | **21 15 20.1** | **+1.1** |
| | comp=Z,0.5nm,0.2s,baz=124,slow=6.3,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **62.09** | **328** | P | **P** | **21 15 19.2** | **+0.2** |
| **BRTR** | **Keskin Array B** | **90.25** | **310** | P | **P** | **21 17 58.5** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=20,slow=6.3,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **90.25** | **310** | P | **P** | **21 17 57.5** | **-1.7** |

*IDC **14** 21:17:59.5±0.9, 38°.37N × 73°.20E, h0 km, mb3.8/17, mb1 3.9/23, mb1mx3.8/54, mbtmp3.8/23, ML3.5/6, MS3.0/5, Ms1 3.0/5, ms1mx2.6/84, Error ellipse: s-maj=16.6km s-min=14.2km az=165.0*
*NNC **14** 21:18:05.2±2.0, 38°.74N × 72°.93E, h0 km, mb4.5, mpv4.1, Error ellipse: s-maj=16.9km s-min=12.5km az=168.0*
*NEIC **14** 21:18:07.9±1.8, 38°.51N±0°.06 × 73°.06E±0°.05, h69 km±8km, mb4.0/9, Error ellipse: s-maj=10.4km s-min=4.1km az=152.0*

**ISC 14 21:18:09.8±0.5, 38°.34N±0°.04 × 73°.23E±0°.07, h100 km, n103, σ2 8°85/95, mb3.7/20, 13C-9D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **3.80** | **5** | P | **Pn** | **21 19 02.0** | **-4.6** |
| | SNR=38 | | | | | | |
| **UCH** | **Uchtor** | **4.00** | **14** | P | **Pn** | **21 19 05.0** | **-4.4** |
| | SNR=52 | | | | | | |
| **TAS** | **Tashkent** | **4.25** | **316** | Pn | **Pn** | **21 19 08.7** | **-3.6** |
| **EKS2** | **Erkin-Say** | **4.33** | **5** | P | **Pn** | **21 19 09.7** | **-3.9** |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **12** | Pn | **Pn** | **21 19 10.7** | **-3.7** |
| | 4.3nm,0.3s,baz=176,slow=6.9,SNR=81 | | | | | | |
| AAK | | | | Sn | **Sn** | **21 20 05.6** | **+1.1** |
| | 1.1nm,0.3s,baz=119,slow=19,SNR=1.4 | | | | | | |
| AAK | | | | LR | LR | 21 21 04.1 | |
| | comp=Z,87nm,20.6s,baz=276,slow=42 | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **12** | P | **Pn** | **21 19 10.7** | **-3.7** |
| | SNR=29 | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **12** | Pn | **Pn** | **21 19 10.5** | **-3.9** |
| **AAK** | **Ala-Archa** | **4.40** | **12** | ⇑Pn | **Pn** | **21 19 10.3** | **-4.1** |
| | 80nm,1.1s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 21 20 13.5 | |
| | 74nm,0.8s | | | | | | |
| **MRKS** | **Merke** | **4.40** | **360** | Pg | **Pn** | **21 19 10.5** | **-3.9** |
| MRKS | | | | Lg | Lg | 21 20 13.1 | |
| **KBK** | **Karagaybulak** | **4.50** | **16** | P | **Pn** | **21 19 14.7** | **-1.2** |
| | SNR=17 | | | | | | |
| **IUG** | **Iuzhnay** | **4.52** | **328** | Pg | Pn | 21 19 10.5 | -5.5 |
| | 658nm,0.5s | | | | | | |
| IUG | | | | Lg | Lg | 21 20 12.8 | |
| | 372nm,1.1s | | | | | | |
| **CEP** | **Cherat** | **4.63** | **194** | P | **Pn** | **21 19 18.3** | **+0.6** |
| **NIL** | **Nilore** | **4.68** | **180** | Pn | **Pn** | **21 19 18.6** | **+0.4** |
| **DZA** | **Taraz** | **4.77** | **343** | Pg | Pn | 21 19 14.3 | -5.0 |
| | 53nm,0.5s | | | | | | |
| DZA | | | | Lg | Lg | 21 20 19.7 | |
| | 172nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **4.79** | **14** | P | **Pn** | **21 19 15.8** | **-3.8** |
| | SNR=16 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **4.88** | **45** | | **Pn** | **21 19 17.4** | **-3.7** |
| **TKM2** | **Tokmak 2** | **4.92** | **21** | P | **Pn** | **21 19 17.8** | **-3.7** |
| | SNR=7.0 | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OTUK | | | | ⇑Lg | | Lg | | 21 23 08.2 |
| | comp=E,32nm,1.1s | | | | | | | |
| **PTH** | **Pithoragarh** | **10.51** | **144** | *eP* | | **Pn** | **21 20 35.0** | **-2.6** |
| PTH | | | | *eS* | | **Sn** | **21 22 28.1** | **-5.5** |
| **KUDL** | **Kundal** | **10.53** | **164** | *eP* | | **Pn** | **21 20 34.5** | **-3.1** |
| KUDL | | | | *eS* | | **Sn** | **21 22 30.6** | **-3.0** |
| **MAKZ** | **Makanchi** | **10.63** | **34** | Pn | | **Pn** | **21 20 36.8** | **-2.2** |
| **MK31** | **Makanchi Array** | **10.76** | **35** | | | **Pn** | **21 20 37.4** | **-3.3** |
| **MK31** | **Makanchi Array** | **10.76** | **35** | Pn | | **Pn** | **21 20 37.4** | **-3.3** |
| | comp=E,6.0nm,1.0s,baz=215,slow=15,SNR=21 | | | | | | | |
| **MKAR** | **Makanchi Array** | **10.76** | **35** | Pn | | **Pn** | **21 20 37.2** | **-3.5** |
| | comp=E,0.2nm,0.3s,baz=215,slow=13,SNR=28 | | | | | | | |
| **MKAR** | **Makanchi Array** | **10.76** | **35** | Pn | | **Pn** | **21 20 37.9** | **-2.8** |
| **KURBB** | **Kurchatov Arra** | **12.84** | **15** | Pn | | Pn | 21 21 00.9 | -7.5 |
| | comp=E,0.0nm,0.3s,baz=205,slow=12,SNR=1.4 | | | | | | | |
| **KURK** | **Kurchatov** | **12.95** | **15** | ⇑Pn | | **Pn** | **21 21 05.1** | **-4.6** |
| | comp=E,3.5nm,1.1s | | | | | | | |
| KURK | | | | ⇑Sn | | **Sn** | **21 23 30.7** | **-1.3** |
| | comp=E,1.6nm,0.6s | | | | | | | |
| **DANN** | **Dangsing** | **13.29** | **135** | *eP* | | Pn | 21 21 09.6 | -5.1 |
| | comp=E,1.0nm,0.4s | | | | | | | |
| **KOLN** | **Koldanda** | **13.66** | **137** | *eP* | | Pn | 21 21 12.9 | -6.5 |
| | comp=E,1.6nm,0.2s | | | | | | | |
| **GKN** | **Gorkha** | **14.04** | **134** | *eP* | | Pn | 21 21 19.1 | -5.3 |
| | comp=E,3.6nm,0.3s | | | | | | | |
| **AB31** | **Akbulak array** | **14.50** | **323** | ⇓Pn | | Pn | 21 21 22.5 | -7.5 |
| | comp=E,2.2nm,0.5s,baz=133,slow=13,SNR=6.8 | | | | | | | |
| **ABKAR** | **Akbulak array** | **14.50** | **323** | Pn | | Pn | 21 21 23.3 | -6.6 |
| **KKN** | **Kakani** | **14.57** | **133** | *eP* | | **Pn** | **21 21 27.6** | **-3.7** |
| | comp=E,9.0nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **14.61** | **134** | *eP* | | Pn | 21 21 26.6 | -5.2 |
| | comp=E,5.1nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **14.80** | **133** | *eP* | | **Pn** | **21 21 30.1** | **-4.1** |
| | comp=E,6.7nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **14.81** | **353** | Pn | | Pn | 21 21 27.6 | -6.3 |
| | comp=E,0.1nm,0.3s,baz=132,slow=10,SNR=3.5 | | | | | | | |
| **PKI** | **Pulchoki** | **14.81** | **133** | *eP* | | **Pn** | **21 21 30.1** | **-4.3** |
| | comp=E,1.0nm,0.2s | | | | | | | |
| **GUN** | **Gumba** | **14.84** | **131** | *eP* | | **Pn** | **21 21 31.5** | **-3.2** |
| **BRVK** | **Borovoye** | **14.86** | **353** | Pn | | **Pn** | **21 21 31.5** | **-2.9** |
| **BRVK** | **Borovoye** | **14.86** | **353** | ⇓Pn | | **Pn** | **21 21 33.9** | **-0.5** |
| | comp=E,6.1nm,0.7s | | | | | | | |
| **JIRN** | **Jiri** | **15.21** | **131** | *eP* | | **Pn** | **21 21 35.4** | **-4.0** |
| | comp=E,4.6nm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **15.98** | **131** | *eP* | | **Pn** | **21 21 44.4** | **-4.6** |
| | comp=E,1.7nm,0.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.22** | **323** | Pn | | **Pn** | **21 21 47.2** | **-4.4** |
| | comp=E,1.0nm,0.3s,baz=118,slow=11,SNR=7.5 | | | | | | | |
| AKTO | | | | LR | | LR | 21 28 22.3 | |
| | comp=E,53nm,20.2s,baz=120,slow=38 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.22** | **323** | ⇓Pn | | **Pn** | **21 21 47.6** | **-4.0** |
| | comp=E,6.5nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **16.36** | **128** | *eP* | | **Pn** | **21 21 49.6** | **-4.1** |
| | comp=E,5.8nm,0.5s | | | | | | | |
| **ODAN** | **Odare** | **16.52** | **130** | *eP* | | **Pn** | **21 21 51.0** | **-4.6** |
| **ZAA0** | **Zalesovo Array** | **17.52** | **23** | | | **P** | **21 22 05.0** | **-2.0** |
| ZAA0 | | | | IAmb | | IAmb | 21 22 07.2 | |
| | comp=E,4.2nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.52** | **23** | P | | **P** | **21 22 04.2** | **-2.8** |
| | comp=E,0.8nm,0.3s,baz=203,slow=10,SNR=21 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.52** | **23** | | | **P** | **21 22 05.0** | **-2.0** |
| **ARU** | **Arti** | **20.56** | **336** | P | | **P** | **21 22 40.2** | **+0.1** |
| | comp=Z,1.4nm,0.6s,baz=157,slow=5.9,SNR=11 | | | | | | | |
| ARU | | | | LR | | LR | 21 31 38.1 | |
| | comp=Z,19nm,20.7s,baz=142,slow=40 | | | | | | | |
| **ARU** | **Arti** | **20.56** | **336** | P | | **P** | **21 22 39.3** | **-0.9** |
| ARU | | | | IAmb | | IAmb | 21 22 42.8 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **MOKO** | **MOKOCHONG** | **21.56** | **118** | *eP* | | **P** | **21 22 53.5** | **+2.1** |
| **KOHI** | **KOHIMA** | **21.66** | **119** | *eP* | | **P** | **21 22 53.3** | **+0.9** |
| KOHI | | | | IAmb | | IAmb | 21 22 56.2 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **LKP** | **Lekhapani** | **21.89** | **113** | *eP* | | **P** | **21 22 55.7** | **+1.0** |
| **GNI** | **Garni** | **22.10** | **284** | P | | **P** | **21 23 00.7** | **+3.8** |
| | comp=Z,3.7nm,0.9s,baz=25,slow=17,SNR=4.4 | | | | | | | |
| **IMP** | **Imphal** | **22.14** | **121** | *eP* | | **P** | **21 22 58.0** | **+0.7** |
| IMP | | | | IAmb | | IAmb | 21 23 02.4 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **BELG** | **Belogornoye** | **22.67** | **317** | P | | **P** | **21 23 02.0** | **-0.5** |
| | comp=Z,14nm,0.9s,baz=180,slow=20,SNR=5.9 | | | | | | | |
| **ONI** | **Oni** | **22.98** | **290** | P | | **P** | **21 23 03.8** | **-2.0** |
| ONI | | | | IAmb | | IAmb | 21 23 14.6 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **23.43** | **293** | P | | **P** | **21 23 11.7** | **+1.8** |
| | comp=Z,0.8nm,0.7s,baz=27,slow=11,SNR=1.4 | | | | | | | |
| **SONM** | **Songino Array** | **25.84** | **58** | P | | **P** | **21 23 33.8** | **+1.9** |
| | comp=Z,1.6nm,1.0s,baz=348,slow=6.2,SNR=11 | | | | | | | |
| **SONM** | **Songino Array** | **25.84** | **58** | P | | **P** | **21 23 33.1** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **29.90** | **124** | P | | **P** | **21 24 11.0** | **+2.9** |
| | comp=Z,0.3nm,0.4s,baz=238,slow=10,SNR=1.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **30.61** | **285** | P | | **P** | **21 24 15.6** | **+1.2** |
| | comp=Z,0.3nm,0.5s,baz=112,slow=12,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **36.99** | **324** | P | | **P** | **21 25 09.7** | **+0.6** |
| | comp=Z,0.8nm,0.5s,baz=107,slow=9.3,SNR=8.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **36.99** | **324** | P | | **P** | **21 25 07.5** | **-1.6** |
| **ARCES** | **ARCESS Array B** | **40.15** | **336** | P | | **P** | **21 25 36.1** | **+0.7** |
| | comp=Z,1.1nm,0.6s,baz=98,slow=8.7,SNR=8.0 | | | | | | | |
| **YAK** | **Yakutsk** | **41.44** | **36** | LR | | LR | 21 44 23.0 | |
| | comp=Z,38nm,19.5s,baz=126,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **42.63** | **56** | P | | **P** | **21 25 58.0** | **+2.0** |
| | comp=Z,0.8nm,0.6s,baz=218,slow=5.5,SNR=4.1 | | | | | | | |
| **TIXI** | **Tiksi** | **43.40** | **22** | P | | **P** | **21 26 02.4** | **+0.6** |
| | comp=Z,1.3nm,0.5s,baz=270,slow=20,SNR=8.5 | | | | | | | |
| **TIXI** | **Tiksi** | **43.40** | **22** | P | | **P** | **21 26 03.2** | **+1.3** |
| TIXI | | | | IAmb | | IAmb | 21 26 03.5 | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.00** | **322** | P | | **P** | **21 26 07.1** | **+0.2** |
| | comp=Z,0.9nm,0.9s,baz=101,slow=7.2,SNR=4.5 | | | | | | | |
| NOA | | | | LR | | LR | 21 45 13.9 | |
| | comp=Z,29nm,19.5s,baz=335,slow=37 | | | | | | | |
| **ESDC** | **Sonseca Array** | **58.17** | **298** | P | | **P** | **21 27 56.4** | **+3.1** |
| | comp=Z,0.9nm,1.1s,baz=69,slow=7.0,SNR=1.4 | | | | | | | |
| **ESDC** | **Sonseca Array** | **58.17** | **298** | P | | **P** | **21 27 52.2** | **-1.0** |
| **TORD** | **Torodi Ar. Bea** | **67.53** | **269** | P | | **P** | **21 28 56.3** | **+0.8** |
| | comp=Z,0.8nm,0.6s,baz=49,slow=6.1,SNR=9.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.53** | **269** | P | | **P** | **21 28 55.2** | **-0.3** |
| TORD | | | | IAmb | | IAmb | 21 29 02.8 | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **INK** | **Inuvik** | **71.79** | **10** | P | | **P** | **21 29 22.5** | **+1.7** |
| | comp=Z,1.4nm,0.6s,baz=346,slow=7.4,SNR=9.7 | | | | | | | |
| **INK** | **Inuvik** | **71.79** | **10** | P | | **P** | **21 29 22.6** | **+1.8** |
| **C36M** | **Paulatuk** | **71.86** | **6** | P | | **P** | **21 29 22.8** | **+1.6** |
| **ILAR** | **Eielson Array** | **72.52** | **17** | P | | **P** | **21 29 26.9** | **+1.7** |
| | comp=Z,0.7nm,0.9s,baz=318,slow=5.3,SNR=6.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.52** | **17** | P | | **P** | **21 29 26.4** | **+1.2** |
| **YKA** | **Yellowknife Ar** | **79.31** | **4** | P | | **P** | **21 30 06.3** | **+2.4** |
| | comp=Z,0.3nm,0.4s,baz=348,slow=5.6,SNR=10 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.31** | **4** | P | | **P** | **21 30 05.1** | **+1.3** |
| **WRA** | **Warramunga Arr** | **81.50** | **124** | P | | **P** | **21 30 18.1** | **+1.9** |
| | comp=Z,0.5nm,1.0s,baz=324,slow=4.3,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.50** | **124** | P | | **P** | **21 30 18.3** | **+2.1** |

*JMA* ***14*** *21:22:08.3±0.1,24.°91N×125.°66E,h50km±1km,M3.5*
*JMA Felt I J1.*
*IDC* ***14*** *21:22:12.3±3.8,25.°12N×125.°48E,h69km±29km,mb3.4/13, mb1 3.5/14,mb1mx3.3/49,mbtmp3.7/14,ML3.5/1,Error ellipse: s-maj=52.4km s-min=21.2km az=163.0*
**ISC 14 21:22:06.9±1.4,25.°06N±0.°10×125.°63E±0.°07,h26km±10km, n24,σ1°08/33,mb3.6/13,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOGS** | **Gusukube** | **0.36** | **215** | P | **Pn** | **21 22 17.1** | **+0.6** |
| JOGS | | | | S | **Sn** | **21 22 23.5** | **+0.7** |
| **JIKM** | **Ikemajima** | **0.37** | **249** | P | **Pn** | **21 22 18.2** | **+1.5** |
| JIKM | | | | S | **Sn** | **21 22 25.3** | **+2.2** |
| **JMJ2** | **Miyako jima3** | **0.42** | **221** | P | **Pn** | **21 22 17.8** | **+0.5** |
| JMJ2 | | | | S | **Sn** | **21 22 24.8** | **+0.6** |
| **JIRB** | **Irabujima** | **0.48** | **241** | P | **Pn** | **21 22 18.8** | **+0.7** |
| JIRB | | | | S | **Sn** | **21 22 26.3** | **+0.7** |
| **JTJ** | **Tarama** | **0.94** | **244** | P | **Pn** | **21 22 25.1** | **+0.6** |
| JTJ | | | | S | **Sn** | **21 22 37.2** | **+0.1** |
| **JISG** | **Ishigakijimahi** | **1.29** | **249** | P | **Pb** | **21 22 30.1** | **-0.4** |
| JISG | | | | *eS* | **Sb** | **21 22 46.5** | **-0.2** |
| **JIJ** | **Ishigaki jima** | **1.52** | **243** | P | **Pn** | **21 22 33.3** | **+0.8** |
| JIJ | | | | *eS* | **Sn** | **21 22 51.6** | **+0.2** |
| **JKE** | **Kume jima 2** | **1.64** | **39** | P | **Pb** | **21 22 37.0** | **+0.6** |
| **JKRS** | **Kuro-shima** | **1.69** | **241** | P | **Pn** | **21 22 35.8** | **+1.0** |
| **IRIF** | **Iriomote-Funau** | **1.87** | **248** | P | **Pn** | **21 22 38.3** | **+1.0** |
| IRIF | | | | *eS* | **Sb** | **21 23 02.6** | **-0.9** |
| **JOW** | **Kunigami** | **2.96** | **53** | P | **Pb** | **21 22 59.9** | **+0.8** |
| | 12nm,0.3s,baz=31,slow=13,SNR=4.7 | | | | | | |
| JOW | | | | S | **Sb** | **21 23 33.0** | **-1.9** |
| | 9.6nm,0.3s,baz=146,slow=29,SNR=1.6 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **25.62** | **260** | P | | **P** | **21 27 33.4** | **-1.1** |
| | 0.3nm,0.6s,baz=61,slow=7.5,SNR=1.9 | | | | | | | |
| **SONM** | **Songino Array** | **27.35** | **331** | P | | **P** | **21 27 49.8** | **-0.2** |
| | 0.6nm,0.7s,baz=150,slow=12,SNR=3.1 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **36.92** | **32** | P | | **P** | **21 29 15.5** | **+1.9** |
| | 0.6nm,0.4s,baz=232,slow=7.1,SNR=1.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.60** | **314** | P | | **P** | **21 29 44.1** | **-0.4** |
| | 0.2nm,0.4s,baz=95,slow=10,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.80** | **325** | P | | **P** | **21 29 52.9** | **-1.2** |
| | 1.2nm,0.5s,baz=104,slow=10,SNR=7.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.11** | **318** | P | | **P** | **21 30 12.7** | **-0.3** |
| | 0.3nm,0.2s,baz=108,slow=9.1,SNR=1.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **66.57** | **28** | P | | **P** | **21 32 55.3** | **+0.8** |
| | 0.1nm,0.5s,baz=299,slow=8.1,SNR=1.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **72.72** | **330** | P | | **P** | **21 33 32.9** | **+0.4** |
| | 1.0nm,0.5s,baz=47,slow=4.8,SNR=11 | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.89** | **319** | P | | **P** | **21 33 44.3** | **-1.0** |
| | 0.2nm,0.4s,baz=67,slow=6.0,SNR=2.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.89** | **307** | P | | **P** | **21 33 52.1** | **+0.5** |
| | 0.4nm,0.4s,baz=104,slow=5.2,SNR=5.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **79.31** | **333** | P | | **P** | **21 34 07.8** | **-2.2** |
| | 0.7nm,0.8s,baz=55,slow=5.9,SNR=2.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.56** | **24** | P | | **P** | **21 34 15.6** | **-1.1** |
| | 0.3nm,0.7s,baz=303,slow=5.6,SNR=4.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **84.69** | **322** | P | | **P** | **21 34 39.0** | **+0.3** |
| | 0.2nm,0.5s,baz=75,slow=8.2,SNR=1.8 | | | | | | | |

*CNRM* ***14*** *21:27:15.2,35.°69N×3.°82W,h7km,ml2.5*
**ISC 14 21:27:17.0±1.1,35.°57N±0.°07×3.°83W±0.°05,h11km,n5, σ1°79/9,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.36** | **194** | P | **Pg** | **21 27 24.6** | **+0.3** |
| PALE | | | | S | **Sg** | **21 27 30.4** | **+1.4** |
| **SMIR** | **Smir Dam** | **1.27** | **276** | P | **Pb** | **21 27 39.6** | **-1.4** |
| SMIR | | | | S | **Sg** | **21 27 57.8** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.29** | **338** | P | Pg | 21 27 44.2 | +2.5 |
| EMAL | | | | S | **Sn** | **21 27 59.9** | **+1.7** |
| **TAF** | **Taforalt** | **1.38** | **123** | P | **Pg** | **21 27 43.5** | **-0.1** |
| TAF | | | | S | **Sn** | **21 27 57.8** | **-2.8** |
| **JBK** | **JBK** | **1.61** | **140** | P | **Pn** | **21 27 46.1** | **+0.5** |
| JBK | | | | S | **Sg** | **21 28 10.8** | **+2.0** |

*NEIC* ***14*** *21:38:18.9±1.6,6.°30S±0.°03×155.°0E±0.°1,h96km±8km, mb4.0/7,Error ellipse: s-maj=17.7km s-min=3.6km az=93.0*
*IDC* ***14*** *21:38:19.2±4.0,6.°21S×154.°89E,h96km±36km,mb3.7/11, mb1 3.9/14,mb1mx3.8/37,mbtmp4.1/14,MS2.6/1, Ms1 2.6/1,ms1mx2.3/52,Error ellipse: s-maj=22.9km s-min=18.6km az=55.0*
**ISC 14 21:38:19.2±0.6,6.°28S±0.°07×154.°94E±0.°09,h100km,n33, σ0°99/32,mb3.9/15,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **3.46** | **307** | Pn | **Pn** | **21 39 11.9** | **+0.8** |
| RABL | | | | Sn | **Sn** | **21 39 51.8** | **+0.5** |
| **HNR** | **Honiara** | **5.87** | **123** | LR | LR | 21 41 36.9 | |
| | comp=Z,52nm,20.6s,baz=83,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **8.31** | **248** | P | **Pn** | **21 40 16.3** | **-0.6** |
| | 11nm,0.3s,baz=54,slow=8.8,SNR=22 | | | | | | |
| PMG | | | | S | **Sn** | **21 41 49.3** | **+0.1** |
| | 1.3nm,0.3s,baz=18,slow=20,SNR=2.0 | | | | | | |
| **CTA** | **Charters Tower** | **16.11** | **211** | P | **P** | **21 42 00.9** | **-0.5** |
| | 0.0nm,0.3s,baz=357,slow=14,SNR=3.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.23** | **146** | P | **Pn** | **21 42 37.4** | **-0.4** |
| | 0.7nm,0.3s,baz=302,slow=11,SNR=10 | | | | | | |
| **WR0** | **Warramunga Arr** | **24.03** | **234** | P | **P** | **21 43 25.9** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 21 43 26.6 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.17** | **234** | P | **P** | **21 43 26.6** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 21 43 27.9 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.18** | **234** | P | **P** | **21 43 27.1** | **+0.6** |
| | comp=Z,4.8nm,0.9s,baz=50,slow=10.0,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 47 05.5** | **+0.6** |
| | comp=Z,0.6nm,0.7s,baz=54,slow=2.4,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.18** | **234** | P | **P** | **21 43 25.6** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.61** | **227** | P | **P** | **21 43 48.6** | **+0.1** |
| | comp=Z,1.3nm,0.5s,baz=58,slow=8.7,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **26.61** | **227** | P | **P** | **21 43 48.9** | **+0.4** |
| **H11S3** | **WAKE ISLAND Hy** | **27.21** | **25** | T | T | 22 12 11.6 | |
| | baz=206,slow=75,SNR=9.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.21** | **25** | T | T | 22 11 57.7 | |
| | baz=206,slow=75,SNR=13 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.23** | **25** | T | T | 22 12 04.3 | |
| | baz=206,slow=75,SNR=8.1 | | | | | | |
| **STKA** | **Stephens Creek** | **28.36** | **204** | P | **P** | **21 44 03.5** | **-0.4** |
| | comp=Z,1.7nm,0.8s,baz=49,slow=11,SNR=3.3 | | | | | | |
| **URZ** | **Urewera** | **37.65** | **151** | P | **P** | **21 45 26.5** | **+1.9** |
| | comp=Z,2.6nm,0.4s,baz=333,slow=4.5,SNR=1.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.21** | **2** | P | **P** | **21 48 09.6** | **-0.1** |
| | comp=Z,1.9nm,0.7s,baz=162,slow=6.7,SNR=2.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.21** | **2** | P | **P** | **21 48 10.4** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **60.43** | **295** | P | **P** | **21 48 19.8** | **+1.0** |
| | comp=Z,3.3nm,0.8s,baz=122,slow=5.3,SNR=22 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.43** | **295** | P | **P** | **21 48 19.2** | **+0.5** |
| **CASY** | **Casey** | **67.25** | **198** | P | **P** | **21 49 02.6** | **0.0** |
| **SONM** | **Songino Array** | **68.71** | **327** | P | **P** | **21 49 11.8** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=127,slow=9.0,SNR=1.8 | | | | | | |
| **SONM** | **Songino Array** | **68.71** | **327** | P | **P** | **21 49 11.2** | **-1.1** |
| SONM | | | | IAmb | IAmb | 21 49 14.4 | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **81.08** | **19** | P | **P** | **21 50 23.0** | **+0.1** |
| **ILAR** | **Eielson Array** | **82.73** | **22** | P | **P** | **21 50 31.3** | **-0.3** |
| | comp=Z,0.5nm,0.8s,baz=235,slow=4.8,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **82.73** | **22** | P | **P** | **21 50 27.9** | **-3.7** |
| **MK31** | **Makanchi Array** | **82.84** | **319** | P | **P** | **21 50 31.8** | **-0.8** |
| MK31 | | | | IAmb | IAmb | 21 50 33.0 | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **82.84** | **319** | P | **P** | **21 50 33.2** | **+0.5** |
| | comp=Z,1.1nm,0.7s,baz=100,slow=5.4,SNR=15 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.84** | **319** | P | **P** | **21 50 32.3** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **83.56** | **326** | P | **P** | **21 50 35.0** | **-1.1** |
| | comp=Z,0.8nm,0.6s,baz=100,slow=3.6,SNR=4.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **83.69** | **180** | P | **P** | **21 50 37.3** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 21 50 44.7 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.74** | **28** | P | **P** | **21 51 33.9** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=260,slow=4.1,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.78** | **287** | PKPbc | **PKPbc** | **21 58 04.7** | **-0.9** |
| | comp=Z,0.5nm,0.8s,baz=35,slow=2.6,SNR=2.5 | | | | | | |

*TUL* ***14*** *21:47:40.7±0.9,36.°47N±0.°02×98.°75W±0.°02,h6km±7km, ML2.8,mb_Lg2.5/11(NEIC),Error ellipse: s-maj=2.8km s-min=2.5km az=194.0*
**NEIC 14 21:47:41.0±1.1,36.°51N±0.°03×98.°75W±0.°02,h13km±4km, Error ellipse: s-maj=4.9km s-min=2.6km az=172.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.24** | **237** | Pg | Pg | 21 47 45.4 | -0.7 |
| U32A | | | | Sg | Sg | 21 47 48.9 | -0.7 |
| **OKCFA** | **Oklahoma City** | **1.52** | **136** | Pn | Pn | 21 48 07.6 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.53** | **136** | Pn | Pn | 21 48 08.3 | +0.2 |
| **FNO** | **Franklin** | **1.66** | **138** | Pn | Pn | 21 48 10.0 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.77** | **181** | Pn | Pn | 21 48 10.9 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.85** | **77** | | Pn | 21 48 12.8 | +0.4 |
| **R32A** | **Long Quarter,** | **1.91** | **1** | | Pb | 21 48 14.6 | -1.1 |
| **W35A** | **Tecumseh** | **2.04** | **131** | Pn | Pn | 21 48 14.4 | -0.7 |
| **X34A** | **Smith Ranch, M** | **2.05** | **158** | Pn | Pn | 21 48 15.8 | +0.6 |
| X34A | | | | IAmb_Lg | | 21 48 49.5 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.43** | **342** | IAmb_Lg | | 21 48 59.2 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.47** | **103** | Pn | Pn | 21 48 21.2 | +0.3 |
| TUL1 | | | | IAmb_Lg | | 21 48 56.7 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **2.88** | **237** | Pn | Pn | 21 48 26.8 | +0.1 |
| AMTX | | | | IAmb_Lg | | 21 49 12.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.36** | **124** | Pn | Pn | 21 48 33.4 | +0.2 |
| **U38A** | **Gravette** | **3.52** | **90** | Pn | Pn | 21 48 36.0 | +0.5 |
| **T25A** | **Trinidad** | **4.58** | **280** | Pn | Pn | 21 48 51.2 | +1.0 |
| T25A | | | | IAmb_Lg | | 21 50 09.9 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **JCT** | **Junction City** | **6.08** | **189** | IAmb_Lg | | 21 51 09.0 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **K38A** | **Parkersburg** | **7.67** | **35** | IAmb_Lg | | 21 51 59.4 | |
| | comp=Z,4.1nm,0.8s | | | | | | |

*TUL* ***14*** *21:51:34.1±0.7,36.°48N±0.°01×98.°74W±0.°02,h5km±7km, ML2.6,mb_Lg2.4/8(NEIC),Error ellipse: s-maj=2.6km s-min=1.4km az=111.0*
**NEIC 14 21:51:34.2±0.8,36.°46N±0.°02×98.°73W±0.°02,h5km±7km, Error ellipse: s-maj=3.2km s-min=2.0km az=147.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.24** | **250** | Pg | Pg | 21 51 38.5 | -0.3 |
| U32A | | | | Sg | Sg | 21 51 42.7 | +0.8 |
| **OKCFA** | **Oklahoma City** | **1.47** | **135** | Pn | Pn | 21 52 01.5 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.72** | **182** | Pn | Pn | 21 52 04.7 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.84** | **75** | Pn | Pn | 21 52 06.6 | +0.1 |
| **R32A** | **Long Quarter,** | **1.96** | **0** | Pn | Pn | 21 52 08.9 | +0.7 |
| **W35A** | **Tecumseh** | **1.99** | **130** | Pn | Pn | 21 52 08.4 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.99** | **158** | Pn | Pb | 21 52 10.0 | -1.0 |
| **CBKS** | **Cedar Bluff** | **2.48** | **341** | IAmb_Lg | | 21 52 54.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.88** | **238** | IAmb_Lg | | 21 53 05.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.31** | **123** | Pn | Pn | 21 52 26.0 | -0.7 |
| **U38A** | **Gravette** | **3.50** | **89** | IAmb_Lg | | 21 53 25.4 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.74** | **90** | IAmb_Lg | | 21 54 02.4 | |
| | comp=Z,8.7nm,1.1s | | | | | | |

*NEIC* ***14*** *21:58:34.4±1.6,16.°73N±0.°06×95.°49W±0.°05,h57km±11km, mb4.0/9,Md3.9/47(MEX),Error ellipse: s-maj=9.1km s-min=6.4km az=177.0*
*MEX* ***14*** *21:58:34.4±0.9,16.°77N×95.°44W,h81km±11km,MD3.9*
**ISC 14 21:58:34.6±0.9,16.°82N±0.°04×95.°52W±0.°02,h67km±9km, n43,σ1°60/70,Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMIG** | **Matias Romero** | **0.66** | **66** | | **Pn** | **21 58 48.0** | **-0.9** |
| CMIG | | | | | **Sn** | **21 58 58.8** | **-0.6** |
| **CMIG** | **Matias Romero** | **0.66** | **66** | *eP* | **Pn** | **21 58 48.0** | **-0.9** |
| CMIG | | | | *i* S | **Sn** | **21 58 58.8** | **-0.6** |
| **OXLC** | **Oaxaca** | **1.16** | **282** | *eP* | **Pn** | **21 58 55.5** | **+0.3** |
| OXLC | | | | *eS* | **Sn** | **21 59 12.1** | **+1.5** |
| **OXBJ** | **Oaxaca** | **1.18** | **282** | | **Pn** | **21 58 55.5** | **0.0** |
| OXBJ | | | | | **Sn** | **21 59 12.2** | **+1.2** |
| **OXBJ** | **Oaxaca** | **1.18** | **282** | *eP* | **Pn** | **21 58 55.5** | **0.0** |
| OXBJ | | | | *i* S | **Sn** | **21 59 12.2** | **+1.2** |
| **VHO** | **Vista Hermosa** | **1.19** | **282** | *eP* | **Pn** | **21 58 55.8** | **+0.2** |
| VHO | | | | *i* S | **Sn** | **21 59 12.4** | **+1.2** |
| **HUIG** | **Huatulco** | **1.19** | **208** | | **Pn** | **21 58 53.9** | **-1.6** |
| HUIG | | | | | **Sn** | **21 59 10.8** | **-0.2** |
| **HUIG** | **Huatulco** | **1.19** | **208** | *eP* | **Pn** | **21 58 53.9** | **-1.6** |
| HUIG | | | | *i* S | **Sn** | **21 59 10.8** | **-0.2** |
| **UXUV** | **UXUV** | **1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SDDR | | | | Sg | Sb | 22 13 27.0 | -0.4 | |
| **SDDR** | **Presa de Saban** | **0.80** | **216** | *i* P | Pb | **22 13 17.4** | **+0.6** | |
| SDDR | | | | IAML | | 22 13 33.0 | | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.91** | **106** | *e*S | Sn | **22 13 31.0** | **-0.2** | |
| LONA1 | | | | IAML | | 22 13 37.1 | | |
| | comp=Z,2μm,2.4s | | | | | | | |
| **BANI** | **BANI** | **1.30** | **162** | | Pb | **22 13 24.8** | **-0.7** | |
| **BANI** | **BANI** | **1.30** | **162** | *i* P | Pb | **22 13 24.6** | **-0.8** | |
| BANI | | | | *e*S | Sb | **22 13 44.2** | **+2.5** | |
| BANI | | | | IAML | | 22 13 45.5 | | |
| | comp=Z,911nm,0.6s | | | | | | | |
| **SDD** | **Santo Domingo** | **1.43** | **145** | Pn | Pn | **22 13 25.4** | **-0.7** | |
| **SDD** | **Santo Domingo** | **1.43** | **145** | *i* P | Pn | **22 13 25.3** | **-0.7** | |
| **LOBA2** | **Hotel Casa Bon** | **1.57** | **191** | *i* P | Pb | **22 13 29.5** | **-0.5** | |
| LOBA2 | | | | IAML | | 22 14 03.7 | | |
| | comp=Z,308nm,0.8s | | | | | | | |
| **DR12** | **Loma Pena Alta** | **1.58** | **122** | Pn | Pn | **22 13 28.1** | **0.0** | |
| **GRTK** | **Grand Turk** | **1.90** | **350** | Pn | Pn | **22 13 33.5** | **+1.1** | |
| **GRTK** | **Grand Turk** | **1.90** | **350** | *i* P | Pn | **22 13 33.5** | **+1.1** | |
| GRTK | | | | *e*S | Sb | **22 13 58.3** | **-0.5** | |
| GRTK | | | | IAML | | 22 13 59.8 | | |
| | comp=Z,602nm,0.7s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.54** | **116** | Pn | Pn | **22 13 41.9** | **+0.7** | |
| **PCDR** | **Punta Cana, DR** | **2.54** | **116** | *i* P | Pn | **22 13 43.3** | **+2.1** | |
| PCDR | | | | IAML | | 22 14 29.3 | | |
| | comp=Z,325nm,0.9s | | | | | | | |
| **PRSN** | **Puerto Rico Se** | **3.73** | **112** | Pn | Pn | **22 13 58.5** | **+0.9** | |
| **CRPR** | **Cabo Rojo, PR** | **3.84** | **114** | Pn | Pn | **22 13 59.1** | **-0.1** | |
| **CRPR** | **Cabo Rojo, PR** | **3.84** | **114** | IAML | | 22 15 05.6 | | |
| | comp=Z,179nm,0.7s | | | | | | | |
| **MLPR** | **Magueyes Islan** | **3.92** | **114** | Pn | Pn | **22 14 00.4** | **+0.2** | |
| **AOPR** | **Arecibo Observ** | **4.03** | **108** | Pn | Pn | **22 14 01.1** | **-0.7** | |
| **MOAC** | **Moa** | **4.05** | **285** | *e*P | Pb | **22 14 12.1** | **-0.1** | |
| MOAC | | | | *e*S | Sn | **22 14 45.6** | **-3.1** | |
| **GTBY** | **Guantanamo Bay** | **4.08** | **275** | Pn | Pn | **22 14 02.2** | **-0.2** | |
| **GTBY** | **Guantanamo Bay** | **4.08** | **275**⇑ | *e*P | Pn | **22 14 02.9** | **+0.5** | |
| **EMPR** | **Esperanza - Ma** | **4.19** | **105** | Pn | Pn | **22 14 04.0** | **0.0** | |
| **OBIP** | **Obispado Ponce** | **4.27** | **111** | Pn | Pn | **22 14 05.1** | **+0.1** | |
| **CELP** | **Cerrillos** | **4.28** | **111** | Pn | Pn | **22 14 06.6** | **+1.4** | |
| **RCC** | **Rio Carpintero** | **4.63** | **275**⇑ | *e*P | Pn | **22 14 10.5** | **+0.4** | |
| RCC | | | | *e*S | Sn | **22 15 02.8** | **-0.4** | |
| RCC | | | | IAML | | 22 15 13.9 | | |
| | comp=E,43nm,0.3s | | | | | | | |
| RCC | | | | IAML | | 22 15 14.0 | | |
| | comp=N,20nm,0.3s | | | | | | | |
| **GCPR** | **Guaynabo City** | **4.64** | **106** | Pn | Pn | **22 14 09.6** | **-0.7** | |
| **SJG** | **San Juan** | **4.65** | **108** | Pn | Pn | **22 14 09.3** | **-1.0** | |
| **PDPR** | **Patillas Dam,** | **4.79** | **109** | Pn | Pn | **22 14 11.1** | **-1.1** | |
| **HUMP** | **Col San Antoni** | **4.91** | **107** | Pn | Pn | **22 14 13.6** | **-0.3** | |
| **HLGC** | **Holguin** | **5.10** | **285** | *e*P | Pn | **22 14 17.6** | **+1.0** | |
| HLGC | | | | *e*S | Sn | **22 15 15.9** | **+1.2** | |
| **CUPR** | **Culebra, Puert** | **5.38** | **103** | Pn | Pn | **22 14 18.9** | **-1.4** | |
| **STVI** | **Saint Thomas** | **5.67** | **102** | Pn | Pn | **22 14 24.3** | **0.0** | |
| **MTDJ** | **Mount Denham** | **6.54** | **259** | Pn | Pn | **22 14 37.9** | **+1.5** | |
| **SMRT** | **St. Maarten** | **7.47** | **101** | Pn | Pn | **22 14 47.6** | **-1.5** | |
| **BIRV** | **Birongo** | **10.10** | **154** | Pn | Pn | **22 15 25.5** | **+0.4** | |
| **BIRD** | **Birdtown, Kers** | **17.24** | **332** | Pn | Pn | **22 16 60.0** | **-0.7** | |
| BIRD | | | | IAmb | IAmb | 22 17 07.3 | | |
| | comp=Z,9.2nm,1.2s | | | | | | | |

**DDA 14 22:38:05.2±0.0, 37.70N×29.26E, h7km±3km, ML1.5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAVA** | **DENIZLI_Tavas** | **0.36** | **229** | P | Pg | 22 38 12.7 | +0.4 |
| TAVA | | | | S | Sb | 22 38 18.5 | -1.4 |
| **GOLH** | **Golhisar** | **0.53** | **152** | P | Pg | 22 38 15.1 | -0.2 |
| GOLH | | | | S | Sb | 22 38 23.9 | -0.7 |
| GOLH | | | | *i* AML | AML | 22 38 30.0 | |
| | comp=N,26nm,0.3s | | | | | | |
| **CAEL** | **Denizli, Camel** | **0.58** | **175** | P | Pg | 22 38 16.9 | +0.4 |
| CAEL | | | | S | Sb | 22 38 26.7 | +0.4 |
| CAEL | | | | *i* AML | AML | 22 38 34.0 | |
| | comp=N,74nm,0.9s | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **0.64** | **90** | P | Pg | 22 38 17.4 | -0.1 |
| BRDR | | | | S | Sb | 22 38 27.2 | -0.7 |
| BRDR | | | | *i* AML | AML | 22 38 28.0 | |
| | comp=E,21nm,0.4s | | | | | | |
| BRDR | | | | *i* AML | AML | 22 38 29.0 | |
| | comp=N,20nm,0.3s | | | | | | |
| **PASA** | **Karahalli, USA** | **0.67** | **16** | P | Pg | 22 38 17.2 | -0.9 |
| PASA | | | | S | Sg | 22 38 27.0 | +0.2 |
| **KZIL** | **AFYON_Kizioren** | **0.89** | **51** | P | Pg | 22 38 22.1 | -0.2 |
| KZIL | | | | *i* AML | AML | 22 38 43.0 | |
| | comp=N,17nm,0.3s | | | | | | |
| **USAK** | **Uak-Merkez** | **1.03** | **350** | P | Pg | 22 38 24.7 | -0.2 |
| USAK | | | | *i* AML | AML | 22 38 41.0 | |
| | comp=E,18nm,0.5s | | | | | | |

**ISK 14 22:38:33.6, 36.97N×27.82E, h25km, ML2.2/5, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSB** | **Milas** | **0.33** | **354** | PG | Pb | 22 38 41.6 | +0.5 |
| MLSB | | | | SG | Sb | 22 38 47.2 | +1.0 |
| **TURN** | **Turunc** | **0.39** | **120** | PG | Pb | 22 38 42.5 | +0.5 |
| TURN | | | | SG | Sn | 22 38 49.0 | -1.2 |
| **YER** | **Yerkesik** | **0.40** | **66** | PG | Pb | 22 38 42.7 | +0.4 |
| YER | | | | SG | Sb | 22 38 49.4 | +1.2 |
| **BODT** | **Bodrum** | **0.42** | **283** | PG | Pb | 22 38 42.9 | +0.4 |
| BODT | | | | SG | Sn | 22 38 49.9 | -1.2 |
| **DALY** | **Dalyan (Mula)** | **0.68** | **103** | PG | Pn | 22 38 47.5 | -0.2 |
| **ARG** | **Arkhangelos** | **0.79** | **162** | PG | Pn | 22 38 49.3 | +0.1 |
| **GCAM** | **G?zelcaml?** | **0.87** | **327** | PG | Pn | 22 38 50.7 | +0.5 |

*TUL **14** 22:42:58.6±1.1, 36.47N±0.03×98.75W±0.03, h10km±6km, ML3.4, mb_Lg3.0/59(NEIC), Error ellipse: s-maj=4.8km s-min=1.9km az=139.0*

**NEIC 14 22:42:58.7±1.2, 36.47N±0.03×98.74W±0.03, h11km±6km, Error ellipse: s-maj=5.0km s-min=3.5km az=152.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.23** | **246** | Pg | Pg | 22 43 03.4 | -0.1 |
| U32A | | | | Sg | Sg | 22 43 07.2 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.73** | **181** | Pn | Pn | 22 43 28.6 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.01** | **158** | IAmb_Lg | | 22 44 04.7 | |
| | comp=Z,104nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.45** | **102** | Pn | Pn | 22 43 38.6 | +0.1 |
| TUL1 | | | | IAmb_Lg | | 22 44 16.9 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.87** | **237** | IAmb_Lg | | 22 44 30.9 | |
| | comp=Z,71nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.12** | **32** | Pn | Pn | 22 43 48.1 | +0.3 |
| **X37A** | **Clayton** | **3.33** | **123** | Pn | Pn | 22 43 51.4 | +0.8 |
| **Z35A** | **Perchaven, San** | **3.37** | **158** | Pn | Pn | 22 43 51.2 | 0.0 |
| **U38A** | **Gravette** | **3.51** | **89** | Pn | Pn | 22 43 53.4 | +0.2 |
| **HHAR** | **Hobbs** | **3.88** | **91** | Pn | Pn | 22 43 58.6 | +0.3 |
| **ABTX** | **Abilene, Hawle** | **3.91** | **191** | Pn | Pn | 22 43 59.2 | +0.5 |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | Pn | Pn | 22 44 00.9 | +1.0 |
| KSCO | | | | IAmb_Lg | | 22 45 14.1 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.14** | **234** | IAmb_Lg | | 22 45 17.8 | |
| | comp=Z,52nm,1.0s | | | | | | |
| **W39A** | **Magazine** | **4.22** | **106** | Pn | Pn | 22 44 03.9 | +0.9 |
| W39A | | | | IAmb_Lg | | 22 45 13.2 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.45** | **135** | IAmb_Lg | | 22 45 24.6 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.50** | **73** | IAmb_Lg | | 22 45 21.0 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **4.60** | **280** | | Pn | 22 44 09.2 | +0.9 |
| **MIAR** | **Mount Ida** | **4.63** | **113** | Pn | Pn | 22 44 09.2 | +0.6 |
| MIAR | | | | IAmb_Lg | | 22 45 37.7 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **4.75** | **90** | IAmb_Lg | | 22 45 39.5 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **BGNE** | **Belgrade** | **4.95** | **5** | Pn | Pn | 22 44 14.6 | +1.6 |
| BGNE | | | | IAmb_Lg | | 22 45 39.3 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.21** | **111** | IAmb_Lg | | 22 45 50.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.24** | **81** | Pn | Pn | 22 44 17.4 | +0.5 |
| MGMO | | | | IAmb_Lg | | 22 45 46.1 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.37** | **101** | IAmb_Lg | | 22 45 52.2 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.38** | **94** | IAmb_Lg | | 22 45 49.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.43** | **102** | Pn | Pn | 22 44 20.4 | +0.8 |
| **R40A** | **Maddies Statio** | **5.46** | **69** | Pn | Pn | 22 44 21.6 | +1.6 |
| R40A | | | | IAmb_Lg | | 22 45 59.7 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **5.66** | **298** | IAmb_Lg | | 22 46 04.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.76** | **170** | IAmb_Lg | | 22 46 08.0 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.79** | **18** | IAmb_Lg | | 22 46 05.1 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **NATX** | **Nacogdoches** | **5.79** | **143** | IAmb_Lg | | 22 46 13.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **5.84** | **122** | IAmb_Lg | | 22 46 20.9 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **189** | Pn | Pn | 22 44 26.7 | -1.3 |
| JCT | | | | IAmb_Lg | | 22 46 22.2 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **K31A** | **O'Neill** | **6.14** | **360** | IAmb_Lg | | 22 46 27.8 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.18** | **73** | IAmb_Lg | | 22 46 25.8 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.35** | **304** | Pn | Pn | 22 44 33.4 | +0.9 |
| **PBMO** | **Poplar Bluff** | **6.69** | **85** | IAmb_Lg | | 22 46 32.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.80** | **75** | IAmb_Lg | | 22 46 33.2 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **SLM** | **Saint Louis** | **7.09** | **70** | IAmb_Lg | | 22 46 42.3 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.16** | **310** | IAmb_Lg | | 22 47 00.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.28** | **231** | IAmb_Lg | | 22 46 58.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.43** | **12** | Pn | Pn | 22 44 45.3 | -1.8 |
| **S44A** | **Carbondale** | **7.68** | **78** | IAmb_Lg | | 22 47 03.8 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **8.23** | **212** | Pn | Pn | 22 44 58.4 | +0.2 |
| **TX32** | **Lajitas Array** | **8.23** | **212** | Pn | Pn | 22 44 59.2 | +1.0 |
| **TXAR** | **Lajitas Array** | **8.23** | **212** | Pn | Pn | 22 44 59.0 | +0.9 |

*NEIC **14** 22:47:19.2±1.7, 21.9S±0.2×179.36W±0.09, h597km±9km, mb4.3/16, Error ellipse: s-maj=24.9km s-min=11.8km az=178.0*

*IDC **14** 22:47:20.6±2.7, 21.87S×179.56W, h604km±21km, mb3.4/9, mb1 3.6/11, mb1mx3.4/35, mbtmp4.3/11, Error ellipse: s-maj=51.7km s-min=15.3km az=143.0*

**ISC 14 22:47:18.9±0.7, 22.0S±0.1×179.4W±0.1, h592km, n48, σ0.74/49, mb4.2/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.86** | **330** | P | P | **22 48 51.4** | **+1.0** |
| | 26nm,0.3s,baz=192,slow=4.6,SNR=62 | | | | | | |
| MSVF | | | | S | S | **22 50 06.2** | **+1.2** |
| | baz=0.0,slow=20,SNR=0.6 | | | | | | |
| **MSVF** | **Nonsavu** | **4.86** | **330** | P | P | **22 48 50.5** | **+0.1** |
| **MSVF** | **Nonsavu** | **4.86** | **330** | S | S | **22 50 05.5** | **+0.6** |
| **DZM** | **Mont Dzumac** | **13.12** | **267** | P | P | **22 50 09.2** | **0.0** |
| | 0.4nm,0.3s,baz=76,slow=19,SNR=3.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **13.12** | **267** | P | P | **22 50 09.0** | **-0.2** |
| **PMG** | **Port Moresby** | **34.44** | **286** | P | P | **22 53 19.4** | **+0.6** |
| **STKA** | **Stephens Creek** | **35.97** | **246** | P | P | **22 53 31.8** | **+0.5** |
| | 2.0nm,0.3s,baz=78,slow=11,SNR=9.8 | | | | | | |
| **STKA** | **Stephens Creek** | **35.97** | **246** | P | P | **22 53 32.2** | **+0.9** |
| **AS31** | **Alice Springs** | **42.92** | **258** | P | P | **22 54 27.4** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 22 54 27.6 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **42.92** | **258** | P | P | **22 54 26.8** | **-0.2** |
| | comp=Z,8.3nm,0.9s,baz=88,slow=8.5,SNR=58 | | | | | | |
| ASAR | | | | PcP | PcP | **22 56 04.1** | **+0.1** |
| | comp=Z,0.9nm,0.6s,baz=107,slow=4.0,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **42.92** | **258** | P | P | **22 54 26.6** | **-0.4** |
| ASAR | | | | | PcP | **22 56 03.5** | **-0.5** |
| **WB0** | **Warramunga Arr** | **43.10** | **264** | P | P | **22 54 27.8** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 22 54 28.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.10** | **264** | P | P | **22 54 27.6** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 22 54 28.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.12** | **264** | P | P | **22 54 27.7** | **-0.8** |
| | comp=Z,2.7nm,0.4s,baz=94,slow=8.3,SNR=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.12** | **264** | P | P | **22 54 27.4** | **-1.2** |
| **FORT** | **Forrest** | **47.51** | **248** | P | P | **22 55 01.4** | **-0.4** |
| **MTN** | **Manton Dam** | **47.89** | **272** | P | P | **22 55 04.3** | **-0.5** |
| MTN | | | | IAmb | IAmb | 22 55 05.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **49.27** | **268** | P | P | **22 55 14.6** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 22 55 15.3 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.55** | **264** | P | P | **22 55 31.6** | **+0.1** |
| | comp=Z,1.9nm,0.3s,baz=98,slow=7.9,SNR=5.0 | | | | | | |
| **SOEI** | **Soe** | **55.26** | **273** | P | P | **22 55 58.9** | **+0.9** |
| SOEI | | | | IAmb | IAmb | 22 56 00.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **56.07** | **258** | P | P | **22 56 02.4** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **56.07** | **258** | P | P | **22 56 02.2** | **-1.1** |
| PSA00 | | | | IAmb | IAmb | 22 56 12.0 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **56.26** | **259** | P | P | **22 56 03.7** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 22 56 04.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.08** | **180** | P | P | **22 57 21.6** | **+1.3** |
| **UGM** | **Wanagama** | **68.64** | **270** | P | P | **22 57 24.5** | **0.0** |
| **SSLB** | **Suanglung** | **73.72** | **305** | P | P | **22 57 52.5** | **-1.4** |
| **SEY** | **Seymchan** | **87.53** | **347** | P | P | **22 59 04.2** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=140,slow=7.9,SNR=6.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.96** | **58** | P | P | **22 59 13.2** | **+1.4** |
| | comp=Z,1.1nm,0.9s,baz=216,slow=6.2,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.96** | **58** | P | P | **22 59 10.3** | **-1.5** |
| **CMAR** | **Chiang Mai Arr** | **89.38** | **290** | P | P | **22 59 15.0** | **+1.2** |
| | comp=Z,1.9nm,0.7s,baz=137,slow=3.0,SNR=16 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.38** | **290** | P | P | **22 59 12.9** | **-0.9** |
| **ILAR** | **Eielson Array** | **90.06** | **13** | P | P | **22 59 15.1** | **-0.8** |
| | comp=Z,0.2nm,0.5s,baz=217,slow=5.4,SNR=2.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **90.94** | **44** | P | P | **22 59 21.4** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=166,slow=0.9,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.26** | **313** | PKiKP | **PKiKP** | **23 04 45.4** | **-0.8** |
| | comp=Z,0.1nm,0.5s,baz=160,slow=1.5,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.13** | **349** | PKP | **PKPdf** | **23 05 21.7** | **+0.1** |
| | comp=Z,4.2nm,0.9s,baz=0.0,slow=3.6,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **136.81** | **342** | PKP | **PKPdf** | **23 05 34.2** | **-0.2** |
| | comp=Z,2.0nm,0.8s,baz=33,slow=1.2,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.64** | **329** | PKP | PKPab | 23 05 45.1 | -0.9 |
| | comp=Z,1.3nm,0.3s,baz=40,slow=3.9,SNR=24 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.64** | **329** | PKPbc | PKPab | 23 05 45.3 | -0.8 |
| **BRTR** | **Keskin Array B** | **146.82** | **310** | PKPbc | **PKPbc** | **23 05 55.2** | **-0.6** |
| | comp=Z,1.6nm,0.8s,baz=136,slow=4.0,SNR=10 | | | | | | |
| **OSTC** | **Ostas** | **148.97** | **341** | *e*PKP | **PKPbc** | **23 06 00.4** | **-0.4** |
| OSTC | | | | *ex* | x | 23 06 07.7 | |
| **DPC** | **Dobruska-Polom** | **149.11** | **340** | *e*PKP | **PKPbc** | **23 06 00.9** | **-0.3** |
| DPC | | | | *ex* | x | 23 06 08.1 | |
| **CLL** | **Collm** | **149.18** | **345** | *i* PKPbc | **PKPbc** | **23 06 01.4** | **+0.2** |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KRLC** | **Kraliky** | **149.21** | **339** | *e*PKP | **PKPbc** | **23 06 01.5** | **+0.1** |
| **PRU** | **Pruhonice** | **149.97** | **342** | *e*PKP | **PKPbc** | **23 06 02.9** | **-0.2** |
| **NKC** | **Novy Kostel** | **150.31** | **345** | *e*PKP | **PKPbc** | **23 06 03.7** | **-0.2** |
| **KHC** | **Kasperske Hory** | **151.02** | **342** | *e*PKP | **PKPbc** | **23 06 05.5** | **-0.1** |
| KHC | | | | *ex* | x | 23 06 15.7 | |
| **CKRC** | **Cesky Krumlov** | **151.08** | **341** | *e*PKP | **PKPbc** | **23 06 05.2** | **-0.6** |
| **GERES** | **GERESS Array B** | **151.24** | **342** | PKPbc | **PKPbc** | **23 06 06.1** | **-0.1** |
| | comp=Z,0.6nm,0.5s,baz=352,slow=2.7,SNR=8.2 | | | | | | |

*IDC **14** 22:47:32.9±1.2, 19.24N×121.35E, h0km, mb3.6/5, mb1 3.9/5, mb1mx3.3/39, mbtmp3.6/5, MS2.9/2, Ms1 3.0/2, ms1mx2.4/72, Error ellipse: s-maj=42.3km s-min=25.4km az=59.0*

**ISC 14 22:47:39.2±1.2, 19.2N±0.1×121.3E±0.2, h46km, n13, σ0.42/6, mb3.5/5, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIPP** | **Brgy, Tapao** | **1.47** | **211**⇑ | *e*P | **Pn** | **22 48 03.2** | **0.0** |
| SIPP | | | | *e*S | Sn | 22 48 31.2 | +10 |
| **CMAR** | **Chiang Mai Arr** | **21.13** | **272** | P | P | **22 52 20.8** | **+0.4** |
| | 0.9nm,0.3s,baz=76,slow=8.3,SNR=6.3 | | | | | | |
| CMAR | | | | LR | LR | 23 01 32.6 | |
| | comp=Z,23nm,18.5s,baz=300,slow=40 | | | | | | |
| **KLR** | **Kul'dur** | **31.14** | **13** | LR | LR | 23 07 51.4 | |
| | comp=Z,30nm,20.1s,baz=214,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.95** | **161** | P | P | **22 55 17.5** | **-0.1** |
| | 0.4nm,0.4s,baz=343,slow=9.1,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.08** | **320** | P | P | **22 55 26.1** | **-0.5** |
| | 0.3nm,0.8s,baz=108,slow=8.9,SNR=4.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.91** | **83** | T | T | 23 41 17.8 | |
| | baz=279 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.92** | **83** | T | T | 23 41 25.1 | |
| | baz=279 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.93** | **83** | T | T | 23 41 22.2 | |
| | baz=279 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.94** | **81** | T | T | 23 41 10.2 | |
| | baz=277,slow=75,SNR=11 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.94** | **81** | T | T | 23 41 10.5 | |
| | baz=277,slow=75,SNR=6.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.95** | **81** | T | T | 23 41 11.6 | |
| | baz=277,slow=75,SNR=9.9 | | | | | | |
| **ASAR** | **Alice Springs** | **44.34** | **163** | P | P | **22 55 45.0** | **-0.1** |
| | 0.4nm,0.3s,baz=345,slow=6.9,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.53** | **23** | P | P | **23 00 22.4** | **+0.4** |
| | 0.9nm,0.7s,baz=311,slow=4.6,SNR=10 | | | | | | |

*BJI **14** 22:47:57.2±0.0, 43.35N×143.51E, h145km, mb4.5/27, mB5.0/16*

*MOS **14** 22:47:58.7±0.8, 43.15N×143.30E, h147km, mb4.6/31, Error ellipse: s-maj=6.7km s-min=4.9km az=87.6*

*NEIC **14** 22:47:59.9±1.1, 43.12N±0.05×143.3E±0.1, h141km±5km, mb4.5/144, Error ellipse: s-maj=13.6km s-min=7.6km az=102.0*

*NIED **14** 22:47:59.8, 43.06N×143.32E, h136km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr0.45; Mθθ-0.24; Mφφ-0.21; Mrθ3.72; Mθφ0.52; Mφr-0.35; Fault plane solution: Mo3.79000×10^15 NP1:φs96.00000°, δ87.00000°, λ82.00000°. NP2:φs344.00000°, δ8.00000°, λ158.00000°.*

*JMA **14** 22:47:59.7±0.1, 43.06N×143.32E, h136km±1km, M4.2*

*JMA Felt II J1.*

*SKHL **14** 22:47:59.4±0.5, 43.10N×143.40E, h139km±4km, mb5.6/5, msha6.0/5*

*IDC **14** 22:48:00.5±0.7, 43.18N×143.27E, h145km±4km, mb4.1/27, mb1 4.2/31, mb1mx4.1/43, mbtmp4.5/31, MS3.0/2, Ms1 3.0/2, ms1mx2.5/88, Error ellipse: s-maj=11.1km s-min=8.9km az=121.0*

**ISC 14 22:47:59.0±0.4, 43.08N±0.03×143.36E±0.03, h140km±3km, h139km:pP-P,n420,σ1.3/09/476, mb4.5/149, 66C-33D, Fault plane solution: NP1:φs77.14910°, δ84.15488°, λ104.73673°. NP2:φs188.31441°, δ15.82970°, λ21.92182°.**
**Principal axes:** T Plg48.7902°, Azm2.9933°; N Plg14.6584°, Azm255.6147°; P Plg37.4652°, Azm154.0510°; **Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAR** | **Ashorobuto** | **0.37** | **54** | ⇓P | Pn | **22 48 18.9** | **+0.4** |
| JAR | | | | *e*S | Sn | **22 48 33.0** | **-0.4** |
| **JOB** | **Onbets** | **0.39** | **116** | ⇑P | Pn | **22 48 19.5** | **+0.9** |
| JOB | | | | *e*S | Sn | **22 48 34.4** | **+0.9** |
| **JCH** | **Churui** | **0.47** | **179** | ⇑P | Pn | **22 48 19.0** | **0.0** |
| JCH | | | | *e*S | Sn | **22 48 33.2** | **-0.9** |
| **JFR** | **Furan** | **0.56** | **279** | ⇑P | Pn | **22 48 19.7** | **+0.2** |
| JFR | | | | *e*S | Sn | **22 48 34.6** | **-0.5** |
| **JBT2** | **Biratori 2** | **0.79** | **248** | ⇑P | Pn | **22 48 21.2** | **+0.2** |
| JBT2 | | | | *e*S | Sn | **22 48 37.1** | **-0.6** |
| **JKK2** | **Kamakawa 2** | **0.91** | **331** | ⇓P | Pn | **22 48 22.4** | **+0.4** |
| **JNBK** | **Urakawa-nobuka** | **0.91** | **209** | ⇑P | Pn | **22 48 22.5** | **+0.5** |
| JNBK | | | | *e*S | Sn | **22 48 39.5** | **0.0** |
| **JAB** | **Ashibetsu** | **0.93** | **298** | ⇓P | Pn | **22 48 22.9** | **+0.8** |
| JAB | | | | *e*S | Sn | **22 48 40.6** | **+0.8** |
| **JTKR** | **Abashiri--Toko** | **0.98** | **24** | ⇓P | Pn | **22 48 23.1** | **+0.6** |
| JTKR | | | | *e*S | Sn | **22 48 40.6** | **+0.1** |
| **JAK** | **Akkeshi** | **0.99** | **94** | P | Pn | **22 48 23.0** | **+0.4** |
| JAK | | | | *e*S | Sn | **22 48 40.5** | **-0.1** |
| **JEM** | **Erimo** | **1.07** | **188** | | Pn | **22 48 23.8** | **+0.4** |
| JEM | | | | Sn | Sn | **22 48 43.6** | **+1.7** |
| **ERM** | **Erimo** | **1.07** | **188** | *c* iPN | Pn | **22 48 24.6** | **+1.2** |
| **ERM** | **Erimo** | **1.07** | **188** | Pn | Pn | **22 48 23.9** | **+0.5** |
| **AKK** | **Akkeshi** | **1.09** | **93** | *i* P | Pn | **22 48 24.2** | **+0.7** |
| AKK | | | | AMB | AMB | 22 48 24.5 | |
| | 1μm,0.2s | | | | | | |
| AKK | | | | *i* S | Sn | **22 48 42.3** | **0.0** |
| **JKA** | **Kamikawa-asahi** | **1.17** | **332** | Pn | Pn | **22 48 25.1** | **+0.8** |
| JKA | | | | Sn | Sn | **22 48 44.0** | **+0.2** |
| **JKA** | **Kamikawa-asahi** | **1.17** | **332** | *i* P | Pn | **22 48 25.2** | **+0.8** |
| **ASAJ** | **Asahikawa** | **1.17** | **332** | P | Pn | **22 48 25.2** | **+0.8** |
| | 222nm,0.3s,baz=201,slow=11,SNR=467 | | | | | | |
| ASAJ | | | | S | Sn | **22 48 44.5** | **+0.8** |
| | 64nm,0.3s,baz=167,slow=20,SNR=11 | | | | | | |
| **JHR** | **Hokuryu** | **1.36** | **300** | ⇓P | Pn | **22 48 26.9** | **+0

comp=E,192nm,0.4s
SHO pmax pmax
comp=Z,287nm,0.4s
SHO pmax pmax
comp=N,78nm,0.5s
SHO smax smax
comp=E,1μm,0.5s
SHO smax smax
comp=N,825nm,0.2s
**SHO Shikotan 2.65 71** *i* P **Pn 22 48 41.6 +0.2**
SHO AMB AMB 22 48 41.9
comp=N,80nm,0.4s
SHO AMB AMB 22 48 41.9
comp=N,190nm,0.4s
SHO AMB AMB 22 48 41.9
comp=N,290nm,0.4s
SHO *i* S **Sn 22 49 12.8 -1.3**
SHO A A 22 49 14.5
comp=N,830nm,0.4s
SHO A A 22 49 14.5
comp=N,1μm,0.4s
**KUR Kuril'sk 3.90 55** PN **Pn 22 48 59.0 +1.5**
KUR S **Sn 22 49 45.7 +2.8**
KUR pmax pmax
comp=Z,129nm,1.0s
KUR smax smax
comp=E,248nm,0.9s
KUR smax smax
comp=N,61nm,0.5s
**KUR Kuril'sk 3.90 55** *e*P **Pn 22 48 58.6 +1.1**
KUR AMB AMB 22 49 07.5
comp=N,150nm,0.7s
KUR *e*S **Sn 22 49 43.2 +0.3**
KUR A A 22 49 46.8
comp=N,90nm,0.6s
KUR A A 22 49 46.8
comp=N,270nm,0.6s
**YSS Yuzh-Sakhalins 3.90 354** *e*PN **Pn 22 48 58.2 +0.8**
YSS *e*S **Sn 22 49 43.4 +0.4**
YSS pmax pmax
comp=Z,80nm,0.8s
YSS smax smax
comp=N,130nm,0.8s
YSS smax smax
comp=E,110nm,0.8s
YSS smax smax
comp=N,1μm,2.3s
**YSS Yuzh-Sakhalins 3.90 354** Pn **Pn 22 48 56.9 -0.6**
**YSS Yuzh-Sakhalins 3.90 354** *e*P **Pn 22 48 58.3 +0.8**
YSS AMB AMB 22 48 58.8
comp=N,80nm,0.8s
YSS *e*S **Sn 22 49 42.6 -0.4**
YSS A A 22 49 45.4
comp=N,130nm,0.8s
YSS A A 22 49 45.4
comp=N,110nm,0.8s
YSS A A 22 49 45.6
comp=N,1μm,2.3s
YSS A A 22 49 45.6
comp=N,900nm,2.3s
**TEY Ternei 5.25 294** *e*P **Pn 22 49 16.1 +0.8**
TEY AMB AMB 22 49 25.2
comp=N,10.0nm,1.0s
**JMM Marumori 5.56 201 Pn 22 49 18.4 -1.2**
**JSD Sado 6.36 219** Pn **Pn 22 49 29.2 -1.1**
**JYT Yasato 7.26 201 Pn 22 49 40.2 -2.3**
**MJB9 Matsu-Tunnel 7.63 213 Pn 22 49 47.7 +0.2**
**MAJO Matsushiro 7.63 213** PN **Pn 22 49 47.6 +0.1**
**MAJO Matsushiro 7.63 213** Pn **Pn 22 49 47.6 +0.1**
**MAT Matsushiro 7.63 213** P **Pn 22 49 47.4 -0.1**
MAT *e*S **Sn 22 51 11.8 -0.8**
**MJAR Matsushiro Arr 7.63 213** P **Pn 22 49 48.3 +0.8**
comp=N,0.7nm,0.3s,baz=22,slow=13,SNR=16
MJAR S **Sn 22 51 14.9 +2.3**
comp=N,0.5nm,0.3s,baz=22,slow=22,SNR=4.5
**MJAR Matsushiro Arr 7.63 213** Pn **Pn 22 49 47.0 -0.5**
**TYV Tymovskoe 7.80 357** *e*P **Pn 22 49 50.0 +0.5**
**GRTR Gornotajezhnoj 8.18 278** *e*P **Pn 22 49 56.7 +2.0**
**USRK Ussuriysk Ar. 8.32 282** P **Pn 22 49 56.9 +0.3**
baz=83,slow=14,SNR=5.0
**GRNR Gornyy 9.03 331** *e*P **Pn 22 50 06.2 +0.1**
GRNR AMB AMB 22 50 08.2
**KLR Kul'dur 10.13 311** P **Pn 22 50 20.8 +0.1**
comp=N,0.2nm,0.3s,baz=122,slow=13,SNR=14
**KLR Kul'dur 10.13 311** *ce*PN **Pn 22 50 20.7 +0.1**
KLR pmax pmax
comp=Z,8.0nm,1.3s
**JHJ Hachijo jima 2 10.33 197** P **Pn 22 50 21.5 -2.0**
comp=Z,22nm,0.3s,baz=272,slow=23,SNR=7.4
JHJ S Sn 22 52 09.5 -8.2
comp=Z,50nm,0.3s,baz=70,slow=22,SNR=8.6
**OKH Okha 10.48 359** *e*P **Pn 22 50 25.2 -0.1**
OKH AMB AMB 22 50 25.6
comp=Z,20nm,0.5s
**SKR Severo-Kuril's 11.57 44** *e*P **Pn 22 50 39.4 -0.3**
SKR AMB AMB 22 50 43.4
comp=Z,20nm,0.8s
**BNX BinXian 11.72 289** ⇑P **Pn 22 50 41.4 -0.3**
BNX pmax pmax
comp=Z,30nm,1.1s
BNX pmax pmax
comp=Z,800nm,3.9s
**CN2 Changchun 13.04 279** *e*P **Pn 22 50 59.3 +0.4**
CN2 pmax pmax
comp=Z,10.0nm,0.3s
**KSRS Korea Array 13.05 250** P **Pn 22 51 00.7 +1.6**
comp=Z,0.3nm,0.3s,baz=60,slow=12,SNR=4.8
KSRS LR LR 22 56 14.1
comp=Z,23nm,19.7s,baz=170,slow=38
**PEA0B Petropavlovsk- 13.85 39** P **Pn 22 51 09.1 0.0**
**PEA0B Petropavlovsk- 13.85 39** P **Pn 22 51 09.1 0.0**
**PETK Petropavlovsk- 13.85 39** P **Pn 22 51 08.1 -1.0**
comp=Z,1.9nm,0.3s,baz=217,slow=9.6,SNR=27
**PETK Petropavlovsk- 13.85 39** P **Pn 22 51 08.6 -0.5**
**PETK Petropavlovsk- 13.85 39** P **Pn 22 51 08.6 -0.5**
**PET Petropavlovsk 14.24 40** AMS AMS 23 03 28.3
comp=Z,100nm,18.0s
**ZEA Zeya 15.06 321** *e*P **P 22 51 25.1 -1.2**
ZEA pmax pmax
comp=N,20nm,0.5s
ZEA pmax pmax
comp=E,10.0nm,0.5s
ZEA pmax pmax
comp=Z,20nm,0.8s
**ZEA Zeya 15.06 321** *e*P **P 22 51 25.1 -1.2**
ZEA AMB AMB 22 51 25.9
comp=Z,20nm,0.7s
ZEA AMB AMB 22 51 25.9
comp=Z,10.0nm,0.7s
ZEA AMB AMB 22 51 25.9
comp=Z,20nm,0.7s
**MA2 Magadan 17.14 13** *ce*P **P 22 51 48.8 -0.3**
MA2 pmax pmax
comp=Z,20nm,0.9s
**MA2 Magadan 17.14 13** P **P 22 51 48.3 -0.8**
MA2 IAmb IAmb 22 51 49.8
comp=Z,21nm,0.8s
**MA2 Magadan 17.14 13** *e*P **P 22 51 48.8 -0.3**
**SEY Seymchan 20.58 12** P **P 22 52 25.3 -1.1**
comp=Z,37nm,0.8s,baz=189,slow=7.9,SNR=163
**SEY Seymchan 20.58 12** *i* P **P 22 52 25.2 -1.2**
**YAK Yakutsk 20.64 342** P **P 22 52 25.4 -1.7**
comp=Z,18nm,0.5s,baz=16,slow=1.7,SNR=8.4
**YAK Yakutsk 20.64 342** *e*P **P 22 52 24.8 -2.3**
YAK *e**PP **pP 22 52 52.9 +0.7**
YAK *e*S **S 22 56 07.7 -2.1**
YAK *e* 22 56 32.2
YAK *e**SS **sS 22 56 54.1 +2.5**
YAK *e* 23 03 37.2
YAK pmax pmax
comp=Z,51nm,1.1s
YAK pmax pmax
comp=N,7.0nm,0.9s
YAK pmax pmax
comp=E,3.0nm,1.1s
YAK smax smax
comp=N,41nm,1.5s
YAK smax smax
comp=E,19nm,1.3s
**YAK Yakutsk 20.64 342** P **P 22 52 25.2 -1.9**
**HNS HongShan 22.53 265** ⇑P **P 22 52 48.3 +1.3**
HNS pmax pmax
comp=E,7.0nm,0.9s
**ULN Ulaanbaatar 25.74 293** *ce*P **P 22 53 16.4 -0.1**
ULN pmax pmax
comp=Z,3.0nm,0.5s

**ULN Ulaanbaatar 25.74 293** P **P 22 53 16.2 -0.2**
**ULN Ulaanbaatar 25.74 293** *e*P **P 22 53 16.4 -0.1**
**SONM Songino Array 26.19 293** P **P 22 53 21.2 +0.8**
comp=Z,14nm,0.7s,baz=84,slow=8.6,SNR=47
**SONM Songino Array 26.19 293** P **P 22 53 19.9 -0.5**
SONM IAmb IAmb 22 53 23.4
comp=Z,17nm,0.9s
**BILL Bilibino 27.82 18** *de*P **P 22 53 33.0 -1.6**
BILL 22 54 28.0
BILL *e*SS SS 22 59 40.0 -30
BILL pmax pmax
comp=Z,3.0nm,0.6s
**BILL Bilibino 27.82 18** P **P 22 53 33.2 -1.4**
**ZAK Zakamensk 28.15 299** *e*P **P 22 53 37.8 -0.1**
ZAK pmax pmax
comp=Z,12nm,1.5s
**ZAK Zakamensk 28.15 299** *e*P **P 22 53 37.8 -0.1**
**XAN Xi'an 28.24 263** P **P 22 53 41.8 +3.0**
XAN pmax pmax
comp=Z,5.0nm,1.5s
**TIXI Tiksi 29.52 351** P **P 22 53 46.5 -3.0**
comp=Z,1.2nm,0.5s,baz=268,slow=22,SNR=4.5
**TIXI Tiksi 29.52 351** *i* P **P 22 53 46.8 -2.8**
TIXI pmax pmax
comp=Z,2.0nm,0.8s
**MOY Mondy 29.59 302** *e*P **P 22 53 51.3 +0.7**
MOY pmax pmax
comp=Z,18nm,1.5s
**H11N2 WAKE ISLAND Hy 30.55 132** T T 23 25 56.9
baz=317,slow=75,SNR=113
**H11N1 WAKE ISLAND Hy 30.57 132** T T 23 25 53.1
baz=317,slow=75,SNR=108
**H11N3 WAKE ISLAND Hy 30.57 132** T T 23 25 58.5
baz=317,slow=75,SNR=62
**CD2 Chengdu 33.58 262** P **P 22 54 27.8 +2.1**
CD2 pmax pmax
comp=Z,10.0nm,0.3s
**TNA Tin City 34.92 33** P **P 22 54 37.4 +0.7**
TNA IAmb IAmb 22 54 38.2
comp=Z,11nm,0.9s
**ANM Nome 35.73 35** P **P 22 54 44.6 +0.9**
ANM pmax pmax
comp=Z,7.0nm,1.0s
**ANM Nome 35.73 35** P **P 22 54 44.6 +0.9**
ANM IAmb IAmb 22 54 45.7
comp=Z,6.8nm,1.0s
**DGZ Jazzator, Alta 38.36 300**⇑ *e*P **P 22 55 07.4 +1.1**
DGZ pmax pmax
comp=Z,8.0nm,0.7s
**NRIK Noril'sk 38.52 332** P **P 22 55 07.0 -0.2**
comp=Z,1.4nm,0.4s,baz=122,slow=7.4,SNR=3.6
**NRIK Noril'sk 38.52 332** *ce*P **P 22 55 06.5 -0.6**
NRIK pmax pmax
comp=Z,3.0nm,0.9s
**NRIK Noril'sk 38.52 332** P **P 22 55 06.6 -0.6**
NRIK IAmb IAmb 22 55 08.7
comp=Z,9.7nm,1.4s
**ZAA0 Zalesovo Array 39.20 307** P **P 22 55 13.2 +0.2**
ZAA0 IAmb IAmb 22 55 14.1
comp=Z,15nm,1.1s
**ZALV Zalesovo Beam 39.20 307** P **P 22 55 12.9 -0.1**
comp=Z,4.0nm,0.4s,baz=85,slow=7.8,SNR=30
ZALV PcP **PcP 22 57 19.8 +0.5**
comp=Z,2.1nm,0.8s,baz=115,slow=2.1,SNR=5.7
ZALV ScP **ScP 23 00 54.9 +0.4**
comp=Z,0.7nm,0.6s,baz=103,slow=6.7,SNR=3.9
**ZALV Zalesovo Beam 39.20 307** P **P 22 55 13.1 +0.1**
**ZALV Zalesovo Beam 39.20 307** P **P 22 55 13.1 +0.1**
**TTA Tatalina 39.69 39** P **P 22 55 18.2 +1.2**
TTA pmax pmax
comp=Z,8.0nm,1.0s
**TTA Tatalina 39.69 39** P **P 22 55 18.2 +1.2**
TTA IAmb IAmb 22 55 34.9
comp=Z,8.0nm,1.0s
**J20K Nowinta River 40.53 37** P **P 22 55 24.4 +0.5**
J20K IAmb IAmb 22 55 25.8
comp=Z,9.6nm,0.8s
**K20K Telida 40.57 38** P **P 22 55 25.5 +1.3**
K20K IAmb IAmb 22 55 26.6
comp=Z,7.4nm,0.9s
**IMAR Indian Mountai 40.75 34** P **P 22 55 26.2 +0.6**
**H21K Melozitna Rive 41.13 34** P **P 22 55 29.6 +0.8**
**CAST Castle Rocks 41.46 38** P **P 22 55 32.8 +1.3**
CAST IAmb IAmb 22 55 33.7
comp=Z,9.8nm,0.6s
**KTH Kantishna Hill 41.98 38** P **P 22 55 36.9 +1.1**
**MLY Manley 42.00 35** P **P 22 55 37.4 +1.5**
**MK31 Makanchi Array 42.44 297** P **P 22 55 40.0 +0.3**
MK31 pmax pmax
comp=Z,9.0nm,0.8s
**MK31 Makanchi Array 42.44 297** P **P 22 55 40.0 +0.3**
MK31 IAmb IAmb 22 55 44.0
comp=Z,8.7nm,0.8s
**MKAR Makanchi Array 42.44 297** P **P 22 55 40.1 +0.4**
comp=Z,7.2nm,0.7s,baz=81,slow=10,SNR=74
MKAR PcP **PcP 22 57 30.7 +0.6**
comp=Z,0.9nm,0.7s,baz=63,slow=4.3,SNR=2.7
MKAR ScP **ScP 23 01 07.1 -0.4**
comp=Z,0.6nm,0.9s,baz=96,slow=2.4,SNR=3.8
**MKAR Makanchi Array 42.44 297** P **P 22 55 40.0 +0.4**
MKAR **ScP 23 01 07.5 0.0**
**TOLK Toolik Lake Re 42.45 30** P **P 22 55 40.2 +0.7**
**H23K Yukon River 42.47 34** P **P 22 55 40.8 +1.0**
**I23K Minto, Yukon-K 42.58 35** P **P 22 55 41.7 +1.2**
**BWN Browne 42.59 37** P **P 22 55 42.1 +1.5**
**MAKZ Makanchi 42.63 297** P **P 22 55 40.3 -1.0**
MAKZ pmax pmax
comp=Z,10.0nm,0.8s
**MAKZ Makanchi 42.63 297** P **P 22 55 40.3 -1.0**
MAKZ IAmb IAmb 22 55 45.7
comp=Z,9.6nm,0.8s
**NEA2 Nenana 42.73 36** P **P 22 55 42.9 +1.1**
**MCK McKinley 42.85 37** P **P 22 55 43.7 +0.9**
MCK pmax pmax
comp=Z,10.0nm,0.8s
**MCK McKinley 42.85 37** P **P 22 55 43.7 +0.9**
MCK IAmb IAmb 22 55 44.5
comp=Z,9.7nm,0.8s
**RND Reindeer 42.91 38** P **P 22 55 44.0 +0.6**
RND pmax pmax
comp=Z,8.0nm,0.8s
**RND Reindeer 42.91 38** P **P 22 55 44.0 +0.6**
RND IAmb IAmb 22 55 44.7
comp=Z,8.1nm,0.8s
**MDM Murphy Dome 43.07 35** P **P 22 55 45.6 +1.1**
MDM IAmb IAmb 22 55 46.5
comp=Z,9.9nm,0.9s
**H24K Noodor Dome 43.16 34** P **P 22 55 46.7 +1.5**
**WRH Wood River Hil 43.16 36** P **P 22 55 46.0 +0.8**
**TCOL CIGO, UAF Yank 43.23 36** P **P 22 55 46.5 +0.7**
**COLA College 43.23 36** *i* P **P 22 55 46.7 +0.9**
COLA pmax pmax
comp=Z,12nm,0.6s
**COLA College 43.23 36** P **P 22 55 46.5 +0.7**
**CCB Clear Creek Bu 43.27 36** P **P 22 55 46.9 +0.8**
**KURK Kurchatov 43.60 304** *ce*P **P 22 55 49.1 +0.1**
KURK pmax pmax
comp=Z,21nm,0.6s
**KURK Kurchatov 43.60 304** P **P 22 55 49.0 +0.1**
**DHY Denali Highway 43.61 38** P **P 22 55 49.8 +0.7**
DHY IAmb IAmb 22 55 50.1
comp=Z,7.1nm,0.7s
**IL31 43.65 36** P **P 22 55 49.5 +0.4**
IL31 IAmb IAmb 22 55 50.6
comp=Z,10nm,0.8s
**ILAR Eielson Array 43.65 36** P **P 22 55 49.8 +0.6**
comp=Z,9.0nm,0.9s,baz=255,slow=5.3,SNR=57
**ILAR Eielson Array 43.65 36** P **P 22 55 50.2 +1.1**
**HDA Harding Lake 43.66 36** P **P 22 55 49.6 +0.3**
HDA IAmb IAmb 22 55 50.4
comp=Z,8.5nm,0.5s
**KURBB Kurchatov Arra 43.68 303** P **P 22 55 49.8 +0.2**
comp=Z,27nm,0.5s,baz=72,slow=8.9,SNR=90
**PRP Porcupine Dome 44.16 34** P **P 22 55 54.5 +1.1**
**FYU Fort Yukon 44.18 33** P **P 22 55 54.7 +1.4**
FYU IAmb IAmb 22 55 55.2
comp=Z,7.8nm,0.6s
**CHTO Chiang Mai 44.45 251** P **P 22 55 56.9 +0.9**
CHTO pmax pmax
comp=Z,3.0nm,0.8s
**CHTO Chiang Mai 44.45 251** P **P 22 55 56.9 +0.9**
**RIDG Independent Ri 44.66 37** P **P 22 55 57.8 +0.5**
**CMAR Chiang Mai Arr 44.69 251** P **P 22 55 58.8 +0.8**
comp=Z,1.3nm,0.6s,baz=38,slow=7.6,SNR=8.4
**CMAR Chiang Mai Arr 44.69 251** *ce*P **P 22 55 59.5 +1.5**

CMAR pmax pmax
comp=Z,1.0nm,0.6s
**CMAR Chiang Mai Arr 44.69 251** P **P 22 55 58.2 +0.2**
**SCRK Sand Creek 45.00 37** P **P 22 56 00.5 +0.5**
**DOT Dot Lake 45.02 37** P **P 22 55 59.8 -0.3**
DOT IAmb IAmb 22 56 02.1
comp=Z,6.2nm,0.7s
**PDGK Podgornoye 45.51 293** *i* P **P 22 56 03.3 -1.0**
PDGK pmax pmax
comp=Z,2.0nm,0.8s
**M26K Nabesna, AK 45.71 39** P **P 22 56 07.2 +1.7**
M26K IAmb IAmb 22 56 08.4
comp=Z,14nm,1.1s
**EGAK Eagle 46.08 35** P **P 22 56 09.0 +0.6**
EGAK IAmb IAmb 22 56 09.3
comp=Z,8.3nm,0.8s
**L27K Beaver Creek, 46.11 38** P **P 22 56 10.5 +1.8**
L27K IAmb IAmb 22 56 11.4
comp=Z,13nm,0.8s
**BCAR Beaver Creek A 46.13 38** P **P 22 56 10.2 +1.3**
**M27K Edge Creek, AK 46.23 39** P **P 22 56 10.8 +1.0**
M27K IAmb IAmb 22 56 12.4
comp=Z,14nm,0.9s
**I29M Ogilvie Camp, 47.16 34** P **P 22 56 17.7 +0.9**
I29M IAmb IAmb 22 56 18.9
comp=Z,8.3nm,0.8s
**EPYK Eagle Plains 47.59 33** P **P 22 56 21.2 +1.1**
EPYK IAmb IAmb 22 56 21.8
comp=Z,10.0nm,0.7s
**BRVK Borovoye 47.83 309** *i* P **P 22 56 22.6 +0.5**
BRVK pmax pmax
comp=Z,18nm,0.8s
**BRVK Borovoye 47.83 309** P **P 22 56 22.8 +0.7**
**TKM2 Tokmak 2 48.28 294** *i* P **P 22 56 26.6 +0.6**
TKM2 pmax pmax
comp=Z,4.0nm,0.5s
**OTUK Ortayu 48.28 302** *i* P **P 22 56 25.5 -0.2**
OTUK pmax pmax
comp=Z,7.0nm,0.9s
**INK Inuvik 48.36 30** P **P 22 56 26.6 +0.7**
INK pmax pmax
comp=Z,6.0nm,0.6s
**INK Inuvik 48.36 30** P **P 22 56 26.6 +0.7**
INK IAmb IAmb 22 56 28.3
comp=Z,6.3nm,0.6s
**M30M Minto, Yukon 48.47 38** P **P 22 56 28.8 +1.9**
**HYT Haines Junctio 48.63 40** P **P 22 56 30.2 +1.9**
**AAK Ala-Archa 49.13 294** P **P 22 56 32.4 0.0**
comp=Z,0.8nm,0.3s,baz=121,slow=9.0,SNR=8.5
**AAK Ala-Archa 49.13 294** *i* P **P 22 56 32.6 +0.1**
AAK pmax pmax
comp=Z,4.0nm,1.8s
**AAK Ala-Archa 49.13 294** P **P 22 56 32.0 -0.5**
**AAK Ala-Archa 49.13 294** *eP* **P 22 56 32.6 +0.1**
**WHY Whitehorse 49.91 40** P **P 22 56 39.8 +1.8**
WHY IAmb IAmb 22 56 40.8
comp=Z,6.3nm,0.8s
**A36M Sachs Harbour 50.12 24** P **P 22 56 40.2 +1.0**
**P33M Teslin, Yukon 51.02 40** P **P 22 56 47.7 +1.4**
P33M IAmb IAmb 22 56 49.1
comp=Z,7.4nm,0.8s
**C36M Palautuk 51.35 27** P **P 22 56 49.0 +0.6**
**KKAR Karatay Array 51.56 297** P **P 22 56 50.7 +0.2**
**KKAR Karatay Array 51.56 297** P **P 22 56 50.7 +0.2**
**ARU Arti 52.93 316** *c* *i* P **P 22 57 00.2 -0.1**
ARU *PP **pP 22 57 33.2 +0.3**
ARU 22 58 05.1
ARU S **S 23 04 19.1 +0.7**
ARU pmax pmax
comp=Z,27nm,1.1s
**ARU Arti 52.93 316** P **P 22 57 00.4 0.0**
**ARU Arti 52.93 316** *eP* **P 22 57 00.2 -0.1**
**EUNU Eureka 53.99 9** P **P 22 57 07.7 -0.1**
EUNU IAmb IAmb 22 57 08.2
comp=Z,6.8nm,0.7s
**NOR Nord 55.12 356** *i* P **P 22 57 13.6 -2.2**
NOR IAmb IAmb 22 57 15.6
comp=Z,3.2nm,0.6s
**ABKAR Akbulak array 55.30 308** P **P 22 57 18.0 +0.3**
ABKAR IAmb IAmb 22 57 18.9
comp=Z,8.0nm,0.8s
**ABKAR Akbulak array 55.30 308** P **P 22 57 18.2 +0.5**
**RES Resolute Bay 56.38 16** P **P 22 57 24.9 -0.1**
RES pmax pmax
comp=Z,8.0nm,0.8s
**RES Resolute Bay 56.38 16** P **P 22 57 24.9 -0.1**
**KIRV Kirov 56.40 321** *ce*P **P 22 57 25.4 +0.1**
**PRGR Permogore 56.57 325** *eP* **P 22 57 24.4 -2.0**
PRGR pmax pmax
comp=Z,43nm,1.2s
**KBL Kabul 56.79 288** P **P 22 57 28.2 -0.6**
KBL pmax pmax
comp=Z,5.0nm,1.0s
**KBL Kabul 56.79 288** P **P 22 57 28.2 -0.6**
KBL IAmb IAmb 22 57 29.2
comp=Z,4.7nm,0.9s
**YKA Yellowknife Ar 57.87 32** P **P 22 57 36.2 +0.6**
comp=Z,5.6nm,0.8s,baz=304,slow=6.5,SNR=78
**YKA Yellowknife Ar 57.87 32** P **P 22 57 35.1 -0.5**
**HAMF Hammerfest 58.62 340** *eP* **P 22 57 40.4 -0.2**
**ARA0 ARCESS Array S 58.89 339** *eP* **P 22 57 42.8 +0.2**
**ARCES ARCESS Array B 58.89 339** P **P 22 57 42.8 +0.2**
comp=Z,4.0nm,0.5s,baz=40,slow=7.6,SNR=42
**NEEM North Greenlan 59.41 4** *i* P **P 22 57 43.6 -2.8**
NEEM IAmb IAmb 22 57 46.5
comp=Z,7.2nm,0.5s
**KLMR Klimovskoe 59.49 327** *eP* **P 22 57 45.9 -0.8**
KLMR pmax pmax
comp=Z,12nm,1.1s
**KLMR Klimovskoe 59.49 327** *eP* **P 22 57 46.0 -0.8**
KLMR AMP 22 57 50.0
comp=Z,12nm,1.1s
**KTK1 Kautokeino 59.84 339** *eP* **P 22 57 49.4 +0.3**
**DAG Danmarks Havn 59.88 355** P **P 22 57 49.2 0.0**
DAG pmax pmax
comp=Z,9.0nm,1.1s
**DAG Danmarks Havn 59.88 355** *i* P **P 22 57 48.0 -1.2**
DAG IAmb IAmb 22 57 49.6
comp=Z,4.6nm,0.6s
**BELG Belogornoye 60.47 316** *i* P **P 22 57 53.5 0.0**
BELG pmax pmax
comp=Z,2.0nm,0.6s
**TRO Tromso 60.50 341** *eP* **P 22 57 53.2 -0.3**
**STEI Steigen 62.66 340** *eP* **P 22 58 07.3 -0.7**
**LOF Lofoten 62.92 341** *eP* **P 22 58 09.6 -0.1**
**FITZ Fitzroy Crossi 63.02 199** P **P 22 58 12.9 +2.0**
comp=Z,2.2nm,0.8s,baz=348,slow=9.3,SNR=2.8
**FAUS Fauske 63.07 340** *eP* **P 22 58 10.4 -0.3**
**WRA Warramunga Arr 63.26 190** P **P 22 58 13.3 +0.8**
comp=Z,2.3nm,0.6s,baz=9.0,slow=6.6,SNR=13
**WRA Warramunga Arr 63.26 190** *i* P **P 22 58 13.1 +0.6**
WRA pmax pmax
comp=Z,2.0nm,0.6s
**WRA Warramunga Arr 63.26 190** P **P 22 58 13.0 +0.5**
**B08A Colville Reser 63.58 48** P **P 22 58 15.6 +1.1**
B08A IAmb IAmb 22 58 16.2
comp=Z,3.8nm,0.8s
**EDM Edmonton 63.74 41** P **P 22 58 16.1 +0.7**
EDM pmax pmax
comp=Z,9.0nm,0.8s
**EDM Edmonton 63.74 41** P **P 22 58 16.1 +0.7**
**VRH Novokhopyorsk 64.15 317** *eP* **P 22 58 17.9 -0.2**
VRH pmax pmax
comp=Z,10.0nm,0.6s
**FIA1 FINESS Array S 64.18 332** P **P 22 58 17.7 -0.4**
**FINES FINESS Array B 64.18 332** P **P 22 58 18.0 -0.1**
comp=Z,8.0nm,0.5s,baz=48,slow=7.3,SNR=80
FINES PcP **PcP 22 58 51.7 -0.2**
comp=Z,1.5nm,0.4s,baz=54,slow=3.8,SNR=4.3
**OBN Obninsk 64.19 322**⇓ *eP* **P 22 58 18.4 +0.2**
OBN *eS **S 23 06 51.3 +7.3**
OBN pmax pmax
comp=Z,31nm,1.7s
**OBN Obninsk 64.19 322** *eP* **P 22 58 18.4 +0.2**
**C09A Chrisman Ranch 64.49 48** P **P 22 58 20.2 -0.2**
**D08A Wollman Farm, 64.58 49** P **P 22 58 22.2 +1.3**
D08A IAmb IAmb 22 58 23.1
comp=Z,7.4nm,0.8s
**SUMG Summit 64.64 1** P **P 22 58 22.0 +0.5**
SUMG pmax pmax
comp=Z,12nm,0.7s
**SUMG Summit 64.64 1** *i* P **P 22 58 20.8 -0.6**
SUMG IAmb IAmb 22 58 22.1
comp=Z,8.7nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SUMG** | **Summit** | **64.64** | **1** | P | **P** | **22 58 22.0** | **+0.5** | |
| **LPSR** | **Galich'ya Gora** | **64.66** | **319** | *e*P | **P** | **22 58 20.4** | **-1.0** | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **NEW** | **Newport** | **64.83** | **47** | P | **P** | **22 58 24.2** | **+1.6** | |
| NEW | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| **E08A** | **Dider Farm, El** | **64.84** | **49** | P | **P** | **22 58 23.9** | **+1.3** | |
| **E09A** | **Wood Farm, Sta** | **65.33** | **49** | P | **P** | **22 58 27.6** | **+1.7** | |
| **PINE** | **Pine Mountain** | **65.38** | **52** | P | **P** | **22 58 28.6** | **+2.2** | |
| **VSR** | **Storozhevoye** | **65.41** | **318** | *e*P | **P** | **22 58 22.2** | **-4.0** | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **VORD** | **Divnogorie** | **65.50** | **318** | *e*P | **P** | **22 58 25.5** | **-1.3** | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **65.56** | **55** | P | **P** | **22 58 29.6** | **+2.0** | |
| YBH | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **65.56** | **55** | P | **P** | **22 58 29.6** | **+2.0** | |
| YBH | | | | IAmb | IAmb | 22 58 30.4 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **VSU** | **Vasula** | **66.02** | **329** | *e*P | **P** | **22 58 29.6** | **-0.4** | |
| **NSS** | **Namsos** | **66.16** | **339** | *e*P | **P** | **22 58 30.5** | **-0.3** | |
| **JTMT** | **Jette** | **66.65** | **46** | P | **P** | **22 58 35.2** | **+0.8** | |
| JTMT | | | | IAmb | IAmb | 22 58 37.0 | | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| **BMO** | **Blue Mountains** | **66.81** | **50** | P | **P** | **22 58 36.6** | **+1.2** | |
| BMO | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **BMO** | **Blue Mountains** | **66.81** | **50** | P | **P** | **22 58 36.6** | **+1.2** | |
| BMO | | | | IAmb | IAmb | 22 58 37.9 | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **MTSE** | **Matsula** | **66.92** | **330** | *e*P | **P** | **22 58 34.7** | **-1.0** | |
| **ASAR** | **Alice Springs** | **66.98** | **189** | P | **P** | **22 58 38.3** | **+1.8** | |
| | comp=Z,2.8nm,0.8s,baz=11,slow=6.4,SNR=24 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 59 05.2** | **+1.3** | |
| | comp=Z,0.5nm,0.7s,baz=3.4,slow=4.6,SNR=1.7 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **67.07** | **52** | P | **P** | **22 58 38.0** | **+0.8** | |
| J08A | | | | IAmb | IAmb | 22 58 40.4 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **GOF** | **Gofitskoye** | **67.22** | **311⇑** | *e*P | **P** | **22 58 38.7** | **+0.8** | |
| **PLID** | **Pearl Lake** | **67.39** | **49** | P | **P** | **22 58 39.8** | **+0.5** | |
| **MSO** | **Missoula** | **67.41** | **47** | P | **P** | **22 58 40.1** | **+0.9** | |
| MSO | | | | IAmb | IAmb | 22 58 41.4 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **ORV** | **Oroville** | **67.61** | **56** | P | **P** | **22 58 40.9** | **+0.4** | |
| ORV | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **ORV** | **Oroville** | **67.61** | **56** | P | **P** | **22 58 40.9** | **+0.4** | |
| **FFC** | **Flin Flon** | **67.85** | **35** | P | **P** | **22 58 42.6** | **+0.9** | |
| FFC | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **FFC** | **Flin Flon** | **67.85** | **35** | P | **P** | **22 58 42.6** | **+0.9** | |
| FFC | | | | IAmb | IAmb | 22 58 43.3 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **FCC** | **Fort Churchill** | **67.95** | **28** | P | **P** | **22 58 42.5** | **+0.3** | |
| FCC | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **FCC** | **Fort Churchill** | **67.95** | **28** | P | **P** | **22 58 42.5** | **+0.3** | |
| FCC | | | | IAmb | IAmb | 22 58 43.0 | | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **BEKR** | **Beckworth** | **68.11** | **56** | P | **P** | **22 58 43.8** | **-0.1** | |
| BEKR | | | | IAmb | IAmb | 22 58 46.0 | | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **KIV** | **Kislovodsk** | **68.11** | **310** | ⇓P | **P** | **22 58 44.9** | **+1.2** | |
| **KIV** | **Kislovodsk** | **68.11** | **310** | *e*P | **P** | **22 58 45.0** | **+1.3** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **68.11** | **310** | P | **P** | **22 58 44.9** | **+1.2** | |
| **ICESG** | **Greenland Ices** | **68.13** | **1** | *i* P | **P** | **22 58 42.4** | **-1.2** | |
| ICESG | | | | IAmb | IAmb | 22 58 44.1 | | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **68.14** | **310** | P | **P** | **22 58 44.3** | **+0.7** | |
| | comp=Z,6.7nm,0.8s,baz=65,slow=3.6,SNR=20 | | | | | | | |
| **KBZ** | **Khabaz** | **68.14** | **310** | *ce*P | **P** | **22 58 44.0** | **+0.4** | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **68.14** | **310** | *e*P | **P** | **22 58 44.0** | **+0.4** | |
| **ZEI** | **Tsey** | **68.16** | **309** | *e*P | **P** | **22 58 42.8** | **-1.3** | |
| ZEI | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **MNK** | **Minsk** | **68.34** | **325** | *i* P | **P** | **22 58 41.8** | **-3.0** | |
| MNK | | | | *i* *PP | **pP** | **22 59 17.7** | **-1.5** | |
| MNK | | | | *i* | | 23 01 14.4 | | |
| MNK | | | | *i* PPP | PPP | 23 02 53.7 | | |
| MNK | | | | *i* S | **S** | **23 07 31.9** | **-2.4** | |
| MNK | | | | *i* *SS | **sS** | **23 08 32.4** | **-0.4** | |
| MNK | | | | *i* SS | **SS** | **23 11 59.1** | **-0.2** | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,4.0nm,1.2s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,13nm,1.5s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,132nm,20.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,125nm,19.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,12nm,16.0s | | | | | | | |
| **MNK** | **Minsk** | **68.34** | **325** | *i* P | **P** | **22 58 41.9** | **-2.9** | |
| | comp=E,4.0nm,1.2s | | | | | | | |
| MNK | | | | *i* P | **P** | **22 58 41.9** | **-2.9** | |
| | comp=N,13nm,1.5s | | | | | | | |
| MNK | | | | *i* P | **P** | **22 58 41.9** | **-2.9** | |
| | comp=Z,22nm,0.9s,baz=45 | | | | | | | |
| MNK | | | | *i* pP | **pP** | **22 59 17.7** | **-1.5** | |
| MNK | | | | *i* PP | **PP** | **23 01 14.5** | **-2.3** | |
| MNK | | | | *i* PPP | PPP | 23 02 53.7 | | |
| MNK | | | | *i* S | **S** | **23 07 31.9** | **-2.4** | |
| MNK | | | | *i* sS | **sS** | **23 08 32.4** | **-0.4** | |
| MNK | | | | *i* SS | **SS** | **23 11 59.1** | **-0.2** | |
| MNK | | | | *i* SSS | SSS | 23 15 12.8 | | |
| MNK | | | | *i* LRM | MLR | 23 33 12.9 | | |
| | comp=N,132nm,19.7s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 23 33 36.5 | | |
| | comp=Z,125nm,19.1s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 23 33 41.6 | | |
| | comp=E,12nm,15.9s | | | | | | | |
| **IIGN** | **Ignalina** | **68.42** | **327** | *e*P | **P** | **22 58 45.4** | **+0.2** | |
| **NACGM** | **Naroch** | **68.51** | **326** | *i* P | **P** | **22 58 46.3** | **+0.5** | |
| **ONI** | **Oni** | **68.54** | **309** | P | **P** | **22 58 46.6** | **+0.3** | |
| ONI | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ONI** | **Oni** | **68.54** | **309** | P | **P** | **22 58 46.6** | **+0.3** | |
| ONI | | | | IAmb | IAmb | 22 58 48.6 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **HRY** | **Holter Researc** | **68.60** | **46** | P | **P** | **22 58 46.8** | **+0.2** | |
| **PAHR** | **Pah Rah Range** | **68.80** | **55** | P | **P** | **22 58 47.8** | **-0.3** | |
| **EGMT** | **Eagleton** | **68.81** | **44** | P | **P** | **22 58 48.4** | **+0.5** | |
| EGMT | | | | IAmb | IAmb | 22 58 49.9 | | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| **EMB** | **Emerald Bay** | **68.82** | **56** | P | **P** | **22 58 49.0** | **+0.7** | |
| EMB | | | | IAmb | IAmb | 22 58 50.7 | | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **LRM** | **Limekiln Ridge** | **68.85** | **47** | P | **P** | **22 58 49.0** | **+0.6** | |
| **NC405** | **NORSAR Array S** | **68.99** | **337** | P | **P** | **22 58 48.6** | **-0.1** | |
| **NC303** | **NORSAR Array S** | **69.00** | **337** | P | **P** | **22 58 48.7** | **0.0** | |
| **NB2** | **NORSAR Subarra** | **69.19** | **337** | P | **P** | **22 58 49.5** | **-0.5** | |
| | comp=Z,7.5nm,0.6s,baz=35,slow=6.5 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.19** | **337** | P | **P** | **22 58 49.5** | **-0.5** | |
| | baz=35,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.19** | **337** | P | **P** | **22 58 49.9** | **-0.1** | |
| | comp=Z,7.9nm,0.7s,baz=35,slow=6.1,SNR=38 | | | | | | | |
| **HLID** | **Hailey** | **69.24** | **49** | P | **P** | **22 58 51.9** | **+1.2** | |
| **YERR** | **Yerington** | **69.34** | **56** | P | **P** | **22 58 53.0** | **+1.5** | |
| YERR | | | | IAmb | IAmb | 22 58 54.0 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **NORES** | **NORESS Array B** | **69.35** | **337** | P | **P** | **22 58 50.7** | **-0.2** | |
| **BOZ** | **Bozeman (W)** | **69.43** | **46** | P | **P** | **22 58 53.1** | **+1.2** | |
| BOZ | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **69.43** | **46** | P | **P** | **22 58 53.1** | **+1.2** | |
| BOZ | | | | IAmb | IAmb | 22 58 54.1 | | |
| | comp=Z,7.9nm,0.7s | | | | | | | |
| **VIKU** | **Vikbolandet** | **69.54** | **333** | *e*P | **P** | **22 58 51.9** | **-0.1** | |
| **KVN** | **Kaiserville** | **69.98** | **55** | P | **P** | **22 58 55.9** | **+0.5** | |
| KVN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **69.98** | **55** | P | **P** | **22 58 55.9** | **+0.5** | |
| KVN | | | | IAmb | IAmb | 22 58 58.0 | | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **LHV** | **Little Huntoon** | **70.25** | **56** | P | **P** | **22 58 58.5** | **+1.8** | |
| LHV | | | | IAmb | IAmb | 22 58 60.0 | | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **70.26** | **56** | P | **P** | **22 58 58.8** | **+1.7** | |
| | comp=Z,2.7nm,0.8s,baz=294,slow=5.8,SNR=16 | | | | | | | |
| **YHH** | **Holmes Hill** | **70.38** | **47** | P | **P** | **22 58 58.9** | **+1.0** | |
| **AKASG** | **Malin Array Be** | **70.44** | **322** | P | **P** | **22 58 57.6** | **-0.1** | |
| | comp=Z,3.7nm,0.6s,baz=42,slow=6.3,SNR=19 | | | | | | | |
| **AKBB** | **Malin Array Si** | **70.44** | **322** | *ce*P | **P** | **22 58 57.8** | **+0.1** | |
| **AKBB** | **Malin Array Si** | **70.44** | **322** | P | **P** | **22 58 57.5** | **-0.2** | |
| AKBB | | | | IAmb | IAmb | 22 59 01.1 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **DY2G** | **Dye2** | **70.53** | **4** | *i* P | **P** | **22 58 56.2** | **-2.1** | |
| DY2G | | | | IAmb | IAmb | 22 58 58.5 | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **FRB** | **Frobisher Bay** | **70.55** | **14** | P | **P** | **22 58 53.7** | **-4.4** | |
| FRB | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **H17A** | **Grant Village** | **70.78** | **47** | P | **P** | **22 58 59.6** | **-0.7** | |
| H17A | | | | IAmb | IAmb | 22 59 04.3 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **MOOW** | **Moose Ponds** | **71.13** | **47** | P | **P** | **22 59 01.7** | **-0.6** | |
| **ASK** | **Askoy** | **71.28** | **340** | *e*P | **P** | **22 59 02.9** | **+0.3** | |
| **HVU** | **Hansel Valley** | **71.31** | **50** | P | **P** | **22 59 04.4** | **+1.0** | |
| HVU | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **HVU** | **Hansel Valley** | **71.31** | **50** | P | **P** | **22 59 04.3** | **+1.0** | |
| **REDW** | **Red Top Meadow** | **71.33** | **48** | P | **P** | **22 59 03.3** | **-0.2** | |
| **BER** | **Bergen** | **71.33** | **339** | *e*P | **P** | **22 59 03.2** | **+0.3** | |
| **LCH** | **Last Change Ra** | **71.42** | **56** | P | **P** | **22 59 05.0** | **+0.9** | |
| **R11A** | **Troy Canyon, C** | **71.94** | **54** | P | **P** | **22 59 07.6** | **+0.4** | |
| **DUG** | **Dugway, Tooele** | **72.34** | **51** | P | **P** | **22 59 09.4** | **-0.1** | |
| DUG | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **72.34** | **51** | P | **P** | **22 59 09.4** | **-0.1** | |
| DUG | | | | IAmb | IAmb | 22 59 12.2 | | |
| | comp=Z,8.8nm,1.2s | | | | | | | |
| **PD31** | **Pinedale Array** | **72.43** | **48** | P | **P** | **22 59 10.3** | **+0.2** | |
| **PDAR** | **Pinedale Array** | **72.43** | **48** | P | **P** | **22 59 11.1** | **+0.9** | |
| | comp=Z,3.3nm,0.5s,baz=264,slow=1.6,SNR=44 | | | | | | | |
| **PDAR** | **Pinedale Array** | **72.43** | **48** | P | **P** | **22 59 10.8** | **+0.7** | |
| **SORM** | **Soroca** | **72.67** | **321** | ⇓P | **P** | **22 59 10.6** | **-0.5** | |
| **QSM** | **Queen of Sheba** | **72.72** | **57** | P | **P** | **22 59 12.4** | **+0.8** | |
| QSM | | | | IAmb | IAmb | 22 59 14.1 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **PURM** | **Purcari** | **73.10** | **319** | ⇓P | **P** | **22 59 14.1** | **+0.5** | |
| **MILM** | **Milestii Mici** | **73.33** | **319** | ⇓P | **P** | **22 59 15.2** | **+0.2** | |
| **SHPR** | **Sheep Range** | **73.41** | **55** | P | **P** | **22 59 15.4** | **-0.4** | |
| **MARD** | **Mardin** | **73.53** | **306** | P | **P** | **22 59 16.7** | **+0.2** | |
| MARD | | | | IAmb | IAmb | 22 59 18.6 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **73.67** | **35** | P | **P** | **22 59 17.9** | **+1.0** | |
| | comp=Z,3.1nm,0.7s,baz=332,slow=4.8,SNR=4.3 | | | | | | | |
| **RDMU** | **Red Mountain** | **73.92** | **49** | P | **P** | **22 59 18.4** | **-0.4** | |
| RDMU | | | | IAmb | IAmb | 22 59 20.9 | | |
| | comp=Z,8.7nm,0.7s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **74.01** | **51** | P | **P** | **22 59 19.9** | **+0.5** | |
| **VASR** | **Vaslui** | **74.01** | **320** | ⇓P | **P** | **22 59 19.7** | **+0.7** | |
| **KWP** | **Kalwaria Pacla** | **74.09** | **324** | P | **P** | **22 59 19.9** | **+0.5** | |
| KWP | | | | pmax | pmax | | | |
| | comp=Z,92nm,1.0s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **74.09** | **324** | P | **P** | **22 59 19.9** | **+0.5** | |
| **SRU** | **San Rafael Swe** | **74.38** | **51** | P | **P** | **22 59 22.1** | **+0.6** | |
| SRU | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **SRU** | **San Rafael Swe** | **74.38** | **51** | P | **P** | **22 59 22.1** | **+0.6** | |
| SRU | | | | IAmb | IAmb | 22 59 23.7 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **RSSD** | **Black Hills** | **74.38** | **44** | P | **P** | **22 59 21.4** | **-0.1** | |
| RSSD | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **RSSD** | **Black Hills** | **74.38** | **44** | P | **P** | **22 59 21.4** | **-0.1** | |
| **BUR08** | **Bucovina Ar. S** | **74.48** | **322** | P | **P** | **22 59 22.3** | **+0.5** | |
| BUR08 | | | | IAmb | IAmb | 22 59 23.3 | | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **BURAR** | **Bucovina Array** | **74.49** | **322** | ⇓P | **P** | **22 59 22.7** | **+0.7** | |
| **GHRR** | | **74.62** | **320** | ⇑P | **P** | **22 59 22.7** | **+0.2** | |
| **TESR** | **Tescani** | **74.65** | **320** | ⇑P | **P** | **22 59 22.8** | **+0.1** | |
| **OJC** | **Ojcow** | **74.85** | **326** | P | **P** | **22 59 24.2** | **+0.4** | |
| OJC | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **OJC** | **Ojcow** | **74.85** | **326** | P | **P** | **22 59 24.2** | **+0.4** | |
| OJC | | | | IAmb | IAmb | 22 59 25.5 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **CFR** | **Carcaliu** | **74.91** | **318** | ⇑P | **P** | **22 59 24.5** | **+0.3** | |
| **VRI** | **Vrincioaia** | **75.08** | **320** | ⇑P | **P** | **22 59 25.8** | **+0.6** | |
| **PLOR** | **Plostina** | **75.13** | **320** | ⇓P | **P** | **22 59 25.0** | **-0.6** | |
| **CRVS** | **Cervenica-Dubn** | **75.17** | **325** | *e*P | **P** | **22 59 26.9** | **+1.2** | |
| **CRVS** | **Cervenica-Dubn** | **75.17** | **325** | *e*P | **P** | **22 59 26.9** | **+1.2** | |
| **TRPA** | **Tarpa** | **75.30** | **324** | ⇑P | **P** | **22 59 27.2** | **+0.9** | |
| **BNN** | **Bunyan** | **75.34** | **310** | P | **P** | **22 59 27.2** | **+0.2** | |
| BNN | | | | IAmb | IAmb | 22 59 28.7 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **HARR** | **Harsova** | **75.37** | **318** | ⇑P | **P** | **22 59 25.3** | **-1.5** | |
| **MLR** | **Muntele Rosu** | **75.73** | **320** | ⇓P | **P** | **22 59 29.2** | **+0.1** | |
| **KSP** | **Ksiaz** | **75.74** | **329** | P | **P** | **22 59 30.0** | **+1.1** | |
| KSP | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **75.87** | **51** | P | **P** | **22 59 30.3** | **+0.2** | |
| PV11 | | | | IAmb | IAmb | 22 59 32.5 | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.96** | **312** | P | **P** | **22 59 31.0** | **+0.5** | |
| | comp=Z,0.9nm,0.6s,baz=86,slow=3.3,SNR=8.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.96** | **312** | *ce*P | **P** | **22 59 31.2** | **+0.7** | |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **OSTC** | **Ostas** | **76.00** | **328** | *e*P | **P** | **22 59 30.9** | **+0.5** | |
| **PV13** | **Radium Mtn., P** | **76.00** | **51** | P | **P** | **22 59 31.6** | **+0.7** | |
| PV13 | | | | IAmb | IAmb | 22 59 33.3 | | |
| | comp=Z,9.2nm,0.9s | | | | | | | |
| **CHVC** | **Chvalec** | **76.03** | **328** | *e*P | **P** | **22 59 30.8** | **+0.2** | |
| **MORC** | **Moravsky Berou** | **76.10** | **327** | ⇓P | **P** | **22 59 31.7** | **+0.7** | |
| **MORC** | **Moravsky Berou** | **76.10** | **327** | P | **P** | **22 59 31.0** | **0.0** | |
| MORC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **MORC** | **Moravsky Berou** | **76.10** | **327** | P | **P** | **22 59 31.0** | **0.0** | |
| MORC | | | | IAmb | IAmb | 22 59 32.3 | | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| **MORC** | **Moravsky Berou** | **76.10** | **327** | *e*P | **P** | **22 59 31.7** | **+0.7** | |
| **UPC** | **Upice** | **76.11** | **328** | *e*P | **P** | **22 59 31.9** | **+0.9** | |
| **DPC** | **Dobruska-Polom** | **76.12** | **328** | P | **P** | **22 59 32.4** | **+1.3** | |
| DPC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.8s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **76.12** | **328** | *e*P | **P** | **22 59 31.3** | **+0.2** | |
| **KRLC** | **Kraliky** | **76.16** | **328** | *e*P | **P** | **22 59 32.1** | **+0.8** | |
| **VOIR** | | **76.19** | **320** | ⇓P | **P** | **22 59 30.0** | **-1.6** | |
| **ARR** | **Arges** | **76.44** | **321** | ⇑P | **P** | **22 59 32.3** | **-0.7** | |
| **CLL** | **Collm** | **76.58** | **331** | *i* P | **P** | **22 59 33.7** | **+0.1** | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **76.58** | **331** | *i* P | **P** | **22 59 33.7** | **+0.1** | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **76.58** | **331** | P | **P** | **22 59 34.0** | **+0.4** | |
| CLL | | | | IAmb | IAmb | 22 59 34.6 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **VYHS** | **Vyhne** | **76.59** | **326** | *e*P | **P** | **22 59 34.6** | **+0.9** | |
| **VYHS** | **Vyhne** | **76.59** | **326** | *e*P | **P** | **22 59 34.6** | **+0.9** | |
| **PVCC** | **Panska Ves** | **76.64** | **329** | *e*P | **P** | **22 59 34.5** | **+0.5** | |
| **JAVC** | **Velka Javorina** | **76.78** | **327** | *e*P | **P** | **22 59 36.4** | **+1.6** | |
| **MVCO** | **Mesa Verde** | **76.84** | **51** | P | **P** | **22 59 36.5** | **+0.8** | |
| **VRAC** | **Vranov** | **76.85** | **327** | ⇑P | **P** | **22 59 35.9** | **+0.7** | |
| **VRAC** | **Vranov** | **76.85** | **327** | *e*P | **P** | **22 59 35.9** | **+0.7** | |
| **X16A** | **Lo Mia Camp, P** | **77.05** | **55** | P | **P** | **22 59 37.6** | **+0.8** | |
| **PRU** | **Pruhonice** | **77.09** | **329** | *e*P | **P** | **22 59 37.2** | **+0.7** | |
| **KRUC** | **Moravsky** | **77.12** | **327** | *e*P | **P** | **22 59 37.3** | **+0.6** | |
| **GZR** | **Gura Zlata** | **77.28** | **322** | ⇑P | **P** | **22 59 36.6** | **-1.1** | |
| **S22A** | **4UR Ranch, Cre** | **77.41** | **50** | P | **P** | **22 59 39.1** | **+0.3** | |
| **K31A** | **O'Neill** | **78.10** | **42** | P | **P** | **22 59 42.7** | **+0.4** | |
| **CKRC** | **Cesky Krumlov** | **78.13** | **328** | *e*P | **P** | **22 59 42.5** | **+0.2** | |
| **KHC** | **Kasperske Hory** | **78.16** | **329** | P | **P** | **22 59 41.3** | **-1.2** | |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **78.16** | **329** | *e*P | **P** | **22 59 42.9** | **+0.4** | |
| **KHC** | **Kasperske Hory** | **78.16** | **329** | P | **P** | **22 59 41.3** | **-1.2** | |
| KHC | | | | IAmb | IAmb | 22 59 44.2 | | |
| | comp=Z,5.5nm,0.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **78.25** | **327** | *e*P | **P** | **22 59 44.4** | **+1.3** | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **78.29** | **40** | P | **P** | **22 59 43.7** | **+0.4** | |
| ECSD | | | | IAmb | IAmb | 22 59 44.7 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **E38A** | **The Farm, Brul** | **78.31** | **35** | P | **P** | **22 59 43.3** | **0.0** | |
| **GERES** | **GERESS Array B** | **78.34** | **329** | P | **P** | **22 59 43.9** | **+0.3** | |
| | comp=Z,1.2nm,0.6s,baz=42,slow=6.3,SNR=14 | | | | | | | |
| **MOA** | **Molln** | **78.94** | **328** | *e*P | **P** | **22 59 47.9** | **+1.2** | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **SCHQ** | **Schefferville** | **79.12** | **17** | P | **P** | **22 59 48.0** | **+0.4** | |
| | comp=Z,3.4nm,0.6s,baz=350,slow=7.5,SNR=7.9 | | | | | | | |
| **VTS** | **Vitosha** | **79.18** | **319** | ⇑P | **P** | **22 59 48.5** | **+0.1** | |
| **VTS** | **Vitosha** | **79.18** | **319** | P | **P** | **22 59 48.9** | **+0.6** | |
| VTS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **VTS** | **Vitosha** | **79.18** | **319** | P | **P** | **22 59 48.9** | **+0.6** | |
| VTS | | | | IAmb | IAmb | 22 59 50.2 | | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **T25A** | **Trinidad** | **79.19** | **49** | P | **P** | **22 59 49.3** | **+0.7** | |
| T25A | | | | IAmb | IAmb | 22 59 50.1 | | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **79.59** | **327** | *e*P | **P** | **22 59 50.6** | **+0.2** | |
| | comp=Z,2.4nm,0.6s,SNR=5.4 | | | | | | | |
| **ANMO** | **Albuquerque** | **79.61** | **52** | P | **P** | **22 59 51.4** | **+0.5** | |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **ANMO** | **Albuquerque** | **79.61** | **52** | P | **P** | **22 59 51.4** | **+0.5** | |
| **OBKA** | **Obir** | **79.92** | **327** | *e*P | **P** | **22 59 53.0** | **+0.8** | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **79.93** | **328** | *i* P | **P** | **22 59 53.5** | **+1.1** | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| **WATA** | **Walderalm** | **80.39** | **329** | *e*P | **P** | **22 59 55.7** | **+0.9** | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **80.43** | **329** | *e*P | **P** | **22 59 55.6** | **+0.5** | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **80.53** | **328** | *e*P | **P** | **22 59 57.6** | **+2.2** | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **121A** | **Cookes Peak, D** | **80.55** | **54** | P | **P** | **22 59 55.9** | **-0.1** | |
| **MOTA** | **Moosalm** | **80.56** | **329** | *e*P | **P** | **22 59 56.1** | **+0.4** | |
| | comp=Z,6.2nm,0.9s,SNR=6.2 | | | | | | | |
| **RETA** | **Reutte** | **80.57** | **330** | *i* P | **P** | **22 59 56.3** | **+0.7** | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **FETA** | **Feichten** | **80.97** | **329** | *e*P | **P** | **22 59 58.7** | **+0.8** | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **DAVA** | **Damuels** | **81.07** | **330** | *e*P | **P** | **22 59 59.2** | **+0.8** | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **VLDQ** | **Val d'Or** | **82.33** | **26** | P | **P** | **23 00 04.3** | **-0.4** | |
| **P38A** | **Dawn** | **82.92** | **41** | P | **P** | **23 00 08.2** | **+0.1** | |
| P38A | | | | IAmb | IAmb | 23 00 09.1 | | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **T35A** | **Sooner Cattle** | **83.56** | **44** | P | **P** | **23 00 12.0** | **+0.7** | |
| T35A | | | | IAmb | IAmb | 23 00 13.2 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **CCM** | **Cathedral Cave** | **85.25** | **40** | P | **P** | **23 00 20.1** | **+0.3** | |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **CCM** | **Cathedral Cave** | **85.25** | **40** | P | **P** | **23 00 20.1** | **+0.3** | |
| CCM | | | | IAmb | IAmb | 23 00 21.3 | | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.30** | **54** | P | **P** | **23 00 21.2** | **+0.9** | |
| **TX32** | **Lajitas Array** | **85.30** | **54** | P | **P** | **23 00 21.2** | **+0.9** | |
| TX32 | | | | IAmb | IAmb | 23 00 22.3 | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.30** | **54** | P | **P** | **23 00 21.4** | **+1.1** | |
| | comp=Z,3.6nm,0.6s,baz=294,slow=3.4,SNR=37 | | | | | | | |
| **P46A** | **Rosedale** | **85.83** | **37** | P | **P** | **23 00 23.5** | **+0.8** | |
| **U40A** | **Yellville** | **85.83** | **42** | P | **P** | **23 00 23.2** | **+0.5** | |
| **S44A** | **Carbondale** | **86.48** | **39** | P | **P** | **23 00 26.4** | **+0.6** | |
| **FCAR** | **Ozark Folk Cen** | **86.56** | **42** | P | **P** | **23 00 26.5** | **+0.2** | |
| FCAR | | | | IAmb | IAmb | 23 00 27.3 | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **F62A** | **Pittston Farm,** | **86.59** | **23** | P | **P** | **23 00 27.1** | **+0.9** | |
| **O54A** | **Avella** | **88.18** | **32** | P | **P** | **23 00 34.2** | **+0.2** | |
| **U49A** | **Red Boiling Sp** | **89.03** | **38** | P | **P** | **23 00 38.0** | **0.0** | |
| **ATD** | **Arta Tunnel** | **89.76** | **285** | LR | LR | 23 45 11.1 | | |
| | comp=Z,25nm,19.2s,baz=86,slow=38 | | | | | | | |
| **ESDC** | **Sonseca Array** | **92.48** | **335** | P | **P** | **23

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,2.7nm,0.8s | | | | | | | | | |
| ABKAR | **Akbulak array** | **57.11** | **317** | P | **P** | **23 15 05.2** | **+1.4** | | | |
| J20K | **Nowinta River** | **72.01** | **27** | P | **P** | **23 16 41.9** | **+1.0** | | | |
| IMAR | **Indian Mountai** | **72.05** | **25** | P | **P** | **23 16 42.0** | **+0.9** | | | |
| CAST | **Castle Rocks** | **72.99** | **28** | P | **P** | **23 16 47.9** | **+1.1** | | | |
| CAST | | | | IAmb | IAmb | 23 16 53.5 | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | | | | |
| SCM | **Sheep Creek Mo** | **75.40** | **29** | P | **P** | **23 17 02.5** | **+1.6** | | | |
| SCM | | | | IAmb | IAmb | 23 17 09.2 | | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | | |
| BMAR | **Burnt Mountain** | **75.45** | **23** | P | **P** | **23 17 02.1** | **+1.0** | | | |
| KBS | **Kingsbay** | **75.78** | **349** | P | **P** | **23 17 04.1** | **+1.4** | | | |
| M24K | **Tolsona, Glenn** | **75.88** | **29** | P | **P** | **23 17 06.0** | **+2.3** | | | |
| M24K | | | | IAmb | IAmb | 23 17 07.1 | | | | |
| | comp=Z,8.3nm,0.9s | | | | | | | | | |
| FINES | **FINESS Array B** | **76.21** | **330** | P | **P** | **23 17 04.5** | **-0.9** | | | |
| | comp=Z,2.0nm,1.0s,baz=356,slow=6.3,SNR=3.4 | | | | | | | | | |
| FINES | **FINESS Array B** | **76.21** | **330** | P | **P** | **23 17 04.5** | **-0.9** | | | |
| M26K | **Nabesna, AK** | **77.26** | **28** | P | **P** | **23 17 12.6** | **+1.1** | | | |
| M26K | | | | IAmb | IAmb | 23 17 19.0 | | | | |
| | comp=Z,3.1nm,1.1s | | | | | | | | | |
| L27K | **Beaver Creek,** | **77.61** | **27** | P | **P** | **23 17 14.8** | **+1.4** | | | |
| BCAR | **Beaver Creek A** | **77.63** | **27** | P | **P** | **23 17 15.2** | **+1.7** | | | |
| EPYK | **Eagle Plains** | **78.72** | **24** | P | **P** | **23 17 19.7** | **+0.2** | | | |
| M30M | **Minto, Yukon** | **79.96** | **27** | P | **P** | **23 17 27.4** | **+1.1** | | | |
| M30M | | | | IAmb | IAmb | 23 17 32.4 | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | | |
| BURAR | **Bucovina Array** | **80.09** | **317** | P | **P** | **23 17 28.1** | **+0.7** | | | |
| C36M | **Paulatuk** | **81.84** | **19** | P | **P** | **23 17 36.2** | **+0.1** | | | |
| VOI | **Vohitsoka** | **82.04** | **244** | P | **P** | **23 17 39.2** | **+1.0** | | | |
| VOI | | | | IAmb | IAmb | 23 17 54.8 | | | | |
| | comp=Z,6.7nm,1.0s | | | | | | | | | |
| NC405 | **NORSAR Array S** | **82.88** | **332** | P | **P** | **23 17 42.7** | **+1.0** | | | |

*IDC **14** 23:07:03.4±8.2,38°.11N×72°.45E,h139km±53km,mb3.4/3, mb1 3.2/7,mb1mx2.7/51,mbtmp3.5/7,Error ellipse: s-maj=70.5km s-min=49.5km az=0.0*
*NNC **14** 23:07:03.6±3.6,38°.28N×72°.08E,h158km±79km,mb2.4, mpv3.3,Error ellipse: s-maj=46.1km s-min=22.5km az=14.0*

**ISC 14 23:07:00.3±2.0,38°.0N±0°.2×72°.1E±0°.1,h113km,n11, σ0s87/14,mb3.9/3,1C-3D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | **Ala-Archa** | **4.95** | **21** | P | **Pn** | **23 08 13.9** | **+1.3** |
| | 0.8nm,0.3s,baz=184,slow=8.3,SNR=11 | | | | | | |
| AAK | | | | S | **Sn** | **23 09 09.2** | **+0.3** |
| | 0.9nm,0.3s,baz=315,slow=24,SNR=7.2 | | | | | | |
| AAK | **Ala-Archa** | **4.95** | **21** | ⇓P | **Pn** | **23 08 13.4** | **+0.8** |
| | 1.9nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **23 09 08.9** | **+0.1** |
| | 10.0nm,0.5s | | | | | | |
| KK02 | **Karatay Array** | **5.20** | **347** | ⇑P | **Pn** | **23 08 16.8** | **+1.0** |
| | 3.4nm,0.4s | | | | | | |
| KK02 | | | | ⇓S | **Sn** | **23 09 14.1** | **-0.5** |
| | 5.5nm,0.4s | | | | | | |
| MKAR | **Makanchi Array** | **11.54** | **37** | P | **Pn** | **23 09 40.9** | **-0.7** |
| | 0.0nm,0.3s,baz=226,slow=14,SNR=2.9 | | | | | | |
| KURBB | **Kurchatov Arra** | **13.39** | **18** | P | **P** | **23 10 10.6** | **-0.5** |
| | 0.0nm,0.3s,baz=207,slow=10,SNR=5.2 | | | | | | |
| AB31 | **Akbulak array** | **14.22** | **326** | P | **Pn** | **23 10 15.3** | **-1.1** |
| | 0.2nm,0.3s,baz=132,slow=13,SNR=5.0 | | | | | | |
| BVAR | **Borovoye Array** | **15.04** | **356** | P | **P** | **23 10 29.3** | **0.0** |
| | 0.2nm,0.3s,baz=95,slow=12,SNR=5.9 | | | | | | |
| ZALV | **Zalesovo Beam** | **18.16** | **25** | P | **P** | **23 11 03.1** | **-0.7** |
| | 0.2nm,0.3s,baz=206,slow=12,SNR=4.2 | | | | | | |
| FINES | **FINESS Array B** | **36.71** | **325** | P | **P** | **23 13 57.1** | **+1.1** |
| | 2.4nm,1.0s,baz=104,slow=18,SNR=1.7 | | | | | | |
| ARCES | **ARCESS Array B** | **40.07** | **337** | P | **P** | **23 14 25.1** | **+1.0** |
| | 2.3nm,1.0s,baz=115,slow=10,SNR=1.1 | | | | | | |
| YKA | **Yellowknife Ar** | **79.67** | **3** | P | **P** | **23 18 54.7** | **-0.2** |
| | 0.3nm,0.6s,baz=349,slow=5.8,SNR=5.6 | | | | | | |

*IDC **14** 23:52:26.9±3.0,2°.62S×132°.96E,h0km,mb3.8/2, mb1 4.2/4,mb1mx3.7/34,mbtmp4.0/4,ML3.8/2,MS3.2/8, Ms1 3.2/8,ms1mx2.9/61,Error ellipse: s-maj=133.0km s-min=28.0km az=79.0*
*NEIC **14** 23:52:31.2±2.0,2°.69S±0°.06×132°.5E±0°.2,h15km±6km, mb4.0/8,Error ellipse: s-maj=24.7km s-min=8.6km az=83.0*

**ISC 14 23:52:33.2±1.2,2°.85S±0°.09×132°.5E±0°.2,h35km,n24, σ2s22/21,mb4.1/3,MS3.0/6,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | **Ternate** | **6.28** | **305** | Pn | **Pn** | **23 54 01.6** | **-1.8** |
| MTN | **Manton Dam** | **10.02** | **188** | | **Pn** | **23 54 56.5** | **+1.6** |
| SOEI | **Soe** | **10.69** | **230** | Pn | **Pn** | **23 55 04.7** | **+0.7** |
| KNRA | **Kununurra** | **13.27** | **196** | | **Pn** | **23 55 41.1** | **+1.8** |
| PMG | **Port Moresby** | **15.94** | **115** | LR | LR | 00 03 59.0 | |
| | comp=Z,146nm,19.4s,baz=274,slow=44 | | | | | | |
| FITZ | **Fitzroy Crossi** | **16.58** | **204** | Pn | **Pn** | **23 56 25.4** | **+2.2** |
| | 0.3nm,0.3s,baz=22,slow=9.0,SNR=10 | | | | | | |
| FITZ | | | | Sn | **Sn** | **23 59 25.1** | **-1.2** |
| | 0.2nm,0.3s,baz=177,slow=5.4,SNR=4.6 | | | | | | |
| WB0 | **Warramunga Arr** | **16.91** | **174** | Pn | **Pn** | **23 56 28.6** | **+1.3** |
| WB0 | | | | IAmb | IAmb | 23 56 46.9 | |
| | comp=Z,16nm,1.4s | | | | | | |
| WRA | **Warramunga Arr** | **17.08** | **174** | P | **Pn** | **23 56 28.5** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=357,slow=12,SNR=11 | | | | | | |
| WRA | | | | S | **Sn** | **23 59 31.1** | **-7.3** |
| | comp=Z,0.2nm,0.3s,baz=0.6,slow=22,SNR=4.1 | | | | | | |
| WRA | | | | LR | LR | 00 04 27.1 | |
| | comp=Z,124nm,19.4s,baz=328,slow=42 | | | | | | |
| WRA | **Warramunga Arr** | **17.08** | **174** | P | **P** | **23 56 31.5** | **+0.6** |
| WB2 | **Warramunga Arr** | **17.08** | **174** | | **Pn** | **23 56 28.9** | **-0.5** |
| AS31 | **Alice Springs** | **20.73** | **176** | P | **P** | **23 57 12.1** | **+1.1** |
| AS31 | | | | IAmb | IAmb | 23 57 25.8 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| ASAR | **Alice Springs** | **20.74** | **176** | P | **P** | **23 57 12.2** | **+1.2** |
| | comp=Z,11nm,0.8s,baz=2.5,slow=12,SNR=58 | | | | | | |
| ASAR | | | | S | **S** | **00 00 59.7** | **-1.1** |
| | comp=Z,2.1nm,0.8s,baz=360,slow=29,SNR=7.4 | | | | | | |
| ASAR | | | | LR | LR | 00 06 13.7 | |
| | comp=Z,101nm,20.3s,baz=28,slow=40 | | | | | | |
| ASAR | **Alice Springs** | **20.74** | **176** | P | **P** | **23 57 12.1** | **+1.1** |
| CTA | **Charters Tower** | **21.75** | **143** | LR | LR | 00 05 49.6 | |
| | comp=Z,40nm,20.7s,baz=302,slow=37 | | | | | | |
| PSA00 | **Pilbara Seismi** | **22.32** | **213** | P | **P** | **23 57 28.7** | **+0.7** |
| PSA00 | | | | IAmb | IAmb | 23 58 11.5 | |
| | comp=Z,12nm,1.6s | | | | | | |
| HNR | **Honiara** | **28.03** | **105** | LR | LR | 00 09 52.4 | |
| | comp=Z,70nm,18.4s,baz=334,slow=38 | | | | | | |
| BBOO | **Buckleboo** | **29.99** | **174** | P | **P** | **23 58 40.5** | **+1.9** |
| STKA | **Stephens Creek** | **30.11** | **164** | P | **P** | **23 58 41.4** | **+1.7** |
| STKA | | | | IAmb | IAmb | 23 59 12.8 | |
| | comp=Z,9.9nm,2.0s | | | | | | |
| CMAR | **Chiang Mai Arr** | **39.26** | **304** | LR | LR | 00 18 44.9 | |
| | comp=Z,8.8nm,19.3s,baz=130,slow=40 | | | | | | |
| KSRS | **Korea Array** | **40.33** | **354** | LR | LR | 00 15 51.0 | |
| | comp=Z,17nm,20.0s,baz=150,slow=35 | | | | | | |
| PALK | **Pallekele** | **52.67** | **281** | LR | LR | 00 25 37.7 | |
| | comp=Z,18nm,19.4s,baz=224,slow=38 | | | | | | |
| MKAR | **Makanchi Array** | **66.23** | **325** | P | **P** | **00 03 17.2** | **-0.5** |
| | comp=Z,0.3nm,0.7s,baz=104,slow=6.1,SNR=4.2 | | | | | | |
| MKAR | **Makanchi Array** | **66.23** | **325** | P | **P** | **00 03 16.0** | **-1.7** |
| MAKZ | **Makanchi** | **66.42** | **325** | P | **P** | **00 03 18.9** | **0.0** |

**IDC 14 23:58:29.1±2.2,1°.81N×126°.16E,h0km,mb3.3/3, mb1 3.5/3,mb1mx3.3/34,mbtmp3.3/3,Error ellipse: s-maj=181.7km s-min=28.1km az=65.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **23.06** | **160** | P | P | 00 03 35.9 | -0.4 |
| | 0.9nm,0.5s,baz=338,slow=11,SNR=7.0 | | | | | | |
| ASAR | **Alice Springs** | **26.42** | **164** | P | P | 00 04 08.2 | +0.5 |
| | 0.2nm,0.3s,baz=346,slow=13,SNR=1.7 | | | | | | |
| MKAR | **Makanchi Array** | **58.81** | **326** | P | P | 00 08 29.2 | -0.1 |
| | 0.2nm,0.5s,baz=128,slow=7.8,SNR=3.5 | | | | | | |

**IDC 15 00:02:17.6±1.6,34°.77S×108°.88W,h0km,mb3.6/3, mb1 4.0/3,mb1mx3.8/22,mbtmp3.6/3,MS3.7/21, Ms1 3.7/21,ms1mx3.5/52,Error ellipse: s-maj=60.9km s-min=43.0km az=168.0,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H03S2 | **Juan Fernandez** | **24.72** | **96** | T | T | 00 33 35.0 | |
| | baz=258 | | | | | | |
| H03S1 | **Juan Fernandez** | **24.74** | **96** | T | T | 00 33 23.7 | |
| | baz=258 | | | | | | |
| H03S3 | **Juan Fernandez** | **24.74** | **96** | T | T | 00 33 23.4 | |
| | baz=258 | | | | | | |
| H03N2 | **Juan Fernandez** | **24.79** | **96** | T | T | 00 33 33.4 | |
| | baz=266,slow=73,SNR=6.5 | | | | | | |
| H03N3 | **Juan Fernandez** | **24.80** | **96** | T | T | 00 33 39.1 | |
| | baz=266,slow=73,SNR=5.1 | | | | | | |
| H03N1 | **Juan Fernandez** | **24.81** | **96** | T | T | 00 33 42.3 | |
| | baz=266,slow=73,SNR=4.7 | | | | | | |
| PLCA | **Paso Flores** | **30.71** | **113** | LR | LR | 00 17 13.7 | |
| | comp=Z,65nm,19.4s,baz=261,slow=29 | | | | | | |
| USHA | **Ushuaia** | **34.36** | **138** | LR | LR | 00 19 19.0 | |
| | comp=Z,182nm,21.1s,baz=250,slow=30 | | | | | | |
| LVC | **Limon Verde** | **36.87** | **82** | LR | LR | 00 20 51.0 | |
| | comp=Z,116nm,18.8s,baz=251,slow=30 | | | | | | |
| NNA | **Nana** | **36.87** | **60** | LR | LR | 00 20 57.7 | |
| | comp=Z,81nm,18.9s,baz=234,slow=30 | | | | | | |
| ATAH | **Atahualpa** | **39.28** | **53** | LR | LR | 00 22 11.7 | |
| | comp=Z,71nm,18.9s,baz=215,slow=30 | | | | | | |
| PMSA | **Palmer Station** | **40.26** | **152** | LR | LR | 00 23 59.5 | |
| | comp=Z,137nm,18.4s,baz=272,slow=32 | | | | | | |
| LPAZ | **La Paz** | **40.78** | **74** | P | P | 00 10 01.5 | 0.0 |
| | 1.1nm,0.7s,baz=246,slow=8.6,SNR=4.4 | | | | | | |
| LPAZ | | | | LR | LR | 00 23 10.0 | |
| | comp=Z,55nm,18.2s,baz=234,slow=31 | | | | | | |
| CPUP | **Villa Florida** | **44.77** | **94** | LR | LR | 00 25 34.9 | |
| | comp=Z,41nm,20.6s,baz=235,slow=31 | | | | | | |
| SIV | **San Ignacio** | **46.59** | **79** | LR | LR | 00 26 30.3 | |
| | comp=Z,100nm,20.8s,baz=302,slow=31 | | | | | | |
| ROSC | **El Rosal** | **51.09** | **47** | LR | LR | 00 29 08.0 | |
| | comp=Z,58nm,20.2s,baz=272,slow=32 | | | | | | |
| APG | **El Apazote** | **52.50** | **23** | LR | LR | 00 28 06.5 | |
| | comp=Z,64nm,22.0s,baz=218,slow=30 | | | | | | |
| SDV | **Santo Domingo** | **56.51** | **47** | LR | LR | 00 32 36.6 | |
| | comp=Z,73nm,20.5s,baz=228,slow=32 | | | | | | |
| PTGA | **Pitinga** | **56.76** | **64** | LR | LR | 00 33 00.6 | |
| | comp=Z,116nm,19.9s,baz=216,slow=32 | | | | | | |
| URZ | **Urewera** | **58.09** | **243** | LR | LR | 00 30 43.3 | |
| | comp=Z,123nm,19.8s,baz=48,slow=29 | | | | | | |
| AFI | **Afiamalu** | **60.02** | **274** | LR | LR | 00 33 11.1 | |
| | comp=Z,120nm,18.6s,baz=3.5,slow=31 | | | | | | |
| RPZ | **Rata Peaks** | **60.40** | **235** | LR | LR | 00 34 38.0 | |
| | comp=Z,81nm,18.1s,baz=158,slow=32 | | | | | | |
| MDP | **Montagnes des** | **66.07** | **65** | LR | LR | 00 38 45.8 | |
| | comp=Z,104nm,18.7s,baz=248,slow=33 | | | | | | |
| SJG | **San Juan** | **66.44** | **45** | LR | LR | 00 40 30.1 | |
| | comp=Z,28nm,19.1s,baz=222,slow=34 | | | | | | |
| NVAR | **Mina Array Bea** | **73.35** | **352** | P | P | 00 13 51.9 | +0.6 |
| | 0.2nm,0.3s,baz=178,slow=7.1,SNR=1.8 | | | | | | |
| DZM | **Mont Dzumac** | **73.57** | **254** | LR | LR | 00 42 25.9 | |
| | comp=Z,47nm,19.8s,baz=90,slow=33 | | | | | | |
| TKL | **Tuckaleechee C** | **73.88** | **21** | LR | LR | 00 40 14.4 | |
| | comp=Z,39nm,19.6s,baz=168,slow=31 | | | | | | |
| PDAR | **Pinedale Array** | **77.17** | **359** | P | P | 00 14 12.1 | -1.1 |
| | 0.3nm,0.6s,baz=157,slow=4.9,SNR=2.5 | | | | | | |
| CTA | **Charters Tower** | **90.27** | **245** | LR | LR | 00 52 22.2 | |
| | comp=Z,37nm,19.0s,baz=86,slow=33 | | | | | | |
| CMAR | **Chiang Mai Arr** | **150.43** | **244** | PKPbc | PKPbc | 00 22 10.5 | -1.1 |
| | 1.1nm,0.3s,baz=192,slow=1.1,SNR=6.9 | | | | | | |
| SONM | **Songino Array** | **150.73** | **307** | PKPbc | PKiKP | 00 22 12.5 | +0.3 |
| | 1.0nm,0.8s,baz=83,slow=1.6,SNR=5.0 | | | | | | |

*CNRM **15** 00:06:32.1,35°.56N×3°.75W,h16km,ml3.2*
*SFS **15** 00:06:35.0,35°.49N×4°.14W,ML3.2,ALBORAN W.*

**ISC 15 00:06:33.5±1.0,35°.52N±0°.04×3°.84W±0°.04,h22km±8km, n11,σ1s38/22,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | **Palemas** | **0.32** | **195** | P | **Pb** | **00 06 40.1** | **-0.5** |
| PALE | | | | S | **Sb** | **00 06 44.8** | **-0.7** |
| SMIR | **Smir Dam** | **1.27** | **278** | P | **Pb** | **00 06 56.0** | **-0.7** |
| SMIR | | | | S | **Sb** | **00 07 14.7** | **+2.1** |
| CHEFC | **Chefchaouen** | **1.30** | **252** | P | **Pb** | **00 06 57.0** | **-0.2** |
| CHEFC | | | | S | **Sb** | **00 07 15.4** | **+1.9** |
| CEU | **Ceuta** | **1.30** | **287** | P | **Pn** | **00 06 54.1** | **-2.2** |
| CEU | | | | S | **Sn** | **00 07 11.4** | **-1.7** |
| EMAL | **Malaga-Limoner** | **1.32** | **339** | P | **Pb** | **00 06 59.3** | **+1.6** |
| EMAL | | | | S | **Sb** | **00 07 15.3** | **+1.0** |
| TAF | **Taforalt** | **1.36** | **121** | P | **Pn** | **00 06 55.6** | **-1.7** |
| TAF | | | | S | **Sn** | **00 07 14.0** | **-0.8** |
| SICH | **Sidi Chahed** | **1.87** | **221** | P | **Pn** | **00 07 02.4** | **-1.7** |
| SICH | | | | S | **Sb** | **00 07 30.5** | **+0.7** |
| LCRM | **LCR** | **2.02** | **205** | P | **Pb** | **00 07 09.6** | **+0.1** |
| LCRM | | | | S | **Sb** | **00 07 35.6** | **+1.3** |
| IFR | **Ifrane** | **2.27** | **208** | P | **Pn** | **00 07 10.0** | **+0.2** |
| IFR | | | | S | **Sn** | **00 07 36.8** | **-0.4** |
| MD31 | **MD31** | **2.76** | **196** | P | **Pn** | **00 07 17.9** | **+1.5** |
| MD31 | | | | S | **Sn** | **00 07 50.7** | **+1.6** |
| TDRA | **Tendrara** | **2.90** | **148** | P | **Pn** | **00 07 18.7** | **+0.2** |
| TDRA | | | | S | **Sn** | **00 07 52.5** | **-0.2** |

*DDA **15** 00:11:22.7±0.0,36°.00N×29°.62E,h5km±2km,ML3.5*
*IDC **15** 00:11:23.2±1.6,36°.11N×29°.65E,h0km,mb3.5/4, mb1 3.7/6,mb1mx3.5/26,mbtmp3.5/6,ML3.3/2,MS2.6/6, Ms1 2.6/6,ms1mx2.5/56,Error ellipse: s-maj=48.0km s-min=17.5km az=148.0*
*ISK **15** 00:11:23.9,36°.13N×29°.68E,h5km,ML3.5/21*
*NIC **15** 00:11:24.6±0.0,36°.16N×29°.67E,h0km±2km,Ml3.2/3*
*GII **15** 00:11:26.3±0.0,35°.86N×29°.70E,h5km,Mm3.3/3*

**ISC 15 00:11:23.4±1.2,36°.05N±0°.03×29°.67E±0°.02,h3km±8km, n92,σ1s63/121,mb3.4/4,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSL | **Kastellorizon** | **0.12** | **324** | P | **Pg** | **00 11 25.9** | **+0.1** |
| KSL | | | | S | **Sg** | **00 11 27.1** | **-0.3** |
| KSL | | | | AMI | | 00 11 27.5 | |
| | 232nm,0.4s | | | | | | |
| KSL | | | | AMI | | 00 11 27.5 | |
| | 232nm,0.4s | | | | | | |
| KSL | | | | AMI | | 00 11 27.6 | |
| | 284nm,0.2s | | | | | | |
| KSL | | | | AMI | | 00 11 27.6 | |
| | 284nm,0.2s | | | | | | |
| AKAS | **Kas** | **0.19** | **343** | PG | **Pg** | **00 11 26.9** | **-0.2** |
| AKAS | | | | SG | **Sg** | **00 11 29.2** | **-0.4** |
| AKAS | **Kas** | **0.19** | **343** | P | **Pg** | **00 11 26.8** | **-0.3** |
| AKAS | | | | S | **Sg** | **00 11 28.7** | **-0.8** |
| DEMR | **Demre-Antalya** | **0.26** | **46** | PG | **Pg** | **00 11 29.1** | **-0.6** |
| DEMR | | | | SG | **Sg** | **00 11 33.1** | **+1.2** |
| AKUM | **Antalya-Kumluc** | **0.61** | **64** | P | **Pg** | **00 11 35.6** | **+0.5** |
| AKUM | | | | S | **Sb** | **00 11 45.7** | **+0.1** |
| ELL | **Elmali** | **0.72** | **15** | PG | **Pg** | **00 11 36.0** | **-1.2** |
| ELL | **Elmali** | **0.72** | **15** | P | **Pg** | **00 11 36.2** | **-1.1** |
| ELL | | | | S | **Sb** | **00 11 47.9** | **-1.1** |
| FETY | **Fethiye** | **0.75** | **321** | PG | **Pb** | **00 11 38.8** | **-0.3** |
| FETY | | | | SG | **Sb** | **00 11 49.6** | **-0.1** |
| FETY | **Fethiye** | **0.75** | **321** | P | **Pg** | **00 11 38.0** | **+0.2** |
| FETY | | | | S | **Sb** | **00 11 48.3** | **-1.4** |
| FETY | | | | *i* AML | AML | 00 11 51.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| FETY | | | | *i* AML | AML | 00 11 55.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| KEMT | **Kemer-ANTALYA** | **0.90** | **52** | PG | **Pb** | **00 11 41.5** | **-0.1** |
| CAME | **Cameli-Denizli** | **0.94** | **342** | PG | **Pg** | **00 11 40.6** | **-0.8** |
| CAME | | | | SG | **Sb** | **00 11 54.4** | **-0.8** |
| KORT | **Korkueli** | **1.09** | **30** | PG | **Pb** | **00 11 44.8** | **-0.2** |
| KORT | **Korkueli** | **1.09** | **30** | P | **Pg** | **00 11 42.1** | **-2.3** |
| KORT | | | | S | **Sn** | **00 12 01.6** | **+0.2** |
| CAEL | **Denizli, Camel** | **1.10** | **345** | P | **Pg** | **00 11 44.3** | **-0.3** |
| CAEL | | | | *i* AML | AML | 00 12 10.0 | |
| | comp=N,2μm,0.9s | | | | | | |
| CAEL | | | | *i* AML | AML | 00 12 12.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| DALY | **Dalyan (Mula)** | **1.12** | **313** | PG | **Pn** | **00 11 45.6** | **-0.3** |
| DALY | | | | SG | **Sn** | **00 12 01.9** | **+0.1** |
| ANTB | **Antalya** | **1.16** | **43** | PN | **Pn** | **00 11 46.1** | **-0.4** |
| GOLH | **Golhisar** | **1.18** | **356** | P | **Pn** | **00 11 46.6** | **-0.4** |
| GOLH | | | | S | **Sn** | **00 12 04.3** | **+0.7** |
| GOLH | | | | *i* AML | AML | 00 12 10.0 | |
| | comp=N,790nm,0.5s | | | | | | |
| GOLH | | | | *i* AML | AML | 00 12 19.0 | |
| | comp=E,677nm,0.7s | | | | | | |
| ARG | **Arkhangelos** | **1.26** | **278** | PN | **Pn** | **00 11 48.8** | **+0.9** |
| ARG | **Arkhangelos** | **1.26** | **278** | P | **Pn** | **00 11 48.7** | **+0.9** |
| ARG | | | | S | **Sn** | **00 12 08.2** | **+2.9** |
| BUCA | **Burdur, Bucak-** | **1.46** | **29** | P | **Pg** | **00 11 50.9** | **-0.4** |
| BUCA | | | | S | **Sn** | **00 12 16.1** | **+5.8** |
| BUCA | | | | *i* AML | AML | 00 12 26.0 | |
| | comp=E,526nm,0.9s | | | | | | |
| TAVA | **DENIZLI_Tavas** | **1.54** | **337** | P | **Pg** | **00 11 52.5** | **-0.4** |
| TAVA | | | | S | **Sg** | **00 12 16.2** | **+3.5** |
| TAVA | | | | *i* AML | AML | 00 12 18.0 | |
| | comp=N,541nm,0.5s | | | | | | |
| TAVA | | | | *i* AML | AML | 00 12 19.0 | |
| | comp=E,670nm,0.5s | | | | | | |
| YER | **Yerkesik** | **1.55** | **314** | PN | **Pg** | **00 11 53.3** | **+0.1** |
| BCK | **Bucak** | **1.59** | **27** | PN | **Pg** | **00 11 53.7** | **-0.1** |
| MULA | **Mugla, Merkez-** | **1.62** | **318** | P | **Pg** | **00 11 54.8** | **+0.4** |
| MULA | | | | S | **Sg** | **00 12 16.7** | **+1.3** |
| MULA | | | | *i* AML | AML | 00 12 19.0 | |
| | comp=N,805nm,0.8s | | | | | | |
| MULA | | | | *i* AML | AML | 00 12 20.0 | |
| | comp=E,1μm,0.7s | | | | | | |
| BRDR | **BURDUR-Merkez** | **1.67** | **11** | P | **Pg** | **00 11 55.4** | **0.0** |
| BRDR | | | | S | **Sg** | **00 12 20.9** | **+3.8** |
| KEPZ | **Antalya-Kepez** | **1.77** | **61** | P | **Pb** | **00 11 55.9** | **-0.6** |
| SUTC | **Sutluce-Ispart** | **1.78** | **37** | PN | **Pb** | **00 11 56.7** | **0.0** |
| BASM | **Basmaki-Afyon** | **1.89** | **9** | PN | **Pb** | **00 11 57.8** | **-0.7** |
| ISP | **Isparta** | **1.89** | **21** | PN | **Pb** | **00 11 58.0** | **-0.6** |
| MLSB | **Milas** | **1.96** | **310** | PN | **Pb** | **00 11 59.8** | **0.0** |
| BAGO | **Egridir - ISPA** | **2.13** | **25** | P | **Pb** | **00 12 02.1** | **-0.6** |
| GAZI | **Gazipasa** | **2.15** | **84** | PN | **Pn** | **00 12 00.8** | **+0.7** |
| GAZI | **Gazipasa** | **2.15** | **84** | P | **Pn** | **00 11 59.8** | **-0.3** |
| GAZI | | | | S | **Sn** | **00 12 25.9** | **-1.3** |
| BODT | **Bodrum** | **2.15** | **299** | PN | **Pn** | **00 12 01.2** | **+1.1** |
| SEDI | **Konya, Seydise** | **2.18** | **50** | P | **Pb** | **00 12 04.1** | **+0.6** |
| SEDI | | | | S | **Sg** | **00 12 35.8** | **+2.4** |
| SEDI | | | | *i* AML | AML | 00 12 38.0 | |
| | comp=E,282nm,0.7s | | | | | | |
| SEYD | **Seydisehir-KON** | **2.20** | **52** | PN | **Pb** | **00 12 02.5** | **-1.4** |
| KZIL | **AFYON_Kizioren** | **2.23** | **10** | P | **Pn** | **00 12 01.9** | **+0.6** |
| PASA | **Karahalli, USA** | **2.29** | **356** | P | **Pb** | **00 12 03.6** | **-1.9** |
| PASA | | | | S | **Sb** | **00 12 31.5** | **-2.8** |
| AFYN | **Afyon-Dinar-K** | **2.31** | **16** | P | Pg | 00 12 15.0 | +7.3 |
| AFYN | | | | *i* AML | AML | 00 13 10.0 | |
| | comp=E,136nm,1.1s | | | | | | |
| DDIM | **Aydin, Didim** | **2.40** | **306** | P | **Pn** | **00 12 04.8** | **+1.3** |
| DDIM | | | | *i* AML | AML | 00 12 52.0 | |
| | comp=N,646nm,1.1s | | | | | | |
| DDIM | | | | *i* AML | AML | 00 12 53.0 | |
| | comp=E,444nm,1.1s | | | | | | |
| AKMS | **Akamas** | **2.41** | **115** | P | **Pn** | **00 12 04.8** | **+1.2** |
| AKMS | | | | AMI | | 00 12 43.0 | |
| | 0.3nm,1.1s | | | | | | |
| AKMS | | | | AMI | | 00 12 43.0 | |
| | 0.2nm,0.6s | | | | | | |
| HDMB | **Hadim** | **2.44** | **67** | PN | **Pn** | **00 12 05.9** | **+1.5** |
| YVAC | **Isparta, Yalva** | **2.54** | **29** | P | **Pb** | **00 12 08.3** | **-1.4** |
| ALFC | **Alefka** | **2.55** | **110** | P | **Pb** | **00 12 08.9** | **-0.9** |
| ALFC | | | | AMI | | 00 12 48.2 | |
| | 0.2nm,0.7s | | | | | | |
| ALFC | | | | AMI | | 00 12 48.5 | |
| | 0.2nm,0.4s | | | | | | |
| GCAM | **G?zelcaml?** | **2.55** | **311** | PN | **Pn** | **00 12 07.4** | **+1.8** |
| GCAM | **G?zelcaml?** | **2.55** | **311** | P | **Pn** | **00 12 07.2** | **+1.5** |
| GCAM | | | | S | **Sb** | **00 12 41.8** | **+0.2** |
| GCAM | | | | *i* AML | AML | 00 12 46.0 | |
| | comp=N,287nm,0.7s | | | | | | |
| GCAM | | | | *i* AML | AML | 00 12 47.0 | |
| | comp=E,211nm,0.7s | | | | | | |
| KULA | **Kula-Manisa** | **2.58** | **342** | PN | **Pn** | **00 12 06.7** | **+0.5** |
| SHUT | **Suhut-Afyon** | **2.59** | **15** | PN | **Pn** | **00 12 07.5** | **+1.2** |
| DOGA | **KONYA_Doganhis** | **2.60** | **37** | P | **Pb** | **00 12 09.4** | **-1.3** |
| DOGA | | | | S | **Sb** | **00 12 43.4** | **+0.4** |
| DOGA | | | | *i* AML | AML | 00 12 49.0 | |
| | comp=N,185nm,0.7s | | | | | | |
| ERMK | **Ermenek** | **2.68** | **76** | P | **Pb** | **00 12 10.5** | **-1.6** |
| NATA | **Nata** | **2.69** | **117** | P | **Pn** | **00 12 09.5** | **+1.9** |
| USAK | **Uak-Merkez** | **2.71** | **349** | P | **Pn** | **00 12 07.4** | **-0.4** |
| USAK | | | | S | **Sb** | **00 12 43.3** | **-2.5** |
| KMER | **Konya-Meram** | **2.76** | **51** | P | **Pb** | **00 12 12.5** | **-0.9** |
| AFYO | **Afyonkarahisar** | **2.77** | **10** | P | **Pn** | **00 12 09.9** | **+1.1** |
| AFYO | | | | *i* AML | AML | 00 13 15.0 | |
| | comp=E,194nm,1.4s | | | | | | |
| AFYO | | | | *i* AML | AML | 00 13 22.0 | |
| | comp=N,194nm,0.9s | | | | | | |
| KONT | **Konya--Tatoy** | **2.86** | **48** | P | **Pb** | **00 12 13.7** | **-1.4** |
| KONT | | | | S | **Sb** | **00 12 48.7** | **-1.9** |
| KKBE | **Karaman, Kazim** | **2.88** | **65** | P | **Pb** | **00 12 13.8** | **-1.6** |
| KKBE | | | | S | **Sb** | **00 12 48.5** | **-2.5** |
| DGB | **zmir** | **2.99** | **313** | P | **Pb** | **00 12 14.8** | **-2.4** |
| DGB | | | | *i* AML | AML | 00 13 05.0 | |
| | comp=N,214nm,1.0s | | | | | | |
| DGB | | | | *i* AML | AML | 00 13 05.0 | |
| | comp=E,163nm,1.0s | | | | | | |
| GDZ | **Gediz** | **3.03** | **357** | P | **Pn** | **00 12 13.3** | **+0.9** |
| DEMI | **Demirci** | **3.08** | **346** | P | **Pn** | **00 12 13.7** | **+0.8** |
| GULN | **MERSIN_Gulnar** | **3.14** | **86** | P | **Pn** | **00 12 17.0** | **+3.3** |
| KDHN | **Kadinhani** | **3.14** | **38** | P | **Pn** | **00 12 16.4** | **+2.5** |
| CSS | **Mathiatis** | **3.18** | **109** | P | **Pn** | **00 12 17.3** | **+3.0** |
| ASGA | **Asgata** | **3.18** | **112** | P | **Pn** | **00 12 16.5** | **+2.1** |
| ALIN | **Konya, Altinte** | **3.40** | **48** | P | **Pb** | **00 12 21.1** | **-3.3** |
| ANDZ | **Kutahya,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NIZ | | | | Pmax | | | | |
| | 274nm,0.2s | | | | | | | |
| NIZ | | | | Smax | | | | |
| | 3µm,0.3s | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.02** | **111** | ⇑*i*Pg | **Pn** | **00 23 33.2** | **+0.7** | |
| YLYR | | | | *e*Pb | **Pb** | **00 23 35.2** | **+3.3** | |
| YLYR | | | | *e*Sg | **Sn** | **00 23 47.6** | **+0.7** | |
| YLYR | | | | *e*Sb | **Sb** | **00 23 51.2** | **+5.8** | |
| YLYR | | | | max | | | | |
| | 103nm,0.1s | | | | | | | |
| YLYR | | | | max | | | | |
| | 632nm,0.2s | | | | | | | |
| **KMO** | **Kumora** | **1.16** | **56** | ⇓*i*Pg | **Pg** | **00 23 35.4** | **+1.1** | |
| KMO | | | | *e*Sg | **Sn** | **00 23 51.8** | **+1.6** | |
| KMO | | | | Pmax | | | | |
| | 191nm,0.3s | | | | | | | |
| KMO | | | | Smax | | | | |
| | 426nm,0.6s | | | | | | | |
| **SYVR** | **Suvo** | **1.62** | **169** | *e*Pg | **Pg** | **00 23 43.0** | **0.0** | |
| SYVR | | | | *e*Sg | **Sg** | **00 24 04.7** | **+0.7** | |
| SYVR | | | | Pmax | | | | |
| | 266nm,0.2s | | | | | | | |
| SYVR | | | | Smax | | | | |
| | 874nm,0.5s | | | | | | | |
| **OGRR** | **Ongureny** | **1.96** | **216** | *e*Pg | **Pb** | **00 23 48.1** | **+0.4** | |
| OGRR | | | | *e* | | 00 23 49.5 | | |
| OGRR | | | | *e*Sg | **Sb** | **00 24 12.6** | **+0.5** | |
| OGRR | | | | *e* | | 00 24 14.3 | | |
| OGRR | | | | max | | | | |
| | 79nm,0.3s | | | | | | | |
| OGRR | | | | max | | | | |
| | 760nm,0.3s | | | | | | | |
| **MXMB** | **Maximikha** | **2.04** | **193** | *e*Pn | **Pb** | **00 23 48.1** | **-1.0** | |
| MXMB | | | | *e*Pg | **Pg** | **00 23 49.9** | **-1.1** | |
| MXMB | | | | *e* | | 00 24 14.5 | | |
| MXMB | | | | *e*Sg | **Sb** | **00 24 15.5** | **+1.0** | |
| **UKT** | **Uakit** | **2.37** | **82** | *e*Pn | **Pb** | **00 23 54.2** | **-0.6** | |
| UKT | | | | *e*Pg | **Pg** | **00 23 57.0** | **-0.4** | |
| UKT | | | | *e*Sn | **Sb** | **00 24 23.1** | **-1.0** | |
| UKT | | | | *e*Sg | **Sg** | **00 24 28.9** | **+0.9** | |
| UKT | | | | Pmax | | | | |
| | 100nm,0.7s | | | | | | | |
| UKT | | | | Smax | | | | |
| | 414nm,0.3s | | | | | | | |
| **SVKR** | **Severomuysk** | **2.46** | **68** | *e*Pn | **Pb** | **00 23 54.8** | **-1.5** | |
| SVKR | | | | *e*Pg | **Pg** | **00 23 59.0** | **-0.1** | |
| SVKR | | | | *e*Sg | **Sg** | **00 24 32.2** | **+1.3** | |
| SVKR | | | | Pmax | | | | |
| | 100nm,0.3s | | | | | | | |
| SVKR | | | | Smax | | | | |
| | 583nm,0.5s | | | | | | | |
| **KELR** | **Kotokel** | **2.63** | **199** | *e*Pn | **Pn** | **00 23 56.6** | **+2.1** | |
| KELR | | | | *e*Pg | **Pb** | **00 24 00.0** | **+0.8** | |
| KELR | | | | *e*Sn | **Sn** | **00 24 26.2** | **-0.2** | |
| KELR | | | | *e*Sg | **Sb** | **00 24 33.2** | **+1.7** | |
| **TRG** | **Tyrgan** | **3.11** | **218** | *e*Pn | **Pn** | **00 24 02.3** | **+1.1** | |
| TRG | | | | *e*Pg | **Pb** | **00 24 08.5** | **+1.1** | |
| TRG | | | | *e*Sn | **Sn** | **00 24 38.3** | **-0.1** | |
| TRG | | | | *e*Sg | **Sb** | **00 24 47.8** | **+2.4** | |
| TRG | | | | Pmax | | | | |
| | 27nm,0.2s | | | | | | | |
| TRG | | | | Smax | | | | |
| | 257nm,0.4s | | | | | | | |
| **UUDB** | **Ulan-Yde** | **3.56** | **199** | *e*Pn | **Pn** | **00 24 08.7** | **+1.4** | |
| UUDB | | | | *e*Pg | **Pb** | **00 24 16.4** | **+1.3** | |
| UUDB | | | | *e* | | 00 24 20.7 | | |
| UUDB | | | | *e*Sn | **Sn** | **00 24 49.1** | **-0.3** | |
| UUDB | | | | *e*Sg | **Sb** | **00 25 01.5** | **+3.2** | |
| UUDB | | | | *e* | | 00 25 08.9 | | |
| UUDB | | | | max | | | | |
| | 48nm,1.3s | | | | | | | |
| UUDB | | | | Smax | | | | |
| | 114nm,0.7s | | | | | | | |
| **BOD** | **Bodaibo** | **3.59** | **42** | *e*Pn | **Pn** | **00 24 10.3** | **+2.7** | |
| BOD | | | | *e*Pg | **Pb** | **00 24 18.1** | **+2.6** | |
| BOD | | | | *e* | | 00 24 24.2 | | |
| BOD | | | | *e*Sn | **Sn** | **00 24 52.2** | **+2.2** | |
| BOD | | | | *e*Sg | **Sg** | **00 25 05.7** | **-1.4** | |
| BOD | | | | *e* | | 00 25 14.0 | | |
| BOD | | | | Pmax | | | | |
| | 25nm,0.3s | | | | | | | |
| BOD | | | | Smax | | | | |
| | 122nm,0.6s | | | | | | | |
| **STDB** | **Stepnoy Dvoret** | **3.60** | **212** | *e*Pn | **Pn** | **00 24 08.9** | **+1.0** | |
| STDB | | | | *e*Pg | **Pb** | **00 24 16.8** | **+1.0** | |
| STDB | | | | *e*Sg | **Sb** | **00 25 02.8** | **+3.3** | |
| **KAB** | **Kabansk** | **3.62** | **209** | *e*Sg | **Sb** | **00 25 03.5** | **+3.4** | |
| KAB | | | | Smax | | | | |
| | 344nm,0.8s | | | | | | | |
| **NLYR** | **Nelyaty** | **3.71** | **68** | *e*Pn | **Pn** | **00 24 12.2** | **+2.8** | |
| NLYR | | | | *e*Pg | **Pg** | **00 24 21.5** | **-1.5** | |
| NLYR | | | | *e*Sn | **Sn** | **00 24 55.3** | **+2.2** | |
| NLYR | | | | *e*Sg | **Sg** | **00 25 10.6** | **-0.5** | |
| NLYR | | | | *e* | | 00 25 19.8 | | |
| NLYR | | | | Pmax | | | | |
| | 37nm,0.7s | | | | | | | |
| NLYR | | | | max | | | | |
| | 116nm,0.9s | | | | | | | |
| **BGT** | **Bolshoye Golou** | **4.03** | **219** | *e*Pn | **Pn** | **00 24 14.5** | **+0.8** | |
| BGT | | | | *e*Pg | **Pb** | **00 24 22.8** | **-0.2** | |
| BGT | | | | *e* | | 00 24 29.4 | | |
| BGT | | | | *e*Sn | **Sn** | **00 24 58.6** | **-2.3** | |
| BGT | | | | *e*Sg | **Sb** | **00 25 14.8** | **+3.1** | |
| BGT | | | | Pmax | | | | |
| | 31nm,0.5s | | | | | | | |
| BGT | | | | Smax | | | | |
| | 170nm,0.6s | | | | | | | |
| **CIT** | **Chita** | **4.03** | **142** | *e*Sg | **Sg** | **00 25 19.5** | **-1.9** | |
| CIT | | | | Smax | | | | |
| | 159nm,0.5s | | | | | | | |
| **IRK** | **Irkutsk** | **4.32** | **228** | *e*Sg | **Sb** | **00 25 24.9** | **+4.7** | |
| IRK | | | | Smax | | | | |
| | 408nm,0.5s | | | | | | | |
| **LSTR** | **Listvyanka** | **4.38** | **221** | *e*Pn | **Pn** | **00 24 18.7** | **+0.1** | |
| LSTR | | | | *e*Pg | **Pb** | **00 24 29.9** | **+0.8** | |
| LSTR | | | | *e*Sn | **Sn** | **00 25 07.5** | **-2.2** | |
| LSTR | | | | *e*Sg | **Sb** | **00 25 26.8** | **+4.9** | |
| LSTR | | | | Pmax | | | | |
| | 15nm,0.4s | | | | | | | |
| LSTR | | | | Smax | | | | |
| | 171nm,1.1s | | | | | | | |
| **VTMR** | **Vitim** | **4.52** | **20** | *e*Pg | **Pb** | **00 24 34.8** | **+3.5** | |
| VTMR | | | | *e* | | 00 25 17.9 | | |
| VTMR | | | | *e*Sg | **Sg** | **00 25 34.7** | **-2.2** | |
| VTMR | | | | *e* | | 00 25 41.9 | | |
| **IVK** | **Ivanovka** | **4.60** | **223** | *e*Pn | **Pn** | **00 24 22.2** | **+0.7** | |
| IVK | | | | *e*Pg | **Pb** | **00 24 34.6** | **+1.9** | |
| IVK | | | | *e*Sn | **Sn** | **00 25 13.1** | **-1.8** | |
| IVK | | | | *e*Sg | **Sb** | **00 25 32.4** | **+4.3** | |
| IVK | | | | Pmax | | | | |
| | 17nm,0.3s | | | | | | | |
| IVK | | | | Smax | | | | |
| | 164nm,0.6s | | | | | | | |
| **TLY** | **Talaya** | **5.00** | **227** | *e*Pn | **Pn** | **00 24 27.8** | **+0.7** | |
| TLY | | | | *e*Pg | **Pb** | **00 24 41.0** | **+1.4** | |
| TLY | | | | *e*Sn | **Sn** | **00 25 22.3** | **-2.6** | |
| TLY | | | | *e*Sg | **Sb** | **00 25 44.5** | **+4.8** | |
| TLY | | | | *e* | | 00 25 55.7 | | |
| TLY | | | | Pmax | | | | |
| | 20nm,0.4s | | | | | | | |
| TLY | | | | Smax | | | | |
| | 62nm,0.5s | | | | | | | |
| **CRS** | **Chara** | **5.18** | **68** | *e*Pn | **Pn** | **00 24 32.2** | **+2.6** | |
| CRS | | | | *e*Pg | **Pg** | **00 24 48.6** | **-2.6** | |
| CRS | | | | *e*Sn | **Sn** | **00 25 30.4** | **+1.0** | |
| CRS | | | | *e*Sg | **Sg** | **00 25 57.0** | **-1.3** | |
| CRS | | | | Pmax | | | | |
| | 34nm,0.9s | | | | | | | |
| CRS | | | | Smax | | | | |
| | 102nm,1.6s | | | | | | | |
| **ARS** | **Arshan** | **5.37** | **235** | *e*Pn | **Pn** | **00 24 32.8** | **+0.5** | |
| ARS | | | | *e* | | 00 24 39.6 | | |
| ARS | | | | *e*Pg | **Pb** | **00 24 48.3** | **+2.3** | |
| ARS | | | | *e*Sn | **Sn** | **00 25 31.2** | **-3.0** | |
| ARS | | | | *e*Sg | **Sb** | **00 25 56.3** | **+5.8** | |
| ARS | | | | Pmax | | | | |
| | 27nm,0.6s | | | | | | | |
| ARS | | | | Smax | | | | |
| | 211nm,0.5s | | | | | | | |
| **KPC** | **Khapcheranga** | **5.82** | **161** | *e*Pn | **Pn** | **00 24 39.8** | **+1.4** | |
| KPC | | | | *e*Pg | **Pb** | **00 24 57.9** | **+4.3** | |
| KPC | | | | *e* | | 00 25 00.1 | | |
| KPC | | | | *e* | | 00 25 06.5 | | |
| KPC | | | | *e*Sn | **Sn** | **00 25 44.5** | **-0.8** | |
| KPC | | | | *e*Sg | **Sg** | **00 26 14.4** | **-4.4** | |
| KPC | | | | max | | | | |
| | 13nm,0.7s | | | | | | | |
| KPC | | | | Smax | | | | |
| | 52nm,1.2s | | | | | | | |
| **TUP** | **Tupik** | **6.10** | **93** | *e*Pn | **Pn** | **00 24 46.0** | **+3.9** | |
| TUP | | | | *e*Pg | Pg | 00 25 04.0 | -4.7 | |
| TUP | | | | *e*Sn | **Sn** | **00 25 53.4** | **+1.5** | |
| TUP | | | | *e*Sg | **Sg** | **00 26 23.9** | **-3.7** | |
| TUP | | | | *e* | | 00 26 39.3 | | |
| TUP | | | | Pmax | | | | |
| | 21nm,1.0s | | | | | | | |
| TUP | | | | Smax | | | | |
| | 106nm,0.4s | | | | | | | |
| **KHNR** | **Khani** | **6.10** | **70** | *e* | **Pg** | **00 25 04.8** | **-4.0** | |
| KHNR | | | | *e*Sg | **Sg** | **00 26 24.5** | **-3.2** | |
| **ZAK** | **Zakamensk** | **6.16** | **220** | *e*Pn | **Pn** | **00 24 43.9** | **+0.8** | |
| ZAK | | | | *e*Pg | **Pb** | **00 25 03.0** | **+3.6** | |
| ZAK | | | | *e*Sn | **Sn** | **00 25 50.5** | **-3.1** | |
| ZAK | | | | *e*Sg | **Sg** | **00 26 22.0** | **-7.6** | |
| ZAK | | | | Pmax | | | | |
| | 6.0nm,0.4s | | | | | | | |
| ZAK | | | | Smax | | | | |
| | 65nm,1.2s | | | | | | | |
| **MOY** | **Mondy** | **6.22** | **238** | *e*Pn | **Pn** | **00 24 45.0** | **+1.1** | |
| MOY | | | | *e*Pg | **Pb** | **00 25 03.5** | **+3.1** | |
| MOY | | | | *e*Sn | **Sn** | **00 25 52.1** | **-3.0** | |
| MOY | | | | *e*Sg | **Sg** | **00 26 23.1** | **-8.4** | |
| MOY | | | | *e* | | 00 26 33.9 | | |
| MOY | | | | *e* | | 00 26 42.3 | | |
| MOY | | | | Pmax | | | | |
| | 12nm,0.7s | | | | | | | |
| MOY | | | | max | | | | |
| | 60nm,0.7s | | | | | | | |
| **YKLR** | **Yuktali** | **6.96** | **74** | *e*Sg | **Sg** | **00 26 51.3** | **-4.0** | |
| YKLR | | | | *e* | | 00 27 07.0 | | |
| **SONM** | **Songino Array** | **7.67** | **196** | Pn | **Pn** | **00 25 06.5** | **+2.7** | |
| | 0.2nm,0.3s,baz=19,slow=14,SNR=6.3 | | | | | | | |
| SONM | | | | Sn | **Sg** | **00 27 10.3** | **-7.7** | |
| | 1.5nm,0.3s,baz=13,slow=26,SNR=12 | | | | | | | |
| **IENR** | **Iengra** | **8.72** | **77** | *e*Sg | **Sg** | **00 27 45.6** | **-6.0** | |
| **CLNS** | **Chul'man** | **8.76** | **73** | *e*Sg | **Sg** | **00 27 46.2** | **-6.8** | |
| **MKAR** | **Makanchi Array** | **18.99** | **255** | P | **Pn** | **00 27 34.8** | **+0.6** | |
| | 0.1nm,0.4s,baz=48,slow=9.3,SNR=5.0 | | | | | | | |

*IDC* ***15*** *00:33:48.6±1.2, 12°.20N×143°.88E, h0km, mb3.7/6, mb1 4.0/6, mb1mx3.6/34, mbtmp3.7/6, Error ellipse: s-maj=50.3km s-min=22.7km az=123.0*

**ISC 15 00:33:52.7±1.0, 12°.2N±0°.2×143°.9E±0°.2, h26km, n13, σ0s98/8, mb3.7/6, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.69** | **35** | Pn | **Pn** | **Pn** | **00 34 20.8** | **+0.2** |
| | 150nm,0.3s,baz=260,slow=2.7,SNR=15 | | | | | | | |
| GUMO | | | | Sn | | **Sn** | **00 34 41.4** | **0.0** |
| | 69nm,0.3s,baz=160,slow=23,SNR=7.1 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.86** | **71** | T | | T | 01 02 34.7 | |
| | baz=252 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.87** | **71** | T | | T | 01 02 44.9 | |
| | baz=252 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.87** | **71** | T | | T | 01 02 42.3 | |
| | baz=252 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.34** | **68** | T | | T | 01 03 00.7 | |
| | baz=255 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.35** | **68** | T | | T | 01 03 00.2 | |
| | baz=255 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.36** | **68** | T | | T | 01 03 04.1 | |
| | baz=255 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.28** | **197** | P | | **P** | **00 40 28.3** | **0.0** |
| | 0.6nm,0.9s,baz=20,slow=9.6,SNR=2.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.83** | **317** | P | | **P** | **00 44 10.6** | **+1.1** |
| | 0.1nm,0.6s,baz=100,slow=6.7,SNR=2.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **70.24** | **25** | P | | **P** | **00 45 02.2** | **-1.0** |
| | 0.2nm,0.4s,baz=252,slow=5.7,SNR=8.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.54** | **27** | P | | **P** | **00 46 23.9** | **+0.6** |
| | 0.4nm,0.3s,baz=285,slow=5.1,SNR=11 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.54** | **51** | P | | **P** | **00 46 44.3** | **+0.5** |
| | 0.3nm,0.5s,baz=266,slow=5.4,SNR=2.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **92.01** | **335** | P | | **P** | **00 46 57.7** | **-1.4** |
| | 1.8nm,1.0s,baz=57,slow=5.1,SNR=1.6 | | | | | | | |

*SJA* ***15*** *00:44:23.0±1.2, 25°.78S×71°.37W, h10km, ML4.0, MW3.9*
*IDC* ***15*** *00:44:25.1±1.7, 25°.99S×70°.59W, h0km, mb4.4/3, mb1 4.0/7, mb1mx3.8/29, mbtmp4.0/7, ML3.6/4, MS2.9/2, Ms1 3.0/2, ms1mx2.6/55, Error ellipse: s-maj=46.9km s-min=26.3km az=104.0*
*GUC* ***15*** *00:44:29.9±0.6, 25°.87S×70°.77W, h55km±11km, ML3.8*

**ISC 15 00:44:29.1±1.0, 25°.90S±0°.03×70°.89W±0°.07, h46km±12km, n57, σ2s15/75, mb4.2/3, 2C-2D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB14** | **IPOC Station P** | **1.34** | **19** | ⇑*i*P | | **Pn** | **00 44 52.5** | **+0.7** |
| PB14 | | | | *i* S | | **Sn** | **00 45 09.3** | **+0.7** |
| PB14 | | | | IAML | | | 00 45 11.2 | |
| | comp=E,2µm,0.3s | | | | | | | |
| **PB14** | **IPOC Station P** | **1.34** | **19** | *e*P | | **Pn** | **00 44 52.0** | **+0.2** |
| PB14 | | | | *e*S | | **Sn** | **00 45 10.8** | **+2.2** |
| PB14 | | | | IAML | | | 00 45 12.3 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **GO03** | **Copiap** | **1.79** | **161** | *e*P | | **Pn** | **00 44 59.2** | **+1.6** |
| GO03 | | | | *e*S | | **Sn** | **00 45 21.2** | **+2.1** |
| GO03 | | | | IAML | | | 00 45 25.6 | |
| | comp=N,736nm,0.3s | | | | | | | |
| **GO03** | **Copiap** | **1.79** | **161** | *e*P | | **Pn** | **00 45 00.0** | **+2.4** |
| GO03 | | | | *e*S | | **Sn** | **00 45 23.7** | **+4.6** |
| **AC02** | **Maricunga** | **1.84** | **121** | ⇓*i*P | | **Pn** | **00 44 59.3** | **+0.7** |
| AC02 | | | | *e*S | | **Sn** | **00 45 21.1** | **+0.2** |
| AC02 | | | | IAML | | | 00 45 23.6 | |
| | comp=E,1µm,0.5s | | | | | | | |
| **AC02** | **Maricunga** | **1.84** | **121** | *e*P | | **Pn** | **00 44 59.5** | **+0.8** |
| AC02 | | | | *e*S | | **Sn** | **00 45 22.5** | **+1.5** |
| **AC04** | **Llanos de Chal** | **2.30** | **184** | *e*P | | **Pn** | **00 45 05.2** | **+0.6** |
| AC04 | | | | *e*S | | **Sn** | **00 45 31.8** | **+0.2** |
| AC04 | | | | IAML | | | 00 45 47.6 | |
| | comp=N,333nm,0.4s | | | | | | | |
| **PB10** | **IPOC Station P** | **2.40** | **7** | *e*P | | **Pn** | **00 45 06.2** | **+0.3** |
| PB10 | | | | IAML | | | 00 45 50.3 | |
| | comp=E,497nm,0.8s | | | | | | | |
| **PB10** | **IPOC Station P** | **2.40** | **7** | *e*P | | **Pn** | **00 45 04.7** | **-1.2** |
| PB10 | | | | *e*P | | **Pn** | **00 45 06.0** | **+0.1** |
| PB10 | | | | *e*S | | **Sn** | **00 45 39.2** | **+5.1** |
| **PB15** | **IPOC Station P** | **2.98** | **26** | *e*P | | **Pn** | **00 45 15.4** | **+1.3** |
| PB15 | | | | *e*S | | **Sn** | **00 45 48.9** | **+0.2** |
| **PB15** | **IPOC Station P** | **2.98** | **26** | *e*P | | **Pn** | **00 45 15.7** | **+1.6** |
| PB15 | | | | *e*S | | **Sn** | **00 45 53.0** | **+4.3** |
| **LCO** | **Las Campanas** | **3.10** | **177** | ⇓*e*P | | **Pn** | **00 45 17.2** | **+1.4** |
| **LCO** | **Las Campanas** | **3.10** | **177** | *e*P | | **Pn** | **00 45 17.0** | **+1.2** |
| **PB06** | **IPOC Station P** | **3.40** | **21** | ⇑*e*P | | **Pn** | **00 45 20.4** | **+0.6** |
| PB06 | | | | IAML | | | 00 46 14.2 | |
| | comp=N,680nm,0.4s | | | | | | | |
| **PB06** | **IPOC Station P** | **3.40** | **21** | *e*P | | **Pn** | **00 45 15.7** | **-4.2** |
| PB06 | | | | *e*P | | **Pn** | **00 45 20.2** | **+0.3** |
| PB06 | | | | *e*S | | **Sn** | **00 46 01.7** | **+2.6** |
| **PB04** | **IPOC Station P** | **3.62** | **11** | *e*P | | **Pn** | **00 45 22.7** | **-0.1** |
| PB04 | | | | IAML | | | 00 46 26.4 | |
| | comp=E,484nm,0.5s | | | | | | | |
| **PB04** | **IPOC Station P** | **3.62** | **11** | *e*P | | **Pn** | **00 45 22.6** | **-0.2** |
| PB04 | | | | *e*S | | **Sn** | **00 46 04.8** | **+0.4** |
| PB04 | | | | *e*S | | Sn | 00 46 13.2 | +8.8 |
| **VCA** | **Vinchina** | **3.70** | **140** | *e*P | | **Pn** | **00 45 23.7** | **-0.2** |
| VCA | | | | *e*P | | Pn | 00 45 29.0 | +5.0 |
| VCA | | | | *e*S | | Sn | 00 46 18.2 | +12 |
| **LVC** | **Limon Verde** | **3.74** | **29** | Pn | | **Pn** | **00 45 25.9** | **+1.1** |
| | comp=E,3.8nm,0.3s,baz=206,slow=8.0,SNR=30 | | | | | | | |
| LVC | | | | Pg | | | 00 45 32.5 | |
| | comp=E,14nm,0.3s,baz=203,slow=13,SNR=19 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **00 46 09.5** | **+1.8** |
| | comp=E,11nm,0.3s,baz=191,slow=14,SNR=1.4 | | | | | | | |
| LVC | | | | Lg | | Lg | 00 46 18.0 | |
| | comp=E,42nm,0.3s,baz=332,slow=24,SNR=10 | | | | | | | |
| LVC | | | | LR | | LR | 00 47 00.5 | |
| | comp=E,153nm,18.6s,baz=206,slow=42 | | | | | | | |
| **LVC** | **Limon Verde** | **3.74** | **29** | *e*P | | **Pn** | **00 45 26.0** | **+1.2** |
| **LVC** | **Limon Verde** | **3.74** | **29** | *e*P | | **Pn** | **00 45 26.2** | **+1.4** |
| LVC | | | | *e*S | | **Sn** | **00 46 13.2** | **+5.4** |
| **PB03** | **IPOC Station P** | **3.98** | **15** | *e*P | | **Pn** | **00 45 28.0** | **+0.2** |
| PB03 | | | | *e*S | | **Sn** | **00 46 14.4** | **+1.2** |
| PB03 | | | | *e*S | | **Sn** | **00 46 20.2** | **+7.0** |
| **GO04** | **Tololo Observa** | **4.26** | **179** | *e*P | | **Pn** | **00 45 34.0** | **+2.4** |
| GO04 | | | | *e*S | | **Sn** | **00 46 22.4** | **+2.2** |
| **PB09** | **IPOC Station P** | **4.36** | **21** | *e*P | | **Pn** | **00 45 34.0** | **+1.0** |
| PB09 | | | | *e*P | | **Pn** | **00 45 34.0** | **+1.0** |
| PB09 | | | | *e*S | | Sn | 00 46 35.5 | +13 |
| **AROD** | **Rodeo** | **4.43** | **164** | *e*P | | Pn | 00 45 38.8 | +4.7 |
| **PB02** | **IPOC Station P** | **4.65** | **12** | *e*P | | **Pn** | **00 45 36.7** | **-0.3** |
| PB02 | | | | *e*P | | **Pn** | **00 45 37.0** | **0.0** |
| PB02 | | | | *e*S | | **Sn** | **00 46 33.3** | **+3.5** |
| **ACCO** | **Cerro Coronel** | **4.94** | **161** | *e*P | | Pn | 00 45 46.0 | +4.9 |
| **ACLC** | **CERRO LA CRUZ** | **4.95** | **136** | *e*P | | **Pn** | **00 45 44.0** | **+2.8** |
| **PB01** | **IPOC Station P** | **5.01** | **15** | *e*P | | Pn | 00 45 36.2 | -5.6 |
| PB01 | | | | *e*P | | Pn | 00 45 36.7 | -5.1 |
| PB01 | | | | *e*P | | **Pn** | **00 45 42.2** | **+0.4** |
| PB01 | | | | *e*S | | Sn | 00 46 26.7 | -12 |
| **PATCX** | **Punta Patache** | **5.10** | **8** | *e*P | | **Pn** | **00 45 42.3** | **-0.8** |
| PATCX | | | | *e*P | | **Pn** | **00 45 42.6** | **-0.6** |
| PATCX | | | | *e*P | | **Pn** | **00 45 42.8** | **-0.4** |
| PATCX | | | | *e*S | | **Sn** | **00 46 36.2** | **-4.7** |
| **TA01** | **Diego Aracena** | **5.35** | **7** | *e*P | | **Pn** | **00 45 46.0** | **-0.5** |
| **APLL** | **PUNTA DE LOS L** | **5.91** | **140** | *e*P | | **Pn** | **00 45 56.0** | **+1.9** |
| **AUSP** | **Uspallata** | **6.44** | **169** | *e*P | | **Pn** | **00 46 01.7** | **+0.1** |
| AUSP | | | | *e*P | | Pn | 00 46 06.0 | +4.4 |
| **VA03** | **San Esteban** | **6.84** | **178** | *e*P | | **Pn** | **00 46 10.0** | **+3.0** |
| **PB12** | **IPOC Station P** | **7.27** | **4** | *e*P | | **Pn** | **00 46 12.0** | **-0.9** |
| **PB16** | **IPOC Station P** | **7.64** | **10** | *e*P | | **Pn** | **00 46 18.7** | **+0.3** |
| **MRA** | **San Martin** | **7.91** | **146** | *e*P | | **Pn** | **00 46 23.0** | **+1.3** |
| **LPAZ** | **La Paz** | **9.91** | **16** | Pn | | **Pn** | **00 46 49.8** | **+0.3** |
| | comp=E,0.4nm,0.3s,baz=200,slow=3.5,SNR=7.9 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **10.25** | **221** | Pn | | **Pn** | **00 46 53.1** | **-0.2** |
| | baz=230,slow=74 | | | | | | | |
| H03N1 | | | | T | | T | 00 57 58.6 | |
| | baz=47,slow=72,SNR=389 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.26** | **221** | Pn | | **Pn** | **00 46 53.4** | **0.0** |
| | baz=230 | | | | | | | |
| H03N2 | | | | T | | T | 00 57 38.3 | |
| | baz=47,slow=72,SNR=133 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.26** | **221** | Pn | | **Pn** | **00 46 53.2** | **-0.4** |
| | baz=230,slow=74 | | | | | | | |
| H03N3 | | | | T | | T | 00 57 30.5 | |
| | baz=47,slow=72,SNR=108 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **10.52** | **219** | Pn | | **Pn** | **00 46 56.2** | **-0.9** |
| **H03S1** | **Juan Fernandez** | **10.53** | **219** | Pn | | **Pn** | **00 46 56.4** | **-0.8** |
| **H03S2** | **Juan Fernandez** | **10.54** | **219** | Pn | | **Pn** | **00 46 57.0** | **-0.3** |
| **CPUP** | **Villa Florida** | **12.20** | **95** | Pn | | **Pn** | **00 47 17.1** | **-3.1** |
| | comp=E,0.1nm,0.3s,baz=276,slow=15,SNR=2.5 | | | | | | | |
| CPUP | | | | LR | | LR | 00 52 20.8 | |
| | comp=E,74nm,21.1s,baz=224,slow=40 | | | | | | | |
| **SIV** | **San Ignacio** | **13.46** | **45** | Pn | | **Pn** | **00 47 33.7** | **-3.9** |
| | comp=E,0.3nm,0.3s,baz=221,slow=9.3,SNR=6.8 | | | | | | | |
| SIV | | | | Sn | | **Sn** | **00 50 05.0** | **-0.8** |
| | comp=E,0.1nm,0.3s,baz=280,slow=20,SNR=3.3 | | | | | | | |
| **PTGA** | **Pitinga** | **27.15** | **25** | P | | **P** | **00 50 09.1** | **+0.8** |
| | comp=E,2.8nm,0.7s,baz=233,slow=5.1,SNR=3.0 | | | | | | | |
| **DBIC** | **Dimbokro** | **71.75** | **73** | P | | **P** | **00 55 48.5** | **+1.4** |
| | comp=E,2.4nm,0.6s,baz=218,slow=6.3,SNR=5.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.54** | **70** | P | | **P** | **00 56 38.4** | **+1.4** |
| | comp=E,2.1nm,0.6s,baz=259,slow=5.0,SNR=18 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.51** | **274** | T | | T | 03 23 00.2 | |
| | baz=108,slow=75,SNR=19 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.52** | **275** | T | | T | 03 22 58.3 | |
| | baz=108,slow=75,SNR=17 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.53** | **274** | T | | T | 03 22 58.8 | |
| | baz=108,slow=75,SNR=15 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.72** | **276** | T | | T | 03 23 23.4 | |
| | baz=108 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.73** | **276** | T | | T | 03 23 17.9 | |
| | baz=108 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.73** | **276** | T | | T | 03 23 23.7 | |
| | baz=108 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.69** | **26** | PKPbc | | **PKiKP** | **01 04 07.5** | **-0.7** |
| | comp=E,2.1nm,0.7s,baz=306,slow=3.5,SNR=9.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.22** | **39** | PKPbc | | **PKPab** | **01 04 17.6** | **-3.7** |
| | comp=E,1.5nm,0.8s,baz=326,slow=1.9,SNR=17 | | | | | | | |

**IDC 15 00:50:13.9±2.1, 6°.92S×128°.93E, h0km, mb3.3/1, mb1 3.5/3, mb1mx3.3/20, mbtmp3.3/3, ML3.2/2, Error ellipse: s-maj=90.2km s-min=28.4km az=75.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.57** | **196** | Pn | | Pn | 00 52 60.0 | -0.5 |
| | baz=15,slow=10 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.97** | **158** | Pn | | Pn | 00 53 33.8 | +0.4 |
| | 0.1nm,0.3s,baz=342,slow=12,SNR=7.4 | | | | | | | |
| WRA | | | | Sn | | Sn | 00 55 57.5 | -12 |
| | 0.5nm,0.3s,baz=330,slow=23,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.33** | **165** | P | | Pn | 00 54 17.5 | +0.1 |
| | 0.1nm,0.3s,baz=343,slow=10,SNR=7.2 | | | | | | | |
| ASAR | | | | S | | Sn | 00 57 15.3 | -16 |
| | 0.1nm,0.3s,baz=346,slow=25,SNR=1.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.58** | **327** | P | | P | 01 01 12.4 | 0.0 |
| | 0.2nm,0.4s,baz=118,slow=7.9,SNR=5.3 | | | | | | | |

*NEIC* ***15*** *01:06:13.1±1.9, 30°.30S±0°.06×177°.6W±0°.2, h35km±2km, mb4.6/14, Error ellipse: s-maj=25.2km s-min=10.3km az=85.0*
*IDC* ***15*** *01:06:15.1±2.4, 30°.16S×177°.87W, h52km±18km, mb4.2/5, mb1 4.4/5, mb1mx4.0/22, mbtmp4.4/5, MS3.7/2, Ms1 3.7/2, ms1mx2.9/51, Error ellipse: s-maj=29.3km s-min=20.4km az=129.0*

**ISC 15 01:06:12.7±0.7, 30°.31S±0°.07×177°.6W±0°.1, h35km, n56, σ1s23/45, mb4.6/12, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.09** | **344** | P | | **Pn** | **01 06 31.8** | **+0.3** |
| | 222nm,0.3s,baz=64,slow=16,SNR=5.9 | | | | | | | |
| RAO | | | | S | | **Sn** | **01 06 44.5** | **-0.9** |
| | 2µm,0.3s,baz=156,slow=23,SNR=17 | | | | | | | |
| **RAO** | **Raoul Island** | **1.09** | **344** | | | **Pn** | **01 06 31.1** | **-0.4** |
| RAO | | | | | | **Sn** | **01 06 44.8** | **-0.6** |
| **URZ** | **Urewera** | **9.06** | **208** | P | | Pn | 01 08 15.1 | -5.9 |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QSPA | South Pole Qui | 59.80 | 180 | P | P | 01 16 16.3 | +2.0 |
| H03S2 | Juan Fernandez | 80.21 | 123 | T | T | 02 47 27.7 | |
| | baz=238 | | | | | | |
| H03S1 | Juan Fernandez | 80.22 | 123 | T | T | 02 47 37.7 | |
| | baz=238 | | | | | | |
| H03S3 | Juan Fernandez | 80.23 | 123 | T | T | 02 47 34.8 | |
| | baz=238 | | | | | | |
| H03N3 | Juan Fernandez | 80.40 | 123 | T | T | 02 47 44.3 | |
| | baz=242,slow=72,SNR=15 | | | | | | |
| H03N2 | Juan Fernandez | 80.41 | 123 | T | T | 02 47 41.5 | |
| | baz=242,slow=72,SNR=11 | | | | | | |
| H03N1 | Juan Fernandez | 80.42 | 123 | T | T | 02 47 43.5 | |
| | baz=242,slow=72,SNR=16 | | | | | | |
| NVAR | Mina Array Bea | 87.92 | 43 | P | P | 01 19 00.1 | +1.0 |
| | comp=Z,0.2nm,0.5s,baz=224,slow=5.0,SNR=1.9 | | | | | | |
| JTS | Las Juntas de | 97.36 | 82 | LR | LR | 01 54 00.5 | |
| | comp=Z,77nm,19.6s,baz=72,slow=29 | | | | | | |
| YKA | Yellowknife Ar | 105.20 | 25 | PKiKP | PKiKP | 01 24 30.2 | -0.5 |
| | comp=Z,0.1nm,0.4s,baz=218,slow=2.9,SNR=1.6 | | | | | | |
| MKAR | Makanchi Array | 117.99 | 310 | PKP | PKPdf | 01 24 54.5 | -1.0 |
| | comp=Z,0.4nm,0.5s,baz=213,slow=0.5,SNR=9.1 | | | | | | |
| MKAR | Makanchi Array | 117.99 | 310 | | PKPdf | 01 24 54.7 | -0.8 |
| ZALV | Zalesovo Beam | 118.20 | 318 | PKP | PKPdf | 01 24 54.5 | -1.1 |
| | comp=Z,0.3nm,0.3s,baz=124,slow=0.5,SNR=1.8 | | | | | | |
| KURK | Kurchatov | 121.25 | 314 | | PKPdf | 01 25 00.4 | -1.1 |
| KURBB | Kurchatov Arra | 121.29 | 314 | PKP | PKPdf | 01 25 00.6 | -1.1 |
| | comp=Z,1.3nm,0.6s,baz=108,slow=1.8,SNR=21 | | | | | | |
| BVAR | Borovoye Array | 126.59 | 316 | PKP | PKPdf | 01 25 11.5 | -0.2 |
| | comp=Z,0.8nm,0.4s,baz=57,slow=11,SNR=11 | | | | | | |
| ARU | Arti | 133.25 | 321 | PKP | PKPdf | 01 25 24.0 | -0.3 |
| | comp=Z,0.7nm,0.6s,baz=322,slow=5.0,SNR=3.8 | | | | | | |
| ARU | Arti | 133.25 | 321 | PKPdf | PKPdf | 01 25 24.1 | -0.1 |
| ARCES | ARCESS Array B | 138.58 | 348 | PKhKP | PKPpre | 01 25 28.1 | |
| | comp=Z,6.0nm,1.1s,baz=64,slow=2.1,SNR=2.0 | | | | | | |
| H10N3 | ASCENSION HYDR | 138.74 | 154 | T | T | 04 01 27.7 | |
| | baz=204,slow=74,SNR=14 | | | | | | |
| H10N1 | ASCENSION HYDR | 138.74 | 154 | T | T | 04 01 21.3 | |
| | baz=204,slow=74,SNR=14 | | | | | | |
| H10N2 | ASCENSION HYDR | 138.75 | 154 | T | T | 04 01 31.6 | |
| | baz=204,slow=74,SNR=14 | | | | | | |
| FINES | FINESS Array B | 145.18 | 340 | PKP | PKPbc | 01 25 45.0 | -0.4 |
| | comp=Z,5.6nm,0.4s,baz=52,slow=4.0,SNR=70 | | | | | | |
| KBZ | Khabaz | 145.36 | 304 | PKPbc | PKPbc | 01 25 46.2 | -0.4 |
| | comp=Z,0.4nm,0.5s,baz=297,slow=2.3,SNR=1.2 | | | | | | |
| NB2 | NORSAR Subarra | 148.71 | 352 | PKP | PKPbc | 01 25 55.5 | -0.1 |
| | comp=Z,0.1nm,0.4s,baz=17,slow=2.6 | | | | | | |
| NOA | NORSAR Array B | 148.71 | 352 | PKPbc | PKPbc | 01 25 54.5 | -1.1 |
| | comp=Z,1.1nm,0.8s,baz=15,slow=4.3,SNR=4.1 | | | | | | |
| AKASG | Malin Array Be | 151.45 | 323 | PKPbc | PKPbc | 01 26 02.1 | -0.4 |
| | comp=Z,3.3nm,0.5s,baz=50,slow=3.0,SNR=13 | | | | | | |
| AKASG | Malin Array Be | 151.45 | 323 | | PKPbc | 01 26 02.8 | +0.3 |
| MMAI | Mount Meron Ar | 151.86 | 284 | PKPbc | PKiKP | 01 26 04.8 | +0.3 |
| | comp=Z,0.8nm,0.3s,baz=68,slow=5.7,SNR=9.6 | | | | | | |
| BRTR | Keskin Array B | 152.87 | 299 | PKPbc | PKPbc | 01 26 04.8 | -1.5 |
| | comp=Z,0.4nm,0.6s,baz=118,slow=5.2,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 162.91 | 178 | PKPab | PKPab | 01 27 01.7 | +0.7 |
| | comp=Z,0.6nm,0.7s,baz=185,slow=3.4,SNR=4.6 | | | | | | |

*JMA **15** 01:14:48.7±0.4, 39.84N×138.87E, h238km±4km, M3.1*
*IDC **15** 01:14:49.3±4.1, 39.80N×138.76E, h230km±37km, mb2.9/6, mb1 3.1/7, mb1mx2.7/48, mbtmp3.5/7, Error ellipse: s-maj=28.1km s-min=24.8km az=166.0*
**ISC 15 01:14:49.8±0.8, 39.78N±0.07×138.97E±0.07, h250km±6km, n16, σ1s88/20, mb3.1/6, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JYW | Yuwa | 0.98 | 104 | P | Pn | 01 15 23.3 | -1.4 |
| JYYZ | Yamagatayuza | 1.06 | 135 | P | Pn | 01 15 24.2 | -1.0 |
| JYK | Kaneyama | 1.38 | 128 | P | Pn | 01 15 25.7 | -1.5 |
| JYK | | | | eS | S | 01 15 54.4 | -2.3 |
| JOM | Ohasama | 1.82 | 99 | P | Pn | 01 15 29.3 | -1.4 |
| JOM | | | | eS | S | 01 16 00.7 | -2.1 |
| JSD | Sado | 1.83 | 198 | P | Pn | 01 15 28.9 | -1.9 |
| JMK | Ichinoseki | 1.93 | 115 | P | Pn | 01 15 30.4 | -1.2 |
| JMK | | | | eS | S | 01 16 02.6 | -1.9 |
| JANG | Nango | 2.04 | 72 | P | Pn | 01 15 31.0 | -1.6 |
| JRY | Ryogami san | 3.76 | 181 | eS | S | 01 16 37.2 | -2.1 |
| JNBK | Urakawa-nobuka | 3.80 | 48 | S | S | 01 16 36.6 | -3.2 |
| USRK | Ussuriysk Ar. | 6.82 | 313 | P | Pn | 01 16 25.6 | -2.6 |
| | baz=115,slow=13,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 38.67 | 310 | P | P | 01 21 49.2 | +0.1 |
| | 0.5nm,0.4s,baz=103,slow=7.5,SNR=3.3 | | | | | | |
| ZALV | | | | PcP | PcP | 01 23 56.5 | +0.9 |
| | 0.4nm,0.4s,baz=84,slow=3.1,SNR=2.0 | | | | | | |
| MKAR | Makanchi Array | 41.07 | 299 | P | P | 01 22 09.1 | 0.0 |
| | 0.4nm,0.6s,baz=92,slow=6.8,SNR=6.4 | | | | | | |
| KURBB | Kurchatov Arra | 42.83 | 305 | P | P | 01 22 23.1 | +0.1 |
| | 1.1nm,0.5s,baz=82,slow=8.4,SNR=11 | | | | | | |
| ILAR | Eielson Array | 48.24 | 34 | P | P | 01 23 07.2 | +2.1 |
| | 0.3nm,0.6s,baz=262,slow=5.4,SNR=1.7 | | | | | | |
| WRA | Warramunga Arr | 59.57 | 185 | P | P | 01 24 28.8 | +1.5 |
| | 0.2nm,0.3s,baz=1.6,slow=2.2,SNR=2.2 | | | | | | |
| YKA | Yellowknife Ar | 62.40 | 30 | P | P | 01 24 47.6 | +1.8 |
| | 0.2nm,0.5s,baz=305,slow=6.4,SNR=5.1 | | | | | | |

*IDC **15** 01:22:36.7±0.8, 7.24S×106.14E, h0km, mb3.9/11, mb1 4.1/11, mb1mx3.8/36, mbtmp4.0/11, MS3.3/5, Ms1 3.3/5, ms1mx2.8/74, Error ellipse: s-maj=49.6km s-min=15.4km az=49.0*
*NEIC **15** 01:22:38.1±2.4, 7.60S±0.06×105.80E±0.08, h10km±1km, mb4.3/10, Error ellipse: s-maj=16.6km s-min=6.7km az=235.0*
*DJA **15** 01:22:39.2±0.4, 8˚S±3˚×10˚6E±˚, h10km, M4.4/13, mb4.7/1, mB6.0/1, MLv4.2/13, Mw(mB)5.6/1*
**ISC 15 01:22:40.1±1.8, 7.61S±0.06×105.92E±0.06, h24km±12km, n48, σ1s21/49, mb4.0/16, MS3.3/5, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKJI | Sukabumi | 0.87 | 46 | P | Pb | 01 22 56.2 | -0.3 |
| SKJI | | | | S | Sb | 01 23 07.3 | -0.5 |
| CGJI | Cibinong | 1.02 | 347 | P | Pn | 01 23 00.1 | +1.3 |
| CGJI | | | | S | Sn | 01 23 13.8 | +1.5 |
| CNJI | Cibinong | 1.23 | 76 | P | Pn | 01 23 01.2 | -0.6 |
| CNJI | | | | S | Sn | 01 23 16.5 | -1.2 |
| DBJI | Dramaga | 1.33 | 38 | P | Pb | 01 23 04.1 | -0.3 |
| DBJI | | | | S | Sb | 01 23 22.9 | +1.8 |
| CBJI | Citeko | 1.50 | 38 | P | Pn | 01 23 03.6 | -1.9 |
| CBJI | | | | S | Sn | 01 23 23.3 | -1.0 |
| TNG | Tangerang | 1.60 | 27 | P | Pn | 01 23 11.8 | +4.9 |
| TNG | | | | P | Pb | 01 23 08.4 | -0.6 |
| CMJI | Cimerak | 2.51 | 94 | P | Pn | 01 23 19.3 | -0.1 |
| XMIS | Christmas Isla | 2.87 | 185 | Pn | Pn | 01 23 22.5 | -1.8 |
| KPJI | Karang Pucung | 3.00 | 85 | P | Pn | 01 23 26.8 | +0.7 |
| KLSI | | 3.13 | 338 | P | Pn | 01 23 30.1 | +2.1 |
| UGM | Wanagama | 4.57 | 94 | Pn | Pn | 01 23 47.9 | +0.2 |
| UGM | Wanagama | 4.57 | 94 | P | Pn | 01 23 48.3 | +0.5 |
| PCJI | Pacitan | 5.24 | 97 | P | Pn | 01 23 57.9 | +1.0 |
| | 0.4nm40nm,0.5s | | | | | | |
| JAGI | Jajag, Banyuwa | 8.20 | 97 | Pn | Pn | 01 24 39.2 | +1.6 |
| MMRI | Maumere | 16.18 | 95 | P | P | 01 26 30.6 | +1.5 |
| FITZ | Fitzroy Crossi | 21.84 | 120 | P | P | 01 27 30.6 | -0.4 |
| | 2.1nm,0.8s,baz=283,slow=8.0,SNR=4.8 | | | | | | |
| KNRA | Kununurra | 23.75 | 112 | P | P | 01 27 51.0 | +0.3 |
| CMAR | Chiang Mai Arr | 26.80 | 345 | P | P | 01 28 15.9 | -2.6 |
| | 1.1nm,0.3s,baz=173,slow=9.6,SNR=1.6 | | | | | | |
| CMAR | | | | LR | LR | 01 40 35.5 | |
| | comp=Z,22nm,18.2s,baz=140,slow=41 | | | | | | |
| WB0 | Warramunga Arr | 30.13 | 117 | P | P | 01 28 48.3 | 0.0 |
| WB0 | | | | IAmb | IAmb | 01 29 10.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 30.14 | 117 | P | P | 01 28 49.0 | +0.6 |
| | comp=Z,0.8nm,0.8s,baz=291,slow=10,SNR=7.7 | | | | | | |
| WRA | | | | PcP | PcP | 01 31 50.0 | +0.4 |
| | comp=Z,0.2nm,0.5s,baz=300,slow=2.1,SNR=1.4 | | | | | | |
| WRA | Warramunga Arr | 30.14 | 117 | P | P | 01 28 48.5 | +0.2 |
| WB2 | Warramunga Arr | 30.15 | 117 | P | P | 01 28 48.9 | +0.4 |
| WB2 | | | | IAmb | IAmb | 01 29 12.1 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| ASAR | Alice Springs | 31.22 | 124 | P | P | 01 28 57.7 | -0.3 |
| | comp=Z,1.3nm,1.0s,baz=301,slow=7.9,SNR=8.0 | | | | | | |
| ASAR | | | | PcP | PcP | 01 31 52.8 | +0.3 |
| | comp=Z,0.3nm,0.5s,baz=294,slow=2.5,SNR=2.1 | | | | | | |
| H08S2 | Diego Garcia H | 33.13 | 268 | T | T | 02 04 34.1 | |
| | baz=92,slow=75,SNR=36 | | | | | | |
| H08S3 | Diego Garcia H | 33.14 | 268 | T | T | 02 04 34.8 | |
| | baz=92,slow=75,SNR=32 | | | | | | |
| H08S1 | Diego Carcia H | 33.15 | 268 | T | T | 02 04 35.5 | |
| | baz=92,slow=75,SNR=34 | | | | | | |
| STKA | Stephens Creek | 41.04 | 131 | P | P | 01 30 23.4 | +1.6 |
| | comp=Z,1.3nm,0.5s,baz=318,slow=12,SNR=4.4 | | | | | | |
| STKA | Stephens Creek | 41.04 | 131 | P | P | 01 30 23.4 | +1.6 |
| GUMO | Guam | 44.03 | 62 | LR | LR | 01 49 13.4 | |
| | comp=Z,23nm,19.7s,baz=120,slow=37 | | | | | | |
| SONM | Songino Array | 55.20 | 0 | P | P | 01 32 09.8 | -1.2 |
| | comp=Z,0.2nm,0.3s,baz=190,slow=7.3,SNR=1.5 | | | | | | |
| SONM | | | | PcP | PcP | 01 33 10.8 | -1.1 |
| | comp=Z,0.4nm,0.4s,baz=186,slow=5.8,SNR=2.6 | | | | | | |
| WSAR | Wadi Sarin | 55.47 | 305 | LR | LR | 01 55 43.8 | |
| | comp=Z,26nm,18.3s,baz=208,slow=36 | | | | | | |
| MK31 | Makanchi Array | 58.10 | 341 | P | P | 01 32 30.3 | -1.2 |
| MK31 | | | | IAmb | IAmb | 01 32 50.3 | |
| | comp=Z,2.2nm,1.5s | | | | | | |
| MKAR | Makanchi Array | 58.10 | 341 | P | P | 01 32 29.9 | -1.7 |
| | comp=Z,0.6nm,0.5s,baz=149,slow=8.3,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 58.10 | 341 | P | P | 01 32 29.6 | -1.9 |
| ZALV | Zalesovo Beam | 63.86 | 346 | P | P | 01 33 08.2 | -2.3 |
| | comp=Z,0.4nm,0.3s,baz=161,slow=6.8,SNR=5.0 | | | | | | |
| BRVK | Borovoye | 67.58 | 338 | P | P | 01 33 33.8 | -0.7 |
| BRVK | | | | IAmb | IAmb | 01 33 34.4 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| ABKAR | Akbulak array | 69.39 | 330 | P | P | 01 33 45.2 | -0.7 |
| BKZ | Black Stump Fm | 70.18 | 129 | P | P | 01 33 52.4 | +1.3 |
| LSZ | Lusaka | 76.25 | 256 | P | P | 01 34 29.4 | +1.9 |
| LSZ | | | | IAmb | IAmb | 01 34 30.4 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| KBZ | Khabaz | 76.39 | 318 | P | P | 01 34 27.5 | 0.0 |
| | comp=Z,1.7nm,0.8s,baz=145,slow=8.5,SNR=4.5 | | | | | | |
| BR131 | Keskin Array S | 81.44 | 312 | P | P | 01 34 55.7 | +0.1 |
| BR131 | | | | IAmb | IAmb | 01 34 56.5 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 81.44 | 312 | P | P | 01 34 55.6 | +0.1 |
| | comp=Z,2.4nm,0.7s,baz=135,slow=6.9,SNR=23 | | | | | | |
| FINES | FINESS Array B | 91.80 | 332 | P | P | 01 35 45.7 | 0.0 |
| | comp=Z,1.9nm,1.0s,baz=106,slow=9.3,SNR=1.4 | | | | | | |
| HFS | Hagfors | 97.65 | 330 | LR | LR | 02 27 19.7 | |
| | comp=Z,54nm,18.2s,baz=252,slow=40 | | | | | | |
| NOA | NORSAR Array B | 98.89 | 331 | LR | LR | 02 24 58.5 | |
| | comp=Z,8.6nm,19.1s,baz=310,slow=38 | | | | | | |
| TXAR | Lajitas Array | 144.77 | 48 | PKP | PKPdf | 01 42 15.3 | -0.4 |
| | comp=Z,0.5nm,0.6s,baz=254,slow=1.5,SNR=8.2 | | | | | | |
| TXAR | Lajitas Array | 144.77 | 48 | | PKPdf | 01 42 15.7 | -0.1 |
| BDFB | Brasilia | 145.35 | 228 | PKPbc | PKPdf | 01 42 18.4 | +1.2 |
| | comp=Z,1.2nm,0.5s,baz=122,slow=2.7,SNR=3.4 | | | | | | |

*TUL **15** 01:52:25.2±1.1, 36.48N±0.02×98.73W±0.04, h5km±7km, ML3.2, mb_Lg2.8/43(NEIC), Error ellipse: s-maj=4.8km s-min=3.3km az=100.0*
**NEIC 15 01:52:26.1±1.7, 36.48N±0.03×98.70W±0.03, h12km±6km, Error ellipse: s-maj=4.2km s-min=4.0km az=194.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| U32A | Winter Ranch, | 0.27 | 248 | P | Pg | 01 52 30.2 | -1.5 |
| U32A | | | | Sg | Sg | 01 52 34.0 | -1.4 |
| OKCFA | Oklahoma City | 1.46 | 136 | Pn | Pn | 01 52 52.2 | -0.2 |
| OKCSW | OKLAHOMA CITY | 1.48 | 136 | Pn | Pn | 01 52 52.5 | -0.1 |
| FNO | Franklin | 1.61 | 139 | | Pn | 01 52 54.7 | +0.3 |
| WMOK | Wichita Mounta | 1.74 | 182 | | Pn | 01 52 55.7 | -0.5 |
| T35A | Sooner Cattle | 1.81 | 75 | Pn | Pn | 01 52 57.5 | +0.3 |
| R32A | Long Quarter, | 1.94 | 360 | Pn | Pn | 01 52 59.4 | +0.4 |
| W35A | Tecumseh | 1.98 | 131 | | Pn | 01 52 59.9 | +0.4 |
| X34A | Smith Ranch, M | 2.00 | 159 | | Pn | 01 53 00.6 | +0.9 |
| TUL1 | Leonard | 2.42 | 103 | Pn | Pn | 01 53 06.0 | +0.5 |
| TUL1 | | | | IAmb_Lg | | 01 53 47.2 | |
| | comp=Z,37nm,0.9s | | | | | | |
| CBKS | Cedar Bluff | 2.47 | 341 | Pn | Pn | 01 53 06.4 | +0.1 |
| AMTX | Amarillo | 2.90 | 238 | Pn | Pn | 01 53 12.4 | +0.1 |
| AMTX | | | | IAmb_Lg | | 01 53 57.4 | |
| | comp=Z,61nm,0.9s | | | | | | |
| KSU1 | Kansas State U | 3.10 | 32 | Pn | Pn | 01 53 15.5 | +0.6 |
| X37A | Clayton | 3.30 | 124 | Pn | Pn | 01 53 17.7 | 0.0 |
| X37A | | | | IAmb_Lg | | 01 54 15.3 | |
| | comp=Z,27nm,0.7s | | | | | | |
| Z35A | Perchaven, San | 3.36 | 159 | Pn | Pn | 01 53 19.0 | +0.6 |
| U38A | Gravette | 3.48 | 89 | Pn | Pn | 01 53 20.5 | +0.4 |
| U38A | | | | IAmb_Lg | | 01 54 22.4 | |
| | comp=Z,19nm,0.7s | | | | | | |
| HHAR | Hobbs | 3.84 | 92 | Pn | Pn | 01 53 25.9 | +0.8 |
| ABTX | Abilene, Hawle | 3.92 | 192 | Pn | Pn | 01 53 25.9 | -0.3 |
| KSCO | Kaye Shedlock' | 4.01 | 310 | Pn | Pn | 01 53 27.4 | -0.2 |
| KSCO | | | | IAmb_Lg | | 01 54 40.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| MSTX | Muleshoe | 4.17 | 234 | Pn | Pn | 01 53 30.8 | +1.1 |
| MSTX | | | | IAmb_Lg | | 01 54 42.2 | |
| | comp=Z,18nm,0.7s | | | | | | |
| W39A | Magazine | 4.19 | 106 | Pn | Pn | 01 53 30.8 | +0.9 |
| W39A | | | | IAmb_Lg | | 01 54 39.7 | |
| | comp=Z,28nm,0.8s | | | | | | |
| Z38A | Mt. Pleasant | 4.43 | 135 | IAmb_Lg | | 01 54 48.3 | |
| | comp=Z,32nm,0.8s | | | | | | |
| S39A | Bolivar | 4.46 | 73 | Pn | Pn | 01 53 35.9 | +2.3 |
| WHTX | Lake Whitney, | 4.59 | 167 | Pn | Pn | 01 53 35.0 | -0.4 |
| MIAR | Mount Ida | 4.60 | 113 | Pn | Pn | 01 53 36.3 | +0.8 |
| MIAR | | | | IAmb_Lg | | 01 55 00.6 | |
| | comp=Z,25nm,1.0s | | | | | | |
| T25A | Trinidad | 4.63 | 280 | Pn | Pn | 01 53 35.7 | -0.4 |
| T25A | | | | IAmb_Lg | | 01 54 49.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| U40A | Yellville | 4.71 | 90 | Pn | Pn | 01 53 37.9 | +0.8 |
| U40A | | | | IAmb_Lg | | 01 55 02.6 | |
| | comp=Z,23nm,1.0s | | | | | | |
| BGNE | Belgrade | 4.94 | 5 | Pn | Pn | 01 53 40.6 | +0.4 |
| BGNE | | | | IAmb_Lg | | 01 55 06.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| P38A | Dawn | 5.14 | 51 | Pn | Pn | 01 53 43.3 | +0.3 |
| P38A | | | | IAmb_Lg | | 01 55 21.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| OGNE | Ogallala | 5.17 | 331 | IAmb_Lg | | 01 55 20.0 | |
| | comp=Z,20nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 5.18 | 111 | Pn | Pn | 01 53 43.8 | +0.4 |
| MGMO | Mountain Grove | 5.20 | 81 | Pn | Pn | 01 53 43.7 | 0.0 |
| MGMO | | | | IAmb_Lg | | 01 55 12.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| WHAR | Wooly Hollow | 5.33 | 101 | Pn | Pn | 01 53 46.0 | +0.4 |
| WHAR | | | | IAmb_Lg | | 01 55 19.9 | |
| | comp=Z,14nm,0.8s | | | | | | |
| R40A | Maddies Statio | 5.43 | 69 | Pn | Pn | 01 53 47.9 | +1.1 |
| SDCO | Great Sand Dun | 5.58 | 285 | Pn | Pn | 01 53 50.3 | +1.0 |
| 435B | Jarrell | 5.76 | 170 | IAmb_Lg | | 01 55 31.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| L34A | Svendsen Farm, | 5.77 | 17 | Pn | Pn | 01 53 49.6 | -2.0 |
| JCT | Junction City | 6.05 | 189 | IAmb_Lg | | 01 55 53.7 | |
| | comp=Z,15nm,0.8s | | | | | | |
| N38A | Joes South For | 6.07 | 43 | Pn | Pn | 01 53 55.0 | -0.7 |
| ISCO | Idaho Springs | 6.38 | 303 | Pn | Pn | 01 53 59.0 | -1.3 |
| PBMO | Poplar Bluff | 6.65 | 85 | IAmb_Lg | | 01 55 59.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| BNM | Barren Site | 6.89 | 253 | Pn | Pn | 01 54 07.8 | +0.7 |
| PHWY | Pilot Hill | 7.14 | 314 | IAmb_Lg | | 01 56 10.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| LENM | Lemitar | 7.15 | 254 | Pn | Pn | 01 54 12.8 | +2.1 |
| N23A | Red Feather La | 7.18 | 310 | IAmb_Lg | | 01 56 19.7 | |
| | comp=Z,18nm,0.9s | | | | | | |
| ECSD | EROS Data Cent | 7.42 | 12 | Pn | Pn | 01 54 13.1 | -1.2 |
| TX31 | Lajitas Ar. Si | 8.26 | 212 | Pn | Pn | 01 54 24.6 | -1.3 |
| TX32 | Lajitas Array | 8.26 | 212 | Pn | Pn | 01 54 25.1 | -0.7 |
| TXAR | Lajitas Array | 8.26 | 212 | Pn | Pn | 01 54 25.7 | -0.2 |
| HDIL | Hopedale | 8.42 | 58 | Pn | Pn | 01 54 28.5 | +0.6 |
| K22A | Casper | 8.63 | 318 | IAmb_Lg | | 01 57 05.1 | |
| | comp=Z,10nm,0.9s | | | | | | |

**IDC 15 02:03:15.6±7.3, 18.45S×177.29W, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.1/36, mbtmp3.6/2, Error ellipse: s-maj=303.7km s-min=69.8km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 45.58 | 260 | P | P | 02 11 37.5 | -0.3 |
| | 0.3nm,0.3s,baz=97,slow=7.5,SNR=14 | | | | | | |
| ASAR | Alice Springs | 45.67 | 255 | P | P | 02 11 38.5 | +0.1 |
| | 0.4nm,0.4s,baz=89,slow=8.6,SNR=7.2 | | | | | | |
| BRTR | Keskin Array B | 145.91 | 315 | PKPbc | PKPdf | 02 22 56.6 | -0.3 |
| | 0.1nm,0.3s,baz=61,slow=4.1,SNR=1.5 | | | | | | |

*IDC **15** 02:08:13.8±1.8, 61.71N×152.93W, h109km±22km, mb3.6/7, mb1 3.7/11, mb1mx3.3/45, mbtmp4.0/11, MS3.3/4, Ms1 3.3/4, ms1mx2.6/86, Error ellipse: s-maj=22.2km s-min=15.4km az=105.0*

*NEIC **15** 02:08:16.2±1.1, 61.78N±0.03×152.44W±0.08, h143km±4km, Error ellipse: s-maj=5.7km s-min=3.5km az=73.0*
*AEIC **15** 02:08:17±1.4, 61.76N±0.03×152.42W±0.08, h141km±4km, ML3.5, mb4.2/9(NEIC), ML3.6/150(NEIC), Error ellipse: s-maj=5.8km s-min=3.7km az=77.0*
**ISC 15 02:08:16.9±0.6, 61.76N±0.03×152.44W±0.03, h143km±5km, n227, σ1s13/258, mb4.0/10, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STLK | Strandline Lak | 0.39 | 131 | | Pn | 02 08 36.5 | -0.4 |
| SPNN | North Nagishla | 0.41 | 198 | | Pn | 02 08 36.9 | -0.3 |
| SPNN | | | | | Sn | 02 08 51.0 | -1.6 |
| BGL | Barrier Glacie | 0.49 | 177 | | Pn | 02 08 37.3 | -0.3 |
| SPBG | Spurr Blockage | 0.50 | 176 | | Pn | 02 08 37.3 | -0.3 |
| SPBG | | | | | Sn | 02 08 53.2 | 0.0 |
| SPCG | Spurr Capps Gl | 0.51 | 156 | | Pn | 02 08 37.0 | -0.6 |
| SPCG | | | | | Sn | 02 08 52.8 | -0.6 |
| SPCN | Chakachatna No | 0.55 | 167 | | Pn | 02 08 37.4 | -0.3 |
| SPCR | Spurr Chakacha | 0.57 | 169 | | Pn | 02 08 37.2 | -0.7 |
| SPCR | Spurr Chakacha | 0.57 | 169 | P | Pn | 02 08 37.2 | -0.7 |
| | baz=350 | | | | | | |
| SPU | Mount Spurr | 0.60 | 162 | | Pn | 02 08 37.3 | -0.8 |
| SPU | | | | Sn | Sn | 02 08 53.3 | -0.8 |
| M19K | Big River Lodg | 0.94 | 280 | Pn | Pn | 02 08 39.9 | -0.5 |
| M19K | | | | Sn | Sn | 02 08 57.2 | -1.2 |
| M19K | Big River Lodg | 0.94 | 280 | P | Pn | 02 08 39.9 | -0.5 |
| | baz=98 | | | | | | |
| M19K | | | | S | Sn | 02 08 57.3 | -1.1 |
| | baz=98 | | | | | | |
| L20K | Farewell, AK | 0.99 | 318 | | Pn | 02 08 40.4 | -0.5 |
| L20K | | | | | Sn | 02 08 57.9 | -1.4 |
| L20K | Farewell, AK | 0.99 | 318 | P | Pn | 02 08 40.4 | -0.5 |
| | baz=136 | | | | | | |
| L20K | | | | S | Sn | 02 08 57.8 | -1.4 |
| | baz=136 | | | | | | |
| M22K | Willow | 1.10 | 89 | | Pn | 02 08 41.4 | -0.4 |
| M22K | | | | Sn | Sn | 02 09 00.4 | -0.5 |
| M22K | | | | IAML | | 02 09 02.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| M22K | | | | IAML | | 02 09 03.3 | |
| | comp=N,1μm,0.7s | | | | | | |
| M22K | Willow | 1.10 | 89 | P | Pn | 02 08 41.5 | -0.4 |
| | baz=271 | | | | | | |
| PPLA | Purkeypile | 1.15 | 6 | Pn | Pn | 02 08 42.2 | -0.2 |
| PPLA | | | | Sn | Sn | 02 09 01.0 | -1.1 |
| PPLA | Purkeypile | 1.15 | 6 | P | Pn | 02 08 42.2 | -0.2 |
| | baz=186 | | | | | | |
| PPLA | | | | S | Sn | 02 09 01.4 | -0.6 |
| | baz=186 | | | | | | |
| CAPN | Captain Cook N | 1.17 | 147 | Pn | Pn | 02 08 43.3 | +0.8 |
| CAPN | | | | Sn | Sn | 02 09 04.0 | +2.0 |
| CAPN | | | | IAML | | 02 09 05.4 | |
| | comp=E,2μm,0.6s | | | | | | |
| CAPN | | | | IAML | | 02 09 18.0 | |
| | comp=N,2μm,0.8s | | | | | | |
| CAPN | Captain Cook N | 1.17 | 147 | P | Pn | 02 08 43.5 | +1.1 |
| | baz=329 | | | | | | |
| DFR | Drift River | 1.17 | 186 | | Pn | 02 08 42.4 | -0.3 |
| RDT | Redoubt | 1.19 | 179 | | Pn | 02 08 42.4 | -0.4 |
| CUT | Chulitna | 1.21 | 57 | Pn | Pn | 02 08 42.5 | -0.4 |
| CUT | | | | Sn | Sn | 02 09 02.0 | -0.8 |
| CUT | | | | IAML | | 02 09 05.6 | |
| | comp=N,2μm,0.6s | | | | | | |
| CUT | Chulitna | 1.21 | 57 | P | Pn | 02 08 42.7 | -0.2 |
| | baz=238 | | | | | | |
| CUT | | | | S | Sn | 02 09 02.8 | 0.0 |
| | baz=238 | | | | | | |
| L19K | White Mountain | 1.22 | 292 | Pn | Pn | 02 08 42.3 | -0.7 |
| L19K | | | | Sn | Sn | 02 09 01.4 | -1.6 |
| L19K | White Mountain | 1.22 | 292 | P | Pn | 02 08 42.5 | -0.5 |
| | baz=109 | | | | | | |
| L19K | | | | S | Sn | 02 09 01.6 | -1.4 |
| | baz=109 | | | | | | |
| NCT | North Crescent | 1.22 | 191 | | Pn | 02 08 42.8 | -0.3 |
| FIS | Fire Island | 1.23 | 119 | Pn | Pn | 02 08 43.5 | +0.4 |
| FIS | | | | IAML | | 02 09 05.8 | |
| | comp=N,1μm,0.6s | | | | | | |
| FIS | | | | IAML | | 02 09 11.2 | |
| | comp=E,796nm,0.5s | | | | | | |
| RSO | Redoubt South | 1.31 | 187 | Pn | Pn | 02 08 43.8 | -0.3 |
| N19K | Bonanza Creek | 1.37 | 227 | Pn | Pn | 02 08 43.8 | -0.8 |
| N19K | | | | | Sn | 02 09 04.2 | -1.5 |
| N19K | Bonanza Creek | 1.37 | 227 | P | Pn | 02 08 44.0 | -0.5 |
| | baz=46 | | | | | | |
| N19K | | | | S | Sn | 02 09 04.7 | -1.0 |
| | baz=46 | | | | | | |
| RC01 | Rabbit Creek A | 1.46 | 116 | | Pn | 02 08 44.8 | -0.6 |
| RC01 | | | | IAML | | 02 09 08.6 | |
| | comp=N,595nm,0.3s | | | | | | |
| RC01 | | | | IAML | | 02 09 08.6 | |
| | comp=E,530nm,0.4s | | | | | | |
| RC01 | Rabbit Creek A | 1.46 | 116 | P | Pn | 02 08 44.8 | -0.6 |
| | baz=299 | | | | | | |
| PMR | Palmer | 1.59 | 94 | Pn | Pn | 02 08 45.0 | -1.7 |
| PMR | Palmer | 1.59 | 94 | P | Pn | 02 08 45.4 | -1.4 |
| | baz=278 | | | | | | |
| SLKM | Skilak Lake | 1.65 | 138 | | Pn | 02 08 46.7 | -0.9 |
| SLKM | | | | | Sn | 02 09 08.9 | -2.1 |
| GHO | Glory Hole Cre | 1.67 | 88 | Pn | Pn | 02 08 46.7 | -1.1 |
| GHO | | | | IAML | | 02 09 12.3 | |
| | comp=N,596nm,0.9s | | | | | | |
| CAST | Castle Rocks | 1.68 | 5 | Pn | Pn | 02 08 47.1 | -0.7 |
| CAST | Castle Rocks | 1.68 | 5 | P | Pn | 02 08 47.3 | -0.5 |
| | baz=186 | | | | | | |
| O20K | Slope Mountain | 1.68 | 183 | | Pn | 02 08 47.6 | -0.3 |
| O20K | | | | | Sn | 02 09 11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CHUM | Lake Minchumin | 2.14 | 2 | | | Pn | 02 08 52.5 | -0.5 |
| CHUM | Lake Minchumin | 2.14 | 2 | P | | Pn | 02 08 52.5 | -0.5 |
| | baz=181 | | | | | | | |
| BRLK | Bradley Lake | 2.14 | 158 | Pn | | Pn | 02 08 52.4 | -0.8 |
| BRLK | | | | | | Sn | 02 09 19.0 | -2.2 |
| BRLK | | | | IAML | | | 02 09 23.4 | |
| | comp=N,600nm,0.6s | | | | | | | |
| HOM | Homer | 2.14 | 169 | Pn | | Pn | 02 08 52.7 | -0.5 |
| HOM | Homer | 2.14 | 169 | P | | Pn | 02 08 53.2 | 0.0 |
| | baz=350 | | | | | | | |
| OPT | Oil Point | 2.15 | 191 | | | Pn | 02 08 53.2 | -0.1 |
| OPT | Oil Point | 2.15 | 191 | P | | Pn | 02 08 53.2 | -0.1 |
| | baz=10 | | | | | | | |
| PWL | Port Wells | 2.18 | 113 | Pn | | Pn | 02 08 52.0 | -1.6 |
| PWL | | | | IAML | | | 02 09 20.8 | |
| | comp=E,368nm,0.7s | | | | | | | |
| PWL | | | | IAML | | | 02 09 21.7 | |
| | comp=N,643nm,0.4s | | | | | | | |
| BRSE | Bradley Lake S | 2.19 | 157 | | | Pn | 02 08 52.8 | -1.0 |
| BRSE | | | | | | Sn | 02 09 19.6 | -2.5 |
| BRSE | Bradley Lake S | 2.19 | 157 | P | | Pn | 02 08 52.7 | -1.0 |
| | baz=339 | | | | | | | |
| BRSE | | | | S | | Sn | 02 09 19.6 | -2.5 |
| | baz=339 | | | | | | | |
| SEW | Seward | 2.21 | 137 | Pn | | Pn | 02 08 52.4 | -1.6 |
| SEW | Seward | 2.21 | 137 | P | | Pn | 02 08 53.0 | -1.0 |
| | baz=320 | | | | | | | |
| CNPM | China Poot | 2.31 | 165 | Pn | | Pn | 02 08 54.4 | -1.0 |
| CNPM | | | | | | Sn | 02 09 22.3 | -2.6 |
| CNPM | | | | IAML | | | 02 09 28.8 | |
| | comp=N,577nm,0.4s | | | | | | | |
| O18K | Koktuh Hills | 2.34 | 217 | Pn | | Pn | 02 08 54.5 | -1.1 |
| O18K | Koktuh Hills | 2.34 | 217 | P | | Pn | 02 08 55.3 | -0.4 |
| | baz=34 | | | | | | | |
| RND | Reindeer | 2.35 | 43 | | | Pn | 02 08 54.8 | -0.9 |
| RND | | | | IAML | | | 02 09 25.5 | |
| | comp=E,250nm,0.6s | | | | | | | |
| RND | | | | IAML | | | 02 09 25.6 | |
| | comp=N,236nm,0.7s | | | | | | | |
| WAT6 | Susitna Watana | 2.36 | 67 | | | Pn | 02 08 55.2 | -0.8 |
| WAT6 | Susitna Watana | 2.36 | 67 | P | | Pn | 02 08 55.2 | -0.8 |
| | baz=252 | | | | | | | |
| SCM | Sheep Creek Mo | 2.43 | 86 | Pn | | Pn | 02 08 55.4 | -1.4 |
| SCM | | | | | | Sn | 02 09 26.9 | -0.6 |
| BPAW | Bear Paw Mtn. | 2.45 | 15 | Pn | | Pn | 02 08 55.6 | -1.3 |
| BPAW | | | | IAML | | | 02 09 27.9 | |
| | comp=N,251nm,0.8s | | | | | | | |
| BPAW | | | | IAML | | | 02 09 28.3 | |
| | comp=E,202nm,0.6s | | | | | | | |
| BPAW | Bear Paw Mtn. | 2.45 | 15 | P | | Pn | 02 08 56.1 | -0.8 |
| | baz=196 | | | | | | | |
| J20K | Nowinta River | 2.55 | 343 | Pn | | Pn | 02 08 57.3 | -0.9 |
| J20K | Nowinta River | 2.55 | 343 | P | | Pn | 02 08 57.5 | -0.7 |
| | baz=161 | | | | | | | |
| MCK | McKinley | 2.56 | 38 | Pn | | Pn | 02 08 57.1 | -1.2 |
| MCK | | | | Sn | | Sn | 02 09 27.9 | -2.4 |
| MCK | | | | IAML | | | 02 09 30.8 | |
| | comp=N,232nm,1.1s | | | | | | | |
| MCK | | | | IAML | | | 02 09 35.4 | |
| | comp=E,141nm,0.7s | | | | | | | |
| MCK | McKinley | 2.56 | 38 | P | | Pn | 02 08 57.8 | -0.5 |
| | baz=220 | | | | | | | |
| MCK | | | | S | | Sn | 02 09 30.0 | -0.2 |
| | baz=220 | | | | | | | |
| DHY | Denali Highway | 2.70 | 58 | Pn | | Pn | 02 08 59.4 | -0.9 |
| DHY | | | | IAML | | | 02 09 33.8 | |
| | comp=E,431nm,0.7s | | | | | | | |
| DHY | Denali Highway | 2.70 | 58 | P | | Pn | 02 08 59.6 | -0.6 |
| | baz=243 | | | | | | | |
| GLI | Glacier Island | 2.72 | 106 | Pn | | Pn | 02 08 57.8 | -2.6 |
| GLI | | | | IAML | | | 02 09 32.8 | |
| | comp=N,322nm,0.6s | | | | | | | |
| GLI | | | | IAML | | | 02 09 33.3 | |
| | comp=E,248nm,0.6s | | | | | | | |
| GLI | Glacier Island | 2.72 | 106 | P | | Pn | 02 08 58.5 | -1.9 |
| | baz=291 | | | | | | | |
| P18K | Big Mountain, | 2.74 | 211 | Pn | | Pn | 02 08 59.4 | -1.3 |
| BWN | Browne | 2.78 | 28 | Pn | | Pn | 02 09 00.8 | -0.2 |
| BWN | | | | IAML | | | 02 10 01.4 | |
| | comp=E,285nm,1.0s | | | | | | | |
| BWN | | | | IAML | | | 02 10 07.0 | |
| | comp=N,278nm,1.0s | | | | | | | |
| JPK | Jack Peak | 2.90 | 101 | | | Pn | 02 09 01.2 | -1.4 |
| Q19K | Cape Douglas, | 2.90 | 192 | Pn | | Pn | 02 09 01.9 | -0.7 |
| Q19K | | | | IAML | | | 02 09 58.9 | |
| | comp=N,202nm,0.9s | | | | | | | |
| Q19K | | | | IAML | | | 02 10 01.8 | |
| | comp=E,372nm,1.9s | | | | | | | |
| M24K | Tolsona, Glenn | 2.98 | 80 | Pn | | Pn | 02 09 03.5 | -0.2 |
| M24K | Tolsona, Glenn | 2.98 | 80 | P | | Pn | 02 09 03.7 | 0.0 |
| | baz=266 | | | | | | | |
| FID | Port Fidalgo | 3.05 | 107 | Pn | | Pn | 02 09 02.6 | -1.9 |
| FID | | | | IAML | | | 02 09 40.9 | |
| | comp=E,307nm,0.5s | | | | | | | |
| KLU | Klutina | 3.12 | 92 | Pn | | Pn | 02 09 04.0 | -1.6 |
| KLU | | | | IAML | | | 02 09 43.5 | |
| | comp=N,203nm,0.6s | | | | | | | |
| KLU | | | | IAML | | | 02 09 43.6 | |
| | comp=E,169nm,0.5s | | | | | | | |
| KLU | Klutina | 3.12 | 92 | P | | Pn | 02 09 04.5 | -1.0 |
| | baz=278 | | | | | | | |
| NEA2 | Nenana | 3.23 | 27 | Pn | | Pn | 02 09 05.2 | -1.7 |
| NEA2 | Nenana | 3.23 | 27 | P | | Pn | 02 09 05.7 | -1.1 |
| | baz=210 | | | | | | | |
| DIV | Divide | 3.26 | 98 | Pn | | Pn | 02 09 05.8 | -1.6 |
| PS11 | TAPS Pump St11 | 3.31 | 81 | | | Pn | 02 09 07.3 | -0.5 |
| WRH | Wood River Hil | 3.37 | 34 | Pn | | Pn | 02 09 07.3 | -1.2 |
| WRH | | | | IAML | | | 02 10 08.7 | |
| | comp=E,85nm,0.7s | | | | | | | |
| MLY | Manley | 3.38 | 12 | Pn | | Pn | 02 09 07.6 | -1.1 |
| MLY | Manley | 3.38 | 12 | P | | Pn | 02 09 08.0 | -0.7 |
| | baz=194 | | | | | | | |
| I21K | Tanana | 3.44 | 3 | Pn | | Pn | 02 09 08.7 | -0.9 |
| I21K | Tanana | 3.44 | 3 | P | | Pn | 02 09 09.1 | -0.4 |
| | baz=184 | | | | | | | |
| EYAK | Cordova Ski Ar | 3.46 | 108 | Pn | | Pn | 02 09 08.8 | -1.0 |
| EYAK | Cordova Ski Ar | 3.46 | 108 | P | | Pn | 02 09 09.2 | -0.6 |
| | baz=294 | | | | | | | |
| PAX | Paxson | 3.47 | 66 | Pn | | Pn | 02 09 09.9 | -0.1 |
| PAX | Paxson | 3.47 | 66 | P | | Pn | 02 09 10.0 | 0.0 |
| | baz=252 | | | | | | | |
| HARP | HAARP | 3.49 | 76 | | | Pn | 02 09 10.1 | -0.1 |
| HARP | HAARP | 3.49 | 76 | P | | Pn | 02 09 10.1 | -0.1 |
| | baz=263 | | | | | | | |
| PS10 | TAPS Pump St10 | 3.51 | 59 | | | Pn | 02 09 10.3 | -0.2 |
| CCB | Clear Creek Bu | 3.58 | 34 | Pn | | Pn | 02 09 10.0 | -1.3 |
| CCB | | | | IAML | | | 02 10 16.8 | |
| | comp=E,47nm,0.8s | | | | | | | |
| HDA | Harding Lake | 3.65 | 41 | Pn | | Pn | 02 09 11.2 | -1.1 |
| HDA | | | | IAML | | | 02 09 56.1 | |
| | comp=E,144nm,0.5s | | | | | | | |
| HDA | Harding Lake | 3.65 | 41 | P | | Pn | 02 09 11.5 | -0.8 |
| | baz=226 | | | | | | | |
| I23K | Minto, Yukon-K | 3.68 | 21 | Pn | | Pn | 02 09 11.4 | -1.2 |
| I23K | | | | IAML | | | 02 10 13.8 | |
| | comp=N,47nm,0.8s | | | | | | | |
| I23K | Minto, Yukon-K | 3.68 | 21 | P | | Pn | 02 09 11.9 | -0.7 |
| | baz=203 | | | | | | | |
| MDM | Murphy Dome | 3.73 | 29 | | | Pn | 02 09 12.0 | -1.4 |
| MDM | | | | IAML | | | 02 10 31.0 | |
| | comp=E,47nm,0.7s | | | | | | | |
| N25K | Chitina, Valde | 3.74 | 89 | Pn | | Pn | 02 09 12.7 | -0.9 |
| N25K | | | | IAML | | | 02 09 57.7 | |
| | comp=E,96nm,0.7s | | | | | | | |
| N25K | | | | IAML | | | 02 09 57.8 | |
| | comp=N,170nm,0.7s | | | | | | | |
| N25K | Chitina, Valde | 3.74 | 89 | P | | Pn | 02 09 13.0 | -0.5 |
| | baz=276 | | | | | | | |
| TCOL | CIGO, UAF Yank | 3.75 | 31 | Pn | | Pn | 02 09 12.6 | -0.9 |
| TCOL | CIGO, UAF Yank | 3.75 | 31 | P | | Pn | 02 09 13.0 | -0.5 |
| | baz=215 | | | | | | | |
| COLA | College | 3.75 | 31 | | | Pn | 02 09 12.6 | -0.9 |
| PS08 | TAPS Pump Stn8 | 3.79 | 40 | | | Pn | 02 09 13.2 | -0.8 |
| BMRM | Bremner River | 3.85 | 98 | Pn | | Pn | 02 09 14.2 | -0.8 |
| BMRM | | | | IAML | | | 02 10 00.9 | |
| | comp=N,81nm,0.8s | | | | | | | |
| BMRM | | | | IAML | | | 02 10 25.6 | |
| | comp=E,67nm,0.5s | | | | | | | |
| BMRM | Bremner River | 3.85 | 98 | P | | Pn | 02 09 13.5 | -1.5 |
| | baz=285 | | | | | | | |
| H21K | Melozitna Rive | 3.92 | 358 | Pn | | Pn | 02 09 14.8 | -1.0 |
| IL31 | | 3.93 | 37 | | | Pn | 02 09 14.0 | -1.8 |
| ILAR | Eielson Array | 3.93 | 37 | P | | Pn | 02 09 14.9 | -1.0 |
| | comp=E,13nm,0.3s,baz=220,slow=14,SNR=585 | | | | | | | |
| ILAR | | | | S | | Sn | 02 09 58.0 | -3.8 |
| | comp=E,4.0nm,0.3s,baz=217,slow=17,SNR=5.9 | | | | | | | |
| ILAR | | | | LR | | LR | 02 10 42.4 | |
| | comp=E,62nm,21.4s,baz=250,slow=36 | | | | | | | |
| ILAR | Eielson Array | 3.93 | 37 | Pn | | Pn | 02 09 14.8 | -1.1 |
| KDAK | Kodiak Island | 3.99 | 181 | P | | Pn | 02 09 13.2 | -3.5 |
| | comp=E,1.7nm,0.3s,baz=55,slow=5.9,SNR=43 | | | | | | | |
| KDAK | | | | S | | Sn | 02 09 57.8 | -5.2 |
| | comp=E,6.7nm,0.3s,baz=27,slow=12,SNR=3.6 | | | | | | | |
| KDAK | Kodiak Island | 3.99 | 181 | Pn | | Pn | 02 09 14.2 | -2.5 |
| KDAK | | | | IAML | | | 02 10 09.6 | |
| | comp=E,69nm,0.8s | | | | | | | |
| KDAK | | | | IAML | | | 02 11 45.5 | |
| | comp=E,54nm,2.6s | | | | | | | |
| RAGM | Ragged Mountai | 4.01 | 107 | Pn | | Pn | 02 09 16.3 | -0.8 |
| RIDG | Independent Ri | 4.02 | 57 | | | Pn | 02 09 17.0 | -0.2 |
| RIDG | Independent Ri | 4.02 | 57 | P | | Pn | 02 09 17.2 | +0.1 |
| | baz=244 | | | | | | | |
| PS07 | TAPS Pump Stn7 | 4.03 | 26 | | | Pn | 02 09 16.5 | -0.6 |
| POKR | Poker Plat Res | 4.05 | 31 | Pn | | Pn | 02 09 16.2 | -1.3 |
| POKR | | | | IAML | | | 02 10 29.4 | |
| | comp=N,40nm,0.7s | | | | | | | |
| POKR | | | | IAML | | | 02 10 34.1 | |
| | comp=E,40nm,0.7s | | | | | | | |
| POKR | Poker Plat Res | 4.05 | 31 | P | | Pn | 02 09 16.9 | -0.6 |
| | baz=216 | | | | | | | |
| GLB | Gilahina Butte | 4.14 | 91 | Pn | | Pn | 02 09 17.7 | -1.0 |
| GLB | | | | IAML | | | 02 10 06.7 | |
| | comp=N,84nm,1.0s | | | | | | | |
| GLB | | | | IAML | | | 02 10 31.2 | |
| | comp=E,65nm,0.6s | | | | | | | |
| HMT | Hamilton | 4.22 | 106 | Pn | | Pn | 02 09 18.9 | -0.9 |
| H23K | Yukon River | 4.28 | 16 | Pn | | Pn | 02 09 19.5 | -1.0 |
| IM03 | | 4.29 | 353 | | | Pn | 02 09 20.2 | -0.3 |
| IMAR | Indian Mountai | 4.29 | 353 | | | Pn | 02 09 19.6 | -0.9 |
| J25K | Salcha River, | 4.30 | 45 | Pn | | Pn | 02 09 19.8 | -1.0 |
| J25K | | | | IAML | | | 02 10 10.0 | |
| | comp=E,117nm,0.9s | | | | | | | |
| J25K | | | | IAML | | | 02 10 10.9 | |
| | comp=N,102nm,0.6s | | | | | | | |
| J25K | Salcha River, | 4.30 | 45 | P | | Pn | 02 09 20.1 | -0.7 |
| | baz=231 | | | | | | | |
| DOT | Dot Lake | 4.30 | 60 | Pn | | Pn | 02 09 19.4 | -1.4 |
| VRDI | Verde Repeater | 4.34 | 93 | Pn | | Pn | 02 09 20.3 | -1.2 |
| VRDI | | | | IAML | | | 02 10 12.1 | |
| | comp=N,52nm,0.9s | | | | | | | |
| VRDI | | | | IAML | | | 02 10 38.0 | |
| | comp=E,41nm,0.9s | | | | | | | |
| L26K | Log Cabin Wild | 4.42 | 69 | Pn | | Pn | 02 09 23.0 | +0.6 |
| BERG | Berg Lake | 4.46 | 104 | Pn | | Pn | 02 09 21.5 | -1.4 |
| SCRK | Sand Creek | 4.47 | 56 | Pn | | Pn | 02 09 22.0 | -1.0 |
| SCRK | | | | IAML | | | 02 10 25.1 | |
| | comp=N,54nm,1.1s | | | | | | | |
| SCRK | | | | IAML | | | 02 10 25.2 | |
| | comp=E,74nm,0.7s | | | | | | | |
| SCRK | Sand Creek | 4.47 | 56 | P | | Pn | 02 09 22.1 | -1.0 |
| | baz=244 | | | | | | | |
| M26K | Nabesna, AK | 4.49 | 78 | Pn | | Pn | 02 09 22.8 | -0.5 |
| M26K | | | | IAML | | | 02 10 35.5 | |
| | comp=E,69nm,0.5s | | | | | | | |
| M26K | | | | IAML | | | 02 10 37.1 | |
| | comp=N,79nm,0.6s | | | | | | | |
| H24K | Noodor Dome | 4.57 | 24 | | | Pn | 02 09 23.6 | -0.8 |
| H24K | Noodor Dome | 4.57 | 24 | P | | Pn | 02 09 23.5 | -0.8 |
| | baz=208 | | | | | | | |
| KHIT | Khitrov Hills | 4.65 | 102 | | | Pn | 02 09 25.1 | -0.4 |
| WAX | Waxell Ridge | 4.83 | 101 | Pn | | Pn | 02 09 27.3 | -0.6 |
| WAX | | | | IAML | | | 02 10 23.5 | |
| | comp=E,83nm,0.7s | | | | | | | |
| PRP | Porcupine Dome | 4.87 | 36 | Pn | | Pn | 02 09 27.3 | -1.1 |
| PRP | | | | IAML | | | 02 10 24.2 | |
| | comp=E,35nm,0.5s | | | | | | | |
| PRP | | | | IAML | | | 02 10 57.6 | |
| | comp=N,33nm,0.7s | | | | | | | |
| PRP | Porcupine Dome | 4.87 | 36 | P | | Pn | 02 09 27.9 | -0.5 |
| | baz=222 | | | | | | | |
| BALM | Baldy | 4.91 | 94 | | | Pn | 02 09 28.8 | -0.1 |
| KIAG | Kiagna River | 4.93 | 95 | | | Pn | 02 09 28.5 | -0.8 |
| M27K | Edge Creek, AK | 5.01 | 78 | Pn | | Pn | 02 09 30.4 | +0.1 |
| M27K | | | | IAML | | | 02 11 01.7 | |
| | comp=E,33nm,0.8s | | | | | | | |
| M27K | | | | IAML | | | 02 11 06.6 | |
| | comp=N,46nm,1.2s | | | | | | | |
| ISLE | Juniper Island | 5.02 | 99 | Pn | | Pn | 02 09 30.2 | -0.3 |
| ISLE | | | | IAML | | | 02 10 47.8 | |
| | comp=E,60nm,2.7s | | | | | | | |
| ISLE | | | | IAML | | | 02 10 54.7 | |
| | comp=N,73nm,2.9s | | | | | | | |
| L27K | Beaver Creek, | 5.11 | 70 | Pn | | Pn | 02 09 30.7 | -0.8 |
| L27K | | | | IAML | | | 02 10 55.0 | |
| | comp=N,22nm,2.3s | | | | | | | |
| L27K | | | | IAML | | | 02 10 58.4 | |
| | comp=E,19nm,1.6s | | | | | | | |
| BC03 | | 5.13 | 70 | | | Pn | 02 09 31.1 | -0.6 |
| BCAR | Beaver Creek A | 5.13 | 70 | Pn | | Pn | 02 09 31.1 | -0.6 |
| PS05 | TAPS Pump Stn5 | 5.14 | 8 | | | Pn | 02 09 31.8 | 0.0 |
| BAGL | Bagley Icefiel | 5.18 | 100 | | | Pn | 02 09 32.2 | -0.1 |
| BARN | Barnard Glacie | 5.23 | 93 | Pn | | Pn | 02 09 32.8 | -0.5 |
| BARN | | | | IAML | | | 02 10 34.1 | |
| | comp=N,40nm,0.7s | | | | | | | |
| BARN | | | | IAML | | | 02 11 03.1 | |
| | comp=E,39nm,1.6s | | | | | | | |
| SII | Sitkinak Islan | 5.29 | 191 | Pn | | Pn | 02 09 31.9 | -2.0 |
| MESA | MESA | 5.35 | 103 | Pn | | Pn | 02 09 34.7 | -0.1 |
| MESA | MESA | 5.35 | 103 | P | | Pn | 02 09 33.9 | -1.0 |
| | baz=292 | | | | | | | |
| YAH | Yahtse | 5.38 | 100 | Pn | | Pn | 02 09 35.7 | +0.4 |
| YAH | | | | IAML | | | 02 11 07.2 | |
| | comp=E,40nm,3.6s | | | | | | | |
| BVCY | Beaver Creek | 5.48 | 78 | | | Pn | 02 09 36.7 | +0.2 |
| BVCY | Beaver Creek | 5.48 | 78 | P | | Pn | 02 09 36.7 | +0.2 |
| | baz=268 | | | | | | | |
| YUK2 | White River | 5.51 | 85 | | | Pn | 02 09 37.0 | +0.1 |
| COLD | Coldfoot | 5.58 | 9 | Pn | | Pn | 02 09 36.9 | -0.8 |
| COLD | Coldfoot | 5.58 | 9 | P | | Pn | 02 09 37.2 | -0.5 |
| | baz=191 | | | | | | | |
| TABL | Table Mountain | 5.64 | 99 | Pn | | Pn | 02 09 38.5 | -0.2 |
| YUK3 | Moose Creek | 5.69 | 85 | | | Pn | 02 09 39.5 | +0.1 |
| YUK3 | Moose Creek | 5.69 | 85 | P | | Pn | 02 09 39.5 | +0.1 |
| | baz=275 | | | | | | | |
| FYU | Fort Yukon | 5.76 | 30 | Pn | | Pn | 02 09 38.7 | -1.5 |
| EGAK | Eagle | 5.92 | 54 | Pn | | Pn | 02 09 41.0 | -1.4 |
| EGAK | Eagle | 5.92 | 54 | P | | Pn | 02 09 41.6 | -0.7 |
| | baz=244 | | | | | | | |
| PCA | Pinnacle | 6.17 | 100 | Pn | | Pn | 02 09 45.9 | +0.2 |
| PINM | Pinnacle | 6.17 | 100 | P | | Pn | 02 09 45.3 | -0.4 |
| | baz=291 | | | | | | | |
| CHIR | Chirikof Islan | 6.18 | 197 | Pn | | Pn | 02 09 42.9 | -2.8 |
| DAWY | Dawson | 6.39 | 63 | Pn | | Pn | 02 09 48.2 | -0.4 |
| DAWY | Dawson | 6.39 | 63 | P | | Pn | 02 09 48.2 | -0.4 |
| | baz=255 | | | | | | | |
| ANM | Nome | 6.50 | 301 | Pn | | Pn | 02 09 50.3 | +0.3 |
| BM03 | Burnt Mountain | 6.61 | 27 | | | Pn | 02 09 50.3 | -1.1 |
| BMAR | Burnt Mountain | 6.62 | 27 | Pn | | Pn | 02 09 50.6 | -1.1 |
| TOLK | Toolik Lake Re | 7.02 | 9 | Pn | | Pn | 02 09 57.6 | +0.7 |
| HYT | Haines Junctio | 7.26 | 91 | Pn | | Pn | 02 09 60.0 | -0.3 |
| M30M | Minto, Yukon | 7.37 | 77 | Pn | | Pn | 02 10 02.3 | +0.6 |
| EPYK | Eagle Plains | 8.29 | 49 | | | Pn | 02 10 12.9 | -1.0 |
| M31M | Drury Creek, Y | 8.51 | 79 | Pn | | Pn | 02 10 17.7 | +0.8 |
| WHY | Whitehorse | 8.55 | 90 | Pn | | Pn | 02 10 17.3 | -0.2 |
| SKAG | Skagway | 8.72 | 98 | Pn | | Pn | 02 10 19.8 | +0.1 |
| BESE | Bessie Mountai | 9.32 | 102 | Pn | | Pn | 02 10 28.2 | +0.4 |
| P33M | Teslin, Yukon | 9.65 | 91 | Pn | | Pn | 02 10 31.8 | -0.4 |
| JIS | Juneau Island | 9.68 | 103 | Pn | | Pn | 02 10 33.9 | +1.4 |
| INK | Inuvik | 10.31 | 42 | P | | Pn | 02 10 40.0 | -0.7 |
| | comp=E,0.8nm,0.3s,baz=235,slow=17,SNR=24 | | | | | | | |
| C36M | Paulatuk | 13.86 | 45 | Pn | | Pn | 02 11 23.9 | -2.9 |
| A36M | Sachs Harbour | 14.63 | 34 | Pn | | Pn | 02 11 34.7 | -1.8 |
| ADK | Adak | 16.44 | 244 | P | | P | 02 12 01.3 | +2.1 |
| ADK | | | | IAmb | | IAmb | 02 12 19.8 | |
| | comp=E,20nm,1.1s | | | | | | | |
| YKA | Yellowknife Ar | 17.55 | 71 | P | | Pn | 02 12 12.6 | +0.4 |
| | comp=E,0.1nm,0.3s,baz=282,slow=12,SNR=11 | | | | | | | |
| SEY | Seymchan | 24.98 | 297 | P | | P | 02 13 25.5 | -1.2 |
| | comp=E,0.5nm,0.3s,baz=296,slow=1.5,SNR=18 | | | | | | | |
| PINE | Pine Mountain | 25.80 | 120 | P | | P | 02 13 37.1 | +2.5 |
| PINE | | | | IAmb | | IAmb | 02 13 51.6 | |
| | comp=E,5.2nm,1.1s | | | | | | | |
| NVAR | Mina Array Bea | 31.38 | 122 | P | | P | 02 14 26.2 | +2.1 |
| | comp=E,0.2nm,0.5s,baz=327,slow=9.8,SNR=2.0 | | | | | | | |
| PDAR | Pinedale Array | 31.59 | 107 | LR | | LR | 02 28 39.5 | |
| | comp=E,59nm,20.3s,baz=126,slow=38 | | | | | | | |
| NRIK | Noril'sk | 42.45 | 333 | P | | P | 02 15 56.7 | -0.1 |
| | comp=E,1.7nm,0.5s,baz=34,slow=6.9,SNR=4.5 | | | | | | | |
| NRIK | Noril'sk | 42.45 | 333 | P | | P | 02 15 57.9 | +1.1 |
| NRIK | | | | IAmb | | IAmb | 02 15 58.0 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| ARCES | ARCESS Array B | 48.99 | 1 | P | | P | 02 16 48.8 | +0.7 |
| | comp=Z,6.2nm,1.1s,baz=354,slow=5.5,SNR=2.1 | | | | | | | |
| ZAA0 | Zalesovo Array | 56.12 | 323 | P | | P | 02 17 40.6 | -0.1 |
| ZALV | Zalesovo Beam | 56.12 | 323 | P | | P | 02 17 40.3 | -0.4 |
| | comp=Z,2.5nm,0.5s,baz=31,slow=7.1,SNR=15 | | | | | | | |
| ZALV | | | | LR | | LR | 02 44 38.5 | |
| | comp=Z,31nm,18.7s,baz=23,slow=39 | | | | | | | |
| ZALV | Zalesovo Beam | 56.12 | 323 | P | | P | 02 17 40.6 | -0.1 |
| ARU | Arti | 59.68 | 341 | P | | P | 02 18 06.0 | +0.6 |
| ARU | | | | IAmb | | IAmb | 02 18 06.3 | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| KURK | Kurchatov | 60.73 | 325 | P | | P | 02 18 12.5 | -0.2 |
| KURK | | | | IAmb | | IAmb | 02 18 13.2 | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| MK31 | Makanchi Array | 63.23 | 321 | P | | P | 02 18 28.8 | -0.6 |
| MKAR | Makanchi Array | 63.23 | 321 | P | | P | 02 18 28.9 | -0.6 |
| | comp=Z,1.0nm,0.6s,baz=32,slow=6.9,SNR=15 | | | | | | | |
| MKAR | Makanchi Array | 63.23 | 321 | P | | P | 02 18 29.0 | -0.5 |
| MAKZ | Makanchi | 63.31 | 321 | P | | P | 02 18 29.6 | -0.4 |
| ABKAR | Akbulak array | 66.34 | 337 | P | | P | 02 18 49.7 | +0.2 |
| AKASG | Malin Array Be | 67.89 | 359 | P | | P | 02 19 00.8 | +1.6 |
| | comp=Z,0.5nm,0.4s,baz=3.3,slow=6.6,SNR=5.1 | | | | | | | |
| TARG | Taragay, Kyrgy | 69.17 | 322 | P | | P | 02 19 06.3 | -1.6 |
| KKAR | Karatay Array | 69.89 | 328 | P | | P | 02 19 12.3 | +0.5 |
| PCRV | Puerto La Cruz | 80.08 | 87 | LR | | LR | 02 57 26.3 | |
| | comp=Z,119nm,19.8s,slow=37 | | | | | | | |

*IDC* ***15*** *02:13:08.1±0.7,0.6*$^{\circ}$*9S×131.2*$^{\circ}$*3E,h0*$^{km}$*,mb4.4/10, mb1 4.4/12,mb1mx3.9/31,mbtmp4.3/12,ML4.4/2,MS2.9/1, Ms1 2.9/1,ms1mx2.4/61,Error ellipse: s-maj=34.7km s-min=14.6km az=73.0*

*DJA* ***15*** *02:13:11.9±1.3,1*$^{\circ}$*S±4*$^{\circ}$*×13*$^{\circ}$*1E±*$^{\circ}$*,h22*$^{km}$*±11*$^{km}$*,M4.4/11, mB5.1/3,mb4.6/11,MLv4.3/5,Mw(mB)4.5/3*

*NEIC* ***15*** *02:13:14.5±1.5,0.7*$^{\circ}$*1S±0.0*$^{\circ}$*9×131.1*$^{\circ}$*5E±0.1*$^{\circ}$*0,h39*$^{km}$*±6*$^{km}$*, mb4.4/28,Error ellipse: s-maj=19.1km s-min=2.7km az=46.0*

**ISC 15 02:13:13.3**±0.5,**0.68S**±0.0$^{\circ}$**7×131.15E**±0.0$^{\circ}$**9,h35**$^{km}$**,n88,**
σ1°**12/80,mb4.5/32,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| FAKI | Fak Fak | 2.48 | 154 | Pn | Pn | 02 | 13 51.5 | +0.3 |
| FAKI | Fak Fak | 2.48 | 154 | P | Pn | 02 | 13 52.6 | +1.3 |
| BNDI | Bandanaira | 4.01 | 198 | P | Pn | 02 | 14 13.5 | +1.2 |
| TNTI | Ternate | 4.05 | 291 | Pn | Pn | 02 | 14 13.5 | +0.7 |
| TNTI | Ternate | 4.05 | 291 | P | Pn | 02 | 14 14.1 | +1.2 |
| SANI | Sanana | 5.33 | 255 | P | Pn | 02 | 14 30.8 | +0.3 |
| | 0.1nm849nm27nm,0.7s | | | | | | | |
| SAUI | Saumlaki | 7.25 | 179 | Pn | Pn | 02 | 14 57.1 | +0.2 |
| APSI | Ampana | 9.50 | 269 | P | Pn | 02 | 15 28.6 | +0.8 |
| | 535nm48nm,0.6s | | | | | | | |
| DRS | Darwin Rock St | 11.68 | 181 | P | Pn | 02 | 15 56.7 | -0.8 |
| | 52nm,0.5s | | | | | | | |
| BKSI | Bulukumba | 11.93 | 247 | P | Pn | 02 | 16 08.1 | +7.0 |
| KDU | Kakadu | 12.00 | 174 | P | Pn | 02 | 15 59.7 | -2.3 |
| MTN | Manton Dam | 12.08 | 180 | Pn | Pn | 02 | 16 01.3 | -1.9 |
| MTN | Manton Dam | 12.08 | 180 | P | Pn | 02 | 16 01.7 | -1.4 |
| KNRA | Kununurra | 15.08 | 189 | Pn | Pn | 02 | 16 40.9 | -3.1 |
| KNRA | | | | IAmb | IAmb | 02 | 16 51.4 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| KNRA | Kununurra | 15.08 | 189 | P | Pn | 02 | 16 42.0 | -2.0 |
| COEN | Coen | 17.77 | 138 | | P | 02 | 17 18.4 | -0.2 |
| COEN | Coen | 17.77 | 138 | P | P | 02 | 17 19.3 | +0.7 |
| FITZ | Fitzroy Crossi | 18.13 | 197 | P | Pn | 02 | 17 20.2 | -2.4 |
| | comp=Z,0.8nm,0.3s,baz=36,slow=11,SNR=22 | | | | | | | |
| FITZ | | | | S | Sn | 02 | 20 27.6 | -16 |
| | comp=Z,0.2nm,0.3s,baz=202,slow=21,SNR=2.1 | | | | | | | |
| FITZ | | | | LR | LR | 02 | 24 30.2 | |
| | comp=Z,41nm,20.1s,baz=16,slow=38 | | | | | | | |
| JAGI | Jajag, Banyuwa | 18.61 | 245 | P | Pn | 02 | 17 41.5 | +13 |
| SBUM | Sibu | 19.18 | 279 | | Pn | 02 | 17 36.3 | +1.0 |
| WB0 | Warramunga Arr | 19.23 | 171 | P | P | 02 | 17 33.8 | -0.9 |
| WRAB | Tennant Creek | 19.39 | 171 | P | P | 02 | 17 36.2 | -0.2 |
| WRAB | | | | IAmb | IAmb | 02 | 17 56.9 | |
| | comp=Z,16nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 19.39 | 171 | P | Pn | 02 | 17 36.9 | -0.8 |
| WRA | Warramunga Arr | 19.39 | 171 | P | P | 02 | 17 36.5 | 0.0 |
| | comp=Z,1.3nm,0.3s,baz=354,slow=13,SNR=38 | | | | | | | |
| WRA | | | | S | S | 02 | 21 01.5 | -13 |
| | comp=Z,1.0nm,0.3s,baz=338,slow=26,SNR=5.9 | | | | | | | |
| WRA | Warramunga Arr | 19.39 | 171 | P | P | 02 | 17 35.5 | -1.0 |
| WB2 | Warramunga Arr | 19.40 | 171 | P | P | 02 | 17 35.8 | -0.7 |
| WR0 | Warramunga Arr | 19.44 | 170 | P | P | 02 | 17 37.1 | 0.0 |
| QIS | Mount Isa | 21.41 | 158 | P | P | 02 | 17 59.1 | +0.7 |
| AS31 | Alice Springs | 23.00 | 174 | P | P | 02 | 18 15.7 | +0.4 |
| AS31 | | | | IAmb | IAmb | 02 | 18 35.9 | |
| | comp=Z,5.2nm,0.6s | | | | | | | |
| ASAR | Alice Springs | 23.00 | 174 | P | P | 02 | 18 15.3 | 0.0 |
| | comp=Z,3.7nm,0.5s,baz=350,slow=11,SNR=37 | | | | | | | |
| ASAR | | | | S | S | 02 | 22 24.3 | +0.7 |
| | comp=Z,0.7nm,0.6s,baz=359,slow=28,SNR=3.1 | | | | | | | |
| ASAR | Alice Springs | 23.00 | 174 | P | P | 02 | 18 15.2 | -0.1 |
| MBWA | Marble Bar | 23.20 | 208 | P | P | 02 | 18 17.2 | -0.1 |
| MBWA | | | | IAmb | IAmb | 02 | 18 40.4 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| PSA00 | Pilbara Seismi | 23.51 | 207 | P | P | 02 | 18 20.8 | +0.5 |
| PSA00 | | | | IAmb | IAmb | 02 | 18 41.7 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| CTA | Charters Tower | 24.30 | 143 | P | P | 02 | 18 26.9 | -0.9 |
| | comp=Z,14nm,1.0s,baz=318,slow=10,SNR=7.6 | | | | | | | |
| CTAO | Charters Tower | 24.30 | 143 | P | P | 02 | 18 27.7 | 0.0 |
| CTAO | | | | IAm

comp=Z,4.2nm,0.6s,baz=116,slow=8.2,SNR=57
**MKAR Makanchi Array 63.68 325 P P 02 23 41.9 +0.6**
**MAKZ Makanchi 63.87 325 P P 02 23 43.1 +0.6**
**KSH Kashi 64.27 315 P P 02 23 47.3 +1.9**
**SEY Seymchan 65.43 10 P P 02 23 53.5 +1.2**
comp=Z,8.2nm,0.7s,baz=208,slow=5.3,SNR=36
**ZALV Zalesovo Beam 66.51 332 P P 02 23 59.5 0.0**
comp=Z,2.7nm,0.6s,baz=110,slow=5.2,SNR=11
**ZALV Zalesovo Beam 66.51 332 P P 02 23 59.4 -0.1**
**KURK Kurchatov 67.82 327 P P 02 24 08.6 +0.8**
**KKAR Karatay Array 69.45 317 P P 02 24 18.3 +0.1**
**TIXI Tiksi 72.23 359 P P 02 24 34.7 +0.2**
TIXI IAmb IAmb 02 24 35.3
comp=Z,3.2nm,0.5s
**BRVK Borovoye 73.48 327 P P 02 24 42.8 +0.5**
BRVK IAmb IAmb 02 24 43.6
comp=Z,3.2nm,0.7s
**NRIK Noril'sk 75.76 345 P P 02 24 55.4 +0.2**
comp=Z,2.0nm,0.6s,baz=117,slow=5.6,SNR=4.2
**NRIK Noril'sk 75.76 345 P P 02 24 55.3 +0.2**
NRIK IAmb IAmb 02 24 55.9
comp=Z,2.3nm,0.7s
**ABKAR Akbulak array 78.34 321 P P 02 25 10.4 +0.3**
**ARU Arti 81.00 328 P P 02 25 24.8 +0.4**
**TTA Tatalina 82.85 26 P P 02 25 34.7 +0.6**
TTA IAmb IAmb 02 25 48.4
comp=Z,3.6nm,1.4s
**CAST Castle Rocks 84.70 26 P P 02 25 43.6 +0.1**
CAST IAmb IAmb 02 26 01.6
comp=Z,2.6nm,1.0s
**ILAR Eielson Array 87.18 25 P P 02 25 54.7 -1.0**
comp=Z,0.3nm,0.5s,baz=251,slow=4.7,SNR=8.0
**ILAR Eielson Array 87.18 25 P P 02 25 55.6 -0.1**
**ARCES ARCESS Array B 96.08 340 P P 02 26 33.4 -3.5**
comp=Z,4.9nm,0.9s,baz=354,slow=1.2,SNR=4.6
**ARCES ARCESS Array B 96.08 340 P P 02 26 35.0 -1.9**
**FINES FINESS Array B 97.78 332 P P 02 26 43.3 -1.4**
comp=Z,0.7nm,0.6s,baz=70,slow=4.6,SNR=1.3
**TORD Torodi Ar. Bea 128.44 286 PKP PKPdf 02 32 17.3 -0.3**
comp=Z,0.5nm,0.7s,baz=85,slow=2.0,SNR=2.5

*ISN **15** 02:45:40.1±2.9, 35.°06N×45.°75E, h25km, ML3.3*
*AZER **15** 02:45:46.1±2.7, 34.°28N×46.°17E, h10km, Error ellipse:*
*s-maj=45.1km s-min=26.1km az=102.0*
*DDA **15** 02:45:49.2±0.0, 34.°84N×45.°49E, h7km±2km, ML3.2*
*TEH **15** 02:45:50.3, 35.°12N×45.°56E, h11km, ML3.3*
**ISC 15 02:45:49.9±0.8, 35.°11N±0.°02×45.°51E±0.°03, h10km, n50,**
**σ2s16/68, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.83** | **119** | *e*Sg | | **Sb** | **02 46 17.1** | **-0.7** |
| IDHR | | | | *e*Pg | | **Pg** | **02 46 05.5** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.00** | **287** | *i* P | | Pg | 02 46 04.0 | -5.2 |
| IKRK | | | | *i* S | | **Sg** | **02 46 16.1** | **-6.1** |
| IKRK | | | | IAML | | | 02 46 32.6 | |
| | comp=N,601nm,0.4s,baz=106 | | | | | | | |
| IKRK | | | | IAML | | | 02 46 32.7 | |
| | comp=E,746nm,0.8s | | | | | | | |
| **IKRK** | **Kirkuk** | **1.00** | **287** | *e*Pg | | **Pn** | **02 46 12.0** | **+1.9** |
| IKRK | | | | *e*Sg | | **Sn** | **02 46 25.0** | **+0.7** |
| IKRK | | | | AML | AML | | 02 46 33.2 | |
| | comp=E,637nm,0.6s | | | | | | | |
| IKRK | | | | AML | AML | | 02 46 33.4 | |
| | comp=N,716nm,0.5s | | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.17** | **131** | *e*Pg | | **Pn** | **02 46 13.1** | **+0.5** |
| IGHG | | | | *e* | | | 02 46 36.2 | |
| | comp=Z,5μm,0.4s | | | | | | | |
| **SNGE** | **Sanandaj** | **1.51** | **90** | *e*Pn | | **Pn** | **02 46 16.7** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **1.51** | **123** | *e*Pg | | **Pg** | **02 46 18.7** | **-0.2** |
| KCHF | | | | *e*Sg | | **Sg** | **02 46 40.1** | **+1.6** |
| KCHF | | | | *e* | | | 02 46 43.1 | |
| | comp=Z,9μm,0.3s | | | | | | | |
| **KER** | **Kermanshah** | **1.52** | **118** | *e*Pg | | **Pg** | **02 46 18.5** | **-0.6** |
| KER | | | | *e*Sg | | **Sg** | **02 46 41.1** | **+2.3** |
| **MAHB** | **Mahabad** | **1.66** | **5** | *e*Pg | | **Pg** | **02 46 22.2** | **+0.3** |
| MAHB | | | | *e* | | | 02 46 49.3 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **IBDR** | **Badra** | **2.02** | **170** | *e*Pn | | **Pb** | **02 46 26.0** | **-0.8** |
| IBDR | | | | *e*Sn | | **Sb** | **02 46 51.5** | **-0.5** |
| **IBZA** | **Bozab** | **2.04** | **108** | *e*Pn | | **Pb** | **02 46 26.2** | **-1.0** |
| IBZA | | | | *e* | | | 02 46 60.0 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **BHD** | **Baghdad** | **2.06** | **207** | *e*Pn | | **Pb** | **02 46 27.0** | **-0.4** |
| BHD | | | | *e*Sn | | **Sb** | **02 46 53.0** | **0.0** |
| **IALM** | **Almabolaq** | **2.20** | **96** | *e*Pn | | **Pb** | **02 46 28.4** | **-1.5** |
| **IKFM** | **Kafar-mosalman** | **2.50** | **129** | *e*Pn | | **Pb** | **02 46 32.7** | **-2.2** |
| **IDOB** | **Doab** | **2.57** | **120** | *e*Pn | | **Pn** | **02 46 33.6** | **+1.8** |
| **IAZR** | **Azarshahr** | **2.59** | **8** | *e*Pn | | **Pn** | **02 46 34.4** | **+2.2** |
| IAZR | | | | *e* | | | 02 47 19.5 | |
| | comp=Z,2μm,0.9s | | | | | | | |
| **CUKT** | **Cukurca** | **2.63** | **325** | P | | **Pn** | **02 46 34.4** | **+1.8** |
| CUKT | | | | S | | **Sb** | **02 47 12.5** | **+2.7** |
| CUKT | | | | *i* AML | | AML | 02 47 24.0 | |
| | comp=Z,212nm,0.6s | | | | | | | |
| CUKT | | | | *i* AML | | AML | 02 47 26.0 | |
| | comp=Z,118nm,1.0s | | | | | | | |
| **YOVA** | **Hakkari_Yksek** | **2.66** | **339** | P | | **Pb** | **02 46 36.2** | **-1.7** |
| YOVA | | | | S | | **Sb** | **02 47 10.9** | **+0.2** |
| YOVA | | | | *i* AML | | AML | 02 47 20.0 | |
| | comp=Z,50nm,0.6s | | | | | | | |
| **IBST** | **Bostanabad** | **2.82** | **23** | *e*Pn | | **Pn** | **02 46 37.4** | **+2.1** |
| **HAKT** | **HAKKARI** | **2.85** | **330** | P | | **Pn** | **02 46 37.8** | **+2.1** |
| HAKT | | | | S | | **Sb** | **02 47 15.0** | **-1.0** |
| HAKT | | | | *i* AML | | AML | 02 47 35.0 | |
| | comp=Z,46nm,1.0s | | | | | | | |
| **HAGD** | **Aghdareh** | **2.99** | **94** | *e*Pn | | **Pn** | **02 46 39.8** | **+2.1** |
| **ZNJK** | **Zanjan** | **3.01** | **58** | *e*Pn | | **Pn** | **02 46 39.5** | **+1.5** |
| **BMDN** | **Meydan** | **3.09** | **117** | *e*Pn | | **Pn** | **02 46 41.4** | **+2.4** |
| **ITBZ** | **Tabriz** | **3.16** | **9** | *e*Pn | | **Pn** | **02 46 41.3** | **+1.4** |
| ITBZ | | | | *e* | | | 02 46 50.4 | |
| | comp=Z,325nm,0.4s | | | | | | | |
| **ISHB** | **Shabestar** | **3.17** | **2** | *e*Pn | | **Pn** | **02 46 41.7** | **+1.6** |
| ISHB | | | | *e* | | | 02 46 49.5 | |
| | comp=Z,663nm,0.4s | | | | | | | |
| **ISRB** | **Sarab** | **3.22** | **32** | *e*Pn | | **Pn** | **02 46 42.8** | **+2.0** |
| ISRB | | | | *e* | | | 02 46 43.6 | |
| | comp=Z,335nm,0.2s | | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **3.38** | **79** | *e*Pn | | **Pn** | **02 46 44.2** | **+1.2** |
| **IMRD** | **Marand** | **3.60** | **2** | *e*Pn | | **Pn** | **02 46 48.5** | **+2.5** |
| IMRD | | | | *e* | | | 02 46 58.9 | |
| | comp=Z,495nm,0.4s | | | | | | | |
| **PERV** | **Siirt/Pervari-** | **3.71** | **321** | P | | **Pg** | **02 46 59.6** | **-1.4** |
| PERV | | | | S | | **Sg** | **02 47 48.7** | **-0.3** |
| **OZAP** | **Van, Ozalp-Mer** | **3.75** | **342** | P | | **Pb** | **02 46 58.6** | **+2.2** |
| **ASAO** | **Ashtian** | **3.76** | **97** | *e*Pn | | **Pn** | **02 46 49.5** | **+1.3** |
| **GEVA** | **Gevas** | **3.76** | **329** | P | | **Pn** | **02 46 51.4** | **+3.3** |
| **TVAN** | **Van** | **3.81** | **334** | P | | **Pb** | **02 46 55.2** | **-2.2** |
| **JIR1** | **Jirandeh** | **3.83** | **64** | *e*Pn | | **Pn** | **02 46 52.1** | **+2.9** |
| **ORD** | **Ordubad** | **3.83** | **6** | P | | **Pb** | **02 46 57.5** | **-0.2** |
| | SNR=7.9 | | | | | | | |
| ORD | | | | S | | **Sg** | **02 47 51.9** | **-1.1** |
| **KHMZ** | **Khomeyn** | **3.92** | **109** | *e*Pn | | **Pn** | **02 46 52.0** | **+1.6** |
| **MIDY** | **Mardin/Midyat-** | **4.04** | **306** | P | | **Pn** | **02 46 53.4** | **+1.5** |
| MIDY | | | | S | | **Sn** | **02 47 42.3** | **+3.0** |
| MIDY | | | | *i* AML | | AML | 02 47 44.0 | |
| | comp=Z,38nm,0.5s | | | | | | | |
| MIDY | | | | *i* AML | | AML | 02 48 09.0 | |
| | comp=Z,47nm,0.9s | | | | | | | |
| **NAX** | **Nakhchivan** | **4.06** | **360** | P | | **Pb** | **02 47 02.9** | **+1.3** |
| | SNR=4.7 | | | | | | | |
| NAX | | | | S | | **Sg** | **02 47 59.3** | **-1.0** |
| **GRMI** | **Germi** | **4.16** | **27** | *e*Pn | | **Pn** | **02 46 56.0** | **+2.4** |
| **LRK** | **Lerik** | **4.19** | **32** | P | | **Pn** | **02 46 56.7** | **+2.6** |
| | SNR=11 | | | | | | | |
| LRK | | | | S | | **Sb** | **02 47 53.7** | **-1.0** |
| **LHJ2** | **Lahijan - Gila** | **4.22** | **60** | *e*Pn | | **Pn** | **02 46 56.1** | **+1.8** |
| **SBZ** | **Shahbuz** | **4.28** | **0** | P | | **Pb** | **02 47 06.5** | **+1.1** |
| | SNR=6.6 | | | | | | | |
| SBZ | | | | S | | **Sg** | **02 48 02.6** | **-4.8** |
| **ASTR** | **Astara** | **4.33** | **36** | P | | **Pn** | **02 46 59.0** | **+3.1** |
| | SNR=11 | | | | | | | |
| ASTR | | | | S | | **Sb** | **02 47 53.4** | **-5.1** |
| **QALM** | **Alamut, Qazvin** | **4.38** | **71** | *e*Pn | | **Pn** | **02 46 58.6** | **+1.8** |
| **YRD** | **Yardimli** | **4.38** | **29** | P | | **Pn** | **02 47 00.2** | **+3.5** |
| | SNR=2.9 | | | | | | | |
| YRD | | | | S | | **Sb** | **02 47 58.4** | **-1.7** |
| **MARD** | **Mardin** | **4.41** | **301** | P | | **Pn** | **02 46 59.1** | **+2.0** |
| MARD | | | | *i* AML | | AML | 02 48 25.0 | |
| | comp=Z,67nm,0.6s | | | | | | | |
| MARD | | | | *i* AML | | AML | 02 48 34.0 | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **LKRN** | **Lenkeran, Azer** | **4.45** | **35** | P | | **Pn** | **02 47 00.1** | **+2.6** |
| | SNR=5.4 | | | | | | | |
| LKRN | | | | S | | **Sb** | **02 47 59.0** | **-2.8** |
| **AMIS** | **Naft Sefid** | **4.67** | **136** | *e*Pn | | **Pn** | **02 47 02.0** | **+1.5** |
| **GLBA** | **Cilalabad** | **4.72** | **28** | P | | **Pn** | **02 47 04.4** | **+3.2** |
| | SNR=4.0 | | | | | | | |
| **GHVR** | **GHOM** | **4.80** | **96** | *e*Pn | | **Pn** | **02 47 03.0** | **+0.6** |
| **KLNJ** | **Kolanjah** | **6.54** | **127** | *e*Pn | | **Pn** | **02 47 28.4** | **+1.9** |

*SOME **15** 02:46:06.8, 39.°68N×74.°65E, h10km*
*KRNET **15** 02:46:09.2±0.1, 39.°54N×75.°13E, mb3.4*
*NNC **15** 02:46:14.5±2.7, 39.°72N×74.°88E, h0km, mb4.0, mpv3.7,*
*Error ellipse: s-maj=20.3km s-min=11.8km az=165.0*
**ISC 15 02:46:13.2±1.2, 39.°69N±0.°05×74.°92E±0.°03, h10km, n69,**
**σ2s54/108, 24C-13D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **1.84** | **298** | ⇓*i* P | | **Pb** | **02 46 46.7** | **-0.3** |
| | baz=99 | | | | | | | |
| OHH | | | | ⇓*i* S | | **Sg** | **02 47 14.1** | **+1.8** |
| | baz=99 | | | | | | | |
| **ARLS** | **Aral** | **2.22** | **348** | ⇑*e*P | | **Pn** | **02 46 51.9** | **+1.7** |
| | baz=45 | | | | | | | |
| ARLS | | | | ⇑*i* S | | **Sb** | **02 47 22.9** | **+1.8** |
| | baz=45 | | | | | | | |
| **DRK** | **Karamyk** | **2.42** | **266** | ⇑*e*P | | **Pn** | **02 46 54.6** | **+1.5** |
| | baz=70 | | | | | | | |
| DRK | | | | ⇑*i* S | | **Sb** | **02 47 27.8** | **+0.8** |
| | baz=70 | | | | | | | |
| **UCH** | **Uchtor** | **2.56** | **353** | P | | **Pn** | **02 46 58.0** | **+2.8** |
| | SNR=58 | | | | | | | |
| **UCH** | **Uchtor** | **2.56** | **353** | ⇑*i* P | | **Pn** | **02 46 56.8** | **+1.7** |
| | baz=50 | | | | | | | |
| UCH | | | | ⇑*i* S | | **Sb** | **02 47 31.3** | **+0.2** |
| | baz=50 | | | | | | | |
| **AML** | **Almayashu** | **2.62** | **340** | P | | **Pn** | **02 46 57.4** | **+1.6** |
| | SNR=37 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.91** | **15** | ⇓*e*P | | **Pn** | **02 47 00.4** | **+0.8** |
| | baz=11 | | | | | | | |
| BOOM | | | | ⇓*i* S | | **Sn** | **02 47 37.8** | **+3.1** |
| | baz=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.97** | **354** | P | | **Pn** | **02 47 03.6** | **+3.1** |
| | SNR=25 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.97** | **354** | ⇓Pn | | **Pn** | **02 47 03.8** | **+3.3** |
| | 16nm,0.5s | | | | | | | |
| AAK | | | | ⇓Sn | | **Sb** | **02 47 45.5** | **+2.9** |
| | 44nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.97** | **354** | ⇑*e*P | | **Pn** | **02 47 02.1** | **+1.6** |
| | baz=51 | | | | | | | |
| AAK | | | | ⇑*i* S | | **Sb** | **02 47 40.8** | **-1.8** |
| | baz=51 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.97** | **0** | P | | **Pn** | **02 47 03.9** | **+3.4** |
| | SNR=13 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.97** | **0** | ⇑*i* P | | **Pn** | **02 47 01.9** | **+1.4** |
| | baz=57 | | | | | | | |
| KBK | | | | ⇑*i* S | | **Sb** | **02 47 40.4** | **-2.2** |
| | baz=57 | | | | | | | |
| **KDJ** | **Kajisay** | **2.98** | **34** | ⇑*i* P | | **Pn** | **02 47 00.6** | **-0.1** |
| | baz=31 | | | | | | | |
| KDJ | | | | ⇑*i* S | | **Sn** | **02 47 38.0** | **+1.4** |
| | baz=31 | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **3.00** | **46** | ⇑*i* P | | **Pn** | **02 47 00.1** | **-1.0** |
| | baz=42 | | | | | | | |
| TARG | | | | ⇑*i* S | | **Sn** | **02 47 37.3** | **+0.1** |
| | baz=42 | | | | | | | |
| **ARK** | **Arkit** | **3.08** | **314** | ⇑*i* P | | **Pn** | **02 47 04.5** | **+2.5** |
| | baz=14 | | | | | | | |
| ARK | | | | ⇑*i* S | | **Sb** | **02 47 44.9** | **-1.0** |
| | baz=14 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.10** | **344** | P | | **Pb** | **02 47 07.8** | **-0.6** |
| | SNR=12 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.10** | **344** | ⇑*i* P | | **Pn** | **02 47 04.3** | **+2.1** |
| | baz=42 | | | | | | | |
| EKS2 | | | | ⇑*i* S | | **Sb** | **02 47 44.4** | **-1.9** |
| | baz=42 | | | | | | | |
| **BTK** | **Batken** | **3.18** | **278** | ⇑*i* P | | **Pn** | **02 47 05.6** | **+2.3** |
| | baz=80 | | | | | | | |
| BTK | | | | ⇑*i* S | | **Sb** | **02 47 46.3** | **-2.3** |
| | baz=80 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.27** | **9** | P | | **Pn** | **02 47 07.8** | **+3.1** |
| | SNR=28 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.27** | **9** | ⇓Pn | | **Pn** | **02 47 07.6** | **+2.9** |
| | 13nm,0.3s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sb** | **02 47 50.5** | **-0.9** |
| | 23nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.27** | **9** | ⇑*e*P | | **Pn** | **02 47 05.8** | **+1.1** |
| | baz=6.0 | | | | | | | |
| TKM2 | | | | ⇑*i* S | | **Sn** | **02 47 47.2** | **+3.4** |
| | baz=6.0 | | | | | | | |
| **CHMS** | **Chumysh** | **3.31** | **358** | P | | **Pn** | **02 47 08.5** | **+3.4** |
| | SNR=11 | | | | | | | |
| **MRKS** | **Merke** | **3.31** | **338** | *e*P | | **Pn** | **02 47 08.2** | **+3.0** |
| | 7.3nm,0.4s | | | | | | | |
| MRKS | | | | *e*S | | **Sb** | **02 47 52.9** | **+0.4** |
| | 23nm,0.6s | | | | | | | |
| **MRKS** | **Merke** | **3.31** | **338** | Pg | | **Pb** | **02 47 12.3** | **+0.2** |
| | 16nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 02 47 52.9 | |
| | 23nm,0.6s | | | | | | | |
| **MNAS** | **Manas** | **3.34** | **328** | ⇓*i* P | | **Pn** | **02 47 08.0** | **+2.4** |
| | baz=27 | | | | | | | |
| MNAS | | | | ⇓*i* S | | **Sb** | **02 47 51.0** | **-2.4** |
| | baz=27 | | | | | | | |
| **TRKS** | **Terek-Say** | **3.42** | **304** | ⇓*i* P | | **Pn** | **02 47 08.4** | **+1.7** |
| | baz=4.0 | | | | | | | |
| TRKS | | | | ⇓*i* S | | **Sb** | **02 47 52.0** | **-3.6** |
| | baz=4.0 | | | | | | | |
| **KST** | **Kastek** | **3.45** | **13** | *e*P | | **Pn** | **02 47 10.3** | **+3.3** |
| | 34nm,0.4s | | | | | | | |
| KST | | | | *e*S | | **Sb** | **02 47 56.4** | **+0.1** |
| | 60nm,0.7s | | | | | | | |
| **KST** | **Kastek** | **3.45** | **13** | Pg | | **Pb** | **02 47 14.6** | **+0.2** |
| | 34nm,0.4s | | | | | | | |
| KST | | | | Lg | | Lg | 02 47 55.8 | |
| | 60nm,0.7s | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.58** | **20** | *e*P | | **Pn** | **02 47 15.7** | **-1.0** |
| | 9.8nm,0.4s | | | | | | | |
| IZV | | | | *e*S | | **Sg** | **02 48 05.8** | **-2.4** |
| | 33nm,0.7s | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.58** | **20** | Pg | | **Pg** | **02 47 20.4** | **-1.4** |
| | 9.8nm,0.4s | | | | | | | |
| IZV | | | | Lg | | Lg | 02 48 05.8 | |
| | 33nm,0.7s | | | | | | | |
| **USP** | **Ospenovka** | **3.59** | **355** | P | | **Pn** | **02 47 11.8** | **+2.9** |
| | SNR=9.3 | | | | | | | |
| **DGS** | **Degeres** | **3.61** | **10** | *e*P | | **Pn** | **02 47 12.7** | **+3.4** |
| | 27nm,0.4s | | | | | | | |
| DGS | | | | *e*S | | **Sb** | **02 48 00.2** | **-0.9** |
| | 40nm,0.8s | | | | | | | |
| **MTBS** | **Maitube** | **3.62** | **18** | *e*P | | **Pn** | **02 47 12.8** | **+3.4** |
| | 17nm,0.3s | | | | | | | |
| MTBS | | | | *e*S | | **Sb** | **02 48 00.3** | **-1.1** |
| | 27nm,0.6s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.68** | **24** | *e*P | | **Pn** | **02 47 13.1** | **+2.6** |
| | 3.6nm,0.5s | | | | | | | |
| TNSS | | | | *e*S | | **Sb** | **02 48 00.4** | **-2.9** |
| | 5.4nm,0.7s | | | | | | | |
| **SGDS** | **Sogindy** | **3.77** | **357** | *e*P | | **Pn** | **02 47 15.2** | **+3.7** |
| | 3.9nm,0.4s | | | | | | | |
| SGDS | | | | *e*S | | **Sb** | **02 48 04.6** | **-1.0** |
| | 8.8nm,0.5s | | | | | | | |
| **SGDS** | **Sogindy** | **3.77** | **357** | Pg | | **Pg** | **02 47 23.9** | **-1.4** |
| | 9.7nm,0.5s | | | | | | | |
| SGDS | | | | Lg | | Lg | 02 48 12.5 | |
| | 8.8nm,0.5s | | | | | | | |
| **MDOK** | **Medeo** | **3.83** | **24** | *e*P | | **Pb** | **02 47 20.5** | **-0.3** |
| | 8.3nm,0.6s | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **02 48 13.4** | **-2.5** |
| | 26nm,0.7s | | | | | | | |
| **MDOK** | **Medeo** | **3.83** | **24** | Pg | | **Pb** | **02 47 20.2** | **-0.6** |
| | 9.7nm,0.8s | | | | | | | |
| MDOK | | | | ⇑Lg | | Lg | 02 48 13.6 | |
| | 23nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **3.83** | **24** | Pg | | **Pb** | **02 47 24.3** | **+3.4** |
| | 8.3nm,0.6s | | | | | | | |
| MDOK | | | | Lg | | Lg | 02 48 13.4 | |
| | 26nm,0.7s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.91** | **24** | *e*P | | **Pb** | **02 47 21.8** | **-0.5** |
| | 7.5nm,0.5s | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **02 48 15.6** | **-3.1** |
| | 40nm,0.8s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.91** | **24** | Pg | | **Pb** | **02 47 26.1** | **+3.8** |
| | 7.5nm,0.5s | | | | | | | |
| KOTS | | | | Lg | | Lg | 02 48 15.6 | |
| | 40nm,0.8s | | | | | | | |
| **KRBS** | **Karabastau** | **4.05** | **8** | *e*P | | **Pb** | **02 47 25.1** | **+0.5** |
| | 9.7nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **02 48 21.1** | **-2.0** |
| | 8.2nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **4.05** | **8** | Pg | | **Pg** | **02 47 29.3** | **-1.3** |
| | 9.7nm,0.5s | | | | | | | |
| KRBS | | | | Lg | | Lg | 02 48 21.1 | |
| | 8.2nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **4.23** | **18** | *e*P | | **Pb** | **02 47 29.0** | **+1.3** |
| | 6.7nm,0.4s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **02 48 27.8** | **-1.3** |
| | 39nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **4.23** | **18** | Pg | | **Pg** | **02 47 33.3** | **-1.0** |
| | 6.7nm,0.4s | | | | | | | |
| KTBS | | | | Lg | | Lg | 02 48 27.8 | |
| | 39nm,0.5s | | | | | | | |
| **SATY** | **Saty** | **4.27** | **37** | *e*P | | **Pb** | **02 47 28.8** | **+0.4** |
| | 7.8nm,0.6s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **02 48 27.8** | **-2.4** |
| | 16nm,0.5s | | | | | | | |
| **SATY** | **Saty** | **4.27** | **37** | Pg | | **Pg** | **02 47 33.2** | **-1.7** |
| | 7.8nm,0.6s | | | | | | | |
| SATY | | | | Lg | | Lg | 02 48 27.8 | |
| | 16nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **4.34** | **14** | *e*P | | **Pb** | **02 47 28.8** | **-0.7** |
| | 5.0nm,0.5s | | | | | | | |
| KUU | | | | *e*S | | **Sb** | **02 48 27.4** | **+5.6** |
| | 31nm,0.7s | | | | | | | |
| **KUU** | **Kurty** | **4.34** | **14** | Pg | | **Pb** | **02 47 32.6** | **+3.2** |
| | 5.4nm,0.7s | | | | | | | |
| KUU | | | | Lg | | Lg | 02 48 27.4 | |
| | 31nm,0.7s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.44** | **20** | *e*P | | **Pb** | **02 47 33.0** | **+1.7** |
| | 6.8nm,0.4s | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | **02 48 34.9** | **-0.9** |
| | 14nm,0.6s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.44** | **20** | Pg | | **Pg** | **02 47 36.3** | **-1.9** |
| | 6.8nm,0.4s | | | | | | | |
| CHKK | | | | Lg | | Lg | 02 48 33.3 | |
| | 14nm,0.6s | | | | | | | |
| **IUG** | **luzhnay** | **4.45** | **305** | *e*P | | **Pn** | **02 47 23.0** | **+2.3** |
| | 94nm,0.3s | | | | | | | |
| IUG | | | | *e*S | | **Sn** | **02 48 17.8** | **+5.2** |
| | 37nm,0.3s | | | | | | | |
| **IUG** | **luzhnay** | **4.45** | **305** | Pg | | **Pb** | **02 47 33.9** | **+2.5** |
| | 183nm,0.4s | | | | | | | |
| IUG | | | | Lg | | Lg | 02 48 29.0 | |
| | 18nm,0.7s | | | | | | | |
| **KURS** | **Kuram** | **4.51** | **32** | *e*P | | **Pb** | **02 47 29.3** | **-3.2** |
| | 5.5nm,0.6s | | | | | | | |
| KURS | | | | *e*S | | **Sb** | **02 48 29.2** | **+2.2** |
| | 7.9nm,0.8s | | | | | | | |
| **KURS** | **Kuram** | **4.51** | **32** | Pg | | **Pb** | **02 47 34.7** | **+2.2** |
| | 5.5nm,0.6s | | | | | | | |
| KURS | | | | Lg | | Lg | 02 48 32.0 | |
| | 7.9nm,0.8s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.63** | **40** | *e*P | | **Pb** | **02 47 35.2** | **+0.6** |
| | 2.6nm,0.1s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **02 48 38.8** | **-3.1** |
| | 10.0nm,0.8s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.63** | **40** | Pg | | **Pg** | **02 47 39.6** | **-2.3** |
| | 5.5nm,0.4s | | | | | | | |
| UZB | | | | Lg | | Lg | 02 48 38.8 | |
| | 10.0nm,0.8s | | | | | | | |
| **KPKS** | **Kokpek** | **4.71** | **36** | *e*P | | **Pb** | **02 47 35.8** | **-0.1** |
| | 11nm,0.6s | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **02 48 39.6** | **+6.8** |
| | 24nm,0.6s | | | | | | | |
| **KK08** | **Karatay Array** | **4.77** | **317** | ⇓Pn | | **Pn** | **02 47 24.7** | **-0.5** |
| | 1.4nm,0.3s,baz=138,slow=13 | | | | | | | |
| KK08 | | | | ⇓Sn | | **Sn** | **02 48 21.9** | **+1.4** |
| | 3.8nm,0.5s,baz=133,slow=26 | | | | | | | |
| **PDGK** | **Podgornoye** | **5.00** | **42** | Pg | | **Pg** | **02 47 46.8** | **-2.1** |
| | 2.7nm,0.5s | | | | | | | |
| PDGK | | | | Lg | | Lg | 02 48 51.5 | |
| | 7.2nm,0.9s | | | | | | | |
| **ARXS** | **Arharly** | **5.02** | **25** | *e*P | | **Pb** | **02 47 42.7** | **+1.6** |
| | 0.2nm,0.4s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **02 48 51.7** | **-2.5** |
| | 7.6nm,0.5s | | | | | | | |
| **ARXS** | **Arharly** | **5.02** | **25** | Pg | | **Pg** | **02 47 46.8** | **-2.4** |
| | 0.2nm,0.4s | | | | | | | |
| ARXS | | | | Lg | | Lg | 02 48 51.7 | |
| | 7.6nm,0.5s | | | | | | | |
| **BRLS** | **Borolday** | **5.08** | **313** | *e*P | | Pn | 02 47 35.4 | +6.1 |
| | 0.8nm,0.2s | | | | | | | |
| BRLS | | | | *e*S | | **Sb** | **02 48 39.6** | **-3.6** |
| | 4.4nm,0.4s | | | | | | | |
| **BRLS** | **Borolday** | **5.08** | **313** | Pg | | **Pb** | **02 47 46.3** | **+4.2** |
| | 3.1nm,0.3s | | | | | | | |
| BRLS | | | | Lg | | Lg | 02 48 51.5 | |
| | 8.0nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **5.15** | **30** | *e*P | | **Pb** | **02 47 43.1** | **-0.2** |
| | 8.2nm,0.4s | | | | | | | |
| BLB | | | | *e*S | | **Sb** | **02 48 52.8** | **+7.6** |
| | 9.7nm,0.5s | | | | | | | |
| **BLB** | **Baldybastay** | **5.15** | **30** | Pg | | **Pb** | **02 47 47.6** | **+4.3** |
| | 8.2nm,0.4s | | | | | | | |
| BLB | | | | Lg | | Lg | 02 48 52.8 | |
| | 9.7nm,0.5s | | | | | | | |
| **BTLS** | **Baital** | **5.39** | **353** | *e*P | | **Pb** | **02 47 49.0** | **+1.5** |
| | 0.9nm,0.3s | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **02 49 02.5** | **-3.7** |
| | 6.3nm,0.7s | | | | | | | |
| **BTLS** | **Baital** | **5.39** | **353** | Pg | | **Pg** | **02 47 53.4** | **-3.0** |
| | 2.3nm,0.5s | | | | | | | |
| BTLS | | | | Lg | | Lg | 02 49 02.5 | |
| | 6.3nm,0.7s | | | | | | | |
| **AB31** | **Akbulak array** | **14.32** | **317** | P | | **Pn** | **02 49 33.0** | **-2.9** |
| | 0.4nm,0.5s,baz=133,slow=13,SNR=12 | | | | | | | |

*NEIC **15** 03:33:11.0±2.1, 4.°5S±0.°1×153.°4E±0.°1, h106km±4km,*
*mb4.2/19, Error ellipse: s-maj=19.5km s-min=17.3km*
*az=110.0*
*IDC **15** 03:33:13.9±7.0, 4.°60S×153.°40E, h144km±51km, mb3.6/7,*
*mb1 3.8/8, mb1mx3.4/41, mbtmp4.1/8, Error ellipse:*
*s-maj=63.9km s-min=24.6km az=95.0*
**ISC 15 03:33:07.1±0.8, 4.°54S±0.°10×153.°7E±0.°1, h85km, n36,**
**σ1s49/37, mb4.2/16, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.59** | **283** | Pn | | **Pn** | **03 33 35.7** | **+2.0** |
| **PMG** | **Port Moresby** | **8.11** | **233** | P | | **Pn** | **03 35 04.6** | **+2.6** |
| | 12nm,0.3s,baz=34,slow=7.0,SNR=23 | | | | | | | |
| PMG | | | | S | | **Sn** | **03 36 32.2** | **+0.1** |
| | 6.4nm,0.3s,ba

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SONM | | | | | IAmb | IAmb | 03 44 08.2 | | |
| | comp=Z,1.7nm,1.3s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **79.84** | **19** | P | **P** | | **03 45 08.8** | **+2.8** | |
| **MLY** | **Manley** | **80.32** | **21** | P | **P** | | **03 45 09.0** | **+0.4** | |
| MLY | | | | IAmb | IAmb | | 03 45 22.5 | | |
| | comp=Z,4.6nm,1.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **80.73** | **319** | P | **P** | | **03 45 10.1** | **-1.1** | |
| **MKAR** | **Makanchi Array** | **80.73** | **319** | P | **P** | | **03 45 10.8** | **-0.4** | |
| | comp=Z,0.8nm,0.9s,baz=92,slow=8.2,SNR=5.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.73** | **319** | P | **P** | | **03 45 10.6** | **-0.6** | |
| **KURK** | **Kurchatov** | **84.13** | **322** | P | **P** | | **03 45 28.1** | **-0.6** | |
| KURK | | | | IAmb | IAmb | | 03 45 29.9 | | |
| | comp=Z,5.4nm,1.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.16** | **322** | P | **P** | | **03 45 27.6** | **-1.2** | |
| | comp=Z,0.7nm,0.9s,baz=102,slow=4.6,SNR=4.4 | | | | | | | | |
| **DAWY** | **Dawson** | **84.18** | **24** | P | **P** | | **03 45 32.2** | **+3.5** | |
| DAWY | | | | IAmb | IAmb | | 03 45 56.4 | | |
| | comp=Z,3.0nm,1.4s | | | | | | | | |
| **KEST** | **Kesra** | **134.83** | **318** | PKP | **PKPdf** | | **03 52 15.7** | **-1.0** | |
| | comp=Z,1.4nm,0.5s,baz=125,slow=6.0,SNR=4.1 | | | | | | | | |
| **KEST** | **Kesra** | **134.83** | **318** | | **PKPdf** | | **03 52 15.5** | **-1.3** | |
| **TORD** | **Torodi Ar. Bea** | **151.09** | **289** | PKPbc | **PKPbc** | | **03 52 48.9** | **-2.6** | |
| | comp=Z,1.0nm,0.7s,baz=24,slow=2.2,SNR=6.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.09** | **289** | PKPbc | **PKPbc** | | **03 52 49.6** | **-1.8** | |

*CNRM **15** 03:42:58.0, 35°.95N × 7°.98W, h185km, ml3.4*
*IGIL **15** 03:43:03.4, 36°.56N × 7°.23W, h20km, ML1.6*
*INMG **15** 03:43:03.6±0.8, 36°.60N × 7°.25W, h15km±3km, ML1.8, Error ellipse: s-maj=3.8km s-min=2.9km az=166.0*

**ISC 15 03:43:00.7±0.9, 36°.57N±0°.05 × 7°.25W±0°.06, h10km, n20, σ1s66/34, 2D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PVAQ** | **Vaqueiros** | **0.91** | **336** | ⇓*e*P | **Pg** | **03 43 19.5** | **+1.2** |
| PVAQ | | | | *e*S | **Sg** | **03 43 31.4** | **+1.2** |
| PVAQ | | | | A | A | 03 43 33.7 | |
| | 14nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **1.23** | **329** | *e*P | **Pb** | **03 43 24.3** | **+0.2** |
| PCVE | | | | *e*S | **Sb** | **03 43 40.1** | **0.0** |
| **MORF** | **Marmelete** | **1.34** | **304** | *e*P | **Pn** | **03 43 25.7** | **+0.1** |
| MORF | | | | *e*S | **Sb** | **03 43 42.2** | **-1.1** |
| MORF | | | | IAML | | 03 43 45.2 | |
| | comp=N,9.0nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.34** | **304** | *e*P | **Pn** | **03 43 26.0** | **+0.5** |
| MORF | | | | *e*S | **Sb** | **03 43 43.1** | **-0.2** |
| MORF | | | | A | A | 03 43 48.6 | |
| | comp=N,7.3nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.39** | **294** | *e*P | **Pn** | **03 43 26.6** | **+0.5** |
| PFVI | | | | *e*S | **Sb** | **03 43 43.8** | **-0.6** |
| **MESJ** | **Messejana** | **1.49** | **329** | *e*P | **Pn** | **03 43 27.6** | **+0.1** |
| MESJ | | | | *e*S | **Sn** | **03 43 45.2** | **-1.7** |
| MESJ | | | | IAML | | 03 43 48.0 | |
| | comp=N,5.2nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **1.49** | **329** | *e*P | **Pn** | **03 43 27.6** | **+0.1** |
| MESJ | | | | *e*S | **Sn** | **03 43 45.7** | **-1.3** |
| MESJ | | | | A | A | 03 43 54.7 | |
| | comp=N,6.9nm,0.9s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.53** | **310** | ⇓*i*P | **Pn** | **03 43 28.5** | **+0.4** |
| PTEO | | | | *e*S | **Sn** | **03 43 47.3** | **-0.7** |
| **PNCL** | **Nicolau / Gran** | **1.85** | **327** | *e*Pn | **Pn** | **03 43 32.6** | **+0.2** |
| PNCL | | | | *e*Sn | **Sn** | **03 43 54.2** | **-1.6** |
| **EVO** | **Evora** | **2.05** | **343** | *e*Pn | **Pn** | **03 43 35.3** | **+0.1** |
| EVO | | | | *e*Sn | **Sn** | **03 43 59.5** | **-1.4** |
| **CHEFC** | **Chefchaouen** | **2.13** | **133** | P | **Pn** | **03 43 36.9** | **+0.6** |
| CHEFC | | | | S | **Sg** | **03 44 12.8** | **+3.7** |
| **PESTR** | **Estremoz** | **2.31** | **353** | *e*Pn | **Pn** | **03 43 39.6** | **+0.8** |
| **PMTG** | **Montargil** | **2.61** | **343** | *e*Pn | **Pn** | **03 43 43.0** | **0.0** |
| PMTG | | | | *e*Sn | **Sn** | **03 44 13.0** | **-1.7** |
| PMTG | | | | A | A | 03 44 14.6 | |
| | comp=N,4.2nm,0.3s | | | | | | |
| **PSBE** | **So Bento** | **3.18** | **338** | *e*Pn | **Pn** | **03 43 51.8** | **+1.0** |
| PSBE | | | | *e*Sn | **Sn** | **03 44 27.2** | **-1.7** |
| **PCBR** | **Castelo Branco** | **3.27** | **357** | *e*Pn | **Pn** | **03 43 51.6** | **-0.4** |
| PCBR | | | | *e*Sn | **Sn** | **03 44 28.0** | **-3.0** |
| **LCRM** | **LCR** | **3.48** | **145** | P | Pn | 03 43 51.6 | -3.4 |
| LCRM | | | | S | **Sn** | **03 44 34.4** | **-1.9** |
| **MTE** | **Manteigas** | **3.83** | **357** | *e*Pn | **Pn** | **03 44 00.1** | **+0.3** |
| **MD31** | **MD31** | **4.22** | **150** | P | Pn | 03 44 03.2 | -2.0 |
| MD31 | | | | S | **Sn** | **03 44 49.3** | **-5.3** |
| **POLO** | **Lamas de Olo** | **4.82** | **355** | *e*Pn | **Pn** | **03 44 13.5** | **+0.2** |
| POLO | | | | *e*Sn | **Sn** | **03 45 06.3** | **-2.9** |
| **OUK** | **Oukaimeden** | **5.37** | **186** | P | Pn | 03 44 09.2 | -12 |

*TUL **15** 03:45:00.2±1.2, 36°.46N±0°.04 × 98°.76W±0°.03, h7km±7km, ML3.2, mb_Lg2.8/39(NEIC), Error ellipse: s-maj=5.0km s-min=2.9km az=160.0*

**NEIC 15 03:45:00.7±1.2, 36°.47N±0°.04 × 98°.76W±0°.03, h11km±2km, Error ellipse: s-maj=5.3km s-min=3.2km az=155.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.22** | **244** | Pg | Pg | 03 45 04.7 | -0.6 |
| U32A | | | | | Sg | 03 45 08.1 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.50** | **134** | Pn | Pn | 03 45 27.2 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.51** | **134** | Pn | Pn | 03 45 27.1 | -0.5 |
| **FNO** | **Franklin** | **1.64** | **137** | Pn | Pn | 03 45 29.5 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.73** | **181** | Pn | Pn | 03 45 30.4 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.86** | **76** | Pn | Pn | 03 45 32.8 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.02** | **158** | IAmb_Lg | | 03 46 07.8 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.47** | **102** | Pn | Pn | 03 45 40.7 | -0.1 |
| **AMTX** | **Amarillo** | **2.86** | **237** | Pn | Pn | 03 45 46.9 | +0.7 |
| **KSU1** | **Kansas State U** | **3.13** | **32** | Pn | Pn | 03 45 50.6 | +0.7 |
| **X37A** | **Clayton** | **3.34** | **123** | Pn | Pn | 03 45 53.2 | +0.4 |
| **Z35A** | **Perchaven, San** | **3.37** | **158** | Pn | Pn | 03 45 53.2 | 0.0 |
| **U38A** | **Gravette** | **3.53** | **89** | Pn | Pn | 03 45 55.6 | +0.2 |
| **HHAR** | **Hobbs** | **3.90** | **91** | | | 03 46 00.8 | +0.3 |
| HHAR | | | | IAmb_Lg | | 03 47 07.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **W39A** | **Magazine** | **4.24** | **106** | IAmb_Lg | | 03 47 16.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.46** | **135** | IAmb_Lg | | 03 47 26.0 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.51** | **73** | Pn | Pn | 03 46 10.3 | +1.3 |
| S39A | | | | IAmb_Lg | | 03 47 26.3 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **4.58** | **280** | Pn | Pn | 03 46 10.6 | +0.4 |
| T25A | | | | IAmb_Lg | | 03 47 32.7 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **MIAR** | **Mount Ida** | **4.64** | **113** | Pn | Pn | 03 46 10.5 | -0.2 |
| MIAR | | | | IAmb_Lg | | 03 47 38.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.76** | **90** | IAmb_Lg | | 03 47 41.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.95** | **5** | Pn | Pn | 03 46 15.2 | +0.2 |
| BGNE | | | | IAmb_Lg | | 03 47 46.2 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **5.01** | **28** | Pn | Pn | 03 46 17.4 | +1.6 |
| **OGNE** | **Ogallala** | **5.15** | **331** | IAmb_Lg | | 03 47 54.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.25** | **81** | Pn | Pn | 03 46 20.3 | +1.1 |
| **W41B** | **Gary Mavity, V** | **5.45** | **102** | Pn | Pn | 03 46 23.9 | +2.2 |
| W41B | | | | IAmb_Lg | | 03 47 56.2 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **5.48** | **69** | Pn | Pn | 03 46 22.9 | +0.7 |
| R40A | | | | IAmb_Lg | | 03 47 55.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **435B** | **Jarrell** | **5.76** | **170** | IAmb_Lg | | 03 48 08.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **189** | IAmb_Lg | | 03 48 20.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.14** | **0** | IAmb_Lg | | 03 48 19.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.20** | **73** | IAmb_Lg | | 03 48 19.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.34** | **304** | Pn | Pn | 03 46 34.1 | -0.2 |
| **HBAR** | **Harrisburg** | **6.63** | **96** | IAmb_Lg | | 03 48 30.3 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.11** | **315** | IAmb_Lg | | 03 48 54.0 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **SLM** | **Saint Louis** | **7.11** | **70** | IAmb_Lg | | 03 48 46.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.44** | **12** | Pn | Pn | 03 46 47.8 | -1.3 |
| **S44A** | **Carbondale** | **7.70** | **78** | IAmb_Lg | | 03 49 09.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **8.23** | **211** | Pn | Pn | 03 47 00.4 | +0.3 |
| **TX32** | **Lajitas Array** | **8.23** | **211** | Pn | Pn | 03 47 00.0 | 0.0 |
| **TXAR** | **Lajitas Array** | **8.23** | **211** | Pn | Pn | 03 47 00.4 | +0.3 |
| **K22A** | **Casper** | **8.60** | **318** | IAmb_Lg | | 03 49 52.2 | |
| | comp=Z,8.6nm,0.9s | | | | | | |

*IDC **15** 03:45:11.6±3.2, 53°.62N × 87°.84E, h0km, mb1 2.7/2, mb1mx2.7/37, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=29.5km s-min=16.5km az=50.0*
*NNC **15** 03:45:13.2±3.8, 53°.33N × 87°.58E, h0km, mb2.8, mpv2.6, Error ellipse: s-maj=29.4km s-min=16.0km az=77.0, Suspected Mining explosion.*

**ISC 15 03:45:08.3±2.2, 52°.34N±0°.04 × 86°.6E±0°.1, h0km, n8, σ1s20/11, 5C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZAA0** | **Zalesovo Array** | **1.92** | **328** | ⇓Pn | **Pg** | **03 45 44.4** | **-0.7** |
| | 0.3nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑Sn | **Sg** | **03 46 09.2** | **-0.8** |
| | 0.6nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.92** | **328** | Pg | **Pg** | **03 45 44.4** | **-0.7** |
| | 1.3nm,0.3s,baz=98,slow=15,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 03 46 09.5 | |
| | 3.1nm,0.3s,baz=110,slow=26,SNR=14 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **1.92** | **328** | *i* | | 03 55 10.0 | |
| | baz=99,slow=340,SNR=4.8 | | | | | | |
| **KURK** | **Kurchatov** | **5.22** | **255** | ⇑Pn | **Pb** | **03 46 42.4** | **+2.1** |
| | 0.5nm,0.6s | | | | | | |
| KURK | | | | ⇓Sn | **Sg** | **03 47 55.3** | **-0.5** |
| | 0.2nm,0.2s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 03 48 32.4 | |
| | 0.2nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.31** | **254** | Pn | **Pg** | **03 46 48.8** | **-1.1** |
| | 0.1nm,0.3s,baz=63,slow=14,SNR=6.0 | | | | | | |
| KURBB | | | | Lg | Lg | 03 48 37.1 | |
| | 0.0nm,0.3s,baz=69,slow=32,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.31** | **254** | ⇑Pn | **Pg** | **03 46 48.4** | **-1.5** |
| | 0.7nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | **Sg** | **03 47 59.0** | **+0.3** |
| | 0.5nm,0.2s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 03 48 33.2 | |
| | 0.4nm,0.1s | | | | | | |
| **MK31** | **Makanchi Array** | **6.21** | **208** | Pn | **Pg** | **03 47 06.3** | **-0.9** |
| | 0.1nm,0.1s,baz=26,slow=13,SNR=7.6 | | | | | | |
| MK31 | | | | ⇑Sn | **Sg** | **03 48 27.3** | **-0.3** |
| | 0.1nm,0.1s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 03 49 04.0 | |
| | 0.1nm,0.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.21** | **208** | Pn | **Pg** | **03 47 06.2** | **-1.0** |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=8.6 | | | | | | |
| MKAR | | | | Lg | Lg | 03 49 15.1 | |
| | 0.0nm,0.3s,baz=32,slow=30,SNR=4.2 | | | | | | |

*IDC **15** 03:55:53.1±1.3, 23°.57S × 66°.63W, h196km±10km, mb3.0/4, mb1 3.2/9, mb1mx3.2/26, mbtmp3.5/9, MS2.8/1, Ms1 2.8/1, ms1mx2.4/15, Error ellipse: s-maj=24.4km s-min=15.6km az=8.0*
*NEIC **15** 03:55:53.9±1.2, 23°.65S±0°.08 × 66°.8W±0°.2, h205km±10km, mb4.0/2, Md3.5(SJA), ML4.0(GUC), Error ellipse: s-maj=20.2km s-min=12.0km az=89.0*
*GUC **15** 03:55:54.6±0.7, 23°.64S × 66°.91W, h222km±10km, ML4.0*

**ISC 15 03:55:53.0±0.7, 23°.64S±0°.06 × 66°.72W±0°.07, h201km, n47, σ0s89/59, mb3.3/5, 7C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.26** | **297** | P | **Pn** | **03 56 35.8** | **+1.0** |
| | 13nm,0.3s,baz=132,slow=7.1,SNR=106 | | | | | | |
| LVC | | | | S | **S** | **03 57 07.7** | **+1.1** |
| | 10.0nm,0.3s,baz=306,slow=22,SNR=17 | | | | | | |
| **LVC** | **Limon Verde** | **2.26** | **297** | Pn | **Pn** | **03 56 35.7** | **+1.0** |
| **LVC** | **Limon Verde** | **2.26** | **297** | *e*P | **Pn** | **03 56 35.8** | **+1.0** |
| LVC | | | | *i*S | **S** | **03 57 07.7** | **+1.1** |
| **PB15** | **IPOC Station P** | **2.56** | **279** | Pn | **Pn** | **03 56 38.3** | **+0.4** |
| **PB15** | **IPOC Station P** | **2.56** | **279** | ⇑*i*P | **Pn** | **03 56 38.5** | **+0.6** |
| PB15 | | | | *i*S | **S** | **03 57 12.8** | **+0.6** |
| **PB06** | **IPOC Station P** | **2.79** | **289** | | **Pn** | **03 56 41.1** | **+0.8** |
| **PB06** | **IPOC Station P** | **2.79** | **289** | ⇑*i*P | **Pn** | **03 56 41.0** | **+0.6** |
| PB06 | | | | *i*S | **S** | **03 57 16.7** | **0.0** |
| PB06 | | | | IAML | | 03 57 19.0 | |
| | comp=N,207nm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **2.97** | **308** | Pn | **Pn** | **03 56 43.3** | **+0.8** |
| **PB09** | **IPOC Station P** | **2.97** | **308** | ⇑*i*P | **Pn** | **03 56 43.6** | **+1.1** |
| PB09 | | | | *i*S | **S** | **03 57 21.1** | **+0.7** |
| **PB03** | **IPOC Station P** | **3.22** | **299** | Pn | **Pn** | **03 56 45.4** | **-0.1** |
| **PB03** | **IPOC Station P** | **3.22** | **299** | ⇑*i*P | **Pn** | **03 56 45.8** | **+0.3** |
| PB03 | | | | *i*S | **S** | **03 57 24.5** | **-1.3** |
| PB03 | | | | IAML | | 03 57 28.5 | |
| | comp=E,188nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **3.42** | **292** | Pn | **Pn** | **03 56 47.6** | **-0.3** |
| **PB04** | **IPOC Station P** | **3.42** | **292** | ⇑*i*P | **Pn** | **03 56 48.0** | **+0.1** |
| PB04 | | | | *i*S | **S** | **03 57 29.0** | **-1.1** |
| PB04 | | | | IAML | | 03 57 33.0 | |
| | comp=N,150nm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **3.49** | **302** | Pn | **Pn** | **03 56 48.9** | **+0.1** |
| **PB07** | **IPOC Station P** | **3.49** | **302** | ⇑*i*P | **Pn** | **03 56 49.0** | **+0.1** |
| PB07 | | | | *i*S | **S** | **03 57 30.0** | **-1.7** |
| PB07 | | | | IAML | | 03 57 32.9 | |
| | comp=N,164nm,0.4s | | | | | | |
| **PB14** | **IPOC Station P** | **3.51** | **253** | Pn | **Pn** | **03 56 48.4** | **-0.6** |
| **PB10** | **IPOC Station P** | **3.52** | **271** | Pn | **Pn** | **03 56 48.8** | **-0.2** |
| **PB10** | **IPOC Station P** | **3.52** | **271** | ⇑*i*P | **Pn** | **03 56 49.0** | **+0.1** |
| **PB01** | **IPOC Station P** | **3.64** | **315** | Pn | **Pn** | **03 56 51.0** | **+0.5** |
| **PB01** | **IPOC Station P** | **3.64** | **315** | *e*P | **Pn** | **03 56 50.8** | **+0.3** |
| PB01 | | | | *i*S | **S** | **03 57 33.9** | **-1.1** |
| PB01 | | | | IAML | | 03 57 37.7 | |
| | comp=N,71nm,0.5s | | | | | | |
| **PB02** | **IPOC Station P** | **3.74** | **308** | Pn | **Pn** | **03 56 51.3** | **-0.4** |
| **PB02** | **IPOC Station P** | **3.74** | **308** | *e*P | **Pn** | **03 56 51.5** | **-0.2** |
| PB02 | | | | *i*S | **S** | **03 57 35.4** | **-1.7** |
| PB02 | | | | IAML | | 03 57 39.4 | |
| | comp=E,158nm,0.3s | | | | | | |
| **AC02** | **Maricunga** | **3.86** | **214** | Pn | **Pn** | **03 56 53.4** | **-0.1** |
| **PB08** | **IPOC Station P** | **4.15** | **327** | Pn | **Pn** | **03 56 57.7** | **+0.5** |
| **PB08** | **IPOC Station P** | **4.15** | **327** | *e*P | **Pn** | **03 56 58.3** | **+1.1** |
| PB08 | | | | *i*S | **S** | **03 57 47.2** | **+0.3** |
| PB08 | | | | IAML | | 03 57 49.5 | |
| | comp=N,61nm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **4.24** | **311** | Pn | **Pn** | **03 56 57.8** | **-0.2** |
| **TA01** | **Diego Aracena** | **4.43** | **313** | Pn | **Pn** | **03 56 58.8** | **-1.5** |
| **GO01** | **Chusmiza** | **4.58** | **329** | Pn | **Pn** | **03 57 03.3** | **+0.8** |
| **PB11** | **IPOC Station P** | **4.73** | **324** | Pn | **Pn** | **03 57 03.7** | **-0.5** |
| **PB16** | **IPOC Station P** | **5.89** | **333** | Pn | **Pn** | **03 57 19.3** | **-0.2** |
| **AC04** | **Llanos de Chal** | **6.00** | **220** | Pn | **Pn** | **03 57 17.9** | **-2.4** |
| **PB12** | **IPOC Station P** | **6.03** | **325** | Pn | **Pn** | **03 57 19.4** | **-1.4** |
| **LPAZ** | **La Paz** | **7.43** | **349** | P | **Pn** | **03 57 38.8** | **-0.8** |
| | comp=N,0.3nm,0.3s,baz=158,slow=8.3,SNR=8.4 | | | | | | |
| LPAZ | | | | S | **S** | **03 59 03.4** | **-0.6** |
| | comp=N,0.1nm,0.3s,baz=57,slow=13,SNR=2.3 | | | | | | |
| **LPAZ** | **La Paz** | **7.43** | **349** | Pn | **Pn** | **03 57 39.7** | **+0.1** |
| **CPUP** | **Villa Florida** | **8.93** | **109** | P | **Pn** | **03 57 57.1** | **-1.2** |
| | comp=N,0.1nm,0.3s,baz=276,slow=14,SNR=3.7 | | | | | | |
| **SIV** | **San Ignacio** | **9.28** | **36** | P | **Pn** | **03 58 01.6** | **-1.4** |
| | comp=N,0.4nm,0.3s,baz=213,slow=11,SNR=11 | | | | | | |
| SIV | | | | LR | LR | 04 01 05.0 | |
| | comp=N,56nm,18.9s,baz=123,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **19.32** | **69** | P | **P** | **04 00 03.2** | **0.0** |
| | comp=N,0.3nm,0.3s,baz=224,slow=14,SNR=3.7 | | | | | | |
| **BDFB** | **Brasilia** | **19.32** | **69** | P | **P** | **04 00 04.5** | **+1.2** |
| BDFB | | | | IAmb | IAmb | 04 00 29.6 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.54** | **324** | P | **P** | **04 06 02.7** | **+0.5** |
| | comp=Z,0.3nm,0.8s,baz=134,slow=5.4,SNR=2.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.54** | **324** | P | **P** | **04 06 02.9** | **+0.7** |
| **ABTX** | **Abilene, Hawle** | **64.17** | **329** | P | **P** | **04 06 04.9** | **-1.3** |
| ABTX | | | | IAmb | IAmb | 04 06 32.0 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.56** | **180** | P | **P** | **04 06 22.0** | **+0.7** |
| **TORD** | **Torodi Ar. Bea** | **76.20** | **69** | P | **P** | **04 07 19.8** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=263,slow=6.0,SNR=4.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.97** | **329** | P | **P** | **04 07 24.6** | **+1.0** |
| | comp=Z,0.1nm,0.5s,baz=138,slow=9.6,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.88** | **340** | P | **P** | **04 08 46.9** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=138,slow=4.8,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **132.06** | **207** | PKP | **PKPdf** | **04 14 43.9** | **+0.5** |
| | comp=Z,0.6nm,1.1s,baz=160,slow=1.8,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.09** | **39** | PKPbc | **PKPbc** | **04 15 08.7** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=315,slow=3.7,SNR=8.2 | | | | | | |

**IDC 15 04:14:56.3±2.9, 55°.36N × 86°.13E, h0km, mb1 3.0/2, mb1mx2.8/44, mbtmp3.0/2, ML2.6/3, Error ellipse: s-maj=26.3km s-min=18.4km az=64.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.60** | **209** | *i* | | 04 24 40.0 | |
| | baz=25,slow=340,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.60** | **209** | Pg | Pn | 04 15 24.6 | -1.2 |
| | 3.1nm,0.3s,baz=32,slow=16,SNR=23 | | | | | | |
| ZALV | | | | Lg | Lg | 04 15 48.3 | |
| | 1.9nm,0.3s,baz=26,slow=31,SNR=6.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.60** | **227** | Pn | Pn | 04 16 34.7 | +0.3 |
| | 0.1nm,0.3s,baz=44,slow=14,SNR=8.2 | | | | | | |
| KURBB | | | | Lg | Lg | 04 18 23.1 | |
| | 0.0nm,0.3s,baz=45,slow=30,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.91** | **197** | Pn | Pn | 04 17 05.7 | -0.5 |
| | 0.1nm,0.3s,baz=23,slow=13,SNR=4.2 | | | | | | |
| MKAR | | | | Lg | Lg | 04 19 41.0 | |
| | 0.1nm,0.3s,baz=26,slow=31,SNR=7.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **9.52** | **262** | Pn | Pn | 04 17 13.9 | -0.6 |
| | 0.2nm,0.3s,baz=48,slow=18,SNR=4.0 | | | | | | |

*JMA **15** 04:18:40.8±0.1, 43°.32N × 144°.28E, h136km±1km, M3.2*
*SKHL **15** 04:18:41.2±0.5, 43°.30N × 144°.30E, h131km±4km, mb4.4/8, msha5.1/8*
*IDC **15** 04:18:42.5±5.4, 43°.63N × 144°.24E, h145km±16km, mb3.2/4, mb1 3.2/4, mb1mx2.9/38, mbtmp3.6/4, Error ellipse: s-maj=105.7km s-min=58.2km az=178.0*

**ISC 15 04:18:40.0±0.9, 43°.30N±0°.06 × 144°.30E±0°.04, h140km±6km, n22, σ0s60/37, mb3.3/4, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAR** | **Ashorobuto** | **0.39** | **270** | P | **Pn** | **04 19 00.2** | **+0.5** |
| JAR | | | | *e*S | **Sn** | **04 19 14.4** | **-0.2** |
| **JAK** | **Akkeshi** | **0.42** | **136** | P | **Pn** | **04 19 00.1** | **+0.3** |
| JAK | | | | *e*S | **Sn** | **04 19 14.9** | **+0.1** |
| **JNK** | **Nakash** | **0.42** | **46** | P | **Pn** | **04 19 00.0** | **+0.2** |
| JNK | | | | *e*S | **Sn** | **04 19 14.4** | **-0.5** |
| **AKK** | **Akkeshi** | **0.48** | **125** | *e*P | **Pn** | **04 19 00.5** | **+0.4** |
| AKK | | | | AMB | AMB | 04 19 00.7 | |
| | 360nm,0.4s | | | | | | |
| AKK | | | | *e*S | **Sn** | **04 19 15.1** | **-0.3** |
| AKK | | | | A | A | 04 19 15.8 | |
| | 1μm,0.5s | | | | | | |
| AKK | | | | A | A | 04 19 15.8 | |
| | 1μm,0.5s | | | | | | |
| **JOB** | **Onbets** | **0.52** | **221** | P | **Pn** | **04 19 01.0** | **+0.7** |
| JOB | | | | *e*S | **Sn** | **04 19 15.8** | **+0.1** |
| **JKHN** | **Kushirohamanak** | **0.66** | **109** | P | **Pn** | **04 19 01.6** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **0.73** | **337** | P | **Pn** | **04 19 02.0** | **+0.4** |
| JTKR | | | | *e*S | **Sn** | **04 19 17.4** | **-0.8** |
| **JRA** | **Rausu** | **0.87** | **43** | P | **Pn** | **04 19 03.3** | **+0.6** |
| JRA | | | | *e*S | **Sn** | **04 19 20.3** | **+0.2** |
| **JCH** | **Churui** | **0.97** | **226** | P | **Pn** | **04 19 03.8** | **+0.2** |
| JCH | | | | *e*S | **Sn** | **04 19 20.7** | **-0.8** |
| **JMP** | **Maruseppu** | **0.99** | **316** | P | **Pn** | **04 19 03.8** | **+0.1** |
| JMP | | | | *e*S | **Sn** | **04 19 20.7** | **-1.2** |
| **GLVR** | **Golovnino** | **0.99** | **63** | *e*P | **Pn** | **04 19 04.4** | **+0.7** |
| GLVR | | | | AMB | AMB | 04 19 04.8 | |
| | 120nm,0.2s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **04 19 21.6** | **-0.1** |
| GLVR | | | | A | A | 04 19 24.9 | |
| | 480nm,0.4s | | | | | | |
| GLVR | | | | A | A | 04 19 24.9 | |
| | 340nm,0.4s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **1.04** | **86** | *i* P | **Pn** | **04 19 04.3** | **+0.1** |
| NMR | | | | AMB | AMB | 04 19 04.6 | |
| | 100nm,0.3s | | | | | | |
| NMR | | | | *i* S | **Sn** | **04 19 21.6** | **-1.0** |
| NMR | | | | A | A | 04 19 22.4 | |
| | 560nm,0.3s | | | | | | |
| NMR | | | | A | A | 04 19 22.4 | |
| | 430nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.05** | **86** | P | **Pn** | **04 19 04.3** | **0.0** |
| NEM2 | | | | *e*S | **Sn** | **04 19 21.5** | **-1.2** |
| **YUK** | **Yuzh-Kuril'sk** | **1.35** | **56** | *e*P | **Pn** | **04 19 08.2** | **+1.0** |
| YUK | | | | AMB | AMB | 04 19 10.6 | |
| | 60nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 04 19 10.6 | |
| | 100nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 04 19 10.6 | |
| | 50nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **04 19 28.0** | **0.0** |
| YUK | | | | A | A | 04 19 31.5 | |
| | 210nm,0.4s | | | | | | |
| YUK | | | | A | A | 04 19 31.5 | |
| | 260nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **1.48** | **304** | P | **Pn** | **04 19 09.2** | **+0.6** |
| | 26nm,0.3s,baz=145,slow=8.4,SNR=16 | | | | | | |
| ASAJ | | | | S |

λ31.71000°. Principal axes: T 2.5647, Plg34.0000°, Azm240.0000°; N -0.0043, Plg54.0000°, Azm42.0000°; P -2.5604, Plg8.0000°, Azm144.0000°;
BJI **15** 05:22:38.5±0.0,23°.08N×120°.85E,*h10km*,mb4.0/22, mB4.5/13,ML4.0/6,Ms4.3/14,Ms7 4.1/12
IDC **15** 05:22:48.9±4.2,22.79N×120.88E,*h105km*±39*km*, mb3.7/23,mb1 3.8/24,mb1mx3.6/46,mbtmp4.0/24, MS3.5/22,Ms1 3.5/22,ms1mx3.2/86,Error ellipse: s-maj=17.9km s-min=12.1km az=68.0
**ISC 15 05:22:37.7**±0.9,**23°.02N**±0°.01×**120°.90E**±0°.01,**h6**$^{km}_{\pm 6km}$, **n242**,σ1§**11**/318,**mb4.3**/42,**MS3.5**/22,**38C-5D**,**Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.19** | **324** | *i* P | **Pg** | **05 22 40.9** | **-0.6** |
| | baz=336 | | | | | | |
| STYH | | | | *i* S | **Sg** | **05 22 43.5** | **-0.5** |
| | baz=336 | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **32** | ⇑*i*P | **Pg** | **05 22 41.5** | **-0.4** |
| | baz=42 | | | | | | |
| ELDTW | | | | *e*S | **Sg** | **05 22 44.5** | **-0.1** |
| | baz=42 | | | | | | |
| **SLGT** | **Liugui** | **0.23** | **265** | ⇑*i*P | **Pg** | **05 22 41.6** | **-0.7** |
| | baz=262 | | | | | | |
| SLGT | | | | *i* S | **Sg** | **05 22 44.7** | **-0.7** |
| | baz=262 | | | | | | |
| **LONT** | **Longtian** | **0.24** | **117** | ⇓*i*P | **Pg** | **05 22 42.9** | **+0.5** |
| | baz=114 | | | | | | |
| LONT | | | | *i* S | **Sg** | **05 22 46.9** | **+1.3** |
| | baz=114 | | | | | | |
| **TWG** | **Pinlang** | **0.25** | **140** | Pg | **Pg** | **05 22 42.9** | **+0.2** |
| **TWG** | **Pinlang** | **0.25** | **140** | ⇓*i*P | **Pg** | **05 22 43.3** | **+0.6** |
| | baz=135 | | | | | | |
| TWG | | | | *i* S | **Sg** | **05 22 47.6** | **+1.6** |
| | baz=135 | | | | | | |
| **TWGBT** | **Beinan** | **0.26** | **140** | ⇓*i*P | **Pg** | **05 22 43.2** | **+0.4** |
| | baz=135 | | | | | | |
| TWGBT | | | | *i* S | **Sg** | **05 22 47.6** | **+1.3** |
| | baz=135 | | | | | | |
| **SGST** | **Jiashian** | **0.30** | **283** | ⇑*i*P | **Pg** | **05 22 42.3** | **-1.2** |
| | baz=284 | | | | | | |
| SGST | | | | *i* S | **Sg** | **05 22 46.8** | **-0.8** |
| | baz=284 | | | | | | |
| **ECS** | **Chishang** | **0.31** | **75** | ⇑*i*P | **Pg** | **05 22 44.3** | **+0.6** |
| | baz=77 | | | | | | |
| ECS | | | | S | **Sg** | **05 22 49.4** | **+1.6** |
| | baz=77 | | | | | | |
| **TTN** | **Taitung** | **0.35** | **139** | *e*P | **Pb** | **05 22 45.7** | **-0.7** |
| | baz=134 | | | | | | |
| TTN | | | | *e*S | **Sb** | **05 22 52.2** | **0.0** |
| | baz=134 | | | | | | |
| **WTP** | **Ta-pu** | **0.35** | **311** | ⇑*i*P | **Pg** | **05 22 44.4** | **-0.1** |
| | baz=316 | | | | | | |
| WTP | | | | *i* S | **Sg** | **05 22 49.8** | **+0.7** |
| | baz=316 | | | | | | |
| **SSD** | **Sandimen** | **0.36** | **222** | ⇑*i*P | **Pg** | **05 22 44.0** | **-0.8** |
| | baz=216 | | | | | | |
| SSD | | | | *i* S | **Sg** | **05 22 48.5** | **-1.1** |
| | baz=216 | | | | | | |
| **TPUB** | **Ta-pu** | **0.38** | **319** | Pg | **Pg** | **05 22 45.1** | **0.0** |
| **TPUB** | **Ta-pu** | **0.38** | **319** | ⇑*i*P | **Pg** | **05 22 45.0** | **0.0** |
| | baz=323 | | | | | | |
| TPUB | | | | S | **Sg** | **05 22 50.7** | **+0.7** |
| | baz=323 | | | | | | |
| **EDH** | **Donghe** | **0.38** | **96** | ⇑*i*P | **Pg** | **05 22 45.9** | **+0.9** |
| | baz=97 | | | | | | |
| EDH | | | | *e*S | **Sb** | **05 22 52.2** | **-0.7** |
| | baz=97 | | | | | | |
| **CHN1** | **Nanshi** | **0.38** | **296** | ⇑*i*P | **Pg** | **05 22 45.3** | **+0.1** |
| | baz=298 | | | | | | |
| CHN1 | | | | *e*S | **Sg** | **05 22 50.3** | **+0.2** |
| | baz=298 | | | | | | |
| **TSMG** | **Majia** | **0.39** | **217** | ⇑*i*P | **Pg** | **05 22 44.5** | **-0.8** |
| | baz=212 | | | | | | |
| TSMG | | | | *i* S | **Sg** | **05 22 49.1** | **-1.2** |
| | baz=212 | | | | | | |
| **SCST** | **Cishan** | **0.39** | **251** | P | **Pg** | **05 22 45.5** | **+0.1** |
| | baz=248 | | | | | | |
| **FULB** | **Fuli** | **0.41** | **63** | ⇑*i*P | **Pg** | **05 22 46.4** | **+0.7** |
| | baz=66 | | | | | | |
| FULB | | | | *e*S | **Sb** | **05 22 53.0** | **-0.9** |
| | baz=66 | | | | | | |
| **ECL** | **Taimali** | **0.42** | **173** | ⇓*i*P | **Pg** | **05 22 45.8** | **-0.1** |
| | baz=167 | | | | | | |
| ECL | | | | *e*S | **Sg** | **05 22 51.2** | **-0.2** |
| | baz=167 | | | | | | |
| **SNST** | **Tainan City** | **0.42** | **299** | ⇑P | **Pg** | **05 22 46.5** | **+0.6** |
| | baz=301 | | | | | | |
| SNST | | | | *e*S | **Sb** | **05 22 53.5** | **-0.8** |
| | baz=301 | | | | | | |
| **CHN4** | **Tsaushan** | **0.44** | **320** | ⇑*i*P | **Pg** | **05 22 46.3** | **+0.1** |
| | baz=324 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **05 22 52.6** | **+0.7** |
| | baz=324 | | | | | | |
| **CHKT** | **Chengkung** | **0.44** | **79** | ⇑P | **Pb** | **05 22 47.5** | **-0.4** |
| | baz=81 | | | | | | |
| CHKT | | | | *e*S | **Sb** | **05 22 55.0** | **+0.3** |
| | baz=81 | | | | | | |
| **TWK** | **Hsinying** | **0.45** | **304** | ⇑*i*P | **Pg** | **05 22 46.9** | **+0.3** |
| | baz=306 | | | | | | |
| TWK | | | | *e*S | **Sb** | **05 22 54.3** | **-1.0** |
| | baz=306 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.47** | **211** | ⇑*i*P | **Pg** | **05 22 46.1** | **-0.7** |
| | baz=207 | | | | | | |
| MASBT | | | | *e*S | **Sg** | **05 22 51.9** | **-1.1** |
| | baz=207 | | | | | | |
| **SGLT** | **Jiouru** | **0.47** | **232** | ⇑P | **Pg** | **05 22 47.5** | **+0.6** |
| | baz=228 | | | | | | |
| SGLT | | | | *e*S | **Sb** | **05 22 57.2** | **+1.4** |
| | baz=228 | | | | | | |
| **YUS** | **Yu-Shan** | **0.47** | **6** | ⇑P | **Pg** | **05 22 46.4** | **-0.6** |
| | baz=11 | | | | | | |
| YUS | | | | *e*S | **Sg** | **05 22 53.2** | **0.0** |
| | baz=11 | | | | | | |
| **TWM1** | **Shoushan** | **0.48** | **246** | ⇑P | **Pg** | **05 22 47.7** | **+0.7** |
| | baz=243 | | | | | | |
| **CHN3** | **Shinhua** | **0.49** | **277** | *e*P | **Pb** | **05 22 48.9** | **0.0** |
| | baz=277 | | | | | | |
| **TWF1** | **Yuli** | **0.50** | **48** | ⇑*i*P | **Pg** | **05 22 47.1** | **-0.3** |
| | baz=51 | | | | | | |
| TWF1 | | | | *e*S | **Sg** | **05 22 53.7** | **-0.2** |
| | baz=51 | | | | | | |
| **ALS** | **Alishan** | **0.50** | **350** | ⇑P | **Pg** | **05 22 47.0** | **-0.4** |
| | baz=355 | | | | | | |
| ALS | | | | *e*S | **Sg** | **05 22 54.9** | **+0.9** |
| | baz=355 | | | | | | |
| **TSPT** | **Pingtung City** | **0.50** | **228** | *e*P | **Pg** | **05 22 47.9** | **+0.5** |
| | baz=225 | | | | | | |
| **SHHT** | **Tainan City** | **0.51** | **271** | ⇑*e*P | **Pb** | **05 22 49.3** | **+0.2** |
| | baz=270 | | | | | | |
| SHHT | | | | *e*S | **Sn** | **05 22 59.6** | **-1.1** |
| | baz=270 | | | | | | |
| **EYUL** | **Yuli** | **0.51** | **50** | ⇑*e*P | **Pg** | **05 22 47.3** | **-0.3** |
| | baz=52 | | | | | | |
| EYUL | | | | *e*S | **Sg** | **05 22 55.1** | **+0.9** |
| | baz=52 | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **44** | | **Pg** | **05 22 47.2** | **-0.6** |
| **YULB** | **Yu-li** | **0.53** | **44** | ⇑*i*P | **Pg** | **05 22 47.3** | **-0.6** |
| | baz=47 | | | | | | |
| YULB | | | | *e*S | **Sg** | **05 22 54.2** | **-0.6** |
| | baz=47 | | | | | | |
| **SSHA** | **Shanhua** | **0.57** | **282** | *e*P | **Pb** | **05 22 51.0** | **+0.8** |
| | baz=282 | | | | | | |
| SSHA | | | | *e*S | **Sn** | **05 23 01.8** | **-0.5** |
| | baz=282 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.58** | **243** | ⇑*e*P | **Pb** | **05 22 50.6** | **+0.3** |
| | baz=241 | | | | | | |
| **ECBN** | **Changbin** | **0.59** | **59** | *e*P | **Pb** | **05 22 50.2** | **-0.4** |
| | baz=62 | | | | | | |
| **SSPT** | **Xinbi** | **0.61** | **210** | ⇑P | **Pg** | **05 22 49.4** | **-0.1** |
| | baz=207 | | | | | | |
| SSPT | | | | *e*S | **Sg** | **05 22 57.5** | **+0.1** |
| | baz=207 | | | | | | |
| **CHN5** | **Tsauling** | **0.61** | **341** | ⇑P | **Pg** | **05 22 49.5** | **-0.1** |
| | baz=344 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **05 23 00.6** | **+0.7** |
| | baz=344 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.62** | **272** | *e*P | **Pb** | **05 22 51.9** | **+0.9** |
| | baz=272 | | | | | | |
| TAI1 | | | | *e*S | **Sn** | **05 23 03.1** | **-0.2** |
| | baz=272 | | | | | | |
| **EHY** | **Hungye** | **0.62** | **39** | ⇑*e*P | **Pg** | **05 22 49.1** | **-0.7** |
| | baz=42 | | | | | | |
| EHY | | | | *e*S | **Sg** | **05 22 57.3** | **-0.6** |
| | baz=42 | | | | | | |
| **LDUT** | **Ludao** | **0.63** | **123** | *e*P | **Pg** | **05 22 50.2** | **+0.4** |
| | baz=121 | | | | | | |
| LDUT | | | | *e*S | **Sb** | **05 23 00.4** | **+0.2** |
| | baz=121 | | | | | | |
| **EAST** | **Anshuo** | **0.63** | **184** | ⇑*i*P | **Pg** | **05 22 49.9** | **0.0** |
| | baz=180 | | | | | | |
| EAST | | | | *e*S | **Sg** | **05 22 58.0** | **-0.1** |
| | baz=180 | | | | | | |
| **CHN2** | **Minshiung** | **0.64** | **323** | *e*P | **Pb** | **05 22 51.6** | **+0.1** |
| | baz=325 | | | | | | |
| **TAI** | **Tainan** | **0.65** | **268** | *e*P | **Pn** | **05 22 53.0** | **-0.5** |
| | baz=268 | | | | | | |
| **CHY** | **Chiayi** | **0.65** | **318** | *e*P | **Pb** | **05 22 51.0** | **-0.5** |
| | baz=320 | | | | | | |
| CHY | | | | *e*S | **Sb** | **05 23 00.9** | **0.0** |
| | baz=320 | | | | | | |
| **TAW** | **Tawu** | **0.66** | **180** | *e*P | **Pg** | **05 22 50.3** | **-0.1** |
| | baz=176 | | | | | | |
| TAW | | | | *e*S | **Sg** | **05 22 59.0** | **+0.2** |
| | baz=176 | | | | | | |
| **ICHU** | **Yijhu** | **0.67** | **301** | *e*P | **Pb** | **05 22 51.3** | **-0.5** |
| | baz=302 | | | | | | |
| ICHU | | | | *e*S | **Sb** | **05 23 01.7** | **+0.4** |
| | baz=302 | | | | | | |
| **SCLT** | **Jiali** | **0.67** | **284** | *e*P | **Pb** | **05 22 52.6** | **+0.8** |
| | baz=284 | | | | | | |
| SCLT | | | | *e*S | **Sn** | **05 23 04.0** | **-0.6** |
| | baz=284 | | | | | | |
| **TAWH** | **Dawu Township** | **0.67** | **181** | P | **Pg** | **05 22 50.6** | **-0.1** |
| | baz=178 | | | | | | |
| TAWH | | | | *e*S | **Sg** | **05 22 59.2** | **-0.2** |
| | baz=178 | | | | | | |
| **HGSD** | **Ruisui** | **0.68** | **45** | *e*P | **Pg** | **05 22 50.9** | **+0.1** |
| | baz=48 | | | | | | |
| HGSD | | | | *e*S | **Sb** | **05 23 01.8** | **+0.1** |
| | baz=48 | | | | | | |
| **SCZT** | **Fangliau** | **0.69** | **202** | ⇑P | **Pg** | **05 22 50.4** | **-0.6** |
| | baz=198 | | | | | | |
| SCZT | | | | *e*S | **Sg** | **05 22 59.2** | **-0.7** |
| | baz=198 | | | | | | |
| **WSSB** | **Gushan** | **0.69** | **238** | *e*P | **Pn** | **05 22 53.4** | **-0.8** |
| | baz=236 | | | | | | |
| **KAU** | **Kaohsiung** | **0.70** | **231** | *e*P | **Pn** | **05 22 54.3** | **0.0** |
| | baz=228 | | | | | | |
| **CHN8** | **Yiju** | **0.71** | **298** | *e*P | **Pb** | **05 22 52.5** | **-0.1** |
| | baz=299 | | | | | | |
| **WGK** | **Gukeng** | **0.73** | **335** | *e*P | **Pb** | **05 22 53.2** | **+0.2** |
| | baz=336 | | | | | | |
| **WDLH** | **Douliu** | **0.75** | **334** | *e*P | **Pb** | **05 22 53.3** | **+0.1** |
| | baz=336 | | | | | | |
| WDLH | | | | *e*S | **Sn** | **05 23 05.8** | **-0.8** |
| | baz=336 | | | | | | |
| **SSLB** | **Suanglung** | **0.77** | **4** | | **Pg** | **05 22 51.5** | **-1.1** |
| **SSLB** | **Suanglung** | **0.77** | **4** | ⇑*e*P | **Pg** | **05 22 51.5** | **-1.1** |
| | baz=6.0 | | | | | | |
| SSLB | | | | *e*S | **Sb** | **05 23 04.3** | **-0.1** |
| | baz=6.0 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.80** | **309** | *e*P | **Pb** | **05 22 53.7** | **-0.3** |
| | baz=311 | | | | | | |
| WSL | | | | *e*S | **Sb** | **05 23 05.1** | **0.0** |
| | baz=311 | | | | | | |
| **SLIU** | **Shizi** | **0.80** | **187** | ⇑*e*P | **Pg** | **05 22 52.7** | **-0.4** |
| | baz=184 | | | | | | |
| SLIU | | | | *e*S | **Sg** | **05 23 03.1** | **-0.4** |
| | baz=184 | | | | | | |
| **WTK** | **Tuku** | **0.82** | **325** | *e*P | **Pb** | **05 22 54.1** | **-0.2** |
| | baz=327 | | | | | | |
| WTK | | | | *e*S | **Sb** | **05 23 06.2** | **+0.6** |
| | baz=327 | | | | | | |
| **WLCH** | **Liuqiu** | **0.82** | **216** | ⇑*e*P | **Pn** | **05 22 56.1** | **+0.3** |
| | baz=214 | | | | | | |
| WLCH | | | | *e*S | **Sn** | **05 23 13.1** | **+4.8** |
| | baz=214 | | | | | | |
| **WJS** | **Zhushan** | **0.82** | **349** | *e*P | **Pb** | **05 22 54.0** | **-0.4** |
| | baz=351 | | | | | | |
| WJS | | | | *e*S | **Sb** | **05 23 06.3** | **+0.6** |
| | baz=351 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.83** | **217** | *e*P | **Pn** | **05 22 56.3** | **+0.3** |
| | baz=214 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.86** | **0** | ⇑*e*P | **Pg** | **05 22 53.8** | **-0.6** |
| | baz=3.0 | | | | | | |
| **WSF** | **Szhu** | **0.88** | **315** | *e*P | **Pb** | **05 22 55.2** | **-0.2** |
| | baz=317 | | | | | | |
| WSF | | | | *e*S | **Sb** | **05 23 08.0** | **+0.6** |
| | baz=317 | | | | | | |
| **WNT** | **Mingjian** | **0.88** | **347** | *e*P | **Pb** | **05 22 55.3** | **-0.1** |
| | baz=350 | | | | | | |
| WNT | | | | *e*S | **Sb** | **05 23 08.2** | **+0.7** |
| | baz=350 | | | | | | |
| **TYC** | **Yuchr** | **0.89** | **358** | ⇑*e*P | **Pg** | **05 22 54.5** | **-0.3** |
| | baz=1.0 | | | | | | |
| TYC | | | | *e*S | **Sn** | **05 23 10.2** | **+0.2** |
| | baz=1.0 | | | | | | |
| **WNT1** | **Nantou City** | **0.91** | **347** | *e*P | **Pb** | **05 22 56.1** | **+0.1** |
| | baz=349 | | | | | | |
| **ESL** | **Shilin** | **0.93** | **32** | *e*P | **Pg** | **05 22 54.7** | **-1.0** |
| | baz=34 | | | | | | |
| ESL | | | | *e*S | **Sb** | **05 23 08.9** | **-0.2** |
| | baz=34 | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.99** | **183** | *e*P | **Pb** | **05 22 57.4** | **0.0** |
| | baz=181 | | | | | | |
| **WUSB** | **Renai** | **0.99** | **12** | ⇑*e*P | **Pg** | **05 22 55.2** | **-1.6** |
| | baz=14 | | | | | | |
| WUSB | | | | *e*S | **Sb** | **05 23 11.4** | **+0.5** |
| | baz=14 | | | | | | |
| **WPL** | **Puli Township** | **0.99** | **3** | *e*P | **Pg** | **05 22 56.3** | **-0.5** |
| | baz=5.0 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.00** | **332** | *e*P | **Pg** | **05 22 57.1** | **+0.1** |
| | baz=333 | | | | | | |
| WRL | | | | *e*S | **Sb** | **05 23 11.6** | **+0.6** |
| | baz=333 | | | | | | |
| **DPDB** | **Guoxing** | **1.01** | **1** | *e*P | **Pg** | **05 22 57.3** | **+0.1** |
| | baz=3.0 | | | | | | |
| **HEN** | **Hengchun** | **1.02** | **188** | *e*P | **Pg** | **05 22 57.1** | **-0.2** |
| | baz=186 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.02** | **326** | *e*P | **Pg** | **05 22 57.5** | **+0.2** |
| | baz=328 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.04** | **1** | *e*P | **Pg** | **05 22 57.1** | **-0.5** |
| | baz=3.0 | | | | | | |
| WCS | | | | *e*S | **Sb** | **05 23 12.5** | **+0.5** |
| | baz=3.0 | | | | | | |
| **WWF** | **Wufeng** | **1.04** | **350** | *e*P | **Pb** | **05 22 58.3** | **+0.1** |
| | baz=352 | | | | | | |
| **SNW** | **Nanwan** | **1.06** | **187** | *e*P | **Pn** | **05 23 00.5** | **+1.3** |
| | baz=185 | | | | | | |
| SNW | | | | *e*S | **Sn** | **05 23 16.3** | **+2.0** |
| | baz=185 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.06** | **37** | *e*P | **Pg** | **05 22 58.2** | **0.0** |
| | baz=38 | | | | | | |
| **CHGB** | **Renai** | **1.07** | **14** | *e*P | **Pg** | **05 22 56.5** | **-1.8** |
| | baz=16 | | | | | | |
| CHGB | | | | *e*S | **Sb** | **05 23 14.0** | **+0.8** |
| | baz=16 | | | | | | |
| **TWK1** | **Hengchun** | **1.07** | **185** | *e*P | **Pn** | **05 22 59.3** | **-0.1** |
| | baz=182 | | | | | | |
| TWK1 | | | | *e*S | **Sn** | **05 23 17.0** | **+2.4** |
| | baz=182 | | | | | | |
| **TWKBT** | **Hengchun** | **1.07** | **184** | *e*P | **Pb** | **05 22 58.8** | **+0.1** |
| | baz=182 | | | | | | |
| TWKBT | | | | *e*S | **Sn** | **05 23 17.1** | **+2.5** |
| | baz=182 | | | | | | |
| **ETM** | **Tongmen** | **1.09** | **30** | *e*P | **Pg** | **05 22 58.1** | **-0.6** |
| | baz=32 | | | | | | |
| **WCHH** | **Zhanghua** | **1.10** | **344** | *e*P | **Pb** | **05 22 59.5** | **+0.2** |
| | baz=345 | | | | | | |
| WCHH | | | | *e*S | **Sn** | **05 23 16.2** | **+0.9** |
| | baz=345 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.11** | **180** | *e*P | **Pg** | **05 22 59.2** | **+0.1** |
| | baz=180 | | | | | | |
| TSEB | | | | *e*S | **Sn** | **05 23 18.4** | **+2.8** |
| | baz=180 | | | | | | |
| **LAY** | **Lan-yu** | **1.15** | **148** | *e*P | **Pg** | **05 22 57.8** | **-1.9** |
| | baz=147 | | | | | | |
| **TCU** | **Taichung** | **1.15** | **350** | *e*P | **Pn** | **05 23 00.7** | **+0.3** |
| | baz=352 | | | | | | |
| TCU | | | | *e*S | **Sn** | **05 23 18.4** | **+2.0** |
| | baz=352 | | | | | | |
| **HWA** | **Hwalien** | **1.16** | **34** | *e*P | **Pg** | **05 23 00.0** | **+0.1** |
| | baz=36 | | | | | | |
| **WDGT** | **Dungji** | **1.17** | **282** | ⇑*e*P | **Pg** | **05 22 59.2** | **-0.9** |
| | baz=282 | | | | | | |
| WDGT | | | | *e*S | **Sb** | **05 23 15.6** | **-0.1** |
| | baz=282 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.17** | **17** | *e*P | **Pg** | **05 22 58.6** | **-1.7** |
| | baz=19 | | | | | | |
| WHF | | | | *e*S | **Sn** | **05 23 17.3** | **-0.5** |
| | baz=19 | | | | | | |
| **LYUB** | **Lan-yu** | **1.19** | **148** | *e*P | **Pg** | **05 23 00.3** | **-0.3** |
| | baz=147 | | | | | | |
| LYUB | | | | *e*S | **Sn** | **05 23 18.2** | **+0.7** |
| | baz=147 | | | | | | |
| **TWD** | **Chiawan** | **1.24** | **31** | *e*P | **Pg** | **05 23 00.1** | **-1.5** |
| | baz=33 | | | | | | |
| TWD | | | | *e*S | **Sn** | **05 23 19.0** | **+0.3** |
| | baz=33 | | | | | | |
| **TDCB** | **Techi** | **1.25** | **11** | *e*P | **Pg** | **05 23 00.9** | **-1.0** |
| | baz=13 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **05 23 21.3** | **+1.9** |
| | baz=13 | | | | | | |
| **TWT** | **Tachien** | **1.26** | **12** | *e*P | **Pg** | **05 23 00.8** | **-1.2** |
| | baz=13 | | | | | | |
| TWT | | | | *e*S | **Sn** | **05 23 21.0** | **+1.5** |
| | baz=13 | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **14** | *e*P | **Pg** | **05 22 60.0** | **-2.1** |
| | baz=16 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **05 23 20.1** | **+0.3** |
| | baz=16 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.30** | **24** | *e*P | **Pn** | **05 23 01.0** | **-1.7** |
| | baz=26 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **05 23 20.3** | **-0.1** |
| | baz=26 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.32** | **292** | *e*P | **Pn** | **05 23 01.4** | **-1.3** |
| | baz=293 | | | | | | |
| PHUB | | | | *e*S | **Sb** | **05 23 18.8** | **-1.3** |
| | baz=293 | | | | | | |
| **ETL** | **Fush Village** | **1.32** | **30** | *e*P | **Pn** | **05 23 02.1** | **-0.7** |
| | baz=32 | | | | | | |
| ETL | | | | *e*S | **Sn** | **05 23 20.7** | **-0.1** |
| | baz=32 | | | | | | |
| **NACB** | **Ninganchiao** | **1.32** | **29** | | **Pn** | **05 23 00.6** | **-2.1** |
| **NACB** | **Ninganchiao** | **1.32** | **29** | *e*P | **Pn** | **05 23 00.7** | **-2.1** |
| | baz=30 | | | | | | |
| NACB | | | | *e*S | **Sg** | **05 23 20.2** | **0.0** |
| | baz=30 | | | | | | |
| **TWQ1** | **Liyutan** | **1.33** | **355** | *e*P | **Pg** | **05 23 03.4** | **+0.1** |
| | baz=357 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **05 23 21.7** | **+0.6** |
| | baz=357 | | | | | | |
| **WDJ** | **Dajia District** | **1.35** | **350** | *e*P | **Pg** | **05 23 03.6** | **0.0** |
| | baz=351 | | | | | | |
| **PNG** | **Penghu** | **1.35** | **294** | *e*P | **Pn** | **05 23 02.1** | **-1.1** |
| | baz=295 | | | | | | |
| PNG | | | | *e*S | **Sb** | **05 23 20.1** | **-1.0** |
| | baz=295 | | | | | | |
| **NSY** | **Sanyi** | **1.40** | **355** | *e*P | **Pg** | **05 23 04.9** | **+0.3** |
| | baz=357 | | | | | | |
| NSY | | | | *e*S | **Sg** | **05 23 23.7** | **+0.9** |
| | baz=357 | | | | | | |
| **NNSB** | **Datong** | **1.48** | **17** | *e*P | **Pn** | **05 23 04.2** | **-0.9** |
| | baz=19 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **05 23 25.5** | **+0.3** |
| | baz=19 | | | | | | |
| **NNS** | **Nan Shan** | **1.48** | **17** | *e*P | **Pn** | **05 23 05.3** | **+0.2** |
| | baz=19 | | | | | | |
| NNS | | | | *e*S | **Sg** | **05 23 27.5** | **+2.0** |
| | baz=19 | | | | | | |
| **NMLH** | **Miaoli** | **1.52** | **356** | *e*P | **Pb** | **05 23 06.0** | **-0.3** |
| | baz=358 | | | | | | |
| NMLH | | | | *e*S | **Sb** | **05 23 26.2** | **+0.3** |
| | baz=358 | | | | | | |
| **ENA** | **Nanau** | **1.60** | **29** | *e*P | **Pb** | **05 23 07.4** | **-0.5** |
| | baz=30 | | | | | | |
| **LATG** | **Datong** | **1.62** | **21** | *e*P | **Pn** | **05 23 06.9** | **-0.1** |
| | baz=22 | | | | | | |
| LATG | | | | *e*S | **Sg** | **05 23 31.1** | **+1.3** |
| | baz=22 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.62** | **7** | *e*P | **Pb** | **05 23 07.8** | **-0.3** |
| | baz=8.0 | | | | | | |
| NFF | | | | *e*S | **Sg** | **05 23 30.7** | **+0.8** |
| | baz=8.0 | | | | | | |
| **LIOB** | **Emei** | **1.63** | **4** | *e*P | **Pb** | **05 23 07.8** | **-0.4** |
| | baz=5.0 | | | | | | |
| LIOB | | | | *e*S | **Sg** | **05 23 31.5** | **+1.4** |
| | baz=5.0 | | | | | | |
| **EWUT** | **Wuta** | **1.64** | **29** | *e*P | **Pn** | **05 23 07.2** | **+0.1** |
| | baz=31 | | | | | | |
| **NDT** | **Datong Townshi** | **1.68** | **20** | *e*P | **Pb** | **05 23 08.5** | **-0.6** |
| | baz=21 | | | | | | |
| **YHNB** | **Yeheng** | **1.70** | **15** | | **Pn** | **05 23 08.4** | **+0.3** |
| **YHNB** | **Yeheng** | **1.70** | **15** | *e*P | **Pn** | **05 23 08.2** | **+0.1** |
| | baz=16 | | | | | | |
| YHNB | | | | *e*S | **Sg** | **05 23 33.8** | **+1.2** |
| | baz=16 | | | | | | |
| **NSK** | **Sanguang** | **1.71** | **14** | *e*P | **Pb** | **05 23 09.0** | **-0.6** |
| | baz=16 | | | | | | |
| NSK | | | | *e*S | **Sg** | **05 23 34.3** | **+1.7** |
| | baz=16 | | | | | | |
| **ENTT** | **Nioudou** | **1.73** | **21** | *e*P | **Pb** | **05 23 09.2** | **-0.7** |
| | baz=22 | | | | | | |
| **SBCB** | **Hsinchu** | **1.77** | **3** | *e*P | **Pb** | **05 23 10.9** | **+0.3** |
| | baz=4.0 | | | | | | |
| **NDS** | **Dongshan** | **1.78** | **25** | *e*P | **Pb** | **05 23 10.2** | **-0.5** |
| | baz=26 | | | | | | |
| NDS | | | | *e*S | **Sg** | **05 23 35.9** | **+1.0** |
| | baz=26 | | | | | | |
| **HSN** | **Hsinchu** | **1.78** | **2** | *e*P | **Pg** | **05 23 14.3** | **+2.4** |
| | baz=5.0 | | | | | | |
| **TWC** | **Suao** | **1.81** | **29** | *e*P | **Pb** | **05 23 10.7** | **-0.6** |
| | baz=30 | | | | | | |
| TWC | | | | *e*S | **Sb** | **05 23 34.5** | **+0.2** |
| | baz=30 | | | | | | |
| **TWE** | **Neicheng** | **1.84** | **22** | *e*P | **Pn** | **05 23 10.3** | **+0.5** |
| | baz=24 | | | | | | |
| **NWLT** | **Wulai** | **1.84** | **17** | *e*P | **Pb** | **05 23 11.5** | **-0.3** |
| | baz=19 | | | | | | |
| NWLT | | | | *e*S | **Sg** | **05 23 37.5** | **+0.6** |
| | baz=19 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.85** | **20** | *e*P | **Pb** | **05 23 11.7** | **-0.3** |
| | baz=21 | | | | | | |
| **NHDH** | **Xindian Distri** | **2.02** | **16** | *e*P | **Pb** | **05 23 15.7** | **+0.7** |
| | baz=17 | | | | | | |
| **TATO** | **Taipei** | **2.02** | **15** | | **Pn** | **05 23 13.1** | **+0.6** |
| **TWA** | **Mucha** | **2.05** | **18** | *e*P | **Pb** | **05 23 15.9** | **+0.4** |
| | baz=19 | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.20** | **21** | *e*P | **Pn** | **05 23 16.0** | **+1.0** |
| | baz=22 | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.22** | **26** | *e*P | **Pb** | **05 23 16.8** | **-1.5** |
| | baz=28 | | | | | | |
| **SXI1** | **Grass Mountain** | **2.25** | **23** | *e*P | **Pn** | **05 23 17.2** | **+1.5** |
| | baz=24 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.36** | **52** | S | **Sn** | **05 23 45.1** | **-1.3** |
| **PTMZ** | **Houxiangcun** | **2.59** | **321** | *e*P | **Pn** | **05 23 19.6** | **-0.6** |
| | baz=322 | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.71** | **303** | | **Pn** | **05 23 21.4** | **-0.5** |
| **QZH** | **Quanzhou** | **2.85** | **313** | Pn | **Pn** | **05 23 23.3** | **-0.5** |
| QZH | | | | Sn | **Sn** | **05 23 55.9** | **-2.6** |
| QZH | | | | smax | smax | | |
| | comp=N,390nm,1.0s | | | | | | |
| QZH | | | | smax | smax | | |
| | comp=E,300nm,0.9s | | | | | | |
| **HATJ** | **Hateruma jima** | **2.86** | **68** | P | **Pn** | **05 23 22.7** | **-1.3** |
| HATJ | | | | *e*S | **Sn** | **05 23 56.2** | **-2.6** |
| **IRIF** | **Iriomote-Funau** | **2.91** | **63** | P | **Pn** | **05 23 24.4** | **-0.2** |
| IRIF | | | | *e*S | **Sn** | **05 23 58.7** | **-1.3** |
| **ZPLA** | **Ao Xicun** | **3.03** | **288** | *e*P | **Pn** | **05 23 24.0** | **-2.3** |
| | baz=288 | | | | | | |
| **JKRS** | **Kuro-shima** | **3.10** | **66** | P | **Pn** | **05 23 26.1** | **-1.2** |
| **JIJ** | **Ishigaki jima** | **3.26** | **65** | P | **Pn** | **05 23 28.6** | **-0.9** |
| JIJ | | | | *e*S | **Sn** | **05 24 07.5** | **-1.2** |
| **AXDP** | **Jialang** | **3.27** | **306** | *e*P | **Pn** | **05 23 29.1** | **-0.5** |
| | baz=305 | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.50** | **63** | P | **Pn** | **05 23 32.4** | **-0.3** |
| JISG | | | | *e*S | **Sn** | **05 24 12.9** | **-1.5** |
| **JTJ** | **Tarama** | **3.84** | **64** | P | **Pn** | **05 23 37.2** | **-0.2** |
| JTJ | | | | *e*S | **Sn** | **05 24 21.9** | **-1.0** |
| **WHN** | **Wuhan** | **9.51** | **323** | P | Pn | 05 25 05.0 | +10 |
| WHN | | | | S | **Sn** | **05 26 43.0** | **+0.5** |
| WHN | | | | LR | LR | | |
| | comp=N,2μm,7.0s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,1μm,5.0s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,2μm,13.8s | | | | | | |
| **XAN** | **Xi'an** | **15.20** | **319** | P | **P** | **05 26 22.0** | **+3.8** |
| XAN | | | | sP | sP | 05 26 31.3 | +10 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8

HNS LR LR
comp=E,860nm,10.8s
HNS LR LR
comp=Z,500nm,13.1s
**KSRS Korea Array 15.61 21** P **P** **05 26 24.2 +1.6**
comp=Z,0.2nm,0.3s,baz=196,slow=12,SNR=9.1
KSRS LR LR 05 31 43.0
comp=Z,53nm,21.8s,baz=210,slow=34
**CD2 Chengdu 17.17 301** P **P** **05 26 41.3 +1.2**
CD2 pmax pmax
comp=Z,10.0nm,1.5s
**HHC Hu-ho-hao-te 19.44 338** *e*P Pn 05 27 13.5 +7.2
HHC S **S** **05 30 47.1 +1.7**
HHC pmax pmax
comp=Z,12nm,1.1s
HHC pmax pmax
comp=Z,150nm,5.1s
HHC LR LR
comp=N,360nm,9.2s
HHC LR LR
comp=E,250nm,9.2s
HHC LR LR
comp=Z,490nm,8.6s
**LZH Lanzhou 19.70 315** *e*P Pn 05 27 21.3 +12
LZH pP sP 05 27 25.3 +14
LZH sP pP 05 27 27.6 +17
LZH pmax pmax
comp=Z,16nm,1.3s
LZH LR LR
comp=N,790nm,10.9s
LZH LR LR
comp=E,490nm,13.1s
LZH LR LR
comp=Z,610nm,13.4s
**MJAR Matsushiro Arr 20.14 44** P Pn 05 27 17.7 +3.2
comp=Z,8.2nm,0.9s,baz=232,slow=7.8,SNR=9.4
MJAR LR LR 05 35 44.7
comp=Z,163nm,19.3s,baz=224,slow=38
**CMAR Chiang Mai Arr 21.02 262** P **P** **05 27 24.1 +1.7**
comp=Z,1.0nm,0.3s,baz=69,slow=9.2,SNR=9.5
CMAR LR LR 05 36 20.1
comp=Z,163nm,18.7s,baz=75,slow=39
**CMAR Chiang Mai Arr 21.02 262** P **P** **05 27 22.1 -0.3**
**XLT XiLinHaoTe 21.21 350** *e*P **P** **05 27 27.0 +2.7**
XLT pP sP 05 27 30.6 +3.2
XLT sP pP 05 27 33.8 +7.3
XLT pmax pmax
comp=Z,15nm,1.4s
XLT pmax pmax
comp=Z,240nm,4.6s
**TOLI2 Tolitoli 21.77 180** P **P** **05 27 27.8 -2.6**
TOLI2 IAmb IAmb 05 27 35.5
comp=Z,14nm,0.9s
**SBUM Sibu 22.11 204** P **P** **05 27 32.2 -1.9**
**GTOI Gorontalo 22.34 174** P **P** **05 27 33.2 -3.3**
comp=Z,11nm,1.0s
**MRSI Marisa 22.43 177** P **P** **05 27 37.8 +0.4**
comp=Z,37nm,0.8s
**MPSI Mapaga 22.56 183** P **P** **05 27 40.2 +1.3**
comp=Z,9.3nm,0.8s
**USRK Ussuriysk Ar. 23.02 21** LR LR 05 37 35.7
comp=Z,61nm,18.0s,baz=186,slow=38
**APSI Ampana 23.79 178** P **P** **05 27 50.7 -0.8**
comp=Z,30nm,0.9s
**GTA Gaotai 24.24 317** *e*P **P** **05 27 56.5 +0.8**
GTA pP sP 05 28 01.5 +2.4
GTA sP pP 05 28 04.5 +6.4
GTA pmax pmax
comp=Z,3.0nm,1.3s
GTA pmax pmax
comp=Z,42nm,5.4s
GTA LR LR
comp=Z,180nm,10.9s
GTA LR LR
comp=Z,160nm,13.1s
GTA LR LR
comp=Z,160nm,13.4s
**SANI Sanana 25.40 168** P **P** **05 28 07.5 +1.3**
comp=Z,28nm,1.0s
**SONM Songino Array 27.35 338** P **P** **05 28 25.4 +1.7**
comp=Z,0.9nm,0.9s,baz=150,slow=6.6,SNR=5.5
SONM LR LR 05 40 32.7
comp=Z,157nm,19.9s,baz=112,slow=39
**KLR Kul'dur 27.53 15** P **P** **05 28 28.4 +3.2**
comp=Z,0.8nm,0.6s,baz=150,slow=6.6,SNR=3.5
KLR LR LR 05 40 31.9
comp=Z,61nm,21.2s,baz=216,slow=38
**ASAJ Asahikawa 27.59 35** LR LR 05 41 06.6
comp=Z,87nm,19.6s,baz=122,slow=40
**JKA Kamikawa-asahi 27.59 35** P **P** **05 28 24.4 -1.4**
**KAPI Kappang 27.88 182** LR LR 05 40 07.3
comp=Z,32nm,18.7s,baz=40,slow=38
**WMQ Urumqi 34.28 315** *e*P **P** **05 29 27.4 +2.5**
**MK31 Makanchi Array 39.00 317** P **P** **05 30 05.1 +0.1**
**MKAR Makanchi Array 39.00 317** P **P** **05 30 05.8 +0.7**
comp=Z,1.4nm,0.8s,baz=119,slow=9.9,SNR=9.4
MKAR PcP **PcP** **05 32 14.9 -0.4**
comp=Z,0.7nm,0.7s,baz=84,slow=6.2,SNR=4.8
**MKAR Makanchi Array 39.00 317** P **P** **05 30 05.0 -0.1**
**YAK Yakutsk 39.45 7** LR LR 05 48 16.7
comp=Z,86nm,18.4s,baz=198,slow=38
**PETK Petropavlovsk- 40.98 33** P **P** **05 30 23.6 +2.3**
comp=Z,1.9nm,0.7s,baz=84,slow=40,SNR=2.6
PETK LR LR 05 47 11.0
comp=Z,72nm,21.5s,baz=226,slow=36
**ZAA0 Zalesovo Array 41.09 328** P **P** **05 30 21.6 -0.6**
**ZALV Zalesovo Beam 41.09 328** P **P** **05 30 22.6 +0.4**
comp=Z,1.9nm,0.6s,baz=116,slow=10,SNR=6.5
ZALV LR LR 05 47 57.0
comp=Z,33nm,18.5s,baz=124,slow=36
**ZALV Zalesovo Beam 41.09 328** P **P** **05 30 22.1 -0.1**
**PALK Pallekele 41.66 254** LR LR 05 49 23.3
comp=Z,75nm,19.1s,baz=171,slow=38
**COEN Coen 42.73 147** P **P** **05 30 34.7 -1.4**
COEN IAmb IAmb 05 30 35.4
comp=Z,11nm,1.1s
**KURK Kurchatov 42.82 321** P **P** **05 30 34.9 -1.6**
**H11N1 WAKE ISLAND Hy 42.83 85** T T 06 15 57.0
baz=282,slow=74,SNR=6.3
**H11N2 WAKE ISLAND Hy 42.83 85** T T 06 15 55.0
baz=282,slow=74,SNR=11
**KURBB Kurchatov Arra 42.84 321** P **P** **05 30 37.7 +1.1**
comp=Z,0.5nm,0.2s,baz=110,slow=42,SNR=2.7
**H11N3 WAKE ISLAND Hy 42.84 85** T T 06 15 54.7
baz=282,slow=74,SNR=8.9
**H11S3 WAKE ISLAND Hy 42.92 87** T T 06 15 52.2
baz=284,slow=75,SNR=14
**H11S1 WAKE ISLAND Hy 42.93 87** T T 06 15 53.3
baz=284,slow=75,SNR=6.7
**H11S2 WAKE ISLAND Hy 42.94 87** T T 06 15 51.9
baz=284,slow=75,SNR=36
**AAK Ala-Archa 43.01 308** LR LR 05 49 01.6
comp=Z,62nm,19.3s,baz=106,slow=36
**PSA00 Pilbara Seismi 44.33 181** P **P** **05 30 47.6 -1.2**
PSA00 IAmb IAmb 05 30 51.7
comp=Z,13nm,1.1s
**WB0 Warramunga Arr 44.52 162** P **P** **05 30 48.6 -1.8**
**WRA Warramunga Arr 44.67 162** P **P** **05 30 49.2 -2.4**
comp=Z,2.0nm,0.6s,baz=344,slow=8.8,SNR=24
**WRA Warramunga Arr 44.67 162** P **P** **05 30 51.3 -0.3**
**WB2 Warramunga Arr 44.67 162** P **P** **05 30 49.9 -1.7**
WB2 IAmb IAmb 05 30 50.1
comp=Z,4.1nm,0.8s
**WR0 Warramunga Arr 44.74 162** P **P** **05 30 50.2 -2.0**
WR0 IAmb IAmb 05 31 08.4
comp=Z,7.8nm,1.2s
**SEY Seymchan 45.16 20** P **P** **05 30 56.0 +1.0**
comp=Z,0.7nm,0.3s,baz=316,slow=23,SNR=1.9
SEY PcP **PcP** **05 32 34.1 -1.2**
comp=Z,2.3nm,0.3s,baz=230,slow=1.0,SNR=5.7
**KKAR Karatay Array 45.98 308** P **P** **05 31 02.0 +0.1**
**KBL Kabul 46.43 296** P **P** **05 31 04.6 -1.2**
KBL IAmb IAmb 05 31 27.8
comp=Z,4.3nm,0.6s
**ASAR Alice Springs 48.09 164** P **P** **05 31 16.4 -2.1**
comp=Z,1.0nm,0.6s,baz=330,slow=5.9,SNR=13
**ASAR Alice Springs 48.09 164** P **P** **05 31 16.3 -2.2**
**BVAR Borovoye Array 48.41 321** P **P** **05 31 22.3 +1.6**
comp=Z,1.1nm,0.8s,baz=190,slow=22,SNR=6.0
**BRVK Borovoye 48.48 321** P **P** **05 31 21.6 +0.4**
BRVK IAmb IAmb 05 31 30.7
comp=Z,11nm,1.4s
**TIXI Tiksi 48.87 3** LR LR 05 53 48.0
comp=Z,115nm,18.0s,baz=184,slow=38
**SHEM Shemya Is, Ala 49.89 40** LR LR 05 55 02.8
comp=Z,14nm,19.5s,baz=42,slow=39
**NRIK Noril'sk 50.46 345** P **P** **05 31 36.4 +0.3**
comp=Z,4.1nm,0.9s,baz=142,slow=9.1,SNR=4.6
**NRIK Noril'sk 50.46 345** P **P** **05 31 35.3 -0.7**
NRIK IAmb IAmb 05 31 39.7
comp=Z,5.8nm,1.0s
**FORT Forrest 53.93 172** P **P** **05 32 01.3 -0.9**
**ABKAR Akbulak array 54.07 315** P **P** **05 32 03.4 +0.1**
**AKTO Aktyubinsk 55.43 316** P **P** **05 32 15.2 +2.2**
comp=Z,1.5nm,0.6s,baz=77,slow=6.8,SNR=4.5
**ARU Arti 55.88 324** P **P** **05 32 16.1 -0.1**
comp=Z,1.7nm,0.2s,baz=45,slow=5.6,SNR=3.5
**ARU Arti 55.88 324** P **P** **05 32 15.6 -0.6**
ARU IAmb IAmb 05 32 17.7
comp=Z,6.1nm,1.0s
**WSAR Wadi Sarin 56.85 283** LR LR 05 59 25.2
comp=Z,37nm,19.9s,baz=89,slow=39
**STKA Stephens Creek 58.07 159** P **P** **05 32 29.7 -2.2**
comp=Z,2.6nm,0.6s,baz=340,slow=11,SNR=4.3
**KBZ Khabaz 66.01 309** P **P** **05 33 25.9 +0.7**
comp=Z,1.8nm,0.8s,baz=241,slow=6.1,SNR=4.7
KBZ LR LR 06 04 39.0
comp=Z,28nm,18.8s,baz=30,slow=38
**KLMR Klimovskoe 66.01 328** *e*P **P** **05 33 23.3 -1.6**
KLMR AMP 05 33 27.6
comp=Z,21nm,1.5s
**TTA Tatalina 66.65 30** P **P** **05 33 29.0 -0.2**
TTA IAmb IAmb 05 33 40.8
comp=Z,5.1nm,1.2s
**IMAR Indian Mountai 67.34 26** P **P** **05 33 33.4 0.0**
**H21K Melozitna Rive 67.76 27** P **P** **05 33 35.4 -0.7**
**KDAK Kodiak Island 69.01 35** LR LR 06 07 14.3
comp=Z,59nm,18.1s,baz=178,slow=38
**H23K Yukon River 69.07 26** P **P** **05 33 45.1 +0.8**
H23K IAmb IAmb 05 34 02.2
comp=Z,6.2nm,1.2s
**TRF Thorofare Moun 69.15 29** P **P** **05 33 44.9 -0.1**
**MDM Murphy Dome 69.77 27** P **P** **05 33 48.7 +0.1**
MDM IAmb IAmb 05 33 59.0
comp=Z,7.1nm,1.3s
**RND Reindeer 69.80 29** P **P** **05 33 49.3 +0.4**
RND IAmb IAmb 05 33 52.2
comp=Z,6.4nm,1.1s
**RC01 Rabbit Creek A 69.83 31** P **P** **05 33 48.4 -0.7**
**ARCES ARCESS Array B 70.52 338** P **P** **05 33 53.3 +0.2**
comp=Z,4.5nm,1.0s,baz=73,slow=3.1,SNR=2.0
**ARCES ARCESS Array B 70.52 338** P **P** **05 33 53.5 +0.3**
**BMAR Burnt Mountain 70.69 24** P **P** **05 33 55.4 +1.1**
**FINES FINESS Array B 72.32 330** P **P** **05 34 04.1 0.0**
comp=Z,2.8nm,0.9s,baz=347,slow=5.7,SNR=2.6
**L27K Beaver Creek, 72.96 28** P **P** **05 34 09.4 +1.4**
L27K IAmb IAmb 05 34 23.6
comp=Z,4.3nm,1.4s
**BCAR Beaver Creek A 72.98 28** P **P** **05 34 09.4 +1.2**
**AKASG Malin Array Be 73.56 318** P **P** **05 34 11.5 -0.2**
comp=Z,0.1nm,0.3s,baz=57,slow=6.1,SNR=4.0
**AKASG Malin Array Be 73.56 318** IAmb IAmb 05 34 11.7
comp=Z,4.0nm,1.5s
**BRTR Keskin Array B 73.65 307** P **P** **05 34 11.8 -0.8**
comp=Z,0.7nm,0.9s,baz=81,slow=8.9,SNR=4.2
**NOA NORSAR Array B 79.13 332** P **P** **05 34 42.0 -1.2**
comp=Z,1.9nm,0.9s,baz=62,slow=5.6,SNR=3.8
NOA LR LR 06 13 09.4
comp=Z,77nm,18.5s,baz=230,slow=38
**RES Resolute Bay 79.85 9** LR LR 06 12 42.7
comp=Z,26nm,20.4s,baz=91,slow=37
**JMIC Jan Mayen 79.89 345** LR LR 06 12 59.3
comp=Z,26nm,20.6s,baz=156,slow=38
**GERES GERESS Array B 83.57 321** P **P** **05 35 05.8 -1.3**
comp=Z,0.8nm,0.7s,baz=63,slow=3.6,SNR=6.1
**YKA Yellowknife Ar 84.14 23** P **P** **05 35 08.2 -1.4**
comp=Z,0.7nm,0.7s,baz=313,slow=4.6,SNR=14
**PDAR Pinedale Array 99.73 35** LR LR 06 25 23.1
comp=Z,16nm,18.0s,baz=197,slow=38

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*IDC **15** 05:48:24.9±1.4,23°.00N×121°.29E,h0km,mb3.5/6, mb1 3.6/6,mb1mx3.4/38,mbtmp3.5/6,MS2.7/1,Ms1 2.7/1, ms1mx2.3/51,Error ellipse: s-maj=69.0km s-min=27.5km az=62.0*

*TAP **15** 05:48:25.5,23°.01N×120°.86E,h4km,ML3.9,C*

**ISC 15 05:48:26.1±0.8,23°.02N±0°.01×120°.87E±0°.01,h9km±6km, n123,σ0s84/194,mb3.4/6,22C-8D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.17** | **330** | ⇓*i*P | | **Pg** | | **05 48 29.8** | **0.0** |
| | baz=334 | | | | | | | | |
| STYH | | | | S | | **Sg** | | **05 48 32.5** | **+0.3** |
| | baz=334 | | | | | | | | |
| **SLGT** | **Liugui** | **0.21** | **263** | ⇑*i*P | | **Pg** | | **05 48 30.2** | **-0.1** |
| | baz=265 | | | | | | | | |
| SLGT | | | | *i* S | | **Sg** | | **05 48 33.1** | **-0.2** |
| | baz=265 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.22** | **38** | ⇑*i*P | | **Pg** | | **05 48 30.4** | **-0.2** |
| | baz=41 | | | | | | | | |
| ELDTW | | | | *e*S | | **Sg** | | **05 48 33.3** | **-0.3** |
| | baz=41 | | | | | | | | |
| **LONT** | **Longtian** | **0.26** | **115** | ⇓P | | **Pg** | | **05 48 31.5** | **+0.1** |
| | baz=113 | | | | | | | | |
| LONT | | | | *i* S | | **Sg** | | **05 48 35.7** | **+0.8** |
| | baz=113 | | | | | | | | |
| **TWG** | **Pinlang** | **0.27** | **137** | ⇓*i*P | | **Pg** | | **05 48 31.7** | **+0.2** |
| | baz=134 | | | | | | | | |
| TWG | | | | *i* S | | **Sg** | | **05 48 35.9** | **+0.8** |
| | baz=134 | | | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **284** | *i* P | | **Pg** | | **05 48 30.9** | **-0.6** |
| | baz=291 | | | | | | | | |
| SGST | | | | *i* S | | **Sg** | | **05 48 35.4** | **+0.1** |
| | baz=291 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.28** | **136** | ⇓*i*P | | **Pg** | | **05 48 31.7** | **+0.1** |
| | baz=134 | | | | | | | | |
| TWGBT | | | | *i* S | | **Sg** | | **05 48 35.7** | **+0.4** |
| | baz=134 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.33** | **314** | ⇓*i*P | | **Pb** | | **05 48 33.2** | **-0.9** |
| | baz=317 | | | | | | | | |
| WTP | | | | S | | **Sb** | | **05 48 38.5** | **-1.1** |
| | baz=317 | | | | | | | | |
| **ECS** | **Chishang** | **0.33** | **76** | P | | **Pg** | | **05 48 33.0** | **+0.4** |
| | baz=72 | | | | | | | | |
| ECS | | | | S | | **Sg** | | **05 48 37.4** | **+0.4** |
| | baz=72 | | | | | | | | |
| **SSD** | **Sandimen** | **0.35** | **219** | ⇑*i*P | | **Pg** | | **05 48 32.5** | **-0.5** |
| | baz=225 | | | | | | | | |
| SSD | | | | S | | **Sg** | | **05 48 36.8** | **-0.8** |
| | baz=225 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.36** | **298** | ⇓*i*P | | **Pb** | | **05 48 34.0** | **-0.6** |
| | baz=308 | | | | | | | | |
| CHN1 | | | | *e*S | | **Sb** | | **05 48 39.3** | **-1.1** |
| | baz=308 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.36** | **322** | *e*P | | **Pb** | | **05 48 33.9** | **-0.8** |
| | baz=324 | | | | | | | | |
| TPUB | | | | *e*S | | **Sb** | | **05 48 39.4** | **-1.0** |
| | baz=324 | | | | | | | | |
| **TTN** | **Taitung** | **0.37** | **136** | ⇓*i*P | | **Pb** | | **05 48 34.4** | **-0.4** |
| | baz=134 | | | | | | | | |
| TTN | | | | *i* S | | **Sb** | | **05 48 40.6** | **0.0** |
| | baz=134 | | | | | | | | |
| **SCST** | **Cishan** | **0.37** | **249** | *e*P | | **Pb** | | **05 48 33.8** | **-1.0** |
| | baz=250 | | | | | | | | |
| SCST | | | | *e*S | | **Sb** | | **05 48 40.1** | **-0.6** |
| | baz=250 | | | | | | | | |
| **TSMG** | **Majia** | **0.38** | **214** | ⇑*i*P | | **Pg** | | **05 48 33.0** | **-0.5** |
| | baz=220 | | | | | | | | |
| TSMG | | | | *i* S | | **Sg** | | **05 48 37.3** | **-1.1** |
| | baz=220 | | | | | | | | |
| **SNST** | **Tainan City** | **0.40** | **300** | P | | **Pb** | | **05 48 35.3** | **0.0** |
| | baz=306 | | | | | | | | |
| SNST | | | | *e*S | | **Sb** | | **05 48 41.3** | **-0.2** |
| | baz=306 | | | | | | | | |
| **EDH** | **Donghe** | **0.40** | **96** | ⇑*i*P | | **Pb** | | **05 48 34.8** | **-0.6** |
| | baz=96 | | | | | | | | |
| EDH | | | | S | | **Sb** | | **05 48 40.8** | **-0.8** |
| | baz=96 | | | | | | | | |
| **ECL** | **Taimali** | **0.43** | **170** | ⇓*i*P | | **Pg** | | **05 48 34.2** | **-0.2** |
| | baz=166 | | | | | | | | |
| ECL | | | | *e*S | | **Sg** | | **05 48 39.4** | **-0.6** |
| | baz=166 | | | | | | | | |
| **FULB** | **Fuli** | **0.43** | **65** | ⇑*i*P | | **Pb** | | **05 48 35.1** | **-0.7** |
| | baz=66 | | | | | | | | |
| FULB | | | | *i* S | | **Sb** | | **05 48 41.6** | **-0.9** |
| | baz=66 | | | | | | | | |
| **TWK** | **Hsinying** | **0.43** | **305** | *e*P | | **Pb** | | **05 48 35.6** | **-0.3** |
| | baz=315 | | | | | | | | |
| TWK | | | | *e*S | | **Sb** | | **05 48 42.5** | **0.0** |
| | baz=315 | | | | | | | | |
| **SGLT** | **Jiouru** | **0.46** | **230** | P | | **Pb** | | **05 48 35.9** | **-0.4** |
| | baz=222 | | | | | | | | |
| SGLT | | | | *e*S | | **Sb** | | **05 48 42.2** | **-1.0** |
| | baz=222 | | | | | | | | |
| **TWM1** | **Shoushan** | **0.46** | **245** | ⇑*i*P | | **Pb** | | **05 48 36.2** | **-0.1** |
| | baz=234 | | | | | | | | |
| TWM1 | | | | *e*S | | **Sb** | | **05 48 43.5** | **+0.3** |
| | baz=234 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.46** | **209** | ⇑*i*P | | **Pg** | | **05 48 34.5** | **-0.5** |
| | baz=207 | | | | | | | | |
| MASBT | | | | S | | **Sg** | | **05 48 40.1** | **-1.0** |
| | baz=207 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.46** | **80** | ⇑*i*P | | **Pb** | | **05 48 36.3** | **-0.1** |
| | baz=80 | | | | | | | | |
| CHKT | | | | *i* S | | **Sb** | | **05 48 43.5** | **+0.1** |
| | baz=80 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.47** | **277** | *e*P | | **Pn** | | **05 48 38.2** | **-0.8** |
| | baz=281 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.47** | **9** | ⇑*i*P | | **Pg** | | **05 48 35.2** | **-0.2** |
| | baz=20 | | | | | | | | |
| YUS | | | | S | | **Sg** | | **05 48 41.6** | **-0.2** |
| | baz=20 | | | | | | | | |
| **SHHT** | **Tainan City** | **0.48** | **270** | P | | **Pn** | | **05 48 38.4** | **-0.8** |
| | baz=272 | | | | | | | | |
| SHHT | | | | *e*S | | **Sb** | | **05 48 46.4** | **+2.5** |
| | baz=272 | | | | | | | | |
| **TSPT** | **Pingtung City** | **0.48** | **226** | *e*P | | **Pg** | | **05 48 35.7** | **+0.2** |
| | baz=222 | | | | | | | | |
| **ALS** | **Alishan** | **0.49** | **353** | ⇑*i*P | | **Pb** | | **05 48 35.9** | **-1.2** |
| | baz=355 | | | | | | | | |
| ALS | | | | S | | **Sb** | | **05 48 44.1** | **-0.5** |
| | baz=355 | | | | | | | | |
| **EYUL** | **Yuli** | **0.53** | **51** | ⇑*i*P | | **Pg** | | **05 48 36.1** | **-0.2** |
| | baz=52 | | | | | | | | |
| EYUL | | | | S | | **Sg** | | **05 48 42.1** | **-1.1** |
| | baz=52 | | | | | | | | |
| **YULB** | **Yu-li** | **0.54** | **46** | ⇑*i*P | | **Pg** | | **05 48 36.1** | **-0.5** |
| | baz=55 | | | | | | | | |
| YULB | | | | *e*S | | **Sg** | | **05 48 42.9** | **-0.8** |
| | baz=55 | | | | | | | | |
| **SSHA** | **Shanhua** | **0.55** | **282** | *e*P | | **Pn** | | **05 48 39.5** | **-0.5** |
| | baz=294 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.56** | **242** | *e*P | | **Pn** | | **05 48 39.9** | **-0.3** |
| | baz=231 | | | | | | | | |
| **SSPT** | **Xinbi** | **0.60** | **208** | ⇑*i*P | | **Pg** | | **05 48 37.9** | **+0.2** |
| | baz=204 | | | | | | | | |
| SSPT | | | | *e*S | | **Sg** | | **05 48 45.8** | **+0.2** |
| | baz=204 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.60** | **343** | ⇑*i*P | | **Pb** | | **05 48 38.3** | **-0.6** |
| | baz=344 | | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | | **05 48 47.2** | **-0.3** |
| | baz=344 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.63** | **325** | *e*P | | **Pb** | | **05 48 39.5** | **+0.2** |
| | baz=326 | | | | | | | | |
| CHN2 | | | | *e*S | | **Sn** | | **05 48 50.1** | **-1.2** |
| | baz=326 | | | | | | | | |
| **CHY** | **Chiayi** | **0.63** | **319** | *e*P | | **Pb** | | **05 48 39.7** | **+0.5** |
| | baz=321 | | | | | | | | |
| CHY | | | | *e*S | | **Sn** | | **05 48 49.7** | **-1.6** |
| | baz=321 | | | | | | | | |
| **EAST** | **Anshuo** | **0.63** | **182** | ⇑*i*P | | **Pg** | | **05 48 38.1** | **-0.2** |
| | baz=170 | | | | | | | | |
| EAST | | | | *e*S | | **Sg** | | **05 48 46.4** | **-0.2** |
| | baz=170 | | | | | | | | |
| **EHY** | **Hungye** | **0.64** | **40** | ⇑*i*P | | **Pg** | | **05 48 38.0** | **-0.5** |
| | baz=34 | | | | | | | | |
| EHY | | | | *e*S | | **Sb** | | **05 48 47.9** | **-0.6** |
| | baz=34 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.64** | **302** | P | | **Pn** | | **05 48 40.7** | **-0.7** |
| | baz=303 | | | | | | | | |
| ICHU | | | | *e*S | | **Sn** | | **05 48 51.4** | **-0.3** |
| | baz=303 | | | | | | | | |
| **SCLT** | **Jiali** | **0.64** | **284** | *e*P | | **Pb** | | **05 48 39.9** | **+0.4** |
| | baz=302 | | | | | | | | |
| SCLT | | | | *e*S | | **Sn** | | **05 48 52.4** | **+0.7** |
| | baz=302 | | | | | | | | |
| **LDUT** | **Ludao** | **0.65** | **122** | *e*P | | **Pg** | | **05 48 38.4** | **-0.3** |
| | baz=121 | | | | | | | | |
| LDUT | | | | *e*S | | **Sb** | | **05 48 49.2** | **+0.5** |
| | baz=121 | | | | | | | | |
| **TAW** | **Tawu** | **0.66** | **178** | *e*P | | **Pg** | | **05 48 38.7** | **0.0** |
| | baz=176 | | | | | | | | |
| TAW | | | | *e*S | | **Sg** | | **05 48 47.3** | **-0.1** |
| | baz=176 | | | | | | | | |
| **TAWH** | **Dawu Township** | **0.68** | **179** | P | | **Pg** | | **05 48 38.9** | **-0.2** |
| | baz=168 | | | | | | | | |
| TAWH | | | | *e*S | | **Sg** | | **05 48 47.6** | **-0.3** |
| | baz=168 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.68** | **200** | ⇑*i*P | | **Pg** | | **05 48 38.9** | **-0.4** |
| | baz=188 | | | | | | | | |
| SCZT | | | | *e*S | | **Sg** | | **05 48 47.0** | **-1.2** |
| | baz=188 | | | | | | | | |
| **KAU** | **Kaohsiung** | **0.69** | **229** | *e*P | | **Pn** | | **05 48 42.5** | **+0.6** |
| | baz=250 | | | | | | | | |
| **CHN8** | **Yiju** | **0.69** | **298** | *e*P | | **Pb** | | **05 48 39.7** | **-0.6** |
| | baz=316 | | | | | | | | |
| CHN8 | | | | *e*S | | **Sn** | | **05 48 52.4** | **-0.4** |
| | baz=316 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.69** | **47** | ⇑*i*P | | **Pb** | | **05 48 39.8** | **-0.6** |
| | baz=41 | | | | | | | | |
| HGSD | | | | *i* S | | **Sb** | | **05 48 50.2** | **+0.1** |
| | baz=41 | | | | | | | | |
| **WDLH** | **Douliu** | **0.73** | **335** | P | | **Pn** | | **05 48 41.9** | **-0.8** |
| | baz=337 | | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | | **05 48 53.4** | **-0.6** |
| | baz=337 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.77** | **6** | ⇑*i*P | | **Pg** | | **05 48 40.2** | **-0.7** |
| | baz=15 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.78** | **310** | P | | **Pn** | | **05 48 42.5** | **-0.8** |
| | baz=312 | | | | | | | | |
| WSL | | | | *e*S | | **Sn** | | **05 48 54.2** | **-0.8** |
| | baz=312 | | | | | | | | |
| **WTK** | **Tuku** | **0.80** | **326** | *e*P | | **Pn** | | **05 48 42.8** | **-0.7** |
| | baz=327 | | | | | | | | |
| **SLIU** | **Shizi** | **0.80** | **185** | P | | **Pg** | | **05 48 41.2** | **-0.4** |
| | baz=184 | | | | | | | | |
| **WLCH** | **Liuqiu** | **0.81** | **214** | *e*P | | **Pn** | | **05 48 44.9** | **+1.3** |
| | baz=212 | | | | | | | | |
| **WJS** | **Zhushan** | **0.81** | **351** | P | | **Pn** | | **05 48 43.2** | **-0.5** |
| | baz=4.0 | | | | | | | | |
| WJS | | | | *e*S | | **Sn** | | **05 48 56.3** | **+0.4** |
| | baz=4.0 | | | | | | | | |
| **WSF** | **Szhu** | **0.86** | **316** | *e*P | | **Pn** | | **05 48 44.2** | **-0.1** |
| | baz=317 | | | | | | | | |
| WSF | | | | *e*S | | **Sn** | | **05 48 56.3** | **-0.7** |
| | baz=317 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.86** | **2** | ⇑*i*P | | **Pb** | | **05 48 42.7** | **-0.6** |
| | baz=13 | | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | | **05 48 56.3** | **-1.0** |
| | baz=13 | | | | | | | | |
| **WNT** | **Mingjian** | **0.87** | **349** | P | | **Pn** | | **05 48 44.0** | **-0.6** |
| | baz=335 | | | | | | | | |
| WNT | | | | *e*S | | **Sn** | | **05 48 57.8** | **+0.3** |
| | baz=335 | | | | | | | | |
| **TYC** | **Yuchr** | **0.88** | **359** | ⇑*i*P | | **Pb** | | **05 48 43.2** | **-0.3** |
| | baz=9.0 | | | | | | | | |
| TYC | | | | *e*S | | **Sn** | | **05 48 58.6** | **+0.9** |
| | baz=9.0 | | | | | | | | |
| **ESL** | **Shilin** | **0.95** | **33** | *e*P | | **Pg** | | **05 48 43.5** | **-0.8** |
| | baz=48 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.99** | **333** | *e*P | | **Pb** | | **05 48 45.2** | **-0.2** |
| | baz=334 | | | | | | | | |
| WRL | | | | *e*S | | **Sn** | | **05 48 59.8** | **-0.5** |
| | baz=334 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.99** | **182** | *e*P | | **Pb** | | **05 48 45.5** | **+0.1** |
| | baz=190 | | | | | | | | |
| **HEN** | **Hengchun** | **1.01** | **187** | *e*P | | **Pn** | | **05 48 47.4** | **+0.9** |
| | baz=186 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.03** | **2** | *e*P | | **Pb** | | **05 48 46.0** | **-0.2** |
| | baz=4.0 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.07** | **183** | *e*P | | **Pn** | | **05 48 48.4** | **+1.1** |
| | baz=182 | | | | | | | | |
| **CHGB** | **Renai** | **1.07** | **15** | P | | **Pg** | | **05 48 45.6** | **-1.1** |
| | baz=25 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.07** | **183** | *e*P | | **Pb** | | **05 48 46.8** | **0.0** |
| | baz=181 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.09** | **345** | *e*P | | **Pn** | | **05 48 47.5** | **-0.1** |
| | baz=345 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.11** | **179** | *e*P | | **Pn** | | **05 48 47.9** | **0.0** |
| | baz=178 | | | | | | | | |
| TSEB | | | | *e*S | | **Sb** | | **05 49 02.9** | **+0.8** |
| | baz=178 | | | | | | | | |
| **TCU** | **Taichung** | **1.14** | **351** | *e*P | | **Pn** | | **05 48 48.8** | **+0.6** |
| | baz=337 | | | | | | | | |
| **WDGT** | **Dungji** | **1.14** | **282** | *e*P | | **Pn** | | **05 48 48.0** | **-0.2** |
| | baz=283 | | | | | | | | |
| WDGT | | | | *e*S | | **Sn** | | **05 49 03.2** | **-0.8** |
| | baz=283 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.16** | **147** | *e*P | | **Pg** | | **05 48 45.7** | **-2.6** |
| | baz=146 | | | | | | | | |
| LAY | | | | *e*S | | **Sg** | | **05 49 02.4** | **-1.0** |
| | baz=146 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HWA** | **Hwalien** | **1.17** | **35** | *eP* | | **Pn** | **05 48 48.4** | **-0.2** |
| | baz=26 | | | | | | | |
| HWA | | | | *eS* | | **Sn** | **05 49 05.1** | **+0.4** |
| | baz=26 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **18** | P | | **Pg** | **05 48 48.2** | **-0.5** |
| | baz=19 | | | | | | | |
| WHF | | | | *eS* | | **Sn** | **05 49 06.6** | **+1.1** |
| | baz=19 | | | | | | | |
| **LYUB** | **Lan-yu** | **1.21** | **147** | *eP* | | **Pg** | **05 48 45.2** | **-4.1** |
| | baz=146 | | | | | | | |
| **TWD** | **Chiawan** | **1.25** | **32** | *eP* | | **Pb** | **05 48 49.4** | **-0.4** |
| | baz=23 | | | | | | | |
| TWD | | | | *eS* | | **Sg** | **05 49 05.5** | **-0.8** |
| | baz=23 | | | | | | | |
| **TDCB** | **Techi** | **1.26** | **12** | *eP* | | **Pg** | **05 48 49.2** | **-1.1** |
| | baz=28 | | | | | | | |
| **TWT** | **Tachien** | **1.26** | **13** | *eP* | | **Pn** | **05 48 49.8** | **-0.3** |
| | baz=28 | | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **16** | *eP* | | **Pg** | **05 48 49.6** | **-0.9** |
| | baz=18 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.29** | **293** | P | | **Pn** | **05 48 49.7** | **-0.6** |
| | baz=294 | | | | | | | |
| PHUB | | | | *eS* | | **Sn** | **05 49 07.5** | **-0.2** |
| | baz=294 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.31** | **25** | *eP* | | **Pn** | **05 48 50.2** | **-0.5** |
| | baz=45 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.33** | **356** | *eP* | | **Pg** | **05 48 52.0** | **+0.4** |
| | baz=359 | | | | | | | |
| TWQ1 | | | | *eS* | | **Sn** | **05 49 09.5** | **+0.9** |
| | baz=359 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.33** | **30** | *eP* | | **Pn** | **05 48 49.5** | **-1.3** |
| | baz=49 | | | | | | | |
| **PNG** | **Penghu** | **1.33** | **295** | P | | **Pn** | **05 48 50.3** | **-0.5** |
| | baz=296 | | | | | | | |
| PNG | | | | *eS* | | **Sn** | **05 49 08.6** | **-0.1** |
| | baz=296 | | | | | | | |
| **ETL** | **Fush Village** | **1.33** | **31** | *eP* | | **Pg** | **05 48 51.2** | **-0.4** |
| | baz=49 | | | | | | | |
| **WDJ** | **Dajia District** | **1.34** | **351** | *eP* | | **Pg** | **05 48 51.9** | **0.0** |
| | baz=339 | | | | | | | |
| **NSY** | **Sanyi** | **1.40** | **356** | *eP* | | **Pg** | **05 48 53.8** | **+1.0** |
| | baz=358 | | | | | | | |
| **NNSB** | **Datong** | **1.48** | **18** | *eP* | | **Pn** | **05 48 52.8** | **-0.2** |
| | baz=18 | | | | | | | |
| NNSB | | | | *eS* | | **Sg** | **05 49 15.6** | **+1.8** |
| | baz=18 | | | | | | | |
| **NNS** | **Nan Shan** | **1.49** | **18** | *eP* | | **Pg** | **05 48 53.9** | **-0.8** |
| | baz=19 | | | | | | | |
| NNS | | | | *eS* | | **Sg** | **05 49 15.7** | **+1.7** |
| | baz=19 | | | | | | | |
| **NMLH** | **Miaoli** | **1.51** | **357** | *eP* | | **Pg** | **05 48 55.3** | **+0.1** |
| | baz=339 | | | | | | | |
| **ENA** | **Nanau** | **1.61** | **29** | *eP* | | **Pb** | **05 48 55.9** | **-0.2** |
| | baz=46 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.62** | **8** | *eP* | | **Pg** | **05 48 56.5** | **-0.7** |
| | baz=10.0 | | | | | | | |
| NFF | | | | *eS* | | **Sg** | **05 49 18.8** | **+0.5** |
| | baz=10.0 | | | | | | | |
| **LATG** | **Datong** | **1.62** | **22** | *eP* | | **Pb** | **05 48 55.9** | **-0.4** |
| | baz=36 | | | | | | | |
| LATG | | | | *eS* | | **Sg** | **05 49 18.4** | **0.0** |
| | baz=36 | | | | | | | |
| **LIOB** | **Emei** | **1.62** | **5** | *eP* | | **Pg** | **05 48 57.7** | **+0.4** |
| | baz=348 | | | | | | | |
| **EWUT** | **Wuta** | **1.65** | **30** | *eP* | | **Pb** | **05 48 56.4** | **-0.2** |
| | baz=30 | | | | | | | |
| EWUT | | | | *eS* | | **Sg** | **05 49 19.2** | **+0.2** |
| | baz=30 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.68** | **20** | P | | **Pg** | **05 48 58.4** | **0.0** |
| | baz=19 | | | | | | | |
| NDT | | | | *eS* | | **Sg** | **05 49 20.9** | **+0.7** |
| | baz=19 | | | | | | | |
| **YHNB** | **Yeheng** | **1.71** | **16** | *eP* | | **Pb** | **05 48 57.3** | **-0.4** |
| | baz=15 | | | | | | | |
| YHNB | | | | *eS* | | **Sg** | **05 49 21.6** | **+0.5** |
| | baz=15 | | | | | | | |
| **NSK** | **Sanguang** | **1.71** | **15** | *eP* | | **Pb** | **05 48 57.7** | **-0.1** |
| | baz=15 | | | | | | | |
| NSK | | | | *eS* | | **Sg** | **05 49 22.7** | **+1.6** |
| | baz=15 | | | | | | | |
| **ENTT** | **Nioudou** | **1.73** | **21** | *eP* | | **Pg** | **05 48 58.3** | **-1.0** |
| | baz=35 | | | | | | | |
| ENTT | | | | *eS* | | **Sg** | **05 49 23.1** | **+1.2** |
| | baz=35 | | | | | | | |
| **NDS** | **Dongshan** | **1.79** | **26** | P | | **Pg** | **05 48 59.2** | **-1.1** |
| | baz=44 | | | | | | | |
| **TWC** | **Suao** | **1.82** | **29** | *eP* | | **Pg** | **05 48 59.9** | **-1.1** |
| | baz=29 | | | | | | | |
| TWC | | | | *eS* | | **Sg** | **05 49 24.3** | **-0.3** |
| | baz=29 | | | | | | | |
| **NWLT** | **Wulai** | **1.84** | **18** | *eP* | | **Pg** | **05 49 00.9** | **-0.6** |
| | baz=17 | | | | | | | |
| NWLT | | | | *eS* | | **Sg** | **05 49 24.5** | **-0.9** |
| | baz=17 | | | | | | | |
| **TWE** | **Neicheng** | **1.84** | **23** | *eP* | | **Pg** | **05 49 00.4** | **-1.1** |
| | baz=40 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.85** | **21** | *eP* | | **Pg** | **05 49 00.5** | **-1.1** |
| | baz=19 | | | | | | | |
| FUSB | | | | *eS* | | **Sg** | **05 49 24.7** | **-1.0** |
| | baz=19 | | | | | | | |
| **NCUH** | **Zhongli** | **1.96** | **8** | *eP* | | **Pg** | **05 49 03.5** | **-0.3** |
| | baz=12 | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.03** | **17** | *eP* | | **Pg** | **05 49 05.5** | **+0.6** |
| | baz=20 | | | | | | | |
| **TWA** | **Mucha** | **2.06** | **18** | *eP* | | **Pg** | **05 49 05.5** | **0.0** |
| | baz=5.0 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.13** | **24** | *eP* | | **Pb** | **05 49 05.4** | **+0.5** |
| | baz=41 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.13** | **13** | *eP* | | **Pg** | **05 49 05.5** | **-1.4** |
| | baz=18 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.21** | **22** | *eP* | | **Pb** | **05 49 06.2** | **-0.1** |
| | baz=43 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.23** | **27** | *eP* | | **Pb** | **05 49 06.0** | **-0.5** |
| | baz=43 | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.26** | **24** | *eP* | | **Pb** | **05 49 07.8** | **+0.6** |
| | baz=42 | | | | | | | |
| **AXDP** | **Jialang** | **3.25** | **306** | *eP* | | **Pn** | **05 49 16.6** | **-0.7** |
| | baz=305 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.50** | **332** | *eP* | | **Pn** | **05 49 20.1** | **-0.5** |
| | baz=333 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.66** | **344** | *eP* | | **Pn** | **05 49 22.5** | **-0.3** |
| | baz=348 | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.46** | **320** | *eP* | | **Pn** | **05 49 32.8** | **-1.2** |
| | baz=318 | | | | | | | |
| **KSRS** | **Korea Array** | **15.62** | **21** | LR | | LR | 05 57 28.7 | |
| | comp=Z,31nm,20.8s,baz=40,slow=35 | | | | | | | |
| **SONM** | **Songino Array** | **27.34** | **338** | P | | **P** | **05 54 11.6** | **+0.2** |
| | 0.2nm,0.5s,baz=161,slow=13,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.98** | **317** | P | | **P** | **05 55 54.6** | **+1.9** |
| | 0.4nm,0.8s,baz=110,slow=8.9,SNR=3.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.07** | **328** | P | | **P** | **05 56 11.4** | **+1.6** |
| | 0.4nm,0.5s,baz=123,slow=5.3,SNR=2.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.82** | **321** | P | | **P** | **05 56 27.9** | **+3.7** |
| | 0.2nm,0.3s,baz=119,slow=7.6,SNR=2.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **162** | P | | **P** | **05 56 38.2** | **-1.3** |
| | 0.4nm,0.5s,baz=345,slow=8.7,SNR=3.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.15** | **23** | P | | **P** | **06 00 57.5** | **+0.1** |
| | 0.2nm,0.7s,baz=308,slow=5.0,SNR=6.1 | | | | | | | |

*IDC* ***15*** *05:57:31.9±2.4,53˚.74N×86˚.83E,h0km,mb1 3.4/3, mb1mx3.1/40,mbtmp3.4/3,ML2.8/3,Error ellipse: s-maj=22.4km s-min=13.5km az=67.0*

*NNC* ***15*** *05:57:33.7±4.8,53˚.56N×86˚.57E,h0km,mb3.3,mpv2.6, Error ellipse: s-maj=36.2km s-min=16.6km az=64.0, Suspected Mining explosion.*

**ISC 15 05:57:36.3±3.1,53˚.6N±0˚.1×86˚.2E±0˚.2,h0km,n9,σ1§27/12, 6C-5D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZAA0** | **Zalesovo Array** | **0.90** | **291** | ⇓P | **Pg** | **05 57 53.8** | **+0.3** |
| | 0.1nm,0.1s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **05 58 11.1** | **+1.1** |
| | 0.6nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.90** | **291** | Pg | **Pb** | **05 57 54.0** | **-0.8** |
| | 0.7nm,0.3s,baz=102,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 05 58 11.7 | |
| | 0.6nm,0.3s,baz=98,slow=27,SNR=13 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **0.90** | **291** | *i* | | 06 04 30.0 | |
| | baz=99,slow=340,SNR=8.6 | | | | | | |
| **KURK** | **Kurchatov** | **5.53** | **241** | ⇑Pn | **Pn** | **05 58 59.0** | **-0.7** |
| | 2.9nm,1.3s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **06 00 01.5** | **-2.4** |
| | 0.1nm,0.6s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 06 00 37.3 | |
| | 4.5nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.63** | **241** | Pn | **Pn** | **05 59 02.2** | **+1.1** |
| | 0.0nm,0.3s,baz=58,slow=14,SNR=6.3 | | | | | | |
| KURBB | | | | Lg | Lg | 06 00 39.8 | |
| | 1.4nm,0.3s,baz=65,slow=30,SNR=234 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.63** | **241** | ⇓Pn | **Pn** | **05 59 01.9** | **+0.8** |
| | 1.1nm,0.6s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **06 00 07.4** | **+1.1** |
| | 1.9nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 00 41.0 | |
| | 4.8nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **7.30** | **202** | ⇑Pn | **Pn** | **05 59 23.8** | **-0.3** |
| | 0.1nm,0.2s,baz=29,slow=7.1,SNR=6.3 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 00 49.4** | **+1.7** |
| MK31 | | | | ⇓Lg | Lg | 06 01 26.6 | |
| | baz=24,slow=28,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.30** | **202** | Pn | **Pn** | **05 59 23.5** | **-0.6** |
| | 0.1nm,0.3s,baz=27,slow=13,SNR=6.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 01 32.8 | |
| | 0.0nm,0.3s,baz=21,slow=30,SNR=6.1 | | | | | | |
| **AAK** | **Ala-Archa** | **13.49** | **220** | Pn | **Pn** | **06 00 48.9** | **0.0** |
| | 0.3nm,0.3s,baz=123,slow=18,SNR=16 | | | | | | |

**TAP 15 06:13:31.2,23˚.28N×121˚.57E,h42km,ML2.1,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ECBN** | **Changbin** | **0.12** | **288** | *eP* | Pn | 06 13 38.7 | +0.7 |
| | baz=287 | | | | | | |
| ECBN | | | | *eS* | Sn | 06 13 43.8 | +0.9 |
| | baz=287 | | | | | | |
| **EYUL** | **Yuli** | **0.24** | **286** | *eP* | Pn | 06 13 39.6 | +0.6 |
| | baz=285 | | | | | | |
| EYUL | | | | *eS* | Sn | 06 13 45.3 | +0.8 |
| | baz=285 | | | | | | |
| **HGSD** | **Ruisui** | **0.25** | **327** | P | Pn | 06 13 39.2 | +0.1 |
| | baz=327 | | | | | | |
| HGSD | | | | *eS* | Sn | 06 13 45.3 | +0.7 |
| | baz=327 | | | | | | |
| **CHKT** | **Chengkung** | **0.26** | **226** | *eP* | Pn | 06 13 40.1 | +0.9 |
| | baz=225 | | | | | | |
| CHKT | | | | *eS* | Sn | 06 13 45.1 | +0.3 |
| | baz=225 | | | | | | |
| **FULB** | **Fuli** | **0.27** | **252** | *eP* | Pn | 06 13 39.6 | +0.3 |
| | baz=252 | | | | | | |
| FULB | | | | *eS* | Sn | 06 13 45.9 | +0.9 |
| | baz=252 | | | | | | |
| **YULB** | **Yu-li** | **0.28** | **294** | P | Pn | 06 13 40.0 | +0.6 |
| | baz=293 | | | | | | |
| YULB | | | | S | Sn | 06 13 45.9 | +0.8 |
| | baz=293 | | | | | | |
| **EHY** | **Hungye** | **0.32** | **314** | *eP* | Pn | 06 13 40.4 | +0.5 |
| | baz=314 | | | | | | |
| EHY | | | | *eS* | Sn | 06 13 46.2 | +0.3 |
| | baz=314 | | | | | | |
| **EDH** | **Donghe** | **0.39** | **219** | *eP* | Pn | 06 13 41.5 | +0.9 |
| | baz=218 | | | | | | |
| EDH | | | | *eS* | Sn | 06 13 48.0 | +0.7 |
| | baz=218 | | | | | | |
| **ELDTW** | **Lidau** | **0.52** | **260** | *eP* | Pn | 06 13 42.4 | +0.1 |
| | baz=259 | | | | | | |
| ELDTW | | | | *eS* | Sn | 06 13 49.7 | -0.5 |
| | baz=259 | | | | | | |
| **ESL** | **Shilin** | **0.55** | **347** | *eS* | Sn | 06 13 51.6 | +0.9 |
| | baz=347 | | | | | | |
| **LONT** | **Longtian** | **0.55** | **228** | *eP* | Pn | 06 13 43.4 | +0.7 |
| | baz=227 | | | | | | |
| LONT | | | | *eS* | Sn | 06 13 52.1 | +1.3 |
| | baz=227 | | | | | | |
| **YUS** | **Yu-Shan** | **0.61** | **290** | *eS* | Sn | 06 13 53.2 | +0.4 |
| | baz=290 | | | | | | |
| **TWGBT** | **Beinan** | **0.65** | **225** | *eP* | Pn | 06 13 44.1 | +0.2 |
| | baz=224 | | | | | | |
| TWGBT | | | | *eS* | Sn | 06 13 53.1 | +0.1 |
| | baz=224 | | | | | | |
| **ALS** | **Alishan** | **0.74** | **288** | *eP* | Pn | 06 13 45.7 | +0.2 |
| | baz=288 | | | | | | |
| ALS | | | | *eS* | Sn | 06 13 56.4 | +0.6 |
| | baz=288 | | | | | | |
| **STYH** | **Taoyuan** | **0.74** | **262** | *eP* | Pn | 06 13 46.0 | +0.8 |
| | baz=262 | | | | | | |
| STYH | | | | *eS* | Sn | 06 13 56.4 | +1.1 |
| | baz=262 | | | | | | |
| **STYH** | **Taoyuan** | **0.74** | **262** | *eP* | Pn | 06 13 46.1 | +0.9 |
| | baz=83 | | | | | | |
| **SSLB** | **Suanglung** | **0.76** | **312** | *eP* | Pn | 06 13 46.5 | +1.0 |
| | baz=311 | | | | | | |
| SSLB | | | | *eS* | Sn | 06 13 57.2 | +1.4 |
| | baz=311 | | | | | | |
| **WUSB** | **Renai** | **0.82** | **330** | *eP* | Pn | 06 13 47.2 | +0.8 |
| | baz=329 | | | | | | |
| WUSB | | | | *eS* | Sn | 06 13 57.5 | 0.0 |
| | baz=329 | | | | | | |
| **CHGB** | **Renai** | **0.86** | **335** | *eP* | Pn | 06 13 47.2 | +0.1 |
| | baz=334 | | | | | | |
| CHGB | | | | *eS* | Sn | 06 13 59.2 | +0.7 |
| | baz=334 | | | | | | |
| **CHN5** | **Tsauling** | **0.88** | **291** | *eP* | Pn | 06 13 48.6 | +1.4 |
| | baz=290 | | | | | | |
| CHN5 | | | | *eS* | Sn | 06 13 59.9 | +1.1 |
| | baz=290 | | | | | | |
| **WTP** | **Ta-pu** | **0.88** | **268** | *eP* | Pn | 06 13 48.1 | +0.9 |
| | baz=267 | | | | | | |
| WTP | | | | *eS* | Sn | 06 14 00.2 | +1.3 |
| | baz=267 | | | | | | |
| **NACB** | **Ninganchiao** | **0.89** | **1** | *eP* | Pn | 06 13 47.5 | +0.3 |
| | baz=1.0 | | | | | | |
| NACB | | | | *eS* | Sn | 06 13 58.6 | -0.3 |
| | baz=1.0 | | | | | | |
| **SLGT** | **Liugui** | **0.90** | **252** | *eP* | Pn | 06 13 48.3 | +0.9 |
| | baz=251 | | | | | | |
| SLGT | | | | *eS* | Sn | 06 14 00.7 | +1.5 |
| | baz=251 | | | | | | |
| **CHN4** | **Tsaushan** | **0.90** | **275** | *eP* | Pn | 06 13 48.6 | +1.1 |
| | baz=274 | | | | | | |
| CHN4 | | | | *eS* | Sn | 06 14 00.8 | +1.5 |
| | baz=274 | | | | | | |
| **TYC** | **Yuchr** | **0.90** | **314** | *eP* | Pn | 06 13 48.1 | +0.6 |
| | baz=313 | | | | | | |
| TYC | | | | *eS* | Sn | 06 14 00.4 | +1.1 |
| | baz=313 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.98** | **322** | *eP* | Pn | 06 13 49.5 | +0.9 |
| | baz=321 | | | | | | |
| WCS | | | | *eS* | Sn | 06 14 02.7 | +1.4 |
| | baz=321 | | | | | | |
| **FUSS** | **Fushou** | **1.01** | **343** | *eP* | Pn | 06 13 49.6 | +0.5 |
| | baz=342 | | | | | | |
| FUSS | | | | *eS* | Sn | 06 14 03.2 | +1.0 |
| | baz=342 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.09** | **233** | *eP* | Pn | 06 13 51.1 | +1.1 |
| | baz=232 | | | | | | |
| MASBT | | | | *eS* | Sn | 06 14 05.5 | +1.6 |
| | baz=232 | | | | | | |

**TAP 15 06:13:38.9,23˚.14N×120˚.45E,h11km,ML0.9,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHN1** | **Nanshi** | **0.08** | **60** | P | Pg | 06 13 42.0 | +0.6 |
| | baz=60 | | | | | | |
| CHN1 | | | | S | Sg | 06 13 44.2 | +0.9 |
| | baz=60 | | | | | | |
| **SNST** | **Tainan City** | **0.09** | **30** | *eP* | Pg | 06 13 42.0 | +0.5 |
| | baz=30 | | | | | | |
| SNST | | | | *eS* | Sg | 06 13 44.1 | +0.8 |
| | baz=30 | | | | | | |
| **TWK** | **Hsinying** | **0.13** | **16** | *eP* | Pg | 06 13 42.8 | +0.7 |
| | baz=21 | | | | | | |
| TWK | | | | *eS* | Sg | 06 13 45.5 | +1.2 |
| | baz=21 | | | | | | |
| **SSHA** | **Shanhua** | **0.15** | **267** | *eP* | Pb | 06 13 43.0 | -0.7 |
| | baz=267 | | | | | | |
| SSHA | | | | *eS* | Sg | 06 13 46.1 | +1.4 |
| | baz=267 | | | | | | |
| **WTP** | **Ta-pu** | **0.18** | **56** | P | Pb | 06 13 43.7 | -0.7 |
| | baz=57 | | | | | | |
| WTP | | | | *eS* | Sg | 06 13 47.4 | +1.7 |
| | baz=57 | | | | | | |
| **TPUB** | **Ta-pu** | **0.23** | **47** | *eP* | Pg | 06 13 44.4 | +0.7 |
| | baz=46 | | | | | | |
| TPUB | | | | *eS* | Sg | 06 13 48.7 | +1.7 |
| | baz=46 | | | | | | |
| **CHN4** | **Tsaushan** | **0.25** | **33** | *eP* | Pb | 06 13 44.9 | -0.5 |
| | baz=32 | | | | | | |
| CHN4 | | | | *eS* | Sg | 06 13 49.3 | +1.9 |
| | baz=32 | | | | | | |
| **STYH** | **Taoyuan** | **0.30** | **85** | *eS* | Sb | 06 13 51.0 | -0.4 |
| | baz=83 | | | | | | |

*NNC* ***15*** *06:14:09.1±5.8,54˚.20N×86˚.45E,h0km,mb3.2,mpv2.4, Error ellipse: s-maj=48.4km s-min=27.7km az=11.0, Suspected Mining explosion.*

*IDC* ***15*** *06:14:10.9±2.5,54˚.18N×86˚.44E,h0km,mb1 3.7/2, mb1mx3.2/36,mbtmp3.7/2,ML2.5/2,Error ellipse: s-maj=20.4km s-min=12.9km az=55.0*

**ISC 15 06:14:13.0±4.4,54˚.2N±0˚.2×86˚.0E±0˚.2,h0km,n8,σ1§29/12, 7C-4D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.75** | **249** | *i* | | 06 19 30.0 | |
| | baz=80,slow=340,SNR=4.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.75** | **249** | ⇑P | **Pg** | **06 14 27.2** | **-0.1** |
| | 0.1nm,0.5s | | | | | | |
| ZAA0 | | | | ⇓S | **Sn** | **06 14 43.3** | **+0.4** |
| | 4.3nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.75** | **249** | Pg | **Pb** | **06 14 28.6** | **-0.3** |
| | 0.4nm,0.3s,baz=77,slow=4.9 | | | | | | |
| ZALV | | | | Lg | Lg | 06 14 43.2 | |
| | 0.9nm,0.3s,baz=71,slow=26,SNR=21 | | | | | | |
| **KURK** | **Kurchatov** | **5.71** | **235** | ⇓Pn | **Pn** | **06 15 39.3** | **+0.3** |
| | 0.1nm,0.2s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **06 16 42.6** | **-2.7** |
| | 0.3nm,0.3s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 06 17 19.3 | |
| | 0.2nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.82** | **235** | Pn | **Pn** | **06 15 41.7** | **+1.2** |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=13 | | | | | | |
| KURBB | | | | Lg | Lg | 06 17 24.9 | |
| | 0.0nm,0.3s,baz=56,slow=34,SNR=6.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.82** | **235** | ⇑Pn | **Pn** | **06 15 41.7** | **+1.2** |
| | 0.5nm,0.2s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **06 16 48.2** | **+0.4** |
| | 0.4nm,0.2s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 06 17 24.4 | |
| | 0.7nm,0.2s | | | | | | |
| **MK31** | **Makanchi Array** | **7.80** | **199** | ⇑Pn | **Pn** | **06 16 06.9** | **-0.8** |
| | 0.1nm,0.1s | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 17 38.0** | **+1.4** |
| MK31 | | | | ⇑Lg | Lg | 06 18 16.8 | |
| | baz=26,slow=31,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.80** | **199** | Pn | **Pn** | **06 16 07.0** | **-0.7** |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=9.1 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 17 37.6** | **+1.0** |
| | 0.0nm,0.3s,baz=21,slow=33,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 06 18 18.2 | |
| | 0.0nm,0.3s,baz=14,slow=31,SNR=8.4 | | | | | | |

**IDC 15 06:20:47.2±3.5,54˚.31N×87˚.29E,h0km,mb1 2.3/1, mb1mx2.3/42,mbtmp2.3/1,ML2.2/2,Error ellipse: s-maj=29.0km s-min=18.1km az=60.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.50** | **257** | *i* | | 06 28 20.0 | |
| | baz=77,slow=342,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.50** | **257** | Pg | Pn | 06 21 14.9 | -0.4 |
| | 0.7nm,0.3s,baz=73,slow=15,SNR=9.8 | | | | | | |
| ZALV | | | | Lg | Lg | 06 21 34.7 | |
| | 1.0nm,0.3s,baz=77,slow=25,SNR=7.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.50** | **239** | Pn | Pn | 06 22 24.2 | +0.2 |
| | 0.0nm,0.3s,baz=55,slow=14,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.17** | **205** | Pn | Pn | 06 22 47.5 | +0.6 |
| | 0.1nm,0.3s,baz=23,slow=11,SNR=1.9 | | | | | | |
| MKAR | | | | Sn | Sn | 06 24 20.3 | +0.5 |
| | 0.0nm,0.3s,baz=22,slow=27,SNR=3.0 | | | | | | |
| MKAR | | | | Lg | Lg | 06 25 07.8 | |
| | 0.0nm,0.3s,baz=16,slow=34,SNR=2.0 | | | | | | |

*SOME* ***15*** *06:24:53.8,43˚.40N×69˚.92E*

*KRNET* ***15*** *06:24:53.0±0.1,43˚.42N×69˚.80E,h9km,mb3.3*

*NNC* ***15*** *06:24:54.1±0.8,43˚.40N×69˚.89E,h0km,mb3.6,mpv3.2, Error ellipse: s-maj=5.0km s-min=3.5km az=155.0, Suspected Mining explosion.*

**ISC 15 06:24:56.4±1.6,43˚.34N±0˚.06×69˚.90E±0˚.05,h0km,n34, σ1§33/56,27C-7D,Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRLS** | **Borolday** | **0.32** | **189** | P | **Pb** | **06 25 05.3** | **+0.4** |
| | 6.1nm,0.3s | | | | | | |
| BRLS | | | | S | **Sb** | **06 25 14.5** | **+3.9** |
| | 2.3nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **0.32** | **189** | *eP* | **Pb** | **06 25 05.3** | **+0.4** |
| | baz=81 | | | | | | |
| BRLS | | | | *eS* | **Sb** | **06 25 14.5** | **+3.9** |
| | baz=81 | | | | | | |
| **KK08** | **Karatay Array** | **0.49** | **119** | ⇑P | **Pg** | **06 25 04.4** | **-1.4** |
| | 14nm,0.5s | | | | | | |
| KK08 | | | | ⇑S | **Sg** | **06 25 11.8** | **-0.4** |
| | 38nm,0.5s | | | | | | |
| **KK09** | **Karatay Array** | **0.49** | **116** | ⇑P | **Pg** | **06 25 04.3** | **-1.4** |
| KK09 | | | | ⇑S | **Sg** | **06 25 11.6** | **-0.5** |
| **KK03** | **Karatay Array** | **0.50** | **118** | ⇓P | **Pg** | **06 25 04.6** | **-1.4** |
| KK03 | | | | ⇑S | **Sg** | **06 25 12.1** | **-0.4** |
| **KK04** | **Karatay Array** | **0.50** | **118** | ⇓P | **Pg** | **06 25 04.5** | **-1.4** |
| KK04 | | | | ⇓S | **Sg** | **06 25 12.1** | **-0.4** |
| **KK01** | **Karatay Array** | **0.50** | **118** | ⇓P | **Pg** | **06 25 04.6** | **-1.4** |
| KK01 | | | | ⇑S | **Sg** | **06 25 12.0** | **-0.5** |
| **KK02** | **Karatay Array** | **0.51** | **118** | ⇓P | **Pg** | **06 25 04.6** | **-1.5** |
| KK02 | | | | ⇑S | **Sg** | **06 25 12.2** | **-0.4** |
| **KK07** | **Karatay Array** | **0.51** | **120** | ⇑P | **Pg** | **06 25 04.6** | **-1.5** |
| KK07 | | | | ⇑S | **Sg** | **06 25 12.1** | **-0.5** |
| **KK05** | **Karatay Array** | **0.51** | **116** | ⇓P | **Pg** | **06 25 04.6** | **-1.5** |
| KK05 | | | | ⇑S | **Sg** | **06 25 12.1** | **-0.5** |
| **KK06** | **Karatay Array** | **0.52** | **118** | ⇑P | **Pg** | **06 25 04.9** | **-1.5** |
| KK06 | | | | ⇑S | **Sg** | **06 25 12.6** | **-0.5** |
| **TCH** | **Chimkent** | **1.05** | **192** | *eP* | **Pg** | **06 25 14.0** | **-2.4** |
| | baz=88 | | | | | | |
| TCH | | | | *eS* | **Sg** | **06 25 28.9** | **-1.1** |
| | baz=88 | | | | | | |
| **DZA** | **Taraz** | **1.14** | **113** | P | **Pg** | **06 25 16.7** | **-1.4** |
| | 66nm,0.1s | | | | | | |
| DZA | | | | S | **Sg** | **06 25 33.7** | **+0.8** |
| | 74nm,0.2s | | | | | | |
| **DZA** | **Taraz** | **1.14** | **113** | *eP* | **Pg** | **06 25 16.8** | **-1.4** |
| | baz=15 | | | | | | |
| DZA | | | | *eS* | **Sg** | **06 25 33.8** | **+0.8** |
| | baz=15 | | | | | | |
| **IUG** | **Iuzhnay** | **1.20** | **175** | P | **Pg** | **06 25 17.7** | **-1.7** |
| | 286nm,0.3s | | | | | | |
| IUG | | | | S | **Sb** | **06 25 35.7** | **-0.4** |
| | 69nm,0.5s | | | | | | |
| **IUG** | **Iuzhnay** | **1.20** | **175** | *eP* | **Pg** | **06 25 17.7** | **-1.7** |
| | baz=72 | | | | | | |
| IUG | | | | *eS* | **Sb** | **06 25 35.7** | **-0.4** |
| | baz=72 | | | | | | |
| **TRKS** | **Terek-Say** | **2.03** | **153** | ⇑*iP* | **Pb** | **06 25 33.0** | **-1.2** |
| | baz=52 | | | | | | |
| TRKS | | | | ⇑*iS* | **Sg** | **06 26 02.3** | **+0.7** |
| | baz=52 | | | | | | |
| **MNAS** | **Manas** | **2.10** | **113** | ⇑*eP* | **Pn** | **06 25 32.9** | **0.0** |
| | baz=14 | | | | | | |
| MNAS | | | | ⇑*iS* | **Sb** | **06 26 02.0** | **0.0** |
| | baz=14 | | | | | | |
| **ARK** | **Arkit** | **2.17** | **135** | ⇑*iP* | **Pn** | **06 25 34.0** | **+0.1** |
| | baz=35 | | | | | | |
| ARK | | | | ⇑*iS* | **Sb** | **06 26 03.9** | **-0.1** |
| | baz=35 | | | | | | |
| **MRKS** | **Merke** | **2.51** | **103** | Pg | **Pb** | **06 25 41.0** | **-1.4** |
| | 3.5nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 06 26 15.6 | |
| | 13nm,0.5s | | | | | | |
| **EKS2** | **Erkin-Say** | **2.92** | **102** | ⇑*iP* | **Pn** | **06 25 44.3** | **0.0** |
| | baz=3.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AAK | | | | ⇑*i*S | | **Sn** | **06 26 34.2** | **+1.2** |
| | baz=1.0 | | | | | | | | |
| **SGDS** | **Sogindy** | **3.45** | **87** | Pg | | **Pb** | **06 25 58.1** | **-0.2** |
| | 1.5nm,0.3s | | | | | | | | |
| SGDS | | | | Lg | | Lg | 06 26 43.2 | | |
| | 4.6nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.19** | **94** | ⇑Pg | | **Pb** | **06 26 09.8** | **-1.3** |
| | 2.6nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 06 27 06.7 | | |
| | 5.5nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.21** | **83** | Pg | | **Pb** | **06 26 11.9** | **+0.4** |
| | 1.1nm,0.3s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 06 27 08.1 | | |
| | 8.3nm,0.5s | | | | | | | | |
| **DGS** | **Degeres** | **4.29** | **89** | Pg | | **Pb** | **06 26 14.2** | **+1.5** |
| | 1.8nm,0.4s | | | | | | | | |
| DGS | | | | Lg | | Lg | 06 27 12.1 | | |
| | 14nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **4.44** | **92** | Pg | | **Pb** | **06 26 15.4** | **+0.1** |
| | 2.4nm,0.3s | | | | | | | | |
| KST | | | | Lg | | Lg | 06 27 14.3 | | |
| | 11nm,0.4s | | | | | | | | |
| **KUU** | **Kurty** | **4.71** | **81** | Pg | | **Pb** | **06 26 19.9** | **+0.1** |
| | 1.2nm,0.9s | | | | | | | | |
| KUU | | | | Lg | | Lg | 06 27 21.9 | | |
| | 4.7nm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **4.78** | **90** | Pg | | **Pb** | **06 26 22.7** | **+1.7** |
| | 0.7nm,0.2s | | | | | | | | |
| MTBS | | | | Lg | | Lg | 06 27 26.7 | | |
| | 6.3nm,0.7s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.95** | **83** | Pg | | **Pb** | **06 26 25.6** | **+1.8** |
| | 0.9nm,0.3s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 06 27 31.7 | | |
| | 15nm,0.5s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.16** | **91** | Pg | | **Pb** | **06 26 29.7** | **+1.9** |
| | 1.3nm,0.5s | | | | | | | | |
| TNSS | | | | Lg | | Lg | 06 27 38.3 | | |
| | 3.5nm,0.6s | | | | | | | | |

**IDC 15 06:31:36.9±3.1, 32°.69S×178°.27W, h0km, mb4.0/2, mb1 4.2/3, mb1mx3.8/27, mbtmp4.0/3, ML3.4/1, Error ellipse: s-maj=70.4km s-min=37.2km az=116.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **6.72** | **213** | Pn | | **06 33 16.0** | **-0.7** |
| | 0.7nm,0.3s,baz=27,slow=9.0,SNR=2.1 | | | | | | |
| URZ | | | | Sn | | 06 34 34.5 | +0.6 |
| | 3.5nm,0.3s,baz=31,slow=23,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **42.81** | **270** | P | | 06 39 36.7 | 0.0 |
| | 1.2nm,0.6s,baz=111,slow=7.8,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.00** | **275** | P | | 06 39 46.3 | 0.0 |
| | 1.0nm,0.3s,baz=114,slow=7.9,SNR=15 | | | | | | |
| **FINES** | **FINESS Array B** | **147.19** | **339** | PKPbc | PKPbc | 06 51 20.3 | -0.9 |
| | 2.1nm,0.9s,baz=48,slow=2.8,SNR=5.2 | | | | | | |

*SOF **15** 06:59:06.8, 44°.15N×22°.14E, h8km, MD2.8*
*BEO **15** 06:59:08.8±0.2, 44°.15N×22°.19E, h0km, ML2.4/16*
**ISC 15 06:59:07.1±1.1, 44°.17N±0°.02×22°.16E±0°.02, h3km±10km, n39, σ1§11/70, 26C-9D, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZAGS** | **Zajecar** | **0.36** | **172** | *e*Pg | **Pb** | **06 59 15.2** | **-0.9** |
| ZAGS | | | | *e*Sg | **Sg** | **06 59 19.1** | **+0.5** |
| **KUBS** | **Kucevo** | **0.43** | **305** | *e*Pg | **Pb** | **06 59 16.6** | **-0.7** |
| KUBS | | | | *e*Sg | **Sb** | **06 59 22.6** | **-1.6** |
| **DJES** | **Djerdap** | **0.56** | **27** | ⇓P | **Pb** | **06 59 19.5** | **-0.1** |
| DJES | | | | ⇓S | **Sb** | **06 59 26.9** | **-1.2** |
| **DJES** | **Djerdap** | **0.56** | **27** | *e*Sg | **Sg** | **06 59 19.3** | **-5.9** |
| **DJES** | **Djerdap** | **0.56** | **27** | *e*Pg | Pn | 06 59 26.8 | +4.8 |
| **PUNG** | **Punghina** | **0.57** | **78** | ⇑P | **Pb** | **06 59 19.5** | **-0.1** |
| PUNG | | | | ⇑S | **Sb** | **06 59 27.8** | **-0.3** |
| **BOVS** | **Bovan** | **0.62** | **212** | ⇑P | **Pb** | **06 59 20.2** | **-0.4** |
| BOVS | | | | ⇑S | **Sb** | **06 59 29.0** | **-0.8** |
| **BOVS** | **Bovan** | **0.62** | **212** | *e*Pg | **Pb** | **06 59 20.0** | **-0.6** |
| BOVS | | | | *e*Sg | **Sb** | **06 59 28.2** | **-1.6** |
| **RMGR** | **Halanga-Turnu** | **0.63** | **37** | ⇑P | **Pb** | **06 59 21.1** | **+0.5** |
| RMGR | | | | ⇑S | **Sb** | **06 59 30.1** | **+0.3** |
| **BLKB** | **Belogradchik** | **0.66** | **145** | ⇑S | **Sb** | **06 59 29.7** | **+1.1** |
| **SVIS** | **Svilajnac** | **0.69** | **279** | *e*Pg | Pn | **06 59 22.9** | **-0.8** |
| SVIS | | | | *e*Sg | **Sb** | **06 59 31.6** | **0.0** |
| **MDVR** | **Moldovita** | **0.69** | **333** | ⇑P | **Pb** | **06 59 22.0** | **+0.1** |
| MDVR | | | | ⇓S | **Sb** | **06 59 31.9** | **0.0** |
| **HERR** | **Herculane** | **0.74** | **14** | ⇓P | **Pb** | **06 59 22.5** | **-0.1** |
| HERR | | | | ⇑S | **Sb** | **06 59 32.5** | **-0.5** |
| **SRE** | **Strehaia** | **0.90** | **56** | ⇓P | **Pn** | **06 59 26.1** | **-0.6** |
| SRE | | | | ⇑S | **Sn** | **06 59 38.8** | **-1.3** |
| **ZAPS** | **Zavoj** | **0.96** | **159** | *e*Pg | **Pb** | **06 59 25.7** | **-0.6** |
| ZAPS | | | | *e*Sg | **Sb** | **06 59 38.4** | **-1.0** |
| **GRUS** | **Gruza** | **1.08** | **256** | *e*Pg | **Pn** | **06 59 29.6** | **+0.5** |
| GRUS | | | | *e*Sg | **Sn** | **06 59 44.4** | **-0.2** |
| **SELS** | **Selova** | **1.21** | **219** | *e*Pg | **Pn** | **06 59 31.6** | **+0.7** |
| SELS | | | | *e*Sg | **Sn** | **06 59 46.8** | **-1.1** |
| **TRUS** | **Trudelj** | **1.26** | **273** | *e*Pg | **Pg** | **06 59 32.1** | **+0.8** |
| TRUS | | | | *e*Sg | **Sn** | **06 59 49.3** | **+0.2** |
| **GZR** | **Gura Zlata** | **1.30** | **19** | ⇑P | **Pg** | **06 59 32.2** | **+0.2** |
| GZR | | | | ⇑S | **Sn** | **06 59 50.5** | **+0.3** |
| **BZS** | **Buzias** | **1.50** | **345** | ⇑P | **Pb** | **06 59 35.1** | **-0.5** |
| BZS | | | | ⇑S | **Sg** | **06 59 56.4** | **+1.1** |
| **BZS** | **Buzias** | **1.50** | **345** | *e*Pg | **Pg** | **06 59 35.6** | **-0.3** |
| BZS | | | | *e*Sg | **Sg** | **06 59 56.1** | **+0.8** |
| **DIVS** | **Divibare** | **1.56** | **268** | *e*Pg | **Pg** | **06 59 37.2** | **+0.2** |
| DIVS | | | | *e*Sg | **Sg** | **06 59 59.1** | **+1.8** |
| **IVAS** | **Ivanjica** | **1.57** | **249** | *e*Pg | **Pg** | **06 59 37.9** | **+0.8** |
| IVAS | | | | *e*Sg | **Sg** | **06 59 57.8** | **+0.4** |
| **VLAD** | **Vladila** | **1.62** | **95** | ⇑P | **Pg** | **06 59 38.2** | **0.0** |
| VLAD | | | | ⇓S | **Sg** | **07 00 00.5** | **+1.2** |
| **PRVS** | **Prvonek** | **1.66** | **182** | *e*Pg | **Pg** | **06 59 38.5** | **-0.4** |
| PRVS | | | | *e*Sg | **Sg** | **07 00 00.3** | **-0.1** |
| **BOSS** | **Bosilegrad** | **1.69** | **172** | *e*Pg | **Pb** | **06 59 38.2** | **-0.5** |
| BOSS | | | | *e*Sg | **Sg** | **07 00 01.2** | **0.0** |
| **LOT** | **Lotru** | **1.72** | **41** | ⇓P | **Pg** | **06 59 39.8** | **-0.2** |
| LOT | | | | ⇓S | **Sg** | **07 00 02.7** | **+0.4** |
| **VTS** | **Vitosha** | **1.73** | **153** | ⇑P | **Pg** | **06 59 40.4** | **+0.1** |
| VTS | | | | ⇑S | **Sg** | **07 00 03.8** | **+1.0** |
| **VTS** | **Vitosha** | **1.73** | **153** | *e*Pg | **Pg** | **06 59 40.4** | **+0.1** |
| VTS | | | | *e*Sg | **Sg** | **07 00 03.5** | **+0.7** |
| **VTS** | **Vitosha** | **1.73** | **153** | P | **Pg** | **06 59 40.2** | **-0.1** |
| **DEV** | **Deva** | **1.80** | **17** | ⇑P | **Pb** | **06 59 40.1** | **-0.5** |
| DEV | | | | ⇑S | **Sg** | **07 00 05.0** | **+0.2** |
| **SJES** | **Sjenica** | **1.83** | **241** | *e*Pg | **Pg** | **06 59 41.5** | **-0.6** |
| SJES | | | | *e*Sg | **Sg** | **07 00 07.2** | **+1.5** |
| **FRGS** | **Fruska Gora** | **1.95** | **301** | ⇑P | **Pb** | **06 59 43.1** | **-0.2** |
| FRGS | | | | ⇑S | **Sg** | **07 00 08.3** | **-1.4** |
| **FRGS** | **Fruska Gora** | **1.95** | **301** | *e*Pg | **Pg** | **06 59 45.3** | **+0.9** |
| FRGS | | | | *e*Sg | **Sg** | **07 00 10.2** | **+0.5** |
| **HUMR** | **Humele** | **2.06** | **79** | ⇑S | **Sb** | **07 00 11.4** | **+0.5** |
| **PGB** | **Panagyurishte** | **2.18** | **137** | P | **Pg** | **06 59 49.1** | **+0.3** |
| **VOIR** | | **2.42** | **57** | ⇑P | **Pn** | **06 59 48.5** | **+1.0** |
| **DRGR** | | **2.65** | **8** | ⇓P | **Pn** | **06 59 52.3** | **+1.5** |
| DRGR | | | | ⇑S | **Sb** | **07 00 26.8** | **-1.5** |
| **MLR** | **Muntele Rosu** | **3.00** | **62** | ⇑P | **Pn** | **06 59 57.5** | **+1.9** |
| MLR | | | | ⇑S | **Sn** | **07 00 34.4** | **+2.2** |

**IDC 15 07:00:40.8±4.3, 6°.25S×129°.66E, h413km±55km, mb3.0/2, mb1 3.1/4, mb1mx2.6/26, mbtmp3.8/4, Error ellipse: s-maj=133.0km s-min=18.8km az=75.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.35** | **162** | P | P | 07 03 44.3 | -1.6 |
| | 0.7nm,0.3s,baz=343,slow=13,SNR=11 | | | | | | |
| **COEN** | **Coen** | **15.35** | **121** | P | P | 07 03 50.4 | -6.3 |
| **ASAR** | **Alice Springs** | **17.79** | **167** | P | P | 07 04 23.1 | +0.4 |
| | 0.7nm,0.3s,baz=344,slow=10,SNR=46 | | | | | | |
| ASAR | | | | S | S | 07 07 27.0 | +0.9 |
| | 0.1nm,0.3s,baz=354,slow=28,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **57.63** | **342** | P | P | 07 09 50.8 | +1.0 |
| | 0.3nm,0.3s,baz=152,slow=6.5,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.77** | **334** | P | P | 07 11 12.7 | -1.1 |
| | 0.4nm,0.4s,baz=119,slow=5.3,SNR=2.4 | | | | | | |

*NNC **15** 07:08:45.5±0.4, 50°.03N×78°.78E, h0km, mb3.2, mpv2.7, Error ellipse: s-maj=7.7km s-min=2.2km az=74.0, Suspected Mining explosion.*
*IDC **15** 07:08:48.2±3.8, 49°.98N×78°.97E, h0km, mb1 2.9/2, mb1mx2.3/40, mbtmp2.9/2, ML2.4/2, Error ellipse: s-maj=47.7km s-min=18.2km az=93.0*

**ISC 15 07:08:46.5±1.0, 50°.05N±0°.05×78°.85E±0°.07, h0km, n16, σ0§90/28, 17C-8D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.58** | **339** | ⇓P | **Pg** | **07 08 56.7** | **-0.9** |
| KUR07 | | | | ⇑S | **Sg** | **07 09 05.2** | **+0.1** |
| **KUR14** | **Kurchatov Arra** | **0.59** | **344** | ⇑P | **Pg** | **07 08 56.9** | **-0.9** |
| KUR14 | | | | ⇓S | **Sg** | **07 09 05.5** | **0.0** |
| **KUR06** | **Kurchatov Arra** | **0.60** | **340** | ⇓P | **Pg** | **07 08 57.0** | **-0.8** |
| KUR06 | | | | ⇑S | **Sg** | **07 09 05.7** | **+0.1** |
| **KUR15** | **Kurchatov Arra** | **0.60** | **342** | ⇑P | **Pg** | **07 08 57.2** | **-0.8** |
| KUR15 | | | | ⇑S | **Sg** | **07 09 05.8** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **0.61** | **341** | ⇑P | **Pg** | **07 08 57.3** | **-1.0** |
| | 7.4nm,0.2s | | | | | | |
| KURBB | | | | ⇓S | **Sg** | **07 09 06.2** | **0.0** |
| | 84nm,0.6s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.62** | **339** | ⇑P | **Pg** | **07 08 57.5** | **-0.9** |
| KUR16 | | | | ⇑S | **Sg** | **07 09 06.3** | **-0.2** |
| **KUR05** | **Kurchatov Arra** | **0.63** | **342** | ⇑P | **Pg** | **07 08 57.5** | **-1.0** |
| KUR05 | | | | ⇓S | **Sg** | **07 09 06.6** | **-0.1** |
| **KUR17** | **Kurchatov Arra** | **0.64** | **338** | ⇓P | **Pg** | **07 08 57.8** | **-0.9** |
| KUR17 | | | | ⇑S | **Sg** | **07 09 07.2** | **+0.3** |
| **KUR04** | **Kurchatov Arra** | **0.65** | **343** | ⇑P | **Pg** | **07 08 58.0** | **-0.8** |
| KUR04 | | | | ⇓S | **Sg** | **07 09 07.4** | **+0.1** |
| **KURK** | **Kurchatov** | **0.69** | **348** | ⇑P | **Pg** | **07 08 58.7** | **-0.9** |
| | 7.2nm,0.4s | | | | | | |
| KURK | | | | ⇑S | **Sg** | **07 09 08.7** | **+0.2** |
| | 22nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **3.85** | **146** | ⇓Pn | **Pn** | **07 09 48.2** | **+1.2** |
| | 1.6nm,0.6s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 07 10 45.6 | |
| | 4.4nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **3.98** | **144** | Pn | **Pn** | **07 09 49.5** | **+0.8** |
| | 0.1nm,0.1s,baz=324,slow=10,SNR=17 | | | | | | |
| MK31 | | | | Pg | **Pb** | **07 09 57.3** | **-0.1** |
| | 0.6nm,0.3s,baz=324,slow=13,SNR=13 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 10 50.7 | |
| | 7.1nm,0.5s,baz=327,slow=27,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **3.98** | **144** | Pn | **Pn** | **07 09 49.5** | **+0.8** |
| | 0.3nm,0.3s,baz=328,slow=10,SNR=16 | | | | | | |
| MKAR | | | | Pg | **Pb** | **07 09 56.2** | **-1.3** |
| | 0.7nm,0.3s,baz=328,slow=14,SNR=21 | | | | | | |
| MKAR | | | | Lg | Lg | 07 10 49.6 | |
| | 0.9nm,0.3s,baz=325,slow=30,SNR=5.6 | | | | | | |
| **OTUK** | **Ortayu** | **4.64** | **250** | ⇑Pn | **Pn** | **07 09 56.6** | **-1.2** |
| | 1.0nm,0.3s | | | | | | |
| OTUK | | | | Pg | **Pb** | **07 10 09.9** | **+1.3** |
| | 0.7nm,0.5s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 07 11 08.8 | |
| | 3.5nm,0.5s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.37** | **41** | *i* | | 07 39 50.0 | |
| | baz=228,slow=338,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.37** | **41** | Pn | **Pn** | **07 10 10.0** | **+2.2** |
| | 0.7nm,0.3s,baz=231,slow=14,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 07 11 38.2 | |
| | 0.4nm,0.3s,baz=226,slow=27,SNR=4.8 | | | | | | |

*INMG **15** 07:29:53.9±1.1, 35°.75N×10°.07W, h31km, ML2.7, Error ellipse: s-maj=7.8km s-min=4.0km az=94.0*
*CNRM **15** 07:29:55.0, 35°.48N×9°.88W, h107km, ml3.6*
*IGIL **15** 07:29:54.3, 35°.76N×10°.08W, h31km, ML2.7*
**ISC 15 07:29:50.5±1.8, 35°.71N±0°.04×10°.1W±0°.1, h35km, n32, σ1§72/59, 3C, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.75** | **35** | ⇑*i*Pn | **Pn** | **07 30 19.8** | **+1.6** |
| PFVI | | | | *e*Sn | **Sn** | **07 30 38.5** | **-0.8** |
| PFVI | | | | A | A | 07 30 43.4 | |
| | 41nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **1.97** | **36** | *e*P | **Pn** | **07 30 23.0** | **+1.6** |
| MORF | | | | *e*S | **Sn** | **07 30 43.8** | **-1.1** |
| MORF | | | | IAML | | 07 30 46.4 | |
| | comp=N,97nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **1.97** | **36** | ⇑*i*Pn | **Pn** | **07 30 22.9** | **+1.6** |
| MORF | | | | *e*Sn | **Sn** | **07 30 43.8** | **-1.1** |
| MORF | | | | A | A | 07 30 46.3 | |
| | comp=N,82nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.13** | **31** | *e*Pn | **Pn** | **07 30 25.0** | **+1.4** |
| PTEO | | | | *e*Sn | **Sn** | **07 30 48.0** | **-0.8** |
| PTEO | | | | A | A | 07 30 50.8 | |
| | comp=N,31nm,0.7s | | | | | | |
| **PCVE** | **Castro Verde** | **2.53** | **40** | *e*Pn | **Pn** | **07 30 30.9** | **+1.9** |
| PCVE | | | | *e*Sn | **Sn** | **07 30 58.2** | **-0.4** |
| PCVE | | | | A | A | 07 31 01.6 | |
| | comp=N,17nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.55** | **48** | ⇑*e*Pn | **Pn** | **07 30 31.2** | **+1.9** |
| PVAQ | | | | *e*Sn | **Sn** | **07 30 58.9** | **-0.2** |
| PVAQ | | | | A | A | 07 30 59.3 | |
| | comp=N,12nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.60** | **35** | *e*P | **Pn** | **07 30 31.7** | **+1.7** |
| MESJ | | | | *e*S | **Sn** | **07 30 59.0** | **-1.4** |
| MESJ | | | | IAML | | 07 31 02.2 | |
| | comp=N,21nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.60** | **35** | *e*Pn | **Pn** | **07 30 31.7** | **+1.7** |
| MESJ | | | | *e*Sn | **Sn** | **07 31 00.0** | **-0.4** |
| MESJ | | | | A | A | 07 31 01.0 | |
| | comp=N,15nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.70** | **27** | *e*Pn | **Pn** | **07 30 32.6** | **+1.2** |
| PNCL | | | | *e*Sn | **Sn** | **07 31 02.3** | **-0.6** |
| PNCL | | | | A | A | 07 31 05.3 | |
| | comp=N,20nm,1.8s | | | | | | |
| **PBEJ** | **Beja** | **2.92** | **37** | *e*Pn | **Pn** | **07 30 36.0** | **+1.6** |
| PBEJ | | | | *e*Sn | **Sn** | **07 31 07.5** | **-0.7** |
| PBEJ | | | | A | A | 07 31 11.6 | |
| | comp=N,7.8nm,0.4s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **3.10** | **13** | *e*Sn | **Sn** | **07 31 11.4** | **-1.4** |
| PMST | | | | A | A | 07 31 14.1 | |
| | comp=N,40nm,0.2s | | | | | | |
| **PACT** | **Alcochete** | **3.21** | **18** | *e*Pn | **Pn** | **07 30 40.4** | **+2.0** |
| PACT | | | | *e*Sn | **Sn** | **07 31 14.9** | **-0.5** |
| PACT | | | | A | A | 07 31 17.2 | |
| | comp=N,29nm,0.4s | | | | | | |
| **EVO** | **Evora** | **3.27** | **30** | *e*Pn | **Pn** | **07 30 40.5** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **07 31 15.5** | **-1.3** |
| EVO | | | | A | A | 07 31 17.8 | |
| | comp=N,28nm,0.3s | | | | | | |
| **PMAFR** | **Mafra** | **3.30** | **11** | *e*Pn | **Pn** | **07 30 41.2** | **+1.6** |
| PMAFR | | | | *e*Sn | **Sn** | **07 31 15.9** | **-1.7** |
| PMAFR | | | | A | A | 07 31 19.6 | |
| | comp=N,62nm,0.2s | | | | | | |
| **PMTG** | **Montargil** | **3.67** | **23** | *e*Pn | **Pn** | **07 30 45.8** | **+1.2** |
| PMTG | | | | *e*Sn | **Sn** | **07 31 25.0** | **-1.6** |
| PMTG | | | | A | A | 07 31 25.5 | |
| | comp=N,13nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **3.73** | **32** | *e*Pn | **Pn** | **07 30 46.5** | **+1.0** |
| PESTR | | | | *e*Sn | **Sn** | **07 31 26.4** | **-1.8** |
| PESTR | | | | A | A | 07 31 28.1 | |
| | comp=N,6.2nm,0.3s | | | | | | |
| **PSBE** | **So Bento** | **3.93** | **15** | *e*Pn | **Pn** | **07 30 49.7** | **+1.4** |
| PSBE | | | | *e*Sn | **Sn** | **07 31 32.1** | **-1.1** |
| PSBE | | | | A | A | 07 31 35.6 | |
| | comp=N,10.0nm,0.4s | | | | | | |
| **PCBR** | **Castelo Branco** | **4.61** | **26** | *e*Pn | **Pn** | **07 30 59.0** | **+1.4** |
| PCBR | | | | *e*Sn | **Sn** | **07 31 48.0** | **-1.9** |
| PCBR | | | | A | A | 07 31 52.7 | |
| | comp=N,4.8nm,0.6s | | | | | | |
| **IFR** | **Ifrane** | **4.64** | **117** | P | **Pn** | **07 30 59.3** | **+1.1** |
| IFR | | | | S | **Sn** | **07 31 47.3** | **-3.7** |
| **LCRM** | **LCR** | **4.76** | **114** | P | **Pn** | **07 31 01.2** | **+1.4** |
| LCRM | | | | S | **Sn** | **07 31 54.2** | **+0.3** |
| **OUK** | **Oukaimeden** | **4.86** | **157** | P | **Pn** | **07 31 03.6** | **+2.1** |
| OUK | | | | S | **Sn** | **07 31 55.0** | **-1.7** |
| **MTE** | **Manteigas** | **5.09** | **22** | *e*Pn | **Pn** | **07 31 05.8** | **+1.5** |
| MTE | | | | *e*Sn | **Sn** | **07 31 59.2** | **-2.7** |
| MTE | | | | A | A | 07 32 03.7 | |
| | comp=N,6.0nm,0.3s | | | | | | |
| **MD31** | **MD31** | **5.25** | **121** | P | **Pn** | **07 31 07.5** | **+1.0** |
| MD31 | | | | S | **Sn** | **07 32 03.6** | **-2.2** |
| **PVIS** | **Viseu** | **5.29** | **18** | *e*Sn | **Sn** | **07 32 03.2** | **-3.5** |
| **TTIG** | **Tnine Tigouga,** | **5.33** | **165** | P | **Pn** | **07 31 06.9** | **-0.8** |
| TTIG | | | | S | **Sn** | **07 32 05.4** | **-2.6** |
| **OUZM** | **OUZ** | **5.54** | **149** | P | **Pn** | **07 31 12.7** | **+2.1** |
| OUZM | | | | S | **Sn** | **07 32 13.0** | **-0.2** |
| **PVRL** | **Vila Real** | **5.86** | **18** | *e*Sn | **Sn** | **07 32 18.2** | **-2.5** |
| PVRL | | | | A | A | 07 32 22.0 | |
| | comp=N,14nm,0.5s | | | | | | |
| **POLO** | **Lamas de Olo** | **5.93** | **17** | *e*Pn | **Pn** | **07 31 17.0** | **+1.1** |
| POLO | | | | *e*Sn | **Sn** | **07 32 19.5** | **-3.1** |
| POLO | | | | A | A | 07 32 22.9 | |
| | comp=N,2.1nm,0.4s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TZRR** | **Tazzarine** | **6.20** | **141** | P | | **Pn** | **07 31 20.7** | **+1.1** |
| TZRR | | | | S | | **Sn** | **07 32 28.8** | **-0.6** |
| **TAF** | **Taforalt** | **6.34** | **96** | P | | **Pn** | **07 31 24.1** | **+2.6** |
| TAF | | | | S | | **Sn** | **07 32 30.9** | **-1.9** |
| **PGAV** | **Gavieira, Arco** | **6.40** | **12** | *e*Pn | | **Pn** | **07 31 23.2** | **+0.9** |
| **PBRG** | **Braganca** | **6.62** | **22** | *e*Sn | | **Sn** | **07 32 36.7** | **-2.8** |
| PBRG | | | | A | | A | 07 32 38.2 | |
| | comp=N,3.3nm,0.1s | | | | | | | |

**DJA 15 07:44:41.3±1.0, 1°.S±4°×122°.1E±°, h10km±7km, M3.9/10, mb4.2/2, MLv3.7/10, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APSI** | **Ampana** | **0.81** | **83** | P | Pg | 07 44 57.0 | +0.2 |
| **MPSI** | **Mapaga** | **1.64** | **325** | P | Pn | 07 45 07.5 | -2.8 |
| **MRSI** | **Marisa** | **1.84** | **36** | P | Pn | 07 45 12.5 | -0.4 |
| MRSI | | | | S | Sn | 07 45 36.7 | +0.5 |
| **TTSI** | **Tana Toraja** | **2.27** | **207** | P | Pn | 07 45 19.0 | +0.1 |
| **GTOI** | **Gorontalo** | **2.71** | **53** | P | Pn | 07 45 25.1 | +0.2 |
| **SPSI** | **Sidrap Palu** | **3.13** | **200** | P | Pn | 07 45 31.0 | +0.3 |
| **BNSI** | **Bone** | **3.45** | **192** | P | Pn | 07 45 35.8 | +0.7 |
| **BKSI** | **Bulukumba** | **4.34** | **190** | P | Pn | 07 45 47.5 | +0.1 |
| **BSSI** | **Bau Bau, Buton** | **5.11** | **184** | P | Pn | 07 45 56.9 | -1.1 |
| | 0.1nm28nm,1.0s | | | | | | |

**IDC 15 07:45:18.3±2.6, 54°.32N×85°.96E, h0km, mb1 2.7/1, mb1mx2.6/45, mbtmp2.7/1, ML2.6/2, Error ellipse: s-maj=19.1km s-min=10.8km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.77** | **241** | *i* | | 07 49 53.2 | |
| | baz=60,slow=339,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.77** | **241** | Pg | Pg | 07 45 31.7 | -1.3 |
| | 0.6nm,0.3s,baz=59,slow=18,SNR=5.8 | | | | | | |
| ZALV | | | | Lg | Lg | 07 45 44.1 | |
| | 4.6nm,0.3s,baz=60,slow=29,SNR=29 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.86** | **234** | Pn | Pn | 07 46 48.0 | +1.7 |
| | 0.1nm,0.3s,baz=49,slow=13,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.89** | **199** | Pn | Pn | 07 47 14.7 | +0.5 |
| | 0.1nm,0.3s,baz=22,slow=13,SNR=7.3 | | | | | | |

*ARE **15** 07:46:00.9±2.2, 11°.7S±0°.2×77°.8W±0°.2, h46km±9km, Error ellipse: s-maj=0.0km s-min=0.0km az=125.0*
*IDC **15** 07:46:16.0±2.6, 12°.04S×77°.51W, h46km±20km, mb3.3/6, mb1 3.6/8, mb1mx3.5/32, mbtmp3.6/8, ML3.3/2, MS2.9/4, Ms1 3.0/4, ms1mx2.7/23, Error ellipse: s-maj=41.2km s-min=15.0km az=46.0*
*NEIC **15** 07:46:16.1±0.9, 12°.12S±0°.09×77°.57W±0°.04, h42km±12km, mb3.9/6, ML4.0(ARE), Error ellipse: s-maj=14.5km s-min=2.5km az=200.0*
**ISC 15 07:46:16.2±1.0, 12°.1S±0°.1×77°.53W±0°.1, h51km, n33, σ0§91/25, mb3.6/6, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNA** | **Nana** | **0.68** | **82** | P | **Pn** | **07 46 29.7** | **-0.1** |
| | 668nm,0.3s,baz=254,slow=9.3,SNR=2966 | | | | | | |
| NNA | | | | S | **Sn** | **07 46 40.2** | **+0.6** |
| | 3µm,0.3s,baz=156,slow=20,SNR=103 | | | | | | |
| NNA | | | | LR | LR | 07 46 56.3 | |
| | comp=Z,427nm,18.0s,baz=250,slow=61 | | | | | | |
| **NNA** | **Nana** | **0.68** | **82** | Pn | **Pn** | **07 46 29.9** | **+0.1** |
| NNA | | | | Sn | **Sn** | **07 46 39.9** | **+0.2** |
| **ATAH** | **Atahualpa** | **4.99** | **350** | P | **Pn** | **07 47 29.9** | **+0.9** |
| | 6.1nm,0.3s,baz=162,slow=9.6,SNR=135 | | | | | | |
| ATAH | | | | S | **Sn** | **07 48 24.7** | **-0.8** |
| | 1.8nm,0.3s,baz=100,slow=11,SNR=1.6 | | | | | | |
| **PB12** | **IPOC Station P** | **9.51** | **134** | Pn | **Pn** | **07 48 30.1** | **-0.6** |
| **PB16** | **IPOC Station P** | **9.93** | **130** | Pn | **Pn** | **07 48 36.8** | **-0.1** |
| **LPAZ** | **La Paz** | **10.03** | **116** | P | **Pn** | **07 48 36.8** | **-1.5** |
| | 0.0nm,0.3s,baz=270,slow=17,SNR=2.6 | | | | | | |
| LPAZ | | | | LR | LR | 07 53 11.5 | |
| | comp=Z,60nm,20.7s,baz=283,slow=41 | | | | | | |
| **LPAZ** | **La Paz** | **10.03** | **116** | Pn | **Pn** | **07 48 37.9** | **-0.3** |
| **PB11** | **IPOC Station P** | **10.75** | **136** | Pn | **Pn** | **07 48 46.8** | **-0.9** |
| **GO01** | **Chusmiza** | **11.01** | **134** | Pn | **Pn** | **07 48 52.8** | **+1.3** |
| **PB08** | **IPOC Station P** | **11.36** | **136** | Pn | **Pn** | **07 48 55.0** | **-1.2** |
| **OTAV** | **Otavalo** | **12.27** | **356** | Pn | **Pn** | **07 49 09.7** | **+0.9** |
| **LVC** | **Limon Verde** | **13.31** | **143** | LR | LR | 07 54 25.2 | |
| | comp=Z,29nm,18.7s,baz=274,slow=37 | | | | | | |
| **SIV** | **San Ignacio** | **16.43** | **106** | LR | LR | 07 57 37.4 | |
| | comp=Z,42nm,21.4s,baz=280,slow=42 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **19.62** | **8** | P | **P** | **07 50 40.5** | **-0.2** |
| ZARC | | | | IAmb | IAmb | 07 51 06.5 | |
| | comp=Z,5.9nm,1.3s | | | | | | |
| **PTGA** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GYA | | | | Sg | **Sb** | **08 00 34.8** | **+2.1** |
| GYA | | | | smax | smax | | |
| | comp=N,620nm,1.2s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,210nm,1.0s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=N,1μm,3.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,680nm,3.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,360nm,3.4s | | | | | | |
| **CD2** | **Chengdu** | **3.65** | **2** | Pn | **Pn** | **08 00 07.0** | **+3.0** |
| CD2 | | | | Pg | **Pg** | **08 00 17.6** | **+0.2** |
| CD2 | | | | Sn | **Sb** | **08 00 52.8** | **-3.7** |
| CD2 | | | | Sg | **Sg** | **08 01 07.3** | **+2.5** |
| CD2 | | | | smax | smax | | |
| | comp=N,60nm,1.0s | | | | | | |
| CD2 | | | | smax | smax | | |
| | comp=E,740nm,0.9s | | | | | | |
| **ENH** | **Enshi** | **5.97** | **58** | | **Pn** | **08 00 33.6** | **-2.2** |
| **XAN** | **Xi'an** | **8.16** | **33** | Pn | **Pn** | **08 01 08.0** | **+2.0** |
| XAN | | | | Pg | **Pg** | **08 01 43.3** | **-0.4** |
| XAN | | | | Sn | **Sn** | **08 02 36.3** | **-2.1** |
| XAN | | | | Sg | **Sg** | **08 03 35.1** | **+5.7** |
| XAN | | | | smax | smax | | |
| | comp=N,130nm,1.1s | | | | | | |
| XAN | | | | smax | smax | | |
| | comp=E,110nm,1.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,690nm,10.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,410nm,10.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,400nm,13.4s | | | | | | |
| **LZH** | **Lanzhou** | **8.82** | **1** | *e*P | **Pn** | **08 01 18.0** | **+3.0** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,290nm,9.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,810nm,9.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,260nm,9.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **9.75** | **207** | Pn | **Pn** | **08 01 29.6** | **+1.8** |
| | comp=Z,0.9nm,0.3s,baz=18,slow=15,SNR=1.9 | | | | | | |
| CMAR | | | | LR | LR | 08 05 31.8 | |
| | comp=Z,89nm,19.5s,baz=25,slow=39 | | | | | | |
| **GTA** | **Gaotai** | **12.54** | **346** | *e*P | **Pn** | **08 02 06.3** | **+0.3** |
| GTA | | | | pP | | 08 02 10.6 | |
| GTA | | | | sP | | 08 02 13.5 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **KNMB** | **Chin-men Tao** | **13.58** | **98** | Pn | **Pn** | **08 02 19.3** | **-0.8** |
| **SONM** | **Songino Array** | **20.67** | **5** | P | **P** | **08 03 44.7** | **-2.7** |
| | comp=Z,0.9nm,0.6s,baz=188,slow=11,SNR=5.6 | | | | | | |
| **WMQ** | **Urumqi** | **20.95** | **326** | *e*P | **P** | **08 03 51.6** | **+1.1** |
| **KSRS** | **Korea Array** | **22.86** | **57** | P | **P** | **08 04 07.8** | **-3.1** |
| | comp=Z,1.4nm,0.6s,baz=236,slow=18,SNR=1.8 | | | | | | |
| KSRS | | | | LR | LR | 08 12 53.3 | |
| | comp=Z,34nm,19.4s,baz=220,slow=36 | | | | | | |
| **MK31** | **Makanchi Array** | **25.76** | **325** | P | **P** | **08 04 38.6** | **+0.4** |
| **MKAR** | **Makanchi Array** | **25.76** | **325** | P | **P** | **08 04 36.9** | **-1.3** |
| | comp=Z,0.6nm,0.8s,baz=133,slow=11,SNR=6.4 | | | | | | |
| **KSH** | **Kashi** | **26.02** | **305** | *e*P | P | 08 04 50.8 | +10 |
| **PALK** | **Pallekele** | **29.45** | **232** | LR | LR | 08 17 56.9 | |
| | comp=Z,28nm,19.3s,baz=183,slow=38 | | | | | | |
| **ABKAR** | **Akbulak array** | **40.02** | **315** | P | **P** | **08 06 41.8** | **-0.5** |
| **TIXI** | **Tiksi** | **46.61** | **11** | P | **P** | **08 07 34.1** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **47.30** | **42** | LR | LR | 08 29 00.3 | |
| | comp=Z,44nm,18.2s,baz=111,slow=38 | | | | | | |
| **WB0** | **Warramunga Arr** | **55.43** | **144** | P | **P** | **08 08 42.2** | **-0.1** |
| WB0 | | | | lAmb | lAmb | 08 08 48.1 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.55** | **144** | P | **P** | **08 08 42.6** | **-0.5** |
| | comp=Z,0.9nm,0.6s,baz=334,slow=8.4,SNR=14 | | | | | | |
| **WB2** | **Warramunga Arr** | **55.56** | **144** | P | **P** | **08 08 43.3** | **+0.1** |
| **WR0** | **Warramunga Arr** | **55.67** | **144** | P | **P** | **08 08 43.6** | **-0.4** |
| WR0 | | | | lAmb | lAmb | 08 09 05.0 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **58.45** | **147** | P | **P** | **08 09 03.6** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=329,slow=6.4,SNR=7.6 | | | | | | |
| **FINES** | **FINESS Array B** | **60.55** | **327** | P | P | 08 09 16.3 | -1.4 |
| | comp=Z,1.0nm,0.7s,baz=123,slow=7.0,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **60.61** | **337** | P | **P** | **08 09 17.0** | **-1.0** |
| | comp=Z,1.7nm,0.8s,baz=95,slow=8.2,SNR=1.4 | | | | | | |
| **IMAR** | **Indian Mountai** | **70.38** | **25** | P | **P** | **08 10 20.6** | **-0.6** |
| **TOLK** | **Toolik Lake Re** | **70.77** | **22** | P | **P** | **08 10 23.6** | **+0.1** |
| TOLK | | | | lAmb | lAmb | 08 10 45.9 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **70.86** | **25** | P | **P** | **08 10 23.7** | **-0.4** |
| **J20K** | **Nowinta River** | **70.93** | **27** | P | **P** | **08 10 26.1** | **+1.5** |
| J20K | | | | lAmb | lAmb | 08 10 28.9 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **71.16** | **23** | P | **P** | **08 10 27.1** | **+1.2** |
| COLD | | | | lAmb | lAmb | 08 10 44.7 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **L19K** | **White Mountain** | **71.42** | **29** | P | **P** | **08 10 28.9** | **+1.3** |
| L19K | | | | lAmb | lAmb | 08 10 31.2 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **MLY** | **Manley** | **71.91** | **25** | P | **P** | **08 10 31.2** | **+0.7** |
| MLY | | | | lAmb | lAmb | 08 10 54.5 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| **H23K** | **Yukon River** | **72.01** | **24** | P | **P** | **08 10 31.7** | **+0.6** |
| H23K | | | | lAmb | lAmb | 08 10 34.3 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **PPLA** | **Purkeypile** | **72.25** | **28** | P | **P** | **08 10 33.4** | **+0.7** |
| **H24K** | **Noodor Dome** | **72.62** | **24** | P | **P** | **08 10 35.1** | **+0.3** |
| **MDM** | **Murphy Dome** | **72.90** | **25** | P | **P** | **08 10 37.2** | **+0.8** |
| MDM | | | | lAmb | lAmb | 08 10 37.4 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **73.00** | **22** | P | **P** | **08 10 37.6** | **+0.6** |
| **MCK** | **McKinley** | **73.20** | **26** | P | **P** | **08 10 38.1** | **0.0** |
| MCK | | | | lAmb | lAmb | 08 11 06.7 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **73.49** | **25** | P | **P** | **08 10 38.8** | **-1.1** |
| | comp=Z,0.5nm,0.9s,baz=273,slow=3.9,SNR=4.7 | | | | | | |
| **SCRK** | **Sand Creek** | **74.98** | **25** | P | **P** | **08 10 48.2** | **-0.6** |
| **YKA** | **Yellowknife Ar** | **85.49** | **17** | P | **P** | **08 11 44.6** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=327,slow=4.8,SNR=6.7 | | | | | | |

*IDC **15** 08:01:33.0±1.1,23.00N×121.29E,h0km,mb3.4/6, mb1 3.7/6,mb1mx3.5/42,mbtmp3.4/6,Error ellipse: s-maj=54.3km s-min=23.2km az=68.0*

*TAP **15** 08:01:33.0,23.00N×120.87E,h5km,ML3.9,C*

**ISC 15 08:01:33.5±0.8,22.98N±0.01×120.93E±0.01,h10km±6km, n120,σ1ş42/206,mb3.4/6,15C-4D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LONT** | **Longtian** | **0.20** | **112** | P | Pg | 08 01 39.0 | +1.2 |
| | baz=111 | | | | | | |
| LONT | | | | S | **Sg** | **08 01 42.9** | **+2.2** |
| | baz=111 | | | | | | |
| **TWG** | **Pinlang** | **0.21** | **140** | ⇓*i*P | **Pg** | **08 01 39.2** | **+1.2** |
| | baz=133 | | | | | | |
| TWG | | | | *i* S | **Sg** | **08 01 43.0** | **+2.1** |
| | baz=133 | | | | | | |
| **TWGBT** | **Beinan** | **0.22** | **139** | ⇓*i*P | **Pg** | **08 01 39.2** | **+1.1** |
| | baz=133 | | | | | | |
| TWGBT | | | | *i* S | **Sg** | **08 01 43.0** | **+1.9** |
| | baz=133 | | | | | | |
| **ELDTW** | **Lidau** | **0.22** | **22** | ⇑*i*P | **Pg** | **08 01 37.9** | **-0.3** |
| | baz=49 | | | | | | |
| ELDTW | | | | *i* S | **Sg** | **08 01 40.9** | **-0.4** |
| | baz=49 | | | | | | |
| **STYH** | **Taoyuan** | **0.23** | **324** | *i* P | **Pg** | **08 01 37.4** | **-0.9** |
| | baz=334 | | | | | | |
| STYH | | | | *i* S | **Sg** | **08 01 40.1** | **-1.4** |
| | baz=334 | | | | | | |
| **SLGT** | **Liugui** | **0.26** | **272** | ⇑*i*P | **Pg** | **08 01 36.8** | **-2.0** |
| | baz=268 | | | | | | |
| SLGT | | | | *i* S | **Sg** | **08 01 39.9** | **-2.4** |
| | baz=268 | | | | | | |
| **ECS** | **Chishang** | **0.29** | **68** | *i* P | **Pg** | **08 01 40.7** | **+1.3** |
| | baz=74 | | | | | | |
| ECS | | | | S | **Sg** | **08 01 45.6** | **+2.2** |
| | baz=74 | | | | | | |
| **TTN** | **Taitung** | **0.31** | **138** | P | Pg | 08 01 41.6 | +1.9 |
| | baz=133 | | | | | | |
| TTN | | | | S | **Sg** | **08 01 47.6** | **+3.8** |
| | baz=133 | | | | | | |
| **SGST** | **Jiashian** | **0.33** | **287** | ⇑*i*P | **Pg** | **08 01 38.6** | **-1.6** |
| | baz=293 | | | | | | |
| SGST | | | | *i* S | **Sg** | **08 01 42.9** | **-1.6** |
| | baz=293 | | | | | | |
| **EDH** | **Donghe** | **0.35** | **92** | P | **Pn** | **08 01 42.2** | **-2.4** |
| | baz=94 | | | | | | |
| EDH | | | | S | **Sb** | **08 01 48.5** | **+1.0** |
| | baz=94 | | | | | | |
| **SSD** | **Sandimen** | **0.36** | **229** | ⇑*i*P | **Pg** | **08 01 39.9** | **-0.8** |
| | baz=219 | | | | | | |
| SSD | | | | *i* S | **Sg** | **08 01 44.0** | **-1.4** |
| | baz=219 | | | | | | |
| **TSMG** | **Majia** | **0.38** | **223** | ⇑*i*P | **Pg** | **08 01 40.4** | **-0.6** |
| | baz=214 | | | | | | |
| TSMG | | | | *i* S | **Sg** | **08 01 44.7** | **-1.4** |
| | baz=214 | | | | | | |
| **ECL** | **Taimali** | **0.39** | **176** | P | **Pb** | **08 01 41.6** | **-0.9** |
| | baz=167 | | | | | | |
| ECL | | | | S | **Sb** | **08 01 47.2** | **-1.3** |
| | baz=167 | | | | | | |
| **WTP** | **Ta-pu** | **0.39** | **312** | ⇓*i*P | **Pg** | **08 01 40.8** | **-0.4** |
| | baz=318 | | | | | | |
| WTP | | | | S | **Sg** | **08 01 46.2** | **-0.2** |
| | baz=318 | | | | | | |
| **FULB** | **Fuli** | **0.40** | **58** | ⇑*i*P | **Pn** | **08 01 42.6** | **-2.9** |
| | baz=64 | | | | | | |
| FULB | | | | S | **Sb** | **08 01 49.3** | **+0.3** |
| | baz=64 | | | | | | |
| **SCST** | **Cishan** | **0.41** | **256** | *e*P | **Pg** | **08 01 41.6** | **0.0** |
| | baz=239 | | | | | | |
| SCST | | | | *e*S | **Sg** | **08 01 47.9** | **+0.9** |
| | baz=239 | | | | | | |
| **CHN1** | **Nanshi** | **0.42** | **299** | ⇓*i*P | **Pg** | **08 01 41.5** | **-0.3** |
| | baz=309 | | | | | | |
| CHN1 | | | | S | **Sg** | **08 01 47.4** | **+0.1** |
| | baz=309 | | | | | | |
| **TPUB** | **Ta-pu** | **0.42** | **319** | P | **Pg** | **08 01 41.4** | **-0.4** |
| | baz=324 | | | | | | |
| TPUB | | | | S | **Sg** | **08 01 47.0** | **-0.3** |
| | baz=324 | | | | | | |
| **CHKT** | **Chengkung** | **0.42** | **74** | ⇑*i*P | **Pn** | **08 01 43.6** | **-2.0** |
| | baz=79 | | | | | | |
| CHKT | | | | S | **Sb** | **08 01 51.0** | **+1.5** |
| | baz=79 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.46** | **216** | P | **Pb** | **08 01 41.9** | **-1.8** |
| | baz=208 | | | | | | |
| MASBT | | | | S | **Sg** | **08 01 47.7** | **-0.8** |
| | baz=208 | | | | | | |
| **SNST** | **Tainan City** | **0.46** | **301** | *e*P | **Pg** | **08 01 42.7** | **+0.2** |
| | baz=307 | | | | | | |
| SNST | | | | *e*S | **Sg** | **08 01 49.4** | **+0.8** |
| | baz=307 | | | | | | |
| **SGLT** | **Jiouru** | **0.48** | **237** | P | **Pb** | **08 01 43.1** | **-0.9** |
| | baz=223 | | | | | | |
| SGLT | | | | *e*S | **Sb** | **08 01 50.6** | **-0.5** |
| | baz=223 | | | | | | |
| **CHN4** | **Tsaushan** | **0.48** | **320** | P | **Pg** | **08 01 42.9** | **0.0** |
| | baz=335 | | | | | | |
| CHN4 | | | | S | **Sg** | **08 01 50.2** | **+1.0** |
| | baz=335 | | | | | | |
| **TWM1** | **Shoushan** | **0.49** | **251** | ⇑*i*P | **Pb** | **08 01 43.5** | **-0.7** |
| | baz=246 | | | | | | |
| **TWK** | **Hsinying** | **0.49** | **305** | ⇑*i*P | **Pg** | **08 01 43.2** | **+0.1** |
| | baz=316 | | | | | | |
| TWK | | | | S | **Sg** | **08 01 50.9** | **+1.2** |
| | baz=316 | | | | | | |
| **YUS** | **Yu-Shan** | **0.50** | **3** | ⇑*i*P | **Pb** | **08 01 42.8** | **-2.0** |
| | baz=20 | | | | | | |
| YUS | | | | *e*S | **Sg** | **08 01 49.3** | **-0.9** |
| | baz=20 | | | | | | |
| **EYUL** | **Yuli** | **0.51** | **45** | P | **Pn** | **08 01 43.8** | **-3.2** |
| | baz=51 | | | | | | |
| EYUL | | | | *e*S | **Sb** | **08 01 50.0** | **-2.2** |
| | baz=51 | | | | | | |
| **CHN3** | **Shinhua** | **0.52** | **280** | P | **Pb** | **08 01 45.3** | **+0.4** |
| | baz=279 | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **40** | ⇑*i*P | **Pb** | **08 01 43.7** | **-1.4** |
| | baz=54 | | | | | | |
| YULB | | | | *e*S | **Sb** | **08 01 50.1** | **-2.6** |
| | baz=54 | | | | | | |
| **SHHT** | **Tainan City** | **0.53** | **274** | P | **Pn** | **08 01 45.8** | **-1.4** |
| | baz=273 | | | | | | |
| SHHT | | | | S | **Sb** | **08 01 55.4** | **+2.6** |
| | baz=273 | | | | | | |
| **ALS** | **Alishan** | **0.54** | **348** | ⇑*i*P | **Pg** | **08 01 43.5** | **-0.6** |
| | baz=355 | | | | | | |
| ALS | | | | *i* S | **Sg** | **08 01 51.7** | **+0.5** |
| | baz=355 | | | | | | |
| **ECBN** | **Changbin** | **0.59** | **55** | *i* P | **Pn** | **08 01 46.7** | **-1.2** |
| | baz=60 | | | | | | |
| **LDUT** | **Ludao** | **0.59** | **121** | P | **Pn** | **08 01 46.5** | **-1.5** |
| | baz=120 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **08 01 56.5** | **-1.1** |
| | baz=120 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.59** | **247** | *e*P | **Pn** | **08 01 47.3** | **-0.7** |
| | baz=232 | | | | | | |
| **SSPT** | **Xinbi** | **0.60** | **214** | ⇑*i*P | **Pb** | **08 01 45.3** | **-0.8** |
| | baz=205 | | | | | | |
| SSPT | | | | *e*S | **Sb** | **08 01 53.7** | **-0.8** |
| | baz=205 | | | | | | |
| **EAST** | **Anshuo** | **0.60** | **187** | *i* P | **Pn** | **08 01 45.6** | **-2.6** |
| | baz=170 | | | | | | |
| EAST | | | | *e*S | **Sb** | **08 01 54.1** | **-0.7** |
| | baz=170 | | | | | | |
| **TAW** | **Tawu** | **0.62** | **182** | *e*P | **Pn** | **08 01 45.6** | **-2.8** |
| | baz=176 | | | | | | |
| TAW | | | | *e*S | **Sb** | **08 01 54.1** | **-1.3** |
| | baz=176 | | | | | | |
| **EHY** | **Hungye** | **0.64** | **35** | *e*P | **Pb** | **08 01 45.4** | **-1.4** |
| | baz=41 | | | | | | |
| **TAWH** | **Dawu Township** | **0.64** | **183** | *e*P | **Pn** | **08 01 46.1** | **-2.6** |
| | baz=177 | | | | | | |
| TAWH | | | | *e*S | **Sb** | **08 01 54.6** | **-1.2** |
| | baz=177 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.65** | **275** | *e*P | **Pn** | **08 01 48.0** | **-0.7** |
| | baz=274 | | | | | | |
| TAI1 | | | | *e*S | **Sn** | **08 01 58.9** | **-0.1** |
| | baz=274 | | | | | | |
| **CHN5** | **Tsauling** | **0.65** | **340** | ⇑*i*P | **Pb** | **08 01 45.8** | **-1.3** |
| | baz=344 | | | | | | |
| CHN5 | | | | S | **Sb** | **08 01 55.9** | **-0.4** |
| | baz=344 | | | | | | |
| **SCZT** | **Fangliau** | **0.67** | **205** | ⇑*i*P | **Pb** | **08 01 46.2** | **-1.1** |
| | baz=189 | | | | | | |
| SCZT | | | | S | **Sg** | **08 01 54.4** | **-0.9** |
| | baz=189 | | | | | | |
| **HGSD** | **Ruisui** | **0.68** | **42** | P | **Pn** | **08 01 47.3** | **-2.0** |
| | baz=40 | | | | | | |
| HGSD | | | | S | **Sn** | **08 01 57.9** | **-2.1** |
| | baz=40 | | | | | | |
| **CHN2** | **Minshiung** | **0.69** | **323** | *e*P | **Pb** | **08 01 47.3** | **-0.3** |
| | baz=326 | | | | | | |
| CHN2 | | | | *e*S | **Sb** | **08 01 57.6** | **+0.4** |
| | baz=326 | | | | | | |
| **CHY** | **Chiayi** | **0.69** | **318** | *e*P | **Pb** | **08 01 47.1** | **-0.6** |
| | baz=322 | | | | | | |
| CHY | | | | *e*S | **Sb** | **08 01 57.5** | **+0.3** |
| | baz=322 | | | | | | |
| **ICHU** | **Yijhu** | **0.70** | **302** | *e*P | **Pb** | **08 01 47.6** | **-0.3** |
| | baz=304 | | | | | | |
| ICHU | | | | *e*S | **Sb** | **08 01 58.3** | **+0.7** |
| | baz=304 | | | | | | |
| **KAU** | **Kaohsiung** | **0.70** | **234** | *e*P | **Pn** | **08 01 49.8** | **+0.3** |
| | baz=220 | | | | | | |
| **CHN8** | **Yiju** | **0.75** | **299** | *e*P | **Pg** | **08 01 48.0** | **0.0** |
| | baz=316 | | | | | | |
| CHN8 | | | | *e*S | **Sb** | **08 02 01.2** | **+2.2** |
| | baz=316 | | | | | | |
| **SLIU** | **Shizi** | **0.77** | **189** | *e*P | **Pn** | **08 01 48.5** | **-2.0** |
| | baz=184 | | | | | | |
| **WGK** | **Gukeng** | **0.78** | **335** | *e*S | **Sb** | **08 02 01.2** | **+1.4** |
| | baz=339 | | | | | | |
| **WDLH** | **Douliu** | **0.79** | **333** | P | **Pb** | **08 01 49.3** | **0.0** |
| | baz=337 | | | | | | |
| WDLH | | | | S | **Sb** | **08 02 01.2** | **+1.1** |
| | baz=337 | | | | | | |
| **SSLB** | **Suanglung** | **0.80** | **2** | P | **Pg** | **08 01 47.8** | **-1.2** |
| | baz=13 | | | | | | |
| SSLB | | | | S | **Sb** | **08 02 00.0** | **-0.5** |
| | baz=13 | | | | | | |
| **WLCH** | **Liuqiu** | **0.81** | **219** | *e*P | **Pn** | **08 01 52.1** | **+1.1** |
| | baz=212 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.84** | **310** | *e*P | **Pb** | **08 01 49.8** | **-0.4** |
| | baz=312 | | | | | | |
| WSL | | | | *e*S | **Sb** | **08 02 02.8** | **+1.3** |
| | baz=312 | | | | | | |
| **WJS** | **Zhushan** | **0.85** | **348** | *e*P | **Pn** | **08 01 50.4** | **-1.3** |
| | baz=4.0 | | | | | | |
| WJS | | | | *e*S | **Sn** | **08 02 04.0** | **-0.2** |
| | baz=4.0 | | | | | | |
| **WTK** | **Tuku** | **0.86** | **325** | *e*P | **Pb** | **08 01 50.1** | **-0.4** |
| | baz=328 | | | | | | |
| WTK | | | | *e*S | **Sb** | **08 02 02.7** | **+0.6** |
| | baz=328 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.90** | **359** | P | **Pb** | **08 01 50.2** | **-1.1** |
| | baz=14 | | | | | | |
| SMLT | | | | S | **Sn** | **08 02 05.0** | **-0.4** |
| | baz=14 | | | | | | |
| **WNT** | **Mingjian** | **0.92** | **346** | *e*P | **Pn** | **08 01 51.6** | **-0.9** |
| | baz=351 | | | | | | |
| **TYC** | **Yuchr** | **0.92** | **356** | P | **Pb** | **08 01 50.9** | **-0.7** |
| | baz=8.0 | | | | | | |
| TYC | | | | S | **Sn** | **08 02 05.4** | **-0.4** |
| | baz=8.0 | | | | | | |
| **ESL** | **Shilin** | **0.95** | **29** | P | **Pn** | **08 01 51.1** | **-1.9** |
| | baz=41 | | | | | | |
| ESL | | | | *e*S | **Sn** | **08 02 05.0** | **-1.6** |
| | baz=41 | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.96** | **185** | *e*P | **Pn** | **08 01 53.5** | **+0.4** |
| | baz=191 | | | | | | |
| **HEN** | **Hengchun** | **0.99** | **190** | *e*P | **Pn** | **08 01 54.4** | **+0.9** |
| | baz=186 | | | | | | |
| **WUSB** | **Renai** | **1.02** | **10** | *e*P | **Pg** | **08 01 51.5** | **-1.7** |
| | baz=14 | | | | | | |
| **TWK1** | **Hengchun** | **1.04** | **186** | *e*P | **Pn** | **08 01 54.3** | **+0.1** |
| | baz=182 | | | | | | |
| **TWKBT** | **Hengchun** | **1.04** | **186** | *e*P | **Pn** | **08 01 54.1** | **-0.1** |
| | baz=173 | | | | | | |
| TWKBT | | | | *e*S | **Sn** | **08 02 09.8** | **+1.0** |
| | baz=173 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.04** | **331** | *e*P | **Pg** | **08 01 53.0** | **-0.6** |
| | baz=335 | | | | | | |
| WRL | | | | *e*S | **Sb** | **08 02 07.7** | **+0.3** |
| | baz=335 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.07** | **359** | *e*P | **Pn** | **08 01 53.6** | **-1.0** |
| | baz=12 | | | | | | |
| WCS | | | | *e*S | **Sn** | **08 02 10.9** | **+1.3** |
| | baz=12 | | | | | | |
| **WWF** | **Wufeng** | **1.07** | **349** | P | **Pn** | **08 01 54.9** | **+0.2** |
| | baz=337 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.08** | **181** | *e*P | **Pn** | **08 01 54.0** | **-0.7** |
| | baz=180 | | | | | | |
| **CHGB** | **Renai** | **1.10** | **12** | *e*P | **Pg** | **08 01 53.0** | **-1.6** |
| | baz=16 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **08 02 11.4** | **+0.8** |
| | baz=16 | | | | | | |
| **LAY** | **Lan-yu** | **1.10** | **148** | *e*P | **Pn** | **08 01 53.5** | **-1.6** |
| | baz=146 | | | | | | |
| **ETM** | **Tongmen** | **1.11** | **28** | *i* P | **Pn** | **08 01 54.7** | **-0.5** |
| | baz=37 | | | | | | |
| **WCHH** | **Zhanghua** | **1.14** | **343** | *e*P | **Pn** | **08 01 55.2** | **-0.4** |
| | baz=346 | | | | | | |
| WCHH | | | | *e*S | **Sn** | **08 02 12.0** | **+0.7** |
| | baz=346 | | | | | | |
| **LYUB** | **Lan-yu** | **1.15** | **148** | *e*P | **Pn** | **08 01 52.9** | **-2.9** |
| | baz=146 | | | | | | |
| **TCU** | **Taichung** | **1.18** | **349** | *e*P | **Pn** | **08 01 56.5** | **+0.4** |
| | baz=339 | | | | | | |
| TCU | | | | *e*S | **Sn** | **08 02 13.7** | **+1.4** |
| | baz=339 | | | | | | |
| **WDGT** | **Dungji** | **1.20** | **284** | *e*P | **Pn** | **08 01 55.4** | **-1.0** |
| | baz=284 | | | | | | |
| WDGT | | | | *e*S | **Sb** | **08 02 10.8** | **-1.0** |
| | baz=284 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **15** | *e*P | **Pn** | **08 01 55.6** | **-1.1** |
| | baz=19 | | | | | | |
| WHF | | | | *e*S | **Sn** | **08 02 15.5** | **+2.1** |
| | baz=19 | | | | | | |
| **TWD** | **Chiawan** | **1.25** | **29** | *e*P | **Pg** | **08 01 57.5** | **-0.1** |
| | baz=23 | | | | | | |
| TWD | | | | *e*S | **Sn** | **08 02 15.2** | **+1.1** |
| | baz=23 | | | | | | |
| **TDCB** | **Techi** | **1.28** | **10** | *e*P | **Pg** | **08 01 57.6** | **-0.6** |
| | baz=13 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **08 02 16.7** | **+1.7** |
| | baz=13 | | | | | | |
| **WHP** | **Taichung City** | **1.29** | **1** | *e*P | **Pg** | **08 01 58.1** | **-0.3** |
| | baz=13 | | | | | | |
| WHP | | | | *e*S | **Sn** | **08 02 17.5** | **+2.4** |
| | baz=13 | | | | | | |
| **FUSS** | **Fushou** | **1.29** | **13** | P | **Pb** | **08 01 56.5** | **-1.6** |
| | baz=16 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **08 02 18.8** | **+3.4** |
| | baz=16 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.32** | **23** | *e*P | **Pg** | **08 01 57.6** | **-1.3** |
| | baz=38 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **08 02 18.6** | **+2.8** |
| | baz=38 | | | | | | |
| **NACB** | **Ninganchiao** | **1.33** | **27** | *e*P | **Pg** | **08 01 57.6** | **-1.6** |
| | baz=47 | | | | | | |
| NACB | | | | *e*S | **Sn** | **08 02 16.4** | **+0.2** |
| | baz=47 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.35** | **293** | *e*P | **Pn** | **08 01 56.7** | **-1.7** |
| | baz=294 | | | | | | |
| PHUB | | | | *e*S | **Sn** | **08 02 14.4** | **-2.1** |
| | baz=294 | | | | | | |
| **TWQ1** | **Liyutan** | **1.37** | **354** | *e*P | **Pg** | **08 01 59.6** | **-0.1** |
| | baz=359 | | | | | | |
| TWQ1 | | | | *e*S | **Sg** | **08 02 19.5** | **+2.0** |
| | baz=359 | | | | | | |
| **WDJ** | **Dajia District** | **1.38** | **349** | *e*P | **Pg** | **08 01 59.7** | **-0.4** |
| | baz=341 | | | | | | |
| WDJ | | | | *e*S | **Sg** | **08 02 20.3** | **+2.2** |
| | baz=341 | | | | | | |
| **PNG** | **Penghu** | **1.39** | **295** | *e*P | **Pn** | **08 01 57.7** | **-1.3** |
| | baz=296 | | | | | | |
| PNG | | | | *e*S | **Sn** | **08 02 15.7** | **-1.6** |
| | baz=296 | | | | | | |
| **NSY** | **Sanyi** | **1.43** | **354** | P | **Pg** | **08 02 00.9** | **-0.2** |
| | baz=358 | | | | | | |
| NSY | | | | S | **Sg** | **08 02 21.9** | **+2.2** |
| | baz=358 | | | | | | |
| **NNSB** | **Datong** | **1.50** | **16** | *e*P | **Pg** | **08 02 01.0** | **-1.4** |
| | baz=19 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **08 02 22.8** | **+1.0** |
| | baz=19 | | | | | | |
| **NNS** | **Nan Shan** | **1.51** | **16** | *e*P | **Pg** | **08 02 01.2** | **-1.3** |
| | baz=21 | | | | | | |
| **NMLH** | **Miaoli** | **1.55** | **355** | *e*P | **Pg** | **08 02 03.0** | **-0.4** |
| | baz=339 | | | | | | |
| **ENA** | **Nanau** | **1.62** | **27** | *e*P | **Pg** | **08 02 03.4** | **-1.2** |
| | baz=46 | | | | | | |
| **LATG** | **Datong** | **1.64** | **20** | P | **Pg** | **08 02 03.2** | **-1.8** |
| | baz=22 | | | | | | |
| LATG | | | | S | **Sg** | **08 02 27.6** | **+1.3** |
| | baz=22 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.65** | **6** | *e*P | **Pg** | **08 02 04.4** | **-0.8** |
| | baz=8.0 | | | | | | |
| NFF | | | | S | **Sg** | **08 02 28.1** | **+1.4** |
| | baz=8.0 | | | | | | |
| **EWUT** | **Wuta** | **1.65** | **28** | *e*P | **Pg** | **08 02 03.8** | **-1.5** |
| | baz=30 | | | | | | |
| EWUT | | | | *e*S | **Sg** | **08 02 27.1** | **+0.4** |
| | baz=30 | | | | | | |
| **LIOB** | **Emei** | **1.66** | **3** | *e*P | **Pg** | **08 02 05.0** | **-0.3** |
| | baz=6.0 | | | | | | |
| LIOB | | | | *e*S | **Sg** | **08 02 28.5** | **+1.6** |
| | baz=6.0 | | | | | | |
| **NDT** | **Datong Townshi** | **1.70** | **18** | *e*P | **Pg** | **08 02 04.9** | **-1.2** |
| | baz=21 | | | | | | |
| NDT | | | | *e*S | **Sg** | **08 02 31.0** | **+2.8** |
| | baz=21 | | | | | | |
| **YHNB** | **Yeheng** | **1.73** | **14** | P | **Pg** | **08 02 05.1** | **-1.7** |
| | baz=15 | | | | | | |
| YHNB | | | | S | **Sg** | **08 02 29.2** | **0.0** |
| | baz=15 | | | | | | |
| **NSK** | **Sanguang** | **1.73** | **13** | *e*P | **Pg** | **08 02 04.8** | **-1.9** |
| | baz=15 | | | | | | |
| NSK | | | | *e*S | **Sg** | **08 02 29.5** | **+0.2** |
| | baz=15 | | | | | | |
| **ENTT** | **Nioudou** | **1.75** | **19** | *e*P | **Pg** | **08 02 05.7** | **-1.4** |
| | baz=36 | | | | | | |
| ENTT | | | | *e*S | **Sg** | **08 02 30.9** | **+1.1** |
| | baz=36 | | | | | | |
| **NDS** | **Dongshan** | **1.80** | **24** | *e*P | **Pg** | **08 02 06.4** | **-1.6** |
| | baz=44 | | | | | | |
| NDS | | | | *e*S | **Sg** | **08 02 30.8** | **-0.6** |
| | baz=44 | | | | | | |
| **TWC** | **Suao** | **1.83** | **27** | P | **Pg** | **08 02 06.7** | **-1.9** |
| | baz=30 | | | | | | |
| TWC | | | | S | **Sg** | **08 02 32.0** | **-0.3** |
| | baz=30 | | | | | | |
| **TWE** | **Neicheng** | **1.86** | **21** | *e*P | **Pg** | **08 02 08.0** | **-1.2** |
| | baz=37 | | | | | | |
| TWE | | | | *e*S | **Sg** | **08 02 34.2** | **+0.9** |
| | baz=37 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FUSB** | **Fushanzhiwuyua** | **1.87** | **19** | *e*P | **Pg** | **08 02 08.8** | **-0.7** |
| | baz=20 | | | | | | | |
| FUSB | | | | *e*S | **Sg** | **08 02 33.7** | **0.0** |
| | baz=20 | | | | | | | |
| **NTC** | **Toucheng** | **2.04** | **24** | *e*P | **Pg** | **08 02 10.9** | **-1.7** |
| | baz=39 | | | | | | | |
| NTC | | | | *e*S | **Sg** | **08 02 39.3** | **+0.2** |
| | baz=39 | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.05** | **15** | *e*P | **Pg** | **08 02 11.0** | **-1.8** |
| | baz=17 | | | | | | | |
| NHDH | | | | *e*S | **Sg** | **08 02 39.9** | **+0.6** |
| | baz=17 | | | | | | | |
| **TWA** | **Mucha** | **2.08** | **17** | P | **Pg** | **08 02 11.9** | **-1.5** |
| | baz=18 | | | | | | | |
| TWA | | | | S | **Sg** | **08 02 40.7** | **+0.3** |
| | baz=18 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.14** | **22** | *e*P | **Pg** | **08 02 12.8** | **-1.9** |
| | baz=40 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.16** | **12** | *e*P | **Pg** | **08 02 13.8** | **-1.1** |
| | baz=13 | | | | | | | |
| TWS1 | | | | *e*S | **Sg** | **08 02 43.7** | **+0.8** |
| | baz=13 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.22** | **20** | *e*P | **Pg** | **08 02 14.0** | **-2.1** |
| | baz=35 | | | | | | | |
| NWF | | | | *e*S | **Sg** | **08 02 44.7** | **-0.3** |
| | baz=35 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.24** | **26** | *e*P | **Pg** | **08 02 13.6** | **-2.8** |
| | baz=42 | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.27** | **22** | *e*P | **Pg** | **08 02 14.2** | **-2.9** |
| | baz=40 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.63** | **321** | *e*P | **Pb** | **08 02 19.0** | **-1.8** |
| | baz=323 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.04** | **317** | P | **P** | **08 09 04.3** | **+3.8** |
| | 0.7nm,0.7s,baz=109,slow=9.5,SNR=6.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.13** | **328** | P | **P** | **08 09 18.4** | **+0.8** |
| | 0.7nm,0.5s,baz=124,slow=8.3,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63** | **162** | P | **P** | **08 09 45.6** | **-0.8** |
| | 0.6nm,0.7s,baz=344,slow=8.7,SNR=2.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.06** | **164** | P | **P** | **08 10 14.4** | **+1.1** |
| | 0.1nm,0.3s,baz=341,slow=7.0,SNR=4.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **70.39** | **27** | P | **P** | **08 12 48.9** | **+1.4** |
| | 0.1nm,0.6s,baz=270,slow=2.7,SNR=1.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.16** | **23** | P | **P** | **08 14 03.9** | **-0.9** |
| | 0.1nm,0.4s,baz=309,slow=4.9,SNR=2.4 | | | | | | | |

*IDC* ***15*** *08:12:11.7±2.0, 1°.44S×178°.25W, h514km±20km, mb3.1/10, mb1 3.5/11, mb1mx3.3/25, mbtmp4.0/11, Error ellipse: s-maj=38.0km s-min=15.9km az=149.0*

**ISC 15 08:12:14.6**±0.8, **18°.5S**±0°.2×**178°.3W**±0°.2, **h550**km, **n14**, σ0**°79**/14, **mb3.5**/10, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.56** | **282** | P | P | 08 13 27.7 | -5.7 |
| | 21nm,0.3s,baz=142,slow=6.9,SNR=61 | | | | | | |
| **STKA** | **Stephens Creek** | **38.46** | **242** | P | **P** | **08 18 50.4** | **+0.6** |
| | 0.9nm,0.3s,baz=85,slow=6.3,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **08 19 38.1** | **-0.7** |
| | 0.3nm,0.3s,baz=91,slow=7.7,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **44.75** | **255** | P | **P** | **08 19 39.6** | **0.0** |
| | 3.0nm,0.5s,baz=90,slow=8.3,SNR=69 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 21 09.7** | **-0.3** |
| | 0.3nm,0.6s,baz=100,slow=4.8,SNR=2.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.26** | **345** | P | **P** | **08 22 56.1** | **+0.5** |
| | 1.9nm,0.8s,baz=146,slow=9.2,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.76** | **44** | P | **P** | **08 23 26.1** | **0.0** |
| | 0.6nm,0.7s,baz=229,slow=8.2,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.21** | **58** | P | **P** | **08 23 59.3** | **+0.9** |
| | 1.1nm,0.7s,baz=219,slow=6.1,SNR=19 | | | | | | |
| **ILAR** | **Eielson Array** | **86.42** | **13** | P | **P** | **08 23 58.1** | **-0.4** |
| | 0.2nm,0.4s,baz=216,slow=4.8,SNR=5.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.69** | **43** | P | **P** | **08 24 04.7** | **-0.5** |
| | 0.1nm,0.3s,baz=263,slow=6.3,SNR=2.0 | | | | | | |
| **PLCA** | **Paso Flores** | **90.85** | **134** | P | **P** | **08 24 19.9** | **0.0** |
| | 2.0nm,0.9s,baz=245,slow=5.8,SNR=4.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.81** | **25** | P | **P** | **08 24 37.0** | **-0.2** |
| | 0.1nm,0.6s,baz=243,slow=4.8,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.90** | **350** | PKP | **PKPdf** | **08 30 15.7** | **+0.2** |
| | 3.6nm,1.0s,baz=321,slow=1.6,SNR=3.6 | | | | | | |
| **GERES** | **GERESS Array B** | **148.19** | **345** | PKPbc | **PKPbc** | **08 30 59.9** | **+1.0** |
| | 0.3nm,0.5s,baz=27,slow=4.6,SNR=2.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **158.32** | **12** | PKP | **PKPdf** | **08 31 07.5** | **-1.8** |
| | 0.3nm,0.3s,baz=49,slow=1.9,SNR=3.9 | | | | | | |

*IDC* ***15*** *08:12:28.0±1.8, 1°.66S×14°.75W, h0km, mb3.8/7, mb1 4.0/8, mb1mx3.7/36, mbtmp3.9/8, ML4.3/1, MS3.7/53, Ms1 3.7/53, ms1mx3.6/79, Error ellipse: s-maj=46.7km s-min=36.0km az=90.0*

*NEIC* ***15*** *08:12:30.9±2.6, 1°.36S±0°.07×15°.1W±0°.2, h10km±2km, mb4.4/4, Error ellipse: s-maj=33.0km s-min=11.5km az=270.0*

*GCMT* ***15*** *08:12:34.2±0.3, 1°.13S±0°.02×15°.20W±0°.02, h25km±1km, MW5.0/101, Moment Tensor Solution. s37,c44; s101,c134; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.35±.14; Mθθ 1.42±.12; Mϕϕ -1.07±.11; Mrθ 0.77±.27; Mθϕ -2.89±.09; Mϕr 1.48±.26; Best double couple: M₀3.55400×10¹⁶ NP1:ϕs261.00000°, δ70.00000°, λ-163.00000°. NP2:ϕs166.00000°, δ74.00000°, λ-21.00000°. Principal axes: T 3.3310, Plg3.0000°, Azm214.0000°; N 0.4440, Plg64.0000°, Azm310.0000°; P -3.7760, Plg26.0000°, Azm123.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 15 08:12:31.0**±1.0, **1°.14S**±0°.1×**14°.9W**±0°.2, **h10**km, **n69**, σ1**°71**/19, **mb4.1/7, MS3.8**/52, **North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR** | **6.43** | **177** | Pn | **Pn** | **08 14 05.4** | **-0.2** |
| | baz=352,slow=12,SNR=10 | | | | | | |
| H10N2 | | | | T | T | 08 20 55.1 | |
| | baz=5.6 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.44** | **177** | Pn | **Pn** | **08 14 05.6** | **-0.2** |
| | baz=352,slow=12,SNR=16 | | | | | | |
| H10N3 | | | | T | T | 08 21 06.9 | |
| | baz=5.6,slow=74 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.45** | **177** | Pn | **Pn** | **08 14 05.8** | **-0.1** |
| | baz=352,slow=12,SNR=14 | | | | | | |
| H10N1 | | | | T | T | 08 20 56.2 | |
| | baz=5.6,slow=74 | | | | | | |
| **ASCN** | **Ascension** | **6.54** | **176** | Pn | **Pn** | **08 14 06.3** | **-1.1** |
| **LIC** | **Lamto** | **12.38** | **52** | *e*PKIKP | Pn | 08 15 33.0 | +5.5 |
| | 90nm,1.0s | | | | | | |
| **TIC** | **Toumodi** | **12.64** | **51** | *e*PKIKP | **Pn** | **08 15 33.1** | **+2.0** |
| **KIC** | **Kosan Boka** | **12.69** | **53** | *e*PKIKP | **Pn** | **08 15 33.4** | **+1.7** |
| | 44nm,1.0s | | | | | | |
| **DBIC** | **Dimbokro** | **12.79** | **51** | Pn | **Pn** | **08 15 32.5** | **-0.6** |
| | 1.5nm,0.3s,baz=244,slow=11,SNR=28 | | | | | | |
| DBIC | | | | Sn | Sn | 08 17 51.1 | -4.5 |
| | 2.7nm,0.3s,baz=168,slow=22,SNR=7.7 | | | | | | |
| DBIC | | | | LR | LR | 08 19 41.0 | |
| | comp=Z,650nm,18.6s,baz=242,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **12.79** | **51** | | **Pn** | **08 15 34.2** | **+1.2** |
| **KOWA** | **Kowa** | **19.07** | **34** | P | **Pn** | **08 16 56.7** | **+2.0** |
| **TORD** | **Torodi Ar. Bea** | **21.86** | **48** | P | **P** | **08 17 23.1** | **-1.0** |
| | 6.6nm,1.1s,baz=239,slow=9.6,SNR=19 | | | | | | |
| TORD | | | | S | **S** | **08 21 21.4** | **-4.5** |
| | 6.0nm,0.8s,baz=236,slow=23,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **21.86** | **48** | P | **P** | **08 17 25.4** | **+1.3** |
| TORD | | | | IAmb | IAmb | 08 17 33.7 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MDT** | **Midelt** | **35.35** | **15** | LR | LR | 08 33 47.5 | |
| | comp=Z,91nm,18.2s,baz=200,slow=36 | | | | | | |
| **BDFB** | **Brasilia** | **35.63** | **245** | LR | LR | 08 31 04.1 | |
| | comp=Z,81nm,20.6s,baz=231,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **36.39** | **121** | LR | LR | 08 31 38.2 | |
| | comp=Z,68nm,20.6s,baz=330,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **38.28** | **280** | LR | LR | 08 31 20.3 | |
| | comp=Z,77nm,21.4s,baz=99,slow=30 | | | | | | |
| **ESDC** | **Sonseca Array** | **42.05** | **13** | LR | LR | 08 37 33.0 | |
| | comp=Z,179nm,20.9s,baz=179,slow=36 | | | | | | |
| **KEST** | **Kesra** | **43.27** | **29** | LR | LR | 08 40 58.3 | |
| | comp=Z,178nm,18.2s,baz=202,slow=39 | | | | | | |
| **PTGA** | **Pitinga** | **45.10** | **270** | LR | LR | 08 37 20.3 | |
| | comp=Z,58nm,18.7s,baz=132,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **45.57** | **124** | LR | LR | 08 37 01.4 | |
| | comp=Z,65nm,20.1s,baz=262,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **45.59** | **136** | LR | LR | 08 36 51.7 | |
| | comp=Z,52nm,18.5s,baz=296,slow=32 | | | | | | |
| **MBAR** | **Mbarara** | **45.60** | **90** | LR | LR | 08 37 48.9 | |
| | comp=Z,110nm,19.6s,baz=126,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **46.89** | **129** | P | P | 08 20 58.3 | -3.7 |
| | comp=Z,3.7nm,1.1s,baz=121,slow=14,SNR=2.1 | | | | | | |
| BOSA | | | | LR | LR | 08 35 43.6 | |
| | comp=Z,80nm,20.6s,baz=240,slow=30 | | | | | | |
| **BOSA** | **Boshof** | **46.89** | **129** | P | **P** | **08 21 03.6** | **+1.6** |
| **CPUP** | **Villa Florida** | **47.76** | **235** | LR | LR | 08 38 23.2 | |
| | comp=Z,83nm,21.4s,baz=71,slow=33 | | | | | | |
| **SIV** | **San Ignacio** | **47.78** | **250** | LR | LR | 08 39 19.7 | |
| | comp=Z,100nm,20.2s,baz=98,slow=34 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.11** | **90** | LR | LR | 08 41 50.8 | |
| | comp=Z,112nm,20.8s,baz=148,slow=34 | | | | | | |
| **SJG** | **San Juan** | **54.03** | **294** | LR | LR | 08 40 01.3 | |
| | comp=Z,46nm,21.2s,baz=96,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **54.49** | **251** | LR | LR | 08 44 00.2 | |
| | comp=Z,97nm,19.8s,baz=86,slow=35 | | | | | | |
| **GERES** | **GERESS Array B** | **55.79** | **22** | P | **P** | **08 22 08.4** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=208,slow=10.0,SNR=2.1 | | | | | | |
| GERES | | | | LR | LR | 08 47 06.8 | |
| | comp=Z,68nm,19.2s,baz=230,slow=37 | | | | | | |
| **SDV** | **Santo Domingo** | **56.49** | **282** | LR | LR | 08 43 06.4 | |
| | comp=Z,35nm,19.1s,baz=103,slow=32 | | | | | | |
| **LVC** | **Limon Verde** | **56.53** | **244** | LR | LR | 08 45 17.6 | |
| | comp=Z,40nm,21.6s,baz=80,slow=35 | | | | | | |
| **EIL** | **Elat** | **56.65** | **53** | LR | LR | 08 47 15.4 | |
| | comp=Z,116nm,18.2s,baz=280,slow=37 | | | | | | |
| **VRAC** | **Vranov** | **57.30** | **24** | LR | LR | 08 46 54.9 | |
| | comp=Z,53nm,20.6s,baz=219,slow=36 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **57.32** | **8** | LR | LR | 08 44 57.1 | |
| | comp=Z,57nm,21.0s,baz=192,slow=34 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **58.40** | **49** | LR | LR | 08 48 41.6 | |
| | comp=Z,34nm,18.8s,baz=50,slow=37 | | | | | | |
| **MLR** | **Muntele Rosu** | **58.98** | **32** | LR | LR | 08 49 08.0 | |
| | comp=Z,145nm,19.3s,baz=226,slow=37 | | | | | | |
| **ROSC** | **El Rosal** | **59.71** | **276** | LR | LR | 08 46 31.7 | |
| | comp=Z,89nm,19.4s,baz=162,slow=34 | | | | | | |
| **BRTR** | **Keskin Array B** | **60.28** | **42** | P | **P** | **08 22 40.7** | **+0.6** |
| | comp=Z,1.0nm,0.6s,baz=230,slow=6.8,SNR=2.0 | | | | | | |
| BRTR | | | | LR | LR | 08 48 34.5 | |
| | comp=Z,48nm,21.5s,baz=230,slow=36 | | | | | | |
| **NNA** | **Nana** | **62.32** | **257** | LR | LR | 08 48 31.8 | |
| | comp=Z,39nm,19.3s,baz=38,slow=35 | | | | | | |
| **ATAH** | **Atahualpa** | **63.57** | **263** | LR | LR | 08 48 35.0 | |
| | comp=Z,75nm,21.8s,baz=99,slow=34 | | | | | | |
| **PLCA** | **Paso Flores** | **63.66** | **224** | LR | LR | 08 48 52.6 | |
| | comp=Z,56nm,18.2s,baz=64,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **64.00** | **29** | P | **P** | **08 23 04.9** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=229,slow=6.6,SNR=1.2 | | | | | | |
| AKASG | | | | LR | LR | 08 52 59.4 | |
| | comp=Z,104nm,18.2s,baz=264,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **64.00** | **29** | IAmb | IAmb | 08 23 17.1 | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **HFS** | **Hagfors** | **65.23** | **15** | LR | LR | 08 52 09.9 | |
| | comp=Z,72nm,20.2s,baz=250,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.40** | **14** | LR | LR | 08 51 25.2 | |
| | comp=Z,67nm,21.1s,baz=210,slow=36 | | | | | | |
| **KBZ** | **Khabaz** | **68.27** | **41** | LR | LR | 08 55 49.4 | |
| | comp=Z,30nm,18.6s,baz=188,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **70.00** | **20** | P | **P** | **08 23 42.3** | **-0.3** |
| | comp=Z,2.4nm,0.8s,baz=187,slow=31,SNR=2.5 | | | | | | |
| FINES | | | | LR | LR | 08 55 21.9 | |
| | comp=Z,92nm,18.4s,baz=230,slow=37 | | | | | | |
| **PMSA** | **Palmer Station** | **72.46** | **200** | LR | LR | 08 47 14.5 | |
| | comp=Z,120nm,20.0s,baz=319,slow=29 | | | | | | |
| **SADO** | **Sadowa** | **72.99** | **318** | LR | LR | 08 47 44.9 | |
| | comp=Z,44nm,22.0s,baz=186,slow=29 | | | | | | |
| **TKL** | **Tuckaleechee C** | **73.78** | **308** | LR | LR | 08 49 14.6 | |
| | comp=Z,29nm,21.3s,baz=112,slow=30 | | | | | | |
| **BELG** | **Belogornoye** | **74.68** | **34** | LR | LR | 08 57 47.8 | |
| | comp=Z,39nm,20.4s,baz=341,slow=36 | | | | | | |
| **WSAR** | **Wadi Sarin** | **75.41** | **66** | LR | LR | 08 58 03.9 | |
| | comp=Z,47nm,18.3s,baz=280,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **75.78** | **14** | LR | LR | 08 59 07.8 | |
| | comp=Z,80nm,19.7s,baz=224,slow=37 | | | | | | |
| **APG** | **El Apazote** | **76.46** | **286** | LR | LR | 08 57 49.8 | |
| | comp=Z,33nm,18.9s,baz=113,slow=36 | | | | | | |
| **KIRV** | **Kirov** | **78.05** | **29** | LR | LR | 09 02 36.5 | |
| | comp=Z,67nm,19.1s,baz=258,slow=38 | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.21** | **38** | LR | LR | 09 02 38.4 | |
| | comp=Z,18nm,21.8s,baz=263,slow=38 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **81.19** | **6** | LR | LR | 09 00 36.8 | |
| | comp=Z,31nm,18.2s,baz=80,slow=36 | | | | | | |
| **ARU** | **Arti** | **82.03** | **33** | LR | LR | 09 03 38.2 | |
| | comp=Z,62nm,18.9s,baz=269,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **92.08** | **305** | LR | LR | 08 59 38.1 | |
| | comp=Z,27nm,19.7s,baz=124,slow=31 | | | | | | |
| **RPN** | **Rapa Nui** | **93.36** | **243** | LR | LR | 09 00 60.0 | |
| | comp=Z,61nm,19.9s,baz=292,slow=31 | | | | | | |
| **PDAR** | **Pinedale Array** | **94.37** | **313** | LR | LR | 09 00 55.3 | |
| | comp=Z,39nm,20.0s,baz=116,slow=31 | | | | | | |
| **PALK** | **Pallekele** | **95.69** | **83** | LR | LR | 09 07 21.9 | |
| | comp=Z,23nm,18.0s,baz=12,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.71** | **333** | P | **P** | **08 25 56.9** | **-0.1** |
| | comp=Z,0.1nm,0.7s,baz=78,slow=8.9,SNR=2.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **96.81** | **36** | LR | LR | 09 13 20.6 | |
| | comp=Z,40nm,18.4s,baz=340,slow=38 | | | | | | |
| **ELK** | **Elko** | **98.75** | **311** | LR | LR | 09 03 46.0 | |
| | comp=Z,29nm,20.4s,baz=164,slow=31 | | | | | | |
| **NEW** | **Newport** | **99.17** | **319** | LR | LR | 09 07 02.0 | |
| | comp=Z,47nm,21.3s,baz=90,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **140.75** | **131** | PKP | **PKPdf** | **08 31 59.4** | **-2.7** |
| | comp=Z,0.4nm,0.9s,baz=240,slow=3.1,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **143.12** | **127** | PKP | PKPbc | 08 32 03.5 | +0.3 |
| | comp=Z,0.2nm,0.6s,baz=261,slow=5.0,SNR=2.0 | | | | | | |

*THE* ***15*** *08:29:40.9, 38°.46N×20°.48E, h6km±1km, ML3.2/5, Error ellipse: s-maj=1.5km s-min=0.2km az=104.0*

*ATH* ***15*** *08:29:41.1, 38°.47N×20°.50E, h7km±3km, ML3.2/3, Error ellipse: s-maj=4.6km s-min=0.8km az=106.0*

**ISC 15 08:29:39.6**±0.8, **38°.49N**±0°.02×**20°.45E**±0°.06, **h18**km±5km, **n27**, σ1**°77**/49, **Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FSK** | **Fiskardo** | **0.10** | **108** | P | **Pg** | **08 29 42.6** | **-0.6** |
| FSK | | | | S | **Sg** | **08 29 43.7** | **-1.8** |
| | 50μm,0.3s | | | | | | |
| **FSK** | **Fiskardo** | **0.10** | **108** | P | **Pg** | **08 29 42.6** | **-0.6** |
| FSK | | | | S | **Sg** | **08 29 43.8** | **-1.8** |
| FSK | | | | AML | AML | 08 29 44.1 | |
| | comp=N,70167μm,0.2s | | | | | | |
| FSK | | | | AML | AML | 08 29 44.2 | |
| **EVGI** | **Lefkada island** | **0.21** | **51** | P | **Pb** | **08 29 45.0** | **0.0** |
| EVGI | | | | S | **Sg** | **08 29 48.5** | **+0.4** |
| | comp=N,6μm,0.3s | | | | | | |
| **EVGI** | **Lefkada island** | **0.21** | **51** | P | **Pb** | **08 29 45.1** | **+0.1** |
| EVGI | | | | S | **Sg** | **08 29 48.2** | **+0.1** |
| **DRAG** | **Dragano-Lefkad** | **0.22** | **27** | P | **Pg** | **08 29 45.4** | **+0.6** |
| DRAG | | | | S | **Sg** | **08 29 49.2** | **+0.8** |
| | comp=N,7μm,0.4s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.22** | **27** | P | **Pg** | **08 29 45.5** | **+0.7** |
| DRAG | | | | S | **Sg** | **08 29 49.4** | **+1.0** |
| **DMLN** | **Damoulianata-K** | **0.26** | **193** | P | **Pg** | **08 29 45.6** | **+0.2** |
| DMLN | | | | S | **Sg** | **08 29 49.1** | **-0.2** |
| | comp=N,13μm,0.5s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.26** | **193** | P | **Pg** | **08 29 45.8** | **+0.4** |
| DMLN | | | | S | **Sg** | **08 29 50.3** | **+1.0** |
| **LXRA** | **Lixouri, Kepha** | **0.29** | **182** | P | **Pg** | **08 29 46.3** | **+0.4** |
| LXRA | | | | S | **Sb** | **08 29 51.5** | **+0.7** |
| **KEF3** | **Kipouria, Keph** | **0.29** | **195** | P | **Pg** | **08 29 46.2** | **+0.2** |
| KEF3 | | | | S | **Sg** | **08 29 50.3** | **-0.1** |
| **KEF3** | **Kipouria, Keph** | **0.29** | **195** | P | **Pg** | **08 29 46.0** | **0.0** |
| KEF3 | | | | S | **Sg** | **08 29 50.7** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.30** | **41** | P | **Pb** | **08 29 46.7** | **+0.2** |
| NYDR | | | | S | **Sb** | **08 29 51.5** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.30** | **41** | P | **Pg** | **08 29 46.6** | **+0.5** |
| **ARGA** | **Argostoli. Kep** | **0.31** | **175** | P | **Pb** | **08 29 47.5** | **+0.9** |
| ARGA | | | | S | **Sb** | **08 29 51.7** | **+0.3** |
| ARGA | | | | AML | AML | 08 29 53.1 | |
| | comp=E,11988μm,0.3s | | | | | | |
| ARGA | | | | AML | AML | 08 29 53.2 | |
| | comp=N,18123μm,0.5s | | | | | | |
| **VLS** | **Valsamata** | **0.33** | **160** | P | **Pg** | **08 29 46.5** | **-0.2** |
| VLS | | | | S | **Sg** | **08 29 50.9** | **-0.5** |
| | comp=N,5μm,0.4s | | | | | | |
| **VLS** | **Valsamata** | **0.33** | **160** | P | **Pg** | **08 29 46.4** | **-0.2** |
| VLS | | | | S | **Sg** | **08 29 51.7** | **+0.3** |
| VLS | | | | AML | AML | 08 29 52.0 | |
| | comp=E,10509μm,0.3s | | | | | | |
| VLS | | | | AML | AML | 08 29 52.1 | |
| | comp=N,7902μm,0.5s | | | | | | |
| **LKD2** | **Lefkada island** | **0.34** | **29** | P | **Pg** | **08 29 47.6** | **+0.7** |
| LKD2 | | | | S | **Sb** | **08 29 53.2** | **+0.8** |
| **LKD2** | **Lefkada island** | **0.34** | **29** | P | **Pg** | **08 29 47.5** | **+0.7** |
| **PSDA** | **Pessada-Kefalo** | **0.39** | **164** | P | **Pg** | **08 29 47.7** | **+0.1** |
| PSDA | | | | S | **Sg** | **08 29 53.0** | **-0.1** |
| **STON** | **Ston** | **4.85** | **335** | *e*Pn | **Pn** | **08 30 54.1** | **+2.4** |
| **MAKA** | **Makarska** | **5.45** | **333** | *e*Pn | **Pn** | **08 31 02.3** | **+2.4** |
| **RICI** | **Ricice** | **5.59** | **334** | *e*Pn | **Pn** | **08 31 03.9** | **+1.9** |
| RICI | | | | Sn | **Sn** | **08 32 01.8** | **-4.0** |
| **KIJV** | **Kijevo** | **6.30** | **332** | *e*Pn | **Pn** | **08 31 13.8** | **+2.2** |
| KIJV | | | | Sn | **Sn** | **08 32 19.4** | **-3.7** |
| **ZIRJ** | **Zirje** | **6.31** | **326** | *e*Pn | **Pn** | **08 31 13.3** | **+1.6** |
| ZIRJ | | | | Sn | **Sn** | **08 32 19.1** | **-4.2** |
| **MORI** | **Morici** | **6.45** | **328** | *e*Pn | **Pn** | **08 31 15.3** | **+1.6** |
| MORI | | | | Sn | **Sn** | **08 32 21.8** | **-5.1** |
| **DUGI** | **Dugi Otok** | **6.83** | **325** | *e*Pn | **Pn** | **08 31 21.5** | **+2.5** |
| DUGI | | | | Sn | **Sn** | **08 32 32.6** | **-3.7** |
| **BRJN** | **Brijuni** | **8.13** | **324** | *e*Pn | **Pn** | **08 31 39.3** | **+2.5** |

*IDC* ***15*** *08:30:19.2±2.2, 53°.59N×86°.86E, h0km, mb1 3.5/3, mb1mx3.2/43, mbtmp3.5/3, ML2.7/3, Error ellipse: s-maj=21.8km s-min=12.9km az=75.0*

*NNC* ***15*** *08:30:20.7±3.1, 53°.51N×86°.65E, h0km, mb3.1, mpv2.9, Error ellipse: s-maj=23.4km s-min=11.3km az=64.0, Suspected Mining explosion.*

**ISC 15 08:30:22.5**±3.6, **53°.6N**±0°.1×**86°.4E**±0°.2, **h0**km, **n9**, σ0**°68**/12, **5C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.04** | **293** | *i* | | 08 37 40.0 | |
| | baz=103,slow=340,SNR=3.3 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.04** | **293** | ⇑P | **Pg** | **08 30 41.8** | **-0.6** |
| | 0.9nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **08 30 59.6** | **0.0** |
| | 6.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.04** | **293** | Pg | **Pg** | **08 30 41.9** | **-0.6** |
| | 2.0nm,0.3s,baz=103,slow=18,SNR=20 | | | | | | |
| ZALV | | | | Lg | Lg | 08 30 59.6 | |
| | 8.6nm,0.3s,baz=109,slow=29,SNR=6.9 | | | | | | |
| **KURK** | **Kurchatov** | **5.59** | **243** | ⇓Pn | **Pn** | **08 31 48.1** | **+1.2** |
| | 1.1nm,0.5s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **08 32 52.2** | **+0.4** |
| | 2.2nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 33 23.2 | |
| | 16nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.69** | **242** | Pn | **Pn** | **08 31 49.0** | **+0.7** |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=8.9 | | | | | | |
| KURBB | | | | Lg | Lg | 08 33 25.6 | |
| | 0.1nm,0.3s,baz=62,slow=34,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.69** | **242** | ⇓Pn | **Pn** | **08 31 48.8** | **+0.5** |
| | 4.0nm,0.8s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **08 32 53.6** | **-0.6** |
| | 5.5nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 08 33 28.8 | |
| | 16nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.27** | **203** | ⇑Pn | **Pn** | **08 32 09.8** | **-0.2** |
| | 0.7nm,0.6s,baz=27,slow=12,SNR=14 | | | | | | |
| MK31 | | | | Sn | **Sn** | **08 33 33.0** | **-0.2** |
| | 1.0nm,0.6s,baz=28,slow=25,SNR=8.1 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 34 12.2 | |
| | 3.3nm,0.8s,baz=29,slow=30,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.27** | **203** | Pn | **Pn** | **08 32 09.6** | **-0.4** |
| | 0.5nm,0.3s,baz=27,slow=14,SNR=22 | | | | | | |
| MKAR | | | | Lg | Lg | 08 34 12.8 | |
| | 0.2nm,0.3s,baz=26,slow=30,SNR=7.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **9.63** | **273** | Pn | **Pn** | **08 32 42.8** | **+0.5** |
| | 0.1nm,0.3s,baz=76,slow=14,SNR=1.5 | | | | | | |

**IDC 15 08:40:22.3**±10.0, **18°.54S×178°.84E, h516**km±71km, **mb2.9/3, mb1 3.1/3, mb1mx2.8/25, mbtmp3.9/3, Error ellipse: s-maj=261.7km s-min=114.5km az=93.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **1.10** | **317** | P | P | 08 41 25.6 | 0.0 |
| | 1.5nm,0.3s,baz=135,slow=16,SNR=5.4 | | | | | | |
| **STKA** | **Stephens Creek** | **36.04** | **241** | P | P | 08 46 40.1 | +0.2 |
| | 1.7nm,0.8s,baz=72,slow=13,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.95** | **261** | P | P | 08 47 27.7 | -0.3 |
| | 0.5nm,0.5s,baz=96,slow=8.4,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **42.10** | **255** | P | P | 08 47 28.9 | -0.2 |
| | 1.5nm,0.6s,baz=89,slow=8.4,SNR=25 | | | | | | |

*IDC* ***15*** *08:44:07.3±2.5, 19°.20S×69°.07W, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.5/20, mbtmp3.6/3, ML3.2/1, Error ellipse: s-maj=69.6km s-min=43.3km az=100.0*

**ISC 15 08:44:09.6**±1.4, **18°.71S**±0°.04×**69°.06W**±0°.05, **h2**km±11km, **n10**, σ0**°92**/16, **2C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB

6.9nm,0.8s,baz=41,slow=29,SNR=4.3
**MKAR Makanchi Array 9.04 220** Pn **Pn** 09 02 45.1 **+0.3**
0.2nm,0.3s,baz=34,slow=13,SNR=13
MKAR Sn **Sn** 09 04 25.7 **-1.5**
0.1nm,0.3s,baz=41,slow=29,SNR=2.5
MKAR Lg Lg 09 05 14.2
0.1nm,0.3s,baz=38,slow=28,SNR=6.4
**SONM Songino Array 11.69 116** Lg Lg 09 06 28.9
0.0nm,0.3s,baz=303,slow=29,SNR=4.4
**I34MN SONGINO INFRAS 11.71 116** *i* 10 06 40.0
baz=311,slow=328,SNR=0.9
**AAK Ala-Archa 15.66 230** Lg Lg 09 08 43.2
0.1nm,0.3s,baz=18,slow=20,SNR=1.6

**IDC 15 09:09:38.3±1.6, 36.77S×47.85E, h0km, mb3.7/4, mb1 4.0/4, mb1mx3.5/44, mbtmp3.8/4, MS3.0/1, Ms1 2.9/1, ms1mx2.5/65, Error ellipse: s-maj=221.3km s-min=25.6km az=24.0, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BOSA** | **Boshof** | **20.65** | **287** | LR | LR | 09 20 57.2 | |
| | comp=Z,44nm,18.8s,baz=187,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **22.35** | **295** | P | P | 09 14 36.6 | -1.3 |
| | 1.8nm,0.5s,baz=131,slow=11,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.98** | **310** | P | P | 09 20 27.3 | +0.7 |
| | 1.2nm,1.1s,baz=122,slow=5.4,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **73.23** | **107** | P | P | 09 21 11.7 | +0.1 |
| | 0.9nm,0.8s,baz=232,slow=5.4,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **75.62** | **104** | P | P | 09 21 25.0 | -0.5 |
| | 0.7nm,0.8s,baz=225,slow=4.5,SNR=6.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **155.06** | **261** | PKP | PKPdf | 09 29 34.0 | +0.5 |
| | 0.6nm,0.9s,baz=130,slow=3.6,SNR=5.6 | | | | | | |

*TUL **15** 09:14:38.9±1.2, 36.88N±0.01×97.79W±0.02, h3km±6km, ML2.6, mb_Lg2.2/9(NEIC), Error ellipse: s-maj=2.4km s-min=1.7km az=100.0*
**NEIC 15 09:14:39.3±0.7, 36.862N±0.010×97.78W±0.02, h2km±7km, Error ellipse: s-maj=2.1km s-min=1.2km az=63.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.01** | **87** | | Pg | 09 14 58.6 | -0.2 |
| **OKCFA** | **Oklahoma City** | **1.47** | **170** | | Pn | 09 15 06.7 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **1.48** | **169** | Pn | Pn | 09 15 06.8 | -0.2 |
| **FNO** | **Franklin** | **1.63** | **169** | IAmb_Lg | | 09 15 32.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.73** | **335** | | Pn | 09 15 10.2 | -0.2 |
| **W35A** | **Tecumseh** | **1.86** | **157** | Pn | Pn | 09 15 12.4 | +0.3 |
| **TUL1** | **Leonard** | **1.86** | **120** | | Pn | 09 15 13.0 | +0.8 |
| TUL1 | | | | IAmb_Lg | | 09 15 41.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.26** | **181** | Pn | Pn | 09 15 19.1 | +1.5 |
| **WMOK** | **Wichita Mounta** | **2.27** | **201** | Pn | Pn | 09 15 18.9 | +1.1 |
| **KSU1** | **Kansas State U** | **2.42** | **22** | Pn | Pn | 09 15 20.5 | +0.7 |
| **CBKS** | **Cedar Bluff** | **2.49** | **322** | IAmb_Lg | | 09 15 56.7 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.76** | **98** | Pn | Pn | 09 15 24.4 | -0.2 |
| **X37A** | **Clayton** | **3.00** | **138** | Pn | Pn | 09 15 28.6 | +0.9 |
| **HHAR** | **Hobbs** | **3.14** | **99** | Pn | Pn | 09 15 30.3 | +0.5 |
| **P38A** | **Dawn** | **4.33** | **49** | IAmb_Lg | | 09 17 04.2 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.67** | **119** | IAmb_Lg | | 09 17 17.3 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.71** | **108** | Pn | Pn | 09 15 51.6 | +0.2 |

*NNC **15** 09:23:18.4±1.3, 51.73N×75.53E, h0km, mb3.1, mpv2.6, Error ellipse: s-maj=53.6km s-min=8.0km az=27.0, Suspected Mining explosion.*
*IDC **15** 09:23:20.7±3.7, 51.66N×75.60E, h0km, mb1 2.8/2, mb1mx2.7/42, mbtmp2.8/2, ML2.2/2, Error ellipse: s-maj=30.8km s-min=23.4km az=85.0*
**ISC 15 09:23:21.1±5.9, 51.6N±0.1×75.6E±0.4, h0km, n9, σ0§87/7, 4C-3D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **2.11** | **117** | Pg | **Pn** | **09 23 57.2** | **-0.5** |
| | 0.4nm,0.3s,baz=301,slow=18,SNR=5.2 | | | | | | |
| KURBB | | | | Lg | Lg | 09 24 28.3 | |
| | 0.4nm,0.3s,baz=298,slow=36,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.11** | **117** | ⇑Pg | **Pb** | **09 23 59.3** | **-1.0** |
| | 2.3nm,0.4s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 24 28.0 | |
| | 35nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **2.12** | **114** | ⇓Pg | **Pn** | **09 23 58.0** | **+0.3** |
| | 2.2nm,0.6s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 24 27.0 | |
| | 8.4nm,0.6s | | | | | | |
| **BVA4** | **Borovoye Array** | **3.48** | **296** | ⇓Lg | Lg | 09 25 05.9 | |
| | 9.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.07** | **64** | Pn | **Pn** | **09 24 52.4** | **+0.4** |
| | 0.3nm,0.3s,baz=258,slow=14,SNR=5.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.07** | **64** | *i* | | 09 58 10.0 | |
| | baz=252,slow=329,SNR=2.3 | | | | | | |
| **MK31** | **Makanchi Array** | **6.53** | **135** | ⇑Sn | **Sn** | **09 26 14.6** | **+1.0** |
| | 0.4nm,0.6s,baz=326,slow=22,SNR=4.6 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 26 46.9 | |
| | 2.3nm,0.6s,baz=322,slow=26,SNR=7.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.53** | **135** | Pn | **Pn** | **09 24 58.7** | **+0.3** |
| | 0.1nm,0.3s,baz=317,slow=12,SNR=4.5 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 26 14.2** | **+0.7** |
| | 0.1nm,0.3s,baz=317,slow=25,SNR=6.7 | | | | | | |
| MKAR | | | | Lg | Lg | 09 26 48.2 | |
| | 0.2nm,0.3s,baz=317,slow=27,SNR=4.4 | | | | | | |
| **AAK** | **Ala-Archa** | **9.02** | **185** | Lg | Lg | 09 28 08.7 | |
| | 0.1nm,0.3s,baz=241,slow=21,SNR=4.4 | | | | | | |

*TUL **15** 09:30:53.1±1.6, 36.07N±0.01×97.06W±0.01, h5km±4km, ML2.6, mb_Lg2.3/16(NEIC), Error ellipse: s-maj=1.7km s-min=1.5km az=134.0*
**NEIC 15 09:30:53.1±1.0, 36.08N±0.01×97.06W±0.01, h7km±5km, Error ellipse: s-maj=1.8km s-min=0.7km az=144.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.74** | **206** | | Pg | 09 31 07.0 | -0.3 |
| OKCFA | | | | Sg | Sg | 09 31 17.2 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.74** | **205** | Pg | Pg | 09 31 06.8 | -0.7 |
| **FNO** | **Franklin** | **0.87** | **199** | Pg | Pg | 09 31 08.8 | -1.1 |
| **T35A** | **Sooner Cattle** | **0.94** | **28** | Pg | Pg | 09 31 10.6 | -0.6 |
| **W35A** | **Tecumseh** | **0.94** | **171** | Pg | Pg | 09 31 10.0 | -1.2 |
| **TUL1** | **Leonard** | **1.04** | **99** | Pg | Pg | 09 31 12.1 | -1.1 |
| **X37A** | **Clayton** | **2.03** | **137** | IAmb_Lg | | 09 31 58.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **2.68** | **331** | IAmb_Lg | | 09 32 22.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **2.81** | **107** | Pn | Pn | 09 31 38.1 | -0.4 |
| W39A | | | | IAmb_Lg | | 09 32 28.0 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.81** | **114** | Pn | Pn | 09 31 53.3 | +1.1 |
| **WHAR** | **Wooly Hollow** | **3.96** | **100** | Pn | Pn | 09 31 54.6 | +0.2 |
| **FCAR** | **Ozark Folk Cen** | **4.01** | **91** | Pn | Pn | 09 31 55.0 | 0.0 |
| FCAR | | | | IAmb_Lg | | 09 33 05.8 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.02** | **102** | IAmb_Lg | | 09 33 05.3 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.42** | **59** | IAmb_Lg | | 09 33 13.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **4.90** | **77** | IAmb_Lg | | 09 33 28.7 | |
| | comp=Z,9.3nm,0.8s | | | | | | |

**PGC 15 09:43:32.0±48.0, 46.28N×127.03W, h10km, MLSn2.9/7, Mw3.5/7, 316km Ssw of Ucluelet, Bc Off Coast Of Washington, Off coast of Washington**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MGB** | **Mount Grey** | **3.14** | **29** | Pn | Pn | 09 44 19.8 | -1.9 |
| **GNW** | **Green Mountain** | **3.15** | **64** | Pn | Pn | 09 44 19.9 | -1.7 |
| **B926** | **Mesachie Lake** | **3.21** | **37** | Pn | Pn | 09 44 21.4 | -1.1 |
| **CLRS** | **Cowichan Lake** | **3.21** | **37** | Pn | Pn | 09 44 21.4 | -1.0 |
| **BTB** | **Buttle Lake** | **3.34** | **17** | Sn | Sn | 09 45 02.0 | -2.3 |
| **B010** | **North Saanich** | **3.39** | **44** | Pn | Pn | 09 44 23.4 | -1.5 |
| **PGC** | **Sidney** | **3.39** | **44** | Pn | Pn | 09 44 24.2 | -0.7 |
| **GHNB** | **Nanoose** | **3.56** | **31** | Pn | Pn | 09 44 26.3 | -1.0 |
| **D05A** | **Enumclaw** | **3.58** | **74** | Pn | Pn | 09 44 25.6 | -2.0 |
| **NLLB** | **Nanaimo Lost L** | **3.59** | **34** | Pn | Pn | 09 44 27.0 | -0.6 |
| NLLB | | | | Sn | Sn | 09 45 06.0 | -4.0 |
| **MCW** | **Mount Constitu** | **3.72** | **48** | Pn | Pn | 09 44 28.9 | -0.6 |
| **TXB** | **Texada** | **3.83** | **26** | Pn | Pn | 09 44 29.9 | -1.1 |
| **SHB** | **Sechelt** | **3.94** | **31** | Pn | Pn | 09 44 32.1 | -0.4 |
| **BIB** | **Bowen Island** | **4.00** | **37** | Pn | Pn | 09 44 32.9 | -0.5 |
| **VDB** | **Vedder Mountai** | **4.31** | **49** | Pn | Pn | 09 44 36.7 | -0.9 |
| **RPW** | **Rockport** | **4.33** | **58** | Pn | Pn | 09 44 37.4 | -0.5 |

*JMA **15** 09:55:53.3±0.2, 31.43N×140.69E, h68km, M3.7*
*IDC **15** 09:56:01.8±1.6, 32.00N×140.31E, h123km±9km, mb3.4/12, mb1 3.6/13, mb1mx3.4/38, mbtmp3.7/13, Error ellipse: s-maj=24.4km s-min=20.7km az=60.0*
**ISC 15 09:55:58.8±0.8, 31.80N±0.09×140.50E±0.09, h100km, n33, σ1§49/32, mb3.6/12, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **1.40** | **335** | *eS* | **Sn** | **09 56 45.0** | **+2.3** |
| **JHJ2** | **Mitsune** | **1.43** | **336** | P | **Pn** | **09 56 23.3** | **-0.8** |
| **JHJ** | **Hachijo jima 2** | **1.45** | **335** | P | **Pn** | **09 56 23.9** | **-0.5** |
| | 28nm,0.3s,baz=347,slow=2.0,SNR=23 | | | | | | |
| JHJ | | | | S | **Sn** | **09 56 45.1** | **+1.4** |
| | 50nm,0.3s,baz=280,slow=23,SNR=5.4 | | | | | | |
| **BSO1** | **Boso 1** | **2.87** | **8** | P | **Pn** | **09 56 42.5** | **+0.2** |
| **BSO3** | **Boso 3** | **2.99** | **0** | P | **Pn** | **09 56 44.6** | **+0.5** |
| **TK02** | **Tokai 2** | **3.15** | **314** | P | **Pn** | **09 56 47.4** | **+1.2** |
| **TTO1** | **TONANKAI O.B.S** | **3.62** | **301** | P | **Pn** | **09 56 52.4** | **-0.1** |
| **JIE** | **Ise** | **4.10** | **310** | P | **Pn** | **09 56 59.6** | **+0.3** |
| **JNY** | **Yasuok** | **4.17** | **329** | P | **Pn** | **09 57 02.3** | **+1.9** |
| **JKN2** | **Miekihoku** | **4.30** | **306** | P | **Pn** | **09 57 01.9** | **-0.1** |
| **JAO** | **Obara** | **4.39** | **323** | P | **Pn** | **09 57 05.0** | **+1.8** |
| **JRY** | **Ryogami san** | **4.41** | **343** | P | **Pn** | **09 57 05.8** | **+2.3** |
| **JAG** | **Ashikaga** | **4.69** | **350** | P | **Pn** | **09 57 08.2** | **+0.9** |
| **JHO** | **Hitachi** | **4.79** | **1** | P | **Pn** | **09 57 08.3** | **-0.4** |
| JHO | | | | *eS* | **Sn** | **09 58 04.2** | **+1.2** |
| **CBIJ** | **Chichi jima** | **4.92** | **162** | P | Pn | 09 57 00.8 | -10 |
| **MJAR** | **Matsushiro Arr** | **5.09** | **339** | P | **Pn** | **09 57 12.4** | **-0.3** |
| | 0.1nm,0.3s,baz=161,slow=10,SNR=5.9 | | | | | | |
| MJAR | | | | S | **Sn** | **09 58 09.0** | **-1.4** |
| | 0.1nm,0.3s,baz=155,slow=14,SNR=1.3 | | | | | | |
| **MAT** | **Matsushiro** | **5.09** | **339** | P | Pn | 09 57 17.9 | +5.1 |
| MAT | | | | *eS* | **Sn** | **09 58 14.4** | **+4.1** |
| **H11S3** | **WAKE ISLAND Hy** | **27.07** | **113** | T | T | 10 30 07.7 | |
| | baz=304,slow=75,SNR=3.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.07** | **113** | T | T | 10 30 14.8 | |
| | baz=304,slow=75,SNR=5.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.09** | **113** | T | T | 10 30 13.9 | |
| | baz=304,slow=75,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **30.40** | **312** | P | **P** | **10 02 00.2** | **-1.3** |
| | 0.5nm,0.9s,baz=115,slow=9.8,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.43** | **306** | P | **P** | **10 04 13.3** | **-2.0** |
| | 0.4nm,0.6s,baz=90,slow=10,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.79** | **187** | P | **P** | **10 04 59.7** | **+3.3** |
| | 0.7nm,1.1s,baz=14,slow=9.1,SNR=2.1 | | | | | | |
| **ILAR** | **Eielson Array** | **54.35** | **30** | P | **P** | **10 05 14.4** | **-0.3** |
| | 0.3nm,0.8s,baz=271,slow=5.8,SNR=2.7 | | | | | | |
| **INK** | **Inuvik** | **59.40** | **26** | P | **P** | **10 05 50.8** | **+0.6** |
| | 1.0nm,0.7s,baz=294,slow=5.3,SNR=4.8 | | | | | | |
| **ARCES** | **ARCES Array B** | **68.63** | **340** | P | **P** | **10 06 50.3** | **-0.4** |
| | 1.9nm,0.8s,baz=57,slow=8.9,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **68.72** | **29** | P | **P** | **10 06 51.0** | **-0.3** |
| | 0.4nm,0.7s,baz=295,slow=6.3,SNR=7.0 | | | | | | |
| **FINES** | **FINESS Array B** | **73.09** | **333** | P | **P** | **10 07 16.7** | **-1.1** |
| | 1.0nm,0.4s,baz=63,slow=5.8,SNR=12 | | | | | | |
| **AKASG** | **Malin Array Be** | **77.98** | **323** | P | **P** | **10 07 44.5** | **-1.4** |
| | 0.6nm,0.6s,baz=50,slow=5.7,SNR=5.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **78.71** | **337** | P | **P** | **10 07 49.2** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=42,slow=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.71** | **337** | P | **P** | **10 07 49.5** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=42,slow=5.4,SNR=4.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.77** | **52** | P | **P** | **10 07 50.8** | **0.0** |
| | comp=Z,0.2nm,0.7s,baz=325,slow=4.6,SNR=2.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.92** | **52** | P | **P** | **10 09 06.2** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=305,slow=3.2,SNR=7.9 | | | | | | |

*FUNV **15** 10:23:01.3, 8.50N×71.47W, h2km, MW3.8*
**ISC 15 10:23:01.7±1.9, 8.54N±0.04×71.35W±0.03, h16km±14km, n16, σ1§29/30, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDV** | **Santo Domingo** | **0.79** | **64** | *eP* | **Pb** | **10 23 17.3** | **0.0** |
| SDV | | | | *eS* | **Sg** | **10 23 28.9** | **+1.2** |
| **MCQV** | **Machiques** | **1.91** | **322** | *eP* | **Pn** | **10 23 33.6** | **+0.1** |
| MCQV | | | | *eS* | **Sn** | **10 23 57.7** | **+0.5** |
| **OCAC** | **Ocana** | **1.97** | **262** | *eP* | **Pn** | **10 23 33.8** | **-0.7** |
| OCAC | | | | *eS* | **Sn** | **10 23 58.9** | **-0.1** |
| **TAMC** | **Tame, Arauca** | **2.13** | **192** | *eP* | **Pb** | **10 23 40.5** | **+0.5** |
| TAMC | | | | *eS* | **Sn** | **10 24 03.5** | **+0.6** |
| **LL6C** | **La Loma 6 Bece** | **2.24** | **302** | *eP* | **Pn** | **10 23 37.7** | **-0.5** |
| LL6C | | | | *eS* | **Sn** | **10 24 04.8** | **-0.7** |
| **LL1C** | **La Loma 1 Cana** | **2.40** | **295** | *eP* | **Pn** | **10 23 41.8** | **+1.5** |
| LL1C | | | | *eS* | **Sn** | **10 24 11.2** | **+2.0** |
| **BARC** | **Barichara** | **2.65** | **223** | *eP* | **Pn** | **10 23 44.4** | **+0.4** |
| BARC | | | | *eS* | **Sb** | **10 24 21.0** | **-0.3** |
| **BRRC** | **Barranca, Sant** | **2.73** | **239** | *eP* | **Pb** | **10 23 49.0** | **-1.2** |
| BRRC | | | | *eS* | **Sb** | **10 24 24.8** | **+1.2** |
| **CRJC** | **Cerrejon, Guaj** | **2.89** | **329** | *eP* | **Pn** | **10 23 46.6** | **-0.6** |
| CRJC | | | | *eS* | **Sn** | **10 24 21.1** | **-0.6** |
| **RUSC** | **La Rusia** | **3.14** | **213** | *eP* | **Pn** | **10 23 51.9** | **+0.9** |
| RUSC | | | | *eS* | **Sn** | **10 24 28.7** | **+0.4** |
| **MONV** | **Montecano** | **3.66** | **22** | *eP* | **Pn** | **10 23 58.8** | **+1.1** |
| MONV | | | | *eS* | **Sn** | **10 24 41.3** | **+0.8** |
| **PTBC** | **PUERTO BERRIO,** | **3.66** | **237** | *eP* | **Pn** | **10 23 57.6** | **-0.1** |
| **BENV** | **Beln** | **3.97** | **69** | *eP* | **Pn** | **10 24 04.1** | **+2.1** |
| BENV | | | | *eS* | **Sn** | **10 24 49.4** | **+1.2** |
| **SJCC** | **San Jacinto, C** | **4.01** | **290** | *eS* | **Sn** | **10 24 49.9** | **+0.5** |
| **CACV** | **CAICARA DEL OR** | **4.86** | **101** | *eP* | **Pb** | **10 24 23.2** | **-3.3** |
| CACV | | | | *eS* | **Sb** | **10 25 22.2** | **-2.6** |
| **BIRV** | **Birongo** | **5.37** | **69** | *eP* | **Pn** | **10 24 22.9** | **+1.6** |
| BIRV | | | | *eS* | **Sn** | **10 25 22.3** | **-0.5** |

*EAF **15** 10:41:22.0±1.7, 25.83S×29.37E, h10km, MD3.5*
**BUL 15 10:41:22.0±0.8, 25.88S×29.37E, h10km, MD3.6, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.57** | **100** | *eP* | Pn | 10 42 03.0 | -0.6 |
| CNG | | | | *eS* | Sn | 10 42 34.0 | -1.0 |
| **CNG** | **Changalane** | **2.57** | **100** | *eP* | Pn | 10 42 03.0 | -0.6 |
| CNG | | | | *eS* | Sn | 10 42 34.0 | -1.0 |
| **MOPA** | **Mopani** | **2.99** | **39** | *i P* | Pn | 10 42 07.0 | -2.5 |
| MOPA | | | | *eS* | Sn | 10 42 41.4 | -4.1 |
| **MOPA** | **Mopani** | **2.99** | **39** | *i P* | Pn | 10 42 07.0 | -2.5 |
| MOPA | | | | *eS* | Sn | 10 42 41.4 | -4.1 |
| **LBTB** | **Lobatse** | **3.52** | **283** | *eP* | Pn | 10 42 16.3 | -0.5 |
| LBTB | | | | *eS* | Sn | 10 42 56.2 | -2.4 |
| **LBTB** | **Lobatse** | **3.52** | **283** | *eP* | Pn | 10 42 16.3 | -0.5 |
| LBTB | | | | *eS* | Sn | 10 42 56.2 | -2.4 |
| **MATP** | **Matopo** | **5.49** | **351** | *eP* | Pn | 10 42 43.8 | -0.2 |
| MATP | | | | *eS* | Sn | 10 43 42.5 | -4.7 |
| **MATP** | **Matopo** | **5.49** | **351** | *eP* | Pn | 10 42 43.8 | -0.2 |
| MATP | | | | *eS* | Sn | 10 43 42.5 | -4.7 |

*IDC **15** 10:41:40.0±0.5, 61.19N×150.30W, h0km, mb4.0/26, mb1 4.0/29, mb1mx3.9/55, mbtmp4.0/29, ML3.9/3, MS3.3/13, Ms1 3.3/13, ms1mx2.9/94, Error ellipse: s-maj=12.0km s-min=10.0km az=24.0*
*NEIC **15** 10:41:45.6, 60.90N×150.06W, h50km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=0.92; $M_{\theta\theta}$=-1.35; $M_{\phi\phi}$2.28; $M_{r\theta}$1.51; $M_{\theta\phi}$1.16; $M_{r\phi}$0.55; Fault plane solution: $M_0$2.81000×$10^{15}$ NP1:$\phi_s$336.79000°, $\delta$51.29000°, $\lambda$-161.34000°. NP2:$\phi_s$234.87000°, $\delta$75.54000°, $\lambda$-40.23000°. Principal axes: T 2.8793, Plg15.0000°, Azm291.0000°; N -0.1545, Plg48.0000°, Azm38.0000°; P -2.7248, Plg38.0000°, Azm188.0000°;*
*NEIC **15** 10:41:46.3±2.1, 60.94N±0.03×150.07W±0.06, h50km±4km Error ellipse: s-maj=4.8km s-min=3.3km az=133.0*
*AEIC **15** 10:41:47±1.9, 60.89N±0.03×150.02W±0.08, h49km±5km, ML4.1, mb4.2/11(NEIC), ML4.3/154(NEIC), Mwr4.2/151(NEIC), Error ellipse: s-maj=5.9km s-min=4.0km az=117.0*
**ISC 15 10:41:46.1±0.6, 60.90N±0.02×150.01W±0.03, h54km±5km, n282, σ1§09/252, mb4.1/34, MS3.3/10, Kenai Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RC01** | **Rabbit Creek A** | **0.23** | **36** | | **Sn** | **10 42 01.5** | **0.0** |
| **RC01** | **Rabbit Creek A** | **0.23** | **36** | | **Pn** | **10 41 55.0** | **-0.1** |
| RC01 | | | | IAML | | 10 41 55.4 | |
| | comp=E,10μm,0.5s | | | | | | |
| RC01 | | | | IAML | | 10 41 55.5 | |
| | comp=N,9μm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **0.23** | **36** | P | **Pn** | **10 41 55.0** | **-0.1** |
| | baz=214 | | | | | | |
| RC01 | | | | S | **Sn** | **10 42 01.5** | **0.0** |
| | baz=214 | | | | | | |
| **FIS** | **Fire Island** | **0.26** | **338** | | **Pn** | **10 41 55.5** | **+0.3** |
| FIS | | | | Sn | **Sn** | **10 42 03.5** | **+1.7** |
| **SLKM** | **Skilak Lake** | **0.41** | **195** | | **Pn** | **10 41 56.5** | **-0.1** |
| SLKM | | | | | **Sn** | **10 42 04.2** | **-0.1** |
| **O22K** | **Cooper Landing** | **0.45** | **161** | | **Pn** | **10 41 56.8** | **-0.2** |
| O22K | | | | Sn | **Sn** | **10 42 05.2** | **+0.4** |
| **O22K** | **Cooper Landing** | **0.45** | **161** | P | **Pn** | **10 41 57.0** | **+0.1** |
| | baz=341 | | | | | | |
| O22K | | | | S | **Sn** | **10 42 05.2** | **+0.4** |
| | baz=341 | | | | | | |
| **CAPN** | **Captain Cook N** | **0.57** | **257** | | **Pn** | **10 41 59.3** | **+0.9** |
| CAPN | | | | Sn | **Sn** | **10 42 10.2** | **+2.8** |
| **CAPN** | **Captain Cook N** | **0.57** | **257** | P | **Pn** | **10 41 59.3** | **+0.9** |
| | baz=77 | | | | | | |
| **PMR** | **Palmer** | **0.81** | **31** | | **Pn** | **10 42 01.3** | **-0.1** |
| PMR | | | | Sn | **Sn** | **10 42 12.7** | **+0.1** |
| PMR | | | | IAML | | 10 42 13.2 | |
| | comp=E,9μm,0.6s | | | | | | |
| PMR | | | | IAML | | 10 42 13.6 | |
| | comp=N,13μm,0.6s | | | | | | |
| **PMR** | **Palmer** | **0.81** | **31** | P | **Pn** | **10 42 01.4** | **-0.1** |
| | baz=212 | | | | | | |
| PMR | | | | S | **Sn** | **10 42 12.9** | **+0.3** |
| | baz=212 | | | | | | |
| **PWL** | **Port Wells** | **0.82** | **92** | Pn | **Pn** | **10 42 01.9** | **+0.3** |
| PWL | | | | IAML | | 10 42 16.1 | |
| | comp=E,10μm,0.3s | | | | | | |
| **SEW** | **Seward** | **0.85** | **161** | | **Pn** | **10 42 01.7** | **-0.2** |
| **SEW** | **Seward** | **0.85** | **161** | P | **Pn** | **10 42 01.7** | **-0.2** |
| | baz=341 | | | | | | |
| **M22K** | **Willow** | **0.85** | **357** | | **Pn** | **10 42 01.2** | **-0.7** |
| **M22K** | **Willow** | **0.85** | **357** | | **Sn** | **10 42 14.2** | **+0.6** |
| **M22K** | **Willow** | **0.85** | **357** | P | **Pn** | **10 42 01.6** | **-0.4** |
| | baz=177 | | | | | | |
| M22K | | | | S | **Sn** | **10 42 14.2** | **+0.6** |
| | baz=177 | | | | | | |
| **KNK** | **Knik Glacier** | **0.91** | **55** | | **Pn** | **10 42 03.1** | **+0.3** |
| **KNK** | **Knik Glacier** | **0.91** | **55** | P | **Pn** | **10 42 03.4** | **+0.7** |
| | baz=236 | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.02** | **31** | | **Pn** | **10 42 04.5** | **+0.3** |
| **GHO** | **Glory Hole Cre** | **1.02** | **31** | IAML | | 10 42 20.3 | |
| | comp=N,10μm,0.6s | | | | | | |
| **SPU** | **Mount Spurr** | **1.03** | **287** | | **Pn** | **10 42 03.8** | **-0.5** |
| **SPCG** | **Spurr Capps Gl** | **1.05** | **293** | | **Pn** | **10 42 04.5** | **-0.2** |
| SPCG | | | | | **Sn** | **10 42 19.4** | **+1.0** |
| **STLK** | **Strandline Lak** | **1.06** | **305** | | **Pn** | **10 42 04.7** | **-0.2** |
| **SPCR** | **Spurr Chakacha** | **1.11** | **287** | | **Pn** | **10 42 05.0** | **-0.5** |
| **SPCR** | **Spurr Chakacha** | **1.11** | **287** | P | **Pn** | **10 42 05.0** | **-0.5** |
| | baz=105 | | | | | | |
| **SPBG** | **Spurr Blockage** | **1.20** | **288** | | **Pn** | **10 42 06.5** | **-0.1** |
| **SML** | **Sawmill** | **1.22** | **41** | | **Pn** | **10 42 07.1** | **+0.3** |
| SML | | | | IAML | | 10 42 24.0 | |
| | comp=E,6μm,0.5s | | | | | | |
| SML | | | | IAML | | 10 42 29.0 | |
| | comp=N,5μm,1.0s | | | | | | |
| **SML** | **Sawmill** | **1.22** | **41** | P | **Pn** | **10 42 07.1** | **+0.3** |
| | baz=222 | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.22** | **198** | | **Pn** | **10 42 06.9** | **0.0** |
| BRSE | | | | | **Sn** | **10 42 23.6** | **+1.3** |
| **BRSE** | **Bradley Lake S** | **1.22** | **198** | P | **Pn** | **10 42 06.9** | **0.0** |
| | baz=17 | | | | | | |
| BRSE | | | | S | **Sn** | **10 42 23.6** | **+1.3** |
| | baz=17 | | | | | | |
| **RDT** | **Redoubt** | **1.22** | **255** | | **Pn** | **10 42 06.6** | **-0.3** |
| **BRLK** | **Bradley Lake** | **1.22** | **201** | | **Pn** | **10 42 07.2** | **+0.2** |
| **BRLK** | **Bradley Lake** | **1.22** | **201** | IAML | | 10 42 26.5 | |
| | comp=E,6μm,0.5s | | | | | | |
| BRLK | | | | IAML | | 10 42 26.7 | |
| | comp=N,5μm,0.5s | | | | | | |
| **DFR** | **Drift River** | **1.35** | **258** | | **Pn** | **10 42 08.4** | **-0.3** |
| DFR | | | | | **Sn** | **10 42 25.7** | **+0.1** |
| **SPNN** | **North Nagishla** | **1.38** | **291** | | **Pn** | **10 42 09.6** | **+0.4** |
| **RSO** | **Redoubt South** | **1.42** | **253** | | **Pn** | **10 42 09.6** | **-0.1** |
| **GLI** | **Glacier Island** | **1.43** | **90** | | **Pn** | **10 42 09.3** | **-0.4** |
| **GLI** | **Glacier Island** | **1.43** | **90** | P | **Pn** | **10 42 09.3** | **-0.4** |
| | baz=272 | | | | | | |
| **NCT** | **North Crescent** | **1.47** | **258** | | **Pn** | **10 42 10.1** | **-0.3** |
| **HOM** | **Homer** | **1.49** | **214** | | **Pn** | **10 42 11.0** | **+0.5** |
| **HOM** | **Homer** | **1.49** | **214** | P | **Pn** | **10 42 11.0** | **+0.5** |
| | baz=33 | | | | | | |
| **CNPM** | **China Poot** | **1.51** | **204** | | **Pn** | **10 42 11.1** | **+0.3** |
| **CNPM** | **China Poot** | **1.51** | **204** | IAML | | 10 42 33.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| CNPM | | | | IAML | | 10 42 34.1 | |
| | comp=E,3μm,0.4s | | | | | | |
| **CUT** | **Chulitna** | **1.51** | **355** | | **Pn** | **10 42 10.3** | **-0.5** |
| **CUT** | **Chulitna** | **1.51** | **355** | | **Sn** | **10 42 30.4** | **+1.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DHY** | **Denali Highway** | **2.51** | **29** | P | | **Pn** | **10 42 25.1** | **+0.6** |
| | baz=211 | | | | | | | |
| **TRF** | **Thorofare Moun** | **2.56** | **357** | | | **Pn** | **10 42 26.2** | **+1.0** |
| **TRF** | **Thorofare Moun** | **2.56** | **357** | IAML | | | 10 43 19.6 | |
| | comp=E,1μm,0.7s | | | | | | | |
| **TRF** | **Thorofare Moun** | **2.56** | **357** | P | | **Pn** | **10 42 26.2** | **+1.0** |
| | baz=177 | | | | | | | |
| **RND** | **Reindeer** | **2.57** | **12** | | | **Pn** | **10 42 26.5** | **+1.2** |
| **RND** | **Reindeer** | **2.57** | **12** | IAML | | | 10 43 07.8 | |
| | comp=E,895nm,1.2s | | | | | | | |
| **BMRM** | **Bremner River** | **2.64** | **86** | Pn | | **Pn** | **10 42 25.8** | **-0.4** |
| BMRM | | | | IAML | | | 10 43 14.9 | |
| | comp=N,1μm,0.7s | | | | | | | |
| BMRM | | | | IAML | | | 10 43 17.5 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **BMRM** | **Bremner River** | **2.64** | **86** | P | | **Pn** | **10 42 25.8** | **-0.4** |
| | baz=271 | | | | | | | |
| **L19K** | **White Mountain** | **2.65** | **301** | | | **Pn** | **10 42 26.6** | **+0.3** |
| **L19K** | **White Mountain** | **2.65** | **301** | IAML | | | 10 43 13.5 | |
| | comp=N,928nm,1.1s | | | | | | | |
| L19K | | | | IAML | | | 10 43 14.1 | |
| | comp=E,978nm,1.4s | | | | | | | |
| **L19K** | **White Mountain** | **2.65** | **301** | P | | **Pn** | **10 42 26.6** | **+0.3** |
| | baz=117 | | | | | | | |
| **KTH** | **Kantishna Hill** | **2.69** | **351** | | | **Pn** | **10 42 28.3** | **+1.3** |
| **KTH** | **Kantishna Hill** | **2.69** | **351** | IAML | | | 10 43 17.0 | |
| | comp=E,1μm,1.4s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **2.69** | **224** | | | **Pn** | **10 42 27.5** | **+0.6** |
| **Q19K** | **Cape Douglas,** | **2.69** | **224** | P | | **Pn** | **10 42 27.5** | **+0.6** |
| | baz=41 | | | | | | | |
| **CAST** | **Castle Rocks** | **2.71** | **340** | Pn | | **Pn** | **10 42 27.4** | **+0.3** |
| CAST | | | | IAML | | | 10 43 15.1 | |
| | comp=E,1μm,1.2s | | | | | | | |
| CAST | | | | IAML | | | 10 43 16.0 | |
| | comp=N,1μm,0.6s | | | | | | | |
| **N25K** | **Chitina, Valde** | **2.71** | **73** | | | **Pn** | **10 42 27.7** | **+0.5** |
| **N25K** | **Chitina, Valde** | **2.71** | **73** | IAML | | | 10 43 12.2 | |
| | comp=E,1μm,0.5s | | | | | | | |
| N25K | | | | IAML | | | 10 43 14.4 | |
| | comp=N,1μm,0.6s | | | | | | | |
| **N25K** | **Chitina, Valde** | **2.71** | **73** | P | | **Pn** | **10 42 27.7** | **+0.5** |
| | baz=257 | | | | | | | |
| **HARP** | **HAARP** | **2.76** | **55** | | | **Pn** | **10 42 29.1** | **+1.3** |
| **HARP** | **HAARP** | **2.76** | **55** | P | | **Pn** | **10 42 29.1** | **+1.3** |
| | baz=239 | | | | | | | |
| **O18K** | **Koktuh Hills** | **2.79** | **250** | | | **Pn** | **10 42 28.4** | **+0.2** |
| **O18K** | **Koktuh Hills** | **2.79** | **250** | IAML | | | 10 43 14.7 | |
| | comp=E,910nm,1.1s | | | | | | | |
| O18K | | | | IAML | | | 10 43 15.4 | |
| | comp=N,1μm,1.0s | | | | | | | |
| **O18K** | **Koktuh Hills** | **2.79** | **250** | P | | **Pn** | **10 42 28.4** | **+0.2** |
| | baz=66 | | | | | | | |
| **MCK** | **McKinley** | **2.88** | **10** | | | **Pn** | **10 42 30.6** | **+1.0** |
| **MCK** | **McKinley** | **2.88** | **10** | IAML | | | 10 43 17.6 | |
| | comp=E,652nm,1.3s | | | | | | | |
| MCK | | | | IAML | | | 10 43 20.0 | |
| | comp=N,972nm,1.1s | | | | | | | |
| **MCK** | **McKinley** | **2.88** | **10** | P | | **Pn** | **10 42 30.6** | **+1.0** |
| | baz=190 | | | | | | | |
| **PAX** | **Paxson** | **2.99** | **44** | | | **Pn** | **10 42 32.3** | **+1.3** |
| **PAX** | **Paxson** | **2.99** | **44** | P | | **Pn** | **10 42 32.3** | **+1.3** |
| | baz=228 | | | | | | | |
| **P18K** | **Big Mountain,** | **3.02** | **242** | | | **Pn** | **10 42 31.4** | **0.0** |
| **P18K** | **Big Mountain,** | **3.02** | **242** | P | | **Pn** | **10 42 31.4** | **0.0** |
| | baz=58 | | | | | | | |
| **GLB** | **Gilahina Butte** | **3.05** | **77** | | | **Pn** | **10 42 32.1** | **+0.2** |
| **GLB** | **Gilahina Butte** | **3.05** | **77** | IAML | | | 10 43 27.0 | |
| | comp=E,631nm,0.8s | | | | | | | |
| **NICHA** | **Nichawak Mount** | **3.06** | **100** | | | **Pn** | **10 42 30.8** | **-1.2** |
| **K20K** | **Telida** | **3.11** | **324** | IAML | | | 10 43 30.1 | |
| | comp=E,663nm,0.8s | | | | | | | |
| **BERG** | **Berg Lake** | **3.15** | **97** | | | **Pn** | **10 42 32.0** | **-1.1** |
| **BERG** | **Berg Lake** | **3.15** | **97** | IAML | | | 10 43 38.8 | |
| | comp=N,1μm,1.0s | | | | | | | |
| **CHUM** | **Lake Minchumin** | **3.18** | **341** | | | **Pn** | **10 42 33.7** | **+0.2** |
| **CHUM** | **Lake Minchumin** | **3.18** | **341** | P | | **Pn** | **10 42 33.7** | **+0.2** |
| | baz=159 | | | | | | | |
| **VRDI** | **Verde Repeater** | **3.21** | **81** | | | **Pn** | **10 42 34.0** | **-0.1** |
| **VRDI** | **Verde Repeater** | **3.21** | **81** | IAML | | | 10 43 34.3 | |
| | comp=N,759nm,1.0s | | | | | | | |
| **PS10** | **TAPS Pump St10** | **3.22** | **36** | | | **Pn** | **10 42 35.2** | **+1.0** |
| **BPAW** | **Bear Paw Mtn.** | **3.24** | **352** | | | **Pn** | **10 42 35.5** | **+1.1** |
| **BPAW** | **Bear Paw Mtn.** | **3.24** | **352** | IAML | | | 10 43 36.1 | |
| | comp=E,544nm,0.6s | | | | | | | |
| BPAW | | | | IAML | | | 10 43 43.6 | |
| | comp=N,568nm,1.0s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **3.24** | **352** | P | | **Pn** | **10 42 35.5** | **+1.1** |
| | baz=172 | | | | | | | |
| **KHIT** | **Khitrov Hills** | **3.36** | **95** | | | **Pn** | **10 42 35.1** | **-1.0** |
| **GRIN** | **Grindle Hills** | **3.36** | **98** | | | **Pn** | **10 42 35.0** | **-1.1** |
| **KDAK** | **Kodiak Island** | **3.40** | **204** | Pn | | **Pn** | **10 42 35.7** | **-0.9** |
| | comp=N,42nm,0.3s,baz=52,slow=10,SNR=434 | | | | | | | |
| KDAK | | | | Sn | | **Sn** | **10 43 12.8** | **-2.6** |
| | comp=N,28nm,0.3s,baz=20,slow=15,SNR=6.8 | | | | | | | |
| KDAK | | | | Lg | Lg | | 10 43 30.2 | |
| | comp=N,36nm,0.3s,baz=307,slow=20,SNR=6.2 | | | | | | | |
| **KDAK** | **Kodiak Island** | **3.40** | **204** | Pn | | **Pn** | **10 42 35.6** | **-0.9** |
| KDAK | | | | IAML | | | 10 43 55.1 | |
| | comp=N,526nm,0.9s | | | | | | | |
| **TT01** | **Tatalina** | **3.48** | **308** | | | **Pn** | **10 42 37.5** | **-0.2** |
| **TTA** | **Tatalina** | **3.49** | **308** | | | **Pn** | **10 42 37.5** | **-0.4** |
| **TTA** | **Tatalina** | **3.49** | **308** | P | | **Pn** | **10 42 37.5** | **-0.4** |
| | baz=123 | | | | | | | |
| **WAX** | **Waxell Ridge** | **3.55** | **94** | | | **Pn** | **10 42 38.0** | **-0.7** |
| **WAX** | **Waxell Ridge** | **3.55** | **94** | IAML | | | 10 43 44.6 | |
| | comp=E,744nm,0.7s | | | | | | | |
| **SNH** | **Sunshine Point** | **3.62** | **98** | | | **Pn** | **10 42 38.5** | **-1.1** |
| **M26K** | **Nabesna, AK** | **3.67** | **63** | IAML | | | 10 43 41.9 | |
| | comp=N,384nm,0.6s | | | | | | | |
| **WRH** | **Wood River Hil** | **3.69** | **13** | | | **Pn** | **10 42 41.9** | **+1.3** |
| **NEA2** | **Nenana** | **3.73** | **6** | | | **Pn** | **10 42 42.4** | **+1.3** |
| **NEA2** | **Nenana** | **3.73** | **6** | P | | **Pn** | **10 42 42.4** | **+1.3** |
| | baz=187 | | | | | | | |
| **RIDG** | **Independent Ri** | **3.73** | **38** | | | **Pn** | **10 42 42.4** | **+1.2** |
| **RIDG** | **Independent Ri** | **3.73** | **38** | IAML | | | 10 43 49.2 | |
| | comp=N,609nm,1.0s | | | | | | | |
| RIDG | | | | IAML | | | 10 43 53.4 | |
| | comp=E,659nm,0.8s | | | | | | | |
| **RIDG** | **Independent Ri** | **3.73** | **38** | P | | **Pn** | **10 42 42.4** | **+1.2** |
| | baz=222 | | | | | | | |
| **KIAG** | **Kiagna River** | **3.74** | **86** | | | **Pn** | **10 42 41.1** | **-0.3** |
| **BALM** | **Baldy** | **3.74** | **85** | | | **Pn** | **10 42 41.1** | **-0.2** |
| **ISLE** | **Juniper Island** | **3.78** | **91** | | | **Pn** | **10 42 41.1** | **-0.8** |
| **ISLE** | **Juniper Island** | **3.78** | **91** | IAML | | | 10 43 45.2 | |
| | comp=E,685nm,0.7s | | | | | | | |
| ISLE | | | | IAML | | | 10 43 50.5 | |
| | comp=N,645nm,0.9s | | | | | | | |
| **HDA** | **Harding Lake** | **3.79** | **21** | | | **Pn** | **10 42 43.4** | **+1.4** |
| **HDA** | **Harding Lake** | **3.79** | **21** | IAML | | | 10 43 52.7 | |
| | comp=N,575nm,0.6s | | | | | | | |
| HDA | | | | IAML | | | 10 43 53.5 | |
| | comp=E,333nm,0.8s | | | | | | | |
| **HDA** | **Harding Lake** | **3.79** | **21** | P | | **Pn** | **10 42 43.4** | **+1.4** |
| | baz=203 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.80** | **53** | | | **Pn** | **10 42 43.3** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **3.80** | **53** | IAML | | | 10 43 52.4 | |
| | comp=E,635nm,0.4s | | | | | | | |
| L26K | | | | IAML | | | 10 43 52.8 | |
| | comp=N,582nm,0.5s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.80** | **53** | P | | **Pn** | **10 42 43.3** | **+1.2** |
| | baz=239 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **3.89** | **14** | | | **Pn** | **10 42 44.5** | **+1.2** |
| **BAGL** | **Bagley Icefiel** | **3.92** | **93** | | | **Pn** | **10 42 43.1** | **-0.5** |
| **PS08** | **TAPS Pump Stn8** | **3.94** | **21** | | | **Pn** | **10 42 45.6** | **+1.6** |
| **MESA** | **MESA** | **4.05** | **97** | | | **Pn** | **10 42 44.5** | **-1.1** |
| **MESA** | **MESA** | **4.05** | **97** | IAML | | | 10 43 37.7 | |
| | comp=N,455nm,0.5s | | | | | | | |
| MESA | | | | IAML | | | 10 44 13.3 | |
| | comp=E,444nm,1.0s | | | | | | | |
| **MESA** | **MESA** | **4.05** | **97** | P | | **Pn** | **10 42 44.5** | **-1.1** |
| | baz=284 | | | | | | | |
| **BARN** | **Barnard Glacie** | **4.07** | **84** | | | **Pn** | **10 42 46.5** | **+0.5** |
| **BARN** | **Barnard Glacie** | **4.07** | **84** | IAML | | | 10 43 51.7 | |
| | comp=N,284nm,0.7s | | | | | | | |
| BARN | | | | IAML | | | 10 43 57.9 | |
| | comp=E,422nm,0.6s | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **4.11** | **13** | | | **Pn** | **10 42 47.6** | **+1.4** |
| **TCOL** | **CIGO, UAF Yank** | **4.11** | **13** | P | | **Pn** | **10 42 47.6** | **+1.4** |
| | baz=195 | | | | | | | |
| **COLA** | **College** | **4.11** | **13** | | | **Pn** | **10 42 47.6** | **+1.4** |
| **YAH** | **Yahtse** | **4.11** | **94** | | | **Pn** | **10 42 45.9** | **-0.6** |
| **YAH** | **Yahtse** | **4.11** | **94** | IAML | | | 10 43 57.9 | |
| | comp=E,284nm,0.8s | | | | | | | |
| YAH | | | | IAML | | | 10 44 01.7 | |
| | comp=N,341nm,0.6s | | | | | | | |
| **IL31** | | **4.14** | **19** | | | **Pn** | **10 42 47.6** | **+0.9** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **4.14** | **19** | Pg | | **Pn** | **10 42 47.6** | **+0.9** |
| | comp=N,5.9nm,0.3s,baz=207,slow=13,SNR=205 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **10 43 32.5** | **-1.2** |
| | comp=N,14nm,0.3s,baz=207,slow=18,SNR=3.1 | | | | | | | |
| ILAR | | | | Lg | Lg | | 10 43 52.6 | |
| | comp=N,19nm,0.3s,baz=217,slow=19,SNR=8.6 | | | | | | | |
| **MDM** | **Murphy Dome** | **4.15** | **11** | | | **Pn** | **10 42 48.1** | **+1.2** |
| **MDM** | **Murphy Dome** | **4.15** | **11** | IAML | | | 10 43 41.5 | |
| | comp=N,260nm,0.9s | | | | | | | |
| MDM | | | | IAML | | | 10 44 04.5 | |
| | comp=E,245nm,1.1s | | | | | | | |
| **MLY** | **Manley** | **4.16** | **356** | | | **Pn** | **10 42 47.6** | **+0.6** |
| **MLY** | **Manley** | **4.16** | **356** | P | | **Pn** | **10 42 47.6** | **+0.6** |
| | baz=175 | | | | | | | |
| **SCRK** | **Sand Creek** | **4.17** | **40** | | | **Pn** | **10 42 47.6** | **+0.4** |
| **SCRK** | **Sand Creek** | **4.17** | **40** | IAML | | | 10 44 06.4 | |
| | comp=E,294nm,0.8s | | | | | | | |
| **SCRK** | **Sand Creek** | **4.17** | **40** | P | | **Pn** | **10 42 47.6** | **+0.4** |
| | baz=225 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.27** | **4** | | | **Pn** | **10 42 49.9** | **+1.4** |
| **I23K** | **Minto, Yukon-K** | **4.27** | **4** | IAML | | | 10 44 07.3 | |
| | comp=N,373nm,0.9s | | | | | | | |
| I23K | | | | IAML | | | 10 44 16.9 | |
| | comp=E,314nm,0.9s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.27** | **4** | P | | **Pn** | **10 42 49.9** | **+1.4** |
| | baz=184 | | | | | | | |
| **J25K** | **Salcha River,** | **4.29** | **28** | | | **Pn** | **10 42 50.1** | **+1.3** |
| **J25K** | **Salcha River,** | **4.29** | **28** | IAML | | | 10 44 06.0 | |
| | comp=E,247nm,0.8s | | | | | | | |
| **J25K** | **Salcha River,** | **4.29** | **28** | P | | **Pn** | **10 42 50.1** | **+1.3** |
| | baz=212 | | | | | | | |
| **I21K** | **Tanana** | **4.39** | **349** | IAML | | | 10 44 11.3 | |
| | comp=E,312nm,1.1s | | | | | | | |
| I21K | | | | IAML | | | 10 44 27.2 | |
| | comp=N,263nm,0.9s | | | | | | | |
| **TABL** | **Table Mountain** | **4.39** | **92** | | | **Pn** | **10 42 50.2** | **-0.1** |
| **TABL** | **Table Mountain** | **4.39** | **92** | IAML | | | 10 44 05.2 | |
| | comp=E,240nm,0.9s | | | | | | | |
| TABL | | | | IAML | | | 10 44 09.4 | |
| | comp=N,196nm,0.8s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.39** | **14** | | | **Pn** | **10 42 51.6** | **+1.5** |
| **POKR** | **Poker Plat Res** | **4.39** | **14** | IAML | | | 10 44 06.7 | |
| | comp=E,202nm,1.4s | | | | | | | |
| POKR | | | | IAML | | | 10 44 10.6 | |
| | comp=N,216nm,0.9s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.39** | **14** | P | | **Pn** | **10 42 51.6** | **+1.5** |
| | baz=197 | | | | | | | |
| **BC03** | | **4.45** | **57** | | | **Pn** | **10 42 51.9** | **+1.0** |
| **PS07** | **TAPS Pump Stn7** | **4.50** | **9** | | | **Pn** | **10 42 52.4** | **+0.9** |
| **YUK2** | **White River** | **4.50** | **75** | | | **Pn** | **10 42 52.4** | **+0.6** |
| **BVCY** | **Beaver Creek** | **4.62** | **67** | | | **Pn** | **10 42 54.3** | **+1.0** |
| **BVCY** | **Beaver Creek** | **4.62** | **67** | P | | **Pn** | **10 42 54.3** | **+1.0** |
| | baz=255 | | | | | | | |
| **YUK3** | **Moose Creek** | **4.68** | **75** | | | **Pn** | **10 42 55.0** | **+0.6** |
| **YUK3** | **Moose Creek** | **4.68** | **75** | P | | **Pn** | **10 42 55.0** | **+0.6** |
| | baz=263 | | | | | | | |
| **SII** | **Sitkinak Islan** | **4.87** | **208** | | | **Pn** | **10 42 55.9** | **-0.8** |
| **SII** | **Sitkinak Islan** | **4.87** | **208** | IAML | | | 10 44 36.2 | |
| | comp=E,252nm,0.7s | | | | | | | |
| **SII** | **Sitkinak Islan** | **4.87** | **208** | P | | **Pn** | **10 42 55.9** | **-0.8** |
| | baz=25 | | | | | | | |
| **PCA** | **Pinnacle** | **4.89** | **95** | | | **Pn** | **10 42 56.5** | **-0.6** |
| **PINM** | **Pinnacle** | **4.89** | **95** | P | | **Pn** | **10 42 56.5** | **-0.6** |
| | baz=284 | | | | | | | |
| **H21K** | **Melozitna Rive** | **4.94** | **346** | IAML | | | 10 44 24.0 | |
| | comp=E,285nm,1.3s | | | | | | | |
| H21K | | | | IAML | | | 10 44 24.2 | |
| | comp=N,204nm,0.9s | | | | | | | |
| **H23K** | **Yukon River** | **4.95** | **2** | IAML | | | 10 44 36.5 | |
| | comp=E,139nm,1.5s | | | | | | | |
| **GCSA** | **Galena City Sc** | **4.98** | **324** | | | **Pn** | **10 42 58.4** | **+0.3** |
| **GCSA** | **Galena City Sc** | **4.98** | **324** | P | | **Pn** | **10 42 58.4** | **+0.3** |
| | baz=138 | | | | | | | |
| **H24K** | **Noodor Dome** | **5.05** | **10** | IAML | | | 10 44 31.9 | |
| | comp=E,199nm,1.2s | | | | | | | |
| **PRP** | **Porcupine Dome** | **5.06** | **22** | | | **Pn** | **10 43 00.6** | **+1.2** |
| **PRP** | **Porcupine Dome** | **5.06** | **22** | IAML | | | 10 44 10.9 | |
| | comp=N,187nm,0.6s | | | | | | | |
| PRP | | | | IAML | | | 10 44 31.7 | |
| | comp=E,150nm,1.0s | | | | | | | |
| **PRP** | **Porcupine Dome** | **5.06** | **22** | P | | **Pn** | **10 43 00.6** | **+1.2** |
| | baz=206 | | | | | | | |
| **BCPM** | **Bancas Point** | **5.23** | **96** | | | **Pn** | **10 43 01.1** | **-0.6** |
| **BCPM** | **Bancas Point** | **5.23** | **96** | IAML | | | 10 44 35.6 | |
| | comp=E,169nm,0.7s | | | | | | | |
| BCPM | | | | IAML | | | 10 44 50.2 | |
| | comp=N,145nm,0.9s | | | | | | | |
| **IM03** | | **5.37** | **343** | | | **Pn** | **10 43 03.8** | **+0.3** |
| **PNL** | **Peninsula** | **5.43** | **99** | | | **Pn** | **10 43 03.9** | **-0.5** |
| **YUK4** | **Talbot Arm** | **5.53** | **80** | P | | **Pn** | **10 43 07.1** | **+1.2** |
| | baz=269 | | | | | | | |
| **EGAK** | **Eagle** | **5.62** | **42** | | | **Pn** | **10 43 07.5** | **+0.6** |
| **EGAK** | **Eagle** | **5.62** | **42** | P | | **Pn** | **10 43 07.5** | **+0.6** |
| | baz=230 | | | | | | | |
| **YUK6** | **Outpost Mounta** | **5.68** | **85** | | | **Pn** | **10 43 08.4** | **+0.3** |
| **YUK6** | **Outpost Mounta** | **5.68** | **85** | P | | **Pn** | **10 43 08.4** | **+0.3** |
| | baz=275 | | | | | | | |
| **DAWY** | **Dawson** | **5.86** | **53** | | | **Pn** | **10 43 11.0** | **+0.8** |
| **DAWY** | **Dawson** | **5.86** | **53** | P | | **Pn** | **10 43 11.0** | **+0.8** |
| | baz=242 | | | | | | | |
| **YUK5** | **Granite Creek** | **5.92** | **82** | | | **Pn** | **10 43 11.2** | **0.0** |
| **HYT** | **Haines Junctio** | **6.11** | **85** | Pn | | **Pn** | **10 43 14.1** | **+0.2** |
| **COLD** | **Coldfoot** | **6.35** | **359** | Pn | | **Pn** | **10 43 17.9** | **+1.0** |
| **ANM** | **Nome** | **7.94** | **304** | Pn | | **Pn** | **10 43 38.4** | **-0.4** |
| **TNA** | **Tin City** | **9.31** | **308** | Pn | | **Pn** | **10 43 57.7** | **+0.2** |
| **INK** | **Inuvik** | **10.22** | **36** | Pn | | **Pn** | **10 44 10.6** | **+0.8** |
| | comp=N,0.2nm,0.3s,baz=231,slow=14,SNR=16 | | | | | | | |
| INK | | | | Sn | | **Sn** | **10 46 04.4** | **+1.6** |
| | comp=N,0.2nm,0.3s,baz=271,slow=17,SNR=2.1 | | | | | | | |
| INK | | | | Lg | Lg | | 10 46 59.7 | |
| | comp=N,0.1nm,0.3s,baz=262,slow=5.3,SNR=1.5 | | | | | | | |
| INK | | | | LR | LR | | 10 48 30.4 | |
| | comp=N,85nm,21.5s,baz=233,slow=41 | | | | | | | |
| **INK** | **Inuvik** | **10.22** | **36** | Pn | | **Pn** | **10 44 10.9** | **+1.0** |
| **DLBC** | **Dease Lake** | **10.40** | **95** | Pn | | **Pn** | **10 44 13.5** | **+1.2** |
| | comp=N,0.3nm,0.3s,baz=334,slow=16,SNR=11 | | | | | | | |
| DLBC | | | | Sn | | Sn | 10 46 16.6 | +9.4 |
| | comp=N,0.3nm,0.3s,baz=276,slow=18,SNR=1.7 | | | | | | | |
| DLBC | | | | Lg | Lg | | 10 47 15.4 | |
| | comp=N,0.2nm,0.3s,baz=221,slow=20,SNR=1.7 | | | | | | | |
| DLBC | | | | LR | LR | | 10 48 49.1 | |
| | comp=N,127nm,21.7s,baz=309,slow=41 | | | | | | | |
| **GAMB** | **Gambell** | **10.47** | **295** | | | **Pn** | **10 44 13.3** | **+0.1** |
| **C36M** | **Paulatuk** | **13.69** | **41** | Pn | | **Pn** | **10 44 54.0** | **-3.1** |
| **A36M** | **Sachs Harbour** | **14.72** | **31** | Pn | | **Pn** | **10 45 08.6** | **-2.1** |
| **BBB** | **Bella Bella** | **14.84** | **116** | LR | | LR | 10 50 25.4 | |
| | comp=N,48nm,20.9s,baz=286,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **16.74** | **69** | Pn | | **Pn** | **10 45 35.8** | **-0.7** |
| | comp=N,0.3nm,0.3s,baz=276,slow=10.0,SNR=56 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **16.74** | **69** | | | pP | 10 45 48.9 | -1.2 |
| **EDM** | **Edmonton** | **21.12** | **95** | P | | **P** | **10 46 27.3** | **+1.3** |
| EDM | | | | IAmb | | IAmb | 10 46 54.0 | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| **NEW** | **Newport** | **22.59** | **109** | P | | **P** | **10 46 44.7** | **+2.9** |
| | comp=Z,0.5nm,0.6s,baz=322,slow=19,SNR=1.5 | | | | | | | |
| NEW | | | | LR | | LR | 10 56 16.0 | |
| | comp=Z,91nm,18.5s,baz=44,slow=38 | | | | | | | |
| **NEW** | **Newport** | **22.59** | **109** | IAmb | | IAmb | 10 47 05.7 | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **RES** | **Resolute Bay** | **23.75** | **33** | P | | **P** | **10 46 52.4** | **-0.5** |
| | comp=Z,0.5nm,0.5s,baz=207,slow=9.0,SNR=1.5 | | | | | | | |
| RES | | | | LR | | LR | 10 57 37.2 | |
| | comp=Z,69nm,18.7s,baz=346,slow=41 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **25.36** | **127** | P | | **P** | **10 47 11.4** | **+3.5** |
| | comp=Z,1.8nm,1.0s,baz=321,slow=2.1,SNR=3.6 | | | | | | | |
| YBH | | | | LR | | LR | 10 55 12.2 | |
| | comp=Z,72nm,21.6s,baz=358,slow=32 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **25.36** | **127** | IAmb | | IAmb | 10 47 32.0 | |
| | comp=Z,9.9nm,1.2s | | | | | | | |
| **SEY** | **Seymchan** | **26.42** | **300** | P | | **P** | **10 47 16.1** | **-1.1** |
| | comp=Z,0.9nm,0.5s,baz=101,slow=11,SNR=4.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **28.80** | **279** | P | | **P** | **10 47 36.8** | **-1.8** |
| | comp=Z,5.7nm,1.1s,baz=93,slow=5.8,SNR=2.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **29.93** | **124** | P | | **P** | **10 47 52.2** | **+3.2** |
| | comp=Z,0.6nm,0.7s,baz=325,slow=9.7,SNR=5.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **30.22** | **108** | P | | **P** | **10 47 53.9** | **+2.4** |
| | comp=Z,0.2nm,0.4s,baz=0.6,slow=5.5,SNR=4.3 | | | | | | | |
| **TIXI** | **Tiksi** | **31.64** | **323** | P | | **P** | **10 48 02.5** | **-0.9** |
| | comp=Z,0.5nm,0.3s,baz=91,slow=23,SNR=3.4 | | | | | | | |
| TIXI | | | | LR | | LR | 11 02 25.8 | |
| | comp=Z,28nm,19.2s,baz=347,slow=40 | | | | | | | |
| **TIXI** | **Tiksi** | **31.64** | **323** | IAmb | | IAmb | 10 48 02.9 | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **FRB** | **Frobisher Bay** | **35.55** | **49** | P | | **P** | **10 48 38.9** | **+1.5** |
| | comp=Z,1.6nm,1.1s,baz=80,slow=20,SNR=1.9 | | | | | | | |
| **SUMG** | **Summit** | **38.94** | **26** | *i* P | | P | 10 49 13.0 | +6.4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DAG** | **Danmarks Havn** | **39.23** | **16** | *i* P | | **P** | **10 49 08.0** | **-0.5** |
| **SPITS** | **Spitsbergen Ar** | **40.91** | **4** | P | | **P** | **10 49 21.0** | **-1.3** |
| | comp=Z,5.0nm,0.9s,baz=98,slow=1.7,SNR=6.1 | | | | | | | |
| **DBG** | **Daneborg** | **41.03** | **19** | *i* P | | **P** | **10 49 23.0** | **-0.4** |
| **NRIK** | **Noril'sk** | **43.73** | **334** | P | | **P** | **10 49 43.0** | **-2.3** |
| | comp=Z,0.9nm,0.3s,baz=172,slow=6.2,SNR=4.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **43.96** | **114** | P | | **P** | **10 49 49.8** | **+2.0** |
| | comp=Z,0.4nm,0.8s,baz=330,slow=7.2,SNR=3.6 | | | | | | | |
| **CCAR** | **Cane Creek** | **45.70** | **99** | P | | **P** | **10 50 01.4** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **47.22** | **287** | P | | **P** | **10 50 12.2** | **-1.0** |
| | comp=Z,1.1nm,0.7s,baz=22,slow=16,SNR=1.9 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **48.19** | **90** | LR | | LR | 11 11 11.4 | |
| | comp=Z,98nm,19.0s,baz=353,slow=37 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **49.81** | **2** | P | | **P** | **10 50 30.9** | **-1.9** |
| | comp=Z,3.6nm,1.0s,baz=21,slow=7.8,SNR=4.3 | | | | | | | |
| **KSRS** | **Korea Array** | **54.41** | **284** | P | | **P** | **10 51 07.7** | **+0.4** |
| | comp=Z,2.9nm,0.7s,baz=34,slow=6.9,SNR=8.5 | | | | | | | |
| **XLT** | **XiLinHaoTe** | **54.64** | **298** | *e*P | | **P** | **10 51 12.5** | **+3.5** |
| XLT | | | | pP | | pP | 10 51 21.3 | -2.2 |
| XLT | | | | sP | | sP | 10 51 24.3 | -5.3 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,200nm,4.4s | | | | | | | |
| **SONM** | **Songino Array** | **55.44** | **307** | P | | **P** | **10 51 15.4** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=37,slow=7.1,SNR=18 | | | | | | | |
| SONM | | | | LR | | LR | 11 15 28.7 | |
| | comp=Z,65nm,18.1s,baz=168,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **55.44** | **307** | IAmb | | IAmb | 10 51 43.5 | |
| | comp=Z,2.4nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.50** | **325** | P | | **P** | **10 51 28.0** | **-1.2** |
| | comp=Z,2.3nm,0.6s,baz=31,slow=7.0,SNR=11 | | | | | | | |
| ZALV | | | | LR | | LR | 11 21 00.7 | |
| | comp=Z,39nm,18.2s,baz=15,slow=41 | | | | | | | |
| **NOA** | **NORSAR Array B** | **57.53** | **11** | P | | **P** | **10 51 29.2** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=347,slow=6.4,SNR=1.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **57.94** | **2** | P | | **P** | **10 51 31.4** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=357,slow=7.6,SNR=3.7 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.06** | **299** | *e*P | | **P** | **10 51 43.3** | **+2.9** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,6.2s | | | | | | | |
| **ARU** | **Arti** | **60.86** | **342** | P | | **P** | **10 51 51.4** | **-1.0** |
| | comp=Z,1.4nm,0.2s,baz=8.4,slow=4.7,SNR=4.4 | | | | | | | |
| ARU | | | | LR | | LR | 11 19 25.6 | |
| | comp=Z,24nm,20.7s,baz=326,slow=37 | | | | | | | |
| **ARU** | **Arti** | **60.86** | **342** | IAmb | | IAmb | 10 51 52.2 | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.94** | **334** | P | | **P** | **10 51 58.3** | **-1.4** |
| | comp=Z,1.9nm,0.6s,baz=50,slow=14,SNR=14 | | | | | | | |
| **KURK** | **Kurchatov** | **62.09** | **327** | P | | **P** | **10 52 00.4** | **-0.3** |
| **KURK** | **Kurchatov** | **62.09** | **327** | IAmb | | IAmb | 10 52 22.7 | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.20** | **327** | P | | **P** | **10 52 00.4** | **-1.1** |
| | comp=Z,2.0nm,0.5s,baz=29,slow=6.7,SNR=19 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.63** | **323** | P | | **P** | **10 52 16.2** | **-1.4** |
| | comp=Z,1.4nm,0.6s,baz=48,slow=6.4,SNR=19 | | | | | | | |
| **GTA** | **Gaotai** | **65.10** | **307** | *e*P | | **P** | **10 52 20.3** | **-0.6** |
| GTA | | | | pP | | pP | 10 52 32.8 | -2.9 |
| GTA | | | | sP | | sP | 10 52 37.3 | -4.5 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **WMQ** | **Urumqi** | **65.61** | **318** | *e*P | | **P** | **10 52 28.4** | **+4.3** |
| **LZH** | **Lanzhou** | **66.33** | **302** | *e*P | | P | 10 52 42.5 | +14 |
| LZH | | | | pP | | sP | 10 52 48.5 | -1.3 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **66.75** | **341** | P | | **P** | **10 52 30.1** | **-1.0** |
| | comp=Z,1.8nm,0.9s,baz=56,slow=5.2,SNR=5.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.75** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AMTX** | **Amarillo** | **3.72** | **239** | Pn | Pn | 11 33 12.1 | +0.3 |
| **U40A** | **Yellville** | **4.00** | **96** | | Pn | 11 33 17.2 | +1.6 |
| U40A | | | | IAmb_Lg | | 11 34 31.6 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **4.13** | **123** | Pn | Pn | 11 33 18.1 | +0.7 |
| **N35A** | **Tabor** | **4.34** | **22** | Pn | Pn | 11 33 20.4 | +0.2 |
| **P38A** | **Dawn** | **4.34** | **49** | | Pn | 11 33 20.4 | +0.1 |
| P38A | | | | IAmb_Lg | | 11 34 34.2 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.43** | **84** | Pn | Pn | 11 33 21.5 | +0.1 |
| **R40A** | **Maddies Statio** | **4.61** | **70** | Pn | Pn | 11 33 24.0 | 0.0 |
| **FCAR** | **Ozark Folk Cen** | **4.67** | **100** | Pn | Pn | 11 33 25.4 | +0.6 |
| **X40A** | **Basin Creek Fa** | **4.67** | **119** | Pn | Pn | 11 33 25.1 | +0.3 |
| **WHAR** | **Wooly Hollow** | **4.72** | **108** | Pn | Pn | 11 33 25.2 | -0.2 |
| **W41B** | **Gary Mavity, V** | **4.79** | **109** | Pn | Pn | 11 33 28.2 | +1.8 |
| **N38A** | **Joes South For** | **5.30** | **41** | IAmb_Lg | | 11 35 11.7 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.31** | **275** | Pn | Pn | 11 33 31.8 | -2.0 |
| **CCM** | **Cathedral Cave** | **5.34** | **75** | Pn | Pn | 11 33 33.0 | -1.0 |
| **T42A** | **Van Buren** | **5.36** | **86** | Pn | Pn | 11 33 34.4 | +0.1 |
| **LCAR** | **Lake Charles** | **5.40** | **96** | Pn | Pn | 11 33 33.7 | -1.1 |
| **K31A** | **O'Neill** | **5.81** | **353** | IAmb_Lg | | 11 35 19.4 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.90** | **89** | Pn | Pn | 11 33 41.6 | -0.1 |
| **FVM** | **French Village** | **5.97** | **77** | Pn | Pn | 11 33 41.8 | -0.8 |

*EAF **15** 11:35:13.9±2.6,23°.83S×29°.55E,h10km,MD3.8*
*BUL **15** 11:35:13.3±0.7,23°.84S×29°.64E,h10km,MD4.1*
**ISC 15 11:35:12.0±1.0,23°.86S±0'.03×29°.58E±0'.04,h10km,n14,**
**σ1§41/28,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSNA** | **Messina** | **1.56** | **15** | *eP* | **Pn** | **11 35 39.8** | **-0.1** |
| MSNA | | | | *eS* | **Sn** | **11 35 59.6** | **-0.6** |
| **MSNA** | **Messina** | **1.56** | **15** | *eP* | **Pn** | **11 35 39.8** | **-0.1** |
| MSNA | | | | *eS* | **Sn** | **11 35 59.6** | **-0.6** |
| **MOPA** | **Mopani** | **1.70** | **79** | *eP* | **Pg** | **11 35 44.1** | **-0.5** |
| MOPA | | | | *eS* | **Sg** | **11 36 08.6** | **+1.9** |
| **MOPA** | **Mopani** | **1.70** | **79** | *eP* | **Pg** | **11 35 44.1** | **-0.5** |
| MOPA | | | | *eS* | **Sg** | **11 36 08.6** | **+1.9** |
| **CNG** | **Changalane** | **3.38** | **136** | *eP* | **Pn** | **11 36 05.6** | **+0.7** |
| CNG | | | | *eS* | **Sn** | **11 36 43.7** | **-1.4** |
| **CNG** | **Changalane** | **3.38** | **136** | *eP* | **Pn** | **11 36 05.6** | **+0.7** |
| CNG | | | | *eS* | **Sn** | **11 36 43.7** | **-1.4** |
| **MATP** | **Matopo** | **3.56** | **343** | *eP* | **Pn** | **11 36 08.2** | **+0.7** |
| MATP | | | | *eS* | **Sn** | **11 36 48.2** | **-1.5** |
| **MATP** | **Matopo** | **3.56** | **343** | *eP* | **Pn** | **11 36 08.2** | **+0.7** |
| MATP | | | | *eS* | **Sn** | **11 36 48.2** | **-1.5** |
| **LBTB** | **Lobatse** | **3.81** | **252** | *eP* | **Pn** | **11 36 12.1** | **+1.2** |
| LBTB | | | | *eS* | **Sn** | **11 36 56.2** | **+0.4** |
| **LBTB** | **Lobatse** | **3.81** | **252** | *eP* | **Pn** | **11 36 12.1** | **+1.2** |
| LBTB | | | | *eS* | **Sn** | **11 36 56.2** | **+0.4** |
| **BLWY** | **Bulawayo** | **3.81** | **346** | *eP* | **Pn** | **11 36 11.5** | **+0.6** |
| BLWY | | | | *eS* | **Sn** | **11 36 54.4** | **-1.5** |
| **BLWY** | **Bulawayo** | **3.81** | **346** | *eP* | **Pn** | **11 36 11.5** | **+0.6** |
| BLWY | | | | *eS* | **Sn** | **11 36 54.4** | **-1.5** |
| **BOSA** | **Boshof** | **6.12** | **218** | *eP* | **Pn** | **11 36 43.7** | **+1.0** |
| BOSA | | | | *eS* | **Sn** | **11 37 49.7** | **-3.2** |
| **BOSA** | **Boshof** | **6.12** | **218** | *eP* | **Pn** | **11 36 43.7** | **+1.0** |
| BOSA | | | | *eS* | **Sn** | **11 37 49.7** | **-3.2** |

*IDC **15** 11:49:27.8±2.7,38°.19N×73°.72E,h0km,mb3.6/3,*
*mb1 3.8/8,mb1mx3.3/62,mbtmp3.7/8,ML3.2/6,Error*
*ellipse: s-maj=40.0km s-min=31.1km az=138.0*
*NNC **15** 11:49:32.6±1.6,38°.57N×73°.25E,h0km,mb4.3,mpv4.0,*
*Error ellipse: s-maj=12.3km s-min=7.3km az=172.0*
**ISC 15 11:49:32.5±1.6,38°.6N±0'.1×73°.19E±0'.07,h10km,n36,**
**σ2§60/36,mb3.8/3,8C-5D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **4.20** | **0** | Pg | **Pb** | **11 50 46.3** | **-0.2** |
| | 17nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 11 51 42.7 | |
| | 39nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **4.21** | **13** | Pn | **Pn** | **11 50 39.8** | **+2.9** |
| | 2.8nm,0.3s,baz=185,slow=11,SNR=23 | | | | | | |
| AAK | | | | Sn | **Sb** | **11 51 35.3** | **-2.3** |
| | 0.9nm,0.3s,baz=96,slow=20,SNR=1.7 | | | | | | |
| **AAK** | **Ala-Archa** | **4.21** | **13** | ⇑Pn | **Pn** | **11 50 39.8** | **+2.9** |
| | 38nm,1.1s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 11 51 37.6 | |
| | 36nm,0.9s | | | | | | |
| **IUG** | **Iuzhnay** | **4.33** | **327** | Pg | **Pb** | **11 50 52.0** | **+3.2** |
| | 2μm,0.7s | | | | | | |
| IUG | | | | Lg | Lg | 11 51 52.7 | |
| | 227nm,1.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.74** | **22** | ⇑Pn | **Pn** | **11 50 46.2** | **+2.1** |
| | 8.4nm,1.3s | | | | | | |
| TKM2 | | | | ⇓Pg | **Pb** | **11 50 58.6** | **+2.8** |
| | 17nm,0.9s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 11 52 02.5 | |
| | 66nm,1.4s | | | | | | |
| **KST** | **Kastek** | **4.96** | **24** | Pg | **Pb** | **11 51 01.7** | **+2.2** |
| | 10nm,0.5s | | | | | | |
| KST | | | | Lg | Lg | 11 52 09.3 | |
| | 24nm,0.7s | | | | | | |
| **KK02** | **Karatay Array** | **4.98** | **337** | ⇑Pn | **Pn** | **11 50 48.1** | **+0.7** |
| | 4.2nm,0.3s,baz=152,slow=13 | | | | | | |
| KK02 | | | | ⇑Pg | **Pb** | **11 50 60.0** | **+0.1** |
| | 8.8nm,0.5s,baz=162,slow=14 | | | | | | |
| KK02 | | | | ⇓Sn | **Sn** | **11 51 49.1** | **+4.0** |
| | 18nm,0.6s,baz=153,slow=24 | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 11 52 08.7 | |
| | 29nm,0.8s,baz=147,slow=24 | | | | | | |
| **SGDS** | **Sogindy** | **5.02** | **12** | Pg | **Pb** | **11 51 03.1** | **+2.6** |
| | 9.2nm,0.8s | | | | | | |
| SGDS | | | | Lg | Lg | 11 52 13.0 | |
| | 12nm,0.8s | | | | | | |
| **DGS** | **Degeres** | **5.08** | **22** | Pg | **Pb** | **11 51 03.9** | **+2.3** |
| | 27nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 11 52 13.8 | |
| | 28nm,0.8s | | | | | | |
| **BRLS** | **Borolday** | **5.15** | **331** | Pg | **Pb** | **11 51 04.2** | **+1.6** |
| | 13nm,0.5s | | | | | | |
| BRLS | | | | Lg | Lg | 11 52 14.7 | |
| | 27nm,0.9s | | | | | | |
| **IZV** | **Izvestkoviy** | **5.18** | **29** | Pg | **Pg** | **11 51 07.1** | **-4.7** |
| | 9.2nm,0.5s | | | | | | |
| IZV | | | | Lg | Lg | 11 52 18.6 | |
| | 19nm,0.7s | | | | | | |
| **MTBS** | **Maitube** | **5.20** | **27** | Pg | **Pb** | **11 51 07.1** | **+3.6** |
| | 12nm,0.7s | | | | | | |
| MTBS | | | | Lg | Lg | 11 52 18.4 | |
| | 12nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.32** | **31** | Pg | **Pb** | **11 51 08.4** | **+2.7** |
| | 11nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 11 52 20.6 | |
| | 6.2nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **5.46** | **31** | ⇓Pg | **Pb** | **11 51 10.6** | **+2.5** |
| | 8.9nm,0.6s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 11 52 24.3 | |
| | 33nm,1.1s | | | | | | |
| **MDOK** | **Medeo** | **5.46** | **31** | Pg | **Pb** | **11 51 11.2** | **+3.1** |
| | 7.4nm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 11 52 25.3 | |
| | 17nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **5.48** | **19** | Pg | **Pb** | **11 51 10.3** | **+2.0** |
| | 10nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 11 52 24.0 | |
| | 12nm,0.9s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.55** | **31** | Pg | **Pb** | **11 51 13.3** | **+3.8** |
| | 9.7nm,0.6s | | | | | | |
| KOTS | | | | Lg | Lg | 11 52 29.2 | |
| | 30nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.80** | **26** | Pg | **Pb** | **11 51 17.3** | **+3.6** |
| | 6.4nm,0.7s | | | | | | |
| KTBS | | | | Lg | Lg | 11 52 36.1 | |
| | 26nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **5.85** | **23** | Pg | **Pb** | **11 51 17.4** | **+2.8** |
| | 5.5nm,0.8s | | | | | | |
| KUU | | | | Lg | Lg | 11 52 36.0 | |
| | 23nm,1.0s | | | | | | |
| **SATY** | **Saty** | **6.00** | **40** | Pg | **Pb** | **11 51 20.0** | **+2.8** |
| | 7.8nm,0.9s | | | | | | |
| SATY | | | | Lg | Lg | 11 52 40.4 | |
| | 12nm,1.0s | | | | | | |
| **CHKK** | **Chushkaly** | **6.03** | **27** | Pg | **Pb** | **11 51 20.8** | **+3.2** |
| | 6.3nm,0.5s | | | | | | |
| CHKK | | | | Lg | Lg | 11 52 42.6 | |
| | 8.5nm,0.7s | | | | | | |
| **KURS** | **Kuram** | **6.21** | **36** | Pg | Pb | 11 51 25.1 | +4.3 |
| | 5.1nm,0.7s | | | | | | |
| KURS | | | | Lg | Lg | 11 52 51.5 | |
| | 8.8nm,1.2s | | | | | | |
| **UZB** | **Uzynbulak** | **6.38** | **42** | Pg | Pg | 11 51 29.0 | -5.6 |
| | 9.4nm,0.7s | | | | | | |
| UZB | | | | Lg | Lg | 11 52 56.0 | |
| | 5.7nm,0.9s | | | | | | |
| **ARXS** | **Arharly** | **6.65** | **30** | Pg | **Pb** | **11 51 31.7** | **+3.4** |
| | 9.5nm,0.8s | | | | | | |
| ARXS | | | | Lg | Lg | 11 53 01.3 | |
| | 10nm,0.9s | | | | | | |
| **BLB** | **Baldybastay** | **6.83** | **34** | Pg | Pb | 11 51 35.8 | +4.5 |
| | 10nm,0.6s | | | | | | |
| BLB | | | | Lg | Lg | 11 53 08.4 | |
| | 5.9nm,0.9s | | | | | | |
| **DJR** | **Jarkent** | **7.62** | **39** | Pg | Pb | 11 51 49.5 | +4.9 |
| | 1.5nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 11 53 31.5 | |
| | 7.5nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **10.62** | **36** | Pn | **Pn** | **11 52 04.2** | **-0.5** |
| | 0.1nm,0.3s,baz=214,slow=13,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.66** | **16** | Pn | **Pn** | **11 52 31.3** | **-1.1** |
| | 0.0nm,0.3s,baz=212,slow=12,SNR=4.2 | | | | | | |
| **AB31** | **Akbulak array** | **14.32** | **323** | ⇑P | **Pn** | **11 52 52.6** | **-2.6** |
| | 1.1nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **14.61** | **353** | Pn | **Pn** | **11 53 00.1** | **+0.9** |
| | 0.1nm,0.3s,baz=122,slow=14,SNR=3.7 | | | | | | |
| **BRVK** | **Borovoye** | **14.65** | **353** | ⇑P | **P** | **11 53 06.8** | **+0.8** |
| | 4.4nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.04** | **323** | Pn | **Pn** | **11 53 19.6** | **+1.5** |
| | 0.4nm,0.3s,baz=109,slow=17,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.34** | **24** | P | **Pn** | **11 53 33.6** | **-0.9** |
| | 0.2nm,0.3s,baz=215,slow=12,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.95** | **336** | P | **P** | **11 57 06.6** | **+0.1** |
| | 1.7nm,0.7s,baz=115,slow=8.3,SNR=4.3 | | | | | | |
| **INK** | **Inuvik** | **71.60** | **10** | P | **P** | **12 00 52.5** | **-1.0** |
| | 0.5nm,0.5s,baz=330,slow=4.7,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.11** | **4** | P | **P** | **12 01 35.3** | **-1.5** |
| | 0.1nm,0.3s,baz=348,slow=5.6,SNR=2.7 | | | | | | |

**IDC 15 12:11:41.4±6.8,47°.61N×145°.82E,h678km±151km,**
**mb2.2/5,mb1 2.4/5,mb1mx2.3/36,mbtmp3.4/5,Error**
**ellipse: s-maj=273.4km s-min=23.3km az=168.0,Sea of Okhotsk**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **26.33** | **285** | P | P | 12 16 28.8 | +0.9 |
| | 0.2nm,0.4s,baz=76,slow=9.6,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **39.00** | **39** | P | P | 12 18 12.2 | -0.7 |
| | 0.3nm,0.7s,baz=275,slow=8.9,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.08** | **293** | P | P | 12 18 36.2 | -1.2 |
| | 0.2nm,0.5s,baz=69,slow=7.7,SNR=2.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.14** | **35** | P | P | 12 19 59.6 | +0.9 |
| | 0.2nm,0.9s,baz=299,slow=6.0,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **61.02** | **332** | P | P | 12 20 52.0 | +0.2 |
| | 0.7nm,0.5s,baz=28,slow=6.3,SNR=1.9 | | | | | | |

*IDC **15** 12:20:02.7±0.7,18°.35N×146°.03E,h119km±6km,mb3.7/14,*
*mb1 3.9/16,mb1mx3.6/38,mbtmp4.0/16,MS3.0/2,*
*Ms1 3.0/2,ms1mx2.4/64,Error ellipse: s-maj=22.1km*
*s-min=10.1km az=100.0*
*NEIC **15** 12:20:03.4±1.6,18°.36N±0'.08×146°.2E±0'.1,h120km±7km,*
*mb4.5/41,Error ellipse: s-maj=20.1km s-min=11.1km*
*az=93.0*
**ISC 15 12:20:04.9±0.4,18°.32N±0'.05×146°.1E±0'.1,h145km,n77,**
**σ1§46/75,mb4.3/33,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.84** | **194** | P | **Pn** | **12 21 15.3** | **-0.9** |
| | 97nm,0.3s,baz=30,slow=2.0,SNR=29 | | | | | | |
| GUMO | | | | S | **Sn** | **12 22 10.7** | **-1.1** |
| | 21nm,0.3s,baz=170,slow=22,SNR=1.5 | | | | | | |
| **GUMO** | **Guam** | **4.84** | **194** | Pn | **Pn** | **12 21 15.9** | **-0.3** |
| **JCJ** | **Chichijima** | **9.43** | **338** | Pn | **Pn** | **12 22 15.7** | **-1.7** |
| **PATS** | **Pohnpei** | **16.52** | **132** | | **Pn** | **12 23 46.4** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **19.42** | **341** | P | **P** | **12 24 20.2** | **+0.2** |
| | 0.1nm,0.3s,baz=146,slow=6.8,SNR=1.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **19.58** | **86** | T | T | 12 45 15.2 | |
| | baz=274,slow=74,SNR=9.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.59** | **86** | T | T | 12 45 16.3 | |
| | baz=274,slow=74,SNR=13 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.60** | **86** | T | T | 12 45 16.9 | |
| | baz=274,slow=74,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.75** | **83** | T | T | 12 45 28.9 | |
| | baz=267,slow=74,SNR=9.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.75** | **83** | T | T | 12 45 29.3 | |
| | baz=267,slow=74,SNR=7.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.77** | **83** | T | T | 12 45 29.6 | |
| | baz=267,slow=74,SNR=8.9 | | | | | | |
| **FAKI** | **Fak Fak** | **25.11** | **214** | P | **P** | **12 25 20.1** | **+3.7** |
| **COEN** | **Coen** | **32.20** | **185** | P | **P** | **12 26 19.2** | **-0.2** |
| **KLR** | **Kul'dur** | **32.93** | **343** | P | **P** | **12 26 26.0** | **+0.7** |
| | 1.0nm,0.6s,baz=163,slow=15,SNR=5.2 | | | | | | |
| KLR | | | | LR | LR | 12 39 53.0 | |
| | comp=Z,31nm,18.0s,baz=44,slow=36 | | | | | | |
| **MTN** | **Manton Dam** | **34.29** | **206** | P | **P** | **12 26 37.9** | **+0.4** |
| MTN | | | | IAmb | IAmb | 12 26 56.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **SOEI** | **Soe** | **35.23** | **219** | P | **P** | **12 26 45.6** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **35.88** | **12** | P | **P** | **12 26 51.9** | **+1.2** |
| | comp=Z,1.3nm,0.6s,baz=130,slow=7.8,SNR=4.5 | | | | | | |
| PETK | | | | LR | LR | 12 40 29.2 | |
| | comp=Z,19nm,21.9s,baz=72,slow=34 | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.88** | **12** | P | **P** | **12 26 50.8** | **0.0** |
| **KNRA** | **Kununurra** | **37.84** | **208** | P | **P** | **12 27 07.6** | **0.0** |
| KNRA | | | | IAmb | IAmb | 12 27 27.7 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **CTAO** | **Charters Tower** | **38.17** | **180** | P | **P** | **12 27 10.8** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 12 27 29.6 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.55** | **197** | P | **P** | **12 27 22.1** | **+0.2** |
| **WR0** | **Warramunga Arr** | **39.69** | **197** | P | **P** | **12 27 23.1** | **0.0** |
| **WRAB** | **Tennant Creek** | **39.72** | **197** | P | **P** | **12 27 23.8** | **+0.4** |
| WRAB | | | | IAmb | IAmb | 12 27 26.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **39.72** | **197** | P | **P** | **12 27 24.1** | **+0.7** |
| WB2 | | | | IAmb | IAmb | 12 27 26.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.73** | **197** | P | **P** | **12 27 23.6** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=18,slow=9.0,SNR=22 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.73** | **197** | P | **P** | **12 27 23.0** | **-0.4** |
| **AS31** | **Alice Springs** | **43.38** | **196** | P | **P** | **12 27 53.3** | **+0.1** |
| **ASAR** | **Alice Springs** | **43.39** | **196** | P | **P** | **12 27 52.9** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=16,slow=6.8,SNR=31 | | | | | | |
| **ASAR** | **Alice Springs** | **43.39** | **196** | P | **P** | **12 27 53.5** | **+0.3** |
| **SONM** | **Songino Array** | **43.65** | **321** | P | **P** | **12 27 56.2** | **+1.0** |
| | comp=Z,0.3nm,0.8s,baz=103,slow=6.2,SNR=1.6 | | | | | | |
| **SEY** | **Seymchan** | **44.78** | **4** | P | **P** | **12 28 05.2** | **+1.4** |
| | comp=Z,0.8nm,0.5s,baz=186,slow=6.7,SNR=7.3 | | | | | | |
| **YAK** | **Yakutsk** | **45.15** | **349** | P | **P** | **12 28 07.5** | **+0.8** |
| **ARMA** | **Armidale** | **48.76** | **174** | P | **P** | **12 28 35.1** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 12 28 37.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **50.09** | **185** | P | **P** | **12 28 44.9** | **-0.3** |
| **BBOO** | **Buckleboo** | **51.73** | **191** | P | **P** | **12 28 58.0** | **+0.6** |
| **FORT** | **Forrest** | **51.80** | **200** | P | **P** | **12 28 59.4** | **+1.5** |
| **MORW** | **Morawa** | **55.32** | **212** | P | **P** | **12 29 24.0** | **+0.3** |
| **NIUE** | **Niue** | **57.01** | **128** | P | **P** | **12 29 35.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **58.52** | **323** | P | **P** | **12 29 46.5** | **+0.6** |
| | comp=Z,0.6nm,0.6s,baz=101,slow=7.5,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **323** | P | **P** | **12 29 47.1** | **+1.2** |
| **O18K** | **Koktuh Hills** | **58.76** | **30** | P | **P** | **12 29 48.1** | **+0.6** |
| **MKAR** | **Makanchi Array** | **58.97** | **314** | P | **P** | **12 29 49.6** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=82,slow=6.3,SNR=2.0 | | | | | | |
| MKAR | | | | pP | **pP** | **12 30 16.1** | **-6.2** |
| | comp=Z,0.2nm,0.6s,baz=87,slow=10.0,SNR=2.2 | | | | | | |
| **N19K** | **Bonanza Creek** | **59.41** | **29** | P | **P** | **12 29 52.5** | **+0.5** |
| N19K | | | | IAmb | IAmb | 12 29 54.3 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **59.49** | **33** | P | **P** | **12 29 55.0** | **+2.6** |
| **L19K** | **White Mountain** | **59.68** | **28** | P | **P** | **12 29 54.6** | **+0.8** |
| L19K | | | | IAmb | IAmb | 12 29 57.3 | |
| | comp=Z,4.6nm,1.2s | | | | | | |
| **CAST** | **Castle Rocks** | **61.27** | **27** | P | **P** | **12 30 05.6** | **+1.1** |
| CAST | | | | IAmb | IAmb | 12 30 06.5 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **61.42** | **24** | P | **P** | **12 30 06.5** | **+1.0** |
| **KTH** | **Kantishna Hill** | **61.81** | **27** | P | **P** | **12 30 08.8** | **+0.5** |
| KTH | | | | IAmb | IAmb | 12 30 09.7 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **63.68** | **25** | P | **P** | **12 30 21.8** | **+1.3** |
| H24K | | | | IAmb | IAmb | 12 30 25.7 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **63.82** | **22** | P | **P** | **12 30 23.1** | **+1.8** |
| TOLK | | | | IAmb | IAmb | 12 30 23.4 | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **IL31** | | **63.83** | **26** | P | **P** | **12 30 21.3** | **-0.1** |
| IL31 | | | | IAmb | IAmb | 12 30 21.9 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **63.83** | **26** | P | **P** | **12 30 20.8** | **-0.7** |
| | comp=Z,1.3nm,0.6s,baz=246,slow=6.3,SNR=35 | | | | | | |
| ILAR | | | | pP | **pP** | **12 30 51.9** | **-3.1** |
| | comp=Z,0.5nm,0.7s,baz=251,slow=5.5,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **63.83** | **26** | P | **P** | **12 30 21.5** | **0.0** |
| **BMAR** | **Burnt Mountain** | **65.33** | **23** | P | **P** | **12 30 32.7** | **+1.5** |
| **EGAK** | **Eagle** | **66.25** | **27** | P | **P** | **12 30 38.4** | **+1.3** |
| EGAK | | | | IAmb | IAmb | 12 31 02.1 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **DAWY** | **Dawson** | **66.93** | **27** | P | **P** | **12 30 42.7** | **+1.2** |
| **HYT** | **Haines Junctio** | **67.57** | **31** | P | **P** | **12 30 46.4** | **+0.6** |
| HYT | | | | IAmb | IAmb | 12 30 48.4 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **69.58** | **23** | P | **P** | **12 30 58.0** | **+0.2** |
| **DLBC** | **Dease Lake** | **71.42** | **33** | P | **P** | **12 31 10.6** | **+1.3** |
| DLBC | | | | IAmb | IAmb | 12 31 39.9 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.84** | **317** | P | **P** | **12 31 24.2** | **+0.5** |
| **EUNU** | **Eureka** | **78.05** | **8** | P | **P** | **12 31 48.2** | **+1.1** |
| **YKA** | **Yellowknife Ar** | **78.16** | **28** | P | **P** | **12 31 48.3** | **+0.4** |
| | comp=Z,2.5nm,0.5s,baz=286,slow=5.5,SNR=48 | | | | | | |
| YKA | | | | pP | **pP** | **12 32 17.8** | **-4.8** |
| | comp=Z,0.9nm,0.6s,baz=289,slow=5.4,SNR=6.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.16** | **28** | P | **P** | **12 31 48.4** | **+0.6** |
| **DBO** | **Dodson Butte** | **78.21** | **48** | P | **P** | **12 31 49.2** | **+0.6** |
| DBO | | | | IAmb | IAmb | 12 32 05.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.94** | **50** | P | **P** | **12 31 53.6** | **+0.9** |
| **ARCES** | **ARCESS Array B** | **82.95** | **342** | P | **P** | **12 32 13.8** | **+0.5** |
| | comp=Z,3.6nm,0.9s,baz=60,slow=7.2,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.95** | **342** | P | **P** | **12 32 13.5** | **+0.2** |
| ARCES | | | | IAmb | IAmb | 12 32 20.1 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **NVAR** | **Tiina Array Bea** | **83.10** | **52** | P | **P** | **12 32 16.4** | **+1.4** |
| | comp=Z,4.1nm,0.6s,baz=267,slow=5.9,SNR=43 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.10** | **52** | P | **P** | **12 32 15.7** | **+0.7** |
| **DUG** | **Dugway, Tooele** | **86.54** | **49** | P | **P** | **12 32 33.0** | **+0.9** |
| DUG | | | | IAmb | IAmb | 12 32 33.6 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **87.36** | **335** | P | **P** | **12 32 34.1** | **-1.3** |
| | comp=Z,0.6nm,0.4s,baz=68,slow=5.5,SNR=8.1 | | | | | | |
| FINES | | | | pP | **pP** | **12 33 07.6** | **-3.4** |
| | comp=Z,1.1nm,0.6s,baz=46,slow=4.0,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **87.36** | **335** | P | **P** | **12 32 34.5** | **-0.9** |
| **PDAR** | **Pinedale Array** | **87.85** | **46** | P | **P** | **12 32 38.8** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=251,slow=1.1,SNR=5.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.85** | **46** | P | **P** | **12 32 39.3** | **+0.9** |
| **PV11** | **David Mesa, Pa** | **90.09** | **49** | P | **P** | **12 32 49.6** | **+0.6** |
| PV11 | | | | IAmb | IAmb | 12 32 52.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **97.77** | **56** | P | Pdif | 12 33 25.5 | +1.3 |
| | comp=Z,0.2nm,0.8s,baz=343,slow=2.8,SNR=1.2 | | | | | | |
| **LPAZ** | **La Paz** | **147.33** | **92** | PKPbc | **PKPbc** | **12 39 34.5** | **+1.4** |
| | comp=Z,1.3nm,0.5s,baz=313,slow=2.4,SNR=4.6 | | | | | | |

*KNET **15** 12:44:02.9±0.5,42°.22N×75°.25E,h18km±8km,ml1.1,Error*
*ellipse: s-maj=4.4km s-min=3.4km az=0.0*
*SOME **15** 12:44:03.9,42°.20N×75°.23E,h15km*
*NNC **15** 12:44:03.8±1.8,42°.20N×75°.23E,h0km,mb2.7,mpv2.6,*
*Error ellipse: s-maj=12.5km s-min=6.2km az=1.0*
**ISC 15 12:44:03.8±1.3,42°.20N±0'.05×75°.25E±0'.02,h4km±11km,**
**n28,σ0§68/52,12C-3D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBK** | **Karagaybulak** | **0.51** | **334** | ⇓P | **Pg** | **12 44 13.8** | **+0.2** |
| | 7.4nm,0.1s,SNR=6.3 | | | | | | |
| KBK | | | | ⇓S | **Sg** | **12 44 20.7** | **+0.4** |
| | 156nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **0.55** | **273** | ⇑P | **Pg** | **12 44 14.1** | **-0.2** |
| | 3.2nm,0.2s,SNR=12 | | | | | | |
| UCH | | | | ⇑S | **Sg** | **12 44 21.6** | **+0.1** |
| | 9.7nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **0.71** | **308** | ⇑P | **Pg** | **12 44 17.1** | **-0.3** |
| | 1.7nm,0.1s,SNR=11 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **12 44 26.3** | **-0.5** |
| | 5.4nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **0.71** | **308** | ⇑P | **Pg** | **12 44 17.1** | **-0.3** |
| | 0.8nm,0.2s | | | | | | |
| AAK | | | | ⇑S | **Sg** | **12 44 26.2** | **-0.5** |
| | 3.9nm,0.5s | | | | | | |
| **ULHL** | **Ulahol** | **0.74** | **86** | ⇑P | **Pg** | **12 44 17.7** | **-0.2** |
| | 1.5nm,0.1s,SNR=12 | | | | | | |
| ULHL

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SATY | | | | | Lg | Lg | 12 45 23.0 | |
| | 2.8nm,0.2s | | | | | | | |
| **ARXS** | **Arharly** | **2.76** | **42** | *e*P | **Pb** | **12 44 53.7** | **0.0** | |
| | 0.5nm,0.2s | | | | | | | |
| ARXS | | | | *e*S | **Sb** | **12 45 29.3** | **+1.5** | |
| | 3.2nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.76** | **42** | Pg | **Pb** | **12 44 53.7** | **0.0** | |
| | 0.5nm,0.2s | | | | | | | |
| ARXS | | | | Lg | Lg | 12 45 29.3 | | |
| | 3.2nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **3.03** | **50** | *e*P | **Pb** | **12 44 58.2** | **-0.2** | |
| | 1.7nm,0.1s | | | | | | | |
| BLB | | | | *e*S | **Sb** | **12 45 37.0** | **+1.2** | |
| | 3.3nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **3.03** | **50** | Pg | **Pb** | **12 44 58.2** | **-0.2** | |
| | 1.7nm,0.1s | | | | | | | |
| BLB | | | | Lg | Lg | 12 45 37.0 | | |
| | 3.3nm,0.4s | | | | | | | |

**IDC 15 12:58:09.0**±324.0, **67°12N**×**43°11E**, **h0**km, **Error ellipse: s-maj=135.6km s-min=80.6km az=110.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I37NO** | **I37NO** | **9.34** | **293** | *i* | | 13 52 20.0 | |
| | baz=91,slow=331,SNR=0.6 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **18.37** | **148** | *i* | | 14 55 24.2 | |
| | baz=340,slow=326,SNR=1.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **23.80** | **103** | *i* | | 15 23 10.0 | |
| | baz=328,slow=331,SNR=1.7 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **30.04** | **336** | *i* | | 16 04 30.0 | |
| | baz=42,slow=341,SNR=1.2 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **37.04** | **89** | *i* | | 16 52 20.0 | |
| | baz=335,slow=336,SNR=0.5 | | | | | | |

*INMG* ***15*** *13:01:41.6*±*1.5, 35°59N*×*3°80W, h4*km±*6*km*, ML2.7, Error ellipse: s-maj=5.5km s-min=3.0km az=25.0*
*MDD* ***15*** *13:01:41.3*±*0.4, 35°57N*×*3°78W, h0*km*, mb_Lg3.1/2, Error ellipse: s-maj=3.5km s-min=2.5km az=18.0*
*SFS* ***15*** *13:01:41.0, 35°57N*×*3°78W, ML2.7, ALBORAN SUR*
*CNRM* ***15*** *13:01:42.5, 35°51N*×*3°74W, h69*km*, ml3.2*
*IGIL* ***15*** *13:01:43.7, 35°59N*×*3°90W, h0*km*, ML2.8*

**ISC 15 13:01:39.9**±1.2, **35°56N**±0°03×**3°79W**±0°03, **h6**km±10km, **n36**, σ2**°07**/64, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.73** | **58** | Pg | **Pg** | **13 01 54.8** | **+0.9** |
| EALB | | | | Sg | **Sg** | **13 02 04.5** | **+1.2** |
| EALB | | | | *i* Vmb_Lg | | 13 02 07.6 | |
| **EMEL** | **Melilla** | **0.73** | **110** | Pg | **Pg** | **13 01 55.3** | **+1.4** |
| EMEL | | | | Sg | **Sg** | **13 02 04.6** | **+1.4** |
| **CHAS** | **Isla Isabel II** | **1.18** | **108** | P | **Pg** | **13 02 00.6** | **-1.8** |
| CHAS | | | | S | **Sg** | **13 02 15.9** | **-1.7** |
| **SMIR** | **Smir Dam** | **1.30** | **276** | S | **Sg** | **13 02 20.6** | **-1.0** |
| **EMAL** | **Malaga-Limoner** | **1.31** | **337** | P | **Pg** | **13 02 04.5** | **-0.4** |
| EMAL | | | | S | **Sg** | **13 02 20.3** | **-1.6** |
| **CEU** | **Ceuta** | **1.33** | **285** | P | **Pn** | **13 02 03.2** | **-1.8** |
| CEU | | | | S | **Sg** | **13 02 18.4** | **-4.2** |
| **CHEFC** | **Chefchaouen** | **1.34** | **251** | P | **Pn** | **13 02 07.1** | **+1.9** |
| CHEFC | | | | S | **Sn** | **13 02 25.7** | **+2.3** |
| **TAF** | **Taforalt** | **1.35** | **123** | P | **Pn** | **13 02 05.2** | **-0.1** |
| TAF | | | | S | **Sg** | **13 02 20.6** | **-2.7** |
| **EJIF** | **Jimena Fronter** | **1.62** | **304** | Pg | **Pn** | **13 02 11.0** | **+2.0** |
| EJIF | | | | Sg | **Sb** | **13 02 32.5** | **+1.4** |
| **LCRM** | **LCR** | **2.06** | **205** | P | **Pn** | **13 02 17.2** | **+2.0** |
| LCRM | | | | S | **Sb** | **13 02 45.3** | **+1.5** |
| **IFR** | **Ifrane** | **2.31** | **209** | P | **Pn** | **13 02 20.2** | **+1.6** |
| IFR | | | | S | **Sn** | **13 02 47.8** | **+0.3** |
| **MD31** | **MD31** | **2.80** | **197** | P | **Pn** | **13 02 26.7** | **+1.4** |
| MD31 | | | | S | **Sn** | **13 02 59.4** | **0.0** |
| **ZHG** | **ZHG** | **3.16** | **229** | P | **Pn** | **13 02 31.2** | **+1.0** |
| ZHG | | | | S | **Sn** | **13 03 09.0** | **+0.8** |
| **ETOB** | **Tobarra** | **3.57** | **30** | Pn | **Pn** | **13 02 38.0** | **+2.1** |
| ETOB | | | | Sn | **Sn** | **13 03 19.4** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **3.66** | **301** | *e*Pn | **Pn** | **13 02 38.1** | **+1.1** |
| PVAQ | | | | *e*Sn | **Sn** | **13 03 19.4** | **-1.1** |
| PVAQ | | | | A | A | 13 03 22.2 | |
| | 16nm,0.8s | | | | | | |
| **PCVE** | **Castro Verde** | **4.00** | **302** | *e*Pn | **Pn** | **13 02 43.6** | **+2.0** |
| **PAB** | **San Pablo** | **4.01** | **354** | Pn | **Pn** | **13 02 43.7** | **+1.9** |
| PAB | | | | Sn | **Sn** | **13 03 29.0** | **-0.2** |
| **FIGM** | **Figuig** | **4.01** | **148** | P | **Pn** | **13 02 43.1** | **+1.1** |
| FIGM | | | | S | **Sn** | **13 03 23.8** | **-5.6** |
| **PBEJ** | **Beja** | **4.09** | **308** | *e*Pn | **Pn** | **13 02 45.0** | **+2.0** |
| PBEJ | | | | *e*Sn | **Sn** | **13 03 30.1** | **-1.1** |
| PBEJ | | | | A | A | 13 03 34.9 | |
| | 8.3nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.11** | **358** | Pn | **Pn** | **13 02 45.3** | **+2.0** |
| ESDC | | | | Sn | **Sn** | **13 03 30.4** | **-1.4** |
| **MESJ** | **Messejana** | **4.22** | **304** | *e*P | **Pn** | **13 02 46.1** | **+1.3** |
| MESJ | | | | *e*S | **Sn** | **13 03 31.9** | **-2.5** |
| MESJ | | | | IAML | | 13 03 36.3 | |
| | comp=N,21nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **304** | *e*Pn | **Pn** | **13 02 46.3** | **+1.5** |
| MESJ | | | | *e*Sn | **Sn** | **13 03 33.4** | **-1.0** |
| MESJ | | | | A | A | 13 03 36.5 | |
| | comp=N,9.1nm,0.3s | | | | | | |
| **EBEN2** | **Beniarda presa** | **4.24** | **42** | Pn | **Pn** | **13 02 44.5** | **-0.6** |
| EBEN2 | | | | Sn | **Sn** | **13 03 31.5** | **-3.4** |
| **EVIV** | **Cofrentes, Val** | **4.27** | **29** | Pn | **Pn** | **13 02 47.2** | **+1.7** |
| EVIV | | | | Sn | **Sn** | **13 03 35.4** | **-0.3** |
| **PESTR** | **Estremoz** | **4.48** | **319** | *e*Pn | **Pn** | **13 02 50.3** | **+1.9** |
| PESTR | | | | *e*Sn | **Sn** | **13 03 39.2** | **-1.6** |
| PESTR | | | | A | A | 13 03 50.7 | |
| | comp=N,7.3nm,1.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.58** | **305** | *e*Pn | **Pn** | **13 02 50.9** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **13 03 41.7** | **-1.4** |
| PNCL | | | | A | A | 13 03 43.3 | |
| | comp=N,8.9nm,0.3s | | | | | | |
| **EPLA** | **Plasencia** | **4.85** | **339** | Pn | **Pn** | **13 02 55.6** | **+2.1** |
| EPLA | | | | Sn | **Sn** | **13 03 44.2** | **-5.8** |
| **PMTG** | **Montargil** | **4.98** | **316** | *e*Pn | **Pn** | **13 02 57.1** | **+2.0** |
| PMTG | | | | *e*Sn | **Sn** | **13 03 51.2** | **-1.8** |
| PMTG | | | | A | A | 13 04 05.1 | |
| | comp=N,7.8nm,0.6s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.18** | **327** | *e*Pn | **Pn** | **13 02 59.6** | **+1.7** |
| **OUZM** | **OUZ** | **5.26** | **209** | P | **Pn** | **13 03 01.7** | **+2.5** |
| OUZM | | | | S | **Sn** | **13 04 00.4** | **+0.2** |
| **ETOR** | **Torete** | **5.43** | **14** | Pn | **Pn** | **13 03 02.8** | **+1.4** |
| ETOR | | | | Sn | Sn | 13 03 54.9 | -9.4 |
| **OUK** | **Oukaimeden** | **5.51** | **219** | P | **Pn** | **13 03 03.3** | **+0.4** |
| OUK | | | | S | **Sn** | **13 04 02.9** | **-3.8** |
| **PVIS** | **Viseu** | **6.08** | **329** | *e*Pn | **Pn** | **13 03 12.8** | **+2.5** |
| **MVO** | **Moncorvo** | **6.15** | **337** | *e*Pn | **Pn** | **13 03 13.7** | **+2.4** |
| **POLO** | **Lamas de Olo** | **6.60** | **333** | *e*Pn | **Pn** | **13 03 19.4** | **+1.9** |
| **PBRG** | **Braganca** | **6.65** | **341** | *e*Pn | **Pn** | **13 03 20.1** | **+1.9** |

*EAF* ***15*** *13:02:41.2*±*2.6, 25°84S*×*30°06E, h10*km*, MD3.7*
*BUL* ***15*** *13:02:41.1*±*1.1, 25°90S*×*30°01E, h10*km*, MD3.9*

**ISC 15 13:02:40.1**±1.3, **25°81S**±0°06×**30°03E**±0°04, **h10**km, **n10**, σ1°**60**/20, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.00** | **104** | *e*P | **Pn** | **13 03 14.3** | **+0.3** |
| CNG | | | | *e*S | **Sn** | **13 03 39.6** | **+0.5** |
| **CNG** | **Changalane** | **2.00** | **104** | *e*P | **Pn** | **13 03 14.3** | **+0.3** |
| CNG | | | | *e*S | **Sn** | **13 03 39.3** | **+0.5** |
| **MOPA** | **Mopani** | **2.60** | **29** | *e*P | **Pn** | **13 03 20.6** | **-1.6** |
| MOPA | | | | *e*S | **Sn** | **13 03 52.1** | **-1.8** |
| **MOPA** | **Mopani** | **2.60** | **29** | *e*P | **Pn** | **13 03 20.6** | **-1.6** |
| MOPA | | | | *e*S | **Sn** | **13 03 52.1** | **-1.8** |
| **MSNA** | **Messina** | **3.45** | **360** | *e*P | **Pn** | **13 03 35.7** | **+1.8** |
| MSNA | | | | *e*S | **Sn** | **13 04 16.0** | **+1.1** |
| **MSNA** | **Messina** | **3.45** | **360** | *e*P | **Pn** | **13 03 35.7** | **+1.8** |
| MSNA | | | | *e*S | **Sn** | **13 04 16.0** | **+1.1** |
| **LBTB** | **Lobatse** | **4.08** | **280** | *e*P | **Pn** | **13 03 43.2** | **+0.5** |
| LBTB | | | | *e*S | **Sn** | **13 04 28.8** | **-1.9** |
| **LBTB** | **Lobatse** | **4.08** | **280** | *e*P | **Pn** | **13 03 43.2** | **+0.5** |
| LBTB | | | | *e*S | **Sn** | **13 04 28.8** | **-1.9** |
| **MATP** | **Matopo** | **5.54** | **345** | *e*P | **Pn** | **13 04 05.0** | **+2.2** |
| MATP | | | | *e*S | **Sn** | **13 05 04.9** | **-1.7** |
| **MATP** | **Matopo** | **5.54** | **345** | *e*P | **Pn** | **13 04 05.0** | **+2.2** |
| MATP | | | | *e*S | **Sn** | **13 05 04.9** | **-1.7** |

*TUL* ***15*** *13:10:33.7*±*0.6, 36°28N*±*0°01*×*97°71W*±*0°02, h5*km±*7*km*,*

*ML2.8, mb_Lg2.6/42(NEIC), Error ellipse: s-maj=2.2km s-min=1.5km az=59.0*

**NEIC 15 13:10:33.5**±0.7, **36°28N**±0°01×**97°71W**±0°02, **h5**km±7km, **Error ellipse: s-maj=2.2km s-min=1.6km az=59.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.88** | **166** | | Pg | 13 10 50.5 | 0.0 |
| OKCFA | | | | IAmb_Lg | | 13 11 01.8 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.90** | **166** | | Pg | 13 10 50.6 | -0.1 |
| **FNO** | **Franklin** | **1.05** | **166** | | Pg | 13 10 53.3 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.05** | **276** | Pg | Pg | 13 10 53.2 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.16** | **56** | Pg | Pg | 13 10 55.4 | -0.3 |
| **W35A** | **Tecumseh** | **1.31** | **148** | | Pn | 13 10 57.8 | -0.7 |
| **TUL1** | **Leonard** | **1.60** | **103** | Pn | Pn | 13 11 02.2 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.67** | **183** | Pn | Pn | 13 11 03.6 | +0.1 |
| X34A | | | | IAmb_Lg | | 13 11 27.7 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.77** | **210** | | Pn | 13 11 04.8 | +0.1 |
| **KSU1** | **Kansas State U** | **2.95** | **17** | Pn | Pn | 13 11 20.8 | -0.3 |
| **HHAR** | **Hobbs** | **3.05** | **89** | Pn | Pn | 13 11 22.4 | +0.1 |
| **W39A** | **Magazine** | **3.37** | **107** | Pn | Pn | 13 11 27.1 | +0.3 |
| W39A | | | | IAmb_Lg | | 13 12 26.4 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.52** | **248** | IAmb_Lg | | 13 12 30.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.79** | **67** | Pn | Pn | 13 11 32.9 | +0.4 |
| S39A | | | | IAmb_Lg | | 13 12 35.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **U40A** | **Yellville** | **3.92** | **87** | IAmb_Lg | | 13 12 41.2 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.98** | **204** | IAmb_Lg | | 13 12 44.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.37** | **113** | IAmb_Lg | | 13 13 04.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.46** | **77** | IAmb_Lg | | 13 12 57.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.46** | **3** | IAmb_Lg | | 13 13 07.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.70** | **43** | IAmb_Lg | | 13 13 06.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.76** | **306** | IAmb_Lg | | 13 13 17.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.78** | **64** | IAmb_Lg | | 13 13 02.2 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.46** | **69** | IAmb_Lg | | 13 13 32.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.48** | **179** | IAmb_Lg | | 13 13 41.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.71** | **37** | IAmb_Lg | | 13 13 41.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **197** | IAmb_Lg | | 13 13 51.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **FVM** | **French Village** | **6.07** | **72** | IAmb_Lg | | 13 13 45.6 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.39** | **353** | IAmb_Lg | | 13 14 09.3 | |
| | comp=Z,17nm,0.7s | | | | | | |

*IDC* ***15*** *13:14:22.9*±*0.7, 9°30N*×*70°28W, h0*km*, mb3.9/10, mb1 4.2/14, mb1mx4.0/42, mbtmp4.1/14, ML3.6/3, MS3.2/4, Ms1 3.2/4, ms1mx2.7/77, Error ellipse: s-maj=18.6km s-min=7.5km az=124.0*
*NEIC* ***15*** *13:14:25.1*±*1.8, 9°36N*±*0°04*×*70°37W*±*0°05, h5*km±*1*km*, mb4.5/16, Error ellipse: s-maj=9.2km s-min=6.7km az=125.0*
*FUNV* ***15*** *13:14:26.1, 9°25N*×*70°39W, h5*km*, MW4.4*

**ISC 15 13:14:23.5**±1.2, **9°29N**±0°02×**70°33W**±0°03, **h1**km±8km, **n103**, σ1°**70**/129, **mb4.3**/17, **1C, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDV** | **Santo Domingo** | **0.50** | **217** | Pg | **Pg** | **13 14 33.7** | **+0.7** |
| | 678nm,0.3s,baz=40,slow=14,SNR=548 | | | | | | |
| SDV | | | | Lg | Lg | 13 14 40.2 | |
| | 1µm,0.3s,baz=312,slow=22,SNR=15 | | | | | | |
| **SDV** | **Santo Domingo** | **0.50** | **217** | *i*P | **Pg** | **13 14 33.8** | **+0.7** |
| SDV | | | | *e*S | **Sg** | **13 14 40.1** | **+0.5** |
| **DABV** | **Dabajuro** | **1.65** | **349** | *e*P | **Pg** | **13 14 56.4** | **+1.1** |
| DABV | | | | *e*S | **Sg** | **13 15 18.8** | **+2.1** |
| **DABV** | **Dabajuro** | **1.65** | **349** | *e*P | **Pg** | **13 14 55.5** | **+0.3** |
| DABV | | | | *e*S | **Sg** | **13 15 17.6** | **+0.9** |
| **MCQV** | **Machiques** | **2.31** | **289** | *e*P | **Pn** | **13 15 03.5** | **+0.8** |
| MCQV | | | | *e*S | **Sn** | **13 15 31.0** | **-0.7** |
| **ELOV** | **Elorza** | **2.42** | **160** | *e*P | **Pn** | **13 15 05.8** | **+1.6** |
| **MONV** | **Montecano** | **2.67** | **7** | *e*P | **Pn** | **13 15 09.2** | **+1.5** |
| MONV | | | | *e*S | **Sn** | **13 15 41.8** | **+0.9** |
| **BENV** | **Beln** | **2.77** | **76** | *e*P | **Pn** | **13 15 11.3** | **+2.1** |
| BENV | | | | *e*S | **Sn** | **13 15 45.2** | **+1.9** |
| **URIC** | **Uribia, Colomb** | **2.91** | **326** | Pn | **Pn** | **13 15 10.6** | **-0.4** |
| **URIC** | **Uribia, Colomb** | **2.91** | **326** | *e*P | **Pn** | **13 15 10.8** | **-0.2** |
| URIC | | | | *e*S | **Sn** | **13 15 44.0** | **-2.6** |
| **LL6C** | **La Loma 6 Bece** | **2.94** | **279** | *e*P | **Pn** | **13 15 11.8** | **+0.4** |
| LL6C | | | | *e*S | **Sb** | **13 15 53.5** | **+0.2** |
| **PAMC** | **Pamplona, Colo** | **3.04** | **231** | *e*P | **Pn** | **13 15 15.2** | **+2.0** |
| PAMC | | | | *e*S | **Sb** | **13 15 56.6** | **0.0** |
| **CRJC** | **Cerrejon, Guaj** | **3.05** | **305** | *e*P | **Pn** | **13 15 13.2** | **+0.2** |
| CRJC | | | | *e*S | **Sn** | **13 15 49.9** | **-0.3** |
| **CVALL** | **Valledupar, Ce** | **3.13** | **293** | *e*P | **Pn** | **13 15 14.6** | **+0.5** |
| CVALL | | | | *e*S | **Sn** | **13 15 51.1** | **-1.1** |
| **OCAC** | **Ocana** | **3.14** | **251** | | **Pn** | **13 15 15.7** | **+1.5** |
| **OCAC** | **Ocana** | **3.14** | **251** | *e*P | **Pn** | **13 15 16.5** | **+2.3** |
| OCAC | | | | *e*S | **Sg** | **13 16 02.3** | **-2.1** |
| **HATO** | **Hato, Curacao** | **3.17** | **25** | | **Pn** | **13 15 15.4** | **+0.8** |
| **LL1C** | **La Loma 1 Cana** | **3.20** | **275** | *e*P | **Pn** | **13 15 16.1** | **+1.2** |
| LL1C | | | | *e*S | **Sb** | **13 16 01.4** | **+0.8** |
| **CARV** | **Caracas** | **3.56** | **70** | *e*P | **Pn** | **13 15 22.2** | **+2.2** |
| **BARC** | **Barichara** | **3.90** | **227** | *e*P | **Pn** | **13 15 27.8** | **+3.0** |
| BARC | | | | *e*S | **Sg** | **13 16 28.6** | **-0.2** |
| **MERV** | **Las Mercedes** | **3.98** | **90** | *e*P | **Pn** | **13 15 27.6** | **+1.9** |
| MERV | | | | *e*S | **Sn** | **13 16 12.6** | **-0.4** |
| **BRRC** | **Barranca, Sant** | **3.99** | **237** | *e*P | **Pn** | **13 15 28.4** | **+2.6** |
| BRRC | | | | *e*S | **Sg** | **13 16 29.1** | **-2.8** |
| **CACV** | **CAICARA DEL OR** | **4.12** | **114** | *e*P | **Pn** | **13 15 35.6** | **-1.3** |
| CACV | | | | *e*S | **Sb** | **13 16 27.8** | **+0.7** |
| **BIRV** | **Birongo** | **4.17** | **73** | Pn | **Pn** | **13 15 30.2** | **+1.9** |
| **BIRV** | **Birongo** | **4.17** | **73** | *e*P | **Pn** | **13 15 30.6** | **+2.3** |
| BIRV | | | | *e*S | **Sn** | **13 16 17.4** | **-0.3** |
| **SMRC** | **Santa Marta, M** | **4.27** | **296** | *e*P | **Pn** | **13 15 29.1** | **-0.6** |
| SMRC | | | | *e*S | **Sn** | **13 16 19.3** | **-0.9** |
| **RUSC** | **La Rusia** | **4.34** | **219** | *e*P | **Pn** | **13 15 33.7** | **+2.6** |
| RUSC | | | | *e*S | **Sn** | **13 16 24.5** | **+1.9** |
| **SJCC** | **San Jacinto, C** | **4.83** | **278** | Pn | **Pn** | **13 15 38.5** | **+1.0** |
| **SJCC** | **San Jacinto, C** | **4.83** | **278** | *e*P | **Pn** | **13 15 38.8** | **+1.4** |
| SJCC | | | | *e*S | **Sn** | **13 16 33.8** | **-0.2** |
| **ZARC** | **Zaragoza, Cauc** | **4.83** | **249** | Pn | **Pn** | **13 15 38.7** | **+1.3** |
| **ZARC** | **Zaragoza, Cauc** | **4.83** | **249** | *e*P | **Pn** | **13 15 38.7** | **+1.3** |
| ZARC | | | | *e*S | **Sn** | **13 16 32.2** | **-1.8** |
| **PTBC** | **PUERTO BERRIO,** | **4.92** | **237** | *e*P | **Pn** | **13 15 39.5** | **+0.9** |
| PTBC | | | | *e*S | **Sn** | **13 16 40.5** | **+4.3** |
| **SPBC** | **San Pablo de B** | **5.18** | **226** | *e*P | **Pn** | **13 15 44.7** | **+2.4** |
| SPBC | | | | *e*S | **Sn** | **13 16 44.5** | **+1.7** |
| **PTGC** | **Puerto Gaitan,** | **5.36** | **200** | *e*P | **Pn** | **13 15 45.5** | **+0.7** |
| PTGC | | | | *e*S | **Sg** | **13 17 10.8** | **-5.2** |
| **URCC** | **San Jos de Ur** | **5.37** | **254** | *e*P | **Pn** | **13 15 47.6** | **+2.8** |
| URCC | | | | *e*S | **Sn** | **13 16 48.1** | **+0.7** |
| **CHIC** | **Chingaza** | **5.73** | **216** | *e*P | **Pn** | **13 15 51.2** | **+1.1** |
| CHIC | | | | *e*S | **Sn** | **13 16 57.0** | **+0.2** |
| **NORC** | **Norcasia** | **5.83** | **231** | *e*P | **Pn** | **13 15 51.6** | **+0.4** |
| NORC | | | | *e*S | **Sn** | **13 16 58.2** | **-0.6** |
| **ROSC** | **El Rosal** | **5.94** | **222** | Pn | **Pn** | **13 15 54.7** | **+1.7** |
| | 16nm,0.3s,baz=20,slow=7.4,SNR=9.7 | | | | | | |
| **ROSC** | **El Rosal** | **5.94** | **222** | | **Pn** | **13 15 55.2** | **+2.3** |
| **GUV2C** | **Guyana, Caldas** | **6.42** | **231** | *e*P | **Pn** | **13 16 02.3** | **+2.5** |
| GUV2C | | | | *e*S | **Sn** | **13 17 19.7** | **+5.7** |
| **CBOC** | **Ciudad Bolivar** | **6.58** | **239** | *e*P | **Pn** | **13 16 05.0** | **+3.3** |
| CBOC | | | | *e*S | **Sn** | **13 17 20.7** | **+3.2** |
| **ANIL** | **Santa Ana** | **6.94** | **227** | *e*P | **Pn** | **13 16 08.4** | **+1.8** |
| ANIL | | | | *e*S | **Sn** | **13 17 27.0** | **+0.6** |
| **GUVC** | **San Jose del G** | **7.08** | **199** | *e*P | **Pn** | **13 16 08.2** | **-0.1** |
| GUVC | | | | *e*S | **Sn** | **13 17 23.2** | **-6.3** |
| **MACC** | **Macarena, Meta** | **7.91** | **206** | *e*P | **Pn** | **13 16 19.9** | **+0.1** |
| **BETC** | **Betania** | **8.30** | **218** | *e*P | **Pn** | **13 16 25.9** | **+0.7** |
| **GARC** | **Garzon, Huila** | **8.73** | **216** | *e*P | **Pn** | **13 16 32.5** | **+1.3** |
| **MLPR** | **Magueyes Islan** | **9.20** | **20** | Pn | **Pn** | **13 16 36.4** | **-1.1** |
| **CRPR** | **Cabo Rojo, PR** | **9.21** | **19** | Pn | **Pn** | **13 16 37.0** | **-0.6** |
| **FLOC** | **Florencia** | **9.31** | **215** | *e*P | **Pn** | **13 16 39.5** | **+0.6** |
| FLOC | | | | *e*S | | 13 19 28.6 | |
| **ICMP** | **Isla Caja de M** | **9.31** | **23** | | **Pn** | **13 16 38.9** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **9.39** | **270** | Pn | **Pn** | **13 16 40.5** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **9.42** | **22** | | **Pn** | **13 16 38.7** | **-1.8** |
| **CELP** | **Cerrillos** | **9.46** | **22** | | **Pn** | **13 16 40.6** | **-0.5** |
| **DR12** | **Loma Pena Alta** | **9.49** | **5** | Pn | **Pn** | **13 16 41.7** | **+0.2** |
| **PDPR** | **Patillas Dam,** | **9.63** | **25** | | **Pn** | **13 16 43.8** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **9.65** | **21** | | **Pn** | **13 16 43.7** | **0.0** |
| **SJG** | **San Juan** | **9.66** | **24** | Pn | **Pn** | **13 16 43.8** | **0.0** |
| | 12nm,0.3s,baz=186,slow=12,SNR=14 | | | | | | |
| SJG | | | | Sn | Sn | 13 18 21.7 | -11 |
| | 2.8nm,0.3s,baz=358,slow=12,SNR=5.5 | | | | | | |
| **SDDR** | **Presa de Saban** | **9.68** | **355** | Pn | **Pn** | **13 16 43.5** | **-0.6** |
| **HUMP** | **Col San Antoni** | **9.82** | **26** | | **Pn** | **13 16 46.1** | **+0.2** |
| **EMPR** | **Esperanza - Ma** | **9.85** | **22** | Pn | **Pn** | **13 16 46.9** | **+0.5** |
| **GCPR** | **Guaynabo City** | **9.87** | **24** | | **Pn** | **13 16 47.1** | **+0.5** |
| **CUPR** | **Culebra, Puert** | **10.22** | **28** | | **Pn** | **13 16 51.1** | **-0.3** |
| **STVI** | **Saint Thomas** | **10.41** | **29** | Pn | **Pn** | **13 16 53.6** | **-0.4** |
| **FDF** | **Fort de France** | **10.48** | **58** | Pn | **Pn** | **13 16 55.4** | **+0.3** |
| **GTBY** | **Guantanamo Bay** | **11.55** | **337** | Pn | **Pn** | **13 17 09.5** | **-0.1** |
| **PRVC** | **Isla de Provid** | **11.56** | **292** | Pn | **Pn** | **13 17 07.8** | **-2.1** |
| **BRU2** | **Volcan** | **12.22** | **269** | Pn | **Pn** | **13 17 18.6** | **-0.4** |
| **PTGA** | **Pitinga** | **14.33** | **133** | Pn | **Pn** | **13 17 47.8** | **0.0** |
| | 0.9nm,0.3s,baz=322,slow=22,SNR=6.0 | | | | | | |
| PTGA | | | | Lg | Lg | 13 21 49.3 | |
| | 2.1nm,0.3s,baz=349,slow=14,SNR=5.0 | | | | | | |
| PTGA | | | | LR | LR | 13 23 42.6 | |
| | comp=Z,77nm,19.1s,baz=84,slow=39 | | | | | | |
| **JTS** | **Las Juntas de** | **14.45** | **275** | LR | LR | 13 24 26.8 | |
| | comp=Z,58nm,19.9s,baz=152,slow=42 | | | | | | |
| **ATAH** | **Atahualpa** | **18.19** | **207** | P | **Pn** | **13 18 37.7** | **-0.2** |
| | 0.2nm,0.3s,baz=27,slow=6.8,SNR=4.1 | | | | | | |
| **APG** | **El Apazote** | **20.48** | **288** | P | Pn | 13 19 04.8 | -0.6 |
| | 7.4nm,0.8s,baz=126,slow=11,SNR=7.0 | | | | | | |
| **NNA** | **Nana** | **22.11** | **197** | LR | LR | 13 28 31.8 | |
| | comp=Z,48nm,18.9s,baz=344,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **25.50** | **175** | P | **P** | **13 19 55.5** | **+1.2** |
| | 1.3nm,0.6s,baz=13,slow=14,SNR=5.0 | | | | | | |
| **LPAZ** | **La Paz** | **25.50** | **175** | P | **P** | **13 19 54.7** | **+0.4** |
| **SIV** | **San Ignacio** | **26.73** | **160** | P | **P** | **13 20 08.7** | **+3.8** |
| | 0.7nm,0.4s,baz=358,slow=13,SNR=5.0 | | | | | | |
| **LCAR** | **Lake Charles** | **32.71** | **328** | P | **P** | **13 20 58.2** | **+0.5** |
| LCAR | | | | IAmb | IAmb | 13 21 16.8 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **WHAR** | **Wooly Hollow** | **32.75** | **326** | P | **P** | **13 20 58.0** | **0.0** |
| **TXAR** | **Lajitas Array** | **37.05** | **307** | P | **P** | **13 21 35.4** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=137,slow=9.0,SNR=13 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **37.05** | **307** | P | **P** | **13 21 35.2** | **-0.2** |
| TX31 | | | | IAmb | IAmb | 13 21 41.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TX32** | **Lajitas Array** | **37.05** | **307** | P | **P** | **13 21 35.7** | **+0.3** |
| **PV13** | **Radium Mtn., P** | **44.96** | **316** | P | **P** | **13 22 40.6** | **0.0** |
| PV13 | | | | IAmb | IAmb | 13 22 48.5 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **SCHQ** | **Schefferville** | **45.51** | **3** | P | **P** | **13 22 44.8** | **+0.3** |
| | comp=Z,2.7nm,0.8s,baz=184,slow=14,SNR=2.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **47.82** | **321** | P | **P** | **13 23 02.3** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=116,slow=11,SNR=5.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **47.82** | **321** | P | **P** | **13 23 02.6** | **-0.5** |
| **PFO** | **Pinyon Flats O** | **48.77** | **307** | LR | LR | 13 46 28.3 | |
| | comp=Z,52nm,18.9s,baz=252,slow=40 | | | | | | |
| **PLCA** | **Paso Flores** | **49.77** | **180** | P | **P** | **13 23 21.1** | **+3.3** |
| | comp=Z,2.4nm,0.9s,baz=8.7,slow=13,SNR=3.3 | | | | | | |
| **PLCA** | **Paso Flores** | **49.77** | **180** | IAmb | IAmb | 13 23 38.5 | |
| | comp=Z,8.5nm,1.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.82** | **312** | P | **P** | **13 23 34.6** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=119

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BGLC** | **Bering Glacier** | **3.02** | **359** | P | | **Pn** | **13 30 44.5** | **-0.1** |
| | baz=181 | | | | | | | | |
| **SNH** | **Sunshine Point** | **3.08** | **3** | | | **Pn** | **13 30 45.4** | **-0.2** |
| SNH | | | | | | **Sn** | **13 31 18.8** | **-3.8** |
| **SNH** | **Sunshine Point** | **3.08** | **3** | IAML | | | 13 31 21.1 | | |
| | comp=E,214nm,1.0s | | | | | | | | |
| SNH | | | | IAML | | | 13 31 21.9 | | |
| | comp=N,185nm,0.7s | | | | | | | | |
| **MESA** | **MESA** | **3.14** | **11** | | | **Pn** | **13 30 46.5** | **-0.1** |
| **MESA** | **MESA** | **3.14** | **11** | Pn | | **Pn** | **13 30 46.4** | **-0.2** |
| MESA | | | | Sn | | **Sn** | **13 31 21.3** | **-2.9** |
| **MESA** | **MESA** | **3.14** | **11** | P | | **Pn** | **13 30 46.8** | **+0.3** |
| | baz=194 | | | | | | | | |
| **NICHA** | **Nichawak Mount** | **3.17** | **352** | | | **Pn** | **13 30 46.0** | **-0.7** |
| NICHA | | | | | | **Sn** | **13 31 20.9** | **-3.7** |
| **GRIN** | **Grindle Hills** | **3.18** | **358** | | | **Pn** | **13 30 46.7** | **-0.3** |
| GRIN | | | | | | **Sn** | **13 31 21.7** | **-3.3** |
| **PNL** | **Peninsula** | **3.23** | **36** | | | **Pn** | **13 30 47.4** | **-0.3** |
| PNL | | | | | | **Sn** | **13 31 22.2** | **-4.0** |
| **PNL** | **Peninsula** | **3.23** | **36** | Pn | | **Pn** | **13 30 47.3** | **-0.3** |
| PNL | | | | Sn | | **Sn** | **13 31 22.1** | **-4.1** |
| **PNL** | **Peninsula** | **3.23** | **36** | P | | **Pn** | **13 30 47.1** | **-0.6** |
| | baz=221 | | | | | | | | |
| **SAMH** | **Samovar Hills** | **3.27** | **21** | | | **Pn** | **13 30 48.5** | **+0.3** |
| SAMH | | | | | | **Sn** | **13 31 23.7** | **-3.5** |
| **SAMH** | **Samovar Hills** | **3.27** | **21** | Pn | | **Pn** | **13 30 48.5** | **+0.3** |
| SAMH | | | | Sn | | **Sn** | **13 31 23.9** | **-3.4** |
| **HMT** | **Hamilton** | **3.29** | **350** | | | **Pn** | **13 30 47.6** | **-0.8** |
| **BERG** | **Berg Lake** | **3.31** | **355** | | | **Pn** | **13 30 47.8** | **-0.9** |
| **BERG** | **Berg Lake** | **3.31** | **355** | IAML | | | 13 31 27.8 | | |
| | comp=E,226nm,0.4s | | | | | | | | |
| BERG | | | | IAML | | | 13 31 40.8 | | |
| | comp=N,186nm,0.7s | | | | | | | | |
| **YAH** | **Yahtse** | **3.34** | **12** | | | **Pn** | **13 30 49.3** | **-0.1** |
| **YAH** | **Yahtse** | **3.34** | **12** | IAML | | | 13 31 31.2 | | |
| | comp=N,136nm,0.8s | | | | | | | | |
| **KHIT** | **Khitrov Hills** | **3.34** | **359** | | | **Pn** | **13 30 48.5** | **-0.8** |
| **PCA** | **Pinnacle** | **3.35** | **25** | | | **Pn** | **13 30 49.2** | **-0.2** |
| **PCA** | **Pinnacle** | **3.35** | **25** | Pn | | **Pn** | **13 30 49.2** | **-0.2** |
| PCA | | | | Sn | | **Sn** | **13 31 25.1** | **-4.2** |
| **PINM** | **Pinnacle** | **3.35** | **26** | P | | **Pn** | **13 30 49.5** | **+0.1** |
| | baz=210 | | | | | | | | |
| **WAX** | **Waxell Ridge** | **3.35** | **2** | | | **Pn** | **13 30 48.7** | **-0.7** |
| **WAX** | **Waxell Ridge** | **3.35** | **2** | IAML | | | 13 31 26.0 | | |
| | comp=E,133nm,0.3s | | | | | | | | |
| **BCPM** | **Bancas Point** | **3.39** | **31** | | | **Pn** | **13 30 49.5** | **-0.3** |
| **BCPM** | **Bancas Point** | **3.39** | **31** | IAML | | | 13 31 32.6 | | |
| | comp=N,182nm,0.4s | | | | | | | | |
| BCPM | | | | IAML | | | 13 31 37.7 | | |
| | comp=E,153nm,0.3s | | | | | | | | |
| **BAGL** | **Bagley Icefiel** | **3.44** | **9** | | | **Pn** | **13 30 50.0** | **-0.4** |
| **TABL** | **Table Mountain** | **3.50** | **16** | | | **Pn** | **13 30 51.5** | **0.0** |
| **TABL** | **Table Mountain** | **3.50** | **16** | Pn | | **Pn** | **13 30 51.6** | **0.0** |
| TABL | | | | Sn | | **Sn** | **13 31 30.2** | **-2.8** |
| **ISLE** | **Juniper Island** | **3.53** | **6** | | | **Pn** | **13 30 51.3** | **-0.5** |
| **ISLE** | **Juniper Island** | **3.53** | **6** | IAML | | | 13 31 35.6 | | |
| | comp=N,117nm,0.8s | | | | | | | | |
| **GOAT** | **Goat Mountain** | **3.58** | **347** | | | **Pn** | **13 30 51.2** | **-1.2** |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **340** | | | **Pn** | **13 30 52.5** | **-1.6** |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **340** | P | | **Pn** | **13 30 52.8** | **-1.3** |
| | baz=159 | | | | | | | | |
| **KIAG** | **Kiagna River** | **3.85** | **6** | | | **Pn** | **13 30 55.7** | **-0.6** |
| **KIAG** | **Kiagna River** | **3.85** | **6** | Pn | | **Pn** | **13 30 55.6** | **-0.6** |
| KIAG | | | | Sn | | **Sn** | **13 31 37.4** | **-4.2** |
| **BMRM** | **Bremner River** | **3.94** | **350** | | | **Pn** | **13 30 56.1** | **-1.3** |
| **BMRM** | **Bremner River** | **3.94** | **350** | IAML | | | 13 31 48.1 | | |
| | comp=E,79nm,0.5s | | | | | | | | |
| BMRM | | | | IAML | | | 13 31 58.0 | | |
| | comp=N,66nm,0.8s | | | | | | | | |
| **BMRM** | **Bremner River** | **3.94** | **350** | P | | **Pn** | **13 30 56.2** | **-1.3** |
| | baz=170 | | | | | | | | |
| **BALM** | **Baldy** | **3.96** | **6** | | | **Pn** | **13 30 57.3** | **-0.5** |
| **BALM** | **Baldy** | **3.96** | **6** | Pn | | **Pn** | **13 30 57.2** | **-0.5** |
| BALM | | | | Sn | | **Sn** | **13 31 40.0** | **-4.2** |
| **BARN** | **Barnard Glacie** | **4.04** | **10** | | | **Pn** | **13 30 58.6** | **-0.3** |
| **BARN** | **Barnard Glacie** | **4.04** | **10** | IAML | | | 13 31 58.1 | | |
| | comp=E,59nm,0.7s | | | | | | | | |
| **FID** | **Port Fidalgo** | **4.04** | **336** | | | **Pn** | **13 30 57.5** | **-1.3** |
| **FID** | **Port Fidalgo** | **4.04** | **336** | IAML | | | 13 31 53.8 | | |
| | comp=N,126nm,0.7s | | | | | | | | |
| **VRDI** | **Verde Repeater** | **4.13** | **358** | | | **Pn** | **13 30 59.4** | **-0.9** |
| **DIV** | **Divide** | **4.25** | **342** | | | **Pn** | **13 30 59.6** | **-2.2** |
| **DIV** | **Divide** | **4.25** | **342** | Pn | | **Pn** | **13 31 00.9** | **-0.8** |
| DIV | | | | Sn | | **Sn** | **13 31 46.4** | **-5.0** |
| **SIT** | **Sitka** | **4.26** | **87** | Pn | | **Pn** | **13 30 59.1** | **-2.7** |
| **GLI** | **Glacier Island** | **4.30** | **333** | | | **Pn** | **13 31 00.1** | **-2.2** |
| GLI | | | | IAML | | | 13 32 02.0 | | |
| | comp=N,64nm,0.7s | | | | | | | | |
| GLI | | | | IAML | | | 13 32 09.1 | | |
| | comp=E,75nm,1.0s | | | | | | | | |
| **GLI** | **Glacier Island** | **4.30** | **333** | P | | **Pn** | **13 31 00.3** | **-2.0** |
| | baz=151 | | | | | | | | |
| **YUK7** | **Dusty Glacier** | **4.30** | **35** | | | **Pn** | **13 31 02.8** | **+0.3** |
| **YUK7** | **Dusty Glacier** | **4.30** | **35** | Pn | | **Pn** | **13 31 03.2** | **+0.7** |
| YUK7 | | | | Sn | | **Sn** | **13 31 50.3** | **-2.5** |
| **JPK** | **Jack Peak** | **4.34** | **337** | | | **Pn** | **13 31 01.1** | **-1.8** |
| **GLB** | **Gilahina Butte** | **4.36** | **356** | | | **Pn** | **13 31 02.2** | **-0.9** |
| **SEW** | **Seward** | **4.46** | **315** | | | **Pn** | **13 31 02.5** | **-2.0** |
| **SEW** | **Seward** | **4.46** | **315** | P | | **Pn** | **13 31 02.0** | **-2.5** |
| | baz=130 | | | | | | | | |
| **PS12** | **TAPS Pump St12** | **4.50** | **348** | | | **Pn** | **13 31 03.8** | **-1.2** |
| **YUK8** | **Steele Glacier** | **4.53** | **21** | Sn | | **Sn** | **13 31 56.9** | **-1.7** |
| **YUK6** | **Outpost Mounta** | **4.57** | **31** | | | **Pn** | **13 31 07.1** | **+0.9** |
| **YUK6** | **Outpost Mounta** | **4.57** | **31** | Pn | | **Pn** | **13 31 06.9** | **+0.7** |
| YUK6 | | | | Sn | | **Sn** | **13 31 56.5** | **-2.9** |
| **N25K** | **Chitina, Valde** | **4.57** | **351** | | | **Pn** | **13 31 05.2** | **-0.9** |
| **N25K** | **Chitina, Valde** | **4.57** | **351** | IAML | | | 13 31 56.7 | | |
| | comp=N,66nm,0.6s | | | | | | | | |
| N25K | | | | IAML | | | 13 31 58.3 | | |
| | comp=E,56nm,0.7s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.57** | **351** | P | | **Pn** | **13 31 05.5** | **-0.7** |
| | baz=171 | | | | | | | | |
| **KLU** | **Klutina** | **4.62** | **343** | | | **Pn** | **13 31 05.0** | **-1.8** |
| KLU | | | | IAML | | | 13 31 59.1 | | |
| | comp=N,48nm,0.4s | | | | | | | | |
| KLU | | | | IAML | | | 13 32 05.1 | | |
| | comp=E,45nm,0.5s | | | | | | | | |
| **KLU** | **Klutina** | **4.62** | **343** | P | | **Pn** | **13 31 05.3** | **-1.5** |
| | baz=162 | | | | | | | | |
| **PWL** | **Port Wells** | **4.62** | **327** | | | **Pn** | **13 31 04.2** | **-2.6** |
| **PWL** | **Port Wells** | **4.62** | **327** | IAML | | | 13 32 10.7 | | |
| | comp=N,55nm,0.6s | | | | | | | | |
| PWL | | | | IAML | | | 13 32 14.0 | | |
| | comp=E,54nm,0.8s | | | | | | | | |
| **PWL** | **Port Wells** | **4.62** | **327** | P | | **Pn** | **13 31 03.8** | **-2.9** |
| | baz=143 | | | | | | | | |
| **BESE** | **Bessie Mountai** | **4.67** | **68** | | | **Pn** | **13 31 08.5** | **+1.1** |
| **BESE** | **Bessie Mountai** | **4.67** | **68** | Pn | | **Pn** | **13 31 07.9** | **+0.6** |
| BESE | | | | Sn | | **Sn** | **13 31 57.6** | **-3.9** |
| **HYT** | **Haines Junctio** | **4.73** | **36** | | | **Pn** | **13 31 08.8** | **+0.5** |
| **HYT** | **Haines Junctio** | **4.73** | **36** | Pn | | **Pn** | **13 31 09.2** | **+0.9** |
| HYT | | | | Sn | | **Sn** | **13 31 59.0** | **-4.2** |
| **SKAG** | **Skagway** | **4.75** | **57** | Pn | | **Pn** | **13 31 08.4** | **0.0** |
| **SKAG** | **Skagway** | **4.75** | **57** | P | | **Pn** | **13 31 08.7** | **+0.3** |
| | baz=245 | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **4.79** | **307** | | | **Pn** | **13 31 07.1** | **-1.9** |
| **BRSE** | **Bradley Lake S** | **4.79** | **307** | P | | **Pn** | **13 31 07.0** | **-2.0** |
| | baz=121 | | | | | | | | |
| **O22K** | **Cooper Landing** | **4.81** | **317** | | | **Pn** | **13 31 07.1** | **-2.2** |
| **O22K** | **Cooper Landing** | **4.81** | **317** | P | | **Pn** | **13 31 07.9** | **-1.4** |
| | baz=132 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **4.83** | **27** | Pn | | **Pn** | **13 31 12.0** | **+2.2** |
| YUK4 | | | | Sn | | **Sn** | **13 32 05.8** | **-0.1** |
| **YUK2** | **White River** | **4.84** | **13** | | | **Pn** | **13 31 10.2** | **+0.8** |
| **YUK2** | **White River** | **4.84** | **13** | Pn | | **Pn** | **13 31 10.7** | **+1.0** |
| YUK2 | | | | Sn | | **Sn** | **13 32 03.4** | **-2.4** |
| **JIS** | **Juneau Island** | **4.84** | **72** | | | **Pn** | **13 31 10.2** | **+0.5** |
| **YUK5** | **Granite Creek** | **4.86** | **32** | | | **Pn** | **13 31 11.4** | **+1.3** |
| **YUK5** | **Granite Creek** | **4.86** | **32** | Pn | | **Pn** | **13 31 11.3** | **+1.1** |
| **BRLK** | **Bradley Lake** | **4.87** | **306** | | | **Pn** | **13 31 08.2** | **-1.9** |
| **BRLK** | **Bradley Lake** | **4.87** | **306** | IAML | | | 13 32 03.1 | | |
| | comp=E,62nm,0.7s | | | | | | | | |
| BRLK | | | | IAML | | | 13 32 09.1 | | |
| | comp=N,57nm,0.6s | | | | | | | | |
| **YUK3** | **Moose Creek** | **4.88** | **15** | | | **Pn** | **13 31 11.4** | **+1.1** |
| **YUK3** | **Moose Creek** | **4.88** | **15** | Pn | | **Pn** | **13 31 11.3** | **+1.0** |
| YUK3 | | | | Sn | | **Sn** | **13 32 03.6** | **-3.4** |
| **CNPM** | **China Poot** | **4.91** | **303** | | | **Pn** | **13 31 08.6** | **-2.1** |
| **CNPM** | **China Poot** | **4.91** | **303** | IAML | | | 13 32 21.4 | | |
| | comp=E,62nm,2.5s | | | | | | | | |
| **SLKM** | **Skilak Lake** | **5.02** | **316** | | | **Pn** | **13 31 10.9** | **-1.2** |
| **KNK** | **Knik Glacier** | **5.11** | **330** | | | **Pn** | **13 31 11.9** | **-1.5** |
| **KNK** | **Knik Glacier** | **5.11** | **330** | IAML | | | 13 32 12.8 | | |
| | comp=E,49nm,0.7s | | | | | | | | |
| KNK | | | | IAML | | | 13 32 34.7 | | |
| | comp=N,43nm,1.2s | | | | | | | | |
| **PS11** | **TAPS Pump St11** | **5.13** | **348** | | | **Pn** | **13 31 13.1** | **-0.5** |
| **KDAK** | **Kodiak Island** | **5.15** | **281** | Pn | | **Pn** | **13 31 12.2** | **-1.7** |
| | comp=N,15nm,0.3s,baz=102,slow=6.0,SNR=230 | | | | | | | | |
| KDAK | | | | Sn | | **Sn** | **13 32 06.2** | **-7.1** |
| | comp=N,5.0nm,0.3s,baz=97,slow=22,SNR=8.3 | | | | | | | | |
| KDAK | | | | LR | LR | | 13 32 50.3 | | |
| | comp=N,73nm,20.0s,baz=77,slow=35 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **5.15** | **281** | IAML | | | 13 32 09.8 | | |
| | comp=N,50nm,1.0s | | | | | | | | |
| **HOM** | **Homer** | **5.15** | **303** | | | **Pn** | **13 31 12.7** | **-1.3** |
| **HOM** | **Homer** | **5.15** | **303** | P | | **Pn** | **13 31 12.8** | **-1.2** |
| | baz=116 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **5.20** | **337** | | | **Pn** | **13 31 11.9** | **-2.7** |
| **SCM** | **Sheep Creek Mo** | **5.20** | **337** | IAML | | | 13 32 24.5 | | |
| | comp=N,40nm,2.0s | | | | | | | | |
| SCM | | | | IAML | | | 13 32 37.3 | | |
| | comp=E,46nm,1.1s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **5.20** | **337** | P | | **Pn** | **13 31 12.0** | **-2.7** |
| | baz=155 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **5.24** | **322** | | | **Pn** | **13 31 13.2** | **-2.0** |
| **RC01** | **Rabbit Creek A** | **5.24** | **322** | IAML | | | 13 32 25.4 | | |
| | comp=E,40nm,0.5s | | | | | | | | |
| RC01 | | | | IAML | | | 13 32 29.2 | | |
| | comp=N,39nm,0.5s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **5.24** | **322** | P | | **Pn** | **13 31 13.2** | **-2.0** |
| | baz=137 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **5.25** | **344** | | | **Pn** | **13 31 14.5** | **-0.8** |
| **M24K** | **Tolsona, Glenn** | **5.25** | **344** | P | | **Pn** | **13 31 14.8** | **-0.5** |
| | baz=163 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **5.30** | **6** | | | **Pn** | **13 31 16.6** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **5.30** | **6** | IAML | | | 13 32 27.2 | | |
| | comp=E,27nm,1.4s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **5.30** | **6** | P | | **Pn** | **13 31 16.4** | **+0.2** |
| | baz=189 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **5.31** | **1** | | | **Pn** | **13 31 16.1** | **-0.1** |
| **M26K** | **Nabesna, AK** | **5.31** | **1** | P | | **Pn** | **13 31 16.3** | **+0.1** |
| | baz=182 | | | | | | | | |
| **SML** | **Sawmill** | **5.41** | **333** | | | **Pn** | **13 31 17.0** | **-0.5** |
| **SML** | **Sawmill** | **5.41** | **333** | IAML | | | 13 32 20.3 | | |
| | comp=E,40nm,1.7s | | | | | | | | |
| SML | | | | IAML | | | 13 32 28.6 | | |
| | comp=N,41nm,0.6s | | | | | | | | |
| **PMR** | **Palmer** | **5.44** | **328** | | | **Pn** | **13 31 17.1** | **-0.8** |
| **BVCY** | **Beaver Creek** | **5.45** | **11** | | | **Pn** | **13 31 18.3** | **+0.3** |
| **BVCY** | **Beaver Creek** | **5.45** | **11** | Pn | | **Pn** | **13 31 18.4** | **+0.4** |
| BVCY | | | | Sn | | **Sn** | **13 32 15.6** | **-5.1** |
| **GHO** | **Glory Hole Cre** | **5.53** | **330** | | | **Pn** | **13 31 19.1** | **-0.1** |
| **CAPN** | **Captain Cook N** | **5.54** | **315** | | | **Pn** | **13 31 18.8** | **-0.4** |
| **WHY** | **Whitehorse** | **5.57** | **47** | | | **Pn** | **13 31 20.2** | **+0.4** |
| **WHY** | **Whitehorse** | **5.57** | **47** | Pn | | **Pn** | **13 31 19.9** | **+0.1** |
| WHY | | | | Sn | | **Sn** | **13 32 21.2** | **-2.6** |
| **O20K** | **Slope Mountain** | **5.79** | **305** | | | **Pn** | **13 31 21.6** | **-1.2** |
| **CRAG** | **Craig** | **5.81** | **102** | Pn | | **Pn** | **13 31 21.3** | **-1.7** |
| **M22K** | **Willow** | **5.86** | **326** | | | **Pn** | **13 31 21.8** | **-1.9** |
| **Q19K** | **Cape Douglas,** | **5.88** | **292** | | | **Pn** | **13 31 22.5** | **-1.4** |
| **OPT** | **Oil Point** | **5.89** | **300** | | | **Pn** | **13 31 23.1** | **-1.1** |
| **RDT** | **Redoubt** | **5.93** | **310** | | | **Pn** | **13 31 23.1** | **-1.7** |
| **L26K** | **Log Cabin Wild** | **5.94** | **359** | | | **Pn** | **13 31 22.0** | **-2.7** |
| **WAT6** | **Susitna Watana** | **5.96** | **339** | | | **Pn** | **13 31 23.9** | **-1.3** |
| **WRAK** | **Wrangell Islan** | **5.97** | **92** | Pn | | **Pn** | **13 31 24.4** | **-0.9** |
| **PAX** | **Paxson** | **6.00** | **350** | | | **Pn** | **13 31 24.6** | **-1.1** |
| **L27K** | **Beaver Creek,** | **6.01** | **6** | | | **Pn** | **13 31 25.8** | **0.0** |
| **BC03** | | **6.01** | **6** | | | **Pn** | **13 31 26.2** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **6.01** | **6** | Pn | | **Pn** | **13 31 25.8** | **-0.1** |
| **RSO** | **Redoubt South** | **6.03** | **308** | | | **Pn** | **13 31 24.5** | **-1.7** |
| **DFR** | **Drift River** | **6.06** | **309** | | | **Pn** | **13 31 25.2** | **-1.4** |
| **SII** | **Sitkinak Islan** | **6.09** | **269** | Pn | | **Pn** | **13 31 25.1** | **-1.7** |
| **SPU** | **Mount Spurr** | **6.14** | **315** | | | **Pn** | **13 31 26.0** | **-1.6** |
| **NCT** | **North Crescent** | **6.15** | **308** | | | **Pn** | **13 31 26.5** | **-1.3** |
| **SPCG** | **Spurr Capps Gl** | **6.20** | **316** | | | **Pn** | **13 31 27.7** | **-0.7** |
| **SPCR** | **Spurr Chakacha** | **6.21** | **315** | | | **Pn** | **13 31 27.6** | **-1.0** |
| **SPCN** | **Chakachatna No** | **6.22** | **315** | | | **Pn** | **13 31 28.0** | **-0.7** |
| **P33M** | **Teslin, Yukon** | **6.22** | **56** | | | **Pn** | **13 31 28.7** | **0.0** |
| **STLK** | **Strandline Lak** | **6.26** | **318** | | | **Pn** | **13 31 28.3** | **-0.9** |
| **SPBG** | **Spurr Blockage** | **6.31** | **315** | | | **Pn** | **13 31 28.7** | **-1.2** |
| **DHY** | **Denali Highway** | **6.35** | **342** | | | **Pn** | **13 31 28.0** | **-2.6** |
| **CUT** | **Chulitna** | **6.42** | **329** | | | **Pn** | **13 31 31.0** | **-0.3** |
| **SPNN** | **North Nagishla** | **6.50** | **315** | | | **Pn** | **13 31 31.7** | **-0.9** |
| **DOT** | **Dot Lake** | **6.58** | **356** | | | **Pn** | **13 31 33.4** | **-0.1** |
| **NDB** | **Naden** | **6.59** | **114** | Pn | | **Pn** | **13 31 32.7** | **-1.1** |
| NDB | | | | Sn | | **Sn** | **13 32 43.5** | **-5.5** |
| **RIDG** | **Independent Ri** | **6.71** | **353** | Pn | | **Pn** | **13 31 34.9** | **-0.4** |
| **M31M** | **Drury Creek, Y** | **6.76** | **37** | | | **Pn** | **13 31 37.0** | **+1.0** |
| **P18K** | **Big Mountain,** | **6.78** | **295** | | | **Pn** | **13 31 33.6** | **-2.8** |
| **O18K** | **Koktuh Hills** | **6.90** | **299** | Pn | | **Pn** | **13 31 35.9** | **-2.1** |
| **SCRK** | **Sand Creek** | **6.90** | **357** | Pn | | **Pn** | **13 31 37.0** | **-1.2** |
| **RND** | **Reindeer** | **6.93** | **338** | Pn | | **Pn** | **13 31 37.4** | **-1.0** |
| **N19K** | **Bonanza Creek** | **6.94** | **307** | | | **Pn** | **13 31 36.9** | **-1.7** |
| **CHIR** | **Chirikof Islan** | **7.04** | **265** | Pn | | **Pn** | **13 31 39.0** | **-0.8** |
| **FARO** | **Faro, Yukon** | **7.13** | **40** | Pn | | **Pn** | **13 31 41.9** | **+0.7** |
| **DLBC** | **Dease Lake** | **7.14** | **74** | Pn | | **Pn** | **13 31 42.3** | **+1.0** |
| | comp=N,1.1nm,0.3s,baz=245,slow=9.7,SNR=34 | | | | | | | | |
| **DLBC** | **Dease Lake** | **7.14** | **74** | | | **Pn** | **13 31 42.1** | **+0.8** |
| **DLBC** | **Dease Lake** | **7.14** | **74** | Pn | | **Pn** | **13 31 41.0** | **-0.3** |
| DLBC | | | | Sn | | **Sn** | **13 32 57.3** | **-5.1** |
| **DAWY** | **Dawson** | **7.22** | **13** | Pn | | **Pn** | **13 31 43.0** | **+0.6** |
| **DAWY** | **Dawson** | **7.22** | **13** | Pn | | **Pn** | **13 31 42.9** | **+0.6** |
| DAWY | | | | Sn | | **Sn** | **13 32 58.3** | **-6.0** |
| **MCK** | **McKinley** | **7.24** | **339** | Pn | | **Pn** | **13 31 42.2** | **-0.4** |
| **DIB** | **Dawson Inlet,** | **7.25** | **118** | Pn | | **Pn** | **13 31 41.1** | **-1.6** |
| **DIB** | **Dawson Inlet,** | **7.25** | **118** | Pn | | **Pn** | **13 31 41.2** | **-1.6** |
| DIB | | | | Sn | | **Sn** | **13 32 59.7** | **-5.3** |
| **TRF** | **Thorofare Moun** | **7.28** | **334** | Pn | | **Pn** | **13 31 42.9** | **-0.5** |
| **PPLA** | **Purkeypile** | **7.36** | **326** | Pn | | **Pn** | **13 31 43.3** | **-1.1** |
| **MAYO** | **Mayo, Yukon** | **7.43** | **26** | Pn | | **Pn** | **13 31 46.5** | **+1.3** |
| MAYO | | | | Sn | | **Sn** | **13 33 04.4** | **-5.0** |
| **M19K** | **Big River Lodg** | **7.47** | **315** | | | **Pn** | **13 31 44.6** | **-1.2** |
| **KTH** | **Kantishna Hill** | **7.53** | **332** | | | **Pn** | **13 31 46.4** | **-0.2** |
| **MOBC** | **Moresby Island** | **7.53** | **117** | Pn | | **Pn** | **13 31 45.3** | **-1.4** |
| **MOBC** | **Moresby Island** | **7.53** | **117** | Pn | | **Pn** | **13 31 45.6** | **-1.0** |
| MOBC | | | | Sn | | **Sn** | **13 33 06.6** | **-5.5** |
| **HDA** | **Harding Lake** | **7.56** | **347** | | | **Pn** | **13 31 45.1** | **-1.8** |
| **J25K** | **Salcha River,** | **7.61** | **353** | Pn | | **Pn** | **13 31 46.8** | **-0.9** |
| **CAST** | **Castle Rocks** | **7.73** | **329** | Pn | | **Pn** | **13 31 48.9** | **-0.4** |
| **BWN** | **Browne** | **7.73** | **339** | Pn | | **Pn** | **13 31 48.7** | **-0.8** |
| **EGAK** | **Eagle** | **7.75** | **6** | Pn | | **Pn** | **13 31 50.0** | **+0.3** |
| **WRH** | **Wood River Hil** | **7.77** | **344** | Pn | | **Pn** | **13 31 49.0** | **-0.9** |
| **RUBB** | **Prince Rupert** | **7.79** | **106** | Pn | | **Pn** | **13 31 49.0** | **-1.2** |
| **RUBB** | **Prince Rupert** | **7.79** | **106** | Sn | | **Sn** | **13 33 13.4** | **-4.9** |
| **L19K** | **White Mountain** | **7.81** | **315** | Pn | | **Pn** | **13 31 49.5** | **-0.9** |
| **CCB** | **Clear Creek Bu** | **7.90** | **345** | | | **Pn** | **13 31 50.4** | **-1.1** |
| **IL31** | | **7.90** | **348** | Pn | | **Pn** | **13 31 49.7** | **-1.9** |
| **ILAR** | **Eielson Array** | **7.90** | **348** | Pn | | **Pn** | **13 31 49.8** | **-1.9** |
| | comp=N,0.5nm,0.3s,baz=173,slow=13,SNR=11 | | | | | | | | |
| ILAR | | | | LR | LR | | 13 35 10.0 | | |
| | comp=N,58nm,20.8s,baz=151,slow=41 | | | | | | | | |
| **ILAR** | **Eielson Array** | **7.90** | **348** | Pn | | **Pn** | **13 31 49.5** | **-2.2** |
| **BNB** | **Barry Inlet** | **7.98** | **120** | Pn | | **Pn** | **13 31 52.0** | **-0.9** |
| **BPAW** | **Bear Paw Mtn.** | **8.00** | **334** | Pn | | **Pn** | **13 31 51.1** | **-1.9** |
| **NEA2** | **Nenana** | **8.04** | **341** | | | **Pn** | **13 31 52.6** | **-1.1** |
| **COLA** | **College** | **8.12** | **346** | Pn | | **Pn** | **13 31 53.8** | **-0.8** |
| **TCOL** | **CIGO, UAF Yank** | **8.12** | **346** | Pn | | **Pn** | **13 31 54.2** | **-0.4** |
| **MMPY** | **Sheldon Lake,** | **8.13** | **42** | Pn | | **Pn** | **13 31 55.9** | **+1.0** |
| MMPY | | | | Sn | | **Sn** | **13 33 24.0** | **-2.7** |
| **GRNB** | **Grenville Isla** | **8.17** | **108** | Pn | | **Pn** | **13 31 53.6** | **-1.8** |
| **GRNB** | **Grenville Isla** | **8.17** | **108** | Pn | | **Pn** | **13 31 53.5** | **-1.8** |
| GRNB | | | | Sn | | **Sn** | **13 33 22.1** | **-5.6** |
| **MDM** | **Murphy Dome** | **8.25** | **345** | | | **Pn** | **13 31 54.2** | **-2.3** |
| **K20K** | **Telida** | **8.29** | **324** | | | **Pn** | **13 31 54.6** | **-2.4** |
| **POKR** | **Poker Plat Res** | **8.30** | **347** | Pn | | **Pn** | **13 31 55.4** | **-1.7** |
| **HG4B** | **Hotspring** | **8.43** | **120** | Pn | | **Pn** | **13 31 57.4** | **-1.5** |
| **HG4B** | **Hotspring** | **8.43** | **120** | Pn | | **Pn** | **13 31 58.1** | **-0.8** |
| HG4B | | | | Sn | | **Sn** | **13 33 29.2** | **-4.8** |
| **BNKB** | **Banks Island** | **8.46** | **111** | Pn | | **Pn** | **13 31 58.2** | **-1.1** |
| BNKB | | | | Sn | | **Sn** | **13 33 28.8** | **-5.9** |
| **PRP** | **Porcupine Dome** | **8.52** | **353** | Pn | | **Pn** | **13 31 57.5** | **-2.8** |
| **I29M** | **Ogilvie Camp,** | **8.60** | **14** | Pn | | **Pn** | **13 32 01.2** | **-0.1** |
| **TTA** | **Tatalina** | **8.69** | **318** | Pn | | **Pn** | **13 32 00.6** | **-1.9** |
| **HWKB** | **Hawksbury Isla** | **8.71** | **108** | Sn | | **Sn** | **13 33 35.8** | **-5.1** |
| **MLY** | **Manley** | **8.75** | **338** | Pn | | **Pn** | **13 32 02.2** | **-1.1** |
| **J20K** | **Nowinta River** | **8.90** | **327** | | | **Pn** | **13 32 04.1** | **-1.3** |
| **H24K** | **Noodor Dome** | **9.04** | **347** | Pn | | **Pn** | **13 32 05.8** | **-1.6** |
| **I21K** | **Tanana** | **9.15** | **336** | Pn | | **Pn** | **13 32 05.9** | **-2.8** |
| **H23K** | **Yukon River** | **9.26** | **343** | Pn | | **Pn** | **13 32 11.0** | **+0.7** |
| **CNBA** | **Chernabura Isl** | **9.51** | **263** | Pn | | **Pn** | **13 32 12.4** | **-1.3** |
| **FYU** | **Fort Yukon** | **9.54** | **355** | Pn | | **Pn** | **13 32 14.1** | **-0.1** |
| **H21K** | **Melozitna Rive** | **9.74** | **336** | Pn | | **Pn** | **13 32 15.5** | **-1.3** |
| **SDPT** | **Sand Point** | **9.81** | **267** | Pn | | **Pn** | **13 32 17.3** | **-0.6** |
| **BBB** | **Bella Bella** | **10.00** | **113** | Pn | | **Pn** | **13 32 19.7** | **-0.7** |
| | comp=N,0.4nm,0.3s,baz=318,slow=14,SNR=1.9 | | | | | | | | |
| BBB | | | | Sn | | **Sn** | **13 34 07.2** | **-5.3** |
| | comp=N,0.8nm,0.3s,baz=49,slow=15,SNR=5.8 | | | | | | | | |
| **BBB** | **Bella Bella** | **10.00** | **113** | Sn | | **Sn** | **13 34 07.0** | **-5.5** |
| **IMAR** | **Indian Mountai** | **10.22** | **335** | Pn | | **Pn** | **13 32 22.3** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **10.38** | **357** | Pn | | **Pn** | **13 32 24.4** | **-1.2** |
| **COLD** | **Coldfoot** | **10.67** | **345** | Pn | | **Pn** | **13 32 27.9** | **-1.6** |
| **COLD** | **Coldfoot** | **10.67** | **345** | Pn | | **Pn** | **13 32 28.0** | **-1.6** |
| **FALS** | **False Pass** | **11.57** | **267** | Pn | | **Pn** | **13 32 42.7** | **+0.8** |
| **INK** | **Inuvik** | **12.05** | **17** | Pn | | **Pn** | **13 32 50.9** | **+2.5** |
| | comp=N,0.0nm,0.3s,baz=239,slow=17,SNR=3.4 | | | | | | | | |
| **ANM** | **Nome** | **13.10** | **314** | Pn | | **Pn** | **13 33 02.7** | **-0.1** |
| **UNV** | **Unalaska Valle** | **13.63** | **266** | Pn | | **Pn** | **13 33 10.7** | **+0.7** |
| **TNA** | **Tin City** | **14.50** | **316** | Pn | | **Pn** | **13 33 22.5** | **+0.7** |
| **C36M** | **Paulatuk** | **14.88** | **27** | Pn | | **Pn** | **13 33 27.0** | **+0.1** |
| **YKA** | **Yellowknife Ar** | **15.25** | **57** | Pn | | **Pn** | **13 33 32.5** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=252,slow=11,SNR=7.7 | | | | | | | | |
| YKA | | | | LR | LR | | 13 39 33.8 | | |
| | comp=N,129nm,18.7s,baz=319,slow=38 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **16.67** | **19** | | | **P** | **13 33 53.3** | **+0.8** |
| A36M | | | | IAmb | IAmb | | 13 33 57.8 | | |
| | comp=Z,7.5nm,1.0s | | | | | | | | |
| **NEW** | **Newport** | **17.99** | **108** | LR | LR | | 13 39 36.8 | | |
| | comp=Z,68nm,20.4s,baz=120,slow=32 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **20.21** | **131** | P | | Pn | 13 34 37.5 | +3.9 | |
| | comp=Z,1.7nm,0.8s,baz=288,slow=3.2,SNR=3.9 | | | | | | | | |
| YBH | | | | LR | LR | | 13 40 22.8 | | |
| | comp=Z,61nm,20.2s,baz=5.5,slow=30 | | | | | | | | |

baz=242
TWGBT **Beinan** 0.28 141 *e*P Pg 13 52 55.3 +0.4
baz=140
WTP **Ta-pu** 0.33 310 *e*P Pg 13 52 56.5 +0.8
baz=310
WTP *e*S Sb 13 53 01.7 -1.4
baz=310
TPUB **Ta-pu** 0.35 318 *e*P Pg 13 52 57.1 +0.9
baz=318
TPUB *e*S Sb 13 53 02.7 -1.2
baz=318
CHN1 **Nanshi** 0.36 294 *e*P Pb 13 52 57.3 -0.9
baz=294
SSD **Sandimen** 0.37 219 *e*P Pg 13 52 57.2 +0.6
baz=221
TSMG **Majia** 0.40 214 *e*P Pb 13 52 58.0 -0.8
baz=220
ECL **Taimali** 0.44 172 *e*P Pg 13 52 57.6 -0.2
baz=171
ECL *e*S Sg 13 53 04.0 +0.4
baz=171

**WEL 15 14:01:54.7±1.0, 36°S±12″×177°E±1°5, h208km±16km, M3.4/10, ML3.8/13, MLv3.4/10, Error ellipse: s-maj=0.0km s-min=0.0km az=120.8, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | **Matakaoa Point** | 2.06 | 188 | P | Pn | 14 02 33.9 | -0.5 |
| MXZ | | | | S | S | 14 03 05.5 | +0.4 |
| WMGZ | **Waiomatatini S** | 2.30 | 185 | P | Pn | 14 02 37.1 | +0.2 |
| WMGZ | | | | S | S | 14 03 10.8 | +1.2 |
| HAZ | **Te Kaha** | 2.35 | 198 | P | Pn | 14 02 37.3 | -0.1 |
| HAZ | | | | S | S | 14 03 11.4 | +1.0 |
| PKGZ | **Pakihiroa** | 2.41 | 192 | P | Pn | 14 02 38.8 | +0.6 |
| PKGZ | | | | S | S | 14 03 12.2 | +0.4 |
| PUZ | **Puketiti** | 2.57 | 188 | P | Pn | 14 02 39.8 | -0.1 |
| PUZ | | | | S | S | 14 03 14.2 | -0.7 |
| RUGZ | **Raukumara Rang** | 2.57 | 198 | P | Pn | 14 02 39.8 | -0.1 |
| RUGZ | | | | S | S | 14 03 15.9 | +0.9 |
| KUZ | **Kuaotunu** | 2.69 | 242 | P | Pn | 14 02 41.4 | +0.1 |
| MWZ | **Matawai** | 2.96 | 198 | P | Pn | 14 02 44.2 | 0.0 |
| MWZ | | | | S | S | 14 03 23.9 | +1.1 |
| CNGZ | **Carnagh Statio** | 2.98 | 187 | P | Pn | 14 02 46.2 | +1.7 |
| TKGZ | **Te Karaka** | 2.99 | 193 | P | Pn | 14 02 45.4 | +0.8 |
| TKGZ | | | | S | S | 14 03 24.7 | +1.4 |
| URZ | **Urewera** | 3.01 | 204 | P | Pn | 14 02 44.5 | -0.3 |
| URZ | | | | S | S | 14 03 24.7 | +0.9 |
| RAGZ | **Rawiri** | 3.14 | 199 | P | Pn | 14 02 45.7 | -0.7 |
| RAGZ | | | | S | S | 14 03 28.0 | +1.4 |
| RIGZ | **Rimuhau** | 3.26 | 193 | P | Pn | 14 02 47.6 | -0.2 |
| RIGZ | | | | S | S | 14 03 29.5 | +0.3 |
| MUGZ | **Murupara** | 3.33 | 207 | P | Pn | 14 02 48.8 | +0.3 |
| RTZ | **Ruatahuna** | 3.38 | 203 | P | Pn | 14 02 48.5 | -0.8 |
| RTZ | | | | S | S | 14 03 32.1 | +0.5 |
| SNGZ | **Shannon Statio** | 3.43 | 198 | P | Pn | 14 02 49.6 | -0.2 |
| SNGZ | | | | S | S | 14 03 33.2 | +0.6 |
| KNZ | **Kokohu** | 3.59 | 193 | P | Pn | 14 02 50.7 | -1.0 |
| RAHZ | **Arahi** | 3.62 | 200 | P | Pn | 14 02 51.9 | -0.2 |
| RAHZ | | | | S | S | 14 03 37.9 | +1.0 |
| MHGZ | **Mahia Peninsul** | 3.68 | 190 | P | Pn | 14 02 53.3 | +0.5 |
| NMHZ | **Naumai** | 3.87 | 202 | P | Pn | 14 02 55.6 | +0.4 |
| ARHZ | **Aropaoanui** | 3.97 | 199 | P | Pn | 14 02 56.0 | -0.4 |
| BKZ | **Black Stump Fm** | 4.04 | 205 | P | Pn | 14 02 56.9 | -0.3 |
| MCHZ | **McNeill Hill** | 4.22 | 201 | P | Pn | 14 02 59.6 | +0.1 |
| KWHZ | **Kaweka Forest** | 4.29 | 204 | P | Pn | 14 03 00.1 | -0.3 |
| TMVZ | **Te Maari** | 4.30 | 213 | P | Pn | 14 03 00.8 | +0.2 |
| OTVZ | **Oturere** | 4.36 | 213 | P | Pn | 14 03 01.0 | -0.4 |
| SNVZ | **South Ngauruho** | 4.39 | 213 | P | Pn | 14 03 01.5 | -0.3 |
| BHHZ | **Black Hill Sta** | 4.48 | 207 | P | Pn | 14 03 01.6 | -1.1 |
| KAHZ | **Kahuranaki** | 4.50 | 198 | P | Pn | 14 03 02.5 | -0.5 |
| KRHZ | **Kereru** | 4.51 | 203 | P | Pn | 14 03 01.6 | -1.5 |
| PNHZ | **Pukenui** | 4.81 | 203 | P | Pn | 14 03 05.4 | -1.4 |
| PRHZ | **Porangahau** | 5.01 | 198 | P | Pn | 14 03 07.6 | -1.7 |
| BFZ | **Birch Farm** | 5.50 | 200 | P | Pn | 14 03 14.3 | -1.3 |
| MRZ | **Mangatainoka R** | 5.69 | 205 | P | Pn | 14 03 15.5 | -2.5 |
| TMWZ | **Te Maipa** | 5.99 | 201 | P | Pn | 14 03 20.5 | -1.5 |
| KIW | **Kapiti Island** | 6.10 | 208 | P | Pn | 14 03 20.7 | -2.6 |
| CAW | **Cannon Point** | 6.26 | 206 | P | Pn | 14 03 22.3 | -3.1 |

*DJA **15** 14:11:08.1±0.9, 1°S±8″×13°8E±°, h42km±58km, M4.0/2, MLv4.0/2*
*IDC **15** 14:11:10.2±1.6, 1°91S×138°29E, h0km, mb3.8/3, mb1 4.0/6, mb1mx3.7/34, mbtmp3.8/6, ML3.9/3, MS3.1/1, Ms1 3.1/1, ms1mx2.3/59, Error ellipse: s-maj=28.4km s-min=19.4km az=13.0*
*NEIC **15** 14:11:11.5±1.3, 1°86S±0°10×138°26E±0°08, h10km±1km, mb4.2/18, Error ellipse: s-maj=16.2km s-min=13.4km az=8.0*

**ISC 15 14:11:11.1±0.7, 1°84S±0°08×138°16E±0°07, h10km, n43, σ1s21/39, mb4.4/7, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SMPI | **Sarmi** | 0.57 | 106 | P | Pn | 14 11 28.4 | +3.2 |
| SMPI | | | | S | Sb | 14 11 44.6 | +13 |
| GENI | **Genyem** | 2.14 | 111 | P | Pb | 14 11 48.8 | -1.1 |
| GENI | | | | S | Sg | 14 12 21.8 | +1.9 |
| BAKI | **Biak** | 2.15 | 287 | P | Pn | 14 11 37.0 | -10 |
| JAY | **Jayapura** | 2.63 | 105 | Pn | Pn | 14 11 53.7 | +0.1 |
| | 6.5nm,0.3s,baz=322,slow=10,SNR=3.1 | | | | | | |
| JAY | | | | Lg | Lg | 14 12 27.7 | |
| | 12nm,0.3s,baz=131,slow=18,SNR=3.8 | | | | | | |
| FAKI | **Fak Fak** | 6.01 | 260 | Pn | Pn | 14 12 33.8 | -6.3 |
| FAKI | **Fak Fak** | 6.01 | 260 | P | Pn | 14 12 34.1 | -6.0 |
| SAUI | **Saumlaki** | 9.17 | 228 | Pn | Pn | 14 13 25.0 | +1.5 |
| PMG | **Port Moresby** | 11.69 | 130 | LR | LR | 14 19 22.5 | |
| | comp=Z,82nm,19.4s,baz=340,slow=43 | | | | | | |
| KDU | **Kakadu** | 12.17 | 207 | P | Pn | 14 14 04.6 | 0.0 |
| MTN | **Manton Dam** | 12.97 | 212 | Pn | Pn | 14 14 15.2 | -0.4 |
| MTN | **Manton Dam** | 12.97 | 212 | P | Pn | 14 14 15.4 | -0.1 |
| COEN | **Coen** | 13.02 | 158 | Pn | Pn | 14 14 17.8 | +1.5 |
| COEN | **Coen** | 13.02 | 158 | P | Pn | 14 14 21.2 | +4.9 |
| | 7.3nm,1.3s | | | | | | |
| SOEI | **Soe** | 15.90 | 240 | Pn | Pn | 14 14 55.9 | +0.7 |
| SOEI | | | | IAmb | IAmb | 14 15 08.4 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| KNRA | **Kununurra** | 16.59 | 213 | Pn | Pn | 14 15 02.3 | -1.6 |
| KNRA | | | | IAmb | IAmb | 14 15 13.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| KNRA | **Kununurra** | 16.59 | 213 | P | Pn | 14 15 02.6 | -1.3 |
| WB0 | **Warramunga Arr** | 18.20 | 191 | | Pn | 14 15 23.9 | -0.1 |
| WB0 | | | | IAmb | IAmb | 14 15 26.4 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| WR0 | **Warramunga Arr** | 18.36 | 191 | P | Pn | 14 15 25.0 | -1.0 |
| WR0 | | | | IAmb | IAmb | 14 15 27.8 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| WRAB | **Tennant Creek** | 18.37 | 191 | P | Pn | 14 15 26.0 | -0.1 |
| WRAB | **Tennant Creek** | 18.37 | 191 | P | P | 14 15 27.3 | +1.2 |
| WB2 | **Warramunga Arr** | 18.38 | 191 | | Pn | 14 15 25.8 | -0.4 |
| WB2 | | | | IAmb | IAmb | 14 15 29.0 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| WRA | **Warramunga Arr** | 18.38 | 191 | P | Pn | 14 15 26.4 | +0.2 |
| | comp=Z,0.7nm,0.3s,baz=13,slow=12,SNR=26 | | | | | | |
| WRA | **Warramunga Arr** | 18.38 | 191 | P | Pn | 14 15 24.5 | -1.8 |
| QIS | **Mount Isa** | 18.66 | 176 | P | Pn | 14 15 31.7 | +2.0 |
| CTA | **Charters Tower** | 19.79 | 157 | P | Pn | 14 15 42.5 | -0.8 |
| | comp=Z,0.3nm,0.3s,baz=350,slow=12,SNR=2.0 | | | | | | |
| CTAO | **Charters Tower** | 19.79 | 157 | Pn | Pn | 14 15 43.0 | -0.3 |
| CTAO | | | | IAmb | IAmb | 14 15 59.8 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| CTAO | **Charters Tower** | 19.79 | 157 | P | Pn | 14 15 44.3 | +1.1 |
| AS31 | **Alice Springs** | 22.09 | 190 | P | P | 14 16 06.1 | -0.5 |
| ASAR | **Alice Springs** | 22.09 | 190 | P | P | 14 16 07.0 | +0.4 |
| | comp=Z,4.2nm,0.8s,baz=14,slow=10,SNR=81 | | | | | | |
| ASAR | **Alice Springs** | 22.09 | 190 | P | P | 14 16 06.2 | -0.4 |
| INKA | **Innaminka** | 25.88 | 175 | P | P | 14 16 44.7 | +1.6 |
| STKA | **Stephens Creek** | 30.06 | 174 | P | P | 14 17 19.7 | -0.8 |
| | comp=Z,1.2nm,0.5s,baz=333,slow=9.1,SNR=5.0 | | | | | | |
| ARMA | **Armidale** | 31.16 | 157 | P | P | 14 17 30.9 | +0.4 |
| ARMA | | | | IAmb | IAmb | 14 17 47.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| PINNC | **Pines Island,** | 35.14 | 128 | P | P | 14 18 03.7 | -1.5 |
| JMN | **Monobe** | 35.60 | 354 | P | P | 14 18 09.2 | +0.2 |
| MDJ | **Mudanjiang** | 46.88 | 352 | P | P | 14 19 41.0 | -0.5 |
| MDJ | | | | IAmb | IAmb | 14 20 09.5 | |
| | comp=Z,6.1nm,1.3s | | | | | | |
| MQZ | **McQueen's Vall** | 51.73 | 148 | P | P | 14 20 17.3 | -1.4 |
| PLWZ | **Palliser** | 51.74 | 145 | P | P | 14 20 16.7 | -2.1 |
| RAR | **Rarotonga** | 63.36 | 113 | P | P | 14 21 39.8 | -1.3 |
| MKAR | **Makanchi Array** | 68.77 | 322 | P | P | 14 22 16.4 | +1.0 |
| | comp=Z,0.3nm,0.8s,baz=103,slow=8.3,SNR=2.9 | | | | | | |
| MKAR | **Makanchi Array** | 68.77 | 322 | P | P | 14 22 15.9 | +0.5 |
| MAKZ | **Makanchi** | 68.97 | 322 | P | P | 14 22 17.4 | +0.8 |
| MAKZ | | | | IAmb | IAmb | 14 22 26.1 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| TIXI | **Tiksi** | 73.61 | 357 | P | P | 14 22 44.7 | +0.6 |
| TIXI | | | | IAmb | IAmb | 14 22 46.1 | |
| | comp=Z,3.3nm,0.4s | | | | | | |

**IDC 15 14:14:08.0±8.9, 37°06S×52°49E, h0km, mb3.5/2, mb1 3.8/2, mb1mx3.1/56, mbtmp3.5/2, Error ellipse: s-maj=504.1km s-min=45.7km az=38.0, South Indian Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | 69.58 | 105 | P | P | 14 25 18.8 | -0.4 |
| | 0.3nm,0.9s,baz=224,slow=6.1,SNR=4.1 | | | | | | |
| WRA | **Warramunga Arr** | 71.93 | 102 | P | P | 14 25 34.0 | +0.4 |
| | 0.5nm,0.8s,baz=232,slow=5.1,SNR=5.4 | | | | | | |
| ILAR | **Eielson Array** | 149.95 | 16 | PKPbc | PKPbc | 14 33 59.0 | -0.3 |
| | 0.6nm,0.7s,baz=318,slow=3.4,SNR=5.5 | | | | | | |
| YKA | **Yellowknife Ar** | 153.31 | 347 | PKPab | PKPab | 14 34 18.4 | -0.7 |
| | 0.2nm,0.6s,baz=21,slow=4.7,SNR=4.1 | | | | | | |

*ATH **15** 14:21:29.8, 38°72N×20°60E, h8km±2km, ML3.2/4, Error ellipse: s-maj=2.5km s-min=0.8km az=101.0*
*THE **15** 14:21:29.5, 38°71N×20°59E, h10km, ML3.0/2, Error ellipse: s-maj=1.0km s-min=0.4km az=289.0*

**ISC 15 14:21:28.1±0.8, 38°75N±0°02×20°55E±0°04, h15km±4km, n42, σ1s76/73, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DRAG | **Dragano-Lefkad** | 0.07 | 163 | P | Pg | 14 21 31.0 | -0.1 |
| DRAG | | | | S | Sg | 14 21 32.3 | -0.8 |
| DRAG | **Dragano-Lefkad** | 0.07 | 163 | P | Pg | 14 21 31.0 | -0.1 |
| DRAG | | | | S | Sg | 14 21 32.1 | -1.0 |
| LKD2 | **Lefkada island** | 0.09 | 63 | P | Pg | 14 21 31.9 | +0.5 |
| LKD2 | | | | S | Sg | 14 21 33.9 | +0.3 |
| LKD2 | **Lefkada island** | 0.09 | 63 | P | Pg | 14 21 31.9 | +0.5 |
| LKD2 | | | | S | Sg | 14 21 33.8 | +0.3 |
| LKD2 | | | | AML | AML | 14 21 34.0 | |
| | comp=E,45738μm,0.2s | | | | | | |
| LKD2 | | | | AML | AML | 14 21 34.1 | |
| | comp=N,50809μm,0.3s | | | | | | |
| TSLK | **Tsoukalades, L** | 0.11 | 46 | P | Pg | 14 21 32.6 | +1.0 |
| TSLK | | | | S | Sg | 14 21 34.8 | +0.9 |
| TSLK | **Tsoukalades, L** | 0.11 | 46 | P | Pg | 14 21 32.6 | +1.0 |
| TSLK | | | | S | Sg | 14 21 35.0 | +1.1 |
| TSLK | | | | AML | AML | 14 21 36.2 | |
| | comp=E,67997μm,0.3s | | | | | | |
| TSLK | | | | AML | AML | 14 21 37.5 | |
| | comp=N,49637μm,0.4s | | | | | | |
| NYDR | **Nydri-Lefkada** | 0.12 | 106 | P | Pg | 14 21 31.7 | +0.1 |
| NYDR | | | | S | Sg | 14 21 33.4 | -0.5 |
| NYDR | **Nydri-Lefkada** | 0.12 | 106 | P | Pg | 14 21 31.7 | +0.1 |
| NYDR | | | | S | Sg | 14 21 33.4 | -0.5 |
| EVGI | **Lefkada island** | 0.15 | 147 | P | Pg | 14 21 32.2 | +0.1 |
| EVGI | | | | S | Sg | 14 21 34.3 | -0.4 |
| EVGI | **Lefkada island** | 0.15 | 147 | P | Pg | 14 21 32.1 | +0.1 |
| EVGI | | | | S | Sg | 14 21 34.3 | -0.4 |
| FSK | **Fiskardo** | 0.29 | 178 | P | Pg | 14 21 35.1 | +0.9 |
| FSK | | | | S | Sg | 14 21 38.8 | +0.5 |
| FSK | **Fiskardo** | 0.29 | 178 | P | Pg | 14 21 35.1 | +0.9 |
| FSK | | | | S | Sg | 14 21 39.4 | +1.0 |
| FSK | | | | AML | AML | 14 21 40.4 | |
| | comp=E,34903μm,0.2s | | | | | | |
| FSK | | | | AML | AML | 14 21 40.9 | |
| | comp=N,11912μm,0.3s | | | | | | |
| KEF4 | **Livadi, Kephal** | 0.50 | 191 | P | Pg | 14 21 38.6 | +0.6 |
| KEF4 | | | | S | Sb | 14 21 46.4 | +0.9 |
| DMLN | **Damoulianata-K** | 0.53 | 195 | P | Pg | 14 21 39.0 | +0.4 |
| DMLN | | | | S | Sg | 14 21 46.7 | +1.1 |
| | comp=N,4μm,0.4s | | | | | | |
| DMLN | **Damoulianata-K** | 0.53 | 195 | P | Pg | 14 21 38.9 | +0.4 |
| DMLN | | | | S | Sb | 14 21 47.4 | +1.0 |
| LXRA | **Lixouri, Kepha** | 0.55 | 189 | P | Pg | 14 21 39.5 | +0.5 |
| LXRA | | | | S | Sb | 14 21 48.2 | +1.1 |
| KEF3 | **Kipouria, Keph** | 0.56 | 196 | P | Pg | 14 21 39.2 | 0.0 |
| KEF3 | **Kipouria, Keph** | 0.56 | 196 | P | Pg | 14 21 39.2 | 0.0 |
| KEF3 | | | | S | Sg | 14 21 48.0 | +1.2 |
| VLS | **Valsamata** | 0.57 | 177 | P | Pg | 14 21 39.4 | +0.1 |
| VLS | | | | S | Sg | 14 21 48.0 | +1.0 |
| | comp=N,2μm,0.1s | | | | | | |
| VLS | **Valsamata** | 0.57 | 177 | P | Pg | 14 21 39.6 | +0.2 |
| VLS | | | | S | Sg | 14 21 47.9 | +1.0 |
| VLS | | | | AML | AML | 14 21 49.7 | |
| | comp=N,3735μm,0.2s | | | | | | |
| VLS | | | | AML | AML | 14 21 51.9 | |
| | comp=E,3799μm,0.3s | | | | | | |
| ARGA | **Argostoli. Kep** | 0.57 | 186 | P | Pg | 14 21 40.7 | +1.4 |
| ARGA | | | | S | Sb | 14 21 48.9 | +1.2 |
| PSDA | **Pessada-Kefalo** | 0.63 | 178 | P | Pg | 14 21 40.6 | +0.1 |
| PSDA | | | | S | Sg | 14 21 49.3 | +0.4 |
| PSDA | **Pessada-Kefalo** | 0.63 | 178 | P | Pg | 14 21 40.6 | +0.1 |
| JAN | **Janina** | 0.94 | 14 | P | Pg | 14 21 47.9 | +1.6 |
| JAN | **Janina** | 0.94 | 14 | P | Pg | 14 21 48.1 | +1.8 |
| RLS | **Riolos of Patr** | 1.00 | 133 | P | Pg | 14 21 47.1 | -0.3 |
| RLS | **Riolos of Patr** | 1.00 | 133 | P | Pg | 14 21 47.5 | +0.1 |
| EVR | **Evrytania** | 1.00 | 80 | P | Pg | 14 21 48.0 | +0.5 |
| ANX | **Ano Chora** | 1.08 | 98 | P | Pg | 14 21 49.2 | +0.1 |
| DRO | **Drossia** | 1.21 | 131 | P | Pb | 14 21 50.7 | 0.0 |
| STON | **Ston** | 4.65 | 333 | *e*Pn | Pn | 14 22 39.0 | +1.2 |
| STON | | | | Sn | Sn | 14 23 28.4 | -3.0 |
| LSTV | **Lastovo** | 4.88 | 327 | *e*Pn | Pn | 14 22 43.0 | +2.1 |
| LSTV | | | | Sn | Sn | 14 23 34.5 | -2.6 |
| MAKA | **Makarska** | 5.26 | 331 | *e*Pn | Pn | 14 22 47.9 | +1.7 |
| RICI | **Ricice** | 5.40 | 333 | *e*Pn | Pn | 14 22 49.3 | +1.2 |
| RICI | | | | Sn | Sn | 14 23 46.9 | -3.0 |
| HVAR | **Hvar** | 5.41 | 326 | *e*Pn | Pn | 14 22 49.8 | +1.7 |
| HVAR | | | | Sn | Sn | 14 23 45.8 | -4.3 |
| KJIV | **Kijevo** | 6.11 | 331 | *e*Pn | Pn | 14 22 59.8 | +2.0 |
| ZIRJ | **Zirje** | 6.14 | 325 | *e*Pn | Pn | 14 22 59.8 | +1.6 |
| ZIRJ | | | | Sn | Sn | 14 24 03.0 | -5.2 |
| MORI | **Morici** | 6.28 | 326 | *e*Pn | Pn | 14 23 02.2 | +2.1 |
| MORI | | | | Sn | Sn | 14 24 07.7 | -3.8 |
| DUGI | **Dugi Otok** | 6.67 | 324 | *e*Pn | Pn | 14 23 07.0 | +1.5 |
| DUGI | | | | Sn | Sn | 14 24 17.6 | -3.6 |
| UDBI | **Udbina** | 6.80 | 330 | *e*Pn | Pn | 14 23 10.0 | +2.7 |
| UDBI | | | | Sn | Sn | 14 24 19.8 | -4.6 |
| NVLJ | **Novalja** | 7.20 | 326 | *e*Pn | Pn | 14 23 14.4 | +1.7 |
| NVLJ | | | | Sn | Sn | 14 24 30.9 | -3.2 |
| BRJN | **Brijuni** | 7.97 | 323 | *e*Pn | Pn | 14 23 24.9 | +1.6 |
| BRJN | | | | Sn | Sn | 14 24 49.0 | -4.2 |

*ATH **15** 14:24:14.3, 38°71N×20°60E, h7km±2km, ML3.6/4, Error ellipse: s-maj=2.5km s-min=0.9km az=96.0*
*THE **15** 14:24:14.1, 38°70N×20°60E, h6km, ML3.6/5, Error ellipse: s-maj=0.9km s-min=0.5km az=283.0*
*IDC **15** 14:24:16.9±3.8, 38°78N×20°42E, h34km±32km, mb3.4/7, mb1 3.6/10, mb1mx3.4/44, mbtmp3.6/10, ML3.3/3, MS2.8/2, Ms1 2.8/2, ms1mx2.3/50, Error ellipse: s-maj=24.2km s-min=19.0km az=60.0*

**ISC 15 14:24:13.2±0.7, 38°72N±0°02×20°55E±0°03, h11km±4km, n81, σ1s62/104, mb3.7/7, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DRAG | **Dragano-Lefkad** | 0.04 | 154 | P | Pg | 14 24 15.2 | -0.1 |
| DRAG | | | | S | Sg | 14 24 16.1 | -0.8 |
| DRAG | **Dragano-Lefkad** | 0.04 | 154 | P | Pg | 14 24 15.2 | -0.1 |
| DRAG | | | | S | Sg | 14 24 16.0 | -0.8 |
| LKD2 | **Lefkada island** | 0.11 | 53 | P | Pg | 14 24 16.3 | +0.3 |
| LKD2 | | | | S | Sg | 14 24 17.7 | -0.4 |
| | 53μm,0.2s | | | | | | |
| LKD2 | **Lefkada island** | 0.11 | 53 | P | Pg | 14 24 16.4 | +0.3 |
| LKD2 | | | | S | Sg | 14 24 18.3 | +0.2 |
| LKD2 | | | | AML | AML | 14 24 18.6 | |
| LKD2 | | | | AML | AML | 14 24 18.8 | |
| NYDR | **Nydri-Lefkada** | 0.12 | 95 | P | Pg | 14 24 16.1 | 0.0 |
| NYDR | | | | S | Sg | 14 24 17.9 | -0.3 |
| NYDR | **Nydri-Lefkada** | 0.12 | 95 | P | Pg | 14 24 16.2 | 0.0 |
| NYDR | | | | S | Sg | 14 24 17.9 | -0.3 |
| TSLK | **Tsoukalades, L** | 0.13 | 39 | P | Pg | 14 24 17.1 | +0.8 |
| TSLK | | | | S | Sg | 14 24 19.4 | +0.8 |
| | 73μm,0.3s | | | | | | |
| TSLK | **Tsoukalades, L** | 0.13 | 39 | P | Pg | 14 24 17.2 | +0.8 |
| TSLK | | | | S | Sg | 14 24 19.8 | +1.2 |
| TSLK | | | | AML | AML | 14 24 20.0 | |
| TSLK | | | | AML | AML | 14 24 21.8 | |
| EVGI | **Lefkada island** | 0.13 | 141 | P | Pg | 14 24 16.4 | +0.1 |
| EVGI | | | | S | Sg | 14 24 18.1 | -0.5 |
| | 99μm,0.2s | | | | | | |
| EVGI | **Lefkada island** | 0.13 | 141 | P | Pg | 14 24 16.4 | +0.1 |
| EVGI | | | | S | Sg | 14 24 18.8 | +0.2 |
| FSK | **Fiskardo** | 0.26 | 178 | P | Pg | 14 24 19.4 | +0.8 |
| FSK | | | | S | Sg | 14 24 22.8 | +0.6 |
| | 16μm,0.3s | | | | | | |
| FSK | **Fiskardo** | 0.26 | 178 | P | Pg | 14 24 19.4 | +0.8 |
| FSK | | | | S | Sg | 14 24 23.5 | +1.3 |
| FSK | | | | AML | AML | 14 24 25.2 | |
| | comp=N,22860μm,0.3s | | | | | | |
| FSK | | | | AML | AML | 14 24 25.3 | |
| | comp=E,55553μm,0.2s | | | | | | |
| DMLN | **Damoulianata-K** | 0.50 | 196 | P | Pg | 14 24 23.2 | +0.2 |
| DMLN | **Damoulianata-K** | 0.50 | 196 | P | Pg | 14 24 23.4 | +0.4 |
| LXRA | **Lixouri, Kepha** | 0.53 | 190 | P | Pg | 14 24 23.9 | +0.3 |
| LXRA | | | | S | Sb | 14 24 32.3 | +0.2 |
| KEF3 | **Kipouria, Keph** | 0.54 | 197 | P | Pg | 14 24 23.6 | -0.2 |
| KEF3 | **Kipouria, Keph** | 0.54 | 197 | P | Pg | 14 24 23.6 | -0.2 |
| KEF3 | | | | S | Sg | 14 24 31.9 | +0.9 |
| VLS | **Valsamata** | 0.55 | 177 | P | Pg | 14 24 23.7 | -0.1 |
| VLS | | | | S | Sg | 14 24 32.1 | +1.1 |
| | comp=E,3μm,0.1s | | | | | | |
| VLS | **Valsamata** | 0.55 | 177 | P | Pg | 14 24 23.8 | -0.1 |
| VLS | | | | S | Sg | 14 24 32.2 | +1.1 |
| VLS | | | | AML | AML | 14 24 33.5 | |
| | comp=E,7857μm,0.2s | | | | | | |
| VLS | | | | AML | AML | 14 24 38.2 | |
| | comp=N,6316μm,0.3s | | | | | | |
| ARGA | **Argostoli. Kep** | 0.55 | 186 | P | Pg | 14 24 25.0 | +1.2 |
| PSDA | **Pessada-Kefalo** | 0.61 | 177 | P | Pg | 14 24 24.9 | -0.1 |
| PSDA | | | | S | Sg | 14 24 34.3 | +1.3 |
| PSDA | **Pessada-Kefalo** | 0.61 | 177 | P | Pg | 14 24 25.0 | 0.0 |
| PSDA | | | | S | Sg | 14 24 34.3 | +1.3 |
| IGT | **Igoumenitsa** | 0.82 | 348 | P | Pg | 14 24 29.7 | +0.6 |
| JAN | **Janina** | 0.96 | 14 | P | Pg | 14 24 32.3 | +0.6 |
| JAN | **Janina** | 0.96 | 14 | P | Pg | 14 24 32.4 | +0.7 |
| RLS | **Riolos of Patr** | 0.98 | 132 | P | Pg | 14 24 31.5 | -0.5 |
| RLS | **Riolos of Patr** | 0.98 | 132 | P | Pg | 14 24 31.6 | -0.5 |
| EVR | **Evrytania** | 1.00 | 79 | P | Pg | 14 24 32.2 | -0.3 |
| LTHK | **Lithakia** | 1.04 | 167 | P | Pg | 14 24 32.2 | -0.9 |
| ANX | **Ano Chora** | 1.08 | 96 | P | Pg | 14 24 33.7 | -0.3 |
| EFP | **Efpalio** | 1.10 | 105 | P | Pg | 14 24 33.7 | -0.7 |
| KEK | **Kerkira** | 1.15 | 330 | P | Pg | 14 24 36.6 | +1.4 |
| KEK | **Kerkira** | 1.15 | 330 | P | Pg | 14 24 36.9 | +1.7 |
| DRO | **Drossia** | 1.20 | 130 | P | Pg | 14 24 35.1 | -1.0 |
| LAKA | **Lakka** | 1.22 | 113 | P | Pg | 14 24 35.5 | -1.1 |
| MAKR | **Makrakomi, Fth** | 1.27 | 76 | P | Pb | 14 24 37.2 | +0.1 |
| THL | **Klokotos Trika** | 1.42 | 53 | P | Pn | 14 24 39.9 | +1.1 |
| AGG | **Agios Georgios** | 1.42 | 77 | P | Pn | 14 24 40.0 | +1.0 |
| KLV | **Kalavryta, Ach** | 1.43 | 118 | P | Pn | 14 24 38.7 | -0.4 |
| OHR | **Ohrid** | 2.39 | 5 | *i* Pn | Pn | 14 24 56.0 | +3.7 |
| STIP | **Stip** | 3.22 | 22 | *i* Pn | Pn | 14 25 08.4 | +4.8 |
| PDG | **Podgorica** | 3.83 | 346 | *e*Pn | Pn | 14 25 13.8 | +1.8 |
| HCY | **Herceg Novi** | 4.04 | 338 | *e*Pn | Pn | 14 25 15.2 | +0.3 |
| TREB | **Trebinje** | 4.33 | 338 | *e*Pn | Pn | 14 25 18.9 | +0.1 |
| BRY | **Bratogost** | 4.44 | 341 | *e*Pn | Pn | 14 25 21.2 | +0.6 |
| STON | **Ston** | 4.67 | 333 | *e*Pn | Pn | 14 25 23.5 | -0.1 |
| STON | **Ston** | 4.67 | 333 | *e*Pn | Pn | 14 25 23.6 | -0.1 |
| STON | | | | Sn | Sn | 14 26 11.2 | -6.6 |
| IDI | **Anoyia** | 4.88 | 133 | Pn | Pn | 14 25 29.5 | +3.0 |
| | comp=N,0.2nm,0.3s,baz=326,slow=18,SNR=1.7 | | | | | | |
| IDI | | | | Sn | Sn | 14 26 26.3 | +3.2 |
| | comp=N,0.8nm,0.3s,baz=133,slow=21,SNR=1.6 | | | | | | |
| LSTV | **Lastovo** | 4.90 | 327 | *e*Pn | Pn | 14 25 26.6 | -0.2 |
| LSTV | | | | Sn | Sn | 14 26 17.5 | -5.9 |
| RUDO | **Rudo** | 4.97 | 350 | *e*Pn | Pn | 14 25 28.8 | +1.1 |
| BBLS | **Lazići** | 5.21 | 351 | *e*Pn | Pn | 14 25 31.8 | +0.7 |
| MAKA | **Makarska** | 5.28 | 331 | *e*Pn | Pn | 14 25 32.0 | 0.0 |
| DIVS | **Divibare** | 5.39 | 356 | *e*Pn | Pn | 14 25 33.8 | +0.3 |
| RICI | **Ricice** | 5.42 | 333 | *e*Pn | Pn | 14 25 33.9 | 0.0 |
| RICI | | | | Sn | Sn | 14 26 31.8 | -4.5 |
| HVAR | **Hvar** | 5.42 | 326 | *e*Pn | Pn | 14 25 33.6 | -0.4 |
| HVAR | | | | Sn | Sn | 14 26 30.6 | -5.7 |
| KIJV | **Kijevo** | 6.13 | 331 | *e*Pn | Pn | 14 25 44.2 | +0.6 |
| KIJV | | | | Sn | Sn | 14 26 47.3 | -6.4 |
| ZIRJ | **Zirje** | 6.16 | 325 | *e*Pn | Pn | 14 25 44.1 | 0.0 |
| ZIRJ | | | | Sn | Sn | 14 26 48.9 | -5.5 |
| MGRS | **Mrkonjic Grad** | 6.25 | 337 | *e*Pn | Pn | 14 25 45.7 | +0.3 |
| MORI | **Morici** | 6.30 | 326 | *e*Pn | Pn | 14 25 46.5 | +0.6 |
| MORI | | | | Sn | Sn | 14 26 50.4 | -7.5 |
| FRGS | **Fruska Gora** | 6.45 | 355 | *e*Pn | Pn | 14 25 47.1 | -1.0 |
| BLY | **Banja Luka** | 6.52 | 338 | *e*Pn | Pn | 14 25 49.1 | +0.1 |
| DUGI | **Dugi Otok** | 6.69 | 324 | *e*Pn | Pn | 14 25 51.3 | 0.0 |
| DUGI | | | | Sn | Sn | 14 26 59.7 | -7.8 |
| UDBI | **Udbina** | 6.82 | 330 | *e*Pn | Pn | 14 25 54.3 | +1.2 |
| MRAK | **Mrakovica** | 6.85 | 338 | *e*Pn | Pn | 14 25 53.4 | -0.2 |
| NVLJ | **Novalja** | 7.22 | 326 | *e*Pn | Pn | 14 25 57.2 | -1.3 |
| NVLJ | | | | Sn | Sn | 14 27 14.7 | -5.7 |
| MORH | **Mrgy, Hungar** | 7.62 | 350 | *e*Pn | Pn | 14 26 03.7 | -0.3 |
| MLR | **Muntele Rosu** | 7.86 | 29 | Pn | Pn | 14 26 11.4 | +3.9 |
| | comp=N,0.1nm,0.3s,baz=272,slow=2.8,SNR=3.0 | | | | | | |
| BRJN | **Brijuni** | 7.99 | 323 | *e*Pn | Pn | 14 26 09.1 | -0.1 |
| BRJN | | | | Sn | Sn | 14 27 31.1 | -8.4 |
| CRES | **Cresnjev** | 8.04 

**ASAJ Asahikawa 8.04 29** P **Pn** 14 43 07.6 -0.9
3.8nm,0.3s,baz=224,slow=13,SNR=72
**ZALV Zalesovo Beam 39.32 312** P **P** 14 48 17.7 +2.8
0.3nm,0.4s,baz=125,slow=7.2,SNR=2.3
**MKAR Makanchi Array 41.17 301** P **P** 14 48 31.3 +1.1
0.2nm,0.4s,baz=83,slow=13,SNR=6.5
**WRA Warramunga Arr 56.88 183** P **P** 14 50 32.2 +3.5
0.4nm,0.4s,baz=359,slow=7.6,SNR=6.8
**ASAR Alice Springs 60.61 183** P P 14 50 58.8 +4.6
0.2nm,0.7s,baz=359,slow=5.5,SNR=6.4
**FINES FINESS Array B 67.08 331** P **P** 14 51 38.1 +2.5
1.2nm,0.9s,baz=35,slow=7.0,SNR=5.4

*IDC **15** 14:43:51.0±1.2,53.˙18N×167.˙02W,h0km,mb3.5/5, mb1 3.7/7,mb1mx3.4/46,mbtmp3.5/7,ML3.0/2,Error ellipse: s-maj=18.7km s-min=13.8km az=11.0*
*AEIC **15** 14:43:57.2±2.4,53.˙19N±0.˙05×166.˙79W±0.˙07,h26km±6km, Error ellipse: s-maj=9.1km s-min=4.2km az=143.0*
*NEIC **15** 14:43:58.0±2.6,53.˙26N±0.˙07×166.˙89W±0.˙07, h46km±11km,mb3.6/18,ML3.9/6,ML3.5(AEIC),Error ellipse: s-maj=12.0km s-min=1.6km az=151.0*
**ISC 15 14:43:57.0±1.3,53.˙2N±0.˙1×166.˙79W±0.˙06,h45km±15km, n85,σ1§32/84,mb3.5/6,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MREP** | **Makushin Rep't** | **0.66** | **2** | | **Pn** | **14 44 09.8** | **-0.3** |
| **UNV** | **Unalaska Valle** | **0.71** | **14** | | **Pn** | **14 44 10.1** | **-0.6** |
| UNV | | | | | **Sn** | **14 44 19.9** | **-0.8** |
| **MSW** | **Makushin Switc** | **0.76** | **0** | | **Pn** | **14 44 11.1** | **-0.4** |
| MSW | | | | | **Sn** | **14 44 22.1** | **+0.1** |
| **MTBL** | **Makushin Table** | **0.82** | **5** | | **Pn** | **14 44 12.2** | **-0.1** |
| **OKSP** | **Okmok Steeple** | **0.91** | **277** | | **Pn** | **14 44 13.5** | **0.0** |
| **AKMO** | **Akutan Morgan** | **1.05** | **26** | | **Pn** | **14 44 15.4** | **+0.1** |
| AKMO | | | | | **Sn** | **14 44 29.1** | **+0.3** |
| **ZRO** | **Akutan Zero** | **1.06** | **27** | | **Pn** | **14 44 15.5** | **+0.1** |
| **AKBBA** | **Akutan Broad B** | **1.08** | **28** | | **Pn** | **14 44 15.6** | **-0.1** |
| **AKGG** | **Akutan Green G** | **1.15** | **24** | | **Pn** | **14 44 17.0** | **+0.3** |
| AKGG | | | | | **Sn** | **14 44 32.1** | **+0.8** |
| **AKSA** | **Akutan Strait** | **1.18** | **33** | | **Pn** | **14 44 16.8** | **-0.3** |
| **AKSA** | **Akutan Strait** | **1.18** | **33** | | **Pn** | **14 44 16.7** | **-0.4** |
| **NIKH** | **Nikolski High** | **1.26** | **263** | | **Pn** | **14 44 18.5** | **+0.3** |
| NIKH | | | | | **Sn** | **14 44 34.5** | **+0.5** |
| **WECS** | **Westdahl Cape** | **1.82** | **40** | | **Pn** | **14 44 26.9** | **+0.9** |
| **WESE** | **West Dahl East** | **1.86** | **44** | | **Pn** | **14 44 27.4** | **+0.9** |
| **SSLS** | **Shishaldin Sou** | **2.27** | **45** | | **Pn** | **14 44 33.5** | **+1.4** |
| **SSLN** | **Shishaldin Nor** | **2.34** | **44** | | **Pn** | **14 44 34.7** | **+1.7** |
| **ISLZ** | **Isanotski Laza** | **2.41** | **48** | | **Pn** | **14 44 35.1** | **+1.2** |
| ISLZ | | | | | **Sn** | **14 45 05.0** | **+2.8** |
| **FALS** | **False Pass** | **2.62** | **48** | | **Pn** | **14 44 38.4** | **+1.6** |
| **SDPT** | **Sand Point** | **4.31** | **57** | Pn | **Pn** | **14 45 00.7** | **+0.8** |
| SDPT | | | | IAML | | 14 46 12.7 | |
| | comp=N,129nm,1.2s | | | | | | |
| SDPT | | | | IAML | | 14 46 14.6 | |
| | comp=E,105nm,1.1s | | | | | | |
| **SPIA** | **Saint Paul Isl** | **4.49** | **335** | | **Pn** | **14 45 03.1** | **+0.7** |
| **CNBA** | **Chernabura Isl** | **4.56** | **66** | Pn | **Pn** | **14 45 04.5** | **+1.1** |
| CNBA | | | | IAML | | 14 46 18.6 | |
| | comp=N,620nm,2.3s | | | | | | |
| **ATKA** | **Atka Island** | **4.61** | **261** | | **Pn** | **14 45 05.7** | **+1.7** |
| **GSTD** | **Great Sitkin T** | **5.81** | **263** | | **Pn** | **14 45 22.7** | **+2.1** |
| **ADK** | **Adak** | **6.17** | **262** | Pn | **Pn** | **14 45 26.9** | **+1.4** |
| **KIWB** | **Kanaga Island** | **6.46** | **263** | Pn | **Pn** | **14 45 30.0** | **+0.5** |
| **P18K** | **Big Mountain,** | **8.96** | **41** | Pn | **Pn** | **14 46 05.7** | **+2.0** |
| **O18K** | **Koktuh Hills** | **9.27** | **39** | Pn | **Pn** | **14 46 10.3** | **+2.4** |
| **KDAK** | **Kodiak Island** | **9.30** | **54** | Pn | **Pn** | **14 46 07.2** | **-1.1** |
| | comp=N,0.3nm,0.3s,baz=235,slow=12,SNR=2.2 | | | | | | |
| KDAK | | | | Sn | **Sn** | **14 47 44.5** | **-6.9** |
| | baz=166,slow=21,SNR=2.9 | | | | | | |
| **Q19K** | **Cape Douglas,** | **9.35** | **47** | Pn | **Pn** | **14 46 08.6** | **-0.5** |
| **N19K** | **Bonanza Creek** | **10.18** | **36** | Pn | **Pn** | **14 46 22.6** | **+2.1** |
| **CNPM** | **China Poot** | **10.72** | **47** | Pn | **Pn** | **14 46 28.2** | **+0.5** |
| **GAMB** | **Gambell** | **10.96** | **348** | Pn | **Pn** | **14 46 31.0** | **+0.1** |
| **M19K** | **Big River Lodg** | **10.99** | **32** | Pn | **Pn** | **14 46 32.1** | **+0.6** |
| **L19K** | **White Mountain** | **11.06** | **30** | Pn | **Pn** | **14 46 33.2** | **+0.8** |
| **SPU** | **Mount Spurr** | **11.32** | **39** | Pn | **Pn** | **14 46 37.6** | **+1.6** |
| **TTA** | **Tatalina** | **11.32** | **26** | Pn | **Pn** | **14 46 36.6** | **+0.5** |
| **ANM** | **Nome** | **11.47** | **3** | Pn | **Pn** | **14 46 39.0** | **+1.0** |
| **SEW** | **Seward** | **11.79** | **47** | Pn | **Pn** | **14 46 41.0** | **-1.4** |
| **O22K** | **Cooper Landing** | **11.86** | **45** | Pn | **Pn** | **14 46 42.3** | **-1.0** |
| **RC01** | **Rabbit Creek A** | **12.18** | **42** | Pn | **Pn** | **14 46 46.9** | **-0.7** |
| **K20K** | **Telida** | **12.20** | **28** | Pn | **Pn** | **14 46 47.0** | **-1.0** |
| **PWL** | **Port Wells** | **12.64** | **45** | Pn | **Pn** | **14 46 53.5** | **-0.5** |
| **J20K** | **Nowinta River** | **12.83** | **26** | Pn | **Pn** | **14 46 57.5** | **+1.0** |
| **CAST** | **Castle Rocks** | **12.83** | **31** | Pn | **Pn** | **14 46 57.5** | **+0.9** |
| **GHO** | **Glory Hole Cre** | **12.88** | **41** | Pn | **Pn** | **14 46 57.8** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **13.55** | **42** | Pn | **Pn** | **14 47 05.5** | **-1.0** |
| **M24K** | **Tolsona, Glenn** | **14.16** | **43** | Pn | **Pn** | **14 47 13.6** | **-1.1** |
| **I21K** | **Tanana** | **14.19** | **26** | Pn | **Pn** | **14 47 14.6** | **-0.5** |
| **DHY** | **Denali Highway** | **14.22** | **38** | Pn | **Pn** | **14 47 15.0** | **-0.6** |
| **H21K** | **Melozitna Rive** | **14.37** | **24** | P | **P** | **14 47 22.9** | **-0.5** |
| **GLB** | **Gilahina Butte** | **14.87** | **47** | Pn | **Pn** | **14 47 22.1** | **-1.9** |
| **I23K** | **Minto, Yukon-K** | **14.91** | **29** | Pn | **Pn** | **14 47 23.1** | **-1.4** |
| **VRDI** | **Verde Repeater** | **14.94** | **48** | Pn | **Pn** | **14 47 24.6** | **-0.6** |
| **WAX** | **Waxell Ridge** | **14.94** | **51** | Pn | **Pn** | **14 47 25.8** | **+0.7** |
| **HDA** | **Harding Lake** | **15.18** | **34** | Pn | **Pn** | **14 47 27.5** | **-0.5** |
| HDA | | | | IAmb | IAmb | 14 47 46.9 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **ISLE** | **Juniper Island** | **15.23** | **51** | Pn | **Pn** | **14 47 28.1** | **-0.8** |
| **ILAR** | **Eielson Array** | **15.43** | **33** | Pn | **Pn** | **14 47 31.8** | **+0.4** |
| | comp=Z,0.0nm,0.3s,baz=226,slow=12,SNR=1.7 | | | | | | |
| **M26K** | **Nabesna, AK** | **15.62** | **44** | Pn | **Pn** | **14 47 33.3** | **-0.5** |
| M26K | | | | IAmb | IAmb | 14 47 34.0 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **L26K** | **Log Cabin Wild** | **15.75** | **42** | P | **P** | **14 47 37.9** | **-0.9** |
| L26K | | | | IAmb | IAmb | 14 47 39.0 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **15.83** | **29** | P | **P** | **14 47 38.5** | **-1.2** |
| H24K | | | | IAmb | IAmb | 14 47 50.0 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **15.84** | **35** | Pn | **Pn** | **14 47 35.8** | **-0.9** |
| J25K | | | | IAmb | IAmb | 14 47 54.2 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **SCRK** | **Sand Creek** | **15.98** | **38** | Pn | **P** | **14 47 39.5** | **-2.0** |
| **COLD** | **Coldfoot** | **16.25** | **23** | P | **P** | **14 47 44.9** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **16.41** | **43** | Pn | **Pn** | **14 47 42.9** | **-0.9** |
| **EGAK** | **Eagle** | **17.45** | **38** | | **P** | **14 47 56.8** | **-0.8** |
| **DAWY** | **Dawson** | **17.80** | **41** | | **P** | **14 48 00.8** | **-0.7** |
| DAWY | | | | IAmb | IAmb | 14 48 17.6 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **17.89** | **28** | P | **P** | **14 48 02.5** | **+0.1** |
| **WHY** | **Whitehorse** | **18.82** | **54** | P | **Pn** | **14 48 13.5** | **0.0** |
| WHY | | | | IAmb | IAmb | 14 48 19.8 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **M31M** | **Drury Creek, Y** | **19.35** | **49** | | **Pn** | **14 48 20.1** | **+0.3** |
| **P33M** | **Teslin, Yukon** | **19.77** | **56** | | **Pn** | **14 48 24.9** | **0.0** |
| P33M | | | | IAmb | IAmb | 14 48 37.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **21.83** | **33** | P | **P** | **14 48 45.0** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=252,slow=8.2,SNR=11 | | | | | | |
| **INK** | **Inuvik** | **21.83** | **33** | IAmb | IAmb | 14 49 13.2 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **SEY** | **Seymchan** | **23.32** | **311** | P | **P** | **14 48 59.1** | **-1.6** |
| | comp=Z,0.7nm,0.6s,baz=90,slow=13,SNR=4.5 | | | | | | |
| **C36M** | **Paulatuk** | **25.40** | **34** | P | **P** | **14 49 18.1** | **-1.6** |
| C36M | | | | IAmb | IAmb | 14 49 42.9 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.54** | **50** | P | **P** | **14 49 48.0** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=275,slow=7.7,SNR=5.5 | | | | | | |
| **LTY** | **Liberty** | **29.68** | **83** | P | **P** | **14 49 58.5** | **+0.1** |
| **YBH** | **Yreka Blue Hor** | **31.43** | **93** | P | **P** | **14 50 16.1** | **+2.2** |
| | comp=Z,1.1nm,0.7s,baz=288,slow=20,SNR=3.5 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **31.43** | **93** | IAmb | IAmb | 14 50 16.4 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.06** | **222** | T | T | 15 33 01.0 | |
| | baz=24,slow=76,SNR=42 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.07** | **221** | T | T | 15 32 52.7 | |
| | baz=24,slow=76,SNR=48 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.08** | **222** | T | T | 15 33 00.2 | |
| | baz=24,slow=76,SNR=42 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.24** | **221** | T | T | 15 34 26.5 | |
| | baz=24,slow=76,SNR=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.26** | **221** | T | T | 15 34 30.6 | |
| | baz=24,slow=76,SNR=25 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.26** | **221** | T | T | 15 34 28.9 | |
| | baz=24,slow=76,SNR=16 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.18** | **92** | P | **P** | **14 52 56.6** | **+0.9** |
| | comp=Z,0.2nm,0.4s,baz=286,slow=5.1,SNR=4.1 | | | | | | |

*IDC **15** 14:50:05.7±2.1,47.˙01N×147.˙14E,h313km±22km,mb2.9/8, mb1 3.1/10,mb1mx2.8/49,mbtmp3.6/10,Error ellipse: s-maj=23.4km s-min=16.4km az=125.0*
**ISC 15 14:50:04.1±0.9,46.˙2N±0.˙1×147.˙5E±0.˙1,h350km,n23, σ1§62/28,mb3.1/8,Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEM2** | **Nemuro 2** | **3.11** | **204** | P | **Pn** | **14 51 04.4** | **-0.1** |
| NEM2 | | | | *e*S | **S** | **14 51 51.2** | **-1.9** |
| **JNK** | **Nakash** | **3.29** | **218** | P | **Pn** | **14 51 07.4** | **+1.2** |
| **JTKR** | **Abashiri--Toko** | **3.39** | **230** | P | **Pn** | **14 51 08.5** | **+1.4** |
| **JMP** | **Maruseppu** | **3.67** | **234** | P | **Pn** | **14 51 11.5** | **+1.7** |
| **JAK** | **Akkeshi** | **3.79** | **213** | P | **Pn** | **14 51 11.6** | **+0.6** |
| JAK | | | | *e*S | **S** | **14 52 04.1** | **-0.8** |
| **JAR** | **Ashorobuto** | **3.94** | **224** | P | **Pn** | **14 51 14.8** | **+2.2** |
| **ASAJ** | **Asahikawa** | **4.05** | **241** | P | **Pn** | **14 51 15.5** | **+1.9** |
| | 1.2nm,0.3s,baz=67,slow=13,SNR=15 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.05** | **241** | P | **Pn** | **14 51 16.0** | **+2.4** |
| **JCH** | **Churui** | **4.66** | **221** | P | **Pn** | **14 51 21.4** | **+1.3** |
| JCH | | | | *e*S | **S** | **14 52 19.7** | **-1.7** |
| **JNBK** | **Urakawa-nobuka** | **5.20** | **223** | P | **Pn** | **14 51 26.8** | **+0.8** |
| JNBK | | | | *e*S | **S** | **14 52 31.0** | **-1.2** |
| **JKB** | **Kayabe** | **6.36** | **229** | P | **Pn** | **14 51 40.3** | **+1.3** |
| JKB | | | | *e*S | **S** | **14 52 53.2** | **-2.8** |
| **JOT** | **Ohata** | **6.71** | **226** | P | **Pn** | **14 51 44.1** | **+0.9** |
| JOT | | | | *e*S | **S** | **14 53 01.0** | **-2.6** |
| **JMK** | **Ichinoseki** | **8.61** | **215** | *e*S | **S** | **14 53 46.7** | **+2.1** |
| **SEY** | **Seymchan** | **16.98** | **8** | P | **P** | **14 53 37.0** | **-2.7** |
| | 0.1nm,0.3s,baz=145,slow=24,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **39.37** | **38** | P | **P** | **14 57 01.4** | **+0.8** |
| | 0.7nm,0.9s,baz=260,slow=6.0,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.75** | **305** | P | **P** | **14 57 03.5** | **-0.2** |
| | 0.4nm,0.3s,baz=90,slow=7.2,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.70** | **295** | P | **P** | **14 57 36.5** | **+1.0** |
| | 0.2nm,0.5s,baz=75,slow=7.6,SNR=2.3 | | | | | | |
| **INK** | **Inuvik** | **44.16** | **32** | P | **P** | **14 57 38.9** | **+0.1** |
| | 0.9nm,0.3s,baz=298,slow=7.8,SNR=6.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.63** | **35** | P | **P** | **14 58 51.2** | **+1.2** |
| | 0.4nm,0.4s,baz=302,slow=7.0,SNR=8.1 | | | | | | |
| **FINES** | **FINESS Array B** | **62.79** | **333** | P | **P** | **14 59 51.8** | **-1.0** |
| | 1.2nm,0.5s,baz=38,slow=9.6,SNR=7.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.39** | **339** | P | **P** | **15 00 21.6** | **-0.6** |
| | comp=Z,0.6nm,0.3s,baz=31,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.39** | **339** | P | **P** | **15 00 22.1** | **-0.1** |
| | comp=Z,0.2nm,0.4s,baz=31,slow=6.7,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **70.64** | **193** | P | P | 15 00 52.1 | +10 |
| | comp=Z,0.1nm,0.3s,baz=11,slow=6.1,SNR=9.0 | | | | | | |

*IDC **15** 15:02:32.5±0.4,20.˙88S×175.˙65W,h0km,mb5.2/31, mb1 5.2/33,mb1mx5.1/41,mbtmp5.1/33,ML5.7/2,MS5.6/62, Ms1 5.6/62,ms1mx5.6/67,Error ellipse: s-maj=13.7km s-min=11.9km az=157.0*
*BJI **15** 15:02:32.9±0.0,20.˙54S×175.˙12W,h14km,mb5.1/62, mB5.8/59,Ms5.8/77,Ms7 5.7/71*
*MOS **15** 15:02:32.9±1.0,20.˙87S×175.˙66W,h13km,mb5.8/57, MS5.8/37,Error ellipse: s-maj=7.9km s-min=7.4km az=28.5*
*NEIC **15** 15:02:32.9±1.3,21.˙00S±0.˙09×175.˙48W±0.˙08,h10km±1km, mb5.7/202,Ms_20 5.8/383,Mwb5.9/73,Mww6.0,Error ellipse: s-maj=15.2km s-min=12.1km az=167.0*
*NOU **15** 15:02:33.8,21.˙18S×175.˙21W,h0km,ML5.8/106,Tonga Islands*
*NEIC **15** 15:02:33,20.˙98S×175.˙48W,h6km,Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$1.41; $M_{\theta\theta}$-9.15; $M_{\phi\phi}$7.74; $M_{r\theta}$1.71; $M_{r\phi}$-3.97; $M_{\theta\phi}$-0.66; Fault plane solution: $M_0$9.59000×$10^{17}$ NP1:$\phi_s$212.31000°, δ79.02000°,λ0.39000°. NP2:$\phi_s$122.24000°,δ89.62000°, λ169.02000°. Principal axes: T 8.7679, Plg8.0000°, Azm77.0000°; N 1.4690, Plg79.0000°, Azm300.0000°; P -10.2368, Plg7.0000°, Azm168.0000°;*
*NEIC **15** 15:02:39,20.˙71S×175.˙63W,h16km,Moment Tensor Solution. Duration: 12s0 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-0.07; $M_{\theta\theta}$-1.06; $M_{\phi\phi}$1.13; $M_{r\theta}$-0.16; $M_{\theta\phi}$-0.58; $M_{r\phi}$-0.19; Fault plane solution: $M_0$1.27000×$10^{18}$ NP1: $\phi_s$121.00000°,δ78.00000°,λ-177.00000°. NP2: $\phi_s$31.00000°,δ87.00000°,λ-11.00000°. Principal axes: T 1.2895, Plg6.0000°, Azm77.0000°; N -0.0480, Plg78.0000°, Azm199.0000°; P -1.2415, Plg10.0000°, Azm346.0000°;*
*GCMT **15** 15:02:39.9±0.1,21.˙04S×175.˙53W,h20km,MW6.0/167, Moment Tensor Solution. s157,c347; s167,c572; Duration: 12s5 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$0.07±.01; $M_{\theta\theta}$-1.30±.01; $M_{\phi\phi}$1.23±.01; $M_{r\theta}$-0.18±.02; $M_{\theta\phi}$-0.59±.01; $M_{r\phi}$-0.01±.01; Best double couple: $M_0$1.40700×$10^{18}$ NP1:$\phi_s$32.00000°,δ84.00000°, λ-4.00000°. NP2:$\phi_s$123.00000°,δ86.00000°, λ-174.00000°. Principal axes: T 1.3610, Plg1.0000°, Azm257.0000°; N 0.0930, Plg83.0000°, Azm158.0000°; P -1.4520, Plg7.0000°, Azm348.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
**ISC 15 15:02:34.9±0.4,20.˙98S±0.˙04×175.˙40W±0.˙04,h15km±2km, h16km:pP-P,n1256,σ2§25/1169,mb5.7/222,MS5.8/293, 105C-110D,Fault plane solution: NP1:$\phi_s$36.86446°, δ89.41966°,λ-14.78506°. NP2:$\phi_s$127.01763°,δ75.21571°, λ-179.39978°. Principal axes:** T Plg9.9785°, Azm82.9013°; N Plg75.2038°, Azm214.6667°; P Plg10.8129°, Azm350.9756°; **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.48** | **71** | P | **Pn** | **15 03 53.5** | **-2.5** |
| | baz=5.4,SNR=40 | | | | | | |
| **NIUE** | **Niue** | **5.48** | **71** | Pn | **Pn** | **15 03 53.3** | **-2.8** |
| **NIUE** | **Niue** | **5.48** | **71** | P | **Pn** | **15 03 53.8** | **-2.3** |
| **MSVF** | **Nonsavu** | **6.98** | **296** | Pn | **Pn** | **15 04 14.5** | **-2.2** |
| | 12nm,0.3s,baz=126,slow=13,SNR=45 | | | | | | |
| **MSVF** | **Nonsavu** | **6.98** | **296** | *e*P | **Pn** | **15 04 16.2** | **-0.5** |
| **MSVF** | **Nonsavu** | **6.98** | **296** | Pn | **Pn** | **15 04 14.9** | **-1.8** |
| **MSVF** | **Nonsavu** | **6.98** | **296** | P | **Pn** | **15 04 17.6** | **+0.9** |
| **AFI** | **Afiamalu** | **7.84** | **27** | Pn | **Pn** | **15 04 26.2** | **-2.3** |
| | 22nm,0.3s,baz=35,slow=1.0,SNR=34 | | | | | | |
| AFI | | | | LR | LR | 15 07 08.1 | |
| | comp=Z,16µm,21.4s,baz=199,slow=35 | | | | | | |
| **AFI** | **Afiamalu** | **7.84** | **27** | Pn | **Pn** | **15 04 25.8** | **-2.7** |
| **AFI** | **Afiamalu** | **7.84** | **27** | P | **Pn** | **15 04 26.6** | **-1.9** |
| **RAO** | **Raoul Island** | **8.54** | **195** | LR | LR | 15 07 23.6 | |
| | comp=Z,85µm,20.1s,baz=15,slow=34 | | | | | | |
| **RAO** | **Raoul Island** | **8.54** | **195** | P | Pn | 15 04 33.1 | -5.0 |
| RAO | | | | pmax | pmax | | |
| | comp=Z,1µm,0.7s | | | | | | |
| **GLKZ** | **Green Lake** | **8.55** | **195** | P | **Pn** | **15 04 39.1** | **+0.9** |
| GLKZ | | | | S | **Sn** | **15 06 14.1** | **-0.3** |
| **RAR** | **Rarotonga** | **14.59** | **94** | Pn | **Pn** | **15 06 00.2** | **-0.7** |
| | comp=Z,1.2nm,0.3s,baz=353,slow=12,SNR=3.5 | | | | | | |
| RAR | | | | Sn | **Sn** | **15 08 43.1** | **+0.7** |
| | comp=Z,12nm,0.3s,baz=266,slow=9.6,SNR=3.9 | | | | | | |
| RAR | | | | LR | LR | 15 10 47.7 | |
| | comp=Z,11µm,19.0s,baz=270,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **14.59** | **94** | P | **Pn** | **15 05 59.0** | **-1.9** |
| **RAR** | **Rarotonga** | **14.59** | **94** | Pn | **Pn** | **15 05 59.0** | **-1.9** |
| **RAR** | **Rarotonga** | **14.59** | **94** | P | **Pn** | **15 06 01.3** | **+0.4** |
| **RTV** | **Rentapao** | **15.59** | **279** | P | **P** | **15 06 20.7** | **+2.3** |
| | comp=Z,837µm,1.3s | | | | | | |
| **DVP** | **Devils Point** | **15.82** | **279** | P | **P** | **15 06 22.8** | **+1.8** |
| | comp=Z,596µm,0.9s | | | | | | |
| **PINNC** | **Pines Island,** | **16.02** | **261** | | **Pn** | **15 06 20.0** | **+0.3** |
| PINNC | | | | IAmb | IAmb | 15 06 36.6 | |
| | comp=Z,419nm,1.0s | | | | | | |
| **LIFNC** | **LIFOU** | **16.23** | **268** | | **Pn** | **15 06 21.3** | **-1.1** |
| **YATNC** | **Mamie plateau,** | **16.52** | **263** | P | **P** | **15 06 31.2** | **+2.5** |
| **OUENC** | **Ouen Island, N** | **16.57** | **262** | | **Pn** | **15 06 25.6** | **-1.1** |
| OUENC | | | | IAmb | IAmb | 15 06 37.2 | |
| | comp=Z,1µm,1.3s | | | | | | |
| **OUENC** | **Ouen Island, N** | **16.57** | **262** | P | **P** | **15 06 30.9** | **+1.7** |
| **ONTNC** | **Ouen Toro** | **16.92** | **262** | Pn | **Pn** | **15 06 27.0** | **-4.2** |
| ONTNC | | | | IAmb | IAmb | 15 06 56.1 | |
| | comp=Z,1µm,1.4s | | | | | | |
| **ONTNC** | **Ouen Toro** | **16.92** | **262** | P | **P** | **15 06 35.4** | **+2.2** |
| **DZM** | **Mont Dzumac** | **16.93** | **263** | *e*Pn | **P** | **15 06 35.9** | **+2.5** |
| | comp=Z,2.8nm,0.3s | | | | | | |
| DZM | | | | *e*LQ | LQ | 15 09 50.7 | |
| | comp=Z,27µm,29.2s | | | | | | |
| DZM | | | | *e*LR | LR | 15 10 35.7 | |
| | comp=Z,124µm,24.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.93** | **263** | Pn | **P** | **15 06 34.2** | **+0.8** |
| | comp=Z,2.2nm,0.3s,baz=88,slow=16,SNR=48 | | | | | | |
| DZM | | | | LR | LR | 15 11 58.0 | |
| | comp=Z,87µm,19.1s,baz=112,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.93** | **263** | Pn | **Pn** | **15 06 27.4** | **-4.0** |
| DZM | | | | IAmb | IAmb | 15 06 43.8 | |
| | comp=Z,931nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.93** | **263** | P | **P** | **15 06 34.4** | **+1.0** |
| **NOUC** | **Port Laguerre** | **17.06** | **263** | P | **P** | **15 06 35.5** | **+0.8** |
| **NFK** | **Norfolk Island** | **17.09** | **239** | P | **Pn** | **15 06 31.5** | **-1.8** |
| | baz=17,SNR=6.0 | | | | | | |
| **NFK** | **Norfolk Island** | **17.09** | **239** | P | **P** | **15 06 39.4** | **+4.4** |
| | comp=Z,2µm,1.5s | | | | | | |
| **OUZ** | **Omahuta** | **17.17** | **212** | P | **Pn** | **15 06 32.4** | **-1.8** |
| **SANVU** | **Saraoutou** | **17.41** | **286** | Pn | **Pn** | **15 06 32.3** | **-5.1** |
| SANVU | | | | IAmb | IAmb | 15 06 58.0 | |
| | comp=Z,465nm,0.9s | | | | | | |
| **SANVU** | **Saraoutou** | **17.41** | **286** | P | **P** | **15 06 43.7** | **+5.1** |
| **HAZ** | **Te Kaha** | **17.73** | **198** | P | **Pn** | **15 06 35.3** | **-5.9** |
| **PUZ** | **Puketiti** | **17.89** | **196** | P | **Pn** | **15 06 38.2** | **-5.0** |
| **URZ** | **Urewera** | **18.39** | **199** | P | **P** | **15 06 45.7** | **-3.6** |
| | comp=Z,3.7nm,0.3s,baz=94,slow=1.9,SNR=22 | | | | | | |
| URZ | | | | LR | LR | 15 13 38.4 | |
| | comp=Z,98µm,18.9s,baz=16,slow=36 | | | | | | |
| **URZ** | **Urewera** | **18.39** | **199** | Pn | **P** | **15 06 43.6** | **-5.7** |
| **URZ** | **Urewera** | **18.39** | **199** | P | **P** | **15 06 43.5** | **-5.8** |
| **URZ** | **Urewera** | **18.39** | **199** | P | **P** | **15 06 45.1** | **-4.2** |
| **TLZ** | **Tolley Road** | **18.98** | **202** | P | **P** | **15 06 52.1** | **-3.7** |
| **KOUNC** | **Koumac, New Ca** | **19.00** | **268** | P | **Pn** | **15 06 58.1** | **+1.2** |
| **HIZ** | **Hauiti** | **19.39** | **204** | | **P** | **15 06 55.2** | **-5.0** |
| **HIZ** | **Hauiti** | **19.39** | **204** | P | **P** | **15 06 57.2** | **-3.1** |
| **BKZ** | **Black Stump Fm** | **19.42** | **199** | | **P** | **15 06 54.3** | **-6.3** |
| **BKZ** | **Black Stump Fm** | **19.42** | **199** | P | **P** | **15 06 56.7** | **-3.9** |
| **VRZ** | **Vera Road** | **19.96** | **203** | P | **P** | **15 07 02.0** | **-4.4** |
| **BFZ** | **Birch Farm** | **20.89** | **198** | P | **P** | **15 07 11.2** | **-5.3** |
| BFZ | | | | IAMs_20 | IAMs_20 | 15 14 47.5 | |
| | comp=Z,36µm,18.0s | | | | | | |
| **BFZ** | **Birch Farm** | **20.89** | **198** | | **P** | **15 07 14.6** | **-1.9** |
| **MSWZ** | **Moikau Station** | **21.86** | **199** | | **P** | **15 07 21.4** | **-5.6** |
| **SNZO** | **South Karori** | **21.93** | **200** | P | **P** | 15 07 18.9 | -8.8 |
| **SNZO** | **South Karori** | **21.93** | **200** | P | **P** | **15 07 30.8** | **+3.1** |
| **BHW** | **Baring Head** | **21.97** | **200** | P | **P** | **15 07 22.0** | **-6.1** |
| **TCW** | **Tory Channel** | **21.98** | **201** | P | **P** | 15 07 20.8 | -7.5 |
| **PLWZ** | **Palliser** | **22.00** | **199** | P | **P** | **15 07 22.6** | **-5.9** |
| **QRZ** | **Quartz Range** | **22.28** | **205** | P | **P** | **15 07 26.2** | **-5.4** |
| QRZ | | | | IAmb | IAmb | 15 07 40.6 | |
| | comp=Z,172nm,0.8s | | | | | | |
| **QRZ** | **Quartz Range** | **22.28** | **205** | P | **P** | **15 07 26.5** | **-5.1** |
| **QRZ** | **Quartz Range** | **22.28** | **205** | P | **P** | **15 07 27.8** | **-3.8** |
| **TUWZ** | **Tuamarina** | **22.29** | **202** | P | P | 15 07 23.2 | -8.4 |
| **NNZ** | **Nelson** | **22.30** | **203** | P | P | 15 07 23.3 | -8.4 |
| NNZ | | | | IAMs_20 | IAMs_20 | 15 16 25.0 | |
| | comp=Z,50µm,22.0s | | | | | | |
| **CTZ** | **Chatham Island** | **22.71** | **182** | P | P | 15 07 44.1 | +8.0 |
| **THZ** | **Tophouse** | **22.95** | **203** | P | **P** | **15 07 32.4** | **-6.3** |
| **KHZ** | **Kahutara** | **23.31** | **201** | P | **P** | **15 07 36.0** | **-6.2** |
| KHZ | | | | IAmb | IAmb | 15 07 50.5 | |
| | comp=Z,236nm,1.0s | | | | | | |
| KHZ | | | | IAMs_20 | IAMs_20 | 15 17 03.6 | |
| | comp=Z,40µm,19.0s | | | | | | |
| **DSZ** | **Denniston Nort** | **23.35** | **205** | P | **P** | **15 07 37.9** | **-4.9** |
| **LTZ** | **Lake Taylor** | **24.07** | **203** | P | **P** | **15 07 42.9** | **-6.8** |
| LTZ | | | | IAmb | IAmb | 15 07 58.9 | |
| | comp=Z,198nm,1.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **24.07** | **203** | P | **P** | **15 07 44.9** | **-4.7** |
| **INZ** | **Inchbonnie** | **24.33** | **204** | P | **P** | **15 07 48.9** | **-3.0** |
| **PA

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EIDS | Eidsvold | 31.07 | 255 | P | P | 15 08 51.8 | -0.8 | |
| RK1H | Rockhampton Ha | 31.63 | 259 | P | P | 15 09 02.9 | +5.4 | |
| | comp=Z,43nm,1.0s | | | | | | | |
| MGCD | Mangrove Creek | 32.07 | 241 | P | P | 15 09 00.6 | -0.7 | |
| | baz=32,SNR=4.6 | | | | | | | |
| MGCD | Mangrove Creek | 32.07 | 241 | P | P | 15 09 06.8 | +5.5 | |
| | comp=Z,82nm,1.0s | | | | | | | |
| RIV | Riverview | 32.18 | 239 | P | P | 15 09 00.8 | -1.4 | |
| RIV | | | | pmax | pmax | | | |
| | comp=Z,124nm,1.9s | | | | | | | |
| SYDH | Sydney Hard Ro | 32.50 | 240 | P | P | 15 09 06.5 | +1.5 | |
| | comp=Z,74nm,1.0s | | | | | | | |
| RMQ | Roma | 33.19 | 253 | P | P | 15 09 10.1 | -1.1 | |
| | baz=33,SNR=38 | | | | | | | |
| RMQ | Roma | 33.19 | 253 | P | P | 15 09 11.4 | +0.2 | |
| KWAJ | Kwajalein Atol | 33.98 | 329 | IAMs_20 | IAMs_20 | 15 22 27.1 | | |
| | comp=Z,20µm,19.0s | | | | | | | |
| CNB | Canberra Magne | 34.00 | 238 | P | P | 15 09 16.8 | -1.4 | |
| | baz=34,SNR=9.1 | | | | | | | |
| CNB | Canberra Magne | 34.00 | 238 | P | P | 15 09 19.1 | +0.9 | |
| CAN | Canberra | 34.28 | 238 | P | P | 15 09 18.2 | -2.5 | |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,130nm,1.0s | | | | | | | |
| CAN | Canberra | 34.28 | 238 | P | P | 15 09 17.5 | -3.2 | |
| CAN | | | | IAmb | IAmb | 15 09 27.7 | | |
| | comp=Z,76nm,1.0s | | | | | | | |
| CAN | | | | IAMs_20 | IAMs_20 | 15 23 08.3 | | |
| | comp=Z,21µm,18.0s | | | | | | | |
| CAN | Canberra | 34.28 | 238 | P | P | 15 09 24.0 | +3.3 | |
| RABL | Rabaul | 35.66 | 293 | P | P | 15 09 34.1 | +1.4 | |
| CTA | Charters Tower | 35.87 | 264 | P | P | 15 09 33.0 | -1.4 | |
| | comp=Z,40nm,1.1s,baz=95,slow=10.0,SNR=32 | | | | | | | |
| CTA | | | | LR | LR | 15 23 12.3 | | |
| | comp=Z,23µm,18.4s,baz=90,slow=35 | | | | | | | |
| CTA | Charters Tower | 35.87 | 264 | P | P | 15 09 33.0 | -1.4 | |
| CTA | Charters Tower | 35.87 | 264 | P | P | 15 09 35.3 | +0.9 | |
| CTAO | Charters Tower | 35.87 | 264 | P | P | 15 09 32.1 | -2.3 | |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,132nm,1.0s | | | | | | | |
| CTAO | Charters Tower | 35.87 | 264 | P | P | 15 09 32.1 | -2.3 | |
| CTAO | | | | IAmb | IAmb | 15 09 41.3 | | |
| | comp=Z,132nm,0.9s | | | | | | | |
| CTAO | Charters Tower | 35.87 | 264 | P | P | 15 09 35.0 | +0.6 | |
| TAOE | Nuku Hiva Isla | 36.04 | 76 | *e*S | S | 15 15 13.0 | -1.9 | |
| | comp=Z,3µm,27.0s | | | | | | | |
| TAOE | | | | *e*LR | LR | 15 19 10.6 | | |
| | comp=Z,52µm,28.4s,baz=252 | | | | | | | |
| TAOE | Nuku Hiva Isla | 36.04 | 76 | *e*T | T | 15 47 08.1 | | |
| | comp=Z,235nm,0.2s | | | | | | | |
| CMSA | Cobar Meteorol | 36.27 | 245 | P | P | 15 09 35.6 | -2.2 | |
| | baz=36,SNR=25 | | | | | | | |
| CMSA | Cobar Meteorol | 36.27 | 245 | P | P | 15 09 38.7 | +0.9 | |
| QLP | Quilpie | 37.25 | 253 | P | P | 15 09 43.6 | -2.5 | |
| | baz=37,SNR=49 | | | | | | | |
| QLP | Quilpie | 37.25 | 253 | P | P | 15 09 46.7 | +0.6 | |
| CORO | Coronation Par | 37.59 | 229 | P | P | 15 09 50.7 | +1.9 | |
| | comp=Z,91nm,1.1s | | | | | | | |
| TOO | Toolangi | 37.60 | 235 | P | P | 15 09 47.1 | -2.0 | |
| | baz=38,SNR=6.7 | | | | | | | |
| TOO | Toolangi | 37.60 | 235 | P | P | 15 09 46.9 | -2.2 | |
| TOO | | | | pmax | pmax | | | |
| | comp=Z,58nm,1.1s | | | | | | | |
| TOO | Toolangi | 37.60 | 235 | P | P | 15 09 46.9 | -2.2 | |
| TOO | Toolangi | 37.60 | 235 | P | P | 15 09 51.8 | +2.7 | |
| | comp=Z,57nm,1.0s | | | | | | | |
| PMG | Port Moresby | 37.82 | 282 | P | P | 15 09 49.3 | -1.8 | |
| | comp=Z,103nm,1.1s,baz=101,slow=3.0,SNR=18 | | | | | | | |
| PMG | | | | LR | LR | 15 23 44.1 | | |
| | comp=Z,15µm,18.1s,baz=95,slow=34 | | | | | | | |
| PMG | Port Moresby | 37.82 | 282 | *d i*P | P | 15 09 49.8 | -1.3 | |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,291nm,1.7s | | | | | | | |
| PMG | | | | MLR | MLR | | | |
| | comp=Z,17µm,17.0s | | | | | | | |
| PMG | Port Moresby | 37.82 | 282 | P | P | 15 09 49.0 | -2.1 | |
| PMG | Port Moresby | 37.82 | 282 | IAMs_20 | IAMs_20 | 15 23 42.3 | | |
| | comp=Z,18µm,18.0s | | | | | | | |
| PMG | Port Moresby | 37.82 | 282 | P | P | 15 09 52.3 | +1.2 | |
| MTSU | Mount Surprise | 38.00 | 267 | P | P | 15 09 51.0 | -1.6 | |
| | baz=38,SNR=37 | | | | | | | |
| MTSU | Mount Surprise | 38.00 | 267 | P | P | 15 09 53.6 | +1.0 | |
| TAU | Tasmania Unive | 38.02 | 226 | IAMs_20 | IAMs_20 | 15 24 09.5 | | |
| | comp=Z,15µm,18.0s | | | | | | | |
| BRAT | Ballarat | 38.80 | 236 | P | P | 15 10 00.6 | +1.6 | |
| | comp=Z,57nm,1.0s | | | | | | | |
| STKA | Stephens Creek | 39.78 | 245 | P | P | 15 10 07.5 | +0.1 | |
| | comp=Z,23nm,1.0s,baz=86,slow=10,SNR=16 | | | | | | | |
| STKA | | | | LR | LR | 15 24 36.8 | | |
| | comp=Z,22µm,19.2s,baz=81,slow=33 | | | | | | | |
| STKA | Stephens Creek | 39.78 | 245 | P | P | 15 10 05.8 | -1.6 | |
| | baz=40,SNR=18 | | | | | | | |
| STKA | Stephens Creek | 39.78 | 245 | P | P | 15 10 04.2 | -3.2 | |
| STKA | Stephens Creek | 39.78 | 245 | P | P | 15 10 08.3 | +0.9 | |
| COEN | Coen | 40.04 | 273 | P | P | 15 10 07.6 | -2.1 | |
| COEN | Coen | 40.04 | 273 | P | P | 15 10 10.2 | +0.5 | |
| ARPS | Mount Arapiles | 40.26 | 238 | P | P | 15 10 12.4 | +1.1 | |
| INKA | Innaminka | 40.35 | 252 | P | P | 15 10 16.5 | +4.3 | |
| PTCN | Pitcairn Islan | 41.75 | 105 | IAMs_20 | IAMs_20 | 15 22 23.5 | | |
| | comp=Z,11µm,18.0s | | | | | | | |
| QIS | Mount Isa | 41.97 | 262 | P | P | 15 10 24.6 | -1.0 | |
| | baz=42,SNR=4.6 | | | | | | | |
| QIS | Mount Isa | 41.97 | 262 | P | P | 15 10 26.8 | +1.2 | |
| HTT | Hallett | 42.16 | 243 | P | P | 15 10 23.3 | -3.8 | |
| | baz=42,SNR=6.5 | | | | | | | |
| HTT | Hallett | 42.16 | 243 | P | P | 15 10 28.3 | +1.2 | |
| LCRK | Leigh Creek | 42.59 | 247 | P | P | 15 10 31.3 | +0.8 | |
| TWOA | Tennyson Woods | 42.61 | 241 | P | P | 15 10 34.8 | +4.2 | |
| | comp=Z,52nm,0.9s | | | | | | | |
| NAPP | Napperby | 42.79 | 243 | P | P | 15 10 34.2 | +2.1 | |
| | comp=Z,98nm,1.1s | | | | | | | |
| WHYH | Whyalla | 43.26 | 244 | P | P | 15 10 38.5 | +2.6 | |
| | comp=Z,65nm,0.8s | | | | | | | |
| WAKE | Wake Island | 43.71 | 335 | IAMs_20 | IAMs_20 | 15 25 25.4 | | |
| | comp=Z,8µm,18.0s | | | | | | | |
| BBOO | Buckleboo | 44.52 | 244 | P | P | 15 10 42.4 | -3.7 | |
| | baz=44,SNR=6.6 | | | | | | | |
| BBOO | Buckleboo | 44.52 | 244 | P | P | 15 10 42.4 | -3.7 | |
| BBOO | Buckleboo | 44.52 | 244 | P | P | 15 10 46.9 | +0.8 | |
| HMH | Humu'ula Sheep | 44.80 | 27 | P | P | 15 10 47.4 | -1.2 | |
| OOD | Oodnadatta | 44.83 | 251 | P | P | 15 10 49.7 | +1.1 | |
| KIP | Kipapa | 45.44 | 23 | P | P | 15 11 00.5 | +7.2 | |
| | comp=Z,235nm,2.6s | | | | | | | |
| MULG | Mulgathing | 46.19 | 248 | P | P | 15 10 57.8 | -1.5 | |
| JAY | Jayapura | 46.51 | 287 | LR | LR | 15 29 44.5 | | |
| | comp=Z,7µm,18.8s,baz=102,slow=35 | | | | | | | |
| JAY | Jayapura | 46.51 | 287 | P | P | 15 11 01.4 | -0.6 | |
| JAY | | | | pmax | pmax | | | |
| | comp=Z,420nm,1.1s | | | | | | | |
| WR0 | Warramunga Arr | 46.75 | 262 | P | P | 15 11 00.0 | -3.9 | |
| WR0 | | | | IAmb | IAmb | 15 11 10.0 | | |
| | comp=Z,107nm,1.4s | | | | | | | |
| AS31 | Alice Springs | 46.78 | 257 | P | P | 15 11 00.1 | -4.0 | |
| ASAR | Alice Springs | 46.78 | 257 | P | P | 15 11 00.9 | -3.2 | |
| | comp=Z,44nm,1.0s,baz=90,slow=7.9,SNR=125 | | | | | | | |
| ASAR | | | | PcP | PcP | 15 12 37.5 | +0.1 | |
| | comp=Z,22nm,0.8s,baz=106,slow=3.8,SNR=10.0 | | | | | | | |
| ASAR | | | | LR | LR | 15 31 04.0 | | |
| | comp=Z,17µm,19.1s,baz=106,slow=37 | | | | | | | |
| ASAR | Alice Springs | 46.78 | 257 | P | P | 15 11 00.1 | -4.0 | |
| WB0 | Warramunga Arr | 46.92 | 262 | P | P | 15 11 01.2 | -4.1 | |
| WB0 | | | | IAmb | IAmb | 15 11 16.3 | | |
| | comp=Z,62nm,0.9s | | | | | | | |
| WB2 | Warramunga Arr | 46.93 | 262 | P | P | 15 11 01.4 | -3.9 | |
| WB2 | | | | IAmb | IAmb | 15 11 11.4 | | |
| | comp=Z,114nm,1.2s | | | | | | | |
| WRAB | Tennant Creek | 46.94 | 262 | ‖ *e*P | P | 15 11 02.1 | -3.2 | |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,111nm,1.4s | | | | | | | |
| WRAB | | | | MLR | MLR | | | |
| | comp=Z,20µm,16.0s | | | | | | | |
| WRAB | Tennant Creek | 46.94 | 262 | P | P | 15 11 01.4 | -3.9 | |
| WRAB | | | | IAmb | IAmb | 15 11 11.3 | | |
| | comp=Z,101nm,1.2s | | | | | | | |
| WRAB | Tennant Creek | 46.94 | 262 | P | P | 15 11 06.2 | +0.9 | |
| WRA | Warramunga Arr | 46.94 | 262 | P | P | 15 11 02.4 | -3.1 | |
| | comp=Z,11nm,0.9s,baz=96,slow=7.8,SNR=26 | | | | | | | |
| WRA | | | | PP | PP | 15 13 02.8 | +6.9 | |
| | comp=Z,14nm,1.0s,baz=101,slow=9.0,SNR=6.6 | | | | | | | |
| WRA | | | | LR | LR | 15 30 37.5 | | |
| | comp=Z,16µm,18.8s,baz=97,slow=36 | | | | | | | |
| WRA | Warramunga Arr | 46.94 | 262 | P | P | 15 11 01.1 | -4.3 | |
| GENI | Genyem | 46.95 | 287 | P | P | 15 11 05.5 | 0.0 | |
| | comp=Z,7µmcomp=Z,485nm,1.1s | | | | | | | |
| GENI | Genyem | 46.95 | 287 | P | P | 15 11 06.8 | +1.3 | |
| SMPI | Sarmi | 48.52 | 287 | P | P | 15 11 21.4 | +3.7 | |
| | comp=Z,3µmcomp=Z,113nm,1.0s | | | | | | | |
| MIDW | Midway | 48.95 | 358 | IAMs_20 | IAMs_20 | 15 26 52.4 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| KDU | Kakadu | 50.39 | 271 | P | P | 15 11 29.0 | -2.9 | |
| | baz=50,SNR=7.2 | | | | | | | |
| KDU | Kakadu | 50.39 | 271 | P | P | 15 11 33.1 | +1.2 | |
| BAKI | Biak | 51.21 | 286 | P | P | 15 11 43.1 | +5.0 | |
| | comp=Z,4µmcomp=Z,227nm,0.9s | | | | | | | |
| FORT | Forrest | 51.34 | 247 | P | P | 15 11 35.1 | -3.9 | |
| | baz=51,SNR=5.8 | | | | | | | |
| FORT | Forrest | 51.34 | 247 | P | P | 15 11 34.8 | -4.1 | |
| FORT | Forrest | 51.34 | 247 | P | P | 15 11 39.9 | +1.0 | |
| MTN | Manton Dam | 51.60 | 270 | P | P | 15 11 37.0 | -4.0 | |
| | baz=52,SNR=13 | | | | | | | |
| MTN | Manton Dam | 51.60 | 270 | P | P | 15 11 37.3 | -3.7 | |
| MTN | | | | IAmb | IAmb | 15 11 47.1 | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| MTN | Manton Dam | 51.60 | 270 | P | P | 15 11 42.4 | +1.4 | |
| WRKA | Warakurna | 51.67 | 254 | P | P | 15 11 37.3 | -4.2 | |
| | baz=52,SNR=142 | | | | | | | |
| WRKA | Warakurna | 51.67 | 254 | P | P | 15 11 38.9 | -2.7 | |
| DRS | Darwin Rock St | 51.94 | 270 | P | P | 15 11 46.7 | +3.2 | |
| | comp=Z,58nm,0.9s | | | | | | | |
| GUMO | Guam | 52.00 | 308 | LR | LR | 15 30 13.2 | | |
| | comp=Z,2µm,20.6s,baz=134,slow=32 | | | | | | | |
| SAUI | Saumlaki | 52.97 | 276 | IAMs_20 | IAMs_20 | 15 30 51.4 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| SAUI | Saumlaki | 52.97 | 276 | P | P | 15 11 54.2 | +2.9 | |
| | comp=Z,4µmcomp=Z,313nm,1.2s | | | | | | | |
| SAUI | Saumlaki | 52.97 | 276 | P | P | 15 11 56.4 | +5.1 | |
| KNRA | Kununurra | 53.05 | 266 | P | P | 15 11 49.2 | -2.7 | |
| | baz=53,SNR=6.4 | | | | | | | |
| KNRA | Kununurra | 53.05 | 266 | P | P | 15 11 48.7 | -3.1 | |
| KNRA | | | | IAmb | IAmb | 15 11 59.1 | | |
| | comp=Z,67nm,0.8s | | | | | | | |
| KNRA | Kununurra | 53.05 | 266 | P | P | 15 11 53.2 | +1.4 | |
| FAKI | Fak Fak | 53.98 | 282 | P | P | 15 11 56.0 | -2.7 | |
| FAKI | | | | IAmb | IAmb | 15 12 13.6 | | |
| | comp=Z,91nm,0.9s | | | | | | | |
| FAKI | | | | IAMs_20 | IAMs_20 | 15 31 52.4 | | |
| | comp=Z,9µm,22.0s | | | | | | | |
| FAKI | Fak Fak | 53.98 | 282 | P | P | 15 12 06.9 | +8.2 | |
| FAKI | Fak Fak | 53.98 | 282 | P | P | 15 12 00.0 | +1.3 | |
| FITZ | Fitzroy Crossi | 55.37 | 262 | LR | LR | 15 35 49.3 | | |
| | comp=Z,15µm,18.1s,baz=97,slow=36 | | | | | | | |
| FITZ | Fitzroy Crossi | 55.37 | 262 | P | P | 15 12 06.4 | -2.4 | |
| | baz=55,SNR=20 | | | | | | | |
| BNDI | Bandanaira | 55.51 | 279 | P | P | 15 12 10.5 | +0.7 | |
| SIJI | Sorong | 55.71 | 284 | P | P | 15 12 08.8 | -2.4 | |
| | comp=Z,46nm,0.7s,baz=71,slow=5.6,SNR=12 | | | | | | | |
| MSAI | Masohi | 56.86 | 280 | P | P | 15 12 23.4 | +4.0 | |
| | comp=Z,256nmcomp=Z,26nm,0.9s | | | | | | | |
| AAI | Ambon | 57.40 | 279 | P | P | 15 12 21.7 | -1.6 | |
| AAI | | | | pmax | pmax | | | |
| | comp=Z,199nm,1.1s | | | | | | | |
| AAI | Ambon | 57.40 | 279 | P | P | 15 12 22.8 | -0.5 | |
| | comp=Z,3µmcomp=Z,201nm,1.1s | | | | | | | |
| SBA | Scott Base | 57.56 | 184 | IAMs_20 | IAMs_20 | 15 33 46.2 | | |
| | comp=Z,6µm,20.0s | | | | | | | |
| VNDA | Vanda | 57.66 | 186 | P | P | 15 12 24.5 | +0.4 | |
| | comp=Z,17nm,1.1s,baz=8.0,slow=8.1,SNR=6.9 | | | | | | | |
| VNDA | | | | LR | LR | 15 34 51.2 | | |
| | comp=Z,4µm,19.7s,baz=14,slow=34 | | | | | | | |
| VNDA | Vanda | 57.66 | 186 | P | P | 15 12 23.8 | -0.3 | |
| VNDA | | | | IAmb | IAmb | 15 12 33.7 | | |
| | comp=Z,150nm,1.4s | | | | | | | |
| SOEI | Soe | 58.95 | 271 | P | P | 15 12 32.8 | -1.4 | |
| SOEI | | | | IAMs_20 | IAMs_20 | 15 39 12.6 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| SOEI | Soe | 58.95 | 271 | P | P | 15 12 33.5 | -0.7 | |
| | comp=Z,5µmcomp=Z,381nm,0.9s | | | | | | | |
| SOEI | Soe | 58.95 | 271 | P | P | 15 12 36.3 | +2.1 | |
| BATI | Baumata | 59.37 | 270 | P | P | 15 12 35.7 | -1.4 | |
| | comp=Z,13nm,0.6s,baz=77,slow=16,SNR=2.3 | | | | | | | |
| BATI | | | | LR | LR | 15 37 41.3 | | |
| | comp=Z,13µm,21.7s,baz=111,slow=36 | | | | | | | |
| PSA00 | Pilbara Seismi | 59.93 | 257 | P | P | 15 12 36.8 | -4.0 | |
| PSA00 | | | | IAmb | IAmb | 15 12 47.2 | | |
| | comp=Z,116nm,1.2s | | | | | | | |
| PSA00 | Pilbara Seismi | 59.93 | 257 | P | P | 15 12 36.8 | -4.0 | |
| PSA00 | | | | IAmb | IAmb | 15 12 47.4 | | |
| | comp=Z,72nm,1.2s | | | | | | | |
| PSA00 | Pilbara Seismi | 59.93 | 257 | P | P | 15 12 39.1 | -1.7 | |
| TNTI | Ternate | 59.94 | 284 | P | P | 15 12 38.5 | -2.4 | |
| TNTI | Ternate | 59.94 | 284 | P | P | 15 12 40.9 | 0.0 | |
| | comp=Z,3µmcomp=Z,181nm,1.0s | | | | | | | |
| TNTI | Ternate | 59.94 | 284 | P | P | 15 12 44.7 | +3.8 | |
| RPN | Rapa Nui | 60.04 | 110 | LR | LR | 15 31 50.4 | | |
| | comp=Z,3µm,21.5s,baz=260,slow=29 | | | | | | | |
| KLBR | Kellerberrin | 60.06 | 245 | P | P | 15 12 38.4 | -3.2 | |
| | baz=60,SNR=11 | | | | | | | |
| KLBR | Kellerberrin | 60.06 | 245 | P | P | 15 12 39.7 | -1.9 | |
| | comp=Z,6µm,1.0s | | | | | | | |
| MEEK | Meekatharra | 60.06 | 251 | P | P | 15 12 37.1 | -4.5 | |
| | baz=60,SNR=6.9 | | | | | | | |
| MEEK | Meekatharra | 60.06 | 251 | P | P | 15 12 43.3 | +1.6 | |
| | comp=Z,50nm,1.0s | | | | | | | |
| SANI | Sanana | 60.06 | 280 | P | P | 15 12 40.0 | -1.8 | |
| SANI | Sanana | 60.06 | 280 | P | P | 15 12 40.2 | -1.6 | |
| MBWA | Marble Bar | 60.12 | 257 | P | P | 15 12 38.4 | -3.8 | |
| MBWA | | | | IAmb | IAmb | 15 12 52.7 | | |
| | comp=Z,121nm,1.2s | | | | | | | |
| MBWA | Marble Bar | 60.12 | 257 | pP | P | 15 12 41.0 | -1.2 | |
| MBWA | Marble Bar | 60.12 | 257 | P | P | 15 12 44.0 | +1.9 | |
| | comp=Z,52nm,1.1s | | | | | | | |
| NWAO | Narrogin (SRO) | 60.33 | 243 | P | P | 15 12 42.7 | -0.7 | |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.1s | | | | | | | |
| NWAO | Narrogin (SRO) | 60.33 | 243 | IAMs_20 | IAMs_20 | 15 37 01.8 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| NWAO | Narrogin (SRO) | 60.33 | 243 | pP | P | 15 12 43.4 | 0.0 | |
| NWAO | Narrogin (SRO) | 60.33 | 243 | P | P | 15 12 46.9 | +3.5 | |
| BLDU | Ballidu | 61.08 | 246 | P | P | 15 12 45.1 | -3.4 | |
| | baz=61,SNR=8.6 | | | | | | | |
| BLDU | Ballidu | 61.08 | 246 | P | P | 15 12 50.1 | +1.6 | |
| | comp=Z,68nm,1.1s | | | | | | | |
| MMRI | Maumere | 61.20 | 272 | P | P | 15 12 46.1 | -3.4 | |
| MMRI | Maumere | 61.20 | 272 | P | P | 15 12 51.9 | +2.3 | |
| | comp=Z,2µmcomp=Z,115nm,1.1s | | | | | | | |
| MMRI | Maumere | 61.20 | 272 | P | P | 15 12 53.2 | +3.6 | |
| MUN | Mundaring | 61.31 | 244 | P | P | 15 12 47.2 | -2.9 | |
| | baz=61,SNR=5.1 | | | | | | | |
| MUN | Mundaring | 61.31 | 244 | P | P | 15 12 49.9 | -0.2 | |
| | comp=Z,125nm,1.1s | | | | | | | |
| MTKN | Mont Kenneth | 61.68 | 244 | P | P | 15 13 00.0 | +7.4 | |
| | comp=Z,247nm,1.0s | | | | | | | |
| MORW | Morawa | 61.89 | 247 | P | P | 15 12 50.6 | -3.5 | |
| | baz=62,SNR=10 | | | | | | | |
| MORW | Morawa | 61.89 | 247 | P | P | 15 12 50.9 | -3.2 | |
| MORW | | | | IAmb | IAmb | 15 13 01.8 | | |
| | comp=Z,80nm,0.9s | | | | | | | |
| MORW | Morawa | 61.89 | 247 | P | P | 15 12 52.7 | -1.4 | |
| | comp=Z,92nm,1.1s | | | | | | | |
| BBSI | Bau Bau | 61.96 | 275 | P | P | 15 13 07.6 | +13 | |
| BASI | Baing, Sumba | 62.25 | 269 | P | P | 15 13 01.5 | +4.9 | |
| | comp=Z,965nmcomp=Z,2µmcomp=Z,155nm,1.4s | | | | | | | |
| KMSI | Cibinong | 62.94 | 282 | P | P | 15 13 04.9 | +3.6 | |
| | comp=Z,2µmcomp=Z,195nm,1.0s | | | | | | | |
| WBSI | Waikabubak, Su | 63.54 | 269 | P | P | 15 13 08.5 | +3.2 | |
| | comp=Z,22µmcomp=Z,2µmcomp=Z,70nm,1.0s | | | | | | | |
| DAV | Davao City (W) | 64.29 | 289 | LR | LR | 15 38 49.8 | | |
| | comp=Z,2µm,20.3s,baz=102,slow=34 | | | | | | | |
| BKSI | Bulukumba | 64.30 | 274 | P | P | 15 13 12.7 | +2.5 | |
| | comp=Z,2µmcomp=Z,846nmcomp=Z,38nm,0.9s | | | | | | | |
| APSI | Ampana | 64.50 | 279 | P | P | 15 13 11.0 | -0.5 | |
| | comp=Z,2µmcomp=Z,150nm,1.2s | | | | | | | |
| CASY | Casey | 64.57 | 206 | IAMs_20 | IAMs_20 | 15 33 43.7 | | |
| | comp=Z,7µm,19.0s | | | | | | | |
| BNSI | Bone | 64.64 | 275 | P | P | 15 13 11.5 | -0.9 | |
| | comp=Z,1µmcomp=Z,88nm,1.6s | | | | | | | |
| KAPI | Kappang | 64.75 | 274 | P | P | 15 13 12.7 | -0.5 | |
| | comp=Z,2.2nm,0.4s,baz=98,slow=4.9,SNR=5.8 | | | | | | | |
| KAPI | | | | LR | LR | 15 41 01.6 | | |
| | comp=Z,2µm,21.9s,baz=129,slow=36 | | | | | | | |
| KAPI | Kappang | 64.75 | 274 | P | P | 15 13 07.3 | -5.9 | |
| KAPI | | | | IAmb | IAmb | 15 13 19.4 | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| KAPI | Kappang | 64.75 | 274 | P | P | 15 13 18.7 | +5.5 | |
| | comp=Z,40nm,1.3s | | | | | | | |
| GIRL | Giralia | 64.76 | 254 | P | P | 15 13 09.4 | -3.7 | |
| | baz=65,SNR=5.7 | | | | | | | |
| MRSI | Marisa | 64.77 | 281 | P | P | 15 13 13.8 | +0.5 | |
| | comp=Z,1µmcomp=Z,92nm,1.1s | | | | | | | |
| SPSI | Sidrap Palu | 65.11 | 275 | P | P | 15 13 17.9 | +2.4 | |
| | comp=Z,1µmcomp=Z,33nm,1.4s | | | | | | | |
| PLAI | Plampang | 65.31 | 270 | P | P | 15 13 16.4 | -0.4 | |
| | comp=Z,2µmcomp=Z,93nm,1.0s | | | | | | | |
| PLAI | Plampang | 65.31 | 270 | P | P | 15 13 18.3 | +1.5 | |
| TTSI | Tana Toraja | 65.39 | 276 | P | P | 15 13 23.1 | +5.7 | |
| | comp=Z,1µmcomp=Z,48nm,1.6s | | | | | | | |
| TOLI2 | Tolitoli | 66.08 | 281 | P | P | 15 13 18.6 | -3.3 | |
| TOLI2 | | | | IAmb | IAmb | 15 13 27.8 | | |
| | comp=Z,62nm,0.9s | | | | | | | |
| TOLI2 | Tolitoli | 66.08 | 281 | P | P | 15 13 23.1 | +1.3 | |
| MPSI | Mapaga | 66.59 | 280 | P | P | 15 13 23.6 | -1.5 | |
| | comp=Z,1µmcomp=Z,78nm,1.0s | | | | | | | |
| IGBI | Denpasar | 67.77 | 269 | P | P | 15 13 43.4 | +11 | |
| JHJ | Hachijo jima 2 | 68.73 | 321 | LR | LR | 15 37 39.8 | | |
| | comp=Z,2µm,22.0s,baz=106,slow=31 | | | | | | | |
| JAGI | Jajag, Banyuwa | 68.81 | 269 | P | P | 15 13 34.4 | -4.7 | |
| JAGI | Jajag, Banyuwa | 68.81 | 269 | P | P | 15 13 42.0 | +2.9 | |
| | comp=Z,2µmcomp=Z,83nm,1.8s | | | | | | | |
| JAGI | Jajag, Banyuwa | 68.81 | 269 | P | P | 15 13 42.0 | +2.9 | |
| | comp=Z,82nm,1.8s | | | | | | | |
| ABJI | Asem Bagus | 68.95 | 270 | P | P | 15 13 44.5 | +4.5 | |
| | comp=Z,81nm,1.1s | | | | | | | |
| QSPA | South Pole Qui | 69.09 | 180 | P | P | 15 13 40.7 | +0.6 | |
| | comp=Z,99nm,1.1s,baz=220,slow=0.8,SNR=41 | | | | | | | |
| QSPA | | | | LR | LR | 15 38 57.3 | | |
| | comp=Z,7µm,21.9s,baz=33,slow=32 | | | | | | | |
| QSPA | South Pole Qui | 69.09 | 180 | P | P | 15 13 39.3 | -0.8 | |
| GMJI | Gumukmas | 69.54 | 269 | P | P | 15 13 54.5 | +11 | |
| MYLDM | Lahad Datu | 69.81 | 284 | P | P | 15 13 43.2 | -2.0 | |
| GRJI | Gresik | 70.89 | 270 | P | P | 15 13 59.0 | +7.1 | |
| | comp=Z,640nmcomp=Z,56nm,0.9s | | | | | | | |
| PWJI | Pagerwojo | 71.15 | 268 | P | P | 15 13 58.9 | +5.4 | |
| | comp=Z,35nm,1.1s | | | | | | | |
| SPMM | Sapulut | 71.47 | 283 | P | P | 15 13 55.0 | -0.4 | |
| PCJI | Pacitan | 71.68 | 268 | P | P | 15 14 00.7 | +4.0 | |
| | comp=Z,86nm,0.7s | | | | | | | |
| MJAR | Matsushiro Arr | 72.06 | 322 | P | P | 15 13 57.4 | -1.0 | |
| | comp=Z,10nm,0.9s,baz=156,slow=5.9,SNR=9.5 | | | | | | | |
| MAJO | Matsushiro | 72.06 | 322 | ‖ *e*P | P | 15 13 58.7 | +0.2 | |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.4s | | | | | | | |
| MAJO | | | | MLR | MLR | | | |
| | comp=Z,3µm,19.0s | | | | | | | |
| MAJO | Matsushiro | 72.06 | 322 | P | P | 15 13 56.6 | -1.8 | |
| MAJO | Matsushiro | 72.06 | 322 | P | P | 15 14 00.8 | +2.3 | |
| MAT | Matsushiro | 72.06 | 322 | P | P | 15 13 56.1 | -2.4 | |
| MAT | | | | S | S | 15 23 18.6 | -1.3 | |
| KKM | Kota Kinabalu | 72.24 | 284 | P | P | 15 14 06.7 | +6.6 | |
| JOW | Kunigami | 72.35 | 309 | LR | LR | 15 41 08.2 | | |
| | comp=Z,4µm,21.3s,baz=109,slow=32 | | | | | | | |
| UGM | Wanagama | 72.38 | 268 | IAMs_20 | IAMs_20 | 15 43 50.7 | | |
| | comp=Z,5µm,22.0s | | | | | | | |
| KIWB | Kanaga Island | 72.54 | 359 | P | P | 15 13 59.3 | -1.6 | |
| ADK | Adak | 72.56 | 359 | P | P | 15 13 59.8 | -1.2 | |
| ADK | | | | pmax | pmax | | | |
| | comp=Z,63nm,1.0s | | | | | | | |
| ADK | Adak | 72.56 | 359 | P | P | 15 13 59.8 | -1.2 | |
| ADK | | | | IAmb | IAmb | 15 14 17.3 | | |
| | comp=Z,63nm,1.0s | | | | | | | |
| ADK | Adak | 72.56 | 359 | IAMs_20 | IAMs_20 | 15 38 16.3 | | |
| | comp=Z,6µm,22.0s | | | | | | | |
| ADK | Adak | 72.56 | 359 | P | P | 15 14 01.6 | +0.6 | |
| ATKA | Atka Island | 72.88 | 1 | P | P | 15 14 07.7 | +4.8 | |
| NIKH | Nikolski High | 73.86 | 4 | P | P | 15 14 08.3 | -0.4 | |
| | baz=186 | | | | | | | |
| SHEM | Shemya Is, Ala | 73.97 | 353 | LR | LR | 15 40 33.6 | | |
| | comp=Z,6µm,20.4s,baz=134,slow=31 | | | | | | | |
| JHS | Saijyo | 74.07 | 318 | P | P | 15 14 08.3 | -2.1 | |
| JHS | | | | IAmb | IAmb | 15 14 15.6 | | |
| | comp=Z,68nm,0.9s | | | | | | | |
| SBUM | Sibu | 74.48 | 279 | P | P | 15 14 15.0 | +1.7 | |
| UNV | Unalaska Valle | 74.91 | 5 | P | P | 15 14 13.5 | -1.2 | |
| UNV | | | | IAmb | IAmb | 15 14 38.0 | | |
| | comp=Z,130nm,1.4s | | | | | | | |
| UNV | Unalaska Valle | 74.91 | 5 | P | P | 15 14 21.6 | +6.8 | |
| JKA | Kamikawa-asahi | 75.33 | 330 | P | P | 15 14 17.6 | +0.1 | |
| ASAJ | Asahikawa | 75.33 | 330 | P | P | 15 14 17.6 | +0.1 | |
| | comp=Z,16nm,0.9s,baz=217,slow=5.1,SNR=3.9 | | | | | | | |
| ASAJ | | | | LR | LR | 15 41 08.7 | | |
| | comp=Z,10µm,21.8s,baz=164,slow=31 | | | | | | | |
| LEM | Lembang | 75.46 | 268 | P | P | 15 14 18.8 | -0.4 | |
| | comp=Z,25nm,0.6s,baz=205,slow=7.4,SNR=5.2 | | | | | | | |
| LEM | | | | LR | LR | 15 46 06.2 | | |
| | comp=Z,6µm,21.9s,baz=110,slow=35 | | | | | | | |
| SKR | Severo-Kuril's | 75.65 | 342 | *e*P | P | 15 14 15.0 | -4.1 | |
| SKR | | | | *e*S | S | 15 23 56.6 | -3.0 | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,800nm,4.4s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,300nm,3.2s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,107nm,1.1s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=Z,1µm,15.0s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=Z,2µm,15.0s | | | | | | | |
| SNCC | San Nicolas Is | 75.81 | 46 | P | P | 15 14 23.4 | +2.9 | |
| | baz=233 | | | | | | | |
| KSM | Kuching | 75.89 | 277 | P | P | 15 14 20.0 | -1.4 | |
| KSM | Kuching | 75.89 | 277 | P | P | 15 14 25.2 | +3.8 | |
| SSLB | Suanglung | 76.28 | 302 | P | P | 15 14 20.3 | -3.1 | |
| TPUB | Ta-pu | 76.29 | 302 | P | P | 15 14 25.4 | +1.9 | |
| SCI2 | San Clemente I | 76.31 |

YSS Yuzh-Sakhalins 77.44 332 P P 15 14 34.1 +4.8
comp=Z,40nm,1.0s
ELS Elsinore Mount 77.46 46 P P 15 14 28.9 -1.0
LPIG La Paz 77.58 58 LR LR 15 40 06.8
comp=Z,6µm,22.0s,baz=232,slow=29
MURC Murrieta 77.59 47 P P 15 14 32.1 +1.5
baz=234
VES Vestal, Richgr 77.67 44 P P 15 14 32.2 +1.3
baz=233
MONP2 Monument Peak 77.71 48 P P 15 14 33.2 +1.7
baz=235,SNR=9.2
VOG Valley Oaks Go 77.77 43 P P 15 14 32.3 +0.8
baz=232
IKP In-Ko-Pah, Jac 77.79 48 P P 15 14 33.4 +1.6
baz=235,SNR=7.8
EDW2 Edwards Air Fo 77.81 45 P P 15 14 33.1 +1.2
baz=234,SNR=19
JCC Jacoby Creek, 77.82 37 IAMs_20 IAMs_20 15 44 18.6
comp=Z,4µm,19.0s
ISA Isabella, Lake 77.96 44 P P 15 14 34.0 +1.4
baz=233,SNR=18
PFO Pinyon Flats O 78.10 47 LR LR 15 43 47.0
comp=Z,3µm,18.7s,baz=242,slow=32
PFO Pinyon Flats O 78.10 47 IAMs_20 IAMs_20 15 39 53.6
comp=Z,4µm,22.0s
PFO Pinyon Flats O 78.10 47 P P 15 14 35.0 +1.4
baz=235,SNR=8.6
TPFO Pinon Flats 78.10 47 P P 15 14 35.0 +1.4
baz=235,SNR=8.2
BBRC Big Bear Solar 78.16 46 P P 15 14 35.3 +1.3
baz=234
SWSC Sam W. Stewart 78.17 48 P P 15 14 35.2 +1.4
baz=235
CMB Columbia Colle 78.19 41 P P 15 14 33.8 0.0
CMB pmax pmax
comp=Z,74nm,1.4s
CMB Columbia Colle 78.19 41 P P 15 14 33.8 0.0
CMB IAmb IAmb 15 14 52.4
comp=Z,74nm,1.4s
CMB IAMs_20 IAMs_20 15 40 38.6
comp=Z,4µm,21.0s
CHIR Chirikof Islan 78.32 11 IAMs_20 IAMs_20 15 47 52.3
comp=Z,6µm,20.0s
LRMC Laurel Mtn Rad 78.37 45 P P 15 14 36.5 +1.5
baz=234,SNR=13
RRX Edison Barstow 78.47 46 P P 15 14 36.9 +1.4
baz=234
WDC Whiskeytown Da 78.52 38 IAMs_20 IAMs_20 15 41 55.1
comp=Z,4µm,21.0s
BELC Belle Mtn. Jos 78.64 47 P P 15 14 37.8 +1.2
baz=235,SNR=6.9
CWC Cottonwood Cre 78.68 44 P P 15 14 38.0 +1.3
baz=233
N02D Trinity Center 78.68 38 IAMs_20 IAMs_20 15 42 00.4
comp=Z,5µm,21.0s
N02D Trinity Center 78.68 38 P P 15 14 38.2 +1.6
baz=229,SNR=12
BELA Belgrano 2 78.76 172 P P 15 14 35.2 -1.2
BC3 Big Chuckawall 78.81 47 P P 15 14 39.2 +1.8
baz=235
MPMC Manual Prospec 78.83 44 P P 15 14 39.2 +1.5
baz=234,SNR=55
GSC Goldstone, Bar 78.84 45 P P 15 14 39.0 +1.4
baz=234,SNR=12
M02C Callahan 78.87 37 IAMs_20 IAMs_20 15 41 55.3
comp=Z,4µm,21.0s
M02C Callahan 78.87 37 P P 15 14 39.1 +1.5
baz=229,SNR=17
KSRS Korea Array 78.87 317 P P 15 14 36.8 -0.8
comp=Z,14nm,1.1s,baz=139,slow=4.8,SNR=7.8
KSRS LR LR 15 43 21.9
comp=Z,3µm,21.6s,baz=135,slow=31
HEC Hector,Ludlow 78.88 46 P P 15 14 39.3 +1.5
baz=235,SNR=8.1
KSAR Wonju Array Be 78.89 317 P P 15 14 35.6 -2.0
KSAR Wonju Array Be 78.89 317 P P 15 14 35.6 -2.0
GLA Glamis 78.91 48 P P 15 14 39.9 +2.0
baz=236
MLAC Mammoth, Mammo 78.91 42 P P 15 14 40.1 +2.0
baz=233
TEY Ternei 78.91 328 ⇓ eP P 15 14 36.9 -0.6
TEY e 15 25 14.5
TEY pmax pmax
comp=Z,10.0nm,1.7s
TIN Tinemaha, Big 78.95 43 P P 15 14 39.7 +1.5
baz=233
L02E Cave Junction 78.95 37 IAMs_20 IAMs_20 15 41 56.4
comp=Z,4µm,20.0s
L02E Cave Junction 78.95 37 P P 15 14 39.3 +1.4
baz=228
YBH Yreka Blue Hor 79.17 37 LR LR 15 42 15.4
comp=Z,4µm,21.4s,baz=236,slow=30
YBH Yreka Blue Hor 79.17 37 IAMs_20 IAMs_20 15 42 15.3
comp=Z,4µm,21.0s
K02D Willamette Mer 79.27 36 P P 15 14 41.5 +1.7
baz=228
SII Sitkinak Islan 79.29 12 IAMs_20 IAMs_20 15 40 58.9
comp=Z,5µm,22.0s
IRM Iron Mountain 79.31 47 P P 15 14 41.8 +1.7
baz=236,SNR=30
GMRC Granite Mounta 79.31 46 P P 15 14 41.7 +1.4
baz=235,SNR=17
BEKR Beckworth 79.35 40 P P 15 14 40.4 +0.1
BEKR IAmb IAmb 15 14 53.9
comp=Z,99nm,1.5s
LCH Last Change Ra 79.43 43 P P 15 14 42.0 +1.2
J01E Myrtle Point 79.44 36 IAMs_20 IAMs_20 15 42 01.3
comp=Z,4µm,21.0s
GWY Greenwater Val 79.45 45 P P 15 14 42.1 +1.1
PMBI Palembang 79.46 271 IAMs_20 IAMs_20 15 53 57.4
comp=Z,5µm,19.0s
GRAC Grapevine Rang 79.47 44 P P 15 14 42.7 +1.8
baz=234,SNR=16
MDSI Maura Dua 79.47 269 P P 15 14 42.6 +1.2
comp=Z,382nmcomp=Z,12nm,0.8s
FURC Furnace Creek, 79.48 44 P P 15 14 42.2 +1.4
baz=234,SNR=6.8
TUQ Turquoise Moun 79.51 46 P P 15 14 42.7 +1.5
baz=235,SNR=6.9
M04C Macdoel 79.70 38 IAMs_20 IAMs_20 15 45 32.3
comp=Z,4µm,19.0s
M04C Macdoel 79.70 38 P P 15 14 43.4 +1.2
baz=230,SNR=8.6
RYN Ryan 79.71 42 P P 15 14 41.5 -0.8
INCN Inchon 79.71 317 P P 15 14 48.1 +5.9
comp=Z,52nm,1.2s
L04D Klamath Falls 79.72 37 P P 15 14 41.5 -0.8
L04D IAmb IAmb 15 14 55.8
comp=Z,71nm,1.1s
L04D IAMs_20 IAMs_20 15 45 30.8
comp=Z,3µm,18.0s
L04D Klamath Falls 79.72 37 P P 15 14 43.7 +1.5
baz=229,SNR=10
NVAR Mina Array Bea 79.73 42 P P 15 14 43.8 +1.3
comp=Z,15nm,0.8s,baz=223,slow=9.2,SNR=71
NVAR LR LR 15 44 58.2
comp=Z,4µm,19.3s,baz=233,slow=32
NVAR Mina Array Bea 79.73 42 P P 15 14 41.6 -0.9
214A Organ Pipe Nat 79.73 50 P P 15 14 44.0 +1.6
baz=237,SNR=14
PMSA Palmer Station 79.87 156 LR LR 15 47 02.7
comp=Z,3µm,18.1s,baz=239,slow=33
PMSA Palmer Station 79.87 156 IAMs_20 IAMs_20 15 46 25.1
comp=Z,5µm,18.0s
SSE Sheshan 79.87 309 P P 15 14 42.4 -0.7
SSE S S 15 24 48.3 +2.1
SSE pmax pmax
comp=Z,2.0nm,0.7s
SSE pmax pmax
comp=Z,280nm,3.0s
SSE LR LR
comp=Z,800nm,23.0s
SSE LR LR
comp=Z,980nm,21.6s
NEE2 Needles Airpor 80.01 47 P P 15 14 45.3 +1.5
baz=236
PDMCI Parker Dam,Lak 80.08 47 P P 15 14 45.7 +1.5
baz=236,SNR=9.7
VLA Vladivostok 80.09 324 ⇓ eP P 15 14 42.0 -2.0
VLA pmax pmax
comp=Z,136nm,4.0s
VLA MLR MLR
comp=Z,2µm,18.0s
I02E Swisshome, OR 80.12 35 IAMs_20 IAMs_20 15 44 55.2
comp=Z,4µm,20.0s
TPNV Topopah Spring 80.17 44 P P 15 14 46.1 +1.2
baz=234,SNR=40

KVN Kaiserville 80.23 42 P P 15 14 45.2 0.0
KVN pmax pmax
comp=Z,57nm,1.3s
KVN Kaiserville 80.23 42 P P 15 14 45.2 0.0
K04D Chiloquin, OR 80.29 37 P P 15 14 45.3 -0.1
baz=230
J04D Umpqua Nationa 80.49 36 P P 15 14 47.8 +1.3
baz=229
TYV Tymovskoe 80.50 335 eP P 15 14 45.5 -0.5
TYV eS S 15 24 52.6 +0.7
TYV pmax pmax
comp=Z,72nm,1.4s
TYV pmax pmax
comp=Z,1µm,5.4s
TYV smax smax
comp=N,700nm,7.2s
TYV smax smax
comp=E,1µm,7.2s
MOD Modoc Plateau 80.66 38 IAMs_20 IAMs_20 15 46 04.8
comp=Z,4µm,19.0s
I04A Tendick Farm, 80.69 36 P P 15 14 47.6 +0.3
baz=229
KDAK Kodiak Island 80.75 12 LR LR 15 43 48.4
comp=Z,3µm,21.5s,baz=224,slow=31
KDAK Kodiak Island 80.75 12 P P 15 14 45.9 -1.3
KDAK pmax pmax
comp=Z,104nm,1.3s
KDAK Kodiak Island 80.75 12 P P 15 14 45.9 -1.3
KDAK IAmb IAmb 15 15 00.0
comp=Z,104nm,1.2s
USRK Ussuriysk Ar. 80.75 325 P P 15 14 47.0 -0.5
comp=Z,11nm,1.1s,baz=132,slow=2.8,SNR=4.9
USRK LR LR 15 47 25.3
comp=Z,4µm,19.6s,baz=123,slow=33
USRK Ussuriysk Ar. 80.75 325 P P 15 14 45.9 -1.6
J05D Fort Rock, OR 81.01 37 P P 15 14 49.7 +0.5
baz=230,SNR=22
PRN Pahroc Range 81.21 44 P P 15 14 49.9 -0.5
PRN IAmb IAmb 15 15 01.5
comp=Z,120nm,1.3s
KSI Kapahiang 81.25 269 P P 15 14 53.3 +2.3
comp=Z,73nm,0.8s
TUC Tucson 81.38 51 P P 15 14 52.1 +0.8
TUC pmax pmax
comp=Z,118nm,1.5s
TUC Tucson 81.38 51 IAMs_20 IAMs_20 15 45 44.7
comp=Z,4µm,18.0s
TUC Tucson 81.38 51 P P 15 14 52.9 +1.6
baz=239
H04A Detroit Lake 81.39 35 P P 15 14 51.0 -0.1
H04A IAmb IAmb 15 15 02.1
comp=Z,66nm,1.2s
R11A Troy Canyon, C 81.40 43 P P 15 14 50.5 -0.9
R11A Troy Canyon, C 81.40 43 P P 15 14 51.9 +0.4
baz=235,SNR=12
Q19K Cape Douglas, 81.62 11 IAMs_20 IAMs_20 15 49 31.4
comp=Z,4µm,19.0s
I05D Terrebonne, OR 81.63 36 P P 15 14 54.1 +1.7
baz=230
MASI Maura Aman, Be 81.75 270 P P 15 14 58.3 +4.6
comp=Z,88nm,1.1s
P18K Big Mountain, 81.78 10 P P 15 14 51.4 -1.3
baz=199
MAW Mawson 81.92 199 P P 15 14 53.1 -0.4
comp=Z,80nm,0.9s,baz=163,slow=2.9,SNR=9.4
MAW LR LR 15 48 44.1
comp=Z,8µm,21.6s,baz=120,slow=34
MAW Mawson 81.92 199 P P 15 14 53.5 0.0
baz=82,SNR=6.9
MAW Mawson 81.92 199 P P 15 14 52.6 -0.9
WVOR Wild Horse Val 81.96 39 P P 15 14 53.3 -0.9
WVOR pmax pmax
comp=Z,93nm,1.3s
WVOR Wild Horse Val 81.96 39 P P 15 14 53.2 -0.9
WVOR IAmb IAmb 15 15 05.8
comp=Z,93nm,1.2s
WVOR IAMs_20 IAMs_20 15 42 39.2
comp=Z,5µm,22.0s
MYKOM Kota Tinggi 82.00 275 IAMs_20 IAMs_20 15 50 48.0
comp=Z,5µm,22.0s
MYKOM Kota Tinggi 82.00 275 P P 15 14 54.0 -1.0
NJ2 Nanjing 82.07 309 eP P 15 14 54.0 -0.8
NJ2 pP pP 15 14 58.6 -0.8
NJ2 sP pwP 15 15 02.4 +0.6
NJ2 PP PP 15 17 58.4 -4.8
NJ2 S S 15 25 11.1 +2.1
NJ2 sS sS 15 25 17.1 +0.5
NJ2 SS SS 15 30 26.5 -2.4
NJ2 pmax pmax
comp=Z,17nm,0.5s
NJ2 pmax pmax
comp=Z,690nm,5.3s
NJ2 LR LR
comp=Z,2µm,20.0s
NJ2 LR LR
comp=Z,2µm,20.4s
NJ2 LR LR
comp=Z,3µm,24.5s
LCMT Little Creek M 82.18 46 P P 15 14 55.3 -0.2
LCMT IAmb IAmb 15 15 19.1
comp=Z,90nm,1.3s
O18K Koktuh Hills 82.22 10 P P 15 14 52.6 -2.4
baz=199,SNR=20
G05D Wamic, OR 82.22 35 P P 15 15 02.6 +7.3
baz=230
MDJ Mudanjiang 82.33 324 P P 15 14 54.8 -1.1
MDJ IAmb IAmb 15 15 02.8
comp=Z,62nm,1.0s
MDJ Mudanjiang 82.33 324 P P 15 14 55.5 -0.4
MDJ pP pP 15 14 58.9 -1.5
MDJ PP PP 15 17 59.1 -5.9
MDJ S S 15 25 13.1 +2.0
MDJ pmax pmax
comp=Z,23nm,1.1s
MDJ pmax pmax
comp=Z,720nm,4.4s
MDJ LR LR
comp=Z,3µm,17.7s
MDJ LR LR
comp=Z,4µm,20.1s
MDJ LR LR
comp=Z,8µm,18.1s
MDJ Mudanjiang 82.33 324 P P 15 15 00.3 +4.4
USHA Ushuaia 82.38 146 LR LR 15 47 52.6
comp=Z,2µm,18.2s,baz=248,slow=33
E04D Cinebar 82.42 34 P P 15 14 57.4 +1.1
baz=229
F05D White Salmon 82.56 35 P P 15 14 57.9 +0.8
baz=230
CNPM China Poot 82.63 12 P P 15 14 56.2 -1.0
CNPM IAmb IAmb 15 15 09.0
comp=Z,109nm,1.3s
WUAZ Wupatki 82.65 48 P P 15 15 00.6 +2.6
baz=238,SNR=19
BRLK Bradley Lake 82.92 12 P P 15 14 57.2 -1.5
BRLK IAmb IAmb 15 15 10.4
comp=Z,95nm,1.1s
ELK Elko 83.00 42 LR LR 15 47 48.2
comp=Z,4µm,18.5s,baz=230,slow=33
ELK Elko 83.00 42 P P 15 14 59.5 -0.3
ELK pmax pmax
comp=Z,60nm,1.2s
ELK Elko 83.00 42 P P 15 14 59.5 -0.3
ELK IAmb IAmb 15 15 13.3
comp=Z,60nm,1.2s
ELK IAMs_20 IAMs_20 15 43 44.0
comp=Z,4µm,22.0s
NKL Nikolayevsk 83.04 335 eP P 15 14 57.0 -2.3
NKL eS S 15 25 16.7 -1.2
NKL pmax pmax
comp=N,784nm,0.6s
NKL pmax pmax
comp=Z,68nm,1.1s
NKL pmax pmax
comp=E,3.0nm,0.7s
NKL smax smax
comp=E,12nm,1.5s
NKL smax smax
comp=N,366nm,2.0s
GRNR Gornyy 83.07 332 ⇓ iP P 15 14 59.9 +0.3
GRNR pmax pmax
comp=Z,10.0nm,1.1s
RSO Redoubt South 83.22 11 P P 15 14 59.4 -1.0
ZAIG Zacatecas 83.25 63 P P 15 15 00.1 -1.4
ZAIG IAmb IAmb 15 15 14.4
comp=Z,41nm,1.1s

N19K Bonanza Creek 83.25 10 P P 15 14 59.4 -1.1
N19K IAmb IAmb 15 15 12.2
comp=Z,76nm,1.2s
N19K Bonanza Creek 83.25 10 P P 15 14 59.9 -0.6
baz=200
QIZ Qiongzhong 83.28 293 P P 15 14 59.3 -2.1
QIZ S S 15 25 22.6 +0.7
QIZ LR LR
comp=Z,2µm,20.6s
QIZ LR LR
comp=Z,970nm,16.2s
QIZ LR LR
comp=Z,2µm,20.4s
PGC Sidney 83.37 32 P P 15 15 01.2 +0.1
SEW Seward 83.52 13 P P 15 15 00.6 -1.1
SEW IAmb IAmb 15 15 13.2
comp=Z,76nm,1.1s
W18A Petrified Fore 83.58 49 P P 15 15 05.6 +2.7
baz=239
121A Cookes Peak, D 83.68 52 P P 15 15 06.6 +3.1
baz=240
BBB Bella Bella 83.70 27 LR LR 15 45 37.4
comp=Z,2µm,19.9s,baz=225,slow=31
H03S2 Juan Fernandez 83.71 124 T T 16 47 12.8
H03S1 Juan Fernandez 83.72 124 T T 16 47 13.8
H03S3 Juan Fernandez 83.72 124 T T 16 47 12.6
DL2 Dalian 83.76 316 P P 15 15 08.5 +5.0
DL2 Dalian 83.76 316 SKS S 15 25 28.0 +2.0
A04D Lummi Island 83.78 32 P P 15 15 05.6 +2.3
baz=228,SNR=14
B05A Bryant 83.78 33 P P 15 15 04.2 +0.9
baz=229
CAPN Captain Cook N 83.80 12 IAMs_20 IAMs_20 15 44 21.1
comp=Z,4µm,22.0s
H03N2 Juan Fernandez 83.84 123 T T 16 47 17.5
baz=258,slow=72,SNR=5237
H03N3 Juan Fernandez 83.84 123 T T 16 47 19.0
baz=258,slow=72,SNR=4466
H03N1 Juan Fernandez 83.86 123 T T 16 47 13.7
baz=258,slow=72,SNR=4569
HAWA Hanford 83.92 35 IAMs_20 IAMs_20 15 47 35.8
comp=Z,3µm,19.0s
SPCR Spurr Chakacha 84.00 11 P P 15 15 02.3 -2.0
baz=202
SPU Mount Spurr 84.01 11 P P 15 15 02.8 -1.5
JRMM Jerantut 84.04 276 P P 15 15 09.0 +3.5
BKNI Bangkinang 84.10 273 IAMs_20 IAMs_20 15 52 37.4
comp=Z,4µm,21.0s
COYC Coyhaique 84.14 137 IAMs_20 IAMs_20 15 43 00.5
comp=Z,5µm,21.0s
SNY Shenyang 84.16 319 ⇓ P P 15 15 04.4 -1.0
SNY Shenyang 84.16 319 S S 15 25 29.8 0.0
SNY pmax pmax
comp=Z,18nm,2.5s
SNY pmax pmax
comp=Z,730nm,5.9s
SNY LR LR
comp=N,640nm,12.4s
SNY LR LR
comp=E,2µm,21.6s
SNY LR LR
comp=Z,3µm,19.6s
C06D Leavenworth 84.17 33 P P 15 15 05.8 +0.4
baz=230
CN2 Changchun 84.18 321 eP P 15 15 04.6 -0.9
CN2 epP PcP 15 15 09.3 0.0
CN2 eS S 15 25 29.0 -1.0
CN2 pmax pmax
comp=Z,60nm,1.3s
CN2 pmax pmax
comp=Z,500nm,5.0s
CN2 LR LR
comp=Z,1µm,18.0s
CN2 LR LR
comp=Z,2µm,18.0s
CN2 LR LR
comp=Z,2µm,17.0s
KLR Kul'dur 84.20 328 P P 15 15 04.0 -1.4
comp=Z,9.2nm,1.0s,baz=49,slow=3.2,SNR=7.4
KLR LR LR 15 46 41.0
comp=Z,9µm,21.9s,baz=138,slow=32
KLR Kul'dur 84.20 328 ⇓ eP P 15 15 05.0 -0.4
KLR pmax pmax
comp=Z,30nm,1.8s
KLR MLR MLR
comp=Z,4µm,19.0s
BMO Blue Mountains 84.20 37 IAMs_20 IAMs_20 15 48 29.4
comp=Z,3µm,19.0s
DUG Dugway, Tooele 84.22 43 P P 15 15 06.8 +0.8
DUG pmax pmax
comp=Z,23nm,1.7s
DUG Dugway, Tooele 84.22 43 P P 15 15 07.4 +1.5
baz=236,SNR=10
BNX BinXian 84.23 324 ⇓ P P 15 15 04.5 -1.2
BNX pP PcP 15 15 08.5 -1.0
BNX PP PP 15 18 20.8 +0.1
BNX S S 15 25 30.5 +0.1
BNX sS ScS 15 25 40.3 -2.1
BNX pmax pmax
comp=Z,42nm,1.1s
BNX pmax pmax
comp=Z,1µm,5.7s
BNX LR LR
comp=Z,5µm,17.2s
BNX LR LR
comp=Z,3µm,14.2s
BNX LR LR
comp=Z,12µm,23.5s
EPT El Paso 84.26 53 IAMs_20 IAMs_20 15 44 16.9
comp=Z,4µm,22.0s
M19K Big River Lodg 84.29 10 P P 15 15 04.5 -1.2
RC01 Rabbit Creek A 84.37 12 P P 15 15 05.0 -1.0
RC01 Rabbit Creek A 84.37 12 P P 15 15 06.4 +0.4
baz=204,SNR=18
PWL Port Wells 84.44 13 P P 15 15 05.6 -0.9
PWL Port Wells 84.44 13 P P 15 15 06.6 +0.2
baz=205,SNR=13
L19K White Mountain 84.48 10 P P 15 15 05.4 -1.2
L19K IAmb IAmb 15 15 21.6
comp=Z,54nm,1.4s
L19K White Mountain 84.48 10 P P 15 15 07.0 +0.3
baz=199,SNR=12
KAIM Kayak Island 84.49 15 IAMs_20 IAMs_20 15 52 08.7
comp=Z,4µm,20.0s
GAMB Gambell 84.53 2 P P 15 15 05.9 -0.8
GAMB IAmb IAmb 15 15 13.3
comp=Z,90nm,1.1s
GAMB Gambell 84.53 2 P P 15 15 07.7 +1.0
baz=184,SNR=37
WHN Wuhan 84.70 305 ⇓ P P 15 15 11.9 +3.5
WHN S S 15 25 28.8 -6.9
WHN pmax pmax
comp=Z,120nm,1.3s
WHN LR LR
comp=Z,1µm,11.9s
WHN LR LR
comp=Z,2µm,12.3s
WHN LR LR
comp=Z,9µm,34.2s
GLI Glacier Island 84.72 13 P P 15 15 07.0 -0.9
GLI Glacier Island 84.72 13 P P 15 15 08.3 +0.4
baz=206
FID Port Fidalgo 84.74 14 IAMs_20 IAMs_20 15 46 02.0
comp=Z,4µm,20.0s
SUCK Suckling Hills 84.78 15 IAMs_20 IAMs_20 15 45 38.2
comp=Z,4µm,20.0s
M22K Willow 84.90 12 P P 15 15 08.0 -0.7
M22K IAMs_20 IAMs_20 15 45 41.3
comp=Z,3µm,22.0s
M22K Willow 84.90 12 P P 15 15 08.8 +0.2
baz=204,SNR=25
MA2 Magadan 84.92 343 c i P P 15 15 07.0 -1.8
MA2 pmax pmax
comp=Z,91nm,1.0s
MA2 MLR MLR
comp=Z,893nm,18.0s
MA2 Magadan 84.92 343 P P 15 15 07.1 -1.8
MA2 IAmb IAmb 15 15 13.5
comp=Z,76nm,1.0s
MA2 IAMs_20 IAMs_20 15 46 16.7
comp=Z,4µm,22.0s
MA2 Magadan 84.92 343 P P 15 15 10.1 +1.3
L20K Farewell, AK 84.92 10 P P 15 15 11.6 +2.7
baz=200
F10A Beach Ranch, E 84.92 37 P P 15 15 08.6 -0.7
F10A IAmb IAmb 15 15 22.2

comp=Z,77nm,1.1s
**KNK Knik Glacier 84.92 13** P **P** **15 15 08.1 -0.8**
**KNK Knik Glacier 84.92 13** P **P** **15 15 09.6 +0.7**
baz=205,SNR=14
**PMR Palmer 84.95 12** P **P** **15 15 07.8 -1.1**
PMR pmax pmax
comp=Z,61nm,1.1s
**PMR Palmer 84.95 12** P **P** **15 15 07.8 -1.1**
PMR IAmb IAmb 15 15 21.1
comp=Z,60nm,1.1s
**PMR Palmer 84.95 12** P **P** **15 15 09.3 +0.4**
baz=205,SNR=14
**TTA Tatalina 85.02 9** P **P** **15 15 08.8 -0.6**
TTA pmax pmax
comp=Z,72nm,1.1s
**TTA Tatalina 85.02 9** P **P** **15 15 08.8 -0.6**
TTA IAmb IAmb 15 15 16.4
comp=Z,72nm,1.1s
**TTA Tatalina 85.02 9** P **P** **15 15 10.3 +0.8**
baz=198,SNR=46
**MNTX Cornudas Mount 85.06 54** P **P** **15 15 12.9 +2.6**
baz=242
**Y22D IRIS PASSCAL I 85.06 51** IAMs_20 IAMs_20 15 44 32.2
comp=Z,3µm,22.0s
**Y22D IRIS PASSCAL I 85.06 51** P **P** **15 15 13.7 +3.3**
baz=241
**LENM Lemitar 85.07 51** P **P** **15 15 08.9 -1.6**
**BERG Berg Lake 85.08 15** P **P** **15 15 09.1 -0.6**
BERG IAMs_20 IAMs_20 15 46 48.2
comp=Z,4µm,20.0s
**PLID Pearl Lake 85.08 38** P **P** **15 15 09.5 -0.9**
PLID IAmb IAmb 15 15 17.4
comp=Z,65nm,1.5s
PLID IAMs_20 IAMs_20 15 49 06.8
comp=Z,4µm,19.0s
**SNH Sunshine Point 85.11 16** IAMs_20 IAMs_20 15 46 28.9
comp=Z,4µm,19.0s
**HVU Hansel Valley 85.12 42** P **P** **15 15 09.5 -1.0**
HVU pmax pmax
comp=Z,45nm,1.2s
**HVU Hansel Valley 85.12 42** P **P** **15 15 09.5 -1.0**
HVU IAmb IAmb 15 15 33.3
comp=Z,45nm,1.2s
**HLID Hailey 85.12 40** P **P** **15 15 11.7 +1.1**
baz=235,SNR=24
**PAYG Puerto Ayora 85.20 89** IAMs_20 IAMs_20 15 43 13.8
comp=Z,5µm,21.0s
**DIV Divide 85.24 14** P **P** **15 15 10.1 -0.5**
**B08A Colville Reser 85.26 34** P **P** **15 15 10.5 -0.4**
B08A IAmb IAmb 15 15 23.4
comp=Z,52nm,1.3s
**TXAR Lajitas Array 85.28 56** P **P** **15 15 12.5 +1.0**
comp=Z,7.8nm,0.9s,baz=221,slow=5.0,SNR=59
TXAR PKKPbc **PKKPbc** **15 33 23.3 +5.8**
comp=Z,1.0nm,1.0s,baz=123,slow=4.6,SNR=4.1
TXAR PKPPKP P'P'df 15 41 32.2 +10
comp=Z,1.2nm,1.1s,baz=132,slow=3.7,SNR=3.6
TXAR LR LR 15 45 12.8
comp=Z,3µm,22.0s,baz=238,slow=30
**SML Sawmill 85.30 13** P **P** **15 15 10.1 -0.7**
SML IAmb IAmb 15 15 26.5
comp=Z,122nm,1.5s
**MESA MESA 85.33 16** P **P** **15 15 10.6 -0.6**
MESA IAMs_20 IAMs_20 15 46 34.9
comp=Z,4µm,20.0s
**WAX Waxell Ridge 85.34 16** P **P** **15 15 10.2 -0.8**
WAX IAMs_20 IAMs_20 15 46 36.0
comp=Z,5µm,19.0s
**BMRM Bremner River 85.36 15** P **P** **15 15 09.8 -1.4**
**BMRM Bremner River 85.36 15** P **P** **15 15 12.0 +0.8**
baz=209,SNR=19
**TIA Tai'an 85.41 311** ⇓P **P** **15 15 15.3 +3.4**
TIA S **S** **15 25 44.1 +1.6**
TIA pmax pmax
comp=Z,27nm,1.3s
TIA pmax pmax
comp=Z,450nm,6.9s
TIA LR LR
comp=Z,2µm,20.8s
TIA LR LR
comp=Z,1µm,23.1s
TIA LR LR
comp=Z,3µm,21.1s
**CUT Chulitna 85.47 11** P **P** **15 15 10.2 -1.3**
CUT IAMs_20 IAMs_20 15 45 02.4
comp=Z,4µm,22.0s
**CUT Chulitna 85.47 11** P **P** **15 15 11.6 0.0**
baz=204,SNR=18
**GULI GuiLin 85.49 299** ⇑P P 15 15 18.9 +6.4
**GULI GuiLin 85.49 299** S **S** **15 25 51.8 +8.0**
GULI pmax pmax
comp=Z,30nm,1.2s
GULI LR LR
comp=N,1µm,19.2s
GULI LR LR
comp=E,2µm,24.2s
GULI LR LR
comp=Z,3µm,25.6s
**MVCO Mesa Verde 85.51 47** IAMs_20 IAMs_20 15 43 57.7
comp=Z,3µm,22.0s
**MVCO Mesa Verde 85.51 47** P **P** **15 15 15.2 +2.5**
baz=240
**KLU Klutina 85.53 14** P **P** **15 15 11.1 -0.9**
KLU IAmb IAmb 15 15 27.1
comp=Z,84nm,1.2s
KLU IAMs_20 IAMs_20 15 46 28.0
comp=Z,4µm,21.0s
**KLU Klutina 85.53 14** P **P** **15 15 11.7 -0.3**
baz=208,SNR=7.0
**SCM Sheep Creek Mo 85.53 13** P **P** **15 15 11.1 -0.9**
SCM pmax pmax
comp=Z,151nm,1.3s
**SCM Sheep Creek Mo 85.53 13** P **P** **15 15 11.1 -0.9**
**YAH Yahtse 85.54 16** P **P** **15 15 11.6 -0.7**
YAH IAmb IAmb 15 15 25.3
comp=Z,52nm,0.9s
YAH IAMs_20 IAMs_20 15 46 33.4
comp=Z,4µm,19.0s
**PPLA Purkeypile 85.59 10** P **P** **15 15 10.4 -1.9**
**ISLE Juniper Island 85.60 16** P **P** **15 15 11.7 -0.8**
ISLE IAMs_20 IAMs_20 15 46 54.9
comp=Z,4µm,20.0s
**IPM Ipoh 85.60 276** P **P** **15 15 10.6 -2.8**
IPM IAMs_20 IAMs_20 15 58 51.3
comp=Z,4µm,20.0s
**IPM Ipoh 85.60 276** P **P** **15 15 13.0 -0.4**
**IPM Ipoh 85.60 276** P **P** **15 15 13.7 +0.3**
comp=Z,26nm,0.9s
**ANM Nome 85.62 4** IAMs_20 IAMs_20 15 48 00.0
comp=Z,3µm,21.0s
**ANM Nome 85.62 4** P **P** **15 15 12.9 +0.7**
baz=189,SNR=13
**K20K Telida 85.72 9** P **P** **15 15 11.9 -0.9**
K20K IAmb IAmb 15 15 25.3
comp=Z,102nm,1.1s
**K20K Telida 85.72 9** P **P** **15 15 13.0 +0.2**
baz=200
**TABL Table Mountain 85.77 16** P **P** **15 15 12.9 -0.4**
TABL IAmb IAmb 15 15 26.0
comp=Z,45nm,0.9s
TABL IAMs_20 IAMs_20 15 46 50.4
comp=Z,4µm,20.0s
**PV23 Carpenter Ridg 85.79 46** P **P** **15 15 12.2 -1.9**
**ANMO Albuquerque 85.82 50** LR LR 15 48 50.6
comp=Z,3µm,18.1s,baz=240,slow=32
**ANMO Albuquerque 85.82 50** *c iP* **P** **15 15 15.7 +1.5**
ANMO pmax pmax
comp=Z,88nm,1.6s
ANMO MLR MLR
comp=Z,3µm,17.0s
**ANMO Albuquerque 85.82 50** IAMs_20 IAMs_20 15 45 06.3
comp=Z,3µm,21.0s
**ANMO Albuquerque 85.82 50** P **P** **15 15 16.1 +1.9**
baz=241
**VRDI Verde Repeater 85.87 15** P **P** **15 15 12.7 -1.1**
VRDI IAmb IAmb 15 15 26.4
comp=Z,75nm,1.0s
**N25K Chitina, Valde 85.93 14** P **P** **15 15 13.1 -0.9**
N25K IAmb IAmb 15 15 20.1
comp=Z,64nm,0.9s
N25K IAMs_20 IAMs_20 15 44 51.6
comp=Z,3µm,22.0s
**N25K Chitina, Valde 85.93 14** P **P** **15 15 13.5 -0.5**
baz=209,SNR=25
**GLB Gilahina Butte 85.97 15** P **P** **15 15 13.0 -1.1**
GLB IAmb IAmb 15 15 20.2
comp=Z,46nm,1.0s
**M24K Tolsona, Glenn 86.02 13** P **P** **15 15 16.0 +1.6**
baz=207
**PV07 Paradox Valley 86.03 46** P **P** **15 15 14.2 -1.0**
**CAST Castle Rocks 86.09 10** P **P** **15 15 13.1 -1.5**
CAST IAmb IAmb 15 15 25.6
comp=Z,70nm,1.1s
CAST IAMs_20 IAMs_20 15 52 42.7
comp=Z,4µm,20.0s
**CAST Castle Rocks 86.09 10** P **P** **15 15 13.2 -1.5**
baz=202,SNR=26
**WAT6 Susitna Watana 86.12 12** P **P** **15 15 14.6 -0.4**
baz=206,SNR=36
**BARN Barnard Glacie 86.16 16** P **P** **15 15 14.2 -1.1**
BARN IAmb IAmb 15 15 28.1
comp=Z,78nm,1.0s
BARN IAMs_20 IAMs_20 15 47 12.8
comp=Z,4µm,20.0s
**KULM Kulim 86.25 277** IAMs_20 IAMs_20 15 59 26.3
comp=Z,3µm,20.0s
**KULM Kulim 86.25 277** P **P** **15 15 18.0 +1.4**
**NEW Newport 86.36 35** LR LR 15 46 07.6
comp=Z,3µm,21.7s,baz=232,slow=30
**NEW Newport 86.36 35** P **P** **15 15 16.3 -0.1**
NEW pmax pmax
comp=Z,19nm,1.2s
**NEW Newport 86.36 35** P **P** **15 15 16.3 -0.1**
**NEW Newport 86.36 35** P **P** **15 15 17.3 +0.9**
baz=233
**KTH Kantishna Hill 86.42 11** P **P** **15 15 15.1 -1.2**
KTH IAmb IAmb 15 15 27.0
comp=Z,100nm,1.1s
KTH IAMs_20 IAMs_20 15 52 33.2
comp=Z,4µm,20.0s
**TRF Thorofare Moun 86.43 11** P **P** **15 15 15.3 -1.2**
TRF IAMs_20 IAMs_20 15 52 43.7
comp=Z,4µm,20.0s
**TRF Thorofare Moun 86.43 11** P **P** **15 15 16.4 -0.1**
baz=203,SNR=25
**TNA Tin City 86.46 3** P **P** **15 15 15.6 -0.8**
TNA IAmb IAmb 15 15 23.7
comp=Z,57nm,1.1s
**TNA Tin City 86.46 3** P **P** **15 15 16.7 +0.4**
baz=187,SNR=24
**J20K Nowinta River 86.48 9** P **P** **15 15 15.8 -0.8**
J20K IAmb IAmb 15 15 22.6
comp=Z,53nm,0.9s
**J20K Nowinta River 86.48 9** P **P** **15 15 16.6 +0.1**
baz=200
**CHUM Lake Minchumin 86.49 10** P **P** **15 15 15.2 -1.4**
baz=202,SNR=34
**SKAG Skagway 86.61 19** P **P** **15 15 18.8 +1.6**
baz=217
**DHY Denali Highway 86.64 12** P **P** **15 15 17.1 -0.4**
DHY IAmb IAmb 15 15 27.7
comp=Z,48nm,1.1s
**DHY Denali Highway 86.64 12** P **P** **15 15 17.8 +0.2**
baz=206,SNR=14
**GCSA Galena City Sc 86.64 8** P **P** **15 15 18.0 +0.7**
baz=197
**RND Reindeer 86.66 12** P **P** **15 15 16.3 -1.2**
RND pmax pmax
comp=Z,178nm,1.2s
**RND Reindeer 86.66 12** P **P** **15 15 16.3 -1.2**
RND IAMs_20 IAMs_20 15 46 11.6
comp=Z,3µm,22.0s
**AHID Auburn Hatcher 86.70 42** IAMs_20 IAMs_20 15 50 30.8
comp=Z,3µm,18.0s
**SYO Syowa Base 86.78 192** ⇓*i*pP **P** **15 15 19.4 +1.3**
**SYO Syowa Base 86.78 192** ⇑*i*sP sP 15 15 22.6 -2.4
**BPAW Bear Paw Mtn. 86.91 10** P **P** **15 15 17.5 -1.2**
BPAW IAmb IAmb 15 15 29.0
comp=Z,47nm,1.4s
**BPAW Bear Paw Mtn. 86.91 10** P **P** **15 15 17.7 -0.9**
baz=203
**RPSI Rantau Prapat 86.92 274** P **P** **15 15 19.1 -0.8**
**S22A 4UR Ranch, Cre 86.92 48** P **P** **15 15 21.8 +2.0**
baz=240,SNR=10
**YUK6 Outpost Mounta 86.94 17** P **P** **15 15 19.2 0.0**
baz=214
**MCK McKinley 86.94 11** P **P** **15 15 17.7 -1.1**
MCK pmax pmax
comp=Z,95nm,1.0s
**MCK McKinley 86.94 11** P **P** **15 15 17.7 -1.1**
MCK IAMs_20 IAMs_20 15 45 47.1
comp=Z,4µm,22.0s
**MCK McKinley 86.94 11** P **P** **15 15 18.0 -0.9**
baz=205,SNR=41
**PAX Paxson 86.94 13** P **P** **15 15 18.0 -0.9**
PAX pmax pmax
comp=Z,62nm,1.4s
**PAX Paxson 86.94 13** P **P** **15 15 18.0 -0.9**
PAX IAmb IAmb 15 15 30.4
comp=Z,62nm,1.4s
**PAX Paxson 86.94 13** P **P** **15 15 19.0 +0.1**
baz=208,SNR=16
**PSI Prapat 86.96 274** P **P** **15 15 19.1 -1.1**
comp=Z,7.5nm,0.8s,baz=150,slow=8.3,SNR=2.7
PSI LR LR 15 55 28.7
comp=Z,3µm,20.5s,baz=138,slow=37
**M26K Nabesna, AK 87.00 14** P **P** **15 15 18.5 -0.6**
M26K IAMs_20 IAMs_20 15 54 45.2
comp=Z,3µm,18.0s
**M26K Nabesna, AK 87.00 14** P **P** **15 15 18.0 -1.1**
baz=210
**HYT Haines Junctio 87.08 18** P **P** **15 15 18.7 -1.0**
**HYT Haines Junctio 87.08 18** P **P** **15 15 20.4 +0.7**
baz=215
**YUK3 Moose Creek 87.08 16** P **P** **15 15 20.5 +0.7**
baz=212,SNR=29
**O20A White River Ci 87.16 45** P **P** **15 15 22.4 +1.7**
baz=240,SNR=9.0
**PLCA Paso Flores 87.17 133** P **P** **15 15 22.4 +1.6**
comp=Z,16nm,1.1s,baz=234,slow=5.1,SNR=22
PLCA PKKPbc **PKKPbc** **15 33 17.0 +4.5**
comp=Z,2.6nm,1.0s,baz=68,slow=5.0,SNR=4.0
PLCA LR LR 15 45 20.9
comp=Z,3µm,21.9s,baz=256,slow=29
**TPAW Teton Pass 87.18 41** IAMs_20 IAMs_20 15 55 23.5
comp=Z,3µm,18.0s
**DLMT Dillon 87.21 39** P **P** **15 15 19.4 -1.3**
DLMT IAMs_20 IAMs_20 15 45 59.2
comp=Z,4µm,22.0s
**M27K Edge Creek, AK 87.22 15** P **P** **15 15 20.2 -0.2**
M27K IAMs_20 IAMs_20 15 53 49.2
comp=Z,3µm,18.0s
**M27K Edge Creek, AK 87.22 15** P **P** **15 15 21.5 +1.2**
baz=211
**BWN Browne 87.24 11** P **P** **15 15 18.9 -1.3**
BWN IAMs_20 IAMs_20 15 53 20.0
comp=Z,3µm,20.0s
**MSO Missoula 87.26 37** P **P** **15 15 19.3 -1.6**
MSO IAMs_20 IAMs_20 15 46 11.4
comp=Z,5µm,22.0s
**MSO Missoula 87.26 37** P **P** **15 15 21.7 +0.8**
baz=235
**SNOW Snow King Moun 87.28 41** IAMs_20 IAMs_20 15 50 42.3
comp=Z,3µm,19.0s
**SEY Seymchan 87.41 346** ⇓*i*P **P** **15 15 18.9 -2.2**
**MOOW Moose Ponds 87.44 41** IAMs_20 IAMs_20 15 45 30.5
comp=Z,3µm,22.0s
**SNAA Sanae 87.45 178** P **P** **15 15 20.9 -0.6**
**SNAA Sanae 87.45 178** LR LR 15 53 01.7
comp=Z,5µm,18.6s,baz=197,slow=35
**SNAA Sanae 87.45 178** ⇓*i*P **P** **15 15 23.0 +1.5**
SNAA pmax pmax
comp=Z,111nm,1.8s
SNAA MLR MLR
comp=Z,6µm,16.0s
**SNAA Sanae 87.45 178** P **P** **15 15 20.1 -1.4**
SNAA IAmb IAmb 15 15 26.8
comp=Z,51nm,1.2s
**L26K Log Cabin Wild 87.46 14** P **P** **15 15 20.3 -1.1**
L26K IAmb IAmb 15 15 33.6
comp=Z,60nm,1.2s
L26K IAMs_20 IAMs_20 15 48 01.0
comp=Z,3µm,20.0s
**L26K Log Cabin Wild 87.46 14** P **P** **15 15 22.2 +0.9**
baz=210,SNR=10
**LOHW Long Hollow 87.46 41** IAMs_20 IAMs_20 15 55 24.9
comp=Z,3µm,18.0s
**VNA3 Neumayer Olymp 87.49 175** P **P** **15 15 20.1 -1.5**
**BVCY Beaver Creek 87.52 15** P **P** **15 15 22.1 +0.5**
baz=212,SNR=17
**CMIG Matias Romero 87.52 71** LR LR 15 45 00.4
comp=Z,5µm,21.4s,baz=248,slow=29
**LRM Limekiln Ridge 87.55 39** P **P** **15 15 20.9 -1.6**
**DLBC Dease Lake 87.56 22** LR LR 15 48 25.3
comp=Z,2µm,18.4s,baz=253,slow=31
**DLBC Dease Lake 87.56 22** P **P** **15 15 21.7 -0.3**
**BW06 Boulder Array 87.66 42** IAMs_20 IAMs_20 15 55 32.4
comp=Z,4µm,18.0s
**BW06 Boulder Array 87.66 42** P **P** **15 15 24.3 +1.2**
baz=238
**PD31 Pinedale Array 87.66 42** P **P** **15 15 22.4 -0.6**
**PDAR Pinedale Array 87.66 42** P **P** **15 15 24.1 +1.0**
comp=Z,3.0nm,0.7s,baz=206,slow=2.7,SNR=24
PDAR PKKPbc **PKKPbc** **15 33 14.9 +2.3**
comp=Z,1.2nm,1.0s,baz=47,slow=3.0,SNR=5.5
PDAR LR LR 15 50 57.6
comp=Z,2µm,18.4s,baz=243,slow=33
**PDAR Pinedale Array 87.66 42** P **P** **15 15 22.4 -0.7**
**HNS HongShan 87.68 312** ⇓P **P** **15 15 22.3 -0.6**
HNS S **S** **15 26 10.4 +5.9**
HNS pmax pmax
comp=Z,39nm,1.4s
HNS pmax pmax
comp=Z,540nm,6.2s
HNS LR LR
comp=Z,2µm,21.7s
HNS LR LR
comp=Z,2µm,22.8s
**GSI Gunungsitoli 87.68 272** P P 15 15 33.2 +10
**NEA2 Nenana 87.70 11** P **P** **15 15 21.2 -1.2**
NEA2 IAmb IAmb 15 15 28.9
comp=Z,51nm,1.5s
NEA2 IAMs_20 IAMs_20 15 53 43.2
comp=Z,4µm,20.0s
**NEA2 Nenana 87.70 11** P **P** **15 15 22.0 -0.5**
baz=205,SNR=12
**WHY Whitehorse 87.70 19** P **P** **15 15 24.3 +1.6**
baz=217
**I21K Tanana 87.75 10** P **P** **15 15 22.2 -0.4**
**I21K Tanana 87.75 10** P **P** **15 15 22.8 +0.1**
baz=202,SNR=43
**RIDG Independent Ri 87.76 13** P **P** **15 15 22.5 -0.3**
RIDG IAMs_20 IAMs_20 15 46 47.2
comp=Z,3µm,21.0s
**RIDG Independent Ri 87.76 13** P **P** **15 15 23.2 +0.4**
baz=208,SNR=18
**WRH Wood River Hil 87.77 11** P **P** **15 15 21.5 -1.3**
WRH IAMs_20 IAMs_20 15 46 46.0
comp=Z,3µm,22.0s
**MLY Manley 87.81 10** P **P** **15 15 21.6 -1.4**
MLY IAmb IAmb 15 15 33.9
comp=Z,50nm,1.2s
**MLY Manley 87.81 10** P **P** **15 15 22.7 -0.3**
baz=203,SNR=29
**L27K Beaver Creek, 87.84 15** P **P** **15 15 22.7 -0.5**
L27K IAmb IAmb 15 15 30.4
comp=Z,55nm,1.4s
L27K IAMs_20 IAMs_20 15 54 19.5
comp=Z,3µm,19.0s
**L27K Beaver Creek, 87.84 15** P **P** **15 15 22.3 -0.9**
baz=211
**DOT Dot Lake 87.84 13** P **P** **15 15 22.2 -0.9**
**SDCO Great Sand Dun 87.85 48** P **P** **15 15 26.1 +2.0**
baz=241
**BCAR Beaver Creek A 87.85 15** P **P** **15 15 22.6 -0.7**
**H17A Grant Village 87.89 40** P **P** **15 15 26.1 +1.9**
baz=238
**BOZ Bozeman (W) 87.91 39** P **P** **15 15 22.5 -1.6**
BOZ pmax pmax
comp=Z,39nm,1.4s
**BOZ Bozeman (W) 87.91 39** P **P** **15 15 22.5 -1.6**
BOZ IAmb IAmb 15 15 42.7
comp=Z,39nm,1.4s
BOZ IAMs_20 IAMs_20 15 45 57.7
comp=Z,4µm,22.0s
**BOZ Bozeman (W) 87.91 39** P **P** **15 15 25.5 +1.4**
baz=237,SNR=15
**HDA Harding Lake 87.93 12** P **P** **15 15 22.6 -0.9**
**HDA Harding Lake 87.93 12** P **P** **15 15 22.9 -0.7**
baz=206,SNR=15
**YHH Holmes Hill 87.94 40** P **P** **15 15 23.3 -1.1**
**BJT Baijiatuao 87.95 314** P **P** **15 15 21.2 -3.0**
BJT pmax pmax
comp=Z,45nm,1.3s
BJT MLR MLR
comp=Z,2µm,20.0s
**BJT Baijiatuao 87.95 314** P **P** **15 15 21.2 -3.0**
BJT IAmb IAmb 15 15 28.9
comp=Z,44nm,1.3s
**BJI Beijing 87.95 314** P **P** **15 15 23.3 -0.9**
BJI pP **PcP** **15 15 26.1 +0.1**
BJI SKS **SKSac** **15 25 51.6 -0.5**
BJI S **S** **15 26 09.5 +2.5**
BJI sS **sS** **15 26 20.4 +5.8**
BJI SS **SS** **15 31 57.3 +1.9**
BJI pmax pmax
comp=Z,27nm,1.9s
BJI pmax pmax
comp=Z,570nm,6.0s
BJI LR LR
comp=Z,1µm,17.5s
BJI LR LR
comp=Z,1µm,16.9s
BJI LR LR
comp=Z,2µm,18.6s
**LYN LuoYang 87.95 308** ⇓*i*P **P** **15 15 24.0 -0.4**
LYN S **S** **15 26 04.5 -2.8**
LYN SS **SS** **15 31 58.3 +2.6**
LYN pmax pmax
comp=Z,10.0nm,0.5s
LYN pmax pmax
comp=Z,280nm,7.1s
LYN LR LR
comp=Z,1µm,22.6s
LYN LR LR
comp=Z,2µm,22.4s
**VNA2 Neumayer--Watz 87.95 176** P **P** **15 15 23.5 -0.3**
baz=180,slow=3.8
**CCB Clear Creek Bu 87.98 12** P **P** **15 15 22.4 -1.3**
**P33M Teslin, Yukon 87.99 20** P **P** **15 15 24.8 +0.8**
baz=219
**MSTX Muleshoe 88.06 53** P **P** **15 15 26.9 +1.9**
baz=243
**H21K Melozitna Rive 88.07 9** P **P** **15 15 23.1 -1.1**
H21K IAmb IAmb 15 15 36.3
comp=Z,43nm,1.1s
**H21K Melozitna Rive 88.07 9** P **P** **15 15 25.0 +0.7**
baz=201
**SCRK Sand Creek 88.15 13** P **P** **15 15 23.8 -1.0**
SCRK IAmb IAmb 15 15 36.8
comp=Z,58nm,1.3s
SCRK IAMs_20 IAMs_20 15 47 00.2
comp=Z,3µm,22.0s
**SCRK Sand Creek 88.15 13** P **P** **15 15 25.3 +0.5**
baz=209,SNR=13
**I23K Minto, Yukon-K 88.16 11** IAMs_20 IAMs_20 15 54 26.2
comp=Z,3µm,20.0s
**I23K Minto, Yukon-K 88.16 11** P **P** **15 15 24.1 -0.4**
baz=204,SNR=11
**VNA1 Neumayer--Stat 88.17 176** P **P** **15 15 24.2 -0.6**
**TCOL CIGO, UAF Yank 88.17 11** P **P** **15 15 23.5 -1.2**
TCOL IAmb IAmb 15 15 30.7
comp=Z,70nm,1.1s
TCOL IAMs_20 IAMs_20 15 46 35.8
comp=Z,4µm,22.0s
**TCOL CIGO, UAF Yank 88.17 11** P **P** **15 15 22.7 -1.9**
baz=206,SNR=16
**COLA College 88.18 11** *c iP* **P** **15 15 23.0 -1.6**
COLA pmax pmax
comp=Z,77nm,1.2s
COLA MLR MLR
comp=Z,2µm,18.0s
**COLA College 88.18 11** P **P** **15 15 23.1 -1.5**
COLA IAmb IAmb 15 15 30.7
comp=Z,64nm,1.0s
**COLA College 88.18 11** P **P** **15 15 22.7 -1.9**
baz=206
**MDM Murphy Dome 88.18 11** P **P** **15 15 23.3 -1.5**
MDM IAmb IAmb 15 15 30.7
comp=Z,75nm,1.2s
MDM IAMs_20 IAMs_20 15 53 48.0
comp=Z,3µm,20.0s
**833A Chaparral WMA, 88.21 59** P **P** **15 15 26.4 +0.7**
baz=245
**IMAR Indian Mountai 88.24 9** P **P** **15 15 24.3 -0.6**
**IL31 88.27 12** P **P** **15 15 23.9 -1.2**
IL31 IAmb IAmb 15 15 31.4
comp=Z,69nm,1.2s
**ILAR Eielson Array 88.27 12** P **P** **15 15 24.4 -0.8**

comp=Z,16nm,1.1s,baz=218,slow=6.3,SNR=31
ILAR LR LR 15 47 22.3
comp=Z,2µm,21.6s,baz=217,slow=30
**ILAR Eielson Array 88.27 12** P **P** **15 15 23.4 -1.8**
**T25A Trinidad 88.32 49** P **P** **15 15 27.1 +0.7**
baz=242
**ENH Enshi 88.33 303** P **P** **15 15 24.1 -2.2**
**NVL N'lazarevskaya 88.36 182** ⇑*i*P P 15 15 36.9 +11
NVL *i* 15 18 58.3
NVL *i* PPP PPP 15 20 55.8
NVL *e*S S 15 25 57.4 -13
NVL pmax pmax
comp=Z,72nm,1.4s
NVL MLR MLR
comp=N,5µm,17.0s
NVL MLR MLR
comp=E,3µm,17.0s
**J25K Salcha River, 88.42 12** P **P** **15 15 25.2 -0.7**
J25K IAmb IAmb 15 15 31.9
comp=Z,47nm,1.2s
J25K IAMs_20 IAMs_20 15 54 10.4
comp=Z,3µm,19.0s
**J25K Salcha River, 88.42 12** P **P** **15 15 26.3 +0.4**
baz=208,SNR=25
**POKR Poker Plat Res 88.47 11** P **P** **15 15 25.1 -1.0**
POKR IAmb IAmb 15 15 37.4
comp=Z,45nm,1.1s
**POKR Poker Plat Res 88.47 11** P **P** **15 15 25.4 -0.7**
baz=206
**Q24A Divide 88.67 47** P **P** **15 15 26.6 -1.5**
**Q24A Divide 88.67 47** P **P** **15 15 29.2 +1.2**
baz=242
**J26L Joseph Creek 88.70 13** P **P** **15 15 28.1 +0.8**
baz=210
**H23K Yukon River 88.75 10** P **P** **15 15 26.4 -1.0**
**H23K Yukon River 88.75 10** P **P** **15 15 26.6 -0.8**
baz=204
**ISCO Idaho Springs 88.75 46** P **P** **15 15 28.1 -0.3**
ISCO pmax pmax
comp=Z,10.0nm,2.3s
**ISCO Idaho Springs 88.75 46** P **P** **15 15 30.5 +2.1**
baz=241
**JCT Junction City 88.80 57** IAMs_20 IAMs_20 15 46 19.4
comp=Z,4µm,22.0s
**JCT Junction City 88.80 57** P **P** **15 15 28.8 +0.3**
baz=245
**GYA Guiyang 89.01 299** ⇑P **P** **15 15 32.3 +2.6**
GYA PP **PP** **15 19 03.6 +3.8**
GYA S **S** **15 26 17.5 -0.4**
GYA pmax pmax
comp=Z,13nm,1.5s
GYA pmax pmax
comp=Z,490nm,4.0s
GYA LR LR
comp=Z,640nm,27.4s
GYA LR LR
comp=Z,900nm,20.0s
GYA LR LR
comp=Z,2µm,20.8s
**H24K Noodor Dome 89.04 11** P **P** **15 15 26.8 -2.0**
H24K IAMs_20 IAMs_20 15 54 53.1
comp=Z,3µm,20.0s
**N23A Red Feather La 89.06 45** P **P** **15 15 31.6 +1.8**
baz=241
**RLMT Red Lodge 89.07 40** P **P** **15 15 31.5 +1.8**
baz=239
**M31M Drury Creek, Y 89.08 18** P **P** **15 15 27.6 -1.4**
M31M IAMs_20 IAMs_20 15 53 04.0
comp=Z,3µm,19.0s
**PRP Porcupine Dome 89.19 12** P **P** **15 15 28.8 -0.9**
PRP IAmb IAmb 15 15 41.5
comp=Z,38nm,1.0s
**PRP Porcupine Dome 89.19 12** P **P** **15 15 27.8 -1.8**
baz=208,SNR=19
**WTLY Watson Lake, Y 89.23 21** P **P** **15 15 31.0 +1.2**
baz=223
**ZEA Zeya 89.25 330** *e*P **P** **15 15 30.0 0.0**
ZEA *e* 15 26 02.9
ZEA *e* 15 26 18.4
ZEA *e* 15 27 25.9
ZEA pmax pmax
comp=N,20nm,1.6s
ZEA pmax pmax
comp=Z,40nm,1.5s
ZEA pmax pmax
comp=E,200nm,7.0s
ZEA pmax pmax
comp=N,200nm,5.3s
ZEA pmax pmax
comp=Z,300nm,6.3s
ZEA pmax pmax
comp=E,600nm,12.1s
**RDOG Red Dog Mine 89.25 5** P **P** **15 15 28.9 -0.8**
RDOG IAMs_20 IAMs_20 15 52 51.9
comp=Z,3µm,20.0s
**RDOG Red Dog Mine 89.25 5** P **P** **15 15 29.9 +0.2**
baz=192
**AMTX Amarillo 89.27 52** P **P** **15 15 29.4 -1.3**
AMTX IAMs_20 IAMs_20 15 50 57.7
comp=Z,5µm,19.0s
**AMTX Amarillo 89.27 52** P **P** **15 15 31.6 +0.9**
baz=244
**DAWY Dawson 89.27 15** P **P** **15 15 29.1 -0.8**
DAWY IAmb IAmb 15 15 43.0
comp=Z,44nm,1.1s
**DAWY Dawson 89.27 15** P **P** **15 15 29.6 -0.4**
baz=213,SNR=26
**EFI East Falkland 89.35 146** P **P** **15 15 31.5 +0.8**
EFI pmax pmax
comp=Z,197nm,1.4s
**EFI East Falkland 89.35 146** IAMs_20 IAMs_20 15 51 57.5
comp=Z,4µm,19.0s
**TIY Taiyuan 89.42 311** P **P** **15 15 32.8 +1.5**
TIY pmax pmax
comp=Z,380nm,5.8s
TIY LR LR
comp=Z,1µm,18.9s
TIY LR LR
comp=Z,2µm,22.7s
TIY LR LR
comp=Z,3µm,24.0s
**EGAK Eagle 89.46 14** P **P** **15 15 29.5 -1.3**
EGAK IAmb IAmb 15 15 43.0
comp=Z,77nm,1.3s
EGAK IAMs_20 IAMs_20 15 47 18.0
comp=Z,4µm,22.0s
**EGAK Eagle 89.46 14** P **P** **15 15 30.7 -0.1**
baz=212,SNR=32
**K22A Casper 89.53 43** P **P** **15 15 33.2 +1.3**
baz=241
**LHMI Lhok Sumawe 89.66 276** IAMs_20 IAMs_20 16 00 10.8
comp=Z,5µm,20.0s
**MAYO Mayo, Yukon 89.78 17** P **P** **15 15 33.4 +1.1**
baz=216
**BILL Bilibino 89.78 353***c i*P **P** **15 15 31.8 -0.4**
BILL *e* 15 19 05.7
BILL *i* S **SKSac** **15 26 05.6 +3.9**
BILL *i* SS **SS** **15 32 20.2 -0.6**
BILL pmax pmax
comp=Z,88nm,3.5s
**BILL Bilibino 89.78 353** P **P** **15 15 31.1 -1.1**
BILL IAMs_20 IAMs_20 15 51 39.6
comp=Z,3µm,20.0s
**ABTX Abilene, Hawle 89.83 55** P **P** **15 15 32.3 -1.0**
**ABTX Abilene, Hawle 89.83 55** P **P** **15 15 35.3 +2.0**
baz=245
**J29M Klondike Camp 89.88 15** P **P** **15 15 34.2 +1.3**
baz=214,SNR=7.4
**XLT XiLinHaoTe 89.92 318** *e*P **P** **15 15 32.0 -1.5**
XLT pP pP 15 15 36.9 -1.2
XLT sP sP 15 15 39.0 -0.7
XLT S **S** **15 26 25.8 +0.2**
XLT sS sS 15 26 33.8 +0.6
XLT pmax pmax
comp=Z,6.0nm,1.2s
XLT pmax pmax
comp=Z,410nm,6.0s
XLT LR LR
comp=Z,2µm,19.4s
XLT LR LR
comp=Z,3µm,19.8s
**COLD Coldfoot 89.93 10** P **P** **15 15 32.9 0.0**
COLD IAmb IAmb 15 15 46.2
comp=Z,38nm,1.0s
**COLD Coldfoot 89.93 10** P **P** **15 15 33.4 +0.5**
baz=204,SNR=27

**FYU Fort Yukon 90.18 12** P **P** **15 15 33.4 -0.6**
**EGMT Eagleton 90.30 38** P **P** **15 15 34.5 -0.6**
EGMT IAMs_20 IAMs_20 15 48 18.7
comp=Z,3µm,21.0s
**EGMT Eagleton 90.30 38** P **P** **15 15 36.6 +1.4**
baz=238
**MMPY Sheldon Lake, 90.32 19** P **P** **15 15 36.0 +1.1**
baz=221
**XAN Xi'an 90.37 306** ⇑P **P** **15 15 34.8 -1.0**
XAN pP pP 15 15 39.4 -0.9
XAN PP **PP** **15 19 12.8 +2.4**
XAN SKS **SKSac** **15 26 07.6 +0.8**
XAN S **S** **15 26 27.5 -2.6**
XAN SS **SS** **15 32 31.8 +0.9**
XAN pmax pmax
comp=Z,21nm,1.2s
XAN pmax pmax
comp=Z,490nm,4.9s
XAN LR LR
comp=Z,2µm,25.0s
XAN LR LR
comp=Z,810nm,20.6s
XAN LR LR
comp=Z,3µm,21.3s
**KSCO Kaye Shedlock' 90.43 48** P **P** **15 15 37.0 +0.9**
baz=243
**I29M Ogilvie Camp, 90.61 15** P **P** **15 15 35.6 -0.5**
I29M IAmb IAmb 15 15 42.9
comp=Z,51nm,1.2s
**I29M Ogilvie Camp, 90.61 15** P **P** **15 15 36.5 +0.3**
baz=214,SNR=27
**435B Jarrell 90.66 57** P **P** **15 15 38.0 +0.8**
baz=246
**APG El Apazote 90.68 74** LR LR 15 46 59.5
comp=Z,4µm,21.5s,baz=198,slow=29
**BMAR Burnt Mountain 91.07 11** P **P** **15 15 38.1 -0.1**
**EDM Edmonton 91.21 32** P **P** **15 15 38.7 -0.5**
EDM pmax pmax
comp=Z,64nm,1.1s
**EDM Edmonton 91.21 32** P **P** **15 15 38.7 -0.5**
EDM IAmb IAmb 15 15 50.2
comp=Z,64nm,1.1s
**WHTX Lake Whitney, 91.25 56** P **P** **15 15 40.4 +0.5**
baz=246
**SNET Serv Nac Est T 91.32 76** IAMs_20 IAMs_20 15 46 19.0
comp=Z,4µm,21.0s
**TOLK Toolik Lake Re 91.32 9** P **P** **15 15 39.1 -0.3**
TOLK IAMs_20 IAMs_20 15 55 20.9
comp=Z,3µm,20.0s
**TOLK Toolik Lake Re 91.32 9** P **P** **15 15 39.5 +0.1**
baz=204,SNR=15
**WMOK Wichita Mounta 91.36 53** P **P** **15 15 41.4 +1.0**
WMOK pmax pmax
comp=Z,22nm,1.4s
**HHC Hu-ho-hao-te 91.44 313** *e*P **P** **15 15 40.3 -0.4**
HHC SKS **SKSac** **15 26 11.4 -1.4**
HHC S **S** **15 26 37.4 -2.3**
HHC SS **SS** **15 32 45.5 -0.7**
HHC pmax pmax
comp=Z,33nm,1.3s
HHC pmax pmax
comp=Z,410nm,7.0s
HHC LR LR
comp=Z,760nm,19.0s
HHC LR LR
comp=Z,2µm,18.4s
**LAO LASA Array 91.69 40** IAMs_20 IAMs_20 15 49 04.9
comp=Z,3µm,22.0s
**LAO LASA Array 91.69 40** P **P** **15 15 42.9 +1.2**
baz=241,SNR=9.5
**OGNE Ogallala 91.71 47** IAMs_20 IAMs_20 15 53 09.7
comp=Z,3µm,19.0s
**KMI Kunming 91.74 296** ⇓P **P** **15 15 42.4 -0.2**
KMI pP PcP 15 15 44.9 +1.4
KMI SKS **SKSac** **15 26 14.0 -1.4**
KMI S **S** **15 26 41.5 -1.9**
KMI SS **SS** **15 32 52.9 +1.6**
KMI pmax pmax
comp=Z,13nm,1.5s
KMI pmax pmax
comp=Z,240nm,7.1s
KMI LR LR
comp=Z,1µm,22.9s
KMI LR LR
comp=Z,1µm,22.9s
KMI LR LR
comp=Z,2µm,23.8s
**RSSD Black Hills 91.83 43** P **P** **15 15 41.3 -1.3**
RSSD pmax pmax
comp=Z,67nm,1.2s
**RSSD Black Hills 91.83 43** P **P** **15 15 41.3 -1.3**
RSSD IAmb IAmb 15 16 04.5
comp=Z,67nm,1.2s
**RSSD Black Hills 91.83 43** IAMs_20 IAMs_20 15 52 58.7
comp=Z,4µm,19.0s
**RSSD Black Hills 91.83 43** P **P** **15 15 43.5 +0.9**
baz=242
**CBKS Cedar Bluff 92.38 49** IAMs_20 IAMs_20 15 57 33.6
comp=Z,3µm,18.0s
**CBKS Cedar Bluff 92.38 49** P **P** **15 15 46.8 +1.8**
baz=245
**BTO Baotou 92.39 313** *e*P **P** **15 15 45.4 +0.3**
BTO S **S** **15 26 51.4 +3.1**
BTO LR LR
comp=Z,6µm,21.1s
BTO LR LR
comp=Z,6µm,20.9s
**ZON Zonda 92.53 125** P **P** **15 15 45.0 -1.1**
ZON pmax pmax
comp=Z,50nm,1.2s
**ZON Zonda 92.53 125** P **P** **15 15 45.0 -1.1**
ZON IAmb IAmb 15 15 57.7
comp=Z,50nm,1.2s
**CM31 Chiang Mai Arr 92.57 289** pP **P** **15 15 47.0 +0.6**
SNR=15
**CMAR Chiang Mai Arr 92.57 289** P **P** **15 15 45.1 -1.2**
comp=Z,6.0nm,1.0s,baz=111,slow=2.9,SNR=31
CMAR PP **PP** **15 19 34.2 +6.2**
comp=Z,3.4nm,1.1s,baz=119,slow=5.2,SNR=4.8
CMAR PKKPbc **PKKPbc** **15 33 05.6 +6.7**
comp=Z,0.7nm,0.7s,baz=273,slow=3.7,SNR=6.0
CMAR LR LR 15 55 54.9
comp=Z,637nm,19.9s,baz=110,slow=35
**CMAR Chiang Mai Arr 92.57 289** *i* P **P** **15 15 45.7 -0.6**
CMAR pmax pmax
comp=Z,6.0nm,1.0s
**CMAR Chiang Mai Arr 92.57 289** P **P** **15 15 44.0 -2.3**
**CHTO Chiang Mai 92.70 289** P **P** **15 15 45.0 -1.9**
CHTO pmax pmax
comp=Z,21nm,1.1s
**CHTO Chiang Mai 92.70 289** P **P** **15 15 45.0 -1.9**
**PZH PanZhiHua 93.09 297** ⇑P **P** **15 15 47.1 -1.6**
PZH PP **PP** **15 19 37.1 +4.9**
PZH S **SKKSac** **15 26 43.9 +2.5**
PZH sS **sS** **15 27 02.0 -0.8**
PZH SS **SS** **15 33 11.0 +0.5**
PZH pmax pmax
comp=Z,60nm,1.5s
PZH pmax pmax
comp=Z,220nm,6.7s
PZH LR LR
comp=Z,3µm,19.2s
PZH LR LR
comp=Z,2µm,18.4s
PZH LR LR
comp=Z,3µm,19.6s
**CD2 Chengdu 93.10 302** P **P** **15 15 49.3 +0.7**
CD2 SKS **SKSac** **15 26 23.8 +1.4**
CD2 S **S** **15 26 53.6 -1.4**
CD2 SS **SS** **15 33 12.4 +2.0**
CD2 pmax pmax
comp=Z,20nm,1.3s
CD2 pmax pmax
comp=Z,210nm,4.5s
CD2 LR LR
comp=Z,150nm,18.6s
CD2 LR LR
comp=Z,1µm,20.6s
CD2 LR LR
comp=Z,2µm,18.7s
**TGUH Tegucigalpa,Un 93.23 76** IAMs_20 IAMs_20 15 47 17.6
comp=Z,4µm,22.0s
**NATX Nacogdoches 93.35 57** P **P** **15 15 48.8 -0.8**
baz=247
**YAK Yakutsk 93.48 337** P **P** **15 15 48.0 -1.4**
comp=Z,14nm,0.7s,baz=116,slow=1.5,SNR=9.8

YAK LR LR 15 53 00.6
comp=Z,1µm,21.7s,baz=125,slow=32
**YAK Yakutsk 93.48 337** *e*P **P** **15 15 48.1 -1.4**
YAK *e**PP **sP** **15 15 57.2 +1.2**
YAK *e* 15 19 32.4
YAK *e*S **SKSac** **15 26 22.3 -0.6**
YAK *e**SS **SKKSac** **15 26 46.4 +4.0**
YAK *e*SS **SS** **15 33 20.0 +5.7**
YAK pmax pmax
comp=Z,83nm,1.0s
YAK pmax pmax
comp=N,8.0nm,1.0s
YAK pmax pmax
comp=E,8.0nm,1.3s
YAK pmax pmax
comp=Z,288nm,5.8s
YAK pmax pmax
comp=N,138nm,4.0s
YAK pmax pmax
comp=E,87nm,4.3s
YAK smax smax
comp=N,303nm,4.3s
YAK smax smax
comp=E,107nm,4.2s
YAK MLR MLR
comp=Z,2µm,22.0s
YAK MLR MLR
comp=E,1µm,20.0s
**YAK Yakutsk 93.48 337** P **P** **15 15 47.1 -2.4**
YAK IAMs_20 IAMs_20 15 50 53.1
comp=Z,3µm,22.0s
**NNA Nana 93.59 104** LR LR 15 47 39.0
comp=Z,4µm,21.2s,baz=243,slow=29
**NNA Nana 93.59 104** IAMs_20 IAMs_20 15 47 14.6
comp=Z,4µm,22.0s
**DGMT Dagmar 93.75 39** P **P** **15 15 49.8 -1.3**
**DGMT Dagmar 93.75 39** IAMs_20 IAMs_20 15 54 25.1
comp=Z,3µm,19.0s
**DGMT Dagmar 93.75 39** P **P** **15 15 52.6 +1.5**
baz=242,SNR=10
**T35A Sooner Cattle 93.93 52** P **P** **15 15 51.4 -0.8**
**ATAH Atahualpa 93.97 99** LR LR 15 48 22.4
comp=Z,2µm,20.9s,baz=252,slow=29
**JTS Las Juntas de 94.03 81** LR LR 15 47 58.9
comp=Z,3µm,20.5s,baz=310,slow=29
**JTS Las Juntas de 94.03 81** IAMs_20 IAMs_20 15 47 45.1
comp=Z,3µm,21.0s
**TUL1 Leonard 94.07 53** IAMs_20 IAMs_20 15 53 34.9
comp=Z,3µm,20.0s
**TUL1 Leonard 94.07 53** P **P** **15 15 54.7 +1.8**
baz=247
**INK Inuvik 94.12 14** LR LR 15 52 48.7
comp=Z,2µm,19.8s,baz=206,slow=32
**INK Inuvik 94.12 14** P **P** **15 15 51.4 -0.8**
INK pmax pmax
comp=Z,56nm,1.2s
**INK Inuvik 94.12 14** P **P** **15 15 51.4 -0.8**
INK IAmb IAmb 15 16 04.5
comp=Z,56nm,1.2s
**INK Inuvik 94.12 14** P **P** **15 15 51.8 -0.4**
baz=219,SNR=29
**BGNE Belgrade 94.56 47** P **P** **15 15 56.1 +1.2**
baz=246
**HDC Heredia 94.71 81** IAMs_20 IAMs_20 15 47 59.0
comp=Z,3µm,21.0s
**KSU1 Kansas State U 94.72 50** IAMs_20 IAMs_20 15 54 56.7
comp=Z,3µm,18.0s
**KSU1 Kansas State U 94.72 50** P **P** **15 15 57.5 +1.8**
baz=247
**LZH Lanzhou 95.00 307** *e*P **P** **15 15 55.3 -2.0**
LZH pP pP 15 16 01.4 -0.5
LZH sP pwP 15 16 05.5 +1.1
LZH *e*S **S** **15 27 15.8 +4.2**
LZH sS sS 15 27 22.1 +2.9
LZH pmax pmax
comp=Z,8.0nm,1.2s
LZH pmax pmax
comp=Z,210nm,5.4s
LZH LR LR
comp=Z,1µm,17.4s
LZH LR LR
comp=Z,1µm,19.0s
LZH LR LR
comp=Z,4µm,22.0s
**MIAR Mount Ida 95.23 55** P **P** **15 15 57.6 -0.6**
MIAR pmax pmax
comp=Z,35nm,1.5s
**MIAR Mount Ida 95.23 55** P **P** **15 15 57.6 -0.6**
MIAR IAmb IAmb 15 16 10.7
comp=Z,35nm,1.5s
**W39A Magazine 95.32 54** P **P** **15 15 56.6 -1.9**
W39A IAmb IAmb 15 16 11.3
comp=Z,37nm,1.3s
**X40A Basin Creek Fa 95.78 55** IAMs_20 IAMs_20 15 51 36.3
comp=Z,3µm,22.0s
**YKA Yellowknife Ar 95.95 24** P **P** **15 16 00.4 -0.3**
comp=Z,3.0nm,0.7s,baz=240,slow=4.7,SNR=50
YKA PP **PP** **15 19 53.5 +0.1**
comp=Z,1.1nm,0.9s,baz=238,slow=7.3,SNR=4.1
YKA PKKPbc **PKKPdf** **15 32 53.1 +0.2**
comp=Z,0.7nm,0.8s,baz=44,slow=2.4,SNR=6.2
YKA PKPPKP P'P'df 15 41 08.5 +10
comp=Z,0.1nm,0.4s,baz=49,slow=3.3,SNR=3.5
YKA LR LR 15 53 04.9
comp=Z,2µm,20.3s,baz=241,slow=32
**YKA Yellowknife Ar 95.95 24** P **P** **15 15 60.0 -0.8**
**LVC Limon Verde 96.26 117** *e*P P 15 16 09.2 +5.5
**U40A Yellville 96.44 54** IAMs_20 IAMs_20 15 56 18.7
comp=Z,2µm,19.0s
**ECSD EROS Data Cent 96.52 46** P **P** **15 16 03.6 -0.2**
baz=247
**OTAV Otavalo 96.58 92** IAMs_20 IAMs_20 15 48 38.3
comp=Z,4µm,21.0s
**VBMS Vicksburg 96.79 58** IAMs_20 IAMs_20 15 58 12.2
comp=Z,3µm,18.0s
**C36M Paulatuk 97.22 16** P **P** **15 16 05.4 -1.0**
**ULN Ulaanbaatar 97.33 318** ⇓*i*P **P** **15 16 05.7 -1.9**
ULN pmax pmax
comp=Z,11nm,1.4s
ULN MLR MLR
comp=Z,1µm,18.0s
**SONM Songino Array 97.72 318** P **P** **15 16 08.7 -0.6**
comp=Z,1.2nm,0.9s,baz=159,slow=5.4,SNR=5.2
SONM PP **PP** **15 20 06.7 -1.0**
comp=Z,2.9nm,1.3s,baz=141,slow=5.7,SNR=4.0
SONM LR LR 15 57 41.4
comp=Z,946nm,19.3s,baz=116,slow=34
**BOD Bodaibo 97.73 329** *e*P Pdif 15 16 10.8 +1.8
BOD pmax pmax
comp=Z,13nm,1.8s
**SCIA State Center 98.17 48** IAMs_20 IAMs_20 15 51 54.8
comp=Z,3µm,22.0s
**CCM Cathedral Cave 98.25 53** IAMs_20 IAMs_20 15 58 34.3
comp=Z,3µm,18.0s
**AGMN Agassiz Nation 98.72 42** IAMs_20 IAMs_20 16 00 29.0
comp=Z,3µm,18.0s
**A36M Sachs Harbour 98.75 14** **P** **15 16 12.7 -0.5**
A36M IAmb IAmb 15 16 20.4
comp=Z,16nm,0.8s
**CZSB Cruzeiro do Su 98.97 102** *e*P Pdif 15 16 21.0 +5.4
**GTA Gaotai 99.17 309** *e*P **Pdif** **15 16 15.3 -0.7**
GTA pP pP 15 16 20.0 -0.6
GTA sP pwP 15 16 23.5 +0.4
GTA PP **PP** **15 20 21.4 +2.4**
GTA SKS **SKSac** **15 26 52.3 -1.8**
GTA S S 15 27 37.8 -9.3
GTA SS **SS** **15 34 28.6 -7.6**
GTA pmax pmax
comp=Z,2.0nm,1.8s
GTA pmax pmax
comp=Z,85nm,6.9s
GTA LR LR
comp=Z,840nm,20.0s
GTA LR LR
comp=Z,2µm,21.4s
GTA LR LR
comp=Z,3µm,21.8s
**ULM Lac du Bonnet 99.43 40** LR LR 15 55 13.1
comp=Z,3µm,20.2s,baz=252,slow=32
**LPAZ La Paz 99.62 112** P **Pdif** **15 16 21.7 +2.4**
comp=Z,5.4nm,1.0s,baz=221,slow=2.9,SNR=5.3
LPAZ LR LR 15 52 06.4
comp=Z,2µm,21.5s,baz=244,slow=30
**LPAZ La Paz 99.62 112** *e*P **Pdif** **15 16 23.4 +4.1**
**PLAL Pickwick Lake 99.63 56** IAMs_20 IAMs_20 15 53 16.3
comp=Z,4µm,22.0s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TIXI | Tiksi | 99.85 | 345 | | LR | LR | 15 55 35.3 | | | |
| | comp=Z,5µm,21.8s,baz=179,slow=32 | | | | | | | | | |
| TIXI | Tiksi | 99.85 | 345 | ⇓ | eP | Pdif | 15 16 16.8 | -1.3 | | |
| TIXI | | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| TIXI | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| LRAL | Lakeview Retre | 99.86 | 58 | | IAMs_20 | IAMs_20 | 15 59 35.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| WVT | Waverly | 100.19 | 55 | | IAMs_20 | IAMs_20 | 15 53 47.9 | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| CRZF | Crozet Islands | 100.46 | 211 | | IAMs_20 | IAMs_20 | 15 56 46.9 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| HDIL | Hopedale | 100.50 | 51 | | IAMs_20 | IAMs_20 | 15 54 19.8 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| ZAK | Zakamensk | 100.56 | 320 | | eP | Pdif | 15 16 29.1 | +7.2 | | |
| ZAK | | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | | |
| JFWS | Jewell Farm | 100.57 | 48 | | IAMs_20 | IAMs_20 | 15 53 54.5 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | | |
| EYMN | Ely | 101.35 | 43 | | IAMs_20 | IAMs_20 | 15 58 28.6 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| GOMU | GeErMu | 101.92 | 304 | | P | Pdif | 15 16 26.1 | -2.5 | | |
| GOMU | | | | | SKS | | 15 27 08.4 | | | |
| GOMU | | | | | SS | SS | 15 35 14.5 | -0.6 | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,770nm,20.5s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,1µm,21.1s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,1µm,21.8s | | | | | | | | | |
| COWI | Conover | 102.32 | 45 | | IAMs_20 | IAMs_20 | 16 02 52.4 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| GOGA | Godfrey | 102.80 | 59 | | IAMs_20 | IAMs_20 | 16 02 52.2 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| MTDJ | Mount Denham | 103.43 | 75 | | IAMs_20 | IAMs_20 | 15 53 08.9 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | | |
| P49A | Miami Univ. Ec | 103.55 | 53 | | IAMs_20 | IAMs_20 | 15 59 45.7 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| TZTN | Tazewell | 103.61 | 56 | | IAMs_20 | IAMs_20 | 15 54 57.7 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| ETMB | Extrema | 104.03 | 106 | | eP | Pdif | 15 16 43.3 | +5.2 | | |
| GLMI | Grayling | 105.02 | 47 | | IAMs_20 | IAMs_20 | 15 57 47.2 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| ACSO | Alum Creek Sta | 105.02 | 52 | | IAMs_20 | IAMs_20 | 16 00 30.7 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| NHSC | New Hope | 105.36 | 60 | | IAMs_20 | IAMs_20 | 16 03 19.3 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| BLA | Blacksburg | 106.21 | 56 | | IAMs_20 | IAMs_20 | 15 58 29.3 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | | |
| SDV | Santo Domingo | 106.86 | 87 | | IAMs_20 | IAMs_20 | 15 54 44.9 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | | |
| M53A | WI Miller and | 107.01 | 52 | | IAMs_20 | IAMs_20 | 16 03 36.3 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| N54A | Moraine State | 107.41 | 52 | | IAMs_20 | IAMs_20 | 16 02 40.8 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| ERPA | Erie | 107.66 | 51 | | IAMs_20 | IAMs_20 | 16 03 39.4 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| CNNC | Cliffs of the | 107.73 | 58 | | IAMs_20 | IAMs_20 | 15 59 13.7 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| M54A | Oil Creek Stat | 107.77 | 52 | | IAMs_20 | IAMs_20 | 15 58 02.3 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| O56A | Blue Knob Stat | 108.32 | 53 | | IAMs_20 | IAMs_20 | 16 03 00.9 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| N59A | State Game Lan | 110.53 | 53 | | IAMs_20 | IAMs_20 | 16 04 46.5 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| PDRB | Porto dos Gac | 111.60 | 112 | | eP | Pdif | 15 17 17.7 | +6.0 | | |
| NRIK | Noril'sk | 111.93 | 338 | ⇑ | iPKiKP | PKiKP | 15 21 08.2 | -0.5 | | |
| NRIK | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| LONY | Lake Ozonia | 111.99 | 49 | | IAMs_20 | IAMs_20 | 16 09 23.7 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| TRY | Troy | 112.38 | 51 | | IAMs_20 | IAMs_20 | 16 05 08.2 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| ZALV | Zalesovo Beam | 112.39 | 321 | | PKiKP | PKiKP | 15 21 08.2 | -1.8 | | |
| | comp=Z,1.6nm,0.5s,baz=183,slow=0.7,SNR=7.3 | | | | | | | | | |
| VT1 | Waterbury | 113.25 | 50 | | IAMs_20 | IAMs_20 | 16 05 41.1 | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| MK31 | Makanchi Array | 113.30 | 313 | | iPKiKP | PKiKP | 15 21 09.2 | -2.8 | | |
| MKAR | Makanchi Array | 113.30 | 313 | | Pdiff | Pdif | 15 17 24.9 | +6.4 | | |
| | comp=Z,1.6nm,1.1s,baz=99,slow=5.5,SNR=5.2 | | | | | | | | | |
| MKAR | | | | | PKiKP | PKiKP | 15 21 09.7 | -2.3 | | |
| | comp=Z,1.8nm,0.6s,baz=140,slow=1.0,SNR=23 | | | | | | | | | |
| MKAR | | | | | PKKPbc | PKKPbc | 15 31 59.4 | +1.1 | | |
| | comp=Z,1.6nm,0.9s,baz=266,slow=4.3,SNR=5.0 | | | | | | | | | |
| HNH | Hanover | 113.51 | 50 | | IAMs_20 | IAMs_20 | 16 05 13.0 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| MAKZ | Makanchi | 113.52 | 313 | | IAMs_20 | IAMs_20 | 16 05 40.7 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | | |
| BRYW | Bryant College | 113.83 | 52 | | IAMs_20 | IAMs_20 | 16 02 26.8 | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| FFD | Franklin Falls | 113.94 | 51 | | IAMs_20 | IAMs_20 | 16 05 17.4 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| TULEG | Thule | 114.11 | 14 | | IAMs_20 | IAMs_20 | 16 05 23.4 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| WVL | Waterville | 115.48 | 50 | | IAMs_20 | IAMs_20 | 16 07 26.0 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| SATY | Saty | 115.67 | 309 | | ePKiKP | PKPdf | 15 21 14.5 | -2.3 | | |
| SATY | Saty | 115.67 | 309 | | ePKP | PKPdf | 15 21 14.6 | -2.3 | | |
| | baz=309 | | | | | | | | | |
| PKME | Peaks-Kenny Pk | 115.80 | 49 | | IAMs_20 | IAMs_20 | 16 06 54.4 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| KURK | Kurchatov | 116.00 | 317 | ⇑ | iPKiKP | PKPdf | 15 21 15.1 | -1.9 | | |
| KURK | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| KURK | Kurchatov | 116.00 | 317 | | | PKPdf | 15 21 14.9 | -2.1 | | |
| KURK | Kurchatov | 116.00 | 317 | | IAMs_20 | IAMs_20 | 16 05 58.5 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | | |
| KURBB | Kurchatov Arra | 116.05 | 317 | | PKP | PKPdf | 15 21 14.9 | -2.2 | | |
| | comp=Z,2.9nm,0.7s,baz=95,slow=1.8,SNR=20 | | | | | | | | | |
| MDOK | Medeo | 116.67 | 309 | | ePKiKP | PKPdf | 15 21 16.6 | -2.2 | | |
| MDOK | Medeo | 116.67 | 309 | | ePKP | PKPdf | 15 21 16.6 | -2.2 | | |
| | baz=309 | | | | | | | | | |
| TNSS | Tian-Shan | 116.73 | 309 | | ePKP | PKPdf | 15 21 17.1 | -2.1 | | |
| | baz=308 | | | | | | | | | |
| CHKK | Chushkaly | 116.77 | 309 | | ePKP | PKPdf | 15 21 16.4 | -2.4 | | |
| | baz=310 | | | | | | | | | |
| KSH | Kashi | 117.16 | 305 | | PKP | PKiKP | 15 21 22.0 | +2.2 | | |
| KSH | | | | | PP | PP | 15 22 36.0 | +5.6 | | |
| KSH | | | | | SS | SS | 15 38 44.9 | +5.5 | | |
| KSH | | | | | AMB | AMB | | | | |
| | comp=Z,290nm,6.9s | | | | | | | | | |
| KSH | | | | | LR | LR | | | | |
| | comp=Z,1µm,20.3s | | | | | | | | | |
| KSH | | | | | LR | LR | | | | |
| | comp=Z,970nm,20.3s | | | | | | | | | |
| KSH | | | | | LR | LR | | | | |
| | comp=Z,2µm,19.2s | | | | | | | | | |
| ULHL | Ulahol | 117.19 | 308 | | P | PKiKP | 15 21 24.0 | +4.1 | | |
| | SNR=5.7 | | | | | | | | | |
| NEEM | North Greenlan | 117.56 | 12 | | i P | PKiKP | 15 21 22.6 | +2.9 | | |
| TKM2 | Tokmak 2 | 117.72 | 308 | | P | PKiKP | 15 21 24.7 | +3.8 | | |
| | SNR=6.5 | | | | | | | | | |
| KBK | Karagaybulak | 118.18 | 308 | | P | PKiKP | 15 21 25.8 | +4.0 | | |
| | SNR=5.3 | | | | | | | | | |
| CHMS | Chumysh | 118.34 | 308 | | P | PKiKP | 15 21 25.8 | +3.9 | | |
| | SNR=5.9 | | | | | | | | | |
| UCH | Uchtor | 118.47 | 307 | | P | PKiKP | 15 21 27.3 | +4.6 | | |
| | SNR=8.0 | | | | | | | | | |
| AAK | Ala-Archa | 118.51 | 308 | | PKP | PKiKP | 15 21 22.7 | +0.3 | | |
| | comp=Z,4.8nm,1.0s,baz=266,slow=2.5,SNR=11 | | | | | | | | | |
| AAK | Ala-Archa | 118.51 | 308 | | P | PKiKP | 15 21 26.5 | +4.1 | | |
| | SNR=6.0 | | | | | | | | | |
| AAK | Ala-Archa | 118.51 | 308 | ⇓ | iPKiKP | PKPdf | 15 21 20.9 | -1.4 | | |
| AAK | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| AAK | Ala-Archa | 118.51 | 308 | | PKPdf | PKPdf | 15 21 19.5 | -2.8 | | |
| AAK | Ala-Archa | 118.51 | 308 | | IAMs_20 | IAMs_20 | 16 12 44.1 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| AAK | Ala-Archa | 118.51 | 308 | | pPKiKP | PKiKP | 15 21 27.0 | +4.6 | | |
| AAK | Ala-Archa | 118.51 | 308 | | iPKiKP | PKPdf | 15 21 21.8 | -0.5 | | |
| | SNR=7.3 | | | | | | | | | |
| BTLS | Baital | 118.92 | 311 | | ePKiKP | PKPdf | 15 21 20.6 | -2.2 | | |
| BTLS | Baital | 118.92 | 311 | | ePKP | PKPdf | 15 21 20.6 | -2.2 | | |
| | baz=311 | | | | | | | | | |
| EKS2 | Erkin-Say | 119.04 | 308 | | P | PKiKP | 15 21 26.4 | +3.0 | | |
| | SNR=6.3 | | | | | | | | | |
| AML | Almayashu | 119.08 | 307 | | P | PKiKP | 15 21 24.0 | +0.2 | | |
| | SNR=9.7 | | | | | | | | | |
| AML | Almayashu | 119.08 | 307 | | i PKiKP | PKPdf | 15 21 22.6 | -1.2 | | |
| | SNR=16 | | | | | | | | | |
| BRZS | Berezniki | 119.81 | 316 | | ePKiKP | PKPdf | 15 21 22.2 | -2.2 | | |
| BRZS | Berezniki | 119.81 | 316 | | ePKP | PKPdf | 15 21 22.2 | -2.2 | | |
| | baz=316 | | | | | | | | | |
| SMTB | Santa Maria do | 120.78 | 115 | | eP | PKiKP | 15 21 32.4 | +4.9 | | |
| BVAR | Borovoye Array | 121.01 | 320 | | PKP | PKPdf | 15 21 24.5 | -2.1 | | |
| | comp=Z,3.2nm,0.6s,baz=57,slow=9.2,SNR=25 | | | | | | | | | |
| BRVK | Borovoye | 121.07 | 320 | ⇓ | iPKiKP | PKPdf | 15 21 24.7 | -2.0 | | |
| BRVK | | | | | MLR | MLR | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| BRVK | Borovoye | 121.07 | 320 | | PKPdf | PKPdf | 15 21 24.2 | -2.5 | | |
| KKAR | Karatay Array | 121.45 | 308 | | PKiKP | PKPdf | 15 21 24.8 | -3.0 | | |
| KKAR | Karatay Array | 121.45 | 308 | | PKPdf | PKPdf | 15 21 24.8 | -3.0 | | |
| IUG | luzhnay | 121.80 | 307 | | ePKiKP | PKPdf | 15 21 26.7 | -1.9 | | |
| IUG | luzhnay | 121.80 | 307 | | ePKP | PKPdf | 15 21 26.7 | -1.9 | | |
| | baz=307 | | | | | | | | | |
| BRLS | Borolday | 121.94 | 308 | | ePKiKP | PKPdf | 15 21 26.8 | -1.9 | | |
| BRLS | Borolday | 121.94 | 308 | | ePKP | PKPdf | 15 21 26.9 | -1.9 | | |
| | baz=308 | | | | | | | | | |
| KBL | Kabul | 122.26 | 298 | | PKiKP | PKPdf | 15 21 27.5 | -2.4 | | |
| KBL | Kabul | 122.26 | 298 | | PKPdf | PKPdf | 15 21 27.5 | -2.4 | | |
| KBL | Kabul | 122.26 | 298 | | pPKiKP | PKiKP | 15 21 34.3 | +4.3 | | |
| | SNR=22 | | | | | | | | | |
| DAG | Danmarks Havn | 122.97 | 6 | | i P | PKPdf | 15 21 27.4 | -2.3 | | |
| SUMG | Summit | 123.04 | 14 | | i P | PKiKP | 15 21 32.0 | +1.3 | | |
| DY2G | Dye2 | 124.25 | 22 | | i P | PKiKP | 15 21 34.4 | +1.4 | | |
| GDU01 | Guandu, BA | 124.57 | 125 | | eP | PKiKP | 15 21 38.5 | +3.6 | | |
| DBG | Daneborg | 124.99 | 8 | | i P | PKiKP | 15 21 36.4 | +2.4 | | |
| SVE | Sverdlovsk | 125.76 | 326 | | i PKiKP | PKPdf | 15 21 34.4 | -1.2 | | |
| SVE | | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| SVE | | | | | MLR | MLR | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| SVE | | | | | MLR | MLR | | | | |
| | comp=E,3µm,20.0s | | | | | | | | | |
| NBPN | Ponto Novo - B | 125.79 | 121 | | eP | PKiKP | 15 21 41.7 | +4.3 | | |
| BOSA | Boshof | 126.81 | 203 | | PKP | PKiKP | 15 21 40.2 | +1.0 | | |
| | comp=E,8.2nm,1.0s,baz=234,slow=1.8,SNR=5.6 | | | | | | | | | |
| ARU | Arti | 126.97 | 326 | | i PKiKP | PKPdf | 15 21 36.9 | -1.0 | | |
| ARU | | | | | | | 15 23 34.0 | | | |
| ARU | | | | | | | 15 28 48.0 | | | |
| ARU | | | | | SP | SP | 15 33 39.0 | +1.3 | | |
| ARU | | | | | SS | SS | 15 40 39.0 | -3.8 | | |
| ARU | Arti | 126.97 | 326 | | PKPdf | PKPdf | 15 21 35.5 | -2.4 | | |
| NBLA | Lagarto - SE | 127.61 | 123 | | eP | PKiKP | 15 21 43.8 | +2.8 | | |
| AB31 | Akbulak array | 128.11 | 317 | | i PKiKP | PKPdf | 15 21 39.3 | -1.0 | | |
| ABKAR | Akbulak array | 128.11 | 317 | | PKPdf | PKPdf | 15 21 37.9 | -2.4 | | |
| ABKAR | Akbulak array | 128.11 | 317 | | PKPdf | PKPdf | 15 21 38.2 | -2.1 | | |
| NBPS | Pedro II - PI | 128.29 | 114 | | eP | PKiKP | 15 21 45.5 | +3.0 | | |
| NBMA | Muriti-CE | 128.94 | 119 | | eP | PKiKP | 15 21 46.6 | +2.9 | | |
| JLN | Jalan Bani Buh | 129.25 | 282 | | pPKiKP | PKiKP | 15 21 48.1 | +4.0 | | |
| | SNR=9.6 | | | | | | | | | |
| WBK | Wadi Bani Khal | 129.73 | 282 | | pPKiKP | PKiKP | 15 21 49.3 | +4.3 | | |
| | SNR=5.6 | | | | | | | | | |
| ARCES | ARCESS Array B | 129.81 | 351 | | PKP | PKPdf | 15 21 42.5 | -0.5 | | |
| | comp=E,3.5nm,0.7s,baz=7.6,slow=1.8,SNR=10 | | | | | | | | | |
| APA | Apatity | 130.01 | 346 | ⇓ | iPKiKP | PKiKP | 15 21 57.1 | +13 | | |
| APA | | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | | |
| WSAR | Wadi Sarin | 130.13 | 283 | | pPKiKP | PKiKP | 15 21 49.5 | +3.7 | | |
| | SNR=6.0 | | | | | | | | | |
| MHTO | MHTO | 130.38 | 280 | | pPKiKP | PKiKP | 15 21 50.0 | +3.7 | | |
| | SNR=9.7 | | | | | | | | | |
| JMDO | Jabal Madar | 130.48 | 282 | | pPKiKP | PKiKP | 15 21 50.8 | +4.3 | | |
| | SNR=6.9 | | | | | | | | | |
| PRGR | Permogore | 130.50 | 336 | | ePKiKP | PKPdf | 15 21 44.2 | -0.2 | | |
| PRGR | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| KIRV | Kirov | 130.58 | 331 | ⇓ | iPKiKP | PKPdf | 15 21 44.4 | -0.3 | | |
| BIDO | Bidbid | 130.63 | 283 | | pPKiKP | PKiKP | 15 21 52.0 | +5.2 | | |
| | SNR=5.9 | | | | | | | | | |
| SMDO | Samad | 130.63 | 283 | | pPKiKP | PKiKP | 15 21 50.7 | +3.8 | | |
| | SNR=11 | | | | | | | | | |
| NBRF | Rio Formoso - | 131.09 | 123 | | eP | PKiKP | 15 21 52.4 | +4.5 | | |
| BSY | Bisya | 131.36 | 282 | | pPKiKP | PKiKP | 15 21 52.4 | +4.1 | | |
| | SNR=7.5 | | | | | | | | | |
| HOQ | Hoqain | 131.38 | 283 | | pPKiKP | PKiKP | 15 21 51.9 | +3.6 | | |
| | SNR=6.9 | | | | | | | | | |
| ARQ | Araqi | 132.06 | 283 | | pPKiKP | PKiKP | 15 21 53.5 | +3.8 | | |
| | SNR=5.4 | | | | | | | | | |
| DMTO | DMTO | 132.54 | 275 | | pPKiKP | PKiKP | 15 21 53.8 | +3.0 | | |
| | SNR=5.1 | | | | | | | | | |
| UOSS | Minazif | 132.55 | 285 | | pPKiKP | PKiKP | 15 21 54.3 | +3.7 | | |
| UOSS | Minazif | 132.55 | 285 | | iPKiKP | PKiKP | 15 21 51.5 | +0.9 | | |
| | SNR=7.3 | | | | | | | | | |
| BANOM | Banah | 132.56 | 286 | | pPKiKP | PKiKP | 15 21 55.1 | +4.5 | | |
| HATD | Hatta, Dubai | 132.60 | 285 | | pPKiKP | PKiKP | 15 21 55.0 | +4.3 | | |
| | SNR=13 | | | | | | | | | |
| HATD | Hatta, Dubai | 132.60 | 285 | | i PKiKP | PKiKP | 15 21 50.8 | +0.1 | | |
| | SNR=9.4 | | | | | | | | | |
| MSFE | Esma-Masafi | 132.63 | 286 | | i PKiKP | PKiKP | 15 21 50.5 | -0.3 | | |
| | SNR=7.0 | | | | | | | | | |
| MASF | Masafi | 132.63 | 286 | | pPKiKP | PKiKP | 15 21 55.2 | +4.3 | | |
| | SNR=6.4 | | | | | | | | | |
| ASHO | Ashiyiah | 132.65 | 285 | | pPKiKP | PKiKP | 15 21 55.1 | +4.2 | | |
| | SNR=6.7 | | | | | | | | | |
| ASHO | Ashiyiah | 132.65 | 285 | | i PKiKP | PKiKP | 15 21 50.3 | -0.6 | | |
| | SNR=6.2 | | | | | | | | | |
| RBK | Rabkut | 133.18 | 275 | | pPKiKP | PKiKP | 15 21 56.9 | +4.7 | | |
| KLMR | Klimovskoe | 133.28 | 337 | | ePKiKP | PKPdf | 15 21 44.3 | -5.4 | | |
| KLMR | | | | | e | | 15 24 14.3 | | | |
| KLMR | | | | | eSS | SS | 15 42 04.5 | +4.9 | | |
| KLMR | | | | | SSS | SSS | 15 46 49.9 | | | |
| KLMR | | | | | pmax | pmax | | | | |
| | comp=Z,32nm,1.4s | | | | | | | | | |
| KLMR | Klimovskoe | 133.28 | 337 | | ePKPdf | PKPdf | 15 21 44.4 | -5.3 | | |
| KLMR | | | | | AMP | | 15 22 03.1 | | | |
| | comp=Z,32nm,1.4s | | | | | | | | | |
| KLMR | | | | | ePP | PP | 15 24 14.3 | -2.3 | | |
| KLMR | | | | | eSS | SS | 15 42 04.6 | +5.0 | | |
| KLMR | | | | | eSS | SS | 15 42 04.6 | +5.0 | | |
| KLMR | | | | | ⇓SSS | SSS | 15 46 50.0 | | | |
| KLMR | | | | | ⇓SSS | SSS | 15 46 50.0 | | | |
| KLMR | | | | | LQ | LQ | 16 10 41.7 | | | |
| KLMR | | | | | LQ | LQ | 16 10 41.7 | | | |
| KLMR | | | | | LR | LR | 16 14 31.9 | | | |
| ASUD | Al Ashush, Dub | 133.30 | 284 | | pPKiKP | PKiKP | 15 21 55.6 | +3.5 | | |
| DOK | Doka | 133.49 | 276 | | pPKiKP | PKiKP | 15 21 55.3 | +2.7 | | |
| | SNR=5.6 | | | | | | | | | |
| WHFO | Wadi Hawf | 133.68 | 275 | | pPKiKP | PKiKP | 15 21 57.3 | +4.2 | | |
| ABTO | Aybut | 134.00 | 274 | | pPKiKP | PKiKP | 15 21 58.6 | +4.8 | | |
| BELG | Belogornoye | 134.43 | 324 | ⇑ | ePKiKP | PKPdf | 15 21 48.1 | -4.0 | | |
| BELG | | | | | i | | 15 21 51.6 | | | |
| BELG | | | | | MLR | MLR | | | | |
| | comp=Z,432nm,19.0s | | | | | | | | | |
| MZR | Muzera | 134.80 | 282 | | pPKiKP | PKiKP | 15 21 60.0 | +4.7 | | |
| MZR | Muzera | 134.80 | 282 | | i PKiKP | PKiKP | 15 21 55.7 | +0.5 | | |
| | SNR=5.8 | | | | | | | | | |
| FINES | FINESS Array B | 136.89 | 345 | | PKhKP | PKPpre | 15 21 48.6 | | | |
| | comp=Z,1.9nm,0.7s,baz=48,slow=2.8,SNR=4.0 | | | | | | | | | |
| FINES | | | | | PKP | PKPdf | 15 21 55.0 | -1.5 | | |
| | comp=Z,3.1nm,0.8s,baz=96,slow=3.8,SNR=6.3 | | | | | | | | | |
| FINES | | | | | PP | PP | 15 24 41.9 | +2.6 | | |
| | comp=Z,4.3nm,1.0s,baz=45,slow=8.4,SNR=4.1 | | | | | | | | | |
| FINES | FINESS Array B | 136.89 | 345 | | PKiKP | PKPdf | 15 21 55.2 | -1.3 | | |
| FINES | FINESS Array B | 136.89 | 345 | | PKPdf | PKPdf | 15 21 55.2 | -1.3 | | |
| MOS | Moscow | 137.45 | 333 | | ePKiKP | PKiKP | 15 22 01.2 | +1.6 | | |
| MOS | | | | | e | | 15 24 49.3 | | | |
| MOS | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,23.0s | | | | | | | | | |
| MAK | Makhachkala | 138.09 | 312 | | eP | Pdif | 15 19 00.9 | -7.9 | | |
| MAK | | | | | i | | 15 21 55.5 | | | |
| MAK | | | | | e | | 15 29 00.6 | | | |
| MAK | | | | | eSS | SS | 15 42 48.4 | -10 | | |
| MAK | | | | | eSSS | SSS | 15 47 56.9 | | | |
| MAK | | | | | pmax | pmax | | | | |
| | comp=Z,172nm,1.1s | | | | | | | | | |
| OBN | Obninsk | 138.32 | 333 | ⇓ | ePKiKP | PKPdf | 15 21 59.0 | -0.3 | | |
| OBN | | | | | e | | 15 24 47.0 | | | |
| OBN | | | | | pmax | pmax | | | | |
| | comp=Z,33nm,1.5s | | | | | | | | | |
| OBN | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,23.0s | | | | | | | | | |
| OBN | Obninsk | 138.32 | 333 | | IAMs_20 | IAMs_20 | 16 25 03.9 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| LPSR | Galich'ya Gora | 138.83 | 328 | | i PKiKP | PKPdf | 15 21 56.9 | -3.4 | | |
| LPSR | | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| LPSR | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,23.0s | | | | | | | | | |
| VORR | Voronezh | 139.25 | 327 | | ePKiKP | PKPdf | 15 21 57.4 | -3.7 | | |
| VORR | | | | | pmax | pmax | | | | |
| | comp=Z,60nm,0.4s | | | | | | | | | |
| VSU | Vasula | 139.27 | 342 | ⇑ | ePKiKP | PKPdf | 15 21 58.4 | -2.5 | | |
| VSU | | | | | MLR | MLR | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| VSU | Vasula | 139.27 | 342 | | eP | PKPdf | 15 21 51.7 | -9.2 | | |
| VSR | Storozhevoye | 139.53 | 327 | | i PKiKP | PKPdf | 15 21 58.8 | -2.8 | | |
| VSR | | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| VSR | | | | | MLR | MLR | | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| NB2 | NORSAR Subarra | 139.71 | 355 | | PKP | PKPdf | 15 21 59.1 | -2.6 | | |
| | comp=Z,10nm,1.2s,baz=17,slow=2.6 | | | | | | | | | |
| NOA | NORSAR Array B | 139.71 | 355 | | PKP | PKPdf | 15 22 00.8 | -1.0 | | |
| | comp=Z,4.5nm,0.9s,baz=16,slow=5.0,SNR=9.4 | | | | | | | | | |
| MTSE | Matsula | 139.83 | 345 | | eP | PKPdf | 15 21 58.7 | -3.2 | | |
| KIBK | Kibwezi | 139.88 | 239 | | IAMs_20 | IAMs_20 | 16 16 57.7 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| ZEI | Tsey | 140.65 | 313 | | i PKiKP | PKiKP | 15 22 09.8 | +3.0 | | |
| ZEI | | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | | |
| GNI | Garni | 140.91 | 308 | ce | PKiKP | PKPdf | 15 22 04.2 | -0.6 | | |
| KBZ | Khabaz | 140.97 | 314 | | PKP | PKPdf | 15 22 02.5 | -1.9 | | |
| | comp=Z,3.0nm,0.9s,baz=207,slow=1.2,SNR=7.2 | | | | | | | | | |
| KBZ | Khabaz | 140.97 | 314 | ⇓ | iPKiKP | PKPdf | 15 22 02.6 | -1.9 | | |
| KBZ | | | | | MLR | MLR | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| KIV | Kislovodsk | 141.03 | 315 | | ePKiKP | PKPdf | 15 22 01.4 | -3.3 | | |
| KIV | | | | | i | | 15 22 04.4 | | | |
| KIV | | | | | e | | 15 25 02.8 | | | |
| KIV | | | | | eSS | SS | 15 43 31.0 | -2.3 | | |
| KIV | | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.1s | | | | | | | | | |
| KIV | | | | | MLR | MLR | | | | |
| | comp=Z,4µm,24.0s | | | | | | | | | |
| KONO | Kongsberg | 141.21 | 356 | ⇑ | PKHKP | PKPpre | 15 21 52.2 | | | |
| KONO | Kongsberg | 141.21 | 356 | | IAMs_20 | IAMs_20 | 16 25 59.8 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| KMBO | Kilima Mbogo | 141.23 | 239 | | PKhKP | PKPpre | 15 21 59.2 | | | |
| | comp=Z,5.7nm,1.1s,baz=92,slow=2.9,SNR=3.8 | | | | | | | | | |
| KMBO | | | | | PKP | PKPdf | 15 22 03.9 | -2.4 | | |
| | comp=Z,8.8nm,0.9s,baz=87,slow=2.4,SNR=6.2 | | | | | | | | | |
| KMBO | Kilima Mbogo | 141.23 | 239 | | PKPpre | PKPpre | 15 21 58.3 | | | |
| NEY | Neytrino | 141.28 | 314 | ⇑ | ePKiKP | PKPdf | 15 22 04.7 | -0.6 | | |
| IDID | Didziasalis | 141.90 | 340 | | eP | PKPdf | 15 22 02.7 | -3.1 | | |
| IIGN | Ignalina | 142.03 | 340 | | eP | PKPdf | 15 22 00.7 | -5.3 | | |
| RAYN | Ar Rayn | 142.15 | 282 | ⇓ | PKiKP | PKPdf | 15 22 01.7 | -5.6 | | |
| RAYN | Ar Rayn | 142.15 | 282 | | PKiKP | PKPdf | 15 22 07.5 | +0.2 | | |
| MNK | Minsk | 142.17 | 338 | | i PKiKP | PKPdf | 15 22 05.9 | -0.4 | | |
| MNK | | | | | i | | 15 25 21.0 | | | |
| MNK | | | | | i PPP | PPP | 15 28 25.6 | | | |
| MNK | | | | | i SS | SS | 15 43 48.3 | +3.4 | | |
| MNK | | | | | i SSS | SSS | 15 49 08.1 | | | |
| MNK | | | | | pmax | pmax | | | | |
| | comp=Z,47nm,0.9s | | | | | | | | | |
| MNK | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| MNK | | | | | MLR | MLR | | | | |
| | comp=N,1µm,23.0s | | | | | | | | | |
| MNK | Minsk | 142.17 | 338 | | i PKP | PKPdf | 15 22 06.0 | -0.3 | | |
| MNK | | | | | i PKP | PKPdf | 15 22 06.0 | -0.3 | | |
| MNK | | | | | i PKP | PKPdf | 15 22 06.0 | -0.3 | | |
| | comp=Z,47nm,0.9s,baz=37 | | | | | | | | | |
| MNK | | | | | i PP | PP | 15 25 21.0 | +9.1 | | |
| MNK | | | | | i SKP | | 15 25 37.8 | | | |
| MNK | | | | | i PKS | PKSdf | 15 25 41.8 | -0.1 | | |
| MNK | | | | | i PPP | PPP | 15 28 25.6 | | | |
| MNK | | | | | i SKKS | | 15 38 35.1 | | | |
| MNK | | | | | i PPS | PPS | 15 41 18.5 | | | |
| MNK | | | | | i SS | SS | 15 43 48.4 | +3.4 | | |
| MNK | | | | | i SSS | SSS | 15 49 08.1 | | | |
| MNK | | | | | i LR | LR | 16 21 33.0 | | | |
| MNK | | | | | i LRM | MLR | 16 26 26.2 | | | |
| | comp=Z,2µm,19.4s | | | | | | | | | |
| MNK | | | | | i LRM | MLR | 16 26 29.4 | | | |
| | comp=N,1µm,22.6s | | | | | | | | | |
| MNK | | | | | i LRM | MLR | 16 26 35.8 | | | |
| | comp=E,217nm,20.3s | | | | | | | | | |
| NACGM | Naroch | 142.22 | 339 | | i PKP | PKPdf | 15 22 02.3 | -4.1 | | |
| PABE | Paberze | 142.59 | 342 | | eP | PKPdf | 15 22 00.5 | -6.5 | | |
| SOC | Sochi | 143.13 | 316 | | i PKiKP | PKPdf | 15 22 09.3 | +0.9 | | |
| SOC | | | | | e | | 15 25 15.6 | | | |
| SOC | | | | | eSS | SS | 15 43 47.7 | -10 | | |
| SOC | | | | | eSSS | SSS | 15 49 12.1 | | | |
| SIRT | Sirnak | 143.39 | 305 | | PKPdf | PKPbc | 15 22 06.2 | -0.1 | | |
| GURO | Guroymak-BITLI | 143.40 | 307 | | | PKPbc | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CLL | | | | *ex* | x | 15 41 24.0 | | |
| CLL | | | | *eSS* | SS | 15 44 48.0 | -15 | |
| CLL | | | | *ePSPS* | | 15 46 06.0 | | |
| CLL | | | | *e(SSS)* | | 15 50 18.0 | | |
| CLL | | | | *eSSSS* | | 15 54 30.0 | | |
| **CRVS** | **Cervenica-Dubn** | **149.05 338** | | *e*PKP2 | **PKiKP** | **15 22 23.0** | **-0.7** | |
| **CRVS** | **Cervenica-Dubn** | **149.05 338** | | *e*PKP | **PKiKP** | **15 22 23.0** | **-0.7** | |
| CRVS | | | | *e* | | 15 22 26.7 | | |
| CRVS | | | | *e* | | 15 22 31.8 | | |
| **CFR** | **Carcaliu** | **149.05 327** | ⇑P | | **PKPdf** | **15 22 19.3** | **+1.0** | |
| **CFR** | **Carcaliu** | **149.05 327** | ⇑PKIKP | | **PKPdf** | **15 22 19.3** | **+1.0** | |
| **OSTC** | **Ostas** | **149.10 346** | ⇑*e*PKP | | **PKPbc** | **15 22 22.1** | **-0.3** | |
| OSTC | | | AMS | AMS | | 16 30 30.0 | | |
| | comp=Z,2µm,21.4s | | | | | | | |
| **CHVC** | **Chvalec** | **149.10 346** | ⇑*e*PKP | | **PKPbc** | **15 22 21.9** | **-0.6** | |
| CHVC | | | AMS | AMS | | 16 30 30.0 | | |
| | comp=Z,3µm,18.1s | | | | | | | |
| **TPGR** | **Topolog** | **149.12 326** | ⇓P | | **PKPbc** | **15 22 22.6** | **-0.1** | |
| **UPC** | **Upice** | **149.19 346** | *e*PKP2 | | **PKPbc** | **15 22 22.5** | **-0.2** | |
| UPC | | | *e*SS | SS | | 15 45 05.7 | +1.1 | |
| UPC | | | MLR | MLR | | | | |
| | comp=Z,3µm,21.1s | | | | | | | |
| **UPC** | **Upice** | **149.19 346** | ⇑*e*PKP | | **PKPbc** | **15 22 22.5** | **-0.2** | |
| UPC | | | *e*SS | SS | | 15 45 05.7 | +1.1 | |
| UPC | | | AMS | AMS | | 16 30 30.0 | | |
| | comp=Z,3µm,21.1s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **149.26 345** | *e*PKP2 | | **PKPbc** | **15 22 23.0** | **+0.1** | |
| DPC | | | MLR | MLR | | | | |
| | comp=Z,2µm,22.5s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **149.26 345** | ⇑*e*PKP | | **PKPbc** | **15 22 23.0** | **+0.1** | |
| DPC | | | AMS | AMS | | 16 23 00.0 | | |
| | comp=Z,2µm,22.5s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **149.26 343** | *e*PKP2 | | **PKPab** | **15 22 27.5** | **+0.2** | |
| OKC | | | MLR | MLR | | | | |
| | comp=Z,3µm,21.1s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **149.26 343** | *e*PKPAB | | **PKPab** | **15 22 27.5** | **+0.2** | |
| OKC | | | AMS | AMS | | 16 26 30.0 | | |
| | comp=Z,3µm,21.1s | | | | | | | |
| **VRI** | **Vrincioaia** | **149.26 329** | ⇑P | | **PKPbc** | **15 22 21.5** | **-1.5** | |
| **VRI** | **Vrincioaia** | **149.26 329** | ⇑PKP2 | | **PKPbc** | **15 22 21.5** | **-1.5** | |
| **BRG** | **Berggiesshubel** | **149.28 348** | *e*PKP | | **PKPdf** | **15 22 20.5** | **+2.0** | |
| BRG | | | Amp | | | 15 22 24.7 | | |
| | comp=Z,90nm,1.3s | | | | | | | |
| BRG | | | *ex* | x | | 15 22 38.4 | | |
| BRG | | | Amp | | | 15 22 39.1 | | |
| | comp=Z,73nm,1.1s | | | | | | | |
| BRG | | | *ex* | x | | 15 22 52.5 | | |
| BRG | | | Amp | | | 15 22 56.3 | | |
| | comp=Z,84nm,1.5s | | | | | | | |
| **BRG** | **Berggiesshubel** | **149.28 348** | *e*PKP2 | | **PKPdf** | **15 22 20.5** | **+2.0** | |
| BRG | | | S | | **SS** | **15 45 09.0** | **+3.5** | |
| BRG | | | pmax | pmax | | | | |
| | comp=Z,90nm,1.3s | | | | | | | |
| BRG | | | pmax | pmax | | | | |
| | comp=Z,73nm,1.1s | | | | | | | |
| BRG | | | pmax | pmax | | | | |
| | comp=Z,85nm,1.5s | | | | | | | |
| BRG | | | MLR | MLR | | | | |
| | comp=N,2µm,21.5s | | | | | | | |
| BRG | | | MLR | MLR | | | | |
| | comp=Z,3µm,21.4s | | | | | | | |
| **TRPA** | **Tarpa** | **149.31 336** | ⇑P | | **PKPdf** | **15 22 20.4** | **+1.8** | |
| **TRPA** | **Tarpa** | **149.31 336** | ⇑PKP | | **PKPbc** | **15 22 21.4** | **-1.5** | |
| TRPA | | | PKIKP | | **pPKPdf** | **15 22 22.2** | **-1.3** | |
| **BMR** | **Baia Mare** | **149.31 335** | ⇑P | | **PKiKP** | **15 22 25.7** | **+1.5** | |
| **BMR** | **Baia Mare** | **149.31 335** | ⇑PKP2 | | **PKiKP** | **15 22 25.7** | **+1.5** | |
| **PLOR** | **Plostina** | **149.31 329** | ⇑P | | **PKPbc** | **15 22 21.4** | **-1.8** | |
| **PLOR** | **Plostina** | **149.31 329** | ⇑PKP2 | | **PKPbc** | **15 22 21.4** | **-1.8** | |
| **TIRR** | **Tirgusor** | **149.40 325** | ⇑P | | **PKPbc** | **15 22 23.7** | **+0.4** | |
| **TIRR** | **Tirgusor** | **149.40 325** | ⇑PKP2 | | **PKPbc** | **15 22 23.7** | **+0.4** | |
| **KRLC** | **Kraliky** | **149.41 345** | *e*PKP2 | | **PKPbc** | **15 22 23.1** | **-0.2** | |
| KRLC | | | MLR | MLR | | | | |
| | comp=Z,2µm,22.5s | | | | | | | |
| **KRLC** | **Kraliky** | **149.41 345** | ⇑*e*PKP | | **PKPbc** | **15 22 23.1** | **-0.2** | |
| KRLC | | | *e*PKPAB | | **pPKPbc** | **15 22 28.3** | **+0.2** | |
| KRLC | | | AMS | AMS | | 16 30 20.0 | | |
| | comp=Z,2µm,22.5s | | | | | | | |
| **ARCR** | **ARCALIA** | **149.42 333** | ⇑P | | **PKPdf** | **15 22 20.0** | **+1.1** | |
| **ANTO** | **Ankara** | **149.45 314** | IAMs_20 | IAMs_20 | | 16 42 13.8 | | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **MORC** | **Moravsky Berou** | **149.48 343** | ⇑P | | **PKPdf** | **15 22 20.4** | **+1.4** | |
| **MORC** | **Moravsky Berou** | **149.48 343** | ⇑PKIKP | | **PKPdf** | **15 22 20.4** | **+1.4** | |
| **MORC** | **Moravsky Berou** | **149.48 343** | *e*PKP | | **PKPbc** | **15 22 23.3** | **-0.2** | |
| **PVCC** | **Panska Ves** | **149.48 347** | *e*PKP2 | | **PKPbc** | **15 22 23.2** | **-0.2** | |
| PVCC | | | MLR | MLR | | | | |
| | comp=Z,4µm,22.7s | | | | | | | |
| **PVCC** | **Panska Ves** | **149.48 347** | ⇑*e*PKP | | **PKPbc** | **15 22 23.2** | **-0.2** | |
| PVCC | | | *e*PKPAB | | **pPKPbc** | **15 22 28.0** | **-0.2** | |
| PVCC | | | AMS | AMS | | 16 28 40.0 | | |
| | comp=Z,4µm,22.7s | | | | | | | |
| **HARR** | **Harsova** | **149.49 326** | ⇑P | | **PKiKP** | **15 22 24.8** | **+0.1** | |
| **HARR** | **Harsova** | **149.49 326** | ⇑PKP2 | | **PKiKP** | **15 22 24.8** | **+0.1** | |
| **COVR** | **Voineasa-Covas** | **149.53 330** | ⇑P | | **PKPbc** | **15 22 21.6** | **-2.1** | |
| **TLBR** | **Topalu** | **149.53 326** | ⇓P | | **PKPbc** | **15 22 23.5** | **-0.2** | |
| **OZUR** | | **149.54 330** | ⇑P | | **PKPbc** | **15 22 22.8** | **-0.9** | |
| **KDZE** | **Karadeniz Ereo** | **149.57 318** | ⇑P | | **PKPdf** | **15 22 21.3** | **+2.0** | |
| **RCY** | **Rachaya** | **149.68 301** | *e*P | | **PKPbc** | **15 22 23.8** | **-0.8** | |
| **BHL** | **Bhannes** | **149.71 302** | *e*P | | **PKPbc** | **15 22 23.6** | **-1.1** | |
| **KECS** | **Kecovo** | **149.74 339** | *e*PKP2 | | **PKPab** | **15 22 29.0** | **-0.3** | |
| **KECS** | **Kecovo** | **149.74 339** | *e*PKP | | **PKPab** | **15 22 29.0** | **-0.3** | |
| KECS | | | *e* | | | 15 22 34.7 | | |
| **QRWL** | **Qaraoun** | **149.79 301** | *e*P | | **PKPbc** | **15 22 23.6** | **-1.2** | |
| **NEHR** | **Nehoiu** | **149.79 329** | ⇓P | | **PKPbc** | **15 22 23.1** | **-1.2** | |
| **SHBL** | **Chebaa** | **149.80 301** | *e*P | | **PKPbc** | **15 22 24.1** | **-0.8** | |
| **DOPR** | **Dopca** | **149.82 330** | ⇑P | | **PKPbc** | **15 22 22.5** | **-1.8** | |
| **DQRL** | **Deir Qamar** | **149.83 301** | *e*P | | **PKPbc** | **15 22 24.2** | **-0.7** | |
| **ISR** | **Istrita** | **149.89 328** | ⇑P | | **PKiKP** | **15 22 26.3** | **+0.7** | |
| **ISR** | **Istrita** | **149.89 328** | ⇑PKP2 | | **PKiKP** | **15 22 26.3** | **+0.7** | |
| **MLR** | **Muntele Rosu** | **149.91 329** | ⇑P | | **PKPbc** | **15 22 23.5** | **-1.3** | |
| **MLR** | **Muntele Rosu** | **149.91 329** | ⇑PKP2 | | **PKPbc** | **15 22 23.5** | **-1.3** | |
| **IZAB** | **Izabela** | **149.92 340** | *e*PKP2 | | **PKPab** | **15 22 29.8** | **-0.3** | |
| **PRU** | **Pruhonice** | **150.00 347** | *e*PKP2 | | **PKPbc** | **15 22 24.3** | **-0.3** | |
| PRU | | | MLR | MLR | | | | |
| | comp=Z,4µm,21.6s | | | | | | | |
| **PRU** | **Pruhonice** | **150.00 347** | ⇑*e*PKP | | **PKPbc** | **15 22 24.3** | **-0.3** | |
| PRU | | | *e*PKPAB | | **pPKPbc** | **15 22 28.5** | **-1.0** | |
| PRU | | | AMS | AMS | | 16 29 00.0 | | |
| | comp=Z,4µm,21.6s | | | | | | | |
| **NKC** | **Novy Kostel** | **150.16 350** | *e*PKIKP | | **PKPbc** | **15 22 24.9** | **-0.2** | |
| NKC | | | *e* | | | 15 22 30.1 | | |
| NKC | | | MLR | MLR | | | | |
| | comp=Z,4µm,21.8s | | | | | | | |
| **NKC** | **Novy Kostel** | **150.16 350** | ⇑*e*PKP | | **PKPbc** | **15 22 24.9** | **-0.2** | |
| NKC | | | *e*PKPAB | | **pPKPbc** | **15 22 30.1** | **+0.2** | |
| NKC | | | AMS | AMS | | 16 24 10.0 | | |
| | comp=Z,4µm,21.8s | | | | | | | |
| **VRAC** | **Vranov** | **150.16 344** | ⇑P | | **PKPbc** | **15 22 23.7** | **-1.4** | |
| **VRAC** | **Vranov** | **150.16 344** | ⇑PKP2 | | **PKPbc** | **15 22 23.7** | **-1.4** | |
| **VRAC** | **Vranov** | **150.16 344** | *e*PKP | | **PKiKP** | **15 22 26.1** | **+0.2** | |
| **LTVH** | **Ltavrtes, Hu** | **150.16 336** | ⇑PKP | | **PKiKP** | **15 22 26.2** | **+0.2** | |
| LTVH | | | PKPpB | | | 15 22 30.8 | | |
| **BEBN** | **Eben Emael** | **150.23 359** | *d*PKPbc | | **PKPdf** | **15 22 21.4** | **+1.3** | |
| **VYHS** | **Vyhne** | **150.27 341** | *e*PKIKP | | **PKPbc** | **15 22 25.1** | **-0.3** | |
| VYHS | | | *e* | | | 15 22 30.3 | | |
| **VYHS** | **Vyhne** | **150.27 341** | *e*PKP | | **PKPbc** | **15 22 25.1** | **-0.3** | |
| VYHS | | | *e* | | | 15 22 30.2 | | |
| VYHS | | | *e* | | | 15 22 36.9 | | |
| **JAVC** | **Velka Javorina** | **150.28 342** | *e*PKP | | **PKiKP** | **15 22 27.0** | **+0.7** | |
| **KOLL** | **Kolacno** | **150.32 341** | *e*PKP | | **PKPbc** | **15 22 25.2** | **-0.3** | |
| **DRGR** | | **150.33 334** | ⇑P | | **PKPbc** | **15 22 25.0** | **-0.7** | |
| **DRGR** | | **150.33 334** | ⇑PKIKP | | **PKPbc** | **15 22 25.0** | **-0.7** | |
| **VOIR** | | **150.38 330** | ⇓P | | **PKiKP** | **15 22 26.6** | **0.0** | |
| **VOIR** | | **150.38 330** | ⇓PKIKP | | **PKiKP** | **15 22 26.6** | **0.0** | |
| **MEM** | **Membach** | **150.41 358** | *d*PKPab | | **PKPab** | **15 22 30.2** | **-1.8** | |
| **PSZ** | **Piszkesteto** | **150.43 339** | ⇑P | | **PKPbc** | **15 22 26.2** | **+0.3** | |
| **PSZ** | **Piszkesteto** | **150.43 339** | ⇑PKIKP | | **PKPbc** | **15 22 26.2** | **+0.3** | |
| **PSZ** | **Piszkesteto** | **150.43 339** | IAMs_20 | IAMs_20 | | 16 29 31.9 | | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **PSZ** | **Piszkesteto** | **150.43 339** | PKIKP | | **PKiKP** | **15 22 29.0** | **+2.4** | |
| **PSZ** | **Piszkesteto** | **150.43 339** | ⇑PKP | | **PKiKP** | **15 22 28.2** | **+1.6** | |
| **BTNL** | **Ternell** | **150.43 358** | *d*PKiKP | | **PKPbc** | **15 22 25.2** | **-0.5** | |
| BTNL | | | *d*PKPab | | **pPKPbc** | **15 22 30.3** | **-0.3** | |
| **KRUC** | **Moravsky** | **150.44 344** | *e*PKP | | **PKPbc** | **15 22 25.2** | **-0.5** | |
| **BSTI** | **Sart Tilman** | **150.45 359** | *d*PKPab | | **PKPab** | **15 22 30.7** | **-1.4** | |
| **SNF** | **Seneffe** | **150.53 0** | *d*PKiKP | | **PKPbc** | **15 22 25.4** | **-0.5** | |
| SNF | | | *d*PKPab | | **pPKPbc** | **15 22 30.9** | **+0.2** | |
| **BCLA** | **Clavier** | **150.62 359** | *d*PKPdf | | **PKPdf** | **15 22 18.2** | **-2.4** | |
| BCLA | | | *d*PKP | | **pPKPdf** | **15 22 23.5** | **-2.0** | |
| BCLA | | | *d*PKPab | | **pPKPbc** | **15 22 30.1** | **-0.8** | |
| **ARR** | **Arges** | **150.62 331** | ⇑P | | **PKPdf** | **15 22 20.6** | **-0.3** | |
| **BGES** | **Gesves** | **150.66 359** | *d*PKPab | | **PKPab** | **15 22 31.1** | **-1.9** | |
| **SMOL** | **Smolenice** | **150.66 342** | *e*PKIKP | | **PKiKP** | **15 22 26.7** | **-0.3** | |
| SMOL | | | *e* | | | 15 22 32.0 | | |
| **SMOL** | **Smolenice** | **150.66 342** | *e*PKP | | **PKiKP** | **15 22 26.7** | **-0.3** | |
| SMOL | | | *e* | | | 15 22 32.0 | | |
| SMOL | | | *e* | | | 15 22 38.9 | | |
| **BHOU** | **Houvegnez** | **150.67 358** | *d*PKiKP | | **PKPbc** | **15 22 26.1** | **-0.2** | |
| BHOU | | | *d*PKPab | | **pPKPbc** | **15 22 31.7** | **+0.6** | |
| **BMRD** | **Maredsous** | **150.74 360** | *d*PKiKP | | **PKPbc** | **15 22 26.0** | **-0.4** | |
| BMRD | | | *d*PKPab | | **pPKPbc** | **15 22 31.0** | **-0.3** | |
| **MODS** | **Modra-Piesok** | **150.83 343** | *e*PKP | | **PKiKP** | **15 22 29.0** | **+1.6** | |
| **BSZH** | **Besenyszg** | **150.84 338** | ⇑PKP | | **PKPbc** | **15 22 26.8** | **+0.1** | |
| BSZH | | | PKPpB | | | 15 22 39.3 | | |
| **GRF** | **Grafenberg Arr** | **150.87 351** | *e*PKP | | **PKPbc** | **15 22 25.4** | **-1.3** | |
| | baz=13,slow=1.6 | | | | | | | |
| GRF | | | *eL* | L | | 16 33 42.8 | | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **RCHB** | **Rochefort** | **150.88 359** | *d*PKiKP | | **PKPbc** | **15 22 26.4** | **-0.3** | |
| RCHB | | | *d*PKPab | | **pPKPbc** | **15 22 31.4** | **-0.2** | |
| **DOU** | **Dourbes** | **150.95 0** | *d*PKiKP | | **PKPbc** | **15 22 26.5** | **-0.4** | |
| DOU | | | *d*PKPab | | **pPKPbc** | **15 22 31.9** | **+0.2** | |
| **LOT** | **Lotru** | **150.95 332** | ⇓P | | **PKPdf** | **15 22 24.3** | **+2.8** | |
| **RAZG** | **Razgrad** | **151.01 326** | ⇓P | | **PKPbc** | **15 22 25.0** | **-2.3** | |
| **KHC** | **Kasperske Hory** | **151.01 348** | ⇓*e*PKIKP | | **PKPdf** | **15 22 20.9** | **-0.5** | |
| **KHC** | **Kasperske Hory** | **151.01 348** | ⇓*e*PKP | | **PKPbc** | **15 22 25.4** | **-1.8** | |
| KHC | | | *e*PKPAB | | **pPKPbc** | **15 22 32.3** | **+0.3** | |
| KHC | | | AMS | AMS | | 16 29 30.0 | | |
| | comp=Z,4µm,19.4s | | | | | | | |
| **SRO** | **Srobarova** | **151.03 341** | *e*PKP | | **PKPab** | **15 22 34.4** | **-0.2** | |
| SRO | | | *e* | | | 15 22 40.5 | | |
| **ZST** | **Bratislava** | **151.04 343** | *e*PKP | | **PKPbc** | **15 22 27.2** | **0.0** | |
| ZST | | | *e* | | | 15 22 32.3 | | |
| ZST | | | *e* | | | 15 22 40.5 | | |
| **BUD** | **Budapest** | **151.10 340** | PKPDF | | **PKPdf** | **15 22 22.7** | **+1.2** | |
| BUD | | | PKPpB | | | 15 22 32.7 | | |
| **CKRC** | **Cesky Krumlov** | **151.16 347** | ⇑*e*PKP | | **PKPbc** | **15 22 26.2** | **-1.3** | |
| CKRC | | | AMS | AMS | | 16 29 00.0 | | |
| | comp=Z,4µm,20.7s | | | | | | | |
| **GERES** | **GERESS Array B** | **151.26 347** | PKPbc | | **PKPbc** | **15 22 26.2** | **-1.6** | |
| | comp=Z,30nm,1.2s,baz=48,slow=2.0,SNR=9.9 | | | | | | | |
| **GERES** | **GERESS Array B** | **151.26 347** | PKIKP | | **PKPdf** | **15 22 24.8** | **+2.9** | |
| **GERES** | **GERESS Array B** | **151.26 347** | | | **PKPdf** | **15 22 24.8** | **+2.9** | |
| **WLF** | **Walferdange** | **151.35 358** | *d*PKiKP | | **PKiKP** | **15 22 28.2** | **-0.2** | |
| **GZR** | **Gura Zlata** | **151.43 333** | ⇓P | | **PKPdf** | **15 22 21.7** | **-0.5** | |
| **GZR** | **Gura Zlata** | **151.43 333** | ⇓PKIKP | | **PKPdf** | **15 22 21.7** | **-0.5** | |
| **LEF** | **Lefka** | **151.46 306** | ⇑P | | **PKPbc** | **15 22 27.3** | **-1.3** | |
| **CONA** | **Conrad Observa** | **151.62 344** | *e*P | | **PKPbc** | **15 22 27.2** | **-1.5** | |
| | comp=Z,12nm,1.2s | | | | | | | |
| CONA | | | *e*P | | **pPKPbc** | **15 22 34.1** | **+0.5** | |
| | comp=Z,43nm,1.2s | | | | | | | |
| CONA | | | *e*P | | **PKPab** | **15 22 37.8** | **+0.5** | |
| | comp=Z,162nm,1.4s | | | | | | | |
| **SOP** | **Sopron** | **151.66 343** | PKPDF | | **PKPdf** | **15 22 24.7** | **+2.3** | |
| SOP | | | PKPpB | | | 15 22 34.5 | | |
| **EGYH** | **Egyhazaskeszo** | **151.68 342** | PKPDF | | **PKPdf** | **15 22 25.0** | **+2.6** | |
| EGYH | | | PKIKP | | **pPKPbc** | **15 22 31.3** | **-2.3** | |
| **BZS** | **Buzias** | **151.73 334** | ⇑P | | **PKPdf** | **15 22 22.4** | **-0.1** | |
| **BZS** | **Buzias** | **151.73 334** | ⇑PKIKP | | **PKPdf** | **15 22 22.4** | **-0.1** | |
| **MPLH** | **Magyarpolny** | **151.84 341** | PKPDF | | **PKPdf** | **15 22 25.0** | **+2.3** | |
| MPLH | | | PKIKP | | **PKiKP** | **15 22 29.4** | **-0.1** | |
| **HERR** | **Herculane** | **151.99 332** | ⇑P | | **PKPbc** | **15 22 26.7** | **-2.8** | |
| **STU** | **Stuttgart** | **152.03 354** | IAMs_20 | IAMs_20 | | 16 36 53.0 | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **MOA** | **Molln** | **152.08 346** | *e*P | | **PKPbc** | **15 22 27.5** | **-2.1** | |
| | comp=Z,4.0nm,0.3s,SNR=5.3 | | | | | | | |
| MOA | | | *i* P | | **PKPab** | **15 22 39.5** | **+0.5** | |
| | comp=Z,52nm,1.2s | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **152.33 339** | ⇑P | | **PKPdf** | **15 22 23.1** | **-0.3** | |
| **MORH** | **Mrgy, Hungar** | **152.33 339** | PKPDF | | **PKPdf** | **15 22 25.0** | **+1.6** | |
| **MORH** | **Mrgy, Hungar** | **152.33 339** | ⇑PKP | | **PKPdf** | **15 22 25.3** | **+1.9** | |
| **ARSA** | **Arzberg** | **152.34 344** | *i* P | | **PKPbc** | **15 22 27.7** | **-2.5** | |
| | comp=Z,13nm,1.4s | | | | | | | |
| ARSA | | | *e*P | | **PKPab** | **15 22 40.7** | **+0.6** | |
| | comp=Z,53nm,1.1s | | | | | | | |
| **MDVR** | **Moldovita** | **152.37 333** | ⇑P | | **PKiKP** | **15 22 34.3** | **+3.6** | |
| **KOVH** | **Kovagotottos** | **152.63 339** | PKPDF | | **PKPdf** | **15 22 26.8** | **+2.9** | |
| **KOVH** | **Kovagotottos** | **152.63 339** | ⇑PKP | | **PKPbc** | **15 22 28.8** | **-2.1** | |
| **SOKA** | **Soboth** | **152.99 344** | *i* P | | **PKPbc** | **15 22 29.0** | **-2.8** | |
| | comp=Z,13nm,1.6s | | | | | | | |
| SOKA | | | *e*P | | **PKPab** | **15 22 43.2** | **+0.2** | |
| | comp=Z,139nm,1.3s,SNR=5.1 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **153.01 347** | *e*P | | **PKPbc** | **15 22 28.5** | **-3.5** | |
| | comp=Z,13nm,1.2s | | | | | | | |
| KBA | | | *i* P | | **PKPab** | **15 22 43.2** | **0.0** | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **RETA** | **Reutte** | **153.09 351** | *e*P | | **PKPbc** | **15 22 29.0** | **-2.9** | |
| | comp=Z,13nm,1.3s | | | | | | | |
| RETA | | | *e*P | | **pPKPab** | **15 22 47.5** | **-0.7** | |
| | comp=Z,54nm,1.3s | | | | | | | |
| **WATA** | **Walderalm** | **153.11 349** | *i* P | | **PKPbc** | **15 22 29.3** | **-2.8** | |
| | comp=Z,27nm,1.8s | | | | | | | |
| WATA | | | *i* P | | **pPKPab** | **15 22 47.0** | **-1.4** | |
| | comp=Z,60nm,1.2s | | | | | | | |
| **WTTA** | **Wattenberg** | **153.17 349** | *i* P | | **PKPbc** | **15 22 29.5** | **-2.8** | |
| | comp=Z,23nm,1.1s | | | | | | | |
| WTTA | | | *i* P | | **PKPab** | **15 22 45.7** | **+1.9** | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **MOTA** | **Moosalm** | **153.18 350** | *i* P | | **PKPbc** | **15 22 29.3** | **-2.9** | |
| | comp=Z,37nm,1.1s | | | | | | | |
| MOTA | | | *e*P | | **pPKPab** | **15 22 48.6** | **0.0** | |
| | comp=Z,90nm,1.4s | | | | | | | |
| **OBKA** | **Obir** | **153.27 345** | *i* P | | **PKPbc** | **15 22 29.3** | **-3.1** | |
| | comp=Z,18nm,1.5s | | | | | | | |
| OBKA | | | *i* P | | **PKPab** | **15 22 42.9** | **-1.3** | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **BOVS** | **Bovan** | **153.29 332** | ⇑P | | **PKPdf** | **15 22 23.8** | **-1.1** | |
| **VTS** | **Vitosha** | **153.35 328** | PKIKP | | **PKPbc** | **15 22 29.8** | **-3.0** | |
| **MYKA** | **Terra Mystica** | **153.38 346** | *i* P | | **PKPbc** | **15 22 29.1** | **-3.5** | |
| | comp=Z,12nm,1.0s | | | | | | | |
| MYKA | | | *i* P | | **PKPab** | **15 22 45.2** | **+0.6** | |
| | comp=Z,106nm,1.6s | | | | | | | |
| **DAVA** | **Damuels** | **153.41 352** | *e*P | | **PKPbc** | **15 22 30.1** | **-2.7** | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.50 348** | *e*P | | **PKPdf** | **15 22 24.0** | **-1.2** | |
| | comp=Z,35nm,1.2s | | | | | | | |
| ABTA | | | *e*P | | **pPKPdf** | **15 22 29.4** | **-0.7** | |
| | comp=Z,35nm,1.2s | | | | | | | |
| **FETA** | **Feichten** | **153.55 351** | *e*P | | **PKPbc** | **15 22 30.0** | **-3.1** | |
| | comp=Z,27nm,1.2s,SNR=5.1 | | | | | | | |
| FETA | | | *e*P | | **PKPab** | **15 22 45.2** | **-0.2** | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **DIVS** | **Divibare** | **153.64 334** | | | **PKPdf** | **15 22 28.9** | **+3.4** | |
| DIVS | | | IAMs_20 | IAMs_20 | | 16 34 25.1 | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **STAL** | **STALIGIAL** | **153.93 347** | | | **PKPdf** | **15 22 29.8** | **+4.0** | |
| **TUE** | **Stuetta** | **154.28 352** | | | **PKPbc** | **15 22 31.2** | **-3.6** | |
| **IDI** | **Anoyia** | **157.19 313** | IAMs_20 | IAMs_20 | | 16 34 25.8 | | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **159.98 20** | PKP | | **PKPdf** | **15 22 34.2** | **+0.4** | |
| | comp=Z,2.7nm,1.2s,baz=262,slow=1.6,SNR=3.3 | | | | | | | |
| ESDC | | | PKPab | | **PKPab** | **15 23 13.2** | **+0.1** | |
| | comp=Z,11nm,1.0s,baz=323,slow=3.1,SNR=8.6 | | | | | | | |
| **ESDC** | **Sonseca Array** | **159.98 20** | PKPab | | **PKPab** | **15 23 11.8** | **-1.3** | |
| **LIC** | **Lamto** | **162.61 146** | *e*PKIKP | | **PKPdf** | **15 22 40.7** | **+3.5** | |
| | comp=Z,78nm,1.2s | | | | | | | |
| **KIC** | **Kosan Boka** | **162.88 147** | *e*PKIKP | | **PKPdf** | **15 22 40.8** | **+3.3** | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **TIC** | **Toumodi** | **162.97 145** | *e*PKIKP | | **PKPdf** | **15 22 41.0** | **+3.4** | |
| **DBIC** | **Dimbokro** | **163.08 146** | PKP | | **PKPdf** | **15 22 38.2** | **+0.6** | |
| | comp=Z,16nm,1.0s,baz=185,slow=2.1,SNR=9.6 | | | | | | | |
| **KEST** | **Kesra** | **164.73 345** | PKPab | | **PKPab** | **15 23 34.1** | **+0.1** | |
| | comp=Z,40nm,1.1s,baz=296,slow=3.3,SNR=8.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.73 160** | PKP | | **PKPdf** | **15 22 44.7** | **+0.8** | |
| | comp=Z,7.6nm,1.1s,baz=313,slow=1.7,SNR=10 | | | | | | | |
| TORD | | | PKPab | | **PKPab** | **15 24 06.7** | **+1.4** | |
| | comp=Z,13nm,0.9s,baz=215,slow=3.9,SNR=9.3 | | | | | | | |
| TORD | | | PP | | **PP** | **15 27 59.1** | **+4.2** | |
| | comp=Z,4.9nm,0.9s,baz=207,slow=3.4,SNR=4.0 | | | | | | | |
| TORD | | | SKKPbc | | | 15 31 50.4 | | |
| | comp=Z,4.3nm,1.2s,baz=73,slow=2.0,SNR=3.9 | | | | | | | |

*IDC **15** 15:09:37.3±1.4,21°.34S×175°.63W,h0km,mb4.0/6, mb1 4.2/8,mb1mx3.9/43,mbtmp4.0/8,ML5.0/1 Error ellipse: s-maj=59.4km s-min=23.9km az=160.0*
*NEIC **15** 15:09:41.3±1.9,21°.3S±0°.2×175°.47W±0°.08,h27km±6km, mb4.6/10,Error ellipse: s-maj=23.5km s-min=10.7km az=176.0*

**ISC 15 15:09:43.2±0.8,21°.3S±0°.2×175°.7W±0°.1,h35km,n22, σ1§44/22,mb4.4/10,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.88** | **300** | Pn | | **Pn** | **Pn** | **15 11 21.8** | **0.0** |
| | 1.0nm,0.3s,baz=131,slow=12,SNR=5.5 | | | | | | | | |
| **MSVF** | **Nonsavu** | **6.88** | **300** | Pn | | **Pn** | **Pn** | **15 11 22.8** | **+1.1** |
| **DZM** | **Mont Dzumac** | **16.65** | **264** | Pn | | **Pn** | **Pn** | **15 13 34.4** | **+0.4** |
| | 0.1nm,0.3s,baz=135,slow=20,SNR=2.6 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.65** | **264** | P | | **P** | **P** | **15 13 39.6** | **+3.5** |
| DZM | | | | IAmb | | IAmb | IAmb | 15 13 40.9 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **CTA** | **Charters Tower** | **35.59** | **265** | P | | **P** | **P** | **15 16 37.4** | **-0.2** |
| | comp=Z,4.0nm,0.9s,baz=122,slow=10,SNR=2.5 | | | | | | | | |
| **CTAO** | **Charters Tower** | **35.59** | **265** | P | | **P** | **P** | **15 16 36.7** | **-0.9** |
| CTAO | | | | IAmb | | IAmb | IAmb | 15 16 55.0 | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **TOO** | **Toolangi** | **37.24** | **235** | P | | **P** | **P** | **15 16 48.9** | **-2.6** |
| **COEN** | **Coen** | **39.80** | **274** | P | | **P** | **P** | **15 17 13.9** | **+0.6** |
| COEN | | | | IAmb | | IAmb | IAmb | 15 17 14.9 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **AS31** | **Alice Springs** | **46.47** | **257** | P | | **P** | **P** | **15 18 06.1** | **-1.1** |
| **ASAR** | **Alice Springs** | **46.47** | **257** | P | | **P** | **P** | **15 18 06.3** | **-0.8** |
| | comp=Z,2.6nm,0.7s,baz=92,slow=7.7,SNR=11 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **PcP** | **15 19 41.7** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=106,slow=3.0,SNR=2.7 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **46.65** | **262** | P | | **P** | **P** | **15 18 08.3** | **-0.2** |
| WB2 | | | | IAmb | | IAmb | IAmb | 15 18 19.7 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.66** | **262** | P | | **P** | **P** | **15 18 08.1** | **-0.6** |
| | comp=Z,1.8nm,1.1s,baz=96,slow=6.0,SNR=4.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.66** | **262** | P | | **P** | **P** | **15 18 07.6** | **-1.1** |
| **QSPA** | **South Pole Qui** | **68.81** | **180** | P | | **P** | **P** | **15 20 45.8** | **+2.0** |
| QSPA | | | | IAmb | | IAmb | IAmb | 15 21 06.6 | |
| | comp=Z,3.2nm,0.9s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **77.58** | **344** | P | | **P** | **P** | **15 21 34.7** | **-0.6** |
| **PETK** | **Petropavlovsk-** | **77.58** | **344** | P | | **P** | **P** | **15 21 34.8** | **-0.6** |
| | comp=Z,3.5nm,0.9s,baz=134,slow=10,SNR=1.4 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **77.58** | **344** | P | | **P** | **P** | **15 21 34.9** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **80.10** | **42** | P | | **P** | **P** | **15 21 50.7** | **+0.9** |
| | comp=Z,0.3nm,0.7s,baz=215,slow=7.6,SNR=1.8 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.64** | **56** | P | | **P** | **P** | **15 22 19.4** | **+0.7** |
| | comp=Z,0.3nm,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ABKAR | **Akbulak array** | **69.60** | **321** | P | **P** | 15 25 33.3 | -0.7 | | |
| ABKAR | | | | IAmb | IAmb | 15 25 34.2 | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | | |
| **ANM** | **Nome** | **76.02** | **25** | P | **P** | 15 26 12.7 | +0.9 | | |
| **TTA** | **Tatalina** | **79.75** | **27** | P | **P** | 15 26 32.8 | +0.1 | | |
| TTA | | | | IAmb | IAmb | 15 26 34.5 | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.77** | **30** | P | **P** | 15 26 33.0 | +0.2 | | |
| O18K | | | | IAmb | IAmb | 15 26 36.5 | | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **L19K** | **White Mountain** | **80.19** | **28** | P | **P** | 15 26 35.4 | +0.4 | | |
| L19K | | | | IAmb | IAmb | 15 26 37.4 | | | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **M19K** | **Big River Lodg** | **80.38** | **28** | P | **P** | 15 26 36.3 | +0.2 | | |
| M19K | | | | IAmb | IAmb | 15 26 39.1 | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **K20K** | **Telida** | **80.68** | **27** | P | **P** | 15 26 38.2 | +0.6 | | |
| **J20K** | **Nowinta River** | **80.72** | **26** | P | **P** | 15 26 37.7 | -0.1 | | |
| J20K | | | | IAmb | IAmb | 15 26 39.9 | | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **80.96** | **33** | P | **P** | 15 26 38.9 | -0.3 | | |
| **IMAR** | **Indian Mountai** | **81.08** | **24** | P | **P** | 15 26 40.0 | +0.4 | | |
| **H21K** | **Melozitna Rive** | **81.44** | **25** | P | **P** | 15 26 41.5 | 0.0 | | |
| H21K | | | | IAmb | IAmb | 15 26 43.4 | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **PPLA** | **Purkeypile** | **81.49** | **27** | P | **P** | 15 26 42.0 | -0.1 | | |
| PPLA | | | | IAmb | IAmb | 15 27 06.2 | | | |
| | comp=Z,9.6nm,1.2s | | | | | | | | |
| **CAST** | **Castle Rocks** | **81.57** | **27** | P | **P** | 15 26 42.4 | 0.0 | | |
| CAST | | | | IAmb | IAmb | 15 26 44.2 | | | |
| | comp=Z,4.1nm,0.7s | | | | | | | | |
| **CNPM** | **China Poot** | **81.76** | **31** | P | **P** | 15 26 43.4 | 0.0 | | |
| **BRLK** | **Bradley Lake** | **81.94** | **31** | P | **P** | 15 26 43.2 | -1.2 | | |
| **BPAW** | **Bear Paw Mtn.** | **82.10** | **26** | P | **P** | 15 26 45.6 | +0.5 | | |
| BPAW | | | | IAmb | IAmb | 15 26 46.9 | | | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **82.10** | **27** | P | **P** | 15 26 45.0 | -0.2 | | |
| KTH | | | | IAmb | IAmb | 15 26 48.1 | | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **MLY** | **Manley** | **82.26** | **25** | P | **P** | 15 26 46.0 | 0.0 | | |
| **CUT** | **Chulitna** | **82.35** | **28** | P | **P** | 15 26 46.7 | +0.3 | | |
| **TRF** | **Thorofare Moun** | **82.38** | **27** | P | **P** | 15 26 46.3 | -0.5 | | |
| TRF | | | | IAmb | IAmb | 15 26 49.1 | | | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **82.56** | **29** | P | **P** | 15 26 47.3 | -0.2 | | |
| RC01 | | | | IAmb | IAmb | 15 26 48.5 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **COLD** | **Coldfoot** | **82.58** | **23** | P | **P** | 15 26 48.4 | +0.8 | | |
| COLD | | | | IAmb | IAmb | 15 26 48.7 | | | |
| | comp=Z,8.5nm,1.4s | | | | | | | | |
| **SEW** | **Seward** | **82.68** | **30** | P | **P** | 15 26 48.1 | 0.0 | | |
| **H23K** | **Yukon River** | **82.79** | **24** | P | **P** | 15 26 49.1 | +0.4 | | |
| H23K | | | | IAmb | IAmb | 15 26 53.1 | | | |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **82.84** | **25** | P | **P** | 15 26 49.5 | +0.6 | | |
| I23K | | | | IAmb | IAmb | 15 26 51.3 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **82.88** | **22** | P | **P** | 15 26 49.8 | +0.6 | | |
| TOLK | | | | IAmb | IAmb | 15 26 50.8 | | | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| **NEA2** | **Nenana** | **82.95** | **26** | P | **P** | 15 26 49.6 | +0.1 | | |
| NEA2 | | | | IAmb | IAmb | 15 26 51.3 | | | |
| | comp=Z,5.6nm,0.9s | | | | | | | | |
| **MCK** | **McKinley** | **82.99** | **27** | P | **P** | 15 26 49.2 | -0.6 | | |
| MCK | | | | IAmb | IAmb | 15 26 50.9 | | | |
| | comp=Z,9.4nm,0.7s | | | | | | | | |
| **RND** | **Reindeer** | **83.02** | **27** | P | **P** | 15 26 49.7 | -0.3 | | |
| RND | | | | IAmb | IAmb | 15 26 50.8 | | | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **SML** | **Sawmill** | **83.25** | **29** | P | **P** | 15 26 51.6 | +0.5 | | |
| SML | | | | IAmb | IAmb | 15 27 06.6 | | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **MDM** | **Murphy Dome** | **83.32** | **25** | P | **P** | 15 26 51.7 | +0.3 | | |
| **WRH** | **Wood River Hil** | **83.38** | **26** | P | **P** | 15 26 50.5 | -1.2 | | |
| **H24K** | **Noodor Dome** | **83.48** | **24** | P | **P** | 15 26 52.9 | +0.7 | | |
| H24K | | | | IAmb | IAmb | 15 26 55.7 | | | |
| | comp=Z,9.3nm,1.1s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.50** | **26** | P | **P** | 15 26 51.5 | -0.8 | | |
| CCB | | | | IAmb | IAmb | 15 26 53.6 | | | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **83.87** | **26** | P | **P** | 15 26 53.1 | -1.2 | | |
| HDA | | | | IAmb | IAmb | 15 26 54.6 | | | |
| | comp=Z,6.9nm,0.6s | | | | | | | | |
| **IL31** | | **83.89** | **26** | P | **P** | 15 26 52.9 | -1.4 | | |
| IL31 | | | | IAmb | IAmb | 15 26 55.1 | | | |
| | comp=Z,3.6nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.89** | **26** | P | **P** | 15 26 53.1 | -1.2 | | |
| | comp=Z,2.7nm,0.5s,baz=243,slow=4.9,SNR=46 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **84.26** | **28** | P | **P** | 15 26 56.1 | -0.3 | | |
| **FYU** | **Fort Yukon** | **84.54** | **24** | P | **P** | 15 26 58.3 | +0.8 | | |
| **J25K** | **Salcha River,** | **84.55** | **26** | P | **P** | 15 26 56.2 | -1.6 | | |
| J25K | | | | IAmb | IAmb | 15 26 57.8 | | | |
| | comp=Z,9.8nm,1.5s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **84.76** | **23** | P | **P** | 15 26 59.5 | +0.8 | | |
| **RIDG** | **Independent Ri** | **84.81** | **27** | P | **P** | 15 26 58.6 | -0.5 | | |
| **BMRM** | **Bremner River** | **85.06** | **29** | P | **P** | 15 27 00.8 | +0.4 | | |
| **SCRK** | **Sand Creek** | **85.18** | **26** | P | **P** | 15 27 01.2 | +0.2 | | |
| SCRK | | | | IAmb | IAmb | 15 27 06.4 | | | |
| | comp=Z,5.3nm,1.1s | | | | | | | | |
| **WAX** | **Waxell Ridge** | **85.95** | **30** | P | **P** | 15 27 05.4 | +0.6 | | |
| **ISLE** | **Juniper Island** | **86.19** | **30** | P | **P** | 15 27 06.5 | +0.4 | | |
| **L27K** | **Beaver Creek,** | **86.21** | **27** | P | **P** | 15 27 06.5 | +0.4 | | |
| L27K | | | | IAmb | IAmb | 15 27 20.9 | | | |
| | comp=Z,4.8nm,1.3s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **86.23** | **27** | P | **P** | 15 27 06.5 | +0.3 | | |
| **EGAK** | **Eagle** | **86.34** | **25** | P | **P** | 15 27 05.9 | -0.7 | | |
| EGAK | | | | IAmb | IAmb | 15 27 28.7 | | | |
| | comp=Z,8.8nm,1.4s | | | | | | | | |
| **DAWY** | **Dawson** | **87.19** | **26** | P | **P** | 15 27 10.8 | 0.0 | | |
| **HYT** | **Haines Junctio** | **88.52** | **29** | P | **P** | 15 27 17.9 | +0.5 | | |
| HYT | | | | IAmb | IAmb | 15 27 34.5 | | | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **INK** | **Inuvik** | **88.80** | **21** | P | **P** | 15 27 17.2 | -1.1 | | |
| INK | | | | IAmb | IAmb | 15 27 18.9 | | | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **FIA1** | **FINESS Array S** | **89.30** | **332** | P | **P** | 15 27 18.3 | -2.5 | | |
| **FINES** | **FINESS Array B** | **89.30** | **332** | P | **P** | 15 27 19.0 | -1.8 | | |
| | comp=Z,1.4nm,0.8s,baz=85,slow=4.0,SNR=5.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **89.30** | **332** | P | **P** | 15 27 18.2 | -2.6 | | |
| **M31M** | **Drury Creek, Y** | **89.74** | **27** | P | **P** | 15 27 22.6 | -0.3 | | |
| **WHY** | **Whitehorse** | **89.82** | **29** | P | **P** | 15 27 23.7 | +0.2 | | |
| WHY | | | | IAmb | IAmb | 15 27 25.5 | | | |
| | comp=Z,4.2nm,1.1s | | | | | | | | |
| **SYO** | **Syowa Base** | **93.80** | **201** | ⇑*eX* | P | 15 27 47.3 | +5.9 | | |
| **YKA** | **Yellowknife Ar** | **98.24** | **24** | P | **P** | 15 28 01.6 | -0.3 | | |
| | comp=Z,0.4nm,0.7s,baz=301,slow=4.8,SNR=5.6 | | | | | | | | |

*IDC **15** 15:27:21.3±2.1, 1°.25N×127°.75E, h0km, mb3.6/3, mb1 3.9/3, mb1mx3.5/29, mbtmp3.7/3, Error ellipse: s-maj=153.6km s-min=24.5km az=67.0*
*DJA **15** 15:27:27.1±0.4, 1°N±5°×12°6E±°, h10km, M3.2/6, MLv3.2/6*
**ISC 15 15:27:29.7**±1.1,**0°.6N**±0°.1×**126°.44E**±0°.07,**h50**km,**n6,**
**σ1§18/7,mb3.5/3,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.95** | **79** | P | **Pn** | 15 27 46.0 | -0.7 |
| TNTI | | | | S | **Sn** | 15 28 00.6 | +1.4 |
| **KMSI** | **Cibinong** | **2.46** | **270** | P | **Pn** | 15 28 07.2 | -0.1 |
| **SANI** | **Sanana** | **2.66** | **190** | P | **Pn** | 15 28 09.9 | -0.2 |
| **WRA** | **Warramunga Arr** | **21.83** | **160** | P | **P** | 15 32 16.8 | -1.2 |
| | 1.7nm,0.6s,baz=343,slow=12,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **25.18** | **164** | P | **P** | 15 32 52.0 | +1.3 |
| | 1.4nm,0.8s,baz=344,slow=12,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.97** | **326** | P | **P** | 15 37 30.9 | -0.2 |
| | 0.2nm,0.5s,baz=125,slow=7.8,SNR=8.2 | | | | | | |

*BUL **15** 15:36:11.1±9.3, 26°.98S×29°.27E, h10km, MD3.9*
*EAF **15** 15:36:13.0±10.0, 26°.84S×29°.37E, h10km, MD3.7*
**ISC 15 15:36:16.5**±3.1,**26°.6S**±0°.2×**29°.6E**±0°.1,**h10**km,**n10,**
**σ2§20/18,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.37** | **83** | *i* P | **Pn** | 15 36 54.9 | -0.5 |
| CNG | | | | *i* S | **Sb** | 15 37 30.6 | +2.0 |
| **CNG** | **Changalane** | **2.37** | **83** | *i* P | **Pn** | 15 36 54.9 | -0.5 |
| CNG | | | | *i* S | **Sb** | 15 37 30.6 | +2.0 |
| **MOPA** | **Mopani** | **3.50** | **29** | *e*P | Pn | 15 36 55.7 | -15 |
| MOPA | | | | *e*S | **Sn** | 15 37 49.2 | -3.4 |
| **MOPA** | **Mopani** | **3.50** | **29** | *e*P | Pn | 15 36 55.7 | -15 |
| MOPA | | | | *e*S | **Sn** | 15 37 49.2 | -3.4 |
| **MSNA** | **Messina** | **4.28** | **6** | *e*P | **Pn** | 15 37 23.4 | +1.7 |
| MSNA | | | | *e*S | **Sn** | 15 38 13.2 | +1.5 |
| **MSNA** | **Messina** | **4.28** | **6** | *e*P | **Pn** | 15 37 23.4 | +1.7 |
| MSNA | | | | *e*S | **Sn** | 15 38 13.2 | +1.5 |
| **MATP** | **Matopo** | **6.24** | **351** | *e*P | **Pn** | 15 37 48.0 | -0.8 |
| MATP | | | | *e*S | **Sn** | 15 38 57.3 | -3.0 |
| **MATP** | **Matopo** | **6.24** | **351** | *e*P | **Pn** | 15 37 48.0 | -0.8 |
| MATP | | | | *e*S | **Sn** | 15 38 57.3 | -3.0 |
| **BLWY** | **Bulawayo** | **6.51** | **352** | *e*P | **Pn** | 15 37 54.1 | +1.6 |
| BLWY | | | | *e*S | **Sn** | 15 39 05.3 | -1.6 |
| **BLWY** | **Bulawayo** | **6.51** | **352** | *e*P | **Pn** | 15 37 54.1 | +1.6 |
| BLWY | | | | *e*S | **Sn** | 15 39 05.3 | -1.6 |

*REN **15** 15:42:52.7±1.8, 37°.57N±0°.03×118°.86W±0°.03, h6km±6km, Error ellipse: s-maj=4.6km s-min=3.5km az=169.0*
*NCEDC **15** 15:42:52.6±1.8, 37°.57N±0°.03×118°.86W±0°.03, h5km±6km, ML3.7/58, ML3.3/70(NEIC), ML3.4/7(REN), Error ellipse: s-maj=3.7km s-min=2.9km az=185.0*
*NEIC **15** 15:42:52.8±1.9, 37°.58N±0°.01×118°.85W±0°.03, h6km±7km, Error ellipse: s-maj=3.6km s-min=1.5km az=68.0*
*ANF **15** 15:42:52.8±0.5, 37°.54N×118°.85W, h5km, ML3.7/22, ML3.7/22, Error ellipse: s-maj=4.3km s-min=3.3km az=107.0*
**ISC 15 15:42:51.8**±0.9,**37°.54N**±0°.02×**118°.86W**±0°.02,**h8**km±7km,
**n94,σ1§07/106,California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLAC** | **Mammoth, Mammo** | **0.10** | **11** | P | **Pg** | 15 42 54.5 | +0.2 |
| | baz=196,SNR=1000 | | | | | | |
| MLAC | | | | S | **Sg** | 15 42 56.2 | +0.1 |
| | baz=196 | | | | | | |
| **MDRNC** | **Doe Ridge** | **0.10** | **10** | | **Pg** | 15 42 54.8 | +0.3 |
| **MRDM** | **Red Cones** | **0.17** | **291** | | **Pg** | 15 42 56.2 | +0.7 |
| **MDCM** | **Deadman Creek** | **0.23** | **320** | | **Pg** | 15 42 56.8 | +0.4 |
| **MTUM** | **Tungsten Hills** | **0.30** | **128** | | **Pb** | 15 42 59.0 | -0.5 |
| **KCC** | **Kaiser Creek** | **0.42** | **240** | | **Pb** | 15 43 01.2 | -0.5 |
| KCC | | | | | **Sb** | 15 43 07.1 | -1.2 |
| **TIN** | **Tinemaha, Big** | **0.69** | **134** | P | **Pb** | 15 43 06.5 | +0.2 |
| | baz=316,SNR=65 | | | | | | |
| TIN | | | | S | **Sb** | 15 43 16.6 | +0.5 |
| | baz=316 | | | | | | |
| **LHV** | **Little Huntoon** | **0.77** | **21** | | **Pg** | 15 43 06.7 | +0.1 |
| LHV | | | | IAML | | 15 43 22.3 | |
| | comp=E,1μm,0.5s | | | | | | |
| LHV | | | | IAML | | 15 43 22.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| **HELL** | **Mitchell Peak,** | **0.86** | **189** | | **Pb** | 15 43 09.5 | +0.3 |
| HELL | | | | | **Sb** | 15 43 21.3 | +0.3 |
| **NVAR** | **Mina Array Bea** | **0.99** | **26** | | **Pg** | 15 43 10.7 | -0.3 |
| **LCH** | **Last Change Ra** | **1.01** | **107** | | **Pb** | 15 43 11.9 | +0.1 |
| LCH | | | | IAML | | 15 43 26.2 | |
| | comp=E,664nm,0.6s | | | | | | |
| LCH | | | | IAML | | 15 43 28.1 | |
| | comp=N,614nm,0.4s | | | | | | |
| **NV11** | **Mina Array Sit** | **1.05** | **32** | | **Pg** | 15 43 11.8 | -0.3 |
| NV11 | | | | IAML | | 15 43 30.6 | |
| | comp=E,539nm,0.9s | | | | | | |
| **RYN** | **Ryan** | **1.12** | **14** | | **Pg** | 15 43 13.1 | -0.3 |
| RYN | | | | IAML | | 15 43 28.6 | |
| | comp=E,458nm,0.4s | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.26** | **150** | P | **Pn** | 15 43 16.5 | +0.5 |
| | baz=332 | | | | | | |
| CWC | | | | S | **Sn** | 15 43 33.5 | +0.3 |
| | baz=332 | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.28** | **199** | P | **Pn** | 15 43 17.2 | +1.1 |
| | baz=18 | | | | | | |
| VOG | | | | S | **Sn** | 15 43 34.2 | +0.7 |
| | baz=18 | | | | | | |
| **GRAC** | **Grapevine Rang** | **1.31** | **114** | | **Pn** | 15 43 17.7 | +1.2 |
| **GRAC** | **Grapevine Rang** | **1.31** | **114** | P | **Pn** | 15 43 18.2 | +1.8 |
| | baz=296,SNR=176 | | | | | | |
| GRAC | | | | S | **Sn** | 15 43 36.5 | +2.3 |
| | baz=296 | | | | | | |
| **CMB** | **Columbia Colle** | **1.31** | **293** | | **Pg** | 15 43 16.4 | -0.5 |
| CMB | | | | | **Sg** | 15 43 33.8 | -0.1 |
| **CMB** | **Columbia Colle** | **1.31** | **293** | Pn | **Pg** | 15 43 16.3 | -0.7 |
| **CMB** | **Columbia Colle** | **1.31** | **293** | IAML | | 15 43 34.3 | |
| | comp=E,564nm,0.3s | | | | | | |
| CMB | | | | IAML | | 15 43 38.1 | |
| | comp=N,670nm,0.8s | | | | | | |
| **TPH** | **Tonopah** | **1.40** | **67** | | **Pb** | 15 43 18.7 | +0.3 |
| **YERR** | **Yerington** | **1.48** | **348** | | **Pn** | 15 43 19.3 | +0.3 |
| YERR | | | | IAML | | 15 44 10.6 | |
| | comp=E,290nm,0.6s | | | | | | |
| **KVN** | **Kaiserville** | **1.63** | **21** | Pn | **Pn** | 15 43 21.4 | +0.4 |
| **PNTR** | **Pine Nut** | **1.66** | **340** | | **Pn** | 15 43 22.2 | +0.7 |
| PNTR | | | | IAML | | 15 43 56.8 | |
| | comp=E,298nm,0.7s | | | | | | |
| **VES** | **Vestal, Richgr** | **1.70** | **186** | Pb | **Pg** | 15 43 24.4 | 0.0 |
| | baz=6.0,SNR=39 | | | | | | |
| VES | | | | S | **Sg** | 15 43 46.6 | +0.1 |
| | baz=6.0 | | | | | | |
| **PDRM** | **Domengine Ranc** | **1.70** | **226** | | **Pg** | 15 43 24.5 | 0.0 |
| **EMB** | **Emerald Bay** | **1.74** | **326** | | **Pn** | 15 43 23.7 | +1.1 |
| EMB | | | | IAML | | 15 44 01.6 | |
| | comp=N,523nm,0.5s | | | | | | |
| EMB | | | | IAML | | 15 44 04.6 | |
| | comp=E,292nm,0.4s | | | | | | |
| **RUBR** | **Rubicon Trail** | **1.82** | **326** | | **Pn** | 15 43 24.8 | +1.0 |
| RUBR | | | | IAML | | 15 44 07.1 | |
| | comp=E,432nm,0.6s | | | | | | |
| **MPMC** | **Manual Prospec** | **1.84** | **143** | P | **Pb** | 15 43 25.5 | -0.3 |
| | baz=324,SNR=92 | | | | | | |
| **VCNR** | **Virginia City** | **1.86** | **341** | | **Pn** | 15 43 25.0 | +0.7 |
| **ISA** | **Isabella, Lake** | **1.90** | **170** | | **Pg** | 15 43 27.6 | -0.6 |
| **ISA** | **Isabella, Lake** | **1.90** | **170** | Pb | **Pg** | 15 43 27.8 | -0.3 |
| | baz=351,SNR=123 | | | | | | |
| ISA | | | | Sb | **Sg** | 15 43 53.2 | +0.5 |
| | baz=351 | | | | | | |
| **FURC** | **Furnace Creek,** | **1.92** | **123** | Pg | **Pg** | 15 43 29.4 | +0.8 |
| | baz=305,SNR=8.8 | | | | | | |
| **MPK** | **Martis Peak** | **1.98** | **333** | | **Pn** | 15 43 26.1 | 0.0 |
| MPK | | | | IAML | | 15 44 06.1 | |
| | comp=N,236nm,0.7s | | | | | | |
| MPK | | | | IAML | | 15 44 21.5 | |
| | comp=E,243nm,0.6s | | | | | | |
| **PACP** | **Pacheco Peak** | **2.01** | **256** | | **Pb** | 15 43 28.7 | 0.0 |
| **PMPB** | **Monarch Peak** | **2.04** | **230** | | **Pb** | 15 43 28.4 | -0.8 |
| **PKD** | **Bear Valley Ra** | **2.08** | **221** | | **Pb** | 15 43 29.6 | -0.4 |
| **HFEM** | **San Felipe** | **2.10** | **256** | | **Pb** | 15 43 30.1 | -0.2 |
| **BLRM** | **Lewis Ranch** | **2.12** | **247** | | **Pb** | 15 43 31.3 | +0.8 |
| **THIS** | **South End of C** | **2.12** | **212** | | **Pb** | 15 43 30.3 | -0.3 |
| **PAGB** | **Antelope Grade** | **2.12** | **212** | | **Pn** | 15 43 28.5 | +0.8 |
| **TPNV** | **Topopah Spring** | **2.16** | **105** | | **Pn** | 15 43 28.9 | +0.5 |
| TPNV | | | | IAML | | 15 44 06.2 | |
| | comp=E,137nm,0.8s | | | | | | |
| TPNV | | | | IAML | | 15 44 11.2 | |
| | comp=E,174nm,0.8s | | | | | | |
| **TPNV** | **Topopah Spring** | **2.16** | **105** | P | **Pn** | 15 43 29.6 | +1.2 |
| | baz=288,SNR=80 | | | | | | |
| **TRAM** | **Private Proper** | **2.17** | **212** | | **Pb** | 15 43 31.2 | -0.3 |
| **PAHR** | **Pah Rah Range** | **2.21** | **349** | Pn | **Pn** | 15 43 29.2 | +0.3 |
| **SAO** | **San Andreas Ge** | **2.21** | **250** | | **Pb** | 15 43 31.3 | -0.7 |
| **GWY** | **Greenwater Val** | **2.21** | **127** | | **Pn** | 15 43 29.3 | +0.3 |
| **TCHL** | **Shandon** | **2.22** | **214** | | **Pb** | 15 43 31.8 | -0.5 |
| **MHC** | **Mount Hamilton** | **2.22** | **266** | | **Pb** | 15 43 31.9 | -0.5 |
| **HSFM** | **Saint Francis** | **2.23** | **252** | | **Pb** | 15 43 31.9 | -0.5 |
| **QSM** | **Queen of Sheba** | **2.24** | **134** | | **Pn** | 15 43 30.0 | +0.7 |
| QSM | | | | IAML | | 15 44 05.1 | |
| | comp=N,161nm,0.6s | | | | | | |
| QSM | | | | IAML | | 15 44 06.9 | |
| | comp=E,153nm,0.4s | | | | | | |
| **SCZ** | **Santa Cruz** | **2.24** | **246** | | **Pb** | 15 43 31.6 | -1.0 |
| **BJCM** | **Johnson Can.** | **2.25** | **245** | | **Pb** | 15 43 31.8 | -1.1 |
| **LRMC** | **Laurel Mtn Rad** | **2.26** | **155** | Sb | **Sg** | 15 44 04.9 | +0.5 |
| | baz=336 | | | | | | |
| **WENL** | **Wente Vineyard** | **2.30** | **273** | | **Pb** | 15 43 33.1 | -0.5 |
| **TSCN** | **Private Proper** | **2.32** | **212** | | **Pb** | 15 43 33.7 | -0.3 |
| **BSMM** | **Soledad Missio** | **2.36** | **242** | | **Pb** | 15 43 33.8 | -0.9 |
| **HCOM** | **Corn Cob Canyo** | **2.37** | **255** | | **Pb** | 15 43 34.0 | -0.7 |
| **SMMC** | **Simmler** | **2.40** | **203** | P | **Pb** | 15 43 34.2 | -1.1 |
| | baz=22 | | | | | | |
| **ARVC** | **Arvin** | **2.40** | **179** | Pb | **Pb** | 15 43 36.1 | +0.7 |
| | baz=360 | | | | | | |
| ARVC | | | | Sb | **Sg** | 15 44 07.6 | -1.5 |
| | baz=360 | | | | | | |
| **BDM** | **Black Diamond** | **2.42** | **281** | | **Pb** | 15 43 36.6 | +1.0 |
| **HAST** | **Hastings Reser** | **2.44** | **243** | | **Pb** | 15 43 34.4 | -1.6 |
| **S11A** | **Rachel** | **2.47** | **87** | | **Pn** | 15 43 33.2 | +0.6 |
| **RAMR** | **Ramage Ranch** | **2.49** | **221** | | **Pb** | 15 43 35.6 | -1.3 |
| **PAPM** | **Alder Peak** | **2.58** | **232** | | **Pn** | 15 43 36.3 | +2.3 |
| **BEKR** | **Beckworth** | **2.61** | **334** | Pn | **Pn** | 15 43 36.0 | +1.5 |
| BEKR | | | | IAML | | 15 44 29.9 | |
| | comp=N,90nm,0.5s | | | | | | |
| BEKR | | | | IAML | | 15 44 31.1 | |
| | comp=E,146nm,0.6s | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.63** | **190** | | **Pn** | 15 43 35.1 | +0.3 |
| **R11A** | **Troy Canyon, C** | **2.71** | **72** | | **Pn** | 15 43 36.4 | +0.4 |
| **R11A** | **Troy Canyon, C** | **2.71** | **72** | Pb | **Pb** | 15 43 41.4 | +0.7 |
| | baz=254,SNR=71 | | | | | | |
| R11A | | | | Sb | **Sg** | 15 44 18.1 | -0.8 |
| | baz=254 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **2.74** | **165** | P | **Pb** | 15 43 39.5 | -1.6 |
| | baz=346,SNR=30 | | | | | | |
| EDW2 | | | | Sb | **Sg** | 15 44 18.7 | -1.1 |
| | baz=346 | | | | | | |
| **PKM** | **Mcpherson Peak** | **2.75** | **197** | P | **Pb** | 15 43 39.8 | -1.6 |
| | baz=16,SNR=16 | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.78** | **143** | | **Pn** | 15 43 37.2 | +0.4 |
| GSC | | | | IAML | | 15 44 30.7 | |
| | comp=E,93nm,0.5s | | | | | | |
| **ORV** | **Oroville** | **2.89** | **315** | | **Pn** | 15 43 40.7 | +2.5 |
| **ORV** | **Oroville** | **2.89** | **315** | Pn | **Pn** | 15 43 38.5 | +0.3 |
| **ORV** | **Oroville** | **2.89** | **315** | IAML | | 15 44 25.1 | |
| | comp=N,69nm,0.5s | | | | | | |
| ORV | | | | IAML | | 15 44 26.6 | |
| | comp=E,93nm,0.5s | | | | | | |
| **OSI** | **Osito Audit: C** | **2.92** | **178** | Sb | **Sg** | 15 44 22.8 | -2.8 |
| | baz=358 | | | | | | |
| **PRN** | **Pahroc Range** | **3.03** | **91** | | **Pn** | 15 43 41.5 | +1.2 |
| **SHPR** | **Sheep Range** | **3.13** | **108** | | **Pn** | 15 43 43.0 | +1.2 |
| **BMN** | **Battle Mountai** | **3.16** | **23** | | **Pn** | 15 43 42.7 | +0.6 |
| **MCCM** | **Marconi Confer** | **3.24** | **282** | Pn | **Pn** | 15 43 44.5 | +1.5 |
| MCCM | | | | IAML | | 15 44 31.8 | |
| | comp=E,122nm,0.8s | | | | | | |
| MCCM | | | | IAML | | 15 44 33.9 | |
| | comp=N,100nm,1.4s | | | | | | |
| **DECC** | **Green Verdugo** | **3.30** | **172** | Sb | **Sg** | 15 44 37.9 | -0.1 |
| | baz=353 | | | | | | |
| **HEC** | **Hector,Ludlow** | **3.38** | **142** | Pg | **Pg** | 15 43 57.4 | +0.7 |
| | baz=324 | | | | | | |
| **BBRC** | **Big Bear Solar** | **3.62** | **154** | Pg | **Pg** | 15 44 00.6 | -0.7 |
| | baz=335 | | | | | | |
| **ICU** | **Indian Springs** | **3.95** | **94** | | **Pn** | 15 43 54.1 | +1.2 |
| **ELS** | **Elsinore Mount** | **4.05** | **163** | | **Pn** | 15 43 55.1 | +0.9 |
| ELS | | | | IAML | | 15 45 04.5 | |
| | comp=N,36nm,0.7s | | | | | | |
| ELS | | | | IAML | | 15 45 05.7 | |
| | comp=E,41nm,0.7s | | | | | | |
| **PSUT** | **Pine Spring** | **4.08** | **74** | Pn | **Pn** | 15 43 56.4 | +1.7 |
| **CIS** | **Catalina Islan** | **4.14** | **175** | Sb | **Sg** | 15 45 02.6 | -2.2 |
| | baz=355 | | | | | | |
| **WDC** | **Whiskeytown Da** | **4.18** | **318** | Pn | **Pn** | 15 43 56.3 | +0.4 |
| WDC | | | | IAML | | 15 45 09.3 | |
| | comp=N,34nm,1.2s | | | | | | |
| WDC | | | | IAML | | 15 45 11.3 | |
| | comp=E,25nm,0.6s | | | | | | |
| **ELK** | **Elko** | **4.26** | **40** | Pn | **Pn** | 15 43 58.1 | +0.8 |
| ELK | | | | IAML | | 15 45 08.0 | |
| | comp=E,35nm,0.5s | | | | | | |
| ELK | | | | IAML | | 15 45 08.8 | |
| | comp=E,28nm,0.5s | | | | | | |
| **CCUT** | **Cedar City** | **4.37** | **88** | | **Pn** | 15 43 59.5 | +0.8 |
| **LCMT** | **Little Creek M** | **4.51** | **95** | Pn | **Pn** | 15 44 01.9 | +1.3 |
| **M04C** | **Macdoel** | **4.83** | **332** | Pn | **Pn** | 15 44 04.9 | 0.0 |
| M04C | | | | IAML | | 15 45 47.3 | |
| | comp=N,36nm,4.7s | | | | | | |
| M04C | | | | IAML | | 15 45 49.5 | |
| | comp=E,28nm,4.8s | | | | | | |
| **U15A** | **North Rim** | **5.37** | **100** | Pn | **Pn** | 15 44 12.0 | -0.6 |
| **DUG** | **Dugway, Tooele** | **5.41** | **59** | Pg | **Pg** | 15 44 34.2 | -1.3 |
| | baz=243 | | | | | | |
| DUG | | | | Sb | **Sg** | 15 45 40.7 | -4.9 |
| | baz=243 | | | | | | |

*NNC **15** 15:43:01.4±1.9, 44°.08N×82°.62E, h0km, mb3.5, mpv3.5, Error ellipse: s-maj=16.5km s-min=7.5km az=136.0*
*SOME **15** 15:43:01.0, 44°.00N×82°.70E, h10km*
**ISC 15 15:42:59.3**±1.8,**43°.97N**±0°.06×**82°.73E**±0°.06,**h1**km±14km,
**n42,σ1§77/57,7C-5D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **1.80** | **254** | *e*P | **Pg** | 15 43 34.5 | +0.7 |
| | 15nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sg** | 15 43 59.9 | +2.7 |
| | 96nm,0.1s | | | | | | |
| **DJR** | **Jarkent** | **2.14** | **281** | *e*P | **Pg** | 15 43 40.7 | +0.3 |
| | 18nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | 15 44 10.0 | +1.8 |
| | 148nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.14** | **281** | Pg | **Pg** | 15 43 40.6 | +0.3 |
| | 18nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 15 44 10.0 | |
| | 148nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **2.44** | **256** | Pg | **Pb** | 15 43 44.7 | +0.8 |
| | 2.6nm,0.2s | | | | | | |
| PDGK | | | | Lg | Lg | 15 44 18.3 | |
| | 18nm,0.1s | | | | | | |
| **KNOS** | **Konyrlen** | **2.58** | **280** | *e*P | **Pg** | 15 43 48.0 | -0.8 |
| | 14nm,0.2s | | | | | | |
| KNOS | | | | *e*S | **Sg** | 15 44 22.3 | +0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KURS | | | | *e*S | **Sg** | **15 44 45.5** | **-1.1** |
| | 6.8nm,0.2s | | | | | | | |
| **KURS** | **Kuram** | **3.34 263** | | Pg | **Pg** | **15 44 01.7** | **-1.6** |
| | 1.0nm,0.3s | | | | | | | |
| KURS | | | | Lg | Lg | 15 44 45.0 | | |
| | 6.8nm,0.2s | | | | | | | |
| **ARXS** | **Arharly** | **3.54 276** | | *e*P | **Pb** | **15 44 04.3** | **+1.5** |
| | 15nm,0.3s | | | | | | | |
| ARXS | | | | *e*S | **Sg** | **15 44 50.6** | **-2.4** |
| | 36nm,0.2s | | | | | | | |
| **ARXS** | **Arharly** | **3.54 276** | | Pg | **Pb** | **15 44 04.3** | **+1.5** |
| | 15nm,0.3s | | | | | | | |
| ARXS | | | | Lg | Lg | 15 44 50.6 | | |
| | 36nm,0.2s | | | | | | | |
| **ZSN** | **Zaisan** | **3.79** | **23** | *e*P | **Pb** | **15 44 06.7** | **-0.2** |
| | 5.1nm,0.2s | | | | | | | |
| ZSN | | | | *e*S | **Sb** | **15 44 54.0** | **+0.8** |
| | 18nm,0.3s | | | | | | | |
| **ZSN** | **Zaisan** | **3.79** | **23** | Pg | **Pb** | **15 44 06.7** | **-0.2** |
| | 5.1nm,0.2s | | | | | | | |
| ZSN | | | | Lg | Lg | 15 44 54.0 | | |
| | 18nm,0.3s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.15 270** | | *e*P | **Pb** | **15 44 15.1** | **+2.0** |
| | 1.1nm,0.2s | | | | | | | |
| CHKK | | | | *e*S | **Sg** | **15 45 08.9** | **-3.6** |
| | 15nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.15 270** | | Pg | **Pb** | **15 44 16.0** | **+2.9** |
| | 2.2nm,0.3s | | | | | | | |
| CHKK | | | | Lg | Lg | 15 45 08.9 | | |
| | 15nm,0.2s | | | | | | | |
| **MDOK** | **Medeo** | **4.21 261** | | *e*P | **Pg** | **15 44 18.0** | **-1.9** |
| | 3.5nm,0.4s | | | | | | | |
| MDOK | | | | *e*S | **Sg** | **15 45 14.0** | **-0.4** |
| | 6.8nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **4.21 261** | | ⇓Lg | Lg | 15 45 18.5 | | |
| | 7.1nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **4.21 261** | | Pg | **Pg** | **15 44 18.0** | **-1.9** |
| | 3.5nm,0.4s | | | | | | | |
| MDOK | | | | Lg | Lg | 15 45 13.0 | | |
| | 6.8nm,0.3s | | | | | | | |
| **KUU** | **Kurty** | **4.62 271** | | *e*P | **Pb** | **15 44 22.0** | **+1.0** |
| | 1.1nm,0.2s | | | | | | | |
| KUU | | | | *e*S | **Sb** | **15 45 21.2** | **+4.1** |
| | 8.8nm,0.3s | | | | | | | |
| **KUU** | **Kurty** | **4.62 271** | | Pg | **Pb** | **15 44 22.0** | **+1.0** |
| | 1.1nm,0.2s | | | | | | | |
| KUU | | | | Lg | Lg | 15 45 21.2 | | |
| | 8.8nm,0.3s | | | | | | | |
| **MTBS** | **Maitube** | **4.66 262** | | *e*P | **Pg** | **15 44 26.2** | **-2.3** |
| | 1.2nm,0.2s | | | | | | | |
| MTBS | | | | *e*S | **Sg** | **15 45 28.0** | **-0.8** |
| | 13nm,0.3s | | | | | | | |
| **MTBS** | **Maitube** | **4.66 262** | | Pg | **Pg** | **15 44 26.2** | **-2.3** |
| | 1.2nm,0.2s | | | | | | | |
| MTBS | | | | Lg | Lg | 15 45 28.0 | | |
| | 13nm,0.3s | | | | | | | |
| **KST** | **Kastek** | **5.01 262** | | *e*P | **Pg** | **15 44 32.7** | **-2.5** |
| | 2.2nm,0.3s | | | | | | | |
| KST | | | | *e*S | **Sg** | **15 45 38.9** | **-1.2** |
| | 4.5nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **5.01 262** | | Pg | **Pg** | **15 44 32.7** | **-2.5** |
| | 2.2nm,0.3s | | | | | | | |
| KST | | | | Lg | Lg | 15 45 38.9 | | |
| | 4.5nm,0.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.30 261** | | ⇑Pg | **Pg** | **15 44 42.7** | **+1.9** |
| | 1.3nm,0.7s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 15 45 47.5 | | |
| | 2.2nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **6.15 260** | | ⇑Lg | Lg | 15 46 16.3 | | |
| | 4.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.24 338** | | ⇓Lg | Lg | 15 46 48.3 | | |
| | 6.6nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **7.30 339** | | ⇑Sn | **Sn** | **15 46 05.8** | **-4.6** |
| | 0.7nm,0.2s | | | | | | | |
| KURK | | | | ⇑Lg | Lg | 15 46 46.1 | | |
| | 2.1nm,0.4s | | | | | | | |
| **OTUK** | **Ortayu** | **8.38 304** | | ⇓Lg | Lg | 15 47 26.2 | | |
| | 1.5nm,0.7s | | | | | | | |

**IDC 15 16:00:28.0±2.8, 5°07S×153°66E, h165km±14km, mb3.2/4, mb1 3.5/5, mb1mx3.1/37, mbtmp3.8/5, Error ellipse: s-maj=33.7km s-min=20.9km az=107.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **7.75** | **236** | P | Pn | 16 02 18.2 | 0.0 |
| | 2.1nm,0.3s,baz=57,slow=9.2,SNR=11 | | | | | | |
| PMG | | | | S | Sn | 16 03 45.9 | +0.9 |
| | 0.4nm,0.3s,baz=288,slow=20,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.92** | **230** | P | P | 16 05 27.1 | +0.1 |
| | 0.9nm,0.5s,baz=56,slow=10,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **26.54** | **224** | P | P | 16 05 50.0 | -0.7 |
| | 0.5nm,0.7s,baz=55,slow=8.8,SNR=8.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.29** | **242** | P | P | 16 06 23.4 | -0.6 |
| | 1.4nm,0.8s,baz=56,slow=8.2,SNR=9.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.77** | **295** | P | P | 16 10 09.7 | +0.4 |
| | 1.0nm,1.1s,baz=92,slow=4.4,SNR=4.0 | | | | | | |

*IDC 15 16:17:50.7±3.3, 37°09N×13°28E, h0km, mb3.7/3, mb1 3.7/4, mb1mx3.4/29, mbtmp3.6/4, ML4.0/1, Error ellipse: s-maj=57.7km s-min=28.6km az=47.0*
*ROM 15 16:18:31.6±0.4, 38°63N±0°02×15°00E±0°03, h217km±4km, ML3.0/6, Error ellipse: s-maj=3.1km s-min=2.0km az=126.0*
**ISC 15 16:18:30.8±1.0, 38°76N±0°06×14°86E±0°07, h200km, n31, σ2s68/34, mb3.6/3, 1C-1D, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IST3** | **Stromboli F** | **0.29** | **82** | P | **Pn** | **16 19 01.0** | **+3.7** |
| **MILZ** | **Milazzo** | **0.57** | **149** | P | **Pn** | **16 19 00.3** | **+2.1** |
| **PLLN** | **Pollina** | **0.95** | **216** | P | **Pn** | **16 19 03.2** | **+2.8** |
| **CEL** | **Celeste** | **0.95** | **121** | P | **Pn** | **16 19 02.3** | **+1.9** |
| CEL | | | | S | **Sn** | **16 19 25.0** | **+1.8** |
| CEL | | | | AML | AML | | |
| | comp=E,243μm,0.4s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,163μm,0.7s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,304μm,0.4s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,202μm,0.4s | | | | | | |
| **MTTG** | **Motta San Giov** | **1.00** | **139** | P | **Pn** | **16 19 03.0** | **+2.3** |
| MTTG | | | | AML | AML | | |
| | comp=E,402μm,1.5s | | | | | | |
| MTTG | | | | AML | AML | | |
| | comp=N,460μm,0.6s | | | | | | |
| MTTG | | | | AML | AML | | |
| | comp=E,407μm,1.5s | | | | | | |
| MTTG | | | | AML | AML | | |
| | comp=N,490μm,0.6s | | | | | | |
| **CSLB** | **Castelbuono** | **1.03** | **218** | P | **Pn** | **16 19 03.3** | **+2.4** |
| **PETRA** | **Petralia Sopra** | **1.09** | **212** | P | **Pn** | **16 19 04.7** | **+3.2** |
| **CET2** | **Cetraro** | **1.15** | **48** | P | **Pn** | **16 19 05.1** | **+3.4** |
| **CAR1** | **CAROLEI** | **1.16** | **65** | P | **Pn** | **16 19 04.0** | **+2.2** |
| CAR1 | | | | S | **Sn** | **16 19 28.2** | **+2.3** |
| **SOI** | **Samo** | **1.17** | **126** | P | **Pn** | **16 19 03.3** | **+1.5** |
| SOI | | | | S | **Sn** | **16 19 27.2** | **+1.5** |
| SOI | | | | AML | AML | | |
| | comp=E,146μm,1.6s | | | | | | |
| SOI | | | | AML | AML | | |
| | comp=N,168μm,0.8s | | | | | | |
| SOI | | | | AML | AML | | |
| | comp=N,171μm,0.8s | | | | | | |
| SOI | | | | AML | AML | | |
| | comp=E,194μm,0.5s | | | | | | |
| **GRI** | **Girifalco** | **1.22** | **87** | P | **Pn** | **16 19 04.6** | **+2.3** |
| **SOLUN** | **Solunto** | **1.24** | **238** | P | **Pn** | **16 19 05.4** | **+3.1** |
| **SPS2** | **Spezzano della** | **1.27** | **65** | P | **Pn** | **16 19 06.2** | **+3.5** |
| SPS2 | | | | AML | AML | | |
| | comp=E,63μm,1.4s | | | | | | |
| SPS2 | | | | AML | AML | | |
| | comp=N,59μm,0.3s | | | | | | |
| **RESU** | **Resuttano** | **1.28** | **210** | P | **Pn** | **16 19 06.7** | **+3.9** |
| **MPG** | **Monte Pellegri** | **1.32** | **243** | P | **Pn** | **16 19 05.9** | **+2.9** |
| **CELI** | **Celico** | **1.44** | **63** | P | **Pn** | **16 19 07.2** | **+3.1** |
| **TDS** | **Terranova Siba** | **1.46** | **52** | P | **Pn** | **16 19 07.6** | **+3.5** |
| **MGR** | **Morigerati** | **1.48** | **21** | P | **Pn** | **16 19 08.2** | **+3.9** |
| **HAGA** | **Augusta** | **1.49** | **171** | P | **Pn** | **16 19 05.7** | **+1.2** |
| HAGA | | | | AML | AML | | |
| | comp=E,134μm,0.5s | | | | | | |
| HAGA | | | | AML | AML | | |
| | comp=N,132μm,1.1s | | | | | | |
| **TIP** | **Timpagrande** | **1.54** | **74** | P | **Pn** | **16 19 07.1** | **+2.1** |
| TIP | | | | S | **Sn** | **16 19 33.5** | **+2.1** |
| **RAFF** | **Raffo Rosso** | **1.58** | **194** | P | **Pn** | **16 19 07.6** | **+2.2** |
| **MEU** | **Monte Lauro** | **1.66** | **178** | P | **Pn** | **16 19 07.5** | **+1.4** |
| MEU | | | | AML | AML | | |
| | comp=N,174μm,1.3s | | | | | | |
| MEU | | | | AML | AML | | |
| | comp=E,149μm,1.4s | | | | | | |
| **PIPA** | **Pietrapaola** | **1.69** | **64** | P | **Pn** | **16 19 08.6** | **+2.4** |
| **MMGO** | **Monte Magaggia** | **1.84** | **234** | P | **Pn** | **16 19 10.1** | **+2.3** |
| **LPDG** | **Lampedusa Capo** | **3.69** | **209** | ⇓P | **Pn** | **16 19 30.3** | **+1.4** |
| **RM33** | **Pellescritta (** | **3.95** | **342** | P | **Pn** | **16 19 33.1** | **+1.1** |
| **FSSB** | **Fossombrone** | **5.17** | **343** | ⇑P | **Pn** | **16 19 48.9** | **+1.6** |
| **AKASG** | **Malin Array Be** | **15.67** | **36** | P | **P** | **16 21 59.2** | **-1.8** |
| | comp=E,0.6nm,0.3s,baz=226,slow=11,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **23.75** | **13** | P | **P** | **16 23 21.9** | **-2.7** |
| | comp=E,0.6nm,0.4s,baz=195,slow=8.0,SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.36** | **7** | P | P | 16 24 28.4 | -3.9 |
| | comp=E,3.0nm,1.1s,baz=185,slow=8.9,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.76** | **58** | P | **P** | **16 26 52.0** | **-3.3** |
| | comp=E,0.2nm,0.4s,baz=280,slow=7.2,SNR=7.5 | | | | | | |

*IDC 15 16:25:30.1±1.8, 27°85S×178°23W, h256km±20km, mb2.8/2, mb1 3.3/3, mb1mx3.1/18, mbtmp3.8/3, Error ellipse: s-maj=53.9km s-min=30.4km az=164.0*
**ISC 15 16:25:30.2±1.1, 27°9S±0°1×178°5W±0°2, h250km, n8, σ1s75/11, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.43** | **158** | P | **Pn** | **16 26 09.2** | **+1.4** |
| | 291nm,0.3s,baz=200,slow=22,SNR=10 | | | | | | |
| RAO | | | | S | **S** | **16 26 38.6** | **+0.9** |
| | 278nm,0.3s,baz=118,slow=22,SNR=2.8 | | | | | | |
| **URZ** | **Urewera** | **10.93** | **198** | P | **Pn** | **16 28 00.4** | **+0.1** |
| | 2.6nm,0.3s,baz=272,slow=4.6,SNR=17 | | | | | | |
| URZ | | | | S | **S** | **16 30 00.9** | **-1.9** |
| | 1.9nm,0.3s,baz=112,slow=20,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **42.84** | **265** | P | **P** | **16 33 05.4** | **+1.3** |
| | 0.2nm,0.5s,baz=91,slow=6.5,SNR=6.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 34 51.5** | **+1.1** |
| | 0.3nm,0.7s,baz=115,slow=4.0,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.60** | **270** | P | **P** | **16 33 11.4** | **+1.2** |
| | 0.6nm,0.4s,baz=100,slow=6.9,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **115.82** | **311** | PKP | **PKPdf** | **16 43 41.7** | **-1.1** |
| | 0.3nm,0.7s,baz=87,slow=3.2,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **119.04** | **315** | PKP | **PKPdf** | **16 43 48.4** | **-0.4** |
| | 0.3nm,0.7s,baz=108,slow=2.9,SNR=3.0 | | | | | | |
| **FINES** | **FINESS Array B** | **142.67** | **341** | PKP | **PKPdf** | **16 44 29.3** | **-3.5** |
| | 0.9nm,0.7s,baz=52,slow=3.1,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **149.04** | **325** | PKPbc | **PKPbc** | **16 44 47.9** | **-0.5** |
| | 0.8nm,0.4s,baz=40,slow=4.2,SNR=6.9 | | | | | | |

*IDC 15 16:34:35.2±1.3, 21°59S×175°41W, h0km, mb3.8/6, mb1 4.1/8, mb1mx3.9/24, mbtmp3.9/8, ML5.0/1, MS3.7/1, Ms1 3.7/1, ms1mx3.2/62, Error ellipse: s-maj=53.1km s-min=23.1km az=156.0*
*NEIC 15 16:34:35.5±2.5, 21°65S±0°1×175°20W±0°05, h10km±1km, mb4.3/8, Error ellipse: s-maj=22.5km s-min=7.3km az=178.0*
**ISC 15 16:34:35.4±0.7, 21°7S±0°1×175°26W±0°09, h10km, n20, σ1s50/20, mb3.8/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.63** | **64** | | **Pn** | **16 35 57.2** | **-2.0** |
| **MSVF** | **Nonsavu** | **7.42** | **301** | Pn | **Pn** | **16 36 21.9** | **-1.9** |
| | 0.9nm,0.3s,baz=141,slow=17,SNR=8.6 | | | | | | |
| **MSVF** | **Nonsavu** | **7.42** | **301** | Pn | **Pn** | **16 36 22.7** | **-1.2** |
| **AFI** | **Afiamalu** | **8.40** | **24** | Pn | **Pn** | **16 36 35.5** | **-1.9** |
| **DZM** | **Mont Dzumac** | **16.99** | **265** | Pn | **Pn** | **16 38 34.3** | **+0.9** |
| | 0.1nm,0.3s,baz=96,slow=17,SNR=3.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.99** | **265** | | **Pn** | **16 38 33.4** | **0.0** |
| DZM | | | | IAmb | IAmb | 16 38 44.5 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **SANVU** | **Saraoutou** | **17.73** | **287** | Pn | **Pn** | **16 38 41.8** | **-0.8** |
| SANVU | | | | IAmb | IAmb | 16 39 10.4 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **17.79** | **200** | Pn | **Pn** | **16 38 40.0** | **-3.2** |
| URZ | | | | IAmb | IAmb | 16 38 56.5 | |
| | comp=Z,53nm,1.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.82** | **200** | P | **P** | **16 38 55.5** | **+0.1** |
| BKZ | | | | IAmb | IAmb | 16 39 19.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **PPT** | **Papeete** | **24.52** | **85** | LR | LR | 16 48 31.9 | |
| | comp=Z,172nm,19.5s,baz=323,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **39.61** | **246** | P | **P** | **16 42 07.1** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=80,slow=6.1,SNR=1.5 | | | | | | |
| **COEN** | **Coen** | **40.21** | **274** | P | **P** | **16 42 14.1** | **+1.6** |
| **ASAR** | **Alice Springs** | **46.75** | **257** | P | **P** | **16 43 04.8** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=99,slow=8.3,SNR=9.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 44 40.8** | **+2.1** |
| | comp=Z,0.5nm,0.6s,baz=114,slow=4.2,SNR=4.6 | | | | | | |
| **WB0** | **Warramunga Arr** | **46.96** | **263** | P | **P** | **16 43 07.1** | **+0.2** |
| **WRA** | **Warramunga Arr** | **46.98** | **263** | P | **P** | **16 43 07.7** | **+0.7** |
| | comp=Z,0.9nm,0.8s,baz=96,slow=7.9,SNR=6.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.08** | **344** | P | **P** | **16 46 35.5** | **+1.3** |
| | comp=Z,5.4nm,1.0s,baz=134,slow=8.5,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.15** | **42** | P | **P** | **16 46 47.1** | **+1.0** |
| | comp=Z,0.4nm,0.7s,baz=225,slow=10,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.55** | **56** | P | **P** | **16 47 16.2** | **+1.9** |
| | comp=Z,0.6nm,0.8s,baz=212,slow=4.4,SNR=5.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.25** | **332** | PKPbc | **PKPbc** | **16 54 12.7** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=42,slow=4.3,SNR=6.0 | | | | | | |
| **KHC** | **Kasperske Hory** | **151.71** | **348** | *e*PKP | **PKiKP** | **16 54 30.5** | **-0.1** |

*IDC 15 16:35:25.5±1.8, 30°02N×79°26E, h0km, mb3.5/9, mb1 3.7/10, mb1mx3.5/35, mbtmp3.5/10, ML3.5/1, Error ellipse: s-maj=56.4km s-min=20.0km az=63.0*
*NDI 15 16:35:28.0±3.1, 30°32N×79°88E, h10km, ML3.6*
**ISC 15 16:35:28.7±0.8, 30°17N±0°06×79°80E±0°06, h10km, n14, σ1s85/18, mb3.5/7, Western Xizang-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DDI** | **Dehra Dun** | **1.52** | **276** | *e*P | **Pn** | **16 35 56.4** | **+0.4** |
| DDI | | | | *e*S | **Sn** | **16 36 14.7** | **-1.2** |
| DDI | | | | *e*S | **Sb** | **16 36 15.8** | **-0.6** |
| DDI | | | | IAML | | 16 36 16.5 | |
| | comp=N,4μm,0.2s | | | | | | |
| **SMLA** | **Simla** | **2.46** | **294** | *e*P | **Pn** | **16 36 10.3** | **+1.4** |
| SMLA | | | | *e*S | **Sn** | **16 36 38.9** | **-0.2** |
| SMLA | | | | IAML | | 16 36 42.5 | |
| | comp=E,615nm,0.5s | | | | | | |
| SMLA | | | | IAML | | 16 36 42.6 | |
| | comp=N,519nm,0.4s | | | | | | |
| **NDI** | **New Delhi** | **2.70** | **237** | *e*P | Pn | 16 36 18.0 | +5.8 |
| NDI | | | | *e*S | **Sn** | **16 36 49.0** | **+4.1** |
| **BHPL** | **Bhopal** | **7.22** | **198** | *e*P | **Pn** | **16 37 14.3** | **0.0** |
| BHPL | | | | *e*S | **Sn** | **16 38 33.2** | **-3.3** |
| BHPL | | | | IAML | | 16 38 35.7 | |
| | comp=N,21nm,0.3s | | | | | | |
| BHPL | | | | IAML | | 16 38 36.7 | |
| | comp=E,25nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **16.71** | **6** | Pn | **Pn** | **16 39 22.1** | **-0.8** |
| | comp=E,0.2nm,0.3s,baz=187,slow=12,SNR=9.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.45** | **358** | P | **P** | **16 40 05.3** | **-1.0** |
| | comp=E,0.7nm,0.5s,baz=181,slow=11,SNR=15 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.95** | **119** | P | **P** | **16 40 14.1** | **+2.2** |
| | comp=E,0.4nm,0.7s,baz=323,slow=10,SNR=4.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **23.86** | **346** | P | **P** | **16 40 41.2** | **-0.9** |
| | comp=E,0.8nm,0.5s,baz=108,slow=14,SNR=7.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **24.04** | **7** | P | **P** | **16 40 43.1** | **-0.7** |
| | comp=E,0.9nm,0.5s,baz=188,slow=9.7,SNR=6.6 | | | | | | |
| **SONM** | **Songino Array** | **26.97** | **42** | P | **P** | **16 41 13.6** | **+3.0** |
| | comp=E,0.5nm,0.6s,baz=231,slow=9.3,SNR=5.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **49.77** | **338** | P | **P** | **16 44 19.9** | **-1.2** |
| | comp=E,3.4nm,1.0s,baz=95,slow=5.6,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **72.35** | **126** | P | **P** | **16 46 55.1** | **0.0** |
| | comp=E,0.2nm,0.6s,baz=309,slow=5.4,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **74.58** | **130** | P | **P** | **16 47 08.4** | **+0.2** |
| | comp=E,0.2nm,0.6s,baz=312,slow=6.2,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **78.63** | **19** | P | **P** | **16 47 29.2** | **-1.2** |
| | comp=E,1.2nm,1.1s,baz=313,slow=7.0,SNR=4.1 | | | | | | |

*IDC 15 16:55:04.0±1.4, 8°64S×130°66E, h0km, mb3.9/2, mb1 4.1/6, mb1mx3.6/43, mbtmp4.0/6, ML3.9/4, Error ellipse: s-maj=55.2km s-min=21.5km az=78.0*
*DJA 15 16:55:07.5±0.9, 9°S±4°×13°1E±°, h15km±8km, M4.4/6, mb4.2/6, mB4.7/2, MLv4.5/6, Mw(mB)3.9/2*
**ISC 15 16:55:07.7±0.9, 8°72S±0°06×130°97E±0°09, h35km, n11, σ1s96/15, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **0.80** | **24** | P | **Pn** | **16 55 21.3** | **-1.2** |
| **MSAI** | **Masohi** | **5.71** | **339** | P | **Pn** | **16 56 29.1** | **-0.9** |
| | 0.1nm935nm5.1nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **6.69** | **261** | P | **Pn** | **16 56 44.2** | **+0.5** |
| | 0.3nm35nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **7.36** | **258** | Sn | **Sn** | **16 58 16.2** | **+1.1** |
| | 2.0nm,0.3s,baz=2.6,slow=19,SNR=4.1 | | | | | | |
| **SIJI** | **Sorong** | **7.80** | **2** | Pn | **Pn** | **16 56 56.5** | **-2.3** |
| | 1.0nm,0.3s,baz=180,slow=20,SNR=1.9 | | | | | | |
| SIJI | | | | Sn | **Sn** | **16 58 25.4** | **-0.6** |
| | 0.6nm,0.3s,baz=194,slow=23,SNR=5.6 | | | | | | |
| **BBSI** | **Bau Bau** | **8.93** | **291** | P | **Pn** | **16 57 15.5** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **10.67** | **208** | Pn | **Pn** | **16 57 37.0** | **-1.1** |
| | 0.7nm,0.3s,baz=29,slow=11,SNR=37 | | | | | | |
| FITZ | | | | Sn | **Sn** | **16 59 32.6** | **-3.7** |
| | 1.1nm,0.3s,baz=190,slow=17,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **11.63** | **164** | Pn | **Pn** | **16 57 51.9** | **+0.7** |
| | 1.0nm,0.3s,baz=346,slow=13,SNR=21 | | | | | | |
| WRA | | | | Sn | **Sn** | **16 59 59.3** | **-0.6** |
| | 1.1nm,0.3s,baz=346,slow=22,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **15.13** | **170** | Pn | **Pn** | **16 58 38.9** | **-0.1** |
| | 0.4nm,0.3s,baz=340,slow=9.9,SNR=46 | | | | | | |
| ASAR | | | | Sn | **Sn** | **17 01 25.1** | **-0.4** |
| | 0.2nm,0.3s,baz=353,slow=26,SNR=7.9 | | | | | | |
| **STKA** | **Stephens Creek** | **25.07** | **158** | P | **P** | **17 00 33.2** | **+4.2** |
| | 3.2nm,1.0s,baz=330,slow=8.1,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.18** | **327** | P | **P** | **17 06 17.6** | **+0.6** |
| | 0.4nm,0.4s,baz=116,slow=8.1,SNR=16 | | | | | | |

*IDC 15 17:06:55.3±1.0, 3°80S×134°06E, h0km, mb4.1/7, mb1 4.3/11, mb1mx4.0/34, mbtmp4.2/11, ML4.3/4, Error ellipse: s-maj=32.0km s-min=19.6km az=74.0*
*NEIC 15 17:07:00.0±2.0, 3°80S±0°08×134°03E±0°09, h33km±6km, mb4.4/19, Error ellipse: s-maj=15.0km s-min=9.1km az=53.0*
*DJA 15 17:07:00.7±0.2, 4°S±5°×13°4E±°, h115km±14km, M4.5/12, mB4.6/4, mb4.7/12, MLv4.5/6, Mw(mB)3.8/4*
**ISC 15 17:06:59.2±0.6, 4°03S±0°05×133°91E±0°07, h35km, n50, σ2s12/52, mb4.3/12, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BAKI** | **Biak** | **3.58** | **38** | P | **Pn** | **17 07 50.9** | **-1.3** |
| **SIJI** | **Sorong** | **4.10** | **320** | Pn | **Pn** | **17 07 59.0** | **-0.5** |
| | 3.5nm,0.3s,baz=182,slow=23,SNR=59 | | | | | | |
| SIJI | | | | Sn | **Sn** | **17 08 43.7** | **-2.5** |
| | baz=115,slow=21,SNR=1.3 | | | | | | |
| **SAUI** | **Saumlaki** | **4.70** | **213** | Pn | **Pn** | **17 08 06.9** | **-0.8** |
| **MSAI** | **Masohi** | **5.01** | **278** | P | **Pn** | **17 08 14.9** | **+2.9** |
| | 0.2nm322nm30nm,0.5s | | | | | | |
| **SMPI** | **Sarmi** | **5.21** | **67** | P | **Pn** | **17 08 14.4** | **-0.2** |
| | 0.2nm34nm,0.9s | | | | | | |
| **AAI** | **Ambon** | **5.71** | **273** | P | **Pn** | **17 08 24.6** | **+3.0** |
| | 0.4nm1μm86nm,0.6s | | | | | | |
| **GENI** | **Genyem** | **6.41** | **77** | P | **Pn** | **17 08 32.5** | **+1.3** |
| | 0.4nm66nm,0.9s | | | | | | |
| **MMPI** | **Merauke** | **7.80** | **125** | P | **Pn** | **17 08 53.8** | **+3.5** |
| | 0.9nm122nm,1.1s | | | | | | |
| **SANI** | **Sanana** | **8.15** | **284** | P | **Pn** | **17 08 55.2** | **+0.1** |
| | 33nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **9.18** | **197** | | **Pn** | **17 09 13.2** | **+4.0** |
| MTN | | | | | **Sn** | **17 10 56.7** | **+5.5** |
| **SOEI** | **Soe** | **11.13** | **239** | Pn | **Pn** | **17 09 37.4** | **+1.4** |
| **SOEI** | **Soe** | **11.13** | **239** | P | Pn | 17 09 41.2 | +5.1 |
| | 38nm,1.1s | | | | | | |
| **BATI** | **Baumata** | **11.87** | **238** | Pn | **Pn** | **17 09 49.5** | **+3.4** |
| | 2.2nm,0.3s,baz=45,slow=5.7,SNR=2.5 | | | | | | |
| **KNRA** | **Kununurra** | **12.63** | **203** | | **Pn** | **17 09 58.5** | **+2.1** |
| KNRA | | | | | **Sn** | **17 12 12.9** | **-3.0** |
| **APSI** | **Ampana** | **12.63** | **284** | P | **Pn** | **17 09 55.4** | **-1.1** |
| | 24nm,0.8s | | | | | | |
| **COEN** | **Coen** | **13.45** | **138** | | **Pn** | **17 10 06.7** | **-1.0** |
| **PMG** | **Port Moresby** | **14.20** | **113** | Pn | **Pn** | **17 10 16.0** | **-1.9** |
| **WB0** | **Warramunga Arr** | **15.65** | **178** | | **Pn** | **17 10 37.4** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 17 11 05.6 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.81** | **178** | Pn | **Pn** | **17 10 36.8** | **-2.5** |
| **WB2** | **Warramunga Arr** | **15.82** | **178** | | **Pn** | **17 10 39.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **15.82** | **179** | Pn | **Pn** | **17 10 39.8** | **+0.4** |
| | comp=Z,0.5nm,0.3s,baz=359,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | **Sn** | **17 13 29.6** | **-4.1** |
| | comp=Z,0.2nm,0.3s,baz=358,slow=23,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.82** | **179** | | **Pn** | **17 10 39.0** | **-0.4** |
| **WR0** | **Warramunga Arr** | **15.84** | **178** | | **Pn** | **17 10 39.7** | **0.0** |
| WR0 | | | | IAmb | IAmb | 17 10 53.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **16.15** | **209** | Pn | **P** | **17 10 46.0** | **-0.6** |
| | comp=Z,1.9nm,0.3s,baz=25,slow=11,SNR=21 | | | | | | |
| FITZ | | | | Sn | **Sn** | **17 13 36.8** | **-5.1** |
| | comp=Z,0.8nm,0.3s,baz=167,slow=11,SNR=8.3 | | | | | | |
| **AS31** | **Alice Springs** | **19.52** | **180** | | **Pn** | **17 11 27.9** | **+2.7** |
| **ASAR** | **Alice Springs** | **19.52** | **180** | P | **Pn** | **17 11 26.7** | **+1.5** |
| | comp=Z,0.9nm,0.3s,baz=1.2,slow=13,SNR=92 | | | | | | |
| ASAR | | | | S | **S** | **17 14 58.0** | **-4.5** |
| | comp=Z,0.1nm,0.3s,baz=358,slow=24,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **19.52** | **180** | | **Pn** | **17 11 27.1** | **+2.0** |
| **CTA** | **Charters Tower** | **19.99** | **144** | P | Pn | 17 11 31.9 | +1.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LLP | | | | *e*S | | **Sn** | 17 11 01.4 | **+3.4** |
| **MSLP** | **Maasin** | **2.81** | **182** | *i*P | | **Pn** | 17 10 26.6 | **+1.1** |
| MSLP | | | | *i* S | | **Sn** | 17 10 50.9 | **-7.3** |
| **SCPH** | **Surigao** | **3.21** | **171** | *e*P | | **Pn** | 17 10 30.4 | **-0.5** |
| SCPH | | | | *e*S | | **Sn** | 17 11 09.4 | **+1.6** |
| **LQP** | **Lukban** | **3.51** | **289** | *e*P | | **Pn** | 17 10 32.8 | **-2.5** |
| **SNPH** | **Sibulan** | **3.97** | **205** | *e*P | | **Pn** | 17 10 40.7 | **-0.8** |
| SNPH | | | | *e*S | | **Sn** | 17 11 27.4 | **+0.5** |
| **KSRS** | **Korea Array** | **24.53** | **6** | P | | **P** | 17 15 01.2 | **+2.5** |
| | 2.3nm,0.8s,baz=193,slow=9.6,SNR=4.5 | | | | | | | |
| **LEM** | **Lembang** | **26.14** | **222** | LR | | LR | 17 27 16.3 | |
| | comp=Z,196nm,18.5s,baz=260,slow=41 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.98** | **164** | P | | **P** | 17 16 21.0 | **-1.8** |
| | 1.1nm,0.6s,baz=345,slow=9.4,SNR=2.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **37.44** | **166** | P | | **P** | 17 16 51.5 | **-1.1** |
| | 1.3nm,0.6s,baz=349,slow=7.5,SNR=6.2 | | | | | | | |
| **SONM** | **Songino Array** | **38.06** | **340** | P | | **P** | 17 16 58.2 | **+0.5** |
| | 0.9nm,0.8s,baz=160,slow=11,SNR=5.5 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.48** | **77** | T | | T | 18 00 24.0 | |
| | baz=268,slow=75,SNR=30 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.49** | **77** | T | | T | 18 00 25.1 | |
| | baz=268,slow=75,SNR=26 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.49** | **77** | T | | T | 18 00 25.5 | |
| | baz=268,slow=75,SNR=40 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.72** | **75** | T | | T | 18 00 46.5 | |
| | baz=266,slow=75,SNR=150 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.72** | **75** | T | | T | 18 00 43.8 | |
| | baz=266,slow=75,SNR=116 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.73** | **75** | T | | T | 18 00 47.9 | |
| | baz=266,slow=75,SNR=136 | | | | | | | |
| **STKA** | **Stephens Creek** | **47.35** | **161** | P | | **P** | 17 18 11.7 | **-1.3** |
| | 0.8nm,0.5s,baz=315,slow=13,SNR=3.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.66** | **331** | P | | **P** | 17 18 47.5 | **+1.9** |
| | 0.9nm,0.7s,baz=120,slow=7.1,SNR=4.3 | | | | | | | |

**TAP 15 17:12:54.4, 22.89N×120.53E, h14km, ML1.2, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCST** | **Cishan** | **0.03** | **271** | *e*P | Pg | 17 12 57.3 | **+0.3** |
| | baz=271 | | | | | | |
| SCST | | | | S | Sg | 17 12 59.6 | +0.8 |
| | baz=271 | | | | | | |
| **TWM1** | **Shoushan** | **0.11** | **237** | *e*P | Pb | 17 12 58.3 | 0.0 |
| | baz=234 | | | | | | |
| **SLGT** | **Liugui** | **0.15** | **46** | *e*P | Pg | 17 12 58.4 | +0.1 |
| | baz=45 | | | | | | |
| SLGT | | | | S | Sb | 17 13 02.1 | -0.1 |
| | baz=45 | | | | | | |
| **SSD** | **Sandimen** | **0.17** | **145** | P | Pb | 17 12 59.1 | -0.2 |
| | baz=143 | | | | | | |
| SSD | | | | S | Sb | 17 13 03.1 | +0.5 |
| | baz=143 | | | | | | |
| **TSMG** | **Majia** | **0.21** | **149** | P | Pb | 17 12 59.7 | -0.3 |
| | baz=148 | | | | | | |
| TSMG | | | | S | Sb | 17 13 03.8 | +0.1 |
| | baz=148 | | | | | | |
| **SHHT** | **Tainan City** | **0.21** | **309** | *e*P | Pb | 17 13 00.2 | +0.1 |
| | baz=309 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.29** | **160** | P | Pb | 17 13 01.1 | -0.2 |
| | baz=160 | | | | | | |
| MASBT | | | | S | Sb | 17 13 06.3 | +0.3 |
| | baz=160 | | | | | | |
| **CHN1** | **Nanshi** | **0.30** | **0** | *e*P | Pg | 17 13 01.1 | +0.4 |
| CHN1 | | | | *e*S | Sb | 17 13 06.8 | +0.5 |
| **STYH** | **Taoyuan** | **0.36** | **39** | *e*P | Pb | 17 13 02.6 | -0.1 |
| | baz=38 | | | | | | |
| STYH | | | | *e*S | Sb | 17 13 09.1 | +0.9 |
| | baz=38 | | | | | | |
| **WTP** | **Ta-pu** | **0.37** | **13** | *e*P | Pg | 17 13 02.3 | +0.3 |
| | baz=13 | | | | | | |
| WTP | | | | *e*S | Sb | 17 13 08.9 | +0.6 |
| | baz=13 | | | | | | |
| **TWK** | **Hsinying** | **0.38** | **355** | *e*P | Pg | 17 13 02.5 | +0.3 |
| | baz=356 | | | | | | |
| **TPUB** | **Ta-pu** | **0.42** | **13** | *e*P | Pg | 17 13 03.2 | +0.3 |
| | baz=12 | | | | | | |
| TPUB | | | | *e*S | Sb | 17 13 10.6 | +0.7 |
| | baz=12 | | | | | | |
| **TPUB** | **Ta-pu** | **0.42** | **13** | P | Pg | 17 13 03.3 | +0.3 |
| **ECL** | **Taimali** | **0.49** | **126** | *e*P | Pb | 17 13 04.7 | -0.1 |
| | baz=125 | | | | | | |
| **ELDTW** | **Lidau** | **0.54** | **56** | *e*P | Pb | 17 13 06.3 | +0.6 |
| | baz=56 | | | | | | |
| **ALS** | **Alishan** | **0.67** | **22** | *e*P | Pb | 17 13 08.2 | +0.2 |
| | baz=23 | | | | | | |
| ALS | | | | *e*S | Sb | 17 13 18.5 | +1.1 |
| | baz=23 | | | | | | |

*TUL **15** 17:18:01.6±1.3, 35.72N±0.01×97.17W±0.01, h7km±5km, ML2.9, mb_Lg2.6/32(NEIC), Error ellipse: s-maj=2.0km s-min=1.3km az=178.0*

**NEIC 15 17:18:01.6±1.0, 35.73N±0.02×97.18W±0.04, h9km±4km, Error ellipse: s-maj=5.6km s-min=1.7km az=110.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.07** | **188** | | Pg | 17 18 03.5 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.38** | **215** | | Pg | 17 18 09.3 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **213** | | Pg | 17 18 09.3 | +0.1 |
| **FNO** | **Franklin** | **0.51** | **201** | Pg | Pg | 17 18 11.4 | -0.1 |
| **W35A** | **Tecumseh** | **0.63** | **157** | Pg | Pg | 17 18 13.4 | -0.4 |
| **TUL1** | **Leonard** | **1.14** | **80** | Pg | Pb | 17 18 22.1 | -1.5 |
| **X34A** | **Smith Ranch, M** | **1.25** | **206** | Pn | Pn | 17 18 25.0 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.30** | **24** | Pn | Pn | 17 18 25.6 | -0.4 |
| **X37A** | **Clayton** | **1.87** | **127** | | Pn | 17 18 33.9 | +0.2 |
| X37A | | | | IAmb_Lg | | 17 19 01.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **2.37** | **72** | Pn | Pn | 17 18 41.2 | +0.4 |
| **HHAR** | **Hobbs** | **2.68** | **77** | | Pn | 17 18 44.1 | -0.9 |
| **W39A** | **Magazine** | **2.82** | **100** | Pn | Pn | 17 18 47.4 | +0.4 |
| **Z38A** | **Mt. Pleasant** | **3.06** | **143** | IAmb_Lg | | 17 19 38.5 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.18** | **111** | | Pn | 17 18 50.6 | -1.2 |
| **KSU1** | **Kansas State U** | **3.40** | **8** | Pg | Pb | 17 19 03.4 | +1.4 |
| **U40A** | **Yellville** | **3.56** | **79** | | Pn | 17 18 55.7 | -1.4 |
| **S39A** | **Bolivar** | **3.67** | **57** | IAmb_Lg | | 17 20 05.3 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.69** | **327** | IAmb_Lg | | 17 20 07.9 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.77** | **108** | | Pn | 17 18 57.9 | -2.1 |
| X40A | | | | IAmb_Lg | | 17 20 05.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.78** | **258** | IAmb_Lg | | 17 20 08.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.01** | **95** | | Pn | 17 19 02.6 | -0.7 |
| WHAR | | | | IAmb_Lg | | 17 20 10.0 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.06** | **96** | | Pn | 17 19 04.6 | +0.6 |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **86** | Pn | Pn | 17 19 02.8 | -1.9 |
| FCAR | | | | IAmb_Lg | | 17 20 12.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.21** | **69** | IAmb_Lg | | 17 20 22.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.69** | **56** | IAmb_Lg | | 17 20 38.2 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.08** | **73** | IAmb_Lg | | 17 20 53.7 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.44** | **309** | IAmb_Lg | | 17 21 08.0 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **5.68** | **204** | IAmb_Lg | | 17 21 11.8 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FVM** | **French Village** | **5.86** | **65** | IAmb_Lg | | 17 21 15.9 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **6.00** | **286** | IAmb_Lg | | 17 21 20.6 | |
| | comp=Z,6.3nm,0.9s | | | | | | |

*GUC **15** 17:38:53.5±0.6, 20.83S×68.04W, h176km±5km, ML3.6*
*SCB **15** 17:38:53.8±1.9, 20.88S×68.01W, h147km±19km, ML3.3/5, Error ellipse: s-maj=10.8km s-min=7.1km az=1.0*

**ISC 15 17:38:52.5±1.9, 20.84S±0.04×68.04W±0.07, h175km±15km, n34, σ0.96/51, 1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB08** | **IPOC Station P** | **1.25** | **304** | *e*P | **Pn** | 17 39 22.9 | **+0.7** |
| PB08 | | | | *e*S | **Sn** | 17 39 45.7 | **+0.7** |
| **PB08** | **IPOC Station P** | **1.25** | **304** | P | **Pn** | 17 39 23.0 | **+0.8** |
| PB08 | | | | S | **Sn** | 17 39 43.7 | **-1.3** |
| PB08 | | | | IAML | | 17 39 48.2 | |
| | 126nm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.36** | **261** | *e*P | **Pn** | 17 39 23.2 | **+0.4** |
| PB01 | | | | *e*S | **Sn** | 17 39 46.0 | **-0.2** |
| PB01 | | | | IAML | | 17 39 48.1 | |
| | comp=N,408nm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.36** | **261** | P | **Pn** | 17 39 24.0 | **+1.2** |
| PB01 | | | | S | **Sn** | 17 39 44.8 | **-1.4** |
| PB01 | | | | IAML | | 17 39 48.1 | |
| | comp=N,404nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **1.47** | **229** | *e*P | **Pn** | 17 39 25.1 | **+1.2** |
| PB09 | | | | *e*S | **Sn** | 17 39 48.9 | **+0.7** |
| PB09 | | | | IAML | | 17 39 50.7 | |
| | comp=N,159nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **1.47** | **229** | P | **Pn** | 17 39 25.0 | **+1.2** |
| **GO01** | **Chusmiza** | **1.59** | **317** | *e*P | **Pn** | 17 39 25.8 | **+0.3** |
| GO01 | | | | IAML | | 17 39 58.0 | |
| | comp=N,305nm,0.1s | | | | | | |
| **PB02** | **IPOC Station P** | **1.79** | **254** | *e*P | **Pn** | 17 39 27.8 | **+0.7** |
| PB02 | | | | *e*S | **Sn** | 17 39 53.7 | **-0.1** |
| PB02 | | | | IAML | | 17 39 57.6 | |
| | comp=E,847nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **1.79** | **254** | P | **Pn** | 17 39 28.0 | **+0.9** |
| **HMBC** | **Humberstone** | **1.82** | **288** | *e*P | **Pn** | 17 39 27.4 | **0.0** |
| HMBC | | | | *e*S | **Sn** | 17 39 53.7 | **-0.6** |
| HMBC | | | | IAML | | 17 39 56.5 | |
| | comp=E,422nm,0.5s | | | | | | |
| **PB11** | **IPOC Station P** | **1.86** | **305** | *e*P | **Pn** | 17 39 27.9 | **+0.1** |
| PB11 | | | | *e*S | **Sn** | 17 39 54.7 | **-0.5** |
| PB11 | | | | IAML | | 17 39 57.4 | |
| | comp=N,446nm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **1.86** | **305** | P | **Pn** | 17 39 28.2 | **+0.4** |
| PB11 | | | | S | **Sn** | 17 39 53.8 | **-1.4** |
| PB11 | | | | IAML | | 17 39 57.7 | |
| | comp=N,281nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.93** | **243** | *e*P | **Pn** | 17 39 29.2 | **+0.7** |
| PB07 | | | | *e*S | **Sn** | 17 39 56.5 | **-0.1** |
| PB07 | | | | IAML | | 17 40 00.6 | |
| | comp=N,328nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.93** | **243** | P | **Pn** | 17 39 29.6 | **+1.0** |
| **LVC** | **Limon Verde** | **1.93** | **204** | *e*P | **Pn** | 17 39 29.3 | **+0.5** |
| LVC | | | | *e*S | **Sn** | 17 39 57.0 | **-0.1** |
| **LVC** | **Limon Verde** | **1.93** | **204** | P | **Pn** | 17 39 29.6 | **+0.8** |
| **PATCX** | **Punta Patache** | **1.97** | **270** | *e*P | **Pn** | 17 39 29.3 | **+0.3** |
| PATCX | | | | *e*S | **Sn** | 17 39 56.9 | **-0.3** |
| PATCX | | | | IAML | | 17 40 00.1 | |
| | comp=N,384nm,0.1s | | | | | | |
| **PB03** | **IPOC Station P** | **1.99** | **233** | *i* P | **Pn** | 17 39 30.0 | **+0.7** |
| PB03 | | | | *e*S | **Sn** | 17 39 57.4 | **-0.4** |
| PB03 | | | | IAML | | 17 39 58.6 | |
| | comp=E,326nm,0.2s | | | | | | |
| **PB03** | **IPOC Station P** | **1.99** | **233** | P | **Pn** | 17 39 30.1 | **+0.8** |
| PB03 | | | | S | **Sn** | 17 39 55.7 | **-2.1** |
| PB03 | | | | IAML | | 17 39 59.6 | |
| | comp=E,161nm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **2.02** | **277** | *e*P | **Pn** | 17 39 29.4 | **0.0** |
| **TA02** | **Huaiquique** | **2.04** | **286** | *e*P | **Pn** | 17 39 29.9 | **+0.3** |
| TA02 | | | | *e*S | **Sn** | 17 39 57.0 | **-1.3** |
| **MOCB** | **Mochara** | **2.28** | **101** | P | **Pn** | 17 39 32.2 | **-0.6** |
| **PB06** | **IPOC Station P** | **2.33** | **217** | *e*P | **Pn** | 17 39 33.8 | **+0.7** |
| PB06 | | | | *e*S | **Sn** | 17 40 04.7 | **0.0** |
| PB06 | | | | IAML | | 17 40 06.0 | |
| | comp=E,310nm,0.1s | | | | | | |
| **PB06** | **IPOC Station P** | **2.33** | **217** | P | **Pn** | 17 39 34.0 | **+0.9** |
| PB06 | | | | S | **Sn** | 17 40 02.0 | **-2.7** |
| PB06 | | | | IAML | | 17 40 06.4 | |
| | comp=E,119nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **2.46** | **232** | *e*P | **Pn** | 17 39 35.1 | **+0.5** |
| PB04 | | | | IAML | | 17 40 09.6 | |
| | comp=E,251nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.46** | **232** | P | **Pn** | 17 39 35.5 | **+1.0** |
| **PB15** | **IPOC Station P** | **2.70** | **209** | *e*P | **Pn** | 17 39 38.4 | **+0.9** |
| **PB15** | **IPOC Station P** | **2.70** | **209** | P | **Pn** | 17 39 38.5 | **+1.0** |
| **PB16** | **IPOC Station P** | **2.85** | **331** | *e*P | **Pn** | 17 39 40.6 | **+0.9** |
| **PB16** | **IPOC Station P** | **2.85** | **331** | P | **Pn** | 17 39 40.9 | **+1.2** |
| **PB12** | **IPOC Station P** | **3.09** | **315** | *e*P | **Pn** | 17 39 41.0 | **-1.1** |
| PB12 | | | | IAML | | 17 40 25.3 | |
| | comp=E,64nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **3.53** | **221** | P | **Pn** | 17 39 47.7 | **+0.2** |
| **BBOE** | **La Paz, Chanca** | **4.01** | **1** | P | **Pn** | 17 39 55.5 | **+1.4** |
| **BBOD** | **La Paz, Gloria** | **4.22** | **353** | P | **Pn** | 17 39 57.9 | **+1.1** |

**IDC 15 17:39:18.7±5.6, 29.27S×179.07W, h0km, mb3.5/2, mb1 3.8/2, mb1mx3.6/21, mbtmp3.5/2, Error ellipse: s-maj=260.5km s-min=86.6km az=165.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.25** | **266** | P | P | 17 47 13.1 | -0.9 |
| | 0.4nm,0.9s,baz=105,slow=7.2,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.13** | **272** | P | P | 17 47 21.7 | +0.5 |
| | 0.5nm,0.4s,baz=111,slow=7.9,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **143.77** | **340** | PKP | PKPdf | 17 58 54.5 | -0.7 |
| | 0.6nm,0.4s,baz=30,slow=4.3,SNR=7.5 | | | | | | |

**DJA 15 17:39:35.3±0.3, 8°S±4°×11°6E±°, h26km±2km, M3.6/13, mb4.0/3, mB4.6/1, MLv3.5/13, Mw(mB)3.8/1, Bali region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGBI** | **Denpasar** | **0.78** | **244** | P | Pn | 17 39 50.5 | -0.1 |
| **JAGI** | **Jajag, Banyuwa** | **1.68** | **270** | P | Pn | 17 40 03.1 | +0.1 |
| JAGI | | | | S | Sn | 17 40 22.5 | -1.2 |
| **ABJI** | **Asem Bagus** | **1.73** | **293** | P | Pn | 17 40 04.7 | +0.9 |
| ABJI | | | | S | Sn | 17 40 25.4 | +0.3 |
| **PLAI** | **Plampang** | **1.94** | **101** | P | Pn | 17 40 08.0 | +1.4 |
| PLAI | | | | S | Sn | 17 40 30.9 | +0.8 |
| **GMJI** | **Gumukmas** | **2.39** | **275** | P | Pn | 17 40 13.2 | +0.4 |
| GMJI | | | | S | Sn | 17 40 41.0 | -0.2 |
| **GRJI** | **Gresik** | **3.68** | **295** | P | Pn | 17 40 31.7 | +1.1 |
| GRJI | | | | S | Sn | 17 41 13.5 | +0.4 |
| **WBSI** | **Waikabubak, Su** | **3.69** | **109** | P | Pn | 17 40 31.2 | +0.5 |
| **PWJI** | **Pagerwojo** | **4.03** | **276** | P | Pn | 17 40 36.2 | +0.8 |
| PWJI | | | | S | Sn | 17 41 24.3 | +2.5 |
| **BWJI** | **Bawean** | **4.10** | **309** | P | Pn | 17 40 37.1 | +0.8 |
| **PCJI** | **Pacitan** | **4.63** | **273** | P | Pn | 17 40 44.3 | +0.6 |
| PCJI | | | | S | Sn | 17 41 35.0 | -1.6 |
| **BSSI** | **Bau Bau, Buton** | **5.15** | **64** | P | Pn | 17 40 50.5 | -0.3 |
| | 0.1nm622nm18nm,0.8s | | | | | | |
| BSSI | | | | S | Sn | 17 41 45.8 | -3.7 |
| | 0.1nm622nm18nm,0.8s | | | | | | |
| **BKSI** | **Bulukumba** | **5.27** | **54** | P | Pn | 17 40 52.0 | -0.4 |
| | 0.1nm11nm,0.5s | | | | | | |
| BKSI | | | | S | Sn | 17 41 49.4 | -3.0 |
| | 0.1nm11nm,0.5s | | | | | | |
| **BNSI** | **Bone** | **5.85** | **47** | P | Pn | 17 41 02.3 | +1.9 |
| BNSI | | | | S | Sn | 17 42 06.8 | +0.1 |

**TAP 15 17:39:56.9, 23.32N×121.15E, h24km, ML1.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **0.18** | **222** | *i* P | Pb | 17 40 02.4 | +0.1 |
| | baz=222 | | | | | | |
| ELDTW | | | | S | Sb | 17 40 05.9 | -0.1 |
| | baz=222 | | | | | | |
| **FULB** | **Fuli** | **0.18** | **133** | *e*P | Pb | 17 40 02.7 | +0.4 |
| | baz=133 | | | | | | |
| FULB | | | | *e*S | Sb | 17 40 06.6 | +0.8 |
| | baz=133 | | | | | | |

**TAP 15 17:39:58.1, 22.97N×120.55E, h14km, ML0.8, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLGT** | **Liugui** | **0.09** | **75** | *e*P | Pg | 17 40 01.9 | +0.7 |
| | baz=86 | | | | | | |
| SLGT | | | | *e*S | Sg | 17 40 05.1 | +1.8 |
| | baz=86 | | | | | | |
| **SGST** | **Jiashian** | **0.12** | **15** | *e*P | Pb | 17 40 02.2 | +0.1 |
| | baz=16 | | | | | | |
| **SSD** | **Sandimen** | **0.23** | **161** | *e*P | Pb | 17 40 03.9 | -0.2 |
| | baz=156 | | | | | | |
| **WTP** | **Ta-pu** | **0.28** | **12** | *i* P | Pb | 17 40 05.3 | +0.3 |
| | baz=13 | | | | | | |
| **TPUB** | **Ta-pu** | **0.34** | **13** | *e*P | Pb | 17 40 06.0 | +0.1 |
| | baz=12 | | | | | | |
| **ELDTW** | **Lidau** | **0.48** | **63** | *e*P | Pb | 17 40 09.2 | +0.8 |
| | baz=63 | | | | | | |
| ELDTW | | | | *e*S | Sb | 17 40 16.3 | +0.9 |
| | baz=63 | | | | | | |

**TAP 15 17:40:01.1, 23.00N×120.88E, h2km±1km, ML0.9, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.20** | **330** | P | Pg | 17 40 05.2 | **+0.2** |
| | baz=332 | | | | | | |
| STYH | | | | S | Sg | 17 40 08.6 | +1.1 |
| | baz=332 | | | | | | |
| **SLGT** | **Liugui** | **0.22** | **269** | *e*P | Pg | 17 40 07.0 | +1.8 |
| | baz=258 | | | | | | |
| **ELDTW** | **Lidau** | **0.23** | **33** | *i* P | Pg | 17 40 06.4 | +0.9 |
| | baz=46 | | | | | | |
| **TWG** | **Pinlang** | **0.25** | **135** | *e*P | Pg | 17 40 07.0 | +1.2 |
| | baz=135 | | | | | | |
| TWG | | | | *e*S | Sg | 17 40 11.2 | +2.2 |
| | baz=135 | | | | | | |
| **TWGBT** | **Beinan** | **0.25** | **134** | *e*P | Pg | 17 40 07.1 | +1.1 |
| | baz=135 | | | | | | |
| TWGBT | | | | *e*S | Sb | 17 40 11.5 | -1.7 |
| | baz=135 | | | | | | |
| **SSD** | **Sandimen** | **0.34** | **223** | *i* P | Pg | 17 40 08.0 | +0.4 |
| | baz=221 | | | | | | |
| SSD | | | | *i* S | Sg | 17 40 12.2 | +0.2 |
| | baz=221 | | | | | | |
| **WTP** | **Ta-pu** | **0.35** | **315** | P | Pb | 17 40 09.3 | -0.8 |
| | baz=321 | | | | | | |
| WTP | | | | *e*S | Sg | 17 40 14.0 | +1.6 |
| | baz=321 | | | | | | |
| **TSMG** | **Majia** | **0.36** | **217** | *e*P | Pb | 17 40 09.5 | -0.8 |
| | baz=224 | | | | | | |
| **CHN1** | **Nanshi** | **0.38** | **300** | *e*P | Pb | 17 40 11.1 | +0.6 |
| | baz=308 | | | | | | |
| CHN1 | | | | *e*S | Sb | 17 40 17.7 | +0.9 |
| | baz=308 | | | | | | |
| **TPUB** | **Ta-pu** | **0.38** | **322** | *e*P | Pb | 17 40 09.9 | -0.7 |
| | baz=323 | | | | | | |
| TPUB | | | | *e*S | Sb | 17 40 16.3 | -0.6 |
| | baz=323 | | | | | | |
| **ECL** | **Taimali** | **0.40** | **171** | *e*P | Pb | 17 40 10.7 | -0.2 |
| | baz=169 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.45** | **211** | *e*P | Pg | 17 40 10.2 | +0.6 |
| | baz=217 | | | | | | |

*ANF **15** 18:47:51.7±0.5, 37.57N×118.88W, h8km±3km, ML3.5/12, Error ellipse: s-maj=8.9km s-min=4.9km az=56.0*
*IASPEI **15** 18:47:52.1±1.1, 37.58N±0.03×118.86W±0.03, h9km±7km, Error ellipse: s-maj=4.7km s-min=4.3km az=28.3, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*NCEDC **15** 18:47:52.2±2.1, 37.58N±0.03×118.86W±0.03, h5km±6km, ML3.4/32, ML3.2/15(REN), ML3.1/78(NEIC), Error ellipse: s-maj=4.8km s-min=1.2km az=141.0*
*NEIC **15** 18:47:52.5±2.3, 37.58N±0.03×118.87W±0.04, h6km±7km, Error ellipse: s-maj=4.8km s-min=3.6km az=145.0*
*REN **15** 18:47:52.2±2.1, 37.57N±0.02×118.86W±0.04, h7km±5km, Error ellipse: s-maj=4.4km s-min=3.1km az=120.0*

**ISC 15 18:47:52.1±0.9, 37.58N±0.02×118.86W±0.02, h8km±7km, n79, σ0.81/86, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLAC** | **Mammoth, Mammo** | **0.06** | **24** | P | **Pg** | 18 47 54.1 | **-0.1** |
| | baz=196 | | | | | | |
| **MDRNC** | **Doe Ridge** | **0.06** | **21** | | **Pg** | 18 47 54.3 | **0.0** |
| **MRDM** | **Red Cones** | **0.16** | **277** | | **Pg** | 18 47 55.8 | **+0.2** |
| **MDCM** | **Deadman Creek** | **0.19** | **313** | | **Pg** | 18 47 56.4 | **+0.3** |
| **MTUM** | **Tungsten Hills** | **0.33** | **133** | | **Pg** | 18 47 58.7 | **0.0** |
| **KCC** | **Kaiser Creek** | **0.44** | **235** | | **Pg** | 18 48 00.8 | **0.0** |
| KCC | | | | | **Sg** | 18 48 06.8 | **+0.2** |
| **TIN** | **Tinemaha, Big** | **0.73** | **136** | P | **Pg** | 18 48 06.2 | **0.0** |
| | baz=316 | | | | | | |
| TIN | | | | S | **Sg** | 18 48 15.9 | **+0.3** |
| | baz=316 | | | | | | |
| **LHV** | **Little Huntoon** | **0.73** | **23** | | **Pg** | 18 48 06.4 | **+0.2** |
| LHV | | | | IAML | | 18 48 21.9 | |
| | comp=N,889nm,0.4s | | | | | | |
| LHV | | | | IAML | | 18 48 22.3 | |
| | comp=E,647nm,0.7s | | | | | | |
| **HELL** | **Mitchell Peak,** | **0.91** | **188** | | **Pg** | 18 48 09.2 | **-0.4** |
| **NVAR** | **Mina Array Bea** | **0.96** | **27** | Pg | **Pg** | 18 48 10.4 | **-0.2** |
| **NV11** | **Mina Array Sit** | **1.02** | **33** | Pg | **Pg** | 18 48 11.4 | **-0.3** |
| **LCH** | **Last Change Ra** | **1.03** | **109** | Pg | **Pg** | 18 48 11.4 | **-0.5** |
| LCH | | | | IAML | | 18 48 25.8 | |
| | comp=E,663nm,0.2s | | | | | | |
| LCH | | | | IAML | | 18 48 26.3 | |
| | comp=N,508nm,0.5s | | | | | | |
| **RYN** | **Ryan** | **1.08** | **14** | | **Pg** | 18 48 12.9 | **-0.1** |
| **CMB** | **Columbia Colle** | **1.29** | **291** | | **Pn** | 18 48 15.9 | **-0.6** |
| **CMB** | **Columbia Colle** | **1.29** | **291** | Pn | **Pn** | 18 48 15.8 | **-0.6** |
| **CMB** | **Columbia Colle** | **1.29** | **291** | IAML | | 18 48 34.1 | |
| | comp=E,292nm,0.3s | | | | | | |
| CMB | | | | IAML | | 18 48 37.6 | |
| | comp=N,443nm,0.7s | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.30** | **151** | P | **Pn** | 18 48 16.1 | **-0.6** |
| | baz=332 | | | | | | |
| CWC | | | | S | **Sg** | 18 48 32.9 | **-1.1** |
| | baz=332 | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.32** | **198** | P | **Pn** | 18 48 16.8 | **-0.1** |
| | baz=18 | | | | | | |
| VOG | | | | S | **Sb** | 18 48 34.3 | **0.0** |
| | baz=18 | | | | | | |
| **GRAC** | **Grapevine Rang** | **1.33** | **116** | | **Pn** | 18 48 17.1 | **+0.1** |
| **GRAC** | **Grapevine Rang** | **1.33** | **116** | P | **Pg** | 18 48 17.7 | **+0.1** |
| | baz=296 | | | | | | |
| GRAC | | | | S | **Sn** | 18 48 35.6 | **+0.7** |
| | baz=296 | | | | | | |
| **TPH** | **Tonopah** | **1.39** | **69** | | **Pn** | 18 48 18.2 | **+0.2** |
| **YERR** | **Yerington** | **1.43** | **348** | | **Pn** | 18 48 19.1 | **+0.5** |
| **KVN** | **Kaiserville** | **1.59** | **22** | | **Pn** | 18 48 21.0 | **+0.3** |
| **PNTR** | **Pine Nut** | **1.61** | **339** | | **Pb** | 18 48 22.3 | **0.0** |
| PNTR | | | | IAML | | 18 48 28.8 | |
| | comp=E,180nm,0.6s | | | | | | |
| **EMB** | **Emerald Bay** | **1.70** | **325** | | **Pb** | 18 48 23.8 | **+0.1** |
| EMB | | | | IAML | | 18 49 01.1 | |
| | comp=N,278nm,0.5s | | | | | | |
| EMB | | | | IAML | | 18 49 04.2 | |
| | comp=E,171nm,0.4s | | | | | | |
| **PDRM** | **Domengine Ranc** | **1.73** | **225** | | **Pb** | 18 48 24.1 | **-0.1** |
| **VES** | **Vestal, Richgr** | **1.74** | **186** | P | **Pb** | 18 48 24.0 | **-0.4** |
| | baz=6.0 | | | | | | |
| VES | | | | S | **Sb** | 18 48 46.1 | **-0.2** |
| | baz=6.0 | | | | | | |
| **RUBR** | **Rubicon Trail** | **1.79** | **326** | | **Pb** | 18 48 25.1 | **-0.2** |
| RUBR | | | | IAML | | 18 49 02.0 | |
| | comp=N,268nm,0.6s | | | | | | |
| RUBR | | | | IAML | | 18 49 06.7 | |
| | comp=E,212nm,0.6s | | | | | | |
| **VCNR** | **Virginia City** | **1.82** | **340** | | **Pn** | 18 48 23.7 | **-0.2** |
| VCNR | | | | IAML | | 18 48 56.2 | |
| | comp=E,170nm,0.5s | | | | | | |
| **Q09A** | **Carvers** | **1.82** | **46** | | **Pb** | 18 48 26.3 | **+0.5** |
|

| | | | | | | |
|---|---|---|---|---|---|---|
| **TPNV** | **Topopah Spring** | **2.18 106** | | **Pn** | **18 48 29.1 +0.3** | |
| TPNV | | | IAML | | 18 49 10.7 | |
| | comp=N,105nm,0.8s | | | | | |
| **TPNV** | **Topopah Spring** | **2.18 106** | P | **Pn** | **18 48 29.1 +0.3** | |
| | baz=288 | | | | | |
| **TRAM** | **Private Proper** | **2.21 211** | | **Pn** | **18 48 30.8 +1.6** | |
| **SAO** | **San Andreas Ge** | **2.22 249** | | **Pn** | **18 48 31.0 +1.8** | |
| **SAO** | **San Andreas Ge** | **2.22 249** | Pn | **Pn** | **18 48 30.4 +1.3** | |
| **MHC** | **Mount Hamilton** | **2.22 265** | | **Pb** | **18 48 31.6 -1.0** | |
| **HSFM** | **Saint Francis** | **2.24 251** | | **Pb** | **18 48 31.6 -1.2** | |
| **GWY** | **Greenwater Val** | **2.24 128** | | **Pn** | **18 48 29.6 -0.1** | |
| GWY | | | IAML | | 18 49 10.2 | |
| | comp=N,80nm,0.4s | | | | | |
| GWY | | | IAML | | 18 49 10.9 | |
| | comp=E,92nm,0.7s | | | | | |
| **SCZ** | **Santa Cruz** | **2.25 245** | | **Pn** | **18 48 31.1 +1.4** | |
| **TCHL** | **Shandon** | **2.26 214** | | **Pn** | **18 48 31.5 +1.8** | |
| **BJCM** | **Johnson Can.** | **2.27 244** | | **Pn** | **18 48 31.4 +1.6** | |
| **QSM** | **Queen of Sheba** | **2.27 135** | Pg | **Pb** | **18 48 33.9 +0.5** | |
| QSM | | | IAML | | 18 49 06.2 | |
| | comp=N,123nm,0.7s | | | | | |
| QSM | | | IAML | | 18 49 06.4 | |
| | comp=E,98nm,0.4s | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **2.30 155** | Pb | **Pb** | **18 48 34.2 +0.3** | |
| | baz=336 | | | | | |
| **BSMM** | **Soledad Missio** | **2.38 241** | | **Pn** | **18 48 33.5 +2.0** | |
| **SMMC** | **Simmler** | **2.44 202** | P | **Pn** | **18 48 33.5 +1.3** | |
| | baz=22 | | | | | |
| **HAST** | **Hastings Reser** | **2.46 242** | | **Pn** | **18 48 33.9 +1.4** | |
| **S11A** | **Rachel** | **2.48 88** | | **Pb** | **18 48 37.3 +0.3** | |
| S11A | | | IAML | | 18 49 30.5 | |
| | comp=E,169nm,0.9s | | | | | |
| **CCAC** | **Calif City Air** | **2.52 164** | Pg | **Pb** | **18 48 37.8 +0.2** | |
| **RAMR** | **Ramage Ranch** | **2.52 220** | | **Pn** | **18 48 35.1 +1.7** | |
| **BEKR** | **Beckworth** | **2.57 333** | | **Pn** | **18 48 34.3 +0.2** | |
| BEKR | | | IAML | | 18 49 29.4 | |
| | comp=N,57nm,0.5s | | | | | |
| BEKR | | | IAML | | 18 49 30.7 | |
| | comp=E,74nm,0.6s | | | | | |
| **PAPM** | **Alder Peak** | **2.61 231** | | **Pn** | **18 48 36.3 +1.7** | |
| **BCW** | **Bitter Crk WRg** | **2.67 190** | | **Pn** | **18 48 35.8 +0.2** | |
| **R11A** | **Troy Canyon, C** | **2.70 72** | | **Pn** | **18 48 36.2 +0.2** | |
| **GSC** | **Goldstone, Bar** | **2.81 143** | | **Pn** | **18 48 38.0 +0.6** | |
| GSC | | | IAML | | 18 49 30.3 | |
| | comp=E,64nm,0.5s | | | | | |
| **ORV** | **Oroville** | **2.86 314** | | **Pn** | **18 48 36.3 -1.6** | |
| ORV | | | IAML | | 18 49 26.1 | |
| | comp=E,50nm,0.5s | | | | | |
| **PRN** | **Pahroc Range** | **3.04 92** | | **Pn** | **18 48 40.3 -0.3** | |
| PRN | | | IAML | | 18 49 40.5 | |
| | comp=E,89nm,0.8s | | | | | |
| PRN | | | IAML | | 18 49 40.5 | |
| | comp=N,86nm,0.9s | | | | | |
| **BMN** | **Battle Mountai** | **3.12 24** | | **Pn** | **18 48 41.3 -0.5** | |
| **SHPR** | **Sheep Range** | **3.15 109** | | **Pn** | **18 48 40.4 -1.8** | |
| **PASC** | **Pasadena Art C** | **3.44 171** | | **Pn** | **18 48 44.8 -1.3** | |
| PASC | | | IAML | | 18 49 45.1 | |
| | comp=N,75nm,0.7s | | | | | |
| PASC | | | IAML | | 18 49 46.0 | |
| | comp=E,68nm,0.8s | | | | | |
| **PSUT** | **Pine Spring** | **4.07 75** | | **Pb** | **18 49 05.3 +1.2** | |
| **ELS** | **Elsinore Mount** | **4.09 163** | | **Pn** | **18 48 54.5 -0.5** | |
| ELS | | | IAML | | 18 50 05.6 | |
| | comp=E,23nm,1.2s | | | | | |
| ELS | | | IAML | | 18 50 07.2 | |
| | comp=N,21nm,4.1s | | | | | |
| **ELK** | **Elko** | **4.23 41** | Pn | **Pn** | **18 48 57.4 +0.2** | |
| ELK | | | IAML | | 18 50 07.5 | |
| | comp=N,21nm,0.5s | | | | | |
| ELK | | | IAML | | 18 50 08.2 | |
| | comp=N,15nm,0.5s | | | | | |
| **PFO** | **Pinyon Flats O** | **4.42 153** | Pg | **Pb** | **18 49 10.8 +0.8** | |
| **LCMT** | **Little Creek M** | **4.52 96** | | **Pn** | **18 49 01.0 0.0** | |
| **U15A** | **North Rim** | **5.38 100** | Pn | **Pn** | **18 49 12.5 -0.5** | |

*TIR* ***15*** *18:54:54.7, 37.18N×21.55E, h38km±19km, Ml5.8*
*BJI* ***15*** *18:54:55.2±0.0, 37.50N×21.74E, h7km, mb4.9/72, mB5.2/40, Ms5.0/43, Ms7 4.6/42*
*IDC* ***15*** *18:54:57.9±0.4, 37.56N×21.86E, h0km, mb4.8/37, mb1 4.9/50, mb1mx4.8/59, mbtmp4.8/50, ML4.4/11, MS4.7/58, Ms1 4.7/58, ms1mx4.5/99, Error ellipse: s-maj=10.3km s-min=9.3km az=136.0*
*MOS* ***15*** *18:54:58.2±1.5, 37.53N×21.71E, h17km, mb5.5/36, MS4.7/22, Error ellipse: s-maj=3.6km s-min=2.1km az=86.6*
*ATH* ***15*** *18:55:00.4, 37.59N×21.72E, h24km±1km, ML5.2/21, Error ellipse: s-maj=1.1km s-min=0.8km az=271.0*
*UPSL* ***15*** *18:55:00.4, 37.57N×21.69E, h30km, Mw5.1, Moment Tensor Solution. s6 Moment tensor: Mrr=0.45; Mθθ=3.19; Mϕϕ=-3.63; Mrθ=-1.85; Mθϕ=4.28; Mrϕ=1.12; Fault plane solution: NP1:ϕs109.00000°, δ89.00000°, λ-21.00000°. NP2:ϕs200.00000°, δ69.00000°, λ-179.00000°.*
*MED_RC* ***15*** *18:55:00.0±0.2, 37.58N×21.77E, h32km, MW5.3/39, Moment Tensor Solution. Body waves: s8,c8;Mantle waves: s39,c74; Duration: 0 Moment tensor: Scale 10¹⁷ Nm; Mrr-0.04±.04; Mθθ 0.91±.03; Mϕϕ -0.87±.02; Mrθ-0.13±.03; Mθϕ 0.79±.02; Mϕr-0.13±.04; Best double couple: Mo1.21000×10¹⁷ NP1:ϕs204.00000°, δ87.00000°, λ172.00000°. NP2:ϕs294.00000°, δ82.00000°, λ3.00000°. Principal axes: T 1.2300, Plg7.0000°, Azm159.0000°; N -0.0600, Plg82.0000°, Azm6.0000°; P -1.1800, Plg4.0000°, Azm249.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=40s.*
*PDG* ***15*** *18:55:01.9±0.6, 37.66N×21.66E, h26km±1km, MD5.2/5, ML5.1/11 Error ellipse: s-maj=1.1km s-min=1.2km az=0.0*
*THE* ***15*** *18:55:01.2, 37.58N×21.70E, h5km±1km, ML5.2/7, Error ellipse: s-maj=1.0km s-min=0.5km az=49.0*
*GCMT* ***15*** *18:55:01.0±0.2, 37.43N±0.01×21.85E±0.01, h34km, MW5.3/118, Moment Tensor Solution. s82,c119; s118,c207; Duration: 1‡1 Moment tensor: Scale 10¹⁷ Nm; Mrr-0.05±.02; Mθθ 0.84±.02; Mϕϕ -0.79±.02; Mrθ-0.28±.03; Mθϕ 0.65±.02; Mϕr 0.14±.03; Best double couple: Mo1.09000×10¹⁷ NP1:ϕs206.00000°, δ73.00000°, λ-179.00000°. NP2:ϕs115.00000°, δ89.00000°, λ-17.00000°. Principal axes: T 1.1110, Plg11.0000°, Azm162.0000°; N -0.0410, Plg73.0000°, Azm292.0000°; P -1.0700, Plg12.0000°, Azm69.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***15*** *18:55:01.7, 37.56N×21.69E, h36km, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr0.28; Mθθ0.37; Mϕϕ -0.65; Mrθ0.20; Mθϕ 0.88; Mϕr-0.06; Fault plane solution: Mo1.06000×10¹⁷ NP1:ϕs105.78000°, δ85.39000°, λ13.27000°. NP2:ϕs14.70000°, δ76.77000°, λ175.26000°. Principal axes: T 0.9051, Plg13.0000°, Azm331.0000°; N 0.2640, Plg76.0000°, Azm125.0000°; P -1.1691, Plg6.0000°, Azm240.0000°;*
*NEIC* ***15*** *18:55:02.0±2.3, 37.57N±0.05×21.78E±0.06, h29km±4km, mb5.2/160, Mwr5.3/56, Mww5.3, ML5.2(ATH), ML5.2(THE) Error ellipse: s-maj=7.7km s-min=6.6km az=52.0*
*HLW* ***15*** *18:55:04.1, 37.53N×22.49E, h30km±50km, Md5.1, Ml5.8*
*GII* ***15*** *18:55:05.5±0.0, 36.75N×22.09E, h14km±1km, mb5.2/5, MD5.3/5*
*NEIC* ***15*** *18:55:06, 37.55N×21.68E, h30km, Moment Tensor Solution. Duration: 10s4 Moment tensor: Scale 10¹⁷Nm; Mrr-0.06; Mθθ 0.78; Mϕϕ -0.71; Mrθ -0.35; Mθϕ 0.74; Mϕr-0.17; Fault plane solution: Mo1.12000×10¹⁷ NP1: ϕs294.00000°, δ77.00000°, λ11.00000°. NP2: ϕs201.00000°, δ79.00000°, λ167.00000°. Principal axes: T 1.2033, Plg17.0000°, Azm157.0000°; N -0.1825, Plg73.0000°, Azm343.0000°; P -1.0208, Plg2.0000°, Azm248.0000°;*
*BEO* ***15*** *18:55:09.2±0.7, 38.23N×21.11E, h0km, ML5.0/10*
*BGR* ***15*** *18:55:14.5±1.5, 38.90N×21.83E, h10km, mb5.7, Error ellipse: s-maj=84.5km s-min=31.1km az=47.0*
**ISC 15 18:55:01.0±0.3, 37.59N±0.02×21.77E±0.02, h22km±2km, h22km; pP-P, n1391, s2‡06/1408, mb5.2/204, MS4.7/70, 189C-187D, Fault plane solution: NP1:ϕs134.12798°, δ86.79102°, λ-21.42072°. NP2:ϕs225.38603°, δ68.61453°, λ-176.55347°. Principal axes:** T Plg12.6067°, Azm181.7107°; N Plg68.3514°, Azm306.0074°; P Plg17.3028°, Azm87.7156°; **Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **DRO** | **Drossia** | **0.37** | **353** | P | **Pb** | **18 55 09.0** | **0.0** |
| DRO | | | | S | **Sb** | **18 55 14.6** | **+0.3** |
| | 740μm,0.8s | | | | | | |
| **DRO** | **Drossia** | **0.37** | **353** | P | **Pb** | **18 55 09.0** | **0.0** |
| DRO | | | | S | **Sb** | **18 55 15.0** | **+0.7** |
| DRO | | | | AML | AML | 18 55 21.9 | |
| DRO | | | | AML | AML | 18 55 25.0 | |
| **ITM** | **Ithomi** | **0.42** | **163** | *i* P | **Pb** | **18 55 10.1** | **+0.2** |
| **ITM** | **Ithomi** | **0.42** | **163** | P | **Pb** | **18 55 10.1** | **+0.2** |
| ITM | | | | S | **Sb** | **18 55 16.4** | **+0.6** |
| | 255μm,0.7s | | | | | | |
| **ITM** | **Ithomi** | **0.42** | **163** | P | **Pb** | **18 55 10.1** | **+0.2** |
| ITM | | | | S | **Sb** | **18 55 16.5** | **+0.6** |
| ITM | | | | AML | AML | 18 55 25.6 | |
| ITM | | | | AML | AML | 18 55 26.0 | |
| **ITM** | **Ithomi** | **0.42** | **163** | Pg | **Pb** | **18 55 10.1** | **+0.2** |
| ITM | | | | Sg | **Sn** | **18 55 17.2** | **-1.8** |
| **ITM** | **Ithomi** | **0.42** | **163** | ⇑P | **Pb** | **18 55 08.5** | **-1.3** |
| **RLS** | **Riolos of Patr** | **0.53** | **333** | P | **Pb** | **18 55 11.3** | **-0.3** |
| RLS | | | | S | **Sb** | **18 55 18.9** | **0.0** |
| | 127μm,0.6s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.53** | **333** | P | **Pb** | **18 55 11.1** | **-0.5** |
| RLS | | | | S | **Sb** | **18 55 18.9** | **0.0** |
| RLS | | | | AML | AML | 18 55 24.3 | |
| RLS | | | | AML | AML | 18 55 28.4 | |
| **KLV** | **Kalavryta, Ach** | **0.55** | **33** | P | **Pb** | **18 55 12.2** | **+0.1** |
| KLV | | | | S | **Sn** | **18 55 21.3** | **-0.8** |
| **KLV** | **Kalavryta, Ach** | **0.55** | **33** | P | **Pb** | **18 55 11.8** | **-0.3** |
| KLV | | | | S | **Sb** | **18 55 20.5** | **+0.9** |
| KLV | | | | AML | AML | 18 55 23.8 | |
| KLV | | | | AML | AML | 18 55 27.0 | |
| **LAKA** | **Lakka** | **0.67** | **14** | P | **Pb** | **18 55 14.1** | **-0.1** |
| LAKA | | | | S | **Sn** | **18 55 24.7** | **-0.5** |
| | 593μm,0.9s | | | | | | |
| **LAKA** | **Lakka** | **0.67** | **14** | P | **Pb** | **18 55 13.9** | **-0.2** |
| LAKA | | | | S | **Sb** | **18 55 23.4** | **+0.3** |
| LAKA | | | | AML | AML | 18 55 26.4 | |
| LAKA | | | | AML | AML | 18 55 27.9 | |
| **PYL** | **PYLOS** | **0.69** | **182** | P | **Pb** | **18 55 14.0** | **-0.4** |
| PYL | | | | S | **Sn** | **18 55 24.5** | **-1.0** |
| **PYL** | **PYLOS** | **0.69** | **182** | P | **Pb** | **18 55 13.8** | **-0.6** |
| PYL | | | | S | **Sn** | **18 55 24.2** | **-1.2** |
| **UPR** | **University Cam** | **0.70** | **1** | P | **Pn** | **18 55 14.8** | **-0.8** |
| **ALIK** | **Aliki, Aigiali** | **0.73** | **22** | P | **Pn** | **18 55 15.2** | **-0.7** |
| ALIK | | | | S | **Sn** | **18 55 27.1** | **+0.7** |
| **LTHK** | **Lithakia** | **0.75** | **280** | P | **Pb** | **18 55 14.1** | **-1.3** |
| **LTHK** | **Lithakia** | **0.75** | **280** | P | **Pb** | **18 55 13.9** | **-1.4** |
| **THAL** | **Thalero** | **0.84** | **57** | P | **Pn** | **18 55 17.2** | **-0.3** |
| THAL | | | | S | **Sn** | **18 55 31.1** | **+1.9** |
| | 297μm,0.7s | | | | | | |
| **THAL** | **Thalero** | **0.84** | **57** | P | **Pb** | **18 55 17.0** | **0.0** |
| THAL | | | | S | **Sn** | **18 55 28.8** | **-0.4** |
| THAL | | | | AML | AML | 18 55 38.8 | |
| THAL | | | | AML | AML | 18 55 40.2 | |
| **EFP** | **Efpalio** | **0.85** | **7** | P | **Pn** | **18 55 16.9** | **-0.7** |
| EFP | | | | S | **Sn** | **18 55 29.8** | **+0.4** |
| | 127μm,0.9s | | | | | | |
| **EFP** | **Efpalio** | **0.85** | **7** | P | **Pn** | **18 55 17.0** | **-0.7** |
| EFP | | | | AML | AML | 18 55 33.0 | |
| EFP | | | | AML | AML | 18 55 35.1 | |
| **ANX** | **Ano Chora** | **1.01** | **7** | P | **Pb** | **18 55 20.1** | **+0.1** |
| ANX | | | | S | **Sn** | **18 55 34.9** | **+1.3** |
| | 148μm,0.9s | | | | | | |
| **ANX** | **Ano Chora** | **1.01** | **7** | P | **Pb** | **18 55 19.6** | **-0.4** |
| ANX | | | | AML | AML | 18 55 39.5 | |
| ANX | | | | AML | AML | 18 55 46.4 | |
| **DLFA** | **Delphi** | **1.06** | **33** | P | **Pb** | **18 55 20.7** | **0.0** |
| **EPID** | **Epidavros** | **1.07** | **88** | P | **Pb** | **18 55 21.6** | **+0.7** |
| EPID | | | | S | **Sn** | **18 55 38.2** | **+3.2** |
| **EPID** | **Epidavros** | **1.07** | **88** | P | **Pb** | **18 55 21.6** | **+0.7** |
| **PSDA** | **Pessada-Kefalo** | **1.07** | **300** | P | **Pb** | **18 55 20.2** | **-0.7** |
| **PSDA** | **Pessada-Kefalo** | **1.07** | **300** | P | **Pn** | **18 55 19.5** | **-1.2** |
| **VLS** | **Valsamata** | **1.10** | **303** | P | **Pb** | **18 55 20.5** | **-0.9** |
| **VLS** | **Valsamata** | **1.10** | **303** | P | **Pb** | **18 55 20.2** | **-1.2** |
| VLS | | | | AML | AML | 18 55 42.5 | |
| | comp=E,79825μm,0.7s | | | | | | |
| VLS | | | | AML | AML | 18 55 48.7 | |
| | comp=N,81683μm,0.7s | | | | | | |
| **VLS** | **Valsamata** | **1.10** | **303** | P | **Pb** | **18 55 20.5** | **-0.9** |
| VLS | | | | S | **Sn** | **18 55 35.3** | **-0.4** |
| **KRND** | **KRANIDI** | **1.12** | **100** | P | **Pb** | **18 55 22.7** | **+1.0** |
| **KRND** | **KRANIDI** | **1.12** | **100** | P | **Pb** | **18 55 22.2** | **+0.5** |
| KRND | | | | S | **Sb** | **18 55 37.1** | **+1.3** |
| **KEF4** | **Livadi, Kephal** | **1.26** | **303** | P | **Pb** | **18 55 23.3** | **-0.7** |
| **KEF4** | **Livadi, Kephal** | **1.26** | **303** | P | **Pb** | **18 55 23.1** | **-1.0** |
| **VLI** | **Veliai** | **1.27** | **132** | P | **Pb** | **18 55 24.7** | **+0.4** |
| VLI | | | | S | **Sb** | **18 55 45.0** | **+4.7** |
| **VLI** | **Veliai** | **1.27** | **132** | P | **Pb** | **18 55 24.7** | **+0.4** |
| **DMLN** | **Damoulianata-K** | **1.28** | **301** | P | **Pb** | **18 55 24.2** | **-0.2** |
| **DMLN** | **Damoulianata-K** | **1.28** | **301** | P | **Pb** | **18 55 23.7** | **-0.7** |
| **KEF3** | **Kipouria, Keph** | **1.28** | **299** | P | **Pb** | **18 55 23.6** | **-0.8** |
| **KEF3** | **Kipouria, Keph** | **1.28** | **299** | P | **Pb** | **18 55 23.0** | **-1.5** |
| **FSK** | **Fiskardo** | **1.29** | **313** | P | **Pb** | **18 55 24.4** | **-0.2** |
| **EVR** | **Evrytania** | **1.33** | **1** | P | **Pb** | **18 55 26.0** | **+0.7** |
| **EVR** | **Evrytania** | **1.33** | **1** | P | **Pb** | **18 55 25.6** | **+0.2** |
| EVR | | | | AML | AML | 18 55 52.5 | |
| EVR | | | | AML | AML | 18 55 53.6 | |
| **VIL2** | **Platees** | **1.34** | **62** | P | **Pb** | **18 55 26.2** | **+0.7** |
| VIL2 | | | | AML | AML | 18 55 52.9 | |
| VIL2 | | | | AML | AML | 18 55 54.1 | |
| **VILL** | **Villia** | **1.35** | **64** | P | **Pb** | **18 55 26.3** | **+0.6** |
| **EVGI** | **Lefkada island** | **1.35** | **320** | P | **Pb** | **18 55 25.2** | **-0.5** |
| **EVGI** | **Lefkada island** | **1.35** | **320** | P | **Pb** | **18 55 25.1** | **-0.6** |
| **MNVA** | **Monemvasia** | **1.35** | **131** | P | **Pb** | **18 55 26.3** | **+0.6** |
| **NYDR** | **Nydri-Lefkada** | **1.41** | **324** | P | **Pb** | **18 55 25.9** | **-0.7** |
| **NYDR** | **Nydri-Lefkada** | **1.41** | **324** | P | **Pb** | **18 55 25.4** | **-1.2** |
| **LKR** | **Lokris** | **1.44** | **42** | P | **Pb** | **18 55 27.3** | **+0.1** |
| **LKR** | **Lokris** | **1.44** | **42** | P | **Pb** | **18 55 27.0** | **-0.1** |
| LKR | | | | AML | AML | 18 55 56.1 | |
| LKR | | | | AML | AML | 18 56 00.6 | |
| **DRAG** | **Dragano-Lefkad** | **1.44** | **320** | P | **Pb** | **18 55 26.8** | **-0.4** |
| **DRAG** | **Dragano-Lefkad** | **1.44** | **320** | P | **Pb** | **18 55 26.6** | **-0.7** |
| **MAKR** | **Makrakomi, Fth** | **1.45** | **11** | P | **Pb** | **18 55 27.8** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.45** | **11** | P | **Pb** | **18 55 27.6** | **+0.2** |
| MAKR | | | | AML | AML | 18 55 56.8 | |
| MAKR | | | | AML | AML | 18 55 57.7 | |
| **ATAL** | **Atalanti** | **1.48** | **41** | P | **Pb** | **18 55 27.9** | **0.0** |
| **ATAL** | **Atalanti** | **1.48** | **41** | P | **Pb** | **18 55 27.8** | **-0.1** |
| ATAL | | | | AML | AML | 18 55 58.8 | |
| ATAL | | | | AML | AML | 18 55 59.4 | |
| **LKD2** | **Lefkada island** | **1.48** | **324** | P | **Pb** | **18 55 27.1** | **-0.9** |
| **LKD2** | **Lefkada island** | **1.48** | **324** | P | **Pb** | **18 55 27.0** | **-1.0** |
| **LKD2** | **Lefkada island** | **1.48** | **324** | P | **Pb** | **18 55 27.6** | **-0.3** |
| | baz=337 | | | | | | |
| LKD2 | | | | S | **Sb** | **18 55 49.2** | **+2.9** |
| | baz=337 | | | | | | |
| **AGG** | **Agios Georgios** | **1.50** | **17** | P | **Pb** | **18 55 29.0** | **+0.8** |
| **AGG** | **Agios Georgios** | **1.50** | **17** | P | **Pb** | **18 55 28.3** | **+0.1** |
| AGG | | | | AML | AML | 18 55 55.7 | |
| | comp=E,81997μm,1.4s | | | | | | |
| AGG | | | | AML | AML | 18 55 55.8 | |
| | comp=N,72709μm,1.2s | | | | | | |
| **AGG** | **Agios Georgios** | **1.50** | **17** | P | **Pn** | **18 55 26.7** | **0.0** |
| AGG | | | | | | 18 55 44.6 | |
| **AGG** | **Agios Georgios** | **1.50** | **17** | | **Pn** | **18 55 26.7** | **0.0** |
| AGG | | | | Sn | **Sn** | **18 55 44.6** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.50** | **17** | ⇑P | **Pb** | **18 55 28.4** | **+0.2** |
| **TSLK** | **Tsoukalades, L** | **1.52** | **325** | P | **Pb** | **18 55 28.3** | **-0.1** |
| **TSLK** | **Tsoukalades, L** | **1.52** | **325** | P | **Pb** | **18 55 27.9** | **-0.6** |
| **ATH** | **Athens Observa** | **1.59** | **75** | P | **Pb** | **18 55 30.1** | **+0.4** |
| **ATH** | **Athens Observa** | **1.59** | **75** | P | **Pb** | **18 55 29.7** | **0.0** |
| ATH | | | | AML | AML | 18 55 56.2 | |
| | comp=N,99014μm,0.9s | | | | | | |
| ATH | | | | AML | AML | 18 56 02.6 | |
| **VLY** | **Voula,Athens** | **1.63** | **80** | P | **Pb** | **18 55 30.6** | **+0.2** |
| **VLY** | **Voula,Athens** | **1.63** | **80** | P | **Pb** | **18 55 30.4** | **0.0** |
| **ATHU** | **Athens Univers** | **1.64** | **76** | P | **Pb** | **18 55 30.8** | **+0.2** |
| **ATHU** | **Athens Univers** | **1.64** | **76** | P | **Pb** | **18 55 30.4** | **-0.2** |
| ATHU | | | | AML | AML | 18 56 01.6 | |
| | comp=N,39841μm,0.8s | | | | | | |
| ATHU | | | | AML | AML | 18 56 06.2 | |
| | comp=E,18755μm,0.7s | | | | | | |
| **KTHA** | **Kythira Island** | **1.69** | **142** | P | **Pb** | **18 55 32.0** | **+0.6** |
| KTHA | | | | AML | AML | 18 56 01.8 | |
| KTHA | | | | AML | AML | 18 56 04.5 | |
| **PTL** | **Penteli** | **1.72** | **74** | P | **Pb** | **18 55 32.0** | **0.0** |
| **PTL** | **Penteli** | **1.72** | **74** | P | **Pb** | **18 55 31.7** | **-0.4** |
| PTL | | | | AML | AML | 18 55 59.2 | |
| | comp=E,67940μm,0.8s | | | | | | |
| PTL | | | | AML | AML | 18 55 59.3 | |
| | comp=N,80088μm,0.6s | | | | | | |
| **DION** | **Dionisos Attik** | **1.78** | **73** | P | **Pb** | **18 55 32.7** | **-0.4** |
| **DION** | **Dionisos Attik** | **1.78** | **73** | P | **Pb** | **18 55 32.6** | **-0.4** |
| DION | | | | AML | AML | 18 56 06.3 | |
| DION | | | | AML | AML | 18 56 07.2 | |
| **THL** | **Klokotos Trika** | **1.98** | **6** | P | **Pb** | **18 55 35.7** | **-0.7** |
| **THL** | **Klokotos Trika** | **1.98** | **6** | P | **Pb** | **18 55 35.9** | **-0.6** |
| THL | | | | AML | AML | 18 56 09.7 | |
| | comp=E,57104μm,1.3s | | | | | | |
| THL | | | | AML | AML | 18 56 16.3 | |
| | comp=N,32699μm,1.1s | | | | | | |
| **XOR** | **Xorichti** | **2.10** | **32** | P | **Pn** | **18 55 36.1** | **+1.2** |
| **ANKY** | **Antikythira Is** | **2.11** | **144** | P | **Pb** | **18 55 38.7** | **+0.1** |
| **KYMI** | **Kymi, Euboea I** | **2.12** | **60** | P | **Pb** | **18 55 36.9** | **-1.8** |
| **KARY** | **Karystos** | **2.16** | **77** | P | **Pb** | **18 55 38.0** | **-1.4** |
| **JAN** | **Janina** | **2.19** | **341** | P | **Pb** | **18 55 38.2** | **-1.7** |
| **JAN** | **Janina** | **2.19** | **341** | P | **Pb** | **18 55 38.3** | **-1.7** |
| **IGT** | **Igoumenitsa** | **2.25** | **330** | P | **Pb** | **18 55 38.5** | **-2.4** |
| **IGT** | **Igoumenitsa** | **2.25** | **330** | P | **Pb** | **18 55 38.7** | **-2.2** |
| | baz=339 | | | | | | |
| IGT | | | | S | **Sb** | **18 56 08.9** | **+0.7** |
| | baz=339 | | | | | | |
| **MHLO** | **Agia Marina, M** | **2.29** | **112** | P | **Pb** | **18 55 40.7** | **-0.9** |
| **KPRO** | **Kipourio** | **2.39** | **353** | P | **Pb** | **18 55 42.5** | **-0.9** |
| **LIT** | **Litokhoron** | **2.57** | **12** | P | **Pb** | **18 55 44.1** | **-2.4** |
| **LIT** | **Litokhoron** | **2.57** | **12** | P | **Pn** | **18 55 42.6** | **+1.2** |
| **LIT** | **Litokhoron** | **2.57** | **12** | Pn | **Pn** | **18 55 42.6** | **+1.2** |
| **LIT** | **Litokhoron** | **2.57** | **12** | ⇑P | **Pn** | **18 55 42.7** | **+1.3** |
| **KEK** | **Kerkira** | **2.62** | **325** | ⇑P | **Pn** | **18 55 43.4** | **+1.4** |
| **PENT** | **Pentalofos** | **2.65** | **350** | P | **Pb** | **18 55 46.6** | **-1.3** |
| **IMMV** | **Iera Moni Meta** | **2.77** | **139** | P | **Pb** | **18 55 47.6** | **-2.2** |
| **KNDR** | **Palaiochora Ch** | **2.81** | **146** | P | **Pn** | **18 55 46.0** | **+1.4** |
| **KBN** | **Korca** | **3.13** | **346** | P | **Pb** | **18 55 51.8** | **-4.2** |
| **KBN** | **Korca** | **3.13** | **346** | Pn | **Pb** | **18 55 51.8** | **-4.2** |
| **KBN** | **Korca** | **3.13** | **346** | P | **Pb** | **18 55 52.9** | **-3.1** |
| | baz=351 | | | | | | |
| KBN | | | | S | **Sb** | **18 56 33.7** | **0.0** |
| | baz=351 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,50nm,1.5s,baz=351 | | | | | | |
| **THE** | **Thessaloniki** | **3.18** | **17** | P | **Pb** | **18 55 53.1** | **-3.8** |
| | baz=17 | | | | | | |
| **FNA** | **Florina** | **3.21** | **355** | P | **Pn** | **18 55 52.4** | **+2.2** |
| **FNA** | **Florina** | **3.21** | **355** | Pn | **Pn** | **18 55 52.4** | **+2.2** |
| **FNA** | **Florina** | **3.21** | **355** | ⇑P | **Pn** | **18 55 52.8** | **+2.6** |
| **FNA** | **Florina** | **3.21** | **355** | P | **Pb** | **18 55 53.0** | **-4.3** |
| | baz=359 | | | | | | |
| FNA | | | | S | **Sb** | **18 56 36.3** | **+0.3** |
| | baz=359 | | | | | | |
| **GVD** | **Gavdhos** | **3.32** | **145** | P | **Pn** | **18 55 53.6** | **+1.9** |
| **VLO** | **Vlora** | **3.38** | **329** | P | **Pn** | **18 55 51.0** | **-1.4** |
| **VLO** | **Vlora** | **3.38** | **329** | | **Pn** | **18 55 51.0** | **-1.4** |
| **VLO** | **Vlora** | **3.38** | **329** | P | **Pn** | **18 55 54.4** | **+2.0** |
| | baz=335 | | | | | | |
| VLO | | | | S | **Sb** | **18 56 38.1** | **-2.7** |
| | baz=335 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=E,51nm,1.4s,baz=335 | | | | | | |
| **IDI** | **Anoyia** | **3.41** | **131** | Pn | **Pn** | **18 55 52.7** | **-0.1** |
| | comp=E,41nm,0.3s,baz=315,slow=15,SNR=163 | | | | | | |
| IDI | | | | Sn | **Sn** | **18 56 35.3** | **+2.6** |
| | comp=E,150nm,0.3s,baz=295,slow=12,SNR=5.9 | | | | | | |
| IDI | | | | LR | LR | 18 57 29.5 | |
| | comp=E,6μm,19.1s,baz=272,slow=46 | | | | | | |
| **IDI** | **Anoyia** | **3.41** | **131** | P | **Pn** | **18 55 55.0** | **+2.1** |
| **IDI** | **Anoyia** | **3.41** | **131** | Pn | **Pn** | **18 55 51.4** | **-1.5** |
| **IDI** | **Anoyia** | **3.41** | **131** | ⇑P | **Pn** | **18 55 53.9** | **+1.0** |
| **HRKL** | **Herakleio** | **3.52** | **129** | P | **Pn** | **18 55 57.0** | **+2.7** |
| **OHR** | **Ohrid** | **3.60** | **348** | *e*Pn | **Pn** | **18 55 58.2** | **+2.7** |
| **OHR** | **Ohrid** | **3.60** | **348** | P | **Pn** | **18 55 58.4** | **+2.9** |
| **OHR** | **Ohrid** | **3.60** | **348** | *i* Pn | **Pn** | **18 55 58.2** | **+2.7** |
| **VAY** | **Valandovo** | **3.78** | **9** | *e*Pn | **Pn** | **18 56 01.0** | **+3.0** |
| VAY | | | | *e*Sn | **Sn** | **18 56 41.6** | **-0.1** |
| **VAY** | **Valandovo** | **3.78** | **9** | P | **Pb** | **18 56 03.7** | **-3.4** |
| VAY | | | | S | **Sb** | **18 56 47.6** | **-4.8** |
| **VAY** | **Valandovo** | **3.78** | **9** | *i* Pn | **Pn** | **18 56 01.5** | **+3.6** |
| **URLA** | **Izmir** | **3.89** | **77** | P | **Pn** | **18 56 02.4** | **+2.9** |
| **BOZC** | **Bozcaada** | **4.04** | **55** | P | **Pn** | **18 56 03.4** | **+1.9** |
| **STIP** | **Stip** | **4.12** | **4** | *i* Pn | **Pn** | **18 56 06.3** | **+3.7** |
| **GADA** | **Gvkgeada** | **4.14** | **50** | P | **Pn** | **18 56 04.5** | **+1.6** |
| **EZN** | **Ezine** | **4.21** | **57** | P | **Pn** | **18 56 06.1** | **+2.3** |
| **EZN** | **Ezine** | **4.21** | **57** | P | **Pn** | **18 56 05.2** | **+1.4** |
| **KOSK** | **Kos Island** | **4.25** | **100** | P | Pn | 18 56 08.9 | +4.6 |
| **TIP** | **Timpagrande** | **4.25** | **294** | ⇑P | **Pn** | **18 56 03.2** | **-1.2** |
| **TIP** | **Timpagrande** | **4.25** | **294** | Pn | **Pn** | **18 56 04.0** | **-0.4** |
| **TIP** | **Timpagrande** | **4.25** | **294** | ⇓P | **Pn** | **18 56 04.0** | **-0.4** |
| **MMB** | **Musomiste** | **4.28** | **20** | P | **Pn** | **18 56 07.1** | **+2.3** |
| MMB | | | | S | **Sn** | **18 56 59.5** | **+5.5** |
| **DKL** | **Dikili** | **4.30** | **68** | P | **Pn** | **18 56 07.7** | **+2.6** |
| **GCAM** | **G?zelcaml?** | **4.34** | **87** | P | **Pn** | **18 56 08.9** | **+3.3** |
| **ZKR** | **Zakros** | **4.36** | **123** | P | **Pn** | **18 56 08.6** | **+2.7** |
| **SKO** | **Skopje** | **4.39** | **357** | P | **Pn** | **18 56 08.4** | **+2.1** |
| **SKO** | **Skopje** | **4.39** | **357** | *i* Pn | **Pn** | **18 56 08.4** | **+2.1** |
| **KKB** | **Krupnik** | **4.39

SJES eSn **Sn** 18 57 24.3 -8.2
**VAE Valguarnera** 5.85 271 Pn **Pn** 18 56 27.6 +1.1
comp=E,3.5nm,0.3s,baz=132,slow=2.9,SNR=19
**BRY Bratogost** 5.86 336 P **Pn** 18 56 27.0 +0.4
**BRY Bratogost** 5.86 336 ePn **Pn** 18 56 26.3 -0.3
**BRY Bratogost** 5.86 336 ⇓*i* Pn **Pn** 18 56 26.7 +0.1
BRY *i* Sn **Sn** 18 57 30.7 -2.4
**SIMA Simav-Kutahya** 5.87 73 P **Pn** 18 56 31.1 +4.4
**RAFF Raffo Rosso** 5.91 269 Pn 18 56 26.1 -1.1
**FETY Fethiye** 5.92 97 P Pn 18 56 32.7 +5.3
**PLE Pljevlja** 6.02 343 ⇑*i* Pn **Pn** 18 56 29.8 +1.0
PLE *i* Sn **Sn** 18 57 34.7 -2.3
**UPM Unac-Piva** 6.02 340 ePn **Pn** 18 56 29.9 +1.0
**UPM Unac-Piva** 6.02 340 ⇓*i* Pn **Pn** 18 56 29.8 +0.9
UPM *i* Sn **Sn** 18 57 34.9 -2.3
**BOVS Bovan** 6.04 360 ⇓P **Pn** 18 56 30.2 +1.2
**BOVS Bovan** 6.04 360 ePn **Pn** 18 56 30.0 +1.0
BOVS eSn **Sn** 18 57 31.0 -6.5
**CAME Cameli-Denizli** 6.04 94 P Pn 18 56 34.3 +5.1
**IVAS Ivanjica** 6.11 349 ePn **Pn** 18 56 30.1 +0.1
**STON Ston** 6.13 331 ⇑*i* Pn **Pn** 18 56 29.4 -0.8
**STON Ston** 6.13 331 ePn **Pn** 18 56 29.3 -0.8
STON Sn Sn 18 57 29.4 -10
**GEDZ Gediz** 6.18 74 P **Pn** 18 56 35.4 +4.3
**ZAGS Zajecar** 6.23 3 ePn **Pn** 18 56 33.1 +1.5
**SGRT San Giovanni R** 6.24 314 **Pn** 18 56 31.6 -0.2
**SGRT San Giovanni R** 6.24 314 P **Pn** 18 56 33.8 +2.0
baz=318
**RUDO Rudo** 6.29 344 ePn **Pn** 18 56 32.2 -0.3
**TVSB Tavsanli** 6.31 71 P **Pn** 18 56 36.9 +4.0
**GRUS Gruza** 6.35 353 ePn **Pn** 18 56 34.0 +0.8
GRUS eSn **Sn** 18 57 37.7 -7.3
**LSTV Lastovo** 6.38 326 ePn **Pn** 18 56 32.7 -1.0
LSTV Sn Sn 18 57 35.3 -11
**AKAS Kas** 6.42 100 P Pn 18 56 39.5 +5.1
**AKAS Kas** 6.42 100 Pn **Pn** 18 56 34.0 -0.4
**BBLS Lazići** 6.52 345 ePn **Pn** 18 56 35.9 +0.2
BBLS eSn Sn 18 57 39.2 -10
**BBLS Lazići** 6.52 345 ⇑*i* Pn **Pn** 18 56 35.9 +0.2
**BAIL Bailesti** 6.54 10 ⇑P Pn 18 56 39.9 +4.2
**ELL Elmali** 6.55 95 P Pn 18 56 41.1 +4.9
**ELL Elmali** 6.55 95 P Pn 18 56 41.6 +5.4
**ELL Elmali** 6.55 95 Pn Pn 18 56 41.6 +5.4
**PAOL Paolisi** 6.56 304 Pn **Pn** 18 56 36.9 +0.8
**BASM Basmaki-Afyon** 6.57 85 P Pn 18 56 41.0 +4.6
**ISK Istanbul-Kandi** 6.63 56 P **Pn** 18 56 39.2 +2.1
**DIVS Divibare** 6.64 349 ePn **Pn** 18 56 37.2 +1.2
DIVS eSn **Sn** 18 57 44.3 -8.1
**DIVS Divibare** 6.64 349 Pn **Pn** 18 56 36.5 -0.8
**DIVS Divibare** 6.64 349 ⇑*i* Pn **Pn** 18 56 37.6 +0.2
**DIVS Divibare** 6.64 349 ⇑P **Pn** 18 56 37.5 +0.1
**SVIS Svilajnac** 6.69 357 ePn **Pn** 18 56 39.4 +1.6
**TRUS Trudelj** 6.71 352 ePn **Pn** 18 56 38.5 +0.3
**SLUM Salum** 6.71 154 P **Pn** 18 56 38.4 +0.2
baz=158
SLUM S Sn 18 57 44.8 -9.2
baz=158
**VLAD Vladila** 6.71 17 ⇑P **Pn** 18 56 40.4 +2.2
**MAKA Makarska** 6.75 329 ePn **Pn** 18 56 37.7 -0.9
**CLTB Caltabellotta** 6.79 273 Pn **Pn** 18 56 39.9 +0.5
**CLTB Caltabellotta** 6.79 273 ⇑P **Pn** 18 56 41.4 +1.9
**CAVI Cavuskoy** 6.82 65 P **Pn** 18 56 43.2 +3.5
**KUBS Kucevo** 6.82 359 ePn **Pn** 18 56 40.8 +1.1
**KORT Korkueli** 6.87 92 P **Pn** 18 56 44.9 +4.4
**RICI Ricice** 6.88 331 ePn **Pn** 18 56 39.1 -1.3
RICI Sn Sn 18 57 49.1 -8.9
**HVAR Hvar** 6.90 326 ePn **Pn** 18 56 39.1 -1.7
HVAR Sn Sn 18 57 48.8 -10
**ISP Isparta** 6.95 85 P **Pn** 18 56 45.8 +4.3
**ISP Isparta** 6.95 85 *d i* P **Pn** 18 56 46.0 +4.5
**ISP Isparta** 6.95 85 Pn **Pn** 18 56 45.5 +4.0
**ISP Isparta** 6.95 85 Pn **Pn** 18 56 45.4 +3.9
**RAZG Razgrad** 6.98 30 ⇑P **Pn** 18 56 45.4 +3.6
**SHUT Suhut-Afyon** 7.00 79 P **Pn** 18 56 46.3 +4.0
**BCK Bucak** 7.01 88 P **Pn** 18 56 46.9 +4.5
**COPA Copaceanca** 7.04 21 ⇑P **Pn** 18 56 45.8 +3.1
**DJES Djerdap** 7.10 4 ⇑P **Pn** 18 56 46.0 +2.5
**ANTB Antalya** 7.12 93 P Pn 18 56 48.5 +4.7
**SRE Strehaia** 7.15 8 ⇑P **Pn** 18 56 46.9 +2.6
**SRE Strehaia** 7.15 8 P **Pn** 18 56 46.8 +2.6
**BORA Eskisehir** 7.17 69 P **Pn** 18 56 48.2 +3.7
**BORA Eskisehir** 7.17 69 Pn **Pn** 18 56 47.1 +2.6
**MDVR Moldovita** 7.19 360 ⇑P **Pn** 18 56 45.8 +1.0
**BEO Beograd** 7.28 353 P **Pn** 18 56 45.5 -0.5
**HERR Herculane** 7.30 4 ⇑P **Pn** 18 56 48.0 +1.6
**SUTC Sutluce-Ispart** 7.34 88 P **Pn** 18 56 51.3 +4.4
**HUMR Humele** 7.35 18 ⇑P **Pn** 18 56 50.4 +3.5
**SGRR Singureni** 7.36 24 ⇓P **Pn** 18 56 49.2 +2.2
**BLJ Bijeljina** 7.43 346 ePn **Pn** 18 56 46.8 -1.3
**CIFT Cifteler, Eski** 7.50 73 P **Pn** 18 56 53.2 +4.0
**KIJV Kijevo** 7.59 329 ePn **Pn** 18 56 49.9 -0.4
KIJV Sn Sn 18 58 05.0 -11
**ZIRJ Zirje** 7.64 324 ePn **Pn** 18 56 49.7 -1.3
ZIRJ Sn Sn 18 58 04.9 -12
**DOBJ Doboj** 7.66 340 ePn **Pn** 18 56 49.7 -1.4
**STFAR Stefanesti-Arg** 7.66 17 ⇑P **Pn** 18 56 53.3 +2.1
**MGRS Mrkonjic Grad** 7.69 334 ⇑*i* Pn **Pn** 18 56 51.9 +0.3
**FRGS Fruska Gora** 7.71 350 ePn **Pn** 18 56 50.5 -1.4
FRGS eSn Sn 18 58 08.3 -10
**FRGS Fruska Gora** 7.71 350 ⇑*i* Pn **Pn** 18 56 50.5 -1.4
**KALB Balgarevo** 7.71 39 ⇓P **Pn** 18 56 55.4 +3.5
**RASA Rasa** 7.77 30 ⇑P **Pn** 18 56 56.8 +4.1
**MORI Morici** 7.78 326 ePn **Pn** 18 56 52.2 -0.6
MORI Sn Sn 18 58 09.9 -10
**SULR** 7.85 24 ⇑P **Pn** 18 56 56.6 +2.7
**LEHL Lehliu** 7.87 27 ⇓P **Pn** 18 56 58.0 +4.0
**SVRH Sivrihisar-ESK** 7.87 73 P **Pn** 18 56 58.2 +4.0
**AUSIV SIVRIHISAR** 7.88 73 P **Pn** 18 56 57.8 +3.4
**MDUB Mudurnu** 7.88 66 Pn **Pn** 18 56 55.3 +0.8
**BLY Banja Luka** 7.95 336 ⇑*i* Pn **Pn** 18 56 54.8 -0.3
**BLY Banja Luka** 7.95 336 ⇑P **Pn** 18 56 54.9 -0.3
**ICOR Ion Corvin** 7.96 33 ⇑P **Pn** 18 56 58.6 +3.3
**AQU L'Aquila** 7.99 309 P **Pn** 18 56 57.4 +1.6
**AQU L'Aquila** 7.99 309 **Pn** 18 56 57.4 +1.6
**AQU L'Aquila** 7.99 309 ⇑*i* Pn **Pn** 18 56 58.8 +2.9
**AQU L'Aquila** 7.99 309 ⇑P **Pn** 18 56 58.7 +2.9
**LOT Lotru** 8.00 10 ⇓P **Pn** 18 56 59.2 +3.3
**SEYD Seydisehir-KON** 8.01 88 P **Pn** 18 57 00.4 +4.3
**MTUR Matau** 8.02 17 ⇑P **Pn** 18 57 00.2 +3.9
**MTUR Matau** 8.02 17 ⇑P **Pn** 18 57 00.2 +3.9
**BZS Buzias** 8.03 359 P **Pn** 18 56 57.1 +0.9
BZS pmax pmax
comp=Z,78nm,1.1s
**KIZT Kizilcal** 8.06 78 P **Pn** 18 57 00.6 +3.7
**ARR Arges** 8.07 15 ⇓P **Pn** 18 56 59.7 +2.9
**MANR Mangalia** 8.10 38 ⇓P **Pn** 18 57 00.7 +3.5
**SECR** 8.11 22 ⇑P **Pn** 18 57 01.5 +4.0
**DUGI Dugi Otok** 8.17 324 ePn **Pn** 18 56 57.5 -0.7
DUGI Sn Sn 18 58 17.9 -12
**AMRR Amara** 8.18 29 ⇑P **Pn** 18 57 00.3 +2.0
**AMRR Amara** 8.18 29 ⇑P **Pn** 18 57 00.3 +2.0
**VOIR** 8.22 16 ⇓P **Pn** 18 57 02.3 +3.3
**VOIR** 8.22 16 ⇓P **Pn** 18 57 02.3 +3.3
**CVDA Cernavoda** 8.24 33 ⇑P **Pn** 18 57 02.3 +3.1
**MRAK Mrakovica** 8.27 335 ⇑*i* Pn **Pn** 18 56 58.9 -0.8
**UDBI Udbina** 8.28 329 ePn **Pn** 18 57 00.3 +0.5
UDBI Sn Sn 18 58 21.2 -11
**MFTR Murfatlar** 8.29 35 ⇑P **Pn** 18 57 03.4 +3.5
**PGOR Pogoanele** 8.30 27 ⇓P **Pn** 18 57 03.4 +3.4
**PRIJ Prijedor** 8.30 334 ⇑*i* Pn **Pn** 18 56 59.6 -0.4
**DEV Deva** 8.33 5 ⇓P **Pn** 18 57 04.0 +3.5
**DEV Deva** 8.33 5 ⇓P **Pn** 18 57 04.0 +3.5
**ISR Istrita** 8.34 24 ⇓P **Pn** 18 57 04.0 +3.5
**ISR Istrita** 8.34 24 ⇓P **Pn** 18 57 04.0 +3.5
**A252A Venje** 8.37 341 ePn **Pn** 18 56 59.6 -1.5
A252A Sn **Sn** 18 58 26.1 -9.8
**KONT Konya--Tatoy** 8.40 84 P **Pn** 18 57 05.3 +3.9
**LADK Ladik-KONYA** 8.40 83 P **Pn** 18 57 05.3 +3.8
**TLBR Topalu** 8.41 32 ⇓P **Pn** 18 57 04.0 +2.5
**NRCA Norcia** 8.44 311 **Pn** 18 57 03.3 +1.2
**HARR Harsova** 8.48 31 ⇑P **Pn** 18 57 05.2 +2.7
**HARR Harsova** 8.48 31 ⇑P **Pn** 18 57 05.2 +2.7
**MLR Muntele Rosu** 8.49 20 ⇑P **Pn** 18 57 06.3 +3.5
**MLR Muntele Rosu** 8.49 20 Pn **Pn** 18 57 04.5 +1.7
comp=Z,3.0nm,0.3s,baz=184,slow=7.0,SNR=34
MLR LR LR 19 00 44.0
comp=Z,5μm,19.2s,baz=210,slow=41
**MLR Muntele Rosu** 8.49 20 P **Pn** 18 57 05.6 +2.8
**MLR Muntele Rosu** 8.49 20 Pn **Pn** 18 57 05.6 +2.8
**TIRR Tirgusor** 8.50 34 ⇓P **Pn** 18 57 03.8 +1.0
**TIRR Tirgusor** 8.50 34 Pn **Pn** 18 57 03.6 +0.9
**TIRR Tirgusor** 8.50 34 ⇑P **Pn** 18 57 05.0 +2.2
**NEHR Nehoiu** 8.54 22 ⇑P **Pn** 18 57 07.4 +4.1
**GAZI Gazipasa** 8.56 96 P **Pn** 18 57 07.6 +4.0
**HDMB Hadim** 8.57 91 P **Pn** 18 57 07.8 +3.9
**A251A Rujevac** 8.59 333 ePn **Pn** 18 57 03.2 -0.8
A251A Sn Sn 18 58 31.3 -8.9
**PLIT Plitvice** 8.63 330 ePn **Pn** 18 57 04.1 -0.5
PLIT Sn Sn 18 58 30.9 -10
**SIRR Siria** 8.68 360 ⇑P **Pn** 18 57 06.5 +1.3
**NVLJ Novalja** 8.70 325 ePn **Pn** 18 57 04.7 -0.8
NVLJ Sn Sn 18 58 30.6 -12
**GRER** 8.71 25 ⇑P **Pn** 18 57 08.6 +3.0
**MDB Medias** 8.77 12 ⇑P **Pn** 18 57 09.5 +3.1
**MDB Medias** 8.77 12 ⇑P **Pn** 18 57 09.5 +3.1
**BISRR Bisoca** 8.77 23 ⇑P **Pn** 18 57 10.0 +3.5
**AMBH Ambrzfalva** 8.79 355 PN **Pn** 18 57 07.7 +1.0
**DOPR Dopca** 8.80 17 ⇓P **Pn** 18 57 10.3 +3.5
**TPGR Topolog** 8.82 32 ⇓P **Pn** 18 57 09.8 +2.7
**MOSL Moslavina** 8.85 337 ePn **Pn** 18 57 06.1 -1.5
**SWA2** 8.87 159 P **Pn** 18 57 06.7 -1.2
baz=162
SWA2 S Sn 18 58 37.4 -10
baz=162
**RABC Rab** 8.88 326 ePn **Pn** 18 57 07.4 -0.6
RABC Sn Sn 18 58 37.2 -10
**COVR Voineasa-Covas** 8.89 20 ⇑P **Pn** 18 57 12.0 +3.9
**BR231 Keskin MP Arra** 8.90 72 P **Pn** 18 57 10.2 +1.9
**LOD Lodumlu** 8.90 72 P **Pn** 18 57 11.1 +2.8
**ANTO Ankara** 8.91 72 P **Pn** 18 57 12.3 +3.8
**ANTO Ankara** 8.91 72 P **Pn** 18 57 10.7 +2.2
**ANTO Ankara** 8.91 72 **Pn** 18 57 10.7 +2.2
**KOVH Kovagotottos** 8.92 343 PN **Pn** 18 57 07.3 -1.2
**MORH Mrgy, Hungar** 8.93 346 ⇑*i* Pn **Pn** 18 57 07.4 -1.2
**MORH Mrgy, Hungar** 8.93 346 PN **Pn** 18 57 07.5 -1.2
**JURR Jurilovca** 8.95 35 ⇑P **Pn** 18 57 11.1 +2.3
**CFR Carcaliu** 8.97 30 ⇓P **Pn** 18 57 11.5 +2.4
**CFR Carcaliu** 8.97 30 ⇓P **Pn** 18 57 11.5 +2.4
**OZUR** 9.02 18 ⇑P **Pn** 18 57 13.8 +3.9
**PLOR Plostina** 9.03 22 ⇑P **Pn** 18 57 13.6 +3.6
**PLOR Plostina** 9.03 22 ⇑P **Pn** 18 57 13.6 +3.6
**MURB Monte Urbino** 9.04 312 **Pn** 18 57 12.3 +2.1
**VRI Vrincioaia** 9.06 23 ⇑P **Pn** 18 57 14.6 +4.1
**VRI Vrincioaia** 9.06 23 ⇑P **Pn** 18 57 14.6 +4.1
**ODBI Odobesti** 9.07 24 ⇑P **Pn** 18 57 13.9 +3.3
**A250A Rusevo Krmpots** 9.09 328 ePn **Pn** 18 57 11.0 +0.1
A250A Sn Sn 18 58 41.0 -12
**MGAB Montegabbione** 9.10 309 ⇓P **Pn** 18 57 14.1 +3.2
**IZVR Izvoarele** 9.13 28 ⇓P **Pn** 18 57 14.4 +3.0
**PANC Panciu** 9.20 24 ⇓P **Pn** 18 57 15.5 +3.2
**TEKE Tekeli-Mersin** 9.21 96 P **Pn** 18 57 16.8 +4.3
**CJR Cluj-Napoca** 9.22 8 ⇓P **Pn** 18 57 15.1 +2.4
**CJR Cluj-Napoca** 9.22 8 ⇓P **Pn** 18 57 15.1 +2.4
**TLCR** 9.25 33 ⇑P **Pn** 18 57 15.7 +2.6
**TLCR** 9.25 33 ⇑P **Pn** 18 57 15.7 +2.6
**BOJS Bojanci** 9.29 330 *i* Pn **Pn** 18 57 13.0 -0.6
BOJS eSn **Sn** 18 58 53.6 -3.8
BOJS IAML 19 01 06.3
comp=Z,7μm,4.6s
**OZLJ Ozalj** 9.30 332 ePn **Pn** 18 57 12.7 -1.0
**LEF Lefka** 9.30 102 P **Pn** 18 57 17.5 +3.7
**SULT Sultanhani-AKS** 9.31 83 P **Pn** 18 57 17.5 +3.6
**SCTR Scantejesti** 9.33 28 ⇑P **Pn** 18 57 17.4 +3.4
**PTJ Puntijarka** 9.37 334 P **Pn** 18 57 13.6 -1.2
**PTJ Puntijarka** 9.37 334 ePn **Pn** 18 57 13.1 -1.7
**SERE Serefiikochisa** 9.38 78 P **Pn** 18 57 18.5 +3.6
**SMRN Sveta Marina** 9.39 325 ePn **Pn** 18 57 13.3 -1.5
**KALN Kalnik** 9.41 337 ePn **Pn** 18 57 13.5 -1.8
**TEVE Tevekalti-Mers** 9.41 93 P **Pn** 18 57 19.1 +3.8
**GHRR** 9.45 25 ⇑P **Pn** 18 57 19.0 +3.2
**GCIS Gornji Cirnik** 9.46 333 *i* Pn **Pn** 18 57 14.7 -1.2
**VARL Varlezi** 9.46 27 ⇓P **Pn** 18 57 18.8 +2.9
**RIY Rijeka** 9.47 327 ⇑*i* Pn **Pn** 18 57 15.1 -0.9
**RIY Rijeka** 9.47 327 ePn **Pn** 18 57 15.5 -0.5
**BRJN Brijuni** 9.48 323 ePn **Pn** 18 57 14.7 -1.4
**CRES Cresnjev** 9.48 332 ⇑*i* Pn **Pn** 18 57 15.4 -0.9
**YESY Yesilyurt** 9.50 85 P **Pn** 18 57 20.2 +3.7
**BRTR Keskin Array B** 9.53 73 Pn **Pn** 18 57 20.1 +3.1
comp=Z,9.5nm,0.3s,baz=254,slow=14,SNR=88
BRTR LR LR 19 01 27.8
comp=Z,5μm,20.4s,baz=264,slow=41
**BRTR Keskin Array B** 9.53 73 P **Pn** 18 57 20.1 +3.1
**BRTR Keskin Array B** 9.53 73 *i* P Pn 18 57 22.2 +5.2
BRTR pmax pmax
comp=Z,50nm,0.8s
**BRTR Keskin Array B** 9.53 73 Pn **Pn** 18 57 20.6 +3.6
**BR131 Keskin Array S** 9.53 73 *c i* P **Pn** 18 57 21.4 +4.4
**BR131 Keskin Array S** 9.53 73 **Pn** 18 57 19.6 +2.6
**KAMT Kaman** 9.54 76 P **Pn** 18 57 20.3 +3.2
**AKKU Akkuyu-Mersin** 9.55 95 P **Pn** 18 57 20.8 +3.7
**LOBO Lobor** 9.56 335 ePn **Pn** 18 57 15.9 -1.3
**BEHE Becsehely** 9.62 339 ⇑*i* Pn **Pn** 18 57 17.3 -0.8
**BEHE Becsehely** 9.62 339 PN **Pn** 18 57 17.7 -0.3
**KEBE Keben-Mersin** 9.62 93 P **Pn** 18 57 22.0 +3.8
**TESR Tescani** 9.63 21 ⇓P **Pn** 18 57 21.7 +3.6
**IKL Isikli** 9.64 94 P **Pn** 18 57 22.4 +4.0
**LEGS Legarje** 9.64 332 *i* Pn **Pn** 18 57 17.4 -1.0
**ARCR ARCALIA** 9.68 11 ⇑P **Pn** 18 57 22.6 +3.7
**CSS Mathiatis** 9.70 102 ePn **Pn** 18 57 23.2 +4.0
**CSS Mathiatis** 9.70 102 Pn **Pn** 18 57 18.5 -0.7
**CSS Mathiatis** 9.70 102 ⇓P **Pn** 18 57 19.0 -0.2
**CSS Mathiatis** 9.70 102 Pn **Pn** 18 57 20.0 +0.8
**BIR Birlad** 9.71 25 ⇑P **Pn** 18 57 21.7 +2.5
**BIR Birlad** 9.71 25 ⇑P **Pn** 18 57 21.7 +2.5
**TIH Tihany** 9.74 344 PN **Pn** 18 57 18.8 -0.9
**LFK Lefkose** 9.76 100 ePn **Pn** 18 57 23.3 +3.2
**BSZH Besenyszg** 9.77 354 ⇑P **Pn** 18 57 21.8 +1.7
**BSZH Besenyszg** 9.77 354 PN **Pn** 18 57 22.4 +2.3
**LTVH Lutvirtes, Hu** 9.79 1 PN **Pn** 18 57 23.1 +2.7
**SILI Silifke-Mersin** 9.80 93 ePn **Pn** 18 57 24.5 +3.9
**CEY Cerknica** 9.82 328 ⇑*i* Pn **Pn** 18 57 20.1 -0.7
**SKDS Skadanscina** 9.84 326 ⇑*i* Pn **Pn** 18 57 19.8 -1.4
**ILGA Ilgaz** 9.88 66 **Pn** 18 57 24.0 +2.1
**OSSC Osservatorio P** 9.96 310 **Pn** 18 57 24.4 +1.7
**LJU Ljubljana** 10.03 330 ⇑*i* Pn **Pn** 18 57 22.4 -1.2
**MPLH Magyarpolny** 10.07 343 PN **Pn** 18 57 23.8 -0.4
MPLH SN **Sn** 18 59 12.3 -4.2
**TRI Trieste** 10.08 326 P **Pn** 18 57 24.0 -0.4
**TRI Trieste** 10.08 326 **Pn** 18 57 24.0 -0.4
**TRI Trieste** 10.08 326 ⇓P **Pn** 18 57 24.4 +0.1
**BUD Budapest** 10.10 349 PN **Pn** 18 57 25.1 +0.6
BUD SN **Sn** 18 59 12.9 -4.2
**CSKK Cskako** 10.11 346 PN **Pn** 18 57 24.2 -0.5
CSKK SN **Sn** 18 59 14.2 -3.2
**KEST Kesra** 10.15 263 Pn **Pn** 18 57 25.9 +0.4
comp=Z,1.2nm,0.3s,baz=7.8,slow=6.8,SNR=14
KEST LR LR 19 02 04.8
comp=Z,2μm,21.0s,baz=6.0,slow=42
**KEST Kesra** 10.15 263 Pn **Pn** 18 57 25.0 -0.5
**BMR Baia Mare** 10.16 7 ⇑P **Pn** 18 57 29.0 +3.5
**BMR Baia Mare** 10.16 7 ⇑P **Pn** 18 57 29.0 +3.5
**PRAR RASCA** 10.31 17 ⇓P **Pn** 18 57 31.1 +3.6
**BURAR Bucovina Array** 10.34 13 ⇑P **Pn** 18 57 31.4 +3.4
**BURAR Bucovina Array** 10.34 13 ⇑P **Pn** 18 57 31.4 +3.4
**BURAR Bucovina Array** 10.34 13 Pn **Pn** 18 57 30.2 +2.2
**EGYH Egyhazaskeszo** 10.35 343 PN **Pn** 18 57 28.5 +0.4
**BUR08 Bucovina Ar. S** 10.36 13 Pn **Pn** 18 57 30.6 +2.2
**SOKA Soboth** 10.37 333 *i* Pn **Pn** 18 57 27.4 -1.0
comp=Z,8.5nm,0.3s,SNR=6.5
SOKA eSn **Sn** 18 59 20.3 -3.5
comp=Z,36nm,0.8s
**BZK Bozkurt** 10.38 61 Pn **Pn** 18 57 30.7 +2.2
**OBKA Obir** 10.40 331 ePn **Pn** 18 57 27.8 -1.1
comp=Z,13nm,0.5s,SNR=14
OBKA *i* Sn **Sn** 18 59 25.5 +0.8
comp=Z,63nm,0.7s
**PSZ Piszkesteto** 10.42 353 P **Pn** 18 57 29.2 +0.1
**PSZ Piszkesteto** 10.42 353 Pn **Pn** 18 57 29.1 +0.1
**PSZ Piszkesteto** 10.42 353 ⇑P **Pn** 18 57 28.1 -1.0
**PSZ Piszkesteto** 10.42 353 PN **Pn** 18 57 29.4 +0.3
PSZ SN **Sn** 18 59 22.3 -2.7
**TATN Tataouine** 10.47 245 ⇑P **Pn** 18 57 27.4 -2.4
**IAS Iasi** 10.51 22 P Pn 18 57 36.7 +6.5
IAS pmax pmax
comp=Z,206nm,1.1s
**SRO Srobarova** 10.53 347 ePn **Pn** 18 57 31.2 +0.7
SRO *e* 18 59 28.5
**SRO Srobarova** 10.53 347 ePN **Pn** 18 57 31.2 +0.7
SRO eSN **Sn** 18 59 28.5 +0.8
**TRPA Tarpa** 10.55 3 ⇑P **Pn** 18 57 32.6 +1.7
**TRPA Tarpa** 10.55 3 PN **Pn** 18 57 32.3 +1.5
**ZCCA Zocca** 10.59 313 **Pn** 18 57 32.5 +1.2
**ARSA Arzberg** 10.70 336 ePn **Pn** 18 57 31.8 -1.1
comp=Z,16nm,0.6s,SNR=12
ARSA eSn **Sn** 18 59 31.6 -0.3
comp=Z,18nm,0.9s
**KIS Kishinev** 10.75 27 *e*P **Pn** 18 57 37.0 +3.4
comp=Z,270nm,2.0s
KIS eS **Sn** 18 59 35.0 +1.8
KIS eLqM 19 01 18.0
comp=Z,2μm,16.0s
KIS eLR LR 19 02 24.0
comp=Z,3μm,12.0s
**KIS Kishinev** 10.75 27 *e*P **Pn** 18 57 37.0 +3.4
KIS eS **Sn** 18 59 35.0 +1.8
KIS pmax pmax
comp=Z,270nm,2.0s
KIS MLR MLR
comp=Z,2μm,13.0s
KIS MLR MLR
comp=N,3μm,12.0s
**PURM Purcari** 10.77 31 ⇑P **Pn** 18 57 36.8 +3.0
**SOP Sopron** 10.79 341 P **Pn** 18 57 33.2 -0.9
SOP pmax pmax
comp=Z,59nm,1.4s
**SOP Sopron** 10.79 341 PN **Pn** 18 57 36.1 +2.0
**PTCC Patocco-Chiusa** 10.80 327 ⇑P **Pn** 18 57 33.6 -0.7
**HNAT Natroun** 10.83 135 P **Pn** 18 57 33.4 -1.3
baz=137
**TEOL Teolo** 10.84 319 **Pn** 18 57 34.7 -0.1
**MYKA Terra Mystica** 10.86 329 ePn **Pn** 18 57 34.5 -0.6
comp=Z,5.9nm,0.5s
MYKA eSn **Sn** 18 59 38.6 +2.6
comp=Z,36nm,0.9s
**KECS Kecovo** 10.93 356 *e*P **Pn** 18 57 36.9 +0.9
**KECS Kecovo** 10.93 356 *e*PN **Pn** 18 57 36.9 +0.9
**PGF Pioggiola** 10.96 301 P **Pn** 18 57 37.8 +1.2
PGF pmax pmax
comp=Z,78nm,1.5s
**STAL STALIGIAL** 10.98 325 Pn **Pn** 18 57 33.9 -2.8
**UZH Uzhgorod** 11.05 2⇑ *e*P **Pn** 18 57 38.5 +0.9
UZH eS **Sn** 18 59 41.6 +1.3
**RYAN Fayoum** 11.07 138 P **Pn** 18 57 36.1 -1.8
baz=140
**IZAB Izabela** 11.08 353 *e*P **Pn** 18 57 38.1 0.0
**VYHS Vyhne** 11.11 350 *e*P **Pn** 18 57 36.7 -1.8
VYHS *e* 18 59 40.7
**VYHS Vyhne** 11.11 350 *e*PN **Pn** 18 57 36.7 -1.8
**VYHS Vyhne** 11.11 350 *e*SN **Sn** 18 59 40.7 -1.3
**ZST Bratislava** 11.14 344 P **Pn** 18 57 39.2 +0.3
ZST pmax pmax
comp=Z,358nm,1.8s
**ZST Bratislava** 11.14 344 *e*SN **Sn** 18 59 39.2 -3.4
**BNN Bunyan** 11.15 79 Pn **Pn** 18 57 41.1 +1.9
**CONA Conrad Observa** 11.21 339 ePn **Pn** 18 57 38.8 -1.0
comp=Z,3.8nm,0.5s
CONA eSn **Sn** 18 59 41.8 -2.6
comp=Z,26nm,0.9s
**PRMA PARMA** 11.21 313 Pn **Pn** 18 57 39.9 0.0
**SNOP Sinop** 11.24 63 Pn Pn 18 57 45.3 +5.0
**KOLL Kolacno** 11.26 348 *e*PN **Pn** 18 57 40.6 +0.1
**KOLL Kolacno** 11.26 348 *e*SN **Sn** 18 59 44.3 -1.2
**MODS Modra-Piesok** 11.27 345 *e*P **Pn** 18 57 43.0 +2.3
**MODS Modra-Piesok** 11.27 345 *e*PN **Pn** 18 57 43.0 +2.3
**CRVS Cervenica-Dubn** 11.31 359 *e*P **Pn** 18 57 43.0 +1.7
**CRVS Cervenica-Dubn** 11.31 359 *e*PN **Pn** 18 57 43.0 +1.7
**CTI Castel Tesino** 11.33 321 P **Pn** 18 57 40.2 -1.3
**CTI Castel Tesino** 11.33 321 Pn **Pn** 18 57 40.2 -1.3
**KBA Koelnbreinsper** 11.34 329 ePn **Pn** 18 57 41.4 -0.4
comp=Z,20nm,0.9s,SNR=15
KBA eSn **Sn** 18 59 47.0 -0.9
comp=Z,43nm,1.1s
**KBA Koelnbreinsper** 11.34 329 P **Pn** 18 57 42.0 +0.2
KBA pmax pmax
comp=Z,90nm,1.2s
**SMOL Smolenice** 11.37 345 *e*P **Pn** 18 57 42.2 +0.2
SMOL *e* 18 59 44.2
**SMOL Smolenice** 11.37 345 *e*PN **Pn** 18 57 42.2 +0.2
**SMOL Smolenice** 11.37 345 *e*SN **Sn** 18 59 44.2 -4.1
**HSAF As Saff** 11.38 131 P **Pn** 18 57 40.5 -1.8
baz=133
**ABTA Abfaltersbach** 11.44 326 ePn **Pn** 18 57 42.8 -0.2
comp=Z,50nm,1.0s,SNR=12
ABTA eSn **Sn** 18 59 48.1 -2.0
comp=Z,89nm,0.8s
**GLL Jalalah** 11.51 131 P **Pn** 18 57 42.0 -2.0
baz=133
**MOA Molln** 11.64 334 *i* Pn **Pn** 18 57 45.7 0.0
comp=Z,11nm,0.5s,SNR=29
MOA eSn **Sn** 18 59 55.3 +0.3
comp=Z,41nm,0.8s
**JAVC Velka Javorina** 11.65 346 ePN **Pn** 18 57 45.8 -0.2
**TOKA Tokat** 11.78 72 Pn 18 57 52.8 +5.1
**HFRF Wahat Farafira** 11.78 150 P **Pn** 18 57 46.3 -1.4
baz=153
**HNTI Hanita** 11.83 108 Pn **Pn** 18 57 48.1 -0.3
HNTI Sn **Sn** 18 59 54.0 -5.8
**SIM Simferopol'** 11.84 48 *e*P **Pn** 18 57 51.6 +3.1
SIM S **Sn** 18 59 59.3 -0.6
SIM pmax pmax
comp=Z,150nm,1.0s
SIM smax smax
comp=N,206nm,1.8s
**BHL Bhannes** 11.87 104 *e*P **Pn** 18 57 47.0 -2.0
**NIE Niedzica** 11.88 355 *e*P **Pn** 18 57 51.4 +2.5
**DQRL Deir Qamar** 11.88 105 *e*P **Pn** 18 57 48.5 -0.7
**NBNS Bani Suef** 11.98 135 P **Pn** 18 57 47.8 -2.7
baz=137
**QRWL Qaraoun** 12.03 105 *e*P **Pn** 18 57 50.2 -0.9
**MMA0 Mount Meron ar** 12.04 108 Pn **Pn** 18 57 49.3 -2.0
MMA0 Sn **Sn** 19 00 00.2 -4.6
**MMA0B Mount Meron ar** 12.04 108 Pn **Pn** 18 57 50.5 -0.8
**MMAI Mount Meron Ar** 12.04 108 Pn **Pn** 18 57 49.4 -1.9
comp=N,5.7nm,0.3s,baz=309,slow=11,SNR=26
MMAI Sn **Sn** 18 59 59.6 -5.2
comp=N,7.3nm,0.3s,baz=310,slow=12,SNR=2.2
**KRUC Moravsky** 12.11 343 *e*PN **Pn** 18 57 50.6 -1.6
**SLTI Sal'it** 12.13 112 Pn **Pn** 18 57 51.0 -1.4
SLTI Sn **Sn** 18 59 59.4 -7.6
**GEM Giv'at Ha'Em** 12.15 107 Pn **Pn** 18 57 51.9 -0.8
GEM Sn **Sn** 19 00 02.7 -4.8
**SHBL Chebaa** 12.15 106 *e*P **Pn** 18 57 51.4 -1.5
**RCY Rachaya** 12.16 105 *e*P **Pn** 18 57 51.8 -1.3
**NATI Neve Ativ** 12.18 107 Pn **Pn** 18 57 52.6 -0.6
**WTTA Wattenberg** 12.22 326 ePn **Pn** 18 57 54.5 +0.7
comp=N,46nm,0.9s,SNR=19
WTTA eSn **Sn** 19 00 06.3 -3.0
comp=N,95nm,0.7s
**WTTA Wattenberg** 12.22 326 P **Pn** 18 57 55.4 +1.6
WTTA pmax pmax
comp=Z,114nm,1.3s
**WATA Walderalm** 12.30 326 ePn **Pn** 18 57 55.4 +0.5
comp=Z,26nm,0.7s,SNR=36
WATA eSn **Sn** 19 00 08.8 -2.5
comp=Z,50nm,1.0s
**VRAC Vranov** 12.30 344 Pn **Pn** 18 57 52.1 -2.6
comp=Z,0.2nm,0.3s,baz=170,slow=14,SNR=11
VRAC LR LR 19 04 01.3
comp=Z,6μm,18.2s,baz=174,slow=44
**VRAC Vranov** 12.30 344 *e*PN **Pn** 18 57 53.5 -1.3
**MMLI Mount Malkishu** 12.31 111 Pn **Pn** 18 57 52.1 -2.9
MMLI Sn **Sn** 19 00 04.6 -7.0
**LVV L'vov** 12.34 7 *e*P **Pn** 18 57 58.4 +3.2
LVV eS **Sn** 19 

**MOTA Moosalm** 12.52 325 *i* Pn **Pn** 18 57 58.3 +0.4
comp=Z,18nm,0.6s,SNR=22
MOTA *e*Sn **Sn** 19 00 15.0 -1.7
comp=Z,65nm,0.7s
**TAMRE El Minia** 12.52 139 P **Pn** 18 57 55.7 -2.2
baz=141
**OKC Ostrava-Krasne** 12.52 349 P **Pn** 18 57 58.0 +0.3
OKC pmax pmax
comp=Z,82nm,1.1s
**OKC Ostrava-Krasne** 12.52 349 AMS AMS 19 03 30.0
comp=Z,5µm,14.8s
**SBF Sospel** 12.54 304 *e*P Pn 18 58 01.9 +3.8
SBF pmax pmax
comp=Z,164nm,1.2s
**TREC Trest** 12.55 341 AMS AMS 19 03 50.0
comp=Z,5µm,12.4s
**MORC Moravsky Berou** 12.56 347 P **Pn** 18 57 57.9 -0.4
**MORC Moravsky Berou** 12.56 347 Pn **Pn** 18 57 57.9 -0.4
**MORC Moravsky Berou** 12.56 347 PN **Pn** 18 57 57.6 -0.7
**MORC Moravsky Berou** 12.56 347 ⇓P **Pn** 18 57 58.0 -0.4
**PART Garmisch-Parte** 12.63 325 *e*P **Pn** 18 57 59.2 -0.1
PART *e*S **Sn** 19 00 14.1 -5.1
**ZUGS Zugspitze, Sch** 12.63 324 *e*P **Pn** 18 58 00.6 +1.0
**YTIR Yattir** 12.64 115 Pn **Pn** 18 57 57.4 -2.1
YTIR Sn **Sn** 19 00 11.0 -8.6
**GEC2 GERESS Array S** 12.69 335 Pn **Pn** 18 57 59.1 -1.0
**GEC2 GERESS Array S** 12.69 335 *e*P **Pn** 18 57 59.1 -1.0
**GERES GERESS Array B** 12.69 335 Pn **Pn** 18 57 58.7 -1.5
comp=Z,1.7nm,0.3s,baz=153,slow=12,SNR=40
GERES LR LR 19 03 20.1
comp=Z,734nm,18.6s,baz=154,slow=39
**GERES GERESS Array B** 12.69 335 P **Pn** 18 57 58.4 -1.8
**GERES GERESS Array B** 12.69 335 Pn **Pn** 18 57 58.4 -1.8
**OJC Ojcow** 12.71 354 *e*P **Pn** 18 58 01.4 +1.1
**OJC Ojcow** 12.71 354 P **Pn** 18 58 01.5 +1.2
OJC pmax pmax
comp=Z,36nm,1.7s
**OJC Ojcow** 12.71 354 **Pn** 18 57 59.4 -0.9
**DSI Dead Sea** 12.72 114 Pn **Pn** 18 57 58.8 -1.7
DSI Sn **Sn** 19 00 13.5 -7.9
**DAVOX Davos/Dischmat** 12.72 320 Pn **Pn** 18 58 02.2 +1.6
comp=Z,1.1nm,0.3s,baz=123,slow=13,SNR=14
DAVOX LR LR 19 04 07.2
comp=Z,3µm,18.8s,baz=119,slow=43
**RETA Reutte** 12.78 324 *i* Pn **Pn** 18 58 04.4 +3.0
comp=Z,5.0nm,0.3s
RETA *i* Sn **Sn** 19 00 22.0 -1.0
comp=Z,24nm,0.6s
**TUE Stuetta** 12.80 318 Pn **Pn** 18 58 01.6 -0.1
**TUE Stuetta** 12.80 318 ⇑P **Pn** 18 58 02.9 +1.1
**MDBI Mazsada** 12.84 115 Pn **Pn** 18 58 00.0 -2.1
**MSBI Mazada** 12.84 115 Pn **Pn** 18 58 00.2 -1.9
**KHC Kasperske Hory** 12.98 335 *e*P **Pn** 18 58 03.2 -0.8
KHC MLR MLR
comp=Z,7µm,11.6s
**KHC Kasperske Hory** 12.98 335 *e*P **Pn** 18 58 03.2 -0.8
KHC *ex* x 18 58 10.5
KHC AMS AMS 19 04 00.0
comp=Z,7µm,11.6s
**KHC Kasperske Hory** 12.98 335 **Pn** 18 58 02.7 -1.3
**KHC Kasperske Hory** 12.98 335 ⇑P **Pn** 18 58 03.3 -0.8
**KRLC Kraliky** 12.99 346 *e*P **Pn** 18 58 05.4 +1.2
KRLC MLR MLR
comp=Z,5µm,13.4s
**KRLC Kraliky** 12.99 346 *e*P **Pn** 18 58 05.4 +1.2
KRLC AMS AMS 19 03 50.0
comp=Z,5µm,13.4s
**GHAJ Ghor Haditha** 12.99 115 **Pn** 18 58 02.0 -2.3
**GHAJ Ghor Haditha** 12.99 115 Pn **Pn** 18 58 03.0 -1.3
**FUR Furstenfeldbru** 13.06 327 P **Pn** 18 58 04.1 -1.1
FUR pmax pmax
comp=Z,209nm,1.4s
**DAVA Damuels** 13.06 322 *e*Pn **Pn** 18 58 08.4 +3.1
comp=Z,9.4nm,0.7s
DAVA *e*Sn **Sn** 19 00 26.3 -3.7
comp=Z,58nm,0.6s
**KRMI Paran Flat** 13.09 121 Pn **Pn** 18 58 02.5 -3.1
KRMI Sn Sn 19 00 21.4 -9.1
**HRDS Abu Rudays** 13.09 129 P **Pn** 18 58 03.3 -2.3
baz=131
**GRB Gharib** 13.10 132 P **Pn** 18 58 03.1 -2.8
baz=134
**PRNI Paran** 13.14 119 Pn **Pn** 18 58 03.0 -3.3
PRNI Sn Sn 19 00 22.3 -9.4
**ZFRI Zfri** 13.14 118 Pn **Pn** 18 58 02.4 -3.8
ZFRI Sn Sn 19 00 22.6 -9.0
**WET Wettzell** 13.23 334 P **Pn** 18 58 05.2 -2.2
WET pmax pmax
comp=Z,121nm,1.4s
**WET Wettzell** 13.23 334 *e*P **Pn** 18 58 04.4 -3.0
**UBR Ueberruh** 13.23 323 *e*P **Pn** 18 58 05.8 -1.7
**DPC Dobruska-Polom** 13.34 345 *e*P **Pn** 18 58 09.7 +0.7
DPC MLR MLR
comp=Z,8µm,13.1s
**DPC Dobruska-Polom** 13.34 345 *e*P **Pn** 18 58 09.7 +0.7
DPC AMS AMS 19 04 00.0
comp=Z,8µm,13.1s
**HRFI Mount Harif** 13.35 120 Pn **Pn** 18 58 06.1 -3.1
HRFI Sn Sn 19 00 27.8 -9.1
**MBDF Montbardon** 13.35 307 *e*P **Pn** 18 58 11.8 +2.5
MBDF pmax pmax
comp=Z,121nm,1.1s
**MBRI Mt Berech** 13.41 122 Pn **Pn** 18 58 07.4 -2.7
MBRI Sn **Sn** 19 00 29.9 -8.7
**PRU Pruhonice** 13.44 340 *e*P **Pn** 18 58 10.3 0.0
PRU MLR MLR
comp=Z,5µm,13.5s
**PRU Pruhonice** 13.44 340 *e*P **Pn** 18 58 10.3 0.0
PRU *ex* x 18 58 20.7
PRU AMS AMS 19 04 30.0
comp=Z,5µm,13.5s
**EIL Elat** 13.52 122 Pn **Pn** 18 58 09.0 -2.5
comp=Z,6.2nm,0.3s,baz=302,slow=4.9,SNR=60
EIL Sn **Sn** 19 00 33.8 -7.2
comp=Z,8.2nm,0.3s,baz=103,slow=5.9,SNR=8.2
**EIL Elat** 13.52 122 ⇑P **Pn** 18 58 08.9 -2.5
EIL ⇑S **Sn** 19 00 34.0 -7.0
**EIL Elat** 13.52 122 Pn **Pn** 18 58 08.5 -3.0
EIL Sn Sn 19 00 31.0 -10
**ASF Jabal al Asfar** 13.54 109 Pn **Pn** 18 58 10.2 -1.6
comp=Z,1.4nm,0.3s,baz=303,slow=10.0,SNR=8.9
**UPC Upice** 13.56 344 P **Pn** 18 58 13.1 +1.2
UPC pmax pmax
comp=Z,64nm,1.1s
**UPC Upice** 13.56 344 AMS AMS 19 04 10.0
comp=Z,7µm,13.8s
**BNI Bardonecchia** 13.56 308 P **Pn** 18 58 12.8 +0.7
**BNI Bardonecchia** 13.56 308 Pn **Pn** 18 58 12.8 +0.7
**OSTC Ostas** 13.56 345 *e*P **Pn** 18 58 13.2 +1.2
OSTC *ex* x 18 58 25.1
**CHVC Chvalec** 13.62 344 *e*P **Pn** 18 58 14.0 +1.2
CHVC *ex* x 18 58 24.3
CHVC AMS AMS 19 04 10.0
comp=Z,6µm,14.7s
**LPG La Plagne** 13.73 310 *e*P **P** 18 58 19.1 -4.0
LPG pmax pmax
comp=Z,31nm,1.1s
**LPL La Plagne** 13.75 310 *e*P **Pn** 18 58 17.2 +2.4
LPL pmax pmax
comp=Z,17nm,1.0s
**KSP Ksiaz** 13.82 345 *e*P **Pn** 18 58 16.5 +1.1
**KSP Ksiaz** 13.82 345 P **Pn** 18 58 16.9 +1.5
KSP pmax pmax
comp=Z,41nm,0.8s
**KSP Ksiaz** 13.82 345 ⇑P **Pn** 18 58 18.4 +3.0
**SENIN Lac Senin/Sane** 13.87 314 Pn **Pn** 18 58 16.9 +0.5
**PVCC Panska Ves** 13.93 341 P **P** 18 58 22.5 -2.4
PVCC pmax pmax
comp=Z,128nm,1.3s
**PVCC Panska Ves** 13.93 341 AMS AMS 19 03 00.0
comp=Z,3µm,13.9s
**ORIF Oris-en-Rattie** 14.00 307 *e*P **P** 18 58 23.8 -2.1
ORIF pmax pmax
comp=Z,78nm,1.4s
**SLE Schleitheim** 14.08 320 P **Pn** 18 58 19.9 +0.8
SLE pmax pmax
comp=Z,159nm,1.3s
**AKASG Malin Array Be** 14.15 20 Pn **Pn** 18 58 19.4 -0.6
comp=Z,1.1nm,0.3s,baz=205,slow=12,SNR=37
**AKASG Malin Array Be** 14.15 20 P **Pn** 18 58 19.7 -0.3
**AKASG Malin Array Be** 14.15 20 **Pn** 18 58 19.7 -0.3
**AKBB Malin Array Si** 14.15 20 *ce*P **Pn** 18 58 20.4 +0.4
**AKBB Malin Array Si** 14.15 20 Pn **Pn** 18 58 19.2 -0.8
**BEL Belsk** 14.27 358 *e*P **P** 18 58 31.7 +3.1

**GRA1 Grafenberg Arr** 14.29 331 **Pn** 18 58 20.9 -1.0
**GRF Grafenberg Arr** 14.29 331 P **Pn** 18 58 20.9 -1.0
**GRFO Grafenberg** 14.29 331 P **Pn** 18 58 21.4 -0.5
**GRFO Grafenberg** 14.29 331 **Pn** 18 58 21.4 -0.5
**NKC Novy Kostel** 14.30 335 AMS AMS 19 04 50.0
comp=Z,6µm,12.8s
**BRG Berggiesshubel** 14.41 340 *e*P **Pn** 18 58 22.2 -1.3
BRG Amp 18 58 25.1
comp=Z,10nm,1.2s
BRG *ex* x 18 58 30.1
BRG Amp 18 58 31.4
comp=Z,43nm,1.3s
BRG *ex* x 18 58 38.2
BRG Amp 18 58 39.8
comp=Z,58nm,1.2s
**BRG Berggiesshubel** 14.41 340 S S 19 01 12.0 -10
BRG Amp 19 03 33.0
comp=N,9.3nm,14.4s
BRG Amp 19 03 34.0
comp=E,3.7nm,14.4s
BRG Amp 19 03 53.0
comp=Z,4.2nm,8.4s
BRG Amp 19 48 09.5
comp=Z,45nm,2.1s
**BRG Berggiesshubel** 14.41 340 *e*P **Pn** 18 58 22.2 -1.3
BRG S S 19 01 12.0 -10
BRG pmax pmax
comp=Z,10.0nm,1.2s
BRG smax smax
comp=N,9µm,14.4s
BRG MLR MLR
comp=E,4µm,14.4s
BRG MLR MLR
comp=Z,4µm,8.4s
**STU Stuttgart** 14.44 325 P **Pn** 18 58 21.4 -2.6
**STU Stuttgart** 14.44 325 Pn **Pn** 18 58 21.4 -2.6
**BFO Black Forest** 14.54 322 P **Pn** 18 58 24.5 -0.9
**BFO Black Forest** 14.54 322 Pn **Pn** 18 58 24.5 -0.9
**BFO Black Forest** 14.54 322 *e*P **Pn** 18 58 24.7 -0.7
**BFO Black Forest** 14.54 322 P **Pn** 18 58 25.6 +0.2
**VIVF Saint-Julien-l** 14.76 305 *e*P **P** 18 58 32.5 -1.7
VIVF pmax pmax
comp=Z,62nm,1.5s
**SOC Sochi** 14.88 61 *d* iP **Pn** 18 58 31.0 +1.0
SOC *e* 19 01 19.0
SOC pmax pmax
comp=Z,14nm,1.0s
SOC MLR MLR
comp=Z,1µm,17.0s
**MOX Moxa** 14.93 334 *e*P **Pn** 18 58 29.0 -1.6
**ECH Echery** 15.05 319 P **Pn** 18 58 30.9 -1.4
ECH pmax pmax
comp=Z,160nm,1.4s
**ECH Echery** 15.05 319 Pn **Pn** 18 58 30.9 -1.4
ECH IAmb IAmb 18 58 47.4
comp=Z,160nm,1.4s
**ECH Echery** 15.05 319 ⇓P **Pn** 18 58 32.2 -0.1
**CLL Collm** 15.06 338 *e*P **Pn** 18 58 32.0 -0.3
CLL MLR MLR
comp=Z,3µm,18.2s
**CLL Collm** 15.06 338 *e*P **Pn** 18 58 32.0 -0.3
CLL *i* pP **P** 18 58 39.6 +2.1
comp=Z,90nm,1.2s
CLL *i* sP **sP** 18 58 45.2 -1.5
comp=Z,167nm,1.1s
CLL *i* sPP 18 58 49.9
CLL *ex* x 18 59 42.0
CLL *e*Sx Sx 19 01 31.0
CLL *e*SS **S** **19 01 42.0 +6.5**
CLL *ex* x 19 01 51.0
CLL *ex* x 19 02 06.0
CLL LmV 19 05 00.0
comp=Z,3µm,18.2s
CLL Lmax 19 05 00.0
**CLL Collm** 15.06 338 Pn **Pn** 18 58 31.9 -0.4
CLL IAmb IAmb 18 58 47.4
comp=Z,122nm,1.0s
**MARD Mardin** 15.11 85 **Pn** 18 58 35.2 +2.0
MARD IAmb IAmb 18 58 45.7
comp=Z,85nm,0.9s
**BATM Batumi** 15.87 69 ⇑P Pn 18 58 34.3 -8.7
**RUE Ruedersdorf** 15.91 342 *e*P **P** 18 58 48.5 +1.6
**RUE Ruedersdorf** 15.91 342 ⇑p **P** 18 58 48.8 +2.0
**GURO Guroymak-BITLI** 15.99 80 P **P** 18 58 46.9 -1.2
**GKP Gorka Klasztor** 16.00 350 *e*P **P** 18 58 49.9 +2.1
**GKP Gorka Klasztor** 16.00 350 *e*P **P** 18 58 49.5 +1.7
**SMF Signal de Mont** 16.06 310 *e*P **P** 18 58 48.8 +0.2
SMF pmax pmax
comp=Z,28nm,1.1s
**LOR Lormes** 16.35 312 P **P** 18 58 53.1 +1.3
LOR pmax pmax
comp=Z,60nm,1.0s
**SIRT Sirnak** 16.40 84 P **P** 18 58 51.8 -0.7
**AVF Avril sur Loir** 16.43 310 *e*P **P** 18 58 52.9 +0.3
AVF pmax pmax
comp=Z,50nm,1.4s
**SUW Suwalki** 16.46 3 *e*P **Pn** 18 58 50.2 -0.2
**SUW Suwalki** 16.46 3 P **Pn** 18 58 49.5 -0.8
SUW pmax pmax
comp=Z,652nm,1.0s
**SUW Suwalki** 16.46 3 **Pn** 18 58 49.5 -0.8
**SUW Suwalki** 16.46 3 *e*P **P** 18 58 52.2 -0.8
**SUW Suwalki** 16.46 3 ⇑P **Pn** 18 58 50.5 +0.1
**SSF Saint Saulge** 16.46 311 *e*P **P** 18 58 53.3 +0.3
SSF pmax pmax
comp=Z,23nm,0.8s
**FLTG Flechtingen** 16.49 337 P **P** 18 58 54.8 +1.5
**WLF Walferdange** 16.50 322 P **Pn** 18 58 49.9 -1.0
WLF pmax pmax
comp=Z,843nm,1.4s
**WLF Walferdange** 16.50 322 **Pn** 18 58 49.9 -1.0
**WLF Walferdange** 16.50 322 *e*P **P** 18 58 53.7 +0.2
comp=Z,880nm,1.4s
**WLF Walferdange** 16.50 322 *d*Pn **P** 18 58 51.3 -2.1
WLF *d*PnPn **sP** 18 59 03.3 +0.8
**BGF Bois d'Agland** 16.63 309 *e*P **P** 18 58 57.9 +3.0
BGF pmax pmax
comp=Z,80nm,1.4s
**KARS Kars** 16.81 73 P **P** 18 58 58.7 +1.5
KARS pmax pmax
comp=Z,548nm,1.4s
**KARS Kars** 16.81 73 P **P** 18 58 58.6 +1.5
**NEY Neytrino** 16.91 64 *c* iP **P** 18 59 01.1 +2.8
NEY pmax pmax
comp=Z,45nm,1.0s
**TCF Toulx Ste Croi** 16.92 307 *e*P **P** 18 59 00.0 +1.9
TCF pmax pmax
comp=Z,227nm,2.7s
**RJF Les Rejaudoux** 17.00 303 *e*P **P** 18 59 00.1 +1.1
RJF pmax pmax
comp=Z,54nm,1.4s
**BHOU Houvegnez** 17.03 324 *d*PnPn P 18 59 08.1 +8.8
**KIV Kislovodsk** 17.05 62 *e*P **P** 18 59 00.4 +0.7
KIV *e*S **S** 19 02 12.2 -4.3
KIV pmax pmax
comp=Z,42nm,1.1s
KIV MLR MLR
comp=Z,417nm,14.0s
**KIV Kislovodsk** 17.05 62 P **P** 18 58 59.2 -0.6
**KIV Kislovodsk** 17.05 62 P **P** 18 59 01.5 +1.7
KIV P **P** 18 59 01.5 +1.7
**KIV Kislovodsk** 17.05 62 ⇓P **P** 18 59 00.5 +0.8
**KIV Kislovodsk** 17.05 62 *i* P **P** 18 59 01.0 +1.3
SNR=18
**KVAR Kislovodsk Arr** 17.06 62 Pn **P** 18 58 59.5 -0.3
baz=256,slow=22,SNR=7.6
**BTNL Ternell** 17.13 324 *d*P **P** 18 59 01.2 +0.8
BTNL *d*PnPn **sP** 18 59 09.7 +0.1
**KBZ Khabaz** 17.15 62 Pn **P** 18 59 01.2 +0.6
comp=Z,0.8nm,0.3s,baz=243,slow=7.9,SNR=36
KBZ LR LR 19 06 43.6
comp=Z,1µm,19.6s,baz=263,slow=41
**KBZ Khabaz** 17.15 62 *d* iP **P** 18 59 01.9 +1.3
KBZ pmax pmax
comp=Z,78nm,0.9s
**MEM Membach** 17.20 324 P **P** 18 59 02.7 +1.5
MEM pmax pmax
comp=Z,175nm,1.4s
**MEM Membach** 17.20 324 *d*P **P** 18 59 02.0 +0.8
MEM *d*x x 18 59 05.3
MEM *d*PnPn **sP** 18 59 10.4 +0.1
MEM *d*PnPn **PnPn** 18 59 11.9 +2.1
**BUG Bochum--Univer** 17.24 328 P **P** 18 59 02.6 +1.0
BUG pmax pmax
comp=Z,106nm,1.3s
**RCHB Rochefort** 17.27 322 *d*P **P** 18 59 03.7 +1.7
RCHB *d*PnPn **sP** 18 59 10.6 -0.5
**ONI Oni** 17.32 66 P **P** 18 59 02.1 -0.5
ONI pmax pmax
comp=Z,95nm,0.8s
**ONI Oni** 17.32 66 P **P** 18 59 02.1 -0.5
**BSTI Sart Tilman** 17.39 323 *d*Pn **P** 18 59 03.0 -0.3
BSTI *d*x x 18 59 11.1
BSTI *d*PnPn **sP** 18 59 14.1 +1.7
**BCLA Clavier** 17.41 323 *d*Pn **P** 18 59 02.9 -0.6
BCLA *d*PnPn **sP** 18 59 13.0 +0.4
**MNK Minsk** 17.43 12 *i* P **Pn** 18 59 01.8 -0.8
MNK *i* S **Sn** 19 02 14.9 -0.9
MNK pmax pmax
comp=Z,97nm,1.1s
MNK pmax pmax
comp=E,7.0nm,1.5s
MNK pmax pmax
comp=N,157nm,1.7s
MNK MLR MLR
comp=N,2µm,19.0s
MNK MLR MLR
comp=Z,2µm,15.0s
**MNK Minsk** 17.43 12 *i* P **Pn** 18 59 01.8 -0.7
comp=E,7.0nm,1.5s
MNK *i* P **Pn** 18 59 01.8 -0.7
comp=N,157nm,1.7s
MNK *i* P **Pn** 18 59 01.8 -0.7
comp=Z,97nm,1.1s,baz=16
MNK *i* PP **PnPn** 18 59 12.0 -0.8
MNK *i* S **Sn** 19 02 14.9 -0.9
MNK *i* SS **SnSn** 19 02 32.4 +3.1
MNK *i* LQ LQ 19 04 13.5
MNK *i* LR LR 19 05 33.5
MNK *i* LRM MLR 19 06 49.2
comp=E,185nm,19.2s
MNK *i* LRM MLR 19 06 49.2
comp=N,2µm,19.0s
MNK *i* LRM MLR 19 06 49.2
comp=Z,2µm,14.7s
**BEBN Eben Emael** 17.48 324 *d*Pn **P** 18 59 04.0 -0.3
BEBN *d*PnPn **sP** 18 59 14.3 +0.9
**BGES Gesves** 17.49 322 *d*Pn **P** 18 59 06.2 +1.8
BGES *d*PnPn **sP** 18 59 14.3 +0.8
**DOU Dourbes** 17.55 321 P **P** 18 59 07.6 +2.6
DOU pmax pmax
comp=Z,93nm,1.5s
**DOU Dourbes** 17.55 321 *d*pPn **P** 18 59 08.1 +3.1
**NCK Nalchik** 17.59 64 ⇓*e*P **P** 18 59 05.8 +0.2
NCK pmax pmax
comp=Z,4.0nm,0.2s
**BMRD Maredsous** 17.59 322 *d*x x 18 59 08.0
BMRD *d*PnPn P 18 59 16.6 +11
**GOF Gofitskoye** 17.61 58 ⇑*e*P **P** 18 59 07.0 +1.3
GOF pmax pmax
comp=Z,182nm,1.0s
**NACGM Naroch** 17.66 10 *i* P **P** 18 59 05.2 -0.9
**CLF Chambon-Foret** 17.66 312 P **P** 18 59 05.7 -0.6
CLF IAmb IAmb 18 59 23.6
comp=Z,281nm,1.4s
**ZEI Tsey** 17.68 66 *e*P **P** 18 59 08.1 +1.4
ZEI pmax pmax
comp=Z,172nm,1.1s
**SNF Seneffe** 17.96 322 *d*x x 18 59 14.0
SNF *d*x x 18 59 19.3
**PABE Paberze** 17.99 4 **Pn** 18 59 07.3 -2.1
PABE IAmb IAmb 18 59 23.5
comp=Z,108nm,0.7s
**PABE Paberze** 17.99 4 *e*P **P** 18 59 08.8 -0.9
**IIGN Ignalina** 18.02 8 *e*P **P** 18 59 09.4 -0.9
IIGN IAmb IAmb 18 59 33.7
comp=Z,57nm,0.9s
**IDID Didziasalis** 18.05 9 *e*P **P** 18 59 10.2 -0.4
IDID IAmb IAmb 18 59 24.3
comp=Z,46nm,0.6s
**GNI Garni** 18.07 75 P **P** 18 59 11.2 +0.2
comp=Z,1.8nm,0.3s,baz=300,slow=1.9,SNR=31
GNI LR LR 19 07 03.7
comp=Z,2µm,18.2s,baz=265,slow=40
**GNI Garni** 18.07 75 *d* iP **P** 18 59 12.1 +1.1
GNI pmax pmax
comp=Z,256nm,1.7s
**GNI Garni** 18.07 75 P **P** 18 59 12.6 +1.6
GNI IAmb IAmb 18 59 17.7
comp=Z,236nm,1.4s
**GNI Garni** 18.07 75 P **P** 18 59 14.4 +3.4
**GNI Garni** 18.07 75 ⇑P **P** 18 59 13.4 +2.4
**GNI Garni** 18.07 75 P **P** 18 59 12.8 +1.8
**UCC Uccle** 18.11 322 P **Pn** 18 59 09.3 -1.7
UCC pmax pmax
comp=Z,23nm,0.8s
**UCC Uccle** 18.11 322 Pn **Pn** 18 59 09.3 -1.7
**BSD Bornholm Skovb** 18.14 347 *i* P **P** 18 59 13.0 +1.5
BSD IAmb IAmb 18 59 26.9
comp=Z,27nm,0.7s
**BSEG Bad Segeberg** 18.16 338 P **P** 18 59 12.2 +0.5
BSEG pmax pmax
comp=Z,124nm,1.2s
**VORD Divnogorie** 18.28 37 *e*P **Pn** 18 59 12.9 -0.1
VORD *e*S **Sn** 19 02 33.5 -2.8
VORD pmax pmax
comp=Z,80nm,0.8s
VORD smax smax
comp=N,30nm,4.7s
**VSR Storozhevoye** 18.38 37 *e*P **Pn** 18 59 13.9 -0.4
VSR pmax pmax
comp=Z,20nm,0.5s
VSR MLR MLR
comp=Z,2µm,11.0s
**PBUR Paburge** 18.45 0 *e*P **Pn** 18 59 18.1 +3.1
**MFF Saint Martin d** 18.54 306 *e*P **Pn** 18 59 18.5 +2.2
MFF pmax pmax
comp=Z,74nm,1.3s
**NAX Nakhchivan** 18.66 78 P **Pn** 18 59 18.9 +1.0
**VORR Voronezh** 18.70 36 *e*P **Pn** 18 59 17.5 -0.7
VORR pmax pmax
comp=Z,93nm,1.0s
**GROC Groznyy** 19.11 65 *e*P **Pn** 18 59 24.4 +1.2
GROC *e*S **S** 19 03 02.4 +4.8
GROC pmax pmax
comp=Z,109nm,0.9s
**COP Copenhagen** 19.17 344 *i* P **Pn** 18 59 29.9 +6.1
COP IAmb IAmb 18 59 42.7
comp=Z,443nm,0.8s
**LPSR Galich'ya Gora** 19.22 33 *e*P **Pn** 18 59 23.3 -1.1
LPSR *e*S **Sn** 19 02 51.6 -7.4
LPSR pmax pmax
comp=Z,240nm,1.0s
LPSR smax smax
comp=E,560nm,11.6s
LPSR MLR MLR
comp=Z,2µm,13.0s
**GANJ Ganja** 19.28 73 P **Pn** 18 59 24.8 -0.5
**LDF La Druitiere** 19.34 312 *e*P **Pn** 18 59 26.8 +0.9
LDF pmax pmax
comp=Z,42nm,1.0s
**ZKTA Zakatala** 19.55 70 P **Pn** 18 59 27.8 -0.7
**DEL Delary** 19.62 347 *i* P **Pn** 18 59 28.0 -1.1
**DEL Delary** 19.62 347 *e*P **Pn** 18 59 29.0 -0.1
**FLN La Foliniere** 19.62 312 *e*P **Pn** 18 59 28.9 -0.4
FLN pmax pmax
comp=Z,75nm,1.0s
**VRH Novokhopyorsk** 19.63 40 *e*P **Pn** 18 59 28.7 -0.6
VRH *e*S **S** 19 03 02.0 -6.0
VRH pmax pmax
comp=Z,210nm,0.8s
VRH smax smax
comp=N,620nm,7.9s
VRH MLR MLR
comp=Z,1µm,10.0s
**GRR Gorron** 19.69 310 *e*P **Pn** 18 59 29.3 -0.7
GRR pmax pmax
comp=Z,43nm,0.9s
**MNGR Mingechevir, A** 19.86 73 P **Pn** 18 59 31.1 -1.1
**SEKA Sheki** 19.96 72 P **Pn** 18 59 32.9 -0.5
**SLIT Slitere, Latvi** 20.06 1 *e*P Pn 18 59 35.0 +0.7
**SLIT Slitere, Latvi** 20.06 1 ⇓P Pn 18 59 32.9 -1.4
**ESBB Sonseca Array** 20.19 284 P **P** 18 59 33.5 -0.6
**ESDC Sonseca Array** 20.19 284 P Pn 18 59 35.0 -1.2
comp=Z,16nm,1.1s,baz=79,slow=11,SNR=28
**ESDC Sonseca Array** 20.19 284 P Pn 18 59 34.5 -1.7
**OBN Obninsk** 20.22 25 P **P** 18 59 34.1 -0.1
comp=Z,13nm,0.6s,baz=208,slow=4.4,SNR=21

OBN LR LR 19 07 53.1
comp=Z,928nm,18.3s,baz=214,slow=38
**OBN Obninsk 20.22 25***d* iP **P 18 59 33.8 -0.4**
OBN *e* 18 59 50.6
OBN *i* S **S 19 03 17.9 -2.0**
OBN pmax pmax
comp=Z,211nm,1.7s
OBN MLR MLR
comp=Z,3μm,17.0s
**OBN Obninsk 20.22 25** P **P 18 59 32.6 -1.6**
OBN IAmb IAmb 18 59 47.0
comp=Z,137nm,0.8s
**OBN Obninsk 20.22 25** ⇓P **P 18 59 34.1 -0.1**
**MAK Makhachkala 20.32 67** *e*P **P 18 59 33.4 -2.1**
MAK *e*S **S 19 03 22.4 +0.2**
MAK pmax pmax
comp=Z,2μm,0.8s
MAK MLR MLR
comp=Z,605nm,15.0s
**PAB San Pablo 20.49 284** P Pn 18 59 37.8 -1.9
PAB pmax pmax
comp=Z,79nm,1.2s
**PAB San Pablo 20.49 284** P Pn 18 59 37.8 -2.0
**PAB San Pablo 20.49 284** ⇑P Pn 18 59 38.0 -1.7
**ELMS Elmsett, Ipswi 20.57 321** *e*P Pn 18 59 39.6 -0.8
ELMS IAmb IAmb 18 59 47.8
comp=Z,428nm,1.2s
**MUD Monsted U'grnd 20.67 340** P Pn 18 59 41.2 -0.3
MUD pmax pmax
comp=Z,210nm,1.5s
**MUD Monsted U'grnd 20.67 340** *i* P Pn 18 59 40.4 -1.2
MUD IAmb IAmb 18 59 55.8
comp=Z,41nm,0.7s
**MUD Monsted U'grnd 20.67 340** ⇑P Pn 18 59 40.9 -0.6
**JQE Queens East 20.74 312** *e*P Pn 18 59 40.3 -2.1
**JSA Saint Aubin 20.81 311** *e*P Pn 18 59 42.2 -1.0
JSA IAmb IAmb 18 59 49.8
comp=Z,124nm,1.0s
**JVM Valle D.L. Mar 20.84 312** *e*P Pn 18 59 41.6 -2.0
**QUIF Quistinic 20.93 307** *e*P Pn 18 59 43.1 -1.5
QUIF pmax pmax
comp=Z,211nm,1.3s
**MOS Moscow 21.08 25** *e*P **P 18 59 42.1 -1.4**
MOS *e* 19 00 17.1
MOS *e*S **S 19 03 32.2 -4.7**
MOS *e* 19 03 38.1
MOS *e*SS **SnSn 19 03 54.1 -4.6**
MOS pmax pmax
comp=Z,500nm,1.5s
MOS pmax pmax
comp=Z,356nm,1.4s
MOS MLR MLR
comp=Z,3μm,16.0s
**VSU Vasula 21.14 7***d e*P **P 18 59 44.0 -0.1**
**VSU Vasula 21.14 7** *e*P **P 18 59 44.4 +0.2**
**VSU Vasula 21.14 7** ⇑P **P 18 59 44.0 -0.1**
**ROSF Rostrenen 21.15 308** *e*P **P 18 59 45.3 +0.9**
**GOET G??ttrup 21.17 341** *i* P P 18 59 51.6 +7.1
GOET IAmb IAmb 18 59 53.2
comp=Z,80nm,0.9s
**OVD Ostervraa, Den 21.18 342** *i* P **P 18 59 48.9 +4.3**
OVD IAmb IAmb 18 59 53.5
comp=Z,121nm,0.9s
**MTSE Matsula 21.18 3** *e*P **P 18 59 45.4 +0.8**
**VIKU Vikbolandet 21.19 353** *e*P **P 18 59 47.3 +2.6**
**LKRN Lenkeran, Azer 21.25 79** P **P 18 59 46.4 +0.9**
**STRD Stroud 22.02 318** *e*P **P 18 59 54.5 +0.8**
**MDT Midelt 22.04 265** P **P 18 59 55.6 +1.4**
comp=Z,26nm,0.9s,baz=88,slow=8.6,SNR=8.7
MDT LR LR 19 10 41.2
comp=Z,880nm,18.4s,baz=80,slow=43
**PBRG Braganca 22.29 290** *e*P **P 19 00 01.0 +4.2**
comp=Z,105nm,1.6s
**MONM Monmouth 22.39 317** *e*P **P 18 59 59.5 +1.7**
MONM IAmb IAmb 19 00 06.3
comp=Z,91nm,0.9s
**HOMB Homborsund 22.44 341** *e*P **P 18 59 59.9 +1.7**
**UPP Uppsala 22.45 355** *e*P **P 18 59 59.7 +1.5**
**MVO Moncorvo 22.50 288** *e*P **P 19 00 01.4 +2.4**
comp=Z,155nm,1.2s
**MCH1 Michaelchurch 22.58 318** *e*P **P 19 00 00.5 +0.8**
MCH1 IAmb IAmb 19 00 07.8
comp=Z,395nm,1.7s
**MCH1 Michaelchurch 22.58 318** ⇑P **P 19 00 02.3 +2.7**
**SNART Snartemo 22.84 340** *i* P **P 19 00 06.0 +3.6**
**SNART Snartemo 22.84 340** *e*P **P 19 00 04.1 +1.7**
**PUL Pulkovo 22.87 11**⇑*e*P **P 19 00 03.3 +0.6**
PUL pmax pmax
comp=Z,95nm,0.5s
**PCBR Castelo Branco 22.89 285** *e*P **P 19 00 06.8 +3.7**
comp=Z,89nm,1.5s
**MTE Manteigas 22.91 286** *e*P **P 19 00 06.8 +3.4**
comp=Z,112nm,1.9s
**HPK Haverah Park 22.95 323** *e*P **P 19 00 04.5 +1.0**
**PESTR Estremoz 23.06 282** *e*P **P 19 00 05.7 +0.8**
comp=Z,103nm,1.4s
**FOEL Foel Wylfa 23.14 319** *e*P **P 19 00 06.5 +0.9**
FOEL IAmb IAmb 19 00 13.4
comp=Z,115nm,0.9s
**HFS Hagfors 23.15 350** P **P 19 00 05.2 -0.3**
comp=Z,14nm,0.4s,baz=156,slow=11,SNR=57
HFS S **S 19 04 15.4 -0.2**
comp=Z,30nm,1.1s,baz=156,slow=15,SNR=4.4
HFS LR LR 19 10 41.1
comp=Z,3μm,18.5s,baz=166,slow=41
**PVIS Viseu 23.16 287** *e*P **P 19 00 04.1 -1.9**
comp=Z,123nm,1.5s
**PVAQ Vaqueiros 23.36 279** *e*P **P 19 00 12.7 +4.9**
comp=Z,132nm,1.9s
**BELG Belogornoye 23.36 42** P **P 19 00 07.5 -0.2**
comp=Z,201nm,0.9s,baz=352,slow=2.1,SNR=42
BELG LR LR 19 10 04.9
comp=Z,819nm,20.4s,baz=240,slow=39
**BELG Belogornoye 23.36 42***d* iP **P 19 00 07.2 -0.5**
BELG pmax pmax
comp=Z,65nm,1.1s
**PBEJ Beja 23.38 280** *e*P **P 19 00 08.6 +0.5**
**KONO Kongsberg 23.42 344**⇓*e*P **P 19 00 03.8 -4.5**
KONO pmax pmax
comp=Z,33nm,2.5s
**KONO Kongsberg 23.42 344** P **P 19 00 09.5 +1.2**
KONO IAmb IAmb 19 00 16.2
comp=Z,72nm,0.9s
**KONO Kongsberg 23.42 344** *e*P **P 19 00 10.1 +1.8**
**KONO Kongsberg 23.42 344** ⇓P **P 19 00 10.0 +1.8**
**EVO Evora 23.43 282** *e*P **P 19 00 11.7 +3.2**
comp=Z,69nm,1.5s
**OSL Oslo 23.46 346** *e*P **P 19 00 08.1 -0.5**
**RSBS Rosebush, Pemb 23.50 316** *e*P **P 19 00 10.9 +1.7**
RSBS IAmb IAmb 19 00 18.2
comp=Z,108nm,1.2s
**PMTG Montargil 23.53 283** *e*P **P 19 00 08.3 -1.2**
comp=Z,87nm,1.4s
**MESJ Messejana 23.68 280** *e*P **P 19 00 11.7 +0.7**
**YLL Llanberis 23.77 319** *e*P **P 19 00 13.6 +1.9**
**PNCL Nicolau / Gran 23.88 281** *e*P **P 19 00 17.0 +4.1**
comp=Z,126nm,1.7s
**BLS5 Blasjo 23.98 341** *e*P **P 19 00 16.2 +2.6**
**KESW Keswick, Cumbr 24.02 323** *e*P **P 19 00 15.3 +1.2**
KESW IAmb IAmb 19 00 21.9
comp=Z,211nm,1.3s
**FINES FINESS Array B 24.03 5** P **P 19 00 13.2 -0.9**
comp=Z,11nm,0.5s,baz=169,slow=9.8,SNR=46
FINES PcP **PcP 19 03 56.2 +1.0**
comp=Z,4.2nm,0.6s,baz=145,slow=2.6,SNR=4.2
FINES S **S 19 04 31.9 +2.1**
comp=Z,18nm,0.9s,baz=186,slow=15,SNR=6.0
FINES LR LR 19 10 36.8
comp=Z,3μm,18.1s,baz=187,slow=39
**FINES FINESS Array B 24.03 5** *i* P **P 19 00 13.1 -1.0**
FINES pmax pmax
comp=Z,11nm,0.5s
**FINES FINESS Array B 24.03 5** P **P 19 00 12.8 -1.3**
**FIA1 FINESS Array S 24.04 5** P **P 19 00 12.4 -1.7**
FIA1 IAmb IAmb 19 00 28.3
comp=Z,93nm,1.1s
FIA1 **S 19 04 28.3 -1.5**
**NC602 NORSAR Array S 24.06 348** P **P 19 00 13.1 -1.2**
**NORES NORESS Array B 24.06 348** P **P 19 00 14.4 +0.1**
NORES pmax pmax
comp=Z,8.0nm,0.9s
**WPS Cemaes, Angles 24.07 319** *e*P **P 19 00 17.2 +2.7**
**KMY Karmoy 24.13 339** *e*P **P 19 00 16.9 +1.9**
**NAO01 NORSAR Array S 24.27 347** P **P 19 00 15.7 -0.6**
**NAO01 NORSAR Array S 24.27 347** *e*P **P 19 00 17.1 +0.8**

**ODD1 Odda 24.35 341** *e*P **P 19 00 19.4 +2.3**
**NC405 NORSAR Array S 24.39 348** P **P 19 00 17.0 -0.4**
**NB201 NORSAR Array S 24.39 348** P **P 19 00 18.0 +0.5**
**NB2 NORSAR Subarra 24.40 348** P **P 19 00 17.9 +0.4**
comp=Z,347nm,1.4s,baz=160,slow=9.3
**NB2 NORSAR Subarra 24.40 348** P **P 19 00 17.9 +0.4**
baz=160,slow=9.3
**NOA NORSAR Array B 24.40 348** P **P 19 00 17.1 -0.4**
comp=Z,7.1nm,0.7s,baz=36,slow=23,SNR=49
NOA LR LR 19 11 45.5
comp=Z,2μm,18.7s,baz=165,slow=41
**NBO00 NORSAR Array S 24.47 347** P **P 19 00 18.0 -0.2**
**EKA Eskdalemuir Ar 24.48 324** P **P 19 00 19.2 +1.0**
comp=Z,34nm,0.7s,baz=127,slow=9.7,SNR=62
EKA LR LR 19 11 49.0
comp=Z,1μm,18.3s,baz=134,slow=41
**ESK Eskdalemuir 24.49 324** *e*P **P 19 00 20.0 +1.6**
ESK IAmb IAmb 19 00 27.3
comp=Z,276nm,1.3s
**ESK Eskdalemuir 24.49 324** P **P 19 00 18.4 0.0**
ESK pmax pmax
comp=Z,355nm,1.4s
**ESK Eskdalemuir 24.49 324** P **P 19 00 18.4 0.0**
**ESK Eskdalemuir 24.49 324** ⇓P **P 19 00 19.6 +1.2**
**NC303 NORSAR Array S 24.55 348** P **P 19 00 18.7 -0.1**
**WIM Isle of Man 24.55 321** *e*P **P 19 00 20.9 +2.0**
**IOMK Kirk Michael 24.55 321** *e*P **P 19 00 20.1 +1.1**
IOMK IAmb IAmb 19 00 28.0
comp=Z,680nm,1.8s
**NC300 NORSAR Array S 24.57 348** P **P 19 00 19.0 -0.1**
**SKAR Skarslia 24.64 344** *e*P **P 19 00 21.5 +1.8**
**RAYN Ar Rayn 24.70 118** P **P 19 00 21.3 +0.7**
RAYN pmax pmax
comp=Z,33nm,0.9s
**RAYN Ar Rayn 24.70 118** P **P 19 00 21.2 +0.7**
**RAYN Ar Rayn 24.70 118** P **P 19 00 22.1 +1.5**
**RAYN Ar Rayn 24.70 118** ⇑P **P 19 00 21.9 +1.3**
**RAYN Ar Rayn 24.70 118** *i* P **P 19 00 21.4 +0.9**
SNR=45
**NC204 NORSAR Array S 24.70 347** P **P 19 00 21.0 +0.7**
**EDI Edinburgh 24.85 326** *e*P **P 19 00 23.2 +1.7**
EDI IAmb IAmb 19 00 32.9
comp=Z,81nm,0.9s
**NEWG New Galloway 24.86 323** *e*P **P 19 00 23.0 +1.3**
**BER Bergen 25.09 341** *e*P **P 19 00 26.1 +2.4**
**ASK Askoy 25.21 341** *e*P **P 19 00 27.2 +2.4**
**HYA Hoyanger 25.55 342** *e*P **P 19 00 30.8 +2.9**
**DOMB Dombas 25.72 346** *e*P **P 19 00 32.2 +2.7**
**CLGH Cloghs, Cushen 25.75 322** *e*P **P 19 00 31.7 +1.9**
**KLMR Klimovskoe 25.84 20** *e*P **P 19 00 29.6 -0.9**
KLMR *e*S **S 19 05 00.4 +1.7**
KLMR pmax pmax
comp=Z,131nm,0.7s
KLMR MLR MLR
comp=Z,2μm,14.0s
**KLMR Klimovskoe 25.84 20** *e*P **P 19 00 29.6 -0.9**
KLMR AMP 19 00 35.4
comp=Z,131nm,0.7s
KLMR *e*S **S 19 05 00.4 +1.7**
KLMR *e*S **S 19 05 00.4 +1.7**
KLMR LQ LQ 19 08 15.9
KLMR LQ LQ 19 08 15.9
KLMR LR LR 19 09 37.2
KLMR AMP 19 11 43.2
comp=Z,2μm,13.5s
**LAWE Loch Awe, Argy 26.05 325** *e*P **P 19 00 34.8 +2.3**
LAWE IAmb IAmb 19 00 43.4
comp=Z,161nm,1.8s
**FOO Floro 26.20 342** *e*P **P 19 00 36.1 +2.3**
**AKN Aaknes 26.26 344** *e*P **P 19 00 36.8 +2.5**
**MOL Molde 26.50 345** *e*P **P 19 00 39.2 +2.7**
**KPL Plockton 26.79 326** *e*P **P 19 00 41.7 +2.7**
KPL IAmb IAmb 19 00 49.0
comp=Z,89nm,1.2s
**LRW Lerwick 26.88 334** *e*P **P 19 00 42.2 +2.3**
LRW IAmb IAmb 19 00 47.9
comp=Z,72nm,1.1s
**SAKB Bahrain 26.95 107** P **P 19 00 41.8 +0.9**
**LINV Loch Inver, As 27.07 328** *e*P **P 19 00 44.8 +3.2**
LINV IAmb IAmb 19 00 52.0
comp=Z,122nm,1.1s
**SHMA Al-Shehemyia 27.34 107** P **P 19 00 45.9 +1.5**
**NSS Namsos 27.61 351** *e*P **P 19 00 47.5 +1.1**
**KIRV Kirov 27.63 32** P **P 19 00 46.1 -0.5**
comp=Z,74nm,0.7s,baz=235,slow=4.0,SNR=25
KIRV LR LR 19 12 32.1
comp=Z,683nm,21.1s,baz=233,slow=38
**KIRV Kirov 27.63 32***d* iP **P 19 00 45.9 -0.7**
**TRNA Turayna 28.14 109** P **P 19 00 52.2 +0.6**
**PRGR Permogore 28.29 24** *e*P **P 19 00 51.2 -1.3**
PRGR *e*S **S 19 05 32.9 -4.3**
PRGR pmax pmax
comp=Z,41nm,0.6s
**AKTO Aktyubinsk 28.76 52** P **P 19 00 56.8 -0.1**
comp=Z,5.7nm,0.5s,baz=256,slow=7.4,SNR=28
AKTO LR LR 19 15 17.0
comp=Z,887nm,21.5s,baz=289,slow=42
**MOR8 Moi Rana 28.94 354** *e*P **P 19 00 59.5 +1.2**
**KONS Konsvik 29.38 353** *e*P **P 19 01 03.3 +1.1**
**ABKAR Akbulak array 29.77 55** P **P 19 01 05.4 -0.4**
**ABKAR Akbulak array 29.77 55** P **P 19 01 05.0 -0.9**
**ABKAR Akbulak array 29.77 55** ⇑P **P 19 01 05.8 0.0**
**GHWR Ruwais 29.83 108** P **P 19 01 07.5 +0.9**
**FAUS Fauske 30.07 355** *e*P **P 19 01 10.4 +2.2**
**TORD Torodi Ar. Bea 30.22 222** P **P 19 01 10.2 +0.2**
comp=Z,8.1nm,0.7s,baz=30,slow=9.2,SNR=53
**TORD Torodi Ar. Bea 30.22 222** P **P 19 01 09.7 -0.4**
**STEI Steigen 30.61 355** *e*P **P 19 01 12.9 -0.2**
**MZWR Madjan Zayed 30.70 107** P **P 19 01 14.8 +0.5**
**APA Apatity 30.74 9**⇓*i*P P 19 01 20.0 +5.8
APA *i* 19 02 11.6
APA *i* S **S 19 06 21.0 +5.3**
APA pmax pmax
comp=Z,15nm,0.7s
APA MLR MLR
comp=Z,2μm,16.0s
**MZR Muzera 30.83 109** P **P 19 01 15.7 +0.2**
**MZR Muzera 30.83 109** *i* P **P 19 01 15.8 +0.4**
SNR=8.1
**ARU Arti 30.86 40** LR LR 19 14 26.7
comp=Z,849nm,18.4s,baz=244,slow=38
**ARU Arti 30.86 40***d* iP **P 19 01 14.7 -0.6**
ARU 19 02 13.6
ARU S **S 19 06 19.3 +1.6**
ARU SS **SnSn 19 07 56.8 -0.6**
ARU SSS SSS 19 08 19.4
ARU pmax pmax
comp=Z,51nm,1.0s
ARU MLR MLR
comp=Z,813nm,18.0s
**ARU Arti 30.86 40** P **P 19 01 14.3 -1.0**
ARU IAmb IAmb 19 01 27.3
comp=Z,50nm,1.0s
**ARU Arti 30.86 40** ⇓P **P 19 01 14.7 -0.6**
**LVZ Lovozero 31.21 9**⇑*e*P **P 19 01 19.4 +1.0**
LVZ pmax pmax
comp=Z,24nm,0.7s
**LVZ Lovozero 31.21 9** ⇑P **P 19 01 20.0 +1.6**
**SHME Shamm 31.23 102** P **P 19 01 19.3 +0.4**
SHME P **P 19 01 19.3 +0.4**
**SHME Shamm 31.23 102** *i* P **P 19 01 18.7 -0.2**
SNR=10.0
**ASUD Al Ashush, Dub 31.33 105** P **P 19 01 20.5 +0.7**
ASUD P **P 19 01 20.5 +0.7**
**NAZ Nazwa, Dubai 31.40 104** P **P 19 01 20.9 +0.4**
NAZ P **P 19 01 20.9 +0.4**
**NAZ Nazwa, Dubai 31.40 104** P **P 19 01 20.6 +0.2**
**BANOM Banah 31.41 102** P **P 19 01 20.9 +0.3**
SNR=11
**BANOM Banah 31.41 102** *i* P **P 19 01 20.1 -0.5**
SNR=34
**FAQ Al Faqa, Dubai 31.47 104** P **P 19 01 21.3 +0.2**
FAQ P **P 19 01 21.3 +0.2**
**KTK1 Kautokeino 31.49 1** *e*P **P 19 01 21.4 +0.6**
**MASF Masafi 31.59 103** P **P 19 01 22.4 +0.3**
**MSFE Esma-Masafi 31.59 103** *i* P **P 19 01 22.1 -0.1**
SNR=6.5
**UOSS Minazif 31.84 103** P **P 19 01 23.6 -0.8**
UOSS IAmb IAmb 19 01 42.1
comp=Z,26nm,0.8s
**UOSS Minazif 31.84 103** P **P 19 01 24.9 +0.6**
UOSS P **P 19 01 24.9 +0.6**
**UOSS Minazif 31.84 103** ⇑P **P 19 01 24.9 +0.6**

**UOSS Minazif 31.84 103** *i* P **P 19 01 24.6 +0.3**
SNR=9.2
**HATD Hatta, Dubai 31.85 104** P **P 19 01 25.0 +0.6**
SNR=10
HATD P **P 19 01 25.0 +0.6**
SNR=10
**HATD Hatta, Dubai 31.85 104** *i* P **P 19 01 25.1 +0.6**
SNR=7.8
**ASHO Ashiyiah 31.86 104** P **P 19 01 24.9 +0.3**
SNR=7.5
**ASHO Ashiyiah 31.86 104** *i* P **P 19 01 24.6 0.0**
SNR=7.1
**ALNE Al Ain 31.96 105** P **P 19 01 25.9 +0.5**
SNR=14
ALNE P **P 19 01 25.9 +0.5**
SNR=14
**ALNE Al Ain 31.96 105** *i* P **P 19 01 25.9 +0.5**
SNR=13
**JETT Jettan, Norway 32.04 359** *e*P **P 19 01 27.6 +2.0**
**ARA0 ARCESS Array S 32.07 2** *e*P **P 19 01 26.1 +0.2**
**ARCES ARCESS Array B 32.07 2** P **P 19 01 25.9 0.0**
comp=Z,5.1nm,0.4s,baz=190,slow=10,SNR=44
ARCES LR LR 19 14 38.3
comp=Z,1μm,18.1s,baz=182,slow=37
**ARCES ARCESS Array B 32.07 2** P **P 19 01 25.1 -0.8**
ARCES IAmb IAmb 19 01 40.1
comp=Z,36nm,1.0s
**SVE Sverdlovsk 32.07 41**⇑*e*P **P 19 01 26.2 +0.2**
SVE *e*S **S 19 06 38.9 +2.2**
SVE pmax pmax
comp=Z,132nm,1.2s
SVE MLR MLR
comp=Z,1μm,13.0s
**TRO Tromso 32.14 358** *e*P **P 19 01 29.0 +2.5**
**UMZA Um Al Zommool 32.26 108** P **P 19 01 28.0 0.0**
UMZA P **P 19 01 28.0 0.0**
**KEV Kevo 32.35 3** P **P 19 01 28.5 +0.2**
KEV pmax pmax
comp=Z,86nm,1.5s
**KEV Kevo 32.35 3** P **P 19 01 28.5 +0.2**
**KEV Kevo 32.35 3** ⇑P **P 19 01 28.6 +0.2**
**FURI Furi 32.40 148** P **P 19 01 27.5 -2.1**
**KOWA Kowa 32.44 232** P **P 19 01 28.6 -1.1**
KOWA IAmb IAmb 19 01 41.5
comp=Z,35nm,1.2s
**HRA Herat 32.73 83** P **P 19 01 29.5 -2.8**
**ARQ Araqi 32.95 106** P **P 19 01 34.6 +0.6**
SNR=12
ARQ P **P 19 01 34.6 +0.6**
SNR=12
**HOQ Hoqain 33.42 104** P **P 19 01 38.2 +0.1**
SNR=8.3
**BSY Bisya 33.80 106** P **P 19 01 41.7 +0.3**
BSY P **P 19 01 41.7 +0.3**
**DOK Doka 33.99 115** P **P 19 01 43.5 +0.4**
DOK P **P 19 01 43.5 +0.4**
**BIDO Bidbid 34.08 104** P **P 19 01 45.2 +1.3**
**WHFO Wadi Hawf 34.19 116** P **P 19 01 45.2 +0.2**
WHFO P **P 19 01 45.2 +0.2**
**ABTO Aybut 34.23 117** P **P 19 01 46.1 +0.7**
ABTO P **P 19 01 46.1 +0.7**
**SMDO Samad 34.27 105** P **P 19 01 45.6 -0.1**
SNR=17
SMDO P **P 19 01 45.6 -0.1**
SNR=17
**JMDO Jabal Madar 34.70 106** P **P 19 01 51.1 +1.8**
**RBK Rabkut 34.78 116** P **P 19 01 51.0 +1.0**
SNR=5.1
**DMTO DMTO 35.17 115** P **P 19 01 53.4 0.0**
**WBK Wadi Bani Khal 35.23 104** P **P 19 01 54.3 +0.5**
WBK P **P 19 01 54.3 +0.5**
**MHTO MHTO 35.38 108** P **P 19 01 55.4 +0.2**
SNR=14
MHTO P **P 19 01 55.4 +0.2**
SNR=14
**SHAO Shalim 35.46 114** P **P 19 01 57.3 +1.4**
SHAO P **P 19 01 57.3 +1.4**
**SHAO Shalim 35.46 114** *i* P **P 19 01 56.2 +0.4**
SNR=6.6
**JLN Jalan Bani Buh 35.82 105** P **P 19 01 59.9 +1.0**
SNR=12
JLN P **P 19 01 59.9 +1.0**
SNR=12
**LODK Lodwar 36.22 157** P **P 19 02 03.0 +0.6**
LODK IAmb IAmb 19 02 14.7
comp=Z,25nm,0.9s
**LODK Lodwar 36.22 157** P **P 19 02 04.1 +1.7**
SNR=11
**BRVK Borovoye 36.69 49***d* iP **P 19 02 06.0 0.0**
BRVK pmax pmax
comp=Z,95nm,1.0s
**BRVK Borovoye 36.69 49** P **P 19 02 06.1 +0.1**
**BRVK Borovoye 36.69 49** P **P 19 02 06.6 +0.6**
**BRVK Borovoye 36.69 49** ⇓P **P 19 02 06.3 +0.3**
**BVAR Borovoye Array 36.75 49** P **P 19 02 06.7 +0.2**
comp=Z,18nm,0.6s,baz=347,slow=4.6,SNR=146
**IUG Iuzhnay 36.93 67** *e*P **P 19 02 06.8 -1.6**
**IUG Iuzhnay 36.93 67** *e*P **P 19 02 06.8 -1.6**
baz=58
**JMIC Jan Mayen 36.99 344** LR LR 19 18 22.0
comp=Z,663nm,19.1s,baz=135,slow=38
**BORG Borgarnes 37.11 331** LR LR 19 18 06.5
comp=Z,644nm,21.5s,baz=129,slow=37
**KKAR Karatay Array 37.13 66** P **P 19 02 08.1 -1.9**
**KKAR Karatay Array 37.13 66** P **P 19 02 08.1 -1.9**
**KBL Kabul 38.02 80** P **P 19 02 13.7 -4.2**
KBL pmax pmax
comp=Z,5.0nm,0.9s
**KBL Kabul 38.02 80** P **P 19 02 13.7 -4.2**
**BRZS Berezniki 38.07 54** *e*P **P 19 02 15.8 -2.0**
**BRZS Berezniki 38.07 54** *e*P **P 19 02 15.8 -2.0**
baz=55
**SOCY Socotra 38.32 123** P **P 19 02 18.6 -1.8**
**SOCY Socotra 38.32 123** P **P 19 02 18.9 -1.4**
**SOCY Socotra 38.32 123** ⇓P **P 19 02 19.1 -1.2**
**MBAR Mbarara 38.89 166** P **P 19 02 24.4 -0.7**
comp=Z,2.0nm,0.4s,baz=316,slow=3.0,SNR=7.4
MBAR LR LR 19 20 01.0
comp=Z,2μm,21.4s,baz=338,slow=39
**MBAR Mbarara 38.89 166***d e*P **P 19 02 26.4 +1.2**
MBAR pmax pmax
comp=Z,19nm,1.7s
**MBAR Mbarara 38.89 166** P **P 19 02 23.3 -1.8**
**DBIC Dimbokro 39.15 225** P **P 19 02 26.9 -0.2**
comp=Z,20nm,0.9s,baz=37,slow=8.7,SNR=21
DBIC LR LR 19 20 39.2
comp=Z,633nm,18.1s,baz=42,slow=39
**DBIC Dimbokro 39.15 225** *e*P **P 19 02 27.1 0.0**
**DBIC Dimbokro 39.15 225** P **P 19 02 27.0 -0.2**
**DBIC Dimbokro 39.15 225** P **P 19 02 26.5 -0.6**
DBIC IAmb IAmb 19 02 46.0
comp=Z,29nm,0.9s
**DBIC Dimbokro 39.15 225** ⇑P **P 19 02 27.2 +0.1**
**TIC Toumodi 39.26 225** *e*P **P 19 02 27.7 -0.4**
**KIC Kosan Boka 39.34 224** *e*P **P 19 02 28.5 -0.2**
comp=Z,32nm,0.8s
**BTLS Baital 39.38 62** *e*P **P 19 02 27.0 -1.8**
**BTLS Baital 39.38 62** *e*P **P 19 02 27.1 -1.8**
baz=62
**EKS2 Erkin-Say 39.58 66** P **P 19 02 30.9 +0.2**
SNR=37
**LIC Lamto 39.61 225** *e*P **P 19 02 30.8 -0.2**
comp=Z,120nm,0.7s
**HSPB Hornsund (broa 39.61 358** *e*P **P 19 02 33.2 +2.9**
**AML Almayashu 39.62 67** P **P 19 02 32.2 +0.9**
SNR=14
**AML Almayashu 39.62 67** P **P 19 02 32.2 +0.9**
**AML Almayashu 39.62 67** *i* P **P 19 02 32.2 +0.9**
SNR=14
**USP Ospenovka 39.99 65** P **P 19 02 33.5 -0.5**
SNR=6.0
**SCO Scoresbysund 40.09 339** *i* P P 19 02 42.6 +8.3
SCO IAmb IAmb 19 02 46.7
comp=Z,11nm,0.9s
**AAK Ala-Archa 40.10 66** P **P 19 02 35.6 +0.5**
comp=Z,22nm,0.9s,baz=263,slow=4.4,SNR=26
AAK LR LR 19 23 35.4
comp=Z,554nm,18.8s,baz=273,slow=43
**AAK Ala-Archa 40.10 66** P **P 19 02 35.2 +0.2**
SNR=17
**AAK Ala-Archa 40.10 66***d* iP **P 19 02 34.6 -0.5**
AAK pmax pmax
comp=Z,26nm,1.0s
**AAK Ala-Archa 40.10 66** P **P 19 02 34.5 -0.5**
**AAK Ala-Archa 40.10 66** P **P 19 02 35.1 +0.1**

AAK P **P** **19 02 35.1 +0.1**
**AAK Ala-Archa 40.10 66** ⇓P **P** **19 02 35.1 +0.1**
**AAK Ala-Archa 40.10 66** *i* P **P** **19 02 35.2 +0.2**
SNR=40
**UCH Uchtor 40.19 66** P **P** **19 02 36.2 0.0**
SNR=8.7
**CHMS Chumysh 40.22 65** P **P** **19 02 35.8 -0.1**
SNR=23
**KBK Karagaybulak 40.42 66** P **P** **19 02 37.9 +0.2**
SNR=14
**SPITS Spitsbergen Ar 40.76 358** P **P** **19 02 41.7 +1.8**
comp=Z,8.6nm,0.5s,baz=164,slow=19,SNR=22
SPITS LR LR 19 21 10.0
comp=Z,1μm,20.6s,baz=130,slow=38
**TKM2 Tokmak 2 40.84 65** P **P** **19 02 41.2 -0.1**
SNR=13
**KMBO Kilima Mbogo 41.10 156** P **P** **19 02 44.6 +1.0**
comp=Z,1.7nm,0.5s,baz=358,slow=6.9,SNR=6.6
KMBO LR LR 19 21 13.8
comp=Z,711nm,19.3s,baz=345,slow=38
**KMBO Kilima Mbogo 41.10 156** *eP* **P** **19 02 43.6 0.0**
KMBO IAmb IAmb 19 02 55.5
comp=Z,45nm,1.0s
**KMBO Kilima Mbogo 41.10 156** P **P** **19 02 43.4 -0.2**
**KMBO Kilima Mbogo 41.10 156** P **P** **19 02 45.8 +2.2**
KMBO P **P** **19 02 45.8 +2.2**
**KMBO Kilima Mbogo 41.10 156** ⇓P **P** **19 02 45.9 +2.2**
**KUU Kurty 41.19 63** *eP* **P** **19 02 42.3 -1.5**
KUU pmax pmax
comp=Z,33nm,1.2s
**KUU Kurty 41.19 63** *eP* **P** **19 02 42.4 -1.5**
comp=Z,33nm,1.2s,baz=64
**NIL Nilore 41.61 79** P **P** **19 02 47.0 -0.5**
NIL pmax pmax
comp=Z,18nm,0.9s
**NIL Nilore 41.61 79** P **P** **19 02 47.0 -0.5**
**NIL Nilore 41.61 79** P **P** **19 02 47.6 +0.2**
NIL P **P** **19 02 47.6 +0.2**
**CHKK Chushkaly 41.66 63** *eP* **P** **19 02 46.5 -1.2**
baz=64
**AAA Alma-Ata 41.73 64** *eP* **P** **19 02 47.5 -0.9**
AAA pmax pmax
comp=Z,15nm,0.8s
**AAA Alma-Ata 41.73 64** *eP* **P** **19 02 47.5 -0.9**
comp=Z,15nm,0.8s,baz=64
**TNSS Tian-Shan 41.79 65** *eP* **P** **19 02 47.9 -1.3**
baz=65
**KURBB Kurchatov Arra 41.79 53** LR LR 19 22 54.7
comp=Z,672nm,19.3s,baz=262,slow=40
**DBG Daneborg 41.83 344** *i* P P 19 02 54.2 +5.6
DBG IAmb IAmb 19 03 02.7
comp=Z,2.2nm,1.0s
**MDOK Medeo 41.84 64** *eP* **P** **19 02 47.9 -1.4**
**MDOK Medeo 41.84 64** *eP* **P** **19 02 48.0 -1.4**
baz=64
**KURK Kurchatov 41.84 53***d i*P **P** **19 02 48.3 -0.8**
KURK pmax pmax
comp=Z,115nm,1.3s
**KURK Kurchatov 41.84 53** P **P** **19 02 48.2 -0.8**
**KURK Kurchatov 41.84 53** P **P** **19 02 49.0 -0.1**
**KURK Kurchatov 41.84 53** ⇓P **P** **19 02 48.6 -0.4**
**KSH Kashi 41.90 70** P **P** **19 02 48.8 -1.1**
KSH sP pP 19 02 56.4 -0.4
KSH PcP **PcP** **19 09 02.4 -2.2**
KSH S **S** **19 09 02.4 -4.5**
KSH ScS **ScS** **19 12 48.6 -2.9**
KSH pmax pmax
comp=Z,8.0nm,1.0s
KSH LR LR
comp=Z,480nm,18.9s
KSH LR LR
comp=Z,370nm,16.1s
KSH LR LR
comp=Z,450nm,19.2s
**TDK Taldyqorghan 42.44 61** *eP* **P** **19 02 52.3 -1.8**
**TDK Taldyqorghan 42.44 61** *eP* **P** **19 02 52.3 -1.8**
baz=62
**KIBK Kibwezi 42.50 156** P **P** **19 02 56.9 +2.1**
**TARG Taragay, Kyrgy 42.70 66** P **P** **19 02 57.4 +0.7**
**ZHN Zhinishke 42.83 64** *eP* **P** **19 02 55.3 -2.0**
**ZHN Zhinishke 42.83 64** *eP* **P** **19 02 55.4 -2.0**
baz=64
**SATY Saty 42.83 64** *eP* **P** **19 02 56.1 -1.3**
**SATY Saty 42.83 64** *eP* **P** **19 02 56.1 -1.3**
baz=64
**SEM Semipalatinsk 42.91 53** *eP* **P** **19 02 56.5 -1.5**
SEM pmax pmax
comp=Z,19nm,0.8s
**SEM Semipalatinsk 42.91 53** *eP* **P** **19 02 56.6 -1.5**
comp=Z,19nm,0.8s,baz=53
**KPKS Kokpek 42.94 64** *eP* **P** **19 02 56.4 -1.8**
**KPKS Kokpek 42.94 64** *eP* **P** **19 02 56.5 -1.8**
baz=64
**DAG Danmarks Havn 43.09 347** *eP* **P** **19 02 59.8 +1.0**
DAG IAmb IAmb 19 03 09.9
comp=Z,7.3nm,0.7s
**DAG Danmarks Havn 43.09 347** ⇑P **P** **19 03 00.1 +1.3**
**UZB Uzynbulak 43.25 64** *eP* **P** **19 02 59.8 -1.0**
**UZB Uzynbulak 43.25 64** *eP* **P** **19 02 59.8 -1.0**
baz=64
**MAKZ Makanchi 44.56 58** P **P** **19 03 09.9 -1.2**
MAKZ pmax pmax
comp=Z,16nm,0.9s
**MAKZ Makanchi 44.56 58** P **P** **19 03 09.9 -1.2**
**MAKZ Makanchi 44.56 58** ⇓P **P** **19 03 10.5 -0.6**
**MK31 Makanchi Array 44.77 58** P **P** **19 03 11.4 -1.5**
MK31 pmax pmax
comp=Z,26nm,0.6s
**MK31 Makanchi Array 44.77 58** P **P** **19 03 11.4 -1.5**
MK31 IAmb IAmb 19 03 16.1
comp=Z,26nm,0.6s
**MKAR Makanchi Array 44.77 58** P **P** **19 03 12.3 -0.6**
comp=Z,26nm,0.5s,baz=272,slow=7.5,SNR=298
MKAR LR LR 19 24 54.7
comp=Z,645nm,20.8s,baz=280,slow=40
**MKAR Makanchi Array 44.77 58** P **P** **19 03 11.8 -1.0**
**ICESG Greenland Ices 45.30 334** *i* P **P** **19 03 19.0 +1.9**
ICESG IAmb IAmb 19 03 30.3
comp=Z,19nm,0.9s
**ZAA0 Zalesovo Array 45.35 48** P **P** **19 03 16.5 -0.8**
**ZALV Zalesovo Beam 45.35 48** P **P** **19 03 16.8 -0.6**
comp=Z,46nm,0.5s,baz=272,slow=8.6,SNR=214
ZALV LR LR 19 23 37.8
comp=Z,371nm,20.0s,baz=276,slow=38
**ZALV Zalesovo Beam 45.35 48** P **P** **19 03 16.3 -1.0**
**SUMG Summit 45.73 339** P **P** **19 03 20.1 -0.4**
SUMG pmax pmax
comp=Z,50nm,1.2s
**SUMG Summit 45.73 339** *i* P **P** **19 03 22.6 +2.0**
SUMG IAmb IAmb 19 03 31.7
comp=Z,10nm,1.1s
**SUMG Summit 45.73 339** P **P** **19 03 20.1 -0.4**
SUMG IAmb IAmb 19 03 32.3
comp=Z,50nm,1.2s
**SUMG Summit 45.73 339** ⇑P **P** **19 03 23.5 +3.0**
**NOR Nord 46.19 353** *i* P **P** **19 03 23.7 +0.1**
NOR IAmb IAmb 19 03 35.1
comp=Z,16nm,0.6s
**NOR Nord 46.19 353** ⇑P **P** **19 03 24.1 +0.6**
NOR ⇑P **P** **19 03 24.2 +0.6**
**ZSN Zaisan 46.37 57** *eP* **P** **19 03 23.8 -1.6**
**ZSN Zaisan 46.37 57** *eP* **P** **19 03 23.9 -1.6**
baz=57
**NDI New Delhi 46.70 84** *eP* **P** **19 03 28.0 -0.2**
**NRIK Noril'sk 46.88 26** P **P** **19 03 29.9 +0.8**
comp=Z,42nm,1.0s,baz=245,slow=5.0,SNR=20
NRIK LR LR 19 25 08.3
comp=Z,1μm,20.0s,baz=260,slow=39
**NRIK Noril'sk 46.88 26***d i*P **P** **19 03 29.5 +0.4**
NRIK pmax pmax
comp=Z,46nm,1.0s
**NRIK Noril'sk 46.88 26** P **P** **19 03 29.6 +0.5**
NRIK IAmb IAmb 19 03 33.6
comp=Z,39nm,0.9s
**DY2G Dye2 47.50 330** *i* P P 19 03 40.8 +6.5
DY2G IAmb IAmb 19 03 45.5
comp=Z,22nm,0.9s
**DGZ Jazzator, Alta 47.59 53***d i*P **P** **19 03 34.7 -0.4**
DGZ pmax pmax
comp=Z,33nm,0.7s
**POO Poona 49.08 98** *eP* **P** **19 03 44.0 -2.8**
**WMQ Urumqi 49.19 61** *eP* **P** **19 03 47.3 -0.1**
WMQ pP sP 19 03 56.1 -1.1
WMQ pmax pmax
comp=Z,23nm,1.7s
WMQ pmax pmax
comp=Z,200nm,5.9s
WMQ LR LR
comp=Z,800nm,12.7s
WMQ LR LR
comp=Z,510nm,14.5s
WMQ LR LR
comp=Z,510nm,18.1s
**SFJD Kangerlussuaq 49.23 330** LR LR 19 26 36.9
comp=Z,742nm,19.0s,baz=86,slow=38
**KRAR Krasnoyarsk 49.68 44** ⇑*i*P **P** **19 03 48.9 -2.0**
**NEEM North Greenlan 49.91 344** *i* P **P** **19 03 54.4 +1.6**
NEEM IAmb IAmb 19 04 07.1
comp=Z,11nm,0.7s
**KLRI Killari 51.50 96** *eP* **P** **19 04 03.8 -1.4**
**PYUN Piuthan 51.51 82** *eP* **P** **19 04 04.4 -0.9**
comp=Z,114nm,0.9s
**DANN Dangsing 52.00 81** *eP* **P** **19 04 08.4 -0.7**
comp=Z,182nm,0.7s
**KOLN Koldanda 52.14 82** *eP* **P** **19 04 08.9 -1.1**
comp=Z,47nm,0.6s
**SRSP Sriramsagar 52.41 94** *eP* **P** **19 04 10.7 -1.2**
**GKN Gorkha 52.84 81** *eP* **P** **19 04 14.0 -1.2**
comp=Z,56nm,0.7s
**LSZ Lusaka 52.93 172** LR LR 19 28 23.3
comp=Z,777nm,20.3s,baz=2.0,slow=38
**LSZ Lusaka 52.93 172** *eP* **P** **19 04 16.3 +0.6**
LSZ IAmb IAmb 19 04 27.0
comp=Z,186nm,1.0s
**LSZ Lusaka 52.93 172** P **P** **19 04 15.3 -0.4**
LSZ pmax pmax
comp=Z,21nm,1.0s
**LSZ Lusaka 52.93 172** P **P** **19 04 15.3 -0.4**
LSZ IAmb IAmb 19 04 27.3
comp=Z,21nm,1.0s
**RPR Rampur 53.20 94** *eP* **P** **19 04 16.3 -1.4**
**DMN Daman 53.39 81** *eP* **P** **19 04 18.8 -0.6**
**HYBB Hyderabad (bro 53.40 96** *eP* **P** **19 04 18.2 -1.1**
**KKN Kakani 53.45 81** *eP* **P** **19 04 18.5 -1.2**
comp=Z,51nm,0.8s
**PKIN Phulchoki 53.64 81** *eP* **P** **19 04 19.7 -1.5**
**PKI Pulchoki 53.65 81** *eP* **P** **19 04 19.9 -1.5**
**CUPL Choutuppal 53.76 96** *eP* **P** **19 04 20.4 -1.5**
**URV Uravakonda 53.79 99** *eP* **P** **19 04 21.6 -0.6**
**GUN Gumba 53.86 80** *eP* **P** **19 04 21.7 -1.2**
comp=Z,44nm,0.5s
**TULEG Thule 53.95 343** P **P** **19 04 22.7 +0.3**
**JIRN Jiri 54.22 80** *eP* **P** **19 04 24.5 -1.1**
comp=Z,49nm,0.7s
**SRLM Srisailam 54.41 97** *eP* **P** **19 04 25.6 -1.1**
**NJS Nagarjunasagar 54.48 96** *eP* **P** **19 04 25.8 -1.4**
**RCLA Racherla 54.83 98** *eP* **P** **19 04 28.3 -1.4**
**RAMN Ramite 54.88 81** *eP* **P** **19 04 28.5 -1.7**
comp=Z,11nm,0.6s
**ADKI Addanki 55.41 96** *eP* **P** **19 04 32.5 -1.4**
**MOY Mondy 55.41 48** *eP* **P** **19 04 34.0 +0.4**
MOY pmax pmax
comp=Z,24nm,1.8s
**MYLAV Mylavaram 55.42 95** *eP* **P** **19 04 32.8 -1.1**
**ODAN Odare 55.54 81** *eP* **P** **19 04 34.0 -1.0**
**TAPN Taplejung 55.55 80** *eP* **P** **19 04 33.9 -1.3**
comp=Z,20nm,0.5s
**PVM Polavaram 55.93 94** *eP* **P** **19 04 36.8 -0.8**
**EUNU Eureka 56.29 349** P **P** **19 04 40.1 +0.8**
EUNU IAmb IAmb 19 04 51.2
comp=Z,25nm,0.9s
**SKHT Srikalahasti 56.42 99** *eP* **P** **19 04 39.9 -1.2**
**TSUM Tsumeb 56.62 185** LR LR 19 31 06.1
comp=Z,2μm,19.8s,baz=0.0,slow=38
**TSUM Tsumeb 56.62 185** *eP* **P** **19 04 41.4 -1.1**
**TSUM Tsumeb 56.62 185** P **P** **19 04 42.5 0.0**
**GOMU GeErMu 57.01 67** P **P** **19 04 45.3 -0.2**
GOMU pP pP 19 04 48.3 -4.4
GOMU sP sP 19 04 53.4 -2.0
GOMU S **S** **19 12 41.3 +2.2**
GOMU pmax pmax
comp=Z,5.0nm,0.7s
GOMU LR LR
comp=Z,180nm,17.3s
GOMU LR LR
comp=Z,220nm,17.7s
GOMU LR LR
comp=Z,270nm,17.3s
**LSA Lhasa 57.13 76** Pg **P** **19 04 46.3 -0.3**
LSA pmax pmax
comp=Z,39nm,0.7s
LSA smax smax
comp=N,40nm,0.7s
LSA smax smax
comp=E,21nm,1.0s
**IRK Irkutsk 57.13 47** *eP* **P** **19 04 44.8 -0.9**
IRK pmax pmax
comp=Z,35nm,2.9s
**CHLP Challavanipeta 57.17 91** *eP* **P** **19 04 45.1 -1.3**
**ZAK Zakamensk 57.20 49** *eP* **P** **19 04 46.4 0.0**
ZAK pmax pmax
comp=Z,24nm,1.0s
**BLWY Bulawayo 57.78 172** *eP* P 19 04 56.1 +5.4
BLWY IAmb IAmb 19 05 01.8
comp=Z,44nm,1.0s
**MATP Matopo 58.05 173** LR LR 19 32 51.1
comp=Z,223nm,18.8s,baz=354,slow=39
**GTA Gaotai 59.23 62** *eP* **P** **19 05 00.0 -0.8**
GTA pP pP 19 05 03.3 -4.6
GTA sP sP 19 05 06.5 -4.2
GTA S **S** **19 13 06.3 -1.3**
GTA pmax pmax
comp=Z,11nm,1.2s
GTA pmax pmax
comp=Z,140nm,6.0s
GTA LR LR
comp=Z,360nm,20.0s
GTA LR LR
comp=Z,310nm,21.1s
GTA LR LR
comp=Z,380nm,21.4s
**SCHQ Schefferville 59.56 318** P **P** **19 05 03.3 +0.7**
comp=Z,8.8nm,0.6s,baz=69,slow=5.0,SNR=25
**SCHQ Schefferville 59.56 318** P **P** **19 05 03.1 +0.4**
**SHL Shillong 59.69 80** P **P** **19 05 01.7 -2.5**
SHL pmax pmax
comp=Z,45nm,1.2s
**SHL Shillong 59.69 80** P **P** **19 05 01.7 -2.5**
**TIXI Tiksi 59.86 20** ⇑*i*P **P** **19 05 04.7 +0.3**
TIXI pmax pmax
comp=Z,15nm,0.9s
**TIXI Tiksi 59.86 20** P **P** **19 05 03.5 -0.8**
TIXI IAmb IAmb 19 05 17.8
comp=Z,14nm,0.8s
**SONM Songino Array 60.07 51** P **P** **19 05 05.9 -0.5**
comp=Z,19nm,1.0s,baz=282,slow=7.4,SNR=72
SONM LR LR 19 34 28.2
comp=Z,509nm,19.9s,baz=308,slow=40
**SONM Songino Array 60.07 51** P **P** **19 05 05.2 -1.2**
SONM IAmb IAmb 19 05 18.9
comp=Z,19nm,0.9s
**MSNA Messina 60.12 171** *eP* **P** **19 05 06.9 +0.2**
MSNA IAmb IAmb 19 05 14.4
comp=Z,128nm,2.3s
**BOD Bodaibo 60.23 38** *eP* **P** **19 05 06.1 -1.0**
BOD pmax pmax
comp=Z,46nm,0.9s
**ULN Ulaanbaatar 60.46 50***d i*P **P** **19 05 08.3 -0.8**
ULN pmax pmax
comp=Z,21nm,0.8s
**ULN Ulaanbaatar 60.46 50** P **P** **19 05 07.7 -1.4**
ULN IAmb IAmb 19 05 13.0
comp=Z,19nm,0.8s
**ULN Ulaanbaatar 60.46 50** P **P** **19 05 08.7 -0.4**
ULN P **P** **19 05 08.7 -0.4**
**RES Resolute Bay 60.61 344** LR LR 19 33 08.7
comp=Z,618nm,18.5s,baz=92,slow=38
**RES Resolute Bay 60.61 344** P **P** **19 05 10.5 +1.0**
RES pmax pmax
comp=Z,12nm,0.8s
**RES Resolute Bay 60.61 344** P **P** **19 05 10.4 +1.0**
RES IAmb IAmb 19 05 19.1
comp=Z,12nm,0.8s
**PALK Pallekele 61.12 104** LR LR 19 34 17.0
comp=Z,412nm,20.9s,baz=68,slow=39
**PALK Pallekele 61.12 104** P **P** **19 05 14.4 +0.6**
**PALK Pallekele 61.12 104** P **P** **19 05 13.1 -0.7**
**MOPA Mopani 61.45 170** *eP* **P** **19 05 17.8 +2.0**
MOPA IAmb IAmb 19 05 28.1
comp=Z,24nm,0.9s
**LBTB Lobatse 62.37 176** LR LR 19 34 41.7
comp=Z,1μm,20.0s,baz=359,slow=38
**LBTB Lobatse 62.37 176** *eP* **P** **19 05 23.1 +1.0**
LBTB IAmb IAmb 19 05 40.9
comp=Z,23nm,0.9s
**LBTB Lobatse 62.37 176** P **P** **19 05 22.5 +0.5**
LBTB pmax pmax
comp=Z,36nm,1.2s
**LBTB Lobatse 62.37 176** P **P** **19 05 22.4 +0.5**
LBTB IAmb IAmb 19 05 41.7
comp=Z,36nm,1.1s
**LZH Lanzhou 63.58 64** *eP* **P** **19 05 29.8 -0.5**
LZH pP pP 19 05 35.4 -2.1
LZH sP sP 19 05 39.3 -0.9
LZH pmax pmax
comp=Z,16nm,1.1s
LZH pmax pmax
comp=Z,170nm,6.0s
LZH LR LR
comp=Z,490nm,14.4s
LZH LR LR
comp=Z,340nm,12.2s
LZH LR LR
comp=Z,440nm,16.6s
**VOI Vohitsoka 63.69 154** P **P** **19 05 33.5 +2.6**
**VOI Vohitsoka 63.69 154** P P 19 05 43.8 +13
**D62A Allapoint, All 64.17 311** P **P** **19 05 35.3 +1.6**
D62A IAmb IAmb 19 05 52.2
comp=Z,17nm,0.8s
**YAK Yakutsk 65.14 30** P **P** **19 05 39.1 -0.7**
comp=Z,25nm,0.7s,baz=262,slow=0.6,SNR=16
YAK LR LR 19 36 48.1
comp=Z,862nm,18.6s,baz=302,slow=38
**YAK Yakutsk 65.14 30** *eP* **P** **19 05 38.6 -1.1**
YAK *e**PP **pP** **19 05 46.2 -0.7**
YAK *e* 19 06 10.5
YAK *e* 19 08 01.7
YAK *e*S **S** **19 14 22.5 +1.6**
YAK *e**SS sS 19 14 49.6 +17
YAK *e* 19 15 34.9
YAK *e*SS **SS** **19 18 36.5 +3.9**
YAK pmax pmax
comp=Z,42nm,0.9s
YAK pmax pmax
comp=N,2.0nm,0.9s
YAK pmax pmax
comp=E,5.0nm,0.9s
YAK pmax pmax
comp=Z,132nm,4.2s
YAK pmax pmax
comp=N,106nm,4.0s
YAK pmax pmax
comp=E,113nm,4.3s
YAK smax smax
comp=E,47nm,2.3s
YAK smax smax
comp=N,45nm,2.3s
YAK MLR MLR
comp=Z,1μm,23.0s
YAK MLR MLR
comp=N,506nm,23.0s
YAK MLR MLR
comp=E,447nm,20.0s
**YAK Yakutsk 65.14 30** P **P** **19 05 38.4 -1.3**
**UPI Upington 65.60 180** *eP* **P** **19 05 43.1 -0.1**
UPI IAmb IAmb 19 06 01.5
comp=Z,18nm,1.2s
**BTO Baotou 65.66 57** *eP* P 19 05 37.1 -6.6
BTO S **S** **19 14 20.1 -8.1**
BTO LR LR
comp=N,2μm,21.0s
BTO LR LR
comp=E,1μm,20.0s
**BOSA Boshof 65.93 177** P **P** **19 05 45.5 +0.1**
comp=E,2.6nm,0.6s,baz=358,slow=6.5,SNR=9.6
BOSA LR LR 19 37 10.2
comp=E,1μm,19.2s,baz=1.0,slow=38
**BOSA Boshof 65.93 177** *eP* **P** **19 05 46.1 +0.7**
BOSA IAmb IAmb 19 05 54.9
comp=Z,435nm,3.0s
**BOSA Boshof 65.93 177** IAmb IAmb 19 05 58.2
comp=Z,18nm,1.0s
**KEIM Keimoes 65.95 181** *eP* **P** **19 05 46.5 +1.1**
KEIM IAmb IAmb 19 06 06.1
comp=Z,12nm,0.7s
**CD2 Chengdu 66.07 69** ⇑P **P** **19 05 45.9 -0.5**
CD2 S **S** **19 14 33.8 +0.3**
CD2 pmax pmax
comp=Z,20nm,1.0s
**HHC Hu-ho-hao-te 66.55 56** *eP* **P** **19 05 48.9 -0.5**
HHC S **S** **19 14 35.3 -3.9**
HHC pmax pmax
comp=Z,21nm,0.9s
HHC pmax pmax
comp=Z,120nm,5.0s
HHC LR LR
comp=Z,380nm,15.2s
HHC LR LR
comp=Z,390nm,16.5s
HHC LR LR
comp=Z,700nm,16.5s
**PZH PanZhiHua 66.83 74** ⇓P **P** **19 05 50.0 -1.4**
PZH pP **pP** **19 05 59.8 +1.1**
PZH sP **sP** **19 06 01.3 -0.1**
PZH S **S** **19 14 37.9 -5.0**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,140nm,5.6s
PZH LR LR
comp=Z,740nm,22.6s
PZH LR LR
comp=Z,600nm,20.4s
PZH LR LR
comp=Z,760nm,21.6s
**HIA Hailar 67.25 45** P **P** **19 05 53.1 -0.5**
HIA pmax pmax
comp=Z,30nm,1.0s
**HIA Hailar 67.25 45** P **P** **19 05 53.1 -0.5**
HIA IAmb IAmb 19 05 57.5
comp=Z,30nm,1.0s
**XLT XiLinHaoTe 67.88 51** *eP* **P** **19 05 57.1 -0.7**
XLT pP pP 19 06 01.6 -3.4
XLT sP sP 19 06 06.1 -1.6
XLT PcP **PcP** **19 06 24.1 -0.1**
XLT PcS 19 10 29.0
XLT sS sS 19 15 08.8 +1.6
XLT pmax pmax
comp=Z,13nm,0.9s
XLT pmax pmax
comp=Z,250nm,4.8s
XLT LR LR
comp=Z,740nm,16.0s
XLT LR LR
comp=Z,500nm,13.5s
**TRQ Mont Tremblant 67.89 312** P **P** **19 05 58.3 +0.5**
TRQ IAmb IAmb 19 06 15.1
comp=Z,14nm,0.9s
**XAN Xi'an 68.21 63** ⇓P **P** **19 05 59.0 -1.0**
XAN pP pP 19 06 03.6 -3.6
XAN sP sP 19 06 05.8 -4.1
XAN pmax pmax
comp=Z,18nm,1.2s
XAN LR LR
comp=Z,440nm,19.2s
XAN LR LR
comp=Z,390nm,13.7s
XAN LR LR
comp=Z,310nm,18.6s
**A36M Sachs Harbour 68.29 349** P **P** **19 05 60.0 +0.3**
**A36M Sachs Harbour 68.29 349** P P 19 06 05.0 +5.4
baz=28
**KMI Kunming 68.32 74** ⇑P **P** **19 06 00.0 -1.0**
KMI pP pP 19 06 05.9 -2.3
KMI pmax pmax
comp=Z,8.0nm,1.1s
**VLDQ Val d'Or 68.56 315** P **P** **19 06 02.9 +1.1**
VLDQ IAmb IAmb 19 06 16.0
comp=Z,20nm,0.9s
**CVNA Calvinia 68.74 182** *eP* P 19 06 09.4 +6.3
CVNA IAmb IAmb 19 06 14.6
comp=Z,24nm,1.0s
**ZEA Zeya 68.74 38** *eP* **P** **19 06 05.8 +3.0**
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax

comp=Z,10.0nm,0.8s
ZEA MLR MLR
comp=N,600nm,16.0s
ZEA MLR MLR
comp=Z,500nm,16.0s
**CHTO Chiang Mai 68.80 82** P **P** **19 06 02.0 -1.7**
CHTO pmax pmax
comp=Z,30nm,1.0s
**CHTO Chiang Mai 68.80 82** P **P** **19 06 02.0 -1.7**
CHTO IAmb IAmb 19 06 17.5
comp=Z,30nm,0.9s
**CHTO Chiang Mai 68.80 82** P **P** **19 06 03.1 -0.7**
**CM31 Chiang Mai Arr 68.99 82** P **P** **19 06 03.5 -1.5**
**CMAR Chiang Mai Arr 68.99 82** P **P** **19 06 04.1 -0.9**
comp=Z,14nm,0.7s,baz=302,slow=7.9,SNR=117
**CMAR Chiang Mai Arr 68.99 82** P **P** **19 06 03.2 -1.7**
**NBCL Cascavel-CE 69.45 247** *e*P **P** **19 06 11.3 +3.5**
**GRAN Grantham 69.53 180** *e*P P 19 06 14.7 +6.8
GRAN IAmb IAmb 19 06 29.5
comp=Z,18nm,1.2s
**SUR Sutherland 69.61 181** LR LR 19 39 21.7
comp=Z,1µm,19.1s,baz=7.0,slow=38
**BJI Beijing 69.98 55** P **P** **19 06 10.1 -0.6**
BJI pP **pP** **19 06 13.3 -4.7**
BJI sP **sP** **19 06 16.4 -4.3**
BJI PcP **PcP** **19 06 33.0 +0.1**
BJI pmax pmax
comp=Z,10.0nm,0.8s
BJI LR LR
comp=Z,560nm,20.9s
BJI LR LR
comp=Z,270nm,20.9s
BJI LR LR
comp=Z,370nm,21.1s
**BJT Baijiatuau 69.99 55** P **P** **19 06 09.6 -1.2**
BJT pmax pmax
comp=Z,8.0nm,0.7s
**BJT Baijiatuau 69.99 55** P **P** **19 06 09.6 -1.2**
**FCC Fort Churchill 70.25 330** P **P** **19 06 13.3 +1.2**
FCC pmax pmax
comp=Z,15nm,0.8s
**FCC Fort Churchill 70.25 330** P **P** **19 06 13.3 +1.2**
FCC IAmb IAmb 19 06 22.9
comp=Z,15nm,0.8s
**HNS HongShan 70.43 58** ⇓P **P** **19 06 12.8 -0.8**
HNS *e*S **S** **19 15 27.9 +2.8**
HNS pmax pmax
comp=Z,9.0nm,1.0s
HNS LR LR
comp=Z,360nm,19.5s
HNS LR LR
comp=Z,350nm,20.6s
**C36M Paulatuk 70.45 348** P **P** **19 06 13.3 +0.3**
C36M IAmb IAmb 19 06 24.5
comp=Z,26nm,1.0s
**C36M Paulatuk 70.45 348** P P 19 06 18.0 +5.0
baz=28
**GYA Guiyang 70.58 71** ⇑P **P** **19 06 17.1 +2.3**
GYA pmax pmax
comp=Z,11nm,1.0s
**NBLV Livramento - P 70.60 244** *e*P **P** **19 06 17.2 +2.4**
**ENH Enshi 70.61 66** P **P** **19 06 13.4 -1.4**
ENH IAmb IAmb 19 06 32.8
comp=Z,17nm,0.8s
**BILL Bilibino 71.37 13** *c i*P **P** **19 06 18.6 -0.1**
BILL *i* 19 06 35.8
BILL *i* S SKiKP 19 16 09.2 +12
BILL pmax pmax
comp=Z,32nm,1.7s
BILL MLR MLR
comp=Z,523nm,17.0s
**BILL Bilibino 71.37 13** P **P** **19 06 18.5 -0.1**
**SADO Sadowa 71.39 312** LR LR 19 37 16.5
comp=Z,357nm,18.1s,baz=87,slow=36
**NBAN Anadia - AL 71.75 242** *e*P **P** **19 06 24.7 +2.9**
**NBPS Pedro II - PI 71.89 249** *e*P **P** **19 06 25.5 +2.7**
**NBMA Muriti-CE 71.92 245** *e*P **P** **19 06 25.9 +3.1**
**SEY Seymchan 72.33 21** P **P** **19 06 25.2 +0.7**
comp=Z,10nm,0.8s,baz=309,slow=4.8,SNR=41
SEY LR LR 19 42 51.7
comp=Z,1µm,18.3s,baz=317,slow=40
**SEY Seymchan 72.33 21** ⇓*e*P **P** **19 06 24.2 -0.4**
**TIA Tai'an 72.71 57** ⇑P **P** **19 06 26.5 -0.8**
TIA pmax pmax
comp=Z,14nm,0.5s
**INK Inuvik 72.81 351** LR LR 19 43 45.4
comp=Z,225nm,18.3s,baz=15,slow=40
**INK Inuvik 72.81 351** P **P** **19 06 27.8 +0.5**
INK pmax pmax
comp=Z,10.0nm,0.8s
**INK Inuvik 72.81 351** P **P** **19 06 27.8 +0.5**
**INK Inuvik 72.81 351** P P 19 06 31.8 +4.5
baz=20
**BNX BinXian 73.53 45** ⇑P **P** **19 06 31.1 -0.9**
BNX pmax pmax
comp=Z,52nm,1.2s
BNX pmax pmax
comp=Z,460nm,5.4s
**CN2 Changchun 73.57 47** *e*P **P** **19 06 31.8 -0.4**
CN2 *e*S **SKiKP** **19 15 58.8 -2.2**
CN2 pmax pmax
comp=Z,20nm,0.8s
CN2 pmax pmax
comp=Z,200nm,4.0s
CN2 LR LR
comp=Z,600nm,13.0s
CN2 LR LR
comp=Z,600nm,13.0s
CN2 LR LR
comp=Z,1µm,15.0s
**KLR Kul'dur 73.70 40** LR LR 19 42 45.7
comp=Z,724nm,18.1s,baz=324,slow=39
**KLR Kul'dur 73.70 40** ⇓*e*P **P** **19 06 32.3 -0.6**
KLR pmax pmax
comp=Z,19nm,0.8s
**NBLA Lagarto - SE 73.73 242** *e*P **P** **19 06 36.1 +2.6**
**TOLK Toolik Lake Re 73.89 357** P **P** **19 06 32.8 -1.0**
TOLK IAmb IAmb 19 06 40.4
comp=Z,19nm,0.8s
**TOLK Toolik Lake Re 73.89 357** P P 19 06 39.4 +5.7
baz=7.1
**YKA Yellowknife Ar 74.28 341** P **P** **19 06 36.7 +0.6**
comp=Z,6.0nm,0.7s,baz=34,slow=5.5,SNR=36
YKA LR LR 19 41 36.1
comp=Z,734nm,19.0s,baz=58,slow=38
**YKA Yellowknife Ar 74.28 341** P **P** **19 06 36.2 +0.1**
**MA2 Magadan 74.43 24** *d i*P **P** **19 06 37.3 +0.3**
MA2 pmax pmax
comp=Z,46nm,1.0s
**MA2 Magadan 74.43 24** P **P** **19 06 35.7 -1.3**
**MDP Montagnes des 74.55 264** LR LR 19 39 10.7
comp=Z,184nm,19.0s,baz=66,slow=36
**RDOG Red Dog Mine 74.62 2** P **P** **19 06 37.3 -0.7**
**RDOG Red Dog Mine 74.62 2** P P 19 06 43.1 +5.2
baz=356,SNR=8.4
**MCWV Mont Chateau 74.77 308** P **P** **19 06 37.2 -2.2**
MCWV IAmb IAmb 19 06 56.2
comp=Z,18nm,0.8s
**BMAR Burnt Mountain 74.79 355** P **P** **19 06 40.1 +1.0**
**GRNR Gornyy 75.00 37** ⇓*i*P **P** **19 06 40.5 0.0**
GRNR pmax pmax
comp=Z,4.0nm,1.0s
GRNR MLR MLR
comp=E,450nm,12.0s
GRNR MLR MLR
comp=N,140nm,13.0s
**COLD Coldfoot 75.33 357** P **P** **19 06 42.3 +0.2**
COLD IAmb IAmb 19 06 56.6
comp=Z,22nm,1.0s
**COLD Coldfoot 75.33 357** P P 19 06 47.7 +5.6
baz=6.6
**NBPN Ponto Novo - B 75.33 244** *e*P **P** **19 06 45.9 +3.0**
**MDJ Mudanjiang 75.44 45** P **P** **19 06 44.5 +1.4**
MDJ pmax pmax
comp=Z,15nm,1.6s
MDJ pmax pmax
comp=Z,360nm,3.5s
**FYU Fort Yukon 75.69 355** P **P** **19 06 44.6 +0.5**
FYU IAmb IAmb 19 06 51.3
comp=Z,30nm,0.9s
**WRGLY Wrigley 75.76 345** P P 19 06 51.0 +6.5
baz=28
**FFC Flin Flon 76.19 330** P **P** **19 06 46.9 -0.3**
FFC pmax pmax
comp=Z,13nm,0.8s
**FFC Flin Flon 76.19 330** P **P** **19 06 46.9 -0.3**

**NJ2 Nanjing 76.26 60** *e*P **P** **19 06 50.4 +2.4**
NJ2 pmax pmax
comp=Z,17nm,0.7s
**H24K Noodor Dome 76.59 356** P P 19 06 54.9 +5.6
baz=8.4
**Q52A Bidwell 76.69 309** P **P** **19 06 48.2 -2.2**
Q52A IAmb IAmb 19 07 04.3
comp=Z,18nm,0.9s
**H23K Yukon River 76.70 356** P **P** **19 06 49.4 -0.5**
H23K IAmb IAmb 19 06 56.9
comp=Z,22nm,0.9s
**H23K Yukon River 76.70 356** P P 19 06 56.1 +6.1
baz=7.1
**IMAR Indian Mountai 76.70 358** P **P** **19 06 50.1 +0.2**
**PRP Porcupine Dome 76.75 355** P **P** **19 06 50.4 0.0**
PRP IAmb IAmb 19 07 00.6
comp=Z,17nm,1.0s
**PRP Porcupine Dome 76.75 355** P P 19 06 56.0 +5.6
baz=10,SNR=13
**ULM Lac du Bonnet 76.76 324** P **P** **19 06 50.1 -0.4**
comp=Z,7.5nm,0.8s,baz=172,slow=1.4,SNR=4.2
ULM LR LR 19 40 45.8
comp=Z,654nm,20.6s,baz=45,slow=36
**ULM Lac du Bonnet 76.76 324** P **P** **19 06 51.3 +0.8**
ULM pmax pmax
comp=Z,40nm,1.2s
**ULM Lac du Bonnet 76.76 324** P **P** **19 06 51.3 +0.8**
ULM IAmb IAmb 19 07 01.6
comp=Z,40nm,1.2s
**TNA Tin City 76.91 4** P **P** **19 06 51.3 +0.2**
TNA IAmb IAmb 19 06 56.5
comp=Z,28nm,0.9s
**TNA Tin City 76.91 4** P P 19 06 56.2 +5.2
baz=352,SNR=16
**H21K Melozitna Rive 77.00 358** P **P** **19 06 52.2 +0.6**
**H21K Melozitna Rive 77.00 358** P P 19 06 58.1 +6.4
baz=4.4
**USA0B Ussuriysk Arra 77.03 44** P **P** **19 06 51.5 -0.6**
USA0B pmax pmax
comp=Z,31nm,0.9s
**USA0B Ussuriysk Arra 77.03 44** P **P** **19 06 51.5 -0.6**
USA0B IAmb IAmb 19 06 55.3
comp=Z,31nm,0.9s
**USRK Ussuriysk Ar. 77.03 44** P **P** **19 06 51.5 -0.6**
comp=Z,27nm,0.8s,baz=284,slow=5.3,SNR=25
**USRK Ussuriysk Ar. 77.03 44** P **P** **19 06 50.6 -1.6**
**EGAK Eagle 77.09 353** P P 19 06 56.6 +4.5
**EGAK Eagle 77.09 353** P P 19 06 57.1 +5.0
baz=14
**POKR Poker Plat Res 77.28 355** P **P** **19 06 54.5 +1.3**
POKR IAmb IAmb 19 06 59.6
comp=Z,22nm,0.8s
**POKR Poker Plat Res 77.28 355** P P 19 06 58.8 +5.5
baz=8.8
**Q51A Peebles 77.32 310** P **P** **19 06 54.9 +1.0**
Q51A IAmb IAmb 19 07 07.0
comp=Z,16nm,0.8s
**I23K Minto, Yukon-K 77.36 356** P **P** **19 06 54.3 +0.7**
I23K IAmb IAmb 19 07 00.2
comp=Z,16nm,0.9s
**I23K Minto, Yukon-K 77.36 356** P P 19 06 59.2 +5.6
baz=7.2,SNR=14
**MCPB Macapa, AP 77.44 260** *e*P **P** **19 06 57.9 +3.0**
**I21K Tanana 77.45 357** P **P** **19 06 54.8 +0.6**
I21K IAmb IAmb 19 07 00.9
comp=Z,22nm,0.8s
**I21K Tanana 77.45 357** P P 19 07 00.2 +6.1
baz=5.1
**MDM Murphy Dome 77.49 356** P **P** **19 06 55.0 +0.6**
MDM IAmb IAmb 19 07 00.6
comp=Z,22nm,0.8s
**PDPR Patillas Dam, 77.53 283** P **P** **19 06 52.1 -3.2**
PDPR IAmb IAmb 19 07 05.7
comp=Z,34nm,0.9s
**MLY Manley 77.55 357** P **P** **19 06 55.8 +1.0**
MLY IAmb IAmb 19 07 01.3
comp=Z,20nm,0.8s
**MLY Manley 77.55 357** P P 19 07 00.2 +5.5
baz=6.1,SNR=18
**TCOL CIGO, UAF Yank 77.55 355** P **P** **19 06 52.7 -2.0**
**IL31 77.59 355** P **P** **19 06 54.7 -0.1**
**ILAR Eielson Array 77.59 355** P **P** **19 06 56.1 +1.2**
comp=Z,5.6nm,0.7s,baz=358,slow=4.1,SNR=43
ILAR LR LR 19 43 44.3
comp=Z,155nm,20.0s,baz=356,slow=38
**ILAR Eielson Array 77.59 355** P **P** **19 06 54.8 -0.1**
**DAWY Dawson 77.59 352** P **P** **19 06 56.5 +1.5**
DAWY IAmb IAmb 19 07 01.4
comp=Z,20nm,0.8s
**DAWY Dawson 77.59 352** P P 19 07 00.5 +5.5
baz=15,SNR=18
**J26L Joseph Creek 77.59 354** P P 19 07 00.4 +5.4
baz=12,SNR=17
**NBIT Itapeh - BA 77.62 240** *e*P **P** **19 06 58.6 +2.9**
**J25K Salcha River, 77.63 354** P **P** **19 06 57.1 +1.9**
**J25K Salcha River, 77.63 354** P P 19 07 00.4 +5.1
baz=10,SNR=9.2
**VLA Vladivostok 77.67 45** ⇑*e*P **P** **19 06 57.2 +1.5**
VLA pmax pmax
comp=Z,40nm,1.0s
**CCB Clear Creek Bu 77.77 355** P **P** **19 06 58.4 +2.5**
**TYV Tymovskoe 77.80 34** *e*P **P** **19 06 59.5 +3.2**
TYV pmax pmax
comp=Z,400nm,5.2s
TYV pmax pmax
comp=Z,11nm,1.0s
**MMPY Sheldon Lake, 77.81 348** P P 19 07 03.1 +6.8
baz=22,SNR=8.5
**NEA2 Nenana 77.90 356** P **P** **19 06 55.8 -0.9**
**NEA2 Nenana 77.90 356** P P 19 07 01.8 +5.2
baz=7.4,SNR=6.9
**HDA Harding Lake 77.95 355** P **P** **19 06 57.1 +0.2**
HDA IAmb IAmb 19 07 03.0
comp=Z,34nm,0.8s
**HDA Harding Lake 77.95 355** P P 19 07 01.8 +4.9
baz=9.1,SNR=18
**WRH Wood River Hil 77.96 356** P **P** **19 06 57.5 +0.5**
**GSI Gunungsitoli 77.97 98** P **P** **19 06 57.4 -0.5**
GSI IAmb IAmb 19 07 05.8
comp=Z,46nm,1.3s
**CMC01 Camacan, BA 77.98 240** *e*P **P** **19 07 00.7 +3.0**
**KULM Kulim 77.99 93** P **P** **19 06 56.9 -1.0**
KULM IAmb IAmb 19 07 11.4
comp=Z,19nm,0.8s
**GCSA Galena City Sc 78.00 359** P P 19 07 03.0 +5.8
baz=1.1,SNR=7.6
**ANM None 78.03 3** P P 19 07 02.3 +5.0
baz=354,SNR=14
**SCRK Sand Creek 78.14 354** P **P** **19 07 00.3 +2.1**
SCRK IAmb IAmb 19 07 04.7
comp=Z,30nm,1.4s
**SCRK Sand Creek 78.14 354** P P 19 07 03.5 +5.3
baz=12,SNR=10
**GAMB Gambell 78.41 6** P **P** **19 06 60.0 +0.5**
**GAMB Gambell 78.41 6** P P 19 07 03.5 +4.1
baz=349
**RIDG Independent Ri 78.45 354** P **P** **19 07 01.7 +1.9**
RIDG IAmb IAmb 19 07 06.2
comp=Z,20nm,0.9s
**RIDG Independent Ri 78.45 354** P P 19 07 05.0 +5.2
baz=11,SNR=9.9
**DOT Dot Lake 78.47 354** P **P** **19 07 00.4 +0.5**
DOT IAmb IAmb 19 07 06.5
comp=Z,18nm,0.8s
**BPAW Bear Paw Mtn. 78.49 357** P **P** **19 06 59.7 -0.3**
BPAW IAmb IAmb 19 07 05.5
comp=Z,21nm,0.8s
**BPAW Bear Paw Mtn. 78.49 357** P P 19 07 04.8 +4.9
baz=5.8,SNR=14
**FARO Faro, Yukon 78.52 348** P P 19 07 07.1 +6.9
baz=20,SNR=8.4
**J20K Nowinta River 78.52 358** P **P** **19 07 01.0 +0.9**
J20K IAmb IAmb 19 07 06.6
comp=Z,20nm,0.8s
**J20K Nowinta River 78.52 358** P P 19 07 05.9 +5.8
baz=3.3,SNR=16
**M31M Drury Creek, Y 78.70 349** P **P** **19 06 59.8 -1.4**
**M31M Drury Creek, Y 78.70 349** P P 19 07 07.2 +6.1
baz=19,SNR=8.4
**MCK McKinley 78.75 356** P **P** **19 07 02.4 +1.0**
MCK pmax pmax
comp=Z,33nm,0.9s
**MCK McKinley 78.75 356** P **P** **19 07 02.4 +1.0**
MCK IAmb IAmb 19 07 07.5
comp=Z,33nm,0.9s
**MCK McKinley 78.75 356** P P 19 07 06.3 +4.9
baz=7.5,SNR=14
**CHUM Lake Minchumin 78.76 357** P P 19 07 06.7 +5.4
baz=4.8,SNR=13
**IPM Ipoh 78.77 93** P **P** **19 07 01.4 -0.9**
**BCAR Beaver Creek A 78.83 352** P **P** **19 07 03.2 +1.3**
**L27K Beaver Creek, 78.83 352** P **P** **19 07 00.4 -1.5**
L27K IAmb IAmb 19 07 08.7
comp=Z,15nm,0.9s
**L27K Beaver Creek, 78.83 352** P P 19 07 07.6 +5.7
baz=13
**KS19 Wonju Array Si 78.87 51** P **P** **19 07 02.1 -0.4**
KS19 IAmb IAmb 19 07 14.3
comp=Z,27nm,0.9s
**KSAR Wonju Array Be 78.92 51** P **P** **19 07 01.4 -1.4**
**KSAR Wonju Array Be 78.92 51** P **P** **19 07 01.4 -1.4**
**KSRS Korea Array 78.94 51** P **P** **19 07 01.9 -0.9**
comp=Z,16nm,0.8s,baz=311,slow=4.3,SNR=42
KSRS LR LR 19 47 08.2
comp=Z,507nm,18.3s,baz=175,slow=40
**L26K Log Cabin Wild 79.02 353** P **P** **19 07 03.9 +0.9**
**L26K Log Cabin Wild 79.02 353** P P 19 07 08.8 +5.9
baz=12,SNR=5.5
**GUA01 Guaratinga, BA 79.03 239** *e*P **P** **19 07 06.0 +2.5**
**KTH Kantishna Hill 79.03 357** P **P** **19 07 03.6 +0.6**
**RND Reindeer 79.07 356** P **P** **19 07 07.1 +3.9**
RND pmax pmax
comp=Z,12nm,0.8s
**RND Reindeer 79.07 356** P **P** **19 07 07.1 +3.9**
**TRF Thorofare Moun 79.10 356** P P 19 07 08.0 +4.5
TRF IAmb IAmb 19 07 09.6
comp=Z,18nm,0.9s
**TRF Thorofare Moun 79.10 356** P P 19 07 08.0 +4.5
baz=6.4,SNR=9.2
**CAST Castle Rocks 79.22 357** P **P** **19 07 04.7 +0.7**
CAST IAmb IAmb 19 07 10.5
comp=Z,20nm,0.8s
**CAST Castle Rocks 79.22 357** P P 19 07 08.6 +4.7
baz=5.0,SNR=14
**PAX Paxson 79.26 354** P P 19 07 08.9 +4.5
baz=10
**DHY Denali Highway 79.30 355** P **P** **19 07 05.4 +0.8**
**DHY Denali Highway 79.30 355** P P 19 07 09.8 +5.2
baz=8.7,SNR=18
**K20K Telida 79.34 358** P **P** **19 07 05.9 +1.2**
K20K IAmb IAmb 19 07 11.6
comp=Z,29nm,1.1s
**K20K Telida 79.34 358** P P 19 07 10.0 +5.4
baz=3.4
**PRPB Parauapebas 79.36 254** *e*P **P** **19 07 09.0 +3.5**
**BVCY Beaver Creek 79.36 352** P P 19 07 10.7 +5.9
baz=14,SNR=12
**T50A Nancy 79.49 309** P **P** **19 07 05.8 -0.1**
T50A IAmb IAmb 19 07 23.8
comp=Z,21nm,1.1s
**M27K Edge Creek, AK 79.53 352** P P 19 07 12.3 +6.5
baz=13,SNR=6.2
**M26K Nabesna, AK 79.60 353** P **P** **19 07 06.6 +0.5**
**M26K Nabesna, AK 79.60 353** P P 19 07 11.7 +5.6
baz=12
**TKL Tuckaleechee C 79.68 307** LR LR 19 43 20.1
comp=Z,322nm,18.7s,baz=63,slow=36
**PPLA Purkeypile 79.74 357** P **P** **19 07 08.3 +1.3**
**PPLA Purkeypile 79.74 357** P P 19 07 12.3 +5.3
baz=4.9,SNR=12
**SDBA SAO DESIDERIO 79.77 246** *e*P **P** **19 07 09.3 +1.7**
**HARP HAARP 79.80 354** P P 19 07 12.8 +5.6
baz=10
**TTA Tatalina 79.81 359** P **P** **19 07 06.9 -0.4**
TTA pmax pmax
comp=Z,17nm,1.1s
**TTA Tatalina 79.81 359** P **P** **19 07 06.8 -0.4**
**TTA Tatalina 79.81 359** P P 19 07 12.9 +5.7
baz=1.8
**WAT6 Susitna Watana 79.82 355** P P 19 07 12.2 +4.8
baz=8.4,SNR=9.5
**YUK3 Moose Creek 79.94 352** P P 19 07 13.7 +5.5
baz=14,SNR=16
**YUK4 Talbot Arm 80.13 351** P P 19 07 14.5 +5.3
baz=16,SNR=7.1
**CUT Chulitna 80.15 356** P P 19 07 13.3 +4.3
baz=6.4
**M24K Tolsona, Glenn 80.17 354** P P 19 07 13.6 +4.4
baz=9.7
**L20K Farewell, AK 80.22 358** P P 19 07 13.8 +4.4
baz=3.5
**WHY Whitehorse 80.25 349** P P 19 07 14.9 +5.2
baz=19
**HYT Haines Junctio 80.48 350** P P 19 07 17.1 +6.1
baz=16,SNR=9.2
**YUK6 Outpost Mounta 80.48 350** P P 19 07 16.8 +5.7
baz=16,SNR=5.4
**SCM Sheep Creek Mo 80.53 355** P P 19 07 16.6 +5.4
baz=8.7
**N25K Chitina, Valde 80.53 353** P P 19 07 16.4 +5.2
baz=11,SNR=6.9
**L19K White Mountain 80.54 358** P **P** **19 07 12.4 +1.2**
**L19K White Mountain 80.54 358** P P 19 07 16.9 +5.8
baz=2.7,SNR=17
**SML Sawmill 80.63 355** P P 19 07 16.8 +5.2
baz=7.9,SNR=8.2
**YSS Yuzh-Sakhalins 80.66 37** ⇑*i*P **P** **19 07 14.3 +2.3**
YSS pmax pmax
comp=Z,54nm,0.9s
**YSS Yuzh-Sakhalins 80.66 37** P **P** **19 07 11.9 -0.1**
**KLU Klutina 80.76 354** P P 19 07 17.9 +5.4
baz=9.9,SNR=5.2
**M19K Big River Lodg 80.81 358** P P 19 07 18.3 +5.7
baz=3.1,SNR=16
**PMR Palmer 80.89 356** P P 19 07 17.8 +4.8
baz=7.3
**T47A Sharon Grove 80.90 310** P **P** **19 07 13.4 -0.2**
T47A IAmb IAmb 19 07 31.8
comp=Z,38nm,1.1s
**KNK Knik Glacier 81.03 355** P P 19 07 19.2 +5.5
baz=7.8,SNR=7.0
**BMRM Bremner River 81.16 353** P P 19 07 19.7 +5.2
baz=11
**RC01 Rabbit Creek A 81.43 356** P P 19 07 20.9 +5.1
baz=6.8,SNR=5.9
**SPCR Spurr Chakacha 81.44 357** P P 19 07 21.2 +5.2
baz=4.8,SNR=6.7
**DLBC Dease Lake 81.47 345** LR LR 19 46 42.4
comp=Z,420nm,18.4s,baz=336,slow=38
**PINM Pinnacle 81.55 351** P P 19 07 22.1 +5.5
baz=14
**PWL Port Wells 81.57 355** P P 19 07 21.8 +5.1
baz=7.9
**N19K Bonanza Creek 81.90 358** P P 19 07 24.2 +5.7
baz=3.0,SNR=7.0
**PETK Petropavlovsk- 81.92 25** P **P** **19 07 21.0 +2.4**
comp=Z,5.4nm,0.8s,baz=335,slow=2.1,SNR=4.4
PETK LR LR 19 46 50.4
comp=Z,624nm,19.3s,baz=312,slow=38
**PET Petropavlovsk 82.31 25** ⇑*e*P **P** **19 07 17.7 -2.9**
PET pmax pmax
comp=Z,40nm,1.8s
**SEW Seward 82.39 356** P P 19 07 26.1 +5.1
baz=7.0
**O19K Port Alsworth 82.52 358** P P 19 07 26.6 +5.1
baz=3.1
**O20K Slope Mountain 82.58 357** P P 19 07 27.0 +5.0
baz=4.5
**ASAJ Asahikawa 82.64 39** LR LR 19 47 56.6
comp=Z,1µm,18.7s,baz=338,slow=38
**CCM Cathedral Cave 82.66 313** P **P** **19 07 22.7 -0.1**
CCM pmax pmax
comp=Z,10.0nm,0.9s
**CCM Cathedral Cave 82.66 313** P **P** **19 07 22.7 -0.1**
**BRSE Bradley Lake S 82.83 356** P P 19 07 28.1 +4.8
baz=6.0
**O18K Koktuh Hills 82.88 358** P **P** **19 07 25.0 +1.4**
**O18K Koktuh Hills 82.88 358** P P 19 07 29.0 +5.5
baz=2.4
**R40A Maddies Statio 83.10 314** P **P** **19 07 23.0 -2.0**
R40A IAmb IAmb 19 07 38.4
comp=Z,19nm,0.9s
**P18K Big Mountain, 83.34 358** P P 19 07 30.1 +4.2
baz=2.4
**BDFB Brasilia 84.16 245** LR LR 19 45 36.8
comp=Z,374nm,18.6s,baz=84,slow=36
**KDAK Kodiak Island 84.87 357** P P 19 07 39.5 +5.9
baz=4.5
**HHAR Hobbs 85.44 313** P **P** **19 07 35.7 -1.4**
HHAR IAmb IAmb 19 07 54.7
comp=Z,18nm,1.1s
**MJB9 Matsu-Tunnel 85.68 46** P **P** **19 07 36.6 -1.6**
MJB9 IAmb IAmb 19 07 55.1

comp=Z,18nm,0.9s
**MAJO Matsushiro 85.69 46** *d i* P **P 19 07 38.6 +0.4**
MAJO pmax pmax
comp=Z,39nm,1.5s
**MAJO Matsushiro 85.69 46** P **P 19 07 37.8 -0.4**
MAJO IAmb IAmb 19 07 55.2
comp=Z,18nm,0.9s
**MAT Matsushiro 85.69 46** P **P 19 07 37.9 -0.3**
**MJAR Matsushiro Arr 85.69 46** P **P 19 07 38.0 -0.2**
comp=Z,20nm,0.8s,baz=313,slow=5.3,SNR=19
**MJAR Matsushiro Arr 85.69 46** P **P 19 07 38.0 -0.2**
**MJAR Matsushiro Arr 85.69 46** P **P 19 07 36.7 -1.5**
MJAR IAmb IAmb 19 07 51.3
comp=Z,13nm,0.9s
**JMM Marumori 86.20 44** P **P 19 07 41.5 +0.8**
**MIAR Mount Ida 86.44 312** P **P 19 07 42.4 +0.5**
MIAR pmax pmax
comp=Z,18nm,1.1s
**MIAR Mount Ida 86.44 312** P **P 19 07 42.4 +0.5**
MIAR IAmb IAmb 19 08 01.8
comp=Z,18nm,1.1s
**MIAR Mount Ida 86.44 312** P **P 19 07 45.1 +3.2**
baz=46
**T35A Sooner Cattle 86.47 315** P **P 19 07 41.4 -0.6**
**SDV Santo Domingo 86.54 278** *e* P P 19 07 47.0 +4.0
**BBB Bella Bella 86.82 342** LR LR 19 48 19.2
comp=Z,479nm,19.4s,baz=31,slow=37
**NEW Newport 87.02 334** LR LR 19 47 09.5
comp=Z,315nm,21.3s,baz=17,slow=36
**NEW Newport 87.02 334** P **P 19 07 45.3 +0.7**
NEW pmax pmax
comp=Z,14nm,0.9s
**NEW Newport 87.02 334** P **P 19 07 45.3 +0.7**
NEW IAmb IAmb 19 08 03.3
comp=Z,14nm,0.8s
**NEW Newport 87.02 334** P P 19 07 50.8 +6.2
baz=32
**X37A Clayton 87.46 313** P **P 19 07 47.0 0.0**
X37A IAmb IAmb 19 08 05.4
comp=Z,16nm,0.9s
**C09A Chrisman Ranch 87.82 334** P **P 19 07 49.6 +1.2**
**PDAR Pinedale Array 88.59 326** P **P 19 07 54.4 +1.9**
comp=Z,0.2nm,0.4s,baz=348,slow=41,SNR=4.5
**HAWA Hanford 89.47 334** P **P 19 07 57.8 +1.6**
HAWA IAmb IAmb 19 08 07.0
comp=Z,11nm,0.9s
**PTLB Pontes e Lacer 92.27 252** *e* P **P 19 08 12.9 +3.3**
**ELK Elko 92.67 329** P **P 19 08 13.4 +1.9**
ELK pmax pmax
comp=Z,6.0nm,1.3s
**ELK Elko 92.67 329** **P 19 08 13.4 +1.9**
**MNTX Cornudas Mount 95.24 317** P **P 19 08 22.2 -1.0**
**NVAR Mina Array Bea 95.88 330** P **P 19 08 28.8 +2.5**
comp=Z,0.4nm,0.7s,baz=219,slow=47,SNR=2.5
**TXAR Lajitas Array 96.09 314** P **P 19 08 29.5 +2.3**
comp=Z,1.3nm,0.8s,baz=89,slow=4.0,SNR=7.4
**TXAR Lajitas Array 96.09 314** P **P 19 08 26.8 -0.4**
**TXAR Lajitas Array 96.09 314** P **P 19 08 26.8 -0.4**
**SYO Syowa Base 107.10 173** ‖ *e* Pdiff **Pdif 19 09 17.8 +2.8**
**WRA Warramunga Arr 119.53 93** PKP **PKPdf 19 13 48.2 -1.0**
comp=Z,0.6nm,0.4s,baz=321,slow=1.9,SNR=10
**WRA Warramunga Arr 119.53 93** **PKPdf 19 13 47.2 -2.0**
**ASAR Alice Springs 121.12 97** PKP **PKiKP 19 13 52.0 -0.4**
comp=Z,1.6nm,0.5s,baz=305,slow=1.6,SNR=27
**ASAR Alice Springs 121.12 97** PKiKP **PKiKP 19 13 52.0 -0.4**
**STKA Stephens Creek 130.95 102** PKP **PKiKP 19 14 12.8 +1.1**
comp=Z,2.3nm,0.8s,baz=284,slow=2.8,SNR=4.8
**STKA Stephens Creek 130.95 102** PKIKP **PKPdf 19 14 09.7 -1.1**
**STKA Stephens Creek 130.95 102** **PKPdf 19 14 09.7 -1.1**
**NOUC Port Laguerre 145.82 73** P **PKiKP 19 14 42.5 +0.2**
**DZM Mont Dzumac 145.91 73** PKPbc **PKiKP 19 14 40.4 -2.2**
comp=Z,22nm,0.8s,baz=256,slow=8.8,SNR=21
**DZM Mont Dzumac 145.91 73** P **PKiKP 19 14 40.6 -2.0**
**ONTNC Ouen Toro 146.05 73** P **PKiKP 19 14 43.8 +1.1**
**YATNC Mamie plateau, 146.24 73** P **PKiKP 19 14 43.3 +0.1**
**OUENC Ouen Island, N 146.41 73** P **PKiKP 19 14 45.7 +2.2**
**MSVF Nonsavu 151.29 53** PKPbc **PKiKP 19 14 53.2 -0.6**
comp=Z,4.8nm,0.7s,baz=225,slow=20,SNR=1.7

**ROM 15 18:55:56.1±0.1, 42°07'99"N×0°00'3"×12°09'06"E±0°00'5, h8km, ML1.7/6 Error ellipse: s-maj=0.4km s-min=0.1km az=72.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRCA** | **Norcia** | **0.16** | **77** | P | Pg | 18 56 00.2 | +0.7 |
| NRCA | | | | S | Sg | 18 56 02.8 | +1.0 |
| NRCA | | | | AML | AML | | |
| | comp=E,346μm,1.0s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,336μm,0.1s | | | | | | |
| **LNSS** | **Leonessa** | **0.22** | **153** | P | Pg | 18 56 01.4 | +0.8 |
| LNSS | | | | S | Sg | 18 56 04.9 | +1.3 |
| LNSS | | | | AML | AML | | |
| | comp=N,426μm,1.3s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,332μm,1.5s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.27** | **29** | P | Pg | 18 56 02.3 | +0.7 |
| FDMO | | | | S | Sg | 18 56 06.7 | +1.4 |
| FDMO | | | | AML | AML | | |
| | comp=E,253μm,0.3s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=N,311μm,0.1s | | | | | | |
| **ASSB** | **Assisi San Ben** | **0.30** | **323** | P | Pb | 18 56 03.2 | -0.7 |
| ASSB | | | | S | Sb | 18 56 08.1 | -1.0 |
| ASSB | | | | AML | AML | | |
| | comp=N,109μm,1.3s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=E,148μm,0.9s | | | | | | |
| **CESX** | **Cesi** | **0.30** | **232** | P | Pb | 18 56 03.1 | -0.8 |
| CESX | | | | S | Sb | 18 56 08.1 | -0.9 |
| **SMA1** | **SAN MARTINO** | **0.36** | **118** | P | Pb | 18 56 04.3 | -0.5 |
| SMA1 | | | | S | Sb | 18 56 10.2 | -0.4 |
| **RM33** | **Pellescritta (** | **0.37** | **142** | P | Pg | 18 56 04.0 | +0.6 |
| RM33 | | | | S | Sb | 18 56 09.7 | -1.2 |
| RM33 | | | | AML | AML | | |
| | comp=E,383μm,1.6s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,371μm,1.2s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.46** | **3** | P | Pg | 18 56 05.7 | +0.7 |
| SNTG | | | | S | Sb | 18 56 13.0 | -0.5 |
| SNTG | | | | AML | AML | | |
| | comp=N,130μm,1.2s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,163μm,1.0s | | | | | | |
| **ATTE** | **AVT- Monte Tez** | **0.57** | **315** | P | Pg | 18 56 05.8 | -1.3 |

*IDC **15** 19:10:01.4±1.4, 17°.95N×86°.68E, h0km, mb3.7/5, mb1 4.0/7, mb1mx3.6/48, mbtmp3.8/7, ML3.9/2, Error ellipse: s-maj=39.8km s-min=21.8km az=77.0*
*HYB **15** 19:10:06.4±0.2, 18°.24N×86°.51E, h1km±21km, ML2.7*
**ISC 15 19:10:05.2±0.8, 17°.82N±0°.09×86°.61E±0°.06, h35km, n17, σ3°62/25, mb3.6/5, Bay of Bengal**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHLP** | **Challavanipeta** | **2.52** | **286** | *e* P | **Pn** | **19 10 45.8** | **+2.3** |
| CHLP | | | | *e* S | **Sn** | **19 11 14.1** | **+1.0** |
| CHLP | | | | IAML | | 19 11 17.8 | |
| | comp=E,97nm,0.1s | | | | | | |
| **PVM** | **Polavaram** | **4.79** | **264** | *e* P | **Pn** | **19 11 18.8** | **+4.0** |
| PVM | | | | *e* S | **Sn** | **19 12 10.0** | **+0.9** |
| **MYLAV** | **Mylavaram** | **5.80** | **260** | *e* P | **Pn** | **19 11 32.9** | **+4.1** |
| MYLAV | | | | *e* S | **Sn** | **19 12 33.9** | **-0.3** |
| **ADKI** | **Addanki** | **6.65** | **254** | *e* P | **Pn** | **19 11 45.0** | **+4.6** |
| ADKI | | | | *e* S | **Sn** | **19 12 54.1** | **-1.0** |
| **NJS** | **Nagarjunasagar** | **7.09** | **261** | *e* S | **Sn** | **19 13 02.7** | **-3.2** |
| **SRLM** | **Srisailam** | **7.58** | **258** | *e* P | **Pn** | **19 11 55.8** | **+2.5** |
| SRLM | | | | *e* S | **Sn** | **19 13 13.4** | **-4.6** |
| **HYBB** | **Hyderabad (bro** | **7.69** | **268** | *e* S | **Sn** | **19 13 14.7** | **-6.1** |
| **RCLA** | **Racherla** | **7.70** | **253** | *e* P | **Pn** | **19 11 58.6** | **+3.7** |
| RCLA | | | | *e* S | **Sn** | **19 13 18.1** | **-2.9** |
| **SKHT** | **Srikalahasti** | **7.78** | **240** | *e* S | **Sn** | **19 13 21.2** | **-1.6** |
| **SRSP** | **Sriramsagar** | **7.92** | **279** | *e* P | **Pn** | **19 12 00.1** | **+2.2** |
| SRSP | | | | *e* S | **Sn** | **19 13 18.2** | **-8.2** |
| **CMAR** | **Chiang Mai Arr** | **11.75** | **85** | Pn | **Pn** | **19 12 47.1** | **-3.2** |
| | comp=E,0.2nm,0.3s,baz=267,slow=14,SNR=11 | | | | | | |
| **PALK** | **Pallekele** | **11.96** | **209** | Pn | **Pn** | **19 12 53.9** | **+0.6** |
| | comp=E,0.9nm,0.3s,baz=134,slow=9.7,SNR=14 | | | | | | |
| PALK | | | | Sn | **Sn** | **19 14 59.4** | **-6.2** |
| | comp=E,1.3nm,0.3s,baz=204,slow=23,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.11** | **354** | P | **P** | **19 16 03.0** | **+0.4** |
| | comp=E,0.4nm,0.7s,baz=176,slow=10.0,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **34.03** | **24** | P | **P** | **19 16 46.0** | **0.0** |
| | comp=E,0.6nm,0.7s,baz=203,slow=8.6,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **36.08** | **358** | P | **P** | **19 17 03.2** | **-0.1** |
| | comp=E,0.5nm,0.8s,baz=163,slow=10,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.02** | **127** | P | **P** | **19 20 10.6** | **+1.8** |
| | comp=E,0.4nm,0.6s,baz=313,slow=7.0,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **61.91** | **130** | P | **P** | **19 20 23.7** | **+2.1** |
| | comp=E,1.5nm,0.5s,baz=309,slow=6.6,SNR=40 | | | | | | |

*TUL **15** 19:27:31.9±0.9, 36°.47N±0°.04×98°.76W±0°.03, h7km±6km, ML3.2, mb_Lg2.8/50(NEIC), Error ellipse: s-maj=5.5km s-min=2.6km az=165.0*
**NEIC 15 19:27:31.9±0.7, 36°.53N±0°.04×98°.79W±0°.03, h14km±4km, Error ellipse: s-maj=5.6km s-min=3.7km az=170.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.23** | **228** | Pg | Pg | 19 27 36.5 | -0.4 |
| U32A | | | | Sg | Sg | 19 27 39.6 | -0.8 |
| **OKCFA** | **Oklahoma City** | **1.56** | **135** | Pn | Pn | 19 27 58.5 | -0.7 |
| **FNO** | **Franklin** | **1.70** | **138** | Pn | Pn | 19 28 01.6 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.79** | **180** | Pn | Pn | 19 28 02.1 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.87** | **78** | Pn | Pn | 19 28 04.0 | +0.5 |
| **R32A** | **Long Quarter,** | **1.89** | **2** | | Pb | 19 28 07.0 | +0.8 |
| **W35A** | **Tecumseh** | **2.08** | **131** | Pn | Pn | 19 28 06.2 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.08** | **158** | | Pn | 19 28 07.7 | +1.3 |
| **AMTX** | **Amarillo** | **2.87** | **236** | IAmb_Lg | | 19 29 03.6 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.09** | **33** | IAmb_Lg | | 19 29 13.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.40** | **124** | Pn | Pn | 19 28 23.6 | -0.8 |
| X37A | | | | IAmb_Lg | | 19 29 22.4 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.96** | **190** | Pn | Pn | 19 28 32.2 | -0.1 |
| **MSTX** | **Muleshoe** | **4.14** | **233** | IAmb_Lg | | 19 29 51.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.28** | **107** | Pn | Pn | 19 28 36.5 | -0.1 |
| W39A | | | | IAmb_Lg | | 19 29 50.2 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.52** | **74** | Pn | Pn | 19 28 39.8 | -0.1 |
| S39A | | | | IAmb_Lg | | 19 29 57.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.52** | **135** | IAmb_Lg | | 19 29 55.2 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **4.55** | **279** | IAmb_Lg | | 19 30 00.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.69** | **113** | IAmb_Lg | | 19 30 07.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.89** | **6** | IAmb_Lg | | 19 30 17.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.17** | **52** | IAmb_Lg | | 19 30 24.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.27** | **111** | IAmb_Lg | | 19 30 24.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.42** | **101** | | Pn | 19 28 52.1 | -0.2 |
| WHAR | | | | IAmb_Lg | | 19 30 32.4 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.43** | **95** | IAmb_Lg | | 19 30 29.7 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.45** | **120** | IAmb_Lg | | 19 30 34.0 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.48** | **69** | Pn | Pn | 19 28 52.7 | -0.4 |
| **W41B** | **Gary Mavity, V** | **5.48** | **102** | IAmb_Lg | | 19 30 37.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.50** | **285** | IAmb_Lg | | 19 30 36.4 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **K31A** | **O'Neill** | **6.08** | **0** | IAmb_Lg | | 19 31 00.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **6.18** | **92** | IAmb_Lg | | 19 30 56.5 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.20** | **74** | IAmb_Lg | | 19 30 48.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.72** | **85** | IAmb_Lg | | 19 31 07.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.83** | **75** | IAmb_Lg | | 19 31 16.8 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.29** | **230** | IAmb_Lg | | 19 31 32.2 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **K22A** | **Casper** | **8.54** | **318** | IAmb_Lg | | 19 32 14.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.94** | **50** | IAmb_Lg | | 19 32 19.1 | |
| | comp=Z,11nm,0.8s | | | | | | |

*BJI **15** 19:28:02.0±0.0, 49°.17S×164°.38E, h9km, mb5.4/51, mB6.3/49, Ms5.7/70, Ms7 5.5/68*
*IDC **15** 19:28:02.4±0.4, 49°.06S×164°.68E, h0km, mb5.4/28, mb1 5.4/30, mb1mx5.2/44, mbtmp5.4/30, ML4.7/2, MS5.4/43, Ms1 5.4/43, ms1mx5.3/48, Error ellipse: s-maj=16.6km s-min=11.1km az=67.0*
*MOS **15** 19:28:03.0±0.9, 49°.12S×164°.35E, h10km, mb5.8/18, MS5.5/47, Error ellipse: s-maj=14.4km s-min=7.1km az=111.4*
*NEIC **15** 19:28:04.6±1.7, 49°.05S±0°.07×164°.5E±0°.1, h10km±1km, mb5.9/103, Ms_20 5.6/308, Mwb5.9/32, Mww5.9, Error ellipse: s-maj=15.9km s-min=12.0km az=103.0*
*NEIC **15** 19:28:04.2, 49°.05S×164°.48E, h8km, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$7.23; $M_{\theta\theta}$2.62; $M_{\phi\phi}$-9.86; $M_{r\theta}$2.62; $M_{r\phi}$-1.64; $M_{\theta\phi}$-0.73; Fault plane solution: $M_0$9.40000×$10^{17}$ NP1:$\phi_s$30.71000°, δ49.07000°, λ124.50000°. NP2:$\phi_s$164.34000°, δ51.49000°, λ56.85000°. Principal axes: T 8.5191, Plg65.0000°, Azm10.0000°; N 1.5588, Plg25.0000°, Azm186.0000°; P -10.0778, Plg1.0000°, Azm277.0000°;*
*NEIC **15** 19:28:07, 49°.17S×164°.15E, h12km, Moment Tensor Solution. Duration: 4s0 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$0.93; $M_{\theta\theta}$0.14; $M_{\phi\phi}$-1.07; $M_{r\theta}$0.07; $M_{r\phi}$-0.12; $M_{\theta\phi}$0.24; Fault plane solution: $M_0$1.04000×$10^{18}$ NP1: $\phi_s$182.00000°, δ38.00000°, λ85.00000°. NP2:$\phi_s$8.00000°, δ52.00000°, λ94.00000°. Principal axes: T 0.9614, Plg83.0000°, Azm299.0000°; N 0.1477, Plg3.0000°, Azm186.0000°; P -1.1091, Plg7.0000°, Azm96.0000°;*
*GCMT **15** 19:28:10.2±0.1, 49°.03S±0°.01×164°.03E±0°.01, h18km, MW6.0/157, Moment Tensor Solution. s154,c325; s157,c528; Duration: 2s3 Moment tensor: Scale $10^{18}$ Nm; $M_{rr}$0.99±.01; $M_{\theta\theta}$0.12±.01; $M_{\phi\phi}$-1.11±.01; $M_{r\theta}$0.20±.02; $M_{r\phi}$-0.16±.01; $M_{\theta\phi}$-0.28±.02; Best double couple: $M_0$1.11700×$10^{18}$ NP1:$\phi_s$21.00000°, δ40.00000°, λ112.00000°. NP2:$\phi_s$174.00000°, δ53.00000°, λ73.00000°. Principal axes: T 1.0760, Plg75.0000°, Azm31.0000°; N 0.0840, Plg14.0000°, Azm184.0000°; P -1.1590, Plg7.0000°, Azm276.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
**ISC 15 19:28:04.7±0.5, 49°.10S±0°.04×164°.61E±0°.04, h15km±2km, h15km:pP-P, n1112, σ1°58/1079, mb5.8/106, MS5.6/244, 77C-70D, Auckland Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APZ** | **The Paps** | **3.21** | **46** | P | **Pn** | **19 28 54.2** | **-0.4** |
| APZ | | | | S | **Sn** | **19 29 30.9** | **-1.6** |
| **PYZ** | **Puysegur Point** | **3.25** | **26** | Pn | **Pn** | **19 28 54.5** | **-0.7** |
| PYZ | | | | Sn | **Sn** | **19 29 32.1** | **-1.4** |
| **PYZ** | **Puysegur Point** | **3.25** | **26** | P | **Pn** | **19 28 53.8** | **-1.4** |
| PYZ | | | | S | **Sn** | **19 29 32.7** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **3.92** | **36** | | **Pn** | **19 29 04.1** | **-0.3** |
| WHZ | | | | Sn | **Sn** | **19 29 49.2** | **-1.0** |
| **WHZ** | **Wether Hill Ro** | **3.92** | **36** | P | **Pn** | **19 29 04.2** | **-0.2** |
| WHZ | | | | S | **Sn** | **19 29 49.3** | **-0.9** |
| **SYZ** | **Scrubby Hill** | **3.98** | **52** | P | **Pn** | **19 29 05.8** | **+0.6** |
| SYZ | | | | S | **Sn** | **19 29 49.3** | **-2.3** |
| **DCZ** | **Deep Cove** | **4.03** | **26** | Pn | **Pn** | **19 29 05.4** | **-0.4** |
| **DCZ** | **Deep Cove** | **4.03** | **26** | P | **Pn** | **19 29 05.3** | **-0.4** |
| **MLZ** | **Mavora Lakes** | **4.43** | **34** | Pn | **Pn** | **19 29 11.7** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **4.43** | **34** | P | **Pn** | **19 29 12.6** | **+1.2** |
| MLZ | | | | S | **Sn** | **19 30 04.3** | **+1.6** |
| **TUZ** | **Tuapeka** | **4.63** | **49** | P | **Pn** | **19 29 14.4** | **+0.3** |
| **MSZ** | **Milford Sound** | **4.98** | **28** | P | **Pn** | **19 29 20.6** | **+1.8** |
| **EAZ** | **Earnscleugh** | **5.02** | **41** | P | **Pn** | **19 29 19.2** | **-0.3** |
| EAZ | | | | S | **Sn** | **19 30 18.7** | **+1.5** |
| **HHSZ** | **Highcliff Hill** | **5.18** | **54** | P | **Pn** | **19 29 22.3** | **+0.7** |
| **WKZ** | **Wanaka** | **5.23** | **37** | Pn | **Pn** | **19 29 22.1** | **-0.3** |
| **WKZ** | **Wanaka** | **5.23** | **37** | P | **Pn** | **19 29 23.3** | **+0.9** |
| WKZ | | | | S | **Sn** | **19 30 24.5** | **+2.1** |
| **ODZ** | **Otahua Downs** | **5.78** | **48** | Pn | **Pn** | **19 29 28.8** | **-1.1** |
| **ODZ** | **Otahua Downs** | **5.78** | **48** | P | **Pn** | **19 29 28.8** | **-1.1** |
| **JCZ** | **Jackson Bay** | **5.79** | **31** | P | **Pn** | **19 29 31.3** | **+1.2** |
| JCZ | | | | S | **Sn** | **19 30 41.2** | **+4.9** |
| **LBZ** | **Lake Benmore** | **6.07** | **41** | Pn | **Pn** | **19 29 31.8** | **-2.1** |
| **LBZ** | **Lake Benmore** | **6.07** | **41** | P | **Pn** | **19 29 31.8** | **-2.1** |
| LBZ | | | | S | **Sn** | **19 30 41.8** | **-1.4** |
| **MCQ** | **Macquarie Isla** | **6.44** | **211** | P | **Pn** | **19 29 37.1** | **-1.8** |
| | baz=6.5,SNR=60 | | | | | | |
| **MCQ** | **Macquarie Isla** | **6.44** | **211** | P | **Pn** | **19 29 37.1** | **-1.8** |
| **MCQ** | **Macquarie Isla** | **6.44** | **211** | Pn | **Pn** | **19 29 37.1** | **-1.8** |
| **TMZ** | **Timaru** | **6.45** | **45** | P | **Pn** | **19 29 37.4** | **-1.6** |
| **FOZ** | **Fox Glacier** | **6.63** | **35** | Pn | **Pn** | **19 29 42.0** | **+0.7** |
| **FOZ** | **Fox Glacier** | **6.63** | **35** | P | **Pn** | **19 29 41.8** | **+0.3** |
| FOZ | | | | S | **Sn** | **19 30 55.6** | **-1.3** |
| **ARCZ** | **Arundel** | **6.86** | **44** | P | **Pn** | **19 29 42.6** | **-2.1** |
| ARCZ | | | | S | **Sn** | **19 31 00.5** | **-2.0** |
| **RPZ** | **Rata Peaks** | **6.99** | **42** | Pn | **Pn** | **19 29 43.8** | **-2.6** |
| | 18nm,0.3s,baz=230,slow=4.3,SNR=32 | | | | | | |
| RPZ | | | | Sn | **Sn** | **19 31 01.4** | **-4.3** |
| | 33nm,0.3s,baz=1.6,slow=21,SNR=3.5 | | | | | | |
| RPZ | | | | LR | LR | 19 32 59.9 | |
| | comp=Z,47μm,18.1s,baz=203,slow=43 | | | | | | |
| **RPZ** | **Rata Peaks** | **6.99** | **42** | Pn | **Pn** | **19 29 44.0** | **-2.4** |
| **RPZ** | **Rata Peaks** | **6.99** | **42** | P | **Pn** | **19 29 43.9** | **-2.6** |
| **GCSZ** | **Gaunt Creek Bo** | **7.01** | **37** | P | **Pn** | **19 29 46.2** | **-0.5** |
| GCSZ | | | | S | **Sn** | **19 31 06.1** | **-0.1** |
| **WACZ** | **Wakanui South** | **7.17** | **47** | P | **Pn** | **19 29 48.0** | **-0.9** |
| WACZ | | | | S | **Sn** | **19 31 08.2** | **-1.9** |
| **MHCZ** | **Mount Hutt** | **7.36** | **43** | P | **Pn** | **19 29 51.3** | **-0.3** |
| MHCZ | | | | S | **Sn** | **19 31 10.6** | **-4.3** |
| **WVZ** | **Waitaha Valley** | **7.38** | **38** | P | **Pn** | **19 29 51.3** | **-0.5** |
| WVZ | | | | S | **Sn** | **19 31 14.7** | **-0.5** |
| **RACZ** | **Rakaia** | **7.48** | **47** | P | **Pn** | **19 29 52.1** | **-1.0** |
| **OXZ** | **Oxford** | **7.73** | **44** | Pn | **Pn** | **19 29 55.4** | **-1.3** |
| **OXZ** | **Oxford** | **7.73** | **44** | P | **Pn** | **19 29 55.0** | **-1.7** |
| **MQZ** | **McQueen's Vall** | **7.74** | **49** | Pn | **Pn** | **19 29 55.2** | **-1.5** |
| **MQZ** | **McQueen's Vall** | **7.74** | **49** | P | **Pn** | **19 29 55.8** | **-1.0** |
| **AKCZ** | **Akaroa Harbour** | **7.75** | **51** | P | **Pn** | **19 29 56.8** | **-0.1** |
| **OKCZ** | **Okains Bay** | **7.93** | **50** | P | **Pn** | **19 29 59.5** | **0.0** |
| **INZ** | **Inchbonnie** | **7.96** | **39** | P | **Pn** | **19 30 00.1** | **+0.4** |
| **AMCZ** | **Amberley** | **8.14** | **46** | P | **Pn** | **19 30 01.1** | **-1.1** |
| **LTZ** | **Lake Taylor** | **8.27** | **43** | Pn | **Pn** | **19 30 01.4** | **-2.7** |
| **GVZ** | **Greta Valley S** | **8.48** | **47** | P | **Pn** | **19 30 05.5** | **-1.4** |
| **DSZ** | **Denniston Nort** | **8.92** | **37** | P | **Pn** | **19 30 12.7** | **-0.3** |
| **KHZ** | **Kahutara** | **9.14** | **46** | Pn | **Pn** | **19 30 14.2** | **-1.7** |
| **KHZ** | **Kahutara** | **9.14** | **46** | P | **Pn** | **19 30 14.6** | **-1.3** |
| **THZ** | **Tophouse** | **9.37** | **42** | Pn | **Pn** | **19 30 17.5** | **-1.6** |
| **THZ** | **Tophouse** | **9.37** | **42** | P | **Pn** | **19 30 17.8** | **-1.3** |
| **MRNZ** | **Matariki Terra** | **9.60** | **40** | P | **Pn** | **19 30 22.3** | **0.0** |
| **BSWZ** | **Blackbirch Sta** | **9.84** | **45** | Pn | **Pn** | **19 30 26.4** | **+0.9** |
| **BSWZ** | **Blackbirch Sta** | **9.84** | **45** | P | **Pn** | **19 30 27.4** | **+1.9** |
| **CMWZ** | **Cape Campbell** | **9.97** | **46** | Pn | **Pn** | **19 30 26.7** | **-0.7** |
| **CMWZ** | **Cape Campbell** | **9.97** | **46** | P | **Pn** | **19 30 28.9** | **+1.5** |
| **QRZ** | **Quartz Range** | **9.99** | **37** | Pn | **Pn** | **19 30 26.5** | **-1.1** |
| **QRZ** | **Quartz Range** | **9.99** | **37** | P | **Pn** | **19 30 26.6** | **-1.0** |
| **NNZ** | **Nelson** | **10.02** | **41** | | **Pn** | **19 30 27.4** | **-0.6** |
| **NNZ** | **Nelson** | **10.02** | **41** | P | **Pn** | **19 30 28.8** | **+0.8** |
| **TUWZ** | **Tuamarina** | **10.10** | **44** | | **Pn** | **19 30 29.6** | **+0.5** |
| **TUWZ** | **Tuamarina** | **10.10** | **44** | P | **Pn** | **19 30 31.6** | **+2.6** |
| **TCW** | **Tory Channel** | **10.42** | **44** | P | **Pn** | **19 30 35.3** | **+1.8** |
| **SNZO** | **South Karori** | **10.54** | **46** | | **Pn** | **19 30 35.8** | **+0.6** |
| **BHW** | **Baring Head** | **10.55** | **47** | | **Pn** | **19 30 35.5** | **+0.2** |
| **BHW** | **Baring Head** | **10.55** | **47** | P | **Pn** | **19 30 37.1** | **+1.8** |
| **DUWZ** | **D'Urville Isla** | **10.59** | **42** | P | **Pn** | **19 30 35.8** | **-0.1** |
| **PLWZ** | **Palliser** | **10.61** | **49** | Pn | **Pn** | **19 30 35.6** | **-0.6** |
| **PLWZ** | **Palliser** | **10.61** | **49** | P | **Pn** | **19 30 37.4** | **+1.2** |
| **MSWZ** | **Moikau Station** | **10.73** | **48** | Pn | **Pn** | **19 30 37.8** | **+0.1** |
| **MSWZ** | **Moikau Station** | **10.73** | **48** | P | **Pn** | **19 30 37.4** | **-0.3** |
| **PAWZ** | **Paruwai Farm** | **10.84** | **49** | P | **Pn** | **19 30 42.3** | **+3.0** |
| **CAW** | **Cannon Point** | **10.87** | **47** | P | **Pn** | **19 30 41.8** | **+2.0** |
| **TRWZ** | **Traveller** | **10.96** | **49** | P | **Pn** | **19 30 41.6** | **+0.7** |
| **KIW** | **Kapiti Island** | **10.99** | **45** | P | **Pn** | **19 30 42.1** | **+0.8** |
| **MTW** | **Mount Morrison** | **11.05** | **48** | P | **Pn** | **19 30 43.2** | **+1.2** |
| **OGWZ** | **Otaki Gorge** | **11.15** | **46** | P | **Pn** | **19 30 43.6** | **+0.1** |
| **HOWZ** | **Holdsworth Sta** | **11.25** | **47** | P | **Pn** | **19 30 46.5** | **+1.6** |
| **TMWZ** | **Te Maipa** | **11.28** | **49** | P | **Pn** | **19 30 47.4** | **+2.1** |
| **MRZ** | **Mangatainoka R** | **11.46** | **47** | P | **Pn** | **19 30 46.2** | **-1.6** |
| **CPWZ** | **Castlepoint** | **11.58** | **49** | P | **Pn** | **19 30 53.6** | **+4.3** |
| **NMEZ** | **Namu Road** | **11.73** | **38** | P | **Pn** | **19 30 52.2** | **+0.8** |
| **PRWZ** | **Pori Road** | **11.74** | **48** | P | **Pn** | **19 30 53.5** | **+2.0** |
| **BFZ** | **Birch Farm** | **11.77** | **49** | Pn | **Pn** | **19 30 52.8** | **+0.8** |
| **BFZ** | **Birch Farm** | **11.77** | **49** | P | **Pn** | **19 30 52.5** | **+0.5** |
| **KHEZ** | **Kahui Hut** | **11.89** | **38** | P | **Pn** | **19 30 53.7** | **0.0** |
| **PREZ** | **Palmer Road** | **11.91** | **39** | P | **Pn** | **19 30 54.7** | **+0.8** |
| **LREZ** | **Lake Rotokare** | **11.91** | **40** | P | **Pn** | **19 30 55.8** | **+1.9** |
| **NEZ** | **North Egmont** | **11.94** | **38** | P | **Pn** | **19 30 55.4** | **+0.9** |
| **PKE** | **Pukeiti** | **11.96** | **38** | P | **Pn** | **19 30 55.4** | **+0.7** |
| **DVHZ** | **Dannevirke** | **12.03** | **47** | P | **Pn** | **19 30 58.2** | **+2.6** |
| **ANWZ** | **Angora Road** | **12.06** | **49** | P | **Pn** | **19 30 58.5** |

**ARPS Mount Arapiles 20.64 298** P **P** **19 32 44.4 +0.8**
baz=20,SNR=23
**ARMA Armidale 21.10 327** P **P** **19 32 50.1 +1.4**
baz=21,SNR=9.9
**ARMA Armidale 21.10 327** P **P** **19 32 49.8 +1.1**
**CMSA Cobar Meteorol 22.61 314** P **P** **19 33 04.6 -0.2**
baz=22,SNR=24
**RAO Raoul Island 23.90 40** LR LR 19 43 53.6
comp=Z,15µm,18.2s,baz=202,slow=40
**STKA Stephens Creek 24.39 306** P **P** **19 33 23.1 +0.7**
comp=Z,58nm,0.9s,baz=132,slow=10,SNR=47
STKA PcP **PcP** **19 37 01.4 +0.1**
comp=Z,11nm,0.7s,baz=164,slow=2.2,SNR=4.0
STKA LR LR 19 40 51.3
comp=Z,14µm,20.9s,baz=155,slow=32
**STKA Stephens Creek 24.39 306** P **P** **19 33 23.0 +0.7**
baz=24,SNR=11
**STKA Stephens Creek 24.39 306** P **P** **19 33 22.7 +0.3**
STKA pmax pmax
comp=Z,73nm,1.5s
**STKA Stephens Creek 24.39 306** P **P** **19 33 22.7 +0.3**
**HTT Hallett 24.69 300** P **P** **19 33 25.2 +0.1**
baz=24,SNR=24
**RMQ Roma 25.71 326** P **P** **19 33 35.2 +0.9**
baz=26,SNR=336
**EIDS Eidsvold 25.94 331** P **P** **19 33 37.0 +0.6**
baz=26,SNR=20
**EIDS Eidsvold 25.94 331** P **P** **19 33 36.6 +0.2**
EIDS IAmb IAmb 19 33 38.6
comp=Z,569nm,1.9s
**ONTNC Ouen Toro 26.78 4** P **P** **19 33 43.2 -0.7**
ONTNC IAmb IAmb 19 33 53.4
comp=Z,537nm,1.8s
**BBOO Buckleboo 26.80 297** P **P** **19 33 43.8 -0.3**
baz=27,SNR=9.2
**BBOO Buckleboo 26.80 297** P **P** **19 33 43.3 -0.8**
BBOO IAmb IAmb 19 34 14.8
comp=Z,446nm,1.9s
**DZM Mont Dzumac 27.01 4** *e*P **P** **19 33 47.9 +1.7**
comp=Z,426nm,1.4s
DZM *e*S **S** **19 38 22.2 -1.0**
comp=Z,3µm,27.6s
DZM *e*LR LR 19 40 34.3
comp=Z,11µm,21.4s
**DZM Mont Dzumac 27.01 4** P **P** **19 33 47.1 +0.9**
comp=Z,54nm,0.9s,baz=192,slow=8.3,SNR=30
DZM LR LR 19 42 58.2
comp=Z,13µm,18.7s,baz=184,slow=33
**DZM Mont Dzumac 27.01 4** P **P** **19 33 47.9 +1.7**
DZM IAmb IAmb 19 34 03.6
comp=Z,239nm,1.3s
**QLP Quilpie 27.48 317** P **P** **19 33 50.7 +0.4**
baz=27,SNR=18
**LIFNC LIFOU 28.34 5** P **P** **19 33 59.0 +1.1**
**VNDA Vanda 28.55 181** P **P** **19 34 00.1 +0.7**
comp=Z,20nm,1.1s,baz=358,slow=8.9,SNR=8.4
VNDA LR LR 19 43 10.9
comp=Z,8µm,19.3s,baz=15,slow=32
**VNDA Vanda 28.55 181** P **P** **19 33 58.3 -1.0**
**CASY Casey 32.30 218** IAMs_20 IAMs_20 19 45 47.5
comp=Z,10µm,18.0s
**CTA Charters Tower 32.47 327** P **P** **19 34 34.9 +0.4**
comp=Z,48nm,0.9s,baz=160,slow=9.1,SNR=57
CTA PcP **PcP** **19 37 21.5 +0.1**
comp=Z,11nm,0.7s,baz=147,slow=5.2,SNR=3.8
CTA LR LR 19 45 55.1
comp=Z,12µm,19.7s,baz=147,slow=33
**CTAO Charters Tower 32.47 327** P **P** **19 34 34.1 -0.4**
CTAO pmax pmax
comp=Z,78nm,1.0s
CTAO MLR MLR
comp=Z,12µm,19.0s
**CTAO Charters Tower 32.47 327** P **P** **19 34 34.1 -0.4**
**CTAO Charters Tower 32.47 327** IAMs_20 IAMs_20 19 45 33.2
comp=Z,12µm,19.0s
**FORT Forrest 33.05 290** P **P** **19 34 39.1 -0.5**
baz=33,SNR=7.6
**FORT Forrest 33.05 290** P **P** **19 34 38.3 -1.2**
**MSVF Nonsavu 33.13 24** P **P** **19 34 40.4 0.0**
comp=Z,16nm,1.0s,baz=217,slow=18,SNR=3.0
MSVF LR LR 19 45 42.7
comp=Z,7µm,21.1s,baz=198,slow=32
**MSVF Nonsavu 33.13 24** P **P** **19 34 39.5 -0.8**
**SANVU Saraoutou 33.63 5** P **P** **19 34 45.3 +0.8**
**QIS Mount Isa 34.79 316** P **P** **19 34 54.6 0.0**
baz=35,SNR=116
**MTSU Mount Surprise 34.98 325** P **P** **19 34 56.8 +0.5**
baz=35,SNR=61
**AS31 Alice Springs 35.02 305** P **P** **19 34 55.6 -1.1**
**ASAR Alice Springs 35.02 305** P **P** **19 34 56.1 -0.6**
comp=Z,78nm,1.0s,baz=138,slow=7.8,SNR=381
ASAR PcP **PcP** **19 37 28.0 -0.6**
comp=Z,21nm,1.0s,baz=137,slow=4.2,SNR=6.0
ASAR PKiKP **PKiKP** **19 44 49.2 -1.3**
comp=Z,0.5nm,0.7s,baz=89,slow=1.2,SNR=5.8
ASAR LR LR 19 48 26.1
comp=Z,7µm,18.6s,baz=158,slow=35
**ASAR Alice Springs 35.02 305** P **P** **19 34 55.5 -1.2**
**WRKA Warakurna 37.10 297** P **P** **19 35 13.7 -0.8**
baz=37,SNR=44
**WR0 Warramunga Arr 37.74 310** P **P** **19 35 18.4 -1.6**
WR0 IAmb IAmb 19 35 19.4
comp=Z,172nm,1.1s
**WB2 Warramunga Arr 37.85 309** P **P** **19 35 19.3 -1.6**
WB2 IAmb IAmb 19 35 20.9
comp=Z,283nm,1.1s
**WRA Warramunga Arr 37.86 309** P **P** **19 35 19.6 -1.3**
comp=Z,113nm,1.0s,baz=145,slow=7.8,SNR=201
WRA PcP **PcP** **19 37 36.8 -0.3**
comp=Z,35nm,1.0s,baz=148,slow=2.6,SNR=18
WRA LR LR 19 49 26.3
comp=Z,5µm,20.2s,baz=142,slow=34
**WRA Warramunga Arr 37.86 309** P **P** **19 35 18.5 -2.4**
**WRAB Tennant Creek 37.86 309** *c iP* **P** **19 35 19.8 -1.2**
WRAB pmax pmax
comp=Z,282nm,1.2s
WRAB MLR MLR
comp=Z,7µm,15.0s
**WRAB Tennant Creek 37.86 309** IAMs_20 IAMs_20 19 49 06.4
comp=Z,9µm,20.0s
**WRAB Tennant Creek 37.86 309** P **P** **19 35 19.7 -1.2**
**WB0 Warramunga Arr 37.98 310** P **P** **19 35 20.1 -1.8**
WB0 IAmb IAmb 19 35 22.0
comp=Z,218nm,1.3s
**NWAO Narrogin (SRO) 38.55 277** P **P** **19 35 25.7 -1.0**
NWAO pmax pmax
comp=Z,64nm,1.1s
NWAO MLR MLR
comp=Z,6µm,18.0s
**NWAO Narrogin (SRO) 38.55 277** P **P** **19 35 25.7 -1.0**
**KLBR Kellerberrin 39.06 279** P **P** **19 35 30.5 -0.5**
baz=39,SNR=12
**COEN Coen 39.23 326** P **P** **19 35 32.2 -0.3**
COEN IAmb IAmb 19 35 34.4
comp=Z,509nm,2.0s
**RAR Rarotonga 39.68 58** LR LR 19 51 14.8
comp=Z,4µm,19.0s,baz=213,slow=35
**RAR Rarotonga 39.68 58** P P 19 35 46.5 +10
**HNR Honiara 39.73 353** P **P** **19 35 36.5 -0.1**
comp=Z,224nm,0.7s,baz=220,slow=5.0,SNR=7.3
HNR LR LR 19 49 23.2
comp=Z,8µm,20.0s,baz=178,slow=32
**HNR Honiara 39.73 353** P **P** **19 35 36.9 +0.3**
HNR pmax pmax
comp=Z,252nm,0.7s
HNR MLR MLR
comp=Z,10µm,20.0s
**HNR Honiara 39.73 353** P **P** **19 35 36.9 +0.3**
HNR IAmb IAmb 19 35 38.3
comp=Z,252nm,0.7s
**HNR Honiara 39.73 353** IAMs_20 IAMs_20 19 49 12.2
comp=Z,10µm,20.0s
**MUN Mundaring 39.82 277** P **P** **19 35 35.8 -1.5**
baz=40,SNR=4.2
**AFI Afiamalu 40.11 37** P **P** **19 35 40.0 +0.1**
AFI pmax pmax
comp=Z,234nm,1.3s
AFI MLR MLR
comp=Z,7µm,22.0s
**AFI Afiamalu 40.11 37** P **P** **19 35 40.0 +0.1**
AFI IAmb IAmb 19 35 54.1
comp=Z,234nm,1.3s
**AFI Afiamalu 40.11 37** P P 19 35 48.7 +8.9
**BLDU Ballidu 40.38 279** P **P** **19 35 40.9 -1.0**
baz=40,SNR=7.1
**QSPA South Pole Qui 41.02 180** P **P** **19 35 48.9 +1.9**
comp=Z,24nm,0.8s,baz=17,slow=3.3,SNR=34
QSPA PcP **PcP** **19 37 47.5 +0.9**
comp=Z,25nm,0.9s,baz=278,slow=1.0,SNR=7.7
QSPA LR LR 19 50 31.2
comp=Z,4µm,18.1s,baz=18,slow=33
**QSPA South Pole Qui 41.02 180** P **P** **19 35 48.6 +1.6**
**MORW Morawa 41.84 280** P **P** **19 35 53.5 -0.5**
baz=42,SNR=21
**MORW Morawa 41.84 280** P **P** **19 35 53.4 -0.6**
MORW IAmb IAmb 19 35 55.0
comp=Z,211nm,1.4s
**MEEK Meekatharra 41.86 285** P **P** **19 35 53.4 -0.8**
baz=42,SNR=16
**PMG Port Moresby 42.18 334** P **P** **19 35 58.3 +1.5**
comp=Z,95nm,1.0s,baz=141,slow=5.3,SNR=33
PMG PcP **PcP** **19 37 51.3 +0.4**
comp=Z,38nm,0.9s,baz=255,slow=5.6,SNR=4.3
PMG LR LR 19 50 33.0
comp=Z,10µm,19.8s,baz=158,slow=32
**PMG Port Moresby 42.18 334** ⇓ *iP* **P** **19 35 57.2 +0.4**
PMG pmax pmax
comp=Z,216nm,1.2s
PMG MLR MLR
comp=Z,5µm,15.0s
**PMG Port Moresby 42.18 334** P **P** **19 35 58.1 +1.3**
PMG IAmb IAmb 19 36 04.0
comp=Z,208nm,1.1s
**PMG Port Moresby 42.18 334** P **P** **19 35 58.4 +1.6**
**FITZ Fitzroy Crossi 44.05 301** P **P** **19 36 11.6 -0.3**
comp=Z,104nm,1.0s,baz=156,slow=9.1,SNR=76
FITZ LR LR 19 53 42.8
comp=Z,3µm,20.8s,baz=146,slow=35
**KNRA Kununurra 44.31 306** P **P** **19 36 13.2 -0.8**
baz=44,SNR=26
**KNRA Kununurra 44.31 306** P **P** **19 36 12.8 -1.2**
KNRA IAmb IAmb 19 36 21.0
comp=Z,238nm,1.1s
**PSA00 Pilbara Seismi 44.78 291** P **P** **19 36 16.4 -1.3**
PSA00 IAmb IAmb 19 36 18.3
comp=Z,204nm,1.3s
**PSA00 Pilbara Seismi 44.78 291** P **P** **19 36 16.4 -1.3**
**KDU Kakadu 44.96 313** P **P** **19 36 18.6 -0.6**
baz=45,SNR=24
**MBWA Marble Bar 45.16 292** P **P** **19 36 19.6 -1.2**
MBWA IAmb IAmb 19 36 21.3
comp=Z,206nm,1.2s
**MBWA Marble Bar 45.16 292** IAMs_20 IAMs_20 19 56 07.4
comp=Z,6µm,19.0s
**MBWA Marble Bar 45.16 292** P **P** **19 36 20.1 -0.7**
comp=Z,90nm,1.5s
**MTN Manton Dam 45.48 311** P **P** **19 36 22.5 -0.8**
baz=45,SNR=18
**MTN Manton Dam 45.48 311** P **P** **19 36 22.2 -1.1**
**RABL Rabaul 45.99 343** P **P** **19 36 27.4 0.0**
**GIRL Giralia 47.49 285** P **P** **19 36 38.9 -0.2**
baz=47,SNR=4.3
**PPT2 Papeete2 48.45 66** *e*S **S** **19 43 49.7 +2.7**
comp=Z,5µm,29.0s
PPT2 *e*LR LR 19 50 31.0
comp=Z,16µm,32.5s
**PPT Papeete 48.46 66** LR LR 19 55 30.9
comp=Z,4µm,18.0s,baz=226,slow=34
**MANU Manus Island 49.16 337** P **P** **19 36 53.3 +1.4**
MANU IAmb IAmb 19 36 58.9
comp=Z,75nm,0.9s
**MAW Mawson 49.84 209** P **P** **19 36 58.2 +1.6**
comp=Z,99nm,1.2s,baz=174,slow=5.9,SNR=4.0
MAW LR LR 19 56 18.1
comp=Z,6µm,18.6s,baz=110,slow=34
**MAW Mawson 49.84 209** P **P** **19 36 57.2 +0.6**
**JAY Jayapura 50.72 328** P **P** **19 37 04.3 +0.4**
comp=Z,54nm,1.0s,baz=180,slow=6.6,SNR=6.8
JAY LR LR 19 57 50.3
comp=Z,7µm,18.7s,baz=146,slow=35
**GENI Genyem 50.83 328** P **P** **19 37 06.9 +2.2**
**BATI Baumata 51.59 305** P **P** **19 37 11.3 +0.9**
comp=Z,77nm,0.9s,baz=197,slow=1.8,SNR=18
BATI LR LR 19 58 03.1
comp=Z,10µm,20.9s,baz=180,slow=35
**SOEI Soe 51.64 306** P **P** **19 37 10.2 -0.7**
**SOEI Soe 51.64 306** P **P** **19 37 11.1 +0.2**
**BELA Belgrano 2 52.74 175** P **P** **19 37 19.1 +0.9**
**BNDI Bandanaira 53.30 315** P **P** **19 37 22.2 -0.8**
**MMRI Maumere 53.66 304** P **P** **19 37 25.4 -0.4**
MMRI IAMs_20 IAMs_20 19 59 15.2
comp=Z,5µm,19.0s
**MMRI Maumere 53.66 304** P **P** **19 37 26.0 +0.2**
comp=Z,261nm,1.9s
**SYO Syowa Base 55.45 201** ⇑ *eP* **P** **19 37 36.0 -2.0**
**SIJI Sorong 55.92 318** P **P** **19 37 42.5 +0.3**
comp=Z,59nm,1.1s,baz=94,slow=4.3,SNR=25
SIJI LR LR 20 01 46.4
comp=Z,6µm,20.7s,baz=103,slow=36
**PATS Pohnpei 55.97 352** IAMs_20 IAMs_20 19 58 15.9
comp=Z,6µm,21.0s
**PLAI Plampang 55.99 300** P **P** **19 37 42.9 +0.2**
comp=Z,84nm,1.3s
**SANI Sanana 57.32 312** P **P** **19 37 51.1 -0.9**
comp=Z,174nm,1.5s
**KAPI Kappang 58.02 304** P **P** **19 37 57.6 +0.6**
comp=Z,69nm,1.1s,baz=175,slow=4.7,SNR=33
KAPI LR LR 20 02 10.1
comp=Z,3µm,21.5s,baz=172,slow=35
**KAPI Kappang 58.02 304** P **P** **19 37 57.0 -0.1**
**KAPI Kappang 58.02 304** IAMs_20 IAMs_20 20 01 58.8
comp=Z,4µm,19.0s
**KAPI Kappang 58.02 304** P **P** **19 37 57.6 +0.6**
comp=Z,150nm,1.6s
**JAGI Jajag, Banyuwa 58.39 296** P **P** **19 37 58.4 -1.2**
JAGI IAmb IAmb 19 38 19.4
comp=Z,75nm,0.9s
**JAGI Jajag, Banyuwa 58.39 296** P **P** **19 37 59.2 -0.4**
**NVL N'lazarevskaya 58.84 190** ⇑ *iP* P 19 38 13.3 +11
NVL *i* 19 47 55.1
NVL pmax pmax
comp=Z,138nm,1.7s
**TNTI Ternate 59.13 315** P **P** **19 38 03.5 -1.2**
TNTI IAmb IAmb 19 38 15.7
comp=Z,81nm,1.1s
**TNTI Ternate 59.13 315** P **P** **19 38 03.8 -0.9**
**SNAA Sanae 59.20 185** P **P** **19 38 05.1 +0.5**
**SNAA Sanae 59.20 185** LR LR 20 00 59.6
comp=Z,3µm,21.9s,baz=152,slow=33
**SNAA Sanae 59.20 185** *ceP* **P** **19 38 04.5 -0.1**
SNAA MLR MLR
comp=Z,2µm,15.0s
**SNAA Sanae 59.20 185** P **P** **19 38 04.7 0.0**
SNAA IAmb IAmb 19 38 11.1
comp=Z,150nm,1.5s
SNAA IAMs_20 IAMs_20 20 02 36.2
comp=Z,4µm,18.0s
**VNA3 Neumayer Olymp 59.90 182** P **P** **19 38 09.7 +0.4**
**VNA2 Neumayer--Watz 60.15 183** P **P** **19 38 11.7 +0.6**
baz=172,slow=5.4
**PMSA Palmer Station 60.34 158** LR LR 19 59 12.0
comp=Z,3µm,21.4s,baz=212,slow=31
**PMSA Palmer Station 60.34 158** IAMs_20 IAMs_20 19 58 27.5
comp=Z,4µm,22.0s
**VNA1 Neumayer--Stat 60.45 183** P **P** **19 38 13.9 +0.9**
**TAOE Nuku Hiva Isla 60.95 68** *e*S **S** **19 46 37.7 +2.5**
comp=Z,5µm,32.6s
TAOE *e*LR LR 19 56 21.0
comp=Z,6µm,25.2s
**SMRI Semarang 61.72 294** P **P** **19 38 22.2 -0.3**
**XMIS Christmas Isla 62.00 287** P **P** **19 38 24.3 -0.1**
**XMIS Christmas Isla 62.00 287** P **P** **19 38 24.6 +0.3**
**TOLI2 Tolitoli 62.64 309** P **P** **19 38 27.1 -1.5**
TOLI2 IAmb IAmb 19 38 29.2
comp=Z,105nm,1.2s
**TOLI2 Tolitoli 62.64 309** P **P** **19 38 27.9 -0.7**
**LEM Lembang 63.61 292** P **P** **19 38 36.7 +1.5**
comp=Z,201nm,0.9s,baz=138,slow=5.1,SNR=53
LEM LR LR 20 04 09.8
comp=Z,1µm,21.4s,baz=138,slow=34
**DAV Davao City (W) 65.51 317** P **P** **19 38 46.9 -0.4**
comp=Z,72nm,0.3s,baz=287,slow=0.5,SNR=11
DAV LR LR 20 08 22.9
comp=Z,2µm,18.3s,baz=146,slow=37
**MYLDM Lahad Datu 67.28 309** P **P** **19 38 59.2 +0.5**
**USHA Ushuaia 67.29 150** LR LR 20 03 56.1
comp=Z,2µm,18.5s,baz=210,slow=32
**RPN Rapa Nui 67.53 106** LR LR 20 01 22.9
comp=Z,1µm,19.5s,baz=231,slow=30
**SBUM Sibu 68.36 302** P **P** **19 39 04.3 -1.3**
SBUM IAmb IAmb 19 39 11.7
comp=Z,100nm,1.5s
**PMBI Palembang 68.41 292** P **P** **19 39 06.2 +0.3**
**KSM Kuching 68.65 299** P **P** **19 39 06.2 -1.2**
KSM IAmb IAmb 19 39 13.1
comp=Z,156nm,1.3s
**KSM Kuching 68.65 299** P **P** **19 39 07.5 +0.1**
**KKM Kota Kinabalu 69.20 307** P **P** **19 39 09.7 -1.2**
KKM IAmb IAmb 19 39 30.8
comp=Z,140nm,1.4s
**KKM Kota Kinabalu 69.20 307** P **P** **19 39 10.6 -0.3**
**GO08 Villa O'Higgin 71.02 144** P **P** **19 39 23.1 +1.5**
**MYKOM Kota Tinggi 72.69 294** P **P** **19 39 31.2 -0.9**
MYKOM IAmb IAmb 19 39 38.3
comp=Z,104nm,1.3s
**EFI East Falkland 73.21 154** ⇓ *eP* **P** **19 39 35.9 +1.3**
EFI pmax pmax
comp=Z,170nm,1.8s
EFI MLR MLR
comp=Z,494nm,16.0s
**BKNI Bangkinang 73.25 291** P **P** **19 39 34.8 -0.5**
**COYC Coyhaique 73.56 142** P **P** **19 39 38.7 +1.9**
COYC IAmb IAmb 19 39 55.6
comp=Z,165nm,1.5s
**TGY Tagaytay City 73.81 316** LR LR 20 13 21.8
comp=Z,893nm,20.0s,baz=144,slow=37
**LL02 Futaleuf 75.62 141** P **P** **19 39 49.9 +1.1**
**GSI Gunungsitoli 76.15 289** P **P** **19 39 53.0 +0.7**
**GSI Gunungsitoli 76.15 289** P **P** **19 39 53.7 +1.5**
**RPSI Rantau Prapat 76.40 291** P **P** **19 39 52.9 -0.7**
**PSI Prapat 76.49 291** P **P** **19 39 52.9 -1.4**
comp=Z,15nm,0.9s,baz=190,slow=8.2,SNR=19
PSI LR LR 20 12 23.6
comp=Z,768nm,20.9s,baz=138,slow=35
**IPM Ipoh 76.53 293** P **P** **19 39 53.0 -1.3**
**IPM Ipoh 76.53 293** P **P** **19 39 54.0 -0.3**
**KULM Kulim 77.39 294** P **P** **19 39 58.3 -0.9**
KULM IAmb IAmb 19 40 07.0
comp=Z,132nm,1.4s
**PLCA Paso Flores 78.19 140** P **P** **19 40 04.8 +1.3**
comp=Z,14nm,1.0s,baz=214,slow=6.5,SNR=20
PLCA LR LR 20 06 56.1
comp=Z,2µm,21.1s,baz=208,slow=30
**PLCA Paso Flores 78.19 140** P **P** **19 40 05.0 +1.5**
PLCA pmax pmax
comp=Z,139nm,1.8s
**PLCA Paso Flores 78.19 140** P **P** **19 40 05.0 +1.5**
PLCA IAmb IAmb 19 40 22.0
comp=Z,139nm,1.8s
**PLCA Paso Flores 78.19 140** *eP* **P** **19 40 05.7 +2.2**
**DLV T Lat 78.26 304** P **P** **19 40 03.4 -0.7**
DLV IAmb IAmb 19 40 10.0
comp=Z,203nm,1.6s
**DLV T Lat 78.26 304** P **P** **19 40 04.4 +0.3**
**LC01 Cunco 79.16 139** P **P** **19 40 09.7 +1.0**
**SRIT Nakonsritamara 80.64 295** P **P** **19 40 16.9 0.0**
SRIT IAmb IAmb 19 40 23.1
comp=Z,167nm,1.4s
**JOW Kunigami 82.26 328** LR LR 20 15 40.8
comp=Z,2µm,19.3s,baz=113,slow=35
**SSLB Suanglung 82.34 320** P **P** **19 40 23.8 -2.0**
SSLB IAMs_20 IAMs_20 20 14 45.2
comp=Z,2µm,20.0s
**SSLB Suanglung 82.34 320** P **P** **19 40 27.8 +2.1**
**UBPT Khong Chiam 82.65 303** P **P** **19 40 27.9 +0.5**
**BO02 Sierra Bellavi 83.06 137** P **P** **19 40 31.0 +1.4**
BO02 IAmb IAmb 19 40 47.5
comp=Z,108nm,1.3s
**BO01 Tunca 83.25 137** P **P** **19 40 31.4 +0.8**
BO01 IAmb IAmb 19 41 06.8
comp=Z,97nm,1.6s
**QIZ Qiongzhong 83.43 309** P **P** **19 40 32.5 +1.1**
QIZ PP **PP** **19 43 42.8 -1.1**
QIZ S **S** **19 50 57.4 +5.2**
QIZ SS **SS** **19 56 22.3 +3.8**
QIZ pmax pmax
comp=Z,2µm,9.8s
QIZ LR LR
comp=Z,940nm,17.6s
QIZ LR LR
comp=Z,870nm,17.5s
QIZ LR LR
comp=Z,1µm,21.6s
**MT01 Popeta 83.62 136** P **P** **19 40 33.4 +0.9**
MT01 IAmb IAmb 19 40 46.4
comp=Z,88nm,1.2s
**BO04 La Punta 83.81 137** P **P** **19 40 33.4 -0.1**
**MT09 Talagante 83.81 136** P **P** **19 40 34.6 +1.0**
MT09 IAmb IAmb 19 40 51.0
comp=Z,72nm,1.3s
**LMEL Las Melosas 84.11 137** P **P** **19 40 36.7 +1.5**
LMEL IAmb IAmb 19 40 52.5
comp=Z,87nm,1.1s
**MT02 Curacav 84.18 136** P **P** **19 40 36.2 +0.9**
MT02 IAmb IAmb 19 40 41.9
comp=Z,128nm,1.6s
**QZH Quanzhou 84.36 319** ⇑ *iP* **P** **19 40 36.3 +0.3**
QZH PP **PP** **19 43 47.9 -3.5**
QZH S **S** **19 51 04.3 +3.0**
QZH pmax pmax
comp=Z,54nm,1.0s
QZH LR LR
comp=Z,970nm,16.6s
QZH LR LR
comp=Z,900nm,13.7s
QZH LR LR
comp=Z,1µm,21.3s
**PEL Peldehue 84.48 136** P **P** **19 40 37.0 +0.1**
PEL pmax pmax
comp=Z,83nm,1.3s
**PEL Peldehue 84.48 136** P **P** **19 40 37.0 +0.1**
PEL IAmb IAmb 19 40 51.2
comp=Z,83nm,1.3s
**VA03 San Esteban 84.86 136** P **P** **19 40 39.7 +0.8**
VA03 IAmb IAmb 19 40 56.9
comp=Z,182nm,1.8s
**GZH Guangzhou 85.13 314** P **P** **19 40 42.0 +2.0**
**H08S2 Diego Garcia H 85.67 263** T T 21 14 47.2
baz=140,slow=76,SNR=203
**H08S1 Diego Carcia H 85.68 263** T T 21 14 48.7
baz=140,slow=76,SNR=176
**H08S3 Diego Garcia H 85.69 263** T T 21 14 47.6
baz=140,slow=76,SNR=298
**JSU Suzuyama 85.83 331** P **P** **19 40 44.0 +0.6**
**RER Riviere de l'E 85.87 242** IAMs_20 IAMs_20 20 10 50.0
comp=Z,3µm,19.0s
**DGAR Diego Garcia 85.87 264** ⇑ *eP* **P** **19 40 44.1 +0.1**
DGAR pmax pmax
comp=Z,329nm,1.0s
DGAR MLR MLR
comp=Z,1µm,16.0s
**CO02 Combarbal 85.96 135** P **P** **19 40 45.7 +1.3**
CO02 IAmb IAmb 19 40 51.2
comp=Z,155nm,1.4s
**CO03 El Pedregal 86.41 135** P **P** **19 40 47.6 +1.0**
**JSG Sagara 86.66 338** P **P** **19 40 47.4 +0.1**
**ZON Zonda 86.73 137** P **P** **19 40 49.0 +0.8**
ZON pmax pmax
comp=Z,110nm,1.6s
**ZON Zonda 86.73 137** P **P** **19 40 49.0 +0.8**
ZON IAmb IAmb 19 41 00.2
comp=Z,110nm,1.6s
**JMN Monobe 86.89 335** P **P** **19 40 49.2 +0.7**
**PBA Port Blair 87.19 291** *eP* **P** **19 40 49.4 -0.9**
PBA IAmb IAmb 19 40 58.3
comp=Z,349nm,1.4s
**JNU Nakatsue 87.20 332** P **P** **19 40 50.8 +0.8**
comp=Z,79nm,1.0s,baz=73,slow=1.9,SNR=9.3
**JNU Nakatsue 87.20 332** P **P** **19 40 50.7 +0.7**
**JNU Nakatsue 87.20 332** P **P** **19 40 51.6 +1.6**
**INU Inuyama 87.59 338** P **P** **19 40 53.1 +1.3**
**INU Inuyama 87.59 338** P **P** **19 40 53.9 +2.1**
**JYT Yasato 87.68 340** P **P** **19 40 53.0 +0.9**
JYT IAmb IAmb 19 40 54.9
comp=Z,143nm,1.5s
**JGF Kuroka 87.74 338** P **P** **19 40 53.0 +0.5**
JGF IAmb IAmb 19 40 56.2
comp=Z,102nm,1.6s
**DGPR DIGLIPUR 88.25 292** *eP* **P** **19 40 53.7 -1.8**
DGPR IAmb IAmb 19 41 01.3
comp=Z,502nm,1.9s
**GULI GuiLin 88.43 313** ⇑ P **P** **19 40 58.4 +2.4**
GULI PP **PP** **19 44 30.3 +6.0**
GULI S **S** **19 51 43.5 +2.6**
GULI pmax pmax
comp=Z,30nm,1.7s
GULI LR LR
comp=Z,1µm,15.7s

GULI LR LR
comp=Z,1µm,19.0s
GULI LR LR
comp=Z,2µm,23.3s
**MJAR Matsushiro Arr 88.44 339** P **P** **19 40 56.6 +0.8**
comp=Z,46nm,1.1s,baz=172,slow=5.3,SNR=31
MJAR LR LR 20 15 29.6
comp=Z,734nm,21.4s,baz=153,slow=32
**MJAR Matsushiro Arr 88.44 339** P **P** **19 40 56.2 +0.4**
MJAR IAmb IAmb 19 41 02.9
comp=Z,144nm,1.5s
**MAJO Matsushiro 88.44 339** *de*P **P** **19 40 55.9 +0.1**
MAJO pmax pmax
comp=Z,144nm,1.4s
MAJO MLR MLR
comp=Z,1µm,19.0s
**MAJO Matsushiro 88.44 339** P **P** **19 40 56.5 +0.7**
**MAJO Matsushiro 88.44 339** P **P** **19 40 57.7 +1.9**
**MAT Matsushiro 88.44 339** P **P** **19 40 56.5 +0.7**
MAT S **S** **19 51 44.2 +3.6**
**MJB9 Matsu-Tunnel 88.44 339** P **P** **19 40 56.6 +0.8**
**SSE Sheshan 88.73 324** P **P** **19 40 58.3 +1.0**
SSE SS SS 19 57 40.4 +4.3
SSE pmax pmax
comp=Z,44nm,1.4s
SSE pmax pmax
comp=Z,180nm,3.5s
SSE LR LR
comp=Z,400nm,19.8s
**CM31 Chiang Mai Arr 88.86 300** P **P** **19 40 58.1 -0.1**
**CMAR Chiang Mai Arr 88.86 300** P **P** **19 40 58.9 +0.7**
comp=Z,18nm,0.8s,baz=161,slow=3.6,SNR=151
CMAR PP **PP** **19 44 32.0 +4.2**
comp=Z,2.7nm,1.0s,baz=148,slow=6.2,SNR=4.2
CMAR LR LR 20 24 03.1
comp=Z,861nm,18.7s,baz=145,slow=38
**CMAR Chiang Mai Arr 88.86 300** P **P** **19 40 58.3 0.0**
**JMM Marumori 89.13 341** P **P** **19 41 00.0 +1.1**
**CHTO Chiang Mai 89.14 300** P **P** **19 40 59.9 +0.3**
CHTO pmax pmax
comp=Z,159nm,1.9s
CHTO MLR MLR
comp=Z,2µm,22.0s
**CHTO Chiang Mai 89.14 300** P **P** **19 40 59.9 +0.3**
CHTO IAmb IAmb 19 41 02.0
comp=Z,159nm,1.9s
**CHTO Chiang Mai 89.14 300** P **P** **19 41 00.4 +0.8**
**GO03 Copiap 89.35 133** P **P** **19 41 01.1 +0.4**
GO03 IAmb IAmb 19 41 07.7
comp=Z,95nm,1.4s
**CNSH ChangSha 89.67 316** ⇑P P 19 40 54.3 -7.5
CNSH PP PP 19 44 20.9 -13
**CNSH ChangSha 89.67 316** S **SKKSac** **19 51 39.3 -4.9**
**CNSH ChangSha 89.67 316** SS SS 19 57 43.6 -6.3
CNSH pmax pmax
comp=Z,31nm,1.5s
CNSH LR LR
comp=N,2µm,16.4s
CNSH LR LR
comp=E,1µm,15.7s
CNSH LR LR
comp=Z,1µm,23.0s
**VOI Vohitsoka 90.30 235** P **P** **19 41 04.7 -0.6**
**VOI Vohitsoka 90.30 235** P **P** **19 41 06.1 +0.8**
**NJ2 Nanjing 90.50 323** ⇑*i*P **P** **19 41 06.4 +0.9**
NJ2 pP **sP** **19 41 11.6 +0.2**
NJ2 sP **pwP** **19 41 15.4 +3.1**
NJ2 PP **PP** **19 44 46.8 +6.1**
NJ2 S **S** **19 52 02.3 +2.4**
NJ2 sS **sS** **19 52 09.0 +2.0**
NJ2 SS **SS** **19 58 00.5 -1.2**
NJ2 pmax pmax
comp=Z,64nm,1.0s
NJ2 pmax pmax
comp=Z,1µm,8.0s
NJ2 LR LR
comp=Z,2µm,19.4s
NJ2 LR LR
comp=Z,920nm,14.2s
NJ2 LR LR
comp=Z,2µm,14.2s
**AC02 Maricunga 90.51 134** P **P** **19 41 07.8 +1.1**
**WHN Wuhan 91.07 318** ⇑P **P** **19 41 08.8 +0.6**
WHN PP **PP** **19 44 45.8 +0.5**
WHN S **S** **19 52 04.3 -0.9**
WHN pmax pmax
comp=Z,280nm,1.6s
WHN pmax pmax
comp=Z,2µm,10.7s
WHN LR LR
comp=Z,3µm,25.2s
**GYA Guiyang 91.22 311** ⇓P **P** **19 41 10.1 +0.9**
GYA PP **PP** **19 44 47.3 +0.6**
GYA SKS **SKSac** **19 51 38.8 -2.0**
GYA S **S** **19 52 05.1 -2.0**
GYA SS **SS** **19 58 11.9 -0.7**
GYA pmax pmax
comp=Z,35nm,1.7s
GYA pmax pmax
comp=Z,2µm,11.2s
GYA LR LR
comp=Z,530nm,14.8s
GYA LR LR
comp=Z,770nm,16.6s
GYA LR LR
comp=Z,680nm,18.2s
**TJN Taejon 91.31 331** ⇑*e*P **P** **19 41 09.6 +0.4**
**TJN Taejon 91.31 331** P **P** **19 41 10.1 +1.0**
**TJN Taejon 91.31 331** P **P** **19 41 10.8 +1.6**
**KAAM Kaadhehdhoo 91.43 269** IAMs_20 IAMs_20 20 11 48.3
comp=Z,2µm,21.0s
**PALK Pallekele 91.47 279** LR LR 20 14 59.4
comp=Z,2µm,20.9s,baz=234,slow=31
**PB14 IPOC Station P 91.76 132** P **P** **19 41 08.4 -3.8**
**KSRS Korea Array 92.12 332** P **P** **19 41 14.6 +1.7**
comp=Z,33nm,0.9s,baz=150,slow=5.6,SNR=45
KSRS LR LR 20 20 19.6
comp=Z,1µm,20.4s,baz=160,slow=34
**KSAR Wonju Array Be 92.12 332** P **P** **19 41 14.0 +1.1**
**KSAR Wonju Array Be 92.12 332** P **P** **19 41 14.0 +1.1**
**KMI Kunming 92.14 307** ⇑P **P** **19 41 14.9 +1.3**
KMI pP sP 19 41 19.0 -0.4
KMI sP pwP 19 41 20.4 -0.1
KMI PP **PP** **19 44 56.4 +2.3**
KMI S **S** **19 52 20.4 +4.7**
KMI SS **SS** **19 58 29.0 +3.0**
KMI pmax pmax
comp=Z,36nm,1.8s
KMI pmax pmax
comp=Z,1µm,10.4s
KMI LR LR
comp=Z,1µm,27.6s
KMI LR LR
comp=Z,940nm,21.1s
KMI LR LR
comp=Z,2µm,34.1s
**KS19 Wonju Array Si 92.18 332** P **P** **19 41 12.1 -1.1**
KS19 IAmb IAmb 19 41 20.7
comp=Z,81nm,1.1s
**ABPO Ambohimpanom 92.40 237** P **P** **19 41 16.1 +1.0**
ABPO pmax pmax
comp=Z,139nm,1.4s
ABPO MLR MLR
comp=Z,1µm,19.0s
**ABPO Ambohimpanom 92.40 237** P **P** **19 41 16.1 +1.0**
**INCN Inchon 92.55 331** P **P** **19 41 15.6 +0.6**
INCN pmax pmax
comp=Z,72nm,1.0s
INCN MLR MLR
comp=Z,2µm,18.0s
**INCN Inchon 92.55 331** P **P** **19 41 15.6 +0.6**
INCN IAmb IAmb 19 41 17.1
comp=Z,72nm,1.0s
**INCN Inchon 92.55 331** IAMs_20 IAMs_20 20 21 06.0
comp=Z,2µm,18.0s
**INCN Inchon 92.55 331** P **P** **19 41 16.9 +1.9**
**PLTB Pedras Altas 92.58 148** P **P** **19 41 16.3 +0.7**
PLTB IAmb IAmb 19 41 23.0
comp=Z,104nm,1.7s
**PLTB Pedras Altas 92.58 148** *e*P **P** **19 41 17.6 +2.0**
**SUR Sutherland 92.70 210** P **P** **19 41 16.3 -0.1**
comp=Z,13nm,1.0s,baz=298,slow=3.5,SNR=3.7
SUR LR LR 20 21 58.1
comp=Z,2µm,18.0s,baz=159,slow=35
**SUR Sutherland 92.70 210** P **P** **19 41 15.5 -0.9**

SUR IAmb IAmb 19 41 21.8
comp=Z,58nm,1.4s
**ENH Enshi 93.03 315** P **P** **19 41 17.0 -0.4**
ENH IAmb IAmb 19 41 23.5
comp=Z,114nm,1.7s
**ITQB Itaqui 93.38 145** *e*P **P** **19 41 21.1 +1.9**
**PZH PanZhiHua 93.78 307** ⇑P **P** **19 41 20.9 -0.2**
PZH sP **pwP** **19 41 28.9 +1.0**
PZH PP **PP** **19 45 05.8 -1.1**
PZH SKS **SKSac** **19 51 55.6 +0.5**
PZH S **S** **19 52 28.8 -1.2**
PZH sS **pS** **19 52 36.1 +0.5**
PZH SS **SS** **19 58 52.5 +3.2**
PZH pmax pmax
comp=Z,80nm,1.8s
PZH pmax pmax
comp=Z,470nm,8.1s
PZH LR LR
comp=Z,5µm,21.2s
PZH LR LR
comp=Z,3µm,21.6s
PZH LR LR
comp=Z,4µm,21.8s
**CPSB Cacapava Do Su 93.88 148** *e*P **P** **19 41 23.5 +1.9**
**LVC Limon Verde 94.19 132** *e*P **P** **19 41 25.6 +2.0**
**BOSA Boshof 94.56 215** P **P** **19 41 23.7 -1.1**
comp=Z,4.6nm,0.8s,baz=122,slow=4.7,SNR=4.3
BOSA LR LR 20 17 44.4
comp=Z,2µm,19.8s,baz=157,slow=32
**BOSA Boshof 94.56 215** P **P** **19 41 23.3 -1.6**
**ASAJ Asahikawa 94.81 344** LR LR 20 18 41.9
comp=Z,2µm,21.2s,baz=159,slow=32
**TIA Tai'an 94.83 323** ⇑P **P** **19 41 26.4 +0.9**
TIA PP **PP** **19 45 13.0 -1.8**
TIA pmax pmax
comp=Z,21nm,0.8s
TIA LR LR
comp=Z,770nm,25.0s
TIA LR LR
comp=Z,840nm,22.1s
TIA LR LR
comp=Z,2µm,20.0s
**LYN LuoYang 95.31 319** ⇑*i*P **P** **19 41 28.6 +0.9**
LYN pP pwP 19 41 33.8 -0.7
LYN PP **PP** **19 45 17.5 -1.1**
LYN S **S** **19 52 47.3 +4.6**
LYN SS **SS** **19 59 15.3 +4.6**
LYN pmax pmax
comp=Z,20nm,2.1s
LYN LR LR
comp=Z,600nm,21.1s
LYN LR LR
comp=Z,900nm,21.6s
**SBV Sambava 95.33 243** P P 19 41 34.7 +6.3
**DL2 Dalian 95.52 328** P P 19 41 15.1 -13
DL2 PP **PP** **19 45 21.6 +1.4**
**DL2 Dalian 95.52 328** SS SS 19 59 23.0 +9.4
DL2 pmax pmax
comp=Z,47nm,1.6s
DL2 pmax pmax
comp=Z,550nm,9.6s
DL2 LR LR
comp=N,1µm,18.8s
DL2 LR LR
comp=E,790nm,17.9s
DL2 LR LR
comp=Z,1µm,18.6s
**HMDM Hanimaadhoo 96.00 273** IAMs_20 IAMs_20 20 15 09.6
comp=Z,2µm,21.0s
**CPUP Villa Florida 96.10 143** P **P** **19 41 32.4 +0.6**
comp=Z,6.4nm,1.1s,baz=200,slow=5.0,SNR=6.1
CPUP LR LR 20 18 05.6
comp=Z,2µm,21.7s,baz=205,slow=31
**CPUP Villa Florida 96.10 143** P **P** **19 41 32.1 +0.4**
CPUP IAmb IAmb 19 41 38.9
comp=Z,55nm,1.7s
**CPUP Villa Florida 96.10 143** *e*P **P** **19 41 33.9 +2.1**
**CD2 Chengdu 96.32 311** ⇑P **P** **19 41 32.5 0.0**
CD2 PP **PP** **19 45 26.0 -0.5**
CD2 SKS **SKSac** **19 52 08.8 +0.4**
CD2 S **S** **19 52 50.8 -0.9**
CD2 pmax pmax
comp=Z,20nm,1.5s
CD2 pmax pmax
comp=Z,810nm,9.8s
CD2 LR LR
comp=Z,1µm,19.6s
CD2 LR LR
comp=Z,850nm,23.0s
**XAN Xi'an 96.45 316** ⇑P **P** **19 41 33.3 +0.3**
XAN pP sP 19 41 38.1 -0.7
XAN sP pwP 19 41 40.3 +0.5
XAN PP **PP** **19 45 28.3 +0.8**
XAN SKS **SKSac** **19 52 06.8 -2.0**
XAN S **S** **19 52 52.8 +0.1**
XAN sS sS 19 53 00.3 +0.4
XAN SS **SS** **19 59 28.6 +1.6**
XAN pmax pmax
comp=Z,32nm,1.4s
XAN LR LR
comp=Z,1µm,22.7s
XAN LR LR
comp=Z,610nm,24.0s
XAN LR LR
comp=Z,2µm,24.0s
**GO01 Chusmiza 96.52 130** P **P** **19 41 35.0 +0.6**
**IMP Imphal 96.72 300** *e*P **P** **19 41 33.4 -1.1**
IMP IAmb IAmb 19 41 36.2
comp=Z,16nm,1.3s
**HNS HongShan 96.82 322** ⇑P **P** **19 41 35.4 +0.9**
HNS PP **PP** **19 45 33.3 +3.1**
HNS pmax pmax
comp=Z,15nm,1.8s
HNS pmax pmax
comp=Z,830nm,9.8s
HNS LR LR
comp=Z,940nm,18.2s
HNS LR LR
comp=Z,920nm,21.1s
HNS LR LR
comp=Z,2µm,19.5s
**BELO BELONIA 96.93 298** *e*P **P** **19 41 35.1 -0.2**
**TER01 Tubaro-SC 97.05 150** *e*P Pdif 19 41 38.6 +2.4
**USRK Ussuriysk Ar. 97.21 337** P **P** **19 41 35.0 -1.0**
comp=Z,3.4nm,0.8s,baz=187,slow=7.7,SNR=5.5
USRK LR LR 20 20 04.6
comp=Z,603nm,21.5s,baz=166,slow=32
**USRK Ussuriysk Ar. 97.21 337** P **P** **19 41 35.7 -0.4**
**USRK Ussuriysk Ar. 97.21 337** P **P** **19 41 35.7 -0.4**
**ITAB Concordia 97.23 148** *e*P Pdif 19 41 39.5 +2.5
**KOHI KOHIMA 97.32 301** *e*P **P** **19 41 36.0 -1.2**
KOHI IAmb IAmb 19 41 51.0
comp=Z,13nm,1.1s
**SILR SILCHAR 97.33 299** ⇑*e*P Pdif 19 41 37.4 +0.2
**SNY Shenyang 97.48 330** ⇓P P 19 41 22.9 -14
**PB16 IPOC Station P 97.48 129** P Pdif 19 41 39.1 +0.2
PB16 IAmb IAmb 19 41 52.0
comp=Z,51nm,2.0s
**YSS Yuzh-Sakhalins 97.54 345** *e*P Pdif 19 41 37.6 +0.1
YSS *e* 19 45 46.0
YSS *e*S **S** **19 52 58.6 -2.6**
YSS *e*PS **PS** **19 54 28.7 +2.7**
YSS pmax pmax
comp=Z,20nm,1.5s
YSS smax smax
comp=E,700nm,10.1s
**YSS Yuzh-Sakhalins 97.54 345** IAMs_20 IAMs_20 20 24 52.6
comp=Z,3µm,20.0s
**MOKO MOKOCHONG 97.56 302** *e*P **P** **19 41 37.9 -0.4**
MOKO IAmb IAmb 19 41 44.4
comp=Z,7.5nm,0.7s
**LKP Lekhapani 97.61 303** *e*P **P** **19 41 35.6 -2.7**
**LBTB Lobatse 97.66 217** LR LR 20 21 18.7
comp=Z,1µm,18.0s,baz=151,slow=33
**TIY Taiyuan 98.02 321** ⇑P Pdif 19 41 48.8 +8.8
TIY PP **PP** **19 45 40.4 +0.9**
**TIY Taiyuan 98.02 321** S **S** **19 53 08.6 +2.6**
**TIY Taiyuan 98.02 321** SS SS 19 59 54.9 +5.8
TIY pmax pmax
comp=Z,580nm,7.6s
TIY LR LR
comp=N,660nm,14.1s
TIY LR LR
comp=E,430nm,17.9s
TIY LR LR
comp=Z,900nm,19.6s
**DIBR DIBRUGARH 98.23 303** *e*P **P** **19 41 40.5 -0.6**
**SHL Shillong 98.47 299** P **P** **19 41 41.8 -0.7**
SHL pmax pmax
comp=Z,63nm,1.6s
**SHL Shillong 98.47 299** P **P** **19 41 41.8 -0.7**
SHL IAmb IAmb 19 45 37.5
comp=Z,63nm,1.6s
**BJT Baijiatuao 98.50 324** P **P** **19 41 40.0 -2.0**
BJT pmax pmax
comp=Z,55nm,2.0s
BJT MLR MLR
comp=Z,2µm,20.0s
**BJT Baijiatuao 98.50 324** P **P** **19 41 40.0 -2.0**
BJT IAmb IAmb 19 41 44.3
comp=Z,55nm,2.0s
**BJT Baijiatuao 98.50 324** IAMs_20 IAMs_20 20 25 24.7
comp=Z,2µm,20.0s
**BJI Beijing 98.52 324** P Pdif 19 41 43.3 +1.2
BJI sP pwP 19 41 48.6 -0.2
BJI PP **PP** **19 45 46.0 +2.8**
BJI SKS **SKSac** **19 52 21.8 +2.8**
BJI SS **SS** **19 59 56.1 +0.2**
BJI pmax pmax
comp=Z,11nm,1.7s
BJI pmax pmax
comp=Z,560nm,8.3s
BJI LR LR
comp=Z,850nm,20.0s
BJI LR LR
comp=Z,960nm,19.1s
BJI LR LR
comp=Z,2µm,18.5s
**CN2 Changchun 98.68 332** *e*P **P** **19 41 41.9 -0.8**
CN2 pmax pmax
comp=Z,10.0nm,1.3s
CN2 LR LR
comp=Z,1µm,20.0s
CN2 LR LR
comp=Z,500nm,20.0s
CN2 LR LR
comp=Z,1µm,20.0s
**NNA Nana 98.73 120** LR LR 20 17 04.0
comp=Z,1µm,20.6s,baz=208,slow=30
**MSEY Mahe Island 98.84 252** IAMs_20 IAMs_20 20 18 35.3
comp=Z,2µm,18.0s
**LPAZ La Paz 99.91 129** LR LR 20 18 21.6
comp=Z,828nm,21.8s,baz=200,slow=30
**LPAZ La Paz 99.91 129** *e*P **Pdif** **19 41 51.9 +2.2**
**LZH Lanzhou 100.48 314** *e*P **Pdif** **19 41 51.9 +0.7**
LZH pP sP 19 41 57.4 +0.3
LZH sP pwP 19 41 59.3 +1.3
LZH PP **PP** **19 45 58.9 +0.4**
LZH SKS 19 52 31.3
LZH *e*S SKKSac 19 53 16.3 +13
LZH SS **SS** **20 00 23.1 -0.8**
LZH pmax pmax
comp=Z,20nm,1.1s
LZH pmax pmax
comp=Z,380nm,5.2s
LZH LR LR
comp=Z,420nm,14.7s
LZH LR LR
comp=Z,1µm,17.1s
LZH LR LR
comp=Z,2µm,18.2s
**HHC Hu-ho-hao-te 101.03 322** *e*P **Pdif** **19 41 54.1 +0.7**
HHC PP **PP** **19 46 01.4 -1.1**
HHC S **Sdif** **19 53 30.8 -0.4**
HHC SS **SS** **20 00 29.8 -1.4**
HHC pmax pmax
comp=Z,7.0nm,1.1s
HHC pmax pmax
comp=Z,440nm,6.2s
HHC LR LR
comp=Z,960nm,17.8s
HHC LR LR
comp=Z,750nm,17.8s
HHC LR LR
comp=Z,2µm,18.4s
**BTO Baotou 101.46 321** *e*P **Pdif** **19 41 58.1 +2.8**
**ADK Adak 101.86 12** IAMs_20 IAMs_20 20 26 06.4
comp=Z,2µm,20.0s
**PET Petropavlovsk 101.87 356** IAMs_20 IAMs_20 20 21 11.5
comp=Z,2µm,22.0s
**XLT XiLinHaoTe 101.90 326** *e*P **Pdif** **19 41 53.8 -3.4**
XLT pP pPdif 19 41 59.6 -1.9
XLT pmax pmax
comp=Z,4.0nm,1.5s
XLT pmax pmax
comp=Z,380nm,6.0s
XLT LR LR
comp=Z,2µm,20.6s
XLT LR LR
comp=Z,790nm,28.6s
**KLR Kul'dur 101.96 399** P **Pdif** **19 41 57.4 +0.2**
comp=Z,1.1nm,0.9s,baz=158,slow=3.2,SNR=4.2
**KLR Kul'dur 101.96 339** ⇓*e*P **Pdif** **19 41 59.8 +2.6**
KLR pmax pmax
comp=Z,15nm,1.8s
KLR MLR MLR
comp=Z,994nm,18.0s
**GOMU GeErMu 105.04 308** Pdif **Pdif** **19 42 11.8 +0.1**
GOMU PP **PP** **19 46 29.8 -3.1**
GOMU LR LR
comp=Z,950nm,23.1s
GOMU LR LR
comp=Z,290nm,23.3s
GOMU LR LR
comp=Z,2µm,23.7s
**LSZ Lusaka 105.20 224** IAMs_20 IAMs_20 20 21 57.3
comp=Z,2µm,21.0s
**109C Camp Elliot, M 107.16 60** IAMs_20 IAMs_20 20 25 49.6
comp=Z,2µm,18.0s
**SAO San Andreas Ge 107.64 54** IAMs_20 IAMs_20 20 31 13.5
comp=Z,2µm,18.0s
**MCCM Marconi Confer 107.93 52** IAMs_20 IAMs_20 20 31 26.8
comp=Z,2µm,20.0s
**PFO Pinyon Flats O 108.05 59** IAMs_20 IAMs_20 20 26 16.4
comp=Z,2µm,19.0s
**UNM Universidad Na 108.37 82** IAMs_20 IAMs_20 20 25 54.7
comp=Z,2µm,18.0s
**HOPS Hopland Field 108.46 52** IAMs_20 IAMs_20 20 28 40.0
comp=Z,2µm,18.0s
**ULN Ulaanbaatar 108.65 323** IAMs_20 IAMs_20 20 32 24.2
comp=Z,1µm,20.0s
**SONM Songino Array 108.89 323** Pdiff **Pdif** **19 42 29.2 +1.0**
comp=Z,0.4nm,0.9s,baz=134,slow=8.3,SNR=2.6
SONM PKiKP **PKiKP** **19 46 31.6 -1.1**
comp=Z,1.3nm,1.0s,baz=181,slow=1.9,SNR=4.1
SONM PP **PP** **19 46 58.9 -1.8**
comp=Z,1.4nm,1.0s,baz=156,slow=6.8,SNR=6.4
SONM PKKPbc **PKKPbc** **19 57 42.6 +2.1**
comp=Z,1.3nm,1.1s,baz=270,slow=1.0,SNR=4.7
**SONM Songino Array 108.89 323** P **Pdif** **19 42 27.0 -1.2**
**SONM Songino Array 108.89 323** **Pdif** **19 42 27.0 -1.2**
**CMB Columbia Colle 109.15 54** IAMs_20 IAMs_20 20 27 26.4
comp=Z,2µm,20.0s
**N02D Trinity Center 110.13 50** IAMs_20 IAMs_20 20 30 23.0
comp=Z,2µm,18.0s
**M02C Callahan 110.37 50** IAMs_20 IAMs_20 20 30 48.3
comp=Z,2µm,19.0s
**TUC Tucson 110.40 64** IAMs_20 IAMs_20 20 25 41.6
comp=Z,2µm,19.0s
**NVAR Mina Array Bea 110.56 55** PKiKP **PKiKP** **19 46 37.2 +0.9**
comp=Z,0.1nm,0.3s,baz=241,slow=3.0,SNR=2.0
**L02E Cave Junction 110.56 49** IAMs_20 IAMs_20 20 32 01.4
comp=Z,2µm,18.0s
**TPNV Topopah Spring 110.60 57** IAMs_20 IAMs_20 20 29 01.9
comp=Z,1µm,18.0s
**YBH Yreka Blue Hor 110.69 50** IAMs_20 IAMs_20 20 31 14.8
comp=Z,2µm,19.0s
**SNET Serv Nac Est T 110.79 93** IAMs_20 IAMs_20 20 25 37.0
comp=Z,1µm,19.0s
**KIBK Kibwezi 111.14 239** IAMs_20 IAMs_20 20 26 52.5
comp=Z,2µm,18.0s
**HUMO Hull Mountain 111.22 49** IAMs_20 IAMs_20 20 31 47.7
comp=Z,1µm,20.0s
**L04D Klamath Falls 111.25 50** IAMs_20 IAMs_20 20 30 39.7
comp=Z,2µm,19.0s
**MOD Modoc Plateau 112.03 51** IAMs_20 IAMs_20 20 31 17.5
comp=Z,1µm,19.0s
**SEY Seymchan 112.11 354** ⇓*i*PKIKP **PKiKP** **19 46 39.6 +1.5**
**KDAK Kodiak Island 112.22 23** IAMs_20 IAMs_20 20 28 56.9
comp=Z,2µm,22.0s
**KMBO Kilima Mbogo 112.58 239** IAMs_20 IAMs_20 20 27 19.1
comp=Z,1µm,18.0s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TXAR | **Lajitas Array** | **112.62** | **71** | PKiKP | **PKiKP** | **19 46 40.2** | **-0.1** | | | |
| | comp=Z,0.6nm,0.8s,baz=183,slow=2.5,SNR=5.2 | | | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **19 57 29.4** | **+1.7** | | | |
| | comp=Z,0.4nm,0.7s,baz=30,slow=5.8,SNR=4.9 | | | | | | | | | |
| **H04D** | **Lebanon** | **112.73** | **48** | IAMs_20 | IAMs_20 | 20 28 00.8 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **112.96** | **22** | IAMs_20 | IAMs_20 | 20 29 23.4 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **P18K** | **Big Mountain,** | **112.98** | **21** | IAMs_20 | IAMs_20 | 20 34 31.1 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **113.28** | **52** | IAMs_20 | IAMs_20 | 20 28 08.4 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **O18K** | **Koktuh Hills** | **113.40** | **21** | IAMs_20 | IAMs_20 | 20 35 03.1 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **ELK** | **Elko** | **113.86** | **55** | IAMs_20 | IAMs_20 | 20 35 16.1 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **O19K** | **Port Alsworth** | **113.91** | **21** | IAMs_20 | IAMs_20 | 20 34 57.6 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **MOY** | **Mondy** | **114.06** | **322** | *e*PKiKP | **PKiKP** | **19 46 42.8** | **+0.4** | | | |
| MOY | | | | pmax | pmax | | | | | |
| | comp=Z,26nm,2.2s | | | | | | | | | |
| **HOM** | **Homer** | **114.09** | **23** | IAMs_20 | IAMs_20 | 20 29 05.5 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **YAK** | **Yakutsk** | **114.24** | **343** | *e*PKiKP | PKPdf | 19 46 41.8 | -0.4 | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,15nm,1.4s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,3.0nm,1.3s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,4.0nm,1.3s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=N,835nm,23.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=E,290nm,22.0s | | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **114.29** | **45** | IAMs_20 | IAMs_20 | 20 27 06.9 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **E04D** | **Cinebar** | **114.30** | **46** | IAMs_20 | IAMs_20 | 20 27 22.1 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **WMQ** | **Urumqi** | **114.35** | **309** | PKP | PKPdf | 19 46 43.0 | -0.2 | | | |
| WMQ | | | | PP | **PP** | **19 47 43.6** | **+3.7** | | | |
| WMQ | | | | AMB | AMB | | | | | |
| | comp=Z,710nm,7.5s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,720nm,19.3s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,560nm,20.3s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.1s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **114.81** | **65** | IAMs_20 | IAMs_20 | 20 31 01.5 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **KVTX** | **Kingsville** | **115.01** | **76** | IAMs_20 | IAMs_20 | 20 30 32.8 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **MVCO** | **Mesa Verde** | **115.17** | **62** | IAMs_20 | IAMs_20 | 20 36 46.9 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **O22K** | **Cooper Landing** | **115.30** | **23** | IAMs_20 | IAMs_20 | 20 30 54.4 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **M19K** | **Big River Lodg** | **115.40** | **20** | IAMs_20 | IAMs_20 | 20 33 25.0 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **L19K** | **White Mountain** | **115.55** | **20** | | **PKiKP** | **19 46 45.1** | **+0.3** | | | |
| L19K | | | | IAMs_20 | IAMs_20 | 20 37 28.8 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **PV13** | **Radium Mtn., P** | **115.64** | **61** | | **PKPdf** | **19 46 45.7** | **-0.3** | | | |
| **HAWA** | **Hanford** | **115.64** | **48** | IAMs_20 | IAMs_20 | 20 29 22.8 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **PV11** | **David Mesa, Pa** | **115.70** | **61** | | **PKPdf** | **19 46 46.0** | **-0.2** | | | |
| **ANM** | **Nome** | **115.72** | **14** | PKiKP | **PKiKP** | **19 46 45.7** | **+0.7** | | | |
| ANM | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **ANM** | **Nome** | **115.72** | **14** | | **PKiKP** | **19 46 45.7** | **+0.7** | | | |
| **RC01** | **Rabbit Creek A** | **115.81** | **23** | IAMs_20 | IAMs_20 | 20 30 29.0 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **TNA** | **Tin City** | **116.28** | **12** | PKPdf | **PKiKP** | **19 46 46.8** | **+0.8** | | | |
| **GLI** | **Glacier Island** | **116.32** | **24** | IAMs_20 | IAMs_20 | 20 34 49.6 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **FID** | **Port Fidalgo** | **116.38** | **24** | IAMs_20 | IAMs_20 | 20 34 26.8 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **PLID** | **Pearl Lake** | **116.50** | **51** | PKPdf | **PKiKP** | **19 46 47.9** | **+0.4** | | | |
| PLID | | | | IAMs_20 | IAMs_20 | 20 33 27.7 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **116.51** | **62** | | **PKPdf** | **19 46 47.1** | **-0.7** | | | |
| **SUCK** | **Suckling Hills** | **116.58** | **26** | IAMs_20 | IAMs_20 | 20 26 05.4 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **116.58** | **25** | IAMs_20 | IAMs_20 | 20 34 17.4 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **MBAR** | **Mbarara** | **116.59** | **234** | IAMs_20 | IAMs_20 | 20 29 12.2 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **116.60** | **23** | IAMs_20 | IAMs_20 | 20 30 51.8 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **HMT** | **Hamilton** | **116.66** | **26** | IAMs_20 | IAMs_20 | 20 34 28.5 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **CUT** | **Chulitna** | **116.81** | **22** | IAMs_20 | IAMs_20 | 20 33 41.3 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **BILL** | **Bilibino** | **116.82** | **1** | ⇓*i*PKiKP | **PKPdf** | **19 46 46.8** | **-0.3** | | | |
| BILL | | | | *e* | | 19 47 58.6 | | | | |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,1.7s | | | | | | | | | |
| BILL | | | | MLR | MLR | | | | | |
| | comp=Z,737nm,18.0s | | | | | | | | | |
| **BILL** | **Bilibino** | **116.82** | **1** | PKPdf | **PKPdf** | **19 46 47.0** | **0.0** | | | |
| **BERG** | **Berg Lake** | **116.86** | **26** | IAMs_20 | IAMs_20 | 20 30 53.0 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **SNH** | **Sunshine Point** | **116.94** | **26** | IAMs_20 | IAMs_20 | 20 29 01.0 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **BMRM** | **Bremner River** | **117.08** | **25** | IAMs_20 | IAMs_20 | 20 31 27.6 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **KLU** | **Klutina** | **117.15** | **24** | IAMs_20 | IAMs_20 | 20 37 11.5 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **WAX** | **Waxell Ridge** | **117.15** | **26** | IAMs_20 | IAMs_20 | 20 29 30.7 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **LODK** | **Lodwar** | **117.38** | **241** | IAMs_20 | IAMs_20 | 20 33 11.1 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **SMCO** | **Snowmass** | **117.39** | **61** | IAMs_20 | IAMs_20 | 20 25 48.5 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **YAH** | **Yahtse** | **117.41** | **27** | IAMs_20 | IAMs_20 | 20 29 37.3 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **435B** | **Jarrell** | **117.42** | **74** | IAMs_20 | IAMs_20 | 20 31 48.6 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **ISLE** | **Juniper Island** | **117.43** | **26** | IAMs_20 | IAMs_20 | 20 29 49.9 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **J20K** | **Nowinta River** | **117.46** | **19** | | **PKiKP** | **19 46 48.8** | **+0.4** | | | |
| J20K | | | | IAMs_20 | IAMs_20 | 20 31 28.2 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **117.50** | **56** | IAMs_20 | IAMs_20 | 20 37 34.3 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **117.53** | **274** | PKP | **PKPdf** | **19 46 49.5** | **-0.4** | | | |
| | comp=Z,3.4nm,0.8s,baz=252,slow=3.2,SNR=2.9 | | | | | | | | | |
| **N25K** | **Chitina, Valde** | **117.61** | **25** | IAMs_20 | IAMs_20 | 20 31 12.5 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **KTH** | **Kantishna Hill** | **117.64** | **21** | IAMs_20 | IAMs_20 | 20 34 55.0 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **TRF** | **Thorofare Moun** | **117.70** | **21** | PKPdf | **PKPdf** | **19 46 48.6** | **-0.5** | | | |
| TRF | | | | IAMs_20 | IAMs_20 | 20 32 12.7 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **BCPM** | **Bancas Point** | **117.72** | **28** | IAMs_20 | IAMs_20 | 20 30 14.8 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **KSH** | **Kashi** | **117.75** | **299** | PKP | **PKiKP** | **19 46 50.5** | **+0.6** | | | |
| KSH | | | | PP | **PP** | **19 48 06.4** | **+2.5** | | | |
| KSH | | | | PKS | **PKSdf** | **19 50 23.0** | **-3.6** | | | |
| KSH | | | | SS | SS | 20 04 19.3 | +3.1 | | | |
| KSH | | | | AMB | AMB | | | | | |
| | comp=Z,930nm,7.2s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,600nm,19.7s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,710nm,21.0s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,2μm,24.7s | | | | | | | | | |
| **BARN** | **Barnard Glacie** | **117.99** | **26** | IAMs_20 | IAMs_20 | 20 30 17.9 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **RND** | **Reindeer** | **118.00** | **22** | PKiKP | **PKPdf** | **19 46 49.2** | **-0.4** | | | |
| RND | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **RND** | **Reindeer** | **118.00** | **22** | PKPdf | **PKPdf** | **19 46 49.2** | **-0.4** | | | |
| RND | | | | IAMs_20 | IAMs_20 | 20 32 29.8 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **TPAW** | **Teton Pass** | **118.06** | **55** | IAMs_20 | IAMs_20 | 20 38 23.4 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **118.09** | **20** | PKPdf | **PKPdf** | **19 46 48.8** | **-0.9** | | | |
| **JIS** | **Juneau Island** | **118.13** | **32** | IAMs_20 | IAMs_20 | 20 35 24.0 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **118.19** | **302** | | **PKPdf** | **19 46 50.2** | **-0.8** | | | |
| **MCK** | **McKinley** | **118.26** | **21** | PKiKP | **PKiKP** | **19 46 50.1** | **+0.1** | | | |
| MCK | | | | MLR | MLR | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **MCK** | **McKinley** | **118.26** | **21** | PKPdf | **PKiKP** | **19 46 50.1** | **+0.1** | | | |
| MCK | | | | IAMs_20 | IAMs_20 | 20 32 38.6 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **ZSN** | **Zaisan** | **118.30** | **311** | *e*PKiKP | **PKPdf** | **19 46 49.6** | **-1.0** | | | |
| **ZSN** | **Zaisan** | **118.30** | **311** | *e*PKP | **PKPdf** | **19 46 49.6** | **-1.0** | | | |
| | baz=311 | | | | | | | | | |
| **LOHW** | **Long Hollow** | **118.33** | **55** | IAMs_20 | IAMs_20 | 20 38 51.5 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **118.34** | **57** | PKP | **PKPdf** | **19 46 49.5** | **-1.6** | | | |
| | comp=Z,0.3nm,0.5s,baz=270,slow=2.8,SNR=3.9 | | | | | | | | | |
| PDAR | | | | PKKPbc | **PKKPab** | **19 57 13.8** | **+4.0** | | | |
| | comp=Z,2.6nm,1.1s,baz=69,slow=2.1,SNR=4.4 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **118.34** | **57** | | **PKPdf** | **19 46 49.9** | **-1.2** | | | |
| PDAR | | | | | **PKKPbc** | **19 57 08.1** | **-0.2** | | | |
| **MOOW** | **Moose Ponds** | **118.35** | **55** | IAMs_20 | IAMs_20 | 20 38 58.9 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **UZB** | **Uzynbulak** | **118.46** | **304** | *e*PKiKP | **PKPdf** | **19 46 50.3** | **-0.9** | | | |
| **UZB** | **Uzynbulak** | **118.46** | **304** | *e*PKP | **PKPdf** | **19 46 50.3** | **-0.9** | | | |
| | baz=304 | | | | | | | | | |
| **BWN** | **Browne** | **118.50** | **21** | IAMs_20 | IAMs_20 | 20 32 05.1 | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **KBL** | **Kabul** | **118.56** | **291** | PKiKP | **PKPdf** | **19 46 50.9** | **-0.8** | | | |
| **KBL** | **Kabul** | **118.56** | **291** | PKPdf | **PKPdf** | **19 46 50.9** | **-0.8** | | | |
| **DGZ** | **Jazzator, Alta** | **118.59** | **314** | *c i*PKiKP | **PKPdf** | **19 46 50.8** | **-0.4** | | | |
| DGZ | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **ISCO** | **Idaho Springs** | **118.59** | **61** | IAMs_20 | IAMs_20 | 20 32 31.3 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **118.60** | **55** | IAMs_20 | IAMs_20 | 20 38 16.4 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **M26K** | **Nabesna, AK** | **118.69** | **25** | | **PKPdf** | **19 46 50.8** | **-0.1** | | | |
| M26K | | | | IAMs_20 | IAMs_20 | 20 31 59.3 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **MSO** | **Missoula** | **118.74** | **51** | | **PKPdf** | **19 46 50.8** | **-0.7** | | | |
| **SATY** | **Saty** | **118.74** | **303** | *e*PKiKP | **PKPdf** | **19 46 50.1** | **-1.6** | | | |
| **SATY** | **Saty** | **118.74** | **303** | *e*PKP | **PKPdf** | **19 46 50.2** | **-1.6** | | | |
| | baz=304 | | | | | | | | | |
| **I21K** | **Tanana** | **118.80** | **19** | | **PKiKP** | **19 46 51.1** | **+0.1** | | | |
| I21K | | | | IAMs_20 | IAMs_20 | 20 32 09.6 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **ZHN** | **Zhinishke** | **118.80** | **304** | *e*PKiKP | **PKPdf** | **19 46 51.2** | **-0.6** | | | |
| **ZHN** | **Zhinishke** | **118.80** | **304** | *e*PKP | **PKPdf** | **19 46 51.2** | **-0.6** | | | |
| | baz=304 | | | | | | | | | |
| **KPKS** | **Kokpek** | **118.86** | **304** | *e*PKiKP | **PKPdf** | **19 46 50.7** | **-1.2** | | | |
| KPKS | | | | *e* | | 19 48 09.4 | | | | |
| **KPKS** | **Kokpek** | **118.86** | **304** | *e*PKP | **PKPdf** | **19 46 50.8** | **-1.2** | | | |
| | baz=304 | | | | | | | | | |
| KPKS | | | | *e*PP | **PP** | **19 48 09.4** | **-2.1** | | | |
| | baz=304 | | | | | | | | | |
| **RWWY** | **Rawlins** | **118.93** | **59** | IAMs_20 | IAMs_20 | 20 33 47.4 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **MLY** | **Manley** | **118.94** | **20** | | **PKPdf** | **19 46 50.7** | **-0.6** | | | |
| **NEA2** | **Nenana** | **118.95** | **21** | | **PKPdf** | **19 46 50.7** | **-0.5** | | | |
| NEA2 | | | | IAMs_20 | IAMs_20 | 20 33 01.9 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **H21K** | **Melozitna Rive** | **119.03** | **19** | | **PKiKP** | **19 46 51.7** | **+0.2** | | | |
| **SDV** | **Santo Domingo** | **119.07** | **112** | IAMs_20 | IAMs_20 | 20 32 56.3 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **WRH** | **Wood River Hil** | **119.08** | **21** | PKPdf | **PKPdf** | **19 46 51.0** | **-0.5** | | | |
| WRH | | | | IAMs_20 | IAMs_20 | 20 34 20.4 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **119.10** | **24** | IAMs_20 | IAMs_20 | 20 36 07.1 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **119.11** | **53** | PKiKP | **PKPdf** | **19 46 52.4** | **0.0** | | | |
| BOZ | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **119.11** | **53** | | **PKPdf** | **19 46 52.4** | **0.0** | | | |
| **IMAR** | **Indian Mountai** | **119.12** | **18** | | **PKPdf** | **19 46 51.3** | **-0.3** | | | |
| **MK31** | **Makanchi Array** | **119.16** | **309** | PKiKP | **PKPdf** | **19 46 51.1** | **-1.2** | | | |
| **MK31** | **Makanchi Array** | **119.16** | **309** | | **PKPdf** | **19 46 51.1** | **-1.2** | | | |
| **MKAR** | **Makanchi Array** | **119.16** | **309** | PKP | **PKPdf** | **19 46 51.4** | **-0.9** | | | |
| | comp=Z,8.3nm,0.9s,baz=147,slow=2.5,SNR=43 | | | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPab** | **19 57 07.1** | **+1.5** | | | |
| | comp=Z,1.1nm,1.1s,baz=346,slow=1.5,SNR=3.8 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **119.16** | **309** | PKPdf | **PKPdf** | **19 46 51.0** | **-1.3** | | | |
| **JTMT** | **Jette** | **119.18** | **50** | | **PKiKP** | **19 46 52.8** | **+0.3** | | | |
| **RIDG** | **Independent Ri** | **119.29** | **23** | | **PKPdf** | **19 46 51.9** | **-0.1** | | | |
| RIDG | | | | IAMs_20 | IAMs_20 | 20 31 03.9 | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **119.30** | **21** | PKPdf | **PKPdf** | **19 46 51.5** | **-0.4** | | | |
| CCB | | | | IAMs_20 | IAMs_20 | 20 32 38.0 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **HDA** | **Harding Lake** | **119.31** | **22** | | **PKPdf** | **19 46 51.7** | **-0.3** | | | |
| **MAKZ** | **Makanchi** | **119.33** | **309** | PKiKP | **PKPdf** | **19 46 51.3** | **-1.3** | | | |
| MAKZ | | | | MLR | MLR | | | | | |
| | comp=Z,700nm,20.0s | | | | | | | | | |
| **MAKZ** | **Makanchi** | **119.33** | **309** | PKPdf | **PKPdf** | **19 46 51.3** | **-1.3** | | | |
| **RDOG** | **Red Dog Mine** | **119.34** | **13** | IAMs_20 | IAMs_20 | 20 31 49.6 | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **119.35** | **20** | IAMs_20 | IAMs_20 | 20 35 37.5 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **DOT** | **Dot Lake** | **119.42** | **24** | | **PKPdf** | **19 46 52.0** | **-0.2** | | | |
| **MDM** | **Murphy Dome** | **119.46** | **21** | IAMs_20 | IAMs_20 | 20 33 05.3 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **119.47** | **21** | IAMs_20 | IAMs_20 | 20 33 35.7 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **COLA** | **College** | **119.48** | **21** | ⇑PKiKP | **PKPdf** | **19 46 51.3** | **-0.9** | | | |
| **COLA** | **College** | **119.48** | **21** | IAMs_20 | IAMs_20 | 20 33 35.7 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **TNSS** | **Tian-Shan** | **119.53** | **303** | *e*PKP | **PKPdf** | **19 46 52.1** | **-1.5** | | | |
| | baz=303 | | | | | | | | | |
| **L27K** | **Beaver Creek,** | **119.55** | **25** | | **PKiKP** | **19 46 52.7** | **+0.1** | | | |
| L27K | | | | IAMs_20 | IAMs_20 | 20 32 33.9 | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **MDOK** | **Medeo** | **119.56** | **303** | *e*PKiKP | **PKPdf** | **19 46 51.7** | **-1.6** | | | |
| **MDOK** | **Medeo** | **119.56** | **303** | *e*PKP | **PKPdf** | **19 46 51.8** | **-1.6** | | | |
| | baz=303 | | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **119.56** | **25** | PKPdf | **PKiKP** | **19 46 52.7** | **+0.1** | | | |
| **IL31** | **Paris** | **119.62** | **22** | | **PKPdf** | **19 46 52.0** | **-0.5** | | | |
| **ILAR** | **Eielson Array** | **119.62** | **22** | PKP | **PKPdf** | **19 46 52.3** | **-0.3** | | | |
| | comp=Z,3.1nm,0.8s,baz=272,slow=3.3,SNR=28 | | | | | | | | | |
| ILAR | | | | PKKPbc | **PKKPab** | **19 57 02.7** | **+0.4** | | | |
| | comp=Z,0.6nm,0.6s,baz=3.8,slow=2.8,SNR=7.7 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **119.62** | **22** | PKPdf | **PKPdf** | **19 46 52.0** | **-0.5** | | | |
| ILAR | | | | | **PKKPab** | **19 57 02.5** | **+0.2** | | | |
| **AAA** | **Alma-Ata** | **119.66** | **303** | *e*PKiKP | **PKPdf** | **19 46 52.3** | **-1.1** | | | |
| **AAA** | **Alma-Ata** | **119.66** | **303** | *e*PKP | **PKPdf** | **19 46 52.4** | **-1.1** | | | |
| | baz=303 | | | | | | | | | |
| **PHWY** | **Pilot Hill** | **119.67** | **60** | IAMs_20 | IAMs_20 | 20 34 16.7 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **SCRK** | **Sand Creek** | **119.70** | **23** | PKPdf | **PKiKP** | **19 46 53.3** | **+0.3** | | | |
| **POKR** | **Poker Plat Res** | **119.78** | **21** | IAMs_20 | IAMs_20 | 20 33 34.7 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **DLBC** | **Dease Lake** | **119.79** | **33** | | **PKiKP** | **19 46 53.2** | **0.0** | | | |
| **J25K** | **Salcha River,** | **119.87** | **22** | PKPdf | **PKPdf** | **19 46 52.9** | **-0.2** | | | |
| **H23K** | **Yukon River** | **119.88** | **20** | | **PKPdf** | **19 46 53.1** | **0.0** | | | |
| H23K | | | | IAMs_20 | IAMs_20 | 20 35 56.4 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **NATX** | **Nacogdoches** | **119.93** | **75** | IAMs_20 | IAMs_20 | 20 32 09.0 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **TDK** | **Taldyqorghan** | **120.02** | **305** | *e*PKiKP | **PKPdf** | **19 46 52.9** | **-1.1** | | | |
| **TDK** | **Taldyqorghan** | **120.02** | **305** | *e*PKP | **PKPdf** | **19 46 52.9** | **-1.1** | | | |
| | baz=305 | | | | | | | | | |
| **CHKK** | **Chushkaly** | **120.04** | **303** | *e*PKP | **PKPdf** | **19 46 53.0** | **-1.1** | | | |
| | baz=303 | | | | | | | | | |
| **RLMT** | **Red Lodge** | **120.05** | **55** | IAMs_20 | IAMs_20 | 20 45 14.9 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **120.12** | **31** | IAMs_20 | IAMs_20 | 20 38 21.4 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **120.20** | **302** | P | **PKPdf** | **19 46 54.2** | **-0.5** | | | |
| | SNR=8.6 | | | | | | | | | |
| **WALA** | **Waterton Lakes** | **120.24** | **49** | | **PKiKP** | **19 46 54.5** | **0.0** | | | |
| **H24K** | **Noodor Dome** | **120.27** | **21** | IAMs_20 | IAMs_20 | 20 39 37.7 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **UOSS** | **Minazif** | **120.30** | **274** | | **PKPdf** | **19 46 53.5** | **-1.6** | | | |
| **UCH** | **Uchtor** | **120.36** | **301** | P | **PKiKP** | **19 46 55.7** | **+0.3** | | | |
| | SNR=10 | | | | | | | | | |
| **KBK** | **Karagaybulak** | **120.40** | **301** | P | **PKPdf** | **19 46 55.0** | **0.0** | | | |
| | SNR=8.1 | | | | | | | | | |
| **KUU** | **Kurty** | **120.42** | **303** | *e*PKiKP | **PKPdf** | **19 46 53.6** | **-1.2** | | | |
| **KUU** | **Kurty** | **120.42** | **303** | *e*PKP | **PKPdf** | **19 46 53.7** | **-1.2** | | | |
| | baz=303 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **120.64** | **301** | PKP | **PKPdf** | **19 46 55.0** | **-0.5** | | | |
| | comp=Z,3.1nm,0.8s,baz=146,slow=4.0,SNR=12 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **120.64** | **301** | P | **PKiKP** | **19 46 55.5** | **0.0** | | | |
| | SNR=6.3 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **120.64** | **301** | *c i*PKiKP | **PKPdf** | **19 46 55.3** | **-0.1** | | | |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,1.7s | | | | | | | | | |
| AAK | | | | MLR | MLR | | | | | |
| | comp=Z,556nm,20.0s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **120.64** | **301** | PKPdf | **PKPdf** | **19 46 55.4** | **-0.1** | | | |
| **NBLV** | **Livramento - P** | **120.70** | **155** | *e*P | **PKiKP** | **19 46 59.2** | **+2.8** | | | |
| **CHMS** | **Chumysh** | **120.73** | **301** | P | **PKPdf** | **19 46 55.1** | **-0.4** | | | |
| | SNR=6.3 | | | | | | | | | |
| **AML** | **Almayashu** | **120.77** | **300** | P | **PKiKP** | **19 46 56.2** | **+0.1** | | | |
| | SNR=14 | | | | | | | | | |
| **COLD** | **Coldfoot** | **120.92** | **19** | PKPdf | **PKiKP** | **19 46 55.6** | **+0.5** | | | |
| **DAWY** | **Dawson** | **121.02** | **25** | PKPdf | **PKiKP** | **19 46 55.7** | **+0.2** | | | |
| **USP** | **Ospenovka** | **121.04** | **302** | P | **PKPdf** | **19 46 55.8** | **-0.2** | | | |
| | SNR=9.0 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **121.06** | **301** | P | **PKPdf** | **19 46 56.2** | **0.0** | | | |
| | SNR=10 | | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **121.08** | **29** | IAMs_20 | IAMs_20 | 20 32 46.8 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **EGAK** | **Eagle** | **121.09** | **24** | PKPdf | **PKPdf** | **19 46 55.1** | **-0.2** | | | |
| EGAK | | | | IAMs_20 | IAMs_20 | 20 33 06.5 | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **SGDS** | **Sogindy** | **121.09** | **302** | *e*PKP | **PKPdf** | **19 46 55.2** | **-1.0** | | | |
| SGDS | baz=302 | | | | | | | | | |
| | baz=302 | | | *e*PP | **PP** | **19 48 25.0** | **-1.8** | | | |
| **CBKS** | **Cedar Bluff** | **121.40** | **66** | IAMs_20 | IAMs_20 | 20 34 49.9 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **OGNE** | **Ogallala** | **121.41** | **62** | IAMs_20 | IAMs_20 | 20 41 24.0 | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **FYU** | **Fort Yukon** | **121.49** | **21** | PKPdf | **PKiKP** | **19 46 57.0** | **+0.8** | | | |
| FYU | | | | IAMs_20 | IAMs_20 | 20 36 02.9 | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **MCPB** | **Macapa, AP** | **121.50** | **136** | *e*P | **PKiKP** | **19 46 59.5** | **+1.6** | | | |
| **EGMT** | **Eagleton** | **121.67** | **52** | IAMs_20 | IAMs_20 | 20 40 35.5 | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **122.24** | **18** | PKPdf | **PKiKP** | **19 46 58.3** | **+0.6** | | | |
| TOLK | | | | IAMs_20 | IAMs_20 | 20 31 36.5 | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **RSSD** | **Black Hills** | **122.28** | **58** | PKiKP | **PKPdf** | **19 46 57.8** | **-0.8** | | | |
| RSSD | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **RSSD** | **Black Hills** | **122.28** | **58** | PKPdf | **PKPdf** | **19 46 57.8** | **-0.8** | | | |
| **BMAR** | **Burnt Mountain** | **122.34** | **21** | PKPdf | **PKiKP** | **19 46 58.5** | **+0.5** | | | |
| **BTLS** | **Baital** | **122.42** | **303** | *e*PKiKP | **PKPdf** | **19 46 57.0** | **-1.5** | | | |
| **BTLS** | **Baital** | **122.42** | **303** | *e*PKP | **PKPdf** | **19 46 57.1** | **-1.5** | | | |
| | baz=303 | | | | | | | | | |
| **RCBR** | **Riachuelo** | **122.44** | **156** | *e*P | **PKiKP** | **19 47 02.9** | **+3.1** | | | |
| **MIAR** | **Mount Ida** | **122.44** | **73** | IAMs_20 | IAMs_20 | 20 35 45.5 | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **SEM** | **Semipalat

comp=Z,8.7nm,0.8s,baz=145,slow=3.0,SNR=15
**NRIK Noril'sk 130.72 333** *de*PKIKP **PKPdf 19 47 13.0 -0.6**
**NRIK Noril'sk 130.72 333** PKPdf **PKPdf 19 47 13.8 +0.1**
**P49A Miami Univ. Ec 131.09 74** **PKPdf 19 47 15.0 -0.3**
P49A IAMs_20 IAMs_20 20 40 26.4
comp=Z,2μm,20.0s
**U54A Nelsons Funny 131.17 79** **PKPdf 19 47 14.8 -0.9**
**N47A Urbana 131.25 72** **PKPdf 19 47 16.0 +0.4**
**Q51A Peebles 131.66 75** **PKPdf 19 47 14.3 -2.1**
**U56A King 131.99 80** **PKPdf 19 47 16.3 -0.8**
**BLA Blacksburg 132.48 79** IAMs_20 IAMs_20 20 40 53.3
comp=Z,1μm,20.0s
**ACSO Alum Creek Sta 132.58 74** IAMs_20 IAMs_20 20 41 30.9
comp=Z,2μm,20.0s
**ABKAR Akbulak array 132.72 300** PKPdf **PKPdf 19 47 17.2 -0.9**
**ABKAR Akbulak array 132.72 300** PKPdf **PKPdf 19 47 17.3 -0.7**
**P52A Corning 132.78 75** IAMs_20 IAMs_20 20 40 17.2
comp=Z,2μm,21.0s
**CNNC Cliffs of the 132.95 83** IAMs_20 IAMs_20 20 50 09.7
comp=Z,1μm,18.0s
**AKTO Aktyubinsk 134.38 301** PKP **PKPdf 19 47 18.7 -2.4**
comp=Z,2.7nm,0.7s,baz=72,slow=0.8,SNR=6.8
AKTO PP **PP 19 49 54.8 +0.6**
comp=Z,4.3nm,1.0s,baz=107,slow=5.3,SNR=8.6
**M53A WI Miller and 134.71 74** IAMs_20 IAMs_20 20 39 38.2
comp=Z,1μm,21.0s
**CBN Corbin Frederi 135.02 80** IAMs_20 IAMs_20 20 42 40.7
comp=Z,1μm,20.0s
**FCC Fort Churchill 135.26 47** PKIKP **PKiKP 19 47 23.5 -0.5**
**FCC Fort Churchill 135.26 47** PKPdf **PKiKP 19 47 23.5 -0.5**
**SVE Sverdlovsk 135.79 310** *i* PKIKP **PKPdf 19 47 23.9 +0.3**
SVE pmax pmax
comp=Z,35nm,1.3s
SVE MLR MLR
comp=Z,1μm,24.0s
**LIC Lamto 136.38 195** *e*P PKPdf 19 47 14.0 -12
comp=Z,89nm,1.2s
**KIC Kosan Boka 136.47 195** *e*P PKPdf 19 47 15.3 -11
comp=Z,39nm,1.1s
**ARU Arti 136.69 309** PKP **PKPdf 19 47 23.8 -1.4**
comp=Z,2.1nm,0.8s,baz=211,slow=2.5,SNR=8.3
**ARU Arti 136.69 309** *i* PKIKP **PKPdf 19 47 24.4 -0.8**
**ARU Arti 136.69 309** PKPdf **PKPdf 19 47 23.1 -2.2**
**DBIC Dimbokro 136.79 195** PKP **PKPdf 19 47 26.8 0.0**
comp=Z,17nm,0.9s,baz=204,slow=2.8,SNR=7.2
**DBIC Dimbokro 136.79 195** PKPpre 19 47 14.8
**TIC Toumodi 136.79 195** *e*P PKPdf 19 47 15.6 -11
**MAK Makhachkala 137.02 287** *e*P **Pdif 19 44 25.7 -7.5**
MAK *i* 19 47 24.0
MAK *e* 19 50 05.3
MAK *e* 19 54 31.9
MAK *e*SS SS 20 08 07.4 -8.4
MAK pmax pmax
comp=Z,156nm,1.6s
**GNI Garni 137.30 281** PKP **PKPdf 19 47 27.4 +0.3**
comp=Z,17nm,1.1s,baz=152,slow=3.8,SNR=9.7
**GNI Garni 137.30 281** *de*PKIKP **PKPdf 19 47 26.6 -0.6**
GNI MLR MLR
comp=Z,611nm,17.0s
**SIRT Sirnak 137.32 277** PKPdf **PKPdf 19 47 27.0 -0.2**
**EIL Elat 137.41 262** PKP **PKPdf 19 47 27.8 +0.3**
comp=Z,8.0nm,1.1s,baz=79,slow=2.3,SNR=5.2
**ASF Jabal al Asfar 137.76 266** PKP **PKPdf 19 47 27.5 -0.7**
comp=Z,3.8nm,0.9s,baz=39,slow=3.8,SNR=5.8
**GHAJ Ghor Haditha 138.08 264** IAMs_20 IAMs_20 20 45 36.8
comp=Z,859nm,18.0s
**GURO Guroymak-BITLI 138.18 278** **PKPdf 19 47 27.5 -1.3**
**GROC Groznyy 138.22 286** PKIKP **PKPdf 19 47 27.3 -1.2**
GROC *e* 19 50 19.6
GROC pmax pmax
comp=Z,25nm,1.0s
**PAL Palisades 138.79 78** IAMs_20 IAMs_20 20 45 14.5
comp=Z,2μm,20.0s
**ZEI Tsey 139.22 284** *i* PKHKP PKPpre 19 47 24.3
ZEI pmax pmax
comp=Z,11nm,1.1s
**MMAI Mount Meron Ar 139.27 266** PKP **PKPdf 19 47 30.1 -0.8**
comp=Z,6.2nm,1.0s,baz=174,slow=3.9,SNR=5.4
**RES Resolute Bay 139.32 24** PKHKP PKPpre 19 47 21.6
**RES Resolute Bay 139.32 24** PKPpre 19 47 21.6
**ONI Oni 139.41 284** PKIKP **PKPdf 19 47 30.0 -0.8**
**ONI Oni 139.41 284** **PKPdf 19 47 30.0 -0.8**
**NCK Nalchik 139.76 285**⇓ *e*PKIKP **PKPdf 19 47 29.4 -2.0**
**NEY Neytrino 140.20 284**⇓ *e*PKIKP **PKPdf 19 47 32.1 -0.3**
NEY MLR MLR
comp=Z,442nm,18.0s
**KBZ Khabaz 140.32 285** PKhKP PKPpre 19 47 24.3
comp=Z,2.1nm,0.8s,baz=149,slow=3.6,SNR=8.2
KBZ PKP **PKPdf 19 47 32.6 +0.3**
comp=Z,14nm,1.0s,baz=143,slow=2.3,SNR=19
KBZ PP **PP 19 50 30.6 -0.7**
comp=Z,3.6nm,1.0s,baz=98,slow=7.5,SNR=4.8
**KBZ Khabaz 140.32 285***c* *i*PKIKP **PKPdf 19 47 30.9 -1.4**
KBZ MLR MLR
comp=Z,479nm,19.0s
**CHVG Ch'k'valeri 140.34 283** ⇑P **PKiKP 19 47 37.5 +2.5**
**CHVG Ch'k'valeri 140.34 283** ⇑PKIKP **PKiKP 19 47 37.5 +2.5**
**KIV Kislovodsk 140.56 285** ⇑P **PKPdf 19 47 27.4 -5.5**
**KIV Kislovodsk 140.56 285** *e*PKIKP **PKPdf 19 47 29.6 -3.3**
KIV *i* 19 47 32.4
KIV *e* 19 50 28.8
KIV *e*SS SS 20 08 52.2 -5.6
KIV *e*SSS SSS 20 14 08.7
KIV pmax pmax
comp=Z,42nm,1.1s
**KIV Kislovodsk 140.56 285** PKPpre 19 47 24.8
**BRYW Bryant College 140.79 79** IAMs_20 IAMs_20 20 35 21.3
comp=Z,1μm,21.0s
**GOF Gofitskoye 140.85 287**⇑ *e*PKIKP **PKPdf 19 47 31.9 -1.4**
GOF pmax pmax
comp=Z,122nm,2.0s
**KTUT Trabzon 140.96 279** ⇑P **PKiKP 19 47 38.8 +2.6**
**BELG Belogornoye 141.11 300** PKhKP PKPpre 19 47 27.5
comp=Z,28nm,1.0s,baz=187,slow=1.6,SNR=8.0
BELG PKP **PKPdf 19 47 32.7 -0.7**
comp=Z,48nm,1.0s,baz=64,slow=2.8,SNR=8.4
**TORD Torodi Ar. Bea 141.48 207** PKhKP PKPpre 19 47 26.6
comp=Z,2.8nm,0.6s,baz=148,slow=2.6,SNR=14
TORD PKP **PKPdf 19 47 34.1 -1.2**
comp=Z,5.7nm,0.7s,baz=154,slow=2.6,SNR=14
**TORD Torodi Ar. Bea 141.48 207** PKPpre 19 47 27.7
**LBNH Lisbon 141.67 75** IAMs_20 IAMs_20 20 50 06.5
comp=Z,1μm,19.0s
**CSS Mathiatis 141.82 267** PKPpre 19 47 27.4
CSS IAMs_20 IAMs_20 20 41 17.3
comp=Z,1μm,22.0s
**KIRV Kirov 142.05 310** PKP **PKPdf 19 47 32.6 -2.3**
comp=Z,4.8nm,0.5s,baz=103,slow=4.1,SNR=5.2
**KIRV Kirov 142.05 310**⇓ *e*PKIKP **PKPdf 19 47 33.9 -1.0**
**LEF Lefka 142.21 267** ⇓P **PKPdf 19 47 35.8 -0.2**
**SOC Sochi 142.28 283** *e*PKIKP **PKPdf 19 47 34.7 -1.1**
SOC *i* 19 47 38.3
SOC *e* 19 50 39.7
SOC *e*PPP PPP 19 53 48.6
SOC *e*SS SS 20 09 18.6 +1.0
SOC *e*SSS SSS 20 14 32.1
SOC pmax pmax
comp=Z,17nm,0.9s
SOC pmax pmax
comp=Z,25nm,1.0s
**BNN Bunyan 142.39 274** PKPpre 19 47 30.6
**LMQ La Malbaie 144.11 71** PKPbc 19 47 37.4 +0.3
**F63A Nahmakanta, Br 144.12 75** **PKPdf 19 47 38.1 -0.9**
**VRH Novokhopyorsk 144.13 296** *e*PKIKP **PKPab 19 47 35.8 -0.7**
VRH pmax pmax
comp=Z,150nm,1.5s
**KOWA Kowa 144.25 199** PKPdf **PKPab 19 47 37.7 -0.3**
**BR131 Keskin Array S 144.31 274***c* *i*PKIKP **PKPab 19 47 37.2 -0.5**
**BR131 Keskin Array S 144.31 274** **PKPab 19 47 37.3 -0.5**
**BRTR Keskin Array B 144.31 274** PKP **PKPab 19 47 37.2 -0.5**
comp=Z,12nm,0.8s,baz=139,slow=4.1,SNR=40
**BRTR Keskin Array B 144.31 274** PKIKP **PKPab 19 47 36.6 -1.2**
**BRTR Keskin Array B 144.31 274** PKPdf **PKPab 19 47 36.6 -1.2**
**SNOP Sinop 144.44 278** PKPdf **PKPab 19 47 37.9 -0.1**
**PRGR Permogore 144.51 314** *e*PKIKP **PKPab 19 47 36.5 -1.1**
PRGR pmax pmax
comp=Z,55nm,0.9s
**F64A Sherman 144.66 75** PKPdf **PKPdf 19 47 39.6 -0.4**
**D62A Allapoint, All 144.72 72** PKPdf PKPbc 19 47 39.4 +0.4
**G65A Princeton 144.88 76** **PKPdf 19 47 40.2 -0.1**
**BR231 Keskin MP Arra 144.93 273** **PKPab 19 47 39.9 -0.2**
**ANTO Ankara 144.94 273** PKIKP **PKPab 19 47 39.6 -0.4**
ANTO MLR MLR
comp=Z,1μm,22.0s
**ANTO Ankara 144.94 273** **PKPab 19 47 39.6 -0.4**
ANTO IAMs_20 IAMs_20 20 43 14.7
comp=Z,1μm,22.0s
**ILGA Ilgaz 144.94 276** **PKPab 19 47 39.7 -0.4**
**AKAS Kas 145.02 266** **PKPbc 19 47 40.0 -0.5**
**ELL Elmali 145.12 267** PKIKP **PKPbc 19 47 40.2 -0.6**
**ELL Elmali 145.12 267** **PKPbc 19 47 40.2 -0.6**
**BZK Bozkurt 145.20 277** ⇑P **PKPbc 19 47 40.6 -0.1**
**BZK Bozkurt 145.20 277** **PKPbc 19 47 39.9 -0.8**
**PQI Presque Isle 145.21 74** **PKPbc 19 47 39.6 -1.0**
**GGN Saint George 145.31 77** **PKPab 19 47 41.2 +0.1**
**ISP Isparta 145.32 269** IAMs_20 IAMs_20 20 42 54.5
comp=Z,961nm,22.0s
**VORD Divnogorie 145.50 294** *e*PKIKP **PKPdf 19 47 40.3 -0.9**
VORD pmax pmax
comp=Z,100nm,0.8s
**TULEG Thule 145.53 19** *i* P **PKPdf 19 47 39.7 -0.9**
**TULEG Thule 145.53 19** **PKPdf 19 47 40.6 +0.1**
**VSR Storozhevoye 145.66 295** *e*PKIKP **PKPdf 19 47 40.6 -0.9**
VSR pmax pmax
comp=Z,400nm,1.3s
**VORR Voronezh 145.77 296** *e*PKIKP **PKPdf 19 47 40.9 -0.8**
VORR pmax pmax
comp=Z,759nm,1.7s
**LPSR Galich'ya Gora 146.21 297** *e*PKP2 **PKPdf 19 47 42.9 +0.5**
LPSR pmax pmax
comp=Z,320nm,1.3s
**MDUB Mudurnu 146.29 273** PKPdf **PKPdf 19 47 42.0 -1.1**
**BORA Eskisehir 146.48 272** **PKPdf 19 47 42.8 -0.6**
**SIM Simferopol' 146.49 282** PKP2 **PKPdf 19 47 43.5 +0.4**
SIM pmax pmax
comp=Z,89nm,0.9s
**KDZE Karadeniz Ereo 146.55 275** ⇑P **PKPdf 19 47 42.6 -0.8**
**LMN Caledonia Moun 146.91 77** **PKPdf 19 47 43.0 -0.9**
**HAL Halifax 147.19 79** PKP2 **PKPbc 19 47 46.7 +0.2**
**HAL Halifax 147.19 79** **PKPbc 19 47 46.7 +0.2**
**NOR Nord 147.36 0** *i* P **PKPbc 19 47 45.2 -0.9**
**KLMR Klimovskoe 147.37 312** *e*PKIKP **PKPdf 19 47 44.4 +0.4**
KLMR pmax pmax
comp=Z,484nm,1.2s
**KLMR Klimovskoe 147.37 312** *e*PKPdf **PKPdf 19 47 44.5 +0.4**
KLMR AMP 19 47 53.4
comp=Z,484nm,1.2s
**IDI Anoyia 147.53 260** ⇑P **PKPbc 19 47 48.1 +0.2**
**IDI Anoyia 147.53 260** PKPdf **PKPdf 19 47 44.9 -0.4**
**MOS Moscow 147.69 302** *e*PKIKP **PKPdf 19 47 44.2 -0.5**
MOS *e* 19 51 12.6
MOS pmax pmax
comp=Z,194nm,1.5s
**OBN Obninsk 148.16 301**⇓ P **PKPbc 19 47 49.1 +0.3**
**OBN Obninsk 148.16 301** PKPbc **PKPbc 19 47 48.5 -0.3**
comp=Z,25nm,0.8s,baz=192,slow=2.4,SNR=4.6
**OBN Obninsk 148.16 301**⇓ *e*PKIKP **PKPdf 19 47 45.4 -0.1**
OBN *e* 19 51 17.3
OBN pmax pmax
comp=Z,508nm,1.3s
**OBN Obninsk 148.16 301** **PKPdf 19 47 44.8 -0.8**
**OBN Obninsk 148.16 301** IAMs_20 IAMs_20 20 56 35.7
comp=Z,1μm,20.0s
**SCHQ Schefferville 148.40 60** PKPbc **PKPbc 19 47 48.7 -0.8**
comp=Z,22nm,1.0s,baz=305,slow=3.2,SNR=8.0
**SCHQ Schefferville 148.40 60** PKPdf **PKPdf 19 47 46.5 +0.5**
**NEEM North Greenlan 148.45 14** *i* P **PKPdf 19 47 45.7 -0.1**
**KBS Kingsbay 148.47 350**⇓ *i*PKP2 **PKiKP 19 47 49.9 -0.7**
**KBS Kingsbay 148.47 350** **PKPbc 19 47 47.3 -1.7**
**SPA0 Spitsbergen Ar 148.51 348** *e*pPKPdf pPKPdf 19 47 49.6 -0.1
**SPB2 Spitsbergen Ar 148.51 348** PKPdf **PKPdf 19 47 46.3 +0.7**
**SPITS Spitsbergen Ar 148.51 348** PKP2 **PKPbc 19 47 47.7 -1.5**
**LVZ Lovozero 149.02 326***c* *i*PKP2 **PKPbc 19 47 50.4 -0.4**
**LVZ Lovozero 149.02 326** **PKPbc 19 47 50.3 -0.5**
**APA Apatity 149.56 325**⇓ *i*PKP2 **PKPbc 19 47 50.7 -1.3**
APA *i* 19 51 29.0
APA *i* 19 54 49.0
APA pmax pmax
comp=Z,63nm,0.9s
**EFOR EFORIE 149.67 277**⇓ P **PKPbc 19 47 53.2 +0.2**
**JURR Jurilovca 149.79 279**⇓ P **PKPbc 19 47 52.2 -1.1**
**PURM Purcari 149.84 283**⇓ P **PKPbc 19 47 53.3 0.0**
**MFTR Murfatlar 149.84 277** ⇑P **PKPbc 19 47 51.5 -2.0**
**ALN Alexandroupoli 149.89 270** PKHKP PKPpre 19 47 51.7
**ALN Alexandroupoli 149.89 270** **PKPbc 19 47 51.7 -2.0**
**TIRR Tirgusor 149.97 278**⇓ P **PKPdf 19 47 51.0 +2.2**
**TIRR Tirgusor 149.97 278**⇓ PKHKP PKPpre 19 47 51.0
**TIRR Tirgusor 149.97 278** **PKPbc 19 47 52.6 -1.1**
**TLCR 150.00 280** ⇑P **PKPbc 19 47 54.0 +0.2**
**TLCR 150.00 280** ⇑PKP2 **PKPbc 19 47 54.0 +0.2**
**PRD Provadia 150.09 275** P **PKPdf 19 47 48.6 -0.4**
**TPGR Topolog 150.13 279** ⇑P **PKPbc 19 47 53.2 -1.0**
**UPNV Upernavik 150.20 23** *i* P **PKPbc 19 47 52.6 -0.8**
**ICOR Ion Corvin 150.22 277**⇓ P **PKPbc 19 47 54.1 -0.3**
**TLBR Topalu 150.24 278**⇓ P **PKPbc 19 47 53.9 -0.5**
**JMB Yambol 150.29 279** P **PKPbc 19 47 50.7 +1.3**
**HARR Harsova 150.38 278** ⇑P **PKPbc 19 47 54.4 -0.3**
**HARR Harsova 150.38 278** ⇑PKIKP **PKPbc 19 47 54.4 -0.3**
**CFR Carcaliu 150.44 279**⇓ P **PKPbc 19 47 55.1 +0.2**
**CFR Carcaliu 150.44 279**⇓ PKIKP **PKPbc 19 47 55.1 +0.2**
**MILM Milestii Mici 150.66 283**⇓ P **PKPbc 19 47 54.6 -0.7**
**MILM Milestii Mici 150.66 283**⇓ PKIKP **PKPbc 19 47 54.6 -0.7**
**BJO1 Bjornoya 150.66 342** *e*pPKPdf pPKPdf 19 47 53.7 +0.5
**TATR Tatarca 150.66 280** ⇑P **PKPab 19 47 59.5 -2.9**
**KDZ Kurdzhali 150.67 271** P **PKPdf 19 47 49.3 -0.8**
**KIS Kishinev 150.69 283** ⇑P **PKPbc 19 47 55.6 +0.2**
**KIS Kishinev 150.69 283** *e*PKP **PKPdf 19 47 46.0 -3.9**
comp=Z,220nm,8.3s
**KIS Kishinev 150.69 283** *e*PP PP 19 51 26.0 -6.9
**KIS Kishinev 150.69 283** *e*PKIKP **PKPdf 19 47 46.0 -3.9**
KIS pmax pmax
comp=Z,220nm,8.3s
**AMRR Amara 150.73 278**⇓ P **PKPab 19 48 01.9 -0.8**
**AMRR Amara 150.73 278**⇓ PKIKP **PKPab 19 48 01.9 -0.8**
**VLDR Vladesti 150.74 280**⇓ P **PKPbc 19 47 55.4 -0.1**
**RAZG Razgrad 150.83 275**⇓ P **PKPbc 19 47 54.7 -1.2**
**SLCR Slobozia Conac 150.84 280**⇓ P **PKPbc 19 47 55.1 -0.6**
**LEOM Leova 150.86 282**⇓ P **PKPbc 19 47 55.6 -0.2**
**LEOM Leova 150.86 282**⇓ PKIKP **PKPbc 19 47 55.6 -0.2**
**VARL Varlezi 150.91 280** ⇑P **PKiKP 19 47 56.4 -0.1**
**LEHL Lehliu 151.01 277** ⇑P **PKiKP 19 47 57.1 +0.3**
**SZH Strazhica 151.08 274** P **PKPdf 19 47 49.3 -1.3**
**PGOR Pogoanele 151.08 278** ⇑P **PKiKP 19 47 57.3 +0.4**
**KEV Kevo 151.10 331** PKIKP **PKPbc 19 47 55.8 +0.1**
**KEV Kevo 151.10 331** **PKPbc 19 47 55.8 +0.1**
**RZN Rozhen 151.15 270** P **PKPdf 19 47 53.8 +2.8**
**BIR Birlad 151.19 281**⇓ P **PKiKP 19 47 56.9 -0.2**
**BIR Birlad 151.19 281**⇓ PKIKP **PKiKP 19 47 56.9 -0.2**
**VASR Vaslui 151.22 282** ⇑P **PKPbc 19 47 55.7 -0.9**
**GHRR 151.25 280**⇓ P **PKiKP 19 47 57.2 -0.1**
**GRER 151.28 279**⇓ P **PKPab 19 48 04.5 -0.4**
**PANC Panciu 151.35 280**⇓ P **PKPab 19 48 01.9 -3.3**
**AGG Agios Georgios 151.35 264** PKIKP **PKPbc 19 47 56.5 -0.8**
**AGG Agios Georgios 151.35 264** **PKPbc 19 47 56.5 -0.8**
**SORM Soroca 151.36 285** ⇑P **PKPbc 19 47 55.7 -1.2**
**SORM Soroca 151.36 285** ⇑PKIKP **PKPbc 19 47 55.7 -1.2**
**ODBI Odobesti 151.37 280**⇓ P **PKiKP 19 47 57.4 -0.1**
**ISR Istrita 151.45 278**⇓ P **PKiKP 19 47 57.6 -0.2**
**ISR Istrita 151.45 278**⇓ PKIKP **PKiKP 19 47 57.6 -0.2**
**SGRR Singureni 151.46 276**⇓ P **PKPbc 19 47 56.8 -0.5**
**SULR 151.47 277**⇓ P **PKiKP 19 48 00.2 +2.5**
**BISRR Bisoca 151.51 279**⇓ P **PKPbc 19 47 57.2 -0.3**
**AKASG Malin Array Be 151.54 290** PKP **PKPdf 19 47 49.6 -1.4**
comp=Z,4.2nm,1.0s,baz=72,slow=1.4,SNR=26
AKASG PKPbc **sPKPdf 19 47 56.1 -0.5**
comp=Z,38nm,0.6s,baz=81,slow=2.6,SNR=85
**AKASG Malin Array Be 151.54 290** **PKPdf 19 47 48.9 -2.1**
**AKBB Malin Array Si 151.54 290**⇓ *i*PKIKP **PKPdf 19 47 49.7 -1.3**
**AKBB Malin Array Si 151.54 290** PKPdf **PKPdf 19 47 49.2 -1.9**
**IAS Iasi 151.56 283** ⇑P **PKPbc 19 47 57.2 -0.2**
**IAS Iasi 151.56 283** ⇑PKIKP **PKPbc 19 47 57.2 -0.2**
**VRI Vrincioaia 151.62 280**⇓ P **PKPbc 19 47 57.1 -0.6**
**VRI Vrincioaia 151.62 280**⇓ PKIKP **PKPbc 19 47 57.1 -0.6**
**PLOR Plostina 151.67 280** ⇑P **PKPbc 19 47 57.4 -0.4**
**PLOR Plostina 151.67 280** ⇑PKIKP **PKPbc 19 47 57.4 -0.4**
**ARA0 ARCESS Array S 151.67 331** *e*PKPbc **PKiKP 19 47 57.7 +0.3**
**ARCES ARCESS Array B 151.67 331** PKP **PKPdf 19 47 49.6 -1.1**
comp=Z,2.3nm,0.8s,baz=22,slow=3.9,SNR=3.9
ARCES PKPbc **PKiKP 19 47 57.5 +0.1**
comp=Z,66nm,0.7s,baz=103,slow=2.1,SNR=179
**ARCES ARCESS Array B 151.67 331** **PKiKP 19 47 57.3 -0.1**
**HAMF Hammerfest 151.72 334** *e*PKPbc **PKiKP 19 47 57.4 -0.1**
**SECR 151.73 278** ⇑P **PKPbc 19 47 56.0 -1.9**
**NEHR Nehoiu 151.74 279** ⇑P **PKPbc 19 47 57.6 -0.3**
**MMB Musomiste 151.75 270** P **PKPdf 19 47 54.6 +2.8**
**LIT Litokhoron 151.82 266** PKIKP **PKPbc 19 47 57.6 -0.7**
**LIT Litokhoron 151.82 266** **PKPbc 19 47 57.6 -0.7**
**TESR Tescani 151.91 281** ⇑P **PKPbc 19 47 56.6 -1.6**
**PGB Panagyurishte 151.92 272** P **PKPdf 19 47 55.2 +3.2**
**COPA Copaceanca 151.92 275** ⇑P **PKPbc 19 47 57.9 -0.5**
**PUL Pulkovo 151.92 310**⇑ *i*PKIKP **PKiKP 19 47 59.3 +1.1**
**COVR Voineasa-Covas 151.95 279** ⇑P **PKPbc 19 47 57.9 -0.5**
**MLR Muntele Rosu 151.99 278** ⇑P **PKPbc 19 47 58.4 -0.2**
**MLR Muntele Rosu 151.99 278** PKPbc **PKPbc 19 47 57.9 -0.8**
comp=Z,58nm,1.0s,baz=244,slow=1.0,SNR=21
**MLR Muntele Rosu 151.99 278** PKIKP **PKPdf 19 47 50.8 -1.3**
MLR MLR MLR
comp=Z,900nm,22.0s
**MLR Muntele Rosu 151.99 278** PKPdf **PKPdf 19 47 50.8 -1.3**
MLR IAMs_20 IAMs_20 21 10 22.3
comp=Z,891nm,22.0s
**DAG Danmarks Havn 152.19 2** *i* P **PKPbc 19 47 55.8 -2.2**
**HUMR Humele 152.24 276** ⇑P **PKPbc 19 47 57.9 -1.1**
**KKB Krupnik 152.31 270** P **PKPdf 19 47 55.7 +3.2**
**OZUR 152.32 280**⇓ P **PKPbc 19 47 58.3 -1.0**
**STFAR Stefanesti-Arg 152.38 277** ⇑P **PKPbc 19 47 59.4 0.0**
**VAY Valandovo 152.38 268** *i* P **PKPbc 19 47 58.4 -1.1**
**VLAD Vladila 152.40 275** ⇑P **PKPbc 19 47 58.2 -1.2**
**MTUR Matau 152.46 277**⇓ P **PKiKP 19 47 59.8 -0.1**
**MTUR Matau 152.46 277**⇓ PKIKP **PKiKP 19 47 59.8 -0.1**
**PRAR RASCA 152.47 282** ⇑P **PKPab 19 48 05.0 -4.9**
**DOPR Dopca 152.53 279** ⇑P **PKPbc 19 47 59.8 +0.1**
**VOIR 152.55 278** ⇑P **PKPbc 19 47 58.3 -1.6**
**VOIR 152.55 278** ⇑PKIKP **PKPbc 19 47 58.3 -1.6**
**VTS Vitosha 152.56 271**⇓ P **PKPbc 19 47 58.1 -2.0**
**VTS Vitosha 152.56 271** PKIKP **PKPdf 19 47 49.8 -3.3**
**VTS Vitosha 152.56 271** PKPdf **PKPdf 19 47 49.8 -3.3**
**VTS Vitosha 152.56 271** P **PKPbc 19 47 56.7 -3.4**
**KTK1 Kautokeino 152.63 331** *e*PKPbc **PKPbc 19 47 59.2 0.0**
**ARR Arges 152.79 277** ⇑P **PKPdf 19 47 51.9 -1.3**
**STIP Stip 152.82 269** *i* P **PKPbc 19 47 58.7 -1.7**
**FNA Florina 152.90 266** PKIKP **PKPdf 19 47 52.2 -1.3**
**FNA Florina 152.90 266** PKPdf **PKPdf 19 47 52.2 -1.3**
**MNK Minsk 153.04 298** *i* PKIKP **PKPdf 19 47 52.7 -0.4**
MNK *i* 19 51 45.6
MNK *i* SS SS 20 11 22.5 +4.0
MNK *i* SSS SSS 20 17 06.8
**MNK Minsk 153.04 298** *i* PKP **PKPdf 19 47 52.7 -0.4**
MNK *i* PKP **PKPdf 19 47 52.7 -0.4**
MNK *i* PKP **PKPdf 19 47 52.7 -0.4**
baz=97
MNK *i* PP **PP 19 51 45.7 -0.5**
MNK *i* PPP PPP 19 55 08.1
MNK *i* SKKS 20 02 35.7
MNK *i* SS **SS 20 11 22.6 +4.1**
MNK *i* SSS SSS 20 17 06.8
MNK *i* LR LR 21 00 40.4
MNK *i* LRM MLR 21 04 20.4
comp=E,63nm,19.3s
MNK *i* LRM MLR 21 04 20.4
comp=N,619nm,22.6s
MNK *i* LRM MLR 21 04 20.4
comp=Z,1μm,24.3s
**BURAR Bucovina Array 153.20 282** ⇑P **PKiKP 19 48 01.8 +0.4**
**BURAR Bucovina Array 153.20 282** ⇑PKIKP **PKiKP 19 48 01.8 +0.4**
**BURAR Bucovina Array 153.20 282** PKPdf **PKPdf 19 47 53.0 -0.8**
**BUR08 Bucovina Ar. S 153.22 282** PKPdf **PKPdf 19 47 53.7 -0.1**
**JETT Jettan, Norway 153.24 333** *e*PKPbc **PKiKP 19 48 01.5 +0.8**
**LOT Lotru 153.39 277**⇓ P **PKPbc 19 48 01.7 -0.1**
**SKO Skopje 153.44 268** *i* P **PKPdf 19 47 56.1 +1.9**
**PUNG Punghina 153.48 274** ⇑P **PKPbc 19 48 01.3 -0.5**
**ARCR ARCALIA 153.59 281** ⇑P **PKPbc 19 48 00.1 -1.8**
**TRO Tromso 153.64 334** *e*PKPbc **PKPbc 19 48 01.2 -0.1**
**NACGM Naroch 153.72 299** *i* PKP **PKiKP 19 48 02.4 +0.4**
**IDID Didziasalis 153.77 300** *e*P **PKPdf 19 47 56.5 +2.4**
**VSU Vasula 153.82 307** *d*PKIKP **PKPbc 19 48 01.7 -0.3**
**VSU Vasula 153.82 307** *e*P **PKPbc 19 48 01.7 -0.3**
**FIA1 FINESS Array S 153.85 314** **PKPbc 19 48 00.9 -1.1**
**FINES FINESS Array B 153.85 314** PKPbc **PKPbc 19 48 01.6 -0.5**
comp=Z,23nm,0.7s,baz=248,slow=2.1,SNR=18
**BOVS Bovan 154.01 272**⇓ P **PKPbc 19 47 59.2 -3.7**
**HERR Herculane 154.06 275** ⇑P **PKPdf 19 47 58.3 +3.3**
**IIGN Ignalina 154.07 300** *e*P **PKPbc 19 47 59.4 -3.3**
**DEV Deva 154.11 278**⇓ P **PKiKP 19 48 08.2 +5.1**
**SUMG Summit 154.27 16** PKIKP **PKPdf 19 47 54.0 -0.9**
**SUMG Summit 154.27 16** *i* P **PKPdf 19 47 55.0 +0.1**
**SUMG Summit 154.27 16** PKPdf **PKPdf 19 47 54.0 -0.9**
**BMR Baia Mare 154.32 282**⇓ P **PKiKP 19 48 05.8 +2.3**
**MDVR Moldovita 154.48 274**⇓ P **PKPbc 19 48 03.6 -0.4**
**DRGR 154.55 279**⇓ P **PKPbc 19 48 04.0 -0.1**
**LVV L'vov 154.57 287** *i* PKIKP **PKPdf 19 47 54.6 -0.9**
LVV *e* 19 48 02.8
LVV *e* 19 51 51.7
**DBG Daneborg 154.62 3** *i* P **PKPbc 19 48 00.8 -2.6**
**TIP Timpagrande 155.06 259**⇓ P **PKPdf 19 48 04.0 +7.3**
**TIP Timpagrande 155.06 259** PKPdf **PKPdf 19 47 55.4 -1.2**
**TRPA Tarpa 155.07 282**⇓ P **PKPdf 19 47 57.4 +1.2**
**PDG Podgorica 155.09 268**⇓ P PKPdf 19 48 05.0 +8.6
**MTSE Matsula 155.33 308** *e*P PKPab 19 48 10.5 -11
**KWP Kalwaria Pacla 155.36 286** PKIKP **PKPdf 19 47 54.7 -1.9**
**KWP Kalwaria Pacla 155.36 286** **PKPdf 19 47 54.7 -1.9**
**PABE Paberze 155.36 300** *e*P PKPdf 19 48 05.9 +10
**UZH Uzhgorod 155.37 283** *e*PKIKP **PKPdf 19 47 58.0 +1.4**
**STEI Steigen 155.71 332** *e*PKPab **PKPab 19 48 22.0 -1.0**
**SUW Suwalki 155.74 296** PKIKP **PKPdf 19 47 55.3 -1.6**
SUW MLR MLR
comp=Z,2μm,21.0s
**SUW Suwalki 155.74 296** PKPdf **PKPdf 19 47 55.3 -1.6**
**SUW Suwalki 155.74 296** *e*P **PKPdf 19 48 02.0 +5.0**
**FRGS Fruska Gora 155.87 274** ⇑P **PKPdf 19 48 04.4 +6.9**
**FAUS Fauske 156.01 331** *e*PKPab **PKPab 19 48 24.1 -0.2**
**PSZ Piszkesteto 156.72 281** ⇑P PKPdf 19 48 07.9 +9.3
**PSZ Piszkesteto 156.72 281** PKIKP **PKPdf 19 47 55.9 -2.6**
PSZ MLR MLR
comp=Z,1μm,21.0s
**PSZ Piszkesteto 156.72 281** PKPdf **PKPdf 19 47 55.9 -2.6**
PSZ IAMs_20 IAMs_20 21 09 38.4
comp=Z,992nm,21.0s
**MOR8 Moi Rana 156.97 329** *e*PKPab **PKPab 19 48 26.8 -1.8**
**MORH Mrgy, Hungar 157.01 276**⇓ P **PKPab 19 48 29.0 -0.3**
**OJC Ojcow 157.32 286** PKIKP **PKPdf 19 47 57.4 -1.8**
**OJC Ojcow 157.32 286** **PKPdf 19 47 57.4 -1.8**
**KEST Kesra 157.50 243** PKPab **PKPab 19 48 33.1 +1.3**
comp=Z,27nm,0.9s,baz=336,slow=7.9,SNR=4.0
**OKC Ostrava-Krasne 158.29 285** AMS AMS 21 08 10.0
comp=Z,1μm,22.7s
**JAVC Velka Javorina 158.39 282** *e*PKP **PKPdf 19 48 00.2 -0.4**
JAVC *e* 19 48 35.9
**MODS Modra-Piesok 158.53 281** *e*PKIKP **PKPdf 19 48 02.1 +1.4**
**MODS Modra-Piesok 158.53 281** *e*PKP **PKPdf 19 48 02.1 +1.4**
MODS *e* 19 48 38.6
**ZST Bratislava 158.60 280** *e*PKP2 **PKPab 19 48 40.9 +4.8**
**MORC Moravsky Berou 158.66 284**⇓ P **PKPdf 19 48 00.1 -0.8**
**MORC Moravsky Berou 158.66 284**⇓ PKIKP **PKPdf 19 48 00.1 -0.8**
**MORC Moravsky Berou 158.66 284** **PKPdf 19 47 59.3 -1.6**
**MORC Moravsky Berou 158.66 284** *e*PKP **PKPdf 19 47 59.2 -1.6**
MORC *e* 19 48 36.2
**NSS Namsos 158.75 327** *e*PKPab **PKPab 19 48 36.8 +0.6**
**BOJS Bojanci 158.99 272** *e*PKPdf **PKPdf 19 48 01.4 +0.1**
**VRAC Vranov 159.18 283**⇓ P **PKPdf 19 48 00.1 -1.3**
**VRAC Vranov 159.18 283** PKP **PKPdf 19 48 00.4 -1.1**
comp=Z,0.9nm,0.3s,baz=26,slow=2.5,SNR=4.6
**VRAC Vranov 159.18 283** *e*PKP **PKPdf 19 47 59.8 -1.6**
VRAC *e* 19 48 37.3
**KRLC Kraliky 159.20 285** *e*PKIKP **PKPdf 19 48 00.8 -0.7**
KRLC MLR MLR
comp=Z,800nm,18.4s
**KRL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SOKA** | **Soboth** | **159.52 275** | *e*P | **PKPdf** | **19 48 00.8** | **-1.2** |
| | comp=Z,18nm,1.4s | | | | | | |
| SOKA | | | *e*P | **PKPab** | **19 48 40.7** | **+0.3** |
| | comp=Z,82nm,1.5s | | | | | | |
| SOKA | | | *e*P | **PP** | **19 52 19.4** | **-3.1** |
| | comp=Z,19nm,1.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **159.54 286** | *e*PKIKP | **PKPdf** | **19 48 00.3** | **-1.6** |
| DPC | | | MLR | MLR | | | |
| | comp=Z,1μm,20.9s | | | | | | |
| **DPC** | **Dobruska-Polom** | **159.54 286** | *e*PKPDF | **PKPdf** | **19 48 00.3** | **-1.6** |
| DPC | | | *e*PKPAB | **PKPab** | **19 48 40.3** | **+0.1** |
| DPC | | | AMS | AMS | 21 11 50.0 | | |
| | comp=Z,1μm,20.9s | | | | | | |
| **OSTC** | **Ostas** | **159.64 286** | AMS | AMS | 21 06 10.0 | | |
| | comp=Z,2μm,22.5s | | | | | | |
| **CHVC** | **Chvalec** | **159.74 286** | *e*PKPAB | **PKPab** | **19 48 41.2** | **+0.1** |
| CHVC | | | AMS | AMS | 21 06 10.0 | | |
| | comp=Z,1μm,22.5s | | | | | | |
| **UPC** | **Upice** | **159.76 286** | AMS | AMS | 21 04 40.0 | | |
| | comp=Z,2μm,21.1s | | | | | | |
| **OBKA** | **Obir** | **159.79 274** | *e*P | **PKPab** | **19 48 41.9** | **+0.4** |
| | comp=Z,39nm,1.9s | | | | | | |
| OBKA | | | *e*P | **PP** | **19 52 20.9** | **-3.0** |
| | comp=Z,21nm,1.7s | | | | | | |
| **TBLU** | **Trondheim** | **160.08 325** | *e*PKPab | **PKPab** | **19 48 41.5** | **-0.6** |
| **MOA** | **Molln** | **160.35 278** | *e*P | **PKPdf** | **19 48 01.7** | **-1.1** |
| | comp=Z,7.9nm,1.5s | | | | | | |
| MOA | | | P | **PKPab** | **19 48 43.7** | **-0.1** |
| | comp=Z,30nm,1.3s | | | | | | |
| MOA | | | *e*P | **PP** | **19 52 21.7** | **-5.2** |
| | comp=Z,12nm,1.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **160.42 274** | *e*P | **PKPdf** | **19 48 02.2** | **-0.8** |
| | comp=Z,7.7nm,1.1s | | | | | | |
| MYKA | | | *e*P | **PKPab** | **19 48 44.3** | **+0.1** |
| | comp=Z,86nm,1.8s | | | | | | |
| MYKA | | | *e*P | **PP** | **19 52 22.8** | **-4.5** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **160.55 280** | *e*PKPDF | **PKPdf** | **19 48 02.7** | **-0.3** |
| CKRC | | | *e*PKPAB | **PKPab** | **19 48 44.4** | **-0.3** |
| CKRC | | | AMS | AMS | 21 06 20.0 | | |
| | comp=Z,1μm,21.5s | | | | | | |
| **NC405** | **NORSAR Array S** | **160.55 318** | | **PKPab** | **19 48 42.9** | **-1.4** |
| **PRU** | **Pruhonice** | **160.61 284** | *e*PKP2 | **PKPab** | **19 48 45.0** | **+0.1** |
| PRU | | | MLR | MLR | | | |
| | comp=Z,1μm,20.7s | | | | | | |
| **PRU** | **Pruhonice** | **160.61 284** | *e*PKPAB | **PKPab** | **19 48 45.0** | **+0.1** |
| PRU | | | AMS | AMS | 21 07 40.0 | | |
| | comp=Z,1μm,20.7s | | | | | | |
| **NC303** | **NORSAR Array S** | **160.65 319** | | **PKPab** | **19 48 42.3** | **-2.4** |
| **PVCC** | **Panska Ves** | **160.67 286** | *e*PKP2 | **PKPab** | **19 48 45.5** | **+0.4** |
| PVCC | | | MLR | MLR | | | |
| | comp=Z,1μm,19.1s | | | | | | |
| **PVCC** | **Panska Ves** | **160.67 286** | *e*PKPAB | **PKPab** | **19 48 45.5** | **+0.4** |
| PVCC | | | AMS | AMS | 21 07 40.0 | | |
| | comp=Z,1μm,19.1s | | | | | | |
| **KBA** | **Koelnbreinsper** | **160.75 275** | P | **PKPdf** | **19 48 02.1** | **-1.4** |
| | comp=Z,14nm,1.6s | | | | | | |
| KBA | | | *e*P | **PKPab** | **19 48 45.3** | **-0.4** |
| | comp=Z,22nm,1.4s | | | | | | |
| **NB201** | **NORSAR Array S** | **160.76 318** | | **PKPab** | **19 48 42.1** | **-3.1** |
| **NC602** | **NORSAR Array S** | **160.79 317** | | **PKPab** | **19 48 42.7** | **-2.6** |
| **NC602** | **NORSAR Array S** | **160.79 317** | *e*PKPab | **PKPab** | **19 48 45.0** | **-0.3** |
| **NB2** | **NORSAR Subarra** | **160.80 318** | P | **PKPab** | **19 48 44.4** | **-1.0** |
| | comp=Z,96nm,1.4s,baz=63,slow=4.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **160.80 318** | PKPab | **PKPab** | **19 48 44.4** | **-1.0** |
| | baz=63,slow=4.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **160.80 318** | PKP | **PKPdf** | **19 48 02.9** | **-0.1** |
| | comp=Z,3.7nm,1.1s,baz=55,slow=1.2,SNR=6.4 | | | | | | |
| NOA | | | PKPab | **PKPab** | **19 48 44.5** | **-1.0** |
| | comp=Z,13nm,0.9s,baz=61,slow=4.4,SNR=24 | | | | | | |
| **NC204** | **NORSAR Array S** | **160.89 319** | | **PKPab** | **19 48 44.8** | **-1.0** |
| **DEL** | **Delary** | **160.94 304** | *e*P | **PKPab** | **19 48 44.8** | **-1.2** |
| **GEC2** | **GERESS Array S** | **160.95 280** | PKPdf | **PKPdf** | **19 48 01.5** | **-2.1** |
| GEC2 | | | PKPab | **PKPab** | **19 48 45.3** | **-1.2** |
| **GERES** | **GERESS Array B** | **160.95 280** | PKP | **PKPdf** | **19 48 02.5** | **-1.1** |
| | comp=Z,2.4nm,1.1s,baz=0.0,slow=1.3,SNR=10 | | | | | | |
| GERES | | | PKPab | **PKPab** | **19 48 46.0** | **-0.5** |
| | comp=Z,30nm,1.1s,baz=116,slow=3.1,SNR=14 | | | | | | |
| GERES | | | PP | **PP** | **19 52 28.6** | **-1.6** |
| | comp=Z,5.8nm,1.2s,baz=96,slow=4.0,SNR=3.8 | | | | | | |
| **GERES** | **GERESS Array B** | **160.95 280** | PKPdf | **PKPdf** | **19 48 02.2** | **-1.4** |
| GERES | | | PKPab | **PKPab** | **19 48 44.2** | **-2.3** |
| GERES | | | | **PP** | **19 52 28.3** | **-1.8** |
| **NBO00** | **NORSAR Array S** | **161.00 319** | | **PKPab** | **19 48 45.4** | **-0.8** |
| **NAO01** | **NORSAR Array S** | **161.03 318** | PKPdf | **PKPdf** | **19 48 01.4** | **-1.7** |
| NAO01 | | | | **PKPab** | **19 48 45.3** | **-1.0** |
| **KHC** | **Kasperske Hory** | **161.08 281** | *e*PKIKP | **PKPdf** | **19 48 08.0** | **+4.4** |
| KHC | | | *e* | | 19 48 46.2 | | |
| KHC | | | *e* | | 19 52 29.1 | | |
| KHC | | | *e*SS | SS | 20 13 36.2 | +51 |
| KHC | | | MLR | MLR | | | |
| | comp=Z,2μm,19.9s | | | | | | |
| **KHC** | **Kasperske Hory** | **161.08 281** | *e*PKPDF | **PKPdf** | **19 48 08.0** | **+4.4** |
| KHC | | | *e*PKPAB | **PKPab** | **19 48 46.2** | **-0.8** |
| KHC | | | *e*PP | **PP** | **19 52 29.1** | **-1.7** |
| KHC | | | *e*SS | SS | 20 13 36.2 | +51 |
| KHC | | | AMS | AMS | 21 08 30.0 | | |
| | comp=Z,2μm,19.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **161.11 287** | PP | PP | 19 52 39.0 | +8.2 |
| **BRG** | **Berggiesshubel** | **161.11 287** | *e*PKIKP | **PKPdf** | **19 48 06.0** | **+2.5** |
| BRG | | | pmax | pmax | | | |
| | comp=Z,45nm,2.1s | | | | | | |
| **BRG** | **Berggiesshubel** | **161.11 287**‖ | *e*PKPf | | 19 48 06.0 | | |
| **BRG** | **Berggiesshubel** | **161.11 287** | *e*PKPab | | 19 48 46.8 | | |
| **BRG** | **Berggiesshubel** | **161.11 287** | Amp | | 19 48 54.5 | | |
| | comp=Z,93nm,1.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **161.19 273** | P | **PKPdf** | **19 48 01.7** | **-2.2** |
| | comp=Z,17nm,1.4s | | | | | | |
| ABTA | | | *e*P | **PKPab** | **19 48 46.1** | **-1.5** |
| | comp=Z,41nm,1.4s | | | | | | |
| ABTA | | | P | **PP** | **19 52 30.4** | **-1.1** |
| | comp=Z,23nm,1.6s | | | | | | |
| **DOMB** | **Dombas** | **161.21 323** | *e*PKPab | **PKPab** | **19 48 46.9** | **-0.2** |
| **RUE** | **Ruedersdorf** | **161.31 292** | *e*P | **PKPab** | **19 48 46.6** | **-1.2** |
| **MOL** | **Molde** | **161.49 325** | *e*PKPab | **PKPab** | **19 48 48.3** | **0.0** |
| **CLL** | **Collm** | **161.74 288** | *e*PKIKP | **PKPdf** | **19 48 07.0** | **+2.9** |
| CLL | | | *i* | | 19 48 49.3 | | |
| CLL | | | pmax | pmax | | | |
| | comp=Z,182nm,3.1s | | | | | | |
| CLL | | | pmax | pmax | | | |
| | comp=Z,65nm,1.9s | | | | | | |
| CLL | | | MLR | MLR | | | |
| | comp=Z,1μm,21.3s | | | | | | |
| **CLL** | **Collm** | **161.74 288** | *e*PKPdf | **PKPdf** | **19 48 07.0** | **+2.9** |
| | comp=Z,182nm,3.1s | | | | | | |
| CLL | | | *i* PKPab | **PKPab** | **19 48 49.3** | **-0.4** |
| | comp=Z,65nm,1.9s | | | | | | |
| CLL | | | *i* pPKPab | **pPKPab** | **19 48 53.7** | **-0.3** |
| | comp=Z,93nm,1.9s | | | | | | |
| CLL | | | *ex* | x | 19 49 06.0 | | |
| CLL | | | *e*PP | **PP** | **19 52 34.0** | **-0.2** |
| CLL | | | *e*PPP | PPP | 19 56 18.0 | | |
| CLL | | | *ex* | x | 19 58 06.0 | | |
| CLL | | | *e*SKKSac | SKKSac | 19 59 26.0 | +5.1 |
| CLL | | | *ex* | x | 19 59 54.0 | | |
| CLL | | | *e*PSKS | | 20 03 01.0 | | |
| CLL | | | *e*PPS | PPS | 20 06 02.0 | | |
| CLL | | | *ex* | x | 20 07 24.0 | | |
| CLL | | | *e*SS | **SS** | **20 12 49.0** | **-2.8** |
| CLL | | | *e*SKSSKSac | **S'S'ac** | **20 13 18.0** | **+5.6** |
| CLL | | | *e*PSS | PSS | 20 13 48.0 | | |
| CLL | | | *e*SSS | SSS | 20 18 54.0 | | |
| CLL | | | *e*PSSrev | | 20 20 18.0 | | |
| CLL | | | *e*(SSSS) | | 20 24 00.0 | | |
| CLL | | | LmH | | 21 08 00.0 | | |
| | comp=N,1μm,20.8s | | | | | | |
| CLL | | | LmH | | 21 08 00.0 | | |
| | comp=E,500nm,21.4s | | | | | | |
| CLL | | | Lm | MLR | 21 11 00.0 | | |
| | comp=Z,1μm,21.3s | | | | | | |
| **CLL** | **Collm** | **161.74 288** | PKPdf | **PKPdf** | **19 48 00.8** | **-3.3** |
| CLL | | | PKPab | **PKPab** | **19 48 48.1** | **-1.6** |
| **WTTA** | **Wattenberg** | **161.92 274** | *e*P | **PKPdf** | **19 48 02.8** | **-2.0** |
| | comp=Z,41nm,1.4s | | | | | | |
| WTTA | | | *e*P | **PKPab** | **19 48 49.2** | **-1.7** |
| | comp=Z,75nm,1.3s | | | | | | |
| WTTA | | | *e*P | **PP** | **19 52 34.0** | **-1.5** |
| | comp=Z,23nm,1.6s | | | | | | |
| **AKN** | **Aaknes** | **161.93 325** | *e*PKPab | **PKPab** | **19 48 50.8** | **+0.5** |
| **PRMA** | **PARMA** | **161.96 266** | PKPdf | **PKPdf** | **19 48 01.5** | **-3.1** |
| **WATA** | **Walderalm** | **161.98 275** | *e*P | **PKPdf** | **19 48 03.4** | **-1.4** |
| | comp=Z,26nm,1.3s | | | | | | |
| WATA | | | *e*P | **PKPab** | **19 48 50.6** | **-0.5** |
| | comp=Z,50nm,1.6s | | | | | | |
| WATA | | | *e*P | **PP** | **19 52 34.1** | **-1.6** |
| | comp=Z,19nm,1.5s | | | | | | |
| **NKC** | **Novy Kostel** | **161.98 284** | AMS | AMS | 21 05 10.0 | | |
| | comp=Z,1μm,20.2s | | | | | | |
| **MOTA** | **Moosalm** | **162.29 274** | *e*P | **PKPdf** | **19 48 02.9** | **-2.2** |
| | comp=Z,12nm,1.0s | | | | | | |
| MOTA | | | *e*P | **PKPab** | **19 48 52.0** | **-0.5** |
| | comp=Z,55nm,1.4s | | | | | | |
| **FETA** | **Feichten** | **162.44 273** | P | **PKPdf** | **19 48 03.8** | **-1.5** |
| | comp=Z,19nm,1.6s | | | | | | |
| FETA | | | P | **PKPab** | **19 48 53.4** | **+0.2** |
| | comp=Z,64nm,1.4s | | | | | | |
| FETA | | | *e*P | **PP** | **19 52 36.9** | **-1.3** |
| | comp=Z,22nm,1.5s | | | | | | |
| **RETA** | **Reutte** | **162.55 275** | *e*P | **PKPdf** | **19 48 04.1** | **-1.1** |
| | comp=Z,10nm,1.1s | | | | | | |
| RETA | | | *e*P | **PKPab** | **19 48 52.5** | **-1.1** |
| | comp=Z,115nm,1.3s | | | | | | |
| RETA | | | *e*P | **PP** | **19 52 36.4** | **-2.4** |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **GRF** | **Grafenberg Arr** | **162.69 282** | *e*PKP | **PKPdf** | **19 48 02.0** | **-3.2** |
| | baz=98,slow=0.9 | | | | | | |
| GRF | | | *e*L | L | 21 06 20.7 | | |
| | comp=Z,1μm,21.3s | | | | | | |
| **HYA** | **Hoyanger** | **162.84 323** | *e*PKPab | **PKPab** | **19 48 55.2** | **+1.0** |
| **DAVA** | **Damuels** | **163.07 273** | *e*P | **PKPdf** | **19 48 04.1** | **-1.8** |
| | comp=Z,11nm,1.2s | | | | | | |
| DAVA | | | *e*P | **PKPab** | **19 48 56.1** | **+0.1** |
| | comp=Z,90nm,1.6s | | | | | | |
| DAVA | | | *e*P | **PP** | **19 52 39.3** | **-2.3** |
| | comp=Z,22nm,1.2s | | | | | | |
| **TUE** | **Stuetta** | **163.19 270** | | **PKPdf** | **19 48 03.8** | **-2.3** |
| TUE | | | | **PKPab** | **19 48 54.5** | **-2.0** |
| **MUD** | **Monsted U'grnd** | **163.48 306** | *i* P | **PKPab** | **19 48 57.0** | **-0.2** |
| **BLS5** | **Blasjo** | **163.66 317** | *e*PKPab | **PKPab** | **19 48 58.8** | **+0.9** |
| **BFO** | **Black Forest** | **164.34 276** | PKP2 | **PKPab** | **19 49 00.1** | **-1.2** |
| **BFO** | **Black Forest** | **164.34 276** | PKPab | **PKPab** | **19 49 00.1** | **-1.2** |
| **SENIN** | **Lac Senin/Sane** | **164.50 268** | PKPab | **PKPab** | **19 48 58.6** | **-3.7** |
| **ECH** | **Echery** | **165.08 275** | PKP2 | **PKPab** | **19 49 02.4** | **-2.2** |
| **ECH** | **Echery** | **165.08 275** | PKPab | **PKPab** | **19 49 02.4** | **-2.2** |
| **MORF** | **Marmelete** | **167.24 205** | *e*PKPdf | **PKPdf** | **19 48 10.7** | **+1.1** |
| MORF | | | *e*PP | **PP** | **19 53 03.8** | **+1.7** |
| MORF | | | IAMs_20 | IAMs_20 | 21 02 22.1 | | |
| | comp=Z,2μm,12.4s | | | | | | |
| **MORF** | **Marmelete** | **167.24 205** | *e*PKIKP | **PKPdf** | **19 48 10.7** | **+1.1** |
| MORF | | | *e* | | 19 53 03.8 | | |
| **ESDC** | **Sonseca Array** | **167.54 225** | PKP | **PKPdf** | **19 48 09.7** | **-0.1** |
| | comp=Z,1.3nm,0.9s,baz=246,slow=25,SNR=5.2 | | | | | | |
| ESDC | | | PKPab | **PKPab** | **19 49 16.8** | **+1.2** |
| | comp=Z,3.4nm,1.0s,baz=160,slow=3.3,SNR=5.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **167.54 225** | | **PKPdf** | **19 48 09.0** | **-0.7** |
| ESDC | | | PKPab | **PKPab** | **19 49 11.7** | **-3.9** |
| **MESJ** | **Messejana** | **167.61 207** | *e*PKPdf | **PKPdf** | **19 48 11.0** | **+1.3** |
| MESJ | | | *e*PP | **PP** | **19 53 05.8** | **+1.8** |
| MESJ | | | IAMs_20 | IAMs_20 | 21 02 32.4 | | |
| | comp=Z,2μm,20.7s | | | | | | |
| **MESJ** | **Messejana** | **167.61 207** | *e*PKIKP | **PKPdf** | **19 48 11.0** | **+1.3** |
| MESJ | | | *e* | | 19 53 05.8 | | |
| **CLF** | **Chambon-Foret** | **168.25 271** | PKPab | **PKPab** | **19 49 14.1** | **-4.5** |
| **LIS** | **Lisbon** | **168.69 206** | *e*PKPdf | **PKPdf** | **19 48 11.6** | **+1.2** |
| LIS | | | *e*PP | **PP** | **19 53 11.4** | **+1.9** |
| **LIS** | **Lisbon** | **168.69 206** | *e*PKIKP | **PKPdf** | **19 48 11.6** | **+1.2** |
| LIS | | | *e* | | 19 53 11.3 | | |

*MAN* ***15*** *20:07:07.1,5.˚62N×126.˚14E,h34km,mb4.7,ML3.6,MS3.6*
*IDC* ***15*** *20:07:11.4±1.0,5.˚95N×125.˚79E,h76km±8km,mb3.8/16, mb1 3.9/17,mb1mx3.7/38,mbtmp4.1/17,Error ellipse: s-maj=33.6km s-min=10.1km az=77.0*
*NEIC* ***15*** *20:07:11.9±1.8,5.˚96N±0.˚04×125.˚8E±0.˚1,h76km±6km, mb4.3/24,Error ellipse: s-maj=20.2km s-min=4.0km az=79.0*
*DJA* ***15*** *20:07:13.0±0.5,6˚N±3˚×12˚6E±˚,h65km±21km,M4.6/11, mb4.5/8,MLv4.6/11*

**ISC 15 20:07:11.2±0.9,5.˚97N±0.˚04×125.˚96E±0.˚06,h75km±8km, n68,σ187/79,mb4.1/25,4C-3D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSPH** | **General Santos** | **1.02** | **276** | *i* P | **Pn** | **20 07 29.3** | **-0.9** |
| GSPH | | | | *i* S | **Sn** | **20 07 43.0** | **-1.4** |
| **DAV** | **Davao City (W)** | **1.16** | **341** | P | **Pn** | **20 07 31.4** | **-0.5** |
| | 124nm,0.3s,baz=184,slow=2.0,SNR=20 | | | | | | |
| DAV | | | | S | **Sn** | **20 07 47.3** | **-0.1** |
| | 183nm,0.3s,baz=116,slow=8.3,SNR=12 | | | | | | |
| **DAV** | **Davao City (W)** | **1.16** | **341** | | **Pn** | **20 07 32.1** | **+0.2** |
| **KCP** | **Kidapawan** | **1.35** | **320**‖ | *i* P | **Pn** | **20 07 34.7** | **+0.3** |
| KCP | | | | *i* S | **Sn** | **20 07 52.6** | **+0.7** |
| **CTBH** | **Cotabato--PC H** | **2.11** | **306**‖ | *i* P | **Pn** | **20 07 45.1** | **+0.7** |
| **BIPH** | **Bislig** | **2.23** | **10**‖ | *e*P | **Pn** | 20 07 51.7 | +5.6 |
| BIPH | | | | | **Sn** | **20 08 17.0** | **+4.2** |
| **SGSI** | **Sangihe** | **2.31** | **191** | P | **Pn** | **20 07 47.2** | **0.0** |
| SGSI | | | | S | **Sn** | **20 08 17.5** | **+2.8** |
| **PAGZ** | **Pagadian** | **3.17** | **306**‖ | *e*P | **Pn** | **20 08 00.2** | **+1.4** |
| PAGZ | | | | *e*S | **Sn** | **20 08 42.8** | **+7.3** |
| **SCPH** | **Surigao** | **3.81** | **353**‖ | *e*P | **Pn** | **20 08 10.4** | **+2.8** |
| **ZCP** | **Zamboanga City** | **3.98** | **284**‖ | *e*P | **Pn** | **20 08 11.6** | **+1.8** |
| ZCP | | | | *i* S | **Sn** | **20 08 59.8** | **+4.5** |
| **LLP** | **Lapu-Lapu** | **4.75** | **336** | *e*P | **Pn** | **20 08 19.9** | **-0.5** |
| LLP | | | | *e*S | **Sn** | **20 09 14.6** | **+0.5** |
| **TNTI** | **Ternate** | **5.35** | **165** | | **Pn** | **20 08 29.7** | **+1.1** |
| **TNTI** | **Ternate** | **5.35** | **165** | P | **Pn** | **20 08 30.5** | **+1.9** |
| | 0.4nm72nm,1.1s | | | | | | |
| **KMSI** | **Cibinong** | **5.72** | **200** | P | **Pn** | **20 08 35.9** | **+2.3** |
| | 0.7nm86nm,0.7s | | | | | | |
| KMSI | | | | S | **Sn** | **20 09 39.3** | **+1.5** |
| | 0.7nm86nm,0.7s | | | | | | |
| **GTOI** | **Gorontalo** | **6.07** | **209** | P | **Pn** | **20 08 38.8** | **+0.5** |
| | 0.2nm34nm,0.4s | | | | | | |
| GTOI | | | | S | **Sn** | **20 09 42.6** | **-3.8** |
| | 0.2nm34nm,0.4s | | | | | | |
| **MRSI** | **Marisa** | **6.78** | **216** | P | **Pn** | **20 08 50.2** | **+2.1** |
| | 1.1nm64nm,0.7s | | | | | | |
| MRSI | | | | S | **Sn** | **20 10 02.0** | **-1.8** |
| | 1.1nm64nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **7.08** | **227** | | **Pn** | **20 08 51.4** | **-0.8** |
| **MYLDM** | **Lahad Datu** | **7.47** | **264** | Pn | **Pn** | **20 09 01.3** | **+3.7** |
| **SANI** | **Sanana** | **7.97** | **180** | P | **Pn** | **20 09 03.5** | **-0.9** |
| | 0.2nm20nm,0.6s | | | | | | |
| **APSI** | **Ampana** | **8.08** | **212** | P | **Pn** | **20 09 10.2** | **+4.3** |
| | 23nm,0.6s | | | | | | |
| **MPSI** | **Mapaga** | **8.25** | **227** | P | **Pn** | **20 09 09.7** | **+1.6** |
| **SIJI** | **Sorong** | **8.62** | **142** | P | **Pn** | **20 09 14.8** | **+1.6** |
| | 4.3nm,0.3s,baz=322,slow=15,SNR=8.2 | | | | | | |
| **SBUM** | **Sibu** | **14.14** | **256** | P | **Pn** | **20 10 29.9** | **+1.8** |
| **BATI** | **Baumata** | **16.23** | **188** | P | **P** | **20 10 57.9** | **+1.2** |
| | 4.3nm,0.3s,baz=344,slow=5.1,SNR=5.2 | | | | | | |
| **TPUB** | **Ta-pu** | **17.98** | **344** | P | **P** | **20 11 14.5** | **-1.3** |
| **SSLB** | **Suanglung** | **18.36** | **345** | P | **P** | **20 11 18.1** | **-1.9** |
| SSLB | | | | IAmb | IAmb | 20 11 32.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **YHNB** | **Yeheng** | **19.11** | **347** | P | **P** | **20 11 24.6** | **-3.6** |
| YHNB | | | | IAmb | IAmb | 20 11 25.0 | |
| | comp=Z,50nm,1.3s | | | | | | |
| **MTN** | **Manton Dam** | **19.39** | **165** | P | **P** | **20 11 29.3** | **-2.0** |
| MTN | | | | IAmb | IAmb | 20 11 51.6 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **KNMB** | **Chin-men Tao** | **19.77** | **339** | | **Pn** | **20 11 36.9** | **-0.6** |
| **KNRA** | **Kununurra** | **21.69** | **173** | P | **P** | **20 11 56.9** | **+0.9** |
| KNRA | | | | IAmb | IAmb | 20 12 13.9 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.92** | **181** | P | **P** | **20 12 20.0** | **+1.6** |
| | comp=Z,2.6nm,0.5s,baz=10,slow=4.2,SNR=16 | | | | | | |
| **COEN** | **Coen** | **26.15** | **139** | P | **P** | **20 12 37.6** | **-1.1** |
| COEN | | | | IAmb | IAmb | 20 12 44.6 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **26.89** | **162** | P | **P** | **20 12 45.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 20 13 07.5 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.04** | **162** | P | **P** | **20 12 46.8** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=347,slow=10.0,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.04** | **162** | IAmb | IAmb | 20 12 55.8 | |
| | comp=Z,0.4nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **27.04** | **162** | P | **P** | **20 12 46.7** | **0.0** |
| WB2 | | | | IAmb | IAmb | 20 12 58.1 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **27.12** | **162** | P | **P** | **20 12 46.9** | **-0.5** |
| **GSI** | **Gunungsitoli** | **28.70** | **262** | P | **P** | **20 12 59.3** | **-2.3** |
| **ASAR** | **Alice Springs** | **30.46** | **166** | P | **P** | **20 13 16.8** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=350,slow=7.8,SNR=9.5 | | | | | | |
| **KSRS** | **Korea Array** | **31.39** | **3** | P | **P** | **20 13 25.8** | **+0.8** |
| | comp=Z,2.2nm,0.5s,baz=188,slow=10,SNR=13 | | | | | | |
| **KS19** | **Wonju Array Si** | **31.43** | **3** | P | **P** | **20 13 26.7** | **+1.3** |
| **BJT** | **Baijiatuan** | **35.02** | **347** | P | **P** | **20 13 58.1** | **+1.4** |
| **USRK** | **Ussuriysk Ar.** | **38.44** | **7** | P | **P** | **20 14 26.6** | **+1.0** |
| | comp=Z,4.3nm,0.6s,baz=187,slow=8.4,SNR=7.5 | | | | | | |
| **STKA** | **Stephens Creek** | **40.48** | **159** | P | **P** | **20 14 42.9** | **+0.1** |
| | comp=Z,0.8nm,0.4s,baz=348,slow=7.8,SNR=3.9 | | | | | | |
| **STKA** | **Stephens Creek** | **40.48** | **159** | P | **P** | **20 14 43.3** | **+0.5** |
| **KLR** | **Kul'dur** | **43.38** | **6** | P | **P** | **20 15 06.6** | **+0.4** |
| | comp=Z,0.9nm,0.4s,baz=226,slow=3.9,SNR=7.2 | | | | | | |
| **ULN** | **Ulaanbaatar** | **44.76** | **342** | P | **P** | **20 15 17.3** | **-0.2** |
| ULN | | | | IAmb | IAmb | 20 15 22.2 | |
| | comp=Z,6.4nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **44.94** | **341** | P | **P** | **20 15 19.4** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=162,slow=9.3,SNR=13 | | | | | | |
| SONM | | | | PcP | **PcP** | **20 16 59.3** | **+0.3** |
| | comp=Z,0.8nm,0.7s,baz=148,slow=3.3,SNR=6.2 | | | | | | |
| **SONM** | **Songino Array** | **44.94** | **341** | P | **P** | **20 15 17.9** | **-1.0** |
| **PETK** | **Petropavlovsk-** | **53.67** | **23** | P | **P** | **20 16 26.4** | **+1.3** |
| | comp=Z,1.2nm,0.5s,baz=210,slow=2.3,SNR=4.1 | | | | | | |
| **MK31** | **Makanchi Array** | **55.29** | **325** | P | **P** | **20 16 36.2** | **-0.9** |
| **MKAR** | **Makanchi Array** | **55.29** | **325** | P | **P** | **20 16 36.5** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=116,slow=7.0,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.29** | **325** | P | **P** | **20 16 35.7** | **-1.4** |
| **MAKZ** | **Makanchi** | **55.48** | **325** | P | **P** | **20 16 37.6** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 20 16 44.9 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **MA2** | **Magadan** | **56.74** | **15** | P | **P** | **20 16 48.8** | **+1.7** |
| **ZALV** | **Zalesovo Beam** | **58.26** | **333** | P | **P** | **20 16 57.6** | **-0.2** |
| | comp=Z,0.8nm,0.4s,baz=120,slow=6.9,SNR=6.1 | | | | | | |
| **KURK** | **Kurchatov** | **59.45** | **327** | P | **P** | **20 17 05.3** | **-1.0** |
| KURK | | | | IAmb | IAmb | 20 17 21.9 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **KKAR** | **Karatay Array** | **61.09** | **316** | P | **P** | **20 17 17.0** | **-0.6** |
| **TIXI** | **Tiksi** | **65.63** | **1** | P | **P** | **20 17 46.9** | **0.0** |
| TIXI | | | | IAmb | IAmb | 20 17 48.3 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **NRIK** | **Noril'sk** | **68.08** | **346** | P | **P** | **20 18 03.1** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=73,slow=7.9,SNR=3.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **69.94** | **320** | P | **P** | **20 18 13.3** | **-1.2** |
| **ABKAR** | **Akbulak array** | **69.94** | **320** | P | **P** | **20 18 13.7** | **-0.8** |
| ABKAR | | | | IAmb | IAmb | 20 18 15.9 | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **ARU** | **Arti** | **72.65** | **327** | P | **P** | **20 18 28.6** | **-2.0** |
| ARU | | | | IAmb | IAmb | 20 18 53.0 | |
| | comp=Z,6.3nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.42** | **26** | P | **P** | **20 19 30.4** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=254,slow=4.2,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.09** | **340** | P | **P** | **20 19 51.6** | **-1.6** |
| | comp=Z,2.2nm,0.8s,baz=69,slow=4.0,SNR=8.3 | | | | | | |
| **FINES** | **FINESS Array B** | **89.51** | **332** | P | **P** | **20 19 58.8** | **-1.2** |
| | comp=Z,0.5nm,0.5s,baz=72,slow=6.2,SNR=6.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.78** | **24** | P | **P** | **20 20 37.1** | **-0.8** |
| | comp=Z,0.3nm,0.7s,baz=299,slow=4.3,SNR=4.1 | | | | | | |
| YKA | | | | PP | **PP** | **20 24 38.3** | **+1.9** |
| | comp=Z,0.1nm,0.5s,baz=307,slow=5.7,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.48** | **289** | PKP | **PKPdf** | **20 25 56.0** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=74,slow=1.5,SNR=6.1 | | | | | | |

*DSN* ***15*** *20:10:23.2±1.0,28˚24N×56˚52E,h10km,ML3.0/9,Error ellipse: s-maj=33.5km s-min=7.8km az=88.0*
*TEH* ***15*** *20:10:24.2,28˚05N×56˚40E,h9km,ML3.3*
*OMAN* ***15*** *20:10:26.2±0.2,28˚21N×56˚50E,h109km±5km,mb4.3/2, ml3.2/13,Error ellipse: s-maj=4.7km s-min=3.9km az=356.0*

**ISC 15 20:10:24.6±0.9,28˚04N±0˚03×56˚38E±0˚04,h10km,n67, σ1879/73,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENO** | **Geno** | **0.66** | **196** | *e*Pg | **Pb** | **20 10 38.2** | **-0.2** |
| **BNDS** | **Bandar-Abbas** | **0.66** | **196** | *e*Pg | **Pb** | **20 10 38.6** | **+0.2** |
| **KHNJ** | **Kahnooj** | **1.18** | **94** | *e*Pg | **Pb** | **20 10 45.9** | **-1.2** |
| **NGRK** | **Negar Kerman** | **1.63** | **11** | *e*Pn | **Pb** | **20 10 54.2** | **-0.8** |
| NGRK | | | | *e* | | 20 11 20.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **LAR1** | **LAR** | **1.81** | **259** | *e*Pn | **Pb** | **20 10 57.2** | **-0.7** |
| LAR1 | | | | *e* | | 20 11 47.9 | |
| | comp=Z,4μm,0.4s | | | | | | |
| **KRBR** | **Kerman** | **1.96** | **10** | *e*Pn | **Pb** | **20 11 00.0** | **-0.7** |
| **TVBK** | **TV Kerman** | **1.97** | **10** | *e*Pn | **Pb** | **20 10 59.5** | **-1.3** |
| T

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IPIR** | **Pirpir** | **6.62** | **316** | *e*Pn | **Pn** | **20 12 03.1** | **+0.7** |
| **IKLH** | **Kolahrood** | **6.69** | **323** | *e*Pn | **Pn** | **20 12 05.3** | **+2.1** |
| **AMIS** | **Naft Sefid** | **7.14** | **302** | *e*Pn | **Pn** | **20 12 10.5** | **+1.3** |

*IDC* ***15*** *20:49:12.9±11.0, 21°.57N×142°.82E, h384km±127km, mb3.2/7, mb1 3.4/7, mb1mx2.7/50, mbtmp3.9/7, Error ellipse: s-maj=27.0km s-min=24.7km az=29.0*

**ISC 15 20:49:06.0**±1.2, **21°.6N**±0°.2×**142°.9E**±0°.3, **h311**km, **n7,** c0**67/7, mb3.7/7, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **42.16** | **192** | P | **P** | **20 56 28.9** | **0.0** |
| | 0.4nm,0.9s,baz=22,slow=7.5,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.56** | **313** | P | **P** | **20 58 02.6** | **-0.1** |
| | 0.4nm,0.9s,baz=92,slow=8.4,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.63** | **28** | P | **P** | **21 00 22.3** | **-0.3** |
| | 0.5nm,0.6s,baz=294,slow=5.3,SNR=6.3 | | | | | | |
| **RES** | **Resolute Bay** | **77.20** | **13** | P | **P** | **21 00 26.1** | **+0.5** |
| | 1.0nm,0.4s,baz=270,slow=1.0,SNR=7.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.91** | **341** | P | **P** | **21 00 34.8** | **-0.2** |
| | 5.4nm,1.1s,baz=54,slow=6.2,SNR=7.5 | | | | | | |
| **KBZ** | **Khabaz** | **82.24** | **314** | P | **P** | **21 00 53.7** | **+0.7** |
| | 1.1nm,0.9s,baz=59,slow=6.3,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **83.14** | **334** | P | **P** | **21 00 56.3** | **-0.9** |
| | 1.2nm,0.6s,baz=70,slow=4.6,SNR=9.5 | | | | | | |

*IDC* ***15*** *20:51:20.0±2.4, 59°.79N×153°.34W, h87km±37km, mb3.4/4, mb1 3.5/8, mb1mx3.2/65, mbtmp3.7/8, Error ellipse: s-maj=38.1km s-min=17.3km az=115.0*

*NEIC* ***15*** *20:51:20.7±0.9, 59°.77N±0°.03×153°.10W±0°.07, h108km±4km, Error ellipse: s-maj=5.4km s-min=4.4km az=126.0*

*AEIC* ***15*** *20:51:22±1.3, 59°.76N±0°.04×153°.08W±0°.07, h103km±4km, ML3.2, mb4.0/2(NEIC), ML3.5/110(NEIC), Error ellipse: s-maj=5.4km s-min=4.7km az=190.0*

**ISC 15 20:51:21.1**±0.7, **59°.77N**±0°.03×**153°.05W**±0°.03, **h109**km±5km, **n217,** c0**871**/209, **mb3.9/5, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.15** | **217** | | **Pn** | **20 51 36.0** | **-0.3** |
| **OPT** | **Oil Point** | **0.15** | **217** | P | **Pn** | **20 51 36.0** | **-0.3** |
| | baz=35 | | | | | | |
| **O20K** | **Slope Mountain** | **0.38** | **35** | | **Pn** | **20 51 36.9** | **-0.3** |
| O20K | | | | | **Sn** | **20 51 48.9** | **-0.4** |
| **O20K** | **Slope Mountain** | **0.38** | **35** | P | **Pn** | **20 51 36.9** | **-0.3** |
| | baz=216 | | | | | | |
| O20K | | | | S | **Sn** | **20 51 48.9** | **-0.4** |
| | baz=216 | | | | | | |
| **AU22** | **Augustine Moun** | **0.43** | **201** | | **Pn** | **20 51 37.0** | **-0.3** |
| **AUL** | **Augustine Lava** | **0.44** | **207** | | **Pn** | **20 51 37.3** | **-0.1** |
| AUL | | | | | **Sn** | **20 51 49.3** | **-0.3** |
| **AUH** | **Augustine H** | **0.46** | **206** | | **Pn** | **20 51 37.5** | **-0.1** |
| **AGU** | **Augustine-Summ** | **0.46** | **205** | | **Pn** | **20 51 37.4** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.46** | **204** | | **Pn** | **20 51 37.4** | **-0.2** |
| **RSO** | **Redoubt South** | **0.71** | **12** | | **Pn** | **20 51 39.2** | **-0.4** |
| **HOM** | **Homer** | **0.72** | **99** | | **Pn** | **20 51 39.6** | **+0.2** |
| **HOM** | **Homer** | **0.72** | **99** | IAML | | 20 51 54.7 | |
| | comp=E,3μm,0.5s | | | | | | |
| HOM | | | | IAML | | 20 51 55.5 | |
| | comp=N,3μm,0.3s | | | | | | |
| **HOM** | **Homer** | **0.72** | **99** | P | **Pn** | **20 51 39.6** | **+0.2** |
| | baz=279 | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **304** | | **Pn** | **20 51 39.4** | **-0.4** |
| O19K | | | | | **Sn** | **20 51 52.9** | **-1.0** |
| **O19K** | **Port Alsworth** | **0.77** | **304** | IAML | | 20 51 53.6 | |
| | comp=E,3μm,0.4s | | | | | | |
| O19K | | | | IAML | | 20 51 54.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **304** | P | **Pn** | **20 51 39.4** | **-0.4** |
| | baz=124 | | | | | | |
| O19K | | | | S | **Sn** | **20 51 52.9** | **-1.0** |
| | baz=124 | | | | | | |
| **RDT** | **Redoubt** | **0.86** | **22** | | **Pn** | **20 51 40.5** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.90** | **200** | | **Pn** | **20 51 40.9** | **-0.4** |
| Q19K | | | | | **Sn** | **20 51 55.7** | **-0.7** |
| **Q19K** | **Cape Douglas,** | **0.90** | **200** | P | **Pn** | **20 51 40.9** | **-0.4** |
| | baz=19 | | | | | | |
| Q19K | | | | S | **Sn** | **20 51 55.7** | **-0.7** |
| | baz=19 | | | | | | |
| **CNPM** | **China Poot** | **0.95** | **104** | | **Pn** | **20 51 41.5** | **-0.2** |
| **CNPM** | **China Poot** | **0.95** | **104** | IAML | | 20 51 58.2 | |
| | comp=E,680nm,0.3s | | | | | | |
| CNPM | | | | IAML | | 20 52 00.1 | |
| | comp=N,810nm,0.3s | | | | | | |
| **O18K** | **Koktuh Hills** | **1.09** | **275** | | **Pn** | **20 51 42.6** | **-0.5** |
| **O18K** | **Koktuh Hills** | **1.09** | **275** | P | **Pn** | **20 51 42.6** | **-0.5** |
| | baz=94 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.09** | **90** | | **Pn** | **20 51 42.7** | **-0.5** |
| BRLK | | | | | **Sn** | **20 51 59.2** | **-0.7** |
| **BRLK** | **Bradley Lake** | **1.09** | **90** | IAML | | 20 52 00.2 | |
| | comp=N,1μm,0.1s | | | | | | |
| BRLK | | | | IAML | | 20 52 01.1 | |
| | comp=E,1μm,0.4s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.17** | **91** | | **Pn** | **20 51 43.5** | **-0.4** |
| **BRSE** | **Bradley Lake S** | **1.17** | **91** | P | **Pn** | **20 51 43.5** | **-0.4** |
| | baz=272 | | | | | | |
| **P18K** | **Big Mountain,** | **1.17** | **252** | | **Pn** | **20 51 43.3** | **-0.7** |
| **P18K** | **Big Mountain,** | **1.17** | **252** | P | **Pn** | **20 51 43.3** | **-0.7** |
| | baz=70 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.26** | **326** | | **Pn** | **20 51 44.7** | **-0.4** |
| **N19K** | **Bonanza Creek** | **1.26** | **326** | | **Sn** | **20 52 02.5** | **-0.8** |
| **N19K** | **Bonanza Creek** | **1.26** | **326** | IAML | | 20 52 02.4 | |
| | comp=E,292nm,0.8s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.26** | **326** | P | **Pn** | **20 51 44.7** | **-0.4** |
| | baz=146 | | | | | | |
| N19K | | | | S | **Sn** | **20 52 02.5** | **-0.8** |
| | baz=146 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.38** | **43** | | **Pn** | **20 51 47.8** | **+1.5** |
| **CAPN** | **Captain Cook N** | **1.38** | **43** | IAML | | 20 52 15.3 | |
| | comp=E,922nm,0.4s | | | | | | |
| CAPN | | | | IAML | | 20 52 24.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.38** | **43** | P | **Pn** | **20 51 47.8** | **+1.5** |
| | baz=224 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.49** | **16** | | **Pn** | **20 51 47.5** | **-0.2** |
| **SPCR** | **Spurr Chakacha** | **1.49** | **16** | P | **Pn** | **20 51 47.5** | **-0.2** |
| | baz=197 | | | | | | |
| **SPU** | **Mount Spurr** | **1.50** | **19** | | **Pn** | **20 51 47.5** | **-0.3** |
| **SPCN** | **Chakachatna No** | **1.52** | **16** | | **Pn** | **20 51 48.0** | **-0.1** |
| SPCN | | | | | **Sn** | **20 52 10.3** | **+1.8** |
| **SPBG** | **Spurr Blockage** | **1.53** | **12** | | **Pn** | **20 51 48.3** | **0.0** |
| **SLKM** | **Skilak Lake** | **1.60** | **61** | | **Pn** | **20 51 49.0** | **0.0** |
| SLKM | | | | | **Sn** | **20 52 09.7** | **-0.5** |
| **SPCG** | **Spurr Capps Gl** | **1.61** | **18** | | **Pn** | **20 51 49.1** | **-0.1** |
| **SPNN** | **North Nagishla** | **1.61** | **6** | | **Pn** | **20 51 49.2** | **-0.1** |
| **O22K** | **Cooper Landing** | **1.81** | **65** | | **Pn** | **20 51 51.6** | **+0.1** |
| **O22K** | **Cooper Landing** | **1.81** | **65** | P | **Pn** | **20 51 51.6** | **+0.1** |
| | baz=248 | | | | | | |
| **STLK** | **Strandline Lak** | **1.83** | **19** | | **Pn** | **20 51 51.9** | **0.0** |
| **SEW** | **Seward** | **1.84** | **78** | | **Pn** | **20 51 51.6** | **-0.4** |
| SEW | | | | | **Sn** | **20 52 14.5** | **-1.0** |
| **SEW** | **Seward** | **1.84** | **78** | P | **Pn** | **20 51 51.6** | **-0.4** |
| | baz=261 | | | | | | |
| SEW | | | | S | **Sn** | **20 52 14.5** | **-1.0** |
| | baz=261 | | | | | | |
| **FIS** | **Fire Island** | **1.96** | **44** | | **Pn** | **20 51 54.8** | **+1.3** |
| **FIS** | **Fire Island** | **1.96** | **44** | IAML | | 20 52 23.1 | |
| | comp=E,340nm,0.8s | | | | | | |
| FIS | | | | IAML | | 20 52 24.6 | |
| | comp=N,363nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.01** | **173** | P | **Pn** | **20 51 53.1** | **-1.0** |
| | comp=N,18nm,0.3s,baz=38,slow=8.3,SNR=284 | | | | | | |
| KDAK | | | | S | **Sn** | **20 52 18.1** | **-1.3** |
| | comp=N,34nm,0.3s,baz=322,slow=23,SNR=63 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.01** | **173** | | **Pn** | **20 51 53.6** | **-0.5** |
| **KDAK** | **Kodiak Island** | **2.01** | **173** | IAML | | 20 52 19.9 | |
| | comp=N,581nm,0.5s | | | | | | |
| KDAK | | | | IAML | | 20 52 20.0 | |
| | comp=N,352nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.11** | **50** | | **Pn** | **20 51 55.4** | **0.0** |
| **RC01** | **Rabbit Creek A** | **2.11** | **50** | IAML | | 20 52 23.6 | |
| | comp=N,623nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.11** | **50** | P | **Pn** | **20 51 55.4** | **0.0** |
| | baz=233 | | | | | | |
| **M19K** | **Big River Lodg** | **2.24** | **343** | | **Pn** | **20 51 56.7** | **-0.3** |
| **M19K** | **Big River Lodg** | **2.24** | **343** | P | **Pn** | **20 51 56.7** | **-0.3** |
| | baz=163 | | | | | | |
| **M22K** | **Willow** | **2.45** | **35** | | **Pn** | **20 52 00.1** | **+0.4** |
| M22K | | | | | **Sn** | **20 52 29.8** | **+0.3** |
| **M22K** | **Willow** | **2.45** | **35** | P | **Pn** | **20 52 00.1** | **+0.4** |
| | baz=217 | | | | | | |
| M22K | | | | S | **Sn** | **20 52 29.8** | **+0.3** |
| | baz=217 | | | | | | |
| **L19K** | **White Mountain** | **2.57** | **341** | | **Pn** | **20 52 00.9** | **-0.4** |
| **L19K** | **White Mountain** | **2.57** | **341** | P | **Pn** | **20 52 00.9** | **-0.4** |
| | baz=160 | | | | | | |
| **PWL** | **Port Wells** | **2.59** | **63** | | **Pn** | **20 52 00.7** | **-0.9** |
| **PMR** | **Palmer** | **2.66** | **45** | | **Pn** | **20 52 01.6** | **-0.8** |
| **PMR** | **Palmer** | **2.66** | **45** | IAML | | 20 52 34.1 | |
| | comp=E,125nm,0.2s | | | | | | |
| PMR | | | | IAML | | 20 52 34.4 | |
| | comp=N,147nm,0.2s | | | | | | |
| **PMR** | **Palmer** | **2.66** | **45** | P | **Pn** | **20 52 01.6** | **-0.8** |
| | baz=228 | | | | | | |
| **KNK** | **Knik Glacier** | **2.80** | **52** | | **Pn** | **20 52 03.5** | **-0.9** |
| KNK | | | | | **Sn** | **20 52 35.5** | **-2.1** |
| **KNK** | **Knik Glacier** | **2.80** | **52** | P | **Pn** | **20 52 03.5** | **-0.9** |
| | baz=236 | | | | | | |
| KNK | | | | S | **Sn** | **20 52 35.5** | **-2.1** |
| | baz=236 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.85** | **43** | | **Pn** | **20 52 04.2** | **-0.9** |
| GHO | | | | IAML | | 20 52 39.5 | |
| | comp=N,222nm,0.4s | | | | | | |
| GHO | | | | IAML | | 20 52 39.9 | |
| | comp=E,250nm,0.4s | | | | | | |
| **CUT** | **Chulitna** | **2.97** | **26** | | **Pn** | **20 52 06.7** | **+0.2** |
| **CUT** | **Chulitna** | **2.97** | **26** | IAML | | 20 52 46.0 | |
| | comp=E,199nm,0.6s | | | | | | |
| CUT | | | | IAML | | 20 52 48.5 | |
| | comp=N,141nm,0.4s | | | | | | |
| **CUT** | **Chulitna** | **2.97** | **26** | P | **Pn** | **20 52 06.7** | **+0.2** |
| | baz=208 | | | | | | |
| **SML** | **Sawmill** | **3.08** | **47** | | **Pn** | **20 52 07.3** | **-0.9** |
| **SML** | **Sawmill** | **3.08** | **47** | IAML | | 20 52 44.4 | |
| | comp=E,115nm,0.4s | | | | | | |
| SML | | | | IAML | | 20 52 44.7 | |
| | comp=N,145nm,0.4s | | | | | | |
| **SML** | **Sawmill** | **3.08** | **47** | P | **Pn** | **20 52 07.3** | **-0.9** |
| | baz=251 | | | | | | |
| **PPLA** | **Purkeypile** | **3.16** | **7** | | **Pn** | **20 52 09.8** | **+0.6** |
| **PPLA** | **Purkeypile** | **3.16** | **7** | P | **Pn** | **20 52 09.8** | **+0.6** |
| | baz=188 | | | | | | |
| **GLI** | **Glacier Island** | **3.16** | **67** | | **Pn** | **20 52 08.5** | **-0.6** |
| **GLI** | **Glacier Island** | **3.16** | **67** | P | **Pn** | **20 52 08.5** | **-0.6** |
| | baz=252 | | | | | | |
| **SII** | **Sitkinak Islan** | **3.28** | **191** | | **Pn** | **20 52 09.5** | **-1.2** |
| **SII** | **Sitkinak Islan** | **3.28** | **191** | IAML | | 20 52 49.0 | |
| | comp=E,105nm,1.0s | | | | | | |
| SII | | | | IAML | | 20 52 49.2 | |
| | comp=N,133nm,0.8s | | | | | | |
| **SII** | **Sitkinak Islan** | **3.28** | **191** | P | **Pn** | **20 52 09.5** | **-1.2** |
| | baz=9.8 | | | | | | |
| **FID** | **Port Fidalgo** | **3.42** | **71** | | **Pn** | **20 52 11.4** | **-1.1** |
| **Q23K** | **Middleton Isla** | **3.42** | **93** | Pn | **Pn** | **20 52 12.2** | **-0.4** |
| Q23K | | | | IAML | | 20 52 60.0 | |
| | comp=N,154nm,1.9s | | | | | | |
| Q23K | | | | IAML | | 20 53 33.1 | |
| | comp=E,207nm,2.2s | | | | | | |
| **JPK** | **Jack Peak** | **3.45** | **65** | | **Pn** | **20 52 12.0** | **-1.0** |
| **TT01** | **Tatalina** | **3.46** | **337** | | **Pn** | **20 52 12.5** | **-0.5** |
| **TTA** | **Tatalina** | **3.47** | **337** | | **Pn** | **20 52 12.6** | **-0.7** |
| **TTA** | **Tatalina** | **3.47** | **337** | P | **Pn** | **20 52 12.6** | **-0.7** |
| | baz=155 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.48** | **51** | | **Pn** | **20 52 12.8** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **3.48** | **51** | IAML | | 20 52 53.7 | |
| | comp=E,116nm,0.5s | | | | | | |
| SCM | | | | IAML | | 20 52 59.4 | |
| | comp=N,106nm,0.7s | | | | | | |
| **K20K** | **Telida** | **3.63** | **353** | | **Pn** | **20 52 15.3** | **-0.1** |
| **CAST** | **Castle Rocks** | **3.69** | **7** | Pn | **Pn** | **20 52 16.5** | **+0.3** |
| **EYAK** | **Cordova Ski Ar** | **3.73** | **75** | Pn | **Pn** | **20 52 15.7** | **-1.0** |
| **WAT6** | **Susitna Watana** | **3.81** | **40** | | **Pn** | **20 52 17.2** | **-0.8** |
| **WAT6** | **Susitna Watana** | **3.81** | **40** | P | **Pn** | **20 52 17.2** | **-0.8** |
| | baz=225 | | | | | | |
| **DIV** | **Divide** | **3.85** | **66** | | **Pn** | **20 52 17.9** | **-0.5** |
| **KLU** | **Klutina** | **3.91** | **61** | | **Pn** | **20 52 18.3** | **-0.9** |
| **KLU** | **Klutina** | **3.91** | **61** | IAML | | 20 53 03.6 | |
| | comp=E,116nm,0.3s | | | | | | |
| **KLU** | **Klutina** | **3.91** | **61** | P | **Pn** | **20 52 18.3** | **-0.9** |
| | baz=247 | | | | | | |
| **TRF** | **Thorofare Moun** | **3.92** | **18** | | **Pn** | **20 52 19.2** | **-0.2** |
| **TRF** | **Thorofare Moun** | **3.92** | **18** | IAML | | 20 53 06.6 | |
| | comp=E,31nm,0.5s | | | | | | |
| TRF | | | | IAML | | 20 53 06.8 | |
| | comp=N,37nm,0.6s | | | | | | |
| **TRF** | **Thorofare Moun** | **3.92** | **18** | P | **Pn** | **20 52 19.2** | **-0.2** |
| | baz=201 | | | | | | |
| **KTH** | **Kantishna Hill** | **3.93** | **14** | | **Pn** | **20 52 19.4** | **0.0** |
| **KTH** | **Kantishna Hill** | **3.93** | **14** | IAML | | 20 53 39.7 | |
| | comp=E,22nm,0.8s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.09** | **52** | | **Pn** | **20 52 21.5** | **-0.1** |
| **M24K** | **Tolsona, Glenn** | **4.09** | **52** | IAML | | 20 53 09.6 | |
| | comp=N,94nm,0.9s | | | | | | |
| M24K | | | | IAML | | 20 53 24.2 | |
| | comp=E,90nm,1.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.09** | **52** | P | **Pn** | **20 52 21.5** | **-0.1** |
| | baz=238 | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.14** | **5** | | **Pn** | **20 52 22.5** | **+0.3** |
| **CHUM** | **Lake Minchumin** | **4.14** | **5** | P | **Pn** | **20 52 22.5** | **+0.3** |
| | baz=185 | | | | | | |
| **RND** | **Reindeer** | **4.16** | **27** | | **Pn** | **20 52 22.3** | **-0.3** |
| **RND** | **Reindeer** | **4.16** | **27** | IAML | | 20 53 29.8 | |
| | comp=E,23nm,0.8s | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.20** | **200** | Pn | **Pn** | **20 52 21.5** | **-1.4** |
| CHIR | | | | IAML | | 20 54 06.1 | |
| | comp=E,90nm,4.2s | | | | | | |
| CHIR | | | | IAML | | 20 55 11.1 | |
| | comp=N,84nm,3.2s | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.24** | **78** | Pn | **Pn** | **20 52 23.0** | **-0.6** |
| RAGM | | | | IAML | | 20 53 15.2 | |
| | comp=E,105nm,0.3s | | | | | | |
| **DHY** | **Denali Highway** | **4.29** | **37** | | **Pn** | **20 52 23.9** | **-0.4** |
| **DHY** | **Denali Highway** | **4.29** | **37** | IAML | | 20 53 14.8 | |
| | comp=E,39nm,0.4s | | | | | | |
| DHY | | | | IAML | | 20 53 15.1 | |
| | comp=N,37nm,0.4s | | | | | | |
| **DHY** | **Denali Highway** | **4.29** | **37** | P | **Pn** | **20 52 23.9** | **-0.4** |
| | baz=222 | | | | | | |
| **KAIM** | **Kayak Island** | **4.36** | **84** | Pn | **Pn** | **20 52 25.2** | **+0.1** |
| **BMRM** | **Bremner River** | **4.36** | **70** | | **Pn** | **20 52 25.0** | **-0.2** |
| **BMRM** | **Bremner River** | **4.36** | **70** | IAML | | 20 53 13.8 | |
| | comp=E,79nm,0.3s | | | | | | |
| BMRM | | | | IAML | | 20 53 16.9 | |
| | comp=N,67nm,0.4s | | | | | | |
| **BMRM** | **Bremner River** | **4.36** | **70** | P | **Pn** | **20 52 25.0** | **-0.2** |
| | baz=258 | | | | | | |
| **MCK** | **McKinley** | **4.43** | **24** | | **Pn** | **20 52 26.3** | **+0.2** |
| **MCK** | **McKinley** | **4.43** | **24** | IAML | | 20 53 35.6 | |
| | comp=E,20nm,2.9s | | | | | | |
| MCK | | | | IAML | | 20 53 38.8 | |
| | comp=N,18nm,1.7s | | | | | | |
| **MCK** | **McKinley** | **4.43** | **24** | P | **Pn** | **20 52 26.3** | **+0.2** |
| | baz=208 | | | | | | |
| **HMT** | **Hamilton** | **4.44** | **79** | Pn | **Pn** | **20 52 26.3** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **4.45** | **12** | | **Pn** | **20 52 25.9** | **-0.4** |
| **BPAW** | **Bear Paw Mtn.** | **4.45** | **12** | P | **Pn** | **20 52 25.9** | **-0.4** |
| | baz=194 | | | | | | |
| **J20K** | **Nowinta River** | **4.45** | **354** | | **Pn** | **20 52 26.1** | **-0.3** |
| **N25K** | **Chitina, Valde** | **4.54** | **62** | | **Pn** | **20 52 27.4** | **-0.3** |
| **N25K** | **Chitina, Valde** | **4.54** | **62** | IAML | | 20 53 19.9 | |
| | comp=E,68nm,0.5s | | | | | | |
| N25K | | | | IAML | | 20 53 20.1 | |
| | comp=N,46nm,0.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.54** | **62** | P | **Pn** | **20 52 27.4** | **-0.3** |
| | baz=250 | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.58** | **80** | | **Pn** | **20 52 27.8** | **-0.4** |
| **SUCK** | **Suckling Hills** | **4.68** | **82** | Pn | **Pn** | **20 52 29.3** | **-0.1** |
| **BERG** | **Berg Lake** | **4.72** | **78** | Pn | **Pn** | **20 52 29.7** | **-0.3** |
| **BWN** | **Browne** | **4.73** | **19** | Pn | **Pn** | **20 52 30.1** | **0.0** |
| BWN | | | | IAML | | 20 53 51.5 | |
| | comp=N,34nm,3.4s | | | | | | |
| BWN | | | | IAML | | 20 54 18.1 | |
| | comp=E,33nm,3.2s | | | | | | |
| **GLB** | **Gilahina Butte** | **4.85** | **66** | | **Pn** | **20 52 31.5** | **-0.3** |
| **GLB** | **Gilahina Butte** | **4.85** | **66** | IAML | | 20 53 27.3 | |
| | comp=E,48nm,0.7s | | | | | | |
| GLB | | | | IAML | | 20 53 27.7 | |
| | comp=N,66nm,0.7s | | | | | | |
| **PAX** | **Paxson** | **4.85** | **45** | | **Pn** | **20 52 31.8** | **-0.1** |
| **PAX** | **Paxson** | **4.85** | **45** | P | **Pn** | **20 52 31.8** | **-0.1** |
| | baz=232 | | | | | | |
| **GRIN** | **Grindle Hills** | **4.91** | **80** | | **Pn** | **20 52 32.7** | **+0.2** |
| **KHIT** | **Khitrov Hills** | **4.95** | **78** | | **Pn** | **20 52 32.8** | **-0.4** |
| **VRDI** | **Verde Repeater** | **4.96** | **69** | | **Pn** | **20 52 32.8** | **-0.7** |
| **VRDI** | **Verde Repeater** | **4.96** | **69** | IAML | | 20 53 29.7 | |
| | comp=N,36nm,0.4s | | | | | | |
| VRDI | | | | IAML | | 20 53 30.9 | |
| | comp=E,18nm,0.4s | | | | | | |
| **PS10** | **TAPS Pump St10** | **5.05** | **40** | | **Pn** | **20 52 34.6** | **+0.2** |
| **SNH** | **Sunshine Point** | **5.15** | **81** | Pn | **Pn** | **20 52 36.4** | **+0.5** |
| **WAX** | **Waxell Ridge** | **5.15** | **78** | Pn | **Pn** | **20 52 35.5** | **-0.3** |
| **NEA2** | **Nenana** | **5.18** | **19** | | **Pn** | **20 52 35.5** | **-0.7** |
| **NEA2** | **Nenana** | **5.18** | **19** | P | **Pn** | **20 52 35.5** | **-0.7** |
| | baz=203 | | | | | | |
| **WRH** | **Wood River Hil** | **5.26** | **24** | | **Pn** | **20 52 36.5** | **-0.7** |
| **WRH** | **Wood River Hil** | **5.26** | **24** | IAML | | 20 53 47.4 | |
| | comp=E,13nm,4.5s | | | | | | |
| WRH | | | | IAML | | 20 54 18.8 | |
| | comp=N,9.5nm,4.4s | | | | | | |
| **MLY** | **Manley** | **5.38** | **11** | | **Pn** | **20 52 38.8** | **-0.2** |
| **MLY** | **Manley** | **5.38** | **11** | P | **Pn** | **20 52 38.8** | **-0.2** |
| | baz=193 | | | | | | |
| **ISLE** | **Juniper Island** | **5.41** | **77** | | **Pn** | **20 52 39.2** | **-0.2** |
| **KIAG** | **Kiagna River** | **5.43** | **73** | | **Pn** | **20 52 39.6** | **-0.2** |
| **I21K** | **Tanana** | **5.45** | **5** | | **Pn** | **20 52 39.3** | **-0.5** |
| **BALM** | **Baldy** | **5.46** | **72** | | **Pn** | **20 52 39.4** | **-0.6** |
| **HDA** | **Harding Lake** | **5.46** | **29** | | **Pn** | **20 52 39.4** | **-0.6** |
| **HDA** | **Harding Lake** | **5.46** | **29** | P | **Pn** | **20 52 39.4** | **-0.6** |
| | baz=214 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.47** | **24** | | **Pn** | **20 52 39.3** | **-0.8** |
| **BAGL** | **Bagley Icefiel** | **5.53** | **78** | | **Pn** | **20 52 41.4** | **+0.5** |
| **M26K** | **Nabesna, AK** | **5.54** | **57** | | **Pn** | **20 52 41.1** | **-0.1** |
| **M26K** | **Nabesna, AK** | **5.54** | **57** | P | **Pn** | **20 52 41.1** | **-0.1** |
| | baz=246 | | | | | | |
| **RIDG** | **Independent Ri** | **5.57** | **41** | | **Pn** | **20 52 41.4** | **-0.1** |
| **RIDG** | **Independent Ri** | **5.57** | **41** | P | **Pn** | **20 52 41.4** | **-0.1** |
| | baz=228 | | | | | | |
| **MESA** | **MESA** | **5.59** | **81** | | **Pn** | **20 52 42.0** | **+0.1** |
| **MESA** | **MESA** | **5.59** | **81** | P | **Pn** | **20 52 42.0** | **+0.1** |
| | baz=271 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.60** | **29** | | **Pn** | **20 52 41.2** | **-0.7** |
| **I23K** | **Minto, Yukon-K** | **5.66** | **16** | | **Pn** | **20 52 42.5** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **5.66** | **16** | P | **Pn** | **20 52 42.5** | **-0.1** |
| | baz=199 | | | | | | |
| **MDM** | **Murphy Dome** | **5.67** | **21** | | **Pn** | **20 52 42.1** | **-0.7** |
| **YAH** | **Yahtse** | **5.69** | **79** | | **Pn** | **20 52 43.7** | **+0.3** |
| **DOT** | **Dot Lake** | **5.78** | **44** | | **Pn** | **20 52 44.3** | **0.0** |
| **IL31** | | **5.78** | **27** | | **Pn** | **20 52 43.5** | **-0.8** |
| **ILAR** | **Eielson Array** | **5.78** | **27** | P | **Pn** | **20 52 43.5** | **-0.9** |
| | comp=N,2.4nm,0.3s,baz=214,slow=14,SNR=78 | | | | | | |
| ILAR | | | | S | **Sn** | **20 53 44.9** | **-4.3** |
| | comp=N,1.9nm,0.3s,baz=55,slow=26,SNR=11 | | | | | | |
| **BARN** | **Barnard Glacie** | **5.79** | **72** | | **Pn** | **20 52 45.1** | **+0.4** |
| **H21K** | **Melozitna Rive** | **5.91** | **1** | | **Pn** | **20 52 45.5** | **-0.5** |
| **H21K** | **Melozitna Rive** | **5.91** | **1** | P | **Pn** | **20 52 45.5** | **-0.5** |
| | baz=181 | | | | | | |
| **POKR** | **Poker Plat Res** | **5.96** | **23** | | **Pn** | **20 52 46.5** | **-0.3** |
| **POKR** | **Poker Plat Res** | **5.96** | **23** | P | **Pn** | **20 52 46.5** | **-0.3** |
| | baz=208 | | | | | | |
| **TABL** | **Table Mountain** | **5.99** | **78** | | **Pn** | **20 52 47.5** | **+0.1** |
| **M27K** | **Edge Creek, AK** | **6.01** | **60** | Pn | **Pn** | **20 52 48.3** | **+0.8** |
| **SCRK** | **Sand Creek** | **6.01** | **42** | | **Pn** | **20 52 46.6** | **-1.0** |
| **SCRK** | **Sand Creek** | **6.01** | **42** | P | **Pn** | **20 52 46.6** | **-1.0** |
| | baz=230 | | | | | | |
| **J25K** | **Salcha River,** | **6.04** | **33** | | **Pn** | **20 52 47.2** | **-0.7** |
| **J25K** | **Salcha River,** | **6.04** | **33** | P | **Pn** | **20 52 47.2** | **-0.7** |
| | baz=220 | | | | | | |
| **IM03** | | **6.24** | **357** | | **Pn** | **20 52 51.0** | **+0.4** |
| **IMAR** | **Indian Mountai** | **6.24** | **357** | | **Pn** | **20 52 51.0** | **+0.4** |
| **H23K** | **Yukon River** | **6.28** | **13** | | **Pn** | **20 52 50.7** | **-0.4** |
| **YUK2** | **White River** | **6.31** | **66** | | **Pn** | **20 52 51.9** | **+0.3** |
| **L27K** | **Beaver Creek,** | **6.31** | **54** | Pn | **Pn** | **20 52 51.1** | **-0.5** |
| **BC03** | | **6.33** | **54** | | **Pn** | **20 52 51.9** | **+0.1** |
| **BCAR** | **Beaver Creek A** | **6.33** | **54** | Pn | **Pn** | **20 52 51.7** | **-0.1** |
| **PCA** | **Pinnacle** | **6.44** | **82** | Pn | **Pn** | **20 52 54.0** | **+0.7** |
| **H24K** | **Noodor Dome** | **6.53** | **19** | Pn | **Pn** | **20 52 53.6** | **-0.9** |
| **PRP** | **Porcupine Dome** | **6.72** | **28** | | **Pn** | **20 52 57.1** | **-0.1** |
| **PRP** | **Porcupine Dome** | **6.72** | **28** | P | **Pn** | **20 52 57.1** | **-0.1** |
| | baz=214 | | | | | | |
| **BCPM** | **Bancas Point** | **6.76** | **83** | Pn | **Pn** | **20 52 58.0** | **+0.4** |
| **EGAK** | **Eagle** | **7.47** | **43** | | **Pn** | **20 53 07.1** | **-0.1** |
| **ANM** | **Nome** | **7.50** | **315** | Pn | **Pn** | **20 53 08.6** | **+1.0** |
| **COLD** | **Coldfoot** | **7.59** | **8** | Pn | **Pn** | **20 53 08.9** | **+0.1** |
| **FYU** | **Fort Yukon** | **7.67** | **24** | Pn | **Pn** | **20 53 09.3** | **-0.6** |
| **DAWY** | **Dawson** | **7.74** | **50** | Pn | **Pn** | **20 53 10.6** | **-0.4** |
| **HYT** | **Haines Junctio** | **7.79** | **76** | Pn | **Pn** | **20 53 12.5** | **+0.7** |
| **BMAR** | **Burnt Mountain** | **8.55** | **22** | Pn | **Pn** | **20 53 21.1** | **-0.8** |
| **WHY** | **Whitehorse** | **9.09** | **77** | Pn | **Pn** | **20 53 30.2** | **+1.0** |
| **P33M** | **Teslin, Yukon** | **10.14** | **79** | Pn | **Pn** | **20 53 44.4** | **+1.0** |
| **DLBC** | **Dease Lake** | **11.89** | **86** | P | **Pn** | **20 54 09.4** | **+2.4** |
| | comp=N,1.3nm,0.3s,baz=287,slow=6.6,SNR=22 | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.57** | **65** | P | **Pn** | **

baz=299
**TPUB Ta-pu 0.20 345** *i* P Pg 20 55 17.9 +0.9
baz=348
TPUB S Sg 20 55 21.4 +1.6
baz=348
**ELDTW Lidau 0.32 75** *e*P Pb 20 55 20.3 -0.7
baz=77
ELDTW *e*S Sg 20 55 24.9 +1.4
baz=77
**ALS Alishan 0.42 15** *e*P Pg 20 55 21.5 +0.3
baz=20
ALS *e*S Sb 20 55 28.9 -0.4
baz=20

**IDC 15 20:58:00.6±7.8, 34°61S×112°77W, h0km, mb3.6/2, mb1 4.1/2, mb1mx3.5/37, mbtmp3.6/2, Error ellipse: s-maj=488.0km s-min=56.6km az=111.0, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **72.85** | **355** | P | P | 21 09 33.0 | +1.6 |
| | 0.3nm,0.5s,baz=187,slow=6.4,SNR=2.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.06** | **2** | P | P | 21 09 54.6 | -1.0 |
| | 0.6nm,0.7s,baz=154,slow=6.5,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.56** | **248** | PKPbc | PKPbc | 21 17 47.5 | +0.2 |
| | 1.0nm,0.8s,baz=166,slow=2.3,SNR=9.0 | | | | | | |
| **SONM** | **Songino Array** | **148.06** | **306** | PKPbc | PKPdf | 21 17 45.4 | +0.6 |
| | 0.7nm,1.0s,baz=108,slow=4.7,SNR=3.7 | | | | | | |

**IDC 15 21:03:07.9±1.2, 6°99S×128°87E, h0km, mb3.4/1, mb1 3.7/4, mb1mx3.3/33, mbtmp3.5/4, ML3.5/3, Error ellipse: s-maj=13.9km s-min=7.4km az=174.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.48** | **196** | Pn | Pn | 21 05 53.2 | 0.0 |
| | 0.3nm,0.3s,baz=14,slow=9.4,SNR=23 | | | | | | |
| FITZ | | | | Sn | Sn | 21 07 48.5 | -14 |
| | 0.6nm,0.3s,baz=197,slow=20,SNR=9.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.93** | **158** | Pn | Pn | 21 06 26.4 | -0.3 |
| | 0.2nm,0.3s,baz=340,slow=10,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 21 08 47.9 | -14 |
| | 0.5nm,0.3s,baz=329,slow=23,SNR=9.0 | | | | | | |
| **ASAR** | **Alice Springs** | **17.27** | **164** | P | Pn | 21 07 10.9 | +0.3 |
| | 0.1nm,0.3s,baz=340,slow=10,SNR=13 | | | | | | |
| ASAR | | | | S | Sn | 21 10 10.6 | -13 |
| | 0.2nm,0.3s,baz=347,slow=25,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.61** | **327** | P | P | 21 14 06.4 | -0.1 |
| | 0.2nm,0.5s,baz=112,slow=8.2,SNR=2.6 | | | | | | |

*ISK 15 21:11:58.9, 38°80N×26°16E, h5km, ML2.7/11*
*DDA 15 21:11:59.2±0.0, 38°80N×26°17E, h7km±2km, ML2.3*
*THE 15 21:12:00.4, 38°80N×26°10E, h9km±1km, ML2.4/4, Error ellipse: s-maj=2.0km s-min=0.5km az=272.0*
*ATH 15 21:12:00.2, 38°79N×26°10E, h16km±2km, ML2.4/4, Error ellipse: s-maj=2.8km s-min=1.0km az=85.0*

**ISC 15 21:12:00.0±1.0, 38°80N±0°02×26°16E±0°02, h10km±9km, n38, σ0°55/59, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOS** | **Chios island** | **0.42** | **192** | P | **Pg** | **21 12 08.5** | **+0.2** |
| CHOS | | | | S | **Sg** | **21 12 14.8** | **+0.9** |
| | 510nm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **0.42** | **192** | P | **Pg** | **21 12 08.2** | **-0.1** |
| CHOS | | | | S | **Sg** | **21 12 14.3** | **+0.4** |
| CHOS | | | | AML | AML | 21 12 19.2 | |
| | comp=N,1078μm,0.4s | | | | | | |
| CHOS | | | | AML | AML | 21 12 19.2 | |
| | comp=E,1657μm,0.3s | | | | | | |
| **PRK** | **Paraskevi** | **0.45** | **11** | P | **Pg** | **21 12 09.4** | **+0.6** |
| PRK | | | | S | **Sb** | **21 12 16.6** | **-0.3** |
| | comp=E,632nm,0.5s | | | | | | |
| **PRK** | **Paraskevi** | **0.45** | **11** | P | **Pg** | **21 12 09.5** | **+0.6** |
| PRK | | | | S | **Sb** | **21 12 16.3** | **-0.6** |
| PRK | | | | AML | AML | 21 12 18.4 | |
| | comp=N,1561μm,0.4s | | | | | | |
| PRK | | | | AML | AML | 21 12 21.6 | |
| | comp=E,1126μm,0.5s | | | | | | |
| **FOCM** | **Foa** | **0.45** | **101** | PG | **Pg** | **21 12 08.4** | **-0.4** |
| FOCM | | | | SG | **Sg** | **21 12 15.1** | **+0.3** |
| **SIGR** | **SIGRI** | **0.47** | **330** | P | **Pg** | **21 12 09.0** | **-0.2** |
| SIGR | | | | S | **Sg** | **21 12 16.0** | **+0.5** |
| | comp=E,568nm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.47** | **330** | P | **Pg** | **21 12 09.1** | **-0.2** |
| SIGR | | | | S | **Sg** | **21 12 16.2** | **+0.6** |
| SIGR | | | | AML | AML | 21 12 16.9 | |
| | comp=E,963μm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 21 12 17.0 | |
| | comp=N,1288μm,0.2s | | | | | | |
| **CAND** | **Candarli** | **0.52** | **73** | PG | **Pg** | **21 12 09.6** | **-0.5** |
| CAND | | | | SG | **Sg** | **21 12 17.5** | **+0.5** |
| **PSRA** | **Psara** | **0.54** | **241** | P | **Pg** | **21 12 10.0** | **-0.4** |
| PSRA | | | | S | **Sg** | **21 12 16.5** | **-1.0** |
| **URLA** | **Izmir** | **0.56** | **142** | PG | **Pg** | **21 12 10.2** | **-0.6** |
| URLA | | | | SG | **Sg** | **21 12 18.7** | **+0.6** |
| **URLA** | **Izmir** | **0.56** | **142** | P | **Pg** | **21 12 10.3** | **-0.5** |
| URLA | | | | S | **Sg** | **21 12 18.2** | **0.0** |
| URLA | | | | *i* AML | AML | 21 12 21.0 | |
| | comp=N,139nm,0.3s | | | | | | |
| URLA | | | | *i* AML | AML | 21 12 24.0 | |
| | comp=N,200nm,0.5s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.62** | **155** | P | **Pg** | **21 12 11.5** | **-0.5** |
| ZEYE | | | | *i* AML | AML | 21 12 20.0 | |
| | comp=N,192nm,0.3s | | | | | | |
| ZEYE | | | | S | **Sg** | **21 12 20.5** | **+0.3** |
| ZEYE | | | | *i* AML | AML | 21 12 23.0 | |
| | comp=N,168nm,0.3s | | | | | | |
| **DKL** | **Dikili** | **0.64** | **65** | PG | **Pg** | **21 12 11.8** | **-0.5** |
| DKL | | | | SG | **Sg** | **21 12 21.3** | **+0.6** |
| **AYVA** | **Ayvalik** | **0.65** | **39** | P | **Pg** | **21 12 11.8** | **-0.8** |
| AYVA | | | | S | **Sg** | **21 12 20.9** | **-0.2** |
| AYVA | | | | *i* AML | AML | 21 12 24.0 | |
| | comp=N,211nm,0.3s | | | | | | |
| AYVA | | | | *i* AML | AML | 21 12 27.0 | |
| | comp=N,94nm,0.3s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.65** | **358** | PG | **Pg** | **21 12 12.1** | **-0.5** |
| **ZEDA** | **zmir-Bergama** | **0.73** | **77** | P | **Pg** | **21 12 13.5** | **-0.6** |
| ZEDA | | | | S | **Sg** | **21 12 23.6** | **0.0** |
| ZEDA | | | | *i* AML | AML | 21 12 26.0 | |
| | comp=N,84nm,0.4s | | | | | | |
| ZEDA | | | | *i* AML | AML | 21 12 27.0 | |
| | comp=N,144nm,0.4s | | | | | | |
| **DGB** | **zmir** | **0.94** | **143** | P | **Pg** | **21 12 17.0** | **-1.1** |
| DGB | | | | S | **Sg** | **21 12 29.8** | **-0.4** |
| DGB | | | | *i* AML | AML | 21 12 32.0 | |
| | comp=N,115nm,0.8s | | | | | | |
| DGB | | | | *i* AML | AML | 21 12 33.0 | |
| | comp=N,93nm,0.2s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **0.99** | **45** | P | **Pg** | **21 12 17.8** | **-1.3** |
| BUHA | | | | S | **Sn** | **21 12 33.9** | **-0.3** |
| BUHA | | | | *i* AML | AML | 21 12 37.0 | |
| | comp=N,106nm,0.8s | | | | | | |
| **EZN** | **Ezine** | **1.03** | **7** | P | **Pg** | **21 12 19.6** | **-0.2** |
| **EZN** | **Ezine** | **1.03** | **7** | PG | **Pg** | **21 12 19.2** | **-0.6** |
| EZN | | | | SG | **Sb** | **21 12 33.9** | **+0.4** |
| **BOZC** | **Bozcaada** | **1.04** | **355** | PG | **Pg** | **21 12 19.3** | **-0.7** |
| BOZC | | | | SG | **Sb** | **21 12 34.3** | **+0.4** |
| **SMG** | **Samos** | **1.21** | **154** | P | **Pb** | **21 12 23.1** | **0.0** |
| SMG | | | | S | **Sn** | **21 12 39.6** | **0.0** |
| | comp=N,205nm,0.3s | | | | | | |
| **SMG** | **Samos** | **1.21** | **154** | P | **Pb** | **21 12 22.6** | **-0.5** |
| SMG | | | | AML | AML | 21 12 40.2 | |
| | comp=E,497μm,0.4s | | | | | | |
| SMG | | | | AML | AML | 21 12 40.4 | |
| | comp=N,317μm,0.3s | | | | | | |
| **AKHS** | **Akhisar** | **1.29** | **86** | P | **Pn** | **21 12 24.4** | **+0.3** |
| AKHS | | | | S | **Sn** | **21 12 42.5** | **+1.0** |
| AKHS | | | | *i* AML | AML | 21 12 43.0 | |
| | comp=N,99nm,0.3s | | | | | | |
| **AKS** | **Akhisar** | **1.29** | **86** | PN | **Pn** | **21 12 24.2** | **+0.1** |
| **LIA** | **Limnos Island** | **1.33** | **325** | P | **Pn** | **21 12 23.9** | **-0.8** |
| **GOMA** | **Golmarmara-Man** | **1.37** | **93** | PN | **Pn** | **21 12 25.5** | **+0.3** |
| **GCAM** | **G?zelcaml?** | **1.39** | **142** | PN | **Pn** | **21 12 25.6** | **+0.2** |
| **GADA** | **Gvkgeada** | **1.40** | **352** | P | **Pn** | **21 12 25.5** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.40** | **352** | PN | **Pn** | **21 12 25.8** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.61** | **8** | PN | **Pn** | **21 12 28.8** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.71** | **43** | PN | **Pn** | **21 12 30.3** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **1.81** | **29** | PN | **Pn** | **21 12 31.7** | **+0.4** |
| **MLSB** | **Milas** | **1.97** | **139** | PN | **Pn** | **21 12 34.0** | **+0.5** |
| **KULA** | **Kula-Manisa** | **1.98** | **98** | PN | **Pn** | **21 12 34.0** | **+0.4** |
| **EDC** | **Edincik** | **2.02** | **40** | PN | **Pn** | **21 12 34.8** | **+0.6** |
| **SIMA** | **Simav-Kutahya** | **2.21** | **82** | PN | **Pn** | **21 12 37.5** | **+0.6** |
| **TURN** | **Turunc** | **2.61** | **140** | PN | **Pn** | **21 12 43.1** | **+0.9** |

*NEIC 15 21:25:59.6±1.7, 8.23S±0.10×159.3E±0.1, h53km±7km, mb4.7/54, Error ellipse: s-maj=17.4km s-min=10.0km az=46.0*
*IDC 15 21:26:00.1±0.5, 8.24S×159.17E, h60km±4km, mb4.1/14, mb1 4.3/14, mb1mx4.1/33, mbtmp4.4/14, MS3.6/16, Ms1 3.6/16, ms1mx3.4/59, Error ellipse: s-maj=16.4km s-min=5.7km az=59.0*

**ISC 15 21:26:00.2±0.5, 8°24S±0°06×159°24E±0°07, h57km±4km, h57km:pP-P, n166, σ1s09/162, mb4.7/51, MS3.7/18, 3C-1D, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.37** | **150** | P | **Pn** | **21 26 23.4** | **+0.4** |
| | 727nm,0.3s,baz=211,slow=4.1,SNR=203 | | | | | | |
| HNR | | | | S | **Sn** | **21 26 41.6** | **+1.4** |
| | 1μm,0.3s,baz=353,slow=22,SNR=18 | | | | | | |
| HNR | | | | LR | LR | 21 26 58.4 | |
| | comp=E,2μm,20.2s,baz=294,slow=41 | | | | | | |
| **HNR** | **Honiara** | **1.37** | **150** | Pn | **Pn** | **21 26 23.1** | **+0.1** |
| **RABL** | **Rabaul** | **8.11** | **299** | Pn | **Pn** | **21 27 55.7** | **+0.4** |
| **SANVU** | **Saraoutou** | **10.58** | **133** | | **Pn** | **21 28 31.2** | **+2.2** |
| **PMG** | **Port Moresby** | **12.00** | **264** | LR | LR | 21 32 46.0 | |
| | comp=Z,103nm,20.0s,baz=121,slow=34 | | | | | | |
| **LIFNC** | **LIFOU** | **14.66** | **149** | | **Pn** | **21 29 26.3** | **+1.9** |
| **DZM** | **Mont Dzumac** | **15.40** | **154** | P | **P** | **21 29 37.5** | **-0.1** |
| | 1.0nm,0.3s,baz=310,slow=21,SNR=14 | | | | | | |
| DZM | | | | LR | LR | 21 35 22.7 | |
| | comp=Z,240nm,18.5s,baz=320,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.40** | **154** | | **Pn** | **21 29 35.1** | **+1.1** |
| **OUENC** | **Ouen Island, N** | **15.88** | **153** | | **Pn** | **21 29 41.0** | **+0.9** |
| **COEN** | **Coen** | **16.75** | **249** | | **P** | **21 29 53.2** | **+0.6** |
| **CTA** | **Charters Tower** | **17.23** | **226** | LR | LR | 21 35 44.7 | |
| | comp=Z,230nm,20.7s,baz=60,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **20.59** | **119** | P | Pn | 21 30 36.4 | -1.1 |
| | 14nm,0.8s,baz=289,slow=7.6,SNR=5.6 | | | | | | |
| MSVF | | | | LR | LR | 21 37 35.6 | |
| | comp=Z,188nm,21.5s,baz=189,slow=34 | | | | | | |
| **ARMA** | **Armidale** | **23.18** | **197** | P | **P** | **21 31 03.3** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 21 31 04.3 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **25.96** | **327** | LR | LR | 21 40 56.8 | |
| | comp=Z,114nm,21.7s,baz=136,slow=35 | | | | | | |
| **WR0** | **Warramunga Arr** | **26.59** | **241** | P | **P** | **21 31 32.7** | **-0.7** |
| **WB0** | **Warramunga Arr** | **26.65** | **242** | P | **P** | **21 31 33.2** | **-0.7** |
| **WRAB** | **Tennant Creek** | **26.75** | **242** | P | **P** | **21 31 33.8** | **-0.9** |
| **WB2** | **Warramunga Arr** | **26.75** | **242** | P | **P** | **21 31 34.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **26.76** | **242** | P | **P** | **21 31 34.2** | **-0.7** |
| | comp=Z,1.4nm,0.3s,baz=65,slow=9.1,SNR=40 | | | | | | |
| WRA | | | | LR | LR | 21 41 41.0 | |
| | comp=Z,137nm,19.4s,baz=44,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.76** | **242** | P | **P** | **21 31 33.1** | **-1.8** |
| **H11S3** | **WAKE ISLAND Hy** | **27.57** | **15** | T | T | 22 00 25.3 | |
| | baz=195,slow=76,SNR=248 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.57** | **15** | T | T | 22 00 13.3 | |
| | baz=195,slow=76,SNR=466 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.58** | **15** | T | T | 22 00 20.3 | |
| | baz=195,slow=76,SNR=167 | | | | | | |
| **MTN** | **Manton Dam** | **28.00** | **258** | P | **P** | **21 31 45.2** | **-0.8** |
| **STKA** | **Stephens Creek** | **28.68** | **213** | P | **P** | **21 31 50.1** | **-1.7** |
| | comp=Z,2.0nm,0.3s,baz=49,slow=13,SNR=12 | | | | | | |
| STKA | | | | LR | LR | 21 42 43.3 | |
| | comp=Z,204nm,18.0s,baz=34,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **28.68** | **213** | P | **P** | **21 31 49.8** | **-2.1** |
| **AS31** | **Alice Springs** | **28.71** | **235** | P | **P** | **21 31 50.5** | **-1.7** |
| **ASAR** | **Alice Springs** | **28.71** | **235** | P | **P** | **21 31 50.8** | **-1.5** |
| | comp=Z,1.0nm,0.3s,baz=62,slow=9.9,SNR=19 | | | | | | |
| ASAR | | | | LR | LR | 21 43 02.7 | |
| | comp=Z,134nm,18.3s,baz=52,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **28.71** | **235** | P | **P** | **21 31 51.8** | **-0.5** |
| **H11N1** | **WAKE ISLAND Hy** | **28.78** | **15** | T | T | 22 01 43.1 | |
| | baz=196,slow=76,SNR=459 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.79** | **15** | T | T | 22 01 43.7 | |
| | baz=196,slow=76,SNR=236 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.80** | **15** | T | T | 22 01 47.7 | |
| | baz=196,slow=76,SNR=265 | | | | | | |
| **SIJI** | **Sorong** | **28.82** | **283** | LR | LR | 21 45 09.7 | |
| | comp=Z,79nm,18.8s,baz=104,slow=40 | | | | | | |
| **AFI** | **Afiamalu** | **28.97** | **104** | P | **P** | **21 31 52.9** | **-1.8** |
| **KNRA** | **Kununurra** | **30.69** | **253** | P | **P** | **21 32 09.4** | **-0.4** |
| **BBOO** | **Buckleboo** | **32.54** | **218** | P | **P** | **21 32 25.5** | **-0.4** |
| **URZ** | **Urewera** | **33.96** | **154** | LR | LR | 21 44 04.1 | |
| | comp=Z,140nm,20.7s,baz=342,slow=32 | | | | | | |
| **BKZ** | **Black Stump Fm** | **34.47** | **156** | P | **P** | **21 32 42.0** | **-0.6** |
| BKZ | | | | IAmb | IAmb | 21 33 06.6 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **TUWZ** | **Tuamarina** | **35.53** | **161** | P | **P** | **21 32 50.9** | **-0.7** |
| **RPZ** | **Rata Peaks** | **36.81** | **166** | LR | LR | 21 45 14.9 | |
| | comp=Z,187nm,19.1s,baz=304,slow=31 | | | | | | |
| **DAV** | **Davao City (W)** | **36.85** | **293** | LR | LR | 21 48 55.2 | |
| | comp=Z,41nm,18.2s,baz=0.5,slow=37 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **40.18** | **246** | P | **P** | **21 33 31.1** | **-0.1** |
| **MBWA** | **Marble Bar** | **40.19** | **247** | P | **P** | **21 33 29.8** | **-1.6** |
| MBWA | | | | IAmb | IAmb | 21 33 36.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **54.08** | **329** | P | **P** | **21 35 17.8** | **-1.3** |
| | comp=Z,1.6nm,0.8s,baz=147,slow=6.8,SNR=2.7 | | | | | | |
| KSRS | | | | pP | **pP** | **21 35 34.5** | **+0.2** |
| | comp=Z,4.5nm,1.1s,baz=123,slow=7.9,SNR=4.2 | | | | | | |
| KSRS | | | | LR | LR | 21 59 27.0 | |
| | comp=Z,18nm,18.2s,baz=345,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **54.25** | **345** | LR | LR | 21 56 32.3 | |
| | comp=Z,189nm,21.1s,baz=144,slow=34 | | | | | | |
| **NJ2** | **Nanjing** | **55.60** | **318** | *e*P | **P** | **21 35 31.4** | **+1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **57.73** | **337** | P | **P** | **21 35 45.5** | **+0.4** |
| | comp=Z,5.9nm,0.8s,baz=181,slow=11,SNR=8.5 | | | | | | |
| USRK | | | | pP | **pP** | **21 36 01.0** | **+0.5** |
| | comp=Z,4.6nm,0.8s,baz=134,slow=8.2,SNR=3.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **57.73** | **337** | P | **P** | **21 35 43.6** | **-1.5** |
| **PETK** | **Petropavlovsk-** | **61.13** | **359** | P | **P** | **21 36 08.2** | **-0.2** |
| | comp=Z,13nm,0.9s,baz=187,slow=12,SNR=10 | | | | | | |
| **PETK** | **Petropavlovsk-** | **61.13** | **359** | P | **P** | **21 36 08.3** | **-0.1** |
| **ENH** | **Enshi** | **61.20** | **311** | P | **P** | **21 36 09.2** | **-0.1** |
| **HNS** | **HongShan** | **61.59** | **321** | ⇑P | **P** | **21 36 11.9** | **+0.1** |
| HNS | | | | sP | **sP** | **21 36 34.8** | **+0.9** |
| HNS | | | | S | **S** | **21 44 33.6** | **+3.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=N,270nm,16.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,340nm,17.4s | | | | | | |
| **XAN** | **Xi'an** | **63.55** | **314** | ⇑P | **P** | **21 36 24.8** | **-0.2** |
| XAN | | | | pP | sP | 21 36 47.8 | +0.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,310nm,16.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,340nm,19.2s | | | | | | |
| **KMI** | **Kunming** | **64.21** | **303** | ⇑P | **P** | **21 36 31.3** | **+1.5** |
| KMI | | | | pP | sP | 21 36 49.5 | -1.9 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **XLT** | **XiLinHaoTe** | **64.95** | **327** | *e*P | **P** | **21 36 34.1** | **+0.1** |
| XLT | | | | pP | pP | 21 36 49.1 | -0.6 |
| XLT | | | | sP | sP | 21 36 54.4 | -1.7 |
| XLT | | | | PcP | **PcP** | **21 37 07.3** | **+0.6** |
| XLT | | | | sS | sS | 21 45 34.9 | -2.5 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,190nm,5.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=N,26nm,19.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,350nm,19.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,310nm,18.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.12** | **295** | P | **P** | **21 36 35.5** | **-0.1** |
| | comp=Z,1.8nm,0.4s,baz=110,slow=4.7,SNR=24 | | | | | | |
| CMAR | | | | LR | LR | 22 05 33.1 | |
| | comp=Z,35nm,18.9s,baz=140,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.12** | **295** | P | **P** | **21 36 34.1** | **-1.5** |
| **CHTO** | **Chiang Mai** | **65.24** | **295** | P | **P** | **21 36 36.0** | **-0.3** |
| CHTO | | | | IAmb | IAmb | 21 36 37.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **PZH** | **PanZhiHua** | **65.59** | **304** | P | **P** | **21 36 41.3** | **+2.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,5.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **65.62** | **322** | *e*P | **P** | **21 36 41.5** | **+3.0** |
| **CD2** | **Chengdu** | **65.84** | **309** | P | **P** | **21 36 40.4** | **+0.3** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **MA2** | **Magadan** | **67.94** | **355** | P | **P** | **21 36 51.8** | **-0.8** |
| **LZH** | **Lanzhou** | **68.18** | **314** | *e*P | **P** | **21 36 56.1** | **+1.2** |
| LZH | | | | pP | pP | 21 37 12.5 | +1.9 |
| LZH | | | | sP | PcP | 21 37 18.8 | -1.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,350nm,12.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,360nm,13.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,290nm,14.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **72.35** | **326** | P | **P** | **21 37 20.3** | **+0.1** |
| ULN | | | | IAmb | IAmb | 21 37 21.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **GTA** | **Gaotai** | **72.55** | **316** | *e*P | **P** | **21 37 22.0** | **+0.5** |
| GTA | | | | pP | pP | 21 37 35.6 | -1.7 |
| GTA | | | | sP | sP | 21 37 42.3 | -1.3 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,90nm,5.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,110nm,16.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,120nm,17.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,190nm,21.1s | | | | | | |
| **SONM** | **Songino Array** | **72.69** | **326** | P | **P** | **21 37 22.6** | **+0.4** |
| | comp=Z,8.2nm,0.9s,baz=140,slow=6.2,SNR=54 | | | | | | |
| SONM | | | | pP | **PcP** | **21 37 39.5** | **+0.2** |
| | comp=Z,4.0nm,0.9s,baz=135,slow=6.3,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **72.69** | **326** | P | **P** | **21 37 21.9** | **-0.3** |
| SONM | | | | IAmb | IAmb | 21 37 23.6 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **SHL** | **Shillong** | **73.56** | **300** | P | **P** | **21 37 26.1** | **-1.8** |
| SHL | | | | IAmb | IAmb | 21 37 44.8 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **YAK** | **Yakutsk** | **73.72** | **346** | LR | LR | 22 06 14.4 | |
| | comp=Z,63nm,22.0s,baz=27,slow=33 | | | | | | |
| **YAK** | **Yakutsk** | **73.72** | **346** | P | **P** | **21 37 27.6** | **-0.1** |
| YAK | | | | IAmb | IAmb | 21 37 51.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **GOMU** | **GeErMu** | **74.82** | **311** | P | **P** | **21 37 36.3** | **+1.1** |
| GOMU | | | | pP | PcP | 21 37 39.6 | -9.4 |
| GOMU | | | | sP | pP | 21 37 44.0 | -7.1 |
| GOMU | | | | S | **SKiKP** | **21 46 59.4** | **+4.1** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,66nm,6.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,100nm,5.8s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,31nm,5.7s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,53nm,5.5s | | | | | | |
| **GAMB** | **Gambell** | **75.12** | **13** | P | **P** | **21 37 35.6** | **-0.1** |
| GAMB | | | | IAmb | IAmb | 21 37 37.0 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **GAMB** | **Gambell** | **75.12** | **13** | P | **P** | **21 37 35.9** | **+0.1** |
| | baz=210 | | | | | | |
| **BILL** | **Bilibino** | **76.26** | **3** | P | **P** | **21 37 42.0** | **-0.3** |
| **P18K** | **Big Mountain,** | **76.56** | **22** | P | **P** | **21 37 43.6** | **-0.6** |
| | baz=226 | | | | | | |
| **ANM** | **Nome** | **77.29** | **15** | P | **P** | **21 37 48.5** | **+0.4** |
| **ANM** | **Nome** | **77.29** | **15** | P | **P** | **21 37 48.7** | **+0.5** |
| | baz=216 | | | | | | |
| **TNA** | **Tin City** | **77.50** | **13** | P | **P** | **21 37 49.3** | **+0.1** |
| | baz=213 | | | | | | |
| **M19K** | **Big River Lodg** | **78.59** | **20** | P | **P** | **21 37 55.7** | **+0.3** |
| M19K | | | | IAmb | IAmb | 21 37 57.2 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **M19K** | **Big River Lodg** | **78.59** | **20** | P | **P** | **21 37 56.1** | **+0.7** |
| | baz=227 | | | | | | |
| **L19K** | **White Mountain** | **78.62** | **20** | P | **P** | **21 37 55.7** | **+0.1** |
| L19K | | | | IAmb | IAmb | 21 37 57.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **L19K** | **White Mountain** | **78.62** | **20** | P | **P** | **21 37 56.0** | **+0.4** |
| | baz=226,SNR=6.8 | | | | | | |
| **TTA** | **Tatalina** | **78.76** | **19** | P | **P** | **21 37 56.4** | **-0.1** |
| TTA | | | | IAmb | IAmb | 21 37 57.6 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **TTA** | **Tatalina** | **78.76** | **19** | P | **P** | **21 37 56.9** | **+0.4** |
| | baz=225,SNR=7.1 | | | | | | |
| **L20K** | **Farewell, AK** | **79.16** | **20** | P | **P** | **21 37 58.9** | **+0.3** |
| | baz=227 | | | | | | |
| **K20K** | **Telida** | **79.69** | **19** | P | **P** | **21 38 02.1** | **+0.7** |
| | baz=227 | | | | | | |
| **PWL** | **Port Wells** | **80.14** | **23** | P | **P** | **21 38 04.4** | **+0.5** |
| | baz=233 | | | | | | |
| **J20K** | **Nowinta River** | **80.23** | **19** | P | **P** | **21 38 04.8** | **+0.5** |
| J20K | | | | IAmb | IAmb | 21 38 05.7 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **J20K** | **Nowinta River** | **80.23** | **19** | P | **P** | **21 38 04.6** | **+0.3** |
| | baz=227 | | | | | | |
| **PMR** | **Palmer** | **80.28** | **22** | P | **P** | **21 38 04.9** | **+0.3** |
| | baz=232 | | | | | | |
| **CAST** | **Castle Rocks** | **80.40** | **20** | P | **P** | **21 38 04.0** | **-1.3** |
| CAST | | | | IAmb | IAmb | 21 38 05.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **CAST** | **Castle Rocks** | **80.40** | **20** | P | **P** | **21 38 04.5** | **-0.8** |
| | baz=229,SNR=8.6 | | | | | | |
| **CHUM** | **Lake Minchumin** | **80.62** | **20** | P | **P** | **21 38 06.8** | **+0.4** |
| | baz=229 | | | | | | |
| **RDOG** | **Red Dog Mine** | **80.69** | **14** | P | **P** | **21 38 06.8** | **+0.1** |
| RDOG | | | | IAmb | IAmb | 21 38 08.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **RDOG** | **Red Dog Mine** | **80.69** | **14** | P | **P** | **21 38 07.3** | **+0.6** |
| | baz=218 | | | | | | |
| **SML** | **Sawmill** | **80.72** | **22** | P | **P** | **21 38 07.2** | **+0.2** |
| | baz=233 | | | | | | |
| **TRF** | **Thorofare Moun** | **81.03** | **21** | P | **P** | **21 38 07.4** | **-1.4** |
| TRF | | | | IAmb | IAmb | 21 38 09.9 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **TRF** | **Thorofare Moun** | **81.03** | **21** | P | **P** | **21 38 07.8** | **-1.0** |
| | baz=230 | | | | | | |
| **IMAR** | **Indian Mountai** | **81.59** | **18** | P | **P** | **21 38 11.2** | **-0.3** |
| **I21K** | **Tanana** | **81.59** | **19** | P | **P** | **21 38 11.8** | **+0.2** |
| | baz=229 | | | | | | |
| **H21K** | **Melozitna Rive** | **81.65** | **18** | P | **P** | **21 38 11.2** | **-0.7** |
| **H21K** | **Melozitna Rive** | **81.65** | **18** | P | **P** | **21 38 12.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RIDG** | **Independent Ri** | **83.15** | **22** | P | | **P** | **21 38 19.7** | **-0.1** |
| | baz=236 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **83.32** | **23** | P | | **P** | **21 38 20.9** | **+0.2** |
| | baz=237 | | | | | | | |
| **DOT** | **Dot Lake** | **83.39** | **22** | P | | **P** | **21 38 20.2** | **-0.7** |
| DOT | | | | IAmb | | IAmb | 21 38 21.9 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **J25K** | **Salcha River,** | **83.46** | **21** | P | | **P** | **21 38 20.4** | **-1.0** |
| **J25K** | **Salcha River,** | **83.46** | **21** | P | | **P** | **21 38 21.0** | **-0.3** |
| | baz=235,SNR=5.8 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **83.53** | **24** | P | | **P** | **21 38 21.8** | **-0.1** |
| M27K | | | | IAmb | | IAmb | 21 38 24.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **83.53** | **24** | P | | **P** | **21 38 22.5** | **+0.6** |
| | baz=238 | | | | | | | |
| **SCRK** | **Sand Creek** | **83.60** | **22** | P | | **P** | **21 38 22.3** | **+0.1** |
| SCRK | | | | IAmb | | IAmb | 21 38 23.2 | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| **SCRK** | **Sand Creek** | **83.60** | **22** | P | | **P** | **21 38 22.4** | **+0.2** |
| | baz=236,SNR=7.0 | | | | | | | |
| **YUK3** | **Moose Creek** | **83.81** | **25** | P | | **P** | **21 38 24.0** | **+0.6** |
| | baz=240 | | | | | | | |
| **L27K** | **Beaver Creek,** | **83.92** | **23** | P | | **P** | **21 38 23.5** | **-0.2** |
| L27K | | | | IAmb | | IAmb | 21 38 25.3 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **L27K** | **Beaver Creek,** | **83.92** | **23** | P | | **P** | **21 38 24.1** | **+0.4** |
| | baz=238 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **83.94** | **23** | P | | **P** | **21 38 22.5** | **-1.3** |
| **J26L** | **Joseph Creek** | **84.05** | **21** | P | | **P** | **21 38 24.5** | **+0.1** |
| | baz=237 | | | | | | | |
| **YUK4** | **Talbot Arm** | **84.35** | **25** | P | | **P** | **21 38 27.6** | **+1.4** |
| | baz=242 | | | | | | | |
| **HYT** | **Haines Junctio** | **84.60** | **26** | P | | **P** | **21 38 28.3** | **+1.0** |
| | baz=242 | | | | | | | |
| **EGAK** | **Eagle** | **85.07** | **22** | P | | **P** | **21 38 29.8** | **+0.4** |
| | baz=239,SNR=5.2 | | | | | | | |
| **WHY** | **Whitehorse** | **85.68** | **27** | P | | **P** | **21 38 33.1** | **+0.4** |
| | baz=245 | | | | | | | |
| **N02D** | **Trinity Center** | **86.44** | **48** | P | | **P** | **21 38 38.5** | **+1.6** |
| | baz=256 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **86.55** | **25** | P | | **P** | **21 38 37.0** | **+0.2** |
| **M31M** | **Drury Creek, Y** | **86.55** | **25** | P | | **P** | **21 38 37.0** | **+0.2** |
| | baz=245,SNR=6.6 | | | | | | | |
| **FARO** | **Faro, Yukon** | **87.00** | **26** | P | | **P** | **21 38 39.2** | **+0.1** |
| | baz=246,SNR=5.2 | | | | | | | |
| **MK31** | **Makanchi Array** | **87.13** | **318** | P | | **P** | **21 38 39.4** | **-0.7** |
| MK31 | | | | IAmb | | IAmb | 21 38 40.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **87.13** | **318** | P | | **P** | **21 38 39.5** | **-0.6** |
| | comp=Z,3.4nm,0.7s,baz=99,slow=6.1,SNR=36 | | | | | | | |
| MKAR | | | | pP | | **pP** | **21 38 56.0** | **-0.3** |
| | comp=Z,1.1nm,0.7s,baz=99,slow=5.9,SNR=5.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **87.13** | **318** | P | | **P** | **21 38 38.9** | **-1.1** |
| **MAKZ** | **Makanchi** | **87.34** | **318** | P | | **P** | **21 38 40.2** | **-0.8** |
| MAKZ | | | | IAmb | | IAmb | 21 38 41.5 | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **87.58** | **325** | P | | **P** | **21 38 39.7** | **-2.3** |
| | comp=Z,0.9nm,0.7s,baz=119,slow=5.2,SNR=5.0 | | | | | | | |
| **BEKR** | **Beckworth** | **87.93** | **49** | P | | **P** | **21 38 43.8** | **-0.4** |
| BEKR | | | | IAmb | | IAmb | 21 38 45.9 | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.20** | **51** | P | | **P** | **21 38 49.8** | **-0.5** |
| | comp=Z,1.2nm,0.8s,baz=244,slow=7.6,SNR=8.7 | | | | | | | |
| **KSH** | **Kashi** | **90.03** | **310** | P | | **P** | **21 38 55.4** | **+1.3** |
| KSH | | | | sP | | sP | 21 39 20.9 | +4.3 |
| KSH | | | | PP | | **PP** | **21 42 31.5** | **+3.5** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **TPNV** | **Topopah Spring** | **90.53** | **53** | P | | **P** | **21 38 57.8** | **+1.3** |
| | baz=260 | | | | | | | |
| **GMRC** | **Granite Mounta** | **90.64** | **55** | P | | **P** | **21 38 58.2** | **+1.2** |
| | baz=260 | | | | | | | |
| **IRM** | **Iron Mountain** | **90.96** | **56** | P | | **P** | **21 38 59.8** | **+1.3** |
| | baz=261 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **91.29** | **52** | P | | **P** | **21 39 00.6** | **+0.6** |
| R11A | | | | IAmb | | IAmb | 21 39 02.1 | |
| | comp=Z,3.9nm,1.1s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **91.29** | **52** | P | | **P** | **21 39 01.1** | **+1.0** |
| | baz=260 | | | | | | | |
| **SYO** | **Syowa Base** | **92.50** | **198** | jP | | **P** | **21 39 04.2** | **-0.5** |
| **HLID** | **Hailey** | **92.98** | **47** | P | | **P** | **21 39 09.4** | **+1.7** |
| | baz=262 | | | | | | | |
| **A36M** | **Sachs Harbour** | **93.34** | **18** | P | | **P** | **21 39 07.9** | **-0.5** |
| **A36M** | **Sachs Harbour** | **93.34** | **18** | P | | **P** | **21 39 08.8** | **+0.4** |
| | baz=254 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.47** | **28** | P | | **P** | **21 39 18.1** | **-0.4** |
| | comp=Z,2.6nm,0.8s,baz=257,slow=4.5,SNR=28 | | | | | | | |
| YKA | | | | pP | | **pP** | **21 39 34.1** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=257,slow=4.7,SNR=7.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.47** | **28** | P | | **P** | **21 39 17.4** | **-1.0** |
| **FINES** | **FINESS Array B** | **116.76** | **337** | PKP | | **PKPdf** | **21 44 36.4** | **-1.4** |
| | comp=Z,2.0nm,1.0s,baz=48,slow=2.8,SNR=3.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **116.76** | **337** | | | **PKPdf** | **21 44 37.0** | **-0.8** |
| **AKASG** | **Malin Array Be** | **120.98** | **325** | PKP | | **PKPdf** | **21 44 44.9** | **-1.4** |
| | comp=Z,0.9nm,0.5s,baz=54,slow=2.4,SNR=6.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **120.98** | **325** | PKPdf | | **PKPdf** | **21 44 44.4** | **-1.8** |
| **NOA** | **NORSAR Array B** | **122.22** | **342** | PKP | | **PKPdf** | **21 44 47.1** | **-1.3** |
| | comp=Z,0.9nm,0.8s,baz=270,slow=2.7,SNR=3.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **130.25** | **331** | PKP | | **PKPdf** | **21 45 03.8** | **-0.4** |
| | comp=Z,1.2nm,0.8s,baz=73,slow=1.8,SNR=7.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **130.25** | **331** | PKPdf | | **PKiKP** | **21 45 04.8** | **-0.2** |
| **ESDC** | **Sonseca Array** | **145.28** | **337** | PKPbc | | **PKPdf** | **21 45 32.1** | **+0.1** |
| | comp=Z,4.4nm,1.0s,baz=22,slow=3.4,SNR=9.0 | | | | | | | |

*IDC **15** 21:32:16.9±1.4,8.°03S×158.°97E,h0km,mb3.8/6, mb1 4.0/6,mb1mx3.8/31,mbtmp3.8/6,Error ellipse: s-maj=34.3km s-min=24.7km az=63.0*

**ISC 15 21:32:23.4±1.2,8.°2S±0.°2×159.°1E±0.°2,h55km,n13, σ0§43/8,mb3.8/6,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **1.45** | **146** | Pn | **Pn** | **21 32 47.2** | **-0.1** |
| | 241nm,0.3s,baz=192,slow=4.5,SNR=56 | | | | | | |
| HNR | | | | Sn | **Sn** | **21 33 05.4** | **+0.1** |
| | 255nm,0.3s,baz=118,slow=17,SNR=8.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.66** | **241** | P | **P** | **21 37 57.9** | **+0.5** |
| | 0.6nm,0.3s,baz=66,slow=9.2,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.58** | **16** | T | T | 22 06 38.4 | |
| | baz=196,slow=76,SNR=35 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.58** | **16** | T | T | 22 06 37.0 | |
| | baz=196,slow=76,SNR=28 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.60** | **16** | T | T | 22 06 42.1 | |
| | baz=196,slow=76,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **28.62** | **235** | P | **P** | **21 38 14.8** | **-0.1** |
| | 0.4nm,0.5s,baz=60,slow=10.0,SNR=6.6 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.80** | **15** | T | T | 22 08 07.2 | |
| | baz=196,slow=76,SNR=67 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.81** | **15** | T | T | 22 08 06.3 | |
| | baz=196,slow=76,SNR=59 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.82** | **15** | T | T | 22 08 09.6 | |
| | baz=196,slow=76,SNR=52 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **33.99** | **250** | P | **P** | **21 39 02.3** | **+0.2** |
| | 1.7nm,0.9s,baz=71,slow=12,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.00** | **295** | P | **P** | **21 42 57.5** | **-0.7** |
| | 0.7nm,0.7s,baz=111,slow=4.9,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **72.61** | **326** | P | **P** | **21 43 45.4** | **+0.2** |
| | 0.7nm,0.7s,baz=140,slow=5.7,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **87.04** | **318** | P | **P** | **21 45 03.4** | **+0.3** |
| | 0.4nm,0.5s,baz=93,slow=5.8,SNR=8.4 | | | | | | |

**IDC 15 21:39:47.6±2.0,2.°02N×84.°49W,h0km,mb3.6/3, mb1 4.0/4,mb1mx3.7/28,mbtmp3.7/4,ML3.7/1,Error ellipse: s-maj=187.1km s-min=25.1km az=57.0,Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **10.94** | **146** | Pn | Pn | 21 42 25.2 | -0.7 |
| | 0.5nm,0.3s,baz=324,slow=16,SNR=4.8 | | | | | | |
| **LPAZ** | **La Paz** | **24.34** | **139** | P | P | 21 45 08.4 | +0.4 |
| | 2.1nm,0.9s,baz=301,slow=8.1,SNR=3.7 | | | | | | |
| **H03N2** | **Juan Fernandez** | **35.66** | **172** | T | T | 22 23 39.2 | |
| | baz=349,slow=76,SNR=17 | | | | | | |
| **H03N1** | **Juan Fernandez** | **35.66** | **172** | T | T | 22 23 40.3 | |
| | baz=349,slow=76,SNR=17 | | | | | | |
| **H03N3** | **Juan Fernandez** | **35.68** | **172** | T | T | 22 23 39.1 | |
| | baz=349,slow=76,SNR=18 | | | | | | |
| **NVAR** | **Mina Array Bea** | **47.63** | **324** | P | P | 21 48 25.8 | -0.1 |
| | 0.3nm,0.7s,baz=143,slow=6.2,SNR=2.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.38** | **345** | P | P | 21 50 25.0 | -0.1 |
| | 0.6nm,0.9s,baz=142,slow=6.4,SNR=6.9 | | | | | | |

**IDC 15 21:42:23.5±4.6,11.°49S×122.°64E,h66km±54km,mb3.0/1, mb1 3.4/4,mb1mx3.0/29,mbtmp3.4/4,ML3.5/3,Error ellipse: s-maj=66.6km s-min=13.5km az=90.0,South of Timor**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **1.62** | **38** | P | Pn | 21 42 49.5 | -0.6 |
| | 39nm,0.3s,baz=268,slow=3.6,SNR=43 | | | | | | |
| BATI | | | | S | Sn | 21 43 10.2 | +0.2 |
| | 7.4nm,0.3s,baz=5.2,slow=4.2,SNR=3.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **7.18** | **157** | P | Pn | 21 44 06.4 | +0.5 |
| | 0.2nm,0.3s,baz=337,slow=8.4,SNR=18 | | | | | | |
| FITZ | | | | S | Sn | 21 45 26.8 | +0.6 |
| | 0.5nm,0.3s,baz=204,slow=22,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.04** | **128** | P | Pn | 21 45 37.9 | -1.6 |
| | 0.4nm,0.3s,baz=305,slow=13,SNR=21 | | | | | | |
| WRA | | | | S | Sn | 21 48 05.4 | -8.4 |
| | 0.2nm,0.3s,baz=304,slow=24,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **16.17** | **140** | P | P | 21 46 08.0 | -0.9 |
| | 0.2nm,0.3s,baz=318,slow=12,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.32** | **331** | P | P | 21 53 17.8 | 0.0 |
| | 0.2nm,0.7s,baz=126,slow=7.3,SNR=1.9 | | | | | | |

*TUL **15** 21:44:32.1±1.1,36.°262N±0.°009×97.°35W±0.°01,h8km±7km, ML3.3,mb_Lg3.1/65(NEIC),Error ellipse: s-maj=1.7km s-min=1.1km az=125.0*

**NEIC 15 21:44:32.1±1.0,36.°26N±0.°01×97.°37W±0.°02,h5km±7km, Error ellipse: s-maj=1.9km s-min=1.7km az=54.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK001** | **Jones High Sch** | **0.70** | **175** | Pg | Pg | 21 44 45.5 | -0.1 |
| **OKCFA** | **Oklahoma City** | **0.85** | **185** | Pg | Pg | 21 44 48.0 | -0.4 |
| OKCFA | | | | IAmb_Lg | | 21 44 59.1 | |
| | comp=Z,131nm,0.9s | | | | | | |
| OKCFA | | | | Sg | Sg | 21 44 59.8 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.86** | **184** | | Pg | 21 44 48.1 | -0.4 |
| **T35A** | **Sooner Cattle** | **0.95** | **46** | | Pg | 21 44 49.7 | -0.6 |
| T35A | | | | Sg | Sg | 21 45 02.2 | -0.4 |
| **FNO** | **Franklin** | **1.00** | **182** | | Pg | 21 44 50.8 | -0.6 |
| FNO | | | | Sg | Sg | 21 45 04.5 | +0.1 |
| **W35A** | **Tecumseh** | **1.18** | **160** | | Pg | 21 44 53.6 | -1.2 |
| **TUL1** | **Leonard** | **1.32** | **105** | | Pn | 21 44 55.9 | -1.3 |
| **U32A** | **Winter Ranch,** | **1.32** | **276** | | Pn | 21 44 56.8 | -0.5 |
| **X37A** | **Clayton** | **2.33** | **135** | IAmb_Lg | | 21 45 47.2 | |
| | comp=Z,82nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **2.41** | **334** | Pn | Pn | 21 45 12.8 | +0.6 |
| **KSU1** | **Kansas State U** | **2.90** | **12** | Pn | Pn | 21 45 18.5 | -0.4 |
| KSU1 | | | | IAmb_Lg | | 21 46 09.9 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.93** | **178** | Pn | Pn | 21 45 19.3 | 0.0 |
| **W39A** | **Magazine** | **3.10** | **109** | | Pn | 21 45 21.3 | -0.4 |
| W39A | | | | IAmb_Lg | | 21 46 17.9 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.54** | **65** | Pn | Pn | 21 45 28.0 | +0.3 |
| S39A | | | | IAmb_Lg | | 21 46 26.5 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.54** | **118** | Pn | Pn | 21 45 28.0 | +0.3 |
| **Z38A** | **Mt. Pleasant** | **3.58** | **146** | IAmb_Lg | | 21 46 32.5 | |
| | comp=Z,61nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.65** | **87** | Pn | Pn | 21 45 29.6 | +0.4 |
| U40A | | | | IAmb_Lg | | 21 46 30.9 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.78** | **250** | Pn | Pn | 21 45 31.8 | +0.8 |
| AMTX | | | | IAmb_Lg | | 21 46 37.3 | |
| | comp=Z,54nm,1.0s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.09** | **208** | Pn | Pn | 21 45 35.9 | +0.6 |
| ABTX | | | | IAmb_Lg | | 21 46 48.6 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.11** | **114** | Pn | Pn | 21 45 35.9 | +0.5 |
| X40A | | | | IAmb_Lg | | 21 46 49.8 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.19** | **76** | Pn | Pn | 21 45 37.8 | +1.1 |
| MGMO | | | | IAmb_Lg | | 21 46 47.1 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.24** | **102** | Pn | Pn | 21 45 38.1 | +0.7 |
| WHAR | | | | IAmb_Lg | | 21 46 52.7 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.26** | **93** | IAmb_Lg | | 21 46 48.4 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.30** | **103** | Pn | Pn | 21 45 37.7 | -0.5 |
| **P38A** | **Dawn** | **4.52** | **41** | IAmb_Lg | | 21 47 04.4 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **62** | Pn | Pn | 21 45 41.3 | -0.2 |
| **N35A** | **Tabor** | **4.79** | **16** | Pn | Pn | 21 45 44.6 | -0.3 |
| **Z41A** | **Richland Creek** | **4.81** | **127** | IAmb_Lg | | 21 47 14.0 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.00** | **305** | IAmb_Lg | | 21 47 20.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **LCAR** | **Lake Charles** | **5.03** | **90** | Pn | Pn | 21 45 46.4 | -1.8 |
| **BGNE** | **Belgrade** | **5.17** | **353** | Pn | Pn | 21 45 49.6 | -0.6 |
| BGNE | | | | IAmb_Lg | | 21 47 28.0 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.21** | **68** | Pn | Pn | 21 45 51.5 | +0.9 |
| **CCM** | **Cathedral Cave** | **5.21** | **68** | IAmb_Lg | | 21 47 17.5 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.32** | **51** | IAmb_Lg | | 21 47 21.3 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.61** | **83** | IAmb_Lg | | 21 47 44.6 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.73** | **281** | IAmb_Lg | | 21 47 44.3 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.75** | **7** | IAmb_Lg | | 21 47 38.0 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.93** | **323** | Pn | Pn | 21 46 01.6 | +0.9 |
| OGNE | | | | IAmb_Lg | | 21 47 44.6 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **143A** | **Socs Landing,** | **6.07** | **124** | IAmb_Lg | | 21 47 58.6 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **SCIA** | **State Center** | **6.49** | **29** | IAmb_Lg | | 21 47 59.8 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **S44A** | **Carbondale** | **6.65** | **75** | IAmb_Lg | | 21 48 10.5 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.67** | **285** | Pn | Pn | 21 46 09.9 | -1.2 |
| **OXF** | **Oxford** | **6.73** | **103** | Pn | Pn | 21 46 10.2 | -1.4 |
| **Q24A** | **Divide** | **6.74** | **296** | IAmb_Lg | | 21 48 14.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **W45A** | **Hickory Valley** | **6.75** | **97** | Pn | Pn | 21 46 11.7 | -0.1 |
| W45A | | | | IAmb_Lg | | 21 48 08.2 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **N41A** | **Harden Midland** | **6.76** | **47** | Pn | Pn | 21 46 11.8 | -0.2 |
| **K38A** | **Parkersburg** | **7.30** | **28** | IAmb_Lg | | 21 48 22.6 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.48** | **4** | Pn | Pn | 21 46 20.3 | -1.6 |
| **L40A** | **Anamosa** | **7.50** | **38** | Pn | Pn | 21 46 21.9 | -0.3 |
| L40A | | | | IAmb_Lg | | 21 48 37.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **HDIL** | **Hopedale** | **7.65** | **53** | Pn | Pn | 21 46 24.4 | +0.2 |
| **O44A** | **Mansfield** | **8.01** | **58** | IAmb_Lg | | 21 48 52.4 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **8.15** | **307** | IAmb_Lg | | 21 49 04.9 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.28** | **44** | Pn | Pn | 21 46 32.5 | -0.3 |
| L42A | | | | IAmb_Lg | | 21 48 56.5 | |
| | comp=Z,24nm,0.9s | | | | | | |

*IDC **15** 21:53:28.5±0.7, 1.°33N×85.°29W, h0km, mb4.2/14, mb1 4.4/21,mb1mx4.1/49,mbtmp4.3/21, ML3.5/7, MS4.3/55, Ms1 4.3/55,ms1mx4.3/64, Error ellipse: s-maj=25.1km s-min=12.2km az=55.0*

*NEIC **15** 21:53:30.9±1.8, 1.°24N±0.°07×85.°28W±0.°07, h10km±1km, mb4.6/89, Md4.6(IGQ), Error ellipse: s-maj=12.6km s-min=11.3km az=219.0*

*GCMT **15** 21:53:31.9±0.3, 1.°19N±0.°01×85.°33W±0.°02, h17km±1km, MW5.1/121, Moment Tensor Solution. s38,c42; s121,c172; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.57±.18; $M_{\theta\theta}$0.92±.15; $M_{\phi\phi}$-1.48±.19; $M_{r\theta}$-0.83±.42; $M_{\theta\phi}$5.31±.15; $M_{\phi r}$-1.44±.42; Best double couple: $M_o$5.71200×$10^{16}$ NP1:φs277.00000°, δ74.00000°, λ8.00000°. NP2:φs185.00000°, δ82.00000°, λ164.00000°. Principal axes: T 5.6380, Plg17.0000°, Azm140.0000°; N 0.1480, Plg72.0000°, Azm340.0000°; P -5.7850, Plg6.0000°, Azm232.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 15 21:53:29.9±0.5,1.°25N±0.°06×85.°32W±0.°08,h10km,n195, σ1§13/155,mb4.5/46,MS4.3/48,1D,Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAYG** | **Puerto Ayora** | **5.32** | **249** | Pn | **Pn** | **21 54 49.3** | **-0.1** |
| **OTAV** | **Otavalo** | **6.94** | **98** | Pn | **Pn** | **21 55 12.3** | **+0.2** |
| **OTAV** | **Otavalo** | **6.94** | **98** | eP | **Pn** | **21 55 12.1** | **0.0** |
| **CUSE** | **Cuicocha Este** | **6.98** | **98** | eP | **Pn** | **21 55 14.2** | **+1.5** |
| **BRU2** | **Volcan** | **7.94** | **19** | Pn | **Pn** | **21 55 24.8** | **-0.9** |
| **BRU2** | **Volcan** | **7.94** | **19** | eP | **Pn** | **21 55 28.8** | **+3.2** |
| **GCUF** | **Volcan Galeras** | **7.97** | **90** | eP | **Pn** | **21 55 23.0** | **-3.4** |
| **SRBA** | **San Rafael, Bu** | **8.17** | **14** | Pn | **Pn** | **21 55 29.7** | **+1.0** |
| **PEZE** | **Perez Zeledon,** | **8.25** | **11** | Pn | **Pn** | **21 55 29.8** | **0.0** |
| **JACO** | **JACO, Garabito** | **8.39** | **4** | Pn | **Pn** | **21 55 32.3** | **+0.7** |
| **RIMA** | **Rio Macho** | **8.59** | **10** | Pn | **Pn** | **21 55 35.6** | **+1.1** |
| **SOTA** | **Rioblanco** | **8.75** | **84** | eP | **Pn** | **21 55 36.5** | **-0.5** |
| **PIZC** | **Pizarro, Choco** | **8.77** | **65** | eP | **Pn** | **21 55 39.7** | **+2.9** |
| **CVTR** | **Volcan Turrial** | **8.86** | **10** | Pn | **Pn** | **21 55 39.1** | **+0.7** |
| **PCON** | **Cinco Dias** | **8.98** | **83** | eP | **Pn** | **21 55 41.7** | **+1.5** |
| **JTS** | **Las Juntas de** | **8.99** | **2** | Pn | **Pn** | **21 55 40.7** | **+0.8** |
| | 1.1nm,0.3s,baz=215,slow=8.9,SNR=8.3 | | | | | | |
| JTS | | | | LR | LR | 21 58 22.9 | |
| | comp=Z,1μm,20.1s,baz=240,slow=33 | | | | | | |
| **JTS** | **Las Juntas de** | **8.99** | **2** | Pn | **Pn** | **21 55 41.4** | **+1.5** |
| **ORTG** | **Ortega, Santa** | **9.06** | **359** | Pn | **Pn** | **21 55 41.9** | **+1.0** |
| **YOTC** | **Yotoco, Valle** | **9.37** | **73** | eP | Pn | 21 55 40.8 | -4.4 |
| **MARP** | **Paez Belalcaza** | **9.49** | **80** | eP | **Pn** | **21 55 47.6** | **+0.6** |
| **PTAC** | **Punta Ardita,** | **9.51** | **52** | eP | **Pn** | **21 55 47.3** | **+0.3** |
| **BCIP** | **Isla Barro Col** | **9.58** | **35** | Pn | **Pn** | **21 55 49.4** | **+1.4** |
| **BCIP** | **Isla Barro Col** | **9.58** | **35** | eP | **Pn** | **21 55 49.3** | **+1.4** |
| **FLOC** | **Florencia** | **9.67** | **88** | eP | **Pn** | **21 55 49.9** | **+0.7** |
| **PLMC** | **San Jos del P** | **9.73** | **68** | eP | **Pn** | **21 55 47.5** | **-2.5** |
| **CBOC** | **Ciudad Bolivar** | **10.36** | **63** | eP | **Pn** | **21 55 59.2** | **+0.4** |
| **ORTC** | **Ortega, Tolima** | **10.41** | **75** | eP | **Pn** | **21 56 00.8** | **+1.5** |
| **ANIL** | **Santa Ana** | **10.42** | **72** | eP | **Pn** | **21 55 59.1** | **-0.6** |
| **PTLC** | **Puerto Leguiza** | **10.58** | **96** | eP | Pn | 21 56 07.4 | +5.8 |
| **GUY2C** | **Guyana, Caldas** | **10.70** | **68** | eP | **Pn** | **21 55 59.4** | **-4.2** |
| **DBBC** | **Dabeiba** | **10.74** | **57** | eP | **Pn** | **21 56 05.9** | **+1.9** |
| **ATAH** | **Atahualpa** | **10.82** | **140** | Pn | **Pn** | **21 56 07.8** | **+2.5** |
| | 1.9nm,0.3s,baz=298,slow=16,SNR=22 | | | | | | |
| ATAH | | | | LR | LR | 21 59 52.5 | |
| | comp=Z,3μm,20.5s,baz=314,slow=35 | | | | | | |
| **HELC** | **Santa Helena** | **10.93** | **63** | eP | **Pn** | **21 56 05.2** | **-1.6** |
| **NORC** | **Norcasia** | **11.28** | **67** | eP | **Pn** | **21 56 11.9** | **+0.6** |
| **MACC** | **Macarena, Meta** | **11.50** | **85** | eP | **Pn** | **21 56 15.3** | **+1.0** |
| **CRIN** | **San Cristobal** | **11.51** | **352** | Pn | **Pn** | **21 56 15.6** | **+1.1** |
| **ROSC** | **El Rosal** | **11.55** | **72** | Pn | **Pn** | **21 56 15.5** | **+0.2** |
| | 1.7nm,0.3s,baz=246,slow=20,SNR=6.7 | | | | | | |
| ROSC | | | | LR | LR | 22 00 26.0 | |
| | comp=Z,2μm,18.1s,baz=232,slow=36 | | | | | | |
| **ROSC** | **El Rosal** | **11.55** | **72** | Pn | **Pn** | **21 56 16.1** | **+0.8** |
| **PTBC** | **PUERTO BERRIO,** | **12.04** | **64** | eP | **Pn** | **21 56 22.6** | **+0.9** |
| **CHIC** | **Chingaza** | **12.05** | **74** | eP | **Pn** | **21 56 21.8** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **12.13** | **59** | Pn | **Pn** | **21 56 23.4** | **+0.5** |
| **ZARC** | **Zaragoza, Cauc** | **12.13** | **59** | eP | **Pn** | **21 56 19.3** | **-3.7** |
| **BRRC** | **Barranca, Sant** | **12.96** | **63** | eP | **Pn** | **21 56 34.1** | **-0.1** |
| **RUSC** | **La Rusia** | **13.05** | **69** | eP | **Pn** | **21 56 35.6** | **-0.4** |
| **SJCC** | **San Jacinto, C** | **13.25** | **49** | Pn | **Pn** | **21 56 38.2** | **-0.1** |
| **MTO3** | **Montecristo** | **13.67** | **343** | Pn | **Pn** | **21 56 46.6** | **+2.5** |
| **OCAC** | **Ocana** | **13.83** | **59** | Pn | **Pn** | **21 56 45.3** | **-0.9** |
| **APG** | **El Apazote** | **14.59** | **340** | Pn | **Pn** | **21 56 56.6** | **0.0** |
| | 0.3nm,0.3s,baz=235,slow=20,SNR=1.9 | | | | | | |
| APG | | | | LR | LR | 22 00 20.1 | |
| | comp=Z,238nm,18.9s,baz=150,slow=28 | | | | | | |
| **NNA** | **Nana** | **15.61** | **148** | Pn | **Pn** | **21 57 10.8** | **+0.5** |
| | 1.0nm,0.3s,baz=285,slow=12,SNR=1.9 | | | | | | |
| NNA | | | | LR | LR | 22 02 19.6 | |
| | comp=Z,2μm,21.3s,baz=326,slow=34 | | | | | | |
| **SOCV** | **Socops** | **16.01** | **64** | eP | **Pn** | **21 57 14.9** | **-0.5** |
| **PETF** | **Flores** | **16.20** | **344** | P | **Pn** | **21 57 20.5** | **+2.7** |
| PETF | | | | IAmb | IAmb | 21 57 24.8 | |
| | comp=Z,81nm,1.4s | | | | | | |
| **CCIG** | **Comitan** | **16.38** | **336** | P | **P** | **21 57 23.2** | **0.0** |
| CCIG | | | | IAmb | IAmb | 21 57 26.2 | |
| | comp=Z,72nm,1.5s | | | | | | |
| **SDV** | **Santo Domingo** | **16.47** | **62** | Pn | **Pn** | **21 57 20.5** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=232,slow=11,SNR=5.1 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 121A | Cookes Peak, D | 37.63 328 | P | P | 22 00 45.9 | +0.5 |
| BNM | Barren Site | 38.33 331 | P | P | 22 00 52.8 | +1.5 |
| CPUP | Villa Florida | 38.49 137 | LR | LR | 22 18 50.3 | |
| | comp=Z,458nm,18.1s,baz=320,slow=40 | | | | | |
| CPUP | Villa Florida | 38.49 137 | P | P | 22 00 51.6 | -0.8 |
| LENM | Lemitar | 38.51 331 | P | P | 22 00 53.6 | +0.9 |
| ANMO | Albuquerque | 38.89 332 | P | P | 22 00 56.7 | +0.8 |
| | comp=Z,1.1nm,0.4s,baz=159,slow=7.9,SNR=5.7 | | | | | |
| ANMO | Albuquerque | 38.89 332 | P | P | 22 00 55.9 | -0.1 |
| R32A | Long Quarter, | 38.99 343 | P | P | 22 00 57.3 | +0.8 |
| R32A | | | IAmb | IAmb | 22 01 14.9 | |
| | comp=Z,8.8nm,0.7s | | | | | |
| TUC | Tucson | 39.12 325 | P | P | 22 00 57.5 | -0.3 |
| T25A | Trinidad | 39.83 336 | P | P | 22 01 04.4 | +0.6 |
| 214A | Organ Pipe Nat | 40.07 322 | P | P | 22 01 04.9 | -0.8 |
| X18A | Snowflake | 40.31 328 | P | P | 22 01 08.3 | +0.4 |
| BDFB | Brasilia | 40.50 116 | LR | LR | 22 19 18.3 | |
| | comp=Z,934nm,19.1s,baz=297,slow=38 | | | | | |
| BDFB | Brasilia | 40.50 116 | P | P | 22 01 09.9 | +0.3 |
| W18A | Petrified Fore | 40.65 329 | P | P | 22 01 11.7 | +1.0 |
| W18A | | | IAmb | IAmb | 22 01 17.7 | |
| | comp=Z,12nm,0.9s | | | | | |
| SDCO | Great Sand Dun | 40.80 335 | P | P | 22 01 12.6 | +0.7 |
| SDCO | | | IAmb | IAmb | 22 01 13.9 | |
| | comp=Z,12nm,1.4s | | | | | |
| X16A | Lo Mia Camp, P | 41.04 326 | P | P | 22 01 14.3 | +0.5 |
| ITQB | Itaqui | 41.18 141 | P | P | 22 01 15.5 | +0.7 |
| 113A | Mohawk Valley, | 41.22 322 | P | P | 22 01 15.2 | +0.1 |
| S22A | 4UR Ranch, Cre | 41.37 334 | P | P | 22 01 16.7 | +0.1 |
| Y14A | Wickenburg | 41.58 324 | P | P | 22 01 18.7 | +0.6 |
| Y14A | | | IAmb | IAmb | 22 01 20.1 | |
| | comp=Z,14nm,1.4s | | | | | |
| MVCO | Mesa Verde | 41.69 332 | P | P | 22 01 19.6 | +0.4 |
| MVCO | | | IAmb | IAmb | 22 01 25.2 | |
| | comp=Z,15nm,1.4s | | | | | |
| LC01 | Cunco | 41.82 164 | P | P | 22 01 19.3 | -0.6 |
| LC01 | | | IAmb | IAmb | 22 01 32.0 | |
| | comp=Z,11nm,1.1s | | | | | |
| WUAZ | Wupatki | 41.82 328 | P | P | 22 01 20.8 | +0.6 |
| PV15 | Paradox Valley | 42.60 333 | P | P | 22 01 26.5 | -0.1 |
| PV15 | | | IAmb | IAmb | 22 01 32.8 | |
| | comp=Z,16nm,1.4s | | | | | |
| PV13 | Radium Mtn., P | 42.60 332 | P | P | 22 01 26.5 | -0.1 |
| PV13 | | | IAmb | IAmb | 22 01 28.4 | |
| | comp=Z,20nm,1.5s | | | | | |
| SMCO | Snowmass | 42.62 335 | P | P | 22 01 25.7 | -1.3 |
| PV11 | David Mesa, Pa | 42.74 332 | P | P | 22 01 28.2 | +0.5 |
| PV11 | | | IAmb | IAmb | 22 01 32.4 | |
| | comp=Z,13nm,1.1s | | | | | |
| PV07 | Paradox Valley | 42.75 333 | P | P | 22 01 27.7 | -0.1 |
| PV07 | | | IAmb | IAmb | 22 01 29.1 | |
| | comp=Z,9.8nm,1.2s | | | | | |
| W13A | Hualapai Mount | 42.92 325 | P | P | 22 01 29.9 | +0.7 |
| U15A | North Rim | 43.00 328 | P | P | 22 01 30.0 | +0.1 |
| PFO | Pinyon Flats O | 43.45 321 | P | P | 22 01 33.6 | +0.2 |
| | comp=Z,4.4nm,1.2s,baz=94,slow=9.9,SNR=4.3 | | | | | |
| PFO | | | LR | LR | 22 18 14.4 | |
| | comp=Z,340nm,19.7s,baz=122,slow=34 | | | | | |
| PFO | Pinyon Flats O | 43.45 321 | P | P | 22 01 34.6 | +1.2 |
| PFO | | | IAmb | IAmb | 22 01 35.5 | |
| | comp=Z,16nm,1.4s | | | | | |
| SADO | Sadowa | 43.69 6 | LR | LR | 22 19 00.0 | |
| | comp=Z,302nm,20.8s,baz=186,slow=35 | | | | | |
| KNB | Kanab | 43.72 328 | P | P | 22 01 36.4 | +0.7 |
| KNB | | | IAmb | IAmb | 22 01 40.8 | |
| | comp=Z,9.5nm,1.4s | | | | | |
| PLCA | Paso Flores | 43.90 164 | P | P | 22 01 36.6 | -0.2 |
| | comp=Z,4.8nm,1.0s,baz=340,slow=8.2,SNR=6.6 | | | | | |
| PLCA | | | LR | LR | 22 16 38.1 | |
| | comp=Z,381nm,18.6s,baz=350,slow=32 | | | | | |
| PLCA | Paso Flores | 43.90 164 | P | P | 22 01 37.4 | +0.6 |
| PLCA | | | IAmb | IAmb | 22 01 38.7 | |
| | comp=Z,18nm,1.3s | | | | | |
| LCMT | Little Creek M | 43.94 327 | P | P | 22 01 38.1 | +0.8 |
| SRU | San Rafael Swe | 44.17 332 | P | P | 22 01 39.5 | +0.3 |
| SRU | | | IAmb | IAmb | 22 01 44.9 | |
| | comp=Z,12nm,1.5s | | | | | |
| Q16A | Castle Valley | 44.33 331 | P | P | 22 01 40.1 | -0.4 |
| Q16A | | | IAmb | IAmb | 22 01 45.3 | |
| | comp=Z,8.4nm,1.3s | | | | | |
| SHPR | Sheep Range | 44.64 325 | P | P | 22 01 42.6 | -0.4 |
| QSM | Queen of Sheba | 45.27 323 | P | P | 22 01 48.2 | +0.4 |
| QSM | | | IAmb | IAmb | 22 01 58.3 | |
| | comp=Z,7.3nm,1.2s | | | | | |
| CCAC | Calif City Air | 45.43 322 | P | P | 22 01 50.0 | +0.8 |
| TPNV | Topopah Spring | 45.58 325 | P | P | 22 01 50.8 | +0.3 |
| PDAR | Pinedale Array | 46.69 335 | LR | LR | 22 22 03.0 | |
| | comp=Z,676nm,18.6s,baz=144,slow=37 | | | | | |
| BGU | Big Grassy Mou | 46.78 331 | P | P | 22 01 59.9 | +0.1 |
| BGU | | | IAmb | IAmb | 22 02 04.1 | |
| | comp=Z,6.8nm,1.3s | | | | | |
| TPH | Tonopah | 46.91 325 | P | P | 22 02 00.1 | -0.8 |
| HVU | Hansel Valley | 47.32 332 | P | P | 22 02 03.5 | -0.6 |
| HVU | | | IAmb | IAmb | 22 02 04.9 | |
| | comp=Z,11nm,1.4s | | | | | |
| NV11 | Mina Array Sit | 47.69 325 | P | P | 22 02 07.0 | +0.1 |
| NV11 | | | IAmb | IAmb | 22 02 25.2 | |
| | comp=Z,11nm,1.5s | | | | | |
| REDW | Red Top Meadow | 47.72 335 | P | P | 22 02 06.5 | -0.7 |
| ELK | Elko | 47.75 329 | P | P | 22 02 06.5 | -0.9 |
| | comp=Z,1.3nm,0.9s,baz=91,slow=4.7,SNR=4.3 | | | | | |
| ELK | | | LR | LR | 22 21 46.6 | |
| | comp=Z,928nm,18.7s,baz=138,slow=36 | | | | | |
| ELK | Elko | 47.75 329 | P | P | 22 02 06.9 | -0.6 |
| ELK | | | IAmb | IAmb | 22 02 09.2 | |
| | comp=Z,8.1nm,1.5s | | | | | |
| NVAR | Mina Array Bea | 47.78 325 | P | P | 22 02 07.5 | -0.3 |
| | comp=Z,1.7nm,1.0s,baz=129,slow=6.3,SNR=9.1 | | | | | |
| NVAR | | | LR | LR | 22 19 45.8 | |
| | comp=Z,403nm,21.9s,baz=147,slow=33 | | | | | |
| NVAR | Mina Array Bea | 47.78 325 | P | P | 22 02 08.7 | +0.9 |
| BMN | Battle Mountai | 48.56 327 | P | P | 22 02 13.3 | -0.4 |
| BMN | | | IAmb | IAmb | 22 02 39.0 | |
| | comp=Z,6.8nm,1.4s | | | | | |
| YHH | Holmes Hill | 48.89 336 | P | P | 22 02 16.1 | -0.2 |
| HLID | Hailey | 49.47 332 | P | P | 22 02 20.4 | -0.2 |
| HLID | | | IAmb | IAmb | 22 02 29.5 | |
| | comp=Z,9.9nm,1.4s | | | | | |
| ULM | Lac du Bonnet | 49.65 351 | P | P | 22 02 20.9 | -0.6 |
| | comp=Z,2.7nm,0.7s,baz=163,slow=9.5,SNR=3.1 | | | | | |
| ULM | | | LR | LR | 22 24 27.4 | |
| | comp=Z,116nm,19.0s,baz=152,slow=38 | | | | | |
| BOZ | Bozeman (W) | 49.87 336 | P | P | 22 02 23.5 | 0.0 |
| MFID | Camas Ranch | 50.02 331 | P | P | 22 02 23.8 | -1.0 |
| MFID | | | IAmb | IAmb | 22 02 31.4 | |
| | comp=Z,10nm,1.5s | | | | | |
| ORV | Oroville | 50.39 324 | P | P | 22 02 28.1 | +0.6 |
| ORV | | | IAmb | IAmb | 22 02 31.6 | |
| | comp=Z,7.2nm,1.3s | | | | | |
| MSO | Missoula | 51.81 335 | P | P | 22 02 36.6 | -1.5 |
| MSO | | | IAmb | IAmb | 22 02 43.3 | |
| | comp=Z,15nm,1.4s | | | | | |
| YBH | Yreka Blue Hor | 52.49 325 | LR | LR | 22 24 54.8 | |
| | comp=Z,331nm,19.3s,baz=142,slow=36 | | | | | |
| NEW | Newport | 54.28 334 | LR | LR | 22 26 43.4 | |
| | comp=Z,371nm,18.2s,baz=139,slow=37 | | | | | |
| SCHQ | Schefferville | 55.52 13 | LR | LR | 22 27 12.7 | |
| | comp=Z,158nm,19.1s,baz=207,slow=36 | | | | | |
| USHA | Ushuaia | 57.60 169 | LR | LR | 22 23 31.2 | |
| | comp=Z,436nm,19.6s,baz=326,slow=31 | | | | | |
| BBB | Bella Bella | 62.05 332 | LR | LR | 22 30 47.3 | |
| | comp=Z,158nm,19.3s,baz=148,slow=36 | | | | | |
| FRB | Frobisher Bay | 63.57 8 | LR | LR | 22 31 29.1 | |
| | comp=Z,353nm,19.2s,baz=192,slow=36 | | | | | |
| YKA | Yellowknife Ar | 64.91 345 | P | P | 22 04 07.5 | -1.8 |
| | comp=Z,1.9nm,1.0s,baz=139,slow=6.7,SNR=13 | | | | | |
| YKA | | | LR | LR | 22 33 55.6 | |
| | comp=Z,265nm,18.6s,baz=124,slow=38 | | | | | |
| PPT | Papeete | 65.94 250 | LR | LR | 22 26 03.7 | |
| | comp=Z,91nm,21.6s,baz=358,slow=30 | | | | | |
| DLBC | Dease Lake | 66.92 336 | LR | LR | 22 34 44.3 | |
| | comp=Z,343nm,18.9s,baz=140,slow=37 | | | | | |
| PMSA | Palmer Station | 67.68 170 | LR | LR | 22 29 18.7 | |
| | comp=Z,153nm,19.6s,baz=353,slow=32 | | | | | |
| SFJD | Kangerlussuaq | 69.95 14 | LR | LR | 22 36 29.6 | |
| | comp=Z,202nm,18.5s,baz=222,slow=37 | | | | | |
| RES | Resolute Bay | 73.57 357 | LR | LR | 22 39 00.8 | |
| | comp=Z,81nm,20.0s,baz=278,slow=37 | | | | | |
| INK | Inuvik | 74.47 343 | P | P | 22 05 07.3 | -0.8 |
| | comp=Z,2.9nm,1.1s,baz=118,slow=3.7,SNR=4.7 | | | | | |
| INK | | | LR | LR | 22 40 34.8 | |
| | comp=Z,301nm,18.8s,baz=112,slow=38 | | | | | |
| INK | Inuvik | 74.47 343 | P | P | 22 05 09.9 | +1.8 |
| INK | | | IAmb | IAmb | 22 05 25.9 | |
| | comp=Z,9.8nm,1.3s | | | | | |
| A36M | Sachs Harbour | 74.99 348 | P | P | 22 05 09.9 | -1.1 |
| A36M | | | IAmb | IAmb | 22 05 14.1 | |
| | comp=Z,6.9nm,1.1s | | | | | |
| KDAK | Kodiak Island | 76.98 330 | LR | LR | 22 38 10.0 | |
| | comp=Z,118nm,18.9s,baz=121,slow=35 | | | | | |
| ILAR | Eielson Array | 77.08 337 | LR | LR | 22 41 10.8 | |
| | comp=Z,271nm,18.2s,baz=132,slow=37 | | | | | |
| BORG | Borgarnes | 78.02 23 | LR | LR | 22 33 42.0 | |
| | comp=Z,293nm,21.2s,baz=173,slow=31 | | | | | |
| MDT | Midelt | 81.52 57 | LR | LR | 22 36 07.2 | |
| | comp=Z,91nm,19.4s,baz=302,slow=31 | | | | | |
| EKA | Eskdalemuir Ar | 84.51 35 | LR | LR | 22 37 17.6 | |
| | comp=Z,118nm,19.9s,baz=274,slow=31 | | | | | |
| JMIC | Jan Mayen | 84.53 19 | LR | LR | 22 42 41.7 | |
| | comp=Z,43nm,19.9s,baz=282,slow=35 | | | | | |
| AFI | Afiamalu | 86.86 256 | LR | LR | 22 38 09.8 | |
| | comp=Z,179nm,18.4s,baz=64,slow=31 | | | | | |
| SNAA | Sanae | 88.80 162 | LR | LR | 22 37 45.6 | |
| | comp=Z,167nm,20.4s,baz=350,slow=30 | | | | | |
| SPITS | Spitsbergen Ar | 91.18 12 | LR | LR | 22 48 23.5 | |
| | comp=Z,202nm,18.1s,baz=23,slow=36 | | | | | |
| DAVOX | Davos/Dischmat | 92.67 43 | LR | LR | 22 44 57.2 | |
| | comp=Z,71nm,18.6s,baz=261,slow=33 | | | | | |
| HFS | Hagfors | 93.42 30 | LR | LR | 22 42 54.0 | |
| | comp=Z,111nm,21.9s,baz=262,slow=32 | | | | | |
| GERES | GERESS Array B | 95.01 41 | LR | LR | 22 43 04.1 | |
| | comp=Z,122nm,21.9s,baz=286,slow=31 | | | | | |
| ARCES | ARCESS Array B | 96.02 19 | LR | LR | 22 45 19.0 | |
| | comp=Z,64nm,21.7s,baz=302,slow=32 | | | | | |
| URZ | Urewera | 96.72 232 | LR | LR | 22 40 57.9 | |
| | comp=Z,177nm,21.2s,baz=106,slow=29 | | | | | |
| VRAC | Vranov | 96.82 40 | LR | LR | 22 44 01.3 | |
| | comp=Z,228nm,21.9s,baz=294,slow=31 | | | | | |
| VAE | Valguarnera | 96.97 52 | LR | LR | 22 44 58.5 | |
| | comp=Z,109nm,19.2s,baz=318,slow=32 | | | | | |
| FINES | FINESS Array B | 99.00 27 | LR | LR | 22 47 09.6 | |
| | comp=Z,83nm,21.6s,baz=277,slow=33 | | | | | |
| H11S2 | WAKE ISLAND Hyl | 106.62 290 | T | T | 00 06 48.3 | |
| | baz=84,slow=75,SNR=10 | | | | | |
| H11S1 | WAKE ISLAND Hyl | 106.62 290 | T | T | 00 06 48.4 | |
| | baz=84,slow=75,SNR=7.9 | | | | | |
| H11S3 | WAKE ISLAND Hyl | 106.63 290 | T | T | 00 06 50.6 | |
| | baz=84,slow=75,SNR=7.1 | | | | | |
| SONM | Songino Array | 130.06 350 | PKP | PKPdf | 22 12 41.1 | +0.6 |
| | comp=Z,0.2nm,0.6s,baz=354,slow=1.4,SNR=4.4 | | | | | |
| MKAR | Makanchi Array | 130.94 11 | PKP | PKPdf | 22 12 42.0 | 0.0 |
| | comp=Z,0.8nm,1.1s,baz=347,slow=5.0,SNR=4.6 | | | | | |
| XAN | Xi'an | 142.44 340 | PKP | PKiKP | 22 13 06.8 | +0.1 |
| XAN | | | pPKP | sPKPdf | 22 13 20.4 | +13 |
| GYA | Guiyang | 150.13 338 | ⇓PKPbc | PKPdf | 22 13 15.8 | -1.2 |
| GYA | | | PP | PP | 22 16 54.5 | -0.5 |
| PZH | PanZhiHua | 151.58 347 | PKPbc | PKPdf | 22 13 18.3 | -0.9 |

*IDC **15** 22:15:39.7±1.2, 15°.49N×120°.75E, h0km, mb3.5/6, mb1 3.7/6, mb1mx3.5/37, mbtmp3.5/6, MS3.8/2, Ms1 3.8/2, ms1mx2.8/50, Error ellipse: s-maj=52.0km s-min=15.8km az=69.0*

*MAN **15** 22:15:43.0, 15°.27N×120°.18E, h4km, mb4.8, ML3.6, MS3.6*

**ISC 15 22:15:46.1±0.8, 15°.34N±0°.07×120°.22E±0°.09, h35km, n12, σ2s06/14, mb3.3/5, 2C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PCPH | Palayan | 0.87 | 75 | ⇑*e*P | | Pn | 22 16 01.3 | -0.6 |
| PCPH | | | | *e*S | | Sn | 22 16 15.5 | +2.2 |
| TGY | Tagaytay City | 1.41 | 151 | Pn | | Pn | 22 16 08.7 | -0.7 |
| | 355nm,0.3s,baz=256,slow=1.1,SNR=12 | | | | | | | |
| TGY | | | | Sn | | Sn | 22 16 26.6 | -0.2 |
| | 452nm,0.3s,baz=92,slow=17,SNR=4.0 | | | | | | | |
| TGY | Tagaytay City | 1.41 | 151 | *e*P | | Pn | 22 16 09.7 | +0.3 |
| TGY | | | | *i* S | | Sn | 22 16 31.0 | +4.2 |
| LQP | Lukban | 1.77 | 134 | ⇑*e*P | | Pn | 22 16 14.5 | +0.2 |
| LQP | | | | *e*S | | Sn | 22 16 37.1 | +1.4 |
| CMAR | Chiang Mai Arr | 20.59 | 282 | P | | P | 22 20 24.6 | +2.3 |
| | 0.8nm,0.7s,baz=95,slow=7.8,SNR=8.1 | | | | | | | |
| SONM | Songino Array | 34.36 | 343 | P | | P | 22 22 29.2 | -0.5 |
| | 0.1nm,0.5s,baz=135,slow=31,SNR=1.9 | | | | | | | |
| WRA | Warramunga Arr | 37.71 | 158 | P | | P | 22 22 55.5 | -3.0 |
| | 0.4nm,0.4s,baz=336,slow=9.5,SNR=5.6 | | | | | | | |
| ASAR | Alice Springs | 41.01 | 161 | P | | P | 22 23 23.8 | -2.3 |
| | 0.4nm,0.6s,baz=342,slow=7.0,SNR=4.4 | | | | | | | |
| MKAR | Makanchi Array | 44.45 | 323 | P | | P | 22 23 54.9 | +1.1 |
| | 0.2nm,0.7s,baz=129,slow=11,SNR=2.0 | | | | | | | |
| DZM | Mont Dzumac | 58.60 | 128 | LR | | LR | 22 49 27.6 | |
| | comp=Z,62nm,20.4s,baz=217,slow=35 | | | | | | | |
| ARU | Arti | 61.77 | 326 | LR | | LR | 22 53 32.7 | |
| | comp=Z,97nm,22.0s,baz=324,slow=37 | | | | | | | |
| FINES | FINESS Array B | 78.64 | 331 | P | | P | 22 27 43.8 | -0.4 |
| | 2.7nm,0.9s,baz=54,slow=9.7,SNR=4.7 | | | | | | | |

*IDC **15** 22:22:01.8±2.5, 20°.15S×66°.09E, h0km, mb3.8/7, mb1 4.0/7, mb1mx3.6/38, mbtmp3.8/7, MS4.0/24, Ms1 4.0/24, ms1mx3.6/79, Error ellipse: s-maj=75.6km s-min=27.3km az=48.0*

**ISC 15 22:22:03.5±2.6, 20°.1S±0°.4×66°.1E±0°.4, h10km, n33, σ0s31/8, mb4.0/8, MS4.0/24, Mauritius-Reunion region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 13.87 | 27 | T | | T | 22 39 17.0 | |
| | baz=205,slow=75,SNR=110 | | | | | | | |
| H08S2 | Diego Garcia H | 13.87 | 27 | T | | T | 22 39 17.6 | |
| | baz=205,slow=75,SNR=52 | | | | | | | |
| H08S3 | Diego Garcia H | 13.88 | 27 | T | | T | 22 39 15.6 | |
| | baz=205,slow=75,SNR=88 | | | | | | | |
| PALK | Pallekele | 30.79 | 29 | LR | | LR | 22 38 10.1 | |
| | comp=Z,247nm,18.4s,baz=313,slow=31 | | | | | | | |
| KMBO | Kilima Mbogo | 33.96 | 300 | LR | | LR | 22 40 19.9 | |
| | comp=Z,138nm,19.6s,baz=91,slow=32 | | | | | | | |
| MATP | Matopo | 35.24 | 263 | LR | | LR | 22 41 18.8 | |
| | comp=Z,83nm,19.6s,baz=86,slow=33 | | | | | | | |
| LSZ | Lusaka | 36.40 | 271 | LR | | LR | 22 42 08.4 | |
| | comp=Z,273nm,21.8s,baz=159,slow=33 | | | | | | | |
| LBTB | Lobatse | 37.63 | 255 | LR | | LR | 22 43 21.3 | |
| | comp=Z,175nm,18.2s,baz=168,slow=34 | | | | | | | |
| PSI | Prapat | 39.45 | 58 | LR | | LR | 22 42 35.9 | |
| | comp=Z,231nm,20.6s,baz=220,slow=31 | | | | | | | |
| SUR | Sutherland | 42.13 | 244 | LR | | LR | 22 44 07.4 | |
| | comp=Z,349nm,20.4s,baz=52,slow=32 | | | | | | | |
| LEM | Lembang | 42.34 | 78 | LR | | LR | 22 43 32.3 | |
| | comp=Z,153nm,21.8s,baz=190,slow=30 | | | | | | | |
| CMAR | Chiang Mai Arr | 50.08 | 42 | P | | P | 22 30 58.7 | -0.2 |
| | 0.5nm,0.4s,baz=232,slow=8.2,SNR=6.2 | | | | | | | |
| CMAR | | | | LR | | LR | 22 48 59.7 | |
| | comp=Z,178nm,20.9s,baz=235,slow=32 | | | | | | | |
| KAPI | Kappang | 54.22 | 81 | LR | | LR | 22 53 25.4 | |
| | comp=Z,43nm,18.6s,baz=283,slow=35 | | | | | | | |
| BATI | Baumata | 56.18 | 89 | P | | P | 22 31 43.9 | -0.2 |
| | 18nm,0.7s,baz=45,slow=4.3,SNR=3.8 | | | | | | | |
| ASAR | Alice Springs | 62.46 | 107 | P | | P | 22 32 27.4 | -0.1 |
| | 0.8nm,0.8s,baz=262,slow=5.7,SNR=5.6 | | | | | | | |
| ASAR | | | | LR | | LR | 22 56 03.6 | |
| | comp=Z,199nm,19.9s,baz=240,slow=33 | | | | | | | |
| WRA | Warramunga Arr | 63.64 | 103 | P | | P | 22 32 35.8 | +0.4 |
| | 1.8nm,1.1s,baz=259,slow=5.5,SNR=5.2 | | | | | | | |
| DAV | Davao City (W) | 64.41 | 71 | LR | | LR | 22 59 30.4 | |
| | comp=Z,65nm,18.1s,baz=295,slow=35 | | | | | | | |
| SNAA | Sanae | 64.44 | 199 | LR | | LR | 22 57 31.0 | |
| | comp=Z,135nm,18.2s,baz=52,slow=33 | | | | | | | |
| STKA | Stephens Creek | 67.65 | 117 | LR | | LR | 22 57 48.9 | |
| | comp=Z,119nm,20.6s,baz=207,slow=32 | | | | | | | |
| MKAR | Makanchi Array | 68.20 | 12 | P | | P | 22 33 04.3 | +0.3 |
| | 1.0nm,0.9s,baz=189,slow=5.6,SNR=7.1 | | | | | | | |
| CTA | Charters Tower | 74.45 | 106 | LR | | LR | 23 03 59.3 | |
| | comp=Z,175nm,19.3s,baz=250,slow=34 | | | | | | | |
| DBIC | Dimbokro | 74.65 | 283 | LR | | LR | 23 05 15.7 | |
| | comp=Z,78nm,18.7s,baz=136,slow=35 | | | | | | | |
| ZALV | Zalesovo Beam | 75.52 | 11 | P | | P | 22 33 48.0 | +0.2 |
| | 1.2nm,0.8s,baz=206,slow=5.6,SNR=6.0 | | | | | | | |
| JOW | Kunigami | 76.21 | 54 | LR | | LR | 23 06 56.9 | |
| | comp=Z,80nm,18.6s,baz=17,slow=35 | | | | | | | |
| SONM | Songino Array | 76.70 | 27 | P | | P | 22 33 55.0 | +0.1 |
| | 0.8nm,0.9s,baz=208,slow=4.4,SNR=5.7 | | | | | | | |
| AKASG | Malin Array Be | 77.66 | 337 | P | | P | 22 33 59.8 | -0.3 |
| | 0.4nm,0.4s,baz=143,slow=4.3,SNR=4.8 | | | | | | | |
| PMG | Port Moresby | 78.47 | 96 | LR | | LR | 23 05 16.0 | |
| | comp=Z,111nm,21.1s,baz=244,slow=33 | | | | | | | |
| KSRS | Korea Array | 81.61 | 45 | LR | | LR | 23 10 21.1 | |
| | comp=Z,77nm,19.3s,baz=240,slow=36 | | | | | | | |
| MDT | Midelt | 85.61 | 307 | LR | | LR | 23 15 22.5 | |
| | comp=Z,55nm,18.3s,baz=101,slow=37 | | | | | | | |
| HNR | Honiara | 90.36 | 100 | LR | | LR | 23 13 47.4 | |
| | comp=Z,107nm,18.3s,baz=3.5,slow=34 | | | | | | | |
| DZM | Mont Dzumac | 91.63 | 114 | LR | | LR | 23 15 28.8 | |
| | comp=Z,66nm,18.0s,baz=263,slow=35 | | | | | | | |
| ASAJ | Asahikawa | 94.55 | 45 | LR | | LR | 23 18 35.7 | |
| | comp=Z,68nm,18.3s,baz=170,slow=36 | | | | | | | |
| EKA | Eskdalemuir Ar | 95.22 | 328 | LR | | LR | 23 19 37.8 | |
| | comp=Z,34nm,18.0s,baz=296,slow=36 | | | | | | | |

**IDC 15 22:37:05.6±2.6, 17°.47S×178°.58W, h624km±22km, mb2.8/3, mb1 3.1/4, mb1mx2.6/40, mbtmp3.7/4, Error ellipse: s-maj=114.5km s-min=30.4km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.23 | 265 | P | | P | 22 38 28.2 | +0.1 |
| | 1.3nm,0.3s,baz=131,slow=11,SNR=9.6 | | | | | | | |
| ASAR | Alice Springs | 44.75 | 254 | P | | P | 22 44 25.6 | -0.2 |
| | 1.2nm,1.1s,baz=93,slow=7.8,SNR=5.9 | | | | | | | |
| ILAR | Eielson Array | 85.50 | 13 | P | | P | 22 48 38.0 | -0.5 |
| | 0.3nm,0.4s,baz=219,slow=4.7,SNR=7.1 | | | | | | | |
| TXAR | Lajitas Array | 85.90 | 58 | P | | P | 22 48 41.4 | 0.0 |
| | 0.5nm,0.8s,baz=221,slow=5.0,SNR=5.2 | | | | | | | |
| GERES | GERESS Array B | 147.15 | 345 | PKPbc | | PKPbc | 22 55 40.1 | 0.0 |
| | 0.5nm,0.4s,baz=25,slow=3.3,SNR=6.3 | | | | | | | |

*IDC **15** 22:37:43.9±2.0, 20°.09S×66°.27E, h0km, mb3.8/9, mb1 4.0/9, mb1mx3.6/53, mbtmp3.8/9, MS3.7/8, Ms1 3.7/8, ms1mx3.2/76, Error ellipse: s-maj=66.9km s-min=25.5km az=43.0*

**ISC 15 22:37:45.8±1.9, 20°.1S±0°.4×66°.3E±0°.3, h10km, n20, σ1s04/10, mb4.0/9, MS3.6/8, Mauritius-Reunion region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 13.70 | 27 | T | | T | 22 55 21.8 | |
| | baz=205,slow=75,SNR=79 | | | | | | | |
| H08S2 | Diego Garcia H | 13.71 | 27 | T | | T | 22 55 26.7 | |
| | baz=205,slow=75,SNR=60 | | | | | | | |
| H08S3 | Diego Garcia H | 13.72 | 27 | T | | T | 22 55 24.4 | |
| | baz=205,slow=75,SNR=86 | | | | | | | |
| PALK | Pallekele | 30.62 | 29 | LR | | LR | 22 54 25.3 | |
| | comp=Z,100nm,18.6s,baz=298,slow=33 | | | | | | | |
| MATP | Matopo | 35.42 | 263 | LR | | LR | 22 58 35.8 | |
| | comp=Z,96nm,18.6s,baz=276,slow=35 | | | | | | | |
| LSZ | Lusaka | 36.58 | 271 | LR | | LR | 22 58 26.7 | |
| | comp=Z,223nm,21.5s,baz=232,slow=34 | | | | | | | |
| PSI | Prapat | 39.25 | 58 | LR | | LR | 22 57 45.3 | |
| | comp=Z,85nm,19.6s,baz=264,slow=31 | | | | | | | |
| SUR | Sutherland | 42.33 | 244 | LR | | LR | 23 01 08.2 | |
| | comp=Z,93nm,19.2s,baz=158,slow=33 | | | | | | | |
| TSUM | Tsumeb | 45.77 | 262 | LR | | LR | 23 03 34.3 | |
| | comp=Z,90nm,18.9s,baz=156,slow=34 | | | | | | | |
| CMAR | Chiang Mai Arr | 49.89 | 42 | P | | P | 22 46 39.7 | -0.1 |
| | 0.9nm,0.3s,baz=229,slow=9.5,SNR=4.9 | | | | | | | |
| CMAR | | | | LR | | LR | 23 04 42.7 | |
| | comp=Z,68nm,21.9s,baz=240,slow=32 | | | | | | | |
| FITZ | Fitzroy Crossi | 55.85 | 99 | LR | | LR | 23 10 16.6 | |
| | comp=Z,98nm,19.2s,baz=138,slow=35 | | | | | | | |
| ASAR | Alice Springs | 62.32 | 107 | P | | P | 22 48 08.6 | -0.3 |
| | 0.9nm,0.8s,baz=262,slow=6.1,SNR=8.5 | | | | | | | |
| WRA | Warramunga Arr | 63.49 | 103 | P | | P | 22 48 16.4 | -0.2 |
| | 2.2nm,1.1s,baz=262,slow=6.0,SNR=5.0 | | | | | | | |
| BRTR | Keskin Array B | 66.83 | 333 | P | | P | 22 48 39.2 | +1.3 |
| | 0.9nm,0.7s,baz=312,slow=38,SNR=2.1 | | | | | | | |
| KBZ | Khabaz | 67.00 | 342 | P | | P | 22 48 37.4 | -1.3 |
| | 1.2nm,0.9s,baz=208,slow=8.7,SNR=3.0 | | | | | | | |
| MKAR | Makanchi Array | 68.08 | 12 | P | | P | 22 48 44.5 | -1.1 |
| | 0.5nm,0.9s,baz=203,slow=5.0,SNR=3.9 | | | | | | | |
| ZALV | Zalesovo Beam | 75.40 | 11 | P | | P | 22 49 29.9 | +0.5 |
| | 0.8nm,0.7s,baz=225,slow=3.6,SNR=4.7 | | | | | | | |
| SONM | Songino Array | 76.54 | 26 | P | | P | 22 49 37.7 | +1.5 |
| | 0.1nm,0.4s,baz=90,slow=16,SNR=2.8 | | | | | | | |
| AKASG | Malin Array Be | 77.65 | 337 | P | | P | 22 49 41.5 | -0.7 |
| | 0.2nm,0.4s,baz=64,slow=28,SNR=1.5 | | | | | | | |
| YKA | Yellowknife Ar | 137.59 | 1 | PKP | | PKPdf | 22 57 09.7 | +0.1 |
| | 0.1nm,0.4s,baz=125,slow=45,SNR=2.0 | | | | | | | |

*IDC **15** 22:39:07.2±1.2, 3°.99N×126°.09E, h0km, mb3.6/7, mb1 3.7/7, mb1mx3.5/42, mbtmp3.6/7, Error ellipse: s-maj=123.1km s-min=17.9km az=70.0*

**ISC 15 22:39:19.0±1.0, 4°.0N±0°.2×126°.0E±0°.7, h107km, n8, σ1s71/8, mb3.4/7, 1C, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| KCP | Kidapawan | 3.14 | 343 | ⇑*e*P | | Pn | 22 40 04.8 | -2.1 |
| FITZ | Fitzroy Crossi | 21.94 | 181 | P | | P | 22 44 03.3 | -0.7 |
| | 1.8nm,0.9s,baz=42,slow=12,SNR=1.6 | | | | | | | |
| WRA | Warramunga Arr | 25.14 | 161 | P | | P | 22 44 33.5 | -0.9 |
| | 0.7nm,0.7s,baz=342,slow=4.4,SNR=4.4 | | | | | | | |
| ASAR | Alice Springs | 28.54 | 165 | P | | P | 22 45 03.3 | -1.5 |
| | 0.2nm,0.3s,baz=339,slow=7.0,SNR=1.5 | | | | | | | |
| STKA | Stephens Creek | 38.62 | 159 | P | | P | 22 46 33.3 | +1.3 |
| | 3.1nm,0.9s,baz=321,slow=12,SNR=4.0 | | | | | | | |
| SONM | Songino Array | 46.83 | 342 | P | | P | 22 47 39.1 | +0.9 |
| | 0.2nm,0.5s,baz=151,slow=5.9,SNR=4.6 | | | | | | | |
| MKAR | Makanchi Array | 56.94 | 325 | P | | P | 22 48 54.4 | +1.2 |
| | 0.5nm,0.5s,baz=121,slow=7.2,SNR=8.4 | | | | | | | |
| ZALV | Zalesovo Beam | 60.04 | 333 | P | | P | 22 49 16.2 | +1.6 |
| | 0.2nm,0.3s,baz=197,slow=4.5,SNR=1.5 | | | | | | | |

*SOME **15** 22:39:53.0, 42°.38N×80°.65E, h10km*
*KRNET **15** 22:39:53.7±0.1, 40°.79N×80°.06E, mb2.3*

**ISC 15 22:39:53.4±3.2, 41°.8N±0°.2×80°.3E±0°.1, h6km±25km, n8, σ1s62/16, 8C, Southern Xin

*ellipse: s-maj=86.6km s-min=32.7km az=161.0*
**ISC 15 22:42:51.9**±1.7, **49°1S**±0″2×**164°6E**±0″1, **h35**km, **n29**, σ1§**33**/39, **Auckland Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APZ** | **The Paps** | **3.23** | **46** | P | **Pn** | **22 43 39.7** | **-0.4** |
| APZ | | | | S | **Sn** | **22 44 16.2** | **-1.2** |
| **PYZ** | **Puysegur Point** | **3.28** | **26** | P | **Pn** | **22 43 39.3** | **-1.5** |
| **WHZ** | **Wether Hill Ro** | **3.95** | **36** | P | **Pn** | **22 43 49.3** | **-0.7** |
| **SYZ** | **Scrubby Hill** | **4.00** | **51** | P | **Pn** | **22 43 50.5** | **-0.2** |
| **DCZ** | **Deep Cove** | **4.06** | **26** | P | **Pn** | **22 43 50.2** | **-1.2** |
| **MLZ** | **Mavora Lakes** | **4.46** | **33** | P | **Pn** | **22 43 57.9** | **+0.9** |
| MLZ | | | | S | **Sn** | **22 44 48.9** | **+1.2** |
| **TUZ** | **Tuapeka** | **4.65** | **49** | P | **Pn** | **22 43 59.3** | **-0.3** |
| TUZ | | | | S | **Sn** | **22 44 52.9** | **+0.6** |
| **MSZ** | **Milford Sound** | **5.01** | **28** | P | **Pn** | **22 44 06.7** | **+2.3** |
| **EAZ** | **Earnscleugh** | **5.05** | **41** | P | **Pn** | **22 44 04.5** | **-0.5** |
| EAZ | | | | S | **Sn** | **22 45 03.3** | **+1.2** |
| **WKZ** | **Wanaka** | **5.26** | **36** | P | **Pn** | **22 44 09.3** | **+1.4** |
| WKZ | | | | S | **Sn** | **22 45 09.8** | **+2.5** |
| **ODZ** | **Otahua Downs** | **5.80** | **47** | P | **Pn** | **22 44 15.0** | **-0.4** |
| **JCZ** | **Jackson Bay** | **5.82** | **31** | P | **Pn** | **22 44 18.6** | **+2.9** |
| **LBZ** | **Lake Benmore** | **6.10** | **41** | P | **Pn** | **22 44 17.7** | **-1.8** |
| LBZ | | | | S | **Sn** | **22 45 27.1** | **-0.9** |
| **TMZ** | **Timaru** | **6.47** | **45** | P | **Pn** | **22 44 24.2** | **-0.4** |
| **FOZ** | **Fox Glacier** | **6.66** | **35** | P | **Pn** | **22 44 27.5** | **+0.4** |
| FOZ | | | | S | **Sn** | **22 45 41.0** | **-0.7** |
| **ARCZ** | **Arundel** | **6.88** | **43** | P | **Pn** | **22 44 33.1** | **+2.8** |
| ARCZ | | | | S | **Sn** | **22 45 46.1** | **-1.2** |
| **RPZ** | **Rata Peaks** 2.1nm,0.3s,baz=211,slow=13,SNR=5.6 | **7.01** | **42** | Pn | **Pn** | **22 44 30.2** | **-1.8** |
| RPZ | | | | Sn | **Sn** | **22 45 49.8** | **-0.6** |
| **GCSZ** | **Gaunt Creek Bo** 5.0nm,0.3s,baz=205,slow=23,SNR=9.0 | **7.04** | **36** | P | **Pn** | **22 44 32.6** | **+0.3** |
| GCSZ | | | | S | **Sn** | **22 45 49.5** | **-1.6** |
| **OXZ** | **Oxford** | **7.76** | **44** | P | **Pn** | **22 44 41.6** | **-0.6** |
| **AKCZ** | **Akaroa Harbour** | **7.77** | **50** | P | **Pn** | **22 44 43.7** | **+1.3** |
| **OKCZ** | **Okains Bay** | **7.95** | **50** | P | **Pn** | **22 44 46.8** | **+1.9** |
| **LTZ** | **Lake Taylor** | **8.29** | **43** | P | **Pn** | **22 44 50.9** | **+1.3** |
| **DSZ** | **Denniston Nort** | **8.95** | **37** | P | **Pn** | **22 44 58.0** | **-0.6** |
| **MRNZ** | **Matariki Terra** | **9.62** | **40** | P | **Pn** | **22 45 08.1** | **+0.3** |
| **QRZ** | **Quartz Range** | **10.02** | **37** | P | **Pn** | **22 45 13.0** | **-0.2** |
| **CTZ** | **Chatham Island** | **14.00** | **74** | P | **Pn** | **22 46 07.2** | **-0.4** |
| **ASAR** | **Alice Springs** 1.0nm,0.9s,baz=140,slow=7.6,SNR=4.3 | **35.05** | **305** | P | **P** | **22 49 40.9** | **-0.6** |
| **WRA** | **Warramunga Arr** 0.7nm,0.8s,baz=134,slow=7.6,SNR=4.1 | **37.89** | **309** | P | **P** | **22 50 04.6** | **-1.0** |
| **ARCES** | **ARCESS Array B** 1.5nm,0.8s,baz=40,slow=2.1,SNR=4.6 | **151.71** | **331** | PKPbc | **PKiKP** | **23 02 43.0** | **+1.5** |

*DDA **15** 23:05:05.3±0.0,3 4°.54N×26°.98E,h7km±4km,ML3.1*
*NIC **15** 23:05:06.3±0.0,3 4°.75N×26°.84E,h5km±2km,Ml4.1/4*
*ISK **15** 23:05:07.9,35°.04N×26°.89E,h5km,ML3.5/19*
*THE **15** 23:05:09.8,34°.95N×26°.80E,h2km±2km,ML3.3/4,Error ellipse: s-maj=6.0km s-min=0.9km az=171.0*
*NEIC **15** 23:05:09.1±2.4,34°.95N±0°.08×26°.93E±0°.04,h10km±1km, mb4.2/11,ML3.8(THE),Error ellipse: s-maj=13.9km s-min=6.3km az=187.0*
*ATH **15** 23:05:10.6,35°.10N×26°.80E,h28km±9km,ML3.3/4,Error ellipse: s-maj=12.4km s-min=2.8km az=172.0*
*IDC **15** 23:05:12.8±1.6,34°.86N×26°.99E,h46km±20km,mb3.8/6, mb1 3.7/11,mb1mx3.3/43,mbtmp3.8/11,ML3.5/5,Error ellipse: s-maj=26.1km s-min=12.7km az=8.0*
**ISC 15 23:05:08.1**±1.3, **34°88N**±0°.05×**26°88E**±0°.03, **h14**km±8km, **n88**, σ1§**15**/109, **mb4.2**/13, **Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.59** | **293** | P | **Pg** | **23 05 19.8** | **+0.1** |
| ZKR | | | | S | **Sb** | **23 05 28.2** | **-0.2** |
| **ZKR** | 9μm,0.4s **Zakros** | **0.59** | **293** | P | **Pg** | **23 05 19.7** | **+0.1** |
| ZKR | | | | S | **Sb** | **23 05 28.4** | **0.0** |
| ZKR | comp=N,10944μm,0.4s | | | AML | AML | 23 05 28.6 | |
| ZKR | comp=E,23070μm,0.4s | | | AML | AML | 23 05 28.9 | |
| **ZKR** | **Zakros** | **0.59** | **293** | PG | **Pg** | **23 05 19.7** | **+0.1** |
| ZKR | | | | SG | **Sb** | **23 05 28.5** | **+0.1** |
| **ZKR** | **Zakros** | **0.59** | **293** | P | **Pg** | **23 05 19.3** | **-0.3** |
| ZKR | comp=E,10nm,0.4s | | | AMI | | 23 05 27.4 | |
| ZKR | comp=E,10nm,0.4s | | | AMI | | 23 05 27.4 | |
| ZKR | comp=E,21nm,0.4s | | | AMI | | 23 05 27.7 | |
| ZKR | comp=E,21nm,0.4s | | | AMI | | 23 05 27.7 | |
| ZKR | | | | S | **Sb** | **23 05 28.7** | **+0.4** |
| **FRMA** | **Ierapetra Chan** | **0.95** | **278** | P | **Pb** | **23 05 24.6** | **-1.7** |
| FRMA | comp=E,668nm,0.4s | | | S | **Sb** | **23 05 37.2** | **-1.5** |
| **NPS** | **Neapolis** | **1.10** | **290** | P | **Pb** | **23 05 29.1** | **+0.1** |
| NPS | comp=E,2μm,0.6s | | | S | **Sg** | **23 05 43.9** | **+0.1** |
| **NPS** | **Neapolis** | **1.10** | **290** | P | **Pg** | **23 05 29.4** | **0.0** |
| NPS | | | | S | **Sb** | **23 05 41.6** | **-1.6** |
| NPS | comp=E,4748μm,0.6s | | | AML | AML | 23 05 49.4 | |
| NPS | comp=N,2921μm,0.7s | | | AML | AML | 23 05 52.1 | |
| **HRKL** | **Herakleio** | **1.52** | **287** | PN | **Pg** | **23 05 36.9** | **-0.4** |
| HRKL | | | | SN | **Sg** | **23 05 58.0** | **+1.0** |
| **KSTL** | **Kastelli Herak** | **1.54** | **286** | P | **Pn** | **23 05 32.9** | **-2.2** |
| **ARG** | **Arkhangelos** | **1.68** | **37** | P | **Pb** | **23 05 38.6** | **-0.1** |
| ARG | comp=N,715nm,0.4s | | | S | **Sb** | **23 06 00.5** | **+0.8** |
| **ARG** | **Arkhangelos** | **1.68** | **37** | P | **Pb** | **23 05 38.1** | **-0.6** |
| ARG | comp=E,1847μm,0.5s | | | AML | AML | 23 06 04.8 | |
| ARG | comp=N,1561μm,0.7s | | | AML | AML | 23 06 05.9 | |
| **ARG** | **Arkhangelos** | **1.68** | **37** | PN | **Pb** | **23 05 38.2** | **-0.6** |
| ARG | | | | SN | **Sb** | **23 05 59.6** | **-0.1** |
| **ARG** | **Arkhangelos** | **1.68** | **37** | P | **Pb** | **23 05 38.1** | **-0.6** |
| ARG | | | | S | **Sg** | **23 06 02.3** | **+0.2** |
| **IDI** | **Anoyia** comp=N,16nm,0.3s,baz=86,slow=17,SNR=73 | **1.68** | **285** | P | **Pg** | **23 05 40.2** | **-0.2** |
| IDI | comp=N,32nm,0.3s,baz=3,3,slow=16,SNR=6.9 | | | S | **Sg** | **23 06 02.9** | **+0.8** |
| **IDI** | **Anoyia** | **1.68** | **285** | P | **Pb** | **23 05 39.5** | **+0.7** |
| IDI | comp=N,908μm,0.8s | | | AML | AML | 23 06 10.0 | |
| IDI | comp=E,736μm,0.4s | | | AML | AML | 23 06 15.0 | |
| **IDI** | **Anoyia** | **1.68** | **285** | PN | **Pb** | **23 05 39.6** | **+0.8** |
| IDI | | | | SN | **Sg** | **23 06 02.5** | **+0.3** |
| **IDI** | **Anoyia** | **1.68** | **285** | | **Pb** | **23 05 39.3** | **+0.5** |
| **KOSK** | **Kos Island** | **1.87** | **3** | PN | **Pn** | **23 05 40.2** | **+0.6** |
| KOSK | | | | SN | **Sn** | **23 06 03.9** | **+1.0** |
| **TURN** | **Turunc** | **2.19** | **30** | PN | **Pn** | **23 05 44.9** | **+0.9** |
| **TURN** | **Turunc** | **2.19** | **30** | P | **Pn** | **23 05 45.9** | **-1.6** |
| TURN | | | | S | **Sb** | **23 06 13.3** | **-1.2** |
| TURN | comp=E,169nm,0.7s | | | *i* AML | AML | 23 06 19.0 | |
| TURN | comp=E,147nm,0.4s | | | *i* AML | AML | 23 06 19.0 | |
| **BODT** | **Bodrum** | **2.20** | **9** | PN | **Pn** | **23 05 44.7** | **+0.4** |
| **VAM** | **Vamos** | **2.25** | **284** | P | **Pb** | **23 05 48.0** | **-0.6** |
| **GVD** | **Gavdhos** | **2.29** | **270** | P | **Pb** | **23 05 48.6** | **-0.6** |
| **GVD** | **Gavdhos** | **2.29** | **270** | PN | **Pb** | **23 05 48.9** | **-0.3** |
| **DALY** | **Dalyan (Mula)** | **2.41** | **36** | PN | **Pn** | **23 05 48.3** | **+1.2** |
| **IMMV** | **Iera Moni Meta** | **2.44** | **285** | P | **Pb** | **23 05 50.1** | **-1.6** |
| **IMMV** | **Iera Moni Meta** | **2.44** | **285** | PN | **Pb** | **23 05 50.8** | **-0.9** |
| **FETY** | **Fethiye** | **2.51** | **45** | PN | **Pn** | **23 05 48.9** | **+0.5** |
| **FETY** | **Fethiye** | **2.51** | **45** | P | **Pn** | **23 05 48.7** | **+0.2** |
| FETY | | | | S | **Sg** | **23 06 28.8** | **+0.1** |
| FETY | comp=E,92nm,1.0s | | | *i* AML | AML | 23 06 36.0 | |
| FETY | comp=E,75nm,0.5s | | | *i* AML | AML | 23 06 40.0 | |
| **MLSB** | **Milas** | **2.52** | **17** | PN | **Pn** | **23 05 48.9** | **+0.3** |
| **YER** | **Yerkesik** | **2.52** | **26** | PN | **Pn** | **23 05 49.1** | **+0.5** |
| **KSL** | **Kastellorizon** | **2.54** | **59** | P | **Pn** | **23 05 50.0** | **+1.1** |
| KSL | | | | S | **Sb** | **23 06 22.8** | **-1.8** |
| **AKAS** | **Kas** | **2.60** | **58** | PN | **Pn** | **23 05 50.8** | **+1.0** |
| **AKAS** | **Kas** | **2.60** | **58** | | **Pn** | **23 05 50.9** | **+1.1** |
| **AKAS** | **Kas** | **2.60** | **58** | P | **Pn** | **23 05 50.6** | **+0.7** |
| AKAS | | | | S | **Sn** | **23 06 21.9** | **+0.6** |
| AKAS | comp=E,228nm,0.5s | | | *i* AML | AML | 23 06 28.0 | |
| AKAS | comp=E,82nm,0.4s | | | *i* AML | AML | 23 06 29.0 | |
| **KNDR** | **Palaiochora Ch** | **2.64** | **279** | PN | **Pb** | **23 05 54.0** | **-1.1** |
| **MULA** | **Mugla, Merkez-** | **2.64** | **26** | P | **Pn** | **23 05 52.5** | **+2.1** |
| MULA | | | | S | **Sb** | **23 06 27.9** | **+0.3** |
| MULA | comp=E,47nm,1.1s | | | *i* AML | AML | 23 06 41.0 | |
| MULA | comp=E,118nm,0.8s | | | *i* AML | AML | 23 06 42.0 | |
| **GCAM** | **G?zelcaml?** | **2.83** | **6** | PN | **Pn** | **23 05 53.5** | **+0.7** |
| **CAME** | **Cameli-Denizli** | **2.85** | **43** | PN | **Pn** | **23 05 54.1** | **+0.9** |
| **CAEL** | **Denizli, Camel** | **2.99** | **41** | P | **Pn** | **23 05 56.3** | **+1.1** |
| **TAVA** | **DENIZLI_Tavas** | **3.06** | **32** | P | **Pn** | **23 05 56.3** | **+0.2** |
| TAVA | | | | S | **Sb** | **23 06 37.9** | **-1.6** |
| TAVA | comp=E,67nm,0.7s | | | *i* AML | AML | 23 06 48.0 | |
| TAVA | comp=E,56nm,0.5s | | | *i* AML | AML | 23 06 53.0 | |
| **ELL** | **Elmali** | **3.09** | **52** | PN | **Pn** | **23 05 58.6** | **+2.1** |
| **ELL** | **Elmali** | **3.09** | **52** | | **Pn** | **23 05 58.3** | **+1.8** |
| **ELL** | **Elmali** | **3.09** | **52** | P | **Pn** | **23 05 57.6** | **+1.1** |
| **AKUM** | **Antalya-Kumluc** | **3.17** | **62** | P | **Pn** | **23 05 58.6** | **+1.1** |
| AKUM | | | | S | **Sn** | **23 06 36.1** | **+1.0** |
| AKUM | comp=E,32nm,0.5s | | | *i* AML | AML | 23 06 37.0 | |
| AKUM | comp=E,45nm,0.4s | | | *i* AML | AML | 23 06 38.0 | |
| **GOLH** | **Golhisar** | **3.20** | **42** | P | **Pn** | **23 05 59.2** | **+1.1** |
| GOLH | comp=E,83nm,0.8s | | | *i* AML | AML | 23 07 07.0 | |
| GOLH | comp=E,59nm,0.6s | | | *i* AML | AML | 23 07 07.0 | |
| **URLA** | **Izmir** | **3.48** | **356** | PN | **Pn** | **23 06 02.2** | **+0.4** |
| **OSC1** | **CSNet OBS 1** | **3.90** | **109** | P | **Pn** | **23 06 06.4** | **-1.1** |
| **ISP** | **Isparta** | **4.16** | **44** | Pn | **Pn** | **23 06 12.5** | **+1.3** |
| **AKMS** | **Akamas** | **4.49** | **87** | P | **Pn** | **23 06 16.0** | **+0.4** |
| AKMS | comp=E,0.6nm,0.4s | | | AMI | | 23 07 09.5 | |
| AKMS | comp=E,0.8nm,0.7s | | | AMI | | 23 07 09.9 | |
| **NATA** | **Nata** | **4.69** | **90** | P | **Pn** | **23 06 19.0** | **+0.7** |
| NATA | | | | S | **Sn** | **23 07 15.7** | **+3.3** |
| **ALFC** | **Alefka** | **4.71** | **85** | P | **Pn** | **23 06 18.5** | **-0.2** |
| ALFC | comp=E,0.5nm,0.9s | | | AMI | | 23 07 12.9 | |
| ALFC | comp=E,0.7nm,0.8s | | | AMI | | 23 07 12.9 | |
| **OSC2** | **CSNet OBS 4** | **4.83** | **110** | S | **Sn** | **23 07 17.7** | **+1.7** |
| **SZAC** | **Souni** | **4.94** | **90** | P | **Pn** | **23 06 22.1** | **+0.2** |
| SZAC | comp=E,0.2nm,0.8s | | | AMI | | 23 07 19.5 | |
| SZAC | comp=E,0.4nm,0.5s | | | AMI | | 23 07 20.5 | |
| **ASGA** | **Asgata** | **5.24** | **89** | P | **Pn** | **23 06 26.0** | **0.0** |
| **CSS** | **Matiatis** | **5.30** | **87** | P | **Pn** | **23 06 27.7** | **+0.8** |
| **AGG** | **Agios Georgios** | **5.51** | **320** | | **Pn** | **23 06 33.0** | **+3.4** |
| **ALN** | **Alexandroupoli** | **6.04** | **354** | Pn | **Pn** | **23 06 37.1** | **+0.2** |
| **LIT** | **Litokhoron** | **6.27** | **328** | Pn | **Pn** | **23 06 41.3** | **+1.2** |
| **FNA** | **Florina** | **7.32** | **325** | Pn | **Pn** | **23 06 57.5** | **+2.9** |
| **MMAI** | **Mount Meron Ar** comp=E,1.3nm,0.3s,baz=287,slow=11,SNR=11 | **7.33** | **102** | P | **Pn** | **23 06 55.2** | **+0.5** |
| **VTS** | **Vitosha** | **8.23** | **341** | Pn | **Pn** | **23 07 08.2** | **+1.1** |
| **EIL** | **Elat** comp=E,0.3nm,0.3s,baz=66,slow=18,SNR=1.9 | **8.59** | **125** | P | **Pn** | **23 07 13.6** | **+1.7** |
| **TIP** | **Timpagrande** | **9.15** | **301** | Pn | **Pn** | **23 07 19.2** | **-0.6** |
| **RAFF** | **Raffo Rosso** | **10.40** | **287** | Pn | **Pn** | **23 07 36.4** | **-0.4** |
| **KBZ** | **Khabaz** comp=E,0.1nm,0.3s,baz=261,slow=11,SNR=7.3 | **15.21** | **50** | P | **P** | **23 08 45.1** | **-2.2** |
| **AKASG** | **Malin Array Be** comp=E,0.5nm,0.3s,baz=195,slow=11,SNR=5.9 | **15.90** | **5** | P | **Pn** | **23 08 52.6** | **+1.3** |
| **VRAC** | **Vranov** | **16.29** | **335** | *e*PN | **P** | **23 08 58.0** | **-1.2** |
| **MORC** | **Moravsky Berou** | **16.39** | **338** | P | **Pn** | **23 08 58.8** | **+1.2** |
| MORC | comp=Z,5.3nm,0.4s | | | IAmb | IAmb | 23 09 02.2 | |
| **GERES** | **GERESS Array B** comp=Z,0.1nm,0.3s,baz=146,slow=12,SNR=2.5 | **17.02** | **329** | P | **P** | **23 09 08.3** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.4nm,0.5s,baz=34,slow=8.6,SNR=4.3 | **31.41** | **233** | P | **P** | **23 11 30.3** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.9nm,1.1s | **31.41** | **233** | IAmb | IAmb | 23 11 33.2 | |
| **KURK** | **Kurchatov** | **40.27** | **51** | P | **P** | **23 12 44.4** | **+0.1** |
| KURK | comp=Z,2.9nm,0.6s | | | IAmb | IAmb | 23 12 45.1 | |
| **MK31** | **Makanchi Array** | **42.75** | **56** | P | **P** | **23 13 05.4** | **+0.5** |
| MK31 | comp=Z,1.6nm,0.8s | | | IAmb | IAmb | 23 13 05.9 | |
| **MKAR** | **Makanchi Array** comp=Z,1.6nm,0.6s,baz=280,slow=7.0,SNR=24 | **42.75** | **56** | P | **P** | **23 13 05.3** | **+0.5** |
| **ZAA0** | **Zalesovo Array** | **44.18** | **46** | P | **P** | **23 13 15.7** | **-0.6** |
| ZAA0 | comp=Z,3.5nm,0.5s | | | IAmb | IAmb | 23 13 16.2 | |
| **ZALV** | **Zalesovo Beam** comp=Z,3.4nm,0.5s,baz=270,slow=8.6,SNR=20 | **44.18** | **46** | P | **P** | **23 13 15.8** | **-0.4** |
| **NRIK** | **Noril'sk** comp=Z,0.9nm,0.4s,baz=190,slow=5.0,SNR=3.7 | **47.54** | **25** | P | **P** | **23 13 43.1** | **+0.7** |
| **SONM** | **Songino Array** comp=Z,0.4nm,0.5s,baz=288,slow=7.1,SNR=6.7 | **58.57** | **51** | P | **P** | **23 15 04.8** | **+0.5** |
| **SONM** | **Songino Array** | **58.57** | **51** | P | **P** | **23 15 04.0** | **-0.3** |
| **BATG** | **Bathurst New B** | **67.15** | **312** | P | **P** | **23 15 59.1** | **-2.2** |
| BATG | comp=Z,3.4nm,1.0s | | | IAmb | IAmb | 23 16 02.2 | |
| **GGN** | **Saint George** | **68.64** | **311** | P | **P** | **23 16 12.1** | **+1.4** |
| **I63A** | **Otisfield** | **71.49** | **311** | P | **P** | **23 16 28.8** | **+0.7** |
| I63A | comp=Z,5.2nm,0.9s | | | IAmb | IAmb | 23 16 40.4 | |
| **YKA** | **Yellowknife Ar** comp=Z,0.2nm,0.7s,baz=37,slow=5.1,SNR=4.9 | **78.14** | **343** | P | **P** | **23 17 04.0** | **-2.4** |
| **IMAR** | **Indian Mountai** | **79.46** | **0** | P | **P** | **23 17 12.8** | **-0.8** |
| **MAGL** | **Barre de l'ile** | **79.58** | **282** | P | **P** | **23 17 16.5** | **+1.4** |
| **WRH** | **Wood River Hil** | **80.90** | **358** | P | **P** | **23 17 19.5** | **-1.8** |
| WRH | comp=Z,2.4nm,1.1s | | | IAmb | IAmb | 23 17 20.5 | |
| **PETK** | **Petropavlovsk-** comp=Z,2.0nm,0.8s,baz=283,slow=13,SNR=2.1 | **82.52** | **27** | P | **P** | **23 17 29.2** | **-0.9** |

*IDC **15** 23:27:00.5±2.7,2°.22S×140°.59E,h38km±27km,mb3.5/6, mb1 3.8/7,mb1mx3.6/31,mbtmp3.7/7,ML3.6/1,Error ellipse: s-maj=30.5km s-min=21.3km az=72.0*
**ISC 15 23:27:00.3**±0.9, **2°2S**±0°.1×**140°6E**±0°.2, **h35**km, **n10**, σ1§**22**/11, **mb3.6**/6, **Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** 188nm,0.3s,baz=271,slow=13,SNR=184 | **0.33** | **152** | Pn | **Pn** | **23 27 08.3** | **-0.4** |
| JAY | 536nm,0.3s,baz=130,slow=18,SNR=34 | | | Sn | **Sn** | **23 27 15.6** | **+1.3** |
| JAY | comp=Z,103nm,18.6s,baz=354,slow=54 | | | LR | LR | 23 27 17.7 | |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=19,slow=12,SNR=7.8 | **18.63** | **199** | P | **P** | **23 31 13.9** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** 2.2nm,0.7s,baz=317,slow=14,SNR=3.0 | **21.51** | **222** | P | **P** | **23 31 47.7** | **+1.3** |
| **ASAR** | **Alice Springs** 1.8nm,0.8s,baz=23,slow=10.0,SNR=13 | **22.27** | **196** | P | **P** | **23 31 54.4** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** 1.0nm,0.3s,baz=113,slow=6.5,SNR=5.6 | **45.81** | **298** | P | **P** | **23 35 18.6** | **-0.6** |
| **SONM** | **Songino Array** 0.1nm,0.4s,baz=179,slow=5.8,SNR=1.5 | **58.09** | **334** | P | **P** | **23 36 51.1** | **+0.7** |
| **MKAR** | **Makanchi Array** 0.6nm,0.7s,baz=105,slow=8.9,SNR=5.8 | **70.54** | **322** | P | **P** | **23 38 12.7** | **+0.9** |
| **ILAR** | **Eielson Array** 0.4nm,0.9s,baz=253,slow=3.1,SNR=4.1 | **84.64** | **24** | P | **P** | **23 39 30.5** | **+0.4** |
| **DBIC** | **Dimbokro** 4.1nm,0.8s,baz=105,slow=4.5,SNR=5.0 | **145.24** | **278** | PKPbc | **PKPbc** | **23 46 33.5** | **-1.6** |
| **LPAZ** | **La Paz** 5.6nm,0.4s,baz=333,slow=22,SNR=26 | **146.22** | **124** | PKPbc | **PKPdf** | **23 46 36.2** | **-1.7** |

*IDC **15** 23:58:15.7±0.8,41°.15N×71°.92E,h0km,mb3.9/11, mb1 4.0/19,mb1mx3.7/53,mbtmp3.9/19,ML3.6/7,MS3.0/2, Ms1 3.0/2,ms1mx2.4/91,Error ellipse: s-maj=14.0km s-min=9.6km az=159.0*
*SOME **15** 23:58:17.9,41°.35N×71°.98E,h15km,MS3.7*
*MOS **15** 23:58:17.3±1.4,41°.30N×71°.88E,h17km,mb4.1/10,Error ellipse: s-maj=5.3km s-min=4.0km az=60.3*
*MOS Felt (IV) at Atana, Kyzyl-Dzhar, Sary-Kashka; (III-IV) at Tash-Kumyr; (III) at Ak-Suu, Kerben, Uchkurgan.*
*KRNET **15** 23:58:17.7±0.1,41°.30N×71°.93E,h18km,mb4.3*
*NEIC **15** 23:58:18.9±2.8,41°.26N±0°.04×71°.91E±0°.04,h10km±1km, mb4.1/11,Error ellipse: s-maj=7.3km s-min=5.0km az=359.0*
*ISU **15** 23:58:18,41°.30N×71°.79E,h5km*
*NNC **15** 23:58:19.1±8.1,41°.46N×71°.76E,h15km±44km,mb4.0, Error ellipse: s-maj=48.1km s-min=30.3km az=11.0*
**ISC 15 23:58:18.2**±1.0, **41°31N**±0°.02×**71°93E**±0°.01, **h9**km±6km, **n226**, σ2§**06**/306, **mb4.1**/21, **38C-39D**, **Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **0.49** | **3** | ⇓*i* PG | **Pg** | **23 58 27.6** | **-0.2** |
| ARK | | | | *i* S | **Sg** | **23 58 34.3** | **0.0** |
| **ARK** | **Arkit** | **0.49** | **3** | P | **Pg** | **23 58 28.0** | **+0.2** |
| ARK | | | | S | **Sg** | **23 58 35.0** | **+0.7** |
| **ARK** | **Arkit** baz=3.0 | **0.49** | **3** | ⇓*i* P | **Pg** | **23 58 27.6** | **-0.2** |
| ARK | baz=3.0 | | | ⇓*i* S | **Sg** | **23 58 34.3** | **0.0** |
| **TRKS** | **Terek-Say** | **0.64** | **291** | ⇓*i* PG | **Pg** | **23 58 29.0** | **-1.5** |
| TRKS | | | | *i* S | **Sg** | **23 58 37.5** | **-1.3** |
| **TRKS** | **Terek-Say** baz=86 | **0.64** | **291** | ⇓*i* P | **Pg** | **23 58 29.0** | **-1.5** |
| TRKS | baz=86 | | | ⇓*i* S | **Sg** | **23 58 37.5** | **-1.3** |
| **FRG** | **Fergana** | **0.94** | **187** | *e*P | **Pn** | **23 58 39.0** | **+1.4** |
| FRG | | | | *e*S | **Sn** | **23 58 54.0** | **+2.9** |
| **OHH** | **Osh** | **1.01** | **140** | *i* PG | **Pg** | **23 58 36.9** | **-0.8** |
| OHH | | | | *i* S | **Sg** | **23 58 50.7** | **-0.2** |
| **OHH** | **Osh** baz=40 | **1.01** | **140** | ⇑*i* P | **Pg** | **23 58 36.9** | **-0.8** |
| OHH | baz=40 | | | ⇑*i* S | **Sg** | **23 58 50.7** | **-0.2** |
| **CHMG** | **Chimgan** | **1.46** | **280** | *i* P | **Pg** | **23 58 47.0** | **+0.7** |
| CHMG | | | | *i* S | **Sg** | **23 59 07.0** | **+1.7** |
| **BTK** | **Batken** | **1.51** | **215** | *i* PG | **Pn** | **23 58 45.7** | **+0.3** |
| BTK | | | | *i* S | **Sb** | **23 59 05.6** | **0.0** |
| **BTK** | **Batken** | **1.51** | **215** | P | **Pb** | **23 58 46.0** | **-0.4** |
| BTK | | | | S | **Sg** | **23 59 06.0** | **-0.6** |
| **BTK** | **Batken** baz=15 | **1.51** | **215** | ⇑*i* P | **Pn** | **23 58 45.7** | **+0.3** |
| BTK | baz=15 | | | ⇑*i* S | **Sb** | **23 59 05.6** | **0.0** |
| **CHRV** | **Charvak** | **1.52** | **283** | *e*P | **Pn** | **23 58 46.0** | **+0.3** |
| CHRV | | | | *e*S | **Sg** | **23 59 10.0** | **+2.8** |
| **AML** | **Almayashu** SNR=121 | **1.56** | **57** | P | **Pn** | **23 58 46.7** | **+0.2** |
| **AML** | **Almayashu** | **1.56** | **57** | *i* PN | **Pn** | **23 58 46.5** | **+0.1** |
| AML | | | | *i* S | **Sn** | **23 59 07.3** | **+0.3** |
| **DZA** | **Taraz** | **1.65** | **345** | *e*PN | **Pb** | **23 58 49.0** | **+0.3** |
| **DZA** | **Taraz** 371nm,0.2s | **1.65** | **345** | *e*P | **Pg** | **23 58 49.8** | **0.0** |
| DZA | 6μm,0.2s | | | *e*S | **Sg** | **23 59 12.6** | **+1.5** |
| **DZA** | **Taraz** baz=346 | **1.65** | **345** | *e*Pn | **Pb** | **23 58 49.0** | **+0.3** |
| **IUG** | **Iuzhnay** | **1.65** | **301** | *e*PN | **Pb** | **23 58 49.1** | **+0.2** |
| **IUG** | **Iuzhnay** 12μm,0.1s | **1.65** | **301** | *e*P | **Pb** | **23 58 48.7** | **-0.1** |
| IUG | 7μm,0.3s | | | *e*S | **Sg** | **23 59 11.2** | **0.0** |
| **IUG** | **Iuzhnay** baz=302 | **1.65** | **301** | *e*Pg | **Pb** | **23 58 48.5** | **-0.3** |
| **IUG** | **Iuzhnay** | **1.65** | **301** | P | **Pg** | **23 58 49.8** | **0.0** |
| IUG | | | | S | **Sg** | **23 59 13.0** | **+1.7** |
| **MRKS** | **Merke** 867nm,0.2s | **1.73** | **33** | *e*P | **Pb** | **23 58 51.2** | **+1.0** |
| MRKS | 1μm,0.3s | | | *e*S | **Sg** | **23 59 14.6** | **+0.7** |
| **MRKS** | **Merke** 867nm,0.2s | **1.73** | **33** | P | **Pg** | **23 58 53.4** | **+2.0** |
| MRKS | 1μm,0.3s | | | S | **Sg** | **23 59 14.8** | **+0.9** |
| **YBZ** | **Yangibazar** | **1.77** | **271** | *e*P | **Pb** | **23 58 50.0** | **-0.8** |
| YBZ | | | | *e*S | **Sg** | **23 59 15.0** | **+0.1** |
| **TGS** | **TashGRES** | **1.82** | **274** | *e*P | **Pg** | **23 58 54.0** | **+1.0** |
| TGS | | | | *e*S | **Sg** | **23 59 22.0** | **+5.4** |
| **DRK** | **Karamyk** baz=83 | **1.83** | **183** | ⇑*i* P | **Pn** | **23 58 50.9** | **+0.9** |
| DRK | baz=83 | | | ⇑*i* S | **Sb** | **23 59 15.0** | **0.0** |
| **ARLS** | **Aral** | **1.88** | **72** | *i* PN | **Pb** | **23 58 52.0** | **-0.8** |
| ARLS | | | | *i* S | **Sb** | **23 59 17.0** | **+0.6** |
| **ARLS** | **Aral** baz=72 | **1.88** | **72** | ⇑*i* P | **Pb** | **23 58 52.0** | **-0.8** |
| ARLS | baz=72 | | | ⇑*i* S | **Sb** | **23 59 17.0** | **+0.6** |
| **EKS2** | **Erkin-Say** SNR=333 | **1.93** | **45** | P | **Pb** | **23 58 53.6** | **-0.1** |
| **EKS2** | **Erkin-Say** | **1.93** | **45** | ⇓*i* PN | **Pb** | **23 58 52.9** | **-0.8** |
| EKS2 | | | | *i* S | **Sb** | **23 59 18.4** | **+0.5** |
| **EKS2** | **Erkin-Say** baz=45 | **1.93** | **45** | ⇓*i* P | **Pb** | **23 58 52.9** | **-0.8** |
| EKS2 | baz=45 | | | ⇓*i* S | **Sb** | **23 59 18.4** | **+0.5** |
| **TAS** | **Tashkent** | **1.98** | **271** | PN | **Pb** | **23 58 53.2** | **-1.3** |
| TAS | | | | S | **Sg** | **23 59 20.9** | **-1.0** |
| **TAS** | **Tashkent** | **1.98** | **271** | Pn | **Pb** | **23 58 53.1** | **-1.3** |
| TAS | | | | | **Sb** | **23 59 19.3** | **0.0** |
| **TAS** | **Tashkent** | **1.98** | **271** | *e*P | **Pb** | **23 58 54.0** | **-0.5** |
| TAS | | | | *e*S | **Sg** | **23 59 22.0** | **+0.1** |
| **TAS** | **Tashkent** baz=72 | **1.98** | **271** | ⇓*i* P | **Pb** | **23 58 53.5** | **-1.0** |
| TAS | baz=72 | | | ⇓*i* S | **Sb** | **23 59 19.5** | **+0.2** |
| **KK02** | **Karatay Array** 158nm,0.4s,baz=153,slow=15 | **2.08** | **330** | ⇑Pn | **Pb** | **23 58 55.6** | **-0.6** |
| KK02 | 711nm,0.5s,baz=151,slow=29 | | | ⇑Sn | **Sb** | **23 59 23.0** | **+0.8** |
| **KKAR** | **Karatay Array** | **2.08** | **330** | PN | **Pb** | **23 58 55.7** | **-0.5** |
| KKAR | | | | | | 23 59 22.2 | |
| **KKAR** | **Karatay Array** | **2.08** | **330** |

SNR=125
**CHMS Chumysh** 2.69 50 *i* PN Pn 23 59 03.3 +1.5
CHMS *i* S Sn 23 59 36.5 +2.0
**CHMS Chumysh** 2.69 50⇑*i*P Pn 23 59 03.3 +1.5
baz=50
CHMS ⇑*i*S Sn 23 59 36.5 +2.0
baz=50
**USP Ospenovka** 2.73 43 P Pb 23 59 05.2 -2.1
SNR=86
**USP Ospenovka** 2.73 43 *i* PN Pn 23 59 03.8 +1.5
USP *i* S Sn 23 59 37.6 +2.1
**USP Ospenovka** 2.73 43⇑*i*P Pn 23 59 03.8 +1.5
baz=43
USP ⇑*i*S Sn 23 59 37.6 +2.1
baz=43
**SGDS Sogindy** 2.93 42 *e*PN Pn 23 59 07.8 +2.7
**SGDS Sogindy** 2.93 42 *e*P Pb 23 59 09.8 -0.9
comp=Z,21nm,0.3s
SGDS *e*S Sb 23 59 47.8 +1.1
comp=Z,571nm,0.5s
**SGDS Sogindy** 2.93 42 *e*Pn Pn 23 59 07.3 +2.2
baz=43
**SGDS Sogindy** 2.93 42 Pg Pb 23 59 09.3 -1.4
comp=Z,31nm,0.2s
SGDS Lg Lg 23 59 46.3
comp=Z,575nm,0.5s
**TKM2 Tokmak 2** 3.17 58 P Pn 23 59 11.3 +2.9
SNR=25
**TKM2 Tokmak 2** 3.17 58 PN Pn 23 59 11.2 +2.7
**TKM2 Tokmak 2** 3.17 58 ⇑Pn Pn 23 59 11.2 +2.7
comp=Z,10nm,0.3s
TKM2 ⇓Pg Pg 23 59 19.9 +1.0
comp=Z,45nm,0.5s
TKM2 ⇓Lg Lg 23 59 57.2
**TKM2 Tokmak 2** 3.17 58⇓*i*P Pn 23 59 10.2 +1.8
baz=58
TKM2 ⇓*i*S Sn 23 59 48.2 +1.7
baz=58
**ULHL Ulahol** 3.36 72 P Pn 23 59 14.0 +2.9
SNR=15
**ULHL Ulahol** 3.36 72 *i* PN Pn 23 59 12.8 +1.8
ULHL *i* S Sn 23 59 52.8 +1.6
**ULHL Ulahol** 3.36 72⇑*i*P Pn 23 59 12.8 +1.8
baz=72
ULHL ⇑*i*S Sn 23 59 52.8 +1.6
baz=72
**DGS Degeres** 3.45 55 *e*S Sg 00 00 06.8 -2.1
comp=Z,882nm,0.6s
DGS *e*P Pb 23 59 21.0 +1.6
comp=Z,163nm,0.6s
**DGS Degeres** 3.45 55 Pg Pg 23 59 24.8 +0.6
comp=Z,163nm,0.6s
DGS Lg Lg 00 00 06.8
comp=Z,882nm,0.6s
**KST Kastek** 3.46 59 *e*S Sg 00 00 06.7 -2.7
comp=Z,352nm,0.5s
KST *e*P Pb 23 59 21.4 +1.6
comp=Z,29nm,0.3s
**KSH Kashi** 3.57 119 Pn Pn 23 59 15.5 +1.7
KSH Sn Sn 23 59 56.3 +0.1
KSH smax smax
comp=N,420nm,0.5s
KSH smax smax
comp=E,400nm,0.8s
**KRBS Karabastau** 3.66 48 *e*S Sg 00 00 12.7 -2.9
comp=E,347nm,0.4s
KRBS *e*P Pb 23 59 24.2 +1.2
comp=E,61nm,0.3s
**KRBS Karabastau** 3.66 48 Pg Pg 23 59 28.1 -0.2
comp=E,61nm,0.3s
KRBS Lg Lg 00 00 12.7
comp=E,347nm,0.4s
**MTBS Maitube** 3.81 60 *e*S Sg 00 00 17.1 -3.3
comp=E,247nm,0.3s
MTBS *e*P Pb 23 59 27.0 +1.5
comp=E,15nm,0.6s
**BTLS Baital** 4.04 22 *e*PN Pn 23 59 22.1 +1.9
BTLS *e* 23 59 33.6
**BTLS Baital** 4.04 22 *e*S Sg 00 00 24.4 -3.6
comp=E,189nm,0.5s
BTLS *e*P Pb 23 59 31.6 +2.1
comp=E,52nm,0.4s
**BTLS Baital** 4.04 22 *e*Pn Pn 23 59 22.2 +1.9
baz=22
BTLS *e*Pg Pg 23 59 33.7 -1.9
baz=22
**BTLS Baital** 4.04 22 Pg Pb 23 59 31.2 +1.7
comp=E,54nm,0.3s
BTLS Lg Lg 00 00 23.7
comp=E,208nm,0.7s
**TNSS Tian-Shan** 4.11 63 *e*S Sg 00 00 27.6 -2.6
comp=E,64nm,0.8s
TNSS *e*P Pb 23 59 33.6 +2.6
comp=E,15nm,0.3s
**TNSS Tian-Shan** 4.11 63 *e*Pn Pn 23 59 23.7 +2.1
baz=64
TNSS *e*Pg Pg 23 59 35.9 -1.1
baz=64
**KUU Kurty** 4.16 50 *e*PN Pn 23 59 23.6 +1.8
KUU *e* 23 59 36.4
**KUU Kurty** 4.16 50 *e*S Sb 00 00 26.8 +5.0
comp=E,284nm,0.4s
KUU *e*P Pb 23 59 33.1 +1.6
comp=E,19nm,0.6s
**KUU Kurty** 4.16 50 *e*Pn Pn 23 59 23.7 +1.8
baz=51
KUU *e*Pg Pg 23 59 36.5 -1.3
baz=51
**KNDC Almaty** 4.20 61 PN Pn 23 59 26.0 +3.6
**KNDC Almaty** 4.20 61 ⇑Pn Pn 23 59 26.0 +3.6
comp=E,25nm,0.3s
KNDC ⇑Pg Pg 23 59 37.2 -1.4
comp=E,115nm,0.7s
**KNDC Almaty** 4.20 61 ⇓Lg Lg 00 00 31.1
comp=E,519nm,0.7s
**MDOK Medeo** 4.23 62 PN Pn 23 59 25.8 +2.9
**MDOK Medeo** 4.23 62 *e*S Sg 00 00 30.2 -3.8
comp=E,197nm,0.7s
MDOK *e*P Pb 23 59 35.1 +2.3
comp=E,27nm,0.6s
**MDOK Medeo** 4.23 62 *e*Pn Pn 23 59 25.0 +2.1
baz=63
MDOK *e*Pg Pg 23 59 37.0 -2.2
baz=63
**MDOK Medeo** 4.23 62 ⇑Pn Pn 23 59 25.8 +2.9
comp=E,21nm,0.4s
MDOK ⇑Pg Pg 23 59 36.8 -2.3
comp=E,50nm,0.6s
**MDOK Medeo** 4.23 62 ⇑Lg Lg 00 00 32.9
comp=E,231nm,0.9s
**KTBS Karatobe** 4.26 54 *e*S Sg 00 00 30.8 -4.1
comp=E,361nm,0.5s
KTBS *e*P Pb 23 59 35.0 +1.8
comp=E,20nm,0.5s
**KTBS Karatobe** 4.26 54 Pg Pg 23 59 38.4 -1.3
comp=E,20nm,0.5s
KTBS Lg Lg 00 00 30.8
comp=E,361nm,0.5s
**KOTS Kotyrbulak** 4.30 62 *e*S Sg 00 00 33.8 -2.4
comp=E,308nm,0.8s
KOTS *e*P Pb 23 59 37.1 +3.1
comp=E,7.7nm,0.2s
**KOTS Kotyrbulak** 4.30 62 Pg Pg 23 59 40.7 +0.1
comp=E,18nm,0.2s
KOTS Lg Lg 00 00 33.8
comp=E,308nm,0.8s
**TARG Taragay, Kyrgy** 4.43 83 Pn Pn 23 59 27.2 +1.3
**CHKK Chushkaly** 4.52 54 *e*S Sb 00 00 37.8 +5.5
comp=E,200nm,0.5s
CHKK *e*P Pb 23 59 39.5 +1.8
comp=E,16nm,0.4s
**CHKK Chushkaly** 4.52 54 *e*Pn Pn 23 59 28.4 +1.6
baz=54
**SATY Saty** 5.12 68 *e*PN Pn 23 59 37.5 +2.3
**SATY Saty** 5.12 68 *e*S Sg 00 00 59.2 -3.3
comp=E,130nm,0.6s
SATY *e*P Pb 23 59 52.1 +4.1
comp=E,18nm,1.5s
**SATY Saty** 5.12 68 *e*Pn Pn 23 59 37.5 +2.3
baz=68
**ZHN Zhinishke** 5.17 67 *e*PN Pn 23 59 38.4 +2.5
**ZHN Zhinishke** 5.17 67 *e*Pn Pn 23 59 38.4 +2.5
baz=67
**ARXS Arharly** 5.22 54 *e*PN Pn 23 59 38.2 +1.7
**ARXS Arharly** 5.22 54 *e*S Sg 00 01 01.2 -4.6
comp=E,203nm,0.6s
ARXS *e*P Pb 23 59 53.2 +3.5
comp=E,24nm,0.6s
**ARXS Arharly** 5.22 54 Pg Pg 23 59 56.9 -1.3
comp=E,24nm,0.6s
ARXS Lg Lg 00 01 01.3
comp=E,203nm,0.6s
**KPKS Kokpek** 5.45 64 *e*PN Pn 23 59 41.5 +1.9
**KPKS Kokpek** 5.45 64 *e*Pn Pn 23 59 41.5 +1.9
baz=65
KPKS *e*Pg Pg 00 00 00.1 -2.3
baz=65
**TMD Tamdy-Bulak** 5.49 277 *e*P Pn 23 59 41.0 +0.9
TMD *e*S Sn 00 00 42.0 -1.4
**UZB Uzynbulak** 5.58 68 *e*PN Pn 23 59 43.7 +2.2
**UZB Uzynbulak** 5.58 68 *e*S Sg 00 01 11.8 -5.4
comp=E,83nm,0.5s
UZB *e*P Pb 23 59 59.4 +3.6
comp=E,10nm,0.5s
**UZB Uzynbulak** 5.58 68 *e*Pn Pn 23 59 43.7 +2.2
baz=69
UZB *e*Pg Pg 00 00 01.6 -3.4
baz=69
**PDGK Podgornoye** 5.96 68 *i* PN Pn 23 59 48.5 +1.8
PDGK pmax pmax
comp=Z,2.0nm,0.5s
**BUXR Bukhara** 5.99 257 *e*P Pn 23 59 47.0 +0.1
BUXR *e*S Sb 00 01 10.0 -4.4
**DZN Dzhankel'dy** 6.51 269 *e*P Pn 23 59 55.0 +0.9
DZN *e*S Sn 00 01 05.0 -3.4
**OTUK Ortayu** 6.94 2 ⇓Lg Lg 00 01 52.4
comp=Z,116nm,0.9s
**KBL Kabul** 7.13 200 PN Pn 00 00 04.6 +1.8
**KBL Kabul** 7.13 200 Pn Pn 00 00 04.6 +1.8
**CEP Cherat** 7.47 180 P Pn 00 00 11.3 +3.9
CEP S Sn 00 01 33.0 +0.6
**NIL Nilore** 7.71 172 P Pn 00 00 10.9 +0.2
**NIL Nilore** 7.71 172 Pn Pn 00 00 10.9 +0.2
**THW Thamme Wali** 8.50 181 ⇓P Pn 00 00 23.8 +2.4
**MAKZ Makanchi** 9.08 49 P Pn 00 00 29.5 0.0
**MAKZ Makanchi** 9.08 49 Pn Pn 00 00 29.5 0.0
**MAKZ Makanchi** 9.08 49 ⇓Pn Pn 00 00 29.3 -0.2
comp=Z,1.6nm,1.0s
MAKZ ⇑Lg Lg 00 03 06.3
comp=Z,25nm,1.1s
**MK31 Makanchi Array** 9.26 50 P Pn 00 00 33.0 +1.2
**MK31 Makanchi Array** 9.26 50 Pn Pn 00 00 33.0 +1.2
**MK31 Makanchi Array** 9.26 50 Pn Pn 00 00 34.0 +2.1
comp=Z,3.3nm,0.7s,baz=236,slow=13,SNR=37
MK31 ⇑Lg Lg 00 03 13.6
comp=Z,8.9nm,0.6s,baz=229,slow=24,SNR=4.2
**MKAR Makanchi Array** 9.26 50 Pn Pn 00 00 34.3 +2.4
comp=Z,0.4nm,0.3s,baz=237,slow=14,SNR=52
MKAR Sn Sn 00 02 16.1 +0.1
comp=Z,0.4nm,0.3s,baz=241,slow=18,SNR=1.6
MKAR Lg Lg 00 03 08.7
comp=Z,0.9nm,0.3s,baz=235,slow=29,SNR=4.5
**MKAR Makanchi Array** 9.26 50 *i* P Pn 00 00 34.2 +2.4
MKAR pmax pmax
comp=Z,5.0nm,0.7s
**MKAR Makanchi Array** 9.26 50 Pn Pn 00 00 33.5 +1.7
**HRA Herat** 10.31 231 Pn Pn 00 00 44.9 -1.5
**KURBB Kurchatov Arra** 10.38 24 Pn Pn 00 00 46.5 -0.7
comp=Z,0.1nm,0.3s,baz=216,slow=13,SNR=5.4
KURBB Lg Lg 00 03 48.2
comp=Z,0.5nm,0.3s,baz=261,slow=19,SNR=5.1
**KURBB Kurchatov Arra** 10.38 24 ⇑Pn Pn 00 00 46.2 -0.9
comp=Z,2.1nm,0.6s
KURBB ⇓Lg Lg 00 03 49.1
comp=Z,78nm,0.7s
**KURK Kurchatov** 10.49 24⇑*e*P Pn 00 00 48.4 -0.3
**KURK Kurchatov** 10.49 24 Pn Pn 00 00 49.4 +0.7
**KURK Kurchatov** 10.49 24 ⇑Pn Pn 00 00 46.5 -2.2
comp=Z,1.6nm,0.7s
KURK ⇑Lg Lg 00 03 51.0
comp=Z,86nm,1.2s
**ZSN Zaisan** 11.10 52 *e*Pn Pn 00 00 59.1 +2.0
baz=52
**AB31 Akbulak array** 11.59 317 Pn Pn 00 01 02.6 -1.0
comp=Z,1.0nm,0.3s,baz=128,slow=14,SNR=80
AB31 ⇑Sn Sn 00 03 08.4 -4.6
comp=Z,5.6nm,0.7s,baz=147,slow=22
AB31 ⇑Lg Lg 00 04 23.1
comp=Z,15nm,0.8s,baz=130,slow=28
**ABKAR Akbulak array** 11.59 317 Pn Pn 00 01 02.7 -0.9
**ABKAR Akbulak array** 11.59 317 Pn Pn 00 01 02.2 -1.5
**BVA1 Borovoye Array** 11.77 355 ⇓Pn Pn 00 01 05.2 -1.0
comp=Z,1.6nm,0.4s
BVA1 ⇓Sn Sn 00 03 13.3 -4.3
comp=Z,8.8nm,0.7s
BVA1 ⇓Lg Lg 00 04 28.4
comp=Z,23nm,0.8s
**BVAR Borovoye Array** 11.77 355 Pn Pn 00 01 05.8 -0.4
comp=Z,0.7nm,0.3s,baz=303,slow=42,SNR=10
BVAR Sn Sn 00 03 14.6 -3.0
comp=Z,1.2nm,0.3s,baz=140,slow=25,SNR=5.5
BVAR Lg Lg 00 04 33.8
comp=Z,1.1nm,0.3s,baz=295,slow=42,SNR=2.0
**BRVK Borovoye** 11.81 355 *de*P Pn 00 01 06.6 -0.2
**BRVK Borovoye** 11.81 355 Pn Pn 00 01 06.5 -0.2
**BRVK Borovoye** 11.81 355 ⇓Pn Pn 00 01 05.6 -1.1
comp=Z,2.8nm,0.7s
BRVK ⇑Sn Sn 00 03 13.3 -5.3
comp=Z,4.0nm,0.6s
BRVK ⇓Lg Lg 00 04 30.6
comp=Z,22nm,1.1s
**WMQ Urumqi** 11.90 73 *e*P Pn 00 01 13.3 +5.3
**AKTO Aktyubinsk** 13.30 318 Pn Pn 00 01 26.2 -0.8
comp=Z,0.6nm,0.3s,baz=106,slow=14,SNR=8.2
AKTO Sn Sn 00 03 48.4 -6.5
comp=Z,0.2nm,0.3s,baz=189,slow=9.4,SNR=3.5
**AKTO Aktyubinsk** 13.30 318 ⇑Pn Pn 00 01 26.3 -0.8
comp=Z,1.6nm,0.5s
AKTO ⇑Sn Sn 00 03 48.5 -6.5
comp=Z,2.6nm,0.6s
AKTO ⇓Lg Lg 00 05 15.8
comp=Z,10.0nm,0.9s
**DGZ Jazzator, Alta** 13.71 47⇓*e*P Pn 00 01 35.3 +2.4
**ZAA0 Zalesovo Array** 15.31 30 Pn Pn 00 01 56.0 +1.7
ZAA0 P P 00 01 59.8 +0.7
ZAA0 lAmb lAmb 00 02 00.3
comp=Z,8.8nm,1.1s
**ZALV Zalesovo Beam** 15.31 30 Pn Pn 00 01 55.1 +0.8
comp=Z,1.4nm,0.3s,baz=224,slow=12,SNR=23
ZALV Sn Sn 00 04 48.5 +4.6
comp=Z,0.2nm,0.3s,baz=238,slow=8.2,SNR=2.2
ZALV LR LR 00 07 48.4
comp=Z,32nm,18.5s,baz=10,slow=37
**ZALV Zalesovo Beam** 15.31 30 *i* P P 00 01 58.2 -1.0
ZALV pmax pmax
comp=Z,5.0nm,0.5s
**ZALV Zalesovo Beam** 15.31 30 Pn 00 01 56.0 +1.7
ZALV P P 00 01 59.6 +0.4
**PYUN Piuthan** 15.99 142 *e*P Pn 00 01 58.6 -4.9
comp=Z,5.5nm,0.4s
**KOLN Koldanda** 16.55 141 *e*P Pn 00 02 06.3 -4.4
**GKN Gorkha** 16.87 138 *e*P Pn 00 02 10.4 -4.3
comp=Z,7.4nm,0.4s
**ARU Arti** 17.45 335 P Pn 00 02 21.2 -0.4
comp=Z,0.0nm,0.3s,baz=229,slow=10,SNR=4.1
**ARU Arti** 17.45 335 *c* *i*P Pn 00 02 20.6 -1.0
ARU S Sn 00 05 36.4 +0.5
ARU pmax pmax
comp=Z,7.0nm,1.5s
**ARU Arti** 17.45 335 Pn Pn 00 02 20.4 -1.2
**GUN Gumba** 17.59 135 *e*P Pn 00 02 21.8 -2.1
comp=Z,17nm,0.7s
**PKIN Phulchoki** 17.60 137 *e*P Pn 00 02 20.9 -3.1
**PKI Phulchoki** 17.61 137 *e*P Pn 00 02 21.3 -2.9
comp=Z,4.5nm,0.5s
**LKRN Lenkeran, Azer** 17.91 269 P P 00 02 30.1 +2.0
**JIRN Jiri** 17.95 135 *e*P Pn 00 02 25.3 -3.1
**MAK Makhachkala** 18.18 283 *e*P Pn 00 02 26.7 -4.0
MAK *e*S Sn 00 05 46.9 -6.7
MAK pmax pmax
comp=Z,72nm,1.2s
MAK MLR MLR
comp=Z,44nm,10.0s
**SEKA Sheki** 18.58 278 P Pn 00 02 37.1 +1.3
**MNGR Mingechevir, A** 18.74 277 P Pn 00 02 38.8 +1.3
**ZKTA Zakatala** 18.95 279 P Pn 00 02 40.6 +0.4
**GANJ Ganja** 19.33 277 P Pn 00 02 45.7 +0.9
**GROC Groznyy** 19.41 284 *e*P Pn 00 02 46.7 +1.0
GROC pmax pmax
comp=Z,6.0nm,0.7s
**BELG Belogornoye** 19.88 312 P P 00 02 48.4 -1.2
comp=Z,0.2nm,0.3s,baz=204,slow=16,SNR=2.3
**BELG Belogornoye** 19.88 312⇑*e*P Pn 00 02 52.4 +1.2
BELG pmax pmax
comp=Z,2.0nm,0.9s
**NAX Nakhchivan** 20.27 273 P Pn 00 02 56.2 +0.2
**GNI Garni** 20.61 276 P Pn 00 03 00.7 +0.6
comp=Z,3.2nm,0.7s,baz=340,slow=6.5,SNR=4.7
**GNI Garni** 20.61 276⇓*e*P Pn 00 02 59.4 -0.7
GNI pmax pmax
comp=Z,15nm,1.1s
**GNI Garni** 20.61 276 P P 00 02 58.5 +0.7
GNI lAmb lAmb 00 03 07.0
comp=Z,14nm,1.1s
**ZEI Tsey** 20.83 283 *e*P Pn 00 03 04.5 +1.8
ZEI pmax pmax
comp=Z,2.0nm,0.6s
**UOSS Minazif** 20.91 224 P 00 03 01.2 +0.2
UOSS lAmb lAmb 00 03 13.5
comp=Z,8.9nm,1.3s
**ONI Oni** 21.18 283 P P 00 03 02.7 -1.1
ONI pmax pmax
comp=Z,4.0nm,0.7s
**ONI Oni** 21.18 283 P P 00 03 02.7 -1.1
ONI lAmb lAmb 00 03 14.5
comp=Z,4.0nm,0.7s
**GTA Gaotai** 21.30 86 *e*P P 00 03 10.4 +5.2
GTA pP sP 00 03 15.3 +6.0
GTA pmax pmax
comp=Z,3.0nm,1.2s
**KBZ Khabaz** 21.49 286 P P 00 03 11.2 +4.2
comp=Z,0.5nm,0.5s,baz=225,slow=12,SNR=7.2
**KBZ Khabaz** 21.49 286⇓*e*P P 00 03 10.6 +3.6
KBZ pmax pmax
comp=Z,6.0nm,2.3s
**KIV Kislovodsk** 21.63 287 *e*P P 00 03 11.8 +3.1
KIV *e*S S 00 07 12.1 +3.8
KIV pmax pmax
comp=Z,4.0nm,1.0s
**KIV Kislovodsk** 21.63 287 P P 00 03 08.2 -0.5
KIV lAmb lAmb 00 03 51.8
comp=Z,7.6nm,1.2s
**SONM Songino Array** 25.25 63 P P 00 03 44.8 +0.2
comp=Z,0.6nm,0.6s,baz=271,slow=10,SNR=7.6
**SONM Songino Array** 25.25 63 *e*P P 00 03 46.4 +1.8
SONM pmax pmax
comp=Z,1.0nm,0.6s
**SONM Songino Array** 25.25 63 P P 00 03 45.4 +0.8
**LZH Lanzhou** 25.36 91 *e*P P 00 03 54.8 +9.1
LZH pP sP 00 04 00.8 +11
LZH sP pP 00 04 04.5 +16
LZH pmax pmax
comp=Z,20nm,1.4s
**PZH PanZhiHua** 28.64 112 P P 00 04 18.3 +3.0
PZH pmax pmax
comp=Z,8.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,4.7s
**HHC Hu-ho-hao-te** 29.70 78 *e*P P 00 04 24.8 +0.2
HHC pmax pmax
comp=Z,8.0nm,0.9s
HHC pmax pmax
comp=Z,160nm,5.6s
**XLT XiLinHaoTe** 32.31 70 *e*P P 00 04 50.6 +3.1
XLT pP sP 00 04 53.9 +2.1
XLT sP pP 00 04 57.8 +7.3
XLT pmax pmax
comp=Z,3.0nm,1.1s
XLT pmax pmax
comp=Z,130nm,4.5s
**MLR Muntele Rosu** 33.32 293 LR LR 00 19 00.6
comp=Z,50nm,21.7s,baz=252,slow=37
**FINES FINESS Array B** 34.02 322 P P 00 05 02.5 +0.4
comp=Z,1.7nm,0.5s,baz=106,slow=8.9,SNR=11
**KEV Kevo** 36.67 336 P P 00 05 25.9 +1.2
KEV pmax pmax
comp=Z,99nm,1.8s
**KEV Kevo** 36.67 336 P P 00 05 25.9 +1.2
**ARCES ARCESS Array B** 37.04 335 P P 00 05 28.4 +0.4
comp=Z,3.0nm,0.5s,baz=111,slow=8.7,SNR=39
**ARCES ARCESS Array B** 37.04 335 *e*P P 00 05 27.5 -0.5
ARCES pmax pmax
comp=Z,3.0nm,0.5s
**GERES GERESS Array B** 40.91 301 P P 00 06 01.6 +0.9
comp=Z,0.3nm,0.3s,baz=46,slow=7.6,SNR=5.0
**GERES GERESS Array B** 40.91 301 *e*P P 00 06 01.9 +1.2
**TIXI Tiksi** 41.07 24⇓*e*P P 00 06 01.6 0.0
TIXI pmax pmax
comp=Z,3.0nm,0.8s
**NB2 NORSAR Subarra** 41.08 320 P P 00 06 01.4 -0.5
comp=Z,0.7nm,0.6s,baz=92,slow=8.6
**NOA NORSAR Array B** 41.08 320 P P 00 06 01.6 -0.3
comp=Z,0.6nm,0.6s,baz=91,slow=8.1,SNR=5.2
**ESDC Sonseca Array** 55.95 295 P P 00 07 56.4 -0.3
comp=Z,0.6nm,0.6s,baz=120,slow=9.2,SNR=1.4
**TORD Torodi Ar. Bea** 66.62 267 P P 00 09 07.5 -1.8
comp=Z,0.5nm,0.6s,baz=44,slow=6.6,SNR=5.5
**TORD Torodi Ar. Bea** 66.62 267 lAmb lAmb 00 10 10.8
comp=Z,9.3nm,1.9s
**IMAR Indian Mountai** 67.39 18 P P 00 09 12.9 -0.4
**INK Inuvik** 69.05 10 P P 00 09 23.6 -0.1
**ILAR Eielson Array** 69.97 17 P P 00 09 28.9 -0.6
comp=Z,1.1nm,0.8s,baz=319,slow=5.1,SNR=15
**YKA Yellowknife Ar** 76.42 3 P P 00 10 06.7 -0.9
comp=Z,2.3nm,0.7s,baz=351,slow=6.0,SNR=42
**YKA Yellowknife Ar** 76.42 3 *e*P P 00 10 07.2 -0.4
YKA pmax pmax
comp=Z,2.0nm,0.7s
**YKA Yellowknife Ar** 76.42 3 P P 00 10 07.4 -0.2
**P33M Teslin, Yukon** 76.81 12 P P 00 10 09.8 -0.2
**WRA Warramunga Arr** 83.95 123 P P 00 10 47.2 -1.6
comp=Z,0.5nm,0.6s,baz=331,slow=4.6,SNR=5.0
**WRA Warramunga Arr** 83.95 123 *e*P P 00 10 47.0 -1.8
WRA pmax pmax
comp=Z,1.0nm,0.6s
**ASAR Alice Springs** 86.44 126 P P 00 10 59.5 -1.8
comp=Z,0.6nm,0.7s,baz=313,slow=5.4,SNR=6.5
**ASAR Alice Springs** 86.44 126 *e*P P 00 10 59.8 -1.4
ASAR pmax pmax
comp=Z,1.0nm,0.6s

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*IDC* ***16*** *00:23:14.9±4.8, 7.°05S±.°155.°77E, h104km±40km, mb3.7/9, mb1 3.9/11, mb1mx3.7/40, mbtmp4.1/11, MS3.1/2, Ms1 3.1/2, ms1mx2.6/57, Error ellipse: s-maj=29.1km s-min=24.1km az=93.0*

*NEIC* ***16*** *00:23:17.8±0.9, 7.°1S±0.°1×155.°7E±0.°1, h116km±10km, mb4.3/8, Error ellipse: s-maj=19.0km s-min=17.7km az=128.0*

**ISC 16 00:23:16.1**±0.6, **7.°11S**±0.°09×**155.°70E**±0.°08, **h100**km, **n34,** σ1**°84/28, mb4.0**/13, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.80** | **119** | LR | LR | | 00 26 16.8 | |
| | comp=Z,200nm,18.5s,baz=324,slow=38 | | | | | | | |
| **PMG** | **Port Moresby** | **8.76** | **254** | P | | **Pn** | **00 25 20.3** | **+0.4** |
| | 2.6nm,0.3s,baz=46,slow=9.4,SNR=6.7 | | | | | | | |
| PMG | | | | S | | **Sn** | **00 26 59.1** | **+2.2** |
| | 2.7nm,0.3s,baz=70,slow=8.1,SNR=1.8 | | | | | | | |
| **PMG** | **Port Moresby** | **8.76** | **254** | | | **Pn** | **00 25 21.4** | **+1.5** |
| **PATS** | **Pohnpei** | **14.09** | **11** | Pn | | **Pn** | **00 26 32.0** | **+0.6** |
| **DZM** | **Mont Dzumac** | **18.13** | **146** | P | | **P** | **00 27 20.1** | **-0.6** |
| | 0.2nm,0.3s,baz=338,slow=19,SNR=2.5 | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.13** | **146** | P | | **Pn** | **00 27 23.4** | **+1.9** |
| DZM | | | | lAmb | | lAmb | 00 27 34.7 | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.33** | **236** | P | | **P** | **00 28 23.8** | **-1.0** |
| | comp=Z,0.5nm,0.4s,baz=61,slow=9.7,SNR=12 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **00 32 01.7** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=65,slow=3.5,SNR=1.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.63** | **229** | P | | **P** | **00 28 44.3** | **-1.2** |
| | comp=Z,0.5nm,0.3s,baz=58,slow=10.0,SNR=9.0 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **00 32 06.7** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=65,slow=2.9,SNR=4.6 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.65** | **23** | T | T | | 00 57 13.1 | |
| | baz=202,slow=76,SNR=107 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.66** | **23** | T | T | | 00 57 12.5 | |
| | baz=202,slow=76,SNR=108 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.67** | **23** | T | T | | 00 57 13.6 | |
| | baz=202,slow=76,SNR=80 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.84** | **22** | T | T | | 00 58 46.3 | |
| | baz=202,slow=76,SNR=5.2 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.85** | **22** | T | T | | 00 58 46.9 | |
| | baz=202,slow=76,SNR=5.5 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.86** | **22** | T | T | | 00 58 48.1 | |
| | baz=202,slow=76,SNR=4.1 | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **31.25** | **247** | P | | **P** | **00 29 25.1** | **-1.5** |
| | comp=Z,2.7nm,0.6s,baz=56,slow=3.2,SNR=16 | | | | | | | |
| FITZ | | | | LR | | LR | 00 41 04.3 | |
| | comp=Z,39nm,18.8s,baz=151,slow=34 | | | | | | | |
| **BBOO** | **Buckleboo** | **31.42** | **213** | P | | **P** | **00 29 26.9** | **-1.0** |
| BBOO | | | | IAmb | | IAmb | 00 29 42.5 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **FORT** | **Forrest** | **34.99** | **224** | P | | **P** | **00 29 57.9** | **-1.1** |
| **THZ** | **Tophouse** | **37.74** | **159** | P | | **P** | **00 30 20.9** | **-1.3** |
| **PLWZ** | **Palliser** | **38.47** | **156** | P | | **P** | **00 30 27.9** | **-0.5** |
| **RPZ** | **Rata Peaks** | **38.87** | **162** | P | | **P** | **00 30 31.9** | **+0.2** |
| RPZ | | | | IAmb | | IAmb | 00 30 46.6 | |
| | comp=Z,9.8nm,1.1s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **39.08** | **287** | P | | **P** | **00 30 34.9** | **+1.1** |
| MYLDM | | | | IAmb | | IAmb | 00 30 52.9 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.46** | **295** | P | | **P** | **00 33 22.1** | **-0.5** |
| | comp=Z,2.8nm,0.3s,baz=121,slow=4.0,SNR=5.0 | | | | | | | |
| **SONM** | **Songino Array** | **69.81** | **327** | P | | **P** | **00 34 15.2** | **-0.7** |
| | comp=Z,0.8nm,0.4s,baz=146,slow=5.9,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **69.81** | **327** | IAmb | | IAmb | 00 34 16.1 | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.22** | **21** | P | | P | 00 35 27.6 | -3.5 |
| | comp=Z,0.4nm,0.7s,baz=241,slow=4.7,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.95** | **319** | P | | **P** | **00 35 33.8** | **-1.4** |
| | comp=Z,1.4nm,0.7s,baz=101,slow=5.8,SNR=17 | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.95** | **319** | P | | **P** | **00 35 34.6** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **84.66** | **326** | P | | **P** | **00 35 35.5** | **-3.1** |
| | comp=Z,0.6nm,0.4s,baz=124,slow=5.9,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.66** | **326** | P | | **P** | **00 35 35.9** | **-2.7** |
| **KURBB** | **Kurchatov Arra** | **87.38** | **322** | P | | **P** | **00 35 50.1** | **-2.0** |
| | comp=Z,53nm,0.8s,baz=96,slow=5.5,SNR=1.6 | | | | | | | |
| **BVAR** | **Borovoye Array** | **92.81** | **323** | P | | **P** | **00 36 14.4** | **-3.0** |
| | comp=Z,0.3nm,0.4s,baz=50,slow=13,SNR=3.0 | | | | | | | |
| **MSU** | **Marysvale** | **96.03** | **52** | P | | **P** | **00 36 35.4** | **+2.6** |
| **GERES** | **GERESS Array B** | **127.51** | **329** | PKP | | **PKPdf** | **00 42 08.7** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=22,slow=1.4,SNR=4.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.73** | **285** | PKPbc | | **PKPdf** | **00 43 01.4** | **+4.8** |
| | comp=Z,0.5nm,0.6s,baz=80,slow=2.6,SNR=3.0 | | | | | | | |

***IDC* 16 00:27:52.2±4.0, 4°53S×153°16E, *h*0km, mb 3.3/2, mb1 3.6/2, mb1mx3.3/40, mbtmp3.3/2, Error ellipse: s-maj=144.7km s-min=44.8km az=115.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.89** | **229** | P | P | 00 33 08.1 | +0.2 |
| | 0.5nm,0.4s,baz=54,slow=9.9,SNR=7.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **86.36** | **319** | P | P | 00 40 05.6 | 0.0 |
| | 0.1nm,0.4s,baz=104,slow=6.6,SNR=1.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.57** | **289** | PKPbc | PKPbc | 00 47 46.8 | -0.5 |
| | 0.2nm,0.3s,baz=88,slow=1.8,SNR=5.1 | | | | | | |

*NOU* ***16*** *00:33:33.4, 43°.61S×172°.89E, h18km, MLv4.2/9, South Island, New Zealand*
*WEL* ***16*** *00:33:33.5±0.3, 44°.5±2°×17°.3E±°, h11km±2km, M3.6/33, ML3.8/33, MLv3.6/33, Error ellipse: s-maj=0.0km s-min=0.0km az=128.1*

**ISC 16 00:33:33.9±1.0, 43°56S±0°.03×172°.81E±0°.03, *h*15km±7km, n88, σ0°88/96, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MQZ** | **McQueen's Vall** | **0.18** | **218** | P | **Pg** | **00 33 38.2** | **-0.1** |
| MQZ | | | | S | **Sg** | **00 33 41.1** | **-0.1** |
| **OKCZ** | **Okains Bay** | **0.24** | **132** | P | **Pb** | **00 33 40.4** | **+0.4** |
| **AKCZ** | **Akaroa Harbour** | **0.32** | **167** | P | **Pb** | **00 33 41.7** | **+0.4** |
| AKCZ | | | | S | **Sb** | **00 33 47.0** | **+0.7** |
| **AMCZ** | **Amberley** | **0.40** | **343** | P | **Pg** | **00 33 41.7** | **-0.3** |
| **RACZ** | **Rakaia** | **0.51** | **251** | P | **Pg** | **00 33 44.1** | **+0.1** |
| RACZ | | | | S | **Sg** | **00 33 51.2** | **+0.3** |
| **OXZ** | **Oxford** | **0.61** | **293** | P | **Pg** | **00 33 44.9** | **-0.9** |
| OXZ | | | | S | **Sg** | **00 33 54.0** | **+0.1** |
| **GVZ** | **Greta Valley S** | **0.62** | **16** | P | **Pb** | **00 33 46.3** | **-0.1** |
| GVZ | | | | S | **Sb** | **00 33 55.6** | **+0.8** |
| **WACZ** | **Wakanui South** | **0.80** | **241** | P | **Pb** | **00 33 49.8** | **+0.3** |
| WACZ | | | | S | **Sn** | **00 34 01.3** | **-0.9** |
| **LTZ** | **Lake Taylor** | **0.87** | **333** | P | **Pb** | **00 33 50.3** | **-0.5** |
| LTZ | | | | S | **Sb** | **00 34 02.3** | **0.0** |
| **MHCZ** | **Mount Hutt** | **0.90** | **272** | P | **Pb** | **00 33 51.0** | **-0.3** |
| **ARCZ** | **Arundel** | **1.24** | **251** | P | **Pn** | **00 33 56.1** | **-0.6** |
| **KHZ** | **Kahutara** | **1.27** | **25** | P | **Pn** | **00 33 56.6** | **-0.4** |
| **KHZ** | **Kahutara** | **1.27** | **25** | P | **Pn** | **00 33 56.6** | **-0.4** |
| **RPZ** | **Rata Peaks** | **1.28** | **263** | P | **Pn** | **00 33 56.7** | **-0.7** |
| **RPZ** | **Rata Peaks** | **1.28** | **263** | P | **Pn** | **00 33 56.6** | **-0.7** |
| **INZ** | **Inchbonnie** | **1.30** | **310** | P | **Pn** | **00 33 57.9** | **+0.4** |
| INZ | | | | S | **Sn** | **00 34 14.5** | **-0.2** |
| **TMZ** | **Timaru** | **1.54** | **237** | P | **Pn** | **00 34 00.6** | **-0.2** |
| **WVZ** | **Waitaha Valley** | **1.59** | **287** | P | **Pn** | **00 34 01.8** | **+0.4** |
| **THZ** | **Tophouse** | **1.80** | **2** | P | **Pn** | **00 34 03.9** | **-0.5** |
| **GCSZ** | **Gaunt Creek Bo** | **1.82** | **277** | P | **Pn** | **00 34 05.1** | **+0.4** |
| **DSZ** | **Denniston Nort** | **1.96** | **337** | P | **Pn** | **00 34 06.4** | **-0.2** |
| **BSWZ** | **Blackbirch Sta** | **2.01** | **23** | P | **Pn** | **00 34 07.2** | **0.0** |
| **LBZ** | **Lake Benmore** | **2.07** | **246** | P | **Pn** | **00 34 08.1** | **+0.1** |
| **ODZ** | **Otahua Downs** | **2.15** | **226** | P | **Pn** | **00 34 08.8** | **-0.3** |
| **ODZ** | **Otahua Downs** | **2.15** | **226** | P | **Pn** | **00 34 08.8** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **2.16** | **359** | P | **Pn** | **00 34 10.5** | **+1.1** |
| **FOZ** | **Fox Glacier** | **2.18** | **270** | P | **Pn** | **00 34 10.6** | **+1.1** |
| **TUWZ** | **Tuamarina** | **2.29** | **22** | P | **Pn** | **00 34 11.3** | **+0.2** |
| **NNZ** | **Nelson** | **2.38** | **10** | P | **Pn** | **00 34 12.6** | **+0.2** |
| **TCW** | **Tory Channel** | **2.59** | **25** | P | **Pn** | **00 34 15.2** | **0.0** |
| **BHW** | **Baring Head** | **2.64** | **36** | P | **Pn** | **00 34 15.5** | **-0.4** |
| **SNZO** | **South Karori** | **2.65** | **33** | P | **Pn** | **00 34 15.5** | **-0.6** |
| **PLWZ** | **Palliser** | **2.69** | **43** | P | **Pn** | **00 34 15.9** | **-0.7** |
| **QRZ** | **Quartz Range** | **2.74** | **356** | P | **Pn** | **00 34 17.4** | **+0.1** |
| **QRZ** | **Quartz Range** | **2.74** | **356** | P | **Pn** | **00 34 17.7** | **+0.4** |
| **MSWZ** | **Moikau Station** | **2.80** | **41** | P | **Pn** | **00 34 17.7** | **-0.5** |
| **HHSZ** | **Highcliff Hill** | **2.81** | **213** | P | **Pn** | **00 34 17.8** | **-0.4** |
| **DUWZ** | **D'Urville Isla** | **2.88** | **17** | P | **Pn** | **00 34 20.4** | **+1.2** |
| **JCZ** | **Jackson Bay** | **2.96** | **259** | P | **Pn** | **00 34 20.8** | **+0.5** |
| **CAW** | **Cannon Point** | **2.97** | **35** | P | **Pn** | **00 34 20.0** | **-0.5** |
| **WKZ** | **Wanaka** | **3.01** | **244** | P | **Pn** | **00 34 21.0** | **0.0** |
| **EAZ** | **Earnscleugh** | **3.01** | **235** | P | **Pn** | **00 34 20.8** | **-0.2** |
| **TRVZ** | **Traveller** | **3.04** | **46** | P | **Pn** | **00 34 20.7** | **-0.6** |
| **KIW** | **Kapiti Island** | **3.12** | **31** | P | **Pn** | **00 34 22.6** | **+0.1** |
| **MTW** | **Mount Morrison** | **3.12** | **41** | P | **Pn** | **00 34 21.6** | **-0.9** |
| **OGWZ** | **Otaki Gorge** | **3.26** | **33** | P | **Pn** | **00 34 23.9** | **-0.4** |
| **TUZ** | **Tuapeka** | **3.29** | **222** | P | **Pn** | **00 34 24.8** | **-0.1** |
| **HOWZ** | **Holdsworth Sta** | **3.34** | **38** | P | **Pn** | **00 34 25.5** | **0.0** |
| **MRZ** | **Mangatainoka R** | **3.56** | **36** | P | **Pn** | **00 34 27.7** | **-0.8** |
| **MLZ** | **Mavora Lakes** | **3.81** | **240** | P | **Pn** | **00 34 31.8** | **-0.2** |
| **BFZ** | **Birch Farm** | **3.85** | **43** | P | **Pn** | **00 34 31.6** | **-0.9** |
| **BFZ** | **Birch Farm** | **3.85** | **43** | P | **Pn** | **00 34 31.8** | **-0.7** |
| **SYZ** | **Scrubby Hill** | **3.95** | **220** | P | **Pn** | **00 34 34.7** | **+0.8** |
| **WHZ** | **Wether Hill Ro** | **4.17** | **234** | P | **Pn** | **00 34 35.8** | **-1.2** |
| **KHEZ** | **Kahui Hut** | **4.36** | **12** | P | **Pn** | **00 34 41.9** | **+2.3** |
| **NBEZ** | **Newall Road No** | **4.36** | **11** | P | **Pn** | **00 34 39.0** | **-0.6** |
| **NEZ** | **North Egmont** | **4.40** | **13** | P | **Pn** | **00 34 42.9** | **+2.8** |
| **PNHZ** | **Pukenui** | **4.44** | **36** | P | **Pn** | **00 34 39.6** | **-1.1** |
| **PKE** | **Pukeiti** | **4.45** | **12** | P | **Pn** | **00 34 43.5** | **+2.7** |
| **VRZ** | **Vera Road** | **4.67** | **19** | P | **Pn** | **00 34 46.0** | **+2.2** |
| **MOVZ** | **Moawhango** | **4.70** | **29** | P | **Pn** | **00 34 45.1** | **+0.7** |
| **APZ** | **The Paps** | **4.72** | **225** | P | **Pn** | **00 34 44.0** | **-0.5** |
| **WNVZ** | **Wahianoa** | **4.72** | **27** | P | **Pn** | **00 34 45.9** | **+1.2** |
| **TRVZ** | **Turoa** | **4.73** | **27** | P | **Pn** | **00 34 46.3** | **+1.5** |
| **KRHZ** | **Kereru** | **4.74** | **35** | P | **Pn** | **00 34 44.9** | **+0.1** |
| **BHHZ** | **Black Hill Sta** | **4.75** | **32** | P | **Pn** | **00 34 45.2** | **+0.2** |
| **WHVZ** | **Whangaehu Hut** | **4.76** | **27** | P | **Pn** | **00 34 46.6** | **+1.3** |
| **FWVZ** | **Far West T-bar** | **4.77** | **27** | P | **Pn** | **00 34 45.9** | **+0.5** |
| **TUVZ** | **Tukino** | **4.79** | **27** | P | **Pn** | **00 34 47.4** | **+1.7** |
| **KAHZ** | **Kahuranaki** | **4.84** | **40** | P | **Pn** | **00 34 46.0** | **-0.2** |
| **NGZ** | **Ngauruhoe** | **4.86** | **27** | P | **Pn** | **00 34 47.7** | **+1.1** |
| **SNVZ** | **South Ngauruho** | **4.86** | **27** | P | **Pn** | **00 34 47.8** | **+1.2** |
| **OTVZ** | **Oturere** | **4.89** | **27** | P | **Pn** | **00 34 47.7** | **+0.7** |
| **NNVZ** | **North Ngauruho** | **4.90** | **26** | P | **Pn** | **00 34 48.2** | **+1.0** |
| **TWVZ** | **Taurewa** | **4.90** | **25** | P | **Pn** | **00 34 48.4** | **+1.2** |
| **WTVZ** | **West Tongariro** | **4.91** | **26** | P | **Pn** | **00 34 48.2** | **+0.9** |
| **ETVZ** | **East Tongariro** | **4.93** | **27** | P | **Pn** | **00 34 48.6** | **+1.1** |
| **TMVZ** | **Te Maari** | **4.95** | **27** | P | **Pn** | **00 34 48.4** | **+0.7** |
| **NTVZ** | **North Tongariro** | **4.95** | **27** | P | **Pn** | **00 34 49.2** | **+1.3** |
| **BKZ** | **Black Stump Fm** | **5.19** | **33** | P | **Pn** | **00 34 50.4** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **5.19** | **33** | P | **Pn** | **00 34 50.4** | **-0.7** |
| **HIZ** | **Hauiti** | **5.28** | **18** | P | **Pn** | **00 34 52.9** | **+0.7** |
| **HIZ** | **Hauiti** | **5.28** | **18** | P | **Pn** | **00 34 51.4** | **-0.8** |
| **TOZ** | **Tahuroa Road** | **6.17** | **20** | P | **Pn** | **00 35 05.9** | **+1.5** |
| **URZ** | **Urewera** | **6.22** | **33** | P | **Pn** | **00 35 03.8** | **-1.3** |
| **URZ** | **Urewera** | **6.22** | **33** | P | **Pn** | **00 35 03.8** | **-1.3** |
| **RUGZ** | **Raukumara Rang** | **6.70** | **35** | P | **Pn** | **00 35 11.8** | **-0.1** |
| **HAZ** | **Te Kaha** | **6.92** | **35** | P | **Pn** | **00 35 13.7** | **-1.0** |

*MEX* ***16*** *00:42:25.7±1.1, 16°.51N×99°.51W, h3km±7km, MD4.2*
*IDC* ***16*** *00:42:27.7±5.6, 17°.19N×99°.11W, h0km, mb3.4/2, mb1 3.6/4, mb1mx3.4/35, mbtmp3.2/4, ML3.1/2, MS3.0/2, Ms1 3.0/2, ms1mx2.5/40, Error ellipse: s-maj=107.0km s-min=20.5km az=20.0*

**ISC 16 00:42:23.9±1.7, 16°41N±0°.05×99°50W±0°.03, *h*19km±4km, n39, σ1°39/59, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRIG** | **Cruz Grande** | **0.48** | **48** | *i* P | **Pb** | **00 42 33.7** | **0.0** |
| CRIG | | | | *i* S | **Sg** | **00 42 39.5** | **-0.8** |
| **ACP2** | **Acapulco** | **0.59** | **321** | *i* P | **Pb** | **00 42 35.5** | **0.0** |
| ACP2 | | | | *i* S | **Sb** | **00 42 42.7** | **-0.7** |
| **DAIG** | **Los Arroyos** | **0.62** | **347** | *i* P | **Pb** | **00 42 35.3** | **-0.8** |
| DAIG | | | | *i* S | **Sb** | **00 42 42.7** | **-1.7** |
| **CAIG** | **El Cayaco** | **0.97** | **311** | *e*P | **Pb** | **00 42 41.2** | **-0.8** |
| CAIG | | | | *i* S | **Sb** | **00 42 53.2** | **-1.2** |
| **MGIG** | **Malinaltepec** | **1.17** | **45** | *e*P | **Pn** | **00 42 44.1** | **-1.2** |
| MGIG | | | | *e*S | **Sb** | **00 42 58.5** | **-1.8** |
| **PNIG** | **Pinotepa** | **1.32** | **91** | *i* P | **Pn** | **00 42 46.9** | **-0.3** |
| PNIG | | | | *i* S | **Sn** | **00 43 04.7** | **+0.4** |
| **MEIG** | **Mezcala** | **1.51** | **356** | *e*P | **Pn** | **00 42 49.2** | **-0.8** |
| MEIG | | | | *i* S | **Sn** | **00 43 07.0** | **-2.2** |
| **HMTT** | **Tlapaneco** | **1.65** | **33** | *e*P | **Pb** | **00 42 53.2** | **-0.4** |
| HMTT | | | | *i* S | **Sb** | **00 43 15.3** | **+1.2** |
| **TXIG** | **Tlaxiaco** | **1.86** | **63** | *e*P | **Pn** | **00 42 55.0** | **0.0** |
| TXIG | | | | *i* S | **Sn** | **00 43 18.0** | **-0.1** |
| **YOIG** | **Yosondua** | **1.93** | **76** | *e*P | **Pn** | **00 42 56.0** | **+0.1** |
| YOIG | | | | *e*S | **Sb** | **00 43 24.8** | **+2.5** |
| **PLIG** | **Platanillo** | **1.97** | **360** | *e*P | **Pn** | **00 42 56.1** | **-0.2** |
| **FTIG** | **Fresnillo de T** | **1.98** | **41** | *e*P | **Pn** | **00 42 56.4** | **-0.1** |
| **ARIG** | **Puente Sto Nin** | **2.03** | **337** | *e*P | **Pn** | **00 42 57.1** | **+0.1** |
| **HLIG** | **Huajuapan de L** | **2.15** | **49** | *e*P | **Pn** | **00 42 58.4** | **-0.5** |
| HLIG | | | | *i* S | **Sb** | **00 43 29.5** | **+0.8** |
| **ZIIG** | **Zihuatanejo** | **2.22** | **303** | *e*P | **Pb** | **00 43 03.6** | **+0.2** |
| **PEIG** | **Puerto Escondi** | **2.30** | **100** | *e*P | **Pn** | **00 43 01.3** | **+0.6** |
| **YAIG** | **Yautepec** | **2.47** | **10** | *e*P | **Pn** | **00 43 04.6** | **+1.4** |
| YAIG | | | | *e*S | **Sb** | **00 43 37.1** | **-0.9** |
| **MAVM** | **Malinalco, Edo** | **2.53** | **0** | *e*P | **Pb** | **00 43 08.3** | **-0.5** |
| MAVM | | | | *e*S | **Sb** | **00 43 41.5** | **+1.8** |
| **VHO** | **Vista Hermosa** | **2.73** | **76** | *e*P | **Pn** | **00 43 07.2** | **+0.3** |
| **AMVM** | **AMECAMECA** | **2.79** | **14** | *i* P | **Pn** | **00 43 06.5** | **-1.3** |
| **TLVM** | **San Miguel Top** | **2.80** | **7** | *e*P | **Pn** | **00 43 10.3** | **+2.3** |
| TLVM | | | | *e*S | **Sn** | **00 43 40.4** | **-1.1** |
| **AOVM** | **Tlapan** | **2.85** | **3** | *e*P | **Pb** | **00 43 13.0** | **-1.3** |
| AOVM | | | | *i* S | **Sb** | **00 43 49.8** | **+0.8** |
| **XCVM** | **Xochimilco** | **2.85** | **7** | *e*P | **Pb** | **00 43 12.8** | **-1.5** |
| **TOVM** | **TOLUCA** | **2.86** | **357** | *e*P | **Pb** | **00 43 12.5** | **-2.0** |
| TOVM | | | | *e*S | **Sb** | **00 43 49.3** | **0.0** |
| **TOIG** | **Toxpalan** | **2.87** | **54** | *e*P | **Pn** | **00 43 08.1** | **-0.6** |
| TOIG | | | | *i* S | **Sb** | **00 43 50.3** | **+1.1** |
| **THVM** | **De Xico** | **2.93** | **10** | *e*P | **Pb** | **00 43 15.2** | **-0.5** |
| THVM | | | | *i* S | **Sn** | **00 43 44.4** | **0.0** |
| **CJVM** | **Cuajimalpa** | **2.94** | **4** | *i* P | **Pb** | **00 43 17.7** | **+1.8** |
| CJVM | | | | *i* S | **Sn** | **00 43 46.3** | **+1.5** |
| **PBVM** | **Pinon** | **3.04** | **7** | *e*P | **Pb** | **00 43 16.2** | **-1.1** |
| PBVM | | | | *e*S | **Sn** | **00 43 45.6** | **-1.2** |
| **AZVM** | **Cuida Lopez Ma** | **3.16** | **4** | *e*P | **Pb** | **00 43 20.9** | **+1.3** |
| AZVM | | | | *i* S | **Sn** | **00 43 52.3** | **+2.0** |
| **PTVM** | **Pico Tres Padr** | **3.19** | **7** | *e*P | **Pb** | **00 43 19.0** | **-1.1** |
| PTVM | | | | *i* S | **Sn** | **00 43 52.8** | **+2.0** |
| **HUIG** | **Huatulco** | **3.32** | **101** | *e*P | **Pn** | **00 43 15.9** | **+1.1** |
| HUIG | | | | *i* S | **Sn** | **00 43 49.9** | **-4.0** |
| **CMIG** | **Matias Romero** | **4.47** | **81** | Pn | **Pn** | **00 43 31.0** | **+0.3** |
| | 1.2nm,0.3s,baz=270,slow=11,SNR=15 | | | | | | |
| CMIG | | | | Sn | **Sn** | **00 44 18.3** | **-4.0** |
| | 3.3nm,0.3s,baz=269,slow=16,SNR=5.1 | | | | | | |
| CMIG | | | | Lg | Lg | 00 44 37.0 | |
| | 2.4nm,0.3s,baz=238,slow=15,SNR=4.4 | | | | | | |
| CMIG | | | | LR | LR | 00 45 29.6 | |
| | comp=Z,113nm,18.3s,baz=260,slow=45 | | | | | | |
| **TXAR** | **Lajitas Array** | **13.42** | **344** | Pn | **Pn** | **00 45 33.2** | **-0.2** |
| | 0.0nm,0.3s,baz=161,slow=14,SNR=1.2 | | | | | | |
| **ANMO** | **Albuquerque** | **19.48** | **343** | LR | LR | 00 54 49.1 | |
| | comp=Z,68nm,19.7s,baz=154,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **27.64** | **344** | P | **P** | **00 48 11.8** | **+1.2** |
| | 0.2nm,0.5s,baz=139,slow=9.8,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.24** | **351** | P | **P** | **00 50 56.5** | **+1.1** |
| | 0.1nm,0.4s,baz=157,slow=7.1,SNR=4.3 | | | | | | |
| **H03N2** | **Juan Fernandez** | **53.32** | **159** | T | T | 01 49 26.8 | |
| | baz=338,slow=78,SNR=41 | | | | | | |
| **H03N1** | **Juan Fernandez** | **53.33** | **158** | T | T | 01 49 29.9 | |
| | baz=338,slow=78,SNR=34 | | | | | | |
| **H03N3** | **Juan Fernandez** | **53.34** | **159** | T | T | 01 49 26.6 | |
| | baz=338,slow=78,SNR=28 | | | | | | |

*ISN* ***16*** *01:25:24.6±0.3, 36°.59N×43°.90E, h0km, ML2.6*
*DDA* ***16*** *01:25:25.0±0.0, 36°.77N×43°.81E, h4km±1km, ML2.3*

**ISC 16 01:25:25.4±1.2, 36°76N±0°.03×43°93E±0°.05, *h*9km±13km, n10, σ1°43/19, Iraq**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CUKT** | **Cukurca** | **0.55** | **333** | P | **Pg** | **01 25 34.9** | **-1.2** |
| CUKT | | | | S | **Sg** | **01 25 42.5** | **-0.9** |
| CUKT | | | | *i* AML | AML | 01 25 44.0 | |
| | comp=N,470nm,0.6s | | | | | | |
| CUKT | | | | *i* AML | AML | 01 25 44.0 | |
| | comp=E,763nm,0.3s | | | | | | |
| **HAKT** | **HAKKARI** | **0.82** | **348** | P | **Pg** | **01 25 40.2** | **-1.0** |
| HAKT | | | | S | **Sg** | **01 25 51.3** | **-0.6** |
| HAKT | | | | *i* AML | AML | 01 25 52.0 | |
| | comp=E,164nm,0.5s | | | | | | |
| HAKT | | | | *i* AML | AML | 01 25 52.0 | |
| | comp=N,235nm,0.6s | | | | | | |
| **YOVA** | **Hakkari_Yksek** | **0.88** | **19** | P | **Pb** | **01 25 42.5** | **-0.5** |
| YOVA | | | | *i* AML | AML | 01 25 55.0 | |
| | comp=N,79nm,0.7s | | | | | | |
| YOVA | | | | S | **Sn** | **01 25 55.3** | **-1.8** |
| YOVA | | | | *i* AML | AML | 01 25 59.0 | |
| | comp=E,59nm,0.8s | | | | | | |
| **IKRK** | **Kirkuk** | **1.40** | **166** | *e*Pg | **Pg** | **01 25 51.9** | **-0.3** |
| | baz=343 | | | | | | |
| IKRK | | | | *e*Sg | **Sg** | **01 26 11.0** | **+0.7** |
| IKRK | | | | AML | AML | 01 26 19.9 | |
| | comp=E,92nm,0.8s | | | | | | |
| IKRK | | | | AML | AML | 01 26 23.7 | |
| | comp=N,145nm,0.3s | | | | | | |
| **PERV** | **Siirt/Pervari-** | **1.62** | **318** | P | **Pg** | **01 25 56.2** | **-0.2** |
| PERV | | | | S | **Sg** | **01 26 17.5** | **+0.1** |
| PERV | | | | *i* AML | AML | 01 26 22.0 | |
| | comp=N,71nm,1.2s | | | | | | |
| PERV | | | | *i* AML | AML | 01 26 23.0 | |
| | comp=N,131nm,0.6s | | | | | | |
| **TVAN** | **Van** | **1.81** | **347** | P | **Pg** | **01 26 00.2** | **0.0** |
| TVAN | | | | S | **Sg** | **01 26 26.5** | **+2.7** |
| TVAN | | | | *i* AML | AML | 01 26 31.0 | |
| | comp=N,35nm,0.7s | | | | | | |
| TVAN | | | | *i* AML | AML | 01 26 31.0 | |
| | comp=N,32nm,0.6s | | | | | | |
| **OZAP** | **Van, Ozalp-Mer** | **1.90** | **2** | P | **Pg** | **01 26 01.6** | **-0.2** |
| OZAP | | | | *i* AML | AML | 01 26 30.0 | |
| | comp=N,12nm,0.8s | | | | | | |
| OZAP | | | | S | **Sg** | **01 26 30.0** | **+3.5** |
| OZAP | | | | *i* AML | AML | 01 26 37.0 | |
| | comp=N,11nm,0.7s | | | | | | |
| **MIDY** | **Mardin/Midyat-** | **2.12** | **289** | P | **Pb** | **01 26 04.0** | **0.0** |
| MIDY | | | | S | **Sb** | **01 26 31.1** | **+0.5** |
| MIDY | | | | *i* AML | AML | 01 26 34.0 | |
| | comp=N,44nm,0.6s | | | | | | |
| MIDY | | | | *i* AML | AML | 01 26 34.0 | |
| | comp=N,44nm,0.7s | | | | | | |
| **VMUR** | **Van-Muradiye** | **2.25** | **353** | P | **Pb** | **01 26 06.1** | **-0.1** |
| VMUR | | | | *i* AML | AML | 01 26 39.0 | |
| | comp=N,7.4nm,0.8s | | | | | | |
| VMUR | | | | *i* AML | AML | 01 26 43.0 | |
| | comp=N,14nm,0.8s | | | | | | |
| **SVAN** | **Silvan-Diyarba** | **2.58** | **303** | P | **Pb** | **01 26 11.4** | **-0.4** |
| SVAN | | | | S | **Sb** | **01 26 45.3** | **+1.7** |
| SVAN | | | | *i* AML | AML | 01 26 54.0 | |
| | comp=N,15nm,0.6s | | | | | | |
| SVAN | | | | *i* AML | AML | 01 26 57.0 | |
| | comp=N,5.9nm,0.6s | | | | | | |

*JMA* ***16*** *02:27:01.1±0.1, 37°.42N×141°.92E, h38km±3km, M3.8*
*NIED* ***16*** *02:27:01.2, 37°.42N×141°.92E, h38km, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr0.86; Mθθ-1.14; Mφφ0.28; Mrθ1.06; Mrφ1.96; Mθφ0.77; Fault plane solution: Mw2.57000×10¹⁴ NP1:φs86.00000°, δ71.00000°, λ33.00000°. NP2:φs344.00000°, δ59.00000°, λ158.00000°.*
*IDC* ***16*** *02:27:08.6±4.7, 37°.36N×141°.72E, h90km±39km, mb3.2/5, mb1 3.3/7, mb1mx3.1/27, mbtmp3.5/7 Error ellipse: s-maj=40.2km s-min=26.1km az=77.0*

**ISC 16 02:27:01.2±1.2, 37°43N±0°.06×142°02E±0°.09, *h*35km, n27, σ1°40/33, mb3.5/5, 4C-2D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **0.92** | **267** | ⇓P | **Pn** | **02 27 16.5** | **-1.2** |
| JFK | | | | S | **Sn** | **02 27 27.0** | **-2.6** |
| **JMST** | **Minamisoumatoc** | **0.95** | **289** | ⇑P | **Pn** | **02 27 17.1** | **-1.0** |
| JMST | | | | S | **Sn** | **02 27 28.3** | **-2.1** |
| **JIKH** | **Ishinomakikobu** | **0.99** | **334** | P | **Pn** | **02 27 18.3** | **-0.3** |
| JIKH | | | | S | **Sn** | **02 27 30.1** | **-1.2** |
| **ONAJ** | **Iwakimizuishiy** | **1.03** | **252** | ⇓P | **Pn** | **02 27 18.0** | **-1.2** |
| ONAJ | | | | S | **Sn** | **02 27 29.9** | **-2.6** |
| **JMM** | **Marumori** | **1.07** | **295** | ⇑P | **Pn** | **02 27 19.1** | **-0.6** |
| JMM | | | | S | **Sn** | **02 27 31.8** | **-1.6** |
| **JIO** | **Ouri** | **1.16** | **333** | ⇑P | **Pn** | **02 27 20.9** | **0.0** |
| JIO | | | | S | **Sn** | **02 27 34.3** | **-1.2** |
| **JFT** | **Otama** | **1.34** | **274** | P | **Pn** | **02 27 23.7** | **+0.2** |
| JFT | | | | S | **Sn** | **02 27 39.4** | **-0.8** |
| **JOU** | **Okura** | **1.43** | **311** | ⇑P | **Pn** | **02 27 25.1** | **+0.4** |
| JOU | | | | S | **Sn** | **02 27 42.3** | **+0.1** |
| **JMK** | **Ichinoseki** | **1.65** | **338** | P | **Pn** | **02 27 28.4** | **+0.7** |
| JMK | | | | S | **Sn** | **02 27 48.2** | **+0.6** |
| **JYS** | **Shirataka** | **1.74** | **298** | S | **Sn** | **02 27 51.6** | **+1.7** |
| **JFY** | **Yanaizu** | **1.84** | **270** | P | **Pn** | **02 27 30.8** | **+0.4** |
| JFY | | | | S | **Sn** | **02 27 52.7** | **+0.1** |
| **JYK** | **Kaneyama** | **1.98** | **319** | P | **Pn** | **02 27 33.1** | **+0.8** |
| JYK | | | | *e*S | **Sn** | **02 27 56.8** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **3.18** | **255** | P | **Pn** | **02 27 51.3** | **+2.6** |
| | 0.6nm,0.3s,baz=70,slow=9.7,SNR=10 | | | | | | |
| MJAR | | | | S | **Sn** | **02 28 28.4** | **+2.9** |
| | 0.4nm,0.3s,baz=94,slow=30,SNR=2.7 | | | | | | |
| **MAT** | **Matsushiro** | **3.18** | **255** | P | **Pn** | **02 27 50.3** | **+1.5** |
| MAT | | | | *e*S | **Sn** | **02 28 27.6** | **+2.1** |
| **USRK** | **Ussuriysk Ar.** | **10.17** | **315** | P | Pn | 02 29 30.2 | +5.5 |
| | baz=130,slow=15,SNR=2.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.94** | **122** | T | T | 03 02 04.5 | |
| | baz=315,slow=75,SNR=42 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.95** | **122** | T | T | 03 02 20.6 | |
| | baz=315,slow=75,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.96** | **122** | T | T | 03 02 19.6 | |
| | baz=315,slow=75,SNR=34 | | | | | | |
| **SONM** | **Songino Array** | **27.97** | **303** | P | **P** | **02 32 49.7** | **+1.1** |
| | 0.3nm,0.5s,baz=106,slow=10,SNR=3.0 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.67** | **124** | T | T | 03 03 15.7 | |
| | baz=317,slow=76,SNR=25 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.67** | **124** | T | T | 03 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MASBT | | | | S | Sg | 02 41 06.5 | -1.6 | | |
| | baz=210 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.49** | **317** | ⇓*i*P | **Pg** | **02 41 01.4** | **-0.5** | | |
| | baz=333 | | | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **02 41 07.3** | **-1.1** | | |
| | baz=333 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.49** | **359** | ⇑*i*P | **Pg** | **02 41 01.2** | **-0.9** | | |
| | baz=17 | | | | | | | | |
| YUS | | | | *e*S | **Sg** | **02 41 07.7** | **-0.9** | | |
| | baz=17 | | | | | | | | |
| **YULB** | **Yu-li** | **0.51** | **38** | ⇑*i*P | **Pg** | **02 41 01.9** | **-0.3** | | |
| | baz=56 | | | | | | | | |
| YULB | | | | *i* S | **Sg** | **02 41 08.6** | **-0.3** | | |
| | baz=56 | | | | | | | | |
| **SGLT** | **Jiouru** | **0.51** | **238** | *e*P | **Pg** | **02 41 01.8** | **-0.5** | | |
| | baz=224 | | | | | | | | |
| SGLT | | | | *e*S | **Sg** | **02 41 10.1** | **+1.2** | | |
| | baz=224 | | | | | | | | |
| **TWK** | **Hsinying** | **0.51** | **302** | ⇓*i*P | **Pg** | **02 41 01.9** | **-0.4** | | |
| | baz=314 | | | | | | | | |
| TWK | | | | S | **Sg** | **02 41 08.8** | **-0.3** | | |
| | baz=314 | | | | | | | | |
| **TWM1** | **Shoushan** | **0.52** | **251** | ⇑*i*P | **Pg** | **02 41 02.2** | **-0.4** | | |
| | baz=247 | | | | | | | | |
| **ALS** | **Alishan** | **0.54** | **345** | ⇑*i*P | **Pg** | **02 41 02.0** | **-0.8** | | |
| | baz=353 | | | | | | | | |
| ALS | | | | S | **Sg** | **02 41 08.6** | **-1.3** | | |
| | baz=353 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.55** | **279** | *e*P | **Pg** | **02 41 03.8** | **+0.7** | | |
| | baz=279 | | | | | | | | |
| CHN3 | | | | *e*S | **Sb** | **02 41 13.8** | **+1.1** | | |
| | baz=279 | | | | | | | | |
| **SHHT** | **Tainan City** | **0.56** | **273** | P | **Pg** | **02 41 04.3** | **+1.0** | | |
| | baz=273 | | | | | | | | |
| SHHT | | | | S | **Sb** | **02 41 13.9** | **+0.9** | | |
| | baz=273 | | | | | | | | |
| **LDUT** | **Ludao** | **0.57** | **124** | P | **Pb** | **02 41 04.2** | **-0.6** | | |
| | baz=122 | | | | | | | | |
| LDUT | | | | *e*S | **Sn** | **02 41 13.7** | **-2.9** | | |
| | baz=122 | | | | | | | | |
| **EHY** | **Hungye** | **0.61** | **33** | ⇑*i*P | **Pg** | **02 41 03.8** | **-0.5** | | |
| | baz=40 | | | | | | | | |
| EHY | | | | S | **Sg** | **02 41 11.7** | **-0.6** | | |
| | baz=40 | | | | | | | | |
| **EAST** | **Anshuo** | **0.61** | **190** | ⇑*i*P | **Pg** | **02 41 03.9** | **-0.4** | | |
| | baz=172 | | | | | | | | |
| EAST | | | | S | **Sg** | **02 41 11.5** | **-0.8** | | |
| | baz=172 | | | | | | | | |
| **SSPT** | **Xinbi** | **0.62** | **216** | ⇑*i*P | **Pg** | **02 41 03.7** | **-0.7** | | |
| | baz=206 | | | | | | | | |
| SSPT | | | | *e*S | **Sg** | **02 41 13.8** | **+1.3** | | |
| | baz=206 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.62** | **248** | *e*P | **Pg** | **02 41 04.9** | **+0.4** | | |
| | baz=244 | | | | | | | | |
| **TAW** | **Tawu** | **0.63** | **185** | ⇑*i*P | **Pg** | **02 41 04.4** | **-0.3** | | |
| | baz=178 | | | | | | | | |
| TAW | | | | S | **Sg** | **02 41 12.6** | **-0.3** | | |
| | baz=178 | | | | | | | | |
| **SSHA** | **Shanhua** | **0.64** | **283** | *e*P | **Pg** | **02 41 05.5** | **+0.8** | | |
| | baz=296 | | | | | | | | |
| **TAWH** | **Dawu Township** | **0.65** | **186** | ⇑P | **Pg** | **02 41 04.6** | **-0.4** | | |
| | baz=179 | | | | | | | | |
| TAWH | | | | S | **Sg** | **02 41 13.4** | **-0.1** | | |
| | baz=179 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.66** | **337** | ⇑*i*P | **Pg** | **02 41 04.5** | **-0.7** | | |
| | baz=343 | | | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **02 41 14.1** | **+0.4** | | |
| | baz=343 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.66** | **41** | ⇑*i*P | **Pb** | **02 41 05.5** | **-0.7** | | |
| | baz=39 | | | | | | | | |
| HGSD | | | | *i* S | **Sb** | **02 41 15.7** | **+0.1** | | |
| | baz=39 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.68** | **274** | *e*P | **Pb** | **02 41 07.1** | **+0.5** | | |
| | baz=273 | | | | | | | | |
| TAI1 | | | | *e*S | **Sb** | **02 41 18.4** | **+2.2** | | |
| | baz=273 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.69** | **207** | ⇑*i*P | **Pg** | **02 41 04.7** | **-1.1** | | |
| | baz=190 | | | | | | | | |
| SCZT | | | | *e*S | **Sg** | **02 41 13.5** | **-1.3** | | |
| | baz=190 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.70** | **320** | *e*P | **Pg** | **02 41 06.4** | **+0.5** | | |
| | baz=325 | | | | | | | | |
| **CHY** | **Chiayi** | **0.70** | **316** | P | **Pg** | **02 41 05.8** | **-0.2** | | |
| | baz=320 | | | | | | | | |
| CHY | | | | S | **Sg** | **02 41 16.8** | **+1.6** | | |
| | baz=320 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.72** | **301** | *e*P | **Pg** | **02 41 06.7** | **+0.3** | | |
| | baz=317 | | | | | | | | |
| ICHU | | | | *e*S | **Sb** | **02 41 18.5** | **+0.9** | | |
| | baz=317 | | | | | | | | |
| **SCLT** | **Jiali** | **0.73** | **285** | *e*P | **Pg** | **02 41 05.6** | **-0.9** | | |
| | baz=302 | | | | | | | | |
| SCLT | | | | *e*S | **Sb** | **02 41 19.0** | **+1.3** | | |
| | baz=302 | | | | | | | | |
| **KAU** | **Kaohsiung** | **0.73** | **235** | *e*P | **Pb** | **02 41 08.6** | **+1.0** | | |
| | baz=251 | | | | | | | | |
| **VWDT** | **VWDT** | **0.78** | **12** | ⇑*i*P | **Pg** | **02 41 06.1** | **-1.3** | | |
| | baz=10.0 | | | | | | | | |
| **SLIU** | **Shizi** | **0.79** | **191** | ⇑*i*P | **Pg** | **02 41 07.0** | **-0.6** | | |
| | baz=177 | | | | | | | | |
| SLIU | | | | *e*S | **Sg** | **02 41 17.3** | **-0.5** | | |
| | baz=177 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.79** | **360** | ⇑*i*P | **Pg** | **02 41 06.2** | **-1.5** | | |
| | baz=5.0 | | | | | | | | |
| SSLB | | | | *e*S | **Sg** | **02 41 18.3** | **+0.3** | | |
| | baz=5.0 | | | | | | | | |
| **WDLH** | **Douliu** | **0.79** | **331** | P | **Pg** | **02 41 08.0** | **+0.2** | | |
| | baz=335 | | | | | | | | |
| WDLH | | | | S | **Sg** | **02 41 18.5** | **+0.4** | | |
| | baz=335 | | | | | | | | |
| **WLCH** | **Liuqiu** | **0.83** | **220** | *e*P | **Pb** | **02 41 09.8** | **+0.5** | | |
| | baz=218 | | | | | | | | |
| **WJS** | **Zhushan** | **0.85** | **346** | *i* P | **Pg** | **02 41 08.8** | **-0.1** | | |
| WJS | | | | *e*S | **Sg** | **02 41 20.5** | **+0.5** | | |
| **WSL** | **Shuilin Townsh** | **0.85** | **308** | *e*P | **Pg** | **02 41 08.6** | **-0.3** | | |
| | baz=311 | | | | | | | | |
| WSL | | | | *e*S | **Sg** | **02 41 20.5** | **+0.4** | | |
| | baz=311 | | | | | | | | |
| **WTK** | **Tuku** | **0.87** | **323** | P | **Pg** | **02 41 09.1** | **-0.1** | | |
| | baz=327 | | | | | | | | |
| WTK | | | | S | **Sg** | **02 41 20.7** | **+0.2** | | |
| | baz=327 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.89** | **356** | *i* P | **Pg** | **02 41 08.3** | **-1.3** | | |
| | baz=13 | | | | | | | | |
| SMLT | | | | *e*S | **Sg** | **02 41 21.1** | **0.0** | | |
| | baz=13 | | | | | | | | |
| **TYC** | **Yuchr** | **0.91** | **354** | ⇑*i*P | **Pg** | **02 41 09.2** | **-0.8** | | |
| | baz=7.0 | | | | | | | | |
| TYC | | | | *e*S | **Sb** | **02 41 23.3** | **+0.2** | | |
| | baz=7.0 | | | | | | | | |
| **WNT** | **Mingjian** | **0.92** | **344** | *i* P | **Pg** | **02 41 10.1** | **0.0** | | |
| | baz=334 | | | | | | | | |
| WNT | | | | *e*S | **Sb** | **02 41 23.5** | **+0.4** | | |
| | baz=334 | | | | | | | | |
| **ESL** | **Shilin** | **0.93** | **28** | ⇑*i*P | **Pg** | **02 41 09.1** | **-1.2** | | |
| | baz=40 | | | | | | | | |
| ESL | | | | *e*S | **Sb** | **02 41 22.2** | **-1.2** | | |
| | baz=40 | | | | | | | | |
| **WSF** | **Szhu** | **0.93** | **314** | *e*P | **Pg** | **02 41 09.1** | **-1.3** | | |
| | baz=317 | | | | | | | | |
| WSF | | | | *e*S | **Sg** | **02 41 23.5** | **+0.9** | | |
| | baz=317 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.97** | **187** | *e*P | **Pg** | **02 41 10.8** | **-0.4** | | |
| | baz=192 | | | | | | | | |
| **HEN** | **Hengchun** | **1.00** | **192** | *e*P | **Pn** | **02 41 12.6** | **-0.4** | | |
| | baz=187 | | | | | | | | |
| **WUSB** | **Renai** | **1.01** | **8** | ⇑*e*P | **Pg** | **02 41 10.0** | **-1.8** | | |
| | baz=5.0 | | | | | | | | |
| WUSB | | | | *e*S | **Sb** | **02 41 25.8** | **0.0** | | |
| | baz=5.0 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.05** | **330** | *e*P | **Pg** | **02 41 11.9** | **-0.7** | | |
| | baz=333 | | | | | | | | |
| WRL | | | | *e*S | **Sg** | **02 41 26.6** | **+0.3** | | |
| | baz=333 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.05** | **188** | *e*P | **Pn** | **02 41 13.1** | **-0.6** | | |
| | baz=183 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.05** | **187** | *e*P | **Pg** | **02 41 12.3** | **-0.4** | | |
| | baz=192 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.06** | **358** | *e*P | **Pg** | **02 41 11.7** | **-1.1** | | |
| | baz=11 | | | | | | | | |
| WCS | | | | *e*S | **Sb** | **02 41 27.9** | **+0.6** | | |
| | baz=11 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.07** | **324** | *e*P | **Pg** | **02 41 12.6** | **-0.4** | | |
| | baz=328 | | | | | | | | |
| WTCT | | | | *e*S | **Sg** | **02 41 27.3** | **+0.4** | | |
| | baz=328 | | | | | | | | |
| **CHGB** | **Renai** | **1.08** | **10** | ⇑*e*P | **Pg** | **02 41 11.3** | **-2.0** | | |
| | baz=6.0 | | | | | | | | |
| CHGB | | | | *e*S | **Sb** | **02 41 27.7** | **-0.4** | | |
| | baz=6.0 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.09** | **183** | *e*P | **Pb** | **02 41 13.4** | **-0.2** | | |
| | baz=190 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.09** | **150** | *e*P | **Pg** | **02 41 11.4** | **-2.0** | | |
| | baz=146 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.14** | **150** | *e*P | **Pg** | **02 41 10.1** | **-4.3** | | |
| | baz=146 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.14** | **341** | *e*P | **Pg** | **02 41 14.2** | **-0.2** | | |
| | baz=345 | | | | | | | | |
| WCHH | | | | *e*S | **Sn** | **02 41 31.5** | **+0.6** | | |
| | baz=345 | | | | | | | | |
| **HWA** | **Hwalien** | **1.15** | **31** | *e*P | **Pb** | **02 41 14.2** | **-0.4** | | |
| | baz=45 | | | | | | | | |
| HWA | | | | *e*S | **Sn** | **02 41 32.4** | **+1.4** | | |
| | baz=45 | | | | | | | | |
| **TCU** | **Taichung** | **1.18** | **347** | *e*P | **Pg** | **02 41 15.0** | **-0.1** | | |
| | baz=338 | | | | | | | | |
| TCU | | | | *e*S | **Sn** | **02 41 32.0** | **+0.2** | | |
| | baz=338 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **14** | *e*P | **Pg** | **02 41 13.3** | **-1.9** | | |
| | baz=18 | | | | | | | | |
| WHF | | | | *e*S | **Sn** | **02 41 33.6** | **+1.2** | | |
| | baz=18 | | | | | | | | |
| **WDGT** | **Dungji** | **1.23** | **283** | P | **Pg** | **02 41 13.9** | **-2.0** | | |
| | baz=283 | | | | | | | | |
| WDGT | | | | *e*S | **Sg** | **02 41 30.3** | **-1.6** | | |
| | baz=283 | | | | | | | | |
| **TWD** | **Chiawan** | **1.23** | **28** | P | **Pg** | **02 41 14.7** | **-1.4** | | |
| | baz=43 | | | | | | | | |
| TWD | | | | *e*S | **Sn** | **02 41 32.9** | **-0.1** | | |
| | baz=43 | | | | | | | | |
| **TDCB** | **Techi** | **1.27** | **8** | *e*P | **Pg** | **02 41 14.8** | **-2.0** | | |
| | baz=13 | | | | | | | | |
| **TWT** | **Tachien** | **1.27** | **9** | P | **Pg** | **02 41 15.7** | **-1.2** | | |
| | baz=13 | | | | | | | | |
| **FUSS** | **Fushou** | **1.28** | **12** | *e*P | **Pg** | **02 41 14.8** | **-2.2** | | |
| | baz=17 | | | | | | | | |
| **WHP** | **Taichung City** | **1.28** | **359** | *e*P | **Pg** | **02 41 16.6** | **-0.5** | | |
| | baz=6.0 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.30** | **22** | *e*P | **Pg** | **02 41 16.1** | **-1.4** | | |
| | baz=45 | | | | | | | | |
| **ETL** | **Fush Village** | **1.31** | **28** | *e*P | **Pg** | **02 41 16.3** | **-1.4** | | |
| | baz=47 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.31** | **26** | *e*P | **Pn** | **02 41 15.2** | **-2.1** | | |
| | baz=47 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.36** | **353** | *e*P | **Pb** | **02 41 18.2** | **-0.1** | | |
| | baz=356 | | | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **02 41 37.7** | **+1.4** | | |
| | baz=356 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.38** | **292** | *e*P | **Pn** | **02 41 15.7** | **-2.4** | | |
| | baz=294 | | | | | | | | |
| PHUB | | | | *e*S | **Sb** | **02 41 33.1** | **-3.3** | | |
| | baz=294 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.38** | **348** | *e*P | **Pb** | **02 41 18.7** | **0.0** | | |
| | baz=340 | | | | | | | | |
| WDJ | | | | *e*S | **Sn** | **02 41 39.4** | **+2.6** | | |
| | baz=340 | | | | | | | | |
| **PNG** | **Penghu** | **1.41** | **294** | P | **Pn** | **02 41 16.4** | **-2.2** | | |
| | baz=295 | | | | | | | | |
| **VCHM** | **Qimei** | **1.43** | **279** | *e*P | **Pn** | **02 41 16.6** | **-2.2** | | |
| | baz=294 | | | | | | | | |
| **NSY** | **Sanyi** | **1.43** | **353** | *e*P | **Pb** | **02 41 19.2** | **-0.3** | | |
| | baz=356 | | | | | | | | |
| NSY | | | | *e*S | **Sg** | **02 41 40.2** | **+1.8** | | |
| | baz=356 | | | | | | | | |
| **NNSB** | **Datong** | **1.48** | **15** | *e*P | **Pn** | **02 41 18.9** | **-0.8** | | |
| | baz=35 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.49** | **15** | *e*P | **Pn** | **02 41 19.1** | **-0.8** | | |
| | baz=35 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.55** | **354** | *e*P | **Pb** | **02 41 21.5** | **0.0** | | |
| | baz=339 | | | | | | | | |
| NMLH | | | | *e*S | **Sg** | **02 41 42.8** | **+0.6** | | |
| | baz=339 | | | | | | | | |
| **ENA** | **Nanau** | **1.60** | **26** | P | **Pb** | **02 41 21.4** | **-1.0** | | |
| | baz=44 | | | | | | | | |
| **LATG** | **Datong** | **1.62** | **19** | P | **Pn** | **02 41 21.8** | **+0.2** | | |
| | baz=23 | | | | | | | | |
| **EWUT** | **Wuta** | **1.63** | **27** | *e*P | **Pb** | **02 41 22.3** | **-0.6** | | |
| | baz=32 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.63** | **1** | P | **Pb** | **02 41 22.8** | **-0.1** | | |
| | baz=348 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.64** | **5** | *e*P | **Pb** | **02 41 22.5** | **-0.6** | | |
| | baz=7.0 | | | | | | | | |
| NFF | | | | *e*S | **Sg** | **02 41 45.8** | **+0.6** | | |
| | baz=7.0 | | | | | | | | |
| **LIOB** | **Emei** | **1.65** | **2** | *e*P | **Pb** | **02 41 22.5** | **-0.7** | | |
| | baz=348 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.68** | **17** | *e*P | **Pb** | **02 41 23.1** | **-0.7** | | |
| | baz=22 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.71** | **13** | P | **Pn** | **02 41 23.3** | **+0.4** | | |
| | baz=18 | | | | | | | | |
| **NSK** | **Sanguang** | **1.72** | **12** | *e*P | **Pn** | **02 41 23.3** | **+0.4** | | |
| | baz=18 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.73** | **19** | *i* P | **Pb** | **02 41 24.6** | **-0.1** | | |
| | baz=35 | | | | | | | | |
| ENTT | | | | *e*S | **Sg** | **02 41 47.1** | **-1.1** | | |
| | baz=35 | | | | | | | | |
| **NDS** | **Dongshan** | **1.77** | **23** | *e*P | **Pb** | **02 41 25.1** | **-0.3** | | |
| | baz=42 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.79** | **1** | *e*P | **Pb** | **02 41 25.1** | **-0.6** | | |
| | baz=348 | | | | | | | | |
| **TWC** | **Suao** | **1.80** | **27** | *e*P | **Pb** | **02 41 25.5** | **-0.4** | | |
| | baz=28 | | | | | | | | |
| TWC | | | | *e*S | **Sb** | **02 41 48.1** | **-0.6** | | |
| | baz=28 | | | | | | | | |
| **TWE** | **Neicheng** | **1.84** | **20** | *e*P | **Pg** | **02 41 26.6** | **-1.1** | | |
| | baz=35 | | | | | | | | |
| TWE | | | | *e*S | **Sg** | **02 41 51.7** | **+0.1** | | |
| | baz=35 | | | | | | | | |
| **NWLT** | **Wulai** | **1.84** | **16** | *e*P | **Pb** | **02 41 25.9** | **-0.6** | | |
| | baz=16 | | | | | | | | |
| NWLT | | | | *e*S | **Sg** | **02 41 50.5** | **-1.3** | | |
| | baz=16 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.85** | **18** | *e*P | **Pb** | **02 41 26.1** | **-0.6** | | |
| | baz=33 | | | | | | | | |
| FUSB | | | | *e*S | **Sb** | **02 41 50.3** | **+0.2** | | |
| | baz=33 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.98** | **6** | *e*P | **Pb** | **02 41 27.6** | **-1.2** | | |
| | baz=13 | | | | | | | | |
| **NTC** | **Toucheng** | **2.02** | **23** | *e*P | **Pb** | **02 41 29.0** | **-0.5** | | |
| | baz=42 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.03** | **15** | *e*P | **Pb** | **02 41 28.9** | **-0.8** | | |
| | baz=19 | | | | | | | | |
| **TWA** | **Mucha** | **2.06** | **16** | *e*P | **Pg** | **02 41 31.4** | **-0.5** | | |
| | baz=39 | | | | | | | | |
| **TAP** | **Taipei** | **2.10** | **14** | *e*P | **Pg** | **02 41 32.5** | **-0.2** | | |
| | baz=2.0 | | | | | | | | |
| **TIPB** | **Shuangxi** | **2.12** | **22** | *e*P | **Pb** | **02 41 29.7** | **-1.7** | | |
| | baz=40 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.14** | **11** | *e*P | **Pb** | **02 41 31.8** | **+0.2** | | |
| | baz=17 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.20** | **20** | *e*P | **Pb** | **02 41 31.9** | **-0.7** | | |
| | baz=42 | | | | | | | | |
| **YM01** | **YM01** | **2.22** | **14** | *e*P | **Pb** | **02 41 31.7** | **-1.2** | | |
| | baz=22 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.22** | **25** | *e*P | **Pn** | **02 41 30.6** | **+0.9** | | |
| | baz=41 | | | | | | | | |
| **ANP** | **Anpu** | **2.24** | **13** | *e*P | **Pb** | **02 41 33.2** | **-0.2** | | |
| | baz=19 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.25** | **22** | *e*P | **Pb** | **02 41 31.9** | **-1.6** | | |
| | baz=40 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.38** | **52** | P | **Pn** | **02 41 32.5** | **+0.5** | | |
| YOJ | | | | *e*S | **Sn** | **02 42 01.2** | **-0.3** | | |
| **YOJ** | **Yonaguni jima** | **2.38** | **52** | *e*P | **Pn** | **02 41 32.3** | **+0.4** | | |
| | baz=55 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.64** | **321** | *e*P | **Pn** | **02 41 34.2** | **-1.3** | | |
| | baz=325 | | | | | | | | |
| **KNM** | **Kinmen** | **2.71** | **302** | *e*P | **Pn** | **02 41 37.1** | **+0.5** | | |
| | baz=302 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.77** | **302** | *e*P | **Pn** | **02 41 36.2** | **-1.2** | | |
| | baz=304 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.82** | **67** | P | **Pn** | **02 41 38.1** | **+0.1** | | |
| HATJ | | | | S | **Sn** | **02 42 11.9** | **-0.3** | | |
| **IRIF** | **Iriomote-Funau** | **2.87** | **62** | P | **Pn** | **02 41 38.9** | **+0.2** | | |
| IRIF | | | | S | **Sn** | **02 42 13.4** | **-0.1** | | |
| **JKRS** | **Kuro-shima** | **3.06** | **65** | P | **Pn** | **02 41 41.9** | **+0.6** | | |
| JKRS | | | | *e*S | **Sn** | **02 42 18.3** | **+0.1** | | |
| **ZPLA** | **Ao Xicun** | **3.09** | **288** | *e*P | **Pn** | **02 41 39.7** | **-2.0** | | |
| | baz=289 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.22** | **64** | P | **Pn** | **02 41 43.3** | **-0.2** | | |
| JIJ | | | | *e*S | **Sn** | **02 42 19.9** | **-2.3** | | |
| **MATB** | **Ma-tsu** | **3.28** | **344** | *e*P | **Pn** | **02 41 43.2** | **-1.1** | | |
| | baz=350 | | | | | | | | |
| **AXDP** | **Jialang** | **3.33** | **305** | *e*P | **Pn** | **02 41 44.1** | **-0.9** | | |
| | baz=307 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.46** | **62** | P | **Pn** | **02 41 46.5** | **-0.2** | | |
| JISG | | | | S | **Sn** | **02 42 25.8** | **-2.2** | | |
| **MHZQ** | **Yeshan** | **3.56** | **331** | *e*P | **Pn** | **02 41 47.0** | **-1.1** | | |
| | baz=337 | | | | | | | | |
| **JTJ** | **Tarama** | **3.80** | **64** | P | **Pn** | **02 41 51.7** | **+0.2** | | |
| JTJ | | | | S | **Sn** | **02 42 35.6** | **-0.9** | | |
| **KSRS** | **Korea Array** | **15.61** | **21** | P | **P** | **02 44 38.5** | **+1.3** | | |
| | 0.2nm,0.3s,baz=196,slow=10,SNR=2.5 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.12** | **44** | P | Pn | 02 45 30.0 | +1.1 | | |
| | 1.5nm,0.4s,baz=236,slow=8.1,SNR=2.8 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.07** | **262** | P | **P** | **02 45 39.9** | **+2.3** | | |
| | 1.1nm,0.3s,baz=62,slow=7.9,SNR=5.3 | | | | | | | | |
| **SONM** | **Songino Array** | **27.39** | **338** | P | **P** | **02 46 42.4** | **+3.8** | | |
| | 0.8nm,0.7s,baz=147,slow=8.9,SNR=6.8 | | | | | | | | |
| **KLR** | **Kul'dur** | **27.54** | **15** | P | **P** | **02 46 43.4** | **+3.6** | | |
| | 0.9nm,0.7s,baz=241,slow=10,SNR=4.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.06** | **317** | P | **P** | **02 48 21.1** | **+1.0** | | |
| | 2.2nm,1.0s,baz=105,slow=9.7,SNR=6.8 | | | | | | | | |
| MKAR | | | | PcP | **PcP** | **02 50 29.5** | **-0.5** | | |
| | 0.2nm,0.6s,baz=127,slow=2.2,SNR=3.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.14** | **328** | P | **P** | **02 48 37.3** | **+0.2** | | |
| | 1.9nm,0.6s,baz=113,slow=7.3,SNR=7.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.89** | **321** | P | **P** | **02 48 52.0** | **+0.5** | | |
| | 94nm,1.0s,baz=113,slow=9.0,SNR=4.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63** | **162** | P | **P** | **02 49 03.2** | **-2.6** | | |
| | 0.7nm,0.5s,baz=344,slow=8.8,SNR=7.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.06** | **164** | P | **P** | **02 49 30.4** | **-2.3** | | |
| | 0.4nm,0.5s,baz=340,slow=6.1,SNR=11 | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.02** | **159** | P | **P** | **02 50 45.5** | **-0.6** | | |
| | 2.3nm,0.8s,baz=333,slow=9.0,SNR=5.5 | | | | | | | | |
| **KBZ** | **Khabaz** | **66.06** | **309** | P | **P** | **02 51 40.7** | **+0.6** | | |
| | 1.0nm,0.9s,baz=146,slow=3.6,SNR=3.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **70.36** | **27** | P | **P** | **02 52 05.7** | **-1.0** | | |
| | 0.3nm,0.9s,baz=278,slow=6.9,SNR=1.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **70.56** | **338** | P | **P** | **02 52 08.2** | **+0.2** | | |
| | 3.0nm,0.8s,baz=63,slow=8.2,SNR=2.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **72.37** | **330** | P | **P** | **02 52 19.5** | **+0.6** | | |
| | 1.9nm,0.7s,baz=70,slow=8.0,SNR=4.7 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **79.18** | **332** | P | **P** | **02 52 59.3** | **+1.4** | | |
| | 0.6nm,0.7s,baz=64,slow=5.4,SNR=1.7 | | | | | | | | |
| **GERES** | **GERESS Array B** | **83.63** | **321** | P | **P** | **02 53 21.9** | **0.0** | | |
| | 0.5nm,0.6s,baz=46,slow=5.8,SNR=4.9 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.14** | **23** | P | **P** | **02 53 22.9** | **-1.2** | | |
| | 0.3nm,0.6s,baz=315,slow=4.6,SNR=7.1 | | | | | | | | |

*JMA* ***16*** *02:45:58.7±0.5,22.97N×121.05E,h0km,M4.4*
*NIED* ***16*** *02:45:58.7,22.97N×121.05E,h0km,MW4.5,Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr-5.16; Mθθ3.04; Mφφ2.13; Mrθ2.28; Mθφ-2.10; Mφr-0.48; Fault plane solution: M0 5.46000×10^15 NP1: φs299.00000°,δ57.00000°,λ-101.00000°. NP2: φs138.00000°,δ34.00000°,λ-74.00000°.*
*NEIC* ***16*** *02:45:59.0±1.0,22.94N±0.06×120.94E±0.08,h6km±1km, mb4.6/32,Mwr4.3/22,ML4.3(TAP) Error ellipse: s-maj=11.4km s-min=7.3km az=113.0*
*NEIC* ***16*** *02:45:59.9,22.99N×120.91E,h7km,Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr-3.65; Mθθ1.18; Mφφ2.47; Mrθ-0.34; Mθφ-2.37; Mφr0.89; Fault plane solution: M0 4.11000×10^15 NP1:φs147.39000°, δ51.67000°,λ-83.75000°. NP2:φs317.38000°,δ38.76000°, λ-97.84000°. Principal axes: T 4.3863, Plg6.0000°, Azm233.0000°; N -0.6111, Plg5.0000°, Azm324.0000°; P -3.7752, Plg82.0000°, Azm90.0000°;*
*TAP* ***16*** *02:45:59.4,23.00N×120.89E,h6km,ML4.8,C*
*BJI* ***16*** *02:46:00.8±0.0,22.97N×120.95E,h20km,mb4.1/53, mB4.6/26,ML4.4/9,Ms4.3/42,Ms7 4.1/38*
*IDC* ***16*** *02:46:05.0±3.6,22.98N×121.12E,h47km±35km,mb3.9/23, mb1 4.1/24,mb1mx4.0/43,mbtmp4.1/24,ML3.8/1,MS3.5/21, Ms1 3.5/21,ms1mx3.2/88,Error ellipse: s-maj=17.9km s-min=12.5km az=73.0*
**ISC 16 02:46:00.4±0.6,22.98N±0.01×120.92E±0.01,h13km±3km, n304,σ1$41/406,mb4.5/49,MS3.5/24,40C-11D,Fault plane solution: NP1:**φs306.07645°,δ48.29748°, λ-84.12450°. **NP2:**φs117.28321°,δ42.03921°, λ-96.55364°. **Principal axes:** T Plg3.1383°, Azm31.9192°; N Plg4.3833°, Azm122.1600°; P Plg84.6055°, Azm266.4250°; **Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LONT** | **Longtian** | **0.21** | **112** | ⇓*i*P | **Pg** | **02 46 04.9** | **-0.1** |
| | baz=115 | | | | | | |
| LONT | | | | *i* S | **Sg** | **02 46 08.5** | **+0.4** |
| | baz=115 | | | | | | |
| **TWG** | **Pinlang** | **0.21** | **140** | Pg | **Pg** | **02 46 04.5** | **-0.7** |
| **TWG** | **Pinlang** | **0.21** | **140** | ⇓*i*P | **Pg** | **02 46 05.1** | **0.0** |
| | baz=138 | | | | | | |
| TWG | | | | *i* S | **Sg** | **02 46 08.8** | **+0.5** |
| | baz=138 | | | | | | |
| **TWGBT** | **Beinan** | **0.22** | **139** | ⇓*i*P | **Pg** | **02 46 05.1** | **-0.2** |
| | baz=138 | | | | | | |
| TWGBT | | | | S | **Sg** | **02 46 08.7** | **+0.2** |
| | baz=138 | | | | | | |
| **ELDTW** | **Lidau** | **0.22** | **23** | ⇑*i*P | **Pg** | **02 46 04.0** | **-1.3** |
| | baz=34 | | | | | | |
| ELDTW | | | | S | **Sg** | **02 46 07.5** | **-1.2** |
| | baz=34 | | | | | | |
| **STYH** | **Taoyuan** | **0.23** | **324** | ⇓P | **Pg** | **02 46 04.0** | **-1.4** |
| | baz=328 | | | | | | |
| STYH | | | | *i* S | **Sg** | **02 46 06.8** | **-2.0** |
| | baz=328 | | | | | | |
| **SLGT** | **Liugui** | **0.26** | **272** | *e*P | **Pg** | **02 46 03.4** | **-2.5** |
| | baz=261 | | | | | | |
| SLGT | | | | *e*S | **Sg** | **02 46 06.5** | **-3.0** |
| | baz=261 | | | | | | |
| **ECS** | **Chishang** | **0.29** | **68** | ⇑*i*P | **Pg** | **02 46 06.4** | **-0.1** |
| | baz=73 | | | | | | |
| ECS | | | | S | **Sg** | **02 46 11.3** | **+0.6** |
| | baz=73 | | | | | | |
| **TTN** | **Taitung** | **0.31** | **138** | ⇓P | **Pb** | **02 46 07.6** | **-0.2** |
| | baz=137 | | | | | | |
| TTN | | | | S | **Sb** | **02 46 13.4** | **+0.6** |
| | baz=137 | | | | | | |
| **SGST** |

SNST S Sg 02 46 16.5 +0.9
baz=304
**CHN4 Tsaushan** 0.47 320 *i* P Pg 02 46 09.5 -0.3
baz=332
CHN4 *e*S Sg 02 46 16.7 +0.5
baz=332
**SGLT Jiouru** 0.47 237⇑ *i*P Pg 02 46 09.8 -0.1
baz=229
**TWM1 Shoushan** 0.49 251⇑ *i*P Pg 02 46 10.2 +0.1
baz=247
**TWK Hsinying** 0.49 305 P Pg 02 46 09.8 -0.3
baz=306
TWK *i* S Sg 02 46 17.3 +0.6
baz=306
**TSPT Pingtung City** 0.50 232 *e*P Pg 02 46 10.2 -0.1
baz=225
**TWF1 Yuli** 0.50 43⇑ *i*P Pg 02 46 09.5 -0.9
baz=57
TWF1 *i* S Sg 02 46 16.1 -1.0
baz=57
**YUS Yu-Shan** 0.50 3⇑ *i*P Pg 02 46 09.1 -1.4
baz=8.0
YUS *i* S Sg 02 46 15.9 -1.4
baz=8.0
**EYUL Yuli** 0.51 45⇑ *i*P Pg 02 46 09.8 -0.8
baz=60
**CHN3 Shinhua** 0.52 280 P Pb 02 46 11.6 +0.2
baz=279
**SHHT Tainan City** 0.53 274⇑ *i*P Pb 02 46 12.3 +0.7
baz=272
SHHT S Sn 02 46 21.6 -0.9
baz=272
**YULB Yu-li** 0.53 40 Pg Pg 02 46 09.3 -1.6
**YULB Yu-li** 0.53 40⇑ *i*P Pg 02 46 09.8 -1.1
baz=57
**ALS Alishan** 0.54 348⇑ *i*P Pg 02 46 09.9 -1.2
baz=352
ALS *i* S Sg 02 46 17.9 -0.3
baz=352
**ECBN Changbin** 0.59 56⇑ *i*P Pb 02 46 12.3 -0.2
baz=60
ECBN S Sb 02 46 22.2 +1.3
baz=60
**SNJT Kaohsiung City** 0.59 247 *e*P Pb 02 46 13.0 +0.4
baz=244
**LDUT Ludao** 0.59 121 *e*P Pb 02 46 12.3 -0.3
baz=123
LDUT *e*S Sb 02 46 21.7 +0.8
baz=123
**SSPT Xinbi** 0.60 213⇑ *i*P Pg 02 46 11.6 -0.5
baz=199
**EAST Anshuo** 0.60 187 P Pg 02 46 11.7 -0.5
baz=182
EAST S Sg 02 46 19.9 -0.3
baz=182
**SSHA Shanhua** 0.60 285 *e*P Pb 02 46 13.3 +0.5
baz=299
**TAW Tawu** 0.62 182 *i* P Pg 02 46 12.4 -0.2
baz=179
**EHY Hungye** 0.64 35⇑ *i*P Pg 02 46 11.8 -1.1
baz=49
EHY *e*S Sg 02 46 21.0 -0.3
baz=49
**TAWH Dawu Township** 0.64 183 *e*P Pg 02 46 12.4 -0.6
baz=180
TAWH *e*S Sg 02 46 21.2 -0.3
baz=180
**TAI1 Yung-k'ang** 0.64 275 *e*P Pn 02 46 14.9 -0.3
baz=273
TAI1 S Sn 02 46 25.2 0.0
baz=273
**CHN5 Tsauling** 0.65 340 ⇑P Pg 02 46 12.5 -0.7
baz=352
CHN5 S Sb 02 46 22.6 -0.2
baz=352
**SCZT Fangliau** 0.67 205⇑ *i*P Pg 02 46 12.5 -1.0
baz=193
SCZT S Sg 02 46 21.4 -1.0
baz=193
**CHN2 Minshiung** 0.68 323 *e*P Pg 02 46 13.9 +0.2
baz=324
CHN2 S Sb 02 46 24.0 +0.4
baz=324
**HGSD Ruisui** 0.68 42⇑ *i*P Pg 02 46 13.5 -0.3
baz=39
HGSD S Sb 02 46 23.6 0.0
baz=39
**CHY Chiayi** 0.69 318 *e*P Pg 02 46 13.9 0.0
baz=319
CHY *e*S Sb 02 46 24.5 +0.8
baz=319
**SCLT Jiali** 0.70 286 *e*P Pb 02 46 15.1 +0.6
baz=301
SCLT *e*S Sn 02 46 26.4 -0.3
baz=301
**ICHU Yijhu** 0.70 302 *e*P Pg 02 46 14.3 +0.2
baz=316
ICHU *e*S Sb 02 46 24.7 +0.6
baz=316
**KAU Kaohsiung** 0.70 234 *e*P Pb 02 46 15.0 +0.5
baz=221
**CHN8 Yiju** 0.75 299 *e*P Pg 02 46 14.7 -0.3
baz=314
CHN8 *e*S Sb 02 46 26.1 +0.7
baz=314
**SLIU Shizi** 0.77 189 *e*P Pg 02 46 14.7 -0.8
baz=185
**WGK Gukeng** 0.77 335 ⇑P Pg 02 46 15.6 +0.2
baz=337
WGK S Sb 02 46 27.1 +0.9
baz=337
**WDLH Douliu** 0.79 333⇑ *e*P Pg 02 46 16.0 +0.3
baz=335
WDLH *e*S Sb 02 46 27.4 +0.8
baz=335
**SSLB Suanglung** 0.80 2 Pg Pg 02 46 13.9 -2.1
**SSLB Suanglung** 0.80 2⇑ *i*P Pg 02 46 14.2 -1.8
baz=11
**WLCH Liuqiu** 0.81 219⇑ *e*P Pn 02 46 18.1 +0.7
baz=215
WLCH *e*S Sn 02 46 33.4 +4.1
baz=215
**TWP Hsiaoliuchiu** 0.82 219 *e*P Pn 02 46 18.3 +0.6
baz=216
**WSL Shuilin Townsh** 0.83 310 *e*P Pg 02 46 16.6 0.0
baz=310
WSL *e*S Sb 02 46 28.9 +0.9
baz=310
**WJS Zhushan** 0.85 348 P Pg 02 46 16.6 -0.4
baz=359
WJS *e*S Sb 02 46 29.3 +0.8
baz=359
**WTK Tuku** 0.85 325 *e*P Pg 02 46 16.7 -0.3
baz=327
**SMLT Sun Moon Lake** 0.90 359⇑ *i*P Pg 02 46 16.5 -1.3
baz=10.0
SMLT S Sn 02 46 31.0 -0.7
baz=10.0
**WNT Mingjian** 0.92 346⇑ *i*P Pb 02 46 18.0 -0.2
baz=333
WNT S Sg 02 46 31.2 +1.0
baz=333
**WSF Szhu** 0.92 315 *e*P Pb 02 46 17.5 -0.6
baz=317
WSF *e*S Sg 02 46 30.7 +0.5
baz=317
**TEGC Jichi Village** 0.92 38 *e*P Pb 02 46 17.5 -0.7
baz=42
**TYC Yuchr** 0.92 356⇑ *i*P Pb 02 46 17.2 -1.0
baz=6.0
TYC *i* S Sn 02 46 31.5 -0.6
baz=6.0
**WNT1 Nantou City** 0.94 346 P Pb 02 46 18.6 -0.1
baz=333
WNT1 S Sn 02 46 33.0 +0.2
baz=333
**ESL Shilin** 0.95 29⇑ *i*P Pb 02 46 17.0 -1.7
baz=40
ESL *e*S Sb 02 46 29.9 -1.4
baz=40
**SMST Manzhou Townsh** 0.96 185 *e*P Pb 02 46 18.9 -0.1
baz=190
**HEN Hengchun** 0.99 190 *e*P Pb 02 46 19.2 -0.2
baz=194
HEN *e*S Sn 02 46 34.3 +0.5
baz=194
**WUSB Renai** 1.02 10⇑ *e*P Pb 02 46 17.8 -2.2
baz=4.0

**WYL Yuanlin Townsh** 1.02 342 *e*P Pb 02 46 19.2 -0.8
baz=345
**SNW Nanwan** 1.03 189 *e*P Pn 02 46 22.6 +2.0
baz=185
**WMLT Mailiao** 1.04 322 *e*P Pb 02 46 20.1 -0.2
baz=323
WMLT *e*S Sg 02 46 34.6 +0.5
baz=323
**WRL Guolierlin Hig** 1.04 331 *e*P Pb 02 46 19.7 -0.6
baz=334
**TWK1 Hengchun** 1.04 186 *e*P Pn 02 46 20.9 +0.1
baz=182
TWK1 *e*S Sn 02 46 36.9 +1.8
baz=182
**DPDB Guoxing** 1.04 0 *e*P Pb 02 46 18.9 -1.5
baz=11
DPDB *e*S Sg 02 46 34.7 +0.4
baz=11
**TWKBT Hengchun** 1.04 186 *e*P Pn 02 46 20.9 +0.1
baz=183
**WTCT Ta-ch'eng** 1.06 326 *e*P Pb 02 46 19.9 -0.6
baz=328
WTCT S Sn 02 46 35.4 -0.2
baz=328
**WCS Beigang Elemen** 1.07 359 *e*P Pb 02 46 18.7 -2.1
baz=10.0
WCS *e*S Sb 02 46 34.4 -0.3
baz=10.0
**WWF Wufeng** 1.07 349 P Pb 02 46 21.0 +0.1
baz=336
WWF S Sn 02 46 36.6 +0.6
baz=336
**TEYL Yanliau Villag** 1.08 35 *e*P Pb 02 46 20.6 -0.4
baz=47
TEYL S Sn 02 46 39.0 +3.0
baz=47
**TSEB Hengchuen, Pin** 1.08 181 *e*P Pn 02 46 21.1 -0.1
baz=189
**LAY Lan-yu** 1.11 148 *e*P Pb 02 46 19.6 -1.9
baz=147
**ETM Tongmen** 1.11 28 *e*P Pb 02 46 19.8 -1.7
baz=37
ETM *e*S Sb 02 46 35.6 -0.2
baz=37
**WCHH Zhanghua** 1.14 343 *e*P Pb 02 46 21.6 -0.5
baz=344
WCHH *e*S Sn 02 46 38.1 +0.5
baz=344
**LYUB Lan-yu** 1.15 148 *e*P Pb 02 46 19.1 -3.1
baz=147
**HWA Hwalien** 1.17 32 *e*P Pn 02 46 21.9 -0.6
baz=45
HWA *e*S Sg 02 46 39.4 +1.1
baz=45
**TCU Taichung** 1.18 349 *e*P Pn 02 46 22.4 -0.3
baz=339
**WDGT Dungji** 1.20 284⇑ *i*P Pn 02 46 21.8 -1.0
baz=284
WDGT S Sb 02 46 37.8 -0.5
baz=284
**WHF Hehuan Shan** 1.20 15 *e*P Pn 02 46 21.6 -1.7
baz=19
**TWD Chiawan** 1.25 29 *e*P Pn 02 46 22.8 -0.9
baz=43
TWD S Sg 02 46 41.5 +0.6
baz=43
**TDCB Techi** 1.28 10 *e*P Pn 02 46 22.9 -1.3
baz=358
TDCB *e*S Sg 02 46 41.8 -0.1
baz=358
**TWT Tachien** 1.28 10 *e*P Pn 02 46 23.1 -1.2
baz=358
TWT S Sg 02 46 42.4 +0.5
baz=358
**WHP Taichung City** 1.29 1 *e*P Pb 02 46 24.5 -0.1
baz=10.0
WHP *e*S Sg 02 46 44.1 +2.1
baz=10.0
**FUSS Fushou** 1.29 13 *e*P Pn 02 46 23.0 -1.4
baz=16
**ETLH Xiulin Townshi** 1.32 23 *e*P Pn 02 46 24.3 -0.4
baz=36
ETLH *e*S Sg 02 46 43.1 0.0
baz=36
**NACB Ninganchiao** 1.33 27 Pn 02 46 23.7 -1.1
**NACB Ninganchiao** 1.33 27 *e*P Pn 02 46 23.4 -1.4
baz=28
NACB *e*S Sn 02 46 42.7 +0.2
baz=28
**PHUB P'eng-hu** 1.35 293 *e*P Pn 02 46 24.2 -0.7
baz=294
PHUB S Sn 02 46 41.2 -1.6
baz=294
**TWQ1 Liyutan** 1.36 354 *e*P Pb 02 46 26.0 +0.2
baz=355
TWQ1 S Sg 02 46 45.6 +1.1
baz=355
**WDJ Dajia District** 1.38 349 *e*P Pb 02 46 26.3 +0.2
baz=341
**PNG Penghu** 1.39 295⇑ *i*P Pn 02 46 24.5 -0.9
baz=296
PNG *i* S Sn 02 46 42.0 -1.6
baz=296
**VCHM Qimei** 1.39 280 *e*P Pn 02 46 24.4 -1.1
baz=293
VCHM *e*S Sn 02 46 41.5 -2.4
baz=293
**NSY Sanyi** 1.43 354 ⇓P Pb 02 46 27.4 +0.4
baz=355
NSY *e*S Sg 02 46 46.3 -0.4
baz=355
**NNSB Datong** 1.50 16 *e*P Pn 02 46 26.7 -0.4
baz=17
NNSB *e*S Sb 02 46 47.4 +0.2
baz=17
**NNS Nan Shan** 1.51 16 *e*P Pn 02 46 27.0 -0.3
baz=16
NNS *e*S Sg 02 46 48.9 -0.1
baz=16
**NMLH Miaoli** 1.55 356 *e*P Pb 02 46 28.5 -0.5
baz=2.0
**ENA Nanau** 1.62 27 *e*P Pb 02 46 29.6 -0.7
baz=28
ENA *e*S Sb 02 46 50.9 +0.3
baz=28
**LATG Datong** 1.64 20⇑ *e*P Pn 02 46 29.6 +0.5
baz=35
LATG *e*S Sb 02 46 50.8 -0.5
baz=35
**NSTT Nanjuang** 1.64 2 *e*P Pb 02 46 30.7 +0.1
baz=3.0
NSTT *e*S Sg 02 46 52.6 -0.7
baz=3.0
**NFF Wufeng Townshi** 1.65 6 *e*P Pn 02 46 30.0 +0.8
baz=6.0
NFF *e*S Sb 02 46 52.5 +1.0
baz=6.0
**EWUT Wuta** 1.65 28 *e*P Pn 02 46 29.6 +0.5
baz=32
**LIOB Emei** 1.66 3 *e*P Pn 02 46 29.9 +0.6
baz=8.0
**NDT Datong Townshi** 1.70 18 *e*P Pn 02 46 30.6 +0.7
baz=27
NDT *e*S Sg 02 46 54.8 -0.4
baz=27
**YHNB Yeheng** 1.73 14 Pn Pn 02 46 30.6 +0.3
**YHNB Yeheng** 1.73 14 P Pn 02 46 30.7 +0.4
baz=13
YHNB S Sg 02 46 55.2 -0.9
baz=13
**NSK Sanguang** 1.73 13 *e*P Pn 02 46 30.1 -0.2
baz=13
NSK *e*S Sb 02 46 54.8 +1.0
baz=13
**ENTT Nioudou** 1.75 20 P Pn 02 46 31.4 +0.9
baz=33
ENTT *e*S Sb 02 46 55.0 +0.6
baz=33
**HSN1 Hsinchu** 1.79 3 *e*P Pg 02 46 34.6 -0.2
baz=9.0
**NDS Dongshan** 1.79 24 *e*P Pb 02 46 32.7 -0.5
baz=41
NDS *e*S Sb 02 46 56.9 +1.3
baz=41
**SBCB Hsinchu** 1.80 2 *e*P Pb 02 46 32.7 -0.6
baz=348
**HSN Hsinchu** 1.81 1 *e*P Pg 02 46 35.0 -0.2
baz=4.0

HSN *e*S Sg 02 46 58.7 0.0
baz=4.0
**TWC Suao** 1.83 27⇑ *i*P Pb 02 46 33.0 -0.8
baz=27
TWC S Sb 02 46 56.0 -0.5
baz=27
**TWE Neicheng** 1.86 21 *e*P Pb 02 46 34.5 +0.3
baz=34
TWE *e*S Sg 02 46 59.9 -0.4
baz=34
**NWLT Wulai** 1.86 16 *e*P Pn 02 46 33.2 +1.2
baz=20
**FUSB Fushanzhiwuyua** 1.87 19 *e*P Pn 02 46 33.2 +1.0
baz=32
FUSB *e*S Sb 02 46 57.5 -0.4
baz=32
**ILA Ilan** 1.93 23 *e*P Pb 02 46 34.7 -0.8
baz=40
**NCUH Zhongli** 1.99 7 *e*P Pg 02 46 37.7 -0.9
baz=13
**NCU National Centr** 1.99 7 *e*P Pb 02 46 37.2 +0.6
baz=13
**NHW Xinwu Township** 2.02 3 *e*P Pb 02 46 36.7 -0.2
baz=18
**NTC Toucheng** 2.04 24 *e*P Pb 02 46 36.4 -0.9
baz=41
**NHDH Xindian Distri** 2.04 15 *e*P Pb 02 46 37.3 -0.2
baz=19
**TATO Taipei** 2.05 14 Pn 02 46 34.5 -0.1
**TATO Taipei** 2.05 14 *e*P Pn 02 46 35.9 +1.3
baz=13
TATO S Sg 02 47 05.5 -0.8
baz=13
**TWA Mucha** 2.08 17 *e*P Pb 02 46 37.9 -0.1
baz=15
TWA *e*S Sg 02 47 06.2 -1.1
baz=15
**TAP Taipei** 2.11 14 *e*P Pb 02 46 37.9 -0.7
baz=3.0
**TAP1 Taipei** 2.12 15 *e*P Pn 02 46 36.9 +1.4
baz=3.0
**TIPB Shuangxi** 2.14 22 *e*P Pn 02 46 37.4 +1.4
baz=37
TIPB *e*S Sg 02 47 08.0 -1.4
baz=37
**TWS1 Kuangyinshan** 2.15 12 *e*P Pb 02 46 39.5 +0.1
baz=19
TWS1 *e*S Sb 02 47 05.5 -0.5
baz=19
**NWF Wu-fen Shan** 2.22 21 *e*P Pn 02 46 37.8 +0.7
baz=41
**WFSB Wu-fen Shan** 2.22 21 *e*P Pn 02 46 37.4 +0.5
baz=41
**NTST Danshui** 2.22 12 *e*P Pb 02 46 39.9 -0.6
baz=18
**YM01 YM01** 2.23 15 *e*P Pn 02 46 38.2 +1.1
baz=357
YM01 *e*S Sb 02 47 09.7 +1.4
baz=357
**TWB1 Santiao Chiao** 2.24 26 *e*P Pn 02 46 38.0 +0.8
baz=41
**ANP Anpu** 2.26 14 *e*P Pb 02 46 40.3 -0.8
baz=17
**SXI1 Grass Mountain** 2.27 22 *e*P Pn 02 46 39.1 +1.3
baz=39
**YM08 YM08** 2.28 15 *e*P Pn 02 46 39.0 +1.3
baz=22
**TNOU National Taiwa** 2.29 20 *e*P Pb 02 46 40.6 -1.0
baz=40
**JYNG Yonagunijimaku** 2.36 51 P Pn 02 46 39.1 +0.2
JYNG *e*S Sn 02 47 08.2 +0.5
**TWY Chenhua** 2.36 15 *e*P Pb 02 46 41.0 -1.9
baz=21
**YOJ Yonaguni jima** 2.41 52 P Pn 02 46 39.7 +0.1
YOJ *e*S Sn 02 47 09.2 +0.2
**YOJ Yonaguni jima** 2.41 52 Pn Pn 02 46 39.1 -0.5
**YOJ Yonaguni jima** 2.41 52 *e*P Pn 02 46 39.0 -0.6
baz=70
YOJ *e*S Sn 02 47 06.9 -2.1
baz=70
**PTMZ Houxiangcun** 2.63 322 *e*P Pn 02 46 41.7 -0.9
baz=326
**KNM Kinmen** 2.69 302 *e*P Pn 02 46 43.4 0.0
baz=304
**KNMB Chin-men Tao** 2.75 303 *e*P Pn 02 46 44.5 +0.3
baz=306
**PCYT Pengchaiyu** 2.83 21 *e*P Pn 02 46 46.6 +1.2
baz=39
**HATJ Hateruma jima** 2.85 67 P Pn 02 46 45.6 -0.1
HATJ S Sn 02 47 19.1 -0.8
**QZH Quanzhou** 2.89 313 Pn Pn 02 46 45.3 -0.9
QZH Sn Sn 02 47 22.3 +1.5
QZH smax smax
comp=N,360nm,0.9s
QZH smax smax
comp=E,450nm,0.5s
**IRIF Iriomote-Funau** 2.90 62 P Pn 02 46 46.3 -0.1
IRIF *e*S Sn 02 47 21.0 -0.1
**ZPLA Ao Xicun** 3.06 289 *e*P Pn 02 46 47.6 -0.9
baz=290
**JKRS Kuro-shima** 3.09 66 P Pn 02 46 49.2 +0.2
JKRS *e*S Sn 02 47 26.4 +0.6
**JIJ Ishigaki jima** 3.26 64 P Pn 02 46 50.7 -0.5
JIJ *e*S Sn 02 47 28.2 -1.6
**MATB Ma-tsu** 3.28 344 *e*P Pn 02 46 51.3 -0.2
baz=349
**AXDP Jialang** 3.31 306 *e*P Pn 02 46 52.1 +0.2
baz=309
**JISG Ishigakijimahi** 3.49 62 P Pn 02 46 53.8 -0.6
JISG *e*S Sn 02 47 34.1 -1.5
**MHZQ Yeshan** 3.55 331 *e*P Pn 02 46 55.1 -0.2
baz=337
**LYJJ Jianjiangzhen** 3.70 344 *e*P Pn 02 46 56.0 -1.3
baz=349
**JTJ Tarama** 3.83 64 P Pn 02 46 58.9 -0.2
JTJ *e*S Sn 02 47 44.0 -0.1
**XPSS Dashiqiu** 3.98 351 *e*P Pn 02 47 00.6 -0.7
baz=355
**JIRB Irabujima** 4.30 64 *e*S Sn 02 47 55.6 0.0
**JMJ2 Miyako jima3** 4.39 66 *e*S Sn 02 47 58.2 +0.3
**JIKM Ikemajima** 4.40 63 *e*S Sn 02 47 58.5 +0.4
**SXFK Yanhouchang** 4.52 319 *e*P Pn 02 47 07.7 -0.9
baz=323
**HKPS Hong Kong Po S** 6.30 265 Pn 02 47 33.0 -0.2
**GZH Guangzhou** 6.98 272 P Pn 02 47 40.6 -1.8
GZH S Sn 02 48 58.5 -3.2
GZH smax smax
comp=N,420nm,0.8s
GZH smax smax
comp=E,290nm,1.0s
**SSE Sheshan** 8.08 2 P Pn 02 47 59.9 +2.4
SSE S Sn 02 49 30.0 +1.2
SSE smax smax
comp=N,52nm,1.1s
SSE smax smax
comp=E,43nm,1.0s
SSE LR LR
comp=N,430nm,11.9s
SSE LR LR
comp=E,290nm,12.2s
**CNSH ChangSha** 8.88 307 ⇓P Pn 02 48 01.8 -6.6
CNSH S Sn 02 49 37.3 -11
CNSH smax smax
comp=N,210nm,1.0s
CNSH smax smax
comp=E,130nm,1.1s
**NJ2 Nanjing** 9.22 349 *e*P Pn 02 48 12.8 -0.3
NJ2 S Sn 02 49 56.8 +0.1
NJ2 pmax pmax
comp=E,42nm,0.6s
NJ2 smax smax
comp=E,150nm,0.9s
NJ2 smax smax
comp=E,100nm,1.2s
NJ2 LR LR
comp=E,650nm,5.7s
NJ2 LR LR
comp=E,610nm,6.4s
NJ2 LR LR
comp=E,1μm,10.7s
**WHN Wuhan** 9.55 323 ⇑P Pn 02 48 20.8 +3.2
WHN S Sn 02 50 09.6 +4.8
WHN LR LR
comp=E,3μm,9.3s
WHN LR LR
comp=E,2μm,11.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHN | | | | LR | LR | | | | |
| | comp=E,2μm,7.5s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.07 251** | | P | **Pn** | **02 48 41.5 +2.9** | | | |
| QIZ | | | | S | **Sn** | **02 50 47.6 +5.3** | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=E,2μm,15.5s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=E,1μm,12.4s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=E,1μm,12.9s | | | | | | | | |
| **GYA** | **Guiyang** | **13.41 288** | ⇑ | P | **P** | **02 49 16.3 -3.8** | | | |
| GYA | | | | S | **Sn** | **02 51 47.6 +7.9** | | | |
| GYA | | | | pmax | pmax | | | | |
| | comp=E,17nm,1.0s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=E,600nm,6.3s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=E,450nm,6.0s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=E,640nm,7.8s | | | | | | | | |
| **LYN** | **LuoYang** | **13.70 329** | *eP* | | **Pn** | **02 49 18.0 +3.6** | | | |
| LYN | | | | PP | P | 02 49 28.4 +5.3 | | | |
| LYN | | | | S | **Sn** | **02 51 50.1 +3.7** | | | |
| LYN | | | | pmax | pmax | | | | |
| | comp=E,110nm,7.7s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=E,600nm,7.6s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=E,410nm,9.8s | | | | | | | | |
| **HNS** | **HongShan** | **15.33 341** | ⇓ | P | **P** | **02 49 44.3 +3.1** | | | |
| HNS | | | | S | **S** | **02 52 41.4 -1.2** | | | |
| HNS | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.6s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=N,590nm,13.0s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=E,1μm,13.7s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,660nm,13.0s | | | | | | | | |
| **KSRS** | **Korea Array** | **15.63 21** | | P | **P** | **02 49 43.0 -1.6** | | | |
| | comp=Z,0.3nm,0.3s,baz=203,slow=12,SNR=9.0 | | | | | | | | |
| KSRS | | | | LR | LR | 02 56 15.5 | | | |
| | comp=Z,82nm,20.8s,baz=205,slow=39 | | | | | | | | |
| **KMI** | **Kunming** | **16.75 281** | ⇑ | P | **P** | **02 50 00.3 +3.0** | | | |
| KMI | | | | pP | sP | 02 50 03.1 -0.3 | | | |
| KMI | | | | S | **S** | **02 53 09.4 -2.7** | | | |
| KMI | | | | sS | sS | 02 53 13.4 -5.2 | | | |
| KMI | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,230nm,11.9s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,290nm,9.7s | | | | | | | | |
| KMI | | | | LR | LR | | | | |
| | comp=Z,290nm,20.5s | | | | | | | | |
| **CD2** | **Chengdu** | **17.21 301** | | P | **P** | **02 50 05.4 +3.2** | | | |
| CD2 | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,80nm,8.8s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,650nm,10.8s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,710nm,9.4s | | | | | | | | |
| **BJI** | **Beijing** | **17.47 348** | | P | **P** | **02 50 07.5 +2.5** | | | |
| BJI | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,390nm,13.5s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,260nm,11.4s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,480nm,14.5s | | | | | | | | |
| **PZH** | **PanZhiHua** | **17.77 285** | | P | **P** | **02 50 11.8 +3.3** | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,110nm,5.5s | | | | | | | | |
| **LZH** | **Lanzhou** | **19.74 315** | *eP* | | **Pn** | **02 50 35.8 +4.1** | | | |
| LZH | | | | sP | sP | 02 50 41.4 +4.9 | | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,390nm,14.1s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,350nm,14.1s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,540nm,13.6s | | | | | | | | |
| **BTO** | **Baotou** | **19.83 335** | *eP* | | **Pn** | **02 50 36.6 +4.0** | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,2μm,13.3s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,1μm,12.0s | | | | | | | | |
| **MAT** | **Matsushiro** | **20.15 44** | | P | Pn | 02 50 39.5 +3.2 | | | |
| **MJAR** | **Matsushiro Arr** | **20.15 44** | | P | Pn | 02 50 35.9 -0.4 | | | |
| | comp=Z,11nm,0.9s,baz=231,slow=8.0,SNR=14 | | | | | | | | |
| MJAR | | | | LR | LR | 02 58 47.5 | | | |
| | comp=Z,187nm,21.7s,baz=220,slow=38 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.04 262** | | P | **P** | **02 50 47.7 +3.5** | | | |
| | comp=Z,2.4nm,0.4s,baz=68,slow=8.5,SNR=16 | | | | | | | | |
| CMAR | | | | PcP | **PcP** | **02 54 52.5 +1.4** | | | |
| | comp=Z,0.8nm,0.4s,baz=75,slow=1.4,SNR=4.1 | | | | | | | | |
| CMAR | | | | LR | LR | 03 00 24.7 | | | |
| | comp=Z,168nm,19.7s,baz=80,slow=40 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.04 262** | | P | **P** | **02 50 43.0 -1.2** | | | |
| CMAR | | | | | **PcP** | **02 54 49.1 -2.0** | | | |
| **XLT** | **XiLinHaoTe** | **21.24 350** | ⇓ | *iP* | **P** | **02 50 49.8 +3.5** | | | |
| XLT | | | | sP | sP | 02 50 56.3 +3.8 | | | |
| XLT | | | | S | Sn | 02 54 46.4 -2.8 | | | |
| XLT | | | | sS | pS | 02 54 56.1 +5.2 | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,210nm,5.2s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,370nm,12.4s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,320nm,8.8s | | | | | | | | |
| **SBUM** | **Sibu** | **22.09 204** | | P | **P** | **02 50 51.9 -3.6** | | | |
| **USRK** | **Ussuriysk Ar.** | **23.04 21** | | P | **P** | **02 51 05.1 -0.2** | | | |
| | comp=Z,1.9nm,0.7s,baz=226,slow=10,SNR=4.3 | | | | | | | | |
| USRK | | | | LR | LR | 03 00 32.9 | | | |
| | comp=Z,97nm,18.7s,baz=183,slow=38 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.04 21** | | P | **P** | **02 51 03.5 -1.8** | | | |
| **GTA** | **Gaotai** | **24.28 317** | ⇑ | P | **P** | **02 51 18.6 +0.9** | | | |
| GTA | | | | pP | pP | 02 51 22.3 0.0 | | | |
| GTA | | | | sP | sP | 02 51 25.3 +1.1 | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,76nm,4.2s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,190nm,13.8s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,150nm,13.1s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,190nm,12.7s | | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **24.50 195** | | P | **P** | **02 51 20.2 +0.6** | | | |
| **GUMO** | **Guam** | **24.55 108** | | LR | LR | 03 00 11.3 | | | |
| | comp=Z,68nm,19.9s,baz=90,slow=35 | | | | | | | | |
| **GOMU** | **GeErMu** | **26.15 306** | | P | **P** | **02 51 36.4 +1.5** | | | |
| GOMU | | | | pP | pP | 02 51 39.1 -0.4 | | | |
| GOMU | | | | S | **S** | **02 56 03.4 -3.2** | | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,130nm,5.4s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,240nm,9.9s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,270nm,10.9s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,310nm,10.1s | | | | | | | | |
| **HIA** | **Hailar** | **26.25 358** | | P | **P** | **02 51 31.9 -3.3** | | | |
| HIA | | | | IAmb | IAmb | 02 51 40.7 | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **SHL** | **Shillong** | **26.57 281** | | P | **P** | **02 51 37.0 -1.6** | | | |
| **ULN** | **Ulaanbaatar** | **27.19 339** | | P | **P** | **02 51 42.8 -1.1** | | | |
| **SONM** | **Songino Array** | **27.38 338** | | P | **P** | **02 51 46.0 +0.4** | | | |
| | comp=Z,1.5nm,0.8s,baz=161,slow=9.6,SNR=9.8 | | | | | | | | |
| SONM | | | | LR | LR | 03 03 55.6 | | | |
| | comp=Z,249nm,19.6s,baz=154,slow=39 | | | | | | | | |
| **SONM** | **Songino Array** | **27.38 338** | | P | **P** | **02 51 47.3 +1.7** | | | |
| **LSA** | **Lhasa** | **27.46 290** | | P | **P** | **02 51 49.5 +2.6** | | | |
| LSA | | | | pP | **sP** | **02 51 54.6 +1.3** | | | |
| LSA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,140nm,6.4s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,180nm,6.4s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,200nm,6.4s | | | | | | | | |
| **KLR** | **Kul'dur** | **27.56 15** | | P | **P** | **02 51 47.2 +0.2** | | | |
| | comp=Z,1.6nm,0.7s,baz=216,slow=8.8,SNR=3.6 | | | | | | | | |
| KLR | | | | LR | LR | 03 03 28.4 | | | |
| | comp=Z,93nm,18.6s,baz=196,slow=38 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **27.61 35** | | LR | LR | 03 04 18.4 | | | |
| | comp=Z,161nm,18.3s,baz=26,slow=40 | | | | | | | | |
| **KAPI** | **Kappang** | **27.85 182** | | LR | LR | 03 04 35.1 | | | |
| | comp=Z,30nm,18.3s,baz=29,slow=40 | | | | | | | | |
| **PSI** | **Prapat** | **29.27 230** | | LR | LR | 03 03 46.5 | | | |
| | comp=Z,52nm,19.4s,baz=12,slow=36 | | | | | | | | |
| **KLSI** | | **31.73 212** | | P | P | 02 52 37.2 +13 | | | |
| **MDSI** | **Maura Dua** | **31.83 213** | | P | **P** | **02 52 27.0 +1.9** | | | |
| | comp=Z,1μmcomp=Z,7.6nm,1.3s | | | | | | | | |
| **BATI** | **Baumata** | **33.09 175** | | LR | LR | 03 08 14.3 | | | |
| | comp=Z,37nm,18.6s,baz=312,slow=40 | | | | | | | | |
| **WMQ** | **Urumqi** | **34.32 315** | *eP* | | P | 02 52 51.8 +5.0 | | | |
| WMQ | | | | pP | sP | 02 52 55.9 +2.5 | | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **MK31** | **Makanchi Array** | **39.04 317** | | P | **P** | **02 53 25.9 -1.0** | | | |
| **MKAR** | **Makanchi Array** | **39.04 317** | | P | **P** | **02 53 28.2 +1.3** | | | |
| | comp=Z,5.1nm,1.0s,baz=108,slow=11,SNR=21 | | | | | | | | |
| MKAR | | | | PcP | **PcP** | **02 55 37.2 +0.4** | | | |
| | comp=Z,1.4nm,0.8s,baz=98,slow=3.7,SNR=5.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.04 317** | | P | **P** | **02 53 26.3 -0.6** | | | |
| MKAR | | | | PcP | **PcP** | **02 55 35.3 -1.6** | | | |
| **MAKZ** | **Makanchi** | **39.24 317** | | P | **P** | **02 53 26.9 -1.7** | | | |
| MAKZ | | | | IAmb | IAmb | 02 53 33.7 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **YAK** | **Yakutsk** | **39.48 6** | | LR | LR | 03 11 31.1 | | | |
| | comp=Z,101nm,20.9s,baz=258,slow=39 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **40.99 33** | | P | **P** | **02 53 42.5 -0.5** | | | |
| | comp=Z,3.7nm,0.8s,baz=234,slow=8.6,SNR=2.5 | | | | | | | | |
| PETK | | | | LR | LR | 03 10 20.0 | | | |
| | comp=Z,101nm,21.8s,baz=209,slow=36 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.12 328** | | P | **P** | **02 53 42.5 -1.5** | | | |
| ZAA0 | | | | IAmb | IAmb | 02 53 51.2 | | | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.12 328** | | P | **P** | **02 53 44.6 +0.5** | | | |
| | comp=Z,6.2nm,0.8s,baz=116,slow=6.9,SNR=17 | | | | | | | | |
| ZALV | | | | PcP | **PcP** | **02 55 43.4 +0.1** | | | |
| | comp=Z,0.8nm,0.7s,baz=90,slow=1.9,SNR=2.4 | | | | | | | | |
| ZALV | | | | LR | LR | 03 11 35.5 | | | |
| | comp=Z,46nm,19.8s,baz=114,slow=37 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.12 328** | | P | **P** | **02 53 43.7 -0.4** | | | |
| ZALV | | | | | **PcP** | **02 55 43.0 -0.4** | | | |
| **KSH** | **Kashi** | **41.36 304** | | P | P | 02 53 52.3 +5.9 | | | |
| KSH | | | | pP | sP | 02 53 57.3 +4.4 | | | |
| KSH | | | | PcP | **PcP** | **02 55 48.3 +3.7** | | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,2.1s | | | | | | | | |
| **COEN** | **Coen** | **42.69 147** | | P | **P** | **02 53 56.5 -0.7** | | | |
| COEN | | | | IAmb | IAmb | 02 53 57.9 | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.81 85** | | T | T | 03 39 13.8 | | | |
| | baz=283,slow=74,SNR=6.3 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.81 85** | | T | T | 03 39 17.5 | | | |
| | baz=283,slow=74,SNR=9.4 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.82 85** | | T | T | 03 39 20.1 | | | |
| | baz=283,slow=74,SNR=8.0 | | | | | | | | |
| **KURK** | **Kurchatov** | **42.86 321** | | P | **P** | **02 53 58.0 -0.2** | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.90 87** | | T | T | 03 39 26.4 | | | |
| | baz=284,slow=74,SNR=11 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.91 87** | | T | T | 03 39 21.6 | | | |
| | baz=284,slow=74,SNR=8.0 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.92 87** | | T | T | 03 39 22.9 | | | |
| | baz=284,slow=74,SNR=5.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **43.05 308** | | LR | LR | 03 13 34.3 | | | |
| | comp=Z,60nm,18.3s,baz=247,slow=38 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63 162** | | P | **P** | **02 54 11.5 -1.3** | | | |
| | comp=Z,1.8nm,0.6s,baz=345,slow=8.8,SNR=19 | | | | | | | | |
| WRA | | | | PcP | **PcP** | **02 55 54.9 -0.6** | | | |
| | comp=Z,0.6nm,0.8s,baz=346,slow=3.6,SNR=2.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63 162** | | P | **P** | **02 54 11.3 -1.5** | | | |
| **KKAR** | **Karatay Array** | **46.01 308** | | P | **P** | **02 54 22.6 -1.1** | | | |
| **KBL** | **Kabul** | **46.47 296** | | P | **P** | **02 54 26.1 -1.5** | | | |
| **ASAR** | **Alice Springs** | **48.06 164** | | P | **P** | **02 54 38.8 -1.0** | | | |
| | comp=Z,0.9nm,0.6s,baz=329,slow=5.7,SNR=17 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.06 164** | | P | **P** | **02 54 38.6 -1.2** | | | |
| **BRVK** | **Borovoye** | **48.52 321** | | P | **P** | **02 54 42.2 -0.8** | | | |
| **CTA** | **Charters Tower** | **49.43 148** | | LR | LR | 03 14 17.4 | | | |
| | comp=Z,24nm,21.5s,baz=88,slow=34 | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **49.90 40** | | LR | LR | 03 16 23.7 | | | |
| | comp=Z,23nm,21.9s,baz=226,slow=36 | | | | | | | | |
| **NRIK** | **Noril'sk** | **50.50 345** | | P | **P** | **02 54 57.7 -0.2** | | | |
| | comp=Z,3.2nm,0.7s,baz=126,slow=8.8,SNR=6.4 | | | | | | | | |
| **NRIK** | **Noril'sk** | **50.50 345** | | P | **P** | **02 54 57.8 0.0** | | | |
| NRIK | | | | IAmb | IAmb | 02 54 58.9 | | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.11 315** | | P | **P** | **02 55 25.1 +0.1** | | | |
| **AKTO** | **Aktyubinsk** | **55.47 316** | | LR | LR | 03 20 03.5 | | | |
| | comp=Z,34nm,20.6s,baz=56,slow=37 | | | | | | | | |
| **ARU** | **Arti** | **55.92 324** | | P | **P** | **02 55 37.5 -0.5** | | | |
| ARU | | | | IAmb | IAmb | 02 55 42.4 | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.03 159** | | P | **P** | **02 55 53.0 -0.2** | | | |
| | comp=Z,2.9nm,0.6s,baz=346,slow=6.4,SNR=12 | | | | | | | | |
| **ONI** | **Oni** | **65.83 308** | | P | **P** | **02 56 44.2 -1.5** | | | |
| ONI | | | | IAmb | IAmb | 02 56 57.3 | | | |
| | comp=Z,4.3nm,1.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **66.04 309** | | P | **P** | **02 56 48.4 +1.4** | | | |
| | comp=Z,3.0nm,0.9s,baz=154,slow=3.4,SNR=8.6 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **66.05 328** | *eP* | | **P** | **02 56 45.7 -1.0** | | | |
| KLMR | | | | AMP | | 02 56 50.2 | | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **KIV** | **Kislovodsk** | **66.16 309** | | P | **P** | **02 56 47.3 -0.6** | | | |
| **J20K** | **Nowinta River** | **67.37 28** | | P | **P** | **02 56 55.5 +0.3** | | | |
| J20K | | | | IAmb | IAmb | 02 57 03.9 | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **67.78 27** | | P | **P** | **02 56 58.1 +0.4** | | | |
| H21K | | | | IAmb | IAmb | 02 57 09.9 | | | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **68.64 23** | | P | **P** | **02 57 03.2 +0.1** | | | |
| TOLK | | | | IAmb | IAmb | 02 57 10.8 | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **69.02 35** | | LR | LR | 03 30 11.7 | | | |
| | comp=Z,32nm,18.7s,baz=196,slow=38 | | | | | | | | |
| **H23K** | **Yukon River** | **69.09 26** | | P | **P** | **02 57 05.7 -0.2** | | | |
| **MDM** | **Murphy Dome** | **69.78 27** | | P | **P** | **02 57 10.4 +0.2** | | | |
| MDM | | | | IAmb | IAmb | 02 57 22.0 | | | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **RND** | **Reindeer** | **69.81 29** | | P | **P** | **02 57 10.2 -0.3** | | | |
| **ILAR** | **Eielson Array** | **70.39 27** | | P | **P** | **02 57 12.6 -1.3** | | | |
| | comp=Z,0.3nm,0.5s,baz=287,slow=5.5,SNR=8.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **70.39 27** | | P | **P** | **02 57 13.7 -0.1** | | | |
| **ARCES** | **ARCESS Array B** | **70.56 338** | | P | **P** | **02 57 14.4 -0.4** | | | |
| | comp=Z,6.6nm,1.1s,baz=23,slow=6.6,SNR=5.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **72.36 330** | | P | **P** | **02 57 26.1 +0.3** | | | |
| | comp=Z,6.1nm,0.8s,baz=83,slow=7.9,SNR=10 | | | | | | | | |
| **FINES** | **FINESS Array B** | **72.36 330** | | P | **P** | **02 57 25.5 -0.3** | | | |
| **L27K** | **Beaver Creek,** | **72.98 28** | | P | **P** | **02 57 29.2 -0.4** | | | |
| L27K | | | | IAmb | IAmb | 02 57 37.8 | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| **MNK** | **Minsk** | **73.33 323** | *i* | P | P | 02 57 26.8 -4.9 | | | |
| | comp=E,3.0nm,1.0s | | | | | | | | |
| MNK | | | | *i* P | P | 02 57 26.8 -4.9 | | | |
| | comp=N,18nm,1.0s | | | | | | | | |
| MNK | | | | *i* P | P | 02 57 26.8 -4.9 | | | |
| | comp=Z,7.0nm,0.8s,baz=254 | | | | | | | | |
| MNK | | | | *i* PcP | **PcP** | **02 57 50.0 +2.0** | | | |
| MNK | | | | *i* PP | **PP** | **03 00 10.3 -4.5** | | | |
| MNK | | | | *i* PPP | PPP | 03 01 55.0 | | | |
| MNK | | | | *i* S | **S** | **03 06 55.9 -4.2** | | | |
| MNK | | | | *i* SS | **SS** | **03 11 40.4 -1.0** | | | |
| MNK | | | | *i* SSS | SSS | 03 15 01.5 | | | |
| MNK | | | | *i* LR | LR | 03 29 30.6 | | | |
| MNK | | | | *i* LRM | MLR | 03 31 49.9 | | | |
| | comp=Z,87nm,14.7s | | | | | | | | |
| MNK | | | | *i* LRM | MLR | 03 32 13.6 | | | |
| | comp=N,379nm,23.0s | | | | | | | | |
| MNK | | | | *i* LRM | MLR | 03 32 32.1 | | | |
| | comp=E,26nm,21.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.60 319** | | P | **P** | **02 57 33.5 +0.1** | | | |
| | comp=E,0.5nm,0.5s,baz=62,slow=5.4,SNR=6.8 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.69 307** | | P | **P** | **02 57 35.6 +1.3** | | | |
| | comp=E,0.7nm,0.5s,baz=66,slow=7.0,SNR=1.7 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **75.34 17** | | P | **P** | **02 57 43.0 0.0** | | | |
| A36M | | | | IAmb | IAmb | 02 57 44.5 | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **C36M** | **Paulatuk** | **77.01 19** | | P | **P** | **02 57 52.7 +0.1** | | | |
| C36M | | | | IAmb | IAmb | 02 57 53.4 | | | |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **77.51 351** | *i* | P | **P** | **02 57 53.7 -1.6** | | | |
| DAG | | | | IAmb | IAmb | 02 57 56.9 | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **77.92 319** | | P | **P** | **02 57 58.2 +0.1** | | | |
| **HFS** | **Hagfors** | **78.49 331** | | LR | LR | 03 36 00.5 | | | |
| | comp=Z,157nm,18.7s,baz=70,slow=38 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **79.17 332** | | P | **P** | **02 58 04.4 -0.4** | | | |
| | comp=Z,4.3nm,0.9s,baz=62,slow=5.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **79.17 332** | | P | **P** | **02 58 04.9 +0.1** | | | |
| | comp=Z,0.7nm,0.7s,baz=78,slow=5.8,SNR=5.8 | | | | | | | | |
| NOA | | | | LR | LR | 03 36 16.1 | | | |
| | comp=Z,50nm,21.4s,baz=290,slow=38 | | | | | | | | |
| **OJC** | **Ojcow** | **79.44 320** | | P | **P** | **02 58 06.0 -0.5** | | | |
| **NEEM** | **North Greenlan** | **79.68 358** | *i* | P | **P** | **02 58 07.2 -0.4** | | | |
| NEEM | | | | IAmb | IAmb | 02 58 12.7 | | | |
| | comp=Z,8.5nm,0.7s | | | | | | | | |
| **DBG** | **Daneborg** | **79.73 350** | *i* | P | **P** | **02 58 04.4 -3.2** | | | |
| DBG | | | | IAmb | IAmb | 02 58 14.4 | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **RES** | **Resolute Bay** | **79.88 9** | | P | **P** | **02 58 08.2 -0.2** | | | |
| RES | | | | IAmb | IAmb | 02 58 09.1 | | | |
| | comp=Z,4.9nm,1.0s | | | | | | | | |
| **VTS** | **Vitosha** | **80.16 312** | | P | **P** | **02 58 09.9 -0.8** | | | |
| VTS | | | | IAmb | IAmb | 02 58 21.8 | | | |
| | comp=Z,6.6nm,1.0s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **80.95 320** | *eP* | | **P** | **02 58 18.6 +3.9** | | | |
| **JAVC** | **Velka Javorina** | **81.26 319** | *eP* | | **P** | **02 58 18.8 +2.4** | | | |
| **OSTC** | **Ostas** | **81.39 321** | *eP* | | **P** | **02 58 18.3 +1.3** | | | |
| **DPC** | **Dobruska-Polom** | **81.41 321** | *eP* | | **P** | **02 58 17.7 +0.5** | | | |
| **VRAC** | **Vranov** | **81.70 320** | *eP* | | **P** | **02 58 21.8 +3.1** | | | |
| **KRUC** | **Moravsky** | **81.93 320** | *eP* | | **P** | **02 58 21.8 +2.0** | | | |
| **CLL** | **Collm** | **82.86 323** | *i* | P | **P** | **02 58 25.2 +0.5** | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **83.55 321** | *eP* | | **P** | **02 58 31.5 +3.2** | | | |
| **GEC2** | **GERESS Array S** | **83.61 321** | *eP* | | **P** | **02 58 27.4 -1.3** | | | |
| **GERES** | **GERESS Array B** | **83.61 321** | | P | **P** | **02 58 29.6 +0.9** | | | |
| | comp=Z,2.3nm,0.9s,baz=46,slow=3.9,SNR=11 | | | | | | | | |
| **SUMG** | **Summit** | **83.66 354** | *i* | P | **P** | **02 58 28.2 -0.7** | | | |
| SUMG | | | | IAmb | IAmb | 02 58 35.4 | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.16 23** | | P | **P** | **02 58 30.6 -0.6** | | | |
| | comp=Z,1.0nm,0.7s,baz=314,slow=4.9,SNR=24 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.16 23** | | P | **P** | **02 58 31.0 -0.2** | | | |
| **KMBO** | **Kilima Mbogo** | **84.61 266** | | P | **P** | **02 58 35.9 +1.3** | | | |
| | comp=Z,0.5nm,0.3s,baz=76,slow=8.3,SNR=4.2 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.47 43** | | P | Pdif | 02 59 34.8 +0.1 | | | |
| | comp=Z,0.4nm,0.8s,baz=305,slow=5.4,SNR=3.6 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.47 43** | | P | **P** | **02 59 33.9 -0.7** | | | |

*GCG* **16** *02:49:57.6±3.1, 11°.99N×88°.44W, h518km±468km, MD4.4*
*IDC* **16** *02:50:02.6±1.0, 11°.93N×86°.20W, h104km±10km, mb3.9/9, mb1 4.1/13, mb1mx3.7/42, mbtmp4.3/13, MS2.4/1, Ms1 2.4/1, ms1mx2.2/66, Error ellipse: s-maj=27.2km s-min=9.4km az=57.0*
*UCR* **16** *02:50:03.4±1.3, 11°.90N×86°.38W, h76km±13km, ML4.2, MW4.4, mb4.4(NEIC)*
*NEIC* **16** *02:50:03.3±1.4, 11°.77N±0°.05×86°.42W±0°.05, h100km±6km, mb4.4/8, Error ellipse: s-maj=8.0km s-min=5.3km az=46.0*
*INET* **16** *02:50:03.8±0.7, 11°.80N×86°.42W, h90km±3km, MW4.0*
*UPA* **16** *02:50:04.3±0.9, 11°.71N×86°.30W, h10km±261km, MW4.7*
*SNET* **16** *02:50:05.9±0.6, 11°.94N×86°.58W, h88km±36km, ML4.5*
**ISC 16 02:50:02.7**±0.7,**11°.80N**±0°.04×**86°.45W**±0°.04,**h104**km±6km,
**n185,**σ1$**24**/220,**mb4.3**/13,**7D,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRUN** | **El Crucero** | **0.23** | **38** | *eP* | **Pn** | **02 50 16.0** | **-1.6** |
| **TISN** | **Laguna Tiscapa** | **0.38** | **27** | *eP* | **Pn** | **02 50 17.8** | **-0.5** |
| **MGAN** | **Managua** | **0.40** | **29** | *eP* | **Pn** | **02 50 17.8** | **-0.5** |
| **COPN** | **Copaltepe** | **0.40** | **339** | *eP* | **Pn** | **02 50 17.8** | **-0.6** |
| **HUEN** | | **0.60** | **26** | *eP* | **Pn** | **02 50 19.5** | **-0.2** |
| **MOMN** | **Momotombo** | **0.61** | **351** | *eP* | **Pn** | **02 50 19.3** | **-0.6** |
| **CNGN** | **Cerro Negro** | **0.74** | **340** | Pn | **Pn** | **02 50 20.6** | **-0.5** |
| CNGN | | | | Sn | **Sn** | **02 50 35.0** | **+0.3** |
| **CNGN** | **Cerro Negro** | **0.74** | **340** | *eP* | **Pn** | **02 50 20.5** | **-0.5** |
| CNGN | | | | *eS* | **Sn** | **02 50 34.0** | **-0.7** |
| **TELN** | **Telica** | **0.88** | **335** | *eP* | **Pn** | **02 50 22.3** | **-0.1** |
| **BRAN** | **Las Pilas** | **0.92** | **6** | *eP* | Pn | 02 50 17.9 | -4.7 |
| **BOAB** | **BOACO BROADBAN** | **.00** | **50** | Pn | **Pn** | **02 50 23.2** | **-0.2** |
| BOAB | | | | Sn | **Sn** | **02 50 38.3** | **-0.7** |
| **BOAB** | **BOACO BROADBAN** | **.00** | **50** | *eP* | **Pn** | **02 50 23.1** | **-0.4** |
| **CRIN** | **San Cristobal** | **1.07** | **327** | Pn | **Pn** | **02 50 24.4** | **+0.1** |
| CRIN | | | | Sn | **Sn** | **02 50 40.5** | **-0.1** |
| **CRIN** | **San Cristobal** | **1.07** | **327** | *eP* | **Pn** | **02 50 24.3** | **0.0** |
| **MATN** | **Matagalpa** | **1.23** | **24** | Pn | **Pn** | **02 50 25.8** | **-0.3** |
| MATN | | | | Sn | **Sn** | **02 50 43.3** | **-0.6** |
| **MATN** | **Matagalpa** | **1.23** | **24** | *eP* | **Pn** | **02 50 26.1** | **-0.1** |
| MATN | | | | *eS* | **Sn** | **02 50 43.4** | **-0.4** |
| **ACON** | **Acoyapa** | **1.25** | **82** | Pn | **Pn** | **02 50 25.9** | **-0.4** |
| ACON | | | | Sn | **Sn** | **02 50 43.4** | **-0.8** |
| **ACON** | **Acoyapa** | **1.25** | **82** | *eP* | **Pn** | **02 50 26.0** | **-0.4**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TECO** | **Alcaldia de Te** | **2.86 307** | *e*P | | **Pn** | **02 50 47.4 +0.6** |
| **TECO** | **Alcaldia de Te** | **2.86 307** | *e*P | | **Pn** | **02 50 47.4 +0.6** |
| **HDC** | **Heredia** | **2.90 128** | | | **Pn** | **02 50 47.3 -0.2** |
| **HDC** | **Heredia** | **2.90 128** | *e*P | | **Pn** | **02 50 48.0 +0.5** |
| **HDC** | **Heredia** | **2.90 128** | ‖ *i*P | | **Pn** | **02 50 48.0 +0.5** |
| HDC | | | *e*S | | **Sn** | **02 51 21.2 -0.7** |
| **SCLA** | **Alcaldia de Sa** | **2.92 311** | *e*P | | **Pn** | **02 50 48.6 +0.9** |
| **SCLA** | **Alcaldia de Sa** | **2.92 311** | *e*P | | **Pn** | **02 50 48.6 +0.9** |
| **COEG** | **Centro de Oper** | **2.99 308** | *e*P | | **Pn** | **02 50 49.2 +0.7** |
| COEG | | | *e*S | | **Sn** | **02 51 23.3 -0.4** |
| COEG | | | IAML | | | 02 51 28.6 |
| | comp=Z,2µm,0.5s | | | | | |
| **COEG** | **Centro de Oper** | **2.99 308** | *e*P | | **Pn** | **02 50 49.3 +0.7** |
| **COEG** | **Centro de Oper** | **2.99 308** | *e*P | | **Pn** | **02 50 49.2 +0.7** |
| COEG | | | *e*S | | **Sn** | **02 51 23.3 -0.4** |
| COEG | | | IAML | | | 02 51 28.6 |
| | comp=Z,2µm,0.5s | | | | | |
| **SJTE** | **Alcalda de S** | **3.08 306** | *e*P | | **Pn** | **02 50 50.5 +0.7** |
| **SJTE** | **Alcalda de S** | **3.08 306** | *e*P | | **Pn** | **02 50 50.5 +0.7** |
| **PAVA** | **Las Pavas** | **3.09 308** | *e*P | | **Pn** | **02 50 50.7 +0.8** |
| PAVA | | | IAML | | | 02 51 32.1 |
| | comp=Z,1µm,0.4s | | | | | |
| **PAVA** | **Las Pavas** | **3.09 308** | *e*P | | **Pn** | **02 50 50.7 +0.8** |
| **PAVA** | **Las Pavas** | **3.09 308** | *e*P | | **Pn** | **02 50 50.7 +0.8** |
| PAVA | | | IAML | | | 02 51 32.1 |
| | comp=Z,1µm,0.4s | | | | | |
| **LFRS** | **El Faro** | **3.13 306** | *e*P | | **Pn** | **02 50 51.4 +0.9** |
| **LFRS** | **El Faro** | **3.13 306** | *e*P | | **Pn** | **02 50 51.4 +0.9** |
| **CVTR** | **Volcan Turrial** | **3.18 124** | | | **Pn** | **02 50 51.5 +0.1** |
| **LBRS** | **Las Brisas** | **3.18 308** | *e*P | | **Pn** | **02 50 52.1 +1.0** |
| **LBRS** | **Las Brisas** | **3.18 308** | *e*P | | **Pn** | **02 50 52.1 +1.0** |
| **RIMA** | **Rio Macho** | **3.24 128** | | | **Pn** | **02 50 52.3 +0.3** |
| **RIMA** | **Rio Macho** | **3.24 128** | *e*P | | **Pn** | **02 50 52.4 +0.3** |
| **LFU** | **La Fuente** | **3.25 307** | *e*P | | **Pn** | **02 50 53.2 +1.3** |
| **LFU** | **La Fuente** | **3.25 307** | *e*P | | **Pn** | **02 50 53.2 +1.3** |
| **LALI** | **Alcalda de L** | **3.27 301** | *e*P | | **Pn** | **02 50 52.7 +0.5** |
| LALI | | | IAML | | | 02 51 31.0 |
| | comp=Z,1µm,0.4s | | | | | |
| **LALI** | **Alcalda de L** | **3.27 301** | *e*P | | **Pn** | **02 50 52.7 +0.5** |
| LALI | | | IAML | | | 02 51 31.0 |
| | comp=Z,1µm,0.4s | | | | | |
| **OPAM** | **Oficina de Pla** | **3.29 306** | *e*P | | **Pn** | **02 50 53.8 +1.3** |
| **OPAM** | **Oficina de Pla** | **3.29 306** | *e*P | | **Pn** | **02 50 53.8 +1.3** |
| **SNET** | **Serv Nac Est T** | **3.30 305** | | | **Pn** | **02 50 53.4 +0.7** |
| **SNET** | **Serv Nac Est T** | **3.30 305** | *e*P | | **Pn** | **02 50 53.7 +1.0** |
| SNET | | | IAML | | | 02 51 37.8 |
| | comp=Z,1µm,0.2s | | | | | |
| **SNET** | **Serv Nac Est T** | **3.30 305** | *e*P | | **Pn** | **02 50 53.7 +1.0** |
| SNET | | | IAML | | | 02 51 37.8 |
| | comp=Z,1µm,0.2s | | | | | |
| **UEES** | **Universidad Ev** | **3.33 305** | *e*P | | **Pn** | **02 50 54.1 +1.0** |
| **UEES** | **Universidad Ev** | **3.33 305** | *e*P | | **Pn** | **02 50 54.1 +1.0** |
| **BOQS** | **Boqueron** | **3.37 305** | *e*P | | **Pn** | **02 50 55.0 +1.3** |
| **BOQS** | **Boqueron** | **3.37 305** | *e*P | | **Pn** | **02 50 55.0 +1.3** |
| **CDM** | **Cerro de Muert** | **3.45 130** | *e*P | | **Pn** | **02 50 55.8 +0.7** |
| **BATAN** | **Batan** | **3.46 119** | | | **Pn** | **02 50 54.6 -0.1** |
| **BATAN** | **Batan** | **3.46 119** | *e*P | | **Pn** | **02 50 55.3 +0.6** |
| BATAN | | | *e*S | | **Sn** | **02 51 34.2 -0.7** |
| **JAYA** | **Jayaque - finc** | **3.46 302** | *e*P | | **Pn** | **02 50 55.5 +0.5** |
| JAYA | | | *e*S | | **Sn** | **02 51 33.9 -1.3** |
| JAYA | | | IAML | | | 02 51 37.9 |
| | comp=Z,2µm,0.3s | | | | | |
| **JAYA** | **Jayaque - finc** | **3.46 302** | *e*P | | **Pn** | **02 50 55.5 +0.5** |
| JAYA | | | *e*S | | **Sn** | **02 51 33.9 -1.3** |
| JAYA | | | IAML | | | 02 51 37.9 |
| | comp=Z,2µm,0.3s | | | | | |
| **CEDA** | **San Andres** | **3.50 305** | *e*P | | **Pn** | **02 50 55.8 +0.5** |
| CEDA | | | IAML | | | 02 51 48.6 |
| | comp=Z,2µm,0.6s | | | | | |
| **CEDA** | **San Andres** | **3.50 305** | *e*P | | **Pn** | **02 50 55.8 +0.5** |
| CEDA | | | IAML | | | 02 51 48.6 |
| | comp=Z,2µm,0.6s | | | | | |
| **TACO** | **Tacachico** | **3.56 308** | *e*P | | **Pn** | **02 50 56.9 +0.7** |
| TACO | | | IAML | | | 02 51 43.8 |
| | comp=Z,293nm,0.6s | | | | | |
| **TACO** | **Tacachico** | **3.56 308** | *e*P | | **Pn** | **02 50 56.9 +0.7** |
| TACO | | | IAML | | | 02 51 43.8 |
| | comp=Z,293nm,0.6s | | | | | |
| **EDDO** | **Dominical** | **3.58 135** | *e*P | | **Pn** | **02 50 58.4 +2.0** |
| EDDO | | | *e*S | | **Sn** | **02 51 36.3 -1.6** |
| **PEZE** | **Perez Zeledon,** | **3.63 131** | | | **Pn** | **02 50 57.0 -0.1** |
| **CEVE** | **Cerro Verde** | **3.70 303** | *e*P | | **Pn** | **02 50 59.4 +1.2** |
| CEVE | | | IAML | | | 02 51 47.5 |
| | comp=Z,3µm,0.3s | | | | | |
| **CEVE** | **Cerro Verde** | **3.70 303** | *e*P | | **Pn** | **02 50 59.4 +1.2** |
| CEVE | | | IAML | | | 02 51 47.5 |
| | comp=Z,3µm,0.3s | | | | | |
| **SBLS** | **San Blas** | **3.70 304** | *e*P | | **Pn** | **02 50 59.7 +1.4** |
| **SBLS** | **San Blas** | **3.70 304** | *e*P | | **Pn** | **02 50 59.7 +1.4** |
| **SNJE** | **San Jose** | **3.71 304** | *e*P | | **Pn** | **02 50 59.6 +1.4** |
| **SNJE** | **San Jose** | **3.71 304** | *e*P | | **Pn** | **02 50 59.6 +1.4** |
| **RTR** | **El Retiro** | **3.75 304** | *e*P | | **Pn** | **02 51 00.6 +1.7** |
| **RTR** | **El Retiro** | **3.75 304** | *e*P | | **Pn** | **02 51 00.6 +1.7** |
| **MTO3** | **Montecristo** | **3.84 313** | | | **Pn** | **02 51 01.4 +1.3** |
| **MTO3** | **Montecristo** | **3.84 313** | *e*P | | **Pn** | **02 51 01.1 +1.0** |
| **MTO3** | **Montecristo** | **3.84 313** | *e*P | | **Pn** | **02 51 01.1 +1.0** |
| **NUBE** | **Las Nubes** | **3.87 303** | *e*P | | **Pn** | **02 51 01.4 +1.0** |
| **NUBE** | **Las Nubes** | **3.87 303** | *e*P | | **Pn** | **02 51 01.4 +1.0** |
| **ESQI** | **Esquipulas** | **3.94 315** | | | **Pn** | **02 51 02.1 +0.8** |
| **SLOZ** | **Alcaldia de Sa** | **3.94 305** | *e*P | | **Pn** | **02 51 02.4 +1.2** |
| **SRBA** | **San Rafael, Bu** | **3.96 130** | | | **Pn** | **02 51 02.4 +0.8** |
| **EDBA** | **Buenos Aires** | **4.07 130** | *e*P | | **Pn** | **02 51 03.9 +0.9** |
| EDBA | | | *e*S | | **Sn** | **02 51 48.9 -0.9** |
| **EDPN** | **Palmar Norte** | **4.07 134** | *e*P | | **Pn** | **02 51 04.6 +1.6** |
| EDPN | | | *e*S | | **Sn** | **02 51 50.1 +0.3** |
| **PTJ1** | **Puerto Jimnez** | **4.48 136** | *e*P | | **Pn** | **02 51 10.7 +2.1** |
| PTJ1 | | | *e*S | | **Sn** | **02 51 59.1 -0.5** |
| **EDSV** | **San Vito** | **4.52 131** | *e*P | | **Pn** | **02 51 11.1 +1.9** |
| EDSV | | | *e*S | | **Sn** | **02 52 04.5 +3.8** |
| **MRL** | **Marmol** | **4.54 316** | *e*P | | **Pn** | **02 51 12.5 +3.1** |
| MRL | | | *e*S | | Sn | 02 52 14.3 +13 |
| **CNI2** | **El Empalme, Bo** | **4.56 121** | *e*P | | **Pn** | **02 51 09.8 +0.2** |
| CNI2 | | | *e*S | | **Sn** | **02 52 00.4 -1.2** |
| **NBG** | **Las Nubes** | **4.70 307** | *e*P | | **Pn** | **02 51 14.8 +3.1** |
| NBG | | | *e*S | | **Sn** | **02 52 09.7 +4.3** |
| **BRU2** | **Volcan** | **4.75 129** | | | **Pn** | **02 51 12.3 0.0** |
| **BRU2** | **Volcan** | **4.75 129** | *e*P | | **Pn** | **02 51 13.5 +1.2** |
| BRU2 | | | *e*S | | **Sn** | **02 52 06.8 +0.4** |
| **BC3P** | **Paso Ancho** | **4.80 128** | *e*P | | **Pn** | **02 51 14.3 +1.3** |
| BC3P | | | *e*S | | **Sn** | **02 52 08.0 +0.4** |
| **PCG** | **Pacaya** | **4.80 303** | *e*P | | **Pn** | **02 51 12.1 -1.0** |
| PCG | | | *e*S | | **Sn** | **02 52 12.9 +5.1** |
| **BCO2** | **Palmira** | **4.92 128** | *e*P | | **Pn** | **02 51 16.1 +1.4** |
| BCO2 | | | *e*S | | **Sn** | **02 52 10.5 0.0** |
| **LNBQ3** | **Los Naranjos,** | **4.95 127** | *e*P | | **Pn** | **02 51 16.5 +1.6** |
| **PTPM** | **Petroterminale** | **5.01 135** | *e*P | | **Pn** | **02 51 17.4 +1.7** |
| PTPM | | | *e*S | | **Sn** | **02 52 12.2 -0.2** |
| **FUG** | **Fuego 3** | **5.03 302** | *e*S | | **Sn** | **02 52 15.0 +1.9** |
| **APG** | **El Apazote** | **5.04 310** | P | | **Pn** | **02 51 18.0 +1.7** |
| | comp=Z,11nm,0.3s,baz=131,slow=8.5,SNR=60 | | | | | |
| APG | | | S | | **Sn** | **02 52 10.8 -2.7** |
| | comp=Z,2.6nm,0.3s,baz=92,slow=19,SNR=1.7 | | | | | |
| **DVD** | **David** | **5.16 130** | *e*P | | **Pn** | **02 51 18.8 +1.1** |
| DVD | | | *e*S | | **Sn** | **02 52 13.2 -2.9** |
| **PRVC** | **Isla de Provid** | **5.20 72** | Pn | | **Pn** | **02 51 18.8 +0.6** |
| **CHIR3** | **Chiriqui UPA,** | **5.28 129** | *e*P | | **Pn** | **02 51 20.9 +1.6** |
| **STG3** | **Santiaguito 3,** | **5.77 301** | *e*P | | Pn | 02 51 13.1 -13 |
| **RTAL** | **Retalhuleu** | **5.79 298** | | | **Pn** | **02 51 27.3 +1.1** |
| **HUEH** | **Huehuetenango** | **6.04 306** | | | **Pn** | **02 51 32.5 +2.7** |
| **PETF** | **Flores** | **6.07 327** | | | **Pn** | **02 51 33.5 +3.4** |
| **BCIP** | **Isla Barro Col** | **7.00 111** | Pn | | **Pn** | **02 51 43.1 +0.3** |
| **CCIG** | **Comitan** | **7.10 310** | | | **Pn** | **02 51 45.4 +1.2** |
| **CMIG** | **Matias Romero** | **9.72 304** | P | | **Pn** | **02 52 20.3 +0.7** |
| | comp=Z,7.0nm,0.3s,baz=97,slow=9.9,SNR=87 | | | | | |
| CMIG | | | S | | **Sn** | **02 53 59.8 -7.2** |
| | comp=Z,1.2nm,0.3s,baz=306,slow=16,SNR=1.4 | | | | | |
| **SOR** | **Soroa** | **11.41 16** | Pn | | **Pn** | **02 52 44.2 +1.6** |
| **ZARC** | **Zaragoza, Cauc** | **12.20 110** | Pn | | **Pn** | **02 52 54.1 +1.1** |
| **OCAC** | **Ocana** | **13.40 104** | Pn | | **Pn** | **02 53 08.6 -0.5** |
| **OTAV** | **Otavalo** | **13.96 145** | Pn | | **Pn** | **02 53 16.5 -0.1** |
| **SDV** | **Santo Domingo** | **15.82 99** | P | | **Pn** | **02 53 38.8 -1.2** |
| | comp=Z,0.6nm,0.3s,baz=272,slow=6.1,SNR=12 | | | | | |
| **SDV** | **Santo Domingo** | **15.82 99** | | | **Pn** | **02 53 38.7 -1.2** |
| **ATAH** | **Atahualpa** | **20.44 157** | P | | **P** | **02 54 34.4 +1.9** |
| | comp=Z,13nm,0.7s,baz=355,slow=9.8,SNR=8.2 | | | | | |
| **PCRV** | **Puerto La Cruz** | **21.47 92** | P | | **P** | **02 54 43.6 +0.5** |
| | comp=Z,9.5nm,0.8s,baz=294,slow=21,SNR=1.5 | | | | | |
| **PLCV** | **Puerto La Cruz** | **21.52 92** | P | | **P** | **02 54 43.6 0.0** |
| **WHTX** | **Lake Whitney,** | **22.51 335** | P | | **P** | **02 54 54.5 +0.7** |
| WHTX | | | IAmb | | IAmb | 02 55 21.7 |
| | comp=Z,22nm,1.1s | | | | | |
| **TXAR** | **Lajitas Array** | **23.70 320** | P | | **P** | **02 55 06.5 +1.2** |
| | comp=Z,8.7nm,0.6s,baz=142,slow=9.6,SNR=138 | | | | | |
| **TXAR** | **Lajitas Array** | **23.70 320** | P | | **P** | **02 55 05.6 +0.3** |
| **TX32** | **Lajitas Array** | **23.70 320** | P | | **P** | **02 55 06.6 +1.2** |
| TX32 | | | IAmb | | IAmb | 02 55 07.1 |
| | comp=Z,9.7nm,0.7s | | | | | |
| **TKL** | **Tuckaleechee C** | **23.88 5** | P | | **P** | **02 55 06.4 -0.3** |
| | comp=Z,8.5nm,1.1s,baz=143,slow=10,SNR=2.4 | | | | | |
| **FNO** | **Franklin** | **25.38 339** | P | | **P** | **02 55 19.4 -1.0** |
| **TUL1** | **Leonard** | **25.45 342** | P | | **P** | **02 55 21.6 +0.6** |
| **S44A** | **Carbondale** | **25.91 355** | P | | **P** | **02 55 24.5 -0.6** |
| S44A | | | IAmb | | IAmb | 02 55 51.3 |
| | comp=Z,14nm,1.1s | | | | | |
| **R53A** | **Hurricane** | **26.72 8** | P | | **P** | **02 55 33.3 +0.9** |
| **PDAR** | **Pinedale Array** | **36.81 331** | P | | **P** | **02 56 59.9 -1.0** |
| | comp=Z,0.3nm,0.5s,baz=125,slow=9.8,SNR=5.5 | | | | | |
| **SIV** | **San Ignacio** | **37.32 137** | P | | **P** | **02 57 04.0 -1.2** |
| | comp=Z,7.8nm,0.6s,baz=309,slow=8.6,SNR=43 | | | | | |
| **NVAR** | **Mina Array Bea** | **38.84 319** | P | | **P** | **02 57 18.7 +0.7** |
| | comp=Z,0.1nm,0.3s,baz=124,slow=8.0,SNR=1.3 | | | | | |
| **NVAR** | **Mina Array Bea** | **38.84 319** | P | | **P** | **02 57 18.0 0.0** |
| **ULM** | **Lac du Bonnet** | **39.12 350** | P | | **P** | **02 57 17.5 -2.4** |
| | comp=Z,2.1nm,0.5s,baz=125,slow=4.4,SNR=3.2 | | | | | |
| **SCHQ** | **Schefferville** | **45.62 16** | P | | **P** | **02 58 11.1 -1.5** |
| | comp=Z,3.4nm,0.5s,baz=217,slow=5.4,SNR=18 | | | | | |
| **PLCA** | **Paso Flores** | **54.30 165** | P | | **P** | **02 59 18.5 +0.1** |
| | comp=Z,4.7nm,1.0s,baz=350,slow=10,SNR=5.0 | | | | | |
| **YKA** | **Yellowknife Ar** | **54.50 344** | P | | **P** | **02 59 18.2 -1.3** |
| | comp=Z,0.4nm,0.8s,baz=141,slow=7.0,SNR=6.4 | | | | | |
| **YKA** | **Yellowknife Ar** | **54.50 344** | P | | **P** | **02 59 19.8 +0.4** |
| **SONM** | **Songino Array** | **119.54 350** | PKP | | **PKPdf** | **03 08 38.7 -1.9** |
| | comp=Z,0.2nm,0.4s,baz=326,slow=0.7,SNR=5.5 | | | | | |
| **KSH** | **Kashi** | **126.39 17** | PKP | | **PKiKP** | **03 08 56.1 +1.6** |
| **ASAR** | **Alice Springs** | **139.93 247** | PKhKP | | PKPpre | 03 09 13.5 |
| | comp=Z,0.7nm,0.7s,baz=118,slow=3.2,SNR=4.5 | | | | | |
| ASAR | | | PKP | | **PKPdf** | **03 09 19.8 0.0** |
| | comp=Z,0.8nm,0.6s,baz=102,slow=1.7,SNR=5.4 | | | | | |
| ASAR | | | SKPbc | | **SKPbc** | **03 12 46.1 -0.2** |
| | comp=Z,0.9nm,0.8s,baz=101,slow=2.9,SNR=8.1 | | | | | |
| **WRA** | **Warramunga Arr** | **140.03 253** | PKhKP | | PKPpre | 03 09 13.0 |
| | comp=Z,1.4nm,0.7s,baz=91,slow=2.9,SNR=4.8 | | | | | |
| WRA | | | PKP | | **PKPdf** | **03 09 20.1 +0.1** |
| | comp=Z,1.4nm,0.7s,baz=91,slow=2.2,SNR=4.9 | | | | | |
| **WRA** | **Warramunga Arr** | **140.03 253** | PKPpre | | PKPpre | 03 09 12.8 |
| WRA | | | | | **PKPdf** | **03 09 20.3 +0.3** |
| **PZH** | **PanZhiHua** | **141.10 348** | PKP | | **PKPdf** | **03 09 21.8 -0.1** |

**WEL 16 03:11:19.5±1.2, 33°S±22″×18°0E±3″4, h396km±20km, M3.5/12, mB4.1/10, ML4.2/11, MLv4.1/12, Mw(mB)3.2/10, Error ellipse: s-maj=0.0km s-min=0.0km az=118.3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **4.67** | **195** | P | | Pn | 03 12 34.9 | -2.9 |
| WMGZ | | | | S | | S | 03 13 42.0 | +0.6 |
| **HAZ** | **Te Kaha** | **4.77** | **201** | P | | Pn | 03 12 36.6 | -2.2 |
| HAZ | | | | S | | S | 03 13 42.4 | -0.9 |
| **PKGZ** | **Pakihiroa** | **4.81** | **198** | P | | Pn | 03 12 39.8 | +0.5 |
| PKGZ | | | | S | | S | 03 13 44.6 | +0.4 |
| **PUZ** | **Puketiti** | **4.94** | **196** | P | | Pn | 03 12 41.3 | +0.7 |
| PUZ | | | | S | | S | 03 13 47.2 | +0.6 |
| **RUGZ** | **Raukumara Rang** | **5.00** | **201** | P | | Pn | 03 12 39.6 | -1.7 |
| RUGZ | | | | S | | S | 03 13 46.3 | -1.5 |
| **TWGZ** | **Tauwhareparae** | **5.11** | **198** | P | | Pn | 03 12 44.1 | +1.7 |
| TWGZ | | | | S | | S | 03 13 51.1 | +1.3 |
| **CNGZ** | **Carnagh Statio** | **5.35** | **195** | P | | Pn | 03 12 46.5 | +1.7 |
| **MWZ** | **Matawai** | **5.38** | **201** | P | | Pn | 03 12 45.6 | +0.4 |
| MWZ | | | | S | | S | 03 13 55.7 | +0.7 |
| **URZ** | **Urewera** | **5.45** | **204** | P | | Pn | 03 12 45.5 | -0.3 |
| URZ | | | | S | | S | 03 13 56.5 | +0.3 |
| **SNGZ** | **Shannon Statio** | **5.85** | **200** | P | | Pn | 03 12 50.3 | +0.1 |
| **KNZ** | **Kokohu** | **5.99** | **197** | P | | Pn | 03 12 52.1 | +0.4 |
| KNZ | | | | S | | S | 03 14 07.4 | +0.6 |
| **RAHZ** | **Arahi** | **6.05** | **202** | P | | Pn | 03 12 52.9 | +0.5 |
| **MTHZ** | **Maungataniwha** | **6.07** | **204** | P | | Pn | 03 12 53.3 | +0.6 |
| **NMHZ** | **Naumai** | **6.30** | **203** | P | | Pn | 03 12 55.9 | +0.7 |
| **ARHZ** | **Aropaoanui** | **6.40** | **201** | P | | Pn | 03 12 56.9 | +0.7 |
| **BKZ** | **Black Stump Fm** | **6.47** | **205** | P | | Pn | 03 12 56.9 | -0.2 |
| **KWHZ** | **Kaweka Forest** | **6.73** | **204** | P | | Pn | 03 13 00.0 | +0.1 |
| **OTVZ** | **Oturere** | **6.78** | **209** | P | | Pn | 03 13 00.8 | +0.1 |
| **SNVZ** | **South Ngauruho** | **6.81** | **209** | P | | Pn | 03 13 01.1 | +0.1 |
| **KAHZ** | **Kahuranaki** | **6.92** | **200** | P | | Pn | 03 13 02.8 | +0.1 |
| **KRHZ** | **Kereru** | **6.94** | **203** | P | | Pn | 03 13 01.3 | -1.0 |
| **PXZ** | **Pawanui** | **7.15** | **199** | P | | P | 03 13 05.2 | 0.0 |
| **VRZ** | **Vera Road** | **7.15** | **214** | P | | P | 03 13 07.8 | +2.5 |
| **PNHZ** | **Pukenui** | **7.24** | **203** | P | | Pn | 03 13 05.1 | -0.6 |
| **WAZ** | **Wanganui** | **7.56** | **210** | P | | Pn | 03 13 02.6 | -6.7 |
| **BFZ** | **Birch Farm** | **7.93** | **201** | P | | Pn | 03 13 13.3 | -0.2 |
| **MRZ** | **Mangatainoka R** | **8.12** | **204** | P | | Pn | 03 13 14.8 | -0.9 |
| **HOWZ** | **Holdsworth Sta** | **8.35** | **204** | P | | Pn | 03 13 17.4 | -1.0 |
| **OGWZ** | **Otaki Gorge** | **8.40** | **206** | P | | Pn | 03 13 17.7 | -1.2 |
| **KIW** | **Kapiti Island** | **8.54** | **207** | P | | Pn | 03 13 19.5 | -0.9 |
| **CAW** | **Cannon Point** | **8.70** | **205** | P | | Pn | 03 13 21.3 | -1.0 |

*TAP* ***16*** *03:15:29.3, 24.87N×122.30E, h125km, ML3.5, C*
*JMA* ***16*** *03:15:29.8±0.1, 24.74N×122.32E, h120km±2km, M2.8*
**ISC 16 03:15:28.6±1.5, 24.85N±0.05×122.30E±0.03, h129km±8km, n72, σ0.84/141, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.33** | **298** | *i* P | | **Pn** | **03 15 46.9** | **+0.2** |
| | baz=296 | | | | | | | |
| TWB1 | | | | S | | **Sn** | **03 16 00.0** | **-0.4** |
| | baz=296 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.45** | **285** | *i* P | | **Pn** | **03 15 47.5** | **+0.2** |
| | baz=283 | | | | | | | |
| TIPB | | | | S | | **Sn** | **03 16 00.9** | **-0.6** |
| | baz=283 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.46** | **302** | P | | **Pn** | **03 15 47.2** | **-0.2** |
| | baz=299 | | | | | | | |
| SXI1 | | | | S | | **Sn** | **03 16 01.5** | **-0.1** |
| | baz=299 | | | | | | | |
| **TWC** | **Suao** | **0.48** | **240** | P | | **Pn** | **03 15 47.7** | **+0.3** |
| | baz=236 | | | | | | | |
| TWC | | | | *e*S | | **Sn** | **03 16 01.4** | **-0.3** |
| | baz=236 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.52** | **295** | *i* P | | **Pn** | **03 15 48.1** | **+0.3** |
| | baz=292 | | | | | | | |
| NWF | | | | *i* S | | **Sn** | **03 16 01.9** | **-0.4** |
| | baz=292 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.52** | **295** | P | | **Pn** | **03 15 48.1** | **+0.4** |
| | baz=292 | | | | | | | |
| WFSB | | | | S | | **Sn** | **03 16 01.9** | **-0.2** |
| | baz=292 | | | | | | | |
| **NDS** | **Dongshan** | **0.58** | **248** | P | | **Pn** | **03 15 48.3** | **+0.3** |
| | baz=245 | | | | | | | |
| NDS | | | | S | | **Sn** | **03 16 02.0** | **-0.7** |
| | baz=245 | | | | | | | |
| **TWE** | **Neicheng** | **0.59** | **257** | P | | **Pn** | **03 15 48.8** | **+0.7** |
| | baz=254 | | | | | | | |
| TWE | | | | *e*S | | **Sn** | **03 16 01.9** | **-1.0** |
| | baz=254 | | | | | | | |
| **EWUT** | **Wuta** | **0.63** | **230** | P | | **Pn** | **03 15 48.9** | **+0.5** |
| | baz=227 | | | | | | | |
| EWUT | | | | S | | **Sn** | **03 16 03.2** | **-0.1** |
| | baz=227 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.66** | **262** | P | | **Pn** | **03 15 48.8** | **+0.2** |
| | baz=260 | | | | | | | |
| FUSB | | | | S | | **Sn** | **03 16 03.8** | **0.0** |
| | baz=260 | | | | | | | |
| **ENA** | **Nanau** | **0.67** | **230** | P | | **Pn** | **03 15 49.6** | **+1.0** |
| | baz=228 | | | | | | | |
| ENA | | | | S | | **Sn** | **03 16 03.6** | **-0.1** |
| | baz=228 | | | | | | | |
| **TWA** | **Mucha** | **0.67** | **281** | *i* P | | **Pn** | **03 15 48.6** | **0.0** |
| | baz=279 | | | | | | | |
| TWA | | | | *i* S | | **Sn** | **03 16 03.1** | **-0.7** |
| | baz=279 | | | | | | | |
| **ENTT** | **Nioudou** | **0.70** | **253** | *i* P | | **Pn** | **03 15 49.7** | **+0.8** |
| | baz=250 | | | | | | | |
| ENTT | | | | *i* S | | **Sn** | **03 16 05.0** | **+0.7** |
| | baz=250 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.71** | **279** | P | | **Pn** | **03 15 49.5** | **+0.6** |
| | baz=277 | | | | | | | |
| NHDH | | | | S | | **Sn** | **03 16 04.4** | **0.0** |
| | baz=277 | | | | | | | |
| **YM01** | **YM01** | **0.73** | **294** | *i* P | | **Pn** | **03 15 49.4** | **+0.3** |
| | baz=292 | | | | | | | |
| YM01 | | | | *i* S | | **Sn** | **03 16 04.2** | **-0.5** |
| | baz=292 | | | | | | | |
| **NWLT** | **Wulai** | **0.73** | **264** | P | | **Pn** | **03 15 49.6** | **+0.4** |
| | baz=262 | | | | | | | |
| NWLT | | | | S | | **Sn** | **03 16 04.2** | **-0.5** |
| | baz=262 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.75** | **121** | P | | **Pn** | **03 15 49.1** | **-0.2** |
| YOJ | | | | *e*S | | **Sn** | **03 16 04.4** | **-0.5** |
| **YOJ** | **Yonaguni jima** | **0.75** | **121** | P | | **Pn** | **03 15 49.3** | **+0.1** |
| | baz=122 | | | | | | | |
| YOJ | | | | *e*S | | **Sn** | **03 16 05.9** | **+1.0** |
| | baz=122 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.76** | **251** | *i* P | | **Pn** | **03 15 50.3** | **+0.9** |
| | baz=249 | | | | | | | |
| NDT | | | | *i* S | | **Sn** | **03 16 05.5** | **+0.4** |
| | baz=249 | | | | | | | |
| **LATG** | **Datong** | **0.78** | **246** | P | | **Pn** | **03 15 50.4** | **+0.8** |
| | baz=244 | | | | | | | |
| LATG | | | | S | | **Sn** | **03 16 05.7** | **+0.3** |
| | baz=244 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.80** | **345** | P | | **Pn** | **03 15 49.9** | **+0.2** |
| | baz=345 | | | | | | | |
| PCYT | | | | S | | **Sn** | **03 16 04.2** | **-1.4** |
| | baz=345 | | | | | | | |
| **YHNB** | **Yeheng** | **0.86** | **258** | *i* P | | **Pn** | **03 15 50.6** | **+0.3** |
| | baz=256 | | | | | | | |
| YHNB | | | | S | | **Sn** | **03 16 05.8** | **-0.8** |
| | baz=256 | | | | | | | |
| **NSK** | **Sanguang** | **0.88** | **259** | *i* P | | **Pn** | **03 15 50.7** | **+0.3** |
| | baz=256 | | | | | | | |
| NSK | | | | *i* S | | **Sn** | **03 16 06.1** | **-0.8** |
| | baz=256 | | | | | | | |
| **ETL** | **Fush Village** | **0.93** | **222** | P | | **Pn** | **03 15 51.7** | **+0.9** |
| | baz=220 | | | | | | | |
| ETL | | | | S | | **Sn** | **03 16 07.2** | **-0.4** |
| | baz=220 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.94** | **224** | P | | **Pn** | **03 15 51.1** | **+0.2** |
| | baz=222 | | | | | | | |
| NACB | | | | S | | **Sn** | **03 16 07.1** | **-0.5** |
| | baz=222 | | | | | | | |
| **NNSB** | **Datong** | **0.94** | **243** | P | | **Pn** | **03 15 51.5** | **+0.5** |
| | baz=242 | | | | | | | |
| NNSB | | | | S | | **Sn** | **03 16 07.7** | **-0.3** |
| | baz=242 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.99** | **229** | P | | **Pn** | **03 15 51.8** | **+0.4** |
| | baz=228 | | | | | | | |
| ETLH | | | | S | | **Sn** | **03 16 07.6** | **-1.1** |
| | baz=228 | | | | | | | |
| **TWD** | **Chiawan** | **1.00** | **220** | P | | **Pn** | **03 15 51.8** | **+0.3** |
| | baz=218 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **03 16 07.8** | **-1.0** |
| | baz=218 | | | | | | | |
| **NCUH** | **Zhongli** | **1.02** | **277** | *i* P | | **Pn** | **03 15 52.0** | **+0.4** |
| | baz=275 | | | | | | | |
| NCUH | | | | S | | **Sn** | **03 16 09.4** | **+0.3** |
| | baz=275 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.10** | **259** | P | | **Pn** | **03 15 52.7** | **+0.2** |
| | baz=257 | | | | | | | |
| NFF | | | | S | | **Sn** | **03 16 09.8** | **-0.8** |
| | baz=257 | | | | | | | |
| **FUSS** | **Fushou** | **1.14** | **238** | *i* P | | **Pn** | **03 15 53.6** | **+0.6** |
| | baz=237 | | | | | | | |
| FUSS | | | | S | | **Sn** | **03 16 11.6** | **0.0** |
| | baz=237 | | | | | | | |
| **ETM** | **Tongmen** | **1.15** | **220** | *e*P | | **Pn** | **03 15 52.5** | **-0.4** |
| | baz=219 | | | | | | | |
| ETM | | | | *e*S | | **Sn** | **03 16 09.7** | **-1.7** |
| | baz=219 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.17** | **213** | P | | **Pn** | **03 15 53.7** | **+0.6** |
| | baz=213 | | | | | | | |
| TEYL | | | | S | | **Sn** | **03 16 11.5** | **-0.2** |
| | baz=213 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **233** | *e*P | | **Pn** | **03 15 55.0** | **+1.3** |
| | baz=232 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **03 16 12.0** | **-0.7** |
| | baz=232 | | | | | | | |
| **LIOB** | **Emei** | **1.19** | **260** | *i* P | | **Pn** | **03 15 53.7** | **+0.5** |
| | baz=259 | | | | | | | |
| LIOB | | | | S | | **Sn** | **03 16 11.5** | **-0.5** |
| | baz=259 | | | | | | | |
| **TWT** | **Tachien** | **1.19** | **240** | P | | **Pn** | **03 15 54.8** | **+1.4** |
| | baz=239 | | | | | | | |
| TWT | | | | S | | **Sn** | **03 16 12.9** | **+0.5** |
| | baz=239 | | | | | | | |
| **TDCB** | **Techi** | **1.20** | **240** | P | | **Pn** | **03 15 54.8** | **+1.3** |
| | baz=239 | | | | | | | |
| TDCB | | | | S | | **Sn** | **03 16 12.9** | **+0.4** |
| | baz=239 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.21** | **260** | P | | **Pn** | **03 15 53.9** | **+0.5** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=224 | | | | | | | | |
| ALS | | | | | *e*S | | **Sn** | 03 16 28.9 | **+1.8** |
| | baz=224 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.94** | **230** | *e*P | | | **Pn** | 03 16 03.0 | **+1.1** |
| | baz=229 | | | | | | | | |
| CHN5 | | | | | S | | **Sn** | 03 16 27.7 | **+0.4** |
| | baz=229 | | | | | | | | |
| **WDLH** | **Douliu** | **1.99** | **235** | P | | | **Pn** | 03 16 03.6 | **+1.3** |
| | baz=233 | | | | | | | | |
| WDLH | | | | | S | | **Sn** | 03 16 28.7 | **+0.6** |
| | baz=233 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.00** | **242** | P | | | **Pn** | 03 16 03.1 | **+0.6** |
| | baz=241 | | | | | | | | |
| WRL | | | | | S | | **Sn** | 03 16 27.5 | **-0.9** |
| | baz=241 | | | | | | | | |
| **EDH** | **Donghe** | **2.08** | **206** | P | | | **Pn** | 03 16 03.5 | **-0.1** |
| | baz=205 | | | | | | | | |
| EDH | | | | | S | | **Sn** | 03 16 28.7 | **-1.7** |
| | baz=205 | | | | | | | | |
| **WTK** | **Tuku** | **2.10** | **237** | P | | | **Pn** | 03 16 04.0 | **+0.3** |
| | baz=235 | | | | | | | | |
| WTK | | | | | S | | **Sn** | 03 16 30.3 | **-0.3** |
| | baz=235 | | | | | | | | |
| **STYH** | **Taoyuan** | **2.18** | **220** | P | | | **Pn** | 03 16 05.9 | **+1.1** |
| | baz=219 | | | | | | | | |
| STYH | | | | | S | | **Sn** | 03 16 32.1 | **-0.4** |
| | baz=219 | | | | | | | | |
| **JTJ** | **Tarama** | **2.19** | **95** | P | | | **Pn** | 03 16 05.7 | **+0.9** |
| JTJ | | | | | *e*S | | **Sn** | 03 16 32.4 | **-0.2** |
| **XPSS** | **Dashiqiu** | **2.81** | **318** | *e*P | | | **Pn** | 03 16 13.1 | **+0.5** |
| | baz=317 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.83** | **242** | P | | | **Pn** | 03 16 12.4 | **-0.5** |
| | baz=241 | | | | | | | | |
| PHUB | | | | | S | | **Sn** | 03 16 44.7 | **-2.4** |
| | baz=241 | | | | | | | | |
| **VCHM** | **Qimei** | **3.10** | **239** | *e*P | | | **Pn** | 03 16 16.3 | **-0.2** |
| | baz=237 | | | | | | | | |
| VCHM | | | | | *e*S | | **Sn** | 03 16 51.4 | **-2.0** |
| | baz=237 | | | | | | | | |

*NEIC* ***16*** *03:33:08.8±1.7, 41.58S±0.09×92.1W±0.3, h10km±2km, mb4.4/9, Error ellipse: s-maj=40.6km s-min=12.8km az=280.0*

*IDC* ***16*** *03:33:14.1±5.1, 41.36S×91.22W, h0km, mb3.8/5, mb1 4.1/6, mb1mx3.9/26, mbtmp3.7/6, ML3.8/1, MS3.6/17, Ms1 3.6/17, ms1mx3.4/53, Error ellipse: s-maj=134.1km s-min=36.0km az=7.0*

**ISC 16 03:33:11.5±0.9, 41.8S±0.1×91.3W±0.2, h10km, n36, σ2.8/08/15, mb4.2/10, MS3.6/16, Southeast of Easter Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H03S2** | **Juan Fernandez** | **12.61** | **55** | T | | T | 03 48 53.6 | |
| | baz=233 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **12.62** | **55** | T | | T | 03 48 50.7 | |
| | baz=233 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **12.63** | **55** | T | | T | 03 48 51.0 | |
| | baz=233 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **12.87** | **54** | T | | T | 03 49 10.1 | |
| | baz=231,slow=71 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **12.88** | **54** | T | | T | 03 49 04.7 | |
| | baz=231,slow=71 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **12.89** | **54** | T | | T | 03 49 05.8 | |
| | baz=231,slow=71 | | | | | | | |
| **PLCA** | **Paso Flores** | **15.65** | **93** | Pn | | **P** | **03 36 57.0** | **+0.7** |
| | 0.1nm,0.3s,baz=260,slow=18,SNR=2.1 | | | | | | | |
| PLCA | | | | LR | | LR | 03 40 29.9 | |
| | comp=Z,70nm,19.3s,baz=256,slow=28 | | | | | | | |
| **RPN** | **Rapa Nui** | **20.80** | **309** | LR | | LR | 03 43 21.0 | |
| | comp=Z,179nm,21.5s,baz=298,slow=30 | | | | | | | |
| **AC04** | **Llanos de Chal** | **21.36** | **57** | P | | **P** | **03 37 58.7** | **-0.2** |
| **AC02** | **Maricunga** | **23.54** | **58** | P | | **P** | **03 38 23.8** | **+1.3** |
| AC02 | | | | IAmb | | IAmb | 03 38 28.1 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **LVC** | **Limon Verde** | **26.80** | **51** | LR | | LR | 03 46 44.5 | |
| | comp=Z,154nm,20.5s,baz=233,slow=31 | | | | | | | |
| **LVC** | **Limon Verde** | **26.80** | **51** | P | | **P** | **03 38 50.9** | **-1.4** |
| LVC | | | | IAmb | | IAmb | 03 39 02.5 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **PMSA** | **Palmer Station** | **27.77** | **155** | LR | | LR | 03 48 21.3 | |
| | comp=Z,69nm,18.5s,baz=308,slow=32 | | | | | | | |
| **CPUP** | **Villa Florida** | **31.86** | **72** | LR | | LR | 03 50 50.3 | |
| | comp=Z,81nm,19.3s,baz=219,slow=33 | | | | | | | |
| **NNA** | **Nana** | **32.29** | **27** | LR | | LR | 03 49 16.7 | |
| | comp=Z,76nm,19.9s,baz=200,slow=30 | | | | | | | |
| **LPAZ** | **La Paz** | **32.31** | **45** | P | | **P** | **03 39 42.1** | **+0.7** |
| | comp=Z,1.1nm,0.9s,baz=214,slow=7.3,SNR=2.8 | | | | | | | |
| **ATAH** | **Atahualpa** | **36.38** | **22** | LR | | LR | 03 52 04.2 | |
| | comp=Z,120nm,19.8s,baz=266,slow=31 | | | | | | | |
| **SIV** | **San Ignacio** | **36.58** | **54** | P | | **P** | **03 40 18.8** | **+1.1** |
| | comp=Z,1.7nm,0.6s,baz=230,slow=10,SNR=7.9 | | | | | | | |
| SIV | | | | LR | | LR | 03 53 37.4 | |
| | comp=Z,99nm,19.9s,baz=295,slow=34 | | | | | | | |
| **AQDB** | **Aquidauana** | **36.79** | **66** | P | | **P** | **03 40 20.1** | **+0.6** |
| AQDB | | | | IAmb | | IAmb | 03 40 21.9 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **OTAV** | **Otavalo** | **43.44** | **19** | P | | **P** | **03 41 11.6** | **-3.5** |
| **QSPA** | **South Pole Qui** | **48.42** | **180** | P | | **P** | **03 41 53.8** | **+0.2** |
| QSPA | | | | IAmb | | IAmb | 03 41 53.8 | |
| | comp=Z,3.7nm,1.4s | | | | | | | |
| **ROSC** | **El Rosal** | **48.95** | **23** | LR | | LR | 04 00 16.5 | |
| | comp=Z,51nm,18.6s,baz=48,slow=33 | | | | | | | |
| **PTGA** | **Pitinga** | **49.70** | **43** | LR | | LR | 04 00 33.9 | |
| | comp=Z,64nm,18.9s,baz=227,slow=33 | | | | | | | |
| **SNAA** | **Sanae** | **50.48** | **156** | P | | **P** | **03 42 09.4** | **+0.3** |
| SNAA | | | | IAmb | | IAmb | 03 42 24.2 | |
| | comp=Z,6.3nm,1.2s | | | | | | | |
| **VNDA** | **Vanda** | **53.05** | **195** | LR | | LR | 04 01 40.9 | |
| | comp=Z,71nm,18.6s,baz=30,slow=32 | | | | | | | |
| **SDV** | **Santo Domingo** | **53.90** | **26** | LR | | LR | 04 03 28.0 | |
| | comp=Z,62nm,19.2s,baz=242,slow=34 | | | | | | | |
| **MDP** | **Montagnes des** | **58.48** | **47** | LR | | LR | 04 06 35.5 | |
| | comp=Z,61nm,18.1s,baz=254,slow=34 | | | | | | | |
| **CMIG** | **Matias Romero** | **58.69** | **356** | LR | | LR | 04 02 47.3 | |
| | comp=Z,49nm,20.3s,baz=196,slow=30 | | | | | | | |
| **URZ** | **Urewera** | **66.84** | **239** | LR | | LR | 04 07 15.5 | |
| | comp=Z,86nm,19.9s,baz=66,slow=30 | | | | | | | |
| **MAW** | **Mawson** | **69.17** | **170** | P | | **P** | **03 44 16.2** | **-1.3** |
| **TXAR** | **Lajitas Array** | **71.70** | **349** | P | | **P** | **03 44 36.4** | **+2.9** |
| | comp=Z,0.5nm,0.8s,baz=174,slow=7.3,SNR=6.3 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **77.40** | **6** | LR | | LR | 04 14 06.1 | |
| | comp=Z,24nm,20.4s,baz=156,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | **77.64** | **347** | LR | | LR | 04 14 17.6 | |
| | comp=Z,50nm,18.6s,baz=145,slow=32 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.56** | **339** | P | | **P** | **03 45 41.6** | **+1.9** |
| | comp=Z,0.5nm,0.9s,baz=169,slow=6.3,SNR=2.1 | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.78** | **347** | P | | **P** | **03 45 51.9** | **+1.0** |
| | comp=Z,0.4nm,0.8s,baz=146,slow=6.6,SNR=3.1 | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.78** | **347** | P | | **P** | **03 45 46.5** | **-4.3** |

**NNC 16 03:50:56.5±7.9, 36.68N×69.65E, h0km, mb3.7, mpv3.4, 5C-3D, Error ellipse: s-maj=63.2km s-min=46.5km az=172.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KK01** | **Karatay Array** | **6.45** | **6** | ⇓P | | Pn | 03 52 34.6 | **+1.7** |
| | 0.6nm,0.5s,baz=192,slow=13 | | | | | | | |
| KK01 | | | | ⇓S | | Sn | 03 53 50.1 | +2.9 |
| | 1.6nm,0.3s,baz=192,slow=24 | | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **31** | ⇑P | | Pn | 03 52 41.4 | +0.6 |
| | 1.7nm,0.5s | | | | | | | |
| AAK | | | | ⇑S | | Sn | 03 54 01.8 | +0.3 |
| | 8.4nm,1.0s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.73** | **34** | ⇑P | | Pn | 03 52 48.6 | -2.0 |
| | 1.9nm,0.7s | | | | | | | |
| TKM2 | | | | ⇑S | | Sn | 03 54 17.6 | -1.3 |
| | 1.0nm,0.4s | | | | | | | |
| **AB31** | **Akbulak array** | **14.43** | **334** | ⇓P | | Pn | 03 54 22.9 | +1.0 |
| | 0.4nm,0.3s,baz=162,slow=13,SNR=49 | | | | | | | |
| AB31 | | | | ⇑S | | Sn | 03 57 03.5 | +1.0 |
| | 1.3nm,0.8s,baz=162,slow=23,SNR=2.8 | | | | | | | |

*IDC* ***16*** *04:04:53.8±0.4, 22.92N×121.03E, h0km, mb4.5/45, mb1 4.6/45, mb1mx4.5/62, mbtmp4.6/45, MS3.8/35, Ms1 3.8/35, ms1mx3.6/90, Error ellipse: s-maj=13.8km s-min=10.3km az=79.0*

*TAP* ***16*** *04:04:54.7, 23.01N×120.87E, h5km, ML5.0, C*

*NEIC* ***16*** *04:04:55.8, 23.04N×120.94E, h8km, Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr=8.26; Mθθ=5.99; Mϕϕ=2.26; Mrθ=-1.34; Mθϕ=-4.94; Mϕr=4.32; Fault plane solution: M0=9.97000×10^15 NP1:ϕs=141.60000°, δ=58.44000°, λ=-70.28000°. NP2:ϕs=287.19000°, δ=36.66000°, λ=-118.78000°. Principal axes: T 10.1253, Plg11.0000°, Azm218.0000°; N -0.3093, Plg17.0000°, Azm311.0000°; P -9.8160, Plg70.0000°, Azm95.0000°;*

*NEIC* ***16*** *04:04:55.7±1.9, 23.04N±0.05×120.93E±0.05, h9km±3km, mb4.8/107, Mwr4.6/23, ML4.6(TAP) Error ellipse: s-maj=8.4km s-min=5.2km az=132.0*

*ASIES* ***16*** *04:04:55.2, 23.01N×120.91E, h14km, MW4.6*

*JMA* ***16*** *04:04:55.4±0.5, 23.04N×121.10E, h0km, M4.6*

*NIED* ***16*** *04:04:55.5, 23.04N×121.10E, h0km, MW4.7, Moment Tensor Solution. s3 Moment tensor: Scale 10^16Nm; Mrr=1.24; Mθθ 0.81; Mϕϕ 0.43; Mrθ 0.27; Mθϕ -0.41; Mϕr-0.21; Fault plane solution: M0 1.20000×10^16 NP1: ϕs304.00000°, δ53.00000°, λ-89.00000°. NP2: ϕs122.00000°, δ37.00000°, λ-92.00000°.*

*BJI* ***16*** *04:04:58.1±0.0, 23.08N×120.81E, h16km, mb4.3/59, mB4.8/36, ML4.6/11, Ms4.6/70, Ms7 4.3/65*

*BGR* ***16*** *04:05:02.4±0.0, 23.86N×121.56E, h33km, mb5.1*

**ISC 16 04:04:55.6±0.5, 23.00N±0.01×120.91E±0.01, h9km±3km, n452, σ1§44/561, mb4.8/122, MS3.9/40, 66C-28D, Fault plane solution: NP1:ϕs108.32379°, δ24.01759°, λ-120.27181°. NP2:ϕs320.90314°, δ69.41982°, λ-77.33999°. Principal axes: T Plg23.4111°, Azm41.1807°; N Plg11.8399°, Azm136.3884°; P Plg63.4374°, Azm251.1802°; Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ELDTW** | **Lidau** | **0.21** | **27** | ⇑*i*P | | **Pg** | **04 04 59.6** | **-0.4** |
| | baz=40 | | | | | | | |
| ELDTW | | | | *i* S | | **Sg** | 04 05 02.5 | **-0.6** |
| | baz=40 | | | | | | | |
| **STYH** | **Taoyuan** | **0.21** | **324** | *i* P | | **Pg** | 04 04 59.0 | **-0.9** |
| | baz=332 | | | | | | | |
| STYH | | | | *i* S | | **Sg** | 04 05 01.8 | **-1.2** |
| | baz=332 | | | | | | | |
| **LONT** | **Longtian** | **0.22** | **114** | *i* P | | **Pg** | 04 05 00.7 | **+0.6** |
| | baz=114 | | | | | | | |
| LONT | | | | S | | **Sg** | 04 05 04.8 | **+1.7** |
| | baz=114 | | | | | | | |
| **TWG** | **Pinlang** | **0.23** | **140** | Pg | | **Pg** | 04 05 00.9 | **+0.7** |
| TWG | | | | Sg | | **Sg** | 04 05 04.6 | **+1.2** |
| **TWG** | **Pinlang** | **0.23** | **140** | ⇓*i*P | | **Pg** | 04 05 00.9 | **+0.7** |
| | baz=135 | | | | | | | |
| TWG | | | | *i* S | | **Sg** | 04 05 05.1 | **+1.7** |
| | baz=135 | | | | | | | |
| **TWGBT** | **Beinan** | **0.24** | **139** | ⇓*i*P | | **Pg** | 04 05 00.9 | **+0.5** |
| | baz=135 | | | | | | | |
| TWGBT | | | | *i* S | | **Sg** | 04 05 04.8 | **+1.2** |
| | baz=135 | | | | | | | |
| **SLGT** | **Liugui** | **0.24** | **269** | *e*P | | **Pg** | 04 04 58.5 | **-2.1** |
| | baz=265 | | | | | | | |
| SLGT | | | | *e*S | | **Sg** | 04 05 01.4 | **-2.5** |
| | baz=265 | | | | | | | |
| **ECS** | **Chishang** | **0.30** | **71** | ⇑*i*P | | **Pb** | 04 05 02.2 | **-0.9** |
| | baz=72 | | | | | | | |
| ECS | | | | S | | **Sb** | 04 05 06.8 | **-1.4** |
| | baz=72 | | | | | | | |
| **SGST** | **Jiashian** | **0.32** | **286** | ⇑*i*P | | **Pg** | 04 05 00.2 | **-1.7** |
| | baz=290 | | | | | | | |
| SGST | | | | *i* S | | **Sg** | 04 05 04.4 | **-1.7** |
| | baz=290 | | | | | | | |
| **TTN** | **Taitung** | **0.33** | **138** | *i* P | | **Pb** | 04 05 03.5 | **-0.1** |
| | baz=134 | | | | | | | |
| TTN | | | | *e*S | | **Sb** | 04 05 09.5 | **+0.6** |
| | baz=134 | | | | | | | |
| **SSD** | **Sandimen** | **0.36** | **226** | ⇑*i*P | | **Pg** | 04 05 01.6 | **-1.1** |
| | baz=217 | | | | | | | |
| SSD | | | | *e*S | | **Sg** | 04 05 05.7 | **-1.8** |
| | baz=217 | | | | | | | |
| **EDH** | **Donghe** | **0.36** | **94** | *e*P | | **Pb** | 04 05 03.9 | **-0.3** |
| | baz=96 | | | | | | | |
| EDH | | | | S | | **Sb** | 04 05 09.9 | **-0.1** |
| | baz=96 | | | | | | | |
| **WTP** | **Ta-pu** | **0.37** | **312** | ⇓*i*P | | **Pg** | 04 05 02.5 | **-0.4** |
| | baz=316 | | | | | | | |
| WTP | | | | S | | **Sg** | 04 05 07.7 | **-0.1** |
| | baz=316 | | | | | | | |
| **TSMG** | **Majia** | **0.38** | **220** | ⇑*i*P | | **Pg** | 04 05 02.1 | **-1.0** |
| | baz=213 | | | | | | | |
| TSMG | | | | *i* S | | **Sg** | 04 05 06.7 | **-1.5** |
| | baz=213 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.40** | **319** | Pg | | **Pg** | 04 05 03.2 | **-0.3** |
| TPUB | | | | Sg | | **Sg** | 04 05 08.7 | **-0.1** |
| **TPUB** | **Ta-pu** | **0.40** | **319** | P | | **Pg** | 04 05 03.0 | **-0.4** |
| | baz=323 | | | | | | | |
| TPUB | | | | S | | **Sg** | 04 05 08.1 | **-0.6** |
| | baz=323 | | | | | | | |
| **CHN1** | **Nanshi** | **0.40** | **298** | *i* P | | **Pg** | 04 05 03.4 | **-0.1** |
| | baz=299 | | | | | | | |
| CHN1 | | | | S | | **Sg** | 04 05 09.0 | **+0.2** |
| | baz=299 | | | | | | | |
| **ECL** | **Taimali** | **0.40** | **175** | *e*P | | **Pg** | 04 05 03.3 | **-0.1** |
| | baz=168 | | | | | | | |
| **SCST** | **Cishan** | **0.40** | **254** | P | | **Pg** | 04 05 03.1 | **-0.3** |
| | baz=250 | | | | | | | |
| **FULB** | **Fuli** | **0.40** | **60** | ⇑*i*P | | **Pb** | 04 05 04.4 | **-0.6** |
| | baz=66 | | | | | | | |
| FULB | | | | S | | **Sb** | 04 05 10.3 | **-0.9** |
| | baz=66 | | | | | | | |
| **CHKT** | **Chengkung** | **0.43** | **76** | ⇑*i*P | | **Pb** | 04 05 05.4 | **0.0** |
| | baz=81 | | | | | | | |
| CHKT | | | | *i* S | | **Sb** | 04 05 12.7 | **+0.7** |
| | baz=81 | | | | | | | |
| **SNST** | **Tainan City** | **0.44** | **300** | *e*P | | **Pg** | 04 05 04.4 | **+0.2** |
| | baz=305 | | | | | | | |
| SNST | | | | *e*S | | **Sg** | 04 05 11.0 | **+0.9** |
| | baz=305 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.46** | **320** | *e*P | | **Pg** | 04 05 04.3 | **-0.3** |
| | baz=323 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.46** | **214** | ⇑*i*P | | **Pg** | 04 05 03.6 | **-1.0** |
| | baz=210 | | | | | | | |
| MASBT | | | | S | | **Sg** | 04 05 09.4 | **-1.3** |
| | baz=210 | | | | | | | |
| **SGLT** | **Jiouru** | **0.47** | **235** | ⇑*i*P | | **Pg** | 04 05 05.0 | **+0.2** |
| | baz=222 | | | | | | | |
| SGLT | | | | *e*S | | **Sb** | 04 05 12.8 | **-0.4** |
| | baz=222 | | | | | | | |
| **TWK** | **Hsinying** | **0.47** | **305** | P | | **Pg** | 04 05 05.0 | **+0.1** |
| | baz=314 | | | | | | | |
| TWK | | | | *e*S | | **Sg** | 04 05 11.6 | **+0.4** |
| | baz=314 | | | | | | | |
| **TWM1** | **Shoushan** | **0.48** | **249** | ⇑P | | **Pg** | 04 05 05.3 | **+0.3** |
| | baz=244 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.49** | **4** | ⇑*i*P | | **Pg** | 04 05 04.5 | **-0.7** |
| | baz=19 | | | | | | | |
| YUS | | | | *i* S | | **Sg** | 04 05 10.9 | **-0.9** |
| | baz=19 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.50** | **230** | ⇑P | | **Pg** | 04 05 05.4 | **+0.1** |
| | baz=224 | | | | | | | |
| TSPT | | | | *e*S | | **Sg** | 04 05 12.7 | **+0.9** |
| | baz=224 | | | | | | | |
| **TWF1** | **Yuli** | **0.50** | **45** | ⇑*i*P | | **Pg** | 04 05 05.2 | **-0.2** |
| | baz=51 | | | | | | | |
| TWF1 | | | | *e*S | | **Sg** | 04 05 11.5 | **-0.4** |
| | baz=51 | | | | | | | |
| **CHN3** | **Shinhua** | **0.51** | **279** | *e*P | | **Pb** | 04 05 07.0 | **+0.3** |
| | baz=278 | | | | | | | |
| **EYUL** | **Yuli** | **0.51** | **47** | ⇑P | | **Pg** | 04 05 05.5 | **-0.1** |
| | baz=60 | | | | | | | |
| **ALS** | **Alishan** | **0.52** | **349** | ⇑*i*P | | **Pg** | 04 05 05.2 | **-0.6** |
| | baz=355 | | | | | | | |
| ALS | | | | S | | **Sg** | 04 05 12.7 | **0.0** |
| | baz=355 | | | | | | | |
| **SHHT** | **Tainan City** | **0.52** | **273** | ⇑P | | **Pb** | 04 05 07.0 | **+0.1** |
| | baz=272 | | | | | | | |
| SHHT | | | | S | | **Sn** | 04 05 17.5 | **-0.7** |
| | baz=272 | | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **42** | Pg | | **Pg** | 04 05 05.3 | **-0.6** |
| YULB | | | | Sg | | **Sg** | 04 05 11.9 | **-1.0** |
| **YULB** | **Yu-li** | **0.53** | **42** | ⇑*i*P | | **Pg** | 04 05 05.4 | **-0.5** |
| | baz=47 | | | | | | | |
| YULB | | | | *e*S | | **Sg** | 04 05 12.0 | **-1.0** |
| | baz=47 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.58** | **246** | *e*P | | **Pb** | 04 05 08.7 | **+0.7** |
| | baz=242 | | | | | | | |
| **ECBN** | **Changbin** | **0.59** | **57** | ⇑*i*P | | **Pb** | 04 05 07.9 | **-0.2** |
| | baz=61 | | | | | | | |
| ECBN | | | | *e*S | | **Sn** | 04 05 18.0 | **-1.9** |
| | baz=61 | | | | | | | |
| **SSHA** | **Shanhua** | **0.59** | **284** | *e*P | | **Pb** | 04 05 08.2 | **0.0** |
| | baz=293 | | | | | | | |
| **SSPT** | **Xinbi** | **0.60** | **212** | ⇑*i*P | | **Pg** | 04 05 07.0 | **-0.3** |
| | baz=204 | | | | | | | |
| SSPT | | | | *e*S | | **Sg** | 04 05 14.9 | **-0.3** |
| | baz=204 | | | | | | | |
| **LDUT** | **Ludao** | **0.61** | **122** | ⇓*i*P | | **Pb** | 04 05 07.9 | **-0.5** |
| | baz=122 | | | | | | | |
| LDUT | | | | S | | **Sb** | 04 05 17.8 | **+0.8** |
| | baz=122 | | | | | | | |
| **EAST** | **Anshuo** | **0.61** | **186** | ⇑*i*P | | **Pg** | 04 05 07.2 | **-0.3** |
| | baz=170 | | | | | | | |
| EAST | | | | *i* S | | **Sg** | 04 05 15.6 | **+0.1** |
| | baz=170 | | | | | | | |
| **EHY** | **Hungye** | **0.63** | **37** | ⇑*e*P | | **Pg** | 04 05 07.2 | **-0.6** |
| | baz=41 | | | | | | | |
| EHY | | | | *e*S | | **Sg** | 04 05 16.5 | **+0.4** |
| | baz=41 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.63** | **274** | *e*P | | **Pb** | 04 05 09.5 | **+0.7** |
| | baz=272 | | | | | | | |
| **CHN5** | **Tsauling** | **0.64** | **340** | ⇑*i*P | | **Pg** | 04 05 07.6 | **-0.4** |
| | baz=344 | | | | | | | |
| **TAW** | **Tawu** | **0.64** | **181** | *e*P | | **Pg** | 04 05 07.7 | **-0.2** |
| | baz=176 | | | | | | | |
| TAW | | | | *e*S | | **Sg** | 04 05 16.7 | **+0.5** |
| | baz=176 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.66** | **182** | *e*P | | **Pg** | 04 05 07.9 | **-0.3** |
| | baz=178 | | | | | | | |
| **CHN2** | **Minshiung** | **0.67** | **323** | *e*P | | **Pb** | 04 05 09.3 | **-0.2** |
| | baz=326 | | | | | | | |
| CHN2 | | | | *e*S | | **Sb** | 04 05 18.9 | **+0.1** |
| | baz=326 | | | | | | | |
| **CHY** | **Chiayi** | **0.67** | **318** | *e*P | | **Pb** | 04 05 08.9 | **-0.6** |
| | baz=321 | | | | | | | |
| CHY | | | | *e*S | | **Sb** | 04 05 18.5 | **-0.4** |
| | baz=321 | | | | | | | |
| **SCZT** | **Fangliau** | **0.68** | **204** | ⇑*i*P | | **Pg** | 04 05 08.0 | **-0.7** |
| | baz=189 | | | | | | | |
| SCZT | | | | *e*S | | **Sg** | 04 05 16.6 | **-1.0** |
| | baz=189 | | | | | | | |
| **HGSD** | **Ruisui** | **0.68** | **44** | ⇑*i*P | | **Pb** | 04 05 09.1 | **-0.6** |
| | baz=41 | | | | | | | |
| HGSD | | | | S | | **Sb** | 04 05 19.3 | **+0.1** |
| | baz=41 | | | | | | | |
| **SCLT** | **Jiali** | **0.69** | **285** | *e*P | | **Pg** | 04 05 08.5 | **-0.3** |
| | baz=285 | | | | | | | |
| **ICHU** | **Yijhu** | **0.69** | **302** | *e*P | | **Pb** | 04 05 09.5 | **-0.3** |
| | baz=303 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.70** | **233** | *e*P | | **Pn** | 04 05 11.3 | **-0.4** |
| | baz=250 | | | | | | | |
| **CHN8** | **Yiju** | **0.73** | **298** | *e*P | | **Pb** | 04 05 10.2 | **-0.3** |
| | baz=316 | | | | | | | |
| CHN8 | | | | *e*S | | **Sb** | 04 05 21.0 | **+0.3** |
| | baz=316 | | | | | | | |
| **WGK** | **Gukeng** | **0.76** | **335** | *e*P | | **Pb** | 04 05 10.6 | **-0.4** |
| | baz=339 | | | | | | | |
| WGK | | | | *e*S | | **Sb** | 04 05 21.1 | **-0.3** |
| | baz=339 | | | | | | | |
| **WDLH** | **Douliu** | **0.77** | **334** | ⇑*e*P | | **Pb** | 04 05 11.1 | **-0.1** |
| | baz=336 | | | | | | | |
| WDLH | | | | *e*S | | **Sb** | 04 05 22.1 | **+0.4** |
| | baz=336 | | | | | | | |
| **SLIU** | **Shizi** | **0.78** | **188** | *e*P | | **Pg** | 04 05 10.3 | **-0.4** |
| | baz=184 | | | | | | | |
| **SSLB** | **Suanglung** | **0.79** | **3** | Pg | | **Pg** | 04 05 09.5 | **-1.3** |
| SSLB | | | | Sg | | **Sg** | 04 05 21.1 | **0.0** |
| **SSLB** | **Suanglung** | **0.79** | **3** | ⇑*i*P | | **Pg** | 04 05 09.5 | **-1.3** |
| | baz=15 | | | | | | | |
| **WLCH** | **Liuqiu** | **0.81** | **218** | *e*P | | **Pn** | 04 05 13.6 | **+0.4** |
| | baz=214 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.82** | **310** | *e*P | | **Pg** | 04 05 11.1 | **-0.2** |
| | baz=311 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.82** | **218** | *e*P | | **Pn** | 04 05 13.7 | **+0.3** |
| | baz=214 | | | | | | | |
| **WJS** | **Zhushan** | **0.84** | **348** | ⇑P | | **Pb** | 04 05 12.0 | **-0.3** |
| | baz=3.0 | | | | | | | |
| WJS | | | | *e*S | | **Sb** | 04 05 24.1 | **+0.3** |
| | baz=3.0 | | | | | | | |
| **WTK** | **Tuku** | **0.84** | **325** | *e*P | | **Pg** | 04 05 11.6 | **-0.2** |
| | baz=328 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.88** | **359** | ⇑*i*P | | **Pg** | 04 05 11.8 | **-0.8** |
| | baz=12 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | 04 05 25.8 | **-1.5** |
| | baz=12 | | | | | | | |
| **WSF** | **Szhu** | **0.90** | **315** | *e*P | | **Pg** | 04 05 12.2 | **-0.7** |
| | baz=318 | | | | | | | |
| WSF | | | | *e*S | | **Sb** | 04 05 25.4 | **-0.1** |
| | baz=318 | | | | | | | |
| **WNT** | **Mingjian** | **0.90** | **347** | ⇑*i*P | | **Pb** | 04 05 13.4 | **-0.1** |
| | baz=335 | | | | | | | |
| WNT | | | | *e*S | | **Sn** | 04 05 26.7 | **-0.9** |
| | baz=335 | | | | | | | |
| **TYC** | **Yuchr** | **0.90** | **357** | ⇑*i*P | | **Pg** | 04 05 12.5 | **-0.5** |
| | baz=8.0 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | 04 05 26.6 | **-1.1** |
| | baz=8.0 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.91** | **39** | *e*P | | **Pb** | 04 05 13.7 | **0.0** |
| | baz=43 | | | | | | | |
| **WNT1** | **Nantou City** | **0.93** | **347** | *e*P | | **Pg** | 04 05 13.4 | **-0.1** |
| | baz=350 | | | | | | | |
| **ESL** | **Shilin** | **0.94** | **30** | *e*P | | **Pg** | 04 05 12.6 | **-1.2** |
| | baz=48 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.97** | **184** | *e*P | | **Pg** | 04 05 14.0 | **-0.4** |
| | baz=181 | | | | | | | |
| **HEN** | **Hengchun** | **1.00** | **189** | *e*P | | **Pn** | 04 05 15.6 | **-0.2** |
| | baz=184 | | | | | | | |
| HEN | | | | *e*S | | **Sn** | 04 05 30.3 | **+0.2** |
| | baz=184 | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.01** | **342** | *e*P | | **Pg** | 04 05 14.7 | **-0.3** |
| | baz=346 | | | | | | | |
| **WUSB** | **Renai** | **1.01** | **11** | ⇑*e*P | | **Pg** | 04 05 13.4 | **-1.7** |
| | baz=14 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | 04 05 30.9 | **+0.4** |
| | baz=14 | | | | | | | |
| **WPL** | **Puli Township** | **1.01** | **2** | *e*P | | **Pg** | 04 05 13.8 | **-1.3** |
| | baz=6.0 | | | | | | | |
| **WMLT** | **Mailiao** | **1.02** | **322** | *e*P | | **Pg** | 04 05 14.7 | **-0.6** |
| | baz=324 | | | | | | | |
| WMLT | | | | *e*S | | **Sb** | 04 05 29.1 | **+0.1** |
| | baz=324 | | | | | | | |
| **DPDB** | **Guoxing** | **1.03** | **1** | *e*P | | **Pg** | 04 05 14.8 | **-0.7** |
| | baz=5.0 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.04** | **326** | *e*P | | **Pb** | 04 05 15.5 | **-0.3** |
| | baz=329 | | | | | | | |
| WTCT | | | | *e*S | | **Sb** | 04 05 29.9 | **+0.4** |
| | baz=329 | | | | | | | |
| **SNW** | **Nanwan** | **1.04** | **188** | *e*P | | **Pn** | 04 05 17.2 | **+0.7** |
| | baz=185 | | | | | | | |
| **TWK1** | **Hengchun** | **1.05** | **185** | *i* P | | **Pg** | 04 05 16.0 | **+0.1** |
| | baz=182 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.05** | **360** | *e*P | | **Pg** | 04 05 13.9 | **-2.0** |
| | baz=19 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.06** | **185** | *i* P | | **Pb** | 04 05 16.2 | **+0.1** |
| | baz=182 | | | | | | | |
| **WWF** | **Wufeng** | **1.06** | **349** | P | | **Pb** | 04 05 16.1 | **0.0** |
| | baz=338 | | | | | | | |
| WWF | | | | S | | **Sn** | 04 05 31.4 | **-0.2** |
| | baz=338 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.07** | **36** | *i* P | | **Pn** | 04 05 16.8 | **-0.1** |
| | baz=39 | | | | | | | |
| **CHGB** | **Renai** | **1.08** | **13** | *e*P | | **

baz=18
**ETLH Xiulin Townshi** 1.31 23 *e*P Pn 04 05 19.3 -0.9
baz=45
**ETL Fush Village** 1.33 29 P Pn 04 05 19.9 -0.5
baz=31
ETL S Sg 04 05 39.0 +0.6
baz=31
**NACB Ninganchiao** 1.33 28 Pn 04 05 19.6 -0.8
NACB Sb 04 05 37.1 -0.7
**NACB Ninganchiao** 1.33 28⇑ *e*P Pn 04 05 19.3 -1.0
baz=46
NACB *i* S Sg 04 05 38.5 +0.1
baz=46
**PHUB P'eng-hu** 1.34 293⇑ *i*P Pn 04 05 18.8 -1.6
baz=294
PHUB *i* S Sb 04 05 36.4 -1.7
baz=294
**TWQ1 Liyutan** 1.35 355 P Pg 04 05 21.4 -0.2
baz=358
TWQ1 *e*S Sg 04 05 39.9 +0.8
baz=358
**WDJ Dajia District** 1.37 350 *e*P Pg 04 05 21.4 -0.5
baz=353
WDJ *e*S Sg 04 05 40.9 +1.2
baz=353
**PNG Penghu** 1.37 295 *i* P Pn 04 05 19.8 -1.2
baz=296
PNG *i* S Sb 04 05 37.7 -1.4
baz=296
**VCHM Qimei** 1.38 279 *e*P Pn 04 05 19.5 -1.6
baz=295
VCHM *e*S Sb 04 05 37.2 -2.1
baz=295
**NSY Sanyi** 1.42 354 *e*P Pb 04 05 22.0 -0.3
baz=358
NSY *e*S Sg 04 05 42.3 +1.0
baz=358
**NNSB Datong** 1.49 17⇑ *e*P Pn 04 05 21.9 -0.8
baz=17
NNSB *e*S Sg 04 05 43.1 -0.4
baz=17
**NNS Nan Shan** 1.50 16 *e*P Pn 04 05 22.3 -0.5
baz=21
**EHP Heping Village** 1.51 30 *e*P Pn 04 05 23.0 +0.1
baz=44
**NMLH Miaoli** 1.54 356 *e*P Pb 04 05 23.6 -0.6
baz=340
**ENA Nanau** 1.61 28 *e*P Pn 04 05 24.5 +0.2
baz=46
**NSTT Nanjuang** 1.63 3 *e*P Pb 04 05 25.9 +0.1
baz=5.0
NSTT *e*S Sg 04 05 49.1 +1.1
baz=5.0
**LATG Datong** 1.63 20⇑ *e*P Pn 04 05 24.8 +0.2
baz=36
LATG *e*S Sb 04 05 46.7 0.0
baz=36
**NFF Wufeng Townshi** 1.64 7 *e*P Pb 04 05 25.6 -0.4
baz=13
**LIOB Emei** 1.64 3 *e*P Pb 04 05 25.7 -0.4
baz=349
**EWUT Wuta** 1.65 29 ⇑P Pn 04 05 25.0 +0.3
baz=45
**NDT Datong Townshi** 1.69 19 *e*P Pb 04 05 26.1 -0.8
baz=23
**YHNB Yeheng** 1.72 14 Pn Pn 04 05 26.0 +0.2
**YHNB Yeheng** 1.72 14⇑ *i*P Pn 04 05 26.1 +0.2
baz=14
YHNB S Sg 04 05 50.0 -0.9
baz=14
**NSK Sanguang** 1.72 14 *e*P Pn 04 05 25.9 +0.1
baz=14
NSK *e*S Sg 04 05 50.7 -0.3
baz=14
**NJD Zhudong** 1.74 5 *e*P Pb 04 05 26.6 -1.1
baz=11
**ENTT Nioudou** 1.74 20 *e*P Pb 04 05 27.3 -0.5
baz=40
**HSN1 Hsinchu** 1.77 3 *e*P Pg 04 05 29.4 -0.3
baz=350
**NDS Dongshan** 1.79 24 *e*P Pb 04 05 27.4 -1.1
baz=43
**SBCB Hsinchu** 1.79 2 *e*P Pb 04 05 28.3 -0.3
baz=349
**HSN Hsinchu** 1.80 2 *e*P Pb 04 05 28.1 -0.6
baz=350
**TWC Suao** 1.82 28 *e*P Pb 04 05 28.0 -1.1
baz=28
TWC *e*S Sb 04 05 51.6 -0.4
baz=28
**TWE Neicheng** 1.85 22⇓ *e*P Pb 04 05 29.9 +0.3
baz=36
TWE *e*S Sg 04 05 54.2 -0.9
baz=36
**NWLT Wulai** 1.85 17 *e*P Pn 04 05 28.3 +0.7
baz=21
**FUSB Fushanzhiwuyua** 1.86 19⇑ *e*P Pb 04 05 29.0 -0.8
baz=19
FUSB *e*S Sb 04 05 53.3 +0.1
baz=19
**ILA Ilan** 1.92 23 *e*P Pn 04 05 29.3 +0.8
baz=42
**NCUH Zhongli** 1.98 7 *e*P Pg 04 05 32.7 -0.8
baz=13
**NCU National Centr** 1.98 7 *e*P Pb 04 05 32.4 +0.6
baz=13
**NHW Xinwu Township** 2.00 4 *e*P Pn 04 05 30.1 +0.4
baz=20
**NTC Toucheng** 2.03 24 *e*P Pb 04 05 31.4 -1.3
baz=43
**NHDH Xindian Distri** 2.04 16 *e*P Pb 04 05 32.8 0.0
baz=20
**TATO Taipei** 2.04 15 Pn 04 05 29.8 -0.3
**TATO Taipei** 2.04 15⇑ *e*P Pb 04 05 32.8 -0.1
baz=14
TATO *e*S Sg 04 05 59.4 -1.8
baz=14
**TWA Mucha** 2.07 17 *e*P Pb 04 05 33.4 +0.1
baz=5.0
**TAP Taipei** 2.10 15 *e*P Pb 04 05 33.5 -0.5
baz=19
**TAP1 Taipei** 2.11 15 *e*P Pb 04 05 33.8 -0.2
baz=19
**JYNG Yonaguni jima** 2.36 52 P Pn 04 05 34.0 -0.5
JYNG *e*S Sn 04 06 02.3 -1.3
**YOJ Yonaguni jima** 2.41 52 P Pn 04 05 35.5 +0.3
YOJ *e*S Sn 04 06 03.9 -1.0
**YOJ Yonaguni jima** 2.41 52 Pn Pn 04 05 35.5 +0.3
**KNMB Chin-men Tao** 2.73 303 Pn Pn 04 05 38.6 -1.1
**HATJ Hateruma jima** 2.86 68 P Pn 04 05 40.9 -0.5
HATJ *e*S Sn 04 06 14.2 -1.7
**QZH Quanzhou** 2.87 313 Pn Pn 04 05 40.6 -1.0
QZH Sn Sn 04 06 12.3 -4.0
QZH smax smax
comp=N,590nm,0.9s
QZH smax smax
comp=E,640nm,0.8s
**IRIF Iriomote-Funau** 2.91 62 P Pn 04 05 42.2 +0.2
IRIF *e*S Sn 04 06 14.7 -2.4
**JKRS Kuro-shima** 3.10 66 P Pn 04 05 44.7 0.0
JKRS *e*S Sn 04 06 21.4 -0.4
**JIJ Ishigaki jima** 3.26 65 P Pn 04 05 46.3 -0.6
JIJ *e*S Sn 04 06 23.9 -1.9
**JISG Ishigakijimahi** 3.49 62 P Pn 04 05 49.4 -0.7
JISG S Sn 04 06 29.9 -1.7
**JTJ Tarama** 3.84 64 P Pn 04 05 55.7 +0.9
JTJ *e*S Sn 04 06 38.9 -1.2
**JIRB Irabujima** 4.30 64 *e*S Sn 04 06 50.6 -1.0
**JMJ2 Miyako jima3** 4.40 66 P Pn 04 06 03.2 +0.6
JMJ2 *e*S Sn 04 06 52.6 -1.3
**JIKM Ikemajima** 4.41 63 P Pn 04 06 03.7 +1.0
JIKM *e*S Sn 04 06 52.6 -1.5
**CVP Callao Caves** 5.34 171⇑ *e*P Pn 04 06 15.4 -0.1
**HKPS Hong Kong Po S** 6.30 265 Pn Pn 04 06 29.5 +0.8
**GZH Guangzhou** 6.97 272 P Pn 04 06 36.4 -1.5
GZH S Sn 04 07 54.9 -2.5
GZH smax smax
comp=N,640nm,1.2s
GZH smax smax
comp=E,270nm,1.1s
**SSE Sheshan** 8.07 2 P Pn 04 06 54.3 +1.3
SSE S Sn 04 08 26.3 +1.9
SSE smax smax
comp=N,94nm,1.4s
SSE smax smax
comp=E,110nm,1.2s
SSE LR LR
comp=N,610nm,15.6s
SSE LR LR
comp=E,2μm,15.8s
**CNSH ChangSha** 8.86 307 ⇑P Pn 04 06 57.6 -6.3
CNSH S Sn 04 08 32.6 -11
CNSH smax smax
comp=N,450nm,1.1s
CNSH smax smax
comp=E,240nm,1.0s
**NJ2 Nanjing** 9.20 349 *e*P Pn 04 07 09.4 +0.9
NJ2 S Sn 04 08 55.8 +3.6
NJ2 pmax pmax
comp=E,35nm,0.7s
NJ2 smax smax
comp=E,290nm,1.2s
NJ2 smax smax
comp=E,130nm,1.1s
NJ2 LR LR
comp=E,5μm,8.0s
NJ2 LR LR
comp=E,4μm,7.1s
NJ2 LR LR
comp=E,1μm,7.3s
**WHN Wuhan** 9.53 323 ⇓P Pn 04 07 15.1 +2.1
WHN S Sn 04 09 03.8 +3.5
WHN LR LR
comp=E,2μm,4.8s
WHN LR LR
comp=E,4μm,10.3s
WHN LR LR
comp=E,3μm,7.9s
**GULI GuiLin** 9.90 285 ⇓P Pn 04 07 20.9 +2.8
GULI LR LR
comp=E,770nm,8.1s
GULI LR LR
comp=E,1μm,7.6s
GULI LR LR
comp=E,1μm,7.0s
**QIZ Qiongzhong** 11.07 251 P Pn 04 07 35.9 +1.8
QIZ S Sn 04 09 41.9 +3.8
QIZ LR LR
comp=E,2μm,14.3s
QIZ LR LR
comp=E,2μm,13.5s
QIZ LR LR
comp=E,3μm,13.3s
**GYA Guiyang** 13.40 288 ⇑P P 04 08 11.8 -3.9
GYA S Sn 04 10 46.3 +11
GYA pmax pmax
comp=E,9.0nm,1.3s
GYA LR LR
comp=E,2μm,6.8s
GYA LR LR
comp=E,1μm,9.9s
GYA LR LR
comp=E,1μm,9.3s
**LYN LuoYang** 13.68 329 *e*P Pn 04 08 11.3 +1.5
LYN PP P 04 08 20.3 +1.6
LYN S Sn 04 10 47.6 +5.7
LYN pmax pmax
comp=E,90nm,6.7s
LYN LR LR
comp=E,1μm,7.8s
LYN LR LR
comp=E,690nm,9.3s
**XAN Xi'an** 15.22 319 P P 04 08 37.6 +1.7
XAN pP sP 04 08 41.1 +0.7
XAN pmax pmax
comp=E,15nm,1.1s
XAN LR LR
comp=E,660nm,7.7s
XAN LR LR
comp=E,1μm,8.4s
XAN LR LR
comp=E,1μm,8.9s
**HNS HongShan** 15.32 341 ⇓P P 04 08 36.4 -0.4
HNS S Sn 04 11 29.3 +7.5
HNS pmax pmax
comp=E,46nm,1.2s
HNS LR LR
comp=E,860nm,12.3s
HNS LR LR
comp=E,2μm,11.8s
HNS LR LR
comp=E,1μm,13.0s
**KSAR Wonju Array Be** 15.60 21 Pn Pn 04 08 35.7 +0.1
**KSRS Korea Array** 15.62 21 Pn P 04 08 38.1 -2.0
comp=E,0.2nm,0.3s,baz=201,slow=12,SNR=14
KSRS LR LR 04 15 12.4
comp=E,281nm,20.3s,baz=200,slow=40
**KMI Kunming** 16.73 281 ⇓P P 04 08 56.5 +3.6
KMI pP sP 04 08 58.8 +1.3
KMI pmax pmax
comp=E,7.0nm,1.4s
KMI LR LR
comp=E,520nm,6.2s
KMI LR LR
comp=E,480nm,15.6s
KMI LR LR
comp=E,400nm,9.1s
**CD2 Chengdu** 17.19 301 P P 04 08 59.3 +1.5
CD2 pmax pmax
comp=E,30nm,1.2s
CD2 LR LR
comp=E,130nm,9.1s
CD2 LR LR
comp=E,1μm,10.5s
CD2 LR LR
comp=E,1μm,9.5s
**BJT Baijiatuau** 17.44 348 Pn Pn 04 08 58.0 -1.2
**BJI Beijing** 17.46 348 P P 04 09 00.5 0.0
BJI S Sn 04 12 16.9 +3.1
BJI pmax pmax
comp=E,5.0nm,1.0s
BJI pmax pmax
comp=E,230nm,5.4s
BJI LR LR
comp=E,580nm,13.3s
BJI LR LR
comp=E,590nm,11.2s
**PZH PanZhiHua** 17.76 285 ⇑P P 04 09 12.0 +7.9
PZH S Sn 04 12 23.0 +1.6
**PZH PanZhiHua** 17.76 285 ScS ScS 04 20 58.0 +0.8
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,90nm,4.9s
PZH LR LR
comp=N,1μm,12.6s
PZH LR LR
comp=E,1μm,11.5s
PZH LR LR
comp=Z,1μm,12.2s
**MYLDM Lahad Datu** 17.87 188 Pn Pn 04 09 02.9 -1.6
MYLDM IAmb IAmb 04 09 31.7
comp=Z,100nm,1.4s
**SNY Shenyang** 18.91 6 ⇑P Pn 04 09 22.0 +4.9
SNY S S 04 12 53.3 +1.8
SNY pmax pmax
comp=Z,17nm,0.9s
SNY pmax pmax
comp=Z,240nm,3.5s
SNY LR LR
comp=Z,560nm,10.1s
SNY LR LR
comp=Z,870nm,10.8s
SNY LR LR
comp=Z,1μm,11.9s
**LZH Lanzhou** 19.73 315 *e*P Pn 04 09 30.6 +3.4
LZH pP sP 04 09 34.8 +4.5
LZH sP pP 04 09 37.6 +8.7
LZH pmax pmax
comp=Z,14nm,1.4s
LZH pmax pmax
comp=Z,230nm,6.0s
LZH LR LR
comp=Z,800nm,13.0s
LZH LR LR
comp=Z,710nm,13.0s
LZH LR LR
comp=Z,970nm,14.1s
**BTO Baotou** 19.82 335 *e*P Pn 04 09 31.9 +3.8
BTO LR LR
comp=Z,4μm,13.5s
BTO LR LR
comp=Z,2μm,12.5s
**MAJO Matsushiro** 20.14 44 P P 04 09 27.5 -2.7
MAJO IAmb IAmb 04 09 41.3
comp=Z,66nm,1.1s
**MAT Matsushiro** 20.14 44 P Pn 04 09 34.5 +2.5
**MJB9 Matsu-Tunnel** 20.14 44 P P 04 09 27.5 -2.7
MJB9 IAmb IAmb 04 09 41.3
comp=Z,62nm,1.1s
**MJAR Matsushiro Arr** 20.15 44 P Pn 04 09 31.0 -1.0
comp=Z,24nm,0.9s,baz=235,slow=6.8,SNR=16
MJAR LR LR 04 17 53.4
comp=Z,270nm,19.8s,baz=221,slow=39
**MJAR Matsushiro Arr** 20.15 44 P P 04 09 27.3 -2.9
MJAR IAmb IAmb 04 09 41.3
comp=Z,41nm,1.1s
**CMAR Chiang Mai Arr** 21.03 262 P P 04 09 42.2 +2.4
comp=Z,5.6nm,0.8s,baz=74,slow=9.5,SNR=4.9
CMAR PcP PcP 04 13 48.7 +1.8
comp=Z,0.9nm,0.3s,baz=22,slow=1.0,SNR=5.5
CMAR LR LR 04 19 29.0
comp=Z,445nm,18.4s,baz=70,slow=41
**CMAR Chiang Mai Arr** 21.03 262 P P 04 09 40.8 +0.9
CMAR PcP PcP 04 13 45.3 -1.6
**XLT XiLinHaoTe** 21.23 350⇑ *i*P P 04 09 43.0 +1.2
XLT pP sP 04 09 47.8 +1.4
XLT sP pP 04 09 51.1 +6.1
XLT PP PnPn 04 10 11.8 +10
XLT S S 04 13 38.8 +0.9
XLT pmax pmax
comp=Z,33nm,1.2s
XLT pmax pmax
comp=Z,200nm,4.3s
XLT LR LR
comp=Z,980nm,16.6s
XLT LR LR
comp=Z,640nm,14.2s
**TOLI2 Tolitoli** 21.76 180 P P 04 09 47.9 +0.2
TOLI2 IAmb IAmb 04 09 52.6
comp=Z,71nm,1.3s
**SBUM Sibu** 22.10 204 P P 04 09 51.1 -0.2
**GTOI Gorontalo** 22.32 174 P P 04 09 52.2 -1.5
comp=Z,286nmcomp=Z,27nm,1.0s
**MRSI Marisa** 22.41 177 P P 04 09 55.3 +0.7
comp=Z,993nmcomp=Z,68nm,0.8s
**MPSI Mapaga** 22.55 183 P P 04 09 56.4 +0.3
comp=Z,14nm,0.8s
**JMM Marumori** 22.59 44 P P 04 09 53.1 -3.4
JMM IAmb IAmb 04 10 02.5
comp=Z,31nm,0.8s
**MDJ Mudanjiang** 22.71 16 P P 04 09 55.2 -2.4
**MDJ Mudanjiang** 22.71 16 P P 04 09 57.8 +0.2
MDJ S S 04 14 07.0 +0.8
MDJ sS sS 04 14 12.3 +0.7
MDJ ScP ScP 04 17 27.0 -0.8
MDJ PcS PcS 04 17 29.4 +0.9
MDJ ScS ScS 04 21 14.0 +0.9
MDJ pmax pmax
comp=Z,15nm,1.1s
MDJ pmax pmax
comp=Z,190nm,4.4s
MDJ LR LR
comp=Z,490nm,10.3s
MDJ LR LR
comp=Z,710nm,11.7s
MDJ LR LR
comp=Z,650nm,12.8s
**USRK Ussuriysk Ar.** 23.03 21 P P 04 10 00.7 -0.3
comp=Z,6.0nm,0.7s,baz=204,slow=4.2,SNR=6.1
USRK LR LR 04 19 39.2
comp=Z,144nm,18.1s,baz=182,slow=38
**USRK Ussuriysk Ar.** 23.03 21 P P 04 09 59.5 -1.5
**BNX BinXian** 23.30 12 ⇓P P 04 10 06.5 +2.8
BNX pmax pmax
comp=Z,8.0nm,0.5s
BNX pmax pmax
comp=Z,270nm,4.0s
**APSI Ampana** 23.77 178 P P 04 10 10.0 +1.4
comp=Z,1μmcomp=Z,67nm,1.3s
**PCI Palu** 23.78 183 P P 04 10 18.7 +10
**GTA Gaotai** 24.27 317 ⇓P P 04 10 13.4 +0.1
GTA pP sP 04 10 19.3 +1.2
GTA sP pP 04 10 22.8 +6.1
GTA sS sS 04 14 42.3 +4.5
GTA pmax pmax
comp=Z,9.0nm,1.5s
GTA pmax pmax
comp=Z,110nm,4.7s
GTA LR LR
comp=Z,320nm,12.7s
GTA LR LR
comp=Z,240nm,13.5s
GTA LR LR
comp=Z,310nm,14.5s
**MTKI Muara Teweh, K** 24.50 195 P P 04 10 17.3 +1.8
**GUMO Guam** 24.56 108 LR LR 04 18 56.6
comp=Z,141nm,19.5s,baz=128,slow=34
**STKI Sintang** 24.57 203 P P 04 10 18.1 +2.0
**SANI Sanana** 25.38 168 P P 04 10 24.4 +1.0
comp=Z,44nm,1.0s
**GOMU GeErMu** 26.14 306 P P 04 10 33.1 +2.6
GOMU sP sP 04 10 38.3 +3.0
GOMU pmax pmax
comp=Z,5.0nm,1.0s
GOMU pmax pmax
comp=Z,82nm,4.7s
GOMU LR LR
comp=Z,410nm,10.1s
GOMU LR LR
comp=Z,520nm,11.2s
GOMU LR LR
comp=Z,610nm,11.0s
**HIA Hailar** 26.23 358 P P 04 10 28.8 -2.0
HIA IAmb IAmb 04 10 38.4
comp=Z,30nm,1.4s
**IPM Ipoh** 26.61 229 P P 04 10 34.0 -0.6
IPM IAmb IAmb 04 10 38.0
comp=Z,18nm,1.0s
**SPSI Sidrap Palu** 26.82 183 P P 04 10 37.9 +1.5
comp=Z,13nm,1.3s
**ULN Ulaanbaatar** 27.18 339 P P 04 10 37.0 -2.6
**SONM Songino Array** 27.37 338 P P 04 10 41.4 +0.1
comp=Z,7.5nm,1.2s,baz=152,slow=10.0,SNR=16
**SONM Songino Array** 27.37 338 P P 04 10 41.1 -0.1
**LSA Lhasa** 27.44 290 P P 04 10 44.3 +1.8
LSA pP sP 04 10 50.1 +2.8
LSA S S 04 15 28.8 +5.2
LSA pmax pmax
comp=Z,10.0nm,1.4s
LSA LR LR
comp=Z,220nm,7.1s
LSA LR LR
comp=Z,270nm,6.4s
LSA LR LR
comp=Z,290nm,8.5s
**KLR Kul'dur** 27.55 15 P P 04 10 43.9 +1.2
comp=Z,2.9nm,0.8s,baz=200,slow=6.3,SNR=8.1
KLR LR LR 04 22 16.9
comp=Z,271nm,18.4s,baz=198,slow=38
**ASAJ Asahikawa** 27.60 35 P P 04 10 44.4 +1.2
comp=Z,20nm,1.1s,baz=220,slow=17,SNR=2.3
ASAJ LR LR 04 22 11.8
comp=Z,430nm,20.2s,baz=94,slow=38
**KAPI Kappang** 27.86 182 P P 04 10 43.9 -1.9
comp=Z,5.0nm,0.8s,baz=286,slow=18,SNR=2.2
KAPI LR LR 04 24 12.3
comp=Z,55nm,19.4s,baz=40,slow=42
**KAPI Kappang** 27.86 182 P P 04 10 44.1 -1.7
KAPI IAmb IAmb 04 11 10.8
comp=Z,27nm,1.4s
**PSI Prapat** 29.27 230 P P 04 10 59.2 +0.7
comp=Z,5.3nm,0.9s,baz=32,slow=9.5,SNR=7.1
PSI LR LR 04 22 50.3
comp=Z,145nm,19.3s,baz=29,slow=37
**RPSI Rantau Prapat** 29.35 230 P P 04 10 59.2 +0.2
**MDSI Maura Dua** 31.83 213 P P 04 11 23.3 +2.3
comp=Z,15nm,0.9s
**JAY Jayapura** 31.87 140 LR LR 04 21 41.5
comp=Z,189nm,21.4s,baz=330,slow=32
**SOEI Soe** 32.72 174 P P 04 11 28.7 -0.1
**BATI Baumata** 33.11 175 P P 04 11 30.5 -1.6
comp=Z,33nm,0.8s,baz=334,slow=2.2,SNR=5.3
**BATI Baumata** 33.11 175 P P 04 11 30.0 -2.1
comp=Z,26nm,1.0s
**WMQ Urumqi** 34.31 315 *e*P P 04 11 46.8 +4.3
WMQ pP sP 04 11 50.0 +2.7
WMQ pmax pmax

comp=Z,18nm,1.5s
**MK31 Makanchi Array 39.02 317** P **P** **04 12 23.0 +0.4**
MK31 PcP **PcP** **04 14 32.3 -0.4**
**MKAR Makanchi Array 39.02 317** P **P** **04 12 22.9 +0.3**
comp=Z,9.0nm,1.0s,baz=113,slow=8.5,SNR=34
MKAR PcP **PcP** **04 14 33.0 +0.3**
comp=Z,4.5nm,1.0s,baz=91,slow=4.5,SNR=4.8
**MAKZ Makanchi 39.23 317** P **P** **04 12 24.8 +0.5**
MAKZ PcP **PcP** **04 14 32.0 -1.3**
**YAK Yakutsk 39.47 6** LR LR 04 30 16.0
comp=Z,99nm,18.4s,baz=101,slow=38
**TARG Taragay, Kyrgy 40.43 308** P **P** **04 12 34.0 -0.8**
**PETK Petropavlovsk- 40.99 33** P **P** **04 12 38.0 -0.8**
comp=Z,5.0nm,0.8s,baz=228,slow=9.8,SNR=4.7
PETK LR LR 04 29 16.1
comp=Z,205nm,21.9s,baz=220,slow=36
**ZAA0 Zalesovo Array 41.11 328** P **P** **04 12 38.3 -1.4**
ZAA0 IAmb IAmb 04 12 47.7
comp=Z,19nm,0.9s
**ZALV Zalesovo Beam 41.11 328** P **P** **04 12 39.9 +0.1**
comp=Z,6.5nm,0.7s,baz=111,slow=8.1,SNR=23
ZALV PcP **PcP** **04 14 38.8 -0.3**
comp=Z,1.4nm,0.9s,baz=88,slow=4.9,SNR=1.9
ZALV LR LR 04 29 11.4
comp=Z,57nm,20.1s,baz=119,slow=35
**ZALV Zalesovo Beam 41.11 328** P **P** **04 12 39.3 -0.4**
ZALV **PcP** **04 14 38.4 -0.8**
**KSH Kashi 41.35 304** P **P** **04 12 46.3 +4.2**
KSH pP sP 04 12 51.4 +4.5
KSH sP pP 04 12 53.8 +8.3
KSH PcP **PcP** **04 14 44.3 +3.9**
KSH pmax pmax
comp=Z,8.0nm,1.4s
KSH LR LR
comp=Z,440nm,12.0s
KSH LR LR
comp=Z,500nm,13.7s
KSH LR LR
comp=Z,570nm,11.7s
**PET Petropavlovsk 41.43 34** P **P** **04 12 42.0 -0.4**
**PALK Pallekele 41.67 254** LR LR 04 31 41.9
comp=Z,161nm,18.8s,baz=167,slow=38
**COEN Coen 42.71 147** P **P** **04 12 52.1 -1.1**
COEN IAmb IAmb 04 12 54.4
comp=Z,18nm,0.9s
**H11N1 WAKE ISLAND Hy 42.82 85** T T 04 58 14.4
baz=282,slow=74,SNR=13
**H11N2 WAKE ISLAND Hy 42.82 85** T T 04 58 07.7
baz=282,slow=74,SNR=26
**H11N3 WAKE ISLAND Hy 42.83 85** T T 04 58 13.5
baz=282,slow=74,SNR=22
**KURK Kurchatov 42.85 321** P **P** **04 12 53.5 -0.5**
**KURBB Kurchatov Arra 42.86 321** P **P** **04 12 54.7 +0.6**
comp=Z,10.0nm,1.0s,baz=105,slow=6.9,SNR=3.6
**H11S3 WAKE ISLAND Hy 42.91 87** T T 04 58 12.4
baz=278,slow=74,SNR=14
**H11S1 WAKE ISLAND Hy 42.92 87** T T 04 58 13.8
baz=278
**H11S2 WAKE ISLAND Hy 42.93 87** T T 04 58 14.0
baz=278,slow=74,SNR=7.8
**NIL Nilore 42.95 295** P **P** **04 12 55.6 +0.5**
NIL IAmb IAmb 04 13 02.6
comp=Z,19nm,1.0s
**AAK Ala-Archa 43.04 308** P **P** **04 12 56.4 +0.5**
comp=Z,2.2nm,0.9s,baz=133,slow=7.2,SNR=4.2
AAK PcP **PcP** **04 14 45.8 -0.2**
comp=Z,2.3nm,0.8s,baz=116,slow=6.8,SNR=4.4
AAK LR LR 04 33 05.9
comp=Z,85nm,20.2s,baz=103,slow=39
**AAK Ala-Archa 43.04 308** P **P** **04 12 56.6 +0.8**
AAK PcP **PcP** **04 14 46.5 +0.5**
**MBWA Marble Bar 43.90 182** P **P** **04 13 02.4 -0.3**
**PSA00 Pilbara Seismi 44.31 181** P **P** **04 13 05.8 -0.2**
**PSA00 Pilbara Seismi 44.31 181** P **P** **04 13 05.8 -0.2**
PSA00 IAmb IAmb 04 13 07.1
comp=Z,12nm,1.1s
**WB0 Warramunga Arr 44.49 162** P **P** **04 13 05.8 -1.8**
**WRA Warramunga Arr 44.65 162** P **P** **04 13 06.6 -2.1**
comp=Z,2.9nm,0.6s,baz=345,slow=8.9,SNR=19
WRA PcP **PcP** **04 14 50.7 -0.8**
comp=Z,0.7nm,0.8s,baz=337,slow=3.5,SNR=1.8
**WRA Warramunga Ar 44.65 162** P **P** **04 13 07.1 -1.7**
WRA PcP **PcP** **04 14 50.8 -0.7**
**WB2 Warramunga Arr 44.65 162** P **P** **04 13 07.1 -1.7**
**SEY Seymchan 45.17 20** PcP **PcP** **04 14 52.1 -0.5**
comp=Z,5.1nm,0.8s,baz=204,slow=5.0,SNR=10
SEY LR LR 04 34 42.7
comp=Z,99nm,18.1s,baz=319,slow=40
**KKAR Karatay Array 46.00 308** P **P** **04 13 19.3 0.0**
KKAR PcP **PcP** **04 14 55.9 -0.1**
**KBL Kabul 46.45 296** P **P** **04 13 23.6 +0.3**
KBL IAmb IAmb 04 13 40.8
comp=Z,10nm,0.9s
**AS31 Alice Springs 48.07 164** P **P** **04 13 35.9 +0.2**
**ASAR Alice Springs 48.07 164** P **P** **04 13 34.1 -1.6**
comp=Z,2.0nm,0.7s,baz=354,slow=14,SNR=20
ASAR PcP **PcP** **04 15 03.0 -0.5**
comp=Z,0.6nm,0.7s,baz=347,slow=3.8,SNR=1.7
ASAR ScP **ScP** **04 18 59.7 +1.4**
comp=Z,0.3nm,0.5s,baz=337,slow=4.0,SNR=4.3
**ASAR Alice Springs 48.07 164** P **P** **04 13 34.4 -1.3**
**BVAR Borovoye Array 48.44 321** P **P** **04 13 38.6 +0.4**
comp=Z,4.9nm,0.9s,baz=84,slow=15,SNR=12
BVAR PcP **PcP** **04 15 06.2 +1.8**
comp=Z,3.0nm,0.8s,baz=78,slow=9.5,SNR=5.2
**BRVK Borovoye 48.51 321** P **P** **04 13 39.1 +0.4**
BRVK IAmb IAmb 04 13 46.8
comp=Z,12nm,0.9s
**TIXI Tiksi 48.89 3** P **P** **04 13 42.5 +1.2**
comp=Z,1.3nm,0.3s,baz=269,slow=20,SNR=4.9
TIXI PcP **PcP** **04 15 07.0 +1.3**
comp=Z,1.2nm,0.5s,baz=271,slow=20,SNR=4.1
**TIXI Tiksi 48.89 3** P **P** **04 13 41.2 -0.2**
TIXI IAmb IAmb 04 14 10.2
comp=Z,12nm,1.1s
**CTAO Charters Tower 49.45 148** P **P** **04 13 45.5 -0.8**
**SHEM Shemya Is, Ala 49.90 40** LR LR 04 33 47.9
comp=Z,60nm,21.9s,baz=170,slow=35
**NRIK Noril'sk 50.48 345** P **P** **04 13 53.2 -0.3**
comp=Z,16nm,1.0s,baz=133,slow=8.0,SNR=12
NRIK LR LR 04 35 29.5
comp=Z,97nm,20.9s,baz=164,slow=36
**NRIK Noril'sk 50.48 345** P **P** **04 13 52.9 -0.6**
NRIK IAmb IAmb 04 13 56.5
comp=Z,19nm,1.0s
**BILL Bilibino 52.88 20** P **P** **04 14 10.9 -0.6**
BILL PcP **PcP** **04 15 19.5 -1.0**
**ABKAR Akbulak array 54.09 315** P **P** **04 14 21.4 +0.7**
ABKAR IAmb IAmb 04 14 28.8
comp=Z,8.8nm,0.8s
**ABKAR Akbulak array 54.09 315** P **P** **04 14 21.1 +0.4**
**AKTO Aktyubinsk 55.45 316** P **P** **04 14 31.2 +0.7**
comp=Z,4.0nm,0.9s,baz=89,slow=7.1,SNR=7.1
AKTO LR LR 04 39 16.6
comp=Z,60nm,18.1s,baz=76,slow=37
**ARU Arti 55.91 324** P **P** **04 14 33.7 +0.1**
comp=Z,1.3nm,0.3s,baz=116,slow=3.0,SNR=9.9
**ARU Arti 55.91 324** P **P** **04 14 33.3 -0.4**
**WSAR Wadi Sarin 56.86 283** LR LR 04 42 29.2
comp=Z,46nm,18.9s,baz=100,slow=40
**STKA Stephens Creek 58.04 159** P **P** **04 14 47.9 -1.2**
comp=Z,5.4nm,0.7s,baz=342,slow=7.6,SNR=9.5
**STKA Stephens Creek 58.04 159** P **P** **04 14 49.4 +0.4**
**KIRV Kirov 61.05 325** P **P** **04 15 09.5 0.0**
comp=Z,11nm,0.8s,baz=62,slow=8.3,SNR=6.3
**BELG Belogornoye 62.01 318** P **P** **04 15 16.1 0.0**
comp=Z,6.4nm,0.5s,baz=0.0,slow=4.0,SNR=4.6
**GNI Garni 65.27 305** P **P** **04 15 40.3 +2.2**
comp=Z,3.2nm,0.5s,baz=159,slow=9.5,SNR=5.3
GNI LR LR 04 48 12.0
comp=Z,48nm,18.1s,baz=76,slow=40
**ONI Oni 65.81 308** P **P** **04 15 42.2 +0.8**
**AKH Akhalkalaki 65.99 307** ⇓P **P** **04 15 44.0 +1.3**
**KBZ Khabaz 66.03 309** P **P** **04 15 43.7 +1.0**
comp=Z,5.4nm,0.9s,baz=115,slow=5.0,SNR=14
KBZ LR LR 04 46 52.8
comp=Z,53nm,18.3s,baz=60,slow=38
**KLMR Klimovskoe 66.03 328** *eP* **P** **04 15 40.4 -2.0**
KLMR AMP 04 15 45.6
comp=Z,33nm,1.2s
**KVAR Kislovodsk Arr 66.14 309** P **P** **04 15 45.0 +1.5**
comp=Z,1.6nm,0.5s,baz=253,slow=19,SNR=2.0
**KIV Kislovodsk 66.14 309** P **P** **04 15 42.5 -1.0**
**TTA Tatalina 66.66 30** P **P** **04 15 46.4 -0.1**
TTA IAmb IAmb 04 15 51.6
comp=Z,4.2nm,0.8s

**L19K White Mountain 67.26 30** P **P** **04 15 49.1 -1.2**
L19K IAmb IAmb 04 15 54.1
comp=Z,7.7nm,1.0s
**O18K Koktuh Hills 67.36 33** P **P** **04 15 49.8 -1.2**
O18K IAmb IAmb 04 15 56.0
comp=Z,14nm,1.2s
**J20K Nowinta River 67.37 28** P **P** **04 15 51.5 +0.5**
**K20K Telida 67.49 29** P **P** **04 15 52.8 +1.0**
K20K IAmb IAmb 04 15 56.9
comp=Z,3.8nm,0.8s
**M19K Big River Lodg 67.51 31** P **P** **04 15 52.5 +0.6**
M19K IAmb IAmb 04 15 57.9
comp=Z,5.5nm,0.8s
**SIRT Sirnak 67.55 303** P **P** **04 15 51.8 -0.8**
**GURO Guroymak-BITLI 67.64 304** P **P** **04 15 52.5 -0.7**
**O19K Port Alsworth 67.76 33** P **P** **04 15 52.3 -1.1**
O19K IAmb IAmb 04 15 59.0
comp=Z,7.1nm,0.8s
**H21K Melozitna Rive 67.77 27** P **P** **04 15 52.7 -0.8**
H21K IAmb IAmb 04 16 01.5
comp=Z,7.2nm,0.8s
**CAST Castle Rocks 68.37 29** P **P** **04 15 55.9 -1.4**
CAST IAmb IAmb 04 16 01.9
comp=Z,5.7nm,0.9s
**RAYN Ar Rayn 68.45 287** P **P** **04 15 57.8 -0.8**
**TOLK Toolik Lake Re 68.63 23** P **P** **04 15 59.2 +0.3**
TOLK IAmb IAmb 04 16 03.1
comp=Z,5.1nm,0.8s
**MLY Manley 68.72 27** P **P** **04 15 58.6 -0.8**
MLY IAmb IAmb 04 16 07.3
comp=Z,7.8nm,1.2s
**SPU Mount Spurr 68.72 31** P **P** **04 15 59.4 -0.1**
**KDAK Kodiak Island 69.02 35** P **P** **04 16 01.3 0.0**
comp=Z,9.7nm,0.8s,baz=265,slow=6.5,SNR=8.2
KDAK LR LR 04 49 26.9
comp=Z,60nm,18.1s,baz=250,slow=39
**KDAK Kodiak Island 69.02 35** P **P** **04 16 00.4 -1.0**
**H23K Yukon River 69.08 26** P **P** **04 16 01.1 -0.6**
H23K IAmb IAmb 04 16 14.2
comp=Z,8.6nm,1.0s
**NEA2 Nenana 69.49 27** P **P** **04 16 04.4 +0.2**
NEA2 IAmb IAmb 04 16 11.6
comp=Z,6.6nm,0.9s
**M22K Willow 69.54 31** P **P** **04 16 05.5 +1.0**
**MDM Murphy Dome 69.78 27** P **P** **04 16 06.1 +0.1**
MDM IAmb IAmb 04 16 13.5
comp=Z,7.1nm,0.9s
**RND Reindeer 69.81 29** P **P** **04 16 05.7 -0.5**
RND IAmb IAmb 04 16 10.1
comp=Z,7.8nm,0.8s
**WRH Wood River Hil 69.93 27** P **P** **04 16 06.5 -0.4**
WRH IAmb IAmb 04 16 29.8
comp=Z,6.0nm,1.1s
**PMR Palmer 70.03 31** P **P** **04 16 05.7 -1.9**
PMR IAmb IAmb 04 16 14.6
comp=Z,7.2nm,0.9s
**ILAR Eielson Array 70.38 27** P **P** **04 16 09.7 +0.1**
comp=Z,0.4nm,0.8s,baz=271,slow=4.5,SNR=13
ILAR LR LR 04 50 07.7
comp=Z,33nm,18.2s,baz=281,slow=39
**KNK Knik Glacier 70.38 31** P **P** **04 16 08.8 -1.0**
KNK IAmb IAmb 04 16 14.7
comp=Z,10.0nm,1.0s
**ARCES ARCESS Array B 70.54 338** P **P** **04 16 11.5 +0.9**
comp=Z,7.5nm,0.9s,baz=77,slow=9.3,SNR=6.3
ARCES LR LR 04 50 00.2
comp=Z,116nm,18.1s,baz=68,slow=38
**ARCES ARCESS Array B 70.54 338** P **P** **04 16 09.7 -0.9**
**PWL Port Wells 70.56 31** P **P** **04 16 09.7 -1.1**
**SPITS Spitsbergen Ar 70.58 348** P **P** **04 16 11.2 +0.5**
comp=Z,23nm,1.0s,baz=79,slow=7.5,SNR=4.2
SPITS LR LR 04 50 20.2
comp=Z,109nm,19.5s,baz=234,slow=39
**BMAR Burnt Mountain 70.71 24** P **P** **04 16 10.9 -0.8**
**SCRK Sand Creek 71.79 28** P **P** **04 16 18.1 -0.3**
**BMRM Bremner River 72.30 31** P **P** **04 16 21.1 -0.4**
BMRM IAmb IAmb 04 16 26.8
comp=Z,11nm,0.9s
**FIA1 FINESS Array S 72.34 330** P **P** **04 16 22.0 +0.5**
**FINES FINESS Array B 72.34 330** P **P** **04 16 21.0 -0.5**
comp=Z,11nm,0.9s,baz=69,slow=7.6,SNR=11
**FINES FINESS Array B 72.34 330** P **P** **04 16 21.2 -0.4**
**M26K Nabesna, AK 72.65 29** P **P** **04 16 24.0 +0.5**
M26K IAmb IAmb 04 16 31.0
comp=Z,5.3nm,0.8s
**VSU Vasula 72.83 327** *eP* **P** **04 16 25.1 +0.7**
**L27K Beaver Creek, 72.97 28** P **P** **04 16 25.5 +0.1**
L27K IAmb IAmb 04 16 33.4
comp=Z,6.8nm,0.9s
**BCAR Beaver Creek A 72.99 28** P **P** **04 16 25.9 +0.4**
**MNK Minsk 73.31 323** *i* P **P** **04 16 24.6 -2.9**
comp=E,2.0nm,0.8s
MNK *i* P **P** **04 16 24.6 -2.9**
comp=N,14nm,0.9s
MNK *i* P **P** **04 16 24.6 -2.9**
comp=Z,13nm,0.9s,baz=74
MNK *i* PcP **PcP** **04 16 40.6 -3.2**
MNK *i* PP **PP** **04 19 10.2 -0.2**
MNK *i* PPP PPP 04 20 52.4
MNK *i* S **S** **04 25 52.7 -3.5**
MNK *i* SS **SS** **04 30 40.4 +3.0**
MNK *i* SSS SSS 04 33 58.0
MNK *i* LQ LQ 04 43 20.7
MNK *i* LR LR 04 48 45.2
MNK *i* LRM MLR 04 50 42.5
comp=E,28nm,20.6s
MNK *i* LRM MLR 04 51 04.7
comp=N,289nm,21.2s
MNK *i* LRM MLR 04 51 12.1
comp=Z,69nm,20.0s
**AKASG Malin Array Be 73.59 318** P **P** **04 16 28.4 -0.7**
comp=Z,2.3nm,0.8s,baz=61,slow=5.7,SNR=9.3
**AKASG Malin Array Be 73.59 318** P **P** **04 16 28.1 -1.1**
**BRTR Keskin Array B 73.67 307** P **P** **04 16 30.6 +0.6**
comp=Z,1.4nm,0.5s,baz=142,slow=6.3,SNR=5.6
**BRTR Keskin Array B 73.67 307** P **P** **04 16 29.1 -1.0**
**DAWY Dawson 73.70 27** P **P** **04 16 28.5 -1.1**
**IDID Didziasalis 73.72 324** *eP* **P** **04 16 30.8 +1.1**
**IIGN Ignalina 73.99 324** *eP* **P** **04 16 32.3 +0.9**
**INK Inuvik 74.41 22** P **P** **04 16 32.7 -0.9**
comp=Z,4.3nm,0.9s,baz=282,slow=6.9,SNR=10
INK LR LR 04 51 48.2
comp=Z,39nm,18.2s,baz=275,slow=38
**INK Inuvik 74.41 22** P **P** **04 16 32.3 -1.3**
INK IAmb IAmb 04 16 37.4
comp=Z,7.5nm,1.1s
**ATD Arta Tunnel 74.70 276** LR LR 04 49 45.3
comp=Z,28nm,18.1s,baz=6.0,slow=36
**SORM Soroca 74.88 316** ⇑P **P** **04 16 36.2 -0.5**
**PABE Paberze 75.16 324** *eP* **P** **04 16 38.5 +0.3**
**M30M Minto, Yukon 75.32 28** P **P** **04 16 38.7 -0.3**
M30M IAmb IAmb 04 16 55.8
comp=Z,8.0nm,1.1s
**A36M Sachs Harbour 75.33 17** P **P** **04 16 38.7 -0.2**
A36M IAmb IAmb 04 16 41.8
comp=Z,15nm,0.9s
**TLCR 75.47 313** ⇓P **P** **04 16 41.0 +0.8**
**VLDR Vladesti 75.76 314** ⇑P **P** **04 16 39.4 -2.4**
**TPGR Topolog 75.84 313** ⇑P **P** **04 16 42.2 -0.2**
**CFR Carcaliu 75.93 313** ⇓P **P** **04 16 43.3 +0.5**
**SUW Suwalki 76.09 323** P **P** **04 16 42.1 -1.4**
**SUW Suwalki 76.09 323** *eP* **P** **04 16 43.8 +0.3**
**EUNU Eureka 76.10 5** P **P** **04 16 43.2 -0.1**
EUNU IAmb IAmb 04 16 47.1
comp=Z,10nm,1.2s
**HARR Harsova 76.23 313** ⇓P **P** **04 16 44.7 +0.2**
**TESR Tescani 76.49 315** ⇓P **P** **04 16 43.2 -2.8**
**ICOR Ion Corvin 76.50 312** ⇑P **P** **04 16 42.7 -3.4**
**VRI Vrincioaia 76.65 314** ⇓P **P** **04 16 46.5 -0.4**
**PLOR Plostina 76.71 314** ⇓P **P** **04 16 48.1 +0.8**
**BISRR Bisoca 76.77 314** ⇑P **P** **04 16 49.8 +2.1**
**UPP Uppsala 76.79 330** *eP* **P** **04 16 47.7 +0.3**
**C36M Paulatuk 77.00 19** P **P** **04 16 46.7 -1.7**
**BURAR Bucovina Array 77.05 316** ⇓P **P** **04 16 49.4 +0.1**
**BURAR Bucovina Array 77.05 316** P **P** **04 16 48.5 -0.7**
BURAR IAmb IAmb 04 16 56.3
comp=Z,8.9nm,1.2s
**BUR08 Bucovina Ar. S 77.05 316** P **P** **04 16 48.1 -1.2**
BUR08 IAmb IAmb 04 16 56.0
comp=Z,9.1nm,1.2s
**MLR Muntele Rosu 77.29 314** ⇓P **P** **04 16 51.4 +0.7**
**MLR Muntele Rosu 77.29 314** P **P** **04 16 51.1 +0.4**
comp=Z,4.4nm,0.8s,baz=72,slow=3.2,SNR=8.6
**MLR Muntele Rosu 77.29 314** P **P** **04 16 49.9 -0.8**
MLR IAmb IAmb 04 16 57.5
comp=Z,13nm,1.3s
**DOPR Dopca 77.50 315** ⇑P **P** **04 16 52.1 +0.4**
**DAG Danmarks Havn 77.50 351** *i* P **P** **04 16 49.1 -2.0**
DAG IAmb IAmb 04 16 53.2
comp=Z,3.0nm,0.8s
**KWP Kalwaria Pacla 77.90 319** P **P** **04 16 53.3 -0.6**
**VOIR 77.90 314** ⇓P **P** **04 16 57.0 +3.0**
**ARR Arges 78.20 314** ⇓P **P** **04 16 56.7 +1.0**
**HUMR Humele 78.27 313** ⇓P **P** **04 16 54.8 -1.2**
**HFS Hagfors 78.47 331** P **P** **04 16 56.2 -0.6**
comp=Z,9.6nm,0.8s,baz=72,slow=4.7,SNR=10
HFS LR LR 04 54 57.6
comp=Z,210nm,18.5s,baz=62,slow=38
**RAO Raoul Island 78.50 129** LR LR 04 47 50.6
comp=Z,485nm,18.4s,baz=140,slow=33
**TRPA Tarpa 78.55 317** ⇓P **P** **04 16 57.2 -0.3**
**NC405 NORSAR Array S 78.90 332** P **P** **04 16 57.7 -1.5**
**DRGR 78.94 316** ⇑P **P** **04 17 00.1 +0.3**
**NC303 NORSAR Array S 79.00 332** P **P** **04 16 58.9 -0.8**
**NB2 NORSAR Subarra 79.15 332** P **P** **04 16 59.9 -0.7**
comp=Z,2.3nm,0.7s,baz=59,slow=5.3
**NOA NORSAR Array B 79.15 332** P **P** **04 17 00.2 -0.4**
comp=Z,6.6nm,0.9s,baz=60,slow=5.5,SNR=14
NOA LR LR 04 55 11.8
comp=Z,96nm,20.9s,baz=60,slow=38
**NC204 NORSAR Array S 79.23 333** P **P** **04 16 58.8 -2.2**
**OJC Ojcow 79.42 320** P **P** **04 17 01.6 -0.6**
**NEEM North Greenlan 79.66 358** *i* P **P** **04 17 02.8 -0.6**
NEEM IAmb IAmb 04 17 08.7
comp=Z,25nm,0.7s
**DBG Daneborg 79.72 350** *i* P **P** **04 17 03.0 -0.3**
DBG IAmb IAmb 04 17 11.1
comp=Z,4.4nm,0.7s
**SIRR Siria 79.80 316** ⇑P **P** **04 17 02.9 -1.5**
**HERR Herculane 79.84 314** ⇑P **P** **04 17 01.9 -2.7**
**RES Resolute Bay 79.87 9** P **P** **04 17 03.8 -0.3**
comp=Z,6.0nm,0.8s,baz=325,slow=6.0,SNR=16
**RES Resolute Bay 79.87 9** P **P** **04 17 03.1 -1.1**
RES IAmb IAmb 04 17 07.3
comp=Z,12nm,1.1s
**LANS Liptovska Anna 80.04 319** *eP* **P** **04 17 07.0 +1.3**
**DLBC Dease Lake 80.09 30** LR LR 04 55 43.1
comp=Z,53nm,19.2s,baz=328,slow=38
**VTS Vitosha 80.14 312** ⇑P **P** **04 17 07.2 +0.7**
**VTS Vitosha 80.14 312** P **P** **04 17 04.9 -1.6**
VTS IAmb IAmb 04 17 15.8
comp=Z,10nm,1.0s
**PSZ Piszkesteto 80.27 318** P **P** **04 17 05.2 -1.8**
PSZ IAmb IAmb 04 17 14.5
comp=Z,16nm,1.3s
**VYHS Vyhne 80.69 319** *eP* **P** **04 17 10.1 +1.0**
**KOLL Kolacno 80.92 319** *eP* **P** **04 17 11.1 +0.8**
**MORC Moravsky Berou 80.93 320** ⇑P **P** **04 17 10.4 -0.1**
**MORC Moravsky Berou 80.93 320** P **P** **04 17 08.6 -1.9**
MORC IAmb IAmb 04 17 15.0
comp=Z,8.1nm,1.1s
**MORC Moravsky Berou 80.93 320** *eP* **P** **04 17 10.9 +0.5**
**JAVC Velka Javorina 81.24 319** *eP* **P** **04 17 14.1 +2.0**
**KRLC Kraliky 81.25 321** *eP* **P** **04 17 12.2 +0.1**
**OSTC Ostas 81.37 321** *eP* **P** **04 17 13.6 +0.9**
**DPC Dobruska-Polom 81.40 321** *eP* **P** **04 17 13.1 +0.2**
**FRGS Fruska Gora 81.43 315** ⇑P **P** **04 17 11.9 -1.3**
**UPC Upice 81.51 321** *eP* **P** **04 17 14.4 +1.0**
**VRAC Vranov 81.69 320** P **P** **04 17 15.1 +0.7**
comp=Z,11nm,1.0s,baz=27,slow=5.2,SNR=8.0
**VRAC Vranov 81.69 320** *eP* **P** **04 17 15.3 +0.9**
**KRUC Moravsky 81.91 320** *eP* **P** **04 17 16.2 +0.6**
**BRG Berggiesshubel 82.52 322** *eP* **P** **04 17 18.6 -0.2**
BRG Amp 04 17 23.2
comp=Z,19nm,1.4s
**PRU Pruhonice 82.58 321** *eP* **P** **04 17 19.5 +0.4**
**CONA Conrad Observa 82.73 319** *eP* **P** **04 17 22.2 +2.2**
comp=Z,11nm,1.4s
**CLL Collm 82.85 323** *i* P **P** **04 17 20.2 -0.2**
comp=Z,16nm,1.5s
CLL *i* pP **pP** **04 17 22.6 -1.5**
comp=Z,20nm,1.3s
CLL *i* PcP **sP** **04 17 26.3 +0.9**
**CLL Collm 82.85 323** P **P** **04 17 19.3 -1.1**
**ARSA Arzberg 83.24 319** *eP* **P** **04 17 25.8 +3.2**
comp=Z,3.6nm,1.1s
**CKRC Cesky Krumlov 83.25 320** *eP* **P** **04 17 22.9 +0.3**
CKRC *eP* **pP** **04 17 23.1 -3.2**
**KHC Kasperske Hory 83.54 321** *eP* **P** **04 17 22.5 -1.6**
**KHC Kasperske Hory 83.54 321** P **P** **04 17 21.7 -2.4**
KHC IAmb IAmb 04 17 27.4
comp=Z,6.9nm,1.2s
**GEC2 GERESS Array S 83.60 321** P **P** **04 17 22.1 -2.4**
**GERES GERESS Array B 83.60 321** P **P** **04 17 24.5 0.0**
comp=Z,5.5nm,1.0s,baz=64,slow=6.1,SNR=18
**GERES GERESS Array B 83.60 321** P **P** **04 17 22.6 -1.9**
**SUMG Summit 83.65 354** *i* P **P** **04 17 24.1 -0.6**
SUMG IAmb IAmb 04 17 27.2
comp=Z,6.5nm,0.8s
**SUMG Summit 83.65 354** P **P** **04 17 23.1 -1.6**
**MOA Molln 83.72 320** *eP* **P** **04 17 27.4 +2.3**
comp=Z,18nm,1.4s
**SOKA Soboth 83.79 318** *eP* **P** **04 17 27.1 +1.5**
comp=Z,13nm,1.3s
**YKA Yellowknife Ar 84.16 23** P **P** **04 17 25.9 -1.0**
comp=Z,2.6nm,0.7s,baz=314,slow=4.8,SNR=40
YKA PKKPbc **PKKPbc** **04 35 41.4 -0.4**
comp=Z,0.2nm,0.7s,baz=131,slow=3.1,SNR=4.0
YKA LR LR 04 57 34.7
comp=Z,44nm,19.8s,baz=290,slow=38
**OBKA Obir 84.17 318** *i* P **P** **04 17 29.7 +2.3**
comp=Z,7.7nm,1.0s
**LODK Lodwar 84.58 271** P **P** **04 17 29.5 -0.6**
**KMBO Kilima Mbogo 84.60 266** P **P** **04 17 31.2 +0.8**
comp=Z,1.3nm,0.4s,baz=33,slow=8.3,SNR=6.4
**KMBO Kilima Mbogo 84.60 266** P **P** **04 17 27.7 -2.6**
KMBO IAmb IAmb 04 17 35.6
comp=Z,7.9nm,1.2s
**GRF Grafenberg Arr 84.62 322** *eP* **P** **04 17 30.3 +0.7**
comp=Z,15nm,1.2s,baz=66,slow=4.8
**KBA Koelnbreinsper 84.64 319** *eP* **P** **04 17 29.8 -0.1**
comp=Z,12nm,1.6s
**ABTA Abfaltersbach 85.30 319** *eP* **P** **04 17 35.3 +2.2**
comp=Z,12nm,1.1s
**WTTA Wattenberg 85.57 320** *i* P **P** **04 17 34.5 -0.1**
comp=Z,11nm,1.0s
**WATA Walderalm 85.57 320** *i* P **P** **04 17 35.5 +0.9**
comp=Z,13nm,1.8s
**FETA Feichten 86.23 320** *i* P **P** **04 17 40.7 +2.8**
comp=Z,8.1nm,1.1s
**DAVOX Davos/Dischmat 86.85 320** P **P** **04 17 41.1 +0.1**
comp=Z,2.5nm,0.8s,baz=31,slow=12,SNR=2.8
**ICESG Greenland Ices 87.10 353** *i* P **P** **04 17 40.7 -1.2**
ICESG IAmb IAmb 04 17 45.3
comp=Z,5.3nm,0.9s
**BORG Borgarnes 87.80 345** LR LR 04 58 54.4
comp=Z,53nm,21.8s,baz=319,slow=37
**EKA Eskdalemuir Ar 88.63 332** P **P** **04 17 49.7 +0.7**
comp=Z,2.5nm,0.9s,baz=62,slow=3.3,SNR=2.6
**DY2G Dye2 90.28 355** *i* P **P** **04 17 59.5 +2.6**
DY2G IAmb IAmb 04 18 01.7
comp=Z,5.8nm,0.7s
**EDM Edmonton 90.76 29** P **P** **04 17 57.0 -2.1**
**B08A Colville Reser 90.89 35** P **P** **04 17 59.0 -0.8**
**NEW Newport 92.12 35** P **P** **04 18 03.5 -2.1**
NEW IAmb IAmb 04 18 09.8
comp=Z,7.1nm,1.2s
**PINE Pine Mountain 92.69 40** P **P** **04 18 06.6 -1.8**
**FRB Frobisher Bay 93.23 4** LR LR 05 04 44.1
comp=Z,50nm,18.0s,baz=359,slow=38
**BMO Blue Mountains 94.14 37** P **P** **04 18 14.0 -1.0**
BMO IAmb IAmb 04 18 16.8
comp=Z,4.5nm,1.2s
**BEKR Beckworth 95.33 43** P **P** **04 18 17.7 -3.0**
BEKR IAmb IAmb 04 18 22.9
comp=Z,3.2nm,1.0s
**NVAR Mina Array Bea 97.47 43** P **P** **04 18 29.2 -1.2**
comp=Z,0.3nm,0.7s,baz=270,slow=4.5,SNR=3.8
**TORD Torodi Ar. Bea 110.51 295** PKKPab PKKPab 04 34 37.2 -3.3
comp=Z,1.3nm,0.8s,baz=257,slow=5.0,SNR=5.6
**ROSC El Rosal 148.58 30** PKPbc **PKPbc** **04 24 44.0 -0.5**
comp=Z,3.0nm,0.3s,baz=326,slow=7.3,SNR=4.1
**ROSC El Rosal 148.58 30** **PKPdf** **04 24 38.5 -2.3**

*IDC **16** 04:13:39.7±1.1,22°.99N×121°.43E,h0km,mb3.6/6, mb1 3.7/6,mb1mx3.3/56,mbtmp3.6/6 Error ellipse: s-maj=73.5km s-min=21.6km az=67.0*

*TAP* ***16*** *04:13:40.9,23˚.00N×120˚.86E,h6km,ML4.0,C*
*JMA* ***16*** *04:13:42.3±0.4,23˚.07N×121˚.11E,h0km,M3.6*
**ISC 16 04:13:41.1**±0.8,**22˚.94N**±0˚.01×**120˚.88E**±0˚.01,**h13**km±5km,
**n143,**σ1**s11**/206,**mb3.5**/6,**31C-2D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWGBT** | **Beinan** baz=133 | **0.22** | **123** | ⇓*i* | *e* | P | **Pg** | **04 13 46.9** | **+1.1** |
| TWGBT | baz=133 | | | *i* | | S | **Sg** | **04 13 50.8** | **+1.7** |
| **SLGT** | **Liugui** baz=262 | **0.23** | **285** | *e* | P | | **Pg** | **04 13 45.6** | **-0.4** |
| SLGT | baz=262 | | | *e* | | S | **Sg** | **04 13 48.0** | **-1.3** |
| **LONT** | **Longtian** baz=112 | **0.23** | **97** | ⇓*i* | *e* | P | **Pg** | **04 13 46.8** | **+0.7** |
| LONT | baz=112 | | | | | S | **Sg** | **04 13 50.8** | **+1.4** |
| **STYH** | **Taoyuan** baz=335 | **0.25** | **337** | ⇑*i* | *e* | P | **Pg** | **04 13 45.4** | **-1.1** |
| STYH | baz=335 | | | | | S | **Sg** | **04 13 48.1** | **-2.0** |
| **ELDTW** | **Lidau** baz=39 | **0.28** | **26** | ⇑*i* | *e* | P | **Pg** | **04 13 45.9** | **-1.2** |
| ELDTW | baz=39 | | | | | S | **Sg** | **04 13 49.8** | **-1.2** |
| **SSD** | **Sandimen** baz=218 | **0.30** | **231** | ⇑*i* | *e* | P | **Pb** | **04 13 47.7** | **-0.6** |
| SSD | baz=218 | | | *i* | | S | **Sb** | **04 13 51.8** | **-1.3** |
| **TTN** | **Taitung** baz=133 | **0.30** | **126** | | | P | **Pn** | **04 13 49.2** | **-2.0** |
| TTN | baz=133 | | | | | S | **Sb** | **04 13 55.5** | **+2.2** |
| **SGST** | **Jiashian** baz=288 | **0.31** | **298** | *i* | | P | **Pg** | **04 13 46.4** | **-1.1** |
| SGST | baz=288 | | | *i* | | S | **Sg** | **04 13 50.8** | **-1.0** |
| **TSMG** | **Majia** baz=213 | **0.32** | **224** | ⇑*i* | *e* | P | **Pb** | **04 13 48.1** | **-0.5** |
| TSMG | baz=213 | | | | | S | **Sb** | **04 13 52.5** | **-1.2** |
| **ECL** | **Taimali** baz=166 | **0.34** | **169** | ⇑*i* | *e* | P | **Pn** | **04 13 49.2** | **-2.6** |
| ECL | baz=166 | | | | *e* | S | **Sb** | **04 13 54.5** | **0.0** |
| **ECS** | **Chishang** baz=75 | **0.35** | **63** | ⇑*i* | *e* | P | **Pb** | **04 13 48.4** | **-0.8** |
| ECS | baz=75 | | | | | S | **Sg** | **04 13 53.0** | **0.0** |
| **SCST** | **Cishan** baz=243 | **0.36** | **262** | *e* | P | | **Pb** | **04 13 49.3** | **-0.1** |
| SCST | baz=243 | | | | *e* | S | **Sb** | **04 13 55.3** | **+0.3** |
| **EDH** | **Donghe** baz=95 | **0.39** | **85** | ⇑*i* | *e* | P | **Pb** | **04 13 50.1** | **+0.2** |
| EDH | baz=95 | | | | | S | **Sb** | **04 13 55.9** | **+0.1** |
| **WTP** | **Ta-pu** baz=318 | **0.40** | **321** | ⇑*i* | *e* | P | **Pg** | **04 13 48.8** | **-0.3** |
| WTP | baz=318 | | | | *e* | S | **Sg** | **04 13 53.9** | **-0.5** |
| **MASBT** | **Mashibuluo** baz=210 | **0.40** | **216** | ⇑*i* | *e* | P | **Pb** | **04 13 49.7** | **-0.3** |
| MASBT | baz=210 | | | | | S | **Sb** | **04 13 55.1** | **-0.8** |
| **CHN1** | **Nanshi** baz=301 | **0.41** | **307** | | | P | **Pb** | **04 13 49.6** | **-0.6** |
| **SGLT** | **Jiouru** baz=222 | **0.42** | **240** | ⇑*i* | *e* | P | **Pn** | **04 13 51.1** | **-1.8** |
| SGLT | baz=222 | | | | | S | **Sb** | **04 13 56.9** | **+0.3** |
| **TPUB** | **Ta-pu** baz=325 | **0.43** | **327** | ⇑*i* | *e* | P | **Pg** | **04 13 49.4** | **-0.3** |
| TPUB | baz=325 | | | | | S | **Sg** | **04 13 54.7** | **-0.8** |
| **TWM1** | **Shoushan** baz=246 | **0.44** | **255** | ⇑*i* | *e* | P | **Pn** | **04 13 51.4** | **-1.7** |
| **SNST** | **Tainan City** baz=307 | **0.45** | **309** | | | P | **Pb** | **04 13 50.7** | **-0.3** |
| SNST | baz=307 | | | | *e* | S | **Sb** | **04 13 57.5** | **-0.1** |
| **FULB** | **Fuli** baz=65 | **0.46** | **55** | ⇑*i* | *e* | P | **Pb** | **04 13 50.5** | **-0.6** |
| FULB | baz=65 | | | | | S | **Sb** | **04 13 57.1** | **-0.8** |
| **CHKT** | **Chengkung** baz=80 | **0.47** | **70** | ⇑*i* | *e* | P | **Pb** | **04 13 51.5** | **+0.2** |
| CHKT | baz=80 | | | | | S | **Sb** | **04 13 58.8** | **+0.6** |
| **TWK** | **Hsinying** baz=309 | **0.49** | **312** | | | P | **Pb** | **04 13 51.1** | **-0.5** |
| TWK | baz=309 | | | | | S | **Sb** | **04 13 58.6** | **-0.1** |
| **CHN4** | **Tsaushan** baz=325 | **0.49** | **327** | ⇑*i* | *e* | P | **Pg** | **04 13 50.6** | **-0.2** |
| **CHN3** | **Shinhua** baz=279 | **0.50** | **286** | *e* | P | | **Pb** | **04 13 51.8** | **+0.1** |
| **SHHT** | **Tainan City** baz=273 | **0.50** | **280** | *e* | P | | **Pn** | **04 13 53.4** | **-0.6** |
| SHHT | baz=273 | | | | *e* | S | **Sn** | **04 14 02.4** | **0.0** |
| **SNJT** | **Kaohsiung City** baz=243 | **0.54** | **250** | *e* | P | | **Pn** | **04 13 54.7** | **+0.3** |
| **SSPT** | **Xinbi** baz=204 | **0.54** | **213** | ⇑*i* | *e* | P | **Pn** | **04 13 53.1** | **-1.4** |
| SSPT | baz=204 | | | | *e* | S | **Sn** | **04 14 02.1** | **-1.2** |
| **EAST** | **Anshuo** baz=170 | **0.55** | **183** | ⇑*i* | *e* | P | **Pn** | **04 13 53.2** | **-1.5** |
| EAST | baz=170 | | | | | S | **Sn** | **04 14 00.6** | **-3.2** |
| **EYUL** | **Yuli** baz=52 | **0.57** | **44** | ⇑*i* | *e* | P | **Pg** | **04 13 51.6** | **-0.7** |
| EYUL | baz=52 | | | | *e* | S | **Sg** | **04 13 58.8** | **-1.2** |
| **ALS** | **Alishan** baz=356 | **0.58** | **353** | ⇑*i* | *e* | P | **Pg** | **04 13 51.5** | **-1.0** |
| ALS | baz=356 | | | | *e* | S | **Sg** | **04 13 58.5** | **-1.7** |
| **TAW** | **Tawu** baz=176 | **0.58** | **179** | ⇑ | | P | **Pn** | **04 13 53.6** | **-1.4** |
| TAW | baz=176 | | | | *e* | S | **Sn** | **04 14 02.1** | **-2.2** |
| **SSHA** | **Shanhua** baz=295 | **0.58** | **290** | *e* | P | | **Pb** | **04 13 53.4** | **+0.2** |
| **TAWH** | **Dawu Township** baz=177 | **0.59** | **179** | ⇑*i* | *e* | P | **Pn** | **04 13 54.0** | **-1.3** |
| TAWH | baz=177 | | | | *e* | S | **Sn** | **04 14 02.5** | **-2.2** |
| **YULB** | **Yu-li** baz=59 | **0.59** | **40** | ⇑*i* | *e* | P | **Pg** | **04 13 51.6** | **-1.2** |
| **LDUT** | **Ludao** baz=121 | **0.60** | **116** | *e* | P | | **Pn** | **04 13 54.1** | **-1.2** |
| LDUT | baz=121 | | | | *e* | S | **Sn** | **04 14 04.3** | **-0.7** |
| **SCZT** | **Fangliau** baz=188 | **0.61** | **203** | ⇑*i* | *e* | P | **Pn** | **04 13 53.9** | **-1.6** |
| SCZT | baz=188 | | | | | S | **Sn** | **04 14 02.6** | **-2.6** |
| **TAI1** | **Yung-k'ang** baz=274 | **0.61** | **280** | *e* | P | | **Pn** | **04 13 55.5** | **+0.1** |
| **KAU** | **Kaohsiung** baz=251 | **0.64** | **235** | *e* | P | | **Pn** | **04 13 58.4** | **+2.4** |
| **CHN5** | **Tsauling** baz=345 | **0.68** | **344** | ⇑*i* | *e* | P | **Pg** | **04 13 53.9** | **-0.6** |
| CHN5 | baz=345 | | | | *e* | S | **Sb** | **04 14 04.7** | **+0.3** |
| **EHY** | **Hungye** baz=41 | **0.70** | **35** | ⇑*i* | *e* | P | **Pg** | **04 13 53.4** | **-1.3** |
| EHY | baz=41 | | | | *e* | S | **Sg** | **04 14 01.3** | **-2.6** |
| **ICHU** | **Yijhu** baz=304 | **0.70** | **307** | *e* | P | | **Pn** | **04 13 55.8** | **-0.8** |
| **CHY** | **Chiayi** baz=322 | **0.70** | **323** | *e* | P | | **Pb** | **04 13 54.6** | **-0.5** |
| CHY | baz=322 | | | | *e* | S | **Sb** | **04 14 05.2** | **+0.5** |
| **CHN2** | **Minshiung** baz=326 | **0.70** | **328** | *e* | P | | **Pn** | **04 13 55.8** | **-1.0** |
| **SLIU** | **Shizi** baz=184 | **0.72** | **186** | *e* | P | | **Pn** | **04 13 56.0** | **-1.0** |
| **CHN8** | **Yiju** baz=317 | **0.74** | **304** | | | P | **Pn** | **04 13 56.3** | **-0.9** |
| CHN8 | baz=317 | | | | *e* | S | **Sn** | **04 14 08.3** | **-0.1** |
| **HGSD** | **Ruisui** baz=38 | **0.74** | **42** | ⇑*i* | *e* | P | **Pb** | **04 13 55.2** | **-0.7** |
| HGSD | baz=38 | | | | | S | **Sb** | **04 14 05.5** | **-0.5** |
| **WLCH** | **Liuqiu** baz=214 | **0.74** | **219** | *e* | P | | **Pn** | **04 13 59.7** | **+2.4** |
| **WDLH** | **Douliu** baz=337 | **0.81** | **337** | *e* | P | | **Pb** | **04 13 57.1** | **0.0** |
| WDLH | baz=337 | | | | *e* | S | **Sb** | **04 14 09.2** | **+1.2** |
| **WSL** | **Shuilin Townsh** baz=312 | **0.84** | **314** | *e* | P | | **Pn** | **04 13 57.9** | **-0.7** |
| WSL | baz=312 | | | | *e* | S | **Sb** | **04 14 09.6** | **+0.9** |
| **SSLB** | **Suanglung** baz=13 | **0.85** | **4** | ⇑*i* | *e* | P | **Pg** | **04 13 55.7** | **-1.9** |
| SSLB | baz=13 | | | | *e* | S | **Sg** | **04 14 07.4** | **-1.4** |
| **WTK** | **Tuku** baz=329 | **0.88** | **329** | *e* | P | | **Pb** | **04 13 58.1** | **0.0** |
| WTK | baz=329 | | | | *e* | S | **Sb** | **04 14 10.6** | **+0.8** |
| **WJS** | **Zhushan** baz=2.0 | **0.89** | **351** | ⇑*i* | *e* | P | **Pb** | **04 13 58.2** | **-0.3** |
| WJS | baz=2.0 | | | | *e* | S | **Sb** | **04 14 10.9** | **+0.5** |
| **SMST** | **Manzhou Townsh** baz=181 | **0.91** | **183** | *e* | P | | **Pn** | **04 14 00.1** | **+0.5** |
| **WSF** | **Szhu** baz=319 | **0.93** | **319** | *e* | P | | **Pg** | **04 13 57.5** | **-1.5** |
| WSF | baz=319 | | | | *e* | S | **Sn** | **04 14 12.7** | **-0.3** |
| **HEN** | **Hengchun** baz=186 | **0.94** | **188** | *e* | P | | **Pn** | **04 14 01.9** | **+1.9** |
| **SMLT** | **Sun Moon Lake** baz=11 | **0.94** | **1** | ⇑*i* | *e* | P | **Pg** | **04 13 58.1** | **-1.2** |
| **WNT** | **Mingjian** baz=336 | **0.95** | **349** | ⇑*i* | *e* | P | **Pb** | **04 13 59.6** | **+0.1** |
| WNT | baz=336 | | | | *e* | S | **Sb** | **04 14 13.0** | **+0.9** |
| **TYC** | **Yuchr** baz=8.0 | **0.96** | **359** | ⇑*i* | *e* | P | **Pg** | **04 13 58.7** | **-1.1** |
| TYC | baz=8.0 | | | | *e* | S | **Sg** | **04 14 12.2** | **-0.1** |
| **TWK1** | **Hengchun** baz=166 | **0.99** | **184** | *e* | P | | **Pn** | **04 14 01.8** | **+1.1** |
| **TWKBT** | **Hengchun** baz=166 | **0.99** | **184** | *e* | P | | **Pn** | **04 14 01.9** | **+1.2** |
| **ESL** | **Shilin** baz=41 | **1.01** | **30** | *e* | P | | **Pg** | **04 13 58.7** | **-1.9** |
| ESL | baz=41 | | | | *e* | S | **Sg** | **04 14 12.1** | **-1.7** |
| **TSEB** | **Hengchuen, Pin** baz=159 | **1.03** | **179** | *e* | P | | **Pn** | **04 14 03.9** | **+2.6** |
| **WRL** | **Guolierlin Hig** baz=335 | **1.07** | **334** | *e* | P | | **Pb** | **04 14 01.3** | **-0.1** |
| WRL | baz=335 | | | | *e* | S | **Sg** | **04 14 15.5** | **-0.2** |
| **WUSB** | **Renai** baz=15 | **1.07** | **12** | *e* | P | | **Pg** | **04 13 59.5** | **-2.4** |
| **LAY** | **Lan-yu** baz=145 | **1.09** | **145** | *e* | P | | **Pn** | **04 14 01.9** | **-0.2** |
| **WCS** | **Beigang Elemen** baz=12 | **1.12** | **1** | *e* | P | | **Pb** | **04 14 01.3** | **-1.0** |
| WCS | baz=12 | | | | *e* | S | **Sn** | **04 14 18.8** | **+1.1** |
| **LYUB** | **Lan-yu** baz=131 | **1.13** | **145** | *e* | P | | **Pg** | **04 14 00.8** | **-2.2** |
| **CHGB** | **Renai** baz=25 | **1.15** | **13** | *e* | P | | **Pg** | **04 14 01.0** | **-2.4** |
| **WDGT** | **Dungji** baz=284 | **1.17** | **286** | *e* | P | | **Pn** | **04 14 03.1** | **-0.1** |
| **WCHH** | **Zhanghua** baz=347 | **1.18** | **345** | *e* | P | | **Pb** | **04 14 02.3** | **-1.0** |
| **TCU** | **Taichung** baz=339 | **1.22** | **351** | *e* | P | | **Pg** | **04 14 04.8** | **+0.2** |
| **HWA** | **Hwalien** baz=46 | **1.23** | **33** | *e* | P | | **Pn** | **04 14 03.5** | **-0.5** |
| HWA | baz=46 | | | | *e* | S | **Sb** | **04 14 19.3** | **-0.7** |
| **WHF** | **Hehuan Shan** baz=20 | **1.25** | **16** | *e* | P | | **Pn** | **04 14 03.8** | **-0.9** |
| **TWD** | **Chiawan** baz=50 | **1.31** | **30** | *e* | P | | **Pn** | **04 14 04.8** | **-0.4** |
| **PHUB** | **P'eng-hu** baz=295 | **1.33** | **296** | *e* | P | | **Pn** | **04 14 04.6** | **-0.9** |
| PHUB | baz=295 | | | | *e* | S | **Sb** | **04 14 22.7** | **-0.3** |
| **TDCB** | **Techi** baz=2.0 | **1.33** | **11** | *e* | P | | **Pn** | **04 14 04.3** | **-1.4** |
| **WHP** | **Taichung City** baz=7.0 | **1.34** | **2** | *e* | P | | **Pg** | **04 14 06.4** | **-0.4** |
| **TWT** | **Tachien** baz=2.0 | **1.34** | **12** | *e* | P | | **Pn** | **04 14 05.3** | **-0.4** |
| **FUSS** | **Fushou** baz=18 | **1.35** | **14** | *e* | P | | **Pn** | **04 14 04.6** | **-1.3** |
| **VCHM** | **Qimei** baz=294 | **1.36** | **282** | *e* | P | | **Pg** | **04 14 06.6** | **-0.7** |
| **PNG** | **Penghu** baz=297 | **1.37** | **298** | *e* | P | | **Pb** | **04 14 05.9** | **-0.8** |
| PNG | baz=297 | | | | *e* | S | **Sb** | **04 14 23.4** | **-0.7** |
| **ETLH** | **Xiulin Townshi** baz=42 | **1.38** | **23** | *e* | P | | **Pn** | **04 14 05.4** | **-0.8** |
| ETLH | baz=42 | | | | *e* | S | **Sb** | **04 14 24.1** | **-0.3** |
| **ETL** | **Fush Village** baz=48 | **1.40** | **29** | *e* | P | | **Pn** | **04 14 06.2** | **-0.1** |
| **NACB** | **Ninganchiao** baz=48 | **1.40** | **28** | *e* | P | | **Pn** | **04 14 04.6** | **-1.7** |
| **TWQ1** | **Liyutan** baz=359 | **1.41** | **356** | *e* | P | | **Pg** | **04 14 07.8** | **-0.4** |
| TWQ1 | baz=359 | | | | *e* | S | **Sg** | **04 14 26.9** | **+0.4** |
| **WDJ** | **Dajia District** baz=342 | **1.42** | **351** | *e* | P | | **Pg** | **04 14 07.7** | **-0.8** |
| WDJ | baz=342 | | | | *e* | S | **Sg** | **04 14 28.2** | **+1.2** |
| **NSY** | **Sanyi** baz=359 | **1.48** | **356** | *e* | P | | **Pg** | **04 14 08.8** | **-0.7** |
| NSY | baz=359 | | | | *e* | S | **Sg** | **04 14 29.6** | **+0.9** |
| **NNSB** | **Datong** baz=21 | **1.56** | **17** | *e* | P | | **Pn** | **04 14 07.9** | **-0.7** |
| **NNS** | **Nan Shan** baz=21 | **1.56** | **17** | *e* | P | | **Pn** | **04 14 08.7** | **-0.1** |
| **NMLH** | **Miaoli** baz=340 | **1.60** | **357** | *e* | P | | **Pg** | **04 14 11.1** | **-0.7** |
| **ENA** | **Nanau** baz=46 | **1.68** | **28** | *e* | P | | **Pn** | **04 14 10.2** | **0.0** |
| **NSTT** | **Nanjuang** baz=348 | **1.69** | **4** | *e* | P | | **Pg** | **04 14 13.1** | **-0.5** |
| **LATG** | **Datong** baz=24 | **1.70** | **20** | *e* | P | | **Pb** | **04 14 11.2** | **-1.1** |
| **NFF** | **Wufeng Townshi** baz=11 | **1.70** | **7** | *e* | P | | **Pb** | **04 14 11.5** | **-0.8** |
| **LIOB** | **Emei** baz=349 | **1.71** | **4** | *e* | P | | **Pb** | **04 14 11.9** | **-0.5** |
| **EWUT** | **Wuta** baz=45 | **1.71** | **28** | *e* | P | | **Pb** | **04 14 11.6** | **-0.8** |
| **NDT** | **Datong Townshi** baz=22 | **1.76** | **19** | *e* | P | | **Pb** | **04 14 12.5** | **-0.7** |
| **YHNB** | **Yeheng** baz=16 | **1.78** | **15** | | | P | **Pn** | **04 14 12.2** | **+0.5** |
| YHNB | baz=16 | | | | *e* | S | **Sg** | **04 14 37.9** | **-0.7** |
| **NSK** | **Sanguang** baz=16 | **1.79** | **14** | | | P | **Pb** | **04 14 13.0** | **-0.7** |
| NSK | baz=16 | | | | *e* | S | **Sb** | **04 14 37.4** | **+1.3** |
| **ENTT** | **Nioudou** baz=35 | **1.81** | **20** | | | P | **Pb** | **04 14 13.4** | **-0.7** |
| ENTT | baz=35 | | | | *e* | S | **Sg** | **04 14 38.8** | **-0.5** |
| **SBCB** | **Hsinchu** baz=349 | **1.85** | **3** | *e* | P | | **Pb** | **04 14 15.0** | **+0.2** |
| **NDS** | **Dongshan** baz=39 | **1.85** | **24** | *e* | P | | **Pb** | **04 14 14.3** | **-0.6** |
| NDS | baz=39 | | | | *e* | S | **Sb** | **04 14 38.5** | **+0.5** |
| **TWC** | **Suao** baz=45 | **1.89** | **28** | *e* | P | | **Pb** | **04 14 15.4** | **0.0** |
| **TWE** | **Neicheng** baz=40 | **1.92** | **22** | *e* | P | | **Pb** | **04 14 15.9** | **0.0** |
| **NWLT** | **Wulai** baz=21 | **1.92** | **17** | *e* | P | | **Pb** | **04 14 15.7** | **-0.3** |
| **FUSB** | **Fushanzhiwuyua** baz=20 | **1.93** | **19** | *e* | P | | **Pb** | **04 14 15.1** | **-1.1** |
| FUSB | baz=20 | | | | *e* | S | **Sg** | **04 14 42.0** | **-1.1** |
| **NCUH** | **Zhongli** baz=14 | **2.04** | **8** | *e* | P | | **Pn** | **04 14 16.4** | **+1.2** |
| **NTC** | **Toucheng** baz=43 | **2.10** | **24** | *e* | P | | **Pb** | **04 14 19.7** | **+0.6** |
| **NHDH** | **Xindian Distri** baz=20 | **2.10** | **16** | *e* | P | | **Pb** | **04 14 19.1** | **0.0** |
| **TWA** | **Mucha** baz=4.0 | **2.13** | **17** | *e* | P | | **Pb** | **04 14 19.8** | **+0.1** |
| **TAP** | **Taipei** baz=3.0 | **2.17** | **15** | *e* | P | | **Pb** | **04 14 18.8** | **-1.5** |
| **TIPB** | **Shuangxi** baz=41 | **2.20** | **23** | *e* | P | | **Pb** | **04 14 19.4** | **-1.4** |
| **TWS1** | **Kuangyinshan** baz=25 | **2.21** | **13** | *e* | P | | **Pg** | **04 14 22.1** | **-1.4** |
| **NWF** | **Wu-fen Shan** baz=44 | **2.28** | **21** | *e* | P | | **Pb** | **04 14 21.6** | **-0.6** |
| **YM01** | **YM01** baz=23 | **2.29** | **16** | *e* | P | | **Pb** | **04 14 20.9** | **-1.4** |
| **TWB1** | **Santiao Chiao** baz=42 | **2.30** | **26** | *e* | P | | **Pb** | **04 14 22.5** | **0.0** |
| **ANP** | **Anpu** baz=20 | **2.31** | **14** | *e* | P | | **Pb** | **04 14 22.2** | **-0.6** |
| **SXI1** | **Grass Mountain** baz=41 | **2.33** | **23** | *e* | P | | **Pn** | **04 14 20.4** | **+1.2** |
| **JYNG** | **Yonagunijimaku** | **2.42** | **51** | | | P | **Pn** | **04 14 20.1** | **-0.3** |
| JYNG | | | | | *e* | S | **Sn** | **04 14 48.7** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **2.47** | **52** | | | P | **Pn** | **04 14 21.8** | **+0.7** |
| YOJ | | | | | *e* | S | **Sn** | **04 14 50.7** | **-0.5** |
| **YOJ** | **Yonaguni jima** baz=55 | **2.47** | **52** | *e* | P | | **Pn** | **04 14 20.9** | **-0.2** |
| **PTMZ** | **Houxiangcun** baz=324 | **2.64** | **323** | *e* | P | | **Pn** | **04 14 23.2** | **-0.2** |
| **KNM** | **Kinmen** baz=301 | **2.69** | **304** | *e* | P | | **Pn** | **04 14 26.0** | **+2.0** |
| **KNMB** | **Chin-men Tao** baz=303 | **2.75** | **304** | *e* | P | | **Pn** | **04 14 25.3** | **+0.4** |
| **HATJ** | **Hateruma jima** | **2.91** | **67** | | | P | **Pn** | **04 14 27.8** | **+0.7** |
| HATJ | | | | | | S | **Sn** | **04 15 00.7** | **-1.2** |
| **IRIF** | **Iriomote-Funau** | **2.96** | **61** | | | P | **Pn** | **04 14 28.3** | **+0.5** |
| IRIF | | | | | *e* | S | **Sn** | **04 15 03.0** | **-0.2** |
| **ZPLA** | **Ao Xicun** baz=289 | **3.04** | **290** | *e* | P | | **Pn** | **04 14 29.0** | **0.0** |
| **JKRS** | **Kuro-shima** | **3.15** | **65** | *e* | S | | **Sn** | **04 15 08.0** | **+0.2** |
| **AXDP** | **Jialang** baz=307 | **3.31** | **307** | *e* | P | | **Pn** | **04 14 32.5** | **0.0** |
| **JIJ** | **Ishigaki jima** | **3.31** | **64** | | | P | **Pn** | **04 14 33.6** | **+1.0** |
| JIJ | | | | | *e* | S | **Sn** | **04 15 11.6** | **-0.3** |
| **MATB** | **Ma-tsu** baz=349 | **3.31** | **345** | *e* | P | | **Pn** | **04 14 32.0** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **3.54** | **62** | *e* | S | | **Sn** | **04 15 16.9** | **-0.7** |
| **MHZQ** | **Yeshan** baz=333 | **3.57** | **332** | *e* | P | | **Pn** | **04 14 36.6** | **+0.4** |
| **LYJJ** | **Jianjiangzhen** baz=349 | **3.74** | **344** | *e* | P | | **Pn** | **04 14 38.4** | **-0.1** |
| **XPSS** | **Dashiqiu** baz=357 | **4.03** | **351** | *e* | P | | **Pn** | **04 14 41.9** | **-0.6** |
| **SXFK** | **Yanhouchang** baz=320 | **4.53** | **320** | *e* | P | | **Pn** | **04 14 49.1** | **-0.4** |
| **SONM** | **Songino Array** 0.4nm,0.6s,baz=142,slow=12,SNR=3.9 | **27.41** | **339** | | | P | **P** | **04 19 27.9** | **+1.4** |
| **MKAR** | **Makanchi Array** 0.8nm,0.7s,baz=103,slow=9.7,SNR=5.8 | **39.05** | **317** | | | P | **P** | **04 21 11.9** | **+4.3** |
| **ZALV** | **Zalesovo Beam** 0.4nm,0.4s,baz=104,slow=6.1,SNR=2.6 | **41.15** | **328** | | | P | **P** | **04 21 25.9** | **+1.0** |
| **WRA** | **Warramunga Arr** 0.7nm,0.6s,baz=345,slow=8.9,SNR=4.7 | **44.60** | **162** | | | P | **P** | **04 21 52.4** | **-0.8** |
| **ASAR** | **Alice Springs** 0.4nm,0.7s,baz=336,slow=6.6,SNR=2.1 | **48.02** | **164** | | | P | **P** | **04 22 20.4** | **+0.3** |
| **YKA** | **Yellowknife Ar** 0.1nm,0.5s,baz=311,slow=4.7,SNR=4.1 | **84.22** | **23** | | | P | **P** | **04 26 12.2** | **+0.1** |

*TUL* ***16*** *04:20:07±1.2,35˚.72N×0˚.02×97˚.17W×0˚.02,h5km±7km,*
*ML3.1,mb_Lg2.8/42(NEIC),Error ellipse: s-maj=3.6km*
*s-min=1.4km az=136.0*
**NEIC 16 04:20:07.4**±1.3,**35.74N**±0˚.02×**97˚.18W**×0˚.02,**h9**km±6km,
**Error ellipse: s-maj=3.5km s-min=0.7km az=143.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.08** | **186** | | | | **Pg** | **04 20 09.0** | **-0.6** |
| OK005 | | | | | | | **Sg** | **04 20 10.4** | **-0.8** |
| **OK001** | **Jones High Sch** | **0.20** | **207** | | | | **Pg** | **04 20 11.2** | **-0.3** |
| OK001 | | | | | | | **Sg** | **04 20 14.2** | **0.0** |
| **OK009** | **Oakdale Elemen** | **0.25** | **232** | | | | **Pg** | **04 20 11.9** | **-0.6** |
| OK009 | | | | | | | **Sg** | **04 20 16.4** | **+0.6** |
| **OKCFA** | **Oklahoma City** | **0.39** | **215** | | | | **Pg** | **04 20 14.2** | **-0.8** |
| OKCFA | | | | | | | **Sg** | **04 20 20.3** | **+0.1** |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **212** | | | | **Pg** | **04 20 14.8** | **-0.2** |
| **FNO** | **Franklin** | **0.51** | **201** | | | | **Pg** | **04 20 16.9** | **-0.4** |
| **W35A** | **Tecumseh** | **0.63** | **157** | | | | **Pg** | **04 20 18.9** | **-0.8** |
| **TUL1** | **Leonard** | **1.14** | **81** | | Pg | | **Pb** | **04 20 27.7** | **-1.6** |
| **X34A** | **Smith Ranch, M** | **1.25** | **205** | | Pg | | **Pn** | **04 20 30.3** | **-0.8** |
| **T35A** | **Sooner Cattle** | **1.29** | **24** | | Pn | | **Pn** | **04 20 30.6** | **-1.1** |
| **WMOK** | **Wichita Mounta** | **1.65** | **233** | | Pn | | **Pn** | **04 20 34.6** | **-1.9** |
| **X37A** | **Clayton** | **1.87** | **127** | | | | **Pn** | **04 20 39.7** | **+0.1** |
| X37A | comp=Z,25nm,0.7s | | | | | IAmb_Lg | | **04 21 07.0** | |
| **U38A** | **Gravette** | **2.37** | **72** | | | | **Pn** | **04 20 46.3** | **-0.1** |
| **HHAR** | **Hobbs** | **2.68** | **77** | | | | **Pn** | **04 20 51.2** | **+0.4** |
| **W39A** | **Magazine** | **2.82** | **100** | | | | **Pn** | **04 20 52.6** | **-0.1** |
| **R32A** | **Long Quarter,** | **2.95** | **336** | | | | **Pn** | **04 20 54.5** | **0.0** |
| **MIAR** | **Mount Ida** | **3.18** | **111** | | | | **Pn** | **04 20 58.4** | **+0.7** |
| **KSU1** | **Kansas State U** | **3.39** | **8** | | Pn | | **Pn** | **04 21 00.5** | **+0.1** |
| KSU1 | comp=Z,17nm,0.8s | | | | | IAmb_Lg | | **04 21 59.0** | |
| **U40A** | **Yellville** | **3.56** | **79** | | Pn | | **Pn** | **04 21 03.2** | **+0.3** |
| **S39A** | **Bolivar** | **3.66** | **57** | | Pn | | **Pn** | **04 21 04.0** | **-0.2** |
| **CBKS** | **Cedar Bluff** | **3.69** | **327** | | Pn | | **Pn** | **04 21 05.3** | **+0.7** |
| CBKS | comp=Z,18nm,0.7s | | | | | IAmb_Lg | | **04 22 09.2** | |
| **ABTX** | **Abilene, Hawle** | **3.72** | **214** | | Pn | | **Pn** | **04 21 05.9** | **+0.9** |
| **X40A** | **Basin Creek Fa** | **3.77** | **108** | | Pn | | **Pn** | **04 21 06.2** | **+0.4** |
| X40A | comp=Z,21nm,1.1s | | | | | IAmb_Lg | | **04 22 11.7** | |
| **AMTX** | **Amarillo** comp=Z,20nm,0.8s | **3.78** | **258** | | | IAmb_Lg | | **04 22 14.3** | |
| **WHAR** | **Wooly Hollow** comp=Z,16nm,1.0s | **4.01** | **95** | | Pn | | **Pn** | **04 21 09.5** | **+0.4** |
| WHAR | | | | | | IAmb_Lg | | **04 22 21.0** | |
| **W41B** | **Gary Mavity, V** comp=Z,18nm,1.0s | **4.07** | **97** | | | | **Pn** | **04 21 10.1** | **+0.3** |
| W41B | | | | | | IAmb_Lg | | **04 22 15.2** | |
| **FCAR** | **Ozark Folk Cen** comp=Z,19nm,0.9s | **4.11** | **86** | | Pn | | **Pn** | **04 21 10.2** | **-0.3** |
| FCAR | | | | | | IAmb_Lg | | **04 22 21.7** | |
| **MGMO** | **Mountain Grove** comp=Z,17nm,0.8s | **4.21** | **69** | | | IAmb_Lg | | **04 22 31.7** | |
| **R40A** | **Maddies Statio** comp=Z,20nm,0.7s | **4.69** | **56** | | Pn | | **Pn** | **04 21 17.3** | **-0.9** |
| R40A | | | | | | IAmb_Lg | | **04 22 37.0** | |
| **P38A** | **Dawn** comp=Z,13nm,0.8s | **4.84** | **36** | | Pn | | **Pn** | **04 21 21.1** | **+0.7** |
| P38A | | | | | | IAmb_Lg | | **04 22 49.2** | |
| **N35A** | **Tabor** comp=Z,22nm,0.8s | **5.26** | **13** | | Pn | | **Pn** | **04 21 26.2** | **+0.1** |
| N35A | | | | | | IAmb_Lg | | **04 23 02.9** | |
| **CCM** | **Cathedral Cave** comp=Z,17nm,0.8s | **5.29** | **62** | | | IAmb_Lg | | **04 22 54.2** | |
| **P40A** | **Paris** comp=Z,19nm,0.8s | **5.56** | **46** | | | IAmb_Lg | | **04 23 04.5** | |
| **JCT** | **Junction City** comp=Z,13nm,0.8s | **5.69** | **203** | | | IAmb_Lg | | **04 23 15.9** | |
| **BGNE** | **Belgrade** comp=Z,16nm,0.8s | **5.71** | **353** | | | IAmb_Lg | | **04 23 23.9** | |
| **FVM** | **French Village** comp=Z,14nm,0.8s | **5.86** | **66** | | | IAmb_Lg | | **04 23 14.6** | |
| **L34A** | **Svendsen Farm,** comp=Z,12nm,0.7s | **6.25** | **6** | | | IAmb_Lg | | **04 23 29.6** | |
| **K31A** | **O'Neill** comp=Z,15nm,0.8s | **6.98** | **350** | | | IAmb_Lg | | **04 24 07.9** | |
| **L40A** | **Anamosa** comp=Z,8.5nm,0.7s | **7.84** | **35** | | | IAmb_Lg | | **04 24 32.3** | |
| **N23A** | **Red Feather La** comp=Z,7.3nm,0.8s | **8.60** | **309** | | | IAmb_Lg | | **04 24 53.3** | |
| **JFWS** | **Jewell Farm** comp=Z,9.3nm,0.8s | **8.95** | **35** | | | IAmb_Lg | | **04 24 59.0** | |

*IDC* ***16*** *04:26:57.1±4.5,61˚.57S×153˚.72E,h0km,mb3.7/3,*
*mb1 4.0/4,mb1mx3.8/22,mbtmp3.8/4,ML3.8/1,MS4.1/32,*
*Ms1 4.1/32,ms1mx4.0/44,Error ellipse: s-maj=328.4km*
*s-min=38.6km az=76.0*

*NEIC* ***16*** *04:26:58.8±1.0, 61°.6S±0°.1×153°.5E±0°.3, h10km±2km, mb4.2/7, Error ellipse: s-maj=27.9km s-min=18.6km az=140.0*

*GCMT* ***16*** *04:27:03.8±0.2, 61°.32S±0°.01×154°.17E±0°.03, h21km±1km, MW5.2/100, Moment Tensor Solution. s41,c51; s100,c146; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=1.08±.24; Mθθ4.95±.18; Mφφ=3.87±.17; Mrθ=0.93±.27; Mθφ=3.42±.16; Mφr3.31±.44; Best double couple: M₀6.62100×10¹⁶ NP1:φs246.00000°, δ58.00000°, λ=170.00000°. NP2:φs151.00000°, δ81.00000°, λ=32.00000°. Principal axes: T 6.6620, Plg15.0000°, Azm203.0000°; N -0.0820, Plg57.0000°, Azm318.0000°; P -6.5800, Plg28.0000°, Azm104.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 16 04:26:58.7±1.1, 61°.6S±0°.1×153°.4E±0°.2, h10km, n49, σ0s47/12, mb4.1/6, MS4.1/33, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNDA** | **Vanda** | **16.21** | **173** | Pn | **Pn** | **04 30 46.4** | **+0.2** |
| | 0.4nm,0.3s,baz=346,slow=12,SNR=9.0 | | | | | | |
| VNDA | | | | LR | LR | 04 36 26.3 | |
| | comp=Z,1μm,20.2s,baz=355,slow=35 | | | | | | |
| **VNDA** | **Vanda** | **16.21** | **173** | | **Pn** | **04 30 46.0** | **-0.2** |
| VNDA | | | | IAmb | IAmb | 04 30 57.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **17.87** | **35** | | **Pn** | **04 31 07.1** | **-0.1** |
| WHZ | | | | IAmb | IAmb | 04 31 15.7 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **MLZ** | **Mavora Lakes** | **18.41** | **35** | | **P** | **04 31 13.9** | **+0.2** |
| **RPZ** | **Rata Peaks** | **20.75** | **38** | LR | LR | 04 38 12.4 | |
| | comp=Z,948nm,19.5s,baz=189,slow=33 | | | | | | |
| **URZ** | **Urewera** | **27.61** | **43** | LR | LR | 04 43 40.8 | |
| | comp=Z,423nm,19.7s,baz=212,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **28.47** | **180** | LR | LR | 04 44 28.6 | |
| | comp=Z,506nm,19.2s,baz=16,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **30.73** | **340** | P | **P** | **04 33 14.5** | **+0.8** |
| | comp=Z,2.3nm,0.8s,baz=183,slow=8.6,SNR=3.5 | | | | | | |
| STKA | | | | LR | LR | 04 42 46.2 | |
| | comp=Z,420nm,21.7s,baz=157,slow=31 | | | | | | |
| **STKA** | **Stephens Creek** | **30.73** | **340** | P | **P** | **04 33 14.1** | **+0.4** |
| **MAW** | **Mawson** | **35.93** | **221** | LR | LR | 04 49 01.3 | |
| | comp=Z,664nm,18.4s,baz=92,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **40.22** | **332** | P | **P** | **04 34 35.3** | **+0.1** |
| | comp=Z,0.6nm,0.8s,baz=164,slow=7.9,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **40.22** | **332** | P | **P** | **04 34 34.6** | **-0.6** |
| **DZM** | **Mont Dzumac** | **40.54** | **19** | eLR | LR | 04 45 10.3 | |
| | comp=Z,1μm,25.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **40.54** | **19** | LR | LR | 04 47 56.0 | |
| | comp=Z,424nm,18.6s,baz=211,slow=31 | | | | | | |
| **CTA** | **Charters Tower** | **41.79** | **350** | LR | LR | 04 49 39.6 | |
| | comp=Z,457nm,19.2s,baz=174,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **41.79** | **350** | P | **P** | **04 34 47.8** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 04 35 05.3 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.72** | **334** | P | **P** | **04 35 03.9** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 04 35 19.2 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.72** | **334** | P | **P** | **04 35 03.2** | **-0.7** |
| | comp=Z,0.7nm,0.8s,baz=164,slow=7.2,SNR=4.7 | | | | | | |
| WRA | | | | LR | LR | 04 52 50.2 | |
| | comp=Z,188nm,18.2s,baz=144,slow=36 | | | | | | |
| **WB0** | **Warramunga Arr** | **43.88** | **334** | P | **P** | **04 35 04.9** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 04 35 16.7 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **45.98** | **190** | LR | LR | 04 55 35.1 | |
| | comp=Z,822nm,18.9s,baz=134,slow=37 | | | | | | |
| **MSVF** | **Nonsavu** | **47.17** | **33** | LR | LR | 04 50 57.1 | |
| | comp=Z,207nm,21.0s,baz=205,slow=31 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **47.67** | **323** | LR | LR | 04 53 42.3 | |
| | comp=Z,216nm,19.3s,baz=166,slow=34 | | | | | | |
| **PMSA** | **Palmer Station** | **50.87** | **160** | LR | LR | 04 55 25.5 | |
| | comp=Z,191nm,18.5s,baz=124,slow=34 | | | | | | |
| **HNR** | **Honiara** | **52.31** | **8** | LR | LR | 04 53 13.8 | |
| | comp=Z,536nm,21.3s,baz=207,slow=30 | | | | | | |
| **AFI** | **Afiamalu** | **53.79** | **43** | LR | LR | 04 58 20.6 | |
| | comp=Z,57nm,19.7s,baz=251,slow=35 | | | | | | |
| **TVO** | **Taravao** | **59.18** | **69** | eT | T | 05 40 07.4 | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **PPT2** | **Papeete2** | **59.21** | **69** | eLR | LR | 04 53 29.8 | |
| | comp=Z,171nm,23.2s | | | | | | |
| **PPT** | **Papeete** | **59.23** | **69** | LR | LR | 04 59 28.6 | |
| | comp=Z,97nm,18.4s,baz=195,slow=33 | | | | | | |
| **JAY** | **Jayapura** | **59.74** | **345** | LR | LR | 05 02 17.4 | |
| | comp=Z,254nm,19.1s,baz=6.0,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **61.80** | **321** | LR | LR | 05 02 25.5 | |
| | comp=Z,124nm,18.5s,baz=177,slow=34 | | | | | | |
| **VAH** | **Vaihoa** | **62.15** | **69** | eT | T | 05 43 49.5 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **71.16** | **73** | eLR | LR | 04 59 01.4 | |
| | comp=Z,138nm,24.5s | | | | | | |
| **PLCA** | **Paso Flores** | **71.97** | **146** | LR | LR | 05 04 07.1 | |
| | comp=Z,102nm,19.0s,baz=201,slow=31 | | | | | | |
| **GUMO** | **Guam** | **75.26** | **351** | LR | LR | 05 09 18.1 | |
| | comp=Z,56nm,19.7s,baz=130,slow=34 | | | | | | |
| **PSI** | **Prapat** | **76.43** | **303** | LR | LR | 05 07 48.2 | |
| | comp=Z,78nm,20.2s,baz=77,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **78.78** | **219** | LR | LR | 05 10 12.0 | |
| | comp=Z,122nm,21.9s,baz=158,slow=33 | | | | | | |
| **H08S2** | **Diego Garcia H** | **78.99** | **274** | T | T | 06 06 39.6 | |
| | baz=150,slow=76,SNR=19 | | | | | | |
| **H08S1** | **Diego Garcia H** | **79.00** | **274** | T | T | 06 06 40.5 | |
| | baz=150,slow=76,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **79.01** | **274** | T | T | 06 06 41.3 | |
| | baz=150,slow=76,SNR=18 | | | | | | |
| **BOSA** | **Boshof** | **80.85** | **224** | LR | LR | 05 13 49.0 | |
| | comp=Z,73nm,18.6s,baz=164,slow=35 | | | | | | |
| **LBTB** | **Lobatse** | **84.05** | **226** | LR | LR | 05 13 36.0 | |
| | comp=Z,91nm,20.3s,baz=153,slow=33 | | | | | | |
| **PALK** | **Pallekele** | **88.25** | **289** | LR | LR | 05 13 07.9 | |
| | comp=Z,74nm,19.6s,baz=341,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **88.92** | **153** | LR | LR | 05 16 32.2 | |
| | comp=Z,66nm,19.7s,baz=216,slow=34 | | | | | | |
| **JOW** | **Kunigami** | **90.45** | **338** | LR | LR | 05 18 56.0 | |
| | comp=Z,96nm,20.1s,baz=288,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.73** | **309** | LR | LR | 05 17 39.4 | |
| | comp=Z,63nm,21.6s,baz=150,slow=34 | | | | | | |
| **LSZ** | **Lusaka** | **92.06** | **232** | LR | LR | 05 19 44.5 | |
| | comp=Z,40nm,18.1s,baz=164,slow=34 | | | | | | |
| **TSUM** | **Tsumeb** | **92.10** | **221** | LR | LR | 05 18 46.6 | |
| | comp=Z,136nm,21.8s,baz=152,slow=34 | | | | | | |
| **NNA** | **Nana** | **96.76** | **131** | LR | LR | 05 15 04.6 | |
| | comp=Z,47nm,20.3s,baz=242,slow=30 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **98.59** | **348** | LR | LR | 05 24 02.3 | |
| | comp=Z,48nm,18.8s,baz=167,slow=35 | | | | | | |

*NIED* ***16*** *04:30:33.0, 35°.56N×141°.06E, h36km, MW4.3, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr1.98; Mθθ-0.44; Mφφ-1.53; Mrθ0.65; Mθφ-0.18; Mφr2.17; Fault plane solution: M₀2.87000×10¹⁵ NP1:φs185.00000°, δ71.00000°, λ93.00000°. NP2:φs187.00000°, δ19.00000°, λ82.00000°.*

*JMA* ***16*** *04:30:32.9±0.1, 35°.56N×141°.06E, h36km±1km, M3.9 Broadband fault plane solution: P waves. NP1: φs264.00000°, δ37.00000°, λ100.00000°. NP2: φs72.00000°, δ53.00000°, λ83.00000°. Principal axes: T Plg80.0000°, Azm310.0000°; N Plg6.0000°, Azm76.0000°; P Plg8.0000°, Azm167.0000°;*

*JMA Felt II J1.*

*NEIC* ***16*** *04:30:34.0±1.9, 35°.59N±0°.04×141°.11E±0°.08, h37km±7km, mb4.4/11, Mwr4.1/12 Error ellipse: s-maj=9.1km s-min=6.5km az=85.0*

*NEIC* ***16*** *04:30:34.2, 35°.58N×141°.11E, h37km, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.88; Mθθ-1.40; Mφφ0.52; Mrθ-0.02; Mθφ-0.78; Mφr1.40; Fault plane solution: M₀2.01000×10¹⁵ NP1:φs283.31000°, δ48.09000°, λ151.64000°. NP2:φs33.14000°, δ69.30000°, λ45.57000°. Principal axes: T 2.1894, Plg46.0000°, Azm257.0000°; N -0.4125, Plg41.0000°, Azm52.0000°; P -1.7769, Plg13.0000°, Azm154.0000°;*

*IDC* ***16*** *04:30:35.7±1.6, 35°.47N×141°.00E, h55km±15km, mb3.7/21, mb1 3.9/27, mb1mx3.7/48, mbtmp4.0/27, MS3.4/8, Ms1 3.4/8, ms1mx2.9/92 Error ellipse: s-maj=15.0km s-min=8.2km az=77.0*

**ISC 16 04:30:32.3±1.3, 35°.53N±0°.05×141°.19E±0°.06, h29km±8km, n83, σ1s28/80, mb4.2/28, MS3.4/4, 1C-4D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHOJ** | **Chosi** | **0.32** | **303** | ⇑P | **Pb** | **04 30 39.9** | **0.0** |
| CHOJ | | | | eS | **Sb** | **04 30 44.8** | **-0.2** |
| **JSMT** | **Sammumatsuo** | **0.61** | **281** | ⇓P | **Pb** | **04 30 44.0** | **-0.5** |
| **JIHU** | **Itakohorinouch** | **0.69** | **309** | ⇓P | **Pn** | **04 30 45.4** | **-0.8** |
| **KTR** | **Katsuura** | **0.81** | **242** | P | **Pn** | **04 30 47.0** | **-0.8** |
| **BSO4** | **Boso 4** | **0.88** | **233** | P | **Pn** | **04 30 48.2** | **-0.5** |
| **BSO1** | **Boso 1** | **0.89** | **191** | P | **Pn** | **04 30 48.6** | **+0.2** |
| **BSO3** | **Boso 3** | **0.91** | **218** | ⇓P | **Pn** | **04 30 48.6** | **-0.4** |
| **JYT** | **Yasato** | **1.07** | **311** | ⇓P | **Pn** | **04 30 50.1** | **-1.3** |
| **JYT** | **Yasato** | **1.07** | **311** | | **Pn** | **04 30 50.0** | **-1.3** |
| JYT | | | | Sn | Sn | 04 31 03.8 | -1.4 |
| **JMM** | **Marumori** | **2.35** | **352** | | **Pn** | **04 31 09.6** | **+0.6** |
| JMM | | | | Sn | Sn | 04 31 37.6 | +0.7 |
| **JSG** | **Sagara** | **2.60** | **252** | | **Pn** | **04 31 12.5** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **2.62** | **294** | P | **Pn** | **04 31 13.2** | **+0.5** |
| | 3.0nm,0.3s,baz=90,slow=13,SNR=46 | | | | | | |
| MJAR | | | | S | **Sn** | **04 31 43.6** | **+0.1** |
| | 2.3nm,0.3s,baz=134,slow=15,SNR=6.3 | | | | | | |
| MJAR | | | | LR | LR | 04 32 20.1 | |
| | comp=Z,623nm,20.2s,baz=122,slow=42 | | | | | | |
| **MAJO** | **Matsushiro** | **2.62** | **294** | | **Pn** | **04 31 13.6** | **+0.9** |
| **MAT** | **Matsushiro** | **2.62** | **294** | P | **Pn** | **04 31 13.4** | **+0.7** |
| MAT | | | | eS | **Sn** | **04 31 45.2** | **+1.6** |
| **MJB9** | **Matsu-Tunnel** | **2.62** | **294** | | **Pn** | **04 31 13.6** | **+0.8** |
| **JHJ2** | **Mitsune** | **2.67** | **206** | Pn | **Pn** | **04 31 14.4** | **+1.1** |
| **JHJ** | **Hashijo jima 2** | **2.67** | **206** | P | **Pn** | **04 31 14.3** | **+0.9** |
| | 49nm,0.3s,baz=320,slow=23,SNR=14 | | | | | | |
| JHJ | | | | S | **Sn** | **04 31 44.9** | **+0.1** |
| | 144nm,0.3s,baz=73,slow=23,SNR=9.0 | | | | | | |
| **JGF** | **Kuroka** | **3.12** | **272** | | **Pn** | **04 31 21.3** | **+1.6** |
| **INU** | **Inuyama** | **3.41** | **268** | Pn | **Pn** | **04 31 24.5** | **+0.9** |
| **JSD** | **Sado** | **3.43** | **318** | | **Pn** | **04 31 23.7** | **-0.2** |
| **JTM** | **Tenmabayashi** | **5.25** | **359** | | **Pn** | **04 31 50.1** | **+1.3** |
| **JHS** | **Saijyo** | **6.62** | **268** | Pn | **Pn** | **04 32 10.2** | **+2.4** |
| **ERM** | **Erimo** | **6.66** | **13** | Pn | **Pn** | **04 32 07.8** | **-0.4** |
| **ASAJ** | **Asahikawa** | **8.64** | **7** | P | **Pn** | **04 32 38.6** | **+3.2** |
| | 2.9nm,0.3s,baz=237,slow=11,SNR=6.9 | | | | | | |
| ASAJ | | | | S | **Sn** | **04 34 08.8** | **-3.1** |
| | 1.0nm,0.3s,baz=89,slow=12,SNR=1.4 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **8.64** | **7** | | **Pn** | **04 32 37.2** | **+1.8** |
| **JNU** | **Nakatsue** | **8.86** | **257** | P | **Pn** | **04 32 43.1** | **+4.6** |
| | 1.1nm,0.3s,baz=66,slow=17,SNR=3.6 | | | | | | |
| **KSRS** | **Korea Array** | **10.85** | **284** | P | **Pn** | **04 33 08.8** | **+3.1** |
| | 0.2nm,0.3s,baz=91,slow=14,SNR=2.5 | | | | | | |
| KSRS | | | | LR | LR | 04 37 15.7 | |
| | comp=Z,266nm,20.9s,baz=90,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.17** | **324** | P | **Pn** | **04 33 10.6** | **+0.6** |
| | baz=126,slow=14,SNR=2.8 | | | | | | |
| USRK | | | | LR | LR | 04 37 16.9 | |
| | comp=Z,217nm,18.6s,baz=108,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.17** | **324** | | **Pn** | **04 33 09.0** | **-1.0** |
| **KLR** | **Kul'dur** | **15.35** | **336** | P | **Pn** | **04 34 06.8** | **+0.1** |
| | 0.2nm,0.3s,baz=151,slow=11,SNR=4.1 | | | | | | |
| KLR | | | | LR | LR | 04 40 00.2 | |
| | comp=Z,126nm,19.4s,baz=190,slow=37 | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.09** | **28** | LR | LR | 04 43 40.0 | |
| | comp=Z,3nm,20.6s,baz=212,slow=37 | | | | | | |
| **MA2** | **Magadan** | **24.86** | **12** | P | **P** | **04 35 50.3** | **-1.9** |
| MA2 | | | | IAmb | IAmb | 04 35 56.4 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.57** | **118** | T | T | 05 05 29.6 | |
| | baz=310,slow=75,SNR=46 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.58** | **118** | T | T | 05 05 25.9 | |
| | baz=310,slow=75,SNR=41 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.59** | **118** | T | T | 05 05 26.8 | |
| | baz=310,slow=75,SNR=48 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.23** | **120** | T | T | 05 06 11.1 | |
| | baz=312,slow=75,SNR=261 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.23** | **120** | T | T | 05 06 07.0 | |
| | baz=312,slow=75,SNR=154 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.25** | **120** | T | T | 05 06 09.7 | |
| | baz=312,slow=75,SNR=146 | | | | | | |
| **SEY** | **Seymchan** | **28.30** | **11** | P | **P** | **04 36 24.6** | **+1.6** |
| | comp=Z,1.1nm,0.3s,baz=217,slow=19,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **28.50** | **306** | P | **P** | **04 36 25.0** | **-0.2** |
| | comp=Z,1.8nm,0.7s,baz=92,slow=9.5,SNR=4.8 | | | | | | |
| SONM | | | | LR | LR | 04 48 10.1 | |
| | comp=Z,71nm,19.6s,baz=339,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **28.50** | **306** | P | **P** | **04 36 22.4** | **-2.8** |
| **TIXI** | **Tiksi** | **36.76** | **354** | P | **P** | **04 37 36.0** | **-0.9** |
| TIXI | | | | IAmb | IAmb | 04 37 38.0 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.96** | **257** | LR | LR | 04 56 53.8 | |
| | comp=Z,57nm,18.6s,baz=65,slow=39 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.80** | **314** | P | **P** | **04 38 26.2** | **-1.1** |
| ZAA0 | | | | IAmb | IAmb | 04 38 28.2 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.80** | **314** | P | **P** | **04 38 27.0** | **-0.3** |
| | comp=Z,3.2nm,0.5s,baz=97,slow=7.4,SNR=14 | | | | | | |
| ZALV | | | | PcP | **PcP** | **04 40 17.7** | **-0.5** |
| | comp=Z,0.6nm,0.4s,baz=88,slow=3.3,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.80** | **314** | P | **P** | **04 38 26.6** | **-0.8** |
| ZALV | | | | | **PcP** | **04 40 17.4** | **-0.7** |
| **NRIK** | **Noril'sk** | **44.56** | **336** | P | **P** | **04 38 41.5** | **+0.3** |
| | comp=Z,1.5nm,0.3s,baz=112,slow=8.3,SNR=2.1 | | | | | | |
| **MK31** | **Makanchi Array** | **44.78** | **303** | P | **P** | **04 38 42.8** | **-0.5** |
| MK31 | | | | IAmb | IAmb | 04 38 43.7 | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.78** | **303** | P | **P** | **04 38 42.8** | **-0.6** |
| | comp=Z,1.2nm,0.5s,baz=87,slow=10.0,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.78** | **303** | P | **P** | **04 38 42.9** | **-0.4** |
| **KURK** | **Kurchatov** | **46.73** | **309** | P | **P** | **04 38 56.4** | **-2.2** |
| **KDAK** | **Kodiak Island** | **48.34** | **41** | P | **P** | **04 39 12.4** | **+1.3** |
| | comp=Z,3.1nm,0.7s,baz=315,slow=13,SNR=1.6 | | | | | | |
| **KDAK** | **Kodiak Island** | **48.34** | **41** | P | **P** | **04 39 10.5** | **-0.6** |
| **TARG** | **Taragay, Kyrgy** | **48.91** | **297** | P | **P** | **04 39 16.7** | **+0.4** |
| TARG | | | | IAmb | IAmb | 04 39 17.2 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **50.86** | **32** | P | **P** | **04 39 31.5** | **+1.3** |
| | comp=Z,0.9nm,0.6s,baz=269,slow=6.1,SNR=10.0 | | | | | | |
| **ILAR** | **Eielson Array** | **50.86** | **32** | P | **P** | **04 39 31.2** | **+1.0** |
| **AAK** | **Ala-Archa** | **51.05** | **299** | LR | LR | 05 02 25.0 | |
| | comp=Z,59nm,18.7s,baz=101,slow=38 | | | | | | |
| **BRVK** | **Borovoye** | **51.51** | **313** | P | **P** | **04 39 34.7** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 04 39 38.9 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| **KKAR** | **Karatay Array** | **53.73** | **301** | P | **P** | **04 39 51.2** | **-0.6** |
| **WRA** | **Warramunga Arr** | **55.55** | **188** | P | **P** | **04 40 04.4** | **-0.6** |
| | comp=Z,2.4nm,0.7s,baz=6.3,slow=8.0,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.55** | **188** | P | **P** | **04 40 04.5** | **-0.6** |
| **INK** | **Inuvik** | **55.81** | **27** | P | **P** | **04 40 08.2** | **+1.8** |
| | comp=Z,0.7nm,0.5s,baz=304,slow=8.8,SNR=7.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **58.77** | **311** | P | **P** | **04 40 27.2** | **-0.4** |
| **ABKAR** | **Akbulak array** | **58.77** | **311** | P | **P** | **04 40 27.4** | **-0.3** |
| ABKAR | | | | IAmb | IAmb | 04 40 27.9 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **59.28** | **188** | P | **P** | **04 40 30.9** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=353,slow=6.7,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **59.28** | **188** | P | **P** | **04 40 30.5** | **-0.9** |
| **YKA** | **Yellowknife Ar** | **65.20** | **30** | P | **P** | **04 41 10.6** | **0.0** |
| | comp=Z,0.3nm,0.9s,baz=299,slow=6.5,SNR=6.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.34** | **340** | P | **P** | **04 41 11.4** | **0.0** |
| | comp=Z,2.3nm,0.8s,baz=51,slow=9.4,SNR=1.6 | | | | | | |
| **FINES** | **FINESS Array B** | **70.06** | **332** | P | **P** | **04 41 41.0** | **-0.2** |
| | comp=Z,1.8nm,0.5s,baz=52,slow=6.1,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **70.06** | **332** | P | **P** | **04 41 40.6** | **-0.7** |
| **KBZ** | **Khabaz** | **71.75** | **311** | P | **P** | **04 41 52.0** | **+0.2** |
| | comp=Z,3.2nm,0.9s,baz=63,slow=11,SNR=10 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.38** | **322** | P | **P** | **04 42 12.5** | **-0.5** |
| | comp=Z,1.7nm,0.5s,baz=48,slow=6.1,SNR=10 | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.50** | **337** | P | **P** | **04 42 13.6** | **0.0** |
| | comp=Z,1.5nm,0.6s,baz=41,slow=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.50** | **337** | P | **P** | **04 42 13.7** | **0.0** |
| | comp=Z,1.2nm,0.6s,baz=39,slow=5.8,SNR=6.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.04** | **53** | P | **P** | **04 42 19.2** | **+1.8** |
| | comp=Z,0.3nm,0.6s,baz=282,slow=4.5,SNR=2.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.04** | **53** | P | **P** | **04 42 17.4** | **0.0** |
| **PDAR** | **Pinedale Array** | **78.85** | **45** | P | **P** | **04 42 34.7** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=323,slow=3.9,SNR=2.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **79.71** | **312** | P | **P** | **04 42 38.0** | **+0.3** |
| | comp=Z,1.1nm,0.8s,baz=314,slow=38,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **83.89** | **328** | P | **P** | **04 42 58.9** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=28,slow=6.0,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.18** | **52** | P | **P** | **04 43 36.7** | **+1.7** |
| | comp=Z,0.3nm,0.8s,baz=328,slow=2.9,SNR=3.5 | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.02** | **98** | T | T | 07 34 49.4 | |
| | baz=290,slow=76,SNR=15 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.03** | **98** | T | T | 07 34 43.5 | |
| | baz=290,slow=76,SNR=18 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.04** | **98** | T | T | 07 34 48.8 | |
| | baz=290,slow=76,SNR=20 | | | | | | |

*ECX* ***16*** *04:46:45.8±0.3, 31°.86N×114°.91W, h11km±3km, MD3.3, ML3.4, Fault plane solution: NP1:φs1.00000°, δ62.00000°, λ-122.00000°.*

*NEIC* ***16*** *04:46:46.4±1.8, 31°.84N±0°.02×114°.90W±0°.05, h15km±4km, Error ellipse: s-maj=6.0km s-min=3.2km az=77.0*

*PAS* ***16*** *04:46:46.7±2.1, 31°.86N±0°.02×114°.87W±0°.04, h6km±2km, Error ellipse: s-maj=5.7km s-min=3.0km az=259.0*

*ANF* ***16*** *04:46:47.0±0.8, 32°.03N×115°.05W, h8km±3km, ML3.1/14, Error ellipse: s-maj=6.8km s-min=3.2km az=169.0*

*MEX* ***16*** *04:46:47.5±0.4, 31°.88N×114°.88W, h7km±15km, MD4.0*

**ISC 16 04:46:45.4±1.1, 31°.87N±0°.02×114°.93W±0°.03, h12km±9km, n80, σ1s34/101, 10C-8D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RITX** | **Riito Sonora** | **0.30** | **356** | ⇑*i*P | **Pb** | **04 46 53.9** | **+1.2** |
| RITX | | | | eS | **Sb** | **04 46 59.3** | **+1.7** |
| **GUVIX** | **Guadalupe Vict** | **0.45** | **345** | Pg | **Pb** | **04 46 56.5** | **+1.1** |
| GUVIX | | | | Sg | **Sb** | **04 47 03.6** | **+1.6** |
| **PESCX** | **Ej. Pescaderos** | **0.57** | **357** | ⇓eP | **Pb** | **04 46 58.3** | **+1.0** |
| PESCX | | | | eS | **Sn** | **04 47 07.7** | **-0.8** |
| **MBIG** | **Mexicali** | **0.58** | **337** | | **Pb** | **04 46 58.1** | **+0.5** |
| MBIG | | | | | **Sb** | **04 47 07.0** | **+1.2** |
| **MBIG** | **Mexicali** | **0.58** | **337** | *e*P | **Pb** | **04 46 58.1** | **+0.5** |
| MBIG | | | | eS | **Sb** | **04 47 07.0** | **+1.2** |
| **MBIG** | **Mexicali** | **0.58** | **337** | ⇑eP | **Pn** | **04 46 58.9** | **-0.6** |
| **CTLX** | **Tlaxcala, TLX** | **0.63** | **344** | ⇑eP | **Pb** | **04 46 58.8** | **+0.4** |
| CTLX | | | | eS | **Sn** | **04 47 08.8** | **-1.3** |
| **CPBX** | **Cerro Prieto** | **0.64** | **330** | | **Pb** | **04 46 59.4** | **+1.0** |
| CPBX | | | | Sg | **Sb** | **04 47 08.7** | **+1.4** |
| **CPBX** | **Cerro Prieto** | **0.64** | **330** | ⇑eP | **Pb** | **04 46 59.5** | **+1.0** |
| CPBX | | | | IAML | | 04 47 27.4 | |
| | comp=N,8μm,0.7s | | | | | | |
| CPBX | | | | ⇑*e* | | 04 47 27.4 | |
| **YUCAX** | **Ej. Yucat¡n** | **0.75** | **350** | ⇓*i*P | **Pn** | **04 47 01.7** | **-0.1** |
| **YMD** | **Yuma Desert** | **0.76** | **26** | ⇓*i*P | **Pn** | **04 47 01.1** | **+0.5** |
| **SFX** | **San Felipe** | **0.83** | **175** | | **Pg** | **04 47 01.7** | **+0.2** |
| SFX | | | | Sg | **Sg** | **04 47 12.6** | **+0.3** |
| SFX | | | | IAML | | 04 47 14.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| SFX | | | | IAML | | 04 47 14.8 | |
| | comp=E,851nm,0.3s | | | | | | |
| **SFX** | **San Felipe** | **0.83** | **175** | ⇓eP | **Pg** | **04 47 01.7** | **+0.2** |
| SFX | | | | IAML | | 04 47 14.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| SFX | | | | IAML | | 04 47 14.8 | |
| | comp=E,1μm,0.4s | | | | | | |
| SFX | | | | ⇑*e* | | 04 47 14.8 | |
| **EMSC** | **East Mesa** | **0.87** | **357** | *e*P | **Pb** | **04 47 03.0** | **+0.5** |
| **UABX** | **UABC, Campus M** | **0.88** | **331** | Pg | **Pn** | **04 47 03.4** | **-0.2** |
| UABX | | | | Sn | **Sn** | **04 47 18.1** | **+1.9** |
| **SPIG** | **San Pedro Mart** | **0.94** | **209** | | **Pg** | **04 47 04.0** | **+0.4** |
| SPIG | | | | | **Sg** | **04 47 16.2** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.94** | **209** | *e*P | **Pg** | **04 47 04.0** | **+0.4** |
| SPIG | | | | eS | **Sg** | **04 47 16.2** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.94** | **209** | ⇓*i*P | **Pg** | **04 47 04.0** | **+0.4** |
| **DREC** | **Desert Rsrch C** | **1.03** | **335** | ⇓eP | **Pn** | **04 47 06.5** | **+0.8** |
| **WESC** | **Westside Schoo** | **1.12** | **323** | ⇓eP | **Pn** | **04 47 08.1** | **+1.3** |
| **YUH2** | **Yuha Desert** | **1.14** | **313** | ⇓eP | **Pg** | **04 47 06.4** | **-1.1** |
| **YUH** | **Yuha Desert** | **1.15** | **313** | | **Pg** | **04 47 06.2** | **-1.3** |
| YUH | | | | IAML | | 04 47 24.3 | |
| | comp=E,400nm,0.6s | | | | | | |
| YUH | | | | IAML | | 04 47 24.5 | |
| | comp=N,333nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **1.19** | **4** | | **Pg** | **04 47 07.3** | **-1.0** |
| GLA | | | | | **Sn** | **04 47 24.3** | **+0.4** |
| GLA | | | | IAML | | 04 47 35.9 | |
| | comp=N,623nm,0.5s | | | | | | |
| GLA | | | | IAML | | 04 47 42.3 | |
| | comp=E,595nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **1.19** | **4** | P | **Pg** | **04 47 07.2** | **-1.1** |
| | baz=182,SNR=56 | | | | | | |
| **RMX** | **La Rumorosa** | **1.22** | **307** | | **Pb** | **04 47 06.5** | **-2.0** |
| RMX | | | | IAML | | 04 47 23.6 | |
| | comp=E,702nm,0.2s | | | | | | |
| RMX | | | | IAML | | 04 47 23.7 | |
| | comp=N,613nm,0.3s | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QSM | Queen of Sheba | 4.39 | 339 | | Pn | 04 47 53.7 | +1.8 |
| GWY | Greenwater Val | 4.54 | 342 | Pn | Pn | 04 47 55.0 | +0.8 |
| SHPR | Sheep Range | 4.63 | 358 | Pn | Pn | 04 47 56.3 | +0.9 |
| WUAZ | Wupatki | 4.70 | 38 | Pn | Pn | 04 47 58.0 | +1.8 |
| WUAZ | | | | IAML | | 04 49 46.9 | |
| | comp=E,38nm,1.5s | | | | | | |
| WUAZ | | | | IAML | | 04 49 56.3 | |
| | comp=E,39nm,2.1s | | | | | | |
| WUAZ | Wupatki | 4.70 | 38 | P | Pn | 04 47 58.1 | +1.8 |
| | baz=219 | | | | | | |
| BCW | Bitter Crk WRg | 4.84 | 311 | | Pn | 04 48 00.4 | +2.2 |
| BCW | | | | IAML | | 04 48 55.8 | |
| | comp=E,36nm,4.8s | | | | | | |
| BCW | | | | IAML | | 04 49 12.1 | |
| | comp=N,36nm,4.3s | | | | | | |
| X18A | Snowflake | 4.95 | 56 | | Pn | 04 48 00.9 | +1.1 |
| U15A | North Rim | 5.05 | 25 | Pn | Pn | 04 48 03.0 | +1.8 |
| TPNV | Topopah Spring | 5.19 | 348 | Pn | Pn | 04 48 03.9 | +0.9 |
| LCMT | Little Creek M | 5.32 | 15 | | Pn | 04 48 06.4 | +1.6 |
| W18A | Petrified Fore | 5.42 | 52 | | Pn | 04 48 08.3 | +2.1 |
| W18A | Petrified Fore | 5.42 | 52 | P | Pn | 04 48 08.4 | +2.1 |
| | baz=234 | | | | | | |
| KNB | Kanab | 5.43 | 18 | Pn | Pn | 04 48 08.8 | +2.5 |
| PRN | Pahroc Range | 5.53 | 359 | | Pn | 04 48 10.3 | +2.7 |
| S11A | Rachel | 5.80 | 354 | Pn | Pn | 04 48 11.8 | +0.3 |
| CCUT | Cedar City | 5.82 | 12 | Pn | Pn | 04 48 14.2 | +2.5 |
| SZCU | Shurtz Canyon | 5.92 | 14 | | Pn | 04 48 14.4 | +1.4 |
| PKCU | Pink Cliffs | 5.97 | 20 | Pn | Pn | 04 48 15.8 | +2.0 |
| 121A | Cookes Peak, D | 6.10 | 82 | | Pn | 04 48 17.3 | +1.8 |
| MTPU | Mount Pierson | 6.56 | 19 | | Pn | 04 48 24.5 | +2.4 |
| RWWY | Rawlins | 11.59 | 30 | | Pn | 04 49 32.1 | +1.2 |

**THE 16 04:52:47.6, 37°.57N × 21°.68E, h7 km ± 11 km, ML 2.1/6, Error ellipse: s-maj=11.9km s-min=0.7km az=106.0, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DRO | Drossia | 0.39 | 3 | P | Pg | 04 52 55.3 | +0.1 |
| DRO | | | | S | Sg | 04 53 00.6 | +0.3 |
| | 592nm,0.2s | | | | | | |
| ITM | Ithomi | 0.43 | 153 | P | Pg | 04 52 56.7 | +0.7 |
| ITM | | | | S | Sg | 04 53 01.9 | +0.3 |
| | 240nm,0.2s | | | | | | |
| KLV | Kalavryta, Ach | 0.60 | 38 | P | Pg | 04 52 58.6 | -0.7 |
| KLV | | | | S | Sg | 04 53 07.8 | +0.6 |
| | 215nm,0.2s | | | | | | |
| LTHK | Lithakia | 0.69 | 282 | P | Pg | 04 53 00.5 | -0.3 |
| LAKA | Lakka | 0.71 | 19 | P | Pg | 04 53 00.8 | -0.5 |
| LAKA | | | | S | Sg | 04 53 11.4 | +0.8 |
| | 418nm,0.3s | | | | | | |
| ALIK | Aliki, Aigiali | 0.77 | 26 | P | Pg | 04 53 02.2 | -0.3 |
| ALIK | | | | S | Sb | 04 53 13.8 | -0.2 |
| EFP | Efpalio | 0.88 | 12 | P | Pg | 04 53 03.8 | -0.7 |
| EFP | | | | S | Sb | 04 53 17.1 | 0.0 |
| | 110nm,0.4s | | | | | | |
| ANX | Ano Chora | 1.04 | 10 | P | Pg | 04 53 06.6 | -1.1 |
| ANX | | | | S | Sn | 04 53 23.1 | -0.5 |
| | 82nm,0.4s | | | | | | |

**THE 16 04:52:53.3, 37°.59N × 21°.78E, h29 km ± 2 km, ML 2.4/3, Error ellipse: s-maj=3.5km s-min=1.0km az=271.0, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DRO | Drossia | 0.36 | 352 | P | Pb | 04 53 02.1 | +0.5 |
| DRO | | | | S | Sb | 04 53 07.0 | -0.3 |
| | 2µm,0.3s | | | | | | |
| ITM | Ithomi | 0.43 | 164 | P | Pb | 04 53 02.5 | -0.1 |
| ITM | | | | S | Sb | 04 53 09.3 | +0.4 |
| | 580nm,0.3s | | | | | | |
| KLV | Kalavryta, Ach | 0.54 | 33 | P | Pb | 04 53 04.1 | -0.3 |
| KLV | | | | S | Sb | 04 53 12.6 | +0.6 |
| | 260nm,0.1s | | | | | | |
| VLI | Veliai | 1.27 | 133 | P | Pn | 04 53 14.3 | -0.8 |

*GRAL 16 04:56:51.0±0.4, 33°.79N × 35°.07E, h33 km ± 1 km, MD3.0*
*GII 16 04:56:52.6±0.2, 33°.67N × 35°.21E, h18 km, MD1.2/3, Mm1.7/2*
**ISC 16 04:56:51.3±2.0, 33°.78N±0°.08 × 35°.2E±0°.1, h41 km ± 20 km, n14, σ0°.65/24, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DQRL | Deir Qamar | 0.33 | 102 | eP | Pn | 04 57 00.1 | 0.0 |
| DQRL | | | | eS | Sn | 04 57 06.8 | +0.6 |
| BHL | Bhannes | 0.41 | 72 | eP | Pn | 04 57 00.9 | -0.2 |
| QRWL | Qaraoun | 0.47 | 119 | eP | Pn | 04 57 02.0 | +0.2 |
| QRWL | | | | eS | Sn | 04 57 09.8 | +0.6 |
| RCY | Rachaya | 0.61 | 117 | eP | Pn | 04 57 04.0 | +0.2 |
| SHBL | Chebaa | 0.63 | 132 | eP | Pn | 04 57 04.2 | +0.2 |
| NATI | Neve Ativ | 0.69 | 138 | Pg | Pn | 04 57 04.8 | +0.2 |
| NATI | | | | Sg | Sn | 04 57 13.5 | -0.6 |
| GEM | Giv'at Ha'Em | 0.69 | 145 | Pg | Pn | 04 57 04.6 | -0.1 |
| GEM | | | | Sg | Sn | 04 57 12.5 | -1.7 |
| HNTI | Hanita | 0.69 | 181 | Pg | Pn | 04 57 04.9 | +0.2 |
| HNTI | | | | Sg | Sn | 04 57 13.4 | -0.9 |
| MMA0B | Mount Meron ar | 0.78 | 167 | Pg | Pn | 04 57 05.3 | -0.7 |
| MMA0B | | | | Sg | Sn | 04 57 16.1 | -0.4 |
| HWQ | Hawqa | 0.81 | 51 | eP | Pn | 04 57 06.3 | -0.1 |
| OFRI | `Ofer | 1.16 | 188 | Pg | Pn | 04 57 11.4 | +0.2 |
| OFRI | | | | Sg | Sn | 04 57 25.3 | -0.6 |
| MMLI | Mount Malkishu | 1.35 | 172 | Pg | Pn | 04 57 13.9 | +0.2 |
| MMLI | | | | Sg | Sn | 04 57 30.7 | +0.3 |
| SLTI | Sal'it | 1.54 | 185 | Pn | Pn | 04 57 16.4 | +0.1 |
| SLTI | | | | Sn | Sn | 04 57 35.5 | +0.5 |
| HMDT | Nahal Hemdat | 1.54 | 169 | Pn | Pn | 04 57 16.8 | +0.4 |
| HMDT | | | | Sn | Sn | 04 57 36.5 | +1.3 |

*DJA 16 04:59:03.1±0.4, 3°.N × 4°.12°.9E±°, h230 km ± 3 km, M4.4/18, mb4.5/18, mB4.9/6, MLv4.6/10, Mw(mB)4.2/6, MwMwp5.7/1, Mwp5.8/1*
*IDC 16 04:59:05.2±1.3, 2°.61N × 128°.54E, h239 km ± 12 km, mb3.6/12, mb1 3.8/16, mb1mx3.5/40, mbtmp4.3/16, Error ellipse: s-maj=15.9km s-min=8.5km az=75.0*
**ISC 16 04:59:05.8±0.5, 2°.56N±0°.06 × 128°.52E±0°.07, h250 km, n46, σ2°.93/48, mb4.1/11, 1C, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 2.12 | 213 | P | Pn | 04 59 47.0 | -2.4 |
| TNTI | | | | S | S | 05 00 21.2 | -2.6 |
| SGSI | Sangihe | 3.18 | 291 | P | Pn | 04 59 57.6 | -2.7 |
| SIJI | Sorong | 4.38 | 141 | P | Pn | 05 00 13.8 | -0.4 |
| | 2.4nm,0.3s,baz=336,slow=20,SNR=2.5 | | | | | | |
| KMSI | Cibinong | 4.94 | 247 | P | Pn | 05 00 18.5 | -2.5 |
| | 3.6nm202nm,0.6s | | | | | | |
| SANI | Sanana | 5.23 | 209 | P | Pn | 05 00 21.9 | -2.6 |
| | 1.9nm9µm278nm,0.6s | | | | | | |
| KCP | Kidapawan | 5.58 | 322 | ⇑iP | Pn | 05 00 26.3 | -2.5 |
| GTOI | Gorontalo | 5.83 | 251 | P | Pn | 05 00 31.3 | -0.5 |
| | 0.2nm257nm19nm,0.8s | | | | | | |
| APSI | Ampana | 7.68 | 243 | P | Pn | 05 00 53.6 | -1.6 |
| | 0.3nm641nm67nm,0.7s | | | | | | |
| MPSI | Mapaga | 8.89 | 256 | P | Pn | 05 01 09.0 | -1.5 |
| | 9.2nm,0.8s | | | | | | |
| TTSI | Tana Toraja | 10.32 | 237 | P | Pn | 05 01 27.4 | -1.2 |
| | 41nm,0.9s | | | | | | |
| SAUI | Saumlaki | 10.84 | 165 | P | Pn | 05 01 31.1 | -3.9 |
| | 205nm,1.0s | | | | | | |
| BNSI | Bone | 10.88 | 231 | P | Pn | 05 01 33.9 | -1.7 |
| | 28nm,1.0s | | | | | | |
| SPSI | Sidrap Palu | 10.88 | 233 | P | Pn | 05 01 34.5 | -1.1 |
| | 27nm,0.6s | | | | | | |
| SMPI | Sarmi | 11.15 | 114 | P | Pn | 05 01 37.3 | -1.6 |
| | 18nm,0.6s | | | | | | |
| BKSI | Bulukumba | 11.47 | 227 | P | Pn | 05 01 42.0 | -0.9 |
| | 777nm75nm,0.6s | | | | | | |
| KAPI | Kappang | 11.55 | 229 | P | P | 05 01 45.7 | -1.7 |
| | 1.3nm,0.3s,baz=208,slow=15,SNR=3.8 | | | | | | |
| KAPI | | | | S | S | 05 03 54.4 | +1.4 |
| | 0.8nm,0.3s,baz=29,slow=23,SNR=2.6 | | | | | | |
| SOEI | Soe | 12.95 | 199 | P | Pn | 05 02 00.4 | -0.9 |
| | 33nm,0.8s | | | | | | |
| JAY | Jayapura | 13.19 | 112 | P | P | 05 02 05.8 | 0.0 |
| | 3.6nm,0.3s,baz=292,slow=5.4,SNR=6.3 | | | | | | |
| BATI | Baumata | 13.57 | 201 | P | P | 05 02 11.1 | +1.1 |
| | 6.6nm,0.3s,baz=54,slow=19,SNR=3.7 | | | | | | |
| MTKI | Muara Teweh, K | 14.05 | 256 | P | P | 05 02 17.8 | +2.5 |
| PLAI | Plampang | 15.58 | 223 | P | P | 05 02 29.5 | -2.6 |
| | 1µm68nm,0.5s | | | | | | |
| STKI | Sintang | 17.21 | 262 | P | P | 05 02 49.3 | -0.7 |
| ABJI | Asem Bagus | 17.57 | 234 | P | P | 05 02 53.5 | -0.5 |
| | 32nm,0.7s | | | | | | |
| JAGI | Jajag, Banyuwa | 18.04 | 232 | P | P | 05 02 58.5 | -0.5 |
| | 35nm,0.6s | | | | | | |
| BLJI | Banyuglugur | 18.07 | 235 | P | P | 05 02 58.9 | -0.4 |
| | 2µm36nm,0.6s | | | | | | |
| GMJI | Gumukmas | 18.49 | 234 | P | P | 05 03 03.4 | -0.4 |
| FITZ | Fitzroy Crossi | 20.73 | 188 | P | P | 05 03 26.6 | -1.0 |
| | 1.5nm,0.5s,baz=16,slow=9.4,SNR=12 | | | | | | |
| FITZ | | | | S | S | 05 07 04.7 | +1.0 |
| | 2.2nm,0.7s,baz=41,slow=9.3,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 23.09 | 166 | P | P | 05 03 49.5 | -0.3 |
| | 3.0nm,0.6s,baz=346,slow=10,SNR=25 | | | | | | |
| WRA | | | | S | S | 05 07 49.8 | +7.8 |
| | 0.6nm,0.3s,baz=337,slow=19,SNR=5.9 | | | | | | |
| WRA | | | | ScP | ScP | 05 10 46.7 | +1.6 |
| | 0.3nm,0.6s,baz=348,slow=3.1,SNR=1.8 | | | | | | |
| MDSI | Maura Dua | 25.31 | 254 | P | P | 05 04 13.7 | +3.7 |
| ASAR | Alice Springs | 26.59 | 169 | P | P | 05 04 22.2 | +0.7 |
| | 2.7nm,0.6s,baz=354,slow=8.2,SNR=47 | | | | | | |
| ASAR | | | | PcP | PcP | 05 07 39.9 | +1.0 |
| | 0.6nm,0.4s,baz=356,slow=2.3,SNR=7.2 | | | | | | |
| ASAR | | | | S | S | 05 08 36.2 | -1.3 |
| | 0.3nm,0.4s,baz=337,slow=14,SNR=2.6 | | | | | | |
| ASAR | | | | ScP | ScP | 05 10 57.5 | +2.4 |
| | 0.4nm,0.5s,baz=318,slow=1.2,SNR=2.9 | | | | | | |
| PSI | Prapat | 29.56 | 271 | P | P | 05 04 49.5 | +1.5 |
| | 3.1nm,0.6s,baz=128,slow=19,SNR=4.3 | | | | | | |
| CMAR | Chiang Mai Arr | 32.99 | 301 | P | P | 05 05 19.4 | +1.6 |
| | 1.6nm,0.3s,baz=114,slow=6.8,SNR=8.8 | | | | | | |
| STKA | Stephens Creek | 36.44 | 161 | P | P | 05 05 47.8 | +0.8 |
| | 3.0nm,0.3s,baz=349,slow=8.0,SNR=19 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.59 | 64 | T | T | 05 50 41.2 | |
| | baz=252 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.61 | 64 | T | T | 05 50 41.9 | |
| | baz=252 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.61 | 64 | T | T | 05 50 42.6 | |
| | baz=252 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.17 | 63 | T | T | 05 51 03.9 | |
| | baz=250 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.18 | 63 | T | T | 05 51 24.7 | |
| | baz=250 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.19 | 63 | T | T | 05 51 28.4 | |
| | baz=250 | | | | | | |
| SONM | Songino Array | 48.98 | 340 | P | P | 05 07 27.3 | 0.0 |
| | 0.4nm,0.4s,baz=132,slow=9.0,SNR=2.6 | | | | | | |
| MSVF | Nonsavu | 52.81 | 114 | P | P | 05 07 57.8 | +1.6 |
| | 6.9nm,0.7s,baz=284,slow=8.3,SNR=2.8 | | | | | | |
| PETK | Petropavlovsk- | 55.85 | 21 | P | P | 05 08 17.0 | -0.4 |
| | 2.4nm,0.7s,baz=204,slow=5.9,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 59.52 | 325 | P | P | 05 08 42.7 | -0.4 |
| | 0.2nm,0.4s,baz=115,slow=8.9,SNR=7.7 | | | | | | |
| ILAR | Eielson Array | 85.39 | 25 | P | P | 05 11 14.5 | -0.3 |
| | 0.3nm,0.6s,baz=266,slow=5.7,SNR=5.9 | | | | | | |
| ARCES | ARCESS Array B | 92.15 | 340 | P | P | 05 11 45.6 | -1.0 |
| | 2.1nm,0.8s,baz=61,slow=5.0,SNR=5.7 | | | | | | |
| TORD | Torodi Ar. Bea | 124.97 | 288 | PKP | PKiKP | 05 17 37.7 | +0.1 |
| | 0.5nm,0.9s,baz=83,slow=1.8,SNR=1.8 | | | | | | |

*NEIC 16 05:13:40.7±0.4, 47°.61N±0°.06 × 69°.94W±0°.04, h11 km ± 6 km, Error ellipse: s-maj=9.1km s-min=2.1km az=197.0*
*OTT 16 05:13:41.4±0.1, 47°.57N × 69°.96W, h14 km, MN2.5/10, Charlevoix Seismic Zone, Qc. 8km northeast from Saint-Denis, Qc*
**ISC 16 05:13:40.8±0.8, 47°.58N±0°.02 × 69°.96W±0°.03, h16 km ± 5 km, n29, σ0°.64/48, 4D, Gaspe Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| A16 | Riviere Ouelle | 0.11 | 198 | ⇓PG | Pg | 05 13 44.4 | +0.1 |
| A16 | | | | SG | Sg | 05 13 45.9 | -0.6 |
| A16 | | | | Trac | | 05 13 46.6 | |
| | comp=Z,222nm,0.1s | | | | | | |
| A61 | Sainte Mathild | 0.15 | 322 | ⇓PG | Pg | 05 13 45.1 | +0.3 |
| A61 | | | | SG | Sg | 05 13 47.8 | +0.4 |
| A61 | | | | Trac | | 05 13 48.0 | |
| | comp=Z,127nm,0.0s | | | | | | |
| A21 | Saint Andre | 0.22 | 54 | PG | Pb | 05 13 46.3 | -0.2 |
| A21 | | | | SG | Sb | 05 13 49.9 | -0.4 |
| A21 | | | | Trac | | 05 13 49.9 | |
| | comp=Z,312nm,0.1s | | | | | | |
| LMQ | La Malbaie | 0.25 | 264 | | Pg | 05 13 46.4 | +0.1 |
| LMQ | | | | Sg | Sg | 05 13 50.1 | -0.1 |
| LMQ | La Malbaie | 0.25 | 264 | PG | Pg | 05 13 46.5 | +0.1 |
| LMQ | | | | SG | Sg | 05 13 50.2 | 0.0 |
| LMQ | | | | Trac | | 05 13 50.9 | |
| | comp=Z,101nm,0.1s | | | | | | |
| A64 | Saint Simeon | 0.26 | 10 | ⇓PG | Pg | 05 13 46.7 | +0.3 |
| A64 | | | | Trac | | 05 13 50.6 | |
| | comp=Z,123nm,0.1s | | | | | | |
| A64 | | | | SG | Sb | 05 13 50.7 | -0.6 |
| A54 | Misere | 0.33 | 249 | PG | Pg | 05 13 47.6 | -0.1 |
| A54 | | | | SG | Sg | 05 13 52.3 | -0.1 |
| A54 | | | | Trac | | 05 13 52.4 | |
| | comp=Z,80nm,0.0s | | | | | | |
| A11 | Saint Roch-des | 0.37 | 206 | ⇓PG | Pg | 05 13 48.3 | -0.1 |
| A11 | | | | SG | Sg | 05 13 53.3 | -0.2 |
| A11 | | | | Trac | | 05 13 53.6 | |
| | comp=Z,9.6nm,0.0s | | | | | | |
| BSCQ | Baie-Sainte-Ca | 0.57 | 16 | PG | Pg | 05 13 51.8 | -0.3 |
| BSCQ | | | | SG | Sg | 05 13 59.7 | 0.0 |
| BSCQ | | | | Trac | | 05 14 01.0 | |
| | comp=Z,41nm,0.1s | | | | | | |
| D62A | Allapoint, All | 0.79 | 128 | Pg | Pg | 05 13 56.2 | 0.0 |
| D62A | | | | Sg | Sg | 05 14 06.8 | +0.2 |
| LESQ | Les-Escoumins | 0.83 | 26 | PG | Pg | 05 13 56.2 | -0.8 |
| LESQ | | | | SG | Sg | 05 14 07.2 | -0.7 |
| LESQ | | | | Trac | | 05 14 10.2 | |
| | comp=Z,5.5nm,0.0s | | | | | | |
| BCLQ | Boischatel | 1.05 | 232 | PG | Pb | 05 13 59.1 | -1.6 |
| BCLQ | | | | Trac | | 05 14 13.5 | |
| | comp=Z,28nm,0.1s | | | | | | |
| QCQ | Quebec | 1.20 | 229 | PG | Pn | 05 14 03.5 | +0.5 |
| QCQ | | | | SG | Sb | 05 14 18.2 | -0.3 |
| QCQ | | | | Trac | | 05 14 19.1 | |
| | comp=Z,5.0nm,0.1s | | | | | | |
| FORQ | Forestville | 1.31 | 25 | PG | Pn | 05 14 04.2 | -0.3 |
| FORQ | | | | SG | Sn | 05 14 22.0 | +0.4 |
| FORQ | | | | Trac | | 05 14 25.7 | |
| | comp=Z,3.9nm,0.0s | | | | | | |
| PQI | Presque Isle | 1.60 | 124 | Pn | Pn | 05 14 09.0 | +0.5 |
| PQI | | | | Sn | Sb | 05 14 30.6 | +0.6 |
| F62A | Pittston Farm, | 1.68 | 180 | | Pn | 05 14 10.7 | +1.1 |
| LATQ | La Tuque | 1.93 | 265 | Pn | Pn | 05 14 13.7 | +0.8 |
| F63A | Nahmakanta, Br | 1.96 | 162 | Pn | Pn | 05 14 14.0 | +0.5 |
| DMCQ | Dolbeau-Mistas | 1.98 | 315 | PN | Pn | 05 14 14.9 | +1.1 |
| DMCQ | | | | SN | Sn | 05 14 39.1 | +0.9 |
| DMCQ | | | | Trac | | 05 14 44.6 | |
| | comp=Z,6.4nm,0.1s | | | | | | |
| F64A | Sherman | 2.04 | 147 | Pn | Pn | 05 14 15.2 | +0.7 |
| BACQ | Baie-Comeau | 2.09 | 34 | PN | Pn | 05 14 16.5 | +1.3 |
| BACQ | | | | SN | Sn | 05 14 41.8 | +0.9 |
| BACQ | | | | LG | Lg | 05 14 46.9 | |
| BACQ | | | | Trac | | 05 14 49.8 | |
| | comp=Z,2.9nm,0.1s | | | | | | |
| DPQ | Saint Jean | 2.12 | 246 | PN | Pn | 05 14 15.9 | +0.2 |
| DPQ | | | | SN | Sn | 05 14 41.5 | -0.2 |
| DPQ | | | | Trac | | 05 14 46.2 | |
| | comp=Z,4.2nm,0.1s | | | | | | |
| CNQ | Baie Comeau | 2.13 | 35 | PN | Pn | 05 14 16.2 | +0.4 |
| CNQ | | | | SN | Sn | 05 14 42.3 | +0.3 |
| CNQ | | | | Trac | | 05 14 50.8 | |
| | comp=Z,5.9nm,0.1s | | | | | | |
| PKME | Peaks-Kenny Pk | 2.36 | 169 | Pn | Pn | 05 14 19.8 | +0.9 |
| PKME | Peaks-Kenny Pk | 2.36 | 169 | PN | Pn | 05 14 19.2 | +0.3 |
| PKME | | | | SN | Sn | 05 14 47.6 | +0.1 |
| PKME | | | | Trac | | 05 14 55.2 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| G62A | West of Eustis | 2.39 | 190 | Pn | Pn | 05 14 21.0 | +1.6 |
| BATG | Bathurst New B | 2.66 | 95 | | Pn | 05 14 23.1 | 0.0 |
| G65A | Princeton | 2.90 | 144 | Pn | Pn | 05 14 26.9 | +0.6 |
| GGN | Saint George | 3.27 | 138 | Pn | Pn | 05 14 31.7 | +0.3 |

*NEIC 16 05:14:56.0±1.7, 2°.27N±0°.07 × 125°.33E±0°.05, h138 km ± 8 km, mb4.5/35, Error ellipse: s-maj=10.9km s-min=5.0km az=206.0*
*IDC 16 05:14:56.4±1.6, 2°.26N × 125°.11E, h148 km ± 14 km, mb4.2/18, mb1 4.2/20, mb1mx4.0/38, mbtmp4.6/20, Error ellipse: s-maj=22.4km s-min=7.8km az=77.0*
*DJA 16 05:14:56.4±0.3, 2°.N±2°.x12°.5E±°, h132 km ± 4 km, M4.7/16, mb4.7/8, mB5.4/3, MLv4.7/16, Mw(mB)4.8/3*
**ISC 16 05:14:56.7±0.3, 2°.23N±0°.04 × 125°.35E±0°.05, h150 km, n115, σ1°.28/131, mb4.5/41, 2C-2D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGSI | Sangihe | 1.46 | 7 | P | Pn | 05 15 24.1 | -1.7 |
| SGSI | | | | S | Sn | 05 15 45.7 | -2.4 |
| KMSI | Cibinong | 2.14 | 220 | P | Pn | 05 15 33.6 | +0.1 |
| KMSI | | | | S | Sn | 05 16 01.0 | -0.8 |
| TNTI | Ternate | 2.49 | 126 | Pn | Pn | 05 15 36.1 | -1.5 |
| TNTI | | | | Sn | Sn | 05 16 05.8 | -3.4 |
| TNTI | Ternate | 2.49 | 126 | P | Pn | 05 15 36.2 | -1.5 |
| TNTI | Ternate | 2.49 | 126 | P | Pn | 05 15 36.6 | -1.0 |
| GTOI | Gorontalo | 2.82 | 236 | P | Pn | 05 15 41.8 | 0.0 |
| MRSI | Marisa | 3.83 | 243 | P | Pn | 05 15 54.9 | +0.2 |
| GSPH | General Santos | 3.85 | 354 | eP | Pn | 05 15 56.7 | +1.6 |
| SANI | Sanana | 4.30 | 171 | P | Pn | 05 15 58.1 | -2.8 |
| TOLI2 | Tolitoli | 4.70 | 256 | Pn | Pn | 05 16 05.4 | -0.7 |
| TOLI2 | Tolitoli | 4.70 | 256 | P | Pn | 05 16 05.8 | -0.3 |
| KCP | Kidapawan | 4.75 | 357 | ⇓iP | Pn | 05 16 06.4 | -0.5 |
| KCP | | | | iS | Sn | 05 17 04.6 | +3.0 |
| DAV | Davao City (W) | 4.81 | 3 | P | Pn | 05 16 07.3 | -0.4 |
| | 77nm,0.3s,baz=76,slow=8.3,SNR=3.9 | | | | | | |
| APSI | Ampana | 4.84 | 230 | P | Pn | 05 16 08.2 | +0.2 |
| MPSI | Mapaga | 5.76 | 251 | P | Pn | 05 16 20.8 | +0.5 |
| | 0.1nm30nm,0.8s | | | | | | |
| AAI | Ambon | 6.53 | 154 | P | Pn | 05 16 29.4 | -1.1 |
| | 1.8nm5µm308nm,0.7s | | | | | | |
| MSAI | Masohi | 6.60 | 147 | P | Pn | 05 16 31.7 | +0.3 |
| | 0.7nm5µm131nm,0.6s | | | | | | |
| SIJI | Sorong | 6.67 | 117 | P | Pn | 05 16 32.0 | -0.4 |
| | 4.2nm,0.3s,baz=292,slow=4.4,SNR=11 | | | | | | |
| SIJI | | | | S | Sn | 05 17 44.6 | -2.8 |
| | 1.7nm,0.3s,baz=185,slow=22,SNR=6.1 | | | | | | |
| MYLDM | Lahad Datu | 7.43 | 293 | Pn | Pn | 05 16 40.7 | -1.9 |
| TTSI | Tana Toraja | 7.62 | 227 | P | Pn | 05 16 45.6 | +0.6 |
| | 0.2nm40nm,0.6s | | | | | | |
| SPSI | Sidrap Palu | 8.30 | 222 | P | Pn | 05 16 54.8 | +0.6 |
| | 20nm,0.7s | | | | | | |
| BNSI | Bone | 8.42 | 218 | P | Pn | 05 16 56.2 | +0.5 |
| | 22nm,0.6s | | | | | | |
| FAKI | Fak Fak | 8.59 | 127 | | Pn | 05 16 56.4 | -1.6 |
| FAKI | Fak Fak | 8.59 | 127 | P | Pn | 05 16 57.3 | -0.7 |
| | 60nm,0.9s | | | | | | |
| KAPI | Kappang | 9.11 | 218 | P | Pn | 05 17 04.4 | -0.6 |
| | 0.3nm,0.3s,baz=88,slow=12,SNR=4.4 | | | | | | |
| KAPI | Kappang | 9.11 | 218 | Pn | Pn | 05 17 02.3 | -2.7 |
| SBUM | Sibu | 13.12 | 271 | | P | 05 18 01.0 | -1.1 |
| GENI | Genyem | 15.57 | 108 | P | P | 05 18 30.1 | +0.7 |
| GENI | Genyem | 15.57 | 108 | P | P | 05 18 28.8 | -0.6 |
| DRS | Darwin Rock St | 15.58 | 159 | P | P | 05 18 29.6 | +0.2 |
| MTN | Manton Dam | 16.04 | 159 | P | P | 05 18 34.8 | +0.3 |
| KDU | Kakadu | 16.43 | 155 | P | Pn | 05 18 39.4 | +0.7 |
| KNRA | Kununurra | 18.11 | 169 | | P | 05 18 56.8 | -0.5 |
| KNRA | | | | IAmb | IAmb | 05 18 58.9 | |
| | comp=Z,33nm,0.8s | | | | | | |
| KNRA | Kununurra | 18.11 | 169 | P | Pn | 05 18 58.7 | -0.2 |
| FITZ | Fitzroy Crossi | 20.20 | 179 | P | P | 05 19 20.2 | +0.3 |
| | comp=Z,4.5nm,0.6s,baz=349,slow=8.5,SNR=14 | | | | | | |
| WB0 | Warramunga Arr | 23.60 | 158 | P | P | 05 19 54.5 | +0.5 |
| WRAB | Tennant Creek | 23.73 | 159 | P | P | 05 19 56.0 | +0.8 |
| WRAB | Tennant Creek | 23.73 | 159 | P | P | 05 19 55.9 | +0.6 |
| WRA | Warramunga Arr | 23.74 | 159 | P | P | 05 19 55.6 | +0.3 |
| | comp=Z,50nm,0.7s,baz=340,slow=10,SNR=168 | | | | | | |
| WRA | | | | S | S | 05 24 02.6 | +2.9 |
| | comp=Z,3.3nm,1.0s,baz=328,slow=20,SNR=8.2 | | | | | | |
| WRA | | | | ScP | ScP | 05 26 59.8 | +0.1 |
| | comp=Z,0.7nm,0.8s,baz=352,slow=3.4,SNR=4.1 | | | | | | |
| WRA | Warramunga Arr | 23.74 | 159 | P | P | 05 19 54.9 | -0.4 |
| WB2 | Warramunga Arr | 23.74 | 159 | P | P | 05 19 55.9 | +0.5 |
| WR0 | Warramunga Arr | 23.83 | 158 | P | P | 05 19 56.8 | +0.7 |
| MBWA | Marble Bar | 23.89 | 193 | P | P | 05 19 56.7 | +0.1 |
| COEN | Coen | 23.90 | 133 | P | P | 05 19 56.5 | -0.3 |
| COEN | | | | IAmb | IAmb | 05 19 58.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| COEN | Coen | 23.90 | 133 | P | P | 05 19 57.7 | +0.9 |
| PSA00 | Pilbara Seismi | 24.26 | 193 | P | P | 05 19 59.9 | -0.1 |
| PSA00 | | | | IAmb | IAmb | 05 20 01.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 24.26 | 193 | P | P | 05 19 60.0 | -0.1 |
| PSA00 | | | | IAmb | IAmb | 05 20 02.5 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 24.26 | 193 | P | P | 05 20 00.3 | +0.3 |
| PMG | Port Moresby | 24.62 | 118 | P | P | 05 20 03.3 | 0.0 |
| | comp=Z,21nm,0.8s,baz=294,slow=10.0,SNR=2.4 | | | | | | |
| JOW | Kunigami | 24.62 | 6 | P | P | 05 20 04.1 | +0.9 |
| | comp=Z,21nm,0.5s,baz=192,slow=6.8,SNR=5.1 | | | | | | |
| QIS | Mount Isa | 26.61 | 149 | P | P | 05 20 22.7 | +1.4 |
| AS31 | Alice Springs | 27.06 | 163 | P | P | 05 20 25.4 | +0.2 |
| ASAR | Alice Springs | 27.06 | 163 | P | P | 05 20 25.9 | +0.6 |
| | comp=Z,4.1nm,0.5s,baz=334,slow=7.3,SNR=60 | | | | | | |
| ASAR | | | | PcP | PcP | 05 23 43.7 | +0.9 |
| | comp=Z,1.8nm,0.7s,baz=342,slow=2.3,SNR=7.0 | | | | | | |
| ASAR | | | | S | S | 05 24 54.2 | +2.0 |
| | comp=Z,0.8nm,0.7s,baz=345,slow=19,SNR=4.3 | | | | | | |
| ASAR | | | | ScP | ScP | 05 27 10.1 | +0.9 |
| | comp=Z,0.3nm,0.5s,baz=352,slow=3.7,SNR=2.3 | | | | | | |
| ASAR | Alice Springs | 27.06 | 163 | P | P | 05 20 25.3 | 0.0 |
| MTSU | Mount Surprise | 27.54 | 138 | P | P | 05 20 30.1 | +0.4 |
| CTA | Charters Tower | 30.21 | 138 | P | P | 05 20 55.3 | +2.0 |
| CTAO | Charters Tower | 30.21 | 138 | P | P | 05 20 52.5 | -0.8 |
| CTAO | | | | IAmb | IAmb | 05 20 56.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| CTAO | Charters Tower | 30.21 | 138 | P | P | 05 20 55.3 | +2.0 |
| NJ2 | Nanjing | 30.29 | 349 | eP | P | 05 20 54.8 | +1.1 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| OOD | Oodnadatta | 31.47 | 162 | P | P | 05 21 05.5 | +1.3 |
| MORW | Morawa | 32.38 | 195 | P | P | 05 21 12.2 | +0.1 |
| MORW | | | | IAmb | IAmb | 05 21 13.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| FORT | Forrest | 32.93 | 176 | P | P | 05 21 17.4 | +0.5 |
| FORT | Forrest | 32.93 | 176 | P | P | 05 21 17.5 | +0.5 |
| PZH | PanZhiHua | 33.10 | 319 | P | P | 05 21 20.5 | +1.8 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| USRK | **Ussuriysk Ar.** | **42.20** | **7** | P | | **P** | **05 22 35.0** | **+0.3** |
| | comp=Z,6.1nm,0.6s,baz=187,slow=7.0,SNR=10 | | | | | | | |
| USRK | **Ussuriysk Ar.** | **42.20** | **7** | P | | **P** | **05 22 33.9** | **-0.8** |
| **MDJ** | **Mudanjiang** | **42.37** | **4** | P | | **P** | **05 22 35.6** | **-0.5** |
| MDJ | | | | IAmb | | IAmb | 05 22 37.4 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **MDJ** | **Mudanjiang** | **42.37** | **4** | P | | **P** | **05 22 36.3** | **+0.2** |
| MDJ | | | | pP | | pP | 05 23 06.5 | -2.7 |
| MDJ | | | | sP | | sP | 05 23 20.3 | -5.9 |
| MDJ | | | | PcS | | **PcS** | **05 28 17.6** | **-1.0** |
| MDJ | | | | S | | **S** | **05 28 51.3** | **+5.2** |
| MDJ | | | | sS | | sS | 05 29 41.8 | -1.9 |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,230nm,4.4s | | | | | | | |
| **MDJ** | **Mudanjiang** | **42.37** | **4** | P | | **P** | **05 22 36.3** | **+0.2** |
| **BNX** | **BinXian** | **43.37** | **2** | ⇓P | | **P** | **05 22 43.9** | **-0.1** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,460nm,4.4s | | | | | | | |
| **CAN** | **Canberra** | **43.43** | **151** | P | | **P** | **05 22 46.1** | **+1.3** |
| CAN | | | | IAmb | | IAmb | 05 22 48.2 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **GTA** | **Gaotai** | **43.70** | **331** | *e*P | | **P** | **05 22 46.4** | **-0.6** |
| GTA | | | | pP | | pwP | 05 23 23.4 | -1.2 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **ASAJ** | **Asahikawa** | **44.42** | **18** | P | | **P** | **05 22 53.4** | **+0.9** |
| | comp=Z,8.3nm,0.7s,baz=216,slow=8.7,SNR=2.1 | | | | | | | |
| **SONM** | **Songino Array** | **48.29** | **343** | P | | **P** | **05 23 21.6** | **-1.2** |
| | comp=Z,1.9nm,0.9s,baz=165,slow=7.2,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **48.29** | **343** | P | | **P** | **05 23 21.6** | **-1.2** |
| **WMQ** | **Urumqi** | **53.18** | **326** | *e*P | | **P** | **05 24 01.8** | **+2.4** |
| **PETK** | **Petropavlovsk-** | **57.33** | **23** | P | | **P** | **05 24 30.1** | **+1.2** |
| | comp=Z,2.8nm,0.6s,baz=204,slow=4.5,SNR=5.8 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.33** | **23** | P | | **P** | **05 24 28.8** | **-0.1** |
| **MK31** | **Makanchi Array** | **58.01** | **326** | P | | **P** | **05 24 32.3** | **-1.5** |
| MK31 | | | | IAmb | | IAmb | 05 24 34.2 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.01** | **326** | P | | **P** | **05 24 32.6** | **-1.2** |
| | comp=Z,3.2nm,0.5s,baz=121,slow=8.3,SNR=53 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **05 25 23.8** | **-0.3** |
| | comp=Z,3.0nm,0.6s,baz=120,slow=4.3,SNR=16 | | | | | | | |
| **MAKZ** | **Makanchi** | **58.19** | **326** | P | | **P** | **05 24 34.0** | **-1.0** |
| MAKZ | | | | IAmb | | IAmb | 05 24 35.3 | |
| | comp=Z,3.9nm,0.6s | | | | | | | |
| **YAK** | **Yakutsk** | **59.74** | **2** | P | | **P** | **05 24 44.6** | **-0.8** |
| **MA2** | **Magadan** | **60.49** | **15** | P | | **P** | **05 24 51.0** | **+0.5** |
| **ZALV** | **Zalesovo Beam** | **61.30** | **334** | P | | **P** | **05 24 53.5** | **-2.7** |
| | comp=Z,0.7nm,0.4s,baz=148,slow=8.7,SNR=3.8 | | | | | | | |
| **KURK** | **Kurchatov** | **62.27** | **328** | P | | **P** | **05 25 00.9** | **-1.7** |
| KURK | | | | IAmb | | IAmb | 05 25 01.9 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **URZ** | **Urewera** | **62.42** | **136** | P | | **P** | **05 25 05.7** | **+1.9** |
| | comp=Z,12nm,0.8s,baz=248,slow=11,SNR=2.5 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **62.42** | **137** | P | | **P** | **05 25 04.8** | **+0.8** |
| BKZ | | | | IAmb | | IAmb | 05 25 06.8 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **TIXI** | **Tiksi** | **69.35** | **1** | P | | **P** | **05 25 47.1** | **-0.4** |
| TIXI | | | | IAmb | | IAmb | 05 25 47.9 | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **NRIK** | **Norilʹsk** | **71.55** | **347** | P | | **P** | **05 26 00.3** | **-0.6** |
| | comp=Z,4.6nm,0.5s,baz=114,slow=5.9,SNR=9.6 | | | | | | | |
| **NRIK** | **Norilʹsk** | **71.55** | **347** | P | | **P** | **05 26 00.8** | **-0.2** |
| NRIK | | | | IAmb | | IAmb | 05 26 01.6 | |
| | comp=Z,5.8nm,0.6s | | | | | | | |
| ABKAR | **Akbulak array** | **72.44** | **321** | P | | **P** | **05 26 05.3** | **-1.3** |
| ARCES | **ARCESS Array B** | **91.37** | **340** | P | | **P** | **05 27 43.5** | **-1.7** |
| | comp=Z,2.8nm,0.8s,baz=60,slow=4.8,SNR=6.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **92.49** | **332** | P | | **P** | **05 27 48.9** | **-1.6** |
| | comp=Z,1.9nm,0.5s,baz=64,slow=6.3,SNR=11 | | | | | | | |
| **MNK** | **Minsk** | **92.54** | **325** | *i* P | | **P** | **05 27 50.8** | **-0.1** |
| | comp=E,3.0nm,0.9s | | | | | | | |
| MNK | | | | *i* P | | **P** | **05 27 50.8** | **-0.1** |
| | comp=N,23nm,0.8s | | | | | | | |
| MNK | | | | *i* P | | **P** | **05 27 50.8** | **-0.1** |
| | comp=Z,9.0nm,0.8s,baz=82 | | | | | | | |
| MNK | | | | *i* PP | | **PP** | **05 31 33.4** | **-0.6** |
| MNK | | | | *i* PPP | | PPP | 05 33 39.7 | |
| MNK | | | | *i* S | | **SKSac** | **05 38 09.3** | **-1.0** |
| MNK | | | | *i* SS | | **SS** | **05 44 56.7** | **-0.4** |
| MNK | | | | *i* SSS | | SSS | 05 48 37.0 | |
| MNK | | | | *i* LRM | | MLR | 06 10 06.2 | |
| | comp=E,71nm,20.3s | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 06 10 06.5 | |
| | comp=N,2μm,20.3s | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 06 10 15.7 | |
| | comp=Z,200nm,24.3s | | | | | | | |
| **NOA** | **NORSAR Array B** | **99.50** | **333** | P | | **Pdif** | **05 28 20.6** | **-1.8** |
| | comp=Z,0.6nm,0.6s,baz=68,slow=4.5,SNR=2.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.05** | **287** | PKP | | **PKiKP** | **05 33 34.1** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=110,slow=2.0,SNR=1.7 | | | | | | | |

**IDC 16 05:31:55.1±2.9, 53°.62N×88°.10E, h0km, mb1 2.5/1, mb1mx1.8/51, mbtmp2.5/1, ML2.2/2, Error ellipse: s-maj=24.8km s-min=18.3km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.97** | **281** | *i* | | | 05 45 48.3 | |
| | baz=96,slow=341,SNR=2.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.97** | **281** | Pn | | Pn | 05 32 30.6 | +0.9 |
| | 0.8nm,0.3s,baz=102,slow=15,SNR=15 | | | | | | | |
| ZALV | | | | Lg | | Lg | 05 32 57.2 | |
| | 1.6nm,0.3s,baz=103,slow=24,SNR=14 | | | | | | | |
| KURBB | **Kurchatov Arra** | **6.61** | **247** | Pn | | Pn | 05 33 33.5 | +0.1 |
| | 0.0nm,0.3s,baz=62,slow=14,SNR=5.6 | | | | | | | |
| KURBB | | | | Sn | | Sn | 05 34 49.4 | -0.1 |
| | 0.0nm,0.3s,baz=298,slow=37,SNR=1.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 05 35 23.3 | |
| | 0.0nm,0.3s,baz=252,slow=41,SNR=1.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.78** | **211** | Pn | | Pn | 05 33 50.6 | +1.1 |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=4.9 | | | | | | | |
| MKAR | | | | Lg | | Lg | 05 36 04.9 | |
| | 0.3nm,0.3s,baz=159,slow=24,SNR=12 | | | | | | | |

*JMA **16** 05:33:01.9±0.1, 40°.35N×142°.08E, h50km±1km, M3.8*
*JMA Felt II J1.*
*IDC **16** 05:33:04.4±2.4, 40°.44N×142°.00E, h73km±18km, mb3.4/8, mb1 3.5/11, mb1mx3.3/46, mbtmp3.7/11, MS3.3/1, Ms1 3.3/1, ms1mx2.3/51, Error ellipse: s-maj=28.9km s-min=15.5km az=110.0*

**ISC 16 05:33:02.0±1.0, 40°.38N±0°.04×142°.03E±0°.08, h50km±7km, n29, σ1°.01/34, mb3.6/8, 2C-5D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JKEN** | **Kujiedanarisaw** | **0.30** | **235** | ⇑P | | **Pn** | **05 33 11.3** | **+0.2** |
| JKEN | | | | S | | **Sn** | **05 33 17.7** | **+0.2** |
| **JANG** | **Nango** | **0.39** | **270** | ⇓P | | **Pn** | **05 33 12.3** | **+0.3** |
| JANG | | | | S | | **Sn** | **05 33 19.6** | **+0.4** |
| **JTH** | **Tanohata** | **0.46** | **196** | ⇑P | | **Pn** | **05 33 12.5** | **-0.2** |
| JTH | | | | S | | **Sn** | **05 33 20.0** | **-0.4** |
| **JKZ** | **Kuzumaki** | **0.66** | **234** | ⇓P | | **Pn** | **05 33 15.7** | **+0.4** |
| JKZ | | | | S | | **Sn** | **05 33 25.3** | **+0.4** |
| **JARK** | **Aomorirokkasho** | **0.81** | **322** | ⇓P | | **Pn** | **05 33 17.1** | **0.0** |
| JARK | | | | S | | **Sn** | **05 33 28.1** | **0.0** |
| **JTM** | **Tenmabayashi** | **0.84** | **300** | ⇓P | | **Pn** | **05 33 17.7** | **+0.2** |
| JTM | | | | S | | **Sn** | **05 33 29.1** | **+0.2** |
| **JOM** | **Ohasama** | **1.07** | **212** | P | | **Pn** | **05 33 20.7** | **+0.1** |
| JOM | | | | S | | **Sn** | **05 33 34.2** | **-0.1** |
| **JAH** | **Hinai** | **1.08** | **260** | P | | **Pn** | **05 33 21.4** | **+0.6** |
| JAH | | | | S | | **Sn** | **05 33 35.6** | **+0.9** |
| **JOT** | **Ohata** | **1.25** | **324** | ⇓P | | **Pn** | **05 33 23.1** | **0.0** |
| JOT | | | | eS | | **Sn** | **05 33 38.9** | **+0.1** |
| **JRG** | **Rokugo** | **1.45** | **228** | P | | **Pn** | **05 33 26.7** | **+0.9** |
| JRG | | | | eS | | **Sn** | **05 33 45.7** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.76** | **6** | P | | **Pn** | **05 33 58.6** | **+1.2** |
| | 5.7nm,0.3s,baz=233,slow=5.1,SNR=11 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **05 34 42.4** | **+2.0** |
| | 2.7nm,0.3s,baz=55,slow=33,SNR=5.7 | | | | | | | |
| **MAT** | **Matsushiro** | **4.86** | **219** | P | | **Pn** | **05 34 14.9** | **+2.3** |
| **MJAR** | **Matsushiro Arr** | **4.86** | **219** | P | | **Pn** | **05 34 15.4** | **+2.8** |
| | 0.2nm,0.3s,baz=28,slow=13,SNR=9.9 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.36** | **300** | P | | **Pn** | **05 35 02.1** | **+1.6** |
| | baz=100,slow=16,SNR=5.8 | | | | | | | |
| **JOW** | **Kunigami** | **17.68** | **224** | LR | | LR | 05 44 04.0 | |
| | comp=Z,103nm,20.4s,baz=342,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **26.47** | **298** | P | | **P** | **05 38 34.7** | **+0.3** |
| | 0.3nm,0.3s,baz=85,slow=8.2,SNR=5.5 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.60** | **127** | T | | T | 06 10 47.2 | |
| | baz=320,slow=75,SNR=24 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.61** | **127** | T | | T | 06 10 44.5 | |
| | baz=320,slow=75,SNR=23 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.62** | **127** | T | | T | 06 10 42.4 | |
| | baz=320,slow=75,SNR=16 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.42** | **129** | T | | T | 06 11 45.0 | |
| | baz=322 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.42** | **129** | T | | T | 06 11 30.2 | |
| | baz=322 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.43** | **129** | T | | T | 06 11 43.3 | |
| | baz=322 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.09** | **310** | P | | **P** | **05 40 31.8** | **-0.6** |
| | 2.0nm,0.4s,baz=97,slow=8.4,SNR=10 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **05 42 35.6** | **-0.5** |
| | 0.6nm,0.4s,baz=64,slow=3.4,SNR=3.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.83** | **299** | P | | **P** | **05 40 54.6** | **-0.4** |
| | 0.6nm,0.5s,baz=85,slow=9.8,SNR=16 | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.43** | **188** | P | | **P** | **05 43 06.8** | **+0.3** |
| | 0.4nm,0.9s,baz=8.0,slow=6.8,SNR=1.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **60.69** | **31** | P | | **P** | **05 43 07.4** | **-0.3** |
| | 0.1nm,0.6s,baz=299,slow=6.6,SNR=2.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **66.09** | **332** | P | | **P** | **05 43 42.5** | **-0.9** |
| | 0.8nm,0.6s,baz=15,slow=7.9,SNR=4.0 | | | | | | | |
| **NOA** | **NORSAR Array B** | **71.30** | **337** | P | | **P** | **05 44 15.7** | **-0.2** |
| | 0.6nm,0.8s,baz=34,slow=6.7,SNR=2.0 | | | | | | | |
| AKASG | **Malin Array Be** | **71.96** | **322** | P | | **P** | **05 44 19.1** | **-0.9** |
| | 0.2nm,0.3s,baz=44,slow=7.1,SNR=4.0 | | | | | | | |

**IDC 16 05:33:18.6±6.3, 13°.96N×102°.92W, h0km, mb3.5/6, mb1 3.9/7, mb1mx3.5/43, mbtmp3.5/7, ML3.2/1, MS3.1/2, Ms1 3.1/2, ms1mx2.7/39, Error ellipse: s-maj=155.2km s-min=93.3km az=105.0, Off coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **15.32** | **358** | Pn | | Pn | 05 36 56.4 | +0.1 |
| | 0.0nm,0.3s,baz=171,slow=12,SNR=9.1 | | | | | | | |
| **ANMO** | **Albuquerque** | **21.14** | **352** | P | | P | 05 38 06.1 | +0.6 |
| | 0.3nm,0.3s,baz=171,slow=9.2,SNR=4.3 | | | | | | | |
| ANMO | | | | LR | | LR | 05 46 33.9 | |
| | comp=Z,29nm,21.0s,baz=160,slow=38 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **27.93** | **334** | P | | P | 05 39 11.7 | +0.8 |
| | 0.2nm,0.7s,baz=156,slow=12,SNR=1.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **29.27** | **350** | P | | P | 05 39 22.4 | -0.4 |
| | 0.3nm,0.7s,baz=187,slow=6.4,SNR=2.5 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.65** | **8** | LR | | LR | 05 56 03.8 | |
| | comp=Z,57nm,19.8s,baz=232,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.18** | **353** | P | | P | 05 42 08.7 | +0.5 |
| | 0.6nm,0.8s,baz=167,slow=7.2,SNR=11 | | | | | | | |
| **INK** | **Inuvik** | **57.78** | **347** | P | | P | 05 43 11.5 | +0.2 |
| | 1.2nm,0.8s,baz=143,slow=6.7,SNR=3.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **58.93** | **340** | P | | P | 05 43 18.4 | -1.0 |
| | 0.8nm,0.9s,baz=145,slow=4.2,SNR=7.3 | | | | | | | |

*IDC **16** 05:41:10.2±0.9, 20°.02S×70°.75W, h0km, mb3.8/6, mb1 4.0/8, mb1mx3.9/31, mbtmp3.9/8, ML3.7/2, MS3.1/4, Ms1 3.1/4, ms1mx2.8/62, Error ellipse: s-maj=27.1km s-min=15.7km az=62.0*
*NEIC **16** 05:41:10.8±2.0, 20°.15S±0°.04×70°.97W±0°.06, h4km±3km, Error ellipse: s-maj=8.4km s-min=5.6km az=61.0*
*GUC **16** 05:41:12.8±0.7, 20°.08S×70°.96W, h33km±3km, ML4.1*
*VAO **16** 05:41:34.6±2.1, 19°.44S×69°.89W, h162km±14km, mb3.9*

**ISC 16 05:41:13.3±2.0, 20°.07S±0°.03×70°.93W±0°.06, h26km±14km, n81, σ1°.53/84, mb4.0/5, 11C-3D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TA02** | **Huaiquique** | **0.77** | **105** | | | **Pn** | **05 41 26.6** | **-1.9** |
| **TA01** | **Diego Aracena** | **0.85** | **125** | | | **Pn** | **05 41 28.2** | **-1.5** |
| **HMBC** | **Humberstone** | **0.99** | **102** | ⇓*i*P | | **Pn** | **05 41 30.1** | **-1.5** |
| HMBC | | | | *i* S | | **Sn** | **05 41 44.0** | **-0.9** |
| HMBC | | | | IAML | | | 05 41 47.9 | |
| | comp=E,8μm,0.4s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.04** | **136** | | | **Pn** | **05 41 30.5** | **-1.8** |
| **PATCX** | **Punta Patache** | **1.04** | **136** | ⇓*i*P | | **Pn** | **05 41 30.7** | **-1.5** |
| PATCX | | | | *i* S | | **Sn** | **05 41 44.5** | **-1.4** |
| PATCX | | | | IAML | | | 05 41 51.7 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **PB11** | **IPOC Station P** | **1.23** | **76** | | | **Pn** | **05 41 33.7** | **-1.3** |
| **PB11** | **IPOC Station P** | **1.23** | **76** | ⇓*i*P | | **Pn** | **05 41 34.0** | **-1.0** |
| PB11 | | | | *i* S | | **Sn** | **05 41 50.8** | **-0.1** |
| PB11 | | | | IAML | | | 05 41 51.7 | |
| | comp=N,13μm,0.3s | | | | | | | |
| **PB12** | **IPOC Station P** | **1.56** | **21** | | | **Pn** | **05 41 38.6** | **-0.7** |
| **PB12** | **IPOC Station P** | **1.56** | **21** | ⇑*i*P | | **Pn** | **05 41 38.5** | **-0.9** |
| PB12 | | | | *e*S | | **Sn** | **05 41 58.8** | **+0.1** |
| PB12 | | | | IAML | | | 05 42 04.2 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **PB02** | **IPOC Station P** | **1.57** | **142** | | | **Pn** | **05 41 39.0** | **-0.6** |
| **PB02** | **IPOC Station P** | **1.57** | **142** | ⇑*i*P | | **Pn** | **05 41 39.0** | **-0.6** |
| PB02 | | | | *i* S | | **Sn** | **05 41 58.8** | **-0.4** |
| PB02 | | | | IAML | | | 05 42 08.5 | |
| | comp=N,5μm,0.5s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.66** | **126** | Pn | | **Pn** | **05 41 40.9** | **+0.1** |
| **PB01** | **IPOC Station P** | **1.66** | **126** | ⇑*i*P | | **Pn** | **05 41 40.5** | **-0.3** |
| PB01 | | | | *i* S | | **Sn** | **05 42 01.4** | **+0.1** |
| PB01 | | | | IAML | | | 05 42 08.9 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **PB08** | **IPOC Station P** | **1.67** | **93** | Pn | | **Pn** | **05 41 41.3** | **+0.1** |
| **PB08** | **IPOC Station P** | **1.67** | **93** | ⇑*i*P | | **Pn** | **05 41 40.8** | **-0.4** |
| PB08 | | | | *e*S | | **Sn** | **05 42 02.9** | **+1.0** |
| PB08 | | | | IAML | | | 05 42 05.9 | |
| | comp=E,6μm,0.8s | | | | | | | |
| **GO01** | **Chusmiza** | **1.68** | **76** | | | **Pn** | **05 41 41.6** | **+0.2** |
| **GO01** | **Chusmiza** | **1.68** | **76** | ⇑*i*P | | **Pn** | **05 41 41.0** | **-0.4** |
| GO01 | | | | *i* S | | **Sb** | **05 42 03.6** | **-1.0** |
| **AP01** | **Chacalluta** | **1.78** | **18** | Pn | | **Pn** | **05 41 41.9** | **-0.4** |
| **AP01** | **Chacalluta** | **1.78** | **18** | *e*P | | **Pn** | **05 41 41.8** | **-0.6** |
| AP01 | | | | *e*S | | **Sn** | **05 42 04.9** | **+0.8** |
| AP01 | | | | IAML | | | 05 42 14.8 | |
| | comp=E,6μm,0.5s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.91** | **150** | | | **Pn** | **05 41 43.9** | **-0.5** |
| **PB07** | **IPOC Station P** | **1.91** | **150** | ⇑*i*P | | **Pn** | **05 41 43.6** | **-0.8** |
| PB07 | | | | *i* S | | **Sb** | **05 42 12.1** | **+1.0** |
| PB07 | | | | IAML | | | 05 42 19.7 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **PB16** | **IPOC Station P** | **2.19** | **38** | Pn | | **Pn** | **05 41 48.2** | **-0.2** |
| **PB16** | **IPOC Station P** | **2.19** | **38** | ⇑*i*P | | **Pn** | **05 41 48.3** | **-0.2** |
| PB16 | | | | *e*S | | **Sb** | **05 42 18.0** | **-1.4** |
| PB16 | | | | IAML | | | 05 42 24.5 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **PB03** | **IPOC Station P** | **2.25** | **151** | | | **Pn** | **05 41 48.3** | **-0.8** |
| **PB03** | **IPOC Station P** | **2.25** | **151** | ⇑*i*P | | **Pn** | **05 41 48.2** | **-0.8** |
| PB03 | | | | *e*S | | **Sb** | **05 42 22.7** | **+1.8** |
| PB03 | | | | IAML | | | 05 42 33.6 | |
| | comp=E,1μm,0.7s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.33** | **138** | | | **Pn** | **05 41 50.6** | **+0.6** |
| **PB09** | **IPOC Station P** | **2.33** | **138** | ⇑*i*P | | **Pn** | **05 41 50.8** | **+0.7** |
| PB09 | | | | *e*S | | **Sb** | **05 42 20.6** | **-2.5** |
| PB09 | | | | IAML | | | 05 42 37.7 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.36** | **162** | | | **Pn** | **05 41 49.4** | **-1.1** |
| **PB04** | **IPOC Station P** | **2.36** | **162** | ⇑*i*P | | **Pn** | **05 41 49.5** | **-1.1** |
| PB04 | | | | *e*S | | **Sb** | **05 42 22.5** | **-1.7** |
| **PB06** | **IPOC Station P** | **2.91** | **155** | | | **Pn** | **05 41 56.8** | **-1.3** |
| **PB06** | **IPOC Station P** | **2.91** | **155** | ⇑*i*P | | **Pn** | **05 41 57.0** | **-1.0** |
| PB06 | | | | *e*S | | **Sn** | **05 42 35.2** | **+2.9** |
| PB06 | | | | IAML | | | 05 42 54.5 | |
| | comp=N,544nm,0.5s | | | | | | | |
| **LVC** | **Limon Verde** | **3.15** | **144** | Pn | | **Pn** | **05 42 02.4** | **+0.8** |
| | comp=N,2.6nm,0.3s,baz=321,slow=11,SNR=54 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **05 42 39.0** | **+0.6** |
| | comp=N,41nm,0.3s,baz=52,slow=17,SNR=5.8 | | | | | | | |
| LVC | | | | Lg | | Lg | 05 42 48.9 | |
| | comp=N,45nm,0.3s,baz=159,slow=7.5,SNR=13 | | | | | | | |
| LVC | | | | LR | | LR | 05 42 56.2 | |
| | comp=N,60nm,18.6s,baz=320,slow=34 | | | | | | | |
| **PB15** | **IPOC Station P** | **3.40** | **157** | | | **Pn** | **05 42 04.0** | **-0.9** |
| **PB10** | **IPOC Station P** | **3.44** | **174** | Pn | | **Pn** | **05 42 03.5** | **-1.8** |
| **PB14** | **IPOC Station P** | **4.56** | **174** | Pn | | **Pn** | **05 42 19.8** | **-1.1** |
| **LPAZ** | **La Paz** | **4.61** | **36** | Pn | | Pb | 05 42 27.7 | -6.1 |
| | comp=N,1.1nm,0.3s,baz=200,slow=6.5,SNR=14 | | | | | | | |
| **AC02** | **Maricunga** | **6.93** | **167** | Pn | | **Pn** | **05 42 53.1** | **-0.6** |
| **SIV** | **San Ignacio** | **10.21** | **68** | Pn | | **Pn** | **05 43 38.0** | **-0.3** |
| | comp=N,1.9nm,0.3s,baz=261,slow=9.0,SNR=30 | | | | | | | |
| SIV | | | | Sn | | **Sn** | **05 45 35.5** | **+3.4** |
| | baz=141,slow=18,SNR=1.6 | | | | | | | |
| SIV | | | | LR | | LR | 05 48 06.6 | |
| | comp=N,254nm,18.2s,baz=302,slow=42 | | | | | | | |
| **VILB** | **Vilhena** | **12.48** | **57** | *e*P | | **Pn** | **05 44 11.6** | **+2.3** |
| **CPUP** | **Villa Florida** | **13.96** | **119** | LR | | LR | 05 51 12.5 | |
| | comp=N,105nm,19.7s,baz=26,slow=44 | | | | | | | |
| **SALV** | **Santo Antonio** | **15.07** | **76** | *e*P | | **Pn** | **05 44 46.1** | **+1.5** |
| **H03N1** | **Juan Fernandez** | **15.10** | **206** | T | | T | 06 00 28.1 | |
| | baz=32,slow=72,SNR=30 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.10** | **207** | T | | T | 06 00 30.9 | |
| | baz=32,slow=72,SNR=28 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.11** | **206** | T | | T | 06 00 27.2 | |
| | baz=32,slow=72,SNR=26 | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **15.82** | **4** | *e*P | | **P** | **05 45 00.5** | **+2.5** |
| **PDRB** | **Porto dos Gac** | **16.03** | **60** | *e*P | | **P** | **05 44 57.9** | **-2.4** |
| **CLDB** | **Colider** | **17.20** | **60** | *e*P | | **Pn** | **05 45 10.9** | **-1.0** |
| **PTGB** | **Pitanga** | **18.04** | **108** | *e*P | | **P** | **05 45 27.6** | **+5.0** |
| **PCMB** | **Pacaembu** | **18.44** | **98** | *e*P | | **Pn** | **05 45 29.3** | **+2.1** |
| **ARAG** | **Araguaiana, MT** | **18.70** | **80** | *e*P | | **P** | **05 45 28.0** | **-1.8** |
| **ITRB** | **Iturama** | **19.34** | **92** | *e*P | | **Pn** | **05 45 38.7** | **+0.6** |
| **MACA** | **Manacapuru-AM** | **19.55** | **32** | *e*P | | **P** | **05 45 38.1** | **-1.1** |
| **NPGB** | **Novo Progresso** | **19.89** | **52** | *e*P | | **P** | **05 45 42.0** | **-0.9** |
| **SNDB** | **Serra Nova Dou** | **20.50** | **70** | *e*P | | **P** | **05 45 47.1** | **-2.4** |
| **PLCA** | **Paso Flores** | **20.60** | **179** | P | | Pn | 05 45 50.8 | -2.0 |
| | comp=N,1.5nm,0.8s,baz=355,slow=14,SNR=3.2 | | | | | | | |
| **PLCA** | **Paso Flores** | **20.60** | **179** | IAmb | | IAmb | 05 46 07.5 | |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| **ITTB** | **Itaituba** | **21.51** | **45** | *e*P | | **P** | **05 45 57.9** | **-2.5** |
| **PTGA** | **Pitinga** | **22.01** | **30** | P | | **P** | **05 46 05.4** | **-0.4** |
| | comp=Z,2.8nm,0.5s,baz=214,slow=10,SNR=7.8 | | | | | | | |
| PTGA | | | | LR | | LR | 05 55 17.6 | |
| | comp=Z,86nm,18.1s,baz=232,slow=39 | | | | | | | |
| **BDFB** | **Brasilia** | **22.24** | **82** | P | | **P** | **05 46 06.7** | **-1.7** |
| | comp=Z,1.3nm,0.7s,baz=258,slow=12,SNR=3.7 | | | | | | | |
| **BDFB** | **Brasilia** | **22.24** | **82** | IAmb | | IAmb | 05 46 23.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **PEXB** | **Peixe** | **23.12** | **73** | *e*P | | **P** | **05 46 17.0** | **-0.5** |
| **PARB** | **Paraibuna** | **23.72** | **102** | *e*P | | **P** | **05 46 24.6** | **+1.1** |
| **BOAV** | **Boa Vista** | **24.55** | **26** | *e*P | | **P** | **05 46 30.9** | **-0.2** |
| **SMTB** | **Santa Maria do** | **25.16** | **67** | *e*P | | **P** | **05 46 35.2** | **-1.4** |
| **JANB** | **Januaria** | **25.84** | **83** | *e*P | | **P** | **05 46 40.5** | **-2.4** |
| **SDBA** | **SAO DESIDERIO** | **26.09** | **77** | *e*P | | **P** | **05 46 43.4** | **-1.8** |
| **MCPB** | **Macapa, AP** | **26.92** | **46** | *e*P | | **P** | **05 46 51.8** | **-0.8** |
| **NVAR** | **Mina Array Bea** | **73.22** | **323** | P | | **P** | **05 52 44.0** | **+1.7** |
| | comp=Z,0.3nm,0.8s,baz=147,slow=5.4,SNR=2.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.67** | **71** | P | | **P** | **05 53 12.4** | **-1.3** |
| | comp=Z,5.2nm,1.0s,baz=253,slow=5.2,SNR=19 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.67** | **71** | P | | **P** | **05 53 12.5** | **-1.1** |
| TORD | | | | IAmb | | IAmb | 05 53 13.5 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.23** | **341** | P | | **P** | **05 54 07.1** | **+0.7** |
| | comp=Z,1.0nm,0.8s,baz=138,slow=4.9,SNR=16 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **125.81** | **279** | T | | T | 08 19 38.8 | |
| | baz=101,slow=74,SNR=23 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **125.82** | **279** | T | | T | 08 19 41.7 | |
| | baz=101,slow=74,SNR=17 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **125.83** | **279** | T | | T | 08 19 40.9 | |
| | baz=101,slow=74,SNR=16 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **125.86** | **280** | T | | T | 08 19 49.1 | |
| | baz=102,slow=74,SNR=10 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **125.88** | **280** | T | | T | 08 19 42.7 | |
| | baz=102,slow=74,SNR=8.6 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **125.88** | **280** | T | | T | 08 19 48.7 | |
| | baz=102,slow=74,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **130.24** | **210** | PKP | | **PKiKP** | **06 00 23.1** | **+0.3** |
| | comp=Z,0.6nm,0.9s,baz=160,slow=3.0,SNR=3.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.53** | **33** | PKPbc | | **PKiKP** | **06 00 50.1** | **-3.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1.8nm,0.3s,baz=200,slow=15,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.52** | **201** | P | **Pn** | **06 36 35.0** | **-2.7** |
| | 6.7nm,0.3s,baz=37,slow=12,SNR=63 | | | | | | |
| FITZ | | | | S | Sn | 06 38 43.6 | -12 |
| | 3.1nm,0.3s,baz=212,slow=22,SNR=6.0 | | | | | | |
| FITZ | | | | LR | LR | 06 41 39.9 | |
| | comp=Z,32nm,19.1s,baz=106,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.52** | **201** | | **Pn** | **06 36 34.4** | **-3.4** |
| **PLAI** | **Plampang** | **12.66** | **258** | P | **Pn** | **06 36 40.1** | **+0.3** |
| | 14nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **13.89** | **164** | Pn | **Pn** | **06 36 52.7** | **-3.1** |
| **WRAB** | **Tennant Creek** | **14.04** | **164** | | **Pn** | **06 36 54.1** | **-3.7** |
| **WRA** | **Warramunga Arr** | **14.05** | **164** | P | **Pn** | **06 36 54.7** | **-3.1** |
| | 7.8nm,0.3s,baz=346,slow=13,SNR=114 | | | | | | |
| WRA | | | | S | Sn | 06 39 20.6 | -12 |
| | 7.5nm,0.3s,baz=353,slow=17,SNR=10 | | | | | | |
| WRA | | | | LR | LR | 06 42 03.4 | |
| | comp=Z,56nm,19.1s,baz=191,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.05** | **164** | Pn | **Pn** | **06 36 53.3** | **-4.5** |
| **WB2** | **Warramunga Arr** | **14.05** | **164** | Pn | **Pn** | **06 36 54.8** | **-3.0** |
| **WR0** | **Warramunga Arr** | **14.12** | **163** | Pn | **Pn** | **06 36 54.9** | **-3.8** |
| **COEN** | **Coen** | **14.73** | **122** | Pn | **Pn** | **06 37 07.7** | **+1.1** |
| **AS31** | **Alice Springs** | **17.54** | **169** | | **P** | **06 37 41.0** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 06 37 44.7 | |
| | comp=Z,14nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **17.54** | **169** | P | **P** | **06 37 39.8** | **-1.4** |
| | comp=Z,4.4nm,0.3s,baz=359,slow=10,SNR=96 | | | | | | |
| ASAR | | | | S | Sn | 06 40 46.4 | -11 |
| | comp=Z,1.8nm,0.3s,baz=349,slow=25,SNR=9.2 | | | | | | |
| **ASAR** | **Alice Springs** | **17.54** | **169** | | **P** | **06 37 40.9** | **-0.2** |
| **MBWA** | **Marble Bar** | **17.92** | **214** | | **P** | **06 37 44.2** | **-1.1** |
| MBWA | | | | IAmb | IAmb | 06 37 59.6 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.19** | **213** | Pn | **Pn** | **06 37 49.2** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 06 37 56.4 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **20.63** | **133** | P | **P** | **06 38 14.2** | **-0.5** |
| | comp=Z,2.7nm,0.6s,baz=319,slow=13,SNR=3.5 | | | | | | |
| **FORT** | **Forrest** | **24.37** | **185** | P | **P** | **06 38 53.2** | **+1.1** |
| **MORW** | **Morawa** | **26.30** | **209** | P | **P** | **06 39 10.0** | **+0.5** |
| MORW | | | | IAmb | IAmb | 06 39 13.6 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **26.84** | **169** | P | **P** | **06 39 14.9** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 06 39 41.4 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **27.48** | **159** | P | **P** | **06 39 21.6** | **+1.6** |
| **DZM** | **Mont Dzumac** | **38.20** | **118** | P | **P** | **06 40 54.3** | **+0.7** |
| | comp=Z,1.9nm,0.5s,baz=266,slow=13,SNR=6.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **38.20** | **118** | IAmb | IAmb | 06 41 03.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **57.95** | **341** | P | **P** | **06 43 26.0** | **+0.8** |
| | comp=Z,0.3nm,0.4s,baz=157,slow=5.7,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **57.95** | **341** | IAmb | IAmb | 06 43 29.9 | |
| | comp=Z,3.3nm,1.5s | | | | | | |
| **MK31** | **Makanchi Array** | **67.88** | **327** | P | **P** | **06 44 31.9** | **+0.9** |
| **MKAR** | **Makanchi Array** | **67.88** | **327** | P | **P** | **06 44 32.0** | **+1.1** |
| | comp=Z,1.5nm,0.4s,baz=114,slow=7.8,SNR=43 | | | | | | |
| **MAKZ** | **Makanchi** | **68.06** | **326** | P | **P** | **06 44 32.9** | **+0.9** |
| MAKZ | | | | IAmb | IAmb | 06 44 42.5 | |
| | comp=Z,3.3nm,1.4s | | | | | | |

*IDC* ***16*** *06:36:04.6±0.9, 53°.03N×163°.20E, h0km, mb3.6/7, mb1 4.0/9, mb1mx3.6/46, mbtmp3.8/9, ML3.9/2, Error ellipse: s-maj=33.4km s-min=20.6km az=155.0*

*KRSC* ***16*** *06:36:05.1±1.7, 53°.22N×163°.06E, h63km±34km, ML4.4*

*MOS* ***16*** *06:36:10.0±0.8, 53°.37N×162°.69E, h68km, mb4.4/3, Error ellipse: s-maj=7.6km s-min=5.0km az=103.0*

**ISC 16 06:36:05.6±3.3, 53°.17N±0°.04×163°.18E±0°.04, h13**km±20km**, n93**,σ2**s14**/140**, mb3.9**/10**, 2C, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **1.64** | **329** | PN | | **Pn** | | **06 36 32.6** | **-1.4** |
| MKZ | | | | S | | **Sn** | | **06 36 50.9** | **-3.9** |
| **MKZ** | **Mys Kozlova** | **1.64** | **329** | *e*P | | **Pn** | | **06 36 32.6** | **-1.4** |
| MKZ | | | | *e*S | | **Sn** | | **06 36 50.9** | **-3.9** |
| **SPN** | **Mys Shipunski** | **1.90** | **269** | PN | | **Pn** | | **06 36 36.9** | **-0.8** |
| SPN | | | | S | | **Sn** | | **06 36 57.7** | **-3.8** |
| **SPN** | **Mys Shipunski** | **1.90** | **269** | *i* P | | **Pn** | | **06 36 36.9** | **-0.8** |
| SPN | | | | *e*S | | **Sn** | | **06 36 57.7** | **-3.8** |
| **NLC** | **Nalytchevo** | **2.31** | **272** | PN | | **Pn** | | **06 36 42.7** | **-0.5** |
| NLC | | | | *e*S | | **Sn** | | **06 37 08.6** | **-2.8** |
| **NLC** | **Nalytchevo** | **2.31** | **272** | *e*P | | **Pn** | | **06 36 42.7** | **-0.5** |
| NLC | | | | *e*S | | **Sn** | | **06 37 08.6** | **-2.8** |
| **KII** | **Karymskiy** | **2.39** | **293** | PN | | **Pn** | | **06 36 43.4** | **-1.0** |
| KII | | | | S | | **Sn** | | **06 37 09.9** | **-3.6** |
| **KII** | **Karymskiy** | **2.39** | **293** | *e*P | | **Pn** | | **06 36 43.4** | **-1.0** |
| KII | | | | *e*S | | **Sn** | | **06 37 09.9** | **-3.6** |
| **SDLR** | **Sedlovina** | **2.59** | **274** | PN | | **Pn** | | **06 36 47.0** | **-0.2** |
| **SDLR** | **Sedlovina** | **2.59** | **274** | *i* P | | **Pn** | | **06 36 47.0** | **-0.2** |
| **TUMD** | **Tumrok D** | **2.61** | **322** | *e*P | | **Pn** | | **06 36 46.6** | **-0.9** |
| TUMD | | | | *e*S | | **Sn** | | **06 37 14.8** | **-4.2** |
| **BKI** | **Bering** | **2.62** | **38** | PN | | **Pn** | | **06 36 45.6** | **-1.9** |
| BKI | | | | S | | **Sn** | | **06 37 15.6** | **-3.4** |
| **BKI** | **Bering** | **2.62** | **38** | *e*P | | **Pn** | | **06 36 45.6** | **-1.9** |
| BKI | | | | *e*S | | **Sn** | | **06 37 15.6** | **-3.4** |
| **UGLR** | **Uglovaya** | **2.62** | **273** | PN | | **Pn** | | **06 36 47.8** | **+0.2** |
| UGLR | | | | S | | **Sn** | | **06 37 17.0** | **-2.3** |
| **UGLR** | **Uglovaya** | **2.62** | **273** | *e*P | | **Pn** | | **06 36 47.8** | **+0.2** |
| UGLR | | | | *e*S | | **Sn** | | **06 37 17.0** | **-2.3** |
| **SMAR** | **Somma** | **2.63** | **274** | PN | | **Pn** | | **06 36 47.5** | **-0.4** |
| SMAR | | | | S | | **Sn** | | **06 37 16.5** | **-3.3** |
| **SMAR** | **Somma** | **2.63** | **274** | *e*P | | **Pn** | | **06 36 47.5** | **-0.4** |
| SMAR | | | | *e*S | | **Sn** | | **06 37 16.5** | **-3.3** |
| **AVH** | **Avacha** | **2.67** | **274** | PN | | **Pn** | | **06 36 48.5** | **+0.2** |
| AVH | | | | S | | **Sn** | | **06 37 18.6** | **-2.0** |
| **AVH** | **Avacha** | **2.67** | **274** | *i* P | | **Pn** | | **06 36 48.5** | **+0.2** |
| AVH | | | | *e*S | | **Sn** | | **06 37 18.6** | **-2.0** |
| **DALK** | **Dalny** | **2.67** | **269** | PN | | **Pn** | | **06 36 47.7** | **-0.5** |
| DALK | | | | S | | **Sn** | | **06 37 17.5** | **-2.9** |
| **DALK** | **Dalny** | **2.67** | **269** | *e*P | | **Pn** | | **06 36 47.7** | **-0.5** |
| DALK | | | | *e*S | | **Sn** | | **06 37 17.5** | **-2.9** |
| **PET** | **Petropavlovsk** | **2.73** | **269** | *e*PN | | **Pn** | | **06 36 49.1** | **0.0** |
| PET | | | | *e*S | | **Sn** | | **06 37 18.9** | **-3.0** |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,86nm,0.4s | | | | | | | | |
| PET | | | | smax | smax | | | | |
| | comp=E,439nm,0.5s | | | | | | | | |
| PET | | | | smax | smax | | | | |
| | comp=N,386nm,0.5s | | | | | | | | |
| PET | | | | MLR | MLR | | | | |
| | comp=Z,100nm,14.0s | | | | | | | | |
| **PET** | **Petropavlovsk** | **2.73** | **269** | *e*P | | **Pn** | | **06 36 48.7** | **-0.4** |
| PET | | | | *e*S | | **Sn** | | **06 37 19.0** | **-3.0** |
| **TUMR** | **Tumrok** | **2.77** | **321** | PN | | **Pn** | | **06 36 49.3** | **-0.4** |
| TUMR | | | | S | | **Sn** | | **06 37 19.7** | **-3.3** |
| **TUMR** | **Tumrok** | **2.77** | **321** | *e*P | | **Pn** | | **06 36 49.3** | **-0.4** |
| TUMR | | | | *e*S | | **Sn** | | **06 37 19.7** | **-3.3** |
| **RUS** | **Russkaya** | **2.93** | **257** | PN | | **Pn** | | **06 36 51.1** | **-0.6** |
| RUS | | | | S | | **Sn** | | **06 37 23.0** | **-3.7** |
| **RUS** | **Russkaya** | **2.93** | **257** | *e*P | | **Pn** | | **06 36 51.1** | **-0.6** |
| RUS | | | | *e*S | | **Sn** | | **06 37 23.0** | **-3.7** |
| **KBTR** | **Krutoberegovo** | **3.06** | **356** | PN | | **Pn** | | **06 36 52.0** | **-1.5** |
| KBTR | | | | S | | **Sn** | | **06 37 26.1** | **-3.7** |
| **KBTR** | **Krutoberegovo** | **3.06** | **356** | *e*P | | **Pn** | | **06 36 52.0** | **-1.5** |
| KBTR | | | | *e*S | | **Sn** | | **06 37 26.1** | **-3.7** |
| **KRMR** | **Karymshinskiy** | **3.07** | **266** | PN | | **Pn** | | **06 36 53.3** | **-0.4** |
| KRMR | | | | S | | **Sn** | | **06 37 26.4** | **-3.8** |
| **KRMR** | **Karymshinskiy** | **3.07** | **266** | *e*P | | **Pn** | | **06 36 53.3** | **-0.4** |
| KRMR | | | | *e*S | | **Sn** | | **06 37 26.4** | **-3.8** |
| **KBG** | **Krutoberegovo** | **3.11** | **355** | PN | | **Pn** | | **06 36 54.1** | **-0.1** |
| KBG | | | | S | | **Sn** | | **06 37 28.2** | **-2.9** |
| **KBG** | **Krutoberegovo** | **3.11** | **355** | *e*P | | **Pn** | | **06 36 54.1** | **-0.1** |
| KBG | | | | *e*S | | **Sn** | | **06 37 28.2** | **-2.9** |
| **MTVR** | **Mutnovka** | **3.11** | **259** | PN | | **Pn** | | **06 36 54.1** | **-0.3** |
| MTVR | | | | S | | **Sn** | | **06 37 28.1** | **-3.3** |
| **MTVR** | **Mutnovka** | **3.11** | **259** | *e*P | | **Pn** | | **06 36 54.1** | **-0.3** |
| MTVR | | | | *e*S | | **Sn** | | **06 37 28.1** | **-3.3** |
| **KMNR** | **Kamenistaya** | **3.11** | **328** | PN | | **Pn** | | **06 36 54.4** | **0.0** |
| **KMNR** | **Kamenistaya** | **3.11** | **328** | *e*P | | **Pn** | | **06 36 54.4** | **0.0** |
| **BZGR** | **Bezymyannyi-Gr** | **3.13** | **333** | PN | | **Pn** | | **06 36 54.2** | **-0.5** |
| BZGR | | | | S | | **Sn** | | **06 37 30.1** | **-1.8** |
| **BZGR** | **Bezymyannyi-Gr** | **3.13** | **333** | *e*P | | **Pn** | | **06 36 54.2** | **-0.5** |
| BZGR | | | | *e*S | | **Sn** | | **06 37 30.1** | **-1.8** |
| **GRL** | **Gorelyy** | **3.16** | **261** | PN | | **Pn** | | **06 36 55.5** | **+0.5** |
| GRL | | | | S | | **Sn** | | **06 37 29.9** | **-2.7** |
| **GRL** | **Gorelyy** | **3.16** | **261** | *e*P | | **Pn** | | **06 36 55.5** | **+0.5** |
| GRL | | | | *e*S | | **Sn** | | **06 37 29.9** | **-2.7** |
| **ZLN** | **Zelenaya** | **3.17** | **335** | PN | | **Pn** | | **06 36 54.9** | **-0.3** |
| ZLN | | | | S | | **Sn** | | **06 37 29.4** | **-3.5** |
| **ZLN** | **Zelenaya** | **3.17** | **335** | *e*P | | **Pn** | | **06 36 54.9** | **-0.3** |
| ZLN | | | | *e*S | | **Sn** | | **06 37 29.4** | **-3.5** |
| **GNL** | **Ganaly** | **3.18** | **282** | PN | | **Pn** | | **06 36 56.0** | **+0.7** |
| GNL | | | | S | | **Sn** | | **06 37 31.8** | **-1.3** |
| **GNL** | **Ganaly** | **3.18** | **282** | *e*P | | **Pn** | | **06 36 56.0** | **+0.7** |
| GNL | | | | *e*S | | **Sn** | | **06 37 31.8** | **-1.3** |
| **BZWR** | **Bezymyannyi-We** | **3.21** | **332** | PN | | **Pn** | | **06 36 55.7** | **-0.1** |
| **BZWR** | **Bezymyannyi-We** | **3.21** | **332** | *e*P | | **Pn** | | **06 36 55.7** | **-0.1** |
| **KIRR** | **Kirishev** | **3.24** | **331** | PN | | **Pn** | | **06 36 56.2** | **0.0** |
| **KIRR** | **Kirishev** | **3.24** | **331** | *e*P | | **Pn** | | **06 36 56.2** | **0.0** |
| **LGNR** | **Loginova** | **3.26** | **335** | PN | | **Pn** | | **06 36 56.5** | **-0.1** |
| **LGNR** | **Loginova** | **3.26** | **335** | *e*P | | **Pn** | | **06 36 56.5** | **-0.1** |
| **CIRR** | **Tsirk** | **3.27** | **335** | PN | | **Pn** | | **06 36 56.8** | **+0.2** |
| **CIRR** | **Tsirk** | **3.27** | **335** | *e*P | | **Pn** | | **06 36 56.8** | **+0.2** |
| **KPT** | **Kopyto** | **3.29** | **330** | PN | | **Pn** | | **06 36 57.1** | **+0.3** |
| **KPT** | **Kopyto** | **3.29** | **330** | *e*P | | **Pn** | | **06 36 57.1** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **3.30** | **271** | *c i* PN | | **Pn** | | **06 36 57.4** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **3.30** | **271** | Pn | | **Pn** | | **06 36 56.9** | **0.0** |
| | comp=Z,16nm,0.3s,baz=94,slow=16,SNR=226 | | | | | | | | |
| PETK | | | | Sn | | **Sn** | | **06 37 34.7** | **-1.3** |
| | comp=Z,17nm,0.3s,baz=183,slow=28,SNR=12 | | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.40** | **248** | PN | | **Pn** | | **06 36 57.4** | **-0.9** |
| KDTR | | | | S | | **Sn** | | **06 37 33.7** | **-4.7** |
| **KDTR** | **Khodutka, Kamc** | **3.40** | **248** | *e*P | | **Pn** | | **06 36 57.4** | **-0.9** |
| KDTR | | | | *e*S | | **Sn** | | **06 37 33.7** | **-4.7** |
| **KRSR** | **Krestovskiy** | **3.41** | **335** | PN | | **Pn** | | **06 36 57.9** | **-0.6** |
| **KRSR** | **Krestovskiy** | **3.41** | **335** | *e*P | | **Pn** | | **06 36 57.9** | **-0.6** |
| **KLY** | **Klyuchi** | **3.48** | **336** | PN | | **Pn** | | **06 36 58.7** | **-0.6** |
| KLY | | | | S | | **Sn** | | **06 37 38.2** | **-2.4** |
| **KLY** | **Klyuchi** | **3.48** | **336** | *e*P | | **Pn** | | **06 36 58.7** | **-0.6** |
| KLY | | | | *e*S | | **Sn** | | **06 37 38.2** | **-2.4** |
| **KOZ** | **Kozyrevsk** | **3.48** | **328** | PN | | **Pn** | | **06 36 59.4** | **+0.1** |
| **KOZ** | **Kozyrevsk** | **3.48** | **328** | *e*P | | **Pn** | | **06 36 59.4** | **+0.1** |
| **BDR** | **Baidarnaya** | **3.59** | **342** | PN | | **Pn** | | **06 36 59.6** | **-1.4** |
| **BDR** | **Baidarnaya** | **3.59** | **342** | *e*P | | **Pn** | | **06 36 59.6** | **-1.4** |
| **APC** | **Apacha** | **3.64** | **269** | PN | | **Pn** | | **06 37 03.0** | **+1.4** |
| APC | | | | S | | **Sn** | | **06 37 43.4** | **-0.9** |
| **APC** | **Apacha** | **3.64** | **269** | *e*P | | **Pn** | | **06 37 03.0** | **+1.4** |
| APC | | | | *e*S | | **Sn** | | **06 37 43.4** | **-0.9** |
| **ESO** | **Esso** | **3.80** | **318** | PN | | **Pn** | | **06 37 04.2** | **+0.5** |
| ESO | | | | S | | **Sn** | | **06 37 45.9** | **-2.4** |
| **ESO** | **Esso** | **3.80** | **318** | *e*P | | **Pn** | | **06 37 04.2** | **+0.5** |
| ESO | | | | *e*S | | **Sn** | | **06 37 45.9** | **-2.4** |
| **PAU** | **Pauzhetka** | **4.26** | **249** | PN | | **Pn** | | **06 37 10.8** | **+0.7** |
| **PAU** | **Pauzhetka** | **4.26** | **249** | *e*P | | **Pn** | | **06 37 10.8** | **+0.7** |
| **SKR** | **Severo-Kuril's** | **5.03** | **243** | *e*PN | | **Pn** | | **06 37 21.1** | **+0.5** |
| SKR | | | | *e*S | | **Sn** | | **06 38 13.9** | **-4.6** |
| **SHEM** | **Shemya Is, Ala** | **6.62** | **89** | Pn | | **Pn** | | **06 37 43.5** | **+1.1** |
| | comp=N,7.6nm,0.3s,baz=207,slow=1.9,SNR=8.2 | | | | | | | | |
| SHEM | | | | Sn | | **Sn** | | **06 38 52.5** | **-5.0** |
| | baz=70,slow=20,SNR=1.5 | | | | | | | | |
| **MA2** | **Magadan** | **9.40** | **318** | *i* PN | | Pn | | 06 38 17.6 | -3.0 |
| **SEY** | **Seymchan** | **11.32** | **334** | *i* PN | | Pn | | 06 38 40.8 | -5.9 |
| **YSS** | **Yuzh-Sakhalins** | **14.49** | **253** | *i* P | | Pn | | 06 39 26.8 | -3.4 |
| **TIXI** | **Tiksi** | **23.82** | **334** | *i* P | | **P** | | **06 41 13.6** | **-4.1** |
| **COLA** | **College** | **27.03** | **45** | *i* P | | **P** | | **06 41 47.7** | **+0.8** |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| **ILAR** | **Eielson Array** | **27.44** | **45** | P | | **P** | | **06 41 51.1** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=262,slow=9.4,SNR=2.5 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.50** | **174** | T | | T | | 07 18 16.8 | |
| | baz=356,slow=76,SNR=4.8 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.51** | **174** | T | | T | | 07 18 18.6 | |
| | baz=356,slow=76,SNR=7.2 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.52** | **174** | T | | T | | 07 18 20.4 | |
| | baz=356,slow=76,SNR=7.1 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **41.84** | **44** | P | | **P** | | **06 43 55.5** | **+0.9** |
| | comp=Z,0.1nm,0.5s,baz=294,slow=7.8,SNR=2.4 | | | | | | | | |
| **KURK** | **Kurchatov** | **49.26** | **303** | *i* P | | P | | 06 44 48.6 | -4.8 |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | **54.59** | **319** | *c i* P | | **P** | | **06 45 33.6** | **+0.6** |
| ARU | | | | | | | | 06 47 31.1 | |
| ARU | | | | S | | **S** | | **06 53 13.6** | **+1.8** |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.8s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **55.85** | **63** | P | | **P** | | **06 45 44.2** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=327,slow=4.3,SNR=2.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **60.77** | **338** | P | | **P** | | **06 46 19.3** | **+2.9** |
| | comp=Z,1.9nm,0.8s,baz=13,slow=8.7,SNR=6.0 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **68.88** | **69** | P | | **P** | | **06 47 11.8** | **+1.8** |
| | comp=Z,0.9nm,0.6s,baz=299,slow=5.0,SNR=21 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.97** | **208** | P | | **P** | | **06 47 57.8** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=23,slow=5.7,SNR=1.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **80.63** | **207** | P | | **P** | | **06 48 18.5** | **+0.8** |
| | comp=Z,0.4nm,0.4s,baz=21,slow=5.6,SNR=4.2 | | | | | | | | |

**NOU 16 06:51:16.9, 14°.55S×167°.56E, h138km, MLv4.5/8, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.96** | **201** | P | | Pn | | 06 51 40.4 | +0.2 |
| **DVP** | **Devils Point** | **3.21** | **169** | P | | Pn | | 06 52 06.9 | +0.3 |
| **KOUNC** | **Koumac, New Ca** | **6.74** | **207** | P | | Pn | | 06 52 53.6 | +0.2 |
| **DZM** | **Mont Dzumac** | **7.55** | **188** | P | | Pn | | 06 53 04.3 | -0.2 |
| **OUENC** | **Ouen Island, N** | **7.86** | **185** | P | | Pn | | 06 53 08.0 | -0.4 |

*IDC* ***16*** *06:53:21.6±0.9, 38°.45N×21°.89E, h0km, mb3.9/15, mb1 4.0/19, mb1mx3.7/48, mbtmp3.8/19, ML3.5/4, MS3.2/10, Ms1 3.2/10, ms1mx2.8/97, Error ellipse: s-maj=16.5km s-min=16.2km az=135.0*

*IASPEI* ***16*** *06:53:22.8±0.8, 38°.40N±0°.02×21°.89E±0°.02, h11km±4km, mb3.7/14, MS3.6/5, Error ellipse: s-maj=2.6km s-min=2.3km az=121.0, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*ATH* ***16*** *06:53:22.3, 38°.39N×21°.90E, h19km±1km, ML3.7/22, Error ellipse: s-maj=1.3km s-min=0.6km az=320.0*

*UPSL* ***16*** *06:53:22.3, 38°.39N×21°.90E, h19km, Mw3.7, Moment Tensor Solution. s3 Moment tensor: Mrr=2.53; Mθθ4.42; Mφφ-1.89; Mrθ0.29; Mrφ0.66; Mθφ3.00; Fault plane solution: NP1:φs230.00000°, δ63.00000°, λ-138.00000°. NP2: φs117.00000°, δ53.00000°, λ-34.00000°.*

*THE* ***16*** *06:53:23.2, 38°.40N×21°.89E, h4km±1km, ML3.7/15 Error ellipse: s-maj=1.1km s-min=0.5km az=289.0*

**ISC 16 06:53:23.1±0.7, 38°.41N±0°.01×21°.88E±0°.02, h11**km±4km**, n176,** σ1s**39**/209**, mb3.7**/14**, MS3.6**/5**, 8C-4D, Greece**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EFP** | **Efpalio** | **0.03** | **43** | P | | **Pg** | | **06 53 24.6** | **-0.5** |
| EFP | | | | S | | **Sg** | | **06 53 25.6** | **-1.0** |
| | 502μm,0.4s | | | | | | | | |
| **EFP** | **Efpalio** | **0.03** | **43** | P | | **Pg** | | **06 53 24.6** | **-0.5** |
| EFP | | | | AML | AML | | | 06 53 26.0 | |
| EFP | | | | AML | AML | | | 06 53 27.4 | |
| **UPR** | **University Cam** | **0.14** | **211** | P | | **Pg** | | **06 53 26.2** | **-0.2** |
| UPR | | | | S | | **Sg** | | **06 53 28.8** | **0.0** |
| **LAKA** | **Lakka** | **0.18** | **155** | P | | **Pg** | | **06 53 26.7** | **-0.4** |
| **LAKA** | **Lakka** | **0.18** | **155** | P | | **Pg** | | **06 53 26.6** | **-0.5** |
| LAKA | | | | S | | **Sg** | | **06 53 30.3** | **+0.4** |
| LAKA | | | | AML | AML | | | 06 53 34.7 | |
| | comp=E,91077μm,0.5s | | | | | | | | |
| LAKA | | | | AML | AML | | | 06 53 39.7 | |
| **ANX** | **Ano Chora** | **0.19** | **9** | P | | **Pg** | | **06 53 27.4** | **+0.1** |
| ANX | | | | S | | **Sg** | | **06 53 30.9** | **+0.7** |
| | comp=E,173μm,0.3s | | | | | | | | |
| **ANX** | **Ano Chora** | **0.19** | **9** | P | | **Pg** | | **06 53 27.3** | **+0.1** |
| ANX | | | | S | | **Sg** | | **06 53 30.9** | **+0.7** |
| ANX | | | | AML | AML | | | 06 53 31.2 | |
| ANX | | | | AML | AML | | | 06 53 32.6 | |
| **ALIK** | **Aliki, Aigiali** | **0.23** | **129** | P | | **Pg** | | **06 53 27.8** | **-0.1** |
| **KLV** | **Kalavryta, Ach** | **0.42** | **150** | P | | **Pg** | | **06 53 30.7** | **-0.7** |
| KLV | | | | S | | **Sg** | | **06 53 37.2** | **+0.3** |
| **KLV** | **Kalavryta, Ach** | **0.42** | **150** | P | | **Pg** | | **06 53 30.7** | **-0.7** |
| KLV | | | | S | | **Sg** | | **06 53 36.6** | **-0.3** |
| KLV | | | | AML | AML | | | 06 53 39.7 | |
| | comp=E,7642μm,0.4s | | | | | | | | |
| KLV | | | | AML | AML | | | 06 53 41.6 | |
| | comp=N,7153μm,0.4s | | | | | | | | |
| **DRO** | **Drossia** | **0.47** | **197** | P | | **Pg** | | **06 53 31.9** | **-0.4** |
| DRO | | | | S | | **Sg** | | **06 53 39.0** | **+0.4** |
| | comp=N,16μm,0.3s | | | | | | | | |
| **DRO** | **Drossia** | **0.47** | **197** | P | | **Pg** | | **06 53 31.8** | **-0.5** |
| DRO | | | | S | | **Sg** | | **06 53 38.0** | **-0.6** |
| DRO | | | | AML | AML | | | 06 53 44.0 | |
| | comp=N,29481μm,0.3s | | | | | | | | |
| DRO | | | | AML | AML | | | 06 53 46.5 | |
| | comp=E,27860μm,0.5s | | | | | | | | |
| **RLS** | **Riolos of Patr** | **0.48** | **223** | P | | **Pg** | | **06 53 32.3** | **-0.1** |
| RLS | | | | S | | **Sg** | | **06 53 39.8** | **+1.1** |
| | comp=E,7μm,0.3s | | | | | | | | |
| **RLS** | **Riolos of Patr** | **0.48** | **223** | P | | **Pg** | | **06 53 32.3** | **-0.1** |
| RLS | | | | S | | **Sg** | | **06 53 39.3** | **+0.6** |
| RLS | | | | AML | AML | | | 06 53 40.2 | |
| | comp=E,12790μm,0.4s | | | | | | | | |
| RLS | | | | AML | AML | | | 06 53 45.5 | |
| | comp=N,15251μm,0.7s | | | | | | | | |
| **DLFA** | **Delphi** | **0.49** | **81** | P | | **Pg** | | **06 53 31.7** | **-0.9** |
| DLFA | | | | S | | **Sg** | | **06 53 39.3** | **+0.2** |
| **EVR** | **Evrytania** | **0.51** | **354** | P | | **Pg** | | **06 53 33.1** | **0.0** |
| EVR | | | | S | | **Sb** | | **06 53 41.7** | **+0.1** |
| | comp=N,12μm,0.2s | | | | | | | | |
| **EVR** | **Evrytania** | **0.51** | **354** | P | | **Pg** | | **06 53 33.0** | **-0.1** |
| EVR | | | | S | | **Sb** | | **06 53 41.2** | **-0.4** |
| EVR | | | | AML | AML | | | 06 53 43.0 | |
| | comp=N,27034μm,0.2s | | | | | | | | |
| EVR | | | | AML | AML | | | 06 53 50.7 | |
| | comp=E,29765μm,1.1s | | | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.64** | **18** | P | | **Pg** | | **06 53 35.5** | **0.0** |
| MAKR | | | | S | | **Sg** | | **06 53 44.2** | **+0.3** |
| | comp=E,41μm,0.5s | | | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.64** | **18** | P | | **Pg** | | **06 53 35.5** | **0.0** |
| MAKR | | | | S | | **Sg** | | **06 53 44.1** | **+0.3** |
| MAKR | | | | AML | AML | | | 06 53 47.5 | |
| | comp=E,28550μm,0.3s | | | | | | | | |
| MAKR | | | | AML | AML | | | 06 53 48.2 | |
| | comp=N,20123μm,0.5s | | | | | | | | |
| **AGG** | **Agios Georgios** | **0.71** | **30** | P | | **Pg** | | **06 53 36.0** | **-0.8** |
| AGG | | | | S | | **Sb** | | **06 53 47.2** | **0.0** |
| | comp=N,8μm,0.4s | | | | | | | | |
| **AGG** | **Agios Georgios** | **0.71** | **30** | P | | **Pg** | | **06 53 36.4** | **-0.4** |
| AGG | | | | S | | **Sg** | | **06 53 46.0** | **-0.1** |
| AGG | | | | AML | AML | | | 06 53 48.1 | |
| | comp=E,17527μm,0.4s | | | | | | | | |
| AGG | | | | AML | AML | | | 06 53 53.5 | |
| | comp=N,16545μm,0.6s | | | | | | | | |
| **THAL** | **Thalero** | **0.72** | **121** | P | | **Pg** | | **06 53 36.3** | **-0.6** |
| THAL | | | | S | | **Sb** | | **06 53 47.2** | **-0.2** |
| | comp=N,8μm,0.4s | | | | | | | | |
| **THAL** | **Thalero** | **0.72** | **121** | P | | **Pg** | | **06 53 36.3** | **-0.6** |
| THAL | | | | S | | **Sg** | | **06 53 45.7** | **-0.7** |
| THAL | | | | AML | AML | | | 06 53 53.5 | |
| | comp=E,16341μm,0.5s | | | | | | | | |
| THAL | | | | AML | AML | | | 06 54 06.3 | |
| | comp=N,11217μm,0.6s | | | | | | | | |
| **LKR** | **Lokris** | **0.91** | **74** | P | | **Pg** | | **06 53 39.3** | **-1.3** |
| **LKR** | **Lokris** | **0.91** | **74** | P | | **Pg** | | **06 53 39.1** | **-1.5** |
| LKR | | | | S | | **Sb** | | **06 53 52.5** | **-0.5** |
| LKR | | | | AML | AML | | | 06 53 57.7 | |
| | comp=N,7514μm,0.5s | | | | | | | | |
| LKR | | | | AML | AML | | | 06 54 00.3 | |
| | comp=E,6462μm,0.3s | | | | | | | | |
| **ATAL** | **Atalanti** | **0.94** | **72** | P | | **Pg** | | **06 53 39.5** | **-1.7** |
| ATAL | | | | S | | **Sb** | | **06 53 54.4** | **+0.6** |
| | comp=E,5μm,0.7s | | | | | | | | |
| **ATAL** | **Atalanti** | **0.94** | **72** | P | | **Pg** | | **06 53 39.4** | **-1.7** |
| ATAL | | | | S | | **Sb** | | **06 53 53.4** | **-0.4** |
| ATAL | | | | AML | AML | | | 06 53 57.6 | |
| | comp=E,6012μm,0.8s | | | | | | | | |

comp=E,3394µm,1.2s
ATH AML AML 06 54 22.6
comp=N,1794µm,0.7s
**PYL PYLOS 1.51 184** P **Pn** **06 53 50.3 +0.2**
**PYL PYLOS 1.51 184** P **Pn** **06 53 50.2 +0.2**
**ATHU Athens Univers 1.56 106** P **Pn** **06 53 51.1 +0.4**
**ATHU Athens Univers 1.56 106** P **Pn** **06 53 51.0 +0.2**
**KPRO Kipourio 1.60 346** P **Pb** **06 52 52.9 +0.3**
KPRO S **Sb** **06 54 13.1 +0.3**
comp=N,2µm,0.8s
**PTL Penteli 1.60 102** P **Pn** **06 53 51.5 +0.2**
**PTL Penteli 1.60 102** P **Pn** **06 53 51.4 +0.1**
**VLY Voula,Athens 1.61 110** P **Pn** **06 53 51.4 +0.1**
**VLY Voula,Athens 1.61 110** P **Pn** **06 53 51.6 +0.3**
**DION Dionisos Attik 1.65 101** P **Pn** **06 53 52.4 +0.5**
**DION Dionisos Attik 1.65 101** P **Pn** **06 53 52.4 +0.5**
DION AML AML 06 54 22.7
comp=E,3010µm,0.6s
DION AML AML 06 54 23.0
comp=N,3282µm,1.0s
**KYMI Kymi, Euboea I 1.75 82** P **Pn** **06 53 53.5 +0.1**
**LIT Litokhoron 1.76 15** P **Pb** **06 53 54.6 -0.7**
**VLI Veliai 1.88 153** P **Pn** **06 53 55.9 +0.8**
**KARY Karystos 2.05 100** P **Pn** **06 53 57.9 +0.5**
**FNA Florina 2.41 351** P **Pb** **06 54 04.6 -1.8**
**OHR Ohrid 2.83 343** *i* Pn **Pb** **06 54 12.5 -1.1**
**VAY Valandovo 2.96 10** *i* Pn **Pn** **06 54 12.3 +2.4**
**STIP Stip 3.29 4** *i* Pn **Pb** **06 54 18.3 -3.1**
**IMMV Iera Moni Meta 3.39 150** *e*P **Pn** **06 54 16.2 +0.4**
**KNDR Palaiochora Ch 3.48 155** *e*P **Pn** **06 54 16.9 -0.2**
**BOZC Bozcaada 3.55 65** *e*P **Pn** **06 54 18.3 +0.3**
**GADA Gvkgeada 3.59 59** *e*P **Pn** **06 54 19.0 +0.4**
**URLA Izmir 3.71 89** *e*P **Pn** **06 54 20.5 +0.3**
**EZN Ezine 3.74 66** *e*P **Pn** **06 54 21.0 +0.4**
**RDO Rodhopi 3.93 45** *e*P **Pn** **06 54 24.1 +0.9**
**IDI Anoyia 3.94 141** ⇑P **Pn** **06 54 23.9 +0.4**
IDI ⇓S **Sn** **06 55 09.4 -0.3**
**IDI Anoyia 3.94 141** Pn **Pn** **06 54 24.1 +0.6**
comp=N,2.8nm,0.3s,baz=321,slow=5.7,SNR=11
IDI Sn **Sn** **06 55 07.9 -1.7**
comp=N,3.2nm,0.3s,baz=261,slow=21,SNR=1.9
**IDI Anoyia 3.94 141** *e*P **Pn** **06 54 24.4 +0.9**
**GVD Gavdhos 3.98 153** *e*P **Pn** **06 54 26.1 +2.2**
**GELI Tayfur-Gelibol 4.08 59** *e*P **Pn** **06 54 25.9 +0.6**
**TIP Timpagrande 4.08 282** ⇑P **Pn** **06 54 26.9 +1.5**
**ERIK Erikli-Kesan 4.24 56** *e*P **Pn** **06 54 28.3 +0.9**
**VTS Vitosha 4.33 13** ⇓P **Pn** **06 54 31.1 +2.1**
**PDG Podgorica 4.49 334** ⇑P **Pn** **06 54 31.6 +0.6**
**PDG Podgorica 4.49 334** *e*Pn **Pn** **06 54 34.7 +3.7**
**BODT Bodrum 4.51 106** *e*P **Pn** **06 54 31.8 +0.6**
**MATE Matera 4.59 301** ⇑P **Pn** **06 54 34.3 +2.0**
**KRBG Karabiga-Canak 4.64 63** *e*P **Pn** **06 54 33.7 +0.7**
**EDRB Edirne 5.07 46** *e*P **Pn** **06 54 40.6 +1.7**
**TRBB Trebinje 5.08 329** *e*Pn **Pn** **06 54 40.9 +1.9**
**BRY Bratogost 5.16 332** *e*Pn **Pn** 06 54 46.2 +5.9
**YER Yerkesik 5.23 102** *e*P **Pn** **06 54 42.3 +1.1**
**TURN Turunc 5.31 106** *e*P **Pn** **06 54 43.4 +1.2**
**KULA Kula-Manisa 5.32 87** *e*P **Pn** **06 54 43.2 +0.7**
**ARG Arkhangelos 5.44 112** *e*P **Pn** **06 54 45.0 +1.0**
**STON Ston 5.48 326** *e*Pn **Pn** **06 54 44.7 +0.2**
**STON Ston 5.48 326** *e*Pn **Pn** **06 54 45.5 +1.0**
**RUDO Rudo 5.54 341** *e*Pn **Pn** **06 54 47.5 +2.1**
**DALY Dalyan (Mula) 5.61 104** *e*P **Pn** **06 54 47.4 +1.1**
**BBLS Lazići 5.77 342** *e*Pn **Pn** **06 54 50.5 +1.9**
**LSTV Lastovo 5.78 321** *e*Pn **Pn** **06 54 48.6 0.0**
**DIVS Divibare 5.86 347** *e*Pn **Pn** **06 54 50.8 +0.9**
**VAE Valguarnera 5.98 263** Sn **Sn** **06 56 03.5 +3.7**
baz=174,slow=22,SNR=1.1
**FETY Fethiye 5.99 105** *e*P **Pn** **06 54 52.8 +1.2**
**TVSB Tavsanli 6.00 78** *e*P **Pn** **06 54 53.0 +1.2**
**CAME Cameli-Denizli 6.07 102** *e*P **Pn** **06 54 54.3 +1.5**
**MAKA Makarska 6.11 324** *e*Pn **Pn** **06 54 53.4 +0.2**
MAKA Sn **Sn** **06 55 57.6 -5.4**
**RICI Ricice 6.22 326** *e*Pn **Pn** **06 54 56.2 +1.4**
**HVAR Hvar 6.30 321** *e*Pn **Pn** **06 54 56.0 +0.2**
**BASM Basmaki-Afyon 6.46 92** *e*P **Pn** **06 54 59.6 +1.5**
**AKAS Kas 6.53 107** *e*P **Pn** **06 55 00.4 +1.3**
**KORT Korkueli 6.86 99** *e*P **Pn** **06 55 04.8 +1.1**
**FRGS Fruska Gora 6.92 348** ⇓P **Pn** **06 55 05.8 +1.4**
**FRGS Fruska Gora 6.92 348** *e*Pn **Pn** **06 55 04.7 +0.3**
**KIJV Kijevo 6.95 325** *e*Pn **Pn** **06 55 04.9 +0.1**
KIJV Sn **Sn** **06 56 18.0 -5.8**
**MGRS Mrkonjic Grad 7.00 331** *e*Pn **Pn** **06 55 09.2 +3.7**
**GZR Gura Zlata 7.01 5** ⇑P **Pn** **06 55 08.0 +2.3**
**ZIRJ Zirje 7.05 320** *e*Pn **Pn** **06 55 05.7 -0.4**
ZIRJ Sn **Sn** **06 56 18.1 -8.0**
**MORI Morici 7.17 321** *e*Pn **Pn** **06 55 08.8 +1.0**
MORI Sn **Sn** **06 56 21.8 -7.3**
**BLY Banja Luka 7.25 332** *e*Pn **Pn** **06 55 06.0 -2.8**
**VOIR 7.41 18** ⇑P **Pn** **06 55 12.6 +1.5**
**MRAK Mrakovica 7.58 332** *e*Pn **Pn** **06 55 14.0 +0.6**
**DUGI Dugi Otok 7.59 320** *e*Pn **Pn** **06 55 14.8 +1.4**
**MLR Muntele Rosu 7.70 22** ⇑P **Pn** **06 55 17.9 +2.7**
**MLR Muntele Rosu 7.70 22** Pn **Pn** **06 55 15.5 +0.4**
comp=N,0.3nm,0.3s,baz=180,slow=18,SNR=2.2
MLR Sn **Sn** **06 56 41.3 -1.0**
baz=151,slow=11,SNR=1.0
**NVLJ Novalja 8.09 322** *e*Pn **Pn** **06 55 21.4 +1.0**
**MORH Mrgy, Hungar 8.16 344** *e*Pn Pn 06 55 16.0 -5.4
**PLOR Plostina 8.24 24** ⇓P **Pn** **06 55 24.0 +1.5**
**VRI Vrincioaia 8.28 24** ⇑P **Pn** **06 55 24.3 +1.3**
**CRES Cresnjev 8.81 329** *e*Pn **Pn** **06 55 30.3 0.0**
**BRJN Brijuni 8.90 319** *e*Pn **Pn** **06 55 32.4 +1.0**
**CEY Cerknica 9.18 325** *e*Pn **Pn** **06 55 35.2 -0.2**
**BRTR Keskin Array B 9.24 78** Pn **Pn** **06 55 38.2 +1.9**
comp=N,0.5nm,0.3s,baz=260,slow=14,SNR=5.3
BRTR LR LR 06 59 30.1
comp=N,62nm,19.6s,baz=274,slow=40
**VRAC Vranov 11.54 342** LR LR 07 01 59.1
comp=N,59nm,19.4s,baz=176,slow=45
**GERES GERESS Array B 11.99 333** Pn **Pn** **06 56 15.0 +1.1**
comp=N,0.1nm,0.3s,baz=155,slow=12,SNR=2.4
GERES LR LR 07 02 03.9
comp=N,117nm,22.0s,baz=126,slow=44
**MMAI Mount Meron Ar 12.23 112** LR LR 07 02 07.0
comp=N,46nm,19.2s,baz=50,slow=43
**OBN Obninsk 19.44 26** LR LR 07 05 10.3
comp=N,33nm,21.5s,baz=201,slow=36
**ESDC Sonseca Array 20.10 282** P **P** **06 57 57.7 +1.0**
comp=N,2.9nm,1.0s,baz=73,slow=10,SNR=7.7
**HFS Hagfors 22.36 349** P **P** **06 58 20.7 -0.1**
comp=N,1.4nm,0.5s,baz=153,slow=13,SNR=8.6
**FINES FINESS Array B 23.21 5** P **P** **06 58 29.2 -0.4**
comp=N,1.4nm,0.5s,baz=147,slow=11,SNR=8.2
**NB2 NORSAR Subarra 23.62 347** P **P** **06 58 34.0 +0.2**
comp=Z,0.7nm,0.5s,baz=159,slow=9.3
**NOA NORSAR Array B 23.62 347** P **P** **06 58 33.2 -0.6**
comp=Z,0.2nm,0.3s,baz=154,slow=9.5,SNR=6.1
NOA LR LR 07 09 32.5
comp=Z,32nm,18.4s,baz=335,slow=41
**EKA Eskdalemuir Ar 23.87 323** P **P** **06 58 34.6 -1.7**
comp=Z,3.8nm,0.8s,baz=126,slow=10,SNR=5.0
EKA LR LR 07 09 22.2
comp=Z,211nm,18.1s,baz=335,slow=40
**TORD Torodi Ar. Bea 30.89 221** P **P** **06 59 39.6 -0.1**
comp=Z,1.6nm,0.6s,baz=29,slow=9.3,SNR=8.1
**ARCES ARCESS Array B 31.25 2** P **P** **06 59 42.6 +0.3**
comp=Z,15nm,1.2s,baz=197,slow=8.6,SNR=7.4
ARCES LR LR 07 15 02.4
comp=Z,65nm,18.5s,baz=302,slow=42
**AAK Ala-Archa 39.69 67** P **P** **07 00 55.1 -0.1**
comp=Z,0.5nm,0.3s,baz=292,slow=19,SNR=2.3
**SPITS Spitsbergen Ar 39.95 358** P **P** **07 00 57.4 +0.6**
comp=Z,9.6nm,1.1s,baz=148,slow=8.5,SNR=1.4
**KURBB Kurchatov Arra 41.23 54** P **P** **07 01 07.4 -0.3**
comp=Z,0.9nm,0.6s,baz=280,slow=8.7,SNR=8.0
**MKAR Makanchi Array 44.27 59** P **P** **07 01 32.9 +0.3**
comp=Z,1.4nm,0.6s,baz=277,slow=6.8,SNR=13
**ZALV Zalesovo Beam 44.74 48** P **P** **07 01 36.0 -0.1**
comp=Z,1.7nm,0.5s,baz=273,slow=7.9,SNR=4.3
**SONM Songino Array 59.48 51** P **P** **07 03 25.7 -0.4**
comp=Z,0.4nm,0.7s,baz=275,slow=8.6,SNR=3.8
**YKA Yellowknife Ar 73.54 341** P **P** **07 04 56.1 +0.6**
comp=Z,0.5nm,0.8s,baz=32,slow=5.2,SNR=6.9
**ILAR Eielson Array 76.78 355** P **P** **07 05 15.0 +0.8**
comp=Z,0.3nm,0.7s,baz=1.9,slow=5.4,SNR=2.2
**PETK Petropavlovsk- 81.15 25** LR LR 07 44 37.0
comp=Z,26nm,18.4s,baz=107,slow=38
**ELK Elko 92.02 329** LR LR 07 51 21.7
comp=Z,58nm,19.5s,baz=53,slow=38

**IDC 16 06:55:25.5±2.7, 55°49N×85°98E, h0km, mb1 2.9/2,**
**mb1mx2.3/38, mbtmp2.9/2, ML2.8/3, Error ellipse: s-maj=23.5km s-min=17.1km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.68** | **204** | *i* | | 07 08 30.0 | |
| | baz=25,slow=342,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.68** | **204** | Pg | Pn | 06 55 55.6 | -0.5 |
| | 4.5nm,0.3s,baz=19,slow=16,SNR=32 | | | | | | |
| ZALV | | | | Lg | Lg | 06 56 20.8 | |
| | 4.5nm,0.3s,baz=18,slow=23,SNR=4.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.62** | **226** | Pn | Pn | 06 57 03.9 | -0.1 |
| | 0.1nm,0.3s,baz=43,slow=14,SNR=17 | | | | | | |
| KURBB | | | | Sn | Sn | 06 58 17.5 | -2.6 |
| | 0.0nm,0.3s,baz=60,slow=18,SNR=1.1 | | | | | | |
| KURBB | | | | Lg | Lg | 06 58 56.9 | |
| | 0.0nm,0.3s,baz=44,slow=31,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **9.01** | **196** | Pn | Pn | 06 57 36.9 | +0.1 |
| | 0.1nm,0.3s,baz=16,slow=15,SNR=5.0 | | | | | | |
| MKAR | | | | Sn | Sn | 06 59 15.4 | -3.4 |
| | 0.1nm,0.3s,baz=26,slow=34,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 00 11.5 | |
| | 0.1nm,0.3s,baz=19,slow=29,SNR=4.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **9.45** | **261** | Pn | Pn | 06 57 42.2 | -0.6 |
| | 0.2nm,0.3s,baz=69,slow=17,SNR=2.3 | | | | | | |

*OMAN **16** 06:58:40.3±0.4, 25°.17N×56°.35E, h16km±3km, ml2.6/13, Error ellipse: s-maj=4.5km s-min=1.6km az=59.0*
*DSN **16** 06:58:44.0±1.2, 25°.10N×56°.33E, h8km, ML3.0/11, Error ellipse: s-maj=16.7km s-min=5.2km az=102.0*
**ISC 16 06:58:41.7±1.3, 25°.15N±0°.03×56°.35E±0°.05, h13km±7km, n26, σ1s42/38, Eastern Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UOSS** | **Minazif** | **0.24** | **214** | P | **Pg** | **06 58 46.4** | **-0.4** |
| UOSS | | | | S | **Sg** | **06 58 49.5** | **-0.8** |
| **UOSS** | **Minazif** | **0.24** | **214** | *e*P | **Pb** | **06 58 47.6** | **-0.2** |
| | SNR=65 | | | | | | |
| **MSFE** | **Esma-Masafi** | **0.28** | **321** | *e*P | **Pn** | **06 58 50.6** | **-0.9** |
| | SNR=196 | | | | | | |
| **HATD** | **Hatta, Dubai** | **0.38** | **212** | P | **Pg** | **06 58 48.8** | **-0.4** |
| | SNR=461 | | | | | | |
| HATD | | | | S | **Sg** | **06 58 54.1** | **-0.3** |
| **HATD** | **Hatta, Dubai** | **0.38** | **212** | *e*P | **Pb** | **06 58 50.0** | **-0.2** |
| | SNR=461 | | | | | | |
| HATD | | | | S | **Sg** | **06 58 54.1** | **-0.3** |
| **ASHO** | **Ashiyiah** | **0.53** | **210** | P | **Pg** | **06 58 51.8** | **-0.3** |
| | SNR=382 | | | | | | |
| ASHO | | | | S | **Sg** | **06 58 59.0** | **-0.2** |
| **ASHO** | **Ashiyiah** | **0.53** | **210** | *e*P | **Pb** | **06 58 52.7** | **-0.2** |
| | SNR=383 | | | | | | |
| ASHO | | | | S | **Sg** | **06 58 59.0** | **-0.2** |
| **NAZ** | **Nazwa, Dubai** | **0.65** | **256** | P | **Pg** | **06 58 53.3** | **-0.9** |
| | SNR=46 | | | | | | |
| NAZ | | | | S | **Sg** | **06 59 02.4** | **-0.3** |
| **NAZ** | **Nazwa, Dubai** | **0.65** | **256** | *e*P | **Pb** | **06 58 55.0** | **+0.2** |
| | SNR=14 | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **0.73** | **301** | P | **Pg** | **06 58 54.1** | **-1.8** |
| UMQ | | | | S | **Sg** | **06 59 04.6** | **-0.9** |
| **BANOM** | **Banah** | **0.78** | **357** | *e*P | **Pn** | **06 58 59.0** | **+0.7** |
| | SNR=52 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **0.80** | **240** | P | **Pg** | **06 58 56.3** | **-0.8** |
| | SNR=58 | | | | | | |
| FAQ | | | | S | **Sb** | **06 59 07.9** | **-0.1** |
| | SNR=18 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **0.80** | **240** | *e*P | **Pb** | **06 58 57.3** | **-0.1** |
| | SNR=58 | | | | | | |
| **SHME** | **Shamm** | **0.92** | **348** | P | **Pn** | **06 59 03.0** | **+2.7** |
| **SOHO** | **SOHO** | **1.02** | **171** | P | **Pb** | **06 59 00.3** | **-0.9** |
| **SOHO** | **SOHO** | **1.02** | **171** | *e*P | **Pb** | **06 59 00.2** | **-0.9** |
| | SNR=21 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **1.06** | **241** | P | **Pb** | **06 59 00.8** | **-1.1** |
| | SNR=18 | | | | | | |
| ASUD | | | | S | **Sg** | **06 59 15.5** | **-0.6** |
| **ASUD** | **Al Ashush, Dub** | **1.06** | **241** | *e*P | **Pn** | **06 59 03.0** | **+0.7** |
| | SNR=25 | | | | | | |
| **ALNE** | **Al Ain** | **1.21** | **207** | P | **Pn** | **06 59 03.3** | **-1.1** |
| | SNR=14 | | | | | | |
| ALNE | | | | S | **Sn** | **06 59 20.9** | **+0.2** |
| **ALNE** | **Al Ain** | **1.21** | **207** | P | **Pg** | **06 59 08.2** | **+3.1** |
| ALNE | | | | S | **Sn** | **06 59 25.8** | **+5.2** |
| **AJN** | **Ajban** | **1.37** | **245** | P | **Pn** | **06 59 05.1** | **-1.4** |
| | SNR=6.6 | | | | | | |
| AJN | | | | S | **Sn** | **06 59 23.9** | **-0.5** |
| | SNR=10 | | | | | | |
| **AJN** | **Ajban** | **1.37** | **245** | P | **Pg** | **06 59 09.8** | **+1.8** |
| **HOQ** | **Hoqain** | **1.79** | **150** | P | **Pn** | **06 59 11.0** | **-1.2** |
| **ARQ** | **Araqi** | **1.81** | **175** | P | **Pn** | **06 59 11.5** | **-1.0** |
| | SNR=8.9 | | | | | | |
| **BSY** | **Bisya** | **2.51** | **162** | P | **Pn** | **06 59 20.9** | **-1.3** |
| **SMDO** | **Samad** | **2.59** | **143** | P | **Pn** | **06 59 21.9** | **-1.5** |

*IDC **16** 07:51:13.6±5.1, 9°.31S×119°.73E, h0km, mb3.5/1, mb1 3.3/3, mb1mx3.2/30, mbtmp3.1/3, ML2.9/2, Error ellipse: s-maj=263.1km s-min=31.0km az=58.0*
*DJA **16** 07:51:20.1±0.5, 10°.5S×112°.0E±°, h33km±6km, M3.2/7, MLv3.2/7*
**ISC 16 07:51:20.4±1.0, 9°.68S±0°.08×119°.77E±0°.06, h61km, n9, σ1s24/11, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.38** | **276** | P | **Pn** | **07 51 29.7** | **-1.5** |
| WBSI | | | | S | **Sn** | **07 51 38.3** | **-0.8** |
| **BASI** | **Baing, Sumba** | **0.96** | **124** | P | **Pn** | **07 51 37.3** | **-0.6** |
| **PLAI** | **Plampang** | **2.14** | **293** | P | **Pn** | **07 51 54.9** | **+1.1** |
| PLAI | | | | S | **Sn** | **07 52 19.6** | **+0.3** |
| **MMRI** | **Maumere** | **2.65** | **67** | P | **Pn** | **07 52 00.5** | **-0.2** |
| **BSSI** | **Bau Bau, Buton** | **3.59** | **12** | P | **Pn** | **07 52 12.7** | **-0.8** |
| **BKSI** | **Bulukumba** | **4.34** | **5** | P | **Pn** | **07 52 24.6** | **+0.7** |
| **WRA** | **Warramunga Arr** | **17.38** | **128** | P | **P** | **07 55 20.0** | **+0.6** |
| | 0.0nm,0.3s,baz=300,slow=12,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **19.39** | **138** | P | **Pn** | **07 55 45.1** | **+2.0** |
| | 0.1nm,0.3s,baz=315,slow=10,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **58.48** | **349** | P | **P** | **08 01 08.9** | **-1.3** |
| | 0.2nm,0.4s,baz=149,slow=6.2,SNR=4.1 | | | | | | |

*IDC **16** 07:59:05.0±0.7, 10°.01N×126°.08E, h0km, mb3.9/11, mb1 4.0/11, mb1mx3.8/34, mbtmp3.9/11, MS2.6/1, Ms1 2.6/1, ms1mx2.1/81, Error ellipse: s-maj=55.9km s-min=15.8km az=73.0*
*NEIC **16** 07:59:13.0±1.1, 9°.96N±0°.10×125°.9E±0°.3, h49km±8km, mb4.1/19, Error ellipse: s-maj=38.4km s-min=9.9km az=74.0*
*MAN **16** 07:59:13.1, 9°.97N×126°.10E, h15km, mb4.5, ML3.3, MS3.1 MAN INTENSITY II - BURGOS & PILAR, SURIGAO DEL NORTE.*
**ISC 16 07:59:14.2±1.3, 9°.96N±0°.05×126°.1E±0°.1, h63km±11km, n53, σ1s36/53, mb4.0/21, 2C-5D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SCPH** | **Surigao** | **0.60** | **253** | ⇓*i*P | **Pn** | **07 59 25.4** | **-2.1** |
| SCPH | | | | *i* S | **Sn** | **07 59 36.2** | **-1.0** |
| **MSLP** | **Maasin** | **1.20** | **278** | ⇑*e*P | **Pn** | **07 59 34.8** | **-0.2** |
| MSLP | | | | *i* S | **Sn** | **07 59 53.6** | **+3.0** |
| **BESP** | **Borongan** | **1.75** | **339** | ⇓*e*P | **Pn** | **07 59 43.3** | **+1.0** |
| BESP | | | | *e*S | **Sn** | **08 00 07.1** | **+3.6** |
| **LLP** | **Lapu-Lapu** | **2.10** | **280** | ⇓*i*P | **Pn** | **07 59 47.7** | **+0.7** |
| LLP | | | | *i* S | **Sn** | **08 00 13.4** | **+1.3** |
| **TBP** | **Tagbilaran** | **2.19** | **263** | ⇓*e*P | **Pn** | **07 59 49.1** | **+0.5** |
| TBP | | | | *i* S | Sn | 08 00 17.9 | +3.5 |
| **BUKP** | **Musuan** | **2.29** | **206** | ⇑*e*P | **Pn** | **07 59 51.6** | **+1.9** |
| BUKP | | | | *e*S | **Sn** | **08 00 21.5** | **+4.6** |
| **RCP** | **Roxas** | **3.63** | **296** | ⇓*e*P | **Pn** | **08 00 09.5** | **+1.5** |
| **KAPI** | **Kappang** | **16.15** | **203** | LR | LR | 08 08 56.5 | |
| | comp=Z,23nm,20.3s,baz=26,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **25.61** | **174** | P | **P** | **08 04 36.9** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 08 04 58.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.88** | **181** | P | **P** | **08 04 58.0** | **-0.2** |
| | comp=Z,2.1nm,1.0s,baz=7.5,slow=10,SNR=2.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.88** | **181** | P | **P** | **08 04 56.7** | **-1.5** |
| FITZ | | | | IAmb | IAmb | 08 05 09.4 | |
| | comp=Z,4.5nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **30.66** | **164** | P | **P** | **08 05 22.3** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 08 05 51.5 | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **30.80** | **165** | P | **P** | **08 05 25.3** | **+1.2** |
| WRAB | | | | IAmb | IAmb | 08 05 48.9 | |
| | comp=Z,3.4nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.81** | **165** | P | **P** | **08 05 22.9** | **-1.3** |
| | comp=Z,0.3nm,0.5s,baz=344,slow=9.2,SNR=2.0 | | | | | | |
| **WB2** | **Warramunga Arr** | **30.81** | **165** | P | **P** | **08 05 24.5** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 08 05 38.6 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **34.29** | **167** | P | **P** | **08 05 55.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **34.29** | **167** | P | **P** | **08 05 52.8** | **-1.8** |
| | comp=Z,0.3nm,0.3s,baz=350,slow=6.9,SNR=9.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 08 30.1** | **+0.3** |
| | comp=Z,0.3nm,0.8s,baz=5.4,slow=3.0,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **34.29** | **167** | P | **P** | **08 05 54.3** | **-0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **40.20** | **73** | T | T | 08 49 41.4 | |
| | baz=263 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.21** | **73** | T | T | 08 49 42.6 | |
| | baz=263 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.22** | **73** | T | T | 08 49 40.8 | |
| | baz=263 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.54** | **71** | T | T | 08 50 08.9 | |
| | baz=265,slow=74,SNR=67 | | | | | | |
| **FORT** | **Forrest** | **40.55** | **177** | P | **P** | **08 06 47.7** | **+0.3** |
| **H11N2** | **WAKE ISLAND Hy** | **40.55** | **71** | T | T | 08 50 00.2 | |
| | baz=265,slow=74,SNR=60 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.56** | **71** | T | T | 08 50 09.3 | |
| | baz=265,slow=74,SNR=84 | | | | | | |
| **SONM** | **Songino Array** | **41.24** | **340** | P | **P** | **08 06 52.0** | **-1.1** |
| | comp=Z,0.6nm,0.6s,baz=159,slow=9.7,SNR=5.7 | | | | | | |
| **SONM** | **Songino Array** | **41.24** | **340** | P | **P** | **08 06 53.0** | **-0.1** |
| **BBOO** | **Buckleboo** | **43.59** | **168** | P | **P** | **08 07 12.0** | **-0.2** |
| **STKA** | **Stephens Creek** | **44.17** | **161** | P | **P** | **08 07 16.5** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=326,slow=11,SNR=1.0 | | | | | | |
| **STKA** | **Stephens Creek** | **44.17** | **161** | P | **P** | **08 07 17.1** | **+0.2** |
| **MK31** | **Makanchi Array** | **52.15** | **323** | P | **P** | **08 08 17.9** | **-0.5** |
| MK31 | | | | IAmb | IAmb | 08 08 18.4 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.15** | **323** | P | **P** | **08 08 17.2** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=123,slow=8.3,SNR=17 | | | | | | |
| MKAR | | | | PcP | **PcP** | **08 09 29.0** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=113,slow=3.3,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.15** | **323** | P | **P** | **08 08 17.4** | **-0.9** |
| **MAKZ** | **Makanchi** | **52.35** | **323** | P | **P** | **08 08 19.1** | **-0.6** |
| MAKZ | | | | IAmb | IAmb | 08 08 25.8 | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.80** | **332** | P | **P** | **08 08 36.0** | **-1.5** |
| | comp=Z,0.6nm,0.3s,baz=116,slow=6.8,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.80** | **332** | P | **P** | **08 08 36.4** | **-1.1** |
| **KURK** | **Kurchatov** | **56.21** | **326** | P | **P** | **08 08 46.8** | **-0.9** |
| KURK | | | | IAmb | IAmb | 08 08 47.7 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **TIXI** | **Tiksi** | **61.66** | **1** | P | **P** | **08 09 25.2** | **+0.1** |
| TIXI | | | | IAmb | IAmb | 08 09 25.9 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **66.98** | **319** | P | **P** | **08 09 59.4** | **-0.8** |
| **O18K** | **Koktuh Hills** | **75.78** | **31** | P | **P** | **08 10 53.9** | **+0.7** |
| **IMAR** | **Indian Mountai** | **76.97** | **24** | P | **P** | **08 11 00.4** | **+0.6** |
| **BPAW** | **Bear Paw Mtn.** | **78.02** | **26** | P | **P** | **08 11 06.3** | **+0.6** |
| BPAW | | | | IAmb | IAmb | 08 11 07.4 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **MLY** | **Manley** | **78.16** | **26** | P | **P** | **08 11 07.3** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **78.73** | **22** | P | **P** | **08 11 10.4** | **+0.8** |
| TOLK | | | | IAmb | IAmb | 08 11 15.6 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **79.80** | **26** | P | **P** | **08 11 14.5** | **-0.9** |
| | comp=Z,0.6nm,0.9s,baz=238,slow=5.2,SNR=2.9 | | | | | | |
| **BMAR** | **Burnt Mountain** | **80.63** | **23** | P | **P** | **08 11 22.0** | **+2.1** |
| **BCAR** | **Beaver Creek A** | **82.17** | **27** | P | **P** | **08 11 30.2** | **+2.1** |
| **ARCES** | **ARCESS Array B** | **84.41** | **340** | P | **P** | **08 11 38.7** | **-0.8** |
| | comp=Z,8.0nm,1.3s,baz=77,slow=6.4,SNR=6.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **84.41** | **340** | P | **P** | **08 11 39.2** | **-0.3** |
| **FINES** | **FINESS Array B** | **86.07** | **332** | P | **P** | **08 11 46.9** | **-0.9** |
| | comp=Z,1.0nm,0.4s,baz=79,slow=4.6,SNR=16 | | | | | | |
| **FINES** | **FINESS Array B** | **86.07** | **332** | P | **P** | **08 11 47.3** | **-0.5** |
| **YKA** | **Yellowknife Ar** | **94.12** | **24** | P | **P** | **08 12 25.6** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=300,slow=4.2,SNR=7.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.20** | **292** | PKP | **PKPdf** | **08 17 58.6** | **-0.4** |
| | comp=Z,0.2nm,0.4s,baz=14,slow=2.2,SNR=1.4 | | | | | | |

*IDC **16** 08:44:41.4±1.8, 34°.52N×139°.70E, h156km±6km, mb3.2/3, mb1 3.3/4, mb1mx2.7/52, mbtmp3.5/4, MS2.7/1, Ms1 2.7/1, ms1mx2.1/86, Error ellipse: s-maj=62.3km s-min=8.3km az=71.0*
*JMA **16** 08:44:42.5±0.1, 34°.41N×139°.38E, h144km±1km, M3.0*
**ISC 16 08:44:42.1±0.9, 34°.42N±0°.05×139°.36E±0°.05, h150km±7km, n22, σ0s64/33, mb3.4/4, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTHY** | **Toshimahigashi** | **0.12** | **332** | P | **Pn** | **08 45 02.2** | **0.0** |
| JTHY | | | | S | **Sn** | **08 45 17.0** | **-0.6** |
| **JIM2** | **Oshima 3** | **0.31** | **12** | P | **Pn** | **08 45 02.6** | **0.0** |
| JIM2 | | | | *e*S | **Sn** | **08 45 17.8** | **-0.6** |
| **JIZS** | **Izushimoda** | **0.49** | **307** | P | **Pn** | **08 45 03.4** | **0.0** |
| JIZS | | | | S | **Sn** | **08 45 19.0** | **-0.6** |
| **JMKN** | **Mikurajimanish** | **0.56** | **160** | P | **Pn** | **08 45 03.6** | **-0.1** |
| **JOD2** | **Odawara 2** | **0.87** | **345** | P | **Pn** | **08 45 06.0** | **+0.2** |
| JOD2 | | | | S | **Sn** | **08 45 23.7** | **-0.3** |
| **JFNN** | **Fujinakano** | **0.95** | **325** | P | **Pn** | **08 45 06.8** | **+0.4** |
| **SHZ3** | **Shizuoka 3** | **1.14** | **305** | P | **Pn** | **08 45 

| | | | | | | |
|---|---|---|---|---|---|---|
| **OBKA** | **Obir** | **0.55 111** | *e*Pg | Pg | 08 48 15.6 | +0.8 |
| | 0.3nm,0.1s | | | | | |
| OBKA | | | *e*Sg | Sg | 08 48 23.2 | +1.2 |
| | 1.3nm,0.1s | | | | | |

**ROM 16 08:48:38.6±0.3, 43°488N±0.′008×12°799E±0.′005, h10km±1km, ML0.8/1, Error ellipse: s-maj=0.8km s-min=0.5km az=171.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SSFR** | **Montelago di S** | **0.05** | **193** | P | Pg | 08 48 40.9 | +0.2 |
| SSFR | | | | S | Sg | 08 48 42.5 | +0.4 |
| **FRON** | **Frontone** | **0.06** | **299** | P | Pg | 08 48 40.7 | -0.1 |
| **ARVD** | **Arcevia** | **0.10** | **85** | P | Pg | 08 48 41.6 | +0.4 |
| ARVD | | | | S | Sg | 08 48 44.0 | +0.8 |
| **MPAG** | **Monte Paganucc** | **0.14** | **348** | P | Pg | 08 48 42.4 | +0.5 |
| **PIEI** | **Pieia** | **0.20** | **284** | P | Pg | 08 48 43.5 | +0.7 |
| PIEI | | | | S | Sg | 08 48 47.1 | +1.5 |
| PIEI | | | | AML | AML | | |
| | comp=E,37μm,1.6s | | | | | | |
| PIEI | | | | AML | AML | | |
| | comp=N,52μm,1.6s | | | | | | |
| **NARO** | **Abbazia di Nar** | **0.20** | **308** | P | Pg | 08 48 43.4 | +0.6 |
| **FSSB** | **Fossombrone** | **0.20** | **356** | P | Pg | 08 48 43.5 | +0.6 |
| **PE3** | **Peglio** | **0.30** | **313** | S | Sb | 08 48 51.0 | -0.3 |

*NEIC **16** 08:51:22.6±1.0, 32°.395±0°.010×179°.878E±0°.012, h403km±7km, mb4.0/15, Error ellipse: s-maj=25.7km s-min=13.2km az=76.0*
*IDC **16** 08:51:24.2±3.4, 32°.743×179°.534E, h414km±33km, mb3.1/3, mb1 3.5/6, mb1mx2.9/39, mbtmp4.3/6, Error ellipse: s-maj=43.2km s-min=33.0km az=74.0*
*WEL **16** 08:51:26.4±0.8, 32°.595N±0°.002×18°.090W±2°.4, h340km±14km, M4.6/24, mB5.1/16, ML5.2/22, MLv5.2/24, Mw(mB)4.4/16, Error ellipse: s-maj=0.0km s-min=0.0km az=109.4*
**ISC 16 08:51:21.8±0.9, 32°.305±0°.107×179°.878E±0°.011, h400km, n99, σ1§85/111, mb3.8/10, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **3.61** | **34** | S | **S** | **08 53 21.9** | **-3.9** |
| **MXZ** | **Matakaoa Point** | **5.39** | **193** | | **Pn** | **08 52 48.4** | **+0.6** |
| MXZ | | | | | **S** | **08 53 54.1** | **-3.7** |
| **MXZ** | **Matakaoa Point** | **5.39** | **193** | P | **Pn** | **08 52 50.2** | **+2.4** |
| MXZ | | | | S | **S** | **08 53 57.7** | **-0.1** |
| **HAZ** | **Te Kaha** | **5.69** | **196** | P | **Pn** | **08 52 53.6** | **+2.7** |
| HAZ | | | | S | **S** | **08 54 03.5** | **0.0** |
| **PKGZ** | **Pakihiroa** | **5.75** | **194** | P | **Pn** | **08 52 55.6** | **+3.9** |
| PKGZ | | | | S | **S** | **08 54 05.5** | **+0.6** |
| **RUGZ** | **Raukumara Rang** | **5.91** | **196** | P | **Pn** | **08 52 55.6** | **+2.1** |
| RUGZ | | | | S | **S** | **08 54 05.7** | **-2.5** |
| **TWGZ** | **Tauwhareparae** | **6.05** | **194** | P | **Pn** | **08 52 58.7** | **+3.8** |
| TWGZ | | | | S | **S** | **08 54 11.2** | **+0.3** |
| **OPRZ** | **Ohinepanea** | **6.13** | **205** | P | **Pn** | **08 52 59.1** | **+3.3** |
| **MARZ** | **Manawahe** | **6.22** | **203** | P | Pn | 08 53 01.3 | +4.6 |
| **MWZ** | **Matawai** | **6.30** | **196** | P | **Pn** | **08 52 58.9** | **+1.3** |
| MWZ | | | | S | **S** | **08 54 14.7** | **-1.1** |
| **CNGZ** | **Carnagh Statio** | **6.31** | **191** | P | **Pn** | **08 53 00.1** | **+2.5** |
| CNGZ | | | | S | **S** | **08 54 13.6** | **-2.2** |
| **EDRZ** | **Edgecumbe** | **6.31** | **202** | P | **Pn** | **08 53 02.0** | **+4.3** |
| **TKGZ** | **Te Karaka** | **6.33** | **194** | P | **Pn** | **08 52 59.1** | **+1.2** |
| TKGZ | | | | S | **S** | **08 54 14.2** | **-2.1** |
| **URZ** | **Urewera** | **6.34** | **199** | P | **Pn** | **08 52 59.1** | **+1.1** |
| | 21nm,0.3s,baz=32,slow=4.3,SNR=92 | | | | | | |
| URZ | | | | S | **S** | **08 54 15.6** | **-0.9** |
| | 26nm,0.3s,baz=98,slow=18,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **6.34** | **199** | | **Pn** | **08 52 59.0** | **+1.1** |
| URZ | | | | | **S** | **08 54 15.0** | **-1.5** |
| **URZ** | **Urewera** | **6.34** | **199** | P | **Pn** | **08 52 58.4** | **+0.5** |
| URZ | | | | S | **S** | **08 54 15.7** | **-0.7** |
| **TOZ** | **Tahuroa Road** | **6.46** | **212** | Pn | | 08 53 04.6 | +5.3 |
| **RIGZ** | **Rimuhau** | **6.60** | **194** | P | **P** | **08 53 02.3** | **+0.7** |
| RIGZ | | | | S | **S** | **08 54 20.4** | **-1.5** |
| **HRRZ** | **Handcock Road** | **6.72** | **204** | P | **P** | **08 53 03.1** | **+0.2** |
| **KNZ** | **Kokohu** | **6.93** | **194** | P | **P** | **08 53 05.5** | **+0.5** |
| KNZ | | | | S | **S** | **08 54 26.9** | **-1.5** |
| **KUTZ** | **Kaahu Road** | **6.97** | **207** | P | **P** | **08 53 09.8** | **+4.2** |
| **MHGZ** | **Mahia Peninsul** | **7.01** | **192** | P | **P** | **08 53 09.1** | **+3.1** |
| MHGZ | | | | S | **S** | **08 54 30.6** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **7.36** | **200** | | **P** | **08 53 09.4** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **7.36** | **200** | P | **P** | **08 53 09.8** | **-0.2** |
| BKZ | | | | S | **S** | **08 54 34.6** | **-2.9** |
| **HIZ** | **Hauiti** | **7.39** | **212** | P | **P** | **08 53 13.5** | **+3.2** |
| **RITZ** | **Rihia Road** | **7.39** | **205** | P | **P** | **08 53 12.8** | **+2.5** |
| **KATZ** | **Kakaramea** | **7.45** | **205** | P | **P** | **08 53 14.8** | **+3.7** |
| **MCHZ** | **McNeill Hill** | **7.56** | **198** | P | **P** | **08 53 13.7** | **+1.5** |
| **NTVZ** | **North Tongarir** | **7.56** | **205** | P | **P** | **08 53 13.9** | **+1.5** |
| **TMVZ** | **Te Maari** | **7.57** | **205** | P | **P** | **08 53 14.0** | **+1.6** |
| **ETVZ** | **East Tongariro** | **7.58** | **205** | P | **P** | **08 53 14.1** | **+1.5** |
| **WTVZ** | **West Tongariro** | **7.61** | **205** | P | **P** | **08 53 14.7** | **+1.8** |
| **NNVZ** | **North Ngauruho** | **7.62** | **205** | P | **P** | **08 53 15.0** | **+2.1** |
| **KWHZ** | **Kaweka Forest** | **7.62** | **200** | P | **P** | **08 53 13.7** | **+0.8** |
| **OTVZ** | **Oturere** | **7.62** | **205** | P | **P** | **08 53 12.7** | **-0.4** |
| **TWVZ** | **Taurewa** | **7.63** | **206** | P | **P** | **08 53 15.2** | **+2.2** |
| **SNVZ** | **South Ngauruho** | **7.65** | **205** | P | **P** | **08 53 15.2** | **+1.8** |
| **NGZ** | **Ngauruhoe** | **7.66** | **205** | P | **P** | **08 53 15.1** | **+1.6** |
| **CKHZ** | **Cape Kidnapper** | **7.67** | **196** | P | **P** | **08 53 15.4** | **+2.0** |
| **TUVZ** | **Tukino** | **7.72** | **205** | P | **P** | **08 53 15.2** | **+1.0** |
| **FWVZ** | **Far West T-bar** | **7.75** | **205** | P | **P** | **08 53 16.0** | **+1.5** |
| **WHVZ** | **Whangaehu Hut** | **7.76** | **205** | P | **P** | **08 53 16.0** | **+1.4** |
| **BHHZ** | **Black Hill Sta** | **7.79** | **202** | P | **Pn** | **08 53 13.9** | **-0.4** |
| **TRVZ** | **Turoa** | **7.79** | **205** | P | **P** | **08 53 16.3** | **+1.4** |
| **WNVZ** | **Wahianoa** | **7.79** | **205** | P | **P** | **08 53 14.5** | **-0.5** |
| **MOVZ** | **Moawhango** | **7.81** | **204** | P | **P** | **08 53 16.6** | **+1.6** |
| **KRHZ** | **Kereru** | **7.83** | **200** | P | **P** | **08 53 15.6** | **+0.3** |
| **KAHZ** | **Kahuranaki** | **7.84** | **197** | P | **P** | **08 53 17.5** | **+2.2** |
| **PKVZ** | **Pokaka** | **7.85** | **206** | P | **P** | **08 53 17.7** | **+2.2** |
| **VRZ** | **Vera Road** | **7.94** | **210** | P | **P** | **08 53 18.5** | **+2.1** |
| **PNHZ** | **Pukenui** | **8.13** | **200** | P | **P** | **08 53 18.7** | **+0.1** |
| **WPHZ** | **Waipukurau** | **8.21** | **198** | P | **P** | **08 53 20.9** | **+1.6** |
| **DREZ** | **Durham Road** | **8.24** | **212** | P | P | 08 53 24.3 | +4.6 |
| **PRHZ** | **Porangahau** | **8.35** | **197** | P | **P** | **08 53 22.4** | **+1.4** |
| **NEZ** | **North Egmont** | **8.35** | **212** | P | P | 08 53 25.6 | +4.5 |
| **LREZ** | **Lake Rotokare** | **8.37** | **210** | P | **P** | **08 53 25.0** | **+3.8** |
| **WAZ** | **Wanganui** | **8.39** | **206** | P | **P** | **08 53 23.0** | **+1.5** |
| **KHEZ** | **Kahui Hut** | **8.41** | **212** | P | **P** | **08 53 26.0** | **+4.3** |
| **NBEZ** | **Newall Road No** | **8.45** | **213** | P | P | 08 53 27.3 | +5.2 |
| **DVHZ** | **Dannevirke** | **8.50** | **199** | P | **P** | **08 53 22.8** | **+0.2** |
| **ANWZ** | **Angora Road** | **8.57** | **197** | P | **P** | **08 53 24.3** | **+1.0** |
| **POWZ** | **Post Office Ro** | **8.70** | **201** | P | **P** | **08 53 25.7** | **+0.8** |
| **BFZ** | **Birch Farm** | **8.84** | **198** | P | **P** | **08 53 26.0** | **-0.3** |
| **BFZ** | **Birch Farm** | **8.84** | **198** | P | **P** | **08 53 26.9** | **+0.5** |
| **MRZ** | **Mangatainoka R** | **9.01** | **201** | P | **Pn** | **08 53 26.8** | **-1.4** |
| **TIWZ** | **Tintock** | **9.02** | **199** | P | **P** | **08 53 30.1** | **+1.7** |
| **CPWZ** | **Castlepoint** | **9.06** | **197** | P | **P** | **08 53 31.6** | **+2.8** |
| **HOWZ** | **Holdsworth Sta** | **9.24** | **201** | P | **Pn** | **08 53 31.0** | **+0.1** |
| **OGWZ** | **Otaki Gorge** | **9.28** | **202** | P | **P** | **08 53 30.6** | **-0.6** |
| **KIW** | **Kapiti Island** | **9.40** | **203** | P | **Pn** | **08 53 33.2** | **+0.4** |
| **CAW** | **Cannon Point** | **9.57** | **202** | P | **P** | **08 53 34.2** | **-0.3** |
| **PAWZ** | **Paruwai Farm** | **9.71** | **200** | P | **Pn** | **08 53 36.8** | **+0.4** |
| **MSWZ** | **Moikau Station** | **9.80** | **200** | | **Pn** | **08 53 37.9** | **+0.6** |
| **SNZO** | **South Karori** | **9.87** | **203** | P | **Pn** | **08 53 37.8** | **-0.4** |
| **BHW** | **Baring Head** | **9.91** | **202** | P | **P** | **08 53 37.3** | **-0.9** |
| **TUWZ** | **Tuamarina** | **10.24** | **205** | P | **P** | **08 53 40.8** | **-1.1** |
| **NNZ** | **Nelson** | **10.27** | **208** | P | **P** | **08 53 40.7** | **-1.6** |
| **RPZ** | **Rata Peaks** | **13.30** | **209** | P | **P** | **08 54 15.8** | **+0.1** |
| | 2.1nm,0.3s,baz=32,slow=3.2,SNR=11 | | | | | | |
| RPZ | | | | S | **S** | **08 56 33.8** | **-5.7** |
| | 0.8nm,0.3s,baz=326,slow=15,SNR=2.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.62** | **307** | P | **P** | **08 54 41.9** | **+0.6** |
| | 0.3nm,0.3s,baz=154,slow=18,SNR=5.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.62** | **307** | P | **P** | **08 54 42.3** | **+1.0** |
| DZM | | | | IAmb | IAmb | 08 54 50.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **26.02** | **278** | P | **P** | **08 56 20.6** | **0.0** |
| EIDS | | | | IAmb | IAmb | 08 56 26.3 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **32.32** | **284** | P | **P** | **08 57 15.6** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 08 57 17.1 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **36.66** | **257** | P | **P** | **08 57 51.9** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 08 58 04.2 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **41.16** | **270** | P | **P** | **08 58 28.9** | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=108,slow=7.6,SNR=18 | | | | | | |
| **WR0** | **Warramunga Arr** | **42.15** | **276** | P | **P** | **08 58 36.3** | **-1.0** |
| **WB2** | **Warramunga Arr** | **42.32** | **275** | P | **P** | **08 58 38.2** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 08 58 39.7 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.33** | **275** | P | **P** | **08 58 38.2** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 08 58 39.6 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.33** | **275** | P | **P** | **08 58 38.4** | **-0.3** |
| | comp=Z,1.6nm,0.3s,baz=113,slow=7.9,SNR=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.33** | **275** | P | **P** | **08 58 37.9** | **-0.8** |
| **WB0** | **Warramunga Arr** | **42.36** | **276** | P | **P** | **08 58 38.6** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 08 59 02.4 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **46.03** | **185** | P | **P** | **08 59 06.9** | **+0.1** |
| **MTN** | **Manton Dam** | **48.46** | **282** | P | **P** | **08 59 25.6** | **-0.6** |
| MTN | | | | IAmb | IAmb | 08 59 34.4 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.50** | **273** | P | **P** | **08 59 40.6** | **-0.7** |
| | comp=Z,0.4nm,0.3s,baz=113,slow=7.7,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.50** | **273** | P | **P** | **08 59 40.6** | **-0.7** |
| FITZ | | | | IAmb | IAmb | 08 59 55.6 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **55.80** | **281** | P | **P** | **09 00 19.9** | **+0.2** |
| **QSPA** | **South Pole Qui** | **57.82** | **180** | P | **P** | **09 00 33.5** | **+0.6** |
| **SNAA** | **Sanae** | **76.31** | **179** | P | **P** | **09 02 26.9** | **-0.6** |
| **FINES** | **FINESS Array B** | **146.22** | **337** | PKPbc | **PKPdf** | **09 10 15.2** | **+1.7** |
| | comp=Z,2.4nm,1.0s,baz=58,slow=3.4,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **146.22** | **337** | | **PKPdf** | **09 10 12.8** | **-0.6** |

*IDC **16** 08:58:06.6±1.1, 29°.106N×103°.149E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.1/56, mbtmp3.6/5, ML2.7/1, MS3.3/1, Ms1 3.3/1, ms1mx2.3/94, Error ellipse: s-maj=81.6km s-min=19.0km az=61.0*
**ISC 16 08:58:08.1±1.4, 29°.1N±0°.2×103°.5E±0°.4, h10km, n7, σ1§28/6, mb3.9/5, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **18.86** | **6** | P | **Pn** | **09 02 29.9** | **+1.0** |
| | 0.0nm,0.3s,baz=180,slow=7.1,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.23** | **323** | P | **P** | **09 03 25.7** | **+0.6** |
| | 0.5nm,0.6s,baz=117,slow=11,SNR=7.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.35** | **336** | P | **P** | **09 04 00.2** | **-1.9** |
| | 0.7nm,0.5s,baz=144,slow=11,SNR=2.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.59** | **326** | P | **P** | **09 04 04.6** | **+0.3** |
| | 60nm,0.8s,baz=129,slow=10,SNR=3.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.54** | **153** | LR | LR | 09 30 19.1 | |
| | comp=Z,26nm,18.5s,baz=178,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.09** | **145** | P | **P** | **09 07 54.8** | **-0.1** |
| | 0.9nm,0.7s,baz=337,slow=8.3,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **60.04** | **148** | P | **P** | **09 08 15.5** | **+0.1** |
| | 0.6nm,0.6s,baz=328,slow=6.9,SNR=7.6 | | | | | | |

*DJA **16** 08:58:35.7±0.5, 7°.58±8°×11°.5E±°, h562km±6km, M4.2/18, mb4.3/8, mB4.5/3, MLv4.2/18, Mw(mB)3.7/3*
*IDC **16** 08:58:35.3±1.2, 6°.50S×114°.62E, h575km±12km, mb2.9/9, mb1 3.1/13, mb1mx2.7/49, mbtmp4.0/13, Error ellipse: s-maj=21.8km s-min=10.9km az=53.0*
*NEIC **16** 08:58:35.5±1.3, 6°.5S±0°.1×114°.6E±0°.1, h574km±8km, mb4.2/18, Error ellipse: s-maj=15.3km s-min=15.2km az=205.0*
**ISC 16 08:58:36.1±0.5, 6°.58S±0°.07×114°.52E±0°.07, h600km, n65, σ2§90/71, mb3.9/16, Bali Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLJI** | **Banyuglugur** | **1.48** | **218** | P | **P** | **08 59 45.0** | **-3.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.92** | **191** | P | **P** | **08 59 46.8** | **-3.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.92** | **191** | P | **P** | **08 59 45.9** | **-4.2** |
| JAGI | | | | S | **S** | **09 00 42.1** | **-8.2** |
| **BWJI** | **Bawean** | **1.98** | **291** | P | **P** | **08 59 47.1** | **-3.2** |
| **GMJI** | **Gumukmas** | **1.99** | **212** | P | **P** | **08 59 45.7** | **-4.6** |
| GMJI | | | | S | **S** | **09 00 43.7** | **-7.0** |
| **GRJI** | **Gresik** | **2.05** | **260** | S | **S** | **09 00 46.4** | **-4.7** |
| **IGBI** | **Denpasar** | **2.31** | **164** | S | **S** | **09 00 44.9** | **-8.4** |
| **PWJI** | **Pagerwojo** | **3.05** | **242** | P | **P** | **08 59 52.6** | **-2.9** |
| **UWJI** | **Ujung Watu** | **3.55** | **272** | P | **P** | **08 59 55.8** | **-2.7** |
| **KBKI** | **Kotabaru** | **3.65** | **27** | P | **P** | **08 59 56.3** | **-2.9** |
| **PCJI** | **Pacitan** | **3.68** | **244** | P | **P** | **08 59 56.9** | **-2.5** |
| PCJI | | | | S | **S** | **09 01 00.8** | **-6.5** |
| **PLAI** | **Plampang** | **3.93** | **125** | P | **P** | **08 59 56.6** | **-4.5** |
| **UGM** | **Wanagama** | **4.18** | **251** | P | **P** | **09 00 01.4** | **-1.5** |
| **UGM** | **Wanagama** | **4.18** | **251** | P | **P** | **09 00 00.0** | **-2.8** |
| **YOGI** | **Yogyakarta** | **4.37** | **253** | P | **P** | **09 00 00.5** | **-3.7** |
| **KAPI** | **Kappang** | **5.43** | **74** | P | **P** | **09 00 10.2** | **-2.3** |
| | 4.4nm,0.3s,baz=280,slow=5.5,SNR=17 | | | | | | |
| **KAPI** | **Kappang** | **5.43** | **74** | P | **P** | **09 00 10.0** | **-2.5** |
| **KPJI** | **Karang Pucung** | **5.59** | **262** | P | **P** | **09 00 12.4** | **-1.4** |
| | 0.5nm120nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **5.71** | **123** | P | P | 08 59 59.7 | -15 |
| **BKSI** | **Bulukumba** | **5.71** | **78** | P | **P** | **09 00 12.5** | **-2.3** |
| | 0.1nm29nm,0.6s | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.84** | **64** | P | **P** | **09 00 13.2** | **-2.7** |
| | 0.2nm56nm,0.8s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.95** | **86** | P | **P** | **09 00 14.7** | **-2.1** |
| | 0.3nm764nm91nm,0.8s | | | | | | |
| **BNSI** | **Bone** | **5.97** | **69** | P | **P** | **09 00 15.2** | **-1.8** |
| | 0.3nm906nm86nm,1.0s | | | | | | |
| **CMJI** | **Cimerak** | **6.14** | **258** | P | **P** | **09 00 15.3** | **-3.1** |
| | 0.3nm1μm55nm,0.6s | | | | | | |
| **LEM** | **Lembang** | **6.86** | **268** | P | **P** | **09 00 23.8** | **-1.2** |
| | 3.8nm,0.3s,baz=323,slow=20,SNR=2.9 | | | | | | |
| **CNJI** | **Cibinong** | **7.37** | **264** | P | **P** | **09 00 27.1** | **-2.4** |
| **CBJI** | **Citeko** | **7.62** | **271** | P | **P** | **09 00 27.7** | **-4.1** |
| **BATI** | **Baumata** | **9.74** | **112** | P | **P** | **09 00 50.5** | **-1.9** |
| | 5.6nm,0.3s,baz=340,slow=21,SNR=1.5 | | | | | | |
| BATI | | | | S | **S** | **09 02 39.7** | **-4.5** |
| | 11nm,0.3s,baz=306,slow=21,SNR=6.4 | | | | | | |
| **TOLI2** | **Tolitoli** | **9.87** | **40** | P | **P** | **09 00 51.3** | **-2.3** |
| **SOEI** | **Soe** | **10.16** | **109** | P | **P** | **09 00 54.8** | **-1.8** |
| **KKM** | **Kota Kinabalu** | **12.65** | **8** | P | **P** | **09 01 18.4** | **-3.1** |
| **PSA00** | **Pilbara Seismi** | **15.78** | **161** | P | **P** | **09 01 50.1** | **-1.3** |
| PSA00 | | | | IAmb | IAmb | 09 02 19.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **16.64** | **124** | P | **P** | **09 02 00.8** | **+1.5** |
| KNRA | | | | IAmb | IAmb | 09 02 13.7 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **MTN** | **Manton Dam** | **17.52** | **112** | P | **P** | **09 02 07.4** | **0.0** |
| MTN | | | | IAmb | IAmb | 09 02 32.5 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **PSI** | **Prapat** | **18.14** | **300** | P | **P** | **09 02 13.3** | **+0.1** |
| | comp=Z,1.2nm,0.3s,baz=132,slow=9.6,SNR=5.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **23.34** | **126** | P | **P** | **09 03 00.7** | **+0.9** |
| WB0 | | | | IAmb | IAmb | 09 03 29.2 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.39** | **127** | P | **P** | **09 03 01.1** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=309,slow=9.4,SNR=2.0 | | | | | | |
| WRA | | | | ScP | **ScP** | **09 09 09.2** | **+2.3** |
| | comp=Z,0.5nm,0.5s,baz=335,slow=2.0,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.39** | **127** | P | **P** | **09 02 59.4** | **-0.8** |
| **WB2** | **Warramunga Arr** | **23.40** | **126** | P | **P** | **09 03 01.0** | **+0.8** |
| WB2 | | | | IAmb | IAmb | 09 03 12.7 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.56** | **126** | P | **P** | **09 03 02.6** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 09 03 29.8 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **25.22** | **134** | P | **P** | **09 03 16.3** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=310,slow=8.4,SNR=7.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 06 30.8** | **+2.0** |
| | comp=Z,0.2nm,0.4s,baz=308,slow=2.7,SNR=5.7 | | | | | | |
| ASAR | | | | S | **S** | **09 07 01.8** | **+0.8** |
| | comp=Z,0.1nm,0.4s,baz=33,slow=9.8,SNR=1.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **09 09 15.7** | **+3.6** |
| | comp=Z,0.5nm,0.6s,baz=320,slow=2.8,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.22** | **134** | P | **P** | **09 03 16.9** | **+0.6** |
| **FORT** | **Forrest** | **27.23** | **154** | P | **P** | **09 03 35.9** | **+2.1** |
| **COEN** | **Coen** | **29.11** | **107** | P | **P** | **09 03 51.3** | **+0.9** |
| COEN | | | | IAmb | IAmb | 09 04 09.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **32.91** | **145** | P | **P** | **09 04 23.4** | **+0.9** |
| **KSRS** | **Korea Array** | **45.55** | **15** | P | **P** | **09 06 04.0** | **+0.5** |
| | comp=Z,2.5nm,0.8s,baz=197,slow=6.7,SNR=5.1 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **52.94** | **16** | P | **P** | **09 06 58.0** | **+0.3** |
| USA0B | | | | IAmb | IAmb | 09 07 25.4 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.94** | **16** | P | **P** | **09 06 58.0** | **+0.4** |
| | comp=Z,2.8nm,0.7s,baz=176,slow=5.4,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.94** | **16** | P | **P** | **09 06 57.6** | **-0.1** |
| **SONM** | **Songino Array** | **54.65** | **353** | P | **P** | **09 07 10.1** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=171,slow=8.4,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **54.65** | **353** | P | **P** | **09 07 10.0** | **+0.3** |
| **KLR** | **Kul'dur** | **57.58** | **13** | P | **P** | **09 07 29.6** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=165,slow=6.8,SNR=4.1 | | | | | | |
| **CASY** | **Casey** | **59.67** | **182** | P | **P** | **09 07 46.4** | **+3.0** |
| **MK31** | **Makanchi Array** | **60.34** | **335** | P | **P** | **09 07 49.0** | **+0.8** |
| **MKAR** | **Makanchi Array** | **60.34** | **335** | P | **P** | **09 07 48.8** | **+0.5** |
| | comp=Z,0.2nm,0.4s,baz=148,slow=6.7,SNR=7.1 | | | | | | |
| **VOI** | **Vohitsoka** | **66.92** | **249** | P | **P** | **09 08 32.5** | **+1.8** |
| VOI | | | | IAmb | IAmb | 09 08 42.3 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.06** | **326** | P | **P** | **09 09 06.8** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **74.74** | **326** | P | **P** | **09 09 16.9** | **+1.2** |
| | comp=Z,0.4nm,0.6s,baz=31,slow=18,SNR=3.6 | | | | | | |
| **SEY** | **Seymchan** | **75.07** | **17** | P | **P** | **09 09 18.4** | **+1.1** |
| | comp=Z,3.2nm,0.3s,baz=136,slow=7.0,SNR=22 | | | | | | |
| **VNDA** | **Vanda** | **75.08** | **170** | P | **P** | **09 09 19.4** | **+2.3** |
| VNDA | | | | IAmb | IAmb | 09 09 45.8 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.41** | **180** | P | **P** | **09 10 02.7** | **+1.4** |
| **SNAA** | **Sanae** | **92.09** | **196** | P | **P** | **09 10 44.5** | **+2.6** |
| **TXAR** | **Lajitas Array** | **137.50** | **53** | SKP | | 09 19 35.2 | |
| | comp=Z,0.3nm,0.8s,baz=288,slow=3.5,SNR=2.8 | | | | | | |
| **CPUP** | **Villa Florida** | **146.35** | **193** | PKPbc | **PKPab** | **09 17 13.7** | **-0.1** |
| | comp=Z,1.0nm,0.6s,baz=49,slow=7.0,SNR=3.6 | | | | | | |
| **CPUP** | **Villa Florida** | **146.35** | **193** | | **PKPbc** | **09 17 12.0** | **+0.6** |

*NOU **16** 09:03:35.3, 38°.76S×175°.94E, h173km, MLv4.0/7, North Island, New Zealand*
*WEL **16** 09:03:41.8±0.4, 39°.5S±3°×17°.6E±°, h98km±4km, M2.9/67, ML2.8/30, MLv2.9/67, Error ellipse: s-maj=0.0km s-min=0.0km az=135.8*
**ISC 16 09:03:38.0±1.5, 38°.90S±0°.04×175°.92E±0°.04, h133km±7km, n129, σ1§30/137, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RITZ** | **Rihia Road** | **0.09** | **213** | P | **Pn** | **09 03 56.9** | **+0.9** |
| **RATZ** | **Rangitukua** | **0.12** | **285** | P | **Pn** | **09 03 56.4** | **+0.4** |
| **HATZ** | **Hinemaiaia** | **0.13** | **87** | P | **Pn** | **09 03 56.4** | **+0.3** |
| HATZ | | | | S | **Sn** | **09 04 07.5** | **-2.2** |
| **KATZ** | **Kakaramea** | **0.19** | **247** | P | **Pn** | **09 03 57.0** | **+0.7** |
| **WHTZ** | **Whakaora** | **0.23** | **7** | P | **Pn** | **09 03 57.0** | **+0.7** |
| **WATZ** | **Wairara** | **0.24** | **322** | P | **Pn** | **09 03 56.8** | **+0.5** |
| **TMVZ** | **Te Maari** | **0.28** | **218** | P | **Pn** | **09 03 57.4** | **+0.9** |
| TMVZ | | | | S | **Sn** | **09 04 10.0** | **-0.6** |
| **NTVZ** | **North Tongarir** | **0.28** | **224** | P | **Pn** | **09 03 57.4** | **+0.9** |
| NTVZ | | | | S | **Sn** | **09 04 10.1** | **-0.5** |
| **ETVZ** | **East Tongariro** | **0.29** | **215** | P | **Pn** | **09 03 57.6** | **+1.0** |
| ETVZ | | | | S | **Sn** | **09 04 10.1** | **-0.6** |
| **KRVZ** | **Karewarewa** | **0.29** | **228** | P | **Pn** | **09 03 57.4** | **+0.8** |
| **OTVZ** | **Oturere** | **0.33** | **217** | P | **Pn** | **09 03 57.8** | **+1.0** |
| OTVZ | | | | S | **Sn** | **09 04 10.6** | **-0.4** |
| **NNVZ** | **North Ngauruho** | **0.33** | **226** | P | **Pn** | **09 03 57.8** | **+1.0** |
| **WTVZ** | **West Tongariro** | **0.34** | **230** | P | **Pn** | **09 03 57.7** | **+0.9** |
| WTVZ | | | | S | **Sn** | **09 04 10.2** | **-0.8** |
| **SNVZ** | **South Ngauruho** | **0.36** | **217** | P | **Pn** | **09 03 58.1** | **+1.1** |
| SNVZ | | | | S | **Sn** | **09 04 10.9** | **-0.4** |
| **NGZ** | **Ngauruhoe** | **0.37** | **222** | P | **Pn** | **09 03 57.9** | **+1.0** |
| **MRHZ** | **Matea Rd** | **0.39** | **81** | P | **Pn** | **09 03 57.8** | **+0.3** |
| MRHZ | | | | S | **Sn** | **09 04 09.0** | **-2.2** |
| **KUTZ** | **Kaahu Road** | **0.42** | **349** | P | **Pn** | **09 03 57.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KHZ | Kahutara | 3.95 | 207 | P | Pn | 09 04 37.1 | 0.0 |
| KHZ | Kahutara | 3.95 | 207 | P | Pn | 09 04 37.1 | 0.0 |
| GVZ | Greta Valley S | 4.62 | 207 | P | Pn | 09 04 45.3 | -0.6 |
| LTZ | Lake Taylor | 4.77 | 214 | P | Pn | 09 04 47.2 | -0.8 |
| INZ | Inchbonnie | 5.11 | 220 | P | Pn | 09 04 52.6 | 0.0 |
| OKCZ | Okains Bay | 5.28 | 203 | P | Pn | 09 04 54.1 | -0.8 |
| RPZ | Rata Peaks | 6.05 | 216 | P | Pn | 09 05 04.7 | -0.4 |
| TMZ | Timaru | 6.60 | 212 | P | Pn | 09 05 11.6 | -0.9 |
| ODZ | Otahua Downs | 7.29 | 211 | P | Pn | 09 05 20.4 | -1.4 |

**WEL 16 09:05:14.4±0.3,41°S±3°×17°5E±°, *h*26km±4km, M3.4/47, ML3.6/48, MLv3.4/47, Error ellipse: s-maj=0.0km s-min=0.0km az=149.5, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KIW | Kapiti Island | 0.20 | 163 | P | Pn | 09 05 21.8 | +0.2 |
| KIW | | | | S | Sb | 09 05 27.3 | +3.2 |
| OGWZ | Otaki Gorge | 0.29 | 119 | P | Pn | 09 05 22.9 | -0.1 |
| OGWZ | | | | S | Sn | 09 05 29.2 | +0.7 |
| CAW | Cannon Point | 0.47 | 158 | P | Pn | 09 05 25.2 | -0.2 |
| CAW | | | | S | Sn | 09 05 33.1 | +0.3 |
| HOWZ | Holdsworth Sta | 0.56 | 114 | P | Pn | 09 05 26.3 | -0.4 |
| HOWZ | | | | S | Sn | 09 05 35.8 | +0.6 |
| MRZ | Mangatainoka R | 0.56 | 89 | P | Pn | 09 05 26.3 | -0.4 |
| MRZ | | | | S | Sn | 09 05 35.6 | +0.4 |
| WEL | Wellington | 0.61 | 185 | P | Pn | 09 05 27.1 | -0.3 |
| WEL | | | | S | Sn | 09 05 36.8 | +0.5 |
| TCW | Tory Channel | 0.68 | 218 | P | Pb | 09 05 27.9 | +0.1 |
| MTW | Mount Morrison | 0.70 | 134 | P | Pn | 09 05 28.5 | -0.1 |
| MTW | | | | S | Sn | 09 05 39.7 | +1.2 |
| DUWZ | D'Urville Isla | 0.71 | 259 | P | Pb | 09 05 27.9 | -0.2 |
| DUWZ | | | | S | Sb | 09 05 37.9 | +0.4 |
| BHW | Baring Head | 0.73 | 178 | P | Pb | 09 05 28.8 | +0.2 |
| BHW | | | | S | Sn | 09 05 39.8 | +0.5 |
| POWZ | Post Office Ro | 0.76 | 69 | P | Pb | 09 05 29.1 | 0.0 |
| MSWZ | Moikau Station | 0.80 | 157 | P | Pn | 09 05 30.0 | 0.0 |
| MSWZ | | | | S | Sn | 09 05 42.4 | +1.2 |
| TIWZ | Tintock | 0.80 | 98 | P | Pb | 09 05 29.3 | -0.5 |
| TIWZ | | | | S | Sn | 09 05 41.8 | +0.6 |
| PAWZ | Paruwai Farm | 0.84 | 148 | P | Pb | 09 05 30.1 | -0.3 |
| PAWZ | | | | S | Sn | 09 05 43.4 | +1.4 |
| PRWZ | Pori Road | 0.87 | 83 | P | Pn | 09 05 30.5 | -0.4 |
| PRWZ | | | | S | Sn | 09 05 44.3 | +1.5 |
| TMWZ | Te Maipa | 0.91 | 119 | P | Pb | 09 05 31.6 | 0.0 |
| WAZ | Wanganui | 0.93 | 7 | P | Pn | 09 05 31.4 | -0.3 |
| PLWZ | Palliser | 0.95 | 161 | P | Pn | 09 05 31.6 | -0.5 |
| TRWZ | Traveller | 0.97 | 139 | P | Pb | 09 05 32.5 | 0.0 |
| TUWZ | Tuamarina | 1.01 | 222 | P | Pn | 09 05 33.0 | +0.1 |
| CPWZ | Castlepoint | 1.06 | 103 | P | Pn | 09 05 32.8 | -0.7 |
| BFZ | Birch Farm | 1.07 | 91 | P | Pn | 09 05 32.6 | -1.1 |
| DVHZ | Dannevirke | 1.08 | 70 | P | Pn | 09 05 33.1 | -0.8 |
| NNZ | Nelson | 1.23 | 243 | P | Pn | 09 05 35.9 | 0.0 |
| LREZ | Lake Rotokare | 1.26 | 345 | P | Pn | 09 05 36.4 | +0.2 |
| BSWZ | Blackbirch Sta | 1.27 | 215 | P | Pn | 09 05 36.3 | -0.1 |
| PNHZ | Pukenui | 1.29 | 54 | P | Pn | 09 05 35.5 | -1.3 |
| MTVZ | Mangateitei | 1.38 | 21 | P | Pn | 09 05 37.8 | -0.1 |
| PREZ | Palmer Road | 1.43 | 338 | P | Pn | 09 05 39.0 | +0.3 |
| PRHZ | Porangahau | 1.43 | 74 | P | Pn | 09 05 38.5 | -0.2 |
| MOVZ | Moawhango | 1.45 | 29 | P | Pn | 09 05 38.2 | -0.7 |
| NMEZ | Namu Road | 1.46 | 329 | P | Pn | 09 05 39.2 | +0.2 |
| WNVZ | Wahianoa | 1.47 | 24 | P | Pn | 09 05 39.2 | -0.1 |
| TRVZ | Turoa | 1.48 | 22 | P | Pn | 09 05 39.5 | 0.0 |
| DRZ | Dome Shelter | 1.50 | 22 | P | Pn | 09 05 40.6 | +0.7 |
| WHVZ | Whangaehu Hut | 1.50 | 23 | P | Pn | 09 05 39.8 | 0.0 |
| BHHZ | Black Hill Sta | 1.51 | 39 | P | Pn | 09 05 39.1 | -0.7 |
| NEZ | North Egmont | 1.51 | 338 | P | Pn | 09 05 40.0 | +0.2 |
| KHEZ | Kahui Hut | 1.52 | 335 | P | Pn | 09 05 40.2 | +0.3 |
| FWVZ | Far West T-bar | 1.52 | 21 | P | Pn | 09 05 39.9 | -0.2 |
| TUVZ | Tukino | 1.54 | 24 | P | Pn | 09 05 40.3 | 0.0 |
| VRZ | Vera Road | 1.55 | 358 | P | Pn | 09 05 40.1 | -0.1 |
| DREZ | Durham Road | 1.56 | 342 | P | Pn | 09 05 40.9 | +0.4 |
| KRHZ | Kereru | 1.56 | 49 | P | Pn | 09 05 39.1 | -1.4 |
| NBEZ | Newall Road No | 1.59 | 332 | P | Pn | 09 05 41.2 | +0.4 |
| NGZ | Ngauruhoe | 1.61 | 22 | P | Pn | 09 05 41.4 | +0.2 |
| SNWZ | South Ngauruho | 1.61 | 23 | P | Pn | 09 05 41.2 | 0.0 |
| PKE | Pukeiti | 1.62 | 336 | P | Pn | 09 05 41.7 | +0.5 |
| OTVZ | Oturere | 1.64 | 23 | P | Pn | 09 05 41.6 | +0.1 |
| MHEZ | Mangahewa | 1.64 | 346 | P | Pn | 09 05 42.3 | +0.7 |
| NNVZ | North Ngauruho | 1.65 | 22 | P | Pn | 09 05 41.9 | +0.1 |
| WTVZ | West Tongariro | 1.66 | 21 | P | Pn | 09 05 41.9 | -0.1 |
| TWVZ | Taurewa | 1.67 | 16 | P | Pn | 09 05 41.8 | -0.2 |
| PXZ | Pawanui | 1.68 | 68 | P | Pn | 09 05 41.1 | -0.9 |
| ETVZ | East Tongariro | 1.68 | 24 | P | Pn | 09 05 42.0 | -0.1 |
| TMVZ | Te Maari | 1.69 | 23 | P | Pn | 09 05 42.3 | -0.1 |
| KRVZ | Karewarewa | 1.69 | 22 | P | Pn | 09 05 42.8 | +0.4 |
| NTVZ | North Tongarir | 1.70 | 23 | P | Pn | 09 05 42.4 | -0.1 |
| KWHZ | Kaweka Forest | 1.74 | 45 | P | Pn | 09 05 41.8 | -1.2 |
| KATZ | Kakaramea | 1.82 | 22 | P | Pn | 09 05 44.3 | +0.2 |
| RITZ | Rihia Road | 1.87 | 25 | P | Pn | 09 05 45.1 | +0.4 |
| MCHZ | McNeill Hill | 1.88 | 50 | P | Pb | 09 05 48.7 | +0.6 |
| RATZ | Rangitukua | 1.94 | 22 | P | Pb | 09 05 47.8 | -1.4 |
| BKZ | Black Stump Fm | 1.97 | 41 | P | Pn | 09 05 44.6 | -1.6 |
| WATZ | Wairara | 2.08 | 20 | P | Pn | 09 05 48.9 | +1.3 |
| HIZ | Hauiti | 2.16 | 0 | P | Pn | 09 05 48.7 | +0.1 |
| MRHZ | Matea Rd | 2.21 | 34 | P | Pn | 09 05 47.5 | -1.8 |
| KUTZ | Kaahu Road | 2.31 | 20 | P | Pn | 09 05 52.9 | +2.1 |
| MTHZ | Maungataniwha | 2.39 | 41 | P | Pn | 09 05 49.9 | -2.0 |
| TLZ | Tolley Road | 2.40 | 13 | P | Pn | 09 05 51.3 | -0.8 |
| ALRZ | Allen Road | 2.41 | 29 | P | Pn | 09 05 50.3 | -1.8 |
| RAHZ | Arahi | 2.47 | 45 | P | Pb | 09 05 59.3 | +1.2 |
| PRRZ | Plateau Road | 2.48 | 29 | P | Pn | 09 05 54.3 | +1.1 |
| TOZ | Tahuroa Road | 2.98 | 10 | P | Pn | 09 05 59.6 | -0.4 |
| OPRZ | Ohinepanea | 3.12 | 26 | P | Pn | 09 06 04.8 | +2.9 |
| AWAZ | Awhitu Peninsu | 3.61 | 358 | P | Pn | 09 06 08.9 | +0.3 |
| ETAZ | East Tamaki Re | 3.72 | 1 | P | Pn | 09 06 11.2 | +1.2 |
| TMZ | Timaru | 4.66 | 216 | P | Pn | 09 06 20.6 | -2.5 |
| ODZ | Otahua Downs | 5.34 | 214 | P | Pn | 09 06 38.4 | +6.0 |

*GUC **16** 09:10:21.3±0.6,21°.66S×67°.54W,h207km±6km, ML3.6*
*SCB **16** 09:10:22.4±1.7,21°.60S×67°.51W,h158km±23km, ML3.2/5, Error ellipse: s-maj=7.8km s-min=4.7km az=1.0*
**ISC 16 09:10:19.6±2.0,21°.66S±0°.05×67°.50W±0°.07, *h*202km±17km, n34, σ1§20/55, 9C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LVC | Limon Verde | 1.62 | 234 | P | Pn | 09 10 56.0 | +1.0 |
| PB09 | IPOC Station P | 1.63 | 265 | ⇑*i*P | Pn | 09 10 56.2 | +1.3 |
| PB09 | | | | *i* S | Sn | 09 11 23.1 | +0.9 |
| PB09 | IPOC Station P | 1.63 | 265 | P | Pn | 09 10 56.1 | +1.2 |
| MOCB | Mochara | 1.78 | 77 | P | Pn | 09 10 56.1 | -0.5 |
| PB01 | IPOC Station P | 1.96 | 288 | ⇑*i*P | Pn | 09 10 58.6 | +0.7 |
| PB01 | | | | *i* S | Sn | 09 11 27.4 | -0.3 |
| PB01 | | | | IAML | | 09 11 29.5 | |
| | comp=E,283nm,0.1s | | | | | | |
| PB01 | IPOC Station P | 1.96 | 288 | P | Pn | 09 10 58.9 | +0.9 |
| PB03 | IPOC Station P | 2.13 | 259 | ⇓*i*P | Pn | 09 11 00.9 | +1.0 |
| PB03 | | | | *i* S | Sn | 09 11 30.6 | -0.6 |
| PB03 | | | | IAML | | 09 11 32.0 | |
| | comp=E,220nm,0.1s | | | | | | |
| PB03 | IPOC Station P | 2.13 | 259 | P | Pn | 09 11 00.9 | +1.0 |
| PB03 | | | | S | Sn | 09 11 28.9 | -2.2 |
| PB03 | | | | IAML | | 09 11 33.4 | |
| | comp=E,63nm,0.3s | | | | | | |
| PB08 | IPOC Station P | 2.16 | 314 | ⇑*i*P | Pn | 09 11 01.8 | +1.3 |
| PB08 | | | | *i* S | Sn | 09 11 32.5 | +0.4 |
| PB06 | IPOC Station P | 2.19 | 241 | ⇑*i*P | Pn | 09 11 01.3 | +0.9 |
| PB06 | | | | *i* S | Sn | 09 11 32.5 | +0.3 |
| PB06 | | | | IAML | | 09 11 34.2 | |
| | comp=E,119nm,0.1s | | | | | | |
| PB06 | IPOC Station P | 2.19 | 241 | P | Pn | 09 11 01.5 | +1.0 |
| PB07 | IPOC Station P | 2.23 | 268 | *e*P | Pn | 09 11 01.8 | +0.9 |
| PB07 | | | | *i* S | Sn | 09 11 32.4 | -0.5 |
| PB07 | | | | IAML | | 09 11 34.2 | |
| | comp=N,280nm,0.2s | | | | | | |
| PB07 | IPOC Station P | 2.23 | 268 | P | Pn | 09 11 02.0 | +1.1 |
| PB07 | | | | S | Sn | 09 11 30.7 | -2.2 |
| PB07 | | | | IAML | | 09 11 33.8 | |
| | comp=N,100nm,0.3s | | | | | | |
| PB02 | IPOC Station P | 2.26 | 278 | ⇑*i*P | Pn | 09 11 02.1 | +0.9 |
| PB02 | | | | *i* S | Sn | 09 11 32.8 | -0.7 |
| PB02 | | | | IAML | | 09 11 34.6 | |
| | comp=E,279nm,0.2s | | | | | | |
| PB02 | IPOC Station P | 2.26 | 278 | P | Pn | 09 11 02.2 | +1.0 |
| PB15 | IPOC Station P | 2.39 | 229 | *e*P | Pn | 09 11 03.9 | +1.2 |
| PB15 | | | | *i* S | Sn | 09 11 36.8 | +0.5 |
| PB15 | IPOC Station P | 2.39 | 229 | P | Pn | 09 11 04.2 | +1.5 |
| PB15 | | | | S | Sn | 09 11 33.9 | -2.4 |
| PB15 | | | | IAML | | 09 11 38.7 | |
| | comp=E,243nm,0.4s | | | | | | |
| GO01 | Chusmiza | 2.54 | 321 | *e*P | Pn | 09 11 05.7 | +1.1 |
| GO01 | | | | *i* S | Sn | 09 11 40.2 | +0.5 |
| GO01 | | | | IAML | | 09 11 44.4 | |
| | comp=N,166nm,0.1s | | | | | | |
| PB04 | IPOC Station P | 2.55 | 254 | *i* P | Pn | 09 11 05.2 | +0.8 |
| PB04 | | | | *i* S | Sn | 09 11 38.7 | -0.6 |
| PB04 | | | | IAML | | 09 11 40.4 | |
| | comp=N,172nm,0.3s | | | | | | |
| PB04 | IPOC Station P | 2.55 | 254 | P | Pn | 09 11 05.4 | +1.0 |
| PB04 | | | | S | Sn | 09 11 37.2 | -2.2 |
| PB04 | | | | IAML | | 09 11 40.0 | |
| | comp=N,72nm,0.3s | | | | | | |
| PATCX | Punta Patache | 2.62 | 288 | ⇑*i*P | Pn | 09 11 05.8 | +0.7 |
| PATCX | | | | *i* S | Sn | 09 11 39.7 | -0.7 |
| PATCX | | | | IAML | | 09 11 42.3 | |
| | comp=E,219nm,0.5s | | | | | | |
| HMBC | Humberstone | 2.62 | 301 | ⇑*i*P | Pn | 09 11 05.5 | +0.3 |
| HMBC | | | | *i* S | Sn | 09 11 39.6 | -1.1 |
| HMBC | | | | IAML | | 09 11 40.1 | |
| | comp=N,206nm,0.4s | | | | | | |
| HMBC | Humberstone | 2.62 | 301 | P | Pn | 09 11 05.6 | +0.3 |
| TA01 | Diego Aracena | 2.73 | 293 | *e*P | Pn | 09 11 06.5 | +0.2 |
| TA01 | | | | *i* S | Sn | 09 11 41.4 | -1.3 |
| TA01 | | | | IAML | | 09 11 43.4 | |
| | comp=E,84nm,0.5s | | | | | | |
| PB11 | IPOC Station P | 2.77 | 313 | ⇑*i*P | Pn | 09 11 07.2 | +0.3 |
| PB11 | | | | *i* S | Sn | 09 11 42.3 | -1.4 |
| PB11 | | | | IAML | | 09 11 43.7 | |
| | comp=N,132nm,0.2s | | | | | | |
| PB11 | IPOC Station P | 2.77 | 313 | P | Pn | 09 11 07.2 | +0.3 |
| PB11 | | | | S | Sn | 09 11 40.8 | -2.9 |
| PB11 | | | | IAML | | 09 11 45.6 | |
| | comp=N,61nm,0.3s | | | | | | |
| PB10 | IPOC Station P | 3.38 | 236 | *e*P | Pn | 09 11 14.8 | +0.9 |
| PB10 | | | | *i* S | Sn | 09 11 54.6 | -1.8 |
| PB10 | | | | IAML | | 09 11 59.5 | |
| | comp=E,34nm,0.1s | | | | | | |
| PB10 | IPOC Station P | 3.38 | 236 | P | Pn | 09 11 14.9 | +1.0 |
| PB16 | IPOC Station P | 3.81 | 330 | ⇑*i*P | Pn | 09 11 21.0 | +1.2 |
| PB16 | | | | *i* S | Sn | 09 12 06.4 | -0.4 |
| PB16 | IPOC Station P | 3.81 | 330 | P | Pn | 09 11 21.1 | +1.3 |
| PB12 | IPOC Station P | 4.03 | 318 | *e*P | Pn | 09 11 21.0 | -1.0 |
| PB12 | | | | IAML | | 09 12 11.0 | |
| | comp=E,29nm,0.3s | | | | | | |
| BBOE | La Paz, Chanca | 4.84 | 354 | P | Pn | 09 11 33.7 | +1.0 |
| BBOD | La Paz, Gloria | 5.10 | 348 | P | Pn | 09 11 37.2 | +1.2 |
| LPAZ | La Paz | 5.37 | 353 | P | Pn | 09 11 40.7 | +1.1 |

*IDC **16** 09:12:02.9±4.7,5°.85S×145°.40E,h101km±41km, mb3.4/5, mb1 3.5/7, mb1mx3.3/36, mbtmp3.7/7, Error ellipse: s-maj=46.5km s-min=26.8km az=134.0*
**ISC 16 09:12:04.1±1.4,6°.0S±0°.1×145°.5E±0°.2, *h*109km, n7, σ1§31/8, mb3.7/4, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.73 | 154 | P | Pn | 09 13 00.9 | +1.0 |
| | 4.9nm,0.3s,baz=336,slow=10.0,SNR=7.4 | | | | | | |
| PMG | | | | S | Sn | 09 13 41.3 | -1.7 |
| | 10nm,0.3s,baz=350,slow=21,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 17.60 | 217 | P | Pn | 09 16 01.8 | -0.8 |
| | 0.2nm,0.3s,baz=38,slow=11,SNR=8.2 | | | | | | |
| ASAR | Alice Springs | 20.80 | 211 | P | P | 09 16 37.2 | +0.3 |
| | 0.2nm,0.4s,baz=33,slow=12,SNR=11 | | | | | | |
| FITZ | Fitzroy Crossi | 22.82 | 237 | P | P | 09 16 57.4 | -0.6 |
| | 1.9nm,0.7s,baz=49,slow=8.3,SNR=5.7 | | | | | | |
| STKA | Stephens Creek | 25.98 | 188 | P | P | 09 17 28.5 | +1.8 |
| | 1.3nm,0.5s,baz=15,slow=14,SNR=4.4 | | | | | | |
| QSPA | South Pole Qui | 83.94 | 180 | P | P | 09 24 21.9 | 0.0 |
| | 0.6nm,0.5s,baz=44,slow=1.6,SNR=7.9 | | | | | | |
| ILAR | Eielson Array | 86.08 | 23 | P | P | 09 24 31.9 | -0.5 |
| | 0.6nm,0.6s,baz=257,slow=4.6,SNR=8.6 | | | | | | |

*ISN **16** 09:16:30.6±1.0,32°.24N×46°.12E,h25km±999km, ML3.2*
*TEH **16** 09:16:32.5,32°.26N×46°.18E,h17km, ML3.1*
**ISC 16 09:16:31.3±1.0,32°.23N±0°.04×46°.04E±0°.05, *h*10km, n17, σ1§70/21, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAFI | Al-Rafai | 0.51 | 173 | *e*Pg | Pg | 09 16 41.3 | +0.1 |
| RAFI | | | | *e*Sg | Sg | 09 16 48.0 | +0.2 |
| RAFI | | | | AML | AML | 09 16 59.2 | |
| | comp=E,2μm,0.5s | | | | | | |
| IBDR | Badra | 0.89 | 354 | *e*Pg | Pg | 09 16 47.3 | -1.1 |
| IBDR | | | | *e*Sg | Sg | 09 16 59.0 | -1.0 |
| IBDR | | | | AML | AML | 09 17 18.7 | |
| | comp=E,454nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 09 17 20.1 | |
| | comp=N,599nm,0.7s | | | | | | |
| BHD | Baghdad | 1.74 | 307 | *e*Pn | Pn | 09 17 02.5 | +0.9 |
| BHD | | | | *e*Sn | Sn | 09 17 24.5 | +0.6 |
| BHD | | | | AML | AML | 09 17 43.1 | |
| | comp=E,368nm,0.5s | | | | | | |
| IKFM | Kafar-mosalman | 2.00 | 49 | *e*Sg | Sg | 09 17 36.3 | +0.8 |
| IKFM | | | | *e*Pn | Pb | 09 17 07.3 | -0.4 |
| IKFM | | | | *e* | | 09 17 45.8 | |
| | comp=Z,2μm,0.6s | | | | | | |
| IGHG | Ghaleghazi | 2.14 | 12 | *e*Pn | Pb | 09 17 10.0 | -0.4 |
| IGHG | | | | *e* | | 09 18 13.3 | |
| | comp=E,2μm,0.7s | | | | | | |
| IDOB | Doab | 2.38 | 48 | *e*Pn | Pb | 09 17 12.9 | -1.4 |
| IDOB | | | | *e* | | 09 18 08.6 | |
| | comp=Z,456nm,0.8s | | | | | | |
| BMDN | Meydan | 2.75 | 58 | *e*Pn | Pb | 09 17 17.7 | -3.0 |
| BMDN | | | | *e* | | 09 18 18.9 | |
| | comp=Z,593nm,0.8s | | | | | | |
| AMIS | Naft Sefid | 2.81 | 101 | *e*Pn | Pb | 09 17 19.0 | -2.7 |
| AMIS | | | | *e* | | 09 18 27.5 | |
| | comp=Z,788nm,0.4s | | | | | | |
| HSAM | Samen | 2.92 | 47 | *e*Pn | Pn | 09 17 20.3 | +2.2 |
| IALM | Almabolaq | 3.17 | 33 | *e*Pn | Pn | 09 17 24.0 | +2.5 |
| HAGD | Aghdareh | 3.66 | 44 | *e*Pn | Pn | 09 17 29.8 | +1.6 |
| HAGD | | | | *e* | | 09 17 31.8 | |
| | comp=Z,376nm,0.3s | | | | | | |
| IPIR | Pirpir | 4.13 | 82 | *e*Pn | Pn | 09 17 36.4 | +1.7 |
| IPIR | | | | *e* | | 09 19 03.8 | |
| | comp=Z,145nm,0.5s | | | | | | |
| IRAZ | Razeghan | 4.53 | 45 | *e*Pn | Pn | 09 17 42.3 | +2.1 |
| IRAZ | | | | *e* | | 09 18 54.7 | |
| | comp=Z,156nm,0.7s | | | | | | |
| IKLH | Kolahrood | 4.79 | 75 | *e*Pn | Pn | 09 17 45.6 | +1.8 |
| KLNJ | Kolanjah | 4.89 | 103 | *e*Pn | Pn | 09 17 46.4 | +1.2 |
| IZEF | Zefreh | 5.35 | 81 | *e*Pn | Pn | 09 17 53.1 | +1.6 |
| IZEF | | | | *e* | | 09 17 53.6 | |
| | comp=Z,148nm,0.4s | | | | | | |
| KRSH | Karshahi | 5.40 | 70 | *e*Pn | Pn | 09 17 53.4 | +1.3 |

*IDC **16** 09:24:19.6±0.9,34°.28N×116°.88W,h0km, mb3.2/1, mb1 3.4/6, mb1mx3.4/34, mbtmp3.1/6, ML3.5/4, MS2.9/6, Ms1 2.9/6, ms1mx2.7/26, Error ellipse: s-maj=17.0km s-min=5.9km az=71.0*
*ANF **16** 09:24:19.8±0.1,34°.29N×116°.87W,h9km, ML4.2/38, Error ellipse: s-maj=1.1km s-min=1.0km az=98.0*
*IASPEI **16** 09:24:20.2±0.9,34°.30N±0°.02×116°.87W±0°.02,h9km±7km, MS3.0/3, Error ellipse: s-maj=3.1km s-min=2.9km az=81.2, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*PAS **16** 09:24:20.7±1.3,34°.30N±0°.01×116°.86W±0°.02,h3km±4km, Mwr3.9/6, ML4.0/88(NEIC), Error ellipse: s-maj=2.2km s-min=1.8km az=75.0*
*NEIC **16** 09:24:20.9±1.6,34°.29N±0°.01×116°.86W±0°.01,h12km±3km, Error ellipse: s-maj=2.1km s-min=1.2km az=47.0*
*NEIC **16** 09:24:20.7,34°.30N×116°.86W,h5km, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.74; $M_{\theta\theta}$-5.72; $M_{\phi\phi}$ 7.46; $M_{r\theta}$ 1.19; $M_{\theta\phi}$-2.75; $M_{\phi r}$-0.98; Fault plane solution: $M_0$7.32000×$10^{14}$ NP1:φs214.00000°, δ77.00000°, λ-4.00000°. NP2:φs304.00000°, δ87.00000°, λ-167.00000°. Principal axes: T 8.1564, Plg7.0000°, Azm78.0000°; N -1.6810, Plg76.0000°, Azm319.0000°; P -6.4754, Plg12.0000°, Azm170.0000°;*
**ISC 16 09:24:20.6±0.8,34°.30N±0°.02×116°.87W±0°.02, *h*7km±6km, n140, σ0§86/174, MS3.0/3, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BBRC | Big Bear Solar | 0.06 | 231 | P | Pg | 09 24 22.1 | -0.3 |
| | baz=50 | | | | | | |
| BBRC | | | | S | Sg | 09 24 23.9 | +0.1 |
| | baz=50 | | | | | | |
| CFSC | Central Fire S | 0.39 | 241 | | Pg | 09 24 28.7 | +0.4 |
| CFSC | | | | | Sg | 09 24 34.6 | +1.2 |
| RSBC | Riverside Bore | 0.50 | 230 | | Pg | 09 24 30.3 | 0.0 |
| RSBC | | | | | Sg | 09 24 37.4 | +0.6 |
| RRX | Edison Barstow | 0.59 | 350 | P | Pg | 09 24 31.8 | -0.1 |
| | baz=169,SNR=500 | | | | | | |
| RRX | | | | S | Sg | 09 24 39.9 | +0.3 |
| | baz=169 | | | | | | |
| GVDA | Garner Valley | 0.65 | 165 | | Pg | 09 24 32.7 | -0.4 |
| GVDA | | | | | Sg | 09 24 41.5 | 0.0 |
| HEC | Hector,Ludlow | 0.69 | 40 | P | Pg | 09 24 33.7 | -0.2 |
| | baz=220,SNR=367 | | | | | | |
| HEC | | | | S | Sg | 09 24 43.3 | +0.4 |
| | baz=220 | | | | | | |
| MURC | Murrieta | 0.75 | 201 | P | Pg | 09 24 34.6 | -0.4 |
| | baz=21,SNR=532 | | | | | | |
| MURC | | | | S | Sg | 09 24 44.6 | -0.1 |
| | baz=21 | | | | | | |
| PFO | Pinyon Flats O | 0.76 | 153 | Pg | Pg | 09 24 34.8 | -0.5 |
| | 350nm,0.3s,baz=332,slow=15,SNR=451 | | | | | | |
| PFO | | | | Lg | Lg | 09 24 45.0 | |
| | 840nm,0.3s,baz=51,slow=12,SNR=27 | | | | | | |
| PFO | | | | LR | LR | 09 24 59.9 | |
| | comp=Z,262nm,21.6s,baz=142,slow=53 | | | | | | |
| PFO | Pinyon Flats O | 0.76 | 153 | Pg | Pg | 09 24 34.8 | -0.5 |
| PFO | | | | Sg | Sg | 09 24 45.0 | -0.3 |
| PFO | | | | IAML | | 09 24 49.9 | |
| | 4μm,0.3s | | | | | | |
| PFO | | | | IAML | | 09 24 50.1 | |
| | 4μm,0.5s | | | | | | |
| PFO | Pinyon Flats O | 0.76 | 153 | P | Pg | 09 24 34.8 | -0.5 |
| | baz=334,SNR=627 | | | | | | |
| PFO | | | | S | Sg | 09 24 44.9 | -0.3 |
| | baz=334 | | | | | | |
| I57US | PINON FLAT INF | 0.77 | 153 | Pg | Pg | 09 24 35.0 | -0.4 |
| | baz=358,slow=34,SNR=0.6 | | | | | | |
| BELC | Belle Mtn. Jos | 0.78 | 112 | P | Pg | 09 24 35.4 | -0.2 |
| | baz=293,SNR=481 | | | | | | |
| BELC | | | | S | Sg | 09 24 45.9 | +0.1 |
| | baz=293 | | | | | | |
| ELS | Elsinore Mount | 0.80 | 216 | | Pg | 09 24 35.5 | -0.5 |
| ELS | | | | Sg | Sg | 09 24 46.1 | -0.2 |
| ELS | | | | IAML | | 09 24 46.4 | |
| | comp=N,6μm,0.6s | | | | | | |
| GSC | Goldstone, Bar | 1.00 | 3 | Pg | Pg | 09 24 39.3 | -0.6 |
| GSC | | | | Sg | Sg | 09 24 53.0 | +0.1 |
| GSC | Goldstone, Bar | 1.00 | 3 | P | Pg | 09 24 39.3 | -0.6 |
| | baz=183,SNR=804 | | | | | | |
| GSC | | | | S | Sg | 09 24 53.1 | +0.1 |
| | baz=183 | | | | | | |
| EDW2 | Edwards Air Fo | 1.10 | 302 | P | Pg | 09 24 40.9 | -0.7 |
| | baz=122,SNR=437 | | | | | | |
| EDW2 | | | | S | Sg | 09 24 55.4 | -0.5 |
| | baz=122 | | | | | | |
| PASC | Pasadena Art C | 1.10 | 264 | | Pg | 09 24 40.9 | -0.8 |
| PASC | | | | Sg | Sg | 09 24 55.7 | -0.2 |
| PASC | | | | IAML | | 09 24 59.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| PASC | | | | IAML | | 09 24 59.3 | |
| | comp=E,3μm,0.6s | | | | | | |
| GMRC | Granite Mounta | 1.11 | 64 | P | Pg | 09 24 40.8 | -1.1 |
| | baz=244,SNR=905 | | | | | | |
| GMRC | | | | S | Sb | 09 24 57.2 | +0.2 |
| | baz=244 | | | | | | |
| DECC | Green Verdugo | 1.21 | 268 | P | Pb | 09 24 43.1 | -0.8 |
| | baz=87,SNR=412 | | | | | | |
| DECC | | | | S | Sb | 09 24 59.8 | -0.1 |
| | baz=87 | | | | | | |
| CCAC | Calif City Air | 1.27 | 312 | | Pn | 09 24 43.8 | -1.1 |
| CCAC | | | | Sg | Sb | 09 25 01.1 | -0.5 |
| FMP | Fort Macarthur | 1.32 | 244 | P | Pn | 09 24 44.4 | -1.1 |
| | baz=63,SNR=34 | | | | | | |
| FMP | | | | S | Sb | 09 25 01.9 | -0.9 |
| | baz=63 | | | | | | |
| BC3 | Big Chuckawall | 1.34 | 118 | P | Pn | 09 24 44.6 | -1.2 |
| | baz=299,SNR=390 | | | | | | |
| BC3 | | | | S | Sn | 09 25 03.3 | -0.6 |
| | baz=299 | | | | | | |
| LRMC | Laurel Mtn Rad | 1.35 | 331 | P | Pn | 09 24 45.1 | -1.0 |
| | baz=150,SNR=498 | | | | | | |
| LRMC | | | | S | Sb | 09 25 04.0 | -0.1 |
| | baz=150 | | | | | | |
| TUQ | Turquoise Moun | 1.38 | 34 | P | Pn | 09 24 45.3 | -1.1 |
| | baz=214,SNR=171 | | | | | | |
| TUQ | | | | S | Sn | 09 25 04.7 | -0.3 |
| | baz=214 | | | | | | |
| 109C | Camp Elliot, M | 1.42 | 188 | Pn | Pn | 09 24 45.8 | -1.0 |
| 109C | | | | Sg | Sn | 09 25 04.3 | -1.5 |
| 109C | Camp Elliot, M | 1.42 | 188 | P | Pn | 09 24 45.9 | -0.9 |
| | baz=8.0,SNR=456 | | | | | | |
| 109C | | | | S | Sn | 09 25 04.4 | -1.3 |
| | baz=8.0 | | | | | | |
| IRM | Iron Mountain | 1.44 | 95 | P | Pn | 09 24 45.5 | -1.6 |
| | baz=276,SNR=897 | | | | | | |
| IRM | | | | S | Sn | 09 25 05.8 | -0.4 |
| | baz=276 | | | | | | |
| MONP2 | Monument Peak | 1.45 | 165 | P | Pn | 09 24 47.1 | -0.4 |
| | baz=346,SNR=913 | | | | | | |
| MONP2 | | | | S | Sn | 09 25 05.9 | -1.0 |
| | baz=346 | | | | | | |
| OSI | Osito Audit: C | 1.56 | 282 | P | Pn | 09 24 48.5 | -0.4 |
| | baz=101,SNR=186 | | | | | | |
| OSI | | | | Sb | Sb | 09 25 10.5 | +0.5 |
| | baz=101 | | | | | | |
| CIS | Catalina Islan | 1.57 | 236 | P | Pn | 09 24 48.1 | -0.8 |
| | baz=55,SNR=158 | | | | | | |
| CIS | | | | S | Sn | 09 25 09.3 | -0.1 |
| | baz=55 | | | | | | |
| SWSC | Sam W. Stewart | 1.62 | 146 | P | Pn | 09 24 48.1 | -1.4 |
| | baz=327,SNR=422 | | | | | | |
| SWSC | | | | Sb | Sg | 09 25 11.8 | -0.8 |
| | baz=327 | | | | | | |
| BAR | Barrett | 1.62 | 174 | | Pn | 09 24 49.4 | -0.3 |
| BAR | | | | Sn | Sb | 09 25 10.8 | -0.7 |
| BAR | | | | IAML | | 09 25 12.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| BAR | | | | IAML | | 09 25 12.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| QSM | Queen of Sheba | 1.66 | 0 | | Pn | 09 24 49.5 | -0.7 |
| QSM | | | | IAML | | 09 25 17.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| QSM | | | | IAML | | 09 25 17.5 | |
| | comp=N,2μm,0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NEE2** | **Needles Airpor** | **1.92** | **75** | P | | **Pn** | **09 24 52.1 -1.6** |
| | baz=256,SNR=140 | | | | | | |
| NEE2 | | | | Sb | | **Sg** | **09 25 21.1 -1.0** |
| | baz=256 | | | | | | |
| **SCI2** | **San Clemente I** | **1.92** | **227** | P | | **Pn** | **09 24 53.4 -0.4** |
| | baz=46,SNR=45 | | | | | | |
| SCI2 | | | | S | | **Sn** | **09 25 17.6 -0.5** |
| | baz=46 | | | | | | |
| **CBX** | **Cerro Bola** | **1.99** | **175** | | | **Pn** | **09 24 55.1 +0.3** |
| CBX | | | | IAML | | | 09 25 24.6 |
| | comp=N,1μm,0.3s | | | | | | |
| **BLYC** | **Blythe** | **2.02** | **105** | | | **Pn** | **09 24 53.6 -1.5** |
| BLYC | | | | IAML | | | 09 25 27.5 |
| | comp=E,976nm,0.5s | | | | | | |
| BLYC | | | | IAML | | | 09 25 27.6 |
| | comp=N,950nm,0.7s | | | | | | |
| **UABX** | **UABC, Campus M** | **2.05** | **144** | Pn | | **Pn** | **09 24 54.7 -0.7** |
| UABX | | | | IAML | | | 09 25 52.7 |
| | comp=N,2μm,0.8s | | | | | | |
| UABX | | | | IAML | | | 09 26 00.3 |
| | comp=E,1μm,1.1s | | | | | | |
| **GLA** | **Glamis** | **2.11** | **126** | | | **Pn** | **09 24 55.6 -0.7** |
| **GLA** | **Glamis** | **2.11** | **126** | P | | **Pn** | **09 24 55.4 -1.0** |
| | baz=307,SNR=37 | | | | | | |
| **FURC** | **Furnace Creek,** | **2.17** | **0** | Pg | | **Pb** | **09 25 01.2 +1.1** |
| | baz=180 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.19** | **288** | | | **Pn** | **09 24 57.2 -0.4** |
| **PDMCI** | **Parker Dam,Lak** | **2.26** | **89** | P | | **Pn** | **09 24 56.9 -1.4** |
| | baz=271,SNR=215 | | | | | | |
| **CPBX** | **Cerro Prieto** | **2.29** | **145** | Pn | | **Pn** | **09 24 57.8 -0.9** |
| CPBX | | | | IAML | | | 09 25 50.0 |
| | comp=N,744nm,0.5s | | | | | | |
| CPBX | | | | IAML | | | 09 25 50.4 |
| | comp=E,1μm,0.7s | | | | | | |
| **SBC** | **Santa Barbara** | **2.36** | **274** | P | | **Pn** | **09 24 59.9 +0.2** |
| | baz=92,SNR=45 | | | | | | |
| **CCX** | **Cicese** | **2.43** | **176** | | | **Pn** | **09 25 01.5 +0.8** |
| CCX | | | | IAML | | | 09 25 39.9 |
| | comp=E,485nm,0.6s | | | | | | |
| CCX | | | | IAML | | | 09 25 42.0 |
| | comp=N,503nm,0.4s | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.45** | **245** | | | **Pn** | **09 25 00.5 -0.5** |
| SNCC | | | | IAML | | | 09 25 37.9 |
| | comp=E,750nm,0.5s | | | | | | |
| SNCC | | | | IAML | | | 09 25 41.1 |
| | comp=N,470nm,0.5s | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.45** | **245** | P | | **Pn** | **09 25 00.4 -0.5** |
| | baz=64,SNR=25 | | | | | | |
| **PKM** | **Mcpherson Peak** | **2.50** | **284** | P | | **Pn** | **09 25 01.8 0.0** |
| | baz=103,SNR=53 | | | | | | |
| **W13A** | **Hualapai Mount** | **2.58** | **71** | Pn | | **Pn** | **09 25 02.1 -1.0** |
| **SHPR** | **Sheep Range** | **2.61** | **32** | | | **Pn** | **09 25 03.2 -0.1** |
| **TPNV** | **Topopah Spring** | **2.69** | **11** | Pn | | **Pn** | **09 25 05.6 +1.0** |
| TPNV | | | | IAML | | | 09 25 48.4 |
| | comp=N,331nm,0.5s | | | | | | |
| **TPNV** | **Topopah Spring** | **2.69** | **11** | P | | **Pn** | **09 25 04.7 +0.2** |
| | baz=191,SNR=83 | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.72** | **352** | | | **Pn** | **09 25 05.5 +0.7** |
| GRAC | | | | IAML | | | 09 25 55.8 |
| | comp=N,607nm,1.0s | | | | | | |
| GRAC | | | | IAML | | | 09 25 56.1 |
| | comp=E,538nm,0.9s | | | | | | |
| **SMMC** | **Simmler** | **2.77** | **292** | P | | **Pn** | **09 25 04.8 -0.6** |
| | baz=111,SNR=17 | | | | | | |
| **TIN** | **Tinemaha, Big** | **2.96** | **338** | Pg | | **Pg** | **09 25 16.1 -1.3** |
| | baz=158,SNR=58 | | | | | | |
| **LCH** | **Last Change Ra** | **3.00** | **348** | Pn | | **Pn** | **09 25 09.0 +0.3** |
| **113A** | **Mohawk Valley,** | **3.01** | **120** | | | **Pn** | **09 25 06.7 -1.9** |
| **PAGB** | **Antelope Grade** | **3.12** | **298** | Pn | | **Pn** | **09 25 09.8 -0.5** |
| PAGB | | | | IAML | | | 09 26 16.3 |
| | comp=E,367nm,0.8s | | | | | | |
| PAGB | | | | IAML | | | 09 26 20.4 |
| | comp=N,384nm,1.1s | | | | | | |
| **Y14A** | **Wickenburg** | **3.23** | **95** | | | **Pn** | **09 25 11.1 -0.7** |
| Y14A | | | | IAML | | | 09 26 15.8 |
| | comp=N,258nm,0.7s | | | | | | |
| **PRN** | **Pahroc Range** | **3.44** | **25** | | | **Pn** | **09 25 15.6 +0.8** |
| PRN | | | | IAML | | | 09 26 21.4 |
| | comp=N,372nm,0.7s | | | | | | |
| PRN | | | | IAML | | | 09 26 29.4 |
| | comp=E,407nm,0.7s | | | | | | |
| **SPIG** | **San Pedro Mart** | **3.45** | **160** | | | **Pn** | **09 25 15.9 +0.8** |
| SPIG | | | | | | **Sn** | **09 25 56.5 +0.1** |
| **S11A** | **Rachel** | **3.46** | **15** | Pn | | **Pn** | **09 25 14.8 -0.2** |
| S11A | | | | IAML | | | 09 26 17.0 |
| | comp=N,424nm,0.7s | | | | | | |
| **SFX** | **San Felipe** | **3.67** | **152** | Pn | | **Pn** | **09 25 17.3 -0.5** |
| **PMPB** | **Monarch Peak** | **3.74** | **302** | Pn | | **Pn** | **09 25 17.9 -1.0** |
| PMPB | | | | IAML | | | 09 26 26.3 |
| | comp=E,354nm,1.0s | | | | | | |
| **TPH** | **Tonopah** | **3.78** | **356** | Pn | | **Pn** | **09 25 19.3 -0.2** |
| **LCMT** | **Little Creek M** | **4.01** | **46** | | | **Pn** | **09 25 22.7 +0.1** |
| **BBGB** | **Big Mountain B** | **4.09** | **305** | Pn | | **Pn** | **09 25 24.0 +0.3** |
| **214A** | **Organ Pipe Nat** | **4.13** | **123** | Pn | | **Pn** | **09 25 23.1 -1.0** |
| 214A | | | | IAML | | | 09 26 39.6 |
| | comp=N,120nm,2.0s | | | | | | |
| 214A | | | | IAML | | | 09 26 43.2 |
| | comp=E,177nm,1.2s | | | | | | |
| **214A** | **Organ Pipe Nat** | **4.13** | **123** | P | | **Pn** | **09 25 22.9 -1.2** |
| | baz=306 | | | | | | |
| **LHV** | **Little Huntoon** | **4.16** | **342** | | | **Pn** | **09 25 25.3 +0.8** |
| **R11A** | **Troy Canyon, C** | **4.17** | **14** | | | **Pn** | **09 25 25.6 +0.7** |
| **R11A** | **Troy Canyon, C** | **4.17** | **14** | Pg | | **Pg** | **09 25 38.7 -1.9** |
| | baz=195 | | | | | | |
| **NV11** | **Mina Array Sit** | **4.25** | **346** | Pn | | **Pn** | **09 25 26.3 +0.3** |
| **KNB** | **Kanab** | **4.27** | **49** | Pn | | **Pn** | **09 25 26.4 +0.2** |
| **NVAR** | **Mina Array Bea** | **4.28** | **345** | Pn | | **Pn** | **09 25 26.9 +0.4** |
| | comp=E,0.9nm,0.3s,baz=166,slow=14,SNR=12 | | | | | | |
| NVAR | | | | Pg | | **Pg** | **09 25 39.8 -2.8** |
| | comp=E,11nm,0.3s,baz=171,slow=19,SNR=60 | | | | | | |
| NVAR | | | | Lg | | Lg | 09 26 35.4 |
| | baz=168,slow=27,SNR=1.3 | | | | | | |
| **U15A** | **North Rim** | **4.30** | **59** | Pn | | **Pn** | **09 25 26.5 -0.3** |
| **CCUT** | **Cedar City** | **4.32** | **40** | Pn | | **Pn** | **09 25 27.4 +0.5** |
| **SAO** | **San Andreas Ge** | **4.47** | **305** | | | **Pn** | **09 25 28.6 -0.2** |
| **X16A** | **Lo Mia Camp, P** | **4.49** | **87** | | | **Pn** | **09 25 29.0 -0.3** |
| **SZCU** | **Shurtz Canyon** | **4.50** | **42** | | | **Pn** | **09 25 29.1 -0.3** |
| **RYN** | **Ryan** | **4.52** | **343** | | | **Pn** | **09 25 28.5 -1.1** |
| **Q09A** | **Carvers** | **4.53** | **357** | Pn | | **Pn** | **09 25 29.3 -0.5** |
| **WUAZ** | **Wupatki** | **4.68** | **73** | Pn | | **Pn** | **09 25 31.5 -0.3** |
| WUAZ | | | | IAML | | | 09 26 54.6 |
| | comp=E,72nm,1.0s | | | | | | |
| WUAZ | | | | IAML | | | 09 27 28.4 |
| | comp=E,67nm,1.7s | | | | | | |
| **WUAZ** | **Wupatki** | **4.68** | **73** | P | | **Pn** | **09 25 31.4 -0.4** |
| | baz=256,SNR=8.6 | | | | | | |
| **CMB** | **Columbia Colle** | **4.69** | **324** | Pn | | **Pn** | **09 25 32.2 +0.3** |
| CMB | | | | IAML | | | 09 26 51.2 |
| | comp=N,73nm,1.1s | | | | | | |
| CMB | | | | IAML | | | 09 26 52.7 |
| | comp=E,108nm,1.0s | | | | | | |
| **PKCU** | **Pink Cliffs** | **4.85** | **48** | | | **Pn** | **09 25 34.2 -0.1** |
| **PSUT** | **Pine Spring** | **4.88** | **29** | Pn | | **Pn** | **09 25 35.2 +0.6** |
| **YERR** | **Yerington** | **5.05** | **339** | | | **Pn** | **09 25 36.7 -0.3** |
| **PNTR** | **Pine Nut** | **5.26** | **336** | Pn | | **Pn** | **09 25 41.2 +1.3** |
| **MTPU** | **Mount Pierson** | **5.32** | **44** | | | **Pn** | **09 25 42.6 +1.7** |
| **EMB** | **Emerald Bay** | **5.34** | **332** | Pn | | **Pn** | **09 25 41.2 +0.2** |
| **RUBR** | **Rubicon Trail** | **5.43** | **332** | Pn | | **Pn** | **09 25 42.7 +0.5** |
| **VCNR** | **Virginia City** | **5.46** | **337** | Pn | | **Pn** | **09 25 41.4 -1.3** |
| **TUC** | **Tucson** | **5.47** | **110** | | | **Pn** | **09 25 41.3 -1.2** |
| **TUC** | **Tucson** | **5.47** | **110** | P | | **Pn** | **09 25 40.9 -1.7** |
| | baz=293 | | | | | | |
| **TCRU** | **Three Creeks R** | **5.59** | **38** | | | **Pn** | **09 25 44.4 0.0** |
| **MPK** | **Martis Peak** | **5.60** | **334** | Pn | | **Pn** | **09 25 44.3 -0.2** |
| **MSU** | **Marysvale** | **5.66** | **41** | Pn | | **Pn** | **09 25 45.4 +0.1** |
| **X18A** | **Snowflake** | **5.72** | **86** | | | **Pn** | **09 25 46.6 +0.4** |
| **PAHR** | **Pah Rah Range** | **5.76** | **340** | Pn | | **Pn** | **09 25 46.1 -0.6** |
| **W18A** | **Petrified Fore** | **5.93** | **80** | Pn | | **Pn** | **09 25 49.6 +0.5** |
| **BMN** | **Battle Mountai** | **6.13** | **357** | Pn | | **Pn** | **09 25 51.8 0.0** |
| **BEKR** | **Beckworth** | **6.22** | **334** | Pn | | **Pn** | **09 25 54.6 +1.6** |
| **ELK** | **Elko** | **6.56** | **11** | Pn | | **Pn** | **09 25 59.2 +1.4** |
| | comp=E,0.3nm,0.3s,baz=195,slow=16,SNR=5.5 | | | | | | |
| ELK | | | | Pg | | Pg | 09 26 21.7 -4.7 |
| | comp=E,1.5nm,0.3s,baz=205,slow=16,SNR=24 | | | | | | |
| ELK | | | | Lg | | Lg | 09 27 45.1 |
| | comp=E,1.0nm,0.3s,baz=86,slow=21,SNR=4.7 | | | | | | |
| ELK | | | | LR | | LR | 09 28 17.5 |
| | comp=E,68nm,19.0s,baz=208,slow=36 | | | | | | |
| **ELK** | **Elko** | **6.56** | **11** | Pn | | **Pn** | **09 25 59.6 +1.8** |
| **TMUT** | **Trail Mountain** | **6.75** | **41** | Pn | | **Pn** | **09 26 00.6 +0.2** |
| **SRU** | **San Rafael Swe** | **7.00** | **45** | Pn | | **Pn** | **09 26 03.2 -0.5** |
| **319A** | **Douglas** | **7.02** | **112** | Pn | | **Pn** | **09 26 02.1 -1.8** |
| **BGU** | **Big Grassy Mou** | **7.28** | **24** | Pn | | **Pn** | **09 26 08.3 +0.8** |
| **MVCO** | **Mesa Verde** | **7.40** | **64** | Pn | | **Pn** | **09 26 09.0 -0.3** |
| **P18A** | **Preston Nutter** | **7.51** | **43** | Pn | | **Pn** | **09 26 09.8 -1.0** |
| **PV23** | **Carpenter Ridg** | **7.57** | **55** | | | **Pn** | **09 26 12.9 +1.3** |
| **121A** | **Cookes Peak, D** | **7.80** | **101** | Pn | | **Pn** | **09 26 14.3 -0.4** |
| **121A** | **Cookes Peak, D** | **7.80** | **101** | P | | **Pn** | **09 26 15.1 +0.4** |
| | baz=286,SNR=7.7 | | | | | | |
| **ANMO** | **Albuquerque** | **8.61** | **83** | Pg | | Pg | 09 26 57.6 -7.8 |
| | comp=E,0.5nm,0.3s,baz=268,slow=14,SNR=16 | | | | | | |
| ANMO | | | | Lg | | Lg | 09 28 50.1 |
| | comp=E,0.1nm,0.3s,baz=9.5,slow=12,SNR=2.5 | | | | | | |
| ANMO | | | | LR | | LR | 09 29 06.6 |
| | comp=E,47nm,20.0s,baz=240,slow=33 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **8.73** | **330** | Pn | | **Pn** | **09 26 27.8 +0.4** |
| | baz=336,slow=23,SNR=1.7 | | | | | | |
| YBH | | | | Lg | | Lg | 09 28 51.8 |
| | comp=E,0.0nm,0.3s,baz=175,slow=23,SNR=2.2 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **8.83** | **64** | Pn | | **Pn** | **09 26 30.6 +1.6** |
| **MNTX** | **Cornudas Mount** | **9.99** | **102** | Pn | | **Pn** | **09 26 45.0 +0.4** |
| **PDAR** | **Pinedale Array** | **10.21** | **32** | Pn | | **Pn** | **09 26 50.3 +2.6** |
| | comp=E,0.1nm,0.3s,baz=203,slow=11,SNR=4.3 | | | | | | |
| PDAR | | | | Lg | | Lg | 09 29 39.7 |
| | comp=E,0.0nm,0.3s,baz=220,slow=26,SNR=4.0 | | | | | | |
| **LPIG** | **La Paz** | **11.66** | **149** | LR | | LR | 09 30 17.3 |
| | comp=E,52nm,20.6s,baz=355,slow=31 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **12.27** | **110** | | | **Pn** | **09 27 15.8 -0.1** |
| **TX32** | **Lajitas Array** | **12.27** | **110** | | | **Pn** | **09 27 15.2 -0.6** |
| **TXAR** | **Lajitas Array** | **12.27** | **110** | Pn | | **Pn** | **09 27 17.1 +1.2** |
| | comp=E,0.2nm,0.3s,baz=291,slow=12,SNR=25 | | | | | | |
| TXAR | | | | Lg | | Lg | 09 30 42.1 |
| | comp=E,0.0nm,0.3s,baz=310,slow=28,SNR=3.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **12.27** | **110** | Pn | | **Pn** | **09 27 16.5 +0.6** |
| **CMIG** | **Matias Romero** | **26.10** | **126** | LR | | LR | 09 41 15.9 |
| | comp=E,48nm,21.7s,baz=220,slow=39 | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.25** | **2** | P | | **P** | **09 30 16.3 +2.2** |
| | comp=E,0.2nm,0.8s,baz=186,slow=8.1,SNR=4.1 | | | | | | |
| **APG** | **El Apazote** | **30.59** | **122** | LR | | LR | 09 42 59.8 |
| | comp=E,34nm,19.4s,baz=95,slow=37 | | | | | | |
| **JTS** | **Las Juntas de** | **37.71** | **122** | LR | | LR | 09 48 58.5 |
| | comp=E,34nm,22.0s,baz=226,slow=39 | | | | | | |

*IDC **16** 09:53:16.5±1.4,20°.06S×66°.29W,h307km±15km,mb3.7/1, mb1 3.5/5,mb1mx3.1/25,mbtmp4.2/5, Error ellipse: s-maj=25.1km s-min=19.4km az=152.0*
*VAO **16** 09:53:25.2±2.9,21°.04S×65°.63W,h376km±22km,mb3.8*
**ISC 16 09:53:16.2±1.0,20°.2S±0°.1×66°.23W±0°.09,h300km,n22, σ1°98/22,Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **3.50** | **225** | P | | | P | **Pn** | **09 54 18.7** | **+1.3** |
| | 25nm,0.3s,baz=242,slow=22,SNR=5.9 | | | | | | | | | |
| **LPAZ** | **La Paz** | **4.25** | **335** | P | | | P | **Pn** | **09 54 23.4** | **-2.5** |
| | 7.7nm,0.3s,baz=149,slow=8.5,SNR=42 | | | | | | | | | |
| LPAZ | | | | S | | | **S** | **S** | **09 55 22.0** | **+0.4** |
| | baz=208,slow=3.2,SNR=0.7 | | | | | | | | | |
| **SIV** | **San Ignacio** | **6.42** | **51** | P | | | P | **Pn** | **09 54 51.3** | **+0.6** |
| | 2.2nm,0.3s,baz=240,slow=12,SNR=39 | | | | | | | | | |
| SIV | | | | S | | | **S** | **S** | **09 56 07.2** | **+0.3** |
| | 0.4nm,0.3s,baz=229,slow=14,SNR=2.0 | | | | | | | | | |
| **ITQB** | **Itaqui** | **12.87** | **139** | *eP* | | | Pn | Pn | 09 56 04.1 | -5.2 |
| **PTGB** | **Pitanga** | **13.86** | **112** | *eP* | | | **P** | **P** | **09 56 18.3** | **-2.6** |
| **PCMB** | **Pacaembu** | **14.07** | **99** | *eP* | | | **P** | **P** | **09 56 21.3** | **-1.9** |
| **ARAG** | **Araguaiana, MT** | **14.41** | **74** | *eP* | | | **Pn** | **P** | **09 56 29.5** | **+1.6** |
| **ITRB** | **Iturama** | **14.93** | **91** | *eP* | | | **P** | **P** | **09 56 31.8** | **-0.9** |
| **FRTB** | **Fartura** | **15.81** | **105** | *eP* | | | **P** | **P** | **09 56 38.6** | **-3.7** |
| **SNDB** | **Serra Nova Dou** | **16.49** | **63** | *eP* | | | **Pn** | **P** | **09 56 53.9** | **+1.7** |
| **IPMB** | **Ipameri, GO** | **17.17** | **86** | *eP* | | | **P** | **P** | **09 56 57.2** | **+0.1** |
| **BDFB** | **Brasilia** | **17.90** | **78** | P | | | **P** | **P** | **09 57 05.3** | **+0.2** |
| | 0.7nm,0.3s,baz=256,slow=4.2,SNR=4.4 | | | | | | | | | |
| **PEXB** | **Peixe** | **18.98** | **68** | *eP* | | | **P** | **P** | **09 57 19.2** | **+2.7** |
| **BSCB** | **Bom Sucesso** | **20.11** | **96** | *eP* | | | **P** | **P** | **09 57 25.8** | **-2.7** |
| **SMTB** | **Santa Maria do** | **21.23** | **61** | *eP* | | | **P** | **P** | **09 57 42.9** | **+3.5** |
| **DIAM** | **Diamantina, MG** | **21.38** | **89** | *eP* | | | **P** | **P** | **09 57 39.3** | **-1.7** |
| **JANB** | **Januaria** | **21.49** | **80** | *eP* | | | **P** | **P** | **09 57 42.2** | **+0.4** |
| **SDBA** | **SAO DESIDERIO** | **21.86** | **73** | *eP* | | | **P** | **P** | **09 57 47.2** | **+2.0** |
| **NAN01** | **Guarapari, ES** | **24.78** | **89** | *eP* | | | **P** | **P** | **09 58 10.2** | **-1.4** |
| **NBLA** | **Lagarto - SE** | **28.83** | **76** | *eP* | | | **P** | **P** | **09 58 47.5** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **74.54** | **69** | P | | | **P** | **P** | **10 04 22.9** | **-0.1** |
| | 1.7nm,0.6s,baz=253,slow=5.7,SNR=15 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **143.07** | **37** | PKP | | | PKPbc | PKPbc | 10 12 12.9 | +0.6 |
| | 0.9nm,0.6s,baz=313,slow=3.2,SNR=6.3 | | | | | | | | | |

*IDC **16** 09:59:37.8±2.6,53°.54N×87°.64E,h0km,mb1 3.9/2, mb1mx3.3/36,mbtmp3.9/2,ML3.0/2,Error ellipse: s-maj=22.1km s-min=13.6km az=63.0*
*NNC **16** 09:59:39.2±2.0,53°.44N×87°.52E,h0km,mb3.4,mpv3.0, Error ellipse: s-maj=15.5km s-min=7.1km az=60.0, Suspected Mining explosion.*
**ISC 16 09:59:38.6±3.5,53°.6N±0°.1×87°.5E±0°.2,h0km,n9,σ0s97/15, 7C-7D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.66** | **285** | *i* | | | | | 10 12 40.0 | |
| | baz=100,slow=335,SNR=1.9 | | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.66** | **285** | ⇓P | | | **Pn** | **Pn** | **10 00 08.6** | **-0.3** |
| | 0.8nm,0.3s | | | | | | | | | |
| ZAA0 | | | | ⇓S | | | **Sg** | **Sg** | **10 00 32.8** | **+0.9** |
| | 1.8nm,0.3s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.66** | **285** | Pg | | | **Pn** | **Pn** | **10 00 08.6** | **-0.3** |
| | 3.9nm,0.3s,baz=102,slow=17,SNR=37 | | | | | | | | | |
| ZALV | | | | Lg | | | Lg | Lg | 10 00 32.0 | |
| | 4.9nm,0.3s,baz=102,slow=28,SNR=11 | | | | | | | | | |
| **KURK** | **Kurchatov** | **6.19** | **246** | ⇓Pn | | | **Pn** | **Pn** | **10 01 11.8** | **+0.7** |
| | 3.5nm,1.1s | | | | | | | | | |
| KURK | | | | ⇓Sn | | | **Sn** | **Sn** | **10 02 22.2** | **-0.3** |
| | 0.7nm,0.5s | | | | | | | | | |
| KURK | | | | ⇑Lg | | | Lg | Lg | 10 02 53.3 | |
| | 8.1nm,1.3s | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.28** | **246** | Pn | | | **Pn** | **Pn** | **10 01 13.2** | **+0.8** |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=18 | | | | | | | | | |
| KURBB | | | | Sn | | | **Sn** | **Sn** | **10 02 25.1** | **+0.3** |
| | 0.1nm,0.3s,baz=54,slow=20,SNR=2.7 | | | | | | | | | |
| KURBB | | | | Lg | | | Lg | Lg | 10 02 57.3 | |
| | 0.1nm,0.3s,baz=63,slow=31,SNR=7.1 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.28** | **246** | ⇑Pn | | | **Pn** | **Pn** | **10 01 12.5** | **+0.1** |
| | 3.2nm,0.8s | | | | | | | | | |
| KURBB | | | | ⇑Sn | | | **Sn** | **Sn** | **10 02 22.9** | **-2.0** |
| | 2.3nm,0.5s | | | | | | | | | |
| KURBB | | | | ⇑Lg | | | Lg | Lg | 10 02 56.7 | |
| | 8.3nm,0.7s | | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.57** | **209** | ⇑Pn | | | **Pn** | **Pn** | **10 01 30.4** | **+0.3** |
| | 0.4nm,0.4s,baz=29,slow=12,SNR=40 | | | | | | | | | |
| MK31 | | | | ⇓Sn | | | **Sn** | **Sn** | **10 02 56.7** | **+0.2** |
| | 0.4nm,0.5s,baz=32,slow=26,SNR=3.9 | | | | | | | | | |
| MK31 | | | | ⇓Lg | | | Lg | Lg | 10 03 35.4 | |
| | 1.6nm,0.6s,baz=27,slow=28,SNR=3.6 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.57** | **209** | Pn | | | **Pn** | **Pn** | **10 01 30.6** | **+0.6** |
| | 0.7nm,0.3s,baz=30,slow=14,SNR=48 | | | | | | | | | |
| MKAR | | | | Sn | | | **Sn** | **Sn** | **10 02 54.7** | **-1.8** |
| | 0.2nm,0.3s,baz=32,slow=28,SNR=6.2 | | | | | | | | | |
| MKAR | | | | Lg | | | Lg | Lg | 10 03 36.0 | |
| | 0.1nm,0.3s,baz=31,slow=26,SNR=6.2 | | | | | | | | | |
| **MAKZ** | **Makanchi** | **7.64** | **210** | ⇑Pn | | | **Pn** | **Pn** | **10 01 31.8** | **+0.7** |
| | 0.5nm,0.5s | | | | | | | | | |
| MAKZ | | | | ⇓Sn | | | **Sn** | **Sn** | **10 02 57.4** | **-1.0** |
| | 0.8nm,0.5s | | | | | | | | | |
| MAKZ | | | | ⇑Lg | | | Lg | Lg | 10 03 35.4 | |
| | 1.1nm,0.8s | | | | | | | | | |

**IDC 16 10:14:21.7±9.5,14°.85N×103°.78W,h0km,mb3.1/4, mb1 3.6/5,mb1mx3.5/29,mbtmp3.2/5,ML3.1/1,MS3.0/6, Ms1 3.0/6,ms1mx2.8/25,Error ellipse: s-maj=283.3km s-min=98.1km az=108.0,Off coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **11.07** | **327** | LR | | | LR | LR | 10 19 44.8 | |
| | comp=Z,92nm,18.6s,baz=144,slow=29 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **14.41** | **0** | Pn | | | Pn | Pn | 10 17 48.9 | +1.8 |
| | 0.0nm,0.3s,baz=183,slow=15,SNR=4.3 | | | | | | | | | |
| TXAR | | | | LR | | | LR | LR | 10 22 21.4 | |
| | comp=Z,54nm,20.1s,baz=184,slow=33 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **20.15** | **354** | P | | | P | P | 10 18 58.4 | +0.6 |
| | 0.9nm,0.9s,baz=160,slow=15,SNR=2.8 | | | | | | | | | |
| ANMO | | | | LR | | | LR | LR | 10 26 34.9 | |
| | comp=Z,31nm,21.2s,baz=180,slow=36 | | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **21.93** | **331** | LR | | | LR | LR | 10 25 53.1 | |
| | comp=Z,68nm,19.1s,baz=167,slow=32 | | | | | | | | | |
| **ELK** | **Elko** | **27.66** | **341** | LR | | | LR | LR | 10 29 50.9 | |
| | comp=Z,24nm,19.4s,baz=220,slow=34 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **28.26** | **351** | P | | | P | P | 10 20 16.1 | -0.8 |
| | 0.3nm,0.8s,baz=174,slow=9.1,SNR=1.8 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **35.88** | **9** | LR | | | LR | LR | 10 36 08.6 | |
| | comp=Z,30nm,18.7s,baz=136,slow=36 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.19** | **353** | P | | | P | P | 10 23 03.2 | -0.4 |
| | 0.1nm,0.7s,baz=165,slow=7.3,SNR=2.3 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **57.81** | **340** | P | | | P | P | 10 24 15.0 | +0.4 |
| | 0.5nm,0.9s,baz=176,slow=5.7,SNR=4.4 | | | | | | | | | |

*IDC **16** 10:30:14.4±0.6,14°.53S×66°.56E,h0km,mb4.1/18, mb1 4.2/18,mb1mx4.0/60,mbtmp4.1/18,MS3.7/10, Ms1 3.7/10,ms1mx3.3/78,Error ellipse: s-maj=18.5km s-min=17.9km az=26.0*
*NEIC **16** 10:30:17.4±1.9,14°.57S±0°.10×66°.7E±0°.1,h10km±1km, mb4.6/23,Error ellipse: s-maj=20.3km s-min=15.3km az=292.0*
**ISC 16 10:30:16.5±0.5,14°.59S±0°.10×66°.6E±0°.1,h10km,n73, σ1°35/57,mb4.5/37,MS3.8/10,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **8.99** | **40** | T | | | T | T | 10 41 49.0 | |
| | baz=220,slow=76,SNR=326 | | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **9.00** | **41** | T | | | T | T | 10 41 50.0 | |
| | baz=220,slow=76,SNR=539 | | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **9.01** | **40** | T | | | T | T | 10 41 57.5 | |
| | baz=220,slow=76,SNR=392 | | | | | | | | | |
| **PALK** | **Pallekele** | **25.83** | **34** | LR | | | LR | LR | 10 43 43.7 | |
| | comp=Z,336nm,20.9s,baz=332,slow=31 | | | | | | | | | |
| **KIBK** | **Kibwezi** | **30.71** | **291** | P | | | **P** | **P** | **10 36 30.2** | **-1.8** |
| **KMBO** | **Kilima Mbogo** | **31.94** | **292** | LR | | | LR | LR | 10 46 36.1 | |
| | comp=Z,49nm,18.5s,baz=90,slow=31 | | | | | | | | | |
| **CRZF** | **Crozet Islands** | **34.06** | **198** | P | | | **P** | **P** | **10 37 01.2** | **+0.3** |
| **PSI** | **Prapat** | **36.38** | **64** | LR | | | LR | LR | 10 49 13.6 | |
| | comp=Z,163nm,20.2s,baz=208,slow=31 | | | | | | | | | |
| **LSZ** | **Lusaka** | **37.10** | **264** | LR | | | LR | LR | 10 50 57.4 | |
| | comp=Z,261nm,20.9s,baz=110,slow=34 | | | | | | | | | |
| **LSZ** | **Lusaka** | **37.10** | **264** | P | | | **P** | **P** | **10 37 27.9** | **+0.3** |
| LSZ | | | | | | | IAmb | IAmb | 10 37 28.9 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **38.40** | **348** | LR | | | LR | LR | 10 50 13.7 | |
| | comp=Z,46nm,20.2s,baz=170,slow=31 | | | | | | | | | |
| **LBTB** | **Lobatse** | **39.81** | **248** | P | | | **P** | **P** | **10 37 50.0** | **-0.3** |
| | comp=Z,4.9nm,0.7s,baz=96,slow=7.6,SNR=8.1 | | | | | | | | | |
| LBTB | | | | | | | LR | LR | 10 51 49.7 | |
| | comp=Z,129nm,19.5s,baz=112,slow=32 | | | | | | | | | |
| **LBTB** | **Lobatse** | **39.81** | **248** | IAmb | | | IAmb | IAmb | 10 37 52.4 | |
| | comp=Z,4.0nm,0.7s | | | | | | | | | |
| **BOSA** | **Boshof** | **40.69** | **243** | P | | | **P** | **P** | **10 37 57.6** | **0.0** |
| | comp=Z,5.4nm,0.8s,baz=81,slow=8.8,SNR=7.9 | | | | | | | | | |
| BOSA | | | | | | | LR | LR | 10 51 57.8 | |
| | comp=Z,116nm,20.0s,baz=98,slow=32 | | | | | | | | | |
| **BOSA** | **Boshof** | **40.69** | **243** | IAmb | | | IAmb | IAmb | 10 37 58.0 | |
| | comp=Z,6.8nm,0.8s | | | | | | | | | |
| **LEM** | **Lembang** | **40.97** | **84** | LR | | | LR | LR | 10 52 53.4 | |
| | comp=Z,63nm,19.1s,baz=290,slow=33 | | | | | | | | | |
| **SUR** | **Sutherland** | **45.20** | **239** | P | | | **P** | **P** | **10 38 34.2** | **0.0** |
| **MAW** | **Mawson** | **53.03** | **182** | LR | | | LR | LR | 10 57 56.2 | |
| | comp=Z,108nm,19.1s,baz=251,slow=31 | | | | | | | | | |
| **KAPI** | **Kappang** | **53.11** | **85** | LR | | | LR | LR | 10 59 31.9 | |
| | comp=Z,44nm,20.7s,baz=278,slow=33 | | | | | | | | | |
| **MARD** | **Mardin** | **57.07** | **336** | P | | | **P** | **P** | **10 40 02.3** | **-0.8** |
| **KKAR** | **Karatay Array** | **57.52** | **3** | P | | | **P** | **P** | **10 40 07.8** | **+1.8** |
| **GURO** | **Guroymak-BITLI** | **57.66** | **337** | P | | | **P** | **P** | **10 40 09.0** | **+1.8** |
| GURO | | | | | | | IAmb | IAmb | 10 40 12.0 | |
| | comp=Z,8.9nm,1.4s | | | | | | | | | |
| **GNI** | **Garni** | **58.14** | **340** | P | | | **P** | **P** | **10 40 08.5** | **-2.1** |
| | comp=Z,6.3nm,0.7s,baz=3,3,slow=17,SNR=1.2 | | | | | | | | | |
| **GNI** | **Garni** | **58.14** | **340** | P |

**IDC 16 10:33:14.6±13.0, 14°.81N×104°.96W, h0km, mb3.2/2, mb1 3.7/3, mb1mx3.4/36, mbtmp3.3/3, ML3.1/1, MS3.0/3, Ms1 3.0/3, ms1mx2.7/28, Error ellipse: s-maj=359.4km s-min=109.4km az=118.0, Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **14.51** | **5** | Pn | Pn | 10 36 43.3 | +1.9 |
| | 0.0nm,0.3s,baz=186,slow=13,SNR=9.3 | | | | | | |
| TXAR | | | | LR | LR | 10 41 57.6 | |
| | comp=Z,78nm,21.9s,baz=186,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **20.10** | **356** | LR | LR | 10 44 21.1 | |
| | comp=Z,38nm,21.9s,baz=166,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **21.43** | **333** | LR | LR | 10 43 57.5 | |
| | comp=Z,51nm,18.3s,baz=161,slow=30 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.12** | **354** | P | P | 10 41 55.8 | -0.2 |
| | 0.1nm,0.5s,baz=166,slow=7.0,SNR=2.3 | | | | | | |
| **ILAR** | **Eielson Array** | **57.46** | **340** | P | P | 10 43 05.1 | 0.0 |
| | 0.6nm,1.0s,baz=144,slow=6.1,SNR=3.3 | | | | | | |

*ARE **16** 10:46:24±3.5, 16°.82S±0°.06×73°.88W±0°.05, h30km±3km, Error ellipse: s-maj=0.0km s-min=0.0km az=122.0*

*IDC **16** 10:46:25.4±0.4, 16°.37S×73°.49W, h0km, mb4.9/30, mb1 5.0/34, mb1mx4.9/45, mbtmp4.9/34, ML4.8/4, MS5.2/58, Ms1 5.2/58, ms1mx5.2/64, Error ellipse: s-maj=15.7km s-min=10.7km az=59.0*

*NEIC **16** 10:46:26.4, 16°.46S×73°.59W, h19km, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$1.56; $M_{\theta\theta}$-0.69; $M_{\phi\phi}$-0.86; $M_{r\theta}$-0.40; $M_{\theta\phi}$1.79; $M_{\phi r}$-1.60; Fault plane solution: $M_o$2.78000×$10^{17}$ NP1:$\phi_s$168.63000°, $\delta$66.81000°, $\lambda$129.38000°. NP2:$\phi_s$284.26000°, $\delta$44.72000°, $\lambda$34.02000°. Principal axes: T 2.7895, Plg51.0000°, Azm125.0000°; N -0.0196, Plg36.0000°, Azm331.0000°; P -2.7699, Plg13.0000°, Azm231.0000°;*

*VAO **16** 10:46:27.8±0.3, 16°.38S×73°.50W, h10km, mb5.4*

*MOS **16** 10:46:27.4±1.1, 16°.30S×73°.50W, h22km, mb5.4/27, MS5.2/16, Error ellipse: s-maj=11.6km s-min=5.6km az=110.4*

*NEIC **16** 10:46:30.0±2.1, 16°.44S±0°.06×73°.61W±0°.08, h29km±1km, mb5.4/437, Ms_20 5.3/282, Mwb5.6/53, Mww5.7, ML5.7(ARE), Error ellipse: s-maj=13.3km s-min=9.3km az=245.0*

*NEIC **16** 10:46:33, 16°.59S×73°.74W, h22km, Moment Tensor Solution. Duration: 12s6 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$2.02; $M_{\theta\theta}$-0.82; $M_{\phi\phi}$-1.20; $M_{r\theta}$0.06; $M_{\theta\phi}$1.52; $M_{\phi r}$-3.61; Fault plane solution: $M_o$4.30000×$10^{17}$ NP1: $\phi_s$294.00000°, $\delta$24.00000°, $\lambda$36.00000°. NP2: $\phi_s$170.00000°, $\delta$76.00000°, $\lambda$110.00000°. Principal axes: T 4.4827, Plg55.0000°, Azm105.0000°; N -0.4034, Plg19.0000°, Azm345.0000°; P -4.0793, Plg28.0000°, Azm244.0000°;*

*GCMT **16** 10:46:34.0±0.1, 16°.59S±0°.01×73°.91W±0°.01, h34km, MW5.7/139, Moment Tensor Solution. s136,c235; s139,c255; Duration: 1s7 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$2.12±.04; $M_{\theta\theta}$0.10±.03; $M_{\phi\phi}$-2.23±.04; $M_{r\theta}$0.10±.04; $M_{\theta\phi}$1.42±.03; $M_{\phi r}$-3.14±.08; Best double couple: $M_o$4.06200×$10^{17}$ NP1:$\phi_s$310.00000°, $\delta$24.00000°, $\lambda$48.00000°. NP2:$\phi_s$175.00000°, $\delta$72.00000°, $\lambda$107.00000°. Principal axes: T 3.8570, Plg59.0000°, Azm108.0000°; N 0.4040, Plg16.0000°, Azm349.0000°; P -4.2670, Plg25.0000°, Azm251.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 16 10:46:29.8±0.7, 16°.51S±0°.04×73°.53W±0°.05, h31km±4km, n1160, σ1°.47/996, mb5.3/257, MS5.3/210, 52C-35D, Fault plane solution: NP1:$\phi_s$292.80072°, $\delta$43.40191°, $\lambda$13.88115°. NP2:$\phi_s$192.62175°, $\delta$80.51183°, $\lambda$132.55495°. Principal axes: T Plg39.0731°, Azm140.6452°; N Plg41.8394°, Azm4.0158°; P Plg23.4025°, Azm251.2171°;**

**Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **3.56** | **122** | | **Pn** | **10 47 26.1** | **+3.2** |
| **AP01** | **Chacalluta** | **3.56** | **122** | *eP* | **Pn** | **10 47 26.3** | **+3.4** |
| **PB12** | **IPOC Station P** | **3.70** | **125** | Pn | **Pn** | **10 47 25.6** | **+0.6** |
| **PB12** | **IPOC Station P** | **3.70** | **125** | *eP* | **Pn** | **10 47 25.6** | **+0.6** |
| **PB16** | **IPOC Station P** | **4.25** | **116** | Pn | **Pn** | **10 47 34.8** | **+1.8** |
| **PB16** | **IPOC Station P** | **4.25** | **116** | ⇓*iP* | Pb | 10 47 38.7 | -5.5 |
| **PB11** | **IPOC Station P** | **4.90** | **132** | Pn | **Pn** | **10 47 42.5** | **+0.9** |
| **PB11** | **IPOC Station P** | **4.90** | **132** | ⇑*iP* | **Pn** | **10 47 42.5** | **+0.9** |
| **TA02** | **Huaiquique** | **4.94** | **140** | | **Pn** | **10 47 43.0** | **+1.1** |
| TA02 | | | | Sn | **Sn** | **10 48 36.5** | **-1.6** |
| **TA02** | **Huaiquique** | **4.94** | **140** | *eP* | **Pn** | **10 47 43.5** | **+1.5** |
| **HMBC** | **Humberstone** | **5.10** | **138** | *i* P | **Pn** | **10 47 45.1** | **+0.9** |
| **TA01** | **Diego Aracena** | **5.14** | **142** | Pn | **Pn** | **10 47 45.3** | **+0.7** |
| TA01 | | | | Sn | **Sn** | **10 48 38.6** | **-4.2** |
| **TA01** | **Diego Aracena** | **5.14** | **142** | ⇑*iP* | **Pn** | **10 47 45.2** | **+0.6** |
| **GO01** | **Chusmiza** | **5.18** | **128** | Pn | **Pn** | **10 47 47.4** | **+1.7** |
| **GO01** | **Chusmiza** | **5.18** | **128** | ⇑*iP* | **Pn** | **10 47 47.4** | **+1.7** |
| **LPAZ** | **La Paz** | **5.19** | **88** | Pn | Pn | 10 47 51.1 | +5.2 |
| | 15nm,0.3s,baz=261,slow=12,SNR=225 | | | | | | |
| LPAZ | | | | Lg | Lg | 10 48 59.5 | |
| | baz=58,slow=24,SNR=1.7 | | | | | | |
| LPAZ | | | | LR | LR | 10 50 10.6 | |
| | comp=Z,84μm,18.7s,baz=265,slow=44 | | | | | | |
| **LPAZ** | **La Paz** | **5.19** | **88** | Pn | **Pn** | 10 47 50.9 | +5.0 |
| **PATCX** | **Punta Patache** | **5.35** | **144** | | **Pn** | **10 47 48.3** | **+0.6** |
| PATCX | | | | Sn | **Sn** | **10 48 45.0** | **-3.3** |
| **PATCX** | **Punta Patache** | **5.35** | **144** | ⇑*iP* | **Pn** | **10 47 48.2** | **+0.6** |
| **PB08** | **IPOC Station P** | **5.51** | **132** | Pn | **Pn** | **10 47 51.3** | **+1.1** |
| **PB08** | **IPOC Station P** | **5.51** | **132** | ⇑*iP* | **Pn** | **10 47 51.2** | **+1.1** |
| **NNA** | **Nana** | **5.52** | **324** | Pn | **Pn** | **10 47 48.6** | **-1.4** |
| | 22nm,0.3s,baz=140,slow=9.5,SNR=26 | | | | | | |
| NNA | | | | Lg | Lg | 10 49 03.7 | |
| | 1μm,0.3s,baz=218,slow=21,SNR=14 | | | | | | |
| NNA | | | | LR | LR | 10 49 55.5 | |
| | comp=Z,15μm,19.0s,baz=154,slow=39 | | | | | | |
| **NNA** | **Nana** | **5.52** | **324** | *ceP* | **Pn** | **10 47 49.4** | **-0.6** |
| NNA | | | | pmax | pmax | | |
| | comp=Z,717nm,1.0s | | | | | | |
| **NNA** | **Nana** | **5.52** | **324** | Pn | **Pn** | **10 47 47.9** | **-2.1** |
| **PB02** | **IPOC Station P** | **5.89** | **145** | | **Pn** | **10 47 55.8** | **+0.6** |
| **PB02** | **IPOC Station P** | **5.89** | **145** | ⇑*iP* | **Pn** | **10 47 55.6** | **+0.5** |
| **PB01** | **IPOC Station P** | **5.92** | **140** | | **Pn** | **10 47 56.0** | **+0.6** |
| **PB01** | **IPOC Station P** | **5.92** | **140** | ⇑*iP* | **Pn** | **10 47 56.2** | **+0.8** |
| **PB07** | **IPOC Station P** | **6.23** | **147** | | **Pn** | **10 47 59.9** | **+0.1** |
| **PB03** | **IPOC Station P** | **6.56** | **148** | | **Pn** | **10 48 04.6** | **+0.2** |
| **PB04** | **IPOC Station P** | **6.61** | **152** | | **Pn** | **10 48 04.8** | **-0.3** |
| **PB09** | **IPOC Station P** | **6.64** | **143** | | **Pn** | **10 48 06.9** | **+1.4** |
| **PB06** | **IPOC Station P** | **7.21** | **149** | | **Pn** | **10 48 13.2** | **0.0** |
| **LVC** | **Limon Verde** | **7.47** | **145** | Pn | **Pn** | **10 48 17.5** | **+0.5** |
| | comp=Z,51nm,0.3s,baz=320,slow=10,SNR=186 | | | | | | |
| LVC | | | | Sn | **Sn** | **10 49 38.4** | **-2.5** |
| | comp=Z,50nm,0.3s,baz=20,slow=10,SNR=3.7 | | | | | | |
| **LVC** | **Limon Verde** | **7.47** | **145** | P | **Pn** | **10 48 18.6** | **+1.6** |
| **LVC** | **Limon Verde** | **7.47** | **145** | Pn | **Pn** | **10 48 18.6** | **+1.6** |
| **LVC** | **Limon Verde** | **7.47** | **145** | *eP* | **Pn** | **10 48 18.7** | **+1.7** |
| **PB15** | **IPOC Station P** | **7.68** | **151** | | **Pn** | **10 48 19.3** | **-0.4** |
| **PB14** | **IPOC Station P** | **8.59** | **161** | Pn | **Pn** | **10 48 30.8** | **-1.6** |
| **ATAH** | **Atahualpa** | **10.46** | **332** | Pn | **Pn** | **10 49 00.4** | **+2.3** |
| | comp=Z,0.5nm,0.3s,baz=166,slow=10,SNR=5.8 | | | | | | |
| ATAH | | | | Sn | **Sn** | **10 50 53.6** | **-0.9** |
| | comp=Z,1.7nm,0.3s,baz=129,slow=4.3,SNR=2.0 | | | | | | |
| ATAH | | | | LR | LR | 10 53 32.1 | |
| | comp=Z,19μm,19.1s,baz=138,slow=41 | | | | | | |
| **AC02** | **Maricunga** | **11.06** | **159** | | **Pn** | **10 49 06.4** | **+0.1** |
| **GO03** | **Copiap** | **11.45** | **165** | | **Pn** | **10 49 10.4** | **-0.8** |
| **AC04** | **Llanos de Chal** | **11.86** | **169** | | **Pn** | **10 49 16.5** | **-0.3** |
| **SIV** | **San Ignacio** | **11.98** | **89** | Pn | **Pn** | **10 49 17.2** | **-1.4** |
| | comp=Z,13nm,0.3s,baz=265,slow=13,SNR=74 | | | | | | |
| SIV | | | | LR | LR | 10 54 33.3 | |
| | comp=Z,40μm,19.7s,baz=282,slow=41 | | | | | | |
| **LCO** | **Las Campanas** | **12.71** | **169** | P | **Pn** | **10 49 31.4** | **+2.6** |
| **LCO** | **Las Campanas** | **12.71** | **169** | Pn | **Pn** | **10 49 31.4** | **+2.6** |
| **TBTG** | **Tabatinga, AM** | **12.75** | **17** | *eP* | **Pn** | **10 49 28.1** | **-1.0** |
| **TBTG** | **Tabatinga, AM** | **12.75** | **17** | *eP* | **Pn** | **10 49 26.9** | **-2.2** |
| **VILB** | **Vilhena** | **13.37** | **76** | *eP* | **Pn** | **10 49 38.0** | **+0.4** |
| **CO05** | **La Serena** | **13.51** | **171** | | **Pn** | **10 49 39.7** | **+0.3** |
| **GO04** | **Tololo Observa** | **13.83** | **170** | Pn | **Pn** | **10 49 44.3** | **+0.3** |
| **PTLB** | **Pontes e Lacer** | **13.88** | **88** | *eP* | **Pn** | **10 49 45.2** | **+0.7** |
| **CO06** | **Fray Jorge** | **14.21** | **173** | | **Pn** | **10 49 48.9** | **0.0** |
| **CO03** | **El Pedregal** | **14.50** | **170** | | **Pn** | **10 49 52.3** | **-0.7** |
| **CO02** | **Combarbal** | **14.81** | **171** | | **Pn** | **10 49 56.3** | **-0.9** |
| **ZON** | **Zonda** | **15.61** | **164** | P | **P** | **10 50 10.2** | **-1.4** |
| ZON | | | | pmax | pmax | | |
| | comp=Z,425nm,1.6s | | | | | | |
| **ZON** | **Zonda** | **15.61** | **164** | Pn | **P** | **10 50 10.2** | **-1.4** |
| ZON | | | | IAmb | IAmb | 10 50 16.2 | |
| | comp=Z,425nm,1.6s | | | | | | |
| **VA06** | **Catapilco** | **16.11** | **173** | Pn | **Pn** | **10 50 13.4** | **-0.6** |
| VA06 | | | | IAmb | IAmb | 10 50 21.3 | |
| | comp=Z,419nm,1.4s | | | | | | |
| **VA03** | **San Esteban** | **16.41** | **171** | Pn | **Pn** | **10 50 18.0** | **+0.1** |
| VA03 | | | | IAmb | IAmb | 10 50 24.9 | |
| | comp=Z,493nm,1.4s | | | | | | |
| **VA01** | **Torpederas** | **16.53** | **174** | Pn | **Pn** | **10 50 20.0** | **+0.7** |
| **ROC1** | **El Roble** | **16.55** | **173** | | **Pn** | **10 50 20.0** | **+0.1** |
| ROC1 | | | | IAmb | IAmb | 10 50 39.6 | |
| | comp=Z,269nm,1.1s | | | | | | |
| **PEL** | **Peldehue** | **16.76** | **172** | P | **Pn** | **10 50 20.3** | **-2.0** |
| PEL | | | | pmax | pmax | | |
| | comp=Z,422nm,1.3s | | | | | | |
| **PEL** | **Peldehue** | **16.76** | **172** | Pn | **Pn** | **10 50 20.3** | **-2.0** |
| PEL | | | | IAmb | IAmb | 10 50 28.7 | |
| | comp=Z,422nm,1.3s | | | | | | |
| **MT02** | **Curacav** | **16.82** | **173** | Pn | **Pn** | **10 50 22.3** | **-0.7** |
| **MT05** | **Renca** | **17.00** | **172** | Pn | **Pn** | **10 50 25.9** | **+0.6** |
| **PDRB** | **Porto dos Gac** | **17.01** | **76** | *eP* | **Pn** | **10 50 24.6** | **-0.9** |
| **SALV** | **Santo Antonio** | **17.14** | **90** | *eP* | **Pn** | **10 50 26.7** | **-0.5** |
| **VA05** | **Santo Domingo** | **17.16** | **175** | | **P** | **10 50 28.8** | **+0.1** |
| **OTAV** | **Otavalo** | **17.33** | **343** | P | **P** | **10 50 31.0** | **-0.2** |
| OTAV | | | | pmax | pmax | | |
| | comp=Z,254nm,1.5s | | | | | | |
| **OTAV** | **Otavalo** | **17.33** | **343** | | **P** | **10 50 31.0** | **-0.2** |
| **OTAV** | **Otavalo** | **17.33** | **343** | *eP* | **P** | **10 50 32.8** | **+1.6** |
| **MT09** | **Talagante** | **17.34** | **173** | P | **P** | **10 50 30.8** | **0.0** |
| MT09 | | | | IAmb | IAmb | 10 50 46.1 | |
| | comp=Z,468nm,1.6s | | | | | | |
| **AQDB** | **Aquidauana** | **17.37** | **106** | P | **Pn** | **10 50 29.9** | **-0.1** |
| **AQDB** | **Aquidauana** | **17.37** | **106** | *eP* | **Pn** | **10 50 29.8** | **-0.1** |
| **MT01** | **Peota** | **17.40** | **174** | P | **P** | **10 50 31.2** | **-0.2** |
| **PAC1** | **Pacto, Paraso** | **17.46** | **342** | *eP* | **P** | **10 50 39.3** | **+7.1** |
| **LMEL** | **Las Melosas** | **17.52** | **171** | P | **P** | **10 50 33.2** | **+0.3** |
| LMEL | | | | IAmb | IAmb | 10 50 37.9 | |
| | comp=Z,512nm,1.7s | | | | | | |
| **H03N1** | **Juan Fernandez** | **17.54** | **195** | T | T | 11 08 59.0 | |
| | baz=17,slow=74 | | | | | | |
| **H03N2** | **Juan Fernandez** | **17.55** | **195** | T | T | 11 08 59.3 | |
| | baz=17,slow=74,SNR=2932 | | | | | | |
| **H03N3** | **Juan Fernandez** | **17.56** | **195** | T | T | 11 08 58.3 | |
| | baz=17,slow=74,SNR=3038 | | | | | | |
| **BO04** | **La Punta** | **17.60** | **172** | P | **P** | **10 50 35.1** | **+1.5** |
| BO04 | | | | IAmb | IAmb | 10 51 04.1 | |
| | comp=Z,398nm,1.8s | | | | | | |
| **TULM** | **Tulcn-Chalpat** | **17.62** | **346** | *eP* | **P** | **10 50 38.3** | **+3.9** |
| **CMBC** | **Cumbal** | **17.85** | **346** | *eP* | **P** | **10 50 41.1** | **+4.2** |
| **PP1B** | **Ponte de Pedra** | **17.87** | **96** | *eP* | **Pn** | **10 50 36.2** | **0.0** |
| **BO01** | **Tunca** | **17.94** | **173** | P | **Pn** | **10 50 36.5** | **-0.5** |
| **CPUP** | **Villa Florida** | **17.96** | **126** | P | **Pn** | **10 50 35.4** | **-1.8** |
| | comp=Z,0.3nm,0.3s,baz=307,slow=12,SNR=12 | | | | | | |
| CPUP | | | | LR | LR | 10 58 59.2 | |
| | comp=Z,14μm,18.3s,baz=300,slow=42 | | | | | | |
| **CPUP** | **Villa Florida** | **17.96** | **126** | P | **Pn** | **10 50 36.2** | **-1.0** |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,81nm,1.2s | | | | | | |
| **CPUP** | **Villa Florida** | **17.96** | **126** | P | **Pn** | **10 50 36.2** | **-1.0** |
| **CPUP** | **Villa Florida** | **17.96** | **126** | *eP* | **Pn** | **10 50 36.6** | **-0.6** |
| **GCUF** | **Volcan Galeras** | **18.02** | **348** | *eP* | **P** | **10 50 40.9** | **+2.0** |
| **FLOC** | **Florencia** | **18.10** | **353** | *eP* | **P** | **10 50 40.9** | **+1.7** |
| **CLDB** | **Colider** | **18.11** | **74** | *eP* | **Pn** | **10 50 38.6** | **-0.6** |
| **MACA** | **Manacapuru-AM** | **18.32** | **45** | *eP* | **P** | **10 50 40.6** | **-1.0** |
| **BO02** | **Sierra Bellavi** | **18.37** | **173** | P | **Pn** | **10 50 42.3** | **0.0** |
| **GO05** | **Huala** | **18.48** | **176** | P | **P** | **10 50 40.8** | **-2.5** |
| **MACC** | **Macarena, Meta** | **18.54** | **359** | *eP* | **P** | **10 50 44.4** | **+0.3** |
| **GARC** | **Garzon, Huila** | **18.68** | **354** | *eP* | **Pn** | **10 50 46.9** | **+0.6** |
| **SOTA** | **Rioblanco** | **18.77** | **350** | *eP* | **Pn** | **10 50 49.0** | **+1.3** |
| **PCON** | **Cinco Dias** | **18.93** | **351** | *eP* | **Pn** | **10 50 51.7** | **+2.0** |
| **BETC** | **Betania** | **19.16** | **354** | *eP* | **Pn** | **10 50 52.8** | **+0.9** |
| **ML02** | **Panimavida** | **19.27** | **175** | P | **Pn** | **10 50 54.0** | **+1.0** |
| **NPGB** | **Novo Progresso** | **20.11** | **64** | *eP* | **P** | **10 51 00.1** | **-1.1** |
| **ITQB** | **Itaqui** | **20.30** | **133** | P | Pn | 10 51 05.3 | 0.0 |
| **ITQB** | **Itaqui** | **20.30** | **133** | *eP* | Pn | 10 51 05.5 | +0.2 |
| **ORTC** | **Ortega, Tolima** | **20.36** | **355** | *eP* | Pn | 10 51 06.0 | -0.1 |
| **YOTC** | **Yotoco, Valle** | **20.55** | **352** | *eP* | Pn | 10 51 07.8 | -0.7 |
| **PTGA** | **Pitinga** | **20.61** | **42** | P | **P** | **10 51 05.5** | **-1.1** |
| | comp=Z,60nm,0.6s,baz=223,slow=12,SNR=60 | | | | | | |
| PTGA | | | | S | **S** | **10 54 48.8** | **-6.7** |
| | comp=Z,20nm,0.8s,baz=209,slow=16,SNR=2.4 | | | | | | |
| PTGA | | | | LR | LR | 11 00 12.9 | |
| | comp=Z,10μm,18.1s,baz=224,slow=40 | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **20.62** | **4** | *eP* | Pn | 10 51 09.3 | +0.1 |
| **ARAG** | **Araguaiana, MT** | **20.88** | **91** | *eP* | **P** | **10 51 10.1** | **+0.4** |
| **CHIC** | **Chingaza** | **21.00** | **359** | *eP* | **P** | **10 51 10.4** | **-0.9** |
| **ROSC** | **El Rosal** | **21.23** | **358** | P | **P** | **10 51 13.6** | **-0.1** |
| | comp=Z,43nm,0.8s,baz=145,slow=1.3,SNR=14 | | | | | | |
| **ROSC** | **El Rosal** | **21.23** | **358** | P | **P** | **10 51 15.5** | **+1.8** |
| **ROSC** | **El Rosal** | **21.23** | **358** | *eP* | **P** | **10 51 16.1** | **+2.4** |
| **ITTB** | **Itaituba** | **21.23** | **57** | *eP* | **P** | **10 51 12.8** | **-0.6** |
| **PLMC** | **San Jos del P** | **21.45** | **352** | *eP* | **P** | **10 51 16.1** | **+0.3** |
| **PCMB** | **Pacaembu** | **21.64** | **107** | *eP* | **P** | **10 51 18.6** | **+0.8** |
| **PTGB** | **Pitanga** | **21.67** | **116** | *eP* | **P** | **10 51 18.7** | **+0.6** |
| **GUY2C** | **Guyana, Caldas** | **21.67** | **355** | *eP* | **P** | **10 51 20.1** | **+1.5** |
| **NORC** | **Norcasia** | **21.97** | **356** | *eP* | **P** | **10 51 21.8** | **+0.5** |
| **SNDB** | **Serra Nova Dou** | **22.02** | **81** | *eP* | **P** | **10 51 21.5** | **-0.3** |
| **SPBC** | **San Pablo de B** | **22.03** | **359** | *eP* | **P** | **10 51 22.5** | **+0.6** |
| **ITRB** | **Iturama** | **22.25** | **102** | *eP* | **P** | **10 51 24.7** | **+0.4** |
| **RUSC** | **La Rusia** | **22.26** | **1** | *eP* | **P** | **10 51 24.9** | **-0.1** |
| **LC01** | **Cunco** | **22.35** | **177** | P | **P** | **10 51 25.4** | **+0.2** |
| LC01 | | | | IAmb | IAmb | 10 51 46.8 | |
| | comp=Z,166nm,1.1s | | | | | | |
| **ITAB** | **Concordia** | **22.51** | **122** | P | **P** | **10 51 26.9** | **-0.1** |
| **ITAB** | **Concordia** | **22.51** | **122** | *eP* | **P** | **10 51 27.9** | **+0.9** |
| **HELC** | **Santa Helena** | **22.64** | **355** | *eP* | **P** | **10 51 33.7** | **+4.8** |
| **BOAV** | **Boa Vista** | **22.76** | **36** | *eP* | **P** | **10 51 29.4** | **-0.3** |
| **PAYG** | **Puerto Ayora** | **22.81** | **312** | P | **P** | **10 51 29.5** | **-0.8** |
| PAYG | | | | IAmb | IAmb | 10 51 58.8 | |
| | comp=Z,87nm,1.0s | | | | | | |
| **PAYG** | **Puerto Ayora** | **22.81** | **312** | IAMs_20 | IAMs_20 | 10 58 18.0 | |
| | comp=Z,10μm,21.0s | | | | | | |
| **PAYG** | **Puerto Ayora** | **22.81** | **312** | *eP* | **P** | **10 51 30.6** | **+0.4** |
| **TAMC** | **Tame, Arauca** | **22.86** | **4** | *eP* | **P** | **10 51 30.1** | **-0.7** |
| **PTBC** | **PUERTO BERRIO,** | **22.92** | **358** | *eP* | **P** | **10 51 30.6** | **-0.7** |
| **BARC** | **Barichara** | **22.96** | **1** | *eP* | **P** | **10 51 31.3** | **-0.7** |
| **CPSB** | **Cacapava Do Su** | **22.99** | **131** | *eP* | **P** | **10 51 32.7** | **+0.7** |
| **LPA** | **La Plata** | **23.04** | **146** | *ceP* | **P** | **10 51 26.3** | **-6.1** |
| LPA | | | | pP | **pP** | **10 51 41.7** | **+1.5** |
| LPA | | | | pPP | | 10 52 05.2 | |
| LPA | | | | PCP | **PcP** | **10 55 20.5** | **-0.8** |
| LPA | | | | S | **S** | **10 55 40.0** | **-1.2** |
| LPA | | | | SSS | SSS | 10 56 27.3 | |
| LPA | | | | SCS | **ScS** | **11 02 43.8** | **+0.8** |
| **LR04** | **Corral** | **23.29** | **180** | P | **P** | **10 51 36.5** | **+1.7** |
| **FRTB** | **Fartura** | **23.52** | **111** | *eP* | **P** | **10 51 37.4** | **0.0** |
| **PLTB** | **Pedras Altas** | **23.63** | **134** | P | **P** | **10 51 39.2** | **+0.8** |
| **PLTB** | **Pedras Altas** | **23.63** | **134** | *eP* | **P** | **10 51 40.0** | **+1.6** |
| **PAMC** | **Pamplona, Colo** | **23.71** | **2** | *eP* | **P** | **10 51 39.7** | **0.0** |
| **PTAC** | **Punta Ardita,** | **23.88** | **349** | *eP* | **P** | **10 51 42.5** | **+1.7** |
| **ZARC** | **Zaragoza, Cauc** | **23.88** | **357** | P | **P** | **10 51 39.9** | **-0.9** |
| ZARC | | | | IAmb | IAmb | 10 51 59.2 | |
| | comp=Z,75nm,0.7s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **23.88** | **357** | *eP* | **P** | **10 51 40.0** | **-0.9** |
| **MALB** | **Monte Alegre** | **23.91** | **54** | *eP* | **P** | **10 51 41.0** | **-0.2** |
| **BB19B** | **Bebedouro** | **24.09** | **105** | *eP* | **P** | **10 51 43.2** | **+0.4** |
| **URBC** | **San Jos de Ur** | **24.19** | **355** | *eP* | **P** | **10 51 46.2** | **+2.6** |
| **IPMB** | **Ipameri, GO** | **24.22** | **97** | *eP* | **P** | **10 51 43.9** | **-0.2** |
| **PLCA** | **Paso Flores** | **24.27** | **174** | P | **P** | **10 51 45.3** | **+0.9** |
| | comp=Z,35nm,0.9s,baz=350,slow=10,SNR=54 | | | | | | |
| PLCA | | | | S | **S** | **10 55 59.6** | **-1.7** |
| | comp=Z,3.7nm,1.0s,baz=90,slow=7.7,SNR=1.4 | | | | | | |
| **PLCA** | **Paso Flores** | **24.27** | **174** | P | **P** | **10 51 45.3** | **+0.9** |
| PLCA | | | | IAmb | IAmb | 10 51 49.1 | |
| | comp=Z,203nm,1.4s | | | | | | |
| **PLCA** | **Paso Flores** | **24.27** | **174** | *eP* | **P** | **10 51 46.0** | **+1.6** |
| **LL04** | **Puerto Octay** | **24.33** | **178** | P | **P** | **10 51 44.6** | **-0.2** |
| **TIJ01** | **Guaruva-PR** | **24.50** | **115** | *eP* | **P** | **10 51 49.0** | **+2.4** |
| **BDFB** | **Brasilia** | **24.53** | **92** | P | **P** | **10 51 47.4** | **+0.4** |
| | comp=Z,26nm,0.8s,baz=258,slow=13,SNR=24 | | | | | | |
| BDFB | | | | LR | LR | 11 02 23.6 | |
| | comp=Z,5μm,18.1s,baz=266,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **24.53** | **92** | P | **P** | **10 51 47.2** | **+0.2** |
| **LL03** | **Petrohue** | **24.56** | **178** | P | **P** | **10 51 48.0** | **+1.2** |
| **OCAC** | **Ocana** | **24.59** | **1** | P | **P** | **10 51 46.5** | **-1.0** |
| **SOCV** | **Socops** | **24.78** | **6** | *eP* | **P** | **10 51 47.6** | **-1.5** |
| **LL05** | **Los Muermos** | **24.81** | **180** | P | **P** | **10 51 51.6** | **+2.5** |
| LL05 | | | | IAmb | IAmb | 10 52 16.0 | |
| | comp=Z,132nm,1.1s | | | | | | |
| **PEXB** | **Peixe** | **24.83** | **83** | *eP* | **P** | **10 51 49.9** | **+0.3** |
| **RCLB** | **Rio Claro- Sao** | **25.19** | **108** | *eP* | **P** | **10 51 53.8** | **+1.0** |
| **PRPB** | **Parauapebas** | **25.39** | **69** | *eP* | **P** | **10 51 54.2** | **-0.4** |
| **SDV** | **Santo Domingo** | **25.39** | **7** | P | **P** | **10 51 54.3** | **-0.6** |
| | comp=Z,52nm,0.8s,baz=167,slow=1.8,SNR=33 | | | | | | |
| **SDV** | **Santo Domingo** | **25.39** | **7** | P | **P** | **10 51 53.9** | **-0.9** |
| SDV | | | | IAmb | IAmb | 10 52 36.4 | |
| | comp=Z,81nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **25.39** | **7** | *eP* | **P** | **10 51 54.0** | **-0.8** |
| **SDV** | **Santo Domingo** | **25.39** | **7** | *eP* | **P** | **10 51 54.4** | **-0.4** |
| **TER01** | **Tubaro-SC** | **25.46** | **122** | *eP* | **P** | **10 51 56.5** | **+1.2** |
| **PET01** | **Itanhaem-SP** | **25.77** | **112** | *eP* | **P** | **10 51 59.4** | **+1.4** |
| **VAO** | **Valinhos** | **25.80** | **109** | *eP* | **P** | **10 51 59.2** | **+0.9** |
| **SJCC** | **San Jacinto, C** | **26.29** | **356** | P | **P** | **10 52 03.1** | **+0.3** |
| **SJCC** | **San Jacinto, C** | **26.29** | **356** | *eP* | **P** | **10 52 05.1** | **+2.3** |
| **SMTB** | **Santa Maria do** | **26.40** | **76** | *eP* | **P** | **10 52 04.7** | **+0.8** |
| **GO07** | **Milladeo Hill,** | **26.52** | **180** | P | **P** | **10 52 04.8** | **+0.2** |
| **MCPB** | **Macapa, AP** | **26.56** | **55** | *eP* | **P** | **10 52 05.2** | **-0.1** |
| **LL02** | **Futaleuf** | **26.63** | **177** | P | **P** | **10 52 04.9** | **-0.7** |
| LL02 | | | | IAmb | IAmb | 10 52 18.4 | |
| | comp=Z,143nm,1.8s | | | | | | |
| **BRU2** | **Volcan** | **26.73** | **340** | P | **P** | **10 52 07.3** | **+0.4** |
| BRU2 | | | | IAmb | IAmb | 10 53 06.5 | |
| | comp=Z,119nm,1.1s | | | | | | |
| **RIOS** | **Rincon, Osa** | **26.93** | **338** | P | **P** | **10 52 10.2** | **+1.8** |
| RIOS | | | | IAmb | IAmb | 10 52 33.6 | |
| | comp=Z,63nm,0.9s | | | | | | |
| **PARB** | **Paraibuna** | **27.07** | **109** | *eP* | **P** | **10 52 10.6** | **+0.7** |
| **SRBA** | **San Rafael, Bu** | **27.36** | **338** | P | **P** | **10 52 14.1** | **+1.6** |
| **BSCB** | **Bom Sucesso** | **27.57** | **104** | *eP* | **P** | **10 52 15.3** | **+0.9** |
| **PEZE** | **Perez Zeledon,** | **27.61** | **338** | P | **P** | **10 52 14.9** | **+0.1** |
| PEZE | | | | IAmb | IAmb | 10 52 47.9 | |
| | comp=Z,99nm,1.7s | | | | | | |
| **BIRV** | **Birongo** | **27.76** | **15** | P | **P** | **10 52 15.5** | **-0.5** |
| BIRV | | | | IAmb | IAmb | 10 52 35.9 | |
| | comp=Z,124nm,1.3s | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **28.01** | **85** | *eP* | **P** | **10 52 18.7** | **+0.3** |
| **RIMA** | **Rio Macho** | **28.04** | **338** | P | **P** | **10 52 15.5** | **-3.2** |
| **JANB** | **Januaria** | **28.15** | **91** | *eP* | **P** | **10 52 20.5** | **+1.0** |
| **HDC** | **Heredia** | **28.34** | **338** | IAMs_20 | IAMs_20 | 11 04 08.2 | |
| | comp=Z,6μm,18.0s | | | | | | |
| **MAN01** | **Angra dos Reis** | **28.52** | **108** | *eP* | **P** | **10 52 24.6** | **+1.8** |
| **DIAM** | **Diamantina, MG** | **28.54** | **98** | *eP* | **P** | **10 52 24.1** | **+1.0** |
| **TMAB** | **Tom-Au,PA,Br** | **28.70** | **63** | *eP* | **P** | **10 52 25.9** | **+1.6** |
| **VAS01** | **Vassouras-RJ** | **28.93** | **106** | *eP* | **P** | **10 52 27.6** | **+1.2** |
| **JTS** | **Las Juntas de** | **28.93** | **336** | P | **P** | **10 52 26.8** | **+0.4** |
| | comp=Z,2.7nm,0.5s,baz=150,slow=10,SNR=2.3 | | | | | | |
| JTS | | | | LR | LR | 11 03 44.3 | |
| | comp=Z,9μ

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NHSC | New Hope | 49.74 353 | P | P | 10 55 19.6 | +0.4 | |
| | baz=172 | | | | | | |
| 152A | Waverly Hall | 50.06 348 | P | P | 10 55 19.8 | -1.9 | |
| GOGA | Godfrey | 50.54 349 | IAMs_20 | IAMs_20 | 11 16 23.5 | | |
| | comp=Z,3µm,22.0s | | | | | | |
| GOGA | Godfrey | 50.54 349 | P | P | 10 55 25.8 | +0.5 | |
| | baz=168 | | | | | | |
| Y57A | Sumter | 50.67 353 | P | P | 10 55 25.2 | -1.0 | |
| 342A | Flagon Creek P | 50.92 339 | P | P | 10 55 27.9 | -0.3 | |
| LRAL | Lakeview Retre | 50.92 345 | P | P | 10 55 26.7 | -1.5 | |
| LRAL | | | IAmb | IAmb | 10 56 07.5 | | |
| | comp=Z,52nm,1.2s | | | | | | |
| LRAL | Lakeview Retre | 50.92 345 | P | P | 10 55 27.8 | -0.4 | |
| | baz=164 | | | | | | |
| 833A | Chaparral WMA, | 51.12 330 | P | P | 10 55 29.4 | -0.4 | |
| 833A | Chaparral WMA, | 51.12 330 | P | P | 10 55 29.2 | -0.6 | |
| | baz=148 | | | | | | |
| BIRD | Birdtown, Kers | 51.30 353 | P | P | 10 55 30.2 | -0.7 | |
| BIRD | | | IAmb | IAmb | 10 56 02.6 | | |
| | comp=Z,50nm,1.0s | | | | | | |
| Z47A | Carrollton | 51.34 344 | P | P | 10 55 31.2 | -0.1 | |
| Z47A | | | IAmb | IAmb | 10 56 10.2 | | |
| | comp=Z,41nm,0.8s | | | | | | |
| 143A | Socs Landing, | 51.84 341 | P | P | 10 55 35.9 | +0.8 | |
| 143A | | | IAmb | IAmb | 10 56 10.8 | | |
| | comp=Z,54nm,1.2s | | | | | | |
| KMSC | Kings Mountain | 51.90 352 | P | P | 10 55 34.7 | -0.8 | |
| KMSC | | | IAmb | IAmb | 10 56 11.8 | | |
| | comp=Z,48nm,0.9s | | | | | | |
| KMSC | Kings Mountain | 51.90 352 | P | P | 10 55 34.7 | -0.8 | |
| | baz=171 | | | | | | |
| FPAL | Fort Paine | 52.05 347 | P | P | 10 55 36.0 | -0.7 | |
| NATX | Nacogdoches | 52.10 337 | P | P | 10 55 35.7 | -1.4 | |
| NATX | | | IAmb | IAmb | 10 56 15.6 | | |
| | comp=Z,46nm,1.1s | | | | | | |
| NATX | Nacogdoches | 52.10 337 | P | P | 10 55 37.2 | +0.1 | |
| | baz=154 | | | | | | |
| X48A | Hartselle | 52.28 346 | P | P | 10 55 37.0 | -1.3 | |
| X48A | | | IAmb | IAmb | 10 55 55.4 | | |
| | comp=Z,33nm,1.0s | | | | | | |
| Y45A | Yeager Farm, C | 52.37 343 | P | P | 10 55 38.2 | -0.8 | |
| Y45A | | | IAmb | IAmb | 10 56 18.9 | | |
| | comp=Z,67nm,1.1s | | | | | | |
| 435B | Jarrell | 52.41 334 | P | P | 10 55 39.8 | +0.4 | |
| | baz=151 | | | | | | |
| V55A | Taylorsville | 52.58 352 | P | P | 10 55 40.1 | -0.5 | |
| V55A | | | IAmb | IAmb | 10 56 16.7 | | |
| | comp=Z,50nm,1.2s | | | | | | |
| W50A | Signal Mountai | 52.63 348 | P | P | 10 55 39.6 | -1.4 | |
| W50A | | | IAmb | IAmb | 10 56 23.7 | | |
| | comp=Z,74nm,1.3s | | | | | | |
| 237A | Washetta, Mont | 52.75 336 | P | P | 10 55 41.0 | -0.9 | |
| 237A | | | IAmb | IAmb | 10 56 16.7 | | |
| | comp=Z,86nm,1.3s | | | | | | |
| SWET | Sewanee | 52.77 347 | P | P | 10 55 40.4 | -1.6 | |
| SWET | | | IAmb | IAmb | 10 56 08.0 | | |
| | comp=Z,32nm,1.0s | | | | | | |
| TKL | Tuckaleechee C | 52.78 350 | LR | LR | 11 18 15.9 | | |
| | comp=Z,3µm,21.8s,baz=162,slow=36 | | | | | | |
| Z41A | Richland Creek | 52.80 340 | P | P | 10 55 42.6 | +0.4 | |
| | baz=157 | | | | | | |
| V52A | Sevierville | 52.93 350 | P | P | 10 55 41.9 | -1.3 | |
| OXF | Oxford | 52.94 344 | P | P | 10 55 43.6 | +0.4 | |
| | baz=161 | | | | | | |
| U56A | King | 52.97 353 | P | P | 10 55 42.9 | -0.5 | |
| U56A | | | IAmb | IAmb | 10 56 01.9 | | |
| | comp=Z,44nm,1.1s | | | | | | |
| CCAR | Cane Creek | 53.07 341 | P | P | 10 55 45.3 | +1.1 | |
| JCT | Junction City | 53.12 331 | P | P | 10 55 44.1 | -0.7 | |
| JCT | | | pmax | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | |
| JCT | | | MLR | MLR | | | |
| | comp=Z,900nm,20.0s | | | | | | |
| JCT | Junction City | 53.12 331 | P | P | 10 55 44.1 | -0.7 | |
| JCT | Junction City | 53.12 331 | P | P | 10 55 45.2 | +0.4 | |
| | baz=148 | | | | | | |
| HPIG | | 53.28 324 | P | P | 10 55 45.7 | -0.4 | |
| HPIG | | | IAmb | IAmb | 10 55 54.9 | | |
| | comp=Z,44nm,1.5s | | | | | | |
| WLAR | White Oak Lake | 53.30 340 | P | P | 10 55 45.5 | -0.3 | |
| U54A | Nelsons Funny | 53.32 352 | P | P | 10 55 44.1 | -2.0 | |
| U54A | | | IAmb | IAmb | 10 56 02.3 | | |
| | comp=Z,42nm,1.1s | | | | | | |
| T59A | Double "B" Far | 53.33 356 | P | P | 10 55 45.6 | -0.4 | |
| T59A | | | IAmb | IAmb | 10 56 06.3 | | |
| | comp=Z,39nm,0.9s | | | | | | |
| X43A | Marvell | 53.36 342 | P | P | 10 55 46.5 | +0.2 | |
| WHTX | Lake Whitney, | 53.40 335 | P | P | 10 55 45.6 | -1.1 | |
| WHTX | Lake Whitney, | 53.40 335 | P | P | 10 55 46.4 | -0.3 | |
| | baz=151 | | | | | | |
| V48A | Smith Brothers | 53.47 347 | P | P | 10 55 46.6 | -0.5 | |
| V48A | | | IAmb | IAmb | 10 56 20.0 | | |
| | comp=Z,43nm,1.1s | | | | | | |
| SLBS | Sierra La Lagu | 53.49 317 | P | P | 10 55 48.8 | +1.2 | |
| Z38A | Mt. Pleasant | 53.56 338 | P | P | 10 55 47.7 | -0.1 | |
| Z38A | | | IAmb | IAmb | 10 56 31.3 | | |
| | comp=Z,31nm,0.8s | | | | | | |
| TZTN | Tazewell | 53.61 350 | IAMs_20 | IAMs_20 | 11 18 30.7 | | |
| | comp=Z,2µm,20.0s | | | | | | |
| TZTN | Tazewell | 53.61 350 | P | P | 10 55 47.8 | -0.4 | |
| | baz=168 | | | | | | |
| BLA | Blacksburg | 53.83 353 | IAMs_20 | IAMs_20 | 11 19 30.6 | | |
| | comp=Z,3µm,22.0s | | | | | | |
| BLA | Blacksburg | 53.83 353 | P | P | 10 55 49.4 | -0.3 | |
| | baz=172 | | | | | | |
| LPIG | La Paz | 54.02 317 | LR | LR | 11 14 06.7 | | |
| | comp=Z,2µm,20.8s,baz=114,slow=31 | | | | | | |
| TXAR | Lajitas Array | 54.07 327 | P | P | 10 55 51.5 | -0.3 | |
| | comp=Z,5.5nm,0.9s,baz=146,slow=8.0,SNR=41 | | | | | | |
| TXAR | | | LR | LR | 11 17 51.3 | | |
| | comp=Z,3µm,19.2s,baz=138,slow=35 | | | | | | |
| TXAR | Lajitas Array | 54.07 327 | P | P | 10 55 51.0 | -0.8 | |
| TX31 | Lajitas Ar. Si | 54.07 327 | P | P | 10 55 50.5 | -1.3 | |
| TX31 | | | IAmb | IAmb | 10 56 34.8 | | |
| | comp=Z,40nm,0.9s | | | | | | |
| TX32 | Lajitas Array | 54.07 327 | P | P | 10 55 51.4 | -0.4 | |
| WVT | Waverly | 54.07 346 | P | P | 10 55 49.5 | -2.0 | |
| WVT | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| WVT | | | MLR | MLR | | | |
| | comp=Z,1µm,20.0s | | | | | | |
| WVT | Waverly | 54.07 346 | P | P | 10 55 49.5 | -2.0 | |
| WVT | Waverly | 54.07 346 | P | P | 10 55 50.9 | -0.7 | |
| | baz=163 | | | | | | |
| S57A | Dark Hollow, R | 54.22 355 | P | P | 10 55 52.0 | -0.6 | |
| MIAR | Mount Ida | 54.23 340 | P | P | 10 55 52.3 | -0.5 | |
| MIAR | | | pmax | pmax | | | |
| | comp=Z,33nm,1.0s | | | | | | |
| MIAR | | | MLR | MLR | | | |
| | comp=Z,2µm,21.0s | | | | | | |
| MIAR | Mount Ida | 54.23 340 | P | P | 10 55 52.3 | -0.5 | |
| MIAR | | | IAmb | IAmb | 10 56 32.9 | | |
| | comp=Z,33nm,1.0s | | | | | | |
| MIAR | Mount Ida | 54.23 340 | P | P | 10 55 52.2 | -0.5 | |
| | baz=156 | | | | | | |
| T50A | Nancy | 54.30 349 | P | P | 10 55 52.8 | -0.3 | |
| T50A | | | IAmb | IAmb | 10 56 10.4 | | |
| | comp=Z,45nm,1.5s | | | | | | |
| W41B | Gary Mavity, V | 54.38 341 | P | P | 10 55 54.0 | +0.2 | |
| W41B | | | IAmb | IAmb | 10 56 31.0 | | |
| | comp=Z,31nm,1.0s | | | | | | |
| W41B | Gary Mavity, V | 54.38 341 | P | P | 10 55 53.2 | -0.6 | |
| | baz=158 | | | | | | |
| LNXT | Lenox | 54.46 344 | P | P | 10 55 54.2 | -0.1 | |
| Z35A | Perchaven, San | 54.49 336 | P | P | 10 55 54.1 | -0.6 | |
| WHAR | Wooly Hollow | 54.50 341 | P | P | 10 55 53.4 | -1.3 | |
| WHAR | | | IAmb | IAmb | 10 56 30.2 | | |
| | comp=Z,70nm,1.4s | | | | | | |
| S54A | Dingess, Beckl | 54.51 352 | P | P | 10 55 53.3 | -1.4 | |
| S54A | | | IAmb | IAmb | 10 56 25.4 | | |
| | comp=Z,37nm,0.9s | | | | | | |
| CBN | Corbin Frederi | 54.54 356 | IAMs_20 | IAMs_20 | 11 22 18.7 | | |
| | comp=Z,2µm,18.0s | | | | | | |
| CBN | Corbin Frederi | 54.54 356 | P | P | 10 55 54.8 | 0.0 | |
| | baz=176 | | | | | | |
| T47A | Sharon Grove | 54.73 347 | P | P | 10 55 54.9 | -1.4 | |
| ABTX | Abilene, Hawle | 54.88 333 | P | P | 10 55 56.0 | -1.5 | |
| ABTX | Abilene, Hawle | 54.88 333 | P | P | 10 55 57.1 | -0.4 | |
| | baz=149 | | | | | | |
| LCAR | Lake Charles | 54.89 343 | P | P | 10 55 56.1 | -1.3 | |
| W39A | Magazine | 54.90 340 | P | P | 10 55 56.6 | -0.9 | |
| W39A | Magazine | 54.90 340 | P | P | 10 55 57.3 | -0.3 | |
| | baz=156,SNR=6.1 | | | | | | |
| X37A | Clayton | 54.90 338 | | P | 10 55 56.7 | -0.8 | |
| X37A | | | IAmb | IAmb | 10 56 39.2 | | |
| | comp=Z,51nm,0.9s | | | | | | |
| FCAR | Ozark Folk Cen | 55.01 342 | P | P | 10 55 56.8 | -1.6 | |
| PARMO | Parma | 55.06 344 | P | P | 10 55 58.1 | -0.6 | |
| T45A | Paducah | 55.12 345 | P | P | 10 55 58.3 | -0.7 | |
| PBMO | Poplar Bluff | 55.35 344 | P | P | 10 55 59.5 | -1.3 | |
| PBMO | | | IAmb | IAmb | 10 56 33.6 | | |
| | comp=Z,35nm,0.9s | | | | | | |
| R50A | Paris | 55.44 350 | P | P | 10 56 00.1 | -1.2 | |
| R50A | | | IAmb | IAmb | 10 56 19.5 | | |
| | comp=Z,36nm,1.1s | | | | | | |
| Q56A | Snyder Ridge, | 55.51 355 | P | P | 10 56 01.9 | 0.0 | |
| Q56A | | | IAmb | IAmb | 10 56 47.4 | | |
| | comp=Z,52nm,1.1s | | | | | | |
| R49A | Shelbyville | 55.59 349 | P | P | 10 56 01.3 | -1.2 | |
| R49A | | | IAmb | IAmb | 10 56 50.1 | | |
| | comp=Z,70nm,1.5s | | | | | | |
| U40A | Yellville | 55.66 341 | P | P | 10 56 02.4 | -0.6 | |
| U40A | | | IAmb | IAmb | 10 56 36.8 | | |
| | comp=Z,34nm,0.8s | | | | | | |
| U40A | Yellville | 55.66 341 | P | P | 10 56 01.8 | -1.3 | |
| | baz=158,SNR=9.8 | | | | | | |
| SDMD | Soldier's Deli | 55.71 357 | P | P | 10 56 03.2 | -0.1 | |
| WCI | Wyandotte Cave | 55.75 348 | P | P | 10 56 02.5 | -1.1 | |
| WCI | | | pmax | pmax | | | |
| | comp=Z,69nm,1.0s | | | | | | |
| WCI | | | MLR | MLR | | | |
| | comp=Z,2µm,20.0s | | | | | | |
| WCI | Wyandotte Cave | 55.75 348 | P | P | 10 56 02.5 | -1.1 | |
| WCI | Wyandotte Cave | 55.75 348 | IAMs_20 | IAMs_20 | 11 20 33.4 | | |
| | comp=Z,2µm,20.0s | | | | | | |
| WCI | Wyandotte Cave | 55.75 348 | P | P | 10 56 02.2 | -1.5 | |
| | baz=165 | | | | | | |
| USIN | University of | 55.79 347 | P | P | 10 56 02.8 | -1.1 | |
| X34A | Smith Ranch, M | 55.84 336 | | P | 10 56 05.0 | +0.7 | |
| X34A | | | IAmb | IAmb | 10 56 40.6 | | |
| | comp=Z,52nm,1.0s | | | | | | |
| S44A | Carbondale | 55.91 345 | P | P | 10 56 03.6 | -1.1 | |
| S44A | | | IAmb | IAmb | 10 56 42.7 | | |
| | comp=Z,55nm,1.0s | | | | | | |
| HHAR | Hobbs | 55.94 340 | P | P | 10 56 03.3 | -1.8 | |
| HHAR | | | IAmb | IAmb | 10 56 44.4 | | |
| | comp=Z,62nm,1.3s | | | | | | |
| W35A | Tecumseh | 55.95 337 | | P | 10 56 04.2 | -1.0 | |
| W35A | | | IAmb | IAmb | 10 56 39.1 | | |
| | comp=Z,55nm,1.1s | | | | | | |
| Q51A | Peebles | 56.00 351 | P | P | 10 56 04.3 | -1.1 | |
| MCWV | Mont Chateau | 56.18 354 | IAMs_20 | IAMs_20 | 11 18 58.1 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| MGMO | Mountain Grove | 56.22 342 | P | P | 10 56 06.3 | -0.8 | |
| MGMO | | | IAmb | IAmb | 10 56 45.4 | | |
| | comp=Z,44nm,1.1s | | | | | | |
| U38A | Gravette | 56.23 340 | | P | 10 56 05.5 | -1.6 | |
| TUL1 | Leonard | 56.23 338 | | P | 10 56 06.2 | -0.9 | |
| TUL1 | | | IAMs_20 | IAMs_20 | 11 20 05.0 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| TUL1 | Leonard | 56.23 338 | P | P | 10 56 06.3 | -0.9 | |
| | baz=154,SNR=14 | | | | | | |
| FNO | Franklin | 56.25 337 | | P | 10 56 06.8 | -0.4 | |
| FNO | | | IAmb | IAmb | 10 56 42.8 | | |
| | comp=Z,53nm,1.1s | | | | | | |
| MVL | Millersville | 56.28 357 | P | P | 10 56 07.4 | +0.1 | |
| MVL | | | IAmb | IAmb | 10 56 45.1 | | |
| | comp=Z,26nm,0.8s | | | | | | |
| WMOK | Wichita Mounta | 56.33 335 | P | P | 10 56 08.0 | +0.1 | |
| WMOK | | | pmax | pmax | | | |
| | comp=Z,11nm,1.7s | | | | | | |
| WMOK | Wichita Mounta | 56.33 335 | P | P | 10 56 07.5 | -0.4 | |
| | baz=151 | | | | | | |
| P52A | Corning | 56.42 352 | IAMs_20 | IAMs_20 | 11 19 53.4 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| P52A | Corning | 56.42 352 | P | P | 10 56 08.3 | -0.1 | |
| | baz=170 | | | | | | |
| FVM | French Village | 56.48 344 | P | P | 10 56 07.2 | -1.7 | |
| FVM | | | pmax | pmax | | | |
| | comp=Z,57nm,1.2s | | | | | | |
| FVM | French Village | 56.48 344 | P | P | 10 56 07.2 | -1.7 | |
| FVM | | | IAmb | IAmb | 10 56 38.2 | | |
| | comp=Z,57nm,1.2s | | | | | | |
| OLIL | Olney | 56.62 346 | P | P | 10 56 08.3 | -1.5 | |
| O56A | Blue Knob Stat | 56.68 355 | P | P | 10 56 09.6 | -0.7 | |
| | baz=174 | | | | | | |
| BLO | Bloomington | 56.71 348 | P | P | 10 56 08.9 | -1.5 | |
| BLO | | | pmax | pmax | | | |
| | comp=Z,36nm,0.9s | | | | | | |
| BLO | Bloomington | 56.71 348 | P | P | 10 56 08.9 | -1.5 | |
| BLO | | | IAmb | IAmb | 10 56 58.6 | | |
| | comp=Z,36nm,0.9s | | | | | | |
| P49A | Miami Univ. Ec | 56.72 350 | P | P | 10 56 08.8 | -1.8 | |
| P49A | | | IAmb | IAmb | 10 56 27.5 | | |
| | comp=Z,53nm,1.2s | | | | | | |
| P49A | | | IAMs_20 | IAMs_20 | 11 19 53.2 | | |
| | comp=Z,3µm,22.0s | | | | | | |
| P49A | Miami Univ. Ec | 56.72 350 | P | P | 10 56 09.3 | -1.2 | |
| | baz=167 | | | | | | |
| CCM | Cathedral Cave | 56.77 343 | P | P | 10 56 09.6 | -1.3 | |
| CCM | | | pmax | pmax | | | |
| | comp=Z,41nm,1.4s | | | | | | |
| CCM | Cathedral Cave | 56.77 343 | P | P | 10 56 09.6 | -1.3 | |
| CCM | | | IAmb | IAmb | 10 57 28.8 | | |
| | comp=Z,41nm,1.4s | | | | | | |
| CCM | Cathedral Cave | 56.77 343 | P | P | 10 56 10.0 | -0.9 | |
| | baz=160 | | | | | | |
| MNTX | Cornudas Mount | 56.85 328 | P | P | 10 56 11.3 | -0.3 | |
| MNTX | | | IAMs_20 | IAMs_20 | 11 18 43.1 | | |
| | comp=Z,2µm,20.0s | | | | | | |
| MNTX | Cornudas Mount | 56.85 328 | P | P | 10 56 11.3 | -0.3 | |
| | baz=143,SNR=17 | | | | | | |
| O53A | New Philadelph | 56.92 353 | IAMs_20 | IAMs_20 | 11 21 26.4 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| SSPA | Standing Stone | 56.99 356 | P | P | 10 56 11.6 | -0.9 | |
| SSPA | | | IAmb | IAmb | 10 56 29.0 | | |
| | comp=Z,47nm,1.3s | | | | | | |
| SSPA | Standing Stone | 56.99 356 | IAMs_20 | IAMs_20 | 11 23 31.6 | | |
| | comp=Z,2µm,20.0s | | | | | | |
| SSPA | Standing Stone | 56.99 356 | P | P | 10 56 12.5 | +0.1 | |
| | baz=175 | | | | | | |
| Q44A | Meyer Farm, Va | 57.00 346 | P | P | 10 56 10.7 | -1.8 | |
| S39A | Bolivar | 57.04 341 | P | P | 10 56 11.4 | -1.4 | |
| S39A | | | IAmb | IAmb | 10 56 46.6 | | |
| | comp=Z,36nm,0.9s | | | | | | |
| ACSO | Alum Creek Sta | 57.13 351 | P | P | 10 56 11.9 | -1.5 | |
| ACSO | | | IAmb | IAmb | 10 56 31.3 | | |
| | comp=Z,48nm,1.1s | | | | | | |
| ACSO | | | IAMs_20 | IAMs_20 | 11 20 36.0 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| ACSO | Alum Creek Sta | 57.13 351 | P | P | 10 56 12.7 | -0.7 | |
| | baz=169 | | | | | | |
| N58A | Sunbury | 57.13 357 | P | P | 10 56 13.3 | -0.1 | |
| N58A | | | IAmb | IAmb | 10 56 44.4 | | |
| | comp=Z,43nm,1.0s | | | | | | |
| N59A | State Game Lan | 57.17 358 | P | P | 10 56 15.3 | +1.6 | |
| | baz=178 | | | | | | |
| P46A | Rosedale | 57.28 347 | P | P | 10 56 13.1 | -1.4 | |
| P46A | | | IAmb | IAmb | 10 56 47.2 | | |
| | comp=Z,35nm,0.9s | | | | | | |
| R40A | Maddies Statio | 57.28 343 | P | P | 10 56 13.0 | -1.5 | |
| R40A | | | IAmb | IAmb | 10 56 52.0 | | |
| | comp=Z,31nm,1.2s | | | | | | |
| O49A | Covington | 57.30 350 | P | P | 10 56 13.2 | -1.3 | |
| O49A | | | IAmb | IAmb | 10 56 32.9 | | |
| | comp=Z,39nm,1.1s | | | | | | |
| T35A | Sooner Cattle | 57.39 338 | | P | 10 56 15.2 | -0.1 | |
| MSTX | Muleshoe | 57.41 331 | P | P | 10 56 15.6 | -0.2 | |
| MSTX | | | IAmb | IAmb | 10 56 53.5 | | |
| | comp=Z,46nm,1.3s | | | | | | |
| MSTX | Muleshoe | 57.41 331 | P | P | 10 56 14.9 | -0.9 | |
| | baz=146 | | | | | | |
| N54A | Moraine State | 57.49 354 | P | P | 10 56 15.8 | -0.2 | |
| | baz=173 | | | | | | |
| O48B | Farmland | 57.50 349 | P | P | 10 56 14.7 | -1.3 | |
| | baz=167 | | | | | | |
| AMTX | Amarillo | 57.69 333 | P | P | 10 56 16.7 | -0.9 | |
| | baz=148 | | | | | | |
| P43A | Skaggs, Pawnee | 57.82 345 | IAmb | IAmb | 10 56 19.4 | | |
| | comp=Z,39nm,0.9s | | | | | | |
| M65A | Busby, Falmout | 57.84 3 | P | P | 10 56 17.9 | -0.4 | |
| | baz=183 | | | | | | |
| M55A | Ridgway | 57.89 355 | IAmb | IAmb | 10 56 55.7 | | |
| | comp=Z,54nm,1.3s | | | | | | |
| SFIN | Lafayette | 57.99 348 | P | P | 10 56 16.8 | -2.6 | |
| SFIN | Lafayette | 57.99 348 | P | P | 10 56 16.9 | -2.6 | |
| | baz=165 | | | | | | |
| N49A | Columbus Grove | 57.99 350 | IAmb | IAmb | 10 56 37.4 | | |
| | comp=Z,40nm,1.1s | | | | | | |
| M54A | Oil Creek Stat | 58.00 355 | IAmb | IAmb | 10 57 30.1 | | |
| | comp=Z,42nm,1.2s | | | | | | |
| M54A | Oil Creek Stat | 58.00 355 | P | P | 10 56 18.7 | -0.9 | |
| | baz=173 | | | | | | |
| M53A | WI Miller and | 58.03 354 | P | P | 10 56 19.1 | -0.7 | |
| M53A | | | IAmb | IAmb | 10 56 47.9 | | |
| | comp=Z,44nm,1.4s | | | | | | |
| M53A | WI Miller and | 58.03 354 | P | P | 10 56 18.8 | -1.0 | |
| | baz=172 | | | | | | |
| M50A | Fremont | 58.29 352 | IAmb | IAmb | 10 56 37.2 | | |
| | comp=Z,24nm,0.8s | | | | | | |
| P40A | Paris | 58.37 343 | P | P | 10 56 20.9 | -1.3 | |
| P40A | | | IAmb | IAmb | 10 56 49.2 | | |
| | comp=Z,20nm,0.8s | | | | | | |
| BINY | Binghamton | 58.46 358 | P | P | 10 56 22.9 | +0.2 | |
| BINY | | | IAmb | IAmb | 10 56 53.3 | | |
| | comp=Z,48nm,1.0s | | | | | | |
| BINY | Binghamton | 58.46 358 | P | P | 10 56 22.4 | -0.3 | |
| | baz=177 | | | | | | |
| L56A | Greenwood | 58.47 356 | IAmb | IAmb | 10 56 49.4 | | |
| | comp=Z,40nm,1.1s | | | | | | |
| QUA2 | Belchertown | 58.50 1 | IAMs_20 | IAMs_20 | 11 21 28.7 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| HDIL | Hopedale | 58.63 346 | P | P | 10 56 22.1 | -1.9 | |
| HDIL | | | IAmb | IAmb | 10 56 24.1 | | |
| | comp=Z,28nm,1.0s | | | | | | |
| HDIL | Hopedale | 58.63 346 | P | P | 10 56 22.4 | -1.6 | |
| | baz=162 | | | | | | |
| ERPA | Erie | 58.63 354 | P | P | 10 56 22.2 | -1.7 | |
| | baz=173 | | | | | | |
| 121A | Cookes Peak, D | 58.76 326 | IAmb | IAmb | 10 56 59.4 | | |
| | comp=Z,35nm,1.1s | | | | | | |
| 121A | Cookes Peak, D | 58.76 326 | P | P | 10 56 26.3 | +1.0 | |
| | baz=141,SNR=12 | | | | | | |
| WVNY | West Valley, N | 58.81 356 | P | P | 10 56 24.7 | -0.5 | |
| P38A | Dawn | 58.88 342 | P | P | 10 56 25.7 | 0.0 | |
| P38A | | | IAmb | IAmb | 10 57 04.0 | | |
| | comp=Z,34nm,1.2s | | | | | | |
| K57A | Scipio Center | 59.01 357 | IAmb | IAmb | 10 56 55.2 | | |
| | comp=Z,43nm,1.0s | | | | | | |
| L48A | N Adams | 59.02 351 | IAmb | IAmb | 10 56 44.3 | | |
| | comp=Z,34nm,1.1s | | | | | | |
| MMNY | Mt. Morris Dam | 59.08 356 | P | P | 10 56 26.5 | -0.5 | |
| AAM | Ann Arbor | 59.26 351 | IAMs_20 | IAMs_20 | 11 21 18.3 | | |
| | comp=Z,3µm,22.0s | | | | | | |
| KSU1 | Kansas State U | 59.38 339 | P | P | 10 56 27.9 | -1.3 | |
| KSU1 | | | IAmb | IAmb | 10 57 01.8 | | |
| | comp=Z,20nm,0.8s | | | | | | |
| KSU1 | Kansas State U | 59.38 339 | IAMs_20 | IAMs_20 | 11 21 35.4 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| KSU1 | Kansas State U | 59.38 339 | P | P | 10 56 28.4 | -0.8 | |
| | baz=154 | | | | | | |
| Y22D | IRIS PASSCAL I | 59.51 328 | IAMs_20 | IAMs_20 | 11 20 20.7 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| Y22D | IRIS PASSCAL I | 59.51 328 | P | P | 10 56 28.9 | -1.5 | |
| | baz=142 | | | | | | |
| R32A | Long Quarter, | 59.53 337 | P | P | 10 56 29.5 | -0.8 | |
| J56A | Wolcott | 59.57 357 | P | P | 10 56 29.4 | -0.9 | |
| J55A | Hilton | 59.61 356 | P | P | 10 56 30.4 | -0.2 | |
| J55A | | | IAmb | IAmb | 10 57 14.5 | | |
| | comp=Z,30nm,0.8s | | | | | | |
| J57A | Williamstown | 59.67 358 | P | P | 10 56 30.4 | -0.7 | |
| J57A | | | IAmb | IAmb | 10 57 08.9 | | |
| | comp=Z,34nm,1.0s | | | | | | |
| N38A | Joes South For | 59.88 343 | IAmb | IAmb | 10 57 10.7 | | |
| | comp=Z,31nm,0.9s | | | | | | |
| L44A | Lake County Fo | 59.88 348 | IAmb | IAmb | 10 57 08.0 | | |
| | comp=Z,30nm,1.0s | | | | | | |
| L44A | | | IAMs_20 | IAMs_20 | 11 24 44.8 | | |
| | comp=Z,3µm,20.0s | | | | | | |
| L44A | Lake County Fo | 59.88 348 | P | P | 10 56 31.1 | -1.5 | |
| | baz=164 | | | | | | |
| ANMO | Albuquerque | 59.97 329 | P | P | 10 56 33.2 | -0.4 | |
| | comp=Z,6.6nm,1.0s,baz=142,slow=9.2,SNR=27 | | | | | | |
| ANMO | | | LR | LR | 11 21 20.1 | | |
| | comp=Z,2µm,19.1s,baz=136,slow=35 | | | | | | |
| ANMO | Albuquerque | 59.97 329 | *ce* | P | 10 56 33.8 | +0.2 | |
| ANMO | | | pmax | pmax | | | |
| | comp=Z,16nm,1.2s | | | | | | |
| ANMO | Albuquerque | 59.97 329 | P | P | 10 56 33.5 | -0.1 | |
| ANMO | Albuquerque | 59.97 329 | IAMs_20 | IAMs_20 | 11 20 59.8 | | |
| | comp=Z,2µm,20.0s | | | | | | |
| ANMO | Albuquerque | 59.97 329 | P | P | 10 56 33.4 | -0.2 | |
| | baz=143 | | | | | | |
| TUC | Tucson | 60.24 324 | P | P | 10 56 33.4 | -1.9 | |
| TUC | | | pmax | pmax | | | |
| | comp=Z,22nm,1.3s | | | | | | |
| TUC | Tucson | 60.24 324 | P | P | 10 56 33.4 | -1.9 | |
| TUC | Tucson | 60.24 324 | IAMs_20 | IAMs_20 | 11 21 38.0 | | |
| | comp=Z,3µm,20.0s | | | | | | |
| TUC | Tucson | 60.24 324 | P | P | 10 56 35.4 | 0.0 | |
| | baz=138 | | | | | | |
| CBKS | Cedar Bluff | 60.26 337 | P | P | 10 56 35.1 | -0.1 | |
| | baz=151 | | | | | | |
| K43A | Burlington | 60.48 348 | P | P | 10 56 35.3 | -1.4 | |
| K43A | | | IAmb | IAmb | 10 57 12.7 | | |
| | comp=Z,43nm,0.9s | | | | | | |
| L40A | Anamosa | 60.52 345 | IAmb | IAmb | 10 57 15.4 | | |
| | comp=Z,30nm,1.1s | | | | | | |
| VT1 | Waterbury | 60.55 1 | IAMs_20 | IAMs_20 | 11 23 01.5 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| T25A | Trinidad | 60.78 332 | P | P | 10 56 39.0 | -0.1 | |
| T25A | | | IAmb | IAmb | 10 57 18.6 | | |
| | comp=Z,31nm,1.1s | | | | | | |
| T25A | Trinidad | 60.78 332 | P | P | 10 56 39.0 | -0.1 | |
| | baz=146,SNR=6.5 | | | | | | |
| LONY | Lake Ozonia | 60.84 359 | P | P | 10 56 38.9 | -0.2 | |
| | baz=179 | | | | | | |
| SCIA | State Center | 60.90 343 | P | P | 10 56 38.1 | -1.5 | |
| SCIA | | | IAmb | IAmb | 10 57 23.8 | | |
| | comp=Z,17nm,0.8s | | | | | | |
| SCIA | State Center | 60.90 343 | P | P | 10 56 38.5 | -1.1 | |
| | baz=158 | | | | | | |
| JFWS | Jewell Farm | 61.10 346 | IAmb | IAmb | 10 57 24.3 | | |
| | comp=Z,17nm,0.8s | | | | | | |
| JFWS | Jewell Farm | 61.10 346 | P | P | 10 56 40.2 | -0.7 | |
| | baz=162 | | | | | | |
| 214A | Organ Pipe Nat | 61.16 322 | IAmb | IAmb | 10 57 16.7 | | |
| | comp=Z,25nm,1.2s | | | | | | |
| 214A | Organ Pipe Nat | 61.16 322 | P | P | 10 56 41.9 | +0.4 | |
| | baz=136,SNR=9.0 | | | | | | |
| SADO | Sadowa | 61.20 355 | LR | LR | 11 25 34.6 | | |
| | comp=Z,1µm,19.7s,baz=181,slow=38 | | | | | | |
| K38A | Parkersburg | 61.47 344 | P | P | 10 56 42.5 | -0.9 | |
| KSCO | Kaye Shedlock' | 61.58 334 | P | P | 10 56 43.6 | -0.8 | |
| | baz=148 | | | | | | |
| PKME | Peaks-Kenny Pk | 61.60 3 | P | P | 10 56 43.3 | -0.8 | |
| | baz=185 | | | | | | |
| MNTQ | Montreal, Queb | 61.71 360 | IAmb | IAmb | 10 56 52.9 | | |
| | comp=Z,29nm,0.9s | | | | | | |
| I42A | Draeger Farm, | 61.73 347 | IAmb | IAmb | 10 56 46.2 | | |
| | comp=Z,28nm,1.1s | | | | | | |
| SFX | San Felipe | 61.74 320 | P | P | 10 56 45.7 | +0.3 | |
| SDCO | Great Sand Dun | 61.77 332 | P | P | 10 56 46.0 | +0.1 | |
| SDCO | | | IAmb | IAmb | 10 57 34.3 | | |
| | comp=Z,32nm,0.9s | | | | | | |
| SDCO | | | IAMs_20 | IAMs_20 | 11 22 17.6 | | |
| | comp=Z,2µm,22.0s | | | | | | |
| SDCO | Great Sand Dun | 61.77 332 | P | P | 10 56 45.7 | -0.2 | |
| | baz=145,SNR=23 | | | | | | |
| W18A | Petrified Fore | 61.78 327 | P | P | 10 56 46.1 | +0.2 | |
| | baz=140,SNR=16 | | | | | | |
| GLMI | Grayling | 61.87 351 | IAMs_20 | IAMs_20 | 11 23 19.4 | | |
| | comp=Z,3µm,20.0s | | | | | | |
| GLMI | Grayling | 61.87 351 | P | P | 10 56 46.2 | +0.2 | |
| | baz=168 | | | | | | |
| BGNE | Belgrade | 61.97 339 | P | P | 10 56 46.3 | -0.6 | |
| | baz=153 | | | | | | |
| H43A | Windswept, Lux | 62.06 349 | IAmb | IAmb | 10 57 06.2 | | |
| | comp=Z,24nm,0.8s | | | | | | |
| I40A | Norwalk | 62.11 346 | P | P | 10 56 46.0 | -1.6 | |
| I40A | | | IAmb | IAmb | 10 56 47.0 | | |
| | comp=Z,28nm,1.2s | | | | | | |
| X16A | Lo Mia Camp, P | 62.17 325 | IAmb | IAmb | 10 57 17.3 | | |
| | comp=Z,25nm,1.1s | | | | | | |
| S22A | 4UR Ranch, Cre | 62.39 331 | IAmb | IAmb | 10 57 31.3 | | |
| | comp=Z,28nm,1.2s | | | | | | |
| S22A | 4UR Ranch, Cre | 62.39 331 | P | P | 10

MVCO **Mesa Verde** **62.77 329** P **P** **10 56 52.1 -0.5**
baz=142,SNR=5.9
I37A **Lemond, Waseca** **62.91 344** P **P** **10 56 52.3 -0.8**
WUAZ **Wupatki** **62.96 326** IAmb IAmb 10 57 22.6
comp=Z,44nm,1.2s
WUAZ **Wupatki** **62.96 326** P **P** **10 56 54.0 +0.3**
baz=139,SNR=10
OGNE **Ogallala** **62.98 336** P **P** **10 56 53.6 -0.1**
baz=149
GLA **Glamis** **63.13 322** P **P** **10 56 55.2 +0.5**
baz=135
D62A **Allapoint, All** **63.42 3** IAmb IAmb 10 57 15.8
comp=Z,27nm,0.8s
ISCO **Idaho Springs** **63.51 333** P **P** **10 56 56.3 -1.2**
ISCO pmax pmax
comp=Z,13nm,1.4s
ISCO **Idaho Springs** **63.51 333** P **P** **10 56 57.3 -0.1**
baz=146
YUH **Yuha Desert** **63.51 321** P **P** **10 56 57.6 +0.4**
YUH IAmb IAmb 10 57 08.6
comp=Z,44nm,1.6s
ECSD **EROS Data Cent** **63.57 341** P **P** **10 56 56.1 -1.3**
ECSD IAmb IAmb 10 57 27.4
comp=Z,47nm,1.2s
ECSD **EROS Data Cent** **63.57 341** P **P** **10 56 56.3 -1.1**
baz=155,SNR=18
PDMCI **Parker Dam,Lak** **63.61 323** P **P** **10 56 58.7 +0.9**
baz=136
IKP **In-Ko-Pah, Jac** **63.62 320** P **P** **10 56 58.5 +0.4**
baz=134,SNR=5.5
SWSC **Sam W. Stewart** **63.64 321** P **P** **10 56 59.1 +1.0**
baz=134
PV15 **Paradox Valley** **63.65 330** IAmb IAmb 10 57 35.7
comp=Z,48nm,1.0s
PV13 **Radium Mtn., P** **63.67 329** IAmb IAmb 10 57 35.4
comp=Z,23nm,1.0s
CBX **Cerro Bola** **63.73 320** P **P** **10 56 58.8 -0.1**
LMQ **La Malbaie** **63.83 2** P **P** **10 56 58.0 -1.1**
LMQ IAmb IAmb 10 57 17.1
comp=Z,26nm,1.2s
BATG **Bathurst New B** **63.84 6** P **P** **10 56 59.6 +0.4**
BATG IAmb IAmb 10 57 01.6
comp=Z,34nm,1.1s
TKX **Tecate** **63.87 320** P **P** **10 56 59.5 -0.2**
SPMN **Marine on St.** **63.89 345** P **P** **10 56 58.5 -0.9**
SPMN IAmb IAmb 10 57 01.1
comp=Z,41nm,0.9s
SPMN **Marine on St.** **63.89 345** P **P** **10 56 58.2 -1.2**
baz=160,SNR=21
BC3 **Big Chuckawall** **63.92 322** P **P** **10 57 00.5 +0.4**
baz=135,SNR=8.2
PV10 **Paradox Valley** **63.95 329** P **P** **10 56 58.4 -2.0**
PV10 IAmb IAmb 10 57 59.8
comp=Z,24nm,1.1s
MONP2 **Monument Peak** **63.98 320** P **P** **10 57 01.0 +0.3**
baz=134,SNR=9.2
BAR **Barrett** **63.99 320** P **P** **10 57 01.3 +0.9**
BAR IAmb IAmb 10 57 12.2
comp=Z,25nm,1.1s
IRM **Iron Mountain** **64.09 322** P **P** **10 57 01.7 +0.5**
baz=135,SNR=17
NEE2 **Needles Airpor** **64.22 323** P **P** **10 57 02.1 +0.2**
baz=136
BELA **Belgrano 2** **64.29 172** P **P** **10 57 03.4 +1.7**
109C **Camp Elliot, M** **64.40 320** P **P** **10 57 03.6 +0.5**
109C IAmb IAmb 10 57 14.1
comp=Z,37nm,1.4s
109C **Camp Elliot, M** **64.40 320** P **P** **10 57 03.1 0.0**
baz=133
BELC **Belle Mtn. Jos** **64.49 322** P **P** **10 57 04.4 +0.6**
baz=134
TPFO **Pinon Flats** **64.49 321** P **P** **10 57 04.8 +0.9**
baz=134,SNR=16
PFO **Pinyon Flats O** **64.50 321** LR LR 11 20 19.7
comp=Z,2µm,21.4s,baz=140,slow=32
PFO **Pinyon Flats O** **64.50 321** P **P** **10 57 04.5 +0.6**
PFO pmax pmax
comp=Z,31nm,1.3s
PFO **Pinyon Flats O** **64.50 321** P **P** **10 57 04.5 +0.6**
PFO IAmb IAmb 10 57 15.2
comp=Z,32nm,1.2s
PFO **Pinyon Flats O** **64.50 321** IAMs_20 IAMs_20 11 19 55.6
comp=Z,3µm,21.0s
PFO **Pinyon Flats O** **64.50 321** P **P** **10 57 04.9 +1.1**
baz=134,SNR=20
N23A **Red Feather La** **64.55 333** P **P** **10 57 04.1 -0.1**
N23A **Red Feather La** **64.55 333** P **P** **10 57 04.3 +0.1**
baz=146
GMRC **Granite Mounta** **64.84 322** P **P** **10 57 06.4 +0.3**
baz=135,SNR=6.0
KNB **Kanab** **64.85 326** IAmb IAmb 10 57 42.8
comp=Z,36nm,1.0s
E38A **The Farm, Brul** **64.89 346** P **P** **10 57 05.2 -0.8**
E38A IAmb IAmb 10 57 05.6
comp=Z,26nm,1.1s
MURC **Murrieta** **64.94 320** P **P** **10 57 07.4 +0.8**
baz=133
SUSD **Miller** **64.94 340** IAmb IAmb 10 57 48.9
comp=Z,33nm,0.9s
SUSD **Miller** **64.94 340** P **P** **10 57 05.8 -0.6**
baz=153
O20A **White River Ci** **64.96 331** IAmb IAmb 10 57 40.1
comp=Z,32nm,1.1s
O20A **White River Ci** **64.96 331** P **P** **10 57 06.8 0.0**
baz=143,SNR=6.5
LCMT **Little Creek M** **65.08 326** P **P** **10 57 08.0 +0.4**
ELS **Elsinore Mount** **65.11 320** P **P** **10 57 08.2 +0.4**
ELS IAmb IAmb 10 57 19.1
comp=Z,33nm,1.3s
TAOE **Nuku Hiva Isla** **65.20 268** *e*S **S** **11 05 47.3 -3.2**
comp=Z,1µm,27.0s
TAOE **Nuku Hiva Isla** **65.20 268** *e*LR LR 11 16 35.0
comp=Z,8µm,25.8s,baz=104
TAOE **Nuku Hiva Isla** **65.20 268** *e*T T 12 07 31.2
comp=Z,27nm,0.2s
BBRC **Big Bear Solar** **65.22 321** P **P** **10 57 08.8 0.0**
baz=134
SRU **San Rafael Swe** **65.25 329** P **P** **10 57 08.5 -0.2**
SRU pmax pmax
comp=Z,23nm,1.0s
SRU **San Rafael Swe** **65.25 329** P **P** **10 57 08.5 -0.2**
SRU IAmb IAmb 10 57 32.9
comp=Z,22nm,1.0s
HEC **Hector,Ludlow** **65.27 322** P **P** **10 57 09.9 +1.1**
baz=134,SNR=17
SCI2 **San Clemente I** **65.36 319** P **P** **10 57 08.9 -0.4**
baz=132
F33A **5 Mile Ranch,** **65.39 343** IAmb IAmb 10 57 10.6
comp=Z,47nm,1.0s
SZCU **Shurtz Canyon** **65.42 326** IAmb IAmb 10 57 47.6
comp=Z,24nm,1.1s
Q16A **Castle Valley** **65.42 328** IAmb IAmb 10 57 22.8
comp=Z,30nm,1.2s
TUQ **Turquoise Moun** **65.45 323** P **P** **10 57 09.9 -0.1**
baz=135
P18A **Preston Nutter** **65.51 330** P **P** **10 57 09.6 -1.0**
P18A IAmb IAmb 10 57 44.1
comp=Z,60nm,1.7s
CIS **Catalina Islan** **65.55 320** P **P** **10 57 10.3 -0.4**
baz=132
P17A **Butcher Ranch,** **65.64 329** P **P** **10 57 11.5 +0.3**
P17A IAmb IAmb 10 57 44.5
comp=Z,24nm,0.9s
FMP **Fort Macarthur** **65.69 320** P **P** **10 57 11.6 +0.2**
baz=132
RRX **Edison Barstow** **65.69 322** P **P** **10 57 12.5 +1.0**
baz=134
RWWY **Rawlins** **65.75 333** IAMs_20 IAMs_20 11 25 19.7
comp=Z,2µm,21.0s
GSC **Goldstone, Bar** **65.87 322** IAmb IAmb 10 57 23.3
comp=Z,35nm,1.5s
GSC **Goldstone, Bar** **65.87 322** P **P** **10 57 14.0 +1.3**
baz=134,SNR=11
RDMU **Red Mountain** **65.92 331** P **P** **10 57 12.6 -0.5**
RDMU IAmb IAmb 10 57 49.6
comp=Z,21nm,0.9s
PASC **Pasadena Art C** **65.93 320** IAmb IAmb 10 57 24.3
comp=Z,47nm,1.4s
DECC **Green Verdugo** **66.07 320** P **P** **10 57 15.6 +1.6**
baz=132
EYMN **Ely** **66.14 347** IAMs_20 IAMs_20 11 29 51.5
comp=Z,2µm,18.0s
EYMN **Ely** **66.14 347** IAmb IAmb 10 57 58.8
comp=Z,24nm,1.0s
VNA3 **Neumayer Olymp** **66.17 161** P **P** **10 57 15.0 +0.9**
K22A **Casper** **66.24 334** P **P** **10 57 14.5 -0.5**
K22A IAmb IAmb 10 57 47.9
comp=Z,24nm,1.1s
K22A **Casper** **66.24 334** P **P** **10 57 14.6 -0.5**
baz=145,SNR=5.9
EDW2 **Edwards Air Fo** **66.29 321** P **P** **10 57 15.8 +0.4**
baz=133,SNR=12
PRN **Pahroc Range** **66.35 325** IAmb IAmb 10 58 04.1
comp=Z,32nm,1.3s
QSM **Queen of Sheba** **66.37 323** P **P** **10 57 16.3 +0.5**
GWY **Greenwater Val** **66.40 323** P **P** **10 57 15.7 -0.6**
GWY IAmb IAmb 10 57 27.0
comp=Z,30nm,1.4s
VNA1 **Neumayer--Stat** **66.42 161** P **P** **10 57 16.5 +0.9**
RSSD **Black Hills** **66.46 336** P **P** **10 57 15.2 -1.3**
RSSD pmax pmax
comp=Z,20nm,1.1s
RSSD MLR MLR
comp=Z,1µm,22.0s
RSSD **Black Hills** **66.46 336** P **P** **10 57 15.2 -1.3**
RSSD **Black Hills** **66.46 336** P **P** **10 57 16.4 -0.1**
baz=148
LRMC **Laurel Mtn Rad** **66.51 322** P **P** **10 57 17.1 +0.2**
baz=133,SNR=9.9
OSI **Osito Audit: C** **66.55 320** P **P** **10 57 18.3 +1.3**
baz=132
NLU **North Lily Min** **66.67 329** P **P** **10 57 18.6 +0.7**
TPNV **Topopah Spring** **66.70 324** P **P** **10 57 18.1 0.0**
TPNV pmax pmax
comp=Z,8.0nm,1.0s
TPNV **Topopah Spring** **66.70 324** P **P** **10 57 18.1 0.0**
TPNV **Topopah Spring** **66.70 324** P **P** **10 57 19.5 +1.4**
baz=135,SNR=16
FURC **Furnace Creek,** **66.71 323** P **P** **10 57 19.2 +1.3**
baz=134,SNR=17
D32A **Dogwood Acres,** **66.78 343** P **P** **10 57 17.8 -0.4**
VNA2 **Neumayer--Watz** **66.78 161** P **P** **10 57 18.8 +0.9**
baz=289,slow=6.2
MPMC **Manual Prospec** **66.79 322** P **P** **10 57 19.9 +1.2**
baz=134,SNR=9.3
JLU **Jordanelle** **66.85 329** P **P** **10 57 18.6 -0.4**
JLU IAmb IAmb 10 57 49.9
comp=Z,29nm,1.0s
S11A **Rachel** **66.91 325** IAmb IAmb 10 58 27.1
comp=Z,58nm,1.4s
ARVC **Arvin** **66.96 321** P **P** **10 57 20.3 +0.7**
baz=132
B35A **Bob, Littlefor** **67.05 346** P **P** **10 57 18.8 -1.0**
B35A IAmb IAmb 10 57 40.7
comp=Z,23nm,0.9s
ISA **Isabella, Lake** **67.11 321** P **P** **10 57 21.2 +0.6**
ISA pmax pmax
comp=Z,19nm,1.1s
ISA **Isabella, Lake** **67.11 321** P **P** **10 57 21.2 +0.6**
ISA **Isabella, Lake** **67.11 321** P **P** **10 57 21.2 +0.6**
baz=133,SNR=12
BCW **Bitter Crk WRg** **67.19 320** P **P** **10 57 20.7 -0.5**
BCW IAmb IAmb 10 57 33.1
comp=Z,53nm,1.2s
DUG **Dugway, Tooele** **67.22 328** P **P** **10 57 21.4 +0.1**
DUG pmax pmax
comp=Z,26nm,0.9s
DUG **Dugway, Tooele** **67.22 328** IAmb IAmb 10 57 59.7
comp=Z,42nm,1.1s
DUG IAMs_20 IAMs_20 11 25 39.7
comp=Z,2µm,20.0s
DUG **Dugway, Tooele** **67.22 328** P **P** **10 57 22.0 +0.7**
baz=139,SNR=28
R11A **Troy Canyon, C** **67.32 325** P **P** **10 57 22.8 +0.8**
baz=136,SNR=14
GRAC **Grapevine Rang** **67.37 323** P **P** **10 57 22.9 +0.7**
baz=134
CWC **Cottonwood Cre** **67.40 322** P **P** **10 57 23.1 +0.5**
baz=133
PKM **Mcpherson Peak** **67.41 320** P **P** **10 57 22.9 +0.3**
baz=132,SNR=8.0
AGMN **Agassiz Nation** **67.52 344** P **P** **10 57 22.1 -0.8**
AGMN IAmb IAmb 10 57 38.1
comp=Z,22nm,0.8s
AGMN **Agassiz Nation** **67.52 344** P **P** **10 57 21.8 -1.1**
baz=157,SNR=13
VES **Vestal, Richgr** **67.59 321** P **P** **10 57 23.8 +0.3**
baz=132,SNR=10
BW06 **Boulder Array** **67.65 332** P **P** **10 57 23.2 -0.9**
BW06 IAMs_20 IAMs_20 11 27 00.2
comp=Z,2µm,22.0s
BW06 **Boulder Array** **67.65 332** P **P** **10 57 23.7 -0.4**
baz=143
PDAR **Pinedale Array** **67.65 332** P **P** **10 57 21.1 -3.0**
comp=Z,5.5nm,1.2s,baz=146,slow=6.4,SNR=15
PDAR LR LR 11 27 23.0
comp=Z,2µm,21.3s,baz=142,slow=36
PDAR **Pinedale Array** **67.65 332** P **P** **10 57 23.1 -0.9**
LCH **Last Change Ra** **67.69 323** IAmb IAmb 10 57 34.7
comp=Z,48nm,1.8s
SMMC **Simmler** **67.80 320** P **P** **10 57 25.1 +0.1**
baz=132,SNR=7.4
BGU **Big Grassy Mou** **67.88 329** P **P** **10 57 25.6 +0.1**
MDND **Maddock** **68.18 341** P **P** **10 57 26.7 -0.4**
MDND **Maddock** **68.18 341** P **P** **10 57 27.1 0.0**
baz=153,SNR=25
PAGB **Antelope Grade** **68.23 320** P **P** **10 57 26.2 -1.4**
PAGB IAmb IAmb 10 57 39.0
comp=Z,49nm,1.3s
AHID **Auburn Hatcher** **68.35 331** P **P** **10 57 27.2 -1.3**
AHID IAMs_20 IAMs_20 11 26 42.8
comp=Z,2µm,21.0s
SNAA **Sanae** **68.39 161** P **P** **10 57 29.3 +1.1**
SNAA **Sanae** **68.39 161** *ce*LR LR 11 24 51.6
comp=Z,896nm,21.2s,baz=304,slow=34
SNAA **Sanae** **68.39 161** *ce*P **P** **10 57 29.3 +1.1**
SNAA pmax pmax
comp=Z,138nm,1.7s
SNAA **Sanae** **68.39 161** P **P** **10 57 29.7 +1.5**
HVU **Hansel Valley** **68.39 329** IAmb IAmb 10 58 05.8
comp=Z,22nm,0.9s
MLAC **Mammoth, Mammo** **68.66 323** P **P** **10 57 30.9 +0.4**
baz=133
ECR **Eagle Creek** **68.70 331** P **P** **10 57 31.1 +0.4**
REDW **Red Top Meadow** **68.70 332** P **P** **10 57 30.8 +0.1**
REDW IAmb IAmb 10 58 25.7
comp=Z,41nm,1.4s
REDW IAMs_20 IAMs_20 11 26 25.0
comp=Z,2µm,22.0s
LOHW **Long Hollow** **68.79 332** P **P** **10 57 31.4 +0.2**
LOHW IAMs_20 IAMs_20 11 26 41.2
comp=Z,2µm,21.0s
NV11 **Mina Array Sit** **68.81 324** P **P** **10 57 33.1 +1.7**
TPAW **Teton Pass** **68.85 332** P **P** **10 57 31.1 -0.5**
TPAW IAMs_20 IAMs_20 11 26 28.9
comp=Z,2µm,22.0s
ELK **Elko** **68.87 327** P **P** **10 57 31.1 -0.6**
comp=Z,4.9nm,0.9s,baz=138,slow=4.4,SNR=13
ELK LR LR 11 26 38.8
comp=Z,3µm,18.9s,baz=140,slow=35
LHV **Little Huntoon** **68.89 323** IAmb IAmb 10 57 56.4
comp=Z,41nm,1.4s
NVAR **Mina Array Bea** **68.90 324** P **P** **10 57 31.9 -0.1**
comp=Z,5.8nm,0.9s,baz=140,slow=6.2,SNR=30
NVAR LR LR 11 27 22.8
comp=Z,1µm,19.5s,baz=144,slow=36
NVAR **Mina Array Bea** **68.90 324** P **P** **10 57 31.8 -0.2**
MOOW **Moose Ponds** **68.96 332** P **P** **10 57 32.0 -0.2**
MOOW IAMs_20 IAMs_20 11 26 46.7
comp=Z,2µm,20.0s
FLWY **Flagg Ranch** **69.20 332** P **P** **10 57 34.1 +0.3**
FLWY IAmb IAmb 10 58 10.6
comp=Z,54nm,1.2s
BBGB **Big Mountain B** **69.27 321** P **P** **10 57 33.2 -1.0**
BBGB IAmb IAmb 10 57 48.0
comp=Z,33nm,0.9s
ULM **Lac du Bonnet** **69.33 345** P **P** **10 57 32.7 -1.4**
comp=Z,14nm,0.8s,baz=161,slow=5.6,SNR=12
ULM LR LR 11 32 01.9
comp=Z,1µm,18.6s,baz=148,slow=40
ULM **Lac du Bonnet** **69.33 345** P **P** **10 57 33.0 -1.1**
ULM pmax pmax
comp=Z,29nm,1.1s
ULM **Lac du Bonnet** **69.33 345** P **P** **10 57 33.0 -1.1**
ULM IAmb IAmb 10 57 35.3
comp=Z,29nm,1.1s
H17A **Grant Village** **69.39 333** P **P** **10 57 33.6 -1.3**
H17A **Grant Village** **69.39 333** P **P** **10 57 35.8 +0.9**
baz=142
RLMT **Red Lodge** **69.40 334** P **P** **10 57 34.1 -0.8**
RLMT **Red Lodge** **69.40 334** P **P** **10 57 35.0 +0.1**
baz=143,SNR=14
LKWY **Lake** **69.45 333** IAmb IAmb 10 58 04.7
comp=Z,24nm,1.1s
LKWY IAMs_20 IAMs_20 11 30 18.7
comp=Z,2µm,19.0s
LAO **LASA Array** **69.46 337** IAmb IAmb 10 57 58.3
comp=Z,25nm,1.1s
LAO IAMs_20 IAMs_20 11 27 00.9
comp=Z,1µm,21.0s
LAO **LASA Array** **69.46 337** P **P** **10 57 34.6 -0.4**
baz=147,SNR=7.7
YMR **Madison River** **69.78 332** IAmb IAmb 10 58 26.4
comp=Z,24nm,1.1s
YERR **Yerington** **69.81 324** P **P** **10 57 36.4 -1.2**
CMB **Columbia Colle** **69.83 322** P **P** **10 57 38.0 +0.4**
CMB pmax pmax
comp=Z,12nm,1.2s
CMB **Columbia Colle** **69.83 322** P **P** **10 57 38.0 +0.4**
CMB IAMs_20 IAMs_20 11 27 09.0
comp=Z,1µm,20.0s
PNTR **Pine Nut** **70.09 323** IAmb IAmb 10 58 10.8
comp=Z,18nm,0.8s
DGMT **Dagmar** **70.22 339** IAmb IAmb 10 58 01.0
comp=Z,37nm,1.1s
DGMT **Dagmar** **70.22 339** P **P** **10 57 39.4 -0.3**
baz=149,SNR=9.3
VCNR **Virginia City** **70.25 324** P **P** **10 57 40.8 +0.5**
EMB **Emerald Bay** **70.30 323** P **P** **10 57 41.3 +0.7**
PAHR **Pah Rah Range** **70.38 324** P **P** **10 57 41.1 +0.1**
PAHR IAmb IAmb 10 57 43.9
comp=Z,30nm,1.0s
HLID **Hailey** **70.53 330** P **P** **10 57 41.7 -0.1**
HLID **Hailey** **70.53 330** P **P** **10 57 41.4 -0.5**
baz=138,SNR=16
MCMT **McKenzie Canyo** **70.75 331** P **P** **10 57 43.5 +0.2**
BOZ **Bozeman (W)** **70.80 333** IAMs_20 IAMs_20 11 27 48.4
comp=Z,2µm,22.0s
BOZ **Bozeman (W)** **70.80 333** P **P** **10 57 43.3 -0.1**
baz=141
BEKR **Beckworth** **71.04 324** P **P** **10 57 45.6 +0.5**
DLMT **Dillon** **71.05 332** P **P** **10 57 44.3 -0.7**
DLMT IAMs_20 IAMs_20 11 28 27.0
comp=Z,2µm,21.0s
MFID **Camas Ranch** **71.12 329** P **P** **10 57 45.9 +0.5**
MFID IAmb IAmb 10 58 24.2
comp=Z,44nm,0.9s
MFID IAMs_20 IAMs_20 11 30 12.8
comp=Z,2µm,19.0s
SCHQ **Schefferville** **71.28 4** P **P** **10 57 45.5 -0.5**
comp=Z,12nm,0.8s,baz=189,slow=3.3,SNR=16
SCHQ LR LR 11 30 40.0
comp=Z,645nm,20.5s,baz=198,slow=37
SCHQ **Schefferville** **71.28 4** P **P** **10 57 45.2 -0.8**
SCHQ IAmb IAmb 10 58 04.3
comp=Z,42nm,1.2s
LIC **Lamto** **71.39 77** *e*P **P** **10 57 46.8 -0.7**
comp=Z,301nm,1.4s
ORV **Oroville** **71.49 323** P **P** **10 57 48.1 +0.5**
ORV pmax pmax
comp=Z,35nm,1.0s
ORV **Oroville** **71.49 323** P **P** **10 57 48.1 +0.5**
ORV IAmb IAmb 10 57 51.0
comp=Z,35nm,1.0s
TIC **Toumodi** **71.54 77** *e*P **P** **10 57 47.6 -0.9**
DBIC **Dimbokro** **71.70 77** P **P** **10 57 49.2 -0.1**
comp=Z,78nm,0.9s,baz=253,slow=4.2,SNR=56
DBIC LR LR 11 28 45.4
comp=Z,5µm,18.8s,baz=252,slow=36
DBIC **Dimbokro** **71.70 77** P **P** **10 57 49.3 -0.1**
KIC **Kosan Boka** **71.71 77** *e*P **P** **10 57 48.4 -1.0**
comp=Z,89nm,0.6s
HRY **Holter Researc** **71.75 333** P **P** **10 57 49.2 +0.1**
WVOR **Wild Horse Val** **71.86 327** P **P** **10 57 50.1 +0.2**
WVOR pmax pmax
comp=Z,11nm,1.0s
WVOR **Wild Horse Val** **71.86 327** IAMs_20 IAMs_20 11 25 55.5
comp=Z,2µm,20.0s
EGMT **Eagleton** **71.93 335** P **P** **10 57 50.0 -0.2**
EGMT IAMs_20 IAMs_20 11 30 17.4
comp=Z,2µm,18.0s
EGMT **Eagleton** **71.93 335** P **P** **10 57 50.1 0.0**
baz=144,SNR=7.0
TIAR **Tiarei** **72.00 257** *e*T T 12 16 11.4
comp=Z,4.3nm,0.2s
PPT2 **Papeete2** **72.21 256** *e*S **S** **11 07 12.0 -1.6**
comp=Z,1µm,26.5s
PPT2 **Papeete2** **72.21 256** *e*LR LR 11 20 00.0
comp=Z,3µm,23.5s,baz=105
PPT **Papeete** **72.22 256** LR LR 11 21 36.6
comp=Z,2µm,18.1s,baz=94,slow=29
MOD **Modoc Plateau** **72.39 325** IAMs_20 IAMs_20 11 29 38.5
comp=Z,2µm,19.0s
J08A **Circle Bar Ran** **72.42 327** P **P** **10 57 54.4 +1.2**
PLID **Pearl Lake** **72.43 330** IAMs_20 IAMs_20 11 31 12.5
comp=Z,2µm,19.0s
MSO **Missoula** **72.77 332** P **P** **10 57 55.6 +0.4**
MSO IAmb IAmb 10 57 57.7
comp=Z,43nm,1.6s
MSO **Missoula** **72.77 332** P **P** **10 57 55.6 +0.4**
baz=140,SNR=10
PMOZ **Porto Moniz, M** **72.82 47** *e*LR LR 11 23 51.6
comp=Z,2µm,18.0s
BMO **Blue Mountains** **72.89 329** IAMs_20 IAMs_20 11 29 21.8
comp=Z,2µm,19.0s
NVL **N'lazarevskaya** **73.01 160** *j*P P 10 58 03.2 +7.0
NVL pmax pmax
comp=Z,170nm,1.8s
N02D **Trinity Center** **73.12 323** IAmb IAmb 10 58 05.5
comp=Z,52nm,1.9s
N02D **Trinity Center** **73.12 323** P **P** **10 57 57.6 +0.3**
baz=131
M04C **Macdoel** **73.16 324** P **P** **10 57 57.7 0.0**
M04C **Macdoel** **73.16 324** P **P** **10 57 58.2 +0.6**
baz=132,SNR=11
K05A **Summer Lake** **73.27 326** P **P** **10 57 58.2 -0.2**
K05A IAmb IAmb 10 58 01.4
comp=Z,46nm,1.3s
I07A **Izee** **73.46 327** IAmb IAmb 10 58 36.6
comp=Z,39nm,1.3s
M02C **Callahan** **73.48 323** P **P** **10 57 59.3 -0.2**
M02C **Callahan** **73.48 323** P **P** **10 58 00.1 +0.6**
baz=131
YBH **Yreka Blue Hor** **73.62 324** LR LR 11 29 59.2
comp=Z,1µm,19.6s,baz=138,slow=36
YBH **Yreka Blue Hor** **73.62 324** P **P** **10 58 00.2 -0.1**
YBH pmax pmax
comp=Z,11nm,1.0s
YBH **Yreka Blue Hor** **73.62 324** P **P** **10 58 00.2 -0.1**
YBH IAMs_20 IAMs_20 11 29 38.0
comp=Z,1µm,20.0s
QSPA **South Pole Qui** **73.65 180** P **P** **10 58 01.8 +1.5**
F10A **Beach Ranch, E** **73.66 330** P **P** **10 58 01.7 +1.3**
K04D **Chiloquin, OR** **73.67 325** P **P** **10 58 01.6 +1.0**
baz=132
L04D **Klamath Falls** **73.71 324** P **P** **10 58 01.6 +0.7**
L04D IAmb IAmb 10 59 21.4
comp=Z,46nm,1.4s
L04D IAMs_20 IAMs_20 11 29 48.4
comp=Z,1µm,20.0s
L04D **Klamath Falls** **73.71 324** P **P** **10 58 00.9 0.0**
baz=131
J05D **Fort Rock, OR** **73.83 326** P **P** **10 58 02.1 +0.5**
baz=133,SNR=7.4
PINE **Pine Mountain** **74.02 326** P **P** **10 58 02.9 +0.1**
PINE IAmb IAmb 10 58 14.4
comp=Z,36nm,1.1s
G08A **Pilot Rock** **74.03 328** P **P** **10 58 04.0 +1.3**
J04D **Umpqua Nationa** **74.28 325** IAmb IAmb 10 58 07.1
comp=Z,38nm,1.0s
J04D IAMs_20 IAMs_20 11 27 22.5
comp=Z,2µm,22.0s
J04D **Umpqua Nationa** **74.28 325** P **P** **10 58 04.6 +0.3**
baz=132
HUMO **Hull Mountain** **74.33 324** IAMs_20 IAMs_20 11 30 04.8
comp=Z,1µm,20.0s
L02E **Cave Junction** **74.40 324** IAmb IAmb 10 58 43.0
comp=Z,49nm,1.6s
L02E IAMs_20 IAMs_20 11 30 53.7
comp=Z,2µm,20.0s
L02E **Cave Junction** **74.40 324** P **P** **10 58 05.5 +0.7**
baz=130
WALA **Waterton Lakes** **74.46 334** P **P** **10 58 04.6 -0.5**
E09A **Wood Farm, Sta** **74.49 330** P **P** **10 58 05.1 -0.1**
E09A IAmb IAmb 10 58 14.9
comp=Z,53nm,1.7s
I05D **Terrebonne, OR** **74.60 327** P **P** **10 58 06.6 +0.7**
baz=133,SNR=6.9
K02D **Willamette Mer** **74.78 324** P **P** **10 58 07.2 +0.2**
baz=130

**I04A Tendick Farm, 74.81 326** P **P** **10 58 07.8 +0.6**
baz=132
**E08A Dider Farm, El 74.92 329** P **P** **10 58 08.7 +1.0**
**FFC Flin Flon 74.97 343** P **P** **10 58 07.1 -0.7**
FFC pmax pmax
comp=Z,9.0nm,0.9s
**FFC Flin Flon 74.97 343** P **P** **10 58 07.1 -0.7**
**HAWA Hanford 75.09 329** P **P** **10 58 08.5 -0.1**
**G05D Wamic, OR 75.20 327** P **P** **10 58 10.2 +0.8**
baz=133
**J01E Myrtle Point 75.23 324** P **P** **10 58 09.9 +0.5**
baz=130
**KOWA Kowa 75.23 70** P **P** **10 58 10.2 0.0**
**D08A Wollman Farm, 75.25 330** P **P** **10 58 09.5 -0.1**
D08A IAmb IAmb 10 58 20.3
comp=Z,64nm,1.7s
**I03D Drain, OR 75.25 325** P **P** **10 58 10.7 +1.0**
baz=131
**NEW Newport 75.28 332** LR LR 11 33 43.0
comp=Z,1µm,18.4s,baz=136,slow=38
**NEW Newport 75.28 332** P **P** **10 58 09.6 -0.1**
NEW pmax pmax
comp=Z,24nm,1.6s
NEW MLR MLR
comp=Z,2µm,22.0s
**NEW Newport 75.28 332** P **P** **10 58 09.6 -0.1**
**NEW Newport 75.28 332** IAMs_20 IAMs_20 11 30 41.9
comp=Z,2µm,22.0s
**NEW Newport 75.28 332** P **P** **10 58 09.7 0.0**
baz=137,SNR=5.6
**E07A Sunnyside 75.36 329** P **P** **10 58 11.1 +0.8**
E07A IAmb IAmb 10 58 13.8
comp=Z,34nm,1.2s
**HOOD Mount Hood Mea 75.42 327** P **P** **10 58 11.6 +0.8**
HOOD IAmb IAmb 10 58 16.6
comp=Z,48nm,1.1s
**H04D Lebanon 75.47 326** IAMs_20 IAMs_20 11 28 26.9
comp=Z,2µm,21.0s
**C09A Chrisman Ranch 75.48 331** P **P** **10 58 11.2 +0.3**
C09A IAmb IAmb 10 58 13.4
comp=Z,68nm,1.6s
**F05D White Salmon 75.71 328** IAMs_20 IAMs_20 11 30 56.3
comp=Z,2µm,20.0s
**F05D White Salmon 75.71 328** P **P** **10 58 13.7 +1.4**
baz=133
**G03D McMinnville, O 76.20 326** P **P** **10 58 16.4 +1.4**
baz=131
**F04A Amboy 76.23 327** P **P** **10 58 17.4 +2.2**
F04A IAmb IAmb 10 58 18.1
comp=Z,40nm,1.0s
**LTY Liberty 76.25 329** P **P** **10 58 16.5 +1.2**
LTY IAmb IAmb 10 58 17.8
comp=Z,60nm,1.5s
**B08A Colville Reser 76.37 331** P **P** **10 58 15.8 -0.2**
**E04D Cinebar 76.73 328** P **P** **10 58 18.9 +0.9**
baz=132
**D05A Enumclaw 76.86 328** P **P** **10 58 19.6 +0.9**
D05A IAmb IAmb 10 58 21.6
comp=Z,61nm,1.1s
**D04E Lakebay 77.25 328** P **P** **10 58 22.0 +1.2**
baz=132
**EDM Edmonton 77.44 337** P **P** **10 58 21.1 -0.8**
**EDM Edmonton 77.44 337** P **P** **10 58 21.1 -0.8**
**B05A Bryant 77.64 329** P **P** **10 58 23.0 0.0**
baz=133,SNR=6.8
**D03D Eldon 77.65 328** P **P** **10 58 23.3 +0.2**
baz=132
**A04D Lummi Island 78.25 329** P **P** **10 58 27.3 +0.9**
baz=132
**PGC Sidney 78.57 329** P **P** **10 58 29.8 +1.7**
PGC IAmb IAmb 10 58 31.6
comp=Z,50nm,1.2s
**LLLB Lillooet 79.13 331** P **P** **10 58 31.1 -0.2**
LLLB IAmb IAmb 10 58 33.5
comp=Z,76nm,1.8s
**TORD Torodi Ar. Bea 79.95 73** P **P** **10 58 36.5 0.0**
comp=Z,89nm,1.0s,baz=263,slow=5.2,SNR=213
**TORD Torodi Ar. Bea 79.95 73** P **P** **10 58 36.3 -0.2**
**FRB Frobisher Bay 80.09 2** P **P** **10 58 35.7 -0.4**
comp=Z,8.0nm,0.8s,baz=185,slow=6.0,SNR=15
FRB LR LR 11 37 35.4
comp=Z,458nm,18.2s,baz=193,slow=38
**RAR Rarotonga 80.78 251** LR LR 11 25 23.8
comp=Z,2µm,21.3s,baz=104,slow=29
**VNDA Vanda 80.96 190** P **P** **10 58 43.1 +2.3**
comp=Z,2.5nm,0.7s,baz=334,slow=3.7,SNR=3.7
VNDA LR LR 11 28 52.5
comp=Z,1µm,19.0s,baz=124,slow=31
**VNDA Vanda 80.96 190** IAmb IAmb 10 59 59.2
comp=Z,38nm,1.4s
**MORF Marmelete 81.13 47** *eP* **P** **10 58 43.8 +1.4**
MORF IAmb IAmb 10 58 45.2
comp=Z,76nm,1.1s
MORF *eS* **S** **11 08 54.6 +4.2**
**MORF Marmelete 81.13 47** *eP* **P** **10 58 44.4 +2.0**
comp=Z,146nm,1.6s
**MORF Marmelete 81.13 47** *eS* **SKKSac** **11 09 03.0 +1.0**
**MORF Marmelete 81.13 47** *eP* **P** **10 58 43.8 +1.4**
MORF *eS* **S** **11 08 54.5 +4.2**
MORF pmax pmax
comp=Z,77nm,1.1s
**PTEO Sao Teotonio 81.19 47** *eP* **P** **10 58 45.5 +2.9**
comp=Z,162nm,1.4s
**PMAFR Mafra 81.48 45** *eS* SKKSac 11 09 16.6 +12
**PNCL Nicolau / Gran 81.59 46** *eP* **P** **10 58 46.8 +2.0**
comp=Z,98nm,2.0s
**PNCL Nicolau / Gran 81.59 46** *eS* **SKKSac** **11 09 05.9 +0.6**
**MESJ Messejana 81.68 47** *eP* **P** **10 58 46.6 +1.3**
MESJ IAmb IAmb 10 58 47.4
comp=Z,43nm,1.1s
MESJ *eS* **S** **11 09 00.1 +4.3**
**MESJ Messejana 81.68 47** *eP* **P** **10 58 46.9 +1.7**
comp=Z,62nm,1.8s
**MESJ Messejana 81.68 47** *eP* **P** **10 58 46.5 +1.3**
MESJ *eS* **S** **11 09 00.1 +4.3**
MESJ pmax pmax
comp=Z,43nm,1.1s
**PACT Alcochete 81.70 46** *eP* **P** **10 58 47.5 +2.2**
comp=Z,481nm,1.5s
**PCVE Castro Verde 81.71 47** *eP* **P** **10 58 47.5 +2.1**
comp=Z,77nm,1.3s
**PCVE Castro Verde 81.71 47** *eS* **SKKSac** **11 09 07.3 +1.1**
**PVAQ Vaqueiros 81.83 47** *eS* **SKKSac** **11 09 07.8 +0.7**
**PVAQ Vaqueiros 81.83 47** *eLR* LR 11 26 31.5
comp=Z,2µm,20.0s
**PBEJ Beja 82.02 47** *eP* **P** **10 58 49.0 +2.0**
**MDT Midelt 82.06 53** P **P** **10 58 48.4 +0.9**
comp=Z,9.3nm,0.9s,baz=270,slow=9.8,SNR=5.1
MDT LR LR 11 33 14.7
comp=Z,2µm,20.6s,baz=260,slow=34
**PSBE So Bento 82.08 45** *eS* **SKKSac** **11 09 09.9 +0.8**
**PMTG Montargil 82.26 46** *eP* **P** **10 58 50.4 +2.1**
comp=Z,62nm,1.8s
**PMTG Montargil 82.26 46** *eS* **SKKSac** **11 09 19.9 +10**
**PESTR Estremoz 82.60 46** *eP* **P** **10 58 51.9 +1.8**
comp=Z,68nm,1.4s
**PESTR Estremoz 82.60 46** *eS* **SKKSac** **11 09 14.7 +1.7**
**PCBR Castelo Branco 83.13 45** *eP* **P** **10 58 54.1 +1.3**
**PVIS Viseu 83.27 44** *eP* **P** **10 58 54.9 +1.4**
comp=Z,106nm,1.7s
**MTE Manteigas 83.35 45** *eP* **P** **10 58 55.2 +1.2**
comp=Z,63nm,1.7s
**MTE Manteigas 83.35 45** *eS* **SKKSac** **11 09 22.2 +3.5**
**MTE Manteigas 83.35 45** *eLR* LR 11 27 52.7
comp=Z,2µm,18.0s
**PGAV Gavieira, Arco 83.61 43** *eS* SKKSac 11 09 33.9 +13
**PGAV Gavieira, Arco 83.61 43** *eLR* LR 11 28 03.3
comp=Z,2µm,22.0s
**POLO Lamas de Olo 83.64 44** *eP* **P** **10 58 57.3 +1.8**
comp=Z,32nm,1.4s
**POLO Lamas de Olo 83.64 44** *eS* **SKKSac** **11 09 25.3 +4.4**
**PVRL Vila Real 83.65 44** *eP* **P** **10 58 56.7 +1.2**
comp=Z,74nm,1.5s
**PCAB Cabril 83.65 43** *eP* **P** **10 58 57.1 +1.6**
comp=Z,96nm,1.6s
**MVO Moncorvo 84.06 44** *eP* **P** **10 58 58.9 +1.3**
comp=Z,97nm,1.6s
**MVO Moncorvo 84.06 44** *eS* **SKKSac** **11 09 29.8 +5.9**
**MVO Moncorvo 84.06 44** *eLR* LR 11 28 42.6
comp=Z,2µm,20.0s
**PBRG Braganca 84.54 44** *eP* **P** **10 59 01.3 +1.3**
comp=Z,101nm,1.6s
**SUR Sutherland 84.89 122** LR LR 11 33 59.6
comp=Z,2µm,20.1s,baz=253,slow=34
**SFJD Kangerlussuaq 84.97 9** LR LR 11 36 12.7
comp=Z,534nm,21.8s,baz=210,slow=35

**YKA Yellowknife Ar 85.09 342** P **P** **10 59 01.9 -0.3**
comp=Z,23nm,0.9s,baz=137,slow=5.2,SNR=297
YKA LR LR 11 39 04.1
comp=Z,1µm,19.6s,baz=151,slow=37
**YKA Yellowknife Ar 85.09 342** P **P** **10 59 01.3 -0.9**
**PAB San Pablo 85.15 46** P **P** **10 59 03.4 +0.2**
PAB pmax pmax
comp=Z,79nm,1.2s
**PAB San Pablo 85.15 46** P **P** **10 59 03.4 +0.2**
**DY2G Dye2 85.20 11** *i* P **P** **10 59 01.6 -1.4**
DY2G IAmb IAmb 10 59 03.0
comp=Z,15nm,0.8s
**ESDC Sonseca Array 85.48 47** P **P** **10 59 06.1 +1.3**
comp=Z,18nm,0.9s,baz=244,slow=4.7,SNR=46
ESDC LR LR 11 35 60.0
comp=Z,1µm,19.0s,baz=235,slow=35
**ESDC Sonseca Array 85.48 47** P **P** **10 59 05.8 +1.0**
**ESBB Sonseca Array 85.48 47** P **P** **10 59 06.0 +1.3**
**TSUM Tsumeb 85.72 109** LR LR 11 36 23.6
comp=Z,2µm,18.3s,baz=274,slow=35
**TSUM Tsumeb 85.72 109** P **P** **10 59 06.8 +0.2**
**WRAK Wrangell Islan 87.64 332** P **P** **10 59 15.1 +0.2**
**WRAK Wrangell Islan 87.64 332** P **P** **10 59 14.7 -0.1**
baz=125
**DLBC Dease Lake 87.80 334** P **P** **10 59 16.6 +0.9**
comp=Z,35nm,0.8s,baz=128,slow=4.8
DLBC LR LR 11 42 21.4
comp=Z,1µm,19.5s,baz=147,slow=38
**DLBC Dease Lake 87.80 334** P **P** **10 59 16.5 +0.8**
**WTLY Watson Lake, Y 88.32 336** P **P** **10 59 18.2 +0.1**
baz=128
**WRGLY Wrigley 88.40 340** P **P** **10 59 18.4 +0.1**
baz=133,SNR=8.4
**ICESG Greenland Ices 88.72 12** *i* P **P** **10 59 19.4 -0.8**
ICESG IAmb IAmb 10 59 21.0
comp=Z,15nm,0.9s
**BOSA Boshof 89.67 120** P **P** **10 59 25.8 +0.3**
comp=Z,5.6nm,0.9s,baz=224,slow=6.6,SNR=4.4
BOSA LR LR 11 36 28.9
comp=Z,2µm,21.0s,baz=254,slow=34
**BOSA Boshof 89.67 120** P **P** **10 59 25.4 0.0**
BOSA IAmb IAmb 10 59 26.5
comp=Z,36nm,1.4s
**P33M Teslin, Yukon 90.00 335** P **P** **10 59 26.2 +0.2**
P33M IAMs_20 IAMs_20 11 41 47.3
comp=Z,2µm,22.0s
**P33M Teslin, Yukon 90.00 335** P **P** **10 59 25.8 -0.2**
baz=125,SNR=18
**BORG Borgarnes 90.17 20** LR LR 11 36 35.5
comp=Z,738nm,21.9s,baz=232,slow=33
**MAW Mawson 90.31 165** LR LR 11 37 59.8
comp=Z,1µm,21.0s,baz=230,slow=34
**SKAG Skagway 90.65 333** P **P** **10 59 29.8 +0.9**
SKAG IAmb IAmb 10 59 39.0
comp=Z,21nm,1.0s
**SKAG Skagway 90.65 333** P **P** **10 59 29.8 +0.9**
baz=122
**MMPY Sheldon Lake, 90.78 337** P **P** **10 59 30.0 +0.4**
baz=126
**WHY Whitehorse 91.10 334** P **P** **10 59 31.3 0.0**
baz=133,SNR=5.8
**LBTB Lobatse 91.11 116** P **P** **10 59 32.9 +0.7**
comp=Z,1.9nm,0.4s,baz=256,slow=11,SNR=4.8
LBTB LR LR 11 39 12.5
comp=Z,1µm,18.1s,baz=250,slow=35
**LBTB Lobatse 91.11 116** P **P** **10 59 32.4 +0.2**
LBTB IAmb IAmb 10 59 49.8
comp=Z,31nm,1.3s
**FARO Faro, Yukon 91.35 336** P **P** **10 59 32.1 -0.2**
baz=124,SNR=19
**M31M Drury Creek, Y 91.75 336** P **P** **10 59 34.1 0.0**
M31M IAMs_20 IAMs_20 11 42 44.4
comp=Z,1µm,20.0s
**M31M Drury Creek, Y 91.75 336** P **P** **10 59 34.0 0.0**
baz=123,SNR=6.7
**SUMG Summit 91.88 10** P **P** **10 59 34.7 -0.2**
SUMG pmax pmax
comp=Z,62nm,1.0s
**SUMG Summit 91.88 10** *i* P **P** **10 59 34.3 -0.6**
SUMG IAmb IAmb 10 59 48.1
comp=Z,20nm,0.9s
**SUMG Summit 91.88 10** P **P** **10 59 34.7 -0.2**
**RES Resolute Bay 92.00 354** LR LR 11 44 36.4
comp=Z,1µm,18.6s,baz=131,slow=38
**RES Resolute Bay 92.00 354** P **P** **10 59 34.6 -0.3**
RES pmax pmax
comp=Z,30nm,1.9s
**RES Resolute Bay 92.00 354** P **P** **10 59 34.6 -0.3**
RES IAmb IAmb 11 00 25.0
comp=Z,30nm,1.9s
**HYT Haines Junctio 92.29 334** P **P** **10 59 37.3 +0.5**
HYT IAmb IAmb 10 59 48.6
comp=Z,13nm,1.2s
**HYT Haines Junctio 92.29 334** P **P** **10 59 37.0 +0.3**
baz=120
**PNL Peninsula 92.54 332** P **P** **10 59 37.6 -0.2**
baz=119
**YUK6 Outpost Mounta 92.71 334** P **P** **10 59 39.1 +0.3**
baz=120
**EKA Eskdalemuir Ar 92.73 33** LR LR 11 38 08.6
comp=Z,324nm,20.1s,baz=215,slow=34
**C36M Paulatuk 92.74 344** IAMs_20 IAMs_20 11 41 54.5
comp=Z,1µm,21.0s
**M30M Minto, Yukon 92.89 336** P **P** **10 59 39.1 -0.3**
M30M IAmb IAmb 10 59 39.8
comp=Z,13nm,1.2s
**CLF Chambon-Foret 92.94 41** P **P** **10 59 39.9 +0.1**
**YUK4 Talbot Arm 93.03 334** P **P** **10 59 40.1 -0.1**
baz=120
**MAYO Mayo, Yukon 93.08 337** P **P** **10 59 40.4 +0.3**
baz=122
**AFI Afiamalu 93.79 254** LR LR 11 31 55.2
comp=Z,1µm,21.5s,baz=105,slow=29
**KEST Kesra 93.87 54** LR LR 11 42 52.7
comp=Z,1µm,19.9s,baz=204,slow=36
**YUK3 Moose Creek 94.00 334** P **P** **10 59 43.9 -0.8**
baz=118
**RAO Raoul Island 94.07 238** LR LR 11 36 26.5
comp=Z,266nm,18.6s,baz=114,slow=32
**BARN Barnard Glacie 94.18 333** IAMs_20 IAMs_20 11 43 07.9
comp=Z,1µm,22.0s
**URZ Urewera 94.37 228** LR LR 11 32 11.0
comp=Z,908nm,21.8s,baz=102,slow=29
**WAX Waxell Ridge 94.44 332** IAMs_20 IAMs_20 11 47 32.6
comp=Z,1µm,20.0s
**BVCY Beaver Creek 94.46 334** P **P** **10 59 46.3 -0.3**
baz=118
**DAWY Dawson 94.65 336** P **P** **10 59 47.2 -0.2**
**DAWY Dawson 94.65 336** P **P** **10 59 46.4 -1.1**
baz=119,SNR=6.1
**NEEM North Greenlan 94.68 5** *i* P **P** **10 59 46.8 -0.9**
NEEM IAmb IAmb 10 59 53.5
comp=Z,5.8nm,0.8s
**A36M Sachs Harbour 94.79 346** P **P** **10 59 47.1 -0.6**
A36M IAMs_20 IAMs_20 11 44 50.8
comp=Z,1µm,20.0s
**A36M Sachs Harbour 94.79 346** P **P** **10 59 46.9 -0.9**
baz=131,SNR=24
**INK Inuvik 94.81 341** P **P** **10 59 47.6 -0.4**
comp=Z,4.5nm,0.8s,baz=104,slow=5.6,SNR=12
INK LR LR 11 48 17.7
comp=Z,597nm,18.4s,baz=114,slow=39
**INK Inuvik 94.81 341** P **P** **10 59 47.1 -0.8**
INK IAmb IAmb 10 59 56.4
comp=Z,17nm,1.3s
**INK Inuvik 94.81 341** P **P** **10 59 47.0 -0.9**
baz=124,SNR=9.2
**EPYK Eagle Plains 94.82 339** IAmb IAmb 10 59 57.1
comp=Z,20nm,1.4s
EPYK IAMs_20 IAMs_20 11 44 48.6
comp=Z,1µm,19.0s
**EPYK Eagle Plains 94.82 339** P **P** **10 59 47.5 -0.7**
baz=121
**M27K Edge Creek, AK 94.86 334** P **P** **10 59 48.1 -0.5**
baz=117
**I29M Ogilvie Camp, 94.88 338** IAmb IAmb 10 59 50.6
comp=Z,13nm,0.9s
**I29M Ogilvie Camp, 94.88 338** P **P** **10 59 47.3 -1.1**
baz=120,SNR=9.3
**MQZ McQueen's Vall 94.96 222** IAMs_20 IAMs_20 11 30 41.1
comp=Z,1µm,20.0s
**HMT Hamilton 95.02 332** IAMs_20 IAMs_20 11 43 06.1
comp=Z,1µm,21.0s
**VRDI Verde Repeater 95.04 333** IAMs_20 IAMs_20 11 43 22.5
comp=Z,1µm,20.0s
**DOU Dourbes 95.10 39** P **P** **10 59 50.0 +0.3**
DOU pmax pmax
comp=Z,24nm,1.8s
**DOU Dourbes 95.10 39** *d*P **P** **10 59 49.8 0.0**
comp=Z,9.0nm,1.4s
DOU *d*PcP **PcP** **10 59 50.2 +0.2**
**MATP Matopo 95.14 113** P **P** **10 59 51.4 +0.6**
comp=Z,1.5nm,0.8s,baz=268,slow=13,SNR=5.9
MATP LR LR 11 40 54.0
comp=Z,1µm,18.9s,baz=254,slow=34
**BCAR Beaver Creek A 95.14 335** P **P** **10 59 49.1 -0.6**
**L27K Beaver Creek, 95.16 335** IAmb IAmb 11 03 39.7
comp=Z,8.8nm,0.8s
**L27K Beaver Creek, 95.16 335** P **P** **10 59 49.4 -0.3**
baz=117
**BMRD Maredsous 95.28 39** *d*PcP **PcP** **10 59 51.1 +0.3**
**GLB Gilahina Butte 95.29 333** IAMs_20 IAMs_20 11 43 41.1
comp=Z,1µm,20.0s
**M26K Nabesna, AK 95.35 334** IAMs_20 IAMs_20 11 50 54.6
comp=Z,1µm,18.0s
**BMRM Bremner River 95.44 332** IAMs_20 IAMs_20 11 45 25.1
comp=Z,998nm,20.0s
**RCHB Rochefort 95.51 39** *d*P **P** **10 59 51.3 -0.2**
RCHB *d*PcP **PcP** **10 59 52.1 +0.3**
**BCLA Clavier 95.64 39** *d*PcP **PcP** **10 59 52.7 +0.3**
**EGAK Eagle 95.67 337** P **P** **10 59 51.4 -0.6**
**EGAK Eagle 95.67 337** P **P** **10 59 51.3 -0.6**
baz=117
**N25K Chitina, Valde 95.70 333** IAMs_20 IAMs_20 11 43 52.9
comp=Z,1µm,22.0s
**N25K Chitina, Valde 95.70 333** P **P** **10 59 50.3 -2.1**
baz=114
**L26K Log Cabin Wild 95.76 335** IAMs_20 IAMs_20 11 46 37.6
comp=Z,1µm,19.0s
**L26K Log Cabin Wild 95.76 335** P **P** **10 59 51.5 -1.0**
baz=115
**WLF Walferdange 95.92 40** *d*P **P** **10 59 54.2 +0.8**
WLF *d*PcP **PcP** **10 59 54.5 +0.9**
**RPZ Rata Peaks 95.97 221** LR LR 11 33 33.3
comp=Z,1µm,20.2s,baz=98,slow=29
**BHOU Houvegnez 96.04 39** *d*PcP **PcP** **10 59 54.9 +0.6**
**MEM Membach 96.12 39** *d*PcP **PcP** **10 59 55.0 +0.4**
**BTNL Ternell 96.19 39** *d*P **P** **10 59 54.3 -0.4**
BTNL *d*PcP **PcP** **10 59 54.8 -0.2**
**KLU Klutina 96.23 333** P **P** **10 59 53.9 -0.9**
KLU IAMs_20 IAMs_20 11 46 42.1
comp=Z,1µm,20.0s
**KLU Klutina 96.23 333** P **P** **10 59 53.3 -1.4**
baz=113
**DOT Dot Lake 96.32 335** P **P** **10 59 54.7 -0.4**
**SCRK Sand Creek 96.42 335** P **P** **10 59 55.1 -0.5**
SCRK IAmb IAmb 11 03 43.3
SCRK comp=Z,36nm,2.0s
IAMs_20 IAMs_20 11 45 48.1
comp=Z,1µm,20.0s
**SCRK Sand Creek 96.42 335** P **P** **10 59 54.5 -1.2**
baz=115
**GLI Glacier Island 96.52 332** IAMs_20 IAMs_20 11 44 14.7
comp=Z,1µm,22.0s
**LSZ Lusaka 96.55 108** LR LR 11 41 53.3
comp=Z,2µm,19.9s,baz=258,slow=34
**M24K Tolsona, Glenn 96.58 333** P **P** **10 59 54.8 -1.5**
baz=113
**PAX Paxson 96.62 334** P **P** **10 59 55.6 -0.9**
PAX pmax pmax
comp=Z,11nm,0.6s
**PAX Paxson 96.62 334** P **P** **10 59 55.6 -0.9**
PAX IAmb IAmb 11 03 20.5
comp=Z,11nm,0.6s
**PAX Paxson 96.62 334** P **P** **10 59 54.8 -1.7**
baz=114
**RIDG Independent Ri 96.67 335** P **P** **10 59 54.9 -1.8**
baz=114
**SLE Schleitheim 96.81 42** P **P** **10 59 55.4 -2.3**
SLE pmax pmax
comp=Z,18nm,0.6s
**SCM Sheep Creek Mo 96.98 333** P **P** **10 59 57.1 -1.0**
SCM pmax pmax
comp=Z,123nm,0.6s
**SCM Sheep Creek Mo 96.98 333** P **P** **10 59 57.1 -1.0**
SCM IAMs_20 IAMs_20 11 52 11.9
comp=Z,1µm,19.0s
**SCM Sheep Creek Mo 96.98 333** P **P** **10 59 55.3 -2.8**
baz=112
**PWL Port Wells 97.08 332** P **P** **10 59 55.7 -2.8**
baz=111
**J25K Salcha River, 97.23 336** P **P** **10 59 58.3 -0.9**
J25K IAmb IAmb 11 03 35.7
J25K comp=Z,7.2nm,0.7s
IAMs_20 IAMs_20 11 46 14.5
comp=Z,1µm,19.0s
**J25K Salcha River, 97.23 336** P **P** **10 59 57.7 -1.5**
baz=113,SNR=5.5
**KNK Knik Glacier 97.33 332** IAMs_20 IAMs_20 11 44 30.2
comp=Z,1µm,20.0s
**CLTB Caltabellotta 97.37 53** IAMs_20 IAMs_20 11 49 21.5
comp=Z,1µm,21.0s
**SML Sawmill 97.42 332** IAMs_20 IAMs_20 11 52 35.4
comp=Z,884nm,19.0s
**SML Sawmill 97.42 332** P **P** **10 59 58.9 -1.2**
baz=111
**WAT6 Susitna Watana 97.44 333** P **P** **10 59 58.6 -1.7**
baz=112,SNR=7.1
**DAVOX Davos/Dischmat 97.44 44** LR LR 11 41 41.2
comp=Z,1µm,20.6s,baz=255,slow=34
**DHY Denali Highway 97.47 334** IAMs_20 IAMs_20 11 47 23.7
comp=Z,971nm,21.0s
**TNS Taunus Mts 97.50 40** P **P** **11 00 00.6 -0.1**
TNS pmax pmax
comp=Z,13nm,1.3s
**O22K Cooper Landing 97.58 331** IAMs_20 IAMs_20 11 50 11.8
comp=Z,866nm,19.0s
**PRP Porcupine Dome 97.65 336** IAmb IAmb 11 03 45.7
comp=Z,5.4nm,0.5s
**PRP Porcupine Dome 97.65 336** P **P** **11 00 00.2 -1.0**
baz=113
**PMR Palmer 97.70 332** P **P** **11 00 00.8 -0.4**
baz=110
**HDA Harding Lake 97.79 335** IAMs_20 IAMs_20 11 45 26.1
comp=Z,951nm,19.0s
**HDA Harding Lake 97.79 335** P **P** **11 00 00.9 -0.8**
baz=112
**RC01 Rabbit Creek A 97.80 332** IAMs_20 IAMs_20 11 49 07.5
comp=Z,1µm,19.0s
**RC01 Rabbit Creek A 97.80 332** P **P** **11 00 01.1 -0.6**
baz=110
**BRSE Bradley Lake S 97.81 330** P **P** **11 00 01.4 -0.5**
baz=109,SNR=5.1
**BRLK Bradley Lake 97.89 330** P **P** **11 00 01.4 -0.8**
**ILAR Eielson Array 97.90 336** P **P** **11 00 01.2 -0.9**
comp=Z,1.8nm,0.9s,baz=151,slow=3.2,SNR=7.9
ILAR LR LR 11 47 04.1
comp=Z,817nm,20.0s,baz=120,slow=37
**BMAR Burnt Mountain 98.06 338** P **P** **11 00 02.1 -0.7**
**KDAK Kodiak Island 98.10 328** LR LR 11 42 53.5
comp=Z,559nm,21.1s,baz=108,slow=35
**M22K Willow 98.20 332** IAMs_20 IAMs_20 11 45 19.0
comp=Z,1µm,21.0s
**M22K Willow 98.20 332** P **P** **11 00 03.1 -0.3**
baz=110
**RND Reindeer 98.21 334** P **P** **11 00 02.3 -1.4**
RND pmax pmax
comp=Z,25nm,0.7s
RND MLR MLR
comp=Z,1µm,21.0s
**RND Reindeer 98.21 334** P **P** **11 00 02.2 -1.4**
RND IAMs_20 IAMs_20 11 47 38.4
comp=Z,1µm,21.0s
**CCB Clear Creek Bu 98.22 335** IAMs_20 IAMs_20 11 47 45.5
comp=Z,883nm,20.0s
**HOM Homer 98.22 330** P **P** **11 00 03.0 -0.7**
baz=109
**POKR Poker Plat Res 98.24 336** P **P** **11 00 02.4 -1.3**
POKR IAmb IAmb 11 00 34.4
comp=Z,9.4nm,0.8s
POKR IAMs_20 IAMs_20 11 46 15.1
comp=Z,1µm,19.0s
**POKR Poker Plat Res 98.24 336** P **P** **11 00 01.6 -2.0**
baz=112
**VAE Valguarnera 98.26 53** LR LR 11 46 26.5
comp=Z,1µm,18.1s,baz=238,slow=37
**WRH Wood River Hil 98.27 335** IAmb IAmb 11 03 53.0
comp=Z,6.4nm,0.8s
WRH IAMs_20 IAMs_20 11 47 37.9
comp=Z,1µm,20.0s
**COLA College 98.32 335** *i* P **P** **11 00 02.1 -1.8**
COLA pmax pmax
comp=Z,9.0nm,0.9s
**COLA College 98.32 335** P **P** **11 00 03.6 -0.3**

**COLA College 98.32 335** IAMs_20 IAMs_20 11 46 14.3
comp=Z,1µm,20.0s
**COLA College 98.32 335** P **P** **11 00 02.8 -1.1**
baz=111
**TCOL CIGO, UAF Yank 98.32 335** IAMs_20 IAMs_20 11 46 14.3
comp=Z,1µm,20.0s
**TCOL CIGO, UAF Yank 98.32 335** P **P** **11 00 03.0 -1.0**
baz=111
**CAPN Captain Cook N 98.34 331** P **P** **11 00 04.1 0.0**
baz=109
**MCK McKinley 98.36 334** IAMs_20 IAMs_20 11 51 06.2
comp=Z,1µm,20.0s
**MCK McKinley 98.36 334** P **P** **11 00 03.2 -1.1**
baz=110
**CUT Chulitna 98.48 333** IAMs_20 IAMs_20 11 48 16.4
comp=Z,864nm,21.0s
**MDM Murphy Dome 98.50 335** P **P** **11 00 04.4 -0.5**
MDM IAmb IAmb 11 00 08.7
comp=Z,12nm,1.0s
MDM IAMs_20 IAMs_20 11 46 10.0
comp=Z,1µm,19.0s
**H24K Noodor Dome 98.68 336** P **P** **11 00 04.9 -0.7**
H24K IAmb IAmb 11 00 08.1
comp=Z,35nm,1.9s
**H24K Noodor Dome 98.68 336** P **P** **11 00 04.9 -0.7**
baz=111
**NEA2 Nenana 98.71 335** P **P** **11 00 04.9 -0.8**
NEA2 IAMs_20 IAMs_20 11 47 51.5
comp=Z,841nm,21.0s
**NEA2 Nenana 98.71 335** P **P** **11 00 04.9 -0.8**
baz=110
**BWN Browne 98.73 335** IAMs_20 IAMs_20 11 44 32.2
comp=Z,1µm,22.0s
**O20K Slope Mountain 98.82 330** P **P** **11 00 05.8 -0.6**
baz=108
**TRF Thorofare Moun 98.83 334** IAMs_20 IAMs_20 11 47 55.8
comp=Z,1µm,20.0s
**TRF Thorofare Moun 98.83 334** P **P** **11 00 06.5 0.0**
baz=109
**Q19K Cape Douglas, 98.98 329** IAMs_20 IAMs_20 11 42 00.7
comp=Z,1µm,22.0s
**RSO Redoubt South 99.00 330** P P 11 00 05.8 -1.6
**I23K Minto, Yukon-K 99.02 335** P **Pdif** **11 00 06.0 -1.1**
I23K IAmb IAmb 11 03 29.9
comp=Z,13nm,1.1s
I23K IAMs_20 IAMs_20 11 46 52.6
comp=Z,936nm,20.0s
**I23K Minto, Yukon-K 99.02 335** P **Pdif** **11 00 06.4 -0.7**
baz=110
**GRFO Grafenberg 99.08 41** IAMs_20 IAMs_20 11 42 39.5
comp=Z,1µm,19.0s
**GRA1 Grafenberg Arr 99.08 41** IAMs_20 IAMs_20 11 42 38.6
comp=Z,1µm,19.0s
**CHIR Chirikof Islan 99.13 326** P **Pdif** **11 00 07.2 -0.6**
baz=106
**KTH Kantishna Hill 99.14 334** IAMs_20 IAMs_20 11 48 05.8
comp=Z,1µm,21.0s
**H23K Yukon River 99.31 336** IAMs_20 IAMs_20 11 45 37.5
comp=Z,1µm,22.0s
**H23K Yukon River 99.31 336** P **Pdif** **11 00 08.2 -0.3**
baz=110
**BPAW Bear Paw Mtn. 99.34 334** **Pdif** **11 00 07.7 -0.9**
BPAW IAMs_20 IAMs_20 11 47 47.1
comp=Z,870nm,20.0s
**BPAW Bear Paw Mtn. 99.34 334** P **Pdif** **11 00 07.1 -1.5**
baz=108
**MLY Manley 99.53 335** IAMs_20 IAMs_20 11 46 20.2
comp=Z,742nm,19.0s
**MLY Manley 99.53 335** P **Pdif** **11 00 08.0 -1.5**
baz=108
**CAST Castle Rocks 99.59 333** IAMs_20 IAMs_20 11 48 41.8
comp=Z,905nm,20.0s
**N19K Bonanza Creek 99.92 331** IAMs_20 IAMs_20 11 49 54.5
comp=Z,1µm,22.0s
**O18K Koktuh Hills 100.00 330** P **Pdif** **11 00 11.1 -0.6**
baz=106
**COLD Coldfoot 100.02 337** P **Pdif** **11 00 11.1 -0.4**
baz=109
**I21K Tanana 100.08 335** IAMs_20 IAMs_20 11 44 56.6
comp=Z,892nm,21.0s
**I21K Tanana 100.08 335** P **Pdif** **11 00 10.8 -1.1**
baz=107
**L20K Farewell, AK 100.10 332** P **Pdif** **11 00 10.5 -1.6**
baz=106
**M19K Big River Lodg 100.17 332** IAMs_20 IAMs_20 11 46 55.3
comp=Z,1µm,22.0s
**M19K Big River Lodg 100.17 332** P **Pdif** **11 00 11.8 -0.5**
baz=106
**TOLK Toolik Lake Re 100.25 339** IAMs_20 IAMs_20 11 48 20.2
comp=Z,1µm,19.0s
**TOLK Toolik Lake Re 100.25 339** P **Pdif** **11 00 11.2 -1.4**
baz=109
**K20K Telida 100.43 333** IAMs_20 IAMs_20 11 45 45.9
comp=Z,1µm,22.0s
**K20K Telida 100.43 333** P **Pdif** **11 00 11.7 -1.7**
baz=106
**KHC Kasperske Hory 100.44 42** *i* P **Pdif** **11 00 11.8 -2.1**
KHC pmax pmax
comp=Z,21nm,1.5s
**L19K White Mountain 100.46 332** IAMs_20 IAMs_20 11 46 27.8
comp=Z,1µm,21.0s
**L19K White Mountain 100.46 332** P **Pdif** **11 00 12.5 -1.1**
baz=106
**H21K Melozitna River 100.55 336** IAMs_20 IAMs_20 11 49 26.0
comp=Z,1µm,19.0s
**H21K Melozitna River 100.55 336** P **Pdif** **11 00 13.1 -0.9**
baz=107
**CLL Collm 100.57 40** *i* P **Pdif** **11 00 14.8 +0.5**
CLL MLR MLR
comp=Z,1µm,19.4s
**CLL Collm 100.57 40** *i* Pdif **Pdif** **11 00 14.8 +0.5**
CLL *e*PP **PP** **11 04 24.0 +2.3**
CLL *ex* x 11 05 48.0
CLL *e*SSKSac sSKSac 11 11 06.0 -1.9
CLL *e*Sdif Sdif 11 11 48.0 -1.0
CLL *e*PS **PS** **11 13 22.0 -0.9**
CLL *e*PPS PPS 11 14 12.0
CLL *ex* x 11 16 48.0
CLL *e*SS **SS** **11 18 42.0 -4.0**
CLL *ex* x 11 19 54.0
CLL *e*SSS SSS 11 22 42.0
CLL *ex* x 11 24 24.0
CLL Lm MLR 11 43 00.0
comp=N,400nm,20.6s
CLL Lm MLR 11 43 00.0
comp=E,1µm,19.5s
CLL Lm MLR 11 43 00.0
comp=Z,1µm,19.4s
**J20K Nowinta River 100.68 334** IAMs_20 IAMs_20 11 45 55.7
comp=Z,875nm,21.0s
**J20K Nowinta River 100.68 334** P **Pdif** **11 00 13.8 -0.8**
baz=106
**IMAR Indian Mountai 101.01 336** Pdif **Pdif** **11 00 15.1 -0.8**
**BRG Berggiesshubel 101.05 40** *e*P **Pdif** **11 00 18.0 +1.4**
BRG Amp 11 00 20.7
comp=Z,24nm,1.8s
BRG *ex* x 11 00 32.9
BRG Amp 11 00 35.6
comp=Z,17nm,1.5s
BRG Amp 11 43 22.0
comp=N,0.3nm,17.5s
BRG Amp 11 43 28.0
comp=Z,1.4nm,20.1s
BRG Amp 11 43 32.0
comp=E,1.1nm,17.5s
**BRG Berggiesshubel 101.05 40** *e*P **Pdif** **11 00 17.9 +1.4**
BRG pmax pmax
comp=Z,24nm,1.8s
BRG MLR MLR
comp=Z,1µm,20.1s
BRG MLR MLR
comp=E,1µm,17.5s
**A21K Barrow 103.31 341** IAMs_20 IAMs_20 11 49 54.8
comp=Z,1µm,20.0s
**VYHS Vyhne 103.72 43** *e*P **Pdif** **11 00 28.9 +0.4**
**VYHS Vyhne 103.72 43** *e*PDIFF **Pdif** **11 00 28.9 +0.4**
**DIVS Divibare 103.79 48** IAMs_20 IAMs_20 11 47 53.9
comp=Z,871nm,19.0s
**RDOG Red Dog Mine 104.94 337** IAMs_20 IAMs_20 11 49 42.1
comp=Z,1µm,22.0s
**ANM Nome 105.55 333** IAMs_20 IAMs_20 11 52 14.3
comp=Z,765nm,20.0s
**IDI Anoyia 106.10 57** IAMs_20 IAMs_20 11 54 12.1
comp=Z,955nm,19.0s
**PABE Paberze 107.67 36** IAMs_20 IAMs_20 11 42 12.2
comp=Z,774nm,20.0s
**MLR Muntele Rosu 108.17 47** IAMs_20 IAMs_20 11 59 01.7
comp=Z,868nm,19.0s
**DZM Mont Dzumac 109.86 239** *e*LR LR 11 37 29.0
comp=Z,2µm,30.9s,baz=136
**MNK Minsk 109.89 37** *i* P **Pdif** **11 00 53.2 -2.5**
MNK *i* 11 12 04.2
MNK *i* PS **PS** **11 14 52.7 -6.9**
MNK *i* SS SS 11 20 50.0 -3.1
MNK *i* SSS SSS 11 24 55.3
MNK pmax pmax
comp=N,21nm,0.7s
MNK pmax pmax
comp=E,3.0nm,0.8s
MNK pmax pmax
comp=Z,7.0nm,0.7s
MNK MLR MLR
comp=E,96nm,20.0s
MNK MLR MLR
comp=N,724nm,21.0s
MNK MLR MLR
comp=Z,1µm,20.0s
**MNK Minsk 109.89 37** *i* P **Pdif** **11 00 53.2 -2.4**
comp=E,3.0nm,0.8s
MNK *i* P **Pdif** **11 00 53.2 -2.4**
comp=N,21nm,0.7s
MNK *i* P **Pdif** **11 00 53.2 -2.4**
comp=Z,7.0nm,0.7s,baz=90
MNK *i* PKP **PKiKP** **11 04 50.6 -7.1**
MNK *i* PP **PP** **11 05 23.9 -6.7**
MNK *i* PPP PPP 11 07 42.4
MNK *i* SKS **SKSdf** **11 12 04.3 -3.1**
MNK *i* PS **PS** **11 14 52.7 -6.9**
MNK *i* SS **SS** **11 20 50.0 -3.1**
MNK *i* SSS SSS 11 24 55.4
MNK *i* LQ LQ 11 41 15.5
MNK *i* LR LR 11 43 22.0
MNK *i* LRM MLR 11 51 13.5
comp=E,96nm,19.5s
MNK *i* LRM MLR 11 51 13.5
comp=N,724nm,20.6s
MNK *i* LRM MLR 11 51 13.5
comp=Z,1µm,20.1s
**AKASG Malin Array Be 110.65 42** PKiKP **PKiKP** **11 04 59.1 -0.1**
comp=Z,0.3nm,0.3s,baz=266,slow=2.8,SNR=2.2
**ISP Isparta 110.91 55** IAMs_20 IAMs_20 11 54 21.0
comp=Z,1µm,22.0s
**CSS Mathiatis 112.93 59** IAMs_20 IAMs_20 11 58 16.1
comp=Z,691nm,20.0s
**BRTR Keskin Array B 113.47 53** PKiKP **PKiKP** **11 05 05.7 +0.5**
comp=Z,2.8nm,1.0s,baz=227,slow=3.2,SNR=5.1
BRTR PP **PP** **11 05 58.5 +1.5**
comp=Z,2.6nm,0.9s,baz=248,slow=6.5,SNR=4.2
**BILL Bilibino 116.31 339** *i* PKiKP **PKiKP** **11 05 16.5 +6.9**
BILL *i* 11 06 14.8
BILL pmax pmax
comp=Z,2.0nm,1.0s
BILL MLR MLR
comp=Z,522nm,20.0s
**SOC Sochi 117.98 49** *i* PKiKP **PKPdf** **11 05 11.4 -2.1**
SOC *e* 11 06 24.4
SOC *e*PPP PPP 11 08 54.2
SOC *e* 11 12 03.3
SOC *e*PS **PKKPdf** **11 16 02.4 -1.1**
SOC *e*SS SS 11 22 36.5 -4.0
SOC *e*SSS SSS 11 27 02.3
SOC pmax pmax
comp=Z,11nm,0.7s
**VRH Novokhopyorsk 118.49 40** *e*PKiKP **PKPdf** **11 05 12.0 -2.3**
VRH pmax pmax
comp=Z,7.0nm,1.0s
**KIV Kislovodsk 120.09 48** *i* PKiKP **PKPdf** **11 05 17.7 0.0**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**SHA1 Shidzhatmaz 120.09 49** *i* PKiKP **PKPdf** **11 05 17.2 -0.7**
**KBZ Khabaz 120.27 49** PKP **PKiKP** **11 05 18.8 +0.8**
comp=Z,7.9nm,0.9s,baz=233,slow=1.8,SNR=18
**KBZ Khabaz 120.27 49c** *i* PKiKP **PKiKP** **11 05 19.1 +1.1**
**NCK Nalchik 120.80 49** *i* PKiKP **PKPdf** **11 05 18.9 -0.1**
**ZEI Tsey 121.10 50** *i* PKiKP **PKPdf** **11 05 20.1 +0.2**
ZEI pmax pmax
comp=Z,7.0nm,1.1s
**STKA Stephens Creek 121.27 215** PKP **PKiKP** **11 05 21.0 +0.5**
comp=Z,1.4nm,0.6s,baz=63,slow=1.4,SNR=4.9
**STKA Stephens Creek 121.27 215** PKiKP **PKiKP** **11 05 21.0 +0.5**
**BELG Belogornoye 121.83 38** PKP **PKPdf** **11 05 20.7 +0.1**
comp=Z,10nm,0.8s,baz=26,slow=2.9,SNR=4.0
**BELG Belogornoye 121.83 38** *i* PKiKP **PKiKP** **11 05 21.0 +0.2**
**GNI Garni 121.98 53** PKP **PKiKP** **11 05 22.8 +1.0**
comp=Z,6.6nm,0.7s,baz=163,slow=3.2,SNR=4.9
**GNI Garni 121.98 53** *i* PKiKP **PKPdf** **11 05 21.8 +0.2**
**GNI Garni 121.98 53** **PKPdf** **11 05 20.0 -1.6**
**H11N3 WAKE ISLAND Hyl 122.72 283** T T 13 19 36.2
baz=99,slow=74,SNR=72
**H11N2 WAKE ISLAND Hyl 122.73 283** T T 13 19 38.4
baz=99,slow=74,SNR=128
**H11N1 WAKE ISLAND Hyl 122.74 283** T T 13 19 38.1
baz=99,slow=74,SNR=146
**H11S2 WAKE ISLAND Hyl 122.75 282** T T 13 19 38.7
baz=99
**H11S1 WAKE ISLAND Hyl 122.76 282** T T 13 19 37.6
baz=99,slow=74
**H11S3 WAKE ISLAND Hyl 122.77 282** T T 13 19 35.9
baz=99,slow=74
**TIXI Tiksi 123.29 352** PKP **PKPdf** **11 05 22.3 -0.6**
comp=Z,1.7nm,0.8s,baz=269,slow=23,SNR=6.0
**TIXI Tiksi 123.29 352** *i* PKiKP **PKPdf** **11 05 20.7 -2.2**
**TIXI Tiksi 123.29 352** **PKPdf** **11 05 22.2 -0.8**
TIXI IAMs_20 IAMs_20 12 03 24.0
comp=Z,829nm,20.0s
**MAK Makhachkala 123.70 49** *e*P **Pdif** **11 01 48.7 -8.7**
MAK *e*SS SS 11 23 52.0 -1.8
MAK pmax pmax
comp=Z,170nm,1.7s
**SEY Seymchan 123.81 337** PKP **PKPdf** **11 05 24.3 +0.1**
comp=Z,3.8nm,0.8s,baz=95,slow=2.4,SNR=18
**NRIK Noril'sk 125.88 8** *i* PKiKP **PKPdf** **11 05 28.0 0.0**
**ARU Arti 126.31 31** PKP **PKiKP** **11 05 29.8 +0.2**
comp=Z,1.4nm,0.4s,baz=48,slow=0.5,SNR=6.2
**ARU Arti 126.31 31** *i* PKiKP **PKPdf** **11 05 29.1 0.0**
ARU 11 07 25.6
ARU 11 12 40.3
ARU SS SS 11 24 22.3 -3.0
ARU MLR MLR
comp=Z,1µm,24.0s
**ARU Arti 126.31 31** **PKiKP** **11 05 30.0 +0.4**
**MA2 Magadan 126.34 334** *i* PKiKP **PKPdf** **11 05 28.1 -1.0**
**MA2 Magadan 126.34 334** IAMs_20 IAMs_20 12 07 03.8
comp=Z,725nm,21.0s
**CTA Charters Tower 126.61 229** PKP **PKiKP** **11 05 32.0 +0.7**
comp=Z,3.8nm,0.9s,baz=161,slow=1.3,SNR=6.7
**CTAO Charters Tower 126.61 229** PKiKP **PKPdf** **11 05 31.0 +0.1**
**CTAO Charters Tower 126.61 229** PKPdf **PKPdf** **11 05 31.0 +0.1**
**AKTO Aktyubinsk 128.61 38** PKP **PKiKP** **11 05 34.3 -0.1**
comp=Z,6.2nm,0.8s,baz=302,slow=2.9,SNR=14
**ABKAR Akbulak array 130.23 39** PKPdf **PKiKP** **11 05 38.7 +1.0**
**YAK Yakutsk 131.66 346** PKP **PKPdf** **11 05 39.8 +0.6**
comp=Z,9.2nm,0.5s,baz=276,slow=1.2,SNR=5.0
YAK SKPbc **SKPab** **11 09 04.1 +1.0**
comp=Z,4.2nm,0.4s,baz=187,slow=3.4,SNR=8.0
**YAK Yakutsk 131.66 346** *e*PKiKP **PKPdf** **11 05 39.2 +0.1**
YAK pmax pmax
comp=Z,24nm,1.1s
YAK pmax pmax
comp=E,4.0nm,1.3s
YAK pmax pmax
comp=N,4.0nm,1.3s
**YAK Yakutsk 131.66 346** IAMs_20 IAMs_20 12 07 47.1
comp=Z,630nm,21.0s
**AS31 Alice Springs 131.91 215** PKPdf **PKPdf** **11 05 40.9 -0.1**
**ASAR Alice Springs 131.91 215** PKP **PKPdf** **11 05 41.1 +0.2**
comp=Z,2.8nm,0.8s,baz=131,slow=2.0,SNR=25
ASAR SKPbc **SKPbc** **11 09 02.7 -2.1**
comp=Z,7.6nm,1.1s,baz=140,slow=4.1,SNR=12
**ASAR Alice Springs 131.91 215** PKPdf **PKPdf** **11 05 41.0 +0.1**
**BRVK Borovoye 133.83 30** *i* PKiKP **PKPdf** **11 05 42.2 -1.3**
BRVK MLR MLR
comp=Z,850nm,18.0s
**BRVK Borovoye 133.83 30** PKPdf **PKPdf** **11 05 43.9 +0.3**
**WR0 Warramunga Arr 134.46 218** PKPdf **PKPdf** **11 05 45.6 -0.1**
**WRA Warramunga Arr 134.59 218** PKP **PKPdf** **11 05 46.0 0.0**
comp=Z,2.1nm,0.9s,baz=107,slow=3.1,SNR=4.7
WRA SKPbc **SKPbc** **11 09 12.8 -1.1**
comp=Z,9.7nm,1.2s,baz=138,slow=3.1,SNR=11
**WRA Warramunga Arr 134.59 218** PKPdf **PKPdf** **11 05 45.9 -0.1**
**WRAB Tennant Creek 134.59 218** *i* PKiKP **PKPdf** **11 05 45.4 -0.6**
**BRZS Berezniki 136.92 32** *e*PKiKP **PKPdf** **11 05 47.6 -1.8**
baz=32
**ZALV Zalesovo Beam 139.01 19** PKP **PKPdf** **11 05 51.3 -1.8**
comp=Z,14nm,1.0s,baz=294,slow=4.7,SNR=5.3
**KURK Kurchatov 139.22 27** *i* PKiKP **PKPdf** **11 05 52.9 -0.7**
**KKAR Karatay Array 139.55 42** PKiKP **PKPdf** **11 05 55.0 +0.5**
**KKAR Karatay Array 139.55 42** PKPdf **PKPdf** **11 05 55.0 +0.5**
**IUG Iuzhnay 139.71 43** *e*PKiKP **PKPdf** **11 05 52.7 -2.2**
**IUG Iuzhnay 139.71 43** *e*PKP **PKPdf** **11 05 52.8 -2.2**
baz=43
**SEM Semipalatinsk 140.15 26** *e*PKiKP **PKPdf** **11 05 53.1 -2.5**
**SEM Semipalatinsk 140.15 26** *e*PKP **PKPdf** **11 05 53.1 -2.5**
baz=26
**KLR Kul'dur 141.43 333** PKhKP PKPpre 11 05 51.8
comp=Z,1.8nm,0.7s,baz=32,slow=6.5,SNR=5.2
KLR PKP **PKPdf** **11 05 58.0 +0.4**
comp=Z,5.3nm,1.0s,baz=355,slow=5.3,SNR=8.4
**KLR Kul'dur 141.43 333** *i* PKiKP **PKPdf** **11 05 56.9 -0.8**
KLR MLR MLR
comp=Z,484nm,23.0s
**SGDS Sogindy 141.91 39** *e*PKP **PKPdf** **11 05 57.0 -1.8**
baz=38
**AAK Ala-Archa 142.29 40** PKhKP PKPpre 11 05 56.9
comp=Z,2.0nm,0.7s,baz=273,slow=8.9,SNR=7.3
**AAK Ala-Archa 142.29 40** *i* PKiKP **PKPdf** **11 05 56.4 -3.2**
**AAK Ala-Archa 142.29 40** PKPdf **PKPdf** **11 05 57.4 -2.3**
**CHKK Chushkaly 143.04 36** *e*PKP PKPbc 11 05 57.5 -0.1
baz=36
**TDK Taldyqorghan 143.09 34** *e*PKiKP PKPbc 11 05 57.7 0.0
**TDK Taldyqorghan 143.09 34** *e*PKP PKPbc 11 05 57.7 0.0
baz=34
**AAA Alma-Ata 143.40 37⇑** *e*PKiKP PKPbc 11 05 59.5 +0.9
**AAA Alma-Ata 143.40 37** *e*PKP PKPbc 11 05 59.5 +0.9
baz=37
**DGZ Jazzator, Alta 143.47 21** *i* PKiKP PKPbc 11 05 58.8 +0.1
**MDOK Medeo 143.50 37** *e*PKiKP PKPbc 11 05 59.1 0.0
**MDOK Medeo 143.50 37** *e*PKP PKPbc 11 05 59.2 +0.1
baz=37
**TNSS Tian-Shan 143.52 37** *e*PKP PKPbc 11 05 59.9 +0.5
baz=37
**MAKZ Makanchi 143.60 29** PKiKP PKPbc 11 05 59.4 +0.4
MAKZ MLR MLR
comp=Z,1µm,21.0s
**MAKZ Makanchi 143.60 29** PKPdf PKPbc 11 05 59.4 +0.3
**MK31 Makanchi Array 143.75 28** PKiKP PKPbc 11 05 59.7 +0.2
**MK31 Makanchi Array 143.75 28** PKPbc 11 05 59.6 +0.2
**MKAR Makanchi Array 143.75 28** PKP PKPbc 11 06 00.3 +0.8
comp=Z,2.8nm,0.8s,baz=336,slow=2.7,SNR=28
MKAR SKPbc **SKiKP** **11 09 40.1 +0.7**
comp=Z,2.0nm,1.0s,baz=285,slow=2.2,SNR=3.1
**MKAR Makanchi Array 143.75 28** PKiKP PKPbc 11 06 00.6 +1.1
**MKAR Makanchi Array 143.75 28** PKPdf PKPbc 11 06 00.6 +1.1
**KPKS Kokpek 144.25 36** *e*PKiKP **PKPab** **11 06 00.5 -0.3**
**KPKS Kokpek 144.25 36** *e*PKP **PKPab** **11 06 00.5 -0.3**
baz=35
**ZHN Zhinishke 144.29 36** *e*PKiKP **PKPab** **11 06 01.0 -0.1**
**ZHN Zhinishke 144.29 36** *e*PKP **PKPab** **11 06 01.0 -0.1**
baz=36
**IRK Irkutsk 144.31 2** *e*PKiKP PKPbc 11 06 01.3 +0.3
IRK pmax pmax
comp=Z,112nm,2.8s
**SATY Saty 144.35 36** *e*PKiKP **PKPab** **11 06 00.6 -0.7**
**SATY Saty 144.35 36** *e*PKP **PKPab** **11 06 00.6 -0.7**
baz=36
**ZSN Zaisan 144.37 25** *e*PKiKP **PKPab** **11 06 00.5 -0.5**
**ZSN Zaisan 144.37 25** *e*PKP **PKPab** **11 06 00.5 -0.5**
baz=25
**UZB Uzynbulak 144.64 36** *e*PKiKP **PKPab** **11 06 02.0 -0.3**
**UZB Uzynbulak 144.64 36** *e*PKP **PKPab** **11 06 02.1 -0.3**
baz=36
**MOY Mondy 144.66 6** *e*PKiKP PKPbc 11 06 02.9 +0.7
MOY pmax pmax
comp=Z,109nm,2.4s
**KSH Kashi 144.92 43** ⇑PKP **PKPdf** **11 06 05.0 +0.7**
KSH PP **PP** **11 09 27.0 +5.0**
KSH PKS **PKSdf** **11 09 39.4 -0.5**
KSH AMB AMB
comp=Z,420nm,8.9s
KSH LR LR
comp=Z,950nm,21.3s
KSH LR LR
comp=Z,1µm,18.9s
KSH LR LR
comp=Z,2µm,19.2s
**USA0B Ussuriysk Arra 144.97 327** PKiKP **PKPab** **11 06 02.8 -0.5**
**USA0B Ussuriysk Arra 144.97 327** **PKPab** **11 06 02.8 -0.5**
**USRK Ussuriysk Ar. 144.97 327** PKP PKPbc 11 06 03.7 +0.4
comp=Z,24nm,1.0s,baz=48,slow=2.8,SNR=26
**MJAR Matsushiro Arr 145.53 312** PKPbc **PKPdf** **11 06 05.3 0.0**
comp=Z,33nm,1.0s,baz=84,slow=1.3,SNR=25
**MJAR Matsushiro Arr 145.53 312** PKPdf **PKPdf** **11 06 04.3 -1.0**
**MAJO Matsushiro 145.53 312** PKiKP **PKPdf** **11 06 04.7 -0.6**
**MAJO Matsushiro 145.53 312** PKPdf **PKPdf** **11 06 04.7 -0.6**
**MAT Matsushiro 145.53 312** PKP **PKPdf** **11 06 04.4 -0.9**
**MJB9 Matsu-Tunnel 145.53 312** **PKPdf** **11 06 05.4 +0.1**
**HIA Hailar 145.59 345** PKiKP **PKPdf** **11 06 04.4 -0.6**
**HIA Hailar 145.59 345** **PKPdf** **11 06 04.4 -0.6**
**HIA Hailar 145.59 345** IAMs_20 IAMs_20 12 14 52.3
comp=Z,714nm,22.0s
**VLA Vladivostok 145.77 326** *i* PKiKP **PKPdf** **11 06 04.1 -1.3**
**MDJ Mudanjiang 145.87 330** **PKPdf** **11 06 05.0 -0.6**
**MDJ Mudanjiang 145.87 330** PKPbc **PKPdf** **11 06 01.3 -4.3**
**BNX BinXian 146.00 333** ⇓PKPbc **PKPdf** **11 06 06.3 +0.5**
**ZAK Zakamensk 146.11 4** *e*PKP2 **PKPbc** **11 06 06.8 -0.1**
ZAK pmax pmax
comp=Z,86nm,1.5s
**CN2 Changchun 148.39 333** *e*PKPbc **PKPdf** **11 06 09.6 -0.2**
CN2 *e*PP **PP** **11 09 45.3 +3.7**
CN2 SKS **SKSdf** **11 13 16.6 +0.6**
CN2 SKKS **SKKSac** **11 16 33.4 +1.9**
CN2 *e*SS **SS** **11 28 50.5 +3.3**
CN2 AMB AMB
comp=Z,230nm,6.5s
CN2 LR LR
comp=Z,370nm,18.0s
CN2 LR LR
comp=Z,510nm,18.0s
CN2 LR LR
comp=Z,560nm,19.0s
**WMQ Urumqi 148.46 26** *e*PKPbc **PKPdf** **11 06 10.8 +0.7**
WMQ PP **PP** **11 09 45.1 +2.9**
WMQ AMB AMB
comp=Z,290nm,4.5s
WMQ LR LR
comp=Z,640nm,19.9s
WMQ LR LR
comp=Z,760nm,16.3s
WMQ LR LR
comp=Z,890nm,19.9s
**BATI Baumata 148.47 214** PKPbc **PKiKP** **11 06 15.8 -0.2**
comp=Z,15nm,0.5s,baz=16,slow=6.5,SNR=5.3
**SOEI Soe 148.52 215** PKPdf **PKPdf** **11 06 09.2 -1.9**
**ULN Ulaanbaatar 148.73 359** *i* PKiKP **PKPdf** **11 06 09.8 -0.7**
**SONM Songino Array 148.76 0** PKP **PKPdf** **11 06 11.1 +0.6**
comp=Z,20nm,0.8s,baz=18,slow=2.9,SNR=20
SONM PKPbc **PKPbc** **11 06 15.1 +0.7**
comp=Z,21nm,0.8s,baz=328,slow=1.6,SNR=23
**SIJI Sorong 150.05 237** PKPbc **PKiKP** **11 06 19.7 +0.4**
comp=Z,10nm,0.6s,baz=62,slow=5.2,SNR=5.4
**NDI New Delhi 150.49 61** *e*P **PKPdf** **11 06 15.5 +1.8**
**SNY Shenyang 150.79 333** ⇓PKPbc **PKiKP** **11 06 20.0 +0.1**
SNY PP PP 11 10 04.3 +8.8
**KLRI Killari 151.45 82** *e*PKPbc **PKPdf** **11 06 15.7 +0.2**
**XLT XiLinHaoTe 151.50 345** *i* PKPbc **PKPbc** **11 06 20.8 -0.2**
XLT PKPab **sPKPbc** **11 06 36.3 +1.8**
XLT PP PP 11 10 09.5 +10
**KSRS Korea Array 151.83 322** PKP **PKPdf** **11 06 15.2 -0.1**
comp=Z,3.8nm,1.0s,baz=85,slow=2.6,SNR=7.1
KSRS PKPbc **PKiKP** **11 06 23.3 +1.1**
comp=Z,18nm,1.0s,baz=22,slow=1.4,SNR=19
**URV Uravakonda 151.85 89** *e*PKPbc **PKPdf** **11 06 17.8 +1.6**
**KSAR Wonju Array Be 151.86 322** PKiKP **PKPdf** **11 06 16.2 +0.7**
**KSAR Wonju Array Be 151.86 322** PKPdf **PKPdf** **11 06 16.2 +0.7**
**SRSP Sriramsagar 153.11 81** *e*PKPbc **PKPdf** **11 06 18.8 +0.9**
**HYBB Hyderabad (bro 153.29 84** *e*PKPbc **PKPdf** **11 06 18.5 +0.4**
**RCLA Racherla 153.54 88** *e*PKPbc **PKPdf** **11 06 19.4 +0.9**
**SRLM Srisailam 153.54 87** *e*PKPbc **PKPdf** **11 06 19.3 +0.7**
**CUPL Choutuppal 153.64 84** *e*PKPbc **PKPdf** **11 06 19.6 +0.9**
**SKHT Srikalahasti 154.03 92** *e*PKPbc **PKPdf** **11 06 20.5 +1.3**
**ADKI Addanki 154.55 88** *e*PKPbc **PKPdf** **11 06 21.9 +2.0**
**KAPI Kappang 154.90 213** IAMs_20 IAMs_20 12 11 56.9
comp=Z,417nm,20.0s
**BJT Baijiatuau 155.10 342** IAMs_20 IAMs_20 12 28 35.2
comp=Z,499nm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MYLAV | **Mylavaram** | **155.25** | **86** | *e*PKPdf | **PKPdf** | **11 06 13.9** | **-7.0** |
| **HHC** | **Hu-ho-hao-te** | **155.35** | **351** | *e*PKP | **PKPdf** | **11 06 21.8** | **+1.3** |
| HHC | | | | PP | **PP** | **11 10 19.3** | **-1.8** |
| HHC | | | | SS | SS | 11 30 03.4 | 0.0 |
| HHC | | | | AMB | AMB | | |
| | comp=Z,240nm,11.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,700nm,18.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,340nm,18.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,1μm,19.6s | | | | | | |
| **BTO** | **Baotou** | **155.79** | **353** | *e*PKP | **PKPdf** | **11 06 21.3** | **+0.2** |
| **GTA** | **Gaotai** | **156.45** | **13** | ⇑PKP | **PKPdf** | **11 06 23.0** | **+0.9** |
| GTA | | | | PKPab | **PKPab** | **11 06 50.8** | **+0.3** |
| GTA | | | | PP | **PP** | **11 10 30.1** | **+2.8** |
| GTA | | | | SS | SS | 11 30 18.3 | +2.8 |
| GTA | | | | AMB | AMB | | |
| | comp=Z,180nm,6.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,360nm,20.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,410nm,20.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,830nm,18.9s | | | | | | |
| **LEM** | **Lembang** | **156.79** | **183** | PKP | **PKPdf** | **11 06 22.0** | **-1.3** |
| | comp=Z,9.8nm,0.3s,baz=332,slow=19,SNR=1.8 | | | | | | |
| **LEM** | **Lembang** | **156.79** | **183** | PKIKP | **PKPdf** | **11 06 22.0** | **-1.3** |
| **GOMU** | **GeErMu** | **157.82** | **26** | PKP | **PKPdf** | **11 06 25.1** | **+0.9** |
| GOMU | | | | sPKP | | 11 06 31.8 | |
| GOMU | | | | SKS | **SKSdf** | **11 13 30.8** | **+2.5** |
| GOMU | | | | SS | **SS** | **11 30 35.6** | **+4.4** |
| GOMU | | | | AMB | AMB | | |
| | comp=Z,230nm,4.1s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,870nm,16.8s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,340nm,16.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,950nm,17.6s | | | | | | |
| **HNS** | **HongShan** | **157.96** | **342** | ⇓PKP | **PKPdf** | **11 06 23.9** | **+0.1** |
| HNS | | | | PP | **PP** | **11 10 42.5** | **+7.0** |
| HNS | | | | LR | LR | | |
| | comp=Z,390nm,19.6s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,770nm,21.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,760nm,19.5s | | | | | | |
| **CHLP** | **Challavanipeta** | **158.54** | **81** | *e*PKPdf | **PKPdf** | **11 06 17.6** | **-7.4** |
| **TOLI2** | **Tolitoli** | **159.19** | **224** | IAMs_20 | IAMs_20 | 12 12 45.7 | |
| | comp=Z,407nm,19.0s | | | | | | |
| **LZH** | **Lanzhou** | **160.36** | **6** | PKP | **PKPdf** | **11 06 26.8** | **-0.1** |
| LZH | | | | PKPab | **PKPab** | **11 07 07.8** | **+0.3** |
| LZH | | | | PP | **PP** | **11 10 47.1** | **-1.5** |
| LZH | | | | SS | SS | 11 30 56.0 | -0.9 |
| LZH | | | | AMB | AMB | | |
| | comp=Z,280nm,4.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,510nm,19.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,650nm,19.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,990nm,18.4s | | | | | | |
| **LSA** | **Lhasa** | **160.77** | **44** | PKP | **PKPdf** | **11 06 29.6** | **+1.6** |
| **NJ2** | **Nanjing** | **160.87** | **326** | *e*PKP | **PKPdf** | **11 06 28.1** | **+0.8** |
| **LYN** | **LuoYang** | **161.25** | **344** | ⇓PKP | **PKPdf** | **11 06 29.0** | **+1.3** |
| LYN | | | | PKPab | **PKPab** | **11 07 10.8** | **-0.4** |
| LYN | | | | SS | SS | 11 31 03.8 | -2.2 |
| LYN | | | | AMB | AMB | | |
| | comp=Z,180nm,7.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,700nm,22.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,720nm,21.6s | | | | | | |
| **XAN** | **Xi'an** | **162.41** | **353** | PKP | **PKPdf** | **11 06 29.8** | **+0.8** |
| XAN | | | | PKPab | **PKPab** | **11 07 16.6** | **+0.2** |
| XAN | | | | PP | **PP** | **11 11 00.1** | **+0.7** |
| XAN | | | | SKKS | | 11 17 44.5 | |
| XAN | | | | LR | LR | | |
| | comp=Z,780nm,21.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,470nm,19.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,19.1s | | | | | | |
| **CD2** | **Chengdu** | **165.45** | **9** | PKP | **PKPdf** | **11 06 32.8** | **+0.9** |
| CD2 | | | | PP | **PP** | **11 11 16.1** | **+0.7** |
| CD2 | | | | SKKS | | 11 18 05.5 | |
| CD2 | | | | SS | SS | 11 31 55.1 | +5.7 |
| CD2 | | | | AMB | AMB | | |
| | comp=Z,310nm,11.6s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,90nm,20.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,780nm,19.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,640nm,20.2s | | | | | | |
| **PZH** | **PanZhiHua** | **169.13** | **23** | PKP | **PKPdf** | **11 06 34.8** | **0.0** |
| PZH | | | | PKPab | **PKPab** | **11 07 45.9** | **-0.4** |
| PZH | | | | PP | **PP** | **11 11 33.3** | **-1.4** |
| PZH | | | | SKKS | | 11 18 20.4 | |
| PZH | | | | AMB | AMB | | |
| | comp=Z,200nm,6.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,19.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,20.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,20.1s | | | | | | |
| **GYA** | **Guiyang** | **170.10** | **359** | ⇓PKP | **PKPdf** | **11 06 36.3** | **+1.0** |
| GYA | | | | PKPab | **PKPab** | **11 07 52.4** | **+1.9** |
| GYA | | | | PP | **PP** | **11 11 37.5** | **-1.7** |
| GYA | | | | AMB | AMB | | |
| | comp=Z,350nm,12.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,720nm,20.5s | | | | | | |
| **KMI** | **Kunming** | **170.75** | **22** | PKP | **PKPdf** | **11 06 37.0** | **+1.1** |
| KMI | | | | sPKP | | 11 06 41.9 | |
| **CHTO** | **Chiang Mai** | **172.47** | **71** | PKIKP | **PKPdf** | **11 06 37.4** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **172.56** | **74** | PKP | **PKPdf** | **11 06 36.2** | **-0.4** |
| | comp=Z,3.6nm,1.1s,baz=281,slow=1.8,SNR=15 | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **11 08 00.2** | **-1.7** |
| | comp=Z,24nm,1.3s,baz=281,slow=6.0,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **172.56** | **74** | PKPdf | **PKPdf** | **11 06 35.8** | **-0.8** |
| CMAR | | | | PKPab | **PKPab** | **11 08 02.3** | **+0.4** |
| **QIZ** | **Qiongzhong** | **175.92** | **308** | PKP | **PKPdf** | **11 06 37.3** | **-0.4** |
| QIZ | | | | PP | **PP** | **11 12 09.0** | **-0.1** |
| QIZ | | | | SS | SS | 11 33 37.6 | +2.3 |
| QIZ | | | | LR | LR | | |
| | comp=Z,630nm,17.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,630nm,17.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,690nm,22.2s | | | | | | |

*IDC **16** 10:55:11.3±2.5,54°.72N×83°.73E,h0km,mb1 2.5/1, mb1mx1.9/63,mbtmp2.5/1,ML2.3/2 Error ellipse: s-maj=20.2km s-min=10.9km az=169.0*

*NNC **16** 10:55:11.7±5.2,53°.11N×85°.73E,h0km,mb2.9,mpv2.2, Error ellipse: s-maj=45.7km s-min=16.1km az=92.0, Suspected Mining explosion.*

**ISC 16 10:55:11.1±2.8,53°.17N±0°.07×85°.9E±0°.2,h10km,n8, σ0°.81/10,6C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.03** | **320** | *i* | | 11 00 29.3 | |
| | baz=320,slow=335,SNR=3.2 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.03** | **320** | ⇑P | **Pg** | **10 55 30.5** | **-0.3** |
| | 0.4nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sb** | **10 55 44.9** | **+0.4** |
| | 1.7nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.03** | **320** | Pg | **Pg** | **10 55 30.3** | **-0.6** |
| | 3.3nm,0.3s,baz=322,slow=19,SNR=28 | | | | | | |
| ZALV | | | | Lg | Lg | 10 55 44.8 | |
| | 6.4nm,0.3s,baz=323,slow=29,SNR=27 | | | | | | |
| **KURK** | **Kurchatov** | **5.14** | **244** | ⇑Pn | **Pn** | **10 56 29.7** | **+1.6** |
| | 0.8nm,0.7s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **10 57 27.8** | **+0.3** |
| | 0.5nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 57 52.0 | |
| | 1.8nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.24** | **244** | Pn | **Pn** | **10 56 30.0** | **+0.6** |
| | 0.1nm,0.3s,baz=39,slow=13,SNR=3.0 | | | | | | |
| KURBB | | | | Sn | **Sn** | **10 57 29.2** | **-0.7** |
| | 0.0nm,0.3s,baz=44,slow=27,SNR=2.0 | | | | | | |
| KURBB | | | | Lg | Lg | 10 57 54.3 | |
| | 0.1nm,0.3s,baz=37,slow=29,SNR=1.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.24** | **244** | ⇑Sn | **Sn** | **10 57 29.2** | **-0.7** |
| | 1.0nm,0.5s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 10 57 54.0 | |
| | 2.3nm,0.5s | | | | | | |
| **KUR17** | **Kurchatov Arra** | **5.27** | **244** | ⇓Pn | **Pn** | **10 56 29.8** | **0.0** |
| | 0.4nm,0.9s,baz=38,slow=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.80** | **202** | Pn | **Pb** | **10 57 09.0** | **-0.3** |
| | 0.1nm,0.3s,baz=10,slow=13,SNR=4.9 | | | | | | |
| MKAR | | | | Lg | Lg | 10 59 27.3 | |
| | 0.1nm,0.3s,baz=12,slow=30,SNR=2.0 | | | | | | |

**VIE 16 10:59:05.2±0.7,48°.77N×10°.20E,h0km,mb2.3/1,ml2.1/5, Error ellipse: s-maj=4.6km s-min=3.0km az=25.0 24 km WSW of Noerdlingen Suspected Mining explosion., Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAVA** | **Damuels** | **1.50** | **188** | *e*Pg | Pb | 10 59 35.0 | +1.1 |
| | 2.4nm,0.2s | | | | | | |
| DAVA | | | | *e*Sg | Sn | 10 59 55.5 | +1.8 |
| | 5.1nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **1.55** | **156** | *e*Pg | Pg | 10 59 35.4 | +0.6 |
| | 0.7nm,0.1s | | | | | | |
| MOTA | | | | *e*Sg | Sn | 10 59 56.2 | +1.2 |
| | 4.8nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **1.71** | **147** | *e*Pg | Pb | 10 59 37.0 | -0.4 |
| | 0.8nm,0.1s | | | | | | |
| WATA | | | | *e*Sg | Sg | 11 00 02.4 | +2.4 |
| | 3.1nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **1.78** | **168** | *e*Pn | Pn | 10 59 37.3 | -0.1 |
| | 0.3nm,0.1s | | | | | | |
| FETA | | | | *e*Sg | Sg | 11 00 03.9 | +1.5 |
| | 0.6nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **1.79** | **147** | *e*Pg | Pg | 10 59 39.7 | +0.3 |
| | 0.6nm,0.2s | | | | | | |
| WTTA | | | | *e*Sg | Sg | 11 00 05.0 | +2.4 |
| | 4.4nm,0.3s | | | | | | |

*IDC **16** 11:02:05.2±1.9,59°.61N×153°.40W,h107km±24km,mb3.5/2, mb1 3.6/6,mb1mx3.0/51,mbtmp3.8/6, Error ellipse: s-maj=28.5km s-min=18.6km az=112.0*

*ANF **16** 11:02:05.2±0.2,59°.66N×153°.30W,h110km±2km,ML3.8/47, Error ellipse: s-maj=1.7km s-min=1.6km az=99.0*

*NEIC **16** 11:02:05.3±0.8,59°.68N±0°.03×153°.37W±0°.07, h114km±5km,Error ellipse: s-maj=5.4km s-min=4.8km az=120.0*

*AEIC **16** 11:02:06±1.0,59°.67N±0°.03×153°.33W±0°.07,h109km±4km, ML3.4,ML3.7/104(NEIC),Error ellipse: s-maj=5.3km s-min=3.7km az=120.0*

**ISC 16 11:02:05.4±0.9,59°.69N±0°.03×153°.28W±0°.04, h116km±6km,n259,σ0°.71/254,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.04** | **144** | | **Pn** | **11 02 21.1** | **-0.2** |
| **P19K** | **Oil Pt** | **0.04** | **144** | | **Pn** | **11 02 21.0** | **-0.3** |
| P19K | | | | | **Sn** | **11 02 32.7** | **-0.5** |
| **AUL** | **Augustine Lava** | **0.32** | **194** | | **Pn** | **11 02 21.8** | **-0.1** |
| AUL | | | | | **Sn** | **11 02 33.7** | **-0.5** |
| **AU22** | **Augustine Moun** | **0.32** | **187** | | **Pn** | **11 02 21.7** | **-0.2** |
| AU22 | | | | | **Sn** | **11 02 33.6** | **-0.6** |
| **AUH** | **Augustine H** | **0.34** | **194** | | **Pn** | **11 02 21.9** | **-0.1** |
| **AGU** | **Augustine-Summ** | **0.34** | **193** | | **Pn** | **11 02 21.8** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.34** | **191** | | **Pn** | **11 02 21.9** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.52** | **40** | | **Pn** | **11 02 23.1** | **0.0** |
| O20K | | | | | **Sn** | **11 02 35.8** | **-0.6** |
| **O20K** | **Slope Mountain** | **0.52** | **40** | P | **Pn** | **11 02 23.1** | **0.0** |
| | baz=221,SNR=21 | | | | | | |
| O20K | | | | S | **Sn** | **11 02 35.7** | **-0.6** |
| | baz=221 | | | | | | |
| **O19K** | **Port Alsworth** | **0.73** | **315** | | **Pn** | **11 02 23.9** | **-0.6** |
| O19K | | | | | **Sn** | **11 02 38.1** | **-0.8** |
| **O19K** | **Port Alsworth** | **0.73** | **315** | P | **Pn** | **11 02 24.2** | **-0.3** |
| | baz=137,SNR=278 | | | | | | |
| O19K | | | | S | **Sn** | **11 02 38.2** | **-0.8** |
| | baz=137 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.78** | **19** | | **Pn** | **11 02 25.0** | **-0.1** |
| RED | | | | | **Sn** | **11 02 39.5** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | | **Pn** | **11 02 24.7** | **-0.4** |
| Q19K | | | | | **Sn** | **11 02 39.0** | **-0.8** |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | IAML | | 11 02 44.5 | |
| | comp=N,1μm,0.8s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.78** | **194** | P | **Pn** | **11 02 24.7** | **-0.4** |
| | baz=12,SNR=20 | | | | | | |
| Q19K | | | | S | **Sn** | **11 02 39.0** | **-0.8** |
| | baz=12 | | | | | | |
| **RSO** | **Redoubt South** | **0.82** | **19** | | **Pn** | **11 02 25.2** | **-0.4** |
| **HOM** | **Homer** | **0.83** | **91** | | **Pn** | **11 02 25.8** | **+0.3** |
| HOM | | | | | **Sn** | **11 02 40.9** | **+0.4** |
| **HOM** | **Homer** | **0.83** | **91** | IAML | | 11 02 42.1 | |
| | comp=N,1μm,0.7s | | | | | | |
| HOM | | | | IAML | | 11 02 43.4 | |
| | comp=E,2μm,0.4s | | | | | | |
| **HOM** | **Homer** | **0.83** | **91** | P | **Pn** | **11 02 25.8** | **+0.3** |
| | baz=272,SNR=18 | | | | | | |
| HOM | | | | S | **Sn** | **11 02 40.7** | **+0.2** |
| | baz=272 | | | | | | |
| **RDWB** | **Redoubt West** | **0.83** | **15** | | **Pn** | **11 02 25.5** | **-0.1** |
| **NCT** | **North Crescent** | **0.90** | **11** | | **Pn** | **11 02 26.1** | **-0.1** |
| NCT | | | | | **Sn** | **11 02 41.2** | **-0.6** |
| **RDJH** | **Redoubt Jeurge** | **0.94** | **15** | | **Pn** | **11 02 26.6** | **0.0** |
| **DFR** | **Drift River** | **0.95** | **18** | | **Pn** | **11 02 26.7** | **0.0** |
| DFR | | | | | **Sn** | **11 02 42.6** | **-0.2** |
| **O18K** | **Koktuh Hills** | **0.99** | **281** | | **Pn** | **11 02 26.1** | **-0.8** |
| O18K | | | | | **Sn** | **11 02 41.8** | **-1.4** |
| **O18K** | **Koktuh Hills** | **0.99** | **281** | P | **Pn** | **11 02 26.3** | **-0.6** |
| | baz=100,SNR=80 | | | | | | |
| O18K | | | | S | **Sn** | **11 02 41.8** | **-1.4** |
| | baz=100 | | | | | | |
| **RDT** | **Redoubt** | **0.99** | **26** | | **Pn** | **11 02 27.1** | **+0.1** |
| **P18K** | **Big Mountain,** | **1.03** | **254** | | **Pn** | **11 02 26.5** | **-1.0** |
| **P18K** | **Big Mountain,** | **1.03** | **254** | P | **Pn** | **11 02 26.5** | **-1.0** |
| | baz=73 | | | | | | |
| P18K | | | | S | **Sn** | **11 02 42.2** | **-1.9** |
| | baz=73 | | | | | | |
| **CNPM** | **China Poot** | **1.05** | **98** | | **Pn** | **11 02 27.5** | **-0.1** |
| **CNPM** | **China Poot** | **1.05** | **98** | IAML | | 11 02 44.7 | |
| | comp=N,843nm,0.4s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.22** | **85** | | **Pn** | **11 02 28.9** | **-0.4** |
| **N19K** | **Bonanza Creek** | **1.28** | **333** | | **Pn** | **11 02 29.8** | **-0.3** |
| **N19K** | **Bonanza Creek** | **1.28** | **333** | P | **Pn** | **11 02 30.0** | **-0.1** |
| | baz=153 | | | | | | |
| N19K | | | | S | **Sn** | **11 02 47.7** | **-1.1** |
| | baz=153 | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.29** | **86** | | **Pn** | **11 02 29.9** | **-0.3** |
| **BRSE** | **Bradley Lake S** | **1.29** | **86** | P | **Pn** | **11 02 29.8** | **-0.3** |
| | baz=266,SNR=16 | | | | | | |
| BRSE | | | | S | **Sn** | **11 02 47.8** | **-1.1** |
| | baz=268 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | | **Pn** | **11 02 34.7** | **+2.0** |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | IAML | | 11 02 59.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| CAPN | | | | IAML | | 11 03 00.4 | |
| | comp=N,1μm,0.5s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.52** | **43** | P | **Pn** | **11 02 32.0** | **-0.7** |
| | baz=226 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.61** | **19** | | **Pn** | **11 02 34.2** | **+0.3** |
| **SPCR** | **Spurr Chakacha** | **1.61** | **19** | P | **Pn** | **11 02 34.2** | **+0.3** |
| | baz=200,SNR=27 | | | | | | |
| SPCR | | | | S | **Sn** | **11 02 55.3** | **-0.3** |
| | baz=200 | | | | | | |
| **SPU** | **Mount Spurr** | **1.62** | **22** | | **Pn** | **11 02 34.4** | **+0.4** |
| **SPCN** | **Chakachatna No** | **1.64** | **19** | | **Pn** | **11 02 34.7** | **+0.5** |
| **SPBG** | **Spurr Blockage** | **1.64** | **16** | | **Pn** | **11 02 34.9** | **+0.6** |
| **SPNN** | **North Nagishla** | **1.71** | **9** | | **Pn** | **11 02 35.6** | **+0.4** |
| **SPCG** | **Spurr Capps Gl** | **1.73** | **21** | | **Pn** | **11 02 35.8** | **+0.4** |
| **SLKM** | **Skilak Lake** | **1.74** | **60** | | **Pn** | **11 02 35.6** | **+0.2** |
| **KABU** | **Katmai Buttres** | **1.76** | **217** | | **Pn** | **11 02 35.7** | **0.0** |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | P | **Pn** | **11 02 36.7** | **-1.2** |
| | comp=N,24nm,0.3s,baz=348,slow=12,SNR=514 | | | | | | |
| KDAK | | | | S | **Sn** | **11 03 00.6** | **-2.1** |
| | comp=N,23nm,0.3s,baz=345,slow=14,SNR=7.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | IAML | | 11 03 08.1 | |
| | comp=N,246nm,0.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.94** | **169** | P | **Pn** | **11 02 36.8** | **-1.1** |
| | baz=349 | | | | | | |
| **O22K** | **Cooper Landing** | **1.95** | **64** | | **Pn** | **11 02 38.3** | **+0.3** |
| **O22K** | **Cooper Landing** | **1.95** | **64** | P | **Pn** | **11 02 38.3** | **+0.3** |
| | baz=247,SNR=40 | | | | | | |
| **STLK** | **Strandline Lak** | **1.95** | **21** | | **Pn** | **11 02 38.5** | **+0.5** |
| **SEW** | **Seward** | **1.98** | **76** | | **Pn** | **11 02 38.2** | **0.0** |
| **SEW** | **Seward** | **1.98** | **76** | P | **Pn** | **11 02 38.3** | **0.0** |
| | baz=259,SNR=8.7 | | | | | | |
| SEW | | | | S | **Sn** | **11 03 02.3** | **-1.1** |
| | baz=259 | | | | | | |
| **FIS** | **Fire Island** | **2.11** | **45** | | **Pn** | **11 02 41.0** | **+1.1** |
| **FIS** | **Fire Island** | **2.11** | **45** | IAML | | 11 03 11.7 | |
| | comp=E,506nm,0.7s | | | | | | |
| FIS | | | | IAML | | 11 03 16.3 | |
| | comp=N,617nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.25** | **50** | | **Pn** | **11 02 41.9** | **+0.1** |
| **RC01** | **Rabbit Creek A** | **2.25** | **50** | P | **Pn** | **11 02 41.9** | **+0.1** |
| | baz=233,SNR=59 | | | | | | |
| **M19K** | **Big River Lodg** | **2.29** | **347** | | **Pn** | **11 02 42.3** | **0.0** |
| **M19K** | **Big River Lodg** | **2.29** | **347** | P | **Pn** | **11 02 42.3** | **0.0** |
| | baz=167,SNR=105 | | | | | | |
| **PLK1** | **Peulik 1** | **2.56** | **224** | | **Pn** | **11 02 46.1** | **+0.3** |
| **M22K** | **Willow** | **2.59** | **36** | | **Pn** | **11 02 46.9** | **+0.7** |
| **M22K** | **Willow** | **2.59** | **36** | IAML | | 11 03 23.3 | |
| | comp=N,1μm,0.5s | | | | | | |
| M22K | | | | IAML | | 11 03 23.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| **M22K** | **Willow** | **2.59** | **36** | P | **Pn** | **11 02 46.7** | **+0.6** |
| | baz=218,SNR=20 | | | | | | |
| **L19K** | **White Mountain** | **2.62** | **344** | | **Pn** | **11 02 46.5** | **-0.1** |
| **L19K** | **White Mountain** | **2.62** | **344** | P | **Pn** | **11 02 46.4** | **-0.1** |
| | baz=163,SNR=69 | | | | | | |
| **PWL** | **Port Wells** | **2.73** | **62** | | **Pn** | **11 02 47.4** | **-0.6** |
| **PWL** | **Port Wells** | **2.73** | **62** | P | **Pn** | **11 02 47.3** | **-0.6** |
| | baz=247,SNR=15 | | | | | | |
| PWL | | | | S | **Sn** | **11 03 19.2** | **-1.6** |
| | baz=247 | | | | | | |
| **PMR** | **Palmer** | **2.80** | **45** | | **Pn** | **11 02 48.3** | **-0.6** |
| **PMR** | **Palmer** | **2.80** | **45** | IAML | | 11 03 22.2 | |
| | comp=E,239nm,0.2s | | | | | | |
| PMR | | | | IAML | | 11 03 22.3 | |
| | comp=N,347nm,0.2s | | | | | | |
| **PMR** | **Palmer** | **2.80** | **45** | P | **Pn** | **11 02 48.2** | **-0.6** |
| | baz=229,SNR=17 | | | | | | |
| PMR | | | | S | **Sn** | **11 03 20.3** | **-2.0** |
| | baz=229 | | | | | | |
| **L20K** | **Farewell, AK** | **2.82** | **354** | | **Pn** | **11 02 49.5** | **+0.4** |
| **L20K** | **Farewell, AK** | **2.82** | **354** | P | **Pn** | **11 02 49.6** | **+0.4** |
| | baz=174,SNR=77 | | | | | | |
| **KNK** | **Knik Glacier** | **2.94** | **52** | | **Pn** | **11 02 50.3** | **-0.5** |
| **KNK** | **Knik Glacier** | **2.94** | **52** | P | **Pn** | **11 02 50.3** | **-0.5** |
| | baz=236,SNR=18 | | | | | | |
| KNK | | | | S | **Sn** | **11 03 24.0** | **-1.8** |
| | baz=236 | | | | | | |
| **CUT** | **Chulitna** | **3.10** | **27** | | **Pn** | **11 02 53.3** | **+0.6** |
| **CUT** | **Chulitna** | **3.10** | **27** | P | **Pn** | **11 02 53.0** | **+0.3** |
| | baz=210 | | | | | | |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | | **Pn** | **11 02 52.5** | **-1.3** |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | IAML | | 11 03 28.9 | |
| | comp=E,220nm,0.7s | | | | | | |
| SII | | | | IAML | | 11 03 29.5 | |
| | comp=N,262nm,0.7s | | | | | | |
| **SII** | **Sitkinak Islan** | **3.17** | **189** | P | **Pn** | **11 02 52.6** | **-1.3** |
| | baz=7.8 | | | | | | |
| **SML** | **Sawmill** | **3.23** | **47** | | **Pn** | **11 02 54.0** | **-0.6** |
| **SML** | **Sawmill** | **3.23** | **47** | IAML | | 11 03 33.8 | |
| | comp=N,267nm,0.6s | | | | | | |
| SML | | | | IAML | | 11 03 42.7 | |
| | comp=E,231nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **3.23** | **47** | P | **Pn** | **11 02 54.0** | **-0.6** |
| | baz=231 | | | | | | |
| **PPLA** | **Purkeypile** | **3.26** | **9** | | **Pn** | **11 02 56.2** | **+1.1** |
| **PPLA** | **Purkeypile** | **3.26** | **9** | P | **Pn** | **11 02 56.0** | **+0.9** |
| | baz=190,SNR=7.3 | | | | | | |
| **GLI** | **Glacier Island** | **3.31** | **66** | | **Pn** | **11 02 55.0** | **-0.6** |
| **GLI** | **Glacier Island** | **3.31** | **66** | IAML | | 11 03 33.2 | |
| | comp=N,120nm,0.7s | | | | | | |
| GLI | | | | IAML | | 11 03 42.6 | |
| | comp=E,171nm,0.4s | | | | | | |
| **GLI** | **Glacier Island** | **3.31** | **66** | P | **Pn** | **11 02 54.8** | **-0.7** |
| | baz=251 | | | | | | |
| **TT01** | **Tatalina** | **3.49** | **339** | | **Pn** | **11 02 57.6** | **-0.4** |
| **TTA** | **Tatalina** | **3.51** | **339** | | **Pn** | **11 02 58.0** | **-0.3** |
| **TTA** | **Tatalina** | **3.51** | **339** | P | **Pn** | **11 02 58.0** | **-0.3** |
| | baz=157,SNR=58 | | | | | | |
| **Q23K** | **Middleton Isla** | **3.54** | **91** | | **Pn** | **11 02 58.7** | **+0.1** |
| **Q23K** | **Middleton Isla** | **3.54** | **91** | IAML | | 11 03 40.5 | |
| | comp=E,148nm,1.8s | | | | | | |
| Q23K | | | | IAML | | 11 03 42.1 | |
| | comp=N,157nm,1.6s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.54** | **91** | P | **Pn** | **11 02 58.4** | **-0.2** |
| | baz=277 | | | | | | |
| **FID** | **Port Fidalgo** | **3.56** | **70** | | **Pn** | **11 02 57.5** | **-1.4** |
| **FID** | **Port Fidalgo** | **3.56** | **70** | IAML | | 11 03 39.7 | |
| | comp=E,165nm,0.3s | | | | | | |
| FID | | | | IAML | | 11 03 41.5 | |
| | comp=N,201nm,0.4s | | | | | | |
| **JPK** | **Jack Peak** | **3.59** | **65** | | **Pn** | **11 02 59.8** | **+0.4** |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | | **Pn** | **11 02 59.5** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | IAML | | 11 03 42.6 | |
| | comp=N,157nm,0.5s | | | | | | |
| SCM | | | | IAML | | 11 03 43.3 | |
| | comp=E,191nm,0.5s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.63** | **51** | P | **Pn** | **11 02 59.5** | **-0.4** |
| | baz=236 | | | | | | |
| **K20K** | **Telida** | **3.70** | **354** | | **Pn** | **11 03 01.0** | **+0.1** |
| **K20K** | **Telida** | **3.70** | **354** | P | **Pn** | **11 03 00.9** | **+0.1** |
| | baz=174 | | | | | | |
| **CAST** | **Castle Rocks** | **3.79** | **8** | | **Pn** | **11 03 02.8** | **+0.8** |
| **CAST** | **Castle Rocks** | **3.79** | **8** | P | **Pn** | **11 03 02.1** | **+0.1** |
| | baz=190,SNR=35 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.87** | **74** | | **Pn** | **11 03 02.8** | **-0.2** |
| **EYAK** | **Cordova Ski Ar** | **3.87** | **74** | P | **Pn** | **11 03 02.8** | **-0.2** |
| | baz=260 | | | | | | |
| **WAT6** | **Susitna Watana** | **3.96** | **40** | | **Pn** | **11 03 04.2** | **-0.2** |
| **WAT6** | **Susitna Watana** | **3.96** | **40** | P | **Pn** | **11 03 03.9** | **-0.5** |
| | baz=225,SNR=12 | | | | | | |
| **DIV** | **Divide** | **4.00** | **66** | | **Pn** | **11 03 04.5** | **-0.3** |
| **TRF** | **Thorofare Moun** | **4.04** | **19** | | **Pn** | **11 03 05.7** | **+0.2** |
| **TRF** | **Thorofare Moun** | **4.04** | **19** | IAML | | 11 03 52.7 | |
| | comp=E,75nm,0.5s | | | | | | |
| TRF | | | | IAML | | 11 03 55.0 | |
| | comp=N,91nm,0.6s | | | | | | |
| **TRF** | **Thorofare Moun** | **4.04** | **19** | P | **Pn** | **11 03 05.3** | **-0.1** |
| | baz=202 | | | | | | |
| **KTH** | **Kantishna Hill** | **4.04** | **15** | | **Pn** | **11 03 05.7** | **+0.3** |
| **KTH** | **Kantishna Hill** | **4.04** | **15** | IAML | | 11 03 53.9 | |
| | comp=N,69nm,0.7s | | | | | | |
| KTH | | | | IAML | | 11 03 55.1 | |
| | comp=E,70nm,0.5s | | | | | | |
| **KLU** | **Klutina** | **4.06** | **60** | | **Pn** | **11 03 05.0** | **-0.6** |
| **KLU** | **Klutina** | **4.06** | **60** | P | **Pn** | **11 03 05.1** | **-0.6** |
| | baz=247,SNR=56 | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.07** | **199** | | **Pn** | **11 03 04.0** | **-1.7** |
| **CHIR** | **Chirikof Islan** | **4.07** | **199** | IAML | | 11 03 49.8 | |
| | comp=N,77nm,0.6s | | | | | | |
| CHIR | | | | IAML | | 11 04 04.8 | |
| | comp=E,63nm,2.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **4.07** | **199** | P | **Pn** | **11 03 04.1** | **-1.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,65nm,0.4s | | | | | | | |
| **BMRM** | **Bremner River** | **4.50** | **70** | P | | **Pn** | **11 03 11.3** | **-0.2** |
| | baz=257,SNR=21 | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.51** | **54** | | | **Pn** | **11 03 11.9** | **+0.3** |
| **J20K** | **Nowinta River** | **4.52** | **355** | | | **Pn** | **11 03 11.8** | **+0.1** |
| **J20K** | **Nowinta River** | **4.52** | **355** | P | | **Pn** | **11 03 11.9** | **+0.1** |
| | baz=175,SNR=14 | | | | | | | |
| **MCK** | **McKinley** | **4.55** | **25** | | | **Pn** | **11 03 12.8** | **+0.6** |
| **MCK** | **McKinley** | **4.55** | **25** | IAML | | | 11 04 06.4 | |
| | comp=E,41nm,0.4s | | | | | | | |
| MCK | | | | IAML | | | 11 04 06.7 | |
| | comp=N,48nm,0.4s | | | | | | | |
| **MCK** | **McKinley** | **4.55** | **25** | P | | **Pn** | **11 03 12.1** | **-0.2** |
| | baz=209,SNR=9.0 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | | | **Pn** | **11 03 12.5** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | IAML | | | 11 04 05.6 | |
| | comp=N,34nm,0.6s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.56** | **13** | P | | **Pn** | **11 03 12.2** | **-0.1** |
| | baz=195,SNR=9.8 | | | | | | | |
| **HMT** | **Hamilton** | **4.58** | **78** | | | **Pn** | **11 03 12.6** | **+0.1** |
| **HMT** | **Hamilton** | **4.58** | **78** | IAML | | | 11 04 06.3 | |
| | comp=N,94nm,0.4s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | | | **Pn** | **11 03 14.8** | **+0.7** |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | IAML | | | 11 04 10.1 | |
| | comp=E,92nm,0.6s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.69** | **62** | P | | **Pn** | **11 03 13.7** | **-0.4** |
| | baz=250,SNR=71 | | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.71** | **79** | | | **Pn** | **11 03 14.7** | **+0.3** |
| **HARP** | **HAARP** | **4.79** | **52** | | | **Pn** | **11 03 15.5** | **+0.1** |
| **HARP** | **HAARP** | **4.79** | **52** | P | | **Pn** | **11 03 15.3** | **-0.1** |
| | baz=239,SNR=11 | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.81** | **81** | | | **Pn** | **11 03 15.9** | **+0.3** |
| **SUCK** | **Suckling Hills** | **4.81** | **81** | IAML | | | 11 04 28.8 | |
| | comp=N,56nm,1.8s | | | | | | | |
| SUCK | | | | IAML | | | 11 05 49.4 | |
| | comp=E,52nm,2.2s | | | | | | | |
| **BWN** | **Browne** | **4.85** | **20** | | | **Pn** | **11 03 16.6** | **+0.5** |
| **BWN** | **Browne** | **4.85** | **20** | IAML | | | 11 04 41.7 | |
| | comp=N,39nm,0.9s | | | | | | | |
| BWN | | | | IAML | | | 11 04 53.9 | |
| | comp=E,45nm,0.8s | | | | | | | |
| **BERG** | **Berg Lake** | **4.86** | **78** | | | **Pn** | **11 03 16.5** | **+0.2** |
| **GLB** | **Gilahina Butte** | **4.99** | **65** | | | **Pn** | **11 03 17.6** | **-0.6** |
| **GLB** | **Gilahina Butte** | **4.99** | **65** | IAML | | | 11 04 16.1 | |
| | comp=N,76nm,0.8s | | | | | | | |
| GLB | | | | IAML | | | 11 04 16.1 | |
| | comp=E,66nm,0.7s | | | | | | | |
| **PAX** | **Paxson** | **5.00** | **45** | | | **Pn** | **11 03 18.7** | **+0.4** |
| **PAX** | **Paxson** | **5.00** | **45** | P | | **Pn** | **11 03 18.0** | **-0.3** |
| | baz=232,SNR=10 | | | | | | | |
| **GRIN** | **Grindle Hills** | **5.04** | **79** | | | **Pn** | **11 03 19.1** | **+0.3** |
| **KHIT** | **Khitrov Hills** | **5.08** | **77** | | | **Pn** | **11 03 19.3** | **-0.1** |
| **VRDI** | **Verde Repeater** | **5.11** | **68** | | | **Pn** | **11 03 20.1** | **+0.3** |
| **VRDI** | **Verde Repeater** | **5.11** | **68** | IAML | | | 11 04 19.0 | |
| | comp=N,40nm,0.7s | | | | | | | |
| VRDI | | | | IAML | | | 11 04 19.1 | |
| | comp=E,30nm,0.4s | | | | | | | |
| **SNH** | **Sunshine Point** | **5.28** | **80** | | | **Pn** | **11 03 22.4** | **+0.4** |
| **SNH** | **Sunshine Point** | **5.28** | **80** | IAML | | | 11 04 32.4 | |
| | comp=E,55nm,2.4s | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.28** | **77** | | | **Pn** | **11 03 22.1** | **0.0** |
| **NEA2** | **Nenana** | **5.30** | **20** | | | **Pn** | **11 03 21.7** | **-0.5** |
| **NEA2** | **Nenana** | **5.30** | **20** | IAML | | | 11 04 21.4 | |
| | comp=E,16nm,0.5s | | | | | | | |
| NEA2 | | | | IAML | | | 11 04 21.6 | |
| | comp=N,18nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.30** | **20** | P | | **Pn** | **11 03 21.8** | **-0.5** |
| | baz=204,SNR=15 | | | | | | | |
| **GCSA** | **Galena City Sc** | **5.35** | **343** | | | **Pn** | **11 03 22.6** | **-0.2** |
| **GCSA** | **Galena City Sc** | **5.35** | **343** | P | | **Pn** | **11 03 22.6** | **-0.2** |
| | baz=160 | | | | | | | |
| **WRH** | **Wood River Hil** | **5.38** | **25** | | | **Pn** | **11 03 22.9** | **-0.5** |
| **MLY** | **Manley** | **5.49** | **11** | | | **Pn** | **11 03 25.0** | **+0.1** |
| **MLY** | **Manley** | **5.49** | **11** | P | | **Pn** | **11 03 24.5** | **-0.3** |
| | baz=194,SNR=11 | | | | | | | |
| **ISLE** | **Juniper Island** | **5.54** | **76** | | | **Pn** | **11 03 25.9** | **+0.2** |
| **I21K** | **Tanana** | **5.55** | **6** | | | **Pn** | **11 03 25.4** | **0.0** |
| **I21K** | **Tanana** | **5.55** | **6** | P | | **Pn** | **11 03 25.5** | **0.0** |
| | baz=187 | | | | | | | |
| **KIAG** | **Kiagna River** | **5.57** | **72** | | | **Pn** | **11 03 26.5** | **+0.5** |
| **BALM** | **Baldy** | **5.59** | **71** | | | **Pn** | **11 03 26.6** | **+0.3** |
| **HDA** | **Harding Lake** | **5.59** | **29** | | | **Pn** | **11 03 26.7** | **+0.5** |
| **CCB** | **Clear Creek Bu** | **5.60** | **25** | | | **Pn** | **11 03 25.8** | **-0.5** |
| **BAGL** | **Bagley Icefiel** | **5.66** | **77** | | | **Pn** | **11 03 27.6** | **+0.5** |
| **M26K** | **Nabesna, AK** | **5.69** | **57** | | | **Pn** | **11 03 28.8** | **+1.2** |
| **M26K** | **Nabesna, AK** | **5.69** | **57** | P | | **Pn** | **11 03 27.1** | **-0.4** |
| | baz=246 | | | | | | | |
| **RIDG** | **Independent Ri** | **5.71** | **41** | | | **Pn** | **11 03 27.9** | **+0.1** |
| **RIDG** | **Independent Ri** | **5.71** | **41** | P | | **Pn** | **11 03 27.8** | **0.0** |
| | baz=228 | | | | | | | |
| **MESA** | **MESA** | **5.72** | **80** | | | **Pn** | **11 03 28.6** | **+0.4** |
| **MESA** | **MESA** | **5.72** | **80** | P | | **Pn** | **11 03 28.3** | **+0.2** |
| | baz=270,SNR=11 | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **5.74** | **29** | | | **Pn** | **11 03 27.4** | **-0.7** |
| **I23K** | **Minto, Yukon-K** | **5.78** | **17** | | | **Pn** | **11 03 28.8** | **+0.2** |
| **I23K** | **Minto, Yukon-K** | **5.78** | **17** | P | | **Pn** | **11 03 28.6** | **0.0** |
| | baz=200,SNR=10 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.79** | **24** | | | **Pn** | **11 03 28.6** | **-0.2** |
| **TCOL** | **CIGO, UAF Yank** | **5.79** | **24** | P | | **Pn** | **11 03 28.5** | **-0.2** |
| | baz=209,SNR=8.6 | | | | | | | |
| **COLA** | **College** | **5.79** | **24** | | | **Pn** | **11 03 28.4** | **-0.3** |
| **COLA** | **College** | **5.79** | **24** | P | | **Pn** | **11 03 28.6** | **-0.1** |
| | baz=209 | | | | | | | |
| **MDM** | **Murphy Dome** | **5.79** | **22** | | | **Pn** | **11 03 28.6** | **-0.3** |
| **YAH** | **Yahtse** | **5.83** | **78** | | | **Pn** | **11 03 30.3** | **+0.7** |
| **L26K** | **Log Cabin Wild** | **5.83** | **51** | | | **Pn** | **11 03 30.0** | **+0.6** |
| **L26K** | **Log Cabin Wild** | **5.83** | **51** | P | | **Pn** | **11 03 29.6** | **+0.1** |
| | baz=239,SNR=9.1 | | | | | | | |
| **IL31** | | **5.91** | **28** | | | **Pn** | **11 03 30.1** | **-0.3** |
| **ILAR** | **Eielson Array** | **5.91** | **28** | P | | **Pn** | **11 03 30.1** | **-0.3** |
| | comp=N,2.5nm,0.3s,baz=214,slow=14,SNR=119 | | | | | | | |
| ILAR | | | | S | | **Sn** | **11 04 31.6** | **-5.2** |
| | comp=N,2.6nm,0.3s,baz=217,slow=22,SNR=7.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **5.91** | **28** | Pn | | **Pn** | **11 03 29.6** | **-0.9** |
| **BARN** | **Barnard Glacie** | **5.93** | **72** | | | **Pn** | **11 03 31.6** | **+0.7** |
| **H21K** | **Melozitna Rive** | **6.00** | **2** | | | **Pn** | **11 03 32.0** | **+0.4** |
| **H21K** | **Melozitna Rive** | **6.00** | **2** | P | | **Pn** | **11 03 31.8** | **+0.2** |
| | baz=183,SNR=20 | | | | | | | |
| **POKR** | **Poker Plat Res** | **6.09** | **24** | P | | **Pn** | **11 03 32.7** | **-0.1** |
| | baz=209 | | | | | | | |
| **TABL** | **Table Mountain** | **6.13** | **78** | | | **Pn** | **11 03 34.3** | **+0.7** |
| **SCRK** | **Sand Creek** | **6.15** | **42** | | | **Pn** | **11 03 33.3** | **-0.5** |
| **SCRK** | **Sand Creek** | **6.15** | **42** | P | | **Pn** | **11 03 33.2** | **-0.7** |
| | baz=230 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **6.16** | **59** | | | **Pn** | **11 03 34.6** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **6.16** | **59** | P | | **Pn** | **11 03 34.0** | **+0.1** |
| | baz=249 | | | | | | | |
| **J25K** | **Salcha River,** | **6.18** | **33** | | | **Pn** | **11 03 33.7** | **-0.4** |
| **J25K** | **Salcha River,** | **6.18** | **33** | P | | **Pn** | **11 03 33.7** | **-0.4** |
| | baz=221,SNR=11 | | | | | | | |
| **IM03** | | **6.32** | **358** | | | **Pn** | **11 03 36.2** | **+0.2** |
| **IMAR** | **Indian Mountai** | **6.32** | **358** | | | **Pn** | **11 03 36.1** | **+0.1** |
| **H23K** | **Yukon River** | **6.39** | **14** | | | **Pn** | **11 03 36.9** | **-0.1** |
| **H23K** | **Yukon River** | **6.39** | **14** | P | | **Pn** | **11 03 37.0** | **0.0** |
| | baz=198,SNR=7.8 | | | | | | | |
| **YUK2** | **White River** | **6.45** | **66** | | | **Pn** | **11 03 38.4** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.46** | **54** | | | **Pn** | **11 03 38.8** | **+0.8** |
| **L27K** | **Beaver Creek,** | **6.46** | **54** | P | | **Pn** | **11 03 37.5** | **-0.4** |
| | baz=244 | | | | | | | |
| **BC03** | | **6.48** | **54** | | | **Pn** | **11 03 38.0** | **-0.1** |
| **BCAR** | **Beaver Creek A** | **6.48** | **54** | | | **Pn** | **11 03 38.5** | **+0.3** |
| **PCA** | **Pinnacle** | **6.57** | **81** | | | **Pn** | **11 03 40.0** | **+0.5** |
| **BVCY** | **Beaver Creek** | **6.62** | **60** | | | **Pn** | **11 03 40.6** | **+0.5** |
| **BVCY** | **Beaver Creek** | **6.62** | **60** | P | | **Pn** | **11 03 40.4** | **+0.3** |
| | baz=251,SNR=16 | | | | | | | |
| **YUK3** | **Moose Creek** | **6.63** | **66** | | | **Pn** | **11 03 40.9** | **+0.6** |
| **YUK3** | **Moose Creek** | **6.63** | **66** | P | | **Pn** | **11 03 41.0** | **+0.6** |
| | baz=257,SNR=16 | | | | | | | |
| **H24K** | **Noodor Dome** | **6.65** | **20** | | | **Pn** | **11 03 40.8** | **+0.3** |
| **H24K** | **Noodor Dome** | **6.65** | **20** | P | | **Pn** | **11 03 40.2** | **-0.2** |
| | baz=204 | | | | | | | |
| **PRP** | **Porcupine Dome** | **6.85** | **28** | | | **Pn** | **11 03 43.3** | **-0.1** |
| **PRP** | **Porcupine Dome** | **6.85** | **28** | P | | **Pn** | **11 03 43.2** | **-0.1** |
| | baz=215,SNR=6.5 | | | | | | | |
| **PNL** | **Peninsula** | **7.03** | **84** | | | **Pn** | **11 03 45.6** | **-0.1** |
| **PNL** | **Peninsula** | **7.03** | **84** | P | | **Pn** | **11 03 45.6** | **-0.1** |
| | baz=276,SNR=10 | | | | | | | |
| **ANM** | **Nome** | **7.48** | **316** | P | | **Pn** | **11 03 52.0** | **+0.4** |
| | baz=126,SNR=5.6 | | | | | | | |
| **YUK6** | **Outpost Mounta** | **7.51** | **74** | | | **Pn** | **11 03 52.6** | **+0.2** |
| **YUK6** | **Outpost Mounta** | **7.51** | **74** | P | | **Pn** | **11 03 52.6** | **+0.2** |
| | baz=267 | | | | | | | |
| **YUK7** | **Dusty Glacier** | **7.62** | **77** | | | **Pn** | **11 03 54.0** | **+0.3** |
| **EGAK** | **Eagle** | **7.62** | **43** | | | **Pn** | **11 03 52.7** | **-0.8** |
| **EGAK** | **Eagle** | **7.62** | **43** | P | | **Pn** | **11 03 52.9** | **-0.6** |
| | baz=234 | | | | | | | |
| **COLD** | **Coldfoot** | **7.69** | **9** | P | | **Pn** | **11 03 54.2** | **-0.3** |
| | baz=192 | | | | | | | |
| **YUK5** | **Granite Creek** | **7.77** | **73** | | | **Pn** | **11 03 56.3** | **+0.5** |
| **DAWY** | **Dawson** | **7.89** | **50** | P | | **Pn** | **11 03 57.9** | **+0.6** |
| | baz=242 | | | | | | | |
| **HYT** | **Haines Junctio** | **7.93** | **75** | | | **Pn** | **11 03 58.4** | **+0.5** |
| **HYT** | **Haines Junctio** | **7.93** | **75** | P | | **Pn** | **11 03 58.4** | **+0.5** |
| | baz=269 | | | | | | | |
| **M30M** | **Minto, Yukon** | **8.48** | **63** | | | **Pn** | **11 04 05.8** | **+0.6** |
| **WHY** | **Whitehorse** | **9.22** | **76** | | | **Pn** | **11 04 14.7** | **-0.6** |
| **WHY** | **Whitehorse** | **9.22** | **76** | P | | **Pn** | **11 04 15.2** | **-0.2** |
| | baz=272 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **9.52** | **67** | P | | **Pn** | **11 04 19.4** | **+0.1** |
| | baz=263,SNR=6.1 | | | | | | | |
| **P33M** | **Teslin, Yukon** | **10.27** | **78** | P | | **Pn** | **11 04 30.2** | **+0.7** |
| | baz=276 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **11.02** | **65** | P | | **Pn** | **11 04 40.3** | **+0.8** |
| | baz=264 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.02** | **86** | P | | **Pn** | **11 04 55.2** | **+2.4** |
| | comp=N,0.3nm,0.3s,baz=264,slow=11,SNR=16 | | | | | | | |
| **INK** | **Inuvik** | **12.17** | **37** | P | | **Pn** | **11 04 56.6** | **+1.9** |
| | comp=N,0.1nm,0.3s,baz=236,slow=12,SNR=1.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.71** | **65** | P | | **Pn** | **11 06 16.1** | **-0.2** |
| | comp=N,0.4nm,0.3s,baz=276,slow=10.0,SNR=50 | | | | | | | |
| **SCHQ** | **Schefferville** | **43.85** | **56** | P | | **P** | **11 10 00.5** | **+0.8** |
| | comp=N,1.6nm,0.5s,baz=317,slow=7.0,SNR=8.2 | | | | | | | |
| **SONM** | **Songino Array** | **54.86** | **306** | P | | **P** | **11 11 24.2** | **+0.8** |
| | comp=N,0.3nm,0.6s,baz=56,slow=7.4,SNR=0.9 | | | | | | | |

*RSNC* ***16*** *11:10:43.9±1.1,3.77N×76.71W,h48km±7km, ML3.3, Mw3.8, Fault plane solution: NP1:ϕs0.00000°, δ38.00000°, λ-125.00000°.*
*IDC* ***16*** *11:10:49.9±3.9,3.95N×76.08W,h151km±40km, mb3.3/2, mb1 3.5/3, mb1mx3.0/30, mbtmp3.7/3, Error ellipse: s-maj=61.6km s-min=23.7km az=93.0*

**ISC 16 11:10:41.9±0.9,3.76N±0.02×76.75W±0.03,h61km±9km, n40,σ1°70/73,4C-3D,Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **YOTC** | **Yotoco, Valle** | **0.46** | **61** | ⇓*i*P | | **Pn** | **11 10 53.2** | **-0.5** |
| YOTC | | | | *e*S | | **Sn** | **11 11 01.7** | **-0.5** |
| YOTC | | | | *i* | | | 11 11 02.4 | |
| | comp=Z,5μm,0.3s | | | | | | | |
| **MARP** | **Paez Belalcaza** | **1.21** | **139** | *e*P | | **Pn** | **11 11 03.1** | **+0.2** |
| MARP | | | | *e*S | | **Sn** | **11 11 20.2** | **+1.6** |
| MARP | | | | *i* | | | 11 11 24.2 | |
| | comp=Z,170nm,0.3s | | | | | | | |
| **PLMC** | **San Jos del P** | **1.23** | **22** | ⇓*i*P | | **Pn** | **11 11 02.2** | **-0.9** |
| PLMC | | | | *e*S | | **Sn** | **11 11 17.5** | **-1.4** |
| **PIZC** | **Pizarro, Choco** | **1.34** | **333** | *e*P | | **Pn** | **11 11 06.3** | **+1.7** |
| PIZC | | | | *e*S | | **Sn** | **11 11 24.9** | **+3.4** |
| PIZC | | | | *i* | | | 11 11 31.5 | |
| | comp=Z,312nm,0.3s | | | | | | | |
| **PCON** | **Cinco Dias** | **1.46** | **166** | *e*P | | **Pn** | **11 11 08.4** | **+1.7** |
| PCON | | | | *e*S | | **Sn** | **11 11 27.1** | **+1.9** |
| PCON | | | | *i* | | | 11 11 37.1 | |
| | comp=Z,777nm,0.5s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **1.50** | **84** | ⇑*i*P | | **Pn** | **11 11 07.0** | **+0.3** |
| ORTC | | | | *e*S | | **Sn** | **11 11 25.7** | **+0.3** |
| ORTC | | | | *i* | | | 11 11 28.8 | |
| | comp=Z,597nm,0.6s | | | | | | | |
| **ANIL** | **Santa Ana** | **1.52** | **61** | ⇑*i*P | | **Pn** | **11 11 07.7** | **+0.5** |
| ANIL | | | | *e*S | | **Sn** | **11 11 26.6** | **+0.3** |
| **SOTA** | **Rioblanco** | **1.62** | **175** | *e*P | | **Pn** | **11 11 10.2** | **+1.5** |
| SOTA | | | | *e*S | | **Sn** | **11 11 30.9** | **+2.0** |
| SOTA | | | | *i* | | | 11 11 35.3 | |
| | comp=Z,654nm,0.5s | | | | | | | |
| **CIBA1** | **Ibague, SGC** | **1.65** | **66** | *e*P | | **Pn** | **11 11 10.1** | **+1.2** |
| CIBA1 | | | | *e*S | | **Sn** | **11 11 30.1** | **+0.9** |
| **BETC** | **Betania** | **1.69** | **129** | *e*P | | **Pn** | **11 11 09.8** | **+0.6** |
| BETC | | | | *e*S | | **Sn** | **11 11 29.7** | **-0.1** |
| BETC | | | | *i* | | | 11 11 35.8 | |
| | comp=Z,480nm,0.5s | | | | | | | |
| **GARC** | **Garzon, Huila** | **2.00** | **141** | *e*P | | **Pn** | **11 11 14.1** | **+0.4** |
| GARC | | | | *e*S | | **Sn** | **11 11 38.9** | **+1.1** |
| GARC | | | | *i* | | | 11 11 39.2 | |
| | comp=Z,585nm,0.3s | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.00** | **43** | *e*P | | **Pn** | **11 11 15.3** | **+1.4** |
| GUY2C | | | | *e*S | | **Sn** | **11 11 39.6** | **+1.5** |
| GUY2C | | | | *i* | | | 11 11 43.0 | |
| | comp=Z,335nm,0.4s | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.21** | **19** | *e*P | | **Pn** | **11 11 16.5** | **0.0** |
| CBOC | | | | *e*S | | **Sn** | **11 11 42.9** | **0.0** |
| CBOC | | | | *i* | | | 11 11 44.6 | |
| | comp=Z,282nm,0.3s | | | | | | | |
| **FLOC** | **Florencia** | **2.42** | **153** | ⇑*i*P | | **Pn** | **11 11 19.8** | **+0.6** |
| FLOC | | | | *e*S | | **Sn** | **11 11 48.1** | **+0.3** |
| FLOC | | | | *i* | | | 11 11 50.8 | |
| | comp=Z,107nm,0.3s | | | | | | | |
| **SOLC** | **Bahia Solano** | **2.54** | **345** | *e*P | | **Pn** | **11 11 21.4** | **+0.7** |
| SOLC | | | | *i* | | | 11 11 48.3 | |
| | comp=Z,54nm,0.2s | | | | | | | |
| SOLC | | | | *e*S | | **Sn** | **11 11 51.2** | **+0.6** |
| **CCUFI** | **Cufio, Nario** | **2.59** | **193** | *e*P | | **Pn** | **11 11 23.6** | **+1.8** |
| CCUFI | | | | *e*S | | **Sn** | **11 11 54.3** | **+1.9** |
| **GCUF** | **Volcan Galeras** | **2.59** | **193** | *e*P | | **Pn** | **11 11 23.1** | **+1.2** |
| GCUF | | | | *e*S | | **Sn** | **11 11 54.9** | **+2.5** |
| GCUF | | | | *i* | | | 11 12 00.7 | |
| | comp=Z,114nm,0.5s | | | | | | | |
| **NORC** | **Norcasia** | **2.59** | **46** | *e*P | | **Pn** | **11 11 23.0** | **+1.5** |
| NORC | | | | *e*S | | **Sn** | **11 11 52.7** | **+0.8** |
| NORC | | | | *i* | | | 11 12 07.0 | |
| | comp=Z,78nm,0.4s | | | | | | | |
| **ROSC** | **El Rosal** | **2.65** | **66** | P | | **Pn** | **11 11 24.9** | **+2.3** |
| | comp=Z,50nm,0.3s,baz=285,slow=20,SNR=32 | | | | | | | |
| ROSC | | | | S | | **Sn** | **11 11 52.5** | **-1.2** |
| | comp=Z,27nm,0.3s,baz=135,slow=19,SNR=4.9 | | | | | | | |
| **ROSC** | **El Rosal** | **2.65** | **66** | *e*P | | **Pn** | **11 11 24.6** | **+2.1** |
| ROSC | | | | *e*S | | **Sn** | **11 11 54.0** | **+4.0** |
| ROSC | | | | *i* | | | 11 12 00.5 | |
| | comp=Z,94nm,0.5s | | | | | | | |
| **HELC** | **Santa Helena** | **2.70** | **27** | *e*P | | **Pn** | **11 11 24.7** | **+1.4** |
| HELC | | | | *e*S | | **Sn** | **11 11 56.0** | **+1.0** |
| HELC | | | | *i* | | | 11 12 02.7 | |
| | comp=Z,98nm,0.5s | | | | | | | |
| **CMBC** | **Cumbal** | **3.00** | **201** | *e*P | | Pn | 11 11 29.8 | +2.3 |
| CMBC | | | | *e*S | | **Sn** | **11 12 05.0** | **+2.5** |
| **CHIC** | **Chingaza** | **3.13** | **74** | ⇑*e*P | | **Pn** | **11 11 30.4** | **+1.3** |
| CHIC | | | | *e*S | | **Sn** | **11 12 05.0** | **-0.5** |
| CHIC | | | | *i* | | | 11 12 10.3 | |
| | comp=Z,80nm,0.5s | | | | | | | |
| **TULM** | **Tulcn-Chalpat** | **3.20** | **199** | *e*P | | **Pn** | **11 11 32.4** | **+2.2** |
| TULM | | | | *e*S | | **Sn** | **11 12 09.9** | **+2.6** |
| TULM | | | | *i* | | | 11 12 19.7 | |
| | comp=Z,39nm,0.5s | | | | | | | |
| **SPBC** | **San Pablo de B** | **3.26** | **55** | *e*P | | **Pn** | **11 11 32.9** | **+2.2** |
| **MACC** | **Macarena, Meta** | **3.31** | **119** | *e*P | | **Pn** | **11 11 31.4** | **+0.1** |
| MACC | | | | *e*S | | **Sn** | **11 12 09.9** | **+0.5** |
| MACC | | | | *i* | | | 11 12 42.8 | |
| | comp=Z,149nm,0.5s | | | | | | | |
| **PTAC** | **Punta Ardita,** | **3.53** | **343** | *e*P | | **Pn** | **11 11 33.9** | **-0.4** |
| PTAC | | | | *e*S | | **Sn** | **11 12 13.2** | **-1.6** |
| PTAC | | | | *i* | | | 11 12 17.8 | |
| | comp=Z,52nm,0.1s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **3.58** | **39** | ⇓*e*P | | **Pn** | **11 11 36.6** | **+1.6** |
| PTBC | | | | *e*S | | **Sn** | **11 12 17.3** | **+1.2** |
| PTBC | | | | *i* | | | 11 12 22.6 | |
| | comp=Z,54nm,0.5s | | | | | | | |
| **CUSE** | **Cuicocha Este** | **3.81** | **206** | *e*P | | **Pn** | **11 11 39.7** | **+1.2** |
| CUSE | | | | *e*S | | **Sn** | **11 12 21.1** | **-1.2** |
| **OTAV** | **Otavalo** | **3.89** | **206** | *e*P | | **Pn** | **11 11 39.6** | **-0.1** |
| OTAV | | | | *e*S | | **Sn** | **11 12 21.7** | **-2.7** |
| OTAV | | | | *i* | | | 11 12 27.9 | |
| | comp=Z,48nm,0.6s | | | | | | | |
| **PAC1** | **Pacto, Paraso** | **4.03** | **211** | *e*P | | **Pn** | **11 11 40.0** | **-1.2** |
| PAC1 | | | | *e*S | | **Sn** | **11 12 22.2** | **-5.1** |
| **UREC** | **San Jos de Ur** | **4.14** | **17** | *e*P | | **Pn** | **11 11 44.8** | **+2.1** |
| UREC | | | | *e*S | | **Sn** | **11 12 33.1** | **+3.1** |
| UREC | | | | *i* | | | 11 12 37.8 | |
| | comp=Z,26nm,0.3s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **4.16** | **27** | *e*P | | **Pn** | **11 11 45.3** | **+2.4** |
| ZARC | | | | *e*S | | **Sn** | **11 12 34.7** | **+4.4** |
| ZARC | | | | *i* | | | 11 12 36.2 | |
| | comp=Z,40nm,0.6s | | | | | | | |
| **RUSC** | **La Rusia** | **4.22** | **60** | *e*P | | **Pn** | **11 11 45.6** | **+1.4** |
| RUSC | | | | *e*S | | **Sn** | **11 12 35.0** | **+2.5** |
| **PAMC** | **Pamplona, Colo** | **5.37** | **48** | *e*P | | **Pn** | **11 12 01.7** | **+1.7** |
| PAMC | | | | *e*S | | **Sn** | **11 13 01.8** | **+1.0** |
| PAMC | | | | *i* | | | 11 13 17.0 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **SDV** | **Santo Domingo** | **7.92** | **50** | P | | **Pn** | **11 12 34.4** | **-0.3** |
| | comp=Z,1.0nm,0.3s,baz=218,slow=19,SNR=2.4 | | | | | | | |
| SDV | | | | S | | Sn | 11 13 56.5 | -6.5 |
| | comp=Z,0.3nm,0.3s,baz=246,slow=20,SNR=1.1 | | | | | | | |
| **PLCA** | **Paso Flores** | **44.64** | **173** | P | | **P** | **11 18 48.5** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=342,slow=9.0,SNR=4.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.94** | **342** | P | | **P** | **11 21 13.4** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=133,slow=6.0,SNR=7.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **144.40** | **233** | PKPbc | | **PKPab** | **11 30 08.9** | **-1.5** |
| | comp=Z,2.0nm,0.7s,baz=119,slow=3.8,SNR=41 | | | | | | | |
| **WRA** | **Warramunga Arr** | **145.70** | **240** | PKPbc | | **PKPdf** | **11 30 13.1** | **-1.3** |
| | comp=Z,0.8nm,0.7s,baz=113,slow=2.8,SNR=6.4 | | | | | | | |

*INET* ***16*** *11:15:19.8±0.6, 13.36N×90.17W, h21km±9km, MW3.2*
*GCG* ***16*** *11:15:19.4±0.9, 14.61N×91.03W, h159km±8km, MD3.8*
*UCR* ***16*** *11:15:21.4±0.9, 13.37N×90.03W, h34km±2km, ML3.7*
*SNET* ***16*** *11:15:21.5±0.9, 13.37N×90.01W, h34km±2km, ML3.7*

**ISC 16 11:15:20.8±2.0,13.33N±0.09×90.07W±0.05,h34km±3km, n68,σ0°41/77,4D,Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **NUBE** | **Las Nubes** | **0.64** | **26** | ⇓*e*P | | **Pb** | **11 15 33.6** | **-0.2** |
| NUBE | | | | *e*S | | **Sn** | **11 15 42.5** | **-0.2** |
| **NUBE** | **Las Nubes** | **0.64** | **26** | ⇓*e*P | | **Pb** | **11 15 33.6** | **-0.2** |
| NUBE | | | | *e*S | | **Sn** | **11 15 42.5** | **-0.2** |
| **CEVE** | **Cerro Verde** | **0.66** | **41** | ⇓*e*P | | **Pb** | **11 15 34.2** | **0.0** |
| CEVE | | | | *e*S | | **Sn** | **11 15 44.0** | **+0.7** |
| CEVE | | | | IAML | | | 11 15 46.9 | |
| | comp=Z,10μm,0.2s | | | | | | | |
| **CEVE** | **Cerro Verde** | **0.66** | **41** | ⇓*e*P | | **Pb** | **11 15 34.2** | **0.0** |
| CEVE | | | | *e*S | | **Sn** | **11 15 44.0** | **+0.7** |
| CEVE | | | | IAML | | | 11 15 46.9 | |
| | comp=Z,10μm,0.2s | | | | | | | |
| **SBLS** | **San Blas** | **0.67** | **40** | *e*P | | **Pb** | **11 15 34.2** | **-0.1** |
| **SBLS** | **San Blas** | **0.67** | **40** | *e*P | | **Pn** | **11 15 34.2** | **-0.1** |
| **JAYA** | **Jayaque - finc** | **0.68** | **62** | *e*P | | **Pn** | **11 15 34.0** | **-0.3** |
| JAYA | | | | IAML | | | 11 15 45.8 | |
| | comp=Z,6μm,0.2s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.68** | **62** | *e*P | | **Pn** | **11 15 34.0** | **-0.3** |
| JAYA | | | | IAML | | | 11 15 45.8 | |
| | comp=Z,6μm,0.2s | | | | | | | |
| **RTR** | **El Retiro** | **0.70** | **36** | *e*P | | **Pb** | **11 15 34.5** | **-0.2** |
| **RTR** | **El Retiro** | **0.70** | **36** | *e*P | | **Pb** | **11 15 34.5** | **-0.2** |
| **SNJE** | **San Jose** | **0.70** | **40** | *e*P | | **Pb** | **11 15 34.6** | **-0.2** |
| **SNJE** | **San Jose** | **0.70** | **40** | *e*P | | **Pb** | **11 15 34.6** | **-0.2** |
| **LALI** | **Alcalda de L** | **0.74** | **78** | *e*P | | **Pn** | **11 15 34.6** | **-0.4** |
| **LALI** | **Alcalda de L** | **0.74** | **78** | *e*P | | **Pn** | **11 15 34.5** | **-0.4** |
| **LALI** | **Alcalda de L** | **0.74** | **78** | *e*P | | **Pn** | **11 15 34.6** | **-0.4** |
| **SLOZ** | **Alcaldia de Sa** | **0.75** | **22** | *e*P | | **Pn** | **11 15 35.1** | **0.0** |
| SLOZ | | | | *e*S | | **Sb** | **11 15 45.9** | **+0.4** |
| **CEDA** | **San Andres** | **0.81** | **54** | *e*P | | **Pn** | **11 15 35.8** | **-0.1** |
| CEDA | | | | IAML | | | 11 15 54.2 | |
| | comp=Z,7μm,0.4s | | | | | | | |
| **CEDA** | **San Andres** | **0.81** | **54** | *e*P | | **Pn** | **11 15 35.7** | **-0.1** |
| **CEDA** | **San Andres** | **0.81** | **54** | *e*P | | **Pn** | **11 15 35.8** | **-0.1** |
| CEDA | | | | IAML | | | 11 15 54.2 | |
| | comp=Z,7μm,0.4s | | | | | | | |
| **BOQS** | **Boqueron** | **0.87** | **62** | *e*P | | **Pn** | **11 15 36.8** | **0.0** |
| BOQS | | | | *e*S | | **Sb** | **11 15 49.0** | **0.0** |
| **BOQS** | **Boqueron** | **0.87** | **62** | *e*P | | **Pn** | **11 15 36.8** | **0.0** |
| B

| | | | | | | |
|---|---|---|---|---|---|---|
| YATNC | Mamie plateau, | 7.28 | 183 | P | Pn | 11 35 37.5 -0.2 |
| DZM | Mont Dzumac | 7.33 | 186 | P | Pn | 11 35 38.0 -0.4 |
| OUENC | Ouen Island, N | 7.64 | 183 | P | Pn | 11 35 42.7 +0.1 |
| PINNC | Pines Island, | 7.82 | 179 | P | Pn | 11 35 45.5 +0.4 |

*TAP **16** 11:35:27.9, 24°.83N × 121°.94E, h11 km, ML4.0, C*
*JMA **16** 11:35:28.6, 24°.83N × 121°.91E, h26 km, M3.0*
**ISC 16 11:35:27.9±0.8, 24°.82N±0°.02 × 121°.95E±0°.02, h12 km±4 km, n123, σ0.69/190, 25C-1D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EGS** | | **0.03** | **318** | ⇓*i* | P | | **Pg** | **11 35 30.0** | **-0.1** |
| | baz=358 | | | | | | | | |
| EGS | | | | | S | | **Sg** | **11 35 31.7** | **+0.1** |
| | baz=358 | | | | | | | | |
| **NTC** | **Toucheng** | **0.12** | **285** | ⇑*i* | P | | **Pg** | **11 35 31.2** | **+0.3** |
| | baz=294 | | | | | | | | |
| NTC | | | | | S | | **Sg** | **11 35 32.7** | **-0.4** |
| | baz=294 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.19** | **322** | ⇑*i* | P | | **Pg** | **11 35 32.4** | **+0.3** |
| | baz=316 | | | | | | | | |
| TIPB | | | | *i* | S | | **Sg** | **11 35 35.1** | **+0.1** |
| | baz=316 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.19** | **10** | ⇑*i* | P | | **Pg** | **11 35 32.2** | **+0.1** |
| | baz=15 | | | | | | | | |
| TWB1 | | | | | S | | **Sg** | **11 35 34.6** | **-0.3** |
| | baz=15 | | | | | | | | |
| **ILA** | **Ilan** | **0.20** | **253** | *i* | P | | **Pg** | **11 35 32.5** | **+0.3** |
| | baz=249 | | | | | | | | |
| ILA | | | | | S | | **Sb** | **11 35 35.9** | **+0.8** |
| | baz=249 | | | | | | | | |
| **TWC** | **Suao** | **0.23** | **204** | ⇑*i* | P | | **Pg** | **11 35 33.2** | **+0.4** |
| | baz=194 | | | | | | | | |
| TWC | | | | *i* | S | | **Sg** | **11 35 36.1** | **-0.1** |
| | baz=194 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **345** | ⇑*i* | P | | **Pg** | **11 35 34.2** | **+0.5** |
| | baz=352 | | | | | | | | |
| SXI1 | | | | *i* | S | | **Sg** | **11 35 37.7** | **+0.1** |
| | baz=352 | | | | | | | | |
| **TWE** | **Neicheng** | **0.28** | **248** | ⇑*i* | P | | **Pg** | **11 35 34.0** | **+0.3** |
| | baz=236 | | | | | | | | |
| TWE | | | | | S | | **Sg** | **11 35 37.7** | **+0.2** |
| | baz=236 | | | | | | | | |
| **NDS** | **Dongshan** | **0.29** | **229** | ⇑*i* | P | | **Pg** | **11 35 34.2** | **+0.4** |
| | baz=227 | | | | | | | | |
| NDS | | | | | S | | **Sg** | **11 35 38.0** | **+0.2** |
| | baz=227 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.29** | **328** | ⇑*i* | P | | **Pb** | **11 35 34.5** | **-0.6** |
| | baz=323 | | | | | | | | |
| NWF | | | | *i* | S | | **Sb** | **11 35 39.0** | **-0.9** |
| | baz=323 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.29** | **328** | ⇑*i* | P | | **Pb** | **11 35 34.5** | **-0.6** |
| | baz=323 | | | | | | | | |
| WFSB | | | | *i* | S | | **Sb** | **11 35 39.1** | **-0.8** |
| | baz=323 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.34** | **259** | ⇑*i* | P | | **Pg** | **11 35 35.0** | **+0.3** |
| | baz=258 | | | | | | | | |
| FUSB | | | | | S | | **Sg** | **11 35 39.2** | **-0.1** |
| | baz=258 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.36** | **333** | ⇑*i* | P | | **Pb** | **11 35 35.8** | **-0.5** |
| | baz=326 | | | | | | | | |
| TNOU | | | | *i* | S | | **Sg** | **11 35 40.5** | **+0.5** |
| | baz=326 | | | | | | | | |
| **TWA** | **Mucha** | **0.37** | **295** | ⇑*i* | P | | **Pb** | **11 35 35.9** | **-0.6** |
| | baz=294 | | | | | | | | |
| TWA | | | | | S | | **Sg** | **11 35 40.8** | **+0.5** |
| | baz=294 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.40** | **242** | *e*P | | | **Pg** | **11 35 36.2** | **+0.4** |
| | baz=240 | | | | | | | | |
| ENTT | | | | | *e*S | | **Sg** | **11 35 41.1** | **0.0** |
| | baz=240 | | | | | | | | |
| **NHY** | **Taipei** | **0.41** | **302** | *e*P | | | **Pb** | **11 35 37.0** | **-0.1** |
| | baz=301 | | | | | | | | |
| NHY | | | | | *e*S | | **Sb** | **11 35 42.6** | **-0.6** |
| | baz=301 | | | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **203** | ⇑*i* | P | | **Pg** | **11 35 36.3** | **+0.2** |
| | baz=205 | | | | | | | | |
| EWUT | | | | | *e*S | | **Sg** | **11 35 41.9** | **+0.4** |
| | baz=205 | | | | | | | | |
| **NWLT** | **Wulai** | **0.41** | **264** | ⇑*i* | P | | **Pg** | **11 35 36.3** | **+0.2** |
| | baz=262 | | | | | | | | |
| NWLT | | | | | *e*S | | **Sg** | **11 35 41.4** | **-0.2** |
| | baz=262 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.41** | **290** | P | | | **Pb** | **11 35 36.9** | **-0.2** |
| | baz=282 | | | | | | | | |
| NHDH | | | | | S | | **Sb** | **11 35 42.5** | **-0.9** |
| | baz=282 | | | | | | | | |
| **ENA** | **Nanau** | **0.44** | **206** | *e*P | | | **Pg** | **11 35 36.8** | **+0.2** |
| | baz=207 | | | | | | | | |
| ENA | | | | | *e*S | | **Sg** | **11 35 42.7** | **+0.2** |
| | baz=207 | | | | | | | | |
| **TATO** | **Taipei** | **0.45** | **290** | *e*P | | | **Pb** | **11 35 37.5** | **-0.2** |
| | baz=279 | | | | | | | | |
| TATO | | | | | *e*S | | **Sg** | **11 35 43.1** | **+0.3** |
| | baz=279 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.46** | **241** | *i* | P | | **Pg** | **11 35 37.2** | **+0.2** |
| | baz=239 | | | | | | | | |
| NDT | | | | | *e*S | | **Sg** | **11 35 42.7** | **-0.3** |
| | baz=239 | | | | | | | | |
| **TAP** | **Taipei** | **0.46** | **298** | ⇑*i* | P | | **Pb** | **11 35 37.9** | **0.0** |
| | baz=291 | | | | | | | | |
| TAP | | | | | S | | **Sb** | **11 35 43.7** | **-1.0** |
| | baz=291 | | | | | | | | |
| **NWRT** | **Kuosheng** | **0.46** | **325** | *i* | P | | **Pb** | **11 35 37.7** | **-0.2** |
| | baz=326 | | | | | | | | |
| **YM01** | **YM01** | **0.47** | **313** | ⇑*i* | P | | **Pb** | **11 35 38.2** | **0.0** |
| | baz=312 | | | | | | | | |
| YM01 | | | | | S | | **Sg** | **11 35 43.9** | **+0.3** |
| | baz=312 | | | | | | | | |
| **LATG** | **Datong** | **0.48** | **233** | ⇑*i* | P | | **Pg** | **11 35 37.6** | **+0.2** |
| | baz=232 | | | | | | | | |
| LATG | | | | | S | | **Sg** | **11 35 44.0** | **+0.1** |
| | baz=232 | | | | | | | | |
| **YM08** | **YM08** | **0.49** | **318** | ⇑*i* | P | | **Pb** | **11 35 38.1** | **-0.4** |
| | baz=309 | | | | | | | | |
| YM08 | | | | | *e*S | | **Sb** | **11 35 46.2** | **+0.6** |
| | baz=309 | | | | | | | | |
| **BACT** | **New Taipei Cit** | **0.49** | **290** | P | | | **Pb** | **11 35 38.8** | **+0.2** |
| | baz=278 | | | | | | | | |
| BACT | | | | | *e*S | | **Sb** | **11 35 46.5** | **+0.8** |
| | baz=278 | | | | | | | | |
| **ANP** | **Anpu** | **0.53** | **313** | ⇑*i* | P | | **Pb** | **11 35 39.0** | **-0.3** |
| | baz=312 | | | | | | | | |
| ANP | | | | | *e*S | | **Sg** | **11 35 45.6** | **+0.2** |
| | baz=312 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.55** | **254** | ⇑*i* | P | | **Pg** | **11 35 38.7** | **+0.1** |
| | baz=252 | | | | | | | | |
| YHNB | | | | | *e*S | | **Sg** | **11 35 45.7** | **-0.2** |
| | baz=252 | | | | | | | | |
| **EHP** | **Heping Village** | **0.55** | **201** | *e*P | | | **Pb** | **11 35 39.2** | **-0.2** |
| | baz=198 | | | | | | | | |
| EHP | | | | | *e*S | | **Sg** | **11 35 45.8** | **-0.1** |
| | baz=198 | | | | | | | | |
| **TWY** | **Chenhua** | **0.55** | **325** | ⇑*i* | P | | **Pb** | **11 35 39.6** | **+0.1** |
| | baz=314 | | | | | | | | |
| TWY | | | | | *e*S | | **Sb** | **11 35 46.8** | **-0.6** |
| | baz=314 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.56** | **300** | ⇑*i* | P | | **Pb** | **11 35 40.2** | **+0.5** |
| | baz=299 | | | | | | | | |
| TWS1 | | | | | S | | **Sb** | **11 35 47.1** | **-0.4** |
| | baz=299 | | | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **255** | *i* | P | | **Pg** | **11 35 38.8** | **-0.1** |
| | baz=262 | | | | | | | | |
| NSK | | | | | *e*S | | **Sg** | **11 35 45.8** | **-0.5** |
| | baz=262 | | | | | | | | |
| **NSM** | **Shimen** | **0.57** | **325** | *e*P | | | **Pb** | **11 35 40.0** | **+0.2** |
| | baz=317 | | | | | | | | |
| **NTST** | **Danshui** | **0.57** | **307** | ⇑*i* | P | | **Pb** | **11 35 40.4** | **+0.6** |
| | baz=306 | | | | | | | | |
| NTST | | | | | *e*S | | **Sb** | **11 35 47.8** | **-0.1** |
| | baz=306 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.65** | **234** | ⇑*i* | P | | **Pg** | **11 35 40.3** | **-0.3** |
| | baz=232 | | | | | | | | |
| NNS | | | | | *e*S | | **Sg** | **11 35 48.4** | **-0.9** |
| | baz=232 | | | | | | | | |
| **NNSB** | **Datong** | **0.65** | **233** | *e*P | | | **Pg** | **11 35 40.3** | **-0.3** |
| | baz=232 | | | | | | | | |
| NNSB | | | | | *e*S | | **Sg** | **11 35 49.1** | **-0.1** |
| | baz=232 | | | | | | | | |
| **NCU** | **National Centr** | **0.71** | **282** | *e*P | | | **Pn** | **11 35 43.2** | **-0.6** |
| | baz=280 | | | | | | | | |
| NCU | | | | | S | | **Sn** | **11 35 53.2** | **-1.4** |
| | baz=280 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.71** | **282** | *e*P | | | **Pn** | **11 35 43.4** | **-0.4** |
| | baz=280 | | | | | | | | |
| NCUH | | | | | *e*S | | **Sb** | **11 35 52.9** | **+0.9** |
| | baz=280 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.72** | **207** | ⇑*i* | P | | **Pb** | **11 35 42.2** | **-0.3** |
| | baz=205 | | | | | | | | |
| NACB | | | | | S | | **Sg** | **11 35 51.6** | **+0.1** |
| | baz=205 | | | | | | | | |
| **ETL** | **Fush Village** | **0.73** | **204** | *e*P | | | **Pg** | **11 35 42.1** | **+0.1** |
| | baz=203 | | | | | | | | |
| ETL | | | | | *e*S | | **Sg** | **11 35 51.8** | **+0.2** |
| | baz=203 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.75** | **215** | *e*P | | | **Pg** | **11 35 42.5** | **+0.1** |
| | baz=213 | | | | | | | | |
| ETLH | | | | | *e*S | | **Sg** | **11 35 51.9** | **-0.4** |
| | baz=213 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.78** | **256** | *e*P | | | **Pb** | **11 35 43.8** | **+0.3** |
| | baz=255 | | | | | | | | |
| NFF | | | | | *e*S | | **Sg** | **11 35 53.3** | **-0.1** |
| | baz=255 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.81** | **8** | *e*P | | | **Pb** | **11 35 44.1** | **+0.2** |
| | baz=10.0 | | | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **204** | *e*P | | | **Pb** | **11 35 43.9** | **0.0** |
| | baz=202 | | | | | | | | |
| TWD | | | | | *e*S | | **Sg** | **11 35 53.8** | **-0.4** |
| | baz=202 | | | | | | | | |
| **FUSS** | **Fushou** | **0.86** | **228** | *e*P | | | **Pg** | **11 35 44.5** | **-0.2** |
| | baz=222 | | | | | | | | |
| FUSS | | | | | *e*S | | **Sg** | **11 35 55.5** | **-0.5** |
| | baz=222 | | | | | | | | |
| **LIOB** | **Emei** | **0.87** | **258** | *e*P | | | **Pn** | **11 35 45.7** | **-0.3** |
| | baz=257 | | | | | | | | |
| LIOB | | | | | *e*S | | **Sn** | **11 35 59.1** | **+0.5** |
| | baz=257 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.88** | **268** | *e*P | | | **Pn** | **11 35 46.6** | **+0.5** |
| | baz=284 | | | | | | | | |
| SBCB | | | | | *e*S | | **Sn** | **11 35 59.4** | **+0.5** |
| | baz=284 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.89** | **258** | *e*P | | | **Pn** | **11 35 45.6** | **-0.6** |
| | baz=249 | | | | | | | | |
| NSTT | | | | | *e*S | | **Sn** | **11 35 58.6** | **-0.3** |
| | baz=249 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.89** | **269** | *e*P | | | **Pn** | **11 35 46.2** | **-0.1** |
| | baz=285 | | | | | | | | |
| HSN | | | | | *e*S | | **Sn** | **11 35 58.2** | **-0.9** |
| | baz=285 | | | | | | | | |
| **HWA** | **Hwalien** | **0.90** | **201** | *e*P | | | **Pn** | **11 35 46.3** | **-0.1** |
| | baz=198 | | | | | | | | |
| **TWT** | **Tachien** | **0.91** | **231** | *e*P | | | **Pb** | **11 35 46.0** | **+0.3** |
| | baz=230 | | | | | | | | |
| TWT | | | | | *e*S | | **Sg** | **11 35 57.1** | **-0.3** |
| | baz=230 | | | | | | | | |
| **TDCB** | **Techi** | **0.92** | **232** | *e*P | | | **Pg** | **11 35 45.4** | **-0.4** |
| | baz=230 | | | | | | | | |
| TDCB | | | | | *e*S | | **Sg** | **11 35 56.4** | **-1.3** |
| | baz=230 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.92** | **223** | *e*P | | | **Pg** | **11 35 45.4** | **-0.4** |
| | baz=211 | | | | | | | | |
| WHF | | | | | *e*S | | **Sn** | **11 35 59.5** | **-0.9** |
| | baz=211 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.98** | **112** | P | | | **Pg** | **11 35 47.0** | **+0.2** |
| JYNG | | | | | *e*S | | **Sg** | **11 36 00.3** | **+0.8** |
| **YOJ** | **Yonaguni jima** | **1.03** | **110** | P | | | **Pb** | **11 35 47.7** | **0.0** |
| YOJ | | | | | *e*S | | **Sg** | **11 36 01.5** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **1.03** | **110** | *e*P | | | **Pb** | **11 35 46.8** | **-0.8** |
| | baz=112 | | | | | | | | |
| **CHGB** | **Renai** | **1.04** | **223** | *e*P | | | **Pb** | **11 35 47.5** | **-0.5** |
| | baz=214 | | | | | | | | |
| CHGB | | | | | *e*S | | **Sn** | **11 36 03.0** | **-0.1** |
| | baz=214 | | | | | | | | |
| **WHP** | **Taichung City** | **1.07** | **239** | *e*P | | | **Pn** | **11 35 48.7** | **-0.1** |
| | baz=237 | | | | | | | | |
| WHP | | | | | *e*S | | **Sb** | **11 36 01.9** | **-0.4** |
| | baz=237 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.09** | **255** | *e*P | | | **Pg** | **11 35 50.6** | **+1.6** |
| | baz=253 | | | | | | | | |
| NMLH | | | | | *e*S | | **Sn** | **11 36 06.5** | **+2.4** |
| | baz=253 | | | | | | | | |
| **ESL** | **Shilin** | **1.11** | **205** | P | | | **Pb** | **11 35 49.0** | **-0.1** |
| | baz=203 | | | | | | | | |
| ESL | | | | | *e*S | | **Sb** | **11 36 03.0** | **-0.5** |
| | baz=203 | | | | | | | | |
| **WUSB** | **Renai** | **1.12** | **223** | *e*P | | | **Pb** | **11 35 49.0** | **-0.3** |
| | baz=215 | | | | | | | | |
| WUSB | | | | | *e*S | | **Sb** | **11 36 03.8** | **-0.2** |
| | baz=215 | | | | | | | | |
| **NSY** | **Sanyi** | **1.16** | **250** | *e*P | | | **Pg** | **11 35 51.4** | **+1.2** |
| | baz=246 | | | | | | | | |
| NSY | | | | | *e*S | | **Sn** | **11 36 08.7** | **+3.0** |
| | baz=246 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.17** | **246** | *e*P | | | **Pg** | **11 35 51.6** | **+1.1** |
| | baz=244 | | | | | | | | |
| TWQ1 | | | | | *e*S | | **Sn** | **11 36 06.1** | **0.0** |
| | baz=244 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.22** | **231** | *e*P | | | **Pg** | **11 35 51.3** | **0.0** |
| | baz=236 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.28** | **249** | *e*P | | | **Pg** | **11 35 53.0** | **+0.4** |
| | baz=245 | | | | | | | | |
| WDJ | | | | | *e*S | | **Sg** | **11 36 10.4** | **+1.1** |
| | baz=245 | | | | | | | | |
| **VWDT** | **VWDT** | **1.30** | **215** | *e*P | | | **Pb** | **11 35 52.4** | **+0.1** |
| | baz=211 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.34** | **226** | *e*P | | | **Pg** | **11 35 53.5** | **-0.3** |
| | baz=211 | | | | | | | | |
| **TCU** | **Taichung** | **1.34** | **240** | *e*P | | | **Pg** | **11 35 55.2** | **+1.4** |
| | baz=255 | | | | | | | | |
| **TYC** | **Yuchr** | **1.35** | **228** | *e*P | | | **Pg** | **11 35 53.6** | **-0.4** |
| | baz=213 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.38** | **222** | *e*P | | | **Pb** | **11 35 53.4** | **-0.2** |
| | baz=218 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.41** | **200** | *e*P | | | **Pg** | **11 35 54.7** | **-0.4** |
| | baz=211 | | | | | | | | |
| **EHY** | **Hungye** | **1.43** | **204** | *e*P | | | **Pn** | **11 35 53.8** | **+0.1** |
| | baz=200 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.47** | **240** | *e*P | | | **Pg** | **11 35 57.1** | **+1.0** |
| | baz=255 | | | | | | | | |
| **WNT** | **Mingjian** | **1.49** | **231** | *e*P | | | **Pg** | **11 35 56.9** | **+0.3** |
| | baz=217 | | | | | | | | |
| **WJS** | **Zhushan** | **1.50** | **228** | *e*P | | | **Pg** | **11 35 57.1** | **+0.4** |
| | baz=215 | | | | | | | | |
| **YULB** | **Yu-li** | **1.55** | **203** | *e*P | | | **Pb** | **11 35 56.4** | **-0.1** |
| | baz=199 | | | | | | | | |
| **EYUL** | **Yuli** | **1.58** | **202** | *e*P | | | **Pg** | **11 35 57.9** | **-0.4** |
| | baz=207 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.61** | **215** | *e*P | | | **Pb** | **11 35 58.3** | **+0.4** |
| | baz=210 | | | | | | | | |
| **ALS** | **Alishan** | **1.68** | **219** | *e*P | | | **Pg** | **11 35 59.9** | **-0.3** |
| | baz=210 | | | | | | | | |
| ALS | | | | | *e*S | | **Sg** | **11 36 22.2** | **+0.3** |
| | baz=210 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.69** | **224** | *e*P | | | **Pg** | **11 36 00.3** | **0.0** |
| | baz=220 | | | | | | | | |
| CHN5 | | | | | *e*S | | **Sg** | **11 36 23.4** | **+1.2** |
| | baz=220 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.69** | **106** | P | | | **Pn** | **11 35 56.7** | **-0.5** |
| IRIF | | | | | S | | **Sn** | **11 36 18.8** | **0.0** |
| **WRL** | **Guolierlin Hig** | **1.71** | **238** | *e*P | | | **Pb** | **11 35 58.2** | **-0.9** |
| | baz=250 | | | | | | | | |
| **WDLH** | **Douliu** | **1.72** | **229** | *e*P | | | **Pg** | **11 36 00.5** | **-0.4** |
| | baz=244 | | | | | | | | |
| **FULB** | **Fuli** | **1.73** | **201** | *e*P | | | **Pb** | **11 36 60.0** | **+0.4** |
| | baz=208 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.80** | **197** | *e*P | | | **Pb** | **11 36 01.0** | **+0.2** |
| | baz=178 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.84** | **208** | *e*P | | | **Pb** | **11 36 00.6** | **-0.9** |
| | baz=191 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.85** | **114** | P | | | **Pn** | **11 36 00.1** | **+0.6** |
| HATJ | | | | | *e*S | | **Sn** | **11 36 23.7** | **+0.8** |
| **CHN4** | **Tsaushan** | **1.92** | **221** | *e*P | | | **Pg** | **11 36 04.2** | **-0.6** |
| | baz=217 | | | | | | | | |
| **CHY** | **Chiayi** | **1.92** | **227** | *e*P | | | **Pb** | **11 36 02.8** | **-0.1** |
| | baz=241 | | | | | | | | |
| **EDH** | **Donghe** | **1.94** | **198** | *e*P | | | **Pn** | **11 36 01.6** | **+0.9** |
| | baz=183 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.94** | **219** | *e*P | | | **Pg** | **11 36 04.2** | **-0.9** |
| | baz=215 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.96** | **107** | P | | | **Pn** | **11 36 01.1** | **+0.1** |
| **STYH** | **Taoyuan** | **1.97** | **213** | *e*P | | | **Pb** | **11 36 03.7** | **0.0** |
| | baz=196 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.99** | **218** | *e*P | | | **Pb** | **11 36 04.9** | **+0.8** |
| | baz=214 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.04** | **231** | *e*P | | | **Pn** | **11 36 03.3** | **+1.2** |
| | baz=244 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.05** | **103** | P | | | **Pn** | **11 36 01.6** | **-0.6** |
| JIJ | | | | | *e*S | | **Sn** | **11 36 28.0** | **+0.4** |
| **TWK** | **Hsinying** | **2.05** | **221** | *e*P | | | **Pb** | **11 36 05.7** | **+0.6** |
| | baz=217 | | | | | | | | |
| **SNST** | **Tainan City** | **2.08** | **220** | *e*P | | | **Pb** | **11 36 06.2** | **+0.6** |
| | baz=217 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.09** | **219** | *e*P | | | **Pb** | **11 36 06.1** | **+0.3** |
| | baz=215 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.11** | **227** | *e*P | | | **Pb** | **11 36 04.8** | **-1.3** |
| | baz=240 | | | | | | | | |
| **SGST** | **Jiashian** | **2.14** | **216** | *e*P | | | **Pb** | **11 36 06.1** | **-0.5** |
| | baz=197 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.16** | **96** | P | | | **Pn** | **11 36 04.6** | **+0.9** |
| JISG | | | | | *e*S | | **Sn** | **11 36 29.1** | **-1.3** |
| **SLGT** | **Liugui** | **2.18** | **214** | *e*P | | | **Pb** | **11 36 06.7** | **-0.6** |
| | baz=210 | | | | | | | | |
| **LDUT** | **Ludao** | **2.19** | **192** | *e*P | | | **Pn** | **11 36 04.4** | **+0.3** |
| | baz=187 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.24** | **307** | *e*P | | | **Pn** | **11 36 03.7** | **-1.2** |
| | baz=304 | | | | | | | | |
| **CHN3** | **Shinhua** | **2.27** | **220** | *e*P | | | **Pb** | **11 36 08.6** | **-0.1** |
| | baz=215 | | | | | | | | |
| **SSD** | **Sandimen** | **2.40** | **211** | *e*P | | | **Pb** | **11 36 10.8** | **-0.1** |
| | baz=207 | | | | | | | | |
| **JTJ** | **Tarama** | **2.51** | **94** | P | | | **Pn** | **11 36 10.2** | **+1.7** |
| **MASBT** | **Mashibuluo** | **2.51** | **209** | *e*P | | | **Pb** | **11 36 11.9** | **-1.0** |
| | baz=205 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.54** | **240** | *e*P | | | **Pn** | **11 36 08.1** | **-0.8** |
| | baz=235 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.58** | **275** | *e*P | | | **Pn** | **11 36 09.6** | **+0.1** |
| | baz=271 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.62** | **311** | *e*P | | | **Pn** | **11 36 09.3** | **-0.7** |
| | baz=310 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.63** | **323** | *e*P | | | **Pn** | **11 36 09.4** | **-0.8** |
| | baz=323 | | | | | | | | |
| **EAST** | **Anshuo** | **2.63** | **203** | *e*P | | | **Pn** | **11 36 11.8** | **+1.5** |
| | baz=187 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.73** | **207** | *e*P | | | **Pb** | **11 36 15.0** | **-1.7** |
| | baz=203 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.80** | **188** | *e*P | | | **Pn** | **11 36 12.6** | **0.0** |
| | baz=176 | | | | | | | | |
| **SLIU** | **Shizi** | **2.80** | **202** | *e*P | | | **Pn** | **11 36 14.8** | **+2.3** |
| | baz=187 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.83** | **187** | *e*P | | | **Pn** | **11 36 12.0** | **-0.9** |
| | baz=177 | | | | | | | | |
| **KNM** | **Kinmen** | **3.23** | **264** | *e*P | | | **Pn** | **11 36 20.6** | **+2.1** |
| | baz=258 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.26** | **264** | *e*P | | | **Pn** | **11 36 18.3** | **-0.5** |
| | baz=259 | | | | | | | | |
| **AXDP** | **Jialang** | **3.62** | **272** | *e*P | | | **Pn** | **11 36 23.7** | **-0.1** |
| | baz=268 | | | | | | | | |

*IDC **16** 11:40:49.5±6.5, 6°.59N × 76°.15W, h104 km±70 km, mb3.0/1, mb1 3.4/2, mb1mx3.0/34, mbtmp3.5/2, ML2.5/1, Error ellipse: s-maj=105.6km s-min=38.8km az=76.0*
*RSNC **16** 11:40:50.6±1.1, 6°.79N × 73°.14W, h140 km±4 km, ML2.9*
**ISC 16 11:40:49.3±0.9, 6°.86N±0°.03 × 73°.11W±0°.04, h149 km±6 km, n28, σ1.9 37/53, 2C-2D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.28** | **196** | ⇑*i* | P | | **Pn** | **11 41 09.8** | **-0.2** |
| BARC | | | | | *e*S | | **Sn** | **11 41 24.0** | **-1.6** |
| BARC | | | | | *i* | | | 11 41 25.6 | |
| | comp=Z,285nm,0.2s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.62** | **40** | ⇓*i* | P | | **Pn** | **11 41 12.6** | **+0.9** |
| PAMC | | | | | *e*S | | **Sn** | **11 41 29.5** | **+0.7** |
| PAMC | | | | | *i* | | | 11 41 32.0 | |
| | comp=Z,205nm,0.5s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.65** | **292** | ⇑*i* | P | | **Pn** | **11 41 11.7** | **+0.3** |
| BRRC | | | | | *e*S | | **Sn** | **11 41 27.9** | **-0.2** |
| BRRC | | | | | *i* | | | 11 41 30.3 | |
| | comp=Z,135nm,0.2s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.96** | **179** | *e*P | | | **Pn** | **11 41 13.7** | **-0.5** |
| RUSC | | | | | *e*S | | **Sn** | **11 41 32.0** | **-1.2** |
| RUSC | | | | | *i* | | | 11 41 33.0 | |
| | comp=Z,135nm,0.2s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **108** | ⇓*i* | P | | **Pn** | **11 41 18.1** | **+0.6** |
| TAMC | | | | | *e*S | | **Sn** | **11 41 39.3** | **+0.3** |
| TAMC | | | | | *i* | | | 11 41 40.2 | |
| | comp=Z,53nm,0.6s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.38** | **257** | *e*P | | | **Pn** | **11 41 16.4** | **-1.2** |
| PTBC | | | | | *e*S | | **Sn** | **11 41 37.2** | **-1.8** |
| PTBC | | | | | *i* | | | 11 41 40.0 | |
| | comp=Z,131nm,0.2s | | | | | | | | |
| **OCAC** | **Ocana** | **1.38** | **351** | *e*P | | | **Pn** | **11 41 18.6** | **+0.9** |
| OCAC | | | | | *e*S | | **Sn** | **11 41 39.9** | **+0.3** |
| OCAC | | | | | *i* | | | 11 41 45.4 | |
| | comp=Z,139nm,0.4s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.54** | **219** | *e*P | | | **Pn** | **11 41 18.7** | **-0.6** |
| SPBC | | | | | *e*S | | **Sn** | **11 41 40.2** | **-2.1** |
| SPBC | | | | | *i* | | | 11 41 45.1 | |
| | comp=Z,95nm,0.4s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **290** | *e*P | | | **Pn** | **11 41 23.0** | **+0.4** |
| ZARC | | | | | *e*S | | **Sn** | **11 41 48.7** | **+0.6** |
| ZARC | | | | | *i* | | | 11 41 53.9 | |
| | comp=Z,110nm,0.5s | | | | | | | | |
| **NORC** | **Norcasia** | **2.18** | **234** | *e*P | | | **Pn** | **11 41 25.7** | **-0.8** |
| NORC | | | | | *e*S | | **Sn** | **11 41 53.9** | **-1.2** |
| NORC | | | | | *i* | | | 11 41 55.7 | |
| | comp=Z,71nm,0.2s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.30** | **196** | *e*P | | | **Pn** | **11 41 27.9** | **-0.5** |
| CHIC | | | | | *e*S | | **Sn** | **11 41 56.2** | **-2.3** |
| CHIC | | | | | *i* | | | 11 42 00.6 | |
| | comp=Z,28nm,0.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.34** | **211** | P | | | **Pn** | **11 41 29.9** | **+1.0** |
| | comp=Z,20nm,0.3s,baz=304,slow=15,SNR=18 | | | | | | | | |
| ROSC | | | | | S | | **Sn** | **11 42 00.3** | **+1.0** |
| | comp=Z,22nm,0.3s,baz=199,slow=23,SNR=13 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.34** | **211** | *e*P | | | **Pn** | **11 41 29.7** | **+0.8** |
| ROSC | | | | | *e*S | | **Sn** | **11 42 00.9** | **+1.6** |
| ROSC | | | | | *i* | | | 11 42 06.0 | |
| | comp=Z,70nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.50** | **255** | *e*P | | | **Pn** | **11 41 31.6** | **+0.9** |
| HELC | | | | | *e*S | | **Sn** | **11 42 01.6** | **-0.9** |
| HELC | | | | | *i* | | | 11 42 08.5 | |
| | comp=Z,56nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.56** | **290** | *e*P | | | **Pn** | **11 41 30.4** | **-0.8** |
| UREC | | | | | *e*S | | **Sn** | **11 42 03.0** | **-0.4** |
| UREC | | | | | *i* | | | 11 42 03.7 | |
| | comp=Z,66nm,0.3s | | | | | | | | |
| **SOCV** | **Socops** | **2.64** | **58** | *e*P | | | **Pn** | **11 41 31.8** | **-0.4** |
| SOCV | | | | | *e*S | | **Sn** | **11 42 03.2** | **-2.0** |
| **GUY2C** | **Guyana, Caldas** | **2.77** | **234** | *e*P | | | **Pn** | **11 41 34.2** | **0.0** |
| GUY2C | | | | | *e*S | | **Sn** | **11 42 08.2** |

*NEIC* ***16*** *12:01:35.7±2.3, 15°.47N±0°.08×104°.79W±0°.08, h0km±1km, mb4.9/301, Md4.8/18(MEX), Error ellipse: s-maj=15.8km s-min=12.1km az=222.0*

*MOS* ***16*** *12:01:36.6±1.2, 15°.45N×104°.86W, h32km, mb5.0/35, Error ellipse: s-maj=14.4km s-min=5.5km az=101.0*

*GCMT* ***16*** *12:01:36.7±0.2, 15°.56N±0°.01×105°.21W±0°.01, h12km, MW5.2/126, Moment Tensor Solution. s73,c99; s126,c214; Duration: 19 Moment tensor: Scale 10^16 Nm; Mrr=2.07±.12; Mθθ 3.30±.12; Mφφ=-1.22±.13; Mrθ 0.92±.31; Mθφ=-7.56±.09; Mφr 3.03±.34; Best double couple: Mw8.66500×10^16 NP1:φ=264.00000°, δ68.00000°, λ=-165.00000°. NP2:φ=169.00000°, δ=76.00000°, λ=-23.00000°. Principal axes: T 9.0400, Plg6.0000°, Azm218.0000°; N -0.7400, Plg63.0000°, Azm320.0000°; P -8.2910, Plg26.0000°, Azm125.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*MEX* ***16*** *12:01:36.8±1.0, 15°.53N×104°.65W, h5km, MD4.8*

**ISC 16 12:01:34.9±0.5, 15°.50N±0°.06×104°.77W±0°.05, h10km, n620, σ1s57/548, mb4.9/148, MS4.7/64, Off coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMIG** | **Aquila** | **3.10** | **26** | | **Pn** | **12 02 22.5** | **-1.4** |
| MMIG | | | | | **Sn** | **12 02 58.9** | **-2.0** |
| **MMIG** | **Aquila** | **3.10** | **26** | *eP* | **Pn** | **12 02 22.5** | **-1.4** |
| MMIG | | | | *eS* | **Sn** | **12 02 58.9** | **-2.0** |
| **ZIIG** | **Zihuatanejo** | **3.80** | **56** | | **Pn** | **12 02 31.9** | **-1.7** |
| ZIIG | | | | | **Sn** | **12 03 14.0** | **-4.4** |
| **ZIIG** | **Zihuatanejo** | **3.80** | **56** | *eP* | **Pn** | **12 02 31.9** | **-1.7** |
| ZIIG | | | | *eS* | **Sn** | **12 03 14.0** | **-4.4** |
| **CAIG** | **El Cayaco** | **4.59** | **70** | | **Pn** | **12 02 43.4** | **-1.1** |
| CAIG | | | | | **Sn** | **12 03 34.4** | **-3.6** |
| **CAIG** | **El Cayaco** | **4.59** | **70** | *eP* | **Pn** | **12 02 43.4** | **-1.1** |
| CAIG | | | | *eS* | **Sn** | **12 03 34.4** | **-3.6** |
| **ARIG** | **Puente Sto Nin** | **5.06** | **56** | | **Pn** | **12 02 49.6** | **-1.4** |
| ARIG | | | | | **Sn** | **12 03 46.0** | **-3.6** |
| **ARIG** | **Puente Sto Nin** | **5.06** | **56** | *eP* | **Pn** | **12 02 49.6** | **-1.4** |
| ARIG | | | | *eS* | **Sn** | **12 03 46.0** | **-3.6** |
| **DAIG** | **Los Arroyos** | **5.15** | **72** | | **Pn** | **12 02 51.1** | **-1.1** |
| DAIG | | | | | **Sn** | **12 03 52.4** | **+0.8** |
| **DAIG** | **Los Arroyos** | **5.15** | **72** | *eP* | **Pn** | **12 02 51.1** | **-1.1** |
| DAIG | | | | *eS* | **Sn** | **12 03 52.4** | **+0.8** |
| **MOIG** | **Morelia** | **5.38** | **39** | Pn | **Pn** | **12 02 57.1** | **+1.5** |
| **MOIG** | **Morelia** | **5.38** | **39** | *eP* | **Pn** | **12 02 52.6** | **-3.0** |
| MOIG | | | | *eS* | **Sn** | **12 03 56.9** | **-0.9** |
| **MEIG** | **Mezcala** | **5.50** | **63** | | **Pn** | **12 02 56.0** | **-1.0** |
| MEIG | | | | | **Sn** | **12 04 00.5** | **+0.1** |
| **MEIG** | **Mezcala** | **5.50** | **63** | *eP* | **Pn** | **12 02 56.0** | **-1.0** |
| MEIG | | | | *eS* | **Sn** | **12 04 00.5** | **+0.1** |
| **CRIG** | **Cruz Grande** | **5.56** | **76** | | **Pn** | **12 02 55.8** | **-2.0** |
| CRIG | | | | | **Sn** | **12 04 00.9** | **-0.9** |
| **CRIG** | **Cruz Grande** | **5.56** | **76** | *eP* | **Pn** | **12 02 55.8** | **-2.0** |
| CRIG | | | | *eS* | **Sn** | **12 04 00.9** | **-0.9** |
| **PLIG** | **Platanillo** | **5.81** | **60** | | **Pn** | **12 03 01.4** | **+0.1** |
| PLIG | | | | | **Sn** | **12 04 04.6** | **-3.4** |
| **PLIG** | **Platanillo** | **5.81** | **60** | *eP* | **Pn** | **12 03 01.4** | **+0.1** |
| PLIG | | | | *eS* | **Sn** | **12 04 04.6** | **-3.4** |
| **ZAIG** | **Zacatecas** | **7.53** | **16** | Pn | **Pn** | **12 03 24.9** | **-0.2** |
| **SLBS** | **Sierra La Lagu** | **9.49** | **330** | Pn | **Pn** | **12 03 54.4** | **+2.5** |
| **CMIG** | **Matias Romero** | **9.63** | **79** | Pn | **Pn** | **12 03 57.7** | **+4.0** |
| | 0.2nm,0.3s,baz=252,slow=20,SNR=3.4 | | | | | | |
| CMIG | | | | LR | LR | 12 07 11.9 | |
| | comp=Z,2μm,18.8s,baz=266,slow=34 | | | | | | |
| **LPIG** | **La Paz** | **10.02** | **330** | Pn | **Pn** | **12 03 59.6** | **+0.6** |
| | 3.3nm,0.3s,baz=15,slow=9.2,SNR=6.8 | | | | | | |
| **HPIG** | | **11.41** | **356** | | **Pn** | **12 04 19.2** | **+0.9** |
| **CCIG** | **Comitan** | **12.18** | **85** | | **Pn** | **12 04 27.8** | **-1.0** |
| **KVTX** | **Kingsville** | **13.59** | **27** | Pn | **Pn** | **12 04 46.9** | **-0.9** |
| **833A** | **Chaparral WMA,** | **13.70** | **20** | Pn | **Pn** | **12 04 51.9** | **+2.5** |
| **833A** | **Chaparral WMA,** | **13.70** | **20** | P | **Pn** | **12 04 53.3** | **+3.9** |
| | baz=203,SNR=26 | | | | | | |
| **TX32** | **Lajitas Array** | **13.81** | **4** | | **Pn** | **12 04 55.3** | **+4.3** |
| **TXAR** | **Lajitas Array** | **13.81** | **4** | Pn | **Pn** | **12 04 54.9** | **+3.9** |
| | 0.2nm,0.3s,baz=187,slow=8.8,SNR=79 | | | | | | |
| TXAR | | | | LR | LR | 12 09 28.6 | |
| | comp=Z,2μm,21.9s,baz=184,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **13.81** | **4** | P | **Pn** | **12 04 54.8** | **+3.8** |
| **TX31** | **Lajitas Ar. Si** | **13.81** | **4** | | **Pn** | **12 04 55.1** | **+4.1** |
| **APG** | **El Apazote** | **13.82** | **90** | Pn | **Pn** | **12 04 55.6** | **+4.4** |
| | 0.1nm,0.3s,baz=298,slow=9.0,SNR=6.0 | | | | | | |
| APG | | | | LR | LR | 12 09 23.2 | |
| | comp=Z,2μm,21.6s,baz=270,slow=33 | | | | | | |
| **735A** | **Kenedy** | **14.77** | **25** | | **Pn** | **12 05 06.5** | **+2.5** |
| **MTO3** | **Montecristo** | **14.93** | **92** | Pn | **Pn** | **12 05 08.2** | **+1.7** |
| **ESQI** | **Esquipulas** | **14.94** | **92** | Pn | **Pn** | **12 05 05.4** | **-1.0** |
| **JCT** | **Junction City** | **15.60** | **16** | P | **Pn** | **12 05 15.4** | **+0.4** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,102nm,1.2s | | | | | | |
| **JCT** | **Junction City** | **15.60** | **16** | Pn | **Pn** | **12 05 15.4** | **+0.4** |
| JCT | | | | IAmb | IAmb | 12 05 30.3 | |
| | comp=Z,102nm,1.1s | | | | | | |
| **JCT** | **Junction City** | **15.60** | **16** | P | **Pn** | **12 05 18.0** | **+3.0** |
| | baz=198,SNR=35 | | | | | | |
| **MNTX** | **Cornudas Mount** | **16.14** | **358** | | **Pn** | **12 05 24.3** | **+2.3** |
| **MNTX** | **Cornudas Mount** | **16.14** | **358** | P | **Pn** | **12 05 24.1** | **+2.2** |
| | baz=178,SNR=28 | | | | | | |
| **319A** | **Douglas** | **16.34** | **346** | | **Pn** | **12 05 26.3** | **+1.7** |
| 319A | | | | IAmb | IAmb | 12 05 43.4 | |
| | comp=Z,111nm,1.4s | | | | | | |
| **435B** | **Jarrell** | **16.58** | **22** | P | **Pn** | **12 05 29.9** | **+2.3** |
| 435B | | | | IAmb | IAmb | 12 05 40.0 | |
| | comp=Z,92nm,1.2s | | | | | | |
| **435B** | **Jarrell** | **16.58** | **22** | P | **P** | **12 05 30.3** | **+0.1** |
| | baz=205 | | | | | | |
| **121A** | **Cookes Peak, D** | **17.18** | **351** | | **Pn** | **12 05 36.4** | **+1.0** |
| **121A** | **Cookes Peak, D** | **17.18** | **351** | P | **P** | **12 05 37.5** | **+0.6** |
| | baz=170 | | | | | | |
| **TUC** | **Tucson** | **17.61** | **343** | P | **Pn** | **12 05 41.9** | **+1.3** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | |
| **TUC** | **Tucson** | **17.61** | **343** | | **Pn** | **12 05 41.9** | **+1.3** |
| **TUC** | **Tucson** | **17.61** | **343** | P | **P** | **12 05 42.3** | **+0.7** |
| | baz=161 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **17.68** | **14** | | **Pn** | **12 05 42.7** | **+1.3** |
| ABTX | | | | IAmb | IAmb | 12 05 52.4 | |
| | comp=Z,116nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **17.68** | **14** | P | **P** | **12 05 43.6** | **+1.3** |
| | baz=197,SNR=32 | | | | | | |
| **WHTX** | **Lake Whitney,** | **17.72** | **21** | | **P** | **12 05 43.9** | **+1.2** |
| WHTX | | | | IAmb | IAmb | 12 05 48.4 | |
| | comp=Z,98nm,1.1s | | | | | | |
| **WHTX** | **Lake Whitney,** | **17.72** | **21** | P | **P** | **12 05 44.3** | **+1.5** |
| | baz=204,SNR=25 | | | | | | |
| **214A** | **Organ Pipe Nat** | **17.95** | **337** | P | **P** | **12 05 46.4** | **+1.1** |
| **214A** | **Organ Pipe Nat** | **17.95** | **337** | P | **Pn** | **12 05 46.0** | **+1.2** |
| | baz=154,SNR=28 | | | | | | |
| **SFX** | **San Felipe** | **18.01** | **331** | P | **Pn** | **12 05 45.3** | **-0.2** |
| **237A** | **Washetta, Mont** | **18.35** | **25** | P | **Pn** | **12 05 50.8** | **+1.2** |
| 237A | | | | IAmb | IAmb | 12 06 00.7 | |
| | comp=Z,139nm,1.1s | | | | | | |
| **MATN** | **Matagalpa** | **18.45** | **96** | P | **Pn** | **12 05 52.7** | **+1.7** |
| **MSTX** | **Muleshoe** | **18.48** | **5** | P | **P** | **12 05 51.7** | **+0.4** |
| MSTX | | | | IAmb | IAmb | 12 06 03.6 | |
| | comp=Z,132nm,1.2s | | | | | | |
| **MSTX** | **Muleshoe** | **18.48** | **5** | P | **Pn** | **12 05 52.8** | **+1.5** |
| | baz=186,SNR=15 | | | | | | |
| **441A** | **DeRidder** | **18.52** | **33** | P | **P** | **12 05 52.5** | **+0.9** |
| 441A | | | | IAmb | IAmb | 12 06 03.3 | |
| | comp=Z,116nm,1.3s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **18.60** | **354** | P | **Pn** | **12 05 54.0** | **+1.2** |
| | baz=174 | | | | | | |
| **NATX** | **Nacogdoches** | **18.63** | **28** | P | **P** | **12 05 53.9** | **+1.1** |
| NATX | | | | IAmb | IAmb | 12 06 05.1 | |
| | comp=Z,167nm,1.2s | | | | | | |
| **NATX** | **Nacogdoches** | **18.63** | **28** | P | **Pn** | **12 05 55.1** | **+2.0** |
| | baz=212,SNR=7.8 | | | | | | |
| **BNM** | **Barren Site** | **18.65** | **355** | P | **Pn** | **12 05 56.2** | **+2.6** |
| **BOAB** | **BOACO BROADBAN** | **18.79** | **97** | P | **Pn** | **12 05 59.2** | **+4.1** |
| **Z35A** | **Perchaven, San** | **19.02** | **20** | P | **P** | **12 05 57.9** | **+0.9** |
| Z35A | | | | IAmb | IAmb | 12 06 07.9 | |
| | comp=Z,80nm,1.1s | | | | | | |
| **113A** | **Mohawk Valley,** | **19.04** | **336** | P | **Pn** | **12 05 59.1** | **+1.1** |
| **ANMO** | **Albuquerque** | **19.43** | **356** | P | **Pn** | **12 06 04.5** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=168,slow=11,SNR=18 | | | | | | |
| ANMO | | | | LR | LR | 12 12 58.3 | |
| | comp=Z,2μm,18.9s,baz=180,slow=35 | | | | | | |
| **ANMO** | **Albuquerque** | **19.43** | **356** | P | **P** | **12 06 02.0** | **+0.3** |
| **ANMO** | **Albuquerque** | **19.43** | **356** | P | **Pn** | **12 06 04.5** | **+1.6** |
| | baz=175 | | | | | | |
| **342A** | **Flagon Creek P** | **19.47** | **34** | P | **P** | **12 06 01.3** | **-0.7** |
| 342A | | | | IAmb | IAmb | 12 06 12.1 | |
| | comp=Z,138nm,1.2s | | | | | | |
| **ORTG** | **Ortega, Santa** | **19.50** | **103** | P | **Pn** | **12 06 05.1** | **+1.4** |
| **AMTX** | **Amarillo** | **19.50** | **8** | P | **P** | **12 06 02.4** | **0.0** |
| AMTX | | | | IAmb | IAmb | 12 06 13.2 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **19.50** | **8** | P | **Pn** | **12 06 04.5** | **+0.8** |
| | baz=189 | | | | | | |
| **X18A** | **Snowflake** | **19.52** | **347** | P | **P** | **12 06 03.2** | **+0.5** |
| **CCX** | **Cicese** | **19.57** | **328** | P | **P** | **12 06 03.4** | **+0.3** |
| **GLA** | **Glamis** | **19.71** | **334** | P | **P** | **12 06 02.8** | **-1.9** |
| GLA | | | | pmax | pmax | | |
| | comp=Z,39nm,1.2s | | | | | | |
| **GLA** | **Glamis** | **19.71** | **334** | P | **P** | **12 06 02.8** | **-1.9** |
| **GLA** | **Glamis** | **19.71** | **334** | P | **P** | **12 06 06.0** | **+1.3** |
| | baz=150 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **19.78** | **344** | P | **P** | **12 06 04.9** | **-0.6** |
| **Z38A** | **Mt. Pleasant** | **19.78** | **25** | P | **P** | **12 06 05.9** | **+0.5** |
| **Y14A** | **Wickenburg** | **19.81** | **339** | P | **P** | **12 06 06.1** | **+0.3** |
| **YUH** | **Yuha Desert** | **19.85** | **331** | P | **P** | **12 06 06.0** | **-0.2** |
| **WMOK** | **Wichita Mounta** | **19.90** | **15** | P | **P** | **12 06 07.1** | **+0.4** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,127nm,1.4s | | | | | | |
| **WMOK** | **Wichita Mounta** | **19.90** | **15** | P | **P** | **12 06 07.1** | **+0.4** |
| WMOK | | | | IAmb | IAmb | 12 06 18.6 | |
| | comp=Z,127nm,1.4s | | | | | | |
| **WMOK** | **Wichita Mounta** | **19.90** | **15** | P | **P** | **12 06 08.5** | **+1.7** |
| | baz=197,SNR=18 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **19.94** | **331** | P | **P** | **12 06 08.4** | **+1.2** |
| | baz=146 | | | | | | |
| **JTS** | **Las Juntas de** | **20.00** | **103** | P | Pn | 12 06 11.1 | +1.5 |
| | comp=Z,22nm,1.0s,baz=348,slow=3.4,SNR=7.6 | | | | | | |
| JTS | | | | LR | LR | 12 12 11.0 | |
| | comp=Z,2μm,20.2s,baz=348,slow=32 | | | | | | |
| **JTS** | **Las Juntas de** | **20.00** | **103** | *i* P | Pn | 12 06 12.8 | +3.2 |
| JTS | | | | pmax | pmax | | |
| | comp=Z,45nm,1.1s | | | | | | |
| **JTS** | **Las Juntas de** | **20.00** | **103** | P | **P** | **12 06 08.7** | **+0.8** |
| JTS | | | | IAmb | IAmb | 12 06 28.0 | |
| | comp=Z,57nm,1.1s | | | | | | |
| **X34A** | **Smith Ranch, M** | **20.02** | **17** | P | **P** | **12 06 09.0** | **+1.0** |
| **W18A** | **Petrified Fore** | **20.04** | **348** | P | Pn | 12 06 10.7 | +0.5 |
| | baz=166 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **20.05** | **332** | P | **P** | **12 06 09.8** | **+1.5** |
| | baz=148,SNR=5.6 | | | | | | |
| **ESPN** | **Las Esperanzas** | **20.14** | **97** | P | **P** | **12 06 10.3** | **+0.9** |
| ESPN | | | | IAmb | IAmb | 12 06 21.2 | |
| | comp=Z,78nm,1.2s | | | | | | |
| **BLYC** | **Blythe** | **20.20** | **336** | P | **P** | **12 06 10.4** | **+0.5** |
| **MONP2** | **Monument Peak** | **20.29** | **331** | P | **P** | **12 06 12.2** | **+1.0** |
| | baz=146 | | | | | | |
| **344A** | **Westbrook Farm** | **20.41** | **36** | P | **P** | **12 06 13.9** | **+1.6** |
| **BC3** | **Big Chuckawall** | **20.50** | **334** | P | **P** | **12 06 14.9** | **+1.6** |
| | baz=150,SNR=8.2 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **20.54** | **337** | P | **P** | **12 06 15.3** | **+1.6** |
| | baz=154,SNR=10 | | | | | | |
| **109C** | **Camp Elliot, M** | **20.62** | **329** | P | **P** | **12 06 15.7** | **+1.2** |
| | baz=144 | | | | | | |
| **Z41A** | **Richland Creek** | **20.74** | **29** | P | **P** | **12 06 17.1** | **+1.3** |
| **Z41A** | **Richland Creek** | **20.74** | **29** | P | **P** | **12 06 17.6** | **+1.8** |
| | baz=214,SNR=17 | | | | | | |
| **WUAZ** | **Wupatki** | **20.80** | **345** | P | **P** | **12 06 18.4** | **+1.8** |
| WUAZ | | | | IAmb | IAmb | 12 06 28.8 | |
| | comp=Z,72nm,1.1s | | | | | | |
| **WUAZ** | **Wupatki** | **20.80** | **345** | P | **P** | **12 06 17.7** | **+1.1** |
| | baz=162,SNR=35 | | | | | | |
| **IRM** | **Iron Mountain** | **20.80** | **335** | P | **P** | **12 06 17.6** | **+1.0** |
| | baz=151,SNR=30 | | | | | | |
| **X37A** | **Clayton** | **20.81** | **22** | | **P** | **12 06 17.1** | **+0.5** |
| X37A | | | | IAmb | IAmb | 12 06 39.1 | |
| | comp=Z,85nm,1.2s | | | | | | |
| **W35A** | **Tecumseh** | **20.82** | **18** | P | **P** | **12 06 18.2** | **+1.5** |
| **TPFO** | **Pinon Flats** | **20.90** | **332** | P | **P** | **12 06 18.5** | **+0.9** |
| | baz=147,SNR=26 | | | | | | |
| **PFO** | **Pinyon Flats O** | **20.91** | **332** | P | **P** | **12 06 18.6** | **+0.9** |
| | comp=Z,14nm,1.1s,baz=149,slow=8.2,SNR=11 | | | | | | |
| PFO | | | | LR | LR | 12 13 09.0 | |
| | comp=Z,3μm,19.4s,baz=146,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **20.91** | **332** | P | **P** | **12 06 18.2** | **+0.5** |
| PFO | | | | pmax | pmax | | |
| | comp=Z,47nm,1.3s | | | | | | |
| **PFO** | **Pinyon Flats O** | **20.91** | **332** | P | **P** | **12 06 18.2** | **+0.5** |
| **PFO** | **Pinyon Flats O** | **20.91** | **332** | P | **P** | **12 06 18.9** | **+1.2** |
| | baz=147,SNR=30 | | | | | | |
| **WLAR** | **White Oak Lake** | **20.96** | **28** | P | **P** | **12 06 19.9** | **+1.7** |
| **143A** | **Socs Landing,** | **21.00** | **33** | P | **P** | **12 06 19.4** | **+0.9** |
| **BELC** | **Belle Mtn. Jos** | **21.03** | **333** | P | **P** | **12 06 19.8** | **+0.8** |
| | baz=149,SNR=5.3 | | | | | | |
| **VBMS** | **Vicksburg** | **21.11** | **35** | P | **P** | **12 06 21.4** | **+1.7** |
| **VBMS** | **Vicksburg** | **21.11** | **35** | P | **P** | **12 06 21.7** | **+2.0** |
| | baz=221,SNR=9.2 | | | | | | |
| **346A** | **Big Creek Wild** | **21.11** | **39** | P | **P** | **12 06 20.3** | **+0.4** |
| **NEE2** | **Needles Airpor** | **21.13** | **337** | P | **P** | **12 06 21.0** | **+0.9** |
| | baz=153 | | | | | | |
| **W13A** | **Huapapi Mount** | **21.17** | **339** | P | **P** | **12 06 20.5** | **-0.1** |
| **RIMA** | **Rio Macho** | **21.17** | **103** | P | **P** | **12 06 22.9** | **+2.0** |
| **MURC** | **Murrieta** | **21.24** | **330** | P | **P** | **12 06 21.7** | **+0.5** |
| | baz=145 | | | | | | |
| **ELS** | **Elsinore Mount** | **21.39** | **330** | P | **P** | **12 06 23.1** | **+0.2** |
| **SCI2** | **San Clemente I** | **21.43** | **327** | P | **P** | **12 06 23.0** | **-0.2** |
| | baz=141 | | | | | | |
| **PEZE** | **Perez Zeledon,** | **21.47** | **104** | P | **P** | **12 06 25.6** | **+1.7** |
| PEZE | | | | IAmb | IAmb | 12 06 34.9 | |
| | comp=Z,72nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **21.48** | **26** | P | **P** | **12 06 22.0** | **-1.8** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,63nm,1.3s | | | | | | |
| **MIAR** | **Mount Ida** | **21.48** | **26** | P | **P** | **12 06 21.9** | **-1.8** |
| MIAR | | | | IAmb | IAmb | 12 06 42.2 | |
| | comp=Z,63nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **21.48** | **26** | P | **P** | **12 06 24.5** | **+0.7** |
| | baz=211 | | | | | | |
| **GMRC** | **Granite Mounta** | **21.56** | **335** | P | **P** | **12 06 26.1** | **+1.4** |
| | baz=150,SNR=6.0 | | | | | | |
| **T25A** | **Trinidad** | **21.56** | **1** | P | **P** | **12 06 26.8** | **+2.0** |
| T25A | | | | IAmb | IAmb | 12 06 50.0 | |
| | comp=Z,86nm,1.4s | | | | | | |
| **T25A** | **Trinidad** | **21.56** | **1** | P | **P** | **12 06 26.5** | **+1.6** |
| | baz=181,SNR=13 | | | | | | |
| **BBRC** | **Big Bear Solar** | **21.66** | **332** | P | **P** | **12 06 27.1** | **+1.2** |
| | baz=147,SNR=6.8 | | | | | | |
| **CIS** | **Catalina Islan** | **21.69** | **328** | P | **P** | **12 06 26.6** | **+0.5** |
| | baz=142 | | | | | | |
| **X40A** | **Basin Creek Fa** | **21.75** | **27** | P | **P** | **12 06 27.0** | **+0.4** |
| X40A | | | | IAmb | IAmb | 12 06 35.5 | |
| | comp=Z,86nm,1.4s | | | | | | |
| **X40A** | **Basin Creek Fa** | **21.75** | **27** | P | **P** | **12 06 28.4** | **+1.8** |
| | baz=213,SNR=9.2 | | | | | | |
| **CCAR** | **Cane Creek** | **21.78** | **30** | P | **P** | **12 06 28.2** | **+1.3** |
| **SRBA** | **San Rafael, Bu** | **21.81** | **104** | P | **P** | **12 06 28.8** | **+1.1** |
| SRBA | | | | IAmb | IAmb | 12 06 51.1 | |
| | comp=Z,39nm,1.3s | | | | | | |
| **TUL1** | **Leonard** | **21.86** | **20** | P | **P** | **12 06 28.1** | **+0.3** |
| TUL1 | | | | IAmb | IAmb | 12 06 40.2 | |
| | comp=Z,95nm,1.1s | | | | | | |
| **TUL1** | **Leonard** | **21.86** | **20** | P | **P** | **12 06 28.7** | **+0.8** |
| | baz=204,SNR=15 | | | | | | |
| **FMP** | **Fort Macarthur** | **21.87** | **328** | P | **P** | **12 06 29.2** | **+1.3** |
| | baz=143 | | | | | | |
| **HEC** | **Hector,Ludlow** | **21.88** | **334** | P | **P** | **12 06 28.5** | **+0.4** |
| | baz=149 | | | | | | |
| **MVCO** | **Mesa Verde** | **21.88** | **352** | P | **P** | **12 06 29.2** | **+0.9** |
| **MVCO** | **Mesa Verde** | **21.88** | **352** | P | **P** | **12 06 29.1** | **+0.8** |
| | baz=170,SNR=9.5 | | | | | | |
| **U15A** | **North Rim** | **21.90** | **344** | P | **P** | **12 06 30.1** | **+1.6** |
| **W39A** | **Magazine** | **21.95** | **25** | P | **P** | **12 06 30.2** | **+1.3** |
| W39A | | | | IAmb | IAmb | 12 06 38.0 | |
| | comp=Z,94nm,1.1s | | | | | | |
| **W39A** | **Magazine** | **21.95** | **25** | P | **P** | **12 06 30.8** | **+2.0** |
| | baz=210,SNR=22 | | | | | | |
| **SNCC** | **San Nicolas Is** | **22.16** | **326** | P | **P** | **12 06 31.1** | **0.0** |
| | baz=140 | | | | | | |
| **SDCO** | **Great Sand Dun** | **22.17** | **358** | P | **P** | **12 06 32.3** | **+0.8** |
| **SDCO** | **Great Sand Dun** | **22.17** | **358** | P | **P** | **12 06 32.6** | **+1.1** |
| | baz=178,SNR=6.2 | | | | | | |
| **PASC** | **Pasadena Art C** | **22.18** | **329** | P | **P** | **12 06 30.9** | **-0.4** |
| **RRX** | **Edison Barstow** | **22.20** | **333** | P | **P** | **12 06 31.5** | **-0.1** |
| | baz=148 | | | | | | |
| **TUQ** | **Turquoise Moun** | **22.23** | **335** | P | **P** | **12 06 32.2** | **+0.2** |
| | baz=151 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **22.24** | **356** | P | **P** | **12 06 34.0** | **+1.8** |
| **S22A** | **4UR Ranch, Cre** | **22.24** | **356** | P | **P** | **12 06 34.2** | **+2.0** |
| | baz=175,SNR=18 | | | | | | |
| **146A** | **Union** | **22.25** | **37** | P | **P** | **12 06 34.6** | **+2.6** |
| **DECC** | **Green Verdugo** | **22.32** | **329** | P | **P** | **12 06 32.8** | **-0.1** |
| | baz=144 | | | | | | |
| **GSC** | **Goldstone, Bar** | **22.48** | **334** | P | **P** | **12 06 35.6** | **+1.0** |
| GSC | | | | pmax | pmax | | |
| | comp=Z,27nm,1.4s | | | | | | |
| **GSC** | **Goldstone, Bar** | **22.48** | **334** | P | **P** | **12 06 35.6** | **+1.0** |
| **GSC** | **Goldstone, Bar** | **22.48** | **334** | P | **P** | **12 06 34.5** | **-0.2** |
| | baz=148 | | | | | | |
| **T35A** | **Sooner Cattle** | **22.56** | **17** | P | **P** | **12 06 35.2** | **-0.2** |
| T35A | | | | IAmb | IAmb | 12 06 43.8 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **W41B** | **Gary Mavity, V** | **22.59** | **28** | P | **P** | **12 06 38.9** | **+3.3** |
| W41B | | | | IAmb | IAmb | 12 06 45.5 | |
| | comp=Z,62nm,1.1s | | | | | | |
| **W41B** | **Gary Mavity, V** | **22.59** | **28** | P | **P** | **12 06 36.8** | **+1.1** |
| | baz=213,SNR=5.4 | | | | | | |
| **KNB** | **Kanab** | **22.60** | **343** | P | **P** | **12 06 37.2** | **+1.2** |
| KNB | | | | pmax | pmax | | |
| | comp=Z,45nm,1.2s | | | | | | |
| **KNB** | **Kanab** | **22.60** | **343** | P | **P** | **12 06 37.2** | **+1.2** |
| KNB | | | | IAmb | IAmb | 12 06 44.2 | |
| | comp=Z,45nm,1.2s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **22.67** | **331** | P | **P** | **12 06 36.7** | **+0.1** |
| | baz=145 | | | | | | |
| **WHAR** | **Wooly Hollow** | **22.67** | **27** | P | **P** | **12 06 38.7** | **+2.2** |
| WHAR | | | | IAmb | IAmb | 12 06 50.9 | |
| | comp=Z,61nm,1.2s | | | | | | |
| **LCMT** | **Little Creek M** | **22.71** | **342** | P | **P** | **12 06 37.3** | **+0.2** |
| **OSI** | **Osito Audit: C** | **22.80** | **329** | P | **P** | **12 06 38.5** | **+0.5** |
| | baz=143 | | | | | | |
| **U38A** | **Gravette** | **22.82** | **22** | P | **P** | **12 06 39.8** | **+1.7** |
| U38A | | | | IAmb | IAmb | 12 06 46.5 | |
| | comp=Z,46nm,1.2s | | | | | | |
| **HHAR** | **Hobbs** | **22.85** | **23** | P | **P** | **12 06 40.1** | **+1.7** |
| HHAR | | | | IAmb | IAmb | 12 06 48.4 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **PV13** | **Radium Mtn., P** | **22.86** | **352** | P | **P** | **12 06 39.0** | **+0.3** |
| PV13 | | | | IAmb | IAmb | 12 06 45.9 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **SHPR** | **Sheep Range** | **22.88** | **338** | P | **P** | **12 06 40.3** | **+1.4** |
| **Y45A** | **Yeager Farm, C** | **22.88** | **34** | P | **P** | **12 06 41.4** | **+2.6** |
| **CCAC** | **Calif City Air** | **22.90** | **331** | P | **P** | **12 06 39.4** | **+0.4** |
| **PV15** | **Paradox Valley** | **22.99** | **353** | P | **P** | **12 06 41.4** | **+1.2** |
| **PV11** | **David Mesa, Pa** | **23.00** | **352** | P | **P** | **12 06 41.1** | **+0.9** |
| PV11 | | | | IAmb | IAmb | 12 06 52.9 | |
| | comp=Z,60nm,1.1s | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **23.02** | **332** | P | **P** | **12 06 40.8** | **+0.5** |
| | baz=147 | | | | | | |
| **PV10** | **Paradox Valley** | **23.10** | **351** | IAmb | IAmb | 12 06 47.4 | |
| | comp=Z,52nm,1.0s | | | | | | |
| **SBC** | **Santa Barbara** | **23.17** | **327** | P | **P** | **12 06 42.5** | **+0.8** |
| | baz=141 | | | | | | |
| **PV23** | **Carpenter Ridg** | **23.17** | **352** | IAmb | IAmb | 12 06 53.4 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **GWY** | **Greenwater Val** | **23.18** | **335** | P | **P** | **12 06 41.5** | **-0.5** |
| **SZCU** | **Shurtz Canyon** | **23.21** | **343** | P | **P** | **12 06 41.9** | **-0.5** |
| **Z47A** | **Carrollton** | **23.23** | **38** | P | **P** | **12 06 42.7** | **+0.4** |
| **FCAR** | **Ozark Folk Cen** | **23.24** | **27** | P | **P** | **12 06 41.0** | **-1.5** |
| FCAR | | | | IAmb | IAmb | 12 06 53.0 | |
| | comp=Z,61nm,1.2s | | | | | | |
| **CCUT** | **Cedar City** | **23.25** | **342** | P | **P** | **12 06 43.4** | **+0.6** |
| **ARVC** | **Arvin** | **23.27** | **330** | P | **P** | **12 06 43.5** | **+0.8** |
| | baz=144 | | | | | | |
| **U40A** | **Yellville** | **23.34** | **25** | IAmb | IAmb | 12 06 56.6 | |
| | comp=Z,62nm,1.2s | | | | | | |
| **U40A** | **Yellville** | **23.34** | **25** | P | **P** | **12 06 43.9** | **+0.5** |
| | baz=210 | | | | | | |
| **Q24A** | **Divide** | **23.38** | **359** | P | **P** | **12 06 43.9** | **-0.3** |
| **Q24A** | **Divide** | **23.38** | **359** | P | **P** | **12 06 44.5** | **+0.3** |
| | baz=179 | | | | | | |
| **MTPU** | **Mount Pierson** | **23.39** | **345** | P | **P** | **12 06 43.9** | **-0.4** |
| MTPU | | | | IAmb | IAmb | 12 06 53.4 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **MPMC** | **Manual Prospec** | **23.42** | **333** | P | **P** | **12 06 44.5** | **+0.1** |
| | baz=148,SNR=5.5 | | | | | | |
| **OXF** | **Oxford** | **23.45** | **33** | P | **P** | **12 06 45.0** | **+0.5** |
| OXF | | | | pmax | pmax | | |
| | comp=Z,90nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **23.45** | **33** | P | **P** | **12 06 45.0** | **+0.5** |
| **OXF** | **Oxford** | **23.45** | **33** | P | **P** | **12 06 45.3** | **+0.8** |
| | baz=220 | | | | | | |
| **R32A** | **Long Quarter,** | **23.45** | **12** | P | **P** | **12 06 44.5** | **-0.1** |
| R32A | | | | IAmb | IAmb | 12 06 54.1 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **FURC** | **Furnace Creek,** | **23.50** | **335** | P | **P** | **12 06 45.5** | **+0.5** |
| | baz=150 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **23.50** | **4** | IAmb | IAmb | 12 06 54.3 | |
| | comp=Z,51nm,1.2s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **23.50** | **4** | P | **P** | **12 06

comp=Z,25nm,1.1s
**152A Waverly Hall 24.97 43 P P 12 06 58.0 -0.8**
152A IAmb IAmb 12 07 09.6
comp=Z,33nm,1.1s
**TIGA Tifton 25.02 47 P P 12 07 00.1 +0.9**
baz=236
**Z51A Franklin 25.09 41 P P 12 06 59.5 -0.4**
**NLU North Lily Min 25.19 347 P P 12 07 00.2 -0.8**
**R40A Maddies Statio 25.24 24 P P 12 07 01.3 +0.1**
R40A IAmb IAmb 12 07 10.2
comp=Z,44nm,1.1s
**MLAC Mammoth, Mammo 25.32 333 P P 12 07 02.8 +0.6**
baz=147
**N23A Red Feather La 25.33 358 P P 12 07 02.4 +0.2**
baz=178
**RDMU Red Mountain 25.33 351 P P 12 07 01.8 -0.4**
RDMU IAmb IAmb 12 07 13.9
comp=Z,37nm,1.1s
**CCM Cathedral Cave 25.45 25 P P 12 07 04.1 +1.1**
CCM pmax pmax
comp=Z,16nm,1.0s
**CCM Cathedral Cave 25.45 25 P P 12 07 04.1 +1.1**
CCM IAmb IAmb 12 07 11.3
comp=Z,16nm,0.9s
**CCM Cathedral Cave 25.45 25 P P 12 07 02.6 -0.4**
baz=212
**OGNE Ogallala 25.47 5 P P 12 07 03.6 +0.3**
baz=186
**WVT Waverly 25.51 33 P P 12 07 04.7 +1.0**
baz=221
**DUG Dugway, Tooele 25.59 346 P P 12 07 03.5 -1.0**
DUG pmax pmax
comp=Z,23nm,1.1s
**DUG Dugway, Tooele 25.59 346 P P 12 07 03.5 -1.0**
DUG IAmb IAmb 12 07 15.5
comp=Z,23nm,1.1s
**DUG Dugway, Tooele 25.59 346 P P 12 07 05.2 +0.7**
baz=162,SNR=8.5
**FPAL Fort Paine 25.63 39 P P 12 07 08.1 +3.4**
**JLU Jordanelle 25.68 348 P P 12 07 03.5 -1.9**
JLU IAmb IAmb 12 07 13.9
comp=Z,22nm,1.1s
**LHV Little Huntoon 25.70 334** IAmb IAmb 12 07 30.2
comp=Z,19nm,1.2s
**NV11 Mina Array Sit 25.71 335 P P 12 07 04.5 -1.1**
**PHWY Pilot Hill 25.72 359 P P 12 07 03.9 -1.9**
PHWY IAmb IAmb 12 07 28.0
comp=Z,25nm,1.4s
**NVAR Mina Array Bea 25.77 335 P P 12 07 06.5 +0.3**
comp=Z,7.1nm,1.2s,baz=156,slow=8.8,SNR=15
NVAR PcP **PcP 12 10 34.8 -1.2**
comp=Z,0.1nm,0.5s,baz=159,slow=3.5,SNR=1.9
NVAR LR LR 12 15 59.3
comp=Z,1µm,21.6s,baz=154,slow=34
**NVAR Mina Array Bea 25.77 335 P P 12 07 05.4 -0.8**
**CTU Camp Tracy 25.83 348 P P 12 07 06.9 +0.2**
CTU IAmb IAmb 12 07 17.4
comp=Z,40nm,1.1s
**P38A Dawn 25.98 20** IAmb IAmb 12 07 19.8
comp=Z,35nm,1.4s
**GOGA Godfrey 26.26 43 P P 12 07 11.4 +0.9**
baz=232
**BGU Big Grassy Mou 26.33 346 P P 12 07 09.1 -2.1**
BGU IAmb IAmb 12 07 25.4
comp=Z,19nm,1.2s
**CMB Columbia Colle 26.35 331 P P 12 07 12.2 +0.9**
CMB pmax pmax
comp=Z,14nm,1.5s
**CMB Columbia Colle 26.35 331 P P 12 07 12.2 +0.9**
**SLM Saint Louis 26.36 26** IAmb IAmb 12 07 25.2
comp=Z,41nm,1.1s
**P40A Paris 26.41 23** IAmb IAmb 12 07 23.1
comp=Z,35nm,1.1s
**T47A Sharon Grove 26.54 33** IAmb IAmb 12 07 27.1
comp=Z,48nm,1.1s
**ELK Elko 26.75 342 P P 12 07 16.4 +1.3**
comp=Z,4.3nm,1.0s,baz=176,slow=6.2,SNR=9.4
ELK LR LR 12 18 08.2
comp=Z,448nm,18.9s,baz=170,slow=37
**PNTR Pine Nut 26.87 334 P P 12 07 16.0 -0.2**
PNTR IAmb IAmb 12 07 22.2
comp=Z,20nm,1.4s
**VCNR Virginia City 27.06 334 P P 12 07 17.9 0.0**
**HVU Hansel Valley 27.09 347 P P 12 07 18.1 +0.1**
HVU pmax pmax
comp=Z,22nm,1.1s
**HVU Hansel Valley 27.09 347 P P 12 07 18.1 +0.1**
HVU IAmb IAmb 12 07 28.1
comp=Z,22nm,1.1s
**K22A Casper 27.10 357 P P 12 07 18.1 -0.1**
baz=176
**BMN Battle Mountai 27.11 339 P P 12 07 18.9 +0.6**
BMN pmax pmax
comp=Z,24nm,1.1s
**BMN Battle Mountai 27.11 339 P P 12 07 18.9 +0.6**
BMN IAmb IAmb 12 07 24.8
comp=Z,24nm,1.1s
**Q44A Meyer Farm, Va 27.12 28 P P 12 07 20.4 +2.3**
**V51A Loudon 27.24 38** IAmb IAmb 12 07 31.1
comp=Z,50nm,1.3s
**PAHR Pah Rah Range 27.30 335 P P 12 07 19.8 -0.1**
**BW06 Boulder Array 27.49 352** IAmb IAmb 12 07 32.2
comp=Z,17nm,1.1s
**BW06 Boulder Array 27.49 352 P P 12 07 22.3 +0.6**
baz=170,SNR=8.6
**PD31 Pinedale Array 27.49 352 P P 12 07 19.4 -2.3**
PD31 IAmb IAmb 12 07 32.2
comp=Z,16nm,1.1s
**PDAR Pinedale Array 27.49 352 P P 12 07 22.1 +0.4**
comp=Z,2.5nm,0.8s,baz=168,slow=7.6,SNR=15
PDAR PcP **PcP 12 10 40.3 +0.3**
comp=Z,0.6nm,0.9s,baz=174,slow=1.8,SNR=2.3
PDAR LR LR 12 19 28.6
comp=Z,422nm,18.6s,baz=190,slow=39
**TKL Tuckaleechee C 27.49 39 P P 12 07 23.4 +1.8**
comp=Z,16nm,1.2s,baz=196,slow=12,SNR=2.7
TKL LR LR 12 20 41.2
comp=Z,1µm,18.5s,baz=231,slow=41
**K31A O'Neill 27.52 10 P P 12 07 21.9 +0.1**
K31A IAmb IAmb 12 07 42.5
comp=Z,40nm,1.1s
**AHID Auburn Hatcher 27.71 350** IAmb IAmb 12 07 33.6
comp=Z,14nm,1.0s
**N41A Harden Midland 27.88 23** IAmb IAmb 12 07 37.5
comp=Z,26nm,1.2s
**WCI Wyandotte Cave 27.90 32 P P 12 07 26.8 +1.6**
baz=221
**TZTN Tazewell 28.22 38 P P 12 07 29.6 +1.5**
baz=228
**REDW Red Top Meadow 28.26 351 P P 12 07 28.8 +0.3**
REDW IAmb IAmb 12 07 35.5
comp=Z,29nm,1.1s
**HDIL Hopedale 28.37 25 P P 12 07 29.8 +0.4**
baz=213
**TPAW Teton Pass 28.40 351 P P 12 07 30.3 +0.4**
TPAW IAmb IAmb 12 07 40.5
comp=Z,20nm,0.9s
**LOHW Long Hollow 28.46 351** IAmb IAmb 12 07 41.9
comp=Z,34nm,1.1s
**RSSD Black Hills 28.54 1 P P 12 07 32.7 +1.6**
baz=182
**KMSC Kings Mountain 28.71 43 P P 12 07 33.6 +1.2**
baz=233
**L40A Anamosa 28.94 21** IAmb IAmb 12 07 42.9
comp=Z,27nm,1.3s
**S51A Beattyville 28.94 36 P P 12 07 36.2 +1.7**
**K38A Parkersburg 28.96 18** IAmb IAmb 12 07 41.8
comp=Z,33nm,1.4s
**ECSD EROS Data Cent 28.99 12 P P 12 07 35.0 +0.1**
baz=196
**HLID Hailey 29.16 346 P P 12 07 36.3 -0.3**
**HLID Hailey 29.16 346 P P 12 07 37.4 +0.9**
baz=161,SNR=7.3
**SFIN Lafayette 29.18 28** IAmb IAmb 12 07 44.1
comp=Z,19nm,0.9s
**H17A Grant Village 29.22 351 P P 12 07 36.7 -0.5**
**H17A Grant Village 29.22 351 P P 12 07 37.8 +0.6**
baz=169
**LKWY Lake 29.37 352 P P 12 07 39.3 +0.8**
LKWY pmax pmax
comp=Z,13nm,1.2s
**LKWY Lake 29.37 352 P P 12 07 39.2 +0.8**
**WVOR Wild Horse Val 29.37 339 P P 12 07 43.3 +4.9**
WVOR pmax pmax
comp=Z,7.0nm,1.1s
**SJCC San Jacinto, C 29.38 97 P P 12 07 42.9 +4.3**
SJCC IAmb IAmb 12 07 49.1
comp=Z,33nm,1.1s
**MFID Camas Ranch 29.39 343 P P 12 07 39.5 +1.0**
**YMR Madison River 29.55 351 P P 12 07 41.4 +1.4**
YMR IAmb IAmb 12 07 52.9
comp=Z,14nm,1.0s
**YHH Holmes Hill 29.65 351 P P 12 07 41.0 0.0**
YHH IAmb IAmb 12 07 50.2
comp=Z,15nm,1.1s
**P49A Miami Univ. Ec 29.69 32 P P 12 07 42.7 +1.6**
**P49A Miami Univ. Ec 29.69 32 P P 12 07 41.7 +0.6**
baz=222
**RLMT Red Lodge 29.78 354 P P 12 07 43.0 +1.0**
**RLMT Red Lodge 29.78 354 P P 12 07 42.4 +0.4**
baz=171
**QLMT Earthquake Lak 29.78 350 P P 12 07 43.8 +1.7**
**O48B Farmland 30.02 31 P P 12 07 44.6 +0.6**
baz=220
**M04C Macdoel 30.05 334** IAmb IAmb 12 07 49.2
comp=Z,21nm,1.5s
**M04C Macdoel 30.05 334 P P 12 07 44.1 -0.3**
baz=146
**OTAV Otavalo 30.09 118 P P 12 07 44.6 -0.8**
OTAV pmax pmax
comp=Z,8.0nm,1.0s
**OTAV Otavalo 30.09 118 P P 12 07 44.6 -0.8**
**ZARC Zaragoza, Cauc 30.34 102** IAmb IAmb 12 08 03.2
comp=Z,22nm,1.5s
**YBH Yreka Blue Hor 30.39 333** LR LR 12 19 22.2
comp=Z,813nm,19.4s,baz=139,slow=35
**DLMT Dillon 30.50 349** IAmb IAmb 12 08 00.3
comp=Z,24nm,1.2s
**BOZ Bozeman (W) 30.56 351** IAmb IAmb 12 07 56.2
comp=Z,18nm,1.1s
**BOZ Bozeman (W) 30.56 351 P P 12 07 49.6 +0.8**
baz=167,SNR=22
**L04D Klamath Falls 30.61 334 P P 12 07 49.1 -0.2**
baz=145
**K04D Chiloquin, OR 30.72 335 P P 12 07 49.8 -0.4**
baz=147
**I40A Norwalk 30.76 20** IAmb IAmb 12 07 58.1
comp=Z,27nm,1.2s
**LRM Limekiln Ridge 30.91 350 P P 12 07 51.6 -0.6**
**PLID Pearl Lake 30.98 344 P P 12 07 53.5 +0.7**
PLID IAmb IAmb 12 07 58.9
comp=Z,11nm,1.1s
**N49A Columbus Grove 31.00 31 P P 12 07 54.8 +2.1**
**J05D Fort Rock, OR 31.07 336 P P 12 07 54.1 +0.7**
baz=148
**ACSO Alum Creek Sta 31.11 33 P P 12 07 56.1 +2.5**
baz=224
**LAO LASA Array 31.12 358** IAmb IAmb 12 08 04.2
comp=Z,28nm,1.4s
**LAO LASA Array 31.12 358 P P 12 07 54.6 +0.9**
baz=177
**BMO Blue Mountains 31.12 343** IAmb IAmb 12 07 59.6
comp=Z,12nm,1.2s
**L02E Cave Junction 31.13 332 P P 12 07 53.0 -0.7**
baz=143
**P52A Corning 31.15 35 P P 12 07 55.8 +1.8**
baz=226
**E28A Huff 31.17 5 P P 12 07 55.1 +0.9**
**I42A Draeger Farm, 31.36 22 P P 12 07 56.6 +0.8**
I42A IAmb IAmb 12 08 04.0
comp=Z,17nm,0.9s
**J04D Umpqua Nationa 31.38 335 P P 12 07 56.5 +0.3**
baz=147
**R55A Marlinton 31.42 39 P P 12 07 56.5 +0.1**
**K02D Willamette Mer 31.59 333 P P 12 07 55.8 -2.0**
baz=144
**O52A Adamsville 31.65 35 P P 12 07 58.5 +0.2**
**L48A N Adams 31.66 30 P P 12 07 58.5 +0.1**
**HRY Holter Researc 31.68 351 P P 12 07 58.6 -0.1**
**F36A Milaca 31.71 15 P P 12 07 59.9 +1.1**
F36A IAmb IAmb 12 08 08.0
comp=Z,25nm,1.5s
**ROSC El Rosal 31.74 106** LR LR 12 17 00.4
comp=Z,237nm,21.8s,baz=258,slow=29
**M50A Fremont 31.93 32 P P 12 08 02.3 +1.5**
**I04A Tendick Farm, 31.96 336 P P 12 08 01.0 -0.1**
baz=147
**I05D Terrebonne, OR 32.00 337 P P 12 08 03.8 +2.3**
baz=149
**O53A New Philadelph 32.08 35 P P 12 08 03.1 +0.9**
baz=227
**G40A Rib Lake 32.12 20** IAmb IAmb 12 08 09.9
comp=Z,12nm,1.1s
**MSO Missoula 32.16 348** IAmb IAmb 12 08 08.9
comp=Z,24nm,1.1s
**MSO Missoula 32.16 348 P P 12 08 03.4 +0.5**
baz=63,SNR=15
**AAM Ann Arbor 32.30 30 P P 12 08 05.1 +1.0**
AAM pmax pmax
comp=Z,47nm,1.0s
**AAM Ann Arbor 32.30 30 P P 12 08 05.1 +1.0**
**AAM Ann Arbor 32.30 30 P P 12 08 05.9 +1.9**
baz=221
**MCWV Mont Chateau 32.47 37 P P 12 08 08.0 +2.4**
baz=229
**MDND Maddock 32.54 6 P P 12 08 07.1 +1.0**
baz=189
**H04D Lebanon 32.70 336 P P 12 08 08.0 +0.5**
baz=147
**EGMT Eagleton 32.70 354 P P 12 08 07.5 -0.1**
EGMT IAmb IAmb 12 08 13.9
comp=Z,27nm,1.1s
**EGMT Eagleton 32.70 354 P P 12 08 07.9 +0.4**
baz=171,SNR=11
**DGMT Dagmar 32.88 1 P P 12 08 09.6 +0.4**
baz=181,SNR=5.3
**M52A Chesterland 32.91 33 P P 12 08 08.9 -0.5**
**E38A The Farm, Brul 32.92 17** IAmb IAmb 12 08 16.0
comp=Z,18nm,1.1s
**M53A WI Miller and 33.20 34 P P 12 08 12.6 +0.6**
**M53A WI Miller and 33.20 34 P P 12 08 13.1 +1.2**
baz=226
**E07A Sunnyside 33.43 341 P P 12 08 16.6 +2.7**
E07A IAmb IAmb 12 08 21.4
comp=Z,16nm,1.2s
**AGMN Agassiz Nation 33.52 11 P P 12 08 14.9 +0.2**
**AGMN Agassiz Nation 33.52 11 P P 12 08 14.6 -0.1**
baz=196,SNR=22
**O56A Blue Knob Stat 33.61 38 P P 12 08 17.0 +1.4**
baz=230
**M54A Oil Creek Stat 33.80 35 P P 12 08 19.2 +2.0**
baz=227
**SDV Santo Domingo 33.98 97** LR LR 12 21 25.1
comp=Z,422nm,18.5s,baz=273,slow=35
**SDV Santo Domingo 33.98 97 P P 12 08 21.5 +2.2**
**B35A Bob, Littlefor 34.01 13** IAmb IAmb 12 08 25.2
comp=Z,20nm,1.0s
**EYMN Ely 34.17 16** IAmb IAmb 12 08 27.7
comp=Z,25nm,0.9s
**EYMN Ely 34.17 16 P P 12 08 20.4 +0.1**
baz=203,SNR=5.3
**E43A Lone Tree Farm 34.19 22** IAmb IAmb 12 08 27.8
comp=Z,34nm,1.2s
**NEW Newport 34.23 345** LR LR 12 22 59.2
comp=Z,336nm,18.5s,baz=168,slow=37
**NEW Newport 34.23 345 P P 12 08 22.0 +1.2**
NEW pmax pmax
comp=Z,25nm,1.2s
**NEW Newport 34.23 345 P P 12 08 22.0 +1.2**
NEW IAmb IAmb 12 08 27.9
comp=Z,25nm,1.1s
**NEW Newport 34.23 345 P P 12 08 21.0 +0.1**
baz=159,SNR=8.0
**SSPA Standing Stone 34.24 38 P P 12 08 20.9 -0.1**
baz=231
**E04D Cinebar 34.35 338 P P 12 08 23.3 +1.4**
baz=149
**ATAH Atahualpa 34.48 129** LR LR 12 19 34.2
comp=Z,2µm,20.4s,baz=299,slow=31
**ULM Lac du Bonnet 35.41 10 P P 12 08 31.2 +0.3**
comp=Z,7.1nm,0.9s,baz=199,slow=12,SNR=2.6
ULM LR LR 12 23 28.0
comp=Z,3µm,18.2s,baz=196,slow=37
**ULM Lac du Bonnet 35.41 10 P P 12 08 32.8 +1.9**
ULM pmax pmax
comp=Z,22nm,1.3s
**ULM Lac du Bonnet 35.41 10 P P 12 08 32.8 +1.9**
ULM IAmb IAmb 12 08 36.9
comp=Z,22nm,1.3s
**N59A State Game Lan 35.68 39 P P 12 08 33.3 -0.2**
baz=233
**SADO Sadowa 36.34 31** LR LR 12 24 06.0
comp=Z,667nm,21.7s,baz=204,slow=37
**SJG San Juan 37.02 80** LR LR 12 25 01.9
comp=Z,152nm,20.3s,baz=258,slow=38
**J57A Williamstown 37.09 36** IAmb IAmb 12 08 51.7
comp=Z,31nm,1.3s
**EDM Edmonton 38.24 352 P P 12 08 54.7 -0.4**
EDM pmax pmax
comp=Z,42nm,1.1s
**EDM Edmonton 38.24 352 P P 12 08 54.7 -0.4**
EDM IAmb IAmb 12 09 05.2
comp=Z,42nm,1.1s
**LONY Lake Ozonia 38.65 35 P P 12 09 00.8 +2.2**
baz=231
**NNA Nana 38.86 133** LR LR 12 21 47.2
comp=Z,1µm,19.8s,baz=312,slow=31
**FFC Flin Flon 39.21 3 P P 12 09 02.9 -0.2**
FFC pmax pmax
comp=Z,23nm,1.2s
**FFC Flin Flon 39.21 3 P P 12 09 02.9 -0.2**
FFC IAmb IAmb 12 09 12.6
comp=Z,23nm,1.2s
**VLDQ Val d'Or 39.55 29 P P 12 09 07.4 +1.3**
**BBB Bella Bella 41.04 338** LR LR 12 26 14.7
comp=Z,606nm,18.7s,baz=134,slow=36
**TAOE Nuku Hiva Isla 42.59 238** *e*LR LR 12 20 56.7
comp=Z,2µm,25.0s
**TAOE Nuku Hiva Isla 42.59 238** *e*T T 12 54 05.4
comp=Z,49nm,0.2s
**RPN Rapa Nui 42.60 186** LR LR 12 22 50.7
comp=Z,1µm,19.9s,baz=14,slow=30
**LMQ La Malbaie 42.78 34 P P 12 09 34.2 +1.5**
LMQ IAmb IAmb 12 09 40.3
comp=Z,25nm,1.2s
**FCC Fort Churchill 43.92 8 P P 12 09 42.3 +0.6**
FCC pmax pmax
comp=Z,21nm,1.2s
**FCC Fort Churchill 43.92 8 P P 12 09 42.3 +0.6**
FCC IAmb IAmb 12 09 52.4
comp=Z,21nm,1.2s
**DLBC Dease Lake 46.81 342** LR LR 12 30 25.6
comp=Z,663nm,18.6s,baz=160,slow=37
**DLBC Dease Lake 46.81 342 P P 12 10 06.1 +1.4**
**GBN Guysborough 46.92 41 P P 12 10 08.1 +2.4**
**PTGA Pitinga 47.11 106** LR LR 12 28 02.2
comp=Z,460nm,19.3s,baz=251,slow=34
**YKA Yellowknife Ar 47.45 354 P P 12 10 09.7 +0.1**
comp=Z,6.9nm,1.0s,baz=168,slow=7.3,SNR=53
YKA PcP **PcP 12 11 39.7 -0.1**
comp=Z,1.6nm,1.1s,baz=169,slow=3.4,SNR=2.1
YKA LR LR 12 29 27.9
comp=Z,645nm,18.2s,baz=148,slow=35
**LPAZ La Paz 48.02 130 P P 12 10 15.6 +0.3**
comp=Z,4.5nm,0.9s,baz=346,slow=5.8,SNR=9.4
LPAZ LR LR 12 28 04.0
comp=Z,2µm,20.4s,baz=314,slow=33
**LPAZ La Paz 48.02 130 P P 12 10 15.7 +0.3**
LPAZ pmax pmax
comp=Z,15nm,1.2s
**LPAZ La Paz 48.02 130 P P 12 10 15.7 +0.3**
LPAZ IAmb IAmb 12 10 23.6
comp=Z,15nm,1.1s
**SCHQ Schefferville 48.97 28 P P 12 10 22.2 +0.7**
comp=Z,7.6nm,1.1s,baz=246,slow=9.1,SNR=5.1
SCHQ LR LR 12 32 23.3
comp=Z,691nm,18.9s,baz=237,slow=38
**SCHQ Schefferville 48.97 28 P P 12 10 22.4 +0.9**
**P33M Teslin, Yukon 49.09 342 P P 12 10 22.7 +0.4**
baz=143
**SKAG Skagway 49.29 340 P P 12 10 25.8 +2.0**
baz=140
**WRGLY Wrigley 49.44 349 P P 12 10 26.1 +1.2**
baz=156
**WHY Whitehorse 50.07 341 P P 12 10 31.1 +1.2**
baz=141
**MMPY Sheldon Lake, 50.63 345 P P 12 10 34.5 +0.5**
baz=146,SNR=29
**FARO Faro, Yukon 50.87 343 P P 12 10 36.7 +0.9**
baz=144,SNR=6.4
**HYT Haines Junctio 51.04 340 P P 12 10 38.3 +1.1**
HYT IAmb IAmb 12 10 43.8
comp=Z,15nm,1.2s
**HYT Haines Junctio 51.04 340 P P 12 10 37.7 +0.5**
baz=138
**M31M Drury Creek, Y 51.14 343 P P 12 10 38.1 +0.2**
M31M IAmb IAmb 12 10 45.1
comp=Z,12nm,1.1s
**M31M Drury Creek, Y 51.14 343 P P 12 10 38.2 +0.4**
baz=142
**YUK6 Outpost Mounta 51.41 340 P P 12 10 40.5 +0.4**
baz=137
**LVC Limon Verde 51.65 136** LR LR 12 27 34.2
comp=Z,442nm,21.9s,baz=324,slow=30
**YUK4 Talbot Arm 51.80 340 P P 12 10 44.0 +1.0**
baz=137
**MESA MESA 52.13 338 P P 12 10 45.5 0.0**
baz=132
**MDP Montagnes des 52.20 96** LR LR 12 32 58.1
comp=Z,296nm,19.1s,baz=282,slow=36
**PMOR Pomarrio Ree 52.29 237** *e*T T 13 06 16.0
comp=Z,9.0nm,0.3s
**MAYO Mayo, Yukon 52.66 343 P P 12 10 49.8 +0.6**
baz=141,SNR=5.8
**YUK3 Moose Creek 52.71 340 P P 12 10 49.9 0.0**
baz=135
**SIV San Ignacio 53.30 124** LR LR 12 31 50.6
comp=Z,1µm,18.3s,baz=309,slow=34
**BVCY Beaver Creek 53.30 340 P P 12 10 54.8 +0.9**
baz=135
**M27K Edge Creek, AK 53.60 340 P P 12 10 56.7 +0.5**
M27K IAmb IAmb 12 11 03.3
comp=Z,20nm,1.0s
**M27K Edge Creek, AK 53.60 340 P P 12 10 55.7 -0.6**
baz=134,SNR=9.5
**BMRM Bremner River 53.63 337 P P 12 10 56.9 +0.5**
baz=130
**M26K Nabesna, AK 54.01 339 P P 12 10 59.6 +0.5**
M26K IAmb IAmb 12 11 05.5
comp=Z,14nm,1.1s
**M26K Nabesna, AK 54.01 339 P P 12 10 58.1 -1.0**
baz=133
**DAWY Dawson 54.03 342 P P 12 10 60.0 +0.7**
DAWY IAmb IAmb 12 11 04.9
comp=Z,18nm,1.3s
**DAWY Dawson 54.03 342 P P 12 10 59.1 -0.2**
baz=138,SNR=8.7
**N25K Chitina, Valde 54.05 338 P P 12 11 00.6 +1.1**
N25K IAmb IAmb 12 11 14.7
comp=Z,19nm,1.3s
**N25K Chitina, Valde 54.05 338 P P 12 10 59.6 +0.1**
baz=130
**BCAR Beaver Creek A 54.06 340 P P 12 11 00.0 +0.5**
**L27K Beaver Creek, 54.07 340 P P 12 10 59.7 +0.1**
baz=134,SNR=5.7
**FRB Frobisher Bay 54.29 19** LR LR 12 32 49.4
comp=Z,490nm,21.9s,baz=216,slow=34
**KLU Klutina 54.46 337 P P 12 11 02.3 -0.2**
baz=129,SNR=8.0
**AC02 Maricunga 54.49 140** IAmb IAmb 12 11 11.2
comp=Z,12nm,1.1s
**GLI Glacier Island 54.53 336 P P 12 11 03.4 +0.5**
baz=127
**L26K Log Cabin Wild 54.55 340 P P 12 11 03.9 +0.8**
baz=132
**H03N2 Juan Fernandez 54.55 153** T T 13 09 57.4
baz=330,slow=77
**H03N1 Juan Fernandez 54.56 153** T T 13 09 58.5
baz=330,slow=77
**H03N3 Juan Fernandez 54.57 153** T T 13 09 56.8
baz=330,slow=77
**I29M Ogilvie Camp, 54.69 344 P P 12 11 02.9 -1.1**
I29M IAmb IAmb 12 11 22.8
comp=Z,15nm,1.2s
**I29M Ogilvie Camp, 54.69 344 P P 12 11 04.1 0.0**
baz=139
**HARP HAARP 54.76 338 P P 12 11 03.5 -1.0**
baz=130,SNR=6.1
**M24K Tolsona, Glenn 54.94 338 P P 12 11 05.9 -0.1**
**M24K Tolsona, Glenn 54.94 338 P P 12 11 04.4 -1.6**
baz=129,SNR=6.5
**PWL Port Wells 55.01 336 P P 12 11 05.6 -0.8**
baz=126
**PPT Papeete 55.05 235** LR LR 12 27 56.3
comp=Z,583nm,18.7s,baz=58,slow=29
**EPYK Eagle Plains 55.06 345 P P 12 11 07.4 +0.7**
EPYK IAmb IAmb 12 11 12.8
comp=Z,17nm,1.2s
**EPYK Eagle Plains 55.06 345 P P 12 11 05.5 -1.2**
baz=142,SNR=6.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PPT2 | **Papeete2** | **55.06** | **235** | *e*S | **S** | **12 18 45.8** | **-4.5** |
| | comp=Z,337nm,27.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 12 26 44.0 | |
| | comp=Z,2µm,25.2s,baz=51 | | | | | | |
| **EGAK** | **Eagle** | **55.08** | **342** | P | **P** | **12 11 07.2** | **+0.4** |
| EGAK | | | | IAmb | IAmb | 12 11 12.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **55.08** | **342** | P | **P** | **12 11 04.9** | **-1.8** |
| | baz=136,SNR=8.0 | | | | | | |
| **C36M** | **Paulatuk** | **55.18** | **352** | P | **P** | **12 11 08.2** | **+0.8** |
| C36M | | | | IAmb | IAmb | 12 11 12.9 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **C36M** | **Paulatuk** | **55.18** | **352** | P | **P** | **12 11 08.8** | **+1.4** |
| | baz=157 | | | | | | |
| **KDAK** | **Kodiak Island** | **55.18** | **331** | P | **P** | **12 11 07.7** | **+0.1** |
| | baz=120 | | | | | | |
| **DOT** | **Dot Lake** | **55.21** | **340** | P | **P** | **12 11 07.5** | **-0.3** |
| DOT | | | | IAmb | IAmb | 12 11 13.3 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **PAX** | **Paxson** | **55.24** | **339** | P | **P** | **12 11 07.8** | **-0.3** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **PAX** | **Paxson** | **55.24** | **339** | P | **P** | **12 11 07.8** | **-0.3** |
| PAX | | | | IAmb | IAmb | 12 11 17.5 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **PAX** | **Paxson** | **55.24** | **339** | P | **P** | **12 11 08.8** | **+0.7** |
| | baz=130 | | | | | | |
| **BRSE** | **Bradley Lake S** | **55.37** | **334** | P | **P** | **12 11 08.8** | **-0.2** |
| | baz=123 | | | | | | |
| **KNK** | **Knik Glacier** | **55.38** | **336** | P | **P** | **12 11 09.8** | **+0.7** |
| | baz=126 | | | | | | |
| **SCRK** | **Sand Creek** | **55.40** | **340** | P | **P** | **12 11 09.8** | **+0.4** |
| SCRK | | | | IAmb | IAmb | 12 11 15.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **55.40** | **340** | P | **P** | **12 11 09.7** | **+0.4** |
| | baz=132 | | | | | | |
| **RIDG** | **Independent Ri** | **55.53** | **340** | P | **P** | **12 11 10.1** | **-0.1** |
| **RIDG** | **Independent Ri** | **55.53** | **340** | P | **P** | **12 11 09.3** | **-0.9** |
| | baz=131,SNR=11 | | | | | | |
| **SML** | **Sawmill** | **55.57** | **337** | P | **P** | **12 11 08.7** | **-1.7** |
| | baz=126,SNR=5.2 | | | | | | |
| **RC01** | **Rabbit Creek A** | **55.70** | **335** | P | **P** | **12 11 12.1** | **+0.8** |
| | baz=124 | | | | | | |
| **HOM** | **Homer** | **55.71** | **333** | P | **P** | **12 11 10.7** | **-0.8** |
| | baz=122 | | | | | | |
| **PMR** | **Palmer** | **55.75** | **336** | IAmb | IAmb | 12 11 17.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **PMR** | **Palmer** | **55.75** | **336** | P | **P** | **12 11 11.8** | **+0.2** |
| | baz=125 | | | | | | |
| **WAT6** | **Susitna Watana** | **55.81** | **338** | P | **P** | **12 11 11.0** | **-1.3** |
| | baz=128,SNR=7.1 | | | | | | |
| **INK** | **Inuvik** | **55.89** | **348** | LR | LR | 12 35 28.1 | |
| | comp=Z,296nm,18.0s,baz=146,slow=36 | | | | | | |
| **INK** | **Inuvik** | **55.89** | **348** | P | **P** | **12 11 11.4** | **-1.2** |
| | baz=146 | | | | | | |
| **DHY** | **Denali Highway** | **55.98** | **338** | P | **P** | **12 11 14.1** | **+0.6** |
| | baz=128 | | | | | | |
| **CAPN** | **Captain Cook N** | **56.10** | **335** | P | **P** | **12 11 15.8** | **+1.7** |
| | baz=123 | | | | | | |
| **Q19K** | **Cape Douglas,** | **56.23** | **332** | P | **P** | **12 11 14.6** | **-0.6** |
| | baz=119 | | | | | | |
| **M22K** | **Willow** | **56.23** | **336** | P | **P** | **12 11 14.3** | **-0.7** |
| | baz=124 | | | | | | |
| **CUT** | **Chulitna** | **56.66** | **337** | P | **P** | **12 11 17.9** | **-0.3** |
| **CUT** | **Chulitna** | **56.66** | **337** | P | **P** | **12 11 18.9** | **+0.8** |
| | baz=125 | | | | | | |
| **HDA** | **Harding Lake** | **56.67** | **340** | P | **P** | **12 11 19.0** | **+0.8** |
| | baz=129 | | | | | | |
| **RND** | **Reindeer** | **56.72** | **338** | P | **P** | **12 11 18.2** | **-0.4** |
| RND | | | | pmax | pmax | | |
| | comp=Z,28nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **56.72** | **338** | P | **P** | **12 11 18.2** | **-0.4** |
| **SPCR** | **Spurr Chakacha** | **56.76** | **335** | P | **P** | **12 11 19.3** | **+0.3** |
| | baz=122 | | | | | | |
| **ILAR** | **Eielson Array** | **56.88** | **340** | P | **P** | **12 11 19.0** | **-0.7** |
| | comp=Z,6.1nm,1.0s,baz=159,slow=4.8,SNR=19 | | | | | | |
| ILAR | | | | LR | LR | 12 34 08.1 | |
| | comp=Z,177nm,18.0s,baz=143,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **56.88** | **340** | P | **P** | **12 11 18.7** | **-1.0** |
| **ILAR** | **Eielson Array** | **56.88** | **340** | P | **P** | **12 11 18.7** | **-1.0** |
| **PRP** | **Porcupine Dome** | **56.93** | **341** | P | **P** | **12 11 20.2** | **0.0** |
| PRP | | | | IAmb | IAmb | 12 11 26.1 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **56.93** | **341** | P | **P** | **12 11 18.9** | **-1.3** |
| | baz=131 | | | | | | |
| **MCK** | **McKinley** | **56.94** | **338** | P | **P** | **12 11 19.7** | **-0.5** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **56.94** | **338** | P | **P** | **12 11 19.6** | **-0.5** |
| MCK | | | | IAmb | IAmb | 12 11 25.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **56.94** | **338** | P | **P** | **12 11 18.6** | **-1.6** |
| | baz=127,SNR=7.5 | | | | | | |
| **WRH** | **Wood River Hil** | **57.10** | **339** | IAmb | IAmb | 12 11 26.8 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **57.11** | **340** | P | **P** | **12 11 21.5** | **+0.2** |
| **O19K** | **Port Alsworth** | **57.15** | **333** | P | **P** | **12 11 21.4** | **-0.2** |
| | baz=119 | | | | | | |
| **P18K** | **Big Mountain,** | **57.17** | **332** | P | **P** | **12 11 20.3** | **-1.5** |
| | baz=118 | | | | | | |
| **TRF** | **Thorofare Moun** | **57.26** | **338** | P | **P** | **12 11 22.0** | **-0.7** |
| | baz=125 | | | | | | |
| **COLA** | **College** | **57.27** | **340** | *i* P | **P** | **12 11 22.9** | **+0.5** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **57.28** | **340** | P | **P** | **12 11 20.9** | **-1.6** |
| | baz=129 | | | | | | |
| **O18K** | **Koktuh Hills** | **57.37** | **332** | IAmb | IAmb | 12 11 28.3 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **O18K** | **Koktuh Hills** | **57.37** | **332** | P | **P** | **12 11 22.1** | **-1.2** |
| | baz=118 | | | | | | |
| **CHNA** | **Chernabura Isl** | **57.45** | **326** | P | **P** | **12 11 22.3** | **-1.6** |
| | baz=111 | | | | | | |
| **NEA2** | **Nenana** | **57.51** | **339** | P | **P** | **12 11 22.4** | **-1.8** |
| | baz=127,SNR=24 | | | | | | |
| **N19K** | **Bonanza Creek** | **57.52** | **334** | P | **P** | **12 11 22.8** | **-1.6** |
| | baz=119 | | | | | | |
| **PPLA** | **Purkeypile** | **57.67** | **336** | P | **P** | **12 11 24.5** | **-1.0** |
| | baz=123 | | | | | | |
| **A36M** | **Sachs Harbour** | **57.77** | **353** | P | **P** | **12 11 26.0** | **+0.2** |
| **A36M** | **Sachs Harbour** | **57.77** | **353** | P | **P** | **12 11 24.4** | **-1.5** |
| | baz=157,SNR=22 | | | | | | |
| **H24K** | **Noodor Dome** | **57.88** | **341** | P | **P** | **12 11 27.0** | **+0.2** |
| H24K | | | | IAmb | IAmb | 12 11 32.1 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **57.88** | **341** | P | **P** | **12 11 26.3** | **-0.5** |
| | baz=129 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **57.89** | **338** | P | **P** | **12 11 25.8** | **-1.1** |
| | baz=125 | | | | | | |
| **CAST** | **Castle Rocks** | **57.91** | **337** | IAmb | IAmb | 12 11 31.9 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **CAST** | **Castle Rocks** | **57.91** | **337** | P | **P** | **12 11 25.4** | **-1.6** |
| | baz=123,SNR=7.8 | | | | | | |
| **BMAR** | **Burnt Mountain** | **57.94** | **343** | P | **P** | **12 11 27.5** | **+0.3** |
| **I23K** | **Minto, Yukon-K** | **57.94** | **340** | P | **P** | **12 11 26.4** | **-0.8** |
| **I23K** | **Minto, Yukon-K** | **57.94** | **340** | P | **P** | **12 11 25.5** | **-1.6** |
| | baz=127,SNR=20 | | | | | | |
| **M19K** | **Big River Lodg** | **58.02** | **335** | P | **P** | **12 11 27.1** | **-0.8** |
| M19K | | | | IAmb | IAmb | 12 11 33.3 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **M19K** | **Big River Lodg** | **58.02** | **335** | P | **P** | **12 11 27.0** | **-0.8** |
| | baz=120 | | | | | | |
| **L20K** | **Farewell, AK** | **58.11** | **336** | P | **P** | **12 11 28.2** | **-0.3** |
| | baz=121 | | | | | | |
| **CHUM** | **Lake Minchumin** | **58.26** | **337** | P | **P** | **12 11 27.7** | **-1.7** |
| | baz=123 | | | | | | |
| **MLY** | **Manley** | **58.34** | **339** | P | **P** | **12 11 28.9** | **-1.1** |
| | baz=126 | | | | | | |
| **L19K** | **White Mountain** | **58.35** | **335** | IAmb | IAmb | 12 11 40.0 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **58.35** | **335** | P | **P** | **12 11 29.0** | **-1.2** |
| | baz=120 | | | | | | |
| **H23K** | **Yukon River** | **58.41** | **340** | P | **P** | **12 11 29.6** | **-0.9** |
| | baz=127,SNR=6.3 | | | | | | |
| **K20K** | **Telida** | **58.64** | **336** | P | **P** | **12 11 30.4** | **-1.8** |
| | baz=121 | | | | | | |
| **I21K** | **Tanana** | **58.86** | **339** | P | **P** | **12 11 32.8** | **-0.8** |
| | baz=124 | | | | | | |
| **J20K** | **Nowinta River** | **59.09** | **337** | P | **P** | **12 11 34.1** | **-1.1** |
| J20K | | | | IAmb | IAmb | 12 11 40.3 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **J20K** | **Nowinta River** | **59.09** | **337** | P | **P** | **12 11 34.3** | **-0.9** |
| | baz=122,SNR=6.1 | | | | | | |
| **TTA** | **Tatalina** | **59.19** | **335** | P | **P** | **12 11 36.4** | **+0.4** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **TTA** | **Tatalina** | **59.19** | **335** | P | **P** | **12 11 36.4** | **+0.4** |
| TTA | | | | IAmb | IAmb | 12 11 40.4 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **TTA** | **Tatalina** | **59.19** | **335** | P | **P** | **12 11 34.1** | **-1.9** |
| | baz=119 | | | | | | |
| **H21K** | **Melozitna Rive** | **59.41** | **339** | P | **P** | **12 11 36.1** | **-1.4** |
| | baz=124,SNR=24 | | | | | | |
| **RES** | **Resolute Bay** | **59.44** | **3** | LR | LR | 12 38 19.7 | |
| | comp=Z,2µm,18.2s,baz=182,slow=37 | | | | | | |
| **RES** | **Resolute Bay** | **59.44** | **3** | IAmb | IAmb | 12 11 42.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **COLD** | **Coldfoot** | **59.47** | **341** | P | **P** | **12 11 38.3** | **+0.5** |
| COLD | | | | IAmb | IAmb | 12 11 43.4 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **59.47** | **341** | P | **P** | **12 11 36.4** | **-1.4** |
| | baz=127,SNR=6.1 | | | | | | |
| **IMAR** | **Indian Mountai** | **59.92** | **339** | P | **P** | **12 11 42.3** | **+1.4** |
| **TOLK** | **Toolik Lake Re** | **60.15** | **343** | P | **P** | **12 11 41.9** | **-0.7** |
| | baz=128,SNR=7.5 | | | | | | |
| **UNV** | **Unalaska Valle** | **61.02** | **323** | P | **P** | **12 11 49.6** | **+1.0** |
| | baz=104 | | | | | | |
| **CPUP** | **Villa Florida** | **62.09** | **132** | P | **P** | **12 11 55.7** | **-0.6** |
| | comp=Z,3.3nm,0.8s,baz=340,slow=7.4,SNR=9.3 | | | | | | |
| CPUP | | | | LR | LR | 12 38 02.6 | |
| | comp=Z,455nm,19.9s,baz=328,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **62.09** | **132** | P | **P** | **12 11 55.7** | **-0.6** |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,17nm,1.5s | | | | | | |
| **CPUP** | **Villa Florida** | **62.09** | **132** | P | **P** | **12 11 55.7** | **-0.6** |
| CPUP | | | | IAmb | IAmb | 12 12 01.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **62.22** | **21** | LR | LR | 12 39 32.8 | |
| | comp=Z,712nm,19.4s,baz=232,slow=36 | | | | | | |
| **DY2G** | **Dye2** | **63.55** | **22** | *i* P | **P** | **12 12 09.5** | **+3.8** |
| DY2G | | | | IAmb | IAmb | 12 12 12.2 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **ANM** | **Nome** | **63.65** | **335** | IAmb | IAmb | 12 12 11.7 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **ANM** | **Nome** | **63.65** | **335** | P | **P** | **12 12 05.4** | **-0.7** |
| | baz=110 | | | | | | |
| **BDFB** | **Brasilia** | **64.02** | **116** | LR | LR | 12 39 15.8 | |
| | comp=Z,620nm,18.5s,baz=314,slow=35 | | | | | | |
| **RDOG** | **Red Dog Mine** | **64.06** | **339** | P | **P** | **12 12 08.8** | **0.0** |
| | baz=114 | | | | | | |
| **PLCA** | **Paso Flores** | **64.33** | **152** | P | **P** | **12 12 10.6** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=319,slow=11,SNR=5.6 | | | | | | |
| PLCA | | | | LR | LR | 12 34 10.6 | |
| | comp=Z,390nm,19.7s,baz=338,slow=30 | | | | | | |
| **PLCA** | **Paso Flores** | **64.33** | **152** | P | **P** | **12 12 10.6** | **-0.3** |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **PLCA** | **Paso Flores** | **64.33** | **152** | IAmb | IAmb | 12 12 22.0 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **TNA** | **Tin City** | **65.00** | **336** | P | **P** | **12 12 15.7** | **+0.9** |
| | baz=108 | | | | | | |
| **RAR** | **Rarotonga** | **65.14** | **237** | LR | LR | 12 32 24.1 | |
| | comp=Z,451nm,18.4s,baz=62,slow=29 | | | | | | |
| **ICESG** | **Greenland Ices** | **66.83** | **21** | *i* P | **P** | **12 12 27.9** | **+0.8** |
| **SUMG** | **Summit** | **68.30** | **17** | *i* P | **P** | **12 12 32.8** | **-3.5** |
| SUMG | | | | IAmb | IAmb | 12 12 42.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **AFI** | **Afiamalu** | **72.40** | **250** | LR | LR | 12 37 02.6 | |
| | comp=Z,317nm,18.4s,baz=40,slow=30 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **72.47** | **321** | LR | LR | 12 37 39.0 | |
| | comp=Z,248nm,18.7s,baz=50,slow=30 | | | | | | |
| **BORG** | **Borgarnes** | **73.32** | **26** | LR | LR | 12 45 21.0 | |
| | comp=Z,398nm,19.4s,baz=276,slow=36 | | | | | | |
| **DAG** | **Danmarks Havn** | **74.13** | **14** | *i* P | **P** | **12 13 11.0** | **-0.1** |
| DAG | | | | IAmb | IAmb | 12 13 18.9 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **75.37** | **337** | *i* P | **P** | **12 13 17.8** | **-0.6** |
| BILL | | | | *i* | | 12 13 34.1 | |
| BILL | | | | *i* | | 12 16 05.5 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,147nm,19.0s | | | | | | |
| **BILL** | **Bilibino** | **75.37** | **337** | P | **P** | **12 13 17.8** | **-0.6** |
| BILL | | | | IAmb | IAmb | 12 13 38.7 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **JMIC** | **Jan Mayen** | **77.50** | **19** | LR | LR | 12 48 21.4 | |
| | comp=Z,477nm,20.5s,baz=272,slow=36 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **80.97** | **10** | LR | LR | 12 50 57.2 | |
| | comp=Z,891nm,18.1s,baz=348,slow=36 | | | | | | |
| **SEY** | **Seymchan** | **82.06** | **333** | *i* P | **P** | **12 13 54.4** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **82.20** | **323** | LR | LR | 12 44 34.5 | |
| | comp=Z,189nm,20.0s,baz=52,slow=31 | | | | | | |
| **MSVF** | **Nonsavu** | **82.90** | **249** | LR | LR | 12 41 40.2 | |
| | comp=Z,288nm,21.4s,baz=46,slow=29 | | | | | | |
| **RAO** | **Raoul Island** | **83.39** | **237** | LR | LR | 12 42 26.1 | |
| | comp=Z,362nm,21.8s,baz=132,slow=30 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **83.84** | **287** | T | T | 13 46 10.3 | |
| | baz=77,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **83.84** | **287** | T | T | 13 46 15.2 | |
| | baz=77,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **83.86** | **287** | T | T | 13 46 13.6 | |
| | baz=77,slow=75 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **83.86** | **34** | LR | LR | 12 51 45.1 | |
| | comp=Z,325nm,19.0s,baz=346,slow=36 | | | | | | |
| **MA2** | **Magadan** | **83.91** | **330** | *i* P | **P** | **12 14 05.3** | **+0.3** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **MA2** | **Magadan** | **83.91** | **330** | P | **P** | **12 14 05.0** | **0.0** |
| MA2 | | | | IAmb | IAmb | 12 14 10.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **PMSA** | **Palmer Station** | **85.80** | **164** | LR | LR | 12 42 52.7 | |
| | comp=Z,152nm,20.8s,baz=301,slow=29 | | | | | | |
| **TIXI** | **Tiksi** | **85.94** | **345** | *i* P | **P** | **12 14 14.6** | **-0.3** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.32** | **16** | LR | LR | 12 53 30.7 | |
| | comp=Z,621nm,21.9s,baz=306,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **88.49** | **26** | P | **P** | **12 14 29.0** | **+1.5** |
| | comp=Z,2.1nm,0.9s,baz=302,slow=4.4,SNR=3.8 | | | | | | |
| NOA | | | | LR | LR | 12 55 39.3 | |
| | comp=Z,307nm,18.4s,baz=300,slow=36 | | | | | | |
| **MDT** | **Midelt** | **90.00** | **56** | LR | LR | 12 55 06.3 | |
| | comp=Z,68nm,18.4s,baz=338,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **90.01** | **26** | LR | LR | 12 55 24.2 | |
| | comp=Z,329nm,20.0s,baz=289,slow=36 | | | | | | |
| **URZ** | **Urewera** | **90.43** | **230** | LR | LR | 12 47 53.9 | |
| | comp=Z,331nm,18.0s,baz=75,slow=31 | | | | | | |
| **YAK** | **Yakutsk** | **91.72** | **337** | LR | LR | 12 58 24.3 | |
| | comp=Z,195nm,19.2s,baz=270,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **91.72** | **337** | *i* P | **P** | **12 14 44.2** | **+1.7** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **93.38** | **321** | *e*P | **P** | **12 14 52.5** | **+2.0** |
| YSS | | | | MLR | MLR | | |
| | comp=Z,200nm,14.0s | | | | | | |
| **FINES** | **FINESS Array B** | **94.02** | **21** | LR | LR | 12 57 29.3 | |
| | comp=Z,432nm,19.9s,baz=310,slow=36 | | | | | | |
| **CLL** | **Collm** | **94.32** | **34** | *e*SKKSac | **SKKSac** | **12 25 52.0** | **+0.8** |
| CLL | | | | *e*PS | PS | 12 27 36.0 | +14 |
| CLL | | | | *e*SS | **SS** | **12 32 24.0** | **-3.0** |
| **DZM** | **Mont Dzumac** | **94.60** | **248** | *e*LR | LR | 12 45 27.0 | |
| | comp=Z,689nm,22.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **94.60** | **248** | LR | LR | 12 48 15.1 | |
| | comp=Z,410nm,20.4s,baz=86,slow=30 | | | | | | |
| **ASAJ** | **Asahikawa** | **94.76** | **318** | LR | LR | 12 49 55.0 | |
| | comp=Z,269nm,20.8s,baz=104,slow=31 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **94.79** | **39** | LR | LR | 12 58 27.7 | |
| | comp=Z,497nm,18.2s,baz=272,slow=36 | | | | | | |
| **NRIK** | **Noril'sk** | **94.94** | **356** | *i* P | **P** | **12 14 59.8** | **+2.6** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **96.42** | **227** | LR | LR | 12 49 06.0 | |
| | comp=Z,476nm,21.6s,baz=44,slow=30 | | | | | | |
| **VRAC** | **Vranov** | **97.34** | **34** | LR | LR | 13 01 06.2 | |
| | comp=Z,340nm,18.4s,baz=302,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **98.52** | **326** | *i* P | **P** | **12 15 14.2** | **+0.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.0s | | | | | | |
| **MNK** | **Minsk** | **99.52** | **26** | *i* P | **Pdif** | **12 15 12.5** | **-5.7** |
| MNK | | | | *i* S | **SKSac** | **12 25 48.3** | **-8.6** |
| MNK | | | | *i* PS | **PS** | **12 28 14.8** | **-3.9** |
| MNK | | | | *i* SS | **SS** | **12 33 37.6** | **-2.4** |
| MNK | | | | *i* SSS | SSS | 12 37 24.1 | |
| MNK | | | | pmax | pmax | | |
| | comp=N,14nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,278nm,22.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,41nm,21.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,148nm,19.0s | | | | | | |
| **MNK** | **Minsk** | **99.52** | **26** | *i* P | **Pdif** | **12 15 12.6** | **-5.6** |
| MNK | | | | *i* P | **Pdif** | **12 15 12.6** | **-5.6** |
| | comp=N,14nm,0.8s | | | | | | |
| MNK | | | | *i* P | **Pdif** | **12 15 12.6** | **-5.6** |
| | comp=Z,12nm,0.8s,baz=134 | | | | | | |
| MNK | | | | *i* PP | **PP** | **12 19 16.0** | **-5.1** |
| MNK | | | | *i* PPP | PPP | 12 21 17.9 | |
| MNK | | | | *i* S | **SKSac** | **12 25 48.3** | **-8.5** |
| MNK | | | | *i* PS | **PS** | **12 28 14.9** | **-3.9** |
| MNK | | | | *i* SS | **SS** | **12 33 37.7** | **-2.3** |
| MNK | | | | *i* SSS | SSS | 12 37 24.2 | |
| MNK | | | | *i* LR | LR | 12 59 01.1 | |
| MNK | | | | *i* LRM | MLR | 13 00 43.0 | |
| | comp=Z,278nm,21.7s | | | | | | |
| MNK | | | | *i* LRM | MLR | 13 00 47.1 | |
| | comp=E,41nm,21.1s | | | | | | |
| MNK | | | | *i* LRM | MLR | 13 01 17.8 | |
| | comp=N,148nm,18.5s | | | | | | |
| **KEST** | **Kesra** | **99.56** | **49** | LR | LR | 13 00 18.1 | |
| | comp=N,131nm,18.3s,baz=341,slow=35 | | | | | | |
| **KIV** | **Kislovodsk** | **113.79** | **25** | *i* PKiKP | **PKiKP** | **12 20 12.6** | **-1.7** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **114.59** | **330** | *e*P | PKPdf | 12 20 18.5 | +2.5 |
| **MAK** | **Makhachkala** | **116.50** | **22** | *e*P | **Pdif** | **12 16 32.6** | **-1.4** |
| MAK | | | | *i* | | 12 20 18.8 | |
| MAK | | | | *e* | | 12 21 26.9 | |
| MAK | | | | *e*PPP | PPP | 12 23 52.1 | |
| MAK | | | | *e* | | 12 27 07.7 | |
| MAK | | | | *e*SS | SS | 12 37 32.6 | +3.2 |
| MAK | | | | *e*SSS | SSS | 12 41 49.3 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,44nm,0.4s | | | | | | |
| **WMQ** | **Urumqi** | **119.88** | **350** | *e*P | **PKiKP** | **12 20 26.9** | **+0.8** |
| WMQ | | | | LR | LR | | |
| | comp=N,400nm,19.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,340nm,19.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,250nm,19.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **123.75** | **256** | PKP | **PKPdf** | **12 20 30.6** | **-3.3** |
| | comp=Z,0.5nm,0.9s,baz=80,slow=2.1,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **124.44** | **252** | PKP | **PKPdf** | **12 20 33.0** | **-2.2** |
| | comp=Z,0.7nm,0.9s,baz=88,slow=2.3,SNR=2.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **138.96** | **324** | PKP | **PKPdf** | **12 21 03.6** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=355,slow=3.3,SNR=5.8 | | | | | | |

*IDC **16** 12:09:18.2±1.4,2.95S×136.21E,h0km,mb3.7/3, mb1 3.9/7,mb1mx3.4/46,mbtmp3.9/7,ML3.7/4,Error ellipse: s-maj=28.2km s-min=21.1km az=40.0*
*DJA **16** 12:09:22.4±0.3,3.3S±4×13.6E±.°,h95km±6km,M4.0/5, mb4.2/5,MLv3.9/5*

**ISC 16 12:09:22.7±0.8,3.04S±0.07×136.18E±0.05,h33km,n18, σ2.66/23,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BAKI** | **Biak** | **1.84** | **358** | P | **Pn** | **12 09 49.2** | **-2.8** |
| **SMPI** | **Sarmi** | **2.73** | **68** | P | **Pn** | **12 10 03.2** | **-1.1** |
| **FAKI** | **Fak Fak** | **3.93** | **272** | P | **Pn** | **12 10 21.1** | **+0.4** |
| **GENI** | **Genyem** | **4.01** | **84** | P | **Pn** | **12 10 23.2** | **+1.4** |
| **JAY** | **Jayapura** | **4.55** | **84** | Pn | **Pn** | **12 10 28.6** | **-0.7** |
| | 0.8nm,0.3s,baz=207,slow=16,SNR=2.4 | | | | | | |
| JAY | | | | Sn | **Sn** | **12 11 21.8** | **+0.7** |
| | 1.3nm,0.3s,baz=108,slow=19,SNR=1.6 | | | | | | |
| **SIJI** | **Sorong** | **5.36** | **294** | Pn | **Pn** | **12 10 40.3** | **-0.2** |
| | 1.6nm,0.3s,baz=218,slow=23,SNR=12 | | | | | | |
| SIJI | | | | Sn | **Sn** | **12 11 41.4** | **+0.3** |
| | 2.9nm,0.3s,baz=330,slow=20,SNR=4.1 | | | | | | |
| **KDU** | **Kakadu** | **10.26** | **201** | P | **Pn** | **12 11 50.0** | **+2.3** |
| **MTN** | **Manton Dam** | **10.95** | **207** | P | **Pn** | **12 12 00.7** | **+3.6** |
| **KNRA** | **Kununurra** | **14.53** | **210** | P | **Pn** | **12 12 47.3** | **+1.3** |
| **WRAB** | **Tennant Creek** | **16.88** | **186** | P | **P** | **12 13 20.5** | **+2.1** |
| **WRA** | **Warramunga Arr** | **16.89** | **186** | Pn | **Pn** | **12 13 13.8** | **-2.9** |
| | 0.5nm,0.3s,baz=4.4,slow=13,SNR=20 | | | | | | |
| WRA | | | | Sn | **Sn** | **12 16 17.8** | **-5.8** |
| | 0.3nm,0.3s,baz=0.6,slow=23,SNR=6.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **16.99** | **153** | P | **Pn** | **12 13 18.3** | **+0.4** |
| **QIS** | **Mount Isa** | **17.73** | **169** | P | **P** | **12 13 29.5** | **+1.8** |
| **FITZ** | **Fitzroy Crossi** | **18.18** | **214** | P | **Pn** | **12 13 33.8** | **+1.1** |
| | 0.6nm,0.3s,baz=32,slow=8.1,SNR=16 | | | | | | |
| FITZ | | | | S | **Sn** | **12 16 47.4** | **-7.5** |
| | 0.3nm,0.3s,baz=163,slow=17,SNR=2.8 | | | | | | |
| **CTA** | **Charters Tower** | **19.59** | **151** | P | **P** | **12 13 47.8** | **-0.4** |
| | 0.3nm,0.3s,baz=339,slow=10,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **20.62** | **186** | P | **P** | **12 14 00.1** | **+0.7** |
| | 3.3nm,0.4s,baz=12,slow=11,SNR=86 | | | | | | |
| ASAR | | | | S | **S** | **12 17 47.6** | **-0.8** |
| | 0.8nm,0.7s,baz=8.2,slow=27,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **29.13** | **171** | P | **P** | **12 15 22.0** | **+1.3** |
| | 1.0nm,0.7s,baz=332,slow=17,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.53** | **323** | P | **P** | **12 20 22.2** | **+0.2** |
| | 0.2nm,0.6s,baz=102,slow=7.8,SNR=4.3 | | | | | | |

**IDC 16 12:16:39.6±12.0,15.24N×105.76W,h0km,mb3.6/3, mb1 3.9/4,mb1mx3.5/37,mbtmp3.6/4,ML2.9/1,Error ellipse: s-maj=329.3km s-min=102.7km az=124.0,Off coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TXAR** | **Lajitas Array** | **14.16** | **7** | Pn | Pn | 12 20 03.3 | +1.6 |
| | 0.0nm,0.3s,baz=182,slow=15,SNR=7.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.61** | **354** | P | P | 12 25 17.0 | 0.0 |
| | 0.4nm,0.8s,baz=169,slow=7.0,SNR=7.7 | | | | | | |
| **INK** | **Inuvik** | **55.94** | **348** | P | P | 12 26 19.6 | +0.4 |
| | 1.0nm,0.8s,baz=129,slow=6.5,SNR=3.3 | | | | | | |
| **ILAR** | **Eielson Array** | **56.80** | **340** | P | P | 12 26 24.8 | -0.6 |
| |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WUAZ | | | | | IAmb | IAmb | 12 24 56.9 | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **21.45** | **333** | P | | **P** | **12 24 50.5** | **+0.6** |
| | comp=Z,2.2nm,1.0s,baz=153,slow=9.0,SNR=4.2 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **21.45** | **333** | IAmb | | IAmb | 12 24 51.3 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **T25A** | **Trinidad** | **22.29** | **1** | P | | **P** | **12 24 58.5** | **-0.4** |
| **TUL1** | **Leonard** | **22.61** | **20** | P | | **P** | **12 25 02.1** | **0.0** |
| TUL1 | | | | IAmb | | IAmb | 12 25 12.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **22.95** | **356** | P | | **P** | **12 25 06.1** | **+0.1** |
| S22A | | | | IAmb | | IAmb | 12 25 13.1 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **PV13** | **Radium Mtn., P** | **23.55** | **352** | P | | **P** | **12 25 11.3** | **-0.7** |
| PV13 | | | | IAmb | | IAmb | 12 25 13.4 | |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| **PV11** | **David Mesa, Pa** | **23.69** | **352** | P | | **P** | **12 25 12.5** | **-0.9** |
| PV11 | | | | IAmb | | IAmb | 12 25 18.5 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **MTPU** | **Mount Pierson** | **24.04** | **346** | P | | **P** | **12 25 17.5** | **+0.6** |
| MTPU | | | | IAmb | | IAmb | 12 25 25.2 | |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **SRU** | **San Rafael Swe** | **24.73** | **350** | P | | **P** | **12 25 22.3** | **-0.7** |
| SRU | | | | IAmb | | IAmb | 12 25 29.0 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **25.12** | **349** | P | | **P** | **12 25 26.8** | **+0.3** |
| P17A | | | | IAmb | | IAmb | 12 25 34.0 | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| **PD31** | **Pinedale Array** | **28.18** | **353** | P | | **P** | **12 25 52.3** | **-1.9** |
| PD31 | | | | IAmb | | IAmb | 12 26 05.3 | |
| | comp=Z,7.8nm,1.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **28.18** | **353** | P | | **P** | **12 25 54.0** | **-0.2** |
| | comp=Z,1.0nm,0.9s,baz=157,slow=9.5,SNR=5.4 | | | | | | | |
| **PDAR** | **Pinedale Array** | **28.18** | **353** | P | | **P** | **12 25 52.3** | **-1.9** |
| **YKA** | **Yellowknife Ar** | **48.15** | **354** | P | | **P** | **12 28 41.0** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=167,slow=7.5,SNR=18 | | | | | | | |
| **INK** | **Inuvik** | **56.56** | **348** | P | | **P** | **12 29 43.6** | **0.0** |
| | comp=Z,1.9nm,1.0s,baz=139,slow=11,SNR=6.1 | | | | | | | |
| **INK** | **Inuvik** | **56.56** | **348** | IAmb | | IAmb | 12 29 51.0 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **57.49** | **340** | P | | **P** | **12 29 50.3** | **0.0** |
| | comp=Z,1.2nm,0.9s,baz=139,slow=7.8,SNR=11 | | | | | | | |
| **TRF** | **Thorofare Moun** | **57.86** | **338** | P | | **P** | **12 29 54.0** | **+0.9** |
| **NEA2** | **Nenana** | **58.11** | **339** | P | | **P** | **12 29 55.3** | **+0.6** |
| **PPLA** | **Purkeypile** | **58.25** | **337** | P | | **P** | **12 29 56.0** | **+0.1** |
| **A36M** | **Sachs Harbour** | **58.46** | **353** | P | | **P** | **12 29 56.7** | **-0.2** |
| A36M | | | | IAmb | | IAmb | 12 30 03.2 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **H24K** | **Noodor Dome** | **58.49** | **341** | P | | **P** | **12 29 57.5** | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **58.55** | **340** | P | | **P** | **12 29 57.9** | **+0.2** |
| I23K | | | | IAmb | | IAmb | 12 29 59.2 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **58.57** | **343** | P | | **P** | **12 29 57.9** | **-0.1** |
| **M19K** | **Big River Lodg** | **58.59** | **335** | P | | **P** | **12 29 58.6** | **+0.5** |
| M19K | | | | IAmb | | IAmb | 12 30 17.1 | |
| | comp=Z,4.1nm,1.3s | | | | | | | |
| **J20K** | **Nowinta River** | **59.68** | **337** | P | | **P** | **12 30 06.0** | **+0.4** |
| J20K | | | | IAmb | | IAmb | 12 30 26.1 | |
| | comp=Z,4.7nm,1.4s | | | | | | | |
| **H21K** | **Melozitna Rive** | **60.02** | **339** | P | | **P** | **12 30 08.1** | **+0.2** |
| **IMAR** | **Indian Mountai** | **60.52** | **339** | P | | **P** | **12 30 10.9** | **-0.4** |
| **TOLK** | **Toolik Lake Re** | **60.79** | **343** | P | | **P** | **12 30 14.2** | **+1.0** |

*IDC* ***16*** *12:20:54.0±1.1,24°.84N×122°.42E,h0km,mb3.6/6, mb1 3.8/6,mb1mx3.3/45,mbtmp3.6/6,Error ellipse: s-maj=62.0km s-min=20.4km az=75.0*
*TAP* ***16*** *12:20:54.9,24°.83N×121°.95E,h9km,ML4.0,C*
*JMA* ***16*** *12:20:55.6±0.1,24°.81N×121°.91E,h26km,M3.3*
**ISC 16 12:20:55.1**±0.8**,24°.83N**±0°.01×**121°.96E**±0°.02**,h10**km±4km**, n143,**σ0°77/223**,mb3.5/6,18C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.04** | **304** | *e*P | **Pg** | **12 20 57.1** | **+0.2** |
| | baz=351 | | | | | | |
| EGS | | | | *i* S | **Sg** | **12 20 57.9** | **-0.3** |
| | baz=351 | | | | | | |
| **NTC** | **Toucheng** | **0.12** | **283** | ⇑*i*P | **Pg** | **12 20 58.2** | **+0.1** |
| | baz=292 | | | | | | |
| NTC | | | | S | **Sg** | **12 21 00.2** | **+0.1** |
| | baz=292 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.18** | **7** | ⇑*i*P | **Pg** | **12 20 59.1** | **+0.1** |
| | baz=14 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **12 21 01.4** | **-0.2** |
| | baz=14 | | | | | | |
| **TIPB** | **Shuangxi** | **0.19** | **319** | ⇑*i*P | **Pg** | **12 20 59.4** | **+0.2** |
| | baz=322 | | | | | | |
| TIPB | | | | *i* S | **Sg** | **12 21 02.1** | **+0.1** |
| | baz=322 | | | | | | |
| **ILA** | **Ilan** | **0.20** | **253** | *i* P | **Pg** | **12 20 59.5** | **+0.2** |
| | baz=250 | | | | | | |
| ILA | | | | *i* S | **Sg** | **12 21 03.0** | **+0.8** |
| | baz=250 | | | | | | |
| **TWC** | **Suao** | **0.24** | **206** | ⇑*i*P | **Pg** | **12 21 00.2** | **+0.2** |
| | baz=200 | | | | | | |
| TWC | | | | *i* S | **Sg** | **12 21 03.1** | **-0.2** |
| | baz=200 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **343** | ⇑*i*P | **Pg** | **12 21 01.2** | **+0.4** |
| | baz=353 | | | | | | |
| SXI1 | | | | S | **Sg** | **12 21 04.4** | **-0.2** |
| | baz=353 | | | | | | |
| **TWE** | **Neicheng** | **0.29** | **249** | ⇑*i*P | **Pg** | **12 21 00.9** | **0.0** |
| | baz=246 | | | | | | |
| TWE | | | | *e*S | **Sg** | **12 21 04.3** | **-0.5** |
| | baz=246 | | | | | | |
| **NDS** | **Dongshan** | **0.29** | **230** | ⇑*i*P | **Pg** | **12 21 01.1** | **+0.1** |
| | baz=228 | | | | | | |
| NDS | | | | S | **Sg** | **12 21 05.1** | **+0.1** |
| | baz=228 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **326** | ⇑*i*P | **Pb** | **12 21 01.5** | **-1.1** |
| | baz=318 | | | | | | |
| NWF | | | | *i* S | **Sb** | **12 21 06.0** | **-1.7** |
| | baz=318 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.35** | **259** | ⇑*i*P | **Pg** | **12 21 02.0** | **0.0** |
| | baz=258 | | | | | | |
| FUSB | | | | *e*S | **Sg** | **12 21 06.2** | **-0.5** |
| | baz=258 | | | | | | |
| **TNOU** | **National Taiwa** | **0.37** | **332** | P | **Pb** | **12 21 02.9** | **-0.9** |
| | baz=325 | | | | | | |
| TNOU | | | | *e*S | **Sb** | **12 21 09.4** | **-0.1** |
| | baz=325 | | | | | | |
| **TWA** | **Mucha** | **0.38** | **294** | ⇑*i*P | **Pb** | **12 21 02.9** | **-1.1** |
| | baz=283 | | | | | | |
| TWA | | | | *i* S | **Sg** | **12 21 08.0** | **+0.4** |
| | baz=283 | | | | | | |
| **ENTT** | **Nioudou** | **0.41** | **243** | ⇑*i*P | **Pg** | **12 21 02.9** | **-0.2** |
| | baz=241 | | | | | | |
| ENTT | | | | S | **Sg** | **12 21 08.7** | **+0.2** |
| | baz=241 | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **204** | ⇑*i*P | **Pg** | **12 21 03.2** | **0.0** |
| | baz=209 | | | | | | |
| EWUT | | | | *e*S | **Sg** | **12 21 09.3** | **+0.6** |
| | baz=209 | | | | | | |
| **NHY** | **Taipei** | **0.42** | **301** | P | **Pb** | **12 21 04.0** | **-0.6** |
| | baz=301 | | | | | | |
| NHY | | | | *e*S | **Sb** | **12 21 11.0** | **0.0** |
| | baz=301 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.42** | **289** | *e*P | **Pb** | **12 21 04.2** | **-0.4** |
| | baz=289 | | | | | | |
| NHDH | | | | S | **Sg** | **12 21 09.3** | **+0.3** |
| | baz=289 | | | | | | |
| **NWLT** | **Wulai** | **0.42** | **264** | P | **Pg** | **12 21 03.5** | **+0.1** |
| | baz=263 | | | | | | |
| NWLT | | | | *e*S | **Sg** | **12 21 08.6** | **-0.4** |
| | baz=263 | | | | | | |
| **ENA** | **Nanau** | **0.45** | **207** | *e*P | **Pg** | **12 21 03.8** | **0.0** |
| | baz=211 | | | | | | |
| ENA | | | | *e*S | **Sg** | **12 21 09.4** | **-0.2** |
| | baz=211 | | | | | | |
| **TATO** | **Taipei** | **0.46** | **289** | *i* P | **Pb** | **12 21 04.5** | **-0.8** |
| | baz=280 | | | | | | |
| **NDT** | **Datong Townshi** | **0.47** | **242** | *e*P | **Pg** | **12 21 04.2** | **-0.1** |
| | baz=241 | | | | | | |
| NDT | | | | *e*S | **Sg** | **12 21 09.9** | **-0.5** |
| | baz=241 | | | | | | |
| **NWRT** | **Kuosheng** | **0.47** | **324** | P | **Pb** | **12 21 04.8** | **-0.7** |
| | baz=315 | | | | | | |
| NWRT | | | | *e*S | **Sb** | **12 21 12.7** | **+0.3** |
| | baz=315 | | | | | | |
| **TAP** | **Taipei** | **0.47** | **297** | *i* P | **Pb** | **12 21 04.9** | **-0.5** |
| | baz=298 | | | | | | |
| TAP | | | | S | **Sb** | **12 21 11.1** | **-1.4** |
| | baz=298 | | | | | | |
| **YM01** | **YM01** | **0.48** | **312** | ⇑*i*P | **Pb** | **12 21 05.2** | **-0.5** |
| | baz=312 | | | | | | |
| YM01 | | | | *i* S | **Sg** | **12 21 10.9** | **+0.1** |
| | baz=312 | | | | | | |
| **LATG** | **Datong** | **0.49** | **234** | P | **Pg** | **12 21 04.5** | **-0.3** |
| | baz=233 | | | | | | |
| LATG | | | | S | **Sg** | **12 21 11.2** | **-0.1** |
| | baz=233 | | | | | | |
| **BACT** | **New Taipei Cit** | **0.50** | **290** | P | **Pb** | **12 21 06.3** | **+0.2** |
| | baz=290 | | | | | | |
| **ANP** | **Anpu** | **0.54** | **312** | ⇑*i*P | **Pb** | **12 21 06.0** | **-0.8** |
| | baz=312 | | | | | | |
| ANP | | | | *e*S | **Sg** | **12 21 11.9** | **-0.9** |
| | baz=312 | | | | | | |
| **EHP** | **Heping Village** | **0.55** | **202** | *e*P | **Pb** | **12 21 06.2** | **-0.7** |
| | baz=200 | | | | | | |
| EHP | | | | S | **Sb** | **12 21 14.3** | **-0.6** |
| | baz=200 | | | | | | |
| **TWY** | **Chenhua** | **0.56** | **324** | ⇑*i*P | **Pb** | **12 21 06.7** | **-0.3** |
| | baz=314 | | | | | | |
| TWY | | | | S | **Sb** | **12 21 14.3** | **-0.8** |
| | baz=314 | | | | | | |
| **YHNB** | **Yeheng** | **0.56** | **254** | P | **Pg** | **12 21 05.6** | **-0.3** |
| | baz=253 | | | | | | |
| YHNB | | | | *e*S | **Sg** | **12 21 11.9** | **-1.3** |
| | baz=253 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.57** | **299** | ⇑*i*P | **Pb** | **12 21 07.2** | **0.0** |
| | baz=299 | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **12 21 14.8** | **-0.5** |
| | baz=299 | | | | | | |
| **NSK** | **Sanguang** | **0.57** | **255** | *i* P | **Pg** | **12 21 05.9** | **-0.3** |
| | baz=254 | | | | | | |
| NSK | | | | *e*S | **Sg** | **12 21 12.9** | **-0.8** |
| | baz=254 | | | | | | |
| **NSM** | **Shimen** | **0.57** | **324** | P | **Pb** | **12 21 07.7** | **+0.4** |
| | baz=314 | | | | | | |
| NSM | | | | *e*S | **Sb** | **12 21 16.2** | **+0.7** |
| | baz=314 | | | | | | |
| **NTST** | **Danshui** | **0.58** | **306** | P | **Pb** | **12 21 07.2** | **-0.1** |
| | baz=306 | | | | | | |
| NTST | | | | *e*S | **Sb** | **12 21 15.1** | **-0.5** |
| | baz=306 | | | | | | |
| **NTY** | **Taoyuan** | **0.63** | **286** | P | **Pb** | **12 21 08.2** | **-0.1** |
| | baz=276 | | | | | | |
| NTY | | | | *e*S | **Sb** | **12 21 17.8** | **+0.7** |
| | baz=276 | | | | | | |
| **NNSB** | **Datong** | **0.66** | **233** | *e*P | **Pg** | **12 21 07.4** | **-0.5** |
| | baz=225 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **12 21 15.2** | **-1.4** |
| | baz=225 | | | | | | |
| **NNS** | **Nan Shan** | **0.66** | **235** | *e*P | **Pg** | **12 21 07.4** | **-0.5** |
| | baz=247 | | | | | | |
| NNS | | | | *e*S | **Sg** | **12 21 15.5** | **-1.1** |
| | baz=247 | | | | | | |
| **NCU** | **National Centr** | **0.72** | **282** | *e*P | **Pb** | **12 21 09.8** | **0.0** |
| | baz=281 | | | | | | |
| NCU | | | | *e*S | **Sb** | **12 21 19.4** | **-0.4** |
| | baz=281 | | | | | | |
| **NCUH** | **Zhongli** | **0.72** | **282** | *e*P | **Pb** | **12 21 10.0** | **+0.2** |
| | baz=281 | | | | | | |
| NCUH | | | | *e*S | **Sb** | **12 21 20.1** | **+0.3** |
| | baz=281 | | | | | | |
| **NACB** | **Ninganchiao** | **0.73** | **207** | ⇑*i*P | **Pg** | **12 21 08.7** | **-0.5** |
| | baz=217 | | | | | | |
| NACB | | | | *e*S | **Sg** | **12 21 18.8** | **+0.1** |
| | baz=217 | | | | | | |
| **ETL** | **Fush Village** | **0.73** | **205** | *e*P | **Pg** | **12 21 09.0** | **-0.3** |
| | baz=204 | | | | | | |
| ETL | | | | *e*S | **Sg** | **12 21 18.8** | **-0.1** |
| | baz=204 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.76** | **216** | *e*P | **Pb** | **12 21 09.8** | **-0.6** |
| | baz=215 | | | | | | |
| ETLH | | | | *e*S | **Sg** | **12 21 18.9** | **-0.7** |
| | baz=215 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.79** | **256** | *e*P | **Pb** | **12 21 10.9** | **-0.1** |
| | baz=256 | | | | | | |
| NFF | | | | *e*S | **Sg** | **12 21 20.6** | **-0.2** |
| | baz=256 | | | | | | |
| **NJD** | **Zhudong** | **0.80** | **264** | *e*P | **Pb** | **12 21 10.8** | **-0.3** |
| | baz=256 | | | | | | |
| NJD | | | | *e*S | **Sn** | **12 21 22.9** | **-1.6** |
| | baz=256 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.81** | **7** | *e*P | **Pb** | **12 21 11.2** | **-0.1** |
| | baz=8.0 | | | | | | |
| PCYT | | | | *e*S | **Sb** | **12 21 22.4** | **+0.2** |
| | baz=8.0 | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **204** | P | **Pg** | **12 21 10.6** | **-0.2** |
| | baz=203 | | | | | | |
| TWD | | | | *e*S | **Sg** | **12 21 20.8** | **-0.6** |
| | baz=203 | | | | | | |
| **NHW** | **Xinwu Township** | **0.85** | **282** | *e*P | **Pb** | **12 21 11.8** | **-0.2** |
| | baz=282 | | | | | | |
| NHW | | | | S | **Sn** | **12 21 25.6** | **-0.2** |
| | baz=282 | | | | | | |
| **HSN1** | **Hsinchu** | **0.86** | **267** | *e*P | **Pb** | **12 21 11.9** | **-0.2** |
| | baz=259 | | | | | | |
| HSN1 | | | | *e*S | **Sn** | **12 21 24.8** | **-1.2** |
| | baz=259 | | | | | | |
| **FUSS** | **Fushou** | **0.87** | **229** | *e*P | **Pg** | **12 21 11.6** | **-0.4** |
| | baz=223 | | | | | | |
| FUSS | | | | *e*S | **Sg** | **12 21 22.4** | **-0.9** |
| | baz=223 | | | | | | |
| **LIOB** | **Emei** | **0.88** | **258** | *e*P | **Pn** | **12 21 13.0** | **-0.7** |
| | baz=258 | | | | | | |
| LIOB | | | | *e*S | **Sb** | **12 21 24.3** | **-0.1** |
| | baz=258 | | | | | | |
| **SBCB** | **Hsinchu** | **0.89** | **268** | *e*P | **Pn** | **12 21 13.8** | **0.0** |
| | baz=285 | | | | | | |
| SBCB | | | | *e*S | **Sn** | **12 21 26.4** | **-0.3** |
| | baz=285 | | | | | | |
| **NSTT** | **Nanjuang** | **0.90** | **258** | P | **Pb** | **12 21 12.9** | **+0.1** |
| | baz=257 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **12 21 24.6** | **-0.2** |
| | baz=257 | | | | | | |
| **HSN** | **Hsinchu** | **0.90** | **269** | P | **Pn** | **12 21 13.3** | **-0.6** |
| | baz=286 | | | | | | |
| HSN | | | | *e*S | **Sn** | **12 21 26.1** | **-1.0** |
| | baz=286 | | | | | | |
| **HWA** | **Hwalien** | **0.91** | **201** | *e*P | **Pg** | **12 21 12.3** | **-0.3** |
| | baz=200 | | | | | | |
| HWA | | | | *e*S | **Sb** | **12 21 25.0** | **-0.1** |
| | baz=200 | | | | | | |
| **TWT** | **Tachien** | **0.92** | **232** | *e*P | **Pb** | **12 21 13.4** | **+0.2** |
| | baz=240 | | | | | | |
| TWT | | | | *e*S | **Sb** | **12 21 25.2** | **-0.3** |
| | baz=240 | | | | | | |
| **TDCB** | **Techi** | **0.93** | **232** | P | **Pb** | **12 21 13.0** | **-0.5** |
| | baz=240 | | | | | | |
| TDCB | | | | *e*S | **Sg** | **12 21 24.4** | **-0.7** |
| | baz=240 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.93** | **223** | *e*P | **Pg** | **12 21 12.7** | **-0.4** |
| | baz=222 | | | | | | |
| WHF | | | | *i* S | **Sg** | **12 21 23.8** | **-1.5** |
| | baz=222 | | | | | | |
| **ETM** | **Tongmen** | **0.96** | **207** | P | **Pg** | **12 21 13.3** | **-0.3** |
| | baz=206 | | | | | | |
| ETM | | | | *e*S | **Sb** | **12 21 27.2** | **+0.7** |
| | baz=206 | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.97** | **112** | P | **Pg** | **12 21 13.8** | **+0.1** |
| JYNG | | | | S | **Sb** | **12 21 27.2** | **+0.4** |
| **TEYL** | **Yanliau Villag** | **1.01** | **199** | *e*P | **Pg** | **12 21 13.6** | **-0.9** |
| | baz=210 | | | | | | |
| TEYL | | | | *e*S | **Sb** | **12 21 27.7** | **-0.3** |
| | baz=210 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.02** | **111** | P | **Pg** | **12 21 14.5** | **-0.2** |
| YOJ | | | | S | **Sg** | **12 21 28.1** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **1.02** | **111** | P | **Pg** | **12 21 14.1** | **-0.6** |
| | baz=111 | | | | | | |
| YOJ | | | | *e*S | **Sb** | **12 21 28.8** | **+0.5** |
| | baz=111 | | | | | | |
| **CHGB** | **Renai** | **1.05** | **224** | P | **Pg** | **12 21 14.6** | **-0.7** |
| | baz=216 | | | | | | |
| CHGB | | | | *e*S | **Sg** | **12 21 27.9** | **-1.1** |
| | baz=216 | | | | | | |
| **WHP** | **Taichung City** | **1.08** | **240** | *e*P | **Pb** | **12 21 15.8** | **-0.1** |
| | baz=239 | | | | | | |
| WHP | | | | *e*S | **Sn** | **12 21 31.3** | **-0.1** |
| | baz=239 | | | | | | |
| **NMLH** | **Miaoli** | **1.10** | **255** | *e*P | **Pn** | **12 21 17.2** | **+0.5** |
| | baz=254 | | | | | | |
| NMLH | | | | S | **Sn** | **12 21 33.2** | **+1.1** |
| | baz=254 | | | | | | |
| **ESL** | **Shilin** | **1.12** | **206** | ⇑*i*P | **Pg** | **12 21 15.6** | **-1.0** |
| | baz=205 | | | | | | |
| ESL | | | | *e*S | **Sn** | **12 21 32.0** | **-0.3** |
| | baz=205 | | | | | | |
| **WUSB** | **Renai** | **1.13** | **223** | *i* P | **Pg** | **12 21 16.1** | **-0.9** |
| | baz=217 | | | | | | |
| WUSB | | | | *i* S | **Sg** | **12 21 31.1** | **-0.5** |
| | baz=217 | | | | | | |
| **NSY** | **Sanyi** | **1.17** | **250** | P | **Pn** | **12 21 18.5** | **+0.9** |
| | baz=249 | | | | | | |
| NSY | | | | S | **Sn** | **12 21 35.5** | **+1.9** |
| | baz=249 | | | | | | |
| **WPL** | **Puli Township** | **1.22** | **229** | *e*P | **Pg** | **12 21 18.9** | **+0.3** |
| | baz=237 | | | | | | |
| WPL | | | | *e*S | **Sn** | **12 21 35.5** | **+0.6** |
| | baz=237 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.23** | **232** | *e*P | **Pg** | **12 21 19.7** | **+1.0** |
| | baz=239 | | | | | | |
| WCS | | | | *e*S | **Sb** | **12 21 32.4** | **-1.9** |
| | baz=239 | | | | | | |
| **WDJ** | **Dajia District** | **1.29** | **249** | *e*P | **Pg** | **12 21 20.5** | **+0.5** |
| | baz=248 | | | | | | |
| WDJ | | | | *e*S | **Sn** | **12 21 38.4** | **+1.7** |
| | baz=248 | | | | | | |
| **VWDT** | **VWDT** | **1.30** | **215** | P | **Pb** | **12 21 19.6** | **-0.2** |
| | baz=215 | | | | | | |
| VWDT | | | | *e*S | **Sn** | **12 21 37.8** | **+0.9** |
| | baz=215 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.35** | **226** | P | **Pb** | **12 21 20.5** | **-0.1** |
| | baz=217 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **12 21 39.9** | **+1.3** |
| | baz=217 | | | | | | |
| **TCU** | **Taichung** | **1.35** | **240** | *e*P | **Pg** | **12 21 22.9** | **+1.8** |
| | baz=258 | | | | | | |
| **SSLB** | **Suanglung** | **1.38** | **222** | *e*P | **Pb** | **12 21 20.7** | **-0.5** |
| | baz=220 | | | | | | |
| **WWF** | **Wufeng** | **1.39** | **236** | *e*P | **Pn** | **12 21 20.5** | **-0.1** |
| | baz=228 | | | | | | |
| WWF | | | | *e*S | **Sg** | **12 21 39.6** | **-0.3** |
| | baz=228 | | | | | | |
| **HGSD** | **Ruisui** | **1.42** | **200** | *e*P | **Pb** | **12 21 21.7** | **+0.1** |
| | baz=213 | | | | | | |
| **EHY** | **Hungye** | **1.44** | **204** | *e*P | **Pn** | **12 21 20.9** | **-0.3** |
| | baz=202 | | | | | | |
| EHY | | | | *e*S | **Sb** | **12 21 40.6** | **+0.2** |
| | baz=202 | | | | | | |
| **WCHH** | **Zhanghua** | **1.48** | **240** | *e*P | **Pb** | **12 21 22.3** | **-0.4** |
| | baz=256 | | | | | | |
| **WNT** | **Mingjian** | **1.50** | **231** | *e*P | **Pg** | **12 21 24.1** | **+0.2** |
| | baz=228 | | | | | | |
| **WJS** | **Zhushan** | **1.51** | **229** | *e*P | **Pg** | **12 21 24.5** | **+0.5** |
| | baz=215 | | | | | | |
| WJS | | | | *e*S | **Sg** | **12 21 46.9** | **+3.3** |
| | baz=215 | | | | | | |
| **ECBN** | **Changbin** | **1.57** | **197** | *e*P | **Pn** | **12 21 23.0** | **-0.2** |
| | baz=212 | | | | | | |
| ECBN | | | | *e*S | **Sb** | **12 21 43.9** | **-0.4** |
| | baz=212 | | | | | | |
| **EYUL** | **Yuli** | **1.58** | **202** | *e*P | **Pb** | **12 21 24.0** | **-0.5** |
| | baz=211 | | | | | | |
| **YUS** | **Yu-Shan** | **1.62** | **215** | *e*P | **Pg** | **12 21 25.9** | **-0.3** |
| | baz=214 | | | | | | |
| YUS | | | | *e*S | **Sg** | **12 21 47.5** | **+0.2** |
| | baz=214 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.68** | **107** | P | **Pn** | **12 21 24.0** | **-0.6** |
| **ALS** | **Alishan** | **1.68** | **219** | P | **Pg** | **12 21 27.0** | **-0.5** |
| | baz=209 | | | | | | |
| **CHN5** | **Tsauling** | **1.69** | **224** | *e*P | **Pg** | **12 21 27.6** | **-0.1** |
| | baz=221 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.71** | **238** | *e*P | **Pn** | **12 21 25.6** | **+0.5** |
| | baz=251 | | | | | | |
| **WDLH** | **Douliu** | **1.72** | **229** | *e*P | **Pb** | **12 21 27.0** | **+0.1** |
| | baz=245 | | | | | | |
| **FULB** | **Fuli** | **1.73** | **201** | *e*P | **Pb** | **12 21 27.4** | **+0.3** |
| | baz=211 | | | | | | |
| **CHKT** | **Chengkung** | **1.80** | **198** | *e*P | **Pb** | **12 21 27.5** | **-0.8** |
| | baz=182 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.84** | **114** | P | **Pn** | **12 21 26.9** | **+0.1** |
| **ELDTW** | **Lidau** | **1.84** | **208** | *e*P | **Pb** | **12 21 27.9** | **-1.2** |
| | baz=192 | | | | | | |
| **CHY** | **Chiayi** | **1.93** | **227** | *e*P | **Pb** | **12 21 29.4** | **-1.0** |
| | baz=242 | | | | | | |
| **EDH** | **Donghe** | **1.94** | **198** | *e*P | **Pn** | **12 21 29.1** | **+0.9** |
| | baz=184 | | | | | | |
| **TPUB** | **Ta-pu** | **1.95** | **219** | *e*P | **Pb** | **12 21 30.8** | **0.0** |
| | baz=215 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.95** | **107** | P | **Pn** | **12 21 28.5** | **+0.2** |
| JKRS | | | | S | **Sn** | **12 21 52.6** | **-0.3** |
| **STYH** | **Taoyuan** | **1.97** | **214** | *e*P | **Pb** | **12 21 30.9** | **-0.3** |
| | baz=197 | | | | | | |
| **WTP** | **Ta-pu** | **2.00** | **218** | *e*P | **Pb** | **12 21 32.1** | **+0.5** |
| | baz=201 | | | | | | |
| WTP | | | | *e*S | **Sg** | **12 21 59.6** | **+0.2** |
| | baz=201 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.04** | **103** | P | **Pn** | **12 21 28.8** | **-0.7** |
| JIJ | | | | *e*S | **Sn** | **12 21 54.6** | **-0.4** |
| **WSL** | **Shuilin Townsh** | **2.05** | **231** | *e*P | **Pb** | **12 21 30.9** | **-1.6** |
| | baz=244 | | | | | | |
| **TWK** | **Hsinying** | **2.06** | **221** | *e*P | **Pb** | **12 21 32.5** | **-0.2** |
| | baz=217 | | | | | | |
| **LONT** | **Longtian** | **2.06** | **202** | *e*P | **Pn** | **12 21 29.6** | **-0.3** |
| | baz=199 | | | | | | |
| **SNST** | **Tainan City** | **2.09** | **220** | *e*P | **Pb** | **12 21 33.3** | **+0.2** |
| | baz=216 | | | | | | |
| **CHN1** | **Nanshi** | **2.10** | **219** | *e*P | **Pb** | **12 21 33.3** | **0.0** |
| | baz=215 | | | | | | |
| **ICHU** | **Yijhu** | **2.12** | **227** | *e*P | **Pb** | **12 21 32.6** | **-1.1** |
| | baz=240 | | | | | | |
| **SGST** | **Jiashian** | **2.15** | **216** | *e*P | **Pb** | **12 21 33.3** | **-0.8** |
| | baz=197 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.15** | **96** | P | **Pn** | **12 21 31.6** | **+0.6** |
| JISG | | | | *e*S | **Sn** | **12 21 57.7** | **0.0** |
| **TWGBT** | **Beinan** | **2.16** | **202** | *e*P | **Pn** | **12 21 31.0** | **-0.2** |
| | baz=188 | | | | | | |
| **SLGT** | **Liugui** | **2.19** | **214** | *e*P | **Pb** | **12 21 33.8** | **-1.0** |
| | baz=209 | | | | | | |
| **MATB** | **Ma-tsu** | **2.25** | **306** | *e*P | **Pn** | **12 21 31.0** | **-1.5** |
| | baz=303 | | | | | | |
| **CHN3** | **Shinhua** | **2.27** | **220** | *e*P | **Pb** | **12 21 36.9** | **+0.6** |
| | baz=217 | | | | | | |
| **SHHT** | **Tainan City** | **2.33** | **220** | *e*P | **Pb** | **12 21 37.4** | **+0.2** |
| | baz=216 | | | | | | |
| **SSD** | **Sandimen** | **2.40** | **211** | *e*P | **Pb** | **12 21 37.6** | **-0.9** |
| | baz=206 | | | | | | |
| **ECL** | **Taimali** | **2.40** | **203** | *e*P | **Pn** | **12 21 35.2** | **+0.6** |
| | baz=188 | | | | | | |
| **TSMG** | **Majia** | **2.43** | **210** | *e*P | **Pb** | **12 21 38.2** | **-0.8** |
| | baz=206 | | | | | | |
| **TWM1** | **Shoushan** | **2.44** | **216** | *e*P | **Pg** | **12 21 40.4** | **-1.5** |
| | baz=211 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.52** | **209** | *e*P | **Pb** | **12 21 39.2** | **-1.3** |
| | baz=205 | | | | | | |
| **PNG** | **Penghu** | **2.53** | **241** | *e*P | **Pn** | **12 21 37.0** | **+0.7** |
| | baz=236 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.54** | **240** | *e*P | **Pn** | **12 21 36.2** | **-0.3** |
| | baz=235 | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.59** | **275** | *e*P | **Pn** | **12 21 36.1** | **-1.1** |
| | baz=273 | | | | | | |
| **WDGT** | **Dungji** | **2.62** | **234** | *e*P | **Pn** | **12 21 38.4** | **+0.8** |
| | baz=230 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.63** | **311** | *e*P | **Pn** | **12 21 36.3** | **-1.3** |
| | baz=308 | | | | | | |
| **XPSS** | **Dashiqiu** | **2.64** | **323** | *e*P | **Pn** | **12 21 36.5** | **-1.2** |
| | baz=321 | | | | | | |
| **EAST** | **Anshuo** | **2.64** | **203** | *e*P | **Pn** | **12 21 38.7** | **+0.9** |
| | baz=190 | | | | | | |
| **SSPT** | **Xinbi** | **2.66** | **209** | *e*P | **Pb** | **12 21 41.7** | **-1.1** |
| | baz=204 | | | | | | |
| **TAWH** | **Dawu Township** | **2.66** | **202** | *e*P | **Pn** | **12 21 38.2** | **+0.1** |
| | baz=189 | | | | | | |
| **SCZT** | **Fangliau** | **2.74** | **207** | *e*P | **Pb** | **12 21 41.7** | **-2.4** |
| | baz=202 | | | | | | |
| **LAY** | **Lan-yu** | **2.80** | **188** | *e*P | **Pn** | **12 21 40.0** | **0.0** |
| | baz=178 | | | | | | |
| **SLIU** | **Shiz

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 46.10 | 164 | P | | P | 12 29 18.9 | -0.8 |
| | 1.1nm,0.8s,baz=347,slow=8.7,SNR=6.9 | | | | | | | |
| ASAR | Alice Springs | 49.58 | 166 | P | | P | 12 29 46.7 | +0.1 |
| | 0.3nm,0.7s,baz=349,slow=7.8,SNR=4.9 | | | | | | | |
| YKA | Yellowknife Ar | 82.10 | 23 | P | | P | 12 33 15.0 | -0.7 |
| | 0.4nm,0.9s,baz=308,slow=4.6,SNR=3.0 | | | | | | | |

*IDC* ***16*** *12:29:32.0±1.5, 15°.08N×105°.80W, h0km, mb3.9/7, mb1 4.2/11, mb1mx4.0/32, mbtmp3.9/11, ML3.2/4, MS3.9/27, Ms1 3.9/27, ms1mx3.7/70, Error ellipse: s-maj=48.2km s-min=18.0km az=55.0*

*NEIC* ***16*** *12:29:37.1±2.9, 15°.60N±0°.10×104°.8W±0°.1, h10km±1km, mb4.4/79, Md4.4/12(MEX), Error ellipse: s-maj=20.8km s-min=12.3km az=228.0*

*MEX* ***16*** *12:29:37.9±1.1, 15°.50N×104°.68W, h10km, MD4.4*

**ISC 16 12:29:36.6±0.9, 15°.66N±0°.08×104°.79W±0°.07, h10km, n123, σ1$41/102, mb4.4/31, MS3.9/23, Off coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MMIG | Aquila | 2.96 | 28 | | | | Pn | 12 30 23.1 | -0.6 |
| MMIG | | | | | | | Sn | 12 30 59.6 | +0.4 |
| MMIG | Aquila | 2.96 | 28 | *e*P | | | Pn | 12 30 23.1 | -0.6 |
| MMIG | | | | *e*S | | | Sn | 12 30 59.6 | +0.4 |
| ZIIG | Zihuatanejo | 3.73 | 58 | | | | Pn | 12 30 32.6 | -1.7 |
| ZIIG | | | | | | | Sn | 12 31 15.9 | -2.4 |
| ZIIG | Zihuatanejo | 3.73 | 58 | *e*P | | | Pn | 12 30 32.6 | -1.7 |
| ZIIG | | | | *e*S | | | Sn | 12 31 15.9 | -2.4 |
| ARIG | Puente Sto Nin | 4.99 | 58 | | | | Pn | 12 30 51.5 | -0.1 |
| ARIG | | | | | | | Sn | 12 31 47.0 | -2.3 |
| ARIG | Puente Sto Nin | 4.99 | 58 | *e*P | | | Pn | 12 30 51.5 | -0.1 |
| ARIG | | | | *e*S | | | Sn | 12 31 47.0 | -2.3 |
| DAIG | Los Arroyos | 5.12 | 74 | | | | Pn | 12 30 52.4 | -0.9 |
| DAIG | | | | | | | Sn | 12 31 55.6 | +3.0 |
| DAIG | Los Arroyos | 5.12 | 74 | *e*P | | | Pn | 12 30 52.4 | -0.9 |
| DAIG | | | | *e*S | | | Sn | 12 31 55.6 | +3.0 |
| MOIG | Morelia | 5.27 | 40 | Pn | | | Pn | 12 30 56.9 | +1.2 |
| CRIG | Cruz Grande | 5.54 | 78 | | | | Pn | 12 30 59.4 | +0.2 |
| CRIG | | | | | | | Sn | 12 32 00.8 | -2.2 |
| CRIG | Cruz Grande | 5.54 | 78 | *e*P | | | Pn | 12 30 59.4 | +0.2 |
| CRIG | | | | *e*S | | | Sn | 12 32 00.8 | -2.2 |
| PLIG | Platanillo | 5.74 | 61 | | | | Pn | 12 31 01.6 | -0.4 |
| PLIG | | | | | | | Sn | 12 32 08.4 | +0.3 |
| PLIG | Platanillo | 5.74 | 61 | *e*P | | | Pn | 12 31 01.6 | -0.4 |
| PLIG | | | | *e*S | | | Sn | 12 32 08.4 | +0.3 |
| ZAIG | Zacatecas | 7.38 | 16 | Pn | | | Pn | 12 31 25.2 | +0.5 |
| SLBS | Sierra La Lagu | 9.35 | 330 | Pn | | | Pn | 12 31 50.7 | -0.8 |
| CMIG | Matias Romero | 9.61 | 80 | Pn | | | Pn | 12 32 07.5 | +12 |
| | 0.0nm,0.3s,baz=256,slow=17,SNR=1.8 | | | | | | | | |
| CMIG | | | | LR | | | LR | 12 35 17.5 | |
| | comp=Z,238nm,21.3s,baz=264,slow=32 | | | | | | | | |
| HPIG | | 11.25 | 356 | | | | Pn | 12 32 15.9 | -1.8 |
| KVTX | Kingsville | 13.45 | 27 | Pn | | | Pn | 12 32 48.7 | +1.1 |
| TX31 | Lajitas Ar. Si | 13.65 | 4 | | | | Pn | 12 32 49.3 | -1.1 |
| TX32 | Lajitas Array | 13.65 | 4 | | | | Pn | 12 32 50.8 | +0.3 |
| TXAR | Lajitas Array | 13.65 | 4 | Pn | | | P | 12 32 56.8 | -2.6 |
| | 0.0nm,0.3s,baz=186,slow=14,SNR=27 | | | | | | | | |
| TXAR | | | | LR | | | LR | 12 38 10.0 | |
| | comp=Z,679nm,18.5s,baz=188,slow=36 | | | | | | | | |
| TXAR | Lajitas Array | 13.65 | 4 | Pn | | | Pn | 12 32 50.8 | +0.3 |
| APG | El Apazote | 13.84 | 91 | Pn | | | P | 12 33 03.2 | +1.6 |
| | 0.4nm,0.3s,baz=279,slow=15,SNR=1.9 | | | | | | | | |
| APG | | | | LR | | | LR | 12 37 14.3 | |
| | comp=Z,224nm,19.7s,baz=214,slow=31 | | | | | | | | |
| JCT | Junction City | 15.45 | 16 | | | | Pn | 12 33 18.2 | +3.5 |
| JCT | | | | | IAmb | | IAmb | 12 33 26.5 | |
| | comp=Z,35nm,1.3s | | | | | | | | |
| MNTX | Cornudas Mount | 15.98 | 358 | | | | P | 12 33 24.9 | -0.3 |
| 319A | Douglas | 16.18 | 346 | | | | P | 12 33 28.2 | +0.7 |
| 319A | | | | | IAmb | | IAmb | 12 33 30.4 | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| 435B | Jarrell | 16.44 | 22 | | | | Pn | 12 33 30.2 | +2.7 |
| 435B | | | | | IAmb | | IAmb | 12 33 40.5 | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| CRIN | San Cristobal | 17.45 | 97 | | | | Pn | 12 33 39.3 | -1.1 |
| TUC | Tucson | 17.45 | 343 | Pn | | | Pn | 12 33 40.6 | +0.3 |
| ABTX | Abilene, Hawle | 17.53 | 15 | | | | Pn | 12 33 41.9 | +0.7 |
| ABTX | | | | | IAmb | | IAmb | 12 33 49.1 | |
| | comp=Z,34nm,1.4s | | | | | | | | |
| WHTX | Lake Whitney, | 17.58 | 21 | Pn | | | Pn | 12 33 42.0 | +0.2 |
| WHTX | | | | | IAmb | | IAmb | 12 33 51.9 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| 214A | Organ Pipe Nat | 17.80 | 337 | Pn | | | Pn | 12 33 43.9 | -0.6 |
| CNGN | Cerro Negro | 17.83 | 98 | P | | | Pn | 12 33 44.7 | -0.3 |
| CNGN | | | | | IAmb | | IAmb | 12 33 51.5 | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| 237A | Washetta, Mont | 18.21 | 25 | | | | Pn | 12 33 48.9 | -0.7 |
| 237A | | | | | IAmb | | IAmb | 12 34 02.2 | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| MSTX | Muleshoe | 18.32 | 5 | | | | Pn | 12 33 49.7 | -1.4 |
| MSTX | | | | | IAmb | | IAmb | 12 34 05.0 | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| BNM | Barren Site | 18.49 | 355 | P | | | Pn | 12 33 54.7 | +1.5 |
| Z35A | Perchaven, San | 18.87 | 20 | P | | | P | 12 33 58.2 | +1.1 |
| 113A | Mohawk Valley, | 18.88 | 336 | P | | | P | 12 33 57.4 | +0.1 |
| 113A | | | | | IAmb | | IAmb | 12 34 05.1 | |
| | comp=Z,22nm,1.5s | | | | | | | | |
| ANMO | Albuquerque | 19.27 | 356 | P | | | Pn | 12 34 05.5 | +2.9 |
| | comp=Z,0.0nm,0.3s,baz=167,slow=14,SNR=7.5 | | | | | | | | |
| ANMO | | | | LR | | | LR | 12 40 34.0 | |
| | comp=Z,233nm,21.4s,baz=176,slow=33 | | | | | | | | |
| ANMO | Albuquerque | 19.27 | 356 | | | | Pn | 12 34 03.4 | +0.8 |
| AMTX | Amarillo | 19.35 | 8 | P | | | P | 12 34 03.7 | +1.3 |
| AMTX | | | | | IAmb | | IAmb | 12 34 17.8 | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| X18A | Snowflake | 19.36 | 347 | P | | | P | 12 34 04.0 | +1.4 |
| X16A | Lo Mia Camp, P | 19.62 | 343 | P | | | P | 12 34 06.3 | +0.9 |
| X34A | Smith Ranch, M | 19.88 | 17 | | | | P | 12 34 08.2 | +0.2 |
| W18A | Petrified Fore | 19.88 | 348 | P | | | P | 12 34 09.5 | +1.2 |
| BLYC | Blythe | 20.05 | 336 | P | | | P | 12 34 10.2 | +0.3 |
| JTS | Las Juntas de | 20.05 | 103 | LR | | | LR | 12 40 02.3 | |
| | comp=Z,298nm,21.8s,baz=356,slow=30 | | | | | | | | |
| 344A | Westbrook Farm | 20.30 | 37 | P | | | P | 12 34 11.2 | -1.5 |
| Z41A | Richland Creek | 20.61 | 30 | P | | | P | 12 34 16.7 | +0.7 |
| WUAZ | Wupatki | 20.64 | 345 | P | | | P | 12 34 17.4 | +0.9 |
| WUAZ | | | | | IAmb | | IAmb | 12 34 29.6 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| W35A | Tecumseh | 20.67 | 19 | | | | P | 12 34 18.3 | +1.6 |
| W35A | | | | | IAmb | | IAmb | 12 34 25.9 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| PFO | Pinyon Flats O | 20.76 | 332 | P | | | P | 12 34 16.4 | -1.4 |
| | comp=Z,2.7nm,0.9s,baz=131,slow=8.1,SNR=5.7 | | | | | | | | |
| PFO | | | | LR | | | LR | 12 41 33.0 | |
| | comp=Z,172nm,19.8s,baz=148,slow=35 | | | | | | | | |
| PFO | Pinyon Flats O | 20.76 | 332 | P | | | P | 12 34 17.9 | +0.2 |
| WLAR | White Oak Lake | 20.82 | 28 | P | | | P | 12 34 19.1 | +0.8 |
| 143A | Socs Landing, | 20.87 | 33 | P | | | P | 12 34 19.5 | +0.6 |
| W13A | Hualapai Mount | 21.01 | 339 | P | | | P | 12 34 21.7 | +1.1 |
| T25A | Trinidad | 21.40 | 1 | P | | | P | 12 34 26.4 | +1.6 |
| T25A | | | | | IAmb | | IAmb | 12 34 31.6 | |
| | comp=Z,23nm,1.4s | | | | | | | | |
| TUL1 | Leonard | 21.71 | 20 | P | | | P | 12 34 28.6 | +0.6 |
| TUL1 | | | | | IAmb | | IAmb | 12 34 37.7 | |
| | comp=Z,35nm,1.4s | | | | | | | | |
| MVCO | Mesa Verde | 21.72 | 352 | P | | | P | 12 34 30.9 | +2.6 |
| MVCO | | | | | IAmb | | IAmb | 12 35 00.6 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| U15A | North Rim | 21.74 | 343 | P | | | P | 12 34 30.9 | +2.4 |
| W39A | Magazine | 21.82 | 25 | P | | | P | 12 34 31.8 | +2.8 |
| W39A | | | | | IAmb | | IAmb | 12 34 38.7 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| SDCO | Great Sand Dun | 22.01 | 358 | P | | | P | 12 34 33.7 | +2.2 |
| S22A | 4UR Ranch, Cre | 22.08 | 356 | P | | | P | 12 34 34.3 | +2.1 |
| S22A | | | | | IAmb | | IAmb | 12 34 54.0 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| LCMT | Little Creek M | 22.56 | 342 | P | | | P | 12 34 38.5 | +1.4 |
| U38A | Gravette | 22.68 | 22 | | IAmb | | IAmb | 12 34 47.8 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| PV13 | Radium Mtn., P | 22.70 | 352 | | IAmb | | IAmb | 12 35 07.4 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| PV11 | David Mesa, Pa | 22.84 | 352 | P | | | P | 12 34 42.2 | +2.0 |
| PV11 | | | | | IAmb | | IAmb | 12 35 10.1 | |
| | comp=Z,9.4nm,0.9s | | | | | | | | |
| FCAR | Ozark Folk Cen | 23.11 | 27 | P | | | P | 12 34 44.0 | +1.2 |
| FCAR | | | | | IAmb | | IAmb | 12 34 50.4 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| MTPU | Mount Pierson | 23.23 | 345 | P | | | P | 12 34 45.0 | +0.6 |
| MTPU | | | | | IAmb | | IAmb | 12 35 14.2 | |
| | comp=Z,22nm,1.5s | | | | | | | | |
| SRU | San Rafael Swe | 23.90 | 349 | P | | | P | 12 34 52.1 | +1.3 |
| SRU | | | | | IAmb | | IAmb | 12 35 07.1 | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| ISCO | Idaho Springs | 24.06 | 358 | IAmb | | | IAmb | 12 35 05.2 | |
| | comp=Z,7.8nm,1.2s | | | | | | | | |
| MGMO | Mountain Grove | 24.12 | 25 | IAmb | | | IAmb | 12 34 58.5 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| P17A | Butcher Ranch, | 24.29 | 349 | IAmb | | | IAmb | 12 35 23.7 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| P18A | Preston Nutter | 24.36 | 350 | IAmb | | | IAmb | 12 35 27.3 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| O20A | White River Ci | 24.57 | 354 | P | | | P | 12 34 58.5 | +1.5 |
| O20A | | | | IAmb | | | IAmb | 12 35 26.2 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| PBMO | Poplar Bluff | 24.61 | 29 | P | | | P | 12 34 59.2 | +2.1 |
| PBMO | | | | IAmb | | | IAmb | 12 35 07.3 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| DUG | Dugway, Tooele | 25.43 | 346 | P | | | P | 12 35 05.1 | +0.4 |
| DUG | | | | IAmb | | | IAmb | 12 35 10.5 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| JLU | Jordanelle | 25.52 | 348 | P | | | P | 12 35 05.2 | -0.4 |
| JLU | | | | IAmb | | | IAmb | 12 35 30.0 | |
| | comp=Z,7.7nm,1.3s | | | | | | | | |
| NVAR | Mina Array Bea | 25.62 | 335 | P | | | P | 12 35 05.3 | -1.3 |
| | comp=Z,0.8nm,1.1s,baz=160,slow=6.6,SNR=4.5 | | | | | | | | |
| NVAR | | | | LR | | | LR | 12 43 59.3 | |
| | comp=Z,221nm,20.2s,baz=183,slow=34 | | | | | | | | |
| CTU | Camp Tracy | 25.67 | 348 | P | | | P | 12 35 08.2 | +1.3 |
| CTU | | | | IAmb | | | IAmb | 12 35 36.7 | |
| | comp=Z,7.4nm,1.0s | | | | | | | | |
| PD31 | Pinedale Array | 27.33 | 352 | P | | | P | 12 35 22.9 | +0.9 |
| PDAR | Pinedale Array | 27.33 | 352 | P | | | P | 12 35 22.6 | +0.7 |
| | comp=Z,1.1nm,0.9s,baz=166,slow=7.5,SNR=9.1 | | | | | | | | |
| TKL | Tuckaleechee C | 27.38 | 39 | LR | | | LR | 12 49 17.3 | |
| | comp=Z,193nm,18.0s,baz=217,slow=42 | | | | | | | | |
| LOHW | Long Hollow | 28.30 | 351 | IAmb | | | IAmb | 12 35 33.8 | |
| | comp=Z,9.8nm,1.3s | | | | | | | | |
| YBH | Yreka Blue Hor | 30.24 | 333 | LR | | | LR | 12 46 13.2 | |
| | comp=Z,167nm,19.5s,baz=160,slow=33 | | | | | | | | |
| BOZ | Bozeman (W) | 30.40 | 350 | P | | | P | 12 35 50.5 | +1.3 |
| BOZ | | | | IAmb | | | IAmb | 12 36 19.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | | | |
| ROSC | El Rosal | 31.80 | 106 | LR | | | LR | 12 46 49.2 | |
| | comp=Z,168nm,19.0s,baz=32,slow=32 | | | | | | | | |
| MSO | Missoula | 32.00 | 348 | IAmb | | | IAmb | 12 36 30.3 | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| AGMN | Agassiz Nation | 33.37 | 11 | P | | | P | 12 36 15.6 | +0.6 |
| ATAH | Atahualpa | 34.59 | 129 | LR | | | LR | 12 47 37.2 | |
| | comp=Z,256nm,22.0s,baz=329,slow=31 | | | | | | | | |
| ULM | Lac du Bonnet | 35.25 | 10 | LR | | | LR | 12 51 29.3 | |
| | comp=Z,376nm,20.9s,baz=194,slow=37 | | | | | | | | |
| SADO | Sadowa | 36.21 | 31 | LR | | | LR | 12 52 41.2 | |
| | comp=Z,182nm,19.2s,baz=223,slow=37 | | | | | | | | |
| NNA | Nana | 38.98 | 133 | LR | | | LR | 12 49 12.4 | |
| | comp=Z,139nm,21.3s,baz=311,slow=30 | | | | | | | | |
| BBB | Bella Bella | 40.89 | 338 | LR | | | LR | 12 54 46.5 | |
| | comp=Z,138nm,18.5s,baz=224,slow=37 | | | | | | | | |
| DLBC | Dease Lake | 46.65 | 342 | LR | | | LR | 12 57 00.8 | |
| | comp=Z,178nm,18.4s,baz=346,slow=35 | | | | | | | | |
| YKA | Yellowknife Ar | 47.29 | 354 | P | | | P | 12 38 09.4 | -0.6 |
| | comp=Z,1.3nm,0.8s,baz=168,slow=7.4,SNR=25 | | | | | | | | |
| YKA | | | | LR | | | LR | 12 57 21.8 | |
| | comp=Z,125nm,19.1s,baz=6.0,slow=35 | | | | | | | | |
| LPAZ | La Paz | 48.13 | 130 | P | | | P | 12 38 17.9 | 0.0 |
| | comp=Z,3.1nm,1.0s,baz=346,slow=6.2,SNR=5.7 | | | | | | | | |
| LPAZ | La Paz | 48.13 | 130 | P | | | P | 12 38 18.4 | +0.5 |
| LVC | Limon Verde | 51.77 | 136 | LR | | | LR | 12 55 47.4 | |
| | comp=Z,105nm,21.0s,baz=327,slow=30 | | | | | | | | |
| SIV | San Ignacio | 53.40 | 124 | LR | | | LR | 12 58 56.0 | |
| | comp=Z,141nm,21.5s,baz=299,slow=33 | | | | | | | | |
| FRB | Frobisher Bay | 54.14 | 19 | LR | | | LR | 13 01 29.6 | |
| | comp=Z,169nm,20.0s,baz=210,slow=35 | | | | | | | | |
| PPT | Papeete | 55.12 | 235 | LR | | | LR | 12 55 48.1 | |
| | comp=Z,174nm,19.1s,baz=24,slow=29 | | | | | | | | |
| RIDG | Independent Ri | 55.38 | 340 | P | | | P | 12 39 10.5 | -0.2 |
| INK | Inuvik | 55.73 | 348 | P | | | P | 12 39 12.7 | -0.4 |
| IL31 | | 56.72 | 340 | P | | | P | 12 39 19.1 | -1.1 |
| ILAR | Eielson Array | 56.72 | 340 | P | | | P | 12 39 18.6 | -1.6 |
| | comp=Z,1.7nm,0.9s,baz=149,slow=5.7,SNR=17 | | | | | | | | |
| ILAR | Eielson Array | 56.72 | 340 | P | | | P | 12 39 19.1 | -1.2 |
| PRP | Porcupine Dome | 56.77 | 341 | P | | | P | 12 39 20.4 | -0.4 |
| PRP | | | | IAmb | | | IAmb | 12 39 49.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| NEA2 | Nenana | 57.35 | 339 | P | | | P | 12 39 23.6 | -1.1 |
| A36M | Sachs Harbour | 57.61 | 353 | P | | | P | 12 39 25.8 | -0.6 |
| A36M | | | | IAmb | | | IAmb | 12 39 36.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | | | |
| H24K | Noodor Dome | 57.72 | 341 | P | | | P | 12 39 26.9 | -0.4 |
| I23K | Minto, Yukon-K | 57.78 | 339 | P | | | P | 12 39 26.8 | -0.9 |
| RES | Resolute Bay | 59.28 | 3 | LR | | | LR | 13 04 27.4 | |
| | comp=Z,145nm,19.3s,baz=82,slow=35 | | | | | | | | |
| SFJD | Kangerlussuaq | 62.08 | 21 | LR | | | LR | 13 05 02.0 | |
| | comp=Z,162nm,19.7s,baz=264,slow=34 | | | | | | | | |
| CPUP | Villa Florida | 62.21 | 132 | P | | | P | 12 39 58.0 | -0.7 |
| | comp=Z,1.0nm,0.3s,baz=296,slow=7.3,SNR=4.1 | | | | | | | | |
| CPUP | Villa Florida | 62.21 | 132 | IAmb | | | IAmb | 12 39 59.5 | |
| | comp=Z,2.9nm,1.0s | | | | | | | | |
| SPITS | Spitsbergen Ar | 80.81 | 10 | LR | | | LR | 13 18 18.9 | |
| | comp=Z,120nm,18.8s,baz=348,slow=36 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 83.78 | 287 | T | | | T | 14 14 24.3 | |
| | baz=77 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 83.78 | 287 | T | | | T | 14 14 24.9 | |
| | baz=77 | | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 83.79 | 287 | T | | | T | 14 14 27.6 | |
| | baz=77 | | | | | | | | |
| ARCES | ARCESS Array B | 88.17 | 16 | LR | | | LR | 13 22 07.5 | |
| | comp=Z,91nm,21.7s,baz=304,slow=36 | | | | | | | | |
| NOA | NORSAR Array B | 88.35 | 26 | LR | | | LR | 13 22 20.1 | |
| | comp=Z,45nm,19.2s,baz=300,slow=36 | | | | | | | | |
| DAVOX | Davos/Dischmat | 94.67 | 39 | LR | | | LR | 13 26 12.9 | |
| | comp=Z,88nm,19.4s,baz=290,slow=36 | | | | | | | | |

*NOU* ***16*** *12:34:54.4, 37°.55S×179°.44E, h145km, mb4.3/9, Off E. Coast of N. Island, N.Z.*

*WEL* ***16*** *12:35:11.5±0.6, 38°.3S×17°.8E±°, h48km±4km, M3.4/57, ML3.5/60, MLv3.4/57, Error ellipse: s-maj=0.0km s-min=0.0km az=63.0*

**ISC 16 12:35:08.9±2.0, 37°.94S±0°.06×178°.24E±0°.07, h76km±10km, n109, σ1$32/115, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PUZ | Puketiti | 0.13 | 173 | P | | | Pn | 12 35 20.5 | +0.4 |
| PUZ | | | | S | | | Sn | 12 35 27.6 | -0.7 |
| PKGZ | Pakihiroa | 0.14 | 292 | P | | | Pn | 12 35 20.0 | -0.1 |
| PKGZ | | | | S | | | Sn | 12 35 26.7 | -1.6 |
| WMGZ | Waiomatatini S | 0.18 | 49 | P | | | Pn | 12 35 21.2 | +1.0 |
| WMGZ | | | | S | | | Sn | 12 35 29.3 | +0.8 |
| TWGZ | Tauwhareparae | 0.31 | 221 | P | | | Pn | 12 35 21.5 | +0.6 |
| TWGZ | | | | S | | | Sn | 12 35 29.9 | +0.1 |
| MXZ | Matakaoa Point | 0.38 | 8 | P | | | Pn | 12 35 22.3 | +1.0 |
| HAZ | Te Kaha | 0.40 | 297 | P | | | Pn | 12 35 21.8 | +0.3 |
| HAZ | | | | S | | | Sn | 12 35 29.3 | -1.4 |
| RUGZ | Raukumara Rang | 0.44 | 267 | P | | | Pn | 12 35 22.1 | +0.1 |
| RUGZ | | | | S | | | Sn | 12 35 29.7 | -1.9 |
| CNGZ | Carnagh Statio | 0.54 | 183 | P | | | Pn | 12 35 24.5 | +1.7 |
| TKGZ | Te Karaka | 0.59 | 211 | P | | | Pn | 12 35 24.0 | +0.9 |
| TKGZ | | | | S | | | Sn | 12 35 34.1 | +0.5 |
| MWZ | Matawai | 0.68 | 235 | P | | | Pn | 12 35 24.8 | +0.6 |
| MWZ | | | | S | | | Sn | 12 35 34.7 | -0.8 |
| RIGZ | Rimuhau | 0.85 | 206 | P | | | Pn | 12 35 27.2 | +1.2 |
| RAGZ | Rawiri | 0.85 | 229 | P | | | Pn | 12 35 27.1 | +1.0 |
| URZ | Urewera | 0.94 | 250 | P | | | Pn | 12 35 27.7 | +0.7 |
| URZ | Urewera | 0.94 | 250 | P | | | Pn | 12 35 28.0 | +0.9 |
| WHRZ | Whale Island | 1.00 | 274 | P | | | Pn | 12 35 29.5 | +1.7 |
| PRGZ | Paritu Road | 1.02 | 196 | P | | | Pn | 12 35 29.1 | +1.0 |
| SNGZ | Shannon Statio | 1.10 | 220 | P | | | Pn | 12 35 30.2 | +1.2 |
| KNZ | Kokohu | 1.17 | 202 | P | | | Pn | 12 35 30.6 | +0.8 |
| EDRZ | Edgecumbe | 1.20 | 262 | P | | | Pn | 12 35 31.1 | +0.8 |
| RTZ | Ruatahuna | 1.20 | 235 | P | | | Pn | 12 35 31.3 | +1.0 |
| MARZ | Manawahe | 1.24 | 267 | P | | | Pn | 12 35 30.9 | +0.2 |
| MHGZ | Mahia Peninsul | 1.24 | 192 | P | | | Pn | 12 35 32.1 | +1.3 |
| MUGZ | Murupara | 1.27 | 245 | P | | | Pn | 12 35 31.9 | +0.7 |
| RAHZ | Arahi | 1.33 | 222 | P | | | Pn | 12 35 33.3 | +1.4 |
| OPRZ | Ohinepanea | 1.33 | 274 | P | | | Pn | 12 35 32.0 | 0.0 |
| WHHZ | Waihua | 1.38 | 214 | P | | | Pn | 12 35 37.1 | +4.6 |
| TARZ | Mount Tarawera | 1.40 | 257 | P | | | Pn | 12 35 33.7 | +0.8 |
| MKRZ | Makatiti | 1.41 | 261 | P | | | Pn | 12 35 34.4 | +1.4 |
| RRRZ | Republican Roa | 1.42 | 253 | P | | | Pn | 12 35 33.7 | +0.7 |
| MTHZ | Maungataniwha | 1.43 | 230 | P | | | Pn | 12 35 34.4 | +1.2 |
| OMRZ | Omania | 1.48 | 263 | P | | | Pn | 12 35 34.5 | +0.6 |
| HLRZ | Highlands Stat | 1.52 | 258 | P | | | Pn | 12 35 35.3 | +0.9 |
| PRRZ | Plateau Road | 1.56 | 248 | P | | | Pn | 12 35 35.5 | +0.6 |
| KARZ | Kaharoa | 1.58 | 266 | P | | | Pn | 12 35 35.5 | +0.4 |
| TGRZ | Tauranga | 1.58 | 277 | P | | | Pn | 12 35 35.2 | +0.1 |
| HRRZ | Handcock Road | 1.60 | 253 | P | | | Pn | 12 35 36.2 | +0.7 |
| NMHZ | Naumai | 1.61 | 224 | P | | | Pn | 12 35 37.3 | +1.6 |
| HSRZ | Hossack Road | 1.61 | 256 | P | | | Pn | 12 35 36.8 | +1.2 |
| ALRZ | Allen Road | 1.62 | 247 | P | | | Pn | 12 35 36.3 | +0.7 |
| NGRZ | Ngongotaha | 1.63 | 264 | P | | | Pn | 12 35 36.9 | +1.1 |
| ARHZ | Aropaoanui | 1.64 | 216 | P | | | Pn | 12 35 37.3 | +1.3 |
| MRHZ | Matea Rd | 1.69 | 237 | P | | | Pn | 12 35 37.5 | +0.9 |
| GRRZ | Galatos Road | 1.73 | 256 | P | | | Pn | 12 35 38.2 | +1.1 |
| WPRZ | Whakapapatarin | 1.73 | 250 | P | | | Pn | 12 35 38.1 | +0.9 |
| BKZ | Black Stump Fm | 1.84 | 228 | P | | | Pn | 12 35 39.7 | +1.2 |
| BKZ | Black Stump Fm | 1.84 | 228 | P | | | Pn | 12 35 39.6 | +1.0 |
| MCHZ | McNeill Hill | 1.93 | 218 | P | | | Pn | 12 35 41.0 | +1.3 |
| HATZ | Hinemaiaia | 1.93 | 240 | P | | | Pn | 12 35 40.5 | +0.7 |
| WHTZ | Whakaora | 1.94 | 247 | P | | | Pn | 12 35 41.5 | +1.6 |
| CKHZ | Cape Kidnapper | 1.94 | 207 | P | | | Pn | 12 35 40.5 | +0.6 |
| KUTZ | Kaahu Road | 1.98 | 253 | P | | | Pn | 12 35 41.4 | +0.9 |
| KWHZ | Kaweka Forest | 2.05 | 223 | P | | | Pn | 12 35 42.4 | +0.9 |
| WATZ | Wairara | 2.11 | 248 | P | | | Pn | 12 35 43.6 | +1.3 |
| KAHZ | Kahuranaki | 2.13 | 209 | P | | | Pn | 12 35 43.0 | +0.5 |
| RITZ | Rihia Road | 2.14 | 240 | P | | | Pn | 12 35 43.9 | +1.3 |
| RATZ | Rangitukua | 2.15 | 244 | P | | | Pn | 12 35 44.2 | +1.5 |
| TLZ | Tolley Road | 2.16 | 259 | P | | | Pn | 12 35 43.5 | +0.6 |
| TOZ | Tahuroa Road | 2.18 | 275 | P | | | Pn | 12 35 43.5 | +0.4 |
| KRHZ | Kereru | 2.24 | 220 | P | | | Pn | 12 35 44.3 | +0.3 |
| KATZ | Kakaramea | 2.25 | 242 | P | | | Pn | 12 35 45.4 | +1.3 |
| BHHZ | Black Hill Sta | 2.30 | 227 | P | | | Pn | 12 35 45.6 | +0.8 |
| TMVZ | Te Maari | 2.31 | 239 | P | | | Pn | 12 35 45.9 | +1.0 |
| ETVZ | East Tongariro | 2.31 | 238 | P | | | Pn | 12 35 45.9 | +0.9 |
| NTVZ | North Tongarir | 2.32 | 239 | P | | | Pn | 12 35 46.1 | +1.0 |
| KUZ | Kuaotunu | 2.33 | 300 | P | | | Pn | 12 35 45.4 | +0.2 |
| KRVZ | Karewarewa | 2.34 | 240 | P | | | Pn | 12 35 46.5 | +1.1 |
| PXZ | Pawanui | 2.35 | 207 | P | | | Pn | 12 35 44.9 | -0.4 |
| OTVZ | Oturere | 2.36 | 238 | P | | | Pn | 12 35 46.6 | +0.9 |
| NNVZ | North Ngauruho | 2.38 | 239 | P | | | Pn | 12 35 47.1 | +1.1 |
| SNVZ | South Ngauruho | 2.39 | 238 | P | | | Pn | 12 35 47.0 | +0.9 |
| WTVZ | West Tongariro | 2.39 | 240 | P | | | Pn | 12 35 47.2 | +1.2 |
| NGZ | Ngauruhoe | 2.41 | 238 | P | | | Pn | 12 35 47.4 | +1.0 |
| TUVZ | Tukino | 2.42 | 236 | P | | | Pn | 12 35 47.6 | +1.1 |
| MOVZ | Moawhango | 2.44 | 232 | P | | | Pn | 12 35 47.2 | +0.6 |
| TWVZ | Taurewa | 2.47 | 242 | P | | | Pn | 12 35 48.0 | +0.9 |
| WHVZ | Whangaehu Hut | 2.47 | 236 | P | | | Pn | 12 35 48.2 | +1.0 |
| FWVZ | Far West T-bar | 2.48 | 237 | P | | | Pn | 12 35 48.2 | +0.9 |
| DRZ | Dome Shelter | 2.48 | 237 | P | | | Pn | 12 35 48.5 | +1.0 |
| WNVZ | Wahianoa | 2.49 | 235 | P | | | Pn | 12 35 48.2 | +0.8 |
| TRVZ | Turoa | 2.51 | 236 | P | | | Pn | 12 35 48.6 | +0.9 |
| PNHZ | Pukenui | 2.53 | 218 | P | | | Pn | 12 35 47.7 | -0.2 |
| WPHZ | Waipukurau | 2.54 | 213 | P | | | Pn | 12 35 47.9 | -0.1 |
| MTVZ | Mangateitei | 2.60 | 235 | P | | | Pn | 12 35 49.9 | +1.0 |
| PRHZ | Porangahau | 2.64 | 208 | P | | | Pn | 12 35 48.7 | -0.6 |
| HIZ | Hauiti | 2.72 | 257 | P | | | Pn | 12 35 52.0 | +1.6 |
| HIZ | Hauiti | 2.72 | 257 | P | | | Pn | 12 35 52.2 | +1.8 |
| ETAZ | East Tamaki Re | 2.81 | 289 | P | | | Pn | 12 35 53.7 | +2.1 |
| DVHZ | Dannevirke | 2.85 | 214 | P | | | Pn | 12 35 51.4 | -0.9 |
| ANWZ | Angora Road | 2.87 | 208 | P | | | Pn | 12 35 51.6 | -0.7 |
| VRZ | Vera Road | 2.97 | 245 | P | | | Pn | 12 35 55.4 | +1.6 |
| POWZ | Post Office Ro | 3.11 | 217 | P | | | Pn | 12 35 55.1 | -0.6 |
| WAZ | Wanganui | 3.12 | 233 | P | | | Pn | 12 35 57.2 | +1.3 |
| BFZ | Birch Farm | 3.14 | 209 | P | | | Pn | 12 35 55.0 | -1.1 |
| BFZ | Birch Farm | 3.14 | 209 | P | | | Pn | 12 35 55.3 | -0.8 |
| PRWZ | Pori Road | 3.15 | 213 | P | | | Pn | 12 35 55.5 | -0.7 |
| MHEZ | Mangahewa | 3.27 | 249 | P | | | Pn | 12 36 01.0 | +3.1 |
| CPWZ | Castlepoint | 3.36 | 207 | P | | | Pn | 12 35 58.4 | -0.7 |
| LREZ | Lake Rot

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=299 | | | | | | | |
| **NTST** | **Danshui** | **0.58** | **307** | P | | **Pb** | **12 36 45.5** | **+0.3** |
| | baz=305 | | | | | | | |
| NTST | | | | *e*S | | **Sb** | **12 36 53.7** | **+0.3** |
| | baz=305 | | | | | | | |
| **NNS** | **Nan Shan** | **0.65** | **236** | P | | **Pb** | **12 36 46.4** | **0.0** |
| | baz=228 | | | | | | | |
| **NNSB** | **Datong** | **0.65** | **234** | *e*P | | **Pb** | **12 36 46.1** | **-0.3** |
| | baz=246 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.72** | **208** | P | | **Pb** | **12 36 47.6** | **+0.1** |
| | baz=207 | | | | | | | |
| **ETL** | **Fush Village** | **0.72** | **205** | *e*P | | **Pb** | **12 36 47.7** | **+0.2** |
| | baz=205 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.74** | **216** | *e*P | | **Pb** | **12 36 48.4** | **+0.4** |
| | baz=215 | | | | | | | |
| **TWD** | **Chiawan** | **0.80** | **205** | P | | **Pb** | **12 36 49.1** | **+0.2** |
| | baz=204 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.82** | **7** | *i* P | | **Pb** | **12 36 49.8** | **+0.5** |
| | baz=8.0 | | | | | | | |
| **FUSS** | **Fushou** | **0.86** | **230** | *e*P | | **Pn** | **12 36 50.8** | **-0.4** |
| | baz=217 | | | | | | | |
| **LIOB** | **Emei** | **0.88** | **259** | *e*P | | **Pn** | **12 36 52.3** | **+1.1** |
| | baz=251 | | | | | | | |
| **SBCB** | **Hsinchu** | **0.89** | **269** | *e*P | | **Pn** | **12 36 51.3** | **-0.1** |
| | baz=285 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.89** | **259** | *e*P | | **Pn** | **12 36 52.2** | **+0.8** |
| | baz=250 | | | | | | | |
| **HSN** | **Hsinchu** | **0.90** | **270** | *e*P | | **Pb** | **12 36 50.4** | **-0.2** |
| | baz=288 | | | | | | | |
| **TWT** | **Tachien** | **0.91** | **232** | *e*P | | **Pn** | **12 36 52.7** | **+0.9** |
| | baz=221 | | | | | | | |
| **TDCB** | **Techi** | **0.92** | **233** | *e*P | | **Pn** | **12 36 51.7** | **-0.3** |
| | baz=232 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.92** | **224** | *e*P | | **Pb** | **12 36 51.3** | **+0.1** |
| | baz=223 | | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.96** | **112** | P | | **Pn** | **12 36 52.4** | **0.0** |
| JYNG | | | | *e*S | | **Sg** | **12 37 04.8** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **1.02** | **110** | P | | **Pn** | **12 36 53.4** | **+0.3** |
| **CHGB** | **Renai** | **1.03** | **224** | P | | **Pn** | **12 36 53.3** | **-0.3** |
| | baz=214 | | | | | | | |
| **WHP** | **Taichung City** | **1.06** | **240** | *e*P | | **Pn** | **12 36 54.6** | **+0.7** |
| | baz=231 | | | | | | | |
| **ESL** | **Shilin** | **1.10** | **206** | *e*P | | **Pg** | **12 36 54.3** | **0.0** |
| | baz=204 | | | | | | | |
| ESL | | | | *e*S | | **Sb** | **12 37 08.4** | **0.0** |
| | baz=204 | | | | | | | |
| **WUSB** | **Renai** | **1.12** | **224** | P | | **Pg** | **12 36 54.5** | **-0.1** |
| | baz=214 | | | | | | | |
| **NSY** | **Sanyi** | **1.16** | **251** | *e*P | | **Pg** | **12 36 57.2** | **+1.8** |
| | baz=267 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.22** | **232** | *e*P | | **Pg** | **12 36 57.2** | **+0.8** |
| | baz=238 | | | | | | | |
| **VWDT** | **VWDT** | **1.29** | **216** | P | | **Pg** | **12 36 57.9** | **0.0** |
| | baz=216 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.34** | **227** | *e*P | | **Pg** | **12 36 58.9** | **+0.1** |
| | baz=219 | | | | | | | |
| **SSLB** | **Suanglung** | **1.37** | **222** | *e*P | | **Pg** | **12 36 59.2** | **-0.2** |
| | baz=223 | | | | | | | |
| **WWF** | **Wufeng** | **1.38** | **237** | P | | **Pg** | **12 36 59.8** | **+0.2** |
| | baz=229 | | | | | | | |
| WWF | | | | *e*S | | **Sg** | **12 37 19.4** | **+1.9** |
| | baz=229 | | | | | | | |
| **EHY** | **Hungye** | **1.42** | **204** | *e*P | | **Pg** | **12 37 00.6** | **+0.2** |
| | baz=205 | | | | | | | |
| **WNT** | **Mingjian** | **1.49** | **232** | *e*P | | **Pg** | **12 37 03.4** | **+1.8** |
| | baz=232 | | | | | | | |
| **WJS** | **Zhushan** | **1.49** | **229** | *e*P | | **Pg** | **12 37 02.8** | **+1.0** |
| | baz=222 | | | | | | | |
| **ALS** | **Alishan** | **1.67** | **219** | *e*P | | **Pg** | **12 37 06.0** | **+0.8** |
| | baz=220 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.68** | **106** | P | | **Pn** | **12 37 02.4** | **+0.2** |
| **CHN5** | **Tsauling** | **1.68** | **224** | *e*P | | **Pg** | **12 37 06.5** | **+1.2** |
| | baz=226 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.70** | **238** | *e*P | | **Pg** | **12 37 05.5** | **-0.3** |
| | baz=255 | | | | | | | |
| **WDLH** | **Douliu** | **1.71** | **230** | *e*P | | **Pg** | **12 37 06.6** | **+0.7** |
| | baz=249 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.84** | **114** | P | | **Pn** | **12 37 05.1** | **+0.6** |
| HATJ | | | | *e*S | | **Sn** | **12 37 27.4** | **-0.3** |
| **TPUB** | **Ta-pu** | **1.93** | **219** | *e*P | | **Pg** | **12 37 09.8** | **-0.4** |
| | baz=219 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.95** | **107** | P | | **Pn** | **12 37 06.5** | **+0.5** |
| JKRS | | | | *e*S | | **Sn** | **12 37 29.7** | **-0.7** |
| **STYH** | **Taoyuan** | **1.96** | **214** | *e*P | | **Pb** | **12 37 09.1** | **+0.4** |
| | baz=202 | | | | | | | |
| **WTP** | **Ta-pu** | **1.98** | **219** | *e*P | | **Pg** | **12 37 10.5** | **-0.7** |
| | baz=218 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.04** | **102** | P | | **Pn** | **12 37 07.8** | **+0.6** |
| **LONT** | **Longtian** | **2.04** | **202** | *e*P | | **Pb** | **12 37 09.7** | **-0.4** |
| | baz=203 | | | | | | | |
| **TWK** | **Hsinying** | **2.04** | **222** | *e*P | | **Pb** | **12 37 10.5** | **+0.3** |
| | baz=221 | | | | | | | |
| **TWGBT** | **Beinan** | **2.14** | **202** | *e*P | | **Pn** | **12 37 08.6** | **-0.1** |
| | baz=188 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.15** | **95** | P | | **Pb** | **12 37 11.5** | **-0.4** |
| **MATB** | **Ma-tsu** | **2.26** | **307** | *e*P | | **Pb** | **12 37 12.2** | **-1.6** |
| | baz=307 | | | | | | | |

**TAP 16 12:36:36.3,24°89N×121°95E,h16km,ML3.8,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NTC** | **Toucheng** | **0.12** | **254** | P | Pb | 12 36 40.4 | +0.1 |
| | baz=253 | | | | | | |
| NTC | | | | S | Sb | 12 36 43.6 | +0.9 |
| | baz=253 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.12** | **14** | *i* P | Pb | 12 36 40.4 | 0.0 |
| | baz=19 | | | | | | |
| TWB1 | | | | *i* S | Sg | 12 36 42.7 | +0.2 |
| | baz=19 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.12** | **14** | *i* S | Sg | 12 36 39.9 | -2.6 |
| | baz=11 | | | | | | |
| **TIPB** | **Shuangxi** | **0.14** | **306** | *i* P | Pb | 12 36 40.5 | -0.2 |
| | baz=307 | | | | | | |
| TIPB | | | | *i* S | Sg | 12 36 43.1 | +0.1 |
| | baz=307 | | | | | | |
| **TIPB** | **Shuangxi** | **0.14** | **306** | S | Sg | 12 36 40.4 | -2.6 |
| | baz=319 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.22** | **341** | *i* P | Pb | 12 36 41.9 | -0.1 |
| | baz=343 | | | | | | |
| SXI1 | | | | S | Sb | 12 36 46.3 | +0.5 |
| | baz=343 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.24** | **319** | P | Pb | 12 36 42.4 | -0.1 |
| | baz=312 | | | | | | |
| NWF | | | | *i* S | Sb | 12 36 46.7 | +0.3 |
| | baz=312 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.24** | **319** | S | Sg | 12 36 42.9 | -2.7 |
| | baz=317 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.24** | **319** | *i* P | Pb | 12 36 42.2 | -0.1 |
| | baz=312 | | | | | | |
| WFSB | | | | *i* S | Sb | 12 36 46.5 | +0.1 |
| | baz=312 | | | | | | |
| **TWC** | **Suao** | **0.29** | **199** | *e*P | Pb | 12 36 42.9 | -0.3 |
| | baz=191 | | | | | | |
| TWC | | | | *e*S | Sg | 12 36 46.5 | -0.3 |
| | baz=191 | | | | | | |
| **TNOU** | **National Taiwa** | **0.31** | **328** | *i* P | Pb | 12 36 43.6 | +0.1 |
| | baz=329 | | | | | | |
| TNOU | | | | *i* S | Sb | 12 36 48.6 | +0.3 |
| | baz=329 | | | | | | |
| **TWE** | **Neicheng** | **0.31** | **238** | *e*P | Pb | 12 36 43.5 | 0.0 |
| | baz=226 | | | | | | |
| TWE | | | | *e*S | Sb | 12 36 48.8 | +0.5 |
| | baz=226 | | | | | | |
| **NDS** | **Dongshan** | **0.33** | **221** | *e*P | Pb | 12 36 43.8 | -0.1 |
| | baz=211 | | | | | | |
| NDS | | | | *e*S | Sb | 12 36 49.8 | +0.8 |
| | baz=211 | | | | | | |
| **TWA** | **Mucha** | **0.35** | **286** | *i* P | Pg | 12 36 43.9 | +0.3 |
| | baz=277 | | | | | | |
| TWA | | | | S | Sg | 12 36 48.8 | +0.3 |
| | baz=277 | | | | | | |
| **NHY** | **Taipei** | **0.38** | **294** | *e*P | Pb | 12 36 44.7 | 0.0 |
| | baz=294 | | | | | | |
| NHY | | | | *e*S | Sb | 12 36 50.6 | +0.2 |
| | baz=294 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.40** | **281** | P | Pg | 12 36 44.7 | +0.3 |
| | baz=277 | | | | | | |
| **NWRT** | **Kuosheng** | **0.41** | **320** | *e*P | Pb | 12 36 45.6 | +0.4 |
| | baz=316 | | | | | | |
| **NWLT** | **Wulai** | **0.42** | **255** | *e*P | Pg | 12 36 44.7 | -0.3 |
| | baz=254 | | | | | | |
| **ENTT** | **Nioudou** | **0.43** | **235** | *e*P | Pg | 12 36 44.5 | -0.5 |
| | baz=234 | | | | | | |
| **TAP** | **Taipei** | **0.43** | **291** | *e*P | Pb | 12 36 45.7 | +0.1 |
| | baz=291 | | | | | | |
| TAP | | | | *e*S | Sb | 12 36 52.0 | +0.1 |
| | baz=291 | | | | | | |
| **YM01** | **YM01** | **0.43** | **307** | *i* P | Pb | 12 36 46.1 | +0.4 |
| | baz=308 | | | | | | |
| YM01 | | | | S | Sb | 12 36 52.0 | 0.0 |
| | baz=308 | | | | | | |
| **YM08** | **YM08** | **0.45** | **312** | *e*P | Pb | 12 36 46.1 | +0.3 |
| | baz=312 | | | | | | |
| **ANP** | **Anpu** | **0.49** | **307** | *e*P | Pb | 12 36 47.1 | +0.4 |
| | baz=307 | | | | | | |
| **ENA** | **Nanau** | **0.50** | **203** | *e*P | Pb | 12 36 46.5 | -0.1 |
| | baz=198 | | | | | | |
| **ENA** | **Nanau** | **0.50** | **203** | *e*S | Sg | 12 36 46.5 | -6.4 |
| | baz=204 | | | | | | |
| **TWY** | **Chenhua** | **0.50** | **320** | *e*P | Pb | 12 36 46.6 | -0.2 |
| | baz=321 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.53** | **294** | P | Pn | 12 36 48.3 | -1.0 |
| | baz=294 | | | | | | |
| **NTST** | **Danshui** | **0.54** | **301** | *e*P | Pn | 12 36 48.5 | -0.8 |
| | baz=310 | | | | | | |
| NTST | | | | *e*S | Sb | 12 36 56.4 | +1.6 |
| | baz=310 | | | | | | |
| **NSK** | **Sanguang** | **0.58** | **249** | *e*P | Pg | 12 36 47.1 | -0.8 |
| | baz=248 | | | | | | |
| **NNS** | **Nan Shan** | **0.69** | **230** | *e*P | Pg | 12 36 49.0 | -0.9 |
| | baz=239 | | | | | | |
| **NNSB** | **Datong** | **0.69** | **229** | *e*P | Pg | 12 36 50.0 | +0.1 |
| | baz=227 | | | | | | |
| NNSB | | | | *e*S | Sb | 12 37 00.6 | +1.2 |
| | baz=227 | | | | | | |
| **NCU** | **National Centr** | **0.70** | **277** | *e*P | Pn | 12 36 52.0 | +0.4 |
| | baz=276 | | | | | | |
| NCU | | | | *e*S | Sb | 12 37 00.6 | +1.0 |
| | baz=276 | | | | | | |
| **NCUH** | **Zhongli** | **0.70** | **277** | P | Pn | 12 36 51.2 | -0.4 |
| | baz=276 | | | | | | |
| NCUH | | | | *e*S | Sb | 12 37 00.0 | +0.3 |
| | baz=276 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.75** | **8** | *e*P | Pn | 12 36 52.2 | 0.0 |
| | baz=9.0 | | | | | | |
| **NACB** | **Ninganchiao** | **0.78** | **205** | P | Pb | 12 36 50.4 | -1.1 |
| | baz=204 | | | | | | |
| **ETL** | **Fush Village** | **0.79** | **203** | *e*P | Pb | 12 36 50.7 | -0.9 |
| | baz=202 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.80** | **213** | *e*P | Pg | 12 36 52.1 | +0.1 |
| | baz=212 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.80** | **252** | *e*P | Pn | 12 36 53.5 | +0.5 |
| | baz=244 | | | | | | |
| **TWD** | **Chiawan** | **0.87** | **202** | *e*P | Pb | 12 36 51.7 | -1.3 |
| | baz=201 | | | | | | |
| **SBCB** | **Hsinchu** | **0.89** | **264** | *e*P | Pn | 12 36 54.1 | 0.0 |
| | baz=280 | | | | | | |
| SBCB | | | | *e*S | Sn | 12 37 06.4 | -0.3 |
| | baz=280 | | | | | | |
| **LIOB** | **Emei** | **0.89** | **254** | *e*P | Pn | 12 36 55.1 | +1.0 |
| | baz=254 | | | | | | |
| **HSN** | **Hsinchu** | **0.90** | **265** | *e*P | Pn | 12 36 54.3 | 0.0 |
| | baz=266 | | | | | | |
| **FUSS** | **Fushou** | **0.91** | **226** | *e*P | Pg | 12 36 54.0 | -0.1 |
| | baz=214 | | | | | | |
| **TWT** | **Tachien** | **0.95** | **228** | *e*P | Pb | 12 36 54.5 | 0.0 |
| | baz=227 | | | | | | |
| TWT | | | | *e*S | Sn | 12 37 07.9 | -0.6 |
| | baz=227 | | | | | | |
| **HWA** | **Hwalien** | **0.96** | **199** | *e*P | Pb | 12 36 54.4 | -0.2 |
| | baz=199 | | | | | | |
| **TDCB** | **Techi** | **0.96** | **229** | *e*P | Pg | 12 36 54.9 | -0.1 |
| | baz=219 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.97** | **220** | *e*P | Pb | 12 36 54.6 | -0.5 |
| | baz=220 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.05** | **114** | *e*P | Pb | 12 36 55.7 | -0.4 |
| | baz=113 | | | | | | |
| **CHGB** | **Renai** | **1.09** | **221** | *e*P | Pb | 12 36 56.8 | -0.1 |
| | baz=211 | | | | | | |
| **WHP** | **Taichung City** | **1.10** | **237** | *e*P | Pn | 12 36 57.3 | +0.1 |
| | baz=236 | | | | | | |
| **NMLH** | **Miaoli** | **1.11** | **252** | *e*P | Pb | 12 36 57.0 | -0.3 |
| | baz=252 | | | | | | |
| **ESL** | **Shilin** | **1.17** | **204** | *e*P | Pn | 12 36 58.0 | 0.0 |
| | baz=203 | | | | | | |
| **WUSB** | **Renai** | **1.17** | **221** | *e*P | Pb | 12 36 58.6 | +0.3 |
| | baz=211 | | | | | | |
| **NSY** | **Sanyi** | **1.18** | **247** | *e*P | Pg | 12 36 59.1 | 0.0 |
| | baz=265 | | | | | | |
| **TWQ1** | **Liyutan** | **1.20** | **244** | *e*P | Pg | 12 36 59.5 | 0.0 |
| | baz=242 | | | | | | |
| TWQ1 | | | | *e*S | Sg | 12 37 14.9 | -0.3 |
| | baz=242 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.26** | **229** | *e*P | Pg | 12 37 00.4 | -0.2 |
| | baz=235 | | | | | | |
| **VWDT** | **VWDT** | **1.35** | **213** | *e*P | Pn | 12 37 00.8 | +0.3 |
| | baz=213 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.39** | **224** | *e*P | Pb | 12 37 02.1 | +0.1 |
| | baz=216 | | | | | | |
| **TYC** | **Yuchr** | **1.40** | **226** | *e*P | Pb | 12 37 01.7 | -0.4 |
| | baz=218 | | | | | | |
| **SSLB** | **Suanglung** | **1.43** | **220** | *e*P | Pn | 12 37 01.9 | +0.3 |
| | baz=220 | | | | | | |
| **EHY** | **Hungye** | **1.49** | **203** | *e*P | Pn | 12 37 02.6 | +0.2 |
| | baz=203 | | | | | | |

*DJA **16** 12:37:38.9±0.2,8°S±2°×12°8E±°,h159km±3km, M4.5/25, mB5.0/6, mb4.4/25, MLv4.6/12, Mw(mB)4.4/6*
*IDC **16** 12:37:39.5±1.8, 7°43S×128°36E,h172km±18km, mb3.9/12, mb1 3.9/15, mb1mx3.6/30, mbtmp4.4/15, MS3.7/1, Ms1 3.7/1, ms1mx2.8/70, Error ellipse: s-maj=17.8km s-min=11.5km az=68.0*
*NEIC **16** 12:37:39.8±2.8, 7°53S±0°07×128°41E±0°07, h182km±5km, mb4.3/20, Error ellipse: s-maj=10.6km s-min=9.7km az=127.0*

**ISC 16 12:37:39.6±0.4,7°51S±0°04×128°31E±0°04,h182km,n119, σ1§65/121,mb4.3/30,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **3.00** | **99** | | **Pn** | **12 38 27.8** | **-0.6** |
| **SAUI** | **Saumlaki** | **3.00** | **99** | P | **Pn** | **12 38 27.8** | **-0.6** |
| SAUI | | | | S | **Sn** | **12 39 04.3** | **-2.1** |
| **SAUI** | **Saumlaki** | **3.00** | **99** | P | **Pn** | **12 38 29.7** | **+1.3** |
| **BNDI** | **Bandanaira** | **3.37** | **28** | P | **Pn** | **12 38 34.3** | **+1.5** |
| **AAI** | **Ambon** | **3.80** | **358** | P | **Pn** | **12 38 37.2** | **-1.1** |
| **MSAI** | **Masohi** | **4.18** | **9** | P | **Pn** | **12 38 42.7** | **-0.4** |
| **SOEI** | **Soe** | **4.57** | **241** | Pn | **Pn** | **12 38 48.5** | **+0.2** |
| **SOEI** | **Soe** | **4.57** | **241** | P | **Pn** | **12 38 49.1** | **+0.9** |
| SOEI | | | | S | **Sn** | **12 39 37.5** | **-4.5** |
| **SOEI** | **Soe** | **4.57** | **241** | P | **Pn** | **12 38 49.2** | **+1.0** |
| **BATI** | **Baumata** | **5.31** | **239** | P | **Pn** | **12 38 58.5** | **+0.8** |
| | 99nm,0.3s,baz=114,slow=2.7,SNR=68 | | | | | | |
| BATI | | | | S | **Sn** | **12 39 55.9** | **-3.3** |
| | 179nm,0.3s,baz=257,slow=19,SNR=12 | | | | | | |
| **BATI** | **Baumata** | **5.31** | **239** | P | **Pn** | **12 38 58.1** | **+0.4** |
| | 1.2nm2µm169nm,0.4s | | | | | | |
| BATI | | | | S | **Sn** | **12 39 54.5** | **-4.6** |
| | 1.2nm2µm169nm,0.4s | | | | | | |
| **DRS** | **Darwin Rock St** | **5.52** | **153** | P | **Pn** | **12 39 00.0** | **-0.3** |
| **SANI** | **Sanana** | **5.89** | **337** | P | **Pn** | **12 39 04.5** | **-0.8** |
| | 0.1nm24nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **5.89** | **337** | P | **Pn** | **12 39 07.6** | **+2.3** |
| **MTN** | **Manton Dam** | **5.99** | **153** | Pn | **Pn** | **12 39 04.8** | **-1.6** |
| **MTN** | **Manton Dam** | **5.99** | **153** | P | **Pn** | **12 39 06.2** | **-0.3** |
| **FAKI** | **Fak Fak** | **6.02** | **41** | Pn | **Pn** | **12 39 04.6** | **-2.3** |
| **FAKI** | **Fak Fak** | **6.02** | **41** | P | **Pn** | **12 39 04.6** | **-2.3** |
| | 1.0nm2µm49nm,1.0s | | | | | | |
| **MMRI** | **Maumere** | **6.11** | **259** | P | **Pn** | **12 39 07.2** | **-0.9** |
| | 0.2nm31nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **6.58** | **142** | P | **Pn** | **12 39 13.4** | **-0.8** |
| **SIJI** | **Sorong** | **7.23** | **24** | P | **Pn** | **12 39 21.3** | **-1.5** |
| | 16nm,0.3s,baz=228,slow=22,SNR=38 | | | | | | |
| SIJI | | | | S | **Sn** | **12 40 39.1** | **-5.3** |
| | 17nm,0.3s,baz=289,slow=23,SNR=14 | | | | | | |
| **BASI** | **Baing, Sumba** | **8.10** | **250** | P | **Pn** | **12 39 32.7** | **-1.5** |
| | 40nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **8.13** | **177** | Pn | **Pn** | **12 39 32.9** | **-1.7** |
| **KNRA** | **Kununurra** | **8.13** | **177** | P | **Pn** | **12 39 33.6** | **-1.0** |
| **WBSI** | **Waikabubak, Su** | **9.07** | **256** | P | **Pn** | **12 39 47.3** | **+0.3** |
| | 26nm,0.9s | | | | | | |
| **PLAI** | **Plampang** | **10.51** | **262** | P | **Pn** | **12 40 06.1** | **+0.4** |
| | 27nm,0.8s | | | | | | |
| **PLAI** | **Plampang** | **10.51** | **262** | P | **Pn** | **12 40 07.7** | **+2.0** |
| **FITZ** | **Fitzroy Crossi** | **10.84** | **194** | P | **Pn** | **12 40 07.3** | **-2.8** |
| | 4.4nm,0.3s,baz=26,slow=11,SNR=98 | | | | | | |
| FITZ | | | | S | Sn | 12 42 01.1 | -9.5 |
| | 15nm,0.3s,baz=320,slow=23,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.84** | **194** | P | **Pn** | **12 40 09.2** | **-0.8** |
| **TOLI2** | **Tolitoli** | **11.39** | **318** | P | **P** | **12 40 22.1** | **-1.5** |
| **WB0** | **Warramunga Arr** | **13.54** | **155** | | **Pn** | **12 40 41.5** | **-3.0** |
| **WRAB** | **Tennant Creek** | **13.67** | **155** | | **Pn** | **12 40 42.2** | **-4.0** |
| **WRAB** | **Tennant Creek** | **13.67** | **155** | P | **Pn** | **12 40 46.1** | **-0.1** |
| **WRA** | **Warramunga Arr** | **13.67** | **155** | P | **Pn** | **12 40 43.3** | **-2.9** |
| | 3.1nm,0.3s,baz=324,slow=13,SNR=72 | | | | | | |
| WRA | | | | S | Sn | 12 43 07.5 | -11 |
| | 13nm,0.3s,baz=324,slow=24,SNR=13 | | | | | | |
| **WR0** | **Warramunga Arr** | **13.77** | **155** | Pn | **Pn** | **12 40 44.7** | **-2.8** |
| **MBWA** | **Marble Bar** | **15.90** | **211** | P | **P** | **12 41 11.9** | **-1.8** |
| MBWA | | | | IAmb | IAmb | 12 41 13.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **15.90** | **211** | P | **P** | **12 41 13.2** | **-0.4** |
| **COEN** | **Coen** | **15.95** | **115** | P | **P** | **12 41 13.5** | **-0.7** |
| COEN | | | | IAmb | IAmb | 12 41 16.1 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **COEN** | **Coen** | **15.95** | **115** | P | **P** | **12 41 14.6** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **16.19** | **209** | | **P** | **12 41 16.6** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 12 41 20.8 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.19** | **209** | P | **P** | **12 41 15.8** | **-1.1** |
| PSA00 | | | | IAmb | IAmb | 12 41 17.3 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.19** | **209** | P | **Pn** | **12 41 17.6** | **+0.5** |
| **AS31** | **Alice Springs** | **16.94** | **162** | P | **Pn** | **12 41 26.6** | **+0.4** |
| **ASAR** | **Alice Springs** | **16.94** | **162** | P | **Pn** | **12 41 25.6** | **-0.6** |
| | comp=Z,13nm,0.3s,baz=342,slow=11,SNR=1699 | | | | | | |
| ASAR | | | | S | **S** | **12 44 26.6** | **-5.9** |
| | comp=Z,3.7nm,0.3s,baz=327,slow=17,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **16.94** | **162** | P | **Pn** | **12 41 26.4** | **+0.3** |
| **QIS** | **Mount Isa** | **16.97** | **141** | P | **Pn** | **12 41 26.6** | **+0.1** |
| **WRKA** | **Warakurna** | **17.43** | **180** | P | **Pn** | **12 41 31.9** | **-0.1** |
| **PMG** | **Port Moresby** | **18.74** | **97** | P | **Pn** | **12 41 46.3** | **-1.1** |
| | comp=Z,2.2nm,0.3s,baz=138,slow=6.0,SNR=11 | | | | | | |
| **PMG** | **Port Moresby** | **18.74** | **97** | P | **P** | **12 41 43.9** | **-1.0** |
| **PMG** | **Port Moresby** | **18.74** | **97** | | **P** | **12 41 44.4** | **-0.5** |
| PMG | | | | IAmb | IAmb | 12 41 50.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **18.74** | **97** | P | **Pn** | **12 41 46.6** | **-0.9** |
| **PMG** | **Port Moresby** | **18.74** | **97** | P | **Pn** | **12 41 46.5** | **-0.9** |
| **MTSU** | **Mount Surprise** | **18.83** | **126** | P | **Pn** | **12 41 47.3** | **-1.1** |
| **SBUM** | **Sibu** | **18.85** | **301** | P | **P** | **12 41 47.4** | **+1.3** |
| SBUM | | | | IAmb | IAmb | 12 41 54.6 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **KSM** | **Kuching** | **20.05** | **296** | P | **P** | **12 42 00.9** | **+2.0** |
| **MEEK** | **Meekatharra** | **21.14** | **205** | P | **P** | **12 42 11.3** | **+0.9** |
| **OOD** | **Oodnadatta** | **21.35** | **162** | P | **P** | **12 42 13.4** | **+0.8** |
| **CTA** | **Charters Tower** | **21.42** | **128** | P | **P** | **12 42 14.4** | **+1.0** |
| | comp=Z,13nm,0.4s,baz=299,slow=14,SNR=2.3 | | | | | | |
| **FORT** | **Forrest** | **23.15** | **181** | P | **P** | **12 42 30.7** | **+0.9** |
| **FORT** | **Forrest** | **23.15** | **181** | P | **P** | **12 42 31.2** | **+1.3** |
| **MULG** | **Mulgathing** | **23.29** | **167** | P | **P** | **12 42 32.8** | **+1.7** |
| **INKA** | **Innaminka** | **23.32** | **151** | P | **P** | **12 42 33.6** | **+2.2** |
| **QLP** | **Quilpie** | **24.27** | **143** | P | **P** | **12 42 43.6** | **+3.5** |
| | comp=Z,23nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **24.36** | **207** | P | **P** | **12 42 43.7** | **+2.8** |
| **LCRK** | **Leigh Creek** | **24.64** | **159** | P | **P** | **12 42 45.0** | **+1.6** |
| **BLDU** | **Ballidu** | **25.42** | **204** | P | **P** | **12 42 54.3** | **+3.8** |
| **BBOO** | **Buckleboo** | **26.18** | **165** | P | **P** | **12 42 58.8** | **+1.5** |
| **STKA** | **Stephens Creek** | **27.23** | **155** | P | **P** | **12 43 07.1** | **+0.5** |
| | comp=Z,4.1nm,0.6s,baz=330,slow=7.3,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **27.23** | **155** | IAmb | IAmb | 12 43 12.8 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **27.23** | **155** | P | **P** | **12 43 07.9** | **+1.2** |
| **HTT** | **Hallett** | **27.60** | **161** | P | **P** | **12 43 12.0** | **+1.9** |
| **CMSA** | **Cobar Meteorol** | **28.89** | **148** | P | **P** | **12 43 23.3** | **+1.9** |
| **TWOA** | **Tennyson Woods** | **28.97** | **162** | P | **P** | **12 43 24.4** | **+2.3** |
| **ARPS** | **Mount Arapiles** | **31.63** | **159** | P | **P** | **12 43 47.9** | **+2.4** |
| **JOW** | **Kunigami** | **34.14** | **360** | LR | LR | 12 57 43.8 | |
| | comp=Z,129nm,21.7s,baz=88,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.80** | **312** | P | **P** | **12 44 48.1** | **+1.2** |
| | comp=Z,1.6nm,0.7s,baz=140,slow=6.8,SNR=15 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.80** | **312** | P | **P** | **12 44 46.6** | **-0.3** |
| **KSRS** | **Korea Array** | **44.73** | **360** | P | **P** | **12 45 35.3** | **+0.6** |
| | comp=Z,1.7nm,0.5s,baz=178,slow=9.4,SNR=11 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.79** | **11** | P | **P** | **12 45 34.3** | **-1.0** |
| | comp=Z,2.7nm,0.7s,baz=190,slow=7.9,SNR=5.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.79** | **11** | IAmb | IAmb | 12 45 36.5 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **45.22** | **337** | P | **P** | **12 45 38.3** | **-0.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **LZH** | **Lanzhou** | **49.09** | **334** | *e*P | **P** | **12 46 10.0** | **+1.3** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.58** | **3** | P | **P** | **12 46 26.8** | **-0.2** |
| | comp=Z,2.3nm,0.5s,baz=165,slow=6.3,SNR=6.8 | | | | | | |
| **ODAN** | **Odare** | **52.34** | **312** | *e*P | **P** | **12 46 33.8** | **+0.5** |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **52.39** | **313** | *e*P | **P** | **12 46 33.1** | **-0.6** |
| **RAMN** | **Ramite** | **52.97** | **312** | *e*P | **P** | **12 46 37.0** | **-1.0** |
| **ASAJ** | **Asahikawa** | **52.99** | **13** | P | **P** | **12 46 37.1** | **-0.3** |
| | comp=Z,5.5nm,0.8s,baz=2.9,slow=16,SNR=5.3 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **52.99** | **13** | P | **P** | **12 46 37.1** | **-0.3** |
| **GTA** | **Gaotai** | **53.63** | **333** | *e*P | **P** | **12 46 43.0** | **+0.6** |
| GTA | | | | pP | pwP | 12 47 26.0 | -2.5 |
| GTA | | | | sP | PcP | 12 47 47.0 | +0.6 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **JIRN** | **Jiri** | **53.67** | **312** | *e*P | **P** | **12 46 43.4** | **+0.2** |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **54.04** | **312** | *e*P | **P** | **12 46 46.0** | **+0.2** |
| | comp=Z,18nm,0.6s | | | | | | |
| **PKI** | **Pulchoki** | **54.19** | **312** | *e*P | **P** | **12 46 46.6** | **-0.4** |
| | comp=Z,6.4nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **54.21** | **312** | *e*P | **P** | **12 46 46.8** | **-0.2** |

**mb1 3.9/5, mb1mx3.4/30, mbtmp3.5/5, ML3.3/1, Error ellipse: s-maj=260.4km s-min=89.3km az=114.0, Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **14.79** | **4** | Pn | Pn | 12 41 36.7 | +0.1 |
| | 0.0nm,0.3s,baz=183,slow=14,SNR=7.4 | | | | | | |
| **ANMO** | **Albuquerque** | **20.41** | **356** | P | Pn | 12 42 46.3 | -0.6 |
| | 1.1nm,0.7s,baz=204,slow=12,SNR=4.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **28.47** | **352** | P | P | 12 44 03.0 | -0.1 |
| | 0.4nm,0.8s,baz=165,slow=8.4,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.44** | **354** | P | P | 12 46 49.4 | -0.5 |
| | 0.7nm,0.7s,baz=169,slow=7.4,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **57.83** | **340** | P | P | 12 47 59.0 | 0.0 |
| | 1.0nm,0.8s,baz=153,slow=4.9,SNR=11 | | | | | | |

**IDC 16 12:56:24.9±7.1, 13°.95N×103°.26W, h0km, mb3.4/5, mb1 3.9/6, mb1mx3.7/27, mbtmp3.5/6, ML3.4/1, MS3.8/1, Ms1 3.8/1, ms1mx2.8/35, Error ellipse: s-maj=160.1km s-min=96.4km az=112.0, Off coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **15.31** | **359** | Pn | Pn | 13 00 02.7 | +0.1 |
| | 0.0nm,0.3s,baz=182,slow=15,SNR=12 | | | | | | |
| **ANMO** | **Albuquerque** | **21.10** | **353** | P | P | 13 01 11.9 | +0.5 |
| | 0.6nm,0.6s,baz=175,slow=7.4,SNR=3.6 | | | | | | |
| **PFO** | **Pinyon Flats O** | **22.96** | **331** | LR | LR | 13 08 16.4 | |
| | comp=Z,212nm,18.8s,baz=164,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **27.79** | **334** | P | P | 13 02 17.2 | +1.2 |
| | 0.2nm,0.6s,baz=145,slow=9.6,SNR=2.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **29.23** | **350** | P | P | 13 02 28.4 | -0.3 |
| | 1.1nm,1.1s,baz=168,slow=9.2,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.15** | **353** | P | P | 13 05 14.4 | +0.2 |
| | 0.5nm,0.6s,baz=167,slow=7.3,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **58.83** | **340** | P | P | 13 06 24.1 | -0.9 |
| | 0.6nm,0.8s,baz=138,slow=9.6,SNR=6.0 | | | | | | |

*IDC **16** 12:58:01.6±6.7, 14°.16N×104°.35W, h0km, mb3.7/6, mb1 4.1/7, mb1mx3.9/26, mbtmp3.7/7, ML3.4/1, MS3.5/6, Ms1 3.5/6, ms1mx3.1/64, Error ellipse: s-maj=159.8km s-min=87.3km az=114.0*

**ISC 16 12:58:03.7±6.1, 14°.2N±0°.6×104°.5W±1°.0, h10km, n15, σ0°28/6, mb3.9/5, MS3.5/4, Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMIG** | **Matias Romero** | **9.66** | **71** | LR | LR | 13 03 46.8 | |
| | comp=Z,111nm,20.9s,baz=269,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **15.07** | **3** | Pn | **Pn** | **13 01 36.9** | **0.0** |
| | 0.0nm,0.3s,baz=191,slow=9.2,SNR=9.0 | | | | | | |
| **JTS** | **Las Juntas de** | **19.46** | **99** | LR | LR | 13 07 35.7 | |
| | comp=Z,64nm,18.2s,baz=13,slow=30 | | | | | | |
| **ANMO** | **Albuquerque** | **20.73** | **355** | P | Pn | 13 02 45.7 | -1.3 |
| | 1.6nm,0.7s,baz=164,slow=14,SNR=4.0 | | | | | | |
| ANMO | | | | LR | LR | 13 09 48.5 | |
| | comp=Z,123nm,19.5s,baz=142,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **27.06** | **336** | P | **P** | **13 03 46.8** | **+0.1** |
| | 0.5nm,0.8s,baz=126,slow=4.6,SNR=3.0 | | | | | | |
| **TKL** | **Tuckaleechee C** | **28.31** | **37** | LR | LR | 13 17 22.4 | |
| | comp=Z,93nm,19.1s,baz=258,slow=41 | | | | | | |
| **PDAR** | **Pinedale Array** | **28.80** | **352** | P | **P** | **13 04 02.0** | **-0.2** |
| | 0.6nm,0.7s,baz=147,slow=8.5,SNR=5.7 | | | | | | |
| **NNA** | **Nana** | **37.77** | **132** | LR | LR | 13 16 15.2 | |
| | comp=Z,105nm,21.7s,baz=310,slow=29 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.76** | **354** | P | **P** | **13 06 48.8** | **+0.3** |
| | 0.7nm,0.7s,baz=167,slow=7.4,SNR=10 | | | | | | |
| **H03N2** | **Juan Fernandez** | **53.28** | **153** | T | T | 14 05 09.6 | |
| | baz=330,slow=77,SNR=14 | | | | | | |
| **H03N1** | **Juan Fernandez** | **53.29** | **153** | T | T | 14 05 11.0 | |
| | baz=330,slow=77,SNR=24 | | | | | | |
| **H03N3** | **Juan Fernandez** | **53.29** | **153** | T | T | 14 05 05.6 | |
| | baz=330,slow=77,SNR=15 | | | | | | |
| **INK** | **Inuvik** | **57.21** | **348** | P | **P** | **13 07 50.6** | **-0.1** |
| | 2.2nm,0.9s,baz=163,slow=7.9,SNR=5.7 | | | | | | |
| **ILAR** | **Eielson Array** | **58.19** | **340** | P | **P** | **13 07 57.5** | **-0.2** |
| | 1.8nm,0.9s,baz=136,slow=7.2,SNR=8.1 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **82.17** | **10** | LR | LR | 13 47 26.6 | |
| | comp=Z,67nm,18.3s,baz=356,slow=36 | | | | | | |

*SJA **16** 13:21:45.3±0.9, 25°.82S×71°.04W, h41km, ML4.1, MW4.0*
*NEIC **16** 13:21:47.7±2.3, 25°.88S±0°.04×71°.0W±0°.1, h42km±9km, Error ellipse: s-maj=18.3km s-min=5.1km az=86.0*
*GUC **16** 13:21:48.7±0.7, 25°.87S×70°.88W, h55km±11km, ML4.2*
*VAO **16** 13:21:48.6±1.0, 25°.94S×70°.68W, h55km, mb4.2*
*IDC **16** 13:21:50.3±1.0, 25°.96S×70°.37W, h66km±5km, mb4.0/4, mb1 4.1/6, mb1mx3.7/30, mbtmp4.3/6, MS3.0/3, Ms1 3.0/3, ms1mx2.7/59, Error ellipse: s-maj=39.9km s-min=13.3km az=109.0*

**ISC 16 13:21:46.9±0.7, 25°.85S±0°.03×70°.98W±0°.06, h48km±6km, n124, σ1951/152, mb4.3/4, 4C-2D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB14** | **IPOC Station P** | **1.32** | **23** | Pn | **Pn** | **13 22 11.1** | **+1.9** |
| **PB14** | **IPOC Station P** | **1.32** | **23** | ↓*iP* | **Pn** | **13 22 11.3** | **+2.0** |
| PB14 | | | | *eS* | **Sn** | **13 22 26.8** | **+0.9** |
| **PB14** | **IPOC Station P** | **1.32** | **23** | *eP* | **Pn** | **13 22 11.0** | **+1.7** |
| PB14 | | | | *eS* | **Sn** | **13 22 27.7** | **+1.7** |
| PB14 | | | | IAML | | 13 22 28.2 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **GO03** | **Copiap** | **1.86** | **159** | | **Pn** | **13 22 18.3** | **+1.9** |
| **GO03** | **Copiap** | **1.86** | **159** | *eP* | **Pn** | **13 22 18.3** | **+1.9** |
| GO03 | | | | *eS* | **Sn** | **13 22 39.0** | **+0.2** |
| GO03 | | | | IAML | | 13 22 41.4 | |
| | comp=E,3μm,0.2s | | | | | | |
| **GO03** | **Copiap** | **1.86** | **159** | *eP* | **Pn** | **13 22 18.4** | **+2.0** |
| GO03 | | | | *eS* | **Sn** | **13 22 40.5** | **+1.8** |
| **AC02** | **Maricunga** | **1.93** | **121** | | **Pn** | **13 22 18.8** | **+1.1** |
| **AC02** | **Maricunga** | **1.93** | **121** | ↑*iP* | **Pn** | **13 22 19.0** | **+1.3** |
| AC02 | | | | *eS* | **Sn** | **13 22 39.9** | **-1.1** |
| AC02 | | | | IAML | | 13 22 41.2 | |
| | comp=N,8μm,0.2s | | | | | | |
| **AC02** | **Maricunga** | **1.93** | **121** | *eP* | **Pn** | **13 22 19.0** | **+1.3** |
| AC02 | | | | *eS* | **Sn** | **13 22 41.0** | **-0.1** |
| AC02 | | | | IAML | | 13 22 41.3 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.35** | **182** | Pn | **Pn** | **13 22 24.3** | **+1.3** |
| **AC04** | **Llanos de Chal** | **2.35** | **182** | *eP* | **Pn** | **13 22 24.3** | **+1.3** |
| AC04 | | | | *eS* | **Sn** | **13 22 51.1** | **+0.4** |
| AC04 | | | | IAML | | 13 22 52.8 | |
| | comp=N,935nm,0.1s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.35** | **182** | *eP* | **Pn** | **13 22 24.6** | **+1.5** |
| AC04 | | | | *eS* | **Sn** | **13 22 51.6** | **+1.0** |
| AC04 | | | | IAML | | 13 22 53.4 | |
| | comp=Z,296nm,0.1s | | | | | | |
| **PB10** | **IPOC Station P** | **2.35** | **9** | Pn | **Pn** | **13 22 24.7** | **+1.5** |
| **PB10** | **IPOC Station P** | **2.35** | **9** | *eP* | **Pn** | **13 22 24.7** | **+1.5** |
| PB10 | | | | *i* S | **Sn** | **13 22 51.9** | **+1.0** |
| PB10 | | | | IAML | | 13 22 53.8 | |
| | comp=E,896nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **2.35** | **9** | *eP* | **Pn** | **13 22 24.8** | **+1.7** |
| PB10 | | | | *eS* | **Sn** | **13 22 52.2** | **+1.4** |
| PB10 | | | | IAML | | 13 22 54.5 | |
| | comp=Z,351nm,0.2s | | | | | | |
| **PB15** | **IPOC Station P** | **2.96** | **28** | | **Pn** | **13 22 33.8** | **+2.2** |
| **PB15** | **IPOC Station P** | **2.96** | **28** | *eP* | **Pn** | **13 22 33.5** | **+1.8** |
| PB15 | | | | *i* S | **Sn** | **13 23 06.9** | **+0.8** |
| **PB15** | **IPOC Station P** | **2.96** | **28** | *eP* | **Pn** | **13 22 34.0** | **+2.3** |
| PB15 | | | | *eS* | **Sn** | **13 23 07.5** | **+1.3** |
| PB15 | | | | IAML | | 13 23 11.2 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **LCO** | **Las Campanas** | **3.16** | **176** | *eP* | **Pn** | **13 22 35.9** | **+1.5** |
| **LCO** | **Las Campanas** | **3.16** | **176** | *eP* | **Pn** | **13 22 36.0** | **+1.6** |
| LCO | | | | IAML | | 13 23 31.4 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **PB06** | **IPOC Station P** | **3.38** | **23** | | **Pn** | **13 22 38.4** | **+1.0** |
| **PB06** | **IPOC Station P** | **3.38** | **23** | ↑*iP* | **Pn** | **13 22 38.6** | **+1.3** |
| PB06 | | | | IAML | | 13 23 38.1 | |
| | comp=N,696nm,0.6s | | | | | | |
| **PB06** | **IPOC Station P** | **3.38** | **23** | *eP* | **Pn** | **13 22 38.8** | **+1.4** |
| PB06 | | | | *eS* | Sn | 13 23 00.9 | -15 |
| PB06 | | | | *eS* | **Sn** | **13 23 16.1** | **-0.1** |
| PB06 | | | | IAML | | 13 23 41.8 | |
| | comp=Z,666nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.58** | **12** | | **Pn** | **13 22 40.8** | **+0.7** |
| **PB04** | **IPOC Station P** | **3.58** | **12** | ↓*iP* | **Pn** | **13 22 41.1** | **+1.0** |
| **PB04** | **IPOC Station P** | **3.58** | **12** | *eP* | **Pn** | **13 22 41.0** | **+1.0** |
| PB04 | | | | *eS* | **Sn** | **13 23 22.1** | **+0.9** |
| PB04 | | | | IAML | | 13 23 24.9 | |
| | comp=Z,526nm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **3.73** | **31** | P | **Pn** | **13 22 44.2** | **+1.8** |
| | comp=Z,13nm,0.3s,baz=196,slow=7.4,SNR=160 | | | | | | |
| LVC | | | | S | **Sn** | **13 23 25.1** | **-0.2** |
| | comp=Z,91nm,0.3s,baz=350,slow=4.4,SNR=19 | | | | | | |
| LVC | | | | LR | LR | 13 24 24.8 | |
| | comp=Z,168nm,20.4s,baz=234,slow=43 | | | | | | |
| **LVC** | **Limon Verde** | **3.73** | **31** | Pn | **Pn** | **13 22 43.7** | **+1.3** |
| **LVC** | **Limon Verde** | **3.73** | **31** | *eP* | **Pn** | **13 22 43.8** | **+1.4** |
| **LVC** | **Limon Verde** | **3.73** | **31** | *eP* | **Pn** | **13 22 44.1** | **+1.8** |
| **LVC** | **Limon Verde** | **3.73** | **31** | *eP* | **Pn** | **13 22 44.0** | **+1.6** |
| LVC | | | | *eS* | Sn | 13 23 35.5 | +10 |
| LVC | | | | IAML | | 13 23 46.7 | |
| | comp=Z,344nm,0.6s | | | | | | |
| **VCA** | **Vinchina** | **3.79** | **140** | *eP* | Pn | 13 22 33.5 | -9.4 |
| VCA | | | | *eS* | Sn | 13 23 12.2 | -14 |
| VCA | | | | IAML | | 13 23 42.1 | |
| | comp=Z,84nm,1.1s | | | | | | |
| **PB03** | **IPOC Station P** | **3.94** | **17** | | **Pn** | **13 22 45.7** | **+0.6** |
| **PB03** | **IPOC Station P** | **3.94** | **17** | *eP* | **Pn** | **13 22 45.6** | **+0.5** |
| **PB03** | **IPOC Station P** | **3.94** | **17** | *eP* | **Pn** | **13 22 46.0** | **+0.9** |
| PB03 | | | | *eS* | **Sn** | **13 23 30.4** | **+0.2** |
| PB03 | | | | IAML | | 13 23 49.9 | |
| | comp=Z,505nm,0.4s | | | | | | |
| **CO05** | **La Serena** | **4.06** | **183** | Pn | **Pn** | **13 22 48.0** | **+1.5** |
| **PB07** | **IPOC Station P** | **4.22** | **14** | | **Pn** | **13 22 49.4** | **+0.5** |
| **PB07** | **IPOC Station P** | **4.22** | **14** | *eP* | **Pn** | **13 22 49.7** | **+0.8** |
| **PB07** | **IPOC Station P** | **4.22** | **14** | *eP* | **Pn** | **13 22 49.7** | **+0.8** |
| PB07 | | | | *eP* | **Pn** | **13 22 50.0** | **+1.0** |
| PB07 | | | | *eS* | **Sn** | **13 23 36.2** | **-0.8** |
| PB07 | | | | IAML | | 13 24 12.3 | |
| | comp=Z,302nm,0.9s | | | | | | |
| **GO04** | **Tololo Observa** | **4.31** | **178** | | **Pn** | **13 22 51.7** | **+1.5** |
| **GO04** | **Tololo Observa** | **4.31** | **178** | *eP* | **Pn** | **13 22 51.4** | **+1.2** |
| **GO04** | **Tololo Observa** | **4.31** | **178** | *eP* | **Pn** | **13 22 52.0** | **+1.8** |
| GO04 | | | | *eP* | **Pn** | **13 22 52.2** | **+2.1** |
| GO04 | | | | *eS* | **Sn** | **13 23 41.0** | **+1.7** |
| **PB09** | **IPOC Station P** | **4.33** | **22** | | **Pn** | **13 22 51.9** | **+1.4** |
| **PB09** | **IPOC Station P** | **4.33** | **22** | *eP* | **Pn** | **13 22 52.3** | **+1.8** |
| **PB09** | **IPOC Station P** | **4.33** | **22** | *eP* | **Pn** | **13 22 52.0** | **+1.5** |
| PB09 | | | | *eS* | Sn | 13 23 50.0 | +10 |
| PB09 | | | | IAML | | 13 24 20.3 | |
| | comp=Z,404nm,0.8s | | | | | | |
| **AROD** | **Rodeo** | **4.50** | **163** | *eP* | **Pn** | **13 22 56.9** | **+3.9** |
| **FSA** | **Cafayete** | **4.51** | **94** | *eP* | **Pn** | **13 22 55.0** | **+2.2** |
| **ACDV** | **Cuesta del Vie** | **4.61** | **160** | *eP* | **Pn** | **13 22 58.0** | **+3.8** |
| ACDV | | | | IAML | | 13 24 16.8 | |
| | comp=Z,37nm,0.5s | | | | | | |
| **PB02** | **IPOC Station P** | **4.62** | **13** | | **Pn** | **13 22 54.5** | **+0.2** |
| **PB02** | **IPOC Station P** | **4.62** | **13** | *eP* | **Pn** | **13 22 54.6** | **+0.3** |
| **PB02** | **IPOC Station P** | **4.62** | **13** | *eP* | **Pn** | **13 22 55.0** | **+0.7** |
| PB02 | | | | *eP* | **Pn** | **13 22 55.2** | **+1.0** |
| PB02 | | | | *eS* | **Sn** | **13 23 44.5** | **-2.2** |
| PB02 | | | | IAML | | 13 23 48.8 | |
| | comp=Z,436nm,0.4s | | | | | | |
| **CO06** | **Fray Jorge** | **4.84** | **187** | Pn | **Pn** | **13 22 57.5** | **+0.3** |
| **PB01** | **IPOC Station P** | **4.97** | **16** | | **Pn** | **13 22 59.5** | **+0.3** |
| **PB01** | **IPOC Station P** | **4.97** | **16** | ↑*iP* | **Pn** | **13 22 59.8** | **+0.7** |
| **PB01** | **IPOC Station P** | **4.97** | **16** | *eP* | **Pn** | **13 22 59.9** | **+0.7** |
| PB01 | | | | *eS* | **Sn** | **13 23 54.1** | **-1.4** |
| PB01 | | | | *eS* | **Sn** | **13 23 55.2** | **-0.2** |
| PB01 | | | | *eS* | **Sn** | **13 23 56.4** | **+0.9** |
| PB01 | | | | IAML | | 13 23 57.7 | |
| | comp=Z,127nm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **4.98** | **177** | | **Pn** | **13 23 00.5** | **+1.2** |
| **ACCO** | **Cerro Coronel** | **5.01** | **161** | *eP* | **Pn** | **13 23 03.0** | **+3.1** |
| ACCO | | | | *eS* | **Sn** | **13 24 01.6** | **+4.8** |
| ACCO | | | | IAML | | 13 24 28.6 | |
| | comp=Z,41nm,0.3s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **5.04** | **136** | *eP* | **Pn** | **13 23 02.0** | **+1.8** |
| ACLC | | | | *eS* | **Sn** | **13 23 55.5** | **-1.8** |
| ACLC | | | | IAML | | 13 24 38.9 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **PATCX** | **Punta Patache** | **5.06** | **9** | Pn | **Pn** | **13 23 00.3** | **-0.1** |
| **PATCX** | **Punta Patache** | **5.06** | **9** | *eP* | **Pn** | **13 23 00.4** | **0.0** |
| **PATCX** | **Punta Patache** | **5.06** | **9** | *eP* | **Pn** | **13 23 00.6** | **+0.2** |
| PATCX | | | | *eP* | **Pn** | **13 23 00.8** | **+0.4** |
| PATCX | | | | *eP* | **Pn** | **13 23 00.9** | **+0.6** |
| PATCX | | | | *eS* | **Sn** | **13 23 54.9** | **-2.7** |
| PATCX | | | | IAML | | 13 24 36.4 | |
| | comp=Z,109nm,0.8s | | | | | | |
| **AHML** | **Horco Molle** | **5.15** | **102** | ↑*eP* | **Pn** | **13 23 03.4** | **+1.9** |
| AHML | | | | *eP* | **Pn** | **13 23 03.8** | **+2.3** |
| AHML | | | | *eS* | **Sn** | **13 23 59.0** | **-0.7** |
| AHML | | | | IAML | | 13 24 21.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **TA01** | **Diego Aracena** | **5.31** | **8** | Pn | **Pn** | **13 23 03.4** | **-0.3** |
| **TA01** | **Diego Aracena** | **5.31** | **8** | *eP* | **Pn** | **13 23 03.9** | **+0.2** |
| TA01 | | | | IAML | | 13 24 59.1 | |
| | comp=Z,82nm,0.6s | | | | | | |
| **CO02** | **Combarbal** | **5.34** | **180** | | **Pn** | **13 23 04.8** | **+0.6** |
| **CO02** | **Combarbal** | **5.34** | **180** | *eP* | **Pn** | **13 23 05.1** | **+1.0** |
| CO02 | | | | IAML | | 13 24 40.3 | |
| | comp=Z,179nm,0.5s | | | | | | |
| **TA02** | **Huaiquique** | **5.61** | **8** | Pn | **Pn** | **13 23 08.3** | **+0.6** |
| **RTLL** | **Cerro Villicun** | **5.89** | **159** | *eS* | **Sn** | **13 24 18.4** | **+0.5** |
| **PB08** | **IPOC Station P** | **5.92** | **17** | Pn | **Pn** | **13 23 12.8** | **+0.4** |
| **PB11** | **IPOC Station P** | **6.18** | **12** | Pn | **Pn** | **13 23 15.1** | **-0.7** |
| **GO01** | **Chusmiza** | **6.37** | **15** | | **Pn** | **13 23 18.6** | **0.0** |
| **VA06** | **Catapilco** | **6.70** | **182** | Pn | **Pn** | **13 23 23.2** | **+0.6** |
| **VA03** | **San Esteban** | **6.90** | **177** | Pn | **Pn** | **13 23 25.9** | **+0.3** |
| **ASAL** | **Salagasta** | **6.97** | **165** | *eP* | **Pn** | **13 23 29.0** | **+2.4** |
| ASAL | | | | *eP* | **Pn** | **13 23 29.0** | **+2.4** |
| **RO01** | **El Roble** | **7.10** | **180** | Pn | **Pn** | **13 23 27.0** | **-1.5** |
| **PB12** | **IPOC Station P** | **7.22** | **5** | Pn | **Pn** | **13 23 29.6** | **-0.5** |
| **MT02** | **Curacav** | **7.39** | **181** | Pn | **Pn** | **13 23 32.0** | **-0.2** |
| **PB16** | **IPOC Station P** | **7.60** | **11** | Pn | **Pn** | **13 23 35.5** | **-0.1** |
| **MT09** | **Talagante** | **7.90** | **180** | Pn | **Pn** | **13 23 40.4** | **+1.1** |
| **MT01** | **Popeta** | **7.99** | **182** | Pn | **Pn** | **13 23 39.8** | **-0.7** |
| **BO04** | **La Punta** | **8.12** | **178** | Pn | **Pn** | **13 23 42.6** | **+0.4** |
| **BO02** | **Sierra Bellavi** | **8.92** | **179** | Pn | **Pn** | **13 23 52.6** | **-0.5** |
| **GO05** | **Huala** | **9.17** | **185** | Pn | **Pn** | **13 23 54.7** | **-1.9** |
| **LPAZ** | **La Paz** | **9.88** | **16** | P | **Pn** | **13 24 08.4** | **+1.6** |
| | comp=Z,1.0nm,0.3s,baz=161,slow=3.6,SNR=20 | | | | | | |
| **LPAZ** | **La Paz** | **9.88** | **16** | *eP* | **Pn** | **13 24 08.5** | **+1.6** |
| **H03N1** | **Juan Fernandez** | **10.24** | **220** | T | T | 13 35 05.5 | |
| | baz=48,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.25** | **221** | T | T | 13 35 06.5 | |
| | baz=48,slow=72 | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.26** | **220** | T | T | 13 34 59.6 | |
| | baz=48,slow=72 | | | | | | |
| **CPUP** | **Villa Florida** | **12.28** | **95** | P | **Pn** | **13 24 42.8** | **+3.7** |
| | comp=Z,0.2nm,0.3s,baz=278,slow=10,SNR=5.6 | | | | | | |
| CPUP | | | | LR | LR | 13 28 46.8 | |
| | comp=Z,62nm,20.3s,baz=224,slow=36 | | | | | | |
| **SIV** | **San Ignacio** | **13.47** | **45** | P | Pn | 13 24 50.6 | -5.0 |
| | comp=Z,3.2nm,0.3s,baz=255,slow=6.6,SNR=24 | | | | | | |
| SIV | | | | S | Sn | 13 27 10.1 | -14 |
| | comp=Z,0.3nm,0.3s,baz=149,slow=19,SNR=1.9 | | | | | | |
| **PLCA** | **Paso Flores** | **14.85** | **179** | P | **P** | **13 25 18.8** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=342,slow=12,SNR=5.2 | | | | | | |
| **CPSB** | **Cacapava Do Su** | **16.12** | **110** | *eP* | **Pn** | **13 25 27.6** | **-2.6** |
| **VILB** | **Vilhena** | **16.35** | **40** | *eP* | **Pn** | **13 25 33.4** | **+0.1** |
| **PTGB** | **Pitanga** | **17.14** | **90** | *eP* | **P** | **13 25 43.8** | **-0.5** |
| **PCMB** | **Pacaembu** | **18.53** | **81** | *eP* | **P** | **13 25 57.3** | **-2.3** |
| **PDRB** | **Porto dos Gac** | **19.53** | **46** | *eP* | **P** | **13 26 10.5** | **-0.1** |
| **TER01** | **Tubaro-SC** | **19.62** | **103** | *eP* | **P** | **13 26 10.6** | **-0.8** |
| **ITRB** | **Iturama** | **19.96** | **76** | *eP* | **P** | **13 26 14.6** | **-0.6** |
| **ARAG** | **Araguaiana, MT** | **20.54** | **64** | *eP* | **P** | **13 26 20.1** | **-1.4** |
| **CLDB** | **Colider** | **20.69** | **47** | *eP* | **P** | **13 26 22.3** | **-0.8** |
| **PET01** | **Itanhaem-SP** | **21.52** | **97** | *eP* | **P** | **13 26 31.2** | **-0.8** |
| **VAO** | **Valinhos** | **22.04** | **88** | *eP* | **P** | **13 26 35.1** | **-2.5** |
| **IPMB** | **Ipameri, GO** | **22.50** | **74** | *eP* | **P** | **13 26 40.0** | **-2.6** |
| **PARB** | **Paraibuna** | **23.18** | **89** | *eP* | **P** | **13 26 47.1** | **-2.5** |
| **BDFB** | **Brasilia** | **23.72** | **69** | P | **P** | **13 26 52.1** | **-2.7** |
| | comp=Z,7.7nm,0.6s,baz=248,slow=12,SNR=9.5 | | | | | | |
| **NPGB** | **Novo Progresso** | **23.91** | **41** | *eP* | **P** | **13 26 56.1** | **-0.4** |
| **BSCB** | **Bom Sucesso** | **24.50** | **84** | *eP* | **P** | **13 27 00.1** | **-1.9** |
| **PEXB** | **Peixe** | **25.37** | **62** | *eP* | **P** | **13 27 09.1** | **-0.7** |
| **VAS01** | **Vassouras-RJ** | **25.37** | **88** | *eP* | **P** | **13 27 09.3** | **-0.4** |
| **ITTB** | **Itaituba** | **25.88** | **37** | *eP* | **P** | **13 27 14.9** | **+0.5** |
| **OTAV** | **Otavalo** | **26.92** | **343** | *eP* | **P** | **13 27 26.4** | **+2.2** |
| **PTGA** | **Pitinga** | **27.13** | **25** | P | **P** | **13 27 28.1** | **+2.4** |
| | comp=Z,2.9nm,0.4s,baz=230,slow=9.6,SNR=7.1 | | | | | | |
| **JANB** | **Januaria** | **27.14** | **72** | *eP* | **P** | **13 27 25.1** | **-0.7** |
| **SMTB** | **Santa Maria do** | **27.91** | **57** | *eP* | **P** | **13 27 32.3** | **-0.3** |
| **SDBA** | **SAO DESIDERIO** | **27.95** | **66** | *eP* | **P** | **13 27 31.9** | **-1.2** |
| **MDP** | **Montagnes des** | **35.54** | **33** | LR | LR | 13 43 08.4 | |
| | comp=Z,45nm,18.4s,baz=246,slow=36 | | | | | | |
| **DBIC** | **Dimbokro** | **71.80** | **73** | P | **P** | **13 33 04.0** | **-0.9** |
| | comp=Z,1.9nm,0.6s,baz=152,slow=19,SNR=3.4 | | | | | | |
| **DBIC** | **Dimbokro** | **71.80** | **73** | IAmb | IAmb | 13 33 04.8 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.59** | **70** | P | **P** | **13 33 53.2** | **-1.6** |
| | comp=Z,1.3nm,0.6s,baz=261,slow=4.5,SNR=9.8 | | | | | | |
| TORD | | | | pP | **sP** | **13 34 11.7** | **-2.4** |
| | comp=Z,3.7nm,0.6s,baz=265,slow=5.1,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **125.20** | **208** | PKP | **PKiKP** | **13 40 43.5** | **+0.3** |
| | comp=Z,0.2nm,0.4s,baz=111,slow=1.4,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **125.20** | **208** | | **PKPdf** | **13 40 42.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **128.26** | **211** | PKP | **PKiKP** | **13 40 49.9** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=154,slow=1.9,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.67** | **26** | PKPbc | **PKPdf** | **13 41 22.0** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=288,slow=0.9,SNR=1.6 | | | | | | |
| ZALV | | | | pPKPbc | sPKPbc | 13 41 42.1 | +0.2 |
| | comp=Z,2.0nm,0.5s,baz=302,slow=4.3,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **150.23** | **38** | PKPbc | **PKiKP** | **13 41 33.3** | **0.0** |
| | comp=Z,0.3nm,0.8s,baz=303,slow=3.6,SNR=3.5 | | | | | | |
| MKAR | | | | pPKPbc | **sPKPbc** | **13 41 51.5** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=320,slow=2.6,SNR=18 | | | | | | |

**TAP 16 13:24:21.6, 24°.85N×121°.98E, h15km±1km, ML1.4, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.04** | **263** | *eP* | Pg | 13 24 24.9 | +0.5 |
| | baz=256 | | | | | | |
| EGS | | | | *eS* | Sg | 13 24 27.2 | +1.0 |
| | baz=256 | | | | | | |
| **NTC** | **Toucheng** | **0.13** | **272** | *eP* | Pb | 13 24 26.0 | +0.2 |
| | baz=271 | | | | | | |
| NTC | | | | *eS* | Sb | 13 24 29.0 | +0.3 |
| | baz=271 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.16** | **4** | P | Pb | 13 24 26.3 | 0.0 |
| | baz=6.0 | | | | | | |
| TWB1 | | | | S | Sb | 13 24 28.9 | -0.5 |
| | baz=6.0 | | | | | | |
| **TIPB** | **Shuangxi** | **0.18** | **311** | P | Pb | 13 24 26.6 | -0.1 |
| | baz=311 | | | | | | |
| TIPB | | | | S | Sg | 13 24 29.5 | +0.4 |
| | baz=311 | | | | | | |
| **ILA** | **Ilan** | **0.23** | **248** | *eP* | Pb | 13 24 27.2 | -0.1 |
| | baz=246 | | | | | | |
| ILA | | | | *eS* | Sb | 13 24 30.9 | -0.3 |
| | baz=246 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.26** | **339** | *eP* | Pb | 13 24 28.5 | +0.4 |
| | baz=339 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.28** | **321** | *eP* | Pb | 13 24 28.9 | +0.5 |
| | baz=321 | | | | | | |
| NWF | | | | S | Sb | 13 24 33.8 | +0.8 |
| | baz=321 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.28** | **321** | *eP* | Pb | 13 24 29.2 | +0.8 |
| | baz=321 | | | | | | |
| **TWE** | **Neicheng** | **0.31** | **246** | *eP* | Pg | 13 24 28.2 | +0.1 |
| | baz=243 | | | | | | |
| TWE | | | | *eS* | Sg | 13 24 32.8 | +0.3 |
| | baz=243 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.36** | **256** | *eP* | Pb | 13 24 30.2 | +0.3 |
| | baz=255 | | | | | | |
| **ENTT** | **Nioudou** | **0.43** | **241** | P | Pb | 13 24 30.7 | -0.2 |
| | baz=240 | | | | | | |

**JMA 16 13:24:48.5±0.1, 24°.21N×123°.79E, h17km±2km, M0.8, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.14** | **336** | P | Pg | 13 24 52.5 | 0.0 |
| IRIF | | | | S | Sg | 13 24 55.1 | 0.0 |
| **HATJ** | **Hateruma jima** | **0.15** | **175** | P | Pg | 13 24 52.6 | -0.1 |
| HATJ | | | | S | Sg | 13 24 55.6 | +0.2 |
| **JKRS** | **Kuro-shima** | **0.20** | **82** | P | Pg | 13 24 53.5 | +0.1 |
| JKRS | | | | S | Sb | 13 24 57.2 | -0.1 |
| **JIJ** | **Ishigaki jima** | **0.36** | **65** | P | Pg | 13 24 55.8 | -0.1 |
| JIJ | | | | S | Sg | 13 25 00.8 | -0.2 |
| **JISG** | **Ishigakijimahi** | **0.60** | **52** | P | Pg | 13 25 00.3 | -0.2 |
| JISG | | | | S | Sb | 13 25 09.0 | +0.1 |

**I

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0.3nm59nm,1.0s | | | | | | | | |
| **GMJI** | **Gumukmas** | **6.53** | **95** | P | | **Pn** | | **13 48 50.8** | **+1.6** |
| | 0.2nm57nm,1.2s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.24** | **96** | Pn | | **Pn** | | **13 49 00.3** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **7.24** | **96** | P | | **Pn** | | **13 49 00.2** | **+1.3** |
| | 0.3nm35nm,0.7s | | | | | | | | |
| **ABJI** | **Asem Bagus** | **7.30** | **91** | P | | **Pn** | | **13 49 03.4** | **+3.7** |
| | 0.4nm62nm,0.8s | | | | | | | | |
| **PLAI** | **Plampang** | **10.85** | **96** | P | | **Pn** | | **13 49 48.5** | **+0.3** |
| | 19nm,1.2s | | | | | | | | |
| **GSI** | **Gunungsitoli** | **12.92** | **314** | Pn | | Pn | | 13 50 11.8 | -4.7 |
| **GIRL** | **Giralia** | **16.41** | **155** | Pn | | **Pn** | | **13 51 01.7** | **-0.1** |
| **BATI** | **Baumata** | **16.77** | **100** | P | | **P** | | **13 51 09.2** | **+1.7** |
| | 2.1nm,0.3s,baz=273,slow=18,SNR=2.1 | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.59** | **139** | P | | **P** | | **13 51 29.3** | **+1.9** |
| PSA00 | | | | IAmb | | IAmb | | 13 51 57.6 | |
| | comp=Z,5.8nm,1.0s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.96** | **121** | P | | Pn | | 13 52 02.2 | +5.7 |
| | comp=Z,1.8nm,0.8s,baz=297,slow=12,SNR=1.3 | | | | | | | | |
| FITZ | | | | S | | **S** | | **13 55 40.2** | **-3.0** |
| | comp=Z,1.8nm,1.0s,baz=319,slow=20,SNR=2.0 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **29.22** | **117** | P | | **P** | | **13 53 11.7** | **+0.4** |
| WB0 | | | | IAmb | | IAmb | | 13 53 19.9 | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.24** | **117** | P | | **P** | | **13 53 11.7** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=291,slow=11,SNR=9.0 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **29.25** | **117** | P | | **P** | | **13 53 11.8** | **+0.4** |
| **WR0** | **Warramunga Arr** | **29.42** | **117** | P | | **P** | | **13 53 13.5** | **+0.5** |
| WR0 | | | | IAmb | | IAmb | | 13 53 30.2 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.36** | **124** | P | | **P** | | **13 53 21.8** | **+0.5** |
| | comp=Z,0.4nm,0.8s,baz=297,slow=8.4,SNR=3.2 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **13 56 19.7** | **-0.3** |
| | comp=Z,0.4nm,0.9s,baz=318,slow=2.2,SNR=2.9 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **34.06** | **268** | T | | T | | 14 29 28.9 | |
| | baz=92,slow=76 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **34.07** | **268** | T | | T | | 14 29 32.4 | |
| | baz=92,slow=76 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **34.08** | **268** | T | | T | | 14 29 30.6 | |
| | baz=92,slow=76 | | | | | | | | |
| **STKA** | **Stephens Creek** | **40.24** | **131** | P | | **P** | | **13 54 47.5** | **+1.6** |
| | comp=Z,3.3nm,0.5s,baz=314,slow=8.3,SNR=13 | | | | | | | | |
| **STKA** | **Stephens Creek** | **40.24** | **131** | IAmb | | IAmb | | 13 54 51.3 | |
| | comp=Z,1.2nm,1.1s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **51.30** | **36** | LR | | LR | | 14 14 42.5 | |
| | comp=Z,269nm,21.8s,baz=358,slow=32 | | | | | | | | |
| **MK31** | **Makanchi Array** | **58.55** | **340** | P | | **P** | | **13 57 02.5** | **-2.6** |
| MK31 | | | | IAmb | | IAmb | | 13 57 06.7 | |
| | comp=Z,2.0nm,1.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.55** | **340** | P | | **P** | | **13 57 00.8** | **-4.3** |
| | comp=Z,0.2nm,0.4s,baz=166,slow=7.4,SNR=6.6 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **69.99** | **329** | P | | **P** | | **13 58 18.0** | **-1.9** |
| **QSPA** | **South Pole Qui** | **82.24** | **180** | P | | **P** | | **13 59 31.0** | **+1.6** |

*IDC **16** 13:51:02.7±1.0, 11.09N×141.09E, h0km, mb3.5/7, mb1 3.7/7, mb1mx3.2/56, mbtmp3.5/7, MS2.9/2, Ms1 2.9/2, ms1mx2.5/46, Error ellipse: s-maj=55.0km s-min=20.8km az=92.0*

**ISC 16 13:51:07.8±1.0, 11.1N±0.1×141.1E±0.3, h34km, n9, σ0§71/8, mb3.5/7, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **15.34** | **220** | LR | LR | 13 59 26.6 | |
| | comp=Z,53nm,21.0s,baz=202,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **28.80** | **338** | LR | LR | 14 07 31.0 | |
| | comp=Z,24nm,19.2s,baz=270,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.52** | **192** | P | **P** | **13 57 26.3** | **-0.6** |
| | 0.4nm,0.9s,baz=9.8,slow=4.5,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **35.22** | **191** | P | **P** | **13 57 59.5** | **+0.4** |
| | 0.4nm,0.6s,baz=18,slow=12,SNR=9.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 00 29.9** | **+0.1** |
| | 0.6nm,0.9s,baz=15,slow=1.7,SNR=5.2 | | | | | | |
| **KLR** | **Kul'dur** | **38.82** | **350** | P | **P** | **13 58 28.5** | **-0.9** |
| | 0.5nm,0.3s,baz=254,slow=9.8,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **46.77** | **328** | P | **P** | **13 59 34.9** | **+0.9** |
| | 0.3nm,0.3s,baz=146,slow=9.1,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.77** | **318** | P | **P** | **14 01 16.1** | **-0.3** |
| | 0.3nm,0.8s,baz=102,slow=5.7,SNR=2.1 | | | | | | |
| **ILAR** | **Eielson Array** | **72.43** | **25** | P | **P** | **14 02 30.9** | **+0.5** |
| | 0.7nm,1.0s,baz=252,slow=5.6,SNR=3.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.79** | **27** | P | **P** | **14 03 48.2** | **-0.1** |
| | 0.2nm,0.6s,baz=288,slow=5.0,SNR=2.6 | | | | | | |

**IDC 16 13:51:51.4±11.0, 14.69N×104.42W, h0km, mb3.6/3, mb1 3.8/4, mb1mx3.5/50, mbtmp3.4/4, MS3.0/3, Ms1 3.0/3, ms1mx2.6/52, Error ellipse: s-maj=308.5km s-min=106.9km az=116.0, Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **10.89** | **330** | LR | LR | 13 57 03.3 | |
| | comp=Z,43nm,19.1s,baz=94,slow=29 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.59** | **3** | Pn | Pn | 13 55 21.5 | +2.2 |
| | baz=183,slow=14,SNR=2.6 | | | | | | |
| TXAR | | | | LR | LR | 14 00 27.2 | |
| | comp=Z,61nm,21.4s,baz=200,slow=35 | | | | | | |
| **JTS** | **Las Juntas de** | **19.50** | **101** | LR | LR | 14 02 15.1 | |
| | comp=Z,67nm,18.7s,baz=204,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **28.33** | **352** | P | P | 13 57 46.9 | -0.2 |
| | 0.4nm,0.8s,baz=170,slow=6.2,SNR=2.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.29** | **354** | P | P | 14 00 33.9 | -0.2 |
| | 0.6nm,0.7s,baz=167,slow=7.3,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **57.75** | **340** | P | P | 14 01 44.0 | +0.1 |
| | 0.7nm,1.0s,baz=252,slow=5.6,SNR=7.4 | | | | | | |

*NEIC **16** 13:57:37.3±2.0, 16.6S±0.1×73.8W±0.1, h10km±1km, mb4.4/5, ML4.2(ARE), Error ellipse: s-maj=28.4km s-min=13.0km az=226.0*
*ARE **16** 13:57:45±3.0, 16.4S±0.1×73.4W±0.1, h20km±5km, Error ellipse: s-maj=0.0km s-min=0.0km az=145.0*
*IDC **16** 13:57:46.1±2.0, 16.92S×73.58W, h90km±18km, mb3.4/2, mb1 3.6/6, mb1mx3.3/46, mbtmp3.8/6, MS3.4/2, Ms1 3.4/2, ms1mx2.7/24, Error ellipse: s-maj=43.2km s-min=13.4km az=49.0*

**ISC 16 13:57:35.4±0.8, 16.84S±0.08×74.12W±0.09, h10km, n32, σ1§91/31, mb4.0/4, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB12** | **IPOC Station P** | **4.02** | **117** | | **Pn** | **13 58 36.4** | **-0.8** |
| **PB12** | **IPOC Station P** | **4.02** | **117** | *e*P | **Pn** | **13 58 38.8** | **+1.6** |
| **PB16** | **IPOC Station P** | **4.64** | **109** | | **Pn** | **13 58 46.2** | **+0.1** |
| **PB11** | **IPOC Station P** | **5.14** | **125** | | **Pn** | **13 58 52.7** | **+0.1** |
| **TA01** | **Diego Aracena** | **5.26** | **135** | Pn | **Pn** | **13 58 55.1** | **+1.0** |
| **PATCX** | **Punta Patache** | **5.46** | **137** | Pn | **Pn** | **13 58 57.5** | **+0.6** |
| **GO01** | **Chusmiza** | **5.46** | **122** | | **Pn** | **13 58 58.2** | **+0.9** |
| **NNA** | **Nana** | **5.50** | **331** | P | **Pb** | **13 59 11.6** | **0.0** |
| | 3.7nm,0.3s,baz=170,slow=12,SNR=3.0 | | | | | | |
| NNA | | | | S | **Sb** | **14 00 15.7** | **-1.9** |
| | 12nm,0.3s,baz=198,slow=12,SNR=5.9 | | | | | | |
| **NNA** | **Nana** | **5.50** | **331** | Pn | **Pn** | **13 58 57.3** | **-0.1** |
| **PB08** | **IPOC Station P** | **5.74** | **126** | Pn | **Pn** | **13 59 01.8** | **+0.7** |
| **LPAZ** | **La Paz** | **5.76** | **85** | P | **Pn** | **13 59 03.9** | **+2.3** |
| | 3.2nm,0.3s,baz=291,slow=9.9,SNR=33 | | | | | | |
| LPAZ | | | | S | **Sn** | **14 00 10.3** | **+2.1** |
| | baz=176,slow=19,SNR=1.3 | | | | | | |
| LPAZ | | | | LR | LR | 14 01 20.8 | |
| | comp=Z,94nm,20.8s,baz=270,slow=41 | | | | | | |
| **PB02** | **IPOC Station P** | **5.98** | **139** | | **Pn** | **13 59 05.9** | **+1.7** |
| **PB01** | **IPOC Station P** | **6.06** | **134** | | **Pn** | **13 59 06.5** | **+1.3** |
| **PB07** | **IPOC Station P** | **6.29** | **141** | Pn | **Pn** | **13 59 10.1** | **+1.6** |
| **PB03** | **IPOC Station P** | **6.62** | **142** | Pn | **Pn** | **13 59 15.8** | **+2.8** |
| **PB04** | **IPOC Station P** | **6.62** | **146** | Pn | **Pn** | **13 59 15.5** | **+2.5** |
| **PB09** | **IPOC Station P** | **6.75** | **138** | Pn | **Pn** | **13 59 17.3** | **+2.6** |
| **LVC** | **Limon Verde** | **7.55** | **140** | P | **Pn** | **13 59 29.1** | **+3.2** |
| | 1.0nm,0.3s,baz=325,slow=11,SNR=10.0 | | | | | | |
| LVC | | | | S | **Sn** | **14 00 48.0** | **-3.8** |
| | 1.1nm,0.3s,baz=101,slow=21,SNR=7.1 | | | | | | |
| **LVC** | **Limon Verde** | **7.55** | **140** | Pn | **Pn** | **13 59 29.0** | **+3.1** |
| **PB15** | **IPOC Station P** | **7.70** | **146** | Pn | **Pn** | **13 59 30.1** | **+2.3** |
| **SIV** | **San Ignacio** | **12.54** | **88** | P | **Pn** | **14 00 33.0** | **-1.1** |
| | 0.4nm,0.3s,baz=278,slow=13,SNR=5.7 | | | | | | |
| **H03N1** | **Juan Fernandez** | **17.09** | **194** | T | T | 14 20 10.2 | |
| | baz=17,slow=74 | | | | | | |
| **H03N2** | **Juan Fernandez** | **17.09** | **194** | T | T | 14 20 06.8 | |
| | baz=17,slow=74 | | | | | | |
| **H03N3** | **Juan Fernandez** | **17.11** | **194** | T | T | 14 20 05.1 | |
| | baz=17,slow=74 | | | | | | |
| **BDFB** | **Brasilia** | **25.08** | **91** | P | **P** | **14 02 59.1** | **-1.4** |
| BDFB | | | | IAmb | IAmb | 14 03 22.0 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **28.43** | **20** | LR | LR | 14 17 03.8 | |
| | comp=Z,294nm,21.4s,slow=41 | | | | | | |
| **YMP** | **Mirror Lake Pl** | **69.52** | **333** | P | **P** | **14 08 46.1** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **80.58** | **73** | P | **P** | **14 09 47.1** | **-1.6** |
| | comp=Z,0.7nm,0.8s,baz=256,slow=5.2,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.58** | **73** | P | **P** | **14 09 46.3** | **-2.4** |
| **YKA** | **Yellowknife Ar** | **85.23** | **342** | P | **P** | **14 10 12.1** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=138,slow=5.5,SNR=6.1 | | | | | | |
| **ESBB** | **Sonseca Array** | **86.11** | **47** | P | **P** | **14 10 17.1** | **+0.3** |
| ESBB | | | | IAmb | IAmb | 14 10 45.7 | |
| | comp=Z,8.8nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **149.08** | **359** | PKPbc | **PKPbc** | **14 17 25.3** | **+1.1** |
| | comp=Z,0.3nm,0.5s,baz=333,slow=1.4,SNR=2.4 | | | | | | |

**IDC 16 14:00:53.0±5.3, 47.99S×122.70E, h0km, mb3.6/2, mb1 3.8/2, mb1mx3.5/37, mbtmp3.6/2, MS3.4/3, Ms1 3.4/3, ms1mx2.8/38, Error ellipse: s-maj=276.8km s-min=80.0km az=103.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **25.86** | **24** | P | P | 14 06 26.2 | -0.1 |
| | 1.7nm,0.8s,baz=193,slow=8.9,SNR=28 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.52** | **23** | P | P | 14 06 58.9 | -0.2 |
| | 0.3nm,0.9s,baz=194,slow=8.3,SNR=2.0 | | | | | | |
| WRA | | | | LR | LR | 14 19 28.6 | |
| | comp=Z,59nm,18.3s,baz=150,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.91** | **6** | LR | LR | 14 19 10.6 | |
| | comp=Z,66nm,18.2s,baz=212,slow=37 | | | | | | |
| **PALK** | **Pallekele** | **66.29** | **314** | LR | LR | 14 36 04.0 | |
| | comp=Z,25nm,18.8s,baz=44,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.54** | **44** | PKPbc | PKPdf | 14 20 31.6 | -0.3 |
| | 0.1nm,0.8s,baz=258,slow=1.1,SNR=1.7 | | | | | | |

*MCSM **16** 14:05:43.1±0.5, 52.7N×4.1E±*, h2km±4km, MLv3.4/6*
*IPEC **16** 14:05:44.3±0.3, 51.46N×16.29E, h0km, ML2.6/2, Error ellipse: s-maj=2.2km s-min=1.1km az=22.0*
*IDC **16** 14:05:45.7±0.7, 51.47N×16.08E, h0km, mb1 3.5/6, mb1mx3.3/51, mbtmp3.4/6, ML2.9/6, Error ellipse: s-maj=11.8km s-min=6.7km az=108.0*
*BGR **16** 14:05:45.7±0.7, 51.41N×16.19E, h1km, ML3.1/6, Error ellipse: s-maj=11.1km s-min=4.4km az=15.0*
*PRU **16** 14:05:45.6±0.0, 51.42N×16.19E, h0km*
*VIE **16** 14:05:47.5±0.7, 51.28N×16.01E, h0km, mb2.5/5, ml2.8/4, Error ellipse: s-maj=6.2km s-min=3.1km az=4.0 72 km WNW of Wroclaw Suspected Mining induced.*

**ISC 16 14:05:42.8±0.7, 51.54N±0.03×16.25E±0.03, h0km, n49, σ1§49/82, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.70** | **178** | *e*Pg | **Pg** | **14 05 56.7** | **+0.5** |
| KSP | | | | *e*Sg | **Sg** | **14 06 04.8** | **-0.5** |
| **KSP** | **Ksiaz** | **0.70** | **178** | *e*Pg | **Pg** | **14 05 56.7** | **+0.5** |
| **KSP** | **Ksiaz** | **0.70** | **178** | Pg | **Pg** | **14 05 56.4** | **+0.2** |
| KSP | | | | Sg | **Sg** | **14 06 04.5** | **-0.8** |
| **CHVC** | **Chvalec** | **0.96** | **187** | *e*PG | **Pg** | **14 06 01.6** | **+0.4** |
| CHVC | | | | *e*SG | **Sg** | **14 06 12.7** | **-1.0** |
| | comp=Z,116nm,0.5s | | | | | | |
| **OSTC** | **Ostas** | **0.99** | **181** | *e*PG | **Pg** | **14 06 01.9** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | **14 06 13.8** | **-0.7** |
| | comp=Z,99nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.05** | **188** | *e*PG | **Pg** | **14 06 02.9** | **+0.1** |
| UPC | | | | *e*SG | **Sg** | **14 06 15.6** | **-0.8** |
| | comp=Z,182nm,0.5s | | | | | | |
| **UPC** | **Upice** | **1.05** | **188** | Pg | **Pg** | **14 06 02.9** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **1.20** | **178** | *e*PG | **Pg** | **14 06 05.3** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **14 06 20.0** | **-1.1** |
| | comp=Z,66nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.20** | **178** | *e*Pg | **Pg** | **14 06 05.5** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **1.20** | **178** | Pg | **Pg** | **14 06 05.4** | **-0.2** |
| **PVCC** | **Panska Ves** | **1.47** | **227** | *e*PG | **Pn** | **14 06 10.9** | **+0.4** |
| **PVCC** | **Panska Ves** | **1.47** | **227** | Pn | **Pn** | **14 06 10.9** | **+0.4** |
| **KRLC** | **Kraliky** | **1.51** | **167** | *e*PG | **Pn** | **14 06 11.2** | **+0.1** |
| KRLC | | | | *e*SG | **Sg** | **14 06 30.2** | **-1.0** |
| | comp=Z,50nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.60** | **246** | Pg | **Pg** | **14 06 14.1** | **+0.7** |
| **BRG** | **Berggiesshubel** | **1.60** | **246** | *e*Pn | **Pn** | **14 06 12.7** | **+0.4** |
| **PRU** | **Pruhonice** | **1.90** | **216** | *e*PG | **Pb** | **14 06 18.0** | **-0.2** |
| PRU | | | | *e*SG | **Sb** | **14 06 42.2** | **-0.3** |
| | comp=Z,53nm,0.6s | | | | | | |
| **FBE** | **Freiberg** | **1.93** | **252** | *e*Sg | **Sb** | **14 06 44.1** | **+0.8** |
| **MORC** | **Moravsky Berou** | **1.95** | **155** | *e*Pn | **Pn** | **14 06 17.4** | **+0.3** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **14 06 43.0** | **+0.6** |
| | 38nm,0.4s,baz=335 | | | | | | |
| **MORC** | **Moravsky Berou** | **1.95** | **155** | *e*Pn | **Pn** | **14 06 17.5** | **+0.3** |
| MORC | | | | *e*Sg | **Sb** | **14 06 44.1** | **+0.1** |
| **CLL** | **Collm** | **2.05** | **265** | *e*Pg | **Pb** | **14 06 22.0** | **+1.2** |
| CLL | | | | *e*Sg | **Sg** | **14 06 50.0** | **+1.5** |
| | comp=Z,27nm,0.7s | | | | | | |
| **VRAC** | **Vranov** | **2.25** | **174** | Pn | **Pn** | **14 06 22.7** | **+1.5** |
| | comp=Z,3.7nm,0.3s,baz=345,slow=17,SNR=10 | | | | | | |
| VRAC | | | | Sn | **Sb** | **14 06 52.3** | **-0.3** |
| | comp=Z,8.3nm,0.3s,baz=265,slow=21,SNR=7.6 | | | | | | |
| VRAC | | | | Lg | Lg | 14 07 01.2 | |
| | comp=Z,4.6nm,0.3s,baz=255,slow=22,SNR=4.2 | | | | | | |
| **VRAC** | **Vranov** | **2.25** | **174** | *e*Pn | **Pn** | **14 06 21.5** | **+0.3** |
| | baz=355 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **14 06 51.9** | **-0.7** |
| | comp=Z,36nm,0.6s,baz=355 | | | | | | |
| **KRUC** | **Moravsky** | **2.49** | **178** | *e*Pn | **Pn** | **14 06 24.5** | **+0.1** |
| | baz=358 | | | | | | |
| **KRUC** | **Moravsky** | **2.49** | **178** | *e*PN | **Pn** | **14 06 24.6** | **+0.1** |
| **OJC** | **Ojcow** | **2.61** | **119** | *e*Pn | **Pn** | **14 06 27.4** | **+1.2** |
| OJC | | | | *e*Pg | **Pg** | **14 06 34.2** | **+1.4** |
| OJC | | | | *e*Sg | **Sg** | **14 07 08.8** | **+2.3** |
| **OJC** | **Ojcow** | **2.61** | **119** | *e*Pn | **Pn** | **14 06 27.0** | **+0.8** |
| **TANN** | **Tannenbergstha** | **2.65** | **246** | *e*Pn | **Pn** | **14 06 27.8** | **+1.0** |
| **WERD** | **Werda** | **2.72** | **248** | *e*Sg | **Sg** | **14 07 09.0** | **-1.1** |
| **NKC** | **Novy Kostel** | **2.74** | **243** | *e*PN | **Pn** | **14 06 29.0** | **+1.0** |
| NKC | | | | *e*SG | **Sg** | **14 07 10.9** | **+0.1** |
| | comp=Z,39nm,0.4s | | | | | | |
| **NKC** | **Novy Kostel** | **2.74** | **243** | Pn | **Pn** | **14 06 29.0** | **+1.0** |
| NKC | | | | pP | **Pb** | **14 06 29.7** | **-3.0** |
| **JAVC** | **Velka Javorina** | **2.84** | **161** | *e*PN | **Pn** | **14 06 30.0** | **+0.6** |
| **KHC** | **Kasperske Hory** | **2.96** | **216** | *e*PN | **Pn** | **14 06 31.5** | **+0.5** |
| KHC | | | | *e*PG | **Pb** | **14 06 37.3** | **+0.9** |
| KHC | | | | *e*SG | **Sg** | **14 07 15.9** | **-1.9** |
| | comp=Z,43nm,0.9s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.96** | **216** | Pn | **Pn** | **14 06 31.3** | **+0.3** |
| KHC | | | | pP | Pb | 14 06 31.7 | -4.7 |
| **CKRC** | **Cesky Krumlov** | **3.00** | **205** | *e*PN | **Pn** | **14 06 32.7** | **+1.2** |
| CKRC | | | | *e*PG | **Pb** | **14 06 38.3** | **+1.3** |
| CKRC | | | | *e*SG | **Sg** | **14 07 16.8** | **-2.2** |
| **SMOL** | **Smolenice** | **3.13** | **165** | *e*PG | **Pg** | **14 06 43.4** | **+0.8** |
| SMOL | | | | *e* | | 14 07 28.7 | |
| SMOL | | | | *e* | | 14 07 36.1 | |
| **GERES** | **GERESS Array B** | **3.16** | **212** | Pn | **Pn** | **14 06 35.0** | **+1.2** |
| | comp=Z,0.8nm,0.3s,baz=35,slow=13,SNR=18 | | | | | | |
| GERES | | | | Pg | **Pb** | **14 06 41.1** | **+1.3** |
| | comp=Z,7.9nm,0.3s,baz=28,slow=16,SNR=53 | | | | | | |
| GERES | | | | Lg | Lg | 14 07 20.7 | |
| | comp=Z,4.9nm,0.3s,baz=30,slow=26,SNR=9.0 | | | | | | |
| **LANS** | **Liptovska Anna** | **3.16** | **138** | *e*PN | **Pn** | **14 06 35.1** | **+1.3** |
| LANS | | | | *e*PG | **Pg** | **14 06 44.6** | **+1.3** |
| LANS | | | | *e*SG | **Sg** | **14 07 23.0** | **-1.2** |
| LANS | | | | *e* | | 14 07 37.7 | |
| **WET** | **Wettzell** | **3.23** | **223** | *e*Pn | **Pn** | **14 06 35.6** | **+0.9** |
| **MODS** | **Modra-Piesok** | **3.24** | **168** | *e*PG | **Pg** | **14 06 47.2** | **+2.3** |
| MODS | | | | *e* | | 14 07 32.2 | |
| **VYHS** | **Vyhne** | **3.48** | **150** | *e*PG | **Pg** | **14 06 49.8** | **+0.4** |
| **CONA** | **Conrad Observa** | **3.63** | **184** | *e*Pn | **Pn** | **14 06 41.3** | **+1.0** |
| | comp=Z,1.1nm,0.2s | | | | | | |
| CONA | | | | Pg | **Pg** | **14 06 50.5** | **-1.8** |
| | comp=Z,3.3nm,0.4s | | | | | | |
| CONA | | | | Sg | **Sg** | **14 07 38.2** | **-1.0** |
| | comp=Z,12nm,0.3s | | | | | | |
| **MOA** | **Molln** | **3.92** | **200** | *e*Pn | **Pn** | **14 06 44.5** | **+0.4** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| MOA | | | | Pg | **Pg** | **14 06 56.9** | **-0.8** |
| | comp=Z,6.2nm,0.4s | | | | | | |
| MOA | | | | *e*Sn | **Sn** | **14 07 29.7** | **-1.0** |
| | comp=Z,0.9nm,0.1s | | | | | | |
| **ARSA** | **Arzberg** | **4.32** | **187** | *e*Pn | **Pn** | **14 06 50.9** | **+1.1** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| ARSA | | | | Pg | **Pg** | **14 07 06.2** | **+0.7** |
| | comp=Z,4.1nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.86** | **204** | *e*Pn | **Pn** | **14 06 58.3** | **+1.1** |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **6.34** | **224** | Pn | **Pn** | **14 07 21.2** | **+3.7** |
| | comp=Z,0.4nm,0.3s,baz=162,slow=20,SNR=2.1 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **14 08 37.6** | **+6.9** |
| | comp=Z,0.6nm,0.3s,baz=177,slow=10,SNR=2.1 | | | | | | |
| DAVOX | | | | Lg | Lg | 14 09 05.4 | |
| | comp=Z,0.8nm,0.3s,baz=352,slow=22,SNR=3.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **8.21** | **91** | Pn | **Pn** | **14 07 44.9** | **+1.9** |
| | comp=Z,0.9nm,0.3s,baz=280,slow=12,SNR=2.3 | | | | | | |
| AKASG | | | | Sn | **Sn** | **14 09 13.1** | **-3.3** |
| | comp=Z,0.8nm,0.3s,baz=272,slow=25,SNR=2.5 | | | | | | |
| **HFS** | **Hagfors** | **8.73** | **352** | Pn | **Pn** | **14 07 50.6** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=169,slow=16,SNR=5.0 | | | | | | |
| HFS | | | | Sn | **Sn** | **14 09 27.8** | **-1.3** |
| | comp=Z,0.1nm,0.3s,baz=177,slow=32,SNR=1.3 | | | | | | |
| **FINES** | **FINESS Array B** | **11.29** | **25** | Pn | **Pn** | **14 08 25.6** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=210,slow=12,SNR=8.5 | | | | | | |
| FINES | | | | Sn | **Sn** | **14 10 27.6** | **-4.4** |
| | comp=Z,0.2nm,0.3s,baz=206,slow=22,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.57** | **10** | Pn | **P** | **14 09 59.2** | **-1.7** |
| | baz=192,slow=12,SNR=6.0 | | | | | | |

*IDC **16** 14:14:10.6±1.5, 21.67S×175.69W, h0km, mb3.8/6, mb1 4.1/7, mb1mx3.8/35, mbtmp3.9/7, ML4.9/1, MS3.5/12, Ms1 3.5/12, ms1mx3.2/62, Error ellipse: s-maj=70.2km s-min=25.1km az=163.0*
*NEIC **16** 14:14:11.9±2.4, 20.9S±0.1×175.46W±0.06, h10km±1km, mb4.5/8, Error ellipse: s-maj=17.6km s-min=8.3km az=343.0*

**ISC 16 14:14:12.4±0.6, 21.0S±0.1×175.55W±0.09, h10km, n39, σ1§79/23, mb4.2/8, MS3.7/10, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.61** | **71** | Pn | **Pn** | **14 15 34.1** | **-1.9** |
| **MSVF** | **Nonsavu** | **6.85** | **297** | Pn | **Pn** | **14 15 53.7** | **+0.6** |
| | 0.7nm,0.3s,baz=116,slow=14,SNR=6.6 | | | | | | |
| MSVF | | | | LR | LR | 14 18 08.7 | |
| | comp=Z,616nm,20.6s,baz=150,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **6.85** | **297** | | **Pn** | **14 15 53.9** | **+0.8** |
| **AFI** | **Afiamalu** | **7.89** | **28** | LR | LR | 14 18 50.8 | |
| | comp=Z,172nm,21.1s,baz=236,slow=33 | | | | | | |
| **RAO** | **Raoul Island** | **8.52** | **194** | Pn | **Pn** | **14 16 17.3** | **+1.5** |
| **DZM** | **Mont Dzumac** | **16.80** | **263** | *e*LR | LR | 14 22 29.0 | |
| | comp=Z,310nm,24.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.80** | **263** | Pn | **P** | **14 18 10.1** | **-0.1** |
| | 0.1nm,0.3s,baz=78,slow=18,SNR=3.8 | | | | | | |
| DZM | | | | LR | LR | 14 23 09.7 | |
| | comp=Z,284nm,20.2s,baz=156,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.80** | **263** | P | **Pn** | **14 18 09.3** | **+1.4** |
| DZM | | | | IAmb | IAmb | 14 18 16.2 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **18.36** | **199** | LR | LR | 14 24 29.4 | |
| | comp=Z,404nm,19.4s,baz=16,slow=35 | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.38** | **199** | P | **P** | **14 18 39.1** | **+0.6** |
| BKZ | | | | IAmb | IAmb | 14 18 51.7 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **BSWZ** | **Blackbirch Sta** | **22.53** | **201** | P | **P** | **14 19 13.7** | **+1.3** |
| **LTZ** | **Lake Taylor** | **24.03** | **202** | P | **P** | **14 19 27.7** | **+0.1** |
| LTZ | | | | IAmb | IAmb | 14 19 50.5 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **PAE** | **Paea** | **24.71** | **87** | *e*T | T | 14 44 31.6 | |
| | comp=Z,5.2nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **24.73** | **87** | *e*LR | LR | 14 25 31.2 | |
| | comp=Z,295nm,26.5s | | | | | | |
| **PPT2** | **Papeete2** | **24.73** | **87** | *e*T | T | 14 44 34.1 | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| **PPT** | **Papeete** | **24.74** | **87** | LR | LR | 14 26 49.2 | |
| | comp=Z,64nm,20.8s,baz=218,slow=30 | | | | | | |
| **FOZ** | **Fox Glacier** | **25.60** | **205** | P | **P** | **14 19 41.5** | **-0.2** |
| **CTA** | **Charters Tower** | **35.73** | **264** | P | **P** | **14 21 10.5** | **-1.1** |
| | comp=Z,3.3nm,0.8s,baz=53,slow=8.5,SNR=4.0 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **36.17** | **76** | *e*LR | LR | 14 30 49.6 | |
| | comp=Z,199nm,25.1s | | | | | | |
| **AS31** | **Alice Springs** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PB08** | **IPOC Station P** | **0.33** | **178** | *eP* | | **Pn** | **14 32 55.4** | **+0.8** |
| PB08 | | | | *eS* | | **Sn** | **14 33 07.1** | **+0.5** |
| PB08 | | | | IAML | | | 14 33 07.9 | |
| | comp=E,9μm,0.3s | | | | | | | |
| **PB11** | **IPOC Station P** | **0.47** | **276** | | | **Pn** | **14 32 55.3** | **+0.2** |
| PB11 | | | | Sn | | **Sn** | **14 33 07.5** | **+0.2** |
| **PB11** | **IPOC Station P** | **0.47** | **276** | *eP* | | **Pn** | **14 32 55.7** | **+0.6** |
| PB11 | | | | *eS* | | **Sn** | **14 33 08.1** | **+0.7** |
| PB11 | | | | IAML | | | 14 33 08.9 | |
| | comp=N,4μm,0.3s | | | | | | | |
| **HMBC** | **Humberstone** | **0.82** | **236** | *eP* | | **Pn** | **14 32 58.4** | **+0.4** |
| HMBC | | | | *eS* | | **Sn** | **14 33 13.2** | **+0.8** |
| HMBC | | | | IAML | | | 14 33 15.2 | |
| | comp=E,3μm,0.6s | | | | | | | |
| **TA02** | **Huaiquique** | **1.02** | **243** | | | **Pn** | **14 33 00.2** | **+0.4** |
| TA02 | | | | Sn | | **Sn** | **14 33 16.0** | **+0.4** |
| **TA02** | **Huaiquique** | **1.02** | **243** | *eP* | | **Pn** | **14 33 00.6** | **+0.9** |
| TA02 | | | | *eS* | | **Sn** | **14 33 16.4** | **+0.8** |
| TA02 | | | | IAML | | | 14 33 17.4 | |
| | comp=N,5μm,0.1s | | | | | | | |
| **TA01** | **Diego Aracena** | **1.22** | **232** | | | **Pn** | **14 33 02.3** | **+0.4** |
| TA01 | | | | Sn | | **Sn** | **14 33 19.7** | **+0.2** |
| **TA01** | **Diego Aracena** | **1.22** | **232** | *eP* | | **Pn** | **14 33 02.5** | **+0.6** |
| TA01 | | | | *eS* | | **Sn** | **14 33 19.9** | **+0.4** |
| TA01 | | | | IAML | | | 14 33 25.5 | |
| | comp=E,548nm,0.6s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.26** | **194** | | | **Pn** | **14 33 03.4** | **+0.8** |
| **PB01** | **IPOC Station P** | **1.26** | **194** | *eP* | | **Pn** | **14 33 03.4** | **+0.8** |
| PB01 | | | | *eS* | | **Sn** | **14 33 21.3** | **+0.6** |
| PB01 | | | | IAML | | | 14 33 22.8 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.37** | **223** | | | **Pn** | **14 33 04.1** | **+0.3** |
| **PATCX** | **Punta Patache** | **1.37** | **223** | *eP* | | **Pn** | **14 33 04.3** | **+0.5** |
| PATCX | | | | *eS* | | **Sn** | **14 33 23.2** | **+0.5** |
| PATCX | | | | IAML | | | 14 33 31.9 | |
| | comp=E,711nm,0.1s | | | | | | | |
| **PB16** | **IPOC Station P** | **1.50** | **347** | | | **Pn** | **14 33 07.6** | **+1.7** |
| **PB16** | **IPOC Station P** | **1.50** | **347** | *eP* | | **Pn** | **14 33 07.8** | **+1.9** |
| PB16 | | | | *eS* | | **Sn** | **14 33 28.9** | **+2.5** |
| PB16 | | | | IAML | | | 14 33 30.3 | |
| | comp=E,344nm,0.7s | | | | | | | |
| **PB12** | **IPOC Station P** | **1.62** | **317** | | | **Pn** | **14 33 07.1** | **+0.2** |
| **PB12** | **IPOC Station P** | **1.62** | **317** | *eP* | | **Pn** | **14 33 07.5** | **+0.6** |
| PB12 | | | | *i* S | | **Sn** | **14 33 27.8** | **-0.5** |
| PB12 | | | | IAML | | | 14 33 35.9 | |
| | comp=N,458nm,0.3s | | | | | | | |
| **PB02** | **IPOC Station P** | **1.65** | **204** | | | **Pn** | **14 33 08.3** | **+1.1** |
| **PB02** | **IPOC Station P** | **1.65** | **204** | *eP* | | **Pn** | **14 33 08.1** | **+0.8** |
| PB02 | | | | *eS* | | **Sn** | **14 33 30.0** | **+1.0** |
| PB02 | | | | IAML | | | 14 33 36.5 | |
| | comp=N,981nm,0.5s | | | | | | | |
| **PB09** | **IPOC Station P** | **1.98** | **182** | | | **Pn** | **14 33 12.6** | **+1.2** |
| **PB09** | **IPOC Station P** | **1.98** | **182** | *eP* | | **Pn** | **14 33 12.9** | **+1.5** |
| PB09 | | | | *eS* | | **Sn** | **14 33 38.1** | **+1.8** |
| PB09 | | | | IAML | | | 14 33 43.5 | |
| | comp=N,353nm,0.4s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.02** | **199** | | | **Pn** | **14 33 13.2** | **+1.2** |
| **PB07** | **IPOC Station P** | **2.02** | **199** | *eP* | | **Pn** | **14 33 13.3** | **+1.3** |
| PB07 | | | | *eS* | | **Sn** | **14 33 37.8** | **+0.4** |
| PB07 | | | | IAML | | | 14 33 45.2 | |
| | comp=E,500nm,0.3s | | | | | | | |
| **PB03** | **IPOC Station P** | **2.29** | **194** | | | **Pn** | **14 33 16.9** | **+1.4** |
| **PB03** | **IPOC Station P** | **2.29** | **194** | *eP* | | **Pn** | **14 33 16.3** | **+0.9** |
| PB03 | | | | *eS* | | **Sn** | **14 33 42.4** | **-1.2** |
| PB03 | | | | IAML | | | 14 33 52.9 | |
| | comp=E,244nm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.67** | **200** | | | **Pn** | **14 33 22.2** | **+1.7** |
| **PB04** | **IPOC Station P** | **2.67** | **200** | *eP* | | **Pn** | **14 33 22.6** | **+2.2** |
| PB04 | | | | *eS* | | **Sn** | **14 33 50.6** | **-1.9** |
| PB04 | | | | IAML | | | 14 34 05.3 | |
| | comp=N,267nm,0.6s | | | | | | | |
| **LVC** | **Limon Verde** | **2.79** | **175** | P | | **Pn** | **14 33 24.1** | **+1.9** |
| | comp=N,6.0nm,0.3s,baz=3.5,slow=10,SNR=45 | | | | | | | |
| LVC | | | | S | | **Sn** | **14 33 57.1** | **+1.4** |
| | comp=N,17nm,0.3s,baz=338,slow=9.5,SNR=4.7 | | | | | | | |
| **LVC** | **Limon Verde** | **2.79** | **175** | | | **Pn** | **14 33 23.7** | **+1.4** |
| **LVC** | **Limon Verde** | **2.79** | **175** | *eP* | | **Pn** | **14 33 23.9** | **+1.7** |
| LVC | | | | *eS* | | **Sn** | **14 33 57.5** | **+1.8** |
| **PB06** | **IPOC Station P** | **2.91** | **187** | | | **Pn** | **14 33 24.4** | **+0.9** |
| **PB06** | **IPOC Station P** | **2.91** | **187** | *eP* | | **Pn** | **14 33 24.7** | **+1.2** |
| PB06 | | | | *eS* | | **Sn** | **14 33 58.4** | **+0.5** |
| PB06 | | | | IAML | | | 14 34 08.1 | |
| | comp=E,228nm,0.6s | | | | | | | |
| **PB15** | **IPOC Station P** | **3.39** | **185** | | | **Pn** | **14 33 30.5** | **+0.5** |
| **LPAZ** | **La Paz** | **3.64** | **16** | P | | **Pn** | **14 33 36.3** | **+2.5** |
| | comp=E,1.5nm,0.3s,baz=191,slow=7.2,SNR=24 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **14 34 15.7** | **-0.5** |
| | comp=E,0.3nm,0.3s,baz=202,slow=15,SNR=2.0 | | | | | | | |
| **LPAZ** | **La Paz** | **3.64** | **16** | | | **Pn** | **14 33 34.1** | **+0.3** |
| **PB10** | **IPOC Station P** | **3.90** | **199** | Pn | | **Pn** | **14 33 37.2** | **+0.5** |
| **PB14** | **IPOC Station P** | **4.93** | **193** | Pn | | **Pn** | **14 33 51.3** | **+0.5** |
| **AC02** | **Maricunga** | **6.99** | **180** | Pn | | **Pn** | **14 34 18.8** | **-0.2** |
| **SIV** | **San Ignacio** | **8.59** | **65** | P | | **Pn** | **14 34 38.5** | **-1.8** |
| | comp=E,1.6nm,0.3s,baz=255,slow=10,SNR=32 | | | | | | | |
| **CPUP** | **Villa Florida** | **12.67** | **123** | P | | **Pn** | **14 35 32.9** | **-2.2** |
| | comp=E,0.2nm,0.3s,baz=288,slow=11,SNR=3.7 | | | | | | | |
| **ITAB** | **Concordia** | **17.27** | **119** | P | | **P** | **14 36 33.5** | **+0.4** |
| ITAB | | | | IAmb | | IAmb | 14 36 33.7 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.02** | **71** | P | | **P** | **14 44 19.3** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=246,slow=5.9,SNR=7.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.02** | **71** | P | | **P** | **14 44 19.7** | **-0.9** |
| TORD | | | | IAmb | | IAmb | 14 44 22.9 | |
| | comp=Z,4.5nm,1.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.52** | **341** | P | | **P** | **14 45 24.6** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=135,slow=4.5,SNR=14 | | | | | | | |

*DJA* ***16*** *15:05:48.9±0.1, 7°S±2°×107°7E±°, h129km±1km, M4.7/73, mB5.2/36, mb4.9/73, MLv5.1/37, Mw(mB)4.6/36*

*NEIC* ***16*** *15:05:48.6±2.2, 7°32S±0°06×106°96E±0°06, h128km±4km, mb4.8/72, Error ellipse: s-maj=8.6km s-min=8.3km az=134.0*

*IDC* ***16*** *15:05:50.9±0.5, 7°02S×107°13E, h140km±2km, mb4.3/29, mb1 4.4/30, mb1mx4.2/46, mbtmp4.7/30, MS3.4/11, Ms1 3.4/11, ms1mx3.0/73, Error ellipse: s-maj=13.4km s-min=7.4km az=50.0*

*GCMT* ***16*** *15:05:50.6±0.4, 7°40S±0°03×107°20E±0°03, h132km±5km, MW4.8/75, Moment Tensor Solution. s8,c11; s75,c97; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr0.06±.12; Mθθ-0.94±.14; Mφφ0.88±.14; Mrθ1.72±.08; Mrφ-0.97±.11; Mθφ-0.68±.08; Best double couple: Mω2.27900×10¹⁶ NP1:ϕ±202.00000°, δ36.00000°, λ2.00000°. NP2: ϕ±111.00000°, δ89.00000°, λ126.00000°. Principal axes: T 2.2790, Plg36.0000°, Azm52.0000°; N 0.0000, Plg36.0000°, Azm290.0000°; P -2.2790, Plg34.0000°, Azm171.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 16 15:05:49.4±0.5, 7°28S±0°04×107°06E±0°03, h137km±3km, n287, σ1§52/309, mb4.7/82, 3C-2D, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNJI** | **Cibinong** | **0.08** | **111** | P | **Pn** | **15 06 07.1** | **-0.8** |
| CNJI | | | | S | **Sn** | **15 06 19.5** | **-2.3** |
| **SKJI** | **Sukabumi** | **0.57** | **299** | P | **Pn** | **15 06 09.2** | **-0.4** |
| **LEM** | **Lembang** | **0.72** | **51** | P | **Pn** | **15 06 11.0** | **+0.2** |
| | 3μm,0.3s,baz=254,slow=5.3,SNR=756 | | | | | | |
| LEM | | | | S | **Sn** | **15 06 28.6** | **+1.5** |
| | 2μm,0.3s,baz=343,slow=22,SNR=27 | | | | | | |
| **LEM** | **Lembang** | **0.72** | **51** | P | **Pn** | **15 06 11.0** | **+0.2** |
| LEM | | | | S | **Sn** | **15 06 27.9** | **+0.9** |
| **DBJI** | **Dramaga** | **0.78** | **337** | P | **Pn** | **15 06 11.7** | **+0.5** |
| DBJI | | | | S | **Sn** | **15 06 28.1** | **+0.4** |
| **TNG** | **Tangerang** | **1.18** | **340** | P | **Pn** | **15 06 17.9** | **+3.3** |
| TNG | | | | P | **Pn** | **15 06 15.4** | **+0.8** |
| TNG | | | | S | **Sn** | **15 06 34.9** | **+1.1** |
| TNG | | | | S | **Sn** | **15 06 37.4** | **+3.6** |
| **JCJI** | **Jatiwangi** | **1.44** | **57** | P | **Pn** | **15 06 16.3** | **-1.0** |
| JCJI | | | | S | **Sn** | **15 06 36.8** | **-1.8** |
| **CMJI** | **Cimerak** | **1.47** | **110** | P | **Pn** | **15 06 17.1** | **-0.5** |
| CMJI | | | | S | **Sn** | **15 06 37.0** | **-2.1** |
| **SBJI** | **Serang** | **1.48** | **321** | P | **Pn** | **15 06 19.3** | **+1.6** |
| **CGJI** | **Cibinong** | **1.51** | **296** | P | **Pn** | **15 06 18.5** | **+0.4** |
| CGJI | | | | S | **Sn** | **15 06 38.9** | **-1.0** |
| **KPJI** | **Karang Pucung** | **1.86** | **92** | P | **Pn** | **15 06 22.7** | **+0.6** |
| KPJI | | | | S | **Sn** | **15 06 46.0** | **-1.1** |
| **BLSI** | **Bandar Lampung** | **2.62** | **316** | P | **Pn** | **15 06 32.1** | **+0.7** |
| BLSI | | | | S | **Sn** | **15 07 04.1** | **+0.3** |
| **KASI** | **Kota Agung** | **3.09** | **304** | P | **Pn** | **15 06 38.3** | **+0.9** |
| KASI | | | | S | **Sn** | **15 07 11.6** | **-2.8** |
| **KLI** | **Kotabumi** | **3.25** | **318** | P | **Pn** | **15 06 40.5** | **+1.0** |
| **YOGI** | **Yogyakarta** | **3.25** | **100** | P | **Pn** | **15 06 39.6** | **0.0** |
| YOGI | | | | S | **Sn** | **15 07 15.9** | **-2.4** |
| **SMRI** | **Semarang** | **3.37** | **86** | Pn | **Pn** | **15 06 41.8** | **+0.7** |
| **SMRI** | **Semarang** | **3.37** | **86** | P | **Pn** | **15 06 42.3** | **+1.3** |
| **SMRI** | **Semarang** | **3.37** | **86** | P | **Pn** | **15 06 42.4** | **+1.4** |
| **XMI** | **Christmas Isla** | **3.43** | **203** | P | **Pn** | **15 06 40.0** | **-1.8** |
| **KLSI** | | **3.46** | **318** | P | **Pn** | **15 06 43.3** | **+1.0** |
| **XMIS** | **Christmas Isla** | **3.47** | **203** | Pn | **Pn** | **15 06 39.4** | **-3.0** |
| **XMIS** | **Christmas Isla** | **3.47** | **203** | P | **Pn** | **15 06 40.2** | **-2.2** |
| **UGM** | **Wanagama** | **3.49** | **101** | Pn | **Pn** | **15 06 42.5** | **-0.2** |
| **UGM** | **Wanagama** | **3.49** | **101** | P | **Pn** | **15 06 42.7** | **0.0** |
| UGM | | | | S | **Sn** | **15 07 21.8** | **-2.1** |
| **UGM** | **Wanagama** | **3.49** | **101** | P | **Pn** | **15 06 43.1** | **+0.4** |
| **LWLI** | **Liwa** | **3.73** | **307** | P | **Pn** | **15 06 46.8** | **+0.8** |
| **UWJI** | **Ujung Watu** | **3.96** | **78** | P | **Pn** | **15 06 49.9** | **+1.1** |
| **MDSI** | **Maura Dua** | **3.99** | **314** | P | **Pn** | **15 06 50.3** | **+1.1** |
| **PCJI** | **Pacitan** | **4.18** | **103** | P | **Pn** | **15 06 51.4** | **-0.3** |
| PCJI | | | | S | **Sn** | **15 07 36.7** | **-3.4** |
| **TPI** | **Tanjungpandan** | **4.53** | **8** | P | **Pn** | **15 06 56.9** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.76** | **99** | P | **Pn** | **15 06 59.7** | **+0.3** |
| PWJI | | | | S | **Sn** | **15 07 50.9** | **-3.0** |
| **TBJI** | **Tambak Boyo** | **4.78** | **85** | P | **Pn** | **15 07 01.6** | **+2.0** |
| **PMBI** | **Palembang** | **4.89** | **332** | Pn | **Pn** | **15 07 01.1** | **0.0** |
| **PMBI** | **Palembang** | **4.89** | **332** | P | **Pn** | **15 07 03.1** | **+2.0** |
| | 2.7nm9μm707nm,1.4s | | | | | | |
| **LHSI** | **Lahat** | **4.91** | **314** | P | **Pn** | **15 07 02.6** | **+1.1** |
| **PPBI** | **Pangkal Pinang** | **5.17** | **350** | P | **Pn** | **15 07 05.6** | **+0.7** |
| | 0.8nm6μm229nm,1.1s | | | | | | |
| **GRJI** | **Gresik** | **5.39** | **86** | P | **Pn** | **15 07 09.4** | **+1.5** |
| | 1.4nm4μm375nm,0.8s | | | | | | |
| **KSI** | **Kapahiang** | **5.72** | **309** | P | **Pn** | **15 07 12.9** | **+0.5** |
| | 592nm,0.7s | | | | | | |
| **BWJI** | **Bawean** | **5.74** | **76** | P | **Pn** | **15 07 14.0** | **+1.4** |
| | 1.1nm326nm,1.0s | | | | | | |
| **MASI** | **Maura Aman, Be** | **6.32** | **310** | P | **Pn** | **15 07 21.3** | **+1.0** |
| | 2.9nm6μm811nm,0.8s | | | | | | |
| **GMJI** | **Gunkmas** | **6.41** | **99** | P | **Pn** | **15 07 22.1** | **+0.7** |
| | 0.8nm81nm,0.8s | | | | | | |
| **PBKI** | **Pangkalan Bun** | **6.46** | **46** | P | **Pn** | **15 07 23.3** | **+1.1** |
| | 1.0nm3μm292nm,1.0s | | | | | | |
| **BLJI** | **Banyuglugur** | **6.50** | **94** | P | **Pn** | **15 07 24.0** | **+1.3** |
| | 0.8nm68nm,0.4s | | | | | | |
| **JMBI** | **JAMBI** | **6.56** | **329** | P | **Pn** | **15 07 24.1** | **+0.5** |
| | 0.5nm125nm,1.0s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.13** | **100** | Pn | **Pn** | **15 07 31.5** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **7.13** | **100** | P | **Pn** | **15 07 31.4** | **+0.2** |
| | 3.0nm4μm343nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.13** | **100** | P | **Pn** | **15 07 32.6** | **+1.4** |
| **ABJI** | **Asem Bagus** | **7.13** | **95** | P | **Pn** | **15 07 32.6** | **+1.4** |
| | 1.1nm4μm297nm,0.8s | | | | | | |
| **DSRI** | **Dabo** | **7.20** | **340** | P | **Pn** | **15 07 29.6** | **-2.5** |
| | 0.1nm23nm,1.0s | | | | | | |
| **KRJI** | **Kerinci** | **7.59** | **312** | P | **Pn** | **15 07 36.7** | **-0.8** |
| | 1.8nm4μm491nm,0.8s | | | | | | |
| **IGBI** | **Denpasar** | **8.15** | **101** | P | **Pn** | **15 07 44.7** | **-0.2** |
| | 2μm232nm,1.2s | | | | | | |
| **STKI** | **Sintang** | **8.53** | **31** | P | **Pn** | **15 07 51.6** | **+1.6** |
| | 65nm,1.2s | | | | | | |
| **TPRI** | **Tanjung Pinang** | **8.53** | **343** | P | **Pn** | **15 07 49.1** | **-0.9** |
| | 5μm130nm,0.7s | | | | | | |
| **PPI** | **Padang Panjang** | **9.49** | **315** | P | **Pn** | **15 08 00.4** | **-2.5** |
| | 30nm,0.5s | | | | | | |
| **KBKI** | **Kotabaru** | **9.89** | **67** | P | **Pn** | **15 08 09.9** | **+1.6** |
| | 753nm61nm,0.9s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **10.04** | **51** | P | **Pn** | **15 08 11.6** | **+1.4** |
| | 2μm23nm,0.7s | | | | | | |
| **PLAI** | **Plampang** | **10.72** | **99** | P | **Pn** | **15 08 17.3** | **-2.1** |
| | 1μm166nm,1.0s | | | | | | |
| **SBUM** | **Sibu** | **10.95** | **28** | Pn | **Pn** | **15 08 24.3** | **+1.9** |
| **COCO** | **West Island** | **11.19** | **243** | Pn | **Pn** | **15 08 23.2** | **-2.4** |
| **WBSI** | **Waikabubak, Su** | **12.42** | **102** | P | **Pn** | **15 08 38.4** | **-3.3** |
| | 1μm51nm,0.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **12.74** | **312** | Pn | Pn | 15 08 40.7 | -5.0 |
| **GSI** | **Gunungsitoli** | **12.74** | **312** | P | Pn | 15 08 40.6 | -5.2 |
| | 52nm,0.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **12.74** | **312** | P | **Pn** | **15 08 42.2** | **-3.6** |
| **KAPI** | **Kappang** | **12.82** | **81** | P | **Pn** | **15 08 45.8** | **-1.1** |
| | 2.8nm,0.3s,baz=192,slow=22,SNR=2.0 | | | | | | |
| **KAPI** | **Kappang** | **12.82** | **81** | | **P** | **15 08 52.4** | **-0.1** |
| **PSI** | **Prapat** | **12.89** | **321** | P | **Pn** | **15 08 43.3** | **-4.6** |
| | 0.9nm,0.3s,baz=153,slow=11,SNR=5.5 | | | | | | |
| **SPSI** | **Sidrap Palu** | **13.07** | **76** | P | **Pn** | **15 08 50.7** | **+0.6** |
| | 824nm41nm,1.1s | | | | | | |
| **BKSI** | **Bulukumba** | **13.13** | **82** | P | **Pn** | **15 08 51.2** | **+0.4** |
| | 912nm114nm,1.1s | | | | | | |
| **BNSI** | **Bone** | **13.29** | **78** | P | **Pn** | **15 08 54.0** | **+1.1** |
| | 1μm74nm,1.1s | | | | | | |
| **TTSI** | **Tana Toraja** | **13.39** | **72** | P | **Pn** | **15 08 55.9** | **+1.8** |
| | 36nm,0.9s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **13.39** | **86** | P | **Pn** | **15 08 54.3** | **+0.1** |
| | 1μm112nm,1.4s | | | | | | |
| **BASI** | **Baing, Sumba** | **13.68** | **103** | P | **Pn** | **15 08 56.7** | **-1.2** |
| | 2μm130nm,0.7s | | | | | | |
| **KULM** | **Kulim** | **14.03** | **333** | Pn | **Pn** | **15 09 01.6** | **-0.8** |
| **MPSI** | **Mapaga** | **14.88** | **60** | P | **P** | **15 09 14.8** | **-0.5** |
| | 2μm179nm,1.4s | | | | | | |
| **MMRI** | **Maumere** | **15.10** | **96** | Pn | **Pn** | **15 09 12.8** | **-2.9** |
| **MMRI** | **Maumere** | **15.10** | **96** | P | **Pn** | **15 09 12.8** | **-2.9** |
| | 2μm120nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **15.10** | **96** | P | **P** | **15 09 18.3** | **+0.6** |
| **BBSI** | **Bau Bau** | **15.52** | **84** | P | **Pn** | **15 09 21.1** | **+0.1** |
| | 255nm29nm,0.9s | | | | | | |
| **APSI** | **Ampana** | **15.86** | **67** | P | **P** | **15 09 26.5** | **+0.3** |
| | 1μm104nm,1.0s | | | | | | |
| **TOLI2** | **Tolitoli** | **16.03** | **59** | | **P** | **15 09 28.3** | **+0.3** |
| TOLI2 | | | | IAmb | IAmb | 15 09 29.9 | |
| | comp=Z,74nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **16.03** | **59** | P | **P** | **15 09 29.4** | **+1.3** |
| **KKM** | **Kota Kinabalu** | **16.08** | **35** | | **P** | **15 09 28.2** | **-0.5** |
| KKM | | | | IAmb | IAmb | 15 09 31.6 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **16.08** | **35** | P | **P** | **15 09 29.9** | **+1.2** |
| **BATI** | **Baumata** | **16.67** | **101** | P | **Pn** | **15 09 33.7** | **-1.4** |
| | comp=Z,8.8nm,0.3s,baz=354,slow=2.1,SNR=15 | | | | | | |
| BATI | | | | S | **Sn** | **15 12 39.1** | **-2.0** |
| | comp=Z,11nm,0.3s,baz=293,slow=23,SNR=8.5 | | | | | | |
| **BATI** | **Baumata** | **16.67** | **101** | P | **Pn** | **15 09 32.3** | **-2.8** |
| | comp=Z,777nmcomp=Z,49nm,0.8s | | | | | | |
| **MRSI** | **Marisa** | **16.73** | **63** | P | **Pn** | **15 09 36.6** | **+0.8** |
| | comp=Z,761nmcomp=Z,75nm,0.7s | | | | | | |
| **GIRL** | **Giralia** | **16.77** | **156** | P | **Pn** | **15 09 39.1** | **+2.9** |
| **MYLDM** | **Lahad Datu** | **16.84** | **43** | P | **Pn** | **15 09 37.2** | **0.0** |
| MYLDM | | | | IAmb | IAmb | 15 09 51.9 | |
| | comp=Z,48nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **17.20** | **99** | P | **P** | **15 09 38.9** | **-2.2** |
| **SOEI** | **Soe** | **17.20** | **99** | P | **P** | **15 09 39.1** | **-2.0** |
| | comp=Z,140nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **17.20** | **99** | P | **Pn** | **15 09 43.0** | **+1.4** |
| **GTOI** | **Gorontalo** | **17.75** | **64** | P | **P** | **15 09 45.1** | **-1.9** |
| | comp=Z,380nmcomp=Z,17nm,1.0s | | | | | | |
| **MBWA** | **Marble Bar** | **18.45** | **140** | Pn | **Pn** | **15 09 56.5** | **0.0** |
| **MBWA** | **Marble Bar** | **18.45** | **140** | P | **Pn** | **15 09 57.3** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **18.83** | **140** | | **Pn** | **15 10 00.3** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 15 10 05.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.83** | **140** | P | **P** | **15 09 58.5** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 15 10 05.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.83** | **140** | P | **Pn** | **15 10 01.2** | **+0.4** |
| **DLV** | **T Lat** | **19.15** | **4** | P | **Pn** | **15 10 03.4** | **-1.4** |
| DLV | | | | IAmb | IAmb | 15 10 04.5 | |
| | comp=Z,50nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **19.57** | **76** | P | **P** | **15 10 06.7** | **-0.1** |
| | comp=Z,744nmcomp=Z,80nm,1.3s | | | | | | |
| **SANI** | **Sanana** | **19.57** | **76** | P | **P** | **15 10 07.1** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **21.05** | **122** | P | **P** | **15 10 23.9** | **+1.2** |
| | comp=Z,8.8nm,0.8s,baz=333,slow=6.1,SNR=16 | | | | | | |
| FITZ | | | | S | **S** | **15 14 10.8** | **+1.3** |
| | comp=Z,10nm,0.9s,baz=255,slow=12,SNR=3.2 | | | | | | |
| FITZ | | | | LR | LR | 15 19 38.5 | |
| | comp=Z,28nm,18.4s,baz=296,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.05** | **122** | P | **P** | **15 10 22.5** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **21.05** | **122** | P | **P** | **15 10 24.5** | **+1.8** |
| **AAI** | **Ambon** | **21.34** | **81** | P | **P** | **15 10 25.7** | **-0.2** |
| | comp=Z,1μmcomp=Z,142nm,0.9s | | | | | | |
| **TNTI** | **Ternate** | **21.78** | **69** | P | **P** | **15 10 29.0** | **-1.6** |
| **TNTI** | **Ternate** | **21.78** | **69** | P | **P** | **15 10 29.3** | **-1.3** |
| | comp=Z,2μmcomp=Z,189nm,1.1s | | | | | | |
| **TNTI** | **Ternate** | **21.78** | **69** | P | **P** | **15 10 32.5** | **+1.9** |
| **MEEK** | **Meekatharra** | **22.17** | **152** | P | **P** | **15 10 36.9** | **+2.4** |
| **KNRA** | **Kununurra** | **22.83** | **113** | P | **P** | **15 10 41.1** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 15 10 59.5 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **22.83** | **113** | P | **P** | **15 10 42.2** | **+1.3** |
| **MORW** | **Morawa** | **23.27** | **160** | P | **P** | **15 10 45.6** | **+0.7** |
| MORW | | | | IAmb | IAmb | 15 10 47.7 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **23.27** | **160** | P | **P** | **15 10 47.1** | **+2.2** |
| **DAV** | **Davao City (W)** | **23.34** | **53** | P | **P** | **15 10 46.0** | **+0.4** |
| | comp=Z,112nm,0.4s,baz=45,slow=3.2,SNR=7.3 | | | | | | |
| **DRS** | **Darwin Rock St** | **24.03** | **104** | P | **P** | **15 10 53.7** | **+1.7** |
| **MTN** | **Manton Dam** | **24.33** | **105** | P | **P** | **15 10 54.4** | **-0.3** |
| MTN | | | | IAmb | IAmb | 15 11 13.4 | |
| | comp=Z,65nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **24.33** | **105** | P | **P** | **15 10 56.5** | **+1.8** |
| **BLDU** | **Ballidu** | **24.91** | **160** | P | **P** | **15 11 01.6** | **+1.8** |
| **SIJI** | **Sorong** | **24.96** | **76** | P | **P** | **15 11 00.4** | **0.0** |
| | comp=Z,62nm,0.7s,baz=274,slow=4.8,SNR=23 | | | | | | |
| **KDU** | **Kakadu** | **25.59** | **104** | P | **P** | **15 11 06.5** | **+0.4** |
| **MUN** | **Mundaring** | **26.01** | **162** | P | **P** | **15 11 11.9** | **+2.2** |
| **KLBR** | **Kellerberrin** | **26.17** | **159** | P | **P** | **15 11 13.1** | **+2.0** |
| **CMAR** | **Chiang Mai Arr** | **26.80** | **343** | P | **P** | **15 11 15.6** | **-1.3** |
| | comp=Z,4.0nm,0.7s,baz=179,slow=9.0,SNR=39 | | | | | | |
| CMAR | | | | pP | **pP** | **15 11 46.5** | **+0.5** |
| | comp=Z,3.8nm,0.6s,baz=176,slow=8.6,SNR=6.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.80** | **343** | P | **P** | **15 11 16.1** | **-0.8** |
| **WRKA** | **Warakurna** | **26.90** | **133** | P | **P** | **15 11 19.3** | **+1.4** |
| **CHTO** | **Chiang Mai** | **27.14** | **343** | P | **P** | **15 11 19.2** | **-0.7** |
| **NWAO** | **Narrogin (SRO)** | **27.21** | **161** | P | **P** | **15 11 21.4** | **+0.9** |
| NWAO | | | | IAmb | IAmb | 15 11 22.9 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **27.21** | **161** | P | **P** | **15 11 22.3** | **+1.8** |
| **WB0** | **Warramunga Arr** | **29.27** | **118** | P | **P** | **15 11 39.5** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 15 11 49.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.29** | **118** | P | **P** | **15 11 40.4** | **+1.3** |
| | comp=Z,2.7nm,0.5s,baz=283,slow=7.5,SNR=66 | | | | | | |
| WRA | | | | S | **S** | **15 16 19.3** | **-3.1** |
| | comp=Z,1.3nm,0.8s,baz=290,slow=16,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.29** | **118** | P | **P** | **15 11 39.7** | **+0.6** |
| **WRAB** | **Tennant Creek** | **29.30** | **118** | P | **P** | **15 11 40.6** | **+1.4** |
| WRAB | | | | IAmb | IAmb | 15 11 59.8 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **29.30** | **118** | P | **P** | **15 11 41.0** | **+1.8** |
| **WB2** | **Warramunga Arr** | **29.30** | **118** | P | **P** | **15 11 40.0** | **+0.8** |
| **WR0** | **Warramunga Arr** | **29.47** | **118** | P | **P** | **15 11 42.0** | **+1.2** |
| WR0 | | | | IAmb | IAmb | 15 11 42.9 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **30.48** | **125** | P | **P** | **15 11 51.0** | **+1.3** |
| | comp=Z,16nm,1.0s,baz=294,slow=8.5,SNR=91 | | | | | | |
| ASAR | | | | S | **S** | **15 16 40.8** | **-0.3** |
| | comp=Z,3.5nm,0.9s,baz=300,slow=16,SNR=7.8 | | | | | | |
| **ASAR** | **Alice Springs** | **30.48** | **125** | P | **P** | **15 11 50.7** | **+1.0** |
| **AS31** | **Alice Springs** | **30.48** | **125** | P | **P** | **15 11 50.6** | **+1.0** |
| **FORT** | **Forrest** | **30.55** | **143** | P | **P** | **15 11 49.7** | **-0.3** |
| FORT | | | | IAmb | IAmb | 15 11 53.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **30.55** | **143** | P | **P** | **15 11 51.9** | **+1.8** |
| **KMI** | **Kunming** | **32.48** | **353** | ⇑P | **P** | **15 12 08.8** | **+1.5** |
| KMI | | | | pP | pP | 15 12 39.6 | +2.8 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **TPUB** | **Ta-pu** | **33.16** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HHC** | **Hu-ho-hao-te** | **48.07** | **5** | *eP* | **P** | | **15 14 16.8** | **+1.6** |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,100nm,6.1s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.56** | **22** | P | **P** | | **15 14 19.2** | **+0.4** |
| **KSRS** | **Korea Array** | **48.59** | **22** | P | **P** | | **15 14 18.9** | **-0.2** |
| | comp=Z,8.7nm,0.8s,baz=208,slow=8.8,SNR=18 | | | | | | | | |
| **KS19** | **Wonju Array Si** | **48.61** | **22** | P | **P** | | **15 14 19.2** | **0.0** |
| **JHS** | **Saijyo** | **48.72** | **29** | P | **P** | | **15 14 19.8** | **-0.4** |
| **INU** | **Inuyama** | **50.94** | **32** | P | **P** | | **15 14 35.3** | **-1.6** |
| INU | | | | IAmb | IAmb | | 15 15 04.6 | | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| **JGF** | **Kuroka** | **51.31** | **32** | P | **P** | | **15 14 37.9** | **-1.9** |
| JGF | | | | IAmb | IAmb | | 15 14 59.2 | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **51.59** | **8** | *iP* | **P** | | **15 14 40.9** | **-0.8** |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,74nm,4.8s | | | | | | | | |
| **NIL** | **Nilore** | **51.82** | **324** | P | **P** | | **15 14 42.4** | **-1.2** |
| NIL | | | | IAmb | IAmb | | 15 14 43.5 | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **MAJO** | **Matsushiro** | **52.48** | **32** | P | **P** | | **15 14 45.8** | **-2.5** |
| MAJO | | | | IAmb | IAmb | | 15 14 46.5 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **MAT** | **Matsushiro** | **52.48** | **32** | P | **P** | | **15 14 46.0** | **-2.3** |
| **MJAR** | **Matsushiro Arr** | **52.48** | **32** | P | **P** | | **15 14 46.2** | **-2.1** |
| | comp=Z,6.6nm,0.5s,baz=217,slow=7.9,SNR=13 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.48** | **32** | P | **P** | | **15 14 45.8** | **-2.5** |
| **MJB9** | **Matsu-Tunnel** | **52.48** | **32** | P | **P** | | **15 14 45.8** | **-2.5** |
| MJB9 | | | | IAmb | IAmb | | 15 14 46.4 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **CN2** | **Changchun** | **53.50** | **17** | *eP* | **P** | | **15 14 52.5** | **-3.2** |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| **JSD** | **Sado** | **53.65** | **31** | P | **P** | | **15 14 55.4** | **-1.4** |
| **WMQ** | **Urumqi** | **53.80** | **343** | *eP* | **P** | | **15 14 59.9** | **+1.9** |
| **JMM** | **Marumori** | **54.83** | **33** | P | **P** | | **15 15 03.5** | **-1.9** |
| **SONM** | **Songino Array** | **54.88** | **359** | P | **P** | | **15 15 05.5** | **-0.2** |
| | comp=Z,3.9nm,0.8s,baz=170,slow=7.7,SNR=30 | | | | | | | | |
| SONM | | | | pP | **pP** | | **15 15 37.0** | **-1.0** |
| | comp=Z,2.2nm,0.8s,baz=175,slow=9.6,SNR=3.7 | | | | | | | | |
| SONM | | | | PcP | **PcP** | | **15 16 06.6** | **+0.4** |
| | comp=Z,7.9nm,0.6s,baz=178,slow=3.9,SNR=39 | | | | | | | | |
| SONM | | | | ScP | **ScP** | | **15 19 52.9** | **+0.9** |
| | comp=Z,2.8nm,0.8s,baz=173,slow=4.2,SNR=14 | | | | | | | | |
| SONM | | | | LR | LR | | 15 42 15.7 | | |
| | comp=Z,35nm,18.2s,baz=138,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **54.88** | **359** | P | **P** | | **15 15 05.8** | **0.0** |
| **ULN** | **Ulaanbaatar** | **54.91** | **360** | P | **P** | | **15 15 05.3** | **-0.7** |
| ULN | | | | IAmb | IAmb | | 15 15 06.8 | | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| **KBL** | **Kabul** | **54.96** | **322** | P | **P** | | **15 15 05.6** | **-1.1** |
| KBL | | | | IAmb | IAmb | | 15 15 06.7 | | |
| | comp=Z,6.8nm,0.7s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **55.51** | **19** | P | **P** | | **15 15 09.5** | **-0.7** |
| MDJ | | | | IAmb | IAmb | | 15 15 10.2 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **55.51** | **19** | P | **P** | | **15 15 09.8** | **-0.4** |
| MDJ | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,2.7s | | | | | | | | |
| MDJ | | | | pmax | pmax | | | | |
| | comp=Z,180nm,4.1s | | | | | | | | |
| **BNX** | **BinXian** | **55.84** | **17** | *i*P | **P** | | **15 15 12.0** | **-0.5** |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,78nm,0.9s | | | | | | | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,440nm,5.4s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **55.97** | **21** | P | **P** | | **15 15 12.9** | **-0.6** |
| USA0B | | | | IAmb | IAmb | | 15 15 17.7 | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.97** | **21** | P | **P** | | **15 15 12.6** | **-0.9** |
| | comp=Z,6.4nm,0.6s,baz=199,slow=7.3,SNR=24 | | | | | | | | |
| **JTM** | **Tenmabayashi** | **57.15** | **30** | P | **P** | | **15 15 20.6** | **-1.3** |
| **AAK** | **Ala-Archa** | **57.86** | **332** | LR | LR | | 15 43 46.5 | | |
| | comp=Z,27nm,19.6s,baz=152,slow=40 | | | | | | | | |
| **MK31** | **Makanchi Array** | **58.17** | **340** | P | **P** | | **15 15 27.3** | **-1.6** |
| **MKAR** | **Makanchi Array** | **58.17** | **340** | P | **P** | | **15 15 27.2** | **-1.7** |
| | comp=Z,3.9nm,0.6s,baz=149,slow=7.4,SNR=47 | | | | | | | | |
| MKAR | | | | ScP | **ScP** | | **15 20 07.4** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=148,slow=7.0,SNR=3.6 | | | | | | | | |
| **KLR** | **Kul'dur** | **60.28** | **19** | LR | LR | | 15 41 19.9 | | |
| | comp=Z,14nm,20.8s,baz=227,slow=36 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **60.39** | **29** | LR | LR | | 15 43 03.8 | | |
| | comp=Z,18nm,18.2s,baz=150,slow=37 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **60.39** | **29** | P | **P** | | **15 15 42.5** | **-1.7** |
| **YSS** | **Yuzh-Sakhalins** | **62.60** | **27** | P | **P** | | **15 15 58.1** | **-0.9** |
| **KURK** | **Kurchatov** | **62.78** | **340** | P | **P** | | **15 15 59.4** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **63.82** | **346** | P | **P** | | **15 16 05.2** | **-1.7** |
| | comp=Z,0.8nm,0.3s,baz=182,slow=3.3,SNR=6.1 | | | | | | | | |
| ZALV | | | | pP | **pP** | | **15 16 40.9** | **+1.0** |
| | comp=Z,2.3nm,0.6s,baz=169,slow=4.1,SNR=5.0 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.82** | **346** | P | **P** | | **15 16 04.7** | **-2.1** |
| **RPZ** | **Rata Peaks** | **66.29** | **135** | P | **P** | | **15 16 25.2** | **+2.0** |
| | comp=Z,8.9nm,0.6s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **66.29** | **135** | P | **P** | | **15 16 24.5** | **+1.3** |
| RPZ | | | | IAmb | IAmb | | 15 16 26.5 | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **OXZ** | **Oxford** | **66.91** | **134** | P | **P** | | **15 16 28.1** | **+1.0** |
| OXZ | | | | IAmb | IAmb | | 15 16 28.7 | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **67.65** | **337** | P | **P** | | **15 16 30.5** | **-1.0** |
| | comp=Z,2.6nm,0.6s,baz=89,slow=12,SNR=24 | | | | | | | | |
| **BRVK** | **Borovoye** | **67.71** | **337** | P | **P** | | **15 16 30.8** | **-1.1** |
| **KHZ** | **Kahutara** | **67.81** | **133** | P | **P** | | **15 16 33.9** | **+1.1** |
| KHZ | | | | IAmb | IAmb | | 15 16 34.6 | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| **TUWZ** | **Tuamarina** | **67.92** | **132** | P | **P** | | **15 16 34.0** | **+0.5** |
| **BSWZ** | **Blackbirch Sta** | **67.92** | **132** | P | **P** | | **15 16 34.4** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **69.51** | **129** | P | **P** | | **15 16 43.7** | **+0.3** |
| BKZ | | | | IAmb | IAmb | | 15 16 50.9 | | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **69.68** | **329** | P | **P** | | **15 16 43.5** | **-0.7** |
| **KMBO** | **Kilima Mbogo** | **69.83** | **271** | LR | LR | | 15 43 38.0 | | |
| | comp=Z,30nm,18.4s,baz=94,slow=32 | | | | | | | | |
| **URZ** | **Urewera** | **70.28** | **128** | P | **P** | | **15 16 48.1** | **+2.4** |
| | comp=Z,20nm,1.2s,baz=278,slow=21,SNR=1.9 | | | | | | | | |
| **YAK** | **Yakutsk** | **71.30** | **11** | P | **P** | | **15 16 52.2** | **-1.4** |
| **AKTO** | **Aktyubinsk** | **71.39** | **329** | P | **P** | | **15 16 54.5** | **0.0** |
| | comp=Z,5.0nm,0.6s,baz=121,slow=5.0,SNR=16 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.81** | **29** | P | **P** | | **15 17 07.7** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **73.81** | **29** | P | **P** | | **15 17 08.1** | **-0.7** |
| | comp=Z,2.7nm,0.7s,baz=222,slow=5.4,SNR=5.2 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.81** | **29** | P | **P** | | **15 17 07.7** | **-1.0** |
| **ARU** | **Arti** | **74.90** | **334** | P | **P** | | **15 17 14.8** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=134,slow=3.9,SNR=5.0 | | | | | | | | |
| ARU | | | | LR | LR | | 15 56 17.9 | | |
| | comp=Z,51nm,18.1s,baz=165,slow=40 | | | | | | | | |
| **ARU** | **Arti** | **74.90** | **334** | P | **P** | | **15 17 14.3** | **-0.6** |
| **MA2** | **Magadan** | **75.13** | **21** | P | **P** | | **15 17 15.7** | **-0.6** |
| MA2 | | | | IAmb | IAmb | | 15 17 16.5 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| **SYO** | **Syowa Base** | **75.26** | **200** | *eX* | P | | 15 17 27.0 | +10 | |
| **VNDA** | **Vanda** | **75.68** | **169** | P | **P** | | **15 17 21.7** | **+2.5** |
| | comp=Z,9.1nm,1.0s,baz=309,slow=7.0,SNR=7.2 | | | | | | | | |
| **MBAR** | **Mbarara** | **76.35** | **271** | LR | LR | | 15 46 52.5 | | |
| | comp=Z,44nm,20.3s,baz=84,slow=32 | | | | | | | | |
| **KBZ** | **Khabaz** | **76.89** | **318** | P | **P** | | **15 17 27.2** | **+0.7** |
| | comp=Z,6.2nm,1.1s,baz=148,slow=2.0,SNR=8.2 | | | | | | | | |
| **LSZ** | **Lusaka** | **77.42** | **256** | LR | LR | | 15 46 29.6 | | |
| | comp=Z,48nm,21.2s,baz=162,slow=31 | | | | | | | | |
| **NRIK** | **Noril'sk** | **77.63** | **353** | P | **P** | | **15 17 29.4** | **-0.7** |
| | comp=Z,2.1nm,0.4s,baz=150,slow=5.6,SNR=5.9 | | | | | | | | |
| **NRIK** | **Noril'sk** | **77.63** | **353** | P | **P** | | **15 17 29.1** | **-1.0** |
| **BOSA** | **Boshof** | **79.38** | **242** | P | **P** | | **15 17 43.1** | **+2.3** |
| | comp=Z,4.2nm,1.0s,baz=165,slow=12,SNR=3.2 | | | | | | | | |
| **TIXI** | **Tiksi** | **80.08** | **7** | P | **P** | | **15 17 41.9** | **-1.5** |
| | comp=Z,5.3nm,0.7s,baz=268,slow=23,SNR=25 | | | | | | | | |
| **TIXI** | **Tiksi** | **80.08** | **7** | P | **P** | | **15 17 41.7** | **-1.8** |
| TIXI | | | | IAmb | IAmb | | 15 17 42.8 | | |
| | comp=Z,6.2nm,0.6s | | | | | | | | |
| **KIRV** | **Kirov** | **80.16** | **333** | P | **P** | | **15 17 44.4** | **+0.3** |
| | comp=Z,16nm,0.7s,baz=91,slow=2.3,SNR=5.1 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **82.06** | **312** | P | **P** | | **15 17 55.3** | **+0.5** |
| | comp=Z,4.0nm,0.6s,baz=131,slow=7.0,SNR=12 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **82.06** | **312** | P | **P** | | **15 17 53.7** | **-1.1** |
| **QSPA** | **South Pole Qui** | **82.71** | **180** | P | **P** | | **15 18 00.0** | **+2.3** |
| | comp=Z,14nm,0.9s,baz=130,slow=1.4,SNR=50 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **82.71** | **180** | P | **P** | | **15 17 59.8** | **+2.1** |
| QSPA | | | | IAmb | IAmb | | 15 18 00.6 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **85.66** | **333** | *eP* | **P** | | **15 18 10.6** | **-1.8** |
| KLMR | | | | AMP | | | 15 18 14.5 | | |
| | comp=Z,18nm,1.0s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TIRR** | **Tirgusor** | **87.02** | **315** | P | **P** | | **15 18 19.6** | **+0.2** |
| TIRR | | | | IAmb | IAmb | | 15 18 21.5 | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **87.95** | **322** | P | **P** | | **15 18 23.8** | **0.0** |
| | comp=Z,2.8nm,0.6s,baz=88,slow=4.6,SNR=21 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **88.95** | **316** | P | **P** | | **15 18 28.6** | **-0.1** |
| MLR | | | | IAmb | IAmb | | 15 18 32.0 | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **89.87** | **318** | P | **P** | | **15 18 31.8** | **-1.2** |
| **FINES** | **FINESS Array B** | **92.05** | **332** | P | **P** | | **15 18 43.2** | **+0.6** |
| | comp=Z,4.0nm,0.7s,baz=107,slow=6.4,SNR=11 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.82** | **340** | P | **P** | | **15 18 50.9** | **+0.2** |
| | comp=Z,3.6nm,0.8s,baz=96,slow=4.9,SNR=7.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **117.10** | **20** | PKP | **PKiKP** | | **15 24 18.4** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=328,slow=1.8,SNR=7.8 | | | | | | | | |
| YKA | | | | SKP | | | 15 27 41.7 | | |
| | comp=Z,0.1nm,0.5s,baz=344,slow=2.9,SNR=3.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **117.10** | **20** | | **PKiKP** | | **15 24 18.1** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **126.71** | **46** | PKP | **PKiKP** | | **15 24 43.3** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=257,slow=1.6,SNR=4.8 | | | | | | | | |
| NVAR | | | | SKPbc | SKiKP | | 15 27 50.9 | -14 | |
| | comp=Z,0.9nm,0.8s,baz=265,slow=4.8,SNR=7.3 | | | | | | | | |
| **PLCA** | **Paso Flores** | **132.17** | **182** | SKPbc | **SKPbc** | | **15 28 02.1** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=7.8,slow=0.6,SNR=4.1 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **132.19** | **36** | PKP | **PKiKP** | | **15 24 49.1** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=148,slow=3.3,SNR=2.4 | | | | | | | | |
| PDAR | | | | SKPbc | **SKPbc** | | **15 28 01.8** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=181,slow=1.4,SNR=7.0 | | | | | | | | |
| **SCHQ** | **Schefferville** | **132.33** | **355** | PKP | **PKiKP** | | **15 24 48.4** | **0.0** |
| | comp=Z,3.2nm,1.0s,baz=291,slow=10,SNR=3.9 | | | | | | | | |
| SCHQ | | | | SKPbc | **SKPab** | | **15 28 02.0** | **-0.7** |
| | comp=Z,6.1nm,0.8s,baz=6.5,slow=3.9,SNR=10 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **133.08** | **20** | SKPbc | **SKPbc** | | **15 28 03.3** | **-0.9** |
| | comp=Z,4.1nm,0.7s,baz=315,slow=5.6,SNR=6.2 | | | | | | | | |
| **CPUP** | **Villa Florida** | **143.31** | **204** | PKP | **PKPdf** | | **15 25 08.1** | **-0.2** |
| | comp=Z,3.1nm,0.6s,baz=160,slow=2.1,SNR=9.1 | | | | | | | | |
| **CPUP** | **Villa Florida** | **143.31** | **204** | | **PKPdf** | | **15 25 07.5** | **-0.8** |
| **TXAR** | **Lajitas Array** | **143.71** | **49** | PKP | **PKPdf** | | **15 25 08.8** | **-0.3** |
| | comp=Z,1.9nm,0.6s,baz=249,slow=1.1,SNR=29 | | | | | | | | |
| TXAR | | | | pPKP | **pPKPdf** | | **15 25 46.8** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=225,slow=1.1,SNR=2.9 | | | | | | | | |
| TXAR | | | | SKPbc | **SKiKP** | | **15 28 36.2** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=275,slow=0.4,SNR=5.0 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **143.71** | **49** | | **PKPdf** | | **15 25 08.1** | **-0.9** |
| **BDFB** | **Brasilia** | **146.41** | **227** | PKPbc | **PKPab** | | **15 25 16.7** | **+0.1** |
| | comp=Z,3.6nm,0.8s,baz=121,slow=12,SNR=3.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **156.10** | **191** | PKPab | **PKPab** | | **15 26 00.3** | **+3.1** |
| | comp=Z,1.0nm,0.6s,baz=198,slow=2.5,SNR=5.5 | | | | | | | | |

**TAP 16 15:14:53.3, 24.82N×121.95E, h10km, ML2.2, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **EGS** | | **0.02** | **329** | *eP* | | Pg | 15 14 55.1 | | 0.0 |
| EGS | baz=352 | | | *eS* | | Sg | 15 14 56.4 | | +0.1 |
| | baz=352 | | | | | | | | |
| **NTC** | **Toucheng** | **0.11** | **286** | *i* P | | Pg | 15 14 56.4 | | +0.5 |
| NTC | baz=294 | | | S | | Sg | 15 14 58.4 | | +0.6 |
| | baz=294 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.18** | **323** | P | | Pg | 15 14 57.7 | | +0.5 |
| TIPB | baz=330 | | | S | | Sg | 15 15 00.5 | | +0.7 |
| | baz=330 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.19** | **12** | P | | Pg | 15 14 57.5 | | +0.2 |
| TWB1 | baz=8.0 | | | S | | Sg | 15 15 00.1 | | +0.1 |
| | baz=8.0 | | | | | | | | |
| **ILA** | **Ilan** | **0.19** | **252** | *eP* | | Pg | 15 14 58.1 | | +0.8 |
| ILA | baz=251 | | | *eS* | | Sg | 15 15 01.5 | | +1.5 |
| | baz=251 | | | | | | | | |
| **TWC** | **Suao** | **0.23** | **202** | P | | Pg | 15 14 58.3 | | +0.3 |
| TWC | baz=195 | | | S | | Sg | 15 15 01.3 | | +0.1 |
| | baz=195 | | | | | | | | |
| **TWE** | **Neicheng** | **0.27** | **248** | P | | Pg | 15 14 59.2 | | +0.4 |
| TWE | baz=247 | | | *eS* | | Sg | 15 15 03.4 | | +0.9 |
| | baz=247 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **347** | *i* P | | Pg | 15 14 59.5 | | +0.6 |
| | baz=351 | | | | | | | | |
| **NDS** | **Dongshan** | **0.28** | **228** | *eP* | | Pg | 15 14 59.2 | | +0.3 |
| NDS | baz=228 | | | *eS* | | Sb | 15 15 05.4 | | +0.1 |
| | baz=228 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.29** | **329** | P | | Pb | 15 14 59.9 | | -0.7 |
| | baz=328 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.33** | **259** | *eP* | | Pg | 15 15 00.3 | | +0.4 |
| | baz=259 | | | | | | | | |
| **TWA** | **Mucha** | **0.36** | **295** | *eP* | | Pg | 15 15 01.0 | | +0.5 |
| | baz=295 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.39** | **242** | *eP* | | Pg | 15 15 01.5 | | +0.5 |
| | baz=242 | | | | | | | | |
| **NWLT** | **Wulai** | **0.41** | **263** | *eP* | | Pg | 15 15 01.7 | | +0.4 |
| NWLT | baz=263 | | | *eS* | | Sg | 15 15 06.9 | | +0.2 |
| | baz=263 | | | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **202** | *eP* | | Pg | 15 15 01.5 | | +0.2 |
| | baz=202 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.41** | **290** | *eP* | | Pb | 15 15 02.4 | | -0.2 |
| NHDH | baz=290 | | | *eS* | | Sb | 15 15 07.8 | | -1.1 |
| | baz=290 | | | | | | | | |
| **ENA** | **Nanau** | **0.44** | **205** | P | | Pb | 15 15 02.5 | | -0.6 |
| ENA | baz=205 | | | *eS* | | Sg | 15 15 07.5 | | -0.1 |
| | baz=205 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.45** | **241** | *eP* | | Pg | 15 15 02.7 | | +0.6 |
| NDT | baz=241 | | | *eS* | | Sg | 15 15 07.9 | | -0.1 |
| | baz=241 | | | | | | | | |
| **YM01** | **YM01** | **0.47** | **313** | *eP* | | Pb | 15 15 03.4 | | -0.2 |
| YM01 | baz=313 | | | *eS* | | Sg | 15 15 08.8 | | +0.2 |
| | baz=313 | | | | | | | | |
| **LATG** | **Datong** | **0.48** | **233** | *eP* | | Pg | 15 15 02.9 | | +0.3 |
| | baz=241 | | | | | | | | |
| **ANP** | **Anpu** | **0.53** | **313** | *eP* | | Pb | 15 15 04.5 | | -0.3 |
| | baz=313 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.54** | **254** | *eP* | | Pg | 15 15 03.9 | | +0.1 |
| YHNB | baz=263 | | | *eS* | | Sg | 15 15 09.6 | | -1.4 |
| | baz=263 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.55** | **300** | *eP* | | Pb | 15 15 05.5 | | +0.4 |
| | baz=299 | | | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **255** | *eP* | | Pg | 15 15 04.2 | | +0.2 |
| | baz=262 | | | | | | | | |
| NSK | | | | *eS* | | Sg | 15 15 10.3 | | -1.0 |
| | baz=262 | | | | | | | | |
| **NNSB** | **Datong** | **0.65** | **233** | *eP* | | Pg | 15 15 06.2 | | +0.4 |
| | baz=240 | | | | | | | | |
| NNSB | | | | *eS* | | Sg | 15 15 13.8 | | -0.5 |
| | baz=240 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.65** | **234** | *eP* | | Pg | 15 15 06.1 | | +0.3 |
| | baz=241 | | | | | | | | |
| NNS | | | | *eS* | | Sg | 15 15 13.7 | | -0.6 |
| | baz=241 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.72** | **206** | *eP* | | Pg | 15 15 07.5 | | +0.3 |
| | baz=206 | | | | | | | | |
| NACB | | | | *eS* | | Sg | 15 15 17.3 | | +0.6 |
| | baz=206 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.75** | **215** | *eP* | | Pb | 15 15 08.1 | | -0.3 |
| | baz=225 | | | | | | | | |
| ETLH | | | | *eS* | | Sb | 15 15 19.3 | | +0.6 |
| | baz=225 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.78** | **256** | *eP* | | Pn | 15 15 09.7 | | -0.7 |
| | baz=248 | | | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **203** | *eP* | | Pg | 15 15 08.6 | | -0.2 |
| | baz=203 | | | | | | | | |
| TWD | | | | *eS* | | Sg | 15 15 19.6 | | +0.2 |
| | baz=203 | | | | | | | | |
| **LIOB** | **Emei** | **0.86** | **258** | *eP* | | Pn | 15 15 11.9 | | +0.3 |
| | baz=258 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.88** | **258** | *eP* | | Pn | 15 15 11.7 | | -0.1 |
| | baz=257 | | | | | | | | |
| NSTT | | | | *eS* | | Sn | 15 15 24.3 | | -0.3 |
| | baz=257 | | | | | | | | |

**TAP 16 15:14:58.3, 24.82N×121.97E, h9km, ML2.4, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **EGS** | | **0.04** | **308** | P | | Pg | 15 15 00.2 | | +0.2 |
| EGS | baz=313 | | | *eS* | | Sg | 15 15 01.5 | | +0.3 |
| | baz=313 | | | | | | | | |
| **NTC** | **Toucheng** | **0.13** | **285** | *eP* | | Pg | 15 15 01.5 | | +0.3 |
| | baz=294 | | | | | | | | |
| NTC | | | | *eS* | | Sg | 15 15 03.4 | | +0.2 |
| | baz=294 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.19** | **6** | *i* P | | Pg | 15 15 02.6 | | +0.4 |
| | baz=360 | | | | | | | | |
| TWB1 | | | | S | | Sg | 15 15 05.1 | | +0.2 |
| | baz=360 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.20** | **320** | P | | Pg | 15 15 02.9 | | +0.4 |
| | baz=325 | | | | | | | | |
| TIPB | | | | S | | Sg | 15 15 05.6 | | +0.4 |
| | baz=325 | | | | | | | | |
| **TWC** | **Suao** | **0.24** | **207** | *eP* | | Pg | 15 15 03.5 | | +0.4 |
| | baz=207 | | | | | | | | |
| TWC | | | | *eS* | | Sg | 15 15 07.8 | | +1.5 |
| | baz=207 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **343** | *eP* | | Pg | 15 15 04.7 | | +0.6 |
| | baz=346 | | | | | | | | |
| SXI1 | | | | *eS* | | Sg | 15 15 08.7 | | +0.8 |
| | baz=346 | | | | | | | | |
| **TWE** | **Neicheng** | **0.29** | **250** | *eP* | | Pg | 15 15 04.6 | | +0.5 |
| | baz=249 | | | | | | | | |
| TWE | | | | *eS* | | Sg | 15 15 08.6 | | +0.7 |
| | baz=249 | | | | | | | | |
| **NDS** | **Dongshan** | **0.29** | **231** | *eP* | | Pg | 15 15 04.3 | | +0.2 |
| | baz=232 | | | | | | | | |
| NDS | | | | *eS* | | Sb | 15 15 10.4 | | -0.5 |
| | baz=232 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **326** | *eP* | | Pg | 15 15 04.9 | | +0.6 |
| | baz=325 | | | | | | | | |
| NWF | | | | *eS* | | Sg | 15 15 09.6 | | +1.2 |
| | baz=325 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **326** | S | | Pg | 15 15 04.5 | | +0.1 |
| | baz=328 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.35** | **260** | *eS* | | Pg | 15 15 04.6 | | -0.7 |
| | baz=259 | | | | | | | | |
| **TWA** | **Mucha** | **0.38** | **295** | *eP* | | Pg | 15 15 06.2 | | +0.3 |
| | baz=295 | | | | | | | | |
| TWA | | | | *eS* | | Sg | 15 15 11.2 | | +0.2 |
| | baz=295 | | | | | | | | |
| **TWA** | **Mucha** | **0.38** | **295** | *eS* | | Pg | 15 15 06.1 | | +0.3 |
| | baz=295 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.41** | **244** | *eP* | | Pg | 15 15 06.3 | | 0.0 |
| | baz=244 | | | | | | | | |
| ENTT | | | | *eS* | | Sg | 15 15 12.4 | | +0.8 |
| | baz=244 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.41** | **244** | *eS* | | Pg | 15 15 06.5 | | +0.2 |
| | baz=242 | | | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **205** | *eP* | | Pg | 15 15 06.8 | | +0.4 |
| | baz=206 | | | | | | | | |
| EWUT | | | | *eS* | | Sg | 15 15 12.4 | | +0.6 |
| | baz=206 | | | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **205** | *eS* | | Pg | 15 15 07.0 | | +0.6 |
| | baz=202 | | | | | | | | |
| **NWLT** | **Wulai** | **0.42** | **264** | *eS* | | Sg | 15 15 11.9 | | -0.3 |
| | baz=265 | | | | | | | | |
| **ENA** | **Nanau** | **0.44** | **208** | *eS* | | Sg | 15 15 12.7 | | 0.0 |
| | baz=209 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.57** | **299** | *eP* | | Pb | 15 15 10.8 | | +0.2 |
| | baz=299 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.73** | **208** | *eP* | | Pg | 15 15 12.7 | | +0.4 |
| | baz=210 | | | | | | | | |
| NACB | | | | *eS* | | Sb | 15 15 22.7 | | -0.6 |
| | baz=210 | | | | | | | | |

*IDC **16** 15:27:17.0±1.8, 18.24S×175.15W, h223km±16km, mb4.1/17, mb1 4.2/18, mb1mx4.2/25, mbtmp4.6/18, Error ellipse: s-maj=13.3km s-min=8.9km az=117.0*
*NOU **16** 15:27:19.3, 18.19S×174.87W, h266km, mb4.9/74, Tonga Islands*
*NEIC **16** 15:27:19.2±1.9, 18.09S±0.09×175.04W±0.09, h247km±5km, mb4.8/86, Error ellipse: s-maj=13.1km s-min=12.3km az=162.0*

**ISC 16 15:27:17.2±0.3, 18.14S±0.05×175.15W±0.06, h228km, n302, σ1s40/308, mb4.8/93, 12C-13D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **NIUE** | **Niue** | **5.04** | **101** | | | **Pn** | **15 28 34.2** | | **+1.3** |
| **NIUE** | **Niue** | **5.04** | **101** | P | | **Pn** | **15 28 34.6** | | **+1.7** |
| **AFI** | **Afiamalu** | **5.31** | **38** | P | | **Pn** | **15 28 36.6** | | **+0.2** |
| | 47nm,0.3s,baz=199,slow=2.9,SNR=53 | | | | | | | | |
| AFI | | | | S | | **S** | **15 29 34.4** | | **-4.8** |
| | 464nm,0.3s,baz=70,slow=22,SNR=30 | | | | | | | | |
| **AFI** | **Afiamalu** | **5.31** | **38** | | | **Pn** | **15 28 36.5** | | **0.0** |
| **AFI** | **Afiamalu** | **5.31** | **38** | P | | **Pn** | **15 28 36.9** | | **+0.5** |
| **MSVF** | **Nonsavu** | **6.48** | **273** | P | | Pn | 15 28 58.3 | | +7.1 |
| | 5.6nm,0.3s,baz=91,slow=9.4,SNR=23 | | | | | | | | |
| **MSVF** | **Nonsavu** | **6.48** | **273** | | | Pn | 15 28 57.7 | | +6.5 |
| **MSVF** | **Nonsavu** | **6.48** | **273** | P | | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RPZ | Rata Peaks | 28.03 202 | IAmb | IAmb | 15 32 46.8 | | |
| | comp=Z,19nm,1.1s | | | | | | |
| RPZ | Rata Peaks | 28.03 202 | P | P | 15 32 47.5 | +0.3 | |
| WHZ | Wether Hill Ro | 31.03 203 | P | P | 15 33 15.4 | +1.7 | |
| WHZ | | | IAmb | IAmb | 15 33 23.0 | | |
| | comp=Z,10nm,0.7s | | | | | | |
| EIDS | Eidsvold | 32.11 251 | P | P | 15 33 23.1 | -0.3 | |
| EIDS | | | IAmb | IAmb | 15 33 23.9 | | |
| | comp=Z,17nm,0.8s | | | | | | |
| EIDS | Eidsvold | 32.11 251 | P | P | 15 33 23.6 | +0.2 | |
| ARMA | Armidale | 32.53 242 | P | P | 15 33 27.2 | 0.0 | |
| ARMA | | | IAmb | IAmb | 15 33 34.0 | | |
| | comp=Z,26nm,1.4s | | | | | | |
| ARMA | Armidale | 32.53 242 | P | P | 15 33 27.9 | +0.8 | |
| RMQ | Roma | 34.31 249 | P | P | 15 33 43.0 | +0.6 | |
| CNB | Canberra Magne | 35.77 234 | P | P | 15 33 54.7 | -0.2 | |
| CAN | Canberra | 36.06 234 | P | P | 15 33 56.4 | -0.9 | |
| CAN | | | IAmb | IAmb | 15 34 19.9 | | |
| | comp=Z,43nm,1.4s | | | | | | |
| CTA | Charters Tower | 36.47 261 | P | P | 15 34 00.4 | -0.5 | |
| | comp=Z,25nm,0.5s,baz=90,slow=11,SNR=83 | | | | | | |
| CTA | Charters Tower | 36.47 261 | P | P | 15 34 00.6 | -0.2 | |
| CTAO | Charters Tower | 36.47 261 | P | P | 15 34 00.2 | -0.6 | |
| CTAO | | | IAmb | IAmb | 15 34 02.0 | | |
| | comp=Z,32nm,0.7s | | | | | | |
| CTAO | Charters Tower | 36.47 261 | P | P | 15 34 00.6 | -0.2 | |
| PMG | Port Moresby | 37.56 278 | P | P | 15 34 11.2 | +1.2 | |
| | comp=Z,37nm,0.8s,baz=78,slow=5.9,SNR=16 | | | | | | |
| PMG | Port Moresby | 37.56 278 | P | P | 15 34 10.7 | +0.7 | |
| PMG | | | IAmb | IAmb | 15 34 11.8 | | |
| | comp=Z,31nm,0.7s | | | | | | |
| PMG | Port Moresby | 37.56 278 | P | P | 15 34 11.4 | +1.4 | |
| CMSA | Cobar Meteorol | 37.75 242 | P | P | 15 34 11.2 | -0.3 | |
| QLP | Quilpie | 38.36 250 | P | P | 15 34 16.4 | -0.2 | |
| MTSU | Mount Surprise | 38.46 263 | P | P | 15 34 17.1 | -0.5 | |
| TOO | Toolangi | 39.46 232 | P | P | 15 34 25.1 | -0.5 | |
| TOO | | | IAmb | IAmb | 15 34 25.8 | | |
| | comp=Z,16nm,0.8s | | | | | | |
| TOO | Toolangi | 39.46 232 | P | P | 15 34 25.4 | -0.2 | |
| COEN | Coen | 40.20 270 | P | P | 15 34 31.7 | -0.3 | |
| COEN | | | IAmb | IAmb | 15 34 34.5 | | |
| | comp=Z,27nm,0.9s | | | | | | |
| COEN | Coen | 40.20 270 | P | P | 15 34 32.2 | +0.2 | |
| STKA | Stephens Creek | 41.25 242 | P | P | 15 34 40.5 | +0.2 | |
| | comp=Z,15nm,0.9s,baz=93,slow=10,SNR=19 | | | | | | |
| STKA | Stephens Creek | 41.25 242 | P | P | 15 34 40.1 | -0.2 | |
| STKA | Stephens Creek | 41.25 242 | P | P | 15 34 40.9 | +0.6 | |
| INKA | Innaminka | 41.54 248 | P | P | 15 34 43.5 | +0.8 | |
| QIS | Mount Isa | 42.66 259 | P | P | 15 34 51.0 | -0.8 | |
| HTT | Hallett | 43.71 240 | P | P | 15 34 59.9 | -0.3 | |
| LCRK | Leigh Creek | 43.95 245 | P | P | 15 35 02.0 | 0.0 | |
| MMPI | Merauke | 44.22 277 | P | P | 15 35 04.7 | +0.3 | |
| | comp=Z,241nm,0.7s | | | | | | |
| TWOA | Tennyson Woods | 44.25 238 | P | P | 15 35 03.8 | -0.5 | |
| NAPP | Napperby | 44.32 241 | P | P | 15 35 05.2 | +0.3 | |
| BBOO | Buckleboo | 46.02 242 | P | P | 15 35 17.4 | -0.8 | |
| BBOO | | | IAmb | IAmb | 15 35 18.4 | | |
| | comp=Z,43nm,0.7s | | | | | | |
| BBOO | Buckleboo | 46.02 242 | P | P | 15 35 17.8 | -0.4 | |
| OOD | Oodnadatta | 46.02 249 | P | P | 15 35 18.9 | +0.6 | |
| GENI | Genyem | 46.42 284 | P | P | 15 35 23.3 | +1.7 | |
| | comp=Z,73nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 47.45 259 | P | P | 15 35 28.3 | -1.2 | |
| MULG | Mulgathing | 47.52 245 | P | P | 15 35 29.5 | -0.4 | |
| WB0 | Warramunga Arr | 47.61 260 | P | P | 15 35 29.4 | -1.3 | |
| WB0 | | | IAmb | IAmb | 15 35 30.6 | | |
| | comp=Z,57nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 47.62 259 | P | P | 15 35 29.5 | -1.4 | |
| WRAB | Tennant Creek | 47.63 259 | P | P | 15 35 29.5 | -1.4 | |
| WRAB | Tennant Creek | 47.63 259 | P | P | 15 35 30.4 | -0.5 | |
| WRA | Warramunga Arr | 47.64 259 | P | P | 15 35 29.8 | -1.2 | |
| | comp=Z,46nm,0.5s,baz=98,slow=7.0,SNR=978 | | | | | | |
| WRA | | | S | S | 15 42 04.2 | -5.0 | |
| | comp=Z,0.9nm,0.9s,baz=92,slow=14,SNR=4.6 | | | | | | |
| WRA | Warramunga Arr | 47.64 259 | P | P | 15 35 29.3 | -1.7 | |
| AS31 | Alice Springs | 47.71 254 | P | P | 15 35 30.7 | -0.8 | |
| ASAR | Alice Springs | 47.71 254 | P | P | 15 35 31.1 | -0.5 | |
| | comp=Z,190nm,0.6s,baz=89,slow=8.8,SNR=3559 | | | | | | |
| ASAR | | | S | S | 15 42 04.8 | -5.4 | |
| | comp=Z,5.4nm,0.9s,baz=90,slow=16,SNR=28 | | | | | | |
| ASAR | Alice Springs | 47.71 254 | P | P | 15 35 30.8 | -0.7 | |
| KDU | Kakadu | 50.65 268 | P | P | 15 35 53.3 | -0.5 | |
| MTN | Manton Dam | 51.89 268 | P | P | 15 36 01.9 | -1.1 | |
| MTN | | | IAmb | IAmb | 15 36 03.3 | | |
| | comp=Z,42nm,0.7s | | | | | | |
| MTN | Manton Dam | 51.89 268 | P | P | 15 36 02.4 | -0.6 | |
| DRS | Darwin Rock St | 52.20 268 | P | P | 15 36 04.7 | -0.6 | |
| FORT | Forrest | 52.71 245 | P | P | 15 36 07.5 | -1.3 | |
| FORT | | | IAmb | IAmb | 15 36 08.3 | | |
| | comp=Z,26nm,0.7s | | | | | | |
| FORT | Forrest | 52.71 245 | P | P | 15 36 08.1 | -0.7 | |
| WRKA | Warakurna | 52.72 252 | P | P | 15 36 08.4 | -0.6 | |
| SAUI | Saumlaki | 52.97 274 | P | P | 15 36 11.2 | +0.3 | |
| | comp=Z,89nm,1.0s | | | | | | |
| KNRA | Kununurra | 53.55 264 | P | P | 15 36 14.3 | -0.7 | |
| KNRA | Kununurra | 53.55 264 | P | P | 15 36 14.8 | -0.3 | |
| FITZ | Fitzroy Crossi | 56.04 260 | P | P | 15 36 32.3 | -0.6 | |
| FITZ | Fitzroy Crossi | 56.04 260 | P | P | 15 36 32.8 | -0.1 | |
| AAI | Ambon | 57.22 277 | P | P | 15 36 41.6 | +0.3 | |
| | comp=Z,72nm,0.5s | | | | | | |
| SOEI | Soe | 59.17 269 | P | P | 15 36 55.5 | +0.5 | |
| SOEI | Soe | 59.17 269 | P | P | 15 36 56.0 | +1.1 | |
| | comp=Z,101nm,0.8s | | | | | | |
| SOEI | Soe | 59.17 269 | P | P | 15 36 56.2 | +1.3 | |
| TNTI | Ternate | 59.54 282 | P | P | 15 36 57.1 | -0.1 | |
| TNTI | | | IAmb | IAmb | 15 36 58.4 | | |
| | comp=Z,26nm,0.9s | | | | | | |
| TNTI | Ternate | 59.54 282 | P | P | 15 36 57.4 | +0.1 | |
| | comp=Z,35nm,0.9s | | | | | | |
| BATI | Baumata | 59.63 269 | P | P | 15 36 59.1 | +1.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| SANI | Sanana | 59.84 278 | P | P | 15 36 58.8 | -0.5 | |
| | comp=Z,37nm,0.9s | | | | | | |
| SANI | Sanana | 59.84 278 | P | P | 15 36 59.3 | 0.0 | |
| SBA | Scott Base | 60.40 184 | P | P | 15 37 04.0 | +1.9 | |
| VNDA | Vanda | 60.50 186 | P | P | 15 37 03.6 | +0.9 | |
| | comp=Z,7.2nm,0.9s,baz=5.3,slow=6.5,SNR=9.0 | | | | | | |
| VNDA | Vanda | 60.50 186 | P | P | 15 37 03.8 | +1.0 | |
| PSA00 | Pilbara Seismi | 60.85 255 | P | P | 15 37 04.8 | -1.3 | |
| PSA00 | Pilbara Seismi | 60.85 255 | P | P | 15 37 05.0 | -1.1 | |
| PSA00 | | | IAmb | IAmb | 15 37 05.9 | | |
| | comp=Z,18nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 60.85 255 | P | P | 15 37 05.3 | -0.8 | |
| MBWA | Marble Bar | 61.02 255 | P | P | 15 37 06.1 | -1.2 | |
| MBWA | | | IAmb | IAmb | 15 37 12.1 | | |
| | comp=Z,11nm,0.8s | | | | | | |
| MBWA | Marble Bar | 61.02 255 | P | P | 15 37 06.5 | -0.7 | |
| MEEK | Meekatharra | 61.25 249 | P | P | 15 37 07.7 | -1.0 | |
| MMRI | Maumere | 61.40 270 | P | P | 15 37 09.1 | -0.8 | |
| MMRI | | | IAmb | IAmb | 15 37 10.1 | | |
| | comp=Z,33nm,0.9s | | | | | | |
| MMRI | Maumere | 61.40 270 | P | P | 15 37 09.1 | -0.8 | |
| | comp=Z,39nm,0.9s | | | | | | |
| NWAO | Narrogin (SRO) | 61.84 242 | P | P | 15 37 11.5 | -1.0 | |
| NWAO | | | IAmb | IAmb | 15 37 18.4 | | |
| | comp=Z,24nm,1.2s | | | | | | |
| BLDU | Ballidu | 62.48 244 | P | P | 15 37 15.9 | -0.9 | |
| MUN | Mundaring | 62.78 243 | P | P | 15 37 18.5 | -0.3 | |
| MORW | Morawa | 63.22 246 | P | P | 15 37 20.7 | -1.1 | |
| MORW | Morawa | 63.22 246 | P | P | 15 37 21.0 | -0.8 | |
| WBSI | Waikabubak, Su | 63.83 268 | P | P | 15 37 27.0 | +1.0 | |
| | comp=Z,28nm,0.9s | | | | | | |
| APSI | Ampana | 64.31 278 | P | P | 15 37 29.9 | +0.9 | |
| | comp=Z,324nmcomp=Z,31nm,1.1s | | | | | | |
| BNSI | Bone | 64.65 274 | P | P | 15 37 31.1 | -0.1 | |
| | comp=Z,26nm,1.2s | | | | | | |
| SPSI | Sidrap Palu | 65.10 274 | P | P | 15 37 32.9 | -1.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| PLAI | Plampang | 65.59 268 | P | P | 15 37 36.8 | -0.5 | |
| | comp=Z,34nm,1.1s | | | | | | |
| GIRL | Giralia | 65.79 253 | P | P | 15 37 38.9 | +0.5 | |
| GIRL | Giralia | 65.79 253 | P | P | 15 37 38.7 | +0.3 | |
| | comp=Z,97nm,1.5s | | | | | | |
| TOLI2 | Tolitoli | 65.81 280 | P | P | 15 37 38.5 | -0.1 | |
| TOLI2 | | | IAmb | IAmb | 15 37 42.4 | | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| TOLI2 | Tolitoli | 65.81 280 | P | P | 15 37 39.2 | +0.6 | |
| MPSI | Mapaga | 66.37 279 | P | P | 15 37 42.2 | 0.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| JHJ2 | Mitsune | 66.69 320 | P | P | 15 37 44.5 | +0.7 | |
| JHJ2 | Mitsune | 66.69 320 | P | P | 15 37 45.1 | +1.3 | |
| IGBI | Denpasar | 68.09 268 | P | P | 15 37 52.5 | -0.5 | |
| | comp=Z,2µmcomp=Z,56nm,0.6s | | | | | | |
| JYT | Yasato | 68.60 322 | P | P | 15 37 56.3 | +0.7 | |
| KBKI | Kotabaru | 68.72 274 | P | P | 15 37 57.4 | +0.4 | |
| | comp=Z,21nm,1.3s | | | | | | |
| JAGI | Jajag, Banyuwa | 69.13 268 | P | P | 15 37 58.1 | -1.4 | |
| JAGI | Jajag, Banyuwa | 69.13 268 | P | P | 15 37 57.8 | -1.7 | |
| | comp=Z,2µmcomp=Z,47nm,0.7s | | | | | | |
| JAGI | Jajag, Banyuwa | 69.13 268 | P | P | 15 37 58.5 | -1.0 | |
| JMM | Marumori | 69.41 324 | P | P | 15 38 00.5 | -0.1 | |
| JMM | | | IAmb | IAmb | 15 38 05.3 | | |
| | comp=Z,44nm,1.3s | | | | | | |
| ADK | Adak | 69.74 359 | P | P | 15 38 02.7 | +0.4 | |
| GMJI | Gumukmas | 69.86 268 | P | P | 15 38 02.6 | -1.3 | |
| | comp=Z,32nm,1.5s | | | | | | |
| JGF | Kuroka | 69.86 320 | P | P | 15 38 03.7 | +0.2 | |
| JGF | | | IAmb | IAmb | 15 38 04.7 | | |
| | comp=Z,18nm,1.0s | | | | | | |
| GSTR | Great Sitkin T | 69.94 359 | P | P | 15 38 02.3 | -1.3 | |
| MJAR | Matsushiro Arr | 69.98 321 | P | P | 15 38 04.5 | +0.3 | |
| | comp=Z,11nm,0.5s,baz=155,slow=5.0,SNR=26 | | | | | | |
| MJAR | Matsushiro Arr | 69.98 321 | P | P | 15 38 04.4 | +0.2 | |
| MAJO | Matsushiro | 69.98 321 | P | P | 15 38 04.5 | +0.3 | |
| MAJO | | | IAmb | IAmb | 15 38 05.4 | | |
| | comp=Z,24nm,0.9s | | | | | | |
| MAJO | Matsushiro | 69.98 321 | P | P | 15 38 05.0 | +0.8 | |
| MAT | Matsushiro | 69.98 321 | P | P | 15 38 04.5 | +0.3 | |
| MJB9 | Matsu-Tunnel | 69.99 321 | P | P | 15 38 04.6 | +0.4 | |
| MJB9 | | | IAmb | IAmb | 15 38 05.3 | | |
| | comp=Z,24nm,1.0s | | | | | | |
| JMN | Monobe | 70.85 317 | P | P | 15 38 10.9 | +1.4 | |
| PWJI | Pagerwojo | 71.49 267 | P | P | 15 38 13.0 | -0.7 | |
| | comp=Z,28nm,0.8s | | | | | | |
| KKM | Kota Kinabalu | 71.81 283 | P | P | 15 38 15.4 | -0.3 | |
| KKM | | | IAmb | IAmb | 15 38 23.8 | | |
| | comp=Z,17nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 71.92 180 | P | P | 15 38 15.7 | +0.2 | |
| QSPA | | | IAmb | IAmb | 15 38 16.9 | | |
| | comp=Z,29nm,0.9s | | | | | | |
| PCJI | Pacitan | 72.03 267 | P | P | 15 38 16.6 | -0.4 | |
| | comp=Z,124nm,0.8s | | | | | | |
| UNV | Unalaska Valle | 72.08 5 | P | P | 15 38 16.1 | -0.2 | |
| UNV | | | IAmb | IAmb | 15 38 44.0 | | |
| | comp=Z,31nm,1.0s | | | | | | |
| JHS | Saijyo | 72.13 317 | P | P | 15 38 18.4 | +1.2 | |
| JNU | Nakatsue | 72.48 315 | P | P | 15 38 19.6 | +0.4 | |
| JNU | | | IAmb | IAmb | 15 38 22.4 | | |
| | comp=Z,34nm,1.0s | | | | | | |
| JEW | Eniwo | 72.63 328 | P | P | 15 38 21.0 | +1.2 | |
| UGM | Wanagama | 72.73 267 | P | P | 15 38 20.4 | -0.8 | |
| UGM | Wanagama | 72.73 267 | P | P | 15 38 20.7 | -0.5 | |
| | comp=Z,76nm,1.7s | | | | | | |
| UGM | Wanagama | 72.73 267 | P | P | 15 38 21.2 | 0.0 | |
| YOGI | Yogyakarta | 72.98 267 | P | P | 15 38 22.8 | +0.2 | |
| | comp=Z,114nm,1.5s | | | | | | |
| JKA | Kamikawa-asahi | 73.00 330 | P | P | 15 38 23.8 | +1.8 | |
| JKA | | | IAmb | IAmb | 15 38 24.7 | | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| SBUM | Sibu | 74.31 278 | P | P | 15 38 30.9 | +0.7 | |
| KPJI | Karang Pucung | 74.41 267 | P | P | 15 38 29.1 | -1.8 | |
| | comp=Z,28nm,0.8s | | | | | | |
| TWG | Pinlang | 74.43 301 | P | P | 15 38 29.8 | -1.0 | |
| TWG | | | IAmb | IAmb | 15 38 52.1 | | |
| | comp=Z,35nm,1.3s | | | | | | |
| PEA0B | Petropavlovsk- | 74.74 343 | P | P | 15 38 32.0 | +0.2 | |
| PETK | Petropavlovsk- | 74.74 343 | P | P | 15 38 32.0 | +0.1 | |
| | comp=Z,13nm,0.9s,baz=112,slow=8.9,SNR=16 | | | | | | |
| PETK | Petropavlovsk- | 74.74 343 | P | P | 15 38 31.6 | -0.2 | |
| CMJI | Cimerak | 74.74 267 | P | P | 15 38 31.9 | -0.8 | |
| | comp=Z,42nm,1.1s | | | | | | |
| SSLB | Suanglung | 74.98 302 | P | P | 15 38 33.4 | -0.5 | |
| SSLB | | | IAmb | IAmb | 15 38 35.9 | | |
| | comp=Z,11nm,0.7s | | | | | | |
| SSLB | Suanglung | 74.98 302 | P | P | 15 38 34.2 | +0.3 | |
| TPUB | Ta-pu | 75.02 301 | P | P | 15 38 33.6 | -0.6 | |
| TPUB | Ta-pu | 75.02 301 | P | P | 15 38 34.3 | +0.2 | |
| YSS | Yuzh-Sakhalins | 75.05 332 | P | P | 15 38 33.6 | -0.2 | |
| YSS | | | IAmb | IAmb | 15 38 36.0 | | |
| | comp=Z,18nm,0.8s | | | | | | |
| KSM | Kuching | 75.79 276 | P | P | 15 38 38.8 | +0.1 | |
| KSM | | | IAmb | IAmb | 15 38 40.6 | | |
| | comp=Z,45nm,1.2s | | | | | | |
| KSRS | Korea Array | 76.96 317 | P | P | 15 38 46.6 | +1.9 | |
| | comp=Z,6.6nm,0.9s,baz=129,slow=6.4,SNR=13 | | | | | | |
| NVAR | Mina Array Bea | 77.47 42 | P | P | 15 38 48.4 | +0.5 | |
| | comp=Z,0.9nm,0.7s,baz=224,slow=9.1,SNR=10.0 | | | | | | |
| CGJI | Cibinong | 77.69 267 | P | P | 15 38 48.2 | -1.2 | |
| | comp=Z,44nm,0.5s | | | | | | |
| TPNV | Topopah Spring | 77.98 45 | P | P | 15 38 51.1 | +0.4 | |
| USRK | Ussuriysk Ar. | 78.58 324 | P | P | 15 38 55.5 | +2.0 | |
| | comp=Z,4.4nm,0.9s,baz=126,slow=4.1,SNR=6.5 | | | | | | |
| P18K | Big Mountain, | 78.95 10 | P | P | 15 38 55.1 | -0.1 | |
| P18K | | | IAmb | IAmb | 15 38 56.1 | | |
| | comp=Z,11nm,1.0s | | | | | | |
| O18K | Koktuh Hills | 79.40 10 | P | P | 15 38 57.4 | -0.2 | |
| MDSI | Maura Dua | 79.76 269 | P | P | 15 38 59.0 | -1.6 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| MDJ | Mudanjiang | 80.19 323 | P | P | 15 39 03.3 | +1.1 | |
| MDJ | | | pP | pwP | 15 39 59.9 | +0.9 | |
| MDJ | | | S | S | 15 48 51.3 | +3.5 | |
| MDJ | Mudanjiang | 80.19 323 | ScS | S | 15 49 06.8 | +19 | |
| MDJ | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| MDJ | | | pmax | pmax | | | |
| | comp=Z,160nm,6.3s | | | | | | |
| NJ2 | Nanjing | 80.50 308 | *e*P | P | 15 39 05.1 | +1.0 | |
| NJ2 | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| BELA | Belgrano 2 | 81.53 172 | P | P | 15 39 08.1 | -0.8 | |
| BNX | BinXian | 82.10 323 | ⇓P | P | 15 39 13.1 | +0.9 | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,34nm,0.9s | | | | | | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,490nm,4.4s | | | | | | |
| MA2 | Magadan | 82.27 343 | P | P | 15 39 11.4 | -1.4 | |
| MA2 | | | IAmb | IAmb | 15 39 13.6 | | |
| | comp=Z,18nm,1.5s | | | | | | |
| TMUT | Trail Mountain | 82.59 45 | P | P | 15 39 14.6 | -0.8 | |
| SRU | San Rafael Swe | 82.96 45 | P | P | 15 39 16.1 | -1.0 | |
| TXAR | Lajitas Array | 83.52 56 | P | P | 15 39 21.7 | +1.6 | |
| | comp=Z,2.3nm,1.0s,baz=219,slow=8.2,SNR=13 | | | | | | |
| ANMO | Albuquerque | 83.84 50 | P | P | 15 39 20.8 | -0.8 | |
| RND | Reindeer | 83.84 12 | P | P | 15 39 21.0 | +0.2 | |
| WRH | Wood River Hil | 84.95 11 | P | P | 15 39 25.7 | -0.5 | |
| H03S2 | Juan Fernandez | 85.08 124 | T | T | 17 13 11.8 | | |
| | SNR=10 | | | | | | |
| H03S1 | Juan Fernandez | 85.10 124 | T | T | 17 13 10.8 | | |
| | SNR=8.2 | | | | | | |
| H03S3 | Juan Fernandez | 85.10 124 | T | T | 17 13 08.9 | | |
| | SNR=5.2 | | | | | | |
| HDA | Harding Lake | 85.11 12 | P | P | 15 39 26.7 | -0.4 | |
| CCB | Clear Creek Bu | 85.16 11 | P | P | 15 39 26.9 | -0.4 | |
| CCB | | | IAmb | IAmb | 15 39 28.1 | | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| TCOL | CIGO, UAF Yank | 85.36 11 | P | P | 15 39 27.9 | -0.3 | |
| TCOL | | | IAmb | IAmb | 15 39 29.1 | | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| COLA | College | 85.36 11 | P | P | 15 39 28.2 | -0.1 | |
| COLA | | | IAmb | IAmb | 15 39 29.1 | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| MDM | Murphy Dome | 85.36 11 | P | P | 15 39 27.8 | -0.5 | |
| PDAR | Pinedale Array | 85.41 42 | P | P | 15 39 29.2 | -0.1 | |
| | comp=Z,0.5nm,0.6s,baz=199,slow=3.8,SNR=6.0 | | | | | | |
| IL31 | | 85.45 12 | P | P | 15 39 28.3 | -0.3 | |
| ILAR | Eielson Array | 85.45 12 | P | P | 15 39 28.6 | -0.2 | |
| | comp=Z,1.3nm,0.7s,baz=232,slow=6.2,SNR=26 | | | | | | |
| IPM | Ipoh | 85.53 276 | P | P | 15 39 31.1 | +0.7 | |
| IPM | Ipoh | 85.53 276 | P | P | 15 39 31.8 | +1.5 | |
| HNS | HongShan | 85.98 311 | ⇑P | P | 15 39 33.4 | +1.4 | |
| HNS | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | |
| LYN | LuoYang | 86.39 308 | ⇑P | P | 15 39 35.6 | +1.5 | |
| LYN | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| ENH | Enshi | 86.98 303 | P | P | 15 39 37.4 | +0.3 | |
| ENH | | | IAmb | IAmb | 15 39 39.4 | | |
| | comp=Z,12nm,0.7s | | | | | | |
| BILL | Bilibino | 87.00 353 | P | P | 15 39 36.1 | -0.1 | |
| GSI | Gunungsitoli | 87.81 272 | P | P | 15 39 42.5 | +1.2 | |
| | comp=Z,38nm,1.3s | | | | | | |
| XLT | XiLinHaoTe | 87.99 318 | *e*P | P | 15 39 42.1 | +0.5 | |
| XLT | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| XLT | | | pmax | pmax | | | |
| | comp=Z,110nm,4.7s | | | | | | |
| XAN | Xi'an | 88.88 306 | P | P | 15 39 47.8 | +1.8 | |
| XAN | | | pP | pwP | 15 40 45.6 | +1.6 | |
| XAN | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| PLCA | Paso Flores | 88.91 133 | P | P | 15 39 46.3 | +0.2 | |
| | comp=Z,9.5nm,1.4s,baz=1.8,slow=1.8,SNR=2.8 | | | | | | |
| HHC | Hu-ho-hao-te | 89.67 313 | *e*P | P | 15 39 49.8 | +0.3 | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,170nm,5.9s | | | | | | |
| INK | Inuvik | 91.32 14 | P | P | 15 39 55.5 | -0.9 | |
| CMAR | Chiang Mai Arr | 91.89 289 | P | P | 15 40 01.7 | +1.5 | |
| | comp=Z,2.7nm,0.9s,baz=99,slow=2.7,SNR=20 | | | | | | |
| CMAR | | | PP | PP | 15 43 48.3 | +5.3 | |
| | comp=Z,0.3nm,0.8s,baz=123,slow=3.3,SNR=1.9 | | | | | | |
| CHTO | Chiang Mai | 92.00 289 | P | P | 15 39 59.8 | -0.9 | |
| CHTO | | | IAmb | IAmb | 15 40 02.8 | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| PZH | PanZhiHua | 92.01 297 | P | P | 15 40 01.8 | +1.0 | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,100nm,4.8s | | | | | | |
| YKA | Yellowknife Ar | 93.27 24 | P | P | 15 40 05.5 | -0.1 | |
| | comp=Z,0.5nm,0.8s,baz=235,slow=4.2,SNR=6.3 | | | | | | |
| LZH | Lanzhou | 93.50 307 | *e*P | P | 15 40 08.8 | +1.3 | |
| LZH | | | pP | sP | 15 41 17.3 | -8.6 | |
| LZH | | | sP | pwP | 15 41 23.0 | +17 | |
| LZH | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| GTA | Gaotai | 97.58 309 | *e*P | Pdif | 15 40 35.1 | +9.2 | |
| GTA | | | pP | sP | 15 41 36.0 | -8.6 | |
| GTA | | | sP | pwP | 15 42 07.0 | +43 | |
| GTA | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.5s | | | | | | |
| MKAR | Makanchi Array | 111.53 314 | Pdiff | **Pdif** | **15 41 32.4** | **+4.7** | |
| | comp=Z,0.1nm,0.6s,baz=69,slow=7.9,SNR=1.7 | | | | | | |
| MKAR | | | PKiKP | **PKiKP** | **15 45 23.2** | **-1.2** | |
| | comp=Z,0.4nm,0.5s,baz=97,slow=1.2,SNR=11 | | | | | | |
| ARCES | ARCESS Array B | 127.06 351 | PKP | **PKPdf** | **15 45 52.8** | **-0.7** | |
| | comp=Z,2.0nm,0.7s,baz=64,slow=2.1,SNR=7.1 | | | | | | |
| FINES | FINESS Array B | 134.21 346 | PKhKP | PKPpre | 15 46 00.4 | | |
| | comp=Z,2.8nm,1.1s,baz=193,slow=29,SNR=1.6 | | | | | | |
| FINES | | | PKP | **PKPdf** | **15 46 07.4** | **+0.2** | |
| | comp=Z,1.9nm,0.9s,baz=61,slow=3.5,SNR=4.7 | | | | | | |
| MNK | Minsk | 139.62 339 | *i* PKP | PKPdf | 15 46 09.0 | -8.5 | |
| | comp=E,2.0nm,0.7s | | | | | | |
| MNK | | | *i* PKP | PKPdf | 15 46 09.0 | -8.5 | |
| | comp=N,19nm,0.8s | | | | | | |
| MNK | | | *i* PKP | PKPdf | 15 46 09.0 | -8.5 | |
| | comp=Z,8.0nm,0.7s,baz=34 | | | | | | |
| MNK | | | *i* pPKP | pPKPdf | 15 47 19.6 | +4.4 | |
| MNK | | | *i* PP | **PP** | **15 49 09.0** | **-5.7** | |
| MNK | | | *i* PPP | PPP | 15 52 16.1 | | |
| MNK | | | *i* SKS | SKSdf | 15 52 51.9 | -14 | |
| MNK | | | *i* SKKS | SKKSdf | 16 02 18.6 | -18 | |
| MNK | | | *i* PPS | PPS | 16 05 21.4 | | |
| MNK | | | *i* SS | **SS** | **16 07 09.6** | **-5.5** | |
| MNK | | | *i* SSS | SSS | 16 12 27.0 | | |
| MNK | | | *i* LRM | MLR | 16 48 14.9 | | |
| | comp=E,11nm,15.5s | | | | | | |
| MNK | | | *i* LRM | MLR | 16 48 17.7 | | |
| | comp=N,214nm,19.0s | | | | | | |
| MNK | | | *i* LRM | MLR | 16 48 21.6 | | |
| | comp=Z,26nm,7.1s | | | | | | |
| AKASG | Malin Array Be | 142.15 335 | PKhKP | PKPpre | 15 46 16.9 | | |
| | comp=Z,1.2nm,0.4s,baz=38,slow=3.9,SNR=16 | | | | | | |
| SORM | Soroca | 144.48 333 | ⇑P | **PKPab** | **15 46 25.1** | **-0.2** | |
| BURAR | Bucovina Array | 146.20 335 | ⇓P | **PKPab** | **15 46 32.0** | **0.0** | |
| CLL | Collm | 146.28 351 | *i* PKPbc | **PKPbc** | **15 46 31.0** | **+0.2** | |
| | comp=Z,11nm,0.8s | | | | | | |
| CLL | | | *e*pPKiKP | **pPKiKP** | **15 47 37.0** | **+5.7** | |
| OSTC | Ostas | 146.41 347 | *e*PKP | **PKPab** | **15 46 33.2** | **+0.6** | |
| CHVC | Chvalec | 146.41 347 | *e*PKP | **PKPab** | **15 46 33.0** | **+0.4** | |
| TLCR | | 146.44 329 | ⇑P | **PKPbc** | **15 46 32.0** | **+0.5** | |
| TESR | Tescani | 146.47 332 | ⇑P | **PKPbc** | **15 46 31.9** | **+0.3** | |
| UPC | Upice | 146.50 347 | *e*PKP | **PKiKP** | **15 46 34.0** | **-0.2** | |
| DPC | Dobruska-Polom | 146.58 347 | *e*PKP | **PKPbc** | **15 46 32.0** | **+0.2** | |
| JURR | Jurilovca | 146.71 328 | ⇓P | **PKPbc** | **15 46 32.4** | **+0.2** | |
| KRLC | Kraliky | 146.73 346 | *e*PKP | **PKPbc** | **15 46 32.2** | **0.0** | |
| CFR | Carcaliu | 146.78 329 | ⇓P | **PKPbc** | **15 46 32.9** | **+0.5** | |
| TRPA | Tarpa | 146.79 338 | ⇓P | **PKPbc** | **15 46 33.0** | **+0.7** | |
| TPGR | Topolog | 146.87 329 | ⇓P | **PKPbc** | **15 46 33.6** | **+0.8** | |
| LANS | Liptovska Anna | 146.88 342 | *e*PKP | **PKPab** | **15 46 34.0** | **-0.5** | |
| VRI | Vrincioaia | 146.93 332 | ⇓P | **PKPbc** | **15 46 33.5** | **+0.6** | |
| PLOR | Plostina | 146.97 332 | ⇓P | **PKPbc** | **15 46 33.4** | **+0.3** | |
| BRTR | Keskin Array B | 147.11 317 | PKPbc | **PKPbc** | **15 46 34.0** | **+0.3** | |
| | comp=Z,6.8nm,0.7s,baz=135,slow=2.9,SNR=16 | | | | | | |
| TIRR | Tirgusor | 147.16 328 | ⇑P | **PKPbc** | **15 46 34.3** | **+0.8** | |
| HARR | Harsova | 147.23 329 | ⇑P | **PKPbc** | **15 46 34.6** | **+0.9** | |
| PRU | Pruhonice | 147.29 348 | *e*PKP | **PKPbc** | **15 46 33.8** | **+0.1** | |
| NKC | Novy Kostel | 147.41 351 | *e*PKP | **PKPab** | **15 46 37.0** | **+0.4** | |
| DOPR | Dopca | 147.44 333 | ⇓P | **PKiKP** | **15 46 35.5** | **-0.8** | |
| MLR | Muntele Rosu | 147.57 332 | ⇑P | **PKPbc** | **15 46 35.6** | **+0.8** | |
| MLR | Muntele Rosu | 147.57 332 | PKPbc | **PKPbc** | **15 46 35.2** | **+0.4** | |
| | comp=Z,2.3nm,0.6s,baz=266,slow=1.7,SNR=4.1 | | | | | | |
| CJR | Cluj-Napoca | 147.58 336 | ⇓P | **PKPbc** | **15 46 35.5** | **+0.8** | |
| VYHS | Vyhne | 147.66 343 | *e*PKP | **PKiKP** | **15 46 35.8** | **-0.8** | |
| KRUC | Moravsky | 147.77 346 | *e*PKP | **PKPbc** | **15 46 35.1** | **+0.1** | |
| DRGR | | 147.86 337 | ⇑P | **PKPbc** | **15 46 36.2** | **+0.7** | |
| SECR | | 147.86 331 | ⇓P | **PKPbc** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.69** | **332** | PG | | **Pn** | **15 28 42.9** | **+0.5** |
| **SIVA** | **Sivas** | **0.72** | **56** | P | | **Pn** | **15 28 43.3** | **+0.6** |
| **SIVA** | **Sivas** | **0.72** | **56** | P | | **Pn** | **15 28 43.3** | **+0.6** |
| SIVA | | | | S | | **Sn** | **15 28 54.3** | **+1.6** |
| **TMBK** | **Timbaki Herakl** | **0.72** | **51** | P | | **Pn** | **15 28 43.2** | **+0.4** |
| TMBK | | | | S | | **Sn** | **15 28 55.4** | **+2.6** |
| | comp=E,692nm,0.4s | | | | | | | |
| **VAM** | **Vamos** | **0.79** | **7** | P | | **Pb** | **15 28 43.9** | **-0.1** |
| VAM | | | | S | | **Sn** | **15 28 55.7** | **+1.2** |
| | comp=E,1μm,0.5s | | | | | | | |
| **VAM** | **Vamos** | **0.79** | **7** | P | | **Pb** | **15 28 43.9** | **-0.1** |
| VAM | | | | S | | **Sn** | **15 28 55.8** | **+1.2** |
| VAM | | | | AML | AML | | 15 28 58.3 | |
| | comp=N,1750μm,0.4s | | | | | | | |
| VAM | | | | AML | AML | | 15 28 58.7 | |
| | comp=E,1732μm,0.5s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **0.82** | **25** | P | | **Pn** | **15 28 43.4** | **-0.7** |
| **IMMV** | **Iera Moni Meta** | **0.84** | **355** | P | | **Pb** | **15 28 44.9** | **0.0** |
| **IMMV** | **Iera Moni Meta** | **0.84** | **355** | P | | **Pn** | **15 28 44.8** | **+0.3** |
| IMMV | | | | S | | **Sn** | **15 28 57.2** | **+1.4** |
| IMMV | | | | AML | AML | | 15 28 59.4 | |
| | comp=N,2635μm,0.7s | | | | | | | |
| IMMV | | | | AML | AML | | 15 29 01.1 | |
| | comp=E,3348μm,0.4s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.84** | **355** | PG | | **Pb** | **15 28 45.1** | **+0.2** |
| IMMV | | | | SG | | **Sn** | **15 28 58.5** | **+2.7** |
| **IDI** | **Anoyia** | **0.94** | **45** | P | | **Pn** | **15 28 46.1** | **+0.2** |
| IDI | | | | S | | **Sn** | **15 28 59.6** | **+1.2** |
| | comp=E,322nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **0.94** | **45** | P | | **Pn** | **15 28 46.1** | **+0.2** |
| **IDI** | **Anoyia** | **0.94** | **45** | PG | | **Pb** | **15 28 46.5** | **-0.1** |
| IDI | | | | SG | | **Sn** | **15 29 01.2** | **+2.8** |
| **HRKL** | **Herakleio** | **1.09** | **50** | PN | | **Pb** | **15 28 48.7** | **-0.2** |
| **ANKY** | **Antikythira Is** | **1.40** | **333** | P | | **Pb** | **15 28 53.9** | **-0.3** |
| **NPS** | **Neapolis** | **1.41** | **63** | P | | **Pb** | **15 28 53.9** | **-0.5** |
| **ZKR** | **Zakros** | **1.83** | **74** | PN | | **Pn** | **15 28 58.6** | **+0.6** |
| **AKASG** | **Malin Array Be** | **16.51** | **12** | Pn | | **Pn** | **15 32 17.6** | **-0.1** |
| | comp=E,0.4nm,0.3s,baz=204,slow=9.8,SNR=4.1 | | | | | | | |
| **BELG** | **Belogornoye** | **24.46** | **36** | P | | **P** | **15 33 43.1** | **-1.5** |
| | comp=E,5.0nm,0.5s,baz=160,slow=22,SNR=2.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.46** | **229** | P | | **P** | **15 34 30.8** | **+0.8** |
| | comp=E,0.2nm,0.4s,baz=31,slow=8.3,SNR=1.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.15** | **51** | P | | **P** | **15 36 17.6** | **-0.5** |
| | comp=E,61nm,0.8s,baz=269,slow=8.3,SNR=1.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.81** | **56** | P | | **P** | **15 36 38.5** | **-1.2** |
| | comp=E,0.3nm,0.5s,baz=276,slow=7.9,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.02** | **46** | P | | **P** | **15 36 46.7** | **-2.4** |
| | comp=E,0.4nm,0.4s,baz=256,slow=7.9,SNR=3.8 | | | | | | | |

*EAF **16** 15:44:30.9±2.7, 25.°91S×29.°84E, h10km, MD3.6*
**BUL 16 15:44:31.2±1.3, 25.°94S×29.°81E, h10km, MD3.7, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.17** | **100** | *i* P | | Pn | 15 45 07.5 | +0.2 |
| CNG | | | | *i* S | | Sn | 15 45 32.7 | -1.5 |
| **CNG** | **Changalane** | **2.17** | **100** | *i* P | | Pn | 15 45 07.5 | +0.2 |
| CNG | | | | *i* S | | Sn | 15 45 32.7 | -1.5 |
| **MOPA** | **Mopani** | **2.81** | **31** | *i* P | | Pn | 15 45 15.1 | -1.1 |
| MOPA | | | | *e*S | | Sn | 15 45 43.9 | -6.3 |
| **MOPA** | **Mopani** | **2.81** | **31** | *i* P | | Pn | 15 45 15.1 | -1.1 |
| MOPA | | | | *e*S | | Sn | 15 45 43.9 | -6.3 |
| **MSNA** | **Messina** | **3.59** | **3** | *i* P | | Pn | 15 45 27.1 | +0.1 |
| MSNA | | | | *i* S | | Sn | 15 46 06.7 | -2.7 |
| **MSNA** | **Messina** | **3.59** | **3** | *i* P | | Pn | 15 45 27.1 | +0.1 |
| MSNA | | | | *i* S | | Sn | 15 46 06.7 | -2.7 |
| **BOSA** | **Boshof** | **4.85** | **236** | *i* P | | Pn | 15 45 43.6 | -0.8 |
| BOSA | | | | *i* S | | Sn | 15 46 36.3 | -4.4 |
| **BOSA** | **Boshof** | **4.85** | **236** | *i* P | | Pn | 15 45 43.6 | -0.8 |
| BOSA | | | | *i* S | | Sn | 15 46 36.3 | -4.4 |
| **MATP** | **Matopo** | **5.62** | **347** | *e*P | | Pn | 15 45 54.8 | -0.3 |
| MATP | | | | *i* S | | Sn | 15 46 54.6 | -5.2 |
| **MATP** | **Matopo** | **5.62** | **347** | *e*P | | Pn | 15 45 54.8 | -0.3 |
| MATP | | | | *i* S | | Sn | 15 46 54.6 | -5.2 |

*NEIC **16** 15:49:34.9±1.7, 30.°44S±0.°04×72.°05W±0.°09, h18km±8km, mb4.2/1, ML3.5(GUC), Error ellipse: s-maj=12.9km s-min=2.6km az=114.0*
*GUC **16** 15:49:34.5±0.7, 30.°49S×72.°05W, h31km±3km, ML3.5*
**ISC 16 15:49:31.5±2.4, 30.°49S±0.°03×72.°20W±0.°07, h3km±15km, n36, σ1s62/49, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.52** | **111** | | | **Pb** | **15 49 44.0** | **+0.7** |
| **CO06** | **Fray Jorge** | **0.52** | **111** | *e*P | | **Pb** | **15 49 43.9** | **+0.7** |
| CO06 | | | | *e*S | | **Sb** | **15 49 50.5** | **-0.7** |
| **CO05** | **La Serena** | **1.01** | **56** | | | **Pb** | **15 49 51.4** | **-0.2** |
| **CO05** | **La Serena** | **1.01** | **56** | *e*P | | **Pb** | **15 49 51.8** | **+0.2** |
| CO05 | | | | *e*S | | **Sg** | **15 50 04.5** | **+0.6** |
| CO05 | | | | IAML | | | 15 50 07.5 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **CO02** | **Combarbal** | **1.25** | **125** | | | **Pn** | **15 49 56.1** | **+0.1** |
| **CO02** | **Combarbal** | **1.25** | **125** | *e*P | | **Pn** | **15 49 56.3** | **+0.2** |
| CO02 | | | | *e*S | | **Sg** | **15 50 12.5** | **+0.8** |
| CO02 | | | | IAML | | | 15 50 16.1 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.25** | **76** | | | **Pn** | **15 49 55.6** | **-0.6** |
| **GO04** | **Tololo Observa** | **1.25** | **76** | *e*P | | **Pn** | **15 49 55.8** | **-0.4** |
| GO04 | | | | *e*S | | **Sb** | **15 50 12.6** | **0.0** |
| GO04 | | | | IAML | | | 15 50 18.3 | |
| | comp=N,4μm,0.5s | | | | | | | |
| **CO03** | **El Pedregal** | **1.34** | **105** | | | **Pn** | **15 49 57.1** | **-0.2** |
| **CO03** | **El Pedregal** | **1.34** | **105** | *e*P | | **Pn** | **15 49 57.3** | **0.0** |
| CO03 | | | | *e*S | | **Sb** | **15 50 14.5** | **-0.6** |
| CO03 | | | | IAML | | | 15 50 20.0 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **LCO** | **Las Campanas** | **1.97** | **42** | *e*P | | **Pn** | **15 50 06.3** | **+0.3** |
| LCO | | | | *e*S | | **Sn** | **15 50 30.0** | **-1.4** |
| **VA06** | **Catapilco** | **2.20** | **160** | | | **Pn** | **15 50 10.2** | **+1.3** |
| **VA06** | **Catapilco** | **2.20** | **160** | *e*P | | **Pn** | **15 50 10.4** | **+1.4** |
| VA06 | | | | *e*S | | **Sn** | **15 50 36.9** | **+0.2** |
| VA06 | | | | IAML | | | 15 50 56.4 | |
| | comp=E,330nm,0.5s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.48** | **24** | Pn | | **Pn** | **15 50 12.2** | **-0.6** |
| **VA01** | **Torpederas** | **2.57** | **170** | Pn | | **Pb** | **15 50 17.6** | **-0.5** |
| **VA03** | **San Esteban** | **2.67** | **149** | | | **Pn** | **15 50 17.2** | **+1.7** |
| **VA03** | **San Esteban** | **2.67** | **149** | *e*P | | **Pn** | **15 50 17.8** | **+2.3** |
| VA03 | | | | *e*S | | **Sb** | **15 50 50.7** | **-2.5** |
| VA03 | | | | IAML | | | 15 51 08.7 | |
| | comp=N,258nm,0.6s | | | | | | | |
| **ROCH** | **El Roble** | **2.67** | **158** | *e*P | | **Pb** | **15 50 17.8** | **-2.3** |
| ROCH | | | | *e*P | | **Pn** | **15 50 16.2** | **+0.5** |
| ROCH | | | | *e*S | | **Sn** | **15 50 47.5** | **-1.1** |
| ROCH | | | | *e*S | | **Sb** | **15 50 48.5** | **-4.9** |
| ROCH | | | | IAML | | | 15 51 04.6 | |
| | comp=N,366nm,0.7s | | | | | | | |
| ROCH | | | | IAML | | | 15 51 06.2 | |
| | comp=N,218nm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **2.67** | **158** | | | **Pn** | **15 50 16.0** | **+0.3** |
| **MT02** | **Curacav** | **2.90** | **162** | | | **Pn** | **15 50 19.7** | **+1.0** |
| **MT02** | **Curacav** | **2.90** | **162** | *e*P | | **Pb** | **15 50 22.0** | **-2.0** |
| MT02 | | | | *e*S | | **Sb** | **15 50 56.8** | **-3.0** |
| **PEL** | **Peldehue** | **2.94** | **154** | | | **Pn** | **15 50 19.7** | **+0.5** |
| **PEL** | **Peldehue** | **2.94** | **154** | *e*P | | **Pn** | **15 50 21.6** | **+2.4** |
| PEL | | | | *e*S | | **Sn** | **15 50 55.9** | **+0.8** |
| PEL | | | | IAML | | | 15 51 16.4 | |
| | comp=E,152nm,0.7s | | | | | | | |
| **MT05** | **Renca** | **3.15** | **157** | Pn | | **Pn** | **15 50 24.6** | **+2.5** |
| **GO03** | **Copiap** | **3.36** | **31** | Pn | | **Pn** | **15 50 25.1** | **+0.1** |
| **MT09** | **Talagante** | **3.43** | **163** | | | **Pn** | **15 50 28.2** | **+2.1** |
| **MT09** | **Talagante** | **3.43** | **163** | *e*P | | **Pn** | **15 50 28.5** | **+2.5** |
| MT09 | | | | IAML | | | 15 51 38.5 | |
| | comp=N,85nm,0.4s | | | | | | | |
| **MT01** | **Popeta** | **3.46** | **167** | Pn | | **Pn** | **15 50 27.9** | **+1.6** |
| **BO04** | **La Punta** | **3.74** | **159** | | | **Pn** | **15 50 31.6** | **+1.5** |
| **LMEL** | **Las Melosas** | **3.75** | **154** | | | **Pn** | **15 50 30.4** | **-0.1** |
| **BO01** | **Tunca** | **4.00** | **167** | Pn | | **Pn** | **15 50 36.0** | **+2.2** |
| **BO02** | **Sierra Bellavi** | **4.45** | **165** | Pn | | **Pn** | **15 50 42.9** | **+2.9** |
| **GO05** | **Huala** | **4.51** | **177** | Pn | | **Pn** | **15 50 41.1** | **+0.3** |
| **AC02** | **Maricunga** | **4.53** | **37** | Pn | | **Pn** | **15 50 41.9** | **+0.4** |
| **BDFB** | **Brasilia** | **26.63** | **62** | P | | **P** | **15 55 10.9** | **-0.8** |
| BDFB | | | | IAmb | | IAmb | 15 55 38.0 | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.73** | **180** | P | | **P** | **15 59 40.0** | **+2.5** |

**IDC 16 16:14:33.2±3.6, 27.°62N×85.°22E, h0km, mb3.2/2, mb1 3.2/4, mb1mx3.1/44, mbtmp3.1/4, ML3.5/2, Error ellipse: s-maj=102.5km s-min=32.4km az=72.0, Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **15.57** | **123** | Pn | | Pn | 16 18 16.2 | +2.1 |
| | 0.1nm,0.3s,baz=303,slow=12,SNR=2.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **19.28** | **354** | P | | Pn | 16 19 00.3 | 0.0 |
| | 0.1nm,0.3s,baz=175,slow=11,SNR=6.0 | | | | | | | |
| **SONM** | **Songino Array** | **26.07** | **34** | P | | P | 16 20 07.9 | -0.6 |
| | 0.2nm,0.5s,baz=218,slow=9.1,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **69.33** | **133** | P | | P | 16 25 42.4 | -0.3 |
| | 0.2nm,0.7s,baz=313,slow=6.2,SNR=1.7 | | | | | | | |

*PRE **16** 16:16:19.2±1.1, 26.°94S×26.°77E, h2km, ML2.7*
*EAF **16** 16:16:23.8±0.8, 27.°03S×26.°88E, h10km, MD3.7*
**ISC 16 16:16:21.2±1.4, 26.°94S±0.°04×26.°82E±0.°03, h11km±10km, n20, σ1s62/40, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PRYS** | **Parys** | **0.48** | **88** | *e*P | | **Pg** | **16 16 29.8** | **-0.8** |
| PRYS | | | | *e*S | | **Sg** | **16 16 37.5** | **+0.4** |
| PRYS | | | | IAML | | | 16 16 41.9 | |
| | comp=Z,291nm,0.7s | | | | | | | |
| **KSR** | **Koster** | **1.09** | **4** | *e*P | | **Pb** | **16 16 41.0** | **-1.0** |
| KSR | | | | *e*S | | **Sb** | **16 16 55.1** | **-1.2** |
| KSR | | | | IAML | | | 16 17 00.8 | |
| | comp=Z,708nm,0.1s | | | | | | | |
| **SWZ** | **Schweizer** | **1.35** | **259** | *e*P | | **Pn** | **16 16 45.0** | **-1.0** |
| SWZ | | | | *e*S | | **Sn** | **16 17 02.1** | **-1.9** |
| SWZ | | | | IAML | | | 16 17 08.1 | |
| | comp=Z,129nm,0.3s | | | | | | | |
| **SLR** | **Silverton** | **1.78** | **48** | *e*P | | **Pn** | **16 16 52.9** | **+1.0** |
| SLR | | | | *e*S | | **Sb** | **16 17 16.4** | **+0.2** |
| SLR | | | | IAML | | | 16 17 19.6 | |
| | comp=Z,138nm,0.5s | | | | | | | |
| **BOSA** | **Boshof** | **2.17** | **219** | *i* P | | **Pn** | **16 16 59.4** | **+2.1** |
| BOSA | | | | *i* S | | **Sn** | **16 17 25.1** | **+0.9** |
| **BOSA** | **Boshof** | **2.17** | **219** | *i* P | | **Pn** | **16 16 59.4** | **+2.1** |
| BOSA | | | | *i* S | | **Sn** | **16 17 25.1** | **+0.9** |
| **LBTB** | **Lobatse** | **2.21** | **330** | *e*P | | **Pb** | **16 17 01.4** | **+0.2** |
| LBTB | | | | *e*S | | **Sb** | **16 17 29.9** | **+1.3** |
| **LBTB** | **Lobatse** | **2.21** | **330** | *e*P | | **Pb** | **16 17 01.4** | **+0.2** |
| LBTB | | | | *e*S | | **Sb** | **16 17 29.9** | **+1.3** |
| **NWCL** | **Newcastle** | **2.85** | **107** | *e*P | | **Pn** | **16 17 07.0** | **+0.3** |
| NWCL | | | | *e*S | | **Sn** | **16 17 41.8** | **+0.8** |
| NWCL | | | | IAML | | | 16 17 51.9 | |
| | comp=Z,44nm,0.4s | | | | | | | |
| **POGA** | **Pongola** | **4.38** | **96** | *e*P | | **Pn** | **16 17 28.3** | **+0.7** |
| POGA | | | | *e*S | | **Sn** | **16 18 18.0** | **-0.5** |
| POGA | | | | IAML | | | 16 18 36.3 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **CNG** | **Changalane** | **4.85** | **84** | *i* P | | **Pn** | **16 17 36.3** | **+2.3** |
| CNG | | | | *e*S | | **Sn** | **16 18 28.2** | **-2.0** |
| **CNG** | **Changalane** | **4.85** | **84** | *i* P | | **Pn** | **16 17 36.3** | **+2.3** |
| CNG | | | | *e*S | | **Sn** | **16 18 28.2** | **-2.0** |
| **UPI** | **Upington** | **5.13** | **253** | *e*P | | **Pn** | **16 17 37.6** | **-0.5** |
| UPI | | | | *e*S | | **Sn** | **16 18 34.3** | **-3.1** |
| UPI | | | | IAML | | | 16 18 43.9 | |
| | comp=Z,13nm,3.4s | | | | | | | |
| **MOPA** | **Mopani** | **5.37** | **52** | *e*P | | **Pn** | **16 17 41.3** | **+0.1** |
| MOPA | | | | *e*S | | **Sn** | **16 18 41.3** | **-1.7** |
| MOPA | | | | IAML | | | 16 18 44.3 | |
| | comp=Z,5.5nm,1.0s | | | | | | | |
| **MOPA** | **Mopani** | **5.37** | **52** | *e*P | | **Pn** | **16 17 43.3** | **+2.1** |
| MOPA | | | | *i* S | | **Sn** | **16 18 41.5** | **-1.5** |
| **MOPA** | **Mopani** | **5.37** | **52** | *e*P | | **Pn** | **16 17 43.3** | **+2.1** |
| MOPA | | | | *i* S | | **Sn** | **16 18 41.5** | **-1.5** |
| **MSNA** | **Messina** | **5.42** | **33** | *e*P | | **Pn** | **16 17 44.8** | **+2.8** |
| MSNA | | | | *e*S | | **Sn** | **16 18 43.6** | **-0.9** |
| **MSNA** | **Messina** | **5.42** | **33** | *e*P | | **Pn** | **16 17 44.8** | **+2.8** |
| MSNA | | | | *e*S | | **Sn** | **16 18 43.6** | **-0.9** |
| **MATP** | **Matopo** | **6.67** | **14** | *e*P | | **Pn** | **16 18 01.2** | **+2.1** |
| MATP | | | | *e*S | | **Sn** | **16 19 14.4** | **-0.7** |
| **MATP** | **Matopo** | **6.67** | **14** | *e*P | | **Pn** | **16 18 01.2** | **+2.1** |
| MATP | | | | *e*S | | **Sn** | **16 19 14.4** | **-0.7** |

*NEIC **16** 16:24:20.9±1.5, 24.°4S±0.°1×179.°5W±0.°1, h490km±12km, mb4.5/26, Error ellipse: s-maj=19.6km s-min=15.1km az=108.0*
*IDC **16** 16:24:22.0±1.9, 24.°38S×179.°74W, h492km±22km, mb3.1/4, mb1 3.4/8, mb1mx3.0/32, mbtmp4.3/8, Error ellipse: s-maj=27.9km s-min=19.5km az=103.0*
**ISC 16 16:24:21.1±0.6, 24.°31S±0.°06×179.°60W±0.°10, h490km, n61, σ1s64/67, mb4.2/14, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **5.15** | **163** | P | | **P** | **16 25 46.2** | **-2.6** |
| **GLKZ** | **Green Lake** | **5.16** | **163** | P | | **P** | **16 25 51.6** | **+2.7** |
| GLKZ | | | | S | | **S** | **16 26 57.9** | **-2.7** |
| **MSVF** | **Nonsavu** | **6.90** | **341** | P | | **P** | **16 26 07.5** | **+1.4** |
| | 5.6nm,0.3s,baz=151,slow=8.8,SNR=19 | | | | | | | |
| **PINNC** | **Pines Island,** | **12.01** | **275** | P | | **P** | **16 27 02.2** | **+2.4** |
| **OUENC** | **Ouen Island, N** | **12.60** | **276** | P | | **P** | **16 27 08.1** | **+2.0** |
| **AFI** | **Afiamalu** | **12.71** | **37** | P | | **P** | **16 27 08.5** | **+1.1** |
| | 3.6nm,0.3s,baz=260,slow=11,SNR=1.8 | | | | | | | |
| **DZM** | **Mont Dzumac** | **13.03** | **277** | P | | **P** | **16 27 12.2** | **+1.4** |
| | 0.5nm,0.3s,baz=79,slow=19,SNR=8.9 | | | | | | | |
| **TWGZ** | **Tauwhareparae** | **13.98** | **188** | P | | **P** | **16 27 23.6** | **+3.0** |
| **URZ** | **Urewera** | **14.19** | **191** | P | | **P** | **16 27 21.6** | **-1.1** |
| | 2.6nm,0.3s,baz=70,slow=4.2,SNR=14 | | | | | | | |
| URZ | | | | S | | **S** | **16 29 52.0** | **-0.5** |
| | 0.2nm,0.3s,baz=29,slow=17,SNR=1.3 | | | | | | | |
| **URZ** | **Urewera** | **14.19** | **191** | P | | **P** | **16 27 23.4** | **+0.7** |
| URZ | | | | S | | **S** | **16 29 54.3** | **+1.7** |
| **MWZ** | **Matawai** | **14.20** | **189** | P | | **P** | **16 27 25.5** | **+2.6** |
| MWZ | | | | S | | **S** | **16 29 56.7** | **+3.9** |
| **RAGZ** | **Rawiri** | **14.37** | **189** | P | | **P** | **16 27 23.3** | **-1.4** |
| **MTHZ** | **Maungataniwha** | **14.81** | **191** | P | | **P** | **16 27 30.6** | **+1.2** |
| MTHZ | | | | S | | **S** | **16 30 07.5** | **+2.8** |
| **BKZ** | **Black Stump Fm** | **15.18** | **192** | P | | **P** | **16 27 34.0** | **+0.8** |
| BKZ | | | | S | | **S** | **16 30 08.0** | **-3.7** |
| **SANVU** | **Saraoutou** | **15.21** | **303** | P | | **P** | **16 27 33.3** | **-0.5** |
| SANVU | | | | IAmb | | IAmb | 16 27 40.9 | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **TMVZ** | **Te Maari** | **15.29** | **194** | P | | **P** | **16 27 35.9** | **+1.4** |
| **SNVZ** | **South Ngauruho** | **15.37** | **194** | P | | **P** | **16 27 37.0** | **+1.6** |
| **WNVZ** | **Wahianoa** | **15.52** | **194** | P | | **P** | **16 27 37.6** | **+0.7** |
| **VRZ** | **Vera Road** | **15.53** | **197** | P | | **P** | **16 27 40.9** | **+4.1** |
| **BHHZ** | **Black Hill Sta** | **15.57** | **193** | P | | **P** | **16 27 35.0** | **-2.4** |
| BHHZ | | | | S | | **S** | **16 30 15.9** | **-3.5** |
| **FUNA** | **Funafuti** | **15.73** | **356** | P | | **P** | **16 27 38.6** | **-0.7** |
| **ANWZ** | **Angora Road** | **16.44** | **191** | P | | **P** | **16 27 47.1** | **+0.7** |
| **BFZ** | **Birch Farm** | **16.70** | **191** | P | | **P** | **16 27 47.9** | **-1.1** |
| **BFZ** | **Birch Farm** | **16.70** | **191** | P | | **P** | **16 27 48.1** | **-1.0** |
| **MRZ** | **Mangatainoka R** | **16.80** | **193** | P | | **P** | **16 27 49.4** | **-0.7** |
| **SNZO** | **South Karori** | **17.61** | **194** | P | | **P** | **16 27 57.5** | **-0.6** |
| **BHW** | **Baring Head** | **17.67** | **194** | P | | **P** | **16 27 58.0** | **-0.6** |
| **PLWZ** | **Palliser** | **17.74** | **193** | P | | **P** | **16 27 59.5** | **+0.1** |
| **QRZ** | **Quartz Range** | **17.74** | **200** | P | | **P** | **16 27 59.2** | **-0.2** |
| **TUWZ** | **Tuamarina** | **17.91** | **196** | P | | **P** | **16 28 00.5** | **-0.4** |
| **THZ** | **Tophouse** | **18.49** | **198** | P | | **P** | **16 28 05.7** | **-0.7** |
| THZ | | | | IAmb | | IAmb | 16 28 19.3 | |
| | comp=Z,46nm,1.5s | | | | | | | |
| **LTZ** | **Lake Taylor** | **19.61** | **198** | P | | **P** | **16 28 15.4** | **-1.1** |
| LTZ | | | | IAmb | | IAmb | 16 28 16.2 | |
| | comp=Z,41nm,1.4s | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.82** | **199** | P | | **P** | **16 28 27.7** | **+0.1** |
| | comp=Z,7.5nm,0.5s,baz=19,slow=3.7,SNR=7.1 | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **23.77** | **202** | P | | **P** | **16 28 53.0** | **-1.0** |
| WHZ | | | | IAmb | | IAmb | 16 29 10.0 | |
| | comp=Z,37nm,1.4s | | | | | | | |
| **CAN** | **Canberra** | **29.26** | **241** | P | | **P** | **16 29 43.2** | **+0.5** |
| CAN | | | | IAmb | | IAmb | 16 29 50.9 | |
| | comp=Z,70nm,1.5s | | | | | | | |
| **CTAO** | **Charters Tower** | **31.84** | **271** | P | | **P** | **16 30 05.3** | **+0.2** |
| CTAO | | | | IAmb | | IAmb | 16 30 05.8 | |
| | comp=Z,7.1nm,0.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **34.91** | **249** | P | | **P** | **16 30 30.7** | **-0.2** |
| | comp=Z,2.7nm,0.9s,baz=80,slow=6.1,SNR=3.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.91** | **249** | IAmb | | IAmb | 16 30 31.8 | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.62** | **247** | P | | **P** | **16 31 08.7** | **-1.0** |
| BBOO | | | | IAmb | | IAmb | 16 31 19.6 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **AS31** | **Alice Springs** | **42.33** | **261** | P | | **P** | **16 31 30.5** | **-1.0** |
| **ASAR** | **Alice Springs** | **42.33** | **261** | P | | **P** | **16 31 30.9** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=96,slow=6.9,SNR=25 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.33** | **261** | P | | **P** | **16 31 30.3** | **-1.2** |
| **WR0** | **Warramunga Arr** | **42.56** | **266** | P | | **P** | **16 31 32.1** | **-1.1** |
| WR0 | | | | IAmb | | IAmb | 16 31 37.9 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **42.73** | **266** | P | | **P** | **16 31 33.5** | **-1.1** |
| **WB0** | **Warramunga Arr** | **42.74** | **267** | P | | **P** | **16 31 33.6** | **-1.1** |
| WB0 | | | | IAmb | | IAmb | 16 31 53.7 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.74** | **266** | P | | **P** | **16 31 33.6** | **-1.1** |
| | comp=Z,1.0nm,0.4s,baz=97,slow=8.3,SNR=34 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.74** | **266** | P | | **P** | **16 31 33.6** | **-1.1** |
| **WAKE** | **Wake Island** | **45.35** | **342** | P | | **P** | **16 31 54.5** | **-0.2** |
| **FORT** | **Forrest** | **46.51** | **250** | P | | **P** | **16 32 02.5** | **-1.2** |
| FORT | | | | IAmb | | IAmb | 16 32 20.8 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| **MTN** | **Manton Dam** | **47.85** | **275** | P | | **P** | **16 32 12.6** | **-1.4** |
| MTN | | | | IAmb | | IAmb | 16 32 17.1 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **KNRA** | **Kununurra** | **49.05** | **270** | P | | **P** | **16 32 22.4** | **-0.6** |
| **OBL** | **Observatory Le** | **49.50** | **31** | P | | **P** | **16 32 24.8** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **51.16** | **266** | P | | **P** | **16 32 38.4** | **-0.1** |
| **SOEI** | **Soe** | **55.24** | **275** | P | | **P** | **16 33 05.8** | **-2.0** |
| SOEI | | | | IAmb | | IAmb | 16 33 15.7 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **MBWA** | **Marble Bar** | **55.66** | **260** | P | | **P** | **16 33 09.6** | **-0.9** |
| MBWA | | | | IAmb | | IAmb | 16 33 36.6 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **MORW** | **Morawa** | **57.08** | **250** | P | | **P** | **16 33 19.1** | **-1.1** |
| **QSPA** | **South Pole Qui** | **65.78** | **180** | P | | **P** | **16 34 18.5** | **+1.7** |
| QSPA | | | | IAmb | | IAmb | 16 34 21.9 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **112.70** | **312** | PKiKP | | **PKiKP** | **16 42 01.4** | **0.0** |
| | comp=Z,0.1nm,0.4s,baz=107,slow=1.1,SNR=1.3 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.36** | **348** | PKP | | **PKiKP** | **16 42 39.9** | **+0.5** |
| | comp=Z,8.3nm,1.1s,baz=35,slow=2.0,SNR=6.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.51** | **327** | PKPbc | | **PKPbc** | **16 43 04.0** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=45,slow=4.2,SNR=3.5 | | | | | | | |
| **CLL** | **Collm** | **151.35** | **343** | *e*PKPbc | | **PKiKP** | **16 43 20.0** | **+1.1** |

*IDC **16** 16:36:19.7±0.8, 22.°90N×120.°73E, h0km, mb3.5/10, mb1 3.7/10, mb1mx3.6/44, mbtmp3.5/10, MS2.9/4, Ms1 3.0/4, ms1mx2.6/68, Error ellipse: s-maj=36.8km s-min=17.2km az=68.0*
*TAP **16** 16:36:20.9, 23.°00N×120.°89E, h4km, ML4.1, C*
*JMA **16** 16:36:24.5±0.3, 23.°16N×121.°18E, h0km, M3.5*
*NIED **16** 16:36:24.5, 23.°16N×121.°18E, h0km, MW3.9, Moment Tensor Solution. s2 Moment tensor: Scale 10^14Nm; Mrr-6.28; Mθθ3.42; Mφφ2.86; Mrθ1.16; Mθφ-2.89; Mφr-3.45; Fault plane solution: M0 7.14000×10^14 NP1: φs326.00000°, δ60.00000°, λ-77.00000°. NP2: φs121.00000°, δ32.00000°, λ-112.00000°.*
**ISC 16 16:36:21.5±0.8, 23.°00N±0.°01×120.°90E±0.°01, h10km±5km, n163, σ1s11/239, mb3.5/9, MS2.8/3, 27C-5D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.21** | **326** | ⇑*i*P | | **Pg** | **16 36 25.5** | **-0.3** |
| | baz=328 | | | | | | | |
| STYH | | | | *i* S | | **Sg** | **16 36 28.8** | **0.0** |
| | baz=328 | | | | | | | |
| **ELDTW** | **Lidau** | **0.22** | **29** | ⇑*i*P | | **Pg** | **16 36 25.5** | **-0.6** |
| | baz=34 | | | | | | | |
| ELDTW | | | | *i* S | | **Sg** | **16 36 28.7** | **-0.5** |
| | baz=34 | | | | | | | |
| **LONT** | **Longtian** | **0.23** | **114** | P | | **Pg** | **16 36 26.6** | **+0.3** |
| | baz=114 | | | | | | | |
| LONT | | | | S | | **Sg** | **16 36 30.0** | **+0.6** |
| | baz=114 | | | | | | | |
| **SLGT** | **Liugui** | **0.24** | **269** | ⇓*i*P | | **Pg** | **16 36 25.1** | **-1.3** |
| | baz=268 | | | | | | | |
| SLGT | | | | *i* S | | **Sg** | **16 36 28.3** | **-1.3** |
| | baz=268 | | | | | | | |
| **TWG** | **Pinlang** | **0.24** | **138** | ⇓*i*P | | **Pg** | **16 36 26.7** | **+0.4** |
| | baz=138 | | | | | | | |
| TWG | | | | *i* S | | **Sg** | **16 36 30.5** | **+0.9** |
| | baz=138 | | | | | | | |
| **TWGBT** | **Beinan** | **0.24** | **138** | ⇓*i*P | | **Pg** |

baz=60
**YULB Yu-li** 0.54 43 ⇑*i*P Pg 16 36 31.1 -0.8
baz=57
**SNJT Kaohsiung City** 0.58 245 *e*P Pb 16 36 34.8 +1.1
baz=236
**SSPT Xinbi** 0.60 211 ⇑*i*P Pb 16 36 33.3 -0.8
baz=207
SSPT S Sb 16 36 42.1 -0.6
baz=207
**EAST Anshuo** 0.61 185 ⇑*i*P Pg 16 36 33.4 0.0
baz=182
EAST *i* S Sg 16 36 41.5 0.0
baz=182
**LDUT Ludao** 0.61 122 *e*P Pb 16 36 34.0 -0.4
baz=122
LDUT *e*S Sb 16 36 44.2 +1.1
baz=122
**TAI1 Yung-k'ang** 0.62 274 *e*P Pn 16 36 35.9 -0.5
baz=273
**CHN5 Tsauling** 0.63 341 P Pb 16 36 33.9 -0.8
baz=342
CHN5 S Sb 16 36 42.9 -0.8
baz=342
**EHY Hungye** 0.64 37 ⇑*i*P Pg 16 36 33.1 -0.8
baz=39
**TAW Tawu** 0.64 181 P Pg 16 36 33.9 0.0
baz=178
TAW *e*S Sb 16 36 43.7 -0.1
baz=178
**TAWH Dawu Township** 0.66 181 P Pg 16 36 34.1 -0.1
baz=180
TAWH *e*S Sb 16 36 44.3 +0.1
baz=180
**CHN2 Minshiung** 0.66 324 *e*P Pb 16 36 35.3 +0.1
baz=324
CHN2 *e*S Sb 16 36 46.3 +1.9
baz=324
**CHY Chiayi** 0.66 319 *e*P Pb 16 36 35.0 -0.2
baz=320
CHY *e*S Sb 16 36 45.3 +0.7
baz=320
**SCLT Jiali** 0.68 285 *e*P Pb 16 36 36.1 +0.7
baz=303
**SCZT Fangliau** 0.68 203 ⇑*i*P Pg 16 36 34.2 -0.4
baz=201
**ICHU Yijhu** 0.68 302 *e*P Pb 16 36 36.2 +0.8
baz=302
ICHU *e*S Sb 16 36 46.8 +1.8
baz=302
**HGSD Ruisui** 0.69 44 ⇑P Pg 16 36 34.9 +0.1
baz=39
HGSD S Sb 16 36 45.2 0.0
baz=39
**KAU Kaohsiung** 0.70 232 *e*P Pn 16 36 37.5 +0.1
baz=251
**WDLH Douliu** 0.76 334 *e*P Pb 16 36 37.7 +0.8
baz=335
WDLH *e*S Sn 16 36 50.4 +0.4
baz=335
**VWDT VWDT** 0.78 16 *e*P Pg 16 36 35.4 -1.2
baz=9.0
**SLIU Shizi** 0.78 187 *e*P Pg 16 36 36.3 -0.4
baz=186
**SSLB Suanglung** 0.79 3 *e*P Pg 16 36 35.6 -1.1
baz=5.0
SSLB *e*S Sb 16 36 49.3 +1.2
baz=5.0
**WLCH Liuqiu** 0.81 217 *e*P Pn 16 36 39.6 +0.7
baz=218
**WSL Shuilin Townsh** 0.81 310 *e*P Pb 16 36 38.2 +0.4
baz=311
**TWP Hsiaoliuchiu** 0.82 218 *e*P Pn 16 36 40.8 +1.6
baz=218
**WTK Tuku** 0.83 326 *e*P Pb 16 36 38.6 +0.4
baz=326
WTK *e*S Sn 16 36 52.3 +0.6
baz=326
**WJS Zhushan** 0.83 349 *e*P Pb 16 36 38.3 +0.1
baz=360
WJS *e*S Sn 16 36 51.8 0.0
baz=360
**SMLT Sun Moon Lake** 0.88 360 ⇑*i*P Pg 16 36 38.1 -0.5
baz=12
SMLT S Sn 16 36 53.1 +0.1
baz=12
**WSF Szhu** 0.89 316 P Pb 16 36 39.5 +0.4
baz=317
WSF S Sn 16 36 53.0 -0.2
baz=317
**WNT Mingjian** 0.90 347 P Pb 16 36 39.6 +0.4
baz=333
WNT *e*S Sn 16 36 54.1 +0.8
baz=333
**TYC Yuchr** 0.90 357 ⇑*i*P Pg 16 36 38.7 -0.2
baz=7.0
TYC S Sb 16 36 52.7 +1.3
baz=7.0
**WNT1 Nantou City** 0.93 347 *e*P Pn 16 36 40.8 +0.1
baz=349
**ESL Shilin** 0.95 31 ⇑*i*P Pg 16 36 38.7 -1.1
baz=40
ESL *e*S Sg 16 36 51.6 -0.5
baz=40
**SMST Manzhou Townsh** 0.97 184 *e*P Pb 16 36 40.7 +0.2
baz=192
**HEN Hengchun** 1.00 189 *e*P Pb 16 36 41.6 +0.6
baz=187
**WUSB Renai** 1.01 11 *e*P Pg 16 36 39.3 -1.7
baz=3.0
WUSB *e*S Sn 16 36 57.8 +1.6
baz=3.0
**WPL Puli Township** 1.01 3 *i* P Pb 16 36 41.6 +0.4
baz=5.0
**WRL Guolierlin Hig** 1.02 332 *e*P Pb 16 36 41.7 +0.4
baz=333
WRL *e*S Sb 16 36 56.0 +1.2
baz=333
**DPDB Guoxing** 1.03 1 *i* P Pb 16 36 41.8 +0.2
baz=12
**TWK1 Hengchun** 1.05 185 *e*P Pb 16 36 42.0 +0.1
baz=192
**WCS Beigang Elemen** 1.05 0 *e*P Pg 16 36 41.5 -0.3
baz=11
WCS *e*S Sn 16 36 58.6 +1.5
baz=11
**TWKBT Hengchun** 1.06 185 *e*P Pb 16 36 42.1 +0.1
baz=182
TWKBT *e*S Sn 16 36 59.6 +2.4
baz=182
**WWF Wufeng** 1.06 350 *e*P Pn 16 36 43.0 +0.5
baz=351
**CHGB Renai** 1.09 13 *e*P Pg 16 36 40.9 -1.6
baz=15
**TSEB Hengchuen, Pin** 1.09 180 *e*P Pb 16 36 43.0 +0.5
baz=164
TSEB *e*S Sn 16 37 02.2 +4.1
baz=164
**ETM Tongmen** 1.10 29 *i* P Pg 16 36 42.1 -0.6
baz=42
**WCHH Zhanghua** 1.12 344 *e*P Pb 16 36 43.3 +0.3
baz=345
**LAY Lan-yu** 1.13 148 *e*P Pg 16 36 41.2 -2.0
baz=147
**TCU Taichung** 1.16 350 *e*P Pn 16 36 44.9 +1.0
baz=338
TCU *e*S Sn 16 37 01.9 +2.1
baz=338
**HWA Hwalien** 1.17 33 *e*P Pg 16 36 43.3 -0.7
baz=46
**WDGT Dungji** 1.17 283 P Pb 16 36 43.7 -0.2
baz=283
WDGT S Sb 16 37 00.1 +0.9
baz=283
**LYUB Lan-yu** 1.18 147 *e*P Pg 16 36 41.0 -3.1
baz=147
**WHF Hehuan Shan** 1.19 16 *e*P Pg 16 36 44.1 -0.4
baz=19
**TWD Chiawan** 1.25 30 *e*P Pg 16 36 44.8 -0.8
baz=43
TWD *e*S Sb 16 37 02.3 +0.8
baz=43
**TDCB Techi** 1.27 11 *e*P Pg 16 36 45.1 -0.9
baz=13
**TWT Tachien** 1.27 11 *e*P Pb 16 36 45.8 0.0
baz=5.0
TWT *e*S Sn 16 37 05.4 +2.5
baz=5.0
**WHP Taichung City** 1.27 2 *e*P Pn 16 36 46.1 +0.6
baz=2.0
WHP *e*S Sn 16 37 05.5 +2.8
baz=2.0
**FUSS Fushou** 1.28 14 *e*P Pg 16 36 44.4 -1.8
baz=16
**ETLH Xiulin Townshi** 1.31 24 *e*P Pg 16 36 45.7 -1.1
baz=37
ETLH *e*S Sn 16 37 04.7 +0.9
baz=37
**PHUB P'eng-hu** 1.33 293 *e*P Pg 16 36 45.5 -1.5
baz=293
PHUB *e*S Sg 16 37 03.4 -0.9
baz=293
**ETL Fush Village** 1.33 30 *e*P Pg 16 36 45.9 -1.2
baz=47
**NACB Ninganchiao** 1.33 28 *e*P Pg 16 36 45.3 -1.8
baz=29
NACB *e*S Sg 16 37 03.7 -0.7
baz=29
**TWQ1 Liyutan** 1.35 355 *e*P Pb 16 36 47.7 +0.8
baz=355
TWQ1 *e*S Sn 16 37 08.1 +3.6
baz=355
**PNG Penghu** 1.36 295 *e*P Pg 16 36 46.3 -1.4
baz=295
PNG *e*S Sg 16 37 04.4 -0.9
baz=295
**WDJ Dajia District** 1.36 350 *e*P Pb 16 36 48.1 +0.9
baz=340
**VCHM Qimei** 1.37 279 *e*P Pg 16 36 46.5 -1.3
baz=294
**NSY Sanyi** 1.42 355 *e*P Pb 16 36 48.7 +0.6
baz=355
NSY *e*S Sn 16 37 10.2 +4.0
baz=355
**NNSB Datong** 1.49 17 *e*P Pn 16 36 48.8 +0.3
baz=18
NNSB *e*S Sn 16 37 10.0 +1.8
baz=18
**NNS Nan Shan** 1.50 17 P Pn 16 36 48.8 +0.2
baz=16
NNS *e*S Sn 16 37 10.3 +1.9
baz=16
**NMLH Miaoli** 1.54 356 *e*P Pg 16 36 51.4 +0.4
baz=340
**ENA Nanau** 1.62 28 *e*P Pb 16 36 51.6 +0.1
baz=44
**NSTT Nanjuang** 1.63 3 *e*P Pg 16 36 52.4 -0.3
baz=3.0
NSTT *e*S Sg 16 37 15.8 +1.8
baz=3.0
**LATG Datong** 1.63 20 *e*P Pn 16 36 51.1 +0.6
baz=23
**NFF Wufeng Townshi** 1.64 7 *e*P Pb 16 36 52.0 +0.1
baz=6.0
NFF *e*S Sg 16 37 15.4 +1.2
baz=6.0
**LIOB Emei** 1.64 4 *e*P Pg 16 36 53.4 +0.3
baz=3.0
LIOB *e*S Sg 16 37 15.8 +1.4
baz=3.0
**EWUT Wuta** 1.65 29 *e*P Pb 16 36 52.1 0.0
baz=32
**NDT Datong Townshi** 1.69 19 *e*P Pg 16 36 53.5 -0.5
baz=22
**YHNB Yeheng** 1.72 15 *e*P Pn 16 36 52.7 +1.1
baz=13
YHNB *e*S Sg 16 37 17.3 +0.4
baz=13
**NSK Sanguang** 1.72 14 P Pg 16 36 53.6 -0.9
baz=13
NSK *e*S Sg 16 37 17.6 +0.6
baz=13
**ENTT Nioudou** 1.74 20 *e*P Pg 16 36 54.1 -0.9
baz=38
**SBCB Hsinchu** 1.79 2 *e*P Pg 16 36 57.1 +1.2
baz=347
**NDS Dongshan** 1.79 24 *e*P Pb 16 36 54.4 -0.1
baz=42
**TWC Suao** 1.82 28 *e*P Pb 16 36 55.0 0.0
baz=29
TWC *e*S Sb 16 37 18.4 +0.5
baz=29
**TWE Neicheng** 1.85 22 P Pb 16 36 55.6 +0.1
baz=36
TWE S Sg 16 37 22.7 +1.6
baz=36
**NWLT Wulai** 1.85 17 *e*P Pg 16 36 56.1 -1.0
baz=16
NWLT *e*S Sg 16 37 20.0 -1.1
baz=16
**FUSB Fushanzhiwuyua** 1.86 20 *e*P Pb 16 36 55.2 -0.5
baz=33
FUSB *e*S Sg 16 37 21.6 +0.1
baz=33
**ILA Ilan** 1.92 24 *e*P Pb 16 36 56.3 -0.4
baz=40
**NHDH Xindian Distri** 2.04 16 *e*P Pg 16 37 00.1 -0.5
baz=14
NHDH *e*S Sg 16 37 27.5 +0.5
baz=14
**TWA Mucha** 2.07 17 *e*P Pg 16 37 00.5 -0.7
baz=16
TWA *e*S Sg 16 37 28.7 +0.6
baz=16
**TAP Taipei** 2.10 15 *e*P Pg 16 37 01.4 -0.5
baz=355
TAP *e*S Sg 16 37 30.2 +1.0
baz=355
**TIPB Shuangxi** 2.14 23 *e*P Pg 16 37 01.2 -1.3
baz=40
**TWS1 Kuangyinshan** 2.15 13 *e*P Pg 16 37 01.5 -1.2
baz=16
**NWF Wu-fen Shan** 2.21 21 *e*P Pg 16 37 03.3 -0.7
baz=35
NWF *e*S Sg 16 37 31.2 -1.5
baz=35
**YM01 YM01** 2.22 16 *e*P Pg 16 37 03.5 -0.7
baz=2.0
**TWB1 Santiao Chiao** 2.23 26 *e*P Pb 16 37 01.8 -0.2
baz=42
**ANP Anpu** 2.25 14 *e*P Pb 16 37 02.4 0.0
baz=3.0
**SXI1 Grass Mountain** 2.27 23 *e*P Pb 16 37 02.5 -0.1
baz=40
**JYNG Yonagunijimaku** 2.37 52 P Pn 16 37 00.6 +0.2
JYNG S Sn 16 37 27.4 -2.2
**YOJ Yonaguni jima** 2.42 53 P Pn 16 37 03.1 +1.9
YOJ *e*S Sn 16 37 31.3 +0.4
**YOJ Yonaguni jima** 2.42 53 *e*P Pn 16 36 59.1 -2.1
baz=55
**PTMZ Houxiangcun** 2.60 322 *e*P Pn 16 37 04.0 +0.2
baz=325
**KNMB Chin-men Tao** 2.73 303 *e*P Pn 16 37 05.1 -0.3
baz=304
**HATJ Hateruma jima** 2.87 68 P Pn 16 37 08.3 +1.0
HATJ *e*S Sn 16 37 40.8 -1.1
**IRIF Iriomote-Funau** 2.91 62 P Pn 16 37 09.0 +1.0
IRIF *e*S Sn 16 37 42.9 -0.2
**ZPLA Ao Xicun** 3.04 288 *e*P Pn 16 37 09.7 0.0
baz=288
**JKRS Kuro-shima** 3.10 66 P Pn 16 37 12.2 +1.6
JKRS *e*S Sn 16 37 48.1 +0.3
**MATB Ma-tsu** 3.26 345 *e*P Pn 16 37 11.9 -0.8
baz=350
**JIJ Ishigaki jima** 3.27 65 P Pn 16 37 12.9 +0.1
JIJ *e*S Sn 16 37 50.4 -1.4
**AXDP Jialang** 3.28 306 *e*P Pn 16 37 12.9 -0.1
baz=307
**JISG Ishigakijimahi** 3.50 62 P Pn 16 37 16.1 +0.1
JISG S Sn 16 37 53.5 -4.0
**LYJJ Jianjiangzhen** 3.69 344 *e*P Pn 16 37 17.8 -0.8
baz=350
**JTJ Tarama** 3.84 64 P Pn 16 37 23.3 +2.5
JTJ *e*S Sn 16 38 06.5 +0.4
**JIRB Irabujima** 4.31 64 P Pn 16 37 28.7 +1.5
JIRB *e*S Sn 16 38 15.8 -1.8
**JMJ2 Miyako jima3** 4.41 66 P Pn 16 37 30.7 +2.2
JMJ2 *e*S Sn 16 38 19.8 -0.1
**KSRS Korea Array** 15.62 21 LR LR 16 46 48.0
comp=Z,25nm,18.8s,baz=210,slow=40
**MJAR Matsushiro Arr** 20.15 44 P Pn 16 40 58.0 +0.2
1.3nm,0.6s,baz=238,slow=8.4,SNR=1.7
MJAR LR LR 16 48 44.5
comp=Z,50nm,21.1s,baz=236,slow=37
**CMAR Chiang Mai Arr** 21.02 262 LR LR 16 50 36.5
comp=Z,24nm,18.5s,baz=220,slow=41
**SONM Songino Array** 27.36 338 P P 16 42 07.2 +0.2
0.5nm,0.7s,baz=154,slow=7.2,SNR=4.3
**ASAJ Asahikawa** 27.60 35 LR LR 16 53 49.9
comp=Z,46nm,20.6s,baz=144,slow=38
**MKAR Makanchi Array** 39.02 317 P P 16 43 46.4 -1.9
0.2nm,0.6s,baz=110,slow=8.3,SNR=4.3
MKAR PcP PcP 16 45 58.6 +0.1
0.3nm,0.7s,baz=103,slow=3.3,SNR=2.8
**ZALV Zalesovo Beam** 41.10 328 P P 16 44 06.0 +0.5
1.3nm,0.7s,baz=107,slow=7.7,SNR=7.1
**H11N1 WAKE ISLAND Hy** 42.83 85 T T 17 29 34.9
baz=282
**H11N2 WAKE ISLAND Hy** 42.83 85 T T 17 29 38.0
baz=282
**H11N3 WAKE ISLAND Hy** 42.84 85 T T 17 29 41.2
baz=282
**H11S3 WAKE ISLAND Hy** 42.92 87 T T 17 29 44.8
baz=284
**H11S1 WAKE ISLAND Hy** 42.93 87 T T 17 29 43.5
baz=284
**H11S2 WAKE ISLAND Hy** 42.94 87 T T 17 29 48.3
baz=284
**WRA Warramunga Arr** 44.65 162 P P 16 44 32.9 -1.7
0.3nm,0.5s,baz=345,slow=8.8,SNR=6.8
**ASAR Alice Springs** 48.08 164 P P 16 45 00.8 -0.8
0.2nm,0.3s,baz=340,slow=7.0,SNR=13
**CTA Charters Tower** 49.46 148 P P 16 45 13.0 +0.9
0.7nm,0.6s,baz=3.8,slow=9.3,SNR=1.3
**ILAR Eielson Array** 70.38 27 P P 16 47 36.0 +0.5
0.2nm,0.6s,baz=288,slow=5.5,SNR=1.5
**AKASG Malin Array Be** 73.58 318 P P 16 47 54.6 -0.2
0.1nm,0.2s,baz=64,slow=6.7,SNR=1.6
**YKA Yellowknife Ar** 84.16 23 P P 16 48 52.5 -0.3
0.3nm,0.7s,baz=310,slow=5.0,SNR=6.4

**IDC 16 16:39:55.2±22.0, 19°.18S×179°.39W, h692km±212km, mb2.5/4, mb1 2.8/4, mb1mx2.6/31, mbtmp3.7/4, Error ellipse: s-maj=303.6km s-min=53.2km az=132.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **32.34** | **263** | P | | P | 16 45 32.9 | +0.3 |
| | 0.6nm,0.4s,baz=86,slow=14,SNR=1.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.50** | **261** | P | | P | 16 47 02.1 | +0.1 |
| | 0.3nm,0.3s,baz=96,slow=7.6,SNR=8.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.57** | **256** | P | | P | 16 47 01.9 | -0.5 |
| | 0.7nm,0.5s,baz=89,slow=7.8,SNR=10 | | | | | | | |
| ASAR | | | | PcP | | PcP | 16 48 33.4 | 0.0 |
| | 0.1nm,0.5s,baz=105,slow=3.7,SNR=1.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **87.33** | **13** | P | | P | 16 51 31.2 | +0.1 |
| | 0.2nm,0.6s,baz=210,slow=5.2,SNR=1.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **141.24** | **331** | PKP | | PKPdf | 16 58 07.1 | -2.4 |
| | 0.6nm,0.6s,baz=52,slow=4.3,SNR=4.9 | | | | | | | |

*IDC **16** 16:50:43.5±2.3, 30°.78S×71°.20W, h0km, mb3.8/1, mb1 3.8/2, mb1mx3.6/19, mbtmp3.8/2, ML3.5/1, Error ellipse: s-maj=137.4km s-min=72.0km az=130.0*
*GUC **16** 16:50:51.6±0.7, 30°.27S×71°.27W, h59km±3km, ML4.2*
*NEIC **16** 16:50:52.1±1.8, 30°.23S±0°.04×71°.4W±0°.1, h47km±8km, mb4.3/2, ML4.2(GUC), Error ellipse: s-maj=15.0km s-min=5.1km az=85.0*

**ISC 16 16:50:52.0±0.8, 30°.23S±0°.03×71°.30W±0°.06, h51km±7km, n70, σ1s01/79, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.32** | **10** | | | **Pn** | **16 51 01.6** | **+0.3** |
| **CO05** | **La Serena** | **0.32** | **10** | ⇑*i*P | | **Pn** | **16 51 01.8** | **+0.4** |
| CO05 | | | | *i* S | | **Sn** | **16 51 09.0** | **+1.0** |
| CO05 | | | | IAML | | | 16 51 09.4 | |
| | comp=E,25μm,0.1s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.44** | **83** | | | **Pn** | **16 51 03.1** | **+0.2** |
| **GO04** | **Tololo Observa** | **0.44** | **83** | *e*P | | **Pn** | **16 51 02.9** | **0.0** |
| GO04 | | | | *i* S | | **Sn** | **16 51 11.2** | **+0.5** |
| **CO06** | **Fray Jorge** | **0.53** | **213** | | | **Pn** | **16 51 03.5** | **-0.1** |
| **CO06** | **Fray Jorge** | **0.53** | **213** | ⇑*i*P | | **Pn** | **16 51 03.6** | **-0.1** |
| CO06 | | | | *i* S | | **Sn** | **16 51 12.2** | **+0.2** |
| **CO03** | **El Pedregal** | **0.81** | **139** | | | **Pn** | **16 51 06.5** | **-0.7** |
| **CO03** | **El Pedregal** | **0.81** | **139** | ⇓*i*P | | **Pn** | **16 51 06.7** | **-0.6** |
| CO03 | | | | *i* S | | **Sn** | **16 51 17.7** | **-0.7** |
| CO03 | | | | IAML | | | 16 51 18.2 | |
| | comp=N,22μm,0.2s | | | | | | | |
| **CO02** | **Combarbal** | **1.00** | **165** | | | **Pn** | **16 51 09.4** | **-0.6** |
| **CO02** | **Combarbal** | **1.00** | **165** | *e*P | | **Pn** | **16 51 09.3** | **-0.6** |
| CO02 | | | | *i* S | | **Sn** | **16 51 22.6** | **-0.5** |
| CO02 | | | | IAML | | | 16 51 29.1 | |
| | comp=N,8μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **1.32** | **23** | Pn | | **Pn** | **16 51 14.5** | **+0.1** |
| **LCO** | **Las Campanas** | **1.32** | **23** | *e*P | | **Pn** | **16 51 14.4** | **+0.1** |
| LCO | | | | *i* S | | **Sn** | **16 51 31.1** | **0.0** |
| LCO | | | | *i* S | | **Sn** | **16 51 31.3** | **+0.3** |
| **AC04** | **Llanos de Chal** | **2.03** | **6** | Pn | | **Pn** | **16 51 24.7** | **+1.0** |
| **AC04** | **Llanos de Chal** | **2.03** | **6** | *e*P | | **Pn** | **16 51 24.8** | **+1.0** |
| **VA06** | **Catapilco** | **2.32** | **180** | | | **Pn** | **16 51 28.4** | **+0.7** |
| **VA06** | **Catapilco** | **2.32** | **180** | *e*P | | **Pn** | **16 51 28.4** | **+0.7** |
| VA06 | | | | *i* S | | **Sn** | **16 51 55.5** | **+0.4** |
| VA06 | | | | IAML | | | 16 52 05.1 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **VA03** | **San Esteban** | **2.61** | **166** | | | **Pn** | **16 51 32.2** | **+0.4** |
| **VA03** | **San Esteban** | **2.61** | **166** | *e*P | | **Pn** | **16 51 33.2** | **+1.5** |
| VA03 | | | | *i* S | | **Sn** | **16 52 03.9** | **+1.6** |
| VA03 | | | | IAML | | | 16 52 08.3 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **ZON** | **Zonda** | **2.61** | **121** | Pn | | **Pn** | **16 51 32.9** | **+1.1** |
| **ROCH** | **El Roble** | **2.74** | **175** | *e*P | | **Pn** | **16 51 34.5** | **+0.7** |
| ROCH | | | | *e*P | | **Pn** | **16 51 33.4** | **-0.4** |
| ROCH | | | | *i* S | | **Sn** | **16 52 05.1** | **-0.7** |
| ROCH | | | | IAML | | | 16 52 18.8 | |
| | comp=N,981nm,0.3s | | | | | | | |
| **ROC1** | **El Roble** | **2.75** | **175** | | | **Pn** | **16 51 33.3** | **-0.5** |
| **GO03** | **Copiap** | **2.79** | **20** | Pn | | **Pn** | **16 51 34.1** | **-0.1** |
| **GO03** | **Copiap** | **2.79** | **20** | *e*P | | **Pn** | **16 51 35.5** | **+1.3** |
| GO03 | | | | *i* S | | **Sn** | **16 52 08.4** | **+1.7** |
| GO03 | | | | IAML | | | 16 52 19.5 | |
| | comp=N,582nm,0.5s | | | | | | | |
| **VA01** | **Torpederas** | **2.80** | **186** | Pn | | **Pn** | **16 51 33.7** | **-0.5** |
| **VA01** | **Torpederas** | **2.80** | **186** | *e*P | | **Pn** | **16 51 33.8** | **-0.5** |
| VA01 | | | | *i* S | | **Sn** | **16 52 10.8** | **+4.0** |
| VA01 | | | | IAML | | | 16 52 17.4 | |
| | comp=E,496nm,0.8s | | | | | | | |
| **PEL** | **Peldehue** | **2.95** | **170** | | | **Pn** | **16 51 37.3** | **+0.9** |
| **MT02** | **Curacav** | **3.02** | **177** | | | **Pn** | **16 51 37.4** | **+0.1** |
| **MT02** | **Curacav** | **3.02** | **177** | *e*P | | **Pn** | **16 51 37.7** | **+0.3** |
| MT02 | | | | *i* S | | **Sn** | **16 52 11.7** | **-0.7** |
| MT02 | | | | IAML | | | 16 52 26.9 | |
| | comp=E,301nm,0.3s | | | | | | | |
| **MT05** | **Renca** | **3.19** | **171** | | | **Pn** | **16 51 40.0** | **+0.3** |
| **MT05** | **Renca** | **3.19** | **171** | *e*P | | **Pn** | **16 51 41.7** | **+2.0** |
| MT05 | | | | IAML | | | 16 52 37.0 | |
| **VA05** | **Santo Domingo** | **3.43** | **184** | | | **Pn** | **16 51 42.9** | **0.0** |
| **VA05** | **Santo Domingo** | **3.43** | **184** | IAML | | | 16 52 38.2 | |
| | comp=E,743nm,0.3s | | | | | | | |
| **MT09** | **Talagante** | **3.54** | **176** | | | **Pn** | **16 51 44.9** | **+0.3** |
| **MT09** | **Talagante** | **3.54** | **176** | *e*P | | **Pn** | **16 51 45.4** | **+0.8** |
| MT09 | | | | *i* S | | **Sn** | **16 52 26.1** | **+0.8** |
| MT09 | | | | IAML | | | 16 52 41.0 | |
| | comp=N,513nm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **3.62** | **179** | Pn | | **Pn** | **16 51 45.6** | **0.0** |
| **LMEL** | **Las Melosas** | **3.73** | **166** | | | **Pn** | **16 51 48.2** | **+1.1** |
| **LMEL** | **Las Melosas** | **3.73** | **166** | *e*P | | **Pn** | **16 51 49.3** | **+2.1** |
| LMEL | | | | *i* S | | **Sn** | **16 52 33.0** | **+3.1** |
| **BO04** | **La Punta** | **3.79** | **171** | | | **Pn** | **16 51 48.7** | **+0.8** |
| **AC02** | **Maricunga** | **3.88** | **30** | Pn | | **Pn** | **16 51 51.0** | **+1.3** |
| **BO01** | **Tunca** | **4.15** | **178** | | | **Pn** | **16 51 53.4** | **+0.6** |
| **BO02** | **Sierra Bellavi** | **4.57** | **175** | | | **Pn** | **16 51 59.7** | **+1.0** |
| **GO05** | **Huala** | **4.79** | **186** | Pn | | **Pn** | **16 52 00.6** | **-1.1** |
| **PB14** | **IPOC Station P** | **5.64** | **8** | Pn | | **Pn** | **16 52 12.9** | **-0.7** |
| **BI05** | **Punta Hualpn** | **6.69** | **193** | Pn | | **Pn** | **16 52 26.0** | **-1.6** |
| **PB10** | **IPOC Station P** | **6.72** | **6** | Pn | | **Pn** | **16 52 27.9** | **-0.3** |
| **PB15** | **IPOC Station P** | **7.18** | **14** | Pn | | **Pn** | **16 52 33.0** | **-1.6** |
| **H03N1** | **Juan Fernandez** | **7.22** | **242** | T | | T | 16 59 38.3 | |
| | baz=70,slow=72,SNR=658 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.24** | **242** | T | | T | 16 59 41.3 | |
| | baz=70,slow=72,SNR=644 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.24** | **242** | T | | T | 16 59 39.9 | |
| | baz=70,slow=72,SNR=768 | | | | | | | |
| **PB06** | **IPOC Station P** | **7.65** | **12** | Pn | | **Pn** | **16 52 39.7** | **-1.3** |
| **LVC** | **Limon Verde** | **7.89** | **16** | Pn | | **Pn** | **16 52 43.4** | **-1.0** |
| **PB04** | **IPOC Station P** | **7.93** | **8** | Pn | | **Pn** | **16 52 45.2** | **+0.3** |
| **PB03** | **IPOC Station P** | **8.27** | **10** | Pn | | **Pn** | **16 52 49.6** | **+0.1** |
| **PB07** | **IPOC Station P** | **8.56** | **9** | Pn | | **Pn** | **16 52 53.1** | **-0.5** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **8.60** | **13** | Pn | **Pn** | **16 52 53.6** | **-0.5** |
| **LC01** | **Cunco** | **8.66** | **183** | Pn | **Pn** | **16 52 53.7** | **-0.9** |
| **PB02** | **IPOC Station P** | **8.96** | **8** | Pn | **Pn** | **16 53 00.3** | **+1.4** |
| **PB01** | **IPOC Station P** | **9.29** | **11** | Pn | **Pn** | **16 53 03.8** | **+0.4** |
| **ITQB** | **Itaqui** | **12.74** | **91** | Pn | **Pn** | **16 53 50.1** | **-0.3** |
| **SIV** | **San Ignacio** | **17.00** | **36** | P | **P** | **16 54 47.6** | **+0.1** |
| | comp=N,0.2nm,0.3s,baz=235,slow=12,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.34** | **70** | P | **P** | **17 03 08.1** | **-0.7** |
| | comp=N,0.6nm,0.7s,baz=254,slow=5.1,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.34** | **70** | IAmb | IAmb | 17 03 09.2 | |
| | comp=Z,2.7nm,1.4s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.38** | **271** | T | T | 19 28 37.8 | |
| | baz=114,slow=75,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.39** | **272** | T | T | 19 28 38.7 | |
| | baz=114,slow=75,SNR=19 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.39** | **271** | T | T | 19 28 39.1 | |
| | baz=114,slow=75,SNR=15 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **150.68** | **29** | | **PKPbc** | **17 10 37.8** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **150.68** | **29** | PKPbc | **PKPbc** | **17 10 38.0** | **+0.1** |
| | comp=Z,3.2nm,0.5s,baz=301,slow=2.8,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.68** | **29** | | **PKPbc** | **17 10 37.8** | **-0.1** |
| **MKAR** | **Makanchi Array** | **153.71** | **44** | PKPbc | **PKPbc** | **17 10 44.4** | **-0.6** |
| | comp=Z,0.2nm,0.7s,baz=281,slow=3.8,SNR=2.3 | | | | | | |
| MKAR | | | | PKPab | **sPKPdf** | **17 10 58.3** | **+0.1** |
| | comp=Z,0.4nm,1.0s,baz=304,slow=2.6,SNR=1.8 | | | | | | |
| **PZH** | **PanZhiHua** | **172.84** | **120** | PKP | **PKPdf** | **17 10 55.6** | **-0.3** |

**IDC 16 16:51:14.1±2.5, 38.84N×100.89E, h0km, mb2.8/1, mb1 3.3/3, mb1mx3.1/30, mbtmp3.2/3, ML3.2/2, Error ellipse: s-maj=61.1km s-min=26.9km az=104.0, Gansu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **9.84** | **22** | Pn | Pn | 16 53 37.6 | +0.7 |
| | 0.4nm,0.3s,baz=207,slow=15,SNR=9.6 | | | | | | |
| SONM | | | | Sn | Sn | 16 55 24.6 | -3.5 |
| | 0.3nm,0.3s,baz=202,slow=21,SNR=3.0 | | | | | | |
| SONM | | | | Lg | Lg | 16 56 25.3 | |
| | 0.2nm,0.3s,baz=206,slow=32,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **15.77** | **306** | Pn | Pn | 16 54 51.8 | -5.7 |
| | 0.1nm,0.3s,baz=109,slow=14,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.38** | **185** | P | P | 16 55 52.2 | -0.2 |
| | 0.4nm,0.6s,baz=350,slow=10,SNR=2.6 | | | | | | |

**MAN 16 17:06:09.1, 11.69N×125.41E, h69km, mb4.2, ML3.0, MS2.7, 1C, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCP** | **Roxas** | **2.62** | **267** | *eP* | Pn | 17 06 51.2 | +2.0 |

*IDC **16** 17:38:31.5±2.0, 7.20S×129.42E, h158km±25km, mb3.0/1, mb1 3.1/6, mb1mx2.9/36, mbtmp3.6/6, Error ellipse: s-maj=26.4km s-min=19.0km az=111.0*

**ISC 16 17:38:30.5±1.0, 7.10S±0.08×129.4E±0.1, h150km, n11, σ1§92/12, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRS** | **Darwin Rock St** | **5.49** | **165** | P | **Pn** | **17 39 50.5** | **+0.1** |
| **SOEI** | **Soe** | **5.76** | **242** | P | Pn | 17 39 59.1 | +5.0 |
| **MTN** | **Manton Dam** | **5.95** | **164** | P | **Pn** | **17 39 56.3** | **-0.2** |
| **SIJI** | **Sorong** | **6.45** | **16** | P | **Pn** | **17 40 05.6** | **+2.3** |
| | 0.4nm,0.3s,baz=198,slow=20,SNR=12 | | | | | | |
| SIJI | | | | S | **Sn** | **17 41 12.0** | **-4.0** |
| | 0.8nm,0.3s,baz=264,slow=23,SNR=7.8 | | | | | | |
| **BATI** | **Baumata** | **6.49** | **241** | P | **Pn** | **17 40 05.2** | **+1.4** |
| | 1.6nm,0.3s,baz=61,slow=10,SNR=2.4 | | | | | | |
| BATI | | | | S | **Sn** | **17 41 16.7** | **-0.2** |
| | 1.3nm,0.3s,baz=87,slow=22,SNR=2.1 | | | | | | |
| **KNRA** | **Kununurra** | **8.55** | **184** | P | **Pn** | **17 40 29.5** | **-1.7** |
| **FITZ** | **Fitzroy Crossi** | **11.54** | **198** | P | **Pn** | **17 41 08.9** | **-1.8** |
| | 0.1nm,0.3s,baz=28,slow=11,SNR=13 | | | | | | |
| FITZ | | | | S | Sn | 17 43 07.5 | -11 |
| | 0.3nm,0.3s,baz=102,slow=20,SNR=6.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.54** | **198** | P | **Pn** | **17 41 09.0** | **-1.8** |
| **WRA** | **Warramunga Arr** | **13.62** | **160** | P | **Pn** | **17 41 37.3** | **-0.4** |
| | 0.2nm,0.3s,baz=339,slow=13,SNR=14 | | | | | | |
| WRA | | | | S | Sn | 17 43 57.3 | -11 |
| | 0.4nm,0.3s,baz=47,slow=28,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **17.02** | **166** | P | **Pn** | **17 42 19.8** | **0.0** |
| | 0.2nm,0.3s,baz=341,slow=9.8,SNR=14 | | | | | | |
| ASAR | | | | S | S | 17 45 10.9 | -18 |
| | 0.1nm,0.3s,baz=321,slow=20,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | **P** | **17 49 14.0** | **+0.5** |
| | 0.2nm,0.4s,baz=125,slow=7.0,SNR=6.6 | | | | | | |

*IDC **16** 17:41:21.9±0.7, 3.43S×131.35E, h0km, mb4.1/10, mb1 4.3/13, mb1mx4.0/36, mbtmp4.2/13, ML2.9/2, MS3.6/16, Ms1 3.6/16, ms1mx3.2/68, Error ellipse: s-maj=26.3km s-min=14.1km az=71.0*

*NEIC **16** 17:41:25.6±2.4, 3.52S±0.06×131.34E±0.08, h28km±5km, mb4.4/40, Error ellipse: s-maj=11.9km s-min=8.0km az=84.0*

*DJA **16** 17:41:26.7±0.8, 3°S±2°×13°1E±°, h26km±7km, M4.4/32, mB4.8/6, mb4.6/32, MLv4.5/10, Mw(mB)4.1/6*

**ISC 16 17:41:25.0±0.4, 3.47S±0.04×131.30E±0.05, h24km, n121, σ2§13/112, mb4.3/23, MS3.6/14, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.74** | **233** | P | **Pn** | **17 41 55.4** | **+1.7** |
| **MSAI** | **Masohi** | **2.37** | **273** | P | **Pn** | **17 42 02.5** | **+0.1** |
| **SIJI** | **Sorong** | **2.59** | **359** | Pn | **Pn** | **17 42 04.2** | **-1.2** |
| | 17nm,0.3s,baz=133,slow=24,SNR=32 | | | | | | |
| SIJI | | | | Sn | **Sn** | **17 42 36.0** | **-0.1** |
| | 53nm,0.3s,baz=145,slow=23,SNR=15 | | | | | | |
| SIJI | | | | LR | LR | 17 43 22.6 | |
| | comp=Z,711nm,21.3s,baz=261,slow=48 | | | | | | |
| **AAI** | **Ambon** | **3.10** | **266** | P | **Pn** | **17 42 13.3** | **+0.8** |
| **SAUI** | **Saumlaki** | **4.48** | **180** | | **Pn** | **17 42 32.0** | **+0.5** |
| **SAUI** | **Saumlaki** | **4.48** | **180** | P | **Pn** | **17 42 33.5** | **+2.0** |
| SAUI | | | | S | **Sn** | **17 43 25.9** | **+3.0** |
| **SAUI** | **Saumlaki** | **4.48** | **180** | P | **Pn** | **17 42 34.1** | **+2.6** |
| **BAKI** | **Biak** | **5.31** | **65** | P | **Pn** | **17 42 44.6** | **+1.7** |
| | 118nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **5.49** | **285** | P | **Pn** | **17 42 43.5** | **-1.8** |
| | 0.6nm782nm36nm,0.6s | | | | | | |
| SANI | | | | S | **Sn** | **17 43 42.8** | **-4.9** |
| | 0.6nm782nm36nm,0.6s | | | | | | |
| **TNTI** | **Ternate** | **5.76** | **317** | | **Pn** | **17 42 48.0** | **-1.1** |
| **TNTI** | **Ternate** | **5.76** | **317** | P | **Pn** | **17 42 48.9** | **-0.2** |
| | 0.1nm27nm,0.8s | | | | | | |
| **TNTI** | **Ternate** | **5.76** | **317** | P | **Pn** | **17 42 50.2** | **+1.1** |
| **SMPI** | **Sarmi** | **7.55** | **79** | P | **Pn** | **17 43 17.0** | **+3.3** |
| | 0.2nm29nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **8.90** | **85** | P | Pn | 17 43 37.1 | +4.9 |
| | 53nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **8.91** | **183** | P | **Pn** | **17 43 31.5** | **-0.8** |
| **BBSI** | **Bau Bau** | **8.93** | **257** | P | **Pn** | **17 43 34.0** | **+1.4** |
| | 100nm9.1nm,1.0s | | | | | | |
| **KDU** | **Kakadu** | **9.23** | **173** | P | **Pn** | **17 43 36.2** | **-0.5** |
| **GTOI** | **Gorontalo** | **9.23** | **296** | P | **Pn** | **17 43 39.5** | **+2.7** |
| | 10nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **9.31** | **181** | Pn | **Pn** | **17 43 37.0** | **-0.9** |
| **MTN** | **Manton Dam** | **9.31** | **181** | P | **Pn** | **17 43 37.9** | **0.0** |
| **SOEI** | **Soe** | **9.36** | **228** | Pn | **Pn** | **17 43 39.2** | **+0.5** |
| **SOEI** | **Soe** | **9.36** | **228** | P | **Pn** | **17 43 41.5** | **+2.8** |
| | 73nm,1.2s | | | | | | |
| **APSI** | **Ampana** | **9.97** | **285** | P | Pn | **17 43 46.9** | **0.0** |
| | 585nm4nm,1.0s | | | | | | |
| **BATI** | **Baumata** | **10.11** | **228** | Pn | Pn | **17 43 48.6** | **-0.2** |
| | 15nm,0.3s,baz=105,slow=0.7,SNR=38 | | | | | | |
| BATI | | | | Sn | **Sn** | **17 45 48.5** | **+7.0** |
| | 1.0nm,0.3s,baz=324,slow=22,SNR=1.3 | | | | | | |
| **BATI** | **Baumata** | **10.11** | **228** | P | Pn | **17 43 51.7** | **+2.9** |
| | 54nm,0.6s | | | | | | |
| **MRSI** | **Marisa** | **10.14** | **293** | P | Pn | **17 43 48.3** | **-0.9** |
| **MMPI** | **Merauke** | **10.31** | **119** | P | Pn | 17 43 56.5 | +5.0 |
| | 148nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **10.36** | **240** | P | Pn | **17 43 55.6** | **+3.3** |
| | 30nm,1.1s | | | | | | |
| **TOLI2** | **Tolitoli** | **11.45** | **293** | Pn | Pn | **17 44 07.3** | **+0.1** |
| **KAPI** | **Kappang** | **11.61** | **262** | Pn | Pn | **17 44 08.8** | **-0.6** |
| | 2.8nm,0.3s,baz=10,slow=21,SNR=2.7 | | | | | | |
| KAPI | | | | LR | LR | 17 49 09.8 | |
| | comp=Z,226nm,21.8s,baz=117,slow=40 | | | | | | |
| **MPSI** | **Mapaga** | **12.00** | **288** | P | Pn | **17 44 16.6** | **+1.9** |
| | 9.2nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **12.38** | **191** | Pn | Pn | **17 44 16.5** | **-3.4** |
| KNRA | | | | Sn | | 17 46 27.8 | -9.4 |
| **PLAI** | **Plampang** | **14.45** | **248** | P | **Pn** | **17 44 48.5** | **+0.3** |
| | 22nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **15.40** | **304** | | **P** | **17 45 04.6** | **-0.7** |
| MYLDM | | | | IAmb | IAmb | 17 45 37.7 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.56** | **200** | Pn | **Pn** | **17 44 59.1** | **-3.8** |
| | comp=Z,1.4nm,0.3s,baz=32,slow=11,SNR=13 | | | | | | |
| FITZ | | | | Sn | Sn | 17 47 42.1 | -13 |
| | comp=Z,0.4nm,0.3s,baz=104,slow=19,SNR=1.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.56** | **200** | Pn | **Pn** | **17 44 58.9** | **-4.0** |
| **COEN** | **Coen** | **15.69** | **132** | Pn | **Pn** | **17 45 03.7** | **-1.0** |
| COEN | | | | IAmb | IAmb | 17 45 11.6 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **COEN** | **Coen** | **15.69** | **132** | P | **Pn** | **17 45 04.4** | **-0.2** |
| **WB0** | **Warramunga Arr** | **16.48** | **170** | | **Pn** | **17 45 11.1** | **-3.6** |
| **MTKI** | **Muara Teweh, K** | **16.58** | **278** | P | **P** | **17 45 19.5** | **+1.1** |
| | comp=Z,14nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.64** | **170** | Pn | **Pn** | **17 45 14.0** | **-2.8** |
| | comp=Z,0.9nm,0.3s,baz=350,slow=12,SNR=8.8 | | | | | | |
| WRA | | | | Sn | Sn | 17 48 10.4 | -11 |
| | comp=Z,1.3nm,0.3s,baz=356,slow=26,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.64** | **170** | P | **Pn** | **17 45 13.0** | **-3.8** |
| **WB2** | **Warramunga Arr** | **16.64** | **170** | | **Pn** | **17 45 11.4** | **-5.4** |
| **WR0** | **Warramunga Arr** | **16.69** | **169** | P | **Pn** | **17 45 11.6** | **-5.8** |
| WR0 | | | | IAmb | IAmb | 17 45 37.1 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **16.82** | **111** | Pn | **Pn** | **17 45 16.7** | **-2.4** |
| | comp=Z,0.4nm,0.3s,baz=346,slow=19,SNR=2.0 | | | | | | |
| **PMG** | **Port Moresby** | **16.82** | **111** | | **Pn** | **17 45 17.7** | **-1.4** |
| PMG | | | | IAmb | IAmb | 17 45 24.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **16.82** | **111** | P | **P** | **17 45 21.4** | **+0.3** |
| **PMG** | **Port Moresby** | **16.82** | **111** | P | **P** | **17 45 21.5** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **17.75** | **253** | | **Pn** | **17 45 29.2** | **-1.6** |
| JAGI | | | | IAmb | IAmb | 17 45 46.5 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.75** | **253** | P | **Pn** | **17 45 31.1** | **+0.3** |
| | comp=Z,22nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **17.78** | **302** | P | **P** | **17 45 33.3** | **+1.5** |
| KKM | | | | IAmb | IAmb | 17 45 37.7 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **BWJI** | **Bawean** | **18.73** | **262** | P | **P** | **17 45 42.1** | **-0.1** |
| | comp=Z,131nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **18.81** | **155** | P | **Pn** | **17 45 45.1** | **+1.4** |
| **MTSU** | **Mount Surprise** | **19.36** | **140** | P | **Pn** | **17 45 51.6** | **+1.2** |
| **TBJI** | **Tambak Boyo** | **19.65** | **259** | P | **Pn** | **17 45 54.6** | **+0.8** |
| | comp=Z,98nm,1.2s | | | | | | |
| **SBUM** | **Sibu** | **19.95** | **287** | P | **P** | **17 45 56.2** | **+0.6** |
| **AS31** | **Alice Springs** | **20.23** | **173** | | **P** | **17 45 58.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **20.23** | **173** | P | **P** | **17 45 59.3** | **+0.7** |
| | comp=Z,21nm,0.7s,baz=353,slow=11,SNR=143 | | | | | | |
| ASAR | | | | S | S | 17 49 34.4 | -10 |
| | comp=Z,0.3nm,0.3s,baz=309,slow=37,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **20.23** | **173** | | **P** | **17 45 57.8** | **-0.8** |
| ASAR | | | | | **S** | **17 49 36.7** | **-8.0** |
| **MBWA** | **Marble Bar** | **20.87** | **212** | P | **P** | **17 46 02.9** | **-2.6** |
| MBWA | | | | IAmb | IAmb | 17 46 23.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.16** | **211** | P | **P** | **17 46 06.8** | **-1.8** |
| PSA00 | | | | IAmb | IAmb | 17 46 07.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.16** | **211** | P | **P** | **17 46 06.0** | **-2.6** |
| PSA00 | | | | IAmb | IAmb | 17 46 07.7 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **KSM** | **Kuching** | **21.55** | **283** | P | **P** | **17 46 12.8** | **-0.1** |
| KSM | | | | IAmb | IAmb | 17 46 25.4 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **WRKA** | **Warakurna** | **21.63** | **187** | P | **P** | **17 46 14.3** | **+0.6** |
| **GUMO** | **Guam** | **21.65** | **38** | LR | LR | 17 54 40.4 | |
| | comp=Z,46nm,18.0s,baz=190,slow=37 | | | | | | |
| **CTA** | **Charters Tower** | **22.04** | **140** | P | **P** | **17 46 19.2** | **+1.1** |
| | comp=Z,6.2nm,0.8s,baz=319,slow=10,SNR=14 | | | | | | |
| **CTA** | **Charters Tower** | **22.04** | **140** | P | **P** | **17 46 20.4** | **+2.3** |
| **CTAO** | **Charters Tower** | **22.04** | **140** | P | **P** | **17 46 16.6** | **-1.5** |
| CTAO | | | | IAmb | IAmb | 17 46 39.4 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **22.04** | **140** | P | **P** | **17 46 20.2** | **+2.1** |
| **CMJI** | **Cimerak** | **23.13** | **258** | P | **P** | **17 46 31.6** | **+1.9** |
| | comp=Z,25nm,0.6s | | | | | | |
| **TPI** | **Tanjungpandan** | **23.62** | **271** | P | **P** | **17 46 36.9** | **+2.4** |
| **LEM** | **Lembang** | **23.81** | **261** | LR | LR | 17 56 22.2 | |
| | comp=Z,188nm,21.8s,baz=79,slow=38 | | | | | | |
| **OOD** | **Oodnadatta** | **24.55** | **171** | P | **P** | **17 46 44.2** | **+1.2** |
| **GIRL** | **Giralia** | **25.23** | **219** | P | **P** | **17 46 47.9** | **-1.3** |
| **INKA** | **Innaminka** | **25.76** | **160** | P | **P** | **17 46 56.3** | **+2.3** |
| **FORT** | **Forrest** | **27.33** | **186** | P | **P** | **17 47 06.7** | **-1.5** |
| **LCRK** | **Leigh Creek** | **27.62** | **167** | P | **P** | **17 47 13.6** | **+2.9** |
| **MORW** | **Morawa** | **29.29** | **208** | P | **P** | **17 47 23.9** | **-1.8** |
| MORW | | | | IAmb | IAmb | 17 47 44.1 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **29.52** | **172** | P | **P** | **17 47 26.5** | **-1.2** |
| BBOO | | | | IAmb | IAmb | 17 47 39.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **29.87** | **162** | P | **P** | **17 47 31.1** | **+0.4** |
| | comp=Z,2.7nm,0.7s,baz=338,slow=10.0,SNR=7.0 | | | | | | |
| **STKA** | **Stephens Creek** | **29.87** | **162** | P | **P** | **17 47 30.6** | **-0.2** |
| **JOW** | **Kunigami** | **30.27** | **355** | LR | LR | 18 00 18.9 | |
| | comp=Z,148nm,19.7s,baz=278,slow=38 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **32.12** | **203** | P | **P** | **17 47 49.3** | **-1.3** |
| NWAO | | | | IAmb | IAmb | 17 47 52.9 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **GSI** | **Gunungsitoli** | **34.04** | **277** | P | **P** | **17 48 08.4** | **+0.7** |
| GSI | | | | IAmb | IAmb | 17 48 17.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **35.68** | **155** | P | **P** | **17 48 18.9** | **-2.7** |
| **TOO** | **Toolangi** | **36.35** | **161** | P | **P** | **17 48 25.3** | **-2.0** |
| TOO | | | | IAmb | IAmb | 17 48 52.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **37.27** | **12** | LR | LR | 18 02 33.3 | |
| | comp=Z,148nm,18.3s,baz=188,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.60** | **306** | P | **P** | **17 48 47.3** | **+0.7** |
| | comp=Z,1.1nm,0.8s,baz=137,slow=7.3,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.60** | **306** | P | **P** | **17 48 45.9** | **-0.7** |
| **CHTO** | **Chiang Mai** | **38.79** | **306** | P | **P** | **17 48 47.1** | **-1.0** |
| CHTO | | | | IAmb | IAmb | 17 49 12.9 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.33** | **9** | LR | LR | 18 02 60.0 | |
| | comp=Z,59nm,20.8s,baz=187,slow=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.46** | **1** | P | **P** | **17 49 57.7** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=182,slow=7.2,SNR=2.6 | | | | | | |
| **MSVF** | **Nonsavu** | **47.93** | **111** | LR | LR | 18 10 07.4 | |
| | comp=Z,102nm,18.4s,baz=357,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.45** | **11** | LR | LR | 18 07 50.4 | |
| | comp=Z,37nm,21.0s,baz=87,slow=33 | | | | | | |
| **GTA** | **Gaotai** | **51.58** | **329** | *eP* | **P** | **17 50 33.5** | **+3.9** |
| GTA | | | | pP | pP | 17 50 37.8 | +1.1 |
| GTA | | | | sP | sP | 17 50 40.6 | +1.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **55.56** | **340** | P | **P** | **17 50 59.0** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=148,slow=8.5,SNR=3.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **60.59** | **18** | LR | LR | 18 14 03.9 | |
| | comp=Z,52nm,22.0s,baz=160,slow=32 | | | | | | |
| **MK31** | **Makanchi Array** | **66.03** | **325** | P | **P** | **17 52 10.7** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 17 52 14.6 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.03** | **325** | P | **P** | **17 52 10.9** | **+1.0** |
| | comp=Z,1.8nm,0.6s,baz=119,slow=8.2,SNR=29 | | | | | | |
| MKAR | | | | LR | LR | 18 23 32.6 | |
| | comp=Z,58nm,18.9s,baz=100,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.03** | **325** | P | **P** | **17 52 10.6** | **+0.8** |
| **MAKZ** | **Makanchi** | **66.22** | **325** | P | **P** | **17 52 11.8** | **+0.8** |
| MAKZ | | | | IAmb | IAmb | 17 52 19.6 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.03** | **333** | P | **P** | **17 52 29.0** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=124,slow=9.6,SNR=4.2 | | | | | | |
| **KURK** | **Kurchatov** | **70.23** | **328** | P | **P** | **17 52 36.9** | **+0.9** |
| KURK | | | | IAmb | IAmb | 17 52 52.5 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **XMAS** | **Kiritimati** | **71.44** | **87** | P | **P** | **17 52 42.9** | **-1.2** |
| **KKAR** | **Karatay Array** | **71.59** | **318** | P | **P** | **17 52 45.0** | **+0.5** |
| **VNDA** | **Vanda** | **75.78** | **173** | P | **P** | **17 53 09.4** | **+0.9** |
| | comp=Z,3.2nm,1.0s,baz=321,slow=24,SNR=1.8 | | | | | | |
| **VNDA** | **Vanda** | **75.78** | **173** | P | **P** | **17 53 09.5** | **+1.0** |
| **BRVK** | **Borovoye** | **75.88** | **327** | P | **P** | **17 53 10.4** | **+1.0** |
| BRVK | | | | IAmb | IAmb | 17 53 18.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **UNV** | **Unalaska Valle** | **76.86** | **33** | P | **P** | **17 53 15.4** | **+0.5** |
| **UOSS** | **Minazif** | **78.00** | **296** | P | **P** | **17 53 20.6** | **-1.4** |
| **SOCY** | **Socotra** | **78.36** | **283** | P | **P** | **17 53 24.4** | **+0.1** |
| **PPTF** | **Pamatai, Papee** | **78.61** | **107** | P | **P** | **17 53 24.5** | **-1.1** |
| **CRZF** | **Crozet Islands** | **80.21** | **224** | P | **P** | **17 53 32.5** | **-1.2** |
| **ABKAR** | **Akbulak array** | **80.58** | **321** | P | **P** | **17 53 36.0** | **+0.5** |
| **ABKAR** | **Akbulak array** | **80.58** | **321** | P | **P** | **17 53 36.0** | **+0.5** |
| ABKAR | | | | IAmb | IAmb | 17 54 15.6 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **ARU** | **Arti** | **83.42** | **328** | LR | LR | 18 32 56.6 | |
| | comp=Z,12nm,21.6s,baz=168,slow=37 | | | | | | |
| **KDAK** | **Kodiak Island** | **85.56** | **31** | LR | LR | 18 29 23.4 | |
| | comp=Z,48nm,18.3s,baz=236,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **89.63** | **25** | P | **P** | **17 54 20.7** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=268,slow=4.3,SNR=5.5 | | | | | | |
| ILAR | | | | LR | LR | 18 27 57.6 | |
| | comp=Z,49nm,21.9s,baz=168,slow=31 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **93.97** | **269** | LR | LR | 18 32 07.5 | |
| | comp=Z,38nm,21.9s,baz=92,slow=32 | | | | | | |
| **INK** | **Inuvik** | **95.13** | **22** | LR | LR | 18 36 04.8 | |
| | comp=Z,26nm,21.5s,baz=74,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.30** | **284** | PKP | **PKiKP** | **18 00 33.5** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=44,slow=1.6,SNR=3.0 | | | | | | |

*NOU **16** 17:45:37.1, 13.81S×172.36E, h635km, mb4.0/11, Vanuatu Islands Region*

*IDC **16** 17:45:38.6±1.4, 14.04S×172.34E, h593km±18km, mb3.3/11, mb1 3.6/13, mb1mx3.3/33, mbtmp4.3/13, Error ellipse: s-maj=31.0km s-min=13.8km az=156.0*

*NEIC **16** 17:45:39.8±1.4, 14.25S±0.09×172.5E±0.1, h613km±9km, mb4.5/26, Error ellipse: s-maj=17.9km s-min=7.0km az=47.0*

**ISC 16 17:45:39.4±0.6, 14.21S±0.09×172.40E±0.09, h600km, n63, σ1§13/64, mb4.4/30, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **5.17** | **256** | P | **P** | **17 47 13.7** | **0.0** |
| SANVU | | | | S | **S** | **17 48 32.9** | **+2.3** |
| **SANVU** | **Saraoutou** | **5.17** | **256** | P | **P** | **17 47 13.7** | **0.0** |
| **MSVF** | **Nonsavu** | **6.47** | **124** | P | **P** | **17 47 25.7** | **+1.0** |
| | 3.3nm,0.3s,baz=279,slow=10,SNR=22 | | | | | | |
| **MSVF** | **Nonsavu** | **6.47** | **124** | P | **P** | **17 47 25.3** | **+0.6** |
| **MSVF** | **Nonsavu** | **6.47** | **124** | P | **P** | **17 47 26.3** | **+1.6** |
| **PINNC** | **Pines Island,** | **9.59** | **209** | P | **P** | **17 47 54.6** | **+0.6** |
| **PINNC** | **Pines Island,** | **9.59** | **209** | P | **P** | **17 47 55.5** | **+1.5** |
| **DZM** | **Mont Dzumac** | **9.65** | **215** | P | **P** | **17 47 56.0** | **+1.2** |
| | 2.0nm,0.3s,baz=58,slow=19,SNR=29 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.65** | **215** | P | **P** | **17 47 55.6** | **+0.8** |
| **DZM** | **Mont Dzumac** | **9.65** | **215** | P | **P** | **17 47 56.1** | **+1.3** |
| **OUENC** | **Ouen Island, N** | **9.72** | **212** | P | **P** | **17 47 56.4** | **+1.1** |
| **OUENC** | **Ouen Island, N** | **9.72** | **212** | P | **P** | **17 47 56.5** | **+1.1** |
| **NOUC** | **Port Laguerre** | **9.75** | **216** | P | **P** | **17 47 57.1** | **+1.4** |
| **ONTNC** | **Ouen Toro** | **9.83** | **214** | P | **P** | **17 47 57.5** | **+1.0** |
| **ONTNC** | **Ouen Toro** | **9.83** | **214** | P | **P** | **17 47 57.9** | **+1.4** |
| **KOUNC** | **Koumac, New Ca** | **9.98** | **230** | P | **P** | **17 47 58.7** | **+0.7** |
| **EIDS** | **Eidsvold** | **22.89** | **238** | P | **P** | **17 49 58.4** | **-0.6** |
| **PMG** | **Port Moresby** | **25.15** | **278** | P | **P** | **17 50 18.6** | **-0.5** |
| | 8.8nm,0.9s,baz=76,slow=1.3,SNR=3.0 | | | | | | |
| **PMG** | **Port Moresby** | **25.15** | **278** | IAmb | IAmb | 17 50 20.1 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **25.64** | **253** | P | **P** | **17 50 23.0** | **-0.4** |
| | comp=Z,5.3nm,0.6s,baz=82,slow=11,SNR=13 | | | | | | |
| **CTAO** | **Charters Tower** | **25.64** | **253** | P | **P** | **17 50 23.0** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 17 50 23.4 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **QRZ** | **Quartz Range** | **26.52** | **180** | P | **P** | **17 50 30.8** | **+0.1** |
| **NNZ** | **Nelson** | **26.92** | **178** | P | **P** | **17 50 33.6** | **-0.7** |
| **BHW** | **Baring Head** | **27.18** | **176** | P | **P** | **17 50 34.8** | **-1.7** |
| **THZ** | **Tophouse** | **27.46** | **179** | P | **P** | **17 50 38.2** | **-0.8** |
| **KHZ** | **Kahutara** | **28.12** | **178** | P | **P** | **17 50 42.7** | **-2.0** |
| **LBZ** | **Lake Benmore** | **30.13** | **183** | P | **P** | **17 51 01.1** | **-1.0** |
| LBZ | | | | IAmb | IAmb | 17 51 01.7 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **33.19** | **233** | P | **P** | **17 51 28.1** | **-0.2**

### Kermadec Islands

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **4.44** | **203** | P | Pn | 17 49 51.4 | +2.1 |
| **HAZ** | **Te Kaha** | **4.61** | **209** | P | Pn | 17 49 50.1 | -0.9 |
| HAZ | | | | S | S | 17 50 55.2 | +1.7 |
| **PKGZ** | **Pakihiroa** | **4.62** | **206** | P | Pn | 17 49 50.9 | -0.3 |
| PKGZ | | | | S | S | 17 50 53.5 | -0.2 |
| **PUZ** | **Puketiti** | **4.72** | **203** | P | Pn | 17 49 53.9 | +1.6 |
| PUZ | | | | S | S | 17 50 56.4 | +0.8 |
| **RUGZ** | **Raukumara Rang** | **4.84** | **209** | P | Pn | 17 49 53.7 | +0.1 |
| RUGZ | | | | S | S | 17 50 56.9 | -1.1 |
| **URZ** | **Urewera** | **5.32** | **211** | P | Pn | 17 49 56.6 | -1.9 |
| URZ | | | | S | S | 17 51 06.7 | -0.4 |
| **MKRZ** | **Makatiti** | **5.52** | **216** | P | Pn | 17 50 02.1 | +1.3 |
| **HLRZ** | **Highlands Stat** | **5.67** | **216** | P | Pn | 17 50 02.7 | +0.3 |
| **RTZ** | **Ruatahuna** | **5.67** | **210** | P | Pn | 17 49 57.9 | -4.6 |
| **BKZ** | **Black Stump Fm** | **6.34** | **210** | P | Pn | 17 50 09.2 | -0.6 |
| **BHHZ** | **Black Hill Sta** | **6.80** | **211** | P | Pn | 17 50 14.0 | -1.0 |
| BHHZ | | | | S | S | 17 51 40.0 | +2.8 |
| **WNVZ** | **Wahianoa** | **6.87** | **214** | P | P | 17 50 18.6 | +1.7 |
| **PNHZ** | **Pukenui** | **7.10** | **209** | P | Pn | 17 50 18.1 | -0.3 |
| PNHZ | | | | S | S | 17 51 42.3 | -1.2 |
| **BFZ** | **Birch Farm** | **7.75** | **205** | P | P | 17 50 26.6 | +0.1 |
| BFZ | | | | S | S | 17 51 57.2 | +0.1 |

*IDC **16** 17:57:28.5±1.1,21˚.42S×68˚.65W,h99km±16km, mb3.5/4, mb1 3.6/6, mb1mx3.4/25, mbtmp3.9/6, Error ellipse: s-maj=36.2km s-min=19.1km az=112.0*
*NEIC **16** 17:57:28.4±1.3,21˚.46S±0˚.03×68˚.94W±0˚.06, h98km±6km, mb4.1/3, ML3.8(GUC), Error ellipse: s-maj=8.8km s-min=4.6km az=94.0*
*GUC **16** 17:57:29.0±0.7,21˚.45S×68˚.87W, h96km±4km, ML3.8*
**ISC 16 17:57:27.8**±0.8,**21˚.44S**±0˚.03×**68˚.92W**±0˚.06,**h103**km±7km, **n52**,σ0⁰**88**/**77**,**mb3.7**/3,**8C-1D**,**Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.47** | **220** | Pn | **Pn** | **17 57 44.1** | **+0.2** |
| PB09 | | | | Sn | **Sn** | **17 57 55.3** | **-0.7** |
| **PB09** | **IPOC Station P** | **0.47** | **220** | ⇓*i*P | **Pn** | **17 57 44.1** | **+0.2** |
| PB09 | | | | *i* S | **Sn** | **17 57 56.0** | **0.0** |
| **PB01** | **IPOC Station P** | **0.66** | **306** | Pn | **Pn** | **17 57 44.5** | **-0.8** |
| PB01 | | | | | **Sn** | **17 57 58.0** | **-0.4** |
| **PB01** | **IPOC Station P** | **0.66** | **306** | ⇑*i*P | **Pn** | **17 57 45.2** | **-0.1** |
| PB01 | | | | *i* S | **Sn** | **17 57 58.4** | **0.0** |
| PB01 | | | | IAML | | 17 57 59.2 | |
| | comp=E,6μm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **0.92** | **277** | Pn | **Pn** | **17 57 47.6** | **-0.1** |
| PB02 | | | | Sn | **Sn** | **17 58 02.5** | **-0.2** |
| **PB02** | **IPOC Station P** | **0.92** | **277** | ⇑*i*P | **Pn** | **17 57 48.0** | **+0.3** |
| PB02 | | | | *i* S | **Sn** | **17 58 03.3** | **+0.6** |
| PB02 | | | | IAML | | 17 58 06.3 | |
| | comp=E,5μm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **0.95** | **252** | Pn | **Pn** | **17 57 47.5** | **-0.5** |
| PB07 | | | | Sn | **Sn** | **17 58 03.2** | **-0.1** |
| **PB07** | **IPOC Station P** | **0.95** | **252** | ⇑*i*P | **Pn** | **17 57 48.4** | **+0.3** |
| PB07 | | | | *i* S | **Sn** | **17 58 03.6** | **+0.2** |
| PB07 | | | | IAML | | 17 58 04.5 | |
| | comp=E,4μm,0.4s | | | | | | |
| **PB03** | **IPOC Station P** | **0.99** | **232** | Pn | **Pn** | **17 57 48.4** | **-0.1** |
| PB03 | | | | Sn | **Sn** | **17 58 03.5** | **-0.5** |
| **PB03** | **IPOC Station P** | **0.99** | **232** | ⇑*i*P | **Pn** | **17 57 48.9** | **+0.4** |
| PB03 | | | | *i* S | **Sn** | **17 58 04.3** | **+0.3** |
| PB03 | | | | IAML | | 17 58 05.1 | |
| | comp=E,3μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **1.17** | **180** | P | **Pn** | **17 57 51.1** | **+0.5** |
| | comp=E,36nm,0.3s,baz=358,slow=9.7,SNR=389 | | | | | | |
| LVC | | | | S | **Sn** | **17 58 09.1** | **+1.1** |
| | comp=E,124nm,0.3s,baz=253,slow=19,SNR=24 | | | | | | |
| **LVC** | **Limon Verde** | **1.17** | **180** | | **Sn** | **17 58 08.4** | **+0.5** |
| **LVC** | **Limon Verde** | **1.17** | **180** | *e*P | **Pn** | **17 57 51.2** | **+0.5** |
| LVC | | | | *i* S | **Sn** | **17 58 08.8** | **+0.9** |
| **PATCX** | **Punta Patache** | **1.31** | **298** | Pn | **Pn** | **17 57 52.3** | **+0.3** |
| PATCX | | | | Sn | **Sn** | **17 58 10.7** | **+0.4** |
| **PATCX** | **Punta Patache** | **1.31** | **298** | ⇑*i*P | **Pn** | **17 57 52.6** | **+0.6** |
| PATCX | | | | *i* S | **Sn** | **17 58 10.9** | **+0.6** |
| PATCX | | | | IAML | | 17 58 13.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PB08** | **IPOC Station P** | **1.31** | **350** | Pn | **Pn** | **17 57 52.8** | **+0.4** |
| PB08 | | | | Sn | **Sn** | **17 58 11.8** | **+1.0** |
| **PB08** | **IPOC Station P** | **1.31** | **350** | ⇑*i*P | **Pn** | **17 57 53.3** | **+0.9** |
| PB08 | | | | *i* S | **Sn** | **17 58 12.3** | **+1.5** |
| **PB06** | **IPOC Station P** | **1.40** | **206** | Pn | **Pn** | **17 57 53.3** | **+0.1** |
| PB06 | | | | Sn | **Sn** | **17 58 13.0** | **+0.6** |
| **PB06** | **IPOC Station P** | **1.40** | **206** | *i* P | **Pn** | **17 57 53.9** | **+0.7** |
| PB06 | | | | *i* S | **Sn** | **17 58 13.3** | **+0.9** |
| PB06 | | | | IAML | | 17 58 14.8 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.45** | **232** | Pn | **Pn** | **17 57 53.9** | **+0.1** |
| PB04 | | | | Sn | **Sn** | **17 58 13.4** | **-0.1** |
| **PB04** | **IPOC Station P** | **1.45** | **232** | *e*P | **Pn** | **17 57 54.2** | **+0.5** |
| PB04 | | | | *i* S | **Sn** | **17 58 14.4** | **+0.9** |
| PB04 | | | | IAML | | 17 58 18.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.46** | **306** | Pn | **Pn** | **17 57 54.0** | **+0.2** |
| TA01 | | | | Sn | **Sn** | **17 58 13.6** | **+0.1** |
| **TA01** | **Diego Aracena** | **1.46** | **306** | ⇑*i*P | **Pn** | **17 57 54.0** | **+0.2** |
| TA01 | | | | *i* S | **Sn** | **17 58 14.1** | **+0.7** |
| TA01 | | | | IAML | | 17 58 17.6 | |
| | comp=E,1μm,0.5s | | | | | | |
| **HMBC** | **Humberstone** | **1.47** | **322** | ⇑*i*P | **Pn** | **17 57 54.3** | **+0.3** |
| HMBC | | | | *i* S | **Sn** | **17 58 14.2** | **+0.4** |
| HMBC | | | | IAML | | 17 58 18.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **TA02** | **Huaiquique** | **1.62** | **315** | Pn | **Pn** | **17 57 55.7** | **0.0** |
| **TA02** | **Huaiquique** | **1.62** | **315** | *e*P | **Pn** | **17 57 55.8** | **0.0** |
| TA02 | | | | *i* S | **Sn** | **17 58 17.6** | **+0.7** |
| TA02 | | | | IAML | | 17 58 23.1 | |
| | comp=N,2μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.78** | **352** | Pn | **Pn** | **17 57 59.2** | **+1.0** |
| **GO01** | **Chusmiza** | **1.78** | **352** | *e*P | **Pn** | **17 57 59.1** | **+1.0** |
| GO01 | | | | *i* S | **Sn** | **17 58 22.9** | **+1.7** |
| **PB11** | **IPOC Station P** | **1.81** | **337** | Pn | **Pn** | **17 57 58.6** | **+0.3** |
| **PB15** | **IPOC Station P** | **1.83** | **196** | Pn | **Pn** | **17 57 59.0** | **+0.4** |
| **PB15** | **IPOC Station P** | **1.83** | **196** | *e*P | **Pn** | **17 57 59.2** | **+0.6** |
| PB15 | | | | *i* S | **Sn** | **17 58 23.5** | **+1.4** |
| **PB10** | **IPOC Station P** | **2.56** | **216** | Pn | **Pn** | **17 58 08.0** | **+0.1** |
| **PB10** | **IPOC Station P** | **2.56** | **216** | *e*P | **Pn** | **17 58 08.4** | **+0.6** |
| PB10 | | | | IAML | | 17 58 50.1 | |
| | comp=E,239nm,0.4s | | | | | | |
| **PB12** | **IPOC Station P** | **3.11** | **334** | Pn | **Pn** | **17 58 13.9** | **-1.2** |
| **PB12** | **IPOC Station P** | **3.11** | **334** | *e*P | **Pn** | **17 58 14.2** | **-0.9** |
| PB12 | | | | *i* S | **Sn** | **17 58 51.3** | **-0.4** |
| **PB16** | **IPOC Station P** | **3.14** | **350** | Pn | **Pn** | **17 58 17.5** | **+1.5** |
| **PB14** | **IPOC Station P** | **3.46** | **203** | Pn | **Pn** | **17 58 20.1** | **0.0** |
| **LPAZ** | **La Paz** | **5.18** | **8** | P | **Pn** | **17 58 45.4** | **+1.8** |
| | comp=E,0.8nm,0.3s,baz=194,slow=9.7,SNR=6.1 | | | | | | |
| **LPAZ** | **La Paz** | **5.18** | **8** | Pn | **Pn** | **17 58 43.0** | **-0.6** |
| **AC02** | **Maricunga** | **5.38** | **182** | Pn | **Pn** | **17 58 45.3** | **-0.8** |
| **GO03** | **Copiap** | **6.25** | **191** | Pn | **Pn** | **17 58 56.8** | **-0.7** |
| **GO04** | **Tololo Observa** | **8.86** | **191** | Pn | **Pn** | **17 59 31.9** | **-1.4** |
| **SIV** | **San Ignacio** | **9.20** | **55** | P | **Pn** | **17 59 34.0** | **-3.6** |
| | comp=E,2.3nm,0.3s,baz=238,slow=10,SNR=38 | | | | | | |
| **CO03** | **El Pedregal** | **9.50** | **189** | Pn | **Pn** | **17 59 40.4** | **-1.3** |
| **CO06** | **Fray Jorge** | **9.52** | **194** | Pn | **Pn** | **17 59 40.0** | **-1.9** |
| **ITAB** | **Concordia** | **16.35** | **114** | | **Pn** | **18 01 11.9** | **+0.7** |
| ITAB | | | | IAmb | IAmb | 18 01 34.2 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **20.63** | **77** | P | **P** | **18 01 58.4** | **-1.0** |
| | comp=Z,2.3nm,0.5s,baz=231,slow=6.5,SNR=3.7 | | | | | | |
| **BDFB** | **Brasilia** | **20.63** | **77** | IAmb | IAmb | 18 02 14.2 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **22.36** | **24** | P | **P** | **18 02 16.3** | **-1.2** |
| | comp=Z,0.9nm,0.3s,baz=193,slow=17,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.34** | **70** | P | **P** | **18 09 12.1** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=260,slow=5.6,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.34** | **70** | IAmb | IAmb | 18 09 31.5 | |
| | comp=Z,4.0nm,1.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.12** | **341** | P | **P** | **18 10 21.7** | **+1.2** |
| | comp=Z,0.3nm,0.6s,baz=132,slow=4.2,SNR=7.2 | | | | | | |

*EAF **16** 17:59:39.8±2.3,20˚.22S×31˚.95E, h10km, MD3.4*
**BUL 16 17:59:37.4**±1.0,**20˚.35S**×**32˚.11E**,**h10**km,**MD3.5, Zimbabwe**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSNA** | **Messina** | **2.78** | **224** | *e*P | Pn | 18 00 22.5 | +0.4 |
| MSNA | | | | *e*S | Sn | 18 00 54.5 | -1.3 |
| **MSNA** | **Messina** | **2.78** | **224** | *e*P | Pn | 18 00 22.5 | +0.4 |
| MSNA | | | | *e*S | Sn | 18 00 54.5 | -1.3 |
| **MOPA** | **Mopani** | **3.23** | **192** | *e*P | Pb | 18 00 31.8 | -3.1 |
| MOPA | | | | *e*S | Sb | 18 01 11.2 | -3.0 |
| **MOPA** | **Mopani** | **3.23** | **192** | *e*P | Pb | 18 00 31.8 | -3.1 |
| MOPA | | | | *e*S | Sb | 18 01 11.2 | -3.0 |
| **BLWY** | **Bulawayo** | **3.29** | **273** | *e*P | Pn | 18 00 29.1 | -0.1 |
| BLWY | | | | *i* S | Sn | 18 01 05.4 | -3.1 |
| **BLWY** | **Bulawayo** | **3.29** | **273** | *e*P | Pn | 18 00 29.1 | -0.1 |
| BLWY | | | | *i* S | Sn | 18 01 05.4 | -3.1 |
| **MATP** | **Matopo** | **3.39** | **268** | *e*P | Pn | 18 00 30.1 | -0.4 |
| MATP | | | | *e*S | Sn | 18 01 08.9 | -1.9 |
| **MATP** | **Matopo** | **3.39** | **268** | *e*P | Pn | 18 00 30.1 | -0.4 |
| MATP | | | | *e*S | Sn | 18 01 08.9 | -1.9 |

*IDC **16** 18:22:48.8±2.9,5˚.93N×126˚.82E, h58km±27km, mb3.1/6, mb1 3.4/7, mb1mx3.1/41, mbtmp3.5/7, ML3.6/1, MS3.1/1, Ms1 3.1/1, ms1mx2.3/23, Error ellipse: s-maj=74.0km s-min=15.9km az=65.0*
**ISC 16 18:22:51.1**±1.0,**5.8N**±0˚.2×**126˚.8E**±0˚.2,**h83**km,**n10**, σ1⁰**64**/**8**,**mb3.4**/6,**Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.71** | **316** | P | Pn | 18 23 15.7 | -3.6 |
| | 101nm,0.3s,baz=69,slow=2.7,SNR=2.5 | | | | | | |
| DAV | | | | LR | LR | 18 23 56.5 | |
| | comp=Z,144nm,20.0s,baz=149,slow=40 | | | | | | |
| **GSPH** | **General Santos** | **1.85** | **278** | *e*P | **Pn** | **18 23 20.4** | **-0.8** |
| **SIJI** | **Sorong** | **8.02** | **146** | P | **Pn** | **18 24 43.2** | **-1.8** |
| | 0.9nm,0.3s,baz=268,slow=8.8,SNR=6.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.81** | **183** | P | **P** | **18 27 56.7** | **+0.2** |
| | 3.2nm,1.1s,baz=17,slow=11,SNR=2.7 | | | | | | |
| FITZ | | | | S | S | 18 31 55.0 | -11 |
| | 1.5nm,1.0s,baz=323,slow=20,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.67** | **164** | P | **P** | **18 28 22.6** | **+0.1** |
| | 0.5nm,0.8s,baz=347,slow=10,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **30.14** | **167** | P | **P** | **18 28 55.9** | **+2.6** |
| | 0.1nm,0.4s,baz=342,slow=8.8,SNR=1.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **40.58** | **18** | LR | LR | 18 46 07.8 | |
| | comp=Z,24nm,20.9s,baz=80,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **45.34** | **341** | P | **P** | **18 31 02.3** | **+1.2** |
| | 0.3nm,0.8s,baz=125,slow=3.7,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.88** | **324** | P | **P** | **18 32 19.6** | **-0.7** |
| | 0.3nm,0.5s,baz=113,slow=6.7,SNR=6.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.75** | **332** | P | **P** | **18 32 39.3** | **-1.0** |
| | 0.3nm,0.4s,baz=122,slow=5.2,SNR=2.0 | | | | | | |

*IDC **16** 18:28:14.8±1.1,47˚.38S×165˚.77E, h0km, mb4.2/6, mb1 4.4/8, mb1mx4.0/31, mbtmp4.3/8, ML4.0/2, MS3.6/9, Ms1 3.6/9, ms1mx3.2/47, Error ellipse: s-maj=35.7km s-min=22.4km az=166.0*
*NEIC **16** 18:28:17.1±2.5, 47˚.31S±0˚.08×165˚.8E±0˚.1, h11km±4km, mb4.3/18, Mwr4.2/15, Error ellipse: s-maj=13.4km s-min=10.6km az=125.0*
*NEIC **16** 18:28:17.8, 47˚.31S×165˚.75E, h19km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.43; $M_{\theta\theta}$1.23; $M_{\phi\phi}$-1.67; $M_{r\theta}$1.37; $M_{r\phi}$1.68; $M_{\theta\phi}$0.24; Fault plane solution: $M_o$2.65000×$10^{15}$ NP1:φ$_s$16.12000°, δ63.18000°, λ163.34000°. NP2:φ$_s$113.81000°, δ75.18000°, λ27.82000°. Principal axes: T 2.7835, Plg30.0000°, Azm338.0000°; N -0.2971, Plg59.0000°, Azm140.0000°; P -2.4865, Plg8.0000°, Azm243.0000°;*
*NOU **16** 18:28:19.4, 47˚.30S×165˚.78E, h23km, mb4.9/18, Off W. Coast of S. Island, N.Z.*
**ISC 16 18:28:16.6**±0.5,**47˚.33S**±0˚.07×**165˚.78E**±0˚.05,**h10**km,**n148**, σ2⁰**00**/145,**mb4.3**/13,**MS3.4**/9,**Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **1.32** | **28** | | **Pb** | **18 28 41.9** | **+0.4** |
| **PYZ** | **Puysegur Point** | **1.32** | **28** | P | **Pg** | **18 28 42.2** | **+0.3** |
| **APZ** | **The Paps** | **1.59** | **73** | P | **Pb** | **18 28 46.2** | **+0.1** |
| APZ | | | | S | **Sn** | **18 29 04.6** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **2.07** | **47** | | **Pn** | **18 28 53.2** | **+1.8** |
| **WHZ** | **Wether Hill Ro** | **2.07** | **47** | P | **Pb** | **18 28 53.6** | **-0.8** |
| WHZ | | | | S | **Sb** | **18 29 19.8** | **-0.3** |
| **DCZ** | **Deep Cove** | **2.09** | **27** | | **Pn** | **18 28 52.5** | **+0.8** |
| **DCZ** | **Deep Cove** | **2.09** | **27** | P | **Pn** | **18 28 53.1** | **+1.4** |
| **SYZ** | **Scrubby Hill** | **2.44** | **72** | P | **Pn** | **18 28 58.9** | **+2.5** |
| **MLZ** | **Mavora Lakes** | **2.55** | **40** | | **Pn** | **18 29 00.3** | **+2.3** |
| **MLZ** | **Mavora Lakes** | **2.55** | **40** | P | **Pb** | **18 29 00.7** | **-1.7** |
| **TUZ** | **Tuapeka** | **2.99** | **64** | P | **Pn** | **18 29 06.3** | **+2.1** |
| TUZ | | | | S | **Sn** | **18 29 43.0** | **+3.1** |
| **MSZ** | **Milford Sound** | **3.05** | **30** | P | **Pb** | **18 29 09.2** | **-1.8** |
| **EAZ** | **Earnscleugh** | **3.22** | **51** | P | **Pn** | **18 29 09.3** | **+2.0** |
| EAZ | | | | S | **Sb** | **18 29 50.7** | **-2.5** |
| **WKZ** | **Wanaka** | **3.37** | **43** | | **Pn** | **18 29 12.2** | **+2.9** |
| **WKZ** | **Wanaka** | **3.37** | **43** | P | **Pn** | **18 29 12.5** | **+3.2** |
| **HHSZ** | **Highcliff Hill** | **3.62** | **68** | P | **Pn** | **18 29 15.3** | **+2.6** |
| **JCZ** | **Jackson Bay** | **3.88** | **34** | P | **Pn** | **18 29 20.4** | **+4.0** |
| **ODZ** | **Otahua Downs** | **4.08** | **58** | Pn | **Pn** | **18 29 18.8** | **-0.3** |
| **ODZ** | **Otahua Downs** | **4.08** | **58** | P | **Pn** | **18 29 19.6** | **+0.5** |
| **ODZ** | **Otahua Downs** | **4.08** | **58** | P | **Pn** | **18 29 19.8** | **+0.8** |
| **LBZ** | **Lake Benmore** | **4.26** | **48** | Pn | **Pn** | **18 29 21.8** | **+0.2** |
| **LBZ** | **Lake Benmore** | **4.26** | **48** | P | **Pn** | **18 29 22.0** | **+0.5** |
| **TMZ** | **Timaru** | **4.69** | **53** | P | **Pn** | **18 29 27.7** | **+0.2** |
| **FOZ** | **Fox Glacier** | **4.74** | **38** | | **Pn** | **18 29 29.7** | **+1.6** |
| **FOZ** | **Fox Glacier** | **4.74** | **38** | P | **Pn** | **18 29 30.8** | **+2.7** |
| **ARCZ** | **Arundel** | **5.08** | **50** | Pn | **Pn** | **18 29 32.8** | **+0.1** |
| **RPZ** | **Rata Peaks** | **5.18** | **48** | Pn | **Pn** | **18 29 33.1** | **-1.0** |
| | 4.7nm,0.3s,baz=196,slow=2.8,SNR=17 | | | | | | |
| RPZ | | | | Sn | **Sn** | **18 30 33.9** | **0.0** |
| | 14nm,0.3s,baz=198,slow=20,SNR=1.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **5.18** | **48** | P | **Pn** | **18 29 33.6** | **-0.5** |
| **RPZ** | **Rata Peaks** | **5.18** | **48** | P | **Pn** | **18 29 34.1** | **0.0** |
| **WACZ** | **Wakanui South** | **5.43** | **54** | P | **Pn** | **18 29 38.2** | **+0.6** |
| **WVZ** | **Waitaha Valley** | **5.51** | **41** | P | **Pn** | **18 29 43.2** | **+4.5** |
| **MHCZ** | **Mount Hutt** | **5.57** | **49** | P | **Pn** | **18 29 42.9** | **+3.4** |
| **RACZ** | **Rakaia** | **5.74** | **53** | P | **Pn** | **18 29 42.7** | **+0.9** |
| **OXZ** | **Oxford** | **5.96** | **50** | | **Pn** | **18 29 44.2** | **-0.7** |
| **OXZ** | **Oxford** | **5.96** | **50** | P | **Pn** | **18 29 46.3** | **+1.5** |
| **MQZ** | **McQueen's Vall** | **6.04** | **56** | | **Pn** | **18 29 45.7** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **6.04** | **56** | P | **Pn** | **18 29 46.1** | **+0.2** |
| **AKCZ** | **Akaroa Harbour** | **6.08** | **58** | P | **Pn** | **18 29 46.9** | **+0.4** |
| **INZ** | **Inchbonnie** | **6.11** | **43** | P | **Pn** | **18 29 51.2** | **+4.3** |
| **OKCZ** | **Okains Bay** | **6.26** | **57** | P | **Pn** | **18 29 52.7** | **+3.8** |
| **LTZ** | **Lake Taylor** | **6.46** | **48** | Pn | **Pn** | **18 29 50.0** | **-1.9** |
| **LTZ** | **Lake Taylor** | **6.46** | **48** | P | **Pn** | **18 29 52.9** | **+1.1** |
| **GVZ** | **Greta Valley S** | **6.73** | **52** | P | Pn | 18 30 00.7 | +5.2 |
| **DSZ** | **Denniston Nort** | **7.05** | **40** | P | **Pn** | **18 30 01.9** | **+2.0** |
| **KHZ** | **Kahutara** | **7.38** | **51** | Pn | **Pn** | **18 30 02.0** | **-2.4** |
| **KHZ** | **Kahutara** | **7.38** | **51** | P | **Pn** | **18 30 08.3** | **+3.9** |
| **KHZ** | **Kahutara** | **7.38** | **51** | P | **Pn** | **18 30 04.6** | **+0.2** |
| **THZ** | **Tophouse** | **7.54** | **45** | Pn | **Pn** | **18 30 06.5** | **-0.1** |
| **THZ** | **Tophouse** | **7.54** | **45** | P | **Pn** | **18 30 08.7** | **+2.1** |
| **MRNZ** | **Matariki Terra** | **7.75** | **43** | P | **Pn** | **18 30 11.2** | **+1.7** |
| **BSWZ** | **Blackbirch Sta** | **8.06** | **49** | Pn | **Pn** | **18 30 12.1** | **-1.5** |
| **BSWZ** | **Blackbirch Sta** | **8.06** | **49** | P | **Pn** | **18 30 18.3** | **+4.6** |
| **QRZ** | **Quartz Range** | **8.12** | **39** | Pn | **Pn** | **18 30 15.4** | **+1.0** |
| **QRZ** | **Quartz Range** | **8.12** | **39** | P | **Pn** | **18 30 15.8** | **+1.4** |
| **QRZ** | **Quartz Range** | **8.12** | **39** | P | **Pn** | **18 30 15.8** | **+1.4** |
| **NNZ** | **Nelson** | **8.19** | **44** | Pn | **Pn** | **18 30 17.4** | **+2.0** |
| **NNZ** | **Nelson** | **8.19** | **44** | P | **Pn** | **18 30 19.4** | **+4.0** |
| **TUWZ** | **Tuamarina** | **8.30** | **48** | Pn | **Pn** | **18 30 18.4** | **+1.4** |
| **TCW** | **Tory Channel** | **8.63** | **48** | P | **Pn** | **18 30 24.8** | **+3.3** |
| **DUWZ** | **D'Urville Isla** | **8.77** | **45** | P | **Pn** | **18 30 26.2** | **+2.7** |
| **SNZO** | **South Karori** | **8.78** | **50** | Pn | **Pn** | **18 30 22.5** | **-1.0** |
| **SNZO** | **South Karori** | **8.78** | **50** | P | **Pn** | **18 30 25.0** | **+1.5** |
| **BHW** | **Baring Head** | **8.80** | **51** | Pn | **Pn** | **18 30 22.4** | **-1.4** |
| **BHW** | **Baring Head** | **8.80** | **51** | P | **Pn** | **18 30 28.4** | **+4.6** |
| **PLWZ** | **Palliser** | **8.89** | **53** | Pn | **Pn** | **18 30 23.4** | **-1.7** |
| **MSWZ** | **Moikau Station** | **8.99** | **52** | Pn | **Pn** | **18 30 27.5** | **+1.0** |
| **KIW** | **Kapiti Island** | **9.21** | **49** | P | **Pn** | **18 30 33.1** | **+3.5** |
| **TRWZ** | **Traveller** | **9.24** | **54** | P | Pn | 18 30 36.7 | +6.8 |
| **OGWZ** | **Otaki Gorge** | **9.38** | **49** | P | **Pn** | **18 30 35.4** | **+3.6** |
| **HOWZ** | **Holdsworth Sta** | **9.50** | **51** | P | **Pn** | **18 30 37.5** | **+4.0** |
| **MRZ** | **Mangatainoka R** | **9.71** | **50** | P | **Pn** | **18 30 39.8** | **+3.5** |
| **NBEZ** | **Newall Road No** | **9.98** | **39** | P | **Pn** | **18 30 41.5** | **+1.5** |
| **BFZ** | **Birch Farm** | **10.04** | **52** | Pn | **Pn** | **18 30 40.4** | **-0.5** |
| **BFZ** | **Birch Farm** | **10.04** | **52** | P | **Pn** | **18 30 42.6** | **+1.7** |
| **NEZ** | **North Egmont** | **10.08** | **40** | P | Pn | 18 30 46.9 | +5.5 |
| **VRZ** | **Vera Road** | **10.49** | **42** | P | **Pn** | **18 30 49.9** | **+3.0** |
| **WNVZ** | **Wahianoa** | **10.72** | **45** | P | **Pn** | **18 30 53.9** | **+3.5** |
| **MOVZ** | **Moawhango** | **10.74** | **46** | P | **Pn** | **18 30 54.0** | **+3.6** |
| **KRHZ** | **Kereru** | **10.87** | **49** | P | **Pn** | **18 30 56.4** | **+4.3** |
| **OTVZ** | **Oturere** | **10.88** | **45** | P | **Pn** | **18 30 55.1** | **+2.6** |
| **NNVZ** | **North Ngauruho** | **10.88** | **45** | P | **Pn** | **18 30 55.3** | **+2.8** |
| **WTVZ** | **West Tongariro** | **10.88** | **45** | P | **Pn** | **18 30 56.6** | **+4.1** |
| **ETVZ** | **East Tongariro** | **10.93** | **45** | P | **Pn** | **18 30 53.9** | **+0.8** |
| **TMVZ** | **Te Maari** | **10.94** | **45** | P | **Pn** | **18 30 57.5** | **+4.2** |
| **KAHZ** | **Kahuranaki** | **11.02** | **51** | P | **Pn** | **18 30 58.5** | **+4.2** |
| **HIZ** | **Hauiti** | **11.03** | **40** | Pn | **Pn** | **18 30 54.7** | **+0.3** |
| **HIZ** | **Hauiti** | **11.03** | **40** | P | **Pn** | **18 30 54.9** | **+0.5** |
| **HIZ** | **Hauiti** | **11.03** | **40** | P | **Pn** | **18 30 54.8** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **11.29** | **48** | Pn | **Pn** | **18 30 58.9** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **11.29** | **48** | P | **Pn** | **18 30 59.7** | **+1.7** |
| **URZ** | **Urewera** | **12.29** | **47** | Pn | **Pn** | **18 31 11.3** | **-0.3** |
| | 1.0nm,0.3s,baz=213,slow=6.1,SNR=5.9 | | | | | | |
| URZ | | | | Sn | **Sn** | **18 33 25.6** | **-3.1** |
| | 0.6nm,0.3s,baz=144,slow=18,SNR=1.3 | | | | | | |
| **URZ** | **Urewera** | **12.29** | **47** | | **Pn** | **18 31 10.9** | **-0.8** |
| **URZ** | **Urewera** | **12.29** | **47** | P | **Pn** | **18 31 13.0** | **+1.4** |
| **TAU** | **Tasmania Unive** | **13.76** | **282** | Pn | **Pn** | **18 31 28.2** | **-3.4** |
| **MOO** | **Moorlands** | **14.05** | **284** | P | **Pn** | **18 31 36.0** | **+0.4** |
| **CNB** | **Canberra Magne** | **17.17** | **308** | P | **Pn** | **18 32 17.0** | **+0.4** |
| **CAN** | **Canberra** | **17.36** | **308** | Pn | **Pn** | **18 32 17.8** | **-1.1** |
| CAN | | | | IAmb | IAmb | 18 32 40.3 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **17.36** | **308** | P | **Pn** | **18 32 19.5** | **+0.6** |
| **TOO** | **Toolangi** | **17.82** | **296** | | **Pn** | **18 32 24.6** | **-0.1** |
| **TOO** | **Toolangi** | **17.82** | **296** | P | **P** | **18 32 26.3** | **+0.9** |
| **MGCD** | **Mangrove Creek** | **17.96** | **316** | P | **P** | **18 32 27.7** | **+0.8** |
| **STKA** | **Stephens Creek** | **24.06** | **301** | P | **P** | **18 33 32.5** | **+0.5** |
| | comp=Z,2.2nm,0.4s,baz=143,slow=13,SNR=6.4 | | | | | | |
| STKA | | | | LR | LR | 18 41 36.8 | |
| | comp=Z,125nm,19.9s,baz=202,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **24.06** | **301** | IAmb | IAmb | 18 33 35.2 | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **HTT** | **Hallett** | **24.57** | **295** | P | **P** | **18 33 37.7** | **+1.0** |
| **RMQ** | **Roma** | **24.76** | **321** | P | **P** | **18 33 38.8** | **+0.4** |
| **EIDS** | **Eidsvold** | **24.83** | **327** | P | **P** | **18 33 40.1** | **+1.2** |
| **DZM** | **Mont Dzumac** | **25.21** | **1** | P | **P** | **18 33 43.8** | **+1.3** |
| | comp=Z,6.0nm,0.9s,baz=204,slow=9.9,SNR=3.2 | | | | | | |
| DZM | | | | LR | LR | 18 41 46.2 | |
| | comp=Z,107nm,19.2s,baz=146,slow=32 | | | | | | |
| **LIFNC** | **LIFOU** | **26.52** | **3** | P | **P** | **18 33 53.9** | **-0.3** |
| | comp=Z,81nm,1.1s | | | | | | |
| **RTV** | **Rentapao** | **29.54** | **5** | P | **P** | **18 34 22.0** | **+0.7** |
| **CTA** | **Charters Tower** | **31.48** | **323** | LR | LR | 18 46 03.3 | |
| | comp=Z,111nm,18.9s,baz=114,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **31.48** | **323** | P | **P** | **18 34 39.9** | **+1.4** |
| CTAO | | | | IAmb | IAmb | 18 35 12.6 | |
| | comp=Z,7.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EMIJ | | | Sg | | Sn | 18 37 40.9 | -0.8 |
| EMIJ | | | *i* Vmb_Lg | | | 18 37 42.2 | |
| **EMAL** | **Malaga-Limoner** | **1.31 335** | P | | **Pn** | **18 37 24.9** | **-0.5** |
| EMAL | | | S | | **Sn** | **18 37 40.7** | **-1.3** |
| **TAF** | **Taforalt** | **1.32 124** | P | | **Pn** | **18 37 26.0** | **+0.4** |
| **TAF** | **Taforalt** | **1.32 124** | P | | **Pn** | **18 37 26.0** | **+0.4** |
| TAF | | | S | | **Sn** | **18 37 42.6** | **+0.2** |
| **SMIR** | **Smir Dam** | **1.34 275** | P | | **Pn** | **18 37 26.2** | **+0.5** |
| **SMIR** | **Smir Dam** | **1.34 275** | P | | **Pn** | **18 37 26.0** | **+0.3** |
| SMIR | | | S | | **Sb** | **18 37 44.9** | **+1.0** |
| **CEU** | **Ceuta** | **1.37 284** | P | | **Pn** | **18 37 23.7** | **-2.4** |
| **CHEFC** | **Chefchaouen** | **1.39 251** | P | | **Pb** | **18 37 28.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.39 251** | P | | **Pb** | **18 37 27.3** | **-0.7** |
| CHEFC | | | S | | **Sb** | **18 37 45.9** | **+0.6** |
| **JBK** | **JBK** | **1.56 142** | P | | **Pn** | **18 37 29.2** | **+0.2** |
| **JBK** | **JBK** | **1.56 142** | P | | **Pn** | **18 37 29.2** | **+0.2** |
| JBK | | | S | | **Sn** | **18 37 48.5** | **-0.1** |
| **EJIF** | **Jimena Fronter** | **1.65 303** | Pn | | **Pn** | **18 37 30.2** | **+0.1** |
| **LIJA** | **Lijar** | **1.89 315** | P | | **Pb** | **18 37 36.0** | **-0.6** |
| LIJA | | | S | | **Sb** | **18 38 04.0** | **+4.1** |
| **SICH** | **Sidi Chahed** | **1.96 222** | S | | Sn | 18 37 43.0 | -15 |
| **LCRM** | **LCR** | **2.10 206** | P | | **Pb** | **18 37 40.0** | **-0.1** |
| **LCRM** | **LCR** | **2.10 206** | P | | **Pb** | **18 37 38.5** | **-1.6** |
| LCRM | | | S | | **Sn** | **18 38 03.0** | **+1.4** |
| **IFR** | **Ifrane** | **2.35 210** | P | | **Pn** | **18 37 40.2** | **+0.4** |
| IFR | | | S | | **Sn** | **18 38 08.8** | **+0.9** |
| **CZD** | **Col de Zad** | **2.75 203** | P | | **Pn** | **18 37 48.0** | **+2.5** |
| **CZD** | **Col de Zad** | **2.75 203** | P | | **Pn** | **18 37 47.5** | **+2.0** |
| CZD | | | S | | **Sn** | **18 38 19.4** | **+1.3** |
| **EZAR** | **Zarzadilla de** | **2.83 35** | Pn | | **Pn** | **18 37 46.9** | **+0.7** |
| EZAR | | | Sn | | **Sn** | **18 38 19.8** | **+0.3** |
| **MD31** | **MD31** | **2.83 198** | P | | **Pn** | **18 37 48.2** | **+1.9** |
| MD31 | | | S | | **Sn** | **18 38 21.7** | **+2.1** |
| **MDT** | **Midelt** | **2.84 195** | P | | **Pn** | **18 37 47.8** | **+1.2** |
| **MDT** | **Midelt** | **2.84 195** | P | | **Pn** | **18 37 47.8** | **+1.2** |
| MDT | | | S | | **Sn** | **18 38 23.2** | **+3.2** |
| **TDRA** | **Tendrara** | **2.90 150** | P | | **Pn** | **18 37 50.0** | **+2.6** |
| **TDRA** | **Tendrara** | **2.90 150** | P | | **Pn** | **18 37 48.5** | **+1.2** |
| TDRA | | | S | | **Sn** | **18 38 21.7** | **+0.3** |
| **CART** | **Cartagena** | **2.98 47** | P | | **Pn** | **18 37 49.6** | **+1.3** |
| CART | | | S | | **Sn** | **18 38 18.8** | **-4.4** |
| **ZHG** | **ZHG** | **3.20 229** | P | | **Pn** | **18 37 52.3** | **+0.9** |
| ZHG | | | S | | **Sn** | **18 38 30.8** | **+2.1** |
| **ETOB** | **Tobarra** | **3.53 29** | Pn | | **Pn** | **18 37 58.7** | **+2.8** |
| ETOB | | | Sn | | **Sn** | **18 38 40.0** | **+3.1** |
| ETOB | | | *i* Vmb_Lg | | | 18 39 07.3 | |
| **EGRO** | **El Granado** | **3.59 304** | Pn | | **Pn** | **18 37 57.1** | **+0.4** |
| EGRO | | | Sn | | **Sn** | **18 38 37.2** | **-1.2** |
| EGRO | | | *i* Vmb_Lg | | | 18 38 42.8 | |
| **PVAQ** | **Vaqueiros** | **3.69 301** | *e*Pn | | **Pn** | **18 37 58.7** | **+0.7** |
| PVAQ | | | *e*Sn | | **Sn** | **18 38 39.7** | **-1.0** |
| PVAQ | | | A | | A | 18 38 48.0 | |
| | 28nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69 301** | P | | **Pn** | **18 37 58.5** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.69 301** | P | | **Pn** | **18 37 58.5** | **+0.5** |
| PVAQ | | | S | | **Sn** | **18 38 41.1** | **+0.4** |
| **PAB** | **San Pablo** | **4.00 353** | Pn | | **Pn** | **18 38 04.2** | **+1.8** |
| PAB | | | Sn | | **Sn** | **18 38 48.4** | **+0.1** |
| PAB | | | *i* Vmb_Lg | | | 18 39 14.0 | |
| **AFON** | **Font Roja** | **4.01 39** | Pn | | **Pn** | **18 38 05.4** | **+2.9** |
| AFON | | | Sn | | **Sn** | **18 38 48.9** | **+0.2** |
| **PCVE** | **Castro Verde** | **4.02 302** | *e*Pn | | **Pn** | **18 38 03.9** | **+1.3** |
| PCVE | | | *e*Sn | | **Sn** | **18 38 49.0** | **+0.1** |
| PCVE | | | A | | A | 18 38 58.9 | |
| | 11nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.10 358** | Pn | | **Pn** | **18 38 05.8** | **+2.1** |
| ESDC | | | Sn | | **Sn** | **18 38 51.6** | **+0.7** |
| ESDC | | | *i* Vmb_Lg | | | 18 39 19.2 | |
| **EBAD** | **Badajoz** | **4.12 322** | Pn | | **Pn** | **18 38 03.9** | **0.0** |
| EBAD | | | Sn | | **Sn** | **18 38 50.6** | **-0.6** |
| EBAD | | | *i* Vmb_Lg | | | 18 38 57.6 | |
| **PBEJ** | **Beja** | **4.12 308** | *e*Pn | | **Pn** | **18 38 05.3** | **+1.3** |
| PBEJ | | | *e*Sn | | **Sn** | **18 38 51.9** | **+0.6** |
| PBEJ | | | A | | A | 18 38 55.3 | |
| | 11nm,0.5s | | | | | | |
| **EBEN2** | **Beniarda presa** | **4.20 41** | Sn | | **Sn** | **18 38 52.6** | **-0.7** |
| **MESJ** | **Messejana** | **4.25 303** | *e*P | | **Pn** | **18 38 06.3** | **+0.5** |
| MESJ | | | *e*S | | **Sn** | **18 38 52.8** | **-1.7** |
| MESJ | | | IAML | | | 18 38 57.2 | |
| | comp=N,16nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.25 303** | *e*Pn | | **Pn** | **18 38 06.8** | **+1.0** |
| MESJ | | | *e*Sn | | **Sn** | **18 38 54.4** | **-0.2** |
| MESJ | | | A | | A | 18 38 58.7 | |
| | comp=N,15nm,0.7s | | | | | | |
| **MORF** | **Marmelete** | **4.32 295** | *e*P | | **Pn** | **18 38 07.4** | **+0.6** |
| MORF | | | *e*S | | **Sn** | **18 38 54.3** | **-2.1** |
| MORF | | | IAML | | | 18 38 59.0 | |
| | comp=N,16nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.32 295** | *e*Pn | | **Pn** | **18 38 08.3** | **+1.5** |
| MORF | | | *e*Sn | | **Sn** | **18 38 56.6** | **+0.2** |
| MORF | | | A | | A | 18 39 01.8 | |
| | comp=N,13nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.39 292** | *e*Pn | | **Pn** | **18 38 09.2** | **+1.5** |
| PFVI | | | *e*Sn | | **Sn** | **18 38 58.3** | **+0.3** |
| PFVI | | | A | | A | 18 39 11.8 | |
| | comp=N,14nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.39 292** | P | | **Pn** | **18 38 07.9** | **+0.2** |
| PFVI | | | S | | **Sn** | **18 38 56.6** | **-1.4** |
| **PESTR** | **Estremoz** | **4.50 318** | *e*Pn | | **Pn** | **18 38 10.9** | **+1.7** |
| PESTR | | | *e*Sn | | **Sn** | **18 39 00.6** | **-0.1** |
| PESTR | | | A | | A | 18 39 38.7 | |
| | comp=N,14nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **4.50 318** | P | | **Pn** | **18 38 09.9** | **+0.7** |
| PESTR | | | S | | **Sn** | **18 38 58.7** | **-2.1** |
| **EVO** | **Evora** | **4.52 312** | P | | **Pn** | **18 38 10.0** | **+0.6** |
| EVO | | | S | | **Sn** | **18 39 00.2** | **-0.9** |
| **EVO** | **Evora** | **4.52 312** | *e*Pn | | **Pn** | **18 38 10.8** | **+1.4** |
| EVO | | | *e*Sn | | **Sn** | **18 39 00.7** | **-0.4** |
| EVO | | | A | | A | 18 39 05.1 | |
| | comp=N,17nm,0.6s | | | | | | |
| **ECHE** | **Chera** | **4.58 28** | Pn | | **Pn** | **18 38 12.3** | **+2.0** |
| **PNCL** | **Nicolau / Gran** | **4.60 305** | *e*Pn | | **Pn** | **18 38 11.1** | **+0.5** |
| PNCL | | | *e*Sn | | **Sn** | **18 39 03.2** | **0.0** |
| PNCL | | | A | | A | 18 39 05.8 | |
| | comp=N,11nm,0.3s | | | | | | |
| **UCM** | **Universidad Co** | **4.74 5** | P | | **Pn** | **18 38 15.2** | **+2.6** |
| UCM | | | S | | **Sn** | **18 39 10.1** | **+3.3** |
| **EPLA** | **Plasencia** | **4.85 338** | Pn | | **Pn** | **18 38 15.6** | **+1.5** |
| EPLA | | | Sn | | **Sn** | **18 39 10.1** | **+0.7** |
| EPLA | | | *i* Vmb_Lg | | | 18 39 35.2 | |
| **PMTG** | **Montargil** | **5.00 316** | *e*Pn | | **Pn** | **18 38 17.1** | **+1.1** |
| PMTG | | | *e*Sn | | **Sn** | **18 39 12.6** | **-0.3** |
| **GUD** | **Guadarrama** | **5.07 356** | Pn | | **Pn** | **18 38 20.0** | **+2.8** |
| GUD | | | Sn | | **Sn** | **18 39 16.2** | **+1.2** |
| GUD | | | *i* Vmb_Lg | | | 18 39 48.8 | |
| **PACT** | **Alcochete** | **5.17 310** | *e*Pn | | **Pn** | **18 38 19.9** | **+1.6** |
| PACT | | | *e*Sn | | **Sn** | **18 39 17.8** | **+0.7** |
| PACT | | | A | | A | 18 39 24.5 | |
| | comp=N,36nm,0.6s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.19 326** | *e*Pn | | **Pn** | **18 38 20.3** | **+1.7** |
| PCBR | | | *e*Sn | | **Sn** | **18 39 16.9** | **-0.8** |
| PCBR | | | A | | A | 18 39 19.2 | |
| | comp=N,11nm,0.8s | | | | | | |
| **OUZM** | **OUZ** | **5.29 209** | P | | **Pn** | **18 38 22.7** | **+2.4** |
| OUZM | | | S | | **Sn** | **18 39 22.9** | **+2.4** |
| **ETOR** | **Torete** | **5.40 14** | Pn | | **Pn** | **18 38 23.0** | **+1.3** |
| ETOR | | | Sn | | **Sn** | **18 39 22.4** | **-0.6** |
| ETOR | | | *i* Vmb_Lg | | | 18 40 04.1 | |
| **OUK** | **Oukaimeden** | **5.55 220** | P | | **Pn** | **18 38 25.2** | **+1.2** |
| OUK | | | S | | **Sn** | **18 39 27.0** | **-0.2** |
| **PMAFR** | **Mafra** | **5.56 309** | *e*Pn | | **Pn** | **18 38 25.3** | **+1.5** |
| PMAFR | | | *e*Sn | | **Sn** | **18 39 26.9** | **0.0** |
| **PSBE** | **So Bento** | **5.62 316** | *e*Pn | | **Pn** | **18 38 26.4** | **+1.8** |
| PSBE | | | *e*Sn | | **Sn** | **18 39 27.8** | **-0.6** |
| **MTE** | **Manteigas** | **5.68 329** | *e*Pn | | **Pn** | **18 38 27.2** | **+1.8** |
| MTE | | | *e*Sn | | **Sn** | **18 39 29.8** | **0.0** |
| **PVIS** | **Viseu** | **6.09 329** | *e*Pn | | **Pn** | **18 38 32.7** | **+1.6** |
| PVIS | | | *e*Sn | | **Sn** | **18 39 39.0** | **-0.9** |
| **MVO** | **Moncorvo** | **6.15 336** | *e*Pn | | **Pn** | **18 38 33.8** | **+1.9** |
| MVO | | | *e*Sn | | **Sn** | **18 39 41.6** | **+0.1** |
| MVO | | | A | | A | 18 39 54.3 | |
| | comp=N,13nm,0.5s | | | | | | |
| **PVRL** | **Vila Real** | **6.49 332** | *e*Pn | | **Pn** | **18 38 38.3** | **+1.7** |
| PVRL | | | *e*Sn | | **Sn** | **18 39 48.4** | **-1.4** |
| PVRL | | | A | | A | 18 39 53.0 | |
| | comp=N,15nm,0.7s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.61 332** | *e*Pn | | **Pn** | **18 38 40.1** | **+1.9** |
| POLO | | | *e*Sn | | **Sn** | **18 39 51.3** | **-1.4** |
| POLO | | | A | | A | 18 39 53.9 | |
| | comp=N,3.2nm,0.8s | | | | | | |
| **PBRG** | **Braganca** | **6.65 340** | *e*Pn | | **Pn** | **18 38 41.1** | **+2.3** |
| PBRG | | | *e*Sn | | **Sn** | **18 39 52.8** | **-0.9** |
| PBRG | | | A | | A | 18 39 55.3 | |
| | comp=N,5.1nm,0.6s | | | | | | |
| **PCAB** | **Cabril** | **6.99 333** | *e*Pn | | **Pn** | **18 38 45.8** | **+2.4** |
| PCAB | | | *e*Sn | | **Sn** | **18 40 00.0** | **-2.0** |
| PCAB | | | A | | A | 18 40 03.5 | |
| | comp=N,11nm,0.7s | | | | | | |
| **ELOB** | **Lobios** | **7.13 333** | Pn | | **Pn** | **18 38 46.9** | **+1.4** |
| ELOB | | | Sn | | **Sn** | **18 40 01.1** | **-4.5** |
| **PGAV** | **Gavieira, Arco** | **7.30 332** | *e*Pn | | **Pn** | **18 38 49.6** | **+1.9** |
| PGAV | | | *e*Sn | | **Sn** | **18 40 08.3** | **-1.4** |
| **ETSF** | **Etsaut** | **7.72 18** | *e*Pn | | **Pn** | **18 38 54.2** | **+0.7** |
| **ETSF** | **Etsaut** | **7.72 18** | *e*P | | Pn | 18 38 59.4 | +5.9 |
| ETSF | | | *e*Sn | | **Sn** | **18 40 16.8** | **-3.3** |
| | comp=N,0.8nm,0.2s | | | | | | |
| **SJPF** | **Ste Jean** | **7.78 14** | *e*Pn | | **Pn** | **18 38 54.2** | **0.0** |
| **SJPF** | **Ste Jean** | **7.78 14** | *e*P | | Pn | 18 38 59.8 | +5.6 |
| SJPF | | | *e*Sn | | **Sn** | **18 40 18.2** | **-3.2** |
| | comp=N,0.6nm,0.2s | | | | | | |
| **EALK** | **Alkurruntz** | **7.83 12** | Pn | | **Pn** | **18 38 56.8** | **+1.8** |
| **EPF** | **Esparros** | **8.09 22** | *e*Pn | | **Pn** | **18 38 58.6** | **+0.1** |
| **EPF** | **Esparros** | **8.09 22** | *e*P | | Pn | 18 39 04.2 | +5.7 |
| EPF | | | *e*Sn | | **Sn** | **18 40 25.2** | **-3.9** |
| | comp=N,0.2nm,0.1s | | | | | | |
| **MTLF** | **Montolieu** | **9.02 29** | *e*Pn | | **Pn** | **18 39 11.5** | **+0.3** |
| **LASF** | **Ste Croix** | **10.30 32** | *e*P | | Pn | 18 39 34.5 | +5.7 |
| **CAF** | **Calviac** | **10.34 24** | *e*Pn | | **Pn** | **18 39 28.8** | **-0.5** |
| **RJF** | **Les Rejaudoux** | **10.51 21** | *e*Pn | | **Pn** | **18 39 31.6** | **0.0** |
| RJF | | | *e*Sn | | **Sn** | **18 41 22.4** | **-6.1** |
| | comp=N,2.6nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **11.93 43** | *e*Sn | | **Sn** | **18 41 56.7** | **-6.7** |
| | comp=N,2.5nm,0.2s | | | | | | |
| **PGF** | **Pioggiola** | **12.10 51** | *e*P | | Pn | 18 39 58.7 | +5.2 |

**TRN 16 18:41:24.2, 13°03N×59°52W, h44km, MD3.6, 2D, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BBSP** | **Saint Philip** | **0.10** | **41** | *j*/*i*P | Pn | 18 41 32.1 | +0.8 |
| **BBGH** | **Gun Hill** | **0.12** | **343** | *j*/*i*P | Pn | 18 41 32.3 | +0.9 |
| BBGH | | | | *e*S | Sn | 18 41 37.7 | +1.2 |
| **BCHC** | **Barbados, Cave** | **0.15** | **315** | *e*P | Pn | 18 41 32.9 | +1.4 |
| BCHC | | | | *e*S | Sn | 18 41 39.0 | +2.3 |
| **SLBI** | **Saint Lucia, B** | **1.72** | **305** | *e*P | Pn | 18 41 53.1 | +1.4 |
| SLBI | | | | *e*S | Sn | 18 42 14.3 | +1.8 |
| **SLCP** | **Castries, St.** | **1.73** | **304** | *e*S | Sn | 18 42 14.5 | +1.9 |
| **MPOM** | **Morne Pois Mar** | **1.91** | **317** | *e*P | Pn | 18 41 55.4 | +1.1 |
| **MPOM** | **Morne Pois Mar** | **1.91** | **317** | *e* | Pn | 18 42 06.0 | +12 |
| MPOM | | | | *e*S | Sn | 18 42 18.0 | +0.8 |
| **GCMP** | **Grenada, Carri** | **1.93** | **254** | *e*P | Pn | 18 41 56.2 | +1.6 |
| GCMP | | | | *e*S | Sn | 18 42 19.3 | +1.6 |
| **MVM** | **Montagne Vaucl** | **2.02** | **319** | *e*P | Pn | 18 41 57.5 | +1.7 |
| **LPMF** | **Morne Lapointe** | **2.08** | **318** | *e*P | Pn | 18 41 58.0 | +1.4 |
| **BIM** | **Bigot** | **2.11** | **315** | *e*P | Pn | 18 41 57.9 | +0.9 |
| **BIM** | **Bigot** | **2.11** | **315** | *e* | Pn | 18 42 08.8 | +12 |
| BIM | | | | *e*S | Sn | 18 42 23.6 | +1.5 |
| **TRMF** | **Trois Ilets** | **2.11** | **315** | *e*P | Pn | 18 41 58.4 | +1.4 |
| **ZAM** | **Aeronautique** | **2.12** | **317** | *e*P | Pn | 18 41 58.8 | +1.6 |
| **ILAM** | **Ilet Lapin Mar** | **2.17** | **323** | *e*P | Pn | 18 41 59.4 | +1.5 |
| **ILAM** | **Ilet Lapin Mar** | **2.17** | **323** | *e* | Pn | 18 42 09.2 | +11 |
| ILAM | | | | *e*S | Sn | 18 42 24.7 | +1.1 |
| **GRNR** | **Grenville** | **2.26** | **247** | *e*S | Sn | 18 42 27.8 | +1.9 |
| **FDF** | **Fort de France** | **2.31** | **317** | *e*P | Pn | 18 42 01.6 | +1.7 |
| FDF | | | | *e*S | Sn | 18 42 27.6 | +0.4 |
| **GRFF** | **Grenada Fort F** | **2.37** | **246** | *e*P | Pn | 18 42 02.2 | +1.6 |
| GRFF | | | | *e*S | Sn | 18 42 29.9 | +1.4 |
| **GBMF** | **Grand Be** | **2.37** | **318** | *e*P | Pn | 18 42 02.5 | +1.8 |
| **PML** | **Morne Lenard** | **2.37** | **317** | *e*P | Pn | 18 42 03.1 | +2.4 |
| **BAMF** | **Morne Balai** | **2.38** | **319** | *e*P | Pn | 18 42 02.6 | +1.9 |
| **SVN** | **Savane Anatole** | **2.41** | **319** | *e*P | Pn | 18 42 02.9 | +1.8 |
| **PCM** | **Pelee Case Pet** | **2.42** | **318** | *e*P | Pn | 18 42 03.0 | +1.7 |
| **TRN** | **Trinidad (W)** | **3.00** | **218** | *e*P | Pn | 18 42 11.2 | +2.0 |
| TRN | | | | *e*S | Sn | 18 42 43.6 | -0.3 |
| **DSLB** | **Salisbury** | **3.02** | **323** | *e*P | Pn | 18 42 11.6 | +2.0 |
| DSLB | | | | *e*S | Sn | 18 42 46.2 | +1.7 |
| **MDCT** | **Cottage Hill,** | **3.19** | **324** | *e*P | Pn | 18 42 14.0 | +2.2 |
| **MAGL** | **Barre de l'ile** | **3.37** | **330** | *e*P | Pn | 18 42 15.1 | +0.8 |
| MAGL | | | | *e*S | Sn | 18 42 53.4 | +0.5 |
| **TDBA** | **Terre de Bas,** | **3.47** | **324** | *e*P | Pn | 18 42 17.8 | +2.1 |
| TDBA | | | | *e*S | Sn | 18 42 56.7 | +1.1 |
| **TBG** | **Guadaloupe-3** | **3.48** | **324** | *e*P | Pn | 18 42 17.8 | +2.0 |
| TBG | | | | *e*S | Sn | 18 42 56.8 | +1.0 |
| **CBE** | **Ff, Capester** | **3.63** | **327** | *e*P | Pn | 18 42 19.9 | +1.9 |
| CBE | | | | *e*S | Sn | 18 43 00.1 | +0.5 |
| **ABD** | **La Joyeuse, An** | **3.92** | **331** | *e*P | Pn | 18 42 23.3 | +1.5 |
| **ANBD** | **Bethesda, Anti** | **4.54** | **332** | *e*P | Pn | 18 42 31.6 | +1.1 |
| **ANBD** | **Bethesda, Anti** | **4.54** | **332** | *e*S | Sn | 18 43 23.8 | +1.8 |

*IDC **16** 18:44:13.7±2.3, 8°.84S×128°.38E, h91km±25km, mb3.4/5, mb1 3.6/10, mb1mx3.3/29, mbtmp3.8/10, Error ellipse: s-maj=21.4km s-min=20.1km az=13.0*
*NEIC **16** 18:44:14.0±2.7, 8°.68S±0°.06×128°.37E±0°.06, h85km±10km, mb4.0/10, Error ellipse: s-maj=8.9km s-min=7.9km az=51.0*

**ISC 16 18:44:14.0±0.6, 8°.78S±0°.05×128°.38E±0°.06, h100km, n46, σ2s06/49, mb3.8/7, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.99** | **75** | Pn | **Pn** | **18 45 00.4** | **+0.7** |
| **SAUI** | **Saumlaki** | **2.99** | **75** | P | **Pn** | **18 45 00.9** | **+1.2** |
| **SOEI** | **Soe** | **4.18** | **256** | Pn | **Pn** | **18 45 15.7** | **0.0** |
| **SOEI** | **Soe** | **4.18** | **256** | P | **Pn** | **18 45 16.2** | **+0.5** |
| **DRS** | **Darwin Rock St** | **4.39** | **146** | P | **Pn** | **18 45 21.8** | **+3.2** |
| **MTN** | **Manton Dam** | **4.86** | **146** | Pn | **Pn** | **18 45 27.5** | **+2.6** |
| **MTN** | **Manton Dam** | **4.86** | **146** | P | **Pn** | **18 45 28.3** | **+3.4** |
| **BATI** | **Baumata** | **4.87** | **253** | P | **Pn** | **18 45 25.0** | **0.0** |
| | 7.5nm,0.3s,baz=74,slow=5.5,SNR=18 | | | | | | |
| BATI | | | | S | **Sn** | **18 46 20.0** | **-0.3** |
| | 13nm,0.3s,baz=133,slow=21,SNR=3.6 | | | | | | |
| **KDU** | **Kakadu** | **5.59** | **134** | P | **Pn** | **18 45 38.1** | **+3.3** |
| **MMRI** | **Maumere** | **6.08** | **271** | Pn | **Pn** | **18 45 41.2** | **-0.2** |
| **KNRA** | **Kununurra** | **6.87** | **177** | Pn | **Pn** | **18 45 54.0** | **+1.8** |
| **KNRA** | **Kununurra** | **6.87** | **177** | P | **Pn** | **18 45 54.5** | **+2.3** |
| **SIJI** | **Sorong** | **8.36** | **20** | P | **Pn** | **18 46 12.2** | **-0.3** |
| | 0.5nm,0.3s,baz=163,slow=19,SNR=2.3 | | | | | | |
| SIJI | | | | S | **Sn** | **18 47 39.4** | **-6.0** |
| | 0.6nm,0.3s,baz=298,slow=23,SNR=1.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.64** | **196** | P | **Pn** | **18 46 29.3** | **-0.6** |
| | 1.7nm,0.3s,baz=26,slow=10,SNR=81 | | | | | | |
| FITZ | | | | S | **Sn** | **18 48 13.6** | **-2.8** |
| | 3.3nm,0.3s,baz=285,slow=16,SNR=8.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.64** | **196** | P | **Pn** | **18 46 30.3** | **+0.4** |
| **PLAI** | **Plampang** | **10.48** | **269** | P | **Pn** | **18 46 39.5** | **-1.9** |
| **WB0** | **Warramunga Arr** | **12.38** | **153** | Pn | **Pn** | **18 47 06.3** | **-0.5** |
| **WRAB** | **Tennant Creek** | **12.50** | **153** | P | **Pn** | **18 47 09.3** | **+0.8** |
| **WRA** | **Warramunga Arr** | **12.51** | **153** | P | **Pn** | **18 47 07.5** | **-1.0** |
| | 0.4nm,0.3s,baz=322,slow=13,SNR=16 | | | | | | |
| WRA | | | | S | Sn | 18 49 19.0 | -7.1 |
| | 1.1nm,0.3s,baz=328,slow=22,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.51** | **153** | | **Pn** | **18 47 06.6** | **-1.9** |
| **WB2** | **Warramunga Arr** | **12.51** | **153** | Pn | **Pn** | **18 47 07.7** | **-0.9** |
| **WR0** | **Warramunga Arr** | **12.61** | **152** | Pn | **Pn** | **18 47 09.5** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **14.07** | **270** | Pn | **Pn** | **18 47 29.8** | **+0.7** |
| **MBWA** | **Marble Bar** | **14.87** | **213** | Pn | **Pn** | **18 47 38.8** | **-0.4** |
| **MBWA** | **Marble Bar** | **14.87** | **213** | P | **Pn** | **18 47 39.4** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **15.15** | **212** | Pn | **Pn** | **18 47 43.1** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **15.15** | **212** | Pn | **Pn** | **18 47 42.8** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 18 47 52.0 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **15.15** | **212** | P | **Pn** | **18 47 42.9** | **+0.2** |
| **COEN** | **Coen** | **15.39** | **111** | Pn | **Pn** | **18 47 45.2** | **-0.5** |
| **COEN** | **Coen** | **15.39** | **111** | P | **Pn** | **18 47 45.9** | **+0.1** |
| **AS31** | **Alice Springs** | **15.72** | **161** | Pn | **Pn** | **18 47 50.1** | **+0.1** |
| **ASAR** | **Alice Springs** | **15.72** | **161** | P | **Pn** | **18 47 50.1** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=9.4,SNR=24 | | | | | | |
| ASAR | | | | S | **Sn** | **18 50 35.5** | **-8.5** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=20,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **15.72** | **161** | P | **Pn** | **18 47 51.1** | **+1.2** |
| **FORT** | **Forrest** | **21.89** | **181** | P | **P** | **18 49 01.2** | **+2.2** |
| **MORW** | **Morawa** | **23.28** | **208** | | **P** | **18 49 14.4** | **+1.3** |
| MORW | | | | IAmb | IAmb | 18 49 34.3 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **RABL** | **Rabaul** | **24.06** | **81** | P | **P** | **18 49 20.1** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **39.70** | **313** | P | **P** | **18 51 37.3** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=143,slow=7.6,SNR=1.7 | | | | | | |
| **SONM** | **Songino Array** | **59.63** | **343** | P | **P** | **18 54 09.2** | **+1.4** |
| | comp=Z,0.4nm,0.9s,baz=134,slow=6.2,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **59.63** | **343** | IAmb | IAmb | 18 54 17.1 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **66.50** | **19** | P | **P** | **18 54 54.0** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **66.50** | **19** | P | **P** | **18 54 54.4** | **+1.4** |
| | comp=Z,5.2nm,1.0s,baz=177,slow=5.8,SNR=4.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **66.50** | **19** | P | **P** | **18 54 54.1** | **+1.2** |
| **MK31** | **Makanchi Array** | **68.85** | **328** | P | **P** | **18 55 08.8** | **+1.0** |
| MK31 | | | | IAmb | IAmb | 18 55 37.1 | |
| | comp=Z,3.0nm,1.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.85** | **328** | P | **P** | **18 55 08.8** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=123,slow=7.9,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.48** | **335** | P | **P** | **18 55 30.2** | **+0.6** |
| | comp=Z,0.4nm,0.3s,baz=108,slow=9.5,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.48** | **335** | P | **P** | **18 55 29.5** | **-0.1** |

*IDC **16** 18:54:10.3±0.9, 0°.70S×127°.34E, h0km, mb3.8/6, mb1 4.0/9, mb1mx3.7/37, mbtmp3.9/9, ML3.5/3, MS4.7/2, Ms1 4.7/2, ms1mx2.8/64, Error ellipse: s-maj=28.0km s-min=17.5km az=59.0*
*DJA **16** 18:54:12.6±0.2, 1°.S±2°×12°.7E±°, h10km, M3.9/18, mb4.2/18, mB4.8/2, MLv3.8/14, Mw(mB)4.0/2, MwMwp6.0/1, Mwp6.1/1*
*NEIC **16** 18:54:13.6±2.5, 0°.59S±0°.05×127°.50E±0°.07, h21km±2km, mb4.1/15, Error ellipse: s-maj=11.0km s-min=7.5km az=78.0*

**ISC 16 18:54:15.6±0.5, 0°.66S±0°.05×127°.40E±0°.06, h41km, n61, σ1s30/62, mb4.2/13, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.42** | **359** | Pn | **Pn** | **18 54 38.3** | **-0.8** |
| **TNTI** | **Ternate** | **1.42** | **359** | P | **Pn** | **18 54 38.2** | **-0.8** |
| TNTI | | | | S | **Sn** | **18 54 57.0** | **+0.5** |
| **TNTI** | **Ternate** | **1.42** | **359** | P | **Pn** | **18 54 39.1** | **+0.1** |
| **SANI** | **Sanana** | **1.97** | **226** | P | **Pn** | **18 54 44.6** | **-1.9** |
| **MSAI** | **Masohi** | **3.08** | **150** | P | **Pn** | **18 55 02.8** | **+1.1** |
| **AAI** | **Ambon** | **3.11** | **165** | P | **Pn** | **18 55 03.1** | **+0.9** |
| AAI | | | | S | **Sn** | **18 55 40.6** | **+2.5** |
| **KMSI** | **Cibinong** | **3.63** | **290** | P | **Pn** | **18 55 09.5** | **+0.2** |
| **SIJI** | **Sorong** | **3.88** | **93** | Pn | **Pn** | **18 55 12.1** | **-0.7** |
| | 4.0nm,0.3s,baz=273,slow=14,SNR=15 | | | | | | |
| SIJI | | | | Sn | **Sn** | **18 55 59.4** | **+2.3** |
| | 0.7nm,0.3s,baz=288,slow=20,SNR=1.8 | | | | | | |
| SIJI | | | | LR | LR | 18 57 29.6 | |
| | comp=Z,59nm,18.9s,baz=32,slow=51 | | | | | | |
| **MRSI** | **Marisa** | **5.57** | **282** | P | **Pn** | **18 55 35.4** | **-0.6** |
| | 0.1nm18nm,0.6s | | | | | | |
| **APSI** | **Ampana** | **5.75** | **267** | P | **Pn** | **18 55 37.4** | **-1.1** |
| | 0.2nm559nm45nm,0.5s | | | | | | |
| **BBSI** | **Bau Bau** | **6.80** | **225** | P | **Pn** | **18 55 51.8** | **-1.0** |
| | 0.0nm3.9nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **6.84** | **285** | Pn | **Pn** | **18 55 54.9** | **+1.4** |
| **MPSI** | **Mapaga** | **7.56** | **278** | P | **Pn** | **18 56 03.6** | **+0.2** |
| | 0.0nm88µm749nm6.3nm,0.6s | | | | | | |
| **DAV** | **Davao City (W)** | **7.89** | **347** | Pn | **Pn** | **18 56 07.5** | **-0.3** |
| **TTSI** | **Tana Toraja** | **7.93** | **253** | P | **Pn** | **18 56 07.7** | **-0.8** |
| | 0.1nm15nm,0.8s | | | | | | |
| **BNSI** | **Bone** | **8.17** | **243** | P | **Pn** | **18 56 12.0** | **+0.3**

*λ-103.00000°. Principal axes: T 4.9060, Plg29.0000°, Azm338.0000°; N 0.6000, Plg13.0000°, Azm241.0000°; P -5.5030, Plg58.0000°, Azm130.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-tate function*

**ISC 16 19:07:16.0±0.6, 4.71S±0.04×152.61E±0.05, h64km±5km, n455, σ1♀23/425, mb4.9/153, 20C-32D, Fault plane solution: NP1:ϕs245.58283°, δ69.06196°, λ-89.16212°. NP2:ϕs63.23931°, δ20.95405°, λ-92.18869°. Principal axes:** T Plg24.0575°, Azm334.9340°; N Plg0.7826°, Azm65.2834°; P Plg65.9281°, Azm157.0355°; **New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.68** | **319** | | | | **Pn** | **19 07 28.8** | **-1.6** |
| **MANU** | **Manus Island** | **5.87** | **297** | | | | **Pn** | **19 08 41.6** | **+1.1** |
| **PMG** | **Port Moresby** | **7.14** | **229** | P | | | **Pn** | **19 08 60.0** | **+2.1** |
| | 9.5nm,0.3s,baz=52,slow=12,SNR=35 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **19 10 17.5** | **-0.1** |
| | 8.2nm,0.3s,baz=86,slow=12,SNR=1.8 | | | | | | | | |
| **PMG** | **Port Moresby** | **7.14** | **229** | *ce*P | | | **Pn** | **19 08 59.7** | **+1.8** |
| PMG | | | | pmax | | pmax | | | |
| | comp=Z,65nm,0.8s | | | | | | | | |
| **PMG** | **Port Moresby** | **7.14** | **229** | Pn | | | **Pn** | **19 08 59.9** | **+2.0** |
| **PMG** | **Port Moresby** | **7.14** | **229** | P | | | **Pn** | **19 09 00.4** | **+2.5** |
| **HNR** | **Honiara** | **8.66** | **123** | P | | | **Pn** | **19 09 21.8** | **+3.1** |
| | comp=Z,10nm,0.3s,baz=274,slow=4.3,SNR=2.1 | | | | | | | | |
| HNR | | | | S | | | **Sn** | **19 10 53.9** | **-1.0** |
| | baz=107,slow=18,SNR=1.4 | | | | | | | | |
| HNR | | | | LR | | LR | LR | 19 12 58.5 | |
| | comp=Z,2μm,20.2s,baz=294,slow=39 | | | | | | | | |
| **HNR** | **Honiara** | **8.66** | **123** | Pn | | | **Pn** | **19 09 21.4** | **+2.7** |
| **GENI** | **Genyem** | **12.59** | **279** | P | | | **Pn** | **19 10 16.9** | **+4.4** |
| | comp=Z,108nm,1.2s | | | | | | | | |
| **PATS** | **Pohnpei** | **12.81** | **26** | | | | **Pn** | **19 10 14.1** | **-1.3** |
| **PATS** | **Pohnpei** | **12.81** | **26** | P | | | **Pn** | **19 10 15.2** | **-0.2** |
| **COEN** | **Coen** | **13.07** | **225** | Pn | | | **Pn** | **19 10 20.0** | **+1.0** |
| **COEN** | **Coen** | **13.07** | **225** | P | | | **Pn** | **19 10 20.2** | **+1.2** |
| **SMPI** | **Sarmi** | **14.13** | **281** | P | | | **Pn** | **19 10 33.7** | **+0.5** |
| | comp=Z,74nm,1.2s | | | | | | | | |
| **CTA** | **Charters Tower** | **16.49** | **202** | P | | | **P** | **19 11 04.9** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=20,slow=12,SNR=14 | | | | | | | | |
| CTA | | | | LR | | LR | LR | 19 16 58.6 | |
| | comp=Z,469nm,21.2s,baz=28,slow=35 | | | | | | | | |
| **CTA** | **Charters Tower** | **16.49** | **202** | P | | | **P** | **19 11 05.5** | **+0.5** |
| **CTAO** | **Charters Tower** | **16.49** | **202** | P | | | **P** | **19 11 05.1** | **+0.1** |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,51nm,1.5s | | | | | | | | |
| **CTAO** | **Charters Tower** | **16.49** | **202** | | | | **P** | **19 11 05.1** | **+0.1** |
| **CTAO** | **Charters Tower** | **16.49** | **202** | P | | | **P** | **19 11 05.5** | **+0.5** |
| **SANVU** | **Saraoutou** | **17.88** | **128** | | | | **P** | **19 11 20.2** | **-0.2** |
| **GUMO** | **Guam** | **19.74** | **337** | P | | | **Pn** | **19 11 43.1** | **+0.3** |
| | comp=Z,5.5nm,0.3s,baz=185,slow=8.2,SNR=15 | | | | | | | | |
| GUMO | | | | LR | | LR | LR | 19 19 45.9 | |
| | comp=Z,278nm,19.8s,baz=155,slow=38 | | | | | | | | |
| **GUMO** | **Guam** | **19.74** | **337** | | | | **P** | **19 11 40.9** | **+0.1** |
| **QIS** | **Mount Isa** | **20.20** | **218** | P | | | **P** | **19 11 46.8** | **+1.0** |
| **EIDS** | **Eidsvold** | **20.59** | **184** | P | | | **P** | **19 11 51.3** | **+1.4** |
| **LIFNC** | **LIFOU** | **21.38** | **140** | P | | | **P** | **19 11 59.1** | **+0.7** |
| **LIFNC** | **LIFOU** | **21.38** | **140** | P | | | **P** | **19 12 00.2** | **+1.8** |
| | comp=Z,335nm,0.9s | | | | | | | | |
| **KDU** | **Kakadu** | **21.41** | **247** | P | | | **P** | **19 11 57.2** | **-1.6** |
| **SIJI** | **Sorong** | **21.65** | **280** | P | | | **P** | **19 12 02.1** | **+0.7** |
| | comp=Z,72nm,0.9s,baz=106,slow=6.4,SNR=16 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **21.79** | **144** | P | | | **P** | **19 12 05.2** | **+2.4** |
| **DZM** | **Mont Dzumac** | **21.85** | **143** | *e*P | | | **P** | **19 12 05.5** | **+2.0** |
| | comp=Z,256nm,1.1s | | | | | | | | |
| DZM | | | | *e*S | | | **S** | **19 16 01.0** | **-0.7** |
| | comp=Z,350nm,24.7s | | | | | | | | |
| DZM | | | | *e*LR | | LR | LR | 19 17 24.8 | |
| | comp=Z,4μm,26.9s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.85** | **143** | P | | | **P** | **19 12 04.5** | **+1.0** |
| | comp=Z,82nm,0.9s,baz=336,slow=13,SNR=41 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.85** | **143** | P | | | **P** | **19 12 05.2** | **+1.7** |
| **DZM** | **Mont Dzumac** | **21.85** | **143** | P | | | **P** | **19 12 05.7** | **+2.2** |
| **RMQ** | **Roma** | **21.96** | **189** | P | | | **P** | **19 12 06.3** | **+1.7** |
| **ONTNC** | **Ouen Toro** | **22.04** | **144** | P | | | **P** | **19 12 07.0** | **+1.5** |
| **YATNC** | **Mamie plateau,** | **22.11** | **143** | P | | | **P** | **19 12 09.1** | **+2.9** |
| **OUENC** | **Ouen Island, N** | **22.35** | **143** | P | | | **P** | **19 12 09.8** | **+1.0** |
| OUENC | | | | IAmb | | IAmb | IAmb | 19 12 12.7 | |
| | comp=Z,79nm,0.8s | | | | | | | | |
| **OUENC** | **Ouen Island, N** | **22.35** | **143** | P | | | **P** | **19 12 10.1** | **+1.3** |
| **MTN** | **Manton Dam** | **22.69** | **248** | P | | | **P** | **19 12 11.4** | **-1.2** |
| MTN | | | | IAmb | | IAmb | IAmb | 19 12 31.7 | |
| | comp=Z,23nm,0.6s | | | | | | | | |
| **MTN** | **Manton Dam** | **22.69** | **248** | P | | | **P** | **19 12 13.0** | **+0.4** |
| **DRS** | **Darwin Rock St** | **22.78** | **249** | P | | | **P** | **19 12 13.2** | **-0.3** |
| | comp=Z,25nm,0.6s | | | | | | | | |
| **PINNC** | **Pines Island,** | **22.86** | **142** | P | | | **P** | **19 12 14.8** | **+0.6** |
| **QLP** | **Quilpie** | **23.17** | **199** | P | | | **P** | **19 12 18.0** | **+0.7** |
| **WB0** | **Warramunga Arr** | **23.21** | **228** | P | | | **P** | **19 12 16.3** | **-1.5** |
| WB0 | | | | IAmb | | IAmb | IAmb | 19 12 34.2 | |
| | comp=Z,45nm,1.0s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.22** | **228** | P | | | **P** | **19 12 16.5** | **-1.4** |
| WR0 | | | | IAmb | | IAmb | IAmb | 19 12 19.2 | |
| | comp=Z,34nm,0.5s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.34** | **228** | *ce*P | | | **P** | **19 12 17.5** | **-1.5** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,28nm,0.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.34** | **228** | P | | | **P** | **19 12 17.0** | **-2.0** |
| WRAB | | | | IAmb | | IAmb | IAmb | 19 12 20.5 | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.34** | **228** | P | | | **P** | **19 12 18.1** | **-0.9** |
| **WB2** | **Warramunga Arr** | **23.35** | **228** | P | | | **P** | **19 12 17.8** | **-1.3** |
| **WRA** | **Warramunga Arr** | **23.36** | **228** | P | | | **P** | **19 12 18.0** | **-1.2** |
| | comp=Z,31nm,0.5s,baz=53,slow=10.0,SNR=149 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **19 16 04.8** | **+0.4** |
| | comp=Z,3.3nm,0.9s,baz=46,slow=1.6,SNR=3.8 | | | | | | | | |
| WRA | | | | S | | | **S** | **19 16 25.2** | **-2.1** |
| | comp=Z,0.9nm,0.5s,baz=48,slow=2.1,SNR=4.6 | | | | | | | | |
| WRA | | | | ScP | | | **ScP** | **19 19 37.5** | **+0.3** |
| | comp=Z,4.4nm,1.2s,baz=3.0,slow=1.2,SNR=5.3 | | | | | | | | |
| WRA | | | | LR | | LR | LR | 19 22 03.3 | |
| | comp=Z,268nm,19.8s,baz=47,slow=38 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.36** | **228** | *i* P | | | **P** | **19 12 18.0** | **-1.2** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,36nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.36** | **228** | P | | | **P** | **19 12 17.3** | **-1.8** |
| **ARMA** | **Armidale** | **25.59** | **182** | P | | | **P** | **19 12 39.1** | **-0.3** |
| **ARMA** | **Armidale** | **25.59** | **182** | P | | | **P** | **19 12 39.4** | **0.0** |
| **TNTI** | **Ternate** | **25.80** | **282** | P | | | **P** | **19 12 41.2** | **-0.2** |
| TNTI | | | | IAmb | | IAmb | IAmb | 19 12 44.0 | |
| | comp=Z,46nm,0.9s | | | | | | | | |
| **TNTI** | **Ternate** | **25.80** | **282** | P | | | **P** | **19 12 40.4** | **-1.0** |
| | comp=Z,60nm,1.1s | | | | | | | | |
| **KNRA** | **Kununurra** | **25.84** | **243** | P | | | **P** | **19 12 41.6** | **-0.2** |
| KNRA | | | | IAmb | | IAmb | IAmb | 19 13 08.4 | |
| | comp=Z,77nm,1.1s | | | | | | | | |
| **KNRA** | **Kununurra** | **25.84** | **243** | P | | | **P** | **19 12 41.1** | **-0.6** |
| **AS31** | **Alice Springs** | **26.08** | **222** | P | | | **P** | **19 12 43.1** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.09** | **222** | P | | | **P** | **19 12 43.3** | **-0.7** |
| | comp=Z,7.6nm,0.5s,baz=56,slow=8.9,SNR=74 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **19 16 08.5** | **-1.9** |
| | comp=Z,1.4nm,0.7s,baz=33,slow=2.5,SNR=2.2 | | | | | | | | |
| ASAR | | | | S | | | **S** | **19 17 07.4** | **-3.5** |
| | comp=Z,1.4nm,0.8s,baz=54,slow=14,SNR=2.5 | | | | | | | | |
| ASAR | | | | ScP | | | **ScP** | **19 19 45.6** | **+0.8** |
| | comp=Z,3.1nm,1.2s,baz=51,slow=4.0,SNR=5.4 | | | | | | | | |
| ASAR | | | | LR | | LR | LR | 19 23 03.8 | |
| | comp=Z,313nm,21.3s,baz=50,slow=36 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.09** | **222** | P | | | **P** | **19 12 42.8** | **-1.2** |
| **SANI** | **Sanana** | **26.70** | **275** | P | | | **P** | **19 12 50.8** | **+1.2** |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.91** | **31** | T | | | T | 19 40 54.9 | |
| | baz=210,slow=76,SNR=128 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.92** | **31** | T | | | T | 19 40 39.4 | |
| | baz=210,slow=76,SNR=140 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.93** | **31** | T | | | T | 19 40 34.6 | |
| | baz=210,slow=76,SNR=88 | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.46** | **193** | P | | | **P** | **19 12 55.8** | **-0.4** |
| **OOD** | **Oodnadatta** | **28.04** | **213** | P | | | **P** | **19 13 01.3** | **-0.1** |
| **MSVF** | **Nonsavu** | **28.06** | **119** | P | | | **P** | **19 13 01.5** | **-0.3** |
| | comp=Z,14nm,0.7s,baz=232,slow=7.0,SNR=6.4 | | | | | | | | |
| **MSVF** | **Nonsavu** | **28.06** | **119** | *i* P | | | **P** | **19 13 01.8** | **+0.1** |
| MSVF | | | | pmax | | pmax | | | |
| | comp=Z,77nm,1.6s | | | | | | | | |
| **MSVF** | **Nonsavu** | **28.06** | **119** | P | | | **P** | **19 13 02.7** | **+1.0** |
| MSVF | | | | IAmb | | IAmb | IAmb | 19 13 05.3 | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| **MNI** | **Manado** | **28.41** | **282** | P | | | **P** | **19 13 05.3** | **+0.4** |
| MNI | | | | pmax | | pmax | | | |
| | comp=Z,145nm,0.9s | | | | | | | | |
| **SOEI** | **Soe** | **28.55** | **258** | P | | | **P** | **19 13 09.2** | **+2.9** |
| **SOEI** | **Soe** | **28.55** | **258** | P | | | **P** | **19 13 06.6** | **+0.4** |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **28.93** | **200** | P | | | **P** | **19 13 08.2** | **-1.0** |
| | comp=Z,10nm,0.7s,baz=12,slow=11,SNR=19 | | | | | | | | |
| STKA | | | | LR | | LR | | 19 24 28.5 | |
| | comp=Z,404nm,21.7s,baz=17,slow=36 | | | | | | | | |
| **STKA** | **Stephens Creek** | **28.93** | **200** | P | | | **P** | **19 13 08.6** | **-0.6** |
| STKA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **28.93** | **200** | P | | | **P** | **19 13 08.6** | **-0.6** |
| **STKA** | **Stephens Creek** | **28.93** | **200** | P | | | **P** | **19 13 08.8** | **-0.5** |
| **LCRK** | **Leigh Creek** | **28.97** | **206** | P | | | **P** | **19 13 09.6** | **-0.1** |
| **KMSI** | **Cibinong** | **29.08** | **280** | P | | | **P** | **19 13 13.5** | **+2.7** |
| | comp=Z,85nm,0.9s | | | | | | | | |
| **BATI** | **Baumata** | **29.20** | **258** | P | | | **P** | **19 13 11.9** | **0.0** |
| | comp=Z,6.3nm,0.5s,baz=108,slow=1.9,SNR=5.9 | | | | | | | | |
| BATI | | | | LR | | LR | | 19 27 25.9 | |
| | comp=Z,278nm,20.9s,baz=98,slow=42 | | | | | | | | |
| **BATI** | **Baumata** | **29.20** | **258** | P | | | **P** | **19 13 14.6** | **+2.7** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **DAV** | **Davao City (W)** | **29.41** | **293** | LR | | LR | LR | 19 26 16.7 | |
| | comp=Z,251nm,18.0s,baz=108,slow=39 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.53** | **241** | P | | | **P** | **19 13 13.2** | **-1.6** |
| | comp=Z,19nm,0.4s,baz=47,slow=7.1,SNR=163 | | | | | | | | |
| FITZ | | | | LR | | LR | | 19 26 28.8 | |
| | comp=Z,277nm,19.9s,baz=68,slow=39 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.53** | **241** | P | | | **P** | **19 13 13.1** | **-1.6** |
| FITZ | | | | IAmb | | IAmb | | 19 13 33.8 | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.53** | **241** | P | | | **P** | **19 13 13.4** | **-1.4** |
| **MMRI** | **Maumere** | **30.41** | **261** | P | | | **P** | **19 13 23.8** | **+1.2** |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **CAN** | **Canberra** | **30.64** | **186** | P | | | **P** | **19 13 24.6** | **+0.2** |
| CAN | | | | pmax | | pmax | | | |
| | comp=Z,50nm,1.5s | | | | | | | | |
| **CAN** | **Canberra** | **30.64** | **186** | P | | | **P** | **19 13 24.6** | **+0.2** |
| CAN | | | | IAmb | | IAmb | | 19 13 52.8 | |
| | comp=Z,50nm,1.5s | | | | | | | | |
| **MULG** | **Mulgathing** | **30.87** | **212** | P | | | **P** | **19 13 25.8** | **-0.7** |
| **WRKA** | **Warakurna** | **30.88** | **227** | P | | | **P** | **19 13 25.5** | **-1.1** |
| **HTT** | **Hatlett** | **31.29** | **202** | P | | | **P** | **19 13 31.5** | **+1.3** |
| **BBOO** | **Buckleboo** | **31.95** | **207** | P | | | **P** | **19 13 34.7** | **-1.1** |
| BBOO | | | | IAmb | | IAmb | | 19 13 38.5 | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| **BBOO** | **Buckleboo** | **31.95** | **207** | P | | | **P** | **19 13 35.4** | **-0.5** |
| **TOLI2** | **Tolitoli** | **32.32** | **280** | P | | | **P** | **19 13 38.8** | **-0.6** |
| **KAPI** | **Kappang** | **32.74** | **268** | LR | | LR | | 19 28 56.3 | |
| | comp=Z,86nm,21.4s,baz=112,slow=40 | | | | | | | | |
| **MPSI** | **Mapaga** | **33.06** | **278** | P | | | **P** | **19 13 44.7** | **-1.2** |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **FORT** | **Forrest** | **34.73** | **219** | P | | | **P** | **19 13 59.2** | **-1.0** |
| **FORT** | **Forrest** | **34.73** | **219** | P | | | **P** | **19 13 59.4** | **-0.8** |
| **PLAI** | **Plampang** | **34.82** | **261** | P | | | **P** | **19 13 59.7** | **-1.4** |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **MYLDM** | **Lahad Datu** | **35.46** | **286** | P | | | **P** | **19 14 08.0** | **+1.4** |
| MYLDM | | | | IAmb | | IAmb | | 19 14 16.1 | |
| | comp=Z,38nm,1.2s | | | | | | | | |
| **MBWA** | **Marble Bar** | **35.85** | **240** | P | | | **P** | **19 14 08.2** | **-1.8** |
| **MBWA** | **Marble Bar** | **35.85** | **240** | P | | | **P** | **19 14 08.9** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **35.91** | **239** | P | | | **P** | **19 14 08.2** | **-2.2** |
| PSA00 | | | | IAmb | | IAmb | | 19 14 12.1 | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **35.91** | **239** | P | | | **P** | **19 14 08.6** | **-1.8** |
| PSA00 | | | | IAmb | | IAmb | | 19 14 12.2 | |
| | comp=Z,42nm,1.4s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **35.91** | **239** | P | | | **P** | **19 14 09.1** | **-1.3** |
| **AFI** | **Afiamalu** | **36.27** | **107** | LR | | LR | | 19 26 49.4 | |
| | comp=Z,308nm,21.0s,baz=340,slow=32 | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **37.88** | **286** | P | | | **P** | **19 14 26.6** | **-0.8** |
| KKM | | | | IAmb | | IAmb | | 19 14 37.6 | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **38.33** | **186** | P | | | **P** | **19 14 31.8** | **+1.2** |
| TAU | | | | pmax | | pmax | | | |
| | comp=Z,64nm,1.3s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **38.33** | **186** | P | | | **P** | **19 14 31.8** | **+1.2** |
| **MEEK** | **Meekatharra** | **39.10** | **233** | P | | | **P** | **19 14 37.0** | **-0.4** |
| **JOW** | **Kunigami** | **39.21** | **324** | LR | | LR | | 19 27 40.5 | |
| | comp=Z,352nm,20.4s,baz=158,slow=31 | | | | | | | | |
| **JOW** | **Kunigami** | **39.21** | **324** | P | | | **P** | **19 14 38.5** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **39.54** | **343** | LR | | LR | | 19 30 36.8 | |
| | comp=Z,98nm,18.1s,baz=142,slow=35 | | | | | | | | |
| **URZ** | **Urewera** | **40.16** | **150** | P | | | **P** | **19 14 46.3** | **+0.3** |
| | comp=Z,22nm,0.7s,baz=245,slow=1.7,SNR=10 | | | | | | | | |
| **URZ** | **Urewera** | **40.16** | **150** | P | | | **P** | **19 14 47.2** | **+1.2** |
| URZ | | | | IAmb | | IAmb | | 19 14 49.8 | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| **URZ** | **Urewera** | **40.16** | **150** | P | | | **P** | **19 14 48.6** | **+2.7** |
| **QRZ** | **Quartz Range** | **40.16** | **156** | P | | | **P** | **19 14 48.0** | **+2.1** |
| **BKZ** | **Black Stump Fm** | **40.55** | **151** | P | | | **P** | **19 14 51.3** | **+2.0** |
| BKZ | | | | IAmb | | IAmb | | 19 14 53.8 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **40.55** | **151** | P | | | **P** | **19 14 50.4** | **+1.1** |
| **THZ** | **Tophouse** | **41.10** | **157** | P | | | **P** | **19 14 55.1** | **+1.3** |
| **GIRL** | **Giralia** | **41.14** | **241** | P | | | **P** | **19 14 53.6** | **-0.7** |
| **GIRL** | **Giralia** | **41.14** | **241** | P | | | **P** | **19 14 54.4** | **+0.1** |
| **TUWZ** | **Tuamarina** | **41.24** | **155** | P | | | **P** | **19 14 56.1** | **+1.2** |
| **YULB** | **Yu-li** | **41.40** | **314** | P | | | **P** | **19 14 57.3** | **+0.9** |
| YULB | | | | IAmb | | IAmb | | 19 15 15.0 | |
| | comp=Z,29nm,0.8s | | | | | | | | |
| **BSWZ** | **Blackbirch Sta** | **41.45** | **156** | P | | | **P** | **19 14 57.9** | **+1.3** |
| **BHW** | **Baring Head** | **41.62** | **155** | P | | | **P** | **19 14 59.0** | **+1.1** |
| **BFZ** | **Birch Farm** | **41.64** | **153** | P | | | **P** | **19 14 59.4** | **+1.4** |
| **BFZ** | **Birch Farm** | **41.64** | **153** | P | | | **P** | **19 15 00.5** | **+2.4** |
| **NACB** | **Ninganchiao** | **41.68** | **315** | P | | | **P** | **19 14 58.5** | **-0.1** |
| NACB | | | | IAmb | | IAmb | | 19 15 18.2 | |
| | comp=Z,34nm,0.8s | | | | | | | | |
| **LTZ** | **Lake Taylor** | **41.74** | **158** | P | | | **P** | **19 15 00.7** | **+1.8** |
| **MSWZ** | **Moikau Station** | **41.79** | **154** | P | | | **P** | **19 14 59.8** | **+0.5** |
| **TPUB** | **Ta-pu** | **41.83** | **313** | P | | | **P** | **19 14 57.5** | **-2.3** |
| TPUB | | | | IAmb | | IAmb | | 19 15 16.8 | |
| | comp=Z,29nm,0.8s | | | | | | | | |
| **SSLB** | **Suanglung** | **41.89** | **314** | P | | | **P** | **19 14 59.3** | **-1.1** |
| SSLB | | | | IAmb | | IAmb | | 19 15 19.9 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **KHZ** | **Kahutara** | **41.91** | **157** | P | | | **P** | **19 15 01.0** | **+0.8** |
| **KHZ** | **Kahutara** | **41.91** | **157** | P | | | **P** | **19 15 02.1** | **+1.9** |
| **PLWZ** | **Palliser** | **41.91** | **154** | P | | | **P** | **19 15 01.0** | **+0.6** |
| **RPZ** | **Rata Peaks** | **42.12** | **160** | P | | | **P** | **19 15 03.1** | **+1.1** |
| | comp=Z,67nm,0.9s,baz=11,slow=1.9,SNR=17 | | | | | | | | |
| RPZ | | | | LR | | LR | LR | 19 31 08.3 | |
| | comp=Z,714nm,19.5s,baz=326,slow=34 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **42.12** | **160** | P | | | **P** | **19 15 03.3** | **+1.3** |
| **RPZ** | **Rata Peaks** | **42.12** | **160** | P | | | **P** | **19 15 04.1** | **+2.1** |
| **OXZ** | **Oxford** | **42.12** | **159** | P | | | **P** | **19 15 02.9** | **+0.9** |
| OXZ | | | | IAmb | | IAmb | | 19 15 06.9 | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| **JMN** | **Monobe** | **42.14** | **336** | P | | | **P** | **19 15 03.2** | **+0.9** |
| JMN | | | | IAmb | | IAmb | | 19 15 16.7 | |
| | comp=Z,58nm,1.3s | | | | | | | | |
| **YHNB** | **Yeheng** | **42.15** | **315** | P | | | **P** | **19 15 00.7** | **-1.8** |
| **KLBR** | **Kellerberrin** | **42.23** | **227** | P | | | **P** | **19 15 00.9** | **-2.2** |
| | comp=Z,30nm,0.6s | | | | | | | | |
| **MORW** | **Morawa** | **42.25** | **231** | P | | | **P** | **19 15 01.7** | **-1.6** |
| MORW | | | | IAmb | | IAmb | | 19 15 27.0 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| **MORW** | **Morawa** | **42.25** | **231** | P | | | **P** | **19 15 02.2** | **-1.1** |
| **LBZ** | **Lake Benmore** | **42.43** | **161** | P | | | **P** | **19 15 05.8** | **+1.3** |
| LBZ | | | | IAmb | | IAmb | | 19 15 07.1 | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| **WKZ** | **Wanaka** | **42.47** | **163** | P | | | **P** | **19 15 05.9** | **+1.1** |
| **BLDU** | **Ballidu** | **42.49** | **228** | P | | | **P** | **19 15 03.8** | **-1.4** |
| **DCZ** | **Deep Cove** | **42.53** | **165** | P | | | **P** | **19 15 05.2** | **-0.1** |
| DCZ | | | | IAmb | | IAmb | | 19 15 12.1 | |
| | comp=Z,39nm,1.1s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **42.70** | **164** | P | | | **P** | **19 15 08.0** | **+1.3** |
| **KSM** | **Kuching** | **42.71** | **277** | P | | | **P** | **19 15 06.8** | **-0.4** |
| **JNU** | **Nakatsue** | **42.90** | **333** | P | | | **P** | **19 15 08.7** | **+0.2** |
| | comp=Z,82nm,0.9s,baz=114,slow=4.5,SNR=13 | | | | | | | | |
| **JNU** | **Nakatsue** | **42.90** | **333** | P | | | **P** | **19 15 08.6** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **43.19** | **343** | LR | | LR | | 19 31 19.3 | |
| | comp=Z,271nm,20.8s,baz=180,slow=33 | | | | | | | | |
| **MAJO** | **Matsushiro** | **43.20** | **343** | *i* P | | | **P** | **19 15 07.8** | **-3.0** |
| MAJO | | | | pmax | | pmax | | | |
| | comp=Z,112nm,3.8s | | | | | | | | |
| **JHS** | **Saijyo** | **43.55** | **337** | P | | | **P** | **19 15 13.2** | **-0.6** |
| JHS | | | | IAmb | | IAmb | | 19 15 20.4 | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **LEM** | **Lembang** | **44.80** | **265** | LR | | LR | | 19 37 18.4 | |
| | comp=Z,88nm,21.9s,baz=40,slow=40 | | | | | | | | |
| **TJN** | **Taejon** | **47.21** | **332** | P | | | **P** | **19 15 43.9** | **+1.3** |
| TJN | | | | pmax | | pmax | | | |
| | comp=Z,272nm,1.1s | | | | | | | | |
| **TJN** | **Taejon** | **47.21** | **332** | P | | | **P** | **19 15 43.9** | **+1.3** |
| **KSRS** | **Korea Array** | **47.84** | **333** | P | | | **P** | **19 15 47.6** | **+0.2** |
| | comp=Z,7.5nm,0.8s,baz=151,slow=8.6,SNR=16 | | | | | | | | |
| KSRS | | | | LR | | LR | | 19 34 34.0 | |
| | comp=Z,102nm,20.7s,baz=150,slow=34 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.84** | **333** | P | | | **P** | **19 15 46.5** | **-1.0** |
| **KSAR** | **Wonju Array Be** | **47.84** | **333** | P | | | **P** | **19 15 46.5** | **-1.0** |
| **KS19** | **Wonju Array Si** | **47.90** | **333** | P | | | **P** | **19 15 48.1** | **+0.2** |
| KS19 | | | | IAmb | | IAmb | | 19 15 49.6 | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| **INCN** | **Inchon** | **48.45** | **332** | P | | | **P** | **19 15 52.4** | **+0.2** |
| INCN | | | | pmax | | pmax | | | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **INCN** | **Inchon** | **48.45** | **332** | P | | | **P** | **19 15 52.4** | **+0.2** |
| **NJ2** | **Nanjing** | **48.66** | **321** | *e*P | | | **P** | **19 15 56.1** | **+2.3** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **49.44** | **351** | P | | | **P** | **19 16 00.3** | **+0.7** |
| | comp=Z,10nm,0.9s,baz=216,slow=20,SNR=3.7 | | | | | | | | |
| ASAJ | | | | LR | | LR | LR | 19 34 27.3 | |
| | comp=Z,132nm,21.8s,baz=242,slow=33 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.10** | **341** | P | | | **P** | **19 16 20.2** | **+0.6** |
| | comp=Z,6.3nm,0.8s,baz=176,slow=7.6,SNR=7.1 | | | | | | | | |
| USRK | | | | LR | | LR | LR | 19 38 50.7 | |
| | comp=Z,43nm,18.0s,baz=148,slow=36 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **52.18** | **351** | *e*P | | | P | 19 16 35.3 | +15 |
| **MDJ** | **Mudanjiang** | **53.27** | **340** | P | | | **P** | **19 16 29.9** | **+1.6** |
| MDJ | | | | pP | | | pP | 19 16 43.9 | -0.4 |
| MDJ | | | | sP | | | sP | 19 16 49.3 | -2.1 |
| MDJ | | | | PcS | | | **PcS** | **19 21 35.3** | **+1.2** |
| MDJ | | | | S | | | **S** | **19 24 00.6** | **+5.7** |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,140nm,6.1s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,200nm,4.6s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,260nm,4.7s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,560nm,17.4s | | | | | | | | |
| **ENH** | **Enshi** | **53.96** | **313** | P | | | **P** | **19 16 32.9** | **-0.7** |
| ENH | | | | IAmb | | IAmb | | 19 16 36.2 | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| **PSI** | **Prapat** | **54.16** | **277** | LR | | LR | | 19 42 30.3 | |
| | comp=Z,109nm,20.6s,baz=115,slow=39 | | | | | | | | |
| **GYA** | **Guiyang** | **54.19** | **307** | ⇓P | | | P | 19 16 40.8 | +5.3 |
| GYA | | | | S | | | **S** | **19 24 14.3** | **+6.0** |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,2.1s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,440nm,23.6s | | | | | | | | |
| **LYN** | **LuoYang** | **54.35** | **319** | *e*P | | | **P** | **19 16 37.4** | **+1.0** |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,90nm,6.5s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,300nm,21.2s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,410nm,23.7s | | | | | | | | |
| **BNX** | **BinXian** | **55.02** | **339** | ⇓P | | | **P** | **19 16 42.5** | **+1.5** |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,46nm,1.2s | | | | | | | | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,310nm,5.3s | | | | | | | | |
| **XAN** | **Xi'an** | **56.43** | **316** | P | | | **P** | **19 16 52.0** | **+0.6** |
| XAN | | | | sP | | | sP | 19 17 16.9 | +1.5 |
| XA

ZEA pmax pmax
comp=N,10.0nm,1.2s
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**MA2 Magadan 64.11 359** *ce*P **P 19 17 41.6 -1.6**
MA2 pmax pmax
comp=Z,12nm,0.8s
**MA2 Magadan 64.11 359** P **P 19 17 43.3 +0.1**
MA2 IAmb IAmb 19 17 46.2
comp=Z,12nm,0.8s
**GTA Gaotai 65.46 317** ⇑P **P 19 17 53.6 +0.9**
GTA pP pwP 19 18 10.9 -0.9
GTA sP sP 19 18 14.8 -1.4
GTA PcP **PcP 19 18 25.8 +1.6**
GTA pmax pmax
comp=Z,6.0nm,1.3s
GTA pmax pmax
comp=Z,77nm,4.5s
GTA LR LR
comp=Z,130nm,19.6s
GTA LR LR
comp=Z,210nm,19.3s
GTA LR LR
comp=Z,270nm,20.0s
**ULN Ulaanbaatar 65.82 328** *ce*P **P 19 17 52.9 -2.0**
ULN pmax pmax
comp=Z,3.0nm,1.0s
**ULN Ulaanbaatar 65.82 328** P **P 19 17 55.9 +1.0**
**SHL Shillong 66.10 300** P **P 19 17 55.7 -1.4**
SHL pmax pmax
comp=Z,35nm,1.2s
**SHL Shillong 66.10 300** P **P 19 17 55.6 -1.4**
**SONM Songino Array 66.15 328** P **P 19 17 56.7 -0.3**
comp=Z,1.1nm,0.5s,baz=146,slow=5.0,SNR=13
SONM LR LR 19 45 15.2
comp=Z,190nm,21.8s,baz=144,slow=34
**SEY Seymchan 67.46 360** P **P 19 18 04.5 -0.3**
comp=Z,1.3nm,0.8s,baz=198,slow=8.1,SNR=5.3
SEY LR LR 19 47 13.4
comp=Z,61nm,19.4s,baz=170,slow=36
**SEY Seymchan 67.46 360** *i* P **P 19 18 03.3 -1.4**
**GOMU GeErMu 67.56 312** P **P 19 18 08.9 +2.4**
GOMU PcP **PcP 19 18 34.8 +1.5**
GOMU S **S 19 26 56.8 -2.0**
GOMU pmax pmax
comp=Z,2.0nm,0.8s
GOMU pmax pmax
comp=Z,110nm,4.4s
GOMU LR LR
comp=Z,160nm,16.0s
GOMU LR LR
comp=Z,290nm,15.6s
GOMU LR LR
comp=Z,280nm,16.4s
**LSA Lhasa 68.03 304** P **P 19 18 10.5 +0.8**
LSA pmax pmax
comp=Z,19nm,1.0s
**YAK Yakutsk 68.85 349** LR LR 19 46 39.2
comp=Z,84nm,21.8s,baz=165,slow=34
**YAK Yakutsk 68.85 349** *ce*P **P 19 18 13.0 -0.5**
YAK pmax pmax
comp=Z,10.0nm,1.7s
**ZAK Zakamensk 69.32 329** *e*P **P 19 18 15.9 -0.9**
ZAK pmax pmax
comp=Z,8.0nm,1.3s
**TAPN Taplejung 70.20 301** *e*P **P 19 18 23.6 +0.7**
comp=Z,30nm,1.0s
**ODAN Odare 70.34 301** *e*P **P 19 18 23.8 +0.1**
comp=Z,55nm,1.0s
**MOY Mondy 71.24 329** *e*P **P 19 18 30.9 +2.4**
**JIRN Jiri 71.58 301** *e*P **P 19 18 32.2 +0.8**
comp=Z,26nm,0.9s
**GUN Gumba 71.91 301** *e*P **P 19 18 33.4 0.0**
comp=Z,53nm,0.9s
**PKI Pulchoki 72.22 301** *e*P **P 19 18 35.1 -0.1**
comp=Z,42nm,1.1s
**PKIN Phulchoki 72.24 301** *e*P **P 19 18 35.2 0.0**
comp=Z,33nm,1.1s
**KKN Kakani 72.39 301** *e*P **P 19 18 36.2 +0.1**
comp=Z,33nm,0.9s
**DMN Daman 72.50 301** *e*P **P 19 18 36.5 -0.2**
comp=Z,72nm,1.0s
**PALK Pallekele 72.73 279** LR LR 19 52 21.6
comp=Z,35nm,20.1s,baz=210,slow=37
**VNDA Vanda 72.92 178** P **P 19 18 37.2 -0.8**
comp=Z,5.4nm,0.8s,baz=329,slow=5.0,SNR=5.6
VNDA LR LR 19 49 29.3
comp=Z,107nm,18.1s,baz=2.5,slow=35
**GKN Gorkha 73.00 301** *e*P **P 19 18 39.4 -0.2**
comp=Z,53nm,1.0s
**BILL Bilibino 73.22 5** *i* P **P 19 18 39.0 -0.9**
BILL *i* 19 18 52.6
BILL *i* 19 21 24.8
BILL pmax pmax
comp=Z,10.0nm,1.0s
BILL MLR MLR
comp=Z,117nm,20.0s
**BILL Bilibino 73.22 5** P **P 19 18 39.5 -0.3**
**GAMB Gambell 73.35 16** P **P 19 18 40.6 0.0**
baz=217
**KOLN Koldanda 73.83 301** *e*P **P 19 18 44.3 -0.2**
comp=Z,56nm,1.0s
**DANN Dangsing 73.83 301** *e*P **P 19 18 45.1 +0.4**
comp=Z,42nm,1.0s
**PYUN Piuthan 74.43 301** *e*P **P 19 18 47.5 -0.5**
comp=Z,63nm,1.0s
**WMQ Urumqi 75.55 317** *e*P **P 19 18 52.5 -1.5**
WMQ pP pP 19 19 10.1 -0.9
WMQ pmax pmax
comp=Z,17nm,0.9s
WMQ LR LR
comp=Z,160nm,21.7s
**ANM Nome 75.75 17** P **P 19 18 54.7 +0.1**
ANM pmax pmax
comp=Z,6.0nm,1.0s
**ANM Nome 75.75 17** P **P 19 18 54.7 +0.1**
**ANM Nome 75.75 17** P **P 19 18 54.5 -0.1**
baz=223
**KDAK Kodiak Island 76.19 27** P **P 19 18 56.4 -0.7**
comp=Z,8.9nm,1.0s,baz=301,slow=20,SNR=3.6
KDAK LR LR 19 48 15.8
comp=Z,57nm,21.9s,baz=252,slow=32
**KDAK Kodiak Island 76.19 27** P **P 19 18 56.5 -0.7**
baz=237
**O18K Koktuh Hills 76.23 24** P **P 19 18 56.5 -0.9**
baz=234
**Q19K Cape Douglas, 76.36 25** P **P 19 18 56.5 -1.7**
baz=236
**O20K Slope Mountain 77.43 25** P **P 19 19 03.9 -0.3**
baz=236
**RSO Redoubt South 77.59 24** P **P 19 19 05.0 -0.3**
**HOM Homer 77.62 25** P **P 19 19 04.2 -0.9**
baz=237
**CNPM China Poot 77.72 26** P **P 19 19 04.9 -0.9**
**L19K White Mountain 77.74 22** P **P 19 19 06.0 +0.1**
L19K IAmb IAmb 19 19 09.7
comp=Z,12nm,0.8s
**L19K White Mountain 77.74 22** P **P 19 19 05.8 -0.1**
baz=234
**TTA Tatalina 77.76 21** P **P 19 19 05.9 -0.1**
TTA pmax pmax
comp=Z,8.0nm,1.2s
**TTA Tatalina 77.76 21** P **P 19 19 05.9 -0.1**
**TTA Tatalina 77.76 21** P **P 19 19 05.9 -0.1**
baz=233
**TIXI Tiksi 77.79 353** P **P 19 19 06.0 +0.1**
comp=Z,0.6nm,0.4s,baz=268,slow=21,SNR=7.0
TIXI LR LR 19 50 41.9
comp=Z,60nm,21.4s,baz=179,slow=34
**TIXI Tiksi 77.79 353** *ce*P **P 19 19 04.5 -1.4**
TIXI pmax pmax
comp=Z,2.0nm,1.3s
**DGZ Jazzator, Alta 77.90 323** *i* P **P 19 19 05.9 -1.3**
DGZ pmax pmax
comp=Z,6.0nm,0.7s
**BRSE Bradley Lake S 78.05 26** P **P 19 19 07.7 0.0**
baz=238
**SPCR Spurr Chakacha 78.22 24** P **P 19 19 08.3 -0.3**
baz=237
**K20K Telida 78.72 22** IAmb IAmb 19 19 14.1
comp=Z,9.3nm,0.8s
**SEW Seward 78.79 26** P **P 19 19 11.1 -0.6**
baz=239
**RDOG Red Dog Mine 78.95 16** IAmb IAmb 19 19 14.8
comp=Z,13nm,0.8s
**RDOG Red Dog Mine 78.95 16** P **P 19 19 12.4 0.0**
baz=225

**J20K Nowinta River 79.17 21** IAmb IAmb 19 19 16.2
comp=Z,11nm,0.8s
**RC01 Rabbit Creek A 79.18 25** P **P 19 19 12.9 -0.9**
baz=239,SNR=6.4
**M22K Willow 79.36 24** IAmb IAmb 19 19 17.0
comp=Z,20nm,0.8s
**M22K Willow 79.36 24** P **P 19 19 14.0 -0.8**
baz=238
**CAST Castle Rocks 79.50 22** IAmb IAmb 19 19 19.0
comp=Z,13nm,0.8s
**CAST Castle Rocks 79.50 22** P **P 19 19 14.6 -0.9**
baz=236,SNR=17
**CUT Chulitna 79.65 23** P **P 19 19 15.6 -0.7**
baz=238
**PWL Port Wells 79.65 25** P **P 19 19 16.2 -0.2**
**PWL Port Wells 79.65 25** P **P 19 19 14.8 -1.6**
baz=240,SNR=7.8
**CHUM Lake Minchumin 79.67 22** P **P 19 19 15.3 -1.1**
baz=236,SNR=16
**PMR Palmer 79.69 24** P **P 19 19 15.5 -1.0**
baz=239
**GHO Glory Hole Cre 79.86 24** IAmb IAmb 19 19 19.3
comp=Z,12nm,0.9s
**KNK Knik Glacier 79.87 25** P **P 19 19 16.8 -0.8**
baz=240
**KTH Kantishna Hill 80.01 22** IAmb IAmb 19 19 22.8
comp=Z,9.7nm,0.8s
**SML Sawmill 80.12 24** IAmb IAmb 19 19 21.0
comp=Z,22nm,0.8s
**SML Sawmill 80.12 24** P **P 19 19 18.3 -0.7**
baz=240
**MKAR Makanchi Array 80.14 319** P **P 19 19 19.0 -0.4**
comp=Z,2.1nm,0.6s,baz=102,slow=5.6,SNR=22
MKAR PKKPbc **PKKPbc 19 38 03.9 -1.2**
comp=Z,0.5nm,0.9s,baz=311,slow=2.4,SNR=4.2
MKAR LR LR 19 53 19.4
comp=Z,145nm,21.8s,baz=94,slow=34
**MKAR Makanchi Array 80.14 319** P **P 19 19 19.0 -0.4**
**GLI Glacier Island 80.19 26** P **P 19 19 18.8 -0.4**
baz=241
**TRF Thorofare Moun 80.19 23** IAmb IAmb 19 19 21.8
comp=Z,11nm,0.9s
**TRF Thorofare Moun 80.19 23** P **P 19 19 18.9 -0.6**
baz=238
**BPAW Bear Paw Mtn. 80.28 22** P **P 19 19 19.4 -0.3**
baz=237
**MAKZ Makanchi 80.34 319** P **P 19 19 20.3 -0.2**
MAKZ pmax pmax
comp=Z,17nm,1.5s
**MAKZ Makanchi 80.34 319** P **P 19 19 20.3 -0.2**
**H21K Melozitna Rive 80.50 20** P **P 19 19 20.5 -0.4**
**I21K Tanana 80.51 21** IAmb IAmb 19 19 24.2
comp=Z,18nm,0.9s
**SCM Sheep Creek Mo 80.55 25** IAmb IAmb 19 19 24.0
comp=Z,19nm,1.0s
**SCM Sheep Creek Mo 80.55 25** P **P 19 19 20.9 -0.4**
baz=241
**EYAK Cordova Ski Ar 80.62 26** P **P 19 19 20.7 -0.9**
baz=243
**WAT6 Susitna Watana 80.75 24** P **P 19 19 21.7 -0.7**
baz=241
**MCK McKinley 80.86 23** IAmb IAmb 19 19 23.7
comp=Z,21nm,0.8s
**MCK McKinley 80.86 23** P **P 19 19 21.8 -1.0**
baz=239
**MLY Manley 80.87 21** P **P 19 19 22.0 -0.9**
baz=237,SNR=21
**DIV Divide 80.88 26** IAmb IAmb 19 19 26.3
comp=Z,14nm,1.0s
**BWN Browne 80.88 22** IAmb IAmb 19 19 47.4
comp=Z,29nm,1.3s
**ZALV Zalesovo Beam 80.98 326** P **P 19 19 22.5 -1.1**
comp=Z,6.0nm,0.6s,baz=110,slow=5.8,SNR=29
ZALV LR LR 19 53 46.9
comp=Z,86nm,21.8s,baz=114,slow=34
**ZALV Zalesovo Beam 80.98 326** *i* P **P 19 19 23.6 0.0**
ZALV pmax pmax
comp=Z,6.0nm,0.6s
**ZALV Zalesovo Beam 80.98 326** P **P 19 19 22.7 -0.9**
**KLU Klutina 80.98 25** IAmb IAmb 19 19 26.6
comp=Z,16nm,0.9s
**KLU Klutina 80.98 25** P **P 19 19 22.8 -0.8**
baz=242
**DHY Denali Highway 81.14 24** P **P 19 19 23.4 -1.1**
baz=241
**M24K Tolsona, Glenn 81.16 25** P **P 19 19 24.3 -0.2**
baz=242
**NEA2 Nenana 81.25 22** P **P 19 19 24.1 -0.7**
baz=239,SNR=14
**BMRM Bremner River 81.31 26** P **P 19 19 24.7 -0.7**
baz=244
**I23K Minto, Yukon-K 81.43 21** P **P 19 19 25.1 -0.7**
baz=239,SNR=6.3
**BERG Berg Lake 81.46 27** P **P 19 19 25.5 -0.6**
BERG IAmb IAmb 19 19 28.6
comp=Z,19nm,0.8s
**WRH Wood River Hil 81.55 22** IAmb IAmb 19 19 28.5
comp=Z,9.7nm,0.8s
**N25K Chitina, Valde 81.60 25** P **P 19 19 26.1 -0.8**
baz=244
**HARP HAARP 81.72 25** P **P 19 19 27.1 -0.4**
baz=243
**CCB Clear Creek Bu 81.75 22** IAmb IAmb 19 19 28.0
comp=Z,8.7nm,0.8s
**TCOL CIGO, UAF Yank 81.84 22** IAmb IAmb 19 19 28.9
comp=Z,17nm,0.7s
**TCOL CIGO, UAF Yank 81.84 22** P **P 19 19 27.3 -0.6**
baz=240
**COLA College 81.84 22** *i* P **P 19 19 26.4 -1.5**
COLA pmax pmax
comp=Z,16nm,0.8s
**COLA College 81.84 22** P **P 19 19 27.1 -0.9**
COLA IAmb IAmb 19 19 28.9
comp=Z,21nm,0.9s
**COLA College 81.84 22** P **P 19 19 27.2 -0.7**
baz=240
**PAX Paxson 81.85 24** P **P 19 19 27.2 -1.0**
baz=243
**GLB Gilahina Butte 81.86 26** IAmb IAmb 19 19 30.6
comp=Z,14nm,0.9s
**VRDI Verde Repeater 81.93 26** IAmb IAmb 19 19 41.8
comp=Z,11nm,0.9s
**HDA Harding Lake 81.95 22** P **P 19 19 28.2 -0.4**
baz=241
**IL31 82.15 22** IAmb IAmb 19 19 30.3
comp=Z,9.2nm,0.8s
**ILAR Eielson Array 82.15 22** P **P 19 19 27.9 -1.7**
comp=Z,10nm,0.9s,baz=251,slow=5.0,SNR=58
ILAR LR LR 19 51 33.1
comp=Z,113nm,19.6s,baz=250,slow=32
**ISLE Juniper Island 82.16 27** IAmb IAmb 19 19 32.5
comp=Z,14nm,0.9s
**COLD Coldfoot 82.24 19** P **P 19 19 30.7 +0.6**
**COLD Coldfoot 82.24 19** P **P 19 19 30.3 +0.3**
baz=238
**RIDG Independent Ri 82.45 23** IAmb IAmb 19 19 36.0
comp=Z,12nm,0.9s
**RIDG Independent Ri 82.45 23** P **P 19 19 31.3 0.0**
baz=243
**BARN Barnard Glacie 82.65 27** IAmb IAmb 19 19 35.1
comp=Z,16nm,0.7s
**DOT Dot Lake 82.73 24** IAmb IAmb 19 19 34.7
comp=Z,15nm,0.8s
**KSH Kashi 82.73 311** P **P 19 19 37.3 +3.9**
KSH pP pwP 19 19 54.0 +1.0
KSH pmax pmax
comp=Z,7.0nm,1.4s
**L26K Log Cabin Wild 82.75 24** P **P 19 19 32.5 -0.3**
L26K IAmb IAmb 19 19 35.0
comp=Z,8.5nm,0.7s
**L26K Log Cabin Wild 82.75 24** P **P 19 19 33.2 +0.4**
baz=245
**A21K Barrow 82.77 15** P **P 19 19 33.2 +0.6**
baz=231
**SCRK Sand Creek 82.90 23** P **P 19 19 33.4 -0.3**
baz=244
**PRP Porcupine Dome 83.01 22** P **P 19 19 33.5 -0.7**
baz=242
**M27K Edge Creek, AK 83.08 25** IAmb IAmb 19 19 37.5
comp=Z,20nm,0.8s
**PNL Peninsula 83.15 28** P **P 19 19 35.0 0.0**
baz=248
**TOLK Toolik Lake Re 83.19 18** IAmb IAmb 19 19 37.6
comp=Z,9.0nm,0.8s
**TOLK Toolik Lake Re 83.19 18** P **P 19 19 34.8 -0.2**
baz=238
**YUK3 Moose Creek 83.46 26** P **P 19 19 36.6 -0.1**
baz=247,SNR=6.2

**BVCY Beaver Creek 83.54 25** P **P 19 19 36.5 -0.4**
baz=247,SNR=6.1
**KURK Kurchatov 83.58 322** *i* P **P 19 19 35.3 -2.0**
KURK pmax pmax
comp=Z,14nm,1.0s
**KURK Kurchatov 83.58 322** P **P 19 19 38.3 +1.0**
KURK IAmb IAmb 19 19 40.0
comp=Z,18nm,1.2s
**FYU Fort Yukon 83.61 21** IAmb IAmb 19 19 39.5
comp=Z,7.4nm,0.7s
**KURBB Kurchatov Arra 83.61 322** P **P 19 19 36.9 -0.6**
comp=Z,0.6nm,0.6s,baz=322,slow=44,SNR=14
KURBB PKKPbc **PKKPbc 19 37 54.7 -2.5**
comp=Z,0.2nm,0.5s,baz=292,slow=2.6,SNR=4.1
**NIL Nilore 83.77 304** P **P 19 19 38.5 -0.2**
NIL pmax pmax
comp=Z,29nm,1.1s
**NIL Nilore 83.77 304** P **P 19 19 38.5 -0.2**
**YUK6 Outpost Mounta 84.09 27** P **P 19 19 39.9 -0.1**
baz=249
**YUK4 Talbot Arm 84.11 27** P **P 19 19 40.7 +0.7**
baz=249
**EGAK Eagle 84.36 23** IAmb IAmb 19 19 43.8
comp=Z,10.0nm,0.8s
**EGAK Eagle 84.36 23** P **P 19 19 41.6 +0.7**
baz=246,SNR=10.0
**HYT Haines Junctio 84.45 28** P **P 19 19 42.4 +0.7**
baz=250
**AAK Ala-Archa 84.47 313** LR LR 19 57 23.8
comp=Z,125nm,21.6s,baz=100,slow=36
**AAK Ala-Archa 84.47 313** *ce*P **P 19 19 40.3 -2.0**
AAK pmax pmax
comp=Z,20nm,2.5s
**AAK Ala-Archa 84.47 313** P **P 19 19 42.1 -0.1**
AAK IAmb IAmb 19 20 07.4
comp=Z,9.3nm,1.1s
**DAWY Dawson 84.79 24** IAmb IAmb 19 19 48.7
comp=Z,7.5nm,1.0s
**DAWY Dawson 84.79 24** P **P 19 19 43.6 +0.4**
baz=248
**SKAG Skagway 85.03 29** P **P 19 19 45.0 +0.5**
baz=252
**QSPA South Pole Qui 85.25 180** P **P 19 19 44.7 -0.9**
comp=Z,11nm,1.0s,baz=318,slow=0.9,SNR=27
**QSPA South Pole Qui 85.25 180** P **P 19 19 45.6 0.0**
**M30M Minto, Yukon 85.36 26** IAmb IAmb 19 19 48.3
comp=Z,5.9nm,0.8s
**J29M Klondike Camp 85.41 24** P **P 19 19 46.7 +0.4**
baz=249
**MAW Mawson 85.58 203** LR LR 19 54 28.5
comp=Z,172nm,22.0s,baz=63,slow=33
**NRIK Noril'sk 85.82 341** P **P 19 19 47.8 -0.4**
comp=Z,4.1nm,0.6s,baz=76,slow=9.3,SNR=3.7
NRIK LR LR 20 01 24.3
comp=Z,45nm,18.1s,baz=125,slow=38
**NRIK Noril'sk 85.82 341** *i* P **P 19 19 48.0 -0.2**
NRIK pmax pmax
comp=Z,4.0nm,0.8s
**M31M Drury Creek, Y 86.30 27** P **P 19 19 50.4 -0.4**
**M31M Drury Creek, Y 86.30 27** P **P 19 19 50.9 +0.1**
baz=253
**P33M Teslin, Yukon 86.47 29** P **P 19 19 52.0 +0.3**
baz=254
**EPYK Eagle Plains 86.66 22** P **P 19 19 52.5 +0.1**
baz=250
**FARO Faro, Yukon 86.78 27** P **P 19 19 53.5 +0.4**
baz=254
**BBB Bella Bella 87.14 37** LR LR 19 57 17.4
comp=Z,85nm,18.5s,baz=258,slow=34
**DLBC Dease Lake 87.41 31** IAmb IAmb 19 20 00.8
comp=Z,16nm,1.2s
**MMPY Sheldon Lake, 87.82 27** P **P 19 19 58.5 +0.4**
baz=256
**INK Inuvik 88.44 21** P **P 19 20 00.3 -0.6**
comp=Z,9.0nm,0.9s,baz=177,slow=9.9,SNR=6.0
INK LR LR 19 58 49.8
comp=Z,57nm,20.8s,baz=269,slow=35
**INK Inuvik 88.44 21** IAmb IAmb 19 20 02.2
comp=Z,8.7nm,0.9s
**INK Inuvik 88.44 21** P **P 19 20 01.3 +0.5**
baz=253
**M02C Callahan 88.99 49** P **P 19 20 04.9 +0.7**
baz=263
**N02D Trinity Center 89.05 49** P **P 19 20 04.8 +0.3**
baz=263
**BRVK Borovoye 89.13 323** *i* P **P 19 20 03.9 -0.5**
BRVK pmax pmax
comp=Z,6.0nm,0.7s
**YBH Yreka Blue Hor 89.14 48** LR LR 19 52 47.0
comp=Z,114nm,21.4s,baz=288,slow=31
**J05D Fort Rock, OR 90.40 47** P **P 19 20 10.5 -0.3**
baz=264
**WRGLY Wrigley 91.44 27** P **P 19 20 16.0 +1.1**
baz=262
**SCI2 San Clemente I 91.57 57** P **P 19 20 15.2 -1.0**
baz=265
**ISA Isabella, Lake 91.84 55** P **P 19 20 17.9 +0.3**
baz=266
**A36M Sachs Harbour 92.02 18** P **P 19 20 17.7 +0.2**
baz=261
**C36M Paulatuk 92.02 21** P **P 19 20 16.4 -1.1**
**C36M Paulatuk 92.02 21** P **P 19 20 17.8 +0.3**
baz=262
**NVAR Mina Array Bea 92.18 52** P **P 19 20 19.2 -0.1**
comp=Z,1.5nm,0.8s,baz=225,slow=5.5,SNR=3.5
NVAR LR LR 19 55 17.5
comp=Z,100nm,20.7s,baz=266,slow=31
**CWC Cottonwood Cre 92.21 54** P **P 19 20 19.5 +0.1**
baz=266
**LRMC Laurel Mtn Rad 92.47 55** P **P 19 20 21.0 +0.4**
baz=266
**MPMC Manual Prospec 92.66 54** P **P 19 20 21.8 +0.2**
baz=266
**BMO Blue Mountains 93.35 45** P **P 19 20 23.1 -1.3**
BMO pmax pmax
comp=Z,6.0nm,1.3s
**BMO Blue Mountains 93.35 45** P **P 19 20 23.1 -1.3**
BMO IAmb IAmb 19 20 42.0
comp=Z,5.6nm,1.2s
**PFO Pinyon Flats O 93.35 57** LR LR 19 54 17.8
comp=Z,137nm,22.0s,baz=244,slow=30
**PFO Pinyon Flats O 93.35 57** P **P 19 20 25.1 +0.4**
baz=267
**TPFO Pinon Flats 93.36 57** P **P 19 20 25.5 +0.8**
baz=267
**NEW Newport 93.66 42** LR LR 19 55 15.1
comp=Z,140nm,20.8s,baz=276,slow=31
**SYO Syowa Base 93.69 199** ‖ *e*pP pP 19 20 42.6 +0.5
**GMRC Granite Mounta 94.08 56** P **P 19 20 28.9 +0.9**
baz=267
**BC3 Big Chuckawall 94.19 57** P **P 19 20 29.6 +1.0**
baz=267
**R11A Troy Canyon, C 94.31 52** P **P 19 20 29.6 +0.6**
baz=267
**IRM Iron Mountain 94.47 56** P **P 19 20 30.6 +0.9**
baz=267
**ELK Elko 94.67 50** LR LR 19 56 59.9
comp=Z,77nm,20.2s,baz=284,slow=32
**RPN Rapa Nui 95.02 118** LR LR 19 56 23.4
comp=Z,93nm,19.4s,baz=282,slow=31
**YKA Yellowknife Ar 95.44 28** P **P 19 20 32.7 -0.7**
comp=Z,3.1nm,0.8s,baz=271,slow=4.5,SNR=39
YKA LR LR 19 57 36.5
comp=Z,167nm,21.1s,baz=284,slow=32
**YKA Yellowknife Ar 95.44 28** *i* P **P 19 20 33.0 -0.4**
YKA pmax pmax
comp=Z,3.0nm,0.8s
**WSAR Wadi Sarin 95.49 293** LR LR 20 04 14.5
comp=Z,26nm,21.9s,baz=116,slow=36
**ARU Arti 96.14 326** LR LR 20 04 47.8
comp=Z,157nm,20.6s,baz=78,slow=36
**ARU Arti 96.14 326** *d* P **P 19 20 34.3 -2.4**
ARU 19 24 28.0
ARU S **SKSac 19 31 06.0 -1.6**
ARU SP **SP 19 33 09.4 -0.3**
ARU pmax pmax
comp=Z,4.0nm,0.9s
**AKTO Aktyubinsk 96.53 320** LR LR 20 06 10.8
comp=Z,46nm,18.6s,baz=81,slow=37
**LPIG La Paz 98.36 66** LR LR 19 55 31.4
comp=Z,35nm,20.5s,baz=207,slow=29
**PDAR Pinedale Array 98.93 48** P **P 19 20 49.0 -0.9**
comp=Z,0.4nm,0.3s,baz=282,slow=41,SNR=3.6
PDAR LR LR 19 59 28.3
comp=Z,108nm,19.2s,baz=276,slow=32
**RES Resolute Bay 100.37 14** P **Pdif 19 20 54.8 -0.5**
comp=Z,0.5nm,0.4s,baz=308,slow=13,SNR=2.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ECSD | **EROS Data Cent** | **108.21** | **46** | P | **PKiKP** | **19 25 37.4** | **+0.2** | |
| | baz=281 | | | | | | | |
| FINES | **FINESS Array B** | **110.89** | **336** | PKiKP | **PKiKP** | **19 25 40.2** | **-1.4** | |
| | comp=Z,1.7nm,0.7s,baz=149,slow=4.4,SNR=3.9 | | | | | | | |
| MNK | **Minsk** | **113.42** | **329** | *i* P | **Pdif** | **19 21 54.8** | **+1.0** | |
| MNK | | | | *i* | | 19 25 45.9 | | |
| MNK | | | | *i* | | 19 26 37.2 | | |
| MNK | | | | *i* PPP | PPP | 19 29 00.7 | | |
| MNK | | | | *i* | | 19 32 54.3 | | |
| MNK | | | | *i* PS | **PS** | **19 36 13.7** | **-1.5** | |
| MNK | | | | *i* SS | SS | 19 42 20.5 | +1.1 | |
| MNK | | | | *i* SSS | SSS | 19 46 33.3 | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,3.0nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,224nm,19.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,9.0nm,14.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,78nm,12.0s | | | | | | | |
| **MNK** | **Minsk** | **113.42** | **329** | *i* P | **Pdif** | **19 21 54.8** | **+1.0** | |
| | comp=E,3.0nm,0.9s | | | | | | | |
| MNK | | | | *i* P | **Pdif** | **19 21 54.8** | **+1.0** | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| MNK | | | | *i* P | **Pdif** | **19 21 54.8** | **+1.0** | |
| | comp=Z,4.0nm,0.9s,baz=63 | | | | | | | |
| MNK | | | | *i* PKP | **PKiKP** | **19 25 46.0** | **-0.7** | |
| MNK | | | | *i* PP | **PP** | **19 26 37.3** | **-0.9** | |
| MNK | | | | *i* PPP | PPP | 19 29 00.7 | | |
| MNK | | | | *i* SKS | **SKSdf** | **19 32 54.3** | **+1.1** | |
| MNK | | | | *i* PS | **PS** | **19 36 13.7** | **-1.5** | |
| MNK | | | | *i* SS | **SS** | **19 42 20.6** | **+1.1** | |
| MNK | | | | *i* SSS | SSS | 19 46 33.4 | | |
| MNK | | | | *i* LR | LR | 20 12 19.0 | | |
| MNK | | | | *i* LRM | MLR | 20 15 06.5 | | |
| | comp=Z,224nm,18.7s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 20 15 22.0 | | |
| | comp=E,9.0nm,13.6s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 20 15 25.2 | | |
| | comp=N,78nm,12.2s | | | | | | | |
| AKASG | **Malin Array Be** | **114.31** | **324** | PKP | PKPdf | 19 25 46.8 | -1.7 | |
| | comp=N,1.4nm,0.5s,baz=53,slow=2.6,SNR=11 | | | | | | | |
| NB2 | **NORSAR Subarra** | **116.77** | **340** | **PKPdf** | **PKPdf** | **19 25 52.1** | **-0.9** | |
| | comp=Z,3.2nm,0.9s,baz=37,slow=1.8 | | | | | | | |
| NOA | **NORSAR Array B** | **116.77** | **340** | PKP | **PKPdf** | **19 25 52.2** | **-0.8** | |
| | comp=Z,1.7nm,0.8s,baz=41,slow=1.8,SNR=4.6 | | | | | | | |
| O48B | **Farmland** | **117.35** | **47** | P | **PKiKP** | **19 25 55.5** | **+0.8** | |
| | baz=288 | | | | | | | |
| P49A | **Miami Univ. Ec** | **117.89** | **47** | P | **PKiKP** | **19 25 56.3** | **+0.5** | |
| | baz=288 | | | | | | | |
| BOSA | **Boshof** | **119.52** | **233** | PKP | **PKPdf** | **19 25 58.1** | **-1.3** | |
| | comp=Z,2.3nm,0.8s,baz=113,slow=1.6,SNR=4.8 | | | | | | | |
| PLCA | **Paso Flores** | **119.96** | **143** | PKP | **PKPdf** | **19 25 59.2** | **-0.6** | |
| | comp=Z,2.7nm,0.9s,baz=228,slow=3.3,SNR=6.8 | | | | | | | |
| SCHQ | **Schefferville** | **120.79** | **25** | PKP | **PKiKP** | **19 26 01.1** | **+0.2** | |
| | comp=Z,1.4nm,0.8s,baz=100,slow=13,SNR=1.5 | | | | | | | |
| KRLC | **Kraliky** | **121.53** | **328** | *e*PKiKP | **PKPdf** | **19 26 02.3** | **-0.2** | |
| KRLC | **Kraliky** | **121.53** | **328** | *e*PKPDF | **PKPdf** | **19 26 02.3** | **-0.2** | |
| DPC | **Dobruska-Polom** | **121.61** | **329** | *e*PKiKP | **PKiKP** | **19 26 03.5** | **+0.7** | |
| DPC | **Dobruska-Polom** | **121.61** | **329** | *e*PKPDF | **PKiKP** | **19 26 03.5** | **+0.7** | |
| KMSC | **Kings Mountain** | **121.84** | **51** | P | **PKiKP** | **19 26 04.2** | **+0.5** | |
| | baz=289 | | | | | | | |
| BRG | **Berggiesshubel** | **122.50** | **330** | *e*PKP | **PKPdf** | **19 26 04.0** | **-0.2** | |
| BRG | | | | Amp | | 19 26 06.1 | | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| BRG | **Berggiesshubel** | **122.50** | **330** | *e*PKiKP | **PKPdf** | **19 26 04.0** | **-0.2** | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| CLL | **Collm** | **122.68** | **331** | *e*PKiKP | **PKPdf** | **19 26 04.0** | **-0.6** | |
| CLL | | | | *e* | | 19 26 23.0 | | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| CLL | **Collm** | **122.68** | **331** | *e*PKPdf | **PKPdf** | **19 26 04.0** | **-0.6** | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| CLL | | | | *e*(pPKPdf) | | 19 26 23.0 | | |
| LONY | **Lake Ozonia** | **122.74** | **39** | P | **PKiKP** | **19 26 05.9** | **+0.8** | |
| | baz=300 | | | | | | | |
| CONA | **Conrad Observa** | **123.27** | **327** | *e*P | **PKPdf** | **19 26 05.7** | **-0.3** | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| CKRC | **Cesky Krumlov** | **123.58** | **328** | *e*PKPDF | **PKPdf** | **19 26 06.1** | **-0.3** | |
| KHC | **Kasperske Hory** | **123.77** | **329** | *e*PKiKP | **PKPdf** | **19 26 06.6** | **-0.2** | |
| KHC | | | | *e* | | 19 26 23.0 | | |
| KHC | **Kasperske Hory** | **123.77** | **329** | *e*PKPDF | **PKPdf** | **19 26 06.6** | **-0.2** | |
| KHC | | | | *e*pPKP | **pPKPdf** | **19 26 23.0** | **-1.7** | |
| KHC | **Kasperske Hory** | **123.77** | **329** | | **PKPdf** | **19 26 06.2** | **-0.6** | |
| GEC2 | **GERESS Array S** | **123.88** | **328** | PKPdf | **PKPdf** | **19 26 05.9** | **-1.2** | |
| GERES | **GERESS Array B** | **123.88** | **328** | PKP | **PKPdf** | **19 26 06.5** | **-0.6** | |
| | comp=Z,3.8nm,0.6s,baz=59,slow=1.0,SNR=18 | | | | | | | |
| SOKA | **Soboth** | **124.45** | **326** | *e*P | **PKPdf** | **19 26 08.4** | **+0.1** | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| LBNH | **Lisbon** | **124.57** | **38** | P | **PKiKP** | **19 26 09.4** | **+0.6** | |
| | baz=302 | | | | | | | |
| PAL | **Palisades** | **124.92** | **42** | P | **PKiKP** | **19 26 10.2** | **+0.7** | |
| | baz=298 | | | | | | | |
| ABTA | **Abfaltersbach** | **125.80** | **327** | *e*P | **PKiKP** | **19 26 11.3** | **0.0** | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| WTTA | **Wattenberg** | **125.95** | **328** | *e*P | **PKPdf** | **19 26 11.0** | **-0.3** | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| MOTA | **Moosalm** | **126.18** | **328** | *e*P | **PKPdf** | **19 26 11.3** | **-0.3** | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| BTNL | **Ternell** | **126.34** | **334** | *d*PKP | **PKiKP** | **19 26 12.5** | **+0.3** | |
| MEM | **Membach** | **126.38** | **334** | *d*PKP | **PKiKP** | **19 26 12.0** | **-0.2** | |
| FETA | **Feichten** | **126.58** | **328** | *e*P | **PKPdf** | **19 26 12.5** | **0.0** | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| BCLA | **Clavier** | **126.82** | **334** | *d*PKP | **PKiKP** | **19 26 13.9** | **+0.8** | |
| DAVA | **Damuels** | **126.85** | **329** | *e*P | **PKPdf** | **19 26 12.7** | **-0.3** | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| WLF | **Walferdange** | **127.00** | **333** | *d*PKP | **PKiKP** | **19 26 15.3** | **+1.9** | |
| BMRD | **Maredsous** | **127.14** | **335** | *d*PKP | **PKiKP** | **19 26 13.6** | **-0.1** | |
| ESDC | **Sonseca Array** | **139.26** | **332** | PKP | **PKPdf** | **19 26 35.7** | **-0.6** | |
| | comp=Z,0.8nm,1.0s,baz=342,slow=8.1,SNR=4.0 | | | | | | | |
| ESDC | | | | SKPbc | **SKPbc** | **19 30 05.0** | **-1.3** | |
| | comp=Z,2.8nm,1.2s,baz=6,9,slow=3.4,SNR=5.9 | | | | | | | |
| TORD | **Torodi Ar. Bea** | **150.10** | **288** | PKPbc | **PKPbc** | **19 26 59.6** | **-1.0** | |
| | comp=Z,13nm,0.7s,baz=63,slow=2.5,SNR=44 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 27 07.3** | **+0.6** | |
| | comp=Z,11nm,0.6s,baz=64,slow=3.2,SNR=14 | | | | | | | |
| TORD | **Torodi Ar. Bea** | **150.10** | **288** | | **PKPbc** | **19 26 59.1** | **-1.5** | |
| BDFB | **Brasilia** | **151.26** | **135** | PKPbc | **PKPbc** | **19 27 03.4** | **-0.1** | |
| | comp=Z,18nm,0.8s,baz=195,slow=3.3,SNR=12 | | | | | | | |
| BDFB | **Brasilia** | **151.26** | **135** | PKIKP | **PKPbc** | **19 27 02.7** | **-0.8** | |
| BDFB | **Brasilia** | **151.26** | **135** | | **PKPbc** | **19 27 02.7** | **-0.8** | |
| DBIC | **Dimbokro** | **157.49** | **276** | PKPab | **PKPab** | **19 27 38.4** | **+0.3** | |
| | comp=Z,4.1nm,0.6s,baz=40,slow=1.8,SNR=7.7 | | | | | | | |
| DBIC | **Dimbokro** | **157.49** | **276** | | **PKPab** | **19 27 37.0** | **-1.1** | |

*IDC* **16** *19:26:43.3±2.2, 24°.72N×94°.77E, h0km, mb3.4/5, mb1 3.4/6, mb1mx3.2/65, mbtmp3.3/6, ML3.0/1, MS3.7/1, Ms1 3.7/1, ms1mx2.7/54 Error ellipse: s-maj=63.9km s-min=31.7km az=58.0*

**ISC 16 19:26:52.0±1.6, 24°.3N±0°.2×94°.8E±0°.4, h112km, n7, σ0s49/6, mb3.1/5, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | **Chiang Mai Arr** | **6.99** | **145** | Pn | **Pn** | **19 28 31.9** | **0.0** |
| | 0.1nm,0.3s,baz=325,slow=11,SNR=1.3 | | | | | | |
| MKAR | **Makanchi Array** | **24.57** | **339** | P | **P** | **19 32 01.8** | **+0.4** |
| | 0.3nm,0.5s,baz=151,slow=9.3,SNR=8.8 | | | | | | |
| AAK | **Ala-Archa** | **24.80** | **322** | P | **P** | **19 32 03.3** | **-0.4** |
| | 1.0nm,0.8s,baz=130,slow=7.9,SNR=1.7 | | | | | | |
| SONM | **Songino Array** | **25.24** | **19** | P | **P** | **19 32 07.2** | **-0.4** |
| | 0.4nm,0.6s,baz=197,slow=11,SNR=6.5 | | | | | | |
| KURBB | **Kurchatov Arra** | **29.14** | **339** | P | **P** | **19 32 42.6** | **+0.4** |
| | 0.2nm,0.6s,baz=159,slow=7.8,SNR=2.2 | | | | | | |
| ZALV | **Zalesovo Beam** | **30.54** | **348** | P | **P** | **19 32 54.9** | **+0.4** |
| | 0.5nm,0.6s,baz=98,slow=8.9,SNR=2.3 | | | | | | |
| JHJ | **Hachijo jima 2** | **40.20** | **67** | LR | LR | 19 51 56.3 | |
| | comp=Z,104nm,18.2s,baz=88,slow=38 | | | | | | |

*IDC* **16** *19:36:49.7±1.7, 3°.41S×131°.73E, h0km, mb3.2/3, mb1 3.4/6, mb1mx3.3/45, mbtmp3.3/6, ML3.1/3, Error ellipse: s-maj=55.7km s-min=20.8km az=84.0*

**ISC 16 19:36:52.0±1.2, 3°.63S±0°.07×131°.7E±0°.2, h35km, n7, σ3s37/9, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | **Sorong** | **2.77** | **351** | Pn | **Pn** | **19 37 30.9** | **-3.1** |
| | 0.5nm,0.3s,baz=170,slow=11,SNR=2.2 | | | | | | |
| SIJI | | | | Sn | **Sn** | **19 38 06.0** | **-0.3** |
| | 3.9nm,0.3s,baz=166,slow=23,SNR=12 | | | | | | |
| BATI | **Baumata** | **10.31** | **230** | Pn | **Pn** | **19 39 19.7** | **+2.2** |
| | 0.7nm,0.3s,baz=82,slow=7.1,SNR=2.2 | | | | | | |
| FITZ | **Fitzroy Crossi** | **15.56** | **202** | Pn | **Pn** | **19 40 29.8** | **+0.9** |
| | 0.1nm,0.3s,baz=31,slow=11,SNR=12 | | | | | | |
| FITZ | | | | Sn | **Sn** | **19 43 13.8** | **-6.3** |
| | 0.1nm,0.3s,baz=285,slow=21,SNR=2.6 | | | | | | |
| WRA | **Warramunga Arr** | **16.42** | **171** | Pn | **P** | **19 40 42.5** | **+0.1** |
| | 0.1nm,0.3s,baz=352,slow=13,SNR=1.5 | | | | | | |
| WRA | | | | Sn | **Sn** | **19 43 41.0** | **-0.1** |
| | 0.1nm,0.3s,baz=359,slow=24,SNR=1.4 | | | | | | |
| ASAR | **Alice Springs** | **20.04** | **174** | P | Pn | 19 41 27.6 | +3.5 |
| | 0.5nm,0.4s,baz=351,slow=11,SNR=15 | | | | | | |
| MKAR | **Makanchi Array** | **66.39** | **325** | P | **P** | **19 47 39.6** | **+2.0** |
| | 0.1nm,0.4s,baz=110,slow=6.7,SNR=2.1 | | | | | | |
| KURBB | **Kurchatov Arra** | **70.57** | **327** | P | **P** | **19 48 06.4** | **+2.9** |
| | 0.2nm,0.4s,baz=110,slow=5.0,SNR=4.0 | | | | | | |

*IDC* **16** *19:43:42.4±3.1, 15°.45S×167°.44E, h86km±27km, mb3.9/10, mb1 4.1/11, mb1mx3.8/36, mbtmp4.2/11, Error ellipse: s-maj=29.2km s-min=22.5km az=107.0*

*NEIC* **16** *19:43:45.0±2.7, 15°.49S±0°.09×167°.6E±0°.1, h117km±5km, mb4.4/20, Error ellipse: s-maj=17.9km s-min=13.1km az=75.0*

*NOU* **16** *19:43:47.3, 15°.52S×167°.29E, h97km, mb4.4/12, Vanuatu Islands*

**ISC 16 19:43:45.9±0.8, 15°.53S±0°.06×167°.4E±0°.1, h124km, n45, σ1s63/49, mb4.3/17, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SANVU | **Saraoutou** | **0.24** | **291** | | **Pn** | **19 44 01.0** | **-2.1** |
| SANVU | | | | Sn | **Sn** | **19 44 13.5** | **-2.6** |
| SANVU | **Saraoutou** | **0.24** | **291** | P | **Pn** | **19 44 01.8** | **-1.3** |
| DVP | **Devils Point** | **2.29** | **162** | P | **Pn** | **19 44 25.0** | **+1.7** |
| LIFNC | **LIFOU** | **5.22** | **182** | Pn | **Pn** | **19 45 00.4** | **-1.4** |
| LIFNC | | | | Sn | **Sn** | **19 45 55.4** | **-5.7** |
| KOUNC | **Koumac, New Ca** | **5.82** | **211** | P | **Pn** | **19 45 10.9** | **+0.9** |
| YATNC | **Mamie plateau,** | **6.51** | **184** | P | **Pn** | **19 45 19.1** | **-0.2** |
| DZM | **Mont Dzumac** | **6.57** | **188** | P | **Pn** | **19 45 18.6** | **-1.5** |
| | 9.9nm,0.3s,baz=17,slow=12,SNR=108 | | | | | | |
| DZM | | | | S | **Sn** | **19 46 32.3** | **-1.5** |
| | 8.8nm,0.3s,baz=330,slow=24,SNR=14 | | | | | | |
| DZM | **Mont Dzumac** | **6.57** | **188** | | **Pn** | **19 45 20.5** | **+0.3** |
| DZM | | | | Sn | **Sn** | **19 46 29.9** | **-4.0** |
| NOUC | **Port Laguerre** | **6.62** | **189** | P | **Pn** | **19 45 22.1** | **+1.3** |
| ONTNC | **Ouen Toro** | **6.80** | **188** | | **Pn** | **19 45 23.9** | **+0.7** |
| ONTNC | **Ouen Toro** | **6.80** | **188** | P | **Pn** | **19 45 24.5** | **+1.3** |
| OUENC | **Ouen Island, N** | **6.87** | **185** | | **Pn** | **19 45 24.8** | **+0.6** |
| OUENC | **Ouen Island, N** | **6.87** | **185** | P | **Pn** | **19 45 25.5** | **+1.3** |
| PINNC | **Pines Island,** | **7.04** | **180** | Pn | **Pn** | **19 45 27.6** | **+1.1** |
| EIDS | **Eidsvold** | **18.17** | **235** | P | **Pn** | **19 47 51.4** | **+1.1** |
| EIDS | | | | IAmb | IAmb | 19 47 52.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| CTA | **Charters Tower** | **20.67** | **254** | P | **P** | **19 48 16.2** | **+0.2** |
| | comp=Z,4.2nm,0.7s,baz=94,slow=9.8,SNR=9.2 | | | | | | |
| CTAO | **Charters Tower** | **20.67** | **254** | P | **P** | **19 48 16.3** | **+0.2** |
| COEN | **Coen** | **23.51** | **271** | P | **P** | **19 48 44.7** | **-0.3** |
| COEN | | | | IAmb | IAmb | 19 48 48.0 | |
| | comp=Z,22nm,1.6s | | | | | | |
| STKA | **Stephens Creek** | **28.61** | **231** | P | **P** | **19 49 31.6** | **+1.0** |
| | comp=Z,1.5nm,0.4s,baz=45,slow=8.8,SNR=10 | | | | | | |
| JAY | **Jayapura** | **29.34** | **294** | P | **P** | **19 49 37.1** | **-0.2** |
| | comp=Z,14nm,0.5s,baz=138,slow=12,SNR=5.5 | | | | | | |
| WR0 | **Warramunga Arr** | **31.61** | **257** | P | **P** | **19 49 56.3** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 19 49 58.6 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| WB0 | **Warramunga Arr** | **31.74** | **257** | P | **P** | **19 49 57.4** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 19 49 58.8 | |
| | comp=Z,16nm,1.6s | | | | | | |
| WB2 | **Warramunga Arr** | **31.79** | **257** | P | **P** | **19 49 57.8** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 19 50 17.1 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| WRA | **Warramunga Arr** | **31.80** | **257** | P | **P** | **19 49 58.0** | **-1.0** |
| | comp=Z,1.0nm,0.4s,baz=80,slow=6.0,SNR=21 | | | | | | |
| WRA | **Warramunga Arr** | **31.80** | **257** | P | **P** | **19 49 57.1** | **-1.8** |
| AS31 | **Alice Springs** | **32.55** | **250** | P | **P** | **19 50 04.4** | **-1.1** |
| AS31 | | | | IAmb | IAmb | 19 50 06.1 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **32.55** | **250** | P | **P** | **19 50 05.0** | **-0.5** |
| | comp=Z,9.1nm,0.7s,baz=74,slow=9.0,SNR=179 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 56 26.7** | **+4.7** |
| | comp=Z,0.7nm,0.9s,baz=41,slow=4.3,SNR=4.1 | | | | | | |
| ASAR | **Alice Springs** | **32.55** | **250** | P | **P** | **19 50 04.5** | **-0.9** |
| BBOO | **Buckleboo** | **33.22** | **233** | P | **P** | **19 50 12.2** | **+1.0** |
| MTN | **Manton Dam** | **35.27** | **270** | P | **P** | **19 50 29.1** | **0.0** |
| KNRA | **Kununurra** | **37.21** | **264** | P | **P** | **19 50 44.5** | **-1.1** |
| FORT | **Forrest** | **39.03** | **240** | P | **P** | **19 51 01.1** | **+0.4** |
| FITZ | **Fitzroy Crossi** | **40.03** | **260** | P | **P** | **19 51 08.6** | **-0.6** |
| FITZ | | | | IAmb | IAmb | 19 51 09.8 | |
| | comp=Z,7.7nm,0.6s | | | | | | |
| PSA00 | **Pilbara Seismi** | **45.38** | **255** | P | **P** | **19 51 52.9** | **+0.6** |
| PSA00 | **Pilbara Seismi** | **45.38** | **255** | P | **P** | **19 51 52.5** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 19 52 00.2 | |
| | comp=Z,19nm,1.4s | | | | | | |
| MBWA | **Marble Bar** | **45.50** | **255** | P | **P** | **19 51 53.1** | **-0.1** |
| MBWA | | | | IAmb | IAmb | 19 51 54.4 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| MORW | **Morawa** | **49.07** | **245** | P | **P** | **19 52 21.0** | **+0.1** |
| CMAR | **Chiang Mai Arr** | **75.42** | **294** | P | **P** | **19 55 18.1** | **+1.5** |
| | comp=Z,1.1nm,0.7s,baz=132,slow=4.8,SNR=16 | | | | | | |
| CHTO | **Chiang Mai** | **75.56** | **294** | P | **P** | **19 55 19.0** | **+1.5** |
| CHTO | | | | IAmb | IAmb | 19 55 57.6 | |
| | comp=Z,7.9nm,1.6s | | | | | | |
| SONM | **Songino Array** | **83.24** | **324** | P | **P** | **19 55 59.3** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=146,slow=6.0,SNR=7.6 | | | | | | |
| SONM | **Songino Array** | **83.24** | **324** | P | **P** | **19 55 58.5** | **-0.1** |
| ILAR | **Eielson Array** | **87.24** | **18** | P | **P** | **19 56 17.5** | **-0.5** |
| | comp=Z,0.1nm,0.4s,baz=248,slow=4.8,SNR=3.0 | | | | | | |
| MKAR | **Makanchi Array** | **97.89** | **316** | P | Pdif | 19 57 09.1 | +1.5 |
| | comp=Z,0.4nm,0.9s,baz=94,slow=4.3,SNR=4.4 | | | | | | |
| YKA | **Yellowknife Ar** | **98.18** | **27** | P | **P** | **19 57 08.2** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=251,slow=4.6,SNR=4.2 | | | | | | |
| YKA | **Yellowknife Ar** | **98.18** | **27** | P | **P** | **19 57 07.7** | **-0.8** |

**IDC 16 19:54:34.4±67.0, 13°.83S×165°.94E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.5/42, mbtmp3.7/3, Error ellipse: s-maj=1133.0km s-min=117.3km az=63.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STKA | **Stephens Creek** | **28.62** | **227** | P | P | 20 00 32.8 | 0.0 |
| | 1.5nm,0.9s,baz=60,slow=8.1,SNR=3.8 | | | | | | |
| WRA | **Warramunga Arr** | **30.81** | **254** | P | P | 20 00 52.9 | +0.7 |
| | 0.3nm,0.8s,baz=85,slow=8.7,SNR=1.6 | | | | | | |
| ASAR | **Alice Springs** | **31.80** | **247** | P | P | 20 01 00.5 | -0.5 |
| | 0.5nm,0.3s,baz=74,slow=9.8,SNR=15 | | | | | | |

*IDC* **16** *20:05:20.1±0.7, 33°.08S×15°.93W, h0km, mb4.3/11, mb1 4.3/11, mb1mx4.1/48, mbtmp4.2/11, MS3.7/1, Ms1 3.6/1, ms1mx2.8/55, Error ellipse: s-maj=23.4km s-min=21.2km az=141.0*

*NEIC* **16** *20:05:22.3±1.4, 33°.06S±0°.08×15°.9W±0°.1, h10km±1km, mb4.7/13, Error ellipse: s-maj=19.2km s-min=10.9km az=236.0*

**ISC 16 20:05:21.7±0.6, 33°.0S±0°.1×15°.9W±0°.1, h10km, n38, σ0s77/30, mb4.5/16, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H09N1 | **TRISTAN DA CUN** | **4.96** | **145** | T | T | 20 11 41.5 | |
| H09W1 | **TRISTAN DA CUN** | **4.98** | **145** | T | T | 20 11 31.7 | |
| | SNR=40 | | | | | | |
| H10S2 | **ASCENSION HYDR** | **23.99** | **3** | T | T | 20 35 27.8 | |
| | baz=182,slow=74,SNR=24 | | | | | | |
| H10S3 | **ASCENSION HYDR** | **24.00** | **3** | T | T | 20 35 28.6 | |
| | baz=38,slow=74,SNR=42 | | | | | | |
| H10N1 | **ASCENSION HYDR** | **25.11** | **3** | T | T | 20 36 56.2 | |
| | baz=184,slow=75 | | | | | | |
| H10N3 | **ASCENSION HYDR** | **25.11** | **3** | T | T | 20 36 56.1 | |
| | baz=184,slow=75 | | | | | | |
| H10N2 | **ASCENSION HYDR** | **25.12** | **3** | T | T | 20 36 56.2 | |
| | baz=184,slow=75 | | | | | | |
| TSUM | **Tsumeb** | **32.89** | **74** | P | **P** | **20 11 55.4** | **-1.0** |
| TSUM | | | | IAmb | IAmb | 20 11 59.2 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| BDFB | **Brasilia** | **33.84** | **293** | P | **P** | **20 12 03.6** | **-1.0** |
| | comp=Z,5.0nm,0.8s,baz=154,slow=7.4,SNR=5.3 | | | | | | |
| BDFB | **Brasilia** | **33.84** | **293** | P | **P** | **20 12 03.7** | **-1.0** |
| ITQB | **Itaqui** | **34.81** | **264** | P | **P** | **20 12 13.0** | **+0.2** |
| BOSA | **Boshof** | **35.43** | **94** | P | **P** | **20 12 17.8** | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=253,slow=4.7,SNR=5.3 | | | | | | |
| LIC | **Lamto** | **40.39** | **17** | *e*P | **P** | **20 13 00.0** | **0.0** |
| | comp=Z,28nm,1.1s | | | | | | |
| KIC | **Kosan Boka** | **40.59** | **17** | *e*P | **P** | **20 13 02.1** | **+0.4** |
| | comp=Z,14nm,0.5s | | | | | | |
| TIC | **Toumodi** | **40.79** | **17** | *e*P | **P** | **20 13 03.6** | **+0.2** |
| DBIC | **Dimbokro** | **40.86** | **17** | P | **P** | **20 13 04.0** | **+0.2** |
| | comp=Z,7.2nm,0.8s,baz=202,slow=11,SNR=8.8 | | | | | | |
| DBIC | **Dimbokro** | **40.86** | **17** | P | **P** | **20 13 04.1** | **+0.2** |
| DBIC | | | | IAmb | IAmb | 20 13 05.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| PMSA | **Palmer Station** | **43.08** | **208** | P | **P** | **20 13 22.8** | **+1.2** |
| SIV | **San Ignacio** | **44.13** | **281** | P | **P** | **20 13 31.3** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=102,slow=7.1,SNR=6.7 | | | | | | |
| KOWA | **Kowa** | **48.61** | **15** | P | **P** | **20 14 05.8** | **+0.1** |
| KOWA | | | | IAmb | IAmb | 20 14 07.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| TORD | **Torodi Ar. Bea** | **48.90** | **23** | P | **P** | **20 14 07.7** | **-0.3** |
| | comp=Z,9.1nm,0.9s,baz=202,slow=5.5,SNR=50 | | | | | | |
| TORD | **Torodi Ar. Bea** | **48.90** | **23** | P | **P** | **20 14 07.7** | **-0.3** |
| TORD | | | | IAmb | IAmb | 20 14 09.7 | |
| | comp=Z,12nm,1.1s | | | | | | |
| MBAR | **Mbarara** | **54.36** | **63** | P | **P** | **20 14 51.4** | **+2.2** |
| | comp=Z,1.1nm,0.4s,baz=189,slow=9.4,SNR=5.8 | | | | | | |
| MBAR | **Mbarara** | **54.36** | **63** | P | **P** | **20 14 50.2** | **+1.0** |
| MAW | **Mawson** | **55.66** | **153** | LR | LR | 20 32 53.7 | |
| | comp=Z,80nm,21.5s,baz=246,slow=30 | | | | | | |
| QSPA | **South Pole Qui** | **57.20** | **180** | P | **P** | **20 15 08.6** | **-0.2** |
| | comp=Z,7.9nm,1.0s,baz=227,slow=2.3,SNR=20 | | | | | | |
| QSPA | **South Pole Qui** | **57.20** | **180** | P | **P** | **20 15 08.2** | **-0.6** |
| QSPA | | | | IAmb | IAmb | 20 15 09.8 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| ABPO | **Ambohimpanom** | **57.63** | **93** | P | **P** | **20 15 12.7** | **+0.1** |
| ABPO | | | | IAmb | IAmb | 20 15 33.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| ESDC | **Sonseca Array** | **73.19** | **10** | P | **P** | **20 16 53.0** | **+0.4** |
| | comp=Z,1.2nm,1.1s,baz=179,slow=6.3,SNR=3.7 | | | | | | |
| DAVOX | **Davos/Dischmat** | **82.78** | **18** | P | **P** | **20 17 46.4** | **+0.5** |
| | comp=Z,2.5nm,0.8s,baz=94,slow=12,SNR=3.6 | | | | | | |
| GERES | **GERESS Array B** | **85.69** | **19** | P | **P** | **20 18 00.3** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=168,slow=5.6,SNR=2.2 | | | | | | |
| AKASG | **Malin Array Be** | **92.39** | **27** | P | **P** | **20 18 32.3** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=225,slow=3.6,SNR=4.2 | | | | | | |
| ASAR | **Alice Springs** | **116.67** | **149** | PKP | **PKPdf** | **20 24 05.7** | **-1.0** |
| | comp=Z,0.6nm,1.1s,baz=211,slow=4.9,SNR=2.6 | | | | | | |
| YKA | **Yellowknife Ar** | **122.67** | **327** | PKP | **PKPdf** | **20 24 15.3** | **-1.6** |
| | comp=Z,0.5nm,0.8s,baz=105,slow=2.3,SNR=5.6 | | | | | | |
| INK | **Inuvik** | **130.45** | **334** | PKP | **PKPdf** | **20 24 31.6** | **+0.1** |
| | comp=Z,2.5nm,1.1s,baz=108,slow=3.2,SNR=3.4 | | | | | | |
| SONM | **Songino Array** | **134.68** | **53** | PKP | **PKiKP** | **20 24 41.7** | **-0.1** |
| | comp=Z,0.4nm,0.9s,baz=333,slow=1.6,SNR=2.5 | | | | | | |
| ILAR | **Eielson Array** | **136.60** | **332** | PKP | **PKPdf** | **20 24 43.2** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=359,slow=1.0,SNR=8.0 | | | | | | |
| KLR | **Kul'dur** | **151.02** | **46** | PKPbc | **PKPbc** | **20 25 14.2** | **-0.3** |
| | comp=Z,5.3nm,0.8s,baz=325,slow=3.9,SNR=18 | | | | | | |

*MEX* **16** *20:12:22.4±0.7, 15°.41N×92°.74W, h114km±6km, MD4.0*
*GCG* **16** *20:12:31.7±0.5, 15°.36N×92°.01W, h4km±30km, MD4.5*

**ISC 16 20:12:21.3±1.8, 15°.36N±0°.08×92°.82W±0°.07, h110km±11km, n13, σ1s79/26, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | **0.52** | **311** | *e*P | **Pn** | **20 12 38.6** | **+0.5** |
| PCIG | | | | *i* S | **Sn** | **20 12 51.4** | **+0.5** |
| PATR | **El Naranjo** | **0.61** | **113** | *i* P | **Pn** | **20 12 38.8** | **-0.4** |
| PATR | | | | *i* S | **Sn** | **20 12 51.9** | **-0.7** |
| PAVE | **Pavencul** | **0.64** | **105** | *i* P | **Pn** | **20 12 39.4** | **+0.1** |
| PAVE | | | | *i* S | **Sn** | **20 12 52.7** | **-0.3** |
| THIG | | **0.70** | **130** | *e*P | **Pn** | **20 12 39.9** | **+0.4** |
| THIG | | | | *i* P | **Pn** | **20 12 40.0** | **+0.4**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BBOO** | **Buckleboo** | **46.66** | **168** | P | **P** | **20 29 19.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **47.24** | **161** | P | **P** | **20 29 24.2** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=14,slow=8.3,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.33** | **322** | P | **P** | **20 29 40.4** | **+0.6** |
| | comp=Z,0.1nm,0.4s,baz=120,slow=8.5,SNR=1.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **20 31 02.3** | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=108,slow=4.7,SNR=2.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.82** | **331** | P | **P** | **20 29 59.0** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=116,slow=6.8,SNR=3.9 | | | | | | |
| ZALV | | | | PcP | **PcP** | **20 31 11.4** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=126,slow=2.5,SNR=1.2 | | | | | | |
| **DZM** | **Mont Dzumac** | **53.30** | **130** | P | **P** | **20 30 09.8** | **-0.1** |
| **KURK** | **Kurchatov** | **53.33** | **325** | P | **P** | **20 30 10.7** | **+1.0** |
| KURK | | | | IAmb | IAmb | 20 30 21.1 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **83.89** | **321** | P | **P** | **20 33 20.4** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=72,slow=3.0,SNR=2.1 | | | | | | |

*IDC **16** 20:23:22.9±1.3, 13˚.02N×125˚.59E, h0km, mb3.6/7, mb1 3.8/7, mb1mx3.5/45, mbtmp3.6/7, ML5.2/1, Error ellipse: s-maj=63.8km s-min=18.0km az=66.0*
*MAN **16** 20:23:26.6, 13˚.06N×125˚.19E, h102km, mb4.5, ML3.4, MS3.2*
*NEIC **16** 20:23:27.7±1.9, 13˚.0N±0˚.1×125˚.5E±0˚.1, h23km±6km, mb4.4/14, Error ellipse: s-maj=21.2km s-min=14.3km az=71.0*

**ISC 16 20:23:29.2±0.7, 12˚.94N±0˚.07×125˚.0E±0˚.1, h41km, n30, σ1s37/28, mb4.1/12, 1C-1D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCP** | **Roxas** | **2.62** | **239** | *e*P | **Pn** | **20 24 08.1** | **-1.0** |
| RCP | | | | *e*S | **Sn** | **20 24 39.5** | **-0.3** |
| **LLP** | **Lapu-Lapu** | **2.81** | **202** | *i*P | **Pn** | **20 24 11.1** | **-0.6** |
| LLP | | | | *e*S | **Sn** | **20 24 48.2** | **+3.9** |
| **TGY** | **Tagaytay City** | **4.15** | **287** | Pn | Pn | 20 24 36.2 | +6.1 |
| | 99nm,0.3s,baz=199,slow=16,SNR=2.4 | | | | | | |
| **YULB** | **Yu-li** | **10.98** | **342** | Pn | **Pn** | **20 26 02.8** | **-1.0** |
| **SSLB** | **Suanglung** | **11.46** | **341** | Pn | **Pn** | **20 26 10.1** | **-0.3** |
| **MTN** | **Manton Dam** | **26.32** | **166** | P | **P** | **20 29 00.9** | **-0.4** |
| **KNRA** | **Kununurra** | **28.67** | **172** | P | **P** | **20 29 22.3** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 20 29 55.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.85** | **179** | P | **P** | **20 29 40.2** | **-1.4** |
| | comp=Z,0.7nm,0.4s,baz=13,slow=13,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.85** | **179** | P | **P** | **20 29 40.8** | **-0.8** |
| FITZ | | | | IAmb | IAmb | 20 29 54.6 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.78** | **164** | P | **P** | **20 30 05.5** | **-1.8** |
| **WRA** | **Warramunga Arr** | **33.94** | **164** | P | **P** | **20 30 07.2** | **-1.6** |
| | comp=Z,0.5nm,0.6s,baz=345,slow=9.1,SNR=2.8 | | | | | | |
| **WB2** | **Warramunga Arr** | **33.94** | **164** | P | **P** | **20 30 07.4** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 20 30 30.0 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.01** | **164** | P | **P** | **20 30 08.4** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 20 30 15.0 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **37.40** | **167** | P | **P** | **20 30 37.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **37.40** | **167** | P | **P** | **20 30 37.6** | **-0.8** |
| | comp=Z,0.5nm,0.4s,baz=353,slow=7.4,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **37.40** | **167** | P | **P** | **20 30 39.1** | **+0.6** |
| **SONM** | **Songino Array** | **38.11** | **340** | P | **P** | **20 30 45.6** | **+1.3** |
| | comp=Z,0.3nm,0.8s,baz=163,slow=8.2,SNR=2.6 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.65** | **75** | T | T | 21 14 26.8 | |
| | baz=266,slow=75,SNR=17 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.66** | **75** | T | T | 21 14 26.8 | |
| | baz=266,slow=75,SNR=13 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.67** | **75** | T | T | 21 14 28.4 | |
| | baz=266,slow=75,SNR=7.3 | | | | | | |
| **MORW** | **Morawa** | **42.66** | **192** | P | **P** | **20 31 20.5** | **-1.5** |
| MORW | | | | IAmb | IAmb | 20 31 38.2 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **46.70** | **167** | P | **P** | **20 31 54.3** | **+0.3** |
| **STKA** | **Stephens Creek** | **47.30** | **161** | P | **P** | **20 31 58.6** | **-0.2** |
| | comp=Z,0.7nm,0.3s,baz=2.2,slow=6.7,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.19** | **322** | P | **P** | **20 32 13.4** | **+0.1** |
| | comp=Z,0.1nm,0.4s,baz=111,slow=7.9,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.19** | **322** | P | **P** | **20 32 15.8** | **+2.5** |
| **ZALV** | **Zalesovo Beam** | **51.72** | **331** | P | **P** | **20 32 32.9** | **+0.7** |
| | comp=Z,0.4nm,0.4s,baz=125,slow=6.5,SNR=2.7 | | | | | | |
| **KURK** | **Kurchatov** | **53.20** | **325** | P | **P** | **20 32 44.9** | **+1.6** |
| KURK | | | | IAmb | IAmb | 20 33 03.3 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **ANM** | **Nome** | **69.67** | **26** | P | **P** | **20 34 33.1** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **70.59** | **140** | P | **P** | **20 34 41.0** | **+0.6** |
| **IMAR** | **Indian Mountai** | **74.69** | **25** | P | **P** | **20 35 05.3** | **+1.0** |

*CNRM **16** 20:24:06.7, 35˚.71N×3˚.67W, h0km, ml2.2*
*MDD **16** 20:24:07.3±0.4, 35˚.49N×3˚.84W, h0km, mb_Lg2.7/7, Error ellipse: s-maj=3.7km s-min=2.8km az=12.0*
*SFS **16** 20:24:09.0, 35˚.53N×3˚.77W, h14km, ML2.6, ALBORAN SUR*

**ISC 16 20:24:09.1±1.1, 35˚.60N±0˚.03×3˚.75W±0˚.02, h18km±6km, n23, σ1s54/47, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.41** | **202** | P | **Pg** | **20 24 16.7** | **-1.0** |
| PALE | | | | S | **Sg** | **20 24 22.6** | **-0.8** |
| **EALB** | **Alboran** | **0.67** | **60** | Pg | **Pb** | **20 24 23.4** | **+1.0** |
| EALB | | | | Sg | **Sb** | **20 24 33.2** | **+1.8** |
| **EMEL** | **Melilla** | **0.72** | **115** | Pg | **Pg** | **20 24 23.0** | **-0.1** |
| EMEL | | | | Sg | **Sg** | **20 24 32.5** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.72** | **121** | P | **Pg** | **20 24 23.0** | **-0.3** |
| GOG | | | | S | **Sb** | **20 24 33.8** | **+0.9** |
| **CHAS** | **Isla Isabel II** | **1.16** | **111** | P | **Pn** | **20 24 28.2** | **-2.2** |
| CHAS | | | | S | **Sb** | **20 24 43.6** | **-1.7** |
| **EMIJ** | **Mijas** | **1.27** | **320** | Pg | **Pn** | **20 24 31.6** | **-0.4** |
| EMIJ | | | | Sg | **Sb** | **20 24 47.9** | **-0.6** |
| EMIJ | | | | *i* Vmb_Lg | | 20 24 49.3 | |
| **EMAL** | **Malaga-Limoner** | **1.28** | **335** | P | **Pn** | **20 24 31.8** | **-0.4** |
| EMAL | | | | S | **Sb** | **20 24 47.4** | **-1.5** |
| **SMIR** | **Smir Dam** | **1.33** | **274** | P | **Pn** | **20 24 32.8** | **0.0** |
| SMIR | | | | S | **Sg** | **20 24 55.4** | **+3.2** |
| **TAF** | **Taforalt** | **1.35** | **125** | P | **Pn** | **20 24 32.4** | **-0.8** |
| TAF | | | | S | **Sn** | **20 24 50.5** | **-0.2** |
| **CEU** | **Ceuta** | **1.35** | **283** | P | **Pn** | **20 24 33.8** | **+0.7** |
| CEU | | | | S | **Sn** | **20 24 46.1** | **-4.5** |
| **CHEFC** | **Chefchaouen** | **1.39** | **250** | P | **Pb** | **20 24 34.8** | **+0.2** |
| CHEFC | | | | S | **Sg** | **20 24 56.3** | **+2.3** |
| **JBK** | **JBK** | **1.60** | **142** | P | **Pn** | **20 24 35.6** | **-1.1** |
| JBK | | | | S | **Sb** | **20 24 59.1** | **+0.9** |
| **EJIF** | **Jimena Fronter** | **1.63** | **302** | Pn | **Pn** | **20 24 35.4** | **-1.6** |
| EJIF | | | | Sn | **Sb** | **20 24 59.3** | **+0.4** |
| **IFR** | **Ifrane** | **2.37** | **209** | P | **Pn** | **20 24 49.3** | **+1.9** |
| IFR | | | | S | **Sn** | **20 25 15.1** | **-0.9** |
| **MD31** | **MD31** | **2.85** | **197** | P | **Pn** | **20 24 54.9** | **+1.0** |
| MD31 | | | | S | **Sb** | **20 25 35.0** | **+0.8** |
| **MDT** | **Midelt** | **2.87** | **195** | P | **Pn** | **20 24 54.4** | **+0.3** |
| MDT | | | | S | **Sb** | **20 25 35.0** | **+0.3** |
| **ETOB** | **Tobarra** | **3.51** | **29** | Pn | **Pn** | **20 25 05.4** | **+2.5** |
| ETOB | | | | *i* Vmb_Lg | | 20 25 34.0 | |
| ETOB | | | | Sn | **Sn** | **20 25 43.1** | **-0.9** |
| **EGRO** | **El Granado** | **3.57** | **304** | Pn | **Pn** | **20 25 01.7** | **-1.9** |
| EGRO | | | | *i* Vmb_Lg | | 20 25 36.5 | |
| EGRO | | | | Sn | **Sn** | **20 25 44.3** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.67** | **301** | *e*Pn | **Pn** | **20 25 06.8** | **+1.8** |
| PVAQ | | | | *e*Sn | **Sn** | **20 25 46.7** | **-1.0** |
| PVAQ | | | | A | A | 20 25 55.4 | |
| | 3.2nm,0.3s | | | | | | |
| **PAB** | **San Pablo** | **3.96** | **353** | Pn | **Pn** | **20 25 11.2** | **+2.0** |
| PAB | | | | Sn | **Sn** | **20 25 56.4** | **+1.2** |
| PAB | | | | *i* Vmb_Lg | | 20 25 57.4 | |
| PAB | | | | Sg | **Sg** | **20 26 13.4** | **-3.0** |
| **ESDC** | **Sonseca Array** | **4.07** | **358** | Pn | **Pn** | **20 25 11.1** | **+0.6** |
| ESDC | | | | *i* Vmb_Lg | | 20 25 48.8 | |
| ESDC | | | | Sn | **Sn** | **20 25 59.2** | **+1.4** |
| **EBAD** | **Badajoz** | **4.08** | **321** | Pn | **Pn** | **20 25 11.0** | **+0.3** |
| EBAD | | | | Sn | **Sn** | **20 25 57.2** | **-0.9** |
| EBAD | | | | *i* Vmb_Lg | | 20 26 03.4 | |
| **PNCL** | **Nicolau / Gran** | **4.58** | **305** | *e*Pn | **Pn** | **20 25 18.4** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **20 26 09.0** | **-1.2** |
| PNCL | | | | A | A | 20 26 11.1 | |
| | 2.7nm,0.7s | | | | | | |

*IDC **16** 20:30:57.9±0.7, 3˚.38S×131˚.38E, h0km, mb4.0/11, mb1 4.2/12, mb1mx4.0/45, mbtmp4.0/12, ML4.2/2, MS3.0/5, Ms1 3.0/5, ms1mx2.7/69, Error ellipse: s-maj=31.5km s-min=13.9km az=76.0*
*DJA **16** 20:31:02.6±0.3, 3˚.5S×3˚×13˚1E±˚, h148km±6km, M4.3/12, mB5.3/1, mb4.4/12, MLv4.2/8, Mw(mB)4.7/1*
*NEIC **16** 20:31:03.7±2.6, 3˚.56S±0˚.08×131˚.35E±0˚.04, h40km±8km, mb4.2/30, Error ellipse: s-maj=11.7km s-min=5.3km az=167.0*

**ISC 16 20:31:02.2±0.5, 3˚.55S±0˚.05×131˚.31E±0˚.07, h35km, n70, σ2s46/63, mb4.1/17, MS3.0/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **2.38** | **275** | P | **Pn** | **20 31 39.9** | **+1.1** |
| **SIJI** | **Sorong** | **2.67** | **359** | Pn | **Pn** | **20 31 41.6** | **-1.1** |
| | 12nm,0.3s,baz=185,slow=22,SNR=118 | | | | | | |
| SIJI | | | | Sn | **Sn** | **20 32 11.7** | **-2.1** |
| | 48nm,0.3s,baz=261,slow=23,SNR=5.7 | | | | | | |
| SIJI | | | | LR | LR | 20 32 37.5 | |
| | comp=Z,234nm,18.2s,baz=260,slow=40 | | | | | | |
| **AAI** | **Ambon** | **3.11** | **267** | P | **Pn** | **20 31 49.1** | **+0.3** |
| **SAUI** | **Saumlaki** | **4.40** | **180** | Pn | **Pn** | **20 32 08.2** | **+1.6** |
| **BAKI** | **Biak** | **5.34** | **64** | P | **Pn** | **20 32 22.3** | **+2.8** |
| **SANI** | **Sanana** | **5.52** | **286** | P | **Pn** | **20 32 19.7** | **-2.2** |
| | 0.2nm29nm,0.8s | | | | | | |
| **TNTI** | **Ternate** | **5.83** | **317** | P | Pn | 20 32 21.7 | -4.5 |
| | 0.1nm31nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **9.23** | **181** | Pn | **Pn** | **20 33 12.8** | **-0.2** |
| **GTOI** | **Gorontalo** | **9.28** | **296** | P | **Pn** | **20 33 12.7** | **-0.8** |
| | 6.3nm,0.6s | | | | | | |
| **SOEI** | **Soe** | **9.32** | **228** | Pn | **Pn** | **20 33 17.2** | **+3.1** |
| **SOEI** | **Soe** | **9.32** | **228** | P | **Pn** | **20 33 17.3** | **+3.1** |
| | 53nm,0.8s | | | | | | |
| **APSI** | **Ampana** | **10.00** | **285** | P | Pn | 20 33 20.1 | -3.4 |
| | 20nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **10.06** | **229** | Pn | **Pn** | **20 33 27.8** | **+3.5** |
| | 9.1nm,0.3s,baz=121,slow=1.4,SNR=34 | | | | | | |
| **BATI** | **Baumata** | **10.06** | **229** | P | **Pn** | **20 33 26.3** | **+2.0** |
| | 69nm,0.7s | | | | | | |
| **MRSI** | **Marisa** | **10.18** | **293** | P | Pn | 20 33 22.4 | -3.5 |
| **TOLI2** | **Tolitoli** | **11.49** | **294** | Pn | **Pn** | **20 33 41.6** | **-2.3** |
| **KAPI** | **Kappang** | **11.61** | **262** | LR | LR | 20 39 28.1 | |
| | comp=Z,85nm,21.3s,baz=123,slow=44 | | | | | | |
| **KNRA** | **Kununurra** | **12.30** | **192** | Pn | **Pn** | **20 33 52.8** | **-2.2** |
| KNRA | | | | Sn | Sn | 20 36 02.8 | -8.2 |
| **MYLDM** | **Lahad Datu** | **15.46** | **304** | Pn | **Pn** | **20 34 38.8** | **+1.0** |
| MYLDM | | | | IAmb | IAmb | 20 34 41.1 | |
| | comp=Z,44nm,1.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.48** | **201** | Pn | **Pn** | **20 34 33.9** | **-4.2** |
| | comp=Z,0.9nm,0.3s,baz=32,slow=11,SNR=46 | | | | | | |
| FITZ | | | | Sn | Sn | 20 37 17.8 | -11 |
| | comp=Z,0.2nm,0.3s,baz=332,slow=12,SNR=2.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.48** | **201** | | **Pn** | **20 34 33.8** | **-4.2** |
| **COEN** | **Coen** | **15.62** | **132** | Pn | **Pn** | **20 34 40.1** | **+0.1** |
| **WB0** | **Warramunga Arr** | **16.39** | **170** | | **Pn** | **20 34 46.3** | **-3.5** |
| WB0 | | | | IAmb | IAmb | 20 34 55.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **16.55** | **170** | | **Pn** | **20 34 47.7** | **-4.0** |
| WRAB | | | | IAmb | IAmb | 20 34 57.5 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.56** | **170** | Pn | **Pn** | **20 34 47.8** | **-4.1** |
| | comp=Z,0.6nm,0.3s,baz=347,slow=13,SNR=18 | | | | | | |
| WRA | | | | Sn | Sn | 20 37 41.4 | -13 |
| | comp=Z,0.2nm,0.3s,baz=351,slow=23,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.56** | **170** | Pn | **Pn** | **20 34 46.9** | **-5.0** |
| **WB2** | **Warramunga Arr** | **16.56** | **170** | Pn | **Pn** | **20 34 46.9** | **-5.0** |
| WB2 | | | | IAmb | IAmb | 20 34 57.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **16.61** | **169** | | **Pn** | **20 34 49.1** | **-3.4** |
| WR0 | | | | IAmb | IAmb | 20 34 57.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.74** | **253** | Pn | **Pn** | **20 35 05.0** | **-1.6** |
| JAGI | | | | IAmb | IAmb | 20 35 40.5 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **GMJI** | **Gumukmas** | **18.37** | **254** | P | P | 20 35 04.9 | -9.2 |
| | comp=Z,20nm,0.8s | | | | | | |
| **BWJI** | **Bawean** | **18.72** | **262** | P | P | 20 35 08.9 | -9.1 |
| | comp=Z,90nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **20.15** | **173** | | **P** | **20 35 33.6** | **0.0** |
| AS31 | | | | IAmb | IAmb | 20 35 37.3 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **20.15** | **173** | P | **P** | **20 35 35.1** | **+1.5** |
| | comp=Z,16nm,0.6s,baz=353,slow=11,SNR=209 | | | | | | |
| ASAR | | | | S | **S** | **20 39 08.6** | **-10** |
| | comp=Z,0.4nm,0.8s,baz=349,slow=26,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **20.15** | **173** | | **P** | **20 35 35.5** | **+1.9** |
| **MBWA** | **Marble Bar** | **20.81** | **212** | P | **P** | **20 35 39.4** | **-1.3** |
| MBWA | | | | IAmb | IAmb | 20 35 40.6 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.09** | **211** | P | **P** | **20 35 42.9** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 20 35 44.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.09** | **211** | P | **P** | **20 35 42.5** | **-1.3** |
| PSA00 | | | | IAmb | IAmb | 20 35 44.2 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **KSM** | **Kuching** | **21.57** | **283** | P | **P** | **20 35 50.5** | **+1.5** |
| KSM | | | | IAmb | IAmb | 20 35 53.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **21.71** | **38** | LR | LR | 20 44 27.0 | |
| | comp=Z,38nm,19.6s,baz=92,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **21.97** | **140** | P | **P** | **20 35 55.2** | **+2.0** |
| | comp=Z,3.3nm,0.7s,baz=305,slow=9.8,SNR=6.9 | | | | | | |
| **FORT** | **Forrest** | **27.25** | **186** | P | **P** | **20 36 44.5** | **+1.3** |
| **MORW** | **Morawa** | **29.23** | **208** | P | **P** | **20 37 00.7** | **-0.1** |
| **BBOO** | **Buckleboo** | **29.45** | **172** | P | **P** | **20 37 03.8** | **+1.1** |
| **STKA** | **Stephens Creek** | **29.79** | **162** | P | **P** | **20 37 07.8** | **+2.0** |
| | comp=Z,1.5nm,0.4s,baz=339,slow=10,SNR=6.8 | | | | | | |
| **STKA** | **Stephens Creek** | **29.79** | **162** | P | **P** | **20 37 08.1** | **+2.3** |
| **JOW** | **Kunigami** | **30.35** | **355** | P | **P** | **20 37 09.8** | **-1.0** |
| | baz=105,slow=16 | | | | | | |
| **JOW** | **Kunigami** | **30.35** | **355** | P | **P** | **20 37 09.5** | **-1.3** |
| **NWAO** | **Narrogin (SRO)** | **32.05** | **203** | P | **P** | **20 37 26.2** | **+0.4** |
| **CAN** | **Canberra** | **35.61** | **155** | P | **P** | **20 38 00.1** | **+3.4** |
| **CMAR** | **Chiang Mai Arr** | **38.66** | **306** | P | **P** | **20 38 23.2** | **+0.5** |
| | comp=Z,1.0nm,0.8s,baz=135,slow=7.8,SNR=11 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.41** | **9** | P | **P** | **20 38 36.2** | **-0.8** |
| | comp=Z,3.5nm,1.0s,baz=200,slow=9.0,SNR=2.4 | | | | | | |
| MJAR | | | | LR | LR | 20 52 23.6 | |
| | comp=Z,36nm,20.3s,baz=212,slow=32 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.41** | **9** | IAmb | IAmb | 20 38 55.5 | |
| | comp=Z,5.7nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **40.92** | **356** | LR | LR | 20 55 46.2 | |
| | comp=Z,21nm,20.0s,baz=230,slow=36 | | | | | | |
| **TAU** | **Tasmania Unive** | **41.70** | **162** | P | **P** | **20 38 47.6** | **0.0** |
| **GTA** | **Gaotai** | **51.65** | **329** | *e*P | **P** | **20 40 07.0** | **+1.2** |
| GTA | | | | pP | pP | 20 40 17.6 | +1.5 |
| GTA | | | | sP | sP | 20 40 21.3 | +1.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **55.64** | **340** | P | **P** | **20 40 35.0** | **+0.2** |
| | comp=Z,0.1nm,0.4s,baz=155,slow=6.6,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **55.64** | **340** | P | **P** | **20 40 35.5** | **+0.7** |
| **YAK** | **Yakutsk** | **65.41** | **359** | P | **P** | **20 41 41.5** | **+0.5** |
| **MK31** | **Makanchi Array** | **66.11** | **325** | P | **P** | **20 41 46.7** | **+0.7** |
| MK31 | | | | IAmb | IAmb | 20 41 47.9 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.11** | **325** | P | **P** | **20 41 46.9** | **+1.0** |
| | comp=Z,1.3nm,0.6s,baz=125,slow=7.7,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.11** | **325** | P | **P** | **20 41 46.5** | **+0.6** |
| **MAKZ** | **Makanchi** | **66.29** | **325** | P | **P** | **20 41 48.3** | **+1.2** |
| MAKZ | | | | IAmb | IAmb | 20 41 50.0 | |
| | comp=Z,8.0nm,1.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.11** | **333** | P | **P** | **20 42 04.5** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=64,slow=6.8,SNR=4.4 | | | | | | |
| **KURK** | **Kurchatov** | **70.30** | **328** | P | **P** | **20 42 12.8** | **+0.7** |
| KURK | | | | IAmb | IAmb | 20 42 14.0 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **75.70** | **173** | P | **P** | **20 42 45.6** | **+2.0** |
| | comp=Z,2.5nm,0.9s,baz=30,slow=5.8,SNR=2.3 | | | | | | |
| **VNDA** | **Vanda** | **75.70** | **173** | P | **P** | **20 42 45.2** | **+1.6** |
| **BVAR** | **Borovoye Array** | **75.88** | **327** | P | **P** | **20 42 44.4** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=76,slow=12,SNR=8.9 | | | | | | |
| **BRVK** | **Borovoye** | **75.95** | **327** | P | **P** | **20 42 44.8** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 20 43 07.6 | |
| | comp=Z,2.8nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **89.69** | **25** | P | **P** | **20 43 56.6** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=280,slow=5.2,SNR=2.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.33** | **284** | PKP | **PKPdf** | **20 50 09.3** | **+1.2** |
| | comp=Z,0.3nm,0.5s,baz=97,slow=1.5,SNR=1.6 | | | | | | |

**WEL 16 21:07:01.6±1.3, 46˚.5S±7˚×16˚.6E±˚, h12km, M3.7/9, ML3.9/9, MLv3.7/9, Error ellipse: s-maj=0.0km s-min=0.0km az=65.7, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.53** | **74** | P | Pb | 21 07 12.4 | -0.3 |
| PYZ | | | | S | Sb | 21 07 21.0 | +0.6 |
| **DCZ** | **Deep Cove** | **1.20** | **45** | P | Pn | 21 07 21.1 | -3.0 |
| DCZ | | | | S | Sb | 21 07 38.7 | -0.8 |
| **WHZ** | **Wether Hill Ro** | **1.45** | **74** | P | Pn | 21 07 26.8 | -0.8 |
| WHZ | | | | S | Sg | 21 07 47.7 | -0.6 |
| **APZ** | **The Paps** | **1.50** | **111** | P | Pn | 21 07 27.2 | -1.1 |
| APZ | | | | S | Sn | 21 07 47.5 | -0.3 |
| **MLZ** | **Mavora Lakes** | **1.79** | **59** | P | Pn | 21 07 32.2 | -0.1 |
| **MSZ** | **Milford Sound** | **2.15** | **41** | P | Pn | 21 07 38.7 | +1.5 |
| **SYZ** | **Scrubby Hill** | **2.22** | **97** | P | Pn | 21 07 38.7 | +0.6 |
| **TUZ** | **Tuapeka** | **2.58** | **83** | P | Pn | 21 07 43.0 | -0.2 |
| **EAZ** | **Earnscleugh** | **2.59** | **66** | P | Pn | 21 07 43.4 | +0.2 |
| **WKZ** | **Wanaka** | **2.62** | **56** | P | Pn | 21 07 44.3 | +0.7 |
| **JCZ** | **Jackson Bay** | **3.01** | **43** | P | Pn | 21 07 50.1 | +1.0 |
| **ODZ** | **Otahua Downs** | **3.53** | **71** | P | Pn | 21 07 54.4 | -1.8 |
| **LBZ** | **Lake Benmore** | **3.55** | **59** | P | Pn | 21 07 56.0 | -0.6 |
| **FOZ** | **Fox Glacier** | **3.91** | **46** | P | Pn | 21 08 00.2 | -1.1 |
| **TMZ** | **Timaru** | **4.05** | **63** | P | Pn | 21 08 01.9 | -1.5 |
| **RPZ** | **Rata Peaks** | **4.46** | **56** | P | Pn | 21 08 07.2 | -1.7 |
| **OXZ** | **Oxford** | **5.26** | **58** | P | Pn | 21 08 19.6 | -0.4 |
| **LTZ** | **Lake Taylor** | **5.73** | **54** | P | Pn | 21 08 25.5 | -1.0 |

*NEIC **16** 21:29:38.8±1.3, 10˚.47S±0˚.07×111˚.35E±0˚.07, h10km±1km, mb4.6/26, Error ellipse: s-maj=13.9km s-min=10.0km az=218.0*
*IDC **16** 21:29:39.0±0.9, 10˚.16S×111˚.65E, h0km, mb4.2/12, mb1 4.3/16, mb1mx4.1/39, mbtmp4.2/16, ML4.0/4, MS3.3/8, Ms1 3.4/8, ms1mx3.0/73, Error ellipse: s-maj=29.3km s-min=13.4km az=38.0*
*DJA **16** 21:29:44.9±0.6, 10˚.S±2˚×11˚1E±˚, h20km±5km, M4.5/27, mb4.6/27, mB5.2/7, MLv4.5/25, Mw(mB)4.5/7, MwMwp5.4/1, Mwp5.6/1*

**ISC 16 21:29:41.9±3.0, 10˚.37S±0˚.06×111˚.48E±0˚.05, h30km±22km, n123, σ1s88/122, mb4.5/43, MS3.2/7, 1C-1D, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCJI** | **Pacitan** | **2.18** | **352** | P | **Pn** | **21 30 15.1** | **-1.0** |
| PCJI | | | | S | **Sn** | **21 30 41.4** | **-0.7** |
| **PWJI** | **Pagerwojo** | **2.35** | **8** | P | **Pn** | **21 30 18.6** | **+0.1** |
| PWJI | | | | S | **Sn** | **21 30 44.5** | **-1.8** |
| **UGM** | **Wanagama** | **2.62** | **339** | Pn | **Pn** | **21 30 21.6** | **-0.6** |
| **UGM** | **Wanagama** | **2.62** | **339** | P | **Pn** | **21 30 22.6** | **+0.5** |
| UGM | | | | S | **Sn** | **21 30 52.0** | **-0.9** |
| **YOGI** | **Yogyakarta** | **2.79** | **335** | P | **Pn** | **21 30 23.9** | **-0.6** |
| YOGI | | | | S | **Sn** | **21 30 57.4** | **+0.2** |
| **GMJI** | **Gumukmas** | **2.84** | **43** | P | **Pn** | **21 30 26.6** | **+1.4** |
| GMJI | | | | S | **Sn** | **21 30 58.5** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **3.24** | **55** | Pn | **Pn** | **21 30 32.2** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **3.24** | **55** | P | **Pn** | **21 30 31.6** | **+0.9** |
| JAGI | | | | S | **Sn** | **21 31 07.4** | **-0.9** |
| **BLJI** | **Banyuglugur** | **3.34** | **39** | P | **Pn** | **21 30 34.2** | **+2.2** |
| BLJI | | | | S | **Sn** | **21 31 11.6** | **+0.9** |
| **SMRI** | **Semarang** | **3.45** | **343** | | **Pn** | **21 30 33.1** | **-0.5** |
| **SMRI** | **Semarang** | **3.45** | **343** | P | **Pn** | **21 30 35.1** | **+1.4** |
| **TBJI** | **Tambak Boyo** | **3.54** | **6** | P | **Pn** | **21 30 34.1** | **-0.8** |
| **GRJI** | **Gresik** | **3.57** | **16** | P | **Pn** | **21 30 36.9** | **+1.7** |
| **ABJI** | **Asem Bagus** | **3.73** | **47** | P | **Pn** | **21 30 40.3** | **+2.6** |
| **IGBI** | **Denpasar** | **3.93** | **67** | P | **Pn** | **21 30 41.4** | **+1.3** |
| **KPJI** | **Karang Pucung** | **3.93** | **320** | P | **Pn** | **21 30 40.6** | **+0.4** |
| **CMJI** | **Cimerak** | **3.94** | **310** | P | **Pn** | **21 30 39.4** | **-1.0** |
| CMJI | | | | S | **Sn** | **21 31 22.5** | **-3.2** |
| **UWJI** | **Ujung Watu** | **3.96** | **352** | P | **Pn** | **21 30 40.7** | **+0.1** |
| **BWJI** | **Bawean** | **4.63** | **15** | P | **Pn** | **21 30 51.2** | **+1.3** |
| **JCJI** | **Jatiwangi

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **31.20** | **337** | P | **P** | **21 35 58.9** | **+0.2** |
| **CHTO** | **Chiang Mai** | **31.52** | **337** | P | **P** | **21 36 00.6** | **-0.9** |
| CHTO | | | | IAmb | IAmb | 21 36 12.1 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **34.85** | **110** | LR | LR | 21 52 38.9 | |
| | comp=Z,44nm,18.2s,baz=265,slow=40 | | | | | | |
| **STKA** | **Stephens Creek** | **35.11** | **132** | P | **P** | **21 36 34.6** | **+1.9** |
| | comp=Z,1.6nm,0.5s,baz=319,slow=7.6,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **35.11** | **132** | P | **P** | **21 36 31.8** | **-1.0** |
| **PALK** | **Pallekele** | **35.30** | **299** | LR | LR | 21 51 55.3 | |
| | comp=Z,60nm,18.2s,baz=218,slow=38 | | | | | | |
| **KMI** | **Kunming** | **36.29** | **347** | ⇓P | **P** | **21 36 46.3** | **+3.2** |
| KMI | | | | pP | pwP | 21 36 54.9 | -0.6 |
| KMI | | | | sP | sP | 21 37 00.8 | +6.8 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **PZH** | **PanZhiHua** | **37.85** | **346** | P | **P** | **21 36 59.1** | **+2.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,6.1s | | | | | | |
| **H08S2** | **Diego Garcia H** | **38.59** | **271** | T | T | 22 18 11.8 | |
| | baz=96,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **38.60** | **271** | T | T | 22 18 05.0 | |
| | baz=96,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **38.61** | **271** | T | T | 22 18 05.0 | |
| | baz=96 | | | | | | |
| **ENH** | **Enshi** | **40.45** | **357** | P | **P** | **21 37 17.8** | **0.0** |
| ENH | | | | IAmb | IAmb | 21 37 28.4 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **SHL** | **Shillong** | **40.50** | **332** | P | **P** | **21 37 17.5** | **-1.0** |
| SHL | | | | IAmb | IAmb | 21 37 41.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **CD2** | **Chengdu** | **41.70** | **350** | P | **P** | **21 37 30.1** | **+1.9** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **NJ2** | **Nanjing** | **42.76** | **9** | *eP* | **P** | **21 37 39.3** | **+2.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **XAN** | **Xi'an** | **44.23** | **357** | P | **P** | **21 37 48.5** | **0.0** |
| XAN | | | | pP | pwP | 21 38 01.9 | +0.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,200nm,11.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,140nm,15.1s | | | | | | |
| **LSA** | **Lhasa** | **44.39** | **334** | P | **P** | **21 37 51.9** | **+1.5** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,5µm,1.0s | | | | | | |
| **PKI** | **Pulchoki** | **45.40** | **327** | *eP* | **P** | **21 37 58.2** | **-0.1** |
| | comp=Z,14nm,0.9s | | | | | | |
| **PKIN** | **Phulchoki** | **45.41** | **327** | *eP* | **P** | **21 37 58.5** | **+0.2** |
| | comp=Z,17nm,1.1s | | | | | | |
| **GUN** | **Gumba** | **45.41** | **328** | *eP* | **P** | **21 37 59.0** | **+0.5** |
| | comp=Z,32nm,0.8s | | | | | | |
| **DMN** | **Daman** | **45.59** | **327** | *eP* | **P** | **21 38 00.1** | **+0.3** |
| | comp=Z,40nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **45.64** | **327** | *eP* | **P** | **21 38 00.1** | **0.0** |
| | comp=Z,15nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **46.15** | **326** | *eP* | **P** | **21 38 04.5** | **+0.4** |
| | comp=Z,31nm,0.9s | | | | | | |
| **LZH** | **Lanzhou** | **46.76** | **352** | ⇑P | **P** | **21 38 11.8** | **+3.1** |
| LZH | | | | pP | sP | 21 38 19.0 | -0.8 |
| LZH | | | | sP | pwP | 21 38 22.8 | +1.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **DANN** | **Dangsing** | **46.91** | **326** | *eP* | **P** | **21 38 10.4** | **+0.2** |
| | comp=Z,36nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **50.00** | **17** | P | **P** | **21 38 34.1** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=198,slow=6.3,SNR=4.9 | | | | | | |
| **GTA** | **Gaotai** | **50.70** | **348** | *eP* | **P** | **21 38 42.8** | **+3.9** |
| GTA | | | | pP | sP | 21 38 50.3 | +0.3 |
| GTA | | | | sP | pwP | 21 38 54.0 | +2.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **BTO** | **Baotou** | **50.73** | **359** | *eP* | **P** | **21 38 42.6** | **+3.5** |
| **HHC** | **Hu-ho-hao-te** | **50.96** | **0** | *eP* | **P** | **21 38 44.6** | **+3.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,5.1s | | | | | | |
| **NIL** | **Nilore** | **56.90** | **322** | P | **P** | **21 39 22.6** | **-1.7** |
| NIL | | | | IAmb | IAmb | 21 39 33.4 | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **58.10** | **356** | P | **P** | **21 39 30.9** | **-1.8** |
| ULN | | | | IAmb | IAmb | 21 39 42.3 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **WMQ** | **Urumqi** | **58.11** | **340** | *eP* | **P** | **21 39 34.1** | **+1.5** |
| WMQ | | | | pP | sP | 21 39 41.9 | -1.6 |
| WMQ | | | | sP | pwP | 21 39 49.1 | +2.9 |
| WMQ | | | | PcP | **PcP** | **21 40 23.8** | **-0.3** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **58.12** | **356** | P | **P** | **21 39 33.1** | **+0.4** |
| | comp=Z,1.3nm,0.6s,baz=166,slow=7.8,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **58.12** | **356** | P | **P** | **21 39 31.6** | **-1.1** |
| SONM | | | | IAmb | IAmb | 21 39 42.5 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **59.59** | **329** | P | **P** | **21 39 45.6** | **+2.5** |
| KSH | | | | pP | pP | 21 39 51.3 | +0.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.8s | | | | | | |
| **KBL** | **Kabul** | **60.10** | **320** | P | **P** | **21 39 45.9** | **-0.9** |
| KBL | | | | IAmb | IAmb | 21 39 56.9 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **62.60** | **338** | P | **P** | **21 40 03.1** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 21 40 13.6 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.60** | **338** | P | **P** | **21 40 03.7** | **+0.5** |
| | comp=Z,2.1nm,0.7s,baz=140,slow=7.8,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.60** | **338** | P | **P** | **21 40 03.2** | **0.0** |
| **AAK** | **Ala-Archa** | **62.66** | **330** | LR | LR | 22 10 37.9 | |
| | comp=Z,52nm,19.3s,baz=283,slow=39 | | | | | | |
| **MAKZ** | **Makanchi** | **62.73** | **338** | P | **P** | **21 40 03.6** | **-0.5** |
| MAKZ | | | | IAmb | IAmb | 21 40 14.3 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.17** | **338** | P | **P** | **21 40 33.2** | **+0.4** |
| | comp=Z,2.3nm,0.2s,baz=150,slow=5.1,SNR=4.9 | | | | | | |
| **KURK** | **Kurchatov** | **67.21** | **338** | P | **P** | **21 40 33.1** | **0.0** |
| **ZAA0** | **Zalesovo Array** | **67.94** | **343** | P | **P** | **21 40 37.4** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 21 40 47.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.94** | **343** | P | **P** | **21 40 38.0** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=123,slow=5.5,SNR=9.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.94** | **343** | P | **P** | **21 40 37.4** | **-0.3** |
| **BRVK** | **Borovoye** | **72.28** | **335** | P | **P** | **21 41 04.5** | **+0.2** |
| **YAK** | **Yakutsk** | **73.56** | **9** | P | **P** | **21 41 11.3** | **-0.4** |
| **ABKAR** | **Akbulak array** | **74.58** | **328** | P | **P** | **21 41 18.0** | **+0.1** |
| **ABKAR** | **Akbulak array** | **74.58** | **328** | P | **P** | **21 41 18.1** | **+0.1** |
| ABKAR | | | | IAmb | IAmb | 21 41 28.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **82.11** | **317** | P | **P** | **21 42 01.9** | **+2.2** |
| | comp=Z,2.0nm,0.9s,baz=166,slow=6.0,SNR=5.9 | | | | | | |
| **TIXI** | **Tiksi** | **82.65** | **5** | P | **P** | **21 42 01.8** | **-0.2** |
| TIXI | | | | IAmb | IAmb | 21 42 11.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **BR131** | **Keskin Array S** | **87.36** | **311** | P | **P** | **21 42 26.3** | **-0.3** |
| **BRTR** | **Keskin Array B** | **87.36** | **311** | P | **P** | **21 42 28.9** | **+2.4** |
| | comp=Z,0.7nm,0.5s,baz=314,slow=38,SNR=1.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **87.36** | **311** | P | **P** | **21 42 26.2** | **-0.3** |
| **MODS** | **Modra-Piesok** | **100.45** | **317** | *e*PDIFF | **Pdif** | **21 43 30.0** | **+3.8** |
| **TXAR** | **Lajitas Array** | **142.15** | **55** | PKP | **PKiKP** | **21 49 13.9** | **-1.1** |
| | comp=Z,0.5nm,0.8s,baz=279,slow=2.4,SNR=4.0 | | | | | | |

**IDC 16 21:33:51.3±2.2,1.1°12N×126.34E,h0km,mb3.4/3, mb1 3.6/3,mb1mx3.1/27,mbtmp3.4/3,MS2.9/1,Ms1 2.9/1, ms1mx2.3/35,Error ellipse: s-maj=192.7km s-min=27.7km az=65.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.35** | **160** | P | P | 21 38 50.5 | -0.6 |
| | 0.8nm,0.7s,baz=338,slow=11,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **25.71** | **164** | P | P | 21 39 23.8 | +0.4 |
| | 0.3nm,0.3s,baz=346,slow=11,SNR=6.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **45.19** | **17** | LR | LR | 22 04 33.7 | |
| | comp=Z,13nm,18.1s,baz=146,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.48** | **326** | P | P | 21 43 56.1 | -0.1 |
| | 0.3nm,0.7s,baz=121,slow=7.9,SNR=4.2 | | | | | | |

**NOU 16 21:33:58.4,15.97S×167.52E,h22km,MLv4.5/11, Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.60** | **330** | P | Pb | 21 34 10.6 | +0.3 |
| **DVP** | **Devils Point** | **1.86** | **160** | P | Pn | 21 34 29.3 | +0.4 |
| **KOUNC** | **Koumac, New Ca** | **5.50** | **214** | P | Pn | 21 35 19.4 | +0.4 |
| **DZM** | **Mont Dzumac** | **6.15** | **189** | P | Pn | 21 35 27.4 | -0.7 |
| **NOUC** | **Port Laguerre** | **6.21** | **190** | P | Pn | 21 35 28.1 | -0.6 |
| **ONTNC** | **Ouen Toro** | **6.38** | **189** | P | Pn | 21 35 32.2 | +1.0 |
| **OUENC** | **Ouen Island, N** | **6.45** | **186** | P | Pn | 21 35 31.8 | -0.2 |

*ASRS 16 22:19:39.5±0.3,52°N±2°×9°9E±°,h10km,MLh4.1/6,Error ellipse: s-maj=4.8km s-min=2.7km az=175.8,confirmed*
*IDC 16 22:19:45.0±2.4,51.20N×98.61E,h0km,mb1 2.9/4, mb1mx2.5/54,mbtmp2.9/4,ML2.3/4,Error ellipse: s-maj=53.9km s-min=15.6km az=16.0*
**ISC 16 22:19:41.1±0.7,51.62N±0.04×98.47E±0.02,h10km,n30, σ2s54/44,2C,Tuva-Buryatia-Mongolia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNGR** | **Kungurtug, Tuv** | **1.18** | **211** | ⇑Pg | **Pg** | **22 20 03.4** | **-0.2** |
| KNGR | | | | Sg | **Sn** | **22 20 19.9** | **0.0** |
| **MOY** | **Mondy** | **1.57** | **87** | ⇑Pg | **Pg** | **22 20 11.5** | **+0.3** |
| MOY | | | | Sg | **Sg** | **22 20 33.0** | **+1.4** |
| **ERNS** | **Erzin** | **2.50** | **238** | Pg | **Pg** | **22 20 30.3** | **+1.4** |
| ERNS | | | | Sg | **Sg** | **22 21 02.5** | **+1.3** |
| **KZLR** | **Kyzyl** | **2.50** | **274** | Pg | **Pg** | **22 20 29.3** | **+0.4** |
| KZLR | | | | Sg | **Sg** | **22 21 04.6** | **+3.3** |
| **ZAK** | **Zakamensk** | **3.28** | **110** | Pg | **Pg** | **22 20 40.5** | **-3.4** |
| ZAK | | | | Sg | **Sg** | **22 21 22.7** | **-3.8** |
| **IRK** | **Irkutsk** | **3.65** | **78** | Pg | **Pg** | **22 20 43.3** | **-1.6** |
| IRK | | | | Sg | **Sg** | **22 21 35.5** | **-2.6** |
| **MINR** | **Mina** | **4.17** | **324** | Pg | **Pg** | **22 21 01.4** | **+0.5** |
| MINR | | | | Sg | **Sg** | **22 21 58.4** | **+3.6** |
| **DJOS** | **Djoyskaya Sosn** | **4.50** | **288** | Pn | **Pn** | **22 20 52.7** | **+3.4** |
| DJOS | | | | Pg | **Pg** | **22 21 06.7** | **-0.6** |
| DJOS | | | | Sg | **Sg** | **22 22 06.9** | **+1.3** |
| **ABNR** | **Abakan** | **4.77** | **299** | Sg | **Sg** | **22 22 16.9** | **+2.8** |
| **TRG** | **Tyrgan** | **4.98** | **74** | Pg | **Pg** | **22 21 14.9** | **-1.5** |
| TRG | | | | Sg | **Sg** | **22 22 17.8** | **-3.1** |
| **SHRR** | **Shira** | **5.78** | **303** | Sg | **Sg** | **22 22 44.6** | **-1.7** |
| **SHRR** | **Shira** | **5.78** | **303** | Pg | **Pb** | **22 21 25.4** | **+3.6** |
| **LUZB** | **Luzhba, Kemero** | **6.17** | **293** | Pn | Pn | 22 21 19.0 | +6.8 |
| LUZB | | | | Pg | **Pg** | **22 21 36.4** | **-2.7** |
| LUZB | | | | Sg | **Sg** | **22 22 57.7** | **-1.4** |
| **SONM** | **Songino Array** | **6.38** | **123** | Pn | **Pn** | **22 21 16.8** | **+1.6** |
| | 0.1nm,0.3s,baz=304,slow=14,SNR=2.4 | | | | | | |
| SONM | | | | Pg | **Pb** | **22 21 34.6** | **+2.3** |
| | 2.2nm,0.3s,baz=310,slow=18,SNR=47 | | | | | | |
| SONM | | | | Lg | Lg | 22 22 58.2 | |
| | 2.1nm,0.3s,baz=305,slow=28,SNR=11 | | | | | | |
| **CUR** | **Chagan-Uzun** | **6.58** | **261** | Pn | Pn | 22 21 24.8 | +6.8 |
| CUR | | | | Pg | **Pb** | **22 21 38.7** | **+3.1** |
| CUR | | | | Sg | **Sg** | **22 23 09.6** | **-2.6** |
| **TASR** | **Tashtagol** | **6.61** | **284** | Pg | Pg | 22 21 43.4 | -4.1 |
| TASR | | | | Sg | **Sg** | **22 23 11.3** | **-1.8** |
| **ULGR** | **Ulagan, Altay** | **6.69** | **266** | Pn | Pn | 22 21 25.0 | +5.6 |
| ULGR | | | | Pg | **Pg** | **22 21 49.7** | **+0.6** |
| ULGR | | | | Sg | **Sg** | **22 23 21.1** | **+5.5** |
| **ULN** | **Ulaanbaatar** | **6.71** | **121** | Pg | Pg | 22 21 42.1 | -7.4 |
| ULN | | | | Sg | **Sg** | **22 23 10.5** | **-5.8** |
| **ARTR** | **Artybash** | **6.96** | **276** | Pn | Pn | 22 21 28.3 | +5.4 |
| ARTR | | | | Pg | **Pg** | **22 21 52.5** | **-1.7** |
| ARTR | | | | Sg | **Sg** | **22 23 26.7** | **+2.6** |
| **AKAR** | **Aktash** | **6.97** | **264** | Pn | Pn | 22 21 29.8 | +6.5 |
| AKAR | | | | Pg | Pg | 22 21 50.5 | -4.0 |
| AKAR | | | | Sg | **Sg** | **22 23 23.6** | **-1.2** |
| **CHBI** | **Chibit, Altay** | **7.05** | **264** | Pn | Pn | 22 21 30.1 | +5.8 |
| CHBI | | | | Pg | **Pg** | **22 21 55.4** | **-0.5** |
| CHBI | | | | Sg | **Sg** | **22 23 24.5** | **-2.6** |
| **BRCR** | **Berchikul'** | **7.25** | **308** | Pg | **Pg** | **22 21 58.5** | **-1.3** |
| BRCR | | | | Sg | **Sg** | **22 23 34.5** | **+0.9** |
| **DGZ** | **Jazzator, Alta** | **7.27** | **259** | Pn | Pn | 22 21 33.8 | +6.4 |
| DGZ | | | | Pg | **Pg** | **22 21 57.1** | **-3.1** |
| DGZ | | | | Sg | **Sg** | **22 23 34.2** | **-0.1** |
| **ELT** | **Eltsovka** | **7.66** | **287** | Sg | **Sg** | **22 23 45.5** | **-1.0** |
| **SALR** | **Pechorkino, Sa** | **8.19** | **295** | Sg | **Sg** | **22 24 02.5** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **8.60** | **291** | Pn | Pn | 22 21 53.6 | +8.2 |
| | 0.1nm,0.3s,baz=107,slow=12,SNR=2.2 | | | | | | |
| ZALV | | | | Lg | Lg | 22 24 11.1 | |
| | 0.5nm,0.3s,baz=112,slow=27,SNR=7.0 | | | | | | |
| **UKR** | **Ust'-Kan** | **8.62** | **271** | Sg | **Sg** | **22 24 21.5** | **+4.1** |
| **NVSII** | **Novosibirsk** | **9.69** | **295** | Sg | Sn | 22 24 48.1 | +59 |
| **MKAR** | **Makanchi Array** | **11.62** | **252** | Pn | Pn | 22 22 31.8 | +4.9 |
| | 0.0nm,0.3s,baz=67,slow=11,SNR=2.2 | | | | | | |
| MKAR | | | | Pg | | 22 23 16.4 | |
| | 0.0nm,0.3s,baz=61,slow=13,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 22 25 52.3 | |
| | 0.1nm,0.3s,baz=57,slow=33,SNR=3.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.56** | **273** | Pn | Pn | 22 22 46.2 | +6.5 |
| | 0.0nm,0.3s,baz=74,slow=15,SNR=2.1 | | | | | | |
| KURBB | | | | Lg | Lg | 22 26 24.7 | |
| | 0.0nm,0.3s,baz=80,slow=32,SNR=2.0 | | | | | | |

*VAO 16 22:23:50.5±0.6,15.62S×73.01W,h87km,mb4.6*
*NEIC 16 22:23:50.7±1.9,15.67S±0.07×72.89W±0.09,h80km±6km, mb4.5/34,ML4.6(ARE),Error ellipse: s-maj=13.7km s-min=9.1km az=62.0*
*IDC 16 22:23:52.6±0.6,15.66S×72.92W,h102km±4km,mb4.0/14, mb1 4.2/18,mb1mx4.1/36,mbtmp4.4/18,MS3.5/10, Ms1 3.5/10,ms1mx3.2/63,Error ellipse: s-maj=17.3km s-min=10.3km az=50.0*
*ARE 16 22:23:52±5.6,15.74S±0.06×73.13W±0.09,h104km±5km, Error ellipse: s-maj=0.0km s-min=0.0km az=146.0*
**ISC 16 22:23:52.0±0.3,15.70S±0.05×72.90W±0.06,h102km, n160,σ1s41/167,mb4.4/18,1C,Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **3.61** | **138** | | **Pn** | **22 24 45.9** | **-0.1** |
| **AP01** | **Chacalluta** | **3.61** | **138** | *eP* | **Pn** | **22 24 46.4** | **+0.4** |
| AP01 | | | | *e*S | **Sn** | **22 25 28.3** | **+0.5** |
| AP01 | | | | IAML | | 22 25 43.5 | |
| | comp=E,5µm,0.7s | | | | | | |
| **PB12** | **IPOC Station P** | **3.80** | **140** | Pn | **Pn** | **22 24 47.7** | **-1.0** |
| **PB12** | **IPOC Station P** | **3.80** | **140** | *eP* | **Pn** | **22 24 48.3** | **-0.4** |
| PB12 | | | | *e*S | **Sn** | **22 25 30.6** | **-1.8** |
| **PB16** | **IPOC Station P** | **4.17** | **129** | | **Pn** | **22 24 54.9** | **+0.8** |
| **PB16** | **IPOC Station P** | **4.17** | **129** | *eP* | **Pn** | **22 24 55.7** | **+1.6** |
| PB16 | | | | *e*S | **Sn** | **22 25 44.3** | **+2.2** |
| **PB11** | **IPOC Station P** | **5.08** | **143** | Pn | **Pn** | **22 25 04.9** | **-1.2** |
| **PB11** | **IPOC Station P** | **5.08** | **143** | *eP* | **Pn** | **22 25 05.3** | **-0.8** |
| PB11 | | | | *e*S | **Sn** | **22 26 02.0** | **-1.7** |
| **TA02** | **Huaiquique** | **5.25** | **150** | | **Pn** | **22 25 08.7** | **-1.5** |
| **GO01** | **Chusmiza** | **5.29** | **139** | | **Pn** | **22 25 09.3** | **+0.1** |
| **GO01** | **Chusmiza** | **5.29** | **139** | *eP* | **Pn** | **22 25 09.6** | **+0.3** |
| GO01 | | | | *e*S | **Sn** | **22 26 09.2** | **0.0** |
| **NNA** | **Nana** | **5.32** | **313** | P | **Pn** | **22 25 09.5** | **+0.3** |
| | comp=E,32nm,0.3s,baz=150,slow=11,SNR=48 | | | | | | |
| NNA | | | | S | **Sn** | **22 26 08.3** | **-1.1** |
| | comp=E,34nm,0.3s,baz=242,slow=21,SNR=2.5 | | | | | | |
| NNA | | | | LR | LR | 22 26 41.0 | |
| | comp=E,73nm,21.0s,baz=164,slow=32 | | | | | | |
| **NNA** | **Nana** | **5.32** | **313** | Pn | **Pn** | **22 25 08.9** | **-0.3** |
| **HMBC** | **Humberstone** | **5.38** | **148** | *eP* | **Pn** | **22 25 09.0** | **-1.1** |
| HMBC | | | | *e*S | **Sn** | **22 26 06.0** | **-4.8** |
| **TA01** | **Diego Aracena** | **5.49** | **152** | Pn | **Pn** | **22 25 10.0** | **-1.4** |
| **TA01** | **Diego Aracena** | **5.49** | **152** | *eP* | **Pn** | **22 25 09.9** | **-1.4** |
| TA01 | | | | *e*S | **Sn** | **22 26 08.6** | **-4.6** |
| **PB08** | **IPOC Station P** | **5.67** | **142** | | **Pn** | **22 25 13.8** | **-0.5** |
| **PATCX** | **Punta Patache** | **5.72** | **153** | Pn | **Pn** | **22 25 13.0** | **-1.7** |
| **PATCX** | **Punta Patache** | **5.72** | **153** | *eP* | **Pn** | **22 25 12.6** | **-2.1** |
| PATCX | | | | *e*S | Sn | 22 26 10.0 | -9.1 |
| **PB01** | **IPOC Station P** | **6.22** | **149** | | **Pn** | **22 25 20.1** | **-1.4** |
| **PB02** | **IPOC Station P** | **6.27** | **153** | | **Pn** | **22 25 20.6** | **-1.5** |
| **PB07** | **IPOC Station P** | **6.64** | **155** | | **Pn** | **22 25 25.2** | **-2.0** |
| **PB03** | **IPOC Station P** | **6.98** | **155** | | **Pn** | **22 25 30.1** | **-1.7** |
| **PB09** | **IPOC Station P** | **6.98** | **151** | | **Pn** | **22 25 30.9** | **-1.0** |
| **PB04** | **IPOC Station P** | **7.09** | **159** | | **Pn** | **22 25 31.0** | **-2.3** |
| **PB06** | **IPOC Station P** | **7.64** | **156** | | **Pn** | **22 25 37.8** | **-3.1** |
| **LVC** | **Limon Verde** | **7.84** | **152** | P | **Pn** | **22 25 43.4** | **-0.3** |
| | comp=E,13nm,0.3s,baz=357,slow=7.9,SNR=101 | | | | | | |
| LVC | | | | S | **Sn** | **22 27 07.7** | **-3.2** |
| | comp=E,30nm,0.3s,baz=80,slow=19,SNR=20 | | | | | | |
| **LVC** | **Limon Verde** | **7.84** | **152** | Pn | **Pn** | **22 25 42.8** | **-0.9** |
| **LVC** | **Limon Verde** | **7.84** | **152** | *eP* | **Pn** | **22 25 43.5** | **-0.2** |
| **CZSB** | **Cruzeiro do Su** | **7.92** | **1** | *eP* | **Pn** | **22 25 41.0** | **-3.5** |
| **PB10** | **IPOC Station P** | **8.08** | **165** | Pn | **Pn** | **22 25 43.9** | **-2.7** |
| **PB15** | **IPOC Station P** | **8.14** | **157** | | **Pn** | **22 25 45.4** | **-2.2** |
| **ETMB** | **Extrema** | **8.75** | **49** | *eP* | **Pn** | **22 25 54.8** | **-1.0** |
| **PB14** | **IPOC Station P** | **9.18** | **166** | Pn | **Pn** | **22 25 58.8** | **-3.2** |
| **ATAH** | **Atahualpa** | **10.07** | **327** | P | **Pn** | **22 26 16.8** | **+2.6** |
| | comp=E,0.9nm,0.3s,baz=355,slow=5.0,SNR=11 | | | | | | |
| ATAH | | | | S | **Sn** | **22 28 06.9** | **+1.4** |
| | comp=E,0.5nm,0.3s,baz=355,slow=21,SNR=1.6 | | | | | | |
| **SIV** | **San Ignacio** | **11.38** | **93** | P | **Pn** | **22 26 30.1** | **-1.5** |
| | comp=E,1.3nm,0.3s,baz=277,slow=11,SNR=22 | | | | | | |
| SIV | | | | S | **Sn** | **22 28 28.4** | **-8.4** |
| | comp=E,0.4nm,0.3s,baz=323,slow=11,SNR=1.0 | | | | | | |
| SIV | | | | LR | LR | 22 31 41.1 | |
| | comp=E,158nm,21.6s,baz=306,slow=41 | | | | | | |
| **AC02** | **Maricunga** | **11.62** | **163** | Pn | **Pn** | **22 26 34.1** | **-1.0** |
| **VILB** | **Vilhena** | **12.60** | **79** | *eP* | **Pn** | **22 26 47.4** | **-0.4** |
| **PTLB** | **Pontes e Lacer** | **13.26** | **91** | *eP* | **Pn** | **22 26 58.2** | **+1.8** |
| **PDRB** | **Porto dos Gac** | **16.23** | **78** | *eP* | **Pn** | **22 27 34.6** | **+0.4** |
| **AQDB** | **Aquidauana** | **17.02** | **109** | | **Pn** | **22 27 42.8** | **-1.1** |
| **AQDB** | **Aquidauana** | **17.02** | **109** | *eP* | **P** | **22 27 44.4** | **+0.3** |
| **ROC1** | **El Roble** | **17.29** | **175** | | **P** | **22 27 45.8** | **-1.4** |
| ROC1 | | | | IAmb | IAmb | 22 27 47.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MACA** | **Manacapuru-AM** | **17.31** | **45** | *eP* | **P** | **22 27 46.0** | **-1.3** |
| **CLDB** | **Colider** | **17.32** | **76** | *eP* | **Pn** | **22 27 48.0** | **+0.4** |
| **PP1B** | **Ponte de Pedra** | **17.37** | **99** | *eP* | **P** | **22 27 47.8** | **-0.2** |
| **CPUP** | **Villa Florida** | **17.95** | **129** | P | **P** | **22 27 54.5** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=304,slow=8.0,SNR=6.9 | | | | | | |
| **CPUP** | **Villa Florida** | **17.95** | **129** | P | **P** | **22 27 53.7** | **-0.7** |
| **CPUP** | **Villa Florida** | **17.95** | **129** | *eP* | **Pn** | **22 27 55.2** | **+0.1** |
| **MT09** | **Talagante** | **18.08** | **175** | P | **P** | **22 27 55.9** | **+0.1** |
| MT09 | | | | IAmb | IAmb | 22 28 06.2 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MT01** | **Popeta** | **18.15** | **176** | P | **P** | **22 27 56.0** | **-0.4** |
| MT01 | | | | IAmb | IAmb | 22 28 00.1 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **LMEL** | **Las Melosas** | **18.23** | **173** | | **P** | **22 27 58.2** | **+0.7** |
| LMEL | | | | IAmb | IAmb | 22 28 01.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **BO04** | **La Punta** | **18.33** | **174** | P | **P** | **22 27 59.0** | **+0.6** |
| BO04 | | | | IAmb | IAmb | 22 28 10.3 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **H03N1** | **Juan Fernandez** | **18.48** | **196** | T | T | 22 46 25.1 | |
| | baz=17,slow=73 | | | | | | |
| **H03N2** | **Juan Fernandez** | **18.49** | **196** | T | T | 22 46 24.0 | |
| | baz=17,slow=73 | | | | | | |
| **H03N3** | **Juan Fernandez** | **18.50** | **196** | T | T | 22 46 22.4 | |
| | baz=17,slow=73 | | | | | | |
| **BO02** | **Sierra Bellavi** | **19.11** | **175** | P | **P** | **22 28 07.3** | **+0.4** |
| BO02 | | | | IAmb | IAmb | 22 28 09.9 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **NPGB** | **Novo Progresso** | **19.21** | **65** | *eP* | **P** | **22 28 08.2** | **0.0** |
| **PTGA** | **Pitinga** | **19.60** | **42** | P | **P** | **22 28 12.6** | **+0.2** |
| | comp=Z,5.1nm,0.3s,baz=333,slow=23,SNR=80 | | | | | | |
| PTGA | | | | LR | LR | 22 36 46.0 | |
| | comp=Z,95nm,19.4s,baz=206,slow=40 | | | | | | |
| **ITTB** | **Itaituba** | **20.28** | **58** | *eP* | **P** | **22 28 19.7** | **-0.1** |
| **ARAG** | **Araguaiana, MT** | **20.30** | **93** | *eP* | **P** | **22 28 21.5** | **+1.6** |
| **ITQB** | **Itaqui** | **20.43** | **136** | P | **P** | **22 28 21.9** | **+0.7** |
| **ITQB** | **Itaqui** | **20.43** | **136** | *eP* | **P** | **22 28 23.0** | **+1.7** |
| **ROSC** | **El Rosal** | **20.46** | **356** | P | Pn | 22 28 23.9 | -1.2 |
| | comp=Z,5.7nm,0.3s,baz=153,slow=11,SNR=4.1 | | | | | | |
| **ROSC** | **El Rosal** | **20.46** | **356** | P | **P** | **22 28 22.1** | **0.0** |
| ROSC | | | | IAmb | IAmb | 22 28 52.4 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **SNDB** | **Serra Nova Dou** | **21.30** | **83** | *eP* | **P** | **22 28 31.4** | **+0.7** |
| **PCMB** | **Pacaembu** | **21.31** | **109** | *eP* | **P** | **22 28 31.5** | **+0.7** |
| **PTGB** | **Pitanga** | **21.48** | **118** | *eP* | **P** | **22 28 33.4** | **+0.7** |
| **BOAV** | **Boa Vista** | **21.75** | **35** | *eP* | **P** | **22 28 35.6** | **+0.1** |
| **ITRB** | **Iturama** | **21.83** | **104** | *eP* | **P** | **22 28 37.1** | **+0.8** |
| **ITAB** | **Concordia** | **22.44** | **124** | P | **P** | **22 28 41.6** | **-1.0** |
| **ITAB** | **Concordia** | **22.44** | **124** | *eP* | **P** | **22 28 42.4** | **-0.2** |
| **MALB** | **Monte Alegre** | **22.95** | **55** | *eP* | **P** | **22 28 47.6** | **-0.2** |
| **CPSB** | **Cacapava Do Su** | **23.07** | **133** | *eP* | **P** | **22 28 49.1** | **+0.2** |
| **ZARC** | **Zaragoza, Cauc** | **23.12** | **355** | P | **P** | **22 28 49.8** | **+0.3** |
| **LC01** | **

comp=Z,4.9nm,0.9s,baz=263,slow=5.0,SNR=20
TORD pP **pP** **22 36 13.0 -0.5**
comp=Z,3.4nm,0.7s,baz=265,slow=5.8,SNR=5.3
**TORD Torodi Ar. Bea 79.13 73** P **P** **22 35 46.0 -0.1**
TORD IAmb IAmb 22 35 47.2
comp=Z,8.9nm,1.2s
**ESDC Sonseca Array 84.48 46** P **P** **22 36 14.4 +0.7**
comp=Z,2.2nm,0.9s,baz=237,slow=4.2,SNR=8.9
ESDC pP **pP** **22 36 40.8 -1.1**
comp=Z,1.6nm,1.0s,baz=252,slow=7.4,SNR=4.5
**ESDC Sonseca Array 84.48 46** P **P** **22 36 14.6 +0.9**
ESDC IAmb IAmb 22 36 16.3
comp=Z,3.4nm,1.1s
**YKA Yellowknife Ar 84.51 342** P **P** **22 36 13.0 -0.2**
comp=Z,4.5nm,0.8s,baz=136,slow=5.0,SNR=68
YKA pP **pP** **22 36 39.6 -1.1**
comp=Z,0.8nm,0.7s,baz=137,slow=5.2,SNR=2.9
**YKA Yellowknife Ar 84.51 342** P **P** **22 36 13.4 +0.2**
**TSUM Tsumeb 85.39 109** P **P** **22 36 20.2 +1.3**
**BOSA Boshof 89.54 119** LR LR 23 14 15.6
comp=Z,43nm,21.2s,baz=128,slow=34
**BOSA Boshof 89.54 119** P **P** **22 36 39.3 +0.6**
BOSA IAmb IAmb 22 36 42.5
comp=Z,9.1nm,1.4s
**LBTB Lobatse 90.92 116** LR LR 23 13 19.4
comp=Z,47nm,18.3s,baz=188,slow=33
**SUMG Summit 90.98 10** *i*P **P** **22 36 45.0 +0.4**
**INK Inuvik 94.25 341** P **P** **22 36 58.4 -0.8**
comp=Z,1.8nm,0.8s,baz=147,slow=4.6,SNR=5.9
**INK Inuvik 94.25 341** P **P** **22 36 58.7 -0.5**
INK IAmb IAmb 22 37 00.2
comp=Z,3.7nm,1.1s
**ILAR Eielson Array 97.42 335** LR LR 23 25 35.4
comp=Z,156nm,18.2s,baz=140,slow=38
**KBZ Khabaz 119.28 48** PKP **PKiKP** **22 42 30.7 +1.2**
comp=Z,1.3nm,0.9s,baz=355,slow=3.7,SNR=4.2
**ASAR Alice Springs 132.92 214** PKP **PKPdf** **22 42 55.8 -0.5**
comp=Z,0.7nm,0.6s,baz=134,slow=1.8,SNR=7.1
**ASAR Alice Springs 132.92 214** **PKPdf** **22 42 55.9 -0.3**
**WRA Warramunga Arr 135.60 218** PKP **PKPdf** **22 43 01.7 +0.4**
comp=Z,2.6nm,0.8s,baz=135,slow=1.9,SNR=12
**WRA Warramunga Arr 135.60 218** **PKPdf** **22 43 01.6 +0.2**
**ZALV Zalesovo Beam 138.05 20** PKP **PKPdf** **22 43 05.5 +0.8**
comp=Z,2.0nm,0.8s,baz=309,slow=4.5,SNR=7.8
**ZALV Zalesovo Beam 138.05 20** **PKiKP** **22 43 05.8 -0.9**
**FITZ Fitzroy Crossi 141.77 209** PKhKP PKPpre 22 43 06.7
comp=Z,2.5nm,0.6s,baz=211,slow=3.1,SNR=6.1
**MKAR Makanchi Array 142.75 28** PKhKP PKPpre 22 43 10.4
comp=Z,9.9nm,0.8s,baz=320,slow=3.2,SNR=8.2
**MKAR Makanchi Array 142.75 28** **PKPdf** **22 43 13.3 -0.3**
**KSH Kashi 143.92 43** *e*PKP **PKPdf** **22 43 16.6 +0.6**
KSH sPKP 22 43 54.4
**MJAR Matsushiro Arr 145.44 313** PKPbc **PKPbc** **22 43 18.6 -0.1**
comp=Z,4.0nm,0.9s,baz=71,slow=5.7,SNR=6.7
**SONM Songino Array 147.95 1** PKPbc **PKiKP** **22 43 26.5 -1.0**
comp=Z,4.6nm,0.7s,baz=332,slow=1.8,SNR=37
SONM pPKPbc **pPKPbc** **22 43 53.4 -1.4**
comp=Z,1.1nm,0.8s,baz=356,slow=1.9,SNR=2.7
**KSRS Korea Array 151.56 324** PKPbc **PKiKP** **22 43 35.5 +0.4**
comp=Z,3.3nm,0.8s,baz=34,slow=1.3,SNR=7.9
**PZH PanZhiHua 168.15 24** PKP **PKPdf** **22 43 45.6 -1.9**
**KMI Kunming 169.77 23** ⇑PKP **PKPdf** **22 43 47.6 -1.0**
KMI pPKP pPKPdf 22 44 11.8 -6.3
**CMAR Chiang Mai Arr 171.73 69** PKPab **PKPab** **22 45 12.9 +0.9**
comp=Z,0.9nm,0.7s,baz=282,slow=5.4,SNR=6.5

*IDC **16** 22:43:11.4±2.5,2.2°21.5S×133.57°E,h0km,mb3.3/1, mb1 3.9/5,mb1mx3.5/28,mbtmp3.8/5,ML3.4/4,Error ellipse: s-maj=52.4km s-min=25.1km az=52.0*
**ISC 16 22:43:13.8±2.2,2.2°2S±0.2°×133.7°E±0.2°,h26km,n6,σ1§53/7, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.76** | **298** | Pn | **Pn** | **22 43 55.3** | **-1.1** |
| | 5.8nm,0.3s,baz=162,slow=19,SNR=13 | | | | | | |
| SIJI | | | | Sn | **Sn** | **22 44 30.3** | **+1.3** |
| | 12nm,0.3s,baz=74,slow=18,SNR=3.5 | | | | | | |
| **BATI** | **Baumata** | **12.77** | **231** | Pn | **Pn** | **22 46 13.8** | **-0.1** |
| | 1.2nm,0.3s,baz=60,slow=12,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.66** | **178** | P | **Pn** | **22 47 17.6** | **-0.6** |
| | 0.1nm,0.3s,baz=353,slow=13,SNR=2.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.68** | **206** | P | **Pn** | **22 47 17.0** | **-1.5** |
| | 0.1nm,0.3s,baz=39,slow=14,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **21.36** | **179** | P | **P** | **22 48 01.3** | **+1.9** |
| | 1.0nm,0.6s,baz=3.4,slow=12,SNR=9.8 | | | | | | |
| **CPUP** | **Villa Florida** | **149.72** | **160** | PKPbc | **PKiKP** | **23 03 03.5** | **+0.3** |
| | 2.2nm,0.4s,baz=18,slow=3.2,SNR=4.0 | | | | | | |

*VAO **16** 22:47:52.4±0.8, 18.67S×69.45W,h10km, mb3.9*
*SJA **16** 22:47:59.9±0.7, 19.05S×69.53W,h106km±3km,ML4.2, MW3.9*
*IDC **16** 22:48:01.8±3.8, 18.88S×69.27W,h102km±34km,mb3.6/4, mb1 3.7/7,mb1mx3.5/28,mbtmp4.0/7,MS3.4/1,Ms1 3.4/1, ms1mx2.5/42, Error ellipse: s-maj=40.8km s-min=15.6km az=127.0*
*NEIC **16** 22:48:01.3±0.9, 19.05S±0.0°×69.52W±0.0°,h99km±6km, mb4.1/4,ML4.2(GUC),Error ellipse: s-maj=6.3km s-min=4.2km az=98.0*
*GUC **16** 22:48:01.7±0.6, 19.03S×69.47W,h94km±3km,ML4.2*
**ISC 16 22:48:00.6±0.6, 19.02S±0.0°×69.44W±0.0°,h100km±6km, n107,σ1§25/129,mb3.6/3,2C-2D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB16** | **IPOC Station P** | **0.68** | **355** | | **Pn** | **22 48 19.4** | **+0.8** |
| PB16 | | | | Sn | **Sn** | **22 48 33.1** | **+1.0** |
| **PB16** | **IPOC Station P** | **0.68** | **355** | ⇓*i*P | **Pn** | **22 48 19.6** | **+0.9** |
| PB16 | | | | *e*S | **Sn** | **22 48 33.0** | **+1.0** |
| **PB16** | **IPOC Station P** | **0.68** | **355** | *e*P | **Pn** | **22 48 19.0** | **+0.3** |
| PB16 | | | | *e*S | **Sn** | **22 48 33.8** | **+1.8** |
| PB16 | | | | *e*S | **Sn** | **22 48 33.9** | **+1.8** |
| PB16 | | | | IAML | | 22 48 35.4 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **GO01** | **Chusmiza** | **0.69** | **160** | | **Pn** | **22 48 19.1** | **+0.5** |
| GO01 | | | | Sn | **Sn** | **22 48 31.9** | **0.0** |
| **GO01** | **Chusmiza** | **0.69** | **160** | *e*P | **Pn** | **22 48 19.1** | **+0.5** |
| GO01 | | | | *e*S | **Sn** | **22 48 32.4** | **+0.5** |
| GO01 | | | | IAML | | 22 48 35.5 | |
| | comp=E,12μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **0.69** | **160** | *e*P | **Pn** | **22 48 19.0** | **+0.4** |
| GO01 | | | | *e*S | **Sn** | **22 48 33.0** | **+1.1** |
| **PB11** | **IPOC Station P** | **0.76** | **195** | | **Pn** | **22 48 19.0** | **+0.1** |
| PB11 | | | | Sn | **Sn** | **22 48 32.5** | **-0.1** |
| **PB12** | **IPOC Station P** | **0.93** | **296** | | **Pn** | **22 48 20.3** | **-0.2** |
| PB12 | | | | Sn | **Sn** | **22 48 35.0** | **-0.5** |
| **PB12** | **IPOC Station P** | **0.93** | **296** | ⇑*i*P | **Pn** | **22 48 20.3** | **-0.2** |
| PB12 | | | | *e*S | **Sn** | **22 48 34.6** | **-0.8** |
| PB12 | | | | IAML | | 22 48 36.4 | |
| | comp=E,4μm,0.7s | | | | | | |
| **PB12** | **IPOC Station P** | **0.93** | **296** | *e*P | **Pn** | **22 48 20.0** | **-0.5** |
| PB12 | | | | *e*S | **Sn** | **22 48 35.6** | **+0.2** |
| **AP01** | **Chacalluta** | **1.07** | **307** | | **Pn** | **22 48 22.2** | **+0.3** |
| AP01 | | | | Sn | **Sn** | **22 48 37.6** | **-0.2** |
| **AP01** | **Chacalluta** | **1.07** | **307** | *e*P | **Pn** | **22 48 22.1** | **+0.2** |
| AP01 | | | | *e*S | **Sn** | **22 48 37.5** | **-0.4** |
| **AP01** | **Chacalluta** | **1.07** | **307** | *e*P | **Pn** | **22 48 22.0** | **+0.2** |
| AP01 | | | | IAML | | 22 48 44.1 | |
| | comp=Z,3μm,0.1s | | | | | | |
| **PB08** | **IPOC Station P** | **1.15** | **166** | | **Pn** | **22 48 23.7** | **+0.5** |
| PB08 | | | | Sn | **Sn** | **22 48 40.5** | **+0.4** |
| **PB08** | **IPOC Station P** | **1.15** | **166** | ⇑*i*P | **Pn** | **22 48 23.8** | **+0.6** |
| PB08 | | | | *e*S | **Sn** | **22 48 40.6** | **+0.5** |
| PB08 | | | | IAML | | 22 48 43.4 | |
| | comp=E,3μm,0.1s | | | | | | |
| **PB08** | **IPOC Station P** | **1.15** | **166** | *e*P | **Pn** | **22 48 18.5** | **-4.7** |
| PB08 | | | | *e*P | **Pn** | **22 48 24.0** | **+0.9** |
| PB08 | | | | *e*S | **Sn** | **22 48 41.7** | **+1.6** |
| PB08 | | | | IAML | | 22 48 43.5 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **HMBC** | **Humberstone** | **1.32** | **199** | ⇓*i*P | **Pn** | **22 48 24.7** | **-0.3** |
| HMBC | | | | *e*S | **Sn** | **22 48 42.0** | **-1.3** |
| HMBC | | | | IAML | | 22 48 51.3 | |
| | comp=N,3μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.40** | **207** | | **Pn** | **22 48 25.4** | **-0.4** |
| **TA02** | **Huaiquique** | **1.40** | **207** | *e*P | **Pn** | **22 48 25.8** | **0.0** |
| TA02 | | | | *e*S | **Sn** | **22 48 43.6** | **-1.1** |
| **TA02** | **Huaiquique** | **1.40** | **207** | *e*P | **Pn** | **22 48 25.8** | **0.0** |
| TA02 | | | | *e*S | **Sn** | **22 48 47.0** | **+2.2** |
| TA02 | | | | IAML | | 22 48 48.2 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **1.69** | **204** | | **Pn** | **22 48 28.9** | **-0.3** |
| **TA01** | **Diego Aracena** | **1.69** | **204** | *e*P | **Pn** | **22 48 28.3** | **-0.9** |
| TA01 | | | | *e*S | **Sn** | **22 48 50.3** | **-0.7** |
| **TA01** | **Diego Aracena** | **1.69** | **204** | *e*P | **Pn** | **22 48 29.0** | **-0.3** |
| TA01 | | | | IAML | | 22 48 55.4 | |
| | comp=Z,973nm,0.5s | | | | | | |
| **PATCX** | **Punta Patache** | **1.91** | **200** | | **Pn** | **22 48 31.7** | **-0.6** |
| **PATCX** | **Punta Patache** | **1.91** | **200** | *e*P | **Pn** | **22 48 31.9** | **-0.4** |
| PATCX | | | | IAML | | 22 49 04.4 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PATCX** | **Punta Patache** | **1.91** | **200** | *e*P | **Pn** | **22 48 32.0** | **-0.2** |
| PATCX | | | | *e*P | **Pn** | **22 48 32.3** | **+0.1** |
| PATCX | | | | *e*P | **Pn** | **22 48 32.3** | **+0.1** |
| **PB01** | **IPOC Station P** | **2.01** | **181** | | **Pn** | **22 48 33.6** | **0.0** |
| **PB01** | **IPOC Station P** | **2.01** | **181** | *e*P | **Pn** | **22 48 33.5** | **0.0** |
| PB01 | | | | IAML | | 22 49 05.2 | |
| | comp=N,3μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **2.01** | **181** | *e*P | **Pn** | **22 48 33.8** | **+0.3** |
| PB01 | | | | *e*S | **Sn** | **22 48 59.4** | **+0.8** |
| PB01 | | | | IAML | | 22 49 04.7 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **2.33** | **191** | | **Pn** | **22 48 37.5** | **-0.1** |
| **PB02** | **IPOC Station P** | **2.33** | **191** | *e*P | **Pn** | **22 48 37.5** | **-0.1** |
| PB02 | | | | IAML | | 22 49 15.0 | |
| | comp=E,4μm,0.4s | | | | | | |
| **PB02** | **IPOC Station P** | **2.33** | **191** | *e*P | **Pn** | **22 48 37.7** | **+0.1** |
| PB02 | | | | *e*S | **Sn** | **22 49 07.8** | **+1.8** |
| PB02 | | | | IAML | | 22 49 15.2 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **2.73** | **189** | | **Pn** | **22 48 43.2** | **+0.3** |
| **PB07** | **IPOC Station P** | **2.73** | **189** | *e*P | **Pn** | **22 48 43.2** | **+0.3** |
| PB07 | | | | IAML | | 22 49 25.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **2.73** | **189** | *e*P | **Pn** | **22 48 43.0** | **+0.1** |
| PB07 | | | | *e*S | **Sn** | **22 49 15.0** | **-0.4** |
| PB07 | | | | IAML | | 22 49 28.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.77** | **176** | | **Pn** | **22 48 44.0** | **+0.5** |
| **PB09** | **IPOC Station P** | **2.77** | **176** | *e*P | **Pn** | **22 48 44.1** | **+0.6** |
| PB09 | | | | IAML | | 22 49 32.7 | |
| | comp=E,616nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **2.77** | **176** | *e*P | **Pn** | **22 48 39.0** | **-4.5** |
| PB09 | | | | *e*P | **Pn** | **22 48 44.0** | **+0.5** |
| PB09 | | | | *e*S | Sn | 22 49 05.5 | -11 |
| PB09 | | | | IAML | | 22 49 27.2 | |
| | comp=Z,577nm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **3.03** | **185** | | **Pn** | **22 48 46.5** | **-0.5** |
| **PB03** | **IPOC Station P** | **3.03** | **185** | *e*P | **Pn** | **22 48 46.2** | **-0.7** |
| PB03 | | | | IAML | | 22 49 33.4 | |
| | comp=E,894nm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **3.03** | **185** | *e*P | **Pn** | **22 48 46.9** | **-0.1** |
| PB03 | | | | *e*S | **Sn** | **22 49 22.0** | **-0.6** |
| PB03 | | | | IAML | | 22 49 32.3 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **3.36** | **191** | | **Pn** | **22 48 51.5** | **0.0** |
| **PB04** | **IPOC Station P** | **3.36** | **191** | *e*P | **Pn** | **22 48 51.4** | **0.0** |
| PB04 | | | | IAML | | 22 49 46.2 | |
| | comp=E,661nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.36** | **191** | *e*P | **Pn** | **22 48 51.5** | **0.0** |
| PB04 | | | | *e*S | Sn | 22 49 18.5 | -12 |
| PB04 | | | | IAML | | 22 49 51.2 | |
| | comp=Z,622nm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **3.61** | **172** | P | **Pn** | **22 48 55.9** | **+1.1** |
| | comp=Z,6.2nm,0.3s,baz=12,slow=9.1,SNR=38 | | | | | | |
| LVC | | | | S | **Sn** | **22 49 42.2** | **+5.4** |
| | comp=Z,36nm,0.3s,baz=252,slow=22,SNR=19 | | | | | | |
| **LVC** | **Limon Verde** | **3.61** | **172** | | **Pn** | **22 48 55.6** | **+0.7** |
| **LVC** | **Limon Verde** | **3.61** | **172** | *e*P | **Pn** | **22 48 55.7** | **+0.8** |
| **LVC** | **Limon Verde** | **3.61** | **172** | *e*P | **Pn** | **22 48 56.0** | **+1.1** |
| LVC | | | | *e*S | **Sn** | **22 49 39.0** | **+2.2** |
| **PB06** | **IPOC Station P** | **3.67** | **182** | | **Pn** | **22 48 55.4** | **-0.1** |
| **PB06** | **IPOC Station P** | **3.67** | **182** | *e*P | **Pn** | **22 48 55.0** | **-0.5** |
| **PB06** | **IPOC Station P** | **3.67** | **182** | *e*P | **Pn** | **22 48 55.7** | **+0.1** |
| PB06 | | | | *e*S | Sn | 22 49 29.0 | -9.0 |
| PB06 | | | | *e*S | Sn | 22 49 50.5 | +12 |
| PB06 | | | | IAML | | 22 49 52.3 | |
| | comp=Z,359nm,0.3s | | | | | | |
| **PB15** | **IPOC Station P** | **4.17** | **180** | | **Pn** | **22 49 02.2** | **-0.1** |
| **PB15** | **IPOC Station P** | **4.17** | **180** | *e*P | **Pn** | **22 49 01.8** | **-0.5** |
| **PB15** | **IPOC Station P** | **4.17** | **180** | *e*P | **Pn** | **22 49 02.7** | **+0.4** |
| PB15 | | | | *e*S | **Sn** | **22 49 47.0** | **-3.1** |
| PB15 | | | | *e*S | **Sn** | **22 49 49.5** | **-0.6** |
| PB15 | | | | IAML | | 22 50 06.2 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **4.59** | **193** | Pn | **Pn** | **22 49 06.8** | **-1.0** |
| **HJA** | **Humahuaca** | **5.61** | **139** | *e*P | **Pn** | **22 49 24.0** | **+1.9** |
| **PB14** | **IPOC Station P** | **5.65** | **189** | | **Pn** | **22 49 20.2** | **-2.3** |
| **PB14** | **IPOC Station P** | **5.65** | **189** | *e*P | **Pn** | **22 49 21.0** | **-1.5** |
| PB14 | | | | *e*S | Sn | 22 50 39.0 | +13 |
| PB14 | | | | IAML | | 22 50 47.4 | |
| | comp=Z,93nm,0.4s | | | | | | |
| **AC02** | **Maricunga** | **7.78** | **178** | | **Pn** | **22 49 50.0** | **-1.7** |
| **AC02** | **Maricunga** | **7.78** | **178** | *e*P | **Pn** | **22 49 50.0** | **-1.7** |
| AC02 | | | | IAML | | 22 51 57.9 | |
| | comp=Z,39nm,0.5s | | | | | | |
| **SIV** | **San Ignacio** | **8.53** | **71** | P | **Pn** | **22 50 00.3** | **-1.2** |
| | comp=Z,2.1nm,0.3s,baz=268,slow=8.5,SNR=31 | | | | | | |
| SIV | | | | S | **Sn** | **22 51 32.2** | **-3.9** |
| | baz=338,slow=23,SNR=1.6 | | | | | | |
| **ETMB** | **Extrema** | **9.67** | **19** | *e*P | Pn | 22 50 07.8 | -9.1 |
| **CZSB** | **Cruzeiro do Su** | **11.66** | **344** | *e*P | Pn | 22 50 34.6 | -9.3 |
| **CPUP** | **Villa Florida** | **13.33** | **125** | P | **Pn** | **22 51 04.6** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=299,slow=13,SNR=3.7 | | | | | | |
| **CPUP** | **Villa Florida** | **13.33** | **125** | *e*P | **Pn** | **22 51 04.9** | **-1.0** |
| **MT02** | **Curacav** | **14.26** | **186** | Pn | **Pn** | **22 51 17.3** | **-0.6** |
| **MT09** | **Talagante** | **14.76** | **185** | Pn | **Pn** | **22 51 25.3** | **+0.8** |
| **MT01** | **Popeta** | **14.87** | **186** | Pn | **Pn** | **22 51 24.5** | **-1.3** |
| **H03N1** | **Juan Fernandez** | **16.67** | **209** | T | T | 23 08 33.1 | |
| | baz=32,slow=72,SNR=27 | | | | | | |
| **H03N2** | **Juan Fernandez** | **16.68** | **209** | T | T | 23 08 32.9 | |
| | baz=32,slow=72,SNR=28 | | | | | | |
| **H03N3** | **Juan Fernandez** | **16.69** | **209** | T | T | 23 09 00.6 | |
| | baz=32,slow=72,SNR=31 | | | | | | |
| **PTGB** | **Pitanga** | **17.09** | **112** | *e*P | **P** | **22 51 54.0** | **+0.3** |
| **ARAG** | **Araguaiana, MT** | **17.15** | **82** | *e*P | **Pn** | **22 51 52.2** | **-1.9** |
| **PCMB** | **Pacaembu** | **17.25** | **102** | *e*P | **P** | **22 51 55.2** | **-0.1** |
| **ITAB** | **Concordia** | **17.88** | **120** | P | **P** | **22 52 02.5** | **+0.2** |
| ITAB | | | | IAmb | IAmb | 22 52 06.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **ITAB** | **Concordia** | **17.88** | **120** | *e*P | **Pn** | **22 52 04.1** | **+1.1** |
| **CPSB** | **Cacapava Do Su** | **18.41** | **131** | *e*P | **Pn** | **22 52 10.9** | **+1.6** |
| **SNDB** | **Serra Nova Dou** | **18.83** | **71** | *e*P | **P** | **22 52 11.3** | **-1.4** |
| **FRTB** | **Fartura** | **19.02** | **107** | *e*P | **P** | **22 52 14.8** | **0.0** |
| **PLTB** | **Pedras Altas** | **19.09** | **135** | P | **P** | **22 52 16.1** | **+0.6** |
| PLTB | | | | IAmb | IAmb | 22 52 38.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **PLTB** | **Pedras Altas** | **19.09** | **135** | *e*P | **Pn** | **22 52 18.4** | **+1.1** |
| **ITTB** | **Itaituba** | **19.78** | **44** | *e*P | **P** | **22 52 20.8** | **-2.3** |
| **IPMB** | **Ipameri, GO** | **20.16** | **90** | *e*P | **P** | **22 52 27.3** | **+0.1** |
| **BDFB** | **Brasilia** | **20.73** | **84** | P | **P** | **22 52 34.4** | **+1.0** |
| | comp=Z,2.4nm,0.4s,baz=264,slow=13,SNR=5.7 | | | | | | |
| **BDFB** | **Brasilia** | **20.73** | **84** | P | **P** | **22 52 34.2** | **+0.8** |
| **PEXB** | **Peixe** | **21.48** | **74** | *e*P | **P** | **22 52 41.2** | **-0.2** |
| **PLCA** | **Paso Flores** | **21.66** | **182** | P | **P** | **22 52 45.4** | **+2.3** |
| | comp=Z,2.6nm,0.9s,baz=3.6,slow=14,SNR=2.9 | | | | | | |
| **SMTB** | **Santa Maria do** | **23.46** | **68** | *e*P | **P** | **22 53 01.6** | **+0.2** |
| **JANB** | **Januaria** | **24.34** | **85** | *e*P | **P** | **22 53 08.9** | **-0.5** |
| **DIAM** | **Diamantina, MG** | **24.42** | **93** | *e*P | **P** | **22 53 10.4** | **+0.2** |
| **SDBA** | **SAO DESIDERIO** | **24.50** | **78** | *e*P | **P** | **22 53 10.4** | **-0.5** |
| **SDV** | **Santo Domingo** | **27.75** | **357** | LR | LR | 23 05 04.2 | |
| | comp=Z,80nm,18.4s,baz=195,slow=37 | | | | | | |
| **NBPN** | **Ponto Novo - B** | **29.36** | **78** | *e*P | **P** | **22 53 54.2** | **-0.2** |
| **NBMA** | **Muriti-CE** | **31.97** | **73** | *e*P | **P** | **22 54 17.6** | **+0.1** |
| **NBAN** | **Anadia - AL** | **33.40** | **79** | *e*P | **P** | **22 54 29.9** | **+0.1** |
| **QSPA** | **South Pole Qui** | **71.16** | **180** | P | **P** | **22 59 09.5** | **+1.1** |
| **TORD** | **Torodi Ar. Bea** | **77.01** | **71** | P | **P** | **22 59 41.5** | **-1.5** |
| | comp=Z,0.4nm,0.4s,baz=254,slow=5.8,SNR=3.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.69** | **341** | P | **P** | **23 00 43.0** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=136,slow=4.7,SNR=20 | | | | | | |
| YKA | | | | pP | **pP** | **23 01 09.9** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=137,slow=4.4,SNR=5.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **27.03** | **279** | T | T | 01 26 17.3 | |
| | baz=99,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **27.04** | **279** | T | T | 01 26 16.6 | |
| | baz=99,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **27.05** | **281** | T | T | 01 26 32.2 | |
| | baz=100,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **27.05** | **279** | T | T | 01 26 17.0 | |
| | baz=99,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **27.06** | **281** | T | T | 01 26 18.6 | |
| | baz=100,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **27.07** | **281** | T | T | 01 26 22.8 | |
| | baz=100,slow=75 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.80** | **212** | PKP | **PKPdf** | **23 07 09.0** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=166,slow=1.5,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **151.06** | **6** | PKPbc | **PKiKP** | **23 07 43.1** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=299,slow=1.1,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **151.06** | **6** | | **PKiKP** | **23 07 42.7** | **+0.1** |

*NEIC **16** 23:04:26.9, 37.20N×118.40W,h18km,Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr=0.13; Mθθ=-1.33; Mφφ 1.21; Mrθ=0.16; Mrφ=-0.50; Mθφ=0.41; Fault plane solution: M0 1.44000×10^16^ NP1:φs303.47000°, δ72.28000°,λ174.36000°. NP2:φs35.19000°,δ84.63000°, λ17.80000°. Principal axes: T 1.4104, Plg16.0000°, Azm261.0000°; N 0.0518, Plg71.0000°, Azm51.0000°; P -1.4622, Plg9.0000°, Azm168.0000°;*
*NCEDC **16** 23:04:26.9±2.3, 37.20N±0.0°×118.40W±0.0°,h15km±4km, Mwr4.8/6,mb4.7/5(NEIC),ML4.9/11(REN), ML4.8/104(NEIC),Mwr4.7/151(NEIC),Mww4.8(NEIC) Error ellipse: s-maj=5.4km s-min=3.3km az=210.0*
*ANF **16** 23:04:26.9±0.1, 37.18N×118.42W,h10km±1km,ML5.2/44, Error ellipse: s-maj=1.7km s-min=1.0km az=54.0*
*NEIC **16** 23:04:26.9, 37.20N×118.40W,h18km,Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr=0.08; Mθθ-1.56; Mφφ 1.64; Mrθ=0.27; Mrφ -0.63; Mθφ=0.20; Fault plane solution: M0 1.76000×10^16^ NP1:φs304.60000°, δ79.37000°,λ-175.87000°. NP2:φs213.84000°, δ85.94000°,λ-10.66000°. Principal axes: T 1.7739, Plg5.0000°, Azm260.0000°; N -0.0347, Plg79.0000°, Azm13.0000°; P -1.7392, Plg10.0000°, Azm169.0000°;*
*REN **16** 23:04:27.3±2.3, 37.22N±0.0°×118.41W±0.0°,h8km±5km Error ellipse: s-maj=3.8km s-min=2.4km az=197.0*
*NEIC **16** 23:04:27.4±2.0, 37.22N±0.0°×118.40W±0.0°,h12km±4km, Error ellipse: s-maj=5.1km s-min=2.1km az=200.0*
*IDC **16** 23:04:28.1±0.5, 37.24N×118.23W,h0km, mb4.1/16, mb1 4.1/23,mb1mx3.9/59,mbtmp4.0/23,ML4.1/6,MS3.9/30, Ms1 3.9/30,ms1mx3.7/86,Error ellipse: s-maj=10.3km s-min=5.0km az=80.0*
*GCMT **16** 23:04:29.9±0.4, 37.23N±0.0°×118.50W±0.0°,h29km±1km, MW4.9/74,Moment Tensor Solution. s17,c19; s74,c99; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=0.07±.19; Mθθ-2.70±.13; Mφφ 2.77±.14; Mrθ=0.47±.23; Mθφ -0.65±.11; Mrφ 0.76±.19; Best double couple: M0 2.94300×10^16^ NP1:φs39.00000°,δ74.00000°,λ5.00000°. NP2: φs308.00000°,δ86.00000°,λ164.00000°. Principal axes: T 3.0560, Plg15.0000°, Azm262.0000°; N -0.2300, Plg73.0000°, Azm113.0000°; P -2.8300, Plg8.0000°, Azm354.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **16** 23:04:32, 37.20N×118.40W,h20km,Moment Tensor Solution. Duration: 10s4 Moment tensor: Scale 10^16^Nm; Mrr=0.37; Mθθ-1.50; Mφφ 1.87; Mrθ 0.40; Mθφ -0.58; Mrφ 0.12; Fault plane solution: M0 1.86000×10^16^ NP1: φs307.00000°,δ77.00000°,λ-168.00000°. NP2: φs214.00000°,δ79.00000°,λ-13.00000°. Principal axes: T 1.9690, Plg1.0000°, Azm261.0000°; N -0.2439, Plg73.0000°, Azm355.0000°; P -1.7251, Plg17.0000°, Azm170.0000°;*
**ISC 16 23:04:26.8±1.1, 37.22N±0.0°×118.38W±0.0°,h1km±7km, n223,σ1§48/233,mb4.2/19,MS3.9/23,California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MTUM** | **Tungsten Hills** | **0.19** | **312** | | **Pg** | **23 04 31.6** | **+1.0** |
| **TIN** | **Tinemaha, Big** | **0.21** | **144** | P | **Pg** | **23 04 31.9** | **+1.1** |
| | baz=317,SNR=1000 | | | | | | |
| TIN | | | | S | **Sg** | **23 04 35.9** | **+2.4** |
| | baz=317 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **0.54** | **319** | P | **Pg** | **23 04 37.8** | **+0.6** |
| | baz=141 | | | | | | |
| MLAC | | | | S | **Sb** | **23 04 46.1** | **-1.6** |
| | baz=141 | | | | | | |
| **LCH** | **Last Change Ra** | **0.59** | **89** | Pg | **Pg** | **23 04 38.7** | **+0.6** |
| LCH | | | | Sg | **Sg** | **23 04 46.7** | **+1.0** |
| LCH | | | | IAML | | 23 04 47.6 | |
| | comp=N,45μm,0.5s | | | | | | |
| LCH | | | | IAML | | 23 04 47.9 | |
| | comp=E,63μm,0.5s | | | | | | |
| **MRDM** | **Red Cones** | **0.66** | **305** | | **Pg** | **23 04 39.4** | **0.0** |
| **MDCM** | **Deadman Creek** | **0.71** | **313** | | **Pg** | **23 04 40.5** | **0.0** |
| **HELL** | **Mitchell Peak,** | **0.75** | **224** | | **Pg** | **23 04 40.6** | **-0.5** |
| **KCC** | **Kaiser Creek** | **0.75** | **278** | | **Pg** | **23 04 40.8** | **-0.5** |
| KCC | | | | | **Sg** | **23 04 51.0** | **0.0** |
| **CWC** | **Cottonwood Cre** | **0.82** | **163** | P | **Pg** | **23 04 41.9** | **-0.6** |
| | baz=341 | | | | | | |
| CWC | | | | S | **Sg** | **23 04 53.5** | **+0.4** |
| | baz=341 | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.84** | **105** | Pg | **Pg** | **23 04 43.2** | **+0.2** |
| GRAC | | | | Sg | **Sb** | **23 04 55.0** | **-1.2** |
| GRAC | | | | IAML | | 23 05 00.7 | |
| | comp=E,41μm,0.8s | | | | | | |
| GRAC | | | | IAML | | 23 05 00.8 | |
| | com

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Q09A** | **Carvers** | **1.87** | **30** | Pn | | **Pn** | **23 04 58.9** | **-1.2** |
| **YERR** | **Yerington** | **1.89** | **339** | | | **Pn** | **23 04 59.0** | **-1.4** |
| YERR | | | | IAML | | | 23 05 30.3 | |
| | comp=E,6µm,0.5s | | | | | | | |
| **CCAC** | **Calif City Air** | **2.09** | **172** | Pn | | **Pn** | **23 05 02.1** | **-0.8** |
| **PNTR** | **Pine Nut** | **2.10** | **333** | Pn | | **Pn** | **23 05 02.4** | **-0.9** |
| PNTR | | | | IAML | | | 23 05 52.7 | |
| | comp=N,5µm,1.1s | | | | | | | |
| PNTR | | | | IAML | | | 23 05 60.0 | |
| | comp=E,5µm,1.1s | | | | | | | |
| **THIS** | **South End of C** | **2.11** | **225** | | | **Pn** | **23 05 03.0** | **-0.2** |
| **PAGB** | **Antelope Grade** | **2.12** | **226** | Pn | | **Pn** | **23 05 02.3** | **-1.0** |
| **ARVC** | **Arvin** | **2.12** | **190** | P | | **Pn** | **23 05 03.7** | **+0.3** |
| | baz=9.3,SNR=248 | | | | | | | |
| ARVC | | | | Sb | | **Sb** | **23 05 32.3** | **-0.6** |
| | baz=9.3 | | | | | | | |
| **S11A** | **Rachel** | **2.14** | **78** | | | **Pn** | **23 05 02.7** | **-1.1** |
| **PKD** | **Bear Valley Ra** | **2.15** | **234** | | | **Pn** | **23 05 03.1** | **-0.7** |
| **TRAM** | **Private Proper** | **2.17** | **225** | | | **Pn** | **23 05 03.7** | **-0.3** |
| **TCHL** | **Shandon** | **2.23** | **227** | | | **Pn** | **23 05 04.8** | **-0.1** |
| **GSC** | **Goldstone, Bar** | **2.30** | **146** | | | **Pn** | **23 05 04.1** | **-1.9** |
| GSC | | | | IAML | | | 23 05 46.6 | |
| | comp=E,7µm,1.1s | | | | | | | |
| GSC | | | | IAML | | | 23 05 53.7 | |
| | comp=N,5µm,1.1s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.30** | **146** | P | | **Pn** | **23 05 04.7** | **-1.3** |
| | baz=326,SNR=777 | | | | | | | |
| **TSCN** | **Private Proper** | **2.31** | **224** | | | **Pn** | **23 05 06.0** | **+0.1** |
| **SMMC** | **Simmler** | **2.31** | **215** | P | | **Pn** | **23 05 05.7** | **-0.3** |
| | baz=34,SNR=384 | | | | | | | |
| SMMC | | | | Sb | | **Sb** | **23 05 36.4** | **-1.9** |
| | baz=34 | | | | | | | |
| **PACP** | **Pacheco Peak** | **2.33** | **266** | | | **Pn** | **23 05 06.5** | **+0.1** |
| **EDW2** | **Edwards Air Fo** | **2.36** | **172** | P | | **Pn** | **23 05 05.7** | **-1.0** |
| | baz=352,SNR=670 | | | | | | | |
| EDW2 | | | | Sb | | **Sb** | **23 05 40.0** | **+0.2** |
| | baz=352 | | | | | | | |
| **BLRM** | **Lewis Ranch** | **2.38** | **257** | | | **Pn** | **23 05 07.4** | **+0.4** |
| **COSM** | **Mount Oso** | **2.40** | **278** | | | **Pn** | **23 05 07.4** | **+0.1** |
| **HFEM** | **San Felipe** | **2.42** | **265** | | | **Pn** | **23 05 07.7** | **+0.1** |
| **MPK** | **Martis Peak** | **2.44** | **328** | | | **Pn** | **23 05 07.4** | **-0.6** |
| **GHS** | **Gilroy Hot Spr** | **2.45** | **268** | | | **Pn** | **23 05 08.0** | **+0.1** |
| **R11A** | **Troy Canyon, C** | **2.49** | **62** | Pn | | **Pn** | **23 05 07.3** | **-1.2** |
| **R11A** | **Troy Canyon, C** | **2.49** | **62** | P | | **Pn** | **23 05 07.4** | **-1.1** |
| | baz=244,SNR=423 | | | | | | | |
| R11A | | | | Sb | | **Sg** | **23 05 45.5** | **-1.2** |
| | baz=244 | | | | | | | |
| **SAO** | **San Andreas Ge** | **2.50** | **260** | Pn | | **Pn** | **23 05 07.6** | **-0.9** |
| **SCZ** | **Santa Cruz** | **2.50** | **256** | | | **Pn** | **23 05 08.0** | **-0.6** |
| **BJCM** | **Johnson Can.** | **2.50** | **255** | | | **Pn** | **23 05 08.0** | **-0.6** |
| **HSFM** | **Saint Francis** | **2.53** | **262** | | | **Pn** | **23 05 09.4** | **+0.4** |
| **RAMR** | **Ramage Ranch** | **2.56** | **232** | | | **Pn** | **23 05 08.9** | **-0.5** |
| **BSMM** | **Soledad Missio** | **2.58** | **252** | | | **Pn** | **23 05 09.3** | **-0.5** |
| **RRX** | **Edison Barstow** | **2.60** | **154** | P | | **Pn** | **23 05 09.6** | **-0.4** |
| | baz=334,SNR=48 | | | | | | | |
| **PAHR** | **Pah Rah Range** | **2.60** | **343** | Pn | | **Pn** | **23 05 09.5** | **-0.6** |
| **MHC** | **Mount Hamilton** | **2.60** | **274** | | | **Pn** | **23 05 10.4** | **+0.3** |
| **PKM** | **Mcpherson Peak** | **2.60** | **207** | P | | **Pn** | **23 05 09.8** | **-0.3** |
| | baz=26,SNR=281 | | | | | | | |
| **OSI** | **Osito Audit: C** | **2.62** | **186** | P | | **Pn** | **23 05 09.5** | **-0.7** |
| | baz=5.6,SNR=354 | | | | | | | |
| OSI | | | | Sb | | **Sb** | **23 05 48.1** | **+0.9** |
| | baz=5.6 | | | | | | | |
| **PRN** | **Pahroc Range** | **2.66** | **85** | | | **Pn** | **23 05 09.9** | **-1.0** |
| **TUQ** | **Turquoise Moun** | **2.67** | **131** | P | | **Pn** | **23 05 09.7** | **-1.4** |
| | baz=312,SNR=181 | | | | | | | |
| TUQ | | | | Sb | | **Sg** | **23 05 50.5** | **-2.1** |
| | baz=312 | | | | | | | |
| **HAST** | **Hastings Reser** | **2.67** | **253** | | | **Pn** | **23 05 10.2** | **-0.8** |
| **HCOM** | **Corn Cob Canyo** | **2.68** | **264** | | | **Pn** | **23 05 11.0** | **-0.1** |
| **SHPR** | **Sheep Range** | **2.68** | **105** | | | **Pn** | **23 05 10.6** | **-0.6** |
| SHPR | | | | IAML | | | 23 06 00.1 | |
| | comp=E,3µm,1.1s | | | | | | | |
| **WENL** | **Wente Vineyard** | **2.71** | **279** | | | **Pn** | **23 05 12.3** | **+0.7** |
| **PAPM** | **Alder Peak** | **2.73** | **242** | | | **Pn** | **23 05 11.2** | **-0.7** |
| **BDM** | **Black Diamond** | **2.86** | **286** | | | **Pn** | **23 05 13.8** | **+0.3** |
| **HEC** | **Hector,Ludlow** | **2.91** | **145** | P | | **Pn** | **23 05 13.1** | **-1.2** |
| | baz=325,SNR=32 | | | | | | | |
| **PMLM** | **Mount Lospe** | **2.94** | **218** | | | **Pn** | **23 05 15.6** | **+0.9** |
| **DECC** | **Green Verdugo** | **2.96** | **179** | P | | **Pn** | **23 05 14.8** | **-0.2** |
| | baz=359,SNR=103 | | | | | | | |
| **SBC** | **Santa Barbara** | **2.98** | **202** | P | | **Pn** | **23 05 15.1** | **0.0** |
| | baz=21,SNR=30 | | | | | | | |
| **BEKR** | **Beckworth** | **3.06** | **330** | | | **Pn** | **23 05 15.8** | **-0.7** |
| BEKR | | | | IAML | | | 23 06 16.3 | |
| | comp=E,3µm,0.8s | | | | | | | |
| BEKR | | | | IAML | | | 23 06 24.5 | |
| | comp=N,2µm,0.9s | | | | | | | |
| **JRSC** | **Jasper Ridge** | **3.08** | **275** | | | **Pn** | **23 05 16.4** | **-0.1** |
| **BKS** | **Berkeley--Byer** | **3.13** | **283** | | | **Pn** | **23 05 18.2** | **+0.9** |
| **BBRC** | **Big Bear Solar** | **3.19** | **158** | P | | **Pn** | **23 05 17.3** | **-0.9** |
| | baz=338,SNR=6.5 | | | | | | | |
| BBRC | | | | Sg | | **Sg** | **23 06 11.5** | **+2.4** |
| | baz=338 | | | | | | | |
| **GMRC** | **Granite Mounta** | **3.29** | **137** | P | | **Pn** | **23 05 17.6** | **-1.9** |
| | baz=318,SNR=60 | | | | | | | |
| GMRC | | | | Sb | | **Sg** | **23 06 09.3** | **-3.1** |
| | baz=318 | | | | | | | |
| **BMN** | **Battle Mountai** | **3.33** | **15** | | | **Pn** | **23 05 19.3** | **-0.9** |
| BMN | | | | IAML | | | 23 06 16.1 | |
| | comp=E,1µm,1.8s | | | | | | | |
| **ORV** | **Oroville** | **3.38** | **314** | | | **Pn** | **23 05 20.5** | **-0.2** |
| ORV | | | | IAML | | | 23 06 18.9 | |
| | comp=N,2µm,1.1s | | | | | | | |
| **FMP** | **Fort Macarthur** | **3.50** | **179** | P | | **Pn** | **23 05 22.0** | **-0.4** |
| | baz=359 | | | | | | | |
| FMP | | | | Sb | | **Sb** | **23 06 15.4** | **+2.7** |
| | baz=359 | | | | | | | |
| **ICU** | **Indian Springs** | **3.56** | **90** | | | **Pn** | **23 05 22.1** | **-1.2** |
| **MNRC** | **McLaughlin Min** | **3.60** | **299** | | | **Pn** | **23 05 24.9** | **+1.0** |
| **ELS** | **Elsinore Mount** | **3.65** | **167** | | | **Pn** | **23 05 23.9** | **-0.6** |
| ELS | | | | IAML | | | 23 06 26.8 | |
| | comp=E,1µm,1.1s | | | | | | | |
| **MCCM** | **Marconi Confer** | **3.68** | **286** | | | **Pn** | **23 05 24.7** | **-0.1** |
| **MURC** | **Murrieta** | **3.74** | **165** | P | | **Pn** | **23 05 25.4** | **-0.3** |
| | baz=345,SNR=43 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **3.76** | **148** | P | | **Pn** | **23 05 25.0** | **-1.0** |
| | baz=329,SNR=217 | | | | | | | |
| BELC | | | | Sg | | **Sg** | **23 06 29.2** | **+1.7** |
| | baz=329 | | | | | | | |
| **CIS** | **Catalina Islan** | **3.81** | **180** | P | | **Pn** | **23 05 26.0** | **-0.6** |
| | baz=0.1,SNR=21 | | | | | | | |
| **PSUT** | **Pine Spring** | **3.81** | **69** | | | **Pn** | **23 05 25.7** | **-1.2** |
| PSUT | | | | IAML | | | 23 06 31.7 | |
| | comp=E,2µm,1.1s | | | | | | | |
| PSUT | | | | IAML | | | 23 06 41.3 | |
| | comp=N,2µm,1.2s | | | | | | | |
| **GDXM** | **Geysers** | **3.83** | **296** | Pn | | **Pn** | **23 05 26.8** | **-0.1** |
| GDXM | | | | IAML | | | 23 06 24.4 | |
| | comp=N,1µm,1.0s | | | | | | | |
| **NEE2** | **Needles Airpor** | **3.91** | **128** | P | | **Pn** | **23 05 27.0** | **-1.1** |
| | baz=310 | | | | | | | |
| NEE2 | | | | Sg | | **Sg** | **23 06 35.5** | **+3.0** |
| | baz=310 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.93** | **156** | Pn | | **Pn** | **23 05 27.6** | **-0.8** |
| | comp=N,7.3nm,0.3s,baz=339,slow=11,SNR=73 | | | | | | | |
| PFO | | | | Pg | | Pg | 23 05 34.9 | -7.2 |
| | comp=N,17nm,0.3s,baz=340,slow=13,SNR=18 | | | | | | | |
| PFO | | | | Lg | | Lg | 23 06 33.4 | |
| | comp=N,49nm,0.3s,baz=225,slow=13,SNR=9.3 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.93** | **156** | | | **Pn** | **23 05 26.9** | **-1.5** |
| PFO | | | | IAML | | | 23 06 39.0 | |
| | comp=N,2µm,2.0s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **3.93** | **156** | P | | **Pn** | **23 05 27.6** | **-0.8** |
| | baz=337,SNR=39 | | | | | | | |
| **FTR** | **Fort Ross** | **4.00** | **290** | | | **Pn** | **23 05 30.2** | **+1.0** |
| **CCUT** | **Cedar City** | **4.01** | **84** | Pn | | **Pn** | **23 05 28.5** | **-1.1** |
| CCUT | | | | IAML | | | 23 06 42.9 | |
| | comp=E,776nm,0.9s | | | | | | | |
| **IRM** | **Iron Mountain** | **4.04** | **138** | P | | **Pn** | **23 05 28.2** | **-1.6** |
| | baz=320,SNR=40 | | | | | | | |
| IRM | | | | Sb | | **Sb** | **23 06 30.9** | **+2.8** |
| | baz=320 | | | | | | | |
| **SNCC** | **San Nicolas Is** | **4.08** | **194** | P | | **Pn** | **23 05 28.1** | **-2.2** |
| | baz=13 | | | | | | | |
| SNCC | | | | S | | **Sn** | **23 06 16.4** | **-2.1** |
| | baz=13 | | | | | | | |
| **LCMT** | **Little Creek M** | **4.11** | **91** | Pn | | **Pn** | **23 05 30.0** | **-0.9** |
| **W13A** | **Hualapai Mount** | **4.21** | **119** | Pn | | **Pn** | **23 05 31.1** | **-1.3** |
| W13A | | | | IAML | | | 23 06 49.0 | |
| | comp=N,729nm,2.1s | | | | | | | |
| **SZCU** | **Shurtz Canyon** | **4.23** | **83** | Pn | | **Pn** | **23 05 31.8** | **-0.8** |
| **SCI2** | **San Clemente I** | **4.24** | **182** | Sb | | **Sb** | **23 06 35.2** | **+1.5** |
| | baz=1.6 | | | | | | | |
| **ELK** | **Elko** | **4.29** | **34** | Pn | | **Pn** | **23 05 33.4** | **0.0** |
| | comp=N,23nm,0.3s,baz=224,slow=12,SNR=244 | | | | | | | |
| ELK | | | | Pg | | Pg | 23 05 41.8 | -7.1 |
| | comp=N,32nm,0.3s,baz=232,slow=8.2,SNR=16 | | | | | | | |
| ELK | | | | Lg | | Lg | 23 06 41.3 | |
| | comp=N,58nm,0.3s,baz=105,slow=22,SNR=3.1 | | | | | | | |
| **BC3** | **Big Chuckawall** | **4.29** | **145** | P | | **Pn** | **23 05 31.8** | **-1.5** |
| | baz=327,SNR=65 | | | | | | | |
| **109C** | **Camp Elliot, M** | **4.45** | **166** | Pn | | **Pn** | **23 05 34.6** | **-0.8** |
| 109C | | | | IAML | | | 23 06 50.7 | |
| | comp=E,862nm,0.7s | | | | | | | |
| 109C | | | | IAML | | | 23 07 00.8 | |
| | comp=N,600nm,1.0s | | | | | | | |
| **109C** | **Camp Elliot, M** | **4.45** | **166** | P | | **Pn** | **23 05 33.9** | **-1.5** |
| | baz=346 | | | | | | | |
| 109C | | | | Sb | | **Sb** | **23 06 43.7** | **+3.9** |
| | baz=346 | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **4.51** | **129** | P | | **Pn** | **23 05 35.1** | **-1.2** |
| | baz=311,SNR=16 | | | | | | | |
| **MONP2** | **Monument Peak** | **4.61** | **159** | P | | **Pn** | **23 05 37.4** | **-0.4** |
| | baz=340,SNR=14 | | | | | | | |
| **BLYC** | **Blythe** | **4.68** | **137** | Pn | | **Pn** | **23 05 36.5** | **-2.1** |
| BLYC | | | | IAML | | | 23 07 01.0 | |
| | comp=E,834nm,0.8s | | | | | | | |
| BLYC | | | | IAML | | | 23 07 05.2 | |
| | comp=N,863nm,1.0s | | | | | | | |
| **BAR** | **Barrett** | **4.75** | **162** | Pn | | **Pn** | **23 05 37.6** | **-1.9** |
| BAR | | | | IAML | | | 23 07 04.4 | |
| | comp=E,631nm,0.7s | | | | | | | |
| BAR | | | | IAML | | | 23 07 13.3 | |
| | comp=N,476nm,0.8s | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **4.76** | **153** | P | | **Pn** | **23 05 38.0** | **-1.8** |
| | baz=334 | | | | | | | |
| SWSC | | | | Sb | | **Sb** | **23 06 53.4** | **+4.5** |
| | baz=334 | | | | | | | |
| **TCRU** | **Three Creeks R** | **4.89** | **72** | Pn | | **Pn** | **23 05 41.5** | **-0.2** |
| TCRU | | | | IAML | | | 23 06 21.2 | |
| | comp=N,684nm,1.1s | | | | | | | |
| TCRU | | | | IAML | | | 23 07 14.5 | |
| | comp=E,722nm,0.8s | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **4.93** | **157** | P | | **Pn** | **23 05 41.1** | **-1.0** |
| | baz=338,SNR=8.3 | | | | | | | |
| **U15A** | **North Rim** | **4.95** | **97** | Pn | | **Pn** | **23 05 42.0** | **-0.5** |
| **RMX** | **La Rumorosa** | **4.98** | **157** | Pn | | **Pn** | **23 05 42.1** | **-0.7** |
| RMX | | | | IAML | | | 23 07 21.9 | |
| | comp=E,534nm,1.8s | | | | | | | |
| **MTPU** | **Mount Pierson** | **4.99** | **79** | Pn | | **Pn** | **23 05 41.5** | **-1.6** |
| MTPU | | | | IAML | | | 23 07 10.9 | |
| | comp=E,466nm,1.9s | | | | | | | |
| MTPU | | | | IAML | | | 23 07 16.4 | |
| | comp=N,594nm,1.9s | | | | | | | |
| **YUH** | **Yuha Desert** | **4.99** | **155** | Pn | | **Pn** | **23 05 41.0** | **-1.8** |
| **N02D** | **Trinity Center** | **5.03** | **319** | P | | **Pn** | **23 05 42.0** | **-1.5** |
| | baz=137,SNR=8.2 | | | | | | | |
| N02D | | | | Sb | | **Sb** | **23 07 01.6** | **+4.9** |
| | baz=137 | | | | | | | |
| **MSU** | **Marysvale** | **5.08** | **73** | Pn | | **Pn** | **23 05 44.0** | **-0.2** |
| **GLA** | **Glamis** | **5.08** | **144** | Pn | | **Pn** | **23 05 41.8** | **-2.4** |
| GLA | | | | IAML | | | 23 07 30.2 | |
| | comp=N,627nm,2.0s | | | | | | | |
| **GLA** | **Glamis** | **5.08** | **144** | P | | **Pn** | **23 05 42.2** | **-1.9** |
| | baz=326,SNR=14 | | | | | | | |
| **CBX** | **Cerro Bola** | **5.10** | **163** | Pn | | **Pn** | **23 05 44.0** | **-0.4** |
| CBX | | | | IAML | | | 23 07 18.6 | |
| | comp=E,563nm,0.8s | | | | | | | |
| CBX | | | | IAML | | | 23 07 18.6 | |
| | comp=N,378nm,0.8s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **5.21** | **358** | Pn | | **Pn** | **23 05 45.6** | **-0.4** |
| **DUG** | **Dugway, Tooele** | **5.27** | **54** | P | | **Pn** | **23 05 46.1** | **-0.7** |
| | baz=237 | | | | | | | |
| **M04C** | **Macdoel** | **5.28** | **331** | P | | **Pn** | **23 05 45.7** | **-1.2** |
| | baz=149 | | | | | | | |
| **M02C** | **Callahan** | **5.42** | **322** | P | | **Pn** | **23 05 48.8** | **+0.1** |
| | baz=139 | | | | | | | |
| **Y14A** | **Wickenburg** | **5.47** | **125** | Pn | | **Pn** | **23 05 49.5** | **-0.1** |
| **BGU** | **Big Grassy Mou** | **5.57** | **47** | Pn | | **Pn** | **23 05 50.7** | **-0.3** |
| **YBH** | **Yreka Blue Hor** | **5.61** | **325** | Pn | | **Pn** | **23 05 53.5** | **+2.0** |
| | comp=N,2.1nm,0.3s,baz=92,slow=12,SNR=12 | | | | | | | |
| YBH | | | | Lg | | Lg | 23 07 21.9 | |
| | baz=86,slow=6.4,SNR=7.4 | | | | | | | |
| YBH | | | | LR | | LR | 23 08 18.6 | |
| | comp=N,1µm,20.1s,baz=152,slow=41 | | | | | | | |
| **L04D** | **Klamath Falls** | **5.83** | **330** | P | | **Pn** | **23 05 54.3** | **-0.2** |
| | baz=148 | | | | | | | |
| **113A** | **Mohawk Valley,** | **5.84** | **138** | Pn | | **Pn** | **23 05 51.9** | **-2.5** |
| **WUAZ** | **Wupatki** | **5.91** | **105** | P | | **Pn** | **23 05 54.4** | **-1.2** |
| | baz=289 | | | | | | | |
| **K04D** | **Chiloquin, OR** | **5.98** | **335** | P | | **Pn** | **23 05 56.8** | **+0.2** |
| | baz=154 | | | | | | | |
| **L02E** | **Cave Junction** | **6.36** | **322** | P | | **Pn** | **23 06 00.1** | **-1.6** |
| | baz=139 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **6.43** | **341** | P | | **Pn** | **23 06 02.7** | **-0.1** |
| | baz=160 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **6.65** | **336** | P | | **Pn** | **23 06 05.3** | **-0.5** |
| | baz=154 | | | | | | | |
| **214A** | **Organ Pipe Nat** | **6.98** | **137** | P | | **Pn** | **23 06 08.3** | **-1.9** |
| | baz=320 | | | | | | | |
| **HLID** | **Hailey** | **7.02** | **24** | P | | **Pn** | **23 06 11.8** | **+1.0** |
| | baz=207 | | | | | | | |
| **I04A** | **Tendick Farm,** | **7.24** | **336** | P | | **Pn** | **23 06 13.7** | **-0.2** |
| | baz=154 | | | | | | | |
| **I03D** | **Drain, OR** | **7.49** | **331** | P | | **Pn** | **23 06 16.9** | **-0.2** |
| | baz=148,SNR=11 | | | | | | | |
| **MVCO** | **Mesa Verde** | **7.89** | **87** | P | | **Pn** | **23 06 21.7** | **-1.1** |
| | baz=273 | | | | | | | |
| **TUC** | **Tucson** | **7.94** | **126** | Pn | | **Pn** | **23 06 23.1** | **-0.4** |
| **TUC** | **Tucson** | **7.94** | **126** | P | | **Pn** | **23 06 23.2** | **-0.3** |
| | baz=310 | | | | | | | |
| **H04D** | **Lebanon** | **8.00** | **337** | P | | **Pn** | **23 06 25.3** | **+1.2** |
| | baz=154 | | | | | | | |
| **O20A** | **White River Ci** | **8.45** | **67** | P | | **Pn** | **23 06 32.0** | **+1.5** |
| | baz=253 | | | | | | | |
| **PDAR** | **Pinedale Array** | **8.74** | **48** | Pn | | **Pn** | **23 06 37.9** | **+3.3** |
| | comp=N,0.8nm,0.3s,baz=245,slow=13,SNR=11 | | | | | | | |
| PDAR | | | | Lg | | Lg | 23 09 00.1 | |
| | comp=N,0.7nm,0.3s,baz=228,slow=25,SNR=1.9 | | | | | | | |
| PDAR | | | | LR | | LR | 23 10 37.6 | |
| | comp=N,334nm,20.8s,baz=244,slow=43 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **9.20** | **83** | P | | **Pn** | **23 06 40.9** | **0.0** |
| | baz=270 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **9.78** | **29** | P | | **Pn** | **23 06 49.8** | **+1.1** |
| | baz=214 | | | | | | | |
| **E04D** | **Cinebar** | **9.83** | **343** | P | | **Pn** | **23 06 48.7** | **-0.5** |
| | baz=160 | | | | | | | |
| **121A** | **Cookes Peak, D** | **9.88** | **115** | P | | **Pn** | **23 06 49.3** | **-0.8** |
| | baz=301 | | | | | | | |
| **ANMO** | **Albuquerque** | **9.92** | **100** | Pn | | **Pn** | **23 06 52.0** | **+1.4** |
| | comp=N,0.1nm,0.3s,baz=288,slow=13,SNR=3.0 | | | | | | | |
| ANMO | | | | Lg | | Lg | 23 09 36.4 | |
| | comp=N,0.2nm,0.3s,baz=214,slow=21,SNR=5.6 | | | | | | | |
| ANMO | | | | LR | | LR | 23 11 07.2 | |
| | comp=N,474nm,20.7s,baz=288,slow=41 | | | | | | | |
| **MSO** | **Missoula** | **10.15** | **18** | P | | **Pn** | **23 06 57.1** | **+3.4** |
| | baz=200 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **10.25** | **83** | P | | **Pn** | **23 06 55.7** | **+0.3** |
| | baz=271 | | | | | | | |
| **ISCO** | **Idaho Springs** | **10.33** | **72** | P | | **Pn** | **23 06 58.1** | **+1.7** |
| | baz=260 | | | | | | | |
| **N23A** | **Red Feather La** | **10.34** | **65** | Pn | | **Pn** | **23 06 55.6** | **-0.9** |
| **N23A** | **Red Feather La** | **10.34** | **65** | P | | **Pn** | **23 06 57.0** | **+0.5** |
| | baz=253 | | | | | | | |
| **RLMT** | **Red Lodge** | **10.46** | **38** | P | | **Pn** | **23 06 57.1** | **-0.9** |
| | baz=224 | | | | | | | |
| **Q24A** | **Divide** | **10.58** | **77** | P | | **Pn** | **23 06 59.3** | **-0.5** |
| | baz=265 | | | | | | | |
| **K22A** | **Casper** | **10.59** | **56** | P | | **Pn** | **23 07 01.8** | **+2.0** |
| | baz=243 | | | | | | | |
| **NEW** | **Newport** | **11.07** | **4** | Pn | | **Pn** | **23 07 08.3** | **+2.1** |
| | comp=N,0.1nm,0.3s,baz=156,slow=9.3,SNR=3.2 | | | | | | | |
| NEW | | | | Lg | | Lg | 23 10 15.9 | |
| | comp=N,0.1nm,0.3s,baz=72,slow=8.6,SNR=1.7 | | | | | | | |
| NEW | | | | LR | | LR | 23 11 24.7 | |
| | comp=N,358nm,20.8s,baz=191,slow=38 | | | | | | | |
| **NEW** | **Newport** | **11.07** | **4** | Pn | | **Pn** | **23 07 03.1** | **-3.1** |
| **NEW** | **Newport** | **11.07** | **4** | P | | **Pn** | **23 07 06.7** | **+0.4** |
| | baz=185 | | | | | | | |
| **EGMT** | **Eagleton** | **12.52** | **28** | P | | **Pn** | **23 07 26.4** | **+0.3** |
| | baz=214 | | | | | | | |
| **AMTX** | **Amarillo** | **13.72** | **95** | P | | **Pn** | **23 07 43.7** | **+1.2** |
| | baz=285 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **14.60** | **118** | P | | **P** | **23 07 58.1** | **-3.1** |
| **TX32** | **Lajitas Array** | **14.60** | **118** | P | | **P** | **23 07 58.1** | **-3.1** |
| **TXAR** | **Lajitas Array** | **14.60** | **118** | Pn | | **P** | **23 07 58.3** | **-3.0** |
| | comp=N,0.1nm,0.3s,baz=312,slow=10.0,SNR=11 | | | | | | | |
| TXAR | | | | Lg | | Lg | 23 12 00.4 | |
| | comp=N,0.0nm,0.3s,baz=311,slow=25,SNR=1.6 | | | | | | | |
| TXAR | | | | LR | | LR | 23 12 57.3 | |
| | comp=N,358nm,21.7s,baz=298,slow=35 | | | | | | | |
| **TXAR** | **Lajitas Array** | **14.60** | **118** | P | | **P** | **23 07 58.1** | **-3.1** |
| **LPIG** | **La Paz** | **14.80** | **150** | LR | | LR | 23 13 37.0 | |
| | comp=N,426nm,18.5s,baz=344,slow=37 | | | | | | | |
| **K31A** | **O'Neill** | **15.98** | **64** | P | | **Pn** | **23 08 13.4** | **+0.5** |
| K31A | | | | IAmb | | IAmb | 23 08 24.2 | |
| | comp=Z,104nm,1.2s | | | | | | | |
| **SUSD** | **Miller** | **16.36** | **58** | P | | **P** | **23 08 18.6** | **-2.0** |
| SUSD | | | | IAmb | | IAmb | 23 08 30.6 | |
| | comp=Z,83nm,1.4s | | | | | | | |
| **EDM** | **Edmonton** | **16.38** | **11** | P | | **P** | **23 08 19.5** | **-1.3** |
| **BBB** | **Bella Bella** | **16.46** | **338** | LR | | LR | 23 14 42.7 | |
| | comp=Z,756nm,18.9s,baz=152,slow=37 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **17.77** | **62** | P | | **Pn** | **23 08 33.8** | **-1.5** |
| | baz=256 | | | | | | | |
| **WHTX** | **Lake Whitney,** | **17.99** | **101** | P | | **Pn** | **23 08 36.1** | **-2.1** |
| | baz=293 | | | | | | | |
| **AGMN** | **Agassiz Nation** | **19.82** | **49** | P | | **Pn** | **23 08 58.7** | **-1.5** |
| | baz=244 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **20.73** | **44** | P | | **P** | **23 09 08.2** | **-0.4** |
| | comp=Z,2.5nm,0.8s,baz=235,slow=12,SNR=2.3 | | | | | | | |
| ULM | | | | LR | | LR | 23 17 44.3 | |
| | comp=Z,348nm,18.3s,baz=238,slow=39 | | | | | | | |
| **FFC** | **Flin Flon** | **20.80** | **27** | P | | **P** | **23 09 08.5** | **-0.8** |
| **DLBC** | **Dease Lake** | **22.55** | **344** | P | | **P** | **23 09 30.0** | **+1.8** |
| | comp=Z,4.0nm,1.0s,baz=230,slow=5.7,SNR=4.9 | | | | | | | |
| DLBC | | | | LR | | LR | 23 18 54.1 | |
| | comp=Z,937nm,18.2s,baz=161,slow=38 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **25.41** | **4** | P | | **P** | **23 09 55.6** | **+0.2** |
| | comp=Z,0.2nm,0.6s,baz=182,slow=9.8,SNR=5.3 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **26.64** | **347** | P | | **P** | **23 10 07.6** | **+0.9** |
| | baz=157 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **27.80** | **83** | P | | **P** | **23 10 17.5** | **+0.1** |
| | comp=Z,6.1nm,1.1s,baz=231,slow=6.5,SNR=1.9 | | | | | | | |
| TKL | | | | LR | | LR | 23 21 59.9 | |
| | comp=Z,321nm,20.3s,baz=270,slow=38 | | | | | | | |
| **CMIG** | **Matias Romero** | **28.83** | **128** | LR | | LR | 23 23 02.9 | |
| | comp=Z,406nm,18.2s,baz=287,slow=39 | | | | | | | |
| **SADO** | **Sadowa** | **30.33** | **63** | LR | | LR | 23 23 12.8 | |
| | comp=Z,227nm,18.0s,baz=211,slow=37 | | | | | | | |
| **INK** | **Inuvik** | **32.26** | **350** | P | | **P** | **23 10 57.1** | **+0.6** |
| | comp=Z,3.7nm,1.1s,baz=165,slow=6.9,SNR=3.5 | | | | | | | |
| INK | | | | LR | | LR | 23 24 52.8 | |
| | comp=Z,463nm,19.9s,baz=154,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **32.34** | **338** | P | | **P** | **23 10 58.4** | **+1.1** |
| | comp=Z,1.3nm,1.0s,baz=152,slow=7.4,SNR=9.3 | | | | | | | |
| **SCHQ** | **Schefferville** | **38.88** | **46** | P | | **P** | **23 11 54.0** | **+0.5** |
| | comp=Z,2.7nm,0.9s,baz=272,slow=12,SNR=2.3 | | | | | | | |
| SCHQ | | | | LR | | LR | 23 27 04.6 | |
| | comp=Z,243nm,19.5s,baz=272,slow=35 | | | | | | | |
| **RES** | **Resolute Bay** | **39.17** | **10** | LR | | LR | 23 28 04.2 | |
| | comp=Z,312nm,20.5s,baz=278,slow=36 | | | | | | | |
| **FRB** | **Frobisher Bay** | **39.78** | **32** | LR | | LR | 23 27 36.5 | |
| | comp=Z,401nm,18.4s,baz=251,slow=35 | | | | | | | |
| **JTS** | **Las Juntas de** | **40.31** | **123** | LR | | LR | 23 30 02.4 | |
| | comp=Z,326nm,20.3s,baz=5.5,slow=38 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **48.41** | **311** | LR | | LR | 23 32 37.1 | |
| | comp=Z,77nm,18.1s,baz=290,slow=35 | | | | | | | |
| **SJG** | **San Juan** | **49.38** | **98** | LR | | LR | 23 36 16.1 | |
| | comp=Z,142nm,21.2s,baz=268,slow=39 | | | | | | | |
| **SDV** | **Santo Domingo** | **51.48** | **111** | LR | | LR | 23 37 13.6 | |
| | comp=Z,118nm,20.1s,baz=291,slow=38 | | | | | | | |
| **ROSC** | **El Rosal** | **51.53** | **118** | LR | | LR | 23 38 31.3 | |
| | comp=Z,168nm,19.1s,baz=55,slow=40 | | | | | | | |
| **SUMG** | **Summit** | **51.95** | **22** | *i* P | | **P** | **23 13 39.0** | **+1.7** |
| **PETK** | **Petropavlovsk-** | **57.89** | **315** | P | | **P** | **23 14 21.9** | **+1.8** |
| | comp=Z,3.9nm,0.9s,baz=61,slow=12,SNR=2.6 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.89** | **315** | P | | **P** | **23 14 19.2** | **-0.9** |
| **JMIC** | **Jan Mayen** | **61.31** | **21** | LR | | LR | 23 40 22.8 | |
| | comp=Z,110nm,18.1s,baz=100,slow=35 | | | | | | | |
| **TIXI** | **Tiksi** | **61.73** | **341** | LR | | LR | 23 43 16.0 | |
| | comp=Z,71nm,20.1s,baz=276,slow=38 | | | | | | | |
| **PTGA** | **Pitinga** | **65.77** | **111** | LR | | LR | 23 46 43.0 | |
| | comp=Z,85nm,20.1s,baz=340,slow=39 | | | | | | | |
| **MDP** | **Montagnes des** | **67.67** | **101** | LR | | LR | 23 48 26.4 | |
| | comp=Z,41nm,21.2s,baz=270,slow=39 | | | | | | | |
| **NRIK** | **Norilsk** | **72.04** | **351** | P | | **P** | **23 15 54.2** | **+2.3** |
| | comp=Z,1.5nm,0.7s,baz=337,slow=4.8,SNR=3.6 | | | | | | | |
| NRIK | | | | LR | | LR | 23 50 58.6 | |
| | comp=Z,51nm,18.2s,baz=353,slow=39 | | | | | | | |
| **NOA** | **NORSAR Array B** | **73.83** | **23** | P | | **P** | **23 16 04.7** | **+2.0** |
| | comp=Z,1.9nm,0.9s,baz=318,slow=5.9,SNR=3.0 | | | | | | | |
| **KLR** | **Kul'dur** | **73.92** | **320

TURI eS Sn 23 08 17.7 +2.2
TURI IAML 23 08 20.3
comp=E,3µm,0.2s
**AGT Agartala 3.08 220** eP Pn **23 07 46.9 +1.9**
AGT eS Sn **23 08 23.4 +2.8**
AGT IAML 23 08 23.8
comp=E,720nm,0.6s
AGT IAML 23 08 25.6
comp=N,640nm,0.4s
**BELO BELONIA 3.50 211** eP Pn **23 07 51.8 +1.1**
BELO eS Sn **23 08 30.8 0.0**
**BRDH Bariadhala 3.92 205** P Pn **23 07 57.6 +1.1**
comp=N,0.6nm,0.3s,baz=360,slow=24,SNR=17
BRDH S Sn **23 08 40.9 -0.4**
comp=N,0.4nm,0.3s,baz=180,slow=24,SNR=23
**LSA Lhasa 3.98 330** Pn Pn **23 08 02.0 +4.3**
LSA Pg 23 08 06.8
LSA Sn Sn **23 08 46.8 +3.5**
LSA Sg 23 08 54.8
LSA smax smax
comp=N,140nm,1.3s
LSA smax smax
comp=E,130nm,1.4s
**GTK Tadong 4.44 285** eP Pn **23 08 06.0 +2.2**
GTK eS Sn **23 08 55.2 +0.9**
**TAPN Taplejung 5.22 283** ePn Pn **23 08 16.6 +1.9**
TAPN eSn Sn **23 09 13.9 0.0**
comp=E,460nm,0.6s
**ODAN Odare 5.44 278** ePn Pn **23 08 19.9 +2.3**
ODAN eSn Sn **23 09 19.1 0.0**
comp=E,519nm,0.4s
**RAMN Ramite 6.15 278** ePn Pn **23 08 29.9 +2.5**
RAMN eSn Sn **23 09 36.5 -0.1**
comp=E,54nm,0.3s
**JIRN Jiri 6.61 284** ePn Pn **23 08 35.7 +1.9**
JIRN eSn Sn **23 09 46.8 -1.3**
comp=E,176nm,0.4s
**GUN Gumba 6.92 285** ePn Pn **23 08 39.9 +1.7**
GUN eSn Sn **23 09 54.2 -1.7**
comp=E,144nm,0.4s
**PKI Pulchoki 7.27 282** ePn Pn **23 08 44.5 +1.5**
**PKIN Phulchoki 7.29 282** ePn Pn **23 08 44.5 +1.4**
PKIN eSn Sn **23 10 03.1 -1.6**
comp=E,83nm,0.3s
**KKN Kakani 7.42 284** ePn Pn **23 08 46.8 +1.9**
KKN eSn Sn **23 10 06.3 -1.7**
comp=E,59nm,0.2s
**PZH PanZhiHua 7.46 86** Pn Pn **23 08 45.5 +0.1**
**DMN Daman 7.55 282** ePn Pn **23 08 48.0 +1.4**
DMN eSn Sn **23 10 09.1 -2.0**
comp=E,121nm,0.5s
**GKN Gorkha 8.02 284** ePn Pn **23 08 54.3 +1.3**
GKN eSn Sn **23 10 20.6 -2.0**
comp=E,142nm,0.3s
**KMI Kunming 8.48 96** ⇑P Pn **23 09 01.4 +2.0**
KMI pmax pmax
comp=E,35nm,0.9s
**DANN Dangsing 8.85 286** ePn Pn **23 09 04.0 -0.5**
DANN eSn Sn **23 10 39.7 -3.4**
**KOLN Koldanda 8.89 282** ePn Pn **23 09 06.2 +1.2**
KOLN eSn Sn **23 10 41.8 -2.3**
comp=E,77nm,0.3s
**CHTO Chiang Mai 8.99 144** P Pn **23 09 08.1 +1.8**
**BWNR Bhubaneshwar 9.18 231** eP Pn **23 09 08.7 -0.1**
BWNR eS Sn 23 10 44.7 -6.2
**CMAR Chiang Mai Arr 9.29 146** P Pn **23 09 11.6 +1.2**
comp=E,0.1nm,0.3s,baz=320,slow=14,SNR=4.9
CMAR LR LR 23 13 33.3
comp=E,80nm,20.7s,baz=340,slow=43
**PYUN Piuthan 9.47 284** ePn Pn **23 09 12.5 -0.5**
PYUN eSn Sn **23 10 55.2 -3.2**
**GOMU GeErMu 9.98 6** P Pn **23 09 20.6 +0.5**
GOMU S Sn **23 11 02.6 -8.4**
GOMU smax smax
comp=E,10.0nm,0.9s
GOMU smax smax
comp=E,9.0nm,0.8s
**CD2 Chengdu 10.19 61** P Pn **23 09 24.3 +1.6**
CD2 pmax pmax
comp=E,10.0nm,0.8s
**ALBI Allahabad 10.51 267** eP Pn **23 09 27.2 +0.2**
ALBI eS Sn 23 11 16.6 -7.0
**RAGD RAYAGADA 11.54 235** eP Pn **23 09 40.9 -0.3**
**CHLP Challavanipeta 11.60 230** eP Pn **23 09 42.3 +0.4**
**LGTI Lohaghat 12.09 288**⇑eP Pn **23 09 49.9 +1.4**
LGTI eS Sn **23 11 57.0 -5.1**
**PTH Pithoragarh 12.13 289** eP Pn **23 09 48.2 -1.2**
PTH eS Sn 23 11 56.3 -7.3
**JBP Jabalpur 12.60 259** eP Pn **23 09 56.9 +1.3**
**LZH Lanzhou 13.24 40** ⇑P Pn **23 10 03.6 -0.9**
LZH pP P 23 10 07.8 -6.1
LZH sP 23 10 11.5
LZH pmax pmax
comp=E,24nm,1.4s
LZH LR LR
comp=E,160nm,10.8s
LZH LR LR
comp=E,200nm,11.9s
LZH LR LR
comp=E,190nm,11.4s
**JHNI Jhansi 13.43 270** eP Pn 23 10 02.3 -4.6
**PVM Polavaram 14.15 233** eP Pn **23 10 17.1 +0.2**
**GTA Gaotai 14.17 21** ⇑P Pn **23 10 14.8 -2.3**
GTA pP P 23 10 19.8 -4.3
GTA sP 23 10 22.3
GTA pmax pmax
comp=E,4.0nm,1.2s
GTA pmax pmax
comp=E,86nm,4.0s
GTA LR LR
comp=E,120nm,14.5s
GTA LR LR
comp=E,150nm,15.6s
GTA LR LR
comp=E,180nm,16.0s
**ENH Enshi 14.71 71** Pn Pn **23 10 23.8 -0.6**
**RPR Rampur 14.98 243** eP Pn **23 10 26.2 -1.8**
**MYLAV Mylavaram 15.20 234** eP Pn **23 10 31.6 +0.7**
**XAN Xi'an 15.47 56** P Pn **23 10 31.3 -3.2**
XAN pP P 23 10 36.4 -2.2
XAN pmax pmax
comp=E,18nm,0.9s
**SRSP Sriramsagar 15.71 245** eP Pn **23 10 36.1 -1.5**
**AKL Akola 16.03 253** eP Pn **23 10 40.4 -1.4**
**CUPL Choutuppal 16.14 239** eP Pn **23 10 43.5 +0.3**
**ADKI Addanki 16.27 233** eP Pn **23 10 46.2 +1.4**
**NJS Nagarjunasagar 16.30 236** eP Pn **23 10 44.5 -0.6**
**HYBB Hyderabad (bro 16.36 240** eP Pn **23 10 45.9 -0.1**
**THN Thein Dam 16.61 296** eP Pn **23 10 46.0 -3.0**
**AJM Ajmer 16.84 275** eP Pn **23 10 51.1 -0.8**
**SRLM Srisailam 16.89 236** eP Pn **23 10 51.4 -1.5**
**RCLA Racherla 17.26 234** eP Pn **23 10 58.0 +0.8**
**KLRI Killari 17.57 246** eP Pn **23 11 00.2 -0.9**
**SKHT Srikalahasti 17.90 229** eP Pn **23 11 06.4 +1.2**
**WMQ Urumqi 18.13 347** eP P **23 11 11.0 +3.1**
WMQ sP pP 23 11 16.4 -0.8
WMQ pmax pmax
comp=E,23nm,0.9s
**LYN LuoYang 18.37 59** eP P **23 11 08.3 -2.2**
LYN pmax pmax
comp=E,10.0nm,1.1s
**URV Uravakonda 18.84 236** eP P **23 11 15.7 -0.1**
**WHN Wuhan 18.89 72** ⇑P P **23 11 16.6 -0.7**
**KSH Kashi 19.69 316** P Pn **23 11 28.3 +1.5**
KSH pP pP 23 11 31.8 -2.8
KSH sP sP 23 11 34.9 -4.1
KSH PP PnPn **23 11 45.6 +4.8**
KSH pmax pmax
comp=E,12nm,0.6s
**BTO Baotou 19.86 40** eP P **23 11 26.8 -0.2**
**HHC Hu-ho-hao-te 20.92 41** eP Pn 23 11 40.9 -0.3
HHC pmax pmax
comp=E,16nm,1.1s
HHC pmax pmax
comp=E,110nm,5.0s
**HNS HongShan 21.17 53** ⇑P P **23 11 41.4 +0.3**
HNS pmax pmax
comp=E,10.0nm,1.0s
**TKM2 Tokmak 2 22.10 323** *i* P P **23 11 52.4 +1.2**
TKM2 pmax pmax
comp=E,18nm,0.9s
**MK31 Makanchi Array 22.32 340** *i* P P **23 11 53.8 +0.5**
MK31 pmax pmax
comp=Z,8.0nm,0.5s

**MK31 Makanchi Array 22.32 340** P P **23 11 53.9 +0.6**
**MKAR Makanchi Array 22.32 340** P P **23 11 54.3 +1.0**
comp=Z,11nm,0.5s,baz=144,slow=13,SNR=253
MKAR PcP PcP **23 15 47.7 -0.3**
comp=Z,0.2nm,0.5s,baz=214,slow=1.6,SNR=2.6
**MKAR Makanchi Array 22.32 340** P P **23 11 53.5 +0.1**
**MAKZ Makanchi 22.43 339** P P **23 11 54.4 -0.1**
MAKZ pmax pmax
comp=Z,14nm,0.7s
**MAKZ Makanchi 22.43 339** P P **23 11 54.4 -0.1**
MAKZ IAmb IAmb 23 11 58.0
comp=Z,14nm,0.7s
**PALK Pallekele 22.43 215** LR LR 23 23 49.9
comp=Z,29nm,18.4s,baz=133,slow=45
**AAK Ala-Archa 22.52 321** P P **23 11 56.8 +1.1**
comp=Z,3.4nm,0.7s,baz=151,slow=7.0,SNR=12
**AAK Ala-Archa 22.52 321** *eP* P **23 11 56.0 +0.3**
AAK pmax pmax
comp=Z,8.0nm,0.9s
**AAK Ala-Archa 22.52 321** P P **23 11 55.8 +0.1**
**KBL Kabul 22.55 297** P P **23 11 56.5 +0.3**
KBL pmax pmax
comp=Z,22nm,1.0s
**KBL Kabul 22.55 297** P P **23 11 56.5 +0.3**
KBL IAmb IAmb 23 12 03.7
comp=Z,22nm,0.9s
**NJ2 Nanjing 22.92 69** *eP* P **23 12 00.1 +0.3**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**SONM Songino Array 23.83 22** P P **23 12 10.2 +1.5**
comp=Z,0.9nm,0.8s,baz=207,slow=9.3,SNR=6.6
**SONM Songino Array 23.83 22** P P **23 12 10.1 +1.4**
**DGZ Jazzator, Alta 23.86 350** *i* P P **23 12 10.0 +1.0**
DGZ pmax pmax
comp=Z,7.0nm,0.8s
**ULN Ulaanbaatar 24.08 23** *i* P P **23 12 11.9 +0.8**
ULN pmax pmax
comp=Z,3.0nm,0.9s
**ULN Ulaanbaatar 24.08 23** P P **23 12 11.0 -0.1**
**KKAR Karatay Array 25.12 318** P P **23 12 20.5 0.0**
**KKAR Karatay Array 25.12 318** P P **23 12 20.5 0.0**
**ZAK Zakamensk 25.25 15** *eP* P **23 12 22.9 +1.3**
ZAK pmax pmax
comp=Z,5.0nm,1.4s
ZAK pmax pmax
comp=Z,4.0nm,1.4s
**XLT XiLinHaoTe 25.43 40** *eP* P **23 12 25.4 +2.1**
XLT pP pP 23 12 29.8 -3.7
XLT sP sP 23 12 33.6 -4.2
XLT pmax pmax
comp=Z,4.0nm,1.1s
XLT pmax pmax
comp=Z,130nm,4.9s
**KURBB Kurchatov Arra 26.88 339** P P **23 12 37.2 +1.0**
comp=Z,4.9nm,0.8s,baz=154,slow=10.0,SNR=17
KURBB PcP PcP **23 15 57.4 -0.4**
comp=Z,0.2nm,0.4s,baz=149,slow=2.6,SNR=2.3
**KURK Kurchatov 26.93 339** *i* P P **23 12 37.3 +0.7**
KURK pmax pmax
comp=Z,8.0nm,0.9s
**KURK Kurchatov 26.93 339** P P **23 12 37.4 +0.8**
**HRA Herat 28.03 294** P P **23 12 46.9 0.0**
**ZAA0 Zalesovo Array 28.39 349** P P **23 12 50.3 +0.6**
**ZALV Zalesovo Beam 28.39 349** P P **23 12 51.2 +1.5**
comp=Z,1.5nm,0.6s,baz=168,slow=7.6,SNR=9.3
**ZALV Zalesovo Beam 28.39 349** *i* P P **23 12 51.2 +1.5**
ZALV pmax pmax
comp=Z,1.0nm,0.6s
**ZALV Zalesovo Beam 28.39 349** P P **23 12 50.0 +0.4**
**HIA Hailar 30.71 35** *i* P P **23 13 10.8 +0.4**
HIA pmax pmax
comp=Z,10.0nm,2.1s
**JOW Kunigami 31.12 81** LR LR 23 25 30.2
comp=Z,45nm,18.1s,baz=42,slow=36
**KSRS Korea Array 31.20 60** LR LR 23 27 27.0
comp=Z,52nm,19.3s,baz=205,slow=39
**ABKAR Akbulak array 34.60 320** P P **23 13 45.8 +1.4**
**ARU Arti 39.17 330** P P **23 14 23.6 +0.5**
**GROC Groznyy 42.04 306** *eP* P **23 14 47.5 +0.5**
GROC *e* 23 16 22.4
GROC *e* 23 16 45.2
GROC pmax pmax
comp=Z,37nm,1.1s
**BELG Belogornoye 43.00 320** P P **23 14 55.1 +0.5**
comp=Z,5.5nm,0.5s,baz=60,slow=8.1,SNR=7.9
**BELG Belogornoye 43.00 320** *i* P P **23 14 54.8 +0.2**
BELG pmax pmax
comp=Z,2.0nm,0.8s
**NRIK Noril'sk 43.25 357** P P **23 14 57.1 +0.8**
comp=Z,2.5nm,0.6s,baz=157,slow=4.9,SNR=4.9
**NRIK Noril'sk 43.25 357** *i* P P **23 14 56.6 +0.2**
NRIK pmax pmax
comp=Z,4.0nm,0.9s
**NRIK Noril'sk 43.25 357** P P **23 14 57.2 +0.8**
**RAYN Ar Rayn 43.37 277** P P **23 14 58.6 +0.5**
RAYN pmax pmax
comp=Z,2.0nm,0.9s
**RAYN Ar Rayn 43.37 277** P P **23 14 58.5 +0.5**
**ZEI Tsey 43.37 305** *eP* P **23 14 59.1 +1.1**
ZEI pmax pmax
comp=Z,14nm,1.0s
**ONI Oni 43.68 305** P P **23 15 03.4 +3.0**
ONI pmax pmax
comp=Z,9.0nm,0.8s
**KBZ Khabaz 44.20 307** P P **23 15 04.9 +0.5**
comp=Z,1.7nm,0.9s,baz=117,slow=5.8,SNR=7.7
**KBZ Khabaz 44.20 307** *i* P P **23 15 03.2 -1.2**
KBZ pmax pmax
comp=Z,10.0nm,2.3s
**GOF Gofitskoye 44.25 309**⇑*eP* P **23 15 05.6 +0.8**
GOF pmax pmax
comp=Z,16nm,0.8s
**NEY Neytrino 44.28 306** *i* P P **23 15 05.8 +0.5**
NEY pmax pmax
comp=Z,5.0nm,0.8s
**KVAR Kislovodsk Arr 44.37 307** P P **23 15 07.6 +1.7**
comp=Z,2.7nm,0.8s,baz=14,slow=4.2,SNR=2.8
**SHA1 Shidzhatmaz 44.37 307** *i* P P **23 15 05.6 -0.5**
**KIV Kislovodsk 44.37 307** *eP* P **23 15 06.5 +0.5**
KIV pmax pmax
comp=Z,12nm,1.1s
KIV MLR MLR
comp=Z,99nm,16.0s
**KIV Kislovodsk 44.37 307** P P **23 15 07.9 +1.9**
KIV IAmb IAmb 23 15 08.9
comp=Z,8.8nm,0.9s
**KIRV Kirov 44.51 329** *i* P P **23 15 05.3 -1.3**
**VRH Novokhopyorsk 46.20 317** *eP* P **23 15 19.3 -0.9**
VRH pmax pmax
comp=Z,9.0nm,0.9s
**LPSR Galich'ya Gora 48.18 318** *eP* P **23 15 35.0 -0.6**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**TOKA Tokat 48.84 302** P P **23 15 43.0 +2.0**
TOKA IAmb IAmb 23 15 43.6
comp=Z,8.3nm,0.6s
**BNN Bunyan 49.40 300** P P **23 15 47.1 +1.8**
**TIXI Tiksi 49.53 14** *i* P P **23 15 44.9 -0.7**
TIXI pmax pmax
comp=Z,3.0nm,0.8s
**TIXI Tiksi 49.53 14** P P **23 15 46.1 +0.5**
TIXI IAmb IAmb 23 15 46.5
comp=Z,3.8nm,0.5s
**SNOP Sinop 49.77 304** P P **23 15 48.9 +1.0**
**KLMR Klimovskoe 50.01 329** *eP* P **23 15 48.0 -1.4**
KLMR pmax pmax
comp=Z,27nm,1.2s
**KLMR Klimovskoe 50.01 329** *eP* P **23 15 48.1 -1.4**
KLMR AMP 23 15 51.6
comp=Z,27nm,1.2s
**OBN Obninsk 50.04 321** *i* P P **23 15 49.7 -0.1**
OBN *i* 23 17 42.2
OBN pmax pmax
comp=Z,9.0nm,1.7s
**BZK Bozkurt 50.67 304** ⇑P P **23 15 55.7 +1.0**
**BZK Bozkurt 50.67 304** P P **23 15 55.8 +1.0**
**ILGA Ilgaz 50.92 303** P P **23 15 58.5 +1.5**
**BR131 Keskin Array S 51.05 301** P P **23 15 59.0 +1.1**
BR131 pmax pmax
comp=Z,8.0nm,0.9s
**BR131 Keskin Array S 51.05 301** P P **23 15 59.0 +1.1**
BR131 IAmb IAmb 23 16 00.2
comp=Z,8.2nm,0.8s
**BRTR Keskin Array B 51.05 301** P P **23 15 58.7 +0.8**
comp=Z,3.3nm,0.7s,baz=105,slow=7.5,SNR=9.8

**BRTR Keskin Array B 51.05 301** P P **23 15 58.3 +0.4**
**ANTO Ankara 51.69 301** P P **23 16 04.3 +1.7**
ANTO pmax pmax
comp=Z,10.0nm,0.6s
**ANTO Ankara 51.69 301** P P **23 16 04.3 +1.7**
**BORA Eskisehir 53.48 301** P P **23 16 16.4 +0.6**
**PURM Purcari 53.53 310** ⇑P P **23 16 16.4 +0.5**
**AKASG Malin Array Be 53.98 315** P P **23 16 18.9 -0.2**
comp=Z,3.0nm,0.5s,baz=80,slow=6.3,SNR=30
**AKASG Malin Array Be 53.98 315** P P **23 16 18.9 -0.2**
AKASG pmax pmax
comp=Z,1.0nm,0.9s
**AKASG Malin Array Be 53.98 315** P P **23 16 18.9 -0.2**
**AKBB Malin Array Si 53.98 315** P P **23 16 19.2 0.0**
AKBB pmax pmax
comp=Z,9.0nm,0.8s
**AKBB Malin Array Si 53.98 315** P P **23 16 19.1 0.0**
AKBB IAmb IAmb 23 16 19.7
comp=Z,8.9nm,0.8s
**MILM Milestii Mici 54.25 310** ⇓P P **23 16 21.1 -0.1**
**MILM Milestii Mici 54.25 310** ⇓P P **23 16 21.1 -0.1**
**ELL Elmali 54.28 298** P P **23 16 22.6 +0.8**
ELL pmax pmax
comp=Z,91nm,0.7s
**ELL Elmali 54.28 298** P P **23 16 22.6 +0.8**
**SORM Soroca 54.53 312** ⇓P P **23 16 23.2 0.0**
**SORM Soroca 54.53 312** ⇓P P **23 16 23.2 0.0**
**CFR Carcaliu 54.79 308** ⇓P P **23 16 25.6 +0.4**
**CFR Carcaliu 54.79 308** ⇓P P **23 16 25.6 +0.4**
**ICOR Ion Corvin 55.10 307** ⇓P P **23 16 28.5 +1.1**
**NACGM Naroch 55.61 320** *i* P P **23 16 30.1 -0.8**
**IDID Didziasalis 55.65 321** *eP* P **23 16 31.4 +0.2**
**VRI Vrincioaia 55.74 309** ⇓P P **23 16 33.6 +1.6**
**VRI Vrincioaia 55.74 309** ⇓P P **23 16 33.6 +1.6**
**TESR Tescani 55.75 310** ⇓P P **23 16 32.4 +0.3**
**PLOR Plostina 55.79 309** ⇑P P **23 16 33.5 +1.1**
**PLOR Plostina 55.79 309** ⇑P P **23 16 33.5 +1.1**
**VSU Vasula 55.87 324** *eP* P **23 16 32.8 +0.1**
**IGN Ignalina 55.95 321** *eP* P **23 16 33.7 +0.4**
**NEHR Nehoiu 56.07 309** ⇓P P **23 16 35.8 +1.4**
**MLR Muntele Rosu 56.31 309** ⇓P P **23 16 37.9 +1.6**
**MLR Muntele Rosu 56.31 309** ⇓P P **23 16 37.9 +1.6**
**MLR Muntele Rosu 56.31 309** P P **23 16 37.6 +1.3**
**FIA1 FINESS Array S 56.49 328** P P **23 16 37.6 +0.6**
FIA1 IAmb IAmb 23 16 47.2
comp=Z,19nm,1.4s
**FINES FINESS Array B 56.49 328** P P **23 16 37.7 +0.6**
comp=Z,4.6nm,0.6s,baz=103,slow=7.9,SNR=20
**DOPR Dopca 56.66 309** ⇓P P **23 16 39.6 +1.0**
**BURAR Bucovina Array 56.66 311** ⇑P P **23 16 39.1 +0.4**
**BURAR Bucovina Array 56.66 311** ⇑P P **23 16 39.1 +0.4**
**BURAR Bucovina Array 56.66 311** P P **23 16 38.8 +0.1**
**BUR08 Bucovina Ar. S 56.67 311** P P **23 16 39.1 +0.3**
**ALN Alexandroupoli 56.71 303** P P **23 16 39.3 +0.3**
ALN pmax pmax
comp=Z,4.0nm,0.7s
**ALN Alexandroupoli 56.71 303** P P **23 16 39.3 +0.3**
ALN IAmb IAmb 23 16 40.4
comp=Z,3.7nm,0.7s
**VOIR 56.94 309** ⇑P P **23 16 41.2 +0.5**
**VOIR 56.94 309** ⇑P P **23 16 41.2 +0.5**
**PABE Paberze 57.24 321** P P **23 16 42.8 +0.3**
**ARR Arges 57.24 309** ⇑P P **23 16 43.5 +0.7**
**MTSE Matsula 57.41 325** *eP* P **23 16 43.7 +0.1**
**KEV Kevo 57.48 338** P P **23 16 44.8 +0.8**
KEV pmax pmax
comp=Z,55nm,1.5s
**KEV Kevo 57.48 338** P P **23 16 44.8 +0.8**
**ARCES ARCESS Array B 57.95 337** P P **23 16 48.1 +0.9**
comp=Z,2.0nm,0.6s,baz=97,slow=6.3,SNR=9.5
**ARCES ARCESS Array B 57.95 337** P P **23 16 48.2 +0.9**
ARCES pmax pmax
comp=Z,32nm,1.5s
**ARCES ARCESS Array B 57.95 337** P P **23 16 48.2 +0.9**
**KWP Kalwaria Pacla 58.19 314** P P **23 16 50.2 +0.9**
KWP pmax pmax
comp=Z,140nm,0.6s
**KWP Kalwaria Pacla 58.19 314** P P **23 16 50.2 +0.9**
**TRPA Tarpa 58.42 312** ⇓P P **23 16 51.7 +0.8**
**DRGR 58.43 310** ⇑P P **23 16 52.1 +0.9**
**DRGR 58.43 310** ⇑P P **23 16 52.1 +0.9**
**IDI Anoyia 58.54 297** P P **23 16 51.8 -0.3**
IDI IAmb IAmb 23 16 53.1
comp=Z,14nm,1.2s
**VTS Vitosha 58.57 306** ⇓P P **23 16 53.2 +0.9**
**VTS Vitosha 58.57 306** ⇓P P **23 16 53.2 +0.9**
**VTS Vitosha 58.57 306** P P **23 16 53.2 +0.9**
VTS IAmb IAmb 23 16 53.4
comp=Z,3.1nm,0.7s
**HERR Herculane 58.85 308** ⇓P P **23 16 55.1 +1.1**
**CRVS Cervenica-Dubn 59.06 313** *eP* P **23 16 56.7 +1.3**
**CRVS Cervenica-Dubn 59.06 313** *eP* P **23 16 56.7 +1.3**
**BILL Bilibino 59.51 25** *i* P P **23 16 56.9 -1.3**
BILL pmax pmax
comp=Z,2.0nm,0.9s
**LIT Litokhoron 59.52 303** P P **23 16 58.3 -0.4**
LIT pmax pmax
comp=Z,15nm,1.5s
**LIT Litokhoron 59.52 303** P P **23 16 58.3 -0.4**
LIT IAmb IAmb 23 17 20.7
comp=Z,15nm,1.5s
**AGG Agios Georgios 59.83 302** P P **23 16 59.9 -1.0**
AGG pmax pmax
comp=Z,17nm,0.9s
**AGG Agios Georgios 59.83 302** P P **23 16 59.9 -1.0**
**OJC Ojcow 60.01 315** P P **23 17 02.2 +0.3**
OJC pmax pmax
comp=Z,5.0nm,0.6s
**OJC Ojcow 60.01 315** P P **23 17 02.2 +0.3**
OJC IAmb IAmb 23 17 03.3
comp=Z,5.4nm,0.6s
**FNA Florina 60.23 304** P P **23 17 03.6 -0.1**
FNA pmax pmax
comp=Z,15nm,1.4s
**FNA Florina 60.23 304** P P **23 17 03.6 -0.1**
FNA IAmb IAmb 23 17 20.6
comp=Z,15nm,1.4s
**ITM Ithomi 60.50 300** P P **23 17 04.5 -1.0**
ITM IAmb IAmb 23 17 06.5
comp=Z,11nm,1.0s
**KMBO Kilima Mbogo 60.58 252** P P **23 17 06.1 -0.5**
comp=Z,0.7nm,0.3s,baz=42,slow=16,SNR=3.6
**KMBO Kilima Mbogo 60.58 252** *i* P P **23 17 07.1 +0.5**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**UPP Uppsala 60.59 326** *eP* P **23 17 05.4 -0.2**
**WB0 Warramunga Arr 60.62 135** P P **23 17 05.2 -1.2**
WB0 IAmb IAmb 23 17 16.6
comp=Z,4.8nm,0.9s
**WRA Warramunga Arr 60.71 135** P P **23 17 06.2 -0.8**
comp=Z,1.7nm,0.8s,baz=326,slow=7.3,SNR=9.3
**WB2 Warramunga Arr 60.72 135** P P **23 17 06.2 -0.9**
WB2 IAmb IAmb 23 17 17.5
comp=Z,3.4nm,0.8s
**VIKU Vikbolandet 61.13 324** *eP* P **23 17 09.3 -0.1**
**PDG Podgorica 61.50 306** P P **23 17 12.1 0.0**
**MORC Moravsky Berou 61.51 314** P P **23 17 13.3 +1.1**
MORC pmax pmax
comp=Z,6.0nm,0.8s
**MORC Moravsky Berou 61.51 314** P P **23 17 13.3 +1.1**
MORC IAmb IAmb 23 17 13.8
comp=Z,5.9nm,0.8s
**SPB2 Spitsbergen Ar 61.83 347** P P **23 17 14.6 +0.8**
**SPITS Spitsbergen Ar 61.83 347** P P **23 17 15.0 +1.1**
SPITS pmax pmax
comp=Z,58nm,1.3s
**MODS Modra-Piesok 61.88 313** *eP* P **23 17 15.4 +0.7**
**MODS Modra-Piesok 61.88 313** *eP* P **23 17 15.3 +0.6**
**KRLC Kraliky 61.95 315** P P **23 17 14.8 -0.4**
KRLC pmax pmax
comp=Z,9.0nm,1.7s
**KRLC Kraliky 61.95 315** *eP* P 23 17 07.4 -7.8
**VRAC Vranov 62.19 314** ⇓P P **23 17 17.6 +0.9**
**VRAC Vranov 62.19 314** ⇓P P **23 17 17.6 +0.9**
**DPC Dobruska-Polom 62.21 315** *eP* P 23 17 02.4 -14
**OSTC Ostas 62.24 315** *eP* P **23 17 17.0 -0.1**
**CHVC Chvalec 62.34 315** *eP* P **23 17 17.9 +0.2**
**KRUC Moravsky 62.35 314** P P **23 17 18.6 +0.8**
**HFS Hagfors 62.54 326** LR LR 23 44 59.9
comp=Z,286nm,21.8s,baz=302,slow=36
**CONA Conrad Observa 62.89 312** *eP* P **23 17 21.8 +0.3**
comp=Z,3.7nm,0.8s
**ASAR Alice Springs 63.22 138** P P **23 17 23.1 -0.7**

comp=Z,0.9nm,0.5s,baz=323,slow=6.7,SNR=14
**ASAR Alice Springs 63.22 138** P **P** 23 17 23.4 -0.5
**ASAR Alice Springs 63.22 138** P **P** 23 17 23.4 -0.5
**PRU Pruhonice 63.39 315** *eP* **P** 23 17 24.7 0.0
**PRU Pruhonice 63.39 315** *eP* **P** 23 17 24.7 0.0
**BRG Berggiesshubel 63.62 316** *eP* **P** 23 17 26.6 +0.4
comp=Z,76nm,2.9s,baz=78,slow=6.7
**NB2 NORSAR Subarra 63.66 327** P **P** 23 17 26.3 0.0
comp=Z,1.9nm,0.6s,baz=82,slow=6.5
**NOA NORSAR Array B 63.66 327** P **P** 23 17 26.3 0.0
comp=Z,5.1nm,0.9s,baz=83,slow=6.5,SNR=7.4
**SOKA Soboth 63.67 311** *eP* **P** 23 17 26.9 +0.2
comp=Z,1.2nm,0.4s
**CKRC Cesky Krumlov 63.75 314** *eP* **P** 23 17 27.6 +0.5
**NC204 NORSAR Array S 63.85 328** P **P** 23 17 27.5 -0.1
**MOA Molln 63.96 313** *eP* **P** 23 17 28.6 0.0
comp=Z,3.8nm,0.7s
**OBKA Obir 64.03 311** *eP* **P** 23 17 29.1 +0.1
comp=Z,3.3nm,0.7s
**CLL Collm 64.13 317** *eP* **P** 23 17 30.0 +0.5
**CLL Collm 64.13 317** *eP* **P** 23 17 30.0 +0.5
**GEC2 GERESS Array S 64.14 314** P **P** 23 17 30.2 +0.4
GEC2 pmax pmax
comp=Z,8.0nm,0.8s
**GEC2 GERESS Array S 64.14 314** P **P** 23 17 30.2 +0.4
GEC2 IAmb IAmb 23 17 31.1
comp=Z,8.4nm,0.8s
**GEC2 GERESS Array S 64.14 314** *eP* **P** 23 17 29.9 +0.1
comp=Z,6.6nm,0.8s,baz=78,slow=6.7
**GERES GERESS Array B 64.14 314** P **P** 23 17 30.5 +0.7
comp=Z,5.0nm,0.7s,baz=68,slow=5.6,SNR=18
**GERES GERESS Array B 64.14 314** P **P** 23 17 30.2 +0.4
**KHC Kasperske Hory 64.17 314** *eP* **P** 23 17 30.2 +0.3
**KHC Kasperske Hory 64.17 314** *eP* **P** 23 17 30.2 +0.3
**ABG1 Leinawald 64.46 316** *eP* **P** 23 17 32.3 +0.6
comp=Z,22nm,0.7s,baz=78,slow=6.7
**MODW Modelwitz 64.53 316** *eP* **P** 23 17 32.7 +0.6
baz=78,slow=6.7
**WET Wettzell 64.61 314** P **P** 23 17 33.4 +0.6
WET pmax pmax
comp=Z,7.0nm,1.9s
**WET Wettzell 64.61 314** *eP* **P** 23 17 32.8 0.0
comp=Z,4.8nm,0.9s,baz=78,slow=6.7
**SCHF Schoenfels 64.62 316** *eP* **P** 23 17 32.9 +0.1
baz=78,slow=6.7
**TANN Tannenbergstha 64.63 316** *eP* **P** 23 17 32.8 -0.1
comp=Z,3.0nm,0.9s,baz=78,slow=6.7
**KONO Kongsberg 64.65 326** P **P** 23 17 33.2 +0.4
KONO pmax pmax
comp=Z,83nm,1.5s
**KONO Kongsberg 64.65 326** P **P** 23 17 33.2 +0.4
**HKWD Heukewalde 64.67 316** *eP* **P** 23 17 33.6 +0.5
comp=Z,3.8nm,0.7s,baz=78,slow=6.7
**WERN Wernitzgruen 64.71 316** *eP* **P** 23 17 34.1 +0.7
baz=78,slow=6.7
**GUNZ Gunzen 64.72 316** *eP* **P** 23 17 33.6 +0.2
baz=78,slow=6.7
**MLFH Mildenfurth 64.80 316** *eP* **P** 23 17 33.6 -0.3
baz=78,slow=6.7
**ROTZ Rotzenmuhle 64.92 315** *eP* **P** 23 17 35.7 +1.0
comp=Z,2.8nm,0.9s,baz=78,slow=6.7
**TAUT Tautenburg 64.99 316** *eP* **P** 23 17 35.5 +0.4
baz=78,slow=6.7
**WIMM Wimmelburg 65.01 317** *eP* **P** 23 17 35.5 +0.3
comp=Z,9.0nm,0.8s,baz=78,slow=6.7
**BSEG Bad Segeberg 65.25 320** P **P** 23 17 38.2 +1.4
BSEG pmax pmax
comp=Z,23nm,2.2s
**ABTA Abfaltersbach 65.35 312** *eP* **P** 23 17 37.2 -0.5
comp=Z,1.9nm,0.7s
**CHRS Christianenhau 65.41 317** *eP* **P** 23 17 38.4 +0.4
baz=78,slow=6.7
**CLZ Clausthal 65.64 317** P **P** 23 17 40.4 +1.0
CLZ pmax pmax
comp=Z,15nm,0.9s
**CRUX Bergwerk Schwa 65.64 316** *eP* **P** 23 17 40.0 +0.6
baz=78,slow=6.7
**WTTA Wattenberg 65.82 312** *eP* **P** 23 17 40.2 -0.6
comp=Z,5.3nm,0.8s
**MOTA Moosalm 66.16 313** *eP* **P** 23 17 42.7 -0.3
comp=Z,6.8nm,0.8s
**RETA Reutte 66.35 313** *eP* **P** 23 17 43.7 -0.4
comp=Z,3.2nm,0.5s
**FETA Feichten 66.48 312** *eP* **P** 23 17 44.3 -0.7
comp=Z,2.3nm,0.7s
**DAVA Damuels 66.98 313** *eP* **P** 23 17 47.7 -0.5
comp=Z,3.7nm,0.7s
**DAVOX Davos/Dischmat 67.11 312** LR LR 23 50 13.1
comp=Z,232nm,18.0s,baz=293,slow=39
**SENIN Lac Senin/Sane 68.93 312** P **P** 23 18 00.8 +0.3
SENIN IAmb IAmb 23 18 01.7
comp=Z,7.4nm,0.9s
**KEST Kesra 70.66 301** P **P** 23 18 10.8 -0.4
comp=Z,5.9nm,1.0s,baz=79,slow=10,SNR=2.8
**KEST Kesra 70.66 301** P **P** 23 18 10.6 -0.6
KEST IAmb IAmb 23 18 26.8
comp=Z,15nm,1.2s
**BBOO Buckleboo 71.40 143** P **P** 23 18 14.4 -1.0
**CLF Chambon-Foret 71.70 315** P **P** 23 18 17.4 +0.2
**EKA Eskdalemuir Ar 72.40 323** P **P** 23 18 21.1 -0.2
**TOLK Toolik Lake Re 74.92 20** P **P** 23 18 36.5 +0.6
TOLK IAmb IAmb 23 18 37.7
comp=Z,6.7nm,0.8s
**IMAR Indian Mountai 74.99 23** P **P** 23 18 36.6 +0.3
**H21K Melozitna Rive 75.50 23** P **P** 23 18 40.0 +0.8
H21K IAmb IAmb 23 18 41.0
comp=Z,4.5nm,0.8s
**J20K Nowinta River 75.79 25** P **P** 23 18 42.1 +1.3
**I21K Tanana 76.04 23** P **P** 23 18 42.8 +0.6
I21K IAmb IAmb 23 18 44.8
comp=Z,5.5nm,0.9s
**SUMG Summit 76.17 347** P **P** 23 18 43.6 +0.2
SUMG pmax pmax
comp=Z,2.0nm,1.2s
**SUMG Summit 76.17 347** P **P** 23 18 43.6 +0.2
**K20K Telida 76.24 25** P **P** 23 18 44.6 +1.1
K20K IAmb IAmb 23 18 58.0
comp=Z,8.1nm,1.4s
**MLY Manley 76.57 23** P **P** 23 18 46.2 +0.9
MLY IAmb IAmb 23 18 47.0
comp=Z,4.1nm,0.8s
**CAST Castle Rocks 76.97 25** P **P** 23 18 48.6 +1.0
**BPAW Bear Paw Mtn. 77.00 24** P **P** 23 18 48.0 +0.3
BPAW IAmb IAmb 23 18 49.1
comp=Z,3.9nm,0.9s
**BMAR Burnt Mountain 77.16 20** P **P** 23 18 50.5 +1.9
**MDM Murphy Dome 77.48 23** P **P** 23 18 50.8 +0.3
MDM IAmb IAmb 23 18 51.9
comp=Z,6.4nm,0.8s
**O18K Koktuh Hills 77.60 29** P **P** 23 18 52.0 +0.8
O18K IAmb IAmb 23 19 10.0
comp=Z,12nm,1.3s
**WRH Wood River Hil 77.82 23** P **P** 23 18 52.1 -0.2
**PRP Porcupine Dome 78.05 21** P **P** 23 18 54.8 +1.0
PRP IAmb IAmb 23 18 55.5
comp=Z,5.3nm,0.6s
**ILAR Eielson Array 78.06 22** P **P** 23 18 53.1 -0.5
comp=Z,2.1nm,0.8s,baz=298,slow=5.1,SNR=22
**RIDG Independent Ri 79.40 23** P **P** 23 19 01.0 -0.1
RIDG IAmb IAmb 23 19 02.0
comp=Z,4.7nm,0.7s
**BRLK Bradley Lake 79.48 28** P **P** 23 19 01.2 -0.3
**SCRK Sand Creek 79.54 22** P **P** 23 19 02.2 +0.3
SCRK IAmb IAmb 23 19 03.0
comp=Z,5.1nm,0.8s
**INK Inuvik 79.60 16** P **P** 23 19 02.4 +0.5
comp=Z,1.0nm,0.6s,baz=346,slow=2.8,SNR=4.4
**INK Inuvik 79.60 16** P **P** 23 19 01.9 -0.1
INK IAmb IAmb 23 19 02.5
comp=Z,9.0nm,1.4s
**DOT Dot Lake 79.72 22** P **P** 23 19 04.2 +1.4
**EGAK Eagle 79.94 21** P **P** 23 19 04.2 +0.3
EGAK IAmb IAmb 23 19 05.2
comp=Z,3.4nm,0.8s
**L27K Beaver Creek, 80.87 22** P **P** 23 19 10.4 +1.3
L27K IAmb IAmb 23 19 11.3
comp=Z,6.7nm,0.7s
**BCAR Beaver Creek A 80.88 22** P **P** 23 19 10.3 +1.2
**M26K Nabesna, AK 80.90 23** P **P** 23 19 10.9 +1.7
**M27K Edge Creek, AK 81.32 23** P **P** 23 19 12.0 +0.5
M27K IAmb IAmb 23 19 14.3
comp=Z,12nm,1.1s
**BARN Barnard Glacie 82.27 24** P **P** 23 19 17.4 +0.8
BARN IAmb IAmb 23 19 33.6
comp=Z,5.1nm,1.0s
**HYT Haines Junctio 83.90 22** P **P** 23 19 26.6 +1.7
HYT IAmb IAmb 23 19 32.5
comp=Z,5.7nm,1.2s
**M31M Drury Creek, Y 83.92 20** P **P** 23 19 25.1 +0.2
M31M IAmb IAmb 23 19 26.5
comp=Z,7.4nm,1.5s
**TORD Torodi Ar. Bea 85.81 283** P **P** 23 19 35.4 +0.1
comp=Z,1.9nm,0.8s,baz=49,slow=3.8,SNR=11
**TORD Torodi Ar. Bea 85.81 283** P **P** 23 19 35.2 -0.1
**YKA Yellowknife Ar 88.76 13** P **P** 23 19 47.8 -0.8
comp=Z,0.2nm,0.5s,baz=331,slow=5.1,SNR=3.9
**TXAR Lajitas Array 122.34 18** PKP **PKPdf** 23 25 50.1 -0.7
comp=Z,0.3nm,0.6s,baz=11,slow=0.2,SNR=4.5
**TXAR Lajitas Array 122.34 18** PKIKP **PKPdf** 23 25 50.3 -0.6
**TXAR Lajitas Array 122.34 18** PKPdf **PKPdf** 23 25 50.3 -0.6
**TAOE Nuku Hiva Isla 126.46 81** PKPdf **PKPdf** 23 25 56.7 -2.3

*NEIC* ***16*** *23:25:15.8±1.6, 18.°0S±0.°1×178.°0W±0.°2, h622km±8km, mb4.1/28, Error ellipse: s-maj=23.3km s-min=15.8km az=116.0*
*IDC* ***16*** *23:25:16.4±2.8, 18.°06S×178.°10W, h627km±21km, mb3.4/7, mb1 3.5/9, mb1mx3.2/43, mbtmp4.4/9, Error ellipse: s-maj=66.9km s-min=23.6km az=142.0*
**ISC 16 23:25:16.6±1.3, 18.°0S±0.°1×178.°1W±0.°1, h628km±13km, n58, σ0°63/66, mb4.1/20, 1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.70** | **274** | P | **P** | **23 26 42.3** | **0.0** |
| | 4.9nm,0.3s,baz=113,slow=3.3,SNR=26 | | | | | | |
| **MSVF** | **Nonsavu** | **3.70** | **274** | P | **P** | **23 26 42.6** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | **P** | **23 28 24.6** | **0.0** |
| | 0.3nm,0.3s,baz=120,slow=10,SNR=2.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | **P** | **23 28 25.0** | **+0.4** |
| DZM | | | | IAmb | IAmb | 23 28 29.5 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **QRZ** | **Quartz Range** | **24.12** | **198** | P | **P** | **23 29 44.9** | **-0.6** |
| **LTZ** | **Lake Taylor** | **26.00** | **196** | P | **P** | **23 30 00.7** | **-1.4** |
| **MLZ** | **Mavora Lakes** | **29.59** | **200** | P | **P** | **23 30 33.3** | **+0.1** |
| MLZ | | | | IAmb | IAmb | 23 30 58.5 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.12** | **200** | P | **P** | **23 30 38.0** | **+0.4** |
| WHZ | | | | IAmb | IAmb | 23 30 38.8 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **33.74** | **261** | P | **P** | **23 31 08.0** | **-0.6** |
| | comp=Z,3.0nm,0.6s,baz=104,slow=7.2,SNR=5.3 | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | **P** | **23 31 08.1** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 23 31 08.9 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **34.79** | **280** | P | **P** | **23 31 17.5** | **+0.2** |
| | comp=Z,13nm,0.5s,baz=147,slow=6.2,SNR=3.8 | | | | | | |
| **PMG** | **Port Moresby** | **34.79** | **280** | P | **P** | **23 31 17.9** | **+0.6** |
| **COEN** | **Coen** | **37.42** | **270** | P | **P** | **23 31 39.3** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.85** | **241** | P | **P** | **23 31 50.3** | **+0.1** |
| | comp=Z,1.8nm,0.7s,baz=109,slow=15,SNR=3.3 | | | | | | |
| **STKA** | **Stephens Creek** | **38.85** | **241** | P | **P** | **23 31 50.6** | **+0.4** |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | **P** | **23 32 27.6** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 23 32 32.7 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **23 32 36.9** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 23 32 37.2 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| WB0 | | | | PcP | **PcP** | **23 34 05.1** | **-0.1** |
| **WB2** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **23 32 36.5** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 23 32 37.4 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| WB2 | | | | PcP | **PcP** | **23 34 05.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **23 32 37.0** | **-0.8** |
| | comp=Z,2.5nm,0.5s,baz=95,slow=7.1,SNR=50 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 34 05.0** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=89,slow=3.7,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **23 32 37.1** | **-0.7** |
| **AS31** | **Alice Springs** | **45.06** | **254** | P | **P** | **23 32 38.4** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 23 32 39.5 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| AS31 | | | | PcP | **PcP** | **23 34 05.7** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | **P** | **23 32 38.2** | **-0.7** |
| | comp=Z,7.2nm,0.6s,baz=88,slow=8.4,SNR=82 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 34 05.7** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=107,slow=3.6,SNR=9.8 | | | | | | |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | **P** | **23 32 38.1** | **-0.8** |
| ASAR | | | | PcP | **PcP** | **23 34 05.3** | **-0.5** |
| **FORT** | **Forrest** | **50.24** | **245** | P | **P** | **23 33 16.6** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **261** | P | **P** | **23 33 39.0** | **-0.4** |
| **SOEI** | **Soe** | **56.38** | **270** | P | **P** | **23 34 01.8** | **+1.0** |
| SOEI | | | | IAmb | IAmb | 23 34 02.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| SOEI | | | | PcP | **PcP** | **23 34 48.4** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **58.18** | **255** | P | **P** | **23 34 11.9** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 23 34 37.5 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.35** | **256** | P | **P** | **23 34 12.9** | **-1.0** |
| **UGM** | **Wanagama** | **69.95** | **268** | P | **P** | **23 35 26.6** | **-0.6** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **23 35 39.6** | **+1.1** |
| **O18K** | **Koktuh Hills** | **79.81** | **11** | P | **P** | **23 36 20.6** | **-0.3** |
| **BELA** | **Belgrano 2** | **82.01** | **173** | P | **P** | **23 36 32.1** | **+0.1** |
| **GHO** | **Glory Hole Cre** | **82.85** | **14** | P | **P** | **23 36 36.1** | **-0.3** |
| GHO | | | | IAmb | IAmb | 23 36 59.4 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **K20K** | **Telida** | **83.26** | **11** | P | **P** | **23 36 37.9** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **83.26** | **14** | P | **P** | **23 36 38.5** | **0.0** |
| SCM | | | | IAmb | IAmb | 23 37 06.2 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **83.87** | **37** | P | **P** | **23 36 43.0** | **+1.3** |
| **TRF** | **Thorofare Moun** | **84.06** | **12** | P | **P** | **23 36 41.4** | **-1.1** |
| TRF | | | | IAmb | IAmb | 23 36 43.2 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **F10A** | **Beach Ranch, E** | **84.10** | **38** | | **P** | **23 36 41.1** | **-1.9** |
| F10A | | | | IAmb | IAmb | 23 36 52.4 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.93** | **13** | P | **P** | **23 36 50.3** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=219,slow=5.1,SNR=7.1 | | | | | | |
| **ILAR** | **Eielson Array** | **85.93** | **13** | P | **P** | **23 36 51.1** | **-0.1** |
| **XAN** | **Xi'an** | **86.58** | **307** | P | **P** | **23 36 55.8** | **+0.7** |
| XAN | | | | pP | PcP | 23 37 03.8 | +7.2 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.22** | **290** | P | **P** | **23 37 08.9** | **+1.2** |
| | comp=Z,1.3nm,0.3s,baz=103,slow=3.1,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.09** | **315** | PKPbc | **PKPdf** | **23 43 44.3** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=66,slow=3.0,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.09** | **315** | | **PKPbc** | **23 43 45.2** | **-0.1** |
| **OSTC** | **Ostas** | **145.59** | **344** | *e*PKP | **PKPbc** | **23 43 46.2** | **-0.1** |
| **CLL** | **Collm** | **145.64** | **348** | *i*/PKPbc | **PKPbc** | **23 43 46.3** | **-0.1** |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.75** | **344** | *e*PKP | **PKPbc** | **23 43 47.0** | **+0.2** |
| **KRLC** | **Kraliky** | **145.87** | **343** | *e*PKP | **PKPbc** | **23 43 47.2** | **+0.1** |
| **PRU** | **Pruhonice** | **146.54** | **345** | *e*PKP | **PKPbc** | **23 43 48.6** | **-0.3** |
| **KHC** | **Kasperske Hory** | **147.57** | **346** | *e*PKP | **PKPbc** | **23 43 51.6** | **-0.1** |
| **CKRC** | **Cesky Krumlov** | **147.68** | **345** | *e*PKP | **PKPbc** | **23 43 51.9** | **0.0** |
| **GERES** | **GERESS Array B** | **147.80** | **345** | PKPbc | **PKPbc** | **23 43 52.4** | **+0.1** |
| | comp=Z,1.3nm,0.6s,baz=338,slow=3.2,SNR=5.6 | | | | | | |
| **GERES** | **GERESS Array B** | **147.80** | **345** | PKPdf | **PKPdf** | **23 43 48.9** | **+0.4** |
| GERES | | | | PKPbc | **PKPbc** | **23 43 52.6** | **+0.2** |
| **WATA** | **Walderalm** | **149.71** | **347** | *e*P | **PKPbc** | **23 43 56.9** | **-0.2** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **RETA** | **Reutte** | **149.73** | **348** | *i* P | **PKPbc** | **23 43 56.7** | **-0.4** |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **149.76** | **347** | *i* P | **PKPbc** | **23 43 57.3** | **0.0** |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.05** | **345** | *e*P | **PKPbc** | **23 43 57.1** | **-0.7** |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **150.19** | **348** | *e*P | **PKPbc** | **23 43 58.2** | **-0.1** |
| | comp=Z,1.9nm,0.7s | | | | | | |

*ANF* ***16*** *23:27:31.0±0.3, 37.°20N×118.°38W, h12km±1km, ML4.7/38, ML4.7/38, Error ellipse: s-maj=2.1km s-min=1.9km az=35.0*
*IDC* ***16*** *23:27:30.4±0.7, 37.°18N×118.°41W, h0km, mb3.6/6, mb1 3.8/13, mb1mx3.7/44, mbtmp3.6/13, ML3.8/7, MS3.3/11, Ms1 3.3/11, ms1mx3.1/75, Error ellipse: s-maj=12.9km s-min=5.7km az=80.0*
*NCEDC* ***16*** *23:27:31.0±2.1, 37.°20N±0.°03×118.°40W±0.°04, h15km±5km, Mwr4.3/6, mb4.3/4(NEIC), ML4.4/106(NEIC), ML4.8/8(REN), Mwr4.2/136(NEIC), Error ellipse: s-maj=5.0km s-min=3.7km az=208.0*
*NEIC* ***16*** *23:27:31.3±1.7, 37.°22N±0.°04×118.°39W±0.°02, h12km±4km, Error ellipse: s-maj=5.7km s-min=2.5km az=189.0*
*NEIC* ***16*** *23:27:31, 37.°20N×118.°40W, h18km, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr 0.05; Mθθ-2.37; Mφφ 2.32; Mrθ 0.28; Mφθ -1.37; Mrφ 0.58; Fault plane solution: Mo 2.79000×10^15 NP1:φ=299.74000°, δ 76.67000°, λ 178.68000°. NP2:φ=30.04000°, δ 88.72000°, λ 13.33000°. Principal axes: T 2.7737, Plg 10.0000°, Azm 256.0000°; N 0.0277, Plg 77.0000°, Azm 35.0000°; P -2.8014, Plg 8.0000°, Azm 164.0000°;*
*NEIC* ***16*** *23:27:31, 37.°20N×118.°40W, h18km, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr 0.11; Mθθ-2.92; Mφφ 2.82; Mrθ 0.55; Mφθ -1.96; Mrφ 0.65; Fault plane solution: Mo 3.58000×10^15 NP1:φ=298.16000°, δ 76.70000°, λ -177.82000°. NP2:φ=207.66000°, δ 87.87000°, λ -13.31000°. Principal axes: T 3.4822, Plg 8.0000°, Azm 254.0000°; N 0.1833, Plg 77.0000°, Azm 19.0000°; P -3.6655, Plg 11.0000°, Azm 162.0000°;*
*REN* ***16*** *23:27:31.4±1.8, 37.°22N±0.°04×118.°40W±0.°02, h11km±2km Error ellipse: s-maj=5.4km s-min=2.6km az=188.0*
**ISC 16 23:27:31.3±0.9, 37.°20N±0.°02×118.°39W±0.°02, h9km±7km, n157, σ1°11/171, mb3.6/6, MS3.4/4, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIN** | **Tinemaha, Big** | **0.19** | **140** | P | **Pg** | **23 27 35.9** | **+0.5** |
| | baz=318,SNR=1000 | | | | | | |
| TIN | | | | S | **Sg** | **23 27 39.5** | **+1.3** |
| | baz=318 | | | | | | |
| **MTUM** | **Tungsten Hills** | **0.21** | **316** | | **Pg** | **23 27 35.7** | **+0.1** |
| **MLAC** | **Mammoth, Mammo** | **0.56** | **320** | P | **Pg** | **23 27 41.9** | **-0.2** |
| | baz=141,SNR=1000 | | | | | | |
| MLAC | | | | S | **Sg** | **23 27 49.9** | **+0.4** |
| | baz=141 | | | | | | |
| **LCH** | **Last Change Ra** | **0.59** | **87** | | **Pg** | **23 27 42.2** | **-0.6** |
| LCH | | | | Sg | **Sg** | **23 27 50.3** | **-0.3** |
| LCH | | | | IAML | | 23 27 51.0 | |
| | comp=E,31μm,0.4s | | | | | | |
| **MRDM** | **Red Cones** | **0.67** | **306** | | **Pg** | **23 27 43.6** | **-0.6** |
| **MDCM** | **Deadman Creek** | **0.73** | **314** | | **Pg** | **23 27 44.7** | **-0.7** |
| **HELL** | **Mitchell Peak,** | **0.73** | **225** | | **Pg** | **23 27 44.7** | **-0.7** |
| **KCC** | **Kaiser Creek** | **0.75** | **279** | | **Pg** | **23 27 44.9** | **-0.9** |
| KCC | | | | | **Sg** | **23 27 54.7** | **-1.0** |
| **CWC** | **Cottonwood Cre** | **0.80** | **162** | P | **Pg** | **23 27 45.8** | **-0.9** |
| | baz=342 | | | | | | |
| CWC | | | | S | **Sg** | **23 27 57.0** | **-0.2** |
| | baz=342 | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.84** | **104** | | **Pg** | **23 27 47.3** | **-0.2** |
| GRAC | | | | Sg | **Sg** | **23 27 58.5** | **0.0** |
| **GRAC** | **Grapevine Rang** | **0.84** | **104** | P | **Pg** | **23 27 47.4** | **-0.1** |
| | baz=284,SNR=1000 | | | | | | |
| GRAC | | | | S | **Sg** | **23 27 58.8** | **+0.3** |
| | baz=284 | | | | | | |
| **LHV** | **Little Huntoon** | **1.05** | **355** | | **Pg** | **23 27 50.8** | **-0.7** |
| LHV | | | | IAML | | 23 28 07.1 | |
| | comp=N,11μm,0.6s | | | | | | |
| LHV | | | | IAML | | 23 28 08.2 | |
| | comp=E,11μm,0.6s | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.19** | **223** | P | **Pb** | **23 27 53.1** | **-0.9** |
| | baz=42,SNR=160 | | | | | | |
| VOG | | | | S | **Sb** | **23 28 09.0** | **-0.6** |
| | baz=42 | | | | | | |
| **NVAR** | **Mina Array Bea** | **1.23** | **3** | Pg | **Pn** | **23 27 53.9** | **-0.9** |
| | comp=E,2μm,0.3s,baz=188,slow=18,SNR=3721 | | | | | | |
| NVAR | | | | Lg | Lg | 23 28 10.6 | |
| | comp=E,2μm,0.3s,baz=274,slow=12,SNR=6.0 | | | | | | |
| NVAR | | | | LR | LR | 23 28 19.2 | |
| | comp=E,457nm,19.9s,baz=15,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **1.23** | **3** | Pn | **Pn** | **23 27 53.7** | **-1.2** |
| **NV11** | **Mina Array Sit** | **1.24** | **8** | Pn | **Pn** | **23 27 53.9** | **-1.1** |
| NV11 | | | | IAML | | 23 28 12.5 | |
| | comp=E,5μm,0.6s | | | | | | |
| NV11 | | | | IAML | | 23 28 13.9 | |
| | comp=N,4μm,0.8s | | | | | | |
| **TPH** | **Tonopah** | **1.27** | **46** | | **Pn** | **23 27 54.4** | **-1.0** |
| **MPMC** | **Manual Prospec** | **1.35** | **147** | P | **Pn** | **23 27 55.5** | **-1.1** |
| | baz=328,SNR=1000 | | | | | | |
| MPMC | | | | S | **Sb** | **23 28 13.7** | **-0.7** |
| | baz=328 | | | | | | |
| **FURC** | **Furnace Creek,** | **1.43** | **121** | P | **Pn** | **23 27 56.4** | **-0.9** |
| | baz=301,SNR=1000 | | | | | | |
| FURC | | | | Sb | **Sg** | **23 28 16.9** | **-0.2** |
| | baz=301 | | | | | | |
| **RYN** | **Ryan** | **1.43** | **356** | | **Pn** | **23 27 56.5** | **-1.0** |
| RYN | | | | IAML | | 23 28 17.3 | |
| | comp=N,4μm,0.3s | | | | | | |
| RYN | | | | IAML | | 23 28 17.4 | |
| | comp=E,6μm,0.5s | | | | | | |
| **VES** | **Vestal, Richgr** | **1.47** | **203** | P | **Pn** | **23 27 57.8** | **-0.2** |
| | baz=22,SNR=254 | | | | | | |
| VES | | | | S | **Sb** | **23 28 17.1** | **-0.5** |
| | baz=22 | | | | | | |
| **ISA** | **Isabella, Lake** | **1.54** | **183** | | **Pn** | **23 27 58.5** | **-0.5** |
| **ISA** | **Isabella, Lake** | **1.54** | **183** | P | **Pn** | **23 27 58.7** | **-0.3** |
| | baz=2.2,SNR=1000 | | | | | | |
| ISA | | | | S | **Sn** | **23 28 18.7** | **-0.4** |
| | baz=2.2 | | | | | | |
| **GWY** | **Greenwater Val** | **1.71** | **126** | | **Pn** | **23 27 59.9** | **-1.6** |
| GWY | | | | IAML | | 23 28 28.9 | |
| | comp=N,5μm,0.7s | | | | | | |
| GWY | | | | IAML | | 23 28 39.2 | |
| | comp=E,5μm,0.6s | | | | | | |
| **TPNV** | **Topopah Spring** | **1.73** | **98** | Pn | **Pn** | **23 28 00.9** | **-0.8** |
| TPNV | | | | IAML | | 23 28 32.0 | |
| | comp=E,3μm,0.7s | | | | | | |
| TPNV | | | | IAML | | 23 28 32.3 | |
| | comp=E,3μm,1.3s | | | | | | |
| **TPNV** | **Topopah Spring** | **1.73** | **98** | P | **Pn** | **23 28 01.0** | **-0.7** |
| | baz=279,SNR=1000 | | | | | | |
| **QSM** | **Queen of Sheba** | **1.74** | **135** | | **Pn** | **23 28 00.4** | **-1.3** |
| **CMB** | **Columbia Colle** | **1.79** | **298** | | **Pn** | **23 28 01.8** | **-0.7** |
| **LRMC** | **Laurel Mtn Rad** | **1.81** | **162** | P | **Pn** | **23 28 01.7** | **-1.1** |
| | baz=342,SNR=1000 | | | | | | |
| LRMC | | | | Sb | **Sb** | **23 28 28.3** | **+0.7** |
| | baz=342 | | | | | | |
| **PDRM** | **Domengine Ranc** | **1.81** | **242** | | **Pn** | **23 28 03.3** | **+0.6** |
| **YERR** | **Yerington** | **1.90** | **339** | | **Pn** | **23 28 03.3** | **-0.8** |
| YERR | | | | IAML | | 23 29 02.6 | |
| | comp=E,2μm,0.6s | | | | | | |
| **CCAC** | **Calif City Air** | **2.07** | **172** | | **Pn** | **23 28 06.0** | **-0.3** |
| CCAC | | | | IAML | | 23 28 42.6 | |
| | comp=E,4μm,0.7s | | | | | | |
| **THIS** | **South End of C** | **2.10** | **226** | | **Pn** | **23 28 07.0** | **+0.4** |
| **ARVC** | **Arvin** | **2.10** | **190** | P | **Pn** | **23 28 07.5** | **+0.8** |
| | baz=9.4,SNR=122 | | | | | | |
| ARVC | | | | Sb | **Sb** | **23 28 36.6** | **+0.7** |
| | baz=9.4 | | | | | | |
| **PNTR** | **Pine Nut** | **2.11** | **333** | Pn | **Pn** | **23 28 06.2** | **-0.9** |
| PNTR | | | | IAML | | 23 28 42.6 | |
| | comp=N,2μm,0.7s | | | | | | |
| PNTR | | | | IAML | | 23 29 03.1 | |
| | comp=E,2μm,0.9s | | | | | | |
| **PKD** | **Bear Valley Ra** | **2.14** | **235** | | **Pn** | **23 28 07.2** | **-0.1** |
| **S11A** | **Rachel** | **2.15** | **77** | | **Pn** | **23 28 06.8** | **-0.7** |
| **TRAM** | **Private Proper** | **2.15** | **225** | | **Pn** | **23 28 07.8** | **+0.4** |
| **PMPB** | **Monarch Peak** | **2.18** | **244** | Pn | **Pn** | **23 28 07.5** | **-0.3** |
| **TCHL** | **Shandon** | **2.22** | **228** | | **Pn** | **23 28 08.9** | **+0.6** |
| **EMB** | **Emerald Bay** | **2.23** | **323** | | **Pn** | **23 28 07.1** | **-1.5** |
| EMB | | | | IAML | | 23 28 44.1 | |
| | comp=E,3μm,0.5s | | | | | | |
| EMB | | | | IAML | | 23 28 56.3 | |
| | comp=N,3μm,0.6

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GHS** | **Gilroy Hot Spr** | **2.45** | **268** | | | **Pn** | **23 28 11.9** | **+0.4** |
| **MPK** | **Martis Peak** | **2.46** | **329** | Pn | | **Pn** | **23 28 11.5** | **-0.3** |
| MPK | comp=E,3µm,0.8s | | | IAML | | | 23 28 57.6 | |
| **SAO** | **San Andreas Ge** | **2.49** | **261** | Pn | | **Pn** | **23 28 12.0** | **0.0** |
| **SCZ** | **Santa Cruz** | **2.49** | **257** | | | **Pn** | **23 28 12.2** | **+0.1** |
| **R11A** | **Troy Canyon, C** | **2.50** | **62** | | | **Pn** | **23 28 11.1** | **-1.2** |
| **R11A** | **Troy Canyon, C** | **2.50** | **62** | P | | **Pn** | **23 28 11.3** | **-1.0** |
| R11A | baz=244,SNR=392 | | | Sb | | **Sb** | **23 28 49.0** | **+1.7** |
| **BJCM** | **Johnson Can.** | **2.50** | **256** | | | **Pn** | **23 28 12.0** | **-0.1** |
| **HSFM** | **Saint Francis** | **2.52** | **262** | | | **Pn** | **23 28 13.1** | **+0.6** |
| **RAMR** | **Ramage Ranch** | **2.54** | **233** | | | **Pn** | **23 28 13.0** | **+0.2** |
| **BSMM** | **Soledad Missio** | **2.58** | **252** | | | **Pn** | **23 28 13.4** | **+0.1** |
| **RRX** | **Edison Barstow** | **2.58** | **154** | P | | **Pn** | **23 28 12.7** | **-0.6** |
| **PKM** | baz=334,SNR=31<br>**Mcpherson Peak** | **2.58** | **207** | P | | **Pn** | **23 28 13.7** | **+0.2** |
| **OSI** | baz=26,SNR=123<br>**Osito Audit: C** | **2.60** | **186** | P | | **Pn** | **23 28 13.9** | **+0.3** |
| OSI | baz=5.7 | | | Sb | | **Sb** | **23 28 51.6** | **+1.5** |
| **MHC** | baz=5.7<br>**Mount Hamilton** | **2.60** | **274** | | | **Pn** | **23 28 14.5** | **+0.8** |
| **PAHR** | **Pah Rah Range** | **2.62** | **343** | Pn | | **Pn** | **23 28 13.0** | **-0.9** |
| **TUQ** | **Turquoise Moun** | **2.66** | **131** | P | | **Pn** | **23 28 13.4** | **-1.1** |
| **PRN** | baz=312,SNR=87<br>**Pahroc Range** | **2.67** | **85** | Pn | | **Pn** | **23 28 13.7** | **-0.9** |
| **HAST** | **Hastings Reser** | **2.67** | **253** | | | **Pn** | **23 28 14.3** | **-0.2** |
| **HCOM** | **Corn Cob Canyo** | **2.68** | **264** | | | **Pn** | **23 28 14.8** | **+0.2** |
| **SHPR** | **Sheep Range** | **2.68** | **104** | | | **Pn** | **23 28 14.1** | **-0.6** |
| SHPR | comp=E,1µm,1.0s | | | IAML | | | 23 29 03.6 | |
| **WENL** | **Wente Vineyard** | **2.72** | **280** | | | **Pn** | **23 28 16.5** | **+1.4** |
| **PAPM** | **Alder Peak** | **2.72** | **243** | | | **Pn** | **23 28 15.3** | **0.0** |
| **BDM** | **Black Diamond** | **2.86** | **286** | | | **Pn** | **23 28 18.4** | **+1.3** |
| **HEC** | **Hector,Ludlow** | **2.89** | **144** | P | | **Pn** | **23 28 16.7** | **-0.9** |
| **PMLM** | baz=326,SNR=24<br>**Mount Lospe** | **2.92** | **219** | | | **Pn** | **23 28 18.8** | **+0.8** |
| **DECC** | **Green Verdugo** | **2.94** | **179** | P | | **Pn** | **23 28 18.2** | **-0.1** |
| **SBC** | baz=359,SNR=46<br>**Santa Barbara** | **2.96** | **202** | Pb | | **Pb** | **23 28 23.7** | **-0.5** |
| SBC | baz=21 | | | Sb | | **Sb** | **23 29 02.9** | **+2.5** |
| **PASC** | baz=21<br>**Pasadena Art C** | **3.03** | **177** | Pn | | **Pn** | **23 28 19.5** | **0.0** |
| PASC | comp=E,2µm,0.9s | | | IAML | | | 23 29 12.7 | |
| PASC | comp=N,931nm,0.8s | | | IAML | | | 23 29 16.2 | |
| **BEKR** | **Beckworth** | **3.08** | **330** | Pn | | **Pn** | **23 28 19.9** | **-0.4** |
| BEKR | comp=N,1µm,0.6s | | | IAML | | | 23 29 28.6 | |
| **JRSC** | **Jasper Ridge** | **3.08** | **275** | | | **Pn** | **23 28 20.6** | **+0.5** |
| **BKS** | **Berkeley--Byer** | **3.13** | **284** | | | **Pn** | **23 28 21.9** | **+1.1** |
| **BBRC** | **Big Bear Solar** | **3.17** | **157** | P | | **Pn** | **23 28 20.7** | **-0.8** |
| **GMRC** | baz=338,SNR=6.0<br>**Granite Mounta** | **3.27** | **137** | P | | **Pn** | **23 28 21.4** | **-1.5** |
| **BMN** | baz=318,SNR=25<br>**Battle Mountai** | **3.35** | **15** | Pn | | **Pn** | **23 28 23.1** | **-0.8** |
| BMN | comp=N,1µm,0.3s | | | IAML | | | 23 29 16.8 | |
| BMN | comp=E,994nm,0.7s | | | IAML | | | 23 29 17.4 | |
| **ORV** | **Oroville** | **3.39** | **315** | | | **Pb** | **23 28 31.3** | **-0.3** |
| **ORV** | **Oroville** | **3.39** | **315** | IAML | | | 23 29 26.3 | |
| **FMP** | comp=N,1µm,0.6s<br>**Fort Macarthur** | **3.48** | **179** | Pb | | **Pb** | **23 28 32.9** | **-0.3** |
| **MNRC** | baz=359,SNR=10<br>**McLaughlin Min** | **3.61** | **299** | | | **Pn** | **23 28 29.8** | **+2.3** |
| **ELS** | **Elsinore Mount** | **3.63** | **167** | | | **Pn** | **23 28 27.5** | **-0.3** |
| **MCCM** | **Marconi Confer** | **3.69** | **286** | Pn | | **Pn** | **23 28 28.3** | **-0.1** |
| MCCM | comp=E,943nm,0.9s | | | IAML | | | 23 29 44.3 | |
| **MURC** | **Murrieta** | **3.73** | **165** | P | | **Pn** | **23 28 29.0** | **0.0** |
| **BELC** | baz=345,SNR=24<br>**Belle Mtn. Jos** | **3.74** | **148** | P | | **Pn** | **23 28 28.8** | **-0.5** |
| **CIS** | baz=329,SNR=159<br>**Catalina Islan** | **3.79** | **180** | P | | **Pn** | **23 28 29.5** | **-0.4** |
| CIS | baz=0.2 | | | Sb | | **Sb** | **23 29 27.3** | **+2.8** |
| **PSUT** | baz=0.2<br>**Pine Spring** | **3.82** | **68** | Pn | | **Pn** | **23 28 30.1** | **-0.5** |
| PSUT | comp=N,701nm,0.5s | | | IAML | | | 23 29 37.0 | |
| PSUT | comp=E,731nm,1.0s | | | IAML | | | 23 29 40.0 | |
| **PFO** | **Pinyon Flats O** | **3.91** | **156** | Pn | | **Pn** | **23 28 31.4** | **-0.4** |
| PFO | comp=E,5.2nm,0.3s,baz=337,slow=13,SNR=48 | | | Pg | | **Pb** | **23 28 38.7** | **-1.9** |
| PFO | comp=E,6.9nm,0.3s,baz=347,slow=14,SNR=16 | | | Lg | | Lg | 23 29 31.8 | |
| PFO | comp=E,12nm,0.3s,baz=308,slow=11,SNR=1.9 | | | LR | | LR | 23 29 41.1 | |
| **PFO** | comp=E,90nm,21.1s,baz=330,slow=34<br>**Pinyon Flats O** | **3.91** | **156** | | | **Pn** | **23 28 31.2** | **-0.5** |
| **PFO** | **Pinyon Flats O** | **3.91** | **156** | P | | **Pn** | **23 28 31.3** | **-0.4** |
| **CCUT** | baz=337,SNR=18<br>**Cedar City** | **4.02** | **84** | | | **Pn** | **23 28 33.0** | **-0.2** |
| CCUT | comp=E,331nm,0.8s | | | IAML | | | 23 29 46.2 | |
| **IRM** | **Iron Mountain** | **4.03** | **138** | P | | **Pn** | **23 28 31.8** | **-1.3** |
| **LCMT** | baz=320,SNR=31<br>**Little Creek M** | **4.12** | **91** | | | **Pn** | **23 28 33.4** | **-1.1** |
| **W13A** | **Hualapai Mount** | **4.20** | **119** | Pn | | **Pn** | **23 28 35.3** | **-0.5** |
| **SZCU** | **Shurtz Canyon** | **4.24** | **83** | | | **Pn** | **23 28 35.8** | **-0.5** |
| SZCU | comp=E,254nm,0.3s | | | IAML | | | 23 29 50.8 | |
| SZCU | comp=N,304nm,0.7s | | | IAML | | | 23 29 56.5 | |
| **BC3** | **Big Chuckawall** | **4.27** | **145** | P | | **Pn** | **23 28 35.3** | **-1.3** |
| **ELK** | baz=327,SNR=33<br>**Elko** | **4.30** | **34** | Pn | | **Pn** | **23 28 37.2** | **+0.1** |
| ELK | comp=N,7.7nm,0.3s,baz=218,slow=14,SNR=84 | | | Lg | | Lg | 23 29 45.0 | |
| ELK | comp=N,189nm,0.3s,baz=294,slow=16,SNR=28 | | | LR | | LR | 23 30 47.9 | |
| **ELK** | comp=N,171nm,20.7s,baz=214,slow=46<br>**Elko** | **4.30** | **34** | | | **Pn** | **23 28 36.7** | **-0.5** |
| ELK | comp=N,329nm,0.4s | | | IAML | | | 23 29 47.8 | |
| ELK | comp=N,391nm,0.8s | | | IAML | | | 23 29 48.1 | |
| **109C** | **Camp Elliot, M** | **4.43** | **166** | Pn | | **Pn** | **23 28 38.3** | **-0.4** |
| 109C | comp=E,253nm,0.7s | | | IAML | | | 23 29 54.2 | |
| **109C** | **Camp Elliot, M** | **4.43** | **166** | P | | **Pn** | **23 28 38.5** | **-0.2** |
| **KNB** | baz=347<br>**Kanab** | **4.45** | **91** | | | **Pn** | **23 28 39.0** | **-0.1** |
| KNB | comp=N,413nm,1.7s | | | IAML | | | 23 29 52.8 | |
| KNB | comp=E,413nm,1.1s | | | IAML | | | 23 30 06.6 | |
| **PDMCI** | **Parker Dam,Lak** | **4.50** | **129** | P | | **Pn** | **23 28 39.0** | **-0.7** |
| **MONP2** | baz=311<br>**Monument Peak** | **4.59** | **159** | P | | **Pn** | **23 28 40.8** | **-0.3** |
| **BLYC** | baz=340,SNR=7.7<br>**Blythe** | **4.67** | **136** | | | **Pn** | **23 28 40.9** | **-1.1** |
| BLYC | comp=N,300nm,0.7s | | | IAML | | | 23 30 01.6 | |
| BLYC | comp=E,326nm,0.8s | | | IAML | | | 23 30 04.4 | |
| **BAR** | **Barrett** | **4.73** | **162** | Pn | | **Pn** | **23 28 42.6** | **-0.2** |
| BAR | comp=E,183nm,0.7s | | | IAML | | | 23 30 07.8 | |
| **SWSC** | **Sam W. Stewart** | **4.75** | **153** | P | | **Pn** | **23 28 41.8** | **-1.3** |
| **PKCU** | baz=334<br>**Pink Cliffs** | **4.85** | **85** | Pn | | **Pn** | **23 28 44.2** | **-0.5** |
| PKCU | comp=N,336nm,2.1s | | | IAML | | | 23 30 19.2 | |
| **TKX** | **Tecate** | **4.85** | **162** | Pn | | **Pn** | **23 28 44.5** | **0.0** |
| **IKP** | **In-Ko-Pah, Jac** | **4.91** | **157** | P | | **Pn** | **23 28 45.1** | **-0.3** |
| **U15A** | baz=338<br>**North Rim** | **4.95** | **97** | Pn | | **Pn** | **23 28 45.6** | **-0.5** |
| U15A | comp=N,293nm,1.0s | | | IAML | | | 23 30 07.6 | |
| U15A | comp=E,303nm,1.1s | | | IAML | | | 23 30 17.6 | |
| **YUH** | **Yuha Desert** | **4.97** | **155** | Pn | | **Pn** | **23 28 44.7** | **-1.5** |
| **GLA** | **Glamis** | **5.07** | **144** | Pn | | **Pn** | **23 28 46.0** | **-1.4** |
| GLA | comp=N,209nm,0.6s | | | IAML | | | 23 30 14.8 | |
| **GLA** | **Glamis** | **5.07** | **144** | P | | **Pn** | **23 28 46.1** | **-1.4** |
| **CBX** | baz=326<br>**Cerro Bola** | **5.08** | **163** | Pn | | **Pn** | **23 28 47.8** | **+0.1** |
| CBX | comp=E,156nm,0.8s | | | IAML | | | 23 30 22.1 | |
| **MSU** | **Marysvale** | **5.08** | **73** | Pn | | **Pn** | **23 28 47.7** | **-0.2** |
| **WVOR** | **Wild Horse Val** | **5.23** | **358** | Pn | | **Pn** | **23 28 49.9** | **+0.1** |
| **M02C** | **Callahan** | **5.43** | **322** | P | | **Pn** | **23 28 52.0** | **-0.5** |
| **Y14A** | baz=139<br>**Wickenburg** | **5.46** | **125** | Pn | | **Pn** | **23 28 52.8** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **5.62** | **325** | Pn | | **Pn** | **23 28 56.5** | **+1.3** |
| YBH | comp=E,0.6nm,0.3s,baz=127,slow=12,SNR=6.6 | | | Lg | | Lg | 23 30 26.5 | |
| YBH | comp=E,2.8nm,0.3s,baz=1.7,slow=14,SNR=5.8 | | | LR | | LR | 23 31 11.8 | |
| **113A** | comp=E,191nm,18.7s,baz=160,slow=39<br>**Mohawk Valley,** | **5.83** | **138** | Pn | | **Pn** | **23 28 55.8** | **-2.1** |
| **214A** | **Organ Pipe Nat** | **6.97** | **137** | Pn | | **Pn** | **23 29 12.1** | **-1.5** |
| **214A** | **Organ Pipe Nat** | **6.97** | **137** | P | | **Pn** | **23 29 11.8** | **-1.8** |
| **PV10** | baz=320<br>**Paradox Valley** | **7.49** | **78** | Pn | | **Pn** | **23 29 17.8** | **-3.2** |
| **TUC** | **Tucson** | **7.93** | **126** | P | | **Pn** | **23 29 27.6** | **+0.7** |
| **PDAR** | baz=310<br>**Pinedale Array** | **8.76** | **48** | Pn | | **Pn** | **23 29 42.4** | **+4.0** |
| PDAR | comp=E,0.5nm,0.3s,baz=226,slow=13,SNR=21 | | | Lg | | Lg | 23 32 04.3 | |
| **S22A** | comp=E,1.1nm,0.3s,baz=225,slow=28,SNR=6.4<br>**4UR Ranch, Cre** | **9.20** | **83** | Pn | | **Pn** | **23 29 44.8** | **+0.3** |
| **ANMO** | **Albuquerque** | **9.91** | **100** | Pn | | **Pn** | **23 29 56.5** | **+2.3** |
| ANMO | comp=E,0.1nm,0.3s,baz=326,slow=18,SNR=2.0 | | | Lg | | Lg | 23 32 38.5 | |
| ANMO | comp=E,0.2nm,0.3s,baz=26,slow=22,SNR=2.0 | | | LR | | LR | 23 34 01.0 | |
| **NEW** | comp=E,120nm,19.2s,baz=275,slow=39<br>**Newport** | **11.09** | **4** | Pn | | **Pn** | **23 30 13.9** | **+3.8** |
| **A04D** | comp=E,0.1nm,0.3s,baz=244,slow=22,SNR=1.5<br>**Lummi Island** | **11.93** | **346** | P | | **Pn** | **23 30 20.3** | **-1.2** |
| **WALA** | baz=163<br>**Waterton Lakes** | **12.29** | **14** | Pn | | **Pn** | **23 30 23.2** | **-3.3** |
| **TX31** | **Lajitas Ar. Si** | **14.59** | **118** | | | **Pn** | **23 30 56.4** | **-1.6** |
| **TXAR** | **Lajitas Array** | **14.59** | **118** | Pn | | **Pn** | **23 31 00.4** | **+2.4** |
| TXAR | comp=E,0.0nm,0.3s,baz=299,slow=13,SNR=2.3 | | | LR | | LR | 23 37 19.0 | |
| **TXAR** | comp=E,93nm,18.2s,baz=295,slow=40<br>**Lajitas Array** | **14.59** | **118** | | | **Pn** | **23 30 58.0** | **0.0** |
| **LPIG** | **La Paz** | **14.78** | **150** | LR | | LR | 23 35 36.8 | |
| **EDM** | comp=E,111nm,20.3s,baz=12,slow=33<br>**Edmonton** | **16.40** | **11** | P | | **P** | **23 31 24.5** | **+0.1** |
| EDM | comp=Z,24nm,1.0s | | | IAmb | | IAmb | 23 31 26.6 | |
| **BBB** | **Bella Bella** | **16.47** | **338** | LR | | LR | 23 36 47.8 | |
| **ULM** | comp=Z,204nm,21.2s,baz=234,slow=34<br>**Lac du Bonnet** | **20.75** | **44** | P | | Pn | 23 32 14.4 | -0.1 |
| ULM | comp=Z,2.9nm,0.7s,baz=232,slow=9.7,SNR=3.5 | | | LR | | LR | 23 40 04.7 | |
| **FFC** | comp=Z,117nm,19.9s,baz=244,slow=36<br>**Flin Flon** | **20.82** | **27** | P | | **P** | **23 32 11.3** | **-1.5** |
| **YKA** | **Yellowknife Ar** | **25.42** | **4** | P | | **P** | **23 33 00.3** | **+1.4** |
| **W50A** | comp=Z,0.1nm,0.4s,baz=58,slow=41,SNR=3.2<br>**Signal Mountai** | **26.69** | **84** | P | | **P** | **23 33 08.1** | **-2.7** |
| W50A | comp=Z,10nm,1.2s | | | IAmb | | IAmb | 23 33 16.1 | |
| **E46A** | **Sault Ste Mari** | **26.84** | **59** | P | | **P** | **23 33 10.5** | **-1.4** |
| **TKL** | **Tuckaleechee C** | **27.80** | **83** | LR | | LR | 23 44 04.3 | |
| **CMIG** | comp=Z,192nm,20.4s,baz=34,slow=36<br>**Matias Romero** | **28.82** | **128** | LR | | LR | 23 46 52.6 | |
| **ILAR** | comp=Z,89nm,19.1s,baz=250,slow=40<br>**Eielson Array** | **32.36** | **338** | P | | **P** | **23 34 02.4** | **+1.7** |
| **APG** | comp=Z,0.5nm,1.0s,baz=163,slow=7.9,SNR=6.4<br>**El Apazote** | **33.21** | **124** | LR | | LR | 23 47 18.0 | |
| **IMAR** | comp=Z,100nm,21.4s,baz=50,slow=36<br>**Indian Mountai** | **35.33** | **336** | P | | **P** | **23 34 26.8** | **+0.3** |
| **SCHQ** | **Schefferville** | **38.89** | **46** | P | | **P** | **23 34 57.8** | **+0.9** |
| **FRB** | comp=Z,2.0nm,0.8s,baz=252,slow=13,SNR=1.9<br>**Frobisher Bay** | **39.80** | **32** | P | | **P** | **23 35 06.9** | **+2.6** |
| **SONM** | comp=Z,1.5nm,0.7s,baz=232,slow=14,SNR=2.7<br>**Songino Array** | **86.38** | **332** | P | | **P** | **23 40 14.7** | **+0.7** |
| | comp=Z,0.2nm,0.8s,baz=20,slow=4.1,SNR=1.5 | | | | | | | |

*IASPEI* **16** *23:47:40.8±0.9, 43.56N±0.02×78.21E±0.02, h18km±4km, Error ellipse: s-maj=3.1km s-min=2.7km az=48.7, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*KRNET* **16** *23:47:40.7±0.1, 43.57N×78.21E, h21km, mb3.4*

*NNC* **16** *23:47:40.6±0.2, 43.57N×78.19E, h0km, mb3.4, mpv3.6, Error ellipse: s-maj=2.1km s-min=1.7km az=176.0*

*SOME* **16** *23:47:41.3, 43.58N×78.12E, h5km*

**ISC 16 23:47:41.6±0.8, 43.57N±0.02×78.20E±0.01, h16km±4km, n85, σ1.920/163, 30C-24D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KURS** | **Kuram** | **0.08** | **195** | *eP* | | **Pg** | **23 47 44.5** | **-0.4** |
| KURS | 33nm,0.1s | | | *eS* | | **Sg** | **23 47 46.5** | **-0.7** |
| **KURS** | 355nm,0.1s<br>**Kuram** | **0.08** | **195** | P | | **Pg** | **23 47 44.5** | **-0.4** |
| KURS | 120nm,0.1s | | | S | | **Sg** | **23 47 46.5** | **-0.7** |
| **KURS** | 762nm,0.2s<br>**Kuram** | **0.08** | **195** | *eP* | | **Pg** | **23 47 44.5** | **-0.4** |
| KURS | baz=2.0 | | | *eS* | | **Sg** | **23 47 46.5** | **-0.7** |
| **KPKS** | baz=2.0<br>**Kokpek** | **0.37** | **106** | ⇑*eP* | | **Pg** | **23 47 48.6** | **-0.6** |
| KPKS | 300nm,0.1s | | | *eS* | | **Sg** | **23 47 53.0** | **-1.4** |
| **KPKS** | 324nm,0.2s<br>**Kokpek** | **0.37** | **106** | ⇑*eP* | | **Pg** | **23 47 48.6** | **-0.6** |
| KPKS | baz=7.0 | | | ⇑*eS* | | **Sg** | **23 47 53.0** | **-1.4** |
| **ZHN** | **Zhinishke** | **0.44** | **157** | *eP* | | **Pg** | **23 47 49.5** | **-0.9** |
| ZHN | 53nm,0.2s | | | *eS* | | **Sg** | **23 47 55.2** | **-1.1** |
| **ZHN** | 981nm,0.1s<br>**Zhinishke** | **0.44** | **157** | P | | **Pg** | **23 47 49.5** | **-0.9** |
| ZHN | 53nm,0.2s | | | S | | **Sg** | **23 47 55.2** | **-1.1** |
| **ZHN** | 2µm,0.2s<br>**Zhinishke** | **0.44** | **157** | *eP* | | **Pg** | **23 47 49.5** | **-0.9** |
| ZHN | baz=58 | | | *eS* | | **Sg** | **23 47 55.3** | **-1.1** |
| **SATY** | baz=58<br>**Saty** | **0.53** | **164** | ⇓*eP* | | **Pg** | **23 47 51.2** | **-1.0** |
| SATY | 62nm,0.1s | | | *eS* | | **Sg** | **23 47 57.8** | **-1.5** |
| **SATY** | 2µm,0.2s<br>**Saty** | **0.53** | **164** | P | | **Pg** | **23 47 51.2** | **-1.0** |
| SATY | 62nm,0.1s | | | S | | **Sg** | **23 47 57.8** | **-1.5** |
| **SATY** | 677nm,0.1s<br>**Saty** | **0.53** | **164** | ⇓*eP* | | **Pg** | **23 47 51.2** | **-1.0** |
| SATY | baz=65 | | | ⇓*eS* | | **Sg** | **23 47 57.8** | **-1.5** |
| **BLB** | baz=65<br>**Baldybastay** | **0.56** | **21** | ⇑*eP* | | **Pg** | **23 47 52.4** | **-0.5** |
| BLB | 340nm,0.1s | | | *eS* | | **Sg** | **23 48 00.0** | **-0.4** |
| **BLB** | 301nm,0.1s<br>**Baldybastay** | **0.56** | **21** | P | | **Pg** | **23 47 52.4** | **-0.5** |
| BLB | 340nm,0.1s | | | S | | **Sg** | **23 48 00.0** | **-0.4** |
| **ARXS** | 316nm,0.3s<br>**Arharly** | **0.70** | **337** | *eP* | | **Pb** | **23 47 54.7** | **-0.7** |
| ARXS | 12nm,0.1s | | | *eS* | | **Sb** | **23 48 04.2** | **-0.6** |
| **ARXS** | 158nm,0.2s<br>**Arharly** | **0.70** | **337** | P | | **Pb** | **23 47 54.7** | **-0.7** |
| ARXS | 12nm,0.1s | | | S | | **Sb** | **23 48 04.2** | **-0.6** |
| **UZB** | 158nm,0.2s<br>**Uzynbulak** | **0.73** | **125** | *eP* | | **Pg** | **23 47 54.8** | **-1.1** |
| UZB | 67nm,0.2s | | | *eS* | | **Sg** | **23 48 04.3** | **-1.3** |
| **UZB** | 114nm,0.2s<br>**Uzynbulak** | **0.73** | **125** | P | | **Pg** | **23 47 54.8** | **-1.1** |
| UZB | 67nm,0.2s | | | S | | **Sg** | **23 48 04.3** | **-1.3** |
| **UZB** | 114nm,0.2s<br>**Uzynbulak** | **0.73** | **125** | *eP* | | **Pg** | **23 47 54.8** | **-1.1** |
| UZB | baz=25 | | | *eS* | | **Sg** | **23 48 04.4** | **-1.3** |
| **KOTS** | baz=25<br>**Kotyrbulak** | **0.86** | **247** | *eP* | | **Pg** | **23 47 57.5** | **-0.9** |
| KOTS | 14nm,0.2s | | | *eS* | | **Sb** | **23 48 09.5** | **0.0** |
| **KOTS** | 308nm,0.1s<br>**Kotyrbulak** | **0.86** | **247** | P | | **Pg** | **23 47 57.5** | **-0.9** |
| KOTS | 14nm,0.2s | | | S | | **Sb** | **23 48 09.5** | **0.0** |
| **KOTS** | 353nm,0.2s<br>**Kotyrbulak** | **0.86** | **247** | *eP* | | **Pg** | **23 47 57.5** | **-0.9** |
| KOTS | baz=48 | | | *eS* | | **Sb** | **23 48 09.5** | **0.0** |
| **ANVS** | baz=48<br>**Anan'yevo** | **0.88** | **207** | ⇑*iP* | | **Pg** | **23 47 57.3** | **-1.4** |
| ANVS | baz=7.0 | | | ⇑*iS* | | **Sg** | **23 48 09.3** | **-0.9** |
| **CHKK** | **Chushkaly** | **0.92** | **288** | ⇑*eP* | | **Pg** | **23 47 58.2** | **-1.3** |
| CHKK | 14nm,0.0s | | | *eS* | | **Sg** | **23 48 10.2** | **-1.4** |
| **CHKK** | 50nm,0.2s<br>**Chushkaly** | **0.92** | **288** | P | | **Pg** | **23 47 58.2** | **-1.3** |
| CHKK | 16nm,0.2s | | | S | | **Sg** | **23 48 10.2** | **-1.4** |
| **CHKK** | 50nm,0.2s<br>**Chushkaly** | **0.92** | **288** | ⇑*eP* | | **Pg** | **23 47 58.2** | **-1.3** |
| CHKK | baz=88 | | | ⇑*eS* | | **Sg** | **23 48 10.3** | **-1.4** |
| **MDOK** | baz=88<br>**Medeo** | **0.93** | **245** | *eP* | | **Pg** | **23 47 58.6** | **-1.1** |
| MDOK | 16nm,0.2s | | | *eS* | | **Sg** | **23 48 11.1** | **-0.9** |
| **MDOK** | 108nm,0.4s<br>**Medeo** | **0.93** | **245** | ⇑P | | **Pg** | **23 47 58.3** | **-1.4** |
| MDOK | 2.8nm,0.2s | | | ⇑S | | **Sg** | **23 48 10.8** | **-1.2** |
| **MDOK** | 40nm,0.2s<br>**Medeo** | **0.93** | **245** | Pg | | **Pg** | **23 47 58.6** | **-1.1** |
| MDOK | 16nm,0.2s | | | Lg | | Lg | 23 48 11.1 | |
| **MDOK** | 108nm,0.4s<br>**Medeo** | **0.93** | **245** | *eP* | | **Pg** | **23 47 58.6** | **-1.1** |
| MDOK | baz=45 | | | *eS* | | **Sg** | **23 48 11.1** | **-0.9** |
| **KNDC** | baz=45<br>**Almaty** | **0.97** | **249** | ⇓P | | **Pg** | **23 47 59.3** | **-1.0** |
| KNDC | 6.7nm,0.2s | | | ⇑S | | **Sb** | **23 48 12.5** | **0.0** |
| **PDGK** | 64nm,0.2s<br>**Podgornoye** | **0.97** | **104** | P | | **Pg** | **23 47 58.9** | **-1.4** |
| PDGK | 20nm,0.2s | | | S | | **Sg** | **23 48 11.9** | **-1.2** |
| **AAA** | 18nm,0.2s<br>**Alma-Ata** | **1.00** | **249** | *eP* | | **Pb** | **23 48 00.4** | **-0.2** |
| AAA | 33nm,0.1s | | | *eS* | | **Sb** | **23 48 13.9** | **+0.4** |
| **AAA** | 20nm,0.1s<br>**Alma-Ata** | **1.00** | **249** | P | | **Pb** | **23 48 00.4** | **-0.2** |
| AAA | 33nm,0.1s | | | S | | **Sb** | **23 48 13.9** | **+0.4** |
| **KNOS** | 20nm,0.1s<br>**Konyrlen** | **1.06** | **41** | ⇓*eP* | | **Pg** | **23 48 01.0** | **-1.1** |
| KNOS | 16nm,0.1s | | | *eS* | | **Sb** | **23 48 15.4** | **+0.2** |
| **TNSS** | 116nm,0.0s<br>**Tian-Shan** | **1.06** | **240** | *eP* | | **Pg** | **23 48 01.0** | **-1.1** |
| TNSS | 18nm,0.2s | | | *eS* | | **Sg** | **23 48 15.0** | **-1.1** |
| **TNSS** | 30nm,0.2s<br>**Tian-Shan** | **1.06** | **240** | P | | **Pg** | **23 48 01.0** | **-1.1** |
| TNSS | 18nm,0.2s | | | S | | **Sg** | **23 48 15.0** | **-1.1** |
| **PRZ** | 30nm,0.2s<br>**Przheval'sk** | **1.09** | **172** | ⇓*iP* | | **Pg** | **23 48 00.7** | **-2.1** |
| PRZ | baz=73 | | | ⇓*iS* | | **Sg** | **23 48 15.2** | **-1.9** |
| **KTBS** | **Karatobe** | **1.11** | **278** | *eP* | | **Pg** | **23 48 01.4** | **-1.6** |
| KTBS | 8.5nm,0.1s | | | *eS* | | **Sg** | **23 48 16.4** | **-1.2** |
| **KTBS** | 39nm,0.2s<br>**Karatobe** | **1.11** | **278** | P | | **Pg** | **23 48 01.5** | **-1.6** |
| KTBS | 8.5nm,0.1s | | | S | | **Sg** | **23 48 16.3** | **-1.2** |
| **KTBS** | 43nm,0.5s<br>**Karatobe** | **1.11** | **278** | *eP* | | **Pg** | **23 48 01.5** | **-1.6** |
| KTBS | baz=78 | | | *eS* | | **Sg** | **23 48 16.4** | **-1.2** |
| **MTBS** | baz=78<br>**Maitube** | **1.36** | **252** | *eP* | | **Pn** | **23 48 06.0** | **0.0** |
| MTBS | 10nm,0.2s | | | *eS* | | **Sg** | **23 48 24.0** | **-1.7** |
| **MTBS** | 224nm,0.2s<br>**Maitube** | **1.36** | **252** | P | | **Pn** | **23 48 06.0** | **0.0** |
| MTBS | 10nm,0.2s | | | S | | **Sg** | **23 48 24.0** | **-1.7** |
| **MTBS** | 224nm,0.2s<br>**Maitube** | **1.36** | **252** | *eP* | | **Pn** | **23 48 06.0** | **0.0** |
| MTBS | baz=52 | | | *eS* | | **Sg** | **23 48 24.0** | **-1.7** |
| **DJR** | baz=52<br>**Jarkent** | **1.38** | **56** | *eP* | | **Pn** | **23 48 06.4** | **+0.2** |
| DJR | 9.2nm,0.1s | | | *eS* | | **Sb** | **23 48 24.8** | **+0.5** |
| **DJR** | 71nm,0.2s<br>**Jarkent** | **1.38** | **56** | P | | **Pn** | **23 48 06.9** | **+0.7** |
| DJR | 17nm,0.3s | | | S | | **Sb** | **23 48 24.8** | **+0.5** |
| **KUU** | 71nm,0.2s<br>**Kurty** | **1.39** | **284** | *eP* | | **Pn** | **23 48 06.0** | **-0.3** |
| KUU | 8.3nm,0.2s | | | *eS* | | **Sb** | **23 48 24.3** | **-0.3** |
| **KUU** | 54nm,0.2s<br>**Kurty** | **1.39** | **284** | P | | **Pn** | **23 48 06.0** | **-0.3** |
| KUU | 8.3nm,0.2s | | | S | | **Sb** | **23 48 24.3** | **-0.3** |
| **KUU** | 54nm,0.2s<br>**Kurty** | **1.39** | **284** | *eP* | | **Pn** | **23 48 06.0** | **-0.3** |
| KUU | baz=84 | | | *eS* | | **Sb** | **23 48 24.3** | **-0.3** |
| **TDK** | baz=84<br>**Taldyqorghan** | **1.44** | **6** | *eP* | | **Pb** | **23 48 07.9** | **-0.1** |
| TDK | 81nm,0.5s | | | *eS* | | **Sg** | **23 48 26.9** | **-1.2** |
| **TDK** | 113nm,0.5s<br>**Taldyqorghan** | **1.44** | **6** | P | | **Pb** | **23 48 07.9** | **-0.1** |
| TDK | 81nm,0.5s | | | S | | **Sg** | **23 48 26.9** | **-1.2** |
| **KTMS** | 113nm,0.5s<br>**Ketmen** | **1.57** | **94** | *eP* | | **Pn** | **23 48 09.2** | **+0.3** |
| KTMS | 14nm,0.2s | | | *eS* | | **Sn** | **23 48 29.1** | **+0.3** |
| **KTMS** | 142nm,0.2s<br>**Ketmen** | **1.57** | **94** | P | | **Pn** | **23 48 09.2** | **+0.3** |
| KTMS | 14nm,0.2s | | | S | | **Sn** | **23 48 29.1** | **+0.3** |
| **KTMS** | 142nm,0.2s<br>**Ketmen** | **1.57** | **94** | *eP* | | **Pn** | **23 48 09.2** | **+0.3** |
| KTMS | baz=94 | | | *eS* | | **Sn** | **23 48 29.2** | **+0.3** |
| **KDJ** | baz=94<br>**Kajisay** | **1.62** | **208** | ⇓*iP* | | **Pb** | **23 48 10.9** | **-0.3** |
| KDJ | baz=8.0 | | | ⇓*iS* | | **Sb** | **23 48 32.0** | **+0.5** |
| **KST** | **Kastek** | **1.72** | **253** | *eP* | | **Pn** | **23 48 11.8** | **+1.0** |
| KST | 6.5nm,0.1s | | | *eS* | | **Sn** | **23 48 34.0** | **+1.5** |
| **KST** | 27nm,0.2s<br>**Kastek** | **1.72** | **253** | P | | **Pn** | **23 48 11.8** | **+1.0** |
| KST | 15nm,0.5s | | | S | | **Sn** | **23 48 34.0** | **+1.5** |
| **KST** | 27nm,0.2s<br>**Kastek** | **1.72** | **253** | *eP* | | **Pn** | **23 48 11.8** | **+1.0** |
| KST | baz=53 | | | *eS* | | **Sn** | **23 48 34.0** | **+1.5** |
| **DGS** | baz=53<br>**Degeres** | **1.80** | **260** | *eP* | | **Pb** | **23 48 13.7** | **-0.5** |
| DGS | 11nm,0.1s | | | *eS* | | **Sb** | **23 48 36.8** | **+0.2** |
| **DGS** | 111nm,0.2s<br>**Degeres** | **1.80** | **260** | P | | **Pb** | **23 48 13.7** | **-0.5** |
| DGS | 15nm,0.2s | | | S | | **Sb** | **23 48 36.8** | **+0.2** |
| **DGS** | 111nm,0.2s<br>**Degeres** | **1.80** | **260** | *eP* | | **Pb** | **23 48 13.7** | **-0.5** |
| DGS | baz=60 | | | *eS* | | **Sb** | **23 48 36.7** | **+0.2** |
| **KRBS** | baz=60<br>**Karabastau** | **1.84** | **275** | *eP* | | **Pb** | **23 48 14.7** | **-0.1** |
| | 4.3nm,0.2s | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KRBS | | | | *e*S | | **Sb** | **23 48 38.2** | **+0.6** |
| | 33nm,0.2s | | | | | | | | | |
| **KRBS** | **Karabastau** | **1.84** | **275** | P | | **Pb** | **23 48 14.7** | **-0.1** |
| | 14nm,0.2s | | | | | | | | | |
| KRBS | | | | S | | **Sb** | **23 48 38.2** | **+0.6** |
| | 33nm,0.2s | | | | | | | | | |
| **KRBS** | **Karabastau** | **1.84** | **275** | *e*P | | **Pb** | **23 48 14.7** | **-0.1** |
| | baz=75 | | | | | | | | | |
| KRBS | | | | *e*S | | **Sb** | **23 48 38.2** | **+0.6** |
| | baz=75 | | | | | | | | | |
| **KAPS** | **Kapalarasan** | **1.91** | **25** | *e*P | | **Pb** | **23 48 16.2** | **+0.3** |
| | 8.1nm,0.1s | | | | | | | | | |
| KAPS | | | | *e*S | | **Sg** | **23 48 41.7** | **-1.2** |
| | 28nm,0.2s | | | | | | | | | |
| **KAPS** | **Kapalarasan** | **1.91** | **25** | P | | **Pb** | **23 48 16.2** | **+0.3** |
| | 8.1nm,0.1s | | | | | | | | | |
| KAPS | | | | S | | **Sg** | **23 48 41.7** | **-1.2** |
| | 28nm,0.2s | | | | | | | | | |
| **ULHL** | **Ulahol** | **1.96** | **228** | ⇑*i*P | | **Pn** | **23 48 15.6** | **+1.4** |
| | baz=28 | | | | | | | | | |
| ULHL | | | | ⇑*i*S | | **Sb** | **23 48 40.8** | **-0.3** |
| | baz=28 | | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.98** | **238** | ⇓*i*P | | **Pn** | **23 48 15.8** | **+1.3** |
| | baz=38 | | | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sb** | **23 48 41.3** | **-0.4** |
| | baz=38 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.01** | **252** | ⇑Pg | | **Pn** | **23 48 16.5** | **+1.5** |
| | 2.2nm,0.3s | | | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 23 48 43.6 | | | |
| | 17nm,0.2s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.01** | **252** | ⇓*i*P | | **Pn** | **23 48 16.3** | **+1.3** |
| | baz=52 | | | | | | | | | |
| TKM2 | | | | ⇓*i*S | | **Sb** | **23 48 42.2** | **-0.5** |
| | baz=52 | | | | | | | | | |
| **KBK** | **Karagaybulak** | **2.55** | **250** | ⇑*i*P | | **Pn** | **23 48 23.8** | **+1.4** |
| | baz=50 | | | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sn** | **23 48 55.2** | **+2.0** |
| | baz=50 | | | | | | | | | |
| **CHMS** | **Chumysh** | **2.58** | **258** | ⇑*i*P | | **Pn** | **23 48 24.2** | **+1.5** |
| | baz=58 | | | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sn** | **23 48 55.9** | **+2.2** |
| | baz=58 | | | | | | | | | |
| **SGDS** | **Sogindy** | **2.60** | **269** | *e*P | | **Pb** | **23 48 27.6** | **-0.2** |
| SGDS | | | | *e*S | | **Sb** | **23 49 01.6** | **+2.1** |
| **SGDS** | **Sogindy** | **2.60** | **269** | Pg | | **Pg** | **23 48 30.1** | **-1.3** |
| | 11nm,0.3s | | | | | | | | | |
| SGDS | | | | Lg | | Lg | 23 49 05.7 | | | |
| | 6.1nm,0.2s | | | | | | | | | |
| **USP** | **Ospenovka** | **2.71** | **265** | ⇓*i*P | | **Pn** | **23 48 26.1** | **+1.6** |
| | baz=65 | | | | | | | | | |
| USP | | | | ⇓*i*S | | **Sn** | **23 48 59.1** | **+2.1** |
| | baz=65 | | | | | | | | | |
| **FRU1** | **Bishkek** | **2.72** | **255** | ⇑*i*P | | **Pn** | **23 48 26.3** | **+1.7** |
| | baz=56 | | | | | | | | | |
| FRU1 | | | | ⇑*i*S | | **Sn** | **23 48 59.3** | **+2.1** |
| | baz=56 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.87** | **252** | ⇓Pg | | **Pb** | **23 48 31.5** | **-0.9** |
| | 2.3nm,0.3s | | | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 23 49 09.3 | | | |
| | 6.7nm,0.6s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.87** | **252** | ⇑*i*P | | **Pn** | **23 48 28.3** | **+1.6** |
| | baz=52 | | | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sn** | **23 49 02.8** | **+1.8** |
| | baz=52 | | | | | | | | | |
| **UCH** | **Uchtor** | **3.02** | **245** | ⇓*i*P | | **Pn** | **23 48 30.6** | **+1.5** |
| | baz=45 | | | | | | | | | |
| UCH | | | | ⇓*i*S | | **Sn** | **23 49 06.4** | **+1.2** |
| | baz=45 | | | | | | | | | |
| **BTLS** | **Baital** | **3.33** | **298** | *e*P | | **Pb** | **23 48 41.7** | **+1.6** |
| | 1.7nm,0.3s | | | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **23 49 24.5** | **-3.8** |
| | 1.8nm,0.1s | | | | | | | | | |
| **BTLS** | **Baital** | **3.33** | **298** | Pg | | **Pb** | **23 48 41.7** | **+1.6** |
| | 1.7nm,0.3s | | | | | | | | | |
| BTLS | | | | Lg | | Lg | 23 49 24.5 | | | |
| | 1.9nm,0.3s | | | | | | | | | |
| **ARLS** | **Aral** | **3.33** | **240** | ⇓*i*P | | **Pn** | **23 48 34.6** | **+1.5** |
| | baz=40 | | | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **23 49 13.9** | **+1.6** |
| | baz=40 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.36** | **256** | ⇑*i*P | | **Pn** | **23 48 35.1** | **+1.6** |
| | baz=56 | | | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sn** | **23 49 14.7** | **+1.6** |
| | baz=56 | | | | | | | | | |
| **MAKZ** | **Makanchi** | **4.20** | **38** | ⇑Pn | | **Pn** | **23 48 46.6** | **+1.8** |
| MAKZ | | | | ⇑Pg | | **Pb** | **23 48 58.0** | **+3.1** |
| MAKZ | | | | ⇓Lg | | Lg | 23 49 51.2 | | | |
| **MK31** | **Makanchi Array** | **4.33** | **40** | ⇓Pn | | **Pn** | **23 48 48.3** | **+1.7** |
| | baz=220,slow=15,SNR=10.0 | | | | | | | | | |
| MK31 | | | | ⇓Pg | | **Pg** | **23 49 00.6** | **-3.9** |
| | 0.5nm,0.5s,baz=223,slow=15,SNR=11 | | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 23 49 55.6 | | | |
| | 0.4nm,0.2s,baz=220,slow=29,SNR=12 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.06** | **2** | ⇑Lg | | Lg | 23 51 22.1 | | | |
| | 3.7nm,0.6s | | | | | | | | | |

*IDC* ***16*** *23:48:32.9±0.6,55.˙88S×125.˙55W,h0km,mb4.4/11, mb1 4.6/11,mb1mx4.5/23,mbtmp4.4/11,MS5.3/43, Ms1 5.3/43,ms1mx5.3/48,Error ellipse: s-maj=26.0km s-min=17.3km az=173.0*

*NEIC* ***16*** *23:48:35.7±2.4,55.˙8S±0.˙1×125.˙2W±0.˙2,h13km±1km, mb5.2/54,Ms_20 5.8/255,Mwb6.0/42,Mww6.1,Error ellipse: s-maj=21.0km s-min=15.8km az=341.0*

*NEIC* ***16*** *23:48:35.2,55.˙82S×125.˙18W,h13km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr=0.04; Mθθ=0.94; Mϕϕ-0.90; Mrθ-0.17; Mrϕ 1.02; Mθϕ=0.08; Fault plane solution: M₀1.39000×10¹⁸ NP1:ϕs201.08000°, δ82.11000°,λ-179.32000°. NP2:ϕs110.99000°, δ89.33000°,λ-7.89000°. Principal axes: T 1.4035, Plg5.0000°, Azm156.0000°; N -0.0343, Plg82.0000°, Azm286.0000°; P -1.3692, Plg6.0000°, Azm66.0000°;*

*GCMT* ***16*** *23:48:38.7±0.1,55.˙74S×124.˙57W,h20km,MW6.1/159, Moment Tensor Solution. s159,c358; s158,c571; Duration: 2s8 Moment tensor: Scale 10¹⁸Nm; Mrr=0.24±.01; Mθθ 1.21±.01; Mϕϕ-0.97±.01; Mrθ-0.21±.02; Mθϕ 1.53±.01; Mrϕ-0.11±.02; Best double couple: M₀1.89200×10¹⁸ NP1:ϕs198.00000°,δ86.00000°, λ176.00000°. NP2:ϕs288.00000°,δ86.00000°,λ4.00000°. Principal axes: T 2.0230, Plg6.0000°, Azm153.0000°; N -0.2670, Plg84.0000°, Azm331.0000°; P -1.7600, Plg0.0000°, Azm63.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***16*** *23:48:40,55.˙82S×125.˙18W,h14km,Moment Tensor Solution. Duration: 10s0 Moment tensor: Scale 10¹⁸Nm; Mrr0.07; Mθθ 0.76; Mϕϕ-0.83; Mrθ-0.05; Mθϕ 1.80; Mrϕ-0.26; Fault plane solution: M₀1.99000×10¹⁸ NP1: ϕs282.00000°,δ82.00000°,λ0.00000°. NP2:ϕs192.00000°, δ90.00000°,λ172.00000°. Principal axes: T 1.9499, Plg6.0000°, Azm147.0000°; N 0.0688, Plg82.0000°, Azm9.0000°; P -2.0186, Plg5.0000°, Azm237.0000°;*

**ISC 16 23:48:37.7±0.8,55.˙9S±0.˙1×125.˙08W±0.˙08,h26km±4km, n320,σ1s86/159,mb5.1/36,MS5.8/177,3C-1D,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **30.94** | **28** | LR | LR | 00 02 40.7 | |
| | comp=Z,4μm,20.1s,baz=201,slow=27 | | | | | | |
| **RPN** | **Rapa Nui** | **30.94** | **28** | P | **P** | **23 54 50.6** | **-1.6** |
| **PTCN** | **Pitcairn Islan** | **31.04** | **351** | P | P | 23 54 49.0 | -4.1 |
| **PTCN** | **Pitcairn Islan** | **31.04** | **351** | IAMs_20 | IAMs_20 | 00 03 32.3 | |
| | comp=Z,20μm,20.0s | | | | | | |
| **USHA** | **Ushuaia** | **31.44** | **112** | LR | LR | 00 04 03.5 | |
| | comp=Z,2μm,19.1s,baz=242,slow=29 | | | | | | |
| **VNDA** | **Vanda** | **32.60** | **203** | LR | LR | 00 04 45.7 | |
| | comp=Z,4μm,21.4s,baz=88,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.25** | **180** | P | **P** | **23 55 21.5** | **+0.4** |
| | comp=Z,1.7nm,0.9s,baz=188,slow=1.9,SNR=4.9 | | | | | | |
| QSPA | | | | LR | LR | 00 07 12.9 | |
| | comp=Z,6μm,20.5s,baz=87,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.25** | **180** | P | **P** | **23 55 21.2** | **+0.1** |
| **BELA** | **Belgrano 2** | **36.20** | **159** | P | **P** | **23 55 35.5** | **-2.0** |
| BELA | | | | IAmb | IAmb | 23 55 49.1 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **PLCA** | **Paso Flores** | **38.23** | **90** | P | **P** | **23 55 57.6** | **+2.3** |
| | comp=Z,4.4nm,1.0s,baz=233,slow=9.6,SNR=4.0 | | | | | | |
| PLCA | | | | LR | LR | 00 07 32.6 | |
| | comp=Z,2μm,18.9s,baz=230,slow=30 | | | | | | |
| **H03S2** | **Juan Fernandez** | **38.50** | **75** | T | T | 00 36 49.7 | |
| | baz=221 | | | | | | |
| **H03S1** | **Juan Fernandez** | **38.50** | **75** | T | T | 00 36 48.0 | |
| | baz=221 | | | | | | |
| **H03S3** | **Juan Fernandez** | **38.51** | **75** | T | T | 00 36 55.2 | |
| | baz=221 | | | | | | |
| **LC01** | **Cunco** | **38.74** | **87** | P | **P** | **23 56 00.0** | **+0.6** |
| **H03N3** | **Juan Fernandez** | **38.79** | **74** | T | T | 00 37 02.8 | |
| | baz=222,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **38.79** | **74** | T | T | 00 37 01.8 | |
| | baz=222,slow=72 | | | | | | |
| **H03N1** | **Juan Fernandez** | **38.80** | **74** | T | T | 00 37 01.7 | |
| | baz=222,slow=72 | | | | | | |
| **BFZ** | **Birch Farm** | **40.60** | **267** | IAMs_20 | IAMs_20 | 00 08 52.7 | |
| | comp=Z,15μm,22.0s | | | | | | |
| **ODZ** | **Otahua Downs** | **40.87** | **257** | IAMs_20 | IAMs_20 | 00 08 56.2 | |
| | comp=Z,16μm,22.0s | | | | | | |
| **SNZO** | **South Karori** | **41.04** | **265** | IAMs_20 | IAMs_20 | 00 10 33.5 | |
| | comp=Z,7μm,18.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **41.43** | **261** | IAMs_20 | IAMs_20 | 00 09 51.8 | |
| | comp=Z,8μm,19.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **41.49** | **268** | IAMs_20 | IAMs_20 | 00 09 21.3 | |
| | comp=Z,17μm,21.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **41.50** | **259** | LR | LR | 00 09 35.2 | |
| | comp=Z,7μm,20.9s,baz=119,slow=31 | | | | | | |
| **LBZ** | **Lake Benmore** | **41.55** | **258** | IAMs_20 | IAMs_20 | 00 09 46.0 | |
| | comp=Z,16μm,21.0s | | | | | | |
| **MXZ** | **Matakaoa Point** | **41.59** | **272** | IAMs_20 | IAMs_20 | 00 11 30.7 | |
| | comp=Z,9μm,20.0s | | | | | | |
| **URZ** | **Urewera** | **41.78** | **270** | LR | LR | 00 09 47.9 | |
| | comp=Z,12μm,20.9s,baz=128,slow=31 | | | | | | |
| **URZ** | **Urewera** | **41.78** | **270** | IAMs_20 | IAMs_20 | 00 09 36.7 | |
| | comp=Z,14μm,19.0s | | | | | | |
| **MEH** | **Mehetia** | **41.79** | **326** | *e*T | T | 00 40 33.2 | |
| **WHZ** | **Wether Hill Ro** | **41.81** | **255** | IAMs_20 | IAMs_20 | 00 09 14.1 | |
| | comp=Z,11μm,22.0s | | | | | | |
| **WKZ** | **Wanaka** | **41.90** | **257** | IAMs_20 | IAMs_20 | 00 09 40.5 | |
| | comp=Z,16μm,20.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **42.05** | **255** | IAMs_20 | IAMs_20 | 00 09 35.4 | |
| | comp=Z,10μm,22.0s | | | | | | |
| **BO02** | **Sierra Bellavi** | **42.28** | **83** | P | **P** | **23 56 29.7** | **+0.9** |
| BO02 | | | | IAmb | IAmb | 23 56 45.4 | |
| | comp=Z,101nm,1.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **42.30** | **259** | IAMs_20 | IAMs_20 | 00 10 10.9 | |
| | comp=Z,15μm,20.0s | | | | | | |
| **BO01** | **Tunca** | **42.41** | **83** | P | **P** | **23 56 30.0** | **+0.3** |
| **PAE** | **Paea** | **42.47** | **324** | *e*T | T | 00 41 23.7 | |
| | comp=Z,3.5nm,0.3s | | | | | | |
| **DCZ** | **Deep Cove** | **42.51** | **255** | IAMs_20 | IAMs_20 | 00 09 35.7 | |
| | comp=Z,8μm,21.0s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **42.54** | **324** | IAMs_20 | IAMs_20 | 00 09 09.9 | |
| | comp=Z,17μm,20.0s | | | | | | |
| **PPT2** | **Papeete2** | **42.54** | **324** | *e*S | S | 00 02 28.7 | -23 |
| | comp=Z,7μm,26.2s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 00 06 02.4 | |
| | comp=Z,40μm,26.1s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 07 49.9 | |
| | comp=Z,40μm,26.0s,baz=163 | | | | | | |
| **PPT2** | **Papeete2** | **42.54** | **324** | *e*T | T | 00 41 28.2 | |
| | comp=Z,7.2nm,0.2s | | | | | | |
| **PPT** | **Papeete** | **42.56** | **324** | LR | LR | 00 09 33.2 | |
| | comp=Z,12μm,21.3s,baz=152,slow=30 | | | | | | |
| **MT01** | **Popeta** | **42.70** | **82** | P | **P** | **23 56 31.6** | **-0.6** |
| **HIZ** | **Hauiti** | **42.87** | **268** | IAMs_20 | IAMs_20 | 00 10 46.6 | |
| | comp=Z,10μm,20.0s | | | | | | |
| **MT09** | **Talagante** | **42.92** | **82** | P | **P** | **23 56 33.3** | **-0.8** |
| **RAR** | **Rarotonga** | **43.19** | **309** | LR | LR | 00 12 32.8 | |
| | comp=Z,5μm,18.0s,baz=150,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **43.19** | **309** | IAMs_20 | IAMs_20 | 00 08 24.4 | |
| | comp=Z,11μm,20.0s | | | | | | |
| **LMEL** | **Las Melosas** | **43.30** | **83** | P | **P** | **23 56 36.1** | **-1.1** |
| **PEL** | **Peldehue** | **43.56** | **82** | P | **P** | **23 56 39.5** | **+0.3** |
| PEL | | | | IAmb | IAmb | 23 56 48.4 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **VA03** | **San Esteban** | **43.91** | **82** | P | **P** | **23 56 40.2** | **-1.9** |
| VA03 | | | | IAmb | IAmb | 23 56 57.8 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **VAH** | **Vaihoa** | **44.14** | **328** | *e*T | T | 00 43 27.8 | |
| | comp=Z,721nm,0.4s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **44.44** | **328** | *e*T | T | 00 43 52.2 | |
| | comp=Z,48nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **44.84** | **80** | P | **P** | **23 56 49.2** | **-0.3** |
| CO02 | | | | IAmb | IAmb | 23 56 56.6 | |
| | comp=Z,72nm,1.3s | | | | | | |
| **CO06** | **Fray Jorge** | **44.90** | **79** | P | **P** | **23 56 50.7** | **+0.9** |
| **VNA3** | **Neumayer Olymp** | **45.25** | **156** | P | **P** | **23 56 50.7** | **-1.5** |
| **RAO** | **Raoul Island** | **45.66** | **283** | LR | LR | 00 12 45.3 | |
| | comp=Z,1μm,19.0s,baz=148,slow=32 | | | | | | |
| **ZON** | **Zonda** | **45.87** | **82** | P | **P** | **23 56 57.2** | **-0.4** |
| **VNA1** | **Neumayer--Stat** | **46.00** | **156** | P | **P** | **23 56 57.0** | **-1.1** |
| **VNA2** | **Neumayer--Watz** | **46.00** | **156** | P | **P** | **23 56 57.0** | **-1.1** |
| | baz=211,slow=10 | | | | | | |
| **SNAA** | **Sanae** | **46.44** | **158** | P | **P** | **23 57 00.9** | **-0.7** |
| **SNAA** | **Sanae** | **46.44** | **158** | P | **P** | **23 57 00.9** | **-0.7** |
| | comp=Z,5.3nm,0.9s,baz=198,slow=11,SNR=6.6 | | | | | | |
| SNAA | | | | LR | LR | 00 15 07.6 | |
| | comp=Z,3μm,21.5s,baz=244,slow=34 | | | | | | |
| **SNAA** | **Sanae** | **46.44** | **158** | P | **P** | **23 57 00.9** | **-0.7** |
| SNAA | | | | IAmb | IAmb | 23 57 12.2 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **48.43** | **340** | *e*S | S | 00 03 53.5 | -23 |
| | comp=Z,7μm,25.8s | | | | | | |
| TAOE | | | | *e*LR | LR | 00 10 33.4 | |
| | comp=Z,29μm,27.9s,baz=183 | | | | | | |
| **AC02** | **Maricunga** | **49.25** | **78** | P | **P** | **23 57 24.1** | **-0.3** |
| AC02 | | | | IAmb | IAmb | 23 57 49.6 | |
| | comp=Z,40nm,1.6s | | | | | | |
| **PB01** | **IPOC Station P** | **53.69** | **73** | P | **P** | **23 57 56.9** | **-0.3** |
| PB01 | | | | IAmb | IAmb | 23 58 01.1 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **ITQB** | **Itaqui** | **54.06** | **91** | P | **P** | **23 57 59.5** | **-0.2** |
| ITQB | | | | IAmb | IAmb | 23 58 09.9 | |
| | comp=Z,46nm,1.1s | | | | | | |
| **PB11** | **IPOC Station P** | **54.65** | **72** | P | **P** | **23 58 04.8** | **+0.5** |
| PB11 | | | | IAmb | IAmb | 23 58 18.3 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **TAU** | **Tasmania Unive** | **54.69** | **244** | IAMs_20 | IAMs_20 | 00 15 20.1 | |
| | comp=Z,11μm,22.0s | | | | | | |
| **AFI** | **Afiamalu** | **55.09** | **300** | LR | LR | 00 17 55.0 | |
| | comp=Z,2μm,18.3s,baz=166,slow=32 | | | | | | |
| **CPUP** | **Villa Florida** | **56.23** | **88** | P | **P** | **23 58 14.8** | **-0.6** |
| | comp=Z,8.1nm,1.0s,baz=253,slow=7.0,SNR=8.9 | | | | | | |
| CPUP | | | | LR | LR | 00 19 12.2 | |
| | comp=Z,2μm,19.4s,baz=227,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **56.23** | **88** | P | **P** | **23 58 15.1** | **-0.3** |
| **CAN** | **Canberra** | **59.44** | **251** | IAMs_20 | IAMs_20 | 00 18 44.8 | |
| | comp=Z,6μm,20.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **59.98** | **275** | *e*S | S | 00 06 30.8 | -22 |
| | comp=Z,2μm,23.6s | | | | | | |
| DZM | | | | *e*LQ | LQ | 00 13 24.4 | |
| | comp=Z,29μm,30.1s | | | | | | |
| DZM | | | | *e*LR | LR | 00 15 54.6 | |
| | comp=Z,12μm,25.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **59.98** | **275** | LR | LR | 00 19 48.9 | |
| | comp=Z,5μm,20.1s,baz=144,slow=31 | | | | | | |
| **AQDB** | **Aquidauana** | **61.75** | **85** | P | **P** | **23 58 53.5** | **-0.3** |
| AQDB | | | | IAmb | IAmb | 23 59 26.0 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **SIV** | **San Ignacio** | **62.38** | **77** | LR | LR | 00 22 39.5 | |
| | comp=Z,572nm,20.4s,baz=232,slow=33 | | | | | | |
| **KOUNC** | **Kounac, New Ca** | **62.40** | **274** | IAMs_20 | IAMs_20 | 00 22 05.5 | |
| | comp=Z,5μm,18.0s | | | | | | |
| **STKA** | **Stephens Creek** | **66.01** | **248** | P | **P** | **23 59 20.3** | **-1.3** |
| | comp=Z,2.2nm,0.8s,baz=122,slow=8.1,SNR=8.1 | | | | | | |
| STKA | | | | LR | LR | 00 23 52.3 | |
| | comp=Z,4μm,19.0s,baz=121,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **66.01** | **248** | P | **P** | **23 59 22.8** | **+1.1** |
| **BDFB** | **Brasilia** | **69.95** | **88** | P | **P** | **23 59 47.9** | **+1.1** |
| | comp=Z,4.2nm,0.9s,baz=190,slow=10,SNR=4.0 | | | | | | |
| BDFB | | | | LR | LR | 00 27 27.0 | |
| | comp=Z,3μm,20.5s,baz=213,slow=33 | | | | | | |
| **BDFB** | **Brasilia** | **69.95** | **88** | P | **P** | **23 59 47.1** | **+0.4** |
| BDFB | | | | IAmb | IAmb | 00 00 27.3 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **CTA** | **Charters Tower** | **72.87** | **260** | LR | LR | 00 27 30.0 | |
| | comp=Z,3μm,19.6s,baz=134,slow=32 | | | | | | |
| **CTAO** | **Charters Tower** | **72.87** | **260** | P | **P** | **00 00 05.1** | **+0.8** |
| CTAO | | | | IAmb | IAmb | 00 00 09.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **ROSC** | **El Rosal** | **73.41** | **54** | LR | LR | 00 25 49.0 | |
| | comp=Z,2μm,21.6s,baz=207,slow=30 | | | | | | |
| **HNR** | **Honiara** | **73.83** | **277** | LR | LR | 00 28 28.7 | |
| | comp=Z,654nm,18.8s,baz=130,slow=33 | | | | | | |
| **JTS** | **Las Juntas de** | **73.93** | **41** | LR | LR | 00 23 03.5 | |
| | comp=Z,657nm,21.4s,baz=262,slow=28 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **75.52** | **52** | P | **P** | **00 00 16.3** | **-3.3** |
| **BOAB** | **BOACO BROADBAN** | **76.66** | **40** | IAMs_20 | IAMs_20 | 00 26 17.6 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **PTGA** | **Pitinga** | **75.68** | **69** | LR | LR | 00 29 34.0 | |
| | comp=Z,1μm,21.7s,baz=214,slow=32 | | | | | | |
| **APG** | **El Apazote** | **76.41** | **34** | LR | LR | 00 24 53.5 | |
| | comp=Z,402nm,20.9s,baz=200,slow=28 | | | | | | |
| **ASAR** | **Alice Springs** | **76.62** | **248** | P | **P** | **00 00 23.4** | **-2.6** |
| | comp=Z,4.6nm,0.8s,baz=144,slow=4.6,SNR=17 | | | | | | |
| ASAR | | | | LR | LR | 00 28 35.2 | |
| | comp=Z,6μm,22.0s,baz=146,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **76.62** | **248** | P | **P** | **00 00 24.3** | **-1.7** |
| **AS31** | **Alice Springs** | **76.63** | **248** | P | **P** | **00 00 24.4** | **-1.5** |
| **SDV** | **Santo Domingo** | **78.67** | **55** | LR | LR | 00 29 54.7 | |
| | comp=Z,1μm,21.7s,baz=200,slow=32 | | | | | | |
| **WR0** | **Warramunga Arr** | **79.33** | **250** | P | **P** | **00 00 40.1** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 00 01 07.6 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **79.45** | **250** | P | **P** | **00 00 39.7** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 00 01 13.7 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.45** | **250** | P | **P** | **00 00 38.0** | **-3.7** |
| | comp=Z,7.0nm,1.0s,baz=143,slow=4.9,SNR=22 | | | | | | |
| WRA | | | | LR | LR | 00 32 08.9 | |
| | comp=Z,6μm,19.5s,baz=142,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **79.45** | **250** | P | **P** | **00 00 40.0** | **-1.6** |
| **WRAB** | **Tennant Creek** | **79.46** | **250** | IAMs_20 | IAMs_20 | 00 31 57.8 | |
| | comp=Z,6μm,20.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **79.57** | **250** | P | **P** | **00 00 40.6** | **-1.7** |
| WB0 | | | | IAmb | IAmb | 00 01 08.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **80.33** | **14** | IAMs_20 | IAMs_20 | 00 27 05.9 | |
| | comp=Z,4μm,21.0s | | | | | | |
| **LPIG** | **La Paz** | **80.69** | **14** | LR | LR | 00 28 57.7 | |
| | comp=Z,3μm,18.1s,baz=194,slow=30 | | | | | | |
| **MORW** | **Morawa** | **80.70** | **231** | P | **P** | **00 00 49.4** | **+1.1** |
| **PMG** | **Port Moresby** | **81.03** | **267** | LR | LR | 00 32 47.1 | |
| | comp=Z,4μm,18.6s,baz=152,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **81.03** | **267** | IAMs_20 | IAMs_20 | 00 31 48.5 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **HPIG** | | **84.18** | **17** | P | **P** | **00 01 05.0** | **-1.4** |
| HPIG | | | | IAmb | IAmb | 00 03 28.2 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **MDP** | **Montagnes des** | **84.48** | **73** | LR | LR | 00 33 33.3 | |
| | comp=Z,537nm,19.8s,baz=212,slow=32 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **85.40** | **238** | P | **P** | **00 01 12.4** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 00 01 23.5 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **85.40** | **238** | P | **P** | **00 01 12.8** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 00 01 28.4 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **85.50** | **244** | LR | LR | 00 33 29.6 | |
| | comp=Z,3μm,21.6s,baz=130,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **85.50** | **244** | P | **P** | **00 01 13.0** | **-0.2** |
| FITZ | | | | IAmb | IAmb | 00 01 44.9 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **85.81** | **238** | P | **P** | **00 01 15.1** | **+0.4** |
| **TX31** | **Lajitas Ar. Si** | **86.87** | **19** | P | **P** | **00 01 18.4** | **-1.1** |
| **TX32** | **Lajitas Array** | **86.87** | **19** | P | **P** | **00 01 18.3** | **-1.3** |
| TX32 | | | | IAmb | IAmb | 00 02 00.5 | |
| | comp=Z,42nm,2.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.87** | **19** | P | **P** | **00 01 18.0** | **-1.6** |
| | comp=Z,0.7nm,0.9s,baz=224,slow=5.0,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 00 31 48.0 | |
| | comp=Z,2μm,21.6s,baz=194,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.87** | **19** | P | **P** | **00 01 18.6** | **-1.0** |
| **319A** | **Douglas** | **88.00** | **13** | P | **P** | **00 01 25.8** | **+0.8** |
| 319A | | | | IAmb | IAmb | 00 02 04.0 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **214A** | **Organ Pipe Nat** | **88.16** | **10** | P | **P** | **00 01 24.6** | **-1.0** |
| **CBX** | **Cerro Bola** | **88.18** | **7** | P | **P** | **00 01 26.7** | **+0.8** |
| **109C** | **Camp Elliot, M** | **88.72** | **7** | IAMs_20 | IAMs_20 | 00 30 45.7 | |
| | comp=Z,4μm,22.0s | | | | | | |
| **JCT** | **Junction City** | **88.73** | **22** | P | **P** | **00 01 29.1** | **+0.7** |
| JCT | | | | IAmb | IAmb | 00 01 43.0 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **TUC** | **Tucson** | **88.73** | **12** | P | **P** | **00 01 28.5** | **+0.1** |
| TUC | | | | IAmb | IAmb | 00 02 07.4 | |
| | comp=Z,38nm,1.8s | | | | | | |
| **TUC** | **Tucson** | **88.73** | **12** | IAMs_20 | IAMs_20 | 00 32 22.2 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **EPT** | **El Paso** | **88.78** | **16** | IAMs_20 | IAMs_20 | 00 32 28.2 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **SJG** | **San Juan** | **88.81** | **55** | LR | LR | 00 35 54.3 | |
| | comp=Z,582nm,21.0s,baz=224,slow=32 | | | | | | |
| **MNTX** | **Cornudas Mount** | **88.88** | **17** | P | **P** | **00 01 28.7** | **-0.4** |
| MNTX | | | | IAmb | IAmb | 00 01 53.3 | |
| | comp=Z,50nm,2.2s | | | | | | |
| MNTX | | | | IAMs_20 | IAMs_20 | 00 32 35.5 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.49** | **7** | LR | LR | 00 32 03.5 | |
| | comp=Z,4μm,21.9s,baz=190,slow=29 | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.49** | **7** | IAMs_20 | IAMs_20 | 00 31 49.9 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **PASC** | **Pasadena Art C** | **89.93** | **6** | IAMs_20 | IAMs_20 | 00 32 16.7 | |
| | comp=Z,4μm,21.0s | | | | | | |
| **JAY** | **Jayapura** | **90.30** | **265** | LR | LR | 00 39 29.2 | |
| | comp=Z,1μm,18.9s,baz=136,slow=34 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **90.74** | **11** | P | **P** | **00 01 38.4** | **+0.6** |
| **SAUI** | **Saumlaki** | **90.99** | **254** | IAMs_20 | IAMs_20 | 00

comp=Z,5µm,21.7s,baz=184,slow=29
**YBH Yreka Blue Hor 97.31 2** IAMs_20 IAMs_20 00 36 44.8
comp=Z,4µm,20.0s
**MOD Modoc Plateau 97.54 4** IAMs_20 IAMs_20 00 37 30.1
comp=Z,3µm,19.0s
**L02E Cave Junction 97.72 1** IAMs_20 IAMs_20 00 36 49.1
comp=Z,4µm,20.0s
**L04D Klamath Falls 97.80 2** IAMs_20 IAMs_20 00 36 44.9
comp=Z,3µm,19.0s
**WVOR Wild Horse Val 98.14 5** IAMs_20 IAMs_20 00 37 31.0
comp=Z,3µm,20.0s
**HUMO Hull Mountain 98.18 2** IAMs_20 IAMs_20 00 35 55.8
comp=Z,4µm,22.0s
**PHWY Pilot Hill 98.28 15** IAMs_20 IAMs_20 00 38 36.2
comp=Z,3µm,20.0s
**OGNE Ogallala 98.47 17** IAMs_20 IAMs_20 00 38 52.3
comp=Z,3µm,20.0s
**J04D Umpqua Nationa 98.83 2** IAMs_20 IAMs_20 00 36 31.0
comp=Z,3µm,20.0s
**AHID Auburn Hatcher 99.03 10** IAMs_20 IAMs_20 00 37 30.8
comp=Z,3µm,21.0s
**BW06 Boulder Array 99.20 12** IAMs_20 IAMs_20 00 38 36.3
comp=Z,3µm,20.0s
**PDAR Pinedale Array 99.20 12** LR LR 00 38 57.1
comp=Z,3µm,19.5s,baz=202,slow=30
**MFID Camas Ranch 99.28 7** IAMs_20 IAMs_20 00 37 33.2
comp=Z,4µm,21.0s
**KAPI Kappang 99.60 246** LR LR 00 42 54.3
comp=Z,2µm,21.5s,baz=178,slow=33
**KAPI Kappang 99.60 246** IAMs_20 IAMs_20 00 45 52.6
comp=Z,3µm,19.0s
**REDW Red Top Meadow 99.65 10** IAMs_20 IAMs_20 00 38 46.1
comp=Z,3µm,20.0s
**SNOW Snow King Moun 99.76 11** IAMs_20 IAMs_20 00 38 49.0
comp=Z,3µm,21.0s
**TPAW Teton Pass 99.77 10** IAMs_20 IAMs_20 00 37 31.2
comp=Z,2µm,21.0s
**LOHW Long Hollow 99.92 11** IAMs_20 IAMs_20 00 38 43.4
comp=Z,3µm,20.0s
**H04D Lebanon 100.10 2** IAMs_20 IAMs_20 00 36 20.6
comp=Z,3µm,22.0s
**BMO Blue Mountains 100.62 6** IAMs_20 IAMs_20 00 37 46.6
comp=Z,3µm,22.0s
**RSSD Black Hills 101.25 15** IAMs_20 IAMs_20 00 41 06.8
comp=Z,3µm,20.0s
**F05D White Salmon 101.49 3** IAMs_20 IAMs_20 00 38 27.4
comp=Z,4µm,20.0s
**RLMT Red Lodge 101.56 11** IAMs_20 IAMs_20 00 39 18.7
comp=Z,4µm,21.0s
**BOZ Bozeman (W) 101.79 10** IAMs_20 IAMs_20 00 40 44.6
comp=Z,3µm,19.0s
**E04D Cinebar 102.13 2** IAMs_20 IAMs_20 00 38 43.5
comp=Z,3µm,20.0s
**MSO Missoula 102.81 8** IAMs_20 IAMs_20 00 40 39.7
comp=Z,4µm,20.0s
**LAO LASA Array 103.47 13** IAMs_20 IAMs_20 00 41 36.3
comp=Z,2µm,18.0s
**NEW Newport 104.03 5** IAMs_20 IAMs_20 00 40 38.9
comp=Z,2µm,18.0s
**TOLI2 Tolitoli 104.24 250** IAMs_20 IAMs_20 00 46 35.8
comp=Z,3µm,21.0s
**BKB Balikpapan 104.26 246** IAMs_20 IAMs_20 00 45 54.6
comp=Z,2µm,21.0s
**ABPO Ambohimpanom 105.07 172** IAMs_20 IAMs_20 00 44 32.4
comp=Z,2µm,20.0s
**DGMT Dagmar 105.48 14** IAMs_20 IAMs_20 00 44 34.8
comp=Z,2µm,19.0s
**PAL Palisades 105.85 38** IAMs_20 IAMs_20 00 39 59.2
comp=Z,2µm,22.0s
**TRY Troy 107.47 37** IAMs_20 IAMs_20 00 44 07.9
comp=Z,2µm,20.0s
**KSI Kapahiang 109.02 231** P **PKiKP 00 07 06.4 +1.4**
**MASI Maura Aman, Be 109.63 231** P **PKiKP 00 07 01.3 -4.8**
comp=Z,79nm,0.9s
**KKM Kota Kinabalu 110.81 249** IAMs_20 IAMs_20 00 49 27.9
comp=Z,2µm,22.0s
**VRDI Verde Repeater 117.71 350** IAMs_20 IAMs_20 00 47 15.6
comp=Z,3µm,20.0s
**GLI Glacier Island 117.75 348** IAMs_20 IAMs_20 00 44 50.8
comp=Z,3µm,21.0s
**PWL Port Wells 117.88 347** IAMs_20 IAMs_20 00 50 00.2
comp=Z,3µm,18.0s
**GLB Gilahina Butte 117.95 350** IAMs_20 IAMs_20 00 48 10.1
comp=Z,3µm,19.0s
**M31M Drury Creek, Y 118.02 355** IAMs_20 IAMs_20 00 45 43.8
comp=Z,4µm,22.0s
**N25K Chitina, Valde 118.19 350** IAMs_20 IAMs_20 00 48 28.4
comp=Z,3µm,20.0s
**RC01 Rabbit Creek A 118.28 347** IAMs_20 IAMs_20 00 45 50.8
comp=Z,4µm,22.0s
**YKA Yellowknife Ar 118.37 6** PKP **PKPdf 00 07 21.9 +0.9**
comp=Z,0.2nm,0.6s,baz=174,slow=1.5,SNR=4.2
**FIS Fire Island 118.40 346** IAMs_20 IAMs_20 00 45 56.8
comp=Z,3µm,22.0s
**KNK Knik Glacier 118.44 347** IAMs_20 IAMs_20 00 45 13.9
comp=Z,3µm,22.0s
**SCM Sheep Creek Mo 118.71 348** IAMs_20 IAMs_20 00 44 47.1
comp=Z,3µm,22.0s
**SML Sawmill 118.80 348** IAMs_20 IAMs_20 00 49 00.6
comp=Z,3µm,19.0s
**GHO Glory Hole Cre 118.84 347** IAMs_20 IAMs_20 00 45 24.6
comp=Z,3µm,22.0s
**M24K Tolsona, Glenn 118.85 349** IAMs_20 IAMs_20 00 47 42.8
comp=Z,3µm,20.0s
**M22K Willow 118.97 347** IAMs_20 IAMs_20 00 46 45.1
comp=Z,3µm,21.0s
**CUT Chulitna 119.62 347** IAMs_20 IAMs_20 00 45 52.2
comp=Z,3µm,22.0s
**DHY Denali Highway 119.92 349** IAMs_20 IAMs_20 00 46 45.2
comp=Z,3µm,22.0s
**RIDG Independent Ri 120.31 350** IAMs_20 IAMs_20 00 49 38.4
comp=Z,3µm,20.0s
**RND Reindeer 120.42 348** IAMs_20 IAMs_20 00 46 26.2
comp=Z,3µm,22.0s
**SCRK Sand Creek 120.46 350** IAMs_20 IAMs_20 00 48 29.3
comp=Z,3µm,20.0s
**TRF Thorofare Moun 120.63 347** IAMs_20 IAMs_20 00 51 38.0
comp=Z,3µm,18.0s
**MCK McKinley 120.74 348** IAMs_20 IAMs_20 00 46 59.8
comp=Z,3µm,22.0s
**KTH Kantishna Hill 120.81 347** IAMs_20 IAMs_20 00 47 02.7
comp=Z,3µm,21.0s
**TORD Torodi Ar. Bea 121.00 114** PKP **PKPdf 00 07 27.8 +0.1**
comp=Z,0.7nm,0.8s,baz=243,slow=2.5,SNR=2.9
**BWN Browne 121.23 348** IAMs_20 IAMs_20 00 51 22.2
comp=Z,2µm,19.0s
**BPAW Bear Paw Mtn. 121.35 347** IAMs_20 IAMs_20 00 47 18.8
comp=Z,2µm,21.0s
**WRH Wood River Hil 121.36 349** IAMs_20 IAMs_20 00 48 02.2
comp=Z,3µm,20.0s
**CCB Clear Creek Bu 121.50 349** IAMs_20 IAMs_20 00 49 05.8
comp=Z,3µm,20.0s
**ILAR Eielson Array 121.52 349** PKhKP PKPpre 00 07 21.5
comp=Z,0.3nm,0.7s,baz=190,slow=1.7,SNR=4.7
**ILAR Eielson Array 121.52 349** **PKPdf 00 07 24.7 -2.4**
**NEA2 Nenana 121.59 348** IAMs_20 IAMs_20 00 47 35.2
comp=Z,2µm,22.0s
**PRP Porcupine Dome 122.11 350** IAMs_20 IAMs_20 00 48 07.1
comp=Z,3µm,21.0s
**I23K Minto, Yukon-K 122.16 348** IAMs_20 IAMs_20 00 48 38.3
comp=Z,3µm,22.0s
**MLY Manley 122.21 347** IAMs_20 IAMs_20 00 52 02.7
comp=Z,2µm,18.0s
**I21K Tanana 122.51 347** IAMs_20 IAMs_20 00 49 06.6
comp=Z,3µm,21.0s
**H21K Melozitna Rive 123.07 347** IAMs_20 IAMs_20 00 47 50.4
comp=Z,3µm,22.0s
**FYU Fort Yukon 123.11 351** IAMs_20 IAMs_20 00 51 55.4
comp=Z,3µm,19.0s
**ANM Nome 124.06 340** IAMs_20 IAMs_20 00 56 33.7
comp=Z,3µm,19.0s
**ERM Erimo 124.34 296** IAMs_20 IAMs_20 00 56 47.8
comp=Z,2µm,19.0s
**GAMB Gambell 124.67 337** IAMs_20 IAMs_20 00 54 08.6
comp=Z,3µm,19.0s
**QIZ Qiongzhong 125.02 251** PKP **PKPdf 00 07 36.0 +0.8**
QIZ PP **PP 00 09 25.1 +0.9**
QIZ SS SS 00 26 22.3 +3.8
QIZ AMB AMB
comp=Z,190nm,14.2s
QIZ LR LR
comp=Z,630nm,23.0s
QIZ LR LR
comp=Z,600nm,22.1s
QIZ LR LR
comp=Z,1µm,21.6s
**PET Petropavlovsk 125.31 314** IAMs_20 IAMs_20 00 50 25.5
comp=Z,3µm,21.0s
**TOLK Toolik Lake Re 125.55 349** PKPdf **PKPdf 00 07 33.9 -0.9**
TOLK IAMs_20 IAMs_20 00 54 05.0
comp=Z,3µm,19.0s
**YSS Yuzh-Sakhalins 128.08 300** IAMs_20 IAMs_20 00 59 25.5
comp=Z,2µm,19.0s
**SSE Sheshan 128.25 270** PKP **PKPdf 00 07 39.1 -1.9**
SSE LR LR
comp=Z,420nm,23.1s
SSE LR LR
comp=Z,210nm,23.9s
SSE LR LR
comp=Z,620nm,25.9s
**A21K Barrow 128.90 347** IAMs_20 IAMs_20 00 55 12.4
comp=Z,2µm,19.0s
**CMAR Chiang Mai Arr 130.11 240** PKP **PKPdf 00 07 45.1 +0.1**
comp=Z,0.8nm,0.4s,baz=218,slow=1.9,SNR=8.0
**CMAR Chiang Mai Arr 130.11 240** **PKPdf 00 07 43.8 -1.2**
**NJ2 Nanjing 130.28 269** *e*PKP **PKiKP 00 07 47.6 +1.9**
**FURI Furi 131.37 158** IAMs_20 IAMs_20 01 02 34.1
comp=Z,1µm,21.0s
**GYA Guiyang 132.74 253** ⇑PKP **PKPdf 00 07 45.1 -4.8**
GYA AMB AMB
comp=Z,110nm,8.5s
GYA LR LR
comp=Z,800nm,23.4s
GYA LR LR
comp=Z,650nm,24.6s
GYA LR LR
comp=Z,1µm,19.5s
**MA2 Magadan 133.03 316** IAMs_20 IAMs_20 00 54 37.4
comp=Z,2µm,22.0s
**BILL Bilibino 133.53 331** IAMs_20 IAMs_20 00 56 35.4
comp=Z,1µm,21.0s
**PZH PanZhiHua 135.40 249** PKP **PKiKP 00 07 57.5 +1.1**
PZH PP **PP 00 10 38.8 +7.0**
PZH SS SS 00 28 30.0 +3.8
PZH AMB AMB
comp=Z,190nm,7.3s
PZH LR LR
comp=Z,410nm,21.7s
PZH LR LR
comp=Z,370nm,23.0s
PZH LR LR
comp=Z,720nm,22.6s
**SOCY Socotra 136.35 179** IAMs_20 IAMs_20 01 01 17.1
comp=Z,1µm,22.0s
**HNS HongShan 136.51 271** ⇓PKP **PKPdf 00 07 56.6 +0.2**
HNS PP **PP 00 10 44.9 +6.2**
HNS LR LR
comp=Z,550nm,23.0s
HNS LR LR
comp=Z,1µm,21.8s
**XAN Xi'an 137.33 262** PKP **PKPdf 00 07 52.5 -5.6**
XAN PP **PP 00 10 41.8 -2.1**
XAN LR LR
comp=Z,630nm,24.7s
XAN LR LR
comp=Z,540nm,23.4s
XAN LR LR
comp=Z,1µm,24.1s
**ESDC Sonseca Array 138.60 88** PKP **PKPdf 00 08 01.8 +1.4**
comp=Z,0.9nm,0.9s,baz=262,slow=3.9,SNR=3.1
**ESDC Sonseca Array 138.60 88** PKPdf **PKPdf 00 08 00.7 +0.4**
**HIA Hailar 141.39 288** IAMs_20 IAMs_20 01 13 35.8
comp=Z,1µm,20.0s
**LZH Lanzhou 141.65 260** *e*PKP **PKiKP 00 08 09.3 +0.3**
LZH PP **PP 00 11 16.5 +5.8**
LZH AMB AMB
comp=Z,170nm,5.4s
LZH LR LR
comp=Z,700nm,18.4s
LZH LR LR
comp=Z,600nm,17.3s
LZH LR LR
comp=Z,860nm,19.5s
**TAPN Taplejung 143.00 233** *e*P **PKPdf 00 08 05.9 -3.1**
**YAK Yakutsk 143.00 311** IAMs_20 IAMs_20 01 03 16.6
comp=Z,1µm,20.0s
**JIRN Jiri 143.94 231** *e*P **PKPab 00 08 07.8 -0.2**
comp=Z,188nm,1.4s
**PKI Pulchoki 144.20 230** *e*P **PKPab 00 08 08.3 -0.6**
comp=Z,104nm,1.4s
**PKIN Phulchoki 144.22 230** *e*P **PKPab 00 08 08.2 -0.7**
comp=Z,198nm,1.8s
**GUN Gumba 144.29 231** *e*P **PKPab 00 08 09.1 -0.2**
comp=Z,76nm,0.8s
**DMN Daman 144.37 230** *e*P **PKPab 00 08 09.0 -0.4**
comp=Z,108nm,0.9s
**KKN Kakani 144.45 230** *e*P **PKPab 00 08 09.3 -0.4**
comp=Z,87nm,0.8s
**GKN Gorkha 144.91 230** *e*P **PKPab 00 08 10.2 -1.1**
comp=Z,146nm,1.2s
**KOLN Koldanda 145.15 228** *e*P **PKPbc 00 08 10.5 -1.7**
comp=Z,141nm,1.1s
**DANN Dangsing 145.59 229** *e*P **PKPdf 00 08 12.7 -0.7**
comp=Z,135nm,0.9s
**PYUN Piuthan 145.69 228** *e*P **PKPdf 00 08 12.7 -0.8**
comp=Z,97nm,1.0s
**GTA Gaotai 146.26 260** *e*PKPbc **PKPdf 00 08 13.3 -0.7**
GTA PKPab **PKiKP 00 08 19.1 +0.8**
GTA sPKP 00 08 27.6
GTA LR LR
comp=Z,510nm,18.5s
GTA LR LR
comp=Z,460nm,19.6s
GTA LR LR
comp=Z,640nm,20.4s
**TIXI Tiksi 146.44 327** IAMs_20 IAMs_20 01 10 04.3
comp=Z,2µm,20.0s
**GOMU GeErMu 146.65 251** PKPbc **PKPbc 00 08 17.0 +0.3**
GOMU pPKP PKiKP 00 08 21.0 +1.5
GOMU sPKP 00 08 24.8
**DAG Danmarks Havn 147.25 24** *i* P **PKPdf 00 08 11.4 -2.9**
**NOR Nord 147.53 15** *i* P **PKPbc 00 08 18.4 +1.0**
**ULN Ulaanbaatar 147.54 278** PKPdf **PKPdf 00 08 17.0 +1.1**
**ULN Ulaanbaatar 147.54 278** IAMs_20 IAMs_20 01 20 49.9
comp=Z,1µm,19.0s
**SONM Songino Array 147.89 277** PKPbc **PKPbc 00 08 19.0 -0.5**
comp=Z,2.9nm,0.9s,baz=146,slow=2.2,SNR=16
**SONM Songino Array 147.89 277** PKPdf **PKPdf 00 08 16.7 +0.2**
**UOSS Minazif 149.04 182** IAMs_20 IAMs_20 01 07 16.2
comp=Z,1µm,22.0s
**ECH Echery 150.17 85** **PKiKP 00 08 27.2 +1.3**
**TUE Stuetta 150.42 89** PKPdf **PKPdf 00 08 20.8 +0.1**
TUE PKPbc **PKiKP 00 08 27.5 +0.8**
**BFO Black Forest 150.89 85** PKPbc **PKPbc 00 08 27.4 +0.6**
**DAVA Damuels 151.19 88** *e*P **PKiKP 00 08 29.2 +0.9**
comp=Z,5.8nm,0.7s
DAVA *e*P **sPKPbc 00 08 37.8 +0.2**
comp=Z,7.9nm,0.7s
**CTI Castel Tesino 151.47 92** PKPbc **PKPbc 00 08 29.4 +1.1**
**FETA Feichten 151.51 89** *e*P **PKiKP 00 08 30.0 +1.1**
comp=Z,10nm,0.9s
**RETA Reute 151.80 89** *e*P **PKPbc 00 08 30.0 +1.1**
comp=Z,5.8nm,0.9s
**MOTA Moosalm 151.91 89** *e*P **PKiKP 00 08 30.7 +1.0**
comp=Z,10.0nm,1.0s
**WTTA Wattenberg 152.16 90** *e*P **PKiKP 00 08 31.5 +1.3**
comp=Z,2.8nm,0.6s
WTTA *e*P **PKPab 00 08 42.1 +2.3**
comp=Z,7.9nm,0.8s
**ABTA Abfaltersbach 152.36 91** *e*P **PKPab 00 08 40.3 -0.2**
comp=Z,6.9nm,1.0s
**KBN Korea 152.96 110** PKPbc **PKPbc 00 08 32.3 +0.5**
**KBA Koelnbreinsper 153.02 91** *e*P **PKiKP 00 08 34.0 +2.0**
comp=Z,3.0nm,0.7s
KBA *e*P **PKPab 00 08 43.1 -0.3**
comp=Z,7.3nm,0.8s
**GRF Grafenberg Arr 153.23 85** *e*PKP **PKiKP 00 08 34.5 +2.3**
baz=240,slow=2.3
GRF *e*L L 01 00 42.0
comp=Z,462nm,21.8s
**OBKA Obir 153.37 94** *e*P **PKPbc 00 08 31.7 -0.9**
comp=Z,3.8nm,0.8s
**SOKA Soboth 153.74 94** *e*P **PKPbc 00 08 34.2 +0.9**
comp=Z,9.0nm,1.3s
SOKA *e*P **sPKPbc 00 08 44.3 +1.0**
comp=Z,9.7nm,1.3s
**MOA Molln 153.97 91** *e*P **PKiKP 00 08 36.0 +2.2**
comp=Z,10.0nm,1.5s
**GERES GERESS Array B 154.19 88** PKPbc **PKPbc 00 08 34.9 +0.7**
comp=Z,1.9nm,0.8s,baz=205,slow=4.3,SNR=5.8
**GERES GERESS Array B 154.19 88** **PKPbc 00 08 33.1 -1.1**
**KHC Kasperske Hory 154.27 88**⇑ *e*PKP **PKPbc 00 08 35.3 +1.0**
KHC *ex* x 00 08 49.7
**CONA Conrad Observa 154.91 92** *e*P **PKPbc 00 08 36.4 +0.6**
comp=Z,1.4nm,0.7s
**CLL Collm 155.00 83** *e*PKPdf **PKPdf 00 08 33.0 +6.1**
CLL *e*PKPdif **sPKPbc 00 08 45.0 -0.7**
CLL *ep*PKPab **sPKPab 00 09 01.0 -0.3**
CLL *e*PP **PP 00 12 36.0 +7.6**
CLL *e*PPP PPP 00 16 00.0
CLL *e*PSKS 00 22 48.0
CLL *ex* x 00 23 48.0
CLL *e*SS SS 00 32 13.0 +3.1
CLL *ex* x 00 34 12.0
CLL *e*SSS SSS 00 37 54.0
CLL *ex* x 00 39 12.0
CLL *ex* x 00 41 12.0
CLL *e*SSSS 00 41 54.0
CLL LmH 01 33 00.0
comp=N,1µm,21.2s
CLL LmH 01 33 00.0
comp=E,800nm,20.2s
**ISP Isparta 155.60 128** IAMs_20 IAMs_20 01 34 41.0
comp=Z,994nm,21.0s
**WMQ Urumqi 155.90 254** *e*PKP **PKPdf 00 08 26.3 -2.2**
WMQ pPKP sPKPdf 00 08 39.1 +0.7
WMQ SS SS 00 32 23.8 +4.1
WMQ AMB AMB
comp=Z,410nm,7.5s
WMQ LR LR
comp=Z,870nm,20.7s
WMQ LR LR
comp=Z,640nm,19.3s
WMQ LR LR
comp=Z,750nm,20.7s
**OSTC Ostas 156.46 87**⇑ *e*PKP **PKPdf 00 08 33.0 +4.1**
**KSH Kashi 158.46 229** PKP **PKPdf 00 08 34.8 +2.8**
KSH LR LR
comp=Z,780nm,18.6s
KSH LR LR
comp=Z,600nm,22.0s
KSH LR LR
comp=Z,2µm,23.7s
**BRTR Keskin Array B 158.53 130** PKPab **PKPab 00 09 07.7 +0.5**
comp=Z,1.2nm,0.5s,baz=182,slow=5.2,SNR=2.2
**BRTR Keskin Array B 158.53 130** PKPdf **PKPdf 00 08 31.4 -0.6**
BRTR PKPab **PKPab 00 09 07.2 0.0**
**MK31 Makanchi Array 160.73 253** PKPab **PKPab 00 09 15.4 -1.0**
**MKAR Makanchi Array 160.73 253** PKP **PKPdf 00 08 33.1 -1.1**
comp=Z,0.6nm,1.0s,baz=80,slow=1.6,SNR=3.0
MKAR PKPab **PKPab 00 09 14.0 -2.5**
comp=Z,2.1nm,0.9s,baz=111,slow=5.4,SNR=7.4
MKAR PP **PP 00 12 58.7 -1.0**
comp=Z,0.8nm,0.9s,baz=130,slow=7.1,SNR=3.5
**MKAR Makanchi Array 160.73 253** PKPdf **PKPdf 00 08 31.4 -2.8**
MKAR PKPab **PKPab 00 09 15.2 -1.2**
**ZAA0 Zalesovo Array 162.77 276** PKPab **PKPab 00 09 24.2 -1.0**
**ZALV Zalesovo Beam 162.77 276** PKPab **PKPab 00 09 24.3 -0.9**
comp=Z,2.3nm,0.8s,baz=101,slow=4.3,SNR=7.5
**ZALV Zalesovo Beam 162.77 276** PKPab **PKPab 00 09 23.6 -1.5**
**AKASG Malin Array Be 163.83 98** PKP **PKPdf 00 08 37.0 -0.1**
comp=Z,0.7nm,0.6s,baz=270,slow=1.1,SNR=6.3
AKASG PKPab **PKPab 00 09 30.9 +1.0**
comp=Z,0.2nm,0.2s,baz=246,slow=4.0,SNR=4.8
**AKASG Malin Array Be 163.83 98** PKPdf **PKPdf 00 08 37.5 +0.5**
**KBZ Khabaz 165.56 143** PKPab **PKPab 00 09 36.8 -0.8**
comp=Z,2.2nm,1.0s,baz=189,slow=2.1,SNR=3.3

*IDC* ***16*** *23:55:46.1±1.6,59.92N×153.05W,h79km±22km,mb3.6/5, mb1 3.7/9,mb1mx3.3/45,mbtmp3.9/9,MS2.2/1,Ms1 2.2/1, ms1mx2.1/83,Error ellipse: s-maj=23.9km s-min=10.7km az=113.0*

*ANF* ***16*** *23:55:47.9±0.2,59.84N×152.86W,h103km±2km,ML3.9/47, Error ellipse: s-maj=2.0km s-min=1.9km az=77.0*

*NEIC* ***16*** *23:55:48.0±1.2,59.84N±0.03×152.90W±0.05, h106km±4km,Error ellipse: s-maj=4.8km s-min=3.1km az=142.0*

*AEIC* ***16*** *23:55:49±1.4,59.83N±0.03×152.89W±0.04,h101km±3km, ML3.5,mb4.2/12(NEIC),ML3.7/124(NEIC),Error ellipse: s-maj=4.7km s-min=3.0km az=157.0*

**ISC 16 23:55:48.4±0.6,59.83N±0.03×152.86W±0.03,**
**h108km±5km,n266,σ1s05/313,mb3.9/8,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPT** | **Oil Point** | **0.26** | **227** | | **Pn** | **23 56 03.3** | **-0.5** |
| **P19K** | **Oil Pt** | **0.26** | **227** | | **Pn** | **23 56 03.2** | **-0.6** |
| P19K | | | | Sn | **Sn** | **23 56 14.5** | **-0.9** |
| **P19K** | **Oil Pt** | **0.26** | **227** | P | **Pn** | **23 56 03.3** | **-0.6** |
| | baz=44 | | | | | | |
| P19K | | | | S | **Sn** | **23 56 14.5** | **-0.9** |
| | baz=44 | | | | | | |
| **O20K** | **Slope Mountain** | **0.28** | **25** | | **Pn** | **23 56 03.4** | **-0.5** |
| O20K | | | | | **Sn** | **23 56 15.0** | **-0.6** |
| **O20K** | **Slope Mountain** | **0.28** | **25** | P | **Pn** | **23 56 03.5** | **-0.5** |
| | baz=208,SNR=206 | | | | | | |
| O20K | | | | S | **Sn** | **23 56 14.9** | **-0.8** |
| | baz=208 | | | | | | |
| **AU22** | **Augustine Moun** | **0.53** | **209** | | **Pn** | **23 56 04.7** | **-0.4** |
| AU22 | | | | | **Sn** | **23 56 17.4** | **-0.4** |
| **AUL** | **Augustine Lava** | **0.53** | **213** | | **Pn** | **23 56 05.0** | **-0.3** |
| **AUH** | **Augustine H** | **0.55** | **213** | | **Pn** | **23 56 05.2** | **-0.4** |
| **AUQ** | **Augustine Qik'** | **0.55** | **211** | | **Pn** | **23 56 05.1** | **-0.4** |
| **RED** | **Redoubt Volcan** | **0.59** | **4** | | **Pn** | **23 56 05.1** | **-0.8** |
| RED | | | | | **Sn** | **23 56 17.5** | **-1.4** |
| **RSO** | **Redoubt South** | **0.64** | **5** | | **Pn** | **23 56 05.7** | **-0.6** |
| **HOM** | **Homer** | **0.64** | **105** | | **Pn** | **23 56 05.8** | **-0.2** |
| HOM | | | | Sn | **Sn** | **23 56 19.0** | **-0.4** |
| HOM | | | | IAML | | 23 56 20.3 | |
| | comp=N,6µm,0.7s | | | | | | |
| HOM | | | | IAML | | 23 56 21.4 | |
| | comp=E,6µm,0.5s | | | | | | |
| **HOM** | **Homer** | **0.64** | **105** | P | **Pn** | **23 56 06.0** | **-0.1** |
| | baz=286,SNR=10 | | | | | | |
| HOM | | | | S | **Sn** | **23 56 19.5** | **+0.2** |
| | baz=286 | | | | | | |
| **RDWB** | **Redoubt West** | **0.66** | **1** | | **Pn** | **23 56 05.5** | **-0.9** |
| **NCT** | **North Crescent** | **0.74** | **357** | | **Pn** | **23 56 06.3** | **-0.7** |
| NCT | | | | | **Sn** | **23 56 19.8** | **-1.2** |
| **RDJH** | **Redoubt Jeurge** | **0.77** | **2** | | **Pn** | **23 56 06.6** | **-0.7** |
| **DFR** | **Drift River** | **0.77** | **6** | | **Pn** | **23 56 06.6** | **-0.7** |
| DFR | | | | | **Sn** | **23 56 20.4** | **-1.1** |
| **RDT** | **Redoubt** | **0.78** | **17** | | **Pn** | **23 56 06.7** | **-0.7** |
| **O19K** | **Port Alsworth** | **0.82** | **297** | Pn | **Pn** | **23 56 06.9** | **-0.7** |
| O19K | | | | Sn | **Sn** | **23 56 20.6** | **-1.5** |
| O19K | | | | IAML | | 23 56 21.5 | |
| | comp=E,4µm,0.5s | | | | | | |
| O19K | | | | IAML | | 23 56 21.8 | |
| | comp=N,3µm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.82** | **297** | P | **Pn** | **23 56 07.0** | **-0.7** |
| | baz=116,SNR=21 | | | | | | |
| O19K | | | | S | **Sn** | **23 56 20.8** | **-1.3** |
| | baz=116 | | | | | | |
| **CNPM** | **China Poot** | **0.88** | **110** | Pn | **Pn** | **23 56 07.9** | **-0.3** |
| CNPM | | | | Sn | **Sn** | **23 56 22.4** | **-0.8** |
| **Q19K** | **Cape Douglas,** | **0.99** | **204** | Pn | **Pn** | **23 56 08.3** | **-1.1** |
| **Q19K** | **Cape Douglas,** | **0.99** | **204** | P | **Pn** | **23 56 08.7** | **-0.7** |
| | baz=23,SNR=48 | | | | | | |
| Q19K | | | | S | **Sn** | **23 56 23.8** | **-1.3** |
| | baz=23 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.00** | **93** | Pn | **Pn** | **23 56 09.0** | **-0.5** |
| BRLK | | | | Sn | **Sn** | **23 56 24.1** | **-1.2** |
| BRLK | | | | IAML | | 23 56 26.0 | |
| | comp=E,2µm,0.6s | | | | | | |
| BRLK | | | | IAML | | 23 56 26.1 | |
| | comp=N,3µm,0.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.08** | **94** | | **Pn** | **23 56 09.8** | **-0.4** |
| BRSE | | | | | **Sn** | **23 56 25.9** | **-0.8** |
| **BRSE** | **Bradley Lake S** | **1.08** | **94** | P | **Pn** | **23 56 09.8** | **-0.4** |
| | baz=276,SNR=40 | | | | | | |
| BRSE | | | | S | **Sn** | **23 56 25.6** | **-1.1** |
| | baz=276 | | | | | | |
| **O18K** | **Koktuh Hills** | **1.19** | **272** | Pn | **Pn** | **23 56 10.8** | **-0.6** |
| O18K | | | | Sn | **Sn** | **23 56 27.5** | **-1.4** |
| **O18K** | **Koktuh Hills** | **1.19** | **272** | P | **Pn** | **23 56 10.8** | **-0.6** |
| | baz=90,SNR=68 | | | | | | |
| O18K | | | | S | **Sn** | **23 56 27.4** | **-1.4** |
| | baz=90 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.27** | **41** | | **Pn** | **23 56 13.7** | **+1.4** |
| **CAPN** | **Captain Cook N** | **1.27** | **41** | P | **Pn** | **23 56 13.7** | **+1.4** |
| | baz=223,SNR=85 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.28** | **321** | | **Pn** | **23 56 11.9** | **-0.7** |
| N19K | | | | Sn | **Sn** | **23 56 29.7** | **-1.1** |
| **P18K** | **Big Mountain,** | **1.28** | **251** | | **Pn** | **23 56 11.6** | **-0.9** |
| P18K | | | | Sn | **Sn** | **23 56 28.9** | **-1.9** |
| **P18K** | **Big Mountain,** | **1.28** | **251** | P | **Pn** | **23 56 11.7** | **-0.9** |

baz=68,SNR=26
P18K S Sn 23 56 29.1 -1.7
baz=68
**SPCR Spurr Chakacha 1.41 13 Pn 23 56 13.7 -0.4**
**SPCR Spurr Chakacha 1.41 13** P **Pn 23 56 13.7 -0.4**
baz=194,SNR=122
SPCR S Sn 23 56 32.5 -1.2
baz=194
**CKT Bend 1.42 13 Pn 23 56 13.7 -0.4**
**SPU Mount Spurr 1.42 16 Pn 23 56 13.6 -0.5**
**SPCN Chakachatna No 1.44 13 Pn 23 56 14.2 -0.2**
SPCN Sn 23 56 34.8 +0.6
**SPBG Spurr Blockage 1.46 9 Pn 23 56 14.4 -0.3**
**SLKM Skilak Lake 1.49 62 Pn 23 56 14.5 -0.5**
**SPCG Spurr Capps Gl 1.53 15 Pn 23 56 15.2 -0.3**
SPCG Sn 23 56 35.6 -0.4
**SPNN North Nagishla 1.55 3 Pn 23 56 15.5 -0.3**
**O22K Cooper Landing 1.70 66 Pn 23 56 17.2 -0.2**
**O22K Cooper Landing 1.70 66** P **Pn 23 56 17.3 -0.2**
baz=249,SNR=22
O22K S Sn 23 56 38.3 -1.3
baz=249
**SEW Seward 1.74 79** Pn **Pn 23 56 17.3 -0.6**
**SEW Seward 1.74 79 Sn 23 56 39.0 -1.4**
**SEW Seward 1.74 79** P **Pn 23 56 17.2 -0.6**
baz=262,SNR=32
SEW S Sn 23 56 38.8 -1.6
baz=262
**STLK Strandline Lak 1.75 16 Pn 23 56 17.8 -0.4**
**FIS Fire Island 1.86 44** Pn **Pn 23 56 20.0 +0.6**
FIS IAML 23 56 52.2
comp=N,799nm,0.6s
FIS IAML 23 56 57.2
comp=E,555nm,0.6s
**RC01 Rabbit Creek A 2.00 49** Pn **Pn 23 56 20.7 -0.5**
RC01 IAML 23 56 46.3
comp=N,1µm,0.4s
RC01 IAML 23 56 46.5
comp=E,710nm,0.6s
**RC01 Rabbit Creek A 2.00 49** P **Pn 23 56 20.7 -0.5**
baz=232,SNR=79
RC01 S Sn 23 56 44.8 -1.6
baz=232
**KABU Katmai Buttres 2.00 220 Pn 23 56 21.6 +0.2**
KABU Sn 23 56 45.9 -0.6
**KELA Mount Kelaz 2.04 228 Pn 23 56 21.7 -0.1**
**KDAK Kodiak Island 2.06 176** P **Pn 23 56 20.8 -1.2**
comp=E,34nm,0.3s,baz=49,slow=10,SNR=124
KDAK S Sn 23 56 46.2 -1.4
comp=E,61nm,0.3s,baz=309,slow=22,SNR=22
KDAK LR LR 23 57 25.0
comp=E,54nm,21.8s,baz=100,slow=46
**KDAK Kodiak Island 2.06 176** Pn **Pn 23 56 20.7 -1.2**
KDAK IAML 23 56 48.0
comp=E,296nm,0.3s
KDAK IAML 23 56 50.2
comp=E,394nm,0.5s
**KDAK Kodiak Island 2.06 176** P **Pn 23 56 20.8 -1.2**
baz=356
KDAK S Sn 23 56 46.1 -1.6
baz=356
**ANCK Angle Creek 2.13 221 Pn 23 56 23.3 +0.3**
**M19K Big River Lodg 2.21 341** Pn **Pn 23 56 23.3 -0.7**
**M22K Willow 2.35 34 Pn 23 56 23.8 0.0**
M22K Sn 23 56 53.2 -1.2
**M22K Willow 2.35 34** P **Pn 23 56 25.7 0.0**
baz=216,SNR=18
M22K S Sn 23 56 53.6 -0.8
baz=216
**PWL Port Wells 2.48 63** Pn **Pn 23 56 26.0 -1.4**
PWL IAML 23 56 58.8
comp=E,456nm,0.4s
**PWL Port Wells 2.48 63** P **Pn 23 56 26.2 -1.3**
baz=248
PWL S Sn 23 56 55.1 -2.3
baz=248
**PMR Palmer 2.55 44** Pn **Pn 23 56 27.0 -1.2**
PMR IAML 23 56 57.2
comp=N,206nm,0.3s
**PMR Palmer 2.55 44** P **Pn 23 56 27.1 -1.2**
baz=228,SNR=44
PMR S Sn 23 56 56.4 -2.5
baz=228
**L19K White Mountain 2.55 339** Pn **Pn 23 56 27.6 -0.8**
**L19K White Mountain 2.55 339** P **Pn 23 56 27.8 -0.6**
baz=157,SNR=42
L19K S Sn 23 56 57.7 -1.5
baz=157
**OHAK Old Harbor 2.62 185** Pn **Pn 23 56 27.9 -1.3**
OHAK Sn **Sn 23 56 57.3 -3.4**
OHAK IAML 23 56 59.3
comp=N,301nm,0.6s
OHAK IAML 23 57 00.3
comp=E,404nm,0.5s
**OHAK Old Harbor 2.62 185** P **Pn 23 56 28.0 -1.3**
baz=4.4,SNR=32
OHAK S Sn 23 56 58.0 -2.8
baz=4.4
**KNK Knik Glacier 2.69 52 Pn 23 56 28.7 -1.5**
KNK IAML 23 57 00.6
comp=E,520nm,0.8s
KNK IAML 23 57 02.4
comp=N,451nm,0.4s
**KNK Knik Glacier 2.69 52** P **Pn 23 56 29.1 -1.2**
baz=236,SNR=52
KNK S Sn 23 56 59.8 -2.6
baz=236
**L20K Farewell, AK 2.71 350 Pn 23 56 30.3 -0.1**
**L20K Farewell, AK 2.71 350** P **Pn 23 56 30.4 -0.1**
baz=169,SNR=24
**GHO Glory Hole Cre 2.74 43** Pn **Pn 23 56 29.8 -1.2**
GHO IAML 23 57 02.5
comp=N,385nm,0.3s
GHO IAML 23 57 04.4
comp=E,387nm,0.4s
**PLK1 Peulik 1 2.82 225 Pn 23 56 32.0 +0.1**
**CUT Chulitna 2.88 25** Pn **Pn 23 56 32.6 0.0**
CUT Sn **Sn 23 57 04.9 -1.7**
CUT IAML 23 57 13.2
comp=N,364nm,0.4s
**CUT Chulitna 2.88 25** P **Pn 23 56 32.5 -0.1**
baz=207,SNR=14
CUT S Sn 23 57 05.3 -1.3
baz=207
**SML Sawmill 2.98 46 Pn 23 56 32.9 -1.2**
SML IAML 23 57 08.4
comp=N,283nm,0.7s
SML IAML 23 57 08.5
comp=E,284nm,0.9s
**SML Sawmill 2.98 46** P **Pn 23 56 32.8 -1.2**
baz=230,SNR=17
SML S Sn 23 57 06.5 -2.7
baz=230
**GLI Glacier Island 3.05 67** Pn **Pn 23 56 33.4 -1.5**
GLI IAML 23 57 10.2
comp=E,274nm,0.5s
GLI IAML 23 57 12.8
comp=N,203nm,0.6s
**GLI Glacier Island 3.05 67** P **Pn 23 56 33.5 -1.5**
baz=252
GLI S Sn 23 57 08.5 -2.4
baz=252
**PPLA Purkeypile 3.10 6** Pn **Pn 23 56 35.7 0.0**
**PPLA Purkeypile 3.10 6** P **Pn 23 56 36.0 +0.3**
baz=187,SNR=9.9
PPLA S Sn 23 57 11.3 -0.8
baz=187
**FID Port Fidalgo 3.31 71 Pn 23 56 36.2 -2.2**
FID IAML 23 57 17.0
comp=N,339nm,0.3s
**Q23K Middleton Isla 3.33 94** Pn **Pn 23 56 38.3 -0.4**
**Q23K Middleton Isla 3.33 94** P **Pn 23 56 38.3 -0.4**
baz=280
**MID Middleton Isla 3.34 94** Pn **Pn 23 56 38.2 -0.5**
MID IAML 23 57 18.9
comp=E,280nm,0.5s
**JPK Jack Peak 3.34 66 Pn 23 56 37.9 -0.9**
**SCM Sheep Creek Mo 3.37 51 Pn 23 56 38.3 -1.0**
SCM IAML 23 57 21.2
comp=N,236nm,0.8s
SCM IAML 23 57 21.3
comp=E,232nm,0.7s
**SCM Sheep Creek Mo 3.37 51** P **Pn 23 56 38.3 -1.0**
baz=236,SNR=18
**TT01 Tatalina 3.44 335 Pn 23 56 39.4 -0.8**
**TTA Tatalina 3.46 335** Pn **Pn 23 56 39.5 -1.0**
**TTA Tatalina 3.46 335** P **Pn 23 56 39.5 -1.0**
baz=153,SNR=16
**K20K Telida 3.59 351 Pn 23 56 41.8 -0.3**
**K20K Telida 3.59 351** P **Pn 23 56 41.9 -0.2**
baz=170,SNR=26
**CAST Castle Rocks 3.62 6 Pn 23 56 42.2 -0.4**
**EYAK Cordova Ski Ar 3.62 75 Pn 23 56 41.6 -1.0**
**EYAK Cordova Ski Ar 3.62 75** P **Pn 23 56 41.4 -1.1**
baz=262
**WAT6 Susitna Watana 3.71 40 Pn 23 56 43.0 -0.9**
**WAT6 Susitna Watana 3.71 40** P **Pn 23 56 43.0 -0.9**
baz=224,SNR=24
**DIV Divide 3.74 67** Pn **Pn 23 56 43.4 -0.8**
**KLU Klutina 3.80 61 Pn 23 56 43.9 -1.1**
KLU IAML 23 57 30.0
comp=E,164nm,0.4s
**KLU Klutina 3.80 61** P **Pn 23 56 43.8 -1.2**
baz=247,SNR=44
**TRF Thorofare Moun 3.84 18** Pn **Pn 23 56 46.0 +0.4**
TRF IAML 23 57 31.4
comp=N,109nm,0.6s
TRF IAML 23 57 32.2
comp=E,76nm,0.5s
**TRF Thorofare Moun 3.84 18** P **Pn 23 56 44.9 -0.7**
baz=200,SNR=18
**KTH Kantishna Hill 3.85 13** Pn **Pn 23 56 45.2 -0.5**
KTH IAML 23 57 30.8
comp=N,60nm,0.7s
KTH IAML 23 57 30.8
comp=E,62nm,0.8s
**M24K Tolsona, Glenn 3.98 52** Pn **Pn 23 56 47.1 -0.3**
M24K IAML 23 57 34.4
comp=N,154nm,0.7s
M24K IAML 23 57 36.7
comp=E,194nm,0.6s
**M24K Tolsona, Glenn 3.98 52** P **Pn 23 56 46.9 -0.6**
baz=238,SNR=19
**RND Reindeer 4.07 26** Pn **Pn 23 56 48.3 -0.3**
RND IAML 23 57 35.0
comp=E,113nm,0.3s
RND IAML 23 57 35.0
comp=N,77nm,0.6s
**CHUM Lake Minchumin 4.08 3 Pn 23 56 48.4 -0.2**
**CHUM Lake Minchumin 4.08 3** P **Pn 23 56 48.1 -0.5**
baz=184,SNR=12
**GOAT Goat Mountain 4.13 76 Pn 23 56 48.6 -0.9**
**RAGM Ragged Mountai 4.14 79** Pn **Pn 23 56 49.2 -0.3**
**PS12 TAPS Pump St12 4.14 63 Pn 23 56 48.4 -1.1**
**DHY Denali Highway 4.19 37** Pn **Pn 23 56 49.6 -0.6**
**DHY Denali Highway 4.19 37** P **Pn 23 56 49.5 -0.8**
baz=222,SNR=11
**PS11 TAPS Pump St11 4.25 55 Pn 23 56 50.5 -0.5**
**BMRM Bremner River 4.25 71** Pn **Pn 23 56 49.8 -1.2**
BMRM IAML 23 57 39.6
comp=E,117nm,0.3s
BMRM IAML 23 57 41.1
comp=N,108nm,0.5s
**BMRM Bremner River 4.25 71** P **Pn 23 56 49.4 -1.7**
baz=258,SNR=32
**KAIM Kayak Island 4.26 85** Pn **Pn 23 56 50.9 -0.2**
**KAIM Kayak Island 4.26 85** P **Pn 23 56 50.7 -0.3**
baz=272
**HMT Hamilton 4.34 80** Pn **Pn 23 56 51.6 -0.6**
**MCK McKinley 4.34 24** Pn **Pn 23 56 51.9 -0.3**
MCK IAML 23 57 45.5
comp=E,58nm,0.5s
MCK IAML 23 57 46.5
comp=N,43nm,0.4s
**MCK McKinley 4.34 24** P **Pn 23 56 52.1 -0.1**
baz=207,SNR=21
**BPAW Bear Paw Mtn. 4.38 11** Pn **Pn 23 56 51.6 -1.1**
BPAW IAML 23 57 40.1
comp=N,48nm,0.8s
**BPAW Bear Paw Mtn. 4.38 11** P **Pn 23 56 52.1 -0.6**
baz=193,SNR=11
**J20K Nowinta River 4.41 353** Pn **Pn 23 56 53.1 0.0**
**N25K Chitina, Valde 4.43 63** Pn **Pn 23 56 52.5 -1.1**
N25K IAML 23 57 45.3
comp=N,69nm,0.7s
N25K IAML 23 57 46.1
comp=E,66nm,0.6s
**N25K Chitina, Valde 4.43 63** P **Pn 23 56 52.4 -1.2**
baz=250,SNR=26
**HARP HAARP 4.54 52 Pn 23 56 54.2 -0.7**
**HARP HAARP 4.54 52** P **Pn 23 56 54.2 -0.7**
baz=239,SNR=5.9
**SUCK Suckling Hills 4.58 83** Pn **Pn 23 56 54.7 -0.7**
SUCK IAML 23 57 48.3
comp=N,72nm,0.6s
SUCK IAML 23 57 52.8
comp=E,57nm,0.5s
**CHGN Chignik 4.60 222** Pn **Pn 23 56 55.6 -0.1**
CHGN IAML 23 59 42.7
comp=E,122nm,0.1s
**BERG Berg Lake 4.62 79** Pn **Pn 23 56 55.2 -0.8**
**BWN Browne 4.64 19** Pn **Pn 23 56 56.1 -0.1**
BWN IAML 23 57 51.1
comp=N,62nm,1.1s
BWN IAML 23 58 09.6
comp=E,60nm,1.1s
**GLB Gilahina Butte 4.74 66** Pn **Pn 23 56 56.4 -1.2**
GLB IAML 23 57 52.0
comp=E,98nm,0.7s
**PAX Paxson 4.75 45** Pn **Pn 23 56 57.2 -0.5**
**PAX Paxson 4.75 45** P **Pn 23 56 56.9 -0.8**
baz=232,SNR=33
**GRIN Grindle Hills 4.80 80 Pn 23 56 58.7 +0.2**
**KHIT Khitrov Hills 4.85 79 Pn 23 56 58.5 -0.6**
**VRDI Verde Repeater 4.86 69** Pn **Pn 23 56 58.1 -1.2**
VRDI IAML 23 57 54.1
comp=N,81nm,0.7s
VRDI IAML 23 57 57.4
comp=E,33nm,0.6s
**PS10 TAPS Pump St10 4.94 40 Pn 23 57 00.1 -0.3**
**WAX Waxell Ridge 5.04 79** Pn **Pn 23 57 00.9 -0.8**
**SNH Sunshine Point 5.04 82** Pn **Pn 23 57 02.0 +0.3**
SNH IAML 23 57 59.6
comp=N,69nm,0.6s
SNH IAML 23 58 00.1
comp=E,73nm,0.6s
**NEA2 Nenana 5.10 19** Pn **Pn 23 57 01.5 -1.0**
**NEA2 Nenana 5.10 19** P **Pn 23 57 01.4 -1.0**
baz=202,SNR=55
**WRH Wood River Hil 5.17 24** Pn **Pn 23 57 02.3 -1.0**
WRH IAML 23 58 00.3
comp=E,48nm,0.4s
WRH IAML 23 58 00.5
comp=N,31nm,0.7s
**GCSA Galena City Sc 5.28 341 Pn 23 57 04.0 -0.8**
**GCSA Galena City Sc 5.28 341** P **Pn 23 57 03.8 -1.0**
baz=158
**ISLE Juniper Island 5.30 77 Pn 23 57 04.6 -0.7**
ISLE IAML 23 58 06.1
comp=N,45nm,0.6s
ISLE IAML 23 58 06.7
comp=E,64nm,0.8s
**MLY Manley 5.31 10 Pn 23 57 04.7 -0.7**
**MLY Manley 5.31 10** P **Pn 23 57 04.4 -1.0**
baz=192,SNR=48
**KIAG Kiagna River 5.33 74 Pn 23 57 05.5 -0.2**
**BALM Baldy 5.35 72 Pn 23 57 05.5 -0.4**
**HDA Harding Lake 5.37 29 Pn 23 57 05.2 -0.8**
**HDA Harding Lake 5.37 29** P **Pn 23 57 05.2 -0.8**
baz=214,SNR=12
**CCB Clear Creek Bu 5.38 24 Pn 23 57 05.2 -1.0**
CCB IAML 23 58 07.7
comp=E,33nm,0.4s
CCB IAML 23 58 08.6
comp=N,27nm,0.5s
**I21K Tanana 5.39 4** Pn **Pn 23 57 05.7 -0.6**
I21K IAML 23 58 29.3
comp=N,22nm,3.5s
**BAGL Bagley Icefiel 5.42 78 Pn 23 57 06.9 +0.1**
**M26K Nabesna, AK 5.43 57 Pn 23 57 06.6 -0.4**
**M26K Nabesna, AK 5.43 57** P **Pn 23 57 06.2 -0.8**
baz=246,SNR=44
**RIDG Independent Ri 5.46 41** Pn **Pn 23 57 07.3 -0.1**
**RIDG Independent Ri 5.46 41** P **Pn 23 57 06.9 -0.5**
baz=228,SNR=15
**MESA MESA 5.49 82 Pn 23 57 08.5 +0.6**
**MESA MESA 5.49 82** P **Pn 23 57 07.7 -0.2**
baz=271,SNR=14
**PS08 TAPS Pump Stn8 5.51 28 Pn 23 57 07.1 -0.9**
**TCOL CIGO, UAF Yank 5.57 23** Pn **Pn 23 57 08.2 -0.6**
**TCOL CIGO, UAF Yank 5.57 23** P **Pn 23 57 08.0 -0.8**
baz=207,SNR=8.3
**COLA College 5.57 23 Pn 23 57 08.0 -0.8**
**COLA College 5.57 23** P **Pn 23 57 08.0 -0.8**
baz=207
**I23K Minto, Yukon-K 5.58 15** Pn **Pn 23 57 08.3 -0.5**
**I23K Minto, Yukon-K 5.58 15** P **Pn 23 57 08.2 -0.7**
baz=199,SNR=52
**MDM Murphy Dome 5.58 21** Pn **Pn 23 57 08.2 -0.8**
**YAH Yahtse 5.59 80 Pn 23 57 09.8 +0.5**
**DOT Dot Lake 5.67 44** Pn **Pn 23 57 10.5 +0.3**
**BARN Barnard Glacie 5.68 73 Pn 23 57 10.8 +0.3**
**IL31 5.69 27 Pn 23 57 09.4 -0.9**
**ILAR Eielson Array 5.69 27** P **Pn 23 57 09.2 -1.1**
comp=N,2.3nm,0.3s,baz=221,slow=14,SNR=92
ILAR S Sn 23 58 09.4 -4.8
comp=N,3.1nm,0.3s,baz=210,slow=16,SNR=5.5
**H21K Melozitna Rive 5.85 0** Pn **Pn 23 57 12.9 +0.3**
**H21K Melozitna Rive 5.85 0** P **Pn 23 57 12.0 -0.6**
baz=180
**POKR Poker Plat Res 5.87 23** Pn **Pn 23 57 12.4 -0.5**
**POKR Poker Plat Res 5.87 23** P **Pn 23 57 12.0 -0.9**
baz=208
**TABL Table Mountain 5.89 79** Pn **Pn 23 57 13.3 0.0**
**PS07 TAPS Pump Stn7 5.89 19 Pn 23 57 12.3 -0.8**
**M27K Edge Creek, AK 5.90 60** Pn **Pn 23 57 13.5 +0.1**
**M27K Edge Creek, AK 5.90 60** P **Pn 23 57 13.2 -0.2**
baz=250
**SCRK Sand Creek 5.91 41** Pn **Pn 23 57 12.5 -1.0**
**SCRK Sand Creek 5.91 41** P **Pn 23 57 12.5 -1.0**
baz=229,SNR=7.7
**IM03 6.19 357 Pn 23 57 16.6 -0.5**
**IMAR Indian Mountai 6.19 357** Pn **Pn 23 57 16.9 -0.3**
**YUK2 White River 6.20 66 Pn 23 57 17.0 -0.4**
**L27K Beaver Creek, 6.20 54** Pn **Pn 23 57 16.5 -0.8**
**H23K Yukon River 6.21 13 Pn 23 57 17.2 -0.2**
**H23K Yukon River 6.21 13** P **Pn 23 57 16.2 -1.2**
baz=196,SNR=43
**BC03 6.22 54 Pn 23 57 16.4 -1.1**
**BCAR Beaver Creek A 6.22 54** Pn **Pn 23 57 16.7 -0.9**
**PCA Pinnacle 6.34 82 Pn 23 57 19.6 +0.3**
**BVCY Beaver Creek 6.37 61** P **Pn 23 57 18.5 -1.1**
baz=251,SNR=9.7
**YUK3 Moose Creek 6.38 67 Pn 23 57 19.6 -0.3**
**YUK3 Moose Creek 6.38 67** P **Pn 23 57 19.1 -0.8**
baz=258,SNR=17
**J26L Joseph Creek 6.39 39** P **Pn 23 57 18.9 -1.1**
baz=227,SNR=8.7
J26L S Sn 23 58 25.4 -6.1
baz=227
**H24K Noodor Dome 6.45 19** Pn **Pn 23 57 19.6 -1.1**
**H24K Noodor Dome 6.45 19** P **Pn 23 57 19.4 -1.2**
baz=203
**PRP Porcupine Dome 6.63 27** Pn **Pn 23 57 22.4 -0.8**
**PRP Porcupine Dome 6.63 27** P **Pn 23 57 22.2 -1.0**
baz=214,SNR=9.8
**BCPM Bancas Point 6.66 83** Pn **Pn 23 57 23.8 +0.3**
**PNL Peninsula 6.81 86 Pn 23 57 25.3 -0.3**
**PNL Peninsula 6.81 86** P **Pn 23 57 24.9 -0.7**
baz=277,SNR=9.7
**YUK4 Talbot Arm 7.16 72** P **Pn 23 57 30.6 0.0**
baz=264
**YUK6 Outpost Mounta 7.27 75 Pn 23 57 32.3 +0.2**
**YUK6 Outpost Mounta 7.27 75** P **Pn 23 57 31.5 -0.5**
baz=268,SNR=8.1
**EGAK Eagle 7.37 43** Pn **Pn 23 57 31.9 -1.2**
**EGAK Eagle 7.37 43** P **Pn 23 57 31.9 -1.2**
baz=233
**COLD Coldfoot 7.52 8** Pn **Pn 23 57 34.5 -0.7**
**COLD Coldfoot 7.52 8** P **Pn 23 57 34.5 -0.7**
baz=190,SNR=15
**YUK5 Granite Creek 7.53 74 Pn 23 57 35.5 +0.1**
**ANM Nome 7.53 314** Pn **Pn 23 57 35.2 -0.1**
**ANM Nome 7.53 314** P **Pn 23 57 35.0 -0.3**
baz=124
**FYU Fort Yukon 7.58 24** Pn **Pn 23 57 34.8 -1.2**
**DAWY Dawson 7.63 50** Pn **Pn 23 57 35.6 -1.1**
**DAWY Dawson 7.63 50** P **Pn 23 57 36.5 -0.2**
baz=242
**HYT Haines Junctio 7.69 76** Pn **Pn 23 57 37.4 -0.2**
**HYT Haines Junctio 7.69 76** P **Pn 23 57 37.4 -0.2**
baz=269
**M30M Minto, Yukon 8.23 64** Pn **Pn 23 57 44.2 -0.7**
**BM03 Burnt Mountain 8.45 22 Pn 23 57 46.6 -1.2**
**BMAR Burnt Mountain 8.46 22 Pn 23 57 46.2 -1.8**
**SKAG Skagway 8.89 85** Pn **Pn 23 57 54.0 +0.3**
**SKAG Skagway 8.89 85** P **Pn 23 57 53.4 -0.3**
baz=280
**TOLK Toolik Lake Re 8.96 8** Pn **Pn 23 57 55.4 +0.6**
**TOLK Toolik Lake Re 8.96 8** P **Pn 23 57 54.9 +0.2**
baz=191,SNR=14
**WHY Whitesre 8.98 77** Pn **Pn 23 57 55.0 -0.1**
**WHY Whitehorse 8.98 77** P **Pn 23 57 55.3 +0.2**
baz=273,SNR=7.5
**M31M Drury Creek, Y 9.27 67** Pn **Pn 23 57 58.9 0.0**
**M31M Drury Creek, Y 9.27 67** P **Pn 23 57 58.7 -0.2**
baz=263
**BESE Bessie Mountai 9.32 90 Pn Pn 23 58 01.7 +2.0**
**UNV Unalaska Valle 9.57 237** Pn **Pn 23 58 00.8 -2.3**
**FARO Faro, Yukon 9.76 67** P **Pn 23 58 05.4 -0.2**
baz=264
**P33M Teslin, Yukon 10.04 79** Pn **Pn 23 58 10.2 +0.8**
**P33M Teslin, Yukon 10.04 79** P **Pn 23 58 09.3 -0.1**
baz=277
**MMPY Sheldon Lake, 10.76 66** P **Pn 23 58 19.2 0.0**
baz=265
**CRAG Craig 11.42 104 Pn Pn 23 58 28.7 +0.7**
**DLBC Dease Lake 11.80 87** P **Pn 23 58 34.0 +1.0**
comp=N,0.6nm,0.3s,baz=278,slow=4.1,SNR=11
DLBC S Sn 00 00 42.3 -0.3
comp=N,0.4nm,0.3s,baz=260,slow=26,SNR=6.9
**DLBC Dease Lake 11.80 87 Pn Pn 23 58 35.4 +2.4**
**MOBC Moresby Island 13.30 111 Pn Pn 23 58 55.1 +2.3**
**ADK Adak 15.49 250 P 23 59 22.1 -0.6**
ADK IAmb IAmb 23 59 44.5
comp=Z,30nm,0.9s
**A36M Sachs Harbour 16.37 31 Pn Pn 23 59 31.5 +0.2**
A36M IAmb IAmb 23 59 36.3
comp=Z,11nm,0.7s
**A36M Sachs Harbour 16.37 31** P **Pn 23 59 30.1 -1.3**
baz=236,SNR=7.8
**YKA Yellowknife Ar 18.46 65** P **P 23 59 56.0 +0.7**
comp=Z,0.6nm,0.3s,baz=277,slow=9.9,SNR=55
**YKA Yellowknife Ar 18.46 65** P **P 23 59 55.9 +0.7**
**RES Resolute Bay 25.41 32** P **P 00 01 06.9 +1.7**
comp=Z,0.6nm,0.6s,baz=256,slow=12,SNR=2.4
**FCC Fort Churchill 29.18 66** P **P 00 01 40.1 +1.0**
**JLU Jordanelle 32.01 108** P **P 00 02 06.0 +1.5**
JLU IAmb IAmb 00 02 07.2
comp=Z,2.8nm,1.1s
**EYMN Ely 36.71 81** P **P 00 02 45.7 +1.0**
EYMN IAmb IAmb 00 02 52.4
comp=Z,5.0nm,1.1s
**E46A Sault Ste Mari 41.36 77** P **P 00 03 24.6 +1.3**
**SCHQ Schefferville 43.60 57** P **P 00 03 41.4 0.0**
comp=Z,1.3nm,0.5s,baz=303,slow=11,SNR=1.6
**SCHQ Schefferville 43.60 57** P **P 00 03 41.6 +0.3**
**WLAR White Oak Lake 46.48 97** P **P 00 04 04.8 +0.6**
**SONM Songino Array 54.95 306** P **P 00 05 08.4 +0.6**
comp=Z,0.5nm,0.6s,baz=56,slow=5.6,SNR=4.0
**SONM Songino Array 54.95 306** P **P 00 05 08.1 +0.3**
SONM IAmb IAmb 00 05 09.4
comp=Z,1.1nm,1.1s
**ZAA0 Zalesovo Array 57.55 324** P **P 00 05 25.8 -0.3**
ZAA0 IAmb IAmb 00 05 26.7
comp=Z,2.3nm,0.7s
**ZALV Zalesovo Beam 57.55 324** P **P 00 05 25.9 -0.1**
comp=Z,2.7nm,0.6s,baz=29,slow=6.7,SNR=12
**ZALV Zalesovo Beam 57.55 324** P **P 00 05 26.1 0.0**
**MK31 Makanchi Array 64.61 321** P **P 00 06 13.2 -0.7**
**MKAR Makanchi Array 64.61 321** P **P 00 06 13.1 -0.8**
comp=Z,0.7nm,0.6s,baz=39,slow=7.0,SNR=19
**MKAR Makanchi Array 64.61 321** P **P 00 06 13.0 -0.9**
**MAKZ Makanchi 64.69 322** P **P 00 06 13.8 -0.7**
**ABKAR Akbulak array 68.05 337** P **P 00 06 34.9 -0.8**

*IDC **17** 00:11:17.0±1.4, 49°01'S×164°61'E, h0km, mb4.3/2, mb1 4.4/4, mb1mx3.9/26, mbtmp4.3/4, ML4.2/2, Error ellipse: s-maj=54.4km s-min=28.5km az=155.0*
*NEIC **17** 00:11:21.5±1.9, 49°0S±0°2'×164°6E±0°2, h24km±5km, mb4.4/4, Error ellipse: s-maj=22.8km s-min=16.5km az=159.0*
**ISC 17 00:11:19.1±0.7, 49°22'S±0°10'×164°69E±0°07, h18km, n67,**

σ1§37/80, **mb4.3**/3, **Auckland Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APZ** | **The Paps** | **3.26** | **44** | P | **Pn** | **00 12 09.8** | **+0.5** |
| APZ | | | | S | **Sn** | **00 12 47.9** | **+0.3** |
| **PYZ** | **Puysegur Point** | **3.34** | **24** | Pn | **Pn** | **00 12 10.1** | **-0.3** |
| **PYZ** | **Puysegur Point** | **3.34** | **24** | P | **Pn** | **00 12 10.1** | **-0.3** |
| PYZ | | | | S | **Sn** | **00 12 48.4** | **-1.2** |
| **WHZ** | **Wether Hill Ro** | **4.00** | **35** | | **Pn** | **00 12 19.3** | **-0.1** |
| **WHZ** | **Wether Hill Ro** | **4.00** | **35** | P | **Pn** | **00 12 19.3** | **-0.1** |
| WHZ | | | | S | **Sn** | **00 13 05.4** | **-0.4** |
| **SYZ** | **Scrubby Hill** | **4.03** | **50** | P | **Pn** | **00 12 20.6** | **+0.8** |
| SYZ | | | | S | **Sn** | **00 13 05.0** | **-1.4** |
| **DCZ** | **Deep Cove** | **4.12** | **25** | Pn | **Pn** | **00 12 21.1** | **0.0** |
| **DCZ** | **Deep Cove** | **4.12** | **25** | P | **Pn** | **00 12 20.3** | **-0.7** |
| DCZ | | | | S | **Sn** | **00 13 08.9** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **4.51** | **32** | Pn | **Pn** | **00 12 27.1** | **+0.6** |
| **MLZ** | **Mavora Lakes** | **4.51** | **32** | P | **Pn** | **00 12 27.8** | **+1.3** |
| **TUZ** | **Tuapeka** | **4.68** | **47** | P | **Pn** | **00 12 29.5** | **+0.8** |
| **MSZ** | **Milford Sound** | **5.06** | **27** | P | **Pn** | **00 12 35.3** | **+1.3** |
| MSZ | | | | S | **Sn** | **00 13 36.2** | **+4.2** |
| **EAZ** | **Earnscleugh** | **5.08** | **40** | P | **Pn** | **00 12 34.7** | **+0.3** |
| EAZ | | | | S | **Sn** | **00 13 34.1** | **+1.6** |
| **HHSZ** | **Highcliff Hill** | **5.21** | **52** | P | **Pn** | **00 12 37.4** | **+1.3** |
| **WKZ** | **Wanaka** | **5.30** | **36** | Pn | **Pn** | **00 12 38.4** | **+1.1** |
| **WKZ** | **Wanaka** | **5.30** | **36** | P | **Pn** | **00 12 38.7** | **+1.3** |
| WKZ | | | | S | **Sn** | **00 13 40.1** | **+2.1** |
| **ODZ** | **Otahua Downs** | **5.83** | **46** | Pn | **Pn** | **00 12 44.5** | **0.0** |
| **ODZ** | **Otahua Downs** | **5.83** | **46** | P | **Pn** | **00 12 44.1** | **-0.4** |
| ODZ | | | | S | **Sn** | **00 13 51.9** | **+1.0** |
| **JCZ** | **Jackson Bay** | **5.87** | **30** | P | **Pn** | **00 12 48.2** | **+3.0** |
| JCZ | | | | S | **Sn** | **00 13 54.2** | **+2.1** |
| **LBZ** | **Lake Benmore** | **6.13** | **40** | Pn | **Pn** | **00 12 47.7** | **-1.1** |
| **LBZ** | **Lake Benmore** | **6.13** | **40** | P | **Pn** | **00 12 47.8** | **-1.0** |
| LBZ | | | | S | **Sn** | **00 13 57.0** | **-1.5** |
| **TMZ** | **Timaru** | **6.50** | **44** | P | **Pn** | **00 12 53.8** | **+0.1** |
| **FOZ** | **Fox Glacier** | **6.71** | **34** | Pn | **Pn** | **00 12 55.3** | **-1.3** |
| **FOZ** | **Fox Glacier** | **6.71** | **34** | P | **Pn** | **00 12 57.4** | **+0.8** |
| **ARCZ** | **Arundel** | **6.92** | **43** | P | **Pn** | **00 13 01.4** | **+1.9** |
| ARCZ | | | | S | **Sn** | **00 14 17.2** | **-0.5** |
| **RPZ** | **Rata Peaks** | **7.05** | **41** | Pn | **Pn** | **00 12 59.0** | **-2.3** |
| | 5.2nm,0.3s,baz=250,slow=3.9,SNR=7.4 | | | | | | |
| RPZ | | | | Sn | **Sn** | **00 14 18.9** | **-2.0** |
| | 13nm,0.3s,baz=231,slow=21,SNR=12 | | | | | | |
| **RPZ** | **Rata Peaks** | **7.05** | **41** | P | **Pn** | **00 12 59.4** | **-1.9** |
| RPZ | | | | S | **Sn** | **00 14 19.7** | **-1.2** |
| **WACZ** | **Wakanui South** | **7.22** | **46** | P | **Pn** | **00 13 04.1** | **+0.4** |
| WACZ | | | | S | **Sn** | **00 14 24.2** | **-0.9** |
| **RACZ** | **Rakaia** | **7.53** | **46** | P | **Pn** | **00 13 08.4** | **+0.6** |
| **MQZ** | **McQueen's Vall** | **7.79** | **48** | Pn | **Pn** | **00 13 11.1** | **-0.3** |
| **MQZ** | **McQueen's Vall** | **7.79** | **48** | P | **Pn** | **00 13 11.8** | **+0.4** |
| **OXZ** | **Oxford** | **7.79** | **44** | P | **Pn** | **00 13 12.3** | **+0.8** |
| **OKCZ** | **Okains Bay** | **7.98** | **50** | P | **Pn** | **00 13 18.0** | **+4.0** |
| **LTZ** | **Lake Taylor** | **8.33** | **42** | Pn | **Pn** | **00 13 19.6** | **+0.7** |
| **LTZ** | **Lake Taylor** | **8.33** | **42** | P | **Pn** | **00 13 20.7** | **+1.8** |
| **THZ** | **Tophouse** | **9.43** | **41** | Pn | **Pn** | **00 13 35.1** | **+1.2** |
| **QRZ** | **Quartz Range** | **10.06** | **36** | Pn | **Pn** | **00 13 42.8** | **+0.2** |
| **BFZ** | **Birch Farm** | **11.82** | **48** | Pn | **Pn** | **00 14 08.4** | **+1.7** |
| **CTZ** | **Chatham Island** | **13.99** | **74** | P | **Pn** | **00 14 38.7** | **+2.4** |
| CTZ | | | | S | **Sn** | **00 17 06.1** | **-4.8** |
| **URZ** | **Urewera** | **14.15** | **44** | Pn | **Pn** | **00 14 38.6** | **+0.2** |
| | 1.1nm,0.3s,baz=50,slow=19,SNR=1.9 | | | | | | |
| **TOO** | **Toolangi** | **18.11** | **303** | P | **P** | **00 15 28.9** | **-1.0** |
| TOO | | | | IAmb | IAmb | 00 15 29.9 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **18.11** | **303** | | **Pn** | **00 15 28.9** | **-2.3** |
| **EIDS** | **Eidsvold** | **26.07** | **331** | P | **P** | **00 16 52.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **35.13** | **305** | P | **P** | **00 18 10.9** | **-0.6** |
| | comp=Z,1.8nm,0.7s,baz=144,slow=8.6,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 20 42.0** | **-0.8** |
| | comp=Z,0.7nm,0.7s,baz=126,slow=3.8,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.97** | **309** | PcP | **PcP** | **00 20 51.2** | **-0.1** |
| | comp=Z,1.9nm,0.8s,baz=139,slow=2.8,SNR=7.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.16** | **301** | P | **P** | **00 19 26.1** | **-0.6** |
| FITZ | | | | IAmb | IAmb | 00 19 33.7 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **45.60** | **311** | P | **P** | **00 19 37.4** | **-0.7** |
| **H08S2** | **Diego Garcia H** | **85.70** | **263** | T | T | 01 57 54.4 | |
| | baz=140,slow=76,SNR=39 | | | | | | |
| **H08S1** | **Diego Carcia H** | **85.72** | **263** | T | T | 01 57 57.5 | |
| | baz=140,slow=76,SNR=9.5 | | | | | | |
| **H08S3** | **Diego Garcia H** | **85.72** | **263** | T | T | 01 57 56.5 | |
| | baz=140,slow=76,SNR=56 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.97** | **300** | P | **P** | **00 24 13.2** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=168,slow=4.0,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **119.28** | **309** | PKP | **PKPdf** | **00 30 05.9** | **-0.4** |
| | comp=Z,0.4nm,0.8s,baz=145,slow=1.6,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **119.28** | **309** | | **PKPdf** | **00 30 06.2** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **128.29** | **36** | PKP | **PKiKP** | **00 30 23.9** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=255,slow=1.7,SNR=6.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **128.29** | **36** | PKPdf | **PKiKP** | **00 30 24.8** | **+1.2** |
| **TORD** | **Torodi Ar. Bea** | **141.39** | **207** | PKP | **PKPdf** | **00 30 50.1** | **+1.1** |
| | comp=Z,0.5nm,0.6s,baz=159,slow=2.8,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **141.39** | **207** | PKPpre | PKPpre | 00 30 42.8 | |
| **AKAS** | **Kas** | **145.06** | **265** | | **PKPdf** | **00 30 55.2** | **+0.2** |
| **ELL** | **Elmali** | **145.16** | **266** | | **PKPdf** | **00 30 56.1** | **+1.0** |
| **SPITS** | **Spitsbergen Ar** | **148.64** | **348** | PKPbc | **PKPbc** | **00 31 03.2** | **-0.2** |
| | comp=Z,19nm,1.0s,baz=145,slow=13,SNR=6.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.63** | **290** | PKPbc | **PKiKP** | **00 31 11.5** | **-0.2** |
| | comp=Z,3.2nm,0.7s,baz=77,slow=2.4,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.63** | **290** | | **PKPbc** | **00 31 10.7** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **151.81** | **331** | PKPbc | **PKiKP** | **00 31 12.0** | **+0.5** |
| | comp=Z,6.4nm,0.7s,baz=67,slow=2.4,SNR=15 | | | | | | |
| **ARCES** | **ARCESS Array B** | **151.81** | **331** | | **PKiKP** | **00 31 12.1** | **+0.5** |
| **FINES** | **FINESS Array B** | **153.97** | **314** | PKPbc | **PKiKP** | **00 31 16.8** | **+0.6** |
| | comp=Z,2.4nm,0.7s,baz=112,slow=5.1,SNR=6.3 | | | | | | |
| **FINES** | **FINESS Array B** | **153.97** | **314** | PKPbc | **PKPbc** | **00 31 16.0** | **-0.1** |
| **NOA** | **NORSAR Array B** | **160.93** | **318** | PKPab | **PKPab** | **00 31 58.9** | **-0.9** |
| | comp=Z,1.4nm,0.9s,baz=268,slow=2.8,SNR=3.3 | | | | | | |

*IDC **17** 00:11:32.7±27.0, 54.˚50S×142.˚29E, h0km, mb4.2/3, mb1 4.5/3, mb1mx3.8/29, mbtmp4.3/3, MS5.0/6, Ms1 5.0/6, ms1mx4.2/42, Error ellipse: s-maj=505.0km s-min=156.4km az=137.0*

*NEIC **17** 00:11:41.2±0.5, 53.˚80S±0.˚06×142.˚3E±0.˚3, h10km±2km, mb4.3/8, Error ellipse: s-maj=30.1km s-min=7.0km az=252.0*

**ISC 17 00:11:39.7**±2.9, **53.˚9S**±0.˚3×**142.˚1E**±0.˚2, **h10km, n19,** σ0§38/13, **mb4.2**/6, **MS4.9**/6, **West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCQ** | **Macquarie Isla** | **9.89** | **100** | | **Pn** | **00 13 01.8** | **0.0** |
| **TAU** | **Tasmania Unive** | **11.57** | **19** | | **Pn** | **00 14 24.8** | **0.0** |
| **STKA** | **Stephens Creek** | **22.06** | **359** | P | **P** | **00 16 34.6** | **+0.2** |
| | 4.3nm,0.8s,baz=168,slow=14,SNR=6.3 | | | | | | |
| **STKA** | **Stephens Creek** | **22.06** | **359** | P | **P** | **00 16 34.4** | **-0.1** |
| **ASAR** | **Alice Springs** | **30.86** | **345** | P | **P** | **00 17 55.9** | **-0.1** |
| | 3.1nm,1.0s,baz=170,slow=9.5,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **30.86** | **345** | P | **P** | **00 17 56.0** | **0.0** |
| **AS31** | **Alice Springs** | **30.86** | **345** | P | **P** | **00 17 56.0** | **0.0** |
| AS31 | | | | IAmb | IAmb | 00 18 22.1 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.41** | **347** | P | **P** | **00 18 27.2** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 00 18 36.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **34.45** | **347** | P | **P** | **00 18 27.3** | **-0.2** |
| **WRA** | **Warramunga Arr** | **34.46** | **347** | P | **P** | **00 18 26.6** | **-0.9** |
| | comp=Z,10nm,1.1s,baz=172,slow=7.7,SNR=25 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.46** | **347** | P | **P** | **00 18 27.4** | **-0.1** |
| **WB0** | **Warramunga Arr** | **34.62** | **347** | P | **P** | **00 18 28.7** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **37.97** | **334** | P | **P** | **00 18 58.2** | **+0.7** |
| FITZ | | | | IAmb | IAmb | 00 19 12.7 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **46.05** | **334** | LR | LR | 00 38 46.9 | |
| | comp=Z,7μm,21.8s,baz=154,slow=35 | | | | | | |
| **LEM** | **Lembang** | **54.61** | **316** | LR | LR | 00 42 40.3 | |
| | comp=Z,915nm,21.9s,baz=147,slow=34 | | | | | | |
| **DAV** | **Davao City (W)** | **62.36** | **341** | LR | LR | 00 47 59.1 | |
| | comp=Z,975nm,21.6s,baz=155,slow=35 | | | | | | |
| **TGY** | **Tagaytay City** | **70.14** | **338** | LR | LR | 00 55 00.4 | |
| | comp=Z,432nm,20.2s,baz=168,slow=37 | | | | | | |
| **PALK** | **Pallekele** | **79.67** | **298** | LR | LR | 00 54 49.9 | |
| | comp=Z,1μm,18.7s,baz=263,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.05** | **319** | LR | LR | 00 57 06.0 | |
| | comp=Z,551nm,21.9s,baz=155,slow=34 | | | | | | |

**DJA 17 00:12:59.8**±0.4, **5.˚S**±2.˚, **12.˚3E**±.˚, **h16km**±3km, **M4.1**/18, **mb4.3**/7, **mB4.9**/1, **MLv3.9**/18, **Mw(mB)4.2**/1, **MwMwp5.1**/3, **Mwp5.3**/3, **Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBSI** | **Bau Bau** | **0.08** | **226** | P | Pg | 00 13 04.7 | +1.6 |
| BBSI | | | | S | Sg | 00 13 06.9 | +1.7 |
| **BSSI** | **Bau Bau, Buton** | **2.24** | **251** | P | Pn | 00 13 36.5 | +0.2 |
| **BKSI** | **Bulukumba** | **2.50** | **272** | P | Pn | 00 13 39.5 | -0.3 |
| **BNSI** | **Bone** | **2.71** | **292** | P | Pn | 00 13 41.5 | -1.3 |
| **SPSI** | **Sidrap Palu** | **3.20** | **297** | P | Pn | 00 13 49.0 | -0.5 |
| **MMRI** | **Maumere** | **3.21** | **187** | P | Pn | 00 13 50.6 | +1.0 |
| **TTSI** | **Tana Toraja** | **3.67** | **310** | P | Pn | 00 13 55.9 | 0.0 |
| **APSI** | **Ampana** | **4.59** | **348** | P | Pn | 00 14 08.1 | -0.6 |
| **SANI** | **Sanana** | **4.74** | **45** | P | Pn | 00 14 11.2 | +0.5 |
| **BATI** | **Baumata** | **4.86** | **168** | P | Pn | 00 14 11.3 | -1.0 |
| **BASI** | **Baing, Sumba** | **5.17** | **203** | P | Pn | 00 14 17.1 | +0.5 |
| | 0.3nm7μm63nm,0.5s | | | | | | |
| **MRSI** | **Marisa** | **5.91** | **353** | P | Pn | 00 14 27.0 | +0.3 |
| | 0.2nm13nm,0.4s | | | | | | |
| **GTOI** | **Gorontalo** | **6.04** | **4** | P | Pn | 00 14 30.4 | +1.9 |
| | 0.0nm5.0nm,0.7s | | | | | | |
| **MPSI** | **Mapaga** | **6.34** | **334** | P | Pn | 00 14 30.7 | -2.0 |
| | 0.1nm942nm4.3nm,0.6s | | | | | | |
| **IGBI** | **Denpasar** | **8.15** | **245** | P | Pn | 00 14 58.3 | +0.7 |
| | 7μm53nm,0.4s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.94** | **250** | P | Pn | 00 15 09.9 | +1.5 |

*JMA **17** 00:18:47.1±0.2, 42.˚04N×142.˚59E, h60km±2km, M3.2*

*IDC **17** 00:18:54.5±10.0, 44.˚02N×141.˚16E, h0km, mb3.6/5, mb1 3.7/5, mb1mx3.4/34, mbtmp3.6/5, Error ellipse: s-maj=268.5km s-min=35.5km az=167.0*

**ISC 17 00:18:46.6**±1.0, **42.˚00N**±0.˚07×**142.˚56E**±0.˚04, **h62km**±8km, **n20,** σ0§37/26, **mb3.4**/5, **5C-5D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNBK** | **Urakawa-nobuka** | **0.31** | **27** | ↑P | **Pn** | **00 18 56.8** | **-0.2** |
| JNBK | | | | eS | **Sn** | **00 19 04.5** | **-0.1** |
| **JSHD** | **Hidakashinhida** | **0.41** | **350** | ↑P | **Pn** | **00 18 58.0** | **+0.1** |
| **JEM** | **Erimo** | **0.44** | **88** | ↑P | **Pn** | **00 18 58.4** | **+0.3** |
| **JTHR** | **Tokachihiroo** | **0.62** | **62** | ↑P | **Pn** | **00 19 00.1** | **+0.1** |
| JTHR | | | | eS | **Sn** | **00 19 10.0** | **+0.2** |
| **JIAM** | **Iburiatsuma** | **0.78** | **323** | ↓P | **Pn** | **00 19 02.7** | **+0.7** |
| **JBT2** | **Biratori 2** | **0.79** | **349** | ↓P | **Pn** | **00 19 01.8** | **-0.3** |
| **JCH** | **Churui** | **0.85** | **44** | ↑P | **Pn** | **00 19 02.7** | **-0.2** |
| JCH | | | | eS | **Sn** | **00 19 14.8** | **0.0** |
| **JKB** | **Kayabe** | **1.15** | **265** | P | **Pn** | **00 19 06.7** | **+0.1** |
| JKB | | | | eS | **Sn** | **00 19 21.6** | **+0.1** |
| **JEW** | **Eniwo** | **1.18** | **316** | ↓P | **Pn** | **00 19 07.3** | **+0.3** |
| JEW | | | | eS | **Sn** | **00 19 22.5** | **+0.3** |
| **JNB** | **Noboribetsu** | **1.22** | **293** | ↓P | **Pn** | **00 19 07.2** | **-0.4** |
| JNB | | | | eS | **Sn** | **00 19 23.2** | **-0.1** |
| **JOT** | **Ohata** | **1.29** | **242** | ↓P | **Pn** | **00 19 08.8** | **+0.3** |
| JOT | | | | eS | **Sn** | **00 19 25.3** | **+0.4** |
| **JOB** | **Onbets** | **1.30** | **46** | P | **Pn** | **00 19 09.6** | **+0.9** |
| **JAB** | **Ashibetsu** | **1.52** | **351** | P | **Pn** | **00 19 12.3** | **+0.6** |
| **JISS** | **Ishikarishitsu** | **1.53** | **327** | P | **Pn** | **00 19 12.1** | **+0.3** |
| **JAR** | **Asahorobuto** | **1.57** | **34** | P | **Pn** | **00 19 12.2** | **-0.1** |
| **SONM** | **Songino Array** | **26.10** | **295** | P | **P** | **00 24 14.5** | **-0.1** |
| | 0.9nm,1.0s,baz=75,slow=9.2,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.39** | **308** | P | **P** | **00 26 10.1** | **+0.1** |
| | 0.6nm,0.4s,baz=73,slow=6.7,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.41** | **298** | P | **P** | **00 26 34.9** | **-0.1** |
| | 0.6nm,0.9s,baz=82,slow=8.8,SNR=5.3 | | | | | | |
| **ILAR** | **Eielson Array** | **44.87** | **35** | P | P | 00 27 02.4 | +7.9 |
| | 0.1nm,0.5s,baz=271,slow=6.1,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **64.85** | **332** | P | **P** | **00 29 18.3** | **-0.4** |
| | 2.1nm,0.9s,baz=41,slow=6.1,SNR=4.1 | | | | | | |

**IDC 17 00:19:56.4**±2.9, **21.˚84S×173.˚64W, h0km, mb3.8**/2, **mb1 4.1**/3, **mb1mx3.6**/29, **mbtmp4.0**/3, **ML4.9**/1, **Error ellipse: s-maj=79.7km s-min=54.7km az=157.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.83** | **296** | Pn | Pn | 00 22 05.7 | +0.2 |
| | 0.4nm,0.3s,baz=116,slow=18,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **48.19** | **257** | P | P | 00 28 38.4 | -0.6 |
| | 1.4nm,0.8s,baz=97,slow=7.7,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.45** | **262** | P | P | 00 28 41.4 | +0.3 |
| | 0.9nm,0.8s,baz=98,slow=7.2,SNR=4.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.09** | **334** | PKPbc | PKPdf | 00 39 37.4 | +0.1 |
| | 1.4nm,0.6s,baz=40,slow=4.2,SNR=8.3 | | | | | | |

*IDC **17** 00:29:18.9±1.7, 32.˚09S×69.˚64W, h0km, mb3.7/3, mb1 4.1/5, mb1mx3.9/20, mbtmp3.8/5, ML4.0/2, Error ellipse: s-maj=57.2km s-min=39.6km az=14.0*

*SJA **17** 00:29:35.5±0.8, 31.˚41S×69.˚28W, h112km±3km, ML4.4, MW4.0*

*NEIC **17** 00:29:35.9±2.2, 31.˚46S±0.˚06×69.˚31W±0.˚05, h108km±5km, mb4.0/9, Md4.3(SJA), Error ellipse: s-maj=8.6km s-min=6.0km az=205.0*

**ISC 17 00:29:35.1**±0.6, **31.˚41S**±0.˚03×**69.˚27W**±0.˚04, **h114km**±5km, **n71,** σ1§67/95, **mb3.7**/8, **San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZON** | **Zonda** | **0.52** | **106** | | **Pn** | **00 29 53.5** | **+1.0** |
| ZON | | | | Sn | **Sn** | **00 30 06.8** | **+1.0** |
| **ZON** | **Zonda** | **0.52** | **106** | eP | **Pn** | **00 29 53.6** | **+1.0** |
| ZON | | | | eS | **Sn** | **00 30 06.8** | **+1.0** |
| **SJA** | **San Juan** | **0.61** | **101** | eP | **Pn** | **00 29 54.2** | **+0.9** |
| SJA | | | | eS | **Sn** | **00 30 07.8** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **0.68** | **84** | eP | **Pn** | **00 29 54.6** | **+0.8** |
| RTLL | | | | eS | **Sn** | **00 30 07.8** | **0.0** |
| RTLL | | | | eS | **Sn** | **00 30 08.8** | **+1.0** |
| **RTCV** | **Cerro Valdivia** | **0.77** | **126** | eP | **Pn** | **00 29 55.8** | **+1.3** |
| RTCV | | | | eS | **Sn** | **00 30 10.5** | **+1.4** |
| RTCV | | | | eS | **Sn** | **00 30 11.1** | **+2.0** |
| **AUSP** | **Uspallata** | **0.82** | **187** | eP | **Pn** | **00 29 56.3** | **+1.1** |
| AUSP | | | | eS | **Sn** | **00 30 11.6** | **+1.2** |
| **ASAL** | **Salagasta** | **1.24** | **163** | eP | **Pn** | **00 30 00.7** | **+1.4** |
| ASAL | | | | eS | **Sn** | **00 30 19.2** | **+1.7** |
| **CO03** | **El Pedregal** | **1.35** | **295** | | **Pn** | **00 30 01.6** | **+1.1** |
| CO03 | | | | Sn | **Sn** | **00 30 20.9** | **+1.2** |
| **ARCO** | **CERRO ARCO** | **1.46** | **169** | eP | **Pn** | **00 30 03.3** | **+1.5** |
| ARCO | | | | eS | **Sn** | **00 30 24.3** | **+2.1** |
| ARCO | | | | IAML | | 00 30 25.2 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **CO02** | **Combarbal** | **1.50** | **277** | | **Pn** | **00 30 02.9** | **+0.6** |
| **AAGR** | **Agrelo** | **1.71** | **168** | eP | **Pn** | **00 30 06.3** | **+1.4** |
| AAGR | | | | eS | **Sn** | **00 30 24.3** | **-3.2** |
| AAGR | | | | eS | **Sn** | **00 30 29.5** | **+2.0** |
| **VA03** | **San Esteban** | **1.74** | **219** | | **Pn** | **00 30 06.2** | **+1.0** |
| **GO04** | **Tololo Observa** | **1.80** | **313** | Pn | **Pn** | **00 30 06.6** | **+0.5** |
| **GO04** | **Tololo Observa** | **1.80** | **313** | eP | **Pn** | **00 30 07.0** | **+0.9** |
| GO04 | | | | eS | **Sn** | **00 30 31.7** | **+2.0** |
| **VA06** | **Catapilco** | **2.07** | **236** | Pn | **Pn** | **00 30 08.7** | **-0.5** |
| **PEL** | **Peldehue** | **2.11** | **214** | Pn | **Pn** | **00 30 10.4** | **+0.8** |
| **PEL** | **Peldehue** | **2.11** | **214** | eP | **Pn** | **00 30 10.5** | **+0.8** |
| PEL | | | | eS | **Sn** | **00 30 37.2** | **+1.0** |
| **AVIZ** | **Vizcacheras** | **2.15** | **163** | eP | **Pn** | **00 30 06.3** | **-4.1** |
| AVIZ | | | | eP | **Pn** | **00 30 11.8** | **+1.4** |
| AVIZ | | | | eS | **Sn** | **00 30 38.6** | **+1.3** |
| **ROC1** | **El Roble** | **2.16** | **223** | | **Pn** | **00 30 09.3** | **-1.2** |
| **CO06** | **Fray Jorge** | **2.16** | **289** | Pn | **Pn** | **00 30 09.5** | **-0.8** |
| **CO05** | **La Serena** | **2.26** | **311** | | **Pn** | **00 30 11.6** | **0.0** |
| **MT05** | **Renca** | **2.34** | **212** | Pn | **Pn** | **00 30 13.6** | **+0.9** |
| **MT02** | **Curacav** | **2.43** | **220** | Pn | **Pn** | **00 30 14.0** | **+0.2** |
| **LMEL** | **Las Melosas** | **2.56** | **198** | Pn | **Pn** | **00 30 15.9** | **+0.3** |
| **VA01** | **Torpederas** | **2.58** | **231** | Pn | **Pn** | **00 30 14.7** | **-1.1** |
| **LCO1** | **Las Campanas** | **2.69** | **332** | | **Pn** | **00 30 18.0** | **+0.5** |
| **MT09** | **Talagante** | **2.77** | **211** | | **Pn** | **00 30 17.9** | **-0.5** |
| **ACLC** | **CERRO LA CRUZ** | **2.81** | **46** | eP | **Pn** | **00 30 20.0** | **+1.1** |
| ACLC | | | | eS | **Sn** | **00 30 54.4** | **+1.8** |
| **BO04** | **La Punta** | **2.81** | **203** | Pn | **Pn** | **00 30 19.2** | **+0.4** |
| **BO02** | **Sierra Bellavi** | **3.61** | **200** | Pn | **Pn** | **00 30 29.3** | **-0.1** |
| **TINO** | **Tinogasta** | **3.65** | **24** | eP | **Pn** | **00 30 33.0** | **+3.0** |
| **GO03** | **Copiap** | **3.89** | **347** | | **Pn** | **00 30 33.5** | **+0.3** |
| **GO03** | **Copiap** | **3.89** | **347** | eP | **Pn** | **00 30 34.0** | **+0.7** |
| GO03 | | | | eS | **Sn** | **00 31 18.7** | **+0.5** |
| **GO05** | **Huala** | **4.23** | **211** | eP | **Pn** | **00 30 35.5** | **-2.2** |
| **AC02** | **Maricunga** | **4.56** | **2** | Pn | **Pn** | **00 30 43.6** | **+1.1** |
| **ML02** | **Panimavida** | **4.70** | **202** | | **Pn** | **00 30 42.7** | **-1.3** |
| **LC01** | **Cunco** | **7.77** | **195** | Pn | **Pn** | **00 31 25.2** | **-0.3** |
| **PB15** | **IPOC Station P** | **8.17** | **359** | Pn | **Pn** | **00 31 30.4** | **-0.8** |
| **LVC** | **Limon Verde** | **8.77** | **2** | Pn | **Pn** | **00 31 36.7** | **-2.7** |
| | comp=Z,1.6nm,0.3s,baz=178,slow=9.5,SNR=5.6 | | | | | | |
| **LVC** | **Limon Verde** | **8.77** | **2** | | **Pn** | **00 31 37.1** | **-2.3** |
| **PLCA** | **Paso Flores** | **9.36** | **186** | Pn | **Pn** | **00 31 46.8** | **-0.3** |
| **PB09** | **IPOC Station P** | **9.57** | **0** | Pn | **Pn** | **00 31 48.3** | **-1.8** |
| **PB11** | **IPOC Station P** | **11.60** | **358** | Pn | **Pn** | **00 32 15.5** | **-1.9** |
| **CPUP** | **Villa Florida** | **11.62** | **67** | Pn | **Pn** | **00 32 15.2** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=233,slow=12,SNR=4.2 | | | | | | |
| CPUP | | | | Sn | **Sn** | **00 34 17.5** | **-7.8** |
| | comp=Z,0.2nm,0.3s,baz=288,slow=15,SNR=1.7 | | | | | | |
| **PB16** | **IPOC Station P** | **13.02** | **359** | P | **P** | **00 32 39.7** | **-2.9** |
| **PLTB** | **Pedras Altas** | **13.36** | **96** | Pn | **Pn** | **00 32 38.9** | **-1.3** |
| **BELA** | **Belgrano 2** | **49.04** | **171** | P | **P** | **00 38 11.6** | **+1.6** |
| BELA | | | | IAmb | IAmb | 00 38 12.9 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **53.12** | **159** | P | **P** | **00 38 40.1** | **-0.5** |
| **TXAR** | **Lajitas Array** | **68.70** | **328** | P | **P** | **00 40 28.5** | **+1.9** |
| | comp=Z,0.3nm,0.6s,baz=149,slow=7.2,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **68.70** | **328** | P | **P** | **00 40 28.3** | **+1.8** |
| **WVT** | **Waverly** | **69.40** | **344** | P | **P** | **00 40 31.3** | **+0.7** |
| **CCM** | **Cathedral Cave** | **72.09** | **342** | P | **P** | **00 40 48.2** | **+1.4** |
| CCM | | | | IAmb | IAmb | 00 41 17.2 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **72.58** | **341** | P | **P** | **00 40 51.3** | **+1.5** |
| **SDCO** | **Great Sand Dun** | **76.67** | **331** | P | **P** | **00 41 16.6** | **+2.8** |
| **KOWA** | **Kowa** | **77.42** | **64** | P | **P** | **00 41 19.5** | **+1.3** |
| KOWA | | | | IAmb | IAmb | 00 41 20.1 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **ECSD** | **EROS Data Cent** | **78.86** | **340** | P | **P** | **00 41 27.0** | **+1.6** |
| ECSD | | | | IAmb | IAmb | 00 41 46.2 | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.11** | **69** | P | **P** | **00 41 38.5** | **+0.2** |
| | comp=Z,1.7nm,0.9s,baz=279,slow=6.4,SNR=8.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.11** | **69** | P | **P** | **00 41 39.4** | **+1.2** |
| TORD | | | | IAmb | IAmb | 00 41 40.8 | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **82.56** | **331** | P | **P** | **00 41 45.3** | **-0.2** |
| | comp=Z,0.2nm,0.5s,baz=134,slow=6.4,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.15** | **323** | P | **P** | **00 41 49.3** | **+0.7** |
| | comp=Z,0.1nm,0.4s,baz=172,slow=4.5,SNR=3.8 | | | | | | |
| **KSH** | **Kashi** | **150.69** | **64** | PKPbc | **PKiKP** | **00 49 15.8** | **+1.1** |
| **ZALV** | **Zalesovo Beam** | **150.79** | **32** | PKPbc | **PKiKP** | **00 49 15.3** | **+1.1** |
| | comp=Z,3.4nm,0.5s,baz=308,slow=2.9,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **153.30** | **47** | PKPbc | **PKiKP** | **00 49 20.2** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=330,slow=1.6,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **153.30** | **47** | | **PKiKP** | **00 49 19.8** | **+0.1** |
| MKAR | | | | PKPab | **PKPab** | **00 49 33.5** | **+1.5** |

**IDC 17 00:49:06.2**±2.4, **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| APYP | | | | *e*S | | **Sn** | **01 15 14.7 -0.4** |
| **SIPP** | **Brgy, Tapao** | **2.18** | **228** | *e*P | | **Pb** | **01 15 01.2 -0.4** |
| SIPP | | | | *e*S | | **Sg** | **01 15 32.6 +0.4** |
| **CAUP** | **Cauayan** | **2.46** | **187** | *e*P | | **Pn** | **01 15 04.6 +2.3** |
| **SAMP** | **Sagada Mountai** | **2.60** | **208** | *e*P | | **Pn** | **01 15 04.4 +0.2** |
| **SMPP** | **San Manuel, Pa** | **3.52** | **204** | *e*P | | **Pn** | **01 15 18.9 +1.9** |
| SMPP | | | | *e*S | | **Sn** | **01 16 01.1 +2.3** |
| **TWG** | **Pinlang** | **3.55** | **344** | | | **Pn** | **01 15 19.4 +2.1** |
| **BALP** | **Baler** | **3.68** | **189** | *e*P | | **Pn** | **01 15 20.5 +1.4** |
| **YULB** | **Yu-li** | **4.05** | **349** | Pn | | **Pn** | **01 15 24.3 +0.1** |
| **TPUB** | **Ta-pu** | **4.13** | **340** | Pn | | **Pn** | **01 15 27.3 +1.9** |
| **SSLB** | **Suanglung** | **4.51** | **346** | Pn | | **Pn** | **01 15 32.5 +2.0** |
| **NACB** | **Ninganchiao** | **4.78** | **354** | Pn | | **Pn** | **01 15 34.0 -0.2** |
| **LQP** | **Lukban** | **5.29** | **187** | *e*P | | **Pn** | **01 15 42.5 +1.0** |
| **YHNB** | **Yeheng** | **5.29** | **352** | Pn | | **Pn** | **01 15 42.6 +1.3** |
| **JOW** | **Kunigami** | **9.29** | **36** | Pn | | **Pn** | **01 16 37.3 +1.1** |
| | 2.4nm,0.3s,baz=112,slow=26,SNR=2.2 | | | | | | |
| **JOW** | **Kunigami** | **9.29** | **36** | Pn | | **Pn** | **01 16 36.2 -0.1** |
| **KSRS** | **Korea Array** | **18.68** | **14** | P | | **P** | **01 18 41.1 +0.7** |
| | 0.2nm,0.3s,baz=204,slow=11,SNR=4.1 | | | | | | |
| **CHTO** | **Chiang Mai** | **21.94** | **272** | P | | **P** | **01 19 16.4 +0.4** |
| **CMAR** | **Chiang Mai Arr** | **21.98** | **271** | P | | **P** | **01 19 16.2 -0.2** |
| | 1.1nm,0.4s,baz=70,slow=8.8,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.98** | **271** | P | | **P** | **01 19 16.0 -0.5** |
| **SONM** | **Songino Array** | **31.13** | **339** | P | | **P** | **01 20 40.5 -0.5** |
| | 0.4nm,0.4s,baz=159,slow=10.0,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **31.13** | **339** | P | | **P** | **01 20 41.0 0.0** |
| **WRA** | **Warramunga Arr** | **40.88** | **162** | P | | **P** | **01 22 02.0 -2.6** |
| | 0.5nm,1.0s,baz=346,slow=9.3,SNR=2.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.04** | **84** | T | | T | 02 07 24.0 |
| | baz=277,slow=74,SNR=25 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.05** | **84** | T | | T | 02 07 24.9 |
| | baz=277,slow=74,SNR=13 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.06** | **84** | T | | T | 02 07 21.8 |
| | baz=277,slow=74,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.06** | **82** | T | | T | 02 07 18.3 |
| | baz=277,slow=75,SNR=21 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.06** | **82** | T | | T | 02 07 18.4 |
| | baz=277,slow=75,SNR=18 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.08** | **82** | T | | T | 02 07 20.2 |
| | baz=277,slow=75,SNR=14 | | | | | | |
| **MK31** | **Makanchi Array** | **42.47** | **319** | P | | **P** | **01 22 18.1 +0.7** |
| MK31 | | | | IAmb | | IAmb | 01 22 19.1 |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.47** | **319** | P | | **P** | **01 22 18.1 +0.8** |
| | comp=Z,2.1nm,0.6s,baz=111,slow=8.7,SNR=44 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.47** | **319** | P | | **P** | **01 22 17.9 +0.6** |
| **MAKZ** | **Makanchi** | **42.67** | **319** | P | | **P** | **01 22 18.6 -0.3** |
| **ASAR** | **Alice Springs** | **44.31** | **165** | P | | **P** | **01 22 30.8 -1.6** |
| | comp=Z,0.2nm,0.4s,baz=348,slow=8.5,SNR=1.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **44.77** | **329** | P | | **P** | **01 22 35.8 0.0** |
| ZAA0 | | | | IAmb | | IAmb | 01 22 36.4 |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.77** | **329** | P | | **P** | **01 22 35.6 -0.1** |
| | comp=Z,1.6nm,0.6s,baz=111,slow=8.1,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.77** | **329** | P | | **P** | **01 22 35.5 -0.3** |
| **KURK** | **Kurchatov** | **46.38** | **323** | P | | **P** | **01 22 49.5 +1.0** |
| KURK | | | | IAmb | | IAmb | 01 23 10.9 |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **49.17** | **311** | P | | **P** | **01 23 11.5 +1.1** |
| **ABKAR** | **Akbulak array** | **57.47** | **317** | P | | **P** | **01 24 11.6 +0.3** |
| **ARU** | **Arti** | **59.49** | **325** | P | | **P** | **01 24 24.8 -0.4** |
| **TTA** | **Tatalina** | **69.21** | **29** | P | | **P** | **01 25 29.7 +0.8** |
| TTA | | | | IAmb | | IAmb | 01 25 52.6 |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **69.99** | **28** | P | | **P** | **01 25 35.0 +1.4** |
| **H21K** | **Melozitna Rive** | **70.47** | **26** | P | | **P** | **01 25 38.1 +1.5** |
| H21K | | | | IAmb | | IAmb | 01 25 43.8 |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **CAST** | **Castle Rocks** | **70.96** | **28** | P | | **P** | **01 25 40.8 +1.2** |
| CAST | | | | IAmb | | IAmb | 01 25 49.5 |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **73.05** | **27** | P | | **P** | **01 25 51.3 -0.8** |
| | comp=Z,0.3nm,0.7s,baz=267,slow=4.5,SNR=1.9 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **73.34** | **30** | P | | **P** | **01 25 53.8 -0.2** |
| **BMAR** | **Burnt Mountain** | **73.51** | **24** | P | | **P** | **01 25 55.8 +1.0** |
| **M26K** | **Nabesna, AK** | **75.22** | **29** | P | | **P** | **01 26 05.5 +0.6** |
| M26K | | | | IAmb | | IAmb | 01 26 30.3 |
| | comp=Z,4.9nm,1.5s | | | | | | |
| **EGAK** | **Eagle** | **75.45** | **26** | P | | **P** | **01 26 06.5 +0.5** |
| EGAK | | | | IAmb | | IAmb | 01 26 16.6 |
| | comp=Z,6.7nm,1.5s | | | | | | |
| **BCAR** | **Beaver Creek A** | **75.61** | **28** | P | | **P** | **01 26 08.2 +1.2** |
| **M27K** | **Edge Creek, AK** | **75.74** | **29** | P | | **P** | **01 26 08.7 +0.8** |
| M27K | | | | IAmb | | IAmb | 01 26 27.5 |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **76.02** | **331** | P | | **P** | **01 26 08.1 -1.3** |
| | comp=Z,1.5nm,0.7s,baz=46,slow=8.2,SNR=5.6 | | | | | | |
| **EPYK** | **Eagle Plains** | **76.78** | **24** | P | | **P** | **01 26 13.2 -0.4** |
| **M30M** | **Minto, Yukon** | **77.94** | **28** | P | | **P** | **01 26 20.6 +0.3** |
| M30M | | | | IAmb | | IAmb | 01 26 28.0 |
| | comp=Z,2.4nm,1.2s | | | | | | |
| **BURAR** | **Bucovina Array** | **80.45** | **317** | P | | **P** | **01 26 33.7 -0.6** |
| **YKA** | **Yellowknife Ar** | **87.01** | **23** | P | | **P** | **01 27 07.5 0.0** |
| | comp=Z,1.0nm,0.6s,baz=308,slow=4.4,SNR=23 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.01** | **23** | P | | **P** | **01 27 07.6 +0.1** |

*IDC **17** 01:17:55.5±0.8,52.°63N×160.°53E,h0km,mb3.7/11,*
*mb1 3.9/11,mb1mx3.6/59,mbtmp3.7/11,Error ellipse:*
*s-maj=23.2km s-min=12.8km az=6.0*
*MOS **17** 01:17:58.6±1.0,52.°46N×160.°71E,h28km,mb4.0/1,Error*
*ellipse: s-maj=9.4km s-min=5.0km az=103.9*
*KRSC **17** 01:17:59.1±1.2,52.°59N×160.°58E,h28km±13km,ML4.3*

**ISC 17 01:17:57.4±2.0,52.°54N±0.°04×160.°65E±0.°04,h14km±12km,**
**n74,σ1§70/97,mb3.8/12,1D,Off east coast of**
**Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPN** | **Mys Shipunski** | **0.67** | **326** | PN | **Pb** | **01 18 11.4** | **+0.5** |
| SPN | | | | S | **Sg** | **01 18 19.9** | **+0.5** |
| **SPN** | **Mys Shipunski** | **0.67** | **326** | *i* P | **Pb** | **01 18 11.4** | **+0.5** |
| SPN | | | | *e*S | **Sg** | **01 18 19.9** | **+0.5** |
| **NLC** | **Nalytchevo** | **1.01** | **309** | PN | **Pb** | **01 18 16.6** | **0.0** |
| NLC | | | | S | **Sb** | **01 18 29.4** | **-0.3** |
| **NLC** | **Nalytchevo** | **1.01** | **309** | *e*P | **Pb** | **01 18 16.6** | **0.0** |
| NLC | | | | *e*S | **Sb** | **01 18 29.4** | **-0.3** |
| **DALK** | **Dalny** | **1.25** | **294** | PN | **Pn** | **01 18 20.5** | **+0.1** |
| DALK | | | | S | **Sb** | **01 18 36.2** | **-0.4** |
| **DALK** | **Dalny** | **1.25** | **294** | *e*P | **Pn** | **01 18 20.5** | **+0.1** |
| DALK | | | | *e*S | **Sb** | **01 18 36.2** | **-0.4** |
| **UGLR** | **Uglovaya** | **1.29** | **302** | PN | **Pb** | **01 18 21.9** | **+0.4** |
| **UGLR** | **Uglovaya** | **1.29** | **302** | *e*P | **Pb** | **01 18 21.9** | **+0.4** |
| **PET** | **Petropavlovsk** | **1.30** | **292** | *i* PN | **Pn** | **01 18 21.4** | **+0.4** |
| PET | | | | *e*S | **Sb** | **01 18 38.0** | **-0.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,456nm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | |
| **PET** | **Petropavlovsk** | **1.30** | **292** | *e*P | **Pn** | **01 18 21.5** | **+0.4** |
| PET | | | | *e*S | **Sb** | **01 18 37.8** | **-0.4** |
| **RUS** | **Russkaya** | **1.31** | **266** | PN | **Pn** | **01 18 21.6** | **+0.4** |
| RUS | | | | S | **Sb** | **01 18 38.1** | **-0.2** |
| **RUS** | **Russkaya** | **1.31** | **266** | *e*P | **Pn** | **01 18 21.6** | **+0.4** |
| RUS | | | | *e*S | **Sb** | **01 18 38.1** | **-0.2** |
| **SMAR** | **Somma** | **1.33** | **304** | PN | **Pb** | **01 18 22.6** | **+0.4** |
| **SMAR** | **Somma** | **1.33** | **304** | *e*P | **Pb** | **01 18 22.6** | **+0.4** |
| **AVH** | **Avacha** | **1.36** | **303** | PN | **Pn** | **01 18 22.6** | **+0.6** |
| **AVH** | **Avacha** | **1.36** | **303** | *e*P | **Pn** | **01 18 22.6** | **+0.6** |
| **KRER** | **Koryakskii** | **1.38** | **304** | PN | **Pb** | **01 18 23.2** | **+0.2** |
| **KRER** | **Koryakskii** | **1.38** | **304** | *e*P | **Pb** | **01 18 23.2** | **+0.2** |
| **KOK** | **Koryaka** | **1.43** | **302** | PN | **Pn** | **01 18 23.8** | **+0.8** |
| **KOK** | **Koryaka** | **1.43** | **302** | *e*P | **Pn** | **01 18 23.8** | **+0.8** |
| **MTVR** | **Mutnovka** | **1.51** | **269** | PN | **Pb** | **01 18 25.3** | **+0.1** |
| MTVR | | | | S | **Sn** | **01 18 43.9** | **+0.4** |
| **MTVR** | **Mutnovka** | **1.51** | **269** | *e*P | **Pb** | **01 18 25.3** | **+0.1** |
| MTVR | | | | *e*S | **Sn** | **01 18 43.9** | **+0.4** |
| **KRMR** | **Karymshinskiy** | **1.56** | **282** | PN | **Pn** | **01 18 25.2** | **+0.6** |
| KRMR | | | | S | **Sn** | **01 18 43.6** | **-1.0** |
| **KRMR** | **Karymshinskiy** | **1.56** | **282** | *e*P | **Pn** | **01 18 25.2** | **+0.6** |
| KRMR | | | | *e*S | **Sn** | **01 18 43.6** | **-1.0** |
| **KII** | **Karymskiy** | **1.66** | **335** | PN | **Pn** | **01 18 27.2** | **+1.1** |
| KII | | | | S | **Sn** | **01 18 46.9** | **-0.3** |
| **KII** | **Karymskiy** | **1.66** | **335** | *e*P | **Pn** | **01 18 27.2** | **+1.1** |
| KII | | | | *e*S | **Sn** | **01 18 46.9** | **-0.3** |
| **KDTR** | **Khodutka, Kamc** | **1.75** | **246** | PN | **Pn** | **01 18 28.2** | **+1.1** |
| KDTR | | | | S | **Sn** | **01 18 49.5** | **+0.3** |
| **KDTR** | **Khodutka, Kamc** | **1.75** | **246** | *e*P | **Pn** | **01 18 28.2** | **+1.1** |
| KDTR | | | | *e*S | **Sn** | **01 18 49.5** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **1.88** | **289** | Pg | **Pn** | **01 18 29.5** | **+0.5** |
| | comp=E,37nm,0.3s,baz=109,slow=21,SNR=222 | | | | | | |
| PETK | | | | Lg | Lg | 01 18 53.4 | |
| | comp=E,51nm,0.3s,baz=94,slow=21,SNR=5.2 | | | | | | |
| **GNL** | **Ganaly** | **2.00** | **306** | PN | **Pb** | **01 18 32.6** | **-0.9** |
| GNL | | | | S | **Sn** | **01 18 56.5** | **+0.9** |
| **GNL** | **Ganaly** | **2.00** | **306** | *e*P | **Pb** | **01 18 32.6** | **-0.9** |
| GNL | | | | *e*S | **Sn** | **01 18 56.5** | **+0.9** |
| **MKZ** | **Mys Kozlova** | **2.12** | **17** | PN | **Pn** | **01 18 33.2** | **+0.9** |
| MKZ | | | | S | **Sn** | **01 18 58.1** | **-0.2** |
| **MKZ** | **Mys Kozlova** | **2.12** | **17** | *e*P | **Pn** | **01 18 33.2** | **+0.9** |
| MKZ | | | | *e*S | **Sn** | **01 18 58.1** | **-0.2** |
| **APC** | **Apacha** | **2.16** | **282** | PN | **Pb** | **01 18 35.3** | **-0.8** |
| APC | | | | S | **Sb** | **01 19 02.2** | **-0.5** |
| **APC** | **Apacha** | **2.16** | **282** | *e*P | **Pb** | **01 18 35.3** | **-0.8** |
| APC | | | | *e*S | **Sb** | **01 19 02.2** | **-0.5** |
| **PAU** | **Pauzhetka** | **2.61** | **247** | PN | **Pb** | **01 18 42.1** | **-1.7** |
| **PAU** | **Pauzhetka** | **2.61** | **247** | P | **Pb** | **01 18 42.1** | **-1.7** |
| **TUMD** | **Tumrok D** | **2.67** | **357** | *e*P | **Pn** | **01 18 41.6** | **+1.7** |
| TUMD | | | | *e*S | **Sn** | **01 19 12.2** | **+0.2** |
| **TUMR** | **Tumrok** | **2.76** | **354** | PN | **Pn** | **01 18 43.9** | **+2.7** |
| **TUMR** | **Tumrok** | **2.76** | **354** | *e*P | **Pn** | **01 18 43.9** | **+2.7** |
| **KMNR** | **Kamenistaya** | **3.23** | **356** | PN | **Pn** | **01 18 51.0** | **+3.4** |
| **KMNR** | **Kamenistaya** | **3.23** | **356** | *e*P | **Pn** | **01 18 51.0** | **+3.4** |
| **SKR** | **Severo-Kuril's** | **3.38** | **238** | *e*PN | **Pn** | **01 18 52.5** | **+2.9** |
| SKR | | | | *e*S | **Sn** | **01 19 30.9** | **+1.4** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,57nm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,386nm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,304nm,0.8s | | | | | | |
| **BZGR** | **Bezymyannyi-Gr** | **3.41** | **0** | PN | **Pb** | **01 18 54.3** | **-3.2** |
| **BZGR** | **Bezymyannyi-Gr** | **3.41** | **0** | *e*P | **Pb** | **01 18 54.3** | **-3.2** |
| **KIRR** | **Kirishev** | **3.42** | **357** | PN | **Pn** | **01 18 53.7** | **+3.4** |
| **KIRR** | **Kirishev** | **3.42** | **357** | *e*P | **Pn** | **01 18 53.7** | **+3.4** |
| **BZWR** | **Bezymyannyi-We** | **3.43** | **359** | PN | **Pb** | **01 18 54.7** | **-3.2** |
| **BZWR** | **Bezymyannyi-We** | **3.43** | **359** | *e*P | **Pb** | **01 18 54.7** | **-3.2** |
| **KPT** | **Kopyto** | **3.44** | **356** | PN | **Pn** | **01 18 54.3** | **+3.8** |
| **KPT** | **Kopyto** | **3.44** | **356** | *e*P | **Pn** | **01 18 54.3** | **+3.8** |
| **ZLN** | **Zelenaya** | **3.48** | **1** | PN | **Pb** | **01 18 55.7** | **-3.1** |
| **ZLN** | **Zelenaya** | **3.48** | **1** | *e*P | **Pb** | **01 18 55.7** | **-3.1** |
| **KOZ** | **Kozyrevsk** | **3.55** | **353** | PN | **Pn** | **01 18 55.6** | **+3.6** |
| **KOZ** | **Kozyrevsk** | **3.55** | **353** | *e*P | **Pn** | **01 18 55.6** | **+3.6** |
| **ESO** | **Esso** | **3.58** | **342** | PN | **Pn** | **01 18 56.2** | **+3.8** |
| **ESO** | **Esso** | **3.58** | **342** | *e*P | **Pn** | **01 18 56.2** | **+3.8** |
| **KBTR** | **Krutoberegovo** | **3.89** | **18** | PN | **Pn** | **01 18 59.0** | **+2.4** |
| **KBTR** | **Krutoberegovo** | **3.89** | **18** | *e*P | **Pn** | **01 18 59.0** | **+2.4** |
| **ILAR** | **Eielson Array** | **28.97** | **45** | P | **P** | **01 23 56.1** | **+0.2** |
| | comp=E,0.3nm,0.6s,baz=262,slow=6.3,SNR=1.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.11** | **169** | T | T | 01 59 56.2 | |
| | baz=353,slow=76,SNR=50 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.12** | **169** | T | T | 02 00 04.8 | |
| | baz=353,slow=76,SNR=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.12** | **169** | T | T | 01 59 56.8 | |
| | baz=353,slow=76,SNR=51 | | | | | | |
| **SONM** | **Songino Array** | **34.36** | **284** | P | **P** | **01 24 41.6** | **-2.0** |
| | comp=E,0.3nm,0.6s,baz=77,slow=7.7,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **43.34** | **42** | P | **P** | **01 25 59.7** | **+1.2** |
| | comp=E,0.1nm,0.5s,baz=300,slow=7.6,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.70** | **296** | P | **P** | **01 26 38.8** | **-2.1** |
| | comp=E,0.3nm,0.6s,baz=55,slow=7.0,SNR=10.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.92** | **342** | P | **P** | **01 27 19.4** | **-0.2** |
| | comp=E,15nm,1.1s,baz=47,slow=6.5,SNR=8.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **57.50** | **61** | P | **P** | **01 27 46.4** | **+0.4** |
| | comp=E,0.4nm,0.8s,baz=339,slow=4.8,SNR=3.3 | | | | | | |
| **FINES** | **FINESS Array B** | **60.76** | **337** | P | **P** | **01 28 07.4** | **-0.6** |
| | comp=E,2.6nm,0.8s,baz=34,slow=8.2,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **69.26** | **329** | P | **P** | **01 29 02.9** | **-0.5** |
| | comp=E,0.5nm,0.4s,baz=32,slow=6.7,SNR=3.5 | | | | | | |
| **KBZ** | **Khabaz** | **70.17** | **317** | P | **P** | **01 29 08.5** | **-0.6** |
| | comp=E,1.3nm,0.8s,baz=85,slow=2.9,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **70.54** | **67** | P | **P** | **01 29 12.9** | **+1.1** |
| | comp=E,0.4nm,0.6s,baz=307,slow=5.0,SNR=5.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **75.73** | **205** | P | **P** | **01 29 43.0** | **+0.8** |
| | comp=E,0.6nm,0.7s,baz=18,slow=5.8,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **79.40** | **205** | P | **P** | **01 30 04.0** | **+1.3** |
| | comp=E,0.6nm,0.6s,baz=13,slow=5.4,SNR=8.8 | | | | | | |

*PRE **17** 01:24:59.8±0.9,26.°29S×28.°39E,h2km,ML2.3*
*BUL **17** 01:25:03.1±2.4,26.°26S×28.°34E,h0km±13km,MD4.0*
*EAF **17** 01:25:03.0±2.7,26.°25S×28.°35E,h0km±14km,MD3.8*

**ISC 17 01:24:59.6±1.2,26.°28S±0.°03×28.°38E±0.°02,h1km±11km,**
**n23,σ2§29/46,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLR** | **Silverton** | **0.55** | **351** | *e*P | **Pg** | **01 25 11.1** | **+0.9** |
| SLR | | | | *e*S | **Sg** | **01 25 18.0** | **+0.7** |
| SLR | | | | IAML | | 01 25 23.5 | |
| | comp=Z,145nm,0.7s | | | | | | |
| **PRYS** | **Parys** | **1.11** | **235** | *e*P | **Pg** | **01 25 21.8** | **+0.7** |
| PRYS | | | | *e*S | **Sg** | **01 25 36.2** | **+0.7** |
| PRYS | | | | IAML | | 01 25 42.4 | |
| | comp=Z,33nm,0.3s | | | | | | |
| **KSR** | **Koster** | **1.40** | **287** | *e*P | **Pn** | **01 25 26.7** | **+0.2** |
| KSR | | | | *e*S | **Sn** | **01 25 46.3** | **+0.6** |
| KSR | | | | IAML | | 01 25 49.7 | |
| | comp=Z,677nm,0.1s | | | | | | |
| **CRLN** | **Carolina, Mapu** | **1.51** | **79** | *e*P | **Pb** | **01 25 28.7** | **+0.1** |
| CRLN | | | | *e*S | **Sg** | **01 25 49.0** | **+0.9** |
| CRLN | | | | IAML | | 01 25 51.2 | |
| | comp=Z,25nm,0.2s | | | | | | |
| **NWCL** | **Newcastle** | **1.98** | **137** | *e*P | **Pn** | **01 25 35.4** | **+1.0** |
| NWCL | | | | *e*S | **Sn** | **01 26 00.3** | **+0.3** |
| NWCL | | | | IAML | | 01 26 06.8 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **2.81** | **296** | *e*P | **Pn** | **01 25 47.0** | **+1.2** |
| LBTB | | | | *e*S | **Sn** | **01 26 21.3** | **+0.9** |
| LBTB | | | | IAML | | 01 26 31.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **2.81** | **296** | *i* P | **Pb** | **01 25 49.8** | **-0.9** |
| LBTB | | | | *i* Sg | **Sg** | **01 26 28.4** | **-1.5** |
| **LBTB** | **Lobatse** | **2.81** | **296** | *i* P | **Pb** | **01 25 49.8** | **-0.9** |
| LBTB | | | | *i* Sg | **Sg** | **01 26 28.4** | **-1.5** |
| **SWZ** | **Schweizer** | **2.87** | **251** | *e*P | **Pn** | **01 25 47.4** | **+0.8** |
| SWZ | | | | *e*S | **Sn** | **01 26 21.9** | **0.0** |
| SWZ | | | | IAML | | 01 26 37.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **POGA** | **Pongola** | **3.16** | **110** | *e*P | **Pn** | **01 25 51.1** | **+0.6** |
| POGA | | | | *e*S | **Sn** | **01 26 28.8** | **-0.1** |
| POGA | | | | IAML | | 01 26 39.8 | |
| | comp=Z,26nm,0.6s | | | | | | |
| **CNG** | **Changalane** | **3.42** | **91** | *i* P | **Pb** | **01 25 58.3** | **-2.8** |
| CNG | | | | *i* Sg | **Sg** | **01 26 50.0** | **+0.4** |
| **CNG** | **Changalane** | **3.42** | **91** | *i* P | **Pb** | **01 25 58.3** | **-2.8** |
| CNG | | | | *i* Sg | **Sg** | **01 26 50.0** | **+0.4** |
| **BOSA** | **Boshof** | **3.62** | **229** | *i* P | **Pn** | **01 25 59.7** | **+2.7** |
| BOSA | | | | *i* Sg | **Sg** | **01 26 53.8** | **-2.1** |
| **BOSA** | **Boshof** | **3.62** | **229** | *i* P | **Pn** | **01 25 59.7** | **+2.7** |
| BOSA | | | | *i* Sg | **Sg** | **01 26 53.8** | **-2.1** |
| **MOPA** | **Mopani** | **3.88** | **46** | *e*P | **Pn** | **01 26 01.6** | **+1.1** |
| MOPA | | | | *e*S | **Sn** | **01 26 45.8** | **-1.0** |
| MOPA | | | | IAML | | 01 27 02.5 | |
| | comp=Z,9.0nm,1.5s | | | | | | |
| **MOPA** | **Mopani** | **3.88** | **46** | *i* P | **Pn** | **01 26 04.3** | **+3.8** |
| MOPA | | | | *i* Sg | **Sg** | **01 27 00.9** | **-3.6** |
| **MOPA** | **Mopani** | **3.88** | **46** | *i* P | **Pn** | **01 26 04.3** | **+3.8** |
| MOPA | | | | *i* Sg | **Sg** | **01 27 00.9** | **-3.6** |
| **MSNA** | **Messina** | **4.20** | **21** | *i* P | **Pn** | **01 26 08.7** | **+3.9** |
| MSNA | | | | *i* S | **Sn** | **01 26 54.1** | **-0.4** |
| **MSNA** | **Messina** | **4.20** | **21** | *i* P | **Pn** | **01 26 08.7** | **+3.9** |
| MSNA | | | | *i* S | **Sn** | **01 26 54.1** | **-0.4** |
| **MATP** | **Matopo** | **5.83** | **1** | *i* P | **Pn** | **01 26 29.9** | **+2.5** |
| MATP | | | | *i* S | **Sn** | **01 27 31.6** | **-3.3** |
| **MATP** | **Matopo** | **5.83** | **1** | *i* P | **Pn** | **01 26 29.9** | **+2.5** |
| MATP | | | | *i* S | **Sn** | **01 27 31.6** | **-3.3** |
| **BLWY** | **Bulawayo** | **6.12** | **2** | *i* P | **Pn** | **01 26 35.3** | **+4.0** |
| BLWY | | | | *i* S | **Sn** | **01 27 39.5** | **-2.6** |
| **BLWY** | **Bulawayo** | **6.12** | **2** | *i* P | **Pn** | **01 26 35.3** | **+4.0** |
| BLWY | | | | *i* S | **Sn** | **01 27 39.5** | **-2.6** |

*MDD **17** 01:34:49.6±0.3,35.°55N×3.°81W,h0km,mb_Lg2.9/5,Error*
*ellipse: s-maj=3.4km s-min=2.3km az=11.0*
*SFS **17** 01:34:49.0,35.°50N×3.°80W,ML2.8,ALBORAN SUR*
*CNRM **17** 01:34:50.4,35.°50N×3.°62W,h10km,ml2.7*
*IGIL **17** 01:34:51.0,35.°56N×3.°84W,h4km,ML2.3*
*INMG **17** 01:34:52.0±1.2,35.°45N×3.°80W,h31km,ML2.3,Error*
*ellipse: s-maj=7.2km s-min=4.3km az=176.0*

**ISC 17 01:34:50.7±1.1,35.°52N±0.°03×3.°77W±0.°03,h26km±12km,**
**n36,σ1§64/58,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.33** | **205** | P | **Pb** | **01 34 57.8** | **-0.4** |
| **EMEL** | **Melilla** | **0.70** | **108** | Pg | **Pb** | **01 35 03.8** | **-0.5** |
| EMEL | | | | Sg | **Sb** | **01 35 13.6** | **0.0** |
| **EALB** | **Alboran** | **0.73** | **55** | Pg | **Pb** | **01 35 03.9** | **-1.0** |
| EALB | | | | Sg | **Sb** | **01 35 13.8** | **-0.8** |
| EALB | | | | *i* Vmb_Lg | | 01 35 15.5 | |
| **CHAS** | **Isla Isabel II** | **1.15** | **106** | P | **Pn** | **01 35 09.8** | **-1.2** |
| CHAS | | | | S | **Sb** | **01 35 25.2** | **-1.1** |
| **TAF** | **Taforalt** | **1.31** | **122** | P | **Pn** | **01 35 13.4** | **0.0** |
| **EMIJ** | **Mijas** | **1.32** | **323** | Pg | **Pn** | **01 35 11.7** | **-1.9** |
| EMIJ | | | | Sg | **Sn** | **01 35 28.3** | **-2.0** |
| EMIJ | | | | *i* Vmb_Lg | | 01 35 34.0 | |
| **EMAL** | **Malaga-Limoner** | **1.35** | **337** | P | **Pn** | **01 35 12.3** | **-1.6** |
| EMAL | | | | S | **Sn** | **01 35 28.4** | **-2.6** |
| **CEU** | **Ceuta** | **1.36** | **287** | P | **Pn** | **01 35 10.5** | **-3.4** |
| CEU | | | | S | **Sn** | **01 35 26.7** | **-4.4** |
| **JBK** | **JBK** | **1.54** | **140** | P | **Pn** | **01 35 16.7** | **+0.1** |
| **EJIF** | **Jimena Fronter** | **1.66** | **305** | Pn | **Pn** | **01 35 17.8** | **-0.4** |
| **LIJA** | **Lijar** | **1.92** | **317** | P | **Pb** | **01 35 27.5** | **+2.5** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pb** | **01 35 27.0** | **-0.1** |
| **IFR** | **Ifrane** | **2.29** | **210** | P | **Pn** | **01 35 28.7** | **+1.8** |
| IFR | | | | S | **Sn** | **01 35 56.2** | **+1.9** |
| **MDT** | **Midelt** | **2.78** | **195** | P | **Pn** | **01 35 35.2** | **+1.6** |
| **EZAR** | **Zarzadilla de** | **2.89** | **35** | Pn | **Pn** | **01 35 34.7** | **-0.4** |
| EZAR | | | | Sn | **Sn** | **01 36 08.2** | **-0.8** |
| **ETOB** | **Tobarra** | **3.59** | **29** | Pn | **Pn** | **01 35 46.5** | **+1.7** |
| ETOB | | | | Sn | **Sn** | **01 36 27.2** | **+0.8** |
| **EGRO** | **El Granado** | **3.60** | **305** | Pn | **Pn** | **01 35 44.5** | **-0.4** |
| EGRO | | | | Sn | **Sn** | **01 36 25.0** | **-1.5** |
| EGRO | | | | *i* Vmb_Lg | | 01 36 29.5 | |
| **PVAQ** | **Vaqueiros** | **3.70** | **302** | *e*Pn | **Pn** | **01 35 46.6** | **+0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **01 36 27.5** | **-1.3** |
| PVAQ | | | | A | A | 01 36 35.5 | |
| | 5.1nm,0.9s | | | | | | |
| **PCVE** | **Castro Verde** | **4.03** | **303** | *e*Pn | **Pn** | **01 35 51.9** | **+1.2** |
| PCVE | | | | *e*Sn | **Sn** | **01 36 37.0** | **-0.1** |
| PCVE | | | | A | A | 01 36 42.5 | |
| | 2.9nm,0.2s | | | | | | |
| **PAB** | **San Pablo** | **4.05** | **354** | Pn | **Pn** | **01 35 51.9** | **+0.8** |
| PAB | | | | Sn | **Sn** | **01 36 37.3** | **-0.4** |
| **PAB** | **San Pablo** | **4.05** | **354** | P | **Pn** | **01 35 52.1** | **+1.0** |
| **EBAD** | **Badajoz** | **4.14** | **322** | Pn | **Pn** | **01 35 51.9** | **-0.4** |
| EBAD | | | | Sn | **Sn** | **01 36 38.5** | **-1.4** |
| **ESDC** | **Sonseca Array** | **4.15** | **358** | Pn | **Pn** | **01 35 53.4** | **+0.9** |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*P | **Pn** | **01 35 53.8** | **-0.1** |
| MESJ | | | | *e*S | **Sn** | **01 36 39.7** | **-3.1** |
| MESJ | | | | IAML | | 01 36 47.0 | |
| | comp=E,5.6nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **304** | *e*Pn | **Pn** | **01 35 54.5** | **+0.6** |
| MESJ | | | | *e*Sn

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **3.81** | **318** | *eP* | | **Pn** | **01 38 52.0** | **+0.5** |
| PB01 | | | | *eS* | | **Sn** | **01 39 38.2** | **+0.1** |
| PB01 | | | | IAML | | | 01 39 42.3 | |
| | comp=Z,657nm,0.3s | | | | | | | |
| **PB02** | **IPOC Station P** | **3.88** | **311** | Pn | | **Pn** | **01 38 52.9** | **+0.6** |
| **PB02** | **IPOC Station P** | **3.88** | **311** | *eP* | | **Pn** | **01 38 53.0** | **+0.6** |
| PB02 | | | | *eS* | | **Sn** | **01 39 38.5** | **-1.1** |
| PB02 | | | | IAML | | | 01 39 41.2 | |
| | comp=Z,2µm,0.2s | | | | | | | |
| **PB08** | **IPOC Station P** | **4.37** | **329** | Pn | | **Pn** | **01 38 59.9** | **+1.2** |
| **PATCX** | **Punta Patache** | **4.40** | **314** | Pn | | **Pn** | **01 38 58.7** | **-0.1** |
| **TA01** | **Diego Aracena** | **4.60** | **316** | Pn | | **Pn** | **01 39 01.6** | **+0.3** |
| **GO01** | **Chusmiza** | **4.80** | **331** | Pn | | **Pn** | **01 39 04.8** | **+0.5** |
| **GO03** | **Copiap** | **4.81** | **220** | Pn | | **Pn** | **01 39 02.8** | **-1.2** |
| **PB11** | **IPOC Station P** | **4.93** | **326** | Pn | | **Pn** | **01 39 05.6** | **-0.1** |
| **AC04** | **Llanos de Chal** | **5.76** | **221** | Pn | | **Pn** | **01 39 14.4** | **-1.7** |
| **PB16** | **IPOC Station P** | **6.12** | **335** | Pn | | **Pn** | **01 39 21.8** | **+0.4** |
| **PB12** | **IPOC Station P** | **6.24** | **327** | Pn | | **Pn** | **01 39 21.3** | **-1.1** |
| **GO04** | **Tololo Observa** | **7.19** | **209** | Pn | | **Pn** | **01 39 32.4** | **-2.5** |
| **CO03** | **El Pedregal** | **7.72** | **206** | Pn | | **Pn** | **01 39 39.4** | **-2.3** |
| **CO02** | **Combarbal** | **8.17** | **206** | Pn | | **Pn** | **01 39 45.6** | **-1.9** |
| **CPUP** | **Villa Florida** | **8.88** | **108** | P | | **Pn** | **01 39 55.9** | **-0.8** |
| | comp=Z,1.2nm,0.3s,baz=285,slow=11,SNR=28 | | | | | | | |
| **CPUP** | **Villa Florida** | **8.88** | **108** | Pn | | **Pn** | **01 39 55.0** | **-1.7** |
| **CPUP** | **Villa Florida** | **8.88** | **108** | *eP* | | **Pn** | **01 39 55.5** | **-1.2** |
| **VA03** | **San Esteban** | **9.42** | **200** | Pn | | **Pn** | **01 40 03.2** | **-0.6** |
| **SIV** | **San Ignacio** | **9.53** | **35** | P | | **Pn** | **01 40 04.7** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=213,slow=13,SNR=25 | | | | | | | |
| SIV | | | | S | | **Sn** | **01 41 50.9** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=305,slow=12,SNR=1.5 | | | | | | | |
| **MT02** | **Curacav** | **10.07** | **201** | Pn | | **Pn** | **01 40 11.1** | **-0.9** |
| **ITQB** | **Itaqui** | **10.71** | **124** | *eP* | | **Pn** | **01 40 19.4** | **-1.0** |
| **AQDB** | **Aquidauana** | **10.81** | **74** | Pn | | **Pn** | **01 40 18.8** | **-2.9** |
| **AQDB** | **Aquidauana** | **10.81** | **74** | *eP* | | **Pn** | **01 40 20.5** | **-1.2** |
| **PTLB** | **Pontes e Lacer** | **11.07** | **42** | *eP* | | **Pn** | **01 40 24.3** | **-0.8** |
| **BO01** | **Tunca** | **11.10** | **199** | Pn | | **Pn** | **01 40 24.6** | **-0.7** |
| **BO02** | **Sierra Bellavi** | **11.38** | **197** | Pn | | **Pn** | **01 40 28.2** | **-0.9** |
| **GO05** | **Huala** | **11.93** | **201** | Pn | | **Pn** | **01 40 36.8** | **+0.8** |
| **ML02** | **Panimavida** | **12.47** | **198** | P | | **P** | **01 40 47.7** | **+0.8** |
| **VILB** | **Vilhena** | **12.56** | **31** | *eP* | | **Pn** | **01 40 44.1** | **0.0** |
| **PP1B** | **Ponte de Pedra** | **12.77** | **63** | *eP* | | **Pn** | **01 40 46.2** | **-0.5** |
| **SALV** | **Santo Antonio** | **13.11** | **55** | *eP* | | **Pn** | **01 40 50.8** | **-0.2** |
| **ITAB** | **Concordia** | **13.61** | **107** | | | **Pn** | **01 40 57.0** | **-0.2** |
| **ITAB** | **Concordia** | **13.61** | **107** | *eP* | | **Pn** | **01 40 56.1** | **-1.1** |
| **PLTB** | **Pedras Altas** | **14.01** | **127** | P | | **P** | **01 41 02.9** | **-1.2** |
| **PLTB** | **Pedras Altas** | **14.01** | **127** | *eP* | | **Pn** | **01 41 02.4** | **+0.3** |
| **ETMB** | **Extrema** | **14.04** | **2** | *eP* | | **Pn** | **01 41 03.3** | **+0.8** |
| **PCMB** | **Pacaembu** | **14.48** | **84** | *eP* | | **Pn** | **01 41 07.5** | **-0.6** |
| **PDRB** | **Porto dos Gac** | **15.52** | **40** | *eP* | | **P** | **01 41 21.1** | **+0.3** |
| **LC01** | **Cunco** | **15.55** | **195** | P | | **Pn** | **01 41 20.0** | **-0.9** |
| **FRTB** | **Fartura** | **15.78** | **91** | *eP* | | **P** | **01 41 23.4** | **-0.3** |
| **ITRB** | **Iturama** | **15.80** | **78** | *eP* | | **Pn** | **01 41 24.0** | **-0.1** |
| **TER01** | **Tubaro-SC** | **16.47** | **110** | *eP* | | **P** | **01 41 30.5** | **-0.8** |
| **CLDB** | **Colider** | **16.66** | **41** | *eP* | | **P** | **01 41 33.4** | **0.0** |
| **PLCA** | **Paso Flores** | **17.06** | **190** | P | | **P** | **01 41 36.8** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=9.5,slow=14,SNR=7.0 | | | | | | | |
| **PLCA** | **Paso Flores** | **17.06** | **190** | P | | **Pn** | **01 41 38.8** | **-0.3** |
| PLCA | | | | IAmb | IAmb | | 01 41 45.6 | |
| | comp=Z,8.4nm,0.7s | | | | | | | |
| **PLCA** | **Paso Flores** | **17.06** | **190** | *eP* | | **P** | **01 41 37.3** | **-0.4** |
| **CZSB** | **Cruzeiro do Su** | **17.08** | **340** | *eP* | | **Pn** | **01 41 38.9** | **-0.5** |
| **LL04** | **Puerto Octay** | **17.59** | **194** | P | | **P** | **01 41 43.1** | **-0.3** |
| LL04 | | | | IAmb | IAmb | | 01 41 45.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **17.75** | **89** | *eP* | | **P** | **01 41 45.3** | **-0.1** |
| **PET01** | **Itanhaem-SP** | **17.80** | **95** | *eP* | | **P** | **01 41 45.6** | **-0.2** |
| **VAO** | **Valinhos** | **18.19** | **91** | *eP* | | **P** | **01 41 49.3** | **-0.9** |
| **IPMB** | **Ipameri, GO** | **18.30** | **75** | *eP* | | **P** | **01 41 51.6** | **+0.3** |
| **LL05** | **Los Muermos** | **18.32** | **196** | P | | **P** | **01 41 51.9** | **+0.6** |
| **SNDB** | **Serra Nova Dou** | **18.89** | **54** | *eP* | | **P** | **01 41 57.5** | **-0.2** |
| **PARB** | **Paraibuna** | **19.38** | **93** | *eP* | | **P** | **01 42 03.4** | **-0.4** |
| **BDFB** | **Brasilia** | **19.46** | **68** | *eP* | | **P** | **01 42 03.7** | **-0.2** |
| | comp=Z,1.3nm,0.3s,baz=245,slow=11,SNR=20 | | | | | | | |
| **BDFB** | **Brasilia** | **19.46** | **68** | P | | **P** | **01 42 03.7** | **-0.2** |
| BDFB | | | | IAmb | IAmb | | 01 42 05.3 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **LL02** | **Futaleuf** | **19.67** | **191** | P | | **P** | **01 42 07.2** | **+1.3** |
| **NPGB** | **Novo Progresso** | **20.03** | **35** | *eP* | | **P** | **01 42 09.0** | **-1.0** |
| **BSCB** | **Bom Sucesso** | **20.53** | **86** | *eP* | | **P** | **01 42 15.4** | **+0.1** |
| **MAN01** | **Angra dos Reis** | **20.95** | **92** | *eP* | | **P** | **01 42 19.3** | **-0.5** |
| **PEXB** | **Peixe** | **21.10** | **59** | *eP* | | **P** | **01 42 21.0** | **-0.3** |
| **VAS01** | **Vassouras-RJ** | **21.51** | **90** | *eP* | | **P** | **01 42 25.5** | **-0.1** |
| **ITTB** | **Itaituba** | **22.16** | **30** | *eP* | | **P** | **01 42 30.5** | **-1.5** |
| **DUB01** | **Friburgo-RJ** | **22.52** | **90** | *eP* | | **P** | **01 42 34.5** | **+0.2** |
| **JANB** | **Januaria** | **22.90** | **71** | *eP* | | **P** | **01 42 37.9** | **-0.9** |
| **SMTB** | **Santa Maria do** | **23.67** | **54** | *eP* | | **P** | **01 42 45.6** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **23.68** | **65** | *eP* | | **P** | **01 42 45.0** | **-0.9** |
| **PTGA** | **Pitinga** | **23.98** | **17** | P | | **P** | **01 42 48.0** | **-0.5** |
| | comp=Z,1.8nm,0.3s,baz=343,slow=23,SNR=5.9 | | | | | | | |
| **PRPB** | **Paraupebas** | **24.02** | **45** | *eP* | | **P** | **01 42 48.3** | **-0.7** |
| **ALF01** | **Guarapari-ES** | **24.31** | **87** | *eP* | | **P** | **01 42 50.9** | **-0.7** |
| **SJMB** | **Sao Joao De Ma** | **24.37** | **83** | *eP* | | **P** | **01 42 51.0** | **-1.2** |
| **RIB01** | **Linhares ES** | **24.92** | **85** | *eP* | | **P** | **01 42 56.5** | **-0.7** |
| **NAN01** | **Guarapari, ES** | **25.59** | **81** | *eP* | | **P** | **01 43 01.9** | **-1.3** |
| **GUA01** | **Guaratinga, BA** | **26.29** | **79** | *eP* | | **P** | **01 43 08.9** | **-0.6** |
| **OTAV** | **Otavalo** | **26.56** | **333** | *eP* | | **P** | **01 43 13.4** | **+1.0** |
| **BOAV** | **Boa Vista** | **26.85** | **14** | *eP* | | **P** | **01 43 15.0** | **+0.5** |
| **CMC01** | **Camacan, BA** | **27.00** | **77** | *eP* | | **P** | **01 43 14.9** | **-0.9** |
| **NBIT** | **Itapeh - BA** | **27.24** | **76** | *eP* | | **P** | **01 43 17.8** | **-0.1** |
| **MCPB** | **Macapa, AP** | **27.42** | **33** | *eP* | | **P** | **01 43 21.3** | **+1.7** |
| **GDU01** | **Guandu, BA** | **27.61** | **73** | *eP* | | **P** | **01 43 19.8** | **-1.4** |
| **NBPN** | **Ponto Novo - B** | **28.42** | **67** | *eP* | | **P** | **01 43 28.1** | **-0.4** |
| **DSPA** | **Despedida** | **30.01** | **182** | P | | **P** | **01 43 41.8** | **-0.2** |
| **NBLA** | **Lagarto - SE** | **30.41** | **70** | *eP* | | **P** | **01 43 44.4** | **-1.5** |
| **ZARC** | **Zaragoza, Cauc** | **32.21** | **345** | P | | **P** | **01 44 00.3** | **-1.4** |
| **NBMO** | **Morrinhos-CE** | **32.95** | **56** | *eP* | | **P** | **01 44 09.8** | **+1.6** |
| **PMSA** | **Palmer Station** | **40.89** | **178** | P | | **P** | **01 45 15.7** | **+1.4** |
| **CELP** | **Cerrillos** | **41.74** | **0** | P | | **P** | **01 45 21.4** | **-0.4** |
| CELP | | | | IAmb | IAmb | | 01 45 43.4 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **SOR** | **Soroa** | **49.04** | **340** | P | | **P** | **01 46 19.7** | **+0.6** |
| **061Z** | **Ochoppi** | **51.35** | **344** | P | | **P** | **01 46 37.6** | **+1.3** |
| **BELA** | **Belgrano 2** | **56.09** | **172** | P | | **P** | **01 47 10.8** | **+0.7** |
| BELA | | | | IAmb | IAmb | | 01 47 11.8 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **BRAL** | **Brewton** | **58.12** | **340** | P | | **P** | **01 47 23.3** | **-1.6** |
| **SNAA** | **Sanae** | **59.35** | **161** | P | | **P** | **01 47 32.9** | **-0.1** |
| SNAA | | | | IAmb | IAmb | | 01 47 44.7 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **59.83** | **340** | P | | **P** | **01 47 36.2** | **-0.4** |
| **Y49A** | **Blount Mountai** | **60.42** | **341** | P | | **P** | **01 47 40.5** | **-0.1** |
| **833A** | **Chaparral WMA,** | **60.72** | **327** | P | | **P** | **01 47 43.6** | **+0.9** |
| **X48A** | **Hartselle** | **61.16** | **341** | P | | **P** | **01 47 45.2** | **-0.4** |
| X48A | | | | IAmb | IAmb | | 01 47 46.2 | |
| | comp=Z,5.6nm,0.6s | | | | | | | |
| **W45A** | **Hickory Valley** | **62.48** | **339** | P | | **P** | **01 47 54.1** | **-0.3** |
| **WVT** | **Waverly** | **62.96** | **341** | P | | **P** | **01 47 57.1** | **-0.4** |
| WVT | | | | IAmb | IAmb | | 01 47 57.8 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **63.74** | **324** | P | | **P** | **01 48 03.6** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=145,slow=6.5,SNR=11 | | | | | | | |
| **TXAR** | **Lajitas Array** | **63.74** | **324** | P | | **P** | **01 48 03.8** | **+0.9** |
| **TX31** | **Lajitas Ar. Si** | **63.74** | **324** | P | | **P** | **01 48 03.5** | **+0.7** |
| **TX32** | **Lajitas Array** | **63.74** | **324** | P | | **P** | **01 48 03.3** | **+0.4** |
| **W39A** | **Magazine** | **64.13** | **336** | P | | **P** | **01 48 06.4** | **+1.2** |
| W39A | | | | IAmb | IAmb | | 01 48 07.5 | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **64.37** | **339** | P | | **P** | **01 48 07.1** | **+0.5** |
| PBMO | | | | IAmb | IAmb | | 01 48 07.6 | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **CCM** | **Cathedral Cave** | **65.80** | **339** | P | | **P** | **01 48 15.4** | **-0.5** |
| CCM | | | | IAmb | IAmb | | 01 48 16.7 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **S39A** | **Bolivar** | **66.18** | **337** | P | | **P** | **01 48 19.0** | **+0.7** |
| **R40A** | **Maddies Statio** | **66.35** | **338** | P | | **P** | **01 48 19.5** | **+0.1** |
| R40A | | | | IAmb | IAmb | | 01 48 20.9 | |
| | comp=Z,4.6nm,1.0s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **66.51** | **325** | P | | **P** | **01 48 19.9** | **-0.6** |
| **DBIC** | **Dimbokro** | **67.57** | **71** | P | | **P** | **01 48 25.7** | **-1.9** |
| | comp=Z,0.9nm,0.5s,baz=219,slow=5.1,SNR=3.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **67.57** | **71** | P | | **P** | **01 48 26.5** | **-1.1** |
| **P38A** | **Dawn** | **67.98** | **338** | P | | **P** | **01 48 30.0** | **+0.4** |
| **F64A** | **Sherman** | **69.46** | **359** | P | | **P** | **01 48 39.2** | **+0.6** |
| F64A | | | | IAmb | IAmb | | 01 48 39.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **I42A** | **Draeger Farm,** | **70.47** | **343** | P | | **P** | **01 48 44.9** | **+0.1** |
| **D62A** | **Allapoint, All** | **70.70** | **358** | P | | **P** | **01 48 45.9** | **-0.2** |
| D62A | | | | IAmb | IAmb | | 01 48 47.6 | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **BATG** | **Bathurst New B** | **70.86** | **1** | P | | **P** | **01 48 47.6** | **+0.6** |
| BATG | | | | IAmb | IAmb | | 01 48 49.4 | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **71.33** | **328** | P | | **P** | **01 48 51.9** | **+1.3** |
| **KOWA** | **Kowa** | **72.21** | **65** | P | | **P** | **01 48 55.6** | **-0.2** |
| **ECSD** | **EROS Data Cent** | **72.69** | **338** | P | | **P** | **01 48 58.2** | **+0.1** |
| **F36A** | **Milaca** | **73.58** | **341** | P | | **P** | **01 49 03.1** | **-0.2** |
| F36A | | | | IAmb | IAmb | | 01 49 04.1 | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **B35A** | **Bob, Littlefor** | **75.90** | **342** | P | | **P** | **01 49 16.9** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** | **76.34** | **69** | P | | **P** | **01 49 19.2** | **-0.5** |
| | comp=Z,1.6nm,0.5s,baz=261,slow=5.6,SNR=31 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.34** | **69** | P | | **P** | **01 49 18.9** | **-0.8** |
| **PD31** | **Pinedale Array** | **77.19** | **329** | P | | **P** | **01 49 25.1** | **+0.9** |
| **PDAR** | **Pinedale Array** | **77.19** | **329** | P | | **P** | **01 49 25.1** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=134,slow=7.5,SNR=9.0 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.19** | **329** | P | | **P** | **01 49 24.5** | **+0.3** |
| **MDND** | **Maddock** | **77.30** | **338** | P | | **P** | **01 49 24.8** | **+0.5** |
| **SCHQ** | **Schefferville** | **78.43** | **360** | P | | **P** | **01 49 30.4** | **+0.1** |
| | comp=Z,3.4nm,0.9s,baz=193,slow=4.3,SNR=7.0 | | | | | | | |
| **SCHQ** | **Schefferville** | **78.43** | **360** | P | | **P** | **01 49 30.5** | **+0.1** |
| SCHQ | | | | IAmb | IAmb | | 01 49 36.0 | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.61** | **321** | P | | **P** | **01 49 33.6** | **+1.5** |
| | comp=Z,0.4nm,0.6s,baz=148,slow=6.0,SNR=1.5 | | | | | | | |
| **DGMT** | **Dagmar** | **79.47** | **336** | P | | **P** | **01 49 38.0** | **+1.7** |
| DGMT | | | | IAmb | IAmb | | 01 49 38.7 | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **HLID** | **Hailey** | **80.14** | **327** | P | | **P** | **01 49 42.4** | **+2.2** |
| HLID | | | | IAmb | IAmb | | 01 49 42.8 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **80.31** | **329** | P | | **P** | **01 49 43.6** | **+2.5** |
| **BOSA** | **Boshof** | **80.58** | **117** | P | | **P** | **01 49 42.5** | **-0.4** |
| BOSA | | | | IAmb | IAmb | | 01 50 10.1 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **HRY** | **Holter Researc** | **81.25** | **330** | P | | **P** | **01 49 47.6** | **+1.7** |
| **PLID** | **Pearl Lake** | **82.03** | **327** | P | | **P** | **01 49 51.5** | **+1.3** |
| PLID | | | | IAmb | IAmb | | 01 49 52.5 | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **K05A** | **Summer Lake** | **82.96** | **323** | P | | **P** | **01 49 56.3** | **+1.4** |
| K05A | | | | IAmb | IAmb | | 01 50 00.9 | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **JTMT** | **Jette** | **83.13** | **330** | P | | **P** | **01 49 57.1** | **+1.4** |
| JTMT | | | | IAmb | IAmb | | 01 49 58.2 | |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **86.19** | **43** | P | | **P** | **01 50 11.8** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=209,slow=4.1,SNR=4.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.12** | **340** | P | | **P** | **01 50 48.0** | **+0.6** |
| | comp=Z,1.4nm,0.6s,baz=137,slow=4.6,SNR=40 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.12** | **340** | P | | **P** | **01 50 47.5** | **0.0** |
| **ASAR** | **Alice Springs** | **128.62** | **204** | PKP | | **PKPdf** | **01 56 36.3** | **+0.1** |
| | comp=Z,1.8nm,0.7s,baz=151,slow=2.2,SNR=18 | | | | | | | |
| **ASAR** | **Alice Springs** | **128.62** | **204** | | | **PKPdf** | **01 56 36.0** | **-0.2** |
| **WRA** | **Warramunga Arr** | **131.79** | **207** | PKP | | **PKPdf** | **01 56 42.4** | **0.0** |
| | comp=Z,1.1nm,0.5s,baz=157,slow=1.8,SNR=21 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.22** | **28** | PKP | PKPbc | | 01 57 00.1 | +0.3 |
| | comp=Z,2.2nm,0.5s,baz=298,slow=4.3,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **146.32** | **40** | PKPbc | | **PKPbc** | **01 57 08.8** | **-0.5** |
| | comp=Z,5.3nm,0.8s,baz=324,slow=2.3,SNR=65 | | | | | | | |
| **SONM** | **Songino Array** | **155.52** | **11** | PKPbc | PKPbc | | 01 57 31.8 | |
| | comp=Z,0.3nm,0.5s,baz=311,slow=2.0,SNR=2.6 | | | | | | | |
| SONM | | | | PKPab | | **PKPab** | **01 57 49.3** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=325,slow=4.2,SNR=5.7 | | | | | | | |
| **PZH** | **PanZhiHua** | **169.28** | **74** | PKP | | **PKPdf** | **01 57 34.3** | **-1.9** |

*IDC* ***17*** *01:54:20.9± 1.6, 15°.86N × 93°.47W, h93km ± 6km, mb3.5/8, mb1 3.8/11, mb1mx3.6/42, mbtmp3.9/11, Error ellipse: s-maj=50.7km s-min=8.4km az=30.0*
*MEX* ***17*** *01:54:20.3± 1.0, 15°.71N × 93°.73W, h93km ± 8km, MD4.4*
*NEIC* ***17*** *01:54:20± 2.5, 15°.71N ± 0°.06 × 93°.69W ± 0°.05, h82km ± 8km, mb4.1/24, Md4.5/61(MEX), Error ellipse: s-maj=8.8km s-min=5.8km az=204.0*
*GCG* ***17*** *01:54:38.4± 1.2, 15°.62N × 92°.26W, h36km ± 436km, MD4.5*

**ISC 17 01:54:19.7±0.6, 15°.65N ± 0°.05 × 93°.77W ± 0°.03, h93km ± 5km, n111, σ2°.91/156, mb4.0/16, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.53** | **84** | | | **Pn** | **01 54 33.9** | | **-1.1** |
| PCIG | | | | | | **Sn** | **01 54 45.0** | | **-1.4** |
| **PCIG** | | **0.53** | **84** | *eP* | | **Pn** | **01 54 33.9** | | **-1.1** |
| PCIG | | | | *eS* | | **Sn** | **01 54 45.0** | | **-1.4** |
| **TGIG** | | **1.28** | **29** | | | **Pn** | **01 54 41.7** | | **-1.3** |
| TGIG | | | | | | **Sn** | **01 54 57.4** | | **-3.2** |
| **TGIG** | | **1.28** | **29** | *eP* | | **Pn** | **01 54 41.7** | | **-1.3** |
| TGIG | | | | *eS* | | **Sn** | **01 54 57.4** | | **-3.2** |
| **PATR** | **El Naranjo** | **1.57** | **109** | *i P* | | **Pn** | **01 54 45.6** | | **-1.1** |
| PATR | | | | *eS* | | **Sn** | **01 55 06.0** | | **-1.2** |
| **PAVE** | **Pavencul** | **1.60** | **106** | *i P* | | **Pn** | **01 54 46.4** | | **-0.6** |
| PAVE | | | | *i S* | | **Sn** | **01 55 06.9** | | **-1.0** |
| **THIG** | | **1.62** | **117** | | | **Pn** | **01 54 46.7** | | **-0.5** |
| THIG | | | | | | **Sn** | **01 55 07.2** | | **-0.9** |
| **THIG** | | **1.62** | **117** | *eP* | | **Pn** | **01 54 46.7** | | **-0.5** |
| THIG | | | | *eS* | | **Sn** | **01 55 07.2** | | **-0.9** |
| **CCIG** | **Comitan** | **1.69** | **68** | Pn | | **Pn** | **01 54 46.8** | | **-1.4** |
| CCIG | | | | | | **Sn** | **01 55 07.9** | | **-1.9** |
| **CCIG** | **Comitan** | **1.69** | **68** | *i P* | | **Pn** | **01 54 47.0** | | **-1.2** |
| CCIG | | | | *i S* | | **Sn** | **01 55 07.8** | | **-2.0** |
| **CHUJ** | **Union Juarez** | **1.69** | **109** | *i P* | | **Pn** | **01 54 47.4** | | **-0.9** |
| CHUJ | | | | *i S* | | **Sn** | **01 55 08.6** | | **-1.3** |
| **UXUV** | **UXUV** | **1.70** | **348** | *i P* | | **Pn** | **01 54 48.3** | | **+0.1** |
| UXUV | | | | *i S* | | **Sn** | **01 55 08.6** | | **-1.2** |
| **CMIG** | **Matias Romero** | **1.79** | **323** | P | | **Pn** | **01 54 49.5** | | **+0.2** |
| | 66nm,0.3s,baz=155,slow=12,SNR=519 | | | | | | | | |
| CMIG | | | | S | | **Sn** | **01 55 09.7** | | **-2.2** |
| | 62nm,0.3s,baz=104,slow=7.6,SNR=10 | | | | | | | | |
| **CMIG** | **Matias Romero** | **1.79** | **323** | | | **Pn** | **01 54 49.1** | | **-0.3** |
| CMIG | | | | | | **Sn** | **01 55 10.4** | | **-1.5** |
| **CMIG** | **Matias Romero** | **1.79** | **323** | *i P* | | **Pn** | **01 54 49.1** | | **-0.3** |
| CMIG | | | | *i S* | | **Sn** | **01 55 10.4** | | **-1.5** |
| **HUEH** | **Huehuetenango** | **2.21** | **98** | Pn | | **Pn** | **01 54 54.7** | | **-0.2** |
| **HUIG** | **Huatulco** | **2.26** | **273** | | | **Pn** | **01 54 54.3** | | **-1.1** |
| HUIG | | | | | | **Sn** | **01 55 19.2** | | **-3.6** |
| **HUIG** | **Huatulco** | **2.26** | **273** | *i P* | | **Pn** | **01 54 54.3** | | **-1.1** |
| HUIG | | | | *i S* | | **Sn** | **01 55 19.2** | | **-3.6** |
| **RTAL** | **Retalhuleu** | **2.29** | **119** | Pn | | **Pn** | **01 54 56.3** | | **+0.4** |
| **NEUV** | **Arroyo Zacate** | **2.83** | **317** | *i P* | | **Pn** | **01 55 02.8** | | **-0.3** |
| NEUV | | | | *i S* | | **Sn** | **01 55 34.2** | | **-2.2** |
| **FUG** | **Fuego 3** | **3.07** | **112** | *eP* | | **Pn** | **01 55 06.3** | | **-0.1** |
| **OXLC** | **Oaxaca** | **3.15** | **297** | *i P* | | **Pn** | **01 55 09.1** | | **+1.5** |
| OXLC | | | | *i S* | | **Sn** | **01 55 43.4** | | **-1.1** |
| **OXBJ** | **Oaxaca** | **3.17** | **297** | | | **Pn** | **01 55 11.7** | | **+3.9** |
| OXBJ | | | | | | **Sn** | **01 55 44.6** | | **-0.2** |
| **OXBJ** | **Oaxaca** | **3.17** | **297** | *i P* | | **Pn** | **01 55 11.7** | | **+3.9** |
| OXBJ | | | | *i S* | | **Sn** | **01 55 44.6** | | **-0.2** |
| **VHO** | **Vista Hermosa** | **3.18** | **297** | *i P* | | **Pn** | **01 55 09.4** | | **+1.4** |
| VHO | | | | *i S* | | **Sn** | **01 55 43.9** | | **-1.2** |
| **APG** | **El Apazote** | **3.25** | **101** | P | | **Pn** | **01 55 07.8** | | **-1.1** |
| | 33nm,0.3s,baz=308,slow=8.3,SNR=146 | | | | | | | | |
| APG | | | | S | | **Sn** | **01 55 43.4** | | **-3.4** |
| | 97nm,0.3s,baz=278,slow=23,SNR=19 | | | | | | | | |
| **PEIG** | **Puerto Escondi** | **3.27** | **277** | *i P* | | **Pn** | **01 55 08.1** | | **-0.9** |
| PEIG | | | | *i S* | | **Sn** | **01 55 44.1** | | **-3.0** |
| **PCG** | **Pacaya** | **3.30** | **112** | *eP* | | **Pn** | 01 55 14.3 | | +4.7 |
| PCG | | | | *eS* | | Sn | 01 55 36.5 | | -12 |
| **NBG** | **Las Nubes** | **3.47** | **107** | *eP* | | **Pn** | **01 55 12.9** | | **+1.0** |
| NBG | | | | *eS* | | Sn | 01 55 38.2 | | -14 |
| **YOIG** | **Yosondua** | **3.82** | **289** | *i P* | | **Pn** | **01 55 17.9** | | **+1.2** |
| YOIG | | | | *i S* | | **Sn** | **01 55 57.8** | | **-3.0** |
| **PETF** | **Flores** | **3.95** | **71** | Pn | | **Pn** | **01 55 17.0** | | **-1.2** |
| **MRL** | **Marmol** | **3.98** | **98** | *eP* | | **Pn** | **01 55 18.0** | | **-0.7** |
| MRL | | | | *eS* | | Sn | 01 55 49.4 | | -15 |
| **TOIG** | **Toxpalan** | **3.99** | **308** | *i P* | | **Pn** | **01 55 20.0** | | **+1.3** |
| TOIG | | | | *i S* | | **Sn** | **01 56 02.8** | | **-1.7** |
| **TXIG** | **Tlaxiaco** | **4.16** | **293** | *i P* | | **Pn** | **01 55 22.7** | | **+1.5** |
| TXIG | | | | *i S* | | **Sn** | **01 56 08.0** | | **-0.9** |
| **PNIG** | **Pinotepa** | **4.26** | **281** | | | **Pn** | **01 55 22.2** | | **-0.1** |
| PNIG | | | | | | **Sn** | **01 56 06.2** | | **-4.7** |
| **PNIG** | **Pinotepa** | **4.26** | **281** | *i P* | | **Pn** | **01 55 22.2** | | **-0.1** |
| PNIG | | | | *i S* | | **Sn** | **01 56 06.2** | | **-4.7** |
| **TPIG** | **Tehuac#an** | **4.41** | **309** | | | **Pn** | **01 55 25.3** | | **+0.8** |
| TPIG | | | | | | **Sn** | **01 56 14.8** | | **0.0** |
| **TPIG** | **Tehuac#an** | **4.41** | **309** | *i P* | | **Pn** | **01 55 25.3** | | **+0.8** |
| TPIG | | | | *i S* | | **Sn** | **01 56 14.8** | | **0.0** |
| **ESQI** | **Esquipulas** | **4.41** | **104** | Pn | | **Pn** | **01 55 22.6** | | **-1.9** |
| **MTO3** | **Montecristo** | **4.43** | **106** | Pn | | **Pn** | **01 55 23.1** | | **-1.8** |
| **HLIG** | **Huajuapan de L** | **4.43** | **300** | *i P* | | **Pn** | **01 55 26.6** | | **+1.7** |
| HLIG | | | | *i S* | | **Sn** | **01 56 14.1** | | **-1.5** |
| **JAUV** | **Jalcomulco** | **4.70** | **322** | *i P* | | **Pn** | **01 55 27.1** | | **-1.2** |
| JAUV | | | | *i S* | | **Sn** | **01 56 14.8** | | **-6.9** |
| **FTIG** | **Fresnillo de T** | **4.75** | **299** | *i P* | | **Pn** | **01 55 30.9** | | **+1.8** |
| FTIG | | | | *i S* | | **Sn** | **01 56 19.6** | | **-3.4** |
| **MGIG** | **Malinaltepec** | **4.93** | **289** | *i P* | | **Pn** | **01 55 33.0** | | **+1.4** |
| MGIG | | | | *i S* | | **Sn** | **01 56 23.6** | | **-3.9** |
| **CRIG** | **Cruz Grande** | **5.27** | **283** | | | **Pn** | **01 55 34.3** | | **-1.7** |
| CRIG | | | | | | Sn | 01 56 26.3 | | -9.1 |
| **CRIG** | **Cruz Grande** | **5.27** | **283** | *i P* | | **Pn** | **01 55 34.3** | | **-1.7** |
| CRIG | | | | *i S* | | Sn | 01 56 26.3 | | -9.1 |
| **PPM** | **Popocatepetl** | **5.75** | **307** | *i P* | | **Pn** | **01 55 47.0** | | **+3.9** |
| PPM | | | | *i S* | | **Sn** | **01 56 49.4** | | **+1.3** |
| **YAIG** | **Yautepec** | **5.99** | **303** | | | **Pn** | **01 55 48.7** | | **+2.7** |
| YAIG | | | | | | **Sn** | **01 56 48.9** | | **-4.3** |
| **YAIG** | **Yautepec** | **5.99** | **303** | *i P* | | **Pn** | **01 55 48.7** | | **+2.7** |
| YAIG | | | | *i S* | | **Sn** | **01 56 48.9** | | **-4.3** |
| **PLIG** | **Platanillo** | **6.13** | **297** | | | **Pn** | **01 55 50.5** | | **+2.6** |
| PLIG | | | | | | **Sn** | **01 56 51.0** | | **-5.6** |
| **PLIG** | **Platanillo** | **6.13** | **297** | *i P* | | **Pn** | **01 55 50.5** | | **+2.6** |
| PLIG | | | | *i S* | | **Sn** | **01 56 51.0** | | **-5.6** |
| **CAIG** | **El Cayaco** | **6.39** | **283** | | | **Pn** | **01 55 52.0** | | **+0.6** |
| CAIG | | | | | | **Sn** | **01 56 59.3** | | **-3.7** |
| **CAIG** | **El Cayaco** | **6.39** | **283

6.5nm,0.6s
TKM2 ⇑Sn **Sb 01 58 12.4 -0.7**
13nm,0.9s
**SGDS Sogindy 4.82 29** *e*P **Pg 01 57 22.4 -0.5**
7.5nm,0.7s
SGDS *e*S **Sg 01 58 27.1 +1.8**
12nm,1.0s
**KST Kastek 5.08 41** *e*P **Pg 01 57 26.8 -1.1**
5.4nm,0.7s
KST *e*S **Sg 01 58 34.4 +0.7**
9.6nm,0.7s
**DGS Degeres 5.13 38** *e*P **Pg 01 57 27.2 -1.7**
17nm,0.6s
DGS *e*S **Sg 01 58 35.3 -0.1**
20nm,0.8s
**KRBS Karabastau 5.44 34** *e*P **Pg 01 57 31.6 -3.3**
4.2nm,0.7s
KRBS *e*S **Sg 01 58 42.7 -2.6**
4.3nm,0.6s
**TNSS Tian-Shan 5.60 46** *e*P **Pg 01 57 37.5 -0.4**
4.7nm,0.6s
TNSS *e*S **Sg 01 58 52.3 +1.9**
4.5nm,0.8s
**KOTS Kotyrbulak 5.82 45** *e*P **Pg 01 57 41.9 -0.2**
7.5nm,0.9s
KOTS *e*S **Sg 01 59 00.0 +2.6**
26nm,0.8s
**KTBS Karatobe 5.93 40** *e*P **Pg 01 57 43.3 -0.8**
2.4nm,0.8s
KTBS *e*S **Sg 01 59 02.3 +1.5**
9.6nm,0.7s
**BTLS Baital 6.08 18** *e*P **Pg 01 57 43.8 -3.3**
2.4nm,0.5s
BTLS *e*S **Sg 01 59 04.8 -1.1**
3.6nm,0.6s
**CHKK Chushkaly 6.18 40** *e*P **Pg 01 57 48.0 -0.9**
0.8nm,0.1s
CHKK *e*S **Sg 01 59 11.0 +2.0**
4.8nm,0.7s
**ARXS Arharly 6.86 42** *e*P **Pg 01 57 59.2 -2.8**
2.6nm,0.6s
ARXS *e*S **Sg 01 59 30.6 -0.3**
6.7nm,0.8s
**UZB Uzynbulak 6.90 53** *e*P Pg 01 57 58.1 -4.5
4.3nm,0.3s
UZB *e*S **Sg 01 59 27.7 -4.2**
1.5nm,0.4s
**BLB Baldybastay 7.13 45** *e*P **Pg 01 58 05.4 -1.8**
4.4nm,0.9s
BLB *e*S **Sg 01 59 40.5 +0.9**
8.2nm,0.7s
**AB31 Akbulak array 12.94 324** Pn **Pn 01 58 51.1 -3.4**
3.8nm,0.9s,baz=163,slow=10.0,SNR=32
AB31 ⇑Sn **Sn 02 01 18.0 -0.5**
1.6nm,0.7s,baz=154,slow=23,SNR=4.9

*IDC* ***17*** *02:24:47.9±1.4, 12.˚82N×92.˚61E, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.6/46, mbtmp3.8/7, ML4.1/1, MS2.9/1, Ms1 2.9/1, ms1mx2.5/85, Error ellipse: s-maj=61.4km s-min=19.2km az=65.0*

**ISC 17 02:24:52.6±1.3, 12.˚9N±0.˚1×92.˚7E±0.˚2, h31km, n8, σ0.73/9, mb3.9/6, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **8.21** | **47** | Pn | **Pn** | **02 26 49.9** | **+0.1** |
| | 0.6nm,0.3s,baz=235,slow=15,SNR=4.1 | | | | | | |
| **PSI** | **Prapat** | **11.77** | **148** | LR | LR | 02 31 58.4 | |
| | comp=Z,54nm,20.2s,baz=308,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **34.92** | **348** | P | **P** | **02 31 42.5** | **+1.0** |
| | 0.7nm,0.9s,baz=171,slow=8.6,SNR=5.9 | | | | | | |
| KURBB | **Kurchatov Arra** | **39.37** | **346** | P | **P** | **02 32 18.6** | **-0.7** |
| | 0.3nm,0.7s,baz=152,slow=6.8,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.44** | **353** | P | **P** | **02 32 35.5** | **-0.8** |
| | 0.3nm,0.4s,baz=156,slow=7.4,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.40** | **128** | P | **P** | **02 34 01.9** | **-0.5** |
| | 2.0nm,0.7s,baz=304,slow=8.5,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 35 13.5** | **+0.4** |
| | 0.7nm,0.5s,baz=321,slow=3.1,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **54.27** | **132** | P | **P** | **02 34 15.9** | **-0.2** |
| | 1.7nm,0.6s,baz=315,slow=7.0,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 35 21.0** | **+0.8** |
| | 0.6nm,0.6s,baz=313,slow=4.0,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **64.62** | **135** | P | **P** | **02 35 27.6** | **+0.1** |
| | 0.7nm,0.4s,baz=315,slow=10.0,SNR=2.0 | | | | | | |

*NEIC* ***17*** *02:54:54.4±2.8, 62.˚42S×0.˚08×164.˚7E±0.˚4, h10km±1km, mb4.8/14, Error ellipse: s-maj=31.9km s-min=13.7km az=86.0*

*IDC* ***17*** *02:54:55.6±2.1, 62.˚66S×162.˚18E, h0km, mb4.3/5, mb1 4.4/5, mb1mx4.0/28, mbtmp4.3/5, ML5.1/1, MS4.2/37, Ms1 4.2/37, ms1mx4.2/46, Error ellipse: s-maj=137.7km s-min=20.4km az=74.0*

*GCMT* ***17*** *02:54:55.4±0.2, 62.˚24S±0.˚01×165.˚22E±0.˚04, h18km±1km, MW5.2/102, Moment Tensor Solution. s31,c37; s102,c138; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=0.48±.29; Mθθ 6.16±.23; Mϕϕ -5.68±.21; Mrθ -4.52±.75; Mθϕ -0.78±.21; Mϕr 1.58±.65; Best double couple: M=7.36800×10^16 NP1:ϕs224.00000°, δ57.00000°, λ173.00000°. NP2:ϕs318.00000°, δ84.00000°, λ33.00000°. Principal axes: T 8.5890, Plg27.0000°, Azm186.0000°; N -2.4430, Plg57.0000°, Azm328.0000°; P -6.1470, Plg18.0000°, Azm87.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 17 02:54:54.1±0.7, 62.˚36S±0.˚07×164.˚6E±0.˚2, h10km, n78, σ1.19/34, mb4.5/8, MS4.2/37, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MCQ** | **Macquarie Isla** | **8.42** | **337** | Pn | **Pn** | **02 56 56.1** | **+0.2** |
| **VNDA** | **Vanda** | **15.26** | **182** | Pn | **Pn** | **02 58 28.8** | **-0.4** |
| | 7.5nm,0.3s,baz=356,slow=13,SNR=142 | | | | | | |
| VNDA | | | | LR | LR | 03 03 30.7 | |
| | comp=Z,3μm,18.2s,baz=15,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **15.26** | **182** | | **Pn** | **02 58 29.2** | **0.0** |
| **SBA** | **Scott Base** | **15.58** | **178** | | **Pn** | **02 58 34.1** | **+0.7** |
| **MLZ** | **Mavora Lakes** | **17.15** | **8** | | **P** | **02 58 55.7** | **+0.4** |
| **ODZ** | **Otahua Downs** | **17.70** | **14** | Pn | **Pn** | **02 58 58.5** | **-2.0** |
| ODZ | | | | IAmb | IAmb | 02 59 00.2 | |
| | comp=Z,84nm,1.5s | | | | | | |
| **WKZ** | **Wanaka** | **17.76** | **10** | Pn | **Pn** | **02 58 59.1** | **-2.1** |
| WKZ | | | | IAmb | IAmb | 02 59 05.8 | |
| | comp=Z,144nm,1.4s | | | | | | |
| **LBZ** | **Lake Benmore** | **18.30** | **13** | P | **P** | **02 59 09.4** | **+1.4** |
| **RPZ** | **Rata Peaks** | **19.06** | **14** | LR | LR | 03 05 25.0 | |
| | comp=Z,2μm,20.4s,baz=214,slow=32 | | | | | | |
| **RPZ** | **Rata Peaks** | **19.06** | **14** | P | **Pn** | **02 59 17.1** | **0.0** |
| RPZ | | | | IAmb | IAmb | 02 59 32.9 | |
| | comp=Z,45nm,1.2s | | | | | | |
| **CASY** | **Casey** | **23.11** | **237** | P | **P** | **02 59 59.7** | **-0.1** |
| CASY | | | | IAmb | IAmb | 03 00 01.1 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **25.33** | **24** | LR | LR | 03 10 00.3 | |
| | comp=Z,1μm,18.7s,baz=196,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **27.73** | **180** | P | **P** | **03 00 42.7** | **+0.2** |
| | comp=Z,19nm,0.9s,baz=19,slow=3.6,SNR=35 | | | | | | |
| QSPA | | | | LR | LR | 03 10 06.3 | |
| | comp=Z,968nm,20.9s,baz=30,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **27.73** | **180** | P | **P** | **03 00 42.4** | **0.0** |
| QSPA | | | | IAmb | IAmb | 03 00 43.6 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **33.89** | **323** | P | **P** | **03 01 36.1** | **-0.7** |
| | comp=Z,2.2nm,0.8s,baz=154,slow=7.3,SNR=3.8 | | | | | | |
| STKA | | | | LR | LR | 03 13 02.8 | |
| | comp=Z,478nm,18.4s,baz=159,slow=32 | | | | | | |
| **BELA** | **Belgrano 2** | **39.51** | **174** | P | **P** | **03 02 24.1** | **-0.1** |
| BELA | | | | IAmb | IAmb | 03 02 24.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **40.29** | **3** | LR | LR | 03 16 24.8 | |
| | comp=Z,194nm,19.3s,baz=210,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **40.29** | **3** | eLR | LR | 03 13 37.9 | |
| | comp=Z,393nm,33.4s | | | | | | |
| **ASAR** | **Alice Springs** | **43.88** | **318** | P | **P** | **03 02 59.5** | **-1.0** |
| | comp=Z,3.5nm,0.9s,baz=160,slow=7.2,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 04 47.8** | **+1.1** |
| | comp=Z,1.5nm,0.9s,baz=134,slow=4.1,SNR=4.4 | | | | | | |
| ASAR | | | | LR | LR | 03 18 17.6 | |
| | comp=Z,186nm,18.8s,baz=165,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **43.88** | **318** | P | **P** | **03 02 59.2** | **-1.4** |
| **AS31** | **Alice Springs** | **43.88** | **318** | P | **P** | **03 03 00.1** | **-0.4** |
| **CTA** | **Charters Tower** | **44.10** | **335** | P | **P** | **03 03 04.0** | **+1.6** |
| | comp=Z,1.1nm,0.3s,baz=151,slow=8.7,SNR=3.5 | | | | | | |
| CTA | | | | LR | LR | 03 18 39.7 | |
| | comp=Z,436nm,18.5s,baz=160,slow=32 | | | | | | |
| **CTAO** | **Charters Tower** | **44.10** | **335** | P | **P** | **03 03 01.3** | **-1.0** |
| CTAO | | | | IAmb | IAmb | 03 03 10.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MSVF** | **Nonsavu** | **45.57** | **18** | LR | LR | 03 20 24.0 | |
| | comp=Z,581nm,18.2s,baz=187,slow=33 | | | | | | |
| **SNAA** | **Sanae** | **45.96** | **185** | P | **P** | **03 03 16.0** | **-0.6** |
| **SNAA** | **Sanae** | **45.96** | **185** | LR | LR | 03 21 41.1 | |
| | comp=Z,808nm,19.8s,baz=148,slow=35 | | | | | | |
| **SNAA** | **Sanae** | **45.96** | **185** | P | **P** | **03 03 15.3** | **-1.3** |
| **VNA3** | **Neumayer Olymp** | **46.61** | **183** | P | **P** | **03 03 20.6** | **-1.1** |
| **VNA2** | **Neumayer--Watz** | **46.87** | **184** | P | **P** | **03 03 22.8** | **-0.9** |
| | baz=168,slow=5.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **47.17** | **183** | P | **P** | **03 03 25.5** | **-0.5** |
| **WB2** | **Warramunga Arr** | **47.24** | **320** | P | **P** | **03 03 28.3** | **+1.1** |
| WB2 | | | | IAmb | IAmb | 03 03 33.3 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.24** | **320** | P | **P** | **03 03 26.1** | **-1.1** |
| | comp=Z,3.0nm,1.1s,baz=155,slow=7.0,SNR=4.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 04 59.7** | **+1.4** |
| | comp=Z,2.4nm,0.9s,baz=151,slow=3.4,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 03 21 16.6 | |
| | comp=Z,272nm,18.6s,baz=144,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **47.79** | **47** | LR | LR | 03 19 48.0 | |
| | comp=Z,235nm,19.6s,baz=202,slow=31 | | | | | | |
| **PMSA** | **Palmer Station** | **48.15** | **154** | LR | LR | 03 20 23.7 | |
| | comp=Z,206nm,20.8s,baz=204,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.82** | **310** | LR | LR | 03 22 45.0 | |
| | comp=Z,133nm,21.1s,baz=160,slow=33 | | | | | | |
| **HNR** | **Honiara** | **52.94** | **354** | LR | LR | 03 22 17.9 | |
| | comp=Z,274nm,21.5s,baz=142,slow=31 | | | | | | |
| **PMG** | **Port Moresby** | **54.36** | **339** | LR | LR | 03 24 03.0 | |
| | comp=Z,272nm,19.9s,baz=164,slow=32 | | | | | | |
| **PAE** | **Paea** | **54.79** | **57** | *e*T | T | 04 02 54.8 | |
| | comp=Z,6.7nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **54.81** | **57** | *e*T | T | 04 02 56.7 | |
| | comp=Z,6.5nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **54.86** | **57** | *e*LR | LR | 03 20 33.0 | |
| | comp=Z,248nm,22.5s | | | | | | |
| **PPT2** | **Papeete2** | **54.86** | **57** | *e*T | T | 04 02 55.8 | |
| | comp=Z,15nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **55.20** | **59** | *e*T | T | 04 03 25.6 | |
| | comp=Z,21nm,0.2s | | | | | | |
| **USHA** | **Ushuaia** | **56.00** | **146** | LR | LR | 03 25 17.3 | |
| | comp=Z,199nm,18.0s,baz=207,slow=32 | | | | | | |
| **VAH** | **Vaihoa** | **57.76** | **58** | *e*T | T | 04 06 36.9 | |
| | comp=Z,282nm,0.2s | | | | | | |
| **BATI** | **Baumata** | **59.83** | **312** | LR | LR | 03 29 15.2 | |
| | comp=Z,198nm,18.8s,baz=153,slow=35 | | | | | | |
| **JAY** | **Jayapura** | **62.32** | **333** | LR | LR | 03 31 25.6 | |
| | comp=Z,137nm,18.3s,baz=308,slow=35 | | | | | | |
| **RPN** | **Rapa Nui** | **64.56** | **100** | LR | LR | 03 26 47.3 | |
| | comp=Z,69nm,20.1s,baz=225,slow=29 | | | | | | |
| **KAPI** | **Kappang** | **66.03** | **310** | LR | LR | 03 33 50.5 | |
| | comp=Z,78nm,19.1s,baz=169,slow=36 | | | | | | |
| **SIJI** | **Sorong** | **66.24** | **323** | LR | LR | 03 35 55.1 | |
| | comp=Z,142nm,18.4s,baz=54,slow=37 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **66.56** | **62** | *e*LR | LR | 03 26 00.4 | |
| | comp=Z,268nm,24.2s | | | | | | |
| **LEM** | **Lembang** | **69.09** | **297** | LR | LR | 03 31 32.6 | |
| | comp=Z,62nm,21.8s,baz=132,slow=32 | | | | | | |
| **H03S2** | **Juan Fernandez** | **71.51** | **128** | T | T | 04 24 56.5 | |
| | baz=204 | | | | | | |
| **H03S1** | **Juan Fernandez** | **71.51** | **128** | T | T | 04 24 58.2 | |
| | baz=204 | | | | | | |
| **H03S3** | **Juan Fernandez** | **71.52** | **128** | T | T | 04 24 56.6 | |
| | baz=204 | | | | | | |
| **H03N3** | **Juan Fernandez** | **71.85** | **128** | T | T | 04 25 14.5 | |
| | baz=205,slow=72,SNR=20 | | | | | | |
| **H03N2** | **Juan Fernandez** | **71.86** | **128** | T | T | 04 25 14.8 | |
| | baz=205,slow=72,SNR=31 | | | | | | |
| **H03N1** | **Juan Fernandez** | **71.87** | **128** | T | T | 04 25 14.3 | |
| | baz=205,slow=72,SNR=16 | | | | | | |
| **SUR** | **Sutherland** | **81.19** | **210** | LR | LR | 03 41 38.2 | |
| | comp=Z,246nm,19.4s,baz=160,slow=35 | | | | | | |
| **PSI** | **Prapat** | **81.43** | **293** | LR | LR | 03 38 04.0 | |
| | comp=Z,84nm,20.3s,baz=146,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **83.66** | **215** | LR | LR | 03 40 33.4 | |
| | comp=Z,164nm,20.7s,baz=173,slow=33 | | | | | | |
| **LVC** | **Limon Verde** | **85.31** | **132** | LR | LR | 03 37 32.0 | |
| | comp=Z,123nm,19.4s,baz=208,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **85.48** | **143** | LR | LR | 03 41 56.2 | |
| | comp=Z,144nm,18.9s,baz=205,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **86.98** | **217** | LR | LR | 03 44 38.8 | |
| | comp=Z,190nm,18.2s,baz=164,slow=35 | | | | | | |
| **MATP** | **Matopo** | **90.47** | **221** | LR | LR | 03 46 28.8 | |
| | comp=Z,49nm,18.5s,baz=169,slow=35 | | | | | | |
| **NNA** | **Nana** | **92.04** | **121** | LR | LR | 03 40 00.6 | |
| | comp=Z,132nm,20.2s,baz=206,slow=29 | | | | | | |
| **PALK** | **Pallekele** | **93.55** | **279** | LR | LR | 03 44 10.5 | |
| | comp=Z,74nm,18.1s,baz=259,slow=32 | | | | | | |
| **SIV** | **San Ignacio** | **94.09** | **136** | LR | LR | 03 47 38.1 | |
| | comp=Z,85nm,18.6s,baz=134,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **95.41** | **222** | LR | LR | 03 49 57.8 | |
| | comp=Z,62nm,18.2s,baz=168,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **95.50** | **300** | LR | LR | 03 48 42.3 | |
| | comp=Z,57nm,19.1s,baz=165,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **95.80** | **117** | LR | LR | 03 41 45.1 | |
| | comp=Z,126nm,21.1s,baz=239,slow=29 | | | | | | |
| **BDFB** | **Brasilia** | **98.13** | **148** | LR | LR | 03 51 01.2 | |
| | comp=Z,89nm,19.3s,baz=163,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **126.86** | **302** | PKP | **PKiKP** | **03 13 58.4** | **+1.0** |
| | comp=Z,1.0nm,1.0s,baz=129,slow=3.9,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **126.86** | **302** | | **PKiKP** | **03 14 00.9** | **+3.6** |
| **TORD** | **Torodi Ar. Bea** | **129.35** | **202** | PKP | **PKiKP** | **03 14 03.9** | **+0.6** |
| | comp=Z,1.5nm,1.1s,baz=143,slow=2.1,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.35** | **202** | PKPdf | **PKPdf** | **03 14 01.6** | **-1.0** |
| **YKA** | **Yellowknife Ar** | **138.49** | **44** | PKhKP | PKPpre | 03 14 11.8 | |
| | comp=Z,0.5nm,0.9s,baz=212,slow=3.2,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **153.35** | **265** | PKPbc | **PKiKP** | **03 14 51.4** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=110,slow=3.0,SNR=1.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **153.35** | **265** | | **PKiKP** | **03 14 50.9** | **-0.4** |

*IDC* ***17*** *02:56:16.5±1.2, 51.˚95N×176.˚71W, h0km, mb3.4/6, mb1 3.8/8, mb1mx3.5/59, mbtmp3.5/8, ML3.7/2, Error ellipse: s-maj=49.9km s-min=21.5km az=159.0*

*NEIC* ***17*** *02:56:24.2±2.6, 51.˚53N±0.˚08×175.˚33W±0.˚08, h21km±7km, mb3.9/39, ML3.5/16(AEIC), Error ellipse: s-maj=11.1km s-min=7.2km az=180.0*

*AEIC* ***17*** *02:56:25.9±2.5, 51.˚55N±0.˚08×175.˚33W±0.˚05, h29km±6km, Error ellipse: s-maj=11.1km s-min=4.3km az=182.0*

**ISC 17 02:56:23.8±1.7, 51.˚5N±0.˚1×175.˚34W±0.˚03, h25km±11km, n85, σ1.40/80, mb3.9/12, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSIG** | **Igitkin Island** | **0.64** | **326** | | **Pn** | **02 56 37.8** | **+0.5** |
| **GSMY** | **Great Sitkin M** | **0.73** | **323** | | **Pn** | **02 56 39.3** | **+0.7** |
| **ETKA** | **Kagalaska Isla** | **0.77** | **302** | | **Pn** | **02 56 39.9** | **+0.8** |
| **GSTD** | **Great Sitkin T** | **0.78** | **320** | | **Pn** | **02 56 39.9** | **+0.7** |
| GSTD | | | | | **Sn** | **02 56 49.8** | **-0.3** |
| **ADK** | **Adak** | **0.94** | **297** | | **Pn** | **02 56 42.1** | **+0.7** |
| ADK | | | | Sn | **Sb** | **02 56 52.4** | **-0.9** |
| **ATKA** | **Atka Island** | **1.03** | **43** | | **Pn** | **02 56 42.8** | **+0.1** |
| ATKA | | | | | **Sb** | **02 56 54.5** | **-1.4** |
| **KOFP** | **Korovin Flat P** | **1.12** | **43** | | **Pb** | **02 56 44.8** | **+0.2** |
| **KIWB** | **Kanaga Island** | **1.19** | **290** | Pn | **Pb** | **02 56 46.0** | **+0.4** |
| KIWB | | | | Sn | **Sn** | **02 57 00.7** | **+0.4** |
| **KIKV** | **Kanaga Island** | **1.21** | **291** | | **Pb** | **02 56 46.5** | **+0.4** |
| **KIMD** | **Kanaga Island** | **1.22** | **285** | | **Pb** | **02 56 46.5** | **+0.4** |
| **TAPA** | **Tanaga Point A** | **1.58** | **284** | | **Pb** | **02 56 52.1** | **-0.2** |
| **TAFP** | **Tanaga Falls P** | **1.70** | **286** | | **Pb** | **02 56 53.9** | **-0.5** |
| TAFP | | | | | **Sb** | **02 57 15.4** | **+0.1** |
| **GALAA** | **Gareloi Lava P** | **2.16** | **279** | | **Pb** | **02 57 01.2** | **-0.9** |
| **NIKH** | **Nikolski High** | **4.27** | **67** | Pn | **Pn** | **02 57 28.3** | **+1.1** |
| **UNV** | **Unalaska Valle** | **5.88** | **63** | Pn | **Pn** | **02 57 51.7** | **+2.4** |
| **SPIA** | **Saint Paul Isl** | **6.45** | **25** | Pn | **Pn** | **02 57 59.9** | **+2.8** |
| **P18K** | **Old Mountain,** | **13.86** | **47** | | **P** | **02 59 44.3** | **-2.3** |
| **OHAK** | **Old Harbor** | **14.06** | **57** | Pn | **Pn** | **02 59 40.8** | **-0.4** |
| **ANM** | **Nome** | **14.13** | **18** | P | **Pn** | **02 59 44.8** | **+2.7** |
| **Q19K** | **Cape Douglas,** | **14.42** | **50** | P | **Pn** | **02 59 47.5** | **+1.4** |
| **KDAK** | **Kodiak Island** | **14.58** | **55** | Pn | **Pn** | **02 59 50.5** | **+2.3** |
| | 0.2nm,0.3s,baz=280,slow=12,SNR=6.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.58** | **55** | Pn | **Pn** | **02 59 46.3** | **-2.0** |
| **N19K** | **Bonanza Creek** | **14.86** | **43** | P | **P** | **02 59 55.3** | **-2.5** |
| **CNPM** | **China Poot** | **15.79** | **50** | P | **Pn** | **03 00 04.9** | **+0.6** |
| **BRLK** | **Bradley Lake** | **16.04** | **49** | P | **Pn** | **03 00 06.3** | **-1.2** |
| BRLK | | | | IAmb | IAmb | 03 00 12.7 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **SEW** | **Seward** | **16.84** | **49** | P | **Pn** | **03 00 15.7** | **-1.9** |
| SEW | | | | IAmb | IAmb | 03 00 24.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **16.90** | **33** | P | **P** | **03 00 21.0** | **+0.8** |
| **PWL** | **Port Wells** | **17.61** | **47** | P | **Pn** | **03 00 27.2** | **-0.1** |
| PWL | | | | IAmb | IAmb | 03 00 36.3 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.70** | **37** | P | **P** | **03 00 29.4** | **+0.2** |
| KTH | | | | IAmb | IAmb | 03 00 33.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **KNK** | **Knik Glacier** | **17.76** | **45** | P | **Pn** | **03 00 27.3** | **-1.8** |
| KNK | | | | IAmb | IAmb | 03 00 29.2 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **TRF** | **Thorofare Moun** | **17.89** | **38** | P | **P** | **03 00 32.9** | **+1.5** |
| **IMAR** | **Indian Mountai** | **18.21** | **29** | P | **P** | **03 00 36.8** | **+2.1** |
| **H21K** | **Melozitna Rive** | **18.29** | **30** | P | **P** | **03 00 37.5** | **+2.0** |
| **SCM** | **Sheep Creek Mo** | **18.41** | **45** | P | **P** | **03 00 33.9** | **-3.1** |
| **RND** | **Reindeer** | **18.44** | **39** | P | **P** | **03 00 33.9** | **-3.3** |
| **MCK** | **McKinley** | **18.56** | **38** | P | **Pn** | **03 00 39.0** | **+0.1** |
| MCK | | | | IAmb | IAmb | 03 01 03.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **DHY** | **Denali Highway** | **18.89** | **41** | P | **Pn** | **03 00 42.9** | **-0.1** |
| DHY | | | | IAmb | IAmb | 03 00 46.6 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **KLU** | **Klutina** | **18.93** | **47** | P | **P** | **03 00 42.3** | **-0.3** |
| KLU | | | | IAmb | IAmb | 03 00 56.3 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **18.95** | **36** | P | **P** | **03 00 40.5** | **-2.3** |
| **WRH** | **Wood River Hil** | **19.25** | **37** | P | **P** | **03 00 44.5** | **-1.6** |
| WRH | | | | IAmb | IAmb | 03 00 44.8 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.44** | **37** | P | **P** | **03 00 46.7** | **-1.4** |
| **MDM** | **Murphy Dome** | **19.44** | **36** | P | **P** | **03 00 47.5** | **-0.7** |
| **HDA** | **Harding Lake** | **19.65** | **38** | P | **P** | **03 00 50.4** | **-0.1** |
| HDA | | | | IAmb | IAmb | 03 00 52.9 | |
| | comp=Z,6.9nm,1.2s | | | | | | |
| **IL31** | | **19.85** | **37** | P | **P** | **03 00 51.1** | **-1.4** |
| IL31 | | | | IAmb | IAmb | 03 01 07.3 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **19.85** | **37** | Pn | **P** | **03 00 51.7** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=215,slow=10,SNR=26 | | | | | | |
| **ILAR** | **Eielson Array** | **19.85** | **37** | P | **P** | **03 00 50.9** | **-1.7** |
| **H24K** | **Noodor Dome** | **20.04** | **34** | P | **Pn** | **03 00 55.6** | **-0.9** |
| **RIDG** | **Independent Ri** | **20.20** | **41** | P | **P** | **03 00 55.3** | **-1.2** |
| RIDG | | | | IAmb | IAmb | 03 01 21.6 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **DOT** | **Dot Lake** | **20.49** | **41** | P | **P** | **03 00 59.1** | **-0.5** |
| DOT | | | | IAmb | IAmb | 03 01 02.1 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **SCRK** | **Sand Creek** | **20.64** | **41** | P | **P** | **03 01 00.2** | **-1.1** |
| SCRK | | | | IAmb | IAmb | 03 01 05.1 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **21.20** | **26** | P | **P** | **03 01 08.1** | **+0.9** |
| TOLK | | | | IAmb | IAmb | 03 01 20.2 | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **L27K** | **Beaver Creek,** | **21.24** | **44** | P | **P** | **03 01 08.1** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **21.26** | **44** | P | **P** | **03 01 06.8** | **-1.1** |
| **BMAR** | **Burnt Mountain** | **22.00** | **32** | P | **P** | **03 01 17.1** | **+1.3** |
| **EGAK** | **Eagle** | **22.08** | **40** | P | **P** | **03 01 16.1** | **-0.6** |
| EGAK | | | | IAmb | IAmb | 03 01 40.7 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **DAWY** | **Dawson** | **22.58** | **42** | P | **P** | **03 01 21.1** | **-0.9** |
| DAWY | | | | IAmb | IAmb | 03 01 26.9 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **A36M** | **Sachs Harbour** | **29.97** | **29** | P | **P** | **03 02 29.6** | **0.0** |
| **YKA** | **Yellowknife Ar** | **33.60** | **47** | P | **P** | **03 03 01.3** | **-0.3** |
| | comp=Z,0.1nm,0.5s,baz=282,slow=9.0,SNR=4.1 | | | | | | |
| YKA | | | | PcP | **PcP** | **03 05 38.1** | **-3.2** |
| | comp=Z,0.3nm,0.9s,baz=282,slow=3.6,SNR=3.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.61** | **210** | T | T | 03 40 11.7 | |
| | baz=19,slow=76,SNR=30 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.62** | **210** | T | T | 03 40 06.8 | |
| | baz=19,slow=76,SNR=28 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.63** | **210** | T | T | 03 40 13.6 | |
| | baz=19,slow=76,SNR=27 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.42** | **279** | P | P | 03 03 05.8 | -12 |
| | comp=Z,1.0nm,0.7s,baz=53,slow=7.6,SNR=1.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.42** | **279** | P | **P** | **03 03 17.9** | **+0.3** |
| **H11S1** | **WAKE ISLAND Hy** | **35.82** | **210** | T | T | 03 41 42.1 | |
| | baz=19,slow=76,SNR=21 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.83** | **210** | T | T | 03 41 42.9 | |
| | baz=19,slow=76,SNR=14 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.84** | **210** | T | T | 03 41 44.6 | |
| | baz=19,slow=76,SNR=10 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **41.09** | **74** | P | **P** | **03 04 07.0** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **41.39** | **85** | P | **P** | **03 04 11.6** | **+3.5** |
| | comp=Z,0.1nm,0.3s,baz=293,slow=5.4,SNR=1.7 | | | | | | |
| **BW06** | **Boulder Array** | **44.21** | **74** | P | **P** | **03 04 32.1** | **+1.1** |
| BW06 | | | | IAmb | IAmb | 03 04 33.1 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **44.21** | **74** | P | **P** | **03 04 31.5** | **+0.6** |
| PD31 | | | | IAmb | IAmb | 03 04 33.1 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **44.21** | **74** | P | **P** | **03 04 32.4** | **+1.5** |
| | comp=Z,1.1nm,0.6s,baz=301,slow=4.1,SNR=14 | | | | | | |
| **PDAR** | **Pinedale Array** | **44.21** | **74** | P | **P** | **03 04 31.7** | **+0.7** |
| **FCC** | **Fort Churchill** | **44.32** | **47** | P | **P** | **03 04 31.1** | **-0.2** |
| FCC | | | | IAmb | IAmb | 03 04 52.2 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| **PV13** | **Radium Mtn., P** | **47.43** | **79** | P | **P** | **03 04 55.8** | **-0.6

**IACM Heraklion 0.67 304** P **Pb** 03 31 10.7 -0.3
**SIVA Sivas 0.78 277** P **Pg** 03 31 11.7 -1.1
SIVA S **Sb** 03 31 24.5 +1.4
comp=E,4μm,0.3s
**SIVA Sivas 0.78 277** P **Pg** 03 31 11.7 -1.1
SIVA S **Sb** 03 31 23.2 +0.1
SIVA AML AML 03 31 26.6
comp=N,6411μm,0.3s
SIVA AML AML 03 31 28.3
comp=E,8077μm,0.4s
**IDI Anoyia 0.79 297** P **Pg** 03 31 11.7 -1.4
IDI S **Sb** 03 31 24.1 +0.5
comp=E,1μm,0.3s
**IDI Anoyia 0.79 297** P **Pg** 03 31 11.6 -1.6
IDI S **Sb** 03 31 24.3 +0.7
IDI AML AML 03 31 27.3
comp=N,2416μm,0.3s
IDI AML AML 03 31 29.0
comp=E,2148μm,0.3s
**IDI Anoyia 0.79 297** PG **Pg** 03 31 11.5 -1.6
IDI SG **Sb** 03 31 23.8 +0.2
**TMBK Timbaki Herakl 0.82 280** P **Pb** 03 31 12.8 -0.7
TMBK S **Sb** 03 31 24.8 +0.5
comp=E,1μm,0.3s
**PRNS Prines Rethymn 1.11 293** P **Pb** 03 31 18.2 -0.3
PRNS S **Sn** 03 31 35.0 +1.5
comp=E,350nm,0.5s
**VAM Vamos 1.35 291** P **Pn** 03 31 21.6 -0.3
**VAM Vamos 1.35 291** P **Pn** 03 31 21.4 -0.6
VAM AML AML 03 31 47.6
comp=N,1998μm,0.4s
VAM AML AML 03 31 47.7
comp=E,1867μm,0.4s
**GVD Gavdhos 1.37 267** P **Pg** 03 31 22.8 -1.3
GVD AML AML 03 31 49.5
comp=N,1621μm,0.4s
GVD AML AML 03 31 54.1
comp=E,2024μm,0.5s
**GVD Gavdhos 1.37 267** PN **Pg** 03 31 22.9 -1.1
**THR6 Thira Island, 1.45 349** P **Pn** 03 31 23.7 +0.4
**THR9 Santorini-Faro 1.46 347** P **Pn** 03 31 23.4 0.0
**THR3 Thira Island, 1.50 349** P **Pn** 03 31 23.9 -0.1
**THR5 Thira Island, 1.52 348** P **Pn** 03 31 24.4 +0.2
**SAP3 Santorini-Thir 1.54 348** P **Pn** 03 31 24.7 +0.2
**IMMV Iera Moni Meta 1.54 291** P **Pn** 03 31 25.0 +0.5
**IMMV Iera Moni Meta 1.54 291** PN **Pb** 03 31 25.2 -0.7
**CMBO Columbo, Santo 1.56 350** P **Pn** 03 31 25.6 +0.8
**KNDR Palaiochora Ch 1.72 281** PN **Pb** 03 31 28.7 -0.2
**KOSK Kos Island 2.07 28** PN **Pn** 03 31 33.1 +1.3
**ARG Arkhangelos 2.32 56** PN **Pn** 03 31 36.9 +1.6
**BODT Bodrum 2.48 30** PN **Pn** 03 31 38.8 +1.4
**TURN Turunc 2.74 47** PN **Pn** 03 31 42.6 +1.7
**TURN Turunc 2.74 47** P **Pn** 03 31 42.7 +1.7
TURN S **Sb** 03 32 20.0 +0.4
**MLSB Milas 2.88 34** PN **Pn** 03 31 45.0 +2.1
**YER Yerkesik 3.01 42** PN **Pn** 03 31 46.5 +1.7
**GCAM G?zelcaml? 3.01 23** PN **Pn** 03 31 46.8 +2.1
**DALY Dalyan (Mula) 3.02 51** PN **Pn** 03 31 46.6 +1.8
**MULA Mugla, Merkez- 3.12 41** P **Pn** 03 31 49.0 +2.7
MULA S **Sb** 03 32 28.3 -2.3
**FETY Fethiye 3.20 57** PN **Pn** 03 31 49.1 +1.7
**FETY Fethiye 3.20 57** P **Pn** 03 31 47.5 +0.1
FETY S **Sb** 03 32 34.0 +1.1
**ZEYE Izmir, Urla-Ze 3.36 10** P **Pn** 03 31 51.1 +1.6
ZEYE S **Sn** 03 32 27.8 -1.2
**AKAS Kas 3.40 66** PN **Pn** 03 31 51.6 +1.4
**AKAS Kas 3.40 66** P **Pn** 03 31 51.1 +0.9
AKAS S **Sn** 03 32 32.5 +2.2
AKAS *i* AML AML 03 32 58.0
comp=E,27nm,0.5s
**URLA Izmir 3.49 11** PN **Pn** 03 31 53.2 +1.9
**URLA Izmir 3.49 11** P **Pn** 03 31 52.5 +1.2
URLA S **Sb** 03 32 39.0 -2.2
**CAME Cameli-Denizli 3.51 54** PN **Pn** 03 31 53.6 +1.8
**TAVA DENIZLI_Tavas 3.60 44** P **Pn** 03 31 55.2 +2.3
TAVA S **Sn** 03 32 39.8 +4.6
**CAEL Denizli, Camel 3.63 52** P **Pn** 03 31 55.3 +2.0
CAEL S **Sg** 03 32 51.7 -2.5
CAEL *i* AML AML 03 32 58.0
comp=E,35nm,0.8s
CAEL *i* AML AML 03 33 04.0
comp=E,30nm,0.7s
CAEL *i* AML AML 03 33 06.0
comp=E,31nm,0.6s
**ITM Ithomi 3.82 307** PN **Pn** 03 31 58.1 +2.2
**ELL Elmali 3.83 61** PN **Pn** 03 31 58.1 +1.9
**GOLH Golhisar 3.85 52** P **Pn** 03 31 58.9 +2.6
GOLH S **Sb** 03 32 49.0 -2.7
**KORT Korkueli 4.27 60** PN **Pn** 03 32 04.2 +2.1
**KULA Kula-Manisa 4.27 32** PN **Pn** 03 32 04.6 +2.4
**USAK Uak-Merkez 4.60 34** P **Pn** 03 32 09.1 +2.5
USAK *i* AML AML 03 33 03.0
comp=E,17nm,1.5s
USAK *i* AML AML 03 34 52.0
comp=E,14nm,5.0s
**SEDI Konya, Seydise 5.47 61** P **Pn** 03 32 20.7 +2.0
SEDI S **Sn** 03 33 23.6 +2.3
SEDI *i* AML AML 03 33 36.0
comp=E,4.9nm,0.7s
**MMAI Mount Meron Ar 8.24 101** Pn **Pn** 03 32 55.2 -1.4
comp=E,0.9nm,0.3s,baz=263,slow=11,SNR=4.6
**AKASG Malin Array Be 15.96 8** Pn **Pn** 03 34 41.8 +0.4
comp=E,0.2nm,0.3s,baz=203,slow=11,SNR=1.6
**ESDC Sonseca Array 24.05 290** P **P** 03 36 11.1 -1.0
comp=E,0.5nm,1.0s,baz=80,slow=10,SNR=1.9
**FINES FINESS Array B 26.53 0** P **P** 03 36 33.2 -1.1
comp=E,1.7nm,0.9s,baz=156,slow=11,SNR=1.4
**TORD Torodi Ar. Bea 30.72 231** P **P** 03 37 11.9 -0.2
comp=E,0.3nm,0.5s,baz=35,slow=9.0,SNR=4.2
**WSAR Wadi Sarin 30.87 103** LR LR 03 52 15.3
comp=E,108nm,21.8s,baz=152,slow=41
**MKAR Makanchi Array 43.50 56** P **P** 03 39 00.2 -0.1
comp=E,0.5nm,0.5s,baz=273,slow=8.1,SNR=7.4

**IDC 17 03:57:21.7±5.0, 16°18S×172°45W, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.6/27, mbtmp3.8/3, Error ellipse: s-maj=364.7km s-min=33.5km az=150.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **50.56** | **257** | P | P | 04 06 22.2 | -0.4 |
| | 0.4nm,0.6s,baz=94,slow=6.9,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **50.75** | **252** | P | P | 04 06 24.1 | +0.1 |
| | 3.4nm,0.6s,baz=89,slow=8.2,SNR=41 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.30** | **41** | P | P | 04 09 01.4 | +0.1 |
| | 0.3nm,0.8s,baz=220,slow=6.8,SNR=2.0 | | | | | | |

**IDC 17 04:01:31.9±6.8, 6°90S×153°56E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.4/25, mbtmp3.4/3, MS3.9/1, Ms1 3.9/1, ms1mx2.6/30, Error ellipse: s-maj=203.7km s-min=41.7km az=111.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.71** | **233** | P | P | 04 06 36.2 | +0.6 |
| | 0.4nm,0.7s,baz=59,slow=11,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.18** | **226** | P | P | 04 06 59.0 | -0.3 |
| | 0.3nm,0.4s,baz=64,slow=9.4,SNR=4.8 | | | | | | |
| **AFI** | **Afiamalu** | **34.77** | **104** | LR | LR | 04 19 44.6 | |
| | comp=E,210nm,21.4s,baz=248,slow=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.39** | **319** | P | P | 04 13 56.0 | 0.0 |
| | 0.7nm,1.0s,baz=108,slow=3.8,SNR=4.3 | | | | | | |

*IDC **17** 04:29:28.5±0.9, 38°26N×70°45E, h0km, mb3.8/12, mb1 4.0/19, mb1mx3.8/51, mbtmp3.9/19, ML3.3/8, MS3.3/5, Ms1 3.3/5, ms1mx2.9/89, Error ellipse: s-maj=17.1km s-min=11.8km az=148.0*
*SOME **17** 04:29:29.8, 38°35N×70°63E, h5km*
*NNC **17** 04:29:30.5±1.6, 38°42N×70°28E, h0km, mb4.7, mpv4.4, Error ellipse: s-maj=12.9km s-min=8.2km az=6.0*
*MOS **17** 04:29:30.2±1.2, 38°52N×70°43E, h12km, mb4.3/10, Error ellipse: s-maj=8.9km s-min=5.2km az=87.0*
*BJI **17** 04:29:31.7±0.0, 38°89N×70°54E, h10km, mb4.1/11, mB4.2/1, ML3.8/2*
*NEIC **17** 04:29:31.0±1.9, 38°44N±0°05×70°5E±0°1, h10km±5km, mb4.3/9, Error ellipse: s-maj=11.4km s-min=6.7km az=86.0*
**ISC 17 04:29:30.5±0.5, 38°39N±0°04×70°51E±0°03, h10km, n159, s235/151, mb3.8/19, MS3.2/3, 13C-7D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAS** | **Tashkent** | **3.08** | **343** | PN | **Pn** | **04 30 19.1** | **-0.1** |
| **TAS** | **Tashkent** | **3.08** | **343** | | **Pn** | **04 30 19.1** | **-0.1** |
| **IUG** | **Iuzhnay** | **3.77** | **355** | *eP* | **Pb** | **04 30 38.5** | **+1.3** |
| | 2μm,0.8s | | | | | | |
| IUG | | | | *eS* | **Sg** | **04 31 28.4** | **-3.2** |
| | 766nm,0.1s | | | | | | |
| **IUG** | **Iuzhnay** | **3.77** | **355** | Pg | **Pb** | **04 30 38.6** | **+1.4** |
| | 2μm,0.6s | | | | | | |
| IUG | | | | Lg | Lg | 04 31 28.6 | |
| **KBL** | **Kabul** | **4.02** | **198** | PN | **Pn** | **04 30 36.8** | **+4.6** |
| **KBL** | **Kabul** | **4.02** | **198** | Pn | **Pn** | **04 30 36.8** | **+4.6** |
| **KSH** | **Kashi** | **4.41** | **73** | Pn | **Pn** | **04 30 36.9** | **-0.6** |
| KSH | | | | Sn | **Sn** | **04 31 23.9** | **-5.1** |
| KSH | | | | smax | smax | | |
| | comp=N,280nm,0.8s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,190nm,1.1s | | | | | | |
| **AML** | **Almayashu** | **4.46** | **32** | P | **Pn** | **04 30 40.3** | **+1.8** |
| | SNR=36 | | | | | | |
| **BRLS** | **Boroldav** | **4.67** | **354** | *eP* | **Pb** | **04 30 52.5** | **+0.1** |
| | 17nm,0.5s | | | | | | |
| BRLS | | | | *eS* | **Sb** | **04 31 52.2** | **+3.5** |
| | 93nm,0.4s | | | | | | |
| **BRLS** | **Boroldav** | **4.67** | **354** | Pg | **Pb** | **04 30 52.5** | **+0.1** |
| | 24nm,0.6s | | | | | | |
| BRLS | | | | Lg | Lg | 04 31 52.2 | |
| | 93nm,0.4s | | | | | | |
| **CEP** | **Cherat** | **4.69** | **166** | P | Pn | 04 30 48.7 | +7.2 |
| **KK31** | **Karatay Array** | **4.71** | **0** | PN | **Pn** | **04 30 43.2** | **+1.6** |
| KK31 | | | | | | 04 30 56.4 | |
| **KKAR** | **Karatay Array** | **4.71** | **0** | PN | **Pn** | **04 30 42.3** | **+0.7** |
| **KKAR** | **Karatay Array** | **4.71** | **0** | Pn | **Pn** | **04 30 42.3** | **+0.7** |
| **KK09** | **Karatay Array** | **4.73** | **360** | ⇑Pn | **Pn** | **04 30 43.3** | **+1.4** |
| | 33nm,0.5s,baz=180,slow=12 | | | | | | |
| KK09 | | | | ⇓Pg | **Pb** | **04 30 56.4** | **+2.9** |
| | 45nm,0.6s | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 04 31 56.9 | |
| | 78nm,0.7s,baz=182,slow=28 | | | | | | |
| **MRKS** | **Merke** | **4.82** | **25** | *eP* | **Pg** | **04 31 01.6** | **-1.2** |
| | 65nm,0.7s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **04 32 07.3** | **+2.1** |
| | 68nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **4.91** | **37** | P | **Pn** | **04 30 46.9** | **+2.2** |
| | SNR=13 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.94** | **29** | P | **Pn** | **04 30 49.2** | **+4.3** |
| | SNR=8.7 | | | | | | |
| **AAK** | **Ala-Archa** | **5.22** | **34** | Pn | **Pn** | **04 30 51.4** | **+2.7** |
| | 8.0nm,0.3s,baz=205,slow=6.2,SNR=44 | | | | | | |
| AAK | | | | Sn | **Sn** | **04 31 54.8** | **+5.7** |
| | 1.6nm,0.3s,baz=354,slow=21,SNR=1.6 | | | | | | |
| AAK | | | | Lg | Lg | 04 32 14.9 | |
| | 2.1nm,0.3s,baz=127,slow=20,SNR=5.2 | | | | | | |
| **AAK** | **Ala-Archa** | **5.22** | **34** | P | Pn | 04 30 53.5 | +4.8 |
| | SNR=7.3 | | | | | | |
| **AAK** | **Ala-Archa** | **5.22** | **34** | | **Pn** | **04 30 48.2** | **-0.5** |
| **AAK** | **Ala-Archa** | **5.22** | **34** | ⇑Pn | **Pn** | **04 30 51.0** | **+2.3** |
| | 33nm,0.6s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 04 32 19.2 | |
| | 92nm,0.9s | | | | | | |
| **NIL** | **Nilore** | **5.22** | **154** | PN | **Pn** | **04 30 51.2** | **+2.6** |
| **NIL** | **Nilore** | **5.22** | **154** | Pn | **Pn** | **04 30 51.2** | **+2.6** |
| **KBK** | **Karagaybulak** | **5.44** | **37** | P | Pn | 04 30 57.4 | +5.6 |
| | SNR=98 | | | | | | |
| **CHMS** | **Chumysh** | **5.62** | **34** | P | Pn | 04 31 00.2 | +6.1 |
| | SNR=6.2 | | | | | | |
| **THW** | **Thamme Wali** | **5.67** | **169** | P | Pn | 04 31 01.1 | +6.3 |
| **USP** | **Ospenovka** | **5.74** | **31** | P | **Pn** | **04 30 59.7** | **+4.0** |
| | SNR=25 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.96** | **39** | P | Pn | 04 31 03.9 | +5.0 |
| | SNR=49 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.96** | **39** | PN | **Pn** | **04 31 02.4** | **+3.5** |
| TKM2 | | | | S | **Sn** | **04 32 14.8** | **+7.6** |
| **TKM2** | **Tokmak 2** | **5.96** | **39** | ⇑Pn | **Pn** | **04 31 02.4** | **+3.5** |
| | 40nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **04 32 14.1** | **+6.8** |
| | 30nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 04 32 44.1 | |
| | 60nm,1.2s | | | | | | |
| **KST** | **Kastek** | **6.23** | **40** | *eP* | **Pb** | **04 31 22.2** | **+3.1** |
| | 14nm,0.5s | | | | | | |
| KST | | | | *eS* | **Sg** | **04 32 42.5** | **-7.8** |
| | 31nm,1.8s | | | | | | |
| **DGS** | **Degeres** | **6.28** | **38** | *eP* | Pb | 04 31 25.6 | +5.7 |
| | 44nm,0.6s | | | | | | |
| DGS | | | | *eS* | **Sg** | **04 32 48.7** | **-3.3** |
| | 40nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **6.28** | **38** | Pg | Pb | 04 31 25.6 | +5.7 |
| | 44nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 04 32 48.7 | |
| | 40nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **6.53** | **42** | *eP* | Pb | 04 31 30.1 | +6.0 |
| | 13nm,0.6s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **04 32 57.8** | **-2.2** |
| | 19nm,0.8s | | | | | | |
| **MTBS** | **Maitube** | **6.53** | **42** | Pg | Pb | 04 31 30.1 | +6.0 |
| | 13nm,0.6s | | | | | | |
| MTBS | | | | Lg | Lg | 04 32 57.8 | |
| | 19nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **6.58** | **35** | *eP* | Pg | 04 31 31.4 | -5.1 |
| | 15nm,0.7s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **04 32 58.6** | **-3.2** |
| | 15nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **6.58** | **35** | Pg | Pg | 04 31 31.4 | -5.1 |
| | 15nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 04 32 58.6 | |
| | 15nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **6.74** | **44** | *eP* | Pb | 04 31 33.8 | +5.8 |
| | 9.6nm,0.6s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **04 33 03.0** | **-3.9** |
| | 10nm,0.9s | | | | | | |
| **TNSS** | **Tian-Shan** | **6.74** | **44** | Pg | Pb | 04 31 33.8 | +5.9 |
| | 9.6nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 04 33 03.0 | |
| | 10nm,0.9s | | | | | | |
| **MDOK** | **Medeo** | **6.88** | **44** | PN | **Pn** | **04 31 14.5** | **+3.0** |
| **MDOK** | **Medeo** | **6.88** | **44** | ⇓Pn | **Pn** | **04 31 14.5** | **+3.0** |
| | 22nm,1.1s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 04 33 12.7 | |
| | 54nm,1.1s | | | | | | |
| **BTLS** | **Baital** | **7.16** | **21** | *eP* | **Pg** | **04 31 45.0** | **-2.4** |
| | 14nm,0.8s | | | | | | |
| BTLS | | | | *eS* | **Sg** | **04 33 23.5** | **+3.5** |
| | 24nm,1.1s | | | | | | |
| **SATY** | **Saty** | **7.60** | **50** | *eP* | Pb | 04 31 47.6 | +5.2 |
| | 5.7nm,0.7s | | | | | | |
| SATY | | | | *eS* | **Sg** | **04 33 27.1** | **-7.1** |
| | 13nm,1.0s | | | | | | |
| **SATY** | **Saty** | **7.60** | **50** | Pg | Pb | 04 31 47.6 | +5.2 |
| | 5.7nm,0.7s | | | | | | |
| SATY | | | | Lg | Lg | 04 33 27.1 | |
| | 13nm,1.0s | | | | | | |
| **HRA** | **Herat** | **7.77** | **242** | Pn | **Pn** | **04 31 23.8** | **0.0** |
| **PDGK** | **Podgornoye** | **8.40** | **51** | P | **Pn** | **04 31 34.8** | **+2.4** |
| **PDGK** | **Podgornoye** | **8.40** | **51** | Pg | Pb | 04 32 01.8 | +5.7 |
| PDGK | | | | Lg | Lg | 04 33 51.5 | |
| **PDGK** | **Podgornoye** | **8.40** | **51** | ⇑Pn | **Pn** | **04 31 34.8** | **+2.4** |
| | 10nm,1.1s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 04 34 04.6 | |
| | 42nm,1.1s | | | | | | |
| **OTUK** | **Ortayu** | **9.94** | **7** | P | **Pn** | **04 31 53.4** | **+0.1** |
| **OTUK** | **Ortayu** | **9.94** | **7** | Pn | **Pn** | **04 31 53.5** | **+0.1** |
| | 4.1nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **12.07** | **42** | *i* P | **Pn** | **04 32 23.5** | **+1.0** |
| **MK31** | **Makanchi Array** | **12.07** | **42** | | **Pn** | **04 32 23.7** | **+1.3** |
| **MK31** | **Makanchi Array** | **12.07** | **42** | Pn | **Pn** | **04 32 23.5** | **+1.0** |
| | 6.9nm,0.8s,baz=233,slow=14,SNR=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.07** | **42** | Pn | **Pn** | **04 32 23.9** | **+1.4** |
| | 0.3nm,0.3s,baz=234,slow=14,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.07** | **42** | | **Pn** | **04 32 23.7** | **+1.2** |
| **AB31** | **Akbulak array** | **13.26** | **328** | P | **Pn** | **04 32 36.8** | **-1.9** |
| AB31 | | | | | | 04 35 00.5 | |
| **AB31** | **Akbulak array** | **13.26** | **328** | ⇑Pn | **Pn** | **04 32 36.5** | **-2.2** |
| | 4.8nm,0.6s | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **04 35 04.9** | **-1.2** |
| | 7.4nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **13.26** | **328** | Pn | **Pn** | **04 32 36.6** | **-2.0** |
| **KURBB** | **Kurchatov Arra** | **13.49** | **22** | Pn | **Pn** | **04 32 41.3** | **-0.5** |
| | 0.2nm,0.3s,baz=214,slow=12,SNR=3.1 | | | | | | |
| **KURK** | **Kurchatov** | **13.60** | **22** | P | **Pn** | **04 32 41.9** | **-1.4** |
| **KURK** | **Kurchatov** | **13.60** | **22** | | **Pn** | **04 32 41.9** | **-1.4** |
| **PYUN** | **Piuthan** | **14.62** | **131** | *eP* | **Pn** | **04 32 56.3** | **-1.3** |
| | 3.2nm,0.4s | | | | | | |
| **PYUN** | **Piuthan** | **14.62** | **131** | *eP* | **P** | **04 33 02.3** | **-1.8** |
| **BVAR** | **Borovoye Array** | **14.64** | **360** | Pn | **Pn** | **04 32 56.3** | **-1.2** |
| | 0.5nm,0.3s,baz=116,slow=13,SNR=8.6 | | | | | | |
| **BRVK** | **Borovoye** | **14.67** | **359** | P | **Pn** | **04 32 57.1** | **-0.9** |
| **BRVK** | **Borovoye** | **14.67** | **359** | Pn | **Pn** | **04 32 57.1** | **-0.9** |
| **BRVK** | **Borovoye** | **14.67** | **359** | ⇑Pn | **Pn** | **04 32 57.0** | **-0.9** |
| | 3.1nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **14.91** | **128** | *eP* | **Pn** | **04 33 00.7** | **-0.9** |
| | 5.4nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **14.91** | **128** | *eP* | **Pn** | **04 33 03.1** | **+1.5** |
| | 4.7nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **14.91** | **128** | *eP* | **P** | **04 33 08.9** | **+1.6** |
| | 11nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.97** | **328** | Pn | **Pn** | **04 33 01.2** | **-0.7** |
| | 0.2nm,0.3s,baz=136,slow=13,SNR=7.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.97** | **328** | ⇓Pn | **Pn** | **04 33 01.8** | **-0.2** |
| | 6.3nm,0.8s | | | | | | |
| AKTO | | | | ⇓Sn | **Sn** | **04 35 46.5** | **-1.2** |
| | 12nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **15.23** | **130** | *eP* | **Pn** | **04 33 03.8** | **-2.0** |
| | 4.8nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **15.23** | **130** | *eP* | **Pn** | **04 33 08.3** | **+2.5** |
| | 1.5nm,0.2s | | | | | | |
| **KOLN** | **Koldanda** | **15.23** | **130** | *eP* | **Pn** | **04 33 09.1** | **+3.3** |
| | 5.5nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **15.70** | **127** | *eP* | **Pn** | **04 33 11.3** | **-0.6** |
| | 2.7nm,0.2s | | | | | | |
| **GKN** | **Gorkha** | **15.70** | **127** | *eP* | **Pn** | **04 33 11.3** | **-0.6** |
| | 6.9nm,0.2s | | | | | | |
| **GKN** | **Gorkha** | **15.70** | **127** | *eP* | **Pn** | **04 33 15.0** | **+3.1** |
| | 15nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **16.25** | **126** | *eP* | **Pn** | **04 33 18.7** | **-0.4** |
| | 3.5nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **16.25** | **126** | *eP* | **Pn** | **04 33 15.8** | **-3.3** |
| | 1.2nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **16.25** | **126** | *eP* | **Pn** | **04 33 20.1** | **+1.0** |
| **DMN** | **Daman** | **16.27** | **127** | *eP* | **Pn** | **04 33 18.6** | **-0.7** |
| | 2.3nm,0.2s | | | | | | |
| **DMN** | **Daman** | **16.27** | **127** | *eP* | **Pn** | **04 33 19.3** | **0.0** |
| | 9.2nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **16.48** | **126** | *eP* | **Pn** | **04 33 21.6** | **-0.4** |
| | 6.0nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **16.48** | **126** | *eP* | **Pn** | **04 33 18.8** | **-3.2** |
| | 5.9nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **16.48** | **126** | *eP* | **Pn** | **04 33 21.5** | **-0.4** |
| | 8.4nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **16.49** | **126** | *eP* | **Pn** | **04 33 22.0** | **-0.2** |
| | 3.3nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **16.49** | **126** | *eP* | **Pn** | **04 33 19.0** | **-3.2** |
| **PKI** | **Pulchoki** | **16.49** | **126** | *eP* | **Pn** | **04 33 21.2** | **-1.0** |
| **GUN** | **Gumba** | **16.55** | **125** | *eP* | **Pn** | **04 33 23.6** | **+0.5** |
| | 6.4nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **16.55** | **125** | *eP* | **Pn** | **04 33 17.9** | **-5.2** |
| | 4.0nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **16.55** | **125** | *eP* | **Pn** | **04 33 23.6** | **+0.5** |
| | 2.9nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **16.57** | **42** | *i* P | **Pn** | **04 33 21.0** | **-1.9** |
| **JIRN** | **Jiri** | **16.93** | **125** | *eP* | **Pn** | **04 33 27.6** | **-0.2** |
| | 5.0nm,0.3s | | | | | | |
| **JIRN** | **Jiri** | **16.93** | **125** | *eP* | **Pn** | **04 33 22.5** | **-5.3** |
| | 1.9nm,0.3s | | | | | | |
| **JIRN** | **Jiri** | **16.93** | **125** | *eP* | **Pn** | **04 33 26.1** | **-1.7** |
| | 5.3nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **17.68** | **125** | *eP* | **Pn** | **04 33 36.7** | **-0.4** |
| | 0.8nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **17.68** | **125** | *eP* | Pn | 04 33 30.3 | -6.8 |
| | 0.5nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **17.68** | **125** | *eP* | Pn | 04 33 30.3 | -6.8 |
| | 0.4nm,0.2s | | | | | | |
| **TAPN** | **Taplejung** | **18.13** | **122** | *eP* | **Pn** | **04 33 43.0** | **+0.3** |
| | 2.2nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **18.13** | **122** | *eP* | **Pn** | **04 33 37.0** | **-5.7** |
| **WSAR** | **Wadi Sarin** | **18.20** | **217** | LR | LR | 04 42 47.6 | |
| | comp=Z,69nm,19.1s,baz=326,slow=44 | | | | | | |
| **ODAN** | **Odare** | **18.25** | **124** | *eP* | **Pn** | **04 33 43.1** | **-1.0** |
| | 7.3nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **18.25** | **124** | *eP* | Pn | 04 33 35.1 | -9.0 |
| | 1.6nm,0.2s | | | | | | |
| **ODAN** | **Odare** | **18.25** | **124** | *eP* | Pn | 04 33 35.9 | -8.2 |
| | 2.2nm,0.2s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **18.39** | **28** | | **Pn** | **04 33 44.4** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **18.39** | **28** | P | **Pn** | **04 33 44.3** | **-1.1** |
| | 0.3nm,0.3s,baz=222,slow=11,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.39** | **28** | *i* P | **Pn** | **04 33 44.2** | **-1.1** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.39** | **28** | P | **Pn** | **04 33 44.6** | **-0.8** |
| **GOMU** | **GeErMu** | **19.45** | **89** | P | **Pn** | **04 34 00.3** | **+1.6** |
| GOMU | | | | pP | pP | 04 34 01.8 | +0.8 |
| GOMU | | | | sP | sP | 04 34 04.8 | +2.2 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,63nm,5.7s | | | | | | |
| **ARU** | **Arti** | **19.73** | **340** | P | **P** | **04 34 00.4** | **+0.4** |
| | comp=Z,0.0nm,0.3s,baz=161,slow=6.6,SNR=8.7 | | | | | | |
| ARU | | | | LR | LR | 04 42 16.1 | |
| | comp=Z,165nm,21.5s,baz=240,slow=39 | | | | | | |
| **ARU** | **Arti** | **19.73** | **340** | *c iP* | **Pn** | **04 34 01.8** | **+0.4** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **ARU** | **Arti** | **19.73** | **340** | P | **P** | **04 33 58.6** | **-1.4** |
| ARU | | | | IAmb | IAmb | 04 34 03.6 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **GNI** | **Garni** | **20.01** | **283** | P | **P** | **04 34 03.0** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=18,slow=10,SNR=1.6 | | | | | | |
| **GNI** | **Garni** | **20.01** | **283** | *i* P | **Pn** | **04 34 07.7** | **+2.6** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **ZEI** | **Tsey** | **20.64** | **291** | *eP* | Pn | 04 34 16.2 | +3.6 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **NCK** | **Nalchik** | **20.92** | **293** | *i* P | **P** | **04 34 12.9** | **-0.2** |
| NCK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **ONI** | **Oni** | **20.96** | **290** | P | **P** | **04 34 13.4** | **-0.2** |
| ONI | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ONI** | **Oni** | **20.96** | **290** | P | **P** | **04 34 13.4** | **-0.2** |
| ONI | | | | IAmb | IAmb | 04 34 20.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **21.44** | **293** | P | **P** | **04 34 18.3** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=113,slow=8.2,SNR=7.6 | | | | | | |
| **KBZ** | **Khabaz** | **21.44** | **293** | *i* P | **P** | **04 34 18.1** | **-0.6** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **NEY** | **Neytrino** | **21.54** | **292** | *i* P | **P** | **04 34 21.3** | **+1.4** |
| NEY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KIV** | **Kislovodsk** | **21.61** | **294** | *eP* | **P** | **04 34 22.4** | **+1.7** |
| KIV | | | | *eS* | **S** | **04 38 22.0** | **+1.9** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KIV** | **Kislovodsk** | **21.61** | **294** | P | **P** | **04 34 19.4** | **-1.2** |
| **SHA1** | **Shidzhatmaz** | **21.62** | **293** | *i* P | **P** | **04 34 21.4** | **+0.6** |
| **GTA** | **Gaotai** | **22.79** | **78** | *eP* | **P** | 04 34 41.4 | +8.1

comp=Z,0.8nm,0.7s,baz=103,slow=8.6,SNR=1.5
**TIXI** **Tiksi** **44.18 23** *e*P **P** **04 37 38.3 -0.7**
TIXI pmax pmax
comp=Z,5.0nm,0.8s
**TIXI** **Tiksi** **44.18 23** P **P** **04 37 39.7 +0.8**
TIXI IAmb IAmb 04 37 44.0
comp=Z,6.5nm,1.1s
**KLR** **Kul'dur** **44.37 55** *i* P **P** **04 37 42.1 +1.3**
KLR pmax pmax
comp=Z,8.0nm,1.9s
**ESDC** **Sonseca Array** **56.25 297** P **P** **04 39 09.7 -1.3**
comp=Z,0.3nm,0.5s,baz=65,slow=7.0,SNR=4.1
**TORD** **Torodi Ar. Bea** **65.39 267** P **P** **04 40 11.2 -2.2**
comp=Z,0.7nm,1.0s,baz=47,slow=6.7,SNR=8.5
**TORD** **Torodi Ar. Bea** **65.39 267** P **P** **04 40 14.1 +0.6**
**C36M** **Paulatuk** **72.04 5** P **P** **04 40 54.3 +0.2**
C36M IAmb IAmb 04 40 57.2
comp=Z,3.7nm,1.0s
**INK** **Inuvik** **72.11 9** P **P** **04 40 54.9 +0.4**
comp=Z,1.2nm,0.5s,baz=338,slow=6.7,SNR=7.4
**INK** **Inuvik** **72.11 9** P **P** **04 40 55.4 +0.9**
INK pmax pmax
comp=Z,3.0nm,1.2s
**INK** **Inuvik** **72.11 9** P **P** **04 40 55.4 +0.9**
INK IAmb IAmb 04 41 10.3
comp=Z,3.0nm,1.2s
**YKA** **Yellowknife Ar** **79.38 2** P **P** **04 41 37.0 +0.8**
comp=Z,0.4nm,0.4s,baz=351,slow=5.6,SNR=14
**YKA** **Yellowknife Ar** **79.38 2** *e*P **P** **04 41 37.0 +0.8**
**YKA** **Yellowknife Ar** **79.38 2** P **P** **04 41 36.7 +0.5**
**WRA** **Warramunga Arr** **83.32 122** P **P** **04 41 58.5 +0.8**
comp=Z,0.9nm,0.7s,baz=326,slow=5.0,SNR=9.0
**WB2** **Warramunga Arr** **83.33 122** P **P** **04 41 58.3 +0.6**
**ASAR** **Alice Springs** **85.65 125** P **P** **04 42 09.9 +0.5**
comp=Z,0.7nm,0.8s,baz=323,slow=4.7,SNR=6.1
**ASAR** **Alice Springs** **85.65 125** P **P** **04 42 10.0 +0.5**
**ASAR** **Alice Springs** **85.65 125** P **P** **04 42 09.8 +0.3**

**TAP 17 04:32:18.4,22.92N×120.54E,h14km,ML3.5,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SCST** | **Cishan** | **0.05** | **233** | *i* P | | Pg | 04 32 21.6 | +0.5 |
| | baz=235 | | | | | | | |
| SCST | | | | S | | Sg | 04 32 23.6 | +0.6 |
| | baz=235 | | | | | | | |
| **TWM1** | **Shoushan** | **0.14** | **229** | *i* P | | Pb | 04 32 23.2 | +0.4 |
| | baz=228 | | | | | | | |
| TWM1 | | | | *i* S | | Sb | 04 32 27.6 | +1.9 |
| | baz=228 | | | | | | | |
| **SGST** | **Jiashan** | **0.17** | **15** | *i* P | | Pg | 04 32 22.6 | 0.0 |
| | baz=17 | | | | | | | |
| SGST | | | | *i* S | | Sb | 04 32 27.2 | +0.5 |
| | baz=17 | | | | | | | |
| **SSD** | **Sandimen** | **0.19** | **152** | *i* P | | Pb | 04 32 23.7 | 0.0 |
| | baz=143 | | | | | | | |
| SSD | | | | *i* S | | Sb | 04 32 27.5 | +0.3 |
| | baz=143 | | | | | | | |
| **SGLT** | **Jiouru** | **0.19** | **192** | *i* P | | Pb | 04 32 24.5 | +0.8 |
| | baz=184 | | | | | | | |
| SGLT | | | | *e*S | | Sb | 04 32 28.4 | +1.1 |
| | baz=184 | | | | | | | |
| **SHHT** | **Tainan City** | **0.20** | **301** | P | | Pb | 04 32 25.2 | +1.2 |
| | baz=309 | | | | | | | |
| SHHT | | | | S | | Sb | 04 32 29.9 | +2.3 |
| | baz=309 | | | | | | | |
| **CHN3** | **Shinhua** | **0.23** | **316** | *i* P | | Pb | 04 32 25.4 | +1.1 |
| | baz=322 | | | | | | | |
| CHN3 | | | | *e*S | | Sb | 04 32 29.8 | +1.6 |
| | baz=322 | | | | | | | |
| **TSMG** | **Majia** | **0.23** | **154** | *i* P | | Pb | 04 32 24.3 | -0.1 |
| | baz=147 | | | | | | | |
| TSMG | | | | *i* S | | Sb | 04 32 28.4 | 0.0 |
| | baz=147 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.24** | **189** | P | | Pb | 04 32 25.5 | +0.9 |
| | baz=184 | | | | | | | |
| TSPT | | | | S | | Sb | 04 32 30.2 | +1.5 |
| | baz=184 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.24** | **229** | *i* P | | Pb | 04 32 25.5 | +0.9 |
| | baz=230 | | | | | | | |
| SNJT | | | | S | | Sb | 04 32 32.0 | +3.2 |
| | baz=230 | | | | | | | |
| **CHN1** | **Nanshi** | **0.27** | **358** | *i* P | | Pb | 04 32 25.5 | +0.4 |
| | baz=8.0 | | | | | | | |
| CHN1 | | | | *i* S | | Sb | 04 32 30.8 | +1.2 |
| | baz=8.0 | | | | | | | |
| **SNST** | **Tainan City** | **0.30** | **353** | *i* P | | Pb | 04 32 26.4 | +0.7 |
| | baz=354 | | | | | | | |
| SNST | | | | *i* S | | Sb | 04 32 31.9 | +1.3 |
| | baz=354 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.31** | **294** | *i* P | | Pb | 04 32 26.6 | +0.9 |
| | baz=294 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.32** | **163** | P | | Pb | 04 32 25.8 | 0.0 |
| | baz=158 | | | | | | | |
| MASBT | | | | S | | Sb | 04 32 31.0 | +0.2 |
| | baz=158 | | | | | | | |
| **SSHA** | **Shanhua** | **0.32** | **314** | P | | Pb | 04 32 27.1 | +1.2 |
| | baz=316 | | | | | | | |
| SSHA | | | | S | | Sb | 04 32 31.9 | +1.0 |
| | baz=316 | | | | | | | |
| **STYT** | **Tauyuan** | **0.32** | **39** | *i* P | | Pb | 04 32 26.3 | +0.4 |
| | baz=48 | | | | | | | |
| STYT | | | | *i* S | | Sb | 04 32 32.5 | +1.4 |
| | baz=48 | | | | | | | |
| **STYH** | **Taoyuan** | **0.34** | **41** | P | | Pb | 04 32 26.7 | +0.5 |
| | baz=48 | | | | | | | |
| STYH | | | | S | | Sb | 04 32 32.5 | +1.1 |
| | baz=48 | | | | | | | |
| **WTP** | **Ta-pu** | **0.34** | **12** | *i* P | | Pb | 04 32 26.7 | +0.4 |
| | baz=14 | | | | | | | |
| WTP | | | | *i* S | | Sb | 04 32 32.7 | +1.2 |
| | baz=14 | | | | | | | |
| **TWK** | **Hsinying** | **0.35** | **353** | *i* P | | Pb | 04 32 27.1 | +0.5 |
| | baz=355 | | | | | | | |
| TWK | | | | S | | Sn | 04 32 34.5 | -1.5 |
| | baz=355 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **13** | P | | Pb | 04 32 27.5 | +0.2 |
| | baz=13 | | | | | | | |
| TPUB | | | | S | | Sb | 04 32 34.1 | +1.0 |
| | baz=13 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.41** | **211** | *i* P | | Pb | 04 32 28.2 | +0.9 |
| | baz=211 | | | | | | | |
| KAU | | | | *i* S | | Sn | 04 32 36.4 | -0.7 |
| | baz=211 | | | | | | | |
| **SCLT** | **Jiali** | **0.41** | **309** | *i* P | | Pb | 04 32 27.8 | +0.4 |
| | baz=312 | | | | | | | |
| SCLT | | | | S | | Sn | 04 32 37.0 | -0.3 |
| | baz=312 | | | | | | | |
| **SSPT** | **Xinbi** | **0.43** | **176** | *i* P | | Pb | 04 32 28.6 | +0.8 |
| | baz=163 | | | | | | | |
| SSPT | | | | *i* S | | Sb | 04 32 35.5 | +1.4 |
| | baz=163 | | | | | | | |
| **ECL** | **Taimali** | **0.50** | **129** | *i* P | | Pb | 04 32 29.0 | 0.0 |
| | baz=127 | | | | | | | |
| ECL | | | | *i* S | | Sb | 04 32 36.2 | +0.1 |
| | baz=127 | | | | | | | |
| **ICHU** | **Yijhu** | **0.50** | **332** | *i* P | | Pb | 04 32 29.8 | +0.8 |
| | baz=334 | | | | | | | |
| ICHU | | | | *i* S | | Sn | 04 32 38.8 | -0.9 |
| | baz=334 | | | | | | | |
| **TWGBT** | **Beinan** | **0.51** | **101** | P | | Pb | 04 32 29.4 | +0.2 |
| | baz=104 | | | | | | | |
| TWGBT | | | | S | | Sb | 04 32 37.4 | +1.0 |
| | baz=104 | | | | | | | |
| **ELDTW** | **Lidau** | **0.52** | **58** | *i* P | | Pb | 04 32 30.1 | +0.7 |
| | baz=57 | | | | | | | |
| ELDTW | | | | *i* S | | Sb | 04 32 38.2 | +1.4 |
| | baz=57 | | | | | | | |
| **CHN8** | **Yiju** | **0.52** | **325** | *i* P | | Pb | 04 32 30.2 | +0.8 |
| | baz=328 | | | | | | | |
| CHN8 | | | | *i* S | | Sn | 04 32 39.7 | -0.4 |
| | baz=328 | | | | | | | |
| **SCZT** | **Fangliau** | **0.55** | **172** | *i* P | | Pb | 04 32 30.0 | +0.2 |
| | baz=160 | | | | | | | |
| SCZT | | | | *i* S | | Sn | 04 32 40.0 | -0.7 |
| | baz=160 | | | | | | | |
| **LONT** | **Longtian** | **0.55** | **91** | *i* P | | Pb | 04 32 30.4 | +0.6 |
| | baz=76 | | | | | | | |
| LONT | | | | *i* S | | Sb | 04 32 38.8 | +1.3 |
| | baz=76 | | | | | | | |
| **WLCH** | **Liuqiu** | **0.58** | **195** | *i* P | | Pn | 04 32 32.9 | +0.7 |
| | baz=195 | | | | | | | |
| WLCH | | | | *e*S | | Sn | 04 32 43.8 | +2.3 |
| | baz=195 | | | | | | | |
| **TTN** | **Taitung** | **0.59** | **106** | *i* P | | Pn | 04 32 31.8 | -0.5 |
| | baz=104 | | | | | | | |
| TTN | | | | S | | Sb | 04 32 40.0 | +1.4 |
| | baz=104 | | | | | | | |
| **CHY** | **Chiayi** | **0.59** | **350** | *i* P | | Pb | 04 32 31.3 | +0.7 |
| | baz=351 | | | | | | | |
| CHY | | | | *i* S | | Sn | 04 32 40.8 | -0.9 |
| | baz=351 | | | | | | | |
| **EAST** | **Anshuo** | **0.60** | **151** | *i* P | | Pb | 04 32 31.1 | +0.3 |
| | baz=142 | | | | | | | |
| EAST | | | | S | | Sn | 04 32 40.9 | -1.3 |
| | baz=142 | | | | | | | |
| **CHN2** | **Minshiung** | **0.62** | **355** | *i* P | | Pn | 04 32 32.0 | -0.7 |
| | baz=355 | | | | | | | |
| CHN2 | | | | *i* S | | Sn | 04 32 42.5 | 0.0 |
| | baz=355 | | | | | | | |
| **ALS** | **Alishan** | **0.64** | **23** | *i* P | | Pb | 04 32 31.8 | +0.2 |
| | baz=23 | | | | | | | |
| ALS | | | | *i* S | | Sn | 04 32 42.1 | -1.4 |
| | baz=23 | | | | | | | |
| **TAW** | **Tawu** | **0.65** | **149** | *i* P | | Pb | 04 32 31.7 | +0.2 |
| | baz=141 | | | | | | | |
| TAW | | | | S | | Sb | 04 32 41.2 | +0.9 |
| | baz=141 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.66** | **150** | P | | Pb | 04 32 31.8 | +0.2 |
| | baz=142 | | | | | | | |
| TAWH | | | | S | | Sb | 04 32 41.1 | +0.5 |
| | baz=142 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.67** | **335** | P | | Pb | 04 32 32.2 | +0.4 |
| | baz=336 | | | | | | | |
| WSL | | | | S | | Sn | 04 32 42.6 | -1.1 |
| | baz=336 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.69** | **34** | *i* P | | Pb | 04 32 33.0 | +0.5 |
| | baz=33 | | | | | | | |
| YUS | | | | *i* S | | Sn | 04 32 43.5 | -1.4 |
| | baz=33 | | | | | | | |
| **CHN5** | **Tsauling** | **0.69** | **11** | *i* P | | Pb | 04 32 32.9 | +0.5 |
| | baz=11 | | | | | | | |
| CHN5 | | | | *i* S | | Sn | 04 32 44.1 | -0.3 |
| | baz=11 | | | | | | | |
| **EDH** | **Donghe** | **0.71** | **85** | *i* P | | Pn | 04 32 33.7 | -0.3 |
| | baz=73 | | | | | | | |
| EDH | | | | *i* S | | Sn | 04 32 44.4 | -0.3 |
| | baz=73 | | | | | | | |
| **SLIU** | **Shizi** | **0.74** | **161** | *i* P | | Pb | 04 32 33.3 | +0.2 |
| | baz=154 | | | | | | | |
| SLIU | | | | *i* S | | Sn | 04 32 45.4 | 0.0 |
| | baz=154 | | | | | | | |
| **FULB** | **Fuli** | **0.75** | **68** | *i* P | | Pn | 04 32 34.7 | 0.0 |
| | baz=66 | | | | | | | |
| FULB | | | | *i* S | | Sn | 04 32 46.2 | +0.4 |
| | baz=66 | | | | | | | |
| **WDLH** | **Douliu** | **0.77** | **0** | *i* P | | Pn | 04 32 34.6 | -0.3 |
| WDLH | | | | *i* S | | Sn | 04 32 46.5 | +0.2 |
| **WSF** | **Szhu** | **0.78** | **338** | *i* P | | Pn | 04 32 34.5 | -0.5 |
| | baz=340 | | | | | | | |
| WSF | | | | *i* S | | Sn | 04 32 46.3 | -0.1 |
| | baz=340 | | | | | | | |
| **WTK** | **Tuku** | **0.78** | **350** | *i* P | | Pb | 04 32 34.3 | +0.5 |
| | baz=351 | | | | | | | |
| WTK | | | | *i* S | | Sn | 04 32 46.0 | -0.5 |
| | baz=351 | | | | | | | |
| **CHKT** | **Chengkung** | **0.79** | **76** | *i* P | | Pn | 04 32 35.2 | +0.1 |
| | baz=90 | | | | | | | |
| CHKT | | | | *e*S | | Sn | 04 32 47.3 | +0.7 |
| | baz=90 | | | | | | | |
| **TWF1** | **Yuli** | **0.82** | **58** | *i* P | | Pn | 04 32 35.3 | -0.3 |
| | baz=57 | | | | | | | |
| **EYUL** | **Yuli** | **0.84** | **59** | *i* P | | Pn | 04 32 35.5 | -0.4 |
| | baz=57 | | | | | | | |
| EYUL | | | | *i* S | | Sn | 04 32 48.0 | +0.1 |
| | baz=57 | | | | | | | |
| **YULB** | **Yu-li** | **0.85** | **56** | P | | Pb | 04 32 35.3 | +0.3 |
| | baz=47 | | | | | | | |
| YULB | | | | S | | Sn | 04 32 48.7 | +0.6 |
| | baz=47 | | | | | | | |
| **WDGT** | **Dungji** | **0.88** | **293** | *e*P | | Pb | 04 32 34.7 | -0.7 |
| | baz=294 | | | | | | | |
| **LDUT** | **Ludao** | **0.89** | **105** | *i* P | | Pg | 04 32 36.1 | +0.3 |
| | baz=92 | | | | | | | |
| LDUT | | | | S | | Sn | 04 32 51.2 | +2.0 |
| | baz=92 | | | | | | | |
| **WJS** | **Zhushan** | **0.92** | **11** | *i* P | | Pn | 04 32 37.1 | +0.2 |
| | baz=357 | | | | | | | |
| WJS | | | | *i* S | | Sn | 04 32 50.3 | +0.3 |
| | baz=357 | | | | | | | |
| **EHY** | **Hungye** | **0.93** | **51** | *i* P | | Pn | 04 32 37.0 | -0.1 |
| | baz=50 | | | | | | | |
| EHY | | | | *i* S | | Sn | 04 32 51.1 | +0.8 |
| | baz=50 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.93** | **163** | P | | Pn | 04 32 37.2 | +0.1 |
| | baz=150 | | | | | | | |
| SMST | | | | S | | Sn | 04 32 51.7 | +1.5 |
| | baz=150 | | | | | | | |
| **SSLB** | **Suanglung** | **0.95** | **24** | P | | Pg | 04 32 37.0 | +0.1 |
| | baz=23 | | | | | | | |
| SSLB | | | | S | | Sn | 04 32 51.0 | +0.3 |
| | baz=23 | | | | | | | |
| **WNT** | **Mingjian** | **0.97** | **8** | *i* P | | Pn | 04 32 37.6 | 0.0 |
| | baz=8.0 | | | | | | | |
| WNT | | | | *i* S | | Sn | 04 32 52.3 | +1.2 |
| | baz=8.0 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.97** | **346** | *i* S | | Sn | 04 32 51.4 | +0.1 |
| | baz=347 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.99** | **352** | P | | Pb | 04 32 37.5 | +0.1 |
| | baz=352 | | | | | | | |
| WRL | | | | S | | Sn | 04 32 51.5 | -0.2 |
| | baz=352 | | | | | | | |
| **HGSD** | **Ruisui** | **1.00** | **55** | P | | Pn | 04 32 39.0 | +1.0 |
| | baz=47 | | | | | | | |
| HGSD | | | | S | | Sn | 04 32 53.2 | +1.3 |
| | baz=47 | | | | | | | |
| **TWK1** | **Hengchun** | **1.00** | **166** | *i* P | | Pn | 04 32 38.3 | +0.3 |
| | baz=164 | | | | | | | |
| TWK1 | | | | S | | Sn | 04 32 54.3 | +2.4 |
| | baz=164 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.00** | **165** | P | | Pn | 04 32 38.0 | 0.0 |
| | baz=165 | | | | | | | |
| **VWDT** | **VWDT** | **1.00** | **34** | P | | Pn | 04 32 38.4 | +0.3 |
| | baz=40 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.02** | **19** | *i* P | | Pn | 04 32 38.6 | +0.1 |
| | baz=19 | | | | | | | |
| SMLT | | | | *i* S | | Sn | 04 32 54.0 | +1.5 |
| | baz=19 | | | | | | | |
| **TYC** | **Yuchr** | **1.03** | **17** | *i* P | | Pn | 04 32 38.9 | +0.5 |
| | baz=4.0 | | | | | | | |
| TYC | | | | *i* S | | Sn | 04 32 54.4 | +1.8 |
| | baz=4.0 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.06** | **161** | P | | Pg | 04 32 40.2 | +1.2 |
| | baz=163 | | | | | | | |
| TSEB | | | | *i* S | | Sn | 04 32 54.7 | +1.2 |
| | baz=163 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.07** | **304** | *e*P | | Pb | 04 32 37.5 | -1.2 |
| | baz=305 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.16** | **1** | P | | Pg | 04 32 40.9 | +0.1 |
| | baz=1.0 | | | | | | | |
| WCHH | | | | *i* S | | Sg | 04 32 57.8 | +1.8 |
| | baz=1.0 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.19** | **17** | P | | Pg | 04 32 41.1 | -0.2 |
| | baz=27 | | | | | | | |
| WCS | | | | S | | Sg | 04 32 57.9 | +1.0 |
| | baz=27 | | | | | | | |
| **WUSB** | **Renai** | **1.20** | **26** | P | | Pg | 04 32 41.3 | -0.3 |
| | baz=25 | | | | | | | |
| WUSB | | | | S | | Sg | 04 32 58.1 | +0.9 |
| | baz=25 | | | | | | | |
| **ESL** | **Shilin** | **1.22** | **42** | *i* P | | Pg | 04 32 42.0 | +0.1 |
| | baz=41 | | | | | | | |
| ESL | | | | *i* S | | Sg | 04 32 60.0 | +2.2 |
| | baz=41 | | | | | | | |
| **TCU** | **Taichung** | **1.23** | **6** | *i* P | | Pb | 04 32 41.7 | +0.2 |
| | baz=6.0 | | | | | | | |
| TCU | | | | *i* S | | Sg | 04 32 58.6 | +0.3 |
| | baz=6.0 | | | | | | | |
| **LAY** | **Lan-yu** | **1.28** | **133** | *i* P | | Pn | 04 32 41.7 | -0.3 |
| | baz=130 | | | | | | | |
| LAY | | | | S | | Sn | 04 32 59.2 | +0.3 |
| | baz=130 | | | | | | | |
| **CHGB** | **Renai** | **1.28** | **27** | P | | Pg | 04 32 43.0 | -0.2 |
| | baz=26 | | | | | | | |
| CHGB | | | | S | | Sg | 04 33 01.6 | +1.7 |
| | baz=26 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.40** | **29** | *i* P | | Pb | 04 32 44.9 | +0.4 |
| | baz=18 | | | | | | | |
| WHF | | | | S | | Sg | 04 33 04.0 | +0.4 |
| | baz=18 | | | | | | | |
| **WHP** | **Taichung City** | **1.41** | **15** | *i* P | | Pb | 04 32 44.4 | -0.2 |
| | baz=14 | | | | | | | |
| WHP | | | | *i* S | | Sg | 04 33 04.7 | +0.8 |
| | baz=14 | | | | | | | |
| **WDJ** | **Dajia District** | **1.43** | **4** | P | | Pb | 04 32 45.2 | +0.3 |
| | baz=3.0 | | | | | | | |
| WDJ | | | | *i* S | | Sg | 04 33 04.9 | +0.3 |
| | baz=3.0 | | | | | | | |
| **HWA** | **Hwalien** | **1.44** | **43** | *e*P | | Pg | 04 32 46.0 | -0.2 |
| | baz=26 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.44** | **9** | *i* P | | Pb | 04 32 45.6 | +0.5 |
| | baz=8.0 | | | | | | | |
| TWQ1 | | | | *i* S | | Sg | 04 33 05.9 | +0.9 |
| | baz=8.0 | | | | | | | |
| **TDCB** | **Techi** | **1.45** | **23** | P | | Pb | 04 32 45.0 | -0.3 |
| | baz=22 | | | | | | | |
| TDCB | | | | *e*S | | Sg | 04 33 05.3 | 0.0 |
| | baz=22 | | | | | | | |
| **TWT** | **Tachien** | **1.46** | **24** | *i* P | | Pb | 04 32 45.6 | +0.2 |
| | baz=22 | | | | | | | |
| TWT | | | | *i* S | | Sg | 04 33 06.0 | +0.5 |
| | baz=22 | | | | | | | |
| **FUSS** | **Fushou** | **1.48** | **26** | *i* P | | Pb | 04 32 45.4 | -0.4 |
| | baz=25 | | | | | | | |
| FUSS | | | | S | | Sg | 04 33 06.3 | +0.2 |
| | baz=25 | | | | | | | |
| **NSY** | **Sanyi** | **1.51** | **8** | *i* S | | Sg | 04 33 07.9 | +0.8 |
| | baz=7.0 | | | | | | | |
| **TWD** | **Chiawan** | **1.51** | **40** | *i* P | | Pb | 04 32 46.0 | -0.3 |
| | baz=38 | | | | | | | |
| TWD | | | | *i* S | | Sg | 04 33 07.7 | +0.4 |
| | baz=38 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.55** | **34** | P | | Pg | 04 32 47.7 | -0.6 |
| | baz=32 | | | | | | | |
| ETLH | | | | S | | Sg | 04 33 09.4 | +0.9 |
| | baz=32 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.59** | **38** | P | | Pb | 04 32 47.6 | 0.0 |
| | baz=35 | | | | | | | |
| NACB | | | | S | | Sg | 04 33 09.8 | +0.2 |
| | baz=35 | | | | | | | |
| **NMLH** | **Miaoli** | **1.63** | **8** | P | | Pb | 04 32 48.0 | -0.3 |
| | baz=7.0 | | | | | | | |
| NMLH | | | | S | | Sg | 04 33 10.3 | -0.8 |
| | baz=7.0 | | | | | | | |
| **NNS** | **Nan Shan** | **1.70** | **27** | P | | Pb | 04 32 48.8 | -0.8 |
| | baz=11 | | | | | | | |
| NNS | | | | *i* S | | Sg | 04 33 12.7 | -0.6 |
| | baz=11 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.76** | **14** | P | | Pn | 04 32 49.1 | +0.6 |
| | baz=13 | | | | | | | |
| NSTT | | | | S | | Sb | 04 33 13.2 | +0.7 |
| | baz=13 | | | | | | | |
| **LIOB** | **Emei** | **1.78** | **14** | *i* P | | Pn | 04 32 49.6 | +0.8 |
| | baz=13 | | | | | | | |
| LIOB | | | | *i* S | | Sb | 04 33 13.8 | +0.8 |
| | baz=13 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.79** | **17** | P | | Pn | 04 32 49.9 | +0.9 |
| | baz=359 | | | | | | | |
| NFF | | | | S | | Sg | 04 33 15.0 | -1.2 |
| | baz=359 | | | | | | | |
| **LATG** | **Datong** | **1.85** | **29** | *e*P | | Pb | 04 32 51.5 | -0.6 |
| | baz=27 | | | | | | | |
| LATG | | | | *e*S | | Sb | 04 33 15.2 | 0.0 |
| | baz=27 | | | | | | | |
| **ENA** | **Nanau** | **1.87** | **36** | *i* P | | Pn | 04 32 51.0 | +1.1 |
| | baz=34 | | | | | | | |
| ENA | | | | *i* S | | Sg | 04 33 17.4 | -1.2 |
| | baz=34 | | | | | | | |
| **EWUT** | **Wuta** | **1.90** | **37** | P | | Pb | 04 32 52.8 | -0.1 |
| | baz=34 | | | | | | | |
| EWUT | | | | S | | Sb | 04 33 17.6 | +1.1 |
| | baz=34 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.90** | **28** | *e*P | | Pb | 04 32 52.8 | -0.2 |
| | baz=26 | | | | | | | |
| NDT | | | | *e*S | | Sb | 04 33 16.9 | +0.3 |
| | baz=26 | | | | | | | |
| **NSK** | **Sanguang** | **1.91** | **23** | *i* P | | Pb | 04 32 51.9 | -1.1 |
| | baz=7.0 | | | | | | | |
| NSK | | | | *i* S | | Sb | 04 33 17.7 | +0.9 |
| | baz=7.0 | | | | | | | |
| **YHNB** | **Yeheng** | **1.91** | **24** | P | | Pn | 04 32 51.0 | +0.4 |
| | baz=6.0 | | | | | | | |
| YHNB | | | | *e*S | | Sg | 04 33 18.5 | -1.4 |
| | baz=6.0 | | | | | | | |
| **ENTT** | **Nioudou** | **1.96** | **29** | *i* P | | Pb | 04 32 53.3 | -0.6 |
| | baz=27 | | | | | | | |
| ENTT | | | | *i* S | | Sb | 04 33 19.3 | +1.1 |
| | baz=27 | | | | | | | |
| **NDS** | **Dongshan** | **2.02** | **32** | P | | Pb | 04 32 54.1 | -0.9 |
| | baz=47 | | | | | | | |
| NDS | | | | S | | Sb | 04 33 19.8 | -0.3 |
| | baz=47 | | | | | | | |
| **NWLT** | **Wulai** | **2.05** | **25** | *i* P | | Pn | 04 32 53.8 | +1.2 |
| | baz=9.0 | | | | | | | |
| NWLT | | | | S | | Sb | 04 33 20.5 | -0.4 |
| | baz=9.0 | | | | | | | |
| **TWC** | **Suao** | **2.07** | **35** | P | | Pb | 04 32 56.0 | +0.2 |
| | baz=34 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.07** | **27** | P | | Pb | 04 32 54.7 | -1.2 |
| | baz=26 | | | | | | | |
| FUSB | | | | S | | Sb | 04 33 21.4 | -0.2 |
| | baz=26 | | | | | | | |
| **TWE** | **Neicheng** | **2.08** | **30** | P | | Pb | 04 32 55.6 | -0.3 |
| | baz=12 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.36** | **30** | *i* P | | Pb | 04 32 58.8 | -2.0 |
| | baz=12 | | | | | | | |
| TIPB | | | | *i* S | | Sb | 04 33 27.8 | -2.1 |
| | baz=12 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.43** | **28** | *i* P | | Pb | 04 33 00.8 | -1.2 |
| | baz=11 | | | | | | | |
| NWF | | | | S | | Sb | 04 33 30.3 | -1.5 |
| | baz=11 | | | | | | | |
| **KNM** | **Kinmen** | **2.44** | **308** | *e*P | | Pn | 04 32 59.6 | +1.8 |
| | baz=309 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.48** | **329** | *e*P | | Pn | 04 33 00.1 | +1.7 |
| | baz=345 | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.49** | **29** | P | | Pb | 04 33 02.1 | -0.9 |
| | baz=12 | | | | | | | |
| SXI1 | | | | *e*S | | Sb | 04 33 31.4 | -2.2 |
| | baz=12 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.50** | **308** | *e*P | | Pn | 04 32 59.3 | +0.7 |
| | baz=311 | | | | | | | |
| **AXDP** | **Jialang** | **3.07** | **311** | *e*P | | Pn | 04 33 06.4 | -0.1 |
| | baz=313 | | | | | | | |
| **MATB** | **Ma-tsu** | **3.27** | **351** | *e*P | | Pn | 04 33 09.1 | -0.1 |
| | baz=352 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.46** | **337** | *e*P | | Pn | 04 33 12.4 | +0.7 |
| | baz=339 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.69** | **349** | *e*P | | Pn | 04 33 15.3 | +0.3 |
| | baz=351 | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.35** | **323** | *e*P | | Pn | 04 33 24.3 | +0.1 |
| | baz=327 | | | | | | | |

*TEH* **17** *04:34:59.7,28.05N×53.33E,h11km,ML3.2*
*OMAN* **17** *04:35:05.3±0.4,27.59N×53.17E,h148km±8km,mb4.6/2, ml3.1/4,Error ellipse: s-maj=26.5km s-min=11.8km az=239.0*
**ISC 17 04:34:59.4**±0.9,**28.01N**±0.04×**53.30E**±0.05,**h10**km,**n28,**
σ1§**82**/36,**Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GHIR** | **Ghir-Karzin** | **0.39** | **315** | *e*P | g | **Pg** | **04 35 07.6** | **+0.4** |
| **QIR1** | **Qir** | **0.52** | **334** | *e* | | | 04 35 29.9 | |
| | comp=Z,40μm,0.4s | | | | | | | |
| QIR1 | | | | *e*P | g | **Pg** | **04 35 09.8** | **+0.3** |
| **JHRM** | **Jahrom** | **0.55** | **26** | *e* | | | 04 35 22.3 | |
| | comp=Z,18μm,0.3s | | | | | | | |
| JHRM | | | | *e*P | g | **Pg** | **04 35 09.3** | **-0.8** |
| **LMD1** | **Lamerd** | **0.68** | **190** | *e*P | g | **Pg** | **04 35 13.7** | **+1.2** |
| LMD1 | | | | *e* | | | 04 35 32.7 | |
| | comp=Z,20μm,0.3s | | | | | | | |
| **LAR1** | **LAR** | **1.01** | **109** | *e*P | g | **Pb** | **04 35 19.4** | **+0.4** |
| LAR1 | | | | *e*S | g | **Sn** | **04 35 34.0** | **0.0** |
| LAR1 | | | | *e* | | | 04 35 38.7 | |
| | comp=Z,13μm,0.6s | | | | | | | |
| **SHI** | **Shiraz** | **1.77** | **337** | *e*P | g | **Pb** | **04 35 31.0** | **-1.0** |
| SHI | | | | *e* | | | 04 36 08.3 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **AHBU** | **AHRAM** | **1.96** | **296** | *e*P | g | **Pg** | **04 35 36.7** | **-0.3** |
| **KLNJ** | **Kolanjah** | **3.34** | **334** | *e*P | n | **Pn** | **04 35 53.6** | **+1.6** |
| KLNJ | | | | *e* | | | 04 36 59.0 | |
| | comp=Z,513nm,0.6s | | | | | | | |
| **NGRK** | **Negar Kerman** | **3.42** | **61** | *e*P | n | **Pn** | **04 35 53.9** | **+0.8** |
| NGRK | | | | *e* | | | 04 36 07.2 | |
| | comp=Z,374nm,0.3s | | | | | | | |
| **IMEH** | **Mehriz** | **3.56** | **18** | *e*P | n | **Pn** | **04 35 57.3** | **+2.4** |
| IMEH | | | | *e* | | | 04 36 02.3 | |
| | comp=Z,270nm,0.2s | | | | | | | |
| **KRBR** | **Kerman** | **3.61** | **56** | *e*P | n | **Pn** | **04 35 58.2** | **+2.5** |
| **TVBK** | **TV Kerman** | **3.61** | **56** | *e*P | n | **Pn** | **04 35 57.4** | **+1.6** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KHGB** | **Koh Gabri** | **3.64** | **49** | *e*Pn | **Pn** | **04 35 57.2** | **+1.1** |
| KHGB | | | | *e* | | 04 36 21.3 | |
| | comp=Z,301nm,0.7s | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **3.83** | **151** | P | **Pn** | **04 35 59.9** | **+1.5** |
| | SNR=6.2 | | | | | | |
| ASUD | | | | S | **Sn** | **04 36 42.2** | **-1.3** |
| **IRAM** | **Ramesheh** | **3.87** | **348** | *e*Pn | **Pn** | **04 36 00.3** | **+1.1** |
| IRAM | | | | *e* | | 04 37 14.8 | |
| | comp=Z,206nm,0.7s | | | | | | |
| **UOSS** | **Minazif** | **4.01** | **139** | P | **Pn** | **04 36 01.8** | **+0.9** |
| UOSS | | | | S | **Sn** | **04 36 46.9** | **-1.0** |
| **HATD** | **Hatta, Dubai** | **4.06** | **141** | P | **Pn** | **04 36 04.2** | **+2.6** |
| HATD | | | | S | **Sn** | **04 36 48.5** | **-0.7** |
| **IBAF** | **Bafgh** | **4.08** | **28** | *e* | | 04 36 04.7 | |
| | comp=Z,576nm,0.2s | | | | | | |
| IBAF | | | | *e*Pn | **Pn** | **04 36 03.7** | **+1.8** |
| **ASHO** | **Ashiyiah** | **4.13** | **143** | P | **Pn** | **04 36 03.3** | **+0.7** |
| | SNR=7.1 | | | | | | |
| ASHO | | | | S | **Sn** | **04 36 49.4** | **-1.7** |
| **CHMN** | **Cheshme madani** | **4.15** | **63** | *e* | | 04 36 32.2 | |
| | comp=Z,192nm,0.5s | | | | | | |
| CHMN | | | | *e*Pn | **Pn** | **04 36 05.8** | **+2.7** |
| **ICHK** | **Chekchek** | **4.33** | **13** | *e*Pn | **Pn** | **04 36 07.0** | **+1.5** |
| **YZKH** | **Yazd** | **4.51** | **14** | *e*Pn | **Pn** | **04 36 09.9** | **+2.1** |
| **NASN** | **Na'in** | **4.79** | **355** | *e*Pn | **Pn** | **04 36 13.7** | **+1.7** |
| **SOHO** | **SOHO** | **4.83** | **142** | P | **Pn** | **04 36 12.9** | **+0.7** |
| SOHO | | | | S | **Sn** | **04 37 07.1** | **-1.1** |
| **IZEF** | **Zefreh** | **4.94** | **350** | *e*Pn | **Pn** | **04 36 15.3** | **+1.3** |
| **ANAR** | **Anarak** | **5.18** | **4** | *e*Pn | **Pn** | **04 36 18.8** | **+1.7** |
| **SMDO** | **Samad** | **6.53** | **138** | P | **Pn** | **04 36 36.4** | **+0.8** |
| SMDO | | | | S | **Sn** | **04 37 47.9** | **-2.4** |
| **MHTO** | **MHTO** | **8.18** | **148** | P | **Pn** | **04 36 57.8** | **-0.4** |
| MHTO | | | | S | **Sn** | **04 38 24.7** | **-6.0** |

*IDC* ***17*** *04:44:32.4±4.6,23˚11S×68˚72W,h0km,mb3.6/5, mb1 3.9/5,mb1mx3.7/24,mbtmp3.6/5, Error ellipse: s-maj=176.9km s-min=30.2km az=14.0*

*GUC* ***17*** *04:44:51.4±0.7,21˚25S×68˚69W,h110km±4km, ML3.9*

**ISC 17 04:44:51.5±1.0,21˚24S±0.04×68˚66W±0.09,h102km±9km, n24,σ1°34/39,mb3.2/4,10C-4D,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PB09** | **IPOC Station P** | **0.77** | **224** | ⇑*i*P | | **Pn** | **04 45 10.1** | **+0.1** |
| PB09 | | | | *i* S | | **Sn** | **04 45 24.8** | **+1.0** |
| **PB01** | **IPOC Station P** | **0.80** | **284** | ⇑*i*P | | **Pn** | **04 45 09.5** | **-0.7** |
| PB01 | | | | *i* S | | **Sn** | **04 45 24.1** | **0.0** |
| PB01 | | | | IAML | | | 04 45 25.7 | |
| | comp=E,3μm,0.1s | | | | | | | |
| **PB02** | **IPOC Station P** | **1.15** | **266** | ⇑*i*P | | **Pn** | **04 45 13.4** | **-0.6** |
| PB02 | | | | *i* S | | **Sn** | **04 45 30.4** | **-0.4** |
| PB02 | | | | IAML | | | 04 45 36.4 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **PB08** | **IPOC Station P** | **1.19** | **337** | ⇓*i*P | | **Pn** | **04 45 15.0** | **+0.3** |
| PB08 | | | | *i* S | | **Sn** | **04 45 33.3** | **+1.4** |
| PB08 | | | | IAML | | | 04 45 36.0 | |
| | comp=E,1μm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.24** | **247** | ⇑*i*P | | **Pn** | **04 45 14.4** | **-0.6** |
| PB07 | | | | *i* S | | **Sn** | **04 45 32.6** | **-0.1** |
| PB07 | | | | IAML | | | 04 45 34.5 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **PB03** | **IPOC Station P** | **1.29** | **232** | ⇑*i*P | | **Pn** | **04 45 15.2** | **-0.4** |
| PB03 | | | | *i* S | | **Sn** | **04 45 33.3** | **-0.4** |
| PB03 | | | | IAML | | | 04 45 34.5 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.46** | **287** | ⇑*i*P | | **Pn** | **04 45 16.9** | **-0.6** |
| PATCX | | | | *i* S | | **Sn** | **04 45 37.0** | **-0.1** |
| PATCX | | | | IAML | | | 04 45 43.2 | |
| | comp=E,3μm,0.1s | | | | | | | |
| **HMBC** | **Humberstone** | **1.50** | **310** | ⇑*i*P | | **Pn** | **04 45 17.2** | **-0.8** |
| HMBC | | | | *i* S | | **Sn** | **04 45 37.4** | **-0.6** |
| HMBC | | | | IAML | | | 04 45 39.3 | |
| | comp=N,2μm,0.2s | | | | | | | |
| **TA01** | **Diego Aracena** | **1.57** | **295** | ⇑*i*P | | **Pn** | **04 45 18.0** | **-0.8** |
| TA01 | | | | *i* S | | **Sn** | **04 45 38.9** | **-0.6** |
| TA01 | | | | IAML | | | 04 45 40.2 | |
| | comp=E,3μm,0.2s | | | | | | | |
| **GO01** | **Chusmiza** | **1.64** | **342** | ⇓*i*P | | **Pn** | **04 45 20.2** | **0.0** |
| GO01 | | | | *i* S | | **Sn** | **04 45 43.2** | **+1.3** |
| GO01 | | | | IAML | | | 04 45 47.3 | |
| | comp=E,4μm,0.1s | | | | | | | |
| **TA02** | **Huaiquique** | **1.68** | **305** | *e*P | | **Pn** | **04 45 19.5** | **-0.6** |
| TA02 | | | | *i* S | | **Sn** | **04 45 41.0** | **-0.9** |
| **PB06** | **IPOC Station P** | **1.68** | **210** | ⇓*i*P | | **Pn** | **04 45 20.1** | **-0.3** |
| PB06 | | | | *i* S | | **Sn** | **04 45 42.6** | **+0.3** |
| PB06 | | | | IAML | | | 04 45 47.6 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **PB11** | **IPOC Station P** | **1.74** | **328** | ⇓*i*P | | **Pn** | **04 45 20.7** | **-0.4** |
| PB11 | | | | *i* S | | **Sn** | **04 45 43.0** | **-0.5** |
| PB11 | | | | IAML | | | 04 45 46.6 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.76** | **232** | ⇑*i*P | | **Pn** | **04 45 20.5** | **-0.8** |
| PB04 | | | | IAML | | | 04 45 45.4 | |
| | comp=N,864nm,0.5s | | | | | | | |
| **PB15** | **IPOC Station P** | **2.10** | **201** | ⇑*i*P | | **Pn** | **04 45 25.6** | **0.0** |
| PB15 | | | | *i* S | | **Sn** | **04 45 52.3** | **+0.7** |
| **PB10** | **IPOC Station P** | **2.86** | **217** | *e*P | | **Pn** | **04 45 34.5** | **-1.0** |
| PB10 | | | | IAML | | | 04 46 20.1 | |
| | comp=N,283nm,0.4s | | | | | | | |
| **PB16** | **IPOC Station P** | **3.00** | **344** | *e*P | | **Pn** | **04 45 38.6** | **+0.6** |
| **PB12** | **IPOC Station P** | **3.05** | **329** | *e*P | | **Pn** | **04 45 36.1** | **-2.0** |
| PB12 | | | | *i* S | | **Sn** | **04 46 12.4** | **-1.6** |
| PB12 | | | | IAML | | | 04 46 25.1 | |
| | comp=E,702nm,0.3s | | | | | | | |
| **BDFB** | **Brasilia** | **20.36** | **78** | P | | **P** | **04 49 17.0** | **-3.2** |
| | comp=E,1.4nm,0.5s,baz=278,slow=13,SNR=3.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.55** | **325** | P | | **P** | **04 54 54.0** | **+2.5** |
| | comp=E,0.1nm,0.4s,baz=140,slow=7.1,SNR=1.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.00** | **330** | P | | **P** | **04 56 19.5** | **+3.2** |
| | comp=E,0.1nm,0.3s,baz=138,slow=11,SNR=2.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.44** | **322** | P | | **P** | **04 56 27.6** | **+2.9** |
| | comp=E,0.3nm,0.7s,baz=148,slow=5.2,SNR=1.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.05** | **70** | P | | **P** | **04 56 31.4** | **-2.6** |
| | comp=E,1.1nm,0.6s,baz=254,slow=4.6,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.29** | **36** | PKPbc | | **PKPdf** | **05 04 15.8** | **-1.6** |
| | comp=E,0.2nm,0.6s,baz=333,slow=1.8,SNR=4.5 | | | | | | | |

**IDC 17 05:07:25.3±5.2,4˚02S×133˚13E,h0km,mb3.3/1, mb1 3.5/3,mb1mx3.3/38,mbtmp3.3/3,ML3.2/2,Error ellipse: s-maj=323.7km s-min=16.7km az=76.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **15.87** | **176** | Pn | | Pn | 05 11 09.6 | -0.7 |
| | 0.1nm,0.3s,baz=354,slow=16,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **19.55** | **178** | P | | Pn | 05 11 56.0 | 0.0 |
| | 0.1nm,0.3s,baz=5.0,slow=12,SNR=2.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.53** | **325** | P | | P | 05 18 23.3 | -0.1 |
| | 0.1nm,0.4s,baz=111,slow=6.9,SNR=2.2 | | | | | | | |

*IDC* ***17*** *05:13:01.8±1.2,32˚44N×47˚87E,h0km,mb3.9/17, mb1 4.0/23,mb1mx3.8/58,mbtmp3.9/23,ML3.9/6,MS3.0/3, Ms1 3.0/3,ms1mx2.7/85,Error ellipse: s-maj=28.0km s-min=13.9km az=173.0*

*SGS* ***17*** *05:13:02.7,32˚77N×48˚14E,h7km,Ml4.4*

*NEIC* ***17*** *05:13:03.7±1.8,32˚38N±0.08×47˚87E±0.08,h10km±1km, mb4.2/27,mb_Lg4.1(TEH),Error ellipse: s-maj=14.5km s-min=9.9km az=26.0*

*ISN* ***17*** *05:13:04.2±1.2,32˚47N×47˚88E,h20km±26km,ML3.6*

*TEH* ***17*** *05:13:05.0,32˚51N×47˚93E,h17km,ML4.1*

*MOS* ***17*** *05:13:11.7±1.1,33˚01N×47˚93E,h61km,mb4.3/20,Error ellipse: s-maj=9.4km s-min=5.3km az=110.6*

*OMAN* ***17*** *05:13:14.5±3.2,31˚21N×47˚91E,h12km±156km,mb5.5/16, ms3.2/4,Error ellipse: s-maj=299.8km s-min=14.2km az=323.0*

**ISC 17 05:13:05.5±1.1,32˚46N±0.03×47˚94E±0.03,h28km±8km, n226,σ2°28/241,mb4.0/37,25C-6D,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **IKFM** | **Kafar-mosalman** | **1.07** | **356** | *e*Pg | | **Pn** | **05 13 24.2** | **-0.4** |
| IKFM | | | | *e*Sg | | **Sb** | **05 13 38.6** | **-0.4** |
| IKFM | | | | *e* | | | 05 13 45.2 | |
| | comp=Z,82μm,0.5s | | | | | | | |
| **AHWZ** | **Ahwaz** | **1.27** | **152** | *e*Pg | | **Pb** | **05 13 29.7** | **+0.8** |
| AHWZ | | | | *e*Sg | | **Sb** | **05 13 49.8** | **+5.0** |
| **IDOB** | **Doab** | **1.34** | **9** | *e*Pg | | **Pb** | **05 13 29.8** | **-0.4** |
| IDOB | | | | *e* | | | 05 13 55.9 | |
| | comp=Z,21μm,0.7s | | | | | | | |
| **AMIS** | **Naft Sefid** | **1.39** | **124** | *e*Pg | | **Pb** | **05 13 31.3** | **+0.4** |
| AMIS | | | | *e*Sg | | **Sb** | **05 13 51.8** | **+3.5** |
| **BMDN** | **Meydan** | **1.43** | **31** | *e*Pg | | **Pb** | **05 13 31.6** | **0.0** |
| BMDN | | | | *e* | | | 05 14 00.8 | |
| | comp=Z,24μm,0.8s | | | | | | | |
| **RAFI** | **Al-Rafai** | **1.71** | **245** | *e*Pg | | **Pn** | **05 13 34.5** | **+1.1** |
| RAFI | | | | *e*Sg | | **Sb** | **05 13 56.0** | **-1.3** |
| RAFI | | | | AML | AML | | 05 14 07.2 | |
| | comp=E,789nm,0.6s | | | | | | | |
| **IBDR** | **Badra** | **1.81** | **292** | *e*Pn | | **Pn** | **05 13 35.5** | **+0.7** |
| IBDR | | | | *e*Sn | | **Sb** | **05 13 59.0** | **-1.3** |
| **HSAM** | **Samen** | **1.84** | **18** | *e*Pn | | **Pb** | **05 13 37.5** | **-1.2** |
| **KCHF** | **Cheshme Sefid,** | **1.96** | **338** | *e*Pn | | **Pn** | **05 13 38.6** | **+1.5** |
| KCHF | | | | *e* | | | 05 14 12.5 | |
| | comp=Z,12μm,0.5s | | | | | | | |
| **IBZA** | **Bozab** | **2.01** | **358** | *e*Pn | | **Pb** | **05 13 40.5** | **-1.1** |
| IBZA | | | | *e* | | | 05 14 14.0 | |
| | comp=Z,15μm,0.7s | | | | | | | |
| **KER** | **Kermanshah** | **2.04** | **341** | P | | **Pn** | **05 13 39.6** | **+1.5** |
| **KER** | **Kermanshah** | **2.04** | **341** | *e*Pn | | **Pn** | **05 13 39.9** | **+1.8** |
| **KHMZ** | **Khmeyn** | **2.13** | **52** | *e*Pn | | **Pb** | **05 13 42.2** | **-1.3** |
| **IGHG** | **Ghaleghazi** | **2.19** | **329** | *e*Pn | | **Pb** | **05 13 42.5** | **-2.1** |
| IGHG | | | | *e* | | | 05 14 34.4 | |
| | comp=Z,20μm,1.0s | | | | | | | |
| **IALM** | **Almabolaq** | **2.41** | **5** | *e*Pn | | **Pb** | **05 13 46.2** | **-2.1** |
| **SHK1** | **Shahrekord** | **2.50** | **92** | *e*Pn | | **Pb** | **05 13 47.0** | **-2.9** |
| SHK1 | | | | *e* | | | 05 14 39.2 | |
| | comp=Z,9μm,0.7s | | | | | | | |
| **IPIR** | **Pirpir** | **2.51** | **84** | *e*Pn | | **Pb** | **05 13 47.5** | **-2.5** |
| IPIR | | | | *e* | | | 05 14 31.2 | |
| | comp=Z,10μm,0.5s | | | | | | | |
| **HAGD** | **Aghdareh** | **2.57** | **23** | *e*Pn | | **Pn** | **05 13 47.7** | **+2.3** |
| HAGD | | | | *e* | | | 05 14 30.7 | |
| | comp=Z,8μm,0.5s | | | | | | | |
| **IDHR** | **Dehrash** | **2.58** | **330** | *e*Pn | | **Pn** | **05 13 47.5** | **+1.8** |
| IDHR | | | | *e* | | | 05 14 31.9 | |
| | comp=Z,6μm,0.5s | | | | | | | |
| **SNGE** | **Sanandaj** | **2.68** | **350** | *e*Pn | | **Pn** | **05 13 49.0** | **+2.1** |
| **ABEH** | **Behbahan** | **2.71** | **132** | *e*Pn | | **Pn** | **05 13 49.3** | **+2.1** |
| **ASAO** | **Ashtian** | **2.72** | **39** | *e*Pn | | **Pb** | **05 13 50.6** | **-3.1** |
| **IBRJ** | **Brojen** | **2.87** | **100** | *e*Pn | | **Pn** | **05 13 51.9** | **+2.2** |
| IBRJ | | | | *e* | | | 05 14 58.7 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **BHD** | **Baghdad** | **3.10** | **286** | *e*Pn | | **Pn** | **05 13 52.5** | **0.0** |
| BHD | | | | *e*Sn | | **Sn** | **05 14 29.0** | **+0.4** |
| BHD | | | | AML | AML | | 05 14 57.6 | |
| | comp=E,333nm,0.6s | | | | | | | |
| **QAMS** | **Qamsar** | **3.17** | **65** | *e*Pn | | **Pn** | **05 13 56.2** | **+2.4** |
| QAMS | | | | *e* | | | 05 14 49.8 | |
| | comp=Z,6μm,0.4s | | | | | | | |
| **IKLH** | **Kolahrood** | **3.18** | **73** | *e*Pn | | **Pn** | **05 13 56.4** | **+2.4** |
| IKLH | | | | *e* | | | 05 15 02.4 | |
| | comp=Z,5μm,0.7s | | | | | | | |
| **IRAZ** | **Razeghan** | **3.38** | **29** | *e*Pn | | **Pn** | **05 13 58.5** | **+1.9** |
| IRAZ | | | | *e* | | | 05 14 59.4 | |
| | comp=Z,5μm,1.1s | | | | | | | |
| **KLNJ** | **Kolanjah** | **3.43** | **114** | *e*Pn | | **Pn** | **05 13 59.6** | **+2.1** |
| **GHVR** | **GHOM** | **3.46** | **53** | *e*Pn | | **Pn** | **05 14 01.3** | **+3.7** |
| **IGAR** | **Gharneh** | **3.47** | **90** | *e*Pn | | **Pn** | **05 14 00.4** | **+2.5** |
| **QABG** | **Abgarm-Qazvin** | **3.52** | **22** | *e*Pn | | **Pn** | **05 13 59.4** | **+0.8** |
| **IQOM** | **Qom** | **3.54** | **47** | *e*Pn | | **Pn** | **05 14 01.2** | **+2.4** |
| IQOM | | | | *e* | | | 05 14 18.6 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **IZEF** | **Zefreh** | **3.73** | **82** | *e*Pn | | **Pn** | **05 14 04.0** | **+2.5** |
| **IRAM** | **Rameseh** | **3.83** | **99** | *e*Pn | | **Pn** | **05 14 04.9** | **+2.1** |
| IRAM | | | | *e* | | | 05 15 28.1 | |
| | comp=Z,2μm,0.8s | | | | | | | |
| **KRSH** | **Karshahi** | **3.83** | **66** | *e*Pn | | **Pn** | **05 14 05.5** | **+2.7** |
| **IMHD** | **Mahdasht** | **3.94** | **34** | *e*Pn | | **Pn** | **05 14 06.4** | **+2.2** |
| **IVRN** | **Varamin** | **4.05** | **50** | *e*Pn | | **Pn** | **05 14 08.2** | **+2.5** |
| **ISFB** | **Sefidab** | **4.07** | **61** | *e*Pn | | **Pn** | **05 14 08.0** | **+2.1** |
| ISFB | | | | *e* | | | 05 15 30.1 | |
| | comp=Z,1μm,0.7s | | | | | | | |
| **IHSB** | **Hasanabad** | **4.07** | **42** | *e*Pn | | **Pn** | **05 14 08.5** | **+2.5** |
| **NASN** | **Na'in** | **4.13** | **84** | *e*Pn | | **Pn** | **05 14 09.7** | **+2.7** |
| **IKRK** | **Kirkuk** | **4.19** | **315** | *e*Pn | | **Pn** | **05 14 09.0** | **+1.5** |
| IKRK | | | | *e*Sn | | **Sn** | **05 14 55.0** | **-0.6** |
| IKRK | | | | AML | AML | | 05 15 30.2 | |
| | comp=E,119nm,0.3s | | | | | | | |
| IKRK | | | | AML | AML | | 05 15 39.7 | |
| | comp=N,133nm,0.6s | | | | | | | |
| **THKV** | **Tehran--Karaj** | **4.23** | **34** | *e*Pn | | **Pn** | **05 14 08.0** | **-0.2** |
| **ZNJK** | **Zanjan** | **4.25** | **8** | *e*Pn | | **Pn** | **05 14 11.1** | **+2.5** |
| **CHTH** | **Charan** | **4.34** | **37** | *e*Pn | | **Pn** | **05 14 12.4** | **+2.5** |
| **IGZV** | **Ghazvin** | **4.35** | **25** | *e*Pn | | **Pn** | **05 14 13.0** | **+3.0** |
| **SRFHA** | **Rafha** | **4.46** | **221** | S | | **Sn** | **05 15 06.8** | **+4.7** |
| SRFHA | Rafha | 4.46 | 221 | P | | Pn | 05 14 13.9 | +2.7 |
| **JIR1** | **Jirandeh** | **4.51** | **19** | *e*Pn | | **Pn** | **05 14 12.7** | **+0.6** |
| **QALM** | **Alamut, Qazvin** | **4.56** | **29** | *e*Pn | | **Pn** | **05 14 14.5** | **+1.7** |
| **IDMV** | **Damavand** | **4.61** | **46** | *e*Pn | | **Pn** | **05 14 16.0** | **+2.4** |
| **MAHB** | **Mahabad** | **4.68** | **337** | *e*Pn | | **Pn** | **05 14 16.2** | **+1.8** |
| **QYSM** | **Um Kedad** | **4.68** | **192** | P | | **Pn** | **05 14 16.7** | **+2.4** |
| **ANAR** | **Anarak** | **4.93** | **80** | *e*Pn | | **Pn** | **05 14 19.9** | **+2.0** |
| **LHJ2** | **Lahijan - Gila** | **5.01** | **20** | *e*Pn | | **Pn** | **05 14 21.3** | **+2.5** |
| **ILAS** | **Lasjerd** | **5.10** | **54** | *e*Pn | | **Pn** | **05 14 22.4** | **+2.2** |
| **IFIR** | **Firoozkooh** | **5.11** | **50** | *e*Pn | | **Pn** | **05 14 22.3** | **+1.9** |
| **IPRN** | **Peran** | **5.25** | **43** | *e*Pn | | **Pn** | **05 14 24.7** | **+2.5** |
| **IBST** | **Bostanabad** | **5.30** | **351** | *e*Pn | | **Pn** | **05 14 24.8** | **+1.8** |
| **ISRB** | **Sarab** | **5.36** | **358** | *e*Pn | | **Pn** | **05 14 26.2** | **+2.4** |
| **SARAR** | **Arar** | **5.53** | **250** | P | | **Pn** | **05 14 27.0** | **+1.0** |
| **ISHM** | **Shahmirzad** | **5.56** | **52** | *e*Pn | | **Pn** | **05 14 29.3** | **+2.7** |
| **IMEH** | **Mehriz** | **5.78** | **99** | *e*Pn | | **Pn** | **05 14 32.2** | **+2.6** |
| **IANJ** | **Anjilo** | **5.81** | **57** | *e*Pn | | **Pn** | **05 14 31.7** | **+1.7** |
| **ASYS** | | **5.84** | **213** | P | | **Pn** | **05 14 30.5** | **+0.2** |
| **IHRS** | **Heris** | **5.89** | **353** | *e*Pn | | **Pn** | **05 14 33.6** | **+2.4** |
| **GHIR** | **Ghir-Karzin** | **6.03** | **132** | *e*Pn | | **Pn** | **05 14 34.1** | **+1.2** |
| **SMAN** | **Sihmah** | **6.26** | **179** | P | | **Pn** | **05 14 36.9** | **+0.9** |
| **IGLO** | **Ghaloghah** | **6.32** | **49** | *e*Pn | | **Pn** | **05 14 40.3** | **+3.2** |
| **GRMI** | **Germi** | **6.34** | **360** | *e*Pn | | **Pn** | **05 14 39.7** | **+2.5** |
| **IBAF** | **Bafgh** | **6.54** | **96** | *e*Pn | | **Pn** | **05 14 42.5** | **+2.5** |
| **SIRT** | **Sirnak** | **6.76** | **320** | Pn | | **Pn** | **05 14 44.5** | **+1.5** |
| **RMAH** | **Rumah** | **7.14** | **188** | P | | **Pn** | **05 14 50.0** | **+1.8** |
| **TPRV** | **Parvadeh(Tabas** | **7.39** | **83** | *e*Pn | | **Pn** | **05 14 54.0** | **+2.3** |
| **SHRO** | **Shahrood** | **7.56** | **60** | *e*Pn | | **Pn** | **05 14 56.2** | **+2.3** |
| **MARD** | **Mardin** | **7.62** | **311** | Pn | | **Pn** | **05 14 55.1** | **+0.4** |
| **GURO** | **Guroymak-BITLI** | **7.75** | **323** | | | **Pn** | **05 14 57.2** | **+0.6** |
| **TKDS** | **Koohdasht(Taba** | **7.80** | **79** | *e*Pn | | **Pn** | **05 14 59.3** | **+2.0** |
| **TABS** | **Tabas** | **7.80** | **79** | *e*Pn | | **Pn** | **05 14 59.4** | **+2.1** |
| **HIL03** | **Ash Shuqayq** | **8.08** | **232** | P | | **Pn** | **05 15 00.8** | **-0.3** |
| **GNI** | **Garni** | **8.10** | **342** | *i* P | | **Pn** | **05 14 57.1** | **-4.3** |
| **HIL01** | **Al Amaaer** | **8.40** | **220** | P | | **Pn** | **05 15 04.1** | **-1.4** |
| **MRVT** | **Maraveh tapeh** | **8.46** | **50** | *e*Pn | | **Pn** | **05 15 09.3** | **+3.0** |
| **SBZV** | **Sabzevar** | **8.90** | **61** | *e*Pn | | **Pn** | **05 15 15.1** | **+2.6** |
| **RAYN** | **Ar Rayn** | **9.15** | **194** | Pn | | **Pn** | **05 15 14.3** | **-1.5** |
| **ASF** | **Jabal al Asfar** | **9.35** | **271** | Pn | | **Pn** | **05 15 16.4** | **-2.1** |
| | comp=N,0.6nm,0.3s,baz=43,slow=10,SNR=3.1 | | | | | | | |
| **ISFR** | **Sfrayin** | **9.46** | **58** | *e*Pn | | **Pn** | **05 15 23.1** | **+2.9** |
| **BSRN** | **Basiran** | **9.49** | **90** | *e*Pn | | **Pn** | **05 15 22.9** | **+2.4** |
| **AFFS** | **`Afif** | **9.54** | **208** | P | | Pn | 05 15 15.2 | -6.0 |
| **SHME** | **Shamm** | **9.59** | **130** | P | | **Pn** | **05 15 22.3** | **+0.5** |
| SHME | | | | S | | **Sn** | **05 17 03.1** | **-5.6** |
| **BANOM** | **Banah** | **9.78** | **130** | P | | **Pn** | **05 15 23.5** | **-0.9** |
| | SNR=15 | | | | | | | |
| BANOM | | | | S | | **Sn** | **05 17 07.5** | **-5.9** |
| | SNR=7.2 | | | | | | | |
| **MASF** | **Masafi** | **10.08** | **132** | P | | **Pn** | **05 15 27.8** | **-0.7** |
| MASF | | | | S | | **Sn** | **05 17 15.5** | **-5.2** |
| **ASUD** | **Al Ashush, Dub** | **10.15** | **138** | P | | **Pn** | **05 15 30.0** | **+0.6** |
| | SNR=8.4 | | | | | | | |
| **UOSS** | **Minazif** | **10.42** | **134** | Pn | | **Pn** | **05 15 32.8** | **-0.4** |
| **UOSS** | **Minazif** | **10.42** | **134** | P | | **Pn** | **05 15 31.6** | **-1.5** |
| UOSS | | | | S | | **Sn** | **05 17 22.6** | **-6.3** |
| **SHRT** | **Shahrakht** | **10.44** | **80** | *e*Pn | | **Pn** | **05 15 36.5** | **+3.1** |
| **HATD** | **Hatta, Dubai** | **10.47** | **135** | P | | **Pn** | **05 15 33.3** | **-0.4** |
| HATD | | | | S | | **Sn** | **05 17 22.4** | **-7.7** |
| **ASHO** | **Ashiyiah** | **10.53** | **135** | P | | **Pn** | **05 15 34.0** | **-0.6** |
| | SNR=6.5 | | | | | | | |
| ASHO | | | | S | | **Sn** | **05 17 26.6** | **-5.1** |
| **MMAI** | **Mount Meron Ar** | **10.57** | **276** | Pn | | **Pn** | **05 15 35.3** | **+0.1** |
| | comp=N,1.1nm,0.3s,baz=76,slow=18,SNR=1.7 | | | | | | | |
| **SOHO** | **SOHO** | **11.22** | **135** | P | | **Pn** | **05 15 40.7** | **-3.4** |
| SOHO | | | | P | | **Pn** | **05 15 40.7** | **-3.4** |
| SOHO | | | | S | | **Sn** | **05 17 43.0** | **-5.7** |
| SOHO | | | | S | | **Sn** | **05 17 43.0** | **-5.7** |
| **EIL** | **Elat** | **11.47** | **259** | LR | | LR | 05 21 30.9 | |
| | comp=N,35nm,19.4s,baz=350,slow=45 | | | | | | | |
| **KBZ** | **Khabaz** | **11.93** | **342** | *i* P | | **Pn** | **05 15 52.2** | **-1.4** |
| **KIV** | **Kislovodsk** | **12.20** | **342** | *e*P | | **Pn** | **05 15 57.3** | **-0.1** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **BSY** | **Bisya** | **12.68** | **137** | P | | **Pn** | **05 16 03.4** | **-0.7** |
| | SNR=8.1 | | | | | | | |
| BSY | | | | P | | **Pn** | **05 16 03.4** | **-0.7** |
| | SNR=8.1 | | | | | | | |
| BSY | | | | S | | **Sn** | **05 18 16.3** | **-8.0** |
| BSY | | | | S | | **Sn** | **05 18 16.3** | **-8.0** |
| **SMDO** | **Samad** | **12.95** | **134** | P | | **Pn** | **05 16 07.1** | **-0.6** |
| SMDO | | | | S | | **Sn** | **05 18 24.6** | **-6.4** |
| **WSAR** | **Wadi Sarin** | **13.18** | **131** | Pn | | **Pn** | **05 16 08.8** | **-2.0** |
| | comp=Z,1.0nm,0.3s,baz=18,slow=14,SNR=7.0 | | | | | | | |
| WSAR | | | | LR | | LR | 05 22 13.8 | |
| | comp=Z,102nm,19.2s,baz=319,slow=42 | | | | | | | |
| **BRTR** | **Keskin Array B** | **13.64** | **306** | Pn | | **Pn** | **05 16 17.8** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=131,slow=6.5,SNR=1.6 | | | | | | | |
| **JLN** | **Jalan Bani Buh** | **14.46** | **132** | P | | **Pn** | **05 16 28.0** | **-0.3** |
| JLN | | | | S | | **Sn** | **05 18 58.9** | **-8.8** |
| **MHTO** | **MHTO** | **14.51** | **139** | P | | **Pn** | **05 16 26.7** | **-2.3** |
| | SNR=12 | | | | | | | |
| MHTO | | | | S | | Sn | 05 18 59.2 | -10 |
| **DOK** | **Doka** | **14.86** | **156** | P | | **Pn** | **05 16 31.0** | **-2.8** |
| DOK | | | | P | | **Pn** | **05 16 31.0** | **-2.8** |
| DOK | | | | S | | Sn | 05 19 03.6 | -14 |
| DOK | | | | S | | Sn | 05 19 03.6 | -14 |
| **WHFO** | **Wadi Hawf** | **15.40** | **159** | P | | **Pn** | **05 16 37.5** | **-3.4** |
| | SNR=6.5 | | | | | | | |
| **ELL** | **Elmali** | **15.45** | **291** | P | | **P** | **05 16 45.8** | **0.0** |
| ELL | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **ELL** | **Elmali** | **15.45** | **291** | | | **P** | **05 16 45.8** | **0.0** |
| **AKAS** | **Kas** | **15.60** | **289** | P | | **P** | **05 16 47.1** | **-0.4** |
| **ABTO** | **Aybut** | **15.80** | **161** | P | | **Pn** | **05 16 42.8** | **-3.4** |
| ABTO | | | | S | | Sn | 05 19 29.3 | -11 |
| **BORA** | **Eskisehir** | **15.93** | **303** | P | | **P** | **05 16 50.9** | **-0.1** |
| **SHAO** | **Shalim** | **15.96** | **152** | P | | **Pn** | **05 16 48.2** | **+0.1** |
| | SNR=8.2 | | | | | | | |
| SHAO | | | | S | | Sn | 05 19 31.7 | -12 |
| **DMTO** | **DMTO** | **15.98** | **155** | P | | **Pn** | **05 16 44.7** | **-3.7** |
| DMTO | | | | S | | Sn | 05 19 32.2 | -13 |
| **ABKAR** | **Akbulak array** | **19.04** | **25** | P | | **Pn** | **05 17 26.3** | **+0.2** |
| **ABKAR** | **Akbulak array** | **19.04** | **25** | P | | **Pn** | **05 17 27.1** | **+0.9** |
| **VRH** | **Novokhopyorsk** | **19.28** | **348** | *e*P | | **P** | **05 17 27.8** | **-0.1** |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **19.34** | **285** | P | | **P** | **05 17 29.0** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=79,slow=14,SNR=10.0 | | | | | | | |
| **IDI** | **Anoyia** | **19.34** | **285** | P | | **Pn** | **05 17 30.8** | **+0.9** |
| IDI | | | | IAmb | IAmb | | 05 17 36.8 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **ALN** | **Alexandroupoli** | **19.44** | **302** | P | | **P** | **05 17 29.9** | **+0.2** |
| ALN | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **ALN** | **Alexandroupoli** | **19.44** | **302** | P | | **P** | **05 17 29.9** | **+0.2** |
| **AKTO** | **Aktyubinsk** | **19.46** | **20** | P | | **P** | **05 17 29.2** | **-0.6** |
| | comp=Z,0.5nm,0.3s,baz=150,slow=4.6,SNR=7.1 | | | | | | | |
| **VORD** | **Divnogorie** | **19.56** | **344** | *e*P | | **P** | **05 17 30.0** | **-0.9** |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **VSR** | **Storozhevoye** | **19.82** | **344** | *e*P | | **P** | **05 17 34.0** | **+0.

BRVK pmax pmax
comp=Z,3.0nm,1.0s
**BRVK Borovoye 26.13 31 P P 05 18 38.2 +1.2**
BRVK IAmb IAmb 05 18 44.6
comp=Z,4.0nm,1.1s
**KIRV Kirov 26.15 2** *ce* P **P 05 18 37.9 +0.9**
**BVAR Borovoye Array 26.16 32 P P 05 18 38.5 +1.2**
comp=Z,1.1nm,0.5s,baz=98,slow=3.3,SNR=7.9
**PSZ Piszkesteto 26.22 314** P **P 05 18 39.2 +1.3**
PSZ pmax pmax
comp=Z,9.0nm,0.8s
**PSZ Piszkesteto 26.22 314** P P **P 05 18 39.2 +1.3**
**PSZ Piszkesteto 26.22 314** P P **P 05 18 40.2 +2.3**
**MORH Mrgy, Hungar 26.32 310** P P **P 05 18 40.1 +1.3**
**OJC Ojcow 27.35 319** P P **P 05 18 50.4 +2.4**
OJC pmax pmax
comp=Z,9.0nm,1.0s
**OJC Ojcow 27.35 319** P P **P 05 18 50.4 +2.4**
OJC IAmb IAmb 05 18 54.6
comp=Z,8.9nm,1.0s
**KURBB Kurchatov Arra 28.92 42** P P **P 05 19 04.0 +2.0**
comp=Z,1.0nm,0.6s,baz=246,slow=9.4,SNR=9.2
**KURK Kurchatov 29.02 42** *i* P P **P 05 19 04.9 +2.1**
KURK pmax pmax
comp=Z,9.0nm,2.3s
**KURK Kurchatov 29.02 42** P P **P 05 19 04.0 +1.1**
**KURK Kurchatov 29.02 42** IAmb IAmb 05 19 05.5
comp=Z,2.1nm,0.8s
**MK31 Makanchi Array 29.82 51** P P **P 05 19 11.0 +1.0**
MK31 pmax pmax
comp=Z,1.0nm,0.7s
**MK31 Makanchi Array 29.82 51** P P **P 05 19 11.0 +1.0**
**MKAR Makanchi Array 29.82 51** P P **P 05 19 11.8 +1.7**
comp=Z,1.2nm,0.6s,baz=249,slow=7.9,SNR=17
**GERES GERESS Array B 30.38 313** P P **P 05 19 16.3 +1.2**
comp=Z,0.5nm,0.5s,baz=122,slow=5.0,SNR=2.2
**FINES FINESS Array B 32.28 340** P P **P 05 19 31.8 +0.3**
comp=Z,1.9nm,0.4s,baz=147,slow=9.5,SNR=24
**ZAA0 Zalesovo Array 33.85 40** P P **P 05 19 46.2 +0.9**
**ZALV Zalesovo Beam 33.85 40** P P **P 05 19 46.1 +0.8**
comp=Z,3.5nm,0.4s,baz=236,slow=8.2,SNR=19
**DGZ Jazzator, Alta 33.92 48** *i* P P **P 05 19 46.5 +0.3**
DGZ pmax pmax
comp=Z,1.0nm,0.5s
**NOA NORSAR Array B 37.22 331** P P **P 05 20 13.9 -0.2**
comp=Z,0.8nm,0.9s,baz=112,slow=9.5,SNR=1.6
**ARCES ARCESS Array B 39.21 348** P P **P 05 20 31.7 +0.9**
comp=Z,1.9nm,0.7s,baz=156,slow=9.3,SNR=6.6
**ESDC Sonseca Array 42.08 295** P P **P 05 20 55.5 +0.5**
comp=Z,0.6nm,0.6s,baz=77,slow=8.0,SNR=11
**SONM Songino Array 46.16 53** P P **P 05 21 28.9 +1.2**
comp=Z,0.2nm,0.4s,baz=294,slow=10.0,SNR=2.5
**TORD Torodi Ar. Bea 46.34 257** P P **P 05 21 29.5 +0.2**
comp=Z,0.4nm,0.7s,baz=72,slow=8.0,SNR=2.6
**ULN Ulaanbaatar 46.60 53** *ce* P **P 05 21 31.8 +0.6**
ULN pmax pmax
comp=Z,4.0nm,1.7s
**DAG Danmarks Havn 53.34 345** *i* P P **P 05 22 21.7 0.0**
DAG IAmb IAmb 05 22 22.2
comp=Z,2.7nm,0.6s
**TIXI Tiksi 56.72 22** *i* P P **P 05 22 46.2 +0.1**
TIXI pmax pmax
comp=Z,2.0nm,1.4s
**SUMG Summit 58.31 339** P P **P 05 22 59.1 +1.3**
**SUMG Summit 58.31 339** *i* P P **P 05 22 57.4 -0.4**
SUMG IAmb IAmb 05 23 00.5
comp=Z,2.8nm,0.6s
**SUMG Summit 58.31 339** P P **P 05 22 59.1 +1.3**
**KLR Kul'dur 62.42 47** P P **P 05 23 26.0 +0.2**
comp=Z,0.6nm,0.6s,baz=315,slow=14
**KLR Kul'dur 62.42 47** P P **P 05 23 26.0 +0.2**
**SEY Seymchan 67.76 29** *i* P P **P 05 24 01.5 +1.3**
**MA2 Magadan 68.64 32** *i* P P **P 05 24 06.6 +0.8**
MA2 pmax pmax
comp=Z,2.0nm,1.1s
**SCHQ Schefferville 76.66 327** P P **P 05 24 53.6 0.0**
comp=Z,2.2nm,0.9s,baz=312,slow=15,SNR=1.6
**SCHQ Schefferville 76.66 327** P P **P 05 24 54.4 +0.8**
SCHQ IAmb IAmb 05 24 58.2
comp=Z,4.8nm,1.1s
**TOLK Toolik Lake Re 78.37 6** P P **P 05 25 03.6 +0.6**
**YKA Yellowknife Ar 84.34 352** P P **P 05 25 34.6 0.0**
comp=Z,0.3nm,0.6s,baz=17,slow=5.2,SNR=6.2
**YKA Yellowknife Ar 84.34 352** *ce* P **P 05 25 36.2 +1.6**

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*IDC* ***17*** *05:27:48.0±1.9, 12°.97N×125°.51E, h0km, mb3.6/6, mb1 3.7/6, mb1mx3.3/45, mbtmp3.6/6, Error ellipse: s-maj=225.5km s-min=19.2km az=68.0*
*MAN* ***17*** *05:27:54.2, 12°.87N×124°.68E, h16km, mb5.0, ML3.9, MS3.9*

**ISC 17 05:27:51.4±1.2, 12°.88N±0°.07×124°.85E±0°.09, h10km, n10, σ1§71/11, mb3.6/6, 3D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RCP** | **Roxas** | **2.44** | **238** | ‖ *e*P | | **Pn** | **05 28 33.4** | **+2.0** |
| RCP | | | | *e*S | | **Sb** | **05 29 04.5** | **-1.1** |
| **GQP** | **Guinayangan** | **2.55** | **294** | ‖ *e*P | | **Pn** | **05 28 33.4** | **+0.6** |
| GQP | | | | *e*S | | **Sg** | **05 29 11.5** | **-1.9** |
| **LLP** | **Lapu-Lapu** | **2.69** | **199** | *e*P | | **Pn** | **05 28 35.9** | **+1.0** |
| LLP | | | | *e*S | | **Sb** | **05 29 13.6** | **+0.7** |
| **LQP** | **Lukban** | **3.44** | **291** | ‖ *e*P | | **Pn** | **05 28 48.6** | **+3.2** |
| **WRA** | **Warramunga Arr** | **33.93** | **164** | P | | P | 05 34 31.5 | -3.5 |
| | 0.7nm,0.6s,baz=342,slow=9.5,SNR=5.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **37.39** | **166** | P | | **P** | **05 35 03.4** | **-1.4** |
| | 0.5nm,0.5s,baz=356,slow=7.8,SNR=7.9 | | | | | | | |
| **SONM** | **Songino Array** | **38.10** | **340** | P | | **P** | **05 35 10.6** | **0.0** |
| | 0.4nm,0.6s,baz=144,slow=10,SNR=2.4 | | | | | | | |
| **STKA** | **Stephens Creek** | **47.31** | **161** | P | | P | 05 36 21.8 | -3.6 |
| | 0.8nm,0.5s,baz=336,slow=7.9,SNR=3.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.12** | **322** | P | | **P** | **05 36 39.8** | **+0.5** |
| | 0.2nm,0.7s,baz=111,slow=7.9,SNR=1.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.68** | **331** | P | | **P** | **05 36 57.9** | **-0.6** |
| | 0.8nm,0.5s,baz=106,slow=11,SNR=4.3 | | | | | | | |

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*DJA* ***17*** *05:31:21.6±1.1, 4°.5±6°×15°.3E±1°.3, h71km±6km, M4.7/11, mB5.5/3, mb4.7/11, MLv4.7/1, Mw(mB)4.9/3*
*IDC* ***17*** *05:31:23.6±0.9, 4°.66S×152°.51E, h62km±6km, mb4.2/20, mb1 4.4/23, mb1mx4.1/43, mbtmp4.5/23, MS3.4/27, Ms1 3.4/27, ms1mx3.3/63, Error ellipse: s-maj=17.2km s-min=9.5km az=81.0*
*NEIC* ***17*** *05:31:23.5±1.6, 4°.64S±0°.07×152°.57E±0°.09, h62km±6km, mb4.7/45, Error ellipse: s-maj=12.6km s-min=9.9km az=81.0*

**ISC 17 05:31:23.1±0.5, 4°.69S±0°.05×152°.60E±0°.07, h58km, n95, σ1§09/84, mb4.6/43, MS3.4/23, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.66** | **318** | Pn | | **Pn** | **05 31 36.8** | **-0.1** |
| **KRVT** | **Keravat (AS076** | **0.69** | **303** | P | | **Pn** | **05 31 38.0** | **+0.9** |
| KRVT | | | | S | | **Sn** | **05 31 48.0** | **+0.7** |
| **PMG** | **Port Moresby** | **7.15** | **229** | P | | **Pn** | **05 33 06.1** | **+0.9** |
| | 4.9nm,0.3s,baz=51,slow=13,SNR=3.0 | | | | | | | |
| PMG | | | | S | | **Sn** | **05 34 27.1** | **+2.0** |
| | 11nm,0.3s,baz=209,slow=24,SNR=3.7 | | | | | | | |
| PMG | | | | LR | | LR | 05 35 21.7 | |
| | comp=Z,183nm,18.9s,baz=350,slow=34 | | | | | | | |
| **PMG** | **Port Moresby** | **7.15** | **229** | Pn | | **Pn** | **05 33 06.8** | **+1.6** |
| **HNR** | **Honiara** | **8.68** | **123** | LR | | LR | 05 37 06.7 | |
| | comp=Z,296nm,19.9s,baz=300,slow=39 | | | | | | | |
| **PATS** | **Pohnpei** | **12.79** | **27** | Pn | | **Pn** | **05 34 22.0** | **-0.3** |
| **COEN** | **Coen** | **13.09** | **225** | Pn | | **Pn** | **05 34 24.6** | **-1.7** |
| **CTA** | **Charters Tower** | **16.51** | **201** | P | | **P** | **05 35 12.4** | **-0.4** |
| | 0.2nm,0.3s,baz=37,slow=13,SNR=5.0 | | | | | | | |
| CTA | | | | LR | | LR | 05 41 15.9 | |
| | comp=Z,63nm,20.3s,baz=26,slow=36 | | | | | | | |
| **CTAO** | **Charters Tower** | **16.51** | **201** | Pn | | **Pn** | **05 35 09.8** | **-1.2** |
| **SANVU** | **Saraoutou** | **17.90** | **128** | P | | **P** | **05 35 28.2** | **+0.1** |
| SANVU | | | | IAmb | | IAmb | 05 35 50.9 | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **GUMO** | **Guam** | **19.71** | **337** | P | | **P** | **05 35 48.8** | **+0.8** |
| | comp=Z,6.6nm,0.3s,baz=214,slow=10,SNR=5.0 | | | | | | | |
| GUMO | | | | LR | | LR | 05 42 33.4 | |
| | comp=Z,47nm,20.2s,baz=102,slow=34 | | | | | | | |
| **GUMO** | **Guam** | **19.71** | **337** | IAmb | | IAmb | 05 35 55.5 | |
| | comp=Z,297nm,1.2s | | | | | | | |
| **EIDS** | **Eidsvold** | **20.62** | **184** | P | | **P** | **05 35 57.9** | **+0.1** |
| **SIJI** | **Sorong** | **21.64** | **279** | P | | **P** | **05 36 09.3** | **+0.4** |
| | comp=Z,9.5nm,0.2s,baz=125,slow=6.1,SNR=4.7 | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.87** | **143** | P | | **P** | **05 36 13.5** | **+2.1** |
| | comp=Z,18nm,0.5s,baz=295,slow=9.3,SNR=49 | | | | | | | |
| DZM | | | | LR | | LR | 05 43 45.3 | |
| | comp=Z,184nm,21.2s,baz=2.0,slow=34 | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.87** | **143** | *e*P | | **P** | **05 36 12.6** | **+1.2** |
| | comp=Z,50nm,0.9s | | | | | | | |
| DZM | | | | *e*LR | | LR | 05 41 29.9 | |
| | comp=Z,505nm,29.4s | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.87** | **143** | P | | **P** | **05 36 12.2** | **+0.9** |
| **ONTNC** | **Ouen Toro** | **22.06** | **144** | P | | **P** | **05 36 13.8** | **+0.5** |
| ONTNC | | | | IAmb | | IAmb | 05 36 16.0 | |
| | comp=Z,44nm,1.1s | | | | | | | |
| **OUENC** | **Ouen Island, N** | **22.37** | **143** | P | | **P** | **05 36 17.1** | **+0.4** |
| OUENC | | | | IAmb | | IAmb | 05 36 46.0 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.23** | **228** | P | | **P** | **05 36 24.8** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | 05 36 28.2 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.23** | **228** | P | | **P** | **05 36 24.6** | **-0.9** |
| WR0 | | | | IAmb | | IAmb | 05 36 26.5 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.36** | **228** | P | | **P** | **05 36 25.8** | **-1.0** |
| WRAB | | | | IAmb | | IAmb | 05 36 28.6 | |
| | comp=Z,21nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **23.36** | **228** | P | | **P** | **05 36 25.8** | **-1.0** |
| **WRA** | **Warramunga Arr** | **23.37** | **228** | P | | **P** | **05 36 26.1** | **-0.8** |
| | comp=Z,13nm,0.5s,baz=52,slow=10,SNR=104 | | | | | | | |
| WRA | | | | pP | | **pwP** | **05 36 41.7** | **+1.7** |
| | comp=Z,5.8nm,0.7s,baz=52,slow=10,SNR=5.6 | | | | | | | |
| WRA | | | | LR | | LR | 05 44 53.0 | |
| | comp=Z,65nm,22.0s,baz=83,slow=35 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.37** | **228** | P | | **P** | **05 36 25.3** | **-1.6** |
| **KNRA** | **Kununurra** | **25.85** | **243** | P | | **P** | **05 36 49.5** | **0.0** |
| KNRA | | | | IAmb | | IAmb | 05 37 14.4 | |
| | comp=Z,35nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **26.10** | **222** | P | | **P** | **05 36 50.9** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.10** | **222** | P | | **P** | **05 36 51.4** | **-0.4** |
| | comp=Z,2.1nm,0.5s,baz=55,slow=9.0,SNR=19 | | | | | | | |
| ASAR | | | | pP | | **pwP** | **05 37 07.7** | **-1.4** |
| | comp=Z,2.6nm,0.5s,baz=59,slow=8.8,SNR=6.8 | | | | | | | |
| ASAR | | | | LR | | LR | 05 46 28.7 | |
| | comp=Z,66nm,21.6s,baz=65,slow=35 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.10** | **222** | P | | **P** | **05 36 50.7** | **-1.0** |
| **MSVF** | **Nonsavu** | **28.07** | **120** | LR | | LR | 05 47 46.0 | |
| | comp=Z,115nm,21.1s,baz=171,slow=35 | | | | | | | |
| **STKA** | **Stephens Creek** | **28.95** | **200** | P | | **P** | **05 37 16.1** | **-1.0** |
| | comp=Z,3.1nm,0.7s,baz=30,slow=15,SNR=8.5 | | | | | | | |
| STKA | | | | LR | | LR | 05 48 59.7 | |
| | comp=Z,76nm,18.7s,baz=26,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **28.95** | **200** | P | | **P** | **05 37 16.7** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **29.54** | **241** | P | | **P** | **05 37 20.8** | **-1.7** |
| | comp=Z,3.1nm,0.3s,baz=70,slow=5.5,SNR=44 | | | | | | | |
| FITZ | | | | pP | | **pP** | **05 37 36.4** | **-0.4** |
| | comp=Z,2.9nm,0.4s,baz=47,slow=7.5,SNR=4.2 | | | | | | | |
| FITZ | | | | LR | | LR | 05 49 20.8 | |
| | comp=Z,70nm,18.8s,baz=142,slow=37 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.54** | **241** | IAmb | | IAmb | 05 37 38.0 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **31.96** | **207** | P | | **P** | **05 37 43.0** | **-0.7** |
| BBOO | | | | IAmb | | IAmb | 05 38 08.8 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **34.75** | **219** | P | | **P** | **05 38 07.0** | **-1.0** |
| **MBWA** | **Marble Bar** | **35.86** | **240** | P | | **P** | **05 38 16.5** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **35.92** | **239** | P | | **P** | **05 38 16.0** | **-2.2** |
| PSA00 | | | | IAmb | | IAmb | 05 38 22.0 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **HIZ** | **Hauiti** | **39.28** | **152** | P | | **P** | **05 38 46.8** | **+0.4** |
| **URZ** | **Urewera** | **40.18** | **150** | P | | **P** | **05 38 54.9** | **+1.1** |
| | comp=Z,9.5nm,0.7s,baz=218,slow=0.8,SNR=1.4 | | | | | | | |
| URZ | | | | LR | | LR | 05 53 03.1 | |
| | comp=Z,24nm,21.2s,baz=299,slow=32 | | | | | | | |
| **RPZ** | **Rata Peaks** | **42.14** | **160** | P | | **P** | **05 39 10.6** | **+0.7** |
| | comp=Z,17nm,0.8s,baz=203,slow=16,SNR=3.5 | | | | | | | |
| RPZ | | | | LR | | LR | 05 54 15.1 | |
| | comp=Z,129nm,19.6s,baz=290,slow=32 | | | | | | | |
| **JNU** | **Nakatsue** | **42.87** | **333** | P | | **P** | **05 39 17.1** | **+1.1** |
| | comp=Z,23nm,0.8s,baz=133,slow=3.1,SNR=4.9 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.17** | **343** | LR | | LR | 05 54 51.8 | |
| | comp=Z,84nm,21.2s,baz=152,slow=33 | | | | | | | |
| **KSRS** | **Korea Array** | **47.81** | **333** | P | | **P** | **05 39 54.8** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=153,slow=8.4,SNR=5.5 | | | | | | | |
| KSRS | | | | LR | | LR | 05 58 39.9 | |
| | comp=Z,13nm,20.5s,baz=345,slow=34 | | | | | | | |
| **NJ2** | **Nanjing** | **48.63** | **321** | *e*P | | **P** | **05 40 02.0** | **+0.6** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **RAR** | **Rarotonga** | **49.00** | **114** | LR | | LR | 05 57 44.0 | |
| | comp=Z,37nm,21.7s,baz=266,slow=32 | | | | | | | |
| **ASAJ** | **Asahikawa** | **49.41** | **351** | LR | | LR | 06 01 41.9 | |
| | comp=Z,20nm,18.3s,baz=160,slow=37 | | | | | | | |
| **XAN** | **Xi'an** | **56.41** | **316** | P | | **P** | **05 40 59.9** | **+0.9** |
| XAN | | | | pP | | pwP | 05 41 16.0 | -0.6 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **KLR** | **Kul'dur** | **56.68** | **344** | LR | | LR | 06 02 09.5 | |
| | comp=Z,54nm,21.4s,baz=254,slow=33 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.65** | **295** | P | | **P** | **05 41 08.4** | **+0.4** |
| | comp=Z,2.8nm,0.3s,baz=102,slow=4.9,SNR=7.1 | | | | | | | |
| CMAR | | | | LR | | LR | 06 04 29.1 | |
| | comp=Z,18nm,21.2s,baz=265,slow=34 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.74** | **4** | P | | **P** | **05 41 07.1** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=161,slow=7.3,SNR=5.3 | | | | | | | |
| PETK | | | | LR | | LR | 06 00 03.1 | |
| | comp=Z,78nm,21.1s,baz=162,slow=30 | | | | | | | |
| **PZH** | **PanZhiHua** | **58.15** | **305** | P | | **P** | **05 41 15.8** | **+4.3** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,80nm,6.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.84** | **324** | *e*P | | **P** | **05 41 17.4** | **+1.4** |
| **SHEM** | **Shemya Is, Ala** | **60.03** | **15** | LR | | LR | 06 05 28.4 | |
| | comp=Z,72nm,18.5s,baz=286,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **66.13** | **328** | P | | **P** | **05 42 04.4** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=151,slow=4.7,SNR=5.0 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **05 42 35.8** | **+1.2** |
| | comp=Z,0.6nm,0.6s,baz=135,slow=3.5,SNR=3.9 | | | | | | | |
| **SONM** | **Songino Array** | **66.13** | **328** | IAmb | | IAmb | 05 42 07.5 | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **SEY** | **Seymchan** | **67.43** | **360** | LR | | LR | 06 10 14.3 | |
| | comp=Z,25nm,20.1s,baz=304,slow=35 | | | | | | | |
| **YAK** | **Yakutsk** | **68.83** | **349** | LR | | LR | 06 10 23.5 | |
| | comp=Z,24nm,21.4s,baz=170,slow=34 | | | | | | | |
| **WMQ** | **Urumqi** | **75.53** | **317** | *e*P | | **P** | **05 43 02.3** | **+0.6** |
| **CNPM** | **China Poot** | **77.70** | **26** | P | | **P** | **05 43 13.0** | **-0.5** |
| **FIS** | **Fire Island** | **78.98** | **25** | P | | **P** | **05 43 20.0** | **-0.5** |
| **J20K** | **Nowinta River** | **79.15** | **21** | P | | **P** | **05 43 21.0** | **-0.4** |
| J20K | | | | IAmb | | IAmb | 05 43 23.1 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **CAST** | **Castle Rocks** | **79.47** | **22** | P | | **P** | **05 43 22.5** | **-0.7** |
| CAST | | | | IAmb | | IAmb | 05 43 24.0 | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **PWL** | **Port Wells** | **79.63** | **25** | P | | **P** | **05 43 23.6** | **-0.4** |
| **MK31** | **Makanchi Array** | **80.11** | **319** | P | | **P** | **05 43 26.1** | **-0.9** |
| **MKAR** | **Makanchi Array** | **80.11** | **319** | P | | **P** | **05 43 26.9** | **-0.1** |
| | comp=Z,0.5nm,0.4s,baz=98,slow=7.4,SNR=19 | | | | | | | |
| MKAR | | | | LR | | LR | 06 21 44.8 | |
| | comp=Z,25nm,18.2s,baz=306,slow=38 | | | | | | | |
| **RND** | **Reindeer** | **80.70** | **23** | P | | **P** | **05 43 28.7** | **-1.2** |
| RND | | | | IAmb | | IAmb | 05 43 30.2 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **MCK** | **McKinley** | **80.83** | **23** | P | | **P** | **05 43 29.5** | **-1.0** |
| **ZAA0** | **Zalesovo Array** | **80.95** | **326** | P | | **P** | **05 43 30.8** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **80.95** | **326** | P | | **P** | **05 43 30.3** | **-1.0** |
| | comp=Z,2.8nm,0.5s,baz=112,slow=5.7,SNR=12 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.95** | **326** | P | | **P** | **05 43 30.5** | **-0.8** |
| **KLU** | **Klutina** | **80.96** | **25** | P | | **P** | **05 43 31.5** | **+0.2** |
| KLU | | | | IAmb | | IAmb | 05 43 35.1 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **DHY** | **Denali Highway** | **81.11** | **24** | P | | **P** | **05 43 31.6** | **-0.6** |
| **NEA2** | **Nenana** | **81.23** | **22** | P | | **P** | **05 43 31.5** | **-1.1** |
| NEA2 | | | | IAmb | | IAmb | 05 43 32.9 | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **WRH** | **Wood River Hil** | **81.53** | **22** | P | | **P** | **05 43 33.2** | **-0.9** |
| WRH | | | | IAmb | | IAmb | 05 43 35.0 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.72** | **22** | P | | **P** | **05 43 33.8** | **-1.4** |
| CCB | | | | IAmb | | IAmb | 05 43 34.7 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **GLB** | **Gilahina Butte** | **81.84** | **26** | P | | **P** | **05 43 35.5** | **-0.5** |
| GLB | | | | IAmb | | IAmb | 05 43 37.0 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **IL31** | | **82.13** | **22** | P | | **P** | **05 43 35.9** | **-1.3** |
| IL31 | | | | IAmb | | IAmb | 05 43 36.8 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.13** | **22** | P | | **P** | **05 43 35.9** | **-1.5** |
| | comp=Z,3.9nm,0.7s,baz=247,slow=4.8,SNR=53 | | | | | | | |
| ILAR | | | | LR | | LR | 06 12 45.0 | |
| | comp=Z,25nm,21.4s,baz=261,slow=30 | | | | | | | |
| **H24K** | **Noodor Dome** | **82.29** | **21** | IAmb | | IAmb | 05 43 39.5 | |
| | comp=Z,8.7nm,1.4s | | | | | | | |
| **DOT** | **Dot Lake** | **82.71** | **24** | P | | **P** | **05 43 39.9** | **-0.4** |
| DOT | | | | IAmb | | IAmb | 05 43 41.1 | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **SCRK** | **Sand Creek** | **82.88** | **23** | P | | **P** | **05 43 41.1** | **-0.3** |
| **L27K** | **Beaver Creek,** | **83.37** | **25** | P | | **P** | **05 43 44.1** | **+0.3** |
| **EGAK** | **Eagle** | **84.33** | **23** | P | | **P** | **05 43 48.7** | **+0.1** |
| EGAK | | | | IAmb | | IAmb | 05 43 50.6 | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **85.27** | **180** | P | | **P** | **05 43 52.5** | **-1.1** |
| | comp=Z,2.2nm,0.8s,baz=227,slow=1.1,SNR=13 | | | | | | | |
| **QSPA** | **South Pole Qui** | **85.27** | **180** | IAmb | | IAmb | 05 44 19.4 | |
| | comp=Z,8.1nm,1.2s | | | | | | | |
| **BBB** | **Bella Bella** | **87.13** | **37** | LR | | LR | 06 17 55.6 | |
| | comp=Z,29nm,18.4s,baz=318,slow=32 | | | | | | | |
| **INK** | **Inuvik** | **88.42** | **21** | P | | **P** | **05 44 08.2** | **-0.4** |
| | comp=Z,2.3nm,0.6s,baz=270,slow=3.0,SNR=14 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.17** | **52** | P | | **P** | **05 44 28.9** | **+1.8** |
| | comp=Z,0.4nm,0.7s,baz=260,slow=8.9,SNR=3.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.42** | **28** | P | | **P** | **05 44 40.8** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=269,slow=5.0,SNR=26 | | | | | | | |
| **WSAR** | **Wadi Sarin** | **95.47** | **293** | LR | | LR | 06 31 30.6 | |
| | comp=Z,18nm,18.8s,baz=7.5,slow=38 | | | | | | | |
| **ARU** | **Arti** | **96.11** | **326** | LR | | LR | 06 31 01.3 | |
| | comp=Z,86nm,18.8s,baz=164,slow=37 | | | | | | | |
| **GERES** | **GERESS Array B** | **123.86** | **328** | PKP | | **PKPdf** | **05 50 15.0** | **0.0** |
| | comp=Z,1.1nm,0.5s,baz=50,slow=2.1,SNR=5.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.09** | **288** | PKPbc | | **PKPbc** | **05 51 07.4** | **-1.1** |
| | comp=Z,2.5nm,0.4s,baz=69,slow=2.4,SNR=34 | | | | | | | |
| **BDFB** | **Brasilia** | **151.28** | **135** | PKPbc | | **PKPbc** | **05 51 11.6** | **+0.2** |
| | comp=Z,3.4nm,0.7s,baz=13,slow=1.5,SNR=4.3 | | | | | | | |

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**TAP 17 05:39:25.4, 21°.26N×121°.83E, h175km±1km, ML3.5, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LYUB** | **Lan-yu** | **0.78** | **343** | P | | Pn | 05 39 50.2 | -0.8 |
| | baz=342 | | | | | | | |
| LYUB | | | | S | | Sn | 05 40 09.4 | -1.5 |
| | baz=342 | | | | | | | |
| **LAY** | **Lan-yu** | **0.82** | **341** | P | | Pn | 05 39 52.1 | +0.8 |
| | baz=341 | | | | | | | |
| LAY | | | | S | | Sn | 05 40 11.2 | -0.3 |
| | baz=341 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.08** | **307** | S | | Sn | 05 40 15.3 | +0.7 |
| | baz=305 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.08** | **307** | *i* S | | Sn | 05 40 15.3 | +0.7 |
| | baz=263 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.17** | **306** | P | | Pn | 05 39 54.1 | +0.2 |
| | baz=305 | | | | | | | |
| TWKBT | | | | S | | Sn | 05 40 15.2 | -0.7 |
| | baz=305 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.17** | **306** | S | | Sn | 05 40 15.7 | -0.3 |
| | baz=269 | | | | | | | |
| **TWK1** | **Hengchun** | **1.18** | **306** | *i* P | | Pn | 05 39 54.1 | +0.1 |
| | baz=305 | | | | | | | |
| TWK1 | | | | S | | Sn | 05 40 14.9 | -1.2 |
| | baz=305 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.20** | **310** | P | | Pn | 05 39 54.1 | 0.0 |
| | baz=309 | | | | | | | |
| SMST | | | | *e*S | | Sn | 05 40 15.9 | -0.5 |
| | baz=309 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.20** | **310** | S | | Sn | 05 40 16.2 | -0.2 |
| | baz=280 | | | | | | | |
| **HEN** | **Hengchun** | **1.26** | **306** | *e*S | | Sn | 05 40 16.4 | -0.9 |
| | baz=306 | | | | | | | |
| **SLIU** | **Shizi** | **1.35** | **315** | *i* P | | Pn | 05 39 55.4 | -0.1 |
| | baz=314 | | | | | | | |
| SLIU | | | | *i* S | | Sn | 05 40 18.0 | -0.9 |
| | baz=314 | | | | | | | |
| **SLIU** | **Shizi** | **1.35** | **315** | S | | Sn | 05 40 18.2 | -0.7 |
| | baz=302 | | | | | | | |
| **TAWH** | **Dawu Township** | **1.39** | **321** | P | | Pn | 05 39 55.2 | -0.6 |
| | baz=320 | | | | | | | |
| TAWH | | | | *e*S | | Sn | 05 40 17.2 | -2.3 |
| | baz=320 | | | | | | | |
| **TAW** | **Tawu** | **1.40** | **322** | P | | Pn | 05 39 56.7 | +0.7 |
| | baz=321 | | | | | | | |
| TAW | | | | *e*S | | Sn | 05 40 17.4 | -2.2 |
| | baz=321 | | | | | | | |
| **EAST** | **Anshuo** | **1.45** | **321** | *i* P | | Pn | 05 39 56.0 | -0.5 |
| | baz=321 | | | | | | | |
| EAST | | | | *i* S | | Sn | 05 40 19.1 | -1.4 |
| | baz=321 | | | | | | | |
| **LDUT** | **Ludao** | **1.45** | **347** | *e*S | | Sn | 05 40 18.3 | -2.2 |
| | baz=346 | | | | | | | |
| **ECL** | **Taimali** | **1.56** | **329** | P | | Pn | 05 39 59.2 | +1.7 |
| | baz=328 | | | | | | | |
| ECL | | | | *i* S | | Sn | 05 40 19.9 | -2.6 |
| | baz=328 | | | | | | | |
| **SCZT** | **Fangliau** | **1.58** | **315** | *i* P | | Pn | 05 39 57.4 | -0.3 |
| | baz=314 | | | | | | | |
| SCZT | | | | *i* S | | Sn | 05 40 21.9 | -0.9 |
| | baz=314 | | | | | | | |
| **TWGBT** | **Beinan** | **1.70** | **336** | P | | Pn | 05 39 59.2 | +0.3 |
| | baz=335 | | | | | | | |
| TWGBT | | | | S | | Sn | 05 40 22.4 | -2.6 |
| | baz=335 | | | | | | | |
| **TWG** | **Pinlang** | **1.71** | **336** | P | | Pn | 05 39 59.1 | +0.1 |
| | baz=335 | | | | | | | |
| TWG | | | | S | | Sn | 05 40 22.6 | -2.6 |
| | baz=335 | | | | | | | |
| **WLCH** | **Liuqiu** | **1.73** | **309** | *e*P | | Pn | 05 40 00.1 | +0.9 |
| | baz=308 | | | | | | | |
| WLCH | | | | *e*S | | Sn | 05 40 23.8 | -1.7 |
| | baz=308 | | | | |

baz=331
**ALS Alishan 2.44 337** P Pn 05 40 07.4 +0.1
baz=337
ALS S Sn 05 40 38.5 -1.5
baz=337
**CHN5 Tsauling 2.56 336** *e*S Sn 05 40 40.7 -1.6
baz=335
**VWDT VWDT 2.57 346** *e*P Pn 05 40 09.3 +0.8
baz=345
VWDT *e*S Sn 05 40 41.8 -0.4
baz=345
**SSLB Suanglung 2.65 342** *e*P Pn 05 40 09.6 0.0
baz=342
SSLB *e*S Sn 05 40 41.8 -2.2
baz=342
**WSL Shuilin Townsh 2.70 327** *e*S Sn 05 40 43.4 -1.6
baz=326
**TYC Yuchr 2.79 341** *e*S Sn 05 40 45.8 -1.1
baz=341
**WUSB Renai 2.80 347** *e*P Pn 05 40 11.8 +0.3
baz=346
WUSB *e*S Sn 05 40 46.8 -0.7
baz=346
**WDGT Dungji 2.83 315** *e*S Sn 05 40 46.2 -1.6
baz=314
**CHGB Renai 2.86 348** *e*S Sn 05 40 48.8 -0.1
baz=347
**WHF Hehuan Shan 2.92 350** *e*S Sn 05 40 49.8 -0.8
baz=349
**VCHM Qimei 2.96 312** *e*S Sn 05 40 49.5 -1.0
baz=311
**WRL Guolierlin Hig 2.96 333** *e*S Sn 05 40 51.0 +0.4
baz=332
**FUSS Fushou 3.03 350** *e*P Pn 05 40 15.1 +0.7
baz=349
**PHUB P'eng-hu 3.07 317** *e*S Sn 05 40 51.0 -2.0
baz=317
**WHP Taichung City 3.12 345** *e*P Pn 05 40 15.6 +0.2
baz=344
WHP *e*S Sn 05 40 54.2 -0.1
baz=344

**TAP 17 05:40:00.2,21.94N×121.27E,h22km±1km,ML2.5,D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAY** | **Lan-yu** | **0.28** | **70** | *i* P | Pb | 05 40 07.2 | +0.5 |
| | baz=70 | | | | | | |
| LAY | | | | S | Sn | 05 40 13.4 | -1.2 |
| | baz=70 | | | | | | |
| **LYUB** | **Lan-yu** | **0.30** | **79** | *e*P | Pb | 05 40 07.0 | +0.1 |
| | baz=78 | | | | | | |
| LYUB | | | | S | Sb | 05 40 11.9 | +0.4 |
| | baz=78 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **0.34** | **263** | P | Pn | 05 40 08.9 | -1.0 |
| | baz=263 | | | | | | |
| **TWKBT** | **Hengchun** | **0.42** | **270** | P | Pn | 05 40 10.0 | -1.0 |
| | baz=269 | | | | | | |
| **TWK1** | **Hengchun** | **0.43** | **270** | *i* S | Sb | 05 40 16.5 | +1.4 |
| | baz=269 | | | | | | |
| **HEN** | **Hengchun** | **0.50** | **277** | *e*P | Pn | 05 40 11.1 | -0.9 |
| | baz=277 | | | | | | |
| HEN | | | | S | Sb | 05 40 17.7 | +0.6 |
| | baz=277 | | | | | | |
| **SLIU** | **Shizi** | **0.51** | **302** | P | Pn | 05 40 11.9 | -0.3 |
| | baz=302 | | | | | | |
| **TAWH** | **Dawu Township** | **0.53** | **318** | P | Pb | 05 40 11.1 | +0.3 |
| | baz=318 | | | | | | |
| TAWH | | | | *e*S | Sb | 05 40 18.1 | 0.0 |
| | baz=318 | | | | | | |
| **TAW** | **Tawu** | **0.54** | **320** | P | Pb | 05 40 11.6 | +0.6 |
| | baz=320 | | | | | | |
| TAW | | | | S | Sn | 05 40 19.7 | -1.2 |
| | baz=320 | | | | | | |
| **EAST** | **Anshuo** | **0.59** | **318** | P | Pn | 05 40 13.2 | -0.1 |
| | baz=318 | | | | | | |
| EAST | | | | S | Sn | 05 40 21.2 | -1.0 |
| | baz=318 | | | | | | |
| **ECL** | **Taimali** | **0.71** | **336** | P | Pn | 05 40 14.7 | -0.3 |
| | baz=336 | | | | | | |
| ECL | | | | S | Sn | 05 40 24.9 | -0.4 |
| | baz=336 | | | | | | |
| **SCZT** | **Fangliau** | **0.74** | **306** | P | Pn | 05 40 14.9 | -0.4 |
| | baz=305 | | | | | | |
| **LDUT** | **Ludao** | **0.75** | **14** | *e*P | Pn | 05 40 15.1 | -0.4 |
| | baz=14 | | | | | | |
| LDUT | | | | *e*S | Sn | 05 40 25.6 | -0.7 |
| | baz=14 | | | | | | |
| **TTN** | **Taitung** | **0.81** | **352** | *e*P | Pn | 05 40 16.1 | -0.3 |
| | baz=352 | | | | | | |
| TTN | | | | *e*S | Sb | 05 40 26.7 | +0.4 |
| | baz=352 | | | | | | |
| **SSPT** | **Xinbi** | **0.84** | **310** | *e*S | Sn | 05 40 28.1 | -0.4 |
| | baz=309 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.89** | **319** | *e*S | Sn | 05 40 29.6 | -0.1 |
| | baz=318 | | | | | | |
| **TWGBT** | **Beinan** | **0.89** | **349** | *e*P | Pn | 05 40 17.3 | -0.1 |
| | baz=348 | | | | | | |
| TWGBT | | | | *e*S | Sn | 05 40 30.2 | +0.6 |
| | baz=348 | | | | | | |
| **TWG** | **Pinlang** | **0.89** | **348** | P | Pb | 05 40 17.0 | 0.0 |
| | baz=348 | | | | | | |
| TWG | | | | *e*S | Sn | 05 40 30.1 | +0.4 |
| | baz=348 | | | | | | |
| **SSD** | **Sandimen** | **0.99** | **324** | *e*P | Pn | 05 40 19.0 | +0.1 |
| | baz=323 | | | | | | |
| **SLGT** | **Liugui** | **1.19** | **331** | P | Pn | 05 40 21.7 | 0.0 |
| | baz=331 | | | | | | |
| **ELDTW** | **Lidau** | **1.26** | **349** | *e*P | Pn | 05 40 21.4 | -1.2 |
| | baz=349 | | | | | | |
| **WTP** | **Ta-pu** | **1.43** | **335** | P | Pb | 05 40 26.3 | +0.1 |
| | baz=335 | | | | | | |
| WTP | | | | *e*S | Sn | 05 40 43.3 | +0.2 |
| | baz=335 | | | | | | |
| **TPUB** | **Ta-pu** | **1.47** | **337** | *e*P | Pn | 05 40 25.9 | +0.4 |
| | baz=336 | | | | | | |
| **TWK** | **Hsinying** | **1.50** | **331** | *e*P | Pn | 05 40 26.1 | +0.2 |
| | baz=331 | | | | | | |

*SFS 17 05:43:42.0,35.50N×3.70W,ML2.8,ALBORAN S.*
*CNRM 17 05:43:44.6,35.66N×3.41W,h17km,ml1.9*
**ISC 17 05:43:46.0±1.3,35.71N±0.05×3.49W±0.04,h32km±12km, n14,σ1°53/24,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.61** | **217** | P | **Pb** | **05 43 57.8** | **-0.6** |
| PALE | | | | S | **Sb** | **05 44 05.8** | **-1.0** |
| **CHAS** | **Isla Isabel II** | **1.01** | **121** | P | **Pb** | **05 44 05.0** | **+0.1** |
| CHAS | | | | S | **Sn** | **05 44 19.4** | **+2.4** |
| **TAF** | **Taforalt** | **1.25** | **135** | P | **Pn** | **05 44 06.9** | **-0.4** |
| TAF | | | | S | **Sb** | **05 44 24.6** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.30** | **324** | S | **Sn** | **05 44 22.4** | **-1.9** |
| **SMIR** | **Smir Dam** | **1.54** | **270** | P | **Pn** | **05 44 09.6** | **-1.7** |
| SMIR | | | | S | **Sb** | **05 44 36.9** | **+3.7** |
| **JBK** | **JBK** | **1.56** | **151** | P | **Pn** | **05 44 10.7** | **-1.1** |
| JBK | | | | S | **Sn** | **05 44 30.5** | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.63** | **249** | P | **Pn** | **05 44 12.3** | **-0.3** |
| CHEFC | | | | S | **Sb** | **05 44 36.3** | **+0.6** |
| **IFR** | **Ifrane** | **2.57** | **212** | P | **Pn** | **05 44 28.1** | **+2.5** |
| IFR | | | | S | **Sn** | **05 44 55.0** | **-0.8** |
| **MD31** | **MD31** | **3.02** | **201** | P | **Pn** | **05 44 32.1** | **+0.3** |
| MD31 | | | | S | **Sn** | **05 45 06.3** | **-0.6** |
| **MDT** | **Midelt** | **3.03** | **198** | P | **Pn** | **05 44 29.9** | **-2.0** |
| MDT | | | | S | **Sn** | **05 45 08.5** | **+1.3** |
| **PVAQ** | **Vaqueiros** | **3.81** | **298** | *e*Pn | **Pn** | **05 44 42.8** | **+0.4** |
| PVAQ | | | | *e*Sn | **Sn** | **05 45 24.5** | **-1.6** |
| PVAQ | | | | A | A | 05 45 31.9 | |
| | 1.7nm,1.2s | | | | | | |
| **MESJ** | **Messejana** | **4.36** | **301** | *e*Pn | **Pn** | **05 44 50.2** | **+0.2** |
| **EVO** | **Evora** | **4.59** | **309** | *e*Pn | **Pn** | **05 44 53.5** | **+0.3** |
| **PNCL** | **Nicolau / Gran** | **4.70** | **302** | *e*Pn | **Pn** | **05 44 55.7** | **+1.0** |

**IDC 17 06:07:54.8±1.5,15.57N×127.18E,h0km,mb3.7/4, mb1 3.9/4,mb1mx3.3/50,mbtmp3.7/4,Error ellipse: s-maj=145.5km s-min=20.5km az=68.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.50** | **162** | P | P | 06 12 56.7 | +0.5 |
| | 1.0nm,0.3s,baz=342,slow=10,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **25.92** | **166** | P | P | 06 13 28.3 | -0.7 |
| | 0.3nm,0.3s,baz=343,slow=11,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **49.48** | **342** | P | P | 06 16 47.5 | +0.4 |
| | 0.3nm,0.5s,baz=157,slow=7.8,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.58** | **326** | P | P | 06 18 00.7 | +0.2 |
| | 1.2nm,0.4s,baz=114,slow=7.8,SNR=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.80** | **328** | P | P | 06 18 28.3 | -0.4 |
| | 1.3nm,0.5s,baz=127,slow=6.1,SNR=8.3 | | | | | | |

**KRSC 17 06:10:51.2±0.6,56.00N×161.57E,h108km±5km,ML4.1, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZLN** | **Zelenaya** | **0.43** | **273** | *e*P | Pn | 06 11 08.7 | +1.3 |
| ZLN | | | | *e*S | Sn | 06 11 21.4 | +1.8 |
| **CIRR** | **Tsirk** | **0.47** | **285** | *e*P | Pn | 06 11 08.6 | +0.9 |
| CIRR | | | | *e*S | Sn | 06 11 21.8 | +1.6 |
| **BZGR** | **Bezymyannyi-Gr** | **0.49** | **263** | *e*P | Pn | 06 11 09.0 | +1.2 |
| BZGR | | | | *e*S | Sn | 06 11 21.9 | +1.6 |
| **LGNR** | **Loginova** | **0.50** | **280** | *e*P | Pn | 06 11 09.1 | +1.0 |
| LGNR | | | | *e*S | Sn | 06 11 22.2 | +1.4 |
| **SMKR** | **Semkarok** | **0.59** | **355** | *e*P | Pn | 06 11 09.6 | +1.1 |
| **KLY** | **Klyuchi** | **0.60** | **302** | *e*P | Pn | 06 11 08.5 | +0.1 |
| KLY | | | | *e*S | Sn | 06 11 21.1 | -0.3 |
| **KRSR** | **Krestovskiy** | **0.60** | **292** | *e*P | Pn | 06 11 09.1 | +0.5 |
| KRSR | | | | *e*S | Sn | 06 11 22.1 | +0.4 |
| **BZWR** | **Bezymyannyi-We** | **0.60** | **267** | *e*P | Pn | 06 11 09.7 | +1.0 |
| BZWR | | | | *e*S | Sn | 06 11 23.2 | +1.4 |
| **BDR** | **Baidarnaya** | **0.60** | **341** | *e*P | Pn | 06 11 09.7 | +1.1 |
| **KBG** | **Krutoberegovo** | **0.69** | **68** | *e*P | Pn | 06 11 10.6 | +1.5 |
| KBG | | | | *e*S | Sn | 06 11 25.0 | +2.4 |
| **KIRR** | **Kirishev** | **0.69** | **267** | *e*P | Pn | 06 11 10.1 | +0.8 |
| KIRR | | | | *e*S | Sn | 06 11 23.9 | +0.9 |
| **SRKR** | **Sorokina** | **0.69** | **342** | *e*P | Pn | 06 11 10.4 | +1.1 |
| **KBTR** | **Krutoberegovo** | **0.73** | **73** | *e*P | Pn | 06 11 10.9 | +1.4 |
| KBTR | | | | *e*S | Sn | 06 11 25.2 | +1.8 |
| **KPT** | **Kopyto** | **0.76** | **268** | *e*P | Pn | 06 11 10.5 | +0.6 |
| KPT | | | | *e*S | Sn | 06 11 24.6 | +0.7 |
| **KMNR** | **Kamenistaya** | **0.79** | **253** | *e*P | Pn | 06 11 11.0 | +0.8 |
| KMNR | | | | *e*S | Sn | 06 11 26.0 | +1.6 |
| **TUMD** | **Tumrok D** | **1.04** | **220** | *e*P | Pn | 06 11 13.5 | +1.0 |
| TUMD | | | | *e*S | Sn | 06 11 29.4 | +0.7 |
| **TUMR** | **Tumrok** | **1.08** | **229** | *e*P | Pn | 06 11 14.4 | +1.3 |
| TUMR | | | | *e*S | Sn | 06 11 31.1 | +1.5 |
| **MKZ** | **Mys Kozlova** | **1.45** | **176** | *e*P | Pn | 06 11 18.8 | +1.6 |
| MKZ | | | | *e*S | Sn | 06 11 38.9 | +2.0 |
| **ESO** | **Esso** | **1.61** | **269** | *e*P | Pn | 06 11 20.4 | +1.2 |
| **BKI** | **Bering** | **2.62** | **106** | *e*P | Pn | 06 11 33.9 | +1.9 |
| BKI | | | | *e*S | Sn | 06 12 05.0 | +1.5 |
| **SPN** | **Mys Shipunski** | **3.04** | **198** | *e*P | Pn | 06 11 38.4 | +0.8 |
| **GNL** | **Ganaly** | **3.12** | **224** | *e*P | Pn | 06 11 40.1 | +1.4 |
| **SDLR** | **Sedlovina** | **3.14** | **211** | *e*P | Pn | 06 11 41.3 | +2.3 |
| **AVH** | **Avacha** | **3.19** | **212** | *e*P | Pn | 06 11 42.9 | +3.2 |
| **KOK** | **Koryka** | **3.20** | **213** | *e*P | Pn | 06 11 42.9 | +3.1 |
| **UGLR** | **Uglovaya** | **3.22** | **211** | *e*P | Pn | 06 11 42.9 | +2.8 |
| **DALK** | **Dalny** | **3.40** | **210** | *e*P | Pn | 06 11 44.5 | +2.2 |
| **PET** | **Petropavlovsk** | **3.43** | **211** | *e*P | Pn | 06 11 45.2 | +2.5 |
| **KRMR** | **Karymshinskiy** | **3.76** | **214** | *e*P | Pn | 06 11 49.2 | +2.1 |
| **RUS** | **Russkaya** | **4.00** | **208** | *e*P | Pn | 06 11 51.1 | +0.8 |
| **GRL** | **Gorelyy** | **4.01** | **212** | *e*P | Pn | 06 11 53.1 | +2.4 |
| **MTVR** | **Mutnovka** | **4.04** | **211** | *e*P | Pn | 06 11 53.0 | +1.9 |
| **TILK** | **Tilichiki** | **5.07** | **27** | *e*P | Pn | 06 12 07.8 | +3.0 |

**IDC 17 06:14:00.7±2.6,54.14N×86.49E,h0km,mb1 2.9/1, mb1mx2.0/58,mbtmp2.9/1,ML2.5/2,Error ellipse: s-maj=21.8km s-min=12.7km az=61.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.00** | **260** | *i* | | 06 19 50.0 | |
| | baz=81,slon=350,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.00** | **260** | Pg | Pg | 06 14 18.8 | -1.1 |
| | 0.6nm,0.3s,baz=76,slow=16,SNR=10 | | | | | | |
| ZALV | | | | Lg | Lg | 06 14 34.1 | |
| | 1.7nm,0.3s,baz=76,slow=31,SNR=19 | | | | | | |
| ZALV | | | | Rg | Rg | 06 14 39.5 | |
| | 50nm,1.2s,baz=77,slow=22,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.01** | **237** | Pn | Pn | 06 15 31.9 | +1.2 |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.82** | **202** | Pn | Pn | 06 15 56.3 | +0.6 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=6.1 | | | | | | |

*NNC 17 06:29:22.0±2.7,54.15N×86.55E,h0km,mb2.8,mpv2.7, Error ellipse: s-maj=25.5km s-min=12.5km az=8.0, Suspected Mining explosion.*
*IDC 17 06:29:23.7±2.4,54.15N×86.47E,h0km,mb1 3.2/2, mb1mx2.5/55,mbtmp3.2/2,ML3.0/2,Error ellipse: s-maj=20.0km s-min=11.7km az=61.0*
**ISC 17 06:29:25.6±4.4,54.1N±0.2×86.3E±0.2,h0km,n9,σ0°82/10, 8C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.88** | **261** | *i* | | 06 35 12.2 | |
| | baz=82,slon=348,SNR=2.9 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.88** | **261** | ⇑P | **Pg** | **06 29 41.7** | **-0.6** |
| | 0.4nm,0.4s | | | | | | |
| ZAA0 | | | | ⇓S | **Sb** | **06 29 56.5** | **+0.6** |
| | 12nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.88** | **261** | Pg | **Pg** | **06 29 41.4** | **-1.0** |
| | 1.8nm,0.3s,baz=77,slow=17,SNR=26 | | | | | | |
| ZALV | | | | Lg | Lg | 06 29 56.5 | |
| | 2.2nm,0.3s,baz=74,slow=29,SNR=8.2 | | | | | | |
| ZALV | | | | Rg | Rg | 06 30 01.2 | |
| | 10nm,0.7s,baz=78,slow=34,SNR=7.1 | | | | | | |
| **KURK** | **Kurchatov** | **5.78** | **237** | ⇑Lg | Lg | 06 32 33.5 | |
| | 5.3nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.89** | **237** | Pn | **Pn** | **06 30 54.8** | **+0.8** |
| | 0.2nm,0.3s,baz=54,slow=13,SNR=19 | | | | | | |
| KURBB | | | | Lg | Lg | 06 32 37.0 | |
| | 0.1nm,0.3s,baz=57,slow=31,SNR=6.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.89** | **237** | ⇑Pn | **Pn** | **06 30 54.8** | **+0.8** |
| | 4.1nm,0.9s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 32 36.9 | |
| | 7.7nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.74** | **201** | ⇑Pn | **Pn** | **06 31 20.2** | **+0.6** |
| | 0.6nm,0.7s,baz=26,slow=14,SNR=8.6 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **06 32 46.9** | **-1.0** |
| | 1.8nm,0.9s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 33 31.5 | |
| | 2.3nm,0.8s,baz=24,slow=28,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.74** | **201** | Pn | **Pn** | **06 31 19.5** | **0.0** |
| | 0.3nm,0.3s,baz=24,slow=14,SNR=12 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 32 48.3** | **+0.4** |
| | 0.1nm,0.3s,baz=19,slow=24,SNR=5.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 33 32.7 | |
| | 0.2nm,0.3s,baz=23,slow=30,SNR=8.6 | | | | | | |
| **MAKZ** | **Makanchi** | **7.80** | **202** | ⇑Sn | **Sn** | **06 32 49.4** | **+0.2** |
| | 1.8nm,0.9s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 06 33 33.8 | |
| | 5.2nm,1.5s | | | | | | |

*IDC 17 06:30:23.7±1.1,52.22N×169.88W,h0km,mb3.8/11, mb1 4.0/13,mb1mx3.5/60,mbtmp3.8/13,ML3.6/2,MS3.5/4, Ms1 3.5/4,ms1mx2.8/100,Error ellipse: s-maj=32.6km s-min=17.6km az=171.0*
*AEIC 17 06:30:26.3.0,51.94N±0.07×169.56W±0.10,h22km±6km, ML3.3,mb3.8/18(NEIC),ML3.8/6(NEIC),Error ellipse: s-maj=11.2km s-min=7.9km az=153.0*
*NEIC 17 06:30:29.1±2.8,52.09N±0.07×169.7W±0.1,h48km±9km, Error ellipse: s-maj=11.6km s-min=7.6km az=139.0*
**ISC 17 06:30:27.7±0.8,52.1N±0.1×169.72W±0.07,h30km,n61, σ1°55/58,mb3.9/12,MS3.4/4,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIKH** | **Nikolski High** | **1.06** | **30** | | **Pn** | **06 30 46.2** | **-0.2** |
| NIKH | | | | | **Sb** | **06 31 02.4** | **+1.5** |
| **OKSP** | **Okmok Steeple** | **1.48** | **35** | | **Pn** | **06 30 52.2** | **-0.1** |
| **OKTU** | **Okmok Mt. Tuli** | **1.68** | **37** | | **Pn** | **06 30 55.4** | **+0.4** |
| **MREP** | **Makushin Rep't** | **2.52** | **45** | | **Pn** | **06 31 07.0** | **+0.5** |
| **MSW** | **Makushin Switc** | **2.57** | **42** | | **Pn** | **06 31 07.9** | **+0.6** |
| MSW | | | | | **Sn** | **06 31 38.4** | **+0.9** |
| **MNAT** | **Makushin Natee** | **2.59** | **44** | | **Pn** | **06 31 07.9** | **+0.4** |
| **UNV** | **Unalaska Valle** | **2.65** | **46** | | **Pn** | **06 31 08.7** | **+0.5** |
| UNV | | | | | **Sn** | **06 31 39.8** | **+0.5** |
| **MTBL** | **Makushin Table** | **2.66** | **43** | | **Pn** | **06 31 09.5** | **+1.1** |
| **ATKA** | **Atka Island** | **2.76** | **275** | | **Pn** | **06 31 11.2** | **+1.4** |
| **AKMO** | **Akutan Morgan** | **3.03** | **46** | | **Pn** | **06 31 15.1** | **+1.7** |
| **AKBBA** | **Akutan Broad B** | **3.07** | **47** | | **Pn** | **06 31 15.9** | **+1.8** |
| **AKUT** | **Akutan** | **3.16** | **47** | Pn | **Pn** | **06 31 16.6** | **+1.3** |
| AKUT | | | | IAML | | 06 32 53.1 | |
| | comp=N,194nm,2.7s | | | | | | |
| **GSTR** | **Great Sitkin T** | **3.91** | **273** | Pn | **Pn** | **06 31 27.4** | **+1.7** |
| **ADK** | **Adak** | **4.31** | **270** | Pn | **Pn** | **06 31 31.9** | **+0.8** |
| ADK | | | | IAML | | 06 32 05.8 | |
| | comp=N,88nm,3.2s | | | | | | |
| ADK | | | | IAML | | 06 33 23.4 | |
| | comp=N,124nm,3.5s | | | | | | |
| **KIWB** | **Kanaga Island** | **4.60** | **270** | Pn | **Pn** | **06 31 37.4** | **+2.3** |
| **SPIA** | **Saint Paul Isl** | **5.14** | **357** | Pn | **Pn** | **06 31 44.9** | **+2.4** |
| **SDPT** | **Sand Point** | **6.40** | **55** | Pn | **Pn** | **06 31 59.6** | **-0.2** |
| **CHGN** | **Chignik** | **7.88** | **53** | Pn | **Pn** | **06 32 21.5** | **+1.5** |
| **OHAK** | **Old Harbor** | **10.83** | **55** | Pn | **Pn** | **06 32 58.9** | **-1.5** |
| **KDAK** | **Kodiak Island** | **11.39** | **53** | Pn | **Pn** | **06 33 05.8** | **-2.3** |
| | comp=N,0.7nm,0.3s,baz=270,slow=8.8,SNR=15 | | | | | | |
| **Q19K** | **Cape Douglas,** | **11.40** | **47** | Pn | **Pn** | **06 33 08.4** | **0.0** |
| **CNPM** | **China Poot** | **12.78** | **47** | Pn | **Pn** | **06 33 26.3** | **-0.8** |
| **BRLK** | **Bradley Lake** | **13.05** | **46** | Pn | **Pn** | **06 33 29.8** | **-1.0** |
| **PWL** | **Port Wells** | **14.68** | **45** | Pn | **Pn** | **06 33 50.3** | **-2.7** |
| **KTH** | **Kantishna Hill** | **15.19** | **33** | Pn | **Pn** | **06 34 00.7** | **+0.9** |
| KTH | | | | IAmb | IAmb | 06 34 05.8 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **FID** | **Port Fidalgo** | **15.46** | **47** | Pn | **Pn** | **06 33 60.0** | **-3.3** |
| FID | | | | IAmb | IAmb | 06 34 24.1 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **15.57** | **42** | Pn | **Pn** | **06 34 02.7** | **-2.1** |
| **EYAK** | **Cordova Ski Ar** | **15.71** | **48** | Pn | **Pn** | **06 34 03.7** | **-2.7** |
| **KLU** | **Klutina** | **16.01** | **45** | Pn | **Pn** | **06 34 07.9** | **-2.5** |
| KLU | | | | IAmb | IAmb | 06 34 16.3 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **16.18** | **42** | Pn | **Pn** | **06 34 11.4** | **-1.2** |
| M24K | | | | IAmb | IAmb | 06 34 19.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HMT** | **Hamilton** | **16.32** | **50** | Pn | **Pn** | **06 34 12.9** | **-1.5** |
| **BMRM** | **Bremner River** | **16.39** | **47** | Pn | **Pn** | **06 34 13.2** | **-2.0** |
| BMRM | | | | IAmb | IAmb | 06 34 26.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **N25K** | **Chitina, Valde** | **16.64** | **45** | Pn | **Pn** | **06 34 16.0** | **-2.4** |
| **GLB** | **Gilahina Butte** | **16.92** | **46** | Pn | **Pn** | **06 34 19.7** | **-2.3** |
| **VRDI** | **Verde Repeater** | **17.00** | **47** | Pn | **Pn** | **06 34 21.0** | **-2.1** |
| VRDI | | | | IAmb | IAmb | 06 34 27.8 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **17.33** | **34** | P | **Pn** | **06 34 24.3** | **-2.7** |
| | comp=Z,0.1nm,0.3s,baz=225,slow=10,SNR=10 | | | | | | |
| **M26K** | **Nabesna, AK** | **17.65** | **44** | Pn | **Pn** | **06 34 29.5** | **-1.5** |
| M26K | | | | IAmb | IAmb | 06 34 34.6 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **M27K** | **Edge Creek, AK** | **18.11** | **44** | | **Pn** | **06 34 36.3** | **-0.5** |
| M27K | | | | IAmb | IAmb | 06 34 48.3 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **BCAR** | **Beaver Creek A** | **18.43** | **42** | | **P** | **06 34 39.8** | **-0.6** |
| **EGAK** | **Eagle** | **19.42** | **38** | | **P** | **06 34 51.0** | **-0.1** |
| EGAK | | | | IAmb | IAmb | 06 35 07.0 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **19.71** | **29** | P | **Pn** | **06 34 54.6** | **-1.3** |
| **PEA0B** | **Petropavlovsk-** | **19.74** | **286** | P | **Pn** | **06 34 55.0** | **-1.3** |
| **PETK** | **Petropavlovsk-** | **19.74** | **286** | P | **P** | **06 34 53.5** | **-1.1** |
| | comp=Z,1.4nm,0.3s,baz=89,slow=13,SNR=17 | | | | | | |
| **P33M** | **Teslin, Yukon** | **21.86** | **54** | P | **P** | **06 35 18.8** | **+1.1** |
| P33M | | | | IAmb | IAmb | 06 35 36.2 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **23.73** | **33** | P | **P** | **06 35 35.0** | **-1.7** |
| | comp=Z,1.3nm,0.4s,baz=248,slow=8.0,SNR=10 | | | | | | |
| INK | | | | LR | LR | 06 46 03.4 | |
| | comp=Z,102nm,18.6s,baz=184,slow=40 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.61** | **48** | P | **P** | **06 36 38.6** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=277,slow=7.1,SNR=14 | | | | | | |
| **KLR** | **Kul'dur** | **36.36** | **289** | P | **P** | **06 37 27.6** | **-1.1** |
| | comp=Z,1.0nm,0.5s,baz=111,slow=5.5,SNR=7.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.26** | **218** | T | T | 07 18 53.1 | |
| | baz=22,slow=76,SNR=11 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.27** | **218** | T | T | 07 18 52.6 | |
| | baz=22,slow=76,SNR=6.1 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.28** | **218** | T | T | 07 19 01.0 | |
| | baz=22,slow=76,SNR=3.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.68** | **79** | P | **P** | **06 38 07.7** | **+2.3** |
| | comp=Z,0.4nm,0.5s,baz=305,slow=3.1,SNR=6.4 | | | | | | |
| **FRB** | **Frobisher Bay** | **49.36** | **35** | P | **P** | **06 39 13.2** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=307,slow=8.7,SNR=10.0 | | | | | | |
| **SONM** | **Songino Array** | **51.27** | **301** | LR | LR | 07 02 22.1 | |
| | comp=Z,41nm,18.0s,baz=298,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.97** | **88** | P | **P** | **06 39 42.0** | **+0.6** |
| | comp=Z,0.5nm,0.8s,baz=290,slow=4.7,SNR=3.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.57** | **318** | LR | LR | 07 08 24.2 | |
| | comp=Z,57nm,19.3s,baz=279,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.86** | **313** | P | **P** | **06 40 56.4** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=40,slow=5.6,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **66.15** | **352** | P | **P** | **06 41 10.6** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=22,slow=11,SNR=5.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **70.17** | **330** | P | **P** | **06 41 37.5** | **+0.5** |
| | comp=Z,1.5nm,0.7s,baz=32,slow=6.8,SNR=4.2 | | | | | | |
| **OBN** | **Obninsk** | **70.99** | **344** | LR | LR | 07 14 39.3 | |
| | comp=Z,17nm,18.1s,baz=346,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.37** | **348** | P | **P** | **06 42 14.8** | **+1.3** |
| | comp=Z,0.2nm,0.3s,baz=18,slow=5.8,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **90.03** | **230** | P | **P** | **06 43 24.3** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=27,slow=4.5,SNR=8.6 | | | | | | |

*IDC 17 06:44:14.7±4.8,6.10S×151.82E,h55km±33km,mb3.3/3, mb1 3.7/4,mb1mx3.3/26,mbtmp3.7/4,ML2.6/1,Error ellipse: s-maj=95.7km s-min=16.0km az=114.0*
**ISC 17 06:44:15.5±2.5,6.0S±0.3×151.5E±0.5,h36km,n6,σ0°63/7, mb3.2/3,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **1.79** | **16** | P | **Pn** | **06 44 44.1** | **+0.2** |
| | baz=180,slow=20 | | | | | | |
| KRVT | | | | S | **Sn** | **06 45 05.1** | **-0.4** |
| | baz=197,slow=19 | | | | | | |
| **PMG** | **Port Moresby** | **5.47** | **232** | P | **Pn** | **06 45 34.7** | **+0.2** |
| | 11nm,0.3s,baz=30,slow=14,SNR=8.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.68** | **229** | P | **P** | **06 49 03.3** | **0.0** |
| | 0.7nm,0.7s,baz=56,slow=12,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **24.38** | **222** | P | **P** | **06 49 29.6** | **-0.9** |
| | 0.4nm,0.6s,baz=53,slow=9.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ITEG** | **Tejag** | **1.75** | **118** | *e*Pg | | **Pg** | **07 09 11.2** | **-1.5** |
| ITEG | | | | *e* | | | 07 09 42.6 | |
| | comp=Z,9µm,0.3s | | | | | | | |
| **AFRZ** | **Afriz** | **1.78** | **99** | *e*Pn | | **Pb** | **07 09 11.4** | **-0.8** |
| AFRZ | | | | *e* | | | 07 09 41.2 | |
| | comp=Z,6µm,0.4s | | | | | | | |
| **IKOO** | **Kooshah** | **2.19** | **126** | *e*Pn | | **Pb** | **07 09 17.8** | **-1.3** |
| IKOO | | | | *e* | | | 07 09 55.9 | |
| | comp=Z,7µm,0.2s | | | | | | | |
| **IMON** | **Monand** | **2.36** | **102** | *e*Pn | | **Pb** | **07 09 20.1** | **-2.1** |
| IMON | | | | *e* | | | 07 09 30.8 | |
| | comp=Z,5µm,0.3s | | | | | | | |
| **YZKH** | **Yazd** | **2.36** | **236** | *e*Pn | | **Pb** | **07 09 21.6** | **-0.5** |
| **SHRO** | **Shahrood** | **2.38** | **342** | *e*Pn | | **Pn** | **07 09 19.0** | **+0.4** |
| **IBAF** | **Bafgh** | **2.42** | **208** | *e*Pn | | **Pb** | **07 09 21.5** | **-1.5** |
| IBAF | | | | *e* | | | 07 10 00.8 | |
| | comp=Z,6µm,0.3s | | | | | | | |
| **BSRN** | **Basiran** | **2.56** | **133** | *e*Pn | | **Pb** | **07 09 22.9** | **-2.6** |
| **ICHK** | **Chekchek** | **2.58** | **236** | *e*Pn | | **Pb** | **07 09 23.1** | **-2.7** |
| ICHK | | | | *e* | | | 07 10 08.8 | |
| | comp=Z,5µm,0.4s | | | | | | | |
| **IDAH** | **Dahanechah** | **2.67** | **111** | *e*Pn | | **Pb** | **07 09 24.4** | **-2.9** |
| **SBZV** | **Sabzevar** | **2.71** | **12** | *e*Pn | | **Pn** | **07 09 23.7** | **+0.4** |
| **ANAR** | **Anarak** | **2.72** | **259** | *e*Pn | | **Pn** | **07 09 24.9** | **+1.6** |
| ANAR | | | | *e* | | | 07 10 21.0 | |
| | comp=Z,1µm,0.5s | | | | | | | |
| **SHRT** | **Shahrakht** | **2.82** | **91** | *e*Pn | | **Pn** | **07 09 25.7** | **+1.1** |
| **IANJ** | **Anjilo** | **3.02** | **306** | *e*Pn | | **Pn** | **07 09 28.8** | **+1.2** |
| IANJ | | | | *e* | | | 07 10 20.6 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **IMEH** | **Mehriz** | **3.04** | **220** | *e*Pn | | **Pb** | **07 09 30.1** | **-3.5** |
| IMEH | | | | *e* | | | 07 10 28.9 | |
| | comp=Z,2µm,0.3s | | | | | | | |
| **IMOG** | **Moghan** | **3.10** | **39** | *e*Pn | | **Pn** | **07 09 29.2** | **+0.5** |
| IMOG | | | | *e* | | | 07 10 34.8 | |
| | comp=Z,1µm,0.8s | | | | | | | |
| **TBJM** | **Torbat-e-JAM** | **3.21** | **60** | *e*Pn | | **Pn** | **07 09 30.9** | **+0.8** |
| **IAKL** | **Akhelmad** | **3.24** | **27** | *e*Pn | | **Pn** | **07 09 31.1** | **+0.5** |
| IAKL | | | | *e* | | | 07 09 45.2 | |
| | comp=Z,1µm,0.3s | | | | | | | |
| **ISAD** | **Sadrabad** | **3.27** | **237** | *e*Pn | | **Pn** | **07 09 33.0** | **+2.0** |
| ISAD | | | | *e* | | | 07 10 27.5 | |
| | comp=Z,4µm,0.5s | | | | | | | |
| **KHGB** | **Koh Gabri** | **3.36** | **186** | *e*Pn | | **Pb** | **07 09 35.1** | **-4.1** |
| KHGB | | | | *e* | | | 07 10 35.6 | |
| | comp=Z,3µm,0.6s | | | | | | | |
| **ISFR** | **Sfrayin** | **3.43** | **15** | *e*Pn | | **Pn** | **07 09 33.9** | **+0.6** |
| ISFR | | | | *e* | | | 07 10 33.7 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **NHDN** | **Nehbandan** | **3.53** | **130** | *e*Pn | | **Pn** | **07 09 36.4** | **+2.0** |
| **NASN** | **Na'in** | **3.56** | **256** | *e*Pn | | **Pn** | **07 09 37.5** | **+2.4** |
| **JRKH** | **Jarkhoshk** | **3.56** | **51** | *e*Pn | | **Pn** | **07 09 35.8** | **+0.9** |
| **ISHM** | **Shahmirzad** | **3.63** | **306** | *e*Pn | | **Pn** | **07 09 37.9** | **+1.9** |
| ISHM | | | | *e* | | | 07 10 45.0 | |
| | comp=Z,4µm,0.4s | | | | | | | |
| **ILAS** | **Lasjerd** | **3.66** | **298** | *e*Pn | | **Pn** | **07 09 37.5** | **+1.2** |
| ILAS | | | | *e* | | | 07 10 52.4 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **IMYA** | **Miami** | **3.69** | **44** | *e*Pn | | **Pn** | **07 09 37.5** | **+0.8** |
| **IKRD** | **Kardeh** | **3.71** | **34** | *e*Pn | | **Pn** | **07 09 37.6** | **+0.6** |
| **IMND** | **Minoodasht** | **3.73** | **341** | *e*Pn | | **Pn** | **07 09 37.8** | **+0.8** |
| **TVBK** | **TV Kerman** | **3.73** | **182** | *e*Pn | | **Pn** | **07 09 39.5** | **+2.0** |
| **KRBR** | **Kerman** | **3.74** | **182** | *e*Pn | | **Pb** | **07 09 40.9** | **-4.8** |
| **IGLO** | **Ghaloghah** | **3.75** | **318** | *e*Pn | | **Pn** | **07 09 39.1** | **+1.6** |
| IGLO | | | | *e* | | | 07 10 53.2 | |
| | comp=Z,2µm,0.8s | | | | | | | |
| **CHMN** | **Cheshme madani** | **3.89** | **172** | *e*Pn | | **Pn** | **07 09 42.4** | **+2.7** |
| CHMN | | | | *e* | | | 07 10 51.8 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **IFIR** | **Firoozkooh** | **3.92** | **300** | *e*Pn | | **Pn** | **07 09 41.0** | **+1.0** |
| **IZEF** | **Zefreh** | **3.93** | **259** | *e*Pn | | **Pn** | **07 09 42.2** | **+2.2** |
| IZEF | | | | *e* | | | 07 10 52.0 | |
| | comp=Z,682nm,0.5s | | | | | | | |
| **ISFB** | **Sefidab** | **3.93** | **280** | *e*Pn | | **Pn** | **07 09 41.7** | **+1.8** |
| ISFB | | | | *e* | | | 07 11 06.4 | |
| | comp=Z,798nm,1.0s | | | | | | | |
| **MRVT** | **Maraveh tapeh** | **3.98** | **351** | *e*Pn | | **Pn** | **07 09 41.7** | **+1.1** |
| **BJRD** | **Bojnurd** | **3.98** | **6** | *e*Pn | | **Pn** | **07 09 41.7** | **+1.0** |
| **KRSH** | **Karshahi** | **3.98** | **275** | *e*Pn | | **Pn** | **07 09 42.2** | **+1.5** |
| **NGRK** | **Negar Kerman** | **4.08** | **182** | *e*Pn | | **Pn** | **07 09 44.9** | **+2.7** |
| NGRK | | | | *e* | | | 07 10 56.9 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **IRAM** | **Ramesheh** | **4.27** | **245** | *e*Pn | | **Pn** | **07 09 46.8** | **+2.1** |
| **IDMV** | **Damavand** | **4.43** | **296** | *e*Pn | | **Pn** | **07 09 48.2** | **+1.3** |
| **IVRN** | **Varamin** | **4.47** | **288** | *e*Pn | | **Pn** | **07 09 48.6** | **+1.3** |
| **IKLH** | **Kolahrood** | **4.47** | **266** | *e*Pn | | **Pn** | **07 09 49.3** | **+1.7** |
| **DAMV** | **Damavand** | **4.49** | **296** | *e*Pn | | **Pn** | **07 09 48.4** | **+0.6** |
| **IPRN** | **Peran** | **4.52** | **305** | *e*Pn | | **Pn** | **07 09 49.2** | **+1.2** |
| **QAMS** | **Qamsar** | **4.60** | **272** | *e*Pn | | **Pn** | **07 09 51.0** | **+1.8** |
| **GHVR** | **GHOM** | **4.72** | **281** | *e*Pn | | **Pn** | **07 09 53.2** | **+2.4** |
| **IQOM** | **Qom** | **4.96** | **285** | *e*Pn | | **Pn** | **07 09 55.6** | **+1.3** |
| **CHTH** | **Charan** | **5.23** | **296** | *e*Pn | | **Pn** | **07 09 59.3** | **+1.3** |
| **KLNJ** | **Kolanjah** | **5.26** | **240** | *e*Pn | | **Pn** | **07 10 00.6** | **+2.2** |
| **ZHSF** | **Zahedan** | **5.26** | **140** | *e*Pn | | **Pn** | **07 10 00.0** | **+1.7** |
| **THKV** | **Tehran--Karaj** | **5.42** | **295** | *e*Pn | | **Pn** | **07 10 00.4** | **-0.1** |
| **ZHDN** | **Zahedan** | **5.45** | **141** | *e*Pn | | **Pn** | **07 10 02.3** | **+1.4** |
| **ASAO** | **Ashtian** | **5.77** | **280** | *e*Pn | | **Pn** | **07 10 07.8** | **+2.4** |
| **IRAZ** | **Razeghan** | **6.00** | **288** | *e*Pn | | **Pn** | **07 10 10.0** | **+1.5** |
| **QABG** | **Abgarm-Qazvin** | **6.35** | **299** | *e*Pn | | **Pn** | **07 10 13.7** | **+0.4** |
| **GHIR** | **Ghir-Karzin** | **6.39** | **213** | *e*Pn | | **Pn** | **07 10 16.9** | **+3.2** |
| **AAK** | **Ala-Archa** | **16.41** | **52** | Pn | | **Pn** | **07 12 29.1** | **-0.9** |
| | comp=Z,0.5nm,0.3s,baz=228,slow=9.9,SNR=6.0 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.71** | **2** | Pn | | **P** | **07 12 37.0** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=193,slow=9.4,SNR=5.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **23.23** | **48** | P | | **P** | **07 13 47.8** | **+1.0** |
| | comp=Z,0.8nm,0.7s,baz=239,slow=11,SNR=9.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **26.39** | **318** | P | | **P** | **07 14 15.8** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=8.7,SNR=1.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.22** | **36** | P | | **P** | **07 14 32.5** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=226,slow=5.9,SNR=2.4 | | | | | | | |
| **NRIK** | **Noril'sk** | **39.54** | **17** | LR | | LR | 07 35 20.9 | |
| | comp=Z,97nm,18.9s,baz=338,slow=40 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **53.98** | **262** | P | | **P** | **07 18 04.5** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=60,slow=8.5,SNR=2.1 | | | | | | | |
| **LBTB** | **Lobatse** | **65.57** | **211** | LR | | LR | 07 47 58.5 | |
| | comp=Z,55nm,18.2s,baz=172,slow=36 | | | | | | | |

*IDC **17** 07:09:14.8±2.1,52°.29N×174°.26W,h114$^{km}_{\pm}$19$^{km}$, mb2.9/3, mb1 3.4/5, mb1mx2.7/48, mbtmp3.4/5, Error ellipse: s-maj=26.5km s-min=12.8km az=151.0*

*NEIC **17** 07:09:20.6±1.1,52°.6N±0°.3×174°.5W±0°.1,h175$^{km}_{\pm}$9$^{km}$, Error ellipse: s-maj=38.6km s-min=8.3km az=171.0*

*AEIC **17** 07:09:21±3.0,52°.5N±0°.2×174°.57W±0°.10,h166$^{km}_{\pm}$6$^{km}$, ML3.0/11, Error ellipse: s-maj=31.6km s-min=7.5km az=171.0*

**ISC 17 07:09:19.9±0.9,53°.0N±0°.1×174°.53W±0°.09,h150$^{km}$,n16,** σ1$^{s}$43/20,**mb3.0/3,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ATKA** | **Atka Island** | **0.87** | **166** | | | **Pn** | **07 09 44.3** | **+0.7** |
| ATKA | | | | | | **Sn** | 07 10 03.1 | +1.5 |
| **GSTR** | **Great Sitkin T** | **1.33** | **225** | | | **Sn** | **07 10 10.8** | **+1.8** |
| **GSTR** | **Great Sitkin T** | **1.33** | **225** | | | **Pn** | **07 09 48.8** | **+1.0** |
| **GSMY** | **Great Sitkin M** | **1.37** | **223** | | | **Pn** | **07 09 48.6** | **+0.5** |
| **GSTD** | **Great Sitkin T** | **1.40** | **225** | | | **Pn** | **07 09 49.0** | **+0.6** |
| GSTD | | | | | | **Sn** | **07 10 10.5** | **+0.3** |
| **ADK** | **Adak** | **1.76** | **229** | Pn | | **Pn** | **07 09 52.5** | **+0.3** |
| **KIWB** | **Kanaga Island** | **2.00** | **234** | | | **Pn** | **07 09 55.5** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **2.40** | **243** | | | **Pn** | **07 10 00.8** | **+1.0** |
| TAFP | | | | | | **Sn** | **07 10 30.5** | **0.0** |
| **UNV** | **Unalaska Valle** | **4.87** | **77** | Pn | | **Pn** | **07 10 33.7** | **+2.3** |
| **KDAK** | **Kodiak Island** | **13.31** | **60** | P | | **Pn** | **07 12 22.2** | **-0.6** |
| | 0.7nm,0.3s,baz=263,slow=8.1,SNR=14 | | | | | | | |
| KDAK | | | | S | | **Sn** | **07 14 52.0** | **+2.1** |
| | 0.3nm,0.3s,baz=242,slow=23,SNR=10 | | | | | | | |
| **CNPM** | **China Poot** | **14.42** | **54** | Pn | | **P** | **07 12 40.4** | **+0.9** |
| **BRLK** | **Bradley Lake** | **14.66** | **53** | Pn | | **P** | **07 12 42.8** | **+0.7** |
| **ILAR** | **Eielson Array** | **18.30** | **39** | P | | **Pn** | **07 13 24.9** | **+1.1** |
| | 0.1nm,0.3s,baz=228,slow=10,SNR=8.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.80** | **88** | P | | **P** | **07 16 44.9** | **-1.7** |
| | 0.2nm,0.5s,baz=313,slow=8.5,SNR=1.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **43.33** | **77** | P | | **P** | **07 17 05.2** | **-1.9** |
| | 0.5nm,0.6s,baz=309,slow=5.7,SNR=5.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **55.85** | **85** | P | | **P** | **07 18 39.1** | **-2.7** |
| | 0.1nm,0.5s,baz=316,slow=5.0,SNR=1.7 | | | | | | | |

*TUL **17** 07:19:21.4±1.1,36°.77N±0°.02×97°.66W±0°.03,h6$^{km}_{\pm}$7$^{km}$, ML2.9,mb_Lg2.8/32(NEIC), Error ellipse: s-maj=3.1km s-min=2.1km az=71.0*

**NEIC 17 07:19:21.4±0.4,36°.74N±0°.01×97°.67W±0°.02,h1$^{km}_{\pm}$7$^{km}$, Error ellipse: s-maj=2.4km s-min=1.2km az=115.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **1.33** | **172** | | | Pg | 07 19 46.5 | -0.5 |
| **FNO** | **Franklin** | **1.50** | **172** | | | Pn | 07 19 49.3 | -0.1 |
| **W35A** | **Tecumseh** | **1.71** | **158** | Pn | | Pn | 07 19 52.6 | +0.3 |
| **TUL1** | **Leonard** | **1.73** | **118** | Pn | | Pn | 07 19 52.7 | +0.2 |
| TUL1 | | | | IAmb_Lg | | | 07 20 18.3 | |
| | comp=Z,53nm,1.0s | | | | | | | |
| **R32A** | **Long Quarter,** | **1.87** | **334** | | | Pn | 07 19 54.2 | -0.4 |
| **X34A** | **Smith Ranch, M** | **2.14** | **184** | Pn | | Pn | 07 19 59.5 | +1.3 |
| **WMOK** | **Wichita Mounta** | **2.19** | **205** | | | Pn | 07 19 59.5 | +0.5 |
| **KSU1** | **Kansas State U** | **2.50** | **19** | | | Pn | 07 20 03.1 | -0.1 |
| **U38A** | **Gravette** | **2.66** | **96** | Pn | | Pn | 07 20 05.5 | +0.1 |
| **X37A** | **Clayton** | **2.85** | **138** | IAmb_Lg | | | 07 20 56.6 | |
| | comp=Z,32nm,0.9s | | | | | | | |
| **HHAR** | **Hobbs** | **3.04** | **98** | Pn | | Pn | 07 20 10.8 | +0.2 |
| HHAR | | | | IAmb_Lg | | | 07 21 05.5 | |
| | comp=Z,31nm,0.8s | | | | | | | |
| **W39A** | **Magazine** | **3.51** | **115** | IAmb_Lg | | | 07 21 21.2 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **S39A** | **Bolivar** | **3.59** | **73** | IAmb_Lg | | | 07 21 17.9 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **AMTX** | **Amarillo** | **3.75** | **242** | IAmb_Lg | | | 07 21 24.0 | |
| | comp=Z,29nm,0.7s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.99** | **122** | IAmb_Lg | | | 07 21 30.9 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **P38A** | **Dawn** | **4.35** | **47** | IAmb_Lg | | | 07 21 43.4 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **N35A** | **Tabor** | **4.41** | **20** | IAmb_Lg | | | 07 21 45.2 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.53** | **118** | IAmb_Lg | | | 07 21 45.4 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **4.81** | **128** | IAmb_Lg | | | 07 21 54.3 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **P40A** | **Paris** | **5.23** | **56** | IAmb_Lg | | | 07 22 13.7 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.31** | **10** | IAmb_Lg | | | 07 22 15.3 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.81** | **87** | IAmb_Lg | | | 07 22 24.9 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **K31A** | **O'Neill** | **5.93** | **352** | IAmb_Lg | | | 07 22 35.1 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **SCIA** | **State Center** | **6.21** | **32** | Pn | | Pn | 07 20 54.4 | +0.3 |
| **S44A** | **Carbondale** | **6.78** | **79** | IAmb_Lg | | | 07 22 53.7 | |
| | comp=Z,14nm,0.8s | | | | | | | |

*IDC **17** 07:26:30.1±1.0,0°.39N×124°.98E,h0$^{km}$,mb3.9/6, mb1 4.0/6,mb1mx3.5/41,mbtmp3.9/6,Error ellipse: s-maj=216.8km s-min=17.9km az=66.0*

*DJA **17** 07:26:34.6±0.9,1°.1N±15°×12°.6E±°,h43$^{km}_{\pm}$62$^{km}$,M3.9/6, mb3.9/1,MLv3.9/6*

*NEIC **17** 07:26:39.2±2.4,0°.9N±0°.1×126°.3E±0°.1,h74$^{km}_{\pm}$9$^{km}$, mb4.3/11,Error ellipse: s-maj=20.4km s-min=12.1km az=48.0*

**ISC 17 07:26:36.4±0.7,0°.75N±0°.10×126°.06E±0°.06,h50$^{km}$,n25,** σ1$^{s}$05/23,**mb4.1/12,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.30** | **89** | | | **Pn** | **07 26 58.6** | **+0.3** |
| **TNTI** | **Ternate** | **1.30** | **89** | P | | **Pn** | **07 26 56.7** | **-1.6** |
| **KMDT** | **Cibinong** | **2.09** | **265** | P | | **Pn** | **07 27 03.3** | **-0.7** |
| **GTOI** | **Gontalo** | **3.06** | **268** | P | | **Pn** | **07 27 23.4** | **+1.1** |
| **APSI** | **Ampana** | **4.71** | **249** | P | | **Pn** | **07 27 44.8** | **-0.2** |
| **MPSI** | **Mapaga** | **6.18** | **266** | P | | **Pn** | **07 28 03.3** | **-1.9** |
| **MYLDM** | **Lahad Datu** | **8.74** | **300** | Pn | | Pn | 07 28 45.5 | +5.3 |
| **WB0** | **Warramunga Arr** | **21.97** | **159** | P | | **P** | **07 31 26.1** | **-0.2** |
| WB0 | | | | IAmb | | IAmb | 07 31 31.2 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.11** | **159** | P | | **P** | **07 31 27.7** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 07 31 32.9 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.11** | **159** | P | | **P** | **07 31 27.5** | **-0.3** |
| | comp=Z,8.3nm,0.7s,baz=337,slow=11,SNR=26 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.11** | **159** | IAmb | | IAmb | 07 31 33.7 | |
| | comp=Z,0.5nm,1.2s | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.11** | **159** | P | | **P** | **07 31 27.7** | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 07 31 33.0 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.20** | **158** | P | | **P** | **07 31 29.1** | **+0.4** |
| WR0 | | | | IAmb | | IAmb | 07 31 34.0 | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **TWG** | **Pinlang** | **22.47** | **348** | P | | **P** | **07 31 32.6** | **+1.0** |
| **AS31** | **Alice Springs** | **25.44** | **163** | P | | **P** | **07 32 01.5** | **+1.7** |
| **ASAR** | **Alice Springs** | **25.44** | **163** | P | | **P** | **07 32 01.1** | **+1.4** |
| | comp=Z,1.0nm,0.4s,baz=347,slow=12,SNR=28 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **07 35 31.4** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=340,slow=2.4,SNR=6.0 | | | | | | | |
| **FORT** | **Forrest** | **31.41** | **177** | P | | **P** | **07 32 53.5** | **+0.5** |
| **STKA** | **Stephens Creek** | **35.63** | **157** | P | | **P** | **07 33 30.2** | **+0.6** |
| | comp=Z,1.6nm,0.6s,baz=342,slow=6.4,SNR=4.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **35.63** | **157** | IAmb | | IAmb | 07 34 12.9 | |
| | comp=Z,4.9nm,2.0s | | | | | | | |
| **SONM** | **Songino Array** | **49.91** | **343** | P | | **P** | **07 35 26.0** | **+0.9** |
| | comp=Z,0.6nm,0.8s,baz=159,slow=8.9,SNR=3.7 | | | | | | | |
| **MK31** | **Makanchi Array** | **59.63** | **327** | P | | **P** | **07 36 35.6** | **+0.1** |
| MK31 | | | | IAmb | | IAmb | 07 36 39.6 | |
| | comp=Z,1.7nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.63** | **327** | P | | **P** | **07 36 33.4** | **-2.0** |
| | comp=Z,1.2nm,0.7s,baz=122,slow=7.3,SNR=8.3 | | | | | | | |
| **MAKZ** | **Makanchi** | **59.81** | **326** | P | | **P** | **07 36 35.6** | **-1.1** |
| MAKZ | | | | IAmb | | IAmb | 07 37 23.7 | |
| | comp=Z,10nm,1.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.94** | **334** | P | | **P** | **07 36 58.2** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=146,slow=8.7,SNR=2.4 | | | | | | | |
| **ABKAR** | **Akbulak array** | **74.03** | **321** | P | | **P** | **07 38 06.0** | **-1.0** |

*MAN **17** 07:32:03.9,4°.50N×128°.16E,h33$^{km}$,mb5.5,ML4.5,MS4.8*

*BJI **17** 07:32:10.2±0.0,4°.70N×127°.90E,h60$^{km}$,mb4.4/36, mB4.9/10,Ms4.4/6,Ms7 4.2/7*

*IDC **17** 07:32:12.6±1.9,4°.60N×127°.65E,h75$^{km}_{\pm}$17$^{km}$,mb3.9/15, mb1 4.1/19,mb1mx3.8/46,mbtmp4.3/19,MS3.3/6, Ms1 3.3/6,ms1mx3.0/76,Error ellipse: s-maj=25.2km s-min=10.8km az=73.0*

*NEIC **17** 07:32:12.3±1.8,4°.66N±0°.08×127°.75E±0°.04,h72$^{km}_{\pm}$8$^{km}$, mb4.7/33, Error ellipse: s-maj=11.9km s-min=2.9km az=201.0*

*DJA **17** 07:32:13.2±0.8,4°.N±7°×12°.8E±°,h10$^{km}$,M4.7/12, mb5.0/12,mB5.0/6,MLv4.8/6,Mw(mB)4.4/6,MwMwp5.9/1, Mwp5.9/1*

**ISC 17 07:32:11.6±0.4,4°.64N±0°.05×127°.81E±0°.06,h66$^{km}$,n115,** σ1$^{s}$33/114,**mb4.6/36,2C-2D,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SGSI** | **Sangihe** | **2.46** | **247** | P | | **Pn** | **07 32 50.4** | **+0.9** |
| SGSI | | | | S | | **Sn** | **07 33 18.7** | **+0.2** |
| **GSPH** | **General Santos** | **3.19** | **297** | *e*P | | Pn | 07 32 55.9 | -3.6 |
| **DAV** | **Davao City (W)** | **3.28** | **318** | Pn | | **Pn** | **07 33 00.9** | **+0.3** |
| **KCP** | **Kidapawan** | **3.59** | **311** | *e*P | | **Pn** | **07 33 03.0** | **-1.8** |
| KCP | | | | *i* S | | **Sn** | **07 33 47.4** | **+1.4** |
| **BIPH** | **Bislig** | **3.81** | **338** | *e*P | | **Pn** | **07 33 06.3** | **-1.5** |
| BIPH | | | | *e*S | | Sn | 07 33 43.4 | -8.0 |
| **TNTI** | **Ternate** | **3.87** | **187** | Pn | | **Pn** | **07 33 10.2** | **+1.6** |
| **TNTI** | **Ternate** | **3.87** | **187** | P | | **Pn** | **07 33 10.6** | **+2.0** |
| **TNTI** | **Ternate** | **3.87** | **187** | P | | **Pn** | **07 33 10.7** | **+2.1** |
| **BUKP** | **Musuan** | **4.22** | **320** | *e*P | | **Pn** | **07 33 14.0** | **+0.4** |
| **CTBH** | **Motabato--PC H** | **4.38** | **306** | P | | Pn | 07 33 22.3 | +6.7 |
| **GTOI** | **Gorontalo** | **6.23** | **230** | P | | **Pn** | **07 33 41.6** | **+0.7** |
| | 0.4nm1µm106nm,1.0s | | | | | | | |
| **SIJI** | **Sorong** | **6.47** | **148** | P | | **Pn** | **07 33 47.6** | **+3.3** |
| | 8.4nm,0.3s,baz=342,slow=9.4,SNR=6.1 | | | | | | | |
| **LLP** | **Lapu-Lapu** | **6.81** | **326** | *e*P | | **Pn** | **07 33 48.7** | **-0.2** |
| **SANI** | **Sanana** | **6.89** | **195** | P | | **Pn** | **07 33 48.5** | **-1.5** |
| | 0.6nm2µm153nm,0.9s | | | | | | | |
| **SANI** | **Sanana** | **6.89** | **195** | P | | **Pn** | **07 33 49.0** | **-1.0** |
| **TOLI2** | **Tolitoli** | **7.84** | **244** | Pn | | **Pn** | **07 34 03.3** | **+0.3** |
| **MSAI** | **Masohi** | **8.01** | **172** | P | | **Pn** | **07 34 15.7** | **+10** |
| **FAKI** | **Fak Fak** | **8.72** | **149** | Pn | | **Pn** | **07 34 16.7** | **+1.6** |
| **MYLDM** | **Lahad Datu** | **9.29** | **274** | Pn | | **Pn** | **07 34 23.7** | **+0.8** |
| **TTSI** | **Tana Toraja** | **11.04** | **226** | P | | **Pn** | **07 34 49.0** | **+2.2** |
| **KKM** | **Kota Kinabalu** | **11.63** | **277** | Pn | | **Pn** | **07 34 54.2** | **-0.7** |
| **SPSI** | **Sidrap Palu** | **11.73** | **223** | P | | **Pn** | **07 34 56.7** | **+0.5** |
| | 27nm,0.8s | | | | | | | |
| **BNSI** | **Bone** | **11.82** | **221** | P | | **Pn** | **07 34 57.2** | **-0.3** |
| | 29nm,0.7s | | | | | | | |
| **BKB** | **Balikpapan** | **12.38** | **242** | Pn | | **Pn** | **07 35 04.7** | **-0.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **12.52** | **220** | P | | **Pn** | **07 35 06.4** | **-0.6** |
| | 1.7nm,0.3s,baz=302,slow=1.2,SNR=8.2 | | | | | | | |
| KAPI | | | | LR | | LR | 07 39 08.3 | |
| | comp=Z,100nm,20.4s,baz=76,slow=34 | | | | | | | |
| **KBKI** | **Kotabaru** | **14.05** | **236** | P | | **Pn** | **07 35 27.4** | **-0.2** |
| | 67nm,0.9s | | | | | | | |
| **GENI** | **Genyem** | **14.29** | **120** | P | | **P** | **07 35 37.9** | **+1.9** |
| | 5µm170nm,1.3s | | | | | | | |
| **GENI** | **Genyem** | **14.29** | **120** | P | | **P** | **07 35 37.3** | **+1.3** |
| **MMRI** | **Maumere** | **14.31** | **203** | Pn | | **Pn** | **07 35 31.4** | **+0.4** |
| **JAY** | **Jayapura** | **14.71** | **119** | P | | **P** | **07 35 39.5** | **-1.3** |
| | 0.4nm,0.3s,baz=124,slow=21,SNR=0.8 | | | | | | | |
| **SOEI** | **Soe** | **14.73** | **194** | | | **Pn** | **07 35 38.8** | **+2.3** |
| **BATI** | **Baumata** | **15.31** | **196** | P | | **Pn** | **07 35 44.0** | **0.0** |
| | 3.2nm,0.3s,baz=123,slow=16,SNR=1.6 | | | | | | | |
| BATI | | | | LR | | LR | 07 41 39.8 | |
| | comp=Z,111nm,21.1s,baz=62,slow=37 | | | | | | | |
| **SBUM** | **Sibu** | **15.71** | **263** | P | | **Pn** | **07 35 49.9** | **+0.9** |
| **WBSI** | **Waikabubak, Su** | **16.48** | **211** | P | | **Pn** | **07 35 59.4** | **+0.7** |
| | 26µm97nm,0.9s | | | | | | | |
| **PLAI** | **Plampang** | **16.70** | **217** | P | | **Pn** | **07 36 02.7** | **+1.2** |
| | 90nm,0.9s | | | | | | | |
| **PLAI** | **Plampang** | **16.70** | **217** | P | | **Pn** | **07 36 01.0** | **-0.5** |
| **DRS** | **Darwin Rock St** | **17.23** | **170** | P | | **Pn** | **07 36 06.7** | **-1.3** |
| **MTN** | **Manton Dam** | **17.68** | **169** | P | | **Pn** | **07 36 11.1** | **-2.4** |
| MTN | | | | IAmb | | IAmb | 07 36 21.9 | |
| | comp=Z,21nm,0.6s | | | | | | | |
| **KSM** | **Kuching** | **17.75** | **260** | P | | **P** | **07 36 13.7** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **18.84** | **226** | P | | **P** | **07 36 25.2** | **-1.2** |
| JAGI | | | | IAmb | | IAmb | 07 36 44.3 | |
| | comp=Z,28nm,0.6s | | | | | | | |
| **GUMO** | **Guam** | **19.03** | **61** | LR | | LR | 07 43 36.8 | |
| | comp=Z,88nm,20.0s,baz=169,slow=36 | | | | | | | |
| **TPUB** | **Ta-pu** | **19.81** | **340** | P | | **P** | **07 36 36.6** | **-0.2** |
| TPUB | | | | IAmb | | IAmb | 07 36 55.5 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **20.21** | **177** | P | | **P** | **07 36 40.3** | **-0.9** |
| KNRA | | | | IAmb | | IAmb | 07 36 46.9 | |
| | comp=Z,30nm,0.6s | | | | | | | |
| **KNRA** | **Kununurra** | **20.21** | **177** | P | | **P** | **07 36 41.4** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **22.69** | **185** | P | | **P** | **07 37 07.0** | **-0.9** |
| | comp=Z,4.2nm,0.5s,baz=10,slow=8.2,SNR=16 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.69** | **185** | P | | **P** | **07 37 08.2** | **+0.2** |
| **LEM** | **Lembang** | **23.15** | **241** | LR | | LR | 07 46 37.2 | |
| | comp=Z,75nm,21.6s,baz=44,slow=38 | | | | | | | |
| **COEN** | **Coen** | **23.95** | **141** | P | | **P** | **07 37 19.2** | **-0.8** |
| **WB0** | **Warramunga Arr** | **25.10** | **165** | P | | **P** | **07 37 30.0** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 07 37 43.8 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **25.25** | **165** | P | | **P** | **07 37 28.2** | **-3.5** |
| WRAB | | | | IAmb | | IAmb | 07 37 38.3 | |
| | comp=Z,16n

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **60.28 332** | P | **P** | **07 42 13.2** | **0.0** | |
| | comp=Z,1.7nm,0.3s,baz=122,slow=6.8,SNR=8.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.28 332** | P | **P** | **07 42 11.2** | **-1.9** | |
| **KURK** | **Kurchatov** | **61.56 327** | P | **P** | **07 42 20.4** | **-1.5** | |
| **LBZ** | **Lake Benmore** | **61.84 147** | P | **P** | **07 42 23.9** | **0.0** | |
| **KHZ** | **Kahutara** | **62.53 143** | P | **P** | **07 42 27.6** | **-0.9** | |
| **KKAR** | **Karatay Array** | **63.31 316** | P | **P** | **07 42 32.8** | **-1.0** | |
| **BRVK** | **Borovoye** | **67.23 326** | P | **P** | **07 42 57.6** | **-1.3** | |
| BRVK | | | IAmb | IAmb | 07 43 13.8 | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.14 320** | P | **P** | **07 43 27.7** | **-1.5** | |
| **ABKAR** | **Akbulak array** | **72.14 320** | P | **P** | **07 43 27.9** | **-1.2** | |
| ABKAR | | | IAmb | IAmb | 07 43 43.8 | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.83 25** | P | **P** | **07 44 32.2** | **-1.5** | |
| | comp=Z,0.4nm,0.6s,baz=250,slow=5.4,SNR=2.3 | | | | | | |
| **KLMR** | **Klimovskoe** | **85.15 331** | *e*P | **P** | **07 44 36.9** | **-3.5** | |
| KLMR | | | AMP | | 07 44 39.9 | | |
| | comp=Z,14nm,1.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **89.97 340** | P | **P** | **07 45 01.7** | **-1.7** | |
| | comp=Z,2.0nm,0.6s,baz=79,slow=6.3,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **91.54 332** | P | **P** | **07 45 08.8** | **-2.1** | |
| | comp=Z,3.1nm,1.1s,baz=191,slow=27,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.65 289** | PKP | **PKPdf** | **07 51 01.9** | **-0.9** | |
| | comp=Z,0.9nm,0.9s,baz=280,slow=2.5,SNR=2.4 | | | | | | |

*CNRM* ***17*** *07:41:38.9, 35.52N×3.71W, h17km, ml2.0*
*SFS* ***17*** *07:41:38.0, 35.45N×3.81W, ML2.9, ALBORAN SUR*
**ISC 17 07:41:39.8±1.1, 35.51N±0.04×3.71W±0.04, h20km±6km, n12, σ1s89/24, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PALE** | **Palemas** | **0.35** | **213** | P | | **Pb** | **07 41 46.7** | **-0.6** |
| PALE | | | | S | | **Sb** | **07 41 50.9** | **-1.4** |
| **CHAS** | **Isla Isabel II** | **1.09** | **107** | P | | **Pn** | **07 41 58.9** | **-1.1** |
| CHAS | | | | S | | **Sn** | **07 42 13.7** | **-0.8** |
| **TAF** | **Taforalt** | **1.27** | **123** | P | | **Pb** | **07 42 03.7** | **+0.6** |
| TAF | | | | S | | **Sn** | **07 42 17.9** | **-1.1** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **335** | P | | **Pb** | **07 42 06.1** | **+1.3** |
| EMAL | | | | S | | **Sb** | **07 42 22.6** | **+0.6** |
| **CHEFC** | **Chefchaouen** | **1.39** | **254** | P | | **Pn** | **07 42 03.0** | **-1.2** |
| CHEFC | | | | S | | **Sb** | **07 42 24.9** | **+2.3** |
| **CEU** | **Ceuta** | **1.41** | **286** | P | | **Pn** | **07 42 01.4** | **-2.9** |
| CEU | | | | S | | **Sn** | **07 42 18.5** | **-3.7** |
| **JBK** | **JBK** | **1.50** | **141** | P | | **Pn** | **07 42 04.8** | **-1.0** |
| JBK | | | | S | | **Sb** | **07 42 26.7** | **+0.9** |
| **IFR** | **Ifrane** | **2.31** | **211** | P | | **Pb** | **07 42 23.7** | **+2.8** |
| IFR | | | | S | | **Sn** | **07 42 43.7** | **-1.1** |
| **MD31** | **MD31** | **2.78** | **199** | P | | **Pn** | **07 42 24.6** | **+1.3** |
| MD31 | | | | S | | **Sn** | **07 42 56.8** | **+0.6** |
| **MDT** | **Midelt** | **2.79** | **196** | P | | **Pn** | **07 42 20.7** | **-2.8** |
| MDT | | | | S | | **Sn** | **07 42 57.2** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.74** | **301** | *e*Pn | | **Pn** | **07 42 38.1** | **+1.7** |
| PVAQ | | | | *e*Sn | | **Sn** | **07 43 18.9** | **-1.0** |
| PVAQ | | | | A | | A | 07 43 26.2 | |
| | 1.9nm,1.0s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **301** | P | | **Pn** | **07 42 38.4** | **+2.0** |
| PVAQ | | | | S | | **Sn** | **07 43 17.4** | **-2.5** |

*BJI* ***17*** *07:44:23.9±0.0, 30.09S×177.15W, h14km, mb5.1/30, mB5.7/17, Ms5.1/11, Ms7 4.9/12*
*IDC* ***17*** *07:44:23.3±0.4, 30.31S×177.81W, h0km, mb4.8/17, mb1 5.0/17, mb1mx4.7/33, mbtmp4.8/17, MS4.8/49, Ms1 4.8/49, ms1mx4.7/61, Error ellipse: s-maj=19.6km s-min=13.8km az=92.0*
*MOS* ***17*** *07:44:25.7±1.0, 30.44S×177.79W, h23km, mb5.3/21, Error ellipse: s-maj=12.3km s-min=9.4km az=109.2*
*NEIC* ***17*** *07:44:26.9±2.9, 30.48S±0.05×177.7W±0.1, h24km±3km, mb5.1/77, Error ellipse: s-maj=15.5km s-min=7.9km az=89.0*
*GCMT* ***17*** *07:44:29.9±0.1, 30.47S±0.01×177.46W±0.01, h29km, MW5.5/123, Moment Tensor Solution. s123,c202; s123,c204; Duration: 1s3 Moment tensor: Scale 10^17 Nm; Mrr1.35±.03; Mθθ-0.08±.02; Mϕϕ-1.27±.02; Mrθ0.28±.03; Mrϕ-0.42±.01; Mθϕ1.24±.03; Best double couple: Mo1.87400×10^17 NP1:ϕs201.00000°, δ24.00000°, λ96.00000°. NP2:ϕs14.00000°, δ66.00000°, λ87.00000°. Principal axes: T 1.8500, Plg68.0000°, Azm279.0000°; N 0.0480, Plg2.0000°, Azm15.0000°; P -1.8970, Plg21.0000°, Azm106.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NOU* ***17*** *07:44:31.1, 31.15S×177.62W, h36km, mb5.4/51, Kermadec Islands Region*
**ISC 17 07:44:28.5±0.3, 30.59S±0.04×177.74W±0.06, h33km, n535, σ1s97/485, mb5.1/85, MS4.8/55, 26C-25D, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GLKZ** | **Green Lake** | **1.33** | **353** | P | | **Pn** | **07 44 47.2** | **-3.5** |
| GLKZ | | | | S | | **Sn** | **07 45 02.3** | **-5.0** |
| **RAO** | **Raoul Island** | **1.34** | **353** | Pn | | **Pn** | **07 44 46.7** | **-4.2** |
| | 2μm,0.3s,baz=62,slow=14,SNR=46 | | | | | | | |
| RAO | | | | Sn | | **Sn** | **07 45 02.1** | **-5.4** |
| | 9μm,0.3s,baz=88,slow=21,SNR=14 | | | | | | | |
| **RAO** | **Raoul Island** | **1.34** | **353** | P | | **Pn** | **07 44 47.0** | **-3.9** |
| RAO | | | | | | | 07 45 02.1 | |
| **RAO** | **Raoul Island** | **1.34** | **353** | Pn | | **Pn** | **07 44 47.0** | **-3.9** |
| **RIZ** | **Raoul Island** | **1.35** | **353** | P | | **Pn** | **07 44 46.7** | **-4.3** |
| RIZ | | | | S | | **Sn** | **07 45 02.5** | **-5.2** |
| **MXZ** | **Matakaoa Point** | **7.69** | **204** | Pn | | **Pn** | **07 46 17.6** | **-0.5** |
| **MXZ** | **Matakaoa Point** | **7.69** | **204** | P | | **Pn** | **07 46 13.7** | **-4.4** |
| MXZ | | | | S | | **Sn** | **07 47 43.4** | **-0.7** |
| **WMGZ** | **Waiomatatini S** | **7.88** | **203** | P | | **Pn** | **07 46 17.5** | **-3.2** |
| WMGZ | | | | S | | **Sn** | **07 47 49.0** | **+0.2** |
| **HAZ** | **Te Kaha** | **8.05** | **206** | P | | **Pn** | **07 46 19.6** | **-3.5** |
| HAZ | | | | S | | **Sn** | **07 47 54.6** | **+1.6** |
| **PKGZ** | **Pakihiroa** | **8.06** | **204** | P | | **Pn** | **07 46 19.4** | **-3.8** |
| PKGZ | | | | S | | **Sn** | **07 47 52.5** | **-0.8** |
| **PUZ** | **Puketiti** | **8.16** | **203** | P | | **Pn** | **07 46 20.4** | **-4.2** |
| PUZ | | | | S | | **Sn** | **07 47 53.9** | **-1.8** |
| **RUGZ** | **Raukumara Rang** | **8.28** | **206** | P | | **Pn** | **07 46 22.7** | **-3.5** |
| RUGZ | | | | S | | **Sn** | **07 47 57.1** | **-1.5** |
| **TWGZ** | **Tauwhareparae** | **8.35** | **204** | P | | **Pn** | **07 46 23.3** | **-4.0** |
| TWGZ | | | | S | | **Sn** | **07 48 00.3** | **-0.1** |
| **WCZ** | **Waipu Caves** | **8.51** | **229** | P | | Pn | 07 46 38.0 | +8.7 |
| **CNGZ** | **Carnagh Statio** | **8.55** | **202** | P | | **Pn** | **07 46 26.0** | **-4.0** |
| CNGZ | | | | S | | **Sn** | **07 48 01.9** | **-3.4** |
| **TKGZ** | **Te Karaka** | **8.63** | **204** | P | | **Pn** | **07 46 28.7** | **-2.3** |
| TKGZ | | | | S | | **Sn** | **07 48 03.0** | **-4.3** |
| **OPRZ** | **Ohinepanea** | **8.64** | **212** | P | | **Pn** | **07 46 30.1** | **-1.0** |
| **MWZ** | **Matawai** | **8.66** | **206** | P | | **Pn** | **07 46 27.5** | **-3.9** |
| **URZ** | **Urewera** | **8.75** | **208** | Pn | | **Pn** | **07 46 28.2** | **-4.5** |
| | 2.7nm,0.3s,baz=267,slow=4.8,SNR=18 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **07 48 10.9** | **+0.7** |
| | 39nm,0.3s,baz=135,slow=12,SNR=9.5 | | | | | | | |
| **URZ** | **Urewera** | **8.75** | **208** | Pn | | **Pn** | **07 46 29.6** | **-3.1** |
| **URZ** | **Urewera** | **8.75** | **208** | P | | **Pn** | **07 46 28.2** | **-4.5** |
| URZ | | | | S | | **Sn** | **07 48 07.8** | **-2.4** |
| **URZ** | **Urewera** | **8.75** | **208** | P | | **Pn** | **07 46 29.3** | **-3.4** |
| **RIGZ** | **Rimuhau** | **8.90** | **203** | P | | Pn | 07 46 29.8 | -5.0 |
| RIGZ | | | | S | | **Sn** | **07 48 11.6** | **-2.3** |
| **TOZ** | **Tahuroa Road** | **9.06** | **216** | P | | **Pn** | **07 46 39.3** | **+2.5** |
| **PRGZ** | **Paritu Road** | **9.06** | **202** | P | | Pn | 07 46 31.8 | -5.1 |
| **SNGZ** | **Shannon Statio** | **9.12** | **205** | P | | **Pn** | **07 46 34.2** | **-3.6** |
| **KNZ** | **Kokohu** | **9.22** | **203** | P | | Pn | 07 46 33.8 | -5.2 |
| **RAHZ** | **Arahi** | **9.33** | **206** | P | | **Pn** | **07 46 38.4** | **-2.2** |
| **BKZ** | **Black Stump Fm** | **9.78** | **207** | P | | Pn | 07 46 41.7 | -5.1 |
| **BFZ** | **Birch Farm** | **11.19** | **204** | Pn | | Pn | 07 47 01.2 | -4.9 |
| **SNZO** | **South Karori** | **12.32** | **208** | P | | **Pn** | **07 47 17.4** | **-4.1** |
| **PLWZ** | **Palliser** | **12.33** | **205** | Pn | | **Pn** | **07 47 19.1** | **-2.6** |
| **BHW** | **Baring Head** | **12.34** | **207** | Pn | | **Pn** | **07 47 20.2** | **-1.6** |
| **NFK** | **Norfolk Island** | **12.53** | **273** | P | | **Pn** | **07 47 26.1** | **+1.6** |
| | baz=13 | | | | | | | |
| **MSVF** | **Nonsavu** | **13.36** | **342** | Pn | | **Pn** | **07 47 34.1** | **-1.8** |
| | 0.3nm,0.3s,baz=152,slow=13,SNR=1.6 | | | | | | | |
| MSVF | | | | LR | | LR | 07 51 58.2 | |
| | comp=Z,7μm,18.7s,baz=176,slow=35 | | | | | | | |
| **MSVF** | **Nonsavu** | **13.36** | **342** | ‖*e*P | | **Pn** | **07 47 35.7** | **-0.2** |
| MSVF | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.9s | | | | | | | |
| **THZ** | **Tophouse** | **13.46** | **211** | Pn | | **Pn** | **07 47 35.9** | **-1.3** |
| **KHZ** | **Kahutara** | **13.72** | **208** | P | | **Pn** | **07 47 36.5** | **-4.1** |
| **PINNC** | **Pines Island,** | **15.43** | **297** | Pn | | **Pn** | **07 48 02.1** | **-1.7** |
| PINNC | | | | IAmb | | IAmb | 07 48 36.9 | |
| | comp=Z,139nm,1.2s | | | | | | | |
| **RPZ** | **Rata Peaks** | **15.84** | **211** | Pn | | **Pn** | **07 48 08.0** | **-0.9** |
| | comp=Z,7.2nm,0.3s,baz=30,slow=1.5,SNR=16 | | | | | | | |
| RPZ | | | | Sn | | **Sn** | **07 50 55.3** | **-8.1** |
| | comp=Z,5.5nm,0.3s,baz=220,slow=21,SNR=6.9 | | | | | | | |
| **RPZ** | **Rata Peaks** | **15.84** | **211** | P | | **Pn** | **07 48 06.9** | **-2.0** |
| **OUENC** | **Ouen Island, N** | **16.01** | **297** | Pn | | **Pn** | **07 48 10.8** | **-0.4** |
| OUENC | | | | IAmb | | IAmb | 07 48 30.4 | |
| | comp=Z,146nm,0.9s | | | | | | | |
| **OUENC** | **Ouen Island, N** | **16.01** | **297** | P | | P | **07 48 18.9** | **+4.6** |
| **ONTNC** | **Ouen Toro** | **16.37** | **296** | Pn | | **Pn** | **07 48 13.2** | **-2.5** |
| ONTNC | | | | IAmb | | IAmb | 07 49 01.6 | |
| | comp=Z,145nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.50** | **297** | Pn | | **P** | **07 48 22.3** | **+2.3** |
| | comp=Z,1.1nm,0.3s,baz=54,slow=19,SNR=15 | | | | | | | |
| DZM | | | | LR | | LR | 07 53 40.2 | |
| | comp=Z,8μm,18.2s,baz=130,slow=34 | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.50** | **297** | *e*Pn | | P | **07 48 22.5** | **+2.5** |
| | comp=Z,342nm,1.4s | | | | | | | |
| DZM | | | | *e*LR | | LR | 07 52 11.0 | |
| | comp=Z,11μm,24.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.50** | **297** | P | | **P** | **07 48 23.3** | **+3.3** |
| **NOUC** | **Port Laguerre** | **16.60** | **297** | P | | **P** | **07 48 25.3** | **+4.4** |
| **LIFNC** | **LIFOU** | **16.68** | **302** | Pn | | **Pn** | **07 48 15.4** | **-4.3** |
| **AFI** | **Afiamalu** | **17.48** | **20** | P | | P | 07 48 38.5 | +7.7 |
| | comp=Z,197nm,1.9s | | | | | | | |
| **RAR** | **Rarotonga** | **18.65** | **64** | LR | | LR | 07 53 51.0 | |
| | comp=Z,3μm,21.6s,baz=242,slow=30 | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **18.92** | **212** | P | | **P** | **07 48 43.8** | **-2.6** |
| **KOUNC** | **Kounac, New Ca** | **19.02** | **297** | P | | **Pn** | **07 48 53.0** | **+4.4** |
| **LHI** | **Lord Howe Isla** | **19.89** | **261** | P | | **Pn** | **07 48 58.7** | **-0.2** |
| | baz=20,SNR=4.5 | | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.89** | **261** | P | | **Pn** | **07 49 02.3** | **+3.4** |
| **SANVU** | **Saraoutou** | **20.43** | **314** | P | | **P** | **07 49 01.6** | **-1.4** |
| SANVU | | | | IAmb | | IAmb | 07 49 33.4 | |
| | comp=Z,65nm,1.0s | | | | | | | |
| **SANVU** | **Saraoutou** | **20.43** | **314** | P | | Pn | 07 49 13.3 | +8.0 |
| **ARMA** | **Armidale** | **26.35** | **262** | P | | **P** | **07 50 03.8** | **+2.1** |
| | baz=26,SNR=15 | | | | | | | |
| **ARMA** | **Armidale** | **26.35** | **262** | P | | **P** | **07 50 02.4** | **+0.7** |
| ARMA | | | | IAmb | | IAmb | 07 50 06.8 | |
| | comp=Z,91nm,1.4s | | | | | | | |
| **ARMA** | **Armidale** | **26.35** | **262** | P | | **P** | **07 50 05.4** | **+3.7** |
| **MGCD** | **Mangrove Creek** | **26.52** | **256** | P | | **P** | **07 50 04.8** | **+1.7** |
| | baz=27,SNR=11 | | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.52** | **256** | P | | **P** | **07 50 07.1** | **+4.0** |
| **CNB** | **Canberra Magne** | **27.93** | **252** | P | | **P** | **07 50 18.8** | **+3.1** |
| | baz=28,SNR=6.9 | | | | | | | |
| **EIDS** | **Eidsvold** | **27.97** | **273** | P | | **P** | **07 50 17.8** | **+1.7** |
| | baz=28,SNR=15 | | | | | | | |
| **EIDS** | **Eidsvold** | **27.97** | **273** | P | | **P** | **07 50 16.1** | **0.0** |
| EIDS | | | | IAmb | | IAmb | 07 50 24.1 | |
| | comp=Z,50nm,0.9s | | | | | | | |
| **EIDS** | **Eidsvold** | **27.97** | **273** | P | | **P** | **07 50 18.0** | **+1.9** |
| **CAN** | **Canberra** | **28.22** | **251** | P | | **P** | **07 50 18.5** | **+0.1** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,38nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **28.22** | **251** | P | | **P** | **07 50 18.4** | **+0.1** |
| CAN | | | | IAmb | | IAmb | 07 50 30.4 | |
| | comp=Z,38nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **28.22** | **251** | P | | **P** | **07 50 21.5** | **+3.1** |
| **PAE** | **Paea** | **28.65** | **70** | *e*T | | T | 08 19 49.6 | |
| | comp=Z,15nm,0.3s | | | | | | | |
| **PPT2** | **Papeete2** | **28.69** | **70** | *e*S | | **S** | **07 55 15.0** | **+5.2** |
| | comp=Z,540nm,22.9s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 07 57 36.2 | |
| | comp=Z,5μm,26.2s,baz=233 | | | | | | | |
| **PPT2** | **Papeete2** | **28.69** | **70** | *e*T | | T | 08 19 53.5 | |
| | comp=Z,11nm,0.3s | | | | | | | |
| **PPT** | **Papeete** | **28.70** | **70** | LR | | LR | 07 58 42.5 | |
| | comp=Z,1μm,21.8s,baz=232,slow=30 | | | | | | | |
| **TVO** | **Taravao** | **28.86** | **70** | *e*T | | T | 08 20 05.8 | |
| | comp=Z,4.2nm,0.3s | | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.13** | **277** | P | | **P** | **07 50 28.6** | **+2.1** |
| | comp=Z,72nm,0.6s | | | | | | | |
| **GLAD** | **Gladstone** | **29.49** | **240** | P | | **P** | **07 50 30.8** | **+1.3** |
| | comp=Z,47nm,1.3s | | | | | | | |
| **HNR** | **Honiara** | **29.59** | **311** | LR | | LR | 08 00 29.2 | |
| | comp=Z,1μm,21.4s,baz=146,slow=33 | | | | | | | |
| **RMQ** | **Roma** | **29.65** | **270** | P | | **P** | **07 50 33.9** | **+2.8** |
| | baz=30,SNR=45 | | | | | | | |
| **RMQ** | **Roma** | **29.65** | **270** | P | | P | 07 50 35.7 | +4.6 |
| **MEH** | **Mehetia** | **29.77** | **72** | *e*T | | T | 08 21 16.2 | |
| | comp=Z,33nm,0.2s | | | | | | | |
| **TOO** | **Toolangi** | **31.09** | **247** | P | | **P** | **07 50 46.1** | **+2.3** |
| | baz=31,SNR=8.3 | | | | | | | |
| **TOO** | **Toolangi** | **31.09** | **247** | P | | **P** | **07 50 45.0** | **+1.2** |
| TOO | | | | pmax | | pmax | | |
| | comp=Z,77nm,1.4s | | | | | | | |
| **TOO** | **Toolangi** | **31.09** | **247** | P | | **P** | **07 50 45.0** | **+1.2** |
| **TOO** | **Toolangi** | **31.09** | **247** | P | | **P** | **07 50 46.7** | **+2.9** |
| **CMSA** | **Cobar Meteorol** | **31.25** | **259** | P | | **P** | **07 50 47.3** | **+2.2** |
| | baz=31,SNR=36 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.25** | **259** | P | | **P** | **07 50 47.0** | **+1.9** |
| **VAH** | **Vaihoa** | **31.54** | **68** | *e*T | | T | 08 23 23.6 | |
| | comp=Z,69nm,0.3s | | | | | | | |
| **BRAT** | **Ballarat** | **32.33** | **247** | P | | **P** | **07 50 57.4** | **+2.8** |
| | comp=Z,24nm,1.0s | | | | | | | |
| **QLP** | **Quilpie** | **33.52** | **267** | P | | **P** | **07 51 06.1** | **+1.0** |
| | baz=34,SNR=7.4 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.01** | **249** | P | | **P** | **07 51 10.4** | **+1.1** |
| **CTA** | **Charters Tower** | **34.05** | **279** | LR | | LR | 08 04 04.2 | |
| | comp=Z,4μm,18.0s,baz=128,slow=35 | | | | | | | |
| **CTA** | **Charters Tower** | **34.05** | **279** | P | | **P** | **07 51 11.5** | **+1.7** |
| **CTAO** | **Charters Tower** | **34.05** | **279** | P | | **P** | **07 51 10.6** | **+0.8** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,317nm,1.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **34.05** | **279** | P | | **P** | **07 51 10.6** | **+0.8** |
| **CTAO** | **Charters Tower** | **34.05** | **279** | P | | **P** | **07 51 11.5** | **+1.7** |
| **STKA** | **Stephens Creek** | **34.65** | **257** | P | | **P** | **07 51 16.1** | **+1.2** |
| | comp=Z,59nm,0.6s,baz=101,slow=10,SNR=190 | | | | | | | |
| STKA | | | | LR | | LR | 08 04 17.7 | |
| | comp=Z,3μm,18.9s,baz=91,slow=34 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.65** | **257** | P | | **P** | **07 51 17.2** | **+2.3** |
| | baz=35,SNR=142 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.65** | **257** | P | | **P** | **07 51 15.6** | **+0.7** |
| STKA | | | | pmax | | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **34.65** | **257** | P | | **P** | **07 51 15.6** | **+0.7** |
| STKA | | | | IAmb | | IAmb | 07 51 22.1 | |
| | comp=Z,26nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **34.65** | **257** | P | | **P** | **07 51 17.0** | **+2.1** |
| **INKA** | **Innaminka** | **36.22** | **264** | P | | **P** | **07 51 32.4** | **+4.0** |
| **MTSU** | **Mount Surprise** | **36.55** | **281** | P | | **P** | **07 51 32.5** | **+1.2** |
| | baz=37,SNR=46 | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.55** | **281** | P | | **P** | **07 51 34.6** | **+3.3** |
| **HTT** | **Hallett** | **36.66** | **254** | P | | **P** | **07 51 33.5** | **+1.3** |
| | baz=37,SNR=81 | | | | | | | |
| **HTT** | **Hallett** | **36.66** | **254** | P | | **P** | **07 51 34.8** | **+2.6** |
| **NAPP** | **Napperby** | **37.34** | **254** | P | | **P** | **07 51 40.2** | **+2.3** |
| | comp=Z,171nm,1.0s | | | | | | | |
| **PTPS** | **Port Pirie** | **37.47** | **254** | P | | **P** | **07 51 43.2** | **+4.3** |
| | comp=Z,148nm,0.7s | | | | | | | |
| **LCRK** | **Leigh Creek** | **37.76** | **259** | P | | **P** | **07 51 43.3** | **+1.9** |
| **WHYH** | **Whyalla** | **37.84** | **254** | P | | **P** | **07 51 43.9** | **+1.8** |
| | comp=Z,73nm,0.8s | | | | | | | |
| **PMG** | **Port Moresby** | **38.89** | **295** | P | | **P** | **07 51 51.9** | **+0.8** |
| | comp=Z,4.9nm,0.3s,baz=176,slow=5.8,SNR=3.6 | | | | | | | |
| PMG | | | | LR | | LR | 08 05 22.5 | |
| | comp=Z,2μm,20.8s,baz=148,slow=32 | | | | | | | |
| **PMG** | **Port Moresby** | **38.89** | **295** | ‖*e*P | | **P** | **07 51 51.7** | **+0.7** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.13** | **254** | P | | **P** | **07 51 53.4** | **+0.5** |
| | baz=39,SNR=76 | | | | | | | |
| **BBOO** | **Buckleboo** | **39.13** | **254** | P | | **P** | **07 51 53.5** | **+0.5** |
| BBOO | | | | IAmb | | IAmb | 07 51 54.6 | |
| | comp=Z,47nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.13** | **254** | P | | **P** | **07 51 53.9** | **+0.9** |
| **COEN** | **Coen** | **39.53** | **286** | P | | **P** | **07 51 57.0** | **+0.5** |
| COEN | | | | IAmb | | IAmb | 07 51 59.3 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **39.53** | **286** | P | | **P** | **07 51 58.4** | **+1.9** |
| **QIS** | **Mount Isa** | **39.55** | **274** | P | | **P** | **07 51 56.8** | **+0.2** |
| | baz=40,SNR=24 | | | | | | | |
| **QIS** | **Mount Isa** | **39.55** | **274** | P | | **P** | **07 51 58.7** | **+2.1** |
| **OOD** | **Oodnadatta** | **40.53** | **262** | P | | **P** | **07 52 06.7** | **+2.1** |
| **TAOE** | **Nuku Hiva Isla** | **41.18** | **66** | *e*S | | **S** | **07 58 26.6** | **+4.9** |
| | comp=Z,1μm,18.7s | | | | | | | |
| TAOE | | | | *e*LR | | LR | 08 03 21.6 | |
| | comp=Z,3μm,26.6s | | | | | | | |
| **MULG** | **Mulgathing** | **41.30** | **258** | P | | **P** | **07 52 12.2** | **+1.2** |
| **AS31** | **Alice Springs** | **43.32** | **267** | P | | **P** | **07 52 26.6** | **-0.9** |
| **ASAR** | **Alice Springs** | **43.32** | **267** | P | | **P** | **07 52 27.0** | **-0.6** |
| | comp=Z,20nm,0.6s,baz=104,slow=6.8,SNR=179 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **07 58 06.2** | **+1.2** |
| | comp=Z,3.4nm,0.7s,baz=117,slow=4.4,SNR=8.0 | | | | | | | |
| ASAR | | | | LR | | LR | 08 10 19.8 | |
| | comp=Z,4μm,18.3s,baz=112,slow=36 | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.15** | **272** | P | | **P** | **07 52 33.7** | **-0.5** |
| **WB2** | **Warramunga Arr** | **44.31** | **272** | P | | **P** | **07 52 35.2** | **-0.3** |
| **WRAB** | **Tennant Creek** | **44.32** | **272** | *d*P | | **P** | **07 52 34.9** | **-0.7** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,62nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.32** | **272** | P | | **P** | **07 52 34.9** | **-0.7** |
| **WRAB** | **Tennant Creek** | **44.32** | **272** | P | | **P** | **07 52 36.5** | **+0.9** |
| **WRA** | **Warramunga Arr** | **44.33** | **272** | P | | **P** | **07 52 34.7** | **-0.9** |
| | comp=Z,37nm,0.6s,baz=110,slow=8.1,SNR=136 | | | | | | | |
| WRA | | | | S | | **S** | **07 59 05.2** | **-2.7** |
| | comp=Z,0.7nm,0.7s,baz=114,slow=13,SNR=2.3 | | | | | | | |
| WRA | | | | LR | | LR | 08 10 29.9 | |
| | comp=Z,3μm,18.0s,baz=102,slow=35 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.33** | **272** | P | | **P** | **07 52 34.1** | **-1.5** |
| **WB0** | **Warramunga Arr** | **44.35** | **272** | P | | **P** | **07 52 35.0** | **-0.8** |
| **FORT** | **Forrest** | **46.21** | **255** | P | | **P** | **07 52 50.1** | **-0.4** |
| | baz=46,SNR=30 | | | | | | | |
| **FORT** | **Forrest** | **46.21** | **255** | P | | **P** | **07 52 50.1** | **-0.4** |
| **FORT** | **Forrest** | **46.21** | **255** | P | | **P** | **07 52 51.2** | **+0.7** |
| **WRKA** | **Warakurna** | **47.67** | **263** | P | | **P** | **07 53 00.7** | **-1.3** |
| | baz=48,SNR=14 | | | | | | | |
| **WRKA** | **Warakurna** | **47.67** | **263** | P | | **P** | **07 53 01.1** | **-0.9** |
| **VNDA** | **Vanda** | **47.93** | **186** | P | | **P** | **07 53 05.2** | **+2.0** |
| | comp=Z,1.4nm,0.7s,baz=38,slow=12,SNR=1.2 | | | | | | | |
| VNDA | | | | LR | | LR | 08 08 36.6 | |
| | comp=Z,211nm,21.2s,baz=40,slow=30 | | | | | | | |
| **VNDA** | **Vanda** | **47.93** | **186** | P | | **P** | **07 53 05.2** | **+2.0** |
| VNDA | | | | pmax | | pmax | | |
| | comp=Z,80nm,1.8s | | | | | | | |
| **JAY** | **Jayapura** | **48.18** | **297** | LR | | LR | 08 10 55.5 | |
| | comp=Z,786nm,21.7s,baz=154,slow=33 | | | | | | | |
| **KNRA** | **Kununurra** | **50.94** | **274** | P | | **P** | **07 53 26.6** | **-0.3** |
| | baz=51,SNR=11 | | | | | | | |
| **KNRA** | **Kununurra** | **50.94** | **274** | P | | **P** | **07 53 26.7** | **-0.3** |
| **KNRA** | **Kununurra** | **50.94** | **274** | P | | **P** | **07 53 27.8** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **52.58** | **270** | P | | **P** | **07 53 38.4** | **-0.8** |
| | baz=53,SNR=17 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.58** | **270** | P | | **P** | **07 53 38.2** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **52.58** | **270** | P | | **P** | **07 53 39.5** | **+0.3** |
| **KLBR** | **Kellerberrin** | **54.50** | **251** | P | | **P** | **07 53 52.6** | **-0.6** |
| | baz=54,SNR=8.9 | | | | | | | |
| **CASY** | **Casey** | **55.08** | **208** | P | | **P** | **07 53 56.9** | **+0.1** |
| **MEEK** | **Meekatharra** | **55.36** | **257** | P | | **P** | **07 53 58.4** | **-1.1** |
| | baz=55,SNR=7.4 | | | | | | | |
| **MEEK** | **Meekatharra** | **55.36** | **257** | P | | **P** | **07 53 59.6** | **+0.1** |
| | comp=Z,23nm,1.0s | | | | | | | |
| **BLDU** | **Ballidu** | **55.65** | **252** | P | | **P** | **07 54 00.3** | **-1.2** |
| | baz=56,SNR=9.4 | | | | | | | |
| **BLDU** | **Ballidu** | **55.65** | **252** | P | | **P** | **07 54 00.5** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **56.16** | **263** | P | | **P** | **07 54 03.7** | **-1.5** |
| PSA00 | | | | IAmb | | IAmb | 07 55 08.3 | |
| | comp=Z,57nm,1.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **56.42** | **264** | P | | **P** | **07 54 05.5** | **-1.6** |
| MBWA | | | | IAmb | | IAmb | 07 54 17.8 | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **MBWA** | **Marble Bar** | **56.42** | **264** | P | | P | 07 54 11.7 | +4.6 |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SIJI** | **Sorong** | **56.61** | **291** | LR | | LR | 08 18 18.0 | |
| | comp=Z,507nm,19.5s,baz=118,slow=36 | | | | | | | |
| **MORW** | **Morawa** | **56.69** | **253** | P | | **P** | **07 54 07.9** | **-1.1** |
| | baz=57,SNR=8.1 | | | | | | | |
| **MORW** | **Morawa** | **56.69** | **253** | P | | **P** | **07 54 07.7** | **-1.2** |
| MORW | | | | IAmb | | IAmb | 07 54 12.3 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **MORW** | **Morawa** | **56.69** | **253** | P | | **P** | **07 54 11.7** | **+2.8** |
| | comp=Z,28nm,1.0

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PET | **Petropavlovsk** | 85.77 | 346 | *e*P | | **P** | 07 57 07.8 | +4.0 |
| PET | | | | *e*S | | **S** | 08 07 39.1 | +5.2 |
| **IKP** | **In-Ko-Pah, Jac** | 85.77 | 48 | P | | **P** | 07 57 03.8 | -0.8 |
| | baz=229 | | | | | | | |
| **VES** | **Vestal, Richgr** | 86.03 | 44 | P | | **P** | 07 57 05.2 | -0.4 |
| | baz=227 | | | | | | | |
| **EDW2** | **Edwards Air Fo** | 86.05 | 45 | P | | **P** | 07 57 05.7 | -0.1 |
| | baz=228 | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | 86.05 | 345 | ⇓*e*P | | **P** | 07 57 06.1 | +0.8 |
| **PETK** | **Petropavlovsk-** | 86.05 | 345 | P | | **P** | 07 57 03.8 | -1.5 |
| | comp=Z,13nm,0.6s,baz=134,slow=6.4,SNR=14 | | | | | | | |
| PETK | | | | LR | | LR | 08 28 47.3 | |
| | comp=Z,402nm,21.6s,baz=164,slow=31 | | | | | | | |
| **PETK** | **Petropavlovsk-** | 86.05 | 345 | P | | **P** | 07 57 04.2 | -1.1 |
| **PETK** | **Petropavlovsk-** | 86.05 | 345 | P | | **P** | 07 57 04.2 | -1.1 |
| **SWSC** | **Sam W. Stewart** | 86.16 | 48 | P | | **P** | 07 57 07.5 | +1.1 |
| | baz=230 | | | | | | | |
| **TPFO** | **Pinon Flats** | 86.17 | 47 | P | | **P** | 07 57 06.0 | -0.6 |
| | baz=229 | | | | | | | |
| **PFO** | **Pinyon Flats O** | 86.17 | 47 | LR | | LR | 08 28 25.7 | |
| | comp=Z,381nm,20.6s,baz=236,slow=31 | | | | | | | |
| **PFO** | **Pinyon Flats O** | 86.17 | 47 | P | | **P** | 07 57 05.4 | -1.1 |
| PFO | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **PFO** | **Pinyon Flats O** | 86.17 | 47 | P | | **P** | 07 57 05.4 | -1.1 |
| **PFO** | **Pinyon Flats O** | 86.17 | 47 | P | | **P** | 07 57 05.8 | -0.8 |
| | baz=229 | | | | | | | |
| **ISA** | **Isabella, Lake** | 86.28 | 45 | IAmb | | IAmb | 07 57 25.1 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **ISA** | **Isabella, Lake** | 86.28 | 45 | P | | **P** | 07 57 07.0 | +0.1 |
| | baz=228 | | | | | | | |
| **PEL** | **Peldehue** | 86.37 | 127 | P | | **P** | 07 57 08.3 | +0.6 |
| **NJ2** | **Nanjing** | 86.53 | 310 | *e*P | | **P** | 07 57 10.0 | +1.8 |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | 86.64 | 45 | P | | **P** | 07 57 09.2 | +0.4 |
| | baz=228 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | 86.71 | 47 | P | | **P** | 07 57 08.9 | -0.4 |
| | baz=229 | | | | | | | |
| **BC3** | **Big Chuckawall** | 86.84 | 48 | P | | **P** | 07 57 09.7 | -0.1 |
| | baz=230 | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | 86.90 | 39 | IAmb | | IAmb | 07 57 29.0 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | 86.90 | 39 | P | | **P** | 07 57 08.9 | -1.0 |
| | baz=225 | | | | | | | |
| **CWC** | **Cottonwood Cre** | 87.03 | 44 | P | | **P** | 07 57 09.6 | -1.2 |
| | baz=228 | | | | | | | |
| **HEC** | **Hector,Ludlow** | 87.04 | 46 | P | | **P** | 07 57 10.0 | -0.7 |
| | baz=229 | | | | | | | |
| **GSC** | **Goldstone, Bar** | 87.06 | 46 | P | | **P** | 07 57 11.7 | +0.9 |
| | baz=229 | | | | | | | |
| **MPMC** | **Manual Prospec** | 87.14 | 45 | P | | **P** | 07 57 10.1 | -1.2 |
| | baz=228 | | | | | | | |
| **ORV** | **Oroville** | 87.17 | 40 | P | | **P** | 07 57 10.1 | -1.1 |
| ORV | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | | |
| **ORV** | **Oroville** | 87.17 | 40 | P | | **P** | 07 57 10.1 | -1.1 |
| **WDC** | **Whiskeytown Da** | 87.32 | 39 | P | | **P** | 07 57 09.4 | -2.4 |
| WDC | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **WDC** | **Whiskeytown Da** | 87.32 | 39 | P | | **P** | 07 57 09.4 | -2.4 |
| WDC | | | | IAmb | | IAmb | 07 57 35.9 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **IRM** | **Iron Mountain** | 87.36 | 47 | P | | **P** | 07 57 12.6 | +0.4 |
| | baz=230 | | | | | | | |
| **113A** | **Mohawk Valley,** | 87.36 | 49 | P | | **P** | 07 57 10.5 | -1.7 |
| **GMRC** | **Granite Mounta** | 87.43 | 47 | P | | **P** | 07 57 12.6 | -0.1 |
| | baz=230 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | 87.44 | 326 | P | | **P** | 07 57 12.0 | -0.3 |
| | comp=Z,4.2nm,0.8s,baz=79,slow=9.9,SNR=5.2 | | | | | | | |
| USRK | | | | LR | | LR | 08 30 50.2 | |
| | comp=Z,260nm,20.6s,baz=127,slow=32 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | 87.44 | 326 | P | | **P** | 07 57 12.0 | -0.3 |
| **USRK** | **Ussuriysk Ar.** | 87.44 | 326 | P | | **P** | 07 57 11.3 | -1.0 |
| **QSM** | **Queen of Sheba** | 87.45 | 45 | IAmb | | IAmb | 07 57 36.6 | |
| | comp=Z,29nm,1.7s | | | | | | | |
| **214A** | **Organ Pipe Nat** | 87.48 | 50 | P | | **P** | 07 57 12.7 | -0.2 |
| | baz=231 | | | | | | | |
| **N02D** | **Trinity Center** | 87.51 | 38 | P | | **P** | 07 57 12.9 | +0.1 |
| | baz=225 | | | | | | | |
| **TUQ** | **Turquoise Moun** | 87.69 | 46 | P | | **P** | 07 57 13.8 | -0.1 |
| | baz=229 | | | | | | | |
| **GWY** | **Greenwater Val** | 87.72 | 45 | IAmb | | IAmb | 07 57 37.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **M02C** | **Callahan** | 87.73 | 38 | P | | **P** | 07 57 13.6 | -0.3 |
| M02C | | | | IAmb | | IAmb | 07 57 49.9 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **M02C** | **Callahan** | 87.73 | 38 | P | | **P** | 07 57 14.8 | +1.0 |
| | baz=225 | | | | | | | |
| **FURC** | **Furnace Creek,** | 87.78 | 45 | P | | **P** | 07 57 14.5 | +0.4 |
| | baz=229 | | | | | | | |
| **GRAC** | **Grapevine Rang** | 87.83 | 44 | IAmb | | IAmb | 07 57 32.7 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **GRAC** | **Grapevine Rang** | 87.83 | 44 | P | | **P** | 07 57 15.0 | +0.5 |
| | baz=228 | | | | | | | |
| **PNTR** | **Pine Nut** | 87.92 | 41 | IAmb | | IAmb | 07 57 39.6 | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | 88.04 | 38 | LR | | LR | 08 28 54.3 | |
| | comp=Z,284nm,22.0s,baz=234,slow=30 | | | | | | | |
| **YERR** | **Yerington** | 88.06 | 42 | IAmb | | IAmb | 07 57 29.7 | |
| | comp=Z,24nm,1.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | 88.23 | 43 | P | | **P** | 07 57 16.3 | -0.2 |
| | comp=Z,2.6nm,0.8s,baz=221,slow=7.1,SNR=13 | | | | | | | |
| NVAR | | | | LR | | LR | 08 30 15.4 | |
| | comp=Z,534nm,20.1s,baz=254,slow=31 | | | | | | | |
| **NVAR** | **Mina Array Bea** | 88.23 | 43 | P | | **P** | 07 57 15.3 | -1.2 |
| **NV11** | **Mina Array Sit** | 88.31 | 43 | IAmb | | IAmb | 07 57 31.0 | |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| **TYV** | **Tymovskoe** | 88.31 | 336 | *e*P | | **P** | 07 57 16.9 | +0.6 |
| TYV | | | | *e*S | | **S** | 08 08 03.2 | +4.5 |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.1s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=N,600nm,7.7s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,400nm,7.7s | | | | | | | |
| **Y14A** | **Wickenburg** | 88.59 | 49 | P | | **P** | 07 57 17.8 | -0.4 |
| Y14A | | | | IAmb | | IAmb | 07 57 37.0 | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **L04D** | **Klamath Falls** | 88.60 | 38 | P | | **P** | 07 57 17.9 | -0.2 |
| | baz=225 | | | | | | | |
| **TUC** | **Tucson** | 89.06 | 51 | P | | **P** | 07 57 19.1 | -1.3 |
| TUC | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.7s | | | | | | | |
| **TUC** | **Tucson** | 89.06 | 51 | P | | **P** | 07 57 19.1 | -1.3 |
| TUC | | | | IAmb | | IAmb | 07 57 44.5 | |
| | comp=Z,29nm,1.7s | | | | | | | |
| **PRN** | **Pahroc Range** | 89.50 | 45 | IAmb | | IAmb | 07 57 41.7 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **319A** | **Douglas** | 89.52 | 53 | IAmb | | IAmb | 07 57 41.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **I04A** | **Tendick Farm,** | 89.65 | 37 | P | | **P** | 07 57 21.9 | -0.9 |
| | baz=225 | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | 89.91 | 49 | P | | **P** | 07 57 24.6 | +0.2 |
| X16A | | | | IAmb | | IAmb | 07 57 43.2 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **J05D** | **Fort Rock, OR** | 89.91 | 38 | P | | **P** | 07 57 24.6 | +0.5 |
| | baz=226 | | | | | | | |
| **TIA** | **Tai'an** | 90.26 | 313 | *e*P | | **P** | 07 57 25.1 | -0.7 |
| TIA | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **CN2** | **Changchun** | 90.42 | 323 | *e*P | | **P** | 07 57 25.6 | -0.8 |
| CN2 | | | | *e*S | | **S** | 08 08 18.9 | +0.2 |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,200nm,5.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,300nm,19.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,300nm,19.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,300nm,17.0s | | | | | | | |
| **GRNR** | **Gornyy** | 90.55 | 333 | ⇓*i*P | | **P** | 07 57 27.5 | +0.7 |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **I05D** | **Terrebonne, OR** | 90.59 | 37 | P | | **P** | 07 57 26.0 | -1.2 |
| | baz=226 | | | | | | | |
| **U15A** | **North Rim** | 90.60 | 47 | IAmb | | IAmb | 07 57 51.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WUAZ** | **Wupatki** | 90.62 | 48 | P | | **P** | 07 57 27.0 | -0.8 |
| WUAZ | | | | IAmb | | IAmb | 07 57 46.8 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **KNB** | **Kanab** | 90.63 | 46 | IAmb | | IAmb | 07 57 52.5 | |
| | comp=Z,19nm,1.5s | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **WVOR** | **Wild Horse Val** | 90.72 | 39 | P | | **P** | 07 57 28.3 | +0.3 |
| WVOR | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.9s | | | | | | | |
| **BNX** | **BinXian** | 90.79 | 325 | ⇑P | | **P** | 07 57 27.8 | -0.2 |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,65nm,1.5s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,460nm,4.3s | | | | | | | |
| **X18A** | **Snowflake** | 90.95 | 50 | IAmb | | IAmb | 07 57 47.9 | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | 91.31 | 330 | P | | **P** | 07 57 29.6 | -0.7 |
| | comp=Z,4.0nm,0.7s,baz=132,slow=2.5,SNR=18 | | | | | | | |
| KLR | | | | LR | | LR | 08 37 24.1 | |
| | comp=Z,344nm,18.6s,baz=148,slow=35 | | | | | | | |
| **KLR** | **Kul'dur** | 91.31 | 330 | ⇓*i*P | | **P** | 07 57 29.9 | -0.4 |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **I07A** | **Izee** | 91.37 | 38 | P | | **P** | 07 57 31.0 | 0.0 |
| I07A | | | | IAmb | | IAmb | 07 58 17.6 | |
| | comp=Z,9.6nm,1.2s | | | | | | | |
| **ELK** | **Elko** | 91.53 | 42 | LR | | LR | 08 32 28.2 | |
| | comp=Z,509nm,19.8s,baz=240,slow=32 | | | | | | | |
| **MTPU** | **Mount Pierson** | 91.66 | 46 | IAmb | | IAmb | 07 57 52.3 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **ENH** | **Enshi** | 91.89 | 304 | P | | **P** | 07 57 34.6 | +1.0 |
| **LYN** | **LuoYang** | 92.29 | 309 | ⇓*i*P | | **P** | 07 57 35.8 | +0.5 |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,330nm,20.6s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,350nm,21.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | 92.30 | 57 | P | | **P** | 07 57 37.0 | +1.4 |
| | comp=Z,1.0nm,1.0s,baz=212,slow=4.4,SNR=4.0 | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPbc** | 08 14 56.4 | +6.1 |
| | comp=Z,0.2nm,0.5s,baz=64,slow=2.9,SNR=5.0 | | | | | | | |
| TXAR | | | | LR | | LR | 08 32 23.5 | |
| | comp=Z,414nm,19.3s,baz=240,slow=31 | | | | | | | |
| **TXAR** | **Lajitas Array** | 92.30 | 57 | P | | **P** | 07 57 37.0 | +1.4 |
| **G08A** | **Pilot Rock** | 92.47 | 37 | P | | **P** | 07 57 34.0 | -2.0 |
| G08A | | | | IAmb | | IAmb | 07 57 40.9 | |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| **HNS** | **HongShan** | 92.52 | 313 | ⇑P | | **P** | 07 57 37.4 | +1.2 |
| HNS | | | | *e*S | | **S** | 08 08 40.6 | +2.6 |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,250nm,21.7s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,490nm,22.6s | | | | | | | |
| **NNA** | **Nana** | 93.16 | 106 | LR | | LR | 08 30 19.4 | |
| | comp=Z,247nm,21.1s,baz=255,slow=30 | | | | | | | |
| **ANMO** | **Albuquerque** | 93.52 | 51 | LR | | LR | 08 34 04.4 | |
| | comp=Z,326nm,18.6s,baz=243,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | 93.52 | 51 | ⇑*e*P | | **P** | 07 57 40.4 | -0.8 |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,26nm,4.4s | | | | | | | |
| **MA2** | **Magadan** | 93.53 | 345 | ⇓*e*P | | **P** | 07 57 39.5 | -0.9 |
| MA2 | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **HVU** | **Hansel Valley** | 93.62 | 43 | IAmb | | IAmb | 07 57 55.6 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **LVC** | **Limon Verde** | 93.65 | 119 | LR | | LR | 08 31 11.8 | |
| | comp=Z,413nm,21.1s,baz=254,slow=30 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | 93.67 | 289 | P | | **P** | 07 57 42.3 | +0.3 |
| | comp=Z,1.5nm,0.3s,baz=137,slow=3.1,SNR=5.0 | | | | | | | |
| **PLID** | **Pearl Lake** | 93.91 | 39 | P | | **P** | 07 57 41.3 | -1.5 |
| PLID | | | | IAmb | | IAmb | 07 57 59.1 | |
| | comp=Z,16nm,1.7s | | | | | | | |
| **ATAH** | **Atahualpa** | 94.39 | 101 | LR | | LR | 08 30 28.0 | |
| | comp=Z,317nm,21.1s,baz=249,slow=29 | | | | | | | |
| **XAN** | **Xi'an** | 94.40 | 307 | P | | P | 07 57 50.4 | +5.3 |
| XAN | | | | pP | | pP | 07 57 53.8 | -0.6 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,450nm,17.9s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,230nm,20.6s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,480nm,17.9s | | | | | | | |
| **APG** | **El Apazote** | 95.20 | 76 | LR | | LR | 08 32 08.0 | |
| | comp=Z,216nm,18.9s,baz=266,slow=30 | | | | | | | |
| **NEW** | **Newport** | 95.39 | 36 | LR | | LR | 08 34 60.0 | |
| | comp=Z,303nm,19.2s,baz=223,slow=32 | | | | | | | |
| **PZH** | **PanZhiHua** | 95.59 | 297 | P | | **P** | 07 57 51.9 | +1.1 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | 96.12 | 43 | PKKPbc | | PKKPbc | 08 14 40.5 | -0.5 |
| | comp=Z,0.6nm,0.6s,baz=100,slow=5.1,SNR=4.1 | | | | | | | |
| PDAR | | | | LR | | LR | 08 35 39.1 | |
| | comp=Z,310nm,19.2s,baz=242,slow=32 | | | | | | | |
| **TNA** | **Tin City** | 96.14 | 4 | P | | **P** | 07 57 50.6 | -1.5 |
| **SEY** | **Seymchan** | 96.21 | 347 | P | | **P** | 07 57 50.8 | -1.8 |
| | comp=Z,2.6nm,0.7s,baz=129,slow=5.4,SNR=12 | | | | | | | |
| **SEY** | **Seymchan** | 96.21 | 347 | ⇓*i*P | | **P** | 07 57 51.4 | -1.1 |
| **RND** | **Reindeer** | 96.45 | 13 | IAmb | | IAmb | 07 58 03.3 | |
| | comp=Z,7.6nm,1.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | 96.52 | 314 | *e*P | | **P** | 07 57 55.5 | +0.8 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,160nm,17.1s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,300nm,16.5s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,690nm,18.4s | | | | | | | |
| **JTS** | **Las Juntas de** | 97.54 | 83 | LR | | LR | 08 31 42.0 | |
| | comp=Z,351nm,21.3s,baz=316,slow=29 | | | | | | | |
| **COLA** | **College** | 97.97 | 12 | ⇑*e*P | | **P** | 07 57 59.6 | -0.8 |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | 98.06 | 13 | P | | **P** | 07 57 59.0 | -1.9 |
| | comp=Z,0.9nm,1.0s,baz=227,slow=4.5,SNR=4.5 | | | | | | | |
| ILAR | | | | PKKP | | **PKKPdf** | 08 14 41.9 | +2.4 |
| | comp=Z,0.4nm,0.6s,baz=44,slow=1.9,SNR=4.8 | | | | | | | |
| ILAR | | | | LR | | LR | 08 36 08.3 | |
| | comp=Z,158nm,20.7s,baz=208,slow=32 | | | | | | | |
| **BILL** | **Bilibino** | 99.05 | 354 | ⇑*e*P | | **Pdif** | 07 58 04.2 | -1.0 |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| **CPUP** | **Villa Florida** | 99.70 | 128 | LR | | LR | 08 35 09.8 | |
| | comp=Z,375nm,21.5s,baz=239,slow=30 | | | | | | | |
| **INK** | **Inuvik** | 103.90 | 15 | PKIKP | | **PKiKP** | 08 02 46.2 | +2.0 |
| | comp=Z,1.0nm,0.7s,baz=123,slow=4.9,SNR=6.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | 105.52 | 25 | PKIKP | | **PKiKP** | 08 02 45.9 | -1.4 |
| | comp=Z,0.3nm,0.5s,baz=254,slow=1.7,SNR=8.3 | | | | | | | |
| YKA | | | | PKKPbc | | **PKKPbc** | 08 14 14.3 | +0.4 |
| | comp=Z,0.4nm,0.7s,baz=32,slow=2.9,SNR=7.1 | | | | | | | |
| **WMQ** | **Urumqi** | 113.52 | 308 | *e*PKP | | **PKiKP** | 08 03 03.8 | +0.7 |
| WMQ | | | | LR | | LR | | |
| | comp=Z,220nm,21.5s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | 115.61 | 314 | *i*PKIKP | | **PKPdf** | 08 03 06.2 | -0.8 |
| **BOSA** | **Boshof** | 117.17 | 203 | PKP | | **PKiKP** | 08 03 12.5 | +1.6 |
| | comp=Z,3.7nm,0.9s,baz=163,slow=7.8,SNR=3.3 | | | | | | | |
| **RES** | **Resolute Bay** | 117.36 | 17 | PKIKP | | **PKPdf** | 08 03 08.7 | -0.8 |
| **RES** | **Resolute Bay** | 117.36 | 17 | PKPdf | | **PKPdf** | 08 03 08.7 | -0.8 |
| **MK31** | **Makanchi Array** | 118.06 | 310 | *i* PKIKP | | **PKPdf** | 08 03 09.3 | -2.4 |
| **MKAR** | **Makanchi Array** | 118.06 | 310 | PKP | | **PKPdf** | 08 03 10.0 | -1.7 |
| | comp=Z,2.6nm,0.6s,baz=152,slow=0.8,SNR=19 | | | | | | | |
| **MKAR** | **Makanchi Array** | 118.06 | 310 | PKIKP | | **PKPdf** | 08 03 10.0 | -1.7 |
| **MKAR** | **Makanchi Array** | 118.06 | 310 | | | **PKPdf** | 08 03 09.2 | -2.5 |
| **MAKZ** | **Makanchi** | 118.27 | 310 | PKIKP | | **PKPdf** | 08 03 08.9 | -3.2 |
| **MAKZ** | **Makanchi** | 118.27 | 310 | | | **PKPdf** | 08 03 08.9 | -3.2 |
| **ZALV** | **Zalesovo Beam** | 118.32 | 318 | PKP | | **PKPdf** | 08 03 10.9 | -0.9 |
| | comp=Z,1.2nm,0.5s,baz=183,slow=2.5,SNR=4.7 | | | | | | | |
| **NRIK** | **Noril'sk** | 119.90 | 336 | PKP | | **PKPdf** | 08 03 13.0 | -1.5 |
| | comp=Z,2.1nm,0.4s,baz=77,slow=2.1,SNR=5.0 | | | | | | | |
| **NRIK** | **Noril'sk** | 119.90 | 336 | ⇓*i*PKIKP | | **PKPdf** | 08 03 13.2 | -1.3 |
| **NRIK** | **Noril'sk** | 119.90 | 336 | | | **PKPdf** | 08 03 12.0 | -2.4 |
| **KSH** | **Kashi** | 120.53 | 300 | PKP | | **PKiKP** | 08 03 16.5 | -0.4 |
| KSH | | | | sPKP | | | 08 03 20.8 | |
| **KURK** | **Kurchatov** | 121.34 | 314 | *d i*PKIKP | | **PKPdf** | 08 03 16.1 | -1.7 |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **KURK** | **Kurchatov** | 121.34 | 314 | | | **PKPdf** | 08 03 16.1 | -1.7 |
| **KURBB** | **Kurchatov Arra** | 121.38 | 314 | PKP | | **PKPdf** | 08 03 16.2 | -1.7 |
| | comp=Z,479nm,1.0s,baz=117,slow=1.9,SNR=14 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | 121.38 | 314 | PKIKP | | **PKPdf** | 08 03 15.9 | -1.9 |
| **TKM2** | **Tokmak 2** | 121.68 | 304 | PKIKP | | **PKPdf** | 08 03 17.5 | -1.5 |
| **AAK** | **Ala-Archa** | 122.40 | 304 | PKP | | **PKPdf** | 08 03 19.1 | -1.2 |
| | comp=Z,5.3nm,0.6s,baz=140,slow=5.2,SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | 122.40 | 304 | PKIKP | | **PKPdf** | 08 03 19.0 | -1.3 |
| **AAK** | **Ala-Archa** | 122.40 | 304 | | | **PKPdf** | 08 03 19.5 | -0.8 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | 124.50 | 293 | PKIKP | | **PKPdf** | 08 03 23.7 | -1.0 |
| **KBL** | **Kabul** | 124.50 | 293 | | | **PKPdf** | 08 03 23.7 | -1.0 |
| **OTUK** | **Ortayu** | 124.96 | 310 | PKIKP | | **PKPdf** | 08 03 23.4 | -1.5 |
| **KK31** | **Karatay Array** | 125.36 | 303 | PKIKP | | **PKPdf** | 08 03 24.2 | -1.6 |
| **KKAR** | **Karatay Array** | 125.36 | 303 | PKIKP | | **PKPdf** | 08 03 24.5 | -1.3 |
| **KKAR** | **Karatay Array** | 125.36 | 303 | PKPdf | | **PKPdf** | 08 03 24.5 | -1.3 |
| **BVAR** | **Borovoye Array** | 126.69 | 316 | PKP | | **PKPdf** | 08 03 26.9 | -1.1 |
| | comp=Z,5.9nm,0.5s,baz=61,slow=12,SNR=18 | | | | | | | |
| **BRVK** | **Borovoye** | 126.76 | 316 | ⇓*i*PKIKP | | **PKPdf** | 08 03 26.8 | -1.3 |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **BRVK** | **Borovoye** | 126.76 | 316 | PKPdf | | **PKPdf** | 08 03 26.9 | -1.3 |
| **UOSS** | **Minazif** | 132.31 | 277 | | | **PKPdf** | 08 03 39.0 | -0.5 |
| **AB31** | **Akbulak array** | 133.20 | 311 | *i* PKIKP | | **PKPdf** | 08 03 37.0 | -3.5 |
| **ARU** | **Arti** | 133.38 | 321 | PKP | | **PKPdf** | 08 03 40.1 | -0.4 |
| | comp=Z,3.0nm,0.2s,baz=86,slow=2.8,SNR=7.1 | | | | | | | |
| ARU | | | | SKPbc | | **SKPab** | 08 07 07.1 | -1.3 |
| | comp=Z,2.2nm,0.2s,baz=73,slow=4.1,SNR=4.3 | | | | | | | |
| **ARU** | **Arti** | 133.38 | 321 | *i* PKIKP | | **PKPdf** | 08 03 40.6 | 0.0 |
| ARU | | | | | | | 08 06 05.9 | |
| **ARU** | **Arti** | 133.38 | 321 | | | **PKiKP** | 08 03 42.6 | +0.8 |
| **KMBO** | **Kilima Mbogo** | 134.14 | 233 | PKP | | **PKiKP** | 08 03 44.5 | -0.5 |
| | comp=Z,1.5nm,0.3s,baz=285,slow=22,SNR=2.4 | | | | | | | |
| KMBO | | | | SKPbc | | **SKPab** | 08 07 13.6 | +0.1 |
| | comp=Z,1.8nm,0.4s,baz=151,slow=5.2,SNR=9.1 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | 134.14 | 233 | | | **SKPab** | 08 07 13.8 | +0.3 |
| **AKTO** | **Aktyubinsk** | 134.39 | 312 | PKP | | **PKPdf** | 08 03 42.0 | -0.7 |
| | comp=Z,10nm,0.9s,baz=54,slow=1.0,SNR=9.0 | | | | | | | |
| **PRGR** | **Permogore** | 138.09 | 331 | *e*PKIKP | | **PKiKP** | 08 03 52.7 | +1.5 |
| PRGR | | | | pmax | | pmax | | |
| | comp=Z,57nm,1.5s | | | | | | | |
| **HAMF** | **Hammerfest** | 138.16 | 349 | *e*PKPdf | | **PKPdf** | 08 03 47.1 | -1.9 |
| **ARCES** | **ARCESS Array B** | 138.82 | 348 | PKhKP | | PKPpre | 08 03 40.7 | |
| | comp=Z,6.1nm,1.0s,baz=34,slow=3.2,SNR=10 | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | 08 03 49.5 | -0.9 |
| | comp=Z,4.7nm,0.7s,baz=69,slow=1.3,SNR=12 | | | | | | | |
| **KTK1** | **Kautokeino** | 139.68 | 349 | *e*PKPdf | | **PKPdf** | 08 03 50.3 | -1.6 |
| **KLMR** | **Klimovskoe** | 141.03 | 332 | *e*PKIKP | | **PKPdf** | 08 03 52.8 | -1.7 |
| KLMR | | | | pmax | | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **KLMR** | **Klimovskoe** | 141.03 | 332 | *e*PKPdf | | **PKPdf** | 08 03 52.9 | -1.6 |
| KLMR | | | | AMP | | | 08 04 10.4 | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **RAYN** | **Ar Rayn** | 141.03 | 270 | PKIKP | | **PKPdf** | 08 03 55.1 | -0.7 |
| **RAYN** | **Ar Rayn** | 141.03 | 270 | | | **PKPdf** | 08 03 55.1 | -0.7 |
| **GNI** | **Garni** | 144.35 | 297 | PKP | | PKPbc | 08 03 59.9 | +0.1 |
| | comp=Z,12nm,0.6s,baz=183,slow=2.8,SNR=7.8 | | | | | | | |
| **GNI** | **Garni** | 144.35 | 297 | ⇑*e*PKIKP | | **PKPdf** | 08 04 00.4 | -1.0 |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,45nm,1.7s | | | | | | | |
| **GNI** | **Garni** | 144.35 | 297 | PKPdf | | **PKPdf** | 08 04 00.3 | -1.0 |
| **MOS** | **Moscow** | 144.61 | 326 | *i* PKHKP | | PKPpre | 08 03 56.6 | |
| MOS | | | | pmax | | pmax | | |
| | comp=Z,70nm,1.1s | | | | | | | |
| **ZEI** | **Tsey** | 144.79 | 302 | *i* PKIKP | | **PKPab** | 08 03 58.7 | -2.4 |
| ZEI | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **GOF** | **Gofitskoye** | 145.08 | 306 | ⇑*e*PKIKP | | **PKPbc** | 08 04 00.8 | -0.9 |
| GOF | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | | |
| **AKH** | **Akhalkalaki** | 145.23 | 300 | ⇑P | | **PKPbc** | 08 04 02.1 | -0.5 |
| **AKH** | **Akhalkalaki** | 145.23 | 300 | *e*P | | **PKPbc** | 08 04 01.9 | -0.7 |
| **CUKT** | **Cukurca** | 145.26 | 292 | *e*P | | **PKPbc** | 08 04 01.7 | -1.0 |
| **PUL** | **Pulkovo** | 145.26 | 335 | ⇑*e*PKIKP | | **PKPbc** | 08 04 00.8 | -1.0 |
| **FINES** | **FINESS Array B** | 145.40 | 340 | PKPbc | | **PKPbc** | 08 04 00.8 | -1.4 |
| | comp=Z,90nm,0.8s,baz=50,slow=4.0,SNR=96 | | | | | | | |
| **LPSR** | **Galich'ya Gora** | 145.40 | 320 | *e*PKIKP | | **PKPbc** | 08 04 01.0 | -1.5 |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,60nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | 145.40 | 304 | PKPbc | | **PKPbc** | 08 04 02.1 | -0.6 |
| | comp=Z,14nm,0.9s,baz=135,slow=2.7,SNR=16 | | | | | | | |
| **KBZ** | **Khabaz** | 145.40 | 304 | ⇓*e*PKIKP | | **PKPbc** | 08 04 01.8 | -0.9 |
| **OBN** | **Obninsk** | 145.45 | 325 | ⇑P | | **PKPdf** | 08 04 01.4 | -1.0 |
| **OBN** | **Ob

comp=Z,29nm,1.0s,baz=172,slow=1.0,SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KONO | Kongsberg | 150.52 | 352 | PKIKP | PKPbc | 08 04 15.5 | -0.6 |
| KONO | Kongsberg | 150.52 | 352 | | PKPbc | 08 04 15.5 | -0.6 |
| PABE | Paberze | 150.71 | 335 | | PKPbc | 08 04 16.1 | -0.6 |
| PABE | Paberze | 150.71 | 335 | *eP* | PKPbc | 08 04 15.0 | -1.7 |
| KVT | Kavak | 150.84 | 300 | *eP* | PKPbc | 08 04 17.4 | -0.1 |
| SARI | SarD1z-Kayseri | 150.91 | 295 | *eP* | PKPbc | 08 04 17.8 | -0.2 |
| STRU | Stroemstad | 150.91 | 351 | *iP* | PKPbc | 08 04 14.7 | -2.3 |
| BLS5 | Blasjo | 151.02 | 356 | *ep*PKPbc | PKiKP | 08 04 19.1 | +1.2 |
| TAHT | Tahtakopru-Hat | 151.22 | 291 | *eP* | PKPbc | 08 04 18.1 | -0.4 |
| SNOP | Sinop | 151.27 | 303 | *eP* | PKPbc | 08 04 18.1 | -0.3 |
| YAYL | Yayladag | 151.29 | 299 | *eP* | PKPbc | 08 04 18.2 | -0.6 |
| BNN | Bunyan | 151.31 | 296 | *eP* | PKPbc | 08 04 18.2 | -0.6 |
| KOZT | Kozan | 151.45 | 293 | *eP* | PKPbc | 08 04 18.9 | -0.1 |
| CEYT | Ceyhan | 151.54 | 292 | *eP* | PKPbc | 08 04 18.6 | -0.6 |
| AKASG | Malin Array Be | 151.58 | 323 | PKPbc | PKPbc | 08 04 17.4 | -1.5 |

comp=Z,47nm,0.8s,baz=47,slow=2.7,SNR=73

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AKBB | Malin Array Si | 151.58 | 323 | *c iP* | PKiKP | 08 04 17.6 | -1.2 |
| MMLI | Mount Malkishu | 151.73 | 282 | *eP* | PKPbc | 08 04 19.7 | -0.2 |
| EIL | Elat | 151.76 | 277 | PKPbc | PKiKP | 08 04 19.9 | -0.4 |

comp=Z,22nm,0.7s,baz=234,slow=0.6,SNR=18

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EIL | Elat | 151.76 | 277 | *eP* | PKPbc | 08 04 19.2 | -0.8 |
| MMAI | Mount Meron Ar | 151.79 | 284 | PKPbc | PKiKP | 08 04 20.4 | 0.0 |

comp=Z,39nm,0.7s,baz=65,slow=6.0,SNR=34

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HOMB | Homborsund | 151.99 | 353 | *iP* | PKPbc | 08 04 18.2 | -1.3 |
| BORU | Boraas | 151.99 | 348 | *iP* | PKPbc | 08 04 17.2 | -2.3 |
| SNART | Snartemo | 152.04 | 354 | *iP* | PKPbc | 08 04 18.2 | -1.4 |
| SNART | Snartemo | 152.04 | 354 | *e*PKPbc | PKPbc | 08 04 18.7 | -1.0 |
| CORM | Corum | 152.05 | 299 | *eP* | PKiKP | 08 04 20.3 | -0.5 |
| KARA | Karaisali | 152.08 | 293 | *eP* | PKPbc | 08 04 19.5 | -1.0 |
| CMRD | Camardi-Nigde | 152.10 | 294 | *eP* | PKPbc | 08 04 20.3 | -0.3 |
| SUW | Suwalki | 152.14 | 333 | *eP* | PKPdf | 08 04 15.7 | +2.3 |
| BZK | Bozkurt | 152.15 | 303 | ⇓P | PKPbc | 08 04 19.0 | -1.5 |
| BZK | Bozkurt | 152.15 | 303 | *eP* | PKiKP | 08 04 20.4 | -0.3 |
| ONAU | Onsala | 152.37 | 349 | *iP* | PKPbc | 08 04 18.6 | -1.7 |
| MERS | Mersin | 152.53 | 292 | *eP* | PKPbc | 08 04 19.9 | -1.7 |
| BLEU | Blekinge | 152.58 | 344 | *iP* | PKPbc | 08 04 18.6 | -2.3 |
| FABU | Falkenberg | 152.60 | 348 | *iP* | PKPbc | 08 04 19.6 | -1.3 |
| KIZK | Mersin | 152.85 | 291 | *eP* | PKPbc | 08 04 20.9 | -1.3 |
| DEL | Delary | 152.87 | 346 | *iP* | PKPbc | 08 04 19.6 | -1.9 |
| DEL | Delary | 152.87 | 346 | *eP* | PKPbc | 08 04 19.6 | -1.9 |
| BRTR | Keskin Array B | 152.88 | 298 | PKPbc | PKPbc | 08 04 21.4 | -1.0 |

comp=Z,12nm,0.7s,baz=132,slow=3.1,SNR=19

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BRTR | Keskin Array B | 152.88 | 298 | *eP* | PKPbc | 08 04 20.6 | -1.8 |
| KAMT | Kaman | 152.88 | 297 | *eP* | PKPbc | 08 04 21.4 | -0.9 |
| IKL | Isikli | 153.24 | 291 | *eP* | PKPbc | 08 04 21.7 | -1.3 |
| PURM | Purcari | 153.36 | 314 | ⇓P | PKPbc | 08 04 22.4 | -0.6 |
| AFSR | Afar-Bala (An | 153.36 | 298 | *eP* | PKPbc | 08 04 22.8 | -0.6 |
| LFK | Lefkose | 153.40 | 288 | *eP* | PKPbc | 08 04 22.6 | -0.9 |
| SORM | Soroca | 153.47 | 319 | ⇑P | PKPbc | 08 04 21.9 | -1.2 |
| SORM | Soroca | 153.47 | 319 | ⇑PKIKP | PKPbc | 08 04 21.9 | -1.2 |
| ANTO | Ankara | 153.50 | 299 | PKIKP | PKPbc | 08 04 22.6 | -1.0 |
| ANTO | Ankara | 153.50 | 299 | | PKPbc | 08 04 22.6 | -1.0 |
| CSS | Mathiatis | 153.57 | 288 | | PKPbc | 08 04 23.1 | -0.7 |
| BERE | Bereket-Mersin | 153.60 | 291 | *eP* | PKPbc | 08 04 22.9 | -1.2 |
| BSD | Bornholm Skovb | 153.87 | 343 | *iP* | PKPbc | 08 04 22.4 | -1.4 |
| BSD | Bornholm Skovb | 153.87 | 343 | *eP* | PKPbc | 08 04 22.1 | -1.7 |
| LEF | Lefka | 153.93 | 288 | ⇑P | PKPbc | 08 04 24.2 | -0.4 |
| LEF | Lefka | 153.93 | 288 | *eP* | PKPbc | 08 04 23.0 | -1.6 |
| GAZI | Gazipasa | 154.34 | 291 | *eP* | PKPbc | 08 04 22.9 | -2.6 |
| EKA | Eskdalemuir Ar | 154.97 | 7 | PKPbc | PKiKP | 08 04 27.0 | +0.9 |

comp=Z,2.8nm,0.8s,baz=323,slow=1.3,SNR=4.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EKA | | | | PKPab | sPKPbc | 08 04 39.5 | +0.7 |

comp=Z,2.3nm,0.7s,baz=314,slow=2.4,SNR=3.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CFR | Carcaliu | 155.05 | 313 | ⇓P | PKPdf | 08 04 26.8 | +9.0 |
| BORA | Eskisehir | 155.26 | 300 | | PKPdf | 08 04 26.1 | +7.7 |
| DBIC | Dimbokro | 155.29 | 163 | PKP | PKPdf | 08 04 19.5 | +0.4 |

comp=Z,1.2nm,0.6s,baz=300,slow=15,SNR=1.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HARR | Harsova | 155.40 | 312 | ⇑P | PKPdf | 08 04 28.6 | +10 |
| BURAR | Bucovina Array | 155.51 | 320 | ⇑P | PKPdf | 08 04 28.6 | +10 |
| VRI | Vrincioaia | 155.59 | 316 | ⇑P | PKPdf | 08 04 30.1 | +12 |
| PLOR | Plostina | 155.65 | 316 | ⇑P | PKPdf | 08 04 31.2 | +12 |
| MLR | Muntele Rosu | 156.26 | 315 | ⇓P | PKPdf | 08 04 29.3 | +10 |
| MLR | Muntele Rosu | 156.26 | 315 | PKP | PKPdf | 08 04 19.7 | +0.1 |

comp=Z,1.6nm,0.7s,baz=145,slow=13,SNR=3.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| UZH | Uzhgorod | 156.39 | 325 | *e*PKIKP | PKPdf | 08 04 19.4 | -0.1 |
| UZH | | | | *i* | | 08 04 46.3 | |
| SLVT | Silivri | 156.53 | 304 | *eP* | PKPdf | 08 04 16.9 | -3.0 |
| TRPA | Tarpa | 156.60 | 324 | ⇑P | PKPdf | 08 04 31.2 | +11 |
| CRVS | Cervenica-Dubn | 156.61 | 327 | *e*PKP2 | PKPab | 08 04 48.2 | -0.7 |
| CRVS | Cervenica-Dubn | 156.61 | 327 | *e*PKP | PKPab | 08 04 48.2 | -0.7 |
| VOIR | | 156.82 | 316 | ⇑P | PKPdf | 08 04 27.7 | +7.4 |
| ARR | Arges | 157.11 | 316 | ⇑P | PKPdf | 08 04 31.4 | +11 |
| DRGR | | 157.37 | 321 | ⇓P | PKPdf | 08 04 27.6 | +6.7 |
| OSTC | Ostas | 157.48 | 336 | *e*PKPAB | PKPab | 08 04 53.3 | +0.7 |
| CHVC | Chvalec | 157.51 | 337 | *e*PKPAB | PKPab | 08 04 51.5 | -1.2 |
| DPC | Dobruska-Polom | 157.62 | 336 | *e*PKP2 | PKPab | 08 04 52.0 | -1.2 |
| DPC | Dobruska-Polom | 157.62 | 336 | *e*PKPAB | PKPab | 08 04 52.0 | -1.2 |
| MORC | Moravsky Berou | 157.63 | 333 | *e*PKP | PKPab | 08 04 52.7 | -0.6 |
| KRLC | Kraliky | 157.68 | 335 | *e*PKP2 | PKPab | 08 04 52.8 | -0.7 |
| KRLC | Kraliky | 157.68 | 335 | *e*PKPAB | PKPab | 08 04 52.8 | -0.7 |
| CLL | Collm | 157.81 | 342 | *e*PKPdif | PKPab | 08 04 38.0 | -16 |
| CLL | | | | *ex* | x | 08 04 47.0 | |
| CLL | | | | *i* PKPab | pPKPab | 08 04 53.1 | -10 |

comp=Z,61nm,1.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CLL | | | | *i* x | x | 08 04 56.3 | |
| CLL | | | | Lm | MLR | 09 14 00.0 | |

comp=Z,400nm,22.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BRG | Berggiesshubel | 157.94 | 340 | *e*PKP | PKPab | 08 04 39.9 | -15 |
| BRG | | | | Amp | | 08 04 41.7 | |

comp=Z,18nm,1.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BRG | | | | *ex* | x | 08 04 53.4 | |
| BRG | | | | Amp | | 08 04 58.5 | |

comp=Z,21nm,1.2s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PVCC | Panska Ves | 158.05 | 339 | *e*PKP2 | PKPab | 08 04 54.5 | -0.5 |
| PVCC | Panska Ves | 158.05 | 339 | *e*PKPAB | PKPab | 08 04 54.5 | -0.5 |
| VYHS | Vyhne | 158.10 | 329 | *e*PKP2 | PKPab | 08 04 58.3 | +2.9 |
| VYHS | Vyhne | 158.10 | 329 | *e*PKP | PKPab | 08 04 58.3 | +2.9 |
| JAVC | Velka Javorina | 158.31 | 332 | *e*PKP | PKPab | 08 04 55.2 | -1.1 |
| VRAC | Vranov | 158.38 | 334 | *e*PKP | PKPab | 08 04 55.2 | -1.3 |
| KRUC | Moravsky | 158.65 | 334 | *e*PKP | PKPab | 08 04 55.3 | -2.4 |
| MODS | Modra-Piesok | 158.86 | 331 | *e*PKP2 | PKPab | 08 05 01.6 | +3.0 |
| MODS | Modra-Piesok | 158.86 | 331 | *e* | | 08 39 58.5 | |
| MODS | Modra-Piesok | 158.86 | 331 | *e*PKP | PKPab | 08 04 51.6 | +3.0 |
| NKC | Novy Kostel | 158.94 | 342 | *e*PKP2 | PKPab | 08 04 58.1 | -0.8 |
| NKC | Novy Kostel | 158.94 | 342 | *e*PKPAB | PKPab | 08 04 58.1 | -0.8 |
| KHC | Kasperske Hory | 159.58 | 338 | *e*PKP2 | PKPab | 08 05 00.3 | -1.5 |
| KHC | Kasperske Hory | 159.58 | 338 | *e*PKPAB | PKPab | 08 05 00.3 | -1.5 |
| CONA | Conrad Observa | 159.78 | 333 | *e*P | PKPab | 08 05 01.7 | -1.1 |

comp=Z,2.3nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GERES | GERESS Array B | 159.79 | 338 | PKP | PKPdf | 08 04 24.3 | +0.5 |

comp=Z,1.3nm,0.8s,baz=156,slow=7.5,SNR=4.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GERES | | | | PKPab | PKPab | 08 05 02.1 | -0.7 |

comp=Z,2.3nm,0.8s,baz=38,slow=2.4,SNR=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BCLA | Clavier | 160.06 | 354 | *d*PKPab | PKPab | 08 05 02.0 | -1.7 |
| BMRD | Maredsous | 160.22 | 355 | *d*PKPab | PKPab | 08 05 02.6 | -1.7 |
| WATA | Walderalm | 161.80 | 339 | *eP* | PKPab | 08 05 10.3 | -1.3 |

comp=Z,5.4nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WTTA | Wattenberg | 161.84 | 339 | *eP* | PKPab | 08 05 11.1 | -0.8 |

comp=Z,6.8nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RETA | Reutte | 161.90 | 341 | *eP* | PKPab | 08 05 11.3 | -0.7 |

comp=Z,4.3nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MOTA | Moosalm | 161.93 | 340 | *eP* | PKPab | 08 05 11.4 | -0.8 |

comp=Z,6.2nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FETA | Feichten | 162.33 | 341 | *eP* | PKPab | 08 05 13.0 | -1.0 |

comp=Z,2.1nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 162.64 | 178 | PKP | PKPdf | 08 04 29.3 | +1.6 |

comp=Z,1.3nm,0.9s,baz=31,slow=1.0,SNR=5.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | | | | PKPab | PKPab | 08 05 16.9 | +1.0 |

comp=Z,9.5nm,1.0s,baz=177,slow=3.5,SNR=13

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 162.64 | 178 | | PKPdf | 08 04 31.2 | +3.6 |
| TORD | | | | | PKPab | 08 05 16.4 | +0.6 |
| DAVOX | Davos/Dischmat | 162.78 | 342 | PKPab | PKPab | 08 05 13.9 | -2.1 |

comp=Z,7.1nm,0.5s,baz=330,slow=4.3,SNR=9.0

**IDC 17 07:53:55.9±3.2, 54°17N×87°35E, h0km, mb1 2.7/2, mb1mx2.7/60, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=28.5km s-min=16.6km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.48 | 262 | *i* | | 08 01 48.3 | |

baz=79,slow=351,SNR=6.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | Zalesovo Beam | 1.48 | 262 | Pg | Pn | 07 54 21.4 | -2.4 |

1.0nm,0.3s,baz=85,slow=31,SNR=13

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | | | | Lg | Lg | 07 54 44.0 | |

1.4nm,0.3s,baz=84,slow=30,SNR=6.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | Kurchatov Arra | 6.44 | 240 | Pn | Pn | 07 55 32.2 | +0.3 |

0.1nm,0.3s,baz=52,slow=12,SNR=2.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | Makanchi Array | 8.04 | 205 | Pn | Pn | 07 55 55.9 | +1.9 |

0.1nm,0.3s,baz=29,slow=14,SNR=5.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | | | | Sn | Sn | 07 57 24.6 | -1.0 |

0.1nm,0.3s,baz=22,slow=27,SNR=3.7

**ROM 17 08:03:36.7±0.0, 43°230N±0°002×12°864E±0°003, h12km, ML1.2/3, 1C, Error ellipse: s-maj=0.2km s-min=0.1km az=222.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SNTG | Esanatoglia | 0.06 | 66 | P | Pg | 08 03 39.5 | +0.3 |
| SNTG | | | | S | Sg | 08 03 41.4 | +0.4 |
| SNTG | | | | AML | AML | | |

comp=N,318μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SNTG | | | | AML | AML | | |

comp=E,262μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FIU1 | Fiuminata | 0.06 | 129 | P | Pg | 08 03 39.4 | +0.2 |
| FIU1 | | | | S | Sg | 08 03 41.3 | +0.4 |
| FOSV | Fossato di Vic | 0.10 | 311 | P | Pg | 08 03 40.0 | +0.4 |
| FOSV | | | | S | Sg | 08 03 42.2 | +0.6 |
| ATCC | AVT- Casa Cast | 0.17 | 255 | P | Pg | 08 03 41.0 | +0.5 |
| ATCC | | | | S | Sg | 08 03 44.3 | +1.0 |
| EL6 | Elcito | 0.20 | 60 | P | Pg | 08 03 41.5 | +0.4 |
| EL6 | | | | S | Sg | 08 03 45.4 | +1.2 |
| MDAR | Monte D'Aria | 0.21 | 100 | P | Pg | 08 03 41.2 | 0.0 |
| SSFR | Montelago di S | 0.21 | 344 | P | Pg | 08 03 41.9 | +0.6 |
| SSFR | | | | S | Sg | 08 03 45.4 | +0.9 |
| ASSB | Assisi San Ben | 0.24 | 219 | P | Pg | 08 03 42.2 | +0.5 |
| ASSB | | | | S | Sg | 08 03 46.2 | +1.0 |
| FDMO | Fiordimonte | 0.25 | 140 | ⇑P | Pg | 08 03 42.4 | +0.4 |
| FDMO | | | | S | Sb | 08 03 46.7 | -0.9 |
| FDMO | | | | AML | AML | | |

comp=N,53μm,1.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FDMO | | | | AML | AML | | |

comp=N,53μm,1.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FDMO | | | | AML | AML | | |

comp=E,52μm,1.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FRON | Frontone | 0.30 | 341 | P | Pg | 08 03 43.4 | +0.4 |
| FRON | | | | S | Sg | 08 03 48.0 | +0.9 |
| NARO | Abbazia di Nar | 0.43 | 332 | P | Pg | 08 03 45.4 | +0.1 |
| NARO | | | | S | Sb | 08 03 52.1 | -0.8 |
| NRCA | Norcia | 0.44 | 155 | P | Pg | 08 03 45.5 | +0.1 |
| NRCA | | | | S | Sb | 08 03 52.4 | -0.6 |
| NRCA | | | | AML | AML | | |

comp=E,64μm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NRCA | | | | AML | AML | | |

comp=N,66μm,1.0s

**IDC 17 08:04:21.0±3.2, 54°26N×87°45E, h0km, mb1 2.9/1, mb1mx2.8/57, mbtmp2.9/1, ML2.6/2, Error ellipse: s-maj=26.2km s-min=17.5km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.58 | 260 | *i* | | 08 12 10.2 | |

baz=79,slow=350,SNR=2.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | Zalesovo Beam | 1.58 | 260 | Pg | Pn | 08 04 48.6 | -1.5 |

0.6nm,0.3s,baz=76,slow=15,SNR=16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | | | | Lg | Lg | 08 05 12.1 | |

0.9nm,0.3s,baz=74,slow=27,SNR=6.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | Kurchatov Arra | 6.55 | 240 | Pn | Pn | 08 05 58.7 | +0.2 |

0.1nm,0.3s,baz=56,slow=14,SNR=5.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | | | | Lg | Lg | 08 07 49.0 | |

0.1nm,0.3s,baz=63,slow=33,SNR=3.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | Makanchi Array | 8.16 | 206 | Pn | Pn | 08 06 22.5 | +1.9 |

0.1nm,0.3s,baz=26,slow=10,SNR=4.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | | | | Sn | Sn | 08 07 52.3 | -1.2 |

0.1nm,0.3s,baz=24,slow=26,SNR=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | | | | Lg | Lg | 08 08 41.1 | |

0.0nm,0.3s,baz=27,slow=27,SNR=6.4

*TUL 17 08:12:14.1±0.8, 36°48N±0°02×98°74W±0°02, h5km±2km, ML2.6, mb_Lg2.2/11(NEIC), Error ellipse: s-maj=3.3km s-min=1.8km az=156.0*

**NEIC 17 08:12:14.8±0.6, 36°47N±0°02×98°74W±0°01, h7km±2km, Error ellipse: s-maj=3.3km s-min=1.5km az=165.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| U32A | Winter Ranch, | 0.23 | 246 | Pg | Pg | 08 12 19.1 | -0.4 |
| U32A | | | | Sg | Sg | 08 12 22.9 | +0.3 |
| FNO | Franklin | 1.63 | 138 | Pg | Pn | 08 12 43.7 | -0.3 |
| WMOK | Wichita Mounta | 1.73 | 181 | Pn | Pn | 08 12 44.9 | -0.5 |
| T35A | Sooner Cattle | 1.84 | 75 | Pn | Pn | 08 12 46.7 | -0.3 |
| R32A | Long Quarter, | 1.95 | 1 | Pn | Pn | 08 12 48.5 | +0.1 |
| X34A | Smith Ranch, M | 2.01 | 158 | Pn | Pn | 08 12 49.4 | +0.1 |
| X34A | | | | lAmb_Lg | | 08 13 18.0 | |

comp=Z,9.4nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CBKS | Cedar Bluff | 2.47 | 342 | lAmb_Lg | | 08 13 30.4 | |

comp=Z,14nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| U38A | Gravette | 3.59 | 311 | lAmb_Lg | | 08 14 11.3 | |

comp=Z,6.8nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSCO | Kaye Shedlock' | 3.99 | 311 | lAmb_Lg | | 08 14 18.0 | |

comp=Z,4.2nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MSTX | Muleshoe | 4.14 | 234 | lAmb_Lg | | 08 14 30.6 | |

comp=Z,8.7nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 237A | Washetta, Mont | 5.08 | 151 | lAmb_Lg | | 08 15 08.2 | |

comp=Z,3.9nm,0.8s

*TUL 17 08:16:49.4±1.2, 35°72N±0°01×97°16W±0°02, h6km±6km, ML3.3, mb_Lg3.1/75(NEIC), Error ellipse: s-maj=3.2km s-min=0.8km az=117.0*

**NEIC 17 08:16:49.9±1.0, 35°74N±0°02×97°19W±0°04, h10km±6km, Error ellipse: s-maj=5.6km s-min=1.1km az=116.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK001 | Jones High Sch | 0.19 | 204 | Pg | Pg | 08 16 53.5 | -0.4 |
| OKCFA | Oklahoma City | 0.38 | 213 | | Pg | 08 16 57.2 | -0.3 |
| OKCSW | OKLAHOMA CITY | 0.39 | 211 | Pg | Pg | 08 16 57.2 | -0.2 |
| FNO | Franklin | 0.51 | 200 | Pg | Pg | 08 16 59.4 | -0.4 |
| FNO | | | | Sg | Sg | 08 17 06.7 | +0.3 |
| W35A | Tecumseh | 0.64 | 156 | Pg | Pg | 08 17 01.3 | -1.0 |
| W35A | | | | Sg | Sg | 08 17 10.1 | -0.5 |
| TUL1 | Leonard | 1.15 | 81 | | Pb | 08 17 10.1 | -1.8 |
| X34A | Smith Ranch, M | 1.25 | 205 | | Pn | 08 17 13.0 | -0.5 |
| T35A | Sooner Cattle | 1.30 | 25 | Pn | Pn | 08 17 13.7 | -0.4 |
| U32A | Winter Ranch, | 1.60 | 294 | lAmb_Lg | | 08 17 40.9 | |

comp=Z,78nm,1.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X37A | Clayton | 1.88 | 127 | Pn | Pn | 08 17 22.4 | +0.3 |
| U38A | Gravette | 2.38 | 72 | | Pn | 08 17 29.9 | +0.9 |
| Z35A | Perchaven, San | 2.40 | 181 | Pn | Pn | 08 17 29.6 | +0.3 |
| HHAR | Hobbs | 2.69 | 77 | | Pn | 08 17 33.9 | +0.6 |
| W39A | Magazine | 2.83 | 100 | | Pn | 08 17 35.6 | +0.4 |
| W39A | | | | lAmb_Lg | | 08 18 20.2 | |

comp=Z,44nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Z38A | Mt. Pleasant | 3.07 | 143 | lAmb_Lg | | 08 18 31.4 | |

comp=Z,54nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MIAR | Mount Ida | 3.19 | 111 | | Pn | 08 17 41.1 | +0.9 |
| MIAR | | | | lAmb_Lg | | 08 18 34.4 | |

comp=Z,34nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CBKS | Cedar Bluff | 3.68 | 327 | lAmb_Lg | | 08 18 52.1 | |

comp=Z,49nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ABTX | Abilene, Hawle | 3.71 | 214 | lAmb_Lg | | 08 18 51.8 | |

comp=Z,32nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AMTX | Amarillo | 3.77 | 258 | lAmb_Lg | | 08 18 59.2 | |

comp=Z,46nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X40A | Basin Creek Fa | 3.78 | 108 | lAmb_Lg | | 08 18 51.6 | |

comp=Z,44nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WLAR | White Oak Lake | 3.93 | 120 | lAmb_Lg | | 08 18 57.8 | |

comp=Z,54nm,1.2s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WHAR | Wooly Hollow | 4.03 | 95 | | Pn | 08 17 51.6 | 0.0 |
| WHAR | | | | lAmb_Lg | | 08 19 01.7 | |

comp=Z,33nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| W41B | Gary Mavity, V | 4.08 | 96 | | Pn | 08 17 52.5 | +0.2 |
| W41B | | | | lAmb_Lg | | 08 18 58.5 | |

comp=Z,30nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FCAR | Ozark Folk Cen | 4.12 | 86 | lAmb_Lg | | 08 18 58.3 | |

comp=Z,40nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MGMO | Mountain Grove | 4.21 | 69 | lAmb_Lg | | 08 19 11.0 | |

comp=Z,44nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Z41A | Richland Creek | 4.39 | 123 | lAmb_Lg | | 08 19 15.4 | |

comp=Z,33nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R40A | Maddies Statio | 4.69 | 56 | lAmb_Lg | | 08 19 18.9 | |

comp=Z,39nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| P38A | Dawn | 4.85 | 36 | lAmb_Lg | | 08 19 25.7 | |

comp=Z,28nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LCAR | Lake Charles | 4.91 | 84 | lAmb_Lg | | 08 19 31.6 | |

comp=Z,22nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 435B | Jarrell | 4.95 | 184 | lAmb_Lg | | 08 19 31.6 | |

comp=Z,22nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N35A | Tabor | 5.26 | 13 | Pn | Pn | 08 18 08.7 | +0.1 |
| CCM | Cathedral Cave | 5.30 | 62 | lAmb_Lg | | 08 19 36.7 | |

comp=Z,52nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HBAR | Harrisburg | 5.33 | 90 | lAmb_Lg | | 08 19 38.3 | |

comp=Z,57nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSCO | Kaye Shedlock' | 5.42 | 309 | lAmb_Lg | | 08 19 48.8 | |

comp=Z,27nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PBMO | Poplar Bluff | 5.56 | 77 | lAmb_Lg | | 08 19 50.4 | |

comp=Z,31nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| P40A | Paris | 5.57 | 46 | lAmb_Lg | | 08 19 47.2 | |

comp=Z,48nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JCT | Junction City | 5.68 | 203 | lAmb_Lg | | 08 19 58.4 | |

comp=Z,30nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BGNE | Belgrade | 5.71 | 353 | lAmb_Lg | | 08 20 03.6 | |

comp=Z,38nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FVM | French Village | 5.87 | 66 | lAmb_Lg | | 08 19 56.5 | |

comp=Z,21nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PEBM | Pemiscott Bayo | 5.96 | 84 | lAmb_Lg | | 08 20 00.3 | |

comp=Z,52nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| T25A | Trinidad | 5.99 | 286 | Pn | Pn | 08 18 19.4 | +0.7 |
| L34A | Svendsen Farm, | 6.25 | 6 | lAmb_Lg | | 08 20 13.7 | |

comp=Z,44nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OGNE | Ogallala | 6.44 | 325 | lAmb_Lg | | 08 20 20.1 | |

comp=Z,41nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S44A | Carbondale | 6.67 | 71 | lAmb_Lg | | 08 20 31.9 | |

comp=Z,44nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SDCO | Great Sand Dun | 6.96 | 289 | Pn | Pn | 08 18 34.0 | +1.7 |
| K31A | O'Neill | 6.98 | 350 | lAmb_Lg | | 08 20 50.7 | |

comp=Z,35nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ISCO | Idaho Springs | 7.80 | 304 | lAmb_Lg | | 08 21 05.1 | |

comp=Z,12nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| O44A | Mansfield | 8.18 | 55 | lAmb_Lg | | 08 21 11.6 | |

comp=Z,33nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N23A | Red Feather La | 8.59 | 309 | lAmb_Lg | | 08 21 34.4 | |

comp=Z,20nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JFWS | Jewell Farm | 8.96 | 35 | lAmb_Lg | | 08 21 44.2 | |

comp=Z,24nm,0.7s

*NEIC 17 08:20:07.6±2.7, 16°25S±0°1×177°74W±0°08, h10km±1km, mb4.8/27, Error ellipse: s-maj=20.3km s-min=12.0km az=163.0*

*IDC 17 08:20:12.5±0.8, 16°54S×178°48W, h0km, mb4.4/14, mb1 4.6/15, mb1mx4.3/49, mbtmp4.3/15, ML5.7/1, MS4.3/53, Ms1 4.3/53, ms1mx4.2/64, Error ellipse: s-maj=36.6km s-min=15.5km az=151.0*

*GCMT 17 08:20:17.4±0.2, 16°80S±0°01×178°13W±0°01, h14km±1km, MW5.1/119, Moment Tensor Solution. s52,c69; s119,c174; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.17±.11; Mθθ=2.60±.13; Mϕϕ2.78±.11; Mrθ0.47±.25; Mθϕ4.23±.11; Mϕr1.25±.26; Best double couple: M₀5.17300×10¹⁶ NP1:ϕs75.00000°, δ79.00000°

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PETK | | | LR | LR | 08 57 51.3 | | |
| | comp=Z,202nm,20.8s,baz=161,slow=31 | | | | | | |
| **LEM** | **Lembang** | **73.47 268** | LR | LR | 09 04 37.3 | | |
| | comp=Z,169nm,18.6s,baz=124,slow=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.58 180** | LR | LR | 08 58 24.8 | | |
| | comp=Z,177nm,21.8s,baz=54,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.58 180** | P | **P** | **08 31 44.1** | **+2.7** | |
| **KSRS** | **Korea Array** | **74.11 318** | P | P | 08 31 48.5 | +3.8 | |
| | comp=Z,1.6nm,0.9s,baz=150,slow=5.8,SNR=5.1 | | | | | | |
| KSRS | | | LR | LR | 08 59 42.2 | | |
| | comp=Z,92nm,21.6s,baz=165,slow=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **75.83 325** | LR | LR | 09 02 00.3 | | |
| | comp=Z,98nm,18.2s,baz=135,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **76.69 49** | LR | LR | 08 58 05.1 | | |
| | comp=Z,281nm,20.1s,baz=238,slow=29 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.85 13** | LR | LR | 08 59 03.3 | | |
| | comp=Z,198nm,20.6s,baz=231,slow=30 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **76.97 39** | P | P | 08 32 09.6 | +8.4 | |
| | comp=Z,2.3nm,0.9s,baz=276,slow=7.6,SNR=6.2 | | | | | | |
| YBH | | | LR | LR | 08 58 50.7 | | |
| | comp=Z,327nm,20.3s,baz=246,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **77.12 60** | LR | LR | 08 58 13.7 | | |
| | comp=Z,155nm,18.1s,baz=246,slow=29 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.91 44** | P | P | 08 32 16.5 | +10 | |
| | comp=Z,1.5nm,0.7s,baz=227,slow=9.2,SNR=9.1 | | | | | | |
| NVAR | | | LR | LR | 09 00 51.9 | | |
| | comp=Z,127nm,19.1s,baz=239,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.91 44** | P | **P** | **08 32 05.6** | **-1.1** | |
| **NV11** | **Mina Array Sit** | **78.01 44** | P | **P** | **08 32 04.9** | **-2.2** | |
| NV11 | | | IAmb | IAmb | 08 32 21.4 | | |
| | comp=Z,12nm,1.4s | | | | | | |
| **KLR** | **Kul'dur** | **79.24 329** | LR | LR | 09 02 17.2 | | |
| | comp=Z,213nm,20.8s,baz=123,slow=32 | | | | | | |
| **CN2** | **Changchun** | **79.32 322** | *e*P | P | 08 32 19.5 | +5.5 | |
| CN2 | | | *e*S | **S** | **08 42 19.1** | **+4.5** | |
| CN2 | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| CN2 | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | LR | LR | | | |
| | comp=N,200nm,15.0s | | | | | | |
| CN2 | | | LR | LR | | | |
| | comp=E,200nm,15.0s | | | | | | |
| CN2 | | | LR | LR | | | |
| | comp=Z,200nm,12.0s | | | | | | |
| **BNX** | **BinXian** | **79.33 324** | ⇑P | P | 08 32 19.6 | +5.5 | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,300nm,5.1s | | | | | | |
| **BMN** | **Battle Mountai** | **79.68 42** | P | **P** | **08 32 13.5** | **-2.8** | |
| BMN | | | IAmb | IAmb | 08 32 42.0 | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TUC** | **Tucson** | **80.27 52** | P | **P** | **08 32 16.9** | **-2.7** | |
| **BBB** | **Bella Bella** | **80.73 28** | LR | LR | 09 02 15.1 | | |
| | comp=Z,290nm,18.2s,baz=238,slow=31 | | | | | | |
| **TTA** | **Tatalina** | **80.94 10** | P | **P** | **08 32 21.6** | **-0.9** | |
| **ELK** | **Elko** | **81.13 40** | LR | LR | 09 00 19.0 | | |
| | comp=Z,139nm,21.8s,baz=251,slow=30 | | | | | | |
| **RND** | **Reindeer** | **82.72 13** | P | **P** | **08 32 30.4** | **-1.5** | |
| RND | | | IAmb | IAmb | 08 32 44.0 | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MCK** | **McKinley** | **82.99 12** | P | **P** | **08 32 31.2** | **-2.0** | |
| **NEW** | **Newport** | **83.94 36** | LR | LR | 09 02 54.6 | | |
| | comp=Z,216nm,18.9s,baz=224,slow=30 | | | | | | |
| **ENH** | **Enshi** | **84.05 304** | P | **P** | **08 32 36.0** | **-3.4** | |
| **MNTX** | **Cornudas Mount** | **84.18 55** | P | **P** | **08 32 39.0** | **-1.1** | |
| MNTX | | | IAmb | IAmb | 08 32 58.0 | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **DLBC** | **Dease Lake** | **84.24 23** | LR | LR | 09 03 46.3 | | |
| | comp=Z,391nm,19.4s,baz=200,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **84.34 13** | P | P | 08 32 46.6 | +6.6 | |
| | comp=Z,6.8nm,1.2s,baz=238,slow=6.1,SNR=17 | | | | | | |
| ILAR | | | LR | LR | 09 02 49.5 | | |
| | comp=Z,93nm,19.9s,baz=222,slow=30 | | | | | | |
| **ILAR** | **Eielson Array** | **84.34 13** | P | **P** | **08 32 41.3** | **+1.3** | |
| **PSI** | **Prapat** | **84.46 275** | LR | LR | 09 12 21.8 | | |
| | comp=Z,112nm,18.3s,baz=133,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **84.64 57** | P | P | 08 32 52.1 | +10 | |
| | comp=Z,1.0nm,1.0s,baz=163,slow=4.8,SNR=5.1 | | | | | | |
| TXAR | | | LR | LR | 09 03 06.1 | | |
| | comp=Z,173nm,20.5s,baz=253,slow=30 | | | | | | |
| **ANMO** | **Albuquerque** | **84.66 51** | LR | LR | 09 03 28.8 | | |
| | comp=Z,210nm,19.3s,baz=254,slow=30 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **84.70 40** | P | **P** | **08 32 40.6** | **-2.0** | |
| **PMSA** | **Palmer Station** | **84.85 157** | LR | LR | 09 05 09.9 | | |
| | comp=Z,114nm,18.4s,baz=181,slow=32 | | | | | | |
| **MAW** | **Mawson** | **85.44 200** | LR | LR | 09 07 48.0 | | |
| | comp=Z,337nm,19.2s,baz=71,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.83 43** | P | P | 08 32 57.3 | +9.0 | |
| | comp=Z,0.3nm,0.7s,baz=222,slow=3.5,SNR=4.1 | | | | | | |
| PDAR | | | LR | LR | 09 07 60.0 | | |
| | comp=Z,109nm,20.0s,baz=272,slow=33 | | | | | | |
| **XAN** | **Xi'an** | **85.95 307** | P | P | 08 32 53.6 | +4.7 | |
| XAN | | | pP | pwP | 08 33 09.4 | +15 | |
| XAN | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.6s | | | | | | |
| **USHA** | **Ushuaia** | **87.31 147** | LR | LR | 09 02 42.3 | | |
| | comp=Z,103nm,21.0s,baz=232,slow=29 | | | | | | |
| **YAK** | **Yakutsk** | **88.51 338** | LR | LR | 09 07 42.4 | | |
| | comp=Z,83nm,20.2s,baz=78,slow=32 | | | | | | |
| **INK** | **Inuvik** | **90.32 15** | LR | LR | 09 07 46.5 | | |
| | comp=Z,122nm,19.4s,baz=212,slow=32 | | | | | | |
| **LZH** | **Lanzhou** | **90.57 307** | *e*P | P | 08 33 16.6 | +5.6 | |
| LZH | | | pP | pwP | 08 33 20.4 | +3.6 | |
| LZH | | | sP | sP | 08 33 24.0 | +9.5 | |
| LZH | | | pmax | pmax | | | |
| | comp=Z,15nm,1.4s | | | | | | |
| **APG** | **El Apazote** | **91.57 75** | LR | LR | 09 07 23.5 | | |
| | comp=Z,85nm,18.3s,baz=330,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **91.81 133** | P | P | 08 33 25.8 | +9.0 | |
| | comp=Z,3.2nm,0.8s,baz=194,slow=3.9,SNR=5.7 | | | | | | |
| PLCA | | | LR | LR | 09 05 02.7 | | |
| | comp=Z,96nm,21.8s,baz=237,slow=29 | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.74 24** | P | P | 08 33 26.6 | +6.4 | |
| | comp=Z,0.7nm,1.0s,baz=244,slow=4.4,SNR=6.3 | | | | | | |
| YKA | | | LR | LR | 09 09 14.2 | | |
| | comp=Z,392nm,19.3s,baz=236,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **92.92 319** | P | **P** | **08 33 24.6** | **+3.0** | |
| | comp=Z,0.3nm,0.3s,baz=134,slow=3.7,SNR=4.8 | | | | | | |
| **JTS** | **Las Juntas de** | **95.45 81** | LR | LR | 09 07 15.3 | | |
| | comp=Z,133nm,19.8s,baz=290,slow=29 | | | | | | |
| **NNA** | **Nana** | **96.80 105** | LR | LR | 09 10 08.2 | | |
| | comp=Z,62nm,19.2s,baz=278,slow=31 | | | | | | |
| **ATAH** | **Atahualpa** | **96.82 99** | LR | LR | 09 07 03.6 | | |
| | comp=Z,164nm,19.6s,baz=276,slow=29 | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.37 40** | LR | LR | 09 11 28.1 | | |
| | comp=Z,281nm,20.1s,baz=265,slow=31 | | | | | | |
| **AKASG** | **Malin Array Be** | **139.60 334** | PKP | | **PKiKP** | **08 39 42.0** | **+3.6** |
| | comp=Z,0.2nm,0.3s,baz=31,slow=1.2,SNR=2.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.25 317** | PKP | | **PKiKP** | **08 39 48.2** | **-0.3** |
| | comp=Z,2.9nm,0.8s,baz=122,slow=1.6,SNR=9.9 | | | | | | |
| **DPC** | **Dobruska-Polom** | **144.37 345** | *e*PKP | | **PKiKP** | **08 39 49.1** | **+0.9** |
| **MORC** | **Moravsky Berou** | **144.56 343** | *e*PKP | | **PKiKP** | **08 39 50.1** | **+1.4** |
| **PRU** | **Pruhonice** | **145.13 346** | *e*PKP | | **PKiKP** | **08 39 55.1** | **+5.3** |
| **VRAC** | **Vranov** | **145.25 344** | *e*PKP | | **PKiKP** | **08 39 51.5** | **+1.5** |
| **JAVC** | **Velka Javorina** | **145.35 342** | *e*PKP | | **PKiKP** | **08 39 52.4** | **+2.1** |
| **KRUC** | **Moravsky** | **145.53 344** | *e*PKP | | **PKiKP** | **08 39 51.9** | **+1.3** |
| **KHC** | **Kasperske Hory** | **146.16 347** | *e*PKP | | **PKiKP** | **08 39 58.0** | **+6.0** |
| **CKRC** | **Cesky Krumlov** | **146.28 346** | *e*PKP | | PKiKP | 08 39 59.3 | +7.1 |
| **GERES** | **GERESS Array B** | **146.40 346** | PKPbc | | **PKiKP** | **08 39 55.1** | **+2.6** |
| | comp=Z,0.3nm,0.3s,baz=342,slow=6.2,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **176.64 169** | PKP | | **PKPdf** | **08 40 25.6** | **+5.8** |
| | comp=Z,0.1nm,0.3s,baz=264,slow=1.4,SNR=9.9 | | | | | | |

*IDC **17** 08:20:27.7±1.9, 1.°14N×126.°47E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.6/40, mbtmp3.7/3, Error ellipse: s-maj=172.4km s-min=23.4km az=66.0*

*DJA **17** 08:20:33.0±0.3, 1.°N±4.°×12.°6E±.°, h10km, M3.8/10, MLv3.8/10*

**ISC 17 08:20:34.5±1.2, 0.°99N±0.°08×126.°15E±0.°07, h44km, n10, σ1°06/10, mb3.6/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.24** | **100** | P | **Pn** | **08 20 55.9** | **+0.5** |
| **KMSI** | **Cibinong** | **2.20** | **259** | P | **Pn** | **08 21 08.1** | **-0.5** |
| **SGSI** | **Sangihe** | **2.75** | **347** | P | **Pn** | **08 21 16.9** | **+0.8** |
| **SANI** | **Sanana** | **3.02** | **183** | P | **Pn** | **08 21 20.9** | **+1.1** |
| **GTOI** | **Gorontalo** | **3.15** | **264** | P | **Pn** | **08 21 22.6** | **+0.9** |
| **MRSI** | **Marisa** | **4.24** | **263** | P | **Pn** | **08 21 37.0** | **+0.5** |
| **APSI** | **Ampana** | **4.88** | **247** | P | **Pn** | **08 21 46.4** | **+1.1** |
| **WRA** | **Warramunga Arr** | **22.30** | **159** | P | **P** | **08 25 26.5** | **-1.8** |
| | 1.2nm,0.5s,baz=339,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **25.64** | **163** | P | **P** | **08 26 00.2** | **0.0** |
| | 0.4nm,0.3s,baz=345,slow=11,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.48** | **326** | P | **P** | **08 30 32.9** | **-0.2** |
| | 0.5nm,0.4s,baz=122,slow=8.0,SNR=14 | | | | | | |

*NEIC **17** 08:31:40.4±0.6, 36.°45N±0.°01×98.°77W±0.°01, h5km±2km, Error ellipse: s-maj=1.9km s-min=1.2km az=215.0*

**TUL 17 08:31:39.9±0.7, 36.°46N±0.°02×98.°77W±0.°02, h7km±2km, ML3.0, mb_Lg2.7/29(NEIC), Error ellipse: s-maj=2.5km s-min=1.7km az=141.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.20** | **247** | Pg | Pg | 08 31 44.2 | +0.2 |
| U32A | | | | Sg | Sg | 08 31 47.7 | +0.9 |
| **FNO** | **Franklin** | **1.64** | **137** | Pn | Pn | 08 32 09.4 | +0.3 |
| **T35A** | **Sooner Cattle** | **1.87** | **75** | Pn | Pb | 08 32 13.4 | -1.0 |
| T35A | | | | IAmb_Lg | | 08 32 39.2 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.96** | **1** | | Pb | 08 32 15.1 | -0.8 |
| **X34A** | **Smith Ranch, M** | **2.00** | **157** | Pn | Pb | 08 32 15.7 | -1.0 |
| X34A | | | | IAmb_Lg | | 08 32 46.7 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **W35A** | **Tecumseh** | **2.02** | **130** | | Pb | 08 32 15.7 | -1.1 |
| **AMTX** | **Amarillo** | **2.84** | **237** | IAmb_Lg | | 08 33 08.5 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.90** | **91** | IAmb_Lg | | 08 33 48.3 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.98** | **311** | IAmb_Lg | | 08 33 56.6 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.11** | **234** | IAmb_Lg | | 08 33 55.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.46** | **135** | IAmb_Lg | | 08 34 01.3 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **S39A** | **Bolivar** | **4.53** | **73** | IAmb_Lg | | 08 34 06.0 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **4.58** | **280** | IAmb_Lg | | 08 34 12.3 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **U40A** | **Yellville** | **4.77** | **89** | IAmb_Lg | | 08 34 09.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.39** | **101** | IAmb_Lg | | 08 34 38.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.75** | **170** | IAmb_Lg | | 08 34 48.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **189** | IAmb_Lg | | 08 35 02.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.21** | **73** | IAmb_Lg | | 08 35 01.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.11** | **315** | IAmb_Lg | | 08 35 26.4 | |
| | comp=Z,8.5nm,0.9s | | | | | | |

*NEIC **17** 08:32:16.7±0.5, 36.°45N±0.°01×98.°76W±0.°01, h6km±2km, Error ellipse: s-maj=2.3km s-min=0.5km az=136.0*

**TUL 17 08:32:16±0.9, 36.°465N±0.°009×98.°76W±0.°01, h2km±3km, ML3.1, mb_Lg2.8/29(NEIC), Error ellipse: s-maj=1.7km s-min=1.1km az=63.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.21** | **247** | Pg | Pg | 08 32 20.6 | +0.5 |
| U32A | | | | Sg | Sg | 08 32 24.0 | +1.0 |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | Pn | Pn | 08 32 56.7 | -0.6 |
| **X37A** | **Clayton** | **3.33** | **123** | IAmb_Lg | | 08 34 11.2 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.98** | **311** | IAmb_Lg | | 08 34 20.8 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.12** | **234** | IAmb_Lg | | 08 34 33.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.23** | **106** | IAmb_Lg | | 08 34 37.2 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.76** | **90** | IAmb_Lg | | 08 34 58.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.25** | **81** | IAmb_Lg | | 08 35 07.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.38** | **101** | IAmb_Lg | | 08 35 14.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.39** | **119** | IAmb_Lg | | 08 35 17.4 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.44** | **102** | IAmb_Lg | | 08 35 11.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.75** | **170** | IAmb_Lg | | 08 35 26.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **189** | IAmb_Lg | | 08 35 42.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.70** | **85** | IAmb_Lg | | 08 35 53.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **7.15** | **310** | IAmb_Lg | | 08 36 07.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.19** | **43** | IAmb_Lg | | 08 37 19.6 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **I40A** | **Norwalk** | **9.68** | **37** | IAmb_Lg | | 08 37 30.8 | |
| | comp=Z,6.8nm,0.9s | | | | | | |

**IDC 17 08:44:47.2±385.0, 30.°22N×133.°00E, h0km, Error ellipse: s-maj=229.4km s-min=128.4km az=94.0, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I30JP** | **ISUMI INFRASON** | **7.98** | **49** | *i* | | 09 34 40.0 | |
| | baz=232,slow=308,SNR=2.0 | | | | | | |
| **I39PW** | **PALAU INFRASON** | **22.62** | **176** | *i* | | 11 03 20.0 | |
| | baz=356,slow=309,SNR=1.9 | | | | | | |
| **I44RU** | **PETROPAVLOVSK** | **29.12** | **31** | *i* | | 11 42 50.0 | |
| | baz=229,slow=317,SNR=0.7 | | | | | | |

*IDC **17** 08:47:48.0±1.4, 21.°35S×178.°21W, h458km±14km, mb3.6/13, mb1 3.9/16, mb1mx3.7/36, mbtmp4.5/16, Error ellipse: s-maj=16.3km s-min=12.4km az=125.0*

*NEIC **17** 08:47:47.8±1.8, 21.°4S±0.°1×178.°1W±0.°1, h458km±7km, mb4.6/38, Error ellipse: s-maj=15.8km s-min=14.9km az=73.0*

**ISC 17 08:47:46.7±0.4, 21.°30S±0.°08×178.°10W±0.°07, h450km, n93, σ1°23/95, mb4.6/32, 15C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.07** | **314** | P | **P** | **08 49 14.7** | **+2.7** |
| | 8.9nm,0.3s,baz=141,slow=7.8,SNR=37 | | | | | | |
| **MSVF** | **Nonsavu** | **5.07** | **314** | P | **P** | **08 49 14.0** | **+2.1** |
| **NIUE** | **Niue** | **7.99** | **75** | P | **P** | **08 49 43.1** | **+1.1** |
| **AFI** | **Afiamalu** | **9.50** | **40** | P | **P** | **08 49 60.0** | **+1.4** |
| | 9.5nm,0.3s,baz=65,slow=19,SNR=8.0 | | | | | | |
| AFI | | | | S | **S** | **08 51 41.2** | **-5.7** |
| | 12nm,0.3s,baz=223,slow=18,SNR=6.6 | | | | | | |
| **AFI** | **Afiamalu** | **9.50** | **40** | P | **P** | **08 49 58.0** | **-0.6** |
| **PINNC** | **Pines Island,** | **13.48** | **262** | P | **P** | **08 50 43.7** | **+2.1** |
| **OUENC** | **Ouen Island, N** | **14.03** | **263** | P | **P** | **08 50 48.8** | **+1.2** |
| **SANVU** | **Saraoutou** | **15.11** | **290** | P | **P** | **08 51 00.3** | **+1.2** |
| SANVU | | | | IAmb | IAmb | 08 51 28.6 | |
| | comp=Z,44nm,1.5s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.48** | **269** | P | **P** | **08 51 15.4** | **+1.9** |
| KOUNC | | | | IAmb | IAmb | 08 51 17.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **URZ** | **Urewera** | **17.41** | **193** | P | **P** | **08 51 21.9** | **-1.2** |
| | comp=Z,2.2nm,0.3s,baz=269,slow=3.1,SNR=14 | | | | | | |
| **URZ** | **Urewera** | **17.41** | **193** | IAmb | IAmb | 08 51 23.5 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.41** | **193** | P | **P** | **08 51 31.6** | **-1.7** |
| BKZ | | | | IAmb | IAmb | 08 51 34.9 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **THZ** | **Tophouse** | **21.77** | **198** | P | **P** | **08 52 04.1** | **0.0** |
| **LTZ** | **Lake Taylor** | **22.89** | **198** | P | **P** | **08 52 14.2** | **-0.1** |
| **OXZ** | **Oxford** | **23.46** | **198** | P | **P** | **08 52 19.1** | **-0.1** |
| OXZ | | | | IAmb | IAmb | 08 52 32.8 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **27.07** | **202** | P | **P** | **08 52 50.9** | **-0.4** |
| WHZ | | | | IAmb | IAmb | 08 52 52.6 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **28.55** | **256** | P | **P** | **08 53 04.2** | **-0.4** |
| **ARMA** | **Armidale** | **28.64** | **245** | P | **P** | **08 53 05.7** | **+0.2** |
| ARMA | | | | IAmb | IAmb | 08 53 07.1 | |
| | comp=Z,18nm,0.5s | | | | | | |
| **CAN** | **Canberra** | **32.00** | **237** | P | **P** | **08 53 34.8** | **+0.4** |
| CAN | | | | IAmb | IAmb | 08 53 36.5 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **33.33** | **266** | P | **P** | **08 53 45.9** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 08 53 47.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **35.36** | **235** | P | **P** | **08 54 03.1** | **+0.2** |
| TOO | | | | IAmb | IAmb | 08 54 04.1 | |
| | comp=Z,22nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **35.44 284** | | P | **P** | **08 54 03.4** | **-0.4** |
| PMG | | | | IAmb | IAmb | 08 54 04.8 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **37.37 245** | | P | **P** | **08 54 19.5** | **-0.1** |
| | comp=Z,13nm,0.5s,baz=91,slow=10,SNR=59 | | | | | | |
| **STKA** | **Stephens Creek** | **37.37 245** | | P | **P** | **08 54 19.9** | **+0.2** |
| **COEN** | **Coen** | **37.55 275** | | P | **P** | **08 54 21.1** | **-0.2** |
| COEN | | | | IAmb | IAmb | 08 54 22.8 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **42.12 244** | | P | **P** | **08 54 57.7** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 08 54 58.4 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.22 263** | | P | **P** | **08 55 13.8** | **-0.9** |
| **AS31** | **Alice Springs** | **44.25 258** | | P | **P** | **08 55 14.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.25 258** | | P | **P** | **08 55 14.6** | **-0.4** |
| | comp=Z,21nm,0.6s,baz=97,slow=8.0,SNR=231 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 56 49.9** | **-0.3** |
| | comp=Z,1.5nm,0.5s,baz=100,slow=3.7,SNR=5.7 | | | | | | |
| ASAR | | | | S | **S** | **09 01 10.8** | **-4.2** |
| | comp=Z,1.5nm,0.9s,baz=94,slow=15,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **44.25 258** | | P | **P** | **08 55 14.8** | **-0.3** |
| **WB0** | **Warramunga Arr** | **44.39 263** | | P | **P** | **08 55 15.4** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 08 55 16.0 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.39 263** | | P | **P** | **08 55 15.2** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 08 55 16.1 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.40 263** | | P | **P** | **08 55 15.1** | **-1.0** |
| WRAB | | | | IAmb | IAmb | 08 55 16.1 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.41 263** | | P | **P** | **08 55 15.2** | **-1.0** |
| | comp=Z,14nm,0.8s,baz=96,slow=7.3,SNR=201 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.41 263** | | P | **P** | **08 55 15.1** | **-1.2** |
| **FORT** | **Forrest** | **48.90 247** | | P | **P** | **08 55 49.1** | **-1.2** |
| **MTN** | **Manton Dam** | **49.08 271** | | IAmb | IAmb | 08 55 51.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **50.52 267** | | P | **P** | **08 56 01.9** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **52.84 263** | | P | **P** | **08 56 18.9** | **-0.3** |
| FITZ | | | | IAmb | IAmb | 08 56 20.0 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **56.44 272** | | P | **P** | **08 56 44.5** | **-0.5** |
| **SOEI** | **Soe** | **56.44 272** | | P | **P** | **08 56 46.8** | **+1.9** |
| **VNDA** | **Vanda** | **57.11 185** | | P | **P** | **08 56 50.1** | **+1.7** |
| | comp=Z,2.1nm,0.7s,baz=24,slow=10.0,SNR=1.6 | | | | | | |
| **VNDA** | **Vanda** | **57.11 185** | | P | **P** | **08 56 50.1** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **57.40 257** | | P | **P** | **08 56 50.3** | **-1.0** |
| **MBWA** | **Marble Bar** | **57.59 258** | | P | **P** | **08 56 51.6** | **-1.0** |
| **GIRL** | **Giralia** | **62.25 255** | | P | **P** | **08 57 24.2** | **+0.4** |
| **QSPA** | **South Pole Qui** | **68.78 180** | | P | **P** | **08 58 05.4** | **+1.1** |
| | comp=Z,12nm,0.8s,baz=252,slow=0.6,SNR=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **68.78 180** | | P | **P** | **08 58 05.1** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 08 58 06.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **69.86 269** | | P | **P** | **08 58 10.4** | **-1.2** |
| **MJAR** | **Matsushiro Arr** | **70.79 324** | | P | **P** | **08 58 17.3** | **+0.7** |
| | comp=Z,1.7nm,0.5s,baz=161,slow=6.0,SNR=4.1 | | | | | | |
| **MAT** | **Matsushiro** | **70.80 324** | | P | **P** | **08 58 17.0** | **+0.3** |
| **TPUB** | **Ta-pu** | **74.33 303** | | P | **P** | **08 58 36.5** | **-1.0** |
| **SSLB** | **Suanglung** | **74.33 304** | | P | **P** | **08 58 36.7** | **-0.9** |
| **KSRS** | **Korea Array** | **77.42 319** | | P | **P** | **08 58 56.0** | **+1.7** |
| | comp=Z,1.5nm,1.0s,baz=132,slow=5.7,SNR=5.0 | | | | | | |
| **BELA** | **Belgrano 2** | **78.79 173** | | P | **P** | **08 59 00.5** | **-0.6** |
| BELA | | | | IAmb | IAmb | 08 59 02.0 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **NJ2** | **Nanjing** | **80.31 310** | *e*P | | **P** | **08 59 09.4** | **-0.5** |
| NJ2 | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.97 39** | P | | P | **08 59 14.5** | **+1.2** |
| | comp=Z,1.2nm,0.6s,baz=236,slow=3.8,SNR=6.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.66 43** | P | | P | **08 59 17.9** | **+0.8** |
| | comp=Z,0.7nm,0.7s,baz=218,slow=8.3,SNR=5.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.56 57** | P | | P | **08 59 48.1** | **+2.0** |
| | comp=Z,0.9nm,0.9s,baz=224,slow=7.7,SNR=5.4 | | | | | | |
| **XAN** | **Xi'an** | **88.54 307** | P | | P | **08 59 51.8** | **+1.2** |
| XAN | | | pP | | pwP | 09 01 45.3 | +11 |
| XAN | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **89.11 13** | P | | P | **08 59 53.4** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=218,slow=5.6,SNR=11 | | | | | | |
| **PDAR** | **Pinedale Array** | **89.60 43** | P | | P | **08 59 56.6** | **+1.1** |
| | comp=Z,0.7nm,1.0s,baz=53,slow=0.7,SNR=3.6 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **89.84 314** | *e*P | | P | **08 59 56.6** | **+0.1** |
| HHC | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| HHC | | | pmax | | pmax | | |
| | comp=Z,170nm,5.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.29 290** | P | | P | **08 59 59.5** | **+0.4** |
| | comp=Z,1.6nm,0.3s,baz=113,slow=2.8,SNR=13 | | | | | | |
| **PZH** | **PanZhiHua** | **91.00 298** | P | | P | **09 00 01.1** | **-1.2** |
| PZH | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | pmax | | pmax | | |
| |

| | | | | | |
|---|---|---|---|---|---|
| **W39A** | **Magazine** comp=Z,17nm,1.1s | **4.23** | **106** | IAmb_Lg | 09 03 53.8 |
| **Z38A** | **Mt. Pleasant** comp=Z,9.6nm,0.8s | **4.46** | **135** | IAmb_Lg | 09 04 03.4 |

*NIED* ***17*** *09:05:21.5, 28˚.13N×128˚.07E, h11km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr-0.56; Mθθ1.22; Mϕϕ-0.66; Mrθ-0.36; Mθϕ2.12; Mϕr-0.46; Fault plane solution: M0 2.38000×10^15 NP1: ϕs192.00000°, δ89.00000°, λ168.00000°. NP2: ϕs282.00000°, δ78.00000°, λ1.00000°.*
*JMA* ***17*** *09:05:21.5±0.2, 28˚.13N×128˚.07E, h11km±3km, M4.2*
*JMA Felt II J1.*
*IDC* ***17*** *09:05:24.2±3.1, 27˚.95N×127˚.85E, h18km±20km, mb3.7/8, mb1 3.9/12, mb1mx3.6/38, mbtmp3.8/12, ML3.3/3, MS3.4/10, Ms1 3.4/10, ms1mx3.1/90, Error ellipse: s-maj=30.1km s-min=10.6km az=80.0*
*NEIC* ***17*** *09:05:27.9±1.6, 27˚.95N±0˚.06×128˚.20E±0˚.08, h52km±10km, mb4.2/9, Error ellipse: s-maj=12.2km s-min=4.1km az=129.0*

**ISC 17 09:05:23.7**±1.4**, 28˚.00N**±0˚.04×**128˚.15E**±0˚.05**, h15**km±10km**, n52**, σ1§43/56**, mb4.0**/12**, MS3.4/8**, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOKE** | **Okinoerabujima** | **0.74** | **150** | P | **Pb** | **09 05 38.2** | **-0.1** |
| JOKE | | | | *e*S | **Sn** | **09 05 50.6** | **-0.1** |
| **JTK** | **Tokunoshima** | **0.74** | **107** | P | **Pb** | **09 05 37.3** | **-1.0** |
| JTK | | | | S | **Sb** | **09 05 48.9** | **+0.6** |
| **JAMN** | **Amaminishikomi** | **0.94** | **75** | P | **Pb** | **09 05 40.1** | **-1.5** |
| JAMN | | | | *e*S | **Sb** | **09 05 53.4** | **-0.5** |
| **JIH** | **Iheya** | **0.98** | **190** | P | **Pg** | **09 05 41.9** | **-0.8** |
| JIH | | | | S | **Sn** | **09 05 56.5** | **0.0** |
| **JYRO** | **Yoronjima** | **1.01** | **165** | P | **Pn** | **09 05 42.9** | **-0.5** |
| JYRO | | | | *e*S | **Sn** | **09 05 57.7** | **+0.4** |
| **JOW** | **Kunigami** 292nm,0.3s,baz=23,slow=12,SNR=374 | **1.17** | **175** | Pg | **Pb** | **09 05 45.4** | **-0.3** |
| JOW | | | | Lg | Lg | 09 06 01.7 | |
| | 160nm,0.3s,baz=116,slow=26,SNR=21 | | | | | | |
| **JOW** | **Kunigami** | **1.17** | **175** | P | **Pb** | **09 05 45.4** | **-0.3** |
| JOW | | | | S | **Sg** | **09 06 02.3** | **+0.7** |
| **JOW** | **Kunigami** | **1.17** | **175** | | **Pb** | **09 05 45.5** | **-0.1** |
| JOW | | | | Sn | **Sg** | **09 06 01.9** | **+0.2** |
| **JAM** | **Amami Oshima** | **1.35** | **72** | P | **Pn** | **09 05 46.7** | **-1.3** |
| JAM | | | | S | **Sn** | **09 06 04.3** | **-1.3** |
| **JTAJ** | **Takarajima** | **1.47** | **39** | P | **Pn** | **09 05 47.2** | **-2.5** |
| **JNTH** | **Nagotoyohara** | **1.48** | **184** | P | **Pb** | **09 05 50.0** | **-1.0** |
| JNTH | | | | *e*S | **Sg** | **09 06 09.8** | **-1.8** |
| **JAGN** | **Aguni-jima** | **1.62** | **210** | P | **Pn** | **09 05 51.1** | **-0.7** |
| **JZK** | **Kikaishima** | **1.64** | **79** | P | **Pn** | **09 05 53.5** | **+1.5** |
| **JJT3** | **Tamagusuku3** | **1.88** | **190** | P | **Pb** | **09 05 56.3** | **-1.5** |
| **JKE** | **Kume jima 2** | **2.07** | **216** | P | **Pn** | **09 05 57.2** | **-0.7** |
| **JYAK** | **Yakushimahirau** | **3.04** | **42** | P | **Pn** | **09 06 11.3** | **+0.1** |
| **JKDJ** | **Kitadaitoujima** | **3.47** | **125** | *e*S | **Sn** | **09 06 58.3** | **+0.2** |
| **JSU** | **Suzuyama** | **4.02** | **29** | | **Pn** | **09 06 26.8** | **+2.0** |
| **JNU** | **Nakatsue** 2.2nm,0.3s,baz=199,slow=5.7,SNR=13 | **5.62** | **24** | Pn | **Pn** | **09 06 50.6** | **+3.8** |
| **JNU** | **Nakatsue** | **5.62** | **24** | | **Pn** | **09 06 49.3** | **+2.5** |
| **YHNB** | **Yeheng** | **6.92** | **243** | | **Pn** | **09 07 06.8** | **+2.1** |
| **JMN** | **Monobe** | **7.54** | **39** | Pn | **Pn** | **09 07 15.1** | **+2.0** |
| **SSLB** | **Suanglung** | **7.72** | **239** | | **Pn** | **09 07 18.3** | **+2.7** |
| **KSRS** | **Korea Array** baz=180,slow=12,SNR=4.5 | **9.43** | **359** | Pn | **Pn** | **09 07 39.9** | **+0.9** |
| KSRS | | | | LR | LR | 09 11 18.1 | |
| | comp=Z,184nm,19.7s,baz=180,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** 0.1nm,0.3s,baz=135,slow=15,SNR=2.2 | **12.03** | **42** | Pn | **Pn** | **09 08 18.8** | **+4.1** |
| MJAR | | | | LR | LR | 09 13 39.3 | |
| | comp=Z,124nm,20.0s,baz=214,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** baz=186,slow=12,SNR=6.5 | **16.45** | **10** | Pn | **P** | **09 09 16.4** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **16.45** | **10** | | **Pn** | **09 09 15.4** | **+1.4** |
| **GUMO** | **Guam** comp=Z,115nm,20.1s,baz=321,slow=33 | **21.17** | **129** | LR | LR | 09 17 09.1 | |
| **KLR** | **Kul'dur** 1.4nm,0.8s,baz=193,slow=5.5,SNR=4.5 | **21.38** | **6** | P | **P** | **09 10 12.5** | **+2.0** |
| **ULN** | **Ulaanbaatar** | **25.74** | **326** | P | **P** | **09 10 53.0** | **-0.7** |
| ULN | | | | IAmb | IAmb | 09 11 01.3 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** comp=Z,3.0nm,0.7s,baz=137,slow=10,SNR=14 | **26.04** | **325** | P | **P** | **09 10 55.3** | **-1.2** |
| SONM | | | | LR | LR | 09 22 12.2 | |
| | comp=Z,130nm,18.1s,baz=154,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **26.04** | **325** | P | **P** | **09 10 55.5** | **-1.0** |
| SONM | | | | IAmb | IAmb | 09 11 04.3 | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **JAY** | **Jayapura** comp=Z,47nm,18.7s,baz=319,slow=37 | **32.66** | **156** | LR | LR | 09 25 35.8 | |
| **PETK** | **Petropavlovsk-** comp=Z,63nm,18.2s,baz=249,slow=37 | **33.24** | **33** | LR | | 09 26 02.4 | |
| **KAPI** | **Kappang** comp=Z,21nm,18.1s,baz=32,slow=38 | **33.81** | **195** | LR | LR | 09 26 49.7 | |
| **MK31** | **Makanchi Array** | **40.32** | **310** | P | **P** | **09 13 00.4** | **-0.1** |
| **MKAR** | **Makanchi Array** comp=Z,1.5nm,0.9s,baz=100,slow=9.5,SNR=6.5 | **40.32** | **310** | P | **P** | **09 12 58.9** | **-1.6** |
| **MKAR** | **Makanchi Array** | **40.32** | **310** | P | **P** | **09 12 59.9** | **-0.7** |
| **MAKZ** | **Makanchi** | **40.53** | **310** | P | **P** | **09 13 01.9** | **-0.4** |
| MAKZ | | | | IAmb | IAmb | 09 13 06.3 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** comp=Z,154nm,18.8s,baz=185,slow=36 | **43.69** | **0** | LR | LR | 09 31 34.3 | |
| **WRA** | **Warramunga Arr** comp=Z,1.4nm,0.7s,baz=353,slow=8.2,SNR=9.9 | **48.04** | **172** | P | **P** | **09 14 02.5** | **0.0** |
| WRA | | | | LR | LR | 09 33 51.9 | |
| | comp=Z,42nm,20.9s,baz=56,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.04** | **172** | P | **P** | **09 14 02.6** | **0.0** |
| **WB2** | **Warramunga Arr** | **48.04** | **172** | P | **P** | **09 14 02.4** | **-0.1** |
| **HNR** | **Honiara** comp=Z,38nm,19.9s,baz=356,slow=35 | **48.28** | **136** | LR | LR | 09 33 20.6 | |
| **BRVK** | **Borovoye** | **48.98** | **317** | P | **P** | **09 14 08.6** | **-1.0** |
| BRVK | | | | IAmb | IAmb | 09 14 24.3 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** comp=Z,0.4nm,0.5s,baz=356,slow=9.4,SNR=10 | **51.67** | **173** | P | **P** | **09 14 30.4** | **+0.3** |
| ASAR | | | | PcP | **PcP** | **09 15 43.6** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=358,slow=3.7,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **51.67** | **173** | P | **P** | **09 14 28.2** | **-1.9** |
| **ABKAR** | **Akbulak array** | **55.39** | **312** | P | **P** | **09 14 55.3** | **-1.9** |
| ABKAR | | | | IAmb | IAmb | 09 15 20.0 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** comp=Z,1.2nm,0.6s,baz=327,slow=9.0,SNR=3.3 | **60.91** | **167** | P | **P** | **09 15 35.6** | **-0.3** |
| **MDM** | **Murphy Dome** | **62.32** | **29** | P | **P** | **09 15 44.2** | **-0.9** |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,0.7s,baz=251,slow=4.5,SNR=5.1 | **62.92** | **29** | P | **P** | **09 15 50.2** | **+1.1** |
| **YKA** | **Yellowknife Ar** comp=Z,0.5nm,0.7s,baz=307,slow=6.0,SNR=7.1 | **76.95** | **25** | P | **P** | **09 17 14.4** | **-1.0** |

*IDC* ***17*** *10:01:10.5±3.0, 53˚.76N×88˚.14E, h0km, mb1 3.3/2, mb1mx3.1/49, mbtmp3.3/2, ML3.1/2, Error ellipse: s-maj=26.0km s-min=15.9km az=58.0*
*NNC* ***17*** *10:01:11.4±3.0, 53˚.70N×88˚.10E, h0km, mb3.2, mpv2.9, Error ellipse: s-maj=24.4km s-min=16.2km az=66.0, Suspected Mining explosion.*

**ISC 17 10:01:12.6**±4.1**, 53˚.8N**±0˚.1×**87˚.9E**±0˚.2**, h0km**, **n8**, σ1§**05**/10**, 6C-4D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** baz=92,slow=343,SNR=1.8 | **1.81** | **276** | *i* | | 10 16 00.0 | |
| **ZAA0** | **Zalesovo Array** 2.3nm,0.6s | **1.81** | **276** | ⇓Pn | **Pn** | **10 01 45.4** | **+0.4** |
| ZAA0 | | | | ⇑Lg | Lg | 10 02 14.6 | |
| | 12nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** 3.2nm,0.3s,baz=94,slow=9.9,SNR=45 | **1.81** | **276** | Pg | **Pb** | **10 01 45.8** | **-0.7** |
| ZALV | | | | Lg | Lg | 10 02 13.7 | |
| | 9.0nm,0.3s,baz=96,slow=26,SNR=21 | | | | | | |
| **KURK** | **Kurchatov** 2.2nm,1.2s | **6.46** | **245** | ⇑Pn | **Pn** | **10 02 50.6** | **+1.8** |
| KURK | | | | ⇓Sn | **Sn** | **10 04 03.0** | **-0.1** |
| | 2.8nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 04 39.5 | |
| | 7.4nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** 0.3nm,0.3s,baz=59,slow=14,SNR=8.4 | **6.55** | **245** | Pn | **Pn** | **10 02 50.3** | **+0.2** |
| KURBB | | | | Lg | Lg | 10 04 40.6 | |
| | 0.1nm,0.3s,baz=61,slow=33,SNR=4.7 | | | | | | |
| **MK31** | **Makanchi Array** 0.4nm,0.6s,baz=29,slow=13,SNR=13 | **7.86** | **209** | ⇓Pn | **Pn** | **10 03 08.5** | **+0.4** |
| MK31 | | | | ⇑Sn | **Sn** | **10 04 39.1** | **+1.4** |
| | 0.8nm,0.6s,baz=254,slow=45,SNR=3.7 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 10 05 20.1 | |
| | 3.0nm,0.9s,baz=29,slow=28,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=32,slow=14,SNR=16 | **7.86** | **209** | Pn | **Pn** | **10 03 08.1** | **0.0** |
| MKAR | | | | Sn | **Sn** | **10 04 37.0** | **-0.7** |
| | 0.3nm,0.3s,baz=30,slow=30,SNR=9.4 | | | | | | |
| MKAR | | | | Lg | Lg | 10 05 17.5 | |
| | 0.1nm,0.3s,baz=31,slow=29,SNR=6.6 | | | | | | |
| **MAKZ** | **Makanchi** 3.0nm,1.1s | **7.94** | **211** | ⇑Sn | **Sn** | **10 04 38.5** | **-1.2** |
| MAKZ | | | | ⇓Lg | Lg | 10 05 24.8 | |
| | 2.7nm,1.1s | | | | | | |

*NOU* ***17*** *10:10:15.4, 42˚.06S×174˚.23E, h17km, MLv4.1/9, Off E. Coast of S. Island, N.Z.*
*WEL* ***17*** *10:10:15.1±0.6, 42˚.5±5˚×17˚.4E±1˚, h10km±6km, M3.3/16, ML3.6/16, MLv3.3/16, Error ellipse: s-maj=0.0km s-min=0.0km az=153.4*

**ISC 17 10:10:14.4**±1.2**, 41˚.98S**±0˚.03×**174˚.17E**±0˚.03**, h13**km±9km**, n74**, σ0§**98**/83**, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMWZ** | **Cape Campbell** | **0.23** | **9** | P | **Pg** | **10 10 19.9** | **+0.5** |
| **BSWZ** | **Blackbirch Sta** | **0.34** | **321** | P | **Pg** | **10 10 20.8** | **-0.5** |
| BSWZ | | | | S | **Sg** | **10 10 25.5** | **-0.4** |
| **TUWZ** | **Tuamarina** | **0.58** | **343** | P | **Pg** | **10 10 25.4** | **-0.2** |
| TUWZ | | | | S | **Sg** | **10 10 33.5** | **+0.3** |
| **KHZ** | **Kahutara** | **0.64** | **227** | P | **Pb** | **10 10 28.4** | **+1.1** |
| KHZ | | | | S | **Sn** | **10 10 39.7** | **+0.6** |
| **KHZ** | **Kahutara** | **0.64** | **227** | P | **Pb** | **10 10 28.7** | **+1.4** |
| **TCW** | **Tory Channel** | **0.78** | **6** | P | **Pg** | **10 10 29.1** | **-0.3** |
| **BHW** | **Baring Head** | **0.78** | **43** | P | **Pb** | **10 10 30.9** | **+1.2** |
| BHW | | | | S | **Sn** | **10 10 41.8** | **+1.2** |
| **SNZO** | **South Karori** | **0.78** | **31** | P | **Pg** | **10 10 30.9** | **+1.1** |
| **WEL** | **Wellington** | **0.83** | **33** | P | **Pg** | **10 10 31.5** | **+1.0** |
| WEL | | | | S | **Sn** | **10 10 45.1** | **+1.2** |
| **PLWZ** | **Palliser** | **0.91** | **64** | P | **Pb** | **10 10 33.0** | **+0.9** |
| **NNZ** | **Nelson** | **0.96** | **322** | P | **Pb** | **10 10 32.2** | **-0.8** |
| **THZ** | **Tophouse** | **0.97** | **283** | P | **Pb** | **10 10 32.9** | **-0.1** |
| **MSWZ** | **Moikau Station** | **0.99** | **56** | P | **Pb** | **10 10 34.0** | **+0.6** |
| MSWZ | | | | S | **Sn** | **10 10 49.1** | **+1.2** |
| **CAW** | **Cannon Point** | **1.10** | **38** | P | **Pb** | **10 10 35.7** | **+0.3** |
| CAW | | | | S | **Sn** | **10 10 51.5** | **+0.8** |
| **PAWZ** | **Paruwai Farm** | **1.12** | **58** | P | **Pb** | **10 10 35.6** | **0.0** |
| PAWZ | | | | S | **Sn** | **10 10 52.0** | **+0.9** |
| **DUWZ** | **D'Urville Isla** | **1.19** | **351** | P | **Pn** | **10 10 36.2** | **-0.6** |
| **MRNZ** | **Matariki Terra** | **1.20** | **298** | P | **Pn** | **10 10 37.1** | **+0.1** |
| **KIW** | **Kapiti Island** | **1.25** | **27** | P | **Pn** | **10 10 38.1** | **+0.5** |
| **TRWZ** | **Traveller** | **1.28** | **63** | P | **Pn** | **10 10 37.5** | **-0.5** |
| **GVZ** | **Greta Valley S** | **1.29** | **220** | P | **Pn** | **10 10 39.1** | **+0.6** |
| **MTW** | **Mount Morrison** | **1.30** | **51** | P | **Pn** | **10 10 37.9** | **-0.3** |
| **OGWZ** | **Otaki Gorge** | **1.39** | **33** | P | **Pn** | **10 10 39.5** | **+0.1** |
| **HOWZ** | **Holdsworth Sta** | **1.48** | **44** | P | **Pn** | **10 10 40.4** | **-0.4** |
| **LTZ** | **Lake Taylor** | **1.61** | **240** | P | **Pn** | **10 10 43.3** | **+0.6** |
| **AMCZ** | **Amberley** | **1.64** | **223** | P | **Pn** | **10 10 43.3** | **+0.4** |
| **QRZ** | **Quartz Range** | **1.69** | **313** | P | **Pn** | **10 10 45.0** | **+1.5** |
| **QRZ** | **Quartz Range** | **1.69** | **313** | P | **Pn** | **10 10 45.0** | **+1.5** |
| **MRZ** | **Mangatainoka R** | **1.70** | **39** | P | **Pn** | **10 10 43.3** | **-0.3** |
| **DSZ** | **Denniston Nort** | **1.78** | **277** | P | **Pb** | **10 10 46.8** | **0.0** |
| **OKCZ** | **Okains Bay** | **1.92** | **205** | P | **Pn** | **10 10 47.1** | **+0.3** |
| **PRWZ** | **Pori Road** | **1.97** | **44** | P | **Pn** | **10 10 46.8** | **-0.6** |
| **OHWZ** | **Ohakea** | **1.98** | **26** | P | **Pn** | **10 10 49.0** | **+1.5** |
| **POWZ** | **Post Office Ro** | **2.00** | **38** | P | **Pn** | **10 10 47.8** | **0.0** |
| **BFZ** | **Birch Farm** | **2.04** | **51** | P | **Pn** | **10 10 47.4** | **-1.0** |
| **BFZ** | **Birch Farm** | **2.04** | **51** | P | **Pn** | **10 10 48.5** | **+0.2** |
| **MQZ** | **McQueen's Vall** | **2.05** | **212** | P | **Pn** | **10 10 48.0** | **-0.6** |
| **OXZ** | **Oxford** | **2.07** | **229** | P | **Pn** | **10 10 48.3** | **-0.5** |
| **AKCZ** | **Akaroa Harbour** | **2.10** | **206** | P | **Pn** | **10 10 49.4** | **+0.1** |
| **INZ** | **Inchbonnie** | **2.15** | **249** | P | **Pn** | **10 10 50.7** | **+0.8** |
| **DVHZ** | **Dannevirke** | **2.26** | **43** | P | **Pn** | **10 10 50.4** | **-1.1** |
| **RACZ** | **Rakaia** | **2.29** | **220** | P | **Pn** | **10 10 51.9** | **0.0** |
| **WAZ** | **Wanganui** | **2.31** | **16** | P | **Pn** | **10 10 54.9** | **+2.7** |
| **TSZ** | **Takapari Road** | **2.35** | **36** | P | **Pn** | **10 10 52.2** | **-0.6** |
| **LREZ** | **Lake Rotokare** | **2.52** | **4** | P | **Pb** | **10 10 59.5** | **0.0** |
| **WPHZ** | **Waipukurau** | **2.58** | **43** | P | **Pn** | **10 10 55.8** | **0.0** |
| **PNHZ** | **Pukenui** | **2.58** | **37** | P | **Pn** | **10 10 55.0** | **-0.8** |
| **WACZ** | **Wakanui South** | **2.60** | **220** | P | **Pn** | **10 10 55.9** | **-0.2** |
| **NBEZ** | **Newall Road No** | **2.72** | **355** | P | **Pb** | **10 11 01.9** | **-1.0** |
| **WVZ** | **Waitaha Valley** | **2.76** | **246** | P | **Pn** | **10 10 59.3** | **+1.0** |
| **MOVZ** | **Moawhango** | **2.84** | **26** | P | **Pb** | **10 11 04.1** | **-0.9** |
| **WNVZ** | **Wahianoa** | **2.87** | **23** | P | **Pn** | **10 11 01.1** | **+1.1** |
| **RPZ** | **Rata Peaks** | **2.87** | **232** | P | **Pn** | **10 10 59.9** | **+0.1** |
| **RPZ** | **Rata Peaks** | **2.87** | **232** | P | **Pn** | **10 11 00.0** | **+0.1** |
| **KRHZ** | **Kereru** | **2.87** | **36** | P | **Pn** | **10 10 58.8** | **-1.1** |
| **BHHZ** | **Black Hill Sta** | **2.88** | **31** | P | **Pn** | **10 10 59.9** | **-0.1** |
| **VRZ** | **Vera Road** | **2.89** | **9** | P | **Pn** | **10 11 01.8** | **+1.8** |
| **ARCZ** | **Arundel** | **2.94** | **227** | P | **Pn** | **10 11 00.8** | **0.0** |
| **SNVZ** | **South Ngauruho** | **3.01** | **22** | P | **Pn** | **10 11 00.7** | **-1.2** |
| **OTVZ** | **Oturere** | **3.04** | **23** | P | **Pn** | **10 11 03.3** | **+1.0** |
| **NNVZ** | **North Ngauruho** | **3.05** | **22** | P | **Pn** | **10 11 04.7** | **+2.2** |
| **WTVZ** | **West Tongariro** | **3.06** | **21** | P | **Pb** | **10 11 08.2** | **-0.5** |
| **KWHZ** | **Kaweka Forest** | **3.08** | **35** | P | **Pn** | **10 11 02.5** | **-0.2** |
| KWHZ | | | | P | **Pb** | **10 11 09.5** | **+0.5** |
| **TMVZ** | **Te Maari** | **3.09** | **23** | P | **Pb** | **10 11 08.8** | **-0.5** |
| **NTVZ** | **North Tongarir** | **3.10** | **22** | P | **Pn** | **10 11 04.2** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **3.33** | **33** | P | **Pn** | **10 11 07.9** | **+1.8** |
| **TMZ** | **Timaru** | **3.33** | **223** | P | **Pn** | **10 11 06.2** | **0.0** |
| **HIZ** | **Hauiti** | **3.50** | **9** | P | **Pn** | **10 11 10.4** | **+1.9** |
| **HIZ** | **Hauiti** | **3.50** | **9** | P | **Pn** | **10 11 10.4** | **+1.9** |
| **ODZ** | **Otahua Downs** | **3.99** | **219** | P | **Pn** | **10 11 14.8** | **-0.5** |
| **ODZ** | **Otahua Downs** | **3.99** | **219** | P | **Pn** | **10 11 15.3** | **+0.1** |
| **URZ** | **Urewera** | **4.35** | **32** | P | **Pn** | **10 11 19.3** | **-0.8** |
| **URZ** | **Urewera** | **4.35** | **32** | P | **Pn** | **10 11 21.8** | **+1.7** |
| **TOZ** | **Tahuroa Road** | **4.37** | **14** | P | **Pn** | **10 11 21.7** | **+1.3** |
| **RIZ** | **Raoul Island** | **14.23** | **29** | P | **P** | **10 13 40.5** | **-2.4** |

*ISN* ***17*** *10:25:15.7±3.6, 32˚.66N×48˚.05E, h25km, ML3.0*
*TEH* ***17*** *10:25:17.1, 32˚.54N×47˚.96E, h8km, ML3.0*

**ISC 17 10:25:17.9**±0.9**, 32˚.52N**±0˚.04×**47˚.94E**±0˚.04**, h10**km**, n18**, σ1§**43**/21**, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKFM** | **Kafar-mosalman** | **1.01** | **356** | *e*Pg | **Pb** | **10 25 36.3** | **-1.2** |
| IKFM | | | | *e*Sg | **Sb** | **10 25 50.1** | **-0.7** |
| IKFM | | | | *e* | | 10 25 59.5 | |
| | comp=Z,8μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.28** | **9** | *e*Pg | **Pg** | **10 25 41.6** | **-1.0** |
| **AHWZ** | **Ahwaz** | **1.32** | **153** | *e*Sg | **Sg** | **10 26 02.1** | **+1.5** |
| **BMDN** | **Meydan** | **1.37** | **33** | *e*Pg | **Pg** | **10 25 44.0** | **-0.3** |
| **AMIS** | **Naft Sefid** | **1.42** | **126** | *e*Pg | **Pg** | **10 25 44.3** | **-0.9** |
| AMIS | | | | *e*Sg | **Sg** | **10 26 05.3** | **+1.6** |
| **RAFI** | **Al-Rafai** baz=60 | **1.74** | **243** | *e*Pn | **Pg** | **10 25 50.9** | **-0.3** |
| RAFI | | | | *e*Sn | **Sn** | **10 26 10.0** | **-0.3** |
| RAFI | | | | AML | AML | 10 26 17.8 | |
| | comp=E,157nm,0.5s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.91** | **337** | *e*Pn | **Pb** | **10 25 52.6** | **-0.3** |
| KCHF | | | | *e* | | 10 26 21.0 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IBZA** | **Bozab** | **1.95** | **358** | *e*Pn | **Pb** | **10 25 53.2** | **-0.5** |
| IBZA | | | | *e* | | 10 26 26.2 | |
| | comp=Z,1μm,0.7s | | | | | | |
| **IGHG** | **Ghaleghazi** | **2.14** | **328** | *e*Pn | **Pb** | **10 25 55.5** | **-1.4** |
| IGHG | | | | *e* | | 10 26 34.8 | |
| | comp=Z,1μm,0.7s | | | | | | |
| **IPIR** | **Pirpir** | **2.50** | **85** | *e*Pn | **Pb** | **10 26 00.7** | **-2.4** |
| IPIR | | | | *e* | | 10 26 41.4 | |
| | comp=Z,289nm,0.4s | | | | | | |
| **IDHR** | **Dehrash** | **2.53** | **330** | *e*Pn | **Pb** | **10 26 01.6** | **-2.0** |
| IDHR | | | | *e* | | 10 26 40.5 | |
| | comp=Z,932nm,0.6s | | | | | | |
| **IKLH** | **Kolahrood** | **3.17** | **74** | *e*Pn | **Pn** | **10 26 09.3** | **+1.3** |
| **IRAZ** | **Razeghan** comp=Z,382nm,0.5s | **3.32** | **29** | *e* | **Pb** | **10 26 16.3** | **-0.8** |
| **QABG** | **Abgarm-Qazvin** | **3.46** | **23** | *e*Pn | **Pn** | **10 26 14.4** | **+2.3** |
| **IZEF** | **Zefreh** | **3.72** | **83** | *e*Pn | **Pn** | **10 26 16.6** | **+0.9** |
| **KRSH** | **Karshahi** | **3.80** | **66** | *e*Pn | **Pn** | **10 26 17.7** | **+1.0** |
| KRSH | | | | *e* | | 10 27 30.1 | |
| | comp=Z,132nm,0.5s | | | | | | |
| **IVRN** | **Varamin** | **4.01** | **51** | *e*Pn | **Pn** | **10 26 21.8** | **+2.3** |
| **ISFB** | **Sefidab** | **4.04** | **62** | *e*Pn | **Pn** | **10 26 21.0** | **+1.1** |

*IDC* ***17*** *10:40:09.3±1.2, 12˚.17N×142˚.84E, h0km, mb3.7/5, mb1 4.1/6, mb1mx3.6/39, mbtmp3.7/6, ML4.1/1, Error ellipse: s-maj=65.4km s-min=20.2km az=121.0*

**ISC 17 10:40:14.1**±1.2**, 12˚.2N**±0˚.3×**142˚.9E**±0˚.3**, h31**km**, n9**, σ1§**37**/7**, mb3.7/5**, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** 44nm,0.3s,baz=248,slow=5.4,SNR=11 | **2.43** | **54** | Pn | **Pn** | **10 40 50.6** | **-1.2** |
| GUMO | | | | Sn | **Sn** | **10 41 21.1** | **+0.6** |
| | 42nm,0.3s,baz=30,slow=23,SNR=6.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=4.7 | **24.29** | **69** | T | T | 11 10 40.9 | |
| **H11N2** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=4.5 | **24.30** | **69** | T | T | 11 10 33.7 | |
| **H11N3** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=4.1 | **24.31** | **69** | T | T | 11 10 38.5 | |
| **WRA** | **Warramunga Arr** 0.8nm,0.9s,baz=19,slow=9.6,SNR=4.6 | **32.97** | **195** | P | **P** | **10 46 45.5** | **-0.8** |
| **ASAR** | **Alice Springs** 0.5nm,0.9s,baz=24,slow=12,SNR=2.9 | **36.65** | **194** | P | **P** | **10 47 18.4** | **+0.2** |
| **ILAR** | **Eielson Array** 1.0nm,0.6s,baz=246,slow=6.0,SNR=18 | **70.70** | **25** | P | **P** | **10 51 25.8** | **-1.0** |
| **YKA** | **Yellowknife Ar** 0.4nm,0.5s,baz=286,slow=5.0,SNR=11 | **85.03** | **27** | P | **P** | **10 52 46.7** | **+0.2** |
| **NVAR** | **Mina Array Bea** 0.2nm,0.5s,baz=282,slow=4.5,SNR=2.2 | **89.35** | **51** | P | **P** | **10 53 10.2** | **+2.0** |

*IDC* ***17*** *10:51:01.9±0.9, 21˚.81S×68˚.20W, h115km±14km, mb3.4/3, mb1 3.5/5, mb1mx3.3/27, mbtmp3.8/5, Error ellipse: s-maj=38.5km s-min=20.7km az=118.0*
*GUC* ***17*** *10:51:02.8±0.7, 21˚.77S×68˚.43W, h120km±4km, ML3.3*

**ISC 17 10:51:02.1**±0.9**, 21˚.74S**±0˚.04×**68˚.44W**±0˚.08**, h123**km±9km**, n24**, σ0§**90**/40**, mb3.5**/3**, 9C-3D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.75** | **265** | ⇑*i*P | **Pn** | **10 51 22.8** | **+0.4** |
| PB09 | | | | *i* S | **Sn** | **10 51 37.9** | **+0.3** |
| **LVC** | **Limon Verde** 270nm,0.3s,baz=36,slow=8.3,SNR=2024 | **0.97** | **206** | P | **Pn** | **10 51 24.4** | **-0.2** |
| LVC | | | | S | **Sn** | **10 51 41.4** | **-0.2** |
| | 27nm,0.3s,baz=230,slow=19,SNR=27 | | | | | | |
| **LVC** | **Limon Verde** | **0.97** | **206** | *e*P | **Pn** | **10 51 24.1** | **-0.5** |
| LVC | | | | *i* S | **Sn** | **10 51 41.1** | **-0.5** |
| **PB01** | **IPOC Station P** | **1.19** | **305** | ⇑*i*P | **Pn** | **10 51 26.7** | **+0.2** |
| PB01 | | | | *i* S | **Sn** | **10 51 45.3** | **+0.4** |
| PB01 | | | | IAML | | 10 51 48.0 | |
| | comp=E,493nm,0.4s | | | | | | |
| **PB03** | **IPOC Station P** | **1.26** | **255** | ⇑*i*P | **Pn** | **10 51 27.1** | **-0.1** |
| PB03 | | | | *i* S | **Sn** | **10 51 45.9** | **-0.4** |
| PB03 | | | | IAML | | 10 51 46.5 | |
| | comp=E,458nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.34** | **270** | ⇑*i*P | **Pn** | **10 51 28.1** | **-0.1** |
| PB07 | | | | *i* S | **Sn** | **10 51 47.8** | **-0.2** |
| PB07 | | | | IAML | | 10 51 49.0 | |
| | comp=N,590nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **1.42** | **287** | ⇑*i*P | **Pn** | **10 51 28.9** | **0.0** |
| PB02 | | | | *i* S | **Sn** | **10 51 49.0** | **-0.2** |
| PB02 | | | | IAML | | 10 51 51.6 | |
| | comp=E,676nm,0.7s | | | | | | |
| **PB06** | **IPOC Station P** | **1.43** | **227** | ⇑*i*P | **Pn** | **10 51 29.1** | **0.0** |
| PB06 | | | | *i* S | **Sn** | **10 51 49.7** | **+0.2** |
| PB06 | | | | IAML | | 10 51 52.0 | |
| | comp=N,276nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.69** | **249** | ⇑*i*P | **Pn** | **10 51 31.9** | **-0.3** |
| PB04 | | | | IAML | | 10 52 07.5 | |
| | comp=N,264nm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **1.72** | **337** | ⇓*i*P | **Pn** | **10 51 34.3** | **+1.6** |
| PB08 | | | | *i* S | **Sn** | **10 51 57.3** | **+1.3** |
| PB08 | | | | IAML | | 10 51 59.8 | |
| | comp=E,170nm,0.3s | | | | | | |
| **PB15** | **IPOC Station P** | **1.75** | **213** | ⇑*i*P | **Pn** | **10 51 33.1** | **+0.2** |
| PB15 | | | | *i* S | **Sn** | **10 51 56.8** | **+0.5** |
| **PATCX** | **Punta

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VA03 | San Esteban | 1.83 | 150 | | | Pb | 10 54 40.9 | -0.6 |
| VA03 | San Esteban | 1.83 | 150 | ⇑ | *i* P | Pb | 10 54 40.6 | -0.9 |
| VA03 | | | | | *i* S | Sb | 10 55 03.2 | -0.9 |
| VA03 | | | | | IAML | | 10 55 06.4 | |
| | comp=E,15μm,0.5s | | | | | | | |
| VA03 | San Esteban | 1.83 | 150 | | *e*P | Pb | 10 54 40.8 | -0.7 |
| VA03 | | | | | *e*S | Sb | 10 55 05.7 | +1.6 |
| VA03 | | | | | IAML | | 10 55 08.2 | |
| | comp=Z,5μm,0.5s | | | | | | | |
| VA01 | Torpederas | 1.84 | 180 | | Pn | Pn | 10 54 39.6 | +0.6 |
| VA01 | Torpederas | 1.84 | 180 | | *e*P | Pn | 10 54 39.5 | +0.4 |
| VA01 | | | | | *i* S | Sb | 10 55 04.0 | -0.3 |
| VA01 | Torpederas | 1.84 | 180 | | *e*P | Pb | 10 54 39.5 | +0.4 |
| ROCH | El Roble | 1.87 | 164 | | *e*P | Pb | 10 54 40.9 | -1.3 |
| ROCH | | | | ⇑ | *i* P | Pn | 10 54 39.7 | 0.0 |
| ROCH | | | | | *i* S | Sb | 10 55 04.3 | -0.9 |
| ROCH | | | | | *i* S | Sb | 10 55 04.4 | -0.9 |
| ROCH | | | | | IAML | | 10 55 07.8 | |
| | comp=N,6μm,0.3s | | | | | | | |
| ROCH | | | | | IAML | | 10 55 17.1 | |
| | comp=N,9μm,0.6s | | | | | | | |
| ROC1 | El Roble | 1.87 | 164 | | | Pn | 10 54 39.8 | +0.1 |
| ROC1 | El Roble | 1.87 | 164 | | *e*P | Pn | 10 54 34.1 | -5.6 |
| ROC1 | | | | | *e*P | Pb | 10 54 39.9 | +0.1 |
| ROC1 | | | | | *e*S | Sb | 10 55 04.6 | -0.8 |
| AROD | Rodeo | 2.12 | 62 | | *e*P | Pg | 10 54 48.0 | -1.3 |
| AROD | | | | | *e*P | Pg | 10 54 48.0 | -1.3 |
| MT02 | Curacav | 2.12 | 169 | | | Pb | 10 54 45.5 | -0.8 |
| MT02 | Curacav | 2.12 | 169 | | *e*P | Pn | 10 54 44.4 | +1.5 |
| MT02 | | | | | *i* S | Sn | 10 55 10.5 | +1.7 |
| MT02 | Curacav | 2.12 | 169 | | *e*P | Pn | 10 54 43.8 | +0.9 |
| MT02 | | | | | *e*S | Sb | 10 55 12.5 | +0.2 |
| MT02 | | | | | IAML | | 10 55 14.1 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| PEL | Peldehue | 2.12 | 158 | | | Pn | 10 54 44.5 | +1.5 |
| PEL | Peldehue | 2.12 | 158 | ⇑ | *i* P | Pn | 10 54 44.7 | +1.7 |
| PEL | | | | | *i* S | Sn | 10 55 10.3 | +1.5 |
| PEL | | | | | IAML | | 10 55 24.9 | |
| | comp=E,5μm,0.4s | | | | | | | |
| PEL | Peldehue | 2.12 | 158 | | *e*P | Pb | 10 54 44.9 | -1.5 |
| PEL | | | | | *e*S | Sb | 10 55 14.7 | +2.3 |
| AUSP | Uspallata | 2.19 | 119 | | *e*P | Pb | 10 54 48.1 | +0.5 |
| AUSP | | | | | *e*S | Sg | 10 55 19.4 | +0.4 |
| ACCO | Cerro Coronel | 2.29 | 76 | | *e*P | Pb | 10 54 50.5 | +1.1 |
| LCO | Las Campanas | 2.31 | 21 | Pn | | Pb | 10 54 48.8 | -0.9 |
| LCO | Las Campanas | 2.31 | 21 | | *e*P | Pb | 10 54 48.3 | -1.3 |
| MT05 | Renca | 2.34 | 161 | Pn | | Pb | 10 54 48.1 | -1.9 |
| MT05 | Renca | 2.34 | 161 | | *e*P | Pn | 10 54 47.9 | +1.9 |
| MT05 | | | | | *i* S | Sb | 10 55 16.9 | -1.7 |
| MT05 | | | | | IAML | | 10 55 20.4 | |
| | comp=E,9μm,0.5s | | | | | | | |
| MT05 | Renca | 2.34 | 161 | | *e*P | Pn | 10 54 48.0 | +2.0 |
| MT05 | | | | | *e*S | Sb | 10 55 18.3 | -0.3 |
| MT05 | | | | | IAML | | 10 55 24.8 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| ACDV | Cuesta del Vie | 2.39 | 66 | | *e*P | Pn | 10 54 46.6 | -0.1 |
| ACDV | | | | | *e*P | Pb | 10 54 52.1 | +1.1 |
| ACDV | | | | | *e*S | Sg | 10 55 26.0 | +0.5 |
| ACDV | | | | | IAML | | 10 55 29.1 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| VA05 | Santo Domingo | 2.48 | 180 | | | Pn | 10 54 48.4 | +0.7 |
| ZON | Zonda | 2.56 | 99 | | *e*P | Pb | 10 54 54.0 | +0.2 |
| ZON | | | | | *e*S | Sg | 10 55 29.3 | -1.6 |
| ZON | | | | | IAML | | 10 55 33.2 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| MT09 | Talagante | 2.65 | 168 | | | Pn | 10 54 51.7 | +1.3 |
| MT09 | Talagante | 2.65 | 168 | ⇑ | *i* P | Pn | 10 54 52.1 | +1.7 |
| MT09 | | | | | *i* S | Sn | 10 55 23.3 | +1.3 |
| MT01 | Popeta | 2.70 | 173 | | | Pn | 10 54 51.3 | +0.4 |
| MT01 | Popeta | 2.70 | 173 | ⇑ | *i* P | Pn | 10 54 52.1 | +1.1 |
| MT01 | | | | | *e*S | Sn | 10 55 24.9 | +1.8 |
| MT01 | | | | | IAML | | 10 55 33.2 | |
| | comp=E,3μm,0.4s | | | | | | | |
| MT01 | Popeta | 2.70 | 173 | | *e*P | Pn | 10 54 46.6 | -4.3 |
| MT01 | | | | | *e*P | Pn | 10 54 52.0 | +1.1 |
| MT01 | | | | | *e*S | Sn | 10 55 25.6 | +2.6 |
| MT01 | | | | | IAML | | 10 55 33.2 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| RTLL | Cerro Villicun | 2.71 | 94 | | *e*P | Pb | 10 54 55.6 | -0.9 |
| RTLL | | | | | *e*S | Sb | 10 55 32.1 | +2.8 |
| RTCV | Cerro Valdivia | 2.73 | 105 | | *e*P | Pb | 10 54 56.2 | -0.6 |
| ASAL | Salagasta | 2.77 | 121 | | *e*P | Pb | 10 54 57.1 | -0.4 |
| ASAL | | | | | *e*S | Sb | 10 55 33.1 | +2.1 |
| ARCO | CERRO ARCO | 2.84 | 127 | | *e*P | Pb | 10 54 58.0 | -0.6 |
| ARCO | | | | | *e*S | Sb | 10 55 34.1 | +1.1 |
| ARCO | | | | | IAML | | 10 55 46.9 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| LMEL | Las Melosas | 2.93 | 156 | | | Pn | 10 54 56.6 | +2.4 |
| BO04 | La Punta | 2.94 | 163 | | | Pn | 10 54 56.0 | +1.8 |
| AC04 | Llanos de Chal | 3.00 | 10 | Pn | | Pn | 10 54 57.3 | +2.2 |
| AC04 | Llanos de Chal | 3.00 | 10 | | *e*P | Pn | 10 54 57.0 | +2.1 |
| AC04 | | | | | *e*P | Pn | 10 54 57.1 | +2.1 |
| AC04 | | | | | *e*S | Sn | 10 55 15.4 | -15 |
| AC04 | | | | | IAML | | 10 55 45.2 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| AAGR | Agrelo | 3.05 | 129 | | *e*P | Pn | 10 54 55.6 | -0.2 |
| AAGR | | | | | *e*P | Pb | 10 55 00.8 | -1.4 |
| AAGR | | | | | *e*S | Sg | 10 55 46.6 | 0.0 |
| BO01 | Tunca | 3.24 | 172 | | *e*P | Pn | 10 54 59.8 | +1.4 |
| BO01 | | | | | *e*S | Sn | 10 55 40.1 | +3.8 |
| BO01 | | | | | IAML | | 10 55 49.6 | |
| | comp=Z,774nm,0.8s | | | | | | | |
| AVFE | Valle Fertil | 3.63 | 83 | | *e*P | Pn | 10 55 07.5 | +3.7 |
| AVFE | | | | | *e*S | Sb | 10 55 52.6 | -3.2 |
| AVFE | | | | | IAML | | 10 55 59.6 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| BO02 | Sierra Bellavi | 3.68 | 169 | | *e*P | Pn | 10 55 06.2 | +1.8 |
| BO02 | | | | | *e*S | Sn | 10 55 52.1 | +4.9 |
| BO02 | | | | | IAML | | 10 56 09.5 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| GO03 | Copiap | 3.77 | 19 | | *e*P | Pn | 10 55 08.4 | +2.7 |
| GO03 | | | | | *e*S | Sb | 10 55 55.6 | -4.3 |
| GO05 | Huala | 3.83 | 184 | | *e*P | Pn | 10 55 06.1 | -0.4 |
| VCA | Vinchina | 3.84 | 52 | | *e*P | Pb | 10 55 12.7 | -3.1 |
| VCA | | | | | *e*S | Sg | 10 56 11.4 | -0.7 |
| ACHE | Chepes | 4.26 | 91 | | *e*P | Pn | 10 55 16.1 | +3.5 |
| ACHE | | | | | *e*S | Sb | 10 56 09.8 | -4.3 |
| APLL | PUNTA DE LOS L | 4.47 | 81 | | *e*P | Pn | 10 55 18.6 | +3.4 |
| RFA | San Rafael | 4.47 | 144 | | *e*P | Pn | 10 55 18.1 | +2.9 |
| AC02 | Maricunga | 4.85 | 28 | Pn | | Pn | 10 55 23.9 | +3.1 |
| AC02 | Maricunga | 4.85 | 28 | | *e*P | Pn | 10 55 24.0 | +3.1 |
| AC02 | | | | | *e*S | Sn | 10 56 23.1 | +6.4 |
| AC02 | | | | | IAML | | 10 56 41.7 | |
| | comp=Z,668nm,0.4s | | | | | | | |
| MRA | San Martin | 5.19 | 105 | | *e*S | Sn | 10 56 27.1 | +2.5 |
| BI05 | Punta Hualpn | 5.71 | 193 | Pn | | Pn | 10 55 30.6 | -1.6 |
| H03N1 | Juan Fernandez | 6.56 | 248 | T | | T | 11 02 30.3 | |
| | baz=76,slow=72,SNR=1496 | | | | | | | |
| H03N3 | Juan Fernandez | 6.57 | 248 | T | | T | 11 02 24.0 | |
| | baz=76,slow=72,SNR=933 | | | | | | | |
| H03N2 | Juan Fernandez | 6.57 | 248 | T | | T | 11 02 30.1 | |
| | baz=76,slow=72,SNR=1492 | | | | | | | |
| H03S3 | Juan Fernandez | 6.69 | 245 | T | | T | 11 02 53.0 | |
| | baz=77 | | | | | | | |
| H03S1 | Juan Fernandez | 6.69 | 245 | T | | T | 11 02 47.9 | |
| | baz=77 | | | | | | | |
| H03S2 | Juan Fernandez | 6.70 | 245 | T | | T | 11 02 56.9 | |
| | baz=77 | | | | | | | |
| FSA | Cafayete | 7.08 | 46 | | *e*P | Pn | 10 55 54.9 | +3.6 |
| LC01 | Cunco | 7.71 | 181 | | | Pn | 10 55 59.1 | -0.5 |
| LR04 | Corral | 8.81 | 189 | Pn | | Pn | 10 56 13.2 | -1.6 |
| LVC | Limon Verde | 8.87 | 17 | P | | Pn | 10 56 14.9 | -1.2 |
| | comp=Z,1.0nm,0.3s,baz=195,slow=11,SNR=4.3 | | | | | | | |
| LVC | | | | S | | Sn | 10 57 58.3 | +2.6 |
| | comp=Z,4.2nm,0.3s,baz=207,slow=14,SNR=1.8 | | | | | | | |
| LVC | | | | LR | | LR | 10 59 43.2 | |
| | comp=Z,265nm,20.3s,baz=214,slow=38 | | | | | | | |
| LVC | Limon Verde | 8.87 | 17 | | *e*P | Pn | 10 56 18.0 | +2.0 |
| PLCA | Paso Flores | 9.58 | 175 | P | | Pn | 10 56 26.4 | +1.0 |
| | comp=Z,0.6nm,0.3s,baz=336,slow=13,SNR=24 | | | | | | | |
| PLCA | | | | LR | | LR | 11 00 06.0 | |
| | comp=Z,150nm,18.6s,baz=332,slow=37 | | | | | | | |
| PLCA | Paso Flores | 9.58 | 175 | Pn | | Pn | 10 56 26.2 | +0.8 |
| PLCA | Paso Flores | 9.58 | 175 | *e*P | | Pn | 10 56 26.7 | +1.4 |
| LL04 | Puerto Octay | 9.73 | 183 | | | Pn | 10 56 26.2 | -1.2 |
| ITQB | Itaqui | 13.05 | 87 | | | Pn | 10 57 13.2 | +0.4 |
| ITQB | Itaqui | 13.05 | 87 | | *e*P | Pn | 10 57 12.7 | -0.2 |
| CPUP | Villa Florida | 13.45 | 73 | P | | Pn | 10 57 18.4 | +0.1 |
| | comp=Z,1.1nm,0.3s,baz=246,slow=12,SNR=7.8 | | | | | | | |
| CPUP | | | | S | | Sn | 10 59 45.6 | -1.6 |
| | comp=Z,0.8nm,0.3s,baz=217,slow=13,SNR=1.8 | | | | | | | |
| CPUP | | | | LR | | LR | 11 02 59.4 | |
| | comp=Z,400nm,18.8s,baz=224,slow=40 | | | | | | | |
| CPUP | Villa Florida | 13.45 | 73 | | *e*P | Pn | 10 57 18.8 | +0.5 |
| LPAZ | La Paz | 15.16 | 13 | P | | Pn | 10 57 43.6 | +1.4 |
| | comp=Z,0.8nm,0.3s,baz=216,slow=4.8,SNR=4.1 | | | | | | | |
| LPAZ | La Paz | 15.16 | 13 | Pn | | Pn | 10 57 41.2 | -1.1 |
| LPAZ | La Paz | 15.16 | 13 | | *e*P | Pn | 10 57 44.5 | +2.3 |
| PLTB | Pedras Altas | 15.40 | 97 | | *e*P | Pn | 10 57 43.6 | -1.2 |
| ITAB | Concordia | 17.48 | 82 | | *e*P | P | 10 58 12.3 | 0.0 |
| AQDB | Aquidauana | 17.85 | 57 | | *e*P | Pn | 10 58 15.6 | -0.3 |
| SIV | San Ignacio | 17.93 | 35 | P | | Pn | 10 58 16.8 | -0.1 |
| | comp=Z,1.2nm,0.3s,baz=207,slow=8.2,SNR=26 | | | | | | | |
| SIV | | | | LR | | LR | 11 05 51.4 | |
| | comp=Z,126nm,19.4s,baz=132,slow=39 | | | | | | | |
| PTGB | Pitanga | 18.44 | 74 | | *e*P | Pn | 10 58 24.3 | +1.2 |
| PTLB | Pontes e Lacer | 19.39 | 39 | | *e*P | P | 10 58 33.8 | +0.5 |
| NNA | Nana | 19.69 | 345 | LR | | LR | 11 05 21.4 | |
| | comp=Z,45nm,18.4s,baz=190,slow=34 | | | | | | | |
| TER01 | Tubaro-SC | 19.70 | 88 | | *e*P | P | 10 58 37.1 | +0.4 |
| PP1B | Ponte de Pedra | 20.35 | 52 | | *e*P | Pn | 10 58 45.4 | -0.5 |
| PCMB | Pacaembu | 20.56 | 67 | | *e*P | P | 10 58 46.0 | -0.1 |
| VILB | Vilhena | 20.98 | 33 | | *e*P | P | 10 58 51.2 | +0.5 |
| SALV | Santo Antonio | 21.05 | 47 | | *e*P | P | 10 58 52.1 | +0.6 |
| ETMB | Extrema | 21.84 | 15 | | *e*P | P | 10 59 01.6 | +1.7 |
| ITRB | Iturama | 22.31 | 64 | | *e*P | P | 10 59 05.1 | +0.1 |
| PET01 | Itanhaem-SP | 22.60 | 78 | | *e*P | P | 10 59 08.8 | +0.8 |
| RCLB | Rio Claro- Sao | 23.10 | 74 | | *e*P | P | 10 59 14.1 | -0.1 |
| CZSB | Cruzeiro do Su | 23.35 | 357 | | *e*P | P | 10 59 16.9 | +1.1 |
| VAO | Valinhos | 23.39 | 76 | | *e*P | P | 10 59 16.5 | +0.2 |
| USHA | Ushuaia | 23.76 | 175 | P | | P | 10 59 20.1 | +0.7 |
| | comp=Z,22nm,0.9s,baz=5.4,slow=7.9,SNR=6.2 | | | | | | | |
| USHA | | | | LR | | LR | 11 09 08.7 | |
| | comp=Z,229nm,20.6s,baz=332,slow=38 | | | | | | | |
| ARAG | Araguaiana, MT | 23.77 | 54 | | *e*P | P | 10 59 19.9 | 0.0 |
| PDRB | Porto dos Gac | 23.86 | 39 | | *e*P | P | 10 59 20.9 | +0.1 |
| PARB | Paraibuna | 24.37 | 78 | | *e*P | P | 10 59 24.8 | -0.8 |
| IPMB | Ipameri, GO | 24.96 | 64 | | *e*P | P | 10 59 29.1 | -1.9 |
| CLDB | Colider | 24.98 | 39 | | *e*P | P | 10 59 31.2 | +0.2 |
| BSCB | Bom Sucesso | 26.11 | 74 | | *e*P | P | 10 59 40.5 | -0.9 |
| BDFB | Brasilia | 26.55 | 60 | P | | P | 10 59 44.5 | -0.9 |
| | comp=Z,9.8nm,0.7s,baz=224,slow=6.9,SNR=13 | | | | | | | |
| BDFB | | | | LR | | LR | 11 11 28.7 | |
| | comp=Z,377nm,19.3s,baz=225,slow=39 | | | | | | | |
| BDFB | Brasilia | 26.55 | 60 | P | | P | 10 59 45.2 | -0.2 |
| BDFB | | | | IAmb | | IAmb | 11 00 01.1 | |
| | comp=Z,20nm,0.6s | | | | | | | |
| VAS01 | Vassouras-RJ | 26.64 | 77 | | *e*P | P | 10 59 45.8 | -0.3 |
| SNDB | Serra Nova Dou | 26.80 | 49 | | *e*P | P | 10 59 47.3 | -0.3 |
| TBTG | Tabatinga, AM | 26.90 | 4 | | *e*P | P | 10 59 48.7 | +0.4 |
| DUB01 | Friburgo-RJ | 27.62 | 78 | | *e*P | P | 10 59 54.7 | -0.2 |
| CAM01 | Campos-RJ | 28.33 | 78 | | *e*P | P | 11 00 01.1 | -0.1 |
| DIAM | Diamantina, MG | 28.36 | 70 | | *e*P | P | 11 00 01.6 | -0.1 |
| NPGB | Novo Progresso | 28.43 | 36 | | *e*P | P | 11 00 01.9 | -0.3 |
| PEXB | Peixe | 28.71 | 54 | | *e*P | P | 11 00 04.6 | -0.1 |
| ALF01 | Guarapari-ES | 29.64 | 77 | | *e*P | P | 11 00 13.3 | +0.4 |
| JANB | Januaria | 29.70 | 64 | | *e*P | P | 11 00 13.3 | -0.2 |
| MACA | Manacapuru-AM | 29.72 | 23 | | *e*P | P | 11 00 14.0 | +0.5 |
| SJMB | Sao Joao De Ma | 30.17 | 73 | | *e*P | P | 11 00 17.4 | -0.1 |
| SDBA | SAO DESIDERIO | 30.93 | 59 | | *e*P | P | 11 00 24.2 | -0.2 |
| SMTB | Santa Maria do | 31.54 | 50 | | *e*P | P | 11 00 30.2 | +0.6 |
| PRPB | Parauapebas | 32.20 | 44 | | *e*P | P | 11 00 35.0 | -0.5 |
| PTGA | Pitinga | 32.24 | 22 | P | | P | 11 00 35.3 | -0.5 |
| | comp=Z,4.3nm,0.8s,baz=196,slow=15,SNR=4.7 | | | | | | | |
| PTGA | | | | LR | | LR | 11 15 26.7 | |
| | comp=Z,124nm,19.2s,baz=182,slow=40 | | | | | | | |
| GUA01 | Guaratinga, BA | 32.39 | 71 | | *e*P | P | 11 00 35.6 | -1.6 |
| CMC01 | Camacan, BA | 33.28 | 69 | | *e*P | P | 11 00 44.9 | -0.1 |
| NBIT | Itapeh - BA | 33.60 | 69 | | *e*P | P | 11 00 48.1 | +0.4 |
| BOAV | Boa Vista | 35.02 | 20 | | *e*P | P | 11 01 00.6 | +0.6 |
| NBPN | Ponto Novo - B | 35.44 | 62 | | *e*P | P | 11 01 03.0 | -0.7 |
| MCPB | Macapa, AP | 35.83 | 35 | | *e*P | P | 11 01 07.0 | 0.0 |
| NBLA | Lagarto - SE | 37.20 | 65 | | *e*P | P | 11 01 18.6 | -0.1 |
| ROSB | Rosrio | 38.27 | 48 | | *e*P | P | 11 01 28.4 | +0.7 |
| ZARC | Zaragoza, Cauc | 38.57 | 355 | P | | P | 11 01 30.9 | +0.7 |
| NBMA | Muriti-CE | 38.78 | 59 | | *e*P | P | 11 01 31.7 | -0.3 |
| NBPS | Pedro II - PI | 38.93 | 53 | | *e*P | P | 11 01 33.2 | -0.2 |
| NBAN | Anadia - AL | 39.18 | 65 | | *e*P | P | 11 01 34.5 | -0.9 |
| NBPB | Pedra_Branca-C | 39.42 | 56 | | *e*P | P | 11 01 35.8 | -1.6 |
| SDV | Santo Domingo | 39.84 | 2 | P | | P | 11 01 41.2 | +0.2 |
| | comp=Z,3.6nm,0.5s,baz=225,slow=2.9,SNR=4.4 | | | | | | | |
| SDV | Santo Domingo | 39.84 | 2 | | *e*P | P | 11 01 41.6 | +0.6 |
| MDP | Montagnes des | 40.38 | 30 | LR | | LR | 11 20 39.6 | |
| | comp=Z,86nm,21.9s,baz=156,slow=39 | | | | | | | |
| QSPA | South Pole Qui | 59.05 | 180 | P | | P | 11 04 07.4 | +0.3 |
| X48A | Hartselle | 66.87 | 346 | P | | P | 11 04 58.6 | -0.6 |
| X48A | | | | IAmb | | IAmb | 11 05 11.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| TXAR | Lajitas Array | 67.45 | 330 | P | | P | 11 05 04.5 | +1.5 |
| | comp=Z,0.5nm,0.6s,baz=155,slow=7.0,SNR=6.0 | | | | | | | |
| TXAR | Lajitas Array | 67.45 | 330 | P | | P | 11 05 01.7 | -1.3 |
| TX32 | Lajitas Array | 67.45 | 330 | P | | P | 11 05 02.0 | -1.1 |
| TX32 | | | | IAmb | | IAmb | 11 06 29.7 | |
| | comp=Z,16nm,2.0s | | | | | | | |
| MNTX | Cornudas Mount | 70.23 | 330 | P | | P | 11 05 20.2 | -0.1 |
| HHAR | Hobbs | 70.29 | 341 | P | | P | 11 05 20.1 | -0.3 |
| R40A | Maddies Statio | 71.74 | 343 | P | | P | 11 05 29.4 | +0.2 |
| R40A | | | | IAmb | | IAmb | 11 05 53.3 | |
| | comp=Z,34nm,1.6s | | | | | | | |
| LIC | Lamto | 73.57 | 72 | | *e*P | P | 11 05 40.1 | -0.6 |
| | comp=Z,18nm,0.5s | | | | | | | |
| TIC | Toumodi | 73.82 | 72 | | *e*P | P | 11 05 41.4 | -0.8 |
| KIC | Kosan Boka | 73.89 | 72 | | *e*P | P | 11 05 41.9 | -0.6 |
| | comp=Z,19nm,0.7s | | | | | | | |
| DBIC | Dimbokro | 73.97 | 72 | P | | P | 11 05 42.6 | -0.4 |
| | comp=Z,10nm,0.5s,baz=232,slow=5.7,SNR=18 | | | | | | | |
| DBIC | | | | LR | | LR | 11 35 08.8 | |
| | comp=Z,65nm,20.8s,baz=212,slow=33 | | | | | | | |
| DBIC | Dimbokro | 73.97 | 72 | P | | P | 11 05 42.2 | -0.8 |
| DBIC | | | | IAmb | | IAmb | 11 05 43.5 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| SUR | Sutherland | 75.91 | 119 | LR | | LR | 11 36 34.3 | |
| | comp=Z,52nm,20.2s,baz=192,slow=34 | | | | | | | |
| KOWA | Kowa | 79.17 | 66 | P | | P | 11 06 11.7 | -0.7 |
| KOWA | | | | IAmb | | IAmb | 11 06 13.1 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| RDMU | Red Mountain | 79.56 | 332 | P | | P | 11 06 13.6 | -0.6 |
| RDMU | | | | IAmb | | IAmb | 11 06 26.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| BOSA | Boshof | 81.09 | 118 | P | | P | 11 06 22.4 | -0.4 |
| | comp=Z,3.4nm,0.8s,baz=237,slow=4.3,SNR=5.3 | | | | | | | |
| BOSA | Boshof | 81.09 | 118 | P | | P | 11 06 22.0 | -0.8 |
| PDAR | Pinedale Array | 81.41 | 333 | P | | P | 11 06 25.4 | +1.2 |
| | comp=Z,0.3nm,0.6s,baz=139,slow=8.4,SNR=2.7 | | | | | | | |
| NVAR | Mina Array Bea | 81.77 | 325 | P | | P | 11 06 28.0 | +1.9 |
| | comp=Z,0.2nm,0.6s,baz=139,slow=4.3,SNR=1.7 | | | | | | | |
| TORD | Torodi Ar. Bea | 82.93 | 70 | P | | P | 11 06 32.1 | -0.4 |
| | comp=Z,9.0nm,0.8s,baz=259,slow=4.7,SNR=50 | | | | | | | |
| TORD | Torodi Ar. Bea | 82.93 | 70 | P | | P | 11 06 32.1 | -0.4 |
| TORD | | | | IAmb | | IAmb | 11 06 33.5 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| LBTB | Lobatse | 83.19 | 115 | LR | | LR | 11 40 31.8 | |
| | comp=Z,72nm,18.5s,baz=198,slow=34 | | | | | | | |
| LBTB | Lobatse | 83.19 | 115 | P | | P | 11 06 33.5 | -0.4 |
| ULM | Lac du Bonnet | 83.87 | 345 | P | | P | 11 06 35.3 | -1.1 |
| | comp=Z,0.8nm,0.4s,baz=135,slow=4.3,SNR=3.5 | | | | | | | |
| DGMT | Dagmar | 84.47 | 339 | P | | P | 11 06 40.7 | +1.1 |
| YKA | Yellowknife Ar | 99.50 | 341 | P | | Pdif | 11 07 48.9 | -0.5 |
| | comp=Z,0.2nm,0.7s,baz=144,slow=4.6,SNR=5.0 | | | | | | | |
| AKASG | Malin Array Be | 120.02 | 46 | PKP | | PKPdf | 11 12 55.5 | -1.9 |
| | comp=Z,0.5nm,0.4s,baz=258,slow=2.7,SNR=6.7 | | | | | | | |
| AKASG | Malin Array Be | 120.02 | 46 | | | PKPdf | 11 12 56.2 | -1.1 |
| ASAR | Alice Springs | 120.23 | 207 | PKP | | PKPdf | 11 12 56.9 | -1.9 |
| | comp=Z,0.4nm,0.7s,baz=137,slow=2.2,SNR=5.5 | | | | | | | |
| ASAR | Alice Springs | 120.23 | 207 | | | PKPdf | 11 12 57.2 | -1.6 |
| WRA | Warramunga Arr | 123.38 | 210 | PKP | | PKPdf | 11 13 03.6 | -1.3 |
| | comp=Z,1.1nm,0.7s,baz=168,slow=1.5,SNR=12 | | | | | | | |
| WRA | Warramunga Arr | 123.38 | 210 | | | PKPdf | 11 13 04.2 | -0.7 |
| H11S2 | WAKE ISLAND Hyl | 126.11 | 271 | T | | T | 13 32 05.3 | |
| | baz=116,slow=74,SNR=38 | | | | | | | |
| H11S1 | WAKE ISLAND Hyl | 126.12 | 271 | T | | T | 13 32 02.4 | |
| | baz=116,slow=74,SNR=31 | | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 126.12 | 271 | T | | T | 13 32 06.8 | |
| | baz=116,slow=74,SNR=31 | | | | | | | |
| H11N3 | WAKE ISLAND Hyl | 126.45 | 272 | T | | T | 13 32 25.2 | |
| | baz=116,slow=75,SNR=14 | | | | | | | |
| H11N1 | WAKE ISLAND Hyl | 126.46 | 272 | T | | T | 13 32 26.0 | |
| | baz=116,slow=75,SNR=7.5 | | | | | | | |
| H11N2 | WAKE ISLAND Hyl | 126.46 | 272 | T | | T | 13 32 30.7 | |
| | baz=116,slow=75,SNR=38 | | | | | | | |
| ZALV | Zalesovo Beam | 151.64 | 30 | PKP | | PKPdf | 11 13 54.5 | -0.2 |
| | comp=Z,1.9nm,0.7s,baz=336,slow=3.2,SNR=7.7 | | | | | | | |
| ZALV | | | | PKPbc | | PKPbc | 11 14 00.5 | -0.5 |
| | comp=Z,12nm,0.5s,baz=297,slow=3.1,SNR=50 | | | | | | | |
| ZALV | Zalesovo Beam | 151.64 | 30 | PKPdf | | PKPdf | 11 13 54.6 | -0.1 |
| ZALV | | | | | | pPKPdf | 11 14 01.2 | -0.3 |
| ZALV | | | | PKPab | | PKPab | 11 14 12.4 | +2.7 |
| KSH | Kashi | 152.42 | 63 | PKPbc | | PKPdf | 11 13 56.1 | -0.5 |
| KSH | | | | pPKP | | PKPbc | 11 14 03.6 | +0.2 |
| MKAR | Makanchi Array | 154.59 | 45 | PKP | | PKPdf | 11 13 59.1 | -0.2 |
| | comp=Z,0.7nm,0.7s,baz=281,slow=0.6,SNR=8.0 | | | | | | | |
| MKAR | | | | PKPbc | | PKPbc | 11 14 07.1 | -0.7 |
| | comp=Z,1.6nm,0.7s,baz=313,slow=2.1,SNR=15 | | | | | | | |
| MKAR | Makanchi Array | 154.59 | 45 | | | PKPdf | 11 13 58.8 | -0.5 |
| MKAR | | | | PKPbc | | PKPbc | 11 14 07.5 | -0.3 |
| MKAR | | | | PKPab | | PKPab | 11 14 23.0 | +0.5 |
| SONM | Songino Array | 163.29 | 5 | PKP | | PKPdf | 11 14 09.0 | -0.6 |
| | comp=Z,0.4nm,0.8s,baz=318,slow=1.9,SNR=2.9 | | | | | | | |
| PZH | PanZhiHua | 172.56 | 127 | PKP | | PKPdf | 11 14 15.1 | -1.6 |

*NOU* ***17*** *11:15:05.2, 19°.82S×173°.18W, h0km, mb4.9/11, Tonga Islands*
*IDC* ***17*** *11:15:22.7±0.6, 20°.79S×175°.79W, h0km, mb4.3/14, mb1 4.5/15, mb1mx4.4/24, mbtmp4.3/15, ML4.2/1, MS3.9/40, Ms1 3.9/40, ms1mx3.7/69, Error ellipse: s-maj=28.1km s-min=17.0km az=146.0*
*NEIC* ***17*** *11:15:24.1±2.0, 20°.90S±0°.09×175°.27W±0°.09, h10km±1km, mb4.9/44, Error ellipse: s-maj=15.5km s-min=12.8km az=138.0*

**ISC 17 11:15:23.6±0.4, 20°.75S±0°.07×175°.63W±0°.07, h10km, n137, σ2≥01/76, mb4.7/33, MS4.0/41, 4C, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NIUE | Niue | 5.62 | 74 | Pn | Pn | 11 16 43.8 | -3.5 |
| MSVF | Nonsavu | 6.68 | 296 | Pn | Pn | 11 17 06.7 | +4.8 |
| | 1.1nm,0.3s,baz=130,slow=14,SNR=9.2 | | | | | | |
| MSVF | | | | Sn | Sn | 11 18 10.4 | -7.6 |
| | baz=155,slow=23,SNR=1.1 | | | | | | |
| MSVF | | | | LR | LR | 11 19 24.6 | |
| | comp=Z,555nm,20.2s,baz=82,slow=37 | | | | | | |
| MSVF | Nonsavu | 6.68 | 296 | | Pn | 11 17 06.3 | +4.5 |
| MSVF | Nonsavu | 6.68 | 296 | P | Pb | 11 17 09.9 | -10 |
| AFI | Afiamalu | 7.73 | 29 | Pn | Pn | 11 17 17.7 | +1.4 |
| | 3.3nm,0.3s,baz=225,slow=14,SNR=2.3 | | | | | | |
| AFI | | | | Sn | Sn | 11 18 43.4 | -0.7 |
| | 0.6nm,0.3s,baz=19,slow=22,SNR=1.1 | | | | | | |
| AFI | Afiamalu | 7.73 | 29 | Pn | Pn | 11 17 16.2 | -0.1 |
| RAO | Raoul Island | 8.72 | 193 | Pn | Pn | 11 17 28.6 | -1.2 |
| FUNA | Funafuti | 13.13 | 337 | P | Pn | 11 18 17.0 | -13 |
| RAR | Rarotonga | 14.82 | 95 | LR | LR | 11 23 02.1 | |
| | comp=Z,384nm,21.9s,baz=276,slow=31 | | | | | | |
| LIFNC | LIFOU | 16.02 | 267 | P | P | 11 19 17.9 | +5.3 |
| LIFNC | | | | IAmb | IAmb | 11 19 24.4 | |
| | comp=Z,112nm,0.9s | | | | | | |
| LIFNC | LIFOU | 16.02 | 267 | P | P | 11 19 21.1 | +8.5 |
| OUENC | Ouen Island, N | 16.39 | 261 | P | P | 11 19 18.9 | +2.2 |
| OUENC | | | | IAmb | IAmb | 11 19 27.1 | |
| | comp=Z,71nm,1.0s | | | | | | |
| OUENC | Ouen Island, N | 16.39 | 261 | P | P | 11 19 26.1 | +9.5 |
| ONTNC | Ouen Toro | 16.74 | 261 | | P | 11 19 23.1 | +2.5 |
| ONTNC | | | | IAmb | IAmb | 11 19 31.1 | |
| | comp=Z,108nm,1.0s | | | | | | |
| ONTNC | Ouen Toro | 16.74 | 261 | P | P | 11 19 30.5 | +10 |
| DZM | Mont Dzumac | 16.74 | 262 | Pn | P | 11 19 23.3 | +2.6 |
| | comp=Z,1.8nm,0.3s,baz=80,slow=19,SNR=30 | | | | | | |
| DZM | | | | LR | LR | 11 24 47.9 | |
| | comp=Z,678nm,19.3s,baz=110,slow=34 | | | | | | |
| DZM | Mont Dzumac | 16.74 | 262 | *e*Pn | P | 11 19 25.3 | +4.6 |
| | comp=Z,285nm,1.1s | | | | | | |
| DZM | | | | *e*LR | LR | 11 23 21.7 | |
| | comp=Z,1μm,27.6s | | | | | | |
| DZM | Mont Dzumac | 16.74 | 262 | P | P | 11 19 23.1 | +2.4 |
| DZM | | | | IAmb | IAmb | 11 19 31.4 | |
| | comp

comp=Z,14nm,1.3s
**PFO Pinyon Flats O 78.10 47** LR LR 11 54 44.9
comp=Z,46nm,18.9s,baz=270,slow=30
**PFO Pinyon Flats O 78.10 47** P **P** **11 27 21.7 -1.4**
**KSRS Korea Array 78.55 317** LR LR 11 57 01.6
comp=Z,36nm,20.4s,baz=115,slow=32
**N02D Trinity Center 78.63 38** P **P** **11 27 25.4 -0.4**
N02D IAmb IAmb 11 27 40.2
comp=Z,16nm,1.6s
**BELA Belgrano 2 79.02 172** P **P** **11 27 27.4 -0.1**
BELA IAmb IAmb 11 27 33.2
comp=Z,10.0nm,0.8s
**YBH Yreka Blue Hor 79.12 37** LR LR 11 57 44.6
comp=Z,86nm,18.8s,baz=242,slow=32
**YERR Yerington 79.45 41** P **P** **11 27 29.7 -0.8**
**NVAR Mina Array Bea 79.70 42** P **P** **11 27 34.4 +2.5**
comp=Z,1.9nm,0.8s,baz=221,slow=8.7,SNR=9.7
NVAR LR LR 11 57 05.8
comp=Z,71nm,18.0s,baz=318,slow=31
**NVAR Mina Array Bea 79.70 42** P **P** **11 27 33.9 +2.0**
**TPNV Topopah Spring 80.15 44** P **P** **11 27 33.4 -0.9**
**KDAK Kodiak Island 80.56 12** LR LR 11 55 15.5
comp=Z,74nm,20.8s,baz=216,slow=30
**MOD Modoc Plateau 80.61 38** P **P** **11 27 36.9 +0.3**
MOD IAmb IAmb 11 27 40.0
comp=Z,28nm,1.9s
**SHPR Sheep Range 80.61 45** P **P** **11 27 35.9 -0.9**
**TUC Tucson 81.40 51** P **P** **11 27 40.0 -1.0**
**PINE Pine Mountain 81.44 37** P **P** **11 27 42.0 +0.9**
PINE IAmb IAmb 11 27 54.8
comp=Z,7.1nm,0.9s
**NJ2 Nanjing 81.75 309** *e*P **P** **11 27 46.0 +3.3**
NJ2 pmax pmax
comp=Z,3.0nm,0.6s
**LCMT Little Creek M 82.17 46** P **P** **11 27 43.9 -1.2**
**KNB Kanab 82.46 46** P **P** **11 27 45.0 -1.6**
KNB IAmb IAmb 11 27 59.9
comp=Z,6.4nm,0.9s
**WUAZ Wupatki 82.65 48** P **P** **11 27 46.0 -1.6**
WUAZ IAmb IAmb 11 27 52.5
comp=Z,10nm,1.4s
**ELK Elko 82.97 42** LR LR 11 59 49.0
comp=Z,81nm,18.6s,baz=236,slow=32
**PKCU Pink Cliffs 83.03 46** P **P** **11 27 48.0 -1.7**
**CN2 Changchun 83.86 321** *e*P **P** 11 27 58.3 +4.9
**CN2 Changchun 83.86 321** *e*S **S** **11 38 08.8 -8.1**
CN2 pmax pmax
comp=Z,10.0nm,1.0s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=N,100nm,13.0s
CN2 LR LR
comp=E,200nm,13.0s
CN2 LR LR
comp=Z,200nm,12.3s
**KLR Kul'dur 83.88 328** LR LR 11 58 33.4
comp=Z,113nm,21.5s,baz=142,slow=31
**H03S2 Juan Fernandez 84.02 124** T T 13 00 09.5
baz=247
**H03S1 Juan Fernandez 84.03 124** T T 13 00 10.5
baz=247
**H03S3 Juan Fernandez 84.04 124** T T 13 00 09.3
baz=247
**H03N2 Juan Fernandez 84.16 123** T T 12 59 59.8
baz=248,slow=71,SNR=150
**H03N3 Juan Fernandez 84.16 123** T T 13 00 02.0
baz=248,slow=71,SNR=42
**H03N1 Juan Fernandez 84.17 123** T T 13 00 05.7
baz=248,slow=71,SNR=45
**DIV Divide 85.06 14** P **P** **11 28 00.5 +1.3**
**TXAR Lajitas Array 85.33 56** P **P** **11 28 04.0 +2.6**
comp=Z,4.5nm,1.0s,baz=218,slow=8.5,SNR=27
TXAR LR LR 11 56 51.5
comp=Z,50nm,21.9s,baz=264,slow=29
**TXAR Lajitas Array 85.33 56** P **P** **11 28 00.3 -1.0**
**N25K Chitina, Valde 85.75 14** IAmb IAmb 11 28 12.9
comp=Z,6.7nm,0.8s
**ANMO Albuquerque 85.84 50** LR LR 12 02 32.9
comp=Z,58nm,18.6s,baz=258,slow=33
**CAST Castle Rocks 85.90 10** P **P** **11 28 03.4 +0.1**
CAST IAmb IAmb 11 28 09.9
comp=Z,8.8nm,1.1s
**TRF Thorofare Moun 86.24 11** P **P** **11 28 05.4 +0.2**
**J20K Nowinta River 86.28 9** P **P** **11 28 06.7 +1.6**
**NEW Newport 86.29 35** LR LR 12 05 10.2
comp=Z,67nm,18.3s,baz=237,slow=35
**RND Reindeer 86.47 12** P **P** **11 28 07.8 +1.7**
**PSI Prapat 86.72 274** LR LR 12 08 28.9
comp=Z,49nm,18.9s,baz=102,slow=37
**MCK McKinley 86.75 12** P **P** **11 28 08.3 +0.9**
**M26K Nabesna, AK 86.82 15** IAmb IAmb 11 28 21.8
comp=Z,6.2nm,1.1s
**SYO Syowa Base 86.96 192**‖ *e*P **P** **11 28 07.8 -0.8**
**SEY Seymchan 87.13 346** LR LR 12 02 58.9
comp=Z,36nm,19.2s,baz=248,slow=33
**PLCA Paso Flores 87.49 133** P **P** **11 28 11.8 -0.1**
comp=Z,1.3nm,0.8s,baz=234,slow=2.7,SNR=7.2
**PDAR Pinedale Array 87.64 42** P **P** **11 28 13.7 +1.2**
comp=Z,0.5nm,0.7s,baz=212,slow=3.4,SNR=6.1
PDAR LR LR 12 01 03.4
comp=Z,33nm,19.6s,baz=322,slow=31
**PDAR Pinedale Array 87.64 42** P **P** **11 28 12.0 -0.6**
**CMIG Matias Romero 87.65 71** LR LR 11 57 47.7
comp=Z,46nm,21.7s,baz=231,slow=29
**CCB Clear Creek Bu 87.79 12** P **P** **11 28 13.1 +0.7**
CCB IAmb IAmb 11 28 20.1
comp=Z,7.7nm,1.2s
**ILAR Eielson Array 88.08 12** P **P** **11 28 13.9 +0.1**
comp=Z,1.0nm,0.8s,baz=207,slow=5.5,SNR=11
**APG El Apazote 90.83 74** LR LR 12 05 18.0
comp=Z,35nm,18.2s,baz=84,slow=33
**HHC Hu-ho-hao-te 91.12 314** *e*P **P** **11 28 30.8 +2.0**
HHC pmax pmax
comp=Z,8.0nm,1.0s
HHC pmax pmax
comp=Z,190nm,6.1s
HHC LR LR
comp=N,330nm,14.0s
HHC LR LR
comp=E,270nm,14.6s
HHC LR LR
comp=Z,200nm,14.6s
**CMAR Chiang Mai Arr 92.29 289** P **P** **11 28 35.2 +0.7**
comp=Z,0.7nm,0.3s,baz=138,slow=33,SNR=1.9
**PZH PanZhiHua 92.79 297** P **P** **11 28 39.3 +2.4**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,4.6s
**YAK Yakutsk 93.18 337** LR LR 12 09 49.3
comp=Z,33nm,18.2s,baz=72,slow=35
**NNA Nana 93.86 104** LR LR 12 00 27.4
comp=Z,38nm,21.7s,baz=268,slow=29
**JTS Las Juntas de 94.21 81** LR LR 12 00 47.3
comp=Z,42nm,21.8s,baz=331,slow=29
**ATAH Atahualpa 94.22 99** LR LR 12 00 44.8
comp=Z,48nm,21.4s,baz=337,slow=29
**YKA Yellowknife Ar 95.82 24** P **P** **11 28 50.5 +0.8**
comp=Z,0.6nm,0.8s,baz=241,slow=4.7,SNR=9.5
**SONM Songino Array 97.40 318** P Pdif 11 28 59.6 +2.0
comp=Z,0.7nm,1.1s,baz=108,slow=4.7,SNR=2.4
**ULM Lac du Bonnet 99.39 40** LR LR 12 10 13.7
comp=Z,98nm,19.4s,baz=312,slow=33
**MKAR Makanchi Array 112.98 313** PKiKP **PKiKP** **11 33 60.0 -1.0**
comp=Z,0.3nm,0.5s,baz=114,slow=0.9,SNR=5.0
**MKAR Makanchi Array 112.98 313** **PKiKP** **11 34 00.7 -0.3**
**AKASG Malin Array Be 144.27 333** PKP PKPbc 11 34 57.5 -0.4
comp=Z,1.4nm,0.7s,baz=42,slow=4.4,SNR=14
**BRTR Keskin Array B 148.63 314** PKPbc **PKiKP** **11 35 11.3 -1.5**
comp=Z,1.5nm,0.6s,baz=127,slow=5.3,SNR=3.8
**CRVS Cervenica-Dubn 148.75 338** *e*PKP PKPab 11 35 23.1 +8.2
**CLL Collm 148.75 350** *e*PKPbc **PKiKP** **11 35 12.0 -0.5**
**PRU Pruhonice 149.72 347**‖ *e*PKP **PKiKP** **11 35 14.5 -0.1**
**VYHS Vyhne 149.97 341** *e*PKP **PKPab** **11 35 20.1 +0.2**
VYHS *e* 11 35 27.4
**KHC Kasperske Hory 150.73 348**‖ *e*PKP **PKiKP** **11 35 16.9 +0.1**
**CKRC Cesky Krumlov 150.88 346**‖ *e*PKP **PKiKP** **11 35 17.2 +0.2**
**GERES GERESS Array B 150.98 347** PKPbc **PKiKP** **11 35 17.1 -0.3**
comp=Z,1.6nm,0.8s,baz=0.0,slow=1.7,SNR=7.5
**GERES GERESS Array B 150.98 347** **PKPdf** **11 35 11.7 +0.7**
GERES PKPbc **pPKPbc** **11 35 18.0 -1.5**
GERES PKPab **PKPab** **11 35 24.3 +0.2**
**TORD Torodi Ar. Bea 172.03 161** PKPab **PKPab** **11 36 58.5 +2.4**
comp=Z,0.8nm,1.0s,baz=184,slow=3.0,SNR=2.2

*TUL* ***17*** *11:46:45.1±0.6,36°.47N±0°.02×98°.76W±0°.02,h8km±1km, ML2.6,mb_Lg2.3/9(NEIC),Error ellipse: s-maj=2.6km s-min=1.6km az=147.0*

**NEIC 17 11:46:45.6±0.5,36°.47N±0°.02×98°.76W±0°.02,h7km±1km, Error ellipse: s-maj=2.4km s-min=1.7km az=146.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.21** | **244** | Pg | | Pg | 11 46 49.7 | -0.2 |
| U32A | | | | Sg | | Sg | 11 46 53.3 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.02** | **158** | Pn | | Pn | 11 47 20.8 | +0.7 |
| X34A | | | | IAmb_Lg | | | 11 47 53.7 | |
| comp=Z,21nm,0.8s | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.46** | **342** | IAmb_Lg | | | 11 48 06.8 | |
| comp=Z,9.1nm,0.8s | | | | | | | | |
| **X37A** | **Clayton** | **3.34** | **123** | IAmb_Lg | | | 11 48 37.9 | |
| comp=Z,9.7nm,0.8s | | | | | | | | |
| **MSTX** | **Muleshoe** | **4.13** | **234** | IAmb_Lg | | | 11 49 04.2 | |
| comp=Z,6.3nm,0.8s | | | | | | | | |
| **S39A** | **Bolivar** | **4.51** | **73** | IAmb_Lg | | | 11 49 09.2 | |
| comp=Z,5.2nm,0.8s | | | | | | | | |

*IDC* ***17*** *11:56:15.2±1.1,27°.92N×127°.64E,h0km,mb3.5/5, mb1 3.7/6,mb1mx3.3/41,mbtmp3.7/6,ML3.8/1,MS3.2/3, Ms1 3.2/3,ms1mx2.7/69,Error ellipse: s-maj=46.5km s-min=14.5km az=64.0*

*JMA* ***17*** *11:56:15.2±0.2,28°.15N×128°.06E,h12km±2km,M3.7*

*NIED* ***17*** *11:56:15.3,28°.15N×128°.06E,h12km,MW4.0,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr=0.20; Mθθ=0.45; Mφφ=0.65; Mrθ=-0.13; Mθφ=1.14; Mφr=0.42; Fault plane solution: M₀1.33000×10¹⁵ NP1: φs=167.00000°,δ85.00000°,λ165.00000°. NP2: φs=258.00000°,δ75.00000°,λ5.00000°.*

**ISC 17 11:56:16.1±1.8,28°.10N±0°.05×128°.10E±0°.06,h14km±12km, n26,σ0°63/29,mb3.5/5,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JTK** | **Tokunoshima** | **0.81** | **113** | P | | **Pg** | **11 56 31.4** | **-0.5** |
| JTK | | | | S | | **Sg** | **11 56 43.0** | **+0.3** |
| **JOKE** | **Okinoerabujima** | **0.85** | **151** | P | | **Pg** | **11 56 32.4** | **-0.2** |
| **JAMN** | **Amaminishikomi** | **0.96** | **81** | P | | **Pb** | **11 56 33.7** | **-0.8** |
| JAMN | | | | *e*S | | **Sb** | **11 56 47.2** | **+0.1** |
| **JIH** | **Iheya** | **1.07** | **186** | P | | **Pb** | **11 56 36.0** | **-0.5** |
| JIH | | | | S | | **Sb** | **11 56 50.6** | **+0.3** |
| **JYRO** | **Yoronjima** | **1.12** | **164** | P | | **Pb** | **11 56 37.1** | **-0.2** |
| JYRO | | | | *e*S | | **Sg** | **11 56 53.0** | **+0.7** |
| **JOW** | **Kunigami** | **1.28** | **173** | Pn | | **Pn** | **11 56 39.4** | **-0.2** |
| 73nm,0.3s,baz=356,slow=14,SNR=167 | | | | | | | | |
| JOW | | | | Sn | | **Sb** | **11 56 56.4** | **+0.1** |
| 51nm,0.3s,baz=168,slow=22,SNR=7.7 | | | | | | | | |
| **JOW** | **Kunigami** | **1.28** | **173** | P | | **Pn** | **11 56 39.4** | **-0.2** |
| JOW | | | | *e*S | | **Sb** | **11 56 56.9** | **+0.6** |
| **JAM** | **Amami Oshima** | **1.36** | **77** | P | | **Pn** | **11 56 40.4** | **-0.3** |
| JAM | | | | *e*S | | **Sn** | **11 56 57.8** | **-0.8** |
| **JTAJ** | **Takarajima** | **1.43** | **43** | P | | **Pn** | **11 56 40.8** | **-0.8** |
| **JNTH** | **Nagotoyohara** | **1.58** | **183** | P | | **Pn** | **11 56 43.9** | **+0.1** |
| **JZK** | **Kikaishima** | **1.66** | **82** | P | | **Pb** | **11 56 47.0** | **+0.4** |
| **JAGN** | **Aguni-jima** | **1.69** | **207** | P | | **Pn** | **11 56 45.0** | **-0.3** |
| **JJT3** | **Tamagusuku3** | **1.97** | **188** | P | | **Pn** | **11 56 49.3** | **+0.1** |
| **JKE** | **Kume jima 2** | **2.12** | **214** | P | | **Pn** | **11 56 51.4** | **+0.2** |
| **JYAK** | **Yakushimahirau** | **2.99** | **44** | P | | **Pn** | **11 57 03.8** | **+0.6** |
| **JMTN** | **Minamitane** | **3.35** | **46** | P | | **Pn** | **11 57 09.0** | **+0.9** |
| **JTN** | **Tanegashima 3** | **3.57** | **44** | P | | **Pn** | **11 57 12.6** | **+1.4** |
| **JNU** | **Nakatsue** | **5.54** | **25** | Pn | | Pn | 11 57 44.5 | +6.1 |
| 2.4nm,0.3s,baz=201,slow=5.9,SNR=13 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.99** | **43** | LR | | LR | 12 03 29.8 | |
| comp=Z,79nm,18.5s,baz=202,slow=35 | | | | | | | | |
| **GUMO** | **Guam** | **21.27** | **129** | LR | | LR | 12 09 22.1 | |
| comp=Z,54nm,18.6s,baz=66,slow=37 | | | | | | | | |
| **SONM** | **Songino Array** | **25.94** | **325** | P | | **P** | **12 01 48.7** | **+0.6** |
| 1.6nm,0.9s,baz=138,slow=9.9,SNR=10.0 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.39** | **257** | LR | | LR | 12 14 39.8 | |
| comp=Z,46nm,18.7s,baz=265,slow=40 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.22** | **310** | P | | **P** | **12 03 52.0** | **-0.3** |
| 0.9nm,0.9s,baz=90,slow=8.6,SNR=7.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.70** | **322** | P | | **P** | **12 03 54.9** | **-1.2** |
| 0.3nm,0.4s,baz=96,slow=7.2,SNR=2.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.14** | **172** | P | | **P** | **12 04 56.4** | **+0.4** |
| 0.7nm,0.9s,baz=356,slow=8.3,SNR=4.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **51.77** | **173** | P | | **P** | **12 05 24.2** | **+0.7** |
| 0.2nm,0.5s,baz=355,slow=8.4,SNR=4.5 | | | | | | | | |

*IDC* ***17*** *12:11:57.6±1.1,0°.86N×129°.00E,h0km,mb3.8/4, mb1 4.1/5,mb1mx3.5/43,mbtmp3.9/5,ML4.2/1,MS2.5/1, Ms1 2.5/1,ms1mx2.2/70,Error ellipse: s-maj=64.6km s-min=18.1km az=62.0*

**ISC 17 12:12:01.4±1.3,0°.9N±0°.2×129°.2E±0°.2,h27km,n12, σ0°46/7,mb3.9/5,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **2.74** | **130** | Pn | | **Pn** | **12 12 43.4** | **-0.3** |
| 34nm,0.3s,baz=236,slow=23,SNR=25 | | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **12 13 16.4** | **+0.4** |
| 7.5nm,0.3s,baz=11,slow=21,SNR=5.9 | | | | | | | | |
| SIJI | | | | LR | | LR | 12 13 51.4 | |
| comp=Z,80nm,20.3s,baz=100,slow=40 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.34** | **167** | P | | **P** | **12 16 46.1** | **-0.5** |
| 1.0nm,0.5s,baz=345,slow=11,SNR=13 | | | | | | | | |
| WRA | | | | S | | S | 12 20 31.6 | -11 |
| 0.5nm,0.9s,baz=348,slow=21,SNR=2.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.86** | **170** | P | | **P** | **12 17 22.6** | **+0.6** |
| 4.1nm,0.8s,baz=348,slow=10,SNR=42 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.67** | **161** | P | | **P** | **12 18 48.8** | **0.0** |
| 1.4nm,0.5s,baz=324,slow=8.9,SNR=5.6 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.75** | **62** | T | | T | 13 03 13.9 | |
| baz=248,slow=75 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.76** | **62** | T | | T | 13 03 16.4 | |
| baz=248,slow=75 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.77** | **62** | T | | T | 13 03 16.5 | |
| baz=248,slow=75 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.38** | **61** | T | | T | 13 04 02.5 | |
| baz=247,slow=75 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.39** | **61** | T | | T | 13 04 03.4 | |
| baz=247,slow=75 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.39** | **61** | T | | T | 13 04 03.3 | |
| baz=247,slow=75 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.24** | **325** | P | | **P** | **12 22 14.3** | **+0.1** |
| 0.4nm,0.4s,baz=121,slow=8.5,SNR=11 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.41** | **327** | P | | **P** | **12 22 41.6** | **-0.1** |
| 0.4nm,0.4s,baz=124,slow=6.3,SNR=5.3 | | | | | | | | |

*IDC* ***17*** *12:23:22.2±0.7,30°.40S×177°.54W,h0km,mb4.7/8, mb1 4.8/8,mb1mx4.1/41,mbtmp4.7/8,MS3.8/21, Ms1 3.8/21,ms1mx3.5/59,Error ellipse: s-maj=23.0km s-min=17.2km az=87.0*

*NEIC* ***17*** *12:23:29.4±1.6,30°.47S±0°.06×177°.8W±0°.2,h35km±1km, mb4.8/22,Error ellipse: s-maj=23.9km s-min=10.5km az=96.0*

**ISC 17 12:23:27.5±0.6,30°.52S±0°.05×177°.7W±0°.1,h33km,n105, σ2°14/97,mb4.8/18,MS3.8/21,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **1.27** | **352** | P | | **Pn** | **12 23 47.0** | **-1.9** |
| GLKZ | | | | S | | **Sn** | **12 24 00.6** | **-4.2** |
| **RAO** | **Raoul Island** | **1.28** | **352** | Pn | | **Pn** | **12 23 46.7** | **-2.3** |
| 847nm,0.3s,baz=69,slow=23,SNR=17 | | | | | | | | |
| RAO | | | | Sn | | **Sn** | **12 24 03.4** | **-1.6** |
| 4µm,0.3s,baz=81,slow=19,SNR=12 | | | | | | | | |
| **RAO** | **Raoul Island** | **1.28** | **352** | | | **Pn** | **12 23 47.3** | **-1.7** |
| **RIZ** | **Raoul Island** | **1.28** | **351** | P | | **Pn** | **12 23 47.2** | **-1.9** |
| RIZ | | | | S | | **Sn** | **12 24 03.1** | **-2.1** |
| **MXZ** | **Matakaoa Point** | **7.76** | **204** | Pn | | **Pn** | **12 25 16.0** | **-2.1** |
| MXZ | | | | Sn | | **Sn** | **12 26 42.6** | **-2.2** |
| **MXZ** | **Matakaoa Point** | **7.76** | **204** | S | | **Sn** | **12 26 42.0** | **-2.8** |
| **WMGZ** | **Waiomatatini S** | **7.96** | **203** | P | | Pn | 12 25 16.5 | -4.2 |
| WMGZ | | | | S | | **Sn** | **12 26 48.0** | **-1.6** |
| **HAZ** | **Te Kaha** | **8.13** | **206** | P | | **Pn** | **12 25 19.8** | **-3.3** |
| HAZ | | | | S | | **Sn** | **12 26 53.6** | **-0.1** |
| **PKGZ** | **Pakihiroa** | **8.13** | **204** | P | | Pn | 12 25 19.0 | -4.3 |
| PKGZ | | | | S | | **Sn** | **12 26 50.9** | **-3.2** |
| **PUZ** | **Puketiti** | **8.24** | **203** | P | | Pn | 12 25 20.0 | -4.6 |
| PUZ | | | | S | | **Sn** | **12 26 53.0** | **-3.5** |
| **RUGZ** | **Raukumara Rang** | **8.35** | **206** | S | | **Sn** | **12 26 58.2** | **-1.3** |
| **TWGZ** | **Tauwhareparae** | **8.43** | **204** | P | | **Pn** | **12 25 24.4** | **-2.9** |
| TWGZ | | | | S | | **Sn** | **12 26 59.9** | **-1.4** |
| **CNGZ** | **Carnagh Statio** | **8.63** | **202** | P | | Pn | 12 25 25.8 | -4.2 |
| CNGZ | | | | S | | **Sn** | **12 27 05.8** | **-0.4** |
| **TKGZ** | **Te Karaka** | **8.71** | **204** | P | | **Pn** | **12 25 28.3** | **-2.8** |
| TKGZ | | | | S | | **Sn** | **12 27 05.2** | **-2.9** |
| **OPRZ** | **Ohinepanea** | **8.71** | **211** | P | | **Pn** | **12 25 34.9** | **+3.7** |
| **MWZ** | **Matawai** | **8.73** | **205** | P | | Pn | 12 25 27.5 | -3.9 |
| MWZ | | | | S | | **Sn** | **12 27 05.5** | **-3.2** |
| **URZ** | **Urewera** | **8.82** | **208** | Pn | | Pn | 12 25 28.9 | -3.8 |
| 2.1nm,0.3s,baz=268,slow=4.2,SNR=8.7 | | | | | | | | |
| URZ | | | | Sn | | **Sn** | **12 27 07.7** | **-3.2** |
| 7.9nm,0.3s,baz=128,slow=15,SNR=9.3 | | | | | | | | |
| **URZ** | **Urewera** | **8.82** | **208** | P | | **Pn** | **12 25 29.5** | **-3.2** |
| URZ | | | | S | | **Sn** | **12 27 07.2** | **-3.7** |
| **RIGZ** | **Rimuhau** | **8.98** | **203** | P | | Pn | 12 25 30.7 | -4.1 |
| RIGZ | | | | S | | **Sn** | **12 27 09.6** | **-5.2** |
| **SNGZ** | **Shannon Statio** | **9.19** | **205** | P | | **Pn** | **12 25 36.0** | **-1.8** |
| SNGZ | | | | S | | **Sn** | **12 27 16.8** | **-3.3** |
| **KNZ** | **Kokohu** | **9.29** | **203** | P | | Pn | 12 25 34.0 | -5.0 |
| **MHGZ** | **Mahia Peninsul** | **9.33** | **201** | P | | Pn | 12 25 34.0 | -5.6 |
| MHGZ | | | | S | | Sn | 12 27 09.2 | -14 |
| **RAHZ** | **Arahi** | **9.40** | **206** | P | | **Pn** | **12 25 38.5** | **-2.1** |
| RAHZ | | | | S | | **Sn** | **12 27 22.4** | **-2.8** |
| **MTHZ** | **Maungataniwha** | **9.44** | **207** | P | | **Pn** | **12 25 39.7** | **-1.5** |
| MTHZ | | | | S | | **Sn** | **12 27 21.3** | **-4.9** |
| **NMHZ** | **Naumai** | **9.67** | **206** | P | | Pn | 12 25 38.3 | -6.1 |
| NMHZ | | | | S | | **Sn** | **12 27 27.2** | **-4.6** |
| **BKZ** | **Black Stump Fm** | **9.85** | **207** | Pn | | Pn | 12 25 42.0 | -4.8 |
| **BKZ** | **Black Stump Fm** | **9.85** | **207** | P | | Pn | 12 25 40.0 | -6.8 |
| BKZ | | | | S | | **Sn** | **12 27 30.7** | **-5.5** |
| **MSVF** | **Nonsavu** | **13.30** | **342** | Pn | | **Pn** | **12 26 33.8** | **-0.4** |
| 0.2nm,0.3s,baz=210,slow=20,SNR=1.2 | | | | | | | | |
| **MSVF** | **Nonsavu** | **13.30** | **342** | | | **Pn** | **12 26 30.3** | **-3.8** |
| **RPZ** | **Rata Peaks** | **15.91** | **211** | Pn | | **Pn** | **12 27 05.4** | **-3.4** |
| 0.6nm,0.3s,baz=81,slow=9.9,SNR=2.1 | | | | | | | | |
| RPZ | | | | Sn | | Sn | 12 29 50.9 | -13 |
| 0.7nm,0.3s,baz=20,slow=15,SNR=1.8 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.50** | **297** | Pn | | **P** | **12 27 21.1** | **+2.1** |
| 0.2nm,0.3s,baz=120,slow=14,SNR=3.9 | | | | | | | | |
| DZM | | | | LR | | LR | 12 32 30.6 | |
| comp=Z,443nm,18.3s,baz=184,slow=33 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.50** | **297** | *e*Pn | | **P** | **12 27 23.0** | **+4.0** |
| 76nm,1.2s | | | | | | | | |
| DZM | | | | *e*LR | | LR | 12 31 16.0 | |
| comp=Z,592nm,24.2s | | | | | | | | |
| **ARMA** | **Armidale** | **26.39** | **262** | P | | **P** | **12 29 05.1** | **+4.0** |
| **EIDS** | **Eidsvold** | **27.99** | **273** | P | | **P** | **12 29 16.5** | **+1.1** |
| EIDS | | | | IAmb | | IAmb | 12 29 28.6 | |
| comp=Z,21nm,1.4s | | | | | | | | |
| **PPT2** | **Papeete2** | **28.64** | **70** | *e*LR | | LR | 12 36 34.2 | |
| comp=Z,307nm,25.5s | | | | | | | | |
| **PPT** | **Papeete** | **28.66** | **70** | LR | | LR | 12 37 28.6 | |
| comp=Z,114nm,21.4s,baz=184,slow=30 | | | | | | | | |
| **CTA** | **Charters Tower** | **34.06** | **279** | P | | **P** | **12 30 10.8** | **+1.9** |
| comp=Z,11nm,0.6s,baz=104,slow=8.8,SNR=22 | | | | | | | | |
| CTA | | | | LR | | LR | 12 42 36.1 | |
| comp=Z,223nm,18.0s,baz=86,slow=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.70** | **257** | P | | **P** | **12 30 16.6** | **+2.3** |
| comp=Z,17nm,0.7s,baz=103,slow=11,SNR=37 | | | | | | | | |
| STKA | | | | LR | | LR | 12 42 57.7 | |
| comp=Z,161nm,19.7s,baz=39,slow=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **34.70** | **257** | P | | **P** | **12 30 16.6** | **+2.3** |
| **PMG** | **Port Moresby** | **38.88** | **295** | LR | | LR | 12 44 01.9 | |
| comp=Z,94nm,20.5s,baz=156,slow=32 | | | | | | | | |
| **BBOO** | **Buckleboo** | **39.18** | **254** | P | | **P** | **12 30 53.5** | **+1.1** |
| BBOO | | | | IAmb | | IAmb | 12 31 07.3 | |
| comp=Z,14nm,0.8s | | | | | | | | |
| **COEN** | **Coen** | **39.55** | **286** | P | | **P** | **12 30 57.7** | **+2.1** |
| **AS31** | **Alice Springs** | **43.35** | **267** | P | | **P** | **12 31 27.0** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.35** | **267** | P | | **P** | **12 31 26.8** | **0.0** |
| comp=Z,4.3nm,0.5s,baz=106,slow=7.3,SNR=175 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **12 33 15.2** | **+0.1** |
| comp=Z,0.9nm,0.9s,baz=120,slow=4.0,SNR=2.1 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **12 37 05.3** | **+1.2** |
| comp=Z,0.5nm,0.7s,baz=116,slow=3.8,SNR=4.7 | | | | | | | | |
| ASAR | | | | LR | | LR | 12 49 28.3 | |
| comp=Z,236nm,18.1s,baz=106,slow=36 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.17** | **272** | P | | **P** | **12 31 33.5** | **+0.1** |
| WR0 | | | | IAmb | | IAmb | 12 31 35.8 | |
| comp=Z,11nm,0.9s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.34** | **272** | P | | **P** | **12 31 34.9** | **+0.1** |
| WB2 | | | | IAmb | | IAmb | 12 31 37.2 | |
| comp=Z,11nm,0.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.35** | **272** | P | | **P** | **12 31 34.8** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 12 31 37.1 | |
| comp=Z,12nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **272** | P | | **P** | **12 31 34.5** | **-0.4** |
| comp=Z,4.4nm,0.3s,baz=110,slow=8.1,SNR=150 | | | | | | | | |
| WRA | | | | LR | | LR | 12 49 11.9 | |
| comp=Z,116nm,18.2s,baz=102,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **272** | P | | **P** | **12 31 34.9** | **+0.1** |
| **WB0** | **Warramunga Arr** | **44.38** | **272** | P | | **P** | **12 31 35.4** | **+0.3** |
| WB0 | | | | IAmb | | IAmb | 12 31 36.8 | |
| comp=Z,28nm,1.3s | | | | | | | | |
| **FORT** | **Forrest** | **46.26** | **255** | P | | **P** | **12 31 49.3** | **-0.6** |
| **VNDA** | **Vanda** | **48.00** | **186** | LR | | LR | 12 50 29.2 | |
| comp=Z,68nm,19.7s,baz=160,slow=34 | | | | | | | | |
| **VNDA** | **Vanda** | **48.00** | **186** | P | | **P** | **12 32 04.5** | **+1.7** |
| VNDA | | | | IAmb | | IAmb | 12 32 18.2 | |
| comp=Z,16nm,1.3s | | | | | | | | |
| **JAY** | **Jayapura** | **48.17** | **297** | LR | | LR | 12 50 14.4 | |
| comp=Z,60nm,18.7s,baz=244,slow=33 | | | | | | | | |
| **MTN** | **Manton Dam** | **50.25** | **279** | P | | **P** | **12 32 21.1** | **+0.3** |
| MTN | | | | IAmb | | IAmb | 12 32 46.2 | |
| comp=Z,15nm,1.1s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.96** | **274** | P | | **P** | **12 32 26.1** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **52.61** | **270** | P | | **P** | **12 32 38.1** | **-0.3** |
| comp=Z,8.0nm,0.9s,baz=109,slow=4.8,SNR=13 | | | | | | | | |
| FITZ | | | | LR | | LR | 12 53 41.7 | |
| comp=Z,108nm,20.4s,baz=131,slow=34 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.61** | **270** | P | | **P** | **12 32 38.8** | **+0.4** |
| FITZ | | | | IAmb | | IAmb | 12 32 39.8 | |
| comp=Z,7.6nm,0.8s | | | | | | | | |
| **CASY** | **Casey** | **55.15** | **208** | P | | **P** | **12 32 57.1** | **+0.8** |
| **BATI** | **Baumata** | **57.91** | **277** | LR | | LR | 12 58 36.2 | |
| comp=Z,258nm,19.2s,baz=135,slow=36 | | | | | | | | |
| **RPN** | **Rapa Nui** | **59.16** | **105** | LR | | LR | 12 54 15.2 | |
| comp=Z,40nm,18.6s,baz=252,slow=31 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.59** | **180** | P | | **P** | **12 33 29.2** | **+1.4** |
| comp=Z,4.4nm,0.8s,baz=240,slow=0.9,SNR=22 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.59** | **180** | P | | **P** | **12 33 30.4** | **+2.6** |
| **KAPI** | **Kappang** | **63.88** | **280** | LR | | LR | 13 02 52.6 | |
| comp=Z,43nm,18.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AKTO** | **Aktyubinsk** | **134.37 312** | PKP | **PKPdf** | **12 42 42.1** | **+0.5** |
| | comp=Z,1.4nm,0.8s,baz=115,slow=4.3,SNR=4.8 | | | | | |
| **ARCES** | **ARCESS Array B** | **138.76 348** | PKhKP | PKPpre | 12 42 38.2 | |
| | comp=Z,7.1nm,1.1s,baz=33,slow=4.6,SNR=4.9 | | | | | |
| ARCES | | | PKP | **PKPdf** | **12 42 48.0** | **-1.2** |
| | comp=Z,4.1nm,0.9s,baz=69,slow=3.0,SNR=5.6 | | | | | |
| **FINES** | **FINESS Array B** | **145.34 340** | PKPbc | **PKPbc** | **12 43 00.2** | **-0.8** |
| | comp=Z,22nm,0.8s,baz=51,slow=4.4,SNR=65 | | | | | |
| **FINES** | **FINESS Array B** | **145.34 340** | | **PKPbc** | **12 43 00.7** | **-0.4** |
| **KBZ** | **Khabaz** | **145.39 304** | PKPbc | **PKPab** | **12 43 01.8** | **-0.2** |
| | comp=Z,1.8nm,0.4s,baz=127,slow=5.2,SNR=5.3 | | | | | |
| **OBN** | **Obninsk** | **145.41 325** | PKPbc | **PKPbc** | **12 43 01.1** | **-0.4** |
| | comp=Z,8.2nm,0.6s,baz=296,slow=5.9,SNR=5.1 | | | | | |
| **OBN** | **Obninsk** | **145.41 325** | | **PKPdf** | **12 43 01.2** | **-0.3** |
| **NB2** | **NORSAR Subarra1** | **148.91 352** | PKP | **PKPbc** | **12 43 11.0** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=11,slow=2.6 | | | | | |
| **NOA** | **NORSAR Array B** | **148.91 352** | PKPbc | **PKPbc** | **12 43 11.0** | **-0.2** |
| | comp=Z,2.8nm,0.6s,baz=14,slow=4.2,SNR=8.5 | | | | | |
| **HFS** | **Hagfors** | **149.41 349** | PKPbc | **PKPbc** | **12 43 11.8** | **-0.6** |
| | comp=Z,8.0nm,0.7s,baz=166,slow=0.6,SNR=8.0 | | | | | |
| **AKASG** | **Malin Array Be** | **151.55 323** | PKPbc | **PKPbc** | **12 43 17.5** | **-0.3** |
| | comp=Z,1.6nm,0.3s,baz=48,slow=2.8,SNR=24 | | | | | |
| **AKASG** | **Malin Array Be** | **151.55 323** | | **PKiKP** | **12 43 18.0** | **-0.2** |
| **EIL** | **Elat** | **151.78 277** | PKPbc | **PKiKP** | **12 43 19.7** | **+0.3** |
| | comp=Z,7.0nm,0.6s,baz=152,slow=2.3,SNR=5.9 | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.80 284** | PKPbc | **PKiKP** | **12 43 19.9** | **+0.5** |
| | comp=Z,4.2nm,0.5s,baz=77,slow=4.4,SNR=13 | | | | | |
| **BRTR** | **Keskin Array B** | **152.88 298** | PKPbc | **PKPbc** | **12 43 21.1** | **-0.3** |
| | comp=Z,2.1nm,0.6s,baz=113,slow=3.2,SNR=6.8 | | | | | |
| BRTR | | | PKPab | **sPKPbc** | **12 43 33.9** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=140,slow=2.7,SNR=4.7 | | | | | |
| **GERES** | **GERESS Array B** | **159.74 338** | PKPab | **PKPab** | **12 44 01.4** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=324,slow=3.6,SNR=3.8 | | | | | |
| **GERES** | **GERESS Array B** | **159.74 338** | | **PKPab** | **12 44 01.5** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **162.70 178** | PKPab | **PKPab** | **12 44 14.5** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=173,slow=2.8,SNR=8.3 | | | | | |

*BUL **17** 12:27:46.0±1.3,26°.08S×29°.31E,h31km±34km,MD3.1*
**EAF 17 12:27:45.7±0.8,25°.87S×29°.57E,h0km±12km,MD3.3,**
**South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **CNG** | **Changalane** | **2.39** | **101** | *eP* | | Pn | | 12 28 25.0 | -1.1 |
| CNG | | | | *eS* | | Sn | | 12 28 55.3 | -0.8 |
| **CNG** | **Changalane** | **2.39** | **101** | *iP* | | Pn | | 12 28 25.0 | -1.1 |
| CNG | | | | *iS* | | Sn | | 12 28 55.3 | -0.8 |
| **CNG** | **Changalane** | **2.39** | **101** | *eP* | | Pn | | 12 28 25.0 | -1.1 |
| CNG | | | | *iP* | | Pn | | 12 28 25.0 | -1.1 |
| CNG | | | | *iS* | | Sn | | 12 28 55.3 | -0.8 |
| CNG | | | | *eS* | | Sn | | 12 28 55.3 | -0.8 |
| **MOPA** | **Mopani** | **2.87** | **36** | *eP* | | Pn | | 12 28 32.3 | -0.5 |
| MOPA | | | | *iS* | | Sn | | 12 29 05.9 | -2.3 |
| **MOPA** | **Mopani** | **2.87** | **36** | *iP* | | Pn | | 12 28 32.3 | -0.5 |
| MOPA | | | | *iS* | | Sn | | 12 29 06.3 | -1.8 |
| **MOPA** | **Mopani** | **2.87** | **36** | *eP* | | Pn | | 12 28 32.3 | -0.5 |
| MOPA | | | | *iP* | | Pn | | 12 28 32.3 | -0.5 |
| MOPA | | | | *iS* | | Sn | | 12 29 05.9 | -2.3 |
| MOPA | | | | *iS* | | Sn | | 12 29 06.3 | -1.8 |
| **MSNA** | **Messina** | **3.54** | **7** | *eP* | | Pn | | 12 28 41.6 | -0.4 |
| MSNA | | | | *eS* | | Sn | | 12 29 23.9 | -0.7 |
| **MSNA** | **Messina** | **3.54** | **7** | *iP* | | Pn | | 12 28 42.9 | +0.9 |
| MSNA | | | | *eS* | | Sn | | 12 29 22.4 | -2.2 |
| **MSNA** | **Messina** | **3.54** | **7** | *eP* | | Pn | | 12 28 41.6 | -0.4 |
| MSNA | | | | *iP* | | Pn | | 12 28 42.9 | +0.9 |
| MSNA | | | | *eS* | | Sn | | 12 29 22.4 | -2.2 |
| MSNA | | | | *eS* | | Sn | | 12 29 23.9 | -0.7 |
| **MATP** | **Matopo** | **5.51** | **349** | *eP* | | Pn | | 12 29 08.3 | -0.9 |
| MATP | | | | *eS* | | Sn | | 12 30 08.6 | -4.8 |
| **MATP** | **Matopo** | **5.51** | **349** | *eP* | | Pn | | 12 29 08.3 | -0.9 |
| MATP | | | | *eS* | | Sn | | 12 30 08.6 | -4.8 |

*IDC **17** 12:49:13.4±1.6,28°.10N×128°.05E,h0km,mb3.4/4,*
*mb1 3.6/4,mb1mx3.2/40,mbtmpg3.4/4,MS3.1/4,Ms1 3.2/4,*
*ms1mx2.8/51,Error ellipse: s-maj=54.1km s-min=13.4km*
*az=72.0*
*JMA **17** 12:49:14.4±0.3,28°.13N×128°.07E,h19km±4km,M3.4*
**ISC 17 12:49:13.9±1.8,28°.10N±0°.05×128°.07E±0°.06,h7km±12km,**
**n22,σ0°65/26,mb3.4/4,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **JTK** | **Tokunoshima** | **0.84** | **112** | P | | P | **Pg** | **12 49 29.9** | **-0.1** |
| JTK | | | | S | | S | **Sg** | **12 49 41.2** | **+0.4** |
| **JOKE** | **Okinoerabujima** | **0.86** | **149** | P | | P | **Pb** | **12 49 31.1** | **0.0** |
| JOKE | | | | *eS* | | S | **Sg** | **12 49 42.5** | **+1.0** |
| **JAMN** | **Amaminishikomi** | **0.98** | **81** | P | | P | **Pg** | **12 49 32.6** | **-0.2** |
| JAMN | | | | *eS* | | S | **Sg** | **12 49 45.6** | **0.0** |
| **JIH** | **Iheya** | **1.06** | **185** | P | | P | **Pg** | **12 49 34.0** | **-0.3** |
| JIH | | | | *eS* | | S | **Sg** | **12 49 48.5** | **+0.4** |
| **JYRO** | **Yoronjima** | **1.12** | **162** | P | | P | **Pb** | **12 49 35.3** | **-0.3** |
| JYRO | | | | *eS* | | S | **Sb** | **12 49 50.3** | **-0.1** |
| **JOW** | **Kunigami** | **1.27** | **172** | Pg | | **Pn** | | **12 49 37.8** | **-0.3** |
| | 47nm,0.3s,baz=352,slow=14,SNR=70 | | | | | | | | |
| JOW | | | | Lg | | Lg | | 12 49 54.4 | |
| | 49nm,0.3s,baz=98,slow=28,SNR=24 | | | | | | | | |
| JOW | | | | LR | | LR | | 12 50 03.3 | |
| | comp=Z,244nm,21.6s,baz=299,slow=39 | | | | | | | | |
| **JOW** | **Kunigami** | **1.27** | **172** | P | | **Pn** | | **12 49 37.7** | **-0.5** |
| JOW | | | | *eS* | | **Sb** | | **12 49 54.1** | **-0.7** |
| **JAM** | **Amami Oshima** | **1.39** | **77** | P | | **Pn** | | **12 49 39.2** | **-0.5** |
| JAM | | | | *eS* | | **Sb** | | **12 49 57.7** | **-0.4** |
| **JTAJ** | **Takarajima** | **1.45** | **43** | P | | **Pn** | | **12 49 39.7** | **-0.8** |
| **JNTH** | **Nagotoyohara** | **1.57** | **182** | P | | **Pn** | | **12 49 42.2** | **-0.1** |
| JNTH | | | | *eS* | | **Sn** | | **12 50 02.5** | **-0.4** |
| **JAGN** | **Aguni-jima** | **1.68** | **206** | P | | **Pn** | | **12 49 43.1** | **-0.6** |
| **JZK** | **Kikaishima** | **1.69** | **82** | P | | **Pg** | | **12 49 46.1** | **-0.2** |
| **JKE** | **Kume jima 2** | **2.10** | **213** | P | | **Pn** | | **12 49 49.3** | **-0.3** |
| **JYAK** | **Yakushimahirau** | **3.02** | **44** | P | | **Pn** | | **12 50 02.6** | **+0.5** |
| **KSRS** | **Korea Array** | **9.33** | **359** | LR | | LR | | 12 55 10.0 | |
| | comp=Z,72nm,19.0s,baz=180,slow=38 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.01** | **43** | LR | | LR | | 12 56 35.4 | |
| | comp=Z,78nm,21.1s,baz=216,slow=37 | | | | | | | | |
| **SONM** | **Songino Array** | **25.93** | **325** | P | | **P** | | **12 54 47.6** | **+0.7** |
| | 0.9nm,0.8s,baz=137,slow=10,SNR=7.0 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.36** | **257** | LR | | LR | | 13 07 44.1 | |
| | comp=Z,34nm,20.0s,baz=305,slow=39 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.21** | **310** | P | | **P** | | **12 56 50.6** | **-0.4** |
| | 0.4nm,0.7s,baz=109,slow=9.9,SNR=3.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.14** | **172** | P | | **P** | | **12 57 54.4** | **-0.4** |
| | 0.8nm,0.9s,baz=353,slow=7.8,SNR=3.5 | | | | | | | | |
| **PALK** | **Pallekele** | **49.27** | **254** | LR | | LR | | 13 20 47.9 | |
| | comp=Z,58nm,19.3s,baz=232,slow=38 | | | | | | | | |
| **ASAR** | **Alice Springs** | **51.77** | **173** | P | | **P** | | **12 58 24.4** | **+2.0** |
| | 0.3nm,0.8s,baz=1.4,slow=10.0,SNR=2.0 | | | | | | | | |

**IDC 17 12:57:08.5±1.2,3°.08N×125°.73E,h0km,mb3.6/5,**
**mb1 3.8/5,mb1mx3.4/38,mbtmpg3.6/5,Error ellipse:**
**s-maj=152.2km s-min=20.5km az=68.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **24.39** | **160** | P | | P | | 13 02 28.1 | -0.7 |
| | 2.1nm,0.8s,baz=338,slow=11,SNR=29 | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.75** | **164** | P | | P | | 13 02 59.6 | +0.5 |
| | 0.2nm,0.3s,baz=345,slow=9.6,SNR=16 | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 13 06 16.1 | +0.1 |
| | 0.1nm,0.7s,baz=342,slow=2.1,SNR=1.5 | | | | | | | | |
| **STKA** | **Stephens Creek** | **37.89** | **158** | P | | P | | 13 04 27.7 | +0.2 |
| | 0.6nm,0.3s,baz=312,slow=9.1,SNR=2.9 | | | | | | | | |
| **SONM** | **Songino Array** | **47.60** | **342** | P | | P | | 13 05 45.5 | -0.8 |
| | 0.2nm,0.5s,baz=147,slow=8.2,SNR=1.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.53** | **326** | P | | P | | 13 06 59.8 | 0.0 |
| | 0.3nm,0.4s,baz=127,slow=7.5,SNR=5.2 | | | | | | | | |

**GUC 17 13:23:22.8±0.8,23°.93S×66°.86W,h211km±6km,ML3.8,**
**2C-2D,Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **SLA** | **San Lorenzo** | **1.47** | **123** | *i* | ⇓*iP* | Pn | | 13 23 56.5 | -0.9 |
| SLA | | | | *i* | S | S | | 13 24 22.4 | -1.6 |
| **LVC** | **Limon Verde** | **2.29** | **304** | *eP* | | Pn | | 13 24 05.4 | -0.2 |
| LVC | | | | *eS* | | S | | 13 24 38.3 | -0.2 |
| **PB15** | **IPOC Station P** | **2.50** | **286** | *eP* | | Pn | | 13 24 07.8 | +0.2 |
| PB15 | | | | *eS* | | S | | 13 24 41.4 | -0.6 |
| **PB06** | **IPOC Station P** | **2.77** | **295** | ⇑*eP* | | Pn | | 13 24 10.6 | 0.0 |
| PB06 | | | | *eS* | | S | | 13 24 46.5 | -1.0 |
| PB06 | | | | IAML | | | | 13 24 47.8 | |
| | comp=E,223nm,0.1s | | | | | | | | |
| **PB09** | **IPOC Station P** | **3.05** | **314** | *eP* | | Pn | | 13 24 13.8 | 0.0 |
| PB09 | | | | IAML | | | | 13 24 56.5 | |
| | comp=E,99nm,0.2s | | | | | | | | |
| **PB03** | **IPOC Station P** | **3.25** | **304** | ⇑*iP* | | Pn | | 13 24 15.6 | -0.5 |
| PB03 | | | | *eS* | | S | | 13 24 55.4 | -2.1 |
| **PB14** | **IPOC Station P** | **3.31** | **257** | *eP* | | Pn | | 13 24 16.9 | 0.0 |
| PB14 | | | | *eS* | | S | | 13 24 57.7 | -1.1 |
| **PB04** | **IPOC Station P** | **3.42** | **297** | *eP* | | Pn | | 13 24 17.7 | -0.4 |
| PB04 | | | | *eS* | | S | | 13 24 58.9 | -2.1 |
| **PB07** | **IPOC Station P** | **3.55** | **308** | *iP* | | Pn | | 13 24 18.9 | -0.8 |
| **PB01** | **IPOC Station P** | **3.76** | **319** | *eP* | | Pn | | 13 24 21.1 | -1.0 |
| PB01 | | | | *eS* | | S | | 13 25 05.3 | -3.0 |
| **PB02** | **IPOC Station P** | **3.82** | **312** | *eP* | | Pn | | 13 24 21.7 | -1.2 |
| **PB08** | **IPOC Station P** | **4.33** | **330** | ⇓*iP* | | Pn | | 13 24 28.9 | -0.6 |

*IDC **17** 14:04:59.3±3.9,36°.29N×70°.89E,h187km±34km,mb3.4/10,*
*mb1 3.5/14,mb1mx3.1/67,mbtmpg3.9/14,Error ellipse:*
*s-maj=26.7km s-min=15.6km az=26.0*
*SOME **17** 14:05:05.6,38°.30N×72°.53E,h5km*
*NNC **17** 14:05:06.9±9.0,37°.32N×70°.51E,h0km,mb4.2,mpv3.9,*
*Error ellipse: s-maj=70.7km s-min=49.5km az=174.0*
**ISC 17 14:05:02.1±0.6,36°.63N±0°.05×70°.99E±0°.09,h200km,n44,**
**σ1°83/52,mb3.7/9,5C-3D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **CEP** | **Cherat** | **2.90** | **165** | P | | **Pn** | | **14 05 52.7** | **+2.0** |
| CEP | | | | S | | **Sn** | | **14 06 29.0** | **+0.3** |
| **THW** | **Thamme Wali** | **3.87** | **171** | P | | **Pn** | | **14 06 03.6** | **+1.2** |
| **SARP** | **Sargodha** | **4.89** | **163** | P | | **Pn** | | **14 06 15.8** | **+0.6** |
| **IUG** | **Iuzhnay** | **5.56** | **353** | *eP* | | **Pn** | | **14 06 27.8** | **+4.1** |
| | 453nm,0.2s | | | | | | | | |
| IUG | | | | *eS* | | **Sn** | | **14 07 26.8** | **-1.5** |
| | 208nm,0.6s | | | | | | | | |
| **CHM** | **Chimkent** | **5.79** | **350** | *eP* | | **Pn** | | **14 06 31.1** | **+4.5** |
| | 113nm,0.2s | | | | | | | | |
| CHM | | | | *eS* | | **Sn** | | **14 07 32.3** | **-1.1** |
| | 373nm,0.5s | | | | | | | | |
| **AML** | **Almayashu** | **5.88** | **20** | P | | **Pn** | | **14 06 30.1** | **+1.9** |
| | SNR=30 | | | | | | | | |
| **UCH** | **Uchtor** | **6.22** | **25** | P | | **Pn** | | **14 06 35.0** | **+2.3** |
| | SNR=14 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.40** | **19** | P | | **Pn** | | **14 06 36.6** | **+2.0** |
| | SNR=10 | | | | | | | | |
| **BRLS** | **Borolday** | **6.46** | **352** | *eP* | | **Pn** | | **14 06 35.7** | **+0.4** |
| | 5.3nm,0.3s | | | | | | | | |
| BRLS | | | | *eS* | | Sn | | 14 07 40.2 | -8.9 |
| | 22nm,0.5s | | | | | | | | |
| **KK09** | **Karatay Array** | **6.50** | **357** | ⇑Pn | | **Pn** | | **14 06 36.8** | **+1.0** |
| | 7.0nm,0.5s,baz=180,slow=14 | | | | | | | | |
| KK09 | | | | ⇓Sn | | **Sn** | | **14 07 43.5** | **-6.5** |
| | 13nm,0.4s,baz=188,slow=23 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **23** | P | | **Pn** | | **14 06 39.3** | **+2.3** |
| | 2.0nm,0.3s,baz=173,slow=5.1,SNR=29 | | | | | | | | |
| AAK | | | | S | | **Sn** | | **14 07 51.4** | **-0.9** |
| | 1.6nm,0.3s,baz=213,slow=7.7,SNR=4.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **23** | P | | **Pn** | | **14 06 39.4** | **+2.3** |
| | SNR=10 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **23** | ⇓Pn | | **Pn** | | **14 06 39.0** | **+2.0** |
| | 3.4nm,0.3s | | | | | | | | |
| AAK | | | | ⇓Sn | | **Sn** | | **14 07 50.4** | **-1.8** |
| | 20nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.22** | **28** | P | | **Pn** | | **14 06 47.7** | **+2.4** |
| | SNR=5.8 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.22** | **28** | ⇑Pn | | **Pn** | | **14 06 47.3** | **+2.0** |
| | 6.1nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | | **14 08 05.6** | **-1.6** |
| | 11nm,1.2s | | | | | | | | |
| **KST** | **Kastek** | **7.46** | **29** | *eP* | | **Pn** | | **14 06 48.5** | **+0.1** |
| | 4.0nm,0.3s | | | | | | | | |
| KST | | | | *eS* | | Sn | | 14 08 02.4 | -11 |
| | 5.7nm,0.9s | | | | | | | | |
| **DGS** | **Degeres** | **7.56** | **28** | *eP* | | **Pn** | | **14 06 48.2** | **-1.4** |
| | 3.7nm,0.8s | | | | | | | | |
| DGS | | | | *eS* | | Sn | | 14 08 02.0 | -13 |
| | 8.4nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.19** | **36** | P | | **Pn** | | **14 08 03.2** | **+1.3** |
| | 0.1nm,0.3s,baz=228,slow=13,SNR=7.7 | | | | | | | | |
| **PYUN** | **Piuthan** | **13.22** | **127** | *eP* | | **Pn** | | **14 08 01.6** | **-1.1** |
| | 24nm,0.4s | | | | | | | | |
| **DANN** | **Dangsing** | **13.56** | **124** | *eP* | | **Pn** | | **14 08 06.8** | **-0.2** |
| | 18nm,0.2s | | | | | | | | |
| **KOLN** | **Koldanda** | **13.84** | **126** | *eP* | | **Pn** | | **14 08 09.6** | **-0.8** |
| | 12nm,0.3s | | | | | | | | |
| **GKN** | **Gorkha** | **14.38** | **123** | *eP* | | **Pn** | | **14 08 16.9** | **0.0** |
| | 37nm,0.4s | | | | | | | | |
| **DMN** | **Daman** | **14.95** | **123** | *eP* | | **Pn** | | **14 08 23.8** | **-0.2** |
| | 25nm,0.4s | | | | | | | | |
| **KKN** | **Kakani** | **14.95** | **122** | *eP* | | **Pn** | | **14 08 23.6** | **-0.4** |
| | 46nm,0.5s | | | | | | | | |
| **AB31** | **Akbulak array** | **14.97** | **331** | ⇑Pn | | **P** | | **14 08 26.7** | **+2.3** |
| | 1.5nm,0.4s,baz=144,slow=12,SNR=75 | | | | | | | | |
| AB31 | | | | ⇑Sn | | **S** | | **14 11 10.5** | **+0.6** |
| | 0.8nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.01** | **19** | P | | **Pn** | | **14 08 24.5** | **+0.3** |
| | 0.1nm,0.3s,baz=207,slow=12,SNR=7.0 | | | | | | | | |
| **PKI** | **Pulchoki** | **15.18** | **122** | *eP* | | **Pn** | | **14 08 26.5** | **-0.4** |
| | 29nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **15.29** | **120** | *eP* | | **Pn** | | **14 08 27.9** | **-0.3** |
| | 29nm,0.4s | | | | | | | | |
| **JIRN** | **Jiri** | **15.66** | **120** | *eP* | | **Pn** | | **14 08 32.8** | **+0.1** |
| | 39nm,0.4s | | | | | | | | |
| **RAMN** | **Ramite** | **16.39** | **122** | *eP* | | **Pn** | | **14 08 41.2** | **-0.2** |
| | 4.0nm,0.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.40** | **359** | P | | **Pn** | | **14 08 42.0** | **+0.9** |
| | 0.5nm,0.3s,baz=308,slow=17,SNR=8.5 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.67** | **330** | P | | **P** | | **14 08 44.0** | **+0.9** |
| | 0.7nm,0.3s,baz=134,slow=9.2,SNR=10 | | | | | | | | |
| **TAPN** | **Taplejung** | **16.91** | **118** | *eP* | | **Pn** | | **14 08 48.5** | **+0.8** |
| | 16nm,0.4s | | | | | | | | |
| **ODAN** | **Odare** | **16.99** | **120** | *eP* | | **Pn** | | **14 08 49.1** | **+0.6** |
| | 26nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.80** | **25** | P | | **P** | | **14 09 18.2** | **+1.1** |
| | 0.1nm,0.3s,baz=217,slow=11,SNR=11 | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.38** | **326** | P | | **P** | | **14 11 55.9** | **+0.7** |
| | 1.1nm,0.4s,baz=120,slow=9.6,SNR=13 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.02** | **338** | P | | **P** | | **14 12 26.4** | **+1.1** |
| | 1.8nm,0.4s,baz=114,slow=8.0,SNR=24 | | | | | | | | |
| **HFS** | **Hagfors** | **42.96** | **322** | P | | **P** | | **14 12 40.8** | **-0.3** |
| | 1.8nm,0.7s,baz=115,slow=6.5,SNR=1.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.27** | **323** | P | | **P** | | **14 12 51.2** | **-0.4** |
| | 0.9nm,0.7s,baz=91,slow=6.4,SNR=1.7 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.91** | **69** | P | | **P** | | **14 13 57.9** | **+0.2** |
| | 1.3nm,0.6s,baz=301,slow=7.0,SNR=1.8 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.71** | **269** | P | | **P** | | **14 15 23.2** | **-2.4** |
| | 0.9nm,0.4s,baz=49,slow=6.4,SNR=12 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.12** | **3** | P | | **P** | | **14 16 54.9** | **+0.2** |
| | 0.7nm,0.5s,baz=351,slow=5.3,SNR=22 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.06** | **122** | P | | **P** | | **14 16 58.2** | **-2.1** |
| | 0.2nm,0.4s,baz=324,slow=4.9,SNR=7.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **84.33** | **125** | P | | **P** | | **14 17 10.3** | **-1.5** |
| | 0.3nm,0.5s,baz=308,slow=5.0,SNR=11 | | | | | | | | |

**JMA 17 14:09:48.3±0.2,28°.13N×128°.06E,h22km,Ryukyu**
**Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **JTK** | **Tokunoshima** | **0.86** | **113** | P | | Pn | Pb | 14 10 04.2 | -0.3 |
| JTK | | | | S | | S | Sb | 14 10 15.3 | -0.3 |
| **JOKE** | **Okinoerabujima** | **0.89** | **149** | P | | Pn | Pb | 14 10 04.7 | -0.4 |
| JOKE | | | | S | | S | Sb | 14 10 16.2 | -0.3 |
| **JAMN** | **Amaminishikomi** | **0.99** | **83** | P | | Pn | Pb | 14 10 06.2 | -0.6 |
| **JIH** | **Iheya** | **1.09** | **184** | P | | Pn | Pb | 14 10 07.8 | -0.5 |
| JIH | | | | *eS* | | Sb | Pb | 14 10 21.9 | -0.4 |
| **JYRO** | **Yoronjima** | **1.15** | **162** | P | | Pn | Pb | 14 10 08.9 | -0.2 |
| **JAM** | **Amami Oshima** | **1.39** | **78** | P | | Pb | Pb | 14 10 13.2 | -0.4 |

*IDC **17** 14:09:48.9±1.1,27°.99N×128°.36E,h0km,mb3.4/6,*
*mb1 3.5/7,mb1mx3.3/53,mbtmpg3.4/7,ML2.4/1,MS3.0/3,*
*Ms1 3.1/3,ms1mx2.6/42,Error ellipse: s-maj=47.9km*
*s-min=14.6km az=81.0*
*JMA **17** 14:09:52.9±0.2,28°.12N×128°.07E,h19km±3km,M3.5*
*NIED **17** 14:09:52.9,28°.12N×128°.07E,h19km,MW3.9,Moment*
*Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm;*
*$M_{rr}$-1.23; $M_{\theta\theta}$4.57; $M_{\phi\phi}$-3.34; $M_{r\theta}$-0.80; $M_{\theta\phi}$6.54; $M_{\phi r}$-0.44;*
*Fault plane solution: $M_0$7.69000×$10^{14}$ NP1:*
*$\phi_s$286.00000°,$\delta$86.00000°,$\lambda$.4.00000°. NP2:$\phi_s$195.00000°,*
*$\delta$86.00000°,$\lambda$176.00000°.*
**ISC 17 14:09:55.2±1.2,28°.04N±0°.06×128°.16E±0°.07,h42km±16km,**
**n25,σ1°47/31,mb3.3/6,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **JTK** | **Tokunoshima** | **0.74** | **110** | P | | **Pn** | | **14 10 08.6** | **-0.7** |
| JTK | | | | S | | **Sn** | | **14 10 19.5** | **+0.1** |
| **JOKE** | **Okinoerabujima** | **0.77** | **152** | P | | **Pn** | | **14 10 09.3** | **-0.3** |
| JOKE | | | | *eS* | | **Sn** | | **14 10 20.7** | **+0.7** |
| **JAMN** | **Amaminishikomi** | **0.92** | **77** | P | | **Pn** | | **14 10 11.0** | **-0.6** |
| JAMN | | | | S | | **Sn** | | **14 10 24.1** | **+0.4** |
| **JIH** | **Iheya** | **1.01** | **190** | P | | **Pn** | | **14 10 12.4** | **-0.6** |
| JIH | | | | S | | **Sn** | | **14 10 26.8** | **+0.8** |
| **JYRO** | **Yoronjima** | **1.04** | **166** | P | | **Pn** | | **14 10 14.1** | **+0.7** |
| JYRO | | | | *eS* | | **Sn** | | **14 10 28.2** | **+1.5** |
| **JOW** | **Kunigami** | **1.21** | **175** | Pn | | **Pn** | | **14 10 11.8** | **-3.8** |
| | 41nm,0.3s,baz=18,slow=14,SNR=26 | | | | | | | | |
| JOW | | | | Sn | | **Sn** | | **14 10 31.3** | **+0.5** |
| | 91nm,0.3s,baz=112,slow=27,SNR=27 | | | | | | | | |
| **JOW** | **Kunigami** | **1.21** | **175** | P | | **Pn** | | **14 10 11.4** | **-4.2** |
| **JOW** | **Kunigami** | **1.21** | **175** | P | | **Pn** | | **14 10 15.9** | **+0.3** |
| JOW | | | | *eS* | | **Sn** | | **14 10 32.8** | **+2.0** |
| **JAM** | **Amami Oshima** | **1.33** | **73** | P | | **Pn** | | **14 10 17.5** | **+0.3** |
| JAM | | | | *eS* | | **Sn** | | **14 10 34.8** | **+1.1** |
| **JTAJ** | **Takarajima** | **1.44** | **39** | P | | **Pn** | | **14 10 18.3** | **-0.5** |
| **JNTH** | **Nagotoyohara** | **1.52** | **185** | P | | **Pn** | | **14 10 20.8** | **+0.9** |
| JNTH | | | | *eS* | | **Sn** | | **14 10 40.8** | **+2.3** |
| **JZK** | **Kikaishima** | **1.62** | **80** | P | | **Pn** | | **14 10 22.6** | **+1.3** |
| **JAGN** | **Aguni-jima** | **1.66** | **210** | P | | **Pn** | | **14 10 21.5** | **-0.3** |
| **JJT3** | **Tamagusuku3** | **1.92** | **190** | P | | **Pn** | | **14 10 26.8** | **+1.4** |
| **JKE** | **Kume jima 2** | **2.10** | **216** | P | | **Pn** | | **14 10 27.4** | **-0.5** |
| **KSRS** | **Korea Array** | **9.39** | **359** | Pn | | **Pn** | | **14 12 06.9** | **-1.0** |
| | 0.0nm,0.3s,baz=180,slow=15,SNR=2.3 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.00** | **43** | LR | | LR | | 14 17 59.6 | |
| | comp=Z,76nm,18.3s,baz=224,slow=41 | | | | | | | | |
| **SONM** | **Songino Array** | **26.02** | **325** | P | | **P** | | **14 15 25.4** | **+1.0** |
| | 1.3nm,0.7s,baz=134,slow=9.6,SNR=10.0 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.43** | **257** | LR | | LR | | 14 28 04.5 | |
| | comp=Z,23nm,18.2s,baz=100,slow=38 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **33.20** | **33** | LR | | LR | | 14 30 08.8 | |
| | comp=Z,30nm,18.2s,baz=42,slow=37 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.30** | **310** | P | | **P** | | **14 17 28.9** | **+0.5** |
| | 0.3nm,0.7s,baz=99,slow=8.7,SNR=4.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.79** | **322** | P | | **P** | | **14 17 32.6** | **+0.4** |
| | 0.4nm,0.5s,baz=116,slow=9.8,SNR=2.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.07** | **172** | P | | **P** | | **14 18 30.1** | **-0.6** |
| | 0.2nm,0.6s,baz=355,slow=8.2,SNR=1.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **51.70** | **173** | P | | **P** | | **14 18 57.1** | **-1.2** |
| | 0.2nm,0.9s,baz=1.9,slow=14,SNR=3.9 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.92** | **25** | P | | **P** | | **14 21 42.5** | **-0.3** |
| | 0.2nm,0.7s,baz=304,slow=6.0,SNR=2.6 | | | | | | | | |

*IDC **17** 14:49:13.5±1.9,7°.16S×130°.50E,h0km,mb3.1/1,*
*mb1 3.9/5,mb1mx3.5/30,mbtmpg3.7/5,ML3.9/4,Error*
*ellipse: s-maj=68.7km s-min=25.1km az=87.0*
**ISC 17 14:49:15.0±1.2,7°.16S±0°.07×130°.5E±0°.2,h100km,n14,**
**σ3°99/8,Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.13** | **137** | P | | Pn | | 14 49 43.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GUY2C | Guyana, Caldas | 2.89 | 306 | ⇓*iP* | Pn | 14 50 42.0 | +1.6 |
| GUY2C | | | | *eS* | Sn | 14 51 16.5 | +0.4 |
| GUY2C | | | | *i* | | 14 51 24.4 | |
| | comp=Z,1μm,0.4s | | | | | | |
| MARP | Paez Belalcaza | 3.02 | 257 | *eP* | Pn | 14 50 43.0 | +1.0 |
| MARP | | | | *ePg* | Pb | 14 50 46.6 | -0.9 |
| MARP | | | | *eS* | Sb | 14 51 24.6 | -0.5 |
| MARP | | | | *i* | | 14 51 26.4 | |
| | comp=Z,690nm,0.4s | | | | | | |
| BARC | Barichara | 3.05 | 357 | *eP* | Pn | 14 50 44.0 | +1.7 |
| BARC | | | | *eS* | Sn | 14 51 21.8 | +2.1 |
| BARC | | | | *i* | | 14 51 41.4 | |
| | comp=Z,921nm,0.4s | | | | | | |
| TAMC | Tame, Arauca | 3.13 | 23⇑ | *eP* | Pn | 14 50 46.7 | +3.3 |
| TAMC | | | | *ePg* | Pb | 14 50 51.9 | +2.5 |
| TAMC | | | | *eS* | Sb | 14 51 25.4 | -2.6 |
| TAMC | | | | *eSg* | Sg | 14 51 34.1 | +0.6 |
| TAMC | | | | *i* | | 14 51 47.8 | |
| | comp=Z,2μm,0.5s | | | | | | |
| FLOC | Florencia | 3.27 | 234 | *eP* | Pn | 14 50 46.4 | +1.1 |
| FLOC | | | | *ePg* | Pb | 14 50 52.5 | +0.7 |
| FLOC | | | | *eS* | Sn | 14 51 26.3 | +1.4 |
| PTBC | PUERTO BERRIO, | 3.32 | 334 | *eP* | Pn | 14 50 45.3 | -0.6 |
| PTBC | | | | *ePg* | Pb | 14 50 53.0 | +0.4 |
| PTBC | | | | *eS* | Sn | 14 51 27.1 | +1.0 |
| PTBC | | | | *eSg* | Sb | 14 51 36.4 | +2.9 |
| PTBC | | | | *i* | | 14 51 38.4 | |
| | comp=Z,509nm,0.6s | | | | | | |
| YOTC | Yotoco, Valle | 3.36 | 278 | ⇓*iP* | Pn | 14 50 47.0 | +0.5 |
| YOTC | | | | *ePg* | Pb | 14 50 53.2 | -0.1 |
| YOTC | | | | *eS* | Sn | 14 51 25.1 | -2.1 |
| YOTC | | | | *eSg* | Sb | 14 51 34.0 | -0.7 |
| YOTC | | | | *i* | | 14 51 36.5 | |
| | comp=Z,323nm,0.6s | | | | | | |
| PLMC | San Jos del P | 3.54 | 293 | *eP* | Pn | 14 50 50.1 | +1.1 |
| PLMC | | | | *eS* | Sb | 14 51 39.7 | -0.2 |
| PLMC | | | | *i* | | 14 51 46.8 | |
| | comp=Z,336nm,0.4s | | | | | | |
| PCON | Cinco Dias | 3.59 | 251 | ⇓*eP* | Pn | 14 50 51.3 | +1.2 |
| PCON | | | | *ePg* | Pb | 14 50 57.8 | +0.4 |
| PCON | | | | *eS* | Sb | 14 51 41.6 | -0.1 |
| PCON | | | | *i* | | 14 51 53.5 | |
| | comp=Z,1μm,0.5s | | | | | | |
| BRRC | Barranca, Sant | 3.62 | 349 | *eP* | Pn | 14 50 51.4 | +1.3 |
| BRRC | | | | *eS* | Sn | 14 51 35.2 | +1.7 |
| BRRC | | | | *i* | | 14 51 55.8 | |
| | comp=Z,210nm,0.3s | | | | | | |
| PTLC | Puerto Leguiza | 3.78 | 208 | *eP* | Pb | 14 50 58.6 | -1.8 |
| PTLC | | | | *ePg* | Pg | 14 51 06.2 | +0.8 |
| PTLC | | | | *eS* | Sg | 14 51 58.2 | +3.7 |
| CBOC | Ciudad Bolivar | 3.79 | 308 | *eP* | Pn | 14 50 54.5 | +2.0 |
| CBOC | | | | *eS* | Sn | 14 51 40.9 | +3.1 |
| CBOC | | | | *i* | | 14 51 58.0 | |
| | comp=Z,168nm,0.6s | | | | | | |
| POPC | Popayan, Colom | 3.79 | 255 | ⇓*eP* | Pn | 14 50 54.2 | +1.6 |
| POPC | | | | *ePg* | Pb | 14 51 01.8 | +1.1 |
| POPC | | | | *i* | | 14 52 00.3 | |
| | comp=Z,237nm,0.6s | | | | | | |
| PAMC | Pamplona, Colo | 3.80 | 5 | *eP* | Pn | 14 50 55.0 | +2.1 |
| PAMC | | | | *eS* | Sn | 14 51 42.3 | +3.8 |
| PAMC | | | | *i* | | 14 52 07.0 | |
| | comp=Z,202nm,0.2s | | | | | | |
| SOTA | Rioblanco | 3.85 | 249 | *eP* | Pn | 14 50 55.3 | +1.6 |
| SOTA | | | | *ePg* | Pb | 14 51 03.0 | +1.1 |
| SOTA | | | | *eS* | Sn | 14 51 41.1 | +1.2 |
| SOTA | | | | *i* | | 14 51 58.1 | |
| | comp=Z,554nm,0.5s | | | | | | |
| ZARC | Zaragoza, Cauc | 4.35 | 335 | Pn | Pn | 14 51 00.1 | +0.1 |
| ZARC | Zaragoza, Cauc | 4.35 | 335 | *eP* | Pn | 14 50 60.0 | -0.1 |
| ZARC | | | | *eS* | Sn | 14 51 49.6 | -1.8 |
| ZARC | | | | *i* | | 14 52 16.1 | |
| | comp=Z,190nm,0.5s | | | | | | |
| OCAC | Ocana | 4.69 | 356 | Pn | Pn | 14 51 05.2 | +0.3 |
| OCAC | Ocana | 4.69 | 356 | *eP* | Pn | 14 51 05.8 | +1.0 |
| OCAC | | | | *eS* | Sn | 14 52 02.2 | +2.1 |
| OCAC | | | | *i* | | 14 52 30.6 | |
| | comp=Z,672nm,0.6s | | | | | | |
| UREC | San Jos de Ur | 4.89 | 329 | *eP* | Pn | 14 51 07.2 | -0.3 |
| GCUF | Volcan Galeras | 4.90 | 242 | *eP* | Pb | 14 51 15.7 | -4.0 |
| GCUF | | | | *eS* | Sb | 14 52 22.3 | +2.9 |
| GCUF | | | | *i* | | 14 52 40.0 | |
| | comp=Z,395nm,0.4s | | | | | | |
| ELOV | Elorza | 4.92 | 45 | *eP* | Pn | 14 51 09.2 | +1.3 |
| ELOV | | | | *ePg* | Pg | 14 51 28.3 | +1.1 |
| ELOV | | | | *eS* | Sn | 14 52 04.2 | -1.4 |
| ELOV | | | | *eSg* | Sg | 14 52 29.8 | -1.3 |
| SOCV | Socops | 5.19 | 24⇑ | *eP* | Pn | 14 51 12.3 | +0.7 |
| SOCV | | | | *ePg* | Pg | 14 51 35.6 | +3.3 |
| SOCV | | | | *eS* | Sn | 14 52 10.5 | -1.6 |
| TULM | Tulcn-Chalpat | 5.53 | 240 | *eP* | Pb | 14 51 32.8 | +2.3 |
| TULM | | | | *eS* | Sb | 14 52 42.0 | +4.4 |
| SDV | Santo Domingo | 5.82 | 24 | Pn | Pn | 14 51 22.1 | +1.5 |
| | comp=Z,45nm,0.3s,baz=186,slow=13,SNR=74 | | | | | | |
| SDV | | | | Pg | Pg | 14 51 45.7 | +1.2 |
| | comp=Z,50nm,0.3s,baz=211,slow=17,SNR=13 | | | | | | |
| SDV | | | | Sn | Sn | 14 52 26.5 | -1.5 |
| | comp=Z,61nm,0.3s,baz=264,slow=19,SNR=6.3 | | | | | | |
| SDV | | | | Lg | Lg | 14 53 04.2 | |
| | comp=Z,96nm,0.3s,baz=74,slow=7.8,SNR=9.3 | | | | | | |
| SDV | Santo Domingo | 5.82 | 24 | Pn | Pn | 14 51 22.2 | +1.7 |
| SDV | Santo Domingo | 5.82 | 24 | *eP* | Pn | 14 51 21.9 | +1.4 |
| SDV | | | | *eS* | Sn | 14 52 27.2 | -0.9 |
| SDV | | | | *i* | | 14 53 15.6 | |
| | comp=Z,368nm,0.6s | | | | | | |
| SDV | Santo Domingo | 5.82 | 24 | *eP* | Pn | 14 51 22.0 | +1.5 |
| SDV | | | | *eS* | Sn | 14 52 25.9 | -2.2 |
| MOTC | Monteria, Cord | 5.85 | 333 | Pn | Pn | 14 51 20.7 | 0.0 |
| LL6C | La Loma 6 Bece | 6.17 | 358 | *eP* | Pn | 14 51 26.3 | +1.2 |
| LL6C | | | | *eS* | Sn | 14 52 35.6 | -0.8 |
| LL6C | | | | *i* | | 14 52 47.6 | |
| | comp=Z,52nm,0.5s | | | | | | |
| OTAV | Otavalo | 6.35 | 239 | Pn | Pn | 14 51 29.4 | +1.4 |
| OTAV | Otavalo | 6.35 | 239 | *eP* | Pn | 14 51 33.6 | +5.7 |
| OTAV | | | | *eS* | Sg | 14 53 11.2 | -5.7 |
| OTAV | | | | *i* | | 14 53 22.3 | |
| | comp=Z,34nm,0.5s | | | | | | |
| OTAV | Otavalo | 6.35 | 239 | *eP* | Pn | 14 51 30.2 | +2.3 |
| OTAV | | | | *eS* | Sn | 14 52 47.3 | +6.0 |
| PAC1 | Pacto, Paraso | 6.63 | 241 | *eP* | Pn | 14 51 37.4 | +5.9 |
| SJCC | San Jacinto, C | 6.68 | 341 | Pn | Pn | 14 51 31.6 | -0.6 |
| SJCC | San Jacinto, C | 6.68 | 341 | *eP* | Pn | 14 51 31.8 | -0.5 |
| SJCC | | | | *eS* | Sn | 14 52 44.9 | -4.2 |
| SJCC | | | | *i* | | 14 52 56.5 | |
| | comp=Z,50nm,0.5s | | | | | | |
| CRJC | Cerrejon, Guaj | 7.44 | 1 | *eP* | Pn | 14 51 41.2 | -1.5 |
| CRJC | | | | *eS* | Sn | 14 53 01.7 | -6.2 |
| CRJC | | | | *i* | | 14 53 25.1 | |
| | comp=Z,67nm,0.1s | | | | | | |
| URIC | Uribia, Colomb | 8.18 | 7 | Pn | Pn | 14 51 50.9 | -1.8 |
| TBTG | Tabatinga, AM | 8.27 | 158 | *eP* | Pn | 14 51 60.0 | +6.0 |
| TBTG | | | | *eS* | Sn | 14 53 27.1 | -0.9 |
| TBTG | | | | *eSg* | Sg | 14 54 14.4 | -4.0 |
| BIRV | Birongo | 9.61 | 44 | Pn | Pn | 14 52 12.9 | +0.6 |
| CZSB | Cruzeiro do Su | 11.19 | 178 | *eP* | Pn | 14 52 34.0 | 0.0 |
| ATAH | Atahualpa | 11.88 | 207 | Pn | Pn | 14 52 43.8 | -0.1 |
| | comp=Z,0.4nm,0.3s,baz=21,slow=15,SNR=2.7 | | | | | | |
| ATAH | | | | Sn | Sn | 14 54 45.6 | -12 |
| | comp=Z,0.2nm,0.3s,baz=124,slow=19,SNR=1.6 | | | | | | |
| PTGA | Pitinga | 13.70 | 108 | Pn | Pn | 14 53 11.9 | +3.5 |
| | comp=Z,1.0nm,0.3s,baz=294,slow=18,SNR=7.7 | | | | | | |
| PTGA | | | | Sn | Sn | 14 55 32.0 | -9.5 |
| | comp=Z,0.8nm,0.3s,baz=138,slow=23,SNR=1.5 | | | | | | |
| PTGA | | | | Lg | Lg | 14 57 06.8 | |
| | comp=Z,3.9nm,0.3s,baz=18,slow=23,SNR=12 | | | | | | |
| MACA | Manacapuru-AM | 14.00 | 118 | *eP* | Pn | 14 53 10.2 | -2.3 |
| MACA | | | | *eS* | Sn | 14 55 45.1 | -3.5 |
| ETMB | Extrema | 14.89 | 153 | *eP* | Pn | 14 53 23.7 | -0.9 |
| SDDR | Presa de Saban | 15.45 | 6 | Pn | Pn | 14 53 32.0 | -0.1 |
| SDDR | | | | IAmb | IAmb | 14 53 45.2 | |
| | comp=Z,20nm,0.9s | | | | | | |
| DR12 | Loma Pena Alta | 15.57 | 13 | Pn | Pn | 14 53 31.4 | -2.4 |
| CELP | Cerrillos | 15.77 | 23 | Pn | Pn | 14 53 33.3 | -3.0 |
| CELP | | | | IAmb | IAmb | 14 53 54.7 | |
| | comp=Z,45nm,1.4s | | | | | | |
| NNA | Nana | 15.88 | 194 | LR | LR | 15 01 14.0 | |
| | comp=Z,82nm,20.1s,baz=322,slow=43 | | | | | | |
| PDPR | Patillas Dam, | 15.94 | 25 | Pn | Pn | 14 53 36.7 | -1.8 |
| PDPR | | | | IAmb | IAmb | 14 53 50.7 | |
| | comp=Z,19nm,0.9s | | | | | | |
| SJG | San Juan | 15.97 | 24 | LR | LR | 15 00 06.4 | |
| | comp=Z,40nm,21.5s,baz=178,slow=38 | | | | | | |
| MTP | Monte Pirata | 16.22 | 26 | Pn | Pn | 14 53 40.7 | -1.3 |
| MTP | | | | IAmb | IAmb | 14 53 58.5 | |
| | comp=Z,26nm,0.9s | | | | | | |
| CUPR | Culebra, Puert | 16.52 | 27 | | Pn | 14 53 46.6 | +0.7 |
| CUPR | | | | IAmb | IAmb | 14 53 53.5 | |
| | comp=Z,29nm,0.8s | | | | | | |
| STVI | Saint Thomas | 16.71 | 28 | Pn | Pn | 14 53 47.3 | -1.0 |
| ITTB | Itaituba | 18.96 | 114 | *eP* | P | 14 54 13.6 | -2.1 |
| ITTB | | | | *eS* | Sn | 14 57 46.8 | -2.4 |
| MALB | Monte Alegre | 19.48 | 106 | *eP* | P | 14 54 20.3 | -1.1 |
| LPAZ | La Paz | 20.27 | 166 | P | Pn | 14 54 32.8 | +0.3 |
| | comp=Z,3.1nm,0.6s,baz=336,slow=9.0,SNR=10 | | | | | | |
| LPAZ | La Paz | 20.27 | 166 | P | Pn | 14 54 32.6 | +0.1 |
| LPAZ | La Paz | 20.27 | 166 | *eP* | P | 14 54 30.3 | -0.3 |
| MDP | Montagnes des | 20.37 | 85 | P | Pn | 14 54 37.2 | +4.1 |
| | comp=Z,7.1nm,0.4s,baz=267,slow=11,SNR=10 | | | | | | |
| MDP | | | | LR | LR | 15 02 35.2 | |
| | comp=Z,70nm,20.0s,baz=274,slow=36 | | | | | | |
| NPGB | Novo Progresso | 20.51 | 121 | *eP* | P | 14 54 31.2 | -1.5 |
| VILB | Vilhena | 20.73 | 142 | *eP* | P | 14 54 34.1 | -0.9 |
| MCPB | Macapa, AP | 21.29 | 100 | *eP* | P | 14 54 39.1 | -2.0 |
| PDRB | Porto dos Gac | 22.10 | 133 | *eP* | P | 14 54 48.5 | -1.2 |
| CLDB | Colider | 22.32 | 130 | *eP* | P | 14 54 51.3 | -0.8 |
| SIV | San Ignacio | 22.71 | 149 | P | P | 14 54 59.3 | +3.1 |
| | comp=Z,0.9nm,0.6s,baz=294,slow=14,SNR=1.4 | | | | | | |
| SIV | | | | LR | LR | 15 03 57.8 | |
| | comp=Z,92nm,20.0s,baz=121,slow=37 | | | | | | |
| TKL | Tuckaleechee C | 33.49 | 344 | LR | LR | 15 12 06.8 | |
| | comp=Z,56nm,18.3s,baz=354,slow=40 | | | | | | |
| TXAR | Lajitas Array | 38.78 | 315 | P | P | 14 57 16.2 | -3.1 |
| | comp=Z,0.4nm,0.7s,baz=120,slow=7.6,SNR=4.8 | | | | | | |
| TXAR | Lajitas Array | 38.78 | 315 | P | P | 14 57 19.4 | +0.1 |
| MNTX | Cornudas Mount | 41.36 | 316 | P | P | 14 57 40.2 | -0.4 |
| EYMN | Ely | 47.02 | 343 | P | P | 14 58 24.2 | -1.6 |
| RSSD | Black Hills | 48.82 | 330 | P | P | 14 58 38.7 | -1.3 |
| RSSD | | | | IAmb | IAmb | 14 58 55.5 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| PDAR | Pinedale Array | 50.81 | 326 | P | P | 14 58 56.7 | +1.5 |
| | comp=Z,0.2nm,0.6s,baz=114,slow=11,SNR=1.8 | | | | | | |
| YKA | Yellowknife Ar | 66.38 | 340 | P | P | 15 00 41.5 | -1.5 |
| | comp=Z,0.6nm,0.5s,baz=134,slow=6.2,SNR=19 | | | | | | |
| DBIC | Dimbokro | 67.91 | 84 | P | P | 15 00 56.9 | +3.1 |
| | comp=Z,3.4nm,0.5s,baz=287,slow=5.3,SNR=10 | | | | | | |
| DBIC | Dimbokro | 67.91 | 84 | P | P | 15 00 53.8 | 0.0 |
| ESDC | Sonseca Array | 71.68 | 49 | P | P | 15 01 19.4 | +2.8 |
| | comp=Z,0.4nm,0.8s,baz=248,slow=6.8,SNR=4.0 | | | | | | |
| ESDC | Sonseca Array | 71.68 | 49 | P | P | 15 01 15.2 | -1.4 |
| TORD | Torodi Ar. Bea | 74.32 | 77 | P | P | 15 01 36.4 | +3.7 |
| | comp=Z,1.5nm,0.5s,baz=286,slow=5.9,SNR=10 | | | | | | |
| BCAR | Beaver Creek A | 77.35 | 334 | P | P | 15 01 49.0 | -0.1 |
| ILAR | Eielson Array | 79.98 | 335 | P | P | 15 02 02.9 | -0.6 |
| | comp=Z,0.2nm,0.6s,baz=112,slow=4.8,SNR=1.2 | | | | | | |
| QSPA | South Pole Qui | 93.56 | 180 | P | P | 15 03 11.1 | +0.6 |
| QSPA | | | | IAmb | IAmb | 15 03 23.4 | |
| | comp=Z,3.4nm,1.2s | | | | | | |
| ASAR | Alice Springs | 147.19 | 230 | PKPbc | PKPdf | 15 09 36.5 | -0.1 |
| | comp=Z,0.6nm,0.8s,baz=122,slow=3.9,SNR=7.4 | | | | | | |
| WRA | Warramunga Arr | 148.74 | 236 | PKPbc | PKPdf | 15 09 40.5 | +1.3 |
| | comp=Z,1.0nm,0.9s,baz=98,slow=3.4,SNR=5.5 | | | | | | |

*IDC* ***17*** *14:53:50.8±1.1,3°.55N×126°.63E,h0km,mb3.7/5, mb1 3.8/6,mb1mx3.5/35,mbtmp3.7/6,ML3.5/1,Error ellipse: s-maj=84.2km s-min=18.7km az=64.0*

**ISC 17 14:53:57.1±1.0,3°.7N±0°.3×126°.9E±0°.4,h50km,n6,σ0.9s67/6, mb3.9/5,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 6.26 | 136 | Pn | | Pn | Pn | 14 55 27.2 | +0.2 |
| | 1.0nm,0.3s,baz=130,slow=19,SNR=1.7 | | | | | | | | |
| WRA | Warramunga Arr | 24.57 | 163 | P | | P | P | 14 59 12.2 | -0.4 |
| | 2.7nm,0.6s,baz=344,slow=12,SNR=14 | | | | | | | | |
| ASAR | Alice Springs | 28.01 | 166 | P | | P | P | 14 59 44.3 | +0.7 |
| | 0.4nm,0.4s,baz=335,slow=10,SNR=6.3 | | | | | | | | |
| STKA | Stephens Creek | 38.01 | 160 | P | | P | P | 15 01 09.8 | -0.7 |
| | 1.5nm,0.6s,baz=340,slow=8.3,SNR=5.9 | | | | | | | | |
| SONM | Songino Array | 47.41 | 341 | P | | P | P | 15 02 26.5 | -0.2 |
| | 0.2nm,0.6s,baz=156,slow=7.9,SNR=2.1 | | | | | | | | |
| MKAR | Makanchi Array | 57.71 | 325 | P | | P | P | 15 03 43.0 | +0.2 |
| | 0.7nm,0.5s,baz=119,slow=8.0,SNR=16 | | | | | | | | |

*IDC* ***17*** *14:58:17.2±1.3,3°.68N×126°.93E,h0km,mb3.6/6, mb1 3.8/6,mb1mx3.5/34,mbtmp3.6/6,MS3.4/4,Ms1 3.4/4, ms1mx2.6/58,Error ellipse: s-maj=103.2km s-min=18.7km az=70.0*

**ISC 17 14:58:23.8±1.1,3°.6N±0°.1×126°.8E±0°.5,h48km,n10, σ0.9s98/8,mb3.6/6,MS3.7/3,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 6.28 | 135 | LR | | LR | LR | 15 01 54.8 | |
| | comp=Z,34nm,18.9s,baz=185,slow=35 | | | | | | | | |
| FITZ | Fitzroy Crossi | 21.59 | 183 | P | | P | P | 15 03 10.9 | +1.3 |
| | 0.7nm,0.4s,baz=348,slow=11,SNR=1.6 | | | | | | | | |
| FITZ | | | | S | | S | S | 15 07 05.0 | -1.5 |
| | 1.1nm,1.0s,baz=240,slow=19,SNR=0.9 | | | | | | | | |
| WRA | Warramunga Arr | 24.53 | 163 | P | | P | P | 15 03 38.8 | -0.3 |
| | 2.0nm,0.7s,baz=341,slow=11,SNR=13 | | | | | | | | |
| ASAR | Alice Springs | 27.96 | 166 | P | | P | P | 15 04 10.9 | +0.9 |
| | 0.3nm,0.4s,baz=338,slow=10,SNR=2.5 | | | | | | | | |
| STKA | Stephens Creek | 37.97 | 159 | P | | P | P | 15 05 36.8 | -0.3 |
| | 0.5nm,0.4s,baz=339,slow=14,SNR=4.0 | | | | | | | | |
| SONM | Songino Array | 47.45 | 341 | P | | P | P | 15 06 54.0 | +0.1 |
| | 0.3nm,0.6s,baz=147,slow=8.1,SNR=1.8 | | | | | | | | |
| MKAR | Makanchi Array | 57.72 | 325 | P | | P | P | 15 08 09.5 | -0.3 |
| | 0.6nm,0.5s,baz=118,slow=7.6,SNR=11 | | | | | | | | |
| MKAR | | | | PcP | | PcP | PcP | 15 09 02.0 | -0.2 |
| | 0.3nm,0.7s,baz=116,slow=3.4,SNR=2.0 | | | | | | | | |
| ZALV | Zalesovo Beam | 60.75 | 333 | LR | | LR | LR | 15 35 44.6 | |
| | comp=Z,53nm,18.2s,baz=349,slow=37 | | | | | | | | |
| ATD | Arta Tunnel | 83.40 | 281 | LR | | LR | LR | 15 44 27.3 | |
| | comp=Z,38nm,22.0s,baz=76,slow=33 | | | | | | | | |
| EIL | Elat | 89.87 | 300 | LR | | LR | LR | 15 54 57.6 | |
| | comp=Z,50nm,21.8s,baz=38,slow=38 | | | | | | | | |

**IDC 17 15:06:15.8±2.2,1°.32N×126°.67E,h0km,mb3.4/3, mb1 3.7/3,mb1mx3.2/33,mbtmp3.5/3,Error ellipse: s-maj=180.2km s-min=26.5km az=66.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 22.43 | 161 | P | | P | P | 15 11 15.5 | -0.9 |
| | 0.6nm,0.4s,baz=339,slow=12,SNR=12 | | | | | | | | |
| ASAR | Alice Springs | 25.81 | 165 | P | | P | P | 15 11 49.7 | +0.7 |
| | 0.6nm,0.5s,baz=346,slow=11,SNR=18 | | | | | | | | |
| MKAR | Makanchi Array | 59.50 | 326 | P | | P | P | 15 16 20.7 | -0.2 |
| | 0.2nm,0.5s,baz=131,slow=7.7,SNR=4.0 | | | | | | | | |

*NOU* ***17*** *15:10:33.6,43°.57S×172°.88E,h5km,MLv4.1/7,South Island, New Zealand*
*WEL* ***17*** *15:10:34.5±0.3,43°.5±0.1°×17°.3E±1°,h10km±2km,M3.7/26, ML3.9/33,MLv3.7/26,Error ellipse: s-maj=0.0km s-min=0.0km az=127.7*

**ISC 17 15:10:34.5±1.0,43°.51S±0°.03×172°.83E±0°.04,h17km±9km, n51,σ0.8s80/57,South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.23 | 214 | P | | Pg | Pg | 15 10 40.4 | +0.6 |
| MQZ | | | | S | | Sg | Sg | 15 10 44.3 | +0.9 |
| OKCZ | Okains Bay | 0.27 | 142 | P | | Pn | Pn | 15 10 42.7 | -1.0 |
| AMCZ | Amberley | 0.36 | 338 | P | | Pg | Pg | 15 10 41.4 | -0.6 |
| AKCZ | Akaroa Harbour | 0.36 | 171 | P | | Pn | Pn | 15 10 44.1 | -1.0 |
| RACZ | Rakaia | 0.55 | 247 | P | | Pb | Pb | 15 10 45.6 | 0.0 |
| GVZ | Greta Valley S | 0.56 | 15 | P | | Pb | Pb | 15 10 46.3 | +0.4 |
| OXZ | Oxford | 0.61 | 288 | P | | Pg | Pg | 15 10 45.5 | -1.1 |
| OXZ | | | | S | | Sg | Sg | 15 10 53.2 | -1.5 |
| LTZ | Lake Taylor | 0.84 | 330 | P | | Pg | Pg | 15 10 50.0 | -0.8 |
| LTZ | | | | S | | Sg | Sg | 15 11 01.3 | -0.6 |
| WACZ | Wakanui South | 0.84 | 239 | P | | Pn | Pn | 15 10 51.5 | -0.1 |
| WACZ | | | | S | | Sb | Sb | 15 11 03.3 | +1.6 |
| MHCZ | Mount Hutt | 0.92 | 268 | P | | Pg | Pg | 15 10 51.8 | -0.6 |
| MHCZ | | | | S | | Sg | Sg | 15 11 04.1 | -0.4 |
| KHZ | Kahutara | 1.21 | 26 | P | | Pb | Pb | 15 10 56.6 | -0.4 |
| KHZ | Kahutara | 1.21 | 26 | P | | Pb | Pb | 15 10 57.1 | +0.1 |
| ARCZ | Arundel | 1.28 | 250 | P | | Pn | Pn | 15 10 57.2 | -0.4 |
| INZ | Inchbonnie | 1.29 | 307 | P | | Pn | Pn | 15 10 57.3 | -0.4 |
| RPZ | Rata Peaks | 1.31 | 260 | P | | Pn | Pn | 15 10 57.6 | -0.5 |
| RPZ | | | | S | | Sg | Sg | 15 11 16.1 | -0.7 |
| RPZ | Rata Peaks | 1.31 | 260 | P | | Pn | Pn | 15 10 57.7 | -0.4 |
| TMZ | Timaru | 1.58 | 236 | P | | Pn | Pn | 15 11 01.9 | +0.1 |
| WVZ | Waitaha Valley | 1.59 | 285 | P | | P | Pn | 15 11 02.3 | +0.4 |
| THZ | Tophouse | 1.75 | 2 | P | | P | Pn | 15 11 04.0 | -0.2 |
| GCSZ | Gaunt Creek Bo | 1.84 | 275 | P | | P | Pb | 15 11 07.2 | -0.4 |
| DSZ | Denniston Nort | 1.92 | 336 | P | | P | Pn | 15 11 06.7 | +0.1 |
| BSWZ | Blackbirch Sta | 1.95 | 24 | P | | P | Pn | 15 11 07.3 | +0.4 |
| LBZ | Lake Benmore | 2.10 | 245 | P | | P | Pn | 15 11 09.5 | +0.5 |
| MRNZ | Matariki Terra | 2.11 | 358 | P | | P | Pn | 15 11 09.8 | +0.7 |
| ODZ | Otahua Downs | 2.19 | 225 | P | | P | Pn | 15 11 10.4 | +0.2 |
| ODZ | Otahua Downs | 2.19 | 225 | P | | P | Pn | 15 11 10.7 | +0.5 |
| FOZ | Fox Glacier | 2.19 | 268 | P | | P | Pn | 15 11 11.5 | +1.3 |
| TUWZ | Tuamarina | 2.24 | 22 | P | | P | Pn | 15 11 10.7 | -0.1 |
| NNZ | Nelson | 2.33 | 10 | P | | P | Pn | 15 11 12.6 | +0.6 |
| SNZO | South Karori | 2.60 | 33 | P | | P | Pn | 15 11 15.8 | 0.0 |
| QRZ | Quartz Range | 2.69 | 355 | P | | P | Pn | 15 11 18.2 | +1.2 |
| QRZ | Quartz Range | 2.69 | 355 | P | | P | Pn | 15 11 18.6 | +1.5 |
| DUWZ | D'Urville Isla | 2.83 | 17 | P | | P | Pn | 15 11 20.5 | +1.5 |
| HHSZ | Highcliff Hill | 2.86 | 213 | P | | P | Pn | 15 11 19.7 | +0.4 |
| CAW | Cannon Point | 2.92 | 35 | P | | P | Pn | 15 11 19.8 | -0.4 |
| JCZ | Jackson Bay | 2.98 | 258 | P | | P | Pn | 15 11 21.7 | +0.5 |
| WKZ | Wanaka | 3.04 | 243 | P | | P | Pn | 15 11 22.4 | +0.5 |
| EAZ | Earnscleugh | 3.06 | 235 | P | | P | Pn | 15 11 22.1 | +0.1 |
| KIW | Kapiti Island | 3.07 | 31 | P | | P | Pn | 15 11 22.2 | -0.1 |
| MTW | Mount Morrison | 3.07 | 41 | P | | P | Pn | 15 11 21.9 | -0.4 |
| OGWZ | Otaki Gorge | 3.21 | 34 | P | | P | Pn | 15 11 23.6 | -0.5 |
| TUZ | Tuapeka | 3.34 | 222 | P | | P | Pn | 15 11 26.3 | +0.3 |
| MRZ | Mangatainoka R | 3.51 | 37 | P | | P | Pn | 15 11 27.6 | -0.7 |
| BFZ | Birch Farm | 3.80 | 43 | P | | P | Pn | 15 11 32.6 | +0.3 |
| BFZ | Birch Farm | 3.80 | 43 | P | | P | Pn | 15 11 33.2 | +0.9 |
| SYZ | Scrubby Hill | 4.00 | 220 | P | | P | Pn | 15 11 35.7 | +0.7 |
| WHZ | Wether Hill Ro | 4.22 | 234 | P | | P | Pn | 15 11 37.2 | -0.9 |
| VRZ | Vera Road | 4.62 | 19 | P | | P | Pn | 15 11 45.5 | +2.0 |
| APZ | The Paps | 4.77 | 224 | P | | P | Pn | 15 11 45.8 | +0.2 |
| HIZ | Hauiti | 5.22 | 18 | P | | P | Pn | 15 11 53.1 | +1.2 |
| HIZ | Hauiti | 5.22 | 18 | P | | P | Pn | 15 11 53.3 | +1.4 |

*IDC* ***17*** *15:11:11.7±1.0,1°.76N×127°.68E,h0km,mb3.7/6, mb1 3.8/7,mb1mx3.6/32,mbtmp3.7/7,ML3.6/1,Error ellipse: s-maj=76.0km s-min=16.9km az=65.0*

**ISC 17 15:11:22.5±1.0,2°.0N±0°.2×128°.5E±0°.3,h100km,n7, σ0.9s79/8,mb3.7/6,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 3.95 | 136 | Pn | | Pn | Pn | 15 12 21.4 | +0.4 |
| | 2.9nm,0.3s,baz=285,slow=23,SNR=22 | | | | | | | | |
| SIJI | | | | Sn | | Sn | Sn | 15 13 06.1 | -0.3 |
| | 2.0nm,0.3s,baz=200,slow=22,SNR=6.4 | | | | | | | | |
| WRA | Warramunga Arr | 22.55 | 166 | P | | P | P | 15 16 13.2 | -1.3 |
| | 1.1nm,0.6s,baz=345,slow=12,SNR=9.0 | | | | | | | | |
| ASAR | Alice Springs | 26.05 | 169 | P | | P | P | 15 16 46.6 | -0.1 |
| | 0.3nm,0.5s,baz=342,slow=10,SNR=9.4 | | | | | | | | |
| STKA | Stephens Creek | 35.91 | 161 | P | | P | P | 15 18 13.8 | +0.6 |
| | 0.9nm,0.7s,baz=339,slow=8.6,SNR=4.1 | | | | | | | | |
| SONM | Songino Array | 49.50 | 340 | P | | P | P | 15 20 02.9 | -0.1 |
| | 0.5nm,0.7s,baz=153,slow=8.3,SNR=5.2 | | | | | | | | |
| MKAR | Makanchi Array | 59.99 | 325 | P | | P | P | 15 21 19.3 | +0.7 |
| | 1.5nm,0.5s,baz=117,slow=8.3,SNR=26 | | | | | | | | |
| ZALV | Zalesovo Beam | 62.94 | 333 | P | | P | P | 15 21 37.6 | -0.7 |
| | 0.4nm,0.4s,baz=111,slow=7.9,SNR=2.4 | | | | | | | | |

*SJA* ***17*** *15:22:25.1±0.8,30°.46S×72°.65W,h15km,ML4.2,MW4.2*
*IDC* ***17*** *15:22:30.1±1.9,30°.71S×71°.77W,h0km,mb4.3/2, mb1 4.1/6,mb1mx3.8/37,mbtmp4.0/6,ML3.6/4,MS3.4/3, Ms1 3.4/3,ms1mx2.9/52,Error ellipse: s-maj=66.0km s-min=29.6km az=105.0*
*GUC* ***17*** *15:22:31.9±0.8,30°.63S×72°.07W,h34km±3km,ML4.1*
*NEIC* ***17*** *15:22:31.2±1.7,30°.52S±0°.04×72°.10W±0°.04,h11km±7km, mb4.3/2,ML4.1(GUC),Error ellipse: s-maj=6.6km s-min=4.8km az=199.0*

**ISC 17 15:22:30.3±1.4,30°.58S±0°.02×72°.12W±0°.04,h4km±9km, n92,σ2.8s06/126,mb4.3/3,4D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| CO06 | Fray Jorge | 0.42 | 102 | | | | Pg | 15 22 39.9 | +1.5 |
| CO06 | | | | Sg | | Sg | Sg | 15 22 44.8 | +0.8 |
| CO06 | Fray Jorge | 0.42 | 102 | ⇓*eP* | | Pg | Pg | 15 22 40.0 | +1.5 |
| CO06 | | | | *eS* | | Sg | Sg | 15 22 46.1 | +2.1 |
| CO06 | | | | IAML | | | | 15 22 49.7 | |
| | comp=E,11μm,0.3s | | | | | | | | |
| CO05 | La Serena | 1.01 | 49 | | | | Pg | 15 22 49.8 | +0.2 |
| CO05 | La Serena | 1.01 | 49 | ⇓*eP* | | Pg | Pg | 15 22 49.9 | +0.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MT02 | | | | | *e*P | Pb | 15 23 17.0 | -3.8 | |
| MT02 | | | | | *e*P | Pb | 15 23 17.0 | -3.8 | |
| MT02 | | | | | IAML | | 15 24 09.7 | | |
| | comp=Z,314nm,0.5s | | | | | | | | |
| **PEL** | **Peldehue** | **2.83** | **155** | Pn | **Pn** | | **15 23 16.6** | **+0.2** | |
| **PEL** | **Peldehue** | **2.83** | **155** | *e*P | **Pn** | | **15 23 16.5** | **+0.2** | |
| PEL | | | | *e*S | **Sn** | | **15 23 48.7** | **-2.1** | |
| PEL | | | | IAML | | | 15 24 10.0 | | |
| | comp=E,676nm,0.7s | | | | | | | | |
| **PEL** | **Peldehue** | **2.83** | **155** | *e*P | **Pn** | | **15 23 15.5** | **-0.8** | |
| PEL | | | | *e*P | **Pb** | | **15 23 20.6** | **-0.8** | |
| PEL | | | | *e*S | **Sg** | | **15 23 59.8** | **-1.3** | |
| **AUSP** | **Uspallata** | **2.85** | **126** | *e*P | **Pn** | | **15 23 14.5** | **-2.3** | |
| AUSP | | | | *e*P | **Pb** | | **15 23 20.0** | **-1.9** | |
| AUSP | | | | *e*S | **Sb** | | **15 24 00.3** | **+3.0** | |
| **MT05** | **Renca** | **3.03** | **158** | *e*P | **Pb** | | **15 23 24.0** | **-0.9** | |
| MT05 | | | | *e*S | **Sn** | | **15 23 55.7** | **-0.3** | |
| MT05 | | | | IAML | | | 15 24 10.9 | | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **MT05** | **Renca** | **3.03** | **158** | *e*P | **Pn** | | **15 23 21.5** | **+2.3** | |
| MT05 | | | | *e*S | **Sb** | | **15 24 00.0** | **-2.3** | |
| MT05 | | | | IAML | | | 15 24 10.0 | | |
| | comp=Z,489nm,1.1s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.09** | **172** | IAML | | | 15 24 26.7 | | |
| | comp=E,623nm,0.3s | | | | | | | | |
| **ZON** | **Zonda** | **3.10** | **109** | *e*P | **Pn** | | **15 23 21.8** | **+1.7** | |
| ZON | | | | *e*S | **Sb** | | **15 24 06.5** | **+2.2** | |
| ZON | | | | IAML | | | 15 24 13.1 | | |
| | comp=Z,416nm,0.7s | | | | | | | | |
| **RTLL** | **Cerro Villicun** | **3.21** | **104** | *e*P | **Pn** | | **15 23 24.0** | **+2.4** | |
| RTLL | | | | *e*S | **Sn** | | **15 24 05.0** | **+4.6** | |
| **MT09** | **Talagante** | **3.32** | **164** | Pn | **Pn** | | **15 23 24.5** | **+1.2** | |
| **MT09** | **Talagante** | **3.32** | **164** | ⇓*e*P | **Pn** | | **15 23 24.4** | **+1.2** | |
| MT09 | | | | *e*S | **Sn** | | **15 24 02.1** | **-1.1** | |
| MT09 | | | | IAML | | | 15 24 26.0 | | |
| | comp=E,530nm,0.6s | | | | | | | | |
| **MT01** | **Popeta** | **3.35** | **168** | | **Pn** | | **15 23 22.2** | **-1.3** | |
| **MT01** | **Popeta** | **3.35** | **168** | *e*P | Pn | | 15 23 14.5 | -9.0 | |
| MT01 | | | | IAML | | | 15 24 32.2 | | |
| | comp=Z,205nm,0.6s | | | | | | | | |
| **GO03** | **Copiap** | **3.40** | **29** | Pn | **Pn** | | **15 23 23.0** | **-1.2** | |
| **GO03** | **Copiap** | **3.40** | **29** | *e*P | **Pn** | | **15 23 23.3** | **-1.0** | |
| GO03 | | | | *e*S | **Sb** | | **15 24 12.5** | **-0.5** | |
| **ASAL** | **Salagasta** | **3.44** | **126** | *e*P | **Pn** | | **15 23 28.8** | **+4.0** | |
| ASAL | | | | *e*S | **Sb** | | **15 24 13.6** | **-0.5** | |
| **ARCO** | **CERRO ARCO** | **3.52** | **131** | *e*P | **Pn** | | **15 23 25.5** | **-0.5** | |
| ARCO | | | | *e*P | Pb | | 15 23 30.0 | -3.4 | |
| ARCO | | | | IAML | | | 15 24 34.6 | | |
| | comp=Z,265nm,0.6s | | | | | | | | |
| **BO04** | **La Punta** | **3.63** | **160** | | **Pn** | | **15 23 28.5** | **+1.2** | |
| **LMEL** | **Las Melosas** | **3.63** | **154** | Pn | **Pn** | | **15 23 28.1** | **+0.6** | |
| **AAGR** | **Agrelo** | **3.75** | **133** | *e*P | **Pn** | | **15 23 33.0** | **+4.0** | |
| AAGR | | | | *e*S | **Sg** | | **15 24 28.5** | **-2.2** | |
| **VCA** | **Vinchina** | **3.87** | **63** | *e*P | **Pn** | | **15 23 28.5** | **-2.2** | |
| VCA | | | | *e*P | Pb | | 15 23 34.0 | -5.2 | |
| VCA | | | | *e*S | **Sb** | | **15 24 23.9** | **-2.6** | |
| VCA | | | | *e*S | **Sg** | | **15 24 28.5** | **-6.1** | |
| VCA | | | | IAML | | | 15 24 38.2 | | |
| | comp=Z,642nm,0.7s | | | | | | | | |
| **BO01** | **Tunca** | **3.90** | **167** | Pn | **Pn** | | **15 23 32.8** | **+1.8** | |
| **BO01** | **Tunca** | **3.90** | **167** | *e*P | **Pn** | | **15 23 33.0** | **+2.0** | |
| BO01 | | | | *e*S | **Sb** | | **15 24 25.5** | **-1.6** | |
| **BO02** | **Sierra Bellavi** | **4.34** | **165** | Pn | **Pn** | | **15 23 38.9** | **+1.6** | |
| **BO02** | **Sierra Bellavi** | **4.34** | **165** | *e*P | **Pn** | | **15 23 39.0** | **+1.8** | |
| BO02 | | | | *e*S | **Sb** | | **15 24 38.0** | **-2.1** | |
| BO02 | | | | IAML | | | 15 24 54.7 | | |
| | comp=Z,230nm,0.6s | | | | | | | | |
| **GO05** | **Huala** | **4.42** | **178** | Pn | **Pn** | | **15 23 38.2** | **+0.1** | |
| **AC02** | **Maricunga** | **4.56** | **36** | Pn | **Pn** | | **15 23 40.1** | **-0.5** | |
| **AC02** | **Maricunga** | **4.56** | **36** | *e*P | **Pn** | | **15 23 40.7** | **+0.1** | |
| AC02 | | | | *e*S | **Sb** | | **15 24 48.0** | **+1.2** | |
| AC02 | | | | IAML | | | 15 25 00.0 | | |
| | comp=Z,161nm,0.7s | | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.62** | **77** | *e*P | **Pn** | | **15 23 38.0** | **-3.1** | |
| ACLC | | | | *e*P | Pb | | 15 23 43.0 | -9.1 | |
| ACLC | | | | *e*S | **Sb** | | **15 24 44.0** | **-4.2** | |
| ACLC | | | | IAML | | | 15 24 55.2 | | |
| | comp=Z,272nm,0.9s | | | | | | | | |
| **ACHE** | **Chepes** | **4.72** | **98** | *e*P | **Pn** | | **15 23 44.0** | **+1.6** | |
| ACHE | | | | *e*S | **Sn** | | **15 24 44.5** | **+6.8** | |
| **APLL** | **PUNTA DE LOS L** | **4.83** | **89** | *e*P | **Pn** | | **15 23 45.0** | **+1.2** | |
| **RFA** | **San Rafael** | **5.18** | **145** | *e*P | **Pn** | | **15 23 51.5** | **+2.8** | |
| **PB14** | **IPOC Station P** | **6.13** | **15** | Pn | **Pn** | | **15 23 58.7** | **-3.2** | |
| **BI05** | **Punta Hualpn** | **6.21** | **188** | Pn | **Pn** | | **15 24 01.8** | **-0.9** | |
| **H03N1** | **Juan Fernandez** | **6.44** | **242** | Pn | **Pn** | | **15 24 04.0** | **-1.6** | |
| | baz=354 | | | | | | | | |
| H03N1 | | | | Sn | **Sn** | | **15 25 20.1** | **+0.7** | |
| | baz=208 | | | | | | | | |
| H03N1 | | | | T | T | | 15 31 05.8 | | |
| | baz=70,slow=72,SNR=478 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.45** | **242** | Pn | **Pn** | | **15 24 05.2** | **-0.6** | |
| | baz=354,slow=74 | | | | | | | | |
| H03N2 | | | | Sn | **Sn** | | **15 25 23.2** | **+3.4** | |
| | baz=208 | | | | | | | | |
| H03N2 | | | | T | T | | 15 31 04.0 | | |
| | baz=70,slow=72,SNR=583 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.45** | **242** | Pn | **Pn** | | **15 24 04.2** | **-1.7** | |
| | baz=354,slow=74 | | | | | | | | |
| H03N3 | | | | Sn | **Sn** | | **15 25 17.1** | **-2.8** | |
| | baz=208 | | | | | | | | |
| H03N3 | | | | T | T | | 15 31 04.5 | | |
| | baz=70,slow=72,SNR=442 | | | | | | | | |
| **LC01** | **Cunco** | **8.30** | **179** | Pn | **Pn** | | **15 24 32.7** | **+1.3** | |
| **LVC** | **Limon Verde** | **8.44** | **21** | Pn | **Pn** | | **15 24 35.9** | **+2.1** | |
| | comp=Z,0.3nm,0.3s,baz=284,slow=6.6,SNR=3.0 | | | | | | | | |
| LVC | | | | Sn | **Sn** | | **15 26 14.9** | **+5.1** | |
| | comp=Z,0.6nm,0.3s,baz=355,slow=23,SNR=1.5 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.21** | **173** | Pn | **Pn** | | **15 24 57.3** | **-0.4** | |
| | comp=Z,0.1nm,0.3s,baz=335,slow=12,SNR=4.9 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.21** | **173** | Pn | **Pn** | | **15 24 58.6** | **+0.9** | |
| **GO01** | **Chusmiza** | **11.19** | **14** | *e*P | **Pn** | | **15 25 11.3** | **-0.2** | |
| **CPUP** | **Villa Florida** | **13.68** | **76** | LR | LR | | 15 31 07.0 | | |
| | comp=Z,102nm,21.2s,baz=240,slow=38 | | | | | | | | |
| **LPAZ** | **La Paz** | **14.69** | **15** | Pn | **Pn** | | **15 26 01.0** | **+1.5** | |
| | comp=Z,0.1nm,0.3s,baz=180,slow=10,SNR=2.7 | | | | | | | | |
| **SIV** | **San Ignacio** | **17.70** | **37** | P | **Pn** | | **15 26 37.3** | **-0.5** | |
| | comp=Z,0.5nm,0.3s,baz=216,slow=11,SNR=17 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.61** | **61** | P | **P** | | **15 28 08.6** | **-1.5** | |
| | comp=Z,4.5nm,0.6s,baz=248,slow=6.7,SNR=5.8 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.61** | **61** | P | **P** | | **15 28 09.6** | **-0.6** | |
| BDFB | | | | IAmb | IAmb | | 15 28 09.9 | | |
| | comp=Z,5.4nm,1.0s | | | | | | | | |
| **PTGA** | **Pitinga** | **31.85** | **23** | LR | LR | | 15 41 53.2 | | |
| | comp=Z,58nm,19.9s,baz=89,slow=36 | | | | | | | | |
| **MDP** | **Montagnes des** | **40.08** | **31** | LR | LR | | 15 48 27.4 | | |
| | comp=Z,81nm,18.2s,baz=284,slow=39 | | | | | | | | |
| **SNAA** | **Sanae** | **54.77** | **159** | P | **P** | | **15 32 01.0** | **+0.2** | |
| SNAA | | | | IAmb | IAmb | | 15 32 21.8 | | |
| | comp=Z,4.5nm,1.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.12** | **70** | P | **P** | | **15 34 56.8** | **-0.9** | |
| | comp=Z,1.4nm,0.7s,baz=258,slow=4.8,SNR=8.8 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.68** | **272** | T | T | | 18 00 16.1 | | |
| | baz=115,slow=74 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.69** | **272** | T | T | | 18 00 20.0 | | |
| | baz=115 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.70** | **272** | T | T | | 18 00 17.3 | | |
| | baz=115,slow=74 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.01** | **273** | T | T | | 18 00 45.7 | | |
| | baz=116 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.02** | **273** | T | T | | 18 00 38.3 | | |
| | baz=116 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.03** | **273** | T | T | | 18 00 49.1 | | |
| | baz=116 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.32** | **29** | PKPbc | **PKiKP** | | **15 42 25.0** | **-0.2** | |
| | comp=Z,10nm,0.8s,baz=299,slow=3.4,SNR=34 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **154.45** | **43** | PKPbc | **PKPbc** | | **15 42 31.2** | **-0.7** | |
| | comp=Z,0.4nm,0.8s,baz=339,slow=1.0,SNR=4.0 | | | | | | | | |

*IDC* ***17*** *15:26:26.7±0.5, 13°.11S×66°.60E, h0km, mb4.3/20, mb1 4.4/20, mb1mx4.1/52, mbtmp4.3/20, MS4.0/18, Ms1 4.0/18, ms1mx3.6/70, Error ellipse: s-maj=17.9km s-min=14.2km az=6.0*

*NEIC* ***17*** *15:26:29.6±2.0, 13°.1S±0°.1×66°.6E±0°.1, h10km±1km, mb4.7/32, Error ellipse: s-maj=19.9km s-min=17.8km az=158.0*

**ISC 17 15:26:28.4**±0.4,**13°.16S**±0°.10×**66°.56E**±0°.08,**h10**km,**n112,** σ1ᵍ**17**/102,**mb4.6**/44,**MS4.1**/21,**5C-11D, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S1** | **Diego Carcia H** | **7.99** | **47** | T | T | 15 36 34.0 | |
| | baz=227,slow=76,SNR=736 | | | | | | |
| **H08S2** | **Diego Garcia H** | **8.00** | **47** | T | T | 15 36 30.2 | |
| | baz=227,slow=76,SNR=1054 | | | | | | |
| **H08S3** | **Diego Garcia H** | **8.01** | **47** | T | T | 15 36 39.3 | |
| | baz=227,slow=76,SNR=1418 | | | | | | |
| **ABPO** | **Ambohimpanom** | **19.46** | **250** | P | **Pn** | **15 30 56.8** | **-0.1** |
| **VOI** | **Vohitsoka** | **20.74** | **242** | P | Pn | 15 31 11.5 | -0.4 |
| **PALK** | **Pallekele** | **24.69** | **35** | LR | LR | 15 39 17.1 | |
| | comp=Z,574nm,21.4s,baz=314,slow=31 | | | | | | |
| **PSI** | **Prapat** | **35.82** | **66** | LR | LR | 15 46 04.9 | |
| | comp=Z,378nm,18.5s,baz=248,slow=33 | | | | | | |
| **WSAR** | **Wadi Sarin** | **37.00** | **348** | P | **P** | **15 33 36.5** | **-1.9** |
| | 4.6nm,0.9s,baz=153,slow=11,SNR=2.4 | | | | | | |
| WSAR | | | | LR | LR | 15 45 20.2 | |
| | comp=Z,88nm,18.8s,baz=166,slow=31 | | | | | | |
| **MATP** | **Matopo** | **37.08** | **254** | LR | LR | 15 47 05.9 | |
| | comp=Z,125nm,21.2s,baz=72,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **37.23** | **262** | P | **P** | **15 33 41.5** | **+0.9** |
| | 2.2nm,0.6s,baz=101,slow=8.5,SNR=5.3 | | | | | | |
| LSZ | | | | LR | LR | 15 47 03.7 | |
| | comp=Z,365nm,21.7s,baz=140,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **37.23** | **262** | P | **P** | **15 33 41.4** | **+0.8** |
| **MBAR** | **Mbarara** | **37.62** | **286** | LR | LR | 15 46 49.0 | |
| | comp=Z,170nm,21.8s,baz=104,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **40.32** | **247** | P | **P** | **15 34 06.3** | **-0.2** |
| | 6.4nm,0.8s,baz=71,slow=7.9,SNR=7.9 | | | | | | |
| LBTB | | | | LR | LR | 15 48 47.0 | |
| | comp=Z,382nm,19.7s,baz=87,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **40.32** | **247** | P | **P** | **15 34 07.2** | **+0.7** |
| LBTB | | | | IAmb | IAmb | 15 34 09.7 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **LEM** | **Lembang** | **40.88** | **85** | LR | LR | 15 47 26.9 | |
| | comp=Z,159nm,20.7s,baz=62,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **41.31** | **242** | P | **P** | **15 34 14.7** | **0.0** |
| | comp=Z,6.4nm,0.9s,baz=108,slow=7.7,SNR=6.2 | | | | | | |
| BOSA | | | | LR | LR | 15 48 59.6 | |
| | comp=Z,251nm,18.8s,baz=57,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **41.31** | **242** | P | **P** | **15 34 15.6** | **+0.9** |
| BOSA | | | | IAmb | IAmb | 15 34 29.7 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **44.80** | **46** | P | **P** | **15 34 44.0** | **+1.2** |
| CM31 | | | | IAmb | IAmb | 15 34 52.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.80** | **46** | P | **P** | **15 34 43.2** | **+0.4** |
| | comp=Z,3.5nm,0.9s,baz=238,slow=8.8,SNR=27 | | | | | | |
| CMAR | | | | LR | LR | 15 50 52.7 | |
| | comp=Z,126nm,21.8s,baz=110,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.80** | **46** | P | **P** | **15 34 42.9** | **+0.1** |
| **CHTO** | **Chiang Mai** | **45.03** | **46** | P | **P** | **15 34 44.9** | **+0.2** |
| CHTO | | | | IAmb | IAmb | 15 34 53.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **SHL** | **Shillong** | **45.72** | **33** | P | **P** | **15 34 51.0** | **+0.8** |
| **SUR** | **Sutherland** | **45.92** | **238** | LR | LR | 15 52 18.5 | |
| | comp=Z,200nm,18.6s,baz=90,slow=34 | | | | | | |
| **KBL** | **Kabul** | **47.50** | **3** | P | **P** | **15 35 03.9** | **-0.1** |
| KBL | | | | IAmb | IAmb | 15 35 13.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **UBPT** | **Khong Chiam** | **47.76** | **55** | P | **P** | **15 35 06.6** | **+0.5** |
| **SBUM** | **Sibu** | **47.89** | **74** | P | **P** | **15 35 07.6** | **+0.4** |
| SBUM | | | | IAmb | IAmb | 15 35 16.1 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **51.34** | **107** | P | **P** | **15 35 33.1** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 15 35 35.1 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **KMI** | **Kunming** | **51.89** | **43** | ⇓P | **P** | **15 35 38.8** | **+1.1** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **52.19** | **41** | P | **P** | **15 35 40.4** | **+0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.7s | | | | | | |
| **KAPI** | **Kappang** | **53.05** | **86** | LR | LR | 15 55 10.8 | |
| | comp=Z,175nm,21.7s,baz=322,slow=32 | | | | | | |
| **KSH** | **Kashi** | **53.13** | **9** | P | **P** | **15 35 43.3** | **-3.3** |
| KSH | | | | pP | pP | 15 35 46.8 | -2.0 |
| KSH | | | | sP | sP | 15 35 50.5 | +0.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **QIZ** | **Qiongzhong** | **53.31** | **54** | P | **P** | **15 35 46.9** | **-1.2** |
| QIZ | | | | S | **S** | **15 43 22.3** | **+2.3** |
| QIZ | | | | LR | LR | | |
| | comp=N,430nm,13.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,420nm,16.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,500nm,18.0s | | | | | | |
| **MAW** | **Mawson** | **54.45** | **182** | LR | LR | 15 53 53.4 | |
| | comp=Z,81nm,20.9s,baz=260,slow=30 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **54.72** | **328** | LR | LR | 15 57 21.9 | |
| | comp=Z,76nm,19.9s,baz=322,slow=34 | | | | | | |
| **GYA** | **Guiyang** | **55.41** | **45** | ⇑P | **P** | **15 36 03.6** | **+0.2** |
| GYA | | | | pP | pwP | 15 36 10.9 | +0.8 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | |
| **GOMU** | **GeErMu** | **55.88** | **28** | P | **P** | **15 36 07.9** | **+1.0** |
| GOMU | | | | sP | pwP | 15 36 13.8 | +0.7 |
| GOMU | | | | PcP | **PcP** | **15 37 04.3** | **-1.4** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,120nm,5.2s | | | | | | |
| **AAK** | **Ala-Archa** | **56.00** | **7** | LR | LR | 15 57 46.7 | |
| | comp=Z,82nm,19.3s,baz=157,slow=34 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **56.33** | **337** | P | **P** | **15 36 10.5** | **+0.7** |
| GURO | | | | IAmb | IAmb | 15 36 13.8 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **56.55** | **39** | P | **P** | **15 36 11.5** | **+0.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **GNI** | **Garni** | **56.78** | **340** | P | **P** | **15 36 12.8** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **56.91** | **103** | P | **P** | **15 36 14.4** | **+0.2** |
| FITZ | | | | IAmb | IAmb | 15 36 22.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ENH** | **Enshi** | **59.76** | **43** | P | **P** | **15 36 32.5** | **-1.4** |
| **WMQ** | **Urumqi** | **59.90** | **18** | *e*P | **P** | **15 36 35.6** | **+1.0** |
| WMQ | | | | sP | pwP | 15 36 43.0 | +2.1 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,170nm,20.9s | | | | | | |
| **LZH** | **Lanzhou** | **60.32** | **34** | ⇓P | P | 15 36 45.3 | +7.5 |
| LZH | | | | pP | pwP | 15 36 50.8 | +6.8 |
| LZH | | | | sP | sP | 15 36 54.6 | +14 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KBZ** | **Khabaz** | **60.60** | **340** | P | **P** | **15 36 39.7** | **+0.4** |
| | comp=Z,2.9nm,0.9s,baz=126,slow=4.8,SNR=5.9 | | | | | | |
| **GTA** | **Gaotai** | **60.79** | **29** | ⇓P | **P** | **15 36 41.4** | **+0.5** |
| GTA | | | | pP | pwP | 15 36 48.6 | +1.5 |
| GTA | | | | sP | sP | 15 36 51.8 | +7.8 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **60.88** | **331** | P | **P** | **15 36 41.7** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=150,slow=6.3,SNR=4.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **60.88** | **331** | P | **P** | **15 36 42.9** | **+1.4** |
| **MAKZ** | **Makanchi** | **61.28** | **12** | P | **P** | **15 36 43.1** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 15 36 45.1 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **61.33** | **12** | P | **P** | **15 36 43.3** | **-0.9** |
| MK31 | | | | IAmb | IAmb | 15 36 44.9 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.33** | **12** | P | **P** | **15 36 43.7** | **-0.6** |
| | comp=Z,1.9nm,0.9s,baz=200,slow=8.8,SNR=13 | | | | | | |
| MKAR | | | | PcP | **PcP** | **15 37 26.8** | **+0.2** |
| | comp=Z,1.5nm,1.0s,baz=192,slow=4.1,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.33** | **12** | P | **P** | **15 36 43.2** | **-1.1** |
| **ABKAR** | **Akbulak array** | **62.42** | **355** | P | **P** | **15 36 49.7** | **-1.8** |
| **ASAR** | **Alice Springs** | **64.25** | **110** | P | **P** | **15 37 04.2** | **-0.2** |
| | comp=Z,5.6nm,0.9s,baz=273,slow=6.0,SNR=52 | | | | | | |
| **ASAR** | **Alice Springs** | **64.25** | **110** | P | **P** | **15 37 03.4** | **-1.0** |
| **AS31** | **Alice Springs** | **64.26** | **110** | P | **P** | **15 37 04.1** | **-0.3** |
| **KURK** | **Kurchatov** | **64.47** | **8** | P | **P** | **15 37 03.7** | **-1.3** |
| KURK | | | | IAmb | IAmb | 15 37 06.1 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **64.96** | **106** | P | **P** | **15 37 08.9** | **0.0** |
| | comp=Z,8.8nm,0.9s,baz=271,slow=5.8,SNR=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.96** | **106** | P | **P** | **15 37 09.3** | **+0.3** |
| **WB2** | **Warramunga Arr** | **64.97** | **106** | P | **P** | **15 37 08.8** | **-0.3** |
| **WRAB** | **Tennant Creek** | **64.97** | **106** | P | **P** | **15 37 07.7** | **-1.3** |
| **WR0** | **Warramunga Arr** | **65.14** | **106** | P | **P** | **15 37 09.9** | **-0.3** |
| **BBOO** | **Buckleboo** | **65.84** | **120** | P | **P** | **15 37 14.5** | **0.0** |
| **BRVK** | **Borovoye** | **66.03** | **2** | P | **P** | **15 37 14.5** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 15 37 15.0 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **BTO** | **Baotou** | **66.94** | **35** | *e*P | **P** | **15 37 22.4** | **+1.0** |
| **NJ2** | **Nanjing** | **67.27** | **47** | *e*P | **P** | **15 37 25.6** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **67.62** | **40** | ⇓P | **P** | **15 37 26.3** | **+0.7** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CFR** | **Carcaliu** | **67.68** | **332** | ⇓P | **P** | **15 37 26.9** | **+1.1** |
| **HHC** | **Hu-ho-hao-te** | **67.97** | **35** | *e*P | **P** | **15 37 30.4** | **+2.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,250nm,7.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,370nm,15.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,260nm,15.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,340nm,15.9s | | | | | | |
| **VTS** | **Vitosha** | **68.26** | **327** | ⇓P | **P** | **15 37 31.1** | **+1.4** |
| **ZAA0** | **Zalesovo Array** | **68.64** | **11** | P | **P** | **15 37 29.9** | **-1.7** |
| ZAA0 | | | | IAmb | IAmb | 15 37 39.0 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.64** | **11** | P | **P** | **15 37 30.7** | **-0.9** |
| | comp=Z,3.2nm,0.8s,baz=224,slow=4.1,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.64** | **11** | P | **P** | **15 37 30.3** | **-1.3** |
| **VRI** | **Vrincioaia** | **68.85** | **331** | ⇑P | **P** | **15 37 34.5** | **+1.3** |
| **PLOR** | **Plostina** | **68.88** | **331** | ⇓P | **P** | **15 37 35.0** | **+1.6** |
| **MLR** | **Muntele Rosu** | **68.94** | **331** | LR | LR | 16 09 39.2 | |
| | comp=Z,122nm,18.2s,baz=336,slow=38 | | | | | | |
| **COVR** | **Voineasa-Covas** | **69.08** | **331** | ⇓P | **P** | **15 37 36.1** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **69.40** | **290** | P | **P** | **15 37 37.3** | **+0.1** |
| | comp=Z,1.2nm,1.0s,baz=59,slow=3.1,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.40** | **290** | P | **P** | **15 37 37.5** | **+0.3** |
| **ARR** | **Arges** | **69.49** | **330** | ⇑P | **P** | **15 37 36.5** | **-0.8** |
| **SONM** | **Songino Array** | **70.32** | **27** | P | **P** | **15 37 42.1** | **-0.3** |
| | comp=Z,2.2nm,0.9s,baz=215,slow=5.1,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **70.32** | **27** | P | **P** | **15 37 42.5** | **+0.2** |
| SONM | | | | IAmb | IAmb | 15 37 44.2 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **GZR** | **Gura Zlata** | **70.43** | **329** | ⇓P | **P** | **15 37 47.3** | **+4.3** |
| **STKA** | **Stephens Creek** | **70.55** | **119** | P | **P** | **15 37 43.8** | **-0.3** |
| | comp=Z,2.8nm,0.8s,baz=298,slow=8.4,SNR=5.9 | | | | | | |
| **STKA** | **Stephens Creek** | **70.55** | **119** | P | **P** | **15 37 44.0** | **-0.1** |
| **BURAR** | **Bucovina Array** | **70.84** | **332** | ⇑P | P | 15 37 53.8 | +8.3 |
| **DRGR** | | **71.44** | **330** | ⇑P | **P** | **15 37 50.0** | **+0.9** |
| **AKASG** | **Malin Array Be** | **71.47** | **336** | P | **P** | **15 37 47.9** | **-1.1** |
| | comp=Z,2.8nm,0.7s,baz=139,slow=5.3,SNR=17 | | | | | | |
| **SIRR** | **Siria** | **71.60** | **329** | ⇓P | **P** | **15 37 51.8** | **+1.8** |
| **TRPA** | **Tarpa** | **72.47** | **331** | ⇓P | **P** | **15 37 57.3** | **+2.2** |
| **DBIC** | **Dimbokro** | **73.61** | **281** | P | **P** | **15 38 02.5** | **-0.1** |
| | comp=Z,3.4nm,1.1s,baz=128,slow=8.2,SNR=3.4 | | | | | | |
| DBIC | | | | LR | LR | 16 07 21.9 | |
| | comp=Z,55nm,21.4s,baz=168,slow=33 | | | | | | |
| **VYHS** | **Vyhne** | **74.52** | **329** | *e*P | **P** | **15 38 08.7** | **+1.4** |
| **MODS** | **Modra-Piesok** | **75.22** | **328** | *e*P | **P** | **15 38 15.4** | **+4.0** |
| **CTA** | **Charters Tower** | **76.05** | **108** | P | **P** | **15 38 16.4** | **-0.3** |
| | comp=Z,5.4nm,0.8s,baz=239,slow=2.4,SNR=4.7 | | | | | | |
| CTA | | | | LR | LR | 16 08 23.5 | |
| | comp=Z,184nm,21.2s,baz=296,slow=33 | | | | | | |
| **KSAR** | **Wonju Array Be** | **76.40** | **46** | P | **P** | **15 38 18.6** | **+0.3** |
| **KSRS** | **Korea Array** | **76.44** | **46** | P | **P** | **15 38 17.2** | **-1.3** |
| | comp=Z,3.2nm,1.0s,baz=238,slow=6.9,SNR=7.3 | | | | | | |
| **KLMR** | **Klimovskoe** | **76.85** | **347** | *e*P | **P** | **15 38 19.2** | **-1.1** |
| KLMR | | | | AMP | | 15 38 28.7 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **GERES** | **GERESS Array B** | **77.37** | **327** | P | **P** | **15 38 23.1** | **-0.6** |
| | comp=Z,1.2nm,0.9s,baz=134,slow=7.6,SNR=6.1 | | | | | | |
| **GERES** | **GERESS Array B** | **77.37** | **327** | P | **P** | **15 38 23.3** | **-0.3** |
| **BELA** | **Belgrano 2** | **79.56** | **192** | P | **P** | **15 38 35.8** | **+0.5** |
| **ESDC** | **Sonseca Array** | **83.87** | **313** | P | **P** | **15 38 58.9** | **+0.2** |
| | comp=Z,1.8nm,0.9s,baz=124,slow=3.6,SNR=8.8 | | | | | | |
| **ILAR** | **Eielson Array** | **123.55** | **16** | PKP | **PKPdf** | **15 45 25.0** | **-0.8** |
| | comp=Z,0.7nm,0.9s,baz=305,slow=3.2,SNR=4.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **130.73** | **1** | PKP | **PKPdf** | **15 45 38.3** | **-1.2** |
| | comp=Z,0.6nm,0.7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| UREC | | | | *i* | | | | 15 29 05.2 | |
| | comp=Z,481nm,0.2s | | | | | | | | |
| **SOCV** | **Socops** | **2.66** | **56** | ǁ*iP* | | **Pn** | | **15 28 22.9** | **-0.7** |
| SOCV | | | | *eS* | | **Sn** | | **15 28 54.0** | **-3.2** |
| **VILC** | **Villavicencio,** | **2.73** | **193** | *eP* | | **Pn** | | **15 28 24.8** | **+0.2** |
| VILC | | | | *eS* | | **Sn** | | **15 28 59.2** | **+0.3** |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **236** | *eP* | | **Pn** | | **15 28 25.5** | **+0.4** |
| GUY2C | | | | *eS* | | **Sn** | | **15 28 59.5** | **-0.2** |
| GUY2C | | | | *i* | | | | 15 29 07.7 | |
| | comp=Z,449nm,0.5s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.75** | **160** | *eP* | | **Pn** | | **15 28 24.2** | **-0.5** |
| PTGC | | | | *eS* | | **Sn** | | **15 28 57.4** | **-1.7** |
| PTGC | | | | *i* | | | | 15 29 00.1 | |
| | comp=Z,274nm,0.4s | | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.77** | **350** | *eP* | | **Pn** | | **15 28 25.4** | **+0.5** |
| LL1C | | | | *eS* | | **Sn** | | **15 29 00.7** | **+1.2** |
| LL1C | | | | *i* | | | | 15 29 10.5 | |
| | comp=Z,954nm,0.6s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.93** | **357** | ǁ*eP* | | **Pn** | | **15 28 25.8** | **-1.1** |
| LL6C | | | | *eS* | | **Sn** | | **15 29 01.5** | **-1.6** |
| LL6C | | | | *i* | | | | 15 29 11.3 | |
| | comp=Z,79nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **252** | ǁ*eP* | | **Pn** | | **15 28 29.1** | **+0.5** |
| CBOC | | | | *eS* | | **Sn** | | **15 29 05.1** | **-0.9** |
| CBOC | | | | *i* | | | | 15 29 17.8 | |
| | comp=Z,143nm,0.5s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **49** | P | | **Pn** | | **15 28 30.6** | **+0.1** |
| | comp=Z,45nm,0.3s,baz=230,slow=9.7,SNR=98 | | | | | | | | |
| SDV | | | | S | | **Sn** | | **15 29 07.9** | **-1.5** |
| | comp=Z,25nm,0.3s,baz=256,slow=19,SNR=18 | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **49** | *eP* | | **Pn** | | **15 28 30.6** | **+0.1** |
| SDV | | | | *eS* | | **Sn** | | **15 29 07.8** | **-1.7** |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *eP* | | **Pn** | | **15 28 32.0** | **+0.8** |
| ANIL | | | | *eS* | | **Sn** | | **15 29 10.6** | **-0.1** |
| ANIL | | | | *i* | | | | 15 29 19.1 | |
| | comp=Z,625nm,0.3s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.58** | **217** | *eP* | | **Pn** | | **15 28 35.0** | **-0.3** |
| ORTC | | | | *eS* | | **Sn** | | **15 29 18.1** | **+0.1** |
| ORTC | | | | *i* | | | | 15 29 22.5 | |
| | comp=Z,224nm,0.4s | | | | | | | | |
| **ELOV** | **Elorza** | **3.59** | **87** | *eP* | | **Pn** | | **15 28 35.3** | **0.0** |
| ELOV | | | | *eS* | | **Sn** | | **15 29 13.4** | **-4.6** |
| **PLMC** | **San Jos del P** | **3.69** | **240** | *eP* | | **Pn** | | **15 28 36.9** | **+0.2** |
| PLMC | | | | *eS* | | **Sn** | | **15 29 17.1** | **-3.4** |
| PLMC | | | | *i* | | | | 15 29 25.6 | |
| | comp=Z,102nm,0.7s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.71** | **326** | Pn | | **Pn** | | **15 28 35.3** | **-1.6** |
| **SJCC** | **San Jacinto, C** | **3.71** | **326** | *eP* | | **Pn** | | **15 28 35.1** | **-1.8** |
| SJCC | | | | *eS* | | **Sn** | | **15 29 16.4** | **-4.6** |
| SJCC | | | | *i* | | | | 15 29 21.1 | |
| | comp=Z,258nm,0.5s | | | | | | | | |
| **LCBC** | **Los crdobas,** | **3.84** | **302** | *eP* | | **Pn** | | **15 28 39.5** | **+1.0** |
| LCBC | | | | *eS* | | **Sn** | | **15 29 20.3** | **-3.5** |
| LCBC | | | | *i* | | | | 15 29 26.6 | |
| | comp=Z,165nm,0.4s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.20** | **3** | *eP* | | **Pn** | | **15 28 41.5** | **-1.9** |
| CRJC | | | | *eS* | | **Sn** | | **15 29 28.1** | **-4.5** |
| CRJC | | | | *i* | | | | 15 29 39.4 | |
| | comp=Z,118nm,0.2s | | | | | | | | |
| **GUVC** | **San Jose del G** | **4.25** | **174** | *eP* | | **Pn** | | **15 28 43.5** | **-0.3** |
| GUVC | | | | *eS* | | **Sn** | | **15 29 31.3** | **-2.2** |
| GUVC | | | | *i* | | | | 15 29 37.6 | |
| | comp=Z,155nm,0.3s | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.28** | **229** | *eP* | | **Pn** | | **15 28 43.5** | **-0.8** |
| YOTC | | | | *eS* | | **Sn** | | **15 29 32.8** | **-1.5** |
| **SMRC** | **Santa Marta, M** | **4.48** | **346** | *eP* | | **Pn** | | **15 28 45.8** | **-1.1** |
| SMRC | | | | *eS* | | **Sn** | | **15 29 34.8** | **-4.2** |
| SMRC | | | | *i* | | | | 15 29 35.5 | |
| | comp=Z,55nm,0.3s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.68** | **189** | *eP* | | **Pn** | | **15 28 48.3** | **-1.2** |
| MACC | | | | *eS* | | **Sn** | | **15 29 37.9** | **-5.8** |
| MACC | | | | *i* | | | | 15 29 45.7 | |
| | comp=Z,76nm,0.8s | | | | | | | | |
| **PTAC** | **Punta Ardita,** | **4.70** | **275** | *eP* | | **Pn** | | **15 28 49.0** | **-0.7** |
| PTAC | | | | *eS* | | **Sn** | | **15 29 42.1** | **-1.8** |
| PTAC | | | | *i* | | | | 15 29 53.8 | |
| | comp=Z,29nm,0.4s | | | | | | | | |
| **BETC** | **Betania** | **4.71** | **210** | *eP* | | **Pn** | | **15 28 48.6** | **-1.3** |
| BETC | | | | *eS* | | **Sn** | | **15 29 40.5** | **-3.9** |
| BETC | | | | *i* | | | | 15 29 45.0 | |
| | comp=Z,70nm,0.4s | | | | | | | | |
| **MARP** | **Paez Belalcaza** | **4.85** | **216** | *eP* | | **Pn** | | **15 28 51.3** | **-0.8** |
| MARP | | | | *eS* | | **Sn** | | **15 29 45.6** | **-2.5** |
| **URIC** | **Uribia, Colomb** | **4.99** | **12** | Pn | | **Pn** | | **15 28 51.1** | **-2.5** |
| **GARC** | **Garzon, Huila** | **5.17** | **208** | *eP* | | **Pn** | | **15 28 55.2** | **-1.0** |
| GARC | | | | *eS* | | **Sn** | | **15 29 49.7** | **-5.8** |
| GARC | | | | *i* | | | | 15 30 01.2 | |
| | comp=Z,82nm,0.3s | | | | | | | | |
| **PCON** | **Cinco Dias** | **5.53** | **217** | *eP* | | **Pn** | | **15 29 02.7** | **+1.4** |
| PCON | | | | *eS* | | **Sn** | | **15 29 57.5** | **-7.1** |
| PCON | | | | *i* | | | | 15 30 15.4 | |
| | comp=Z,28nm,0.6s | | | | | | | | |
| **POPC** | **Popayan, Colom** | **5.54** | **220** | *eP* | | **Pn** | | **15 29 01.1** | **+0.1** |
| POPC | | | | *eS* | | **Sn** | | **15 30 01.9** | **-2.3** |
| **FLOC** | **Florencia** | **5.77** | **206** | *eP* | | **Pn** | | **15 29 02.6** | **-1.4** |
| FLOC | | | | *eS* | | Sn | | 15 30 00.0 | -10 |
| FLOC | | | | *i* | | | | 15 30 15.2 | |
| | comp=Z,27nm,0.4s | | | | | | | | |
| **SOTA** | **Rioblanco** | **5.81** | **217** | *eP* | | **Pn** | | **15 29 06.0** | **+1.1** |
| SOTA | | | | *eS* | | **Sn** | | **15 30 04.0** | **-7.1** |
| SOTA | | | | *i* | | | | 15 30 24.0 | |
| | comp=Z,19nm,0.6s | | | | | | | | |
| **PTLC** | **Puerto Leguiza** | **6.80** | **195** | *eS* | | Sn | | 15 30 52.7 | +19 |
| **BIRV** | **Birongo** | **7.67** | **61** | Pn | | **Pn** | | **15 29 26.4** | **-2.8** |
| **OTAV** | **Otavalo** | **8.43** | **220** | Pn | | **Pn** | | **15 29 40.3** | **+0.5** |
| **ORTG** | **Ortega, Santa** | **12.73** | **287** | P | | **P** | | **15 30 43.5** | **+2.5** |
| **Y49A** | **Blount Mountai** | **29.62** | **337** | P | | **P** | | **15 33 32.4** | **+1.5** |
| Y49A | | | | | IAmb | IAmb | | 15 33 56.4 | |
| | comp=Z,4.3nm,1.1s | | | | | | | | |
| **V48A** | **Smith Brothers** | **31.44** | **338** | P | | **P** | | **15 33 48.6** | **+1.7** |
| **WVT** | **Waverly** | **32.17** | **337** | P | | **P** | | **15 33 54.4** | **+1.1** |
| WVT | | | | | IAmb | IAmb | | 15 33 54.5 | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **33.40** | **331** | P | | **P** | | **15 34 04.7** | **+0.7** |
| WHAR | | | | | IAmb | IAmb | | 15 34 32.6 | |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **33.81** | **332** | P | | **P** | | **15 34 07.4** | **-0.1** |
| FCAR | | | | | IAmb | IAmb | | 15 34 11.8 | |
| | comp=Z,3.2nm,0.9s | | | | | | | | |
| **W39A** | **Magazine** | **34.08** | **329** | P | | **P** | | **15 34 10.8** | **+1.0** |
| W39A | | | | | IAmb | IAmb | | 15 34 11.3 | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **U40A** | **Yellville** | **34.53** | **331** | P | | **P** | | **15 34 14.8** | **+1.0** |
| **MGMO** | **Mountain Grove** | **34.91** | **333** | P | | **P** | | **15 34 17.3** | **+0.3** |
| MGMO | | | | | IAmb | IAmb | | 15 34 22.4 | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| **SFIN** | **Lafayette** | **35.72** | **342** | P | | **P** | | **15 34 24.6** | **+0.8** |
| **R40A** | **Maddies Statio** | **35.84** | **334** | P | | **P** | | **15 34 24.9** | **0.0** |
| **TX31** | **Lajitas Ar. Si** | **36.50** | **312** | P | | **P** | | **15 34 31.3** | **+0.5** |
| TX31 | | | | | IAmb | IAmb | | 15 34 54.9 | |
| | comp=Z,3.8nm,1.0s | | | | | | | | |
| **TX32** | **Lajitas Array** | **36.50** | **312** | P | | **P** | | **15 34 31.6** | **+0.8** |
| **TXAR** | **Lajitas Array** | **36.50** | **312** | P | | **P** | | **15 34 31.3** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=126,slow=9.4,SNR=12 | | | | | | | | |
| TXAR | | | | PcP | | **PcP** | | **15 36 52.3** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=122,slow=4.5,SNR=2.5 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **39.01** | **314** | P | | **P** | | **15 34 53.0** | **+1.3** |
| MNTX | | | | | IAmb | IAmb | | 15 34 53.9 | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| **LMN** | **Caledonia Moun** | **39.56** | **9** | P | | **P** | | **15 34 57.3** | **+1.3** |
| LMN | | | | | IAmb | IAmb | | 15 35 07.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **D62A** | **Allapoint, All** | **40.29** | **4** | P | | **P** | | **15 35 03.5** | **+1.5** |
| D62A | | | | | IAmb | IAmb | | 15 35 17.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| **BATG** | **Bathurst New B** | **40.78** | **7** | P | | **P** | | **15 35 06.6** | **+0.6** |
| **ECSD** | **EROS Data Cent** | **42.18** | **334** | P | | **P** | | **15 35 17.6** | **0.0** |
| ECSD | | | | | IAmb | IAmb | | 15 35 19.0 | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **42.59** | **321** | P | | **P** | | **15 35 22.5** | **+1.2** |
| **EYMN** | **Ely** | **43.90** | **342** | P | | **P** | | **15 35 31.3** | **0.0** |
| **PV13** | **Radium Mtn., P** | **44.94** | **319** | P | | **P** | | **15 35 41.4** | **+1.4** |
| PV13 | | | | | IAmb | IAmb | | 15 35 42.0 | |
| | comp=Z,2.7nm,0.7s | | | | | | | | |
| **B35A** | **Bob, Littlefor** | **44.98** | **341** | P | | **P** | | **15 35 39.7** | **-0.1** |
| B35A | | | | | IAmb | IAmb | | 15 36 04.2 | |
| | comp=Z,3.8nm,1.1s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.32** | **340** | P | | **P** | | **15 35 57.6** | **-0.4** |
| | comp=Z,2.6nm,0.4s,baz=137,slow=8.2,SNR=3.2 | | | | | | | | |
| **MSU** | **Marysvale** | **47.34** | **318** | P | | **P** | | **15 36 00.0** | **+1.3** |
| **SCHQ** | **Schefferville** | **48.16** | **5** | P | | **P** | | **15 36 04.0** | **-0.5** |
| | comp=Z,3.2nm,0.9s,baz=215,slow=15,SNR=1.6 | | | | | | | | |
| **SCHQ** | **Schefferville** | **48.16** | **5** | P | | **P** | | **15 36 04.6** | **+0.1** |
| SCHQ | | | | | IAmb | IAmb | | 15 36 09.6 | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **DGMT** | **Dagmar** | **49.19** | **333** | P | | **P** | | **15 36 13.5** | **+1.0** |
| **YHH** | **Holmes Hill** | **50.09** | **325** | P | | **P** | | **15 36 21.8** | **+2.1** |
| **NVAR** | **Mina Array Bea** | **51.52** | **315** | P | | **P** | | **15 36 31.1** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=110,slow=7.8,SNR=2.4 | | | | | | | | |
| **EGMT** | **Eagleton** | **51.55** | **329** | P | | **P** | | **15 36 31.0** | **+0.8** |
| EGMT | | | | | IAmb | IAmb | | 15 36 46.6 | |
| | comp=Z,2.3nm,1.0s | | | | | | | | |
| **LRM** | **Limekiln Ridge** | **51.61** | **326** | P | | **P** | | **15 36 31.8** | **+0.8** |
| **FFC** | **Flin Flon** | **53.12** | **339** | P | | **P** | | **15 36 41.5** | **-0.2** |
| FFC | | | | | IAmb | IAmb | | 15 36 41.6 | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **53.57** | **319** | P | | **P** | | **15 36 46.1** | **+0.9** |
| WVOR | | | | | IAmb | IAmb | | 15 36 46.5 | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **FCC** | **Fort Churchill** | **54.30** | **347** | P | | **P** | | **15 36 49.4** | **-0.7** |
| **I07A** | **Izee** | **54.91** | **320** | P | | **P** | | **15 36 55.6** | **+0.7** |
| I07A | | | | | IAmb | IAmb | | 15 36 57.6 | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **55.98** | **317** | P | | **P** | | **15 37 01.7** | **-0.9** |
| YBH | | | | | IAmb | IAmb | | 15 37 28.3 | |
| | comp=Z,1.7nm,1.1s | | | | | | | | |
| **EDM** | **Edmonton** | **56.66** | **332** | P | | **P** | | **15 37 06.6** | **-0.5** |
| **YKA** | **Yellowknife Ar** | **63.30** | **340** | P | | **P** | | **15 37 52.1** | **-0.1** |
| | comp=Z,2.3nm,0.5s,baz=133,slow=6.6,SNR=49 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.30** | **340** | P | | **P** | | **15 37 52.0** | **-0.1** |
| **SUMG** | **Summit** | **69.01** | **11** | P | | **P** | | **15 38 28.8** | **-0.1** |
| **A36M** | **Sachs Harbour** | **72.47** | **345** | P | | **P** | | **15 38 49.3** | **+0.1** |
| **M27K** | **Edge Creek, AK** | **74.24** | **333** | P | | **P** | | **15 39 00.9** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **74.40** | **334** | P | | **P** | | **15 39 02.0** | **+1.2** |
| **L27K** | **Beaver Creek,** | **74.41** | **334** | P | | **P** | | **15 39 03.0** | **+2.0** |
| **VRDI** | **Verde Repeater** | **74.67** | **332** | P | | **P** | | **15 39 04.5** | **+1.8** |
| VRDI | | | | | IAmb | IAmb | | 15 39 17.7 | |
| | comp=Z,5.7nm,1.2s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **74.76** | **333** | P | | **P** | | **15 39 03.9** | **+1.0** |
| **BMAR** | **Burnt Mountain** | **76.69** | **338** | P | | **P** | | **15 39 14.7** | **+0.8** |
| **ILAR** | **Eielson Array** | **77.00** | **335** | P | | **P** | | **15 39 15.1** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=103,slow=4.7,SNR=2.6 | | | | | | | | |
| **RND** | **Reindeer** | **77.59** | **333** | P | | **P** | | **15 39 19.5** | **+0.6** |
| **PPLA** | **Purkeypile** | **79.02** | **333** | P | | **P** | | **15 39 27.1** | **+0.2** |
| **J20K** | **Nowinta River** | **80.02** | **334** | P | | **P** | | **15 39 32.5** | **+0.4** |
| **TTA** | **Tatalina** | **80.76** | **333** | P | | **P** | | **15 39 36.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **122.33** | **20** | PKP | | **PKPdf** | | **15 46 15.6** | **-1.4** |
| | comp=Z,0.2nm,0.4s,baz=351,slow=1.7,SNR=6.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **122.33** | **20** | | | **PKPdf** | | **15 46 16.1** | **-0.9** |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKP | | **PKPdf** | | **15 47 05.8** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=127,slow=2.8,SNR=2.0 | | | | | | | | |
| ASAR | | | | PKPbc | | **PKPbc** | | **15 47 10.0** | **-1.1** |
| | comp=Z,0.9nm,0.5s,baz=118,slow=3.7,SNR=18 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35** | **241** | PKPbc | | **PKPbc** | | **15 47 13.3** | **-0.8** |
| | comp=Z,0.8nm,0.4s,baz=105,slow=3.0,SNR=19 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35** | **241** | PKPbc | | **PKPbc** | | **15 47 12.7** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **153.71** | **17** | PKPbc | | **PKPbc** | | **15 47 21.3** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=320,slow=2.6,SNR=4.9 | | | | | | | | |

**ATH 17 15:33:09.7, 39.12N×22.16E, h20km±4km, ML1.5/1, Error ellipse: s-maj=5.5km s-min=2.4km az=127.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **MAKR** | **Makrakomi, Fth** | **0.11** | **192** | P | | Pb | 15 | 33 | 13.2 | -2.1 |
| MAKR | | | | S | | Sb | 15 | 33 | 16.8 | -2.3 |
| MAKR | | | | | AML | AML | 15 | 33 | 17.4 | |
| | comp=N,341μm,0.3s | | | | | | | | | |
| MAKR | | | | | AML | AML | 15 | 33 | 17.4 | |
| | comp=E,420μm,0.4s | | | | | | | | | |
| **AGG** | **Agios Georgios** | **0.17** | **127** | P | | Pb | 15 | 33 | 13.7 | -1.5 |
| AGG | | | | S | | Sb | 15 | 33 | 18.5 | -0.4 |
| **EVR** | **Evrytania** | **0.34** | **233** | P | | Pb | 15 | 33 | 17.2 | 0.0 |
| **THL** | **Klokotos Trika** | **0.46** | **346** | P | | Pb | 15 | 33 | 19.2 | +0.2 |
| **ANX** | **Ano Chora** | **0.56** | **200** | P | | Pb | 15 | 33 | 21.2 | +0.2 |

**THE 17 15:33:18.4, 38.72N×20.60E, h6km±2km, ML1.5/1, Error ellipse: s-maj=2.0km s-min=0.6km az=252.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **DRAG** | **Dragano-Lefkad** | **0.04** | **204** | P | | Pg | 15 | 33 | 19.6 | -0.2 |
| DRAG | | | | S | | Sg | 15 | 33 | 20.8 | 0.0 |
| **NYDR** | **Nydri-Lefkada** | **0.08** | **96** | P | | Pg | 15 | 33 | 20.0 | -0.3 |
| NYDR | | | | S | | Sg | 15 | 33 | 21.6 | 0.0 |
| **LKD2** | **Lefkada island** | **0.08** | **36** | P | | Pg | 15 | 33 | 20.1 | -0.3 |
| LKD2 | | | | S | | Sg | 15 | 33 | 21.7 | 0.0 |
| **EVGI** | **Lefkada island** | **0.11** | **155** | P | | Pg | 15 | 33 | 20.7 | -0.1 |
| EVGI | | | | S | | Sg | 15 | 33 | 23.1 | +0.7 |
| | 405nm,0.2s | | | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.11** | **24** | P | | Pg | 15 | 33 | 20.8 | 0.0 |
| TSLK | | | | S | | Sg | 15 | 33 | 23.1 | +0.6 |

*IDC **17** 15:35:39.2±8.0, 14.20S×167.22E, h151km±79km, mb3.2/4, mb1 3.4/5, mb1mx3.1/47, mbtmp3.7/5, Error ellipse: s-maj=70.5km s-min=31.3km az=155.0*

**ISC 17 15:35:39.3±1.4, 14.2S±0.1×167.2E±0.2, h150km, n6, σ0.9 91/7, mb3.5/4, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **DZM** | **Mont Dzumac** | **7.86** | **185** | P | | **Pn** | **15** | **37** | **31.4** | **+0.5** |
| | 0.6nm,0.3s,baz=216,slow=7.4,SNR=7.9 | | | | | | | | | |
| DZM | | | | S | | **Sn** | **15** | **38** | **57.8** | **-0.9** |
| | 0.2nm,0.3s,baz=111,slow=23,SNR=1.1 | | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.30** | **229** | P | | **P** | **15** | **41** | **28.6** | **+1.0** |
| | 0.6nm,0.4s,baz=64,slow=11,SNR=4.7 | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.91** | **255** | P | | **P** | **15** | **41** | **50.1** | **-0.8** |
| | 0.3nm,0.7s,baz=85,slow=8.9,SNR=1.9 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.82** | **248** | P | | **P** | **15** | **41** | **58.5** | **-0.2** |
| | 0.4nm,0.3s,baz=78,slow=9.3,SNR=29 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.04** | **18** | P | | **P** | **15** | **48** | **02.7** | **+0.2** |
| | 0.5nm,0.8s,baz=239,slow=6.6,SNR=3.3 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.73** | **345** | PKP | | **PKPdf** | **15** | **54** | **10.1** | **-0.8** |
| | 5.5nm,1.1s,baz=64,slow=2.1,SNR=5.8 | | | | | | | | | |

*IDC **17** 15:36:37.6±2.5, 10.29S×161.15E, h75km±18km, mb3.8/13, mb1 3.9/15, mb1mx3.8/47, mbtmp4.1/15, MS3.6/6, Ms1 3.6/6, ms1mx3.1/56, Error ellipse: s-maj=25.3km s-min=16.5km az=94.0*

*NEIC **17** 15:36:38.4±1.1, 10.3S±0.1×161.1E±0.1, h73km±8km, mb4.5/19, Error ellipse: s-maj=18.8km s-min=10.3km az=47.0*

**ISC 17 15:36:36.6±0.6, 10.28S±0.08×161.18E±0.09, h62km, n51, σ1.9 02/47, mb4.4/24, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **HNR** | **Honiara** | **1.48** | **305** | P | | **Pn** | **15** | **37** | **02.2** | **+1.1** |
| | 135nm,0.3s,baz=152,slow=3.1,SNR=44 | | | | | | | | | |
| HNR | | | | S | | **Sn** | **15** | **37** | **20.7** | **+1.2** |
| | 909nm,0.3s,baz=159,slow=21,SNR=25 | | | | | | | | | |
| HNR | | | | LR | | LR | 15 | 37 | 55.3 | |
| | comp=Z,229nm,18.7s,baz=152,slow=53 | | | | | | | | | |
| **HNR** | **Honiara** | **1.48** | **305** | | | **Pn** | **15** | **37** | **02.0** | **+0.9** |
| HNR | | | | | | Sn | **15** | **37** | **20.8** | **+1.3** |
| **SANVU** | **Saraoutou** | **7.80** | **132** | | | Pn | **15** | **38** | **29.0** | **+1.5** |
| **LIFNC** | **LIFOU** | **11.96** | **152** | | | Pn | **15** | **39** | **25.1** | **+0.9** |
| **DZM** | **Mont Dzumac** | **12.76** | **157** | P | | Pn | **15** | **39** | **37.0** | **+1.6** |
| | 0.6nm,0.3s,baz=16,slow=13,SNR=1.9 | | | | | | | | | |
| DZM | | | | LR | | LR | 15 | 43 | 09.3 | |
| | comp=Z,92nm,18.4s,baz=227,slow=31 | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.76** | **157** | Pn | | **Pn** | **15** | **39** | **36.9** | **+1.5** |
| **OUENC** | **Ouen Island, N** | **13.23** | **157** | Pn | | **Pn** | **15** | **39** | **44.0** | **+2.3** |
| **PATS** | **Pohnpei** | **17.24** | **350** | | | **P** | **15** | **40** | **35.9** | **+1.9** |
| **CTA** | **Charters Tower** | **17.38** | **234** | P | | **P** | **15** | **40** | **35.3** | **-0.3** |
| | 0.1nm,0.3s,baz=55,slow=15,SNR=2.3 | | | | | | | | | |
| CTA | | | | LR | | LR | 15 | 46 | 13.8 | |
| | comp=Z,61nm,18.6s,baz=90,slow=33 | | | | | | | | | |
| **WR0** | **Warramunga Arr** | **27.42** | **246** | P | | **P** | **15** | **42** | **16.3** | **-0.5** |
| **WB0** | **Warramunga Arr** | **27.50** | **247** | P | | **P** | **15** | **42** | **17.0** | **-0.5** |
| **WRAB** | **Tennant Creek** | **27.59** | **246** | P | | **P** | **15** | **42** | **17.7** | **-0.6** |
| WRAB | | | | | IAmb | IAmb | 15 | 42 | 36.0 | |
| | comp=Z,12nm,1.5s | | | | | | | | | |
| **WB2** | **Warramunga Arr** | **27.59** | **246** | P | | **P** | **15** | **42** | **17.6** | **-0.6** |
| WB2 | | | | | IAmb | IAmb | 15 | 42 | 40.3 | |
| | comp=Z,12nm,1.4s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.60** | **246** | P | | **P** | **15** | **42** | **18.0** | **-0.3** |
| | comp=Z,1.9nm,0.5s,baz=77,slow=8.8,SNR=18 | | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **15** | **45** | **34.0** | **-0.8** |
| | comp=Z,0.6nm,0.7s,baz=76,slow=2.8,SNR=3.2 | | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.10** | **11** | T | | T | 16 | 11 | 38.6 | |
| | baz=194,slow=76,SNR=5.0 | | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.10** | **11** | T | | T | 16 | 11 | 29.9 | |
| | baz=194,slow=76,SNR=7.2 | | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.12** | **11** | T | | T | 16 | 11 | 28.8 | |
| | baz=194,slow=76,SNR=3.3 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **29.22** | **239** | P | | **P** | **15** | **42** | **31.6** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=67,slow=9.5,SNR=14 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15** | **45** | **37.7** | **-1.2** |
| | comp=Z,0.3nm,0.7s,baz=83,slow=2.9,SNR=2.1 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **29.22** | **239** | P | | **P** | **15** | **42** | **32.1** | **-0.6** |
| **H11N1** | **WAKE ISLAND Hy** | **30.33** | **11** | T | | T | 16 | 13 | 35.3 | |
| | baz=190,slow=76,SNR=9.0 | | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.34** | **11** | T | | T | 16 | 13 | 24.2 | |
| | baz=190,slow=76,SNR=7.0 | | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.35** | **11** | T | | T | 16 | 13 | 26.9 | |
| | baz=190,slow=76,SNR=17 | | | | | | | | | |
| **SIJI** | **Sorong** | **31.18** | **286** | LR | | LR | 15 | 55 | 36.7 | |
| | comp=Z,389nm,18.2s,baz=336,slow=37 | | | | | | | | | |
| **URZ** | **Urewera** | **31.31** | **155** | LR | | LR | 15 | 53 | 29.9 | |
| | comp=Z,71nm,18.3s,baz=344,slow=32 | | | | | | | | | |
| **KNRA** | **Kununurra** | **32.02** | **257** | P | | **P** | **15** | **42** | **57.2** | **-0.3** |
| KNRA | | | | | IAmb | IAmb | 15 | 42 | 57.4 | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| **BBOO** | **Buckleboo** | **32.22** | **222** | P | | **P** | **15** | **42** | **58.8** | **-0.3** |
| BBOO | | | | | IAmb | IAmb | 15 | 42 | 59.5 | |
| | comp=Z,6.7nm,0.6s | | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.27** | **253** | P | | **P** | **15** | **43** | **24.5** | **-1.2** |
| **JHJ** | **Hachijo jima 2** | **47.73** | **336** | LR | | LR | 16 | 05 | 34.9 | |
| | comp=Z,155nm,18.9s,baz=156,slow=36 | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.35** | **336** | P | | **P** | **15** | **45** | **33.6** | **-1.3** |
| | comp=Z,1.2nm,0.6s,baz=166,slow=8.7,SNR=4.1 | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.35** | **336** | P | | **P** | **15** | **45** | **34.1** | **-0.8** |
| **ASAJ** | **Asahikawa** | **56.71** | **344** | P | | **P** | **15** | **46** | **13.2** | **-0.6** |
| | comp=Z,8.8nm,0.9s,baz=260,slow=11,SNR=5.7 | | | | | | | | | |
| **KSRS** | **Korea Array** | **56.80** | **329** | P | | **P** | **15** | **46** | **13.9** | **-0.7** |
| | comp=Z,1.1nm,0.8s,baz=146,slow=8.8,SNR=2.9 | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **60.35** | **336** | P | | **P** | **15** | **46** | **38.6** | **-0.5** |
| | comp=Z,2.0nm,0.6s,baz=122,slow=5.4,SNR=2.4 | | | | | | | | | |
| USRK | | | | LR | | LR | 16 | 09 | 39.2 | |
| | comp=Z,76nm,21.8s,baz=195,slow=33 | | | | | | | | | |
| **KLR** | **Kul'dur** | **64.66** | **339** | P | | **P** | **15** | **47** | **07.9** | **+0.1** |
| | comp=Z,1.0nm,0.5s,baz=156,slow=3.9,SNR=7.3 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **67.71** | **295** | P | | **P** | **15** | **47** | **27.7** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=120,slow=4.5,SNR=5.3 | | | | | | | | | |
| **SONM** | **Songino Array** | **75.44** | **325** | P | | **P** | **15** | **48** | **14.6** | **+0.5** |
| | comp=Z,1.2nm,0.7s,baz=138,slow=5.5,SNR=9.1 | | | | | | | | | |
| **SONM** | **Songino Array** | **75.44** | **325** | P | | **P** | **15** | **48** | **13.9** | **-0.2** |
| **YAK** | **Yakutsk** | **76.16** | **345** | P | | **P** | **15** | **48** | **17.8** | **+0.2** |
| | comp=Z,2.7nm,0.4s,baz=88,slow=1.4,SNR=4.3 | | | | | | | | | |
| **BILL** | **Bilibino** | **78.20** | **2** | P | | **P** | **15** | **48** | **29.8** | **+0.8** |
| BILL | | | | | IAmb | IAmb | 15 | 48 | 50.7 | |
| | com

*Ms1 4.0/24,ms1mx3.7/69 Error ellipse: s-maj=16.8km s-min=9.2km az=79.0*
*NEIC **17** 15:48:17.4±1.7,7°.10N±0°.06×126°.82E±0°.08,h65km±6km, mb4.7/57,Error ellipse: s-maj=13.7km s-min=3.7km az=50.0*
**ISC 17 15:48:16.5**±0.3,**7°.08N**±0°.04×**126°.93E**±0°.05,**h60**km,**n203,** σ1§**40**/197,**mb4.6**/55,**MS4.0**/25,**7C-5D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **1.23** | **333** | ⇓*iP* | **Pn** | **15 48 40.7** | **+3.1** |
| BIPH | | | | *i* S | **Sn** | **15 48 56.3** | **+3.0** |
| **DAV** | **Davao City (W)** | **1.34** | **270** | P | **Pn** | **15 48 38.1** | **-0.9** |
| | 734nm,0.3s,baz=83,slow=2.8,SNR=47 | | | | | | |
| DAV | | | | S | **Sn** | **15 48 58.2** | **+2.2** |
| | 695nm,0.3s,baz=100,slow=23,SNR=7.9 | | | | | | |
| DAV | | | | LR | LR | 15 49 14.7 | |
| | comp=Z,10μm,19.1s,baz=336,slow=47 | | | | | | |
| **DAV** | **Davao City (W)** | **1.34** | **270** | Pn | **Pn** | **15 48 38.5** | **-0.6** |
| **DAV** | **Davao City (W)** | **1.34** | **270** | P | **Pn** | **15 48 39.8** | **+0.8** |
| **KCP** | **Kidapawan** | **1.83** | **268** | ⇓*iP* | **Pn** | **15 48 45.2** | **-0.4** |
| KCP | | | | *i* S | **Sn** | **15 49 10.1** | **+2.3** |
| **GSPH** | **General Santos** | **2.20** | **243** | *eP* | **Pn** | **15 48 49.1** | **-1.7** |
| **CTBH** | **Cotabato--PC H** | **2.67** | **273** | ⇓*iP* | **Pn** | **15 48 56.9** | **-0.2** |
| CTBH | | | | *i* S | **Sn** | **15 49 29.7** | **+1.5** |
| **SCPH** | **Surigao** | **3.04** | **332** | ⇑*eP* | **Pn** | **15 49 02.1** | **0.0** |
| **SGSI** | **Sangihe** | **3.65** | **203** | P | **Pn** | **15 49 12.8** | **+2.3** |
| **MSLP** | **Maasin** | **3.66** | **326** | *eP* | **Pn** | **15 49 09.8** | **-0.8** |
| **TBP** | **Tagbilaran** | **3.99** | **311** | *eP* | **Pn** | **15 49 14.4** | **-0.8** |
| TBP | | | | *i* S | **Sn** | **15 50 04.2** | **+3.5** |
| **SNPH** | **Sibulan** | **4.29** | **302** | ⇑*iP* | **Pn** | **15 49 20.0** | **+0.7** |
| SNPH | | | | *i* S | **Sn** | **15 50 10.9** | **+2.7** |
| **LLP** | **Lapu-Lapu** | **4.35** | **318** | ⇓*iP* | **Pn** | **15 49 20.6** | **+0.5** |
| LLP | | | | *i* S | **Sn** | **15 50 14.2** | **+4.7** |
| **ZCP** | **Zamboanga City** | **4.82** | **269** | ⇑*eP* | **Pn** | **15 49 27.1** | **+0.5** |
| **CNOP** | **Candoni, Negro** | **5.05** | **303** | *eP* | **Pn** | **15 49 29.9** | **+0.3** |
| **RCP** | **Roxas** | **6.07** | **317** | ⇑*eP* | **Pn** | **15 49 44.7** | **+1.0** |
| **TNTI** | **Ternate** | **6.28** | **176** | Pn | **Pn** | **15 49 47.9** | **+1.4** |
| **TNTI** | **Ternate** | **6.28** | **176** | P | **Pn** | **15 49 48.0** | **+1.4** |
| | 0.3nm79nm,0.8s | | | | | | |
| **TNTI** | **Ternate** | **6.28** | **176** | P | **Pn** | **15 49 48.6** | **+2.0** |
| | 80nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **7.10** | **205** | P | Pn | 15 50 03.4 | +5.6 |
| | 0.5nm116nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **7.50** | **212** | P | **Pn** | **15 50 04.6** | **+1.3** |
| | 0.2nm732nm67nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **7.50** | **212** | P | **Pn** | **15 50 03.8** | **+0.5** |
| | 0.2nm732nm67nm,0.6s | | | | | | |
| **MRSI** | **Marisa** | **8.23** | **217** | P | **Pn** | **15 50 14.7** | **+1.4** |
| | 0.4nm999nm108nm,0.7s | | | | | | |
| **MRSI** | **Marisa** | **8.23** | **217** | P | **Pn** | **15 50 14.6** | **+1.3** |
| | 1μm108nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **8.53** | **226** | Pn | **Pn** | **15 50 15.7** | **-1.7** |
| **MYLDM** | **Lahad Datu** | **8.59** | **258** | Pn | **Pn** | **15 50 20.8** | **+2.6** |
| **LQP** | **Lukban** | **8.77** | **323** | ⇓*eP* | Pn | 15 50 26.1 | +5.3 |
| **SIJI** | **Sorong** | **9.01** | **151** | P | **Pn** | **15 50 22.6** | **-1.3** |
| | 5.6nm,0.3s,baz=333,slow=18,SNR=12 | | | | | | |
| **SANI** | **Sanana** | **9.12** | **186** | P | **Pn** | **15 50 25.2** | **-0.2** |
| | 37nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **9.12** | **186** | P | **Pn** | **15 50 23.5** | **-1.9** |
| **SPSI** | **Sidrap Palu** | **13.10** | **213** | P | **Pn** | **15 51 22.5** | **+2.7** |
| | 12nm,0.7s | | | | | | |
| **BBSI** | **Bau Bau** | **13.22** | **199** | P | **Pn** | **15 51 24.8** | **+3.3** |
| | 5.2nm,0.9s | | | | | | |
| **BNSI** | **Bone** | **13.28** | **211** | P | **Pn** | **15 51 23.9** | **+1.6** |
| | 22nm,1.1s | | | | | | |
| **KBKI** | **Kotabaru** | **14.89** | **227** | P | **P** | **15 51 47.8** | **-0.2** |
| | 660nm24nm,0.8s | | | | | | |
| KBKI | | | | pP | Pn | 15 51 50.0 | +6.4 |
| | 660nm24nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **15.36** | **253** | P | **P** | **15 51 55.5** | **+2.2** |
| SBUM | | | | IAmb | IAmb | 15 51 56.6 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **STKI** | **Sintang** | **16.91** | **246** | P | **P** | **15 52 12.3** | **+1.8** |
| | comp=Z,22nm,1.2s | | | | | | |
| **SOEI** | **Soe** | **16.93** | **189** | P | **P** | **15 52 11.4** | **+0.6** |
| SOEI | | | | IAmb | IAmb | 15 52 30.5 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **17.48** | **191** | P | **P** | **15 52 17.3** | **+0.6** |
| | comp=Z,6.0nm,0.3s,baz=15,slow=1.7,SNR=19 | | | | | | |
| BATI | | | | LR | LR | 16 00 19.9 | |
| | comp=Z,369nm,20.4s,baz=339,slow=41 | | | | | | |
| **BATI** | **Baumata** | **17.48** | **191** | P | **P** | **15 52 20.2** | **+3.5** |
| | comp=Z,27nm,0.5s | | | | | | |
| **BATI** | **Baumata** | **17.48** | **191** | P | **Pn** | **15 52 15.0** | **-1.3** |
| | comp=Z,27nm,0.5s | | | | | | |
| **KSM** | **Kuching** | **17.48** | **252** | P | **P** | **15 52 17.9** | **+1.1** |
| **KSM** | **Kuching** | **17.48** | **252** | P | **P** | **15 52 18.5** | **+1.8** |
| **PLAI** | **Plampang** | **18.25** | **210** | P | **Pn** | **15 52 28.3** | **+2.6** |
| **JOW** | **Kunigami** | **19.68** | **4** | P | **P** | **15 52 40.0** | **-0.9** |
| | comp=Z,28nm,0.3s,baz=144,slow=14,SNR=7.1 | | | | | | |
| **JOW** | **Kunigami** | **19.68** | **4** | P | **P** | **15 52 40.9** | **+0.1** |
| **JOW** | **Kunigami** | **19.68** | **4** | P | **P** | **15 52 41.4** | **+0.6** |
| **DRS** | **Darwin Rock St** | **19.78** | **168** | P | **Pn** | **15 52 45.0** | **+1.1** |
| **MTN** | **Manton Dam** | **20.23** | **168** | P | **P** | **15 52 47.5** | **+0.7** |
| MTN | | | | IAmb | IAmb | 15 53 09.3 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **20.23** | **168** | P | **P** | **15 52 47.7** | **+0.9** |
| **KDU** | **Kakadu** | **20.40** | **164** | P | **P** | **15 52 48.8** | **+0.2** |
| **QIZ** | **Qiongzhong** | **20.42** | **307** | P | **P** | **15 52 48.3** | **-0.6** |
| QIZ | | | | IAmb | IAmb | 15 52 58.2 | |
| | comp=Z,39nm,1.3s | | | | | | |
| **QIZ** | **Qiongzhong** | **20.42** | **307** | P | **P** | **15 52 49.0** | **+0.1** |
| **UBPT** | **Khong Chiam** | **22.56** | **293** | P | **P** | **15 53 11.5** | **-0.4** |
| UBPT | | | | IAmb | IAmb | 15 53 37.5 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **22.68** | **175** | P | **P** | **15 53 13.5** | **+0.3** |
| **KNRA** | **Kununurra** | **22.68** | **175** | P | **P** | **15 53 13.7** | **+0.5** |
| **KPJI** | **Karang Pucung** | **22.96** | **232** | P | **P** | **15 53 17.8** | **+1.7** |
| | comp=Z,34nm,0.6s | | | | | | |
| **JSU** | **Suzuyama** | **24.52** | **7** | P | **P** | **15 53 29.2** | **-1.2** |
| JSU | | | | IAmb | IAmb | 15 53 37.8 | |
| | comp=Z,64nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.05** | **183** | P | **P** | **15 53 35.5** | **+0.2** |
| | comp=Z,5.7nm,0.6s,baz=12,slow=7.6,SNR=20 | | | | | | |
| FITZ | | | | PcP | **PcP** | **15 57 09.3** | **+0.3** |
| | comp=Z,2.0nm,0.5s,baz=333,slow=4.5,SNR=2.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.05** | **183** | P | **P** | **15 53 35.8** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **25.05** | **183** | P | **P** | **15 53 36.0** | **+0.7** |
| **NJ2** | **Nanjing** | **25.96** | **344** | *eP* | **P** | **15 53 44.3** | **+0.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **COEN** | **Coen** | **26.40** | **142** | P | **P** | **15 53 48.0** | **+0.4** |
| **COEN** | **Coen** | **26.40** | **142** | P | **P** | **15 53 48.5** | **+0.9** |
| **GYA** | **Guiyang** | **27.27** | **317** | ⇑P | **P** | **15 53 59.1** | **+3.6** |
| GYA | | | | S | **S** | **15 58 33.5** | **+2.7** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,610nm,15.4s | | | | | | |
| **JMN** | **Monobe** | **27.29** | **13** | P | **P** | **15 53 55.4** | **0.0** |
| JMN | | | | IAmb | IAmb | 15 53 59.0 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **27.67** | **165** | P | **P** | **15 53 58.3** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 15 54 15.7 | |
| | comp=Z,8.8nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.82** | **165** | P | **P** | **15 54 00.1** | **-0.1** |
| **WRAB** | **Tennant Creek** | **27.82** | **165** | P | **P** | **15 54 00.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **27.83** | **165** | P | **P** | **15 53 59.3** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=335,slow=11,SNR=23 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 57 15.5** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=343,slow=2.6,SNR=3.6 | | | | | | |
| WRA | | | | S | **S** | **15 58 34.8** | **-4.6** |
| | comp=Z,0.5nm,0.6s,baz=346,slow=17,SNR=2.4 | | | | | | |
| WRA | | | | ScP | **ScP** | **16 00 50.9** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=339,slow=3.2,SNR=5.6 | | | | | | |
| WRA | | | | LR | LR | 16 07 19.1 | |
| | comp=Z,174nm,18.3s,baz=340,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.83** | **165** | P | **P** | **15 53 59.6** | **-0.8** |
| **WB2** | **Warramunga Arr** | **27.83** | **165** | P | **P** | **15 54 00.1** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 15 54 18.6 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **27.89** | **165** | P | **P** | **15 54 00.6** | **-0.4** |
| **KMI** | **Kunming** | **29.26** | **311** | P | **P** | **15 54 13.1** | **-0.3** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **29.31** | **194** | P | **P** | **15 54 13.4** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 15 54 31.7 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **29.31** | **194** | P | **P** | **15 54 14.4** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **29.49** | **295** | P | **P** | **15 54 14.4** | **-0.8** |
| | comp=Z,0.7nm,0.5s,baz=90,slow=7.9,SNR=11 | | | | | | |
| CMAR | | | | PcP | **PcP** | **15 57 19.4** | **-0.2** |
| | comp=Z,0.7nm,0.6s,baz=90,slow=1.7,SNR=4.4 | | | | | | |
| CMAR | | | | LR | LR | 16 06 40.0 | |
| | comp=Z,292nm,18.6s,baz=100,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.49** | **295** | P | **P** | **15 54 14.2** | **-1.1** |
| **CHTO** | **Chiang Mai** | **29.61** | **296** | P | **P** | **15 54 15.6** | **-0.7** |
| **INU** | **Inuyama** | **29.62** | **17** | P | **P** | **15 54 15.8** | **-0.3** |
| **GSI** | **Gununguitoli** | **29.82** | **260** | P | **P** | **15 54 16.8** | **-1.4** |
| **GSI** | **Gununguitoli** | **29.82** | **260** | P | **P** | **15 54 17.9** | **-0.3** |
| **QIS** | **Mount Isa** | **30.16** | **156** | P | **P** | **15 54 21.5** | **+0.4** |
| **KSRS** | **Korea Array** | **30.25** | **2** | P | **P** | **15 54 20.6** | **-1.0** |
| | comp=Z,1.1nm,0.6s,baz=181,slow=9.8,SNR=8.2 | | | | | | |
| **MTSU** | **Mount Surprise** | **30.37** | **146** | P | **P** | **15 54 24.2** | **+1.2** |
| **PZH** | **PanZhiHua** | **30.78** | **312** | P | **P** | **15 54 25.4** | **-1.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,6.1s | | | | | | |
| **MAJO** | **Matsushiro** | **31.08** | **18** | P | **P** | **15 54 30.1** | **+1.0** |
| MAJO | | | | IAmb | IAmb | 15 54 30.6 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **MAT** | **Matsushiro** | **31.08** | **18** | P | **P** | **15 54 27.2** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **31.08** | **18** | P | **P** | **15 54 27.2** | **-1.9** |
| | comp=Z,3.1nm,0.5s,baz=188,slow=7.6,SNR=8.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **31.08** | **18** | P | **P** | **15 54 27.5** | **-1.6** |
| **AS31** | **Alice Springs** | **31.31** | **168** | P | **P** | **15 54 31.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **31.31** | **168** | P | **P** | **15 54 30.9** | **-0.4** |
| | comp=Z,1.3nm,0.5s,baz=351,slow=7.5,SNR=40 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 57 24.6** | **+0.2** |
| | comp=Z,3.1nm,0.5s,baz=351,slow=2.4,SNR=18 | | | | | | |
| ASAR | | | | S | **S** | **15 59 33.0** | **-1.1** |
| | comp=Z,0.6nm,0.7s,baz=355,slow=20,SNR=5.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 01 02.5** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=342,slow=3.1,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **31.31** | **168** | P | **P** | **15 54 30.4** | **-0.8** |
| **WRKA** | **Warakurna** | **31.95** | **178** | P | **P** | **15 54 37.3** | **+0.5** |
| **CTA** | **Charters Tower** | **33.02** | **145** | P | **P** | **15 54 46.3** | **0.0** |
| | comp=Z,4.1nm,1.0s,baz=318,slow=10,SNR=2.4 | | | | | | |
| **JMM** | **Marumori** | **33.13** | **20** | P | **P** | **15 54 46.8** | **-0.2** |
| **OOD** | **Oodnadatta** | **35.69** | **167** | P | **P** | **15 55 09.5** | **+0.3** |
| **HHC** | **Hu-ho-hao-te** | **36.32** | **340** | *eP* | **P** | **15 55 16.6** | **+2.0** |
| **HNR** | **Honiara** | **36.76** | **116** | LR | LR | 16 11 07.0 | |
| | comp=Z,73nm,18.2s,baz=304,slow=37 | | | | | | |
| **INKA** | **Innaminka** | **37.11** | **159** | P | **P** | **15 55 21.7** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **37.24** | **6** | P | **P** | **15 55 21.4** | **-0.8** |
| | comp=Z,4.1nm,0.6s,baz=176,slow=9.4,SNR=8.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **37.24** | | P | **P** | **15 55 21.7** | **-0.5** |
| **MORW** | **Morawa** | **37.44** | **196** | P | **P** | **15 55 23.8** | **-0.3** |
| MORW | | | | IAmb | IAmb | 15 55 47.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **37.44** | **196** | P | **P** | **15 55 25.4** | **+1.3** |
| **FORT** | **Forrest** | **37.66** | **178** | P | **P** | **15 55 26.3** | **+0.4** |
| **MULG** | **Mulgathing** | **37.77** | **170** | P | **P** | **15 55 27.6** | **+0.7** |
| **BLDU** | **Ballidu** | **38.74** | **194** | P | **P** | **15 55 35.7** | **+0.7** |
| **LCRK** | **Leigh Creek** | **38.85** | **164** | P | **P** | **15 55 37.4** | **+1.4** |
| **ASAJ** | **Asahikawa** | **39.35** | **18** | LR | LR | 16 10 37.8 | |
| | comp=Z,190nm,20.8s,baz=178,slow=34 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.44** | **192** | P | **P** | **15 55 42.0** | **+1.1** |
| **MUN** | **Mundaring** | **40.17** | **194** | P | **P** | **15 55 48.2** | **+1.3** |
| **H11S3** | **WAKE ISLAND Hy** | **40.30** | **70** | T | T | 16 39 23.3 | |
| | baz=262,slow=70 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.31** | **70** | T | T | 16 39 24.7 | |
| | baz=262,slow=70 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.32** | **70** | T | T | 16 39 35.9 | |
| | baz=262,slow=70 | | | | | | |
| **GTA** | **Gaotai** | **40.38** | **327** | ⇑P | **P** | **15 55 49.1** | **+0.3** |
| GTA | | | | pP | pP | 15 56 04.5 | +0.8 |
| GTA | | | | sP | sP | 15 56 10.9 | +0.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **40.61** | **168** | P | **P** | **15 55 50.7** | **+0.1** |
| **BBOO** | **Buckleboo** | **40.61** | **168** | P | **P** | **15 55 51.5** | **+0.9** |
| **H11N1** | **WAKE ISLAND Hy** | **40.73** | **68** | T | T | 16 40 10.6 | |
| | baz=265,slow=74,SNR=14 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.74** | **68** | T | T | 16 40 04.1 | |
| | baz=265,slow=74,SNR=17 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.75** | **68** | T | T | 16 40 17.2 | |
| | baz=265,slow=74,SNR=16 | | | | | | |
| **STKA** | **Stephens Creek** | **41.19** | **161** | P | **P** | **15 55 55.4** | **0.0** |
| | comp=Z,4.1nm,0.7s,baz=350,slow=8.8,SNR=9.4 | | | | | | |
| **STKA** | **Stephens Creek** | **41.19** | **161** | P | **P** | **15 55 55.5** | **+0.2** |
| **STKA** | **Stephens Creek** | **41.19** | **161** | P | **P** | **15 55 55.8** | **+0.4** |
| **GOMU** | **GeErMu** | **41.24** | **319** | P | **P** | **15 56 09.9** | **+14** |
| GOMU | | | | pP | sP | 15 56 15.5 | -2.3 |
| GOMU | | | | sP | pP | 15 56 20.4 | +9.4 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **NAPP** | **Napperby** | **41.44** | **166** | P | **P** | **15 55 58.9** | **+1.6** |
| **HTT** | **Hallett** | **41.87** | **165** | P | **P** | **15 56 02.2** | **+1.3** |
| **RKGY** | **Rocky Gully** | **42.52** | **192** | P | **P** | **15 56 08.6** | **+2.5** |
| **TWOA** | **Tennyson Woods** | **43.31** | **166** | P | **P** | **15 56 14.4** | **+1.9** |
| **ARMA** | **Armidale** | **44.18** | **149** | P | **P** | **15 56 20.8** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 15 56 38.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **44.22** | **340** | P | **P** | **15 56 18.5** | **-1.4** |
| | comp=Z,0.8nm,0.5s,baz=153,slow=8.5,SNR=10 | | | | | | |
| SONM | | | | PcP | **PcP** | **15 58 03.1** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=147,slow=2.7,SNR=3.5 | | | | | | |
| SONM | | | | LR | LR | 16 15 42.9 | |
| | comp=Z,183nm,18.7s,baz=165,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **44.22** | **340** | P | **P** | **15 56 17.4** | **-2.5** |
| **ARPS** | **Mount Arapiles** | **45.80** | **163** | P | **P** | **15 56 33.9** | **+1.5** |
| **PALK** | **Pallekele** | **45.85** | **273** | LR | LR | 16 16 22.1 | |
| | comp=Z,112nm,21.3s,baz=173,slow=37 | | | | | | |
| **DZM** | **Mont Dzumac** | **48.36** | **128** | P | **P** | **15 56 53.1** | **+0.5** |
| | comp=Z,3.3nm,0.6s,baz=270,slow=9.1,SNR=1.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **48.36** | **128** | P | **P** | **15 56 52.2** | **-0.4** |
| **DZM** | **Mont Dzumac** | **48.36** | **128** | P | **P** | **15 56 54.5** | **+1.8** |
| | comp=Z,22nm,2.4s | | | | | | |
| **WMQ** | **Urumqi** | **50.14** | **323** | *eP* | **P** | **15 57 07.1** | **+1.1** |
| WMQ | | | | LR | LR | | |
| | comp=Z,220nm,20.9s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **52.28** | **23** | P | **P** | **15 57 23.1** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **52.28** | **23** | P | **P** | **15 57 22.0** | **+0.2** |
| | comp=Z,3.7nm,0.5s,baz=205,slow=4.8,SNR=20 | | | | | | |
| **PETK** | **Petropavlovsk-** | **52.28** | **23** | P | **P** | **15 57 23.4** | **+1.6** |
| **YAK** | **Yakutsk** | **54.88** | **2** | P | **P** | **15 57 39.7** | **-0.9** |
| | comp=Z,1.9nm,0.3s,baz=195,slow=1.0,SNR=4.4 | | | | | | |
| **MK31** | **Makanchi Array** | **54.96** | **324** | P | **P** | **15 57 40.2** | **-1.3** |
| **MKAR** | **Makanchi Array** | **54.96** | **324** | P | **P** | **15 57 40.2** | **-1.3** |
| | comp=Z,3.5nm,0.6s,baz=121,slow=8.4,SNR=73 | | | | | | |
| MKAR | | | | ScP | **ScP** | **16 02 35.0** | **-1.4** |
| | comp=Z,0.2nm,0.5s,baz=105,slow=4.6,SNR=1.9 | | | | | | |
| MKAR | | | | LR | LR | 16 22 04.4 | |
| | comp=Z,98nm,20.8s,baz=112,slow=37 | | | | | | |
| **MAKZ** | **Makanchi** | **55.15** | **324** | P | **P** | **15 57 41.2** | **-1.7** |
| MAKZ | | | | IAmb | IAmb | 15 57 41.8 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **55.43** | **14** | P | **P** | **15 57 45.3** | **+0.7** |
| **NIL** | **Nilore** | **56.09** | **306** | P | **P** | **15 57 48.0** | **-1.8** |
| **MSVF** | **Nonsavu** | **56.17** | **117** | LR | LR | 16 19 27.9 | |
| | comp=Z,124nm,20.9s,baz=209,slow=33 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.73** | **332** | P | **P** | **15 57 58.1** | **-2.9** |
| | comp=Z,0.8nm,0.5s,baz=115,slow=5.9,SNR=4.4 | | | | | | |
| ZALV | | | | LR | LR | 16 23 57.4 | |
| | comp=Z,100nm,18.3s,baz=168,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.73** | **332** | P | **P** | **15 57 58.4** | **-2.6** |
| **AAK** | **Ala-Archa** | **58.05** | **316** | LR | LR | 16 24 46.6 | |
| | comp=Z,344nm,20.8s,baz=94,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **58.05** | **316** | P | **P** | **15 58 03.1** | **-0.7** |
| AAK | | | | IAmb | IAmb | 15 58 03.4 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **SEY** | **Seymchan** | **58.74** | **13** | P | **P** | **15 58 07.8** | **-0.1** |
| | comp=Z,3.5nm,1.0s,baz=206,slow=5.1,SNR=11 | | | | | | |
| **KURK** | **Kurchatov** | **59.06** | **326** | P | **P** | **15 58 08.3** | **-2.0** |
| KURK | | | | IAmb | IAmb | 15 58 21.8 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **KKAR** | **Karatay Array** | **60.96** | **316** | P | **P** | **15 58 22.0** | **-1.6** |
| **AFI** | **Afiamalu** | **64.30** | **109** | LR | LR | 16 22 41.4 | |
| | comp=Z,113nm,20.3s,baz=258,slow=32 | | | | | | |
| **TIXI** | **Tiksi** | **64.51** | **1** | P | **P** | **15 58 46.3** | **-0.3** |
| | comp=Z,0.9nm,0.4s,baz=169,slow=3.4,SNR=8.3 | | | | | | |
| TIXI | | | | LR | LR | 16 28 05.7 | |
| | comp=Z,89nm,20.3s,baz=181,slow=37 | | | | | | |
| **BRVK** | **Borovoye** | **64.72** | **326** | P | **P** | **15 58 46.9** | **-1.5** |
| **NRIK** | **Noril'sk** | **67.25** | **346** | LR | LR | 16 31 32.1 | |
| | comp=Z,133nm,18.2s,baz=142,slow=39 | | | | | | |
| **ABKAR** | **Abkulak array** | **69.71** | **320** | P | **P** | **15 59 18.2** | **-1.8** |
| **UNV** | **Unalaska Valle** | **70.58** | **35** | P | **P** | **15 59 27.1** | **+1.9** |
| **AKTO** | **Aktyubinsk** | **71.19** | **321** | LR | LR | 16 33 47.3 | |
| | comp=Z,177nm,18.3s,baz=106,slow=38 | | | | | | |
| **ARU** | **Arti** | **72.24** | **327** | P | **P** | **15 59 33.4** | **-1.8** |
| | baz=97,slow=7.8 | | | | | | |
| ARU | | | | LR | LR | 16 32 45.6 | |
| | comp=Z,171nm,18.5s,baz=132,slow=37 | | | | | | |
| **ARU** | **Arti** | **72.24** | **327** | P | **P** | **15 59 33.5** | **-1.7** |
| ARU | | | | IAmb | IAmb | 15 59 34.3 | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **TTA** | **Tatalina** | **77.84** | **27** | P | **P** | **16 00 08.1** | **+0.6** |
| TTA | | | | IAmb | IAmb | 16 00 32.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **78.84** | **26** | P | **P** | **16 00 14.1** | **+1.3** |
| J20K | | | | IAmb | IAmb | 16 00 43.1 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **78.97** | **33** | P | **P** | **16 00 13.8** | **+0.1** |
| | comp=Z,6.7nm,0.6s,baz=285,slow=4.5,SNR=8.9 | | | | | | |
| KDAK | | | | LR | LR | 16 27 58.3 | |
| | comp=Z,98nm,21.9s,baz=251,slow=30 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.97** | **33** | P | **P** | **16 00 14.3** | **+0.7** |
| KDAK | | | | IAmb | IAmb | 16 00 16.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **79.22** | **24** | P | **P** | **16 00 15.6** | **+0.7** |
| **RAYN** | **Ar Rayn** | **79.37** | **293** | P | **P** | **16 00 15.9** | **-0.8** |
| RAYN | | | | IAmb | IAmb | 16 00 17.3 | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **CAST** | **Castle Rocks** | **79.67** | **27** | P | **P** | **16 00 17.9** | **+0.5** |
| CAST | | | | IAmb | IAmb | 16 00 18.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **BRLK** | **Bradley Lake** | **79.98** | **31** | P | **P** | **16 00 18.8** | **-0.4** |
| BRLK | | | | IAmb | IAmb | 16 00 44.4 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **TRF** | **Thorofare Moun** | **80.48** | **27** | P | **P** | **16 00 21.5** | **-0.5** |
| TRF | | | | IAmb | IAmb | 16 00 37.1 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **RC01** | **Rabbit Creek A** | **80.62** | **29** | P | **P** | **16 00 22.4** | **-0.2** |
| **TOLK** | **Toolik Lake Re** | **81.08** | **22** | P | **P** | **16 00 25.9** | **+0.9** |
| TOLK | | | | IAmb | IAmb | 16 00 27.1 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **RND** | **Reindeer** | **81.12** | **27** | P | **P** | **16 00 25.0** | **-0.3** |
| **PWL** | **Port Wells** | **81.29** | **30** | P | **P** | **16 00 26.5** | **+0.4** |
| **ILAR** | **Eielson Array** | **82.01** | **26** | P | **P** | **16 00 28.9** | **-1.0** |
| | comp=Z,2.5nm,0.5s,baz=246,slow=5.1,SNR=59 | | | | | | |
| **SCRK** | **Sand Creek** | **83.29** | **26** | P | **P** | **16 00 37.0** | **+0.4** |
| SCRK | | | | IAmb | IAmb | 16 00 38.5 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **VRDI** | **Verde Repeater** | **83.66** | **29** | P | **P** | **16 00 39.1** | **+0.4** |
| VRDI | | | | IAmb | IAmb | 16 00 40.6 | |
| | comp=Z,5.5nm,0.5s | | | | | | |
| **DAWY** | **Dawson** | **85.30** | **26** | P | **P** | **16 00 47.5** | **+0.7** |
| DAWY | | | | IAmb | IAmb | 16 00 49.3 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **PPT** | **Papeete** | **85.95** | **108** | LR | LR | 16 31 17.0 | |
| | comp=Z,48nm,19.9s,baz=214,slow=30 | | | | | | |
| **INK** | **Inuvik** | **86.99** | **22** | P | **P** | **16 00 54.2** | **-0.6** |
| | comp=Z,2.8nm,0.6s,baz=309,slow=4.9,SNR=12 | | | | | | |
| **INK** | **Inuvik** | **86.99** | **22** | P | **P** | **16 00 54.3** | **-0.6** |
| INK | | | | IAmb | IAmb | 16 00 56.1 | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.39** | **340** | P | **P** | **16 00 55.0** | **-1.9** |
| | comp=Z,7.8nm,1.0s,baz=56,slow=4.5,SNR=6.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **87.47** | **303** | LR | LR | 16 45 42.2 | |
| | comp=Z,30nm,19.0s,baz=238,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **88.05** | **310** | P | **P** | **16 00 59.4** | **-1.5** |
| | comp=Z,1.2nm,0.5s,baz=113,slow=5.9,SNR=2.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **88.05** | **310** | P | **P** | **16 00 59.9** | **-0.9** |
| **FINES** | **FINESS Array B** | **88.99** | **332** | P | **P** | **16 01 02.7** | **-1.9** |
| | comp=Z,2.2nm,0.5s,baz=83,slow=4.4,SNR=13 | | | | | | |
| FINES | | | | LR | LR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.7s,baz=97,slow=3.7,SNR=5.6 | | | | | | |
| ASAR | | | | ScP | ScP | 16 03 05.7 | -6.7 |
| | comp=Z,0.2nm,0.8s,baz=82,slow=4.1,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.65** | **249** | P | **P** | **15 56 56.1** | **-1.0** |
| **BBOO** | **Buckleboo** | **33.52** | **232** | P | **P** | **15 57 05.2** | **+0.8** |
| BBOO | | | | IAmb | IAmb | 15 57 06.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **37.15** | **264** | P | **P** | **15 57 35.9** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 15 58 04.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **39.25** | **239** | P | **P** | **15 57 53.3** | **+0.1** |
| FORT | | | | IAmb | IAmb | 15 57 55.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.02** | **259** | P | **P** | **15 57 60.0** | **+0.3** |
| | comp=Z,2.5nm,0.7s,baz=97,slow=8.1,SNR=2.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.02** | **259** | P | **P** | **15 57 59.1** | **-0.6** |
| FITZ | | | | IAmb | IAmb | 15 58 26.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **49.23** | **244** | P | **P** | **15 59 12.6** | **-0.1** |
| MORW | | | | IAmb | IAmb | 15 59 37.7 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **JOW** | **Kunigami** | **56.17** | **317** | P | **P** | **16 00 05.0** | **+1.3** |
| **VNDA** | **Vanda** | **62.72** | **181** | P | **P** | **16 00 48.5** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **68.20** | **354** | P | **P** | **16 01 24.5** | **+1.1** |
| | comp=Z,4.6nm,0.9s,baz=178,slow=14,SNR=4.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **68.20** | **354** | P | **P** | **16 01 24.9** | **+1.5** |
| **KLR** | **Kul'dur** | **71.15** | **336** | P | **P** | **16 01 42.7** | **+1.2** |
| | comp=Z,0.8nm,0.7s,baz=228,slow=8.1,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.03** | **294** | P | **P** | **16 02 05.7** | **+0.6** |
| | comp=Z,1.8nm,0.8s,baz=122,slow=4.4,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.03** | **294** | P | **P** | **16 02 06.1** | **+1.0** |
| **QSPA** | **South Pole Qui** | **75.16** | **180** | P | **P** | **16 02 05.0** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 16 02 06.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **78.43** | **353** | P | **P** | **16 02 23.7** | **+0.5** |
| | comp=Z,2.9nm,0.9s,baz=146,slow=5.8,SNR=10.0 | | | | | | |
| **YAK** | **Yakutsk** | **82.17** | **343** | P | **P** | **16 02 43.7** | **+0.5** |
| | comp=Z,2.4nm,0.3s,baz=72,slow=1.7,SNR=6.0 | | | | | | |
| **ULN** | **Ulaanbaatar** | **82.27** | **324** | P | **P** | **16 02 45.4** | **+1.2** |
| **SONM** | **Songino Array** | **82.63** | **324** | P | **P** | **16 02 46.8** | **+0.7** |
| | comp=Z,1.6nm,0.9s,baz=143,slow=6.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **82.63** | **324** | P | **P** | **16 02 46.6** | **+0.5** |
| **CAST** | **Castle Rocks** | **84.12** | **17** | P | **P** | **16 02 52.7** | **-0.6** |
| **ILAR** | **Eielson Array** | **86.65** | **18** | P | **P** | **16 03 04.5** | **-1.2** |
| | comp=Z,0.9nm,0.7s,baz=229,slow=6.2,SNR=6.4 | | | | | | |
| **SYO** | **Syowa Base** | **88.58** | **197** | *eP* | **P** | **16 03 16.6** | **+1.6** |
| **TIXI** | **Tiksi** | **90.11** | **349** | P | **P** | **16 03 21.3** | **-0.7** |
| | comp=Z,1.5nm,0.8s,baz=268,slow=24,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.33** | **316** | P | **P** | **16 03 55.9** | **+0.2** |
| | comp=Z,1.1nm,0.7s,baz=84,slow=5.8,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.33** | **316** | P | Pdif | 16 03 56.1 | +0.4 |
| **ZALV** | **Zalesovo Beam** | **97.52** | **294** | P | **P** | **16 03 55.7** | **-0.6** |
| | comp=Z,1.6nm,0.7s,baz=92,slow=3.6,SNR=6.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.66** | **27** | P | **P** | **16 03 55.4** | **-1.3** |
| | comp=Z,0.3nm,0.7s,baz=253,slow=4.8,SNR=3.5 | | | | | | |
| **H03S2** | **Juan Fernandez** | **100.55** | **129** | T | T | 17 56 15.3 | |
| | baz=241 | | | | | | |
| **H03S1** | **Juan Fernandez** | **100.56** | **129** | T | T | 17 56 15.1 | |
| | baz=241 | | | | | | |
| **H03S3** | **Juan Fernandez** | **100.57** | **129** | T | T | 17 56 14.0 | |
| | baz=241 | | | | | | |
| **H03N2** | **Juan Fernandez** | **100.72** | **129** | T | T | 17 56 22.0 | |
| | baz=249,slow=72,SNR=9.2 | | | | | | |
| **H03N3** | **Juan Fernandez** | **100.72** | **129** | T | T | 17 56 26.0 | |
| | baz=249,slow=72,SNR=7.8 | | | | | | |
| **H03N1** | **Juan Fernandez** | **100.73** | **129** | T | T | 17 56 20.8 | |
| | baz=249,slow=72,SNR=9.6 | | | | | | |
| ARCES | **ARCESS Array B** | **120.40** | **345** | PKP | **PKPdf** | **16 09 12.0** | **-0.6** |
| | comp=Z,5.2nm,1.0s,baz=51,slow=1.7,SNR=5.7 | | | | | | |
| ARCES | **ARCESS Array B** | **120.40** | **345** | | **PKPdf** | **16 09 11.8** | **-0.8** |
| **FINES** | **FINESS Array B** | **125.86** | **338** | PKP | **PKPdf** | **16 09 22.7** | **-0.6** |
| | comp=Z,2.1nm,1.0s,baz=66,slow=3.5,SNR=3.6 | | | | | | |
| GERES | **GERESS Array B** | **139.78** | **333** | PKP | **PKPdf** | **16 09 48.7** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=41,slow=3.1,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.93** | **265** | PKP | **PKPdf** | **16 10 25.2** | **-2.5** |
| | comp=Z,0.4nm,0.6s,baz=95,slow=2.2,SNR=2.2 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **16 11 27.2** | **-1.1** |
| | comp=Z,0.9nm,0.8s,baz=98,slow=3.6,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.93** | **265** | PKPdf | **PKPdf** | **16 10 28.1** | **+0.5** |
| TORD | | | | | **PKPab** | **16 11 27.8** | **-0.5** |

*IDC* ***17*** *15:54:42.1±3.4,5°.77S×151°.89E,h66km±22km,mb3.3/5, mb1 3.5/6,mb1mx2.9/44,mbtmp3.6/6,Error ellipse: s-maj=68.0km s-min=14.6km az=116.0*

**ISC 17 15:54:38.5±1.6,5°.9S±0°.1×152°.1E±0°.2,h36km,n8, σ1°55/10,mb3.5/5,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **1.61** | **358** | P | **Pn** | **15 55 05.3** | **+0.8** |
| | baz=107,slow=19 | | | | | | |
| KRVT | | | | S | **Sn** | **15 55 24.8** | **+0.7** |
| | baz=270,slow=20 | | | | | | |
| **PMG** | **Port Moresby** | **5.98** | **234** | P | **Pn** | **15 56 06.5** | **+2.0** |
| | 1.2nm,0.3s,baz=25,slow=14,SNR=5.5 | | | | | | |
| PMG | | | | S | **Sn** | **15 57 09.5** | **-2.3** |
| | 2.5nm,0.3s,baz=196,slow=16,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.17** | **229** | P | **P** | **15 59 32.1** | **+0.5** |
| | 0.4nm,0.5s,baz=52,slow=9.7,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **24.84** | **223** | P | **P** | **15 59 58.8** | **+1.1** |
| | 0.6nm,0.5s,baz=56,slow=8.9,SNR=5.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.50** | **243** | P | **P** | **16 00 31.5** | **+0.8** |
| | 1.2nm,0.3s,baz=58,slow=11,SNR=21 | | | | | | |
| **SONM** | **Songino Array** | **66.90** | **328** | P | **P** | **16 05 25.7** | **-1.6** |
| | 0.3nm,0.7s,baz=148,slow=5.4,SNR=1.9 | | | | | | |
| **ILAR** | **Eielson Array** | **83.47** | **22** | P | **P** | **16 07 01.8** | **-0.4** |
| | 0.4nm,0.8s,baz=260,slow=5.4,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.95** | **286** | PKPbc | **PKPbc** | **16 14 24.9** | **-1.3** |
| | 0.3nm,0.5s,baz=78,slow=3.1,SNR=1.8 | | | | | | |

**PGC 17 15:58:34.6±4.2,50°.00N×130°.23W,h10km,MLSn2.9/10, Mw3.5/10,214km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region,Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOLB** | **Holberg** | **1.49** | **64** | Pn | Pn | 15 58 59.4 | -2.0 |
| HOLB | | | | Sn | Sn | 15 59 16.6 | -4.3 |
| **PACB** | **Port Alice, BC** | **1.81** | **75** | Pn | Pn | 15 59 03.3 | -2.5 |
| PACB | | | | Sn | Sn | 15 59 24.2 | -4.6 |
| **PHC** | **Port Hardy** | **1.93** | **67** | Pn | Pn | 15 59 05.5 | -1.9 |
| PHC | | | | Sn | Sn | 15 59 28.4 | -3.2 |
| **MAYB** | **Maynard** | **2.00** | **77** | Pn | Pn | 15 59 06.1 | -2.5 |
| **TLCB** | **Telegraph Cove** | **2.24** | **75** | Sn | Sn | 15 59 36.4 | -3.1 |
| **WOSB** | **Woss** | **2.36** | **85** | Pn | Pn | 15 59 12.0 | -1.4 |
| **BBB** | **Bella Bella** | **2.56** | **31** | Pn | Pn | 15 59 15.4 | -0.7 |
| BBB | | | | Sn | Sn | 15 59 43.0 | -4.3 |
| **NCRB** | **Newcastle Ridg** | **2.71** | **80** | Pn | Pn | 15 59 17.3 | -1.0 |
| **BNB** | **Barry Inlet** | **2.75** | **340** | Pn | Pn | 15 59 17.1 | -1.6 |
| **BUTB** | **Butedale** | **3.26** | **19** | Pn | Pn | 15 59 25.6 | -0.2 |
| BUTB | | | | Sn | Sn | 16 00 02.5 | -2.2 |
| **BNKB** | **Banks Island** | **3.34** | **3** | Pn | Pn | 15 59 26.0 | -0.9 |
| BNKB | | | | Sn | Sn | 16 00 05.6 | -1.0 |
| **GRNB** | **Grenville Isla** | **3.86** | **2** | Pn | Pn | 15 59 33.3 | -0.6 |
| GRNB | | | | Sn | Sn | 16 00 18.0 | -1.3 |
| **UBRB** | **Upper Baezaeko** | **4.81** | **51** | Pn | Pn | 15 59 47.6 | +0.5 |
| UBRB | | | | Sn | Sn | 16 00 42.1 | -0.9 |

*NAO* ***17*** *15:59:48.2±1.9,73°.50N×7°.42E,ML3.7*

*IDC* ***17*** *15:59:50.0±1.1,73°.48N×7°.99E,h0km,mb3.5/6, mb1 3.7/10,mb1mx3.4/49,mbtmp3.5/10,ML3.0/3,MS3.5/1, Ms1 3.5/1,ms1mx2.6/68,Error ellipse: s-maj=25.4km s-min=13.2km az=64.0*

*BER* ***17*** *15:59:53.0±2.5,73°.65N×8°.17E,h10km,ML2.3,MW3.7, ML3.7(NAO),Confirmed Earthquake*

**ISC 17 15:59:50.3±0.7,73°.60N±0°.05×8°.22E±0°.07,h11km,n47, σ2°11/56,mb3.3/6,Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRBA** | **Barentsburg A** | **4.72** | **15** | Pn | **Pn** | **16 01 02.6** | **+1.4** |
| **BRBA** | **Barentsburg A** | **4.72** | **15** | *eP* | **Pn** | **16 01 01.9** | **+0.7** |
| BRBA | | | | IAML | | 16 03 03.2 | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **BRBB** | **Barentsburg B** | **4.75** | **15** | Pn | **Pn** | **16 01 02.3** | **+0.6** |
| **BRBB** | **Barentsburg B** | **4.75** | **15** | *eP* | **Pn** | **16 01 02.6** | **+0.9** |
| BRBB | | | | *eS* | **Sn** | **16 01 52.7** | **-3.9** |
| **SPA0** | **Spitsbergen Ar** | **5.01** | **20** | Pn | **Pn** | **16 01 06.6** | **+1.3** |
| | baz=196,slow=12 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **5.01** | **20** | Pn | **Pn** | **16 01 06.6** | **+1.3** |
| | baz=196,slow=12 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **5.01** | **20** | Pn | **Pn** | **16 01 07.0** | **+1.7** |
| | baz=182,slow=22,SNR=102 | | | | | | |
| SPITS | | | | Sn | **Sn** | **16 02 02.0** | **-1.1** |
| | baz=228,slow=19,SNR=1.2 | | | | | | |
| **TRO** | **Tromso** | **5.22** | **134** | *eP* | **Pn** | **16 01 09.3** | **+1.2** |
| TRO | | | | IAML | | 16 03 08.0 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **HOPEN** | **Hopen** | **5.22** | **48** | Pn | **Pn** | **16 01 09.0** | **+0.8** |
| **HOPEN** | **Hopen** | **5.22** | **48** | *eP* | **Pn** | **16 01 08.9** | **+0.8** |
| HOPEN | | | | IAML | | 16 03 05.1 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **KBS** | **Kingsbay** | **5.43** | **8** | Pn | **Pn** | **16 01 11.7** | **+0.7** |
| **KBS** | **Kingsbay** | **5.43** | **8** | *eP* | **Pn** | **16 01 11.5** | **+0.5** |
| KBS | | | | IAML | | 16 02 59.3 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **JETT** | **Jettan, Norway** | **5.59** | **130** | *eP* | **Pn** | **16 01 15.8** | **+2.5** |
| JETT | | | | *eS* | **Sn** | **16 02 15.6** | **-1.8** |
| JETT | | | | IAML | | 16 02 21.2 | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **HAMF** | **Hammerfest** | **5.60** | **114** | *eP* | **Pn** | **16 01 13.8** | **+0.5** |
| HAMF | | | | *eS* | **Sn** | **16 02 15.1** | **-2.4** |
| HAMF | | | | IAML | | 16 02 40.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **LOF** | **Lofoten** | **5.76** | **160** | *eP* | **Pn** | **16 01 15.6** | **+0.1** |
| LOF | | | | IAML | | 16 03 08.3 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **KIF** | **Kilpisjarvi** | **6.12** | **133** | Pn | **Pn** | **16 01 21.8** | **+1.3** |
| **KIF** | **Kilpisjarvi** | **6.12** | **133** | *eP* | **Pn** | **16 01 21.6** | **+1.1** |
| **STEI** | **Steigen** | **6.14** | **154** | *eP* | **Pn** | **16 01 21.9** | **+1.2** |
| STEI | | | | IAML | | 16 03 41.9 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **KTK1** | **Kautokeino** | **6.65** | **126** | *eP* | **Pn** | **16 01 29.3** | **+1.5** |
| **FAUS** | **Fauske** | **6.67** | **156** | *eP* | **Pn** | **16 01 29.4** | **+1.5** |
| FAUS | | | | *eS* | **Sn** | **16 02 40.1** | **-3.8** |
| FAUS | | | | IAML | | 16 02 49.9 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.81** | **118** | Pn | **Pn** | **16 01 30.8** | **+0.9** |
| | baz=318,slow=14 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.81** | **118** | *eP* | **Pn** | **16 01 30.5** | **+0.6** |
| ARA0 | | | | Pn | **Pn** | **16 01 30.8** | **+0.9** |
| | baz=318,slow=14 | | | | | | |
| ARA0 | | | | *eS* | **Sn** | **16 02 41.6** | **-5.6** |
| ARA0 | | | | Sn | **Sn** | **16 02 42.1** | **-5.2** |
| | baz=318,slow=22 | | | | | | |
| ARA0 | | | | IAML | | 16 02 58.4 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| ARCES | **ARCESS Array B** | **6.81** | **118** | Pn | **Pn** | **16 01 30.7** | **+0.8** |
| | baz=325,slow=11,SNR=69 | | | | | | |
| ARCES | | | | Sn | Sn | 16 02 38.0 | -9.2 |
| | baz=314,slow=20,SNR=1.5 | | | | | | |
| ARCES | | | | LR | LR | 16 04 25.1 | |
| | comp=Z,340nm,19.2s,baz=220,slow=40 | | | | | | |
| **KEV** | **Kevo** | **7.04** | **114** | *eP* | **Pn** | **16 01 33.2** | **+0.1** |
| **HEF** | **Hetta** | **7.22** | **128** | *eP* | **Pn** | **16 01 38.0** | **+2.5** |
| **KONS** | **Konsvik** | **7.32** | **164** | *eP* | **Pn** | **16 01 38.3** | **+1.4** |
| KONS | | | | *eS* | **Sn** | **16 02 54.0** | **-5.9** |
| KONS | | | | IAML | | 16 03 06.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **DAG** | **Danmarks Havn** | **7.53** | **307** | *eP* | **Pn** | **16 01 39.1** | **-0.6** |
| DAG | | | | *eS* | Sn | 16 02 54.4 | -11 |
| **MOR8** | **Moi Rana** | **7.75** | **161** | *eP* | **Pn** | **16 01 43.4** | **+0.5** |
| **DBG** | **Daneborg** | **7.87** | **289** | Pn | **Pn** | **16 01 41.2** | **-3.1** |
| **DBG** | **Daneborg** | **7.87** | **289** | Pn | Pn | **16 01 41.2** | **-3.1** |
| DBG | | | | *eS* | Sn | 16 03 02.4 | -11 |
| **NSS** | **Namsos** | **9.20** | **170** | *eP* | **Pn** | **16 02 03.2** | **+0.5** |
| **NOR** | **Nord** | **9.51** | **338** | Pn | **Pn** | **16 02 04.7** | **-2.2** |
| **NOR** | **Nord** | **9.51** | **338** | Pn | Pn | **16 02 04.7** | **-2.2** |
| **SCO** | **Scoresbysund** | **9.74** | **266** | *i* P | **Pn** | **16 02 08.3** | **-1.8** |
| **APA0** | **Apatity Array** | **10.11** | **114** | Pn | **Pn** | **16 02 14.8** | **-0.3** |
| | baz=321,slow=12 | | | | | | |
| **APA0** | **Apatity Array** | **10.11** | **114** | Pn | **Pn** | **16 02 14.8** | **-0.3** |
| | baz=321,slow=12 | | | | | | |
| **NOA** | **NORSAR Array B** | **12.66** | **173** | Pn | **Pn** | **16 02 51.2** | **+1.1** |
| | comp=Z,0.0nm,0.3s,baz=349,slow=14,SNR=2.5 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.88** | **142** | P | **Pn** | **16 03 05.1** | **-1.4** |
| | baz=345,slow=9.3 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.88** | **142** | P | **Pn** | **16 03 05.1** | **-1.4** |
| | baz=345,slow=9.3 | | | | | | |
| **FINES** | **FINESS Array B** | **13.88** | **142** | Pn | **Pn** | **16 03 04.8** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=340,slow=10,SNR=5.8 | | | | | | |
| **KLMR** | **Klimovskoe** | **17.27** | **121** | *e*Pn | **P** | **16 03 54.6** | **+2.2** |
| KLMR | | | | AMP | | 16 03 58.5 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **KIRV** | **Kirov** | **21.76** | **111** | P | **P** | **16 04 42.1** | **+0.8** |
| | comp=Z,9.8nm,0.7s,baz=112,slow=4.6,SNR=4.5 | | | | | | |
| AKASG | **Malin Array Be** | **24.68** | **147** | P | **P** | **16 05 11.8** | **+1.1** |
| | comp=Z,0.5nm,0.4s,baz=344,slow=9.5,SNR=3.7 | | | | | | |
| **GERES** | **GERESS Array B** | **24.95** | **171** | P | **P** | **16 05 15.7** | **+2.3** |
| | comp=Z,0.2nm,0.2s,baz=342,slow=9.5,SNR=3.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.96** | **322** | P | **P** | **16 07 16.4** | **+0.8** |
| | comp=Z,0.4nm,0.8s,baz=13,slow=7.9,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **40.91** | **344** | P | **P** | **16 07 34.1** | **+2.3** |
| | comp=Z,0.5nm,0.9s,baz=0.2,slow=7.5,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.39** | **88** | P | **P** | **16 07 38.2** | **+2.2** |
| | comp=Z,0.1nm,0.5s,baz=341,slow=7.2,SNR=2.4 | | | | | | |

*IDC* ***17*** *16:13:53.9±1.5,4°.58S×152°.42E,h70km±12km,mb3.3/5, mb1 3.5/6,mb1mx3.2/26,mbtmp3.6/6,Error ellipse: s-maj=31.4km s-min=18.8km az=123.0*

**ISC 17 16:13:52.7±1.2,4°.63S±0°.09×152°.6E±0°.1,h58km,n8, σ1°44/10,mb3.4/5,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **0.68** | **298** | P | **Pn** | **16 14 07.5** | **+0.9** |
| | baz=107,slow=19 | | | | | | |
| KRVT | | | | S | **Sn** | **16 14 17.9** | **+1.1** |
| | baz=107,slow=19 | | | | | | |
| **PMG** | **Port Moresby** | **7.21** | **229** | P | **Pn** | **16 15 37.0** | **+1.5** |
| | 0.6nm,0.3s,baz=48,slow=12,SNR=1.6 | | | | | | |
| PMG | | | | S | **Sn** | **16 16 55.6** | **-0.5** |
| | 0.3nm,0.3s,baz=24,slow=18,SNR=1.2 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.90** | **144** | P | **P** | **16 18 43.1** | **+1.8** |
| | 6.4nm,1.0s,baz=296,slow=9.9,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.43** | **228** | P | **P** | **16 18 55.3** | **-1.7** |
| | 0.5nm,0.4s,baz=52,slow=9.7,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **26.16** | **222** | P | **P** | **16 19 21.4** | **-0.5** |
| | 0.5nm,0.9s,baz=55,slow=9.3,SNR=10 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.59** | **241** | P | **P** | **16 19 51.0** | **-1.5** |
| | 2.1nm,0.9s,baz=60,slow=8.8,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **82.06** | **22** | P | **P** | **16 26 05.8** | **-0.7** |
| | 0.3nm,0.7s,baz=251,slow=5.3,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.09** | **288** | PKPbc | **PKiKP** | **16 33 38.0** | **-0.8** |
| | 0.1nm,0.4s,baz=49,slow=4.1,SNR=1.6 | | | | | | |

**IDC 17 16:30:33.6±1.6,3°.79S×135°.46E,h0km,mb3.5/2, mb1 3.7/5,mb1mx3.5/32,mbtmp3.5/5,ML3.3/2,Error ellipse: s-maj=52.1km s-min=28.1km az=76.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.09** | **305** | Pn | Pn | 16 31 50.8 | -0.4 |
| | baz=195,slow=20 | | | | | | |
| SIJI | | | | Sn | Sn | 16 32 45.8 | -5.0 |
| | 1.1nm,0.3s,baz=142,slow=19,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.10** | **184** | Pn | Pn | 16 34 22.7 | +1.2 |
| | 0.1nm,0.3s,baz=6.2,slow=12,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **19.82** | **184** | P | P | 16 35 05.5 | -0.6 |
| | 0.1nm,0.3s,baz=6.2,slow=11,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.69** | **324** | P | P | 16 41 39.0 | -0.1 |
| | 0.1nm,0.5s,baz=114,slow=6.5,SNR=1.5 | | | | | | |
| **ILAR** | **Eielson Array** | **88.16** | **25** | P | P | 16 43 26.5 | +0.3 |
| | 0.6nm,1.0s,baz=246,slow=5.8,SNR=2.6 | | | | | | |

*IDC* ***17*** *16:32:26.5±3.8,21°.59N×143°.36E,h318km±37km, mb3.0/12,mb1 3.3/14,mb1mx3.1/47,mbtmp3.9/14,Error ellipse: s-maj=26.2km s-min=13.1km az=86.0*

**ISC 17 16:32:24.4±1.0,21°.6N±0°.1×143°.4E±0°.2,h300km,n14, σ0°85/16,mb3.4/11,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ** | **Hachijo jima 2** | **11.97** | **345** | P | **Pn** | **16 35 07.3** | **+0.8** |
| | 9.1nm,0.3s,baz=218,slow=17,SNR=2.7 | | | | | | |
| **MJAR** | **Matsushiro Ar** | **15.62** | **344** | P | **P** | **16 35 48.6** | **+0.5** |
| | 0.1nm,0.3s,baz=165,slow=12,SNR=3.2 | | | | | | |
| **KSRS** | **Korea Array** | **20.76** | **323** | P | **P** | **16 36 43.2** | **+0.4** |
| | 0.9nm,0.6s,baz=151,slow=8.1,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **39.59** | **320** | P | **P** | **16 39 27.6** | **+0.2** |
| | 0.2nm,0.4s,baz=125,slow=6.0,SNR=2.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.80** | **274** | P | **P** | **16 39 44.8** | **-0.8** |
| | 0.2nm,0.3s,baz=96,slow=4.8,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.18** | **193** | P | **P** | **16 39 49.3** | **+0.8** |
| | 0.5nm,0.2s,baz=15,slow=9.2,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **45.88** | **192** | P | **P** | **16 40 18.1** | **+0.4** |
| | 0.1nm,0.3s,baz=14,slow=6.8,SNR=7.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.46** | **322** | P | **P** | **16 41 20.8** | **-0.5** |
| | 0.8nm,0.5s,baz=117,slow=8.1,SNR=4.6 | | | | | | |
| ZALV | | | | PcP | **PcP** | **16 42 19.8** | **-0.8** |
| | 0.5nm,0.5s,baz=122,slow=4.6,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.96** | **313** | P | **P** | **16 41 24.9** | **0.0** |
| | 0.8nm,0.5s,baz=91,slow=8.1,SNR=22 | | | | | | |
| MKAR | | | | PcP | **PcP** | **16 42 22.3** | **-0.4** |
| | 0.2nm,0.4s,baz=82,slow=4.0,SNR=5.8 | | | | | | |
| **ILAR** | **Eielson Array** | **62.08** | **27** | P | **P** | **16 42 11.6** | **-1.8** |
| | 0.1nm,0.4s,baz=268,slow=6.0,SNR=1.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.49** | **28** | P | **P** | **16 43 42.5** | **+1.2** |
| | 0.4nm,0.4s,baz=292,slow=5.8,SNR=6.3 | | | | | | |
| ARCES | **ARCESS Array B** | **79.13** | **342** | P | **P** | **16 43 56.2** | **+0.5** |
| | 1.1nm,0.7s,baz=68,slow=7.3,SNR=4.3 | | | | | | |
| **KBZ** | **Khabaz** | **82.63** | **314** | P | **P** | **16 44 14.9** | **+0.4** |
| | 1.0nm,0.7s,baz=72,slow=19,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **83.41** | **335** | P | **P** | **16 44 17.3** | **-0.9** |
| | 2.6nm,0.8s,baz=61,slow=3.4,SNR=9.2 | | | | | | |

**IDC 17 16:39:42.2±2.2,10°.05S×113°.22E,h0km,mb3.1/4, mb1 3.4/5,mb1mx3.1/33,mbtmp3.3/5,ML4.1/1,Error ellipse: s-maj=78.1km s-min=23.5km az=46.0,South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **10.29** | **92** | Pn | Pn | 16 42 10.6 | -0.7 |
| | 1.5nm,0.3s,baz=275,slow=12,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.62** | **118** | P | P | 16 44 45.0 | 0.0 |
| | 0.3nm,0.7s,baz=293,slow=11,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **23.94** | **127** | P | P | 16 44 58.2 | -0.1 |
| | 0.2nm,0.6s,baz=300,slow=9.1,SNR=8.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **40.29** | **270** | T | T | 17 30 36.5 | |
| | baz=95,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **40.30** | **270** | T | T | 17 30 34.9 | |
| | baz=95,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **40.31** | **270** | T | T | 17 30 35.9 | |
| | baz=95 | | | | | | |
| **SONM** | **Songino Array** | **57.94** | **355** | P | P | 16 49 37.6 | +1.1 |
| | 0.2nm,0.3s,baz=173,slow=8.5,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.97** | **337** | P | P | 16 50 09.8 | -0.9 |
| | 0.1nm,0.6s,baz=144,slow=7.8,SNR=1.9 | | | | | | |

**NOU 17 16:43:40.8,20°.22S×169°.61E,h104km,MLv4.0/13, Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIFNC** | **LIFOU** | **2.29** | **256** | P | Pn | 16 44 16.3 | -1.0 |
| **DVP** | **Devils Point** | **2.82** | **331** | P | Pn | 16 44 24.5 | +0.2 |
| **PINNC** | **Pines Island,** | **3.12** | **220** | P | Pn | 16 44 28.1 | -0.1 |
| YATNC | **Mamie plateau,** | **3.13** | **234** | P | Pn | 16 44 27.0 | -1.4 |
| OUENC | **Ouen Island, N** | **3.38** | **229** | P | Pn | 16 44 31.9 | +0.1 |
| **DZM** | **Mont Dzumac** | **3.48** | **238** | P | Pn | 16 44 33.1 | -0.1 |
| ONTNC | **Ouen Toro** | **3.60** | **234** | P | Pn | 16 44 34.9 | +0.2 |
| **NOUC** | **Port Laguerre** | **3.61** | **238** | P | Pn | 16 44 35.5 | +0.7 |
| KOUNC | **Koumac, New Ca** | **5.00** | **265** | P | Pn | 16 44 54.5 | +0.9 |
| | 25nm,2.5s | | | | | | |

**IDC 17 16:54:04.1±1.8,3°.27S×127°.48E,h0km,mb3.1/2, mb1 3.5/4,mb1mx3.1/45,mbtmp3.3/4,ML3.4/2,Error ellipse: s-maj=37.2km s-min=28.4km az=89.0,Seram**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.47** | **58** | Pn | Pn | 16 55 13.4 | +0.3 |
| | 2.1nm,0.3s,baz=246,slow=19,SNR=14 | | | | | | |
| SIJI | | | | Sn | Sn | 16 56 06.9 | +1.0 |
| | 0.4nm,0.3s,baz=229,slow=19,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.87** | **159** | P | P | 16 58 15.8 | +0.7 |
| | 0.1nm,0.3s,baz=343,slow=12,SNR=5.5 | | | | | | |
| **ASAR** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SAHE** | **Sakarya_HENDEK** | **1.97** | **286** | P | **Pb** | **16 56 36.4** | **-1.4** |
| **YARM** | **Yarimca-Ladik(** | **1.98** | **72** | PN | **Pb** | **16 56 36.9** | **-1.2** |
| **KDHN** | **Kadinhani** | **2.04** | **208** | P | **Pb** | **16 56 37.8** | **-1.2** |
| **ALIN** | **Konya, Altinte** | **2.05** | **190** | P | **Pn** | **16 56 37.2** | **+0.4** |
| **KIZO** | **Buyukkizoglu-L** | **2.05** | **73** | PN | **Pb** | **16 56 38.3** | **-1.0** |
| **SGAZ** | **Eskisehir, Sey** | **2.08** | **248** | P | **Pb** | **16 56 38.1** | **-1.7** |
| **GULA** | **Gulagac** | **2.09** | **160** | PN | **Pb** | **16 56 38.7** | **-1.3** |
| **SULT** | **Sultanhani-AKS** | **2.12** | **176** | PN | **Pn** | **16 56 38.7** | **+0.9** |
| **KVT** | **Kavak** | **2.19** | **69** | PN | **Pn** | **16 56 39.6** | **+1.0** |
| **SNOP** | **Sinop** | **2.20** | **39** | PN | **Pn** | **16 56 39.3** | **+0.5** |
| **LADK** | **Ladik-KONYA** | **2.25** | **200** | PN | **Pn** | **16 56 40.4** | **+0.8** |
| **BORA** | **Eskisehir** | **2.26** | **260** | P | **Pn** | **16 56 40.0** | **+0.3** |
| **KAYN** | **Sakarya, Kayna** | **2.38** | **287** | P | **Pn** | **16 56 41.8** | **+0.7** |
| **SAMS** | **Samsun-Alacam** | **2.39** | **63** | P | **Pb** | **16 56 43.6** | **-1.5** |
| **CUSAR** | **Sarkisla-SIVAS** | **2.41** | **111** | P | **Pn** | **16 56 42.7** | **+1.0** |
| **BNN** | **Bunyan** | **2.43** | **126** | PN | **Pn** | **16 56 43.4** | **+1.4** |
| **TOKT** | **Tokat** | **2.45** | **89** | PN | **Pn** | **16 56 43.4** | **+1.2** |
| **KONT** | **Konya--Tatoy** | **2.49** | **198** | P | **Pn** | **16 56 44.3** | **+1.5** |
| **YESY** | **Yesilyurt** | **2.56** | **173** | PN | **Pn** | **16 56 45.1** | **+1.4** |
| **CMRD** | **Camardi-Nigde** | **2.95** | **154** | PN | **Pn** | **16 56 50.7** | **+1.5** |
| **RSDY** | **Resadiye-TOKAT** | **3.04** | **87** | PN | **Pn** | **16 56 52.0** | **+1.6** |
| **SARI** | **SarD1z-Kayseri** | **3.05** | **128** | PN | **Pn** | **16 56 52.5** | **+1.8** |
| **KBZ** | **Khabaz** | **7.88** | **61** | Pn | **Pn** | **16 57 59.3** | **+2.5** |
| | 0.1nm,0.3s,baz=240,slow=17,SNR=1.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **10.77** | **346** | Pn | **Pn** | **16 58 34.9** | **-1.4** |
| | 0.7nm,0.3s,baz=167,slow=13,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **35.58** | **63** | P | **P** | **17 03 01.1** | **+1.3** |
| | 0.1nm,0.3s,baz=267,slow=8.6,SNR=5.6 | | | | | | |

**NOU 17 17:05:13.0, 17°06S×167°99E, h7km, MLv4.5/11, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.69** | **164** | P | Pg | 17 05 26.4 | +0.1 |
| **RTV** | **Rentapao** | **0.84** | **150** | P | Pg | 17 05 29.5 | +0.4 |
| **SANVU** | **Saraoutou** | **1.77** | **335** | P | Pn | 17 05 43.5 | -0.6 |
| **KOUNC** | **Koumac, New Ca** | **4.94** | **225** | P | Pn | 17 06 27.8 | +0.2 |
| **DZM** | **Mont Dzumac** | **5.19** | **196** | P | Pn | 17 06 31.8 | +0.5 |
| **OUENC** | **Ouen Island, N** | **5.44** | **191** | P | Pn | 17 06 34.2 | -0.3 |

*PRU **17** 17:13:43.6±0.0, 51°.45N×16°.13E, h0km*
*VIE **17** 17:13:44.7±1.5, 51°.32N×15°.99E, h0km, mb2.6/1, ml2.2/1, Error ellipse: s-maj=12.2km s-min=6.0km az=36.0 75 km WNW of Wroclaw Suspected Mining induced.*

**ISC 17 17:13:42.2±1.8, 51°.45N±0°.08×16°.19E±0°.05, h0km, n17, σ0.66/33, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.61** | **174** | *e*Pg | **Pb** | **17 13 55.3** | **-0.4** |
| KSP | | | | *e*Sg | **Sb** | **17 14 03.8** | **-1.0** |
| **CHVC** | **Chvalec** | **0.86** | **186** | *e*PG | **Pb** | **17 14 00.0** | **-0.1** |
| CHVC | | | | *e*SG | **Sb** | **17 14 11.7** | **-0.5** |
| **OSTC** | **Ostas** | **0.89** | **179** | *e*PG | **Pb** | **17 14 00.9** | **+0.3** |
| OSTC | | | | *e*SG | **Sb** | **17 14 12.8** | **-0.2** |
| **UPC** | **Upice** | **0.95** | **187** | *e*PG | **Pb** | **17 14 02.2** | **+0.7** |
| UPC | | | | *e*SG | **Sb** | **17 14 14.2** | **-0.4** |
| | comp=Z,20nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.10** | **175** | *e*PG | **Pb** | **17 14 04.1** | **-0.1** |
| DPC | | | | *e*SG | **Sb** | **17 14 18.6** | **-0.4** |
| **PVCC** | **Panska Ves** | **1.37** | **229** | *e*PG | **Pg** | **17 14 08.5** | **0.0** |
| PVCC | | | | *e*SG | **Sb** | **17 14 26.9** | **0.0** |
| | comp=Z,30nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.42** | **164** | *e*PG | **Pb** | **17 14 10.0** | **+0.3** |
| **BRG** | **Berggiesshubel** | **1.52** | **249** | Pg | **Pn** | **17 14 11.0** | **+0.3** |
| BRG | | | | Sg | **Sg** | **17 14 31.0** | **-0.2** |
| BRG | | | | Amp | | 17 14 32.5 | |
| | comp=Z,9.5nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.79** | **216** | *e*SG | **Sg** | **17 14 40.2** | **+0.4** |
| **MORC** | **Moravsky Berou** | **1.88** | **152** | *e*PN | **Pn** | **17 14 16.0** | **+0.3** |
| MORC | | | | *e*SG | **Sb** | **17 14 42.2** | **+0.7** |
| **CLL** | **Collm** | **2.00** | **267** | *e*Pg | **Pb** | **17 14 19.0** | **-0.5** |
| CLL | | | | *ex* | x | 17 14 23.0 | |
| CLL | | | | *e*Sg | **Sg** | **17 14 46.0** | **-0.4** |
| **VRAC** | **Vranov** | **2.16** | **173** | *e*PN | **Pg** | **17 14 23.4** | **-0.1** |
| VRAC | | | | *e*SG | **Sg** | **17 14 51.7** | **+0.3** |
| **KRUC** | **Moravsky** | **2.39** | **177** | *e*SG | **Sg** | **17 14 59.9** | **+0.9** |
| **NKC** | **Novy Kostel** | **2.66** | **244** | *e*PN | **Pn** | **17 14 27.4** | **+1.0** |
| NKC | | | | *e*PG | **Pg** | **17 14 32.8** | **-0.4** |
| NKC | | | | *e*SG | **Sg** | **17 15 08.5** | **+0.8** |
| **KHC** | **Kasperske Hory** | **2.86** | **217** | *e*PN | **Pn** | **17 14 29.6** | **+0.5** |
| KHC | | | | *e*PG | **Pb** | **17 14 35.4** | **+1.3** |
| KHC | | | | *e*SN | **Sn** | **17 15 03.1** | **-1.1** |
| KHC | | | | *e*SG | **Sg** | **17 15 14.5** | **+0.5** |
| **CKRC** | **Cesky Krumlov** | **2.89** | **205** | *e*SG | **Sg** | **17 15 14.5** | **-0.6** |
| **CONA** | **Conrad Observa** | **3.53** | **184** | *i* Pg | **Pg** | **17 14 49.7** | **-0.1** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| CONA | | | | Sg | **Sg** | **17 15 33.8** | **-1.7** |

*BJI **17** 17:25:57.7±0.0, 0°.43N×129°.50E, h27km, mb5.3/83, mB5.9/79, Ms6.0/99, Ms7 5.9/92*
*IDC **17** 17:26:00.3±0.4, 0°.87N×129°.04E, h0km, mb5.2/37, mb1 5.3/43, mb1mx5.1/50, mbtmp5.3/43, ML5.2/6, MS5.7/54, Ms1 5.7/54, ms1mx5.6/61, Error ellipse: s-maj=13.1km s-min=8.9km az=77.0*
*NEIC **17** 17:26:02.2±2.0, 0°.86N±0°.06×129°.06E±0°.05, h9km±1km, mb5.8/226, Ms_20 6.0/321, Mwb6.0/46, Mww6.0, Error ellipse: s-maj=10.4km s-min=7.9km az=184.0*
*MOS **17** 17:26:02.4±1.3, 0°.89N×129°.04E, h24km, mb5.8/49, MS5.7/35, Error ellipse: s-maj=6.6km s-min=3.8km az=112.5*
*NEIC **17** 17:26:02.3, 0°.84N×129°.07E, h14km, Moment Tensor Solution. Moment tensor: Scale $10^{18}$Nm; $M_{rr}$0.11; $M_{\theta\theta}$1.22; $M_{\phi\phi}$-1.33; $M_{r\theta}$0.37; $M_{r\phi}$0.47; $M_{\theta\phi}$0.00; Fault plane solution: $M_0$1.41000×$10^{18}$ NP1:$\phi_s$126.03000°, δ80.70000°, λ13.13000°. NP2:$\phi_s$33.87000°, δ77.05000°, λ170.45000°. Principal axes: T 1.4086, Plg16.0000°, Azm350.0000°; N 0.0054, Plg74.0000°, Azm161.0000°; P -1.4140, Plg3.0000°, Azm260.0000°;*
*DJA **17** 17:26:03.4±0.1, 1°N±2°×12°9E±°, h10km, M5.9/121, mB6.2/115, mb5.9/121, MLv6.0/15, Mw6.1/38, Mw(mB)5.9/115, MwMwp5.8/88, Mwp5.9/88*
*KLM **17** 17:26:04, 0°.81N×129°.27E, h21km, mb5.9*
*GCMT **17** 17:26:04.2±0.1, 0°.84N×128°.98E, h16km, MW6.1/164, Moment Tensor Solution. s149,c329; s164,c567; Duration: 287 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-0.13±.01; $M_{\theta\theta}$1.62±.01; $M_{\phi\phi}$-1.48±.01; $M_{r\theta}$0.42±.03; $M_{\theta\phi}$0.61±.01; $M_{r\phi}$0.29±.03; Best double couple: $M_0$1.73700×$10^{18}$ NP1:$\phi_s$125.00000°, δ75.00000°, λ4.00000°. NP2:$\phi_s$34.00000°, δ86.00000°, λ164.00000°. Principal axes: T 1.8480, Plg13.0000°, Azm348.0000°; N -0.2150, Plg74.0000°, Azm201.0000°; P -1.6260, Plg8.0000°, Azm80.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
*NEIC **17** 17:26:06, 0°.96N×129°.08E, h24km, Moment Tensor Solution. Duration: 890 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-0.09; $M_{\theta\theta}$1.06; $M_{\phi\phi}$-0.98; $M_{r\theta}$0.13; $M_{\theta\phi}$0.49; $M_{r\phi}$0.75; Fault plane solution: $M_0$1.37000×$10^{18}$ NP1: $\phi_s$119.00000°, δ60.00000°, λ-10.00000°. NP2: $\phi_s$214.00000°, δ81.00000°, λ-149.00000°. Principal axes: T 1.2533, Plg15.0000°, Azm343.0000°; N 0.2024, Plg58.0000°, Azm228.0000°; P -1.4557, Plg28.0000°, Azm80.0000°;*

**ISC 17 17:26:03.1±0.4, 0°.82N±0°.03×129°.03E±0°.03, h17km±1km, h18km:pP-P, n1375, σ1.87/1381, mb5.7/283, MS5.9/266, 174C-75D, Fault plane solution: NP1:$\phi_s$299.31335°, δ81.38762°, λ16.17056°. NP2:$\phi_s$206.82698°, δ74.01669°, λ171.03850°. Principal axes:** T Plg17.4934°, Azm163.9103°; N Plg71.7332°, Azm326.6265°; P Plg5.0956°, Azm72.2999°; **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.66** | **269** | Pn | **Pn** | **17 26 31.7** | **+0.2** |
| TNTI | | | | Sn | **Sb** | **17 26 53.4** | **-0.5** |
| **TNTI** | **Ternate** | **1.66** | **269** | ⇓P | **Pn** | **17 26 31.9** | **+0.4** |
| **TNTI** | **Ternate** | **1.66** | **269** | P | **Pn** | **17 26 31.8** | **+0.4** |
| **TNTI** | **Ternate** | **1.66** | **269** | P | **Pb** | **17 26 33.0** | **-0.3** |
| **SIJI** | **Sorong** | **2.80** | **127** | Pn | **Pn** | **17 26 45.7** | **-1.5** |
| | 753nm,0.3s,baz=317,slow=12,SNR=580 | | | | | | |
| SIJI | | | | Sn | **Sn** | **17 27 19.4** | **-1.1** |
| | 466nm,0.3s,baz=28,slow=23,SNR=10 | | | | | | |
| **MSAI** | **Masohi** | **4.13** | **181** | P | **Pn** | **17 27 06.7** | **+1.1** |
| **SANI** | **Sanana** | **4.16** | **227** | ⇓P | **Pn** | **17 27 05.6** | **-0.4** |
| **SANI** | **Sanana** | **4.16** | **227** | P | **Pn** | **17 27 04.9** | **-1.0** |
| **SANI** | **Sanana** | **4.16** | **227** | P | **Pn** | **17 27 06.1** | **+0.2** |
| **SGSI** | **Sangihe** | **4.51** | **309** | P | **Pn** | **17 27 12.7** | **+2.0** |
| **AAI** | **Ambon** | **4.55** | **191** | P | **Pn** | **17 27 12.0** | **+0.7** |
| **AAI** | **Ambon** | **4.55** | **191** | P | **Pn** | **17 27 11.7** | **+0.4** |
| **KMSI** | **Cibinong** | **5.05** | **267** | P | **Pn** | **17 27 19.3** | **+1.2** |
| | 22nm4µm55µm6µm,0.6s | | | | | | |
| **BNDI** | **Bandanaira** | **5.38** | **171** | ⇑P | **Pn** | **17 27 22.7** | **+0.1** |
| **BNDI** | **Bandanaira** | **5.38** | **171** | P | **Pn** | **17 27 23.6** | **+1.0** |
| **GTOI** | **Gorontalo** | **6.02** | **268** | P | **Pn** | **17 27 34.3** | **+2.9** |
| | 4.0nm40µm11µm1µm,1.0s | | | | | | |
| **GSPH** | **General Santos** | **6.63** | **322** | ⇑*e*P | **Pn** | **17 27 40.8** | **+0.8** |
| **MRSI** | **Marisa** | **7.09** | **267** | P | **Pn** | **17 27 46.1** | **-0.1** |
| | 4.7nm127µm16µm2µm,0.8s | | | | | | |
| **DAV** | **Davao City (W)** | **7.10** | **331** | Pn | **Pn** | **17 27 46.8** | **+0.5** |
| | 58nm,0.3s,baz=126,slow=2.8,SNR=12 | | | | | | |
| **DAV** | **Davao City (W)** | **7.10** | **331** | ⇑P | **Pn** | **17 27 47.7** | **+1.3** |
| **DAV** | **Davao City (W)** | **7.10** | **331** | P | **Pn** | **17 27 51.0** | **+4.7** |
| **KCP** | **Kidapawan** | **7.30** | **328** | ⇓*i*P | **Pn** | **17 27 51.4** | **+2.3** |
| KCP | | | | *i* S | **Pg** | **17 28 23.0** | **0.0** |
| **BAKI** | **Biak** | **7.36** | **106** | P | **Pn** | **17 27 50.5** | **+0.7** |
| | 26µm2µm,0.6s | | | | | | |
| **APSI** | **Ampana** | **7.57** | **257** | P | **Pn** | **17 27 53.4** | **+0.6** |
| | 7.8nm81µm24µm3µm,1.1s | | | | | | |
| **BIPH** | **Bislig** | **7.79** | **340** | ⇓*e*P | Pn | 17 28 01.0 | +5.2 |
| BIPH | | | | *e*S | **Sn** | **17 29 22.8** | **-0.8** |
| **CTBH** | **Cotabato--PC H** | **7.95** | **323** | ⇓*i*P | **Pn** | **17 27 58.9** | **+0.9** |
| **TOLI2** | **Tolitoli** | **8.25** | **272** | Pn | **Pn** | **17 28 01.9** | **-0.2** |
| **TOLI2** | **Tolitoli** | **8.25** | **272** | P | **Pn** | **17 28 04.9** | **+2.8** |
| **I39PW** | **PALAU INFRASON** | **8.65** | **39** | *i* | | 18 22 30.0 | |
| | baz=222,slow=325,SNR=0.9 | | | | | | |
| **BBSI** | **Bau Bau** | **8.99** | **226** | P | **Pn** | **17 28 13.8** | **+1.6** |
| | 2µm211nm,1.0s | | | | | | |
| **SAUI** | **Saumlaki** | **9.03** | **166** | Pn | **Pn** | **17 28 11.2** | **-1.7** |
| **SAUI** | **Saumlaki** | **9.03** | **166** | ⇑P | **Pn** | **17 28 11.0** | **-1.8** |
| **SAUI** | **Saumlaki** | **9.03** | **166** | P | **Pn** | **17 28 11.9** | **-0.9** |
| | 93µm22µm2µm,1.0s | | | | | | |
| **SAUI** | **Saumlaki** | **9.03** | **166** | P | **Pn** | **17 28 11.8** | **-1.0** |
| **MPSI** | **Mapaga** | **9.14** | **267** | P | **Pn** | **17 28 16.0** | **+1.7** |
| | 97µm12µm685nm,1.0s | | | | | | |
| **ZCP** | **Zamboanga City** | **9.22** | **311** | ⇓*e*P | **Pn** | **17 28 16.5** | **+1.1** |
| ZCP | | | | *e*S | **Sn** | **17 30 02.3** | **+3.5** |
| **SCPH** | **Surigao** | **9.58** | **339** | ⇓*e*P | **Pn** | **17 28 21.9** | **+1.6** |
| **TTSI** | **Tana Toraja** | **9.97** | **247** | P | **Pn** | **17 28 27.6** | **+1.9** |
| | 58µm14µm1µm,0.9s | | | | | | |
| **MSLP** | **Maasin** | **10.14** | **336** | ⇑*e*P | **Pn** | **17 28 29.5** | **+1.4** |
| **TBP** | **Tagbilaran** | **10.21** | **330** | *e*P | **Pn** | **17 28 27.2** | **-1.7** |
| **SNPH** | **Sibulan** | **10.24** | **326** | *e*P | **Pn** | **17 28 28.8** | **-0.8** |
| **BNSI** | **Bone** | **10.31** | **240** | P | **Pn** | **17 28 31.7** | **+1.3** |
| | 45µm8µm567nm,0.9s | | | | | | |
| **SPSI** | **Sidrap Palu** | **10.40** | **243** | P | **Pn** | **17 28 34.0** | **+2.4** |
| | 51µm17µm2µm,0.9s | | | | | | |
| **BKSI** | **Bulukumba** | **10.78** | **235** | P | **Pn** | **17 28 39.5** | **+2.6** |
| | 33µm9µm711nm,1.3s | | | | | | |
| **KAPI** | **Kappang** | **10.93** | **238** | Pn | **Pn** | **17 28 39.5** | **+0.7** |
| | 12nm,0.3s,baz=71,slow=4.8,SNR=38 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 30 37.6** | **-3.1** |
| | 2.3nm,0.3s,baz=0.4,slow=23,SNR=0.8 | | | | | | |
| KAPI | | | | LR | LR | 17 33 24.8 | |
| | comp=Z,26µm,19.7s,baz=88,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **10.93** | **238** | Pn | **Pn** | **17 28 39.2** | **+0.4** |
| **KAPI** | **Kappang** | **10.93** | **238** | ⇓P | **Pn** | **17 28 39.9** | **+1.1** |
| **KAPI** | **Kappang** | **10.93** | **238** | P | **Pn** | **17 28 41.5** | **+2.7** |
| **BSSI** | **Bau Bau, Buton** | **10.97** | **231** | P | **Pn** | **17 28 42.9** | **+3.4** |
| | 24µm7µm815nm,0.8s | | | | | | |
| **CNOP** | **Candoni, Negro** | **10.98** | **325** | ⇓*e*P | **Pn** | **17 28 37.2** | **-2.3** |
| **MYLDM** | **Lahad Datu** | **11.37** | **293** | Pn | **Pn** | **17 28 46.2** | **+1.3** |
| **MYLDM** | **Lahad Datu** | **11.37** | **293** | ⇑P | **Pn** | **17 28 48.2** | **+3.3** |
| **SGKI** | **Sangatta, Kali** | **11.50** | **263** | P | **Pn** | **17 28 47.9** | **+1.2** |
| | 70µm10µm581nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **11.52** | **204** | Pn | **Pn** | **17 28 47.9** | **+0.8** |
| **SOEI** | **Soe** | **11.52** | **204** | ⇑P | **Pn** | **17 28 50.3** | **+3.2** |
| **SOEI** | **Soe** | **11.52** | **204** | P | **Pn** | **17 28 47.0** | **-0.1** |
| | 28µm11µm351nm,1.0s | | | | | | |
| **MMRI** | **Maumere** | **11.57** | **216** | Pn | **Pn** | **17 28 49.4** | **+1.7** |
| **MMRI** | **Maumere** | **11.57** | **216** | ⇑P | **Pn** | **17 28 50.5** | **+2.8** |
| **MMRI** | **Maumere** | **11.57** | **216** | P | **Pn** | **17 28 48.1** | **+0.4** |
| | 33µm13µm668nm,1.9s | | | | | | |
| **MMRI** | **Maumere** | **11.57** | **216** | P | **Pn** | **17 28 49.5** | **+1.8** |
| **GENI** | **Genyem** | **11.64** | **107** | ⇓P | **Pn** | **17 28 50.9** | **+2.2** |
| **GENI** | **Genyem** | **11.64** | **107** | P | **Pn** | **17 28 51.7** | **+3.1** |
| | 64µm21µm866nm,1.8s | | | | | | |
| **GENI** | **Genyem** | **11.64** | **107** | P | **Pn** | **17 28 51.7** | **+3.1** |
| **SMKI** | **Samarinda** | **11.88** | **264** | P | **Pn** | **17 28 53.7** | **+1.7** |
| | 74µm318nm,0.8s | | | | | | |
| **JAY** | **Jayapura** | **12.13** | **106** | Pn | **Pn** | **17 28 55.9** | **+0.5** |
| | 2.8nm,0.3s,baz=232,slow=9.7,SNR=11 | | | | | | |
| JAY | | | | LR | LR | 17 33 12.0 | |
| | comp=Z,26µm,20.4s,baz=286,slow=36 | | | | | | |
| **JAY** | **Jayapura** | **12.13** | **106** | P | **Pn** | **17 28 56.4** | **+1.0** |
| | 30µm5µm120nm,1.6s | | | | | | |
| **BATI** | **Baumata** | **12.18** | **206** | Pn | **Pn** | **17 28 58.0** | **+2.0** |
| | 2.4nm,0.3s,baz=308,slow=1.6,SNR=15 | | | | | | |
| BATI | | | | LR | LR | 17 33 52.3 | |
| | comp=Z,59µm,18.0s,baz=25,slow=39 | | | | | | |
| **BATI** | **Baumata** | **12.18** | **206** | P | **Pn** | **17 28 59.6** | **+3.6** |
| | 14µm5µm245nm,1.1s | | | | | | |
| **RCP** | **Roas** | **12.36** | **330** | ⇓*e*P | **Pn** | **17 29 01.0** | **+2.5** |
| **SPMM** | **Sapulut** | **13.13** | **287** | P | **Pn** | **17 29 13.0** | **+4.0** |
| **KBKI** | **Kotabaru** | **13.49** | **252** | P | **Pn** | **17 29 13.6** | **-0.3** |
| | 981nm3µm318nm,1.4s | | | | | | |
| **PPR** | **Puerto Princes** | **13.57** | **311** | ⇓*e*P | **Pn** | **17 29 18.2** | **+3.2** |
| **MTN** | **Manton Dam** | **13.73** | **171** | P | **Pn** | **17 29 12.9** | **-4.3** |
| | baz=14,SNR=722 | | | | | | |
| **MTN** | **Manton Dam** | **13.73** | **171** | | **Pn** | **17 29 12.7** | **-4.5** |
| **KKM** | **Kota Kinabalu** | **13.80** | **292** | Pn | **Pn** | **17 29 19.2** | **+0.9** |
| **KKM** | **Kota Kinabalu** | **13.80** | **292** | ⇓P | **Pn** | **17 29 18.7** | **+0.5** |
| **KKM** | **Kota Kinabalu** | **13.80** | **292** | P | **Pn** | **17 29 21.2** | **+3.0** |
| **BASI** | **Baing, Sumba** | **13.81** | **217** | P | **Pn** | **17 29 18.2** | **-0.1** |
| | 13µm10µm766nm,1.6s | | | | | | |
| **KDU** | **Kakadu** | **13.84** | **166** | P | Pn | 17 29 13.0 | -5.7 |
| | baz=14,SNR=176 | | | | | | |
| **WBSI** | **Waikabubak, Su** | **14.14** | **222** | P | **Pn** | **17 29 26.2** | **+3.4** |
| | 21µm9µm427nm,1.1s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **14.24** | **263** | P | **Pn** | **17 29 23.9** | **-0.3** |
| | 36µm5µm208nm,1.6s | | | | | | |
| **PLAI** | **Plampang** | **14.74** | **229** | P | **Pn** | **17 29 32.3** | **+1.2** |
| | 20µm11µm555nm,0.9s | | | | | | |
| **JCNP** | **Jose Panganiba** | **14.78** | **335** | ⇑*e*P | **Pn** | **17 29 29.8** | **-1.7** |
| **LQP** | **Lubban** | **15.15** | **331** | ⇓*e*P | **Pn** | **17 29 34.0** | **-2.6** |
| **TGY** | **Tagaytay City** | **15.44** | **329** | Pn | **Pn** | **17 29 38.1** | **-2.2** |
| | 83nm,0.3s,baz=170,slow=2.3,SNR=6.9 | | | | | | |
| TGY | | | | LR | LR | 17 36 06.0 | |
| | comp=Z,26µm,18.5s,baz=142,slow=39 | | | | | | |
| **LUBP** | **Lubang** | **15.50** | **326** | ⇑*e*P | **P** | **17 29 44.6** | **-0.8** |
| **KNRA** | **Kununurra** | **16.39** | **181** | P | **Pn** | **17 29 48.3** | **-4.2** |
| | baz=16,SNR=152 | | | | | | |
| **KNRA** | **Kununurra** | **16.39** | **181** | P | **Pn** | **17 29 48.5** | **-4.0** |
| KNRA | | | | IAmb | IAmb | 17 30 02.9 | |
| | comp=Z,1µm,1.1s | | | | | | |
| **PCPH** | **Palayan** | **16.61** | **332** | ⇓*e*P | **Pn** | **17 29 54.6** | **-0.7** |
| **IGBI** | **Denpasar** | **16.82** | **235** | P | **P** | **17 30 01.2** | **+1.1** |
| | comp=Z,13µmcomp=Z,9µmcomp=Z,415nm,0.9s | | | | | | |
| **SBUM** | **Sibu** | **16.88** | **276** | P | **Pn** | **17 29 58.0** | **-0.7** |
| **SBUM** | **Sibu** | **16.88** | **276** | ⇓P | **Pn** | **17 29 58.0** | **-0.7** |
| **SBUM** | **Sibu** | **16.88** | **276** | P | **P** | **17 30 01.0** | **+0.3** |
| **ABJI** | **Asem Bagus** | **17.05** | **240** | P | **P** | **17 30 04.1** | **+1.4** |
| | comp=Z,48µmcomp=Z,15µmcomp=Z,629nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.46** | **238** | Pn | **Pn** | **17 30 02.6** | **-3.5** |
| JAGI | | | | IAmb | IAmb | 17 30 33.1 | |
| | comp=Z,1µm,1.2s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.46** | **238** | ⇓P | **P** | **17 30 07.6** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **17.46** | **238** | P | **P** | **17 30 07.3** | **+0.1** |
| | comp=Z,36µmcomp=Z,26µmcomp=Z,935nm,1.6s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.46** | **238** | P | **P** | **17 30 03.9** | **+2.1** |
| **STKI** | **Sintang** | **17.56** | **268** | P | **P** | **17 30 09.2** | **+0.8** |
| | comp=Z,22µmcomp=Z,6µmcomp=Z,192nm,1.7s | | | | | | |
| **BLJI** | **Banyuglugur** | **17.58** | **241** | P | **Pn** | **17 30 06.7** | **-0.9** |
| | comp=Z,29µmcomp=Z,9µmcomp=Z,700nm,0.7s | | | | | | |
| **BWJI** | **Bawean** | **17.64** | **248** | P | **P** | **17 30 13.6** | **+4.5** |
| | comp=Z,20µmcomp=Z,15µmcomp=Z,1µm,1.2s | | | | | | |
| **PBKI** | **Pangkalan Bun** | **17.70** | **259** | P | **P** | **17 30 09.5** | **-0.4** |
| | comp=Z,7µmcomp=Z,519nm,1.1s | | | | | | |
| **GMJI** | **Gumukmas** | **17.97** | **240** | P | **P** | **17 30 14.3** | **+1.5** |
| | comp=Z,38µmcomp=Z,25µmcomp=Z,910nm,1.2s | | | | | | |
| **GRJI** | **Gresik** | **18.21** | **245** | P | **P** | **17 30 17.3** | **+1.8** |
| | comp=Z,990nmcomp=Z,4µmcomp=Z,405nm,1.0s | | | | | | |
| **MANU** | **Manus Island** | **18.55** | **99** | P | **P** | **17 30 17.4** | **-1.9** |
| MANU | | | | IAmb | IAmb | 17 30 37.4 | |
| | comp=Z,817nm,1.9s | | | | | | |
| **MANU** | **Manus Island** | **18.55** | **99** | ⇓P | **Pn** | **17 30 19.9** | **+0.3** |
| **KSM** | **Kuching** | **18.73** | **272** | | **P** | **17 30 20.8** | **-0.4** |
| KSM | | | | IAmb | IAmb | 17 30 37.1 | |
| | comp=Z,857nm,1.4s | | | | | | |
| KSM | | | | S | **Sn** | **17 33 47.1** | **-3.8** |
| **KSM** | **Kuching** | **18.73** | **272** | ⇑P | **P** | **17 30 21.1** | **-0.1** |
| **KSM** | **Kuching** | **18.73** | **272** | P | **Pn** | **17 30 23.0** | **+1.4** |
| **KSM** | **Kuching** | **18.73** | **272** | P | **Pn** | **17 30 22.8** | **+1.2** |
| **TBJI** | **Tambak Boyo** | **18.75** | **246** | P | **Pn** | **17 30 25.5** | **+3.7** |
| | comp=Z,23µmcomp=Z,24µmcomp=Z,1µm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.09** | **190** | P | **P** | **17 30 22.9** | **-2.2** |
| | comp=Z,1.1nm,0.3s,baz=21,slow=13,SNR=21 | | | | | | |
| FITZ | | | | LR | LR | 17 38 59.2 | |
| | comp=Z,35µm,20.0s,baz=19,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.09** | **190** | P | **P** | **17 30 23.5** | **-1.6** |
| | baz=19,SNR=47 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.09** | **190** | P | **P** | **17 30 23.7** | **-1.4** |
| FITZ | | | | IAmb | IAmb | 17 30 46.9 | |
| | comp=Z,623nm,1.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.09** | **190** | P | **P** | **17 30 23.8** | **-1.3** |
| **PWJI** | **Pagerwojo** | **19.29** | **243** | P | **Pn** | **17 30 30.3** | **+1.9** |
| | comp=Z,43µmcomp=Z,15µmcomp=Z,844nm,0.9s | | | | | | |
| **UWJI** | **Ujung Watu** | **19.42** | **248** | P | **Pn** | **17 30 32.5** | **+2.5** |
| | comp=Z,17µmcomp=Z,875nm,0.9s | | | | | | |
| **PCJI** | **Pacitan** | **19.92** | **243** | P | **Pn** | **17 30 36.2** | **+0.3** |
| | comp=Z,26µmcomp=Z,14µmcomp=Z,923nm,1.2s | | | | | | |
| **SMRI** | **Semarang** | **20.12** | **247** | P | **P** | **17 30 36.4** | **-0.1** |
| **SMRI** | **Semarang** | **20.12** | **247** | ⇓P | Pn | 17 30 38.8 | +0.4 |
| **SMRI** | **Semarang** | **20.12** | **247** | P | Pn | 17 30 39.7 | +1.3 |
| | comp=Z,45µmcomp=Z,36µmcomp=Z,1µm,1.0s | | | | | | |
| **SMRI** | **Semarang** | **20.12** | **247** | P | Pn | 17 30 39.6 | +1.2 |
| | comp=Z,1µm,1.1s | | | | | | |
| **GUMO** | **Guam** | **20.18** | **50** | P | **P** | **17 30 36.9** | **-0.1** |
| | comp=Z,114nm,0.6s,baz=154,slow=22,SNR=4.2 | | | | | | |
| GUMO | | | | LR | LR | 17 38 24.0 | |
| | comp=Z,16µm,18.8s,baz=231,slow=37 | | | | | | |
| **GUMO** | **Guam** | **20.18** | **50** | P | **P** | **17 30 35.3** | **-1.8** |
| GUMO | | | | IAmb | IAmb | 17 31 10.1 | |
| | comp=Z,1µm,1.6s | | | | | | |
| **COEN** | **Coen** | **20.30** | **137** | P | **P** | **17 30 37.0** | **-1.4** |
| **COEN** | **Coen** | **20.30** | **137** | ⇑P | **P** | **17 30 36.8** | **-1.5** |
| **COEN** | **Coen** | **20.30** | **137** | P | **P** | **17 30 37.9** | **-0.4** |
| **UGM** | **Wanagama** | **20.39** | **244** | P | Pn | 17 30 40.5 | -0.9 |
| **UGM** | **Wanagama** | **20.39** | **244** | P | Pn | 17 30 43.6 | +2.1 |
| | comp=Z,30µmcomp=Z,30µmcomp=Z,2µm,1.9s | | | | | | |
| **UGM** | **Wanagama** | **20.39** | **244** | P | Pn | 17 30 41.1 | -0.4 |
| **YOGI** | **Yogyakarta** | **20.55** | **245** | P | Pn | 17 30 44.6 | +1.2 |
| | comp=Z,15µmcomp=Z,26µmcomp=Z,2µm,1.5s | | | | | | |
| **PMG** | **Port Moresby** | **20.72** | **120** | P | **P** | **17 30 43.1** | **+0.2** |
| | comp=Z,97nm,0.9s,baz=290,slow=8.9,SNR=11 | | | | | | |
| PMG | | | | LR | LR | 17 40 13.3 | |
| | comp=Z,57µm,18.4s,baz=286,slow=41 | | | | | | |
| **PMG** | **Port Moresby** | **20.72** | **120** | *c i*P | Pn | 17 30 44.4 | -0.9 |
| PMG | | | | pmax | pmax | |

**ASAR Alice Springs 24.79 169 P P 17 31 23.9 -0.4**
comp=Z,253nm,0.8s,baz=354,slow=9.6,SNR=496
ASAR S S 17 35 49.4 +3.0
comp=Z,17nm,1.1s,baz=345,slow=20,SNR=2.1
ASAR LR LR 17 42 41.1
comp=Z,33μm,20.2s,baz=1.5,slow=40
ASAR P3KPbc 18 04 27.2
comp=Z,0.4nm,1.0s,baz=186,slow=2.6,SNR=1.8
**ASAR Alice Springs 24.79 169 P P 17 31 24.0 -0.4**
**KLI Kotabumi 24.80 257 P P 17 31 26.8 +2.3**
KLI pmax pmax
comp=Z,1μm,1.0s
**KLI Kotabumi 24.80 257 P P 17 31 26.6 +2.1**
comp=Z,18μmcomp=Z,15μmcomp=Z,1μm,1.0s
**YHNB Yeheng 24.84 343 P P 17 31 24.5 -0.4**
YHNB IAmb IAmb 17 31 40.4
comp=Z,249nm,0.9s
**YHNB Yeheng 24.84 343 P P 17 31 24.3 -0.6**
**KLSI 24.88 257 P P 17 31 27.0 +1.7**
comp=Z,8μmcomp=Z,5μmcomp=Z,246nm,1.0s
**TATO Taipei 25.10 344 P P 17 31 26.2 -0.9**
TATO IAmb IAmb 17 31 36.4
comp=Z,332nm,1.1s
**TATO Taipei 25.10 344 P P 17 31 25.8 -1.3**
**MYKOM Kota Tinggi 25.19 272 P P 17 31 28.9 +0.8**
MYKOM IAmb IAmb 17 31 37.4
comp=Z,354nm,1.1s
**MYKOM Kota Tinggi 25.19 272 ⇓P P 17 31 29.1 +1.1**
**KASI Kota Agung 25.29 255 P P 17 31 30.5 +1.5**
comp=Z,14μmcomp=Z,9μmcomp=Z,1μm,1.0s
**MDSI Maura Dua 25.38 258 P P 17 31 30.5 +0.7**
comp=Z,10μmcomp=Z,6μmcomp=Z,495nm,1.1s
**JMBI JAMBI 25.50 265 P P 17 31 34.9 +4.0**
comp=Z,10μmcomp=Z,741nm,0.8s
**LWLI Liwa 25.60 257 P P 17 31 33.9 +1.9**
comp=Z,36μmcomp=Z,966nm,0.9s
**KNMB Chin-men Tao 25.66 337 P P 17 31 31.4 -0.8**
KNMB IAmb IAmb 17 31 43.9
comp=Z,335nm,1.1s
**WRKA Warakurna 25.71 182 P P 17 31 32.3 -0.4**
baz=26,SNR=329
**WRKA Warakurna 25.71 182 ⇑P P 17 31 32.3 -0.4**
**WRKA Warakurna 25.71 182 P P 17 31 32.8 +0.1**
**XMI Christmas Isla 25.77 244 ⇑P P 17 31 33.4 0.0**
**XMI Christmas Isla 25.77 244 P P 17 31 33.2 -0.2**
**HKPS Hong Kong Po S 25.79 327 P P 17 31 31.5 -1.9**
**HKC Hong Kong Obse 25.79 327 ⇑P P 17 31 34.0 +0.6**
**XMIS Christmas Isla 25.82 244 P P 17 31 33.4 -0.4**
**XMIS Christmas Isla 25.82 244 P P 17 31 34.3 +0.5**
**JOW Kunigami 25.88 358 P P 17 31 33.7 -0.4**
comp=Z,156nm,1.0s,baz=192,slow=8.9,SNR=15
JOW LR LR 17 40 02.9
comp=Z,37μm,21.7s,baz=164,slow=33
**JOW Kunigami 25.88 358 P P 17 31 33.1 -1.1**
JOW IAmb IAmb 17 32 16.2
comp=Z,231nm,0.8s
**JOW Kunigami 25.88 358 ⇑P P 17 31 33.9 -0.3**
**JOW Kunigami 25.88 358 P P 17 31 36.0 +1.8**
**MCO Taipa Grande 25.99 326 P P 17 31 41.0 +5.8**
**QZH Quanzhou 26.02 338 ⇑*i*P P 17 31 35.3 -0.2**
QZH S S 17 36 04.9 -0.8
QZH pmax pmax
comp=Z,150nm,1.1s
QZH pmax pmax
comp=Z,5μm,7.1s
QZH LR LR
comp=Z,13μm,16.6s
QZH LR LR
comp=Z,5μm,16.6s
QZH LR LR
comp=Z,17μm,19.4s
**QIZ Qiongzhong 26.11 315 P P 17 31 37.1 +0.8**
**QIZ Qiongzhong 26.11 315 P P 17 31 38.6 +2.3**
QIZ S S 17 36 10.3 +3.1
QIZ pmax pmax
comp=Z,43nm,0.9s
QIZ pmax pmax
comp=Z,3μm,7.7s
QIZ LR LR
comp=Z,29μm,20.4s
QIZ LR LR
comp=Z,19μm,18.4s
QIZ LR LR
comp=Z,13μm,15.5s
**QIZ Qiongzhong 26.11 315 P P 17 31 37.9 +1.6**
**JRMM Jerantut 26.70 277 P P 17 31 44.0 +2.2**
**CTA Charters Tower 26.77 142 P P 17 31 43.4 +1.0**
comp=Z,47nm,1.1s,baz=327,slow=10.0,SNR=17
CTA LR LR 17 43 57.7
comp=Z,58μm,19.9s,baz=326,slow=40
**CTA Charters Tower 26.77 142 P P 17 31 43.8 +1.5**
**GZH Guangzhou 26.87 327 P P 17 31 45.9 +2.7**
GZH S S 17 36 25.1 +5.9
GZH LR LR
comp=Z,26μm,17.8s
GZH LR LR
comp=Z,29μm,17.3s
**MASI Maura Aman, Be 27.06 262 P P 17 31 47.8 +2.7**
comp=Z,12μmcomp=Z,10μmcomp=Z,1μm,1.1s
**UBPT Khong Chiam 27.34 303 P P 17 31 47.9 +0.4**
UBPT IAmb IAmb 17 32 10.6
comp=Z,143nm,1.0s
**UBPT Khong Chiam 27.34 303 ⇑P P 17 31 49.1 +1.6**
**GIRL Giralia 27.41 211 P P 17 31 49.6 +1.5**
baz=27,SNR=9.3
**GIRL Giralia 27.41 211 P P 17 31 46.7 -1.4**
**GIRL Giralia 27.41 211 ⇓P P 17 31 52.6 +4.5**
**GIRL Giralia 27.41 211 P P 17 31 49.3 +1.2**
**KRJI Kerinci 27.71 264 P P 17 31 55.1 +4.1**
comp=Z,16μmcomp=Z,20μmcomp=Z,1μm,1.3s
**BKNI Bangkinang 27.99 269 P P 17 31 54.1 +0.7**
**BKNI Bangkinang 27.99 269 P P 17 31 56.1 +2.7**
comp=Z,10μmcomp=Z,4μmcomp=Z,268nm,1.1s
**BKNI Bangkinang 27.99 269 P P 17 31 56.0 +2.7**
comp=Z,263nm,1.1s
**IPM Ipoh 28.20 278 P P 17 31 55.6 +0.3**
IPM IAmb IAmb 17 32 08.5
comp=Z,137nm,1.1s
**IPM Ipoh 28.20 278 P P 17 31 58.0 +2.7**
**IPM Ipoh 28.20 278 P P 17 31 56.5 +1.2**
**PPI Padang Panjang 28.66 268 P P 17 32 00.9 +1.6**
comp=Z,979nmcomp=Z,112nm,1.1s
**KULM Kulim 28.68 279 P P 17 32 01.0 +1.5**
**KULM Kulim 28.68 279 ⇑P P 17 32 00.8 +1.3**
**KULM Kulim 28.68 279 P P 17 32 02.0 +2.5**
**MEEK Meekatharra 29.08 199 P P 17 32 01.9 -1.1**
baz=29,SNR=37
**MEEK Meekatharra 29.08 199 P P 17 32 02.2 -0.8**
**OOD Oodnadatta 29.16 168 P P 17 32 03.7 +0.2**
**MNSI Mandailing Nat 29.44 270 P P 17 32 07.4 +1.1**
comp=Z,3μmcomp=Z,111nm,1.0s
**PATS Pohnpei 29.81 78 IAMs_20 IAMs_20 17 40 50.4**
comp=Z,40μm,20.0s
**RPSI Rantau Prapat 30.14 274 P P 17 32 12.5 0.0**
**PSI Prapat 30.15 274 P P 17 32 12.5 -0.2**
comp=Z,192nm,0.8s,baz=99,slow=4.5,SNR=128
PSI LR LR 17 46 20.0
comp=Z,11μm,21.0s,baz=86,slow=40
**GULI GuiLin 30.28 325 ⇑P P 17 32 17.8 +4.3**
GULI S S 17 37 17.3 +4.5
GULI pmax pmax
comp=Z,20nm,0.9s
GULI LR LR
comp=Z,14μm,19.3s
GULI LR LR
comp=Z,16μm,19.8s
GULI LR LR
comp=Z,22μm,22.8s
**SRIT Nakonsritamara 30.30 286 P P 17 32 14.9 +1.0**
SRIT IAmb IAmb 17 32 31.4
comp=Z,226nm,1.6s
**INKA Innaminka 30.55 159 P P 17 32 16.3 +0.5**
comp=Z,350nm,1.2s
**JSU Suzuyama 30.55 2 P P 17 32 15.5 -0.4**
**JSU Suzuyama 30.55 2 ⇑P P 17 32 15.0 -0.9**
**TSI Tuntungan 30.55 275 P P 17 32 18.5 +2.4**
comp=Z,9μmcomp=Z,4μmcomp=Z,262nm,1.1s
**QLP Quilpie 30.93 153 P P 17 32 19.3 0.0**
baz=31,SNR=11
**QLP Quilpie 30.93 153 ⇑P P 17 32 18.8 -0.6**
**QLP Quilpie 30.93 153 P P 17 32 18.9 -0.4**
**SSE Sheshan 31.02 347 P P 17 32 20.8 +0.8**
SSE S S 17 37 27.4 +3.1
SSE pmax pmax
comp=Z,20nm,0.8s
SSE pmax pmax
comp=Z,870nm,5.9s
SSE LR LR
comp=Z,4μm,17.0s
SSE LR LR
comp=Z,8μm,18.1s
**CNSH ChangSha 31.27 332 ⇑P P 17 32 11.6 -11**
CNSH PP **PnPn 17 33 19.8 -4.8**
CNSH S S 17 37 11.0 -17
CNSH LR LR
comp=N,13μm,18.2s
CNSH LR LR
comp=E,15μm,22.5s
CNSH LR LR
comp=Z,17μm,19.2s
**MULG Mulgathing 31.30 172 P P 17 32 22.8 +0.4**
**KCSI Kotacane, Aceh 31.34 275 P P 17 32 23.8 +0.6**
comp=Z,173μmcomp=Z,3μmcomp=Z,250nm,0.9s
**FORT Forrest 31.43 182 P P 17 32 23.3 -0.3**
baz=31,SNR=49
**FORT Forrest 31.43 182 P P 17 32 23.2 -0.5**
**FORT Forrest 31.43 182 ⇑P P 17 32 22.8 -0.9**
**FORT Forrest 31.43 182 P P 17 32 23.4 -0.3**
**GSI Gunungsitoli 31.45 271 P P 17 32 24.0 0.0**
**GSI Gunungsitoli 31.45 271 ⇓P P 17 32 23.0 -1.1**
**GSI Gunungsitoli 31.45 271 P P 17 32 24.4 +0.3**
comp=Z,9μmcomp=Z,5μmcomp=Z,496nm,1.2s
**GSI Gunungsitoli 31.45 271 P P 17 32 24.7 +0.6**
**RK1H Rockhampton Ha 31.85 140 P P 17 32 29.4 +2.0**
**JNU Nakatsue 32.18 3 P P 17 32 30.1 -0.2**
comp=Z,43nm,0.9s,baz=211,slow=2.5,SNR=6.8
JNU LR LR 17 43 40.1
comp=Z,24μm,21.6s,baz=178,slow=33
**JNU Nakatsue 32.18 3 P P 17 32 29.3 -1.0**
JNU IAmb IAmb 17 32 43.7
comp=Z,77nm,0.9s
**JNU Nakatsue 32.18 3 P P 17 32 32.4 +2.1**
comp=Z,95nm,1.0s
**MORW Morawa 32.21 202 P P 17 32 29.9 -0.6**
baz=32,SNR=23
**MORW Morawa 32.21 202 P P 17 32 29.8 -0.7**
MORW IAmb IAmb 17 32 43.1
comp=Z,97nm,0.9s
**MORW Morawa 32.21 202 ⇑P P 17 32 30.1 -0.4**
**MORW Morawa 32.21 202 P P 17 32 30.4 -0.1**
**LCRK Leigh Creek 32.30 165 P P 17 32 31.2 -0.1**
**LHMI Lhok Sumawe 32.33 278 P P 17 32 30.7 -1.1**
**HNR Honiara 32.43 109 LR LR 17 45 15.1**
comp=Z,20μm,21.6s,baz=271,slow=36
**HNR Honiara 32.43 109 P P 17 32 31.0 -1.7**
HNR pmax pmax
comp=Z,463nm,0.9s
HNR MLR MLR
comp=Z,22μm,22.0s
**HNR Honiara 32.43 109 P P 17 32 31.0 -1.7**
**NJ2 Nanjing 32.52 344 ⇑*i*P P 17 32 33.1 -0.1**
NJ2 pP **pP 17 32 37.4 -0.9**
NJ2 S S 17 37 50.1 +2.4
NJ2 sS **sS 17 38 01.0 +4.6**
NJ2 pmax pmax
comp=Z,19nm,0.9s
NJ2 pmax pmax
comp=Z,800nm,4.5s
NJ2 LR LR
comp=Z,14μm,14.7s
NJ2 LR LR
comp=Z,9μm,11.8s
NJ2 LR LR
comp=Z,12μm,20.6s
**WHN Wuhan 32.69 336 ⇑P P 17 32 35.3 +0.7**
WHN S S 17 37 53.4 +3.1
WHN pmax pmax
comp=Z,150nm,0.9s
WHN LR LR
comp=Z,23μm,14.3s
WHN LR LR
comp=Z,50μm,22.6s
WHN LR LR
comp=Z,76μm,25.2s
**JMN Monobe 33.05 7 P P 17 32 37.4 -0.5**
JMN IAmb IAmb 17 32 52.1
comp=Z,246nm,1.4s
**JMN Monobe 33.05 7 ⇑P P 17 32 38.4 +0.5**
**RMQ Roma 33.15 146 P P 17 32 39.6 +0.8**
baz=33,SNR=18
**RMQ Roma 33.15 146 P P 17 32 40.0 +1.2**
**GYA Guiyang 33.36 322 ⇑P P 17 32 41.1 +0.3**
GYA sP sP 17 32 48.6 +0.5
GYA S S **17 38 02.6 +1.4**
GYA SS **SnSn 17 40 09.1 +6.3**
GYA pmax pmax
comp=Z,37nm,1.5s
GYA pmax pmax
comp=Z,1μm,5.4s
GYA LR LR
comp=Z,9μm,23.7s
GYA LR LR
comp=Z,10μm,18.9s
GYA LR LR
comp=Z,8μm,18.7s
**BLDU Ballidu 33.38 200 P P 17 32 41.7 +0.9**
baz=33,SNR=21
**BLDU Ballidu 33.38 200 P P 17 32 40.9 +0.1**
**EIDS Eidsvold 33.66 142 P P 17 32 43.1 -0.1**
baz=34,SNR=25
**EIDS Eidsvold 33.66 142 P P 17 32 42.8 -0.4**
EIDS IAmb IAmb 17 32 49.8
comp=Z,92nm,0.9s
**EIDS Eidsvold 33.66 142 ⇓P P 17 32 43.1 -0.1**
**EIDS Eidsvold 33.66 142 P P 17 32 44.1 +0.9**
**JHJ Hachijo jima 2 33.69 16 LR LR 17 43 02.0**
comp=Z,15μm,21.8s,baz=179,slow=30
**KLBR Kellerberrin 33.96 197 P P 17 32 45.4 -0.4**
baz=34,SNR=20
**KLBR Kellerberrin 33.96 197 P P 17 32 45.6 -0.2**
**BBOO Buckleboo 34.10 169 P P 17 32 46.4 -0.5**
baz=34,SNR=63
**BBOO Buckleboo 34.10 169 P P 17 32 46.5 -0.5**
**BBOO Buckleboo 34.10 169 P P 17 32 46.8 -0.2**
**JHS Saijyo 34.22 6 P P 17 32 48.3 +0.3**
JHS IAmb IAmb 17 33 09.6
comp=Z,115nm,1.0s
**JHS Saijyo 34.22 6 ⇑P P 17 32 47.8 -0.3**
**CM31 Chiang Mai Arr 34.34 302 P P 17 32 49.4 +0.1**
**CMAR Chiang Mai Arr 34.34 302 P P 17 32 50.1 +0.8**
comp=Z,11nm,0.8s,baz=127,slow=6.8,SNR=76
CMAR ScP **ScP 17 39 13.8 +3.9**
comp=Z,1.2nm,0.8s,baz=96,slow=1.8,SNR=1.9
**CMAR Chiang Mai Arr 34.34 302 P P 17 32 49.3 0.0**
**CHTO Chiang Mai 34.50 303 P P 17 32 50.1 -0.6**
CHTO pmax pmax
comp=Z,112nm,1.3s
CHTO MLR MLR
comp=Z,9μm,18.0s
**CHTO Chiang Mai 34.50 303 P P 17 32 50.1 -0.6**
CHTO IAmb IAmb 17 33 10.0
comp=Z,112nm,1.3s
**CHTO Chiang Mai 34.50 303 P P 17 32 52.9 +2.2**
**CHTO Chiang Mai 34.50 303 ⇓P P 17 32 51.5 +0.8**
**CHTO Chiang Mai 34.50 303 P P 17 32 51.7 +1.0**
**WHYH Whyalla 34.62 167 P P 17 32 51.3 -0.2**
**STKA Stephens Creek 34.63 161 P P 17 32 51.2 -0.3**
comp=Z,63nm,0.6s,baz=333,slow=8.4,SNR=80
STKA LR LR 17 49 38.7
comp=Z,18μm,18.1s,baz=340,slow=41
**STKA Stephens Creek 34.63 161 P P 17 32 51.1 -0.5**
baz=35,SNR=47
**STKA Stephens Creek 34.63 161 P P 17 32 50.6 -1.0**
**STKA Stephens Creek 34.63 161 P P 17 32 51.7 +0.1**
**ENH Enshi 34.68 329 P P 17 32 51.8 -0.4**
ENH IAmb IAmb 17 33 00.6
comp=Z,84nm,0.8s
ENH IAMs_20 IAMs_20 17 49 06.7
comp=Z,27μm,20.0s
**MUN Mundaring 34.80 199 P P 17 32 52.7 -0.4**
baz=35,SNR=18
**MUN Mundaring 34.80 199 P P 17 32 53.1 0.0**
**NAPP Napperby 34.89 167 P P 17 32 54.1 +0.3**
**KMI Kunming 35.05 316 ⇑P P 17 32 56.6 +1.0**
KMI pP pP 17 33 01.4 +0.6
KMI sP sP 17 33 03.5 +0.6
KMI PP **PnPn 17 34 12.9 -0.1**
KMI S S **17 38 24.8 -2.8**
KMI SS **SnSn 17 40 49.8 +5.9**
KMI pmax pmax
comp=Z,53nm,1.6s
KMI pmax pmax
comp=Z,1μm,5.6s
KMI LR LR
comp=Z,16μm,21.9s
KMI LR LR
comp=Z,13μm,21.3s
KMI LR LR
comp=Z,10μm,24.3s
**INU Inuyama 35.16 11 P P 17 32 55.2 -0.8**
INU IAmb IAmb 17 33 17.8
comp=Z,130nm,1.0s
INU IAMs_20 IAMs_20 17 46 05.3
comp=Z,31μm,20.0s
**INU Inuyama 35.16 11 ⇑P P 17 32 55.7 -0.4**
**INU Inuyama 35.16 11 P P 17 32 56.5 +0.4**
**HTT Hallett 35.32 166 P P 17 32 57.8 +0.2**
baz=35,SNR=35
**HTT Hallett 35.32 166 ⇑P P 17 32 58.0 +0.4**
**HTT Hallett 35.32 166 P P 17 32 57.8 +0.2**
**TJN Taejon 35.42 358*ce*P P 17 32 57.2 -1.0**
**TJN Taejon 35.42 358 P P 17 32 57.3 -1.0**
**TJN Taejon 35.42 358 P P 17 32 58.5 +0.2**
comp=Z,448nm,0.9s
**JGF Kuroka 35.47 12 P P 17 32 57.8 -1.0**
**CMSA Cobar Meteorol 35.85 155 P P 17 33 01.9 -0.2**
baz=36,SNR=54
**CMSA Cobar Meteorol 35.85 155 P P 17 33 02.2 +0.1**
**KSAR Wonju Array Be 36.46 358 P P 17 33 05.8 -1.4**
**KSAR Wonju Array Be 36.46 358 P P 17 33 05.8 -1.4**
**KSRS Korea Array 36.47 359 P P 17 33 06.2 -1.1**
comp=Z,37nm,0.8s,baz=174,slow=9.7,SNR=40
KSRS LR LR 17 46 13.0
comp=Z,20μm,21.9s,baz=180,slow=33
**KS19 Wonju Array Si 36.52 358 P P 17 33 07.4 -0.3**
**MJAR Matsushiro Arr 36.55 12 P P 17 33 05.9 -2.2**
comp=Z,40nm,0.8s,baz=187,slow=8.8,SNR=41
MJAR LR LR 17 46 51.5
comp=Z,18μm,20.7s,baz=196,slow=34
**MJAR Matsushiro Arr 36.55 12 P P 17 33 06.1 -2.0**
MJAR pmax pmax
comp=Z,87nm,1.0s
**MJAR Matsushiro Arr 36.55 12 P P 17 33 06.1 -2.0**
**MAJO Matsushiro 36.55 12*d i*P P 17 33 06.8 -1.3**
MAJO pmax pmax
comp=Z,88nm,0.9s
MAJO MLR MLR
comp=Z,17μm,21.0s
**MAJO Matsushiro 36.55 12 P P 17 33 06.1 -2.0**
MAJO IAmb IAmb 17 33 18.9
comp=Z,124nm,0.9s
**MAJO Matsushiro 36.55 12 ⇓P P 17 33 06.9 -1.2**
**MAJO Matsushiro 36.55 12 P P 17 33 09.2 +1.1**
**MAT Matsushiro 36.55 12 P P 17 33 05.8 -2.3**
MAT S S **17 38 56.2 +6.3**
**INCN Inchon 36.55 357 P P 17 33 07.7 -0.4**
INCN pmax pmax
comp=Z,50nm,1.0s
INCN MLR MLR
comp=Z,22μm,21.0s
**INCN Inchon 36.55 357 P P 17 33 07.7 -0.4**
**INCN Inchon 36.55 357 IAMs_20 IAMs_20 17 45 41.4**
comp=Z,22μm,21.0s
**INCN Inchon 36.55 357 P P 17 33 10.7 +2.6**
comp=Z,55nm,2.0s
**MJB9 Matsu-Tunnel 36.55 12 P P 17 33 06.8 -1.3**
MJB9 IAmb IAmb 17 33 18.9
comp=Z,122nm,0.9s
**PZH PanZhiHua 36.62 316 P P 17 33 08.8 -0.1**
PZH PcP **PcP 17 35 33.4 +1.4**
PZH S S **17 38 50.5 -1.0**
PZH pmax pmax
comp=Z,40nm,1.0s
PZH pmax pmax
comp=Z,1μm,9.4s
PZH LR LR
comp=Z,12μm,22.0s
PZH LR LR
comp=Z,11μm,23.0s
PZH LR LR
comp=Z,9μm,18.0s
**GHSS Government Hou 36.66 167 P P 17 33 11.0 +2.0**
comp=Z,286nm,1.1s
**JYT Yasato 36.73 15 P P 17 33 09.5 0.0**
**TWOA Tennyson Woods 36.77 167 P P 17 33 10.9 +1.0**
**TIA Tai'an 36.91 344 ⇓P P 17 33 10.8 -0.3**
TIA S S **17 38 55.0 -0.4**
TIA pmax pmax
comp=Z,27nm,1.3s
TIA pmax pmax
comp=Z,2μm,12.3s
TIA LR LR
comp=Z,8μm,20.6s
TIA LR LR
comp=Z,6μm,18.1s
TIA LR LR
comp=Z,11μm,12.2s
**LYN LuoYang 36.96 337 ⇑*i*P P 17 33 11.3 -0.2**
LYN PP **PnPn 17 34 36.4 +0.3**
LYN S S **17 38 55.5 -0.6**
LYN pmax pmax
comp=Z,30nm,1.4s
LYN pmax pmax
comp=Z,2μm,11.0s
LYN LR LR
comp=Z,16μm,25.5s
LYN LR LR
comp=Z,7μm,24.0s
LYN LR LR
comp=Z,18μm,23.5s
**RKGY Rocky Gully 37.01 197 P P 17 33 12.1 +0.2**
baz=37,SNR=5.7
**RKGY Rocky Gully 37.01 197 P P 17 33 13.3 +1.4**
**HJU Haeju 37.17 356 P P 17 33 13.1 -0.2**
HJU pP **pP 17 33 16.9 -1.6**
HJU S S 17 38 48.5 -11
HJU AmB
comp=Z,3μm,3.8s
HJU AMS AMS
comp=N,23μm,14.0s
HJU AMS AMS
comp=E,22μm,13.1s
HJU AMS AMS
comp=Z,29μm,17.3s
**ARMA Armidale 37.79 147 P P 17 33 19.3 +0.5**
baz=38,SNR=66
**ARMA Armidale 37.79 147 P P 17 33 18.7 0.0**
ARMA IAmb IAmb 17 33 21.6
comp=Z,210nm,1.0s
**ARMA Armidale 37.79 147 ⇑P P 17 33 19.1 +0.3**
**ARMA Armidale 37.79 147 P P 17 33 19.6 +0.8**
**XAN Xi'an 38.04 332 P P 17 33 19.8 -1.0**
XAN pP pP 17 33 24.5 -1.5
XAN PP **PnPn 17 34 53.3 +4.0**
XAN PcP **PcP 17 35 30.6 -5.5**
XAN S S **17 39 10.3 -2.4**
XAN PcS **PcS 17 39 22.8 -2.3**
XAN ScS **ScS 17 43 27.8 -4.8**
XAN pmax pmax
comp=Z,180nm,1.4s
XAN pmax pmax
comp=Z,2μm,5.3s
XAN LR LR
comp=Z,10μm,20.6s
XAN LR LR
comp=Z,13μm,19.9s
XAN LR LR
comp=Z,19μm,22.1s
**PYAG Pyongyang 38.17 356 P P 17 33 22.2 +0.5**
PYAG pP **pP 17 33 26.9 0.0**
PYAG S S 17 38 59.6 -15
PYAG AmB
comp=Z,2μm,3.5s
PYAG AMS AMS
comp=N,23μm,17.1s
PYAG AMS AMS
comp=E,15μm,11.4s
PYAG AMS AMS
comp=Z,22μm,16.5s
**CD2 Chengdu 38.34 324 P P 17 33 23.4 +0.1**
CD2 S S **17 39 18.9 +1.7**
CD2 pmax pmax
comp=Z,90nm,1.2s
CD2 pmax pmax
comp=Z,2μm,7.6s

CD2 LR LR
comp=Z,2µm,20.2s
CD2 LR LR
comp=Z,14µm,20.4s
CD2 LR LR
comp=Z,12µm,24.5s
**JMM Marumori 38.43 15** P **P** **17 33 23.8 -0.1**
JMM IAmb IAmb 17 33 41.9
comp=Z,196nm,1.1s
**JMM Marumori 38.43 15** ⇑P **P** **17 33 24.3 +0.4**
**DL2 Dalian 38.51 351** P **P** **17 33 22.8 -1.8**
DL2 PP **PnPn** **17 34 56.4 +1.6**
DL2 S **S** **17 39 17.4 -2.1**
DL2 pmax pmax
comp=Z,49nm,0.9s
DL2 pmax pmax
comp=Z,2µm,7.7s
DL2 LR LR
comp=Z,10µm,19.0s
DL2 LR LR
comp=Z,20µm,20.0s
DL2 LR LR
comp=Z,10µm,36.9s
**HNS HongShan 38.73 342** ⇑P **P** **17 33 25.4 -1.0**
HNS PP **PP** **17 34 56.0 +0.7**
HNS S **S** **17 39 21.3 -1.5**
HNS pmax pmax
comp=Z,47nm,1.0s
HNS LR LR
comp=Z,13µm,18.6s
HNS LR LR
comp=Z,8µm,22.1s
HNS LR LR
comp=Z,15µm,20.2s
**HHU Hamhung 38.95 358** P **P** **17 33 28.8 +0.6**
**KWAJ Kwajalein Atol 39.23 77** IAMs_20 IAMs_20 17 45 48.0
comp=Z,22µm,20.0s
**ARPS Mount Arapiles 39.24 164** P **P** **17 33 31.5 +0.7**
baz=39,SNR=57
**ARPS Mount Arapiles 39.24 164** P **P** **17 33 31.6 +0.8**
**SUJ Sinuiju 39.32 355** P **P** **17 33 30.3 -1.0**
SUJ pP **pP** **17 33 34.4 -2.2**
SUJ S **S** **17 39 30.5 -1.2**
SUJ AmB
comp=Z,2µm,3.3s
SUJ AMS AMS
comp=N,7µm,16.1s
SUJ AMS AMS
comp=E,12µm,25.6s
SUJ AMS AMS
comp=Z,7µm,16.2s
**MGCD Mangrove Creek 39.73 150** P **P** **17 33 35.8 +0.9**
baz=40,SNR=4.0
**TIY Taiyuan 39.77 339** *e*P **P** **17 33 34.9 -0.4**
TIY PP **PnPn** **17 35 13.5 +3.4**
TIY S **S** **17 39 37.4 -1.4**
TIY pmax pmax
comp=Z,29nm,0.6s
TIY pmax pmax
comp=Z,2µm,5.3s
TIY LR LR
comp=Z,7µm,14.0s
TIY LR LR
comp=Z,4µm,14.0s
TIY LR LR
comp=Z,8µm,15.2s
**RIV Riverview 40.26 151** P **P** **17 33 40.4 +1.2**
baz=40,SNR=4.2
**CAN Canberra 40.51 155** P **P** **17 33 41.5 +0.1**
CAN pmax pmax
comp=Z,207nm,1.2s
CAN MLR MLR
comp=Z,29µm,19.0s
**CAN Canberra 40.51 155** P **P** **17 33 41.5 +0.1**
CAN IAmb IAmb 17 33 57.7
comp=Z,207nm,1.2s
**CAN Canberra 40.51 155** ⇑P **P** **17 33 43.3 +1.9**
**CAN Canberra 40.51 155** P **P** **17 33 43.0 +1.6**
**KOUNC Koumac, New Ca 40.52 124** ⇑p P 17 33 46.8 +5.2
**KOUNC Koumac, New Ca 40.52 124** P P 17 33 46.8 +5.2
comp=Z,57nm,2.0s
**BRAT Ballarat 40.59 162** P **P** **17 33 44.0 +2.1**
**CNB Canberra Magne 40.66 154** P **P** **17 33 43.4 +0.7**
baz=41,SNR=5.8
**CNB Canberra Magne 40.66 154** P **P** **17 33 44.7 +2.0**
**H11S3 WAKE ISLAND Hy 40.92 62** T T 18 17 18.6
baz=248,slow=75,SNR=2066
**H11S2 WAKE ISLAND Hy 40.93 62** T T 18 17 20.8
baz=248,slow=75,SNR=1280
**H11S1 WAKE ISLAND Hy 40.94 62** T T 18 17 19.9
baz=248,slow=75,SNR=809
**SANVU Saraoutou 41.04 115** P **P** **17 33 46.3 +0.3**
SANVU IAmb IAmb 17 34 01.8
comp=Z,451nm,1.6s
SANVU IAMs_20 IAMs_20 17 49 49.4
comp=Z,24µm,22.0s
**SANVU Saraoutou 41.04 115** ⇓P **P** **17 33 47.9 +1.9**
**SANVU Saraoutou 41.04 115** P **P** **17 33 48.3 +2.3**
**SNY Shenyang 41.12 354** ⇑P **P** **17 33 45.3 -0.9**
SNY S **S** **17 39 50.8 -7.8**
SNY pmax pmax
comp=Z,17nm,1.3s
SNY pmax pmax
comp=Z,990nm,4.8s
SNY LR LR
comp=Z,11µm,21.1s
SNY LR LR
comp=Z,22µm,22.6s
SNY LR LR
comp=Z,18µm,22.6s
**TOO Toolangi 41.12 160** P **P** **17 33 47.8 +1.4**
baz=41,SNR=14
**TOO Toolangi 41.12 160** P **P** **17 33 46.9 +0.5**
TOO pmax pmax
comp=Z,78nm,0.8s
**TOO Toolangi 41.12 160** P **P** **17 33 46.9 +0.5**
**TOO Toolangi 41.12 160** ⇓P **P** **17 33 47.7 +1.4**
**TOO Toolangi 41.12 160** P **P** **17 33 47.7 +1.3**
**JTM Tenmabayashi 41.26 14** P **P** **17 33 47.0 -0.4**
JTM IAmb IAmb 17 34 25.6
comp=Z,255nm,1.3s
**JTM Tenmabayashi 41.26 14** ⇑P **P** **17 33 48.5 +1.1**
**IMP Imphal 41.46 308** IAmb IAmb 17 33 56.5
comp=Z,160nm,0.7s
**H11N1 WAKE ISLAND Hy 41.55 61** T T 18 18 06.1
baz=247,slow=75,SNR=1806
**H11N2 WAKE ISLAND Hy 41.56 61** T T 18 18 07.2
baz=247,slow=75,SNR=1778
**H11N3 WAKE ISLAND Hy 41.56 61** T T 18 18 07.4
baz=247,slow=75,SNR=1324
**MSHR Mys Shultsa 41.62 2**⇓*e*P **P** **17 33 51.1 +0.7**
MSHR pmax pmax
comp=Z,35nm,1.0s
**KOHI KOHIMA 41.78 309** IAmb IAmb 17 33 59.4
comp=Z,382nm,1.1s
**LZH Lanzhou 42.16 329** ⇑P **P** **17 33 55.8 +0.7**
LZH pP pP 17 34 01.5 +1.1
LZH sP sP 17 34 06.1 +3.7
LZH PP **PP** **17 35 31.1 -1.8**
LZH S **S** **17 40 14.4 -0.2**
LZH sS sS 17 40 26.9 +3.6
LZH pmax pmax
comp=Z,91nm,1.6s
LZH pmax pmax
comp=Z,2µm,4.9s
LZH LR LR
comp=Z,17µm,16.8s
LZH LR LR
comp=Z,10µm,18.4s
LZH LR LR
comp=Z,23µm,18.5s
**VLA Vladivostok 42.20 3**⇓*e*P **P** **17 33 55.0 0.0**
VLA pmax pmax
comp=Z,160nm,1.7s
VLA MLR MLR
comp=Z,11µm,18.0s
**DVP Devils Point 42.72 117** P P 17 34 04.9 +5.2
**HHC Hu-ho-hao-te 42.88 340** *e*P **P** **17 34 00.4 -0.4**
HHC S **S** **17 40 21.0 -3.9**
HHC SS **SS** **17 43 29.5 -7.1**
HHC pmax pmax
comp=Z,77nm,0.8s
HHC pmax pmax
comp=Z,2µm,4.5s
HHC LR LR
comp=Z,12µm,18.4s

HHC LR LR
comp=Z,8µm,19.0s
HHC LR LR
comp=Z,12µm,19.7s
**NOUC Port Laguerre 42.90 124** P **P** **17 34 03.1 +2.0**
**CN2 Changchun 42.92 356** *e*P **P** **17 33 57.1 -3.8**
CN2 *e*S S 17 40 14.8 -10
CN2 pmax pmax
comp=Z,600nm,6.2s
CN2 LR LR
comp=Z,12µm,21.0s
CN2 LR LR
comp=Z,6µm,21.0s
CN2 LR LR
comp=Z,10µm,22.0s
**DZM Mont Dzumac 43.00 124** LR LR 17 52 25.3
comp=Z,15µm,19.0s,baz=316,slow=37
**DZM Mont Dzumac 43.00 124** *e*P **P** **17 34 04.1 +2.0**
comp=Z,152nm,1.1s
DZM *e*S **S** **17 40 30.0 +2.9**
comp=Z,11µm,27.4s
DZM *e*LQ LQ 17 44 10.1
comp=Z,16µm,31.2s
DZM *e*LR LR 17 46 00.1
comp=Z,21µm,22.4s
**DZM Mont Dzumac 43.00 124** P **P** **17 34 03.2 +1.2**
**DZM Mont Dzumac 43.00 124** ⇑P **P** **17 34 04.5 +2.5**
**DZM Mont Dzumac 43.00 124** P **P** **17 34 04.5 +2.5**
**LIFNC LIFOU 43.10 122** P **P** **17 34 02.6 -0.1**
LIFNC IAmb IAmb 17 34 14.8
comp=Z,230nm,1.2s
LIFNC IAMs_20 IAMs_20 17 50 01.1
comp=Z,20µm,21.0s
**ONTNC Ouen Toro 43.12 125** P **P** **17 34 02.2 -0.6**
ONTNC IAmb IAmb 17 34 10.2
comp=Z,394nm,2.0s
**BTO Baotou 43.20 339** *e*P **P** **17 34 03.3 -0.1**
BTO S **S** **17 40 29.8 +0.2**
BTO LR LR
comp=Z,45µm,21.8s
BTO LR LR
comp=Z,26µm,18.0s
**USA0B Ussuriysk Arra 43.28 3** P **P** **17 34 03.0 -0.8**
USA0B pmax pmax
comp=Z,74nm,1.1s
**USA0B Ussuriysk Arra 43.28 3** P **P** **17 34 03.0 -0.8**
**USRK Ussuriysk Ar. 43.28 3** P **P** **17 34 03.9 0.0**
comp=Z,21nm,0.8s,baz=187,slow=7.0,SNR=17
USRK LR LR 17 52 02.2
comp=Z,8µm,18.1s,baz=179,slow=36
**USRK Ussuriysk Ar. 43.28 3** P **P** **17 34 03.4 -0.4**
**JEW Eniwo 43.30 13** P **P** **17 34 03.0 -1.0**
**YATNC Mamie plateau, 43.36 124** P **P** **17 34 08.5 +3.6**
comp=Z,93nm,1.1s
**SHL Shillong 43.45 308** P **P** **17 34 05.0 -0.8**
SHL pmax pmax
comp=Z,249nm,0.7s
**SHL Shillong 43.45 308** P **P** **17 34 05.0 -0.8**
**SHL Shillong 43.45 308** *e*P **P** **17 34 06.0 +0.3**
SHL IAmb IAmb 17 34 08.3
comp=Z,188nm,0.7s
**SHL Shillong 43.45 308** P **P** **17 34 06.8 +1.0**
SNR=72
**OUENC Ouen Island, N 43.48 124** P **P** **17 34 04.5 -1.3**
**MDJ Mudanjiang 43.62 1** P **P** **17 34 05.7 -0.9**
**MDJ Mudanjiang 43.62 1** P **P** **17 34 05.8 -0.8**
MDJ pP pP 17 34 12.3 +0.5
MDJ sP sP 17 34 13.3 -0.6
MDJ PP **PP** **17 35 49.5 +1.3**
MDJ S **S** **17 40 39.3 +4.0**
MDJ pmax pmax
comp=Z,19nm,2.1s
MDJ LR LR
comp=Z,11µm,19.9s
MDJ LR LR
comp=Z,7µm,16.3s
MDJ LR LR
comp=Z,14µm,20.3s
**MDJ Mudanjiang 43.62 1** P **P** **17 34 08.9 +2.3**
comp=Z,80nm,1.3s
**GUWA GUWAHATI 43.90 308** IAmb IAmb 17 34 11.4
comp=Z,92nm,0.7s
**PINNC Pines Island, 44.07 124** P **P** **17 34 10.3 -0.2**
PINNC IAmb IAmb 17 34 35.0
comp=Z,374nm,1.7s
**XLT XiLinHaoTe 44.42 347** *e*P **P** **17 34 12.1 -1.1**
XLT sP sP 17 34 19.6 -0.8
XLT S **S** **17 40 42.4 -4.9**
XLT pmax pmax
comp=Z,59nm,0.9s
XLT pmax pmax
comp=Z,3µm,5.5s
XLT LR LR
comp=Z,900nm,17.6s
XLT LR LR
comp=Z,9µm,16.9s
XLT LR LR
comp=Z,12µm,19.0s
**TEY Ternei 44.54 8**⇑*e*P **P** **17 34 16.0 +2.1**
TEY *e* 17 40 40.6
TEY pmax pmax
comp=N,20nm,1.2s
TEY pmax pmax
comp=Z,40nm,1.2s
TEY pmax pmax
comp=N,700nm,5.7s
TEY pmax pmax
comp=Z,1µm,5.7s
TEY pmax pmax
comp=E,1µm,7.6s
TEY pmax pmax
comp=N,2µm,9.8s
TEY MLR MLR
comp=N,4µm,16.0s
TEY MLR MLR
comp=E,4µm,16.0s
**BNX BinXian 44.76 358** ⇓P **P** **17 34 14.6 -1.1**
BNX PP **PP** **17 36 02.1 +1.7**
BNX S **S** **17 40 48.6 -3.3**
BNX pmax pmax
comp=E,37nm,1.0s
BNX pmax pmax
comp=E,3µm,5.8s
BNX LR LR
comp=E,28µm,18.1s
BNX LR LR
comp=E,8µm,13.5s
BNX LR LR
comp=E,53µm,20.8s
**ASAJ Asahikawa 44.77 14** P **P** **17 34 16.6 +0.8**
comp=E,36nm,1.0s,baz=203,slow=15,SNR=7.0
**JKA Kamikawa-asahi 44.77 14** P **P** **17 34 16.4 +0.5**
JKA IAmb IAmb 17 34 43.6
comp=Z,268nm,1.5s
**GLAD Gladstone 45.04 160** P **P** **17 34 19.6 +1.6**
**DHUB DHUBRI 45.16 307** IAmb IAmb 17 34 22.0
comp=Z,148nm,0.8s
**MOO Moorlands 46.07 161** P **P** **17 34 27.0 +0.8**
baz=46,SNR=4.9
**MOO Moorlands 46.07 161** P **P** **17 34 30.9 +4.7**
**LSA Lhasa 46.08 312** P **P** **17 34 28.0 +1.0**
LSA pP **sP** **17 34 34.9 +0.6**
LSA PP **PP** **17 36 12.4 -2.8**
LSA S **S** **17 41 12.6 +0.1**
LSA pmax pmax
comp=Z,160nm,0.9s
LSA pmax pmax
comp=Z,130nm,2.7s
LSA LR LR
comp=Z,4µm,16.4s
LSA LR LR
comp=Z,3µm,20.6s
LSA LR LR
comp=Z,5µm,20.6s
**BWNR Bhubaneshwar 46.46 298**⇑*e*P **P** **17 34 31.2 +1.7**
**TAU Tasmania Unive 46.53 161** P **P** **17 34 29.1 -0.7**
TAU pmax pmax
comp=Z,333nm,1.6s
TAU MLR MLR
comp=Z,16µm,19.0s
**TAU Tasmania Unive 46.53 161** P **P** **17 34 29.1 -0.7**
**TAU Tasmania Unive 46.53 161** IAMs_20 IAMs_20 17 56 46.9
comp=Z,16µm,19.0s
**GTA Gaotai 46.76 329** ⇑P **P** **17 34 31.4 -0.4**
GTA pP pP 17 34 37.3 +0.2
GTA sP sP 17 34 40.8 +1.7

GTA S **S** **17 41 17.5 -3.8**
GTA SS **SS** **17 44 40.6 -7.4**
GTA pmax pmax
comp=Z,22nm,1.2s
GTA pmax pmax
comp=Z,1µm,5.5s
GTA LR LR
comp=Z,10µm,20.4s
GTA LR LR
comp=Z,11µm,20.0s
GTA LR LR
comp=Z,16µm,18.9s
**GTK Tadong 46.87 308** IAmb IAmb 17 34 41.1
comp=Z,245nm,0.9s
**KUR Kuril'sk 47.26 18** *e*P **P** **17 34 34.1 -1.3**
KUR 17 36 26.0
KUR S **S** **17 41 28.8 +0.9**
KUR *e*SSS SSS 17 45 58.6
KUR pmax pmax
comp=Z,2260µm,4.4s
KUR MLR MLR
comp=E,5µm,15.0s
KUR MLR MLR
comp=E,10µm,19.0s
KUR MLR MLR
comp=N,2µm,13.0s
**GOMU GeErMu 47.38 322** P **P** **17 34 38.3 +1.3**
GOMU PcP **PcP** **17 36 07.5 -0.1**
GOMU S **S** **17 41 33.0 +2.3**
GOMU ScS **ScS** **17 44 28.8 -2.1**
GOMU pmax pmax
comp=N,9.0nm,1.0s
GOMU pmax pmax
comp=N,1µm,5.6s
GOMU LR LR
comp=N,8µm,19.2s
GOMU LR LR
comp=N,4µm,19.4s
GOMU LR LR
comp=N,9µm,19.4s
**CHLP Challavanipeta 47.49 295** *e*P **P** **17 34 38.9 +1.2**
CHLP IVmBBB 17 34 56.2
comp=Z,1µm,1.9s
CHLP *e*S **S** **17 41 31.1 -0.8**
CHLP IVMs_BB IVMs_BB 17 52 21.2
comp=Z,783nm,25.8s
**YSS Yuzh-Sakhalins 47.49 13***ce*P **P** **17 34 36.6 -0.6**
YSS *e**SP **sP** **17 34 49.7 +5.2**
YSS *e*S **S** **17 41 30.8 -0.3**
YSS *e*SS **SS** **17 44 53.2 -6.0**
YSS pmax pmax
comp=Z,1µm,5.8s
YSS pmax pmax
comp=N,700nm,5.4s
YSS pmax pmax
comp=Z,50nm,0.7s
YSS smax smax
comp=N,2µm,6.4s
**YSS Yuzh-Sakhalins 47.49 13** P **P** **17 34 36.6 -0.6**
**YSS Yuzh-Sakhalins 47.49 13** P **P** **17 34 40.7 +3.5**
comp=N,86nm,2.0s
**TAPN Taplejung 47.59 307** *e*P **P** **17 34 38.8 +0.1**
comp=N,399nm,1.0s
**NFK Norfolk Island 47.59 132** P **P** **17 34 39.0 +0.7**
baz=48,SNR=5.4
**NFK Norfolk Island 47.59 132** ⇑p P 17 34 44.4 +6.1
**BOK Bokaro 47.62 302** *e*P **P** **17 34 40.3 +1.7**
BOK IAmb IAmb 17 34 43.9
comp=Z,74nm,1.0s
**ODAN Odare 47.63 307** *e*P **P** **17 34 38.9 0.0**
comp=Z,657nm,0.7s
**RAGD RAYAGADA 48.24 295**⇑*e*P **P** **17 34 46.2 +2.7**
**KLR Kul'dur 48.29 2** P **P** **17 34 42.3 -1.0**
comp=Z,15nm,0.8s,baz=210,slow=3.5,SNR=26
KLR LR LR 17 52 54.4
comp=Z,6µm,21.6s,baz=185,slow=34
**KLR Kul'dur 48.29 2***ce*P **P** **17 34 42.4 -0.9**
**RAMN Ramite 48.30 306** *e*P **P** **17 34 44.8 +0.6**
comp=Z,74nm,0.6s
**PALK Pallekele 48.60 279** P **P** **17 34 47.7 +1.3**
comp=Z,22nm,1.1s,baz=182,slow=11,SNR=4.3
PALK LR LR 17 57 08.7
comp=Z,5µm,20.9s,baz=204,slow=38
**PALK Pallekele 48.60 279** P **P** **17 34 47.7 +1.3**
PALK pmax pmax
comp=Z,55nm,1.1s
PALK MLR MLR
comp=Z,4µm,20.0s
**PALK Pallekele 48.60 279** IAmb IAmb 17 34 56.9
comp=Z,55nm,1.1s
**PALK Pallekele 48.60 279** P **P** **17 34 48.4 +2.0**
**HIA Hailar 48.92 352** P **P** **17 34 46.1 -2.2**
HIA pmax pmax
comp=Z,83nm,1.5s
HIA MLR MLR
comp=Z,13µm,21.0s
**HIA Hailar 48.92 352** **P** **17 34 46.1 -2.2**
**HIA Hailar 48.92 352** IAMs_20 IAMs_20 17 54 49.6
comp=Z,13µm,21.0s
**JIRN Jiri 48.94 307** *e*P **P** **17 34 49.2 0.0**
comp=Z,449nm,0.8s
**GUN Gumba 49.29 307** *e*P **P** **17 34 51.9 0.0**
comp=Z,523nm,0.7s
**UGL Uglegorsk 49.37 11** *e*P **P** **17 34 53.7 +2.1**
UGL *e*S **S** **17 41 56.5 -1.1**
UGL pmax pmax
comp=Z,100nm,1.1s
UGL pmax pmax
comp=Z,2µm,5.5s
UGL smax smax
comp=E,3µm,5.3s
UGL smax smax
comp=N,3µm,6.7s
**PVM Polavaram 49.39 292** *e*P **P** **17 34 53.7 +1.3**
PVM IVmBBB 17 35 07.2
comp=Z,534nm,4.0s
PVM *e*S **S** **17 41 58.3 -0.6**
PVM IVMs_BB IVMs_BB 17 53 09.5
comp=Z,848nm,23.0s
**PKI Pulchoki 49.52 306** *e*P **P** **17 34 53.1 -0.5**
comp=Z,124nm,0.7s
**PKIN Phulchoki 49.54 306** *e*P **P** **17 34 53.2 -0.5**
comp=Z,103nm,0.7s
**KKN Kakani 49.72 307** *e*P **P** **17 34 54.7 -0.3**
comp=Z,317nm,0.9s
**DMN Daman 49.78 306** *e*P **P** **17 34 55.7 +0.2**
comp=Z,400nm,0.9s
**MDRS Chennai 49.82 286** *e*P **P** **17 34 56.5 +0.8**
MDRS IAmb IAmb 17 35 03.7
comp=Z,102nm,1.3s
**GRNR Gornyy 50.16 6**⇓*iP* **P** **17 35 00.9 +3.2**
GRNR *e* 17 36 57.6
GRNR *e*S S 17 42 18.6 +10
GRNR pmax pmax
comp=N,10.0nm,1.1s
GRNR pmax pmax
comp=Z,20nm,1.0s
**MYLAV Mylavaram 50.19 291** *e*P **P** **17 34 59.4 +1.0**
MYLAV IVmBBB 17 35 28.8
comp=Z,472nm,2.3s
MYLAV *e*S **S** **17 42 10.4 +0.3**
MYLAV IVMs_BB IVMs_BB 18 03 49.9
comp=Z,790nm,21.8s
**GKN Gorkha 50.33 307** *e*P **P** **17 34 59.2 -0.3**
comp=Z,334nm,0.9s
**SKHT Srikalahasti 50.45 287** *e*P **P** **17 35 00.7 +0.2**
SKHT IVmBBB 17 35 33.3
comp=Z,398nm,2.3s
SKHT *e*S **S** **17 42 12.3 -1.4**
SKHT IVMs_BB IVMs_BB 17 52 32.6
comp=Z,763nm,21.1s
**ULN Ulaanbaatar 50.59 341***ce*P **P** **17 35 00.7 -0.4**
ULN pmax pmax
comp=Z,139nm,1.5s
ULN MLR MLR
comp=Z,8µm,20.0s
**ULN Ulaanbaatar 50.59 341** P **P** **17 35 00.1 -1.1**
ULN IAmb IAmb 17 35 35.0
comp=Z,127nm,1.2s
**ULN Ulaanbaatar 50.59 341** P **P** **17 35 00.9 -0.3**
**ULN Ulaanbaatar 50.59 341** ⇑P **P** **17 35 00.8 -0.4**
**ADKI Addanki 50.62 290** *e*P **P** **17 35 03.6 +1.9**
ADKI IVmB_BB 17 36 08.2
comp=Z,507nm,4.3s
ADKI *e*S **S** **17 42 15.9 -0.1**
ADKI IVMs_BB IVMs_BB 17 55 23.2

comp=Z,683nm,23.0s
**VLK Valmikinagar 50.67 305⇑** *e*P P **17 35 03.9 +2.0**
**SONM Songino Array 50.78 340** P P **17 35 01.9 -0.7**
comp=Z,15nm,0.6s,baz=153,slow=7.8,SNR=71
SONM PcP **PcP 17 36 21.6 +2.2**
comp=Z,20nm,0.9s,baz=169,slow=2.9,SNR=1.4
SONM LR LR 17 58 26.1
comp=Z,4μm,18.0s,baz=157,slow=38
SONM PKP2bc P'P'bc 18 06 08.9
comp=Z,1.8nm,1.2s,baz=275,slow=1.4,SNR=4.3
**SONM Songino Array 50.78 340** P **P 17 35 01.3 -1.3**
**KOLN Koldanda 51.07 306** *e*P P **17 35 05.4 +0.2**
comp=Z,929nm,0.8s
**DANN Dangsing 51.17 307** *e*P P **17 35 06.1 0.0**
comp=Z,877nm,0.8s
**TYV Tymovskoe 51.19 11** *e*P P **17 35 06.3 +0.9**
TYV *e*S **S 17 42 26.1 +3.2**
TYV pmax pmax
comp=Z,25nm,1.5s
TYV pmax pmax
comp=Z,2μm,5.3s
TYV smax smax
comp=N,2μm,7.7s
TYV smax smax
comp=E,3μm,7.7s
TYV smax smax
comp=N,9.0nm,2.5s
TYV smax smax
comp=E,12nm,2.5s
**NJS Nagarjunasagar 51.39 291** *e*P P **17 35 06.6 -0.9**
NJS IVmB_BB 17 35 37.2
comp=Z,479nm,2.5s
NJS *e*S **S 17 42 25.6 -1.2**
NJS IVMs_BB IVMs_BB 17 52 17.3
comp=Z,526nm,27.7s
**RCLA Racherla 51.49 289** *e*P P **17 35 09.2 +0.9**
RCLA IVmBBB 17 35 25.1
comp=Z,707nm,1.2s
RCLA *e*S **S 17 42 25.4 -2.8**
RCLA IVMs_BB IVMs_BB 18 01 16.7
comp=Z,1μm,18.9s
**SALM Salem 51.57 284⇑** *e*P P **17 35 10.9 +2.1**
**ALBI Allahabad 51.63 302⇑** *e*P P **17 35 09.5 +0.3**
**MSVF Nonsavu 51.64 113** LR LR 17 56 49.0
comp=Z,10μm,20.1s,baz=298,slow=36
**MSVF Nonsavu 51.64 113⇑** *i*P P **17 35 10.3 +0.9**
MSVF pmax pmax
comp=Z,146nm,1.2s
MSVF MLR MLR
comp=Z,8μm,16.0s
**MSVF Nonsavu 51.64 113** P P **17 35 09.1 -0.3**
MSVF IAmb IAmb 17 35 31.7
comp=Z,130nm,1.1s
**MSVF Nonsavu 51.64 113** IAMs_20 IAMs_20 17 56 49.3
comp=Z,11μm,21.0s
**MSVF Nonsavu 51.64 113⇓** P P **17 35 11.9 +2.4**
**MSVF Nonsavu 51.64 113** P P **17 35 11.6 +2.2**
**SRLM Srisailam 51.68 290** *e*P P **17 35 09.8 +0.1**
SRLM IVmB_BB 17 35 39.1
comp=Z,621nm,1.8s
SRLM *e*S **S 17 42 28.2 -2.7**
SRLM IVMs_BB IVMs_BB 17 59 27.0
comp=Z,607nm,17.6s
**PYUN Piuthan 51.70 306** *e*P P **17 35 10.1 +0.2**
comp=Z,781nm,0.8s
**CUPL Choutuppal 51.91 291** *e*P P **17 35 12.0 +0.6**
CUPL IVmB_BB 17 35 41.1
comp=Z,568nm,1.5s
CUPL *e*S **S 17 42 32.6 -1.4**
CUPL IVMsBB 17 54 33.7
comp=Z,610nm,18.7s
**RPR Rampur 51.93 293** *e*P P **17 35 11.7 +0.2**
RPR IVmBBB 17 35 41.2
comp=Z,537nm,2.2s
RPR *e*S **S 17 42 33.3 -0.9**
RPR IVMs_BB IVMs_BB 17 57 48.7
comp=Z,673nm,27.1s
**KOD Kodaikanal 52.09 282⇑** *e*P P **17 35 14.2 +1.0**
**HYB Hyderabad 52.28 291** *e*P P **17 35 15.1 +0.9**
HYB IAmb IAmb 17 35 19.6
comp=Z,98nm,1.0s
**HYBB Hyderabad (bro 52.28 291** *e*P P **17 35 14.8 +0.5**
HYBB IVmB_BB 17 35 43.7
comp=Z,811nm,1.5s
HYBB *e*S **S 17 42 36.9 -2.2**
HYBB IVMs_BB IVMs_BB 17 54 31.6
comp=Z,690nm,21.9s
**CIT Chita 52.66 348** *e*P P **17 35 16.2 -0.2**
CIT *e* 17 36 19.0
CIT *e* 17 37 15.4
CIT *e*S **S 17 42 35.4 -7.8**
CIT pmax pmax
comp=Z,270nm,2.5s
**ZEA Zeya 52.76 359** *e*P P **17 35 16.3 -0.8**
ZEA *e*S **S 17 42 46.1 +1.6**
ZEA pmax pmax
comp=N,400nm,5.0s
ZEA pmax pmax
comp=Z,700nm,5.5s
ZEA pmax pmax
comp=E,10.0nm,0.8s
ZEA pmax pmax
comp=N,20nm,1.3s
ZEA pmax pmax
comp=Z,40nm,1.0s
**SRSP Sriramsagar 52.82 293** *e*P P **17 35 18.5 +0.4**
SRSP *e*S **S 17 42 46.9 +0.5**
**URV Uravakonda 53.00 288** *e*P P **17 35 19.5 0.0**
URV IVmBBB 17 36 24.2
comp=Z,404nm,5.6s
URV *e*S **S 17 42 45.3 -3.7**
URV IVMs_BB IVMs_BB 18 01 01.2
comp=Z,718nm,18.0s
**NKL Nikolayevsk 53.05 9** *e*P P **17 35 17.1 -2.1**
NKL *e* 17 37 17.2
NKL *e*S **S 17 42 46.0 -2.3**
NKL pmax pmax
comp=E,3.0nm,0.8s
NKL pmax pmax
comp=N,660nm,0.9s
NKL pmax pmax
comp=Z,62nm,0.9s
NKL smax smax
comp=E,4.0nm,1.5s
NKL smax smax
comp=N,617nm,1.7s
**ZAK Zakamensk 54.02 340** *e*P P **17 35 25.5 -1.1**
ZAK pmax pmax
comp=Z,43nm,1.4s
**KLRI Killari 54.24 292** *e*P P **17 35 28.5 -0.1**
KLRI IVmBBB 17 35 57.7
comp=Z,688nm,2.0s
KLRI *e*S **S 17 43 02.6 -3.2**
KLRI IVMs_BB IVMs_BB 17 49 38.8
comp=Z,767nm,11.9s
**LGTI Lohaghat 54.44 306** *e*P P **17 35 31.0 +1.2**
**AKL Akola 54.47 295⇑** *e*P P **17 35 31.0 +0.8**
**PTH Pithoragarh 54.50 306** *e*P P **17 35 30.5 0.0**
**SKR Severo-Kuril's 54.74 21** *e*P P **17 35 30.6 -1.0**
SKR *e*S **S 17 43 12.6 +1.3**
SKR pmax pmax
comp=Z,500nm,13.7s
SKR MLR MLR
comp=Z,2μm,16.0s
**BHPL Bhopal 54.77 298** *e*P P **17 35 32.6 +0.2**
BHPL IAmb IAmb 17 35 40.8
comp=Z,109nm,1.1s
**IRK Irkutsk 55.29 342** *e*P P **17 35 35.3 -0.3**
IRK pmax pmax
comp=Z,152nm,2.3s
**MOY Mondy 55.89 339** *e*P P **17 35 39.7 -0.4**
MOY pmax pmax
comp=Z,135nm,2.2s
**GOA Goa 56.36 288** *e*P P **17 35 44.8 +0.9**
**WMQ Urumqi 56.41 325** P P **17 35 43.9 0.0**
WMQ sP sP 17 35 54.8 +3.6
WMQ PP **PP 17 37 51.8 +2.2**
WMQ PcS **PcS 17 40 39.8 -1.6**
WMQ S **S 17 43 29.4 -4.7**
WMQ pmax pmax
comp=Z,110nm,1.1s
WMQ pmax pmax
comp=Z,2μm,5.1s
WMQ LR LR
comp=Z,17μm,18.1s
WMQ LR LR
comp=Z,11μm,16.9s
WMQ LR LR
comp=Z,10μm,20.3s
**DDI Dehra Dun 56.53 306** *e*P P **17 35 45.8 +0.9**
DDI IAmb IAmb 17 35 52.6
comp=Z,330nm,1.0s
**SONA Sohna 56.60 304⇑** *e*P P **17 35 45.5 0.0**
**POO Poona 56.89 292** *e*P P **17 35 47.4 -0.3**
POO IAmb IAmb 17 35 52.1
comp=Z,93nm,1.3s
**KUDL Kundal 57.06 303⇑** *e*P P **17 35 49.2 +0.5**
**PEA0B Petropavlovsk- 57.30 20** P P **17 35 48.1 -1.8**
PEA0B pmax pmax
comp=Z,98nm,1.1s
**PEA0B Petropavlovsk- 57.30 20** P P **17 35 48.1 -1.8**
PEA0B IAmb IAmb 17 35 58.7
comp=Z,98nm,1.1s
**PETK Petropavlovsk- 57.30 20** P P **17 35 50.2 +0.3**
comp=Z,74nm,1.0s,baz=202,slow=7.5,SNR=19
PETK LR LR 17 59 58.4
comp=Z,3μm,20.1s,baz=205,slow=36
**PETK Petropavlovsk- 57.30 20** P P **17 35 50.7 +0.8**
**PETK Petropavlovsk- 57.30 20** P P **17 35 50.7 +0.8**
**PYZ Puysegur Point 57.32 150** IAMs_20 IAMs_20 18 00 55.3
comp=Z,13μm,18.0s
**SMLA Simla 57.53 307** *e*P P **17 35 52.4 +0.5**
SMLA IAmb IAmb 17 35 59.7
comp=Z,190nm,0.8s
**PET Petropavlovsk 57.57 21** *e*P P **17 35 53.2 +1.4**
PET *e*S **S 17 43 47.5 -1.3**
PET *e*PS **PnS 17 43 58.2 -2.5**
PET *e*SS **SS 17 47 36.7 -2.4**
PET pmax pmax
comp=Z,70nm,1.2s
PET pmax pmax
comp=Z,700nm,3.5s
PET pmax pmax
comp=Z,1μm,11.1s
**PET Petropavlovsk 57.57 21** P P **17 35 51.3 -0.5**
PET IAmb IAmb 17 36 00.5
comp=Z,112nm,1.3s
**PET Petropavlovsk 57.57 21** ⇑P P **17 35 53.8 +2.0**
**WHZ Wether Hill Ro 57.78 149** P P **17 35 53.0 -0.4**
WHZ IAmb IAmb 17 36 24.5
comp=Z,95nm,1.4s
WHZ IAMs_20 IAMs_20 17 59 44.5
comp=Z,16μm,22.0s
**LBZ Lake Benmore 58.00 146** P P **17 35 54.7 -0.3**
LBZ IAmb IAmb 17 36 08.5
comp=Z,120nm,1.0s
**THZ Tophouse 58.01 142** P P **17 35 53.6 -1.5**
THZ IAmb IAmb 17 36 27.1
comp=Z,100nm,1.2s
**RPZ Rata Peaks 58.07 145** P P **17 35 57.9 +2.3**
comp=Z,38nm,0.8s,baz=268,slow=10,SNR=3.4
RPZ LR LR 18 01 15.5
comp=Z,11μm,20.7s,baz=308,slow=36
**RPZ Rata Peaks 58.07 145** IAMs_20 IAMs_20 18 00 33.3
comp=Z,14μm,20.0s
**BOD Bodaibo 58.08 351** *e*P P **17 35 54.3 -1.0**
BOD pmax pmax
comp=Z,81nm,1.4s
**TUWZ Tuamarina 58.46 141** P P **17 35 57.9 -0.4**
**BSWZ Blackbirch Sta 58.58 142** P P **17 35 58.2 -0.9**
**ODZ Otahua Downs 58.67 147** IAMs_20 IAMs_20 18 00 51.1
comp=Z,14μm,21.0s
**RAO Raoul Island 58.78 125** LR LR 18 00 08.5
comp=Z,9μm,19.9s,baz=290,slow=35
**RAO Raoul Island 58.78 125** IAMs_20 IAMs_20 17 59 47.7
comp=Z,11μm,21.0s
**BKZ Black Stump Fm 58.90 138** P P **17 36 01.6 +0.2**
BKZ IAmb IAmb 17 36 25.0
comp=Z,93nm,1.0s
**THN Thein Dam 59.15 308⇑** *e*P P **17 36 04.1 +0.9**
**ZSN Zaisan 60.18 327** *e*P P **17 36 08.2 -1.9**
ZSN *e*S **S 17 44 22.4 -0.7**
**ZSN Zaisan 60.18 327** *e*P P **17 36 08.2 -1.9**
baz=327
ZSN *e*S **S 17 44 22.5 -0.7**
baz=327
**DGZ Jazzator, Alta 60.24 330** *de*P P **17 36 10.8 +0.1**
DGZ pmax pmax
comp=Z,54nm,1.5s
DGZ MLR MLR
comp=Z,10μm,22.0s
**AFI Afiamalu 60.41 106** LR LR 17 59 19.3
comp=Z,8μm,21.9s,baz=270,slow=33
**MA2 Magadan 61.00 12** *ce*P P **17 36 15.3 -0.1**
MA2 pmax pmax
comp=Z,62nm,0.9s
**MA2 Magadan 61.00 12** P P **17 36 15.2 -0.1**
MA2 IAmb IAmb 17 36 48.9
comp=Z,78nm,1.1s
**MA2 Magadan 61.00 12** ⇑P P **17 36 15.5 +0.1**
**YAK Yakutsk 61.06 0** P P **17 36 14.7 -1.0**
comp=Z,30nm,0.8s,baz=196,slow=0.5,SNR=22
**YAK Yakutsk 61.06 0** *c i*P P **17 36 15.1 -0.7**
YAK *e* 17 36 57.5
YAK *e* 17 38 25.8
YAK *e*PPP PPP 17 39 59.6
YAK *e*S **S 17 44 32.8 -0.9**
YAK *e**SS sS 17 44 53.1 +10
YAK pmax pmax
comp=Z,172nm,0.9s
YAK pmax pmax
comp=N,46nm,1.1s
YAK pmax pmax
comp=E,19nm,1.1s
YAK pmax pmax
comp=Z,227nm,3.5s
YAK pmax pmax
comp=N,244nm,3.5s
YAK pmax pmax
comp=E,113nm,3.3s
YAK smax smax
comp=N,667nm,3.8s
YAK smax smax
comp=E,654nm,3.7s
**YAK Yakutsk 61.06 0** P P **17 36 14.8 -1.0**
YAK IAMs_20 IAMs_20 17 59 34.4
comp=Z,9μm,21.0s
**YAK Yakutsk 61.06 0** ⇑P P **17 36 15.1 -0.7**
YAK ⇑P **pP 17 36 16.3 -4.9**
YAK ⇑P **sP 17 36 21.9 -1.2**
**PDGK Podgornoye 61.11 321** *i* P P **17 36 16.5 -0.2**
PDGK pmax pmax
comp=Z,73nm,1.0s
**MK31 Makanchi Array 61.24 325** *i* P P **17 36 16.6 -0.8**
MK31 pmax pmax
comp=Z,28nm,0.6s
**MK31 Makanchi Array 61.24 325** P P **17 36 16.1 -1.3**
MK31 IAmb IAmb 17 36 55.9
comp=Z,62nm,1.1s
**MKAR Makanchi Array 61.24 325** P P **17 36 16.6 -0.8**
comp=Z,20nm,0.5s,baz=115,slow=7.9,SNR=193
MKAR PKPPKP **P'P'df 18 05 30.9 -2.1**
comp=Z,1.2nm,0.9s,baz=277,slow=2.1,SNR=7.1
MKAR PKP2ab P'P'ab 18 05 50.2
comp=Z,1.2nm,0.9s,baz=284,slow=3.0,SNR=4.6
**MKAR Makanchi Array 61.24 325** P P **17 36 16.1 -1.3**
**UZB Uzunbulak 61.31 320** *e*P P **17 36 18.2 +0.1**
UZB pmax pmax
comp=Z,11nm,0.5s
**MAKZ Makanchi 61.43 325** P P **17 36 17.2 -1.4**
MAKZ pmax pmax
comp=Z,75nm,1.0s
MAKZ MLR MLR
comp=Z,8μm,19.0s
**MAKZ Makanchi 61.43 325** P P **17 36 17.2 -1.4**
MAKZ IAmb IAmb 17 36 30.1
comp=Z,75nm,1.0s
MAKZ IAMs_20 IAMs_20 18 06 16.8
comp=Z,8μm,19.0s
**NIL Nilore 61.52 308** P P **17 36 19.2 -0.3**
NIL pmax pmax
comp=Z,83nm,1.1s
**NIL Nilore 61.52 308** P P **17 36 19.2 -0.3**
NIL IAmb IAmb 17 37 03.2
comp=Z,83nm,1.1s
**NIL Nilore 61.52 308** P P **17 36 19.4 -0.1**
**SATY Saty 61.67 320** *e*P P **17 36 18.7 -1.7**
SATY pmax pmax
comp=Z,23nm,0.9s
**SATY Saty 61.67 320** *e*P P **17 36 18.8 -1.7**
comp=Z,23nm,0.9s,baz=320
**KPKS Kokpek 61.69 320** *e*P P **17 36 19.1 -1.4**
KPKS pmax pmax
comp=Z,15nm,0.8s
**KPKS Kokpek 61.69 320** *e*P P **17 36 19.1 -1.4**
comp=Z,15nm,0.8s,baz=320
**ZHN Zhinishke 61.70 320** *e*P P **17 36 19.2 -1.5**
**ZHN Zhinishke 61.70 320** *e*P P **17 36 19.2 -1.5**
baz=320
**KSH Kashi 61.72 315** P P **17 36 22.5 +1.7**
KSH sP sP 17 36 29.1 +0.9
KSH S **S 17 44 43.1 -0.1**
KSH SS **SS 17 48 46.4 +1.4**
KSH pmax pmax
comp=Z,26nm,1.2s
KSH LR LR
comp=Z,6μm,20.2s
KSH LR LR
comp=Z,5μm,17.3s
KSH LR LR
comp=Z,8μm,23.0s
**ARXS Arharly 62.59 321** *e*P P **17 36 25.8 -0.8**
**MDOK Medeo 62.59 320** *e*P P **17 36 25.4 -1.3**
MDOK *e*S **S 17 44 53.4 -0.8**
MDOK MLR MLR
comp=Z,4μm,20.0s
**MDOK Medeo 62.59 320** *e*P P **17 36 25.5 -1.3**
baz=319
MDOK *e*S **S 17 44 53.5 -0.8**
baz=319
MDOK LR LR 18 01 13.1
comp=Z,4μm,20.4s,baz=319
**TDK Taldyqorghan 62.61 322** *e*P P **17 36 25.4 -1.2**
TDK pmax pmax
comp=Z,14nm,1.0s
**TDK Taldyqorghan 62.61 322** *e*P P **17 36 25.4 -1.2**
comp=Z,14nm,1.0s,baz=322
TDK LR LR 18 00 46.4
comp=Z,2μm,18.0s,baz=322
**CHKK Chushkaly 62.95 320** *e*P P **17 36 27.4 -1.5**
baz=320
**KUU Kurty 63.39 320** *e*P P **17 36 30.0 -1.8**
KUU pmax pmax
comp=Z,57nm,1.2s
**KUU Kurty 63.39 320** *e*P P **17 36 30.1 -1.8**
comp=Z,57nm,1.2s,baz=320
**TKM2 Tokmak 2 63.44 319** P P **17 36 31.8 -0.6**
SNR=26
**TKM2 Tokmak 2 63.44 319** *i* P P **17 36 31.6 -0.8**
TKM2 pmax pmax
comp=Z,44nm,0.9s
**KBK Karagaybulak 63.75 318** P P **17 36 34.8 +0.3**
SNR=8.9
**UCH Uchtor 63.86 318** P P **17 36 35.6 +0.2**
SNR=44
**CHMS Chumysh 64.03 319** P P **17 36 37.6 +1.6**
SNR=9.1
**AAK Ala-Archa 64.04 318** P P **17 36 36.1 -0.2**
comp=Z,5.7nm,0.6s,baz=115,slow=5.8,SNR=11
AAK LR LR 18 07 34.2
comp=Z,7μm,21.3s,baz=103,slow=39
**AAK Ala-Archa 64.04 318⇓** *e*P P **17 36 36.9 +0.6**
AAK pmax pmax
comp=Z,41nm,1.2s
AAK MLR MLR
comp=Z,9μm,23.0s
**AAK Ala-Archa 64.04 318** P P **17 36 36.1 -0.2**
AAK IAmb IAmb 17 37 09.2
comp=Z,57nm,1.2s
**AAK Ala-Archa 64.04 318** P P **17 36 36.6 +0.2**
**AAK Ala-Archa 64.04 318** *i* P P **17 36 36.2 -0.2**
SNR=9.0
**ZAA0 Zalesovo Array 64.21 333** P P **17 36 35.4 -1.5**
ZAA0 IAmb IAmb 17 36 53.1
comp=Z,73nm,1.3s
**ZALV Zalesovo Beam 64.21 333** P P **17 36 34.8 -2.1**
comp=Z,12nm,0.8s,baz=113,slow=5.8,SNR=42
ZALV PKP2bc P'P'bc 18 05 32.9
comp=Z,0.3nm,0.4s,baz=318,slow=4.1,SNR=3.6
**ZALV Zalesovo Beam 64.21 333** P P **17 36 35.4 -1.5**
**ZALV Zalesovo Beam 64.21 333** P P **17 36 35.4 -1.5**
**SGDS Sogindy 64.30 319** *e*P P **17 36 36.5 -1.4**
baz=319
**USP Ospenovka 64.31 319** P P **17 36 37.4 -0.5**
SNR=33
**AML Almayashu 64.37 317** P P **17 36 38.7 -0.1**
SNR=40
**AML Almayashu 64.37 317** P P **17 36 38.9 +0.2**
**AML Almayashu 64.37 317** *i* P P **17 36 38.7 -0.1**
SNR=40
**SEY Seymchan 64.37 12** P P **17 36 39.1 +1.2**
comp=Z,41nm,0.9s,baz=210,slow=5.7,SNR=85
SEY LR LR 18 02 33.3
comp=Z,6μm,21.1s,baz=204,slow=34
**SEY Seymchan 64.37 12** ⇑*i*P P **17 36 38.1 +0.3**
**SEM Semipalatinsk 64.37 328** *e*P P **17 36 36.4 -2.0**
**SEM Semipalatinsk 64.37 328** *e*P P **17 36 36.5 -2.0**
baz=328
**EKS2 Erkin-Say 64.53 318** P P **17 36 39.2 -0.3**
SNR=41
**KBL Kabul 65.11 308** P P **17 36 42.8 -0.7**
KBL pmax pmax
comp=Z,51nm,0.8s
**KBL Kabul 65.11 308** P P **17 36 42.8 -0.7**
KBL IAmb IAmb 17 37 09.2
comp=Z,51nm,0.8s
**KBL Kabul 65.11 308** P P **17 36 43.4 -0.1**
SNR=27
**BTLS Baital 65.37 320** *e*P P **17 36 43.5 -1.2**
**BTLS Baital 65.37 320** *e*P P **17 36 43.5 -1.2**
baz=320
**KURBB Kurchatov Arra 65.41 327** P P **17 36 43.6 -1.3**
comp=Z,58nm,0.7s,baz=126,slow=6.2,SNR=22
**KURBB Kurchatov Arra 65.41 327** P P **17 36 42.8 -2.1**
**KURK Kurchatov 65.42 327** *c i*P P **17 36 43.8 -1.1**
KURK pmax pmax
comp=Z,121nm,1.0s
KURK MLR MLR
comp=Z,5μm,21.0s
**KURK Kurchatov 65.42 327** P P **17 36 43.6 -1.3**
**KURK Kurchatov 65.42 327** P P **17 36 44.4 -0.5**
**IUG Iuzhnay 66.89 316** *e*P P **17 36 53.2 -1.5**
**IUG Iuzhnay 66.89 316** *e*P P **17 36 53.3 -1.5**
baz=316
**KK31 Karatay Array 66.91 317** P P **17 36 53.7 -1.0**
**KKAR Karatay Array 66.91 317** P P **17 36 53.3 -1.4**
**KKAR Karatay Array 66.91 317** P P **17 36 53.3 -1.4**
**TAS Tashkent 67.11 315** P P **17 36 54.3 -1.7**
TAS pmax pmax
comp=Z,114nm,1.0s
**TAS Tashkent 67.11 315** P P **17 36 54.3 -1.7**
**BRLS Borolday 67.35 317** *e*P P **17 36 56.4 -1.1**
**BRLS Borolday 67.35 317** *e*P P **17 36 56.4 -1.1**
baz=316
**OTUK Ortayu 67.82 323** P P **17 36 59.5 -0.8**
**CASY Casey 68.24 188** P P **17 37 02.8 +0.3**
CASY IAmb IAmb 17 37 35.7
comp=Z,92nm,1.2s
**CASY Casey 68.24 188** IAMs_20 IAMs_20 18 04 50.0
comp=Z,8μm,20.0s
**BRZS Berezniki 68.38 325** *e*P P **17 37 02.4 -1.4**
**BRZS Berezniki 68.38 325** *e*P P **17 37 02.4 -1.4**
baz=324
**HRA Herat 70.49 306** P P **17 37 16.0 -1.4**
**TIXI Tiksi 70.72 360** P P **17 37 16.9 -0.9**
comp=Z,10nm,0.7s,baz=153,slow=5.4,SNR=61
TIXI LR LR 18 08 00.4
comp=Z,8μm,20.0s,baz=181,slow=36
**TIXI Tiksi 70.72 360** *de*P P **17 37 16.9 -0.9**
TIXI pmax pmax
comp=Z,62nm,1.1s
TIXI MLR MLR
comp=Z,10μm,18.0s
**TIXI Tiksi 70.72 360** P P **17 37 15.3 -2.5**
TIXI IAmb IAmb 17 37 53.0
comp=Z,58nm,1.0s
**JLN Jalan Bani Buh 70.84 293** P P **17 37 19.8 +0.2**
**BVAR Borovoye Array 71.00 327** P P **17 37 18.6 -1.2**
comp=Z,16nm,0.8s,baz=79,slow=15,SNR=62
**BRVK Borovoye 71.07 327** *ce*P P **17 37 19.4 -0.9**
BRVK pmax pmax
comp=Z,86nm,1.2s
BRVK MLR MLR
comp=Z,6μm,24.0s
**BRVK Borovoye 71.07 327** P P **17 37 18.6 -1.7**
BRVK IAmb IAmb 17 37 59.3
comp=Z,76nm,0.9s

BRVK **Borovoye** 71.07 327 P **P** 17 37 19.5 -0.9
WBK **Wadi Bani Khal** 71.30 294 P **P** 17 37 24.0 +1.6
SNR=8.5
WSAR **Wadi Sarin** 71.69 294 LR LR 18 11 37.0
comp=Z,2µm,19.9s,baz=110,slow=38
BILL **Bilibino** 71.79 14 *eP* **P** 17 37 25.6 +1.2
BILL *e* 17 40 04.2
BILL *eS* **S** 17 46 44.3 +0.6
BILL *eSS* **SS** 17 51 23.5 +3.6
BILL pmax pmax
comp=Z,34nm,1.2s
BILL **Bilibino** 71.79 14 P **P** 17 37 24.5 +0.1
MHTO **MHTO** 72.04 292 P **P** 17 37 28.1 +1.3
SNR=21
JMDO **Jabal Madar** 72.07 293 P **P** 17 37 29.0 +2.0
SNR=8.1
BIDO **Bidbid** 72.19 294 P **P** 17 37 28.4 +0.8
SNR=7.8
SMDO **Samad** 72.20 294 P **P** 17 37 27.9 +0.1
RAR **Rarotonga** 72.81 112 LR LR 18 09 01.0
comp=Z,2µm,19.5s,baz=269,slow=35
NIKH **Nikolski High** 72.90 34 P **P** 17 37 30.8 -0.5
baz=248
HOQ **Hoqain** 72.94 294 P **P** 17 37 33.5 +1.3
BSY **Bisya** 72.94 293 P **P** 17 37 34.0 +1.8
SNR=12
XMAS **Kiritimati** 73.51 88 IAMs_20 IAMs_20 18 06 59.8
comp=Z,7µm,20.0s
ARQ **Araqi** 73.63 294 P **P** 17 37 37.3 +1.0
SNR=6.7
NRIK **Noril'sk** 73.79 346 P **P** 17 37 35.4 -0.8
comp=Z,24nm,0.6s,baz=125,slow=6.5,SNR=39
NRIK LR LR 18 10 14.2
comp=Z,4µm,21.3s,baz=140,slow=36
NRIK **Noril'sk** 73.79 346 P **P** 17 37 35.2 -1.1
NRIK IAmb IAmb 17 37 50.2
comp=Z,75nm,0.9s
SPIA **Saint Paul Isl** 73.85 30 P **P** 17 37 36.4 -0.3
baz=245
SHAO **Shalim** 73.97 288 P **P** 17 37 40.0 +1.7
SNR=16
SHAO **Shalim** 73.97 288 *i* P **P** 17 37 37.5 -0.8
SNR=23
UOSS **Minazif** 74.10 296 P **P** 17 37 37.9 -1.1
UOSS **Minazif** 74.10 296 P **P** 17 37 39.0 +0.1
UOSS **Minazif** 74.10 296 P **P** 17 37 37.9 -1.1
BANOM **Banah** 74.13 297 P **P** 17 37 39.9 +0.7
BANOM **Banah** 74.13 297 P **P** 17 37 38.9 -0.3
HATD **Hatta, Dubai** 74.15 295 P **P** 17 37 40.5 +1.2
SNR=11
HATD **Hatta, Dubai** 74.15 295 *i* P **P** 17 37 40.2 +0.9
SNR=10
MSFE **Esma-Masafi** 74.19 296 *i* P **P** 17 37 40.7 +1.2
SNR=8.0
MASF **Masafi** 74.19 296 P **P** 17 37 40.3 +0.8
SNR=9.0
ASHO **Ashiyiah** 74.20 295 P **P** 17 37 39.7 +0.1
ASHO P **pP** 17 37 40.3 -4.8
SNR=5.7
ASHO **Ashiyiah** 74.20 295 P **P** 17 37 40.7 +1.1
SHME **Shamm** 74.28 297 P **P** 17 37 40.8 +0.8
SNR=5.2
SHME **Shamm** 74.28 297 P **P** 17 37 41.6 +1.6
ALNE **Al Ain** 74.41 295 P **P** 17 37 41.7 +0.9
SNR=29
ALNE **Al Ain** 74.41 295 *i* P **P** 17 37 41.2 +0.4
SNR=41
UNV **Unalaska Valle** 74.53 34 P **P** 17 37 40.8 0.0
baz=249
DMTO **DMTO** 74.59 288 P **P** 17 37 42.3 +0.4
SNR=6.4
NAZ **Nazwa, Dubai** 74.59 296 P **P** 17 37 43.3 +1.5
SNR=8.6
NAZ **Nazwa, Dubai** 74.59 296 P **P** 17 37 42.4 +0.6
FAQ **Al Faqa, Dubai** 74.63 295 P **P** 17 37 42.6 +0.6
SNR=6.7
FAQ **Al Faqa, Dubai** 74.63 295 *i* P **P** 17 37 42.2 +0.2
SNR=14
RER **Riviere de l'E** 74.73 248 P **P** 17 37 42.0 -0.8
UMZA **Um Al Zommool** 74.81 293 P **P** 17 37 43.5 +0.4
ASUD **Al Ashush, Dub** 74.85 295 P **P** 17 37 44.2 +0.9
SNR=9.0
ASUD **Al Ashush, Dub** 74.85 295 *i* P **P** 17 37 44.3 +0.9
SNR=15
AJN **Ajban** 75.16 295 P **P** 17 37 46.3 +1.3
SNR=8.2
AJN **Ajban** 75.16 295 *i* P **P** 17 37 46.0 +1.0
SNR=5.4
SOCY **Socotra** 75.20 282 P **P** 17 37 44.2 -1.5
SOCY IAmb IAmb 17 37 50.1
comp=Z,101nm,0.8s
SOCY **Socotra** 75.20 282 P **P** 17 37 45.2 -0.4
RBK **Rabkut** 75.28 288 P **P** 17 37 46.5 +0.6
SNR=6.9
DOK **Doka** 75.43 289 P **P** 17 37 45.8 -1.0
SNR=26
WHFO **Wadi Hawf** 75.72 288 P **P** 17 37 48.0 -0.5
SNR=15
AB31 **Akbulak array** 75.84 321 P **P** 17 37 47.4 -1.1
ABKAR **Akbulak array** 75.84 321 P **P** 17 37 47.2 -1.3
ABKAR **Akbulak array** 75.84 321 P **P** 17 37 46.9 -1.6
ABKAR IAmb IAmb 17 38 16.2
comp=Z,44nm,1.0s
POHA **Pohakuloa** 76.03 70 P **P** 17 37 47.3 -3.2
MZWR **Madinat Zayed** 76.08 294 P **P** 17 37 50.8 +0.4
GAMB **Gambell** 76.13 23 P **P** 17 37 50.0 +0.2
GAMB **Gambell** 76.13 23 P **P** 17 37 49.8 0.0
baz=242
GAMB S **S** 17 47 36.2 +3.5
baz=242
ABTO **Aybut** 76.14 288 P **P** 17 37 50.4 -0.5
SNR=11
MZR **Muzera** 76.38 293 P **P** 17 37 53.0 +0.8
SNR=9.1
MZR **Muzera** 76.38 293 *i* P **P** 17 37 52.2 +0.1
SNR=18
FALS **False Pass** 76.57 33 P **P** 17 37 52.3 -0.1
baz=252
GHWR **Ruwais** 77.02 294 P **P** 17 37 56.1 +0.4
AKTO **Aktyubinsk** 77.35 322 LR LR 18 16 08.0
comp=Z,7µm,18.6s,baz=108,slow=39
SVE **Sverdlovsk** 77.63 328 *ceP* **P** 17 37 58.4 0.0
SVE *eS* **S** 17 47 47.6 -1.7
SVE *e* 17 52 55.5
SVE pmax pmax
comp=Z,92nm,1.2s
SVE MLR MLR
comp=Z,4µm,17.0s
SLWR **Sila** 78.11 294 P **P** 17 38 02.5 +0.7
SDPT **Sand Point** 78.33 33 P **P** 17 38 01.8 -0.5
SDPT **Sand Point** 78.33 33 P **P** 17 38 02.0 -0.3
baz=254
TNA **Tin City** 78.38 22 P **P** 17 38 03.7 +1.3
TNA **Tin City** 78.38 22 P **P** 17 38 01.8 -0.6
baz=246
TNA S **S** 17 47 59.1 +2.0
baz=246
KHOR **Al-Khor Airpor** 78.39 296 P **P** 17 38 04.5 +1.2
TRNA **Turayna** 78.59 295 P **P** 17 38 04.7 +0.3
ARU **Arti** 78.61 328 LR LR 18 14 55.0
comp=Z,4µm,20.3s,baz=102,slow=37
ARU **Arti** 78.61 328 *d i* P **P** 17 38 02.8 -1.1
ARU 17 38 18.0
ARU 17 48 20.1
ARU pmax pmax
comp=Z,23nm,1.0s
ARU MLR MLR
comp=Z,4µm,21.0s
ARU **Arti** 78.61 328 P **P** 17 38 02.2 -1.6
ARU IAmb IAmb 17 38 20.1
comp=Z,108nm,1.5s
CHNA **Chernabura Isl** 78.68 34 P **P** 17 38 03.9 -0.4
baz=255
SHMA **Al-Shehemyia** 78.90 296 P **P** 17 38 06.8 +0.7
ANM **Nome** 78.98 24 P **P** 17 38 04.4 -1.3
ANM pmax pmax
comp=Z,69nm,1.4s
ANM MLR MLR
comp=Z,3µm,20.0s
ANM **Nome** 78.98 24 P **P** 17 38 04.4 -1.3
ANM **Nome** 78.98 24 P **P** 17 38 05.7 -0.1
baz=248
ANM S **S** 17 48 04.0 +0.4
baz=248
SAKB **Bahrain** 79.30 296 P **P** 17 38 08.8 +0.6
CHGN **Chignik** 79.70 33 P **P** 17 38 09.9 +0.1
baz=256
VNDA **Vanda** 80.27 173 P **P** 17 38 12.2 -0.3
comp=Z,18nm,1.0s,baz=327,slow=4.0,SNR=9.4
VNDA LR LR 18 14 55.1
comp=Z,6µm,18.1s,baz=340,slow=36
VNDA **Vanda** 80.27 173 P **P** 17 38 12.6 +0.1
VNDA pmax pmax
comp=Z,34nm,1.0s
VNDA **Vanda** 80.27 173 P **P** 17 38 12.6 +0.1
SBA **Scott Base** 81.16 172 IAMs_20 IAMs_20 18 15 09.7
comp=Z,7µm,20.0s
RDOG **Red Dog Mine** 81.17 21 P **P** 17 38 17.8 +0.2
RDOG IAmb IAmb 17 38 33.9
comp=Z,144nm,1.4s
RDOG **Red Dog Mine** 81.17 21 P **P** 17 38 17.8 +0.2
baz=250,SNR=8.0
RDOG S **S** 17 48 29.5 +2.9
baz=250
MAW **Mawson** 81.85 201 LR LR 18 16 28.1
comp=Z,2µm,18.0s,baz=64,slow=37
LKRN **Lenkeran, Azer** 81.88 309 P **P** 17 38 23.4 +1.5
PPT **Papeete** 82.04 108 LR LR 18 13 02.8
comp=Z,3µm,18.9s,baz=265,slow=34
PPT2 **Papeete2** 82.04 108 *e*S **S** 17 48 37.5 -0.1
comp=Z,5µm,28.0s
PPT2 **Papeete2** 82.04 108 *e*LR LR 18 04 05.0
comp=Z,7µm,27.2s
P18K **Big Mountain,** 82.06 30 P **P** 17 38 21.6 -0.8
baz=258
P18K S **S** 17 48 37.0 +0.8
baz=258
O18K **Koktuh Hills** 82.17 30 P **P** 17 38 22.1 -0.9
O18K IAmb IAmb 17 38 31.7
comp=Z,60nm,1.1s
O18K **Koktuh Hills** 82.17 30 P **P** 17 38 22.3 -0.7
baz=258
O18K S **S** 17 48 37.6 +0.4
baz=258
TTA **Tatalina** 82.46 26 P **P** 17 38 24.7 +0.2
TTA pmax pmax
comp=Z,49nm,0.9s
TTA **Tatalina** 82.46 26 P **P** 17 38 24.7 +0.2
TTA IAmb IAmb 17 38 33.5
comp=Z,50nm,0.9s
TTA **Tatalina** 82.46 26 P **P** 17 38 24.3 -0.2
baz=257
ABPO **Ambohimpanom** 82.51 251 P **P** 17 38 25.3 -0.5
ABPO pmax pmax
comp=Z,66nm,1.5s
ABPO MLR MLR
comp=Z,2µm,21.0s
ABPO **Ambohimpanom** 82.51 251 P **P** 17 38 25.3 -0.5
ABPO IAmb IAmb 17 38 38.5
comp=Z,66nm,1.4s
GCSA **Galena City Sc** 82.51 25 P **P** 17 38 24.8 +0.2
baz=256
OHAK **Old Harbor** 82.65 32 P **P** 17 38 25.6 +0.1
OHAK IAmb IAmb 17 38 34.1
comp=Z,104nm,1.0s
OHAK **Old Harbor** 82.65 32 P **P** 17 38 24.8 -0.7
baz=260
OHAK S **S** 17 48 43.5 +1.3
baz=260
N19K **Bonanza Creek** 82.71 29 P **P** 17 38 27.0 +1.1
N19K **Bonanza Creek** 82.71 29 P **P** 17 38 25.2 -0.7
baz=258
N19K S **S** 17 48 43.3 +0.3
baz=258
Q19K **Cape Douglas,** 82.77 31 P **P** 17 38 26.3 +0.2
Q19K **Cape Douglas,** 82.77 31 P **P** 17 38 25.6 -0.5
baz=260
L19K **White Mountain** 82.82 27 P **P** 17 38 27.8 +1.5
L19K IAmb IAmb 17 38 35.5
comp=Z,69nm,0.9s
L19K IAMs_20 IAMs_20 18 15 46.9
comp=Z,5µm,20.0s
L19K **White Mountain** 82.82 27 P **P** 17 38 25.3 -1.0
baz=258
L19K S **S** 17 48 44.4 +0.6
baz=258
M19K **Big River Lodg** 82.97 28 P **P** 17 38 25.7 -1.4
M19K IAmb IAmb 17 38 36.4
comp=Z,61nm,1.0s
M19K **Big River Lodg** 82.97 28 P **P** 17 38 25.9 -1.2
baz=258
VOI **Vohitsoka** 83.09 248 P **P** 17 38 29.2 +0.5
VOI IAmb IAmb 17 38 41.8
comp=Z,58nm,0.9s
VOI **Vohitsoka** 83.09 248 P **P** 17 38 30.2 +1.5
SNR=6.1
VOI **Vohitsoka** 83.09 248 P **P** 17 38 30.1 +1.3
KDAK **Kodiak Island** 83.12 32 LR LR 18 11 30.3
comp=Z,3µm,20.2s,baz=269,slow=33
KDAK **Kodiak Island** 83.12 32 P **P** 17 38 29.0 +1.0
KDAK pmax pmax
comp=Z,146nm,1.0s
KDAK MLR MLR
comp=Z,5µm,22.0s
KDAK **Kodiak Island** 83.12 32 P **P** 17 38 29.0 +1.0
KDAK **Kodiak Island** 83.12 32 IAMs_20 IAMs_20 18 16 54.3
comp=Z,5µm,22.0s
KDAK **Kodiak Island** 83.12 32 P **P** 17 38 26.9 -1.1
baz=261
KDAK S **S** 17 48 47.1 +0.1
baz=261
MAK **Makhachkala** 83.23 313 *eP* P 17 38 24.0 -4.8
MAK *e* 17 41 34.7
MAK *eS* **S** 17 48 41.4 -7.3
MAK pmax pmax
comp=Z,703nm,1.3s
SEKA **Sheki** 83.31 311 P **P** 17 38 30.4 +1.0
L20K **Farewell, AK** 83.32 27 P **P** 17 38 28.5 -0.5
baz=259
L20K S **S** 17 48 49.8 +0.9
baz=259
MNGR **Mingechevir, A** 83.36 311 P **P** 17 38 31.1 +1.6
K20K **Telida** 83.41 26 P **P** 17 38 30.6 +1.2
K20K IAmb IAmb 17 38 38.8
comp=Z,88nm,0.9s
K20K **Telida** 83.41 26 P **P** 17 38 28.9 -0.4
baz=259
K20K S **S** 17 48 52.0 +2.3
baz=259
O20K **Slope Mountain** 83.48 30 P **P** 17 38 29.4 -0.5
baz=260
RSO **Redoubt South** 83.49 29 P **P** 17 38 30.6 +0.5
J20K **Nowinta River** 83.54 25 P **P** 17 38 30.1 +0.1
J20K IAmb IAmb 17 38 39.4
comp=Z,75nm,0.8s
J20K **Nowinta River** 83.54 25 P **P** 17 38 29.7 -0.3
baz=258
J20K S **S** 17 48 53.2 +2.3
baz=258
RAYN **Ar Rayn** 83.73 293 P **P** 17 38 31.7 -0.2
RAYN pmax pmax
comp=Z,66nm,1.0s
RAYN MLR MLR
comp=Z,3µm,21.0s
RAYN **Ar Rayn** 83.73 293 P **P** 17 38 31.7 -0.2
RAYN IAmb IAmb 17 38 38.9
comp=Z,66nm,1.0s
RAYN **Ar Rayn** 83.73 293 P **P** 17 38 32.0 +0.1
RAYN **Ar Rayn** 83.73 293 *i* P **P** 17 38 32.0 +0.1
SNR=57
ZKTA **Zakatala** 83.78 312 P **P** 17 38 33.3 +1.6
SPCR **Spurr Chakacha** 83.87 29 P **P** 17 38 32.1 +0.2
baz=260,SNR=17
SPCR S **S** 17 48 52.6 -2.0
baz=260
KIRV **Kirov** 83.89 329 LR LR 18 18 13.7
comp=Z,4µm,21.1s,baz=99,slow=37
KIRV **Kirov** 83.89 329 *deP* **P** 17 38 31.9 +0.1
HOM **Homer** 83.91 30 P **P** 17 38 31.9 0.0
baz=261
GANJ **Ganja** 83.93 311 P **P** 17 38 35.2 +2.7
SPU **Mount Spurr** 83.94 29 P **P** 17 38 33.3 +1.1
IMAR **Indian Mountai** 84.06 24 P **P** 17 38 33.6 +0.9
CNPM **China Poot** 84.09 30 P **P** 17 38 33.8 +0.9
CNPM IAmb IAmb 17 38 43.7
comp=Z,104nm,1.1s
DDFL **Dedoflistskaro** 84.14 311 P **P** 17 38 37.2 +3.5
PPLA **Purkeypile** 84.17 27 P **P** 17 38 34.1 +0.6
PPLA **Purkeypile** 84.17 27 P **P** 17 38 33.1 -0.3
baz=260,SNR=9.4
A21K **Barrow** 84.25 18 P **P** 17 38 33.7 +0.3
baz=255
A21K S **S** 17 48 57.4 -0.3
baz=255
CHUM **Lake Minchumin** 84.28 26 P **P** 17 38 34.4 +0.6
baz=260,SNR=68
CHUM S **S** 17 48 59.3 +0.9
baz=260
CAST **Castle Rocks** 84.30 26 P **P** 17 38 33.8 -0.2
CAST IAmb IAmb 17 38 42.9
comp=Z,55nm,0.8s
CAST **Castle Rocks** 84.30 26 P **P** 17 38 34.7 +0.8
baz=260,SNR=27
BRLK **Bradley Lake** 84.30 30 P **P** 17 38 33.6 -0.4
CAPN **Captain Cook N** 84.31 29 P **P** 17 38 34.3 +0.4
baz=262
BRSE **Bradley Lake S** 84.37 30 P **P** 17 38 34.7 +0.4
baz=262
BRSE S **S** 17 48 57.4 -2.1
baz=262
H21K **Melozitna Rive** 84.39 24 P **P** 17 38 34.8 +0.5
baz=260,SNR=21
H21K S **S** 17 49 01.5 +2.1
baz=260
NAX **Nakhchivan** 84.47 309 P **P** 17 38 36.6 +1.2
GROC **Groznyy** 84.50 313 *eP* **P** 17 38 36.3 +1.0
GROC *eS* **S** 17 48 59.9 -1.5
GROC pmax pmax
comp=Z,106nm,1.2s
I21K **Tanana** 84.64 25 P **P** 17 38 37.4 +1.9
I21K IAmb IAmb 17 38 52.5
comp=Z,122nm,1.5s
I21K **Tanana** 84.64 25 P **P** 17 38 35.5 0.0
baz=260
I21K S **S** 17 49 03.9 +2.0
baz=260
KTH **Kantishna Hill** 84.84 26 P **P** 17 38 37.3 +0.6
KTH IAmb IAmb 17 38 45.4
comp=Z,97nm,1.1s
BPAW **Bear Paw Mtn.** 84.89 26 P **P** 17 38 35.8 -1.1
BPAW IAmb IAmb 17 38 45.8
comp=Z,48nm,0.9s
BPAW **Bear Paw Mtn.** 84.89 26 P **P** 17 38 36.5 -0.4
baz=261
BPAW S **S** 17 49 05.8 +1.2
baz=261
M22K **Willow** 84.95 28 P **P** 17 38 36.8 -0.4
M22K **Willow** 84.95 28 P **P** 17 38 38.0 +0.8
baz=262,SNR=41
CUT **Chulitna** 84.97 27 P **P** 17 38 37.9 +0.6
CUT **Chulitna** 84.97 27 P **P** 17 38 37.5 +0.3
baz=262,SNR=12
O22K **Cooper Landing** 84.97 29 P **P** 17 38 38.0 +0.7
O22K **Cooper Landing** 84.97 29 P **P** 17 38 37.7 +0.4
baz=263
O22K S **S** 17 49 03.9 -1.5
baz=263
RC01 **Rabbit Creek A** 85.04 29 P **P** 17 38 37.8 +0.1
RC01 **Rabbit Creek A** 85.04 29 P **P** 17 38 37.8 +0.1
baz=263,SNR=24
RC01 S **S** 17 49 01.9 -4.2
baz=263
SEW **Seward** 85.06 30 P **P** 17 38 38.6 +0.8
SEW **Seward** 85.06 30 P **P** 17 38 38.0 +0.2
baz=263,SNR=12
SEW S **S** 17 49 04.9 -1.4
baz=263
GNI **Garni** 85.10 310 *deP* **P** 17 38 40.0 +1.3
GNI pmax pmax
comp=Z,116nm,1.7s
GNI MLR MLR
comp=Z,3µm,25.0s
GNI **Garni** 85.10 310 P **P** 17 38 38.6 -0.1
TRF **Thorofare Moun** 85.10 26 P **P** 17 38 37.4 -0.7
TRF IAmb IAmb 17 38 46.5
comp=Z,90nm,1.0s
TRF **Thorofare Moun** 85.10 26 P **P** 17 38 38.9 +0.7
baz=262,SNR=30
TRF S **S** 17 49 08.0 +1.0
baz=262
MLY **Manley** 85.14 25 P **P** 17 38 38.4 +0.3
baz=262
MLY S **S** 17 49 02.4 -4.6
baz=262
PMR **Palmer** 85.40 28 P **P** 17 38 39.3 -0.1
PMR pmax pmax
comp=Z,179nm,1.0s
PMR **Palmer** 85.40 28 P **P** 17 38 39.3 -0.1
PMR **Palmer** 85.40 28 P **P** 17 38 39.6 +0.2
baz=263,SNR=30
PMR S **S** 17 49 06.0 -3.5
baz=263
COLD **Coldfoot** 85.67 23 P **P** 17 38 41.1 +0.4
COLD **Coldfoot** 85.67 23 P **P** 17 38 41.4 +0.6
baz=262
COLD S **S** 17 49 11.9 -0.2
baz=262
KNK **Knik Glacier** 85.70 29 P **P** 17 38 41.1 +0.1
KNK **Knik Glacier** 85.70 29 P **P** 17 38 41.7 +0.7
baz=264,SNR=38
KNK S **S** 17 49 11.5 -1.2
baz=264
PWL **Port Wells** 85.70 29 P **P** 17 38 41.3 +0.4
PWL **Port Wells** 85.70 29 P **P** 17 38 41.7 +0.7
baz=264,SNR=43
PWL S **S** 17 49 12.0 -0.6
baz=264
I23K **Minto, Yukon-K** 85.73 25 P **P** 17 38 41.5 +0.5
I23K IAmb IAmb 17 38 50.3
comp=Z,109nm,1.2s
I23K **Minto, Yukon-K** 85.73 25 P **P** 17 38 41.5 +0.5
baz=263,SNR=20
I23K S **S** 17 49 12.2 -0.5
baz=263
RND **Reindeer** 85.74 27 P **P** 17 38 40.7 -0.5
RND pmax pmax
comp=Z,104nm,0.9s
RND **Reindeer** 85.74 27 P **P** 17 38 40.7 -0.5
MCK **McKinley** 85.74 26 P **P** 17 38 40.9 -0.3
MCK pmax pmax
comp=Z,89nm,1.0s
MCK **McKinley** 85.74 26 P **P** 17 38 40.9 -0.3
MCK IAmb IAmb 17 38 49.5
comp=Z,89nm,1.0s
MCK **McKinley** 85.74 26 P **P** 17 38 41.9 +0.7
baz=263,SNR=22
MCK S **S** 17 49 13.4 +0.4
baz=263
NEA2 **Nenana** 85.78 25 P **P** 17 38 41.5 +0.2
NEA2 IAmb IAmb 17 38 51.0
comp=Z,48nm,1.0s
NEA2 **Nenana** 85.78 25 P **P** 17 38 42.0 +0.7
baz=263
NEA2 S **S** 17 49 11.9 -1.4
baz=263
SML **Sawmill** 85.80 28 P **P** 17 38 42.4 +0.9
baz=264,SNR=105
SML S **S** 17 49 12.0 -1.7
baz=264
ZEI **Tsey** 85.86 313 *eP* **P** 17 38 41.7 -0.8
ZEI pmax pmax
comp=Z,106nm,1.4s
BGD **Bogdanovka** 86.02 311 P **P** 17 38 45.4 +2.1
ATD **Arta Tunnel** 86.09 281 P **P** 17 38 44.7 +0.8
comp=Z,4.5nm,0.3s,baz=80,slow=19,SNR=2.1
ATD LR LR 18 16 59.2
comp=Z,718nm,19.6s,baz=78,slow=36
TOLK **Toolik Lake Re** 86.11 21 P **P** 17 38 43.5 +0.7
TOLK IAmb IAmb 17 38 52.9
comp=Z,46nm,1.1s
TOLK **Toolik Lake Re** 86.11 21 P **P** 17 38 43.6 +0.7
baz=262
TOLK S **S** 17 49 16.4 -0.1
baz=262
AKH **Akhalkalaki** 86.11 311 ⇑P **P** 17 38 45.6 +1.9
AKH **Akhalkalaki** 86.11 311 P **P** 17 38 44.6 +0.9
PRGR **Permogore** 86.14 332 *eP* **P** 17 38 42.8 -0.3
PRGR pmax pmax
comp=Z,313nm,2.0s
WAT6 **Susitna Watana** 86.15 27 P **P** 17 38 43.9 +0.5
baz=264,SNR=49
WAT6 S **S** 17 49 17.7 +0.4
baz=264
MDM **Murphy Dome** 86.18 25 P **P** 17 38 44.0 +0.7
ONI **Oni** 86.19 312 P **P** 17 38 44.9 +1.0
ONI pmax pmax
comp=Z,193nm,1.5s
ONI **Oni** 86.19 312 P **P** 17 38 44.9 +1.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRH** | **Wood River Hil** | **86.19** | **26** | P | **P** | **17 38 43.7** | **+0.3** |
| WRH | | | | IAmb | IAmb | 17 38 52.2 | |
| | comp=Z,64nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **86.28** | **28** | P | **P** | **17 38 44.3** | **+0.4** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,283nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **86.28** | **28** | P | **P** | **17 38 44.3** | **+0.4** |
| **SCM** | **Sheep Creek Mo** | **86.28** | **28** | P | **P** | **17 38 44.5** | **+0.6** |
| | baz=265,SNR=40 | | | | | | |
| SCM | | | | S | **S** | **17 49 18.3** | **-0.1** |
| | baz=265 | | | | | | |
| **GLI** | **Glacier Island** | **86.30** | **29** | P | **P** | **17 38 43.8** | **-0.2** |
| **GLI** | **Glacier Island** | **86.30** | **29** | P | **P** | **17 38 44.0** | **0.0** |
| | baz=265 | | | | | | |
| GLI | | | | S | **S** | **17 49 15.6** | **-2.9** |
| | baz=265 | | | | | | |
| **GEVA** | **Gevas** | **86.33** | **308** | P | **P** | **17 38 44.8** | **0.0** |
| **TCOL** | **CIGO, UAF Yank** | **86.33** | **25** | IAMs_20 | IAMs_20 | 18 14 47.9 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **86.33** | **25** | P | **P** | **17 38 45.2** | **+1.2** |
| | baz=264 | | | | | | |
| TCOL | | | | S | **S** | **17 49 17.5** | **-1.1** |
| | baz=264 | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.33** | **25** | P | **P** | **17 38 44.2** | **+0.2** |
| CCB | | | | IAMs_20 | IAMs_20 | 18 14 47.9 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **COLA** | **College** | **86.34** | **25⇑** | *i*P | **P** | **17 38 44.8** | **+0.8** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,40nm,2.1s | | | | | | |
| **COLA** | **College** | **86.34** | **25** | IAMs_20 | IAMs_20 | 18 14 47.8 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **COLA** | **College** | **86.34** | **25** | P | **P** | **17 38 45.3** | **+1.3** |
| | baz=264 | | | | | | |
| COLA | | | | S | **S** | **17 49 18.6** | **0.0** |
| | baz=264 | | | | | | |
| **DHY** | **Denali Highway** | **86.37** | **27** | P | **P** | **17 38 44.9** | **+0.5** |
| DHY | | | | IAmb | IAmb | 17 39 03.1 | |
| | comp=Z,50nm,1.0s | | | | | | |
| **DHY** | **Denali Highway** | **86.37** | **27** | P | **P** | **17 38 44.6** | **+0.2** |
| | baz=265,SNR=12 | | | | | | |
| DHY | | | | S | **S** | **17 49 21.1** | **+1.6** |
| | baz=265 | | | | | | |
| **KARS** | **Kars** | **86.39** | **310** | P | **P** | **17 38 45.3** | **+0.3** |
| KARS | | | | pmax | pmax | | |
| | comp=Z,824nm,1.3s | | | | | | |
| **KARS** | **Kars** | **86.39** | **310** | P | **P** | **17 38 45.3** | **+0.3** |
| **H24K** | **Noodor Dome** | **86.42** | **24** | P | **P** | **17 38 43.5** | **-1.0** |
| **H24K** | **Noodor Dome** | **86.42** | **24** | P | **P** | **17 38 45.0** | **+0.5** |
| | baz=264 | | | | | | |
| H24K | | | | S | **S** | **17 49 20.2** | **+0.5** |
| | baz=264 | | | | | | |
| **POKR** | **Poker Plat Res** | **86.54** | **25** | IAMs_20 | IAMs_20 | 18 17 18.3 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **86.54** | **25** | P | **P** | **17 38 46.0** | **+1.0** |
| | baz=264 | | | | | | |
| POKR | | | | S | **S** | **17 49 19.6** | **-1.1** |
| | baz=264 | | | | | | |
| **Q23K** | **Middleton Isla** | **86.56** | **31** | P | **P** | **17 38 45.6** | **+0.4** |
| | baz=266 | | | | | | |
| **GOF** | **Gofitskoye** | **86.58** | **315⇑** | *e*P | **P** | **17 38 46.1** | **+0.4** |
| GOF | | | | *e*S | SKSac | 17 49 09.7 | -12 |
| GOF | | | | pmax | pmax | | |
| | comp=Z,100nm,1.9s | | | | | | |
| **FID** | **Port Fidalgo** | **86.59** | **29** | P | **P** | **17 38 45.2** | **-0.2** |
| **KBZ** | **Khabaz** | **86.64** | **314** | P | **P** | **17 38 45.0** | **-1.0** |
| | comp=Z,12nm,0.8s,baz=93,slow=4.5,SNR=15 | | | | | | |
| KBZ | | | | LR | LR | 18 24 51.1 | |
| | comp=Z,2µm,18.1s,baz=82,slow=41 | | | | | | |
| **KBZ** | **Khabaz** | **86.64** | **314⇑** | *e*P | **P** | **17 38 47.0** | **+1.1** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,84nm,1.7s | | | | | | |
| **HDA** | **Harding Lake** | **86.68** | **26** | P | **P** | **17 38 45.5** | **-0.2** |
| HDA | | | | IAMs_20 | IAMs_20 | 18 14 59.1 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **HDA** | **Harding Lake** | **86.68** | **26** | P | **P** | **17 38 45.8** | **+0.1** |
| | baz=265,SNR=15 | | | | | | |
| HDA | | | | S | **S** | **17 49 19.7** | **-2.3** |
| | baz=265 | | | | | | |
| HDA | | | | S | **S** | **17 49 19.7** | **-2.3** |
| | baz=265 | | | | | | |
| **IL31** | | **86.74** | **25** | P | **P** | **17 38 45.2** | **-0.7** |
| **ILAR** | **Eielson Array** | **86.74** | **25** | P | **P** | **17 38 45.2** | **-0.8** |
| | comp=Z,2.1nm,0.6s,baz=242,slow=4.8,SNR=31 | | | | | | |
| ILAR | | | | PKKPbc | **PKKPbc** | **17 56 44.6** | **+1.2** |
| | comp=Z,2.0nm,0.9s,baz=54,slow=1.8,SNR=12 | | | | | | |
| ILAR | | | | LR | LR | 18 15 32.3 | |
| | comp=Z,2µm,20.4s,baz=277,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **86.74** | **25** | P | **P** | **17 38 45.8** | **-0.2** |
| **ILAR** | **Eielson Array** | **86.74** | **25** | P | **P** | **17 38 45.8** | **-0.2** |
| **SIRT** | **Sirnak** | **86.80** | **307** | P | **P** | **17 38 46.7** | **-0.3** |
| **KIV** | **Kislovodsk** | **86.80** | **314⇓** | P | **P** | **17 38 48.6** | **+1.7** |
| **KIV** | **Kislovodsk** | **86.80** | **314** | *e*P | **P** | **17 38 47.1** | **+0.2** |
| KIV | | | | *e* | | 17 49 13.1 | |
| KIV | | | | *e*SS | SS | 17 55 03.8 | -2.3 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **KIV** | **Kislovodsk** | **86.80** | **314** | P | **P** | **17 38 46.3** | **-0.6** |
| KIV | | | | IAmb | IAmb | 17 39 33.6 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **86.80** | **314** | *i* P | **P** | **17 38 48.6** | **+1.7** |
| | SNR=11 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **86.84** | **28** | P | **P** | **17 38 46.7** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **86.84** | **28** | P | **P** | **17 38 46.5** | **-0.2** |
| | baz=266,SNR=23 | | | | | | |
| M24K | | | | S | **S** | **17 49 24.5** | **+0.6** |
| | baz=266 | | | | | | |
| **KLU** | **Klutina** | **86.92** | **29** | P | **P** | **17 38 46.4** | **-0.7** |
| KLU | | | | IAmb | IAmb | 17 38 56.3 | |
| | comp=Z,70nm,1.1s | | | | | | |
| **KLU** | **Klutina** | **86.92** | **29** | P | **P** | **17 38 47.0** | **-0.1** |
| | baz=266,SNR=25 | | | | | | |
| KLU | | | | S | **S** | **17 49 23.7** | **-0.9** |
| | baz=266 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **86.94** | **30** | P | **P** | **17 38 46.7** | **-0.3** |
| | baz=266 | | | | | | |
| EYAK | | | | S | **S** | **17 49 25.5** | **+0.9** |
| | baz=266 | | | | | | |
| **DIV** | **Divide** | **86.96** | **29** | P | **P** | **17 38 47.4** | **+0.1** |
| **GURO** | **Guroymak-BITLI** | **87.14** | **308** | P | **P** | **17 38 48.9** | **+0.2** |
| **CHVG** | **Ch'k'valeri** | **87.20** | **313⇑** | P | **P** | **17 38 50.6** | **+1.8** |
| **CHVG** | **Ch'k'valeri** | **87.20** | **313⇑** | P | **P** | **17 38 50.6** | **+1.8** |
| **PAX** | **Paxson** | **87.23** | **27** | P | **P** | **17 38 49.3** | **+0.7** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,74nm,1.4s | | | | | | |
| **PAX** | **Paxson** | **87.23** | **27** | P | **P** | **17 38 49.3** | **+0.7** |
| PAX | | | | IAmb | IAmb | 17 39 07.6 | |
| | comp=Z,74nm,1.4s | | | | | | |
| **PAX** | **Paxson** | **87.23** | **27** | P | **P** | **17 38 48.8** | **+0.2** |
| | baz=266,SNR=12 | | | | | | |
| PAX | | | | S | **S** | **17 49 26.9** | **-0.7** |
| | baz=266 | | | | | | |
| **HARP** | **HAARP** | **87.33** | **28** | P | **P** | **17 38 49.7** | **+0.7** |
| | baz=267 | | | | | | |
| HARP | | | | S | **S** | **17 49 36.6** | **+8.1** |
| | baz=267 | | | | | | |
| **PRP** | **Porcupine Dome** | **87.37** | **25** | S | **S** | **17 49 33.3** | **+4.4** |
| | baz=266 | | | | | | |
| **J25K** | **Salcha River,** | **87.38** | **25** | P | **P** | **17 38 49.3** | **+0.2** |
| J25K | | | | IAMs_20 | IAMs_20 | 18 15 19.5 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **J25K** | **Salcha River,** | **87.38** | **25** | P | **P** | **17 38 49.4** | **+0.2** |
| | baz=266 | | | | | | |
| J25K | | | | S | **S** | **17 49 33.9** | **+5.0** |
| | baz=266 | | | | | | |
| **RAGM** | **Ragged Mountai** | **87.46** | **30** | IAMs_20 | IAMs_20 | 18 13 26.7 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **BMRM** | **Bremner River** | **87.52** | **29** | P | **P** | **17 38 50.6** | **+0.6** |
| BMRM | | | | IAmb | IAmb | 17 38 59.1 | |
| | comp=Z,62nm,0.9s | | | | | | |
| **BMRM** | **Bremner River** | **87.52** | **29** | P | **P** | **17 38 50.6** | **+0.6** |
| | baz=267,SNR=19 | | | | | | |
| BMRM | | | | S | **S** | **17 49 31.2** | **+0.8** |
| | baz=267 | | | | | | |
| **RIDG** | **Independent Ri** | **87.55** | **26** | P | **P** | **17 38 50.2** | **+0.1** |
| RIDG | | | | IAmb | IAmb | 17 38 59.9 | |
| | comp=Z,43nm,1.1s | | | | | | |
| RIDG | | | | IAMs_20 | IAMs_20 | 18 12 42.5 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **RIDG** | **Independent Ri** | **87.55** | **26** | P | **P** | **17 38 50.5** | **+0.4** |
| | baz=267 | | | | | | |
| RIDG | | | | S | **S** | **17 49 30.8** | **+0.1** |
| | baz=267 | | | | | | |
| **FYU** | **Fort Yukon** | **87.56** | **24** | P | **P** | **17 38 50.7** | **+0.8** |
| FYU | | | | IAmb | IAmb | 17 38 59.1 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **N25K** | **Chitina, Valde** | **87.56** | **29** | P | **P** | **17 38 50.7** | **+0.6** |
| N25K | | | | IAmb | IAmb | 17 38 59.8 | |
| | comp=Z,58nm,1.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **87.56** | **29** | P | **P** | **17 38 50.3** | **+0.1** |
| | baz=267,SNR=6.3 | | | | | | |
| N25K | | | | S | **S** | **17 49 30.8** | **0.0** |
| | baz=267 | | | | | | |
| **KAIM** | **Kayak Island** | **87.56** | **30** | P | **P** | **17 38 50.2** | **+0.1** |
| | baz=267 | | | | | | |
| **HMT** | **Hamilton** | **87.66** | **30** | IAMs_20 | IAMs_20 | 18 18 44.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **VRH** | **Novokhopyorsk** | **87.67** | **321** | *e*P | **P** | **17 38 50.5** | **-0.3** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,50nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **87.86** | **23** | P | **P** | **17 38 52.1** | **+0.6** |
| **DOT** | **Dot Lake** | **87.90** | **26** | P | **P** | **17 38 51.9** | **+0.2** |
| **GLB** | **Gilahina Butte** | **87.93** | **29** | P | **P** | **17 38 52.2** | **+0.3** |
| GLB | | | | IAmb | IAmb | 17 39 01.9 | |
| | comp=Z,61nm,1.2s | | | | | | |
| **SCRK** | **Sand Creek** | **87.94** | **26** | P | **P** | **17 38 53.0** | **+1.0** |
| SCRK | | | | IAMs_20 | IAMs_20 | 18 13 16.5 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **SCRK** | **Sand Creek** | **87.94** | **26** | P | **P** | **17 38 52.8** | **+0.8** |
| | baz=268 | | | | | | |
| SCRK | | | | S | **S** | **17 49 35.5** | **+1.0** |
| | baz=268 | | | | | | |
| **MENT** | **Mentasta** | **88.02** | **27** | P | **P** | **17 38 52.7** | **+0.4** |
| MENT | | | | IAmb | IAmb | 17 39 01.7 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **VRDI** | **Verde Repeater** | **88.09** | **29** | P | **P** | **17 38 53.0** | **+0.1** |
| VRDI | | | | IAmb | IAmb | 17 39 02.7 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **MARD** | **Mardin** | **88.11** | **307** | P | **P** | **17 38 53.0** | **-0.4** |
| MARD | | | | IAmb | IAmb | 17 39 01.1 | |
| | comp=Z,61nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **88.15** | **26** | P | **P** | **17 38 53.0** | **0.0** |
| | baz=268 | | | | | | |
| J26L | | | | S | **S** | **17 49 36.5** | **+0.1** |
| | baz=268 | | | | | | |
| **L26K** | **Log Cabin Wild** | **88.20** | **27** | P | **P** | **17 38 53.4** | **+0.3** |
| **L26K** | **Log Cabin Wild** | **88.20** | **27** | P | **P** | **17 38 52.8** | **-0.3** |
| | baz=268 | | | | | | |
| L26K | | | | S | **S** | **17 49 37.3** | **+0.5** |
| | baz=268 | | | | | | |
| **M26K** | **Nabesna, AK** | **88.34** | **28** | P | **P** | **17 38 53.8** | **-0.1** |
| | baz=269 | | | | | | |
| M26K | | | | S | **S** | **17 49 40.8** | **+2.6** |
| | baz=269 | | | | | | |
| **WAX** | **Waxell Ridge** | **88.36** | **30** | P | **P** | **17 38 53.8** | **-0.3** |
| WAX | | | | IAmb | IAmb | 17 39 03.6 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **SNH** | **Sunshine Point** | **88.37** | **30** | P | **P** | **17 38 54.6** | **+0.6** |
| **MESA** | **MESA** | **88.81** | **30** | IAMs_20 | IAMs_20 | 18 12 14.6 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **MESA** | **MESA** | **88.81** | **30** | P | **P** | **17 38 56.2** | **-0.1** |
| | baz=270 | | | | | | |
| MESA | | | | S | **S** | **17 49 45.3** | **+2.2** |
| | baz=270 | | | | | | |
| **M27K** | **Edge Creek, AK** | **88.86** | **28** | P | **P** | **17 38 57.5** | **+1.1** |
| **M27K** | **Edge Creek, AK** | **88.86** | **28** | P | **P** | **17 38 56.9** | **+0.5** |
| | baz=270 | | | | | | |
| M27K | | | | S | **S** | **17 49 44.9** | **+1.6** |
| | baz=270 | | | | | | |
| **L27K** | **Beaver Creek,** | **88.89** | **27** | P | **P** | **17 38 55.2** | **-1.2** |
| L27K | | | | IAmb | IAmb | 17 39 06.3 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **L27K** | **Beaver Creek,** | **88.89** | **27** | P | **P** | **17 38 56.8** | **+0.4** |
| | baz=270 | | | | | | |
| L27K | | | | S | **S** | **17 49 43.4** | **0.0** |
| | baz=270 | | | | | | |
| **BCAR** | **Beaver Creek A** | **88.91** | **27** | P | **P** | **17 38 56.6** | **+0.1** |
| **YAH** | **Yahtse** | **88.91** | **30** | IAMs_20 | IAMs_20 | 18 12 19.2 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **SOC** | **Sochi** | **88.94** | **313** | *e*P | **P** | **17 38 55.7** | **-1.3** |
| SOC | | | | *e* | | 17 42 23.6 | |
| SOC | | | | *e*PPP | PPP | 17 44 19.3 | |
| SOC | | | | *e*S | **SKSac** | **17 49 25.0** | **-1.1** |
| SOC | | | | *e*SS | **SS** | **17 55 33.9** | **-3.3** |
| SOC | | | | *e*SSS | SSS | 17 59 09.0 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **BARN** | **Barnard Glacie** | **88.96** | **29** | P | **P** | **17 38 56.4** | **-0.6** |
| **KLMR** | **Klimovskoe** | **89.05** | **331** | *e*P | **P** | **17 38 56.1** | **-1.0** |
| KLMR | | | | *e* | | 17 42 25.4 | |
| KLMR | | | | *e*S | **SKSac** | **17 49 24.4** | **-1.5** |
| KLMR | | | | *e*SS | **SS** | **17 55 33.4** | **-4.4** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,86nm,1.4s | | | | | | |
| **KLMR** | **Klimovskoe** | **89.05** | **331** | *e*P | **P** | **17 38 56.2** | **-0.9** |
| KLMR | | | | AMP | | 17 39 11.4 | |
| | comp=Z,86nm,1.4s | | | | | | |
| KLMR | | | | *e*PP | **PP** | **17 42 25.5** | **-1.4** |
| KLMR | | | | *e*S | **SKSac** | **17 49 24.5** | **-1.5** |
| KLMR | | | | *e*S | **SKSac** | **17 49 24.5** | **-1.5** |
| KLMR | | | | *e*SS | **SS** | **17 55 33.5** | **-4.4** |
| KLMR | | | | *e*SS | **SS** | **17 55 33.5** | **-4.4** |
| KLMR | | | | *e*PKKP | **PKKPbc** | **17 56 38.7** | **+1.1** |
| KLMR | | | | LQ | LQ | 18 12 13.8 | |
| KLMR | | | | LQ | LQ | 18 12 13.8 | |
| KLMR | | | | LR | LR | 18 16 04.0 | |
| **ANKE** | **Ethiopia-Afar** | **89.17** | **280** | *e*P | P | 17 39 14.2 | +15 |
| ANKE | | | | *e*S | **S** | **17 49 53.8** | **+5.3** |
| ANKE | | | | IAMs_20 | IAMs_20 | 17 50 45.3 | |
| | comp=N,868nm,16.0s | | | | | | |
| **EGAK** | **Eagle** | **89.19** | **25** | P | **P** | **17 38 58.1** | **+0.4** |
| **EGAK** | **Eagle** | **89.19** | **25** | P | **P** | **17 38 58.2** | **+0.5** |
| | baz=270 | | | | | | |
| EGAK | | | | S | **S** | **17 49 45.9** | **-0.1** |
| | baz=270 | | | | | | |
| **TABL** | **Table Mountain** | **89.21** | **30** | IAMs_20 | IAMs_20 | 18 12 29.2 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **VORR** | **Voronezh** | **89.25** | **321** | *e*P | **P** | **17 38 59.5** | **+1.2** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.4s | | | | | | |
| **VSR** | **Storozhevoye** | **89.28** | **321** | *e*P | **P** | **17 38 57.5** | **-0.9** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| **BVCY** | **Beaver Creek** | **89.33** | **28** | P | **P** | **17 38 58.9** | **+0.4** |
| | baz=270 | | | | | | |
| BVCY | | | | S | **S** | **17 49 48.3** | **+0.8** |
| | baz=270 | | | | | | |
| **LPSR** | **Galich'ya Gora** | **89.42** | **322** | *e*P | **P** | **17 38 58.6** | **-0.4** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,50nm,1.0s | | | | | | |
| **YUK3** | **Moose Creek** | **89.53** | **28** | P | **P** | **17 39 00.1** | **+0.4** |
| | baz=271 | | | | | | |
| YUK3 | | | | S | **S** | **17 49 48.6** | **-1.1** |
| | baz=271 | | | | | | |
| **PINM** | **Pinnacle** | **89.66** | **30** | P | **P** | **17 39 00.7** | **+0.6** |
| | baz=271 | | | | | | |
| **DAWY** | **Dawson** | **89.97** | **26** | P | **P** | **17 39 01.0** | **-0.4** |
| **DAWY** | **Dawson** | **89.97** | **26** | P | **P** | **17 39 01.8** | **+0.4** |
| | baz=272 | | | | | | |
| DAWY | | | | S | **S** | **17 49 53.5** | **+0.1** |
| | baz=272 | | | | | | |
| **PNL** | **Peninsula** | **90.10** | **30** | P | **P** | **17 39 01.7** | **-0.4** |
| | baz=272 | | | | | | |
| PNL | | | | S | **S** | **17 49 57.0** | **+2.3** |
| | baz=272 | | | | | | |
| **MOS** | **Moscow** | **90.12** | **326** | *e*P | **P** | **17 39 05.0** | **+2.8** |
| MOS | | | | *e* | | 17 42 42.2 | |
| MOS | | | | *e*S | **SKSac** | **17 49 34.6** | **+2.1** |
| MOS | | | | pmax | pmax | | |
| | comp=Z,68nm,1.4s | | | | | | |
| **FURI** | **Furi** | **90.22** | **279** | *e*P | P | 17 39 18.2 | +14 |
| FURI | | | | *e*S | **S** | **17 49 59.0** | **+0.8** |
| FURI | | | | IAMs_20 | IAMs_20 | 17 51 05.5 | |
| | comp=Z,6µm,36.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **90.38** | **25** | P | **P** | **17 39 03.2** | **-0.1** |
| I29M | | | | IAmb | IAmb | 17 39 11.3 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **90.38** | **25** | P | **P** | **17 39 03.8** | **+0.5** |
| | baz=273 | | | | | | |
| I29M | | | | S | **S** | **17 49 56.6** | **-0.5** |
| | baz=273 | | | | | | |
| **YUK4** | **Talbot Arm** | **90.41** | **29** | P | **P** | **17 39 04.4** | **+0.6** |
| | baz=272 | | | | | | |
| YUK4 | | | | S | **S** | **17 50 01.5** | **+3.6** |
| | baz=272 | | | | | | |
| **J29M** | **Klondike Camp** | **90.47** | **26** | P | **P** | **17 39 04.1** | **+0.3** |
| | baz=273 | | | | | | |
| J29M | | | | S | **S** | **17 50 00.4** | **+2.4** |
| | baz=273 | | | | | | |
| **SYO** | **Syowa Base** | **90.55** | **201⇑** | *e*sP | sP | 17 39 10.8 | -0.9 |
| **ANN** | **Anapa** | **90.56** | **315** | *e*P | **P** | **17 39 05.9** | **+1.4** |
| ANN | | | | *e*PP | **pP** | **17 39 09.8** | **-0.3** |
| ANN | | | | *e* | | 17 49 34.3 | |
| ANN | | | | *e* | | 17 49 52.9 | |
| ANN | | | | pmax | pmax | | |
| | comp=Z,48nm,0.9s | | | | | | |
| **YUK6** | **Outpost Mounta** | **90.57** | **29** | P | **P** | **17 39 05.1** | **+0.6** |
| | baz=273 | | | | | | |
| YUK6 | | | | S | **S** | **17 50 02.0** | **+2.6** |
| | baz=273 | | | | | | |
| **DILA** | **Dilla** | **90.64** | **276** | *e*P | P | 17 39 18.2 | +12 |
| DILA | | | | *e*S | **S** | **17 50 00.3** | **-1.5** |
| DILA | | | | IAMs_20 | IAMs_20 | 17 54 26.4 | |
| | comp=N,8µm,43.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.74** | **180** | P | **P** | **17 39 03.8** | **-1.3** |
| | comp=N,26nm,1.0s,baz=328,slow=3.5,SNR=20 | | | | | | |
| QSPA | | | | LR | LR | 18 21 38.1 | |
| | comp=N,11µm,18.9s,baz=15,slow=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **90.74** | **180** | P | **P** | **17 39 04.0** | **-1.0** |
| QSPA | | | | IAmb | IAmb | 17 39 17.7 | |
| | comp=Z,109nm,1.4s | | | | | | |
| **OBN** | **Obninsk** | **90.75** | **325** | *ce*P | **P** | **17 39 05.2** | **+0.1** |
| OBN | | | | *e* | | 17 42 41.2 | |
| OBN | | | | *e*SS | SS | 17 56 05.3 | +2.6 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,81nm,1.4s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| **OBN** | **Obninsk** | **90.75** | **325** | IAMs_20 | IAMs_20 | 18 25 26.9 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **LVZ** | **Lovozero** | **90.90** | **338⇓** | *i*P | **P** | **17 39 06.0** | **+0.3** |
| LVZ | | | | pmax | pmax | | |
| | comp=Z,257nm,3.0s | | | | | | |
| LVZ | | | | MLR | MLR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **90.94** | **99** | *e*S | **S** | **17 50 01.8** | **-2.5** |
| | comp=Z,2µm,25.7s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **90.94** | **99** | *e*LR | LR | 18 08 11.5 | |
| | comp=Z,8µm,21.6s | | | | | | |
| **HYT** | **Haines Junctio** | **90.99** | **29** | P | **P** | **17 39 07.6** | **+1.2** |
| HYT | | | | IAmb | IAmb | 17 39 14.9 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **HYT** | **Haines Junctio** | **90.99** | **29** | P | **P** | **17 39 07.1** | **+0.7** |
| | baz=273 | | | | | | |
| HYT | | | | S | **S** | **17 50 04.0** | **+0.9** |
| | baz=273 | | | | | | |
| **KIBK** | **Kibwezi** | **91.01** | **268** | P | **P** | **17 39 07.4** | **0.0** |
| **APA** | **Apatity** | **91.41** | **338⇓** | *i*P | **P** | **17 39 10.3** | **+2.3** |
| APA | | | | *i* | | 17 49 41.0 | |
| APA | | | | *i* S | **S** | **17 50 08.0** | **+1.7** |
| APA | | | | *i* PS | **PS** | **17 51 14.0** | **-3.1** |
| APA | | | | *i* PPS | PPS | 17 51 49.0 | |
| APA | | | | *i* SS | **SS** | **17 56 15.0** | **+3.4** |
| APA | | | | pmax | pmax | | |
| | comp=Z,32nm,0.9s | | | | | | |
| **KVT** | **Kavak** | **91.72** | **311** | P | **P** | **17 39 11.9** | **+1.8** |
| **KMBO** | **Kilima Mbogo** | **91.79** | **269** | P | **P** | **17 39 13.2** | **+1.9** |
| | comp=Z,4.6nm,0.9s,baz=88,slow=4.9,SNR=8.4 | | | | | | |
| KMBO | | | | LR | LR | 18 18 11.1 | |
| | comp=Z,2µm,21.4s,baz=77,slow=34 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **91.79** | **269⇑** | *e*P | **P** | **17 39 12.8** | **+1.6** |
| **KMBO** | **Kilima Mbogo** | **91.79** | **269** | P | **P** | **17 39 12.7** | **+1.4** |
| KMBO | | | | IAmb | IAmb | 17 39 45.1 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **91.79** | **269** | *e*P | P | 17 39 20.2 | +8.9 |
| KMBO | | | | *e*S | **SKKSac** | **17 50 04.2** | **+3.6** |
| KMBO | | | | IAML | | 17 59 59.3 | |
| | comp=Z,13nm,0.2s | | | | | | |
| **BNN** | **Bunyan** | **91.98** | **309** | P | **P** | **17 39 10.7** | **-0.8** |
| BNN | | | | IAmb | IAmb | 17 39 26.9 | |
| | comp=Z,85nm,1.2s | | | | | | |
| **INK** | **Inuvik** | **92.01** | **22** | P | **P** | **17 39 10.3** | **-0.4** |
| | comp=Z,8.9nm,1.1s,baz=247,slow=6.4,SNR=7.4 | | | | | | |
| INK | | | | LR | LR | 18 18 56.5 | |
| | comp=Z,2µm,21.7s,baz=268,slow=34 | | | | | | |
| **INK** | **Inuvik** | **92.01** | **22** | P | **P** | **17 39 10.4** | **-0.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,52nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **92.01** | **22** | P | **P** | **17 39 10.4** | **-0.4** |
| INK | | | | IAmb | IAmb | 17 39 18.7 | |
| | comp=Z,52nm,1.4s | | | | | | |
| **INK** | **Inuvik** | **92.01** | **22** | P | **P** | **17 39 11.3** | **+0.6** |
| | baz=277 | | | | | | |
| INK | | | | S | **S** | **17 50 07.5** | **-4.2** |
| | baz=277 | | | | | | |
| **SKAG** | **Skagway** | **92.18** | **31** | P | **P** | **17 39 12.5** | **+0.8** |
| SKAG | | | | IAmb | IAmb | 17 39 20.9 | |
| | comp=Z,58nm,1.0s | | | | | | |
| **SKAG** | **Skagway** | **92.18** | **31** | P | **P** | **17 39 12.1** | **+0.4** |
| | baz=275 | | | | | | |
| **WHY** | **Whitehorse** | **92.29** | **29** | P | **P** | **17 39 11.9** | **-0.5** |
| WHY | | | | IAmb | IAmb | 17 39 21.5 | |
| | comp=Z,63nm,1.1s | | | | | | |
| **WHY** | **Whitehorse** | **92.29** | **29** | P | **P** | **17 39 13.1** | **+0.7** |
| | baz=276 | | | | | | |
| WHY | | | | S | **S** | **17 50 17.4** | **+2.6** |
| | baz=276 | | | | | | |
| **M31M** | **Drury Creek, Y** | **92.36** | **28** | P | **P** | **17 39 12.6** | **0.0** |
| M31M | | | | IAmb | IAmb | 17 39 21.4 | |
| | comp=Z,44nm,1.5s | | | | | | |
| M31M | | | | IAMs_20 | IAMs_20 | 18 20 10.4 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **M31M** | **Drury Creek, Y** | **92.36** | **28** | P | **P** | **17 39 13.3** | **+0.7** |
| | baz=276 | | | | | | |
| M31M | | | | S | **S** | **17 50 15.4** | **+0.2** |
| | baz=276 | | | | | | |
| **SIT** | **Sitka** | **92.40** | **33** | S | **S** | **17 50 16.8** | **+1.1** |
| | baz=275 | | | | | | |
| **BESE** | **Bessie Mountai** | **92.51** | **31** | P | **P** | **17 39 13.9** | **+0.5** |
| BESE | | | | IAmb | IAmb | 17 39 22.6 | |
| | comp=Z,54nm,1.1s | | | | | | |
| **GHAJ** | **Ghor Haditha** | **92.54** | **301** | P | **P** | **17 39 12.2** | **-1.8** |
| GHAJ | | | | IAmb | IAmb | 17 39 21.4 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **FARO** | **Faro, Yukon** | **92.85** | **28** | P | **P** | **17 39 15.3** | **+0.5** |
| | baz=277 | | | | | | |
| FARO | | | | S | **S** | **17 50 19.9** | **+0.4** |
| | baz=277 | | | | | | |
| **MSF** | **Maaselka** | **93.34** | **336** | P | **P** | **17 39 19.7** | **+2.7** |
| **P33M** | **Teslin, Yukon** | **93.36** | **30** | P | **P** | **17 39 17.0** | **-0.3** |
| P33M | | | | IAmb | IAmb | 17 39 25.9 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **P33M** | **Teslin, Yukon** | **93.36** | **30** | P | **P** | **17 39 17.1** | **-0.3** |
| | baz=278 | | | | | | |
| P33M | | | | S | **S** | **17 50 24.0** | **-0.3** |
| | baz=278 | | | | | | |
| **KEV** | **Kevo** | **93.39** | **340** | IAMs_20 | IAMs_20 | 18 24 05.8 | |
| | comp=Z,7µm,21.0s | | | | | | |
| **LODK** | **Lodwar** | **93.61** | **273** | P | **P** | **17 39 18.2** | **-1.3** |
| **BR131** | **Keskin Array S** | **93.64** | **310⇑** | *e*P | **P** | **17 39 18.9** | **-0.2** |
| **BR131** | **Keskin Array S** | **93.64** | **310** | P | **P** | **17 39 16.8** | **-2.3** |
| **BRTR** | **Keskin Array B** | **93.64** | **310** | P | **P** | **17 39 18.4** | **-0.8** |
| | comp=Z,5.7nm,0.9s,baz=97,slow=8.8,SNR=5.1 | | | | | | |
| BRTR | | | | PP | **PP** | **17 43 06.0** | **+2.0** |
| | comp=Z,1.2nm,0.6s,baz=118,slow=8.3,SNR=2.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **93.64** | **310** | P | **P** | **17 39 17.5** | **-1.6** |
| **MMPY** | **Sheldon Lake,** | **93.75** | **27** | P | **P** | **17 39 19.3** | **+0.3** |
| | baz=279 | | | | | | |
| MMPY | | | | S | **S** | **17 50 25.8** | **-1.8** |
| | baz=279 | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **OUL** | **Oulu** | **94.78** | **336** | | P | **P** | **17 39 26.4** | **+2.8** | | |
| OUL | | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.4s | | | | | | | | | |
| **DLBC** | **Dease Lake** | **95.04** | **31** | | LR | LR | 18 19 01.0 | | | |
| | comp=Z,1μm,21.1s,baz=298,slow=34 | | | | | | | | | |
| **DLBC** | **Dease Lake** | **95.04** | **31** | | P | **P** | **17 39 24.9** | **-0.2** | | |
| **C36M** | **Paulatuk** | **95.16** | **20** | | P | **P** | **17 39 23.8** | **-1.4** | | |
| **C36M** | **Paulatuk** | **95.16** | **20** | | P | **P** | **17 39 24.9** | **-0.3** | | |
| | baz=286 | | | | | | | | | |
| C36M | | | | | S | **S** | **17 50 41.3** | **+1.9** | | |
| | baz=286 | | | | | | | | | |
| **MDUB** | **Mudurnu** | **95.44** | **311** | | P | **P** | **17 39 25.5** | **-1.8** | | |
| **FINES** | **FINESS Array B** | **95.47** | **332** | | P | **P** | **17 39 24.8** | **-2.0** | | |
| | comp=Z,14nm,1.1s,baz=80,slow=4.9,SNR=12 | | | | | | | | | |
| FINES | | | | | LR | LR | 18 26 13.4 | | | |
| | comp=Z,5μm,21.9s,baz=76,slow=38 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.59** | **321** | | P | **P** | **17 39 26.0** | **-1.6** | | |
| | comp=Z,2.0nm,0.6s,baz=67,slow=4.2,SNR=6.8 | | | | | | | | | |
| AKASG | | | | | LR | LR | 18 27 00.0 | | | |
| | comp=Z,3μm,18.1s,baz=74,slow=38 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.59** | **321** | | P | **P** | **17 39 26.0** | **-1.6** | | |
| **AKASG** | **Malin Array Be** | **95.59** | **321** | | P | **P** | **17 39 24.9** | **-2.7** | | |
| **AKBB** | **Malin Array Si** | **95.59** | **321** | ⇓ | *e*P | **P** | **17 39 27.2** | **-0.4** | | |
| **AKBB** | **Malin Array Si** | **95.59** | **321** | | P | **P** | **17 39 25.1** | **-2.4** | | |
| **MNK** | **Minsk** | **95.81** | **325** | | *i* P | **P** | **17 39 29.1** | **+0.6** | | |
| MNK | | | | | *i* | | 17 43 20.7 | | | |
| MNK | | | | | *i* PPP | PPP | 17 45 23.1 | | | |
| MNK | | | | | *i* S | **SKSac** | **17 50 05.2** | **+1.1** | | |
| MNK | | | | | *i* SS | **SS** | **17 57 17.8** | **+2.7** | | |
| MNK | | | | | *i* SSS | SSS | 18 01 01.3 | | | |
| MNK | | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| MNK | | | | | pmax | pmax | | | | |
| | comp=N,16nm,0.9s | | | | | | | | | |
| MNK | | | | | pmax | pmax | | | | |
| | comp=E,3.0nm,0.9s | | | | | | | | | |
| MNK | | | | | MLR | MLR | | | | |
| | comp=E,489nm,20.0s | | | | | | | | | |
| MNK | | | | | MLR | MLR | | | | |
| | comp=N,3μm,20.0s | | | | | | | | | |
| MNK | | | | | MLR | MLR | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **MNK** | **Minsk** | **95.81** | **325** | | *i* P | **P** | **17 39 29.2** | **+0.7** | | |
| | comp=E,3.0nm,0.9s | | | | | | | | | |
| MNK | | | | | *i* P | **P** | **17 39 29.2** | **+0.7** | | |
| | comp=N,16nm,0.9s | | | | | | | | | |
| MNK | | | | | *i* P | **P** | **17 39 29.2** | **+0.7** | | |
| | comp=Z,9.0nm,0.9s,baz=80 | | | | | | | | | |
| MNK | | | | | *i* PP | **PP** | **17 43 20.7** | **+0.5** | | |
| MNK | | | | | *i* PPP | PPP | 17 45 23.1 | | | |
| MNK | | | | | *i* S | **SKSac** | **17 50 05.2** | **+1.2** | | |
| MNK | | | | | *i* SKKS | ScS | 17 51 04.2 | +18 | | |
| MNK | | | | | *i* PS | PS | 17 51 32.3 | -34 | | |
| MNK | | | | | *i* SS | **SS** | **17 57 17.8** | **+2.7** | | |
| MNK | | | | | *i* SSS | SSS | 18 01 01.3 | | | |
| MNK | | | | | *i* LR | LR | 18 17 28.2 | | | |
| MNK | | | | | *i* LRM | MLR | 18 22 59.3 | | | |
| | comp=E,489nm,19.8s | | | | | | | | | |
| MNK | | | | | *i* LRM | MLR | 18 23 43.4 | | | |
| | comp=N,3μm,20.1s | | | | | | | | | |
| MNK | | | | | *i* LRM | MLR | 18 23 49.8 | | | |
| | comp=Z,3μm,20.1s | | | | | | | | | |
| **NOR** | **Nord** | **96.17** | **355** | | P | **P** | **17 39 31.2** | **+1.5** | | |
| **NOR** | **Nord** | **96.17** | **355** | | *i* P | **P** | **17 39 28.5** | **-1.2** | | |
| **NACGM** | **Naroch** | **96.37** | **325** | | *i* P | **P** | **17 39 32.5** | **+1.5** | | |
| **SORM** | **Soroca** | **96.52** | **319** | ⇑ | P | **P** | **17 39 31.1** | **-0.8** | | |
| **SORM** | **Soroca** | **96.52** | **319** | ⇑ | P | **P** | **17 39 31.1** | **-0.8** | | |
| **ALE** | **Alert** | **96.59** | **1** | | IAMs_20 | IAMs_20 | 18 20 16.9 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **TLCR** | | **96.62** | **316** | ⇑ | P | **P** | **17 39 31.7** | **-0.7** | | |
| **TLCR** | | **96.62** | **316** | ⇑ | P | **P** | **17 39 31.7** | **-0.7** | | |
| **ELL** | **Elmali** | **96.83** | **307** | | P | **P** | **17 39 31.8** | **-1.9** | | |
| ELL | | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.0s | | | | | | | | | |
| **ELL** | **Elmali** | **96.83** | **307** | | P | **P** | **17 39 31.8** | **-1.9** | | |
| **TIRR** | **Tirgusor** | **97.01** | **315** | | IAMs_20 | IAMs_20 | 18 26 17.9 | | | |
| | comp=Z,7μm,22.0s | | | | | | | | | |
| **VLDR** | **Vladesti** | **97.04** | **316** | ⇑ | P | Pdif | 17 39 36.2 | +1.8 | | |
| **CFR** | **Carcaliu** | **97.10** | **316** | ⇑ | P | Pdif | 17 39 38.1 | +3.4 | | |
| **CFR** | **Carcaliu** | **97.10** | **316** | ⇑ | P | Pdif | 17 39 38.1 | +3.4 | | |
| **WRGLY** | **Wrigley** | **97.10** | **26** | | P | Pdif | 17 39 34.5 | +0.3 | | |
| | baz=286 | | | | | | | | | |
| WRGLY | | | | | S | **S** | **17 50 59.2** | **+2.8** | | |
| | baz=286 | | | | | | | | | |
| **BBB** | **Bella Bella** | **97.23** | **37** | | LR | LR | 18 14 58.5 | | | |
| | comp=Z,4μm,21.8s,baz=281,slow=30 | | | | | | | | | |
| **TESR** | **Tescani** | **97.92** | **317** | ⇑ | P | Pdif | 17 39 38.5 | +0.1 | | |
| **VRI** | **Vrincioaia** | **97.97** | **316** | ⇑ | P | Pdif | 17 39 38.9 | +0.3 | | |
| **VRI** | **Vrincioaia** | **97.97** | **316** | ⇑ | P | Pdif | 17 39 38.9 | +0.3 | | |
| **PLOR** | **Plostina** | **98.03** | **316** | ⇑ | P | Pdif | 17 39 43.5 | +4.6 | | |
| **PLOR** | **Plostina** | **98.03** | **316** | ⇑ | P | Pdif | 17 39 43.5 | +4.6 | | |
| **MBAR** | **Mbarara** | **98.30** | **270** | | LR | LR | 18 23 19.3 | | | |
| | comp=Z,840nm,19.0s,baz=64,slow=35 | | | | | | | | | |
| **MBAR** | **Mbarara** | **98.30** | **270** | ⇑ | *e*P | Pdif | 17 39 41.6 | +0.7 | | |
| **MBAR** | **Mbarara** | **98.30** | **270** | | *e*P | Pdif | 17 39 48.3 | +7.4 | | |
| MBAR | | | | | *e*S | SKKSac | 17 50 30.2 | -18 | | |
| MBAR | | | | | IAMs_20 | IAMs_20 | 17 51 11.2 | | | |
| | comp=Z,73nm,4.7s | | | | | | | | | |
| **COVR** | **Voineasa-Covas** | **98.34** | **316** | ⇑ | P | Pdif | 17 39 44.4 | +4.1 | | |
| **NEHR** | **Nehoiu** | **98.34** | **316** | ⇑ | P | Pdif | 17 39 45.0 | +4.8 | | |
| **MLR** | **Muntele Rosu** | **98.58** | **316** | ⇓ | P | Pdif | 17 39 42.7 | +1.2 | | |
| **MLR** | **Muntele Rosu** | **98.58** | **316** | | LR | LR | 18 29 57.9 | | | |
| | comp=Z,4μm,21.6s,baz=65,slow=39 | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **98.58** | **316** | ⇓ | P | Pdif | 17 39 42.7 | +1.2 | | |
| **MLR** | **Muntele Rosu** | **98.58** | **316** | | P | **P** | **17 39 40.6** | **-0.8** | | |
| MLR | | | | | IAmb | IAmb | 17 40 19.4 | | | |
| | comp=Z,35nm,1.3s | | | | | | | | | |
| MLR | | | | | IAMs_20 | IAMs_20 | 18 29 47.3 | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **SUW** | **Suwalki** | **98.61** | **325** | | P | Pdif | 17 39 45.1 | +3.9 | | |
| SUW | | | | | pmax | pmax | | | | |
| | comp=Z,39nm,1.1s | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **98.69** | **318** | ⇑ | P | Pdif | 17 39 42.7 | +0.9 | | |
| **BURAR** | **Bucovina Array** | **98.69** | **318** | ⇑ | P | Pdif | 17 39 42.7 | +0.8 | | |
| **BURAR** | **Bucovina Array** | **98.69** | **318** | | P | **P** | **17 39 40.4** | **-1.5** | | |
| **BUR08** | **Bucovina Ar. S** | **98.69** | **318** | | | **P** | **17 39 39.5** | **-2.4** | | |
| BUR08 | | | | | IAmb | IAmb | 17 39 51.8 | | | |
| | comp=Z,32nm,1.6s | | | | | | | | | |
| **VOIR** | | **99.21** | **316** | ⇑ | P | **Pdif** | **17 39 46.7** | **+2.5** | | |
| **VOIR** | | **99.21** | **316** | ⇑ | P | **Pdif** | **17 39 46.7** | **+2.5** | | |
| **EZN** | **Ezine** | **99.22** | **310** | | P | **Pdif** | **17 39 47.9** | **+3.7** | | |
| **ARR** | **Arges** | **99.51** | **316** | ⇑ | P | **Pdif** | **17 39 49.9** | **+4.4** | | |
| **RES** | **Resolute Bay** | **100.24** | **11** | | P | **Pdif** | **17 39 47.1** | **-0.9** | | |
| **RES** | **Resolute Bay** | **100.24** | **11** | | Pdif | **Pdif** | **17 39 47.1** | **-0.9** | | |
| **UZH** | **Uzhgorod** | **100.39** | **320** | | *e*P | **Pdif** | **17 39 53.1** | **+3.8** | | |
| **DAG** | **Danmarks Havn** | **100.42** | **353** | | P | **Pdif** | **17 39 53.7** | **+4.9** | | |
| DAG | | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.2s | | | | | | | | | |
| **DRGR** | | **100.53** | **318** | ⇓ | P | **Pdif** | **17 39 51.0** | **+1.0** | | |
| **DRGR** | | **100.53** | **318** | ⇓ | P | **Pdif** | **17 39 51.0** | **+1.0** | | |
| **CRVS** | **Cervenica-Dubn** | **100.86** | **320** | | *e*P | **Pdif** | **17 39 52.5** | **+1.1** | | |
| **CRVS** | **Cervenica-Dubn** | **100.86** | **320** | | *e*PDIFF | **Pdif** | **17 39 52.5** | **+1.1** | | |
| **VTS** | **Vitosha** | **101.03** | **314** | ⇑ | P | **Pdif** | **17 39 52.5** | **+0.1** | | |
| **VTS** | **Vitosha** | **101.03** | **314** | ⇑ | P | **Pdif** | **17 39 52.5** | **+0.1** | | |
| **VTS** | **Vitosha** | **101.03** | **314** | | Pdif | **Pdif** | **17 39 51.4** | **-1.1** | | |
| **HERR** | **Herculane** | **101.14** | **316** | ⇓ | P | **Pdif** | **17 39 55.0** | **+2.3** | | |
| **YKA** | **Yellowknife Ar** | **101.17** | **25** | | P | **Pdif** | **17 39 52.5** | **+0.2** | | |
| | comp=Z,3.2nm,0.9s,baz=295,slow=4.7,SNR=21 | | | | | | | | | |
| YKA | | | | | PP | **PP** | **17 44 02.9** | **+2.0** | | |
| | comp=Z,2.8nm,1.1s,baz=296,slow=6.4,SNR=4.2 | | | | | | | | | |
| YKA | | | | | PKKPbc | **PKKPbc** | **17 56 03.5** | **-1.7** | | |
| | comp=Z,3.0nm,0.9s,baz=113,slow=2.6,SNR=11 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **101.17** | **25** | | Pdif | **Pdif** | **17 39 52.1** | **-0.2** | | |
| **D03D** | **Eldon** | **101.40** | **41** | | P | **Pdif** | **17 39 53.3** | **-0.5** | | |
| | baz=284 | | | | | | | | | |
| **BZS** | **Buzias** | **101.53** | **317** | ⇓ | P | **Pdif** | **17 39 54.1** | **-0.3** | | |
| **BZS** | **Buzias** | **101.53** | **317** | ⇓ | P | **Pdif** | **17 39 54.1** | **-0.3** | | |
| **MDVR** | **Moldovita** | **101.65** | **316** | ⇑ | P | **Pdif** | **17 39 47.7** | **-7.4** | | |
| **D04E** | **Lakebay** | **101.70** | **41** | | P | **Pdif** | **17 39 54.6** | **-0.5** | | |
| | baz=284 | | | | | | | | | |
| **F04D** | **Rainier, OR** | **101.80** | **43** | | P | **Pdif** | **17 39 55.1** | **-0.5** | | |
| | baz=284 | | | | | | | | | |
| **J01E** | **Myrtle Point** | **101.82** | **46** | | IAMs_20 | IAMs_20 | 18 33 08.1 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **J01E** | **Myrtle Point** | **101.82** | **46** | | P | **Pdif** | **17 39 54.6** | **-1.1** | | |
| | baz=282 | | | | | | | | | |
| **NEEM** | **North Greenlan** | **101.83** | **0** | | *i* P | **Pdif** | **17 39 54.4** | **-1.0** | | |
| **G03D** | **McMinnville, O** | **101.83** | **43** | | P | **Pdif** | **17 39 54.7** | **-1.0** | | |
| | baz=283 | | | | | | | | | |
| **COR** | **Corvallis** | **101.95** | **44** | | IAMs_20 | IAMs_20 | 18 18 43.8 | | | |
| | comp=Z,5μm,22.0s | | | | | | | | | |
| **LIT** | **Litokhoron** | **102.08** | **311** | | P | **Pdif** | **17 39 55.9** | **-1.1** | | |
| **LIT** | **Litokhoron** | **102.08** | **311** | | Pdif | **Pdif** | **17 39 55.9** | **-1.1** | | |
| **TULEG** | **Thule** | **102.08** | **4** | | IAMs_20 | IAMs_20 | 18 26 54.8 | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | |
| **K02D** | **Willamette Mer** | **102.11** | **46** | | P | **Pdif** | **17 39 55.5** | **-1.6** | | |
| | baz=282 | | | | | | | | | |
| **PSZ** | **Piszkesteto** | **102.12** | **319** | | IAMs_20 | IAMs_20 | 18 30 14.2 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **JCC** | **Jacoby Creek,** | **102.24** | **48** | | IAMs_20 | IAMs_20 | 18 23 06.8 | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | |
| **L02E** | **Cave Junction** | **102.27** | **47** | | IAMs_20 | IAMs_20 | 18 22 05.1 | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | |
| **H04D** | **Lebanon** | **102.35** | **44** | | IAMs_20 | IAMs_20 | 18 19 08.1 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **102.40** | **334** | | P | **Pdif** | **17 39 55.5** | **-2.5** | | |
| | comp=Z,13nm,1.1s,baz=65,slow=4.6 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **102.40** | **334** | | P | **Pdif** | **17 39 55.5** | **-2.5** | | |
| | baz=65,slow=4.6 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **102.40** | **334** | | P | **Pdif** | **17 39 56.0** | **-1.9** | | |
| | comp=Z,7.1nm,1.1s,baz=66,slow=4.6,SNR=5.5 | | | | | | | | | |
| **HUMO** | **Hull Mountain** | **102.64** | **46** | | IAMs_20 | IAMs_20 | 18 17 22.8 | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **102.71** | **322** | | AMS | AMS | 18 37 30.0 | | | |
| | comp=Z,4μm,19.5s | | | | | | | | | |
| **M02C** | **Callahan** | **102.98** | **47** | | IAMs_20 | IAMs_20 | 18 17 34.0 | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **103.01** | **47** | | IAMs_20 | IAMs_20 | 18 21 25.2 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **N02D** | **Trinity Center** | **103.19** | **48** | | IAMs_20 | IAMs_20 | 18 19 53.4 | | | |
| | comp=Z,6μm,22.0s | | | | | | | | | |
| **L04D** | **Klamath Falls** | **103.20** | **46** | | IAMs_20 | IAMs_20 | 18 22 44.6 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **KRLC** | **Kraliky** | **103.48** | **322** | | AMS | AMS | 18 36 50.0 | | | |
| | comp=Z,4μm,19.2s | | | | | | | | | |
| **KSP** | **Ksiaz** | **103.53** | **323** | | P | **Pdif** | **17 40 08.0** | **+4.8** | | |
| KSP | | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | | |
| **M04C** | **Macdoel** | **103.64** | **47** | | IAMs_20 | IAMs_20 | 18 21 45.3 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **MCCM** | **Marconi Confer** | **103.66** | **50** | | IAMs_20 | IAMs_20 | 18 20 40.7 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **103.67** | **323** | | AMS | AMS | 18 32 40.0 | | | |
| | comp=Z,4μm,20.3s | | | | | | | | | |
| **OSTC** | **Ostas** | **103.67** | **323** | | AMS | AMS | 18 35 40.0 | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | |
| **UPC** | **Upice** | **103.81** | **323** | | AMS | AMS | 18 36 00.0 | | | |
| | comp=Z,4μm,18.3s | | | | | | | | | |
| **O03E** | **Pages Creek** | **104.01** | **48** | | IAMs_20 | IAMs_20 | 18 29 53.2 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **TREC** | **Trest** | **104.52** | **322** | | AMS | AMS | 18 37 20.0 | | | |
| | comp=Z,5μm,17.6s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **104.67** | **323** | | AMS | AMS | 18 30 50.0 | | | |
| | comp=Z,5μm,22.8s | | | | | | | | | |
| **MOD** | **Modoc Plateau** | **104.72** | **46** | | IAMs_20 | IAMs_20 | 18 23 02.9 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **PRU** | **Pruhonice** | **104.87** | **323** | | P | **Pdif** | **17 40 09.1** | **-0.1** | | |
| PRU | | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,2.5s | | | | | | | | | |
| **PRU** | **Pruhonice** | **104.87** | **323** | | AMS | AMS | 18 33 40.0 | | | |
| | comp=Z,3μm,17.0s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **104.93** | **324** | | *e*PKP | PKiKP | 17 44 37.2 | +13 | | |
| BRG | | | | | Amp | | 17 44 39.5 | | | |
| | comp=Z,12nm,1.5s | | | | | | | | | |
| **NEW** | **Newport** | **105.05** | **39** | | IAMs_20 | IAMs_20 | 18 20 56.5 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **SAO** | **San Andreas Ge** | **105.07** | **52** | | IAMs_20 | IAMs_20 | 18 25 55.6 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **CLL** | **Collm** | **105.33** | **324** | | IAMs_20 | IAMs_20 | 18 38 08.6 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **105.41** | **321** | | AMS | AMS | 18 38 30.0 | | | |
| | comp=Z,4μm,17.8s | | | | | | | | | |
| **EDM** | **Edmonton** | **105.51** | **34** | | P | **Pdif** | **17 40 12.4** | **+0.4** | | |
| **EDM** | **Edmonton** | **105.51** | **34** | | Pdif | **Pdif** | **17 40 12.4** | **+0.4** | | |
| **KHC** | **Kasperske Hory** | **105.76** | **322** | | *e*PP | **PP** | **17 44 34.5** | **-1.1** | | |
| KHC | | | | | AMS | AMS | 18 40 00.0 | | | |
| | comp=Z,4μm,20.2s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **105.78** | **322** | | Pdiff | **Pdif** | **17 40 13.9** | **+0.6** | | |
| | comp=Z,0.3nm,0.6s,baz=65,slow=4.7,SNR=2.1 | | | | | | | | | |
| GERES | | | | | PP | **PP** | **17 44 34.5** | **-1.3** | | |
| | comp=Z,1.5nm,0.9s,baz=54,slow=9.9,SNR=3.8 | | | | | | | | | |
| **BMO** | **Blue Mountains** | **106.00** | **43** | | IAMs_20 | IAMs_20 | 18 20 56.9 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **NKC** | **Novy Kostel** | **106.05** | **323** | | AMS | AMS | 18 36 00.0 | | | |
| | comp=Z,5μm,20.8s | | | | | | | | | |
| **PLID** | **Pearl Lake** | **106.80** | **42** | | IAMs_20 | IAMs_20 | 18 26 32.6 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **GRA1** | **Grafenberg Arr** | **106.99** | **323** | | IAMs_20 | IAMs_20 | 18 37 21.5 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **GRFO** | **Grafenberg** | **106.99** | **323** | | IAMs_20 | IAMs_20 | 18 35 31.6 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **107.09** | **49** | | Pdiff | **Pdif** | **17 40 25.2** | **+5.6** | | |
| | comp=Z,2.8nm,1.0s,baz=270,slow=6.0,SNR=7.5 | | | | | | | | | |
| NVAR | | | | | PP | **PP** | **17 44 47.0** | **+0.9** | | |
| | comp=Z,0.4nm,0.5s,baz=279,slow=7.9,SNR=3.1 | | | | | | | | | |
| NVAR | | | | | PKKP | **PKKPdf** | **17 55 57.3** | **-2.4** | | |
| | comp=Z,1.5nm,0.8s,baz=130,slow=3.0,SNR=3.9 | | | | | | | | | |
| **MFID** | **Camas Ranch** | **107.45** | **44** | | IAMs_20 | IAMs_20 | 18 27 01.0 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **MSO** | **Missoula** | **107.56** | **40** | | IAMs_20 | IAMs_20 | 18 27 39.6 | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | |
| **AQU** | **L'Aquila** | **108.12** | **315** | | IAMs_20 | IAMs_20 | 18 38 30.4 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **HLID** | **Hailey** | **108.38** | **43** | | IAMs_20 | IAMs_20 | 18 22 31.5 | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **STU** | **Stuttgart** | **108.57** | **323** | | IAMs_20 | IAMs_20 | 18 37 04.4 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **ELK** | **Elko** | **108.70** | **46** | | IAMs_20 | IAMs_20 | 18 31 46.4 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **BFO** | **Black Forest** | **109.28** | **323** | | IAMs_20 | IAMs_20 | 18 34 01.1 | | | |
| | comp=Z,3μm,18.0s | | | | | | | | | |
| **109C** | **Camp Elliot, M** | **109.44** | **55** | | IAMs_20 | IAMs_20 | 18 27 15.6 | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **109.51** | **40** | | IAMs_20 | IAMs_20 | 18 29 22.2 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **VLC** | **Villacollemand** | **109.58** | **318** | | IAMs_20 | IAMs_20 | 18 40 27.8 | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | |
| **WLF** | **Walferdange** | **109.99** | **324** | | IAMs_20 | IAMs_20 | 18 38 07.9 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **ECH** | **Echery** | **110.03** | **323** | | IAMs_20 | IAMs_20 | 18 33 52.1 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **TSUM** | **Tsumeb** | **110.49** | **250** | | IAMs_20 | IAMs_20 | 18 27 50.9 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **110.63** | **46** | | IAMs_20 | IAMs_20 | 18 34 57.3 | | | |
| | comp=Z,3μm,18.0s | | | | | | | | | |
| **FFC** | **Flin Flon** | **110.70** | **29** | | IAMs_20 | IAMs_20 | 18 37 18.6 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **110.70** | **42** | | IAMs_20 | IAMs_20 | 18 27 33.7 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **110.73** | **321** | | IAMs_20 | IAMs_20 | 18 39 49.8 | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **MOOW** | **Moose Ponds** | **110.80** | **42** | | IAMs_20 | IAMs_20 | 18 23 54.3 | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | |
| **REDW** | **Top Meadow** | **110.87** | **42** | | IAMs_20 | IAMs_20 | 18 23 56.4 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **SNOW** | **Snow King Moun** | **110.90** | **42** | | IAMs_20 | IAMs_20 | 18 23 58.1 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **LOHW** | **Long Hollow** | **110.94** | **42** | | IAMs_20 | IAMs_20 | 18 24 08.3 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **BW06** | **Boulder Array** | **111.98** | **43** | | IAMs_20 | IAMs_20 | 18 24 31.6 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **111.98** | **43** | | PP | **PP** | **17 45 23.2** | **+1.9** | | |
| | comp=Z,0.5nm,0.8s,baz=280,slow=6.3,SNR=2.0 | | | | | | | | | |
| PDAR | | | | | PKKPbc | **PKKPbc** | **17 55 30.1** | **-1.4** | | |
| | comp=Z,2.7nm,1.0s,baz=108,slow=5.8,SNR=4.8 | | | | | | | | | |
| **DGMT** | **Dagmar** | **112.82** | **35** | | IAMs_20 | IAMs_20 | 18 31 26.3 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **KEST** | **Kesra** | **113.24** | **310** | | PP | **PP** | **17 45 32.9** | **+2.5** | | |
| | comp=Z,7.8nm,0.9s,baz=87,slow=15,SNR=3.7 | | | | | | | | | |
| **WUAZ** | **Wupatki** | **113.25** | **51** | | IAMs_20 | IAMs_20 | 18 34 28.1 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **O20A** | **White River Ci** | **113.92** | **45** | | P | **PKiKP** | **17 44 41.8** | **-0.1** | | |
| | baz=293 | | | | | | | | | |
| **RWWY** | **Rawlins** | **114.01** | **43** | | IAMs_20 | IAMs_20 | 18 25 38.4 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **TUC** | **Tucson** | **114.72** | **54** | | IAMs_20 | IAMs_20 | 18 36 22.5 | | | |
| | comp=Z,4μm,18.0s | | | | | | | | | |
| **MVCO** | **Mesa Verde** | **114.84** | **48** | | IAMs_20 | IAMs_20 | 18 26 07.0 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **RSSD** | **Black Hills** | **115.02** | **39** | | IAMs_20 | IAMs_20 | 18 32 38.9 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **SMCO** | **Snowmass** | **115.19** | **45** | | IAMs_20 | IAMs_20 | 18 31 25.0 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **PHWY** | **Pilot Hill** | **115.36** | **43** | | IAMs_20 | IAMs_20 | 18 26 41.2 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **115.87** | **47** | | PKPdf | **PKiKP** | **17 44 43.3** | **-2.5** | | |
| S22A | | | | | | **PKKPbc** | **17 55 19.3** | **+1.1** | | |
| **ISCO** | **Idaho Springs** | **115.90** | **44** | | P | **PKiKP** | **17 44 44.7** | **-1.1** | | |
| | baz=295 | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **116.83** | **46** | | IAMs_20 | IAMs_20 | 18 38 02.4 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **116.83** | **46** | | P | **PKPdf** | **17 44 46.9** | **-0.7** | | |
| | baz=294 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **117.22** | **50** | | IAMs_20 | IAMs_20 | 18 25 32.0 | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **117.22** | **50** | | P | **PKiKP** | **17 44 48.6** | **+0.2** | | |
| | baz=292 | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **117.55** | **32** | | IAMs_20 | IAMs_20 | 18 33 44.1 | | | |
| | comp=Z,5μm,22.0s | | | | | | | | | |
| **OGNE** | **Ogalla** | **117.83** | **42** | | IAMs_20 | IAMs_20 | 18 32 04.4 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **EPT** | **El Paso** | **118.33** | **53** | | IAMs_20 | IAMs_20 | 18 30 14.8 | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **119.25** | **53** | | IAMs_20 | IAMs_20 | 18 30 55.2 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **119.25** | **53** | | P | **PKPdf** | **17 44 51.4** | **-0.8** | | |
| | baz=291 | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **119.80** | **37** | | PKPdf | **PKPdf** | **17 44 51.8** | **-1.1** | | |
| **ECSD** | **EROS Data Cent** | **119.80** | **37** | | IAMs_20 | IAMs_20 | 18 39 13.1 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **119.80** | **37** | | P | **PKPdf** | **17 44 52.3** | **-0.5** | | |
| | baz=305 | | | | | | | | | |
| **EYMN** | **Ely** | **120.04** | **30** | | IAMs_20 | IAMs_20 | 18 35 37.7 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **BGNE** | **Belgrade** | **120.13** | **40** | | P | **PKiKP** | **17 44 53.7** | **+0.1** | | |
| | baz=302 | | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **120.40** | **43** | | IAMs_20 | IAMs_20 | 18 32 18.7 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **AMTX** | **Amarillo** | **120.83** | **48** | | IAMs_20 | IAMs_20 | 18 29 13.5 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **121.14** | **319** | | PKP | **PKiKP** | **17 44 56.0** | **+0.2** | | |
| | comp=Z,0.3nm,0.4s,baz=29,slow=1.8,SNR=1.7 | | | | | | | | | |
| ESDC | | | | | PP | **PP** | **17 46 26.7** | **+1.5** | | |
| | comp=Z,1.4nm,0.8s,baz=45,slow=5.6,SNR=1.6 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **121.48** | **55** | | PKP | **PKiKP** | **17 44 56.8** | **+0.1** | | |
| | comp=Z,1.2nm,0.8s,baz=343,slow=2.6,SNR=8.5 | | | | | | | | | |
| TXAR | | | | | PKKPab | **PKKPab** | **17 55 00.1** | **+2.2** | | |
| | comp=Z,1.6nm,0.9s,baz=121,slow=6.3,SNR=6.2 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **121.48** | **55** | | | **PKPdf** | **17 44 53.5** | **-3.1** | | |
| TXAR | | | | | | **PKKPbc** | **17 54 55.9** | **-1.4** | | |
| **MVO**

comp=Z,4µm,22.0s
**LCR2 La Lucha 2 145.49 72** *eP* **PKPab 17 45 43.1 +1.1**
**OCM Ochomogo 145.49 71** *eP* **PKPab 17 45 42.8 +0.8**
**RIMA Rio Macho 145.61 71** *eP* **PKPbc 17 45 42.3 +0.1**
**CDM Cerro de Muert 145.76 72** *eP* **PKPab 17 45 43.7 +0.3**
**SRBA San Rafael, Bu 146.24 72** *eP* **PKPab 17 45 45.5 +0.7**
**GTBY Guantanamo Bay 148.62 48 PKPdf 17 45 44.2 -2.4**
GTBY IAMs_20 IAMs_20 18 59 16.4
comp=Z,2µm,21.0s
**GTBY Guantanamo Bay 148.62 48** *eP* **PKPab 17 45 53.0 -0.7**
**PLTB Pedras Altas 149.12 176** PKPab **PKPbc 17 45 51.4 +0.1**
**PLTB Pedras Altas 149.12 176** *eP* **PKPbc 17 45 49.8 -1.4**
**PB14 IPOC Station P 149.77 143** PKPab **PKiKP 17 45 54.2 -0.2**
**CPSB Cacapava Do Su 150.48 176** *eP* **PKPbc 17 45 52.0 -2.6**
**ITQB Itaqui 150.80 170** *eP* **PKPbc 17 45 52.6 -2.8**
**PB04 IPOC Station P 151.61 140 PKPbc 17 45 54.6 -3.1**
**SDDR Presa de Saban 151.98 44** IAMs_20 IAMs_20 19 01 18.0
comp=Z,3µm,20.0s
**SDDR Presa de Saban 151.98 44** *eP* **PKPbc 17 45 56.1 -2.3**
**NNA Nana 152.04 114** IAMs_20 IAMs_20 18 47 29.8
comp=Z,3µm,20.0s
**PTAC Punta Ardita, 152.08 73** *eP* **PKPdf 17 45 53.0 +0.8**
**LVC Limon Verde 152.19 142** IAMs_20 IAMs_20 18 44 57.8
comp=Z,3µm,22.0s
**LVC Limon Verde 152.19 142** *eP* **PKPdf 17 45 54.7 +2.2**
**TER01 Tubaro-SC 152.38 184** *eP* **PKPdf 17 45 55.6 +3.4**
**OTAV Otavalo 152.50 88** PKIKP **PKPdf 17 45 51.9 -1.5**
OTAV MLR MLR
comp=Z,3µm,20.0s
**OTAV Otavalo 152.50 88 PKPdf 17 45 51.9 -1.5**
**OTAV Otavalo 152.50 88** IAMs_20 IAMs_20 18 45 39.1
comp=Z,3µm,20.0s
**OTAV Otavalo 152.50 88** *eP* **PKPbc 17 45 58.6 -1.7**
**OTAV Otavalo 152.50 88** *eP* **PKPdf 17 45 54.6 +1.2**
**GCUF Volcan Galeras 153.55 86** *eP* **PKPbc 17 45 59.8 -2.9**
**DBBC Dabeiba 153.65 72** *eP* **PKPbc 17 46 02.4 0.0**
**SJCC San Jacinto, C 153.66 66** *eP* **PKPdf 17 45 57.8 +3.2**
**ITAB Concordia 153.71 178** PKPdf **PKPdf 17 45 51.1 -3.1**
**ITAB Concordia 153.71 178** *eP* **PKPdf 17 45 57.3 +3.1**
**CPUP Villa Florida 153.91 167** PKPbc **PKPbc 17 46 01.8 -0.7**
comp=Z,10nm,1.0s,baz=356,slow=1.2,SNR=11
**CPUP Villa Florida 153.91 167** PKIKP **PKPdf 17 45 53.1 -1.4**
CPUP 17 46 01.8
**CPUP Villa Florida 153.91 167** PKPdf **PKPdf 17 45 53.1 -1.4**
CPUP PKPbc **PKPbc 17 46 01.8 -0.7**
**CPUP Villa Florida 153.91 167** *eP* **PKPdf 17 45 58.2 +3.8**
**POPC Popayan, Colom 154.09 83** *eP* **PKPdf 17 45 53.0 -2.4**
**CBOC Ciudad Bolivar 154.13 75** *eP* **PKPab 17 46 11.2 -6.0**
**YOTC Yotoco, Valle 154.20 79** *eP* **PKPbc 17 45 59.8 -3.8**
**SOTA Rioblanco 154.20 83** *eP* **PKPdf 17 45 59.8 +3.9**
**PCON Cinco Dias 154.39 83** *eP* **PKiKP 17 46 08.8 +4.2**
**ZARC Zaragoza, Cauc 154.79 70** *eP* **PKPdf 17 45 57.4 +1.3**
**GUY2C Guyana, Caldas 154.91 76** *eP* **PKPbc 17 46 03.2 -2.4**
**ANIL Santa Ana 155.03 78** *eP* **PKPab 17 46 18.8 -2.3**
**FLOC Florencia 155.21 84** *eP* PKPdf 17 46 06.5 +10
**CRJC Cerrejon, Guaj 155.25 61** *eP* PKPab 17 46 11.2 -11
**ORTC Ortega, Tolima 155.29 79** *eP* **PKPdf 17 45 57.5 +0.7**
**PTBC PUERTO BERRIO 155.45 72** *eP* PKPdf 17 46 08.8 +12
**TIJ01 Guaruva-PR 155.56 184** *eP* **PKPdf 17 45 58.5 +1.6**
**ROSC El Rosal 156.01 76** PKPbc **PKPdf 17 46 05.3 +7.1**
comp=Z,6.2nm,0.4s,baz=285,slow=5.3,SNR=4.4
**ROSC El Rosal 156.01 76** *eP* **PKPab 17 46 32.6 +7.2**
**PTLC Puerto Leguiza 156.16 88** *eP* PKPab 17 46 13.4 -12
**PTGB Pitanga 156.22 178** *eP* **PKPdf 17 45 59.8 +1.9**
**PET01 Itanhaem-SP 156.39 188** *eP* **PKPdf 17 46 00.8 +2.9**
**CHIC Chingaza 156.63 76** *eP* **PKPdf 17 46 03.2 +4.1**
**BARC Barichara 156.65 71** *eP* **PKPab 17 46 34.7 +6.7**
**RUSC La Rusia 156.94 73** *eP* **PKPdf 17 46 06.8 +7.2**
**MACC Macarena, Meta 156.94 83** *eP* **PKPdf 17 45 59.8 +0.8**
**PARB Paraibuna 157.02 193** *eP* **PKPdf 17 46 02.5 +3.7**
**MAN01 Angra dos Reis 157.05 197** *eP* **PKPdf 17 46 02.2 +3.3**
**LPAZ La Paz 157.14 133** PKP **PKPdf 17 46 01.4 +1.5**
comp=Z,0.9nm,0.4s,baz=180,slow=1.0,SNR=1.4
**LPAZ La Paz 157.14 133** *eP* **PKPdf 17 46 06.5 +6.7**
**LPAZ La Paz 157.14 133** *eP* **PKPdf 17 46 01.8 +1.9**
**CAM01 Campos-RJ 157.23 203** *eP* **PKPdf 17 46 01.9 +2.9**
**DUB01 Friburgo-RJ 157.26 201** *eP* **PKPdf 17 46 01.8 +2.6**
**VAS01 Vassouras-RJ 157.44 198** *eP* **PKPdf 17 46 02.7 +3.3**
**FRTB Fartura 157.56 183** *eP* **PKPdf 17 46 01.7 +2.2**
**VAO Valinhos 157.60 190** *eP* **PKPdf 17 46 02.1 +2.5**
**ALF01 Guarapari-ES 157.92 206** *eP* **PKPdf 17 46 03.2 +3.3**
**HATO Hato, Curacao 157.96 54** IAMs_20 IAMs_20 19 04 57.8
comp=Z,2µm,21.0s
**SDV Santo Domingo 158.17 63** IAMs_20 IAMs_20 19 06 11.5
comp=Z,2µm,20.0s
**SDV Santo Domingo 158.17 63** *eP* **PKPdf 17 45 59.4 -1.3**
**SDV Santo Domingo 158.17 63** *eP* **PKPdf 17 46 01.8 +1.1**
**RCLB Rio Claro- Sao 158.27 189** *eP* **PKPdf 17 46 02.8 +2.3**
**ANWB Willy Bob 158.77 30** IAMs_20 IAMs_20 18 57 34.1
comp=Z,3µm,20.0s
**RIB01 Linhares ES 158.89 209** *eP* **PKPdf 17 46 02.5 +1.3**
**BSCB Bom Sucesso 159.05 196** *eP* **PKPdf 17 46 03.7 +2.2**
**PCMB Pacaembu 159.33 179** *eP* **PKPdf 17 46 03.8 +2.2**
**SJMB Sao Joao De Ma 159.79 208** *eP* **PKPdf 17 46 04.3 +2.0**
**AQDB Aquidauana 159.92 167** *eP* **PKPdf 17 46 04.4 +2.1**
**TBTG Tabatinga, AM 160.79 100** *eP* **PKPdf 17 46 05.5 +2.0**
**GUA01 Guaratinga, BA 160.85 214** *eP* **PKPdf 17 46 05.5 +2.1**
**DIAM Diamantina, MG 161.21 202** *eP* **PKPdf 17 46 06.0 +2.0**
**ITRB Iturama 161.22 182** *eP* **PKPdf 17 46 06.4 +2.6**
**CMC01 Camacan, BA 161.65 217** *eP* **PKPdf 17 46 05.4 +1.1**
**NBIT Itapeh - BA 161.93 219** *eP* **PKPdf 17 46 06.9 +2.3**
**NBRF Rio Formoso - 162.39 243** *eP* **PKPdf 17 46 07.3 +2.2**
**ETMB Extrema 162.40 121** *eP* **PKPdf 17 46 07.3 +2.2**
**IPMB Ipameri, GO 162.72 189** *eP* **PKPdf 17 46 07.3 +1.9**
**PP1B Ponte de Pedra 162.88 167** *eP* **PKPdf 17 46 07.7 +2.1**
**NBAN Anadia - AL 162.94 238** *eP* **PKPdf 17 46 08.0 +2.3**
**PTLB Pontes e Lacer 163.38 151** *eP* **PKPdf 17 46 08.1 +2.1**
**NBLA Lagarto - SE 163.45 232** *eP* **PKPdf 17 46 07.5 +1.3**
**RCBR Riachuelo 164.16 251** *eP* **PKPdf 17 46 09.0 +2.1**
**SALV Santo Antonio 164.30 163** *eP* **PKPdf 17 46 08.3 +1.4**
**JANB Januaria 164.39 205** *eP* **PKPdf 17 46 09.2 +2.1**
**VILB Vilhena 164.87 143** *eP* **PKPdf 17 46 09.0 +1.6**
**BDFB Brasilia 164.98 191** PKP **PKPdf 17 46 08.7 +1.1**
comp=Z,1.1nm,0.3s,baz=141,slow=6.5,SNR=1.7
BDFB PKPab **PKPab 17 47 04.3 +0.6**
comp=Z,7.7nm,1.0s,baz=160,slow=12,SNR=1.7
BDFB PP **PP 17 50 51.8 +3.3**
comp=Z,6.3nm,1.0s,baz=175,slow=7.4,SNR=4.0
**ARAG Araguaiana, MT 165.18 177** *eP* **PKPdf 17 46 10.1 +2.5**
**NBPB Pedra_Branca-C 167.70 247** *eP* **PKPdf 17 46 11.7 +2.0**

*NEIC **17** 17:29:19.4±1.7,38.04S±0.06×74.78W±0.1,h10km±2km*
*Error ellipse: s-maj=18.3km s-min=10.1km az=270.0*
*GUC **17** 17:29:21.2±0.3,38.09S×74.76W,h13km±12km,ML3.8*
**ISC 17 17:29:17.0±3.3,38.04S±0.04×75.0W±0.1,h4km±18km,n37,**
**σ1§00/46, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LC02** | **Puerto Saavedr** | **1.46** | **121** | | **Pn** | **17 29 43.6** | **-0.5** |
| LC02 | | | | IAML | | 17 30 14.3 | |
| | comp=N,2µm,0.3s | | | | | | |
| LC02 | | | | IAML | | 17 30 15.2 | |
| | comp=E,3µm,0.3s | | | | | | |
| **LC02** | **Puerto Saavedr** | **1.46** | **121** | *eP* | **Pb** | **17 29 44.8** | **+0.2** |
| LC02 | | | | *i* S | **Sg** | **17 30 03.4** | **-0.4** |
| **BI05** | **Punta Hualpn** | **1.92** | **48** | | **Pn** | **17 29 50.5** | **+0.1** |
| BI05 | | | | IAML | | 17 30 17.5 | |
| | comp=E,1µm,0.2s | | | | | | |
| BI05 | | | | IAML | | 17 30 17.7 | |
| | comp=N,1µm,0.2s | | | | | | |
| **BI05** | **Punta Hualpn** | **1.92** | **48** | *eP* | **Pn** | **17 29 51.6** | **+1.2** |
| BI05 | | | | *eS* | **Sn** | **17 30 14.7** | **-0.3** |
| BI05 | | | | IAML | | 17 30 17.9 | |
| | comp=E,2µm,0.1s | | | | | | |
| **LR04** | **Corral** | **2.20** | **147** | | **Pn** | **17 29 55.0** | **+0.7** |
| LR04 | | | | IAML | | 17 30 22.3 | |
| | comp=N,883nm,0.3s | | | | | | |
| **LR04** | **Corral** | **2.20** | **147** | *eP* | **Pn** | **17 29 55.6** | **+1.4** |
| LR04 | | | | *eS* | **Sn** | **17 30 21.3** | **-0.6** |
| LR04 | | | | IAML | | 17 30 22.4 | |
| | comp=N,872nm,0.2s | | | | | | |
| **LC01** | **Cunco** | **2.58** | **110** | Pn | **Pn** | **17 30 00.7** | **+1.2** |
| **LC01** | **Cunco** | **2.58** | **110** | *eP* | **Pb** | **17 30 02.9** | **-0.9** |
| LC01 | | | | *eS* | **Sn** | **17 30 30.7** | **-0.6** |
| **LR03** | **Panguipulli** | **2.59** | **129** | Pn | **Pn** | **17 29 59.6** | **-0.2** |
| LR03 | | | | IAML | | 17 30 36.1 | |
| | comp=N,622nm,0.6s | | | | | | |
| LR03 | | | | IAML | | 17 30 37.0 | |
| | comp=E,506nm,0.6s | | | | | | |
| **LR03** | **Panguipulli** | **2.59** | **129** | *eP* | **Pn** | **17 30 01.0** | **+1.3** |
| LR03 | | | | *eS* | **Sn** | **17 30 31.4** | **-0.3** |
| LR03 | | | | IAML | | 17 30 44.4 | |
| | comp=N,540nm,0.4s | | | | | | |
| **LL04** | **Puerto Octay** | **3.48** | **146** | Pn | **Pn** | **17 30 13.2** | **+1.2** |
| **LL04** | **Puerto Octay** | **3.48** | **146** | *eP* | **Pn** | **17 30 13.8** | **+1.9** |
| LL04 | | | | *eS* | **Sn** | **17 30 52.6** | **-1.0** |
| LL04 | | | | IAML | | 17 30 54.8 | |
| | comp=N,174nm,0.2s | | | | | | |
| **LL05** | **Los Muermos** | **3.55** | **162** | Pn | **Pn** | **17 30 13.8** | **+0.9** |
| LL05 | | | | IAML | | 17 30 54.5 | |
| | comp=E,180nm,4.5s | | | | | | |
| **ML02** | **Panimavida** | **3.65** | **52** | | **Pn** | **17 30 13.1** | **-1.1** |
| ML02 | | | | IAML | | 17 31 03.5 | |
| | comp=E,298nm,0.4s | | | | | | |
| ML02 | | | | IAML | | 17 31 05.5 | |
| | comp=N,339nm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **3.65** | **52** | *eP* | **Pn** | **17 30 16.1** | **+1.9** |
| **GO05** | **Huala** | **3.89** | **40** | | **Pn** | **17 30 17.3** | **-0.3** |
| GO05 | | | | IAML | | 17 31 06.4 | |
| | comp=N,163nm,0.4s | | | | | | |
| **GO05** | **Huala** | **3.89** | **40** | *eP* | **Pn** | **17 30 18.4** | **+0.7** |
| GO05 | | | | *eS* | **Sn** | **17 31 02.3** | **-1.5** |
| **BO03** | **Pichilemu** | **4.29** | **35** | *eP* | **Pn** | **17 30 23.2** | **+0.1** |
| **PLCA** | **Paso Flores** | **4.35** | **129** | | **Pn** | **17 30 25.4** | **+1.4** |
| **BO02** | **Sierra Bellavi** | **4.68** | **47** | | **Pn** | **17 30 29.7** | **+1.2** |
| **BO02** | **Sierra Bellavi** | **4.68** | **47** | *eP* | **Pn** | **17 30 29.8** | **+1.2** |
| BO02 | | | | *eS* | **Sn** | **17 31 23.9** | **+0.6** |
| **BO01** | **Tunca** | **4.81** | **42** | | **Pn** | **17 30 31.3** | **+1.1** |
| BO01 | | | | IAML | | 17 31 31.4 | |
| | comp=N,72nm,0.6s | | | | | | |
| **BO01** | **Tunca** | **4.81** | **42** | *eP* | **Pn** | **17 30 31.4** | **+1.2** |
| BO01 | | | | *eS* | **Sn** | **17 31 26.3** | **-0.1** |
| **MT01** | **Popeta** | **5.15** | **37** | | **Pn** | **17 30 35.3** | **+0.4** |
| MT01 | | | | IAML | | 17 31 38.1 | |
| | comp=N,93nm,0.3s | | | | | | |
| MT01 | | | | IAML | | 17 31 39.3 | |
| | comp=E,98nm,0.4s | | | | | | |
| **VA05** | **Santo Domingo** | **5.16** | **33** | | **Pn** | **17 30 34.5** | **-0.4** |
| VA05 | | | | IAML | | 17 31 39.0 | |
| | comp=N,131nm,0.3s | | | | | | |
| **GO07** | **Milladeo Hill,** | **5.16** | **169** | | **Pn** | **17 30 36.5** | **+1.4** |
| **MT09** | **Talagante** | **5.34** | **38** | | **Pn** | **17 30 38.6** | **+0.9** |
| **BO04** | **La Punta** | **5.37** | **42** | | **Pn** | **17 30 38.7** | **+0.7** |
| BO04 | | | | IAML | | 17 31 43.3 | |
| | comp=E,88nm,0.5s | | | | | | |
| **LL02** | **Futaleuf** | **5.67** | **156** | Pn | **Pn** | **17 30 43.0** | **+1.1** |
| **VA01** | **Torpederas** | **5.69** | **29** | Pn | **Pn** | **17 30 41.4** | **-0.9** |
| **LMEL** | **Las Melosas** | **5.70** | **44** | | **Pn** | **17 30 42.8** | **+0.2** |
| **MT02** | **Curacav** | **5.70** | **34** | | **Pn** | **17 30 42.2** | **-0.3** |
| **MT05** | **Renca** | **5.78** | **38** | Pn | **Pn** | **17 30 44.2** | **+0.7** |
| **ROC1** | **El Roble** | **6.00** | **34** | Pn | **Pn** | **17 30 45.8** | **-1.0** |
| **PEL** | **Peldehue** | **6.01** | **37** | | **Pn** | **17 30 47.0** | **+0.3** |
| **VA03** | **San Esteban** | **6.38** | **36** | Pn | **Pn** | **17 30 52.6** | **+0.7** |
| **CO03** | **El Pedregal** | **8.01** | **27** | Pn | **Pn** | **17 31 15.9** | **+1.7** |

**IDC 17 17:29:35.3±1.8,0.65N×128.90E,h0km,mb4.2/3,**
**mb1 4.5/4,mb1mx3.5/46,mbtmp4.3/4,ML4.0/1,MS5.2/3,**
**Ms1 5.3/3,ms1mx4.8/68,Error ellipse: s-maj=65.3km**
**s-min=27.6km az=56.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **2.80** | **122** | Pn | **Pn** | 17 30 20.1 | -1.3 |
| | 26nm,0.3s,baz=324,slow=19,SNR=8.7 | | | | | | |
| SIJI | | | | Sn | Sn | 17 30 51.6 | -4.4 |
| | 11nm,0.3s,baz=41,slow=19,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.14** | **166** | P | P | 17 34 22.0 | -0.1 |
| | 4.7nm,0.4s,baz=343,slow=11,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **24.65** | **169** | P | P | 17 34 58.8 | +0.8 |
| | 10nm,0.8s,baz=343,slow=11,SNR=2.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **34.33** | **303** | LR | LR | 17 50 32.7 | |
| | comp=Z,5µm,21.0s,baz=105,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.31** | **325** | P | P | 17 39 52.8 | 0.0 |
| | 1.6nm,0.9s,baz=119,slow=8.1,SNR=1.0 | | | | | | |
| **EIL** | **Elat** | **93.12** | **300** | LR | LR | 18 28 15.9 | |
| | comp=Z,901nm,21.0s,baz=82,slow=38 | | | | | | |
| **MATP** | **Matopo** | **99.97** | **249** | LR | LR | 18 27 01.7 | |
| | comp=Z,1µm,19.1s,baz=91,slow=34 | | | | | | |

*DJA **17** 17:34:07.4±1.0,5.5N×9.5E×,h13km±5km,M4.7/9,*
*mb4.6/7,mB5.7/2,MLv4.7/9,Mw(mB)5.2/2,MwMwp5.8/1,*
*Mwp5.8/1*
*BJI **17** 17:34:08.0±0.0,5.40N×94.50E,h38km,mb4.9/38,*
*mB5.4/12,Ms5.3/5,Ms7 5.2/5*
*IDC **17** 17:34:08.4±0.7,5.40N×94.49E,h52km±4km,mb4.4/27,*
*mb1 4.4/29,mb1mx4.2/50,mbtmp4.6/29,Error ellipse:*
*s-maj=19.7km s-min=11.2km az=46.0*
*NEIC **17** 17:34:09.2±1.2,5.40N±0.08×94.51E±0.06,h55km±6km,*
*mb4.8/43,Error ellipse: s-maj=12.0km s-min=8.7km*
*az=189.0*
**ISC 17 17:34:07.5±0.4,5.39N±0.06×94.50E±0.06,h46km,n158,**
**σ1§10/161,mb4.8/71,17C-3D,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSI** | **Banda Aceh** | **0.80** | **82** | P | **Pn** | **17 34 23.6** | **+1.1** |
| **LHMI** | **Lhok Sumawe** | **2.44** | **94** | | **Pn** | **17 34 46.6** | **+1.7** |
| **LHMI** | **Lhok Sumawe** | **2.44** | **94** | P | **Pn** | **17 34 46.8** | **+1.9** |
| **KCSI** | **Kotacane, Aceh** | **3.75** | **119** | P | **Pn** | **17 35 05.5** | **+2.6** |
| **TSI** | **Tuntungan** | **4.46** | **115** | P | **Pn** | **17 35 14.9** | **+2.2** |
| **GSI** | **Gunungsitoli** | **5.09** | **143** | | **Pn** | **17 35 20.8** | **-0.5** |
| **GSI** | **Gunungsitoli** | **5.09** | **143** | P | **Pn** | **17 35 21.1** | **-0.2** |
| **GSI** | **Gunungsitoli** | **5.09** | **143** | ⇑P | **Pn** | **17 35 21.1** | **-0.2** |
| **PSI** | **Prapat** | **5.11** | **120** | P | **Pn** | **17 35 24.7** | **+3.1** |
| | 15nm,0.3s,baz=301,slow=16,SNR=1.8 | | | | | | |
| PSI | | | | S | **Sn** | **17 36 18.0** | **-1.4** |
| | 3.3nm,0.3s,baz=292,slow=22,SNR=1.1 | | | | | | |
| **RPSI** | **Rantau Prapat** | **5.16** | **121** | | **Pn** | **17 35 24.7** | **+2.5** |
| **SRIT** | **Nakonsritamara** | **5.98** | **58** | | **Pn** | **17 35 35.6** | **+2.0** |
| **KULM** | **Kulim** | **6.12** | **91** | Pn | **Pn** | **17 35 36.7** | **+1.2** |
| KULM | | | | | **Sn** | **17 36 45.5** | **+1.1** |
| **IPM** | **Ipoh** | **6.56** | **98** | Pn | **Pn** | **17 35 42.2** | **+0.7** |
| **MNSI** | **Mandailing Nat** | **6.82** | **132** | P | **Pn** | **17 35 44.8** | **-0.3** |
| | 0.7nm3µm68nm,0.7s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **13.70** | **18** | P | **P** | **17 37 24.1** | **-2.7** |
| **CMAR** | **Chiang Mai Arr** | **13.70** | **18** | P | **P** | **17 37 23.3** | **-3.5** |
| | 3.9nm,0.3s,baz=209,slow=14,SNR=69 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.70** | **18** | P | **P** | **17 37 24.0** | **-2.8** |
| **PALK** | **Pallekele** | **13.84** | **279** | P | **Pn** | **17 37 23.4** | **+2.1** |
| | 1.2nm,0.3s,baz=186,slow=10,SNR=7.1 | | | | | | |
| PALK | | | | S | Sn | 17 39 40.6 | -13 |
| | 2.7nm,0.3s,baz=122,slow=19,SNR=8.9 | | | | | | |
| **PALK** | **Pallekele** | **13.84** | **279** | | **Pn** | **17 37 22.4** | **+1.1** |
| **CHTO** | **Chiang Mai** | **14.03** | **18** | P | **P** | **17 37 28.1** | **-2.5** |
| **IMP** | **Imphal** | **19.34** | **358** | ⇓*eP* | **P** | **17 38 28.6** | **-0.7** |
| IMP | | | | IAmb | IAmb | 17 38 29.4 | |
| | comp=Z,13nm,0.4s | | | | | | |
| **KOHI** | **KOHIMA** | **20.22** | **359** | *eP* | **P** | **17 38 36.9** | **-2.1** |
| KOHI | | | | IAmb | IAmb | 17 38 41.6 | |
| | comp=Z,44nm,0.4s | | | | | | |
| **MOKO** | **MOKOCHONG** | **20.82** | **0** | *eP* | **P** | **17 38 43.6** | **-1.8** |
| MOKO | | | | IAmb | IAmb | 17 38 46.9 | |
| | comp=Z,68nm,0.5s | | | | | | |
| **DHUB** | **DHUBRI** | **20.96** | **349** | *eP* | **P** | **17 38 44.6** | **-2.2** |
| DHUB | | | | IAmb | IAmb | 17 38 50.3 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **KMI** | **Kunming** | **21.16** | **21** | ⇓P | **P** | **17 38 51.8** | **+2.6** |
| KMI | | | | pP | pwP | 17 39 02.4 | +0.7 |
| KMI | | | | sP | sP | 17 39 05.9 | +0.6 |
| KMI | | | | LR | LR | | |
| | comp=Z,5µm,13.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,5µm,16.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,9µm,15.4s | | | | | | |
| **PZH** | **PanZhiHua** | **22.11** | **17** | P | **P** | **17 39 01.4** | **+2.2** |
| **ODAN** | **Odare** | **22.41** | **343** | *eP* | **P** | **17 39 01.6** | **-1.0** |
| | comp=Z,55nm,0.6s | | | | | | |
| **GTK** | **Tadong** | **22.52** | **346** | *eP* | **P** | **17 39 05.1** | **+1.3** |
| GTK | | | | IAmb | IAmb | 17 39 05.5 | |
| | comp=Z,14nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **22.73** | **341** | *eP* | **P** | **17 39 05.0** | **-1.0** |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **22.78** | **344** | *eP* | **P** | **17 39 05.7** | **-0.9** |
| | comp=Z,50nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **23.52** | **341** | *eP* | **P** | **17 39 12.8** | **-1.2** |
| | comp=Z,102nm,0.6s | | | | | | |
| **PKI** | **Pulchoki** | **23.70** | **340** | *eP* | **P** | **17 39 14.6** | **-1.1** |
| | comp=Z,19nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **23.71** | **340** | *eP* | **P** | **17 39 14.6** | **-1.1** |
| | comp=Z,36nm,0.5s | | | | | | |
| **DMN** | **Daman** | **23.84** | **339** | *eP* | **P** | **17 39 15.8** | **-1.1** |
| | comp=Z,36nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **23.85** | **341** | *eP* | **P** | **17 39 16.3** | **-0.8** |
| | comp=Z,103nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **23.94** | **340** | *eP* | **P** | **17 39 16.9** | **-0.9** |
| | comp=Z,32nm,0.5s | | | | | | |
| **GYA** | **Guiyang** | **23.96** | **28** | ⇑P | **P** | **17 39 18.8** | **+0.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **24.37** | **338** | *eP* | **P** | **17 39 21.6** | **0.0** |
| | comp=Z,36nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **24.56** | **336** | *eP* | **P** | **17 39 24.1** | **+0.7** |
| | comp=Z,88nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **25.01** | **337** | *eP* | **P** | **17 39 28.2** | **+0.6** |
| | comp=Z,106nm,0.6s | | | | | | |
| **PYUN** | **Piuthan** | **25.10** | **335** | *eP* | **P** | **17 39 29.2** | **+0.9** |
| | comp=Z,48nm,0.3s | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.49** | **240** | T | T | 18 05 31.6 | |
| | baz=60,slow=76,SNR=204 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.49** | **240** | T | T | 18 05 30.2 | |
| | baz=60,slow=76,SNR=207 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.50** | **240** | T | T | 18 05 25.0 | |
| | baz=60,slow=76,SNR=148 | | | | | | |
| **CD2** | **Chengdu** | **26.84** | **18** | P | **P** | **17 39 43.5** | **-0.4** |
| **ENH** | **Enshi** | **28.50** | **28** | | **P** | **17 39 58.0** | **-0.7** |
| ENH | | | | IAmb | IAmb | 17 40 06.4 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **XAN** | **Xi'an** | **31.50** | **23** | P | **P** | **17 40 24.3** | **-0.9** |
| XAN | | | | pP | pP | 17 40 36.8 | -0.1 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,37nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **34.21** | **7** | ⇑P | **P** | **17 40 48.9** | **0.0** |
| GTA | | | | pP | pP | 17 40 58.3 | -2.3 |
| GTA | | | | sP | pwP | 17 41 02.3 | -0.7 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **34.97** | **38** | *eP* | **P** | **17 40 57.5** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **36.82** | **27** | ⇑P | **P** | **17 41 12.3** | **+1.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| **KSH** | **Kashi** | **37.88** | **336** | P | **P** | **17 41 20.1** | **-0.2** |
| KSH | | | | pP | pP | 17 41 32.8 | +0.9 |
| KSH | | | | sP | sP | 17 41 39.5 | +2.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **38.48** | **21** | *eP* | **P** | **17 41 28.3** | **+3.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.58** | **128** | P | **P** | **17 41 25.6** | **-0.7** |
| | comp=Z,4.6nm,0.7s,baz=330,slow=3.8,SNR=6.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.58** | **128** | IAmb | IAmb | 17 41 27.6 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **JOW** | **Kunigami** | **38.61** | **53** | P | **P** | **17 41 27.9** | **+1.3** |
| | comp=Z,7.8nm,0.4s,baz=248,slow=5.4,SNR=5.7 | | | | | | |
| **WMQ** | **Urumqi** | **38.74** | **352** | *eP* | **P** | **17 41 28.3** | **+0.8** |
| WMQ | | | | pP | pwP | 17 41 42.4 | +0.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **40.66** | **117** | P | **P** | **17 41 42.0** | **-1.6** |
| MTN | | | | IAmb | IAmb | 17 41 58.1 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **41.12** | **337** | P | **P** | **17 41 47.9** | **+0.6** |
| | comp=Z,2.2nm,0.3s,baz=175,slow=8.9,SNR=6.1 | | | | | | |
| **MK31** | **Makanchi Array** | **42.58** | **348** | P | **P** | **17 41 59.0** | **0.0** |
| MK31 | | | | IAmb | IAmb | 17 42 00.4 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.58** | **348** | P | **P** | **17 41 59.5** | **+0.5** |
| | comp=Z,24nm,0.6s,baz=179,slow=8.1,SNR=89 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.58** | **348** | P | **P** | **17 41 59.1** | **+0.2** |
| **MAKZ** | **Makanchi** | **42.66** | **347** | P | **P** | **17 41 59.8** | **+0.2** |
| **KKAR** | **Karatay Array** | **43.14** | **334** | P | **P** | **17 42 03.8** | **+0.2** |
| **SONM** | **Songino Array** | **43.51** | **12** | P | **P** | **17 42 06.4** | **-0.2** |
| | comp=Z,6.8nm,0.6s,baz=191,slow=8.5,SNR=49 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 43 54.5** | **+0.6** |
| | comp=Z,1.6nm,0.4s,baz=196,slow=4.2,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **43.51** | **12** | P | **P** | **17 42 06.1** | **-0.5** |
| **ULN** | **Ulaanbaatar** | **43.67** | **12** | P | **P** | **17 42 07.5** | **-0.5** |
| **KSRS** | **Korea Array** | **44.13** | **39** | P | **P** | **17 42 11.3** | **-0.2** |
| | comp=Z,1.4nm,0.4s,baz=224,slow=8.8,SNR=9.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **46.52** | **124** | P | **P** | **17 42 30.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 17 42 34.5 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.56** | **124** | P | **P** | **17 42 31.3** | **+0.1** |
| | comp=Z,4.8nm,0.6s,baz=304,slow=9.1,SNR=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.56** | **124** | P | **P** | **17 42 30.9** | **-0.3** |
| **WRAB** | **Tennant Creek** | **46.56** | **124** | P | **P** | **17 42 30.6** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 17 42 32.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.57** | **124** | P | **P** | **17 42 31.2** | **0.0** |
| WB2 | | | | IAmb | IAmb | 17 42 32.3 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.73** | **124** | P | **P** | **17 42 32.4** | **-0.2** |
| WR0 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BR131 | | | | | IAmb | IAmb | 17 44 39.4 | | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | | |
| **MA2** | **Magadan** | **68.80** | **27** | P | **P** | | **17 45 06.3** | **-0.5** | | |
| **TIXI** | **Tiksi** | **69.59** | **11** | P | **P** | | **17 45 10.5** | **-1.0** | | |
| | comp=Z,4.4nm,0.3s,baz=195,slow=5.8,SNR=25 | | | | | | | | | |
| **TIXI** | **Tiksi** | **69.59** | **11** | P | **P** | | **17 45 10.3** | **-1.1** | | |
| TIXI | | | | | IAmb | IAmb | 17 45 11.3 | | | |
| | comp=Z,8.3nm,0.6s | | | | | | | | | |
| **SORM** | **Soroca** | **70.19** | **319** | ⇑P | **P** | | **17 45 15.0** | **-0.6** | | |
| **IDI** | **Anoyia** | **70.28** | **305** | ⇑P | **P** | | **17 45 17.0** | **+0.5** | | |
| **IDI** | **Anoyia** | **70.28** | **305** | P | **P** | | **17 45 17.1** | **+0.5** | | |
| IDI | | | | | IAmb | IAmb | 17 45 18.7 | | | |
| | comp=Z,8.7nm,0.7s | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.32** | **322** | P | **P** | | **17 45 15.3** | **-1.0** | | |
| | comp=Z,1.5nm,0.5s,baz=89,slow=5.3,SNR=19 | | | | | | | | | |
| AKASG | | | | | pP | | **17 45 30.3** | **+1.5** | | |
| | comp=Z,1.9nm,0.5s,baz=87,slow=5.3,SNR=4.6 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.32** | **322** | P | **P** | | **17 45 15.7** | **-0.6** | | |
| **AKBB** | **Malin Array Si** | **70.32** | **322** | P | **P** | | **17 45 15.5** | **-0.8** | | |
| AKBB | | | | | IAmb | IAmb | 17 45 35.0 | | | |
| | comp=Z,17nm,1.4s | | | | | | | | | |
| **VRI** | **Vrincioaia** | **70.74** | **317** | ⇑P | **P** | | **17 45 20.0** | **+1.0** | | |
| **PLOR** | **Plostina** | **70.79** | **317** | ⇑P | **P** | | **17 45 19.6** | **+0.2** | | |
| **TESR** | **Tescani** | **70.93** | **317** | ⇑P | **P** | | **17 45 20.5** | **+0.3** | | |
| **MLR** | **Muntele Rosu** | **71.20** | **316** | ⇑P | **P** | | **17 45 22.8** | **+0.8** | | |
| **MLR** | **Muntele Rosu** | **71.20** | **316** | P | **P** | | **17 45 22.1** | **+0.1** | | |
| MLR | | | | | IAmb | IAmb | 17 45 23.7 | | | |
| | comp=Z,8.9nm,0.8s | | | | | | | | | |
| **HUMR** | **Humele** | **71.68** | **315** | ⇑P | **P** | | **17 45 24.7** | **-0.1** | | |
| **VOIR** | | **71.80** | **316** | ⇑P | **P** | | **17 45 25.3** | **-0.3** | | |
| **ARR** | **Arges** | **72.08** | **316** | ⇑P | **P** | | **17 45 27.0** | **-0.2** | | |
| **BURAR** | **Bucovina Array** | **72.12** | **318** | ⇑P | **P** | | **17 45 27.9** | **+0.4** | | |
| **BURAR** | **Bucovina Array** | **72.12** | **318** | P | **P** | | **17 45 28.2** | **+0.8** | | |
| **BUR08** | **Bucovina Ar. S** | **72.14** | **318** | P | **P** | | **17 45 28.1** | **+0.6** | | |
| **VTS** | **Vitosha** | **72.60** | **313** | ⇑P | **P** | | **17 45 30.3** | **-0.2** | | |
| **LIT** | **Litokhoron** | **72.80** | **310** | P | **P** | | **17 45 31.0** | **-0.6** | | |
| LIT | | | | | IAmb | IAmb | 17 45 31.7 | | | |
| | comp=Z,8.9nm,0.7s | | | | | | | | | |
| **ITM** | **Ithomi** | **72.89** | **307** | P | **P** | | **17 45 32.0** | **-0.1** | | |
| **DRGR** | | **73.65** | **317** | ⇑P | **P** | | **17 45 37.1** | **+0.7** | | |
| **TRPA** | **Tarpa** | **73.99** | **318** | ⇑P | **P** | | **17 45 39.1** | **+0.8** | | |
| **LVZ** | **Lovozero** | **74.00** | **340** | P | **P** | | **17 45 37.9** | **-0.2** | | |
| LVZ | | | | | IAmb | IAmb | 17 45 51.1 | | | |
| | comp=Z,32nm,1.3s | | | | | | | | | |
| **SUW** | **Suwalki** | **74.72** | **325** | P | **P** | | **17 45 41.4** | **-1.0** | | |
| **CRVS** | **Cervenica-Dubn** | **74.83** | **319** | *eP* | **P** | | **17 45 45.2** | **+2.0** | | |
| **FINES** | **FINESS Array B** | **75.06** | **332** | P | **P** | | **17 45 44.1** | **-0.2** | | |
| | comp=Z,3.3nm,0.5s,baz=107,slow=6.2,SNR=14 | | | | | | | | | |
| FINES | | | | | pP | | **pwP** | **17 45 59.0** | **-0.9** | |
| | comp=Z,1.5nm,0.4s,baz=95,slow=5.7,SNR=2.0 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **75.06** | **332** | P | **P** | | **17 45 43.5** | **-0.8** | | |
| **OJC** | **Ojcow** | **76.10** | **320** | P | **P** | | **17 45 50.4** | **0.0** | | |
| OJC | | | | | IAmb | IAmb | 17 45 52.2 | | | |
| | comp=Z,15nm,1.0s | | | | | | | | | |
| **VYHS** | **Vyhne** | **76.49** | **318** | *eP* | **P** | | **17 45 53.2** | **+0.5** | | |
| **ZST** | **Bratislava** | **77.61** | **318** | *eP* | **P** | | **17 46 00.1** | **+1.1** | | |
| **ARCES** | **ARCESS Array B** | **77.71** | **340** | P | **P** | | **17 45 59.4** | **+0.2** | | |
| | comp=Z,7.5nm,0.9s,baz=102,slow=6.8,SNR=28 | | | | | | | | | |
| ARCES | | | | | pP | | **pwP** | **17 46 14.2** | **-0.7** | |
| | comp=Z,2.4nm,0.5s,baz=89,slow=6.5,SNR=2.7 | | | | | | | | | |
| **OBKA** | **Obir** | **79.20** | **316** | *eP* | **P** | | **17 46 09.0** | **+1.0** | | |
| | comp=Z,3.6nm,0.7s | | | | | | | | | |
| **GEC2** | **GERESS Array S** | **79.91** | **319** | P | **P** | | **17 46 11.8** | **0.0** | | |
| GEC2 | | | | | IAmb | IAmb | 17 46 13.5 | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **79.91** | **319** | P | **P** | | **17 46 12.5** | **+0.7** | | |
| | comp=Z,6.8nm,0.7s,baz=94,slow=5.5,SNR=20 | | | | | | | | | |
| GERES | | | | | pP | | **pwP** | **17 46 27.8** | **-0.2** | |
| | comp=Z,3.7nm,0.8s,baz=98,slow=5.5,SNR=3.5 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **79.91** | **319** | P | **P** | | **17 46 11.8** | **0.0** | | |
| **MOTA** | **Moosalm** | **81.59** | **317** | *eP* | **P** | | **17 46 20.7** | **-0.2** | | |
| | comp=Z,2.6nm,0.5s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **82.06** | **331** | pP | pP | | 17 46 37.9 | +2.2 | | |
| | comp=Z,0.7nm,0.6s,baz=95,slow=5.4,SNR=1.8 | | | | | | | | | |
| **KEST** | **Kesra** | **82.95** | **305** | P | **P** | | **17 46 28.7** | **+0.5** | | |
| | comp=Z,7.0nm,0.9s,baz=48,slow=1.1,SNR=4.4 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.08** | **310** | P | **P** | | **17 47 17.5** | **+0.7** | | |
| | comp=Z,3.3nm,1.1s,baz=93,slow=5.1,SNR=2.2 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **96.90** | **22** | P | **P** | | **17 47 33.5** | **-0.2** | | |
| | comp=Z,0.3nm,0.5s,baz=270,slow=3.6,SNR=1.5 | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **98.60** | **12** | P | **P** | | **17 47 41.0** | **-0.1** | | |
| **INK** | **Inuvik** | **99.27** | **16** | P | **Pdif** | | **17 47 44.3** | **+0.1** | | |
| | comp=Z,0.8nm,0.5s,baz=335,slow=5.5,SNR=1.6 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **108.74** | **14** | PP | **PP** | | **17 52 55.2** | **-2.1** | | |
| | comp=Z,0.4nm,0.7s,baz=335,slow=7.8,SNR=5.7 | | | | | | | | | |
| **SCHQ** | **Schefferville** | **118.01** | **348** | PKP | **PKiKP** | | **17 52 49.5** | **+0.2** | | |
| | comp=Z,1.1nm,0.5s,baz=20,slow=15,SNR=5.8 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **123.86** | **8** | PKP | **PKPdf** | | **17 53 00.7** | **+0.1** | | |
| | comp=Z,3.0nm,0.7s,baz=10,slow=3.2,SNR=3.4 | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **126.84** | **32** | PKP | **PKPdf** | | **17 53 06.1** | **-0.9** | | |
| | comp=Z,1.2nm,0.6s,baz=286,slow=1.6,SNR=5.6 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **127.33** | **22** | PKP | **PKPdf** | | **17 53 07.9** | **0.0** | | |
| | comp=Z,1.2nm,0.6s,baz=98,slow=2.2,SNR=11 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **141.31** | **26** | PKhKP | PKPpre | | 17 53 28.5 | | | |
| | comp=Z,0.6nm,0.6s,baz=27,slow=2.1,SNR=6.6 | | | | | | | | | |
| TXAR | | | | | PKP | | **PKPdf** | **17 53 34.8** | **+0.6** | |
| | comp=Z,1.3nm,0.5s,baz=168,slow=1.0,SNR=18 | | | | | | | | | |

*IDC* ***17*** *17:47:26.3±2.3, 1°15.N×127°.53E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.2/42, mbtmp3.5/3, Error ellipse: s-maj=196.8km s-min=24.7km az=67.0*
*DJA* ***17*** *17:47:27.7±0.5, 1°N±4°×12°.8E±°, h10km, M4.0/7, mb4.2/2, MLv3.9/7*

**IDC 17 17:47:28.1±1.7, 1°.0N±0°.1×127°.5E±0°.1, h10km, n8, σ1$66/8, mb3.3/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **0.24** | **222** | P | | **Pg** | **17 47 33.0** | **0.0** |
| **SANI** | **Sanana** | **3.35** | **207** | P | | **Pn** | **17 48 20.1** | **-0.5** |
| **KMSI** | **Cibinong** | **3.56** | **264** | P | | **Pn** | **17 48 23.3** | **-0.2** |
| **GTOI** | **Gorontalo** | **4.53** | **266** | P | | **Pn** | **17 48 38.9** | **+2.2** |
| **APSI** | **Ampana** | **6.16** | **253** | P | | **Pn** | **17 48 57.8** | **-1.4** |
| **WRA** | **Warramunga Arr** | **21.81** | **163** | P | | **P** | **17 52 21.2** | **+0.6** |
| | 0.6nm,0.5s,baz=341,slow=11,SNR=4.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.24** | **166** | P | | **P** | **17 52 56.6** | **+2.1** |
| | 0.3nm,0.5s,baz=346,slow=11,SNR=7.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.28** | **326** | P | | **P** | **17 57 35.5** | **-1.4** |
| | 0.6nm,0.5s,baz=118,slow=8.3,SNR=11 | | | | | | | |

**IDC 17 17:47:45.2±2.2, 1°.00N×127°.25E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.2/42, mbtmp3.6/3, Error ellipse: s-maj=179.2km s-min=26.1km az=66.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.94** | **162** | P | | P | 17 52 38.8 | -1.8 |
| | 0.6nm,0.4s,baz=340,slow=11,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.36** | **166** | P | | P | 17 53 15.1 | +1.0 |
| | 0.7nm,0.5s,baz=345,slow=10.0,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.09** | **326** | P | | P | 17 57 54.2 | -0.1 |
| | 0.4nm,0.5s,baz=124,slow=8.2,SNR=6.4 | | | | | | | |

*IDC* ***17*** *17:50:21.0±1.1, 0°.79N×128°.99E, h0km, mb4.0/5, mb1 4.2/6, mb1mx3.7/42, mbtmp4.1/6, ML3.7/1, Error ellipse: s-maj=60.8km s-min=18.5km az=64.0*

**IDC 17 17:50:22.4±1.0, 0°.9N±0°.2×129°.2E±0°.2, h10km, n12, σ0$82/8, mb4.0/5, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SIJI** | **Sorong** | **2.70** | **129** | Pn | | **Pn** | **17 51 06.2** | **+0.2** |
| | 12nm,0.3s,baz=330,slow=18,SNR=37 | | | | | | | |
| SIJI | | | | | | Sn | **17 51 38.5** | **-0.3** |
| | 5.3nm,0.3s,baz=229,slow=19,SNR=2.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.27** | **166** | P | | **P** | **17 55 08.5** | **-0.6** |
| | 3.7nm,0.6s,baz=345,slow=11,SNR=24 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.80** | **170** | P | | **P** | **17 55 44.9** | **+0.1** |
| | 18nm,0.7s,baz=349,slow=9.9,SNR=40 | | | | | | | |
| ASAR | | | | | | PcP | **PcP** | **17 59 23.0** | **+1.6** |
| | 0.2nm,0.8s,baz=343,slow=1.0,SNR=1.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.61** | **161** | P | | **P** | **17 57 11.7** | **-0.2** |
| | 2.7nm,0.7s,baz=342,slow=9.5,SNR=6.3 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.78** | **62** | T | | T | 18 41 38.0 | |
| | baz=248,slow=75,SNR=164 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.79** | **62** | T | | T | 18 41 38.3 | |
| | baz=248,slow=75,SNR=130 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.80** | **62** | T | | T | 18 41 38.2 | |
| | baz=248,slow=75,SNR=87 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.41** | **61** | T | | T | 18 42 24.2 | |
| | baz=247,slow=75,SNR=218 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.42** | **61** | T | | T | 18 42 23.8 | |
| | baz=247,slow=75,SNR=192 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.43** | **61** | T | | T | 18 42 24.2 | |
| | baz=247,slow=75,SNR=188 | | | | | | | |
| **SONM** | **Songino Array** | **50.80** | **340** | P | | **P** | **17 59 23.0** | **-0.1** |
| | 0.4nm,0.7s,baz=151,slow=6.3,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.30** | **325** | P | | **P** | **18 00 37.7** | **-0.5** |
| | 0.6nm,0.5s,baz=110,slow=6.3,SNR=11 | | | | | | | |

*JMA* ***17*** *18:00:28.0±0.3, 45°.16N×141°.89E, h296km±3km, M3.1*
*IDC* ***17*** *18:00:29.2±1.0, 45°.42N×141°.84E, h268km±35km, mb2.8/7, mb1 3.1/7, mb1mx2.8/43, mbtmp3.4/7, Error ellipse: s-maj=83.3km s-min=19.9km az=175.0*
*SKHL* ***17*** *18:00:29.8±0.4, 45°.20N×141°.90E, h293km±4km, mb4.3/9, msha4.4/5*

**ISC 17 18:00:29.1±0.7, 45°.06N±0°.06×141°.93E±0°.07, h285km±6km, n28, σ1$30/39, mb3.0/7, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JWK2** | **Keihoku** | **0.26** | **356** | P | | **Pn** | **18 01 05.6** | **+0.1** |
| JWK2 | | | | | *eS* | **S** | **18 01 34.0** | **-0.3** |
| **JRR** | **Rishiri** | **0.44** | **281** | P | | **Pn** | **18 01 06.3** | **+0.5** |
| **JSE** | **Soyaes** | **0.48** | **102** | P | | **Pn** | **18 01 06.2** | **+0.3** |
| **JRBN** | **Rebuntou** | **0.71** | **301** | P | | **Pn** | **18 01 06.3** | **-0.3** |
| **ASAJ** | **Asahikawa** | **1.06** | **153** | P | | **Pn** | **18 01 08.7** | **+0.5** |
| | 18nm,0.3s,baz=357,slow=3.7,SNR=87 | | | | | | | |
| ASAJ | | | | | | S | **18 01 39.8** | **+0.5** |
| | baz=16,slow=18,SNR=1.0 | | | | | | | |
| **ASAJ** | **Asahikawa** | **1.06** | **153** | P | | **Pn** | **18 01 08.8** | **+0.5** |
| **JHR** | **Hokuryu** | **1.32** | **186** | P | | **Pn** | **18 01 10.6** | **+0.9** |
| **JKK2** | **Kamakawa 2** | **1.32** | **153** | P | | **Pn** | **18 01 10.6** | **+0.8** |
| JKK2 | | | | | *eS* | **S** | **18 01 44.1** | **+2.1** |
| **JMP** | **Maruseppu** | **1.47** | **135** | P | | **Pn** | **18 01 11.4** | **+0.7** |
| **JTKR** | **Abashiri--Toko** | **1.79** | **127** | P | | **Pn** | **18 01 13.7** | **+0.8** |
| JTKR | | | | | *eS* | **S** | **18 01 48.6** | **+0.9** |
| **JFR** | **Furan** | **1.96** | **165** | P | | **Pn** | **18 01 14.8** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **1.98** | **17** | *eP* | | **Pn** | **18 01 13.9** | **-0.4** |
| YSS | | | | | AMB | AMB | 18 01 14.4 | |
| | 110nm,0.3s | | | | | | | |
| YSS | | | | | *eS* | **S** | **18 01 47.9** | **-2.4** |
| YSS | | | | | A | A | 18 01 48.8 | |
| | 30nm,0.4s | | | | | | | |
| YSS | | | | | A | A | 18 01 48.8 | |
| | 30nm,0.4s | | | | | | | |
| **JAR** | **Ashorobuto** | **2.21** | **142** | P | | **Pn** | **18 01 17.3** | **+1.0** |
| JAR | | | | | *eS* | **S** | **18 01 54.4** | **+0.5** |
| **JEW** | **Eniwo** | **2.24** | **189** | P | | **Pn** | **18 01 17.9** | **+1.2** |
| **JCH** | **Churui** | **2.66** | **156** | P | | **Pn** | **18 01 19.6** | **-0.9** |
| JCH | | | | | *eS* | **S** | **18 01 58.5** | **-2.9** |
| **JNBK** | **Urakawa-nobuka** | **2.84** | **168** | P | | **Pn** | **18 01 22.9** | **+0.6** |
| JNBK | | | | | *eS* | **S** | **18 02 03.8** | **-0.9** |
| **JAK** | **Akkeshi** | **2.87** | **135** | *eS* | | **S** | **18 02 03.4** | **-1.7** |
| **AKK** | **Akkeshi** | **2.93** | **133** | *eP* | | **Pn** | **18 01 23.0** | **-0.1** |
| AKK | | | | | *eS* | **S** | **18 02 04.5** | **-1.7** |
| **NMR** | **Nemuro--Hokkai** | **3.21** | **120** | *eP* | | **Pn** | **18 01 27.3** | **+1.3** |
| NMR | | | | | AMB | AMB | 18 01 28.5 | |
| | 30nm,0.9s | | | | | | | |
| NMR | | | | | *eS* | **S** | **18 02 09.4** | **-2.0** |
| **NEM2** | **Nemuro 2** | **3.23** | **120** | *eS* | | **S** | **18 02 08.8** | **-2.8** |
| **JKB** | **Kayabe** | **3.23** | **192** | P | | **Pn** | **18 01 25.8** | **-0.5** |
| JKB | | | | | *eS* | **S** | **18 02 09.1** | **-2.8** |
| **SONM** | **Songino Array** | **24.51** | **289** | P | | **P** | **18 05 23.4** | **+0.5** |
| | 0.4nm,0.8s,baz=97,slow=8.6,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.65** | **294** | P | | **P** | **18 07 41.9** | **+0.1** |
| | 0.3nm,0.6s,baz=84,slow=9.6,SNR=2.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **42.66** | **37** | P | | **P** | **18 07 57.4** | **-0.3** |
| | 0.4nm,0.6s,baz=275,slow=8.9,SNR=5.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.76** | **33** | P | | **P** | **18 09 43.1** | **-0.1** |
| | 0.3nm,0.4s,baz=304,slow=6.8,SNR=7.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.25** | **321** | P | | **P** | **18 10 58.2** | **-0.9** |
| | 0.4nm,0.4s,baz=44,slow=6.1,SNR=4.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **71.85** | **47** | P | | **P** | **18 11 22.0** | **+0.7** |
| | 0.5nm,0.6s,baz=298,slow=1.9,SNR=5.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.95** | **53** | P | | **P** | **18 12 33.8** | **+1.3** |
| | 0.1nm,0.4s,baz=316,slow=3.8,SNR=1.6 | | | | | | | |

*IDC* ***17*** *18:01:45.1±1.1, 0°.84N×129°.01E, h0km, mb3.9/5, mb1 4.1/6, mb1mx3.6/36, mbtmp3.9/6, ML3.8/1, Error ellipse: s-maj=54.6km s-min=18.1km az=67.0*
*NEIC* ***17*** *18:01:47.4±1.5, 0°.8N±0°.1×129°.12E±0°.08, h10km±2km, mb4.1/7, Error ellipse: s-maj=22.7km s-min=13.7km az=11.0*
*DJA* ***17*** *18:01:48.1±0.4, 1°N±5°×12°9E±°, h10km, M4.2/11, mb4.4/5, MLv4.0/11*

**ISC 17 18:01:46.4±0.8, 0°.79N±0°.09×129°.16E±0°.07, h10km, n30, σ1$25/26, mb4.1/9, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **1.79** | **270** | Pn | | **Pn** | **18 02 17.0** | **-0.4** |
| TNTI | | | | | | Sn | **18 02 40.5** | **+0.3** |
| **TNTI** | **Ternate** | **1.79** | **270** | P | | **Pn** | **18 02 17.0** | **-0.4** |
| **SIJI** | **Sorong** | **2.68** | **128** | Pn | | **Pn** | **18 02 30.8** | **+1.1** |
| | 14nm,0.3s,baz=322,slow=17,SNR=57 | | | | | | | |
| SIJI | | | | | | Sn | **18 03 02.8** | **+0.7** |
| | 6.1nm,0.3s,baz=180,slow=20,SNR=7.9 | | | | | | | |
| **MSAI** | **Masohi** | **4.11** | **183** | P | | **Pn** | **18 02 51.9** | **+2.5** |
| **SANI** | **Sanana** | **4.24** | **228** | P | | **Pn** | **18 02 50.3** | **-0.8** |
| **KMSI** | **Cibinong** | **5.18** | **268** | P | | **Pn** | **18 03 04.7** | **+0.7** |
| | 0.3nm81nm,0.5s | | | | | | | |
| **GTOI** | **Gorontalo** | **6.15** | **269** | P | | **Pn** | **18 03 20.7** | **+3.4** |
| | 0.1nm12nm,0.7s | | | | | | | |
| **APSI** | **Ampana** | **7.69** | **257** | P | | **Pn** | **18 03 39.1** | **+0.5** |
| | 0.1nm32nm,0.9s | | | | | | | |
| **TOLI2** | **Tolitoli** | **8.38** | **272** | Pn | | **Pn** | **18 03 49.5** | **+1.4** |
| **SPSI** | **Sidrap Palu** | **10.50** | **243** | P | | **Pn** | **18 04 18.3** | **+1.2** |
| **KNRA** | **Kununurra** | **16.36** | **181** | Pn | | **Pn** | **18 05 34.2** | **-2.2** |
| KNRA | | | | | | IAmb | IAmb | 18 05 51.3 | |
| | comp=Z,36nm,1.5s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.06** | **166** | P | | **P** | **18 06 31.5** | **+0.6** |
| WB0 | | | | | | IAmb | IAmb | 18 06 42.1 | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.22** | **166** | P | | **P** | **18 06 33.2** | **+0.6** |
| | comp=Z,1.5nm,0.4s,baz=345,slow=11,SNR=15 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.22** | **166** | P | | **P** | **18 06 32.4** | **-0.2** |
| **WB2** | **Warramunga Arr** | **21.22** | **166** | P | | **P** | **18 06 33.5** | **+0.9** |
| WB2 | | | | | | IAmb | IAmb | 18 06 40.4 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.28** | **166** | P | | **P** | **18 06 34.1** | **+0.8** |
| WR0 | | | | | | IAmb | IAmb | 18 06 38.1 | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **AS31** | **Alice Springs** | **24.74** | **170** | P | | **P** | **18 07 08.6** | **+0.3** |
| AS31 | | | | | | IAmb | IAmb | 18 07 15.1 | |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.74** | **170** | P | | **P** | **18 07 09.8** | **+1.5** |
| | comp=Z,11nm,0.8s,baz=348,slow=10,SNR=42 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.74** | **170** | P | | **P** | **18 07 08.7** | **+0.4** |
| **KSRS** | **Korea Array** | **36.50** | **358** | P | | **P** | **18 08 52.0** | **+0.1** |
| | comp=Z,0.8nm,0.7s,baz=181,slow=10,SNR=2.6 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.82** | **62** | T | | T | 18 52 59.6 | | |
| | baz=248,slow=75,SNR=46 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.83** | **62** | T | | T | 18 52 57.7 | | |
| | baz=248,slow=75,SNR=29 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.83** | **62** | T | | T | 18 52 57.9 | | |
| | baz=248,slow=75,SNR=25 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.45** | **61** | T | | T | 18 53 47.5 | | |
| | baz=247,slow=75,SNR=60 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.46** | **61** | T | | T | 18 53 47.0 | | |
| | baz=247,slow=75,SNR=192 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.47** | **61** | T | | T | 18 53 47.4 | | |
| | baz=247,slow=75,SNR=292 | | | | | | | | |
| **SONM** | **Songino Array** | **50.85** | **340** | P | | **P** | **18 10 46.4** | **-1.2** |
| | comp=Z,0.5nm,0.7s,baz=139,slow=8.2,SNR=3.4 | | | | | | | | |
| **MK31** | **Makanchi Array** | **61.34** | **325** | P | | **P** | **18 12 02.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **61.34** | **325** | P | | **P** | **18 12 02.1** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=116,slow=8.3,SNR=24 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.34** | **325** | P | | **P** | **18 12 01.9** | **-0.5** |

**IDC 17 18:05:26.7±1.6, 0°.85N×129°.06E, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.3/37, mbtmp3.7/4, ML3.6/1, Error ellipse: s-maj=67.6km s-min=24.6km az=60.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SIJI** | **Sorong** | **2.79** | **128** | Pn | | Pn | 18 06 11.7 | -1.0 |
| | 8.9nm,0.3s,baz=334,slow=20,SNR=14 | | | | | | | |
| SIJI | | | | | | Sn | 18 06 44.2 | -2.9 |
| | 5.6nm,0.3s,baz=19,slow=23,SNR=4.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.30** | **166** | P | | P | 18 10 14.5 | -0.7 |
| | 0.6nm,0.5s,baz=344,slow=11,SNR=8.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.82** | **169** | P | | P | 18 10 51.6 | +0.8 |
| | 4.1nm,0.6s,baz=348,slow=11,SNR=36 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.88** | **62** | T | | T | 18 56 41.0 | |
| | baz=248,slow=75,SNR=50 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.89** | **62** | T | | T | 18 56 41.8 | |
| | baz=248,slow=75,SNR=46 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.89** | **62** | T | | T | 18 56 42.2 | |
| | baz=248,slow=75,SNR=43 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.50** | **61** | T | | T | 18 57 28.3 | |
| | baz=247,slow=75,SNR=95 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.51** | **61** | T | | T | 18 57 29.5 | |
| | baz=247,slow=75,SNR=59 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.52** | **61** | T | | T | 18 57 29.7 | |
| | baz=247,slow=75,SNR=69 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.23** | **325** | P | | P | 18 15 43.6 | -0.1 |
| | 0.2nm,0.4s,baz=120,slow=7.8,SNR=4.9 | | | | | | | |

*IDC* ***17*** *18:08:16.0±1.4, 11°.36N×122°.41E, h0km, mb3.5/4, mb1 3.8/5, mb1mx3.4/50, mbtmp3.6/5, ML4.6/1, Error ellipse: s-maj=61.1km s-min=19.7km az=61.0*
*MAN* ***17*** *18:08:18.6, 11°.49N×122°.02E, h12km, mb5.1, ML4.0, MS4.1*
*MAN INTENSITY IV - CULASI, SEBASTE & TIBIAO, ANTIQUE; LIBACAO & MADALAG, AKLAN; INTENSITY III - PANDAN & BUGASONG, ANTIQUE.*
*NEIC* ***17*** *18:08:22.1±0.7, 11°.43N±0°.08×122°.2E±0°.2, h38km±11km, mb3.8/5, Error ellipse: s-maj=24.2km s-min=10.5km az=75.0*

**ISC 17 18:08:18.5±1.6, 11°.42N±0°.04×122°.08E±0°.05, h14km±11km, n23, σ1$58/31, mb3.5/7, 2C-8D, Panay**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KALP** | **Kalibo** | **0.36** | **45** | ⇓*iP* | | **Pb** | **18 08 26.5** | **-0.2** |
| **RCP** | **Roxas** | **0.67** | **78** | ⇓*eP* | | **Pg** | **18 08 31.6** | **0.0** |
| RCP | | | | *i* | S | **Sn** | **18 08 44.0** | **0.0** |
| **CNOP** | **Candoni, Negro** | **1.68** | **161** | ⇓*eP* | | **Pn** | **18 08 48.0** | **+0.6** |
| CNOP | | | | *eS* | | **Sg** | **18 09 11.9** | **-0.5** |
| **LLP** | **Lapu-Lapu** | **2.15** | **120** | ⇓*iP* | | **Pb** | **18 08 56.1** | **-1.2** |
| LLP | | | | *i* | S | **Sb** | **18 09 24.4** | **+0.5** |
| **PGP** | **Puerto Galera** | **2.34** | **332** | ⇓*eP* | | **Pn** | **18 08 56.2** | **-0.5** |
| PGP | | | | *i* | S | **Sb** | **18 09 30.6** | **+1.1** |
| **SNPH** | **Sibulan** | **2.36** | **151** | ⇓*iP* | | **Pb** | **18 08 59.1** | **-1.7** |
| SNPH | | | | *i* | S | **Sb** | **18 09 30.8** | **+1.0** |
| **GQP** | **Guinayangan** | **2.50** | **8** | ⇑*eP* | | **Pn** | **18 08 58.4** | **-0.4** |
| GQP | | | | *eS* | | **Sn** | **18 09 29.5** | **+0.4** |
| **LQP** | **Lukban** | **2.73** | **349** | ⇓*eP* | | **Pn** | **18 09 01.9** | **-0.2** |
| LQP | | | | *eS* | | **Sn** | **18 09 32.5** | **-2.5** |
| **TGY** | **Tagaytay City** | **2.89** | **337** | Pn | | **Pn** | **18 09 06.4** | **+2.1** |
| | 74nm,0.3s,baz=179,slow=7.7,SNR=1.7 | | | | | | | |
| **MSLP** | **Maasin** | **3.02** | **115** | ⇑*eP* | | **Pn** | **18 09 08.0** | **+2.1** |
| **ZCP** | **Zamboanga City** | **4.46** | **180** | ⇓*eP* | | **Pn** | **18 09 27.0** | **+1.2** |
| ZCP | | | | *eS* | | **Sn** | **18 10 16.0** | **-1.5** |
| **MYLDM** | **Lahad Datu** | **7.14** | **210** | | | **Pn** | **18 10 05.1** | **+2.5** |
| **TOLI2** | **Tolitoli** | **10.32** | **187** | Pn | | **Pn** | **18 10 47.8** | **+1.5** |
| **T

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BGNE** | **Belgrade** | **5.71** | **352** | Pn | Pn | 18 16 27.5 | -0.3 |
| BGNE | | | | IAmb_Lg | | 18 18 20.3 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.84** | **66** | IAmb_Lg | | 18 18 15.1 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **6.01** | **286** | IAmb_Lg | | 18 18 21.6 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **SLM** | **Saint Louis** | **6.24** | **60** | IAmb_Lg | | 18 18 18.0 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **6.88** | **25** | IAmb_Lg | | 18 18 42.7 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.99** | **289** | Pn | Pn | 18 16 46.9 | +1.3 |
| **Q24A** | **Divide** | **7.13** | **299** | IAmb_Lg | | 18 19 01.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **K38A** | **Parkersburg** | **7.69** | **25** | IAmb_Lg | | 18 19 17.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **OLIL** | **Olney** | **7.82** | **65** | IAmb_Lg | | 18 19 20.3 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **L40A** | **Anamosa** | **7.82** | **34** | IAmb_Lg | | 18 19 27.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.95** | **242** | IAmb_Lg | | 18 19 30.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **8.54** | **313** | IAmb_Lg | | 18 19 42.8 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **8.60** | **309** | IAmb_Lg | | 18 19 47.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.94** | **35** | IAmb_Lg | | 18 19 48.2 | |
| | comp=Z,23nm,0.9s | | | | | | |

*IDC **17** 18:23:21.7±2.4, 6°.53S×129°.88E, h156$^{km}$±22$^{km}$, mb3.3/3, mb1 3.6/6, mb1mx3.1/33, mbtmp4.1/6, Error ellipse: s-maj=40.0km s-min=23.1km az=104.0*

*NEIC **17** 18:23:21.4±2.1, 6°.55S±0°.08×129°.8E±0°.1, h153$^{km}$±12$^{km}$, mb4.1/10, Error ellipse: s-maj=15.3km s-min=11.4km az=88.0*

**ISC 17 18:23:19.8**±0.6, **6°.58S**±0°.05×**129°.83E**±0°.06, **h146**$^{km}$, **n50, σ2$^{s}$30/52, mb4.1/7, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.02** | **134** | Pn | **Pn** | **18 23 58.4** | **+3.4** |
| SAUI | | | | Sn | **Sn** | **18 24 20.6** | **-1.4** |
| **SAUI** | **Saumlaki** | **2.02** | **134** | P | **Pn** | **18 23 59.1** | **+4.1** |
| **BNDI** | **Bandanaira** | **2.04** | **2** | P | Pn | 18 24 02.2 | +6.9 |
| **SIJI** | **Sorong** | **5.85** | **14** | P | **Pn** | **18 24 45.9** | **+1.3** |
| | 11nm,0.3s,baz=224,slow=10,SNR=26 | | | | | | |
| SIJI | | | | S | **Sn** | **18 25 47.9** | **-2.9** |
| | 5.7nm,0.3s,baz=85,slow=23,SNR=10.0 | | | | | | |
| **SANI** | **Sanana** | **5.91** | **319** | P | Pn | 18 24 52.2 | +6.9 |
| **DRS** | **Darwin Rock St** | **5.91** | **170** | P | **Pn** | **18 24 46.8** | **+1.4** |
| **SOEI** | **Soe** | **6.34** | **240** | Pn | **Pn** | **18 24 51.3** | **+0.1** |
| **SOEI** | **Soe** | **6.34** | **240** | P | **Pn** | **18 24 54.9** | **+3.6** |
| **MTN** | **Manton Dam** | **6.36** | **168** | Pn | **Pn** | **18 24 51.6** | **+0.3** |
| **MTN** | **Manton Dam** | **6.36** | **168** | P | **Pn** | **18 24 52.5** | **+1.2** |
| **KDU** | **Kakadu** | **6.61** | **157** | P | **Pn** | **18 24 55.3** | **+0.6** |
| **BATI** | **Baumata** | **7.08** | **239** | P | **Pn** | **18 25 03.9** | **+2.9** |
| | 12nm,0.3s,baz=88,slow=2.9,SNR=23 | | | | | | |
| BATI | | | | S | **Sn** | **18 26 18.5** | **-1.9** |
| | 9.1nm,0.3s,baz=81,slow=6.7,SNR=10 | | | | | | |
| **KNRA** | **Kununurra** | **9.10** | **186** | | **Pn** | **18 25 27.4** | **-0.7** |
| **KNRA** | **Kununurra** | **9.10** | **186** | P | **Pn** | **18 25 28.0** | **0.0** |
| **PLAI** | **Plampang** | **12.15** | **259** | P | **Pn** | **18 26 10.4** | **+2.1** |
| **FITZ** | **Fitzroy Crossi** | **12.16** | **199** | P | **Pn** | **18 26 06.2** | **-2.1** |
| | 1.4nm,0.3s,baz=25,slow=11,SNR=51 | | | | | | |
| FITZ | | | | S | Sn | 18 28 12.8 | -10 |
| | 0.7nm,0.3s,baz=123,slow=16,SNR=2.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.16** | **199** | Pn | **Pn** | **18 26 05.9** | **-2.5** |
| **FITZ** | **Fitzroy Crossi** | **12.16** | **199** | P | **Pn** | **18 26 07.2** | **-1.1** |
| **WB0** | **Warramunga Arr** | **13.84** | **162** | P | **Pn** | **18 26 26.8** | **-3.2** |
| **WRAB** | **Tennant Creek** | **13.98** | **162** | Pn | **Pn** | **18 26 31.1** | **-0.7** |
| **WRAB** | **Tennant Creek** | **13.98** | **162** | P | **Pn** | **18 26 31.7** | **-0.1** |
| **WRA** | **Warramunga Arr** | **13.99** | **162** | P | **Pn** | **18 26 28.9** | **-3.0** |
| | 0.8nm,0.3s,baz=348,slow=13,SNR=35 | | | | | | |
| WRA | | | | S | Sn | 18 28 56.2 | -11 |
| | 2.0nm,0.3s,baz=334,slow=22,SNR=8.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.99** | **162** | | **Pn** | **18 26 27.8** | **-4.1** |
| **WB2** | **Warramunga Arr** | **13.99** | **162** | | **Pn** | **18 26 29.1** | **-2.9** |
| **WR0** | **Warramunga Arr** | **14.07** | **161** | Pn | **Pn** | **18 26 30.0** | **-2.9** |
| **COEN** | **Coen** | **15.04** | **120** | P | **P** | **18 26 48.1** | **+1.3** |
| COEN | | | | IAmb | IAmb | 18 27 15.6 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **COEN** | **Coen** | **15.04** | **120** | P | **P** | **18 26 48.1** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.65** | **262** | Pn | **Pn** | **18 26 51.0** | **-1.6** |
| **JAGI** | **Jajag, Banyuwa** | **15.65** | **262** | P | **P** | **18 26 55.7** | **+2.0** |
| **QIS** | **Mount Isa** | **16.82** | **147** | P | **Pn** | **18 27 07.3** | **+0.4** |
| **AS31** | **Alice Springs** | **17.44** | **167** | P | **Pn** | **18 27 14.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **17.44** | **167** | P | **Pn** | **18 27 14.8** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=342,slow=9.0,SNR=68 | | | | | | |
| ASAR | | | | S | **Sn** | **18 30 17.9** | **-10** |
| | comp=Z,0.2nm,0.3s,baz=352,slow=26,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **17.44** | **167** | P | **Pn** | **18 27 14.7** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **17.76** | **212** | | **P** | **18 27 17.6** | **+0.7** |
| PSA00 | | | | IAmb | IAmb | 18 27 35.9 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.76** | **212** | | **P** | **18 27 17.1** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 18 27 37.3 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.76** | **212** | P | **Pn** | **18 27 18.6** | **+0.5** |
| **MTSU** | **Mount Surprise** | **18.21** | **130** | P | **Pn** | **18 27 24.6** | **+1.1** |
| **WRKA** | **Warakurna** | **18.41** | **184** | P | **Pn** | **18 27 25.7** | **-0.2** |
| **OOD** | **Oodnadatta** | **21.82** | **166** | P | **P** | **18 28 00.7** | **+0.1** |
| **MULG** | **Mulgathing** | **23.91** | **171** | P | **P** | **18 28 22.3** | **+2.0** |
| **CMAR** | **Chiang Mai Arr** | **39.33** | **310** | P | **P** | **18 30 35.7** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=135,slow=7.1,SNR=2.9 | | | | | | |
| **MAJO** | **Matsushiro** | **43.61** | **10** | P | **P** | **18 31 07.7** | **-1.9** |
| MAJO | | | | IAmb | IAmb | 18 31 15.2 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **43.61** | **10** | P | **P** | **18 31 07.4** | **-2.3** |
| **SONM** | **Songino Array** | **57.99** | **342** | P | **P** | **18 32 57.5** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=164,slow=7.6,SNR=1.5 | | | | | | |
| **MK31** | **Makanchi Array** | **67.78** | **327** | P | **P** | **18 34 02.6** | **+0.7** |
| MK31 | | | | IAmb | IAmb | 18 34 03.8 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.78** | **327** | P | **P** | **18 34 03.1** | **+1.2** |
| | comp=Z,2.8nm,0.5s,baz=120,slow=8.1,SNR=64 | | | | | | |
| **MAKZ** | **Makanchi** | **67.96** | **327** | P | **P** | **18 34 02.8** | **-0.2** |
| MAKZ | | | | IAmb | IAmb | 18 34 04.7 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.06** | **329** | P | **P** | **18 34 28.6** | **+0.6** |
| | comp=Z,0.8nm,0.5s,baz=128,slow=4.9,SNR=8.4 | | | | | | |
| **KURK** | **Kurchatov** | **72.07** | **329** | P | **P** | **18 34 28.4** | **+0.5** |
| **KKAR** | **Karatay Array** | **72.91** | **319** | P | **P** | **18 34 33.2** | **0.0** |

**IDC 17 18:34:41.5**±2.9, **0°.74N×128°.49E, h0**$^{km}$, **mb3.0/3, mb1 3.3/3, mb1mx2.6/35, mbtmp3.1/3, Error ellipse: s-maj=229.0km s-min=30.3km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.34** | **165** | P | P | 18 39 29.6 | -0.8 |
| | 0.4nm,0.9s,baz=344,slow=11,SNR=1.3 | | | | | | |
| **ASAR** | **Alice Springs** | **24.83** | **168** | P | P | 18 40 06.2 | +0.5 |
| | 1.0nm,0.9s,baz=345,slow=11,SNR=3.4 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.43** | **62** | T | T | 19 25 55.9 | |
| | baz=248,slow=75,SNR=11 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.45** | **63** | T | T | 19 25 54.8 | |
| | baz=248,slow=75,SNR=5.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.45** | **62** | T | T | 19 25 55.0 | |
| | baz=248,slow=75,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.99** | **325** | P | P | 18 44 56.8 | 0.0 |
| | 0.2nm,0.8s,baz=117,slow=7.2,SNR=1.5 | | | | | | |

*IDC **17** 18:38:19.8±2.8, 6°.53N×125°.67E, h0$^{km}$, mb3.4/3, mb1 3.6/3, mb1mx2.9/35, mbtmp3.4/3, Error ellipse: s-maj=317.3km s-min=27.8km az=65.0*

*MAN **17** 18:38:23.0, 6°.74N×126°.08E, h4$^{km}$, mb4.4, ML3.2, MS2.9*

**ISC 17 18:38:21.2**±1.2, **6°.63N**±0°.09×**126°.08E**±0°.10, **h10**$^{km}$, **n5, σ1$^{s}$41/7, mb3.3/3, 1C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KCP** | **Kidapawan** | **1.05** | **291** | *eP* | **Pg** | **18 38 42.3** | **+0.8** |
| **BIPH** | **Bislig** | **1.57** | **10** | *eP* | **Pg** | **18 38 52.5** | **+1.1** |
| BIPH | | | | *eS* | **Sn** | **18 39 08.5** | **-1.0** |
| **WRA** | **Warramunga Arr** | **27.63** | **163** | P | **P** | **18 44 11.0** | **+1.9** |
| | 0.3nm,0.7s,baz=340,slow=9.9,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **31.07** | **166** | P | **P** | **18 44 39.4** | **-0.3** |
| | 0.4nm,0.9s,baz=344,slow=6.8,SNR=8.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 47 34.5** | **-1.0** |
| | 0.6nm,1.1s,baz=347,slow=2.5,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.83** | **324** | P | **P** | **18 47 50.9** | **-0.7** |
| | 0.2nm,0.5s,baz=115,slow=7.3,SNR=5.1 | | | | | | |

**IDC 17 18:45:06.0**±2.4, **0°.78N×128°.71E, h0**$^{km}$, **mb3.4/3, mb1 3.7/3, mb1mx3.0/30, mbtmp3.5/3, Error ellipse: s-maj=168.6km s-min=27.2km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.32** | **165** | P | P | 18 49 53.7 | -1.1 |
| | 0.5nm,0.7s,baz=345,slow=11,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **24.82** | **169** | P | P | 18 50 30.7 | +0.6 |
| | 2.4nm,0.7s,baz=347,slow=10,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.22** | **62** | T | T | 19 36 20.1 | |
| | baz=248,slow=75,SNR=52 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.23** | **62** | T | T | 19 36 21.3 | |
| | baz=248,slow=75,SNR=28 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.23** | **62** | T | T | 19 36 21.4 | |
| | baz=248,slow=75,SNR=34 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.84** | **61** | T | T | 19 37 05.5 | |
| | baz=247,slow=75,SNR=117 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.85** | **61** | T | T | 19 37 06.5 | |
| | baz=247,slow=75,SNR=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.86** | **61** | T | T | 19 37 06.9 | |
| | baz=247,slow=75,SNR=102 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.09** | **325** | P | P | 18 55 21.9 | -0.1 |
| | 0.2nm,0.5s,baz=128,slow=7.5,SNR=4.5 | | | | | | |

*IDC **17** 18:47:39.6±8.1, 36°.24N×140°.26E, h41$^{km}$±55$^{km}$, mb3.3/3, mb1 3.5/4, mb1mx2.8/38, mbtmp3.6/4, ML3.5/1, Error ellipse: s-maj=113.5km s-min=23.8km az=62.0*

*JMA **17** 18:47:42.3, 36°.08N×139°.89E, h45$^{km}$±1$^{km}$, M3.1*

*JMA Felt I J1.*

**ISC 17 18:47:41.7**±1.0, **36°.10N**±0°.05×**139°.90E**±0°.06, **h52**$^{km}$±9$^{km}$, **n13, σ1$^{s}$11/21, mb3.6/3, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYT** | **Yasato** | **0.27** | **62** | P | **Pn** | **18 47 50.8** | **0.0** |
| JYT | | | | S | **Sn** | **18 47 57.0** | **-0.2** |
| **JAG** | **Ashikaga** | **0.48** | **312** | P | **Pn** | **18 47 53.2** | **+0.3** |
| JAG | | | | S | **Sn** | **18 48 00.9** | **-0.1** |
| **JRY** | **Ryogami san** | **0.81** | **264** | P | **Pn** | **18 47 57.0** | **-0.1** |
| JRY | | | | S | **Sn** | **18 48 07.6** | **-0.7** |
| **JKT** | **Katashina** | **0.84** | **322** | P | **Pn** | **18 47 57.8** | **+0.2** |
| JKT | | | | S | **Sn** | **18 48 09.7** | **+0.6** |
| **JOD2** | **Odawara 2** | **1.07** | **218** | P | **Pn** | **18 48 01.9** | **+1.5** |
| JOD2 | | | | S | **Sn** | **18 48 14.7** | **+0.5** |
| **JYN** | **Shimob** | **1.26** | **242** | P | **Pn** | **18 48 04.4** | **+1.4** |
| **JFY** | **Yanaizu** | **1.31** | **353** | P | **Pn** | **18 48 04.7** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **1.43** | **288** | P | **Pn** | **18 48 05.9** | **+0.5** |
| | 3.3nm,0.3s,baz=89,slow=11,SNR=162 | | | | | | |
| MJAR | | | | S | **Sn** | **18 48 19.8** | **-3.4** |
| | 1.8nm,0.3s,baz=110,slow=21,SNR=7.2 | | | | | | |
| **MAT** | **Matsushiro** | **1.44** | **288** | P | **Pn** | **18 48 05.2** | **-0.2** |
| MAT | | | | *eS* | **Sn** | **18 48 23.7** | **+0.5** |
| **JHJ** | **Hachijo jima 2** | **2.98** | **182** | P | **Pn** | **18 48 26.5** | **0.0** |
| | 15nm,0.3s,baz=46,slow=18,SNR=9.0 | | | | | | |
| JHJ | | | | S | **Sn** | **18 48 59.4** | **-1.6** |
| | 5.4nm,0.3s,baz=239,slow=22,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.65** | **313** | P | **P** | **18 55 24.8** | **0.0** |
| | 0.7nm,0.5s,baz=97,slow=7.4,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.59** | **303** | P | **P** | **18 55 41.0** | **+0.3** |
| | 0.3nm,0.6s,baz=92,slow=9.2,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.99** | **186** | P | **P** | **18 57 14.7** | **-0.2** |
| | 0.5nm,0.8s,baz=1.2,slow=7.6,SNR=2.1 | | | | | | |

**NEIC 17 18:48:08.2**±1.5, **36°.84N**±0°.01×**97°.64W**±0°.02, **h5**$^{km}$±1$^{km}$, **mb_Lg2.8/3, Error ellipse: s-maj=3.1km s-min=2.8km az=246.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.90** | **85** | | Pg | 18 48 25.0 | -0.5 |
| **U32A** | **Winter Ranch,** | **1.19** | **248** | IAmb_Lg | | 18 48 45.3 | |
| | comp=Z,93nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **1.79** | **332** | Pn | Pn | 18 48 39.0 | -0.8 |
| **W35A** | **Tecumseh** | **1.80** | **160** | | Pb | 18 48 41.3 | -0.2 |
| **X37A** | **Clayton** | **2.91** | **140** | Pg | Pg | 18 49 02.7 | -1.2 |
| **W39A** | **Magazine** | **3.53** | **117** | IAmb_Lg | | 18 50 05.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.54** | **75** | Pg | Pb | 18 49 12.5 | +1.1 |
| **K38A** | **Parkersburg** | **6.90** | **31** | IAmb_Lg | | 18 51 46.7 | |
| | comp=Z,14nm,1.3s | | | | | | |

**IDC 17 18:59:28.6**±2.6, **0°.67N×128°.30E, h0**$^{km}$, **mb3.1/3, mb1 3.4/3, mb1mx3.2/32, mbtmp3.2/3, Error ellipse: s-maj=200.7km s-min=29.1km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.32** | **164** | P | P | 19 04 15.7 | -1.6 |
| | 0.8nm,1.1s,baz=344,slow=11,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **24.80** | **168** | P | P | 19 04 53.2 | +0.8 |
| | 0.8nm,0.6s,baz=344,slow=10,SNR=19 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.63** | **63** | T | T | 19 50 40.0 | |
| | baz=248,slow=75,SNR=52 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.65** | **63** | T | T | 19 50 40.4 | |
| | baz=248,slow=75,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.65** | **62** | T | T | 19 50 42.0 | |
| | baz=248,slow=75,SNR=16 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.26** | **61** | T | T | 19 51 25.3 | |
| | baz=247,slow=75,SNR=104 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.27** | **61** | T | T | 19 51 26.2 | |
| | baz=247,slow=75,SNR=81 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.27** | **61** | T | T | 19 51 28.2 | |
| | baz=247,slow=75,SNR=88 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.95** | **326** | P | P | 19 09 43.4 | -0.1 |
| | 0.1nm,0.6s,baz=116,slow=7.9,SNR=2.0 | | | | | | |

*TUL **17** 18:59:42.1±1.9, 35°.66N±0°.01×97°.39W±0°.02, h7$^{km}$±2$^{km}$, ML3.0, mb_Lg2.8/31(NEIC), Error ellipse: s-maj=2.0km s-min=1.4km az=125.0*

**NEIC 17 18:59:42.0**±0.9, **35°.68N**±0°.01×**97°.40W**±0°.02, **h10**$^{km}$±2$^{km}$, **Error ellipse: s-maj=2.1km s-min=1.6km az=132.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.10** | **191** | | Pg | 18 59 44.5 | -0.2 |
| OK009 | | | | Sg | Sg | 18 59 46.3 | -0.2 |
| **OK001** | **Jones High Sch** | **0.15** | **144** | Pg | Pg | 18 59 45.4 | 0.0 |
| OK001 | | | | Sg | Sg | 18 59 47.7 | 0.0 |
| **OK005** | **Luther M Schoo** | **0.17** | **99** | Pg | Pg | 18 59 46.0 | +0.3 |
| OK005 | | | | Sg | Sg | 18 59 48.8 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.27** | **189** | | Pg | 18 59 47.5 | +0.1 |
| OKCFA | | | | Sg | Sg | 18 59 48.5 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **187** | Pg | Pg | 18 59 47.6 | -0.1 |
| OKCSW | | | | Sg | Sg | 18 59 51.6 | +0.2 |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 18 59 50.3 | -0.1 |
| FNO | | | | Sg | Sg | 18 59 56.3 | +0.3 |
| **W35A** | **Tecumseh** | **0.68** | **141** | Pg | Pg | 18 59 54.8 | -0.3 |
| W35A | | | | Sg | Sg | 19 00 04.0 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.14** | **198** | | Pb | 19 00 03.7 | 0.0 |
| **TUL1** | **Leonard** | **1.33** | **80** | | Pn | 19 00 05.9 | -0.7 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pb | 19 00 08.3 | -0.3 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | Pn | Pn | 19 00 08.3 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.47** | **299** | Pn | Pn | 19 00 08.5 | -0.1 |
| **X37A** | **Clayton** | **1.99** | **123** | Pn | Pn | 19 00 16.0 | +0.4 |
| X37A | | | | IAmb_Lg | | 19 00 47.6 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.56** | **72** | | Pn | 19 00 23.9 | +0.4 |
| **HHAR** | **Hobbs** | **2.87** | **77** | | Pn | 19 00 28.6 | +0.8 |
| **R32A** | **Long Quarter,** | **2.93** | **339** | | Pn | 19 00 29.0 | +0.4 |
| **W39A** | **Magazine** | **2.99** | **98** | Pn | Pn | 19 00 30.5 | +1.0 |
| W39A | | | | IAmb_Lg | | 19 01 23.9 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.13** | **140** | | Pn | 19 00 31.1 | -0.3 |
| **MIAR** | **Mount Ida** | **3.33** | **109** | Pn | Pn | 19 00 33.9 | -0.3 |
| **CBKS** | **Cedar Bluff** | **3.64** | **330** | | Pn | 19 00 37.2 | -1.3 |
| **U40A** | **Yellville** | **3.75** | **78** | | Pn | 19 00 38.5 | -1.3 |
| U40A | | | | IAmb_Lg | | 19 01 45.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.84** | **57** | | Pn | 19 00 39.9 | -1.2 |
| **X40A** | **Basin Creek Fa** | **3.93** | **106** | IAmb_Lg | | 19 01 49.1 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.19** | **94** | Pn | Pn | 19 00 45.0 | -0.9 |
| **W41B** | **Gary Mavity, V** | **4.24** | **95** | IAmb_Lg | | 19 02 05.7 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.74** | **250** | | Pn | 19 00 52.8 | -0.8 |
| MSTX | | | | IAmb_Lg | | 19 02 16.8 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **R40A** | **Maddies Statio** | **4.86** | **56** | IAmb_Lg | | 19 02 25.6 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **4.99** | **37** | | Pn | 19 00 56.2 | -0.7 |
| **KSCO** | **Kaye Shedlock'** | **5.33** | **310** | IAmb_Lg | | 19 02 42.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.47** | **63** | IAmb_Lg | | 19 02 39.7 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.57** | **202** | IAmb_Lg | | 19 02 53.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.73** | **46** | IAmb_Lg | | 19 02 45.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.74** | **77** | IAmb_Lg | | 19 02 47.2 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.75** | **354** | IAmb_Lg | | 19 02 57.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.84** | **286** | IAmb_Lg | | 19 02 48.3 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **6.84** | **71** | IAmb_Lg | | 19 03 21.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **T45A** | **Paducah** | **7.19** | **77** | IAmb_Lg | | 19 03 49.2 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **RSSD** | **Black Hills** | **9.85** | **331** | IAmb_Lg | | 19 04 52.2 | |
| | comp=Z,7.1nm,0.8s | | | | | | |

**IDC 17 19:15:17.1**±3.1, **0°.77N×128°.58E, h0**$^{km}$, **mb3.2/3, mb1 3.4/3, mb1mx3.0/28, mbtmp3.2/3, Error ellipse: s-maj=251.7km s-min=29.6km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.34** | **165** | P | P | 19 20 04.9 | -1.2 |
| | 0.2nm,0.6s,baz=345,slow=11,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **24.83** | **168** | P | P | 19 20 42.0 | +0.7 |
| | 0.7nm,0.8s,baz=343,slow=11,SNR=7.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.96** | **61** | T | T | 20 07 19.0 | |
| | baz=247,slow=75,SNR=6.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.97** | **61** | T | T | 20 07 19.9 | |
| | baz=247,slow=75,SNR=7.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.98** | **61** | T | T | 20 07 20.3 | |
| | baz=247,slow=75,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.03** | **325** | P | P | 19 25 32.6 | -0.1 |
| | 0.1nm,0.5s,baz=125,slow=8.5,SNR=1.7 | | | | | | |

*IDC **17** 19:26:47.7±0.6, 3°.45S×101°.50E, h0$^{km}$, mb4.5/30, mb1 4.6/32, mb1mx4.4/55, mbtmp4.5/32, ML4.2/2, MS3.3/2, Ms1 3.5/2, ms1mx3.0/79, Error ellipse: s-maj=25.1km s-min=10.5km az=45.0*

*DJA **17** 19:26:53.2±0.3, 4°.5±3°×10°1E±°, h10$^{km}$, M4.7/21, mb4.9/9, mB5.2/6, MLv4.8/21, Mw(mB)4.5/6*

*NEIC **17** 19:26:55.4±1.6, 3°.51S±0°.07×101°.49E±0°.07, h54$^{km}$±6$^{km}$, mb4.7/37, Error ellipse: s-maj=12.3km s-min=7.9km az=224.0*

**ISC 17 19:26:56.0**±0.9, **3°.49S**±0°.06×**101°.56E**±0°.06, **h63**$^{km}$±7$^{km}$, **n198, σ1$^{s}$26/207, mb4.8/69, 9C-2D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MASI** | **Maura Aman, Be** | **0.76** | **63** | P | **Pn** | **19 27 10.4** | **-0.8** |
| MASI | | | | S | **Sn** | **19 27 21.3** | **-1.1** |
| **KSI** | **Kapahiang** | **1.04** | **99** | P | **Pn** | **19 27 13.4** | **-1.3** |
| **KRJI** | **Kerinci** | **1.40** | **356** | P | **Pn** | **19 27 19.4** | **-0.1** |
| **JMBI** | **JAMBI** | **2.78** | **48** | P | **Pn** | **19 27 38.6** | **+0.5** |
| **MDSI** | **Maura Dua** | **2.79** | **111** | P | **Pn** | **19 27 39.0** | **+0.7** |
| **LWLI** | **Liwa** | **2.92** | **121** | P | **Pn** | **19 27 41.5** | **+1.4** |
| **RGRI** | **Rengat** | **3.22** | **14** | P | **Pn** | **19 27 45.2** | **+1.1** |
| **PMBI** | **Palembang** | **3.26** | **80** | | **Pn** | **19 27 44.1** | **-0.5** |
| **PMBI** | **Palembang** | **3.26** | **80** | P | **Pn** | **19 27 45.5** | **+0.9** |
| **PMBI** | **Palembang** | **3.26** | **80** | P | **Pn** | **19 27 46.2** | **+1.6** |
| **KLSI** | | **3.38** | **111** | P | **Pn** | **19 27 48.1** | **+1.8** |
| **KASI** | **Kota Agung** | **3.55** | **125** | P | **Pn** | **19 27 50.1** | **+1.4** |
| **KLI** | **Kotabumi** | **3.56** | **113** | P | **Pn** | **19 27 51.6** | **+2.8** |
| **BKNI** | **Bangkinang** | **3.83** | **352** | | **Pn** | **19 27 52.7** | **+0.2** |
| **BKNI** | **Bangkinang** | **3.83** | **352** | P | **Pn** | **19 27 53.7** | **+1.2** |
| **BKNI** | **Bangkinang** | **3.83** | **352** | P | **Pn** | **19 27 54.4** | **+1.9** |
| **BLSI** | **Bandar Lampung** | **4.12** | **117** | P | **Pn** | **19 27 58.8** | **+2.4** |
| **DSRI** | **Dabo** | **4.25** | **45** | P | **Pn** | **19 27 58.9** | **+0.7** |
| **PPBI**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **33.45** | **337** | *eP* | | **P** | **19 33 30.0** | **+0.5** |
| | comp=Z,36nm,0.8s | | | | | | | |
| **TAPN** | **Taplejung** | **33.45** | **337** | *eP* | | **PcP** | **19 36 10.9** | **+1.3** |
| **WRKA** | **Warakurna** | **33.47** | **132** | P | | **P** | **19 33 31.3** | **+1.9** |
| **RAMN** | **Ramite** | **33.54** | **335** | *eP* | | **P** | **19 33 31.7** | **+1.5** |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **33.54** | **335** | *eP* | | **PcP** | **19 36 11.3** | **+1.5** |
| **CD2** | **Chengdu** | **34.28** | **3** | P | | **P** | **19 33 35.5** | **-0.8** |
| **JIRN** | **Jiri** | **34.34** | **335** | *eP* | | **P** | **19 33 38.1** | **+0.9** |
| | comp=Z,45nm,0.8s | | | | | | | |
| **JIRN** | **Jiri** | **34.34** | **335** | *eP* | | **PcP** | **19 36 13.6** | **+1.4** |
| **ENH** | **Enshi** | **34.42** | **12** | P | | **P** | **19 33 36.9** | **-0.6** |
| **PKI** | **Pulchoki** | **34.59** | **334** | *eP* | | **P** | **19 33 39.8** | **+0.4** |
| | comp=Z,14nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **34.59** | **334** | *eP* | | **PcP** | **19 36 13.8** | **+0.9** |
| | comp=Z,3.2nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **34.60** | **334** | *eP* | | **P** | **19 33 39.8** | **+0.4** |
| | comp=Z,7.2nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **34.60** | **334** | *eP* | | **PcP** | **19 36 13.8** | **+0.9** |
| **GUN** | **Gumba** | **34.69** | **335** | *eP* | | **P** | **19 33 41.0** | **+0.8** |
| | comp=Z,66nm,0.5s | | | | | | | |
| **GUN** | **Gumba** | **34.69** | **335** | *eP* | | **PcP** | **19 36 14.3** | **+1.1** |
| **DMN** | **Daman** | **34.76** | **334** | *eP* | | **P** | **19 33 41.7** | **+1.0** |
| | comp=Z,8.1nm,0.4s | | | | | | | |
| **DMN** | **Daman** | **34.76** | **334** | *eP* | | **PcP** | **19 36 14.5** | **+1.2** |
| | comp=Z,7.9nm,0.3s | | | | | | | |
| **KKN** | **Kakani** | **34.84** | **334** | *eP* | | **P** | **19 33 42.0** | **+0.6** |
| | comp=Z,33nm,0.7s | | | | | | | |
| **KKN** | **Kakani** | **34.84** | **334** | *eP* | | **PcP** | **19 36 14.4** | **+0.9** |
| **GKN** | **Gorkha** | **35.30** | **334** | *eP* | | **P** | **19 33 46.0** | **+0.7** |
| | comp=Z,38nm,0.6s | | | | | | | |
| **GKN** | **Gorkha** | **35.30** | **334** | *eP* | | **PcP** | **19 36 15.3** | **+0.5** |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| **KOLN** | **Koldanda** | **35.58** | **332** | *eP* | | **P** | **19 33 48.8** | **+1.1** |
| | comp=Z,58nm,0.8s | | | | | | | |
| **KOLN** | **Koldanda** | **35.58** | **332** | *eP* | | **PcP** | **19 36 16.4** | **+0.8** |
| | comp=Z,10nm,0.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **35.88** | **119** | P | | **P** | **19 33 49.5** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | 19 33 51.2 | |
| | comp=Z,8.7nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.90** | **120** | P | | **P** | **19 33 50.4** | **0.0** |
| | comp=Z,5.1nm,0.3s,baz=298,slow=11,SNR=78 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **19 36 17.2** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=304,slow=2.0,SNR=1.2 | | | | | | | |
| WRA | | | | S | | **S** | **19 39 20.8** | **-3.5** |
| | comp=Z,0.8nm,0.9s,baz=299,slow=15,SNR=4.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.90** | **120** | P | | **P** | **19 33 50.0** | **-0.4** |
| **WRAB** | **Tennant Creek** | **35.91** | **120** | P | | **P** | **19 33 50.7** | **+0.2** |
| WRAB | | | | IAmb | | IAmb | 19 33 51.7 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.91** | **120** | P | | **P** | **19 33 51.1** | **+0.6** |
| **WB2** | **Warramunga Arr** | **35.91** | **120** | P | | **P** | **19 33 50.1** | **-0.4** |
| **DANN** | **Dangsing** | **36.00** | **333** | *eP* | | **P** | **19 33 52.3** | **+0.9** |
| | comp=Z,27nm,0.5s | | | | | | | |
| **DANN** | **Dangsing** | **36.00** | **333** | *eP* | | **PcP** | **19 36 17.6** | **+0.6** |
| **WR0** | **Warramunga Arr** | **36.08** | **120** | P | | **P** | **19 33 51.4** | **-0.6** |
| **PYUN** | **Piuthan** | **36.14** | **332** | *eP* | | **P** | **19 33 53.5** | **+0.9** |
| **PYUN** | **Piuthan** | **36.14** | **332** | *eP* | | **PcP** | **19 36 17.9** | **+0.6** |
| | comp=Z,9.1nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **37.12** | **126** | P | | **P** | **19 34 00.8** | **0.0** |
| AS31 | | | | IAmb | | IAmb | 19 34 03.2 | |
| | comp=Z,3.4nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **37.12** | **126** | P | | **P** | **19 34 01.1** | **+0.4** |
| | comp=Z,5.3nm,0.4s,baz=299,slow=7.8,SNR=181 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **19 36 21.3** | **+1.1** |
| | comp=Z,0.4nm,0.4s,baz=314,slow=2.5,SNR=2.6 | | | | | | | |
| ASAR | | | | S | | **S** | **19 39 39.9** | **-3.0** |
| | comp=Z,0.6nm,1.1s,baz=298,slow=15,SNR=1.6 | | | | | | | |
| **XAN** | **Xi'an** | **37.97** | **10** | P | | **P** | **19 34 07.1** | **-0.7** |
| XAN | | | | sP | | sP | 19 34 28.6 | -2.3 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=N,270nm,19.2s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=E,250nm,19.2s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,270nm,18.1s | | | | | | | |
| **NJ2** | **Nanjing** | **38.98** | **24** | *eP* | | **P** | **19 34 19.3** | **+3.1** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **LZH** | **Lanzhou** | **39.43** | **3** | ⇓P | | **P** | **19 34 19.6** | **-0.5** |
| LZH | | | | pP | | pP | 19 34 29.8 | -6.1 |
| LZH | | | | sP | | sP | 19 34 36.3 | -7.0 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | | |
| **GOMU** | **GeErMu** | **39.99** | **351** | P | | **P** | **19 34 24.1** | **-0.9** |
| GOMU | | | | pP | | pP | 19 34 26.8 | -14 |
| GOMU | | | | sP | | sP | 19 34 28.3 | -20 |
| GOMU | | | | PcP | | **PcP** | **19 36 32.9** | **+3.7** |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **OOD** | **Oodnadatta** | **40.53** | **130** | P | | **P** | **19 34 30.3** | **+1.1** |
| **MULG** | **Mulgathing** | **40.66** | **134** | P | | **P** | **19 34 32.0** | **+1.8** |
| **QIS** | **Mount Isa** | **40.73** | **118** | P | | **P** | **19 34 31.3** | **+0.3** |
| **GTA** | **Gaotai** | **42.72** | **358** | *eP* | | **P** | **19 34 47.3** | **+0.2** |
| GTA | | | | pP | | pP | 19 35 00.5 | -2.6 |
| GTA | | | | sP | | sP | 19 35 06.5 | -3.8 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.50** | **136** | P | | **P** | **19 34 54.7** | **+1.3** |
| **LCRK** | **Leigh Creek** | **43.78** | **132** | P | | **P** | **19 34 57.4** | **+1.8** |
| **INKA** | **Innaminka** | **44.46** | **127** | P | | **P** | **19 35 03.4** | **+2.3** |
| **HHC** | **Hu-ho-hao-te** | **45.07** | **11** | *eP* | | **P** | **19 35 09.5** | **+3.6** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,300nm,6.9s | | | | | | | |
| **NAPP** | **Napperby** | **45.16** | **135** | P | | **P** | **19 35 08.3** | **+1.7** |
| | comp=Z,7.5nm,0.7s | | | | | | | |
| **NIL** | **Nilore** | **45.60** | **326** | P | | **P** | **19 35 09.7** | **-0.4** |
| **HTT** | **Hallett** | **45.84** | **135** | P | | **P** | **19 35 14.2** | **+2.1** |
| **STKA** | **Stephens Creek** | **47.00** | **132** | P | | **P** | **19 35 22.1** | **+0.9** |
| | comp=Z,4.2nm,0.5s,baz=308,slow=7.5,SNR=21 | | | | | | | |
| **STKA** | **Stephens Creek** | **47.00** | **132** | P | | **P** | **19 35 21.3** | **+0.2** |
| **STKA** | **Stephens Creek** | **47.00** | **132** | P | | **P** | **19 35 21.8** | **+0.7** |
| | comp=Z,2.0nm,1.3s | | | | | | | |
| **KSRS** | **Korea Array** | **47.54** | **29** | P | | **P** | **19 35 25.3** | **+0.1** |
| | comp=Z,9nm,0.6s,baz=212,slow=8.0,SNR=4.6 | | | | | | | |
| **WMQ** | **Urumqi** | **48.73** | **347** | *eP* | | **P** | **19 35 35.4** | **+1.1** |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,78nm,0.7s | | | | | | | |
| **KSH** | **Kashi** | **48.85** | **334** | P | | **P** | **19 35 34.6** | **-0.8** |
| KSH | | | | pP | | pP | 19 35 47.8 | -3.9 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **48.95** | **14** | *eP* | | **P** | **19 35 36.5** | **+0.4** |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,170nm,5.1s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **49.97** | **129** | P | | **P** | **19 35 45.7** | **+1.8** |
| **SONM** | **Songino Array** | **51.29** | **4** | P | | **P** | **19 35 54.5** | **+0.7** |
| | comp=Z,10nm,0.6s,baz=187,slow=9.9,SNR=115 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **19 37 07.7** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=191,slow=4.1,SNR=8.6 | | | | | | | |
| **SONM** | **Songino Array** | **51.29** | **4** | P | | **P** | **19 35 54.5** | **+0.7** |
| SONM | | | | IAmb | | IAmb | 19 35 55.3 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.37** | **5** | P | | **P** | **19 35 55.0** | **+0.6** |
| ULN | | | | IAmb | | IAmb | 19 35 55.9 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **CN2** | **Changchun** | **51.75** | **22** | *eP* | | **P** | **19 35 55.8** | **-1.3** |
| CN2 | | | | *eS* | | **S** | **19 43 12.6** | **-1.7** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=N,200nm,15.1s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=E,300nm,15.1s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,300nm,16.0s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.82** | **336** | P | | **P** | **19 35 58.9** | **+1.1** |
| | SNR=6.7 | | | | | | | |
| **KBK** | **Karagaybulak** | **51.87** | **335** | P | | **P** | **19 35 59.4** | **+1.2** |
| | SNR=6.1 | | | | | | | |
| **AML** | **Almayashu** | **51.98** | **334** | P | | **P** | **19 36 00.1** | **+0.7** |
| | SNR=10 | | | | | | | |
| **AAK** | **Ala-Archa** | **52.05** | **335** | P | | **P** | **19 36 00.1** | **+0.6** |
| | comp=Z,2.5nm,0.7s,baz=163,slow=7.0,SNR=16 | | | | | | | |
| AAK | | | | PcP | | **PcP** | **19 37 11.5** | **+0.5** |
| | comp=Z,1.1nm,0.6s,baz=140,slow=6.4,SNR=3.7 | | | | | | | |
| **AAK** | **Ala-Archa** | **52.05** | **335** | P | | **P** | **19 35 59.9** | **+0.4** |
| AAK | | | | IAmb | | IAmb | 19 36 07.3 | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **CHMS** | **Chumysh** | **52.23** | **335** | P | | **P** | **19 36 01.2** | **+0.5** |
| | SNR=5.6 | | | | | | | |
| **EKS2** | **Erkin-Say** | **52.37** | **334** | P | | **P** | **19 36 02.6** | **+0.7** |
| | SNR=25 | | | | | | | |
| **MAT** | **Matsushiro** | **52.48** | **37** | P | | **P** | **19 36 01.3** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **52.48** | **37** | P | | **P** | **19 36 01.7** | **-0.9** |
| | comp=Z,1.1nm,0.5s,baz=210,slow=8.1,SNR=2.6 | | | | | | | |
| **MK31** | **Makanchi Array** | **52.89** | **343** | P | | **P** | **19 36 05.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **52.89** | **343** | P | | **P** | **19 36 05.6** | **+0.1** |
| | comp=Z,18nm,0.4s,baz=157,slow=9.0,SNR=549 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **19 37 15.1** | **+1.2** |
| | comp=Z,0.7nm,0.4s,baz=108,slow=11,SNR=0.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.89** | **343** | P | | **P** | **19 36 05.3** | **-0.2** |
| **MAKZ** | **Makanchi** | **52.99** | **343** | P | | **P** | **19 36 06.0** | **-0.3** |
| **BNX** | **BinXian** | **54.13** | **22** | ⇓P | | **P** | **19 36 15.0** | **+0.4** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,290nm,4.2s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.76** | **26** | P | | **P** | **19 36 19.5** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **54.76** | **26** | P | | **P** | **19 36 19.5** | **+0.3** |
| | comp=Z,8.2nm,0.5s,baz=215,slow=4.5,SNR=32 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.76** | **26** | P | | **P** | **19 36 19.3** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **57.42** | **343** | P | | **P** | **19 36 37.8** | **-0.2** |
| | comp=Z,29nm,0.3s,baz=162,slow=6.4,SNR=35 | | | | | | | |
| KURBB | | | | PcP | | **PcP** | **19 37 31.4** | **+0.1** |
| | comp=Z,1.9nm,0.5s,baz=157,slow=3.4,SNR=1.1 | | | | | | | |
| **KURK** | **Kurchatov** | **57.48** | **343** | P | | **P** | **19 36 38.3** | **-0.1** |
| KURK | | | | IAmb | | IAmb | 19 36 40.5 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.92** | **349** | P | | **P** | **19 36 48.2** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **58.92** | **349** | P | | **P** | **19 36 48.2** | **-0.3** |
| | comp=Z,13nm,0.4s,baz=160,slow=6.0,SNR=93 | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.12** | **339** | P | | **P** | **19 37 09.5** | **-0.8** |
| | comp=Z,4.4nm,0.5s,baz=88,slow=14,SNR=14 | | | | | | | |
| **BRVK** | **Borovoye** | **62.18** | **339** | P | | **P** | **19 37 09.9** | **-0.8** |
| BRVK | | | | IAmb | | IAmb | 19 37 10.4 | |
| | comp=Z,4.8nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **63.69** | **331** | P | | **P** | **19 37 20.3** | **-0.5** |
| **ABKAR** | **Akbulak array** | **63.69** | **331** | P | | **P** | **19 37 20.0** | **-0.8** |
| ABKAR | | | | IAmb | | IAmb | 19 37 21.3 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **65.41** | **331** | P | | **P** | **19 37 31.4** | **-0.6** |
| | comp=Z,1.8nm,0.4s,baz=129,slow=3.3,SNR=7.4 | | | | | | | |
| **DZM** | **Mont Dzumac** | **65.44** | **113** | P | | **P** | **19 37 33.2** | **+0.3** |
| | comp=Z,3.2nm,0.7s,baz=294,slow=9.8,SNR=1.6 | | | | | | | |
| **GNI** | **Garni** | **67.68** | **316** | P | | **P** | **19 37 46.9** | **0.0** |
| | comp=Z,1.8nm,0.5s,baz=66,slow=17,SNR=2.4 | | | | | | | |
| **YAK** | **Yakutsk** | **68.80** | **14** | P | | **P** | **19 37 52.1** | **-1.1** |
| **GURO** | **Guroymak-BITLI** | **68.94** | **314** | P | | **P** | **19 37 54.9** | **+0.1** |
| **ARU** | **Arti** | **69.19** | **336** | P | | **P** | **19 37 55.2** | **-0.5** |
| ARU | | | | IAmb | | IAmb | 19 37 58.0 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **70.45** | **319** | P | | **P** | **19 38 04.2** | **+0.5** |
| | comp=Z,6.5nm,0.8s,baz=99,slow=5.5,SNR=15 | | | | | | | |
| **KIV** | **Kislovodsk** | **70.69** | **319** | ⇑P | | **P** | **19 38 05.8** | **+0.4** |
| **NRIK** | **Noril'sk** | **73.31** | **355** | P | | **P** | **19 38 18.6** | **-1.9** |
| | comp=Z,2.1nm,0.4s,baz=144,slow=5.4,SNR=3.8 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.32** | **32** | P | | **P** | **19 38 20.2** | **-0.6** |
| | comp=Z,1.4nm,0.5s,baz=326,slow=0.7,SNR=8.3 | | | | | | | |
| **MA2** | **Magadan** | **73.75** | **24** | P | | **P** | **19 38 23.1** | **-0.1** |
| MA2 | | | | IAmb | | IAmb | 19 38 24.2 | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **CSS** | **Mathiatis** | **74.36** | **308** | P | | **P** | **19 38 26.6** | **-0.8** |
| CSS | | | | IAmb | | IAmb | 19 38 29.3 | |
| | comp=Z,6.9nm,1.0s | | | | | | | |
| **KIRV** | **Kirov** | **74.38** | **335** | P | | **P** | **19 38 27.4** | **+0.6** |
| | comp=Z,11nm,0.7s,baz=144,slow=9.9,SNR=3.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.47** | **312** | P | | **P** | **19 38 33.5** | **-0.2** |
| | comp=Z,3.3nm,0.5s,baz=146,slow=7.2,SNR=8.8 | | | | | | | |
| **TIXI** | **Tiksi** | **77.08** | **9** | P | | **P** | **19 38 40.6** | **-1.4** |
| TIXI | | | | IAmb | | IAmb | 19 38 41.7 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **SORM** | **Soroca** | **81.48** | **320** | ⇑P | | **P** | **19 39 06.7** | **+0.2** |
| **AKASG** | **Malin Array Be** | **81.61** | **322** | P | | **P** | **19 39 06.4** | **-0.7** |
| | comp=Z,1.2nm,0.5s,baz=89,slow=4.7,SNR=7.8 | | | | | | | |
| **VRI** | **Vrincioaia** | **82.00** | **317** | ⇑P | | **P** | **19 39 10.6** | **+1.3** |
| **MLR** | **Muntele Rosu** | **82.45** | **317** | ⇑P | | **P** | **19 39 12.5** | **+0.7** |
| **MLR** | **Muntele Rosu** | **82.45** | **317** | P | | **P** | **19 39 12.4** | **+0.7** |
| | comp=Z,3.4nm,0.8s,baz=162,slow=4.7,SNR=4.6 | | | | | | | |
| **MLR** | **Muntele Rosu** | **82.45** | **317** | P | | **P** | **19 39 12.1** | **+0.2** |
| MLR | | | | IAmb | | IAmb | 19 39 13.9 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **BURAR** | **Bucovina Array** | **83.40** | **319** | ⇑P | | **P** | **19 39 17.5** | **+0.8** |
| **BUR08** | **Bucovina Ar. S** | **83.42** | **319** | P | | **P** | **19 39 17.4** | **+0.6** |
| BUR08 | | | | IAmb | | IAmb | 19 39 20.9 | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **VTS** | **Vitosha** | **83.78** | **313** | ⇑P | | **P** | **19 39 19.5** | **+0.7** |
| **LIT** | **Litokhoron** | **83.90** | **311** | P | | **P** | **19 39 18.0** | **-1.3** |
| LIT | | | | IAmb | | IAmb | 19 39 20.0 | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **DRGR** | | **84.91** | **317** | ⇑P | | **P** | **19 39 24.9** | **+0.6** |
| **TRPA** | **Tarpa** | **85.27** | **319** | ⇑P | | **P** | **19 39 26.3** | **+0.4** |
| **BZS** | **Buzias** | **85.46** | **316** | ⇑P | | **P** | **19 39 27.7** | **+0.7** |
| **FINES** | **FINESS Array B** | **86.15** | **332** | P | | **P** | **19 39 30.1** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=104,slow=6.1,SNR=9.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.40** | **340** | P | | **P** | **19 39 40.8** | **+0.1** |
| | comp=Z,4.6nm,0.8s,baz=96,slow=7.6,SNR=10 | | | | | | | |
| **GERES** | **GERESS Array B** | **91.19** | **319** | P | | **P** | **19 39 53.7** | **-0.6** |
| | comp=Z,0.5nm,0.6s,baz=50,slow=4.2,SNR=5.9 | | | | | | | |
| **HFS** | **Hagfors** | **91.94** | **330** | P | | **P** | **19 39 57.6** | **+0.2** |
| | comp=Z,3.2nm,0.8s,baz=140,slow=7.4,SNR=2.3 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **92.41** | **348** | P | | **P** | **19 39 58.2** | **-1.1** |
| | comp=Z,5.3nm,0.9s,baz=150,slow=15,SNR=1.0 | | | | | | | |
| **NOA** | **NORSAR Array B** | **93.20** | **331** | P | | **P** | **19 40 02.8** | **-0.4** |
| | comp=Z,0.7nm,0.8s,baz=96,slow=4.6,SNR=1.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **132.09** | **31** | PKP | | **PKiKP** | **19 46 04.2** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=38,slow=2.4,SNR=5.1 | | | | | | | |
| **PDAR** | **Pinedale Array** | **132.09** | **31** | | | **PKPdf** | **19 46 02.7** | **-0.5** |
| **BDFB** | **Brasilia** | **144.39** | **237** | PKP | | **PKPdf** | **19 46 26.7** | **+0.4** |
| | comp=Z,2.1nm,0.5s,baz=135,slow=2.9,SNR=3.6 | | | | | | | |
| **BDFB** | **Brasilia** | **144.39** | **237** | | | **PKPab** | **19 46 24.1** | **-0.3** |
| **TXAR** | **Lajitas Array** | **144.88** | **40** | PKP | | **PKPdf** | **19 46 26.7** | **-0.1** |
| | comp=Z,5.8nm,0.5s,baz=267,slow=0.9,SNR=82 | | | | | | | |
| **TXAR** | **Lajitas Array** | **144.88** | **40** | | | **PKPdf** | **19 46 26.4** | **-0.3** |

*IDC **17**20:00:25.8±2.1,13°.72S×170°.18E,h628km±27km,mb2.7/5, mb1 3.0/7,mb1mx2.8/36,mbtmp3.7/7,Error ellipse: s-maj=39.3km s-min=18.4km az=168.0*

**ISC 17 20:00:24.1±0.9,13°.45S±0°.2×170°.2E±0°.1,h600km,n9, σ2s05/10,mb3.3/5,Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **8.69** | **120** | P | **P** | **20 02 32.2** | **+2.1** |
| | 0.5nm,0.3s,baz=280,slow=22,SNR=1.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.30** | **202** | P | **P** | **20 02 36.9** | **+0.8** |
| | 0.2nm,0.3s,baz=130,slow=23,SNR=1.5 | | | | | | |
| **RAO** | **Raoul Island** | **19.22** | **147** | P | **P** | **20 04 07.3** | **-3.4** |
| | 175nm,0.3s,baz=119,slow=22,SNR=3.2 | | | | | | |
| **STKA** | **Stephens Creek** | **32.00** | **230** | P | **P** | **20 06 02.5** | **-0.4** |
| | 0.6nm,0.4s,baz=53,slow=6.8,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.90** | **254** | P | **P** | **20 06 26.5** | **-0.9** |
| | 0.3nm,0.4s,baz=86,slow=8.6,SNR=9.1 | | | | | | |
| **ASAR** | **Alice Springs** | **35.79** | **248** | P | **P** | **20 06 32.9** | **-1.8** |
| | 0.9nm,0.4s,baz=77,slow=9.2,SNR=32 | | | | | | |
| ASAR | | | | ScP | **S** | **20 11 33.7** | **+2.9** |
| | 0.4nm,0.8s,baz=88,slow=4.0,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **84.44** | **17** | P | **P** | **20 11 54.0** | **-0.1** |
| | 0.2nm,0.5s,baz=232,slow=4.8,SNR=1.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.17** | **61** | P | **P** | **20 12 36.5** | **+0.7** |
| | 0.1nm,0.4s,baz=278,slow=6.3,SNR=2.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.69** | **346** | PKP | **PKPdf** | **20 18 05.7** | **-0.6** |
| | 22nm,1.3s,baz=64,slow=2.1,SNR=2.1 | | | | | | |

**IDC 17 20:16:37.6±1.7,0°.67N×129°.11E,h0km,mb3.3/3, mb1 3.6/4,mb1mx3.4/31,mbtmp3.4/4,ML3.2/1,Error ellipse: s-maj=56.3km s-min=24.4km az=52.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.65** | **125** | Pn | Pn | **20 17 21.9** | **+0.3** |
| | 4.0nm,0.3s,baz=96,slow=15,SNR=36 | | | | | | |
| SIJI | | | | Sn | Sn | 20 17 55.2 | +0.8 |
| | 2.5nm,0.3s,baz=47,slow=24,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.12** | **166** | P | P | 20 21 23.9 | -0.2 |
| | 0.4nm,0.5s,baz=347,slow=11,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **24.64** | **169** | P | P | 20 22 00.0 | -0.1 |
| | 1.9nm,0.7s,baz=346,slow=10,SNR=15 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.92** | **62** | T | T | 21 07 51.6 | |
| | baz=248,slow=75,SNR=35 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.93** | **62** | T | T | 21 07 50.8 | |
| | baz=248,slow=75,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.93** | **62** | T | T | 21 07 53.1 | |
| | baz=248,slow=75,SNR=8.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.55** | **60** | T | T | 21 08 33.3 | |
| | baz=247,slow=75,SNR=37 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.56** | **60** | T | T | 21 08 33.2 | |
| | baz=247,slow=75,SNR=48 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.57** | **60** | T | T | 21 08 34.8 | |
| | baz=247,slow=75,SNR=50 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.41** | **325** | P | P | 20 26 55.7 | 0.0 |
| | 0.2nm,0.5s,baz=118,slow=8.6,SNR=2.1 | | | | | | |

*IDC **17**20:28:51.0±1.9,5°.09S×129°.54E,h182km±24km,mb3.0/1, mb1 3.5/6,mb1mx3.0/41,mbtmp4.0/6,Error ellipse: s-maj=37.3km s-min=17.8km az=92.0*
*DJA **17**20:28:54.4±0.8,5°.5S×13°.0E±°,h156km±20km,M4.4/6, MLv4.4/6*

**ISC 17 20:28:50.0±0.9,5°.11S±0°.06×129°.61E±0°.09,h200km,n9, σ3s38/14,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **1.88** | **339** | P | **Pn** | **20 29 28.2** | **+0.9** |
| **SAUI** | **Saumlaki** | **3.32** | **150** | P | **Pn** | **20 29 47.3** | **+3.9** |
| **SIJI** | **Sorong** | **4.52** | **22** | P | **Pn** | **20 29 59.3** | **+0.9** |
| | 18nm,0.3s,baz=41,slow=7.7,SNR=133 | | | | | | |
| SIJI | | | | S | **Sn** | **20 30 48.8** | **-3.4** |
| | 15nm,0.3s,baz=219,slow=23,SNR=20 | | | | | | |
| **SANI** | **Sanana** | **4.72** | **310** | P | **Pn** | **20 30 02.5** | **+1.6** |
| SANI | | | | S | **Sn** | **20 30 55.3** | **-1.4** |
| **BATI** | **Baumata** | **7.77** | **229** | P | **Pn** | **20 30 42.4** | **+2.1** |
| | 1.4nm,0.3s,baz=276,slow=21,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.48** | **196** | P | **Pn** | **20 31 54.6** | **+1.0** |
| | 0.3nm,0.3s,baz=25,slow=14,SNR=1.8 | | | | | | |
| FITZ | | | | S | **S** | **20 34 18.6** | **-5.3** |
| | 0.1nm,0.3s,baz=323,slow=21,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.45** | **163** | P | **Pn** | **20 32 18.3** | **+0.5** |
| | 0.3nm,0.3s,baz=339,slow=12,SNR=4.6 | | | | | | |
| WRA | | | | S | **S** | **20 35 02.2** | **-7.2** |
| | 0.4nm,0.3s,baz=334,slow=20,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **18.91** | **168** | P | **Pn** | **20 32 59.3** | **+0.4** |
| | 0.7nm,0.3s,baz=347,slow=11,SNR=43 | | | | | | |
| ASAR | | | | S | **S** | **20 36 19.5** | **-0.7** |
| | baz=348,slow=20,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.44** | **327** | P | **P** | **20 39 20.2** | **+2.4** |
| | 0.2nm,0.4s,baz=114,slow=7.5,SNR=6.4 | | | | | | |

*IDC **17**20:41:14.3±4.4,36°.23N×71°.17E,h215km±37km,mb3.2/9, mb1 3.3/14,mb1mx3.0/57,mbtmp3.9/14,Error ellipse: s-maj=33.4km s-min=19.0km az=15.0*
*NNC **17**20:41:15.0±5.6,36°.82N×70°.62E,h0km,mb4.4,mpv4.3, Error ellipse: s-maj=47.9km s-min=38.4km az=159.0*

**ISC 17 20:41:17.9±0.7,36°.47N±0°.07×71°.33E±0°.10,h250km,n41, σ1s39/42,mb3.3/8,2C-6D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CEP** | **Cherat** | **2.68** | **170** | P | Pn | 20 42 06.4 | -0.8 |
| CEP | | | | S | **S** | **20 42 44.0** | **-2.1** |
| **THW** | **Thamme Wali** | **3.68** | **175** | ⇓P | Pn | 20 42 17.2 | -0.8 |
| **AML** | **Almayashu** | **5.95** | **17** | P | **Pn** | **20 42 44.8** | **-0.9** |
| | SNR=171 | | | | | | |
| **UCH** | **Uchtor** | **6.26** | **22** | P | **Pn** | **20 42 49.1** | **-0.5** |
| | SNR=113 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **16** | P | **Pn** | **20 42 51.5** | **-0.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JIRN** | **Jiri** | **15.34** | **121** | *e*P | | **Pn** | **20 44 43.5** | **+0.9** |
| | 17nm,0.5s | | | | | | | |
| **RAMN** | **Ramite** | **16.07** | **122** | *e*P | | **Pn** | **20 44 51.7** | **+0.6** |
| | 1.4nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.57** | **358** | P | | **Pn** | **20 44 56.4** | **-0.1** |
| | 1.2nm,0.3s,baz=181,slow=12,SNR=18 | | | | | | | |
| **TAPN** | **Taplejung** | **16.60** | **119** | *e*P | | **Pn** | **20 44 58.5** | **+1.2** |
| | 3.4nm,0.3s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.94** | **330** | P | | **Pn** | **20 44 59.8** | **-1.0** |
| | 3.3nm,0.3s,baz=139,slow=8.9,SNR=50 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.94** | **330** | ‖Pn | | **Pn** | **20 45 03.0** | **+2.2** |
| | 10nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.84** | **24** | P | | **P** | **20 45 30.5** | **+0.6** |
| | 2.0nm,0.3s,baz=217,slow=10,SNR=12 | | | | | | | |
| **ARU** | **Arti** | **21.75** | **341** | P | | **P** | **20 45 50.2** | **+1.0** |
| | 0.4nm,0.4s,baz=123,slow=7.1,SNR=5.3 | | | | | | | |
| **SONM** | **Songino Array** | **28.14** | **55** | P | | **P** | **20 46 49.5** | **+2.5** |
| | 0.5nm,0.8s,baz=267,slow=7.4,SNR=5.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.66** | **326** | P | | **P** | **20 48 09.3** | **+0.5** |
| | 1.7nm,0.8s,baz=132,slow=8.0,SNR=7.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.28** | **338** | P | | **P** | **20 48 39.7** | **+1.2** |
| | 3.7nm,0.8s,baz=115,slow=8.0,SNR=12 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.57** | **323** | P | | **P** | **20 49 05.2** | **+0.3** |
| | 1.0nm,0.9s,baz=101,slow=7.7,SNR=2.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.98** | **269** | P | | **P** | **20 51 36.3** | **-1.6** |
| | 0.3nm,0.4s,baz=59,slow=5.9,SNR=2.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.27** | **3** | P | | **P** | **20 53 07.2** | **+1.5** |
| | 0.2nm,0.4s,baz=352,slow=5.5,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.75** | **122** | P | | **P** | **20 53 09.1** | **+0.2** |
| | 0.7nm,1.1s,baz=327,slow=4.8,SNR=2.0 | | | | | | | |

*NEIC* ***17*** *20:50:40.9±1.9, 7.°66S×0.°06×126.°74E±0.°05, h193km±10km, mb4.0/13, Error ellipse: s-maj=11.1km s-min=3.0km az=138.0*

*IDC* ***17*** *20:50:41.1±1.6, 7.°61S×126.°71E, h184km±18km, mb3.6/6, mb1 3.7/11, mb1mx3.4/30, mbtmp4.1/11, Error ellipse: s-maj=19.6km s-min=14.9km az=65.0*

*DJA* ***17*** *20:50:41.5±0.4, 8.°S×12.°7E±.°, h198km±9km, M4.4/10, mb4.3/4, mB4.7/1, MLv4.5/10, Mw(mB)3.9/1*

**ISC 17 20:50:41.0**±0.5, **7.°67S**±0.°05×**126.°79E**±0.°05, **h200**km, **n55,** σ1§**52**/57, **mb4.1**/21, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **3.24** | **230** | Pn | | | **Pn** | **20 51 31.5** | **-2.1** |
| **SOEI** | **Soe** | **3.24** | **230** | P | | | **Pn** | **20 51 33.9** | **+0.2** |
| **BATI** | **Baumata** | **3.99** | **231** | P | | | **Pn** | **20 51 42.9** | **+0.2** |
| | 197nm,0.3s,baz=90,slow=2.1,SNR=205 | | | | | | | | |
| BATI | | | | S | | | **Sn** | **20 52 29.7** | **-1.4** |
| | 38nm,0.3s,baz=300,slow=20,SNR=12 | | | | | | | | |
| **BATI** | **Baumata** | **3.99** | **231** | P | | | **Pn** | **20 51 42.9** | **+0.2** |
| **AAI** | **Ambon** | **4.20** | **20** | P | | | **Pn** | **20 51 46.8** | **+1.5** |
| **SAUI** | **Saumlaki** | **4.48** | **94** | Pn | | | **Pn** | **20 51 50.2** | **+1.4** |
| SAUI | | | | | | | **Sn** | **20 52 40.0** | **-2.1** |
| **SAUI** | **Saumlaki** | **4.48** | **94** | P | | | **Pn** | **20 51 51.0** | **+2.2** |
| **MMRI** | **Maumere** | **4.61** | **258** | Pn | | | **Pn** | **20 51 49.3** | **-1.1** |
| **MMRI** | **Maumere** | **4.61** | **258** | P | | | **Pn** | **20 51 49.5** | **-1.0** |
| **BASI** | **Baing, Sumba** | **6.64** | **247** | P | | | **Pn** | **20 52 15.0** | **-1.6** |
| | 0.5nm84nm,0.9s | | | | | | | | |
| **MTN** | **Manton Dam** | **6.68** | **141** | Pn | | | **Pn** | **20 52 18.2** | **+1.0** |
| **KAPI** | **Kappang** | **7.48** | **290** | P | | | **Pn** | **20 52 27.7** | **+0.2** |
| | 0.3nm,0.3s,baz=120,slow=8.1,SNR=1.0 | | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **7.57** | **254** | P | | | **Pn** | **20 52 27.0** | **-1.8** |
| | 0.2nm33nm,0.8s | | | | | | | | |
| **SIJI** | **Sorong** | **8.10** | **34** | P | | | **Pn** | **20 52 35.5** | **-0.1** |
| | 1.1nm,0.3s,baz=236,slow=22,SNR=6.2 | | | | | | | | |
| SIJI | | | | S | | | **Sn** | **20 54 00.8** | **-6.1** |
| | 0.6nm,0.3s,baz=304,slow=23,SNR=1.8 | | | | | | | | |
| **KNRA** | **Kununurra** | **8.19** | **167** | Pn | | | **Pn** | **20 52 36.6** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **10.43** | **186** | P | | | **Pn** | **20 53 04.8** | **-0.9** |
| | 1.5nm,0.3s,baz=17,slow=11,SNR=61 | | | | | | | | |
| FITZ | | | | S | | | Sn | 20 54 53.2 | -9.0 |
| | 3.3nm,0.3s,baz=200,slow=13,SNR=6.9 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.43** | **186** | Pn | | | **Pn** | **20 53 04.6** | **-1.1** |
| **WB0** | **Warramunga Arr** | **14.11** | **149** | | | | **Pn** | **20 53 53.3** | **+0.9** |
| **WRAB** | **Tennant Creek** | **14.22** | **150** | | | | **Pn** | **20 53 53.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **14.22** | **150** | P | | | **Pn** | **20 53 53.8** | **0.0** |
| | 0.7nm,0.3s,baz=324,slow=13,SNR=27 | | | | | | | | |
| WRA | | | | S | | | S | 20 56 22.4 | -10 |
| | 0.3nm,0.3s,baz=326,slow=22,SNR=4.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.22** | **150** | P | | | **P** | **20 53 55.4** | **0.0** |
| **WB2** | **Warramunga Arr** | **14.23** | **150** | Pn | | | **Pn** | **20 53 52.8** | **-1.1** |
| **WR0** | **Warramunga Arr** | **14.34** | **149** | | | | **Pn** | **20 53 55.4** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **15.36** | **205** | | | | **Pn** | **20 54 07.0** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **15.36** | **205** | | | | **P** | **20 54 08.3** | **+0.3** |
| PSA00 | | | | | IAmb | | IAmb | 20 54 11.6 | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **COEN** | **Coen** | **17.26** | **113** | | | | **P** | **20 54 29.2** | **+0.3** |
| **AS31** | **Alice Springs** | **17.31** | **158** | | | | **Pn** | **20 54 32.1** | **+1.1** |
| **ASAR** | **Alice Springs** | **17.31** | **158** | P | | | **Pn** | **20 54 32.5** | **+1.5** |
| | comp=Z,1.2nm,0.3s,baz=331,slow=10,SNR=86 | | | | | | | | |
| ASAR | | | | S | | | **S** | **20 57 34.5** | **-4.7** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=16,SNR=2.8 | | | | | | | | |
| **SBUM** | **Sibu** | **17.68** | **304** | Pn | | | **Pn** | **20 54 34.0** | **-1.3** |
| **STKA** | **Stephens Creek** | **27.75** | **152** | P | | | **P** | **20 56 15.0** | **+3.8** |
| | comp=Z,1.4nm,0.8s,baz=327,slow=11,SNR=3.1 | | | | | | | | |
| **STKA** | **Stephens Creek** | **27.75** | **152** | | IAmb | | IAmb | 20 57 01.8 | |
| | comp=Z,4.1nm,1.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.80** | **314** | P | | | **P** | **20 57 39.5** | **+1.1** |
| | comp=Z,2.7nm,0.5s,baz=142,slow=6.8,SNR=32 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **38.03** | **314** | P | | | **P** | **20 57 40.5** | **+0.1** |
| **KSRS** | **Korea Array** | **44.90** | **1** | P | | | **P** | **20 58 37.0** | **+1.3** |
| | comp=Z,0.6nm,0.3s,baz=191,slow=8.3,SNR=3.4 | | | | | | | | |
| **ODAN** | **Odare** | **51.35** | **313** | *e*P | | | **P** | **20 59 25.9** | **+0.3** |
| | comp=Z,5.7nm,0.5s | | | | | | | | |
| **TAPN** | **Taplejung** | **51.41** | **314** | *e*P | | | **P** | **20 59 26.5** | **+0.4** |
| | comp=Z,7.2nm,0.5s | | | | | | | | |
| **RAMN** | **Ramite** | **51.97** | **313** | *e*P | | | **P** | **20 59 31.3** | **+1.1** |
| | comp=Z,3.2nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **53.05** | **314** | *e*P | | | **P** | **20 59 38.7** | **+0.4** |
| | comp=Z,11nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **53.19** | **313** | *e*P | | | **P** | **20 59 39.4** | **+0.1** |
| | comp=Z,5.8nm,0.4s | | | | | | | | |
| **PKIN** | **Phulchoki** | **53.20** | **313** | *e*P | | | **P** | **20 59 39.4** | **+0.1** |
| | comp=Z,4.6nm,0.4s | | | | | | | | |
| **KKN** | **Kakani** | **53.41** | **313** | *e*P | | | **P** | **20 59 41.2** | **+0.5** |
| | comp=Z,5.2nm,0.5s | | | | | | | | |
| **GKN** | **Gorkha** | **54.00** | **313** | *e*P | | | **P** | **20 59 45.2** | **+0.3** |
| | comp=Z,9.2nm,0.4s | | | | | | | | |
| **KOLN** | **Koldanda** | **54.63** | **312** | *e*P | | | **P** | **20 59 50.2** | **+0.7** |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **DANN** | **Dangsing** | **54.83** | **313** | *e*P | | | **P** | **20 59 51.7** | **+0.6** |
| | comp=Z,7.9nm,0.6s | | | | | | | | |
| **PYUN** | **Piuthan** | **55.26** | **312** | *e*P | | | **P** | **20 59 54.3** | **+0.2** |
| | comp=Z,4.5nm,0.4s | | | | | | | | |
| **SONM** | **Songino Array** | **58.13** | **344** | P | | | **P** | **21 00 15.0** | **+1.2** |
| | comp=Z,0.5nm,0.4s,baz=164,slow=7.4,SNR=11 | | | | | | | | |
| **SONM** | **Songino Array** | **58.13** | **344** | | IAmb | | IAmb | 21 01 15.4 | |
| | comp=Z,6.3nm,1.9s | | | | | | | | |
| **MK31** | **Makanchi Array** | **67.08** | **328** | P | | | **P** | **21 01 13.2** | **+0.3** |
| **MKAR** | **Makanchi Array** | **67.08** | **328** | P | | | **P** | **21 01 13.6** | **+0.7** |
| | comp=Z,1.6nm,0.6s,baz=124,slow=7.6,SNR=30 | | | | | | | | |
| **AAK** | **Ala-Archa** | **69.03** | **321** | P | | | **P** | **21 01 26.5** | **+1.2** |
| AAK | | | | | IAmb | | IAmb | 21 01 26.9 | |
| | comp=Z,1.6nm,0.8s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **70.81** | **335** | P | | | **P** | **21 01 35.8** | **+0.1** |
| ZAA0 | | | | | IAmb | | IAmb | 21 01 36.2 | |
| | comp=Z,4.6nm,1.2s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.81** | **335** | P | | | **P** | **21 01 36.5** | **+0.9** |
| | comp=Z,1.5nm,0.4s,baz=133,slow=5.1,SNR=9.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.81** | **335** | P | | | **P** | **21 01 35.4** | **-0.3** |
| **KURK** | **Kurchatov** | **71.47** | **330** | P | | | **P** | **21 01 39.0** | **-0.7** |
| KURK | | | | | IAmb | | IAmb | 21 01 41.9 | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **TIXI** | **Tiksi** | **79.17** | **1** | P | | | **P** | **21 02 23.2** | **+0.1** |
| TIXI | | | | | IAmb | | IAmb | 21 02 33.0 | |
| | comp=Z,5.8nm,1.4s | | | | | | | | |

*IDC* ***17*** *21:01:19.6±2.1, 43.°81N×105.°45W, h0km, mb1 3.5/3, mb1mx3.2/36, mbtmp3.3/3, ML2.7/2, Error ellipse: s-maj=49.8km s-min=9.7km az=149.0*

*NEIC* ***17*** *21:01:20.6±1.2, 43.°80N±0.°05×105.°22W±0.°06, h0km±2km, ML3.0/54, Error ellipse: s-maj=9.3km s-min=7.1km az=323.0*

**ISC 17 21:01:19.9**±1.1, **43.°80N**±0.°06×**105.°25W**±0.°06, **h0**km, **n35,** σ1§**05**/35, **Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.93** | **69** | | | | **Pg** | **21 01 38.2** | **+0.4** |
| **K22A** | **Casper** | **1.48** | **220** | | | | **Pn** | **21 01 46.7** | **-1.2** |
| **PHWY** | **Pilot Hill** | **2.50** | **184** | | | | **Pn** | **21 02 01.6** | **-0.5** |
| PHWY | | | | | IAML | | | 21 02 39.3 | |
| | 64nm,0.3s | | | | | | | | |
| PHWY | | | | | IAML | | | 21 02 39.8 | |
| | 51nm,0.3s | | | | | | | | |
| **RWWY** | **Rawlins** | **2.56** | **215** | | | | **Pn** | **21 02 03.9** | **+1.0** |
| RWWY | | | | | IAML | | | 21 02 41.5 | |
| | 115nm,0.6s | | | | | | | | |
| **N23A** | **Red Feather La** | **2.94** | **190** | Pn | | | **Pn** | **21 02 08.9** | **+0.7** |
| N23A | | | | | IAML | | | 21 02 56.4 | |
| | comp=N,75nm,0.4s | | | | | | | | |
| N23A | | | | | IAML | | | 21 02 59.0 | |
| | comp=E,48nm,0.4s | | | | | | | | |
| **LAO** | **LASA Array** | **2.98** | **347** | Pn | | | **Pn** | **21 02 08.6** | **+0.1** |
| **BW06** | **Boulder Array** | **3.31** | **253** | | | | **Pn** | **21 02 13.7** | **+0.4** |
| BW06 | | | | | IAML | | | 21 03 06.8 | |
| | comp=E,42nm,0.3s | | | | | | | | |
| BW06 | | | | | IAML | | | 21 03 09.1 | |
| | comp=E,31nm,0.4s | | | | | | | | |
| **PD31** | **Pinedale Array** | **3.31** | **253** | Pn | | | **Pn** | **21 02 13.4** | **+0.1** |
| **PDAR** | **Pinedale Array** | **3.31** | **253** | Pn | | | **Pn** | **21 02 13.5** | **+0.2** |
| | comp=E,4.8nm,0.3s,baz=71,slow=14,SNR=70 | | | | | | | | |
| PDAR | | | | | Lg | | Lg | 21 02 59.8 | |
| | comp=E,13nm,0.3s,baz=74,slow=33,SNR=9.1 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **3.31** | **253** | Pn | | | **Pn** | **21 02 13.8** | **+0.6** |
| **YMP** | **Mirror Lake Pl** | **3.65** | **287** | | | | **Pn** | **21 02 18.3** | **+0.3** |
| **OGNE** | **Ogallala** | **3.71** | **139** | | | | **Pn** | **21 02 19.8** | **+1.2** |
| **LKWY** | **Lake** | **3.79** | **284** | | | | **Pn** | **21 02 20.9** | **+1.1** |
| LKWY | | | | | IAML | | | 21 02 54.9 | |
| | comp=E,27nm,0.5s | | | | | | | | |
| LKWY | | | | | IAML | | | 21 03 32.0 | |
| | comp=E,18nm,1.7s | | | | | | | | |
| **H17A** | **Grant Village** | **3.89** | **281** | | | | **Pn** | **21 02 22.0** | **+0.8** |
| H17A | | | | | IAML | | | 21 03 26.7 | |
| | comp=E,16nm,0.3s | | | | | | | | |
| **LOHW** | **Long Hollow** | **3.89** | **269** | | | | **Pn** | **21 02 21.9** | **+0.7** |
| **FLWY** | **Flagg Ranch** | **3.95** | **276** | | | | **Pn** | **21 02 22.3** | **+0.3** |
| FLWY | | | | | IAML | | | 21 03 34.0 | |
| | comp=E,30nm,1.8s | | | | | | | | |
| FLWY | | | | | IAML | | | 21 04 11.9 | |
| | comp=E,23nm,4.2s | | | | | | | | |
| **MOOW** | **Moose Ponds** | **3.98** | **271** | | | | **Pn** | **21 02 23.3** | **+0.8** |
| **ISCO** | **Idaho Springs** | **4.00** | **184** | Pn | | | **Pn** | **21 02 22.9** | **+0.1** |
| ISCO | | | | | IAML | | | 21 03 29.9 | |
| | comp=E,16nm,2.3s | | | | | | | | |
| **YHH** | **Holmes Hill** | **4.14** | **286** | Pn | | | **Pn** | **21 02 25.2** | **+0.4** |
| **TPAW** | **Teton Pass** | **4.15** | **268** | | | | **Pn** | **21 02 25.0** | **+0.1** |
| TPAW | | | | | IAML | | | 21 03 41.6 | |
| | comp=E,14nm,1.2s | | | | | | | | |
| TPAW | | | | | IAML | | | 21 03 49.9 | |
| | comp=E,28nm,0.8s | | | | | | | | |
| **E28A** | **Huff** | **4.25** | **48** | | | | **Pn** | **21 02 26.8** | **+0.9** |
| **O20A** | **White River Ci** | **4.29** | **212** | | | | **Pn** | **21 02 27.5** | **+0.9** |
| O20A | | | | | IAML | | | 21 03 05.9 | |
| | comp=E,25nm,4.4s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.40** | **258** | | | | **Pn** | **21 02 29.4** | **+1.3** |
| AHID | | | | | IAML | | | 21 03 54.2 | |
| | comp=E,18nm,0.8s | | | | | | | | |
| AHID | | | | | IAML | | | 21 03 54.4 | |
| | comp=E,19nm,0.8s | | | | | | | | |
| **ECR** | **Eagle Creek** | **4.52** | **263** | | | | **Pn** | **21 02 32.0** | **+2.2** |
| **QLMT** | **Earthquake Lak** | **4.56** | **285** | | | | **Pn** | **21 02 32.3** | **+1.9** |
| **DGMT** | **Dagmar** | **4.73** | **8** | | | | **Pn** | **21 02 34.1** | **+1.6** |
| **SMCO** | **Snowmass** | **4.79** | **196** | | | | **Pn** | **21 02 35.8** | **+2.0** |
| SMCO | | | | | IAML | | | 21 03 54.5 | |
| | comp=E,18nm,0.3s | | | | | | | | |
| SMCO | | | | | IAML | | | 21 04 02.8 | |
| | comp=E,14nm,2.7s | | | | | | | | |
| **Q24A** | **Divide** | **4.83** | **179** | | | | **Pn** | **21 02 34.5** | **+0.4** |
| **BOZ** | **Bozeman (W)** | **4.89** | **294** | | | | **Pn** | **21 02 35.5** | **+0.6** |
| BOZ | | | | | IAML | | | 21 03 24.4 | |
| | comp=E,11nm,4.8s | | | | | | | | |
| BOZ | | | | | IAML | | | 21 04 24.2 | |
| | comp=E,10nm,4.2s | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.17** | **157** | | | | **Pn** | **21 02 38.5** | **-0.2** |
| **EGMT** | **Eagleton** | **5.27** | **325** | | | | **Pn** | **21 02 39.9** | **-0.1** |
| **P18A** | **Preston Nutter** | **5.60** | **224** | | | | **Pn** | **21 02 45.1** | **+0.3** |
| **PV07** | **Paradox Valley** | **5.94** | **207** | Pn | | | **Pn** | **21 02 50.5** | **+1.2** |
| **ULM** | **Lac du Bonnet** | **9.09** | **41** | Pn | | | **Pn** | **21 03 32.2** | **-0.1** |
| | comp=E,0.8nm,0.3s,baz=234,slow=11,SNR=4.3 | | | | | | | | |
| ULM | | | | | Lg | | Lg | 21 06 00.3 | |
| | comp=E,0.3nm,0.3s,baz=124,slow=21,SNR=2.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.52** | **347** | P | | | **P** | **21 05 46.0** | **-2.5** |
| | comp=E,0.0nm,0.3s,baz=156,slow=11,SNR=2.5 | | | | | | | | |

**IDC 17 21:06:53.4**±2.5, **0.°88N**×**129.°00E**, **h0**km, **mb3.2**/3, **mb1 3.5**/3, **mb1mx2.9**/40, **mbtmp3.3**/3, **Error ellipse: s-maj=176.2km s-min=27.4km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.34** | **166** | P | | | P | 21 11 41.8 | -0.5 |
| | 0.7nm,1.0s,baz=346,slow=11,SNR=2.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.86** | **169** | P | | | P | 21 12 18.1 | +0.3 |
| | 0.9nm,0.8s,baz=349,slow=12,SNR=12 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.91** | **62** | T | | | T | 21 58 11.9 | |
| | baz=248,slow=75,SNR=25 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.93** | **62** | T | | | T | 21 58 10.4 | |
| | baz=248,slow=75,SNR=22 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.93** | **62** | T | | | T | 21 58 11.4 | |
| | baz=248,slow=75,SNR=29 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.54** | **61** | T | | | T | 21 58 53.0 | |
| | baz=247,slow=75,SNR=36 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.55** | **61** | T | | | T | 21 58 55.6 | |
| | baz=247,slow=75,SNR=34 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.56** | **61** | T | | | T | 21 58 55.9 | |
| | baz=247,slow=75,SNR=31 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.18** | **325** | P | | | P | 21 17 09.9 | 0.0 |
| | 0.2nm,0.6s,baz=121,slow=6.1,SNR=4.9 | | | | | | | | |

*IDC* ***17*** *21:28:20.9±10.0, 26.°15S×177.°02W, h130km±75km, mb3.6/6, mb1 3.9/8, mb1mx3.5/38, mbtmp4.2/8, Error ellipse: s-maj=95.6km s-min=25.1km az=146.0*

*NEIC* ***17*** *21:28:22.4±2.3, 25.°73S±0.°10×177.°1W±0.°1, h135km±11km, mb4.3/10, Error ellipse: s-maj=19.4km s-min=14.1km az=90.0*

**ISC 17 21:28:21.8**±0.7, **25.°75S**±0.°09×**177.°1W**±0.°1, **h126**km, **n26,** σ1§**57**/26, **mb4.2**/11, **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **3.56** | **191** | Pn | | | **Pn** | **21 29 17.0** | **+1.3** |
| **MSVF** | **Nonsavu** | **9.16** | **330** | P | | | **Pn** | **21 30 34.6** | **+3.6** |
| | 2.4nm,0.3s,baz=137,slow=14,SNR=32 | | | | | | | | |
| **MSVF** | **Nonsavu** | **9.16** | **330** | Pn | | | **Pn** | **21 30 33.7** | **+2.6** |
| **NIUE** | **Niue** | **9.39** | **46** | Pn | | | **Pn** | **21 30 33.4** | **-0.7** |
| **AFI** | **Afiamalu** | **12.80** | **24** | P | | | **Pn** | **21 31 17.2** | **-2.2** |
| | 10nm,0.3s,baz=130,slow=2.8,SNR=6.2 | | | | | | | | |
| AFI | | | | S | | | Sn | 21 33 27.8 | -13 |
| | 6.3nm,0.3s,baz=211,slow=21,SNR=2.8 | | | | | | | | |
| **PINNC** | **Pines Island,** | **14.44** | **279** | | | | **P** | **21 31 44.0** | **+0.5** |
| **DZM** | **Mont Dzumac** | **15.48** | **280** | P | | | **P** | **21 31 55.2** | **0.0** |
| | 0.2nm,0.3s,baz=118,slow=17,SNR=2.8 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.48** | **280** | | | | **P** | **21 31 55.1** | **-0.1** |
| DZM | | | | | IAmb | | IAmb | 21 32 05.4 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **EIDS** | **Eidsvold** | **28.67** | **264** | P | | | **P** | **21 34 06.0** | **-0.9** |
| EIDS | | | | | IAmb | | IAmb | 21 34 11.3 | |
| | comp=Z,6.1nm,1.1s | | | | | | | | |
| **CTA** | **Charters Tower** | **34.14** | **272** | P | | | **P** | **21 34 55.5** | **+0.5** |
| | comp=Z,2.3nm,0.6s,baz=102,slow=11 | | | | | | | | |
| **COEN** | **Coen** | **39.01** | **280** | P | | | **P** | **21 35 36.4** | **+0.1** |
| COEN | | | | | IAmb | | IAmb | 21 35 59.9 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **BBOO** | **Buckleboo** | **41.19** | **249** | P | | | **P** | **21 35 52.2** | **-1.9** |
| BBOO | | | | | IAmb | | IAmb | 21 35 53.1 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.35** | **262** | P | | | **P** | **21 36 18.3** | **-1.5** |
| | comp=Z,1.0nm,0.8s,baz=92,slow=6.7,SNR=16 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.73** | **267** | P | | | **P** | **21 36 21.1** | **-1.8** |
| **WRA** | **Warramunga Arr** | **44.92** | **267** | P | | | **P** | **21 36 22.4** | **-1.9** |
| | comp=Z,0.8nm,0.4s,baz=101,slow=7.6,SNR=24 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.92** | **267** | P | | | **P** | **21 36 22.3** | **-2.1** |
| **FORT** | **Forrest** | **48.16** | **251** | P | | | **P** | **21 36 48.6** | **-0.9** |
| **KNRA** | **Kununurra** | **51.31** | **270** | P | | | **P** | **21 37 12.0** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **266** | P | | | **P** | **21 37 27.1** | **-1.2** |
| | comp=Z,2.4nm,1.0s,baz=86,slow=13,SNR=1.5 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **64.34** | **180** | P | | | **P** | **21 38 45.1** | **+1.2** |
| QSPA | | | | | IAmb | | IAmb | 21 38 46.9 | |
| | comp=Z,3.6nm,0.8s | | | | | | | | |
| **BELA** | **Belgrano 2** | **74.27** | **172** | P | | | **P** | **21 39 45.1** | **+0.5** |
| BELA | | | | | IAmb | | IAmb | 21 39 50.8 | |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **81.53** | **345** | P | | | **P** | **21 40 25.1** | **+0.1** |
| | comp=Z,1.8nm,0.6s,baz=162,slow=6.1,SNR=2.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.21** | **57** | P | | | **P** | **21 41 03.2** | **-0.5** |
| | comp=Z,0.1nm,0.6s,baz=214,slow=6.4,SNR=1.3 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **144.27** | **353** | PKP | | | **PKPab** | **21 47 40.0** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=7.7,slow=4.1,SNR=1.7 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **147.94** | **328** | PKPbc | | | **PKPbc** | **21 47 51.7** | **-0.3** |
| | comp=Z,0.4nm,0.4s,baz=44,slow=3.8,SNR=5.1 | | | | | | | | |
| **CLL** | **Collm** | **153.34** | **346** | *e*PKPbc | | | **PKiKP** | **21 48 07.0** | **+2.1** |

*IDC* ***17*** *21:34:39.6±0.7, 0.°92N×129.°12E, h0km, mb4.3/12, mb1 4.3/15, mb1mx4.0/44, mbtmp4.2/15, ML3.8/3, MS3.2/4, Ms1 3.2/4, ms1mx2.7/67, Error ellipse: s-maj=28.1km s-min=13.4km az=74.0*

*NEIC* ***17*** *21:34:41.0±2.0, 0.°76N±0.°09×129.°15E±0.°08, h10km±1km, mb4.5/23, Error ellipse: s-maj=16.6km s-min=11.4km az=29.0*

*DJA* ***17*** *21:34:43.0±0.4, 1.°N±5.°×12.°9E±.°, h10km, M4.3/12, mb4.6/7, mB4.4/1, MLv4.1/12, Mw(mB)3.6/1*

**ISC 17 21:34:40.7**±0.5, **0.°80N**±0.°06×**129.°15E**±0.°06, **h10**km, **n82,** σ1§**09**/76, **mb4.5**/31, **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.78** | **269** | | | | **Pn** | **21 35 11.5** | **-0.1** |
| TNTI | | | | | Sn | | **Sn** | **21 35 35.0** | **+0.6** |
| **TNTI** | **Ternate** | **1.78** | **269** | P | | | **Pn** | **21 35 11.9** | **+0.3** |
| **SIJI** | **Sorong** | **2.69** | **128** | Pn | | | **Pn** | **21 35 25.4** | **+1.2** |
| | 74nm,0.3s,baz=200,slow=23,SNR=141 | | | | | | | | |
| SIJI | | | | | Sn | | **Sn** | **21 35 58.2** | **+1.5** |
| | 19nm,0.3s,baz=52,slow=23,SNR=10 | | | | | | | | |
| SIJI | | | | | LR | | LR | 21 36 43.3 | |
| | comp=Z,238nm,20.3s,baz=234,slow=44 | | | | | | | | |
| **MSAI** | **Masohi** | **4.13** | **183** | P | | | **Pn** | **21 35 45.8** | **+1.9** |
| **SANI** | **Sanana** | **4.25** | **228** | P | | | **Pn** | **21 35 44.4** | **-1.1** |
| **AAI** | **Ambon** | **4.56** | **192** | P | | | **Pn** | **21 35 49.9** | **+0.1** |
| **KMSI** | **Cibinong** | **5.17** | **268** | P | | | **Pn** | **21 35 59.2** | **+1.0** |
| | 0.7nm151nm,0.7s | | | | | | | | |
| **GTOI** | **Gorontalo** | **6.14** | **268** | P | | | **Pn** | **21 36 14.2** | **+2.6** |
| | 0.1nm307nm26nm,0.7s | | | | | | | | |
| **MRSI** | **Marisa** | **7.22** | **267** | P | | | **Pn** | **21 36 28.5** | **+2.2** |
| | 0.1nm34nm,0.6s | | | | | | | | |
| **BAKI** | **Biak** | **7.23** | **106** | P | | | Pn | 21 36 31.9 | +5.3 |
| **APSI** | **Ampana** | **7.69** | **257** | P | | | **Pn** | **21 36 33.1** | **+0.2** |
| | 0.2nm41nm,0.5s | | | | | | | | |
| **TOLI2** | **Tolitoli** | **8.37** | **272** | Pn | | | **Pn** | **21 36 42.6** | **+0.4** |
| **MPSI** | **Mapaga** | **9.26** | **267** | P | | | **Pn** | **21 36 57.2** | **+2.8** |
| | 13nm,0.9s | | | | | | | | |
| **TTSI** | **Tana Toraja** | **10.08** | **248** | P | | | **Pn** | **21 37 07.2** | **+1.5** |
| | 26nm,0.6s | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **10.50** | **243** | P | | | **Pn** | **21 37 12.6** | **+1.1** |
| | 26nm,0.6s | | | | | | | | |
| **BKSI** | **Bulukumba** | **10.88** | **236** | P | | | Pn | 21 37 21.5 | +4.9 |
| **KAPI** | **Kappang** | **11.02** | **238** | Pn | | | **Pn** | **21 37 21.1** | **+2.5** |
| | 0.7nm,0.3s,baz=76,slow=12,SNR=1.9 | | | | | | | | |
| **KAPI** | **Kappang** | **11.02** | **238** | Pn | | | **Pn** | **21 37 18.1** | **-0.5** |
| **MYLDM** | **Lahad Datu** | **11.49** | **292** | Pn | | | **Pn** | **21 37 25.1** | **+0.2** |
| **MTN** | **Manton Dam** | **13.70** | **172** | | | | **Pn** | **21 37 53.7** | **-1.5** |
| **KNRA** | **Kununurra** | **16.38** | **181** | | | | **Pn** | **21 38 28.7** | **-2.2** |
| **FITZ** | **Fitzroy Crossi** | **19.10** | **190** | P | | | **Pn** | **21 39 04.6** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NRIK** | **Noril'sk** | **73.83** | **346** | P | **P** | **21 46 15.6** | **+0.3** |
| | comp=Z,3.9nm,0.6s,baz=129,slow=4.1,SNR=6.4 | | | | | | |
| **NRIK** | **Noril'sk** | **73.83** | **346** | P | **P** | **21 46 15.3** | **+0.1** |
| NRIK | | | | IAmb | IAmb | 21 46 16.2 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.93** | **321** | P | **P** | **21 46 26.1** | **-1.6** |
| **ABKAR** | **Akbulak array** | **75.93** | **321** | P | **P** | **21 46 26.9** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 21 46 45.1 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| **CAST** | **Castle Rocks** | **84.26** | **26** | P | **P** | **21 47 13.4** | **+0.9** |
| CAST | | | | IAmb | IAmb | 21 47 30.4 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **86.69** | **25** | P | **P** | **21 47 25.0** | **+0.4** |
| | comp=Z,0.2nm,0.5s,baz=253,slow=4.3,SNR=1.8 | | | | | | |
| **BCAR** | **Beaver Creek A** | **88.86** | **27** | P | **P** | **21 47 36.0** | **+1.0** |

**PGC 17 21:58:43.9±1.2, 50.56N×130.30W, h10km, MLSn2.9/18, Mw3.5/18, 204km west of Pt. Hardy, Bc Vancouver Island, Canada Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.39** | **86** | Pn | Pn | 21 59 07.2 | -2.1 |
| HOLB | | | | Sn | Sb | 21 59 23.5 | -4.1 |
| **BPBC** | **Brooks Peninsu** | **1.67** | **103** | Pn | Pn | 21 59 10.4 | -2.9 |
| **PACB** | **Port Alice, BC** | **1.80** | **93** | Pn | Pn | 21 59 12.8 | -2.1 |
| PACB | | | | Sn | Sn | 21 59 32.8 | -4.9 |
| **HG4B** | **Hotspring** | **1.83** | **342** | Pn | Pn | 21 59 12.8 | -2.5 |
| HG4B | | | | Sn | Sn | 21 59 34.9 | -3.6 |
| **PHC** | **Port Hardy** | **1.83** | **84** | Pn | Pn | 21 59 13.7 | -1.7 |
| PHC | | | | Sn | Sn | 21 59 34.8 | -3.9 |
| **MAYB** | **Maynard** | **2.00** | **93** | Pn | Pn | 21 59 16.0 | -1.9 |
| **BBB** | **Bella Bella** | **2.13** | **39** | Pn | Pn | 21 59 17.9 | -1.6 |
| BBB | | | | Sn | Sn | 21 59 41.6 | -4.3 |
| **TLCB** | **Telegraph Cove** | **2.21** | **89** | Pn | Pn | 21 59 19.3 | -1.3 |
| TLCB | | | | Sn | Sn | 21 59 44.9 | -3.1 |
| **BNB** | **Barry Inlet** | **2.21** | **336** | Pn | Pn | 21 59 19.3 | -1.5 |
| BNB | | | | Sn | Sn | 21 59 44.3 | -3.9 |
| **WOSB** | **Woss** | **2.42** | **98** | Pn | Pn | 21 59 22.2 | -1.4 |
| **NCRB** | **Newcastle Ridg** | **2.72** | **92** | Pn | Pn | 21 59 26.1 | -1.7 |
| **BUTB** | **Butedale** | **2.76** | **24** | Pn | Pn | 21 59 27.7 | -0.6 |
| BUTB | | | | Sn | Sn | 21 59 58.5 | -3.1 |
| **BNKB** | **Banks Island** | **2.79** | **5** | Pn | Pn | 21 59 26.8 | -1.8 |
| BNKB | | | | Sn | Sn | 21 59 57.9 | -4.4 |
| **DIB** | **Dawson Inlet,** | **2.97** | **334** | Pn | Pn | 21 59 29.2 | -1.8 |
| DIB | | | | Sn | Sn | 22 00 03.5 | -3.2 |
| **HWKB** | **Hawksbury Isla** | **3.13** | **13** | Pn | Pn | 21 59 32.0 | -1.3 |
| HWKB | | | | Sn | Sn | 22 00 07.3 | -3.3 |
| **BTB** | **Buttle Lake** | **3.27** | **108** | Pn | Pn | 21 59 33.6 | -1.8 |
| **GRNB** | **Grenville Isla** | **3.30** | **4** | Pn | Pn | 21 59 34.2 | -1.4 |
| GRNB | | | | Sn | Sn | 22 00 11.0 | -3.4 |
| **KITB** | **Kitimat** | **3.67** | **16** | Pn | Pn | 21 59 39.8 | -0.8 |
| KITB | | | | Sn | Sn | 22 00 21.4 | -2.5 |
| **RUBB** | **Prince Rupert** | **3.77** | **0** | Pn | Pn | 21 59 41.7 | -0.4 |
| **TXB** | **Texada** | **3.87** | **101** | Pn | Pn | 21 59 42.5 | -1.0 |
| **MGB** | **Mount Grey** | **3.96** | **111** | Pn | Pn | 21 59 44.6 | -0.1 |
| **SHB** | **Sechelt** | **4.25** | **101** | Pn | Pn | 21 59 46.7 | -2.1 |
| **UBRB** | **Upper Baezaeko** | **4.52** | **56** | Pn | Pn | 21 59 53.0 | +0.6 |
| UBRB | | | | Sn | Sn | 22 00 43.3 | -1.7 |
| **FSB** | **Fort Saint Jam** | **5.36** | **41** | Pn | Pn | 22 00 02.8 | -1.1 |
| **LLLB** | **Lillooet** | **5.37** | **86** | Pn | Pn | 22 00 03.7 | -0.3 |
| **MBW** | **Mount Baker** | **5.74** | **105** | Pn | Pn | 22 00 10.4 | +1.1 |

*IDC 17 21:59:07.6±7.6, 37.50N×72.06E, h169km±48km, mb3.3/7, mb1 3.3/13, mb1mx3.1/57, mbtmp3.8/13, Error ellipse: s-maj=66.9km s-min=23.5km az=8.0*
*SOME 17 21:59:07.7, 38.58N×72.43E, h10km*
*NNC 17 21:59:07.0±4.3, 37.83N×71.61E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=33.6km s-min=21.7km az=170.0*
**ISC 17 21:59:02.9±0.8, 37.27N±0.07×71.82E±0.08, h150km, n43, σ2s33/50, mb3.5/7, 4C-5D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IUG** | **luzhnay** | **5.06** | **345** | *e*P | Pn | 22 00 21.9 | +4.7 |
| IUG | 296nm,0.5s | | | *e*S | **Sn** | **22 01 12.9** | **-2.3** |
| | 188nm,0.5s | | | | | | |
| **AML** | **Almayashu** | **5.07** | **16** | P | **Pn** | **22 00 19.1** | **+1.6** |
| | SNR=48 | | | | | | |
| **CHM** | **Chimkent** | **5.33** | **342** | *e*P | Pn | 22 00 26.7 | +6.1 |
| CHM | 51nm,0.2s | | | *e*S | **Sn** | **22 01 20.9** | **-0.4** |
| | 337nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **5.37** | **22** | P | **Pn** | **22 00 23.2** | **+1.6** |
| | SNR=28 | | | | | | |
| **MRKS** | **Merke** | **5.58** | **11** | *e*P | Pn | 22 00 28.4 | +4.4 |
| MRKS | 6.7nm,0.1s | | | *e*S | **Sn** | **22 01 24.7** | **-2.7** |
| | 86nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **5.59** | **15** | P | **Pn** | **22 00 26.7** | **+2.5** |
| | SNR=20 | | | | | | |
| **AAK** | **Ala-Archa** | **5.74** | **20** | P | **Pn** | **22 00 28.4** | **+2.1** |
| AAK | 3.3nm,0.3s,baz=178,slow=6.9,SNR=59 | | | S | **Sn** | **22 01 30.2** | **-1.2** |
| | 3.4nm,0.3s,baz=332,slow=22,SNR=26 | | | | | | |
| **AAK** | **Ala-Archa** | **5.74** | **20** | ⇑P | **Pn** | **22 00 28.2** | **+2.0** |
| | SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **5.74** | **20** | ⇑P | **Pn** | **22 00 27.8** | **+1.6** |
| | 8.1nm,0.7s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **22 01 29.7** | **-1.7** |
| | 61nm,0.9s | | | | | | |
| **KBK** | **Karagaybulak** | **5.89** | **23** | P | **Pn** | **22 00 30.9** | **+2.6** |
| | SNR=6.4 | | | | | | |
| **KK09** | **Karatay Array** | **5.93** | **351** | ⇓P | **Pn** | **22 00 30.3** | **+1.7** |
| | 4.0nm,0.3s,baz=170,slow=12 | | | | | | |
| KK09 | | | | ⇓S | **Sn** | **22 01 32.2** | **-3.6** |
| | 96nm,0.7s,baz=167,slow=22 | | | | | | |
| **BRLS** | **Boroldoy** | **5.95** | **346** | *e*P | **Pn** | **22 00 30.3** | **+1.4** |
| | 10nm,0.1s | | | | | | |
| BRLS | | | | *e*S | **Sn** | **22 01 27.8** | **-8.4** |
| | 84nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **6.15** | **20** | P | **Pn** | **22 00 33.1** | **+1.6** |
| | SNR=9.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.34** | **26** | ⇑P | **Pn** | **22 00 35.4** | **+1.1** |
| | 3.0nm,0.6s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **22 01 47.0** | **+1.1** |
| | 6.3nm,0.8s | | | | | | |
| **DGS** | **Degeres** | **6.69** | **26** | *e*P | Pn | 22 00 44.8 | +6.0 |
| | 2.9nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sn** | **22 01 52.4** | **-1.5** |
| | 7.5nm,0.8s | | | | | | |
| **BTLS** | **Baital** | **7.94** | **11** | *e*P | Pn | 22 01 11.3 | +16 |
| | 1.2nm,0.3s | | | | | | |
| BTLS | | | | *e*S | Sn | 22 02 37.3 | +13 |
| | 8.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.28** | **36** | P | **Pn** | **22 01 53.6** | **+0.9** |
| | 0.1nm,0.3s,baz=226,slow=15,SNR=8.4 | | | | | | |
| **PYUN** | **Piuthan** | **13.11** | **131** | *e*P | **Pn** | **22 02 01.3** | **-2.4** |
| | 19nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **13.40** | **128** | *e*P | **Pn** | **22 02 05.7** | **-1.8** |
| | 21nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **13.72** | **130** | *e*P | **Pn** | **22 02 09.7** | **-1.7** |
| | 8.5nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.19** | **18** | P | **Pn** | **22 02 15.7** | **-1.2** |
| | 0.0nm,0.3s,baz=203,slow=12,SNR=4.3 | | | | | | |
| **GKN** | **Gorkha** | **14.20** | **127** | *e*P | **Pn** | **22 02 16.3** | **-1.2** |
| | 19nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.76** | **328** | ⇑P | **P** | **22 02 26.5** | **+0.3** |
| | 1.4nm,0.4s,baz=133,slow=12,SNR=109 | | | | | | |
| AB31 | | | | S | **Sn** | **22 05 05.8** | **-1.9** |
| | 3.0nm,0.5s,baz=136,slow=25,SNR=13 | | | | | | |
| **KKN** | **Kakani** | **14.76** | **126** | *e*P | **Pn** | **22 02 22.7** | **-1.8** |
| | 13nm,0.6s | | | | | | |
| **DMN** | **Daman** | **14.77** | **127** | *e*P | **Pn** | **22 02 23.1** | **-1.6** |
| | 13nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **14.98** | **126** | *e*P | **P** | **22 02 26.6** | **-2.5** |
| | 20nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.99** | **126** | *e*P | **P** | **22 02 26.8** | **-2.5** |
| | 24nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **15.07** | **124** | *e*P | **P** | **22 02 27.6** | **-2.6** |
| | 92nm,1.0s | | | | | | |
| **JIRN** | **Jiri** | **15.44** | **124** | *e*P | **P** | **22 02 32.6** | **-1.8** |
| | 71nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.79** | **357** | P | **P** | **22 02 36.7** | **-0.9** |
| | 0.8nm,0.3s,baz=170,slow=12,SNR=8.0 | | | | | | |
| **RAMN** | **Ramite** | **16.18** | **125** | *e*P | **P** | **22 02 41.8** | **-0.7** |
| | 2.9nm,0.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.47** | **327** | P | **Pn** | **22 02 46.1** | **+1.0** |
| | 0.7nm,0.3s,baz=137,slow=8.7,SNR=10 | | | | | | |
| AKTO | | | | S | **S** | **22 05 44.0** | **-3.9** |
| | 0.5nm,0.3s,baz=198,slow=7.5,SNR=9.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.47** | **327** | ⇑P | **Pn** | **22 02 49.8** | **+4.7** |
| | 3.4nm,0.9s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **22 05 47.5** | **-1.2** |
| | 2.1nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **16.66** | **122** | *e*P | **Pn** | **22 02 49.1** | **+1.1** |
| | 8.7nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **16.77** | **124** | *e*P | **Pn** | **22 02 49.2** | **0.0** |
| | 11nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.95** | **24** | P | **Pn** | **22 03 13.4** | **-1.1** |
| | 1.6nm,0.3s,baz=215,slow=11,SNR=33 | | | | | | |
| **ARU** | **Arti** | **21.13** | **339** | P | **P** | **22 03 37.8** | **+2.1** |
| | 0.6nm,0.4s,baz=114,slow=8.7,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **27.36** | **56** | P | **P** | **22 04 33.8** | **-0.2** |
| | 0.2nm,0.4s,baz=268,slow=8.8,SNR=4.4 | | | | | | |
| **FINES** | **FINESS Array B** | **37.22** | **325** | P | **P** | **22 06 01.7** | **+2.3** |
| | 1.4nm,0.8s,baz=121,slow=10,SNR=8.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.69** | **337** | P | **P** | **22 06 30.2** | **+2.1** |
| | 2.1nm,0.8s,baz=108,slow=7.7,SNR=5.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.17** | **323** | P | **P** | **22 06 58.0** | **+1.6** |
| | 0.9nm,0.7s,baz=91,slow=7.8,SNR=1.7 | | | | | | |
| **INK** | **Inuvik** | **73.04** | **10** | P | **P** | **22 10 17.4** | **+1.5** |
| | 0.4nm,0.5s,baz=345,slow=3.0,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.45** | **3** | P | **P** | **22 10 58.7** | **+1.2** |
| | 0.5nm,0.5s,baz=350,slow=5.1,SNR=8.7 | | | | | | |

*IDC 17 22:09:16.4±1.1, 0.82N×128.95E, h0km, mb3.8/5, mb1 4.0/6, mb1mx3.7/33, mbtmp3.8/6, ML4.1/1, MS2.8/3, Ms1 2.8/3, ms1mx2.5/68, Error ellipse: s-maj=62.5km s-min=18.7km az=64.0*
*NEIC 17 22:09:17.4±2.1, 1.0N±0.2×129.17E±0.08, h10km±2km, mb4.0/12, Error ellipse: s-maj=26.0km s-min=14.0km az=5.0*
**ISC 17 22:09:17.4±0.8, 1.0N±0.1×129.15E±0.07, h10km, n31, σ1s01/25, mb3.9/10, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.79** | **264** | Pn | **Pn** | **22 09 47.5** | **-0.8** |
| TNTI | | | | Sn | **Sn** | **22 10 11.6** | **+0.5** |
| **SIJI** | **Sorong** | **2.78** | **130** | Pn | **Pn** | **22 10 02.0** | **-0.1** |
| | 30nm,0.3s,baz=97,slow=16,SNR=54 | | | | | | |
| SIJI | | | | Sn | **Sn** | **22 10 35.2** | **-0.6** |
| | 6.7nm,0.3s,baz=207,slow=22,SNR=6.2 | | | | | | |
| SIJI | | | | LR | LR | 22 10 51.2 | |
| | comp=Z,76nm,20.4s,baz=154,slow=33 | | | | | | |
| **TOLI2** | **Tolitoli** | **8.36** | **271** | Pn | **Pn** | **22 11 20.1** | **+1.3** |
| **KAPI** | **Kappang** | **11.10** | **238** | LR | LR | 22 17 12.4 | |
| | comp=Z,32nm,19.7s,baz=69,slow=44 | | | | | | |
| **KNRA** | **Kununurra** | **16.52** | **181** | | **P** | **22 13 11.4** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 22 13 14.2 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.24** | **190** | | **P** | **22 13 41.4** | **-0.6** |
| **WB0** | **Warramunga Arr** | **21.22** | **166** | P | **P** | **22 14 02.8** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 22 14 10.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.38** | **166** | P | **P** | **22 14 04.1** | **-1.2** |
| | comp=Z,2.0nm,0.5s,baz=344,slow=11,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.38** | **166** | P | **P** | **22 14 03.1** | **-2.2** |
| **WR0** | **Warramunga Arr** | **21.44** | **166** | P | **P** | **22 14 04.7** | **-1.3** |
| WR0 | | | | IAmb | IAmb | 22 14 09.7 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **24.90** | **170** | P | **P** | **22 14 40.1** | **-0.6** |
| AS31 | | | | IAmb | IAmb | 22 14 46.4 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.90** | **170** | P | **P** | **22 14 40.7** | **-0.1** |
| | comp=Z,8.2nm,0.8s,baz=349,slow=10,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **24.90** | **170** | P | **P** | **22 14 39.9** | **-0.8** |
| **BBOO** | **Buckleboo** | **34.20** | **170** | P | **P** | **22 16 04.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **34.71** | **161** | P | **P** | **22 16 08.7** | **+1.0** |
| | comp=Z,0.5nm,0.3s,baz=328,slow=11,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **34.71** | **161** | P | **P** | **22 16 07.7** | **0.0** |
| **ARMA** | **Armidale** | **37.83** | **147** | P | **P** | **22 16 35.9** | **+1.3** |
| **H11S3** | **WAKE ISLAND Hy** | **40.75** | **62** | T | T | 23 00 33.6 | |
| | baz=248,slow=75,SNR=62 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.77** | **62** | T | T | 23 00 34.5 | |
| | baz=248,slow=75,SNR=31 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.77** | **62** | T | T | 23 00 34.8 | |
| | baz=248,slow=75,SNR=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.38** | **61** | T | T | 23 01 18.8 | |
| | baz=247,slow=75,SNR=95 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.39** | **61** | T | T | 23 01 19.9 | |
| | baz=247,slow=75,SNR=130 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.40** | **61** | T | T | 23 01 20.2 | |
| | baz=247,slow=75,SNR=200 | | | | | | |
| **SONM** | **Songino Array** | **50.70** | **340** | P | **P** | **22 18 18.1** | **+0.8** |
| | comp=Z,3.6nm,1.5s,baz=149,slow=7.2,SNR=3.9 | | | | | | |
| **YAK** | **Yakutsk** | **60.93** | **0** | LR | LR | 22 47 45.1 | |
| | comp=Z,21nm,18.9s,baz=250,slow=38 | | | | | | |
| **MK31** | **Makanchi Array** | **61.20** | **325** | P | **P** | **22 19 32.7** | **+0.2** |
| MK31 | | | | IAmb | IAmb | 22 19 38.5 | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.20** | **325** | P | **P** | **22 19 33.0** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=121,slow=8.1,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.20** | **325** | P | **P** | **22 19 32.3** | **-0.2** |
| **KURK** | **Kurchatov** | **65.37** | **327** | P | **P** | **22 19 59.8** | **-0.2** |
| **ABKAR** | **Akbulak array** | **75.82** | **321** | P | **P** | **22 21 02.5** | **-1.3** |
| ABKAR | | | | IAmb | IAmb | 22 21 25.2 | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.82** | **321** | P | **P** | **22 21 02.1** | **-1.7** |

**IDC 17 22:13:52.5±2.4, 8.57S×130.95E, h0km, mb3.4/1, mb1 3.6/4, mb1mx3.5/28, mbtmp3.5/4, ML3.3/3, MS3.2/2, Ms1 3.2/2, ms1mx2.6/33, Error ellipse: s-maj=74.5km s-min=31.2km az=79.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **10.79** | **208** | Pn | Pn | 22 16 29.0 | +0.7 |
| | 0.2nm,0.3s,baz=26,slow=12,SNR=2.1 | | | | | | |
| FITZ | | | | Sn | Sn | 22 18 23.9 | -6.0 |
| | 0.3nm,0.3s,baz=264,slow=21,SNR=2.9 | | | | | | |
| FITZ | | | | LR | LR | 22 21 34.8 | |
| | comp=Z,39nm,19.5s,baz=131,slow=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **11.77** | **164** | Pn | Pn | 22 16 41.9 | +0.1 |
| | 0.2nm,0.3s,baz=347,slow=12,SNR=9.0 | | | | | | |
| WRA | | | | Sn | Sn | 22 18 49.8 | -4.3 |
| | 0.3nm,0.3s,baz=354,slow=23,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **15.28** | **170** | Pn | Pn | 22 17 28.6 | -1.0 |
| | 0.1nm,0.3s,baz=350,slow=10,SNR=4.0 | | | | | | |
| ASAR | | | | Sn | Sn | 22 20 15.2 | -4.5 |
| | 0.0nm,0.3s,baz=358,slow=24,SNR=3.9 | | | | | | |
| **MSVF** | **Nonsavu** | **46.65** | **106** | LR | LR | 22 41 46.1 | |
| | comp=Z,99nm,18.5s,baz=144,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.04** | **327** | P | P | 22 25 06.3 | 0.0 |
| | 0.4nm,0.9s,baz=124,slow=6.1,SNR=2.7 | | | | | | |

*IDC 17 22:22:43.8±1.9, 2.45N×95.64E, h0km, mb3.9/7, mb1 4.0/9, mb1mx3.6/41, mbtmp3.9/9, ML4.0/2, MS3.1/4, Ms1 3.1/4, ms1mx2.8/84, Error ellipse: s-maj=53.2km s-min=20.0km az=57.0*
*DJA 17 22:22:48.0±0.8, 3.1N±4.9.6E±., h10km, M4.3/8, mb4.5/5, mB4.7/2, MLv4.2/8, Mw(mB)3.9/2*
*NEIC 17 22:22:49.6±1.0, 2.57N±0.05×95.81E±0.08, h29km±6km, mb4.2/15, Error ellipse: s-maj=11.4km s-min=7.4km az=99.0*
**ISC 17 22:22:48.1±0.7, 2.53N±0.07×95.76E±0.08, h25km, n48, σ0s71/45, mb4.1/16, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **2.19** | **124** | Pn | **Pn** | **22 23 22.7** | **-0.3** |
| **GSI** | **Gunungsitoli** | **2.19** | **124** | P | **Pn** | **22 23 23.0** | **0.0** |
| GSI | | | | S | **Sn** | **22 23 48.2** | **-1.1** |
| **KCSI** | **Kotacane, Aceh** | **2.24** | **64** | P | **Pn** | **22 23 23.9** | **+0.2** |
| **LHMI** | **Lhok Sumawe** | **2.93** | **24** | Pn | **Pn** | **22 23 33.3** | **+0.2** |
| **LHMI** | **Lhok Sumawe** | **2.93** | **24** | P | **Pn** | **22 23 33.2** | **+0.1** |
| **TSI** | **Tuntungan** | **2.96** | **71** | P | **Pn** | **22 23 35.0** | **+1.4** |
| **RPSI** | **Rantau Prapat** | **3.17** | **87** | | **Pn** | **22 23 37.2** | **+0.8** |
| **PSI** | **Prapat** | **3.18** | **85** | Pn | **Pn** | **22 23 37.2** | **+0.6** |
| | 3.8nm,0.3s,baz=286,slow=7.1,SNR=17 | | | | | | |
| PSI | | | | Sn | **Sn** | **22 24 12.9** | **-0.9** |
| | 4.0nm,0.3s,baz=233,slow=20,SNR=4.9 | | | | | | |
| PSI | | | | LR | LR | 22 25 10.8 | |
| | comp=Z,196nm,19.8s,baz=258,slow=45 | | | | | | |
| **MNSI** | **Mandailing Nat** | **4.19** | **114** | P | **Pn** | **22 23 51.6** | **+1.0** |
| **PPI** | **Padang Panjang** | **5.51** | **123** | P | **Pn** | **22 24 10.3** | **+1.6** |
| | 437nm20nm,0.5s | | | | | | |
| **KULM** | **Kulim** | **5.60** | **61** | | **Pn** | **22 24 09.9** | **0.0** |
| **IPM** | **Ipoh** | **5.60** | **70** | | **Pn** | **22 24 09.8** | **-0.2** |
| **SRIT** | **Nakonsritamara** | **7.13** | **32** | Pn | **Pn** | **22 24 30.1** | **-0.9** |
| **MDSI** | **Maura Dua** | **10.93** | **130** | P | **Pn** | **22 25 23.3** | **+0.2** |
| **LEM** | **Lembang** | **15.05** | **128** | LR | LR | 22 32 48.7 | |
| | comp=Z,96nm,18.8s,baz=259,slow=40 | | | | | | |
| **PALK** | **Pallekele** | **15.72** | **288** | LR | LR | 22 31 38.0 | |
| | comp=Z,63nm,18.8s,baz=202,slow=34 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **16.13** | **11** | Pn | **Pn** | **22 26 33.8** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **16.13** | **11** | Pn | **Pn** | **22 26 35.1** | **+1.7** |
| | 0.6nm,0.3s,baz=197,slow=11,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 22 32 23.6 | |
| | comp=Z,44nm,18.7s,baz=190,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.13** | **11** | | **Pn** | **22 26 33.2** | **-0.1** |
| **MYLDM** | **Lahad Datu** | **22.84** | **83** | P | **P** | **22 27 50.3** | **+0.6** |
| **H08S2** | **Diego Garcia H** | **25.32** | **246** | T | T | 22 54 30.2 | |
| | baz=68,slow=76,SNR=94 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.32** | **246** | T | T | 22 54 27.1 | |
| | baz=68,slow=76,SNR=120 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.33** | **246** | T | T | 22 54 31.9 | |
| | baz=68,slow=76,SNR=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.87** | **126** | P | **P** | **22 29 45.9** | **-0.4** |
| FITZ | | | | IAmb | IAmb | 22 30 11.5 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **NIL** | **Nilore** | **37.43** | **328** | P | **P** | **22 30 00.3** | **+0.8** |
| NIL | | | | IAmb | IAmb | 22 30 02.8 | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **42.22** | **340** | P | **P** | **22 30 38.7** | **-1.0** |
| TARG | | | | IAmb | IAmb | 22 31 05.9 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.93** | **122** | P | **P** | **22 30 52.6** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 22 31 17.0 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.96** | **122** | P | **P** | **22 30 53.3** | **-0.3** |
| | comp=Z,0.6nm,0.6s,baz=299,slow=9.4,SNR=7.8 | | | | | | |
| **HRA** | **Herat** | **44.48** | **319** | P | **P** | **22 30 56.7** | **-1.1** |
| HRA | | | | IAmb | IAmb | 22 31 12.2 | |
| | comp=Z,2.5nm,1.3s | | | | | | |
| **FORT** | **Forrest** | **45.22** | **140** | P | **P** | **22 31 04.3** | **+0.8** |
| **ASAR** | **Alice Springs** | **45.35** | **127** | P | **P** | **22 31 04.6** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=295,slow=8.1,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **45.35** | **127** | P | **P** | | |
| **MK31** | **Makanchi Array** | **45.62** | **347** | P | **P** | **22 31 06.1** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 22 31 14.2 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.62** | **347** | P | **P** | **22 31 06.7** | **+0.2** |
| | comp=Z,2.2nm,0.7s,baz=153,slow=8.8,SNR=27 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.62** | **347** | P | **P** | **22 31 06.1** | **-0.3** |
| **SONM** | **Songino Array** | **46.05** | **10** | P | **P** | **22 31 09.6** | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=189,slow=9.0,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **46.05** | **10** | P | **P** | **22 31 09.0** | **-1.0** |
| **KKAR** | **Karatay Array** | **46.23** | **334** | P | **P** | **22 31 11.4** | **0.0** |
| **KURK** | **Kurchatov** | **50.15** | **346** | P | **P** | **22 31 41.8** | **+0.4** |
| KURK | | | | IAmb | IAmb | 22 31 42.4 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.03** | **352** | P | **P** | **22 31 55.8** | **+0.3** |
| ZAA0 | | | | IAmb | IAmb | 22 32 03.4 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.03** | **352** | P | **P** | **22 31 55.5** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=174,slow=7.2,SNR=8.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.03** | **352** | P | **P** | **22 31 55.3** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **52.40** | **32** | P | **P** | **22 31 59.0** | **+0.6** |
| | comp=Z,1.1nm,0.8s,baz=238,slow=8.3,SNR=1.9 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.67** | **332** | P | **P** | **22 32 22.6** | **+0.4** |
| ABKAR | | | | IAmb | IAmb | 22 32 40.3 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **55.67** | **332** | P | **P** | **22 32 22.6** | **+0.4** |
| **KLR** | **Kul'dur** | **55.73** | **28** | P | **P** | **22 32 22.5** | **-0.2** |
| | comp=Z,1.4nm,0.7s,baz=257,slow=8.5,SNR=6.0 | | | | | | |
| **ONTNC** | **Ouen Toro** | **73.19** | **114** | P | **P** | **22 34 16.5** | **-0.9** |
| **BURAR** | **Bucovina Array** | **75.08** | **319** | P | **P** | **22 34 28.7** | **+0.6** |

*NIED 17 22:31:23.4, 24.48N×122.96E, h72km, MW3.9, Moment Tensor Solution. s2 Moment tensor: Scale 10^14Nm; Mrr6.21; Mθθ2.05; Mϕϕ-8.27; Mrθ0.66; Mθϕ-0.08; Mϕr-3.52; Fault plane solution: Mo8.09000×10^14 NP1: ϕs174.00000°, δ58.00000°, λ82.00000°. NP2: ϕs9.00000°, δ33.00000°, λ103.00000°.*
*TAP 17 22:31:23.8, 24.38N×122.92E, h64km, ML4.3, C*
*JMA 17 22:31:23.3±0.1, 24.48N×122.96E, h72km±1km, M3.9*
*NEIC 17 22:31:23.7±1.4, 24.47N±0.06×122.98E±0.06, h69km±2km, mb4.4/13, Error ellipse: s-maj=9.6km s-min=7.4km az=149.0*
*IDC 17 22:31:43.1±2.3, 24.40N×125.47E, h214km±23km, mb3.4/7, mb1 3.6/9, mb1mx3.1/46, mbtmp4.0/9, Error ellipse: s-maj=32.4km s-min=13.0km az=74.0*
**ISC 17 22:31:23.3±0.7, 24.40N±0.03×122.95E±0.02, h71km±5km, n177, σ1s05/305, mb4.4/13, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.05** | **357** | P | **Pn** | **22

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **1.27 256** | P | | **Pn** | **22 31 45.5 +0.1** |
| | baz=255 | | | | | | | | |
| TWD | | | S | | **Sn** | **22 32 01.9 0.0** |
| | baz=255 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.28 281** | P | | **Pn** | **22 31 46.8 +1.3** |
| | baz=281 | | | | | | | | |
| ENTT | | | S | | **Sn** | **22 32 02.8 +0.6** |
| | baz=281 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.29 286** | P | | **Pn** | **22 31 46.0 +0.4** |
| | baz=287 | | | | | | | | |
| FUSB | | | S | | **Sn** | **22 32 02.7 +0.3** |
| | baz=287 | | | | | | | | |
| **HWA** | **Hwalien** | **1.30 251** | P | | **Pn** | **22 31 46.3 +0.7** |
| | baz=251 | | | | | | | | |
| HWA | | | S | | **Sn** | **22 32 02.5 0.0** |
| | baz=251 | | | | | | | | |
| **LATG** | **Datong** | **1.30 276** | *e*P | | **Pn** | **22 31 46.7 +0.8** |
| | baz=276 | | | | | | | | |
| LATG | | | *e*S | | **Sn** | **22 32 03.7 +0.9** |
| | baz=276 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.32 279** | *e*P | | **Pn** | **22 31 47.1 +1.1** |
| | baz=279 | | | | | | | | |
| NDT | | | *e*S | | **Sn** | **22 32 03.9 +0.8** |
| | baz=279 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.35 262** | P | | **Pn** | **22 31 46.9 +0.4** |
| | baz=262 | | | | | | | | |
| ETLH | | | *e*S | | **Sn** | **22 32 03.9 +0.1** |
| | baz=262 | | | | | | | | |
| **NWLT** | **Wulai** | **1.37 286** | P | | **Pn** | **22 31 47.9 +1.2** |
| | baz=286 | | | | | | | | |
| NWLT | | | *e*S | | **Sn** | **22 32 04.5 +0.3** |
| | baz=286 | | | | | | | | |
| **TWA** | **Mucha** | **1.37 295** | P | | **Pn** | **22 31 47.4 +0.7** |
| | baz=296 | | | | | | | | |
| TWA | | | S | | **Sn** | **22 32 04.5 +0.4** |
| | baz=296 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.41 294** | P | | **Pn** | **22 31 48.4 +1.3** |
| | baz=294 | | | | | | | | |
| NHDH | | | S | | **Sn** | **22 32 05.8 +0.7** |
| | baz=294 | | | | | | | | |
| **NNSB** | **Datong** | **1.43 271** | P | | **Pn** | **22 31 48.1 +0.6** |
| | baz=271 | | | | | | | | |
| NNSB | | | *e*S | | **Sn** | **22 32 05.8 +0.1** |
| | baz=271 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.44 272** | P | | **Pn** | **22 31 48.3 +0.7** |
| | baz=272 | | | | | | | | |
| NNS | | | *e*S | | **Sn** | **22 32 06.2 +0.3** |
| | baz=272 | | | | | | | | |
| **TATO** | **Taipei** | **1.45 294** | | | **Pn** | **22 31 48.0 +0.4** |
| TATO | | | | Sn | **Sn** | **22 32 06.2 +0.3** |
| **TAP** | **Taipei** | **1.46 296** | *e*P | | **Pn** | **22 31 48.7 +0.9** |
| | baz=297 | | | | | | | | |
| TAP | | | *e*S | | **Sn** | **22 32 06.9 +0.7** |
| | baz=297 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.46 281** | | | **Pn** | **22 31 48.8 +1.0** |
| **YHNB** | **Yeheng** | **1.46 281** | *e*P | | **Pn** | **22 31 49.1 +1.2** |
| | baz=281 | | | | | | | | |
| YHNB | | | *e*S | | **Sn** | **22 32 06.9 +0.6** |
| | baz=281 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.46 327** | *i* P | | **Pn** | **22 31 48.9 +1.1** |
| | baz=328 | | | | | | | | |
| PCYT | | | *e*S | | **Sn** | **22 32 06.9 +0.7** |
| | baz=328 | | | | | | | | |
| **NSK** | **Sanguang** | **1.47 281** | *e*P | | **Pn** | **22 31 48.9 +0.9** |
| | baz=281 | | | | | | | | |
| NSK | | | S | | **Sn** | **22 32 06.7 0.0** |
| | baz=281 | | | | | | | | |
| **ESL** | **Shilin** | **1.50 247** | P | | **Pn** | **22 31 48.3 -0.1** |
| | baz=247 | | | | | | | | |
| ESL | | | S | | **Sn** | **22 32 07.3 0.0** |
| | baz=247 | | | | | | | | |
| **TWY** | **Chenhua** | **1.50 306** | *i* P | | **Pn** | **22 31 49.3 +0.9** |
| | baz=306 | | | | | | | | |
| TWY | | | S | | **Sn** | **22 32 08.4 +1.1** |
| | baz=306 | | | | | | | | |
| **ANP** | **Anpu** | **1.52 301** | *e*P | | **Pn** | **22 31 49.1 +0.5** |
| | baz=302 | | | | | | | | |
| ANP | | | *e*S | | **Sn** | **22 32 07.7 0.0** |
| | baz=302 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.56 297** | *e*P | | **Pn** | **22 31 50.1 +1.0** |
| | baz=297 | | | | | | | | |
| TWS1 | | | *e*S | | **Sn** | **22 32 09.3 +0.8** |
| | baz=297 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.56 261** | P | | **Pn** | **22 31 49.9 +0.4** |
| | baz=260 | | | | | | | | |
| WHF | | | S | | **Sn** | **22 32 08.5 -0.7** |
| | baz=260 | | | | | | | | |
| **NTST** | **Danshui** | **1.56 299** | P | | **Pn** | **22 31 50.0 +0.9** |
| | baz=300 | | | | | | | | |
| NTST | | | S | | **Sn** | **22 32 09.8 +1.2** |
| | baz=300 | | | | | | | | |
| **FUSS** | **Fushou** | **1.56 265** | *e*P | | **Pn** | **22 31 50.4 +1.0** |
| | baz=264 | | | | | | | | |
| FUSS | | | *e*S | | **Sn** | **22 32 09.1 0.0** |
| | baz=264 | | | | | | | | |
| **JTJ** | **Tarama** | **1.62 81** | P | | **Pn** | **22 31 50.1 +0.2** |
| JTJ | | | *e*S | | **Sn** | **22 32 10.0 +0.1** |
| **TDCB** | **Techi** | **1.64 265** | P | | **Pn** | **22 31 51.6 +1.3** |
| | baz=265 | | | | | | | | |
| TDCB | | | S | | **Sn** | **22 32 10.6 -0.1** |
| | baz=265 | | | | | | | | |
| **CHGB** | **Renai** | **1.65 259** | P | | **Pn** | **22 31 51.3 +0.7** |
| | baz=258 | | | | | | | | |
| CHGB | | | S | | **Sn** | **22 32 11.3 +0.1** |
| | baz=258 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.66 237** | *e*P | | **Pn** | **22 31 50.7 +0.2** |
| | baz=236 | | | | | | | | |
| HGSD | | | S | | **Sn** | **22 32 10.5 -0.6** |
| | baz=236 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.68 278** | P | | **Pn** | **22 31 52.1 +1.3** |
| | baz=278 | | | | | | | | |
| NFF | | | *e*S | | **Sn** | **22 32 11.6 -0.1** |
| | baz=278 | | | | | | | | |
| **NCU** | **National Centr** | **1.70 290** | *e*P | | **Pn** | **22 31 52.2 +1.3** |
| | baz=290 | | | | | | | | |
| NCU | | | *e*S | | **Sn** | **22 32 12.7 +0.7** |
| | baz=290 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.70 290** | *e*P | | **Pn** | **22 31 51.9 +0.9** |
| | baz=290 | | | | | | | | |
| NCUH | | | *e*S | | **Sn** | **22 32 13.8 +1.8** |
| | baz=290 | | | | | | | | |
| **WUSB** | **Renai** | **1.72 257** | P | | **Pn** | **22 31 52.3 +0.9** |
| | baz=256 | | | | | | | | |
| WUSB | | | *e*S | | **Sn** | **22 32 12.0 -0.7** |
| | baz=256 | | | | | | | | |
| **EHY** | **Hungye** | **1.73 239** | P | | **Pn** | **22 31 51.7 +0.2** |
| | baz=238 | | | | | | | | |
| EHY | | | *e*S | | **Sn** | **22 32 12.2 -0.6** |
| | baz=238 | | | | | | | | |
| **VWDT** | **VWDT** | **1.77 249** | P | | **Pn** | **22 31 53.0 +1.0** |
| | baz=248 | | | | | | | | |
| VWDT | | | S | | **Sn** | **22 32 14.0 +0.3** |
| | baz=248 | | | | | | | | |
| **LIOB** | **Emei** | **1.78 278** | *e*P | | **Pn** | **22 31 53.3 +1.2** |
| | baz=278 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.79 278** | *e*P | | **Pn** | **22 31 53.4 +1.3** |
| | baz=277 | | | | | | | | |
| NSTT | | | *e*S | | **Sn** | **22 32 15.0 +0.9** |
| | baz=277 | | | | | | | | |
| **YULB** | **Yu-li** | **1.81 237** | | | **Pn** | **22 31 52.5 -0.1** |
| **YULB** | **Yu-li** | **1.81 237** | P | | **Pn** | **22 31 52.9 +0.4** |
| | baz=236 | | | | | | | | |
| YULB | | | S | | **Sn** | **22 32 14.4 -0.3** |
| | baz=236 | | | | | | | | |
| **EYUL** | **Yuli** | **1.82 235** | P | | **Pn** | **22 31 53.2 +0.6** |
| | baz=234 | | | | | | | | |
| EYUL | | | S | | **Sn** | **22 32 15.3 +0.4** |
| | baz=234 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.83 283** | *e*P | | **Pn** | **22 31 53.8 +1.0** |
| | baz=283 | | | | | | | | |
| SBCB | | | *e*S | | **Sn** | **22 32 15.9 +0.9** |
| | baz=283 | | | | | | | | |
| **WHP** | **Taichung City** | **1.83 267** | *e*P | | **Pn** | **22 31 54.3 +1.5** |
| | baz=266 | | | | | | | | |
| WHP | | | *e*S | | **Sn** | **22 32 15.7 +0.5** |
| | baz=266 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.89 260** | *e*P | | **Pn** | **22 31 53.0 -0.6** |
| | baz=259 | | | | | | | | |
| WCS | | | *e*S | | **Sn** | **22 32 17.6 +1.1** |
| | baz=259 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.92 252** | | | **Pn** | **22 31 54.5 +0.5** |
| **SSLB** | **Suanglung** | **1.92 252** | *e*P | | **Pn** | **22 31 54.8 +0.7** |
| | baz=251 | | | | | | | | |
| SSLB | | | *e*S | | **Sn** | **22 32 17.0 -0.4** |
| | baz=251 | | | | | | | | |
| **FULB** | **Fuli** | **1.93 232** | *e*P | | **Pn** | **22 31 54.1 0.0** |
| | baz=231 | | | | | | | | |
| FULB | | | *e*S | | **Sn** | **22 32 17.1 -0.4** |
| | baz=231 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.94 255** | *e*P | | **Pn** | **22 31 55.6 +1.3** |
| | baz=254 | | | | | | | | |
| SMLT | | | *e*S | | **Sn** | **22 32 18.3 +0.4** |
| | baz=254 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.94 229** | *e*P | | **Pn** | **22 31 54.6 +0.4** |
| | baz=227 | | | | | | | | |
| CHKT | | | *e*S | | **Sn** | **22 32 16.9 -0.9** |
| | baz=227 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.97 274** | *e*P | | **Pn** | **22 31 55.7 +1.1** |
| | baz=274 | | | | | | | | |
| NMLH | | | *e*S | | **Sn** | **22 32 18.9 +0.5** |
| | baz=274 | | | | | | | | |
| **TYC** | **Yuchr** | **1.97 256** | *e*P | | **Pn** | **22 31 55.8 +1.1** |
| | baz=255 | | | | | | | | |
| TYC | | | *e*S | | **Sn** | **22 32 18.9 +0.4** |
| | baz=255 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.98 269** | *e*P | | **Pn** | **22 31 56.5 +1.7** |
| | baz=268 | | | | | | | | |
| TWQ1 | | | *e*S | | **Sn** | **22 32 19.4 +0.6** |
| | baz=268 | | | | | | | | |
| **NSY** | **Sanyi** | **1.99 271** | *e*P | | **Pn** | **22 31 55.9 +1.0** |
| | baz=270 | | | | | | | | |
| NSY | | | *e*S | | **Sn** | **22 32 19.3 +0.2** |
| | baz=270 | | | | | | | | |
| **YUS** | **Yu-Shan** | **2.04 244** | *e*P | | **Pn** | **22 31 57.1 +1.1** |
| | baz=243 | | | | | | | | |
| YUS | | | *e*S | | **Sn** | **22 32 20.4 -0.5** |
| | baz=243 | | | | | | | | |
| **JIRB** | **Irabujima** | **2.07 78** | P | | **Pn** | **22 31 56.2 +0.3** |
| JIRB | | | *e*S | | **Sn** | **22 32 21.2 +0.4** |
| **EDH** | **Donghe** | **2.07 227** | *e*P | | **Pn** | **22 31 56.0 0.0** |
| | baz=226 | | | | | | | | |
| EDH | | | *e*S | | **Sn** | **22 32 19.8 -1.1** |
| | baz=226 | | | | | | | | |
| **TCU** | **Taichung** | **2.09 264** | *e*P | | **Pn** | **22 31 57.4 +1.2** |
| | baz=263 | | | | | | | | |
| TCU | | | *e*S | | **Sn** | **22 32 21.9 +0.6** |
| | baz=263 | | | | | | | | |
| **WDJ** | **Dajia District** | **2.10 269** | *e*P | | **Pn** | **22 31 57.8 +1.3** |
| | baz=268 | | | | | | | | |
| WDJ | | | *e*S | | **Sn** | **22 32 22.8 +1.1** |
| | baz=268 | | | | | | | | |
| **WJS** | **Zhushan** | **2.11 255** | *e*P | | **Pn** | **22 31 59.2 +2.7** |
| | baz=254 | | | | | | | | |
| WJS | | | *e*S | | **Sn** | **22 32 23.5 +1.8** |
| | baz=254 | | | | | | | | |
| **WNT** | **Mingjian** | **2.13 256** | *e*P | | **Pn** | **22 31 59.2 +2.4** |
| | baz=256 | | | | | | | | |
| WNT | | | *e*S | | **Sn** | **22 32 25.2 +2.9** |
| | baz=256 | | | | | | | | |
| **ELDTW** | **Lidau** | **2.14 236** | *e*P | | **Pn** | **22 31 57.4 +0.3** |
| | baz=235 | | | | | | | | |
| ELDTW | | | *e*S | | **Sn** | **22 32 21.6 -1.1** |
| | baz=235 | | | | | | | | |
| **ALS** | **Alishan** | **2.15 246** | *e*P | | **Pn** | **22 31 58.4 +1.0** |
| | baz=245 | | | | | | | | |
| ALS | | | *e*S | | **Sn** | **22 32 23.2 -0.1** |
| | baz=245 | | | | | | | | |
| **JIKM** | **Ikemajima** | **2.16 76** | P | | **Pn** | **22 31 57.5 +0.4** |
| JIKM | | | *e*S | | **Sn** | **22 32 23.6 +0.7** |
| **LDUT** | **Ludao** | **2.19 219** | *e*P | | **Pn** | **22 31 57.7 +0.1** |
| | baz=217 | | | | | | | | |
| LDUT | | | *e*S | | **Sn** | **22 32 22.1 -1.6** |
| | baz=217 | | | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.19 81** | P | | **Pn** | **22 31 58.2 +0.6** |
| JMJ2 | | | *e*S | | **Sn** | **22 32 25.3 +1.5** |
| **WCHH** | **Zhanghua** | **2.21 262** | *e*P | | **Pn** | **22 31 59.3 +1.6** |
| | baz=261 | | | | | | | | |
| WCHH | | | *e*S | | **Sn** | **22 32 24.6 +0.6** |
| | baz=261 | | | | | | | | |
| **CHN5** | **Tsauling** | **2.23 249** | *e*P | | **Pn** | **22 32 00.1 +2.0** |
| | baz=249 | | | | | | | | |
| CHN5 | | | *e*S | | **Sn** | **22 32 26.6 +1.9** |
| | baz=249 | | | | | | | | |
| **LONT** | **Longtian** | **2.23 229** | *e*P | | **Pn** | **22 31 58.8 +0.6** |
| | baz=228 | | | | | | | | |
| LONT | | | *e*S | | **Sn** | **22 32 24.6 -0.2** |
| | baz=228 | | | | | | | | |
| **JOGS** | **Gusukube** | **2.27 80** | P | | **Pn** | **22 31 59.3 +0.7** |
| JOGS | | | *e*S | | **Sn** | **22 32 27.4 +1.8** |
| **WDLH** | **Douliu** | **2.31 253** | *e*P | | **Pn** | **22 32 01.5 +2.3** |
| | baz=252 | | | | | | | | |
| **TTN** | **Taitung** | **2.33 226** | *e*P | | **Pn** | **22 32 00.8 +1.4** |
| | baz=224 | | | | | | | | |
| TTN | | | *e*S | | **Sn** | **22 32 27.3 +0.3** |
| | baz=224 | | | | | | | | |
| **TWGBT** | **Beinan** | **2.33 228** | *e*P | | **Pn** | **22 31 59.6 +0.1** |
| | baz=227 | | | | | | | | |
| TWGBT | | | *e*S | | **Sn** | **22 32 25.6 -1.5** |
| | baz=227 | | | | | | | | |
| **TWG** | **Pinlang** | **2.33 228** | | | **Pn** | **22 31 59.6 +0.1** |
| **STYH** | **Taoyuan** | **2.34 239** | *e*P | | **Pn** | **22 32 00.9 +1.3** |
| | baz=238 | | | | | | | | |
| STYH | | | *e*S | | **Sn** | **22 32 27.6 +0.3** |
| | baz=238 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.39 243** | | | **Pn** | **22 32 02.0 +1.7** |
| **TPUB** | **Ta-pu** | **2.39 243** | *e*P | | **Pn** | **22 32 02.5 +2.2** |
| | baz=242 | | | | | | | | |
| TPUB | | | *e*S | | **Sn** | **22 32 30.8 +2.2** |
| | baz=242 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.40 259** | *e*P | | **Pn** | **22 32 01.7 +1.3** |
| | baz=258 | | | | | | | | |
| WRL | | | *e*S | | **Sn** | **22 32 29.0 +0.1** |
| | baz=258 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.43 242** | *e*P | | **Pn** | **22 32 03.1 +2.2** |
| | baz=241 | | | | | | | | |
| **WTK** | **Tuku** | **2.44 254** | *e*P | | **Pn** | **22 32 03.0 +2.0** |
| | baz=253 | | | | | | | | |
| WTK | | | *e*S | | **Sn** | **22 32 32.0 +2.1** |
| | baz=253 | | | | | | | | |
| **CHY** | **Chiayi** | **2.48 249** | *e*P | | **Pn** | **22 32 03.7 +2.3** |
| | baz=248 | | | | | | | | |
| CHY | | | *e*S | | **Sn** | **22 32 33.2 +2.5** |
| | baz=248 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **2.49 258** | *e*P | | **Pn** | **22 32 03.6 +1.9** |
| | baz=257 | | | | | | | | |
| WTCT | | | *e*S | | **Sn** | **22 32 30.8 -0.3** |
| | baz=257 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.52 242** | *e*P | | **Pn** | **22 32 04.4 +2.3** |
| | baz=241 | | | | | | | | |
| CHN1 | | | *e*S | | **Sn** | **22 32 33.2 +1.3** |
| | baz=241 | | | | | | | | |
| **SLGT** | **Liugui** | **2.53 237** | *e*P | | **Pn** | **22 32 03.4 +1.1** |
| | baz=236 | | | | | | | | |
| SLGT | | | *e*S | | **Sn** | **22 32 31.9 -0.2** |
| | baz=236 | | | | | | | | |
| **SGST** | **Jiashian** | **2.53 239** | *e*P | | **Pn** | **22 32 03.8 +1.6** |
| | baz=238 | | | | | | | | |
| SGST | | | *e*S | | **Sn** | **22 32 32.5 +0.4** |
| | baz=238 | | | | | | | | |
| **SNST** | **Tainan City** | **2.53 243** | *e*P | | **Pn** | **22 32 04.6 +2.3** |
| | baz=242 | | | | | | | | |
| SNST | | | *e*S | | **Sn** | **22 32 33.0 +0.9** |
| | baz=242 | | | | | | | | |
| **ECL** | **Taimali** | **2.56 226** | *e*P | | **Pn** | **22 32 02.8 +0.1** |
| | baz=225 | | | | | | | | |
| ECL | | | *e*S | | **Sn** | **22 32 31.3 -1.5** |
| | baz=225 | | | | | | | | |
| **WSF** | **Szhu** | **2.61 254** | *e*P | | **Pn** | **22 32 04.1 +0.9** |
| | baz=253 | | | | | | | | |
| WSF | | | *e*S | | **Sn** | **22 32 33.8 0.0** |
| | baz=253 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.64 251** | *e*P | | **Pn** | **22 32 05.2 +1.5** |
| | baz=250 | | | | | | | | |
| WSL | | | *e*S | | **Sn** | **22 32 35.1 +0.5** |
| | baz=250 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.65 248** | *e*P | | **Pn** | **22 32 05.6 +1.8** |
| | baz=247 | | | | | | | | |
| ICHU | | | *e*S | | **Sn** | **22 32 34.4 -0.6** |
| | baz=247 | | | | | | | | |
| **SSD** | **Sandimen** | **2.69 233** | *e*P | | **Pn** | **22 32 06.2 +1.8** |
| | baz=231 | | | | | | | | |
| SSD | | | *e*S | | **Sn** | **22 32 35.5 -0.3** |
| | baz=231 | | | | | | | | |
| **TSMG** | **Majia** | **2.70 232** | *e*P | | **Pn** | **22 32 06.0 +1.5** |
| | baz=231 | | | | | | | | |
| TSMG | | | *e*S | | **Sn** | **22 32 36.0 -0.2** |
| | baz=231 | | | | | | | | |
| **CHN3** | **Shinhua** | **2.71 241** | *e*P | | **Pn** | **22 32 06.4 +1.8** |
| | baz=240 | | | | | | | | |
| **SCST** | **Cishan** | **2.71 237** | *e*P | | **Pn** | **22 32 06.3 +1.6** |
| | baz=236 | | | | | | | | |
| SCST | | | *e*S | | **Sn** | **22 32 36.2 -0.1** |
| | baz=236 | | | | | | | | |
| **SSHA** | **Shanhua** | **2.74 243** | *e*P | | **Pn** | **22 32 06.4 +1.3** |
| | baz=242 | | | | | | | | |
| SSHA | | | *e*S | | **Sn** | **22 32 37.8 +0.6** |
| | baz=242 | | | | | | | | |
| **SHHT** | **Tainan City** | **2.75 241** | *e*P | | **Pn** | **22 32 06.6 +1.4** |
| | baz=240 | | | | | | | | |
| SHHT | | | *e*S | | **Sn** | **22 32 37.7 +0.3** |
| | baz=240 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.77 231** | *e*P | | **Pn** | **22 32 06.7 +1.2** |
| | baz=229 | | | | | | | | |
| MASBT | | | *e*S | | **Sn** | **22 32 37.7 -0.2** |
| | baz=229 | | | | | | | | |
| **TAW** | **Tawu** | **2.77 223** | *e*P | | **Pn** | **22 32 06.4 +0.9** |
| | baz=222 | | | | | | | | |
| TAW | | | *e*S | | **Sn** | **22 32 37.2 -0.7** |
| | baz=222 | | | | | | | | |
| **EAST** | **Anshuo** | **2.79 224** | *e*P | | **Pn** | **22 32 06.0 +0.3** |
| | baz=223 | | | | | | | | |
| EAST | | | *e*S | | **Sn** | **22 32 38.2 -0.1** |
| | baz=223 | | | | | | | | |
| **TAWH** | **Dawu Township** | **2.79 223** | *e*P | | **Pn** | **22 32 06.2 +0.5** |
| | baz=222 | | | | | | | | |
| TAWH | | | *e*S | | **Sn** | **22 32 37.5 -0.8** |
| | baz=222 | | | | | | | | |
| **TWM1** | **Shoushan** | **2.80 236** | *e*P | | **Pn** | **22 32 06.1 +0.3** |
| | baz=235 | | | | | | | | |
| **SCLT** | **Jiali** | **2.80 245** | *e*P | | **Pn** | **22 32 07.2 +1.3** |
| | baz=244 | | | | | | | | |
| SCLT | | | *e*S | | **Sn** | **22 32 38.6 0.0** |
| | baz=244 | | | | | | | | |
| **SGLT** | **Jiouru** | **2.80 234** | *e*P | | **Pn** | **22 32 07.2 +1.3** |
| | baz=233 | | | | | | | | |
| SGLT | | | *e*S | | **Sn** | **22 32 38.5 -0.1** |
| | baz=233 | | | | | | | | |
| **SSPT** | **Xinbi** | **2.90 229** | *e*P | | **Pn** | **22 32 09.3 +2.0** |
| | baz=228 | | | | | | | | |
| SSPT | | | *e*S | | **Sn** | **22 32 40.0 -1.0** |
| | baz=228 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **2.90 236** | *e*P | | **Pn** | **22 32 08.4 +1.2** |
| | baz=235 | | | | | | | | |
| **SLIU** | **Shizi** | **2.94 223** | *e*P | | **Pn** | **22 32 08.2 +0.5** |
| | baz=222 | | | | | | | | |
| SLIU | | | *e*S | | **Sn** | **22 32 41.1 -0.8** |
| | baz=222 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.94 227** | *e*P | | **Pn** | **22 32 09.0 +1.2** |
| | baz=226 | | | | | | | | |
| SCZT | | | *e*S | | **Sn** | **22 32 41.7 -0.3** |
| | baz=226 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **3.06 220** | *e*P | | **Pn** | **22 32 10.4 +0.9** |
| | baz=219 | | | | | | | | |
| SMST | | | *e*S | | **Sn** | **22 32 43.9 -1.0** |
| | baz=219 | | | | | | | | |
| **WLCH** | **Liuqiu** | **3.12 230** | *e*P | | **Pn** | **22 32 12.1 +1.9** |
| | baz=229 | | | | | | | | |
| WLCH | | | *e*S | | **Sn** | **22 32 44.6 -1.8** |
| | baz=229 | | | | | | | | |
| **HEN** | **Hengchun** | **3.13 221** | *e*P | | **Pn** | **22 32 12.1 +1.7** |
| | baz=220 | | | | | | | | |
| HEN | | | *e*S | | **Sn** | **22 32 45.5 -1.2** |
| | baz=220 | | | | | | | | |
| **TWKBT** | **Hengchun** | **3.14 219** | *e*P | | **Pn** | **22 32 11.8 +1.3** |
| | baz=218 | | | | | | | | |
| TWKBT | | | *e*S | | **Sn** | **22 32 46.6 -0.3** |
| | baz=218 | | | | | | | | |
| **TWK1** | **Hengchun** | **3.14 219** | *e*P | | **Pn** | **22 32 11.9 +1.4** |
| | baz=218 | | | | | | | | |
| TWK1 | | | *e*S | | **Sn** | **22 32 46.4 -0.5** |
| | baz=218 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **3.21 255** | *e*P | | **Pn** | **22 32 12.1 +0.7** |
| | baz=254 | | | | | | | | |
| PHUB | | | *e*S | | **Sn** | **22 32 47.5 -1.1** |
| | baz=254 | | | | | | | | |
| **PNG** | **Penghu** | **3.21 256** | *e*P | | **Pn** | **22 32 11.8 +0.4** |
| | baz=255 | | | | | | | | |
| PNG | | | *e*S | | **Sn** | **22 32 46.8 -1.8** |
| | baz=255 | | | | | | | | |
| **WDGT** | **Dungji** | **3.22 250** | *e*P | | **Pn** | **22 32 12.4 +0.9** |
| | baz=249 | | | | | | | | |
| WDGT | | | *e*S | | **Sn** | **22 32 48.1 -0.6** |
| | baz=249 | | | | | | | | |
| **MATB** | **Ma-tsu** | **3.23 303** | *e*P | | **Pn** | **22 32 11.8 +0.1** |
| | baz=302 | | | | | | | | |
| MATB | | | *e*S | | **Sn** | **22 32 48.3 -0.7** |
| | baz=302 | | | | | | | | |
| **VCHM** | **Qimei** | **3.43 250** | *e*P | | **Pn** | **22 32 15.1 +0.6** |
| | baz=249 | | | | | | | | |
| VCHM | | | *e*S | | **Sn** | **22 32 53.6 -0.4** |
| | baz=249 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.54 281** | *e*P | | **Pn** | **22 32 16.0 +0.1** |
| | baz=280 | | | | | | | | |
| PTMZ | | | *e*S | | **Sn** | **22 32 53.9 -2.7** |
| | baz=280 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.54 316** | *e*P | | **Pn** | **22 32 15.7 -0.2** |
| | baz=315 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.59 307** | *e*P | | **Pn** | **22 32 16.7 +0.1** |
| | baz=307 | | | | | | | | |
| **MHZQ** | **Yeshan** | **3.93 296** | *e*P | | **Pn** | **22 32 21.2 -0.1** |
| | baz=295 | | | | | | | | |
| **KNM** | **Kinmen** | **4.12 271** | *e*P | | **Pn** | **22 32 25.1 +1.3** |
| | baz=270 | | | | | | | | |
| KNM | | | *e*S | | **Sn** | **22 33 09.4 -1.3** |
| | baz=270 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.16 272** | Pn | | **Pn** | **22 32 23.9 -0.4** |
| **KNMB** | **Chin-men Tao** | **4.16 272** | *e*P | | **Pn** | **22 32 24.0 -0.4** |
| | baz=271 | | | | | | | | |
| KNMB | | | *e*S | | **Sn** | **22 33 08.1 -3.6** |
| | baz=271 | | | | | | | | |
| **AXDP** | **Jialang** | **4.56 277** | *e*P | | **Pn** | **22 32 30.1 +0.3** |
| | baz=276 | | | | | | | | |
| AXDP | | | *e*S | | **Sn** | **22 33 17.8 -3.7** |
| | baz=276 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.77 265** | *e*P | | **Pn** | **22 32 32.9 +0.1** |
| | baz=264 | | | | | | | | |
| ZPLA | | | *e*S | | **Sn** | **22 33 22.9 -3.8** |
| | baz=264 | | | | | | | | |
| **SXFK** | **Yanhouchang** | **5.19 294** | *e*P | | **Pn** | **22 32 38.5 0.0** |
| | baz=292 | | | | | | | | |
| **JOW** | **Kunigami** | **5.38 62** | P | | **Pn** | **22 32 39.6 -1.5** |
| | 22nm,0.3s,baz=150,slow=16,SNR=52 | | | | | | | | |
| **JOW** | **Kunigami** | **5.38 62** | | | **Pn** | **22 32 39.4 -1.7** |
| **KSRS** | **Korea Array** | **13.69 17** | P | | **P** | **22 34 40.3 -0.2** |
| | 0.3nm,0.3s,baz=194,slow=12,SNR=9.6 | | | | | | | | |
| **KSRS** | **Korea Array** | **13.69 17** | P | | **P** | **22 34 40.3 -0.2** |
| **USRK** | **Ussuriysk Ar.** | **21.09 18** | P | | **P** | **22 36 00.3 -1.5** |
| **SONM** | **Songino Array** | **26.82 335** | P | | P | 22 37 13.7 +17 |
| | 0.5nm,0.7s,baz=154,slow=9.9,SNR=4.3 | | | | | | | | |
| **SONM** | **Songino Array** | **26.82 335** | P | | **P** | **22 36 57.0 -0.1** |
| **MKAR** | **Makanchi Array** | **39.31 315** | P | | P | 22 39 03.8 +18 |
| | 0.3nm,0.6s,baz=106,slow=8.5,SNR=4.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.95 326** | P | | P | 22 39 16.0 +17 |
| | 0.8nm,0.8s,baz=115,slow=10,SNR=2.7 | | | | | | | | |
| **COEN** | **Coen** | **42.94 150** | P | | **P** | **22 39 16.5 +1.1** |
| COEN | | | | IAmb | IAmb | 22 39 17.3 |
| | comp=Z,5.4nm,0.7s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.30 165** | P | | **P** | **22 39 34.9 +0.7** |
| WB0 | | | | IAmb | IAmb | 22 39 35.4 |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.45 165** | P | | **P** | **22 39 36.4 +0.9** |
| | comp=Z,6.3nm,0.7s,baz=347,slow=8.8,SNR=32 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.45 165** | P | | **P** | **22 39 35.2 -0.2** |
| **WB2** | **Warramunga Arr** | **45.45 165** | P | | **P** | **22 39 35.8 +0.4** |
| WB2 | | | | IAmb | IAmb | 22 39 37.2 |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.80 184** | P | | **P** | **22 39 37.6 -0.5** |
| PSA00 | | | | IAmb | IAmb | 22 39 37.7 |
| | comp=Z,8.5nm,1.1s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.80 184** | P | | **P** | **22 39 37.6 -0.5** |
| PSA00 | | | | IAmb | IAmb | 22 39 38.6 |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| **AS31** | **Alice Springs** | **48.95 167** | P | | **P** | **22 40 03.4 +0.8** |
| AS31 | | | | IAmb | IAmb | 22 40 06.3 |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.95 167** | P | | **P** | **22 40 04.2 +1.5** |
| | comp=Z,2.0nm,0.6s,baz=349,slow=11,SNR=29 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.95 167** | P | | **P** | **22 40 03.4 +0.8** |
| **FORT** | **Forrest** | **55.09 175** | P | | **P** | **22 40 48.4 +0.4** |
| **BBOO** | **Buckleboo** | **58.25 167** | P | | **P** | **22 41 10.6 +0.1** |
| **STKA** | **Stephens Creek** | **58.73 161** | P | | **P** | **22 41 14.8 +1.0** |
| | comp=Z,1.6nm,0.5s,baz=342,slow=9.6,SNR=4.1 | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.73 161** | P | | **P** | **22 41 14.1 +0.3** |
| **TOLK** | **Toolik Lake Re** | **66.61 24** | P | | **P** | **22 42 06.5 +0.6** |
| TOLK | | | | IAmb | IAmb | 22 42 26.0 |
| | comp=Z,7.1nm,1.4s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **68.67 24** | P | | **P** | **22 42 18.9 0.0** |
| **M24K** | **Tolsona, Glenn** | **69.15 30** | P | | **P** | **22 42 21.9 0.0** |
| **YKA** | **Yellowknife Ar** | **82

*IDC* ***17*** *22:36:49.6±1.1,0.″81N×128.″89E, h0km, mb3.9/5, mb1 4.1/6, mb1mx3.7/36, mbtmp4.0/6, ML4.0/1, MS3.0/2, Ms1 3.0/2, ms1mx2.5/71, Error ellipse: s-maj=60.7km s-min=18.3km az=64.0*

*NEIC* ***17*** *22:36:52.2±0.8, 0.″73N±0.″06×129.″08E±0.″06, h10km±1km, mb4.1/13, Error ellipse: s-maj=12.8km s-min=6.2km az=228.0*

**ISC 17 22:36:51.6±0.7, 0.″70N±0.″08×129.″05E±0.″07, h10km, n34, σ1§00/28, mb4.1/10, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.69** | **272** | Pn | **Pn** | **22 37 21.5** | **+0.4** |
| TNTI | | | | Sn | **Sb** | **22 37 44.8** | **+0.8** |
| **SIJI** | **Sorong** | **2.71** | **125** | Pn | **Pn** | **22 37 35.8** | **+0.6** |
| | 23nm,0.3s,baz=110,slow=11,SNR=29 | | | | | | |
| SIJI | | | | Sn | **Sn** | **22 38 08.9** | **+0.9** |
| | 14nm,0.3s,baz=167,slow=22,SNR=12 | | | | | | |
| **TOLI2** | **Tolitoli** | **8.28** | **273** | Pn | **Pn** | **22 38 53.2** | **+1.4** |
| **SAUI** | **Saumlaki** | **8.91** | **165** | Pn | **Pn** | **22 39 00.4** | **-0.1** |
| **MTN** | **Manton Dam** | **13.61** | **171** | Pn | **Pn** | **22 40 02.0** | **-2.9** |
| **KNRA** | **Kununurra** | **16.27** | **181** | Pn | **Pn** | **22 40 40.8** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 22 40 46.2 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.98** | **190** | P | **Pn** | **22 41 14.7** | **+0.7** |
| FITZ | | | | IAmb | IAmb | 22 41 31.4 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.00** | **166** | P | **P** | **22 41 35.8** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 22 41 40.5 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.16** | **166** | P | **P** | **22 41 38.0** | **+0.9** |
| | comp=Z,2.8nm,0.7s,baz=345,slow=11,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.16** | **166** | P | **P** | **22 41 36.8** | **-0.4** |
| **TPUB** | **Ta-pu** | **23.91** | **341** | P | **P** | **22 42 05.4** | **-0.4** |
| **AS31** | **Alice Springs** | **24.67** | **169** | P | **P** | **22 42 12.6** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 22 42 16.3 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **24.67** | **169** | P | **P** | **22 42 14.3** | **+1.4** |
| | comp=Z,8.1nm,0.8s,baz=348,slow=11,SNR=53 | | | | | | |
| **ASAR** | **Alice Springs** | **24.67** | **169** | P | **P** | **22 42 12.3** | **-0.6** |
| **BBOO** | **Buckleboo** | **33.98** | **169** | P | **P** | **22 43 35.2** | **-0.3** |
| **STKA** | **Stephens Creek** | **34.51** | **161** | P | **P** | **22 43 41.1** | **+1.0** |
| | comp=Z,1.5nm,0.5s,baz=326,slow=10,SNR=4.0 | | | | | | |
| **STKA** | **Stephens Creek** | **34.51** | **161** | P | **P** | **22 43 40.2** | **+0.1** |
| **KSRS** | **Korea Array** | **36.59** | **358** | LR | LR | 22 57 13.4 | |
| | comp=Z,15nm,19.7s,baz=295,slow=34 | | | | | | |
| **ARMA** | **Armidale** | **37.68** | **147** | P | **P** | **22 44 07.2** | **-0.2** |
| **H11S3** | **WAKE ISLAND Hy** | **40.95** | **62** | T | T | 23 28 05.6 | |
| | baz=248,slow=75,SNR=144 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.96** | **62** | T | T | 23 28 02.1 | |
| | baz=248,slow=75,SNR=184 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.97** | **62** | T | T | 23 28 02.5 | |
| | baz=248,slow=75,SNR=165 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.58** | **61** | T | T | 23 28 48.3 | |
| | baz=247,slow=75,SNR=621 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.59** | **61** | T | T | 23 28 49.0 | |
| | baz=247,slow=75,SNR=322 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.60** | **61** | T | T | 23 28 52.6 | |
| | baz=247,slow=75,SNR=652 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **43.39** | **3** | LR | LR | 23 02 25.2 | |
| | comp=Z,30nm,19.6s,baz=13,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **43.39** | **3** | P | **P** | **22 44 54.0** | **-0.3** |
| **SHL** | **Shillong** | **43.54** | **308** | P | **P** | **22 44 55.8** | **-0.3** |
| SHL | | | | IAmb | IAmb | 22 45 07.5 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **50.90** | **340** | P | **P** | **22 45 53.0** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=157,slow=6.1,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **50.90** | **340** | P | **P** | **22 45 53.2** | **+0.1** |
| **MK31** | **Makanchi Array** | **61.35** | **325** | P | **P** | **22 47 07.7** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 22 47 29.1 | |
| | comp=Z,1.8nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.35** | **325** | P | **P** | **22 47 05.1** | **-2.6** |
| | comp=Z,0.7nm,0.5s,baz=121,slow=7.4,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.35** | **325** | P | **P** | **22 47 07.1** | **-0.6** |
| **KURK** | **Kurchatov** | **65.53** | **327** | P | **P** | **22 47 35.9** | **+0.7** |
| KURK | | | | IAmb | IAmb | 22 47 55.7 | |
| | comp=Z,2.3nm,1.1s | | | | | | |

*TUL* ***17*** *22:46:12.2±0.6, 35.″72N±0.″01×97.″16W±0.″01, h5km±1km, ML2.8, mb_Lg2.3/8(NEIC), Error ellipse: s-maj=1.9km s-min=1.3km az=132.0*

**NEIC 17 22:46:13.0±0.6, 35.722N±0.009×97.164W±0.008, h6km±6km, Error ellipse: s-maj=1.4km s-min=0.8km az=207.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK005** | **Luther M Schoo** | **0.07** | **198** | Pg | Pg | 22 46 14.2 | -0.5 |
| **OKCFA** | **Oklahoma City** | **0.39** | **217** | Pg | Pg | 22 46 20.0 | -0.5 |
| OKCFA | | | | Sg | Sg | 22 46 25.7 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **215** | Pg | Pg | 22 46 20.0 | -0.5 |
| OKCSW | | | | Sg | Sg | 22 46 25.7 | +0.1 |
| **FNO** | **Franklin** | **0.50** | **203** | Pg | Pg | 22 46 22.1 | -0.5 |
| FNO | | | | Sg | Sg | 22 46 29.4 | +0.2 |
| **W35A** | **Tecumseh** | **0.62** | **157** | Pg | Pg | 22 46 24.0 | -0.8 |
| W35A | | | | Sg | Sg | 22 46 32.9 | 0.0 |
| **TUL1** | **Leonard** | **1.13** | **80** | Pg | Pg | 22 46 32.8 | -1.9 |
| **X34A** | **Smith Ranch, M** | **1.25** | **206** | Pg | Pg | 22 46 35.7 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.30** | **24** | Pg | Pg | 22 46 36.2 | -1.5 |
| **WMOK** | **Wichita Mounta** | **1.65** | **234** | Pn | Pn | 22 46 42.2 | -0.3 |
| **X37A** | **Clayton** | **1.85** | **127** | Pn | Pn | 22 46 45.2 | -0.1 |
| **U38A** | **Gravette** | **2.36** | **72** | | Pn | 22 46 52.5 | +0.2 |
| **HHAR** | **Hobbs** | **2.67** | **77** | Pn | Pn | 22 46 56.6 | 0.0 |
| **W39A** | **Magazine** | **2.81** | **100** | | Pn | 22 46 57.0 | -1.5 |
| **MIAR** | **Mount Ida** | **3.17** | **111** | Pn | Pn | 22 47 01.8 | -1.6 |
| **U40A** | **Yellville** | **3.55** | **78** | Pn | Pn | 22 47 07.5 | -1.2 |
| **S39A** | **Bolivar** | **3.66** | **56** | Pn | Pn | 22 47 09.8 | -0.4 |
| **CBKS** | **Cedar Bluff** | **3.71** | **327** | IAmb_Lg | | 22 48 14.2 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.79** | **259** | IAmb_Lg | | 22 48 16.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.00** | **95** | Pn | Pn | 22 47 14.6 | -0.3 |
| **W41B** | **Gary Mavity, V** | **4.05** | **96** | Pn | Pn | 22 47 15.1 | -0.5 |
| **FCAR** | **Ozark Folk Cen** | **4.10** | **86** | Pn | Pn | 22 47 16.5 | +0.3 |
| **R40A** | **Maddies Statio** | **4.68** | **55** | IAmb_Lg | | 22 48 42.2 | |
| | comp=Z,6.7nm,0.8s | | | | | | |

**ISN 17 22:53:26.2±0.3, 32.″47N×47.″97E, h10km, ML1.9, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBDR** | **Badra** | **1.83** | **291** | *i* P | Pb | 22 53 59.2 | -0.6 |
| IBDR | | | | *i* S | Sb | 22 54 23.4 | +0.7 |
| | baz=110 | | | | | | |
| IBDR | | | | IAML | | 22 54 34.6 | |
| | comp=N,14nm,0.8s | | | | | | |
| IBDR | | | | IAML | | 22 54 47.4 | |
| | comp=E,15nm,1.0s | | | | | | |
| **IBDR** | **Badra** | **1.83** | **291** | *e*Pg | Pb | 22 53 59.0 | -0.8 |
| | baz=110 | | | | | | |
| IBDR | | | | *e*Sg | Sg | 22 54 26.0 | +1.0 |
| IBDR | | | | AML | AML | 22 54 28.3 | |
| | comp=N,15nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 22 54 28.8 | |
| | comp=E,15nm,0.4s | | | | | | |

*IDC* ***17*** *23:22:46.6±2.2, 32.″93S×178.″48W, h0km, mb4.0/2, mb1 4.3/3, mb1mx3.9/26, mbtmp4.1/3, ML3.9/1, Error ellipse: s-maj=60.0km s-min=34.5km az=124.0*

*NEIC* ***17*** *23:22:54.6±1.3, 33.″2S±0.″1×179.″4W±0.″2, h10km±2km, mb4.3/11, Error ellipse: s-maj=26.4km s-min=16.8km az=76.0*

**ISC 17 23:22:53.0±1.4, 33.″01S±0.″09×179.″1W±0.″2, h10km, n19, σ1§70/20, mb4.2/7, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **6.07** | **209** | Pn | **Pn** | **23 24 22.7** | **-0.1** |
| | 2.8nm,0.3s,baz=280,slow=5.2,SNR=8.2 | | | | | | |
| URZ | | | | Sn | **Sn** | **23 25 35.2** | **+2.9** |
| | 2.8nm,0.3s,baz=332,slow=23,SNR=1.7 | | | | | | |
| **URZ** | **Urewera** | **6.07** | **209** | | **Pn** | **23 24 22.5** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **7.10** | **209** | Pn | **Pn** | **23 24 35.5** | **-1.5** |
| **MSVF** | **Nonsavu** | **15.43** | **350** | | **Pn** | **23 26 33.1** | **+2.2** |
| MSVF | | | | IAmb | IAmb | 23 26 50.6 | |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **PINNC** | **Pines Island,** | **15.76** | **308** | Pn | **Pn** | **23 26 36.1** | **+1.1** |
| PINNC | | | | IAmb | IAmb | 23 26 39.9 | |
| | comp=Z,48nm,1.1s | | | | | | |
| **LIFNC** | **LIFOU** | **17.21** | **312** | | **Pn** | **23 26 54.8** | **+1.3** |
| **COEN** | **Coen** | **39.17** | **290** | P | **P** | **23 30 21.5** | **+0.2** |
| COEN | | | | IAmb | IAmb | 23 30 27.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **42.10** | **270** | P | **P** | **23 30 44.2** | **-1.3** |
| **ASAR** | **Alice Springs** | **42.10** | **270** | P | **P** | **23 30 45.0** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=110,slow=7.4,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **42.10** | **270** | P | **P** | **23 30 43.8** | **-1.7** |
| **WRA** | **Warramunga Arr** | **43.33** | **276** | P | **P** | **23 30 54.6** | **-0.8** |
| | comp=Z,1.5nm,0.4s,baz=115,slow=7.6,SNR=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.33** | **276** | P | **P** | **23 30 53.7** | **-1.8** |
| **WB0** | **Warramunga Arr** | **43.37** | **276** | P | **P** | **23 30 55.0** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 23 31 09.7 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **50.03** | **277** | P | **P** | **23 31 46.1** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **51.47** | **273** | P | **P** | **23 31 57.6** | **-1.2** |
| FITZ | | | | IAmb | IAmb | 23 32 03.0 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **54.77** | **266** | P | **P** | **23 32 22.3** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 23 32 36.0 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.10** | **180** | P | **P** | **23 32 40.2** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 23 32 49.1 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **147.24** | **338** | PKPbc | **PKPdf** | **23 42 30.4** | **-3.1** |
| | comp=Z,1.2nm,0.4s,baz=64,slow=3.2,SNR=17 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.14** | **280** | PKPbc | **PKPdf** | **23 42 43.3** | **+2.5** |
| | comp=Z,0.5nm,0.4s,baz=87,slow=7.4,SNR=4.6 | | | | | | |

*ARE* ***17*** *23:57:53±4.5, 9.″71S±0.″07×75.″86W±0.″08, h26km±7km, Error ellipse: s-maj=0.0km s-min=0.0km az=208.0*

*IDC* ***17*** *23:57:54.4±0.9, 9.″60S×75.″64W, h0km, mb3.7/4, mb1 4.0/8, mb1mx3.9/40, mbtmp3.9/8, ML3.7/4, MS3.3/9, Ms1 3.5/9, ms1mx3.1/65, Error ellipse: s-maj=27.8km s-min=14.4km az=114.0*

*NEIC* ***17*** *23:57:57.4±2.3, 9.″60S±0.″05×75.″62W±0.″08, h18km±6km, mb4.0/9, ML4.2(ARE), Error ellipse: s-maj=12.9km s-min=4.6km az=119.0*

**ISC 17 23:57:59.7±0.6, 9.″61S±0.″06×75.″5W±0.″1, h41km, n31, σ1§08/26, mb3.7/4, MS3.5/4, Central Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNA** | **Nana** | **2.69** | **209** | Pn | **Pn** | **23 58 40.1** | **-0.5** |
| | 38nm,0.3s,baz=19,slow=19,SNR=51 | | | | | | |
| NNA | | | | Sn | **Sn** | **23 59 11.9** | **-0.1** |
| | 20nm,0.3s,baz=303,slow=23,SNR=6.0 | | | | | | |
| NNA | | | | Lg | Lg | 23 59 17.2 | |
| | 38nm,0.3s,baz=325,slow=23,SNR=11 | | | | | | |
| **NNA** | **Nana** | **2.69** | **209** | | **Pn** | **23 58 39.5** | **-1.1** |
| **ATAH** | **Atahualpa** | **3.76** | **311** | Pn | **Pn** | **23 58 58.0** | **+2.5** |
| | 4.4nm,0.3s,baz=145,slow=12,SNR=27 | | | | | | |
| ATAH | | | | Lg | Lg | 23 59 50.0 | |
| | 6.7nm,0.3s,baz=82,slow=19,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **9.79** | **133** | Lg | Lg | 00 03 04.7 | |
| | baz=186,slow=15,SNR=5.0 | | | | | | |
| LPAZ | | | | LR | LR | 00 03 41.3 | |
| | comp=Z,54nm,21.0s,baz=328,slow=35 | | | | | | |
| **OTAV** | **Otavalo** | **10.21** | **343** | | **Pn** | **00 00 21.4** | **-2.8** |
| **GO01** | **Chusmiza** | **11.72** | **149** | Pn | **Pn** | **00 00 44.3** | **-0.6** |
| **PATCX** | **Punta Patache** | **12.29** | **156** | Pn | **Pn** | **00 00 51.5** | **-0.8** |
| **LVC** | **Limon Verde** | **14.40** | **155** | LR | LR | 00 07 09.3 | |
| | comp=Z,131nm,20.3s,baz=338,slow=38 | | | | | | |
| **ROSC** | **El Rosal** | **14.41** | **5** | LR | LR | 00 07 23.9 | |
| | comp=Z,100nm,21.8s,baz=229,slow=40 | | | | | | |
| **SIV** | **San Ignacio** | **15.45** | **116** | Pn | **Pn** | **00 01 34.5** | **-0.5** |
| | 0.4nm,0.3s,baz=291,slow=12,SNR=5.4 | | | | | | |
| SIV | | | | Lg | Lg | 00 06 02.6 | |
| | 0.3nm,0.3s,baz=21,slow=21,SNR=5.2 | | | | | | |
| SIV | | | | LR | LR | 00 08 26.4 | |
| | comp=Z,93nm,19.6s,baz=283,slow=41 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **17.00** | **2** | P | **Pn** | **00 01 54.5** | **-0.2** |
| ZARC | | | | IAmb | IAmb | 00 01 58.8 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **PTGA** | **Pitinga** | **17.82** | **61** | P | **Pn** | **00 02 04.8** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=332,slow=22,SNR=1.9 | | | | | | |
| PTGA | | | | Lg | Lg | 00 07 24.3 | |
| | comp=Z,0.9nm,0.3s,baz=329,slow=23,SNR=2.4 | | | | | | |
| PTGA | | | | LR | LR | 00 09 08.7 | |
| | comp=Z,50nm,18.5s,baz=100,slow=38 | | | | | | |
| **OCAC** | **Ocana** | **17.87** | **7** | | **Pn** | **00 02 04.3** | **-1.2** |
| **AC02** | **Maricunga** | **18.17** | **161** | | **Pn** | **00 02 08.4** | **-1.1** |
| AC02 | | | | IAmb | IAmb | 00 02 19.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **SDV** | **Santo Domingo** | **19.01** | **15** | P | **P** | **00 02 18.3** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=226,slow=9.2,SNR=4.4 | | | | | | |
| **SJCC** | **San Jacinto, C** | **19.38** | **1** | P | **P** | **00 02 22.6** | **+0.2** |
| **CPUP** | **Villa Florida** | **23.95** | **136** | LR | LR | 00 15 00.8 | |
| | comp=Z,152nm,19.8s,baz=290,slow=43 | | | | | | |
| **BDFB** | **Brasilia** | **27.49** | **105** | LR | LR | 00 14 55.2 | |
| | comp=Z,123nm,18.9s,baz=299,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **47.28** | **326** | P | **P** | **00 06 29.5** | **+0.1** |
| | comp=Z,0.7nm,0.9s,baz=156,slow=8.9,SNR=4.8 | | | | | | |
| TXAR | | | | PcP | **PcP** | **00 08 01.2** | **+1.1** |
| | comp=Z,0.2nm,0.7s,baz=134,slow=5.2,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **47.28** | **326** | P | **P** | **00 06 28.3** | **-1.1** |
| **SADO** | **Sadowa** | **54.23** | **357** | LR | LR | 00 35 35.8 | |
| | comp=Z,46nm,18.1s,baz=140,slow=42 | | | | | | |
| **SDCO** | **Great Sand Dun** | **54.83** | **331** | P | **P** | **00 07 26.5** | **+0.4** |
| **PDAR** | **Pinedale Array** | **60.69** | **332** | P | **P** | **00 08 07.2** | **0.0** |
| | comp=Z,0.9nm,1.0s,baz=134,slow=5.2,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.97** | **343** | P | **P** | **00 09 52.6** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=139,slow=5.6,SNR=6.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.92** | **75** | P | **P** | **00 10 06.5** | **+1.4** |
| | comp=Z,1.3nm,0.8s,baz=276,slow=4.7,SNR=3.6 | | | | | | |
| **KDAK** | **Kodiak Island** | **91.25** | **329** | LR | LR | 00 55 31.9 | |
| | comp=Z,28nm,18.5s,baz=112,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **136.16** | **221** | PKP | **PKPdf** | **00 17 17.6** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=143,slow=3.2,SNR=3.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **138.44** | **225** | PKP | **PKPdf** | **00 17 22.5** | **+0.7** |
| | comp=Z,0.6nm,0.9s,baz=121,slow=1.9,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **141.87** | **358** | PKP | **PKPdf** | **00 17 28.7** | **+1.3** |
| | comp=Z,0.3nm,0.8s,baz=309,slow=2.8,SNR=2.2 | | | | | | |
| **KSRS** | **Korea Array** | **145.13** | **326** | PKPbc | **PKPdf** | **00 17 33.6** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=58,slow=2.9,SNR=7.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **145.43** | **217** | PKPbc | **PKPab** | **00 17 34.8** | **+0.4** |
| | comp=Z,4.0nm,0.9s,baz=136,slow=7.5,SNR=4.8 | | | | | | |

*IDC* ***17*** *23:57:59.3±0.5, 38.″95N×71.″44E, h0km, mb4.4/27, mb1 4.5/35, mb1mx4.4/54, mbtmp4.4/35, ML3.7/8, MS3.7/23, Ms1 3.7/23, ms1mx3.4/86, Error ellipse: s-maj=9.7km s-min=8.6km az=141.0*

*MOS* ***17*** *23:58:00.2±1.4, 39.″01N×71.″47E, h37km, mb5.0/47, Error ellipse: s-maj=4.2km s-min=3.2km az=80.6*

*SOME* ***17*** *23:58:00.1, 39.″18N×71.″32E, h5km, MS4.2*

*KRNET* ***17*** *23:58:00.6±0.1, 39.″09N×71.″36E, h14km, mb4.9*

*BJI* ***17*** *23:58:04.4±0.0, 39.″11N×71.″48E, h42km, mb4.6/46, mB4.8/25, ML4.4/4, Ms4.3/21, Ms7 4.0/18*

*NEIC* ***17*** *23:58:05.9±1.3, 39.″06N±0.″05×71.″31E±0.″08, h45km±5km, mb4.6/72, Error ellipse: s-maj=9.3km s-min=7.2km az=100.0*

*NNC* ***17*** *23:58:07.6±3.5, 39.″53N×71.″33E, h0km, mb5.0, mpv4.6, Error ellipse: s-maj=30.5km s-min=15.1km az=29.0*

**ISC 17 23:58:03.4±0.7, 39.″06N±0.″03×71.″36E±0.″03, h24km±5km, n437, σ2§24/458, mb4.7/112, MS3.7/22, 68C-38D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRK** | **Karamyk** | **0.54** | **39** | ⇑*i*P | **Pb** | **23 58 10.8** | **-3.6** |
| | baz=41 | | | | | | |
| DRK | | | | ⇑*i*S | **Sb** | **23 58 18.2** | **-3.7** |
| | baz=41 | | | | | | |
| **BTK** | **Batken** | **1.08** | **337** | *i* PG | **Pn** | **23 58 20.6** | **-2.5** |
| BTK | | | | *i* S | **Sn** | **23 58 35.4** | **-1.9** |
| **BTK** | **Batken** | **1.08** | **337** | ⇑*i*P | **Pn** | **23 58 20.6** | **-2.5** |
| | baz=37 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **23 58 35.4** | **-1.9** |
| | baz=37 | | | | | | |
| **OHH** | **Osh** | **1.82** | **36** | *i* PN | **Pn** | **23 58 34.0** | **+0.7** |
| OHH | | | | *i* S | **Sb** | **23 58 58.6** | **0.0** |
| **OHH** | **Osh** | **1.82** | **36** | ⇑*i*P | **Pn** | **23 58 34.0** | **+0.7** |
| | baz=37 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **23 58 58.6** | **0.0** |
| | baz=37 | | | | | | |
| **TRKS** | **Terek-Say** | **2.47** | **356** | ⇓*i*PN | **Pn** | **23 58 42.9** | **+0.6** |
| TRKS | | | | *i* S | **Sn** | **23 59 13.8** | **+2.0** |
| **TRKS** | **Terek-Say** | **2.47** | **356** | ⇓*i*P | **Pn** | **23 58 42.9** | **+0.6** |
| | baz=57 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sn** | **23 59 13.8** | **+2.0** |
| | baz=57 | | | | | | |
| **TAS** | **Tashkent** | **2.76** | **326** | PN | **Pn** | **23 58 47.6** | **+1.5** |
| **TAS** | **Tashkent** | **2.76** | **326** | | **Pn** | **23 58 47.6** | **+1.5** |
| **TAS** | **Tashkent** | **2.76** | **326** | ⇓*i*P | **Pn** | **23 58 47.8** | **+1.7** |
| | baz=25 | | | | | | |
| TAS | | | | ⇓*i*S | **Sn** | **23 59 21.9** | **+3.2** |
| | baz=25 | | | | | | |
| **ARK** | **Arkit** | **2.77** | **9** | ⇑*i*P | **Pn** | **23 58 47.8** | **+1.5** |
| | baz=10.0 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **23 59 22.4** | **-3.4** |
| | baz=10.0 | | | | | | |
| **IUG** | **luzhnay** | **3.24** | **342** | *e*PN | **Pn** | **23 58 52.9** | **+0.1** |
| **IUG** | **luzhnay** | **3.24** | **342** | *e*P | **Pb** | **23 58 59.8** | **-0.5** |
| | 13μm,0.7s | | | | | | |
| IUG | | | | *e*S | **Sb** | **23 59 43.4** | **+4.0** |
| | 5μm,0.7s | | | | | | |
| **IUG** | **luzhnay** | **3.24** | **342** | *e*Pn | **Pn** | **23 58 52.9** | **+0.1** |
| | baz=343 | | | | | | |
| **CHM** | **Chimkent** | **3.52** | **338** | *e*P | **Pb** | **23 59 05.0** | **0.0** |
| | 376nm,0.8s | | | | | | |
| CHM | | | | *e*S | **Sb** | **23 59 51.2** | **+4.0** |
| | 5μm,0.4s | | | | | | |
| **AML** | **Almayashu** | **3.54** | **29** | P | **Pn** | **23 59 00.5** | **+3.3** |
| | SNR=535 | | | | | | |
| **AML** | **Almayashu** | **3.54** | **29** | *i* PN | **Pn** | **23 58 58.7** | **+1.5** |
| AML | | | | *i* S | **Sn** | **23 59 41.4** | **+2.9** |
| **ARLS** | **Aral** | **3.59** | **38** | *i* PN | **Pn** | **23 58 59.2** | **+1.5** |
| ARLS | | | | *i* S | **Sn** | **23 59 42.4** | **+3.0** |
| **ARLS** | **Aral** | **3.59** | **38** | ⇑*i*P | **Pn** | **23 58 59.2** | **+1.5** |
| | baz=38 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **23 59 42.4** | **+3.0** |
| | baz=38 | | | | | | |
| **KSH** | **Kashi** | **3.60** | **81** | P | **Pn** | **23 58 57.0** | **-0.8** |
| KSH | | | | smax | smax | | |
| | comp=N,2μm,0.8s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,1μm,0.9s | | | | | | |
| **MRKS** | **Merke** | **3.94** | **20** | *e*S | **Sb** | **00 00 05.5** | **+6.0** |
| | 455nm,0.6s | | | | | | |
| MRKS | | | | *e*P | **Pb** | **23 59 13.0** | **+0.8** |
| | 127nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **3.97** | **36** | P | **Pn** | **23 59 06.5** | **+3.4** |
| | SNR=217 | | | | | | |
| **UCH** | **Uchtor** | **3.97** | **36** | *i* PN | **Pn** | **23 59 04.8** | **+1.7** |
| UCH | | | | *i* S | **Sn** | **23 59 51.8** | **+2.7** |
| **UCH** | **Uchtor** | **3.97** | **36** | ⇓*i*P | **Pn** | **23 59 04.8** | **+1.7** |
| | baz=36 | | | | | | |
| UCH | | | | ⇓*i*S | **Sn** | **23 59 51.3** | **+2.2** |
| | baz=36 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.03** | **26** | P | **Pn** | **23 59 07.2** | **+3.5** |
| | SNR=154 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.03** | **26** | ⇓*i*PN | **Pn** | **23 59 05.4** | **+1.7** |
| EKS2 | | | | *i* S | **Sn** | **23 59 52.9** | **+2.6** |
| **EKS2** | **Erkin-Say** | **4.03** | **26** | ⇓*i*P | **Pn** | **23 59 05.4** | **+1.7** |
| | baz=26 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sn** | **23 59 52.9** | **+2.6** |
| | baz=26 | | | | | | |
| **KK06** | **Karatay Array** | **4.08** | **351** | ⇓Pn | **Pn** | **23 59 06.3** | **+2.0** |
| | 50nm,0.3s,baz=178,slow=13 | | | | | | |
| KK06 | | | | ⇓Pg | **Pb** | **23 59 15.1** | **+0.7** |
| | 199nm,0.6s | | | | | | |
| KK06 | | | | ⇓Sn | **Sn** | **23 59 49.9** | **-1.2** |
| | 238nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **4.09** | **351** | PN | **Pn** | **23 59 06.1** | **+1.7** |
| **KKAR** | **Karatay Array** | **4.09** | **351** | | **Pn** | **23 59 06.1** | **+1.7** |
| **BRLS** | **Borolday** | **4.13** | **344** | *e*PN | **Pn** | **23 59 02.5** | **-2.4** |
| **BRLS** | **Borolday** | **4.13** | **344** | *e*S | **Sb** | **00 00 01.8** | **-3.0** |
| | 320nm,0.4s | | | | | | |
| BRLS | | | | *e*P | Pb | 23 59 10.5 | -4.8 |
| | 63nm,0.7s | | | | | | |
| **BRLS** | **Borolday** | **4.13** | **344** | *e*Pn | **Pn** | **23 59 02.6** | **-2.4** |
| | baz=343 | | | | | | |
| **BRLS** | **Borolday** | **4.13** | **344** | Pg | **Pn** | **23 59 07.3** | **+2.4** |
| | 23nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 23 59 56.1 | |
| | 282nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **33** | Pn | **Pn** | **23 59 10.8** | **+3.6** |
| | 44nm,0.3s,baz=200,slow=5.9,SNR=733 | | | | | | |
| AAK | | | | Sn | **Sb** | **00 00 04.0** | **-5.5** |
| | 45nm,0.3s,baz=69,slow=20,SNR=12 | | | | | | |
| AAK | | | | Lg | Lg | 00 00 14.6 | |
| | 70nm,0.3s,baz=10.0,slow=16,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **33** | P | **Pn** | **23 59 10.9** | **+3.6** |
| | SNR=295 | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **33** | *c* PN | **Pn** | **23 59 10.5** | **+3.3** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,116nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **33** | Pn | **Pn** | **23 59 10.7** | **+3.4** |
| **AAK** | **Ala-Archa** | **4.29** | **33** | ⇓Pn | **Pn** | **23 59 10.8** | **+3.6** |
| | comp=Z,149nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **33** | ⇑*i*P | **Pn** | **23 59 09.0** | **+1.8** |
| | baz=33 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **23 59 58.9** | **+2.3** |
| | baz=33 | | | | | | |
| **FRU1** | **Bishkek** | **4.49** | **32** | *e*PN | **Pn** | **23 59 12.0** | **+2.1** |
| FRU1 | | | | *i* S | **Sn** | **00 00 03.5** | **+2.2** |
| **F

KNDC **Almaty** 5.92 44 ⇑Pn Pn 23 59 33.3 +3.7
comp=Z,97nm,0.7s
MDOK **Medeo** 5.93 45 *e*PN Pn 23 59 31.1 +1.3
MDOK **Medeo** 5.93 45 *e*Pn Pn 23 59 31.2 +1.3
baz=46
MDOK **Medeo** 5.93 45 ⇓Pn Pn 23 59 32.9 +3.1
comp=Z,85nm,0.7s
KOTS **Kotyrbulak** 6.01 44 Pg Pb 23 59 49.5 +1.9
KOTS Lg Lg 00 01 10.7
KUU **Kurty** 6.10 36 *e*PN Pn 23 59 33.3 +1.3
KUU pmax pmax
comp=Z,10.0nm,0.6s
KUU **Kurty** 6.10 36 *e*Pn Pn 23 59 33.3 +1.3
comp=Z,9.9nm,0.6s,baz=38
KTBS **Karatobe** 6.13 39 Pg Pb 23 59 49.4 0.0
comp=Z,27nm,0.9s
KTBS Lg Lg 00 01 11.4
comp=Z,348nm,0.7s
THW **Thamme Wali** 6.26 177 P Pn 23 59 37.8 +3.5
BTLS **Baital** 6.30 18 *e*PN Pn 23 59 35.7 +1.0
BTLS **Baital** 6.30 18 *e*Pn Pn 23 59 35.8 +1.0
baz=19
CHKK **Chushkaly** 6.38 40 *e*Pn Pn 23 59 37.4 +1.5
baz=41
SATY **Saty** 6.65 51 *e*PN Pn 23 59 40.8 +1.1
SATY **Saty** 6.65 51 *e*Pn Pn 23 59 40.8 +1.1
baz=52
ZHN **Zhinishke** 6.73 50 *e*PN Pn 23 59 43.3 +2.6
ZHN **Zhinishke** 6.73 50 *e*Pn Pn 23 59 43.4 +2.6
baz=52
JMU **Jammu** 6.95 155 *e*P Pn 23 59 45.8 +2.1
JMU *e*S Sn 00 01 07.2 +5.2
KPKS **Kokpek** 7.05 49 *e*PN Pn 23 59 47.1 +2.0
KPKS pmax pmax
comp=Z,15nm,0.7s
KPKS **Kokpek** 7.05 49 *e*Pn Pn 23 59 47.1 +2.0
comp=Z,15nm,0.7s,baz=50
ARXS **Arharly** 7.06 41 Pg Pb 00 00 07.3 +2.0
comp=Z,26nm,0.8s
ARXS Lg Lg 00 01 41.2
comp=Z,163nm,0.9s
UZB **Uzynbulak** 7.08 52 *e*PN Pn 23 59 47.2 +1.7
UZB pmax pmax
comp=Z,7.0nm,0.7s
UZB **Uzynbulak** 7.08 52 *e*Pn Pn 23 59 47.2 +1.7
comp=Z,7.0nm,0.7s,baz=54
PDGK **Podgornoye** 7.46 53 P Pn 23 59 53.7 +2.9
PDGK **Podgornoye** 7.46 53 ⇑Pn Pn 23 59 53.7 +2.9
comp=Z,18nm,0.8s
THN **Thein Dam** 7.50 151 *e*P Pn 23 59 53.7 +2.5
THN *e*S Sn 00 01 19.0 +3.5
TDK **Taldyqorghan** 7.92 39 *e*P Pn 23 59 58.0 +1.1
TDK pmax pmax
comp=Z,17nm,0.9s
TDK **Taldyqorghan** 7.92 39 *e*Pn Pn 23 59 58.1 +1.1
comp=Z,17nm,0.9s,baz=40
BHK **Bhakra** 8.67 150 *e*P Pn 00 00 10.6 +3.2
HRA **Herat** 8.68 240 Pn Pn 00 00 06.6 -1.0
BRZS **Berezniki** 10.96 4 *e*P Pn 00 00 37.3 -1.2
BRZS pmax pmax
comp=Z,4.0nm,1.0s
BRZS **Berezniki** 10.96 4 *e*Pn Pn 00 00 37.4 -1.2
comp=Z,4.3nm,1.0s,baz=5.0
MAKZ **Makanchi** 10.97 42 P Pn 00 00 40.7 +2.0
MAKZ **Makanchi** 10.97 42 Pn Pn 00 00 40.7 +2.0
MK31 **Makanchi Array** 11.12 42 P Pn 00 00 42.6 +1.8
MK31 **Makanchi Array** 11.12 42 Pn 00 00 42.5 +1.8
MKAR **Makanchi Array** 11.12 42 Pn Pn 00 00 43.0 +2.2
comp=Z,0.6nm,0.3s,baz=234,slow=14,SNR=86
MKAR Lg Lg 00 03 49.4
comp=Z,0.5nm,0.3s,baz=231,slow=25,SNR=3.1
MKAR LR LR 00 05 14.9
comp=Z,270nm,18.7s,baz=238,slow=39
MKAR **Makanchi Array** 11.12 42 P Pn 00 00 43.0 +2.2
MKAR **Makanchi Array** 11.12 42 Pn Pn 00 00 41.9 +1.1
NDI **New Delhi** 11.43 153 *e*P Pn 00 00 44.4 -0.7
NDI *e*S Sn 00 02 50.9 -1.2
KUDL **Kundal** 11.70 157 *e*P Pn 00 00 46.3 -2.4
KUDL *e*S Sn 00 02 58.5 0.0
PTH **Pithoragarh** 11.98 140 *e*P Pn 00 00 53.2 +0.4
LGTI **Lohaghat** 12.07 140 *e*P Pn 00 00 51.7 -2.2
KURBB **Kurchatov Arra** 12.62 21 Pn Pn 00 00 59.6 -1.6
comp=Z,0.2nm,0.3s,baz=215,slow=13,SNR=51
KURBB Lg Lg 00 04 36.6
comp=Z,0.3nm,0.3s,baz=208,slow=31,SNR=5.6
KURBB LR LR 00 06 07.9
comp=Z,200nm,20.2s,baz=189,slow=38
KURK **Kurchatov** 12.73 21⇓*e*P Pn 00 01 02.5 -0.2
KURK **Kurchatov** 12.73 21 Pn Pn 00 01 01.9 -0.7
AJM **Ajmer** 12.85 167 *e*P Pn 00 01 02.2 -2.3
ZSN **Zaisan** 12.91 45 *e*P Pn 00 01 06.3 +1.0
ZSN pmax pmax
comp=Z,4.0nm,1.2s
ZSN **Zaisan** 12.91 45 *e*Pn Pn 00 01 06.3 +1.0
comp=Z,3.6nm,1.2s,baz=46
SEM **Semipalatinsk** 12.97 26 *e*P Pn 00 01 03.0 -3.2
SEM **Semipalatinsk** 12.97 26 *e*Pn Pn 00 01 03.0 -3.2
baz=27
ABKAR **Akbulak array** 13.06 325 Pn Pn 00 01 04.8 -2.5
ABKAR **Akbulak array** 13.06 325 Pn Pn 00 01 04.6 -2.6
WMQ **Urumqi** 13.14 64 *e*P Pn 00 01 12.0 +3.6
WMQ pP P 00 01 19.8 +1.5
WMQ pmax pmax
comp=Z,23nm,0.9s
WMQ LR LR
comp=Z,780nm,10.5s
BVAR **Borovoye Array** 13.98 358 Pn Pn 00 01 18.3 -1.5
comp=Z,0.6nm,0.3s,baz=116,slow=13,SNR=21
BVAR Sn Sn 00 03 47.1 -7.0
comp=Z,0.7nm,0.3s,baz=176,slow=27,SNR=2.5
BRVK **Borovoye** 14.02 357⇑*e*P Pn 00 01 18.6 -1.7
BRVK pmax pmax
comp=Z,14nm,1.7s
BRVK **Borovoye** 14.02 357 Pn Pn 00 01 18.5 -1.8
PYUN **Piuthan** 14.59 135 *e*P Pn 00 01 25.0 -3.5
comp=Z,96nm,0.8s
AKTO **Aktyubinsk** 14.78 325 Pn Pn 00 01 28.0 -2.7
comp=Z,2.2nm,0.3s,baz=130,slow=15,SNR=28
AKTO Sn Sn 00 04 09.4 -4.1
comp=Z,3.3nm,0.3s,baz=206,slow=22,SNR=11
AKTO LR LR 00 07 01.3
comp=Z,174nm,21.4s,baz=160,slow=36
DANN **Dangsing** 14.84 132 *e*P Pn 00 01 27.8 -4.1
comp=Z,65nm,0.7s
KOLN **Koldanda** 15.19 134 *e*P Pn 00 01 33.3 -3.2
comp=Z,95nm,1.1s
GKN **Gorkha** 15.61 131 *e*P Pn 00 01 37.8 -4.1
comp=Z,32nm,0.5s
DGZ **Jazzator, Alta** 15.62 42*c i*P Pn 00 01 41.2 -0.7
DGZ pmax pmax
comp=Z,18nm,1.1s
KKN **Kakani** 16.14 130 *e*P Pn 00 01 44.3 -4.6
comp=Z,35nm,0.6s
DMN **Daman** 16.18 131 *e*P Pn 00 01 45.4 -3.9
comp=Z,40nm,0.7s
ALBI **Allahabad** 16.30 144 *e*P Pn 00 01 48.9 -1.7
PKIN **Phulchoki** 16.37 130 *e*P Pn 00 01 48.1 -3.7
comp=Z,37nm,0.6s
PKI **Pulchoki** 16.38 130 *e*P Pn 00 01 47.4 -4.6
comp=Z,82nm,0.9s
GUN **Gumba** 16.42 128 *e*P Pn 00 01 47.6 -4.9
comp=Z,18nm,0.4s
JIRN **Jiri** 16.79 128 *e*P Pn 00 01 52.7 -4.5
comp=Z,38nm,0.5s
ZAA0 **Zalesovo Array** 17.49 27 Pn Pn 00 02 04.7 -0.7
ZALV **Zalesovo Beam** 17.49 27 P Pn 00 02 04.4 -1.0
comp=Z,2.6nm,0.3s,baz=225,slow=4.4,SNR=52
ZALV LR LR 00 09 04.9
comp=Z,233nm,18.0s,baz=224,slow=38
ZALV **Zalesovo Beam** 17.49 27 P Pn 00 02 04.9 -0.5
ZALV **Zalesovo Beam** 17.49 27 Pn Pn 00 02 04.9 -0.5
RAMN **Ramite** 17.55 129 *e*P Pn 00 02 03.0 -3.7
comp=Z,6.4nm,0.5s
LKRN **Lenkeran, Azer** 17.59 276 P P 00 02 10.0 +2.4
TAPN **Taplejung** 17.95 126 *e*P Pn 00 02 07.3 -4.4
comp=Z,49nm,0.7s
ODAN **Odare** 18.10 127 *e*P Pn 00 02 10.0 -3.4
comp=Z,62nm,0.8s
GTK **Tadong** 18.55 124 *e*P P 00 02 16.6 -1.9
GTK IAmb IAmb 00 02 24.6
comp=Z,13nm,0.7s
SEKA **Sheki** 18.59 284 P Pn 00 02 20.9 +1.8
MNGR **Mingechevir, A** 18.69 283 P Pn 00 02 22.4 +2.2
LSA **Lhasa** 18.78 114 P Pn 00 02 21.9 0.0
LSA pmax pmax
comp=Z,13nm,1.1s
GOMU **GeErMu** 18.78 91 P P 00 02 20.4 -0.8
GOMU pP pP 00 02 26.6 -2.5
GOMU pmax pmax
comp=Z,11nm,0.9s
GOMU pmax pmax
comp=Z,81nm,4.8s
ZKTA **Zakatala** 19.02 286 P Pn 00 02 25.8 +1.6
UOSS **Minazif** 19.02 227 P P 00 02 23.8 +0.3
SVE **Sverdlovsk** 19.13 342 *e*P Pn 00 02 24.9 -0.5
SVE *e*S Sn 00 05 57.9 -1.0
SVE pmax pmax
comp=Z,22nm,1.4s
WSAR **Wadi Sarin** 19.14 218 P P 00 02 25.1 +0.3
comp=Z,0.1nm,0.3s,baz=156,slow=8.0,SNR=1.7
GANJ **Ganja** 19.28 283 P Pn 00 02 29.0 +1.6
LGD **Lagodekhi** 19.30 286 P Pn 00 02 30.2 +2.6
ARU **Arti** 19.33 338 P Pn 00 02 27.4 -0.4
comp=Z,0.0nm,0.3s,baz=175,slow=6.1,SNR=26
ARU S Sn 00 05 55.5 -8.3
comp=Z,0.0nm,0.3s,baz=130,slow=21,SNR=2.4
ARU LR LR 00 10 11.6
comp=Z,189nm,18.2s,baz=126,slow=38
ARU **Arti** 19.33 338*c i*P P 00 02 27.1 +0.4
ARU S S 00 06 04.7 +0.9
ARU pmax pmax
comp=Z,21nm,0.9s
ARU **Arti** 19.33 338 P P 00 02 26.5 -0.2
ARU IAmb IAmb 00 02 43.7
comp=Z,21nm,0.8s
GROC **Groznyy** 19.67 290 *e*P Pn 00 02 32.5 +0.5
GROC *e*S Sn 00 06 13.7 +1.6
GROC pmax pmax
comp=Z,63nm,1.0s
NAX **Nakhchivan** 20.06 279 P Pn 00 02 37.6 +0.9
GNI **Garni** 20.52 282 P Pn 00 02 41.7 -0.5
comp=Z,24nm,1.0s,baz=1.8,slow=5.6,SNR=17
GNI LR LR 00 11 57.9
comp=Z,183nm,18.7s,baz=84,slow=41
GNI **Garni** 20.52 282*ce*P Pn 00 02 43.2 +1.0
GNI pmax pmax
comp=Z,70nm,1.4s
GNI **Garni** 20.52 282 P P 00 02 41.0 +1.0
KZRT **Kazreti** 20.69 285 P Pn 00 02 47.2 +3.1
SRSP **Sriramsagar** 20.96 161 *e*P P 00 02 43.2 -1.4
ZEI **Tsey** 21.04 289 *e*P P 00 02 47.4 +1.8
ZEI pmax pmax
comp=Z,13nm,0.7s
RPR **Rampur** 21.28 159 *e*P P 00 02 47.8 -0.2
BGD **Bogdanovka** 21.30 285 P P 00 02 54.5 +6.1
AKH **Akhalkalaki** 21.37 285 P P 00 02 50.7 +1.6
ONI **Oni** 21.37 288 P P 00 02 50.1 +1.1
ONI pmax pmax
comp=Z,101nm,1.2s
ONI **Oni** 21.37 288 P P 00 02 50.1 +1.1
KLRI **Killari** 21.41 166 *e*P P 00 02 50.2 +0.7
KARS **Kars** 21.74 283 P P 00 02 53.7 +0.7
KARS pmax pmax
comp=Z,224nm,1.4s
KARS **Kars** 21.74 283 P P 00 02 53.7 +0.7
GOF **Gofitskoye** 21.80 295⇑*e*P P 00 02 56.5 +3.0
GOF pmax pmax
comp=Z,64nm,0.9s
KBZ **Khabaz** 21.80 292 P P 00 02 52.6 -0.9
comp=Z,5.2nm,0.8s,baz=95,slow=7.9,SNR=12
KBZ LR LR 00 12 17.3
comp=Z,138nm,18.8s,baz=90,slow=39
KBZ **Khabaz** 21.80 292*ce*P P 00 02 55.5 +2.0
KBZ pmax pmax
comp=Z,13nm,1.0s
SHL **Shillong** 21.89 122 P P 00 02 53.7 -1.1
SHL pmax pmax
comp=Z,17nm,0.6s
SHL **Shillong** 21.89 122 P P 00 02 53.7 -1.1
SHL IAmb IAmb 00 03 00.6
comp=Z,17nm,0.6s
KIV **Kislovodsk** 21.97 292 *e*P P 00 02 57.1 +1.7
KIV *e*S S 00 06 56.3 -0.4
KIV pmax pmax
comp=Z,27nm,1.0s
KIV MLR MLR
comp=Z,93nm,14.0s
KIV **Kislovodsk** 21.97 292 P P 00 02 54.5 -0.9
KIV IAmb IAmb 00 03 16.2
comp=Z,23nm,0.7s
GTA **Gaotai** 22.01 80 ⇑P P 00 02 56.6 +0.7
GTA pP pP 00 03 05.6 +2.1
GTA sP sP 00 03 10.3 +3.3
GTA pmax pmax
comp=Z,16nm,1.3s
GTA pmax pmax
comp=Z,110nm,5.1s
GTA LR LR
comp=Z,340nm,13.5s
GTA LR LR
comp=Z,270nm,15.3s
GTA LR LR
comp=Z,320nm,15.3s
GEVA **Gevas** 22.07 277 P P 00 02 57.5 +0.8
GEVA IAmb IAmb 00 03 04.2
comp=Z,18nm,0.9s
HYBB **Hyderabad (bro** 22.46 162 *e*P P 00 03 01.3 +0.5
CUPL **Choutuppal** 22.67 161 *e*P P 00 03 03.2 +0.2
SIRT **Sirnak** 22.72 275 P P 00 03 03.5 0.0
GURO **Guroymak-BITLI** 22.82 278 P P 00 03 04.3 -0.4
MOKO **MOKOCHONG** 23.18 116 *e*P P 00 03 08.9 +0.4
MOKO IAmb IAmb 00 03 17.8
comp=Z,39nm,1.0s
CHLP **Challavanipeta** 23.26 148 *e*P P 00 03 08.4 -0.6
KOHI **KOHIMA** 23.29 118 *e*P P 00 03 09.1 -0.4
KOHI IAmb IAmb 00 03 21.4
comp=Z,68nm,0.8s
NJS **Nagarjunasagar** 23.48 161 *e*P P 00 03 10.0 -1.2
PVM **Polavaram** 23.51 155 *e*P P 00 03 11.2 -0.3
MYLAV **Mylavaram** 23.66 157 *e*P P 00 03 13.0 +0.1
SRLM **Srisailam** 23.81 162 *e*P P 00 03 13.9 -0.6
VRH **Novokhopyorsk** 24.00 310 *e*P P 00 03 15.3 -0.6
VRH pmax pmax
comp=Z,10.0nm,0.9s
KIRV **Kirov** 24.10 331 P P 00 03 17.1 +0.3
comp=Z,15nm,0.6s,baz=103,slow=3.3,SNR=9.8
MOY **Mondy** 24.15 49 *e*P P 00 03 18.3 +0.8
MOY pmax pmax
comp=Z,26nm,1.5s
ADKI **Addanki** 24.33 160 *e*P P 00 03 19.1 -0.2
RCLA **Racherla** 24.44 162 *e*P P 00 03 18.5 -1.8
URV **Uravakonda** 24.58 166 *e*P P 00 03 20.1 -1.5
ZAK **Zakamensk** 25.15 53 *e*P P 00 03 26.8 +0.2
ZAK pmax pmax
comp=Z,29nm,1.1s
VORD **Divnogorie** 25.39 308 *e*P P 00 03 30.9 +2.3
VORD pmax pmax
comp=Z,10.0nm,0.8s
VSR **Storozhevoye** 25.54 309 *e*P P 00 03 31.2 +1.3
VSR pmax pmax
comp=Z,30nm,0.5s
VORR **Voronezh** 25.64 310 *e*P P 00 03 32.8 +1.9
VORR pmax pmax
comp=Z,10.0nm,0.3s
LZH **Lanzhou** 25.84 86 ⇓P P 00 03 34.1 +1.0
LZH pP pP 00 03 47.4 +5.9
LZH sP sP 00 03 54.0 +9.0
LZH pmax pmax
comp=Z,16nm,1.4s
LZH pmax pmax
comp=Z,150nm,4.9s
LZH LR LR
comp=Z,250nm,14.1s
LZH LR LR
comp=Z,340nm,14.1s
LZH LR LR
comp=Z,370nm,16.3s
LPSR **Galich'ya Gora** 26.09 312 *e*P P 00 03 32.7 -2.2
LPSR pmax pmax
comp=Z,20nm,1.0s
SKHT **Srikalahasti** 26.28 161 *e*P P 00 03 35.6 -1.3
SONM **Songino Array** 26.71 59 P P 00 03 41.0 +0.2
comp=Z,6.9nm,0.9s,baz=263,slow=8.6,SNR=24
SONM LR LR 00 15 12.2
comp=Z,278nm,18.3s,baz=279,slow=39
SONM **Songino Array** 26.71 59 P P 00 03 41.0 +0.2
SONM **Songino Array** 26.71 59 P P 00 03 40.6 -0.1
RAYN **Ar Rayn** 26.86 242 ⇑P P 00 03 43.0 +0.8
RAYN **Ar Rayn** 26.86 242 P P 00 03 41.7 -0.6
ULN **Ulaanbaatar** 27.16 59*de*P P 00 03 45.4 +0.6
ULN pmax pmax
comp=Z,12nm,1.7s
ULN **Ulaanbaatar** 27.16 59 P P 00 03 44.4 -0.4
PRGR **Permogore** 27.59 333 *e*P P 00 03 50.6 +2.3
PRGR pmax pmax
comp=Z,68nm,1.9s
CD2 **Chengdu** 27.65 97 P P 00 03 50.4 +1.1
CD2 pmax pmax
comp=Z,20nm,1.1s
OBN **Obninsk** 28.24 316 P P 00 03 54.1 0.0
comp=Z,2.2nm,0.5s,baz=128,slow=22,SNR=1.5
OBN **Obninsk** 28.24 316⇓*e*P P 00 03 54.8 +0.7
OBN *e* 00 04 00.5
OBN 00 04 47.0
OBN PPP PPP 00 04 53.0
OBN 00 07 16.0
OBN S S 00 08 37.0 -1.4
OBN SS SnSn 00 09 59.0 +3.4
OBN pmax pmax
comp=Z,5.0nm,0.8s
PZH **PanZhiHua** 28.31 107 P P 00 03 55.9 +0.6
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,120nm,6.0s
BR131 **Keskin Array S** 29.02 283 P P 00 04 00.4 -1.1
BR131 pmax pmax
comp=Z,7.0nm,1.1s
BR131 **Keskin Array S** 29.02 283 P P 00 04 00.4 -1.1
BRTR **Keskin Array B** 29.02 283 P P 00 04 03.5 +2.0
comp=Z,1.6nm,0.5s,baz=107,slow=1.5,SNR=3.1
BRTR **Keskin Array B** 29.02 283 P P 00 04 00.8 -0.8
KLMR **Klimovskoe** 29.42 328 *e*P P 00 04 03.4 -1.2
KLMR *e* 00 04 56.5
KLMR pmax pmax
comp=Z,29nm,1.5s
KLMR **Klimovskoe** 29.42 328 *e*P P 00 04 03.5 -1.2
KLMR AMP 00 04 10.2
comp=Z,29nm,1.5s
KLMR *e*PP PnPn 00 04 56.6 -2.2
MMAI **Mount Meron Ar** 29.57 269 PcP PcP 00 07 11.1 +0.2
comp=Z,0.6nm,0.6s,baz=64,slow=3.4,SNR=2.5
MMAI LR LR 00 19 18.9
comp=Z,66nm,19.9s,baz=234,slow=43
KMI **Kunming** 29.83 108 ⇑P P 00 04 07.8 -1.1
KMI pmax pmax
comp=Z,8.0nm,0.8s
HHC **Hu-ho-hao-te** 30.68 74 *e*P P 00 04 17.8 +1.6
HHC pmax pmax
comp=Z,5.0nm,1.2s
HHC pmax pmax
comp=Z,140nm,5.4s
EIL **Elat** 31.31 264 LR LR 00 19 41.5
comp=Z,137nm,18.4s,baz=69,slow=42
CMAR **Chiang Mai Arr** 31.52 123 P P 00 04 23.1 -0.5
comp=Z,1.2nm,0.3s,baz=313,slow=9.5,SNR=5.9
CMAR **Chiang Mai Arr** 31.52 123*ce*P P 00 04 24.3 +0.8
CMAR pmax pmax
comp=Z,1.0nm,0.3s
NRIK **Noril'sk** 31.56 11 P P 00 04 24.4 +1.0
comp=Z,5.2nm,0.8s,baz=183,slow=6.1,SNR=9.0
NRIK **Noril'sk** 31.56 11*de*P P 00 04 24.1 +0.7
NRIK **Noril'sk** 31.56 11 P P 00 04 24.1 +0.7
NRIK IAmb IAmb 00 04 35.5
comp=Z,8.9nm,0.8s
AKASG **Malin Array Be** 31.63 306 P P 00 04 24.3 +0.1
comp=Z,1.5nm,0.5s,baz=76,slow=9.0,SNR=12
AKASG LR LR 00 19 34.3
comp=Z,231nm,19.3s,baz=0.5,slow=41
AKASG **Malin Array Be** 31.63 306*ce*P P 00 04 27.0 +2.8
AKASG pmax pmax
comp=Z,2.0nm,0.5s
AKASG **Malin Array Be** 31.63 306 P P 00 04 24.0 -0.3
AKBB **Malin Array Si** 31.63 306⇑*e*P P 00 04 26.4 +2.2
AKBB **Malin Array Si** 31.63 306 P P 00 04 24.3 0.0
AKBB IAmb IAmb 00 04 30.0
comp=Z,5.2nm,0.8s
MILM **Milestii Mici** 31.78 298 ⇑P P 00 04 30.0 +4.4
MILM **Milestii Mici** 31.78 298 ⇑P P 00 04 30.0 +4.4
TLCR 31.86 295 ⇑P P 00 04 31.0 +4.7
TLCR 31.86 295 ⇑P P 00 04 31.0 +4.7
GYA **Guiyang** 32.04 102 ⇓P P 00 04 28.6 +0.4
GYA pmax pmax
comp=Z,14nm,0.8s
SORM **Soroca** 32.08 301 ⇑P P 00 04 32.0 +3.8
SORM **Soroca** 32.08 301 ⇑P P 00 04 32.0 +3.8
TPGR **Topolog** 32.16 294 ⇑P P 00 04 33.6 +4.5
CFR **Carcaliu** 32.34 295 ⇓P P 00 04 34.2 +3.7
CFR **Carcaliu** 32.34 295 ⇓P P 00 04 34.2 +3.7
ENH **Enshi** 32.37 94 P P 00 04 30.4 -0.6
ENH IAmb IAmb 00 04 34.2
comp=Z,8.3nm,0.8s
PALK **Pallekele** 32.75 163 LR LR 00 17 03.5
comp=Z,79nm,18.4s,baz=274,slow=35
PANC **Panciu** 32.98 296 ⇑P P 00 04 41.4 +5.3
PUL **Pulkovo** 33.02 322⇑*e*P P 00 04 35.4 -0.9
PUL pmax pmax
comp=Z,23nm,0.6s
ODBI **Odobesti** 33.05 296 ⇑P P 00 04 39.7 +2.9
BOD **Bodaibo** 33.21 41 *e*P P 00 04 37.6 -0.4
BOD pmax pmax
comp=Z,38nm,1.0s
VRI **Vrincioaia** 33.27 297 ⇑P P 00 04 43.9 +5.2
VRI **Vrincioaia** 33.27 297 ⇑P P 00 04 43.9 +5.2
TESR **Tescani** 33.28 298 ⇑P P 00 04 42.7 +3.9
BISRR **Bisoca** 33.31 296 ⇑P P 00 04 49.0 +10
PLOR **Plostina** 33.33 296 ⇑P P 00 04 40.6 +1.3
PLOR **Plostina** 33.33 296 ⇑P P 00 04 40.6 +1.3
NEHR **Nehoiu** 33.61 296 ⇓P P 00 04 48.8 +7.1
COVR **Voineasa-Covas** 33.64 297 ⇓P P 00 04 44.3 +2.3
MLR **Muntele Rosu** 33.85 296 ⇑P P 00 04 49.2 +5.3
MLR **Muntele Rosu** 33.85 296 P P 00 04 46.2 +2.3
comp=Z,14nm,0.8s,baz=201,slow=1.5,SNR=14
MLR LR LR 00 23 33.1
comp=Z,108nm,18.1s,baz=291,slow=45
MLR **Muntele Rosu** 33.85 296 P P 00 04 44.4 +0.5
DOPR **Dopca** 34.20 297 ⇓P P 00 04 46.8 0.0
BUR01 **Bucovina Ar. S** 34.20 300 ⇑P P 00 04 51.7 +4.8
BURAR **Bucovina Array** 34.20 300 P P 00 04 48.0 +1.1
BUR08 **Bucovina Ar. S** 34.21 300 P P 00 04 46.5 -0.5
VOIR 34.48 296 ⇑P P 00 04 52.5 +3.2
VOIR 34.48 296 ⇑P P 00 04 52.5 +3.2
ARR **Arges** 34.78 296 ⇑P P 00 04 53.6 +1.7
CBBR **Cluj-Babes-Bol** 35.39 298 ⇑P P 00 05 02.7 +5.7
APA **Apatity** 35.40 336⇓*i*P P 00 04 57.7 +0.8
APA pmax pmax
comp=Z,6.0nm,0.9s
FIA1 **FINESS Array S** 35.55 324 P P 00 04 58.0 -0.1
FINES **FINESS Array B** 35.55 324 P P 00 04 58.4 +0.2
comp=Z,4.1nm,0.6s,baz=106,slow=11,SNR=15
FINES LR LR 00 21 41.2
comp=Z,212nm,18.6s,baz=193,slow=40
FINES **FINESS Array B** 35.55 324*ce*P P 00 05 00.6 +2.4
FINES pmax pmax
comp=Z,6.0nm,0.7s
FINES **FINESS Array B** 35.55 324 P P 00 04 58.0 -0.2
HIA **Hailar** 35.62 57⇑*e*P P 00 04 59.1 +0.1
HIA pmax pmax
comp=Z,2.0nm,1.0s
KWP **Kalwaria Pacla** 35.78 303 P P 00 05 01.4 +1.0
KWP pmax pmax
comp=Z,206nm,1.4s
KWP **Kalwaria Pacla** 35.78 303 P P 00 05 01.4 +1.0
DRGR 35.96 299 ⇑P P 00 05 06.1 +4.0
DRGR 35.96 299 ⇑P P 00 05 06.1 +4.0
TRPA **Tarpa** 35.97 301 ⇑P P 00 05 07.6 +5.6
TRPA **Tarpa** 35.97 301 P P 00 05 05.5 +3.6
UZH **Uzhgorod** 36.10 302 *e*P P 00 05 05.4 +2.3
VTS **Vitosha** 36.20 291 ⇑P P 00 05 08.8 +4.7
VTS **Vitosha** 36.20 291 ⇑P P 00 05 08.9 +4.7
LTVH **Ltavrtes, Hu** 36.46 300 P P 00 05 12.4 +6.3
BZS **Buzias** 36.86 297 ⇑P P 00 05 10.7 +1.1
BZS **Buzias** 36.86 297 ⇑P P 00 05 10.7 +1.1
ATD **Arta Tunnel** 37.34 230 LR LR 00 21 51.7
comp=Z,55nm,19.7s,baz=2.5,slow=38
OJC **Ojcow** 37.64 305 P P 00 05 20.4 +4.2
UBPT **Khong Chiam** 38.14 119 P P 00 05 19.6 -1.1
DIVS **Divibare** 38.24 295 P P 00 05 21.1 -0.3
DIVS IAmb IAmb 00 05 30.0
comp=Z,10nm,0.9s
ARCES **ARCESS Array B** 38.90 336 P P 00 05 26.1 -0.4
comp=Z,2.3nm,0.5s,baz=108,slow=7.8,SNR=11
ARCES LR LR 00 22 29.9
comp=Z,293nm,19.0s,baz=302,slow=38

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARCES** | **ARCES Array B** | **38.90** | **336** | P | **P** | **00 05 26.4** | **-0.2** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **ARCES** | **ARCES Array B** | **38.90** | **336** | P | **P** | **00 05 26.4** | **-0.2** |
| ARCES | | | | IAmb | IAmb | 00 05 30.8 | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **NJ2** | **Nanjing** | **38.91** | **85** | *eP* | **P** | **00 05 28.1** | **+1.1** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **MORC** | **Moravsky Berou** | **39.12** | **304** | *eP* | **P** | **00 05 31.5** | **+2.8** |
| **JAVC** | **Velka Javorina** | **39.13** | **303** | *eP* | P | 00 05 33.6 | +4.8 |
| **KOVH** | **Kovagotottos** | **39.22** | **298** | P | **P** | **00 05 30.7** | **+1.2** |
| **MPLH** | **Magyarpolny** | **39.43** | **300** | P | **P** | **00 05 34.4** | **+3.2** |
| **VRAC** | **Vranov** | **39.78** | **303** | *eP* | **P** | **00 05 38.0** | **+3.8** |
| **DPC** | **Dobruska-Polom** | **39.85** | **305** | *eP* | **P** | **00 05 36.0** | **+1.2** |
| **DPC** | **Dobruska-Polom** | **39.85** | **305** | *eP* | **P** | **00 05 36.0** | **+1.2** |
| **KRUC** | **Moravsky** | **39.94** | **303** | *eP* | **P** | **00 05 39.5** | **+4.0** |
| **SOP** | **Sopron** | **40.02** | **301** | P | **P** | **00 05 40.5** | **+4.4** |
| **ZEA** | **Zeya** | **40.16** | **50** | *eP* | **P** | **00 05 38.4** | **+1.2** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **CONA** | **Conrad Observa** | **40.45** | **301** | *eP* | P | 00 05 45.1 | +5.3 |
| | comp=Z,14nm,1.6s | | | | | | | |
| **PRU** | **Pruhonice** | **41.03** | **305** | *eP* | P | 00 05 49.3 | +4.8 |
| **PRU** | **Pruhonice** | **41.03** | **305** | *eP* | P | 00 05 49.3 | +4.8 |
| **DEL** | **Delary** | **41.04** | **315** | *i* P | **P** | **00 05 47.0** | **+2.6** |
| **BRG** | **Berggiesshubel** | **41.31** | **306** | *eP* | **P** | **00 05 51.2** | **+4.5** |
| BRG | | | | Amp | | 00 05 52.8 | | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **41.31** | **306** | *eP* | **P** | **00 05 51.2** | **+4.5** |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **41.34** | **303** | *eP* | **P** | **00 05 49.4** | **+2.3** |
| **GERES** | **GERESS Array B** | **41.73** | **303** | P | **P** | **00 05 51.9** | **+1.5** |
| | comp=Z,1.5nm,0.7s,baz=52,slow=8.6,SNR=11 | | | | | | | |
| **GERES** | **GERESS Array B** | **41.73** | **303** | P | **P** | **00 05 51.0** | **+0.6** |
| **YAK** | **Yakutsk** | **41.73** | **37** | *d iP* | **P** | **00 05 49.7** | **-0.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | |
| **YAK** | **Yakutsk** | **41.73** | **37** | P | **P** | **00 05 49.0** | **-1.0** |
| **KHC** | **Kasperske Hory** | **41.77** | **303** | ⇓*eP* | **P** | **00 05 54.4** | **+3.8** |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,45nm,2.0s | | | | | | | |
| **KHC** | **Kasperske Hory** | **41.77** | **303** | *eP* | **P** | **00 05 52.5** | **+1.9** |
| KHC | | | | *ex* | x | 00 07 33.4 | | |
| **KHC** | **Kasperske Hory** | **41.77** | **303** | P | **P** | **00 05 50.8** | **+0.2** |
| **CLL** | **Collm** | **41.85** | **307** | *eP* | **P** | **00 05 55.0** | **+3.8** |
| **CLL** | **Collm** | **41.85** | **307** | *eP* | **P** | **00 05 51.0** | **-0.2** |
| CLL | | | | *ePP* | **sP** | **00 06 02.0** | **-0.8** |
| CLL | | | | *ePP* | **PnPn** | **00 07 33.0** | **0.0** |
| **KBA** | **Koelnbreinsper** | **42.27** | **300** | P | P | 00 06 00.1 | +5.2 |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **NORES** | **NORESS Array B** | **42.36** | **321** | P | **P** | **00 05 57.8** | **+2.6** |
| **NC303** | **NORSAR Array S** | **42.47** | **322** | P | **P** | **00 05 55.2** | **-0.9** |
| **NB2** | **NORSAR Subarra** | **42.53** | **321** | P | **P** | **00 05 56.3** | **-0.4** |
| | comp=Z,1.3nm,0.5s,baz=93,slow=8.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **42.53** | **321** | P | **P** | **00 05 56.0** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=93,slow=8.0,SNR=9.0 | | | | | | | |
| NOA | | | | LR | LR | 00 24 45.2 | | |
| | comp=Z,98nm,21.3s,baz=0.0,slow=38 | | | | | | | |
| **NOA** | **NORSAR Array B** | **42.53** | **321** | P | **P** | **00 05 56.0** | **-0.7** |
| **MDJ** | **Mudanjiang** | **42.94** | **63** | P | **P** | **00 06 00.1** | **0.0** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,160nm,7.1s | | | | | | | |
| **TIXI** | **Tiksi** | **43.30** | **23** | *ce*P | **P** | **00 06 02.3** | **-0.4** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.3s | | | | | | | |
| **TIXI** | **Tiksi** | **43.30** | **23** | P | **P** | **00 06 02.2** | **-0.4** |
| TIXI | | | | IAmb | IAmb | 00 06 03.5 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **WTTA** | **Wattenberg** | **43.38** | **301** | *eP* | **P** | **00 06 07.2** | **+3.3** |
| | comp=Z,11nm,1.3s | | | | | | | |
| **WATA** | **Walderalm** | **43.40** | **301** | *eP* | P | 00 06 10.7 | +6.7 |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **43.44** | **56** | P | **P** | **00 06 04.1** | **0.0** |
| | comp=Z,3.0nm,0.6s,baz=284,slow=7.3,SNR=17 | | | | | | | |
| KLR | | | | LR | LR | 00 26 02.5 | | |
| | comp=Z,127nm,18.6s,baz=304,slow=39 | | | | | | | |
| **KLR** | **Kul'dur** | **43.44** | **56** | *ce*P | **P** | **00 06 04.0** | **-0.1** |
| **KSRS** | **Korea Array** | **43.82** | **74** | P | **P** | **00 06 06.2** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=293,slow=5.8,SNR=2.8 | | | | | | | |
| KSRS | | | | LR | LR | 00 26 26.4 | | |
| | comp=Z,53nm,18.4s,baz=270,slow=39 | | | | | | | |
| **RETA** | **Reutte** | **43.91** | **302** | *eP* | P | 00 06 15.9 | +7.9 |
| | comp=Z,13nm,2.2s | | | | | | | |
| **PSI** | **Prapat** | **43.96** | **138** | P | **P** | **00 06 07.1** | **-1.7** |
| | comp=Z,2.5nm,0.5s,baz=313,slow=17,SNR=2.1 | | | | | | | |
| **RPSI** | **Rantau Prapat** | **44.05** | **138** | P | **P** | **00 06 07.1** | **-2.3** |
| **DAVA** | **Damuels** | **44.54** | **301** | *eP* | **P** | **00 06 15.8** | **+2.7** |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **CDF** | **Champ du Feu** | **46.00** | **304** | *eP* | **P** | **00 06 29.0** | **+4.4** |
| CDF | | | | pmax | pmax | | | |
| | comp=Z,62nm,2.1s | | | | | | | |
| **HINF** | **Hinteralfeld** | **46.41** | **303** | *eP* | **P** | **00 06 31.1** | **+3.2** |
| HINF | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **46.48** | **301** | P | **P** | **00 06 28.3** | **-0.4** |
| SENIN | | | | IAmb | IAmb | 00 06 41.9 | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **LPG** | **La Plagne** | **47.09** | **300** | *eP* | **P** | **00 06 34.0** | **+0.6** |
| LPG | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **LPL** | **La Plagne** | **47.09** | **300** | *eP* | **P** | **00 06 33.9** | **+0.5** |
| LPL | | | | pmax | pmax | | | |
| | comp=Z,65nm,2.0s | | | | | | | |
| **GIVF** | **Givet** | **47.18** | **306** | *eP* | P | 00 06 38.5 | +4.8 |
| GIVF | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **CABF** | **La Chapelle** | **47.23** | **301** | *eP* | **P** | **00 06 38.5** | **+4.2** |
| CABF | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.4s | | | | | | | |
| **BNI** | **Bardonecchia** | **47.26** | **299** | P | **P** | **00 06 35.5** | **+0.9** |
| BNI | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **BNI** | **Bardonecchia** | **47.26** | **299** | P | **P** | **00 06 34.7** | **+0.1** |
| BNI | | | | IAmb | IAmb | 00 06 47.6 | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **BAIF** | **Baives** | **47.57** | **306** | *eP* | **P** | **00 06 40.4** | **+3.6** |
| BAIF | | | | pmax | pmax | | | |
| | comp=Z,45nm,1.6s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **48.68** | **300** | *eP* | **P** | **00 06 47.1** | **+1.6** |
| VIVF | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.6s | | | | | | | |
| **BGF** | **Bois d'Agland** | **49.38** | **302** | *eP* | **P** | **00 06 54.1** | **+3.3** |
| BGF | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **49.88** | **302** | *eP* | **P** | **00 06 55.9** | **+1.2** |
| TCF | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **50.67** | **315** | P | **P** | **00 07 02.2** | **+1.8** |
| **LDF** | **La Druitiere** | **50.69** | **306** | *eP* | **P** | **00 07 01.0** | **+0.3** |
| LDF | | | | pmax | pmax | | | |
| | comp=Z,222nm,2.4s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **50.79** | **226** | P | **P** | **00 07 03.1** | **+1.1** |
| | comp=Z,2.6nm,1.0s,baz=46,slow=13,SNR=5.6 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **50.79** | **226** | ⇓*eP* | **P** | **00 07 02.6** | **+0.5** |
| **GRR** | **Gorron** | **51.22** | **305** | *eP* | **P** | **00 07 07.7** | **+3.0** |
| GRR | | | | pmax | pmax | | | |
| | comp=Z,168nm,2.0s | | | | | | | |
| **LFF** | **La Frestale** | **51.30** | **301** | *eP* | P | 00 07 10.2 | +4.9 |
| LFF | | | | pmax | pmax | | | |
| | comp=Z,51nm,1.6s | | | | | | | |
| **KIBK** | **Kibwezi** | **51.35** | **225** | P | **P** | **00 07 05.7** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **51.79** | **70** | P | **P** | **00 07 07.9** | **-1.2** |
| | comp=Z,4.3nm,0.8s,baz=293,slow=10.0,SNR=6.2 | | | | | | | |
| **ASAJ** | **Asahikawa** | **51.99** | **60** | LR | LR | 00 31 38.3 | | |
| | comp=Z,92nm,19.0s,baz=324,slow=39 | | | | | | | |
| **SEY** | **Seymchan** | **52.14** | **35** | ⇓*eP* | **P** | **00 07 11.7** | **+0.4** |
| **MA2** | **Magadan** | **52.19** | **39** | ⇓*eP* | **P** | **00 07 11.8** | **+0.1** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **MA2** | **Magadan** | **52.19** | **39** | P | **P** | **00 07 11.4** | **-0.3** |
| MA2 | | | | IAmb | IAmb | 00 07 12.5 | | |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **SGMF** | **Saint Gilles** | **52.34** | **306** | *eP* | **P** | **00 07 12.9** | **-0.1** |
| SGMF | | | | pmax | pmax | | | |
| | comp=Z,182nm,1.8s | | | | | | | |
| **ROSF** | **Rostrenen** | **52.76** | **306** | *eP* | **P** | **00 07 19.4** | **+3.2** |
| ROSF | | | | pmax | pmax | | | |
| | comp=Z,323nm,2.3s | | | | | | | |
| **QUIF** | **Quistinic** | **52.84** | **306** | *eP* | **P** | **00 07 19.8** | **+3.1** |
| QUIF | | | | pmax | pmax | | | |
| | comp=Z,232nm,1.9s | | | | | | | |
| **ETSF** | **Etsaut** | **52.90** | **299** | *eP* | **P** | **00 07 21.7** | **+4.3** |
| ETSF | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **BILL** | **Bilibino** | **56.19** | **27** | *i*P | **P** | **00 07 41.5** | **+0.8** |
| BILL | | | | *i* | | 00 07 47.7 | | |
| BILL | | | | | | 00 08 39.0 | | |
| BILL | | | | SSS | SSS | 00 21 19.0 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,52nm,15.0s | | | | | | | |
| **BILL** | **Bilibino** | **56.19** | **27** | P | **P** | **00 07 40.9** | **+0.2** |
| BILL | | | | IAmb | IAmb | 00 07 42.4 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **ESDC** | **Sonseca Array** | **56.54** | **297** | P | **P** | **00 07 43.5** | **-0.3** |
| | comp=Z,1.7nm,0.7s,baz=54,slow=7.0,SNR=13 | | | | | | | |
| **ESDC** | **Sonseca Array** | **56.54** | **297** | P | **P** | **00 07 42.7** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **57.95** | **45** | LR | LR | 00 33 34.0 | | |
| | comp=Z,71nm,18.9s,baz=315,slow=37 | | | | | | | |
| **SUMG** | **Summit** | **58.74** | **341** | P | **P** | **00 07 59.1** | **0.0** |
| SUMG | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **SUMG** | **Summit** | **58.74** | **341** | P | **P** | **00 07 59.1** | **0.0** |
| SUMG | | | | IAmb | IAmb | 00 08 14.5 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **KAPI** | **Kappang** | **62.58** | **123** | LR | LR | 00 41 35.5 | | |
| | comp=Z,21nm,18.3s,baz=245,slow=42 | | | | | | | |
| **VOI** | **Vohitsoka** | **64.87** | **205** | P | **P** | **00 08 40.6** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **66.09** | **268** | P | **P** | **00 08 47.6** | **-1.0** |
| | comp=Z,10nm,0.5s,baz=46,slow=5.7,SNR=31 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.09** | **268** | P | **P** | **00 08 47.6** | **-1.0** |
| TORD | | | | IAmb | IAmb | 00 08 51.6 | | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **ANM** | **Nome** | **67.56** | **23** | P | **P** | **00 08 57.8** | **+0.5** |
| ANM | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **ANM** | **Nome** | **67.56** | **23** | P | **P** | **00 08 57.8** | **+0.5** |
| ANM | | | | IAmb | IAmb | 00 08 59.0 | | |
| | comp=Z,8.4nm,1.1s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **68.38** | **15** | P | **P** | **00 09 03.0** | **+0.6** |
| **A36M** | **Sachs Harbour** | **68.63** | **5** | P | **P** | **00 09 03.9** | **0.0** |
| **COLD** | **Coldfoot** | **69.43** | **16** | P | **P** | **00 09 09.0** | **+0.1** |
| COLD | | | | IAmb | IAmb | 00 09 20.8 | | |
| | comp=Z,9.7nm,1.0s | | | | | | | |
| **IMAR** | **Indian Mountai** | **69.65** | **18** | P | **P** | **00 09 09.6** | **-0.6** |
| **KOWA** | **Kowa** | **69.73** | **272** | P | **P** | **00 09 11.0** | **-0.5** |
| **H21K** | **Melozitna Rive** | **70.14** | **18** | P | **P** | **00 09 13.2** | **-0.2** |
| H21K | | | | IAmb | IAmb | 00 09 24.6 | | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **70.39** | **14** | P | **P** | **00 09 15.5** | **+0.7** |
| **J20K** | **Nowinta River** | **71.02** | **19** | P | **P** | **00 09 18.3** | **-0.4** |
| J20K | | | | IAmb | IAmb | 00 09 30.4 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **H24K** | **Noodor Dome** | **71.11** | **16** | P | **P** | **00 09 19.6** | **+0.3** |
| H24K | | | | IAmb | IAmb | 00 09 26.8 | | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **C36M** | **Paulatuk** | **71.30** | **6** | P | **P** | **00 09 19.7** | **-0.5** |
| **INK** | **Inuvik** | **71.33** | **10** | P | **P** | **00 09 20.8** | **+0.3** |
| INK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **INK** | **Inuvik** | **71.33** | **10** | P | **P** | **00 09 20.8** | **+0.3** |
| INK | | | | IAmb | IAmb | 00 09 21.7 | | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **MDM** | **Murphy Dome** | **71.78** | **17** | P | **P** | **00 09 23.0** | **-0.4** |
| MDM | | | | IAmb | IAmb | 00 09 24.4 | | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **COLA** | **College** | **71.94** | **16** | *de*P | **P** | **00 09 24.6** | **+0.4** |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **CAST** | **Castle Rocks** | **72.17** | **19** | P | **P** | **00 09 25.7** | **0.0** |
| CAST | | | | IAmb | IAmb | 00 09 34.0 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **IL31** | | **72.24** | **16** | P | **P** | **00 09 25.6** | **-0.4** |
| **ILAR** | **Eielson Array** | **72.24** | **16** | P | **P** | **00 09 25.6** | **-0.5** |
| | comp=Z,2.8nm,0.8s,baz=323,slow=5.5,SNR=28 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.24** | **16** | P | **P** | **00 09 25.4** | **-0.6** |
| **SCRK** | **Sand Creek** | **73.55** | **15** | P | **P** | **00 09 33.8** | **-0.2** |
| SCRK | | | | IAmb | IAmb | 00 09 35.0 | | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| **DHY** | **Denali Highway** | **73.60** | **17** | P | **P** | **00 09 33.9** | **-0.4** |
| DHY | | | | IAmb | IAmb | 00 09 47.1 | | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **PAX** | **Paxson** | **74.12** | **17** | P | **P** | **00 09 36.7** | **-0.6** |
| PAX | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **PAX** | **Paxson** | **74.12** | **17** | P | **P** | **00 09 36.7** | **-0.6** |
| PAX | | | | IAmb | IAmb | 00 09 38.3 | | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **DAWY** | **Dawson** | **74.37** | **14** | P | **P** | **00 09 38.3** | **-0.3** |
| DAWY | | | | IAmb | IAmb | 00 09 39.4 | | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| **L27K** | **Beaver Creek,** | **74.81** | **15** | P | **P** | **00 09 41.6** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **74.81** | **15** | P | **P** | **00 09 41.6** | **+0.3** |
| **DBIC** | **Dimbokro** | **75.13** | **267** | LR | LR | 00 46 24.5 | | |
| | comp=Z,57nm,18.8s,baz=71,slow=39 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **75.47** | **134** | P | **P** | **00 09 44.7** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **76.20** | **127** | P | **P** | **00 09 50.2** | **+0.5** |
| **M30M** | **Minto, Yukon** | **76.20** | **13** | P | **P** | **00 09 48.8** | **-0.4** |
| **KNRA** | **Kununurra** | **76.38** | **123** | P | **P** | **00 09 50.2** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 00 09 51.9 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **M31M** | **Drury Creek, Y** | **76.96** | **12** | P | **P** | **00 09 53.3** | **-0.2** |
| M31M | | | | IAmb | IAmb | 00 10 00.9 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **HYT** | **Haines Junctio** | **77.70** | **14** | P | **P** | **00 09 57.8** | **0.0** |
| HYT | | | | IAmb | IAmb | 00 09 59.8 | | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.68** | **3** | P | **P** | **00 10 02.9** | **-0.1** |
| | comp=Z,2.3nm,0.8s,baz=350,slow=5.6,SNR=31 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.68** | **3** | P | **P** | **00 10 02.5** | **-0.5** |
| **P33M** | **Teslin, Yukon** | **79.10** | **12** | P | **P** | **00 10 05.3** | **-0.2** |
| P33M | | | | IAmb | IAmb | 00 10 09.6 | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **SCHQ** | **Schefferville** | **79.86** | **337** | P | **P** | **00 10 09.5** | **-0.1** |
| SCHQ | | | | IAmb | IAmb | 00 10 10.1 | | |
| | comp=Z,5.1nm,1.0s | | | | | | | |
| **BOSA** | **Boshof** | **79.89** | **220** | P | **P** | **00 10 09.8** | **-0.3** |
| | comp=Z,4.2nm,0.9s,baz=42,slow=5.8,SNR=3.2 | | | | | | | |
| **BOSA** | **Boshof** | **79.89** | **220** | P | **P** | **00 10 08.9** | **-1.2** |
| BOSA | | | | IAmb | IAmb | 00 10 13.3 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.11** | **122** | P | **P** | **00 10 26.2** | **-1.0** |
| | comp=Z,5.2nm,0.7s,baz=327,slow=4.9,SNR=24 | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.11** | **122** | P | **P** | **00 10 26.2** | **-1.0** |
| **WB2** | **Warramunga Arr** | **83.12** | **122** | P | **P** | **00 10 26.6** | **-0.7** |
| **COEN** | **Coen** | **85.09** | **112** | P | **P** | **00 10 36.5** | **-0.9** |
| **AS31** | **Alice Springs** | **85.49** | **125** | P | **P** | **00 10 37.7** | **-1.6** |
| **ASAR** | **Alice Springs** | **85.49** | **125** | P | **P** | **00 10 38.5** | **-0.8** |
| | comp=Z,3.2nm,0.7s,baz=316,slow=5.1,SNR=9.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **85.49** | **125** | P | **P** | **00 10 38.0** | **-1.3** |
| **STKA** | **Stephens Creek** | **96.07** | **126** | P | **P** | **00 11 27.6** | **-1.1** |
| | comp=Z,2.0nm,0.7s,baz=336,slow=20,SNR=3.7 | | | | | | | |
| **PLCA** | **Paso Flores** | **150.88** | **254** | PKPbc | **PKPbc** | **00 17 53.9** | **+0.3** |
| | comp=Z,1.9nm,0.7s,baz=133,slow=4.6,SNR=3.5 | | | | | | | |

*IDC **18** 00:04:26.8±2.0, 0°.83N×128°.81E, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.6/41, mbtmp3.9/3, MS2.4/1, Ms1 2.4/1, ms1mx2.1/70, Error ellipse: s-maj=140.9km s-min=23.9km az=68.0*

*DJA **18** 00:04:28.5±0.4, 1°.N±6°×12°.9E±°, h10km, M3.9/7, MLv3.9/7*

**ISC 18 00:04:27.7**±1.5, **0°.9N**±0°.2×**129°.13E**±0°.10, **h10**km, **n6, σ0°.97/6, mb3.9/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.76** | **266** | P | **Pn** | **00 04 58.5** | **+0.2** |
| TNTI | | | | S | **Sb** | **00 05 21.9** | **-0.5** |
| **FAKI** | **Fak Fak** | **4.91** | **141** | P | **Pn** | **00 05 41.4** | **-0.2** |
| **KAPI** | **Kappang** | **11.05** | **238** | LR | LR | 00 12 37.7 | |
| | comp=Z,19nm,18.3s,baz=174,slow=46 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.33** | **166** | P | **P** | **00 09 14.5** | **-0.6** |
| | 0.8nm,0.5s,baz=346,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **24.85** | **170** | P | **P** | **00 09 52.0** | **+1.5** |
| | 6.5nm,0.6s,baz=343,slow=11,SNR=51 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.23** | **325** | P | **P** | **00 14 42.8** | **-0.2** |
| | 0.5nm,0.5s,baz=117,slow=8.2,SNR=15 | | | | | | |

*IDC **18** 00:10:31.8±6.1, 19°.36N×144°.99E, h173km±55km, mb3.0/5, mb1 3.4/6, mb1mx2.9/43, mbtmp3.7/6, Error ellipse: s-maj=123.5km s-min=20.5km az=115.0*

**ISC 18 00:10:34.5**±1.1, **19°.2N**±0°.1×**145°.3E**±0°.5, **h200**km, **n6,**

**σ1°33/7, mb3.2/5, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.57** | **184** | P | **Pn** | **00 11 54.5** | **-1.8** |
| | 29nm,0.3s,baz=196,slow=12,SNR=4.4 | | | | | | |
| GUMO | | | | S | **Sn** | **00 13 02.4** | **+1.6** |
| | 6.7nm,0.3s,baz=177,slow=22,SNR=1.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.33** | **196** | P | **P** | **00 17 53.1** | **+0.5** |
| | 0.3nm,0.4s,baz=19,slow=8.9,SNR=10 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.76** | **209** | P | **P** | **00 18 04.2** | **-0.2** |
| | 0.5nm,0.3s,baz=24,slow=9.7,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **44.00** | **195** | P | **P** | **00 18 23.0** | **+0.7** |
| | 0.3nm,0.6s,baz=20,slow=7.0,SNR=5.3 | | | | | | |
| **ILAR** | **Eielson Array** | **63.40** | **26** | P | **P** | **00 20 41.9** | **-0.5** |
| | 0.4nm,0.8s,baz=242,slow=5.0,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.76** | **28** | P | **P** | **00 22 09.9** | **+0.8** |
| | 0.2nm,0.5s,baz=288,slow=6.3,SNR=2.6 | | | | | | |

*ISU **18** 00:12:20, 41°.19N×68°.94E, h15km*

*KRNET **18** 00:12:21.5±0.1, 41°.10N×69°.30E, h12km, mb3.0*

*SOME **18** 00:12:21.8, 41°.10N×69°.32E, h5km*

*NNC **18** 00:12:23.5±3.6, 41°.24N×69°.17E, h0km, mb3.6, mpv3.4, Error ellipse: s-maj=23.1km s-min=18.9km az=36.0*

**ISC 18 00:12:21.7**±1.0, **41°.17N**±0°.03×**69°.27E**±0°.04, **h13**km±7km, **n28, σ2s21/49, 8C-4D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAS** | **Tashkent** | **0.16** | **8** | *eP* | **Pg** | **00 12 26.0** | **+0.5** |
| TAS | | | | *eS* | **Sg** | **00 12 30.0** | **+1.8** |
| **YNGY** | **Yangiyul** | **0.18** | **252** | *eP* | **Pg** | **00 12 23.0** | **-2.8** |
| YNGY | | | | *eS* | Sg | 00 12 47.0 | +18 |
| **TGS** | **TashGRES** | **0.32** | **37** | *eP* | **Pg** | **00 12 27.0** | **-1.3** |
| TGS | | | | *eS* | **Sg** | **00 12 32.0** | **-0.6** |
| **CHRV** | **Charvak** | **0.70** | **47** | *eP* | **Pb** | **00 12 37.0** | **+1.1** |
| CHRV | | | | *eS* | **Sb** | **00 12 47.0** | **+1.5** |
| **IUG** | **luzhnay** | **1.14** | **30** | *eP* | **Pb** | **00 12 43.9** | **+0.6** |
| | 84nm,0.2s | | | | | | |
| IUG | | | | *eS* | **Sn** | **00 13 00.1** | **+1.1** |
| | 38nm,0.2s | | | | | | |
| **IUG** | **luzhnay** | **1.14** | **30** | P | **Pb** | **00 12 43.9** | **+0.6** |
| | 84nm,0.2s | | | | | | |
| IUG | | | | S | **Sn** | **00 13 00.1** | **+1.1** |
| | 38nm,0.2s | | | | | | |
| **IUG** | **luzhnay** | **1.14** | **30** | *eP* | **Pb** | **00 12 43.9** | **+0.6** |
| | baz=27 | | | | | | |
| IUG | | | | *eS* | **Sn** | **00 13 00.1** | **+1.1** |
| | baz=27 | | | | | | |
| **CHM** | **Chimkent** | **1.18** | **12** | *eP* | **Pn** | **00 12 45.3** | **+1.3** |
| | 36nm,0.1s | | | | | | |
| CHM | | | | *eS* | **Sn** | **00 13 03.1** | **+3.1** |
| | 344nm,0.2s | | | | | | |
| **TCH** | **Chimkent** | **1.18** | **12** | *eP* | **Pn** | **00 12 45.3** | **+1.3** |
| | baz=10.0 | | | | | | |
| TCH | | | | *eS* | **Sn** | **00 13 03.1** | **+3.2** |
| | baz=10.0 | | | | | | |
| **TRKS** | **Terek-Say** | **1.46** | **75** | ⇑*iP* | **Pg** | **00 12 49.0** | **-0.7** |
| | baz=75 | | | | | | |
| TRKS | | | | ⇑*eS* | **Sg** | **00 13 09.2** | **+0.5** |
| | baz=75 | | | | | | |
| **BTK** | **Batken** | **1.62** | **133** | ⇑*iP* | **Pn** | **00 12 50.7** | **+0.6** |
| | baz=32 | | | | | | |
| BTK | | | | ⇑*iS* | **Sb** | **00 13 12.4** | **+0.4** |
| | baz=32 | | | | | | |
| **BRLS** | **Boroldav** | **1.91** | **13** | *eP* | **Pn** | **00 12 53.5** | **-0.6** |
| | 5.7nm,0.1s | | | | | | |
| BRLS | | | | *eS* | **Sn** | **00 13 15.8** | **-2.2** |
| | 18nm,0.1s | | | | | | |
| **BRLS** | **Boroldav** | **1.91** | **13** | P | **Pn** | **00 12 53.5** | **-0.6** |
| | 5.7nm,0.1s | | | | | | |
| BRLS | | | | S | **Sn** | **00 13 15.8** | **-2.2** |
| | 18nm,0.1s | | | | | | |
| **FRG** | **Fergana** | **2.07** | **112** | *eP* | **Pg** | **00 13 01.0** | **-0.4** |
| FRG | | | | *eS* | **Sg** | **00 13 30.0** | **+1.7** |
| **ARK** | **Arkit** | **2.12** | **72** | ⇓*iP* | **Pb** | **00 13 00.2** | **0.0** |
| | baz=70 | | | | | | |
| ARK | | | | ⇓*iS* | **Sg** | **00 13 28.5** | **-1.5** |
| | baz=70 | | | | | | |
| **KK02** | **Karatay Array** | **2.15** | **25** | ⇓Pn | **Pb** | **00 13 01.4** | **+0.9** |
| | 1.6nm,0.2s,baz=214,slow=16 | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 00 13 30.7 | |
| | 11nm,0.5s,baz=215,slow=28 | | | | | | |
| **ANR** | **Andizhan** | **2.38** | **99** | *eS* | **Sg** | **00 13 42.0** | **+3.8** |
| **DRK** | **Karamyk** | **2.57** | **130** | ⇑*iP* | **Pn** | **00 13 05.5** | **+2.1** |
| | baz=29 | | | | | | |
| DRK | | | | ⇑*iS* | **Sb** | **00 13 37.7** | **-1.7** |
| | baz=29 | | | | | | |
| **OHH** | **Osh** | **2.75** | **102** | ⇑*iP* | **Pn** | **00 13 08.3** | **+2.7** |
| | baz=1.0 | | | | | | |
| OHH | | | | ⇑*iS* | **Sb** | **00 13 42.5** | **-1.9** |
| | baz=1.0 | | | | | | |
| **

0.3nm,0.6s,baz=336,slow=7.0,SNR=5.9
**SONM Songino Array 50.44 344** P **P** **00 38 20.8 -0.3**
0.2nm,0.5s,baz=161,slow=6.1,SNR=1.5
**MKAR Makanchi Array 59.82 327** P **P** **00 39 27.0 -1.6**
0.3nm,0.5s,baz=117,slow=8.9,SNR=5.3

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**IDC 18 00:43:48.8±5.3, 18°98S×175°90W, h0km, mb3.8/2, mb1 4.1/2, mb1mx3.2/39, mbtmp3.8/2, Error ellipse: s-maj=265.7km s-min=56.2km az=147.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **46.79** | **260** | P | P | 00 52 19.5 | -1.1 |
| | 0.3nm,0.6s,baz=98,slow=7.2,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **46.80** | **255** | P | P | 00 52 21.1 | +0.4 |
| | 2.4nm,0.6s,baz=88,slow=8.1,SNR=37 | | | | | | |
| **GERES** | **GERESS Array B** | **149.21** | **348** | PKPbc | PKPbc | 01 03 39.0 | -0.5 |
| | 0.2nm,0.5s,baz=352,slow=2.0,SNR=1.7 | | | | | | |

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**NEIC 18 00:44:56.8±0.3, 36°46N±0°01×98°77W±0°01, h4km±2km, ML2.3/32, Error ellipse: s-maj=2.0km s-min=1.2km az=175.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.20** | **248** | Pg | Pg | 00 45 00.6 | -0.2 |
| U32A | | | | Sg | Sg | 00 45 04.1 | +0.6 |
| U32A | | | | IAML | | 00 45 04.3 | |
| | comp=N,480nm,0.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.71** | **180** | Pn | Pn | 00 45 26.5 | -1.0 |
| **T35A** | **Sooner Cattle** | **1.87** | **75** | | Pn | 00 45 29.7 | +0.2 |

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*IDC **18** 00:54:21.9±4.3, 46°.54N×153°.46E, h170km±41km, mb2.9/4, mb1 3.2/7, mb1mx3.0/32, mbtmp3.5/7, Error ellipse: s-maj=62.9km s-min=20.2km az=140.0*
**ISC 18 00:54:17.8±1.1, 48°.3N±0°.2×153°.5E±0°.2, h132km, n7, σ1§58/7, mb3.3/4, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** | **5.49** | **28** | P | **Pn** | **00 55 39.6** | **+2.2** |
| | 0.5nm,0.3s,baz=213,slow=15,SNR=2.6 | | | | | | |
| **KLR** | **Kul'dur** | **14.34** | **282** | P | **P** | **00 57 37.0** | **-0.7** |
| | 0.2nm,0.3s,baz=63,slow=10,SNR=5.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.40** | **262** | P | **P** | **00 57 50.1** | **+0.6** |
| | baz=74,slow=14,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **35.18** | **40** | P | **P** | **01 00 57.3** | **-1.3** |
| | 0.3nm,0.6s,baz=260,slow=5.5,SNR=10 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.52** | **38** | P | **P** | **01 02 53.2** | **-1.2** |
| | 0.3nm,0.5s,baz=300,slow=6.8,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **70.08** | **199** | P | **P** | **01 05 16.5** | **+1.0** |
| | 0.3nm,0.6s,baz=22,slow=6.8,SNR=2.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **76.52** | **61** | P | **P** | **01 05 53.1** | **-0.4** |
| | 0.1nm,0.4s,baz=308,slow=4.5,SNR=4.7 | | | | | | |

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*NNC **18** 00:56:07.9±0.3, 43°.12N×78°.67E, h0km, mb2.9, mpv3.0, Error ellipse: s-maj=3.7km s-min=1.2km az=172.0*
*KRNET **18** 00:56:08.5±0.1, 43°.16N×78°.65E, h14km, mb2.9*
*SOME **18** 00:56:08.6, 43°.15N×78°.63E, h10km*
**ISC 18 00:56:08.5±0.9, 43°.14N±0°.02×78°.65E±0°.02, h9km±6km, n61, σ0§53/115, 15C-15D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZHN** | **Zhinishke** | **0.16** | **279** | *e*P | **Pg** | **00 56 11.9** | **0.0** |
| | 186nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **00 56 14.2** | **-0.1** |
| | 406nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **0.16** | **279** | P | **Pg** | **00 56 11.9** | **0.0** |
| | 186nm,0.1s | | | | | | |
| ZHN | | | | S | **Sg** | **00 56 14.2** | **-0.1** |
| | 406nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **0.16** | **279** | *e*P | **Pg** | **00 56 12.0** | **0.0** |
| | baz=73 | | | | | | |
| ZHN | | | | *e*S | **Sg** | **00 56 14.3** | **-0.1** |
| | baz=73 | | | | | | |
| **SATY** | **Saty** | **0.20** | **244** | ⇓*i*P | **Pg** | **00 56 12.8** | **+0.2** |
| | 33nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 56 15.5** | **+0.1** |
| | 406nm,0.2s | | | | | | |
| **SATY** | **Saty** | **0.20** | **244** | P | **Pg** | **00 56 12.8** | **+0.2** |
| | 33nm,0.2s | | | | | | |
| SATY | | | | S | **Sg** | **00 56 15.5** | **+0.1** |
| | 406nm,0.2s | | | | | | |
| **SATY** | **Saty** | **0.20** | **244** | ⇓*i*P | **Pg** | **00 56 12.8** | **+0.2** |
| | baz=41 | | | | | | |
| SATY | | | | ⇓*e*S | **Sg** | **00 56 15.5** | **+0.1** |
| | baz=41 | | | | | | |
| **UZB** | **Uzynbulak** | **0.28** | **89** | *e*P | **Pg** | **00 56 13.9** | **-0.2** |
| | 17nm,0.1s | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 56 17.4** | **-0.4** |
| | 120nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **0.28** | **89** | P | **Pg** | **00 56 13.9** | **-0.2** |
| | 17nm,0.1s | | | | | | |
| UZB | | | | S | **Sg** | **00 56 17.5** | **-0.4** |
| | 120nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **0.28** | **89** | *e*P | **Pg** | **00 56 13.9** | **-0.2** |
| | baz=92 | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 56 17.5** | **-0.4** |
| | baz=92 | | | | | | |
| **KPKS** | **Kokpek** | **0.32** | **5** | *e*P | **Pg** | **00 56 14.7** | **-0.3** |
| | 153nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 56 18.9** | **-0.4** |
| | 108nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **0.32** | **5** | *e*P | **Pg** | **00 56 14.7** | **-0.3** |
| | baz=5.0 | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 56 18.9** | **-0.4** |
| | baz=5.0 | | | | | | |
| **KURS** | **Kuram** | **0.49** | **315** | *e*P | **Pg** | **00 56 17.9** | **-0.2** |
| | 1.9nm,0.1s | | | | | | |
| KURS | | | | *e*S | **Sg** | **00 56 24.6** | **0.0** |
| | 12nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **0.49** | **315** | P | **Pg** | **00 56 17.9** | **-0.2** |
| | 1.9nm,0.1s | | | | | | |
| KURS | | | | S | **Sg** | **00 56 24.6** | **0.0** |
| | 12nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **0.49** | **315** | *e*P | **Pg** | **00 56 17.9** | **-0.2** |
| | baz=13 | | | | | | |
| KURS | | | | *e*S | **Sg** | **00 56 24.5** | **0.0** |
| | baz=13 | | | | | | |
| **PDGK** | **Podgornoye** | **0.64** | **73** | P | **Pg** | **00 56 21.1** | **+0.1** |
| | 2.3nm,0.1s | | | | | | |
| PDGK | | | | S | **Sg** | **00 56 29.7** | **+0.2** |
| | 8.1nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **0.64** | **73** | ⇑P | **Pg** | **00 56 20.2** | **-0.8** |
| | 1.1nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **00 56 28.7** | **-0.8** |
| | 12nm,0.5s | | | | | | |
| **PRZ** | **Przheval'sk** | **0.68** | **195** | ⇑*i*P | **Pg** | **00 56 21.6** | **-0.2** |
| | baz=96 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sg** | **00 56 31.1** | **+0.4** |
| | baz=96 | | | | | | |
| **ANVS** | **Anan'yevo** | **0.80** | **244** | ⇑*i*P | **Pg** | **00 56 23.9** | **-0.1** |
| | baz=43 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sg** | **00 56 34.9** | **+0.4** |
| | baz=43 | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.13** | **275** | *e*P | **Pg** | **00 56 29.9** | **-0.3** |
| | 4.6nm,0.1s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **00 56 45.2** | **+0.1** |
| | 25nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.13** | **275** | P | **Pg** | **00 56 29.9** | **-0.3** |
| | 4.6nm,0.1s | | | | | | |
| KOTS | | | | S | **Sb** | **00 56 45.2** | **+0.1** |
| | 25nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.13** | **275** | *e*P | **Pg** | **00 56 29.9** | **-0.3** |
| | baz=74 | | | | | | |
| KOTS | | | | *e*S | **Sb** | **00 56 45.2** | **+0.1** |
| | baz=74 | | | | | | |
| **MDOK** | **Medeo** | **1.17** | **272** | *e*P | **Pb** | **00 56 30.3** | **-0.7** |
| | 1.9nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **00 56 45.8** | **-0.6** |
| | 6.1nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **1.17** | **272** | ⇓P | **Pb** | **00 56 29.5** | **-1.6** |
| | 1.5nm,0.6s | | | | | | |
| MDOK | | | | ⇓S | **Sn** | **00 56 46.8** | **-0.7** |
| | 3.1nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **1.17** | **272** | Pg | **Pb** | **00 56 30.3** | **-0.7** |
| | 1.9nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 00 56 45.8 | |
| | 6.1nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **1.17** | **272** | *e*P | **Pb** | **00 56 30.3** | **-0.7** |
| | baz=71 | | | | | | |
| MDOK | | | | *e*S | **Sb** | **00 56 45.8** | **-0.6** |
| | baz=71 | | | | | | |
| **TNSS** | **Tian-Shan** | **1.25** | **266** | *e*P | **Pn** | **00 56 32.1** | **-0.5** |
| | 1.2nm,0.1s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 56 48.8** | **0.0** |
| | 2.5nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.25** | **266** | P | **Pn** | **00 56 32.1** | **-0.5** |
| | 1.2nm,0.1s | | | | | | |
| TNSS | | | | S | **Sg** | **00 56 48.7** | **0.0** |
| | 2.5nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.25** | **266** | *e*P | **Pn** | **00 56 32.1** | **-0.5** |
| | baz=65 | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 56 48.8** | **0.0** |
| | baz=65 | | | | | | |
| **KNOS** | **Konyrlen** | **1.27** | **17** | *e*P | **Pn** | **00 56 32.3** | **-0.5** |
| | 5.7nm,0.1s | | | | | | |
| KNOS | | | | *e*S | **Sn** | **00 56 49.5** | **-0.5** |
| | 4.4nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **1.40** | **301** | *e*P | **Pb** | **00 56 34.6** | **-0.3** |
| | 1.3nm,0.1s | | | | | | |
| CHKK | | | | *e*S | **Sn** | **00 56 53.0** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.40** | **301** | P | **Pb** | **00 56 34.6** | **-0.3** |
| | 1.3nm,0.1s | | | | | | |
| CHKK | | | | S | **Sn** | **00 56 53.0** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.40** | **301** | *e*P | **Pb** | **00 56 34.6** | **-0.3** |
| | baz=1.0 | | | | | | |
| CHKK | | | | *e*S | **Sn** | **00 56 53.0** | **+0.1** |
| | baz=1.0 | | | | | | |
| **DJR** | **Jarkent** | **1.45** | **35** | *e*P | **Pb** | **00 56 35.4** | **-0.4** |
| | 11nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **00 56 54.5** | **-0.6** |
| | 97nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **1.45** | **35** | P | **Pb** | **00 56 35.4** | **-0.4** |
| | 11nm,0.2s | | | | | | |
| DJR | | | | S | **Sg** | **00 56 54.5** | **-0.6** |
| | 97nm,0.2s | | | | | | |
| **KDJ** | **Kajisay** | **1.48** | **227** | ⇑*i*P | **Pb** | **00 56 36.4** | **0.0** |
| | baz=27 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sg** | **00 56 56.2** | **0.0** |
| | baz=27 | | | | | | |
| **KTBS** | **Karatobe** | **1.54** | **292** | *e*P | **Pb** | **00 56 37.1** | **-0.1** |
| | 4.2nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 56 57.4** | **-0.6** |
| | 24nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **1.54** | **292** | P | **Pb** | **00 56 37.1** | **-0.1** |
| | 4.2nm,0.2s | | | | | | |
| KTBS | | | | S | **Sg** | **00 56 57.4** | **-0.6** |
| | 24nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **1.54** | **292** | *e*P | **Pb** | **00 56 37.1** | **-0.1** |
| | baz=92 | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 56 57.4** | **-0.6** |
| | baz=92 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.54** | **204** | ⇓*i*P | **Pb** | **00 56 37.4** | **-0.2** |
| | baz=4.0 | | | | | | |
| TARG | | | | ⇓*i*S | **Sg** | **00 56 58.3** | **+0.1** |
| | baz=4.0 | | | | | | |
| **MTBS** | **Maitube** | **1.62** | **270** | *e*P | **Pb** | **00 56 39.0** | **+0.3** |
| | 1.9nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **00 57 00.7** | **0.0** |
| | 12nm,0.1s | | | | | | |
| **MTBS** | **Maitube** | **1.62** | **270** | P | **Pb** | **00 56 39.0** | **+0.3** |
| | 1.9nm,0.2s | | | | | | |
| MTBS | | | | S | **Sg** | **00 57 00.7** | **0.0** |
| | 12nm,0.1s | | | | | | |
| **MTBS** | **Maitube** | **1.62** | **270** | *e*P | **Pb** | **00 56 39.0** | **+0.3** |
| | baz=70 | | | | | | |
| MTBS | | | | *e*S | **Sg** | **00 57 00.7** | **0.0** |
| | baz=70 | | | | | | |
| **KUU** | **Kurty** | **1.84** | **295** | *e*P | **Pb** | **00 56 42.2** | **-0.1** |
| | 2.1nm,0.2s | | | | | | |
| KUU | | | | ⇓*i*S | **Sb** | **00 57 06.3** | **+0.8** |
| | 15nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.84** | **295** | P | **Pb** | **00 56 42.2** | **-0.1** |
| | 2.1nm,0.2s | | | | | | |
| KUU | | | | S | **Sb** | **00 57 06.3** | **+0.8** |
| | 15nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.84** | **295** | *e*P | **Pb** | **00 56 42.2** | **-0.1** |
| | baz=94 | | | | | | |
| KUU | | | | ⇓*i*S | **Sb** | **00 57 06.3** | **+0.8** |
| | baz=94 | | | | | | |
| **TDK** | **Taldyqorghan** | **1.87** | **355** | *e*P | **Pg** | **00 56 44.0** | **-0.3** |
| | 29nm,0.4s | | | | | | |
| TDK | | | | *e*S | **Sg** | **00 57 09.2** | **+0.7** |
| | 13nm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **1.87** | **355** | P | **Pg** | **00 56 44.0** | **-0.3** |
| | 29nm,0.4s | | | | | | |
| TDK | | | | S | **Sg** | **00 57 09.2** | **+0.7** |
| | 13nm,0.4s | | | | | | |
| **KST** | **Kastek** | **1.97** | **268** | *e*P | **Pb** | **00 56 45.1** | **+0.5** |
| | 2.2nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sg** | **00 57 11.2** | **-0.6** |
| | 3.4nm,0.2s | | | | | | |
| **KST** | **Kastek** | **1.97** | **268** | Pg | **Pb** | **00 56 45.1** | **+0.5** |
| | 2.2nm,0.2s | | | | | | |
| KST | | | | Lg | Lg | 00 57 11.2 | |
| | 3.4nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **1.99** | **244** | ⇓*e*P | **Pb** | **00 56 44.7** | **-0.3** |
| | baz=44 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sb** | **00 57 11.0** | **+1.1** |
| | baz=44 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.10** | **253** | ⇑*i*P | **Pb** | **00 56 46.1** | **-0.7** |
| | baz=52 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sb** | **00 57 13.5** | **+0.5** |
| | baz=52 | | | | | | |
| **DGS** | **Degeres** | **2.10** | **274** | *e*P | **Pb** | **00 56 47.3** | **+0.4** |
| | 4.7nm,0.2s | | | | | | |
| DGS | | | | *e*S | **Sg** | **00 57 15.1** | **-1.1** |
| | 22nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **2.10** | **274** | Pg | **Pb** | **00 56 47.3** | **+0.4** |
| | 4.7nm,0.2s | | | | | | |
| DGS | | | | Lg | Lg | 00 57 15.1 | |
| | 22nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.20** | **13** | *e*P | **Pb** | **00 56 49.3** | **+0.7** |
| | 1.5nm,0.1s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **00 57 18.6** | **-0.7** |
| | 9.6nm,0.1s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.20** | **13** | Pg | **Pb** | **00 56 49.3** | **+0.7** |
| | 1.5nm,0.1s | | | | | | |
| KAPS | | | | Lg | Lg | 00 57 18.5 | |
| | 9.6nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **2.23** | **285** | *e*P | **Pb** | **00 56 49.5** | **+0.4** |
| | 2.2nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **00 57 18.4** | **+1.5** |
| | 5.4nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **2.23** | **285** | Pg | **Pb** | **00 56 49.5** | **+0.4** |
| | 2.2nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 00 57 18.4 | |
| | 5.4nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.25** | **265** | ⇑Pg | **Pb** | **00 56 49.9** | **+0.4** |
| | 1.1nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 00 57 20.2 | |
| | 5.1nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.25** | **265** | ⇓*i*P | **Pb** | **00 56 48.1** | **-1.3** |
| | baz=65 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sb** | **00 57 17.1** | **-0.3** |
| | baz=65 | | | | | | |
| **AAK** | **Ala-Archa** | **3.09** | **262** | ⇑Pg | **Pb** | **00 57 03.3** | **-0.5** |
| | 2.1nm,1.1s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 00 57 45.9 | |
| | 3.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **4.47** | **34** | ⇑Pn | **Pn** | **00 57 17.7** | **+1.2** |
| | 0.4nm,0.6s,baz=213,slow=30,SNR=3.9 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **00 58 10.5** | **+1.8** |
| | 0.4nm,0.6s,baz=213,slow=26,SNR=5.4 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 00 58 28.8 | |
| | 0.4nm,0.5s,baz=212,slow=30,SNR=6.9 | | | | | | |

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*MOS **18** 01:07:11.7±1.0, 56°.25S×27°.60W, h113km, mb6.0/15, Error ellipse: s-maj=17.1km s-min=9.7km az=108.0*
*NEIC **18** 01:07:11.5±1.4, 56°.26S±0°.09×27°.6W±0°.1, h99km±1km, mb5.8/191, Mwb5.7/22, Mww5.6, Error ellipse: s-maj=15.5km s-min=12.2km az=208.0*
*BJI **18** 01:07:12.8±0.0, 56°.13S×27°.52W, h120km, mB5.7/21*
*IDC **18** 01:07:13.4±0.4, 56°.25S×27°.46W, h121km±3km, mb5.3/16, mb1 5.5/17, mb1mx5.2/23, mbtmp5.7/17, MS4.6/29, Ms1 4.6/29, ms1mx4.5/35, Error ellipse: s-maj=8.9km s-min=7.9km az=50.0*
*NEIC **18** 01:07:14.2, 56°.22S×27°.71W, h100km, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr1.76; Mθθ-0.49; Mϕϕ-1.27; Mrθ-2.95; Mϕθ1.48; Mϕr1.23; Fault plane solution: M0 3.86000×10¹⁷ NP1:ϕs169.48000°, δ23.20000°, λ139.87000°. NP2:ϕs297.24000°, δ75.29000°, λ71.86000°. Principal axes: T 3.7974, Plg56.0000°, Azm184.0000°; N 0.1164, Plg18.0000°, Azm302.0000°; P -3.9137, Plg28.0000°, Azm42.0000°;*
*GCMT **18** 01:07:15.5±0.1, 56°.28S±0°.01×27°.09W±0°.01, h116km±1km, MW5.7/148, Moment Tensor Solution. s132,c230; s148,c298; Duration: 1§7 Moment tensor: Scale 10¹⁷ Nm; Mrr1.28±.04; Mθθ0.02±.06; Mϕϕ-1.30±.05; Mrθ-2.98±.04; Mϕϕ2.22±.05; Mϕr1.24±.03; Best double couple: M0 4.08200×10¹⁷ NP1:ϕs183.00000°, δ31.00000°, λ158.00000°. NP2:ϕs292.00000°, δ79.00000°, λ61.00000°. Principal axes: T 3.7450, Plg48.0000°, Azm171.0000°; N 0.6800, Plg29.0000°, Azm298.0000°; P -4.4200, Plg28.0000°, Azm45.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **18** 01:07:16, 56°.11S×27°.44W, h100km, Moment Tensor Solution. Duration: 4§0 Moment tensor: Scale 10¹⁷Nm; Mrr1.02; Mθθ-0.32; Mϕϕ-0.70; Mrθ-2.64; Mϕθ2.25; Mϕr0.98; Fault plane solution: M0 3.72000×10¹⁷ NP1: ϕs180.00000°, δ34.00000°, λ161.00000°. NP2: ϕs286.00000°, δ80.00000°, λ58.00000°. Principal axes: T 3.1987, Plg46.0000°, Azm163.0000°; N 0.8768, Plg32.0000°, Azm292.0000°; P -4.0755, Plg27.0000°, Azm41.0000°;*
**ISC 18 01:07:12.6±0.3, 56°.23S±0°.04×27°.48W±0°.04, h117km±2km, h117km:pP-P, n934, σ1§53/1057, mb5.7/131, 16C-33D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **5.51** | **287** | *e*P | **Pn** | **01 08 32.5** | **+0.3** |
| **HOPE** | **Hope Point** | **5.51** | **287** | Pn | **Pn** | **01 08 32.5** | **+0.3** |
| HOPE | | | | Sn | **Sn** | **01 09 30.0** | **-4.3** |
| **HOPE** | **Hope Point** | **5.51** | **287** | P | **Pn** | **01 08 32.8** | **+0.6** |
| **VNA1** | **Neumayer--Stat** | **16.69** | **158** | P | **Pn** | **01 10 59.0** | **0.0** |
| **VNA1** | **Neumayer--Stat** | **16.69** | **158** | ScP | **ScP** | **01 19 04.7** | **+0.6** |
| **VNA3** | **Neumayer Olymp** | **16.88** | **160** | P | **Pn** | **01 11 00.6** | **-0.7** |
| VNA3 | | | | S | Sn | 01 13 57.0 | -12 |
| **VNA3** | **Neumayer Olymp** | **16.88** | **160** | ScP | **ScP** | **01 19 04.7** | **+0.2** |
| **VNA3** | **Neumayer Olymp** | **16.88** | **160** | sP | sP | 01 11 47.7 | +11 |
| **VNA2** | **Neumayer--Watz** | **17.09** | **157** | P | **P** | **01 11 03.2** | **-0.5** |
| | baz=314,slow=12 | | | | | | |
| VNA2 | | | | S | Sn | 01 14 02.7 | -11 |
| **VNA2** | **Neumayer--Watz** | **17.09** | **157** | ScP | **ScP** | **01 19 05.2** | **+0.3** |
| **VNA2** | **Neumayer--Watz** | **17.09** | **157** | sP | sP | 01 11 47.9 | +9.2 |
| **EFI** | **East Falkland** | **18.48** | **271** | *c*P | **Pn** | **01 11 20.2** | **-0.4** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,266nm,1.0s | | | | | | |
| **EFI** | **East Falkland** | **18.48** | **271** | P | **P** | **01 11 19.5** | **+0.4** |
| EFI | | | | IAmb | IAmb | 01 11 22.2 | |
| | comp=Z,215nm,0.7s | | | | | | |
| **EFI** | **East Falkland** | **18.48** | **271** | P | **Pn** | **01 11 20.5** | **-0.2** |
| **SNAA** | **Sanae** | **18.64** | **156** | P | **P** | **01 11 21.4** | **+0.6** |
| **SNAA** | **Sanae** | **18.64** | **156** | ScP | **ScP** | **01 19 08.6** | **+0.3** |
| **SNAA** | **Sanae** | **18.64** | **156** | P | **P** | **01 11 21.6** | **+0.7** |
| | comp=Z,140nm,0.3s,baz=294,slow=10,SNR=1938 | | | | | | |
| SNAA | | | | S | **S** | **01 14 38.9** | **-7.9** |
| | comp=Z,0.6nm,0.3s,baz=283,slow=21,SNR=1.9 | | | | | | |
| SNAA | | | | LR | LR | 01 17 49.4 | |
| | comp=Z,830nm,18.1s,baz=310,slow=34 | | | | | | |
| SNAA | | | | ScP | **ScP** | **01 19 08.6** | **+0.3** |
| | baz=340,slow=4.0 | | | | | | |
| SNAA | | | | ScS | **ScS** | **01 22 50.0** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=205,slow=14,SNR=6.0 | | | | | | |
| **SNAA** | **Sanae** | **18.64** | **156** | P | **P** | **01 11 21.5** | **+0.7** |
| SNAA | | | | | **ScP** | **01 19 08.5** | **+0.2** |
| **PMSA** | **Palmer Station** | **19.66** | **229** | P | **Pn** | **01 11 35.1** | **+0.7** |
| | comp=Z,97nm,0.3s,baz=68,slow=6.3,SNR=34 | | | | | | |
| PMSA | | | | S | **Sn** | **01 15 12.8** | **-2.6** |
| | comp=Z,0.7nm,0.3s,baz=187,slow=18,SNR=1.6 | | | | | | |
| **PMSA** | **Palmer Station** | **19.66** | **229** | P | **P** | **01 11 31.9** | **+0.1** |
| **PMSA** | **Palmer Station** | **19.66** | **229** | P | **Pn** | **01 11 34.6** | **+0.2** |
| **SMAI** | **San Martin Ant** | **21.52** | **221** | P | **P** | **01 11 53.9** | **+2.1** |
| SMAI | | | | IAmb | IAmb | 01 11 56.8 | |
| | comp=Z,746nm,1.4s | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **21.69** | **34** | P | **P** | **01 11 55.7** | **+2.0** |
| | SNR=18 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **21.72** | **34** | P | **P** | **01 11 56.1** | **+2.0** |
| | SNR=12 | | | | | | |
| **BELA** | **Belgrano 2** | **21.89** | **184** | P | **P** | **01 11 55.9** | **+0.4** |
| **NVL** | **N'lazarevskaya** | **22.20** | **146** | ⇑*i*P | **P** | **01 12 05.9** | **+7.1** |
| NVL | | | | *e*S | **S** | **01 16 00.3** | **+5.3** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,164nm,1.2s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=N,392nm,17.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=E,2μm,17.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,704nm,17.0s | | | | | | |
| **MG01** | **Puerto William** | **22.52** | **256** | P | **P** | **01 12 02.7** | **+0.6** |
| MG01 | | | | IAmb | IAmb | 01 12 05.0 | |
| | comp=Z,343nm,0.8s | | | | | | |
| **USHA** | **Ushuaia** | **22.98** | **256** | P | **P** | **01 12 07.4** | **+0.7** |
| | comp=Z,54nm,0.8s,baz=102,slow=11,SNR=48 | | | | | | |
| USHA | | | | PcP | **PcP** | **01 15 53.6** | **+1.4** |
| | comp=Z,28nm,0.8s,baz=98,slow=4.0,SNR=6.0 | | | | | | |
| USHA | | | | LR | LR | 01 19 05.6 | |
| | comp=Z,2μm,20.1s,baz=112,slow=31 | | | | | | |
| **MG02** | **Cerro Sombrero** | **24.21** | **261** | P | **P** | **01 12 18.0** | **+0.1** |
| MG02 | | | | IAmb | IAmb | 01 12 21.2 | |
| | comp=Z,481nm,0.9s | | | | | | |
| **MG03** | **Isla Dawson** | **24.45** | **257** | P | **P** | **01 12 20.1** | **0.0** |
| **GO10** | **Punta Arenas** | **25.06** | **259** | P | **P** | **01 12 25.9** | **+0.2** |
| **MG04** | **Isla Riesco** | **25.47** | **259** | P | **P** | **01 12 29.4** | **+0.1** |
| **MG05** | **Puerto Natales** | **26.51** | **261** | P | **P** | **01 12 38.6** | **-0.1** |
| MG05 | | | | IAmb | IAmb | 01 12 51.3 | |
| | comp=Z,231nm,1.1s | | | | | | |
| **GO08** | **Villa O'Higgin** | **28.17** | **267** | P | **P** | **01 12 54.8** | **+1.2** |
| GO08 | | | | IAmb | IAmb | 01 12 55.5 | |
| | comp=Z,88nm,0.7s | | | | | | |
| **COYC** | **Coyhaique** | **29.57** | **272** | P | **P** | **01 13 06.9** | **+0.9** |
| COYC | | | | IAmb | IAmb | 01 13 07.8 | |
| | comp=Z,126nm,0.8s | | | | | | |
| **COYC** | **Coyhaique** | **29.57** | **272** | P | **P** | **01 13 06.9** | **+0.9** |
| COYC | | | | pP | **pwP** | **01 13 36.5** | **+1.9** |
| **PLTB** | **Pedras Altas** | **30.50** | **312** | *e*P | **P** | **01 13 15.2** | **+0.9** |
| **LL02** | **Futaleuf** | **30.94** | **276** | P | **P** | **01 13 18.5** | **+0.4** |
| **CPSB** | **Cacapava Do Su** | **31.62** | **314** | *e*P | **P** | **01 13 25.8** | **+1.5** |
| **TER01** | **Tubaro-SC** | **31.69** | **322** | *e*P | **P** | **01 13 26.7** | **+1.9** |
| **PLCA** | **Paso Flores** | **31.88** | **281** | P | **P** | **01 13 25.9** | **-0.5** |
| | comp=Z,22nm,1.0s,baz=144,slow=8.4,SNR=27 | | | | | | |
| PLCA | | | | pP | **pP** | **01 13 53.0** | **+1.8** |
| | comp=Z,16nm,0.9s,baz=134,slow=8.2,SNR=5.0 | | | | | | |
| PLCA | | | | PcP | **PcP** | **01 16 15.1** | **+1.0** |
| | comp=Z,27nm,0.8s,baz=139,slow=2.1,SNR=12 | | | | | | |
| PLCA | | | | ScP | **ScP** | **01 19 44.6** | **-1.8** |
| | comp=Z,15nm,0.8s,baz=128,slow=2.5,SNR=14 | | | | | | |
| PLCA | | | | LR | LR | 01 25 50.5 | |
| | comp=Z,886nm,21.3s,baz=129,slow=35 | | | | | | |
| PLCA | | | | P3KPbc | | 01 44 55.6 | |
| | comp=Z,1.1nm,0.9s,baz=285,slow=4.3,SNR=3.3 | | | | | | |
| PLCA | | | | P3KP | | 01 46 22.5 | |
| | comp=Z,2.9nm,1.0s,baz=215,slow=6.3,SNR=3.7 | | | | | | |
| **PLCA** | **Paso Flores** | **31.88** | **281** | *e*P | **P** | **

QSPA LR LR 01 26 45.7
comp=Z,808nm,21.9s,baz=186,slow=34
**QSPA South Pole Qui 34.02 180 P P 01 13 46.1 +1.2**
QSPA PcP PcP 01 16 20.6 +0.9
QSPA ScP 01 19 52.8 -0.7
**QSPA South Pole Qui 34.02 180 P P 01 13 46.8 +1.9**
**LR04 Corral 34.05 279 P P 01 13 44.9 -0.3**
LR04 lAmb lAmb 01 13 45.0
comp=Z,98nm,1.1s
LR04 PcP PcP 01 16 21.0 +0.9
**PET01 Itanhaem-SP 35.04 327** *eP* **P 01 13 54.8 +0.9**
**PARB Paraibuna 35.46 330** *eP* **P 01 13 59.6 +2.0**
**DUB01 Friburgo-RJ 35.84 336** *eP* **P 01 14 03.3 +2.4**
**VAS01 Vassouras-RJ 35.91 334** *eP* **P 01 14 03.9 +2.5**
**CAM01 Campos-RJ 35.93 337** *eP* **P 01 14 03.7 +2.2**
**ML02 Panimavida 35.93 286 P P 01 14 00.1 -1.3**
**VAO Valinhos 36.16 329** *eP* **P 01 14 06.2 +2.7**
**BI05 Punta Hualpn 36.16 283 P P 01 14 02.9 -0.4**
BI05 lAmb lAmb 01 14 03.8
comp=Z,77nm,0.9s
**PTGB Pitanga 36.22 320** *eP* **P 01 14 05.2 +1.1**
**BO02 Sierra Bellavi 36.33 288 P P 01 14 04.8 -0.1**
BO02 PcP 01 16 28.0 +1.0
**FRTB Fartura 36.64 325** *eP* **P 01 14 09.4 +1.8**
**LMEL Las Melosas 36.74 289 P P 01 14 09.1 +0.5**
**GO05 Huala 36.77 286 P P 01 14 07.6 -1.1**
GO05 PcP PcP 01 16 29.3 +1.0
**BO01 Tunca 36.79 288 P P 01 14 08.2 -0.5**
BO01 PcP PcP 01 16 28.8 +0.5
**CPUP Villa Florida 36.81 312 P P 01 14 09.2 +0.3**
comp=Z,84nm,0.9s,baz=150,slow=7.6,SNR=78
CPUP pP pP 01 14 32.5 -2.0
comp=Z,69nm,0.8s,baz=152,slow=7.1,SNR=7.7
CPUP PcP PcP 01 16 29.1 +0.7
comp=Z,47nm,0.6s,baz=156,slow=2.1,SNR=16
CPUP ScP ScP 01 20 02.8 -1.3
comp=Z,45nm,1.1s,baz=117,slow=3.3,SNR=10
CPUP LR LR 01 29 35.6
comp=Z,551nm,19.7s,baz=154,slow=36
**CPUP Villa Florida 36.81 312 P P 01 14 09.4 +0.5**
CPUP lAmb lAmb 01 14 10.5
comp=Z,163nm,1.1s
CPUP PcP PcP 01 16 29.3 +0.8
**CPUP Villa Florida 36.81 312** *eP* **P 01 14 09.5 +0.5**
**BO04 La Punta 36.85 289 P P 01 14 08.1 -1.2**
**RCLB Rio Claro- Sao 36.87 328** *eP* **P 01 14 11.8 +2.2**
**MT09 Talagante 37.22 289 P P 01 14 11.7 -0.9**
MT09 lAmb lAmb 01 14 12.9
comp=Z,63nm,0.5s
**MT01 Popeta 37.29 288 P P 01 14 11.7 -1.2**
MT01 lAmb lAmb 01 14 14.2
comp=Z,89nm,1.2s
**BSCB Bom Sucesso 37.47 333** *eP* **P 01 14 15.9 +1.3**
**PEL Peldehue 37.54 289 P P 01 14 15.0 -0.2**
PEL pmax pmax
comp=Z,147nm,1.1s
**PEL Peldehue 37.54 289 P P 01 14 15.0 -0.2**
PEL lAmb lAmb 01 14 17.0
comp=Z,147nm,1.1s
**VA05 Santo Domingo 37.64 288 P P 01 14 15.6 -0.2**
**MT02 Curacav 37.69 289 P P 01 14 16.1 -0.3**
MT02 lAmb lAmb 01 14 18.5
comp=Z,74nm,0.6s
**ZON Zonda 37.76 293 P P 01 14 16.5 -0.5**
ZON pmax pmax
comp=Z,51nm,0.7s
**ZON Zonda 37.76 293 P P 01 14 16.5 -0.5**
ZON lAmb lAmb 01 14 30.7
comp=Z,51nm,0.7s
**VA03 San Esteban 37.77 290 P P 01 14 17.1 -0.1**
VA03 lAmb lAmb 01 14 19.1
comp=Z,72nm,0.6s
**ROC1 El Roble 37.85 289 P P 01 14 16.6 -1.4**
ROC1 lAmb lAmb 01 14 23.7
comp=Z,67nm,0.6s
**RIB01 Linhares ES 38.11 340** *eP* **P 01 14 20.7 +0.7**
**VA01 Torpederas 38.15 289 P P 01 14 20.3 +0.2**
VA01 PcP 01 16 33.4 +1.0
**VA06 Catapilco 38.32 289 P P 01 14 21.5 -0.1**
VA06 lAmb lAmb 01 14 22.4
comp=Z,178nm,1.1s
**BB19B Bebedouro 38.45 327** *eP* **P 01 14 23.5 +0.6**
**ELIM Elim 38.58 76** *eP* **P 01 14 23.6 -0.2**
ELIM lAmb lAmb 01 14 25.5
comp=Z,227nm,1.3s
**PCMB Pacaembu 38.81 323** *eP* **P 01 14 27.0 +1.2**
**SJMB Sao Joao De Ma 38.86 339** *eP* **P 01 14 28.0 +1.8**
**CO02 Combarbal 39.23 291 P P 01 14 29.7 +0.3**
CO02 lAmb lAmb 01 14 30.5
comp=Z,76nm,0.6s
**CO03 El Pedregal 39.36 292 P P 01 14 30.4 0.0**
**NAN01 Guarapari, ES 39.50 341** *eP* **P 01 14 33.1 +1.5**
**DIAM Diamantina, MG 39.79 336** *eP* **P 01 14 35.9 +1.7**
**GO04 Tololo Observa 39.95 292 P P 01 14 35.2 -0.3**
**CO06 Fray Jorge 39.98 291 P P 01 14 35.4 -0.1**
**MATJ Matjiesfontein 40.04 76** ⇓*iP* **P 01 14 36.0 0.0**
MATJ lAmb lAmb 01 14 36.7
comp=Z,450nm,1.8s
**MAW Mawson 40.10 143 P P 01 14 36.2 +0.2**
comp=Z,165nm,0.8s,baz=226,slow=9.7,SNR=14
**ITRB Iturama 40.29 325** *eP* **P 01 14 39.5 +1.4**
**CO05 La Serena 40.38 292 P P 01 14 38.7 0.0**
CO05 lAmb lAmb 01 14 39.3
comp=Z,137nm,1.1s
**GUA01 Guaratinga, BA 40.67 342** *eP* **P 01 14 42.6 +1.4**
**LCO Las Campanas 40.83 293** *eP* **P 01 14 42.6 -0.2**
**LCO Las Campanas 40.83 293 P P 01 14 42.7 -0.1**
LCO lAmb lAmb 01 14 43.7
comp=Z,148nm,1.2s
**LCO Las Campanas 40.83 293 P P 01 14 42.3 -0.5**
LCO pP pP 01 15 07.7 -0.7
**SUR Sutherland 40.84 75** LR LR 01 28 24.3
comp=Z,1μm,19.6s,baz=214,slow=31
**SUR Sutherland 40.84 75 P P 01 14 44.0 +1.3**
**CVNA Calvinia 40.97 73** ⇓*iP* **P 01 14 44.6 +0.9**
CVNA lAmb lAmb 01 14 46.3
comp=Z,399nm,1.5s
**KOMG Komaggas 41.09 69** *eP* **P 01 14 44.4 -0.2**
KOMG lAmb lAmb 01 14 46.6
comp=Z,2μm,1.7s
**IPMB Ipameri, GO 41.27 329** *eP* **P 01 14 47.9 +1.7**
**AQDB Aquidauana 41.43 318 P P 01 14 47.7 +0.3**
AQDB lAmb lAmb 01 14 49.3
comp=Z,116nm,1.1s
**AQDB Aquidauana 41.43 318** *eP* **P 01 14 47.3 -0.1**
**H03S1 Juan Fernandez 41.44 281 P P 01 14 48.8 +1.7**
**H03S3 Juan Fernandez 41.46 281 P P 01 14 48.6 +1.4**
**H03S2 Juan Fernandez 41.46 281 P P 01 14 48.7 +1.5**
**ROSN Rosenhof 41.57 80** *eP* **P 01 14 48.7 +0.3**
ROSN lAmb lAmb 01 14 50.8
comp=Z,56nm,0.8s
**KROM Kromhout 41.58 80** *eP* **P 01 14 49.9 +1.3**
KROM lAmb lAmb 01 14 50.4
comp=Z,163nm,0.9s
**GRAN Grantham 41.64 76** ⇓*iP* **P 01 14 49.9 +0.7**
GRAN lAmb lAmb 01 14 50.7
comp=Z,45nm,0.8s
**AC04 Llanos de Chal 41.67 294 P P 01 14 49.2 -0.2**
**H03N3 Juan Fernandez 41.74 281 P P 01 14 50.8 +1.2**
baz=233,slow=21,SNR=5.2
**GO03 Copiap 41.74 295 P P 01 14 50.1 0.0**
GO03 lAmb lAmb 01 14 51.0
comp=Z,188nm,1.1s
**H03N1 Juan Fernandez 41.75 281 P P 01 14 50.9 +1.4**
baz=233,slow=21,SNR=9.3
**H03N2 Juan Fernandez 41.76 281 P P 01 14 50.9 +1.2**
baz=233,slow=21,SNR=5.0
**AC02 Maricunga 41.81 297 P P 01 14 51.6 +0.5**
**CMC01 Camacan, BA 41.82 342** *eP* **P 01 14 52.1 +1.5**
**NBIT Itapeh - BA 42.23 343** *eP* **P 01 14 55.2 +1.3**
**JANB Januaria 43.07 336** *eP* **P 01 15 02.1 +1.3**
**SOE Somerset East 43.18 80** *eP* **P 01 15 01.7 +0.1**
SOE lAmb lAmb 01 15 02.6
comp=Z,86nm,0.8s
**GDU01 Guandu, BA 43.44 343** *eP* **P 01 15 04.9 +1.2**
**BDFB Brasilia 43.44 331 P P 01 15 05.5 +1.6**
comp=Z,32nm,0.9s,baz=146,slow=5.5,SNR=43
BDFB LR LR 01 32 11.3
comp=Z,636nm,19.8s,baz=150,slow=34
**BDFB Brasilia 43.44 331 P P 01 15 05.2 +1.4**
**SHEL Horse Pasture 43.47 31 P P 01 15 05.0 +1.0**
SHEL pmax pmax
comp=Z,847nm,1.0s
**SHEL Horse Pasture 43.47 31 P P 01 15 05.0 +1.0**

**PP1B Ponte de Pedra 43.77 321** *eP* **P 01 15 07.2 +0.9**
**KEIM Keimoes 43.80 72** ⇓*iP* **P 01 15 07.1 +0.5**
KEIM lAmb lAmb 01 15 08.4
comp=Z,120nm,1.3s
**UPI Upington 44.22 72** ⇓*iP* **P 01 15 10.2 +0.3**
UPI lAmb lAmb 01 15 39.0
comp=Z,66nm,1.1s
**PB14 IPOC Station P 44.28 297 P P 01 15 10.7 -0.1**
PB14 lAmb lAmb 01 15 11.6
comp=Z,115nm,1.0s
**ARAG Araguaiana, MT 44.50 326** *eP* **P 01 15 13.6 +1.4**
**PB15 IPOC Station P 45.02 300 P P 01 15 16.9 +0.4**
PB15 lAmb lAmb 01 15 22.0
comp=Z,159nm,0.6s
**LVC Limon Verde 45.25 301** *ceP* **P 01 15 19.7 +1.1**
LVC pmax pmax
comp=Z,363nm,0.8s
**LVC Limon Verde 45.25 301 P P 01 15 19.3 +0.7**
**LVC Limon Verde 45.25 301** *eP* **P 01 15 19.9 +1.4**
**LVC Limon Verde 45.25 301 P P 01 15 19.7 +1.1**
**PB10 IPOC Station P 45.29 298 P P 01 15 18.5 +0.1**
PB10 lAmb lAmb 01 15 20.0
comp=Z,94nm,0.9s
**PB06 IPOC Station P 45.49 300 P P 01 15 20.6 +0.4**
PB06 lAmb lAmb 01 15 22.0
comp=Z,142nm,0.9s
**SALV Santo Antonio 45.62 320** *eP* **P 01 15 21.9 +0.8**
**SDBA SAO DESIDERIO 45.76 336** *eP* **P 01 15 23.5 +1.2**
**NBLA Lagarto - SE 45.84 346** *eP* **P 01 15 23.9 +1.1**
**SBA Scott Base 45.89 184 P P 01 15 23.6 +1.2**
SBA pmax pmax
comp=Z,253nm,0.9s
**SBA Scott Base 45.89 184 P P 01 15 23.6 +1.2**
SBA lAmb lAmb 01 15 26.6
comp=Z,253nm,0.9s
**PB04 IPOC Station P 46.09 299 P P 01 15 25.4 +0.5**
**PB09 IPOC Station P 46.10 301 P P 01 15 25.2 +0.2**
**PB03 IPOC Station P 46.14 300 P P 01 15 25.6 +0.3**
**BOSA Boshof 46.17 76 P P 01 15 25.5 +0.1**
comp=Z,69nm,1.0s,baz=213,slow=7.8,SNR=42
BOSA pP pP 01 15 52.7 +1.8
comp=Z,38nm,1.0s,baz=224,slow=6.7,SNR=4.0
BOSA ScP ScP 01 20 41.1 -0.3
comp=Z,16nm,0.9s,baz=214,slow=4.3,SNR=6.0
BOSA LR LR 01 31 39.8
comp=Z,1μm,18.9s,baz=220,slow=32
**BOSA Boshof 46.17 76** ⇓*iP* **P 01 15 25.3 -0.1**
BOSA lAmb lAmb 01 15 26.4
comp=Z,143nm,1.2s
**BOSA Boshof 46.17 76 P P 01 15 25.6 +0.2**
BOSA pmax pmax
comp=Z,149nm,1.3s
**BOSA Boshof 46.17 76 P P 01 15 25.6 +0.2**
BOSA lAmb lAmb 01 15 26.7
comp=Z,148nm,1.2s
**NBPN Ponto Novo - B 46.35 343** *eP* **P 01 15 27.5 +0.7**
**VNDA Vanda 46.38 183 P P 01 15 28.4 +2.1**
comp=Z,198nm,0.7s,baz=186,slow=6.7,SNR=308
VNDA PcP PcP 01 17 01.3 +2.2
comp=Z,45nm,0.8s,baz=238,slow=5.0,SNR=2.5
VNDA ScP ScP 01 20 41.6 +0.2
comp=Z,17nm,0.8s,baz=196,slow=3.5,SNR=4.4
VNDA LR LR 01 33 15.1
comp=Z,389nm,20.3s,baz=180,slow=34
**VNDA Vanda 46.38 183 P P 01 15 28.3 +1.9**
**PB07 IPOC Station P 46.48 300 P P 01 15 28.8 +0.9**
**PB02 IPOC Station P 46.83 300 P P 01 15 31.0 +0.4**
**PB01 IPOC Station P 46.87 301 P P 01 15 31.6 +0.7**
**PEXB Peixe 46.89 332** *eP* **P 01 15 32.4 +1.4**
**NBAN Anadia - AL 46.96 348** *eP* **P 01 15 32.4 +0.9**
**PTLB Pontes e Lacer 47.31 316** *eP* **P 01 15 35.0 +0.8**
**SWZ Schweizer 47.34 75** *eP* **P 01 15 34.3 -0.3**
SWZ lAmb lAmb 01 15 35.4
comp=Z,102nm,0.8s
**PATCX Punta Patache 47.38 300 P P 01 15 35.0 +0.1**
**PB08 IPOC Station P 47.48 302 P P 01 15 36.4 +0.4**
**CCD Concordia, Ant 47.53 170 P P 01 15 37.0 +1.3**
**SIV San Ignacio 47.59 314** LR LR 01 35 40.7
comp=Z,333nm,21.6s,baz=169,slow=36
**TA01 Diego Aracena 47.61 301 P P 01 15 37.0 +0.5**
TA01 lAmb lAmb 01 15 38.4
comp=Z,321nm,1.3s
**NBRF Rio Formoso - 47.81 350** *eP* **P 01 15 39.1 +1.0**
**TA02 Huaiquique 47.83 301 P P 01 15 38.8 +0.6**
**SNDB Serra Nova Dou 47.86 328** *eP* **P 01 15 40.2 +1.7**
**GO01 Chusmiza 47.91 302 P P 01 15 40.5 +1.1**
**PB11 IPOC Station P 48.05 302 P P 01 15 40.1 0.0**
**H10S2 ASCENSION HYDR 48.22 17 P P 01 15 42.3 +1.4**
H10S2 T T 02 08 34.1
baz=189,slow=74,SNR=20
**H10S3 ASCENSION HYDR 48.22 17 P P 01 15 42.3 +1.3**
H10S3 T T 02 08 34.4
baz=31,slow=74,SNR=14
**PRYS Parys 48.64 77** lAmb lAmb 01 15 42.9
comp=Z,187nm,1.0s
PRYS ⇓*iP* **P 01 15 44.5 -0.1**
**WDLM Western Deep L 49.07 76** *eP* **P 01 15 47.3 -0.6**
WDLM lAmb lAmb 01 15 48.8
comp=Z,74nm,0.8s
**PB16 IPOC Station P 49.20 303 P P 01 15 49.4 -0.1**
PB16 lAmb lAmb 01 15 51.4
comp=Z,75nm,0.6s
**LBTB Lobatse 49.21 73** ScP ScP **01 20 54.8 +0.5**
comp=Z,14nm,0.8s,baz=211,slow=4.9,SNR=8.1
LBTB S S **01 22 43.5 -2.2**
comp=Z,2.8nm,0.8s,baz=357,slow=20,SNR=2.1
LBTB LR LR 01 33 47.7
comp=Z,829nm,18.3s,baz=218,slow=32
**LBTB Lobatse 49.21 73** ⇓*iP* **P 01 15 48.3 -0.6**
LBTB lAmb lAmb 01 15 50.0
comp=Z,146nm,0.9s
**LBTB Lobatse 49.21 73 P P 01 15 49.4 +0.5**
LBTB lAmb lAmb 01 15 50.2
comp=Z,152nm,0.9s
LBTB ScP ScP **01 20 54.9 +0.5**
**KSR Koster 49.24 75** ⇓*iP* **P 01 15 49.2 -0.1**
KSR lAmb lAmb 01 15 50.2
comp=Z,108nm,1.1s
**ASCN Ascension 49.27 17 P P 01 15 50.2 +0.9**
**NBLV Livramento - P 49.31 348** *eP* **P 01 15 50.6 +0.9**
**H10N1 ASCENSION HYDR 49.34 17 P P 01 15 51.5 +2.1**
baz=188,slow=9.7,SNR=11
H10N1 T T 02 09 58.7
SNR=6.8
**H10N3 ASCENSION HYDR 49.34 17 P P 01 15 51.5 +2.1**
baz=188,slow=9.7,SNR=15
H10N3 T T 02 09 56.9
SNR=18
**PB12 IPOC Station P 49.35 302 P P 01 15 50.4 +0.4**
PB12 lAmb lAmb 01 15 52.9
comp=Z,282nm,1.5s
**H10N2 ASCENSION HYDR 49.35 17 P P 01 15 51.9 +2.3**
baz=188,slow=9.7,SNR=14
H10N2 T T 02 09 59.1
SNR=7.5
**NWCL Newcastle 49.39 80** ⇓*iP* **P 01 15 50.9 +0.7**
NWCL lAmb lAmb 01 15 51.1
comp=Z,68nm,0.7s
**NBMA Muriti-CE 49.55 345** *eP* **P 01 15 53.0 +1.6**
**SMTB Santa Maria do 49.82 334** *eP* **P 01 15 55.2 +1.8**
**PDRB Porto dos Gac 49.96 321** *eP* **P 01 15 55.0 +0.5**
**VILB Vilhena 50.00 317** *eP* **P 01 15 55.4 +0.5**
**NBPV Pedro Velho 50.06 350** *eP* **P 01 15 56.7 +1.5**
**SLR Silverton 50.08 76** ⇓*iP* **P 01 15 55.1 -0.5**
SLR lAmb lAmb 01 15 56.2
comp=Z,114nm,1.0s
**CLDB Colider 50.33 323** *eP* **P 01 15 57.6 +0.3**
**LPAZ La Paz 50.35 306 P P 01 15 59.6 +1.4**
comp=Z,97nm,0.4s,baz=144,slow=6.3,SNR=221
LPAZ pP pP **01 16 25.0 -0.2**
comp=Z,94nm,0.7s,baz=170,slow=6.3,SNR=4.1
LPAZ ScP ScP **01 20 58.5 -1.4**
comp=Z,15nm,0.9s,baz=130,slow=3.1,SNR=6.5
LPAZ S S **01 23 02.4 -0.2**
comp=Z,10nm,0.9s,baz=35,slow=25,SNR=13
LPAZ LR LR 01 37 44.9
comp=Z,290nm,21.3s,baz=156,slow=36
LPAZ PKPPKP P'P'df 01 46 36.4 -9.0
comp=Z,2.3nm,0.9s,baz=185,slow=1.4,SNR=3.8
**LPAZ La Paz 50.35 306 P P 01 15 58.6 +0.4**
LPAZ ScP ScP **01 20 58.4 -1.4**
**LPAZ La Paz 50.35 306** *eP* **P 01 15 59.6 +1.4**
**POGA Pongola 50.69 81** ⇓*iP* **P 01 15 60.0 +0.1**
POGA lAmb lAmb 01 16 01.0
comp=Z,86nm,0.9s

**CRLN Carolina, Mapu 50.83 78** *eP* **P 01 16 00.8 -0.4**
**MAGG Maguga Dam 51.44 79** *eP* **P 01 16 05.8 +0.2**
MAGG lAmb lAmb 01 16 06.8
comp=Z,157nm,0.9s
**NBPB Pedra_Branca-C 51.46 345** *eP* **P 01 16 07.0 +1.3**
**CNG Changalane 51.78 80** ⇓*iP* **P 01 16 08.4 +0.4**
CNG lAmb lAmb 01 16 09.1
comp=Z,77nm,1.6s
**NBCL Cascavel-CE 52.57 346** *eP* **P 01 16 15.6 +1.6**
**NBPS Pedro II - PI 52.88 342** *eP* **P 01 16 17.3 +1.0**
**PRPB Parauapebas 52.97 332** *eP* **P 01 16 18.5 +1.6**
**MOPA Mopani 53.55 78** ⇓*iP* **P 01 16 21.0 -0.1**
MOPA lAmb lAmb 01 16 22.1
comp=Z,112nm,1.0s
**NBMO Morrinhos-CE 53.72 344** *eP* **P 01 16 24.1 +1.7**
**MSNA Messina 53.75 76** ⇓*iP* **P 01 16 22.9 +0.3**
MSNA lAmb lAmb 01 16 23.7
comp=Z,155nm,1.1s
**NPGB Novo Progresso 53.77 325** *eP* **P 01 16 23.5 +0.7**
**CASY Casey 53.79 160 P P 01 16 24.0 +1.7**
**CASY Casey 53.79 160 P P 01 16 19.9 -2.4**
**MATP Matopo 54.49 73 S S 01 23 55.1 -2.9**
comp=Z,1.6nm,0.7s,baz=311,slow=23,SNR=5.6
MATP LR LR 01 36 49.1
comp=Z,273nm,18.0s,baz=207,slow=33
**PAF Port-aux-Franc 54.64 127 P P 01 16 29.4 +0.8**
PAF pmax pmax
comp=Z,365nm,1.0s
**PAF Port-aux-Franc 54.64 127 P P 01 16 29.4 +0.8**
**ROSB Rosrio 54.83 340** *eP* **P 01 16 32.0 +1.6**
**ETMB Extrema 55.26 311** *eP* **P 01 16 34.2 +0.6**
**TMAB Tom-Au,PA,Br 56.20 335** *eP* **P 01 16 41.9 +1.7**
**ITTB Itaituba 56.41 325** *eP* **P 01 16 42.7 +1.0**
**DRV Dumont d'Urvil 57.06 174 P P 01 16 46.3 +0.7**
**NNA Nana 58.20 299** LR LR 01 41 18.1
comp=Z,222nm,21.9s,baz=154,slow=35
**NNA Nana 58.20 299 P P 01 16 54.1 -0.3**
NNA pmax pmax
comp=Z,212nm,1.1s
**NNA Nana 58.20 299 P P 01 16 54.1 -0.3**
**NNA Nana 58.20 299 P P 01 16 54.7 +0.4**
NNA pP pP **01 17 21.8 -0.2**
**MALB Monte Alegre 58.34 328** *eP* **P 01 16 56.9 +1.7**
**LSZ Lusaka 58.59 69 S S 01 24 50.9 -1.2**
comp=Z,1.5nm,0.8s,baz=330,slow=21,SNR=1.5
LSZ LR LR 01 39 57.9
comp=Z,1μm,18.8s,baz=210,slow=34
**LSZ Lusaka 58.59 69** ⇓*iP* **P 01 16 56.7 -0.4**
LSZ lAmb lAmb 01 16 58.4
comp=Z,2μm,0.9s
**LSZ Lusaka 58.59 69 P P 01 16 57.5 +0.4**
LSZ pmax pmax
comp=Z,244nm,1.0s
**LSZ Lusaka 58.59 69 P P 01 16 57.5 +0.4**
**LSZ Lusaka 58.59 69 P P 01 16 57.6 +0.4**
LSZ pP pP **01 17 25.8 +1.3**
**MCPB Macapa, AP 59.14 331** *eP* **P 01 17 02.9 +2.1**
**MACA Manacapuru-AM 59.20 320** *eP* **P 01 17 00.9 -0.3**
**CZSB Cruzeiro do Su 59.96 306** *eP* **P 01 17 06.7 +0.2**
**PTGA Pitinga 61.22 322** ScP ScP **01 21 44.4 -2.3**
baz=150,slow=10
PTGA LR LR 01 45 14.8
comp=Z,324nm,18.3s,baz=170,slow=37
**VOI Vohitsoka 63.36 90 P P 01 17 30.2 +0.8**
**RPN Rapa Nui 63.47 260** LR LR 01 41 37.2
comp=Z,224nm,20.1s,baz=142,slow=32
**BOAV Boa Vista 64.33 323** *eP* **P 01 17 35.9 +0.4**
**MDP Montagnes des 64.52 332** LR LR 01 44 22.2
comp=Z,553nm,19.6s,baz=159,slow=34
**DBIC Dimbokro 65.40 25 P P 01 17 43.1 +0.7**
comp=Z,146nm,0.8s,baz=196,slow=7.6,SNR=176
DBIC S S **01 26 16.1 -1.3**
comp=Z,4.0nm,1.1s,baz=162,slow=3.4,SNR=2.1
DBIC LR LR 01 40 28.7
comp=Z,964nm,19.6s,baz=206,slow=30
DBIC PKPPKP **P'P'df 01 46 20.3 -0.1**
comp=Z,3.4nm,0.8s,baz=8.1,slow=5.8,SNR=5.0
**DBIC Dimbokro 65.40 25** ⇓*iP* **P 01 17 43.0 +0.6**
**DBIC Dimbokro 65.40 25 P P 01 17 42.2 -0.2**
DBIC lAmb lAmb 01 17 44.2
comp=Z,184nm,0.9s
**ABPO Ambohimpanom 65.92 88 P P 01 17 47.8 +1.7**
ABPO pmax pmax
comp=Z,30nm,1.1s
**ABPO Ambohimpanom 65.92 88 P P 01 17 47.8 +1.7**
**AIS Amsterdam Isla 66.96 124 P P 01 17 54.1 +1.9**
**RER Riviere de l'E 68.95 97 P P 01 18 07.1 +2.0**
RER lAmb lAmb 01 18 08.5
comp=Z,108nm,1.0s
**MCQ Macquarie Isla 69.51 184 P P 01 18 08.8 +1.0**
MCQ pmax pmax
comp=Z,149nm,0.7s
**MCQ Macquarie Isla 69.51 184 P P 01 18 08.8 +1.0**
MCQ lAmb lAmb 01 18 10.6
comp=Z,149nm,0.7s
**OTAV Otavalo 69.62 304** *ceP* **P 01 18 11.0 +1.4**
OTAV pmax pmax
comp=Z,342nm,1.3s
**OTAV Otavalo 69.62 304 P P 01 18 10.8 +1.1**
**OTAV Otavalo 69.62 304** *eP* **P 01 18 11.6 +2.0**
**OTAV Otavalo 69.62 304 P P 01 18 11.0 +1.4**
**MBO M'Bour 70.90 11 P P 01 18 18.2 +1.5**
MBO lAmb lAmb 01 18 20.1
comp=Z,222nm,1.0s
**ROSC El Rosal 71.88 310 P P 01 18 23.6 +0.4**
comp=Z,62nm,0.8s,baz=155,slow=2.1,SNR=22
ROSC S S **01 27 34.0 -0.8**
comp=Z,4.9nm,0.4s,baz=271,slow=22,SNR=2.4
**ROSC El Rosal 71.88 310 P P 01 18 23.6 +0.4**
**MBAR Mbarara 72.37 63** LR LR 01 48 02.6
comp=Z,589nm,18.2s,baz=188,slow=34
**MBAR Mbarara 72.37 63** *diP* **P 01 18 28.6 +2.7**
**MBAR Mbarara 72.37 63 P P 01 18 27.7 +1.8**
MBAR lAmb lAmb 01 18 30.3
comp=Z,149nm,1.4s
**MBAR Mbarara 72.37 63 P P 01 18 29.0 +3.1**
MBAR pP **pwP 01 18 57.7 +0.1**
**KOWA Kowa 73.15 24 P P 01 18 31.7 +1.5**
KOWA lAmb lAmb 01 18 32.7
comp=Z,116nm,1.1s
**TORD Torodi Ar. Bea 73.29 30 P P 01 18 31.5 +0.5**
comp=Z,143nm,0.7s,baz=200,slow=6.4,SNR=790
TORD pP **pP 01 19 00.7 +1.1**
comp=Z,86nm,0.8s,baz=200,slow=5.8,SNR=6.3
TORD S **SKiKP 01 27 50.7 +0.4**
comp=Z,2.6nm,1.1s,baz=253,slow=5.4,SNR=5.4
TORD PKKPab 01 39 21.9
comp=Z,1.8nm,1.0s,baz=276,slow=2.7,SNR=4.4
TORD PKPPKP **P'P'df 01 46 10.2 +3.2**
comp=Z,2.0nm,1.0s,baz=342,slow=2.4,SNR=3.6
**GRGR Grenville 73.83 325 P P 01 18 34.9 +0.8**
GRGR lAmb lAmb 01 18 36.2
comp=Z,234nm,0.8s
**BIRV Birongo 73.84 320 P P 01 18 35.5 +1.2**
BIRV lAmb lAmb 01 18 36.7
comp=Z,350nm,1.2s
**SDV Santo Domingo 74.02 315** LR LR 01 54 10.9
comp=Z,655nm,18.0s,baz=156,slow=38
**SDV Santo Domingo 74.02 315 P P 01 18 36.2 +0.7**
SDV lAmb lAmb 01 18 37.4
comp=Z,145nm,0.9s
**SDV Santo Domingo 74.02 315** *eP* **P 01 18 36.3 +0.7**
**SDV Santo Domingo 74.02 315 P P 01 18 36.1 +0.6**
SDV pP **sP 01 19 14.0 -2.8**
**ZARC Zaragoza, Cauc 74.49 311 P P 01 18 37.0 -1.1**
**OCAC Ocana 74.52 313 P P 01 18 37.0 -1.4**
**KIBK Kibwezi 74.64 71 P P 01 18 39.7 +0.6**
**PAYG Puerto Ayora 74.64 293 P P 01 18 39.7 +0.7**
**MCLT Moule a Chique 75.08 326 P P 01 18 41.5 +0.1**
MCLT lAmb lAmb 01 18 43.6
comp=Z,231nm,1.0s
**KMBO Kilima Mbogo 75.25 69 P P 01 18 46.5 +3.7**
comp=Z,14nm,1.1s,baz=219,slow=3.9,SNR=23
KMBO LR LR 01 50 18.2
comp=Z,318nm,18.2s,baz=182,slow=34
**KMBO Kilima Mbogo 75.25 69** ⇓*iP* **P 01 18 46.6 +3.8**
KMBO lAmb lAmb 01 18 48.1
comp=Z,74nm,1.1s
**KMBO Kilima Mbogo 75.25 69 P P 01 18 45.6 +2.8**
KMBO pmax pmax
comp=Z,27nm,1.2s
**KMBO Kilima Mbogo 75.25 69 P P 01 18 45.6 +2.8**
**KMBO Kilima Mbogo 75.25 69 P P 01 18 46.6 +3.8**
**BIM Bigot 75.89 326 P P 01 18 46.7 +0.8**

BIM IAmb IAmb 01 18 48.9
comp=Z,183nm,0.9s
**MOTC Monteria, Cord 75.98 311 P P 01 18 47.2 +0.6**
**FDF Fort de France 76.11 326 P P 01 18 47.6 +0.3**
FDF pmax pmax
comp=Z,72nm,0.8s
**FDF Fort de France 76.11 326 P P 01 18 47.6 +0.3**
FDF IAmb IAmb 01 18 52.8
comp=Z,72nm,0.8s
**HATO Hato, Curacao 76.40 318 P P 01 18 49.8 +0.9**
**SJCC San Jacinto, C 76.78 312 P P 01 18 52.0 +0.9**
SJCC IAmb IAmb 01 18 53.1
comp=Z,160nm,1.0s
**WHZ Wether Hill Ro 77.42 191 P P 01 18 55.6 +1.2**
**H05N1 Guadeloupe/Mar 77.58 327 P P 01 18 56.5 +1.1**
SNR=5.7
**MLZ Mavora Lakes 77.93 191 P P 01 18 57.9 +0.7**
MLZ IAmb IAmb 01 19 00.1
comp=Z,166nm,1.4s
**DCZ Deep Cove 77.93 190 P P 01 18 57.8 +0.6**
**ODZ Otahua Downs 77.95 193 P P 01 18 57.5 +0.2**
ODZ IAmb IAmb 01 19 00.5
comp=Z,126nm,1.4s
**BCIP Isla Barro Col 78.14 307 P P 01 18 59.6 +0.9**
BCIP pmax pmax
comp=Z,232nm,1.4s
**BCIP Isla Barro Col 78.14 307 P P 01 18 59.6 +0.9**
BCIP IAmb IAmb 01 19 01.0
comp=Z,232nm,1.4s
**LODK Lodwar 78.15 65 P P 01 19 00.5 +1.6**
**WKZ Wanaka 78.36 192 P P 01 19 00.6 +1.0**
WKZ IAmb IAmb 01 19 05.9
comp=Z,116nm,0.9s
**LBZ Lake Benmore 78.65 193 P P 01 19 01.9 +0.7**
LBZ IAmb IAmb 01 19 03.4
comp=Z,237nm,1.4s
**MQZ McQueen's Vall 78.99 195 P P 01 19 03.2 +0.2**
MQZ IAmb IAmb 01 19 04.3
comp=Z,76nm,0.9s
**CDITO Canoas 79.00 304 P P 01 19 04.6 +1.2**
CDITO IAmb IAmb 01 19 06.4
comp=Z,310nm,1.2s
**BRU2 Volcan 79.11 304 P P 01 19 04.8 +0.7**
BRU2 IAmb IAmb 01 19 13.3
comp=Z,156nm,1.1s
**RPZ Rata Peaks 79.20 194 P P 01 19 04.3 +0.1**
comp=Z,50nm,0.7s,baz=218,slow=5.8,SNR=19
**RPZ Rata Peaks 79.20 194 P P 01 19 04.8 +0.5**
RPZ IAmb IAmb 01 19 05.7
comp=Z,72nm,0.8s
**RIOS Rincon, Osa 79.41 303 P P 01 19 06.6 +1.0**
**SRBA San Rafael, Bu 79.81 304 P P 01 19 08.6 +0.7**
SRBA IAmb IAmb 01 19 10.4
comp=Z,175nm,1.0s
**SMRT St. Maarten 79.83 326 P P 01 19 08.3 +0.6**
SMRT IAmb IAmb 01 19 09.2
comp=Z,156nm,1.1s
**LTZ Lake Taylor 79.95 195 P P 01 19 09.3 +0.9**
LTZ IAmb IAmb 01 19 10.3
comp=Z,299nm,1.4s
**LTZ Lake Taylor 79.95 195 P P 01 19 08.9 +0.5**
**PEZE Perez Zeledon, 80.08 304 P P 01 19 09.9 +0.6**
PEZE IAmb IAmb 01 19 12.1
comp=Z,203nm,1.0s
**KHZ Kahutara 80.13 196 P P 01 19 09.2 +0.1**
KHZ IAmb IAmb 01 19 10.6
comp=Z,153nm,1.4s
**KHZ Kahutara 80.13 196 P P 01 19 07.7 -1.5**
**RIMA Rio Macho 80.51 304 P P 01 19 12.4 +0.7**
RIMA IAmb IAmb 01 19 14.4
comp=Z,190nm,1.4s
**BATAN Batan 80.57 304 P P 01 19 12.7 +0.9**
BATAN IAmb IAmb 01 19 13.7
comp=Z,205nm,1.1s
**MTP Monte Pirata 80.68 324 P P 01 19 12.6 +0.3**
**PLWZ Palliser 80.69 197 P P 01 19 13.0 +0.7**
**STVI Saint Thomas 80.72 324 P P 01 19 12.8 +0.4**
STVI IAmb IAmb 01 19 13.9
comp=Z,108nm,0.8s
**PDPR Patillas Dam, 80.76 323 P P 01 19 12.9 +0.2**
**BSWZ Blackbirch Sta 80.76 196 P P 01 19 13.5 +0.9**
**BSWZ Blackbirch Sta 80.76 196 P P 01 19 13.9 +1.3**
**CUPR Culebra, Puert 80.78 324 P P 01 19 13.9 +1.1**
CUPR IAmb IAmb 01 19 14.7
comp=Z,78nm,0.8s
**JACO JACO, Garabito 80.79 303 P P 01 19 14.3 +1.3**
JACO IAmb IAmb 01 19 15.5
comp=Z,111nm,0.8s
**HUMP Col San Antoni 80.82 323 P P 01 19 13.0 0.0**
**HDC Heredia 80.83 304 P P 01 19 14.3 +0.9**
**THZ Tophouse 80.86 195 P P 01 19 13.9 +0.6**
THZ IAmb IAmb 01 19 19.7
comp=Z,154nm,0.6s
**THZ Tophouse 80.86 195 P P 01 19 13.8 +0.6**
**SJG San Juan 80.89 323 LR LR 01 57 34.8**
comp=Z,133nm,19.1s,baz=136,slow=37
**SJG San Juan 80.89 323 P P 01 19 13.1 -0.3**
SJG pmax pmax
comp=Z,55nm,1.2s
**SJG San Juan 80.89 323 P P 01 19 13.1 -0.3**
**BHW Baring Head 80.91 197 P P 01 19 14.4 +1.0**
**CAO2 Cobano, Puntar 81.02 303 P P 01 19 15.3 +1.0**
CAO2 IAmb IAmb 01 19 16.9
comp=Z,242nm,1.1s
**SNZO South Karori 81.03 197 P P 01 19 14.3 +0.3**
**TMWZ Te Maipa 81.03 198 P P 01 19 15.4 +1.3**
**TUWZ Tuamarina 81.03 196 P P 01 19 14.6 +0.6**
**MTW Mount Morrison 81.05 197 P P 01 19 15.7 +1.5**
**MLPR Magueyes Islan 81.06 322 P P 01 19 13.5 -0.8**
MLPR **pP 01 19 39.9 -3.7**
**CRPR Cabo Rojo, PR 81.12 322 P P 01 19 14.0 -0.5**
CRPR **pP 01 19 40.6 -3.4**
**TAU Tasmania Unive 81.13 176 P P 01 19 15.1 +0.6**
TAU pmax pmax
comp=Z,453nm,0.9s
**TAU Tasmania Unive 81.13 176 P P 01 19 15.1 +0.6**
**TAU Tasmania Unive 81.13 176 P P 01 19 14.5 0.0**
**CAW Cannon Point 81.17 197 P P 01 19 15.5 +0.8**
**TCW Tory Channel 81.19 196 P P 01 19 15.6 +0.8**
**MRNZ Matariki Terra 81.24 195 P P 01 19 15.7 +0.5**
**HOWZ Holdsworth Sta 81.30 197 P P 01 19 16.5 +1.0**
**NNZ Nelson 81.33 196 P P 01 19 15.4 -0.2**
NNZ IAmb IAmb 01 19 17.5
comp=Z,128nm,0.9s
**NNZ Nelson 81.33 196 P P 01 19 16.2 +0.6**
**BFZ Birch Farm 81.38 198 P P 01 19 16.1 +0.1**
BFZ IAmb IAmb 01 19 17.4
comp=Z,102nm,0.9s
**BFZ Birch Farm 81.38 198 P P 01 19 16.9 +1.0**
**JTS Las Juntas de 81.47 303 LR LR 01 57 47.0**
comp=Z,114nm,20.7s,baz=171,slow=37
**JTS Las Juntas de 81.47 303***c iP* **P 01 19 17.9 +1.2**
JTS pmax pmax
comp=Z,212nm,1.2s
**JTS Las Juntas de 81.47 303 P P 01 19 16.5 -0.1**
JTS IAmb IAmb 01 19 19.4
comp=Z,391nm,1.4s
**JTS Las Juntas de 81.47 303 P P 01 19 18.0 +1.4**
**MRZ Mangatainoka R 81.52 198 P P 01 19 17.4 +0.8**
**DUNO Dulce Nombre, 81.55 302 P P 01 19 17.3 +0.3**
**COVE Coope Vega, Sa 81.59 304 P P 01 19 17.0 -0.2**
**DUWZ D'Urville Isla 81.65 196 P P 01 19 17.8 +0.5**
**PRHZ Porangahau 81.72 198 P P 01 19 14.8 -2.9**
**POWZ Post Office Ro 81.75 198 P P 01 19 18.6 +0.8**
**DVHZ Dannevirke 81.77 198 P P 01 19 19.2 +1.2**
**ORTG Ortega, Santa 81.78 303 P P 01 19 18.7 +0.4**
ORTG IAmb IAmb 01 19 20.8
comp=Z,289nm,1.1s
**QRZ Quartz Range 81.84 195 P P 01 19 17.4 -0.9**
QRZ IAmb IAmb 01 19 19.0
comp=Z,87nm,0.6s
**QRZ Quartz Range 81.84 195 P P 01 19 17.0 -1.3**
**TSZ Takapari Road 82.04 198 P P 01 19 20.5 +1.1**
**KAHZ Kahuranaki 82.13 199 P P 01 19 19.3 -0.6**
**HZTE Horizontes, Gu 82.17 303 P P 01 19 20.7 +0.5**
**BHHZ Black Hill Sta 82.57 198 P P 01 19 24.4 +2.2**
**KWHZ Kaweka Forest 82.58 198 P P 01 19 23.5 +1.3**
**BANI BANI 82.62 319 P P 01 19 22.9 +0.3**
**DR12 Loma Pena Alta 82.64 320 P P 01 19 22.2 -0.4**
**WNVZ Wahianoa 82.81 198 P P 01 19 25.0 +1.4**
**BKZ Black Stump Fm 82.81 199 P P 01 19 24.6 +1.1**
BKZ IAmb IAmb 01 19 31.0
comp=Z,141nm,1.3s

**OTVZ Oturere 82.96 198 P P 01 19 25.3 +0.9**
**ACON Acoyapa 83.05 304 P P 01 19 25.5 +0.7**
**KHEZ Kahui Hut 83.11 197 P P 01 19 25.1 +0.1**
**VRZ Vera Road 83.15 197 P P 01 19 25.3 +0.1**
**JAKH Jacmel 83.28 317 P P 01 19 26.1 +0.3**
**SDDR Presa de Saban 83.50 319 P P 01 19 27.6 +0.5**
**LGNH Logne 83.57 317 P P 01 19 28.2 +0.9**
**URZ Urewera 83.58 199 P P 01 19 27.3 0.0**
comp=Z,61nm,1.0s,baz=228,slow=4.0,SNR=4.2
**URZ Urewera 83.58 199 P P 01 19 28.0 +0.6**
URZ IAmb IAmb 01 19 32.4
comp=Z,186nm,1.4s
**BOAB BOACO BROADBAND 83.69 303 P P 01 19 28.0 -0.1**
**SC01 Santiago de lo 83.71 319 P P 01 19 28.5 +0.5**
SC01 IAmb IAmb 01 19 30.2
comp=Z,156nm,0.8s
**HIZ Hauiti 83.73 197 P P 01 19 28.1 0.0**
**MATN Matagalpa 84.23 303 P P 01 19 31.6 +0.6**
MATN IAmb IAmb 01 19 32.7
comp=Z,132nm,1.0s
**TOZ Tahuroa Road 84.38 198 P P 01 19 33.6 +2.1**
**GTBY Guantanamo Bay 85.81 316 P P 01 19 39.2 +0.6**
GTBY IAmb IAmb 01 19 40.8
comp=Z,68nm,1.1s
**TGUH Tegucigalpa,Un 85.85 303 P P 01 19 39.1 +0.1**
**TOO Toolangi 86.37 174 P P 01 19 38.5 -2.9**
TOO pmax pmax
comp=Z,101nm,0.8s
**TOO Toolangi 86.37 174 P P 01 19 38.5 -2.9**
TOO IAmb IAmb 01 19 43.9
comp=Z,101nm,0.8s
**MTO3 Montecristo 87.13 301 P P 01 19 45.7 +0.3**
**ESQI Esquipulas 87.26 301 P P 01 19 47.0 +1.1**
**CAN Canberra 88.76 177 P P 01 19 53.0 +0.1**
CAN pmax pmax
comp=Z,198nm,1.3s
**CAN Canberra 88.76 177 P P 01 19 53.0 +0.1**
CAN IAmb IAmb 01 19 54.9
comp=Z,198nm,1.3s
**CAN Canberra 88.76 177 P P 01 19 53.8 +0.9**
**ATD Arta Tunnel 88.88 67 LR LR 01 57 51.1**
comp=Z,426nm,18.8s,baz=198,slow=34
**MORW Morawa 89.55 149 P P 01 19 55.6 -0.9**
MORW IAmb IAmb 01 19 57.5
comp=Z,47nm,0.9s
**PETF Flores 89.55 302 P P 01 19 56.1 -0.4**
PETF IAmb IAmb 01 19 58.5
comp=Z,160nm,1.4s
**CCIG Comitan 90.09 300 P P 01 19 58.6 -0.7**
CCIG IAmb IAmb 01 20 01.0
comp=Z,101nm,1.4s
**BBOO Buckleboo 90.21 166 P P 01 19 59.7 +0.1**
BBOO IAmb IAmb 01 20 01.2
comp=Z,139nm,0.9s
**MDT Midelt 90.81 19 P P 01 20 05.3 +3.2**
comp=Z,39nm,0.7s,baz=213,slow=1.0,SNR=93
MDT pP **pP 01 20 32.4 +0.5**
comp=Z,36nm,0.9s,baz=178,slow=1.7,SNR=7.8
**FORT Forrest 90.86 159 P P 01 20 03.6 +1.0**
**TVO Taravao 91.63 234** *eP* **P 01 20 07.1 +0.7**
comp=Z,72nm,1.0s
**STKA Stephens Creek 91.75 171 P P 01 20 07.5 +0.7**
comp=Z,68nm,0.7s,baz=160,slow=5.3,SNR=55
STKA PP **PP 01 23 43.3 -2.7**
comp=Z,19nm,0.8s,baz=162,slow=7.4,SNR=6.0
**STKA Stephens Creek 91.75 171 P P 01 20 06.3 -0.4**
**TIAR Tiarei 91.87 234** *eP* **P 01 20 07.9 +0.4**
comp=Z,0.8nm,1.0s
**PPT2 Papeete2 91.94 234** *e*PS PS 01 32 38.2 +14
comp=Z,627nm,33.2s
**PPT2 Papeete2 91.94 234** *e*LR LR 01 50 24.8
comp=Z,3µm,36.2s
**PPT Papeete 91.96 234** LR LR 01 52 12.4
comp=Z,254nm,21.5s,baz=192,slow=29
**ARMA Armidale 93.69 179 P P 01 20 16.5 +0.6**
**060A Indiantown 94.27 314 P P 01 20 19.9 +1.8**
**TAOE Nuku Hiva Isla 94.93 246** *e*LR LR 01 51 43.2
comp=Z,643nm,34.8s
**KEST Kesra 96.81 29 LR LR 02 01 38.2**
comp=Z,332nm,18.0s,baz=162,slow=34
**ESDC Sonseca Array 97.60 18 P Pdif 01 20 35.2 +2.1**
comp=Z,3.2nm,0.8s,baz=194,slow=4.5,SNR=17
ESDC pP pP 01 21 02.3 -0.6
comp=Z,2.5nm,0.8s,baz=197,slow=5.2,SNR=4.5
ESDC sP sP 01 21 14.6 -0.4
comp=Z,4.1nm,0.9s,baz=204,slow=4.4,SNR=4.7
ESDC PKKPbc **PKKPbc 01 37 06.8 -1.3**
comp=Z,1.4nm,0.8s,baz=353,slow=4.8,SNR=5.2
**ESDC Sonseca Array 97.60 18 P Pdif 01 20 35.8 +2.7**
**PSA00 Pilbara Seismi 97.72 150 P Pdif 01 20 34.5 +0.3**
PSA00 IAmb IAmb 01 20 35.2
comp=Z,50nm,1.4s
**PSA00 Pilbara Seismi 97.72 150 P Pdif 01 20 34.3 +0.1**
PSA00 IAmb IAmb 01 20 35.2
comp=Z,34nm,1.4s
**EIDS Eidsvold 98.72 179 IAmb IAmb 01 20 39.5**
comp=Z,26nm,1.0s
**ASAR Alice Springs 98.86 163 P P 01 20 39.1 -0.2**
comp=Z,49nm,0.7s,baz=191,slow=4.1,SNR=138
ASAR PP **PP 01 24 37.3 -3.9**
comp=Z,16nm,0.7s,baz=190,slow=6.7,SNR=4.5
ASAR S **SKSac 01 31 02.6 -4.0**
comp=Z,1.7nm,0.9s,baz=159,slow=14,SNR=6.4
ASAR PKKPbc **PKKPdf 01 37 05.2 0.0**
comp=Z,1.8nm,0.6s,baz=15,slow=2.2,SNR=12
ASAR PKKPab PKKPbc 01 37 33.9 +31
comp=Z,1.3nm,0.6s,baz=20,slow=2.2,SNR=5.0
ASAR PKPPKP 01 45 15.4
comp=Z,1.0nm,0.9s,baz=68,slow=0.5,SNR=4.5
ASAR LR LR 02 03 57.4
comp=Z,240nm,18.0s,baz=192,slow=34
**ASAR Alice Springs 98.86 163 P P 01 20 39.3 0.0**
**ASAR Alice Springs 98.86 163 P P 01 20 39.3 0.0**
**AS31 Alice Springs 98.87 163 IAmb IAmb 01 20 40.8**
comp=Z,18nm,0.8s
**TIGA Tifton 99.47 314 P Pdif 01 20 41.9 +0.4**
baz=152
**VAE Valguarnera 99.90 33 LR LR 02 05 03.4**
comp=Z,271nm,18.4s,baz=156,slow=35
**EIL Elat 100.58 52 PP PP 01 24 46.7 -8.7**
comp=Z,3.9nm,1.0s,baz=230,slow=16,SNR=2.5
EIL PKKPbc **PKKPbc 01 37 00.5 +1.4**
comp=Z,2.0nm,0.8s,baz=130,slow=4.8,SNR=3.7
EIL PKKPab PKKPdf 01 37 25.6 +21
comp=Z,4.2nm,1.0s,baz=160,slow=3.7,SNR=4.8
**DZM Mont Dzumac 101.12 193 P Pdif 01 20 50.0 +0.5**
comp=Z,6.0nm,0.8s,baz=117,slow=18,SNR=2.4
**DZM Mont Dzumac 101.12 193** *e*LR LR 01 54 37.2
comp=Z,776nm,26.7s
**IDI Anoyia 101.43 41 PP PP 01 24 56.5 -5.3**
comp=Z,3.7nm,0.5s,baz=172,slow=7.1,SNR=2.2
**FITZ Fitzroy Crossi 102.57 154 P Pdif 01 20 56.1 +0.3**
comp=Z,3.6nm,0.6s,baz=213,slow=6.8,SNR=9.0
FITZ PP **PP 01 25 05.0 -4.3**
comp=Z,3.3nm,0.8s,baz=213,slow=6.3,SNR=5.0
**WRA Warramunga Arr 102.58 162 P Pdif 01 20 55.5 -0.4**
comp=Z,17nm,0.8s,baz=194,slow=4.0,SNR=47
WRA PP **PP 01 25 05.8 -3.5**
comp=Z,12nm,0.9s,baz=191,slow=6.0,SNR=8.7
WRA S **SKSac 01 31 21.5 -3.1**
comp=Z,3.0nm,1.1s,baz=201,slow=5.8,SNR=5.5
WRA PKKPbc **PKKPbc 01 36 55.0 +2.4**
comp=Z,1.6nm,0.5s,baz=356,slow=2.8,SNR=24
WRA PKKPab PKKPdf 01 37 17.7 +19
comp=Z,2.8nm,1.1s,baz=12,slow=4.7,SNR=4.6
**WRA Warramunga Arr 102.58 162 P Pdif 01 20 56.1 +0.2**
**WRA Warramunga Arr 102.58 162 Pdif Pdif 01 20 56.1 +0.2**
**ASF Jabal al Asfar 103.58 52 PKKPab 01 37 11.6**
comp=Z,3.1nm,0.9s,baz=33,slow=3.7,SNR=4.3
**MMAI Mount Meron Ar 103.65 50 PP PP 01 25 13.7 -4.8**
comp=Z,1.7nm,0.8s,baz=229,slow=5.5,SNR=3.3
MMAI PKKPab PKKPdf 01 37 12.2 +13
comp=Z,3.4nm,0.9s,baz=35,slow=5.3,SNR=7.1
**CTA Charters Tower 103.80 174 Pdiff Pdif 01 21 01.4 +0.1**
comp=Z,8.7nm,0.7s,baz=160,slow=8.9,SNR=12
CTA PP **PP 01 25 10.6 -7.7**
comp=Z,9.0nm,0.8s,baz=193,slow=8.2,SNR=5.5
**833A Chaparral WMA, 103.81 300 P Pdif 01 21 02.0 +1.1**
baz=147
**435B Jarrell 105.01 303 P PKiKP 01 25 22.1 +1.9**
baz=147
**N59A State Game Lan 105.05 324 P PKiKP 01 25 22.2 +2.2**
baz=155
**BINY Binghamton 106.28 325 P PKiKP 01 25 22.7 +0.5**
baz=154
**WCI Wyandotte Cave 106.47 315 P PKiKP 01 25 22.5 -0.2**
baz=150
**N54A Moraine State 106.52 321 P PKiKP 01 25 22.7 0.0**
baz=153
**TXAR Lajitas Array 106.73 298 Pdiff Pdif 01 21 14.7 +0.7**
comp=Z,1.1nm,0.9s,baz=126,slow=6.5,SNR=9.5
TXAR PKiKP **PKiKP 01 25 23.9 +0.3**
comp=Z,3.3nm,0.9s,baz=161,slow=4.3,SNR=16
TXAR PKKPbc **PKKPbc 01 36 41.8 +1.0**
comp=Z,0.7nm,0.8s,baz=297,slow=0.5,SNR=5.8
TXAR PKKPab **PKKPab 01 36 58.6 +2.9**
comp=Z,1.4nm,0.9s,baz=302,slow=2.8,SNR=7.2
TXAR SKKPbc SKKPbc 01 40 13.1 0.0
comp=Z,2.0nm,1.0s,baz=209,slow=2.3,SNR=5.3
**ABTX Abilene, Hawle 107.50 303 P PKiKP 01 25 24.7 -0.2**
baz=146
**FETA Feichten 107.74 26** *e*P **PKKPbc 01 36 39.3 +1.0**
comp=Z,0.8nm,0.4s
**ABTA Abfaltersbach 107.94 28** *e*P **PKKPbc 01 36 38.4 +0.8**
comp=Z,1.6nm,0.5s
ABTA *e*P **PKKPdf 01 36 51.5 -0.4**
comp=Z,2.7nm,0.7s
**MOTA Moosalm 108.14 27** *e*P **PKKPbc 01 36 39.0 +1.9**
comp=Z,0.1nm,0.2s
**RETA Reutte 108.19 26** *e*P **PKKPbc 01 36 38.5 +1.6**
comp=Z,0.5nm,0.3s
**WTTA Wattenberg 108.20 27** *e*P **PKKPbc 01 36 38.4 +1.4**
comp=Z,4.3nm,0.5s
**OBKA Obir 108.26 29** *e*P **PKKPbc 01 36 37.6 +1.0**
**CCM Cathedral Cave 108.32 312 P PKiKP 01 25 26.2 0.0**
baz=148
**BFO Black Forest 108.40 24** *e*PKKPbc PKKPbc 01 36 36.9 +0.8
baz=20,slow=3.2
BFO *e*PKKPab **PKKPdf 01 36 49.7 -1.2**
baz=20,slow=4.5
**KBA Koelnbreinsper 108.47 28** *e*P **PKKPbc 01 36 37.9 +1.9**
comp=Z,1.6nm,0.5s
**SOKA Soboth 108.55 29** *e*P **PKKPdf 01 36 49.6 -1.0**
comp=Z,4.3nm,0.9s
**SFIN Lafayette 108.64 316 P PKiKP 01 25 26.3 -0.3**
baz=150
**BRTR Keskin Array B 108.66 45 PKiKP PKiKP 01 25 27.2 +0.2**
comp=Z,0.7nm,0.5s,baz=170,slow=2.5,SNR=2.7
BRTR PP PP 01 25 45.2 -10
comp=Z,3.3nm,1.0s,baz=212,slow=4.4,SNR=4.5
BRTR PKKPab **PKKPdf 01 36 49.3 -0.9**
comp=Z,2.3nm,0.8s,baz=254,slow=0.9,SNR=4.9
**WMOK Wichita Mounta 108.85 304 P PKiKP 01 25 27.0 -0.3**
baz=146
**ARSA Arzberg 109.21 29** *e*P **PKKPbc 01 36 34.9 +1.4**
comp=Z,1.0nm,0.3s
**MOA Molln 109.42 28** *e*P **PKKPbc 01 36 34.3 +1.4**
comp=Z,2.0nm,0.6s
**MNTX Cornudas Mount 109.51 298 P PKiKP 01 25 28.3 -0.3**
baz=145
**HDIL Hopedale 109.65 315 P PKiKP 01 25 28.8 +0.2**
baz=149
**CONA Conrad Observa 109.92 29** *e*P **PKKPbc 01 36 33.0 +1.7**
comp=Z,2.3nm,0.7s
**MSTX Muleshoe 110.09 301 P PKiKP 01 25 29.6 -0.2**
baz=145
**GERES GERESS Array B 110.19 28 PKiKP PKiKP 01 25 28.4 -1.0**
comp=Z,0.5nm,0.5s,baz=172,slow=0.7,SNR=5.5
GERES PP **PP 01 25 58.5 -7.7**
comp=Z,2.8nm,0.9s,baz=204,slow=5.9,SNR=6.2
GERES PKKPbc **PKKPbc 01 36 31.2 +0.8**
comp=Z,1.3nm,0.6s,baz=27,slow=3.3,SNR=9.3
GERES PKKPab **PKKPab 01 36 41.9 +3.1**
comp=Z,1.8nm,0.9s,baz=25,slow=3.5,SNR=5.7
**WET Wettzell 110.25 27** *e*PKKPab PKKPab 01 36 42.3 +3.9
baz=20,slow=4.5
**CKRC Cesky Krumlov 110.32 28** *e*PKKP **PKKPab 01 36 41.2 +3.1**
**AMTX Amarillo 110.32 302 P PKiKP 01 25 30.2 0.0**
baz=145
**GRF Grafenberg Arr 110.35 26** *e*PKKPbc PKKPbc 01 36 31.4 +1.5
baz=20,slow=3.2
**KHC Kasperske Hory 110.42 27** *e*PP **PP 01 26 04.5 -3.3**
KHC *e*PKKP **PKKPab 01 36 40.8 +3.1**
**MLR Muntele Rosu 110.83 37 PKiKP PKiKP 01 25 30.0 -0.8**
comp=Z,7.1nm,1.0s,baz=163,slow=9.4,SNR=3.9
MLR PP PP 01 26 02.7 -8.2
comp=Z,12nm,1.2s,baz=223,slow=4.4,SNR=4.3
**MLR Muntele Rosu 110.83 37** *i* PKiKP **PKiKP 01 25 30.0 -0.8**
**NKC Novy Kostel 111.15 26** *e*PKKP 01 36 37.6
**WERN Wernitzgruen 111.18 26** *e*PKKPab PKKPab 01 36 37.9 +3.7
baz=20,slow=4.5
**VRAC Vranov 111.38 29** PKKPab PKKPab 01 36 37.1 +3.7
comp=Z,1.6nm,0.4s,baz=3.3,slow=2.6,SNR=6.3
**121A Cookes Peak, D 111.38 297 P PKiKP 01 25 33.1 +0.8**
baz=144,SNR=12
**PSI Prapat 111.79 120** PKKPbc PKKPbc 01 36 26.9 +2.8
comp=Z,6.8nm,0.6s,baz=288,slow=3.2,SNR=7.0
PSI PKKPab **PKKPab 01 36 36.6 -0.3**
comp=Z,21nm,0.9s,baz=331,slow=3.3,SNR=10
**RCLA Racherla 111.84 95** *e*PKiKP **PKiKP 01 25 33.0 -0.5**
**IBBN Ibbenburen 112.00 22** *e*PKKPbc PKKPbc 01 36 25.6 +1.2
baz=20,slow=3.2
IBBN *e*PKKPab **PKKPab 01 36 33.8 +3.4**
baz=20,slow=4.5
**FBE Freiberg 112.01 27** *e*PKKPbc PKKPbc 01 36 25.9 +1.5
baz=20,slow=3.2
FBE *e*PKKPab **PKKPab 01 36 34.2 +3.6**
baz=20,slow=4.5
**TRPA Tarpa 112.05 34** ⇑P **PKiKP 01 25 33.9 +1.1**
**BRG Berggiesshubel 112.11 27** *e*PKKPab PKKPab 01 36 33.4 +3.3
baz=20,slow=4.5
**KRLC Kraliky 112.13 29** *e*PKKP **PKKPab 01 36 33.6 +3.4**
**DPC Dobruska-Polom 112.25 29** *e*PKKP **PKKPab 01 36 33.4 +3.8**
**CLL Collm 112.28 26** *e*PKiKP **PKiKP 01 25 33.0 -0.2**
CLL pmax pmax
comp=Z,5.0nm,0.9s
**CLL Collm 112.28 26** *e*PKKPbc PKKPbc 01 36 24.6 +1.1
baz=20,slow=3.2
**UPC Upice 112.32 28** *e*PKKP **PKKPab 01 36 32.9 +3.6**
**SRLM Srisailam 112.33 94** *e*PKiKP **PKiKP 01 25 34.2 -0.2**
**BURAR Bucovina Array 112.45 36** ||P **PKiKP 01 25 34.9 +1.1**
**BURAR Bucovina Array 112.45 36** ||PKiKP **PKiKP 01 25 34.9 +1.1**
**CBKS Cedar Bluff 112.64 306 P PKiKP 01 25 34.8 +0.4**
baz=145
**KLRI Killari 112.64 91** *e*PKiKP **PKiKP 01 25 34.8 -0.2**
**ANMO Albuquerque 112.67 299** PKKPbc PKKPbc 01 36 24.8 +2.9
comp=Z,3.8nm,0.9s,baz=329,slow=1.4,SNR=9.6
**ANMO Albuquerque 112.67 299** *i* PKiKP **PKiKP 01 25 35.1 +0.3**
**ANMO Albuquerque 112.67 299 P PKiKP 01 25 35.0 +0.3**
baz=144
**TUC Tucson 112.72 294 P PKiKP 01 25 35.4 +0.6**
baz=143
**RETH Rethem/Aller, 112.76 23** *e*PKKPbc PKKPbc 01 36 22.8 +0.9
baz=20,slow=3.2
**FLTG Flechtingen 112.80 25** *e*PKKPab PKKPab 01 36 29.8 +2.9
baz=20,slow=4.5
**NJS Nagarjunasagar 112.92 94** *e*PKiKP **PKiKP 01 25 35.2 -0.3**
**EKA Eskdalemuir Ar 112.95 15 PKiKP PKiKP 01 25 34.6 +0.3**
comp=Z,1.8nm,0.8s,baz=202,slow=1.9,SNR=3.5
EKA PKKPbc **PKKPbc 01 36 21.2 -0.2**
comp=Z,1.1nm,0.4s,baz=352,slow=2.7,SNR=18
EKA PKKPab **PKKPab 01 36 28.8 +2.7**
comp=Z,2.7nm,0.7s,baz=22,slow=3.9,SNR=6.9
**MILM Milestii Mici 113.05 38** ||P **PKiKP 01 25 34.9 +0.1**
**MILM Milestii Mici 113.05 38** ||PKiKP **PKiKP 01 25 34.9 +0.1**
**HYBB Hyderabad (bro 113.20 93** *e*PKiKP **PKiKP 01 25 35.7 -0.3**
**CUPL Choutuppal 113.31 94** *e*PKiKP **PKiKP 01 25 35.8 -0.5**
**KAPI Kappang 113.31 144** PKKPbc PKKPbc 01 36 21.9 +3.0
comp=Z,14nm,0.9s,baz=124,slow=4.2,SNR=5.0
**T25A Trinidad 113.44 302 P PKiKP 01 25 36.5 +0.3**
baz=144,SNR=7.5
**214A Organ Pipe Nat 113.47 293 P PKiKP 01 25 36.6 +0.4**
baz=143,SNR=6.0
**GNI Garni 113.71 53** PKiKP PKiKP 01 25 36.8 +0.3
comp=Z,4.7nm,0.9s,baz=135,slow=4.3,SNR=5.0
GNI PKKPab **PKKPab 01 36 25.2 +0.8**
comp=Z,5.2nm,0.9s,baz=188,slow=5.2,SNR=5.2
**GNI Garni 113.71 53** ⇑*i* PKiKP **PKiKP 01 25 38.1 +1.6**
**MYLAV Mylavaram 113.82 95** *e*PKPdf **PKiKP 01 25 37.1 -0.1**
**SRSP Sriramsagar 114.30 92** *e*PKPdf PKPdf 01 25 37.4 -0.7
**SOC Sochi 114.37 47** *i* PKiKP **PKiKP 01 25 39.4 +2.0**
SOC *e* 01 26 39.7
SOC *e*PPP PPP 01 29 02.7
SOC *e*PS **PKKPbc 01 36 18.2 +2.0**
SOC *e*SS SS 01 42 26.2 +7.3
SOC *e*SSS SSS 01 46 40.5
**SDCO Great Sand Dun 114.45 302 P PKiKP 01 25 38.5 +0.3**
baz=143,SNR=8.0
**PMG Port Moresby 114.45 174** PKP PKPdf 01 25 38.7 +0.1
comp=Z,31nm,0.8s,baz=157,slow=4.0,SNR=5.3
**PMG Port Moresby 114.45 174***d i* PKiKP PKPdf 01 25 39.0 +0.4
**PVM Polavaram 114.78 96** *e*PKPdf **PKiKP 01 25 39.2 +0.2**
**S22A 4UR Ranch, Cre 115.08 301 P PKiKP 01 25 40.1 +0.6**

baz=143,SNR=9.5
**Q24A Divide** 115.25 303 P PKPdf 01 25 39.5 -0.3
baz=143
**SCHQ Schefferville** 115.26 336 PKP PKPdf 01 25 38.7 -0.1
comp=Z,10nm,0.9s,baz=212,slow=1.7,SNR=15
SCHQ SKP SKPdf 01 29 02.0 -1.0
comp=Z,4.0nm,0.7s,baz=177,slow=2.6,SNR=4.6
SCHQ PKKPab PKKPbc 01 36 14.1 +0.7
comp=Z,1.5nm,0.5s,baz=34,slow=3.6,SNR=5.4
**ECSD EROS Data Cent** 115.30 311 P PKPdf 01 25 39.3 0.0
baz=145
**GLA Glamis** 115.38 292 P PKiKP 01 25 40.4 +0.6
baz=142,SNR=6.3
**OGNE Ogallala** 115.40 306 P PKiKP 01 25 40.0 +0.3
baz=144
**MVCO Mesa Verde** 115.47 299 P PKiKP 01 25 40.5 +0.3
baz=142,SNR=8.3
**ZEI Tsey** 115.48 51 *i* PKIKP PKPdf 01 25 38.5 -1.4
ZEI pmax pmax
comp=Z,4.0nm,1.1s
**WUAZ Wupatki** 115.55 296 P PKiKP 01 25 41.0 +0.7
baz=142
**IKP In-Ko-Pah, Jac** 115.73 291 P PKiKP 01 25 41.4 +0.8
baz=142,SNR=8.7
**SWSC Sam W. Stewart** 115.80 291 P PKiKP 01 25 41.3 +0.7
baz=142
**KBZ Khabaz** 115.81 49 PKP PKiKP 01 25 40.4 +0.2
comp=Z,4.1nm,0.7s,baz=194,slow=5.5,SNR=14
KBZ PP PP 01 26 43.4 -2.8
comp=Z,3.8nm,0.9s,baz=176,slow=8.6,SNR=3.7
KBZ PKKPab PKKPab 01 36 17.4 +2.7
comp=Z,2.8nm,0.9s,baz=127,slow=4.6,SNR=5.9
**KBZ Khabaz** 115.81 49 *i* PKIKP PKiKP 01 25 40.8 +0.6
**KIV Kislovodsk** 115.91 49 P PKiKP 01 25 41.2 +0.7
**KIV Kislovodsk** 115.91 49 *i* PKIKP PKiKP 01 25 40.9 +0.3
KIV *e* 01 26 47.6
KIV *e* PPP PPP 01 29 15.7
KIV *e* PS **PKKPdf 01 36 29.8 -6.6**
KIV pmax pmax
comp=Z,11nm,1.1s
KIV MLR MLR
comp=Z,195nm,22.0s
**KIV Kislovodsk** 115.91 49 PKiKP 01 25 40.8 +0.3
**NCK Nalchik** 115.92 50 *c i* PKIKP PKiKP 01 25 41.3 +0.8
**PDMCI Parker Dam,Lak** 116.01 293 P PKiKP 01 25 41.5 +0.6
baz=142,SNR=27
**MONP2 Monument Peak** 116.09 291 P PKiKP 01 25 42.2 +0.8
baz=142,SNR=8.8
**ISCO Idaho Springs** 116.13 303 P PKiKP 01 25 41.7 +0.3
baz=143,SNR=12
**BC3 Big Chuckawall** 116.18 292 P PKiKP 01 25 41.9 +0.5
baz=142,SNR=6.3
**IRM Iron Mountain** 116.41 292 P PKiKP 01 25 42.5 +0.7
baz=142,SNR=12
**AKASG Malin Array Be** 116.44 36 PKP PKPdf 01 25 40.6 -0.5
comp=Z,5.9nm,0.7s,baz=238,slow=1.6,SNR=18
AKASG PP PP 01 26 47.9 -2.5
comp=Z,3.1nm,0.9s,baz=213,slow=6.2,SNR=7.7
AKASG SKP SKPdf 01 29 03.8 -1.6
comp=Z,0.6nm,0.5s,baz=235,slow=1.9,SNR=4.3
AKASG PKKPbc PKKPbc 01 36 06.0 -3.1
comp=Z,3.2nm,0.8s,baz=37,slow=3.9,SNR=5.5
AKASG PKKPab PKKPab 01 36 13.3 +1.9
comp=Z,2.3nm,0.7s,baz=34,slow=4.5,SNR=10
**AKASG Malin Array Be** 116.44 36 PKIKP PKPdf 01 25 41.1 -0.1
**AKASG Malin Array Be** 116.44 36 PKPdf 01 25 41.1 -0.1
**AKBB Malin Array Si** 116.44 36 *i* PKIKP PKiKP 01 25 41.2 0.0
**AKBB Malin Array Si** 116.44 36 PKPdf PKPdf 01 25 41.0 -0.1
**NEE2 Needles Airpor** 116.61 293 P PKiKP 01 25 42.5 +0.4
baz=142,SNR=5.6
**TPFO Pinon Flats** 116.66 291 P PKiKP 01 25 43.2 +0.8
baz=142,SNR=5.3
**PFO Pinyon Flats O** 116.67 291 PKKPab PKKPab 01 36 11.3 -1.0
comp=Z,2.6nm,0.7s,baz=297,slow=4.2,SNR=4.3
**PFO Pinyon Flats O** 116.67 291 PKIKP PKiKP 01 25 43.4 +1.0
**PFO Pinyon Flats O** 116.67 291 PKPdf PKiKP 01 25 43.4 +1.0
**PFO Pinyon Flats O** 116.67 291 P PKiKP 01 25 43.2 +0.8
baz=142
**EYMN Ely** 116.72 317 P PKPdf 01 25 41.3 -0.5
baz=146,SNR=7.4
**SUSD Miller** 116.86 310 P PKPdf 01 25 42.1 -0.2
baz=144
**MURC Murrieta** 117.04 290 P PKiKP 01 25 43.5 +0.4
baz=141
**CHLP Challavanipeta** 117.14 97 *e* PKPdf PKPdf 01 25 42.4 -1.1
**N23A Red Feather La** 117.15 303 P PKiKP 01 25 43.6 +0.3
baz=142,SNR=9.2
**GMRC Granite Mounta** 117.16 292 P PKiKP 01 25 44.3 +0.9
baz=141,SNR=22
**MAK Makhachkala** 117.20 53 *e* P Pdif 01 22 02.1 +2.1
MAK *i* 01 25 44.3
MAK *e* 01 26 14.9
MAK *e* 01 26 54.4
MAK *e* 01 32 25.9
MAK *e* PS **PS 01 36 46.1 +6.1**
MAK *e* SS SS 01 42 55.6 -0.3
MAK *e* SSS SSS 01 47 21.6
MAK pmax pmax
comp=Z,358nm,1.7s
MAK MLR MLR
comp=Z,327nm,18.0s
**BBRC Big Bear Solar** 117.41 291 P PKiKP 01 25 44.9 +0.9
baz=141
**CIS Catalina Islan** 117.53 289 P PKiKP 01 25 45.0 +1.0
baz=141
**HEC Hector,Ludlow** 117.55 292 P PKiKP 01 25 44.9 +0.9
baz=141,SNR=5.7
**O20A White River Ci** 117.64 301 P PKiKP 01 25 44.5 +0.3
baz=142
**TUQ Turquoise Moun** 117.81 293 P PKiKP 01 25 45.4 +0.8
baz=141
**SNCC San Nicolas Is** 118.00 288 P PKiKP 01 25 45.8 +1.0
baz=141
**DECC Green Verdugo** 118.14 290 P PKiKP 01 25 45.9 +0.7
baz=141
**GSC Goldstone, Bar** 118.16 292 P PKiKP 01 25 46.1 +0.9
baz=141,SNR=15
**MPSI Mapaga** 118.37 142 PKP PKiKP 01 25 47.0 +0.8
**EDW2 Edwards Air Fo** 118.45 291 P PKiKP 01 25 46.6 +0.9
baz=141,SNR=50
**OSI Osito Audit: C** 118.63 290 P PKiKP 01 25 46.8 +0.8
baz=141
**FAKI Fak Fak** 118.76 157 PKiKP 01 25 47.1 +0.1
**RSSD Black Hills** 118.82 307 PKIKP PKiKP 01 25 46.4 0.0
**RSSD Black Hills** 118.82 307 PKPdf PKiKP 01 25 46.4 0.0
**ARVC Arvin** 119.08 290 P PKiKP 01 25 48.2 +1.3
baz=140
**FURC Furnace Creek,** 119.08 293 P PKiKP 01 25 48.2 +1.4
baz=140
**MPMC Manual Prospec** 119.09 292 P PKiKP 01 25 48.1 +0.9
baz=140
**TPNV Topopah Spring** 119.14 294 P PKiKP 01 25 48.3 +1.1
baz=140,SNR=16
**MNK Minsk** 119.25 33 *i* PKIKP PKiKP 01 25 46.7 +0.2
MNK *i* 01 26 16.2
MNK *i* 01 32 47.4
MNK *i* SS SS 01 43 24.9 +2.7
MNK pmax pmax
comp=Z,32nm,1.0s
MNK pmax pmax
comp=E,7.0nm,0.9s
MNK pmax pmax
comp=N,19nm,0.8s
MNK MLR MLR
comp=E,56nm,19.0s
MNK MLR MLR
comp=N,286nm,21.0s
MNK MLR MLR
comp=Z,92nm,8.0s
**MNK Minsk** 119.25 33 *i* PKP PKiKP 01 25 46.7 +0.2
comp=E,7.0nm,0.8s
MNK *i* PKP PKiKP 01 25 46.7 +0.2
comp=N,19nm,0.8s,baz=212
MNK *i* PKP PKiKP 01 25 46.7 +0.2
comp=Z,32nm,1.0s
MNK *i* pPKP pPKPdf 01 26 16.2 -1.6
MNK *i* PP PP 01 27 06.1 -3.8
MNK *i* PPP PPP 01 30 10.4
MNK *i* SKS SKSdf 01 32 47.4 +0.4
MNK *i* SS SS 01 43 25.0 +2.8
MNK *i* LR LR 02 11 34.3
MNK *i* LRM MLR 02 16 42.2
comp=E,56nm,19.2s
MNK *i* LRM MLR 02 16 53.5
comp=N,286nm,21.1s
MNK *i* LRM MLR 02 16 53.5
comp=Z,92nm,8.1s
**NACGM Naroch** 119.26 33 *i* PKP PKiKP 01 25 47.1 +0.6
**ISA Isabella, Lake** 119.30 291 P PKiKP 01 25 48.7 +1.3
baz=140,SNR=32
**TOLI2 Tolitoli** 119.39 143 PKPdf PKPdf 01 25 47.6 -0.6
**PKM Mcpherson Peak** 119.41 289 P PKiKP 01 25 49.1 +1.3
baz=140
**IIGN Ignalina** 119.48 32 *e* P PKiKP 01 25 47.6 +0.6
**IDID Didziasalis** 119.60 32 *e* P PKPdf 01 25 46.8 -0.3
**CWC Cottonwood Cre** 119.69 292 P PKiKP 01 25 49.2 +1.0
baz=140
**VIKU Vikbolandet** 119.72 25 *e* P PKiKP 01 25 47.3 0.0
**VES Vestal, Richgr** 119.76 291 P PKiKP 01 25 48.4 +0.2
baz=140,SNR=5.6
**RABL Rabaul** 119.78 180 PKiKP 01 25 49.1 +0.1
**SMMC Simmler** 119.83 290 P PKiKP 01 25 50.0 +1.6
baz=140,SNR=7.4
**R11A Troy Canyon, C** 119.87 295 P PKiKP 01 25 49.5 +0.9
baz=140
**DUG Dugway, Tooele** 119.90 298 P PKiKP 01 25 49.3 +0.8
baz=140
**HYA Hoyanger** 120.02 18 *e* PKPdf PKiKP 01 25 49.8 +2.0
**TIN Tinemaha, Big** 120.24 292 P PKiKP 01 25 50.3 +1.0
baz=140
**ULM Lac du Bonnet** 120.27 316 PKP PKPdf 01 25 47.9 -0.7
comp=Z,20nm,0.6s,baz=145,slow=1.3,SNR=22
ULM PP PP 01 27 13.2 -3.6
comp=Z,9.6nm,0.9s,baz=138,slow=5.5,SNR=4.5
ULM SKP SKPdf 01 29 11.3 -1.6
comp=Z,12nm,0.9s,baz=141,slow=1.0,SNR=5.7
ULM PKKPbc PKKPbc 01 35 55.4 +0.1
comp=Z,3.6nm,0.8s,baz=323,slow=6.2,SNR=3.2
ULM SKKPbc SKKPbc 01 39 26.9 -6.6
comp=Z,2.8nm,0.9s,baz=261,slow=2.9,SNR=3.2
**BW06 Boulder Array** 120.30 302 P PKPdf 01 25 48.7 -0.6
baz=140,SNR=16
**PDAR Pinedale Array** 120.30 302 PKP PKPdf 01 25 48.7 -0.5
comp=Z,4.8nm,0.5s,baz=140,slow=4.8,SNR=58
PDAR SKP SKPdf 01 29 13.4 -0.1
comp=Z,4.5nm,1.1s,baz=110,slow=2.2,SNR=5.2
PDAR PKKPbc PKKPab 01 35 56.5 +0.5
comp=Z,1.1nm,0.7s,baz=25,slow=1.0,SNR=8.0
PDAR PKKP PKKPdf 01 36 28.4 +0.3
comp=Z,1.0nm,0.8s,baz=107,slow=1.5,SNR=4.0
**VSR Storozhevoye** 120.38 42 *e* PKIKP PKPdf 01 25 48.4 -0.3
VSR pmax pmax
comp=Z,10.0nm,0.6s
**GENI Genyem** 120.51 166 PKP PKiKP 01 25 54.0 +3.6
**HFS Hagfors** 120.52 22 PKP PKPdf 01 25 47.8 -0.9
comp=Z,7.4nm,0.6s,baz=172,slow=4.4,SNR=18
HFS PP PP 01 27 10.1 -8.3
comp=Z,22nm,1.1s,baz=164,slow=7.7,SNR=5.4
HFS PKKPbc PKKPbc 01 35 54.6 -0.1
comp=Z,6.2nm,0.7s,baz=54,slow=2.6,SNR=14
**SIJI Sorong** 120.52 155 PKP PKiKP 01 25 50.9 +0.4
comp=Z,19nm,0.5s,baz=158,slow=3.2,SNR=5.6
**JAY Jayapura** 120.66 166 PKP PKPdf 01 25 50.5 -0.1
comp=Z,32nm,0.9s,baz=244,slow=2.8,SNR=4.9
**VORR Voronezh** 120.76 42 *e* PKIKP PKPdf 01 25 48.3 -1.2
VORR pmax pmax
comp=Z,20nm,0.5s
**NB2 NORSAR Subarra** 120.83 21 PKPdf PKPdf 01 25 49.4 0.0
comp=Z,3.7nm,0.8s,baz=202,slow=1.9
**NOA NORSAR Array B** 120.83 21 PKP PKiKP 01 25 49.6 +0.1
comp=Z,7.1nm,0.7s,baz=204,slow=1.9,SNR=22
NOA pPKP pPKPdf 01 26 18.1 -2.7
comp=Z,3.5nm,0.8s,baz=204,slow=1.8,SNR=4.4
NOA SKP SKPdf 01 29 14.0 +0.4
comp=Z,2.3nm,0.9s,baz=205,slow=1.7,SNR=4.4
NOA PKKPbc PKKPbc 01 35 53.3 -0.2
comp=Z,4.6nm,0.7s,baz=26,slow=4.3,SNR=18
**AKN Aaknes** 121.10 18 *e* pPKP pPKPdf 01 26 25.3 +4.1
**UPP Uppsala** 121.15 25 *e* P PKPdf 01 25 48.8 -1.2
**NVAR Mina Array Bea** 121.32 293 PKP PKiKP 01 25 52.8 +1.3
comp=Z,16nm,0.5s,baz=128,slow=2.9,SNR=102
NVAR pPKP pPKPdf 01 26 22.6 0.0
comp=Z,4.7nm,0.7s,baz=116,slow=3.4,SNR=2.9
NVAR SKP SKPdf 01 29 15.9 +0.3
comp=Z,3.9nm,0.9s,baz=138,slow=3.8,SNR=4.9
NVAR PKKPbc PKKPab 01 35 52.1 0.0
comp=Z,2.7nm,0.9s,baz=297,slow=2.5,SNR=7.6
**NVAR Mina Array Bea** 121.32 293 PKiKP 01 25 52.5 +1.0
**VRH Novokhoporsk** 121.33 44 *e* PKIKP PKPdf 01 25 50.3 -0.3
VRH pmax pmax
comp=Z,50nm,0.6s
**KBL Kabul** 121.37 74 PKIKP PKPdf 01 25 51.5 0.0
**KBL Kabul** 121.37 74 PKPdf PKPdf 01 25 51.5 0.0
**LPSR Galich'ya Gora** 121.40 41 *e* PKIKP PKPdf 01 25 50.3 -0.4
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**MTSE Matsula** 121.69 29 *e* P PKiKP 01 25 51.4 +0.3
**LAO LASA Array** 121.78 307 P PKiKP 01 25 52.0 +0.2
baz=140,SNR=27
**RLMT Red Lodge** 121.97 304 P PKiKP 01 25 52.8 +0.3
baz=140
**H17A Grant Village** 122.02 303 P PKiKP 01 25 53.9 +1.2
baz=139,SNR=12
**DGMT Dagmar** 122.26 310 P PKiKP 01 25 52.8 +0.1
baz=140,SNR=15
**VSU Vasula** 122.28 30 *e* P PKPdf 01 25 51.0 -1.1
**OBN Obninsk** 122.58 38 PKP PKiKP 01 25 53.0 0.0
comp=Z,6.9nm,0.5s,baz=169,slow=1.7,SNR=9.6
OBN SKP SKPdf 01 29 16.4 -0.6
comp=Z,2.4nm,0.4s,baz=257,slow=4.4,SNR=3.6
OBN PKKPbc PKKPab 01 35 44.3 -0.5
comp=Z,1.2nm,0.4s,baz=297,slow=2.3,SNR=3.3
**OBN Obninsk** 122.58 38 *c i* PKIKP PKiKP 01 25 53.0 0.0
OBN *e* 01 26 23.7
OBN *e* 01 26 36.5
OBN *i* 01 27 33.2
OBN *e* PPS PPS 01 39 04.6
OBN SS SS 01 44 12.0 +7.3
OBN pmax pmax
comp=Z,28nm,0.6s
**NIL Nilore** 122.97 78 PKIKP PKiKP 01 25 55.2 +0.6
**NIL Nilore** 122.97 78 PKPdf PKiKP 01 25 55.2 +0.6
**HLID Hailey** 123.23 300 P PKiKP 01 25 55.9 +0.9
baz=138,SNR=16
**BOZ Bozeman (W)** 123.42 303 P PKiKP 01 25 55.9 +0.6
baz=138,SNR=11
**MOS Moscow** 123.45 38 *i* PKIKP PKPdf 01 25 53.2 -1.3
MOS *e* 01 26 34.9
MOS pmax pmax
comp=Z,47nm,0.8s
MOS pmax pmax
comp=Z,100nm,0.9s
**SFJD Kangerlussuaq** 124.12 349 PKP PKPdf 01 25 55.1 -0.3
comp=Z,17nm,0.7s,baz=155,slow=3.1,SNR=6.8
SFJD SKKPab SKKPbc 01 39 28.5 +6.6
comp=Z,3.0nm,0.8s,baz=307,slow=5.1,SNR=1.9
**SFJD Kangerlussuaq** 124.12 349 PKIKP PKiKP 01 25 55.9 +0.2
**SFJD Kangerlussuaq** 124.12 349 PKiKP 01 25 55.9 +0.2
**PYUN Piuthan** 124.14 90 *e* P PKPdf 01 25 56.4 -0.6
comp=Z,94nm,1.0s
**NSS Namsos** 124.16 19 *e* PKPdf PKiKP 01 25 56.3 +0.4
**KOLN Koldanda** 124.22 90 *e* P PKPdf 01 25 56.8 -0.4
comp=Z,116nm,1.0s
**EGMT Eagleton** 124.37 306 P PKiKP 01 25 57.3 +0.4
baz=138,SNR=21
**O03E Paynes Creek** 124.51 292 P PKiKP 01 25 57.8 +0.3
baz=138,SNR=48
**FINES FINESS Array B** 124.62 28 PKP PKiKP 01 25 56.8 -0.1
comp=Z,40nm,0.5s,baz=159,slow=1.6,SNR=277
FINES pPKP pPKPdf 01 26 25.3 -2.6
comp=Z,16nm,0.8s,baz=132,slow=2.8,SNR=3.6
FINES SKP SKPdf 01 29 21.1 +0.3
comp=Z,8.9nm,0.8s,baz=225,slow=2.9,SNR=5.8
FINES PKKPbc PKKPbc 01 35 38.6 -0.2
comp=Z,1.9nm,0.7s,baz=56,slow=4.8,SNR=4.9
FINES SKKPbc SKKPbc 01 39 14.1 -5.7
comp=Z,4.7nm,0.9s,baz=50,slow=3.0,SNR=7.2
**DANN Dangsing** 124.76 90 *e* P PKPdf 01 25 58.0 -0.3
comp=Z,213nm,1.2s
**O02D Mt. Diablo Mer** 124.94 291 P PKiKP 01 25 59.2 +0.8
baz=137,SNR=13
**DMN Daman** 124.94 92 *e* P PKPdf 01 25 58.5 -0.2
comp=Z,69nm,1.0s
**GKN Gorkha** 124.98 91 *e* P PKPdf 01 25 58.3 -0.3
comp=Z,103nm,1.1s
**PKIN Phulchoki** 125.08 92 *e* P PKPdf 01 25 58.5 -0.4
comp=Z,80nm,1.1s
**PKI Pulchoki** 125.08 92 *e* P PKPdf 01 25 58.6 -0.4
comp=Z,78nm,1.1s
**CMAR Chiang Mai Arr** 125.15 111 PKP PKiKP 01 25 59.2 -0.1
comp=Z,22nm,0.8s,baz=233,slow=3.8,SNR=65
CMAR pPKP pPKPdf 01 26 28.4 -1.7
comp=Z,9.9nm,0.9s,baz=233,slow=4.0,SNR=2.8
CMAR SKP SKPdf 01 29 24.4 +1.2
comp=Z,2.0nm,0.3s,baz=246,slow=3.7,SNR=5.1
CMAR PKKP PKKPdf 01 36 21.6 +4.1
comp=Z,1.5nm,0.3s,baz=354,slow=1.9,SNR=5.5
CMAR SKKPab SKKPbc 01 39 22.7 +9.0
comp=Z,1.1nm,0.6s,baz=12,slow=4.6,SNR=1.9
**CMAR Chiang Mai Arr** 125.15 111 PKIKP PKiKP 01 25 59.7 +0.3
**CMAR Chiang Mai Arr** 125.15 111 PKiKP 01 25 59.7 +0.3
**KKN Kakani** 125.18 92 *e* P PKPdf 01 25 59.0 -0.1
comp=Z,32nm,0.7s
**RAMN Ramite** 125.26 94 *e* P PKiKP 01 25 59.5 -0.1
comp=Z,14nm,0.4s
**MSO Missoula** 125.41 303 P PKiKP 01 25 59.5 +0.4
baz=137,SNR=46
**CHTO Chiang Mai** 125.45 111 PKIKP PKPdf 01 25 59.6 +0.1
**CHTO Chiang Mai** 125.45 111 PKPdf PKPdf 01 25 59.6 +0.1
**N02D Trinity Center** 125.48 292 P PKiKP 01 26 00.2 +0.7
baz=137,SNR=32
**JIRN Jiri** 125.58 93 *e* P PKPdf 01 26 00.1 +0.1
comp=Z,102nm,0.7s
**GUN Gumba** 125.60 92 *e* P PKPdf 01 26 00.0 0.0
comp=Z,96nm,0.9s
**M04C Macdoel** 125.62 293 P PKiKP 01 26 00.5 +0.8
baz=137,SNR=12
**ODAN Odare** 125.63 94 *e* P PKiKP 01 26 00.3 -0.1
comp=Z,66nm,0.7s
**UBPT Khong Chiam** 125.76 119 PKPdf PKiKP 01 26 01.0 +0.4
**M02C Callahan** 125.86 292 P PKiKP 01 26 01.0 +0.8
baz=137,SNR=18
**FFC Flin Flon** 126.10 316 PKIKP PKPdf 01 25 59.8 +0.2
**FFC Flin Flon** 126.10 316 PKPdf PKPdf 01 25 59.8 +0.2
**MOR8 Moi Rana** 126.10 20 *e* PKPdf PKiKP 01 26 00.4 +0.7
**KONS Konsvik** 126.15 19 *e* PKPdf PKiKP 01 26 00.2 +0.4
**L04D Klamath Falls** 126.18 294 P PKiKP 01 26 01.1 +0.3
baz=137,SNR=9.3
**K04D Chiloquin, OR** 126.19 294 P PKiKP 01 26 01.3 +0.5
baz=136
**TAPN Taplejung** 126.19 94 *e* P PKPdf 01 26 00.5 -0.6
comp=Z,17nm,0.6s
**J05D Fort Rock, OR** 126.40 295 P PKiKP 01 26 02.1 +0.8
baz=136,SNR=22
**L02E Cave Junction** 126.80 293 P PKiKP 01 26 02.8 +0.9
baz=136,SNR=6.6
**J04D Umpqua Nationa** 126.81 295 P PKiKP 01 26 02.7 +0.6
baz=136
**I05D Terrebonne, OR** 127.21 296 P PKiKP 01 26 03.5 +0.7
baz=136,SNR=14
**K02D Willamette Mer** 127.22 293 P PKiKP 01 26 03.5 +0.7
baz=136,SNR=12
**FAUS Fauske** 127.33 19 *e* PKPdf PKiKP 01 26 02.4 +0.3
**I04A Tendick Farm,** 127.36 295 P PKiKP 01 26 03.0 -0.1
baz=136,SNR=9.8
**IUG luzhnay** 127.51 68 *e* PKIKP PKPdf 01 26 02.9 0.0
**IUG luzhnay** 127.51 68 *e* PKP PKPdf 01 26 03.0 0.0
baz=69
**AKTO Aktyubinsk** 127.57 54 PKP PKiKP 01 26 02.9 -0.3
comp=Z,35nm,1.0s,baz=186,slow=2.7,SNR=57
AKTO PP PP 01 28 09.8 +3.9
comp=Z,7.7nm,1.0s,baz=70,slow=9.1,SNR=4.3
AKTO SKPbc SKPbc 01 29 08.2
comp=Z,9.6nm,0.9s,baz=238,slow=4.4,SNR=5.3
AKTO PKKPbc PKKPbc 01 35 27.7
comp=Z,2.4nm,0.9s,baz=27,slow=2.9,SNR=5.4
AKTO SKKPbc SKKPbc 01 39 03.3 -5.3
comp=Z,2.1nm,0.7s,baz=95,slow=5.3,SNR=3.9
**AB31 Akbulak array** 127.60 56 *i* PKIKP PKPdf 01 26 00.5 -2.2
**ABKAR Akbulak array** 127.60 56 PKPdf PKPdf 01 26 02.9 +0.2
ABKAR pPKPdf pPKPdf 01 26 30.9 -3.1
**LOF Lofoten** 127.68 18 *e* PKPdf PKiKP 01 26 04.1 +1.3
**J01E Myrtle Point** 127.69 293 P PKiKP 01 26 04.2 +0.5
baz=136
**I03D Drain, OR** 127.77 294 P PKiKP 01 26 04.2 +0.4
baz=136
**STEI Steigen** 127.81 19 *e* PKPdf PKPdf 01 26 02.7 +0.3
**G05D Wamic, OR** 127.84 297 P PKiKP 01 26 04.3 +0.4
baz=135,SNR=5.4
**NEW Newport** 127.94 302 PP PP 01 28 10.0 +1.5
comp=Z,2.2nm,0.7s,baz=177,slow=14,SNR=3.3
NEW SKPbc SKPbc 01 29 09.2
comp=Z,9.2nm,0.9s,baz=117,slow=4.5,SNR=3.2
**NEW Newport** 127.94 302 P PKPdf 01 26 03.1 -0.4
baz=135,SNR=9.8
**BRLS Boroldav** 128.03 67 *e* PKiKP PKPdf 01 26 03.7 -0.1
**BRLS Boroldav** 128.03 67 *e* PKP PKPdf 01 26 03.7 -0.1
baz=68
**H04D Lebanon** 128.05 295 P PKiKP 01 26 04.5 +0.2
baz=135,SNR=6.6
**KLMR Klimovskoe** 128.06 35 *e* PKIKP PKPdf 01 26 02.4 -0.8
KLMR *e* 01 28 08.8
KLMR pmax pmax
comp=Z,97nm,1.4s
**KLMR Klimovskoe** 128.06 35 *e* PKPdf PKPdf 01 26 02.4 -0.8
KLMR AMP 01 26 04.7
comp=Z,97nm,1.4s
KLMR *e* PP PP 01 28 08.8 -0.1
**I02E Swisshome, OR** 128.32 294 P PKiKP 01 26 05.4 +0.6
baz=135
**F05D White Salmon** 128.37 297 P PKiKP 01 26 05.5 +0.6
baz=135,SNR=5.5
**KK31 Karatay Array** 128.44 68 PKIKP PKPdf 01 26 04.6 +0.1
**KKAR Karatay Array** 128.44 68 PKPdf PKPdf 01 26 04.4 -0.1
KKAR pPKPdf pPKPdf 01 26 32.1 -3.6
**SUMG Summit** 128.74 356 PKIKP PKPdf 01 26 02.7 -2.0
**SUMG Summit** 128.74 356 PKPdf PKPdf 01 26 02.7 -2.0
**KSH Kashi** 128.77 75 PKP PKPdf 01 26 05.6 +0.2
KSH sPKP 01 26 45.6
KSH SKS SKSdf 01 33 01.8 -4.2
**G03D McMinnville, O** 128.80 296 P PKiKP 01 26 06.5 +0.8
baz=135
**E04D Cinebar** 129.39 297 P PKiKP 01 26 07.2 +0.3
baz=134,SNR=6.1
**KIRV Kirov** 129.81 42 *de* PKIKP PKPdf 01 26 06.9 +0.3
comp=Z,39nm,0.6s,baz=252,slow=0.2,SNR=26
KIRV PP PP 01 28 14.2 -6.2
comp=Z,7.3nm,0.6s,baz=261,slow=17,SNR=1.8
KIRV SKPbc SKPab 01 29 16.6 -0.9
comp=Z,26nm,0.8s,baz=50,slow=2.0,SNR=9.5
**KIRV Kirov** 129.81 42 *de* PKIKP PKiKP 01 26 07.3 0.0
**EKS2 Erkin-Say** 129.83 70 P SKPbc 01 29 18.9 +0.1
SNR=16
**UCH Uchtor** 129.91 71 P PKiKP 01 26 08.9 +0.2
SNR=24
**UCH Uchtor** 129.91 71 P SKPbc 01 29 18.9 -0.7
SNR=18
**TRO Tromso** 129.96 19 *e* PKPdf PKPdf 01 26 06.9 +0.4
**JETT Jettan, Norway** 130.17 20 *e* PKPdf PKiKP 01 26 08.7 +0.9
**AAK Ala-Archa** 130.19 71 *ce* PKIKP PKiKP 01 26 08.6 -0.3
**AAK Ala-Archa** 130.19 71 PKPdf PKiKP 01 26 09.1 +0.2
**UPNV Upernavik** 130.24 349 *i* P SKPbc 01 29 14.8 -4.3
**KTK1 Kautokeino** 130.27 21 *e* PKPdf PKiKP 01 26 07.7 -0.3
**D03D Eldon** 130.32 298 P PKiKP 01 26 09.6 +0.8
baz=133
**B05A Bryant** 130.33 299 P PKiKP 01 26 08.7 0.0
baz=133,SNR=37
**DBG Daneborg** 130.35 3 *i* P SKPbc 01 29 14.8 -4.7
**KBK Karagaybulak** 130.44 71 P PKiKP 01 26 09.3 -0.1
SNR=23
**KBK Karagaybulak** 130.44 71 P SKPbc 01 29 21.5 +0.4
SNR=10.0
**USP Ospenovka** 130.63 70 P PKPdf 01 26 08.9 +0.2
SNR=23
**USP Ospenovka** 130.63 70 P SKPbc 01 29 21.5 -0.1
SNR=16
**PRGR Permogore** 130.64 37 *e* PKIKP PKPdf 01 26 07.0 -1.0
PRGR *e* 01 26 36.8
PRGR pmax pmax
comp=Z,131nm,0.9s
**SGDS Sogindy** 130.83 70 *e* PKP PKPdf 01 26 09.0 -0.1
baz=70
**A04D Lummi Island** 130.94 299 P PKiKP 01 26 10.6 +0.7
baz=133
**TKM2 Tokmak 2** 130.97 71 P PKPdf 01 26 09.3 -0.3
SNR=12
**TKM2 Tokmak 2** 130.97 71 P SKPbc 01 29 22.1 -0.9
SNR=7.5
**ARA0 ARCESS Array S** 131.17 22 *e* PKPdf PKiKP 01 26 09.7 -0.2
**ARCES ARCESS Array B** 131.17 22 PKP PKPdf 01 26 09.1 +0.2
comp=Z,20nm,0.6s,baz=187,slow=1.6,SNR=81
ARCES pPKP pPKPdf 01 26 36.7 -3.6
comp=Z,27nm,0.9s,baz=253,slow=1.3,SNR=4.9
ARCES sPKP sPKPdf 01 26 49.9 -2.3
comp=Z,24nm,0.9s,baz=242,slow=2.6,SNR=5.6
ARCES PP PP 01 28 27.3 -1.7
comp=Z,18nm,0.9s,baz=213,slow=5.8,SNR=5.2
ARCES SKPbc SKPbc 01 29 21.1 -1.5
comp=Z,14nm,1.0s,baz=214,slow=1.3,SNR=5.1

ARCES PKKP **PKKPdf** 01 36 07.0 -0.6
comp=Z,1.9nm,0.6s,baz=42,slow=3.8,SNR=5.1
**ARCES ARCESS Array B** 131.17 22 PKIKP **PKPdf** 01 26 09.3 +0.4
**ARCES ARCESS Array B** 131.17 22 PKPdf **PKPdf** 01 26 09.3 +0.4
**APA Apatity** 131.43 27 ⇓*i* PKIKP **PKPdf** 01 26 07.4 -2.0
APA *i* 01 26 53.0
APA pmax pmax
comp=Z,19nm,0.8s
**TGY Tagaytay City** 131.48 137 PKP **PKiKP** 01 26 11.9 -0.3
comp=Z,174nm,0.3s,baz=135,slow=5.4,SNR=3.8
**BTLS Baital** 131.61 68 *e*PKIKP **PKPdf** 01 26 10.6 +0.1
**BTLS Baital** 131.61 68 *e*PKP **PKPdf** 01 26 10.6 +0.1
baz=69
**HAMF Hammerfest** 131.70 20 *e*PKPdf **PKiKP** 01 26 10.4 -0.5
**TNSS Tian-Shan** 131.77 72 *e*PKP **PKPdf** 01 26 11.4 0.0
baz=72
**AAA Alma-Ata** 131.87 72 *e*PKIKP **PKPdf** 01 26 11.3 +0.2
**AAA Alma-Ata** 131.87 72 *e*PKP **PKPdf** 01 26 11.4 +0.2
baz=72
**MDOK Medeo** 131.91 72 *e*PKIKP **PKPdf** 01 26 11.4 +0.1
**MDOK Medeo** 131.91 72 *e*PKP **PKPdf** 01 26 11.4 +0.1
baz=72
**ARU Arti** 131.94 48 PKP **PKPdf** 01 26 11.2 +0.5
comp=Z,9.6nm,0.6s,baz=201,slow=1.5,SNR=54
ARU SKPbc **SKPbc** 01 29 25.0 -0.7
comp=Z,7.9nm,0.8s,baz=200,slow=1.1,SNR=6.8
**ARU Arti** 131.94 48 PKPdf **PKiKP** 01 26 11.7 0.0
**KUU Kurty** 132.03 71 *e*PKIKP **PKPdf** 01 26 11.0 -0.3
**KUU Kurty** 132.03 71 *e*PKP **PKPdf** 01 26 11.1 -0.3
baz=71
**SATY Saty** 132.56 73 *e*PKIKP **PKPdf** 01 26 12.3 -0.2
**SATY Saty** 132.56 73 *e*PKP **PKPdf** 01 26 12.3 -0.2
baz=74
**KMI Kunming** 132.62 110 ⇓PKP **PKiKP** 01 26 14.6 +0.2
**DAG Danmarks Havn** 132.86 3 *i* P **SKPbc** 01 29 26.8 -1.6
**OTUK Ortayu** 132.89 64 PKIKP **PKPdf** 01 26 12.6 -0.2
**UZB Uzynbulak** 132.95 73 *e*PKIKP **PKPdf** 01 26 13.3 +0.1
**UZB Uzynbulak** 132.95 73 *e*PKP **PKPdf** 01 26 13.3 +0.1
baz=74
**KPKS Kokpek** 132.98 73 *e*PKIKP **PKPdf** 01 26 13.0 -0.2
**KPKS Kokpek** 132.98 73 *e*PKP **PKPdf** 01 26 13.0 -0.2
baz=73
**SVE Sverdlovsk** 133.06 49 *e*PKIKP **PKiKP** 01 26 13.5 -0.5
SVE pmax pmax
comp=Z,56nm,0.9s
**PZH PanZhiHua** 133.20 108 PKP **PKPdf** 01 26 14.8 +0.6
**NEEM North Greenlan** 134.23 353 *i* P **SKPbc** 01 29 30.8 -2.5
**BRVK Borovoye** 134.98 58⇑ *e*PKIKP **PKiKP** 01 26 17.3 -0.7
**BVAR Borovoye Array** 135.01 58 PKhKP PKPpre 01 26 04.7
comp=Z,1.2nm,0.6s,baz=36,slow=7.9,SNR=6.2
BVAR PKP **PKPdf** 01 26 16.7 +0.1
comp=Z,17nm,0.9s,baz=155,slow=3.4,SNR=5.5
BVAR pPKP pPKPdf 01 26 47.2 -0.7
comp=Z,14nm,0.9s,baz=160,slow=3.0,SNR=4.3
BVAR sPKP sPKPdf 01 27 00.6 +0.8
comp=Z,16nm,0.8s,baz=39,slow=9.6,SNR=6.6
BVAR SKPbc **SKPbc** 01 29 34.7 -1.4
comp=Z,12nm,0.8s,baz=169,slow=3.3,SNR=9.2
BVAR PKKP **PKKPdf** 01 35 59.9 +0.1
comp=Z,1.9nm,0.8s,baz=60,slow=12,SNR=4.5
BVAR SKKPbc **SKKPbc** 01 38 37.1 -4.6
comp=Z,2.8nm,0.7s,baz=70,slow=13,SNR=6.7
**TULEG Thule** 135.09 347 *i* P **SKPbc** 01 29 34.7 -0.9
**GYA Guiyang** 135.75 113 ⇓PKP **PKiKP** 01 26 20.5 -0.1
GYA AMB AMB
comp=Z,960nm,7.4s
**BBB Bella Bella** 135.82 300 SKPbc **SKPbc** 01 29 37.9 -0.7
comp=Z,50nm,1.0s,baz=57,slow=5.5,SNR=7.8
**YKA Yellowknife Ar** 136.20 318 PKhKP PKPpre 01 26 04.2
comp=Z,1.8nm,0.6s,baz=125,slow=3.7,SNR=34
YKA PKP **PKPdf** 01 26 18.6 +0.2
comp=Z,25nm,0.5s,baz=126,slow=2.4,SNR=64
YKA pPKP pPKPdf 01 26 48.3 -1.4
comp=Z,8.0nm,0.7s,baz=129,slow=2.1,SNR=2.2
YKA PP **PP** 01 28 58.1 -3.0
comp=Z,8.2nm,0.9s,baz=121,slow=6.2,SNR=7.4
YKA SKPbc **SKPbc** 01 29 37.4 -2.1
comp=Z,29nm,0.9s,baz=123,slow=2.1,SNR=12
YKA PKKP **PKKPdf** 01 35 57.7 +0.1
comp=Z,1.6nm,0.8s,baz=318,slow=2.0,SNR=9.9
YKA SKKPbc **SKKPbc** 01 38 36.8 -1.1
comp=Z,3.6nm,0.9s,baz=308,slow=2.9,SNR=6.6
**SPA0 Spitsbergen Ar** 136.78 12 *e*PKIKP **PKiKP** 01 26 21.6 +0.6
**SPITS Spitsbergen Ar** 136.78 12 PKhKP PKPpre 01 26 12.8
comp=Z,5.4nm,0.8s,baz=213,slow=6.0,SNR=1.5
SPITS PKP **PKiKP** 01 26 20.3 -0.7
comp=Z,22nm,0.9s,baz=177,slow=7.5,SNR=6.2
SPITS SKPbc **SKPbc** 01 29 38.9 -1.9
comp=Z,23nm,1.1s,baz=213,slow=6.0,SNR=3.8
**GOMU GeErMu** 136.81 93 PKP **PKPdf** 01 26 17.0 -4.0
**GUMO Guam** 137.04 169 PKP **PKPdf** 01 26 20.9 -0.7
comp=Z,129nm,0.8s,baz=182,slow=3.4,SNR=4.8
**MK31 Makanchi Array** 137.10 72 *i* PKHKP PKPpre 01 26 00.4
MK31 pmax pmax
comp=Z,10.0nm,0.9s
**MKAR Makanchi Array** 137.10 72 PKP **PKPdf** 01 26 19.7 -1.0
comp=Z,9.1nm,0.7s,baz=159,slow=3.6,SNR=18
MKAR SKPbc **SKPbc** 01 29 39.4 -3.3
comp=Z,9.4nm,0.8s,baz=246,slow=3.0,SNR=11
MKAR PKKP **PKKPdf** 01 35 48.7 -6.9
comp=Z,0.8nm,0.7s,baz=216,slow=6.9,SNR=4.2
MKAR SKKPbc **SKKPbc** 01 38 27.9 -5.4
comp=Z,1.7nm,0.9s,baz=54,slow=6.2,SNR=3.7
**KURBB Kurchatov Arra** 137.53 65 SKKPbc SKKPbc 01 38 27.4 -4.4
comp=Z,1.3nm,0.3s,baz=53,slow=3.9,SNR=5.0
**KURBB Kurchatov Arra** 137.53 65 PKHKP PKPpre 01 26 11.5
**NOR Nord** 137.72 2 *i* P **SKPbc** 01 29 43.7 +0.2
**CD2 Chengdu** 137.76 106 PKP **PKPdf** 01 26 23.5 +1.0
**RES Resolute Bay** 137.97 339 PKhKP PKPpre 01 26 11.9
comp=Z,8.0nm,0.8s,baz=164,slow=7.4,SNR=3.9
RES PKP **PKPdf** 01 26 22.4 +1.0
comp=Z,49nm,1.0s,baz=121,slow=0.7,SNR=39
RES SKPbc **SKPbc** 01 29 43.6 -0.7
comp=Z,34nm,1.1s,baz=140,slow=4.4,SNR=16
RES SKKPbc **SKKPbc** 01 38 30.5 -1.2
comp=Z,5.6nm,0.8s,baz=338,slow=2.6,SNR=6.6
**WMQ Urumqi** 138.10 79 PKP **PKiKP** 01 26 25.0 +0.2
WMQ PP **PP** 01 29 16.5 +3.2
WMQ AMB AMB
comp=Z,310nm,5.7s
WMQ LR LR
comp=Z,260nm,19.5s
**H02S1 DAWSON INLET T** 138.56 299 PKP **PKiKP** 01 26 24.6 -0.7
SNR=22
**ZSN Zaisan** 138.88 73 *e*PKIKP **PKPdf** 01 26 24.0 +0.1
**ZSN Zaisan** 138.88 73 *e*PKP **PKPdf** 01 26 24.1 +0.1
baz=73
**WRGLY Wrigley** 139.99 316 P **PKiKP** 01 26 26.9 -1.0
baz=120
**CRAG Craig** 140.15 301 P **PKPdf** 01 26 26.9 +1.0
baz=123
**WRAK Wrangell Islan** 140.29 303 P **PKPdf** 01 26 27.3 +1.1
baz=122
**DLBC Dease Lake** 140.30 307 PKhKP PKPpre 01 26 18.7
comp=Z,14nm,0.9s,baz=28,slow=2.6,SNR=6.7
DLBC SKPbc **SKPbc** 01 29 50.6 -0.7
comp=Z,21nm,1.0s,baz=78,slow=4.5,SNR=10
**WTLY Watson Lake, Y** 140.62 309 P **PKPdf** 01 26 28.0 +1.3
baz=120
**LZH Lanzhou** 141.73 101 ⇓PKP **PKPdf** 01 26 24.5 -5.2
LZH sPKP 01 27 18.8
**GTA Gaotai** 141.87 93 PKPbc **PKPdf** 01 26 24.3 -5.5
GTA pPKP PKiKP 01 26 30.4 -2.3
GTA sPKP 01 26 34.1
GTA LR LR
comp=N,130nm,17.8s
GTA LR LR
comp=E,290nm,17.8s
GTA LR LR
comp=Z,200nm,17.4s
**P33M Teslin, Yukon** 142.42 308 P **PKPdf** 01 26 31.4 +1.4
baz=118
**ZALV Zalesovo Beam** 142.59 64 PKhKP PKPpre 01 26 26.8
comp=Z,15nm,0.5s,baz=213,slow=2.8,SNR=12
ZALV PP **PP** 01 29 39.5 -1.0
comp=Z,2.5nm,0.7s,baz=251,slow=4.5,SNR=3.6
ZALV SKPbc **SKPbc** 01 29 56.0 -1.1
comp=Z,4.5nm,0.6s,baz=215,slow=3.1,SNR=4.0
ZALV SKKPbc **SKKPbc** 01 38 09.1 -2.9
comp=Z,2.4nm,0.8s,baz=54,slow=7.5,SNR=3.5
**XAN Xi'an** 142.94 108 PKP PKiKP 01 26 44.4 +9.4
XAN sPKP 01 27 21.9
XAN PP PP 01 29 57.6 +15
**A36M Sachs Harbour** 144.28 328 PKPdf **PKPdf** 01 26 32.7 -0.1
**A36M Sachs Harbour** 144.28 328 P **PKPdf** 01 26 32.5 -0.3
baz=109

**MIDW Midway** 144.74 230 PKPdf PKPbc 01 26 34.5 +0.4
**HYT Haines Junctio** 144.77 307 P **PKPdf** 01 26 35.0 +0.8
baz=115
**PNL Peninsula** 145.14 305 P **PKPab** 01 26 35.7 +0.9
baz=115,SNR=31
**MAYO Mayo, Yukon** 145.17 312 P **PKPab** 01 26 35.6 +0.8
baz=112,SNR=13
**LYN LuoYang** 145.20 111⇑ *i* PKPbc **PKPab** 01 26 35.9 +0.2
LYN pPKP pPKPdf 01 27 06.9 -0.1
LYN sPKP 01 27 18.3
LYN PP **PP** 01 30 03.5 +7.4
**YUK6 Outpost Mounta** 145.20 307 P **PKPab** 01 26 36.0 +0.7
baz=114,SNR=53
**YUK4 Talbot Arm** 145.49 307 P **PKPab** 01 26 37.0 +0.7
baz=113,SNR=164
**JOW Kunigami** 145.83 139 PKPbc **PKPab** 01 26 38.5 +0.2
comp=Z,116nm,0.8s,baz=224,slow=3.7,SNR=25
JOW SKPbc **SKPbc** 01 30 04.5 -1.3
comp=Z,14nm,0.5s,baz=179,slow=3.3,SNR=4.9
**INK Inuvik** 145.84 320 pPKP **pPKPdf** 01 27 06.3 -0.6
INK SKPbc **SKPbc** 01 30 03.6 -0.7
comp=Z,63nm,1.1s,baz=87,slow=2.7,SNR=7.3
**INK Inuvik** 145.84 320 PKP2 **PKPab** 01 26 37.0 -0.1
**INK Inuvik** 145.84 320 PKPdf **PKPab** 01 26 37.0 -0.1
**INK Inuvik** 145.84 320 P **PKPab** 01 26 37.4 +0.2
baz=107
**NJ2 Nanjing** 146.38 122 ⇑PKPbc **PKPab** 01 26 39.8 -0.5
NJ2 PKPab **PKiKP** 01 26 41.3 -0.7
NJ2 pPKP **pPKPdf** 01 27 07.8 -1.2
NJ2 sPKP 01 27 23.8
NJ2 PP **PP** 01 30 06.8 +3.8
NJ2 SS SS 01 48 56.1 +5.7
NJ2 AMB AMB
comp=Z,450nm,9.9s
NJ2 LR LR
comp=Z,540nm,20.8s
**J29M Klondike Camp** 146.44 313 P **PKPab** 01 26 39.5 -0.2
baz=109,SNR=13
**YUK3 Moose Creek** 146.46 308 P **PKPbc** 01 26 39.2 +0.5
baz=112,SNR=77
**MESA MESA** 146.53 304 P **PKPab** 01 26 40.1 -0.2
baz=113,SNR=32
**I29M Ogilvie Camp,** 146.76 314 P **PKPbc** 01 26 39.5 +0.2
baz=108,SNR=73
**DAWY Dawson** 146.79 312 P **PKPbc** 01 26 39.9 +0.5
baz=109,SNR=201
**BVCY Beaver Creek** 146.86 309 P **PKPbc** 01 26 40.4 +0.7
baz=110,SNR=93
**M27K Edge Creek, AK** 147.29 308 P **PKPbc** 01 26 41.5 +0.5
baz=110,SNR=116
**BCAR Beaver Creek A** 147.48 309 **PKPbc** 01 26 41.8 +0.4
**L27K Beaver Creek,** 147.50 309 P **PKPbc** 01 26 42.1 +0.7
baz=109,SNR=222
**KAIM Kayak Island** 147.57 303 P **PKiKP** 01 26 42.9 -0.7
baz=112,SNR=14
**EGAK Eagle** 147.74 313 P **PKPbc** 01 26 42.1 +0.2
baz=107,SNR=38
**M26K Nabesna, AK** 147.79 308 P **PKPbc** 01 26 42.6 +0.3
baz=109,SNR=48
**BMRM Bremner River** 148.03 305 P **PKiKP** 01 26 43.9 -0.7
baz=110,SNR=75
**L26K Log Cabin Wild** 148.15 309 P **PKiKP** 01 26 44.0 -0.7
baz=108,SNR=90
**N25K Chitina, Valde** 148.25 306 P **PKiKP** 01 26 44.7 -0.4
baz=109,SNR=54
**Q23K Middleton Isla** 148.30 302 P **PKiKP** 01 26 44.5 -0.6
baz=112
**BTO Baotou** 148.35 101 *e*PKPbc **PKPdf** 01 26 40.8 0.0
BTO LR LR
comp=Z,5μm,14.8s
BTO LR LR
comp=Z,3μm,10.3s
**EYAK Cordova Ski Ar** 148.42 304 P **PKiKP** 01 26 45.1 -0.1
baz=110,SNR=32
**HNS HongShan** 148.54 111 PKPbc **PKPbc** 01 26 45.5 +0.6
**J26L Joseph Creek** 148.66 312 P **PKiKP** 01 26 45.5 -0.3
baz=106,SNR=204
**SCRK Sand Creek** 148.70 311 P **PKiKP** 01 26 45.7 -0.3
baz=106,SNR=110
**HARP HAARP** 148.75 307 P **PKiKP** 01 26 45.7 -0.3
baz=108,SNR=49
**KLU Klutina** 148.81 305 P **PKiKP** 01 26 46.4 +0.2
baz=109,SNR=17
**TIA Tai'an** 148.88 115 PKPbc **PKPbc** 01 26 45.9 +0.1
**RIDG Independent Ri** 149.00 310 P **PKiKP** 01 26 46.8 +0.3
baz=106,SNR=14
**PAX Paxson** 149.06 308 P **PKPbc** 01 26 46.0 +0.5
baz=107,SNR=84
**M24K Tolsona, Glenn** 149.12 307 P **PKiKP** 01 26 47.4 +0.6
baz=108,SNR=14
**GLI Glacier Island** 149.15 304 P **PKiKP** 01 26 46.5 -0.3
baz=109,SNR=26
**NRIK Noril'sk** 149.25 39 PKPbc **PKPbc** 01 26 45.9 +0.2
comp=Z,49nm,0.8s,baz=253,slow=1.8,SNR=62
**NRIK Noril'sk** 149.25 39 PKP2 **PKPbc** 01 26 45.5 -0.2
**NRIK Noril'sk** 149.25 39 **PKPbc** 01 26 45.5 -0.2
**HHC Hu-ho-hao-te** 149.36 103 PKPbc **PKiKP** 01 26 47.6 -0.5
**J25K Salcha River,** 149.44 311 P **PKiKP** 01 26 47.3 -0.1
baz=104,SNR=9.7
**SCM Sheep Creek Mo** 149.55 306 P **PKiKP** 01 26 48.0 +0.3
baz=107,SNR=52
**PRP Porcupine Dome** 149.71 313 P **PKiKP** 01 26 47.9 -0.1
baz=102,SNR=31
**PWL Port Wells** 149.72 304 P **PKiKP** 01 26 48.2 +0.2
baz=108,SNR=6.7
**DHY Denali Highway** 149.92 308 P **PKiKP** 01 26 48.9 +0.3
baz=105,SNR=8.2
**MOY Mondy** 149.93 77 *e*PKIKP **PKPdf** 01 26 43.1 +0.1
MOY pmax pmax
comp=Z,141nm,1.5s
**KNK Knik Glacier** 149.95 305 P **PKiKP** 01 26 48.6 +0.1
baz=107,SNR=5.4
**JCJ Chichijima** 149.95 161 PKPdf **PKPdf** 01 26 44.9 +1.2
**WAT6 Susitna Watana** 149.95 307 P **PKiKP** 01 26 48.8 +0.2
baz=106,SNR=146
**SML Sawmill** 150.00 305 P **PKiKP** 01 26 48.8 +0.1
baz=107,SNR=14
**SEW Seward** 150.01 302 P **PKiKP** 01 26 48.6 +0.1
baz=109,SNR=32
**HDA Harding Lake** 150.06 311 P **PKiKP** 01 26 48.3 -0.3
baz=103,SNR=15
**ILAR Eielson Array** 150.12 311 PKP **PKPdf** 01 26 40.3 -2.4
comp=Z,12nm,0.9s,baz=135,slow=1.0,SNR=101
ILAR PKPbc **PKiKP** 01 26 48.8 +0.1
comp=Z,330nm,0.8s,baz=138,slow=3.7,SNR=302
ILAR pPKPbc **pPKPbc** 01 27 17.4 -1.5
comp=Z,5.2nm,0.7s,baz=71,slow=30,SNR=3.4
**ILAR Eielson Array** 150.12 311 PKPdf **PKPdf** 01 26 40.8 -1.9
ILAR PKPbc **PKiKP** 01 26 48.6 -0.1
**O22K Cooper Landing** 150.26 302 P **PKiKP** 01 26 49.3 +0.2
baz=108,SNR=20
**PMR Palmer** 150.31 305 P **PKiKP** 01 26 49.3 +0.2
baz=106,SNR=9.1
**POKR Poker Plat Res** 150.41 312 P **PKPbc** 01 26 49.0 +0.3
baz=102,SNR=7.0
**RC01 Rabbit Creek A** 150.44 304 P **PKiKP** 01 26 50.0 +0.5
baz=107,SNR=22
**BRSE Bradley Lake S** 150.51 301 P **PKiKP** 01 26 50.0 +0.3
baz=108,SNR=41
**ZAK Zakamensk** 150.53 80 *e*PKIKP **PKPdf** 01 26 44.3 +0.3
ZAK *e* 01 27 18.5
ZAK pmax pmax
comp=Z,185nm,1.1s
ZAK pmax pmax
comp=Z,111nm,1.1s
**COLA College** 150.54 312 PKIKP **PKPdf** 01 26 41.1 -2.3
**COLA College** 150.54 312 P **PKiKP** 01 26 49.4 -0.1
baz=102
**TCOL CIGO, UAF Yank** 150.54 311 P **PKiKP** 01 26 49.3 -0.3
baz=102,SNR=19
**H24K Noodor Dome** 150.73 313 P **PKiKP** 01 26 50.2 +0.1
baz=100,SNR=15
**KDAK Kodiak Island** 150.75 296 PKPbc **PKiKP** 01 26 50.6 +0.4
comp=Z,401nm,0.6s,baz=140,slow=2.6,SNR=282
KDAK pPKPbc **pPKPbc** 01 27 22.6 +2.2
comp=Z,82nm,0.6s,baz=167,slow=1.9,SNR=2.3
**KDAK Kodiak Island** 150.75 296 **PKiKP** 01 26 50.9 +0.8
**KDAK Kodiak Island** 150.75 296 P **PKiKP** 01 26 50.7 +0.5
baz=111
**MCK McKinley** 150.76 309 P **PKiKP** 01 26 50.5 +0.3
baz=103,SNR=14
**M22K Willow** 150.81 305 P **PKiKP** 01 26 50.8 +0.6
baz=106,SNR=6.5
**SONM Songino Array** 150.90 87 PKP **PKPdf** 01 26 44.4 -0.3
comp=Z,8.2nm,1.0s,baz=212,slow=1.7,SNR=15
SONM PKPbc **PKPbc** 01 26 50.8 +0.3
comp=Z,95nm,0.7s,baz=224,slow=3.0,SNR=148

SONM pPKPbc **pPKPbc** 01 27 22.1 +0.7
comp=Z,66nm,0.9s,baz=232,slow=2.2,SNR=5.5
**SONM Songino Array** 150.90 87 PKIKP **PKPdf** 01 26 45.0 +0.3
**SONM Songino Array** 150.90 87 PKPdf **PKPdf** 01 26 45.0 +0.3
SONM PKPbc **PKiKP** 01 26 50.9 -0.1
**OHAK Old Harbor** 150.91 295 P **PKiKP** 01 26 50.9 +0.4
baz=111,SNR=30
**HOM Homer** 150.92 300 P **PKiKP** 01 26 51.2 +0.7
baz=108
**NEA2 Nenana** 151.00 311 P **PKPbc** 01 26 50.3 +0.3
baz=101,SNR=7.3
**CAPN Captain Cook N** 151.01 303 P **PKiKP** 01 26 52.1 +1.5
baz=106
**CUT Chulitna** 151.04 306 P **PKiKP** 01 26 51.3 +0.6
baz=104,SNR=8.5
**I23K Minto, Yukon-K** 151.22 312 P **PKPbc** 01 26 50.6 +0.2
baz=100,SNR=21
**BJI Beijing** 151.27 109 PKPbc **PKPbc** 01 26 51.5 +0.1
**TRF Thorofare Moun** 151.29 308 P **PKiKP** 01 26 51.7 +0.3
baz=102,SNR=12
**O20K Slope Mountain** 151.52 301 P **PKiKP** 01 26 51.9 0.0
baz=107,SNR=8.3
**SPCR Spurr Chakacha** 151.63 303 P **PKiKP** 01 26 52.0 0.0
baz=105,SNR=17
**Q19K Cape Douglas,** 151.66 298 P **PKiKP** 01 26 52.4 +0.2
baz=108,SNR=11
**TOLK Toolik Lake Re** 151.71 319 P **PKiKP** 01 26 52.6 +0.6
baz=94,SNR=29
**BPAW Bear Paw Mtn.** 151.72 309 P **PKiKP** 01 26 52.3 +0.3
baz=101,SNR=15
**MLY Manley** 151.78 311 P **PKPbc** 01 26 51.8 0.0
baz=99
**COLD Coldfoot** 151.84 316 P **PKiKP** 01 26 53.2 +1.0
baz=96,SNR=17
**IRK Irkutsk** 151.99 78 *e*PKIKP **PKPbc** 01 26 52.0 -0.7
IRK *e* 01 27 20.4
IRK pmax pmax
comp=Z,139nm,0.8s
**PPLA Purkeypile** 152.02 307 P **PKiKP** 01 26 53.2 +0.3
baz=102,SNR=18
**CAST Castle Rocks** 152.07 308 P **PKiKP** 01 26 52.8 0.0
baz=101,SNR=11
**CHUM Lake Minchumin** 152.26 309 P **PKiKP** 01 26 53.4 +0.3
baz=100,SNR=7.9
**I21K Tanana** 152.32 312 P **PKiKP** 01 26 53.4 +0.2
baz=98,SNR=14
**O19K Port Alsworth** 152.36 300 P **PKPbc** 01 26 53.3 +0.1
baz=106,SNR=30
**JNU Nakatsue** 152.47 138 PKPbc **PKPbc** 01 26 54.5 +0.1
comp=Z,53nm,0.7s,baz=225,slow=0.7,SNR=14
**P18K Big Mountain,** 152.58 299 **PKiKP** 01 26 54.0 0.0
**P18K Big Mountain,** 152.58 299 P **PKPbc** 01 26 53.9 +0.1
baz=107,SNR=15
**N19K Bonanza Creek** 152.60 302 P **PKPbc** 01 26 53.9 +0.1
baz=104
**L20K Farewell, AK** 152.69 305 P **PKPbc** 01 26 54.0 +0.1
baz=102
**O18K Koktuh Hills** 152.70 300 P **PKiKP** 01 26 54.4 +0.2
baz=106
**H21K Melozitna Rive** 152.72 312 P **PKiKP** 01 26 54.7 +0.6
baz=96,SNR=12
**M19K Big River Lodg** 152.81 304 P **PKiKP** 01 26 54.6 +0.2
baz=102
**K20K Telida** 152.94 307 P **PKiKP** 01 26 54.9 +0.3
baz=100
**L19K White Mountain** 153.08 305 **PKiKP** 01 26 55.3 +0.4
**L19K White Mountain** 153.08 305 P **PKiKP** 01 26 55.1 +0.1
baz=102,SNR=8.0
**J20K Nowinta River** 153.10 309 P **PKiKP** 01 26 55.4 +0.5
baz=98
**IMAR Indian Mountai** 153.14 313 PKPbc **PKiKP** 01 26 56.1 +1.2
**CHGN Chignik** 153.21 291 P **PKPbc** 01 26 55.1 -0.1
baz=111
**CHNA Chernabura Isl** 153.29 287 P **PKiKP** 01 26 55.7 +0.2
baz=113,SNR=7.3
**TTA Tatalina** 153.74 306 P **PKiKP** 01 26 57.5 +1.1
baz=99,SNR=18
**XLT XiLinHaoTe** 153.89 103 *e*PKPbc **PKPdf** 01 26 48.9 -0.3
XLT PKPab **PKPab** 01 27 11.4 +0.4
**SDPT Sand Point** 153.96 288 P **PKiKP** 01 26 57.1 +0.2
baz=112,SNR=6.0
**KSAR Wonju Array Be** 154.99 128 PKIKP **PKPdf** 01 26 50.4 -0.4
**KSAR Wonju Array Be** 154.99 128 PKPdf **PKPdf** 01 26 50.4 -0.4
**KSRS Korea Array** 155.01 128 PKP **PKPdf** 01 26 50.8 0.0
comp=Z,4.3nm,0.7s,baz=234,slow=1.4,SNR=9.3
KSRS PKPab **PKPab** 01 27 15.1 -0.6
comp=Z,14nm,0.9s,baz=214,slow=4.9,SNR=11
KSRS PP **PP** 01 30 47.1 -5.3
comp=Z,0.8nm,0.4s,baz=174,slow=5.7,SNR=1.7
**INU Inuyama** 156.59 147 **PKPab** 01 27 23.8 +1.2
**UNV Unalaska Valle** 156.65 281 P **PKPab** 01 27 23.3 +0.9
baz=113
**RDOG Red Dog Mine** 156.67 318 **PKPab** 01 27 23.9 +1.8
**RDOG Red Dog Mine** 156.67 318 P **PKPab** 01 27 23.3 +1.2
baz=82,SNR=8.8
**ANM Nome** 157.99 309 P **PKPab** 01 27 28.5 +0.6
baz=88
**MAJO Matsushiro** 158.06 148 PKIKP **PKPdf** 01 26 54.9 +0.1
**MAJO Matsushiro** 158.06 148 PKPdf **PKPdf** 01 26 54.9 +0.1
MAJO **PKPab** 01 27 29.8 +0.9
**MAT Matsushiro** 158.06 148 *e*PKP **PKPdf** 01 26 53.2 -1.6
**MJAR Matsushiro Arr** 158.06 148 PKP **PKPdf** 01 26 54.4 -0.4
comp=Z,9.7nm,1.1s,baz=208,slow=1.3,SNR=10
MJAR PKPab **PKPab** 01 27 29.0 +0.1
comp=Z,17nm,0.8s,baz=186,slow=4.6,SNR=12
MJAR PP PP 01 30 60.0 -9.0
comp=Z,1.7nm,0.6s,baz=182,slow=6.0,SNR=2.1
**MJAR Matsushiro Arr** 158.06 148 PKIKP **PKPdf** 01 26 54.9 +0.1
**MJAR Matsushiro Arr** 158.06 148 PKPdf **PKPdf** 01 26 54.9 +0.1
**CN2 Changchun** 158.78 114 *e*PKP **PKPdf** 01 26 55.4 0.0
CN2 PP **PP** 01 31 16.6 +3.3
**TNA Tin City** 158.99 312 P **PKPab** 01 27 33.2 +1.0
baz=83,SNR=7.5
**BOD Bodaibo** 159.16 70 *e*PKIKP **PKPdf** 01 26 53.6 -1.8
BOD pmax pmax
comp=Z,26nm,1.1s
**SPIA Saint Paul Isl** 159.70 288 P **PKPab** 01 27 38.1 +2.6
baz=103
**GAMB Gambell** 160.82 308 P **PKPab** 01 27 40.9 +0.7
baz=84
**MDJ Mudanjiang** 161.43 119 PKP **PKPdf** 01 26 58.8 +0.5
MDJ AMB AMB
comp=Z,1μm,7.5s
**TIXI Tiksi** 161.59 24 PKP **PKPdf** 01 26 54.2 -3.5
comp=Z,0.6nm,0.3s,baz=320,slow=3.4,SNR=5.8
TIXI PKPab **PKPab** 01 27 44.9 +1.5
comp=Z,14nm,0.7s,baz=298,slow=6.3,SNR=21
TIXI PP **PP** 01 31 26.5 -1.4
comp=Z,3.6nm,0.4s,baz=92,slow=23,SNR=6.2
**TIXI Tiksi** 161.59 24 PKPab **PKPab** 01 27 45.2 +1.8
**USRK Ussuriysk Ar.** 162.26 124 PKPab **PKPab** 01 27 46.4 -0.7
comp=Z,12nm,0.7s,baz=239,slow=3.7,SNR=13
**USRK Ussuriysk Ar.** 162.26 124 PKP2 **PKPab** 01 27 46.8 -0.3
**USRK Ussuriysk Ar.** 162.26 124 PKPab **PKPab** 01 27 46.8 -0.3
**ZEA Zeya** 165.31 89 *e*PKIKP **PKPdf** 01 27 00.9 -0.8
ZEA pmax pmax
comp=Z,10.0nm,1.5s
**KLR Kul'dur** 165.63 110 PKP **PKPdf** 01 27 01.9 -0.2
comp=Z,7.1nm,1.0s,baz=232,slow=1.3,SNR=8.5
KLR PKPab **PKPab** 01 28 01.2 -0.6
comp=Z,15nm,0.7s,baz=233,slow=3.4,SNR=23
**ASAJ Asahikawa** 166.33 148 PKPab **PKPab** 01 28 05.3 +0.4
comp=Z,7.2nm,0.4s,baz=222,slow=12,SNR=3.6
**BILL Bilibino** 166.57 337*d* *i* PKIKP **PKPdf** 01 26 57.7 -4.6
BILL *e* 01 27 26.4
BILL *e* 01 27 35.6
BILL *e* 01 28 06.5
BILL 01 33 56.0
BILL pmax pmax
comp=Z,23nm,1.3s
**YAK Yakutsk** 166.96 54 *e*PKIKP **PKPdf** 01 27 01.8 -0.9
YAK pmax pmax
comp=Z,19nm,0.9s
**YSS Yuzh-Sakhalins** 168.91 143 *i* PKIKP **PKPdf** 01 27 05.7 +1.2
YSS *e* 01 28 16.9
**GRNR Gornyy** 168.97 113 ⇓ *i* PKP2 **PKPab** 01 28 17.2 +0.6
GRNR pmax pmax
comp=Z,10.0nm,1.0s
**TYV Tymovskoe** 172.04 128 *e*PKIKP **PKPdf** 01 27 06.5 +0.4
TYV pmax pmax
comp=Z,500nm,4.3s
TYV pmax pmax
comp=Z,16nm,1.3s
**SEY Seymchan** 173.28 1 PKP **PKPdf** 01 27 04.0 -2.3
comp=Z,14nm,1.0s,baz=40,slow=0.9
**SEY Seymchan** 173.28 1 PKIKP **PKPdf** 01 27 04.0 -2.3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PET** | **Petropavlovsk** | **175.21** | **230** | *e*PKP2 | **PKPab** | **01 28 44.5** | **+0.4** |
| PET | | | | pmax | pmax | | |
| | comp=Z,63nm,1.3s | | | | | | |
| **PET** | **Petropavlovsk** | **175.21** | **230** | | **PKPab** | **01 28 45.1** | **+1.1** |
| **PEA0B** | **Petropavlovsk-** | **175.66** | **226** | PKIKP | **PKPdf** | **01 27 07.5** | **+0.2** |
| **PEA0B** | **Petropavlovsk-** | **175.66** | **226** | | **PKPdf** | **01 27 07.5** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **175.66** | **226** | PKP | **PKPdf** | **01 27 06.7** | **-0.7** |
| | comp=Z,26nm,0.9s,baz=159,slow=4.5,SNR=18 | | | | | | |
| PETK | | | | PKPab | **PKPab** | **01 28 46.2** | **+0.1** |
| | comp=Z,29nm,0.8s,baz=148,slow=8.6,SNR=15 | | | | | | |
| PETK | | | | PP | **PP** | **01 32 47.2** | **+7.8** |
| | comp=Z,13nm,1.1s,baz=218,slow=4.1,SNR=5.4 | | | | | | |
| PETK | | | | SKKPab | | 01 35 48.5 | |
| | comp=Z,6.0nm,0.9s,baz=169,slow=3.0,SNR=3.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **175.66** | **226** | PKIKP | **PKPdf** | **01 27 06.8** | **-0.5** |
| PETK | | | | | | 01 28 46.4 | |
| **PETK** | **Petropavlovsk-** | **175.66** | **226** | | **PKPdf** | **01 27 06.8** | **-0.5** |
| PETK | | | | | **PKPab** | **01 28 46.4** | **+0.2** |

**TAP 18 01:09:18.3,23.02N×120.87E,h5km,ML3.2,15C-6D,C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.18** | **330** | *i* P | | Pg | 01 09 22.6 | +0.7 |
| | baz=330 | | | | | | | |
| STYH | | | | S | | Sg | 01 09 25.3 | +1.1 |
| | baz=330 | | | | | | | |
| **STYT** | **Tauyuan** | **0.18** | **324** | ⇓*i* P | | Pg | 01 09 22.5 | +0.6 |
| | baz=326 | | | | | | | |
| STYT | | | | S | | Sg | 01 09 25.0 | +0.7 |
| | baz=326 | | | | | | | |
| **ELDTW** | **Lidau** | **0.22** | **38** | ⇑*i* P | | Pg | 01 09 23.3 | +0.7 |
| | baz=40 | | | | | | | |
| ELDTW | | | | *i* S | | Sg | 01 09 26.2 | +0.6 |
| | baz=40 | | | | | | | |
| **LONT** | **Longtian** | **0.26** | **115** | ⇓*i* P | | Pg | 01 09 24.5 | +1.0 |
| | baz=116 | | | | | | | |
| LONT | | | | *i* S | | Sg | 01 09 28.3 | +1.4 |
| | baz=116 | | | | | | | |
| **TWG** | **Pinlang** | **0.27** | **137** | ⇓*i* P | | Pb | 01 09 24.6 | -1.0 |
| | baz=136 | | | | | | | |
| TWG | | | | *e*S | | Sg | 01 09 28.5 | +1.4 |
| | baz=136 | | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **284** | *e*P | | Pg | 01 09 23.9 | +0.2 |
| | baz=289 | | | | | | | |
| SGST | | | | *e*S | | Sg | 01 09 27.9 | +0.6 |
| | baz=289 | | | | | | | |
| **TWGBT** | **Beinan** | **0.28** | **136** | ⇓*i* P | | Pg | 01 09 24.7 | +0.9 |
| | baz=136 | | | | | | | |
| TWGBT | | | | *i* S | | Sg | 01 09 28.4 | +1.1 |
| | baz=136 | | | | | | | |
| **ECS** | **Chishang** | **0.33** | **76** | ⇑*i* P | | Pb | 01 09 25.9 | -0.8 |
| | baz=72 | | | | | | | |
| ECS | | | | *i* S | | Sg | 01 09 30.7 | +1.6 |
| | baz=72 | | | | | | | |
| **WTP** | **Ta-pu** | **0.33** | **314** | ⇓*i* P | | Pb | 01 09 26.0 | -0.7 |
| | baz=315 | | | | | | | |
| WTP | | | | S | | Sb | 01 09 31.1 | -1.3 |
| | baz=315 | | | | | | | |
| **SSD** | **Sandimen** | **0.35** | **219** | ⇑*e*P | | Pg | 01 09 25.3 | +0.2 |
| | baz=226 | | | | | | | |
| **CHN1** | **Nanshi** | **0.36** | **298** | P | | Pb | 01 09 26.6 | -0.6 |
| | baz=298 | | | | | | | |
| CHN1 | | | | *e*S | | Sb | 01 09 32.2 | -0.9 |
| | baz=298 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.36** | **322** | ⇓*i* P | | Pb | 01 09 26.6 | -0.6 |
| | baz=322 | | | | | | | |
| TPUB | | | | *i* S | | Sb | 01 09 31.8 | -1.4 |
| | baz=322 | | | | | | | |
| **TTN** | **Taitung** | **0.36** | **136** | *e*P | | Pb | 01 09 26.8 | -0.5 |
| | baz=135 | | | | | | | |
| **SCST** | **Cishan** | **0.37** | **250** | P | | Pb | 01 09 26.6 | -0.8 |
| | baz=249 | | | | | | | |
| **TSMG** | **Majia** | **0.37** | **214** | ⇑*i* P | | Pg | 01 09 25.8 | +0.2 |
| | baz=213 | | | | | | | |
| TSMG | | | | *e*S | | Sg | 01 09 30.1 | -0.4 |
| | baz=213 | | | | | | | |
| **EDH** | **Donghe** | **0.40** | **96** | P | | Pb | 01 09 27.7 | -0.2 |
| | baz=97 | | | | | | | |
| EDH | | | | S | | Sb | 01 09 34.0 | -0.3 |
| | baz=97 | | | | | | | |
| **SNST** | **Tainan City** | **0.40** | **300** | *e*P | | Pb | 01 09 27.7 | -0.2 |
| | baz=300 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.42** | **322** | P | | Pb | 01 09 27.9 | -0.4 |
| | baz=323 | | | | | | | |
| **ECL** | **Taimali** | **0.42** | **170** | ⇑P | | Pg | 01 09 27.1 | +0.6 |
| | baz=168 | | | | | | | |
| ECL | | | | S | | Sg | 01 09 32.6 | +0.5 |
| | baz=168 | | | | | | | |
| **FULB** | **Fuli** | **0.43** | **65** | ⇑*i* P | | Pb | 01 09 28.1 | -0.3 |
| | baz=66 | | | | | | | |
| FULB | | | | *i* S | | Sb | 01 09 34.3 | -0.9 |
| | baz=66 | | | | | | | |
| **TWK** | **Hsinying** | **0.43** | **305** | *i* P | | Pb | 01 09 28.2 | -0.3 |
| | baz=313 | | | | | | | |
| TWK | | | | *e*S | | Sb | 01 09 36.1 | +0.8 |
| | baz=313 | | | | | | | |
| **SGLT** | **Jiouru** | **0.46** | **230** | *e*P | | Pb | 01 09 28.4 | -0.4 |
| | baz=226 | | | | | | | |
| **TWM1** | **Shoushan** | **0.46** | **245** | *e*P | | Pb | 01 09 28.9 | 0.0 |
| | baz=244 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.46** | **209** | ⇑*i* P | | Pg | 01 09 27.4 | +0.2 |
| | baz=210 | | | | | | | |
| MASBT | | | | *e*S | | Sg | 01 09 33.3 | +0.1 |
| | baz=210 | | | | | | | |
| **CHKT** | **Chengkung** | **0.46** | **80** | P | | Pb | 01 09 28.9 | 0.0 |
| | baz=81 | | | | | | | |
| CHKT | | | | S | | Sb | 01 09 36.3 | +0.2 |
| | baz=81 | | | | | | | |
| **CHN3** | **Shinhua** | **0.47** | **277** | *e*P | | Pb | 01 09 30.2 | +1.1 |
| | baz=277 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.48** | **9** | ⇑*i* P | | Pg | 01 09 28.1 | +0.5 |
| | baz=11 | | | | | | | |
| **SHHT** | **Tainan City** | **0.48** | **271** | *e*P | | Pn | 01 09 30.7 | -1.2 |
| | baz=270 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.48** | **226** | *e*P | | Pb | 01 09 29.2 | -0.2 |
| | baz=222 | | | | | | | |
| **ALS** | **Alishan** | **0.49** | **353** | ⇑*i* P | | Pg | 01 09 28.7 | +0.8 |
| | baz=354 | | | | | | | |
| ALS | | | | S | | Sb | 01 09 36.3 | -1.1 |
| | baz=354 | | | | | | | |
| **TWF1** | **Yuli** | **0.51** | **49** | ⇑*i* P | | Pg | 01 09 28.8 | +0.5 |
| | baz=51 | | | | | | | |
| TWF1 | | | | S | | Sg | 01 09 35.5 | +0.5 |
| | baz=51 | | | | | | | |
| **EYUL** | **Yuli** | **0.53** | **51** | P | | Pg | 01 09 28.9 | +0.4 |
| | baz=61 | | | | | | | |
| **YULB** | **Yu-li** | **0.54** | **46** | ⇑*i* P | | Pg | 01 09 29.1 | +0.3 |
| | baz=47 | | | | | | | |
| YULB | | | | *e*S | | Sg | 01 09 35.7 | -0.1 |
| | baz=47 | | | | | | | |
| **SSPT** | **Xinbi** | **0.60** | **208** | *i* P | | Pb | 01 09 30.7 | -0.6 |
| | baz=197 | | | | | | | |
| **CHY** | **Chiayi** | **0.63** | **319** | *e*P | | Pb | 01 09 31.8 | 0.0 |
| | baz=320 | | | | | | | |
| **EAST** | **Anshuo** | **0.63** | **182** | ⇑*i* P | | Pg | 01 09 31.0 | +0.5 |
| | baz=171 | | | | | | | |
| EAST | | | | *e*S | | Sg | 01 09 39.0 | +0.3 |
| | baz=171 | | | | | | | |
| **EHY** | **Hungye** | **0.64** | **40** | ⇑*i* P | | Pg | 01 09 30.8 | +0.2 |
| | baz=42 | | | | | | | |
| **SCLT** | **Jiali** | **0.64** | **284** | *e*P | | Pb | 01 09 32.9 | +0.9 |
| | baz=303 | | | | | | | |
| **LDUT** | **Ludao** | **0.65** | **122** | *e*P | | Pb | 01 09 31.6 | -0.5 |
| | baz=122 | | | | | | | |
| **TAW** | **Tawu** | **0.66** | **178** | *e*P | | Pg | 01 09 31.6 | +0.6 |
| | baz=177 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.67** | **179** | *e*P | | Pg | 01 09 31.7 | +0.4 |
| | baz=178 | | | | | | | |
| **SCZT** | **Fangliau** | **0.68** | **200** | ⇑*i* P | | Pg | 01 09 31.7 | +0.3 |
| | baz=189 | | | | | | | |
| SCZT | | | | *e*S | | Sg | 01 09 40.2 | -0.1 |
| | baz=189 | | | | | | | |
| **HGSD** | **Ruisui** | **0.69** | **47** | P | | Pb | 01 09 32.6 | -0.3 |
| | baz=41 | | | | | | | |
| HGSD | | | | *i* S | | Sb | 01 09 43.0 | +0.2 |
| | baz=41 | | | | | | | |
| **WGK** | **Gukeng** | **0.72** | **337** | *e*P | | Pb | 01 09 34.3 | +0.8 |
| | baz=338 | | | | | | | |
| **SSLB** | **Suanglung** | **0.77** | **6** | P | | Pg | 01 09 33.0 | -0.1 |
| | baz=15 | | | | | | | |
| **VWDT** | **VWDT** | **0.77** | **19** | ⇑*i* P | | Pg | 01 09 32.9 | -0.3 |
| | baz=19 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.78** | **310** | *e*P | | Pb | 01 09 35.0 | +0.6 |
| | baz=310 | | | | | | | |
| **SLIU** | **Shizi** | **0.80** | **185** | *e*P | | Pg | 01 09 34.1 | +0.4 |
| | baz=184 | | | | | | | |
| **WJS** | **Zhushan** | **0.81** | **351** | *e*P | | Pb | 01 09 34.9 | -0.1 |
| | baz=351 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.82** | **215** | *e*P | | Pn | 01 09 38.3 | +1.8 |
| | baz=214 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.86** | **2** | P | | Pb | 01 09 35.4 | -0.5 |
| | baz=11 | | | | | | | |
| **WNT** | **Mingjian** | **0.87** | **349** | *e*P | | Pb | 01 09 36.4 | +0.4 |
| | baz=350 | | | | | | | |
| **TYC** | **Yuchr** | **0.88** | **359** | P | | Pb | 01 09 36.1 | -0.1 |
| | baz=8.0 | | | | | | | |
| **WNT1** | **Nantou City** | **0.90** | **349** | *e*P | | Pb | 01 09 37.0 | +0.5 |
| | baz=350 | | | | | | | |
| **ESL** | **Shilin** | **0.95** | **33** | *e*P | | Pg | 01 09 36.5 | 0.0 |
| | baz=48 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.99** | **333** | *e*P | | Pb | 01 09 37.9 | -0.1 |
| | baz=334 | | | | | | | |
| **WPL** | **Puli Township** | **0.99** | **4** | *e*P | | Pb | 01 09 38.0 | 0.0 |
| | baz=15 | | | | | | | |
| **WUSB** | **Renai** | **1.00** | **13** | *e*P | | Pg | 01 09 36.8 | -0.7 |
| | baz=24 | | | | | | | |
| **WWF** | **Wufeng** | **1.03** | **351** | *e*P | | Pn | 01 09 39.7 | +0.2 |
| | baz=337 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.04** | **2** | *e*P | | Pb | 01 09 39.0 | +0.2 |
| | baz=13 | | | | | | | |
| **TWK1** | **Hengchun** | **1.07** | **183** | *e*P | | Pn | 01 09 40.4 | +0.5 |
| | baz=182 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.07** | **183** | *e*P | | Pb | 01 09 39.7 | +0.3 |
| | baz=182 | | | | | | | |
| **CHGB** | **Renai** | **1.07** | **15** | *e*P | | Pg | 01 09 39.2 | +0.2 |
| | baz=25 | | | | | | | |
| **ETM** | **Tongmen** | **1.10** | **31** | P | | Pg | 01 09 39.6 | +0.1 |
| | baz=38 | | | | | | | |
| **WDGT** | **Dungji** | **1.14** | **282** | *e*P | | Pb | 01 09 40.5 | 0.0 |
| | baz=293 | | | | | | | |
| **HWA** | **Hwalien** | **1.17** | **35** | *e*P | | Pn | 01 09 41.5 | +0.2 |
| | baz=48 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **18** | *e*P | | Pg | 01 09 40.6 | -0.4 |
| | baz=20 | | | | | | | |
| **TWD** | **Chiawan** | **1.25** | **32** | *e*P | | Pn | 01 09 42.5 | 0.0 |
| | baz=50 | | | | | | | |
| **WHP** | **Taichung City** | **1.26** | **3** | *e*P | | Pn | 01 09 43.1 | +0.4 |
| | baz=17 | | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **15** | *e*P | | Pg | 01 09 42.2 | -0.6 |
| | baz=18 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.29** | **293** | *e*P | | Pn | 01 09 42.5 | -0.6 |
| | baz=293 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.31** | **25** | *e*P | | Pn | 01 09 43.0 | -0.3 |
| | baz=45 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.33** | **356** | *e*P | | Pg | 01 09 45.0 | +1.1 |
| | baz=359 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.33** | **30** | *e*P | | Pn | 01 09 43.3 | -0.2 |
| | baz=49 | | | | | | | |
| **NSY** | **Sanyi** | **1.40** | **356** | *e*P | | Pg | 01 09 45.6 | +0.5 |
| | baz=359 | | | | | | | |
| **NNSB** | **Datong** | **1.48** | **18** | *e*P | | Pb | 01 09 46.2 | -0.3 |
| | baz=21 | | | | | | | |
| **NNS** | **Nan Shan** | **1.49** | **18** | *e*P | | Pb | 01 09 46.3 | -0.3 |
| | baz=20 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.61** | **4** | *e*P | | Pg | 01 09 50.0 | +0.8 |
| | baz=349 | | | | | | | |
| **LATG** | **Datong** | **1.63** | **22** | *e*P | | Pb | 01 09 48.4 | -0.5 |
| | baz=24 | | | | | | | |
| **LIOB** | **Emei** | **1.63** | **5** | *e*P | | Pg | 01 09 49.3 | -0.2 |
| | baz=349 | | | | | | | |

*JMA* ***18*** *01:09:37.4±0.5,22.91N×120.97E,h0km,M5.0*

*NIED* ***18*** *01:09:37.4,22.91N×120.97E,h0km,MW5.0,Moment Tensor Solution. s3 Moment tensor: Scale $10^{16}$Nm; Mrr-3.65; Mθθ2.03; Mφφ1.62; Mrθ0.95; Mrφ-1.43; Mθφ-0.79; Fault plane solution: M0 3.68000×$10^{16}$ NP1: φs311.00000°,δ55.00000°,λ-90.00000°. NP2: φs131.00000°,δ35.00000°,λ-89.00000°.*

*IDC* ***18*** *01:09:38.1±0.4,22.95N×121.02E,h0km,mb4.5/36, mb1 4.6/38,mb1mx4.4/63,mbtmp4.5/38,ML4.1/2,MS4.2/22, Ms1 4.3/22,ms1mx3.9/81 Error ellipse: s-maj=13.3km s-min=11.0km az=91.0*

*MOS* ***18*** *01:09:39.1±1.1,22.88N×120.94E,h15km,mb5.2/66, MS4.3/4, Error ellipse: s-maj=6.9km s-min=4.2km az=110.6*

*NEIC* ***18*** *01:09:39.3±1.3,22.98N±0.05×120.94E±0.04,h4km±3km, mb5.0/113,Mwr4.9/23,ML5.1(TAP), Error ellipse: s-maj=7.0km s-min=4.8km az=167.0*

*ASIES* ***18*** *01:09:39.3,23.00N×120.90E,h11km,MW4.7*

*NEIC* ***18*** *01:09:39.3,22.97N×120.94E,h8km, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; Mrr-2.96; Mθθ1.75; Mφφ1.20; Mrθ-0.07; Mrφ-1.78; Mθφ1.14; Fault plane solution: M0 3.33000×$10^{16}$ NP1:φs295.50000°, δ39.89000°,λ-113.81000°. NP2:φs145.40000°, δ54.08000°,λ-71.35000°. Principal axes: T 3.3781, Plg7.0000°, Azm222.0000°; N -0.1018, Plg15.0000°, Azm314.0000°; P -3.2763, Plg73.0000°, Azm107.0000°;*

*BJI* ***18*** *01:09:39.5±0.0,23.06N×120.89E,h10km,mb4.5/73, mB5.0/52, ML5.1/11,Ms5.0/84,Ms7 4.8/77*

*TAP* ***18*** *01:09:39.0,23.02N×120.87E,h5km,ML5.3,C*

*GCMT* ***18*** *01:09:41.4±0.3,23.07N±0.02×120.92E±0.02,h12km, MW5.0/80,Moment Tensor Solution. s32,c36; s80,c120; Duration: 0 Moment tensor: Scale $10^{16}$Nm; Mrr-3.49±.10; Mθθ1.73±.10; Mφφ1.76±.11; Mrθ-0.68±.36; Mθφ-1.93±.07; Mφr-0.58±.38; Best double couple: M0 3.69600×$10^{16}$ NP1:φs329.00000°,δ46.00000°,λ-70.00000°. NP2: φs121.00000°,δ47.00000°,λ-109.00000°. Principal axes: T 3.6760, Plg1.0000°, Azm225.0000°; N 0.0410, Plg14.0000°, Azm135.0000°; P -3.7160, Plg76.0000°, Azm317.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***18*** *01:09:48.6±0.0,24.03N×121.49E,h33km,mb5.2*

**ISC 18 01:09:41.6±0.3,23.01N±0.01×120.91E±0.01,h17km±1km, h17km:pP-P,n656,σ1s69/818,mb4.9/160,MS4.4/32, 105C-31D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.20** | **323** | ⇓*i* P | | **Pg** | **01 09 43.2** | **-3.3** |
| | baz=331 | | | | | | | |
| STYH | | | | *i* S | | **Sg** | **01 09 46.2** | **-3.7** |
| | baz=331 | | | | | | | |
| **ELDTW** | **Lidau** | **0.21** | **29** | ⇑*i* P | | **Pg** | **01 09 43.9** | **-2.8** |
| | baz=41 | | | | | | | |
| ELDTW | | | | *i* S | | **Sg** | **01 09 47.1** | **-3.0** |
| | baz=41 | | | | | | | |
| **STYT** | **Tauyuan** | **0.21** | **318** | ⇓*i* P | | **Pg** | **01 09 43.1** | **-3.5** |
| | baz=327 | | | | | | | |
| STYT | | | | *i* S | | **Sg** | **01 09 45.7** | **-4.4** |
| | baz=327 | | | | | | | |
| **LONT** | **Longtian** | **0.23** | **116** | ⇓*i* P | | **Pg** | **01 09 45.1** | **-1.8** |
| | baz=116 | | | | | | | |
| LONT | | | | S | | **Sg** | **01 09 49.2** | **-1.2** |
| | baz=116 | | | | | | | |
| **TWG** | **Pinlang** | **0.24** | **141** | Pg | | **Pg** | **01 09 45.3** | **-1.8** |
| TWG | | | | Sg | | **Sg** | **01 09 49.6** | **-1.2** |
| **TWG** | **Pinlang** | **0.24** | **141** | ⇓*i* P | | **Pg** | **01 09 45.3** | **-1.8** |
| | baz=135 | | | | | | | |
| **TWGBT** | **Beinan** | **0.24** | **140** | ⇓*i* P | | **Pg** | **01 09 45.2** | **-1.9** |
| | baz=136 | | | | | | | |
| TWGBT | | | | S | | **Sg** | **01 09 48.8** | **-2.1** |
| | baz=136 | | | | | | | |
| **ECS** | **Chishang** | **0.30** | **73** | ⇑*i* P | | **Pg** | **01 09 46.6** | **-1.5** |
| | baz=73 | | | | | | | |
| ECS | | | | *i* S | | **Sg** | **01 09 51.7** | **-0.8** |
| | baz=73 | | | | | | | |
| **SGST** | **Jiashian** | **0.31** | **284** | ⇑*i* P | | **Pg** | **01 09 44.4** | **-3.8** |
| | baz=284 | | | | | | | |
| SGST | | | | S | | **Sg** | **01 09 48.8** | **-4.0** |
| | baz=284 | | | | | | | |
| **TTN** | **Taitung** | **0.33** | **139** | ⇓P | | **Pg** | **01 09 47.9** | **-0.8** |
| | baz=135 | | | | | | | |
| TTN | | | | S | | **Sb** | **01 09 54.0** | **-0.1** |
| | baz=135 | | | | | | | |
| **WTP** | **Ta-pu** | **0.36** | **311** | ⇓P | | **Pg** | **01 09 46.6** | **-2.6** |
| | baz=315 | | | | | | | |
| WTP | | | | S | | **Sg** | **01 09 51.9** | **-2.4** |
| | baz=315 | | | | | | | |
| **EDH** | **Donghe** | **0.36** | **95** | ⇑P | | **Pg** | **01 09 48.3** | **-0.9** |
| | baz=97 | | | | | | | |
| EDH | | | | S | | **Sg** | **01 09 54.2** | **-0.2** |
| | baz=97 | | | | | | | |
| **TSMG** | **Majia** | **0.39** | **219** | ⇑*i* P | | **Pg** | **01 09 46.4** | **-3.1** |
| | baz=221 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **319** | Pg | | **Pg** | **01 09 47.2** | **-2.5** |
| TPUB | | | | Sg | | **Sg** | **01 09 52.4** | **-2.7** |
| **TPUB** | **Ta-pu** | **0.39** | **319** | ⇓*i* P | | **Pg** | **01 09 47.2** | **-2.5** |
| | baz=322 | | | | | | | |
| TPUB | | | | *i* S | | **Sg** | **01 09 52.5** | **-2.7** |
| | baz=322 | | | | | | | |
| **CHN1** | **Nanshi** | **0.39** | **297** | P | | **Pg** | **01 09 47.5** | **-2.2** |
| | baz=298 | | | | | | | |
| CHN1 | | | | S | | **Sg** | **01 09 53.1** | **-2.1** |
| | baz=298 | | | | | | | |
| **SCST** | **Cishan** | **0.40** | **253** | ⇑*i* P | | **Pg** | **01 09 47.5** | **-2.4** |
| | baz=249 | | | | | | | |
| **FULB** | **Fuli** | **0.40** | **61** | ⇑*i* P | | **Pg** | **01 09 48.6** | **-1.2** |
| | baz=66 | | | | | | | |
| FULB | | | | S | | **Sg** | **01 09 55.1** | **-0.4** |
| | baz=66 | | | | | | | |
| **ECL** | **Taimali** | **0.41** | **174** | P | | **Pg** | **01 09 47.7** | **-2.2** |
| | baz=167 | | | | | | | |
| ECL | | | | S | | **Sg** | **01 09 52.9** | **-2.8** |
| | baz=167 | | | | | | | |
| **CHKT** | **Chengkung** | **0.43** | **77** | ⇑*i* P | | **Pg** | **01 09 49.7** | **-0.6** |
| | baz=81 | | | | | | | |
| CHKT | | | | *i* S | | **Sb** | **01 09 57.2** | **+0.3** |
| | baz=81 | | | | | | | |
| **SNST** | **Tainan City** | **0.43** | **299** | ⇑*i* P | | **Pg** | **01 09 48.8** | **-1.7** |
| | baz=305 | | | | | | | |
| SNST | | | | *e*S | | **Sg** | **01 09 55.7** | **-0.7** |
| | baz=305 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.45** | **320** | *e*P | | **Pg** | **01 09 48.5** | **-2.2** |
| | baz=323 | | | | | | | |
| CHN4 | | | | *e*S | | **Sg** | **01 09 55.6** | **-1.3** |
| | baz=323 | | | | | | | |
| **TWK** | **Hsinying** | **0.47** | **304** | P | | **Pg** | **01 09 49.0** | **-2.0** |
| | baz=306 | | | | | | | |
| TWK | | | | *i* S | | **Sg** | **01 09 56.2** | **-1.2** |
| | baz=306 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.47** | **213** | ⇑*i* P | | **Pg** | **01 09 48.0** | **-3.1** |
| | baz=210 | | | | | | | |
| MASBT | | | | *e*S | | **Sg** | **01 09 53.9** | **-3.5** |
| | baz=210 | | | | | | | |
| **SGLT** | **Jiouru** | **0.48** | **234** | ⇑*i* P | | **Pg** | **01 09 49.4** | **-1.8** |
| | baz=226 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.48** | **5** | ⇑*i* P | | **Pg** | **01 09 48.8** | **-2.8** |
| | baz=19 | | | | | | | |
| YUS | | | | *e*S | | **Sg** | **01 09 55.1** | **-3.1** |
| | baz=19 | | | | | | | |
| **TWM1** | **Shoushan** | **0.48** | **248** | *e*P | | **Pg** | **01 09 49.4** | **-1.9** |
| | baz=244 | | | | | | | |
| **TWF1** | **Yuli** | **0.50** | **46** | ⇑*i* P | | **Pg** | **01 09 49.4** | **-2.1** |
| | baz=51 | | | | | | | |
| TWF1 | | | | *e*S | | **Sg** | **01 09 55.6** | **-2.7** |
| | baz=51 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.50** | **229** | P | | **Pg** | **01 09 49.8** | **-1.9** |
| | baz=218 | | | | | | | |
| TSPT | | | | *e*S | | **Sg** | **01 09 57.6** | **-0.8** |
| | baz=218 | | | | | | | |
| **CHN3** | **Shinhua** | **0.51** | **278** | *e*P | | **Pg** | **01 09 51.1** | **-0.7** |
| | baz=277 | | | | | | | |
| **EYUL** | **Yuli** | **0.51** | **48** | ⇑*i* P | | **Pg** | **01 09 49.7** | **-2.1** |
| | baz=52 | | | | | | | |
| EYUL | | | | S | | **Sg** | **01 09 56.3** | **-2.3** |
| | baz=52 | | | | | | | |
| **ALS** | **Alishan** | **0.51** | **349** | ⇑*i* P | | **Pg** | **01 09 49.4** | **-2.6** |
| | baz=355 | | | | | | | |
| ALS | | | | *i* S | | **Sg** | **01 09 57.1** | **-1.8** |
| | baz=355 | | | | | | | |
| **SHHT** | **Tainan City** | **0.52** | **272** | ⇑*e*P | | **Pg** | **01 09 51.4** | **-0.5** |
| | baz=271 | | | | | | | |
| SHHT | | | | *e*S | | **Sb** | **01 10 00.9** | **+1.4** |
| | baz=271 | | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **43** | Pg | | **Pg** | **01 09 49.6** | **-2.5** |
| YULB | | | | Sg | | **Sg** | **01 09 56.0** | **-3.2** |
| **YULB** | **Yu-li** | **0.53** | **43** | ⇑*i* P | | **Pg** | **01 09 49.7** | **-2.4** |
| | baz=47 | | | | | | | |
| YULB | | | | *e*S | | **Sg** | **01 09 56.3** | **-2.9** |
| | baz=47 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.59** | **245** | *e*P | | **Pg** | **01 09 52.9** | **-0.3** |
| | baz=241 | | | | | | | |
| **SSHA** | **Shanhua** | **0.59** | **283** | *e*P | | **Pg** | **01 09 52.9** | **-0.3** |
| | baz=299 | | | | | | | |
| SSHA | | | | *e*S | | **Sn** | **01 10 03.0** | **-1.3** |
| | baz=299 | | | | | | | |
| **ECBN** | **Changbin** | **0.59** | **58** | ⇑*i* P | | **Pg** | **01 09 52.3** | **-1.0** |
| | baz=62 | | | | | | | |
| ECBN | | | | *e*S | | **Sb** | **01 10 02.0** | **+0.5** |
| | baz=62 | | | | | | | |
| **SSPT** | **Xinbi** | **0.61** | **211** | ⇑*i* P | | **Pg** | **01 09 51.4** | **-2.3** |
| | baz=204 | | | | | | | |
| SSPT | | | | *e*S | | **Sg** | **01 10 00.8** | **-0.9** |
| | baz=204 | | | | | | | |
| **LDUT** | **Ludao** | **0.61** | **123** | ⇓P | | **Pg** | **01 09 52.1** | **-1.6** |
| | baz=122 | | | | | | | |
| LDUT | | | | S | | **Sb** | **01 10 02.3** | **+0.1** |
| | baz=122 | | | | | | | |
| **EAST** | **Anshuo** | **0.62** | **185** | ⇑*i* P | | **Pg** | **01 09 51.6** | **-2.3** |
| | baz=170 | | | | | | | |
| EAST | | | | *e*S | | **Sg** | **01 09 59.5** | **-2.7** |
| | baz=170 | | | | | | | |
| **EHY** | **Hungye** | **0.63** | **37** | ⇑*i* P | | **Pg** | **01 09 51.5** | **-2.5** |
| | baz=42 | | | | | | | |
| EHY | | | | *e*S | | **Sg** | **01 10 00.1** | **-2.2** |
| | baz=42 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.63** | **273** | ⇑*e*P | | **Pg** | **01 09 53.5** | **-0.5** |
| | baz=272 | | | | | | | |
| TAI1 | | | | *e*S | | **Sn** | **01 10 05.2** | **-0.2** |
| | baz=272 | | | | | | | |
| **TAW** | **Tawu** | **0.65** | **181** | *e*P | | **Pg** | **01 09 52.2** | **-2.1** |
| | baz=177 | | | | | | | |
| **CHN2** | **Minshiung** | **0.66** | **323** | *e*P | | **Pg** | **01 09 53.3** | **-1.3** |
| | baz=325 | | | | | | | |
| CHN2 | | | | S | | **Sg** | **01 10 03.1** | **-0.2** |
| | baz=325 | | | | | | | |
| **CHY** | **Chiayi** | **0.66** | **318** | *e*P | | **Pg** | **01 09 53.0** | **-1.6** |
| | baz=320 | | | | | | | |
| CHY | | | | *e*S | | **Sg** | **01 10 03.2** | **-0.2** |
| | baz=320 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.66** | **182** | *e*P | | **Pg** | **01 09 52.6** | **-2.1** |
| | baz=178 | | | | | | | |
| **HGSD** | **Ruisui** | **0.68** | **44** | ⇑*i* P | | **Pg** | **01 09 53.3** | **-1.7** |
| | baz=41 | | | | | | | |
| HGSD | | | | S | | **Sg** | **01 10 04.0** | **0.0** |
| | baz=41 | | | | | | | |
| **ICHU** | **Yijhu** | **0.68** | **301** | *e*P | | **Pg** | **01 09 53.3** | **-1.7** |
| | baz=303 | | | | | | | |
| ICHU | | | | *e*S | | **Sb** | **01 10 04.2** | **+0.1** |
| | baz=303 | | | | | | | |
| **SCLT** | **Jiali** | **0.68** | **284** | *e*P | | **Pg** | **01 09 54.4** | **-0.6** |
| | baz=299 | | | | | | | |
| SCLT | | | | S | | **Sn** | **01 10 05.5** | **-1.1** |
| | baz=299 | | | | | | | |
| **SCZT** | **Fangliau** | **0.69** | **203** | ⇑*i* P | | **Pg** | **01 09 52.4** | **-2.7** |
| | baz=189 | | | | | | | |
| SCZT | | | | *e*S | | **Sg** | **01 10 01.3** | **-2.9** |
| | baz=189 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.70** | **232** | *e*P | | **Pb** | **01 09 55.0** | **-0.5** |
| | baz=219 | | | | | | | |
| **CHN8** | **Yiju** | **0.73** | **298** | *e*P | | **Pb** | **01 09 53.9** | **-1.9** |
| | baz=300 | | | | | | | |
| CHN8 | | | | S | | **Sg** | **01 10 06.2** | **+0.7** |
| | baz=300 | | | | | | | |
| **WGK** | **Gukeng** | **0.75** | **335** | ⇑P | | **Pb** | **01 09 55.0** | **-1.2** |
| | baz=338 | | | | | | | |
| WGK | | | | *i* S | | **Sb** | **01 10 06.1** | **0.0** |
| | baz=338 | | | | | | | |
| **WDLH** | **Douliu** | **0.76** | **333** | ⇑*e*P | | **Pb** | **01 09 55.3** | **-1.1** |
| | baz=336 | | | | | | | |
| WDLH | | | | S | | **Sg** | **01 10 07.0** | **+0.4** |
| | baz=336 | | | | | | | |
| **VWDT** | **VWDT** | **0.77** | **16** | P | | **Pb** | **01 09 53.7** | **-2.9** |
| | baz=17 | | | | | | | |
| VWDT | | | | *e*S | | **Sb** | **01 10 06.6** | **-0.3** |
| | baz=17 | | | | | | | |
| **SSLB** | **Suanglung** | **0.78** | **3** | Pg | | **Pb** | **01 09 53.7** | **-3.1** |
| SSLB | | | | Sg | | **Sb** | **01 10 04.2** | **-2.8** |
| **SSLB** | **Suanglung** | **0.78** | **3** | ⇑*i* P | | **Pb** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WJS** | **Zhushan** | **0.83** | **348** | ⇑ | *i* | P | **Pb** | **01 09 56.2** | **-1.4** |
| | baz=1.0 | | | | | | | | |
| WJS | | | | | | S | **Sb** | **01 10 08.6** | **+0.2** |
| | baz=1.0 | | | | | | | | |
| **WTK** | **Tuku** | **0.83** | **325** | | *e* | P | **Pb** | **01 09 56.1** | **-1.5** |
| | baz=328 | | | | | | | | |
| WTK | | | | | *e* | S | **Sg** | **01 10 08.8** | **0.0** |
| | baz=328 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.87** | **359** | ⇑ | *i* | P | **Pb** | **01 09 56.1** | **-2.3** |
| | baz=12 | | | | | | | | |
| SMLT | | | | | *e* | S | **Sg** | **01 10 10.5** | **+0.3** |
| | baz=12 | | | | | | | | |
| **WNT** | **Mingjian** | **0.89** | **347** | | *i* | P | **Pb** | **01 09 57.5** | **-1.2** |
| | baz=335 | | | | | | | | |
| WNT | | | | | | S | **Sb** | **01 10 10.1** | **-0.2** |
| | baz=335 | | | | | | | | |
| **WSF** | **Szhu** | **0.89** | **315** | ⇑ | | P | **Pb** | **01 09 57.0** | **-1.6** |
| | baz=318 | | | | | | | | |
| WSF | | | | | | S | **Sb** | **01 10 09.9** | **-0.3** |
| | baz=318 | | | | | | | | |
| **TYC** | **Yuchr** | **0.90** | **357** | ⇑ | *i* | P | **Pb** | **01 09 56.8** | **-1.9** |
| | baz=8.0 | | | | | | | | |
| TYC | | | | | *i* | S | **Sg** | **01 10 10.7** | **-0.1** |
| | baz=8.0 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.91** | **40** | | *e* | P | **Pb** | **01 09 57.6** | **-1.3** |
| | baz=43 | | | | | | | | |
| **WNT1** | **Nantou City** | **0.92** | **347** | | *e* | P | **Pb** | **01 09 58.1** | **-1.1** |
| | baz=335 | | | | | | | | |
| WNT1 | | | | | *e* | S | **Sg** | **01 10 11.7** | **0.0** |
| | baz=335 | | | | | | | | |
| **ESL** | **Shilin** | **0.94** | **31** | | *e* | P | **Pb** | **01 09 57.3** | **-2.1** |
| | baz=48 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.98** | **184** | | *e* | P | **Pb** | **01 09 58.7** | **-1.4** |
| | baz=181 | | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.00** | **342** | | *e* | P | **Pb** | **01 09 59.3** | **-1.1** |
| | baz=345 | | | | | | | | |
| WYL | | | | | | S | **Sb** | **01 10 13.4** | **+0.1** |
| | baz=345 | | | | | | | | |
| **WUSB** | **Renai** | **1.00** | **11** | ⇑ | *e* | P | **Pb** | **01 09 57.7** | **-2.9** |
| | baz=14 | | | | | | | | |
| WUSB | | | | | *e* | S | **Sb** | **01 10 13.7** | **+0.2** |
| | baz=14 | | | | | | | | |
| **WPL** | **Puli Township** | **1.00** | **3** | | *e* | P | **Pb** | **01 09 57.8** | **-2.8** |
| | baz=14 | | | | | | | | |
| WPL | | | | | *e* | S | **Sb** | **01 10 13.3** | **-0.2** |
| | baz=14 | | | | | | | | |
| **HEN** | **Hengchun** | **1.01** | **189** | | *e* | P | **Pb** | **01 09 59.6** | **-1.0** |
| | baz=169 | | | | | | | | |
| **WMLT** | **Mailiao** | **1.01** | **322** | | *e* | P | **Pb** | **01 09 59.2** | **-1.5** |
| | baz=324 | | | | | | | | |
| WMLT | | | | | *e* | S | **Sb** | **01 10 13.5** | **-0.2** |
| | baz=324 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.02** | **331** | | *e* | P | **Pb** | **01 09 59.3** | **-1.4** |
| | baz=334 | | | | | | | | |
| WRL | | | | | *e* | S | **Sb** | **01 10 13.0** | **-0.8** |
| | baz=334 | | | | | | | | |
| **DPDB** | **Guoxing** | **1.02** | **1** | | *e* | P | **Pb** | **01 09 58.9** | **-2.0** |
| | baz=13 | | | | | | | | |
| DPDB | | | | | | S | **Sb** | **01 10 14.5** | **+0.4** |
| | baz=13 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.03** | **326** | | *e* | P | **Pb** | **01 09 59.9** | **-1.1** |
| | baz=329 | | | | | | | | |
| WTCT | | | | | *i* | S | **Sb** | **01 10 14.0** | **-0.3** |
| | baz=329 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.05** | **0** | | *e* | P | **Pb** | **01 09 57.7** | **-3.6** |
| | baz=12 | | | | | | | | |
| WCS | | | | | *e* | S | **Sb** | **01 10 12.9** | **-1.8** |
| | baz=12 | | | | | | | | |
| **WWF** | **Wufeng** | **1.05** | **349** | | *e* | P | **Pb** | **01 10 00.4** | **-0.9** |
| | baz=338 | | | | | | | | |
| WWF | | | | | | S | **Sg** | **01 10 15.5** | **-0.2** |
| | baz=338 | | | | | | | | |
| **SNW** | **Nanwan** | **1.05** | **188** | | *e* | P | **Pn** | **01 10 01.8** | **+0.2** |
| | baz=185 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.06** | **185** | | *e* | P | **Pb** | **01 10 00.9** | **-0.6** |
| | baz=182 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.06** | **185** | | *e* | P | **Pb** | **01 10 00.5** | **-1.1** |
| | baz=182 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.07** | **36** | | *e* | P | **Pb** | **01 10 00.7** | **-0.9** |
| | baz=48 | | | | | | | | |
| TEYL | | | | | | S | **Sg** | **01 10 17.6** | **+1.4** |
| | baz=48 | | | | | | | | |
| **CHGB** | **Renai** | **1.08** | **13** | | *e* | P | **Pb** | **01 09 58.7** | **-3.2** |
| | baz=25 | | | | | | | | |
| **ETM** | **Tongmen** | **1.09** | **29** | | *e* | P | **Pb** | **01 09 60.0** | **-2.1** |
| | baz=38 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.10** | **180** | | *e* | P | **Pb** | **01 10 01.6** | **-0.6** |
| | baz=159 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.12** | **343** | | *e* | P | **Pn** | **01 10 00.9** | **-1.5** |
| | baz=346 | | | | | | | | |
| WCHH | | | | | *e* | S | **Sn** | **01 10 17.1** | **-0.3** |
| | baz=346 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.13** | **148** | | *e* | P | **Pn** | **01 09 59.5** | **-3.2** |
| | baz=146 | | | | | | | | |
| **TCU** | **Taichung** | **1.16** | **349** | | *e* | P | **Pn** | **01 10 02.3** | **-0.8** |
| | baz=339 | | | | | | | | |
| **HWA** | **Hwalien** | **1.16** | **33** | | *e* | P | **Pn** | **01 10 01.7** | **-1.3** |
| | baz=45 | | | | | | | | |
| HWA | | | | | *e* | S | **Sg** | **01 10 19.8** | **+0.5** |
| | baz=45 | | | | | | | | |
| **WDGT** | **Dungji** | **1.18** | **283** | | *e* | P | **Pn** | **01 10 01.3** | **-2.0** |
| | baz=284 | | | | | | | | |
| WDGT | | | | | *i* | S | **Sb** | **01 10 17.4** | **-1.1** |
| | baz=284 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.18** | **148** | | *e* | P | **Pn** | **01 09 58.6** | **-4.7** |
| | baz=146 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **16** | | *e* | P | **Pn** | **01 10 00.7** | **-3.0** |
| | baz=10.0 | | | | | | | | |
| WHF | | | | | *e* | S | **Sg** | **01 10 20.2** | **+0.1** |
| | baz=10.0 | | | | | | | | |
| **TWD** | **Chiawan** | **1.24** | **30** | | *e* | P | **Pn** | **01 10 02.6** | **-1.6** |
| | baz=22 | | | | | | | | |
| TWD | | | | | | S | **Sn** | **01 10 20.9** | **+0.3** |
| | baz=22 | | | | | | | | |
| **TDCB** | **Techi** | **1.26** | **10** | ⇑ | *e* | P | **Pn** | **01 10 02.2** | **-2.4** |
| | baz=24 | | | | | | | | |
| TDCB | | | | | *e* | S | **Sg** | **01 10 22.1** | **-0.5** |
| | baz=24 | | | | | | | | |
| **TWT** | **Tachien** | **1.27** | **11** | | *e* | P | **Pn** | **01 10 02.6** | **-2.1** |
| | baz=14 | | | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **2** | | *e* | P | **Pn** | **01 10 03.6** | **-1.0** |
| | baz=11 | | | | | | | | |
| WHP | | | | | *e* | S | **Sg** | **01 10 22.3** | **-0.3** |
| | baz=11 | | | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **14** | | *e* | P | **Pn** | **01 10 02.3** | **-2.6** |
| | baz=15 | | | | | | | | |
| FUSS | | | | | *e* | S | **Sg** | **01 10 23.1** | **+0.2** |
| | baz=15 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.31** | **24** | | *e* | P | **Pn** | **01 10 03.8** | **-1.3** |
| | baz=45 | | | | | | | | |
| **ETL** | **Fush Village** | **1.32** | **30** | | *e* | P | **Pn** | **01 10 04.7** | **-0.6** |
| | baz=31 | | | | | | | | |
| ETL | | | | | *e* | S | **Sb** | **01 10 22.8** | **+0.1** |
| | baz=31 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.32** | **28** | | | Pn | **Pn** | **01 10 03.5** | **-1.8** |
| **NACB** | **Ninganchiao** | **1.32** | **28** | ⇑ | | P | **Pn** | **01 10 03.5** | **-1.8** |
| | baz=45 | | | | | | | | |
| NACB | | | | | *e* | S | **Sn** | **01 10 22.5** | **0.0** |
| | baz=45 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.33** | **293** | | *e* | P | **Pn** | **01 10 03.1** | **-2.2** |
| | baz=294 | | | | | | | | |
| PHUB | | | | | | S | **Sn** | **01 10 20.5** | **-2.2** |
| | baz=294 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.34** | **355** | | *e* | P | **Pn** | **01 10 05.6** | **0.0** |
| | baz=358 | | | | | | | | |
| TWQ1 | | | | | *e* | S | **Sg** | **01 10 24.6** | **-0.4** |
| | baz=358 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.36** | **350** | | *e* | P | **Pn** | **01 10 06.2** | **+0.4** |
| | baz=341 | | | | | | | | |
| WDJ | | | | | | S | **Sg** | **01 10 25.8** | **+0.3** |
| | baz=341 | | | | | | | | |
| **PNG** | **Penghu** | **1.36** | **294** | ⇑ | | P | **Pn** | **01 10 03.6** | **-2.2** |
| | baz=296 | | | | | | | | |
| PNG | | | | | *i* | S | **Sn** | **01 10 21.8** | **-1.7** |
| | baz=296 | | | | | | | | |
| **VCHM** | **Qimei** | **1.38** | **279** | | *e* | P | **Pn** | **01 10 03.9** | **-2.1** |
| | baz=293 | | | | | | | | |
| VCHM | | | | | *e* | S | **Sn** | **01 10 21.9** | **-2.0** |
| | baz=293 | | | | | | | | |
| **NSY** | **Sanyi** | **1.41** | **355** | ⇑ | *e* | P | **Pn** | **01 10 06.8** | **+0.2** |
| | baz=358 | | | | | | | | |
| NSY | | | | | | S | **Sg** | **01 10 27.2** | **0.0** |
| | baz=358 | | | | | | | | |
| **NNSB** | **Datong** | **1.48** | **17** | ⇑ | *e* | P | **Pn** | **01 10 06.2** | **-1.4** |
| | baz=18 | | | | | | | | |
| NNSB | | | | | *e* | S | **Sg** | **01 10 29.0** | **-0.5** |
| | baz=18 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.49** | **16** | | *e* | P | **Pn** | **01 10 06.4** | **-1.4** |
| | baz=17 | | | | | | | | |
| NNS | | | | | *e* | S | **Sg** | **01 10 29.2** | **-0.6** |
| | baz=17 | | | | | | | | |
| **EHP** | **Heping Village** | **1.51** | **30** | | *e* | P | **Pn** | **01 10 07.3** | **-0.5** |
| | baz=44 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.53** | **356** | | *e* | P | **Pn** | **01 10 08.3** | **+0.1** |
| | baz=342 | | | | | | | | |
| NMLH | | | | | *e* | S | **Sb** | **01 10 29.6** | **+1.0** |
| | baz=342 | | | | | | | | |
| **ENA** | **Nanau** | **1.61** | **28** | | *e* | P | **Pn** | **01 10 08.1** | **-1.1** |
| | baz=28 | | | | | | | | |
| ENA | | | | | *e* | S | **Sb** | **01 10 30.4** | **-0.4** |
| | baz=28 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.62** | **3** | | *e* | P | **Pn** | **01 10 08.9** | **-0.5** |
| | baz=4.0 | | | | | | | | |
| NSTT | | | | | *e* | S | **Sb** | **01 10 31.3** | **+0.1** |
| | baz=4.0 | | | | | | | | |
| **LATG** | **Datong** | **1.62** | **20** | ⇑ | *i* | P | **Pn** | **01 10 09.4** | **-0.2** |
| | baz=35 | | | | | | | | |
| LATG | | | | | | S | **Sb** | **01 10 32.0** | **+0.6** |
| | baz=35 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.63** | **7** | ⇑ | *e* | P | **Pn** | **01 10 09.8** | **+0.2** |
| | baz=7.0 | | | | | | | | |
| NFF | | | | | *e* | S | **Sb** | **01 10 32.2** | **+0.6** |
| | baz=7.0 | | | | | | | | |
| **LIOB** | **Emei** | **1.64** | **3** | | *e* | P | **Pn** | **01 10 09.8** | **+0.2** |
| | baz=4.0 | | | | | | | | |
| LIOB | | | | | *e* | S | **Sg** | **01 10 33.2** | **-1.2** |
| | baz=4.0 | | | | | | | | |
| **EWUT** | **Wuta** | **1.64** | **29** | ⇑ | *e* | P | **Pn** | **01 10 09.4** | **-0.2** |
| | baz=45 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.68** | **19** | | *e* | P | **Pn** | **01 10 10.2** | **0.0** |
| | baz=19 | | | | | | | | |
| NDT | | | | | *e* | S | **Sg** | **01 10 35.1** | **-0.8** |
| | baz=19 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.71** | **14** | | *e* | P | **Pn** | **01 10 10.3** | **-0.4** |
| | baz=14 | | | | | | | | |
| YHNB | | | | | | S | **Sb** | **01 10 34.4** | **+0.5** |
| | baz=14 | | | | | | | | |
| **NSK** | **Sanguang** | **1.71** | **14** | | *e* | P | **Pn** | **01 10 10.3** | **-0.5** |
| | baz=13 | | | | | | | | |
| NSK | | | | | | S | **Sb** | **01 10 34.1** | **+0.2** |
| | baz=13 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.73** | **20** | | | P | **Pn** | **01 10 11.5** | **+0.6** |
| | baz=34 | | | | | | | | |
| ENTT | | | | | *e* | S | **Sb** | **01 10 34.9** | **+0.4** |
| | baz=34 | | | | | | | | |
| **HSN1** | **Hsinchu** | **1.77** | **3** | | *e* | P | **Pb** | **01 10 13.4** | **-0.2** |
| | baz=350 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.78** | **2** | | *e* | P | **Pn** | **01 10 11.8** | **+0.3** |
| | baz=4.0 | | | | | | | | |
| SBCB | | | | | | S | **Sb** | **01 10 36.4** | **+0.6** |
| | baz=4.0 | | | | | | | | |
| **NDS** | **Dongshan** | **1.78** | **24** | ⇑ | | P | **Pn** | **01 10 12.0** | **+0.4** |
| | baz=38 | | | | | | | | |
| NDS | | | | | *e* | S | **Sg** | **01 10 37.7** | **-1.4** |
| | baz=38 | | | | | | | | |
| **HSN** | **Hsinchu** | **1.79** | **2** | | *e* | P | **Pb** | **01 10 14.3** | **+0.4** |
| | baz=4.0 | | | | | | | | |
| HSN | | | | | *e* | S | **Sb** | **01 10 37.6** | **+1.5** |
| | baz=4.0 | | | | | | | | |
| **TWC** | **Suao** | **1.81** | **28** | | *e* | P | **Pn** | **01 10 12.2** | **+0.1** |
| | baz=27 | | | | | | | | |
| TWC | | | | | *e* | S | **Sb** | **01 10 36.9** | **+0.1** |
| | baz=27 | | | | | | | | |
| **TWE** | **Neicheng** | **1.84** | **22** | ⇑ | *e* | P | **Pn** | **01 10 13.2** | **+0.7** |
| | baz=35 | | | | | | | | |
| TWE | | | | | | S | **Sb** | **01 10 38.3** | **+0.7** |
| | baz=35 | | | | | | | | |
| **NWLT** | **Wulai** | **1.84** | **17** | ⇑ | *e* | P | **Pn** | **01 10 12.8** | **+0.3** |
| | baz=16 | | | | | | | | |
| NWLT | | | | | *e* | S | **Sb** | **01 10 38.3** | **+0.6** |
| | baz=16 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.85** | **19** | ⇑ | *e* | P | **Pn** | **01 10 13.2** | **+0.5** |
| | baz=18 | | | | | | | | |
| FUSB | | | | | *e* | S | **Sb** | **01 10 37.5** | **-0.5** |
| | baz=18 | | | | | | | | |
| **ILA** | **Ilan** | **1.91** | **24** | | *e* | P | **Pb** | **01 10 15.1** | **-0.9** |
| | baz=41 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.97** | **7** | | *e* | P | **Pb** | **01 10 16.5** | **-0.5** |
| | baz=13 | | | | | | | | |
| **NCU** | **National Centr** | **1.97** | **7** | | *e* | P | **Pb** | **01 10 16.3** | **-0.8** |
| | baz=13 | | | | | | | | |
| **NHW** | **Xinwu Township** | **2.00** | **4** | | *e* | P | **Pn** | **01 10 14.2** | **-0.4** |
| | baz=8.0 | | | | | | | | |
| **NTY** | **Taoyuan** | **2.02** | **10** | | *e* | P | **Pb** | **01 10 18.2** | **+0.4** |
| | baz=16 | | | | | | | | |
| **NTC** | **Toucheng** | **2.02** | **24** | ⇑ | *e* | P | **Pn** | **01 10 16.3** | **+1.4** |
| | baz=43 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.03** | **16** | ⇑ | *e* | P | **Pb** | **01 10 17.5** | **-0.5** |
| | baz=15 | | | | | | | | |
| NHDH | | | | | *e* | S | **Sb** | **01 10 44.0** | **+1.1** |
| | baz=15 | | | | | | | | |
| **TATO** | **Taipei** | **2.03** | **15** | | | | **Pn** | **01 10 15.2** | **+0.1** |
| **TATO** | **Taipei** | **2.03** | **15** | ⇑ | *i* | P | **Pb** | **01 10 17.4** | **-0.7** |
| | baz=14 | | | | | | | | |
| TATO | | | | | *i* | S | **Sg** | **01 10 45.6** | **-1.4** |
| | baz=14 | | | | | | | | |
| **BACT** | **New Taipei Cit** | **2.04** | **14** | | *e* | P | **Pb** | **01 10 18.5** | **+0.3** |
| | baz=19 | | | | | | | | |
| **EGS** | | **2.06** | **27** | | *e* | P | **Pb** | **01 10 17.4** | **-1.1** |
| | baz=43 | | | | | | | | |
| **TWA** | **Mucha** | **2.06** | **17** | | *e* | P | **Pb** | **01 10 17.1** | **-1.5** |
| | baz=16 | | | | | | | | |
| TWA | | | | | *e* | S | **Sg** | **01 10 46.1** | **-1.8** |
| | baz=16 | | | | | | | | |
| **TAP** | **Taipei** | **2.10** | **15** | | *e* | P | **Pn** | **01 10 17.1** | **+1.2** |
| | baz=19 | | | | | | | | |
| **TAP1** | **Taipei** | **2.10** | **15** | | *e* | P | **Pb** | **01 10 18.4** | **-0.8** |
| TAP1 | | | | | | S | **Sb** | **01 10 45.9** | **+0.8** |
| **NHY** | **Taipei** | **2.11** | **16** | | *e* | P | **Pb** | **01 10 18.7** | **-0.8** |
| | baz=3.0 | | | | | | | | |
| **TIPB** | **Shuangxi** | **2.13** | **23** | | *e* | P | **Pn** | **01 10 17.5** | **+1.0** |
| | baz=36 | | | | | | | | |
| TIPB | | | | | *e* | S | **Sb** | **01 10 46.7** | **+0.8** |
| | baz=36 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.14** | **12** | | *e* | P | **Pb** | **01 10 18.5** | **-1.4** |
| | baz=12 | | | | | | | | |
| TWS1 | | | | | *e* | S | **Sb** | **01 10 47.4** | **+1.3** |
| | baz=12 | | | | | | | | |
| **NTST** | **Danshui** | **2.21** | **13** | | *e* | P | **Pb** | **01 10 19.4** | **-1.6** |
| | baz=13 | | | | | | | | |
| NTST | | | | | *e* | S | **Sb** | **01 10 49.0** | **+1.0** |
| | baz=13 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.21** | **21** | | *e* | P | **Pn** | **01 10 18.2** | **+0.7** |
| | baz=42 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **2.21** | **21** | | *e* | P | **Pb** | **01 10 19.4** | **-1.7** |
| | baz=35 | | | | | | | | |
| WFSB | | | | | *e* | S | **Sb** | **01 10 48.9** | **+0.8** |
| | baz=35 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.22** | **26** | | *e* | P | **Pn** | **01 10 18.5** | **+0.8** |
| | baz=37 | | | | | | | | |
| TWB1 | | | | | *e* | S | **Sb** | **01 10 47.8** | **-0.8** |
| | baz=37 | | | | | | | | |
| **ANP** | **Anpu** | **2.24** | **14** | | *e* | P | **Pn** | **01 10 18.1** | **+0.1** |
| | baz=19 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.26** | **23** | | *e* | P | **Pn** | **01 10 19.8** | **+1.5** |
| | baz=3.0 | | | | | | | | |
| SXI1 | | | | | *e* | S | **Sb** | **01 10 48.3** | **-1.4** |
| | baz=3.0 | | | | | | | | |
| **YM08** | **YM08** | **2.26** | **16** | | *e* | P | **Pn** | **01 10 20.0** | **+1.8** |
| | baz=360 | | | | | | | | |
| YM08 | | | | | *e* | S | **Sb** | **01 10 50.8** | **+1.1** |
| | baz=360 | | | | | | | | |
| **TNOU** | **National Taiwa** | **2.28** | **20** | | *e* | P | **Pn** | **01 10 19.6** | **+1.2** |
| | baz=41 | | | | | | | | |
| **TWY** | **Chenhua** | **2.35** | **15** | | *e* | P | **Pb** | **01 10 22.1** | **-1.4** |
| | baz=2.0 | | | | | | | | |
| TWY | | | | | *e* | S | **Sb** | **01 10 52.0** | **-0.1** |
| | baz=2.0 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.36** | **52** | | | P | **Pn** | **01 10 18.9** | **-0.6** |
| JYNG | | | | | | S | **Sn** | **01 10 49.1** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **2.41** | **53** | | | P | **Pn** | **01 10 20.0** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **2.41** | **53** | | | P | **Pn** | **01 10 19.8** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **2.41** | **53** | | | Pn | **Pn** | **01 10 19.8** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **2.41** | **53** | | *e* | P | **Pn** | **01 10 20.0** | **-0.3** |
| | baz=51 | | | | | | | | |
| YOJ | | | | | *e* | S | **Sn** | **01 10 49.4** | **0.0** |
| | baz=51 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.60** | **321** | | *e* | P | **Pn** | **01 10 21.1** | **-1.8** |
| | baz=323 | | | | | | | | |
| **KNM** | **Kinmen** | **2.67** | **302** | | *e* | P | **Pn** | **01 10 23.4** | **-0.4** |
| | baz=301 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.73** | **303** | | | Pn | **Pn** | **01 10 24.1** | **-0.5** |
| **KNMB** | **Chin-men Tao** | **2.73** | **303** | | *e* | P | **Pn** | **01 10 22.6** | **-2.0** |
| | baz=304 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **2.82** | **22** | | *e* | P | **Pn** | **01 10 25.7** | **-0.2** |
| | baz=41 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.86** | **68** | | | P | **Pn** | **01 10 25.5** | **-0.9** |
| HATJ | | | | | | S | **Sn** | **01 11 00.7** | **+0.3** |
| **QZH** | **Quanzhou** | **2.87** | **313** | ⇑ | *i* | Pn | **Pn** | **01 10 25.0** | **-1.5** |
| QZH | | | | | | Sn | **Sn** | **01 10 57.8** | **-2.8** |
| QZH | | | | | | smax | smax | | |
| | comp=N,2μm,0.8s | | | | | | | | |
| QZH | | | | | | smax | smax | | |
| | comp=E,2μm,0.9s | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.91** | **62** | | | P | **Pn** | **01 10 26.4** | **-0.7** |
| **ZPLA** | **Ao Xicun** | **3.04** | **288** | | *e* | P | **Pn** | **01 10 27.2** | **-1.8** |
| | baz=288 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **3.10** | **66** | | | P | **Pn** | **01 10 28.9** | **-0.8** |
| **MATB** | **Ma-tsu** | **3.25** | **345** | | *e* | P | **Pn** | **01 10 30.0** | **-1.8** |
| | baz=351 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.26** | **65** | | | P | **Pn** | **01 10 30.7** | **-1.2** |
| JIJ | | | | | | S | **Sn** | **01 11 08.3** | **-2.0** |
| **MSUT** | **Lienchiang** | **3.27** | **344** | | *e* | P | **Pn** | **01 10 30.8** | **-1.3** |
| | baz=351 | | | | | | | | |
| **AXDP** | **Jialang** | **3.28** | **306** | | *e* | P | **Pn** | **01 10 30.8** | **-1.5** |
| | baz=307 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.49** | **63** | | | P | **Pn** | **01 10 33.9** | **-1.2** |
| JISG | | | | | | S | **Sn** | **01 11 16.5** | **+0.5** |
| **MHZQ** | **Yeshan** | **3.52** | **331** | | *e* | P | **Pn** | **01 10 34.4** | **-1.2** |
| | baz=335 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.68** | **344** | ⇑ | *e* | P | **Pn** | **01 10 36.8** | **-0.9** |
| | baz=350 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.96** | **351** | | *e* | P | **Pn** | **01 10 40.1** | **-1.4** |
| | baz=358 | | | | | | | | |
| **JIRB** | **Irabujima** | **4.30** | **64** | | | P | **Pn** | **01 10 45.7** | **-0.6** |
| JIRB | | | | | | S | **Sn** | **01 11 35.6** | **-0.5** |
| **JMJ** | **Miyako jima 2** | **4.40** | **65** | | *e* | P | **Pn** | **01 10 47.4** | **-0.2** |
| | baz=68 | | | | | | | | |
| **JMJ2** | **Miyako jima3** | **4.40** | **66** | | | P | **Pn** | **01 10 46.9** | **-0.7** |
| JMJ2 | | | | | | S | **Sn** | **01 11 38.3** | **-0.1** |
| **JIKM** | **Ikemajima** | **4.40** | **63** | | | P | **Pn** | **01 10 47.6** | **-0.1** |
| **SXFK** | **Yanhouchang** | **4.50** | **319** | | *e* | P | **Pn** | **01 10 47.9** | **-1.1** |
| | baz=320 | | | | | | | | |
| **VDOS** | **Pratas Island** | **4.51** | **240** | | *e* | P | **Pn** | **01 10 49.4** | **+0.3** |
| | baz=243 | | | | | | | | |
| **CVP** | **Callao Caves** | **5.34** | **171** | | *e* | P | Pn | 01 10 55.5 | -5.2 |
| **HKPS** | **Hong Kong Po S** | **6.29** | **265** | | | Pn | **Pn** | **01 11 12.3** | **-1.4** |
| **HKPS** | **Hong Kong Po S** | **6.29** | **265** | | *e* | P | **Pn** | **01 11 12.8** | **-0.8** |
| | baz=267 | | | | | | | | |
| **GZH** | **Guangzhou** | **6.97** | **272** | | | P | **Pn** | **01 11 19.3** | **-3.6** |
| GZH | | | | | | S | **Sn** | **01 12 36.4** | **-5.4** |
| GZH | | | | | | smax | smax | | |
| | comp=N,1μm,1.0s | | | | | | | | |
| GZH | | | | | | smax | smax | | |
| | comp=E,900nm,1.1s | | | | | | | | |
| **JOW** | **Kunigami** | **7.69** | **59** | | | Pn | **Pn** | **01 11 30.9** | **-2.0** |
| | 5.5nm,0.3s,baz=127,slow=20,SNR=16 | | | | | | | | |
| JOW | | | | | | Sn | **Sn** | **01 12 57.7** | **-2.0** |
| | 1.2nm,0.3s,baz=324,slow=28,SNR=1.5 | | | | | | | | |
| **JOW** | **Kunigami** | **7.69** | **59** | | *e* | P | **Pn** | **01 11 30.6** | **-2.3** |
| | baz=73 | | | | | | | | |
| **SSE** | **Sheshan** | **8.06** | **2** | | | P | **Pn** | **01 11 39.5** | **+1.6** |
| SSE | | | | | | S | **Sn** | **01 13 11.4** | **+2.7** |
| SSE | | | | | | pmax | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | | | |
| SSE | | | | | | pmax | pmax | | |
| | comp=Z,130nm,4.0s | | | | | | | | |
| SSE | | | | | | smax | smax | | |
| | comp=N,170nm,1.1s | | | | | | | | |
| SSE | | | | | | smax | smax | | |
| | comp=E,210nm,1.0s | | | | | | | | |
| **CNSH** | **ChangSha** | **8.85** | **307** | ⇓ | | P | Pn | 01 11 38.9 | -10 |
| CNSH | | | | | | S | Sn | 01 13 12.8 | -15 |
| CNSH | | | | | | smax | smax | | |
| | comp=N,860nm,1.3s | | | | | | | | |
| CNSH | | | | | | smax | smax | | |
| | comp=E,600nm,1.0s | | | | | | | | |
| **LQP** | **Lukban** | **8.87** | **176** | ⇑ | *e* | P | **Pn** | **01 11 50.8** | **+1.6** |
| **NJ2** | **Nanjing** | **9.19** | **349** | ⇑ | | P | **Pn** | **01 11 52.1** | **-1.3** |
| NJ2 | | | | | | pP | | 01 11 55.3 | |
| NJ2 | | | | | | sP | | 01 11 58.1 | |
| NJ2 | | | | | | S | **Sn** | **01 13 36.8** | **+0.3** |
| NJ2 | | | | | | sS | | 01 13 41.3 | |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=E,56nm,1.1s | | | | | | | | |
| NJ2 | | | | | | smax | smax | | |
| | comp=E,480nm,1.2s | | | | | | | | |
| NJ2 | | | | | | smax | smax | | |
| | comp=E,420nm,1.5s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=E,6μm,4.9s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=E,4μm,6.1s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=E,4μm,6.2s | | | | | | | | |
| **WHN** | **Wuhan** | **9.52** | **323** | ⇑ | | P | **Pn** | **01 11 57.3** | **-0.6** |
| WHN | | | | | | S | **Sn** | **01 13 44.0** | **-0.6** |
| WHN | | | | | | LR | LR | | |
| | comp=E,14μm,6.6s | | | | | | | | |
| WHN | | | | | | LR | LR | | |
| | comp=E,8μm,6.6s | | | | | | | | |
| WHN | | | | | | LR | LR | | |
| | comp=E,12μm,7.4s | | | | | | | | |
| **GULI** | **GuiLin** | **9.89** | **285** | | *e* | P | **Pn** | **01 12 05.1** | **+2.0** |
| GULI | | | | | | LR | LR | | |
| | comp=E,2μm,7.0s | | | | | | | | |
| GULI | | | | | | LR | LR | | |
| | comp=E,4μm,7.1s | | | | | | | | |
| GULI | | | | | | LR | LR | | |
| | comp=E,4μm,6.5s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.06** | **251** | | | P | **Pn** | **01 12 20.6** | **+1.4** |
| QIZ | | | | | | S | **Sn** | **01 14 26.8** | **+4.2** |
| QIZ | | | | | | LR | LR | | |
| | comp=E,7μm,13.9s | | | | | | | | |
| QIZ | | | | | | LR | LR | | |
| | comp=E,6μm,13.7s | | | | | | | | |
| QIZ | | | | | | LR | LR | | |
| | comp=E,7μm,12.7s | | | | | | | | |
| **JNU** | **Nakatsue** | **13.37** | **39** | | | Pn | **Pn** | **01 12 52.4** | **+1.7** |
| | baz=175,slow=6.0,SNR=2.2 | | | | | | | | |
| **GYA** | **Guiyang** | **13.39** | **288** | ⇑ | | P | **Pn** | **01 12 53.8** | **+2.7** |
| GYA | | | | | | S | **Sn** | **01 15 24.6** | **+4.9** |
| GYA | | | | | | pmax | pmax | | |
| | comp=E,19nm,1.0s | | | | | | | | |
| GYA | | | | | | pmax | pmax | | |
| | comp=E,110nm,5.0s | | | | | | | | |
| GYA | | | | | | LR | LR | | |
| | comp=E,5μm,7.0s | | | | | | | | |
| GYA | | | | | | LR | LR | | |
| | comp=E,3μm,8.2s | | | | | | | | |
| GYA | | | | | | LR | LR | | |
| | comp=E,4μm,8.6s | | | | | | | | |
| **TIA** | **Tai'an** | **13.56** | **347** | | | P | **Pn** | **01 12 56.8** | **+3.6** |
| TIA | | | | | | S | **Sn** | **01 15 30.4** | **+6.8** |
| TIA | | | | | | LR | LR | | |
| | comp=E,3μm,11.3s | | | | | | | | |
| TIA

comp=Z,86nm,1.1s
**HNS HongShan 15.31 341** ⇑P **Pn 01 13 18.8 +1.9**
HNS S **S 01 16 15.8 -6.6**
HNS pmax pmax
comp=Z,75nm,1.3s
HNS LR LR
comp=Z,2μm,13.1s
HNS LR LR
comp=Z,6μm,11.6s
HNS LR LR
comp=Z,4μm,12.3s
**KSAR Wonju Array Be 15.59 21** P **Pn 01 13 22.5 +1.9**
**KSAR Wonju Array Be 15.59 21** **Pn 01 13 22.5 +1.9**
**KSRS Korea Array 15.62 21** Pn **Pn 01 13 22.9 +2.0**
comp=Z,0.4nm,0.3s,baz=199,slow=12,SNR=28
KSRS LR LR 01 19 57.1
comp=Z,595nm,20.3s,baz=205,slow=40
**KS19 Wonju Array Si 15.64 21** Pn **Pn 01 13 20.7 -0.5**
**DL2 Dalian 15.86 2** P **P 01 13 29.9 +2.2**
DL2 S **S 01 16 29.5 -4.2**
DL2 pmax pmax
comp=Z,100nm,1.2s
DL2 pmax pmax
comp=Z,320nm,4.9s
DL2 LR LR
comp=N,2μm,9.2s
DL2 LR LR
comp=E,2μm,10.0s
DL2 LR LR
comp=Z,4μm,11.8s
**JHS Saijyo 16.01 39** Pn **Pn 01 13 25.7 -0.3**
**TIY Taiyuan 16.37 335** *e*P **P 01 13 33.9 +0.4**
TIY PP **sP 01 13 41.8 +0.4**
TIY pmax pmax
comp=Z,20nm,0.5s
TIY pmax pmax
comp=Z,340nm,4.0s
TIY LR LR
comp=Z,5μm,10.6s
TIY LR LR
comp=Z,3μm,9.3s
TIY LR LR
comp=Z,5μm,11.5s
**KMI Kunming 16.73 281** ⇓P **P 01 13 37.9 +0.2**
KMI sP pP 01 13 42.5 -0.5
KMI PP **sP 01 13 50.9 +5.2**
KMI S **Sn 01 16 45.4 +4.3**
KMI pmax pmax
comp=Z,5.0nm,1.0s
KMI pmax pmax
comp=Z,190nm,4.6s
KMI LR LR
comp=Z,1μm,12.1s
KMI LR LR
comp=Z,2μm,8.2s
KMI LR LR
comp=Z,1μm,11.1s
**CD2 Chengdu 17.18 301** P **P 01 13 42.8 +0.3**
CD2 S **Sn 01 16 52.9 +1.1**
CD2 pmax pmax
comp=Z,50nm,1.1s
CD2 pmax pmax
comp=Z,150nm,4.5s
CD2 LR LR
comp=Z,5μm,9.8s
CD2 LR LR
comp=Z,4μm,10.6s
**BJT Baijiatuau 17.43 348** P **Pn 01 13 44.2 +0.3**
BJT pmax pmax
comp=Z,92nm,1.4s
**BJT Baijiatuau 17.43 348** **Pn 01 13 44.2 +0.3**
**BJI Beijing 17.45 348** P **P 01 13 46.0 +0.7**
BJI pP **pP 01 13 49.1 -1.6**
BJI S **Sn 01 16 58.8 +0.8**
BJI pmax pmax
comp=Z,9.0nm,0.8s
BJI pmax pmax
comp=Z,530nm,7.1s
BJI LR LR
comp=Z,2μm,10.8s
**PZH PanZhiHua 17.75 285** P **P 01 13 51.0 +2.1**
PZH sP **sP 01 13 57.3 +0.4**
PZH PP **PnPn 01 14 04.3 +5.5**
PZH SS S 01 17 27.0 +14
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,260nm,5.9s
PZH LR LR
comp=Z,2μm,10.8s
PZH LR LR
comp=Z,2μm,9.8s
PZH LR LR
comp=Z,2μm,9.3s
**SPMM Sapulut 18.69 194** P **Pn 01 14 05.0 +5.4**
**JHJ Hachijo jima 2 19.44 55** P **P 01 14 07.5 +0.2**
comp=Z,3.6nm,0.3s,baz=234,slow=19,SNR=1.9
JHJ LR LR 01 22 08.4
comp=Z,372nm,18.1s,baz=320,slow=39
**HHC Hu-ho-hao-te 19.46 338** *e*P **Pn 01 14 10.4 +1.6**
HHC sP sP 01 14 17.0 +1.6
HHC S **S 01 17 50.3 +3.4**
HHC pmax pmax
comp=Z,32nm,1.1s
HHC pmax pmax
comp=Z,360nm,5.8s
HHC LR LR
comp=Z,2μm,13.7s
HHC LR LR
comp=Z,1μm,14.4s
HHC LR LR
comp=Z,3μm,15.0s
**JHJ2 Mitsune 19.46 55** P **P 01 14 04.7 -2.8**
**LZH Lanzhou 19.72 315** *e*P **Pn 01 14 13.1 +1.1**
LZH pP pP 01 14 20.3 +4.7
LZH sP sP 01 14 24.8 +6.4
LZH S **Sn 01 17 54.6 +1.4**
LZH pmax pmax
comp=Z,31nm,1.6s
LZH pmax pmax
comp=Z,460nm,4.1s
LZH LR LR
comp=Z,3μm,10.3s
LZH LR LR
comp=Z,2μm,9.8s
LZH LR LR
comp=Z,3μm,9.8s
**BTO Baotou 19.81 335** *e*P **Pn 01 14 14.8 +1.9**
BTO LR LR
comp=Z,13μm,12.4s
BTO LR LR
comp=Z,7μm,9.1s
**MAJO Matsushiro 20.14 44**⇑ *e*P Pn 01 14 18.5 +1.7
MAJO pmax pmax
comp=Z,43nm,1.0s
**MAT Matsushiro 20.14 44** P Pn 01 14 16.8 0.0
MAT S **S 01 18 01.2 +0.7**
**MJAR Matsushiro Arr 20.14 44** P **P 01 14 15.3 +0.4**
comp=Z,37nm,1.0s,baz=236,slow=7.9,SNR=36
MJAR LR LR 01 22 27.4
comp=Z,1μm,21.7s,baz=223,slow=38
**MJAR Matsushiro Arr 20.14 44** P **P 01 14 15.4 +0.4**
MJAR pmax pmax
comp=Z,63nm,1.2s
**MJAR Matsushiro Arr 20.14 44** P **P 01 14 15.4 +0.4**
MJAR IAmb IAmb 01 14 23.0
comp=Z,63nm,1.1s
**CMAR Chiang Mai Arr 21.03 262** P **P 01 14 26.6 +1.8**
comp=Z,3.1nm,0.7s,baz=68,slow=9.5,SNR=18
CMAR PcP **PcP 01 18 32.1 +0.5**
comp=Z,1.5nm,0.3s,baz=41,slow=1.0,SNR=6.1
CMAR LR LR 01 24 13.4
comp=Z,1μm,18.5s,baz=75,slow=41
**CMAR Chiang Mai Arr 21.03 262** *i* P **P 01 14 26.7 +2.0**
CMAR pmax pmax
comp=Z,3.0nm,0.6s
**CMAR Chiang Mai Arr 21.03 262** P **P 01 14 22.4 -2.3**
CMAR PcP **PcP 01 18 31.2 -0.3**
**CN2 Changchun 21.08 9** *e*P **P 01 14 24.9 -0.1**
CN2 *e*S **S 01 18 14.4 -4.5**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 pmax pmax
comp=Z,200nm,4.0s
CN2 LR LR
comp=Z,2μm,11.0s
CN2 LR LR
comp=Z,900nm,11.0s
CN2 LR LR
comp=Z,2μm,12.0s
**XLT XiLinHaoTe 21.22 350** *e*P **P 01 14 26.8 +0.2**
XLT pP pP 01 14 32.4 +0.3
XLT sP sP 01 14 34.3 -0.2
XLT S **S 01 18 20.3 -1.6**
XLT sS Sn 01 18 25.4 -3.6
XLT pmax pmax
comp=Z,59nm,1.2s
XLT pmax pmax
comp=Z,360nm,4.3s
XLT LR LR
comp=Z,2μm,16.9s
XLT LR LR
comp=Z,2μm,13.5s
**MSHR Mys Shultsa 21.30 21**⇓ *e*P **P 01 14 31.1 +3.7**
MSHR pmax pmax
comp=Z,36nm,1.0s
**TOLI2 Tolitoli 21.76 180** P **P 01 14 32.7 +0.1**
TOLI2 IAmb IAmb 01 14 43.2
comp=Z,74nm,1.3s
**VLA Vladivostok 22.03 22***de*P **P 01 14 37.9 +2.7**
VLA pmax pmax
comp=Z,49nm,1.3s
**SBUM Sibu 22.10 204** P **P 01 14 35.2 -1.0**
**SBUM Sibu 22.10 204** P **P 01 14 38.0 +1.8**
**MRSI Marisa 22.42 177** P **P 01 14 43.6 +4.0**
comp=Z,2μmcomp=Z,85nm,0.9s
**MPSI Mapaga 22.55 183** P **P 01 14 43.7 +2.7**
comp=Z,27nm,1.3s
**JMM Marumori 22.59 44** P **P 01 14 39.0 -2.3**
JMM IAmb IAmb 01 14 48.0
comp=Z,51nm,1.1s
**MDJ Mudanjiang 22.70 16** P **P 01 14 41.7 -0.7**
MDJ IAmb IAmb 01 14 49.2
comp=Z,38nm,1.1s
**MDJ Mudanjiang 22.70 16** P **P 01 14 42.1 -0.3**
MDJ pP pP 01 14 44.8 -3.1
MDJ sP sP 01 14 46.3 -4.0
MDJ PP **PnPn 01 15 06.4 0.0**
MDJ S **S 01 18 51.6 +1.5**
MDJ SS Sn 01 19 22.5 +18
MDJ pmax pmax
comp=Z,9.0nm,0.7s
MDJ pmax pmax
comp=Z,600nm,5.0s
MDJ LR LR
comp=Z,2μm,16.7s
MDJ LR LR
comp=Z,4μm,15.7s
MDJ LR LR
comp=Z,2μm,12.2s
**USA0B Ussuriysk Arra 23.02 21** P **P 01 14 45.6 -0.1**
USA0B pmax pmax
comp=Z,22nm,0.9s
**USA0B Ussuriysk Arra 23.02 21** P **P 01 14 45.6 -0.1**
**USRK Ussuriysk Ar. 23.02 21** P **P 01 14 45.1 -0.7**
comp=Z,18nm,0.8s,baz=188,slow=5.2,SNR=14
**USRK Ussuriysk Ar. 23.02 21** P **P 01 14 44.5 -1.2**
**USRK Ussuriysk Ar. 23.02 21** P **P 01 14 44.5 -1.2**
**BNX BinXian 23.29 12** ⇑P **P 01 14 51.1 +2.7**
BNX pP **sP 01 14 55.9 -0.5**
BNX sP **pP 01 14 57.6 +3.7**
BNX PP **PnPn 01 15 21.1 +6.7**
BNX S **S 01 18 59.5 -0.5**
BNX sS **pS 01 19 04.4 -1.7**
BNX pmax pmax
comp=Z,12nm,1.0s
BNX pmax pmax
comp=Z,380nm,7.2s
BNX LR LR
comp=Z,2μm,11.6s
BNX LR LR
comp=Z,2μm,11.0s
BNX LR LR
comp=Z,3μm,11.0s
**APSI Ampana 23.78 178** P **P 01 14 54.7 +1.2**
comp=Z,94nm,1.2s
**GTA Gaotai 24.26 317** ⇑P **P 01 14 58.3 +0.3**
GTA pP pP 01 15 03.6 -0.2
GTA sP sP 01 15 07.5 +1.3
GTA PcP **PcP 01 18 39.4 +1.4**
GTA sS sS 01 19 24.3 -0.8
GTA pmax pmax
comp=Z,24nm,1.5s
GTA pmax pmax
comp=Z,320nm,4.7s
GTA LR LR
comp=Z,920nm,12.7s
GTA LR LR
comp=Z,700nm,13.4s
GTA LR LR
comp=Z,800nm,12.4s
**MTKI Muara Teweh, K 24.51 195** P **P 01 15 04.8 +4.5**
comp=Z,36nm,0.4s
**STKI Sintang 24.58 203** P **P 01 15 05.9 +5.0**
**GOMU GeErMu 26.13 306** P **P 01 15 15.9 +0.7**
GOMU pP pP 01 15 20.5 -0.6
GOMU sP sP 01 15 22.3 -1.2
GOMU PcP **PcP 01 18 44.8 +2.3**
GOMU pmax pmax
comp=Z,2.0nm,0.8s
GOMU LR LR
comp=Z,1μm,10.3s
GOMU LR LR
comp=Z,2μm,11.3s
GOMU LR LR
comp=Z,2μm,11.6s
**HIA Hailar 26.23 358***d* iP **P 01 15 16.6 +1.0**
HIA pmax pmax
comp=Z,40nm,1.0s
**HIA Hailar 26.23 358** P **P 01 15 15.0 -0.6**
HIA IAmb IAmb 01 15 19.6
comp=Z,31nm,0.9s
**ERM Erimo 26.54 39**⇑ *e*P **P 01 15 19.2 +0.8**
ERM pmax pmax
comp=Z,24nm,0.9s
**IPM Ipoh 26.62 229** P **P 01 15 25.0 +5.6**
**ULN Ulaanbaatar 27.17 339**⇑ *e*P **P 01 15 24.2 0.0**
ULN pmax pmax
comp=Z,23nm,1.3s
**ULN Ulaanbaatar 27.17 339** P **P 01 15 24.0 -0.3**
**SONM Songino Array 27.36 338** P **P 01 15 25.1 -0.8**
comp=Z,2.7nm,0.8s,baz=157,slow=9.1,SNR=18
SONM ScP **ScP 01 22 25.3 +0.6**
comp=Z,0.7nm,0.9s,baz=140,slow=3.7,SNR=3.2
SONM LR LR 01 27 35.5
comp=Z,1μm,20.5s,baz=147,slow=39
**SONM Songino Array 27.36 338** P **P 01 15 24.1 -1.8**
SONM IAmb IAmb 01 15 32.9
comp=Z,20nm,1.1s
SONM ScP **ScP 01 22 24.8 +0.1**
**LSA Lhasa 27.44 290** P **P 01 15 29.3 +2.1**
LSA pP **sP 01 15 39.3 +3.8**
LSA S **S 01 20 10.0 +2.6**
LSA pmax pmax
comp=Z,18nm,1.7s
LSA pmax pmax
comp=Z,130nm,2.8s
LSA LR LR
comp=Z,710nm,10.3s
LSA LR LR
comp=Z,1μm,9.3s
LSA LR LR
comp=Z,940nm,15.7s
**KLR Kul'dur 27.54 15** P **P 01 15 27.2 -0.1**
comp=Z,7.5nm,0.9s,baz=237,slow=7.8,SNR=11
**KLR Kul'dur 27.54 15**⇓ *e*P **P 01 15 29.3 +1.9**
KLR pmax pmax
comp=Z,12nm,1.0s
**ASAJ Asahikawa 27.59 35** P **P 01 15 28.6 +0.7**
comp=Z,17nm,0.8s,baz=236,slow=18,SNR=6.6
ASAJ LR LR 01 26 56.8
comp=Z,1μm,20.5s,baz=235,slow=38
**KAPI Kappang 27.87 182** LR LR 01 28 38.5
comp=Z,198nm,19.5s,baz=37,slow=41
**PSI Prapat 29.28 230** P **P 01 15 43.8 +0.5**
comp=Z,13nm,1.0s,baz=15,slow=5.7,SNR=8.4
**RPSI Rantau Prapat 29.35 230** P **P 01 15 43.8 0.0**
**YSS Yuzh-Sakhalins 29.66 31** *e*P **P 01 15 48.7 +2.5**
YSS *e* 01 16 55.0
YSS *e*S **S 01 20 43.8 +2.7**
YSS pmax pmax
comp=Z,40nm,1.2s
**ZAK Zakamensk 30.60 338** *e*P **P 01 15 54.0 -0.7**
ZAK pmax pmax
comp=Z,5.0nm,1.2s
**ZEA Zeya 31.06 7** *e*P P 01 16 05.1 +6.6
ZEA *e*S **S 01 21 09.0 +6.1**
ZEA pmax pmax
comp=N,10.0nm,0.6s
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax
comp=Z,20nm,0.8s
ZEA smax smax
comp=N,200nm,13.2s
ZEA MLR MLR
comp=E,500nm,14.0s
ZEA MLR MLR
comp=N,900nm,10.0s
ZEA MLR MLR
comp=Z,800nm,13.0s
**IRK Irkutsk 31.86 341** *e*P **P 01 16 03.5 -2.2**
IRK pmax pmax
comp=Z,45nm,3.8s
**JAY Jayapura 31.88 140** LR LR 01 26 37.2
comp=Z,434nm,21.0s,baz=336,slow=32
**LEM Lembang 32.38 205** LR LR 01 30 50.0
comp=Z,124nm,18.0s,baz=42,slow=39
**BATI Baumata 33.12 175** P **P 01 16 15.9 -1.1**
comp=Z,30nm,0.3s,baz=308,slow=18,SNR=2.3
BATI LR LR 01 30 45.6
comp=Z,173nm,21.7s,baz=25,slow=38
**WMQ Urumqi 34.30 315** *e*P **P 01 16 31.3 +4.2**
WMQ sP sP 01 16 42.3 +6.9
WMQ PcP **PcP 01 19 03.3 +0.1**
WMQ pmax pmax
comp=Z,22nm,1.3s
WMQ pmax pmax
comp=Z,290nm,4.7s
WMQ LR LR
comp=Z,860nm,11.3s
WMQ LR LR
comp=Z,1μm,11.3s
WMQ LR LR
comp=Z,170nm,13.5s
**DGZ Jazzator, Alta 37.39 324**⇓ *e*P **P 01 16 56.2 +2.6**
DGZ pmax pmax
comp=Z,15nm,1.1s
**ZSN Zaisan 37.72 319** *e*P **P 01 16 58.1 +1.8**
**ZSN Zaisan 37.72 319** *e*P **P 01 16 58.1 +1.8**
baz=319
**MK31 Makanchi Array 39.02 317** *i* P **P 01 17 07.2 0.0**
MK31 pmax pmax
comp=Z,28nm,0.9s
**MK31 Makanchi Array 39.02 317** P **P 01 17 06.3 -0.9**
**MKAR Makanchi Array 39.02 317** P **P 01 17 07.7 +0.5**
comp=Z,4.8nm,0.8s,baz=114,slow=9.7,SNR=37
MKAR PcP **PcP 01 19 15.7 -1.6**
comp=Z,7.1nm,1.1s,baz=101,slow=6.0,SNR=6.3
**MKAR Makanchi Array 39.02 317** *i* P **P 01 17 08.1 +0.9**
MKAR pmax pmax
comp=Z,5.0nm,0.9s
**MKAR Makanchi Array 39.02 317** P **P 01 17 07.2 0.0**
MKAR **PcP 01 19 16.2 -1.1**
**MAKZ Makanchi 39.22 317** P **P 01 17 09.4 +0.5**
MAKZ pmax pmax
comp=Z,30nm,1.1s
**MAKZ Makanchi 39.22 317** P **P 01 17 09.4 +0.5**
MAKZ IAmb IAmb 01 17 18.7
comp=Z,30nm,1.1s
**YAK Yakutsk 39.46 6** *e*P **P 01 17 09.4 -1.3**
YAK pmax pmax
comp=Z,10.0nm,0.7s
**PDGK Podgornoye 39.65 311** *i* P **P 01 17 12.8 0.0**
PDGK pmax pmax
comp=Z,44nm,1.3s
**UZB Uzynbulak 39.93 310** *e*P **P 01 17 16.7 +1.6**
**UZB Uzynbulak 39.93 310** *e*P **P 01 17 16.7 +1.6**
baz=310
**KPKS Kokpek 40.26 311** *e*P **P 01 17 18.7 +1.0**
**KPKS Kokpek 40.26 311** *e*P **P 01 17 18.8 +1.0**
baz=311
**SATY Saty 40.34 310** *e*P **P 01 17 19.3 +0.9**
**SATY Saty 40.34 310** *e*P **P 01 17 19.4 +1.0**
baz=310
**TDK Taldyqorghan 40.91 313** *e*P **P 01 17 24.3 +1.4**
TDK pmax pmax
comp=Z,13nm,0.7s
**TDK Taldyqorghan 40.91 313** *e*P **P 01 17 24.4 +1.4**
comp=Z,13nm,0.7s,baz=313
**PEA0B Petropavlovsk- 40.98 33**⇑ *e*P **P 01 17 25.5 +2.0**
**PETK Petropavlovsk- 40.98 33** P **P 01 17 22.1 -1.3**
comp=Z,8.0nm,0.8s,baz=241,slow=11,SNR=7.3
PETK LR LR 01 35 36.4
comp=Z,447nm,19.6s,baz=222,slow=38
**ZAA0 Zalesovo Array 41.10 328** P **P 01 17 24.0 -0.4**
ZAA0 IAmb IAmb 01 17 32.1
comp=Z,30nm,0.8s
**ZALV Zalesovo Beam 41.10 328** P **P 01 17 24.1 -0.3**
comp=Z,18nm,1.0s,baz=114,slow=7.2,SNR=36
ZALV PcP **PcP 01 19 23.9 +0.1**
comp=Z,1.3nm,0.6s,baz=97,slow=3.9,SNR=2.2
**ZALV Zalesovo Beam 41.10 328** P **P 01 17 23.8 -0.6**
**FITZ Fitzroy Crossi 41.11 173** P **P 01 17 22.4 -2.4**
comp=Z,5.3nm,0.7s,baz=351,slow=6.8,SNR=9.4
**FITZ Fitzroy Crossi 41.11 173** P **P 01 17 22.8 -2.0**
**MDOK Medeo 41.32 310** *e*P **P 01 17 27.4 +0.8**
**MDOK Medeo 41.32 310** *e*P **P 01 17 27.5 +0.8**
baz=310
**KSH Kashi 41.34 304** P **P 01 17 28.9 +2.2**
KSH pP sP 01 17 34.4 -0.7
KSH pmax pmax
comp=Z,6.0nm,2.0s
KSH LR LR
comp=Z,380nm,13.4s
KSH LR LR
comp=Z,450nm,10.7s
KSH LR LR
comp=Z,820nm,9.4s
**TNSS Tian-Shan 41.36 310** *e*P **P 01 17 28.1 +0.9**
baz=310
**PET Petropavlovsk 41.43 34***ce*P **P 01 17 28.0 +1.0**
PET pmax pmax
comp=Z,49nm,1.0s
**PET Petropavlovsk 41.43 34** P **P 01 17 27.4 +0.4**
PET IAmb IAmb 01 17 31.5
comp=Z,44nm,0.9s
**AAA Alma-Ata 41.43 310** *e*P **P 01 17 28.1 +0.7**
**AAA Alma-Ata 41.43 310** *e*P **P 01 17 28.1 +0.7**
baz=310
**PALK Pallekele 41.67 254** LR LR 01 36 26.4
comp=Z,525nm,19.2s,baz=166,slow=38
**SEM Semipalatinsk 41.77 321** *e*P **P 01 17 30.4 +0.3**
SEM pmax pmax
comp=Z,47nm,1.7s
**SEM Semipalatinsk 41.77 321** *e*P **P 01 17 30.5 +0.3**
comp=Z,47nm,1.7s,baz=321
**KUU Kurty 42.01 311** *e*P **P 01 17 32.6 +0.6**
KUU pmax pmax
comp=Z,53nm,2.0s
**KUU Kurty 42.01 311** *e*P **P 01 17 32.7 +0.6**
comp=Z,53nm,2.0s,baz=311
**MA2 Magadan 42.17 22***ce*P **P 01 17 34.8 +1.8**
MA2 pmax pmax
comp=Z,17nm,1.0s
**MA2 Magadan 42.17 22** P **P 01 17 33.0 0.0**
**COEN Coen 42.72 147** P **P 01 17 36.7 -1.3**
COEN IAmb IAmb 01 17 44.0
comp=Z,29nm,1.1s
**KURK Kurchatov 42.84 321**⇓ *e*P **P 01 17 40.0 +1.4**
KURK pmax pmax
comp=Z,50nm,1.7s
**KURK Kurchatov 42.84 321** P **P 01 17 38.8 +0.2**
KURK IAmb IAmb 01 17 45.5
comp=Z,42nm,1.3s
**KURBB Kurchatov Arra 42.85 321** P **P 01 17 38.9 +0.2**
**H11S3 WAKE ISLAND Hy 42.91 87** T T 02 03 01.0
baz=284,slow=74,SNR=6.0
**H11S1 WAKE ISLAND Hy 42.92 87** T T 02 03 01.8
baz=284,slow=74,SNR=5.9
**H11S2 WAKE ISLAND Hy 42.93 87** T T 02 03 01.8
baz=284
**NIL Nilore 42.94 295** P **P 01 17 39.0 -0.8**
NIL pmax pmax
comp=Z,33nm,1.0s
**NIL Nilore 42.94 295** P **P 01 17 39.0 -0.8**
NIL IAmb IAmb 01 17 46.4

comp=Z,33nm,0.9s
**AAK Ala-Archa 43.03 308** LR LR 01 38 26.2
comp=Z,203nm,19.4s,baz=120,slow=40
**AAK Ala-Archa 43.03 308**⇑*eP* **P 01 17 41.7 +1.2**
AAK pmax pmax
comp=Z,11nm,1.7s
**AAK Ala-Archa 43.03 308** P **P 01 17 40.5 -0.1**
**SGDS Sogindy 43.11 310** *eP* **P 01 17 41.7 +0.7**
baz=310
MOS pmax pmax
comp=Z,30nm,1.3s
**BTLS Baital 43.89 312** *eP* **P 01 17 48.1 +0.9**
BTLS pmax pmax
comp=Z,17nm,1.9s
**BTLS Baital 43.89 312** *eP* **P 01 17 48.1 +0.9**
comp=Z,17nm,1.9s,baz=312
**PSA00 Pilbara Seismi 44.32 181** P **P 01 17 49.5 -1.4**
PSA00 IAmb IAmb 01 17 54.5
comp=Z,18nm,0.9s
**PSA00 Pilbara Seismi 44.32 181** P **P 01 17 49.3 -1.5**
PSA00 IAmb IAmb 01 17 54.0
comp=Z,8.9nm,1.1s
**WB0 Warramunga Arr 44.50 162** P **P 01 17 50.8 -1.5**
**WRA Warramunga Arr 44.65 162** P **P 01 17 51.0 -2.5**
comp=Z,3.2nm,0.7s,baz=344,slow=8.7,SNR=8.8
**WRA Warramunga Arr 44.65 162** *i* P **P 01 17 53.0 -0.5**
WRA pmax pmax
comp=Z,4.0nm,0.6s
**WRA Warramunga Arr 44.65 162** P **P 01 17 51.9 -1.7**
**WB2 Warramunga Arr 44.66 162** P **P 01 17 51.8 -1.8**
**SEY Seymchan 45.17 20** P **P 01 17 56.4 -0.7**
comp=Z,0.7nm,0.2s,baz=215,slow=12,SNR=1.5
SEY PcP **PcP**
comp=Z,5.9nm,0.9s,baz=204,slow=5.4,SNR=13
**OTUK Ortayu 45.85 316** P **P 01 18 03.4 +0.6**
**KK31 Karatay Array 45.99 308** P **P 01 18 04.3 +0.3**
**KKAR Karatay Array 45.99 308** P **P 01 18 03.5 -0.5**
**KKAR Karatay Array 45.99 308** P **P 01 18 03.5 -0.5**
**BRZS Berezniki 46.13 318** *eP* **P 01 18 06.0 +1.0**
BRZS pmax pmax
comp=Z,20nm,1.6s
**BRZS Berezniki 46.13 318** *eP* **P 01 18 06.1 +1.0**
comp=Z,20nm,1.6s,baz=318
**IUG luzhnay 46.20 307** *eP* **P 01 18 07.3 +1.5**
**IUG luzhnay 46.20 307** *eP* **P 01 18 07.3 +1.5**
baz=307
**KBL Kabul 46.45 296** P **P 01 18 08.5 +0.5**
KBL pmax pmax
comp=Z,48nm,1.5s
**KBL Kabul 46.45 296** P **P 01 18 08.5 +0.5**
**BRLS Borolday 46.47 308** *eP* **P 01 18 10.3 +2.5**
BRLS pmax pmax
comp=Z,18nm,2.3s
**BRLS Borolday 46.47 308** *eP* **P 01 18 10.3 +2.5**
comp=Z,18nm,2.3s,baz=308
**ASAR Alice Springs 48.08 164** P **P 01 18 18.8 -1.6**
comp=Z,2.0nm,0.8s,baz=337,slow=6.7,SNR=3.4
**ASAR Alice Springs 48.08 164** P **P 01 18 18.7 -1.8**
**ASAR Alice Springs 48.08 164** P **P 01 18 18.7 -1.8**
**BRVK Borovoye 48.50 321**⇑*eP* **P 01 18 24.0 +0.6**
BRVK pmax pmax
comp=Z,35nm,1.2s
**BRVK Borovoye 48.50 321** P **P 01 18 23.4 +0.1**
**TIXI Tiksi 48.88 3**⇓*eP* **P 01 18 26.6 +0.6**
TIXI pmax pmax
comp=Z,7.0nm,1.0s
**TIXI Tiksi 48.88 3** P **P 01 18 23.3 -2.7**
**CTA Charters Tower 49.46 148** P **P 01 18 30.4 -0.7**
comp=Z,1.3nm,0.3s,baz=338,slow=10,SNR=4.0
CTA LR LR 01 37 35.1
comp=Z,260nm,21.9s,baz=298,slow=34
**SHEM Shemya Is, Ala 49.89 40** LR LR 01 39 06.8
comp=Z,146nm,21.6s,baz=307,slow=36
**NRIK Noril'sk 50.47 345** P **P 01 18 36.8 -1.4**
comp=Z,26nm,1.1s,baz=123,slow=8.2,SNR=27
NRIK LR LR 01 40 13.5
comp=Z,397nm,19.6s,baz=149,slow=36
**NRIK Noril'sk 50.47 345**⇓*eP* **P 01 18 36.6 -1.6**
NRIK pmax pmax
comp=Z,39nm,1.2s
**NRIK Noril'sk 50.47 345** P **P 01 18 36.8 -1.4**
**HRA Herat 52.07 296** P **P 01 18 49.6 -1.4**
**BILL Bilibino 52.87 20**⇓*iP* **P 01 18 56.6 +0.5**
BILL **PP* **pP 01 19 02.0 -0.2**
BILL *e*SP* **sP 01 19 05.6 +1.1**
BILL *i* 01 20 04.2
BILL PPP PPP 01 22 03.0
BILL S **S 01 26 18.0 -6.0**
BILL pmax pmax
comp=Z,12nm,1.3s
BILL MLR MLR
comp=Z,270nm,15.0s
**BILL Bilibino 52.87 20** P **P 01 18 55.2 -0.9**
**AB31 Akbulak array 54.09 315** *i* P **P 01 19 05.6 +0.3**
**ABKAR Akbulak array 54.09 315** P **P 01 19 05.9 +0.6**
**ABKAR Akbulak array 54.09 315** P **P 01 19 05.6 +0.2**
ABKAR IAmb IAmb 01 19 12.7
comp=Z,26nm,1.1s
**SVE Sverdlovsk 54.84 324** *eP* **P 01 19 11.5 +0.8**
SVE pmax pmax
comp=Z,32nm,1.3s
**ARU Arti 55.90 324**⇑*eP* **P 01 19 18.4 +0.1**
ARU pmax pmax
comp=Z,37nm,1.3s
**ARU Arti 55.90 324** P **P 01 19 17.9 -0.4**
**BBOO Buckleboo 57.36 165** P **P 01 19 28.2 -0.7**
BBOO IAmb IAmb 01 19 30.7
comp=Z,12nm,0.9s
**STKA Stephens Creek 58.05 159** P **P 01 19 32.2 -1.7**
comp=Z,3.3nm,0.7s,baz=6.4,slow=8.5,SNR=4.1
**STKA Stephens Creek 58.05 159** P **P 01 19 32.1 -1.7**
STKA pmax pmax
comp=Z,1.0nm,1.1s
**STKA Stephens Creek 58.05 159** P **P 01 19 32.1 -1.7**
**ANM Nome 62.48 28** P **P 01 20 05.8 +2.0**
ANM pmax pmax
comp=Z,8.0nm,1.0s
**ANM Nome 62.48 28** P **P 01 20 05.8 +2.0**
ANM IAmb IAmb 01 20 08.5
comp=Z,8.3nm,1.0s
**RDOG Red Dog Mine 63.72 24** P **P 01 20 11.2 -0.8**
RDOG IAmb IAmb 01 20 17.5
comp=Z,9.8nm,0.6s
**GNI Garni 65.26 305**⇑*eP* **P 01 20 25.8 +3.0**
GNI pmax pmax
comp=Z,24nm,1.5s
**ZEI Tsey 65.45 308** *eP* **P 01 20 23.9 -0.1**
ZEI pmax pmax
comp=Z,13nm,1.0s
**VRH Novokhopyorsk 65.74 317** *eP* **P 01 20 24.5 -0.9**
VRH pmax pmax
comp=Z,20nm,1.3s
**ONI Oni 65.81 308** P **P 01 20 26.0 -0.1**
ONI pmax pmax
comp=Z,22nm,1.2s
**ONI Oni 65.81 308** P **P 01 20 26.0 -0.1**
**KBZ Khabaz 66.02 309** P **P 01 20 27.9 +0.6**
comp=Z,7.0nm,0.9s,baz=108,slow=3.2,SNR=12
**KBZ Khabaz 66.02 309**⇓*eP* **P 01 20 28.6 +1.3**
KBZ pmax pmax
comp=Z,23nm,2.0s
**KLMR Klimovskoe 66.02 328** *eP* **P 01 20 26.0 -1.0**
KLMR *e* 01 22 49.6
KLMR pmax pmax
comp=Z,49nm,1.1s
**KLMR Klimovskoe 66.02 328** *eP* **P 01 20 26.1 -1.0**
KLMR AMP 01 20 33.2
comp=Z,49nm,1.1s
KLMR *e*PP **PP 01 22 49.6 -2.5**
**KIV Kislovodsk 66.13 309**⇑P **P 01 20 29.3 +1.1**
**KIV Kislovodsk 66.13 309** *eP* **P 01 20 28.5 +0.3**
KIV pmax pmax
comp=Z,14nm,1.0s
KIV MLR MLR
comp=Z,115nm,17.0s
**KIV Kislovodsk 66.13 309** P **P 01 20 27.6 -0.7**
**GEVA Gevas 66.89 303** P **P 01 20 32.4 -0.9**
**VORR Voronezh 67.24 318** *eP* **P 01 20 37.2 +2.2**
VORR pmax pmax
comp=Z,20nm,0.4s
**L19K White Mountain 67.26 30** P **P 01 20 34.4 -0.5**
**LPSR Galich'ya Gora 67.27 319** *eP* **P 01 20 33.8 -1.4**
LPSR pmax pmax
comp=Z,10.0nm,1.1s
**VSR Storozhevoye 67.33 318** *eP* **P 01 20 35.3 -0.3**
VSR pmax pmax
comp=Z,30nm,0.5s

**J20K Nowinta River 67.36 28** P **P 01 20 36.0 +0.4**
J20K IAmb IAmb 01 20 43.3
comp=Z,10nm,0.8s
**K20K Telida 67.48 29** P **P 01 20 35.6 -0.8**
K20K IAmb IAmb 01 20 40.8
comp=Z,8.3nm,0.9s
**SIRT Sirnak 67.54 303** P **P 01 20 37.8 +0.5**
**MOS Moscow 67.58 323** *eP* **P 01 20 36.6 -0.4**
MOS pmax pmax
comp=Z,30nm,1.3s
**H21K Melozitna Rive 67.77 27** P **P 01 20 37.9 -0.2**
H21K IAmb IAmb 01 20 45.8
comp=Z,9.0nm,0.8s
**APA Apatity 68.02 336**⇓*iP* **P 01 20 38.2 -1.4**
APA pmax pmax
comp=Z,24nm,1.0s
**OBN Obninsk 68.27 322**⇓*iP* **P 01 20 42.3 +0.9**
OBN **PP* **pP 01 20 47.0 -0.6**
OBN **SP* **sP 01 20 49.0 -0.9**
OBN *e* 01 23 10.4
OBN *eS* **S 01 29 41.9 +0.7**
OBN pmax pmax
comp=Z,83nm,2.5s
**CAST Castle Rocks 68.36 29** P **P 01 20 41.9 0.0**
CAST IAmb IAmb 01 20 46.4
comp=Z,17nm,1.1s
**RAYN Ar Rayn 68.45 287**⇑P **P 01 20 42.7 -0.5**
**RAYN Ar Rayn 68.45 287** **P 01 20 42.5 -0.7**
**TOLK Toolik Lake Re 68.63 23** P **P 01 20 43.5 0.0**
TOLK IAmb IAmb 01 20 52.0
comp=Z,10nm,0.9s
**MLY Manley 68.71 27** P **P 01 20 43.2 -0.8**
MLY IAmb IAmb 01 20 51.0
comp=Z,9.4nm,1.0s
**SPU Mount Spurr 68.71 31** P **P 01 20 43.2 -1.0**
**MARD Mardin 68.87 303** P **P 01 20 43.4 -2.3**
**KDAK Kodiak Island 69.01 35** LR LR 01 51 32.4
comp=Z,278nm,21.9s,baz=261,slow=36
**I23K Minto, Yukon-K 69.27 27** P **P 01 20 47.8 +0.3**
I23K IAmb IAmb 01 20 50.7
comp=Z,6.8nm,0.6s
**NEA2 Nenana 69.49 27** P **P 01 20 49.8 +0.9**
NEA2 IAmb IAmb 01 20 52.9
comp=Z,20nm,1.5s
**M22K Willow 69.53 31** P **P 01 20 49.6 +0.5**
**MCK McKinley 69.70 28** P **P 01 20 49.8 -0.4**
MCK pmax pmax
comp=Z,28nm,1.5s
**MCK McKinley 69.70 28** P **P 01 20 49.8 -0.4**
**H24K Noodor Dome 69.75 26** P **P 01 20 50.3 -0.2**
**MDM Murphy Dome 69.77 27** P **P 01 20 49.5 -1.2**
MDM IAmb IAmb 01 20 55.4
comp=Z,12nm,1.0s
**RND Reindeer 69.80 29** P **P 01 20 50.1 -0.8**
RND pmax pmax
comp=Z,21nm,1.0s
**RND Reindeer 69.80 29** P **P 01 20 50.1 -0.8**
**POKR Poker Plat Res 70.07 27** P **P 01 20 53.0 +0.6**
POKR IAmb IAmb 01 21 00.0
comp=Z,7.1nm,0.8s
**ILAR Eielson Array 70.37 27** P **P 01 20 53.3 -0.9**
comp=Z,0.4nm,0.5s,baz=273,slow=4.4,SNR=11
ILAR PP **PP 01 23 29.1 -0.7**
comp=Z,0.3nm,0.9s,baz=259,slow=0.9,SNR=3.9
ILAR LR LR 01 53 51.5
comp=Z,86nm,18.8s,baz=308,slow=38
**ILAR Eielson Array 70.37 27** P **P 01 20 53.8 -0.5**
**ILAR Eielson Array 70.37 27** P **P 01 20 53.8 -0.5**
**KNK Knik Glacier 70.38 31** P **P 01 20 54.3 -0.1**
KNK IAmb IAmb 01 20 59.1
comp=Z,18nm,1.0s
**ARCES ARCESS Array B 70.53 338** P **P 01 20 55.4 +0.2**
comp=Z,6.6nm,0.7s,baz=47,slow=2.3,SNR=8.4
**ARCES ARCESS Array B 70.53 338** P **P 01 20 55.1 -0.1**
ARCES pmax pmax
comp=Z,13nm,1.0s
**ARCES ARCESS Array B 70.53 338** P **P 01 20 55.1 -0.1**
ARCES IAmb IAmb 01 20 57.2
comp=Z,13nm,0.9s
**PWL Port Wells 70.55 31** P **P 01 20 55.4 -0.1**
**SPITS Spitsbergen Ar 70.58 348** P **P 01 20 55.1 -0.2**
comp=Z,23nm,1.0s,baz=85,slow=6.9,SNR=3.4
SPITS LR LR 01 55 24.3
comp=Z,328nm,18.2s,baz=236,slow=39
**BMAR Burnt Mountain 70.70 24** P **P 01 20 56.5 +0.2**
**KLU Klutina 71.55 30** P **P 01 21 01.5 -0.1**
KLU IAmb IAmb 01 21 10.9
comp=Z,9.4nm,1.0s
**SCRK Sand Creek 71.78 28** P **P 01 21 02.6 -0.4**
**DOT Dot Lake 71.84 28** P **P 01 21 03.2 0.0**
**N25K Chitina, Valde 72.13 30** P **P 01 21 05.0 -0.1**
**MENT Mentasta 72.17 29** P **P 01 21 05.3 0.0**
**BNN Bunyan 72.26 305** P **P 01 21 07.4 +1.0**
**BMRM Bremner River 72.30 31** P **P 01 21 05.4 -0.6**
BMRM IAmb IAmb 01 21 09.8
comp=Z,18nm,1.2s
**FIA1 FINESS Array S 72.33 330** P **P 01 21 05.7 -0.4**
**FINES FINESS Array B 72.33 330** P **P 01 21 05.2 -0.9**
comp=Z,14nm,0.9s,baz=72,slow=8.2,SNR=12
**FINES FINESS Array B 72.33 330** *i* P **P 01 21 06.0 -0.1**
FINES pmax pmax
comp=Z,19nm,1.0s
**GLB Gilahina Butte 72.54 30** P **P 01 21 06.9 -0.6**
GLB IAmb IAmb 01 21 12.1
comp=Z,17nm,1.3s
**M26K Nabesna, AK 72.64 29** P **P 01 21 08.1 0.0**
M26K IAmb IAmb 01 21 12.7
comp=Z,11nm,1.1s
**EGAK Eagle 72.74 26** P **P 01 21 08.3 -0.3**
**VSU Vasula 72.82 327**⇑*eP* **P 01 21 11.0 +1.9**
VSU pmax pmax
comp=Z,132nm,1.2s
**VSU Vasula 72.82 327** *eP* **P 01 21 06.0 -3.1**
**L27K Beaver Creek, 72.97 28** P **P 01 21 09.7 -0.3**
L27K IAmb IAmb 01 21 19.0
comp=Z,13nm,1.2s
**BCAR Beaver Creek A 72.99 28** P **P 01 21 10.2 +0.1**
**ASF Jabal al Asfar 73.30 298** P **P 01 21 13.8 +1.3**
comp=Z,2.7nm,0.8s,baz=56,slow=6.2,SNR=2.7
**MNK Minsk 73.30 323** *iP* **P 01 21 11.0 -1.0**
MNK *i* 01 23 53.8
MNK *i* PPP PPP 01 25 38.4
MNK *i* S **S 01 30 39.6 -0.3**
MNK pmax pmax
comp=Z,23nm,1.1s
**MNK Minsk 73.30 323** *iP* **P 01 21 11.1 -1.0**
MNK *iP* **P 01 21 11.1 -1.0**
MNK *iP* **P 01 21 11.1 -1.0**
comp=Z,23nm,1.1s,baz=254
MNK *i* PP **PP 01 23 53.8 -1.2**
MNK *i* PPP PPP 01 25 38.5
MNK *i* S **S 01 30 39.6 -0.3**
MNK *i* SS **SS 01 35 11.2 -10**
MNK *i* SSS SSS 01 38 24.6
**NOR Nord 73.48 354** *iP* **P 01 21 11.1 -1.6**
NOR IAmb IAmb 01 21 15.2
comp=Z,12nm,1.0s
**AKASG Malin Array Be 73.58 318** P **P 01 21 12.5 -1.3**
comp=Z,3.9nm,0.9s,baz=61,slow=5.8,SNR=16
**AKASG Malin Array Be 73.58 318***ceP* **P 01 21 14.3 +0.6**
AKASG pmax pmax
comp=Z,4.0nm,0.8s
**AKASG Malin Array Be 73.58 318** P **P 01 21 14.0 +0.2**
AKASG IAmb IAmb 01 21 16.9
comp=Z,14nm,1.4s
**AKBB Malin Array Si 73.58 318**⇑*eP* **P 01 21 13.8 +0.1**
**BRTR Keskin Array B 73.67 307** P **P 01 21 15.2 +0.5**
comp=Z,1.9nm,0.6s,baz=101,slow=6.6,SNR=6.2
**BRTR Keskin Array B 73.67 307***ceP* **P 01 21 15.0 +0.3**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**BRTR Keskin Array B 73.67 307** P **P 01 21 13.8 -0.9**
**DAWY Dawson 73.69 27** P **P 01 21 13.8 -0.5**
**IDID Didziasalis 73.71 324** *eP* **P 01 21 13.9 -0.5**
**NACGM Naroch 73.80 323** *iP* **P 01 21 15.7 +0.7**
**IIGN Ignalina 73.98 324** *eP* **P 01 21 15.6 -0.4**
**MTSE Matsula 74.21 327** *eP* **P 01 21 16.0 -1.2**
**MMAI Mount Meron Ar 74.25 300** P **P 01 21 20.2 +2.0**
comp=Z,0.9nm,0.6s,baz=91,slow=9.2,SNR=5.0
**INK Inuvik 74.41 22** P **P 01 21 17.8 -0.4**
comp=Z,6.2nm,1.1s,baz=292,slow=6.4,SNR=7.4
**INK Inuvik 74.41 22** P **P 01 21 18.0 -0.2**
INK pmax pmax
comp=Z,12nm,1.0s

**INK Inuvik 74.41 22** P **P 01 21 18.0 -0.2**
INK IAmb IAmb 01 21 25.3
comp=Z,12nm,0.9s
**SORM Soroca 74.87 316**⇑P **P 01 21 20.5 -0.8**
**SORM Soroca 74.87 316**⇑P **P 01 21 20.5 -0.8**
**PABE Paberze 75.15 324** *eP* **P 01 21 21.6 -1.2**
**CSS Mathiatis 75.31 302** P **P 01 21 23.4 -0.8**
**M30M Minto, Yukon 75.31 28** P **P 01 21 21.9 -1.8**
**A36M Sachs Harbour 75.32 17** P **P 01 21 22.4 -1.1**
A36M IAmb IAmb 01 21 24.6
comp=Z,14nm,0.8s
**EIL Elat 75.65 296** P **P 01 21 26.6 +0.4**
comp=Z,4.6nm,1.0s,baz=11,slow=5.2,SNR=4.0
**TPGR Topolog 75.84 313**⇓P **P 01 21 24.7 -2.3**
**CFR Carcaliu 75.92 313**⇑P **P 01 21 26.5 -0.9**
**CFR Carcaliu 75.92 313**⇑P **P 01 21 26.5 -0.9**
**SUW Suwalki 76.08 323** P **P 01 21 27.6 -0.6**
SUW pmax pmax
comp=Z,31nm,0.8s
**SUW Suwalki 76.08 323** P **P 01 21 27.6 -0.6**
**SUW Suwalki 76.08 323** *eP* **P 01 21 26.9 -1.2**
**EUNU Eureka 76.09 5** P **P 01 21 26.8 -1.1**
EUNU IAmb IAmb 01 21 37.1
comp=Z,12nm,1.2s
**TESR Tescani 76.48 315**⇑P **P 01 21 30.6 0.0**
**VRI Vrincioaia 76.64 314**⇑P **P 01 21 32.7 +1.1**
**VRI Vrincioaia 76.64 314**⇑P **P 01 21 32.7 +1.1**
**PLOR Plostina 76.70 314**⇑P **P 01 21 35.5 +3.6**
**PLOR Plostina 76.70 314**⇑P **P 01 21 35.5 +3.6**
**UPP Uppsala 76.78 330** *eP* **P 01 21 28.6 -3.3**
**C36M Paulatuk 76.99 19** P **P 01 21 31.0 -2.0**
**BURAR Bucovina Array 77.04 316**⇑P **P 01 21 34.2 +0.3**
**BURAR Bucovina Array 77.04 316**⇑P **P 01 21 34.2 +0.3**
**BURAR Bucovina Array 77.04 316** P **P 01 21 33.4 -0.5**
BURAR IAmb IAmb 01 21 40.7
comp=Z,12nm,1.3s
**BUR08 Bucovina Ar. S 77.04 316** P **P 01 21 33.4 -0.5**
BUR08 IAmb IAmb 01 21 38.1
comp=Z,19nm,1.3s
**NEHR Nehoiu 77.07 314**⇑P **P 01 21 36.5 +2.5**
**MLR Muntele Rosu 77.28 314**⇑P **P 01 21 35.5 +0.2**
**MLR Muntele Rosu 77.28 314** P **P 01 21 34.2 -1.2**
comp=Z,6.0nm,0.8s,baz=54,slow=5.8,SNR=5.2
**MLR Muntele Rosu 77.28 314**⇑P **P 01 21 35.5 +0.2**
**MLR Muntele Rosu 77.28 314** P **P 01 21 34.4 -0.9**
MLR IAmb IAmb 01 21 44.0
comp=Z,8.7nm,0.8s
**ELL Elmali 77.38 305** P **P 01 21 35.5 -0.5**
ELL pmax pmax
comp=Z,47nm,1.3s
**ELL Elmali 77.38 305** P **P 01 21 35.5 -0.5**
**DAG Danmarks Havn 77.49 351** P **P 01 21 37.2 +1.5**
**DAG Danmarks Havn 77.49 351** *iP* **P 01 21 33.5 -2.2**
DAG IAmb IAmb 01 21 38.3
comp=Z,25nm,1.4s
**ARCR ARCALIA 77.77 316**⇓P **P 01 21 39.3 +1.4**
**KWP Kalwaria Pacla 77.89 319** P **P 01 21 38.2 -0.3**
KWP pmax pmax
comp=Z,179nm,0.8s
**KWP Kalwaria Pacla 77.89 319** P **P 01 21 38.2 -0.3**
**VOIR 77.89 314**⇑P **P 01 21 43.4 +4.7**
**VOIR 77.89 314**⇑P **P 01 21 43.4 +4.7**
**BMR Baia Mare 78.11 317**⇓P **P 01 21 40.9 +1.2**
**BMR Baia Mare 78.11 317**⇓P **P 01 21 40.9 +1.2**
**ARR Arges 78.19 314**⇓P **P 01 21 41.1 +0.8**
**CBBR Cluj-Babes-Bol 78.40 316**⇑P **P 01 21 42.6 +1.3**
**HFS Hagfors 78.47 331** P **P 01 21 41.5 0.0**
comp=Z,6.0nm,0.9s,baz=45,slow=7.2,SNR=5.3
**UZH Uzhgorod 78.51 318** *eP* **P 01 21 43.4 +1.5**
UZH *i* 01 21 47.8
**TRPA Tarpa 78.54 317**⇑P **P 01 21 43.5 +1.4**
**TRPA Tarpa 78.54 317** P **P 01 21 44.5 +2.5**
**LOT Lotru 78.73 315**⇑P **P 01 21 44.3 +1.0**
**NC405 NORSAR Array S 78.89 332** P **P 01 21 42.6 -1.2**
**CRVS Cervenica-Dubn 78.92 318** *eP* **P 01 21 46.6 +2.4**
**CRVS Cervenica-Dubn 78.92 318** *eP* **P 01 21 46.6 +2.4**
CRVS *e* 01 36 32.6
**DRGR 78.93 316**⇑P **P 01 21 44.9 +0.5**
**DRGR 78.93 316**⇑P **P 01 21 44.9 +0.5**
**DEV Deva 79.14 315**⇑P **P 01 21 45.9 +0.5**
**DEV Deva 79.14 315**⇑P **P 01 21 45.9 +0.5**
**NB2 NORSAR Subarra 79.14 332** P **P 01 21 44.2 -1.0**
comp=Z,38nm,1.4s,baz=62,slow=5.6
**NB2 NORSAR Subarra 79.14 332** P **P 01 21 44.2 -1.0**
baz=62,slow=5.6
**NOA NORSAR Array B 79.14 332** P **P 01 21 44.2 -1.0**
comp=Z,7.3nm,1.2s,baz=78,slow=5.8,SNR=11
NOA LR LR 02 00 37.7
comp=Z,434nm,18.2s,baz=205,slow=39
**OJC Ojcow 79.41 320** P **P 01 21 46.9 +0.1**
OJC pmax pmax
comp=Z,31nm,1.3s
**OJC Ojcow 79.41 320** P **P 01 21 46.9 +0.1**
OJC IAmb IAmb 01 21 50.5
comp=Z,31nm,1.3s
**NEEM North Greenlan 79.65 358** *iP* **P 01 21 47.5 -0.6**
NEEM IAmb IAmb 01 21 55.1
comp=Z,28nm,0.9s
**DBG Daneborg 79.71 350** *iP* **P 01 21 45.4 -2.6**
**RES Resolute Bay 79.86 9** P **P 01 21 47.8 -1.0**
RES pmax pmax
comp=Z,24nm,1.1s
**RES Resolute Bay 79.86 9** P **P 01 21 47.8 -1.0**
RES IAmb IAmb 01 21 51.3
comp=Z,24nm,1.1s
**VTS Vitosha 80.13 312**⇑P **P 01 21 51.8 +0.7**
**VTS Vitosha 80.13 312**⇑P **P 01 21 51.8 +0.7**
**VTS Vitosha 80.13 312** P **P 01 21 50.0 -1.1**
VTS IAmb IAmb 01 22 00.1
comp=Z,9.8nm,0.8s
**PSZ Piszkesteto 80.26 318** P **P 01 21 50.6 -1.0**
PSZ pmax pmax
comp=Z,31nm,1.5s
**PSZ Piszkesteto 80.26 318** P **P 01 21 50.6 -1.0**
PSZ IAmb IAmb 01 21 58.1
comp=Z,31nm,1.5s
**PSZ Piszkesteto 80.26 318** P **P 01 21 52.1 +0.5**
**TULEG Thule 80.50 2** *iP* **P 01 21 51.1 -1.2**
TULEG IAmb IAmb 01 21 54.0
comp=Z,52nm,1.6s
**TULEG Thule 80.50 2** P **P 01 21 51.0 -1.2**
TULEG IAmb IAmb 01 21 54.4
comp=Z,20nm,1.1s
**VYHS Vyhne 80.68 319** *eP* **P 01 21 54.4 +0.7**
**VYHS Vyhne 80.68 319** *eP* **P 01 21 54.3 +0.6**
**KOLL Kolacno 80.91 319** *eP* **P 01 21 55.5 +0.6**
**MORC Moravsky Berou 80.92 320**⇑P **P 01 21 55.6 +0.6**
**MORC Moravsky Berou 80.92 320**⇑P **P 01 21 55.6 +0.6**
**MORC Moravsky Berou 80.92 320** *eP* **P 01 21 56.8 +1.7**
**JAVC Velka Javorina 81.23 319** *eP* **P 01 21 58.4 +1.7**
**KRLC Kraliky 81.24 321** *eP* **P 01 21 52.0 -4.7**
**KRLC Kraliky 81.24 321** *eP* **P 01 21 52.0 -4.7**
**OSTC Ostas 81.36 321** *eP* **P 01 21 57.1 -0.2**
**DPC Dobruska-Polom 81.39 321** *eP* **P 01 21 57.4 -0.1**
**DPC Dobruska-Polom 81.39 321** *eP* **P 01 21 57.4 -0.1**
**FRGS Fruska Gora 81.42 315**⇑P **P 01 21 56.9 -0.9**
**CHVC Chvalec 81.44 321** *eP* **P 01 21 57.8 0.0**
**CSKK Cskako 81.50 318** P **P 01 22 01.1 +3.0**
**UPC Upice 81.50 321** *eP* **P 01 21 59.1 +1.0**
**UPC Upice 81.50 321** *eP* **P 01 21 59.1 +1.0**
**SMOL Smolenice 81.52 319** *eP* **P 01 22 00.6 +2.4**
**SMOL Smolenice 81.52 319** *eP* **P 01 22 00.6 +2.4**
**VRAC Vranov 81.68 320**⇑P **P 01 22 00.8 +1.7**
**VRAC Vranov 81.68 320** P **P 01 21 59.3 +0.2**
comp=Z,10.0nm,1.1s,baz=75,slow=5.7,SNR=7.5
**VRAC Vranov 81.68 320** *eP* **P 01 22 00.5 +1.5**
**IDI Anoyia 81.69 305** LR LR 02 06 02.2
comp=Z,87nm,19.1s,baz=197,slow=41
**KRUC Moravsky 81.90 320** *eP* **P 01 22 00.8 +0.6**
**MPLH Magyarpolny 82.03 318** P **P 01 22 01.7 +0.8**
**KOVH Kovagotottos 82.13 317** P **P 01 22 01.7 +0.3**
**BRG Berggiesshubel 82.51 322** *eP* **P 01 22 04.4 +1.0**
BRG Amp 01 22 11.4
comp=Z,43nm,1.8s
BRG *ex* x 01 25 31.6
BRG Amp 01 25 40.1
comp=Z,29nm,2.0s
**BRG Berggiesshubel 82.51 322** *eP* **P 01 22 04.4 +1.0**
BRG pmax pmax
comp=Z,43nm,1.8s
**PRU Pruhonice 82.58 321** *eP* **P 01 22 04.7 +1.0**
**PRU Pruhonice 82.58 321** *eP* **P 01 22 04.7 +1.0**
**CONA Conrad Observa 82.72 319** *eP* **P 01 22 04.1 -0.6**

comp=Z,14nm,1.6s
**CLL Collm 82.84 323** *i* P **P** **01 22 06.2 +1.2**
CLL pmax pmax
comp=Z,23nm,1.4s
**CLL Collm 82.84 323** *i* P **P** **01 22 06.2 +1.2**
comp=Z,23nm,1.4s
**CLL Collm 82.84 323** P **P** **01 22 03.8 -1.2**
CLL lAmb lAmb 01 22 07.0
comp=Z,15nm,1.2s
**ARSA Arzberg 83.23 319** *eP* **P** **01 22 06.7 -0.5**
comp=Z,8.9nm,1.4s
**CKRC Cesky Krumlov 83.24 320** *eP* **P** **01 22 05.5 -1.7**
**KHC Kasperske Hory 83.53 321**⇓ *eP* **P** **01 22 10.1 +1.4**
KHC pmax pmax
comp=Z,24nm,1.3s
**KHC Kasperske Hory 83.53 321** *eP* **P** **01 22 07.9 -0.8**
**KHC Kasperske Hory 83.53 321** P **P** **01 22 07.8 -0.8**
KHC lAmb lAmb 01 22 12.5
comp=Z,15nm,1.4s
**GEC2 GERESS Array S 83.59 321** P **P** **01 22 07.8 -1.3**
GEC2 lAmb lAmb 01 22 11.4
comp=Z,8.0nm,1.0s
**GERES GERESS Array B 83.59 321** P **P** **01 22 09.0 -0.1**
comp=Z,4.6nm,0.9s,baz=62,slow=3.2,SNR=20
**GERES GERESS Array B 83.59 321** P **P** **01 22 08.8 -0.3**
**GERES GERESS Array B 83.59 321** P **P** **01 22 08.8 -0.3**
**SUMG Summit 83.64 354** P **P** **01 22 08.8 -0.5**
SUMG pmax pmax
comp=Z,23nm,1.0s
**SUMG Summit 83.64 354** *i* P **P** **01 22 09.0 -0.3**
SUMG lAmb lAmb 01 22 11.3
comp=Z,52nm,1.4s
**SUMG Summit 83.64 354** P **P** **01 22 08.8 -0.5**
**NKC Novy Kostel 83.66 322** *eP* **P** **01 22 09.5 +0.2**
**NKC Novy Kostel 83.66 322** *eP* **P** **01 22 09.5 +0.2**
**MOA Molln 83.72 320** *eP* **P** **01 22 13.1 +3.4**
comp=Z,9.4nm,1.1s
**SOKA Soboth 83.78 318** *eP* **P** **01 22 10.7 +0.6**
comp=Z,14nm,1.6s
**YKA Yellowknife Ar 84.15 23** P **P** **01 22 10.2 -1.4**
comp=Z,2.3nm,0.7s,baz=314,slow=4.8,SNR=41
**YKA Yellowknife Ar 84.15 23** *ceP* **P** **01 22 10.3 -1.2**
YKA pmax pmax
comp=Z,2.0nm,0.7s
**YKA Yellowknife Ar 84.15 23** P **P** **01 22 09.7 -1.8**
**OBKA Obir 84.16 318** *eP* **P** **01 22 12.8 +0.7**
comp=Z,3.5nm,0.8s
**KMBO Kilima Mbogo 84.59 266** P **P** **01 22 17.5 +2.5**
comp=Z,4.6nm,0.9s,baz=80,slow=6.3,SNR=3.0
**GRA1 Grafenberg Arr 84.61 322** P **P** **01 22 13.8 -0.4**
**GRF Grafenberg Arr 84.61 322** P **P** **01 22 13.8 -0.4**
GRF pmax pmax
comp=Z,35nm,1.4s
**GRF Grafenberg Arr 84.61 322** *eP* **P** **01 22 15.6 +1.4**
comp=Z,22nm,1.4s,baz=66,slow=4.9
**KBA Koelnbreinsper 84.63 319** *eP* **P** **01 22 15.8 +1.2**
comp=Z,10nm,1.4s
**ABTA Abfaltersbach 85.29 319** *eP* **P** **01 22 18.2 +0.5**
comp=Z,14nm,1.3s
**STAL STALIGIAL 85.40 319** P **P** **01 22 17.7 -0.6**
**WTTA Wattenberg 85.56 320** *eP* **P** **01 22 19.7 +0.5**
comp=Z,13nm,1.0s
**WATA Walderalm 85.56 320** *eP* **P** **01 22 18.5 -0.7**
comp=Z,11nm,1.2s
**MOTA Moosalm 85.84 320** *eP* **P** **01 22 18.9 -1.6**
comp=Z,12nm,1.6s
**FETA Feichten 86.22 320** *eP* **P** **01 22 22.0 -0.4**
comp=Z,9.6nm,1.4s
**ICESG Greenland Ices 87.09 353** *i* P P 01 22 21.4 -5.1
ICESG lAmb lAmb 01 22 28.2
comp=Z,13nm,1.2s
**TUE Stuetta 87.32 320** P **P** **01 22 27.3 -0.6**
TUE lAmb lAmb 01 22 31.1
comp=Z,19nm,1.4s
**EKA Eskdalemuir Ar 88.62 332** P **P** **01 22 33.0 -0.7**
comp=Z,1.9nm,0.8s,baz=48,slow=2.5,SNR=5.7
**DY2G Dye2 90.27 355** *i* P P 01 22 36.2 -5.2
DY2G lAmb lAmb 01 22 43.5
comp=Z,16nm,0.9s
**EDM Edmonton 90.75 29** P **P** **01 22 42.9 -0.8**
EDM pmax pmax
comp=Z,16nm,1.1s
**EDM Edmonton 90.75 29** P **P** **01 22 42.9 -0.8**
**B08A Colville Reser 90.89 35** P **P** **01 22 43.4 -1.0**
B08A lAmb lAmb 01 22 47.5
comp=Z,8.7nm,1.0s
**NEW Newport 92.11 35** P **P** **01 22 50.1 -0.1**
NEW pmax pmax
comp=Z,7.0nm,1.1s
**NEW Newport 92.11 35** P **P** **01 22 50.1 -0.1**
NEW lAmb lAmb 01 22 54.6
comp=Z,7.0nm,1.1s
**WALA Waterton Lakes 93.24 33** P **P** **01 22 54.8 -0.6**
WALA lAmb lAmb 01 23 08.4
comp=Z,11nm,1.4s
**BMO Blue Mountains 94.13 37** P **P** **01 22 58.7 -0.9**
BMO pmax pmax
comp=Z,9.0nm,1.5s
**BMO Blue Mountains 94.13 37** P **P** **01 22 58.7 -0.9**
BMO lAmb lAmb 01 23 01.4
comp=Z,8.6nm,1.5s
**FFC Flin Flon 94.31 23** P **P** **01 22 58.8 -1.2**
FFC pmax pmax
comp=Z,9.0nm,1.5s
**FFC Flin Flon 94.31 23** P **P** **01 22 58.8 -1.2**
FFC lAmb lAmb 01 23 02.8
comp=Z,9.1nm,1.4s
**NVAR Mina Array Bea 97.46 43** P **P** **01 23 14.5 -0.6**
comp=Z,0.6nm,0.7s,baz=343,slow=2.8,SNR=3.1
**LSZ Lusaka 98.28 257** LR LR 02 06 02.6
comp=Z,223nm,19.8s,baz=107,slow=34
**MOTC Monteria, Cord 144.49 29** *eP* PKPbc 01 29 16.9 +0.4
**UREC San Jos de Ur 145.46 30** *eP* **PKPbc** **01 29 15.9 -3.7**
**DBBC Dabeiba 145.78 31** *eP* **PKPbc** **01 29 20.8 +0.1**
**OCAC Ocana 145.97 26** *eP* **PKPdf** **01 29 19.8 -0.9**
**ZARC Zaragoza, Cauc 145.99 29** *eP* **PKPdf** **01 29 19.8 -0.8**
**SDV Santo Domingo 146.35 21** *eP* **PKPdf** **01 29 19.8 -1.6**
**BRRC Barranca, Sant 146.83 27**⇑ *eP* **PKPbc** **01 29 23.8 0.0**
**SOCV Socops 146.84 22** *eP* **PKPdf** **01 29 20.8 -1.2**
**CBOC Ciudad Bolivar 146.88 32** *eP* **PKPdf** **01 29 22.8 +0.4**
**PTBC PUERTO BERRIO 147.01 29** *eP* **PKPdf** **01 29 19.8 -2.5**
**PAMC Pamplona, Colo 147.03 25** *eP* **PKPdf** **01 29 23.8 +0.8**
**BARC Barichara 147.51 27** *eP* **PKPdf** **01 29 24.7 +1.3**
**PLMC San Jos del P 147.57 33** *eP* **PKPdf** **01 29 23.8 +0.4**
**GUY2C Guyana, Caldas 147.75 32** *eP* **PKPbc** **01 29 25.7 -1.2**
**SPBC San Pablo de B 147.97 29** *eP* **PKPdf** **01 29 24.7 +0.7**
**RUSC La Rusia 148.19 27** *eP* **PKPdf** **01 29 25.7 +0.8**
**YOTC Yotoco, Valle 148.32 34** *eP* **PKPbc** **01 29 26.7 -1.4**
**ELOV Elorza 148.49 20** *eP* **PKPbc** **01 29 26.7 -1.6**
**ROSC El Rosal 148.58 30** PKPbc **PKPbc** **01 29 27.7 -1.3**
comp=Z,17nm,0.9s,baz=164,slow=15,SNR=2.3
**ORTC Ortega, Tolima 148.94 33** *eP* **PKPbc** **01 29 27.7 -1.9**
**CHIC Chingaza 149.03 29** *eP* **PKPdf** **01 29 25.7 -0.5**
**POPC Popayan, Colom 149.36 36** *eP* **PKPdf** **01 29 28.6 +2.1**
**SOTA Rioblanco 149.73 37** *eP* **PKPbc** **01 29 30.6 -1.5**
**OTAV Otavalo 150.19 42**⇓ PKIKP **PKiKP** **01 29 34.7 +0.7**
**PTGA Pitinga 157.84 2** PKPab **PKPab** **01 30 09.5 -1.2**
comp=Z,5.0nm,0.8s,baz=92,slow=9.8,SNR=5.5

*IDC **18** 01:10:33.5±1.0,0.°77N×129.°09E,h0km,mb4.1/6, mb1 4.3/8,mb1mx3.9/52,mbtmp4.2/8,ML3.9/2,MS4.5/2, Ms1 4.5/2,ms1mx3.2/69,Error ellipse: s-maj=36.4km s-min=16.3km az=74.0*
*NEIC **18** 01:10:34.8±1.1,0.°8N±0.°1×129.°04E±0.°07,h10km±1km, mb4.1/8,Error ellipse: s-maj=19.3km s-min=10.4km az=18.0*
*DJA **18** 01:10:35.0±0.6,1.°N±5.°×12.°9E±.°,h10km,M4.3/7,mb4.6/6, mB5.0/2,MLv4.1/7,Mw(mB)4.3/2*
**ISC 18 01:10:34.4±0.7,0.85N±0.08×129.11E±0.05,h10km,n38, σ1§41/31,mb4.1/11,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.75** | **268** | | | **Pn** | **01 11 04.3** | **-0.5** |
| TNTI | | | | | Sn | **Sn** | **01 11 26.2** | **-0.9** |
| **TNTI** | **Ternate** | **1.75** | **268** | | P | **Pn** | **01 11 04.8** | **0.0** |
| TNTI | | | | | S | **Sg** | **01 11 28.1** | **-2.6** |
| **SIJI** | **Sorong** | **2.75** | **128** | | Pn | **Pn** | **01 11 16.8** | **-1.8** |
| | 50nm,0.3s,baz=337,slow=8.4,SNR=41 | | | | | | | |
| SIJI | | | | | Sn | **Sn** | **01 11 51.4** | **-0.5** |
| | 14nm,0.3s,baz=338,slow=19,SNR=13 | | | | | | | |
| **MSAI** | **Masohi** | **4.17** | **183** | | P | **Pn** | **01 11 39.2** | **+1.0** |
| **SANI** | **Sanana** | **4.25** | **227** | | P | **Pn** | **01 11 39.6** | **+0.4** |
| **FAKI** | **Fak Fak** | **4.88** | **140** | | | **Pn** | **01 11 48.3** | **+0.3** |
| **GTOI** | **Gorontalo** | **6.11** | **268** | | P | Pn | 01 12 09.3 | +4.5 |
| | 0.1nm282nm30nm,0.9s | | | | | | | |
| **TTSI** | **Tana Toraja** | **10.06** | **247** | | P | Pn | 01 13 09.5 | +10 |
| **SPSI** | **Sidrap Palu** | **10.49** | **243** | | P | **Pn** | **01 13 07.5** | **+2.5** |
| | 19nm,0.9s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **13.87** | **292** | | | **Pn** | **01 13 48.7** | **-2.6** |
| **KNRA** | **Kununurra** | **16.42** | **181** | | | **Pn** | **01 14 24.2** | **-0.9** |
| **KSM** | **Kuching** | **18.81** | **272** | | P | **Pn** | **01 14 56.0** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **19.14** | **190** | | P | **Pn** | **01 14 59.2** | **+0.4** |
| | 0.1nm,0.3s,baz=5.2,slow=11,SNR=5.8 | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.13** | **166** | | P | **P** | **01 15 18.2** | **-1.5** |
| WB0 | | | | | lAmb | lAmb | 01 15 36.3 | |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.29** | **166** | | P | **P** | **01 15 20.9** | **-0.5** |
| | comp=Z,3.3nm,0.7s,baz=346,slow=11,SNR=20 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.29** | **166** | | P | **P** | **01 15 20.3** | **-1.1** |
| **WB2** | **Warramunga Arr** | **21.29** | **166** | | P | **P** | **01 15 21.1** | **-0.3** |
| WB2 | | | | | lAmb | lAmb | 01 15 38.0 | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.35** | **166** | | P | **P** | **01 15 21.4** | **-0.6** |
| WR0 | | | | | lAmb | lAmb | 01 15 38.7 | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **KPJI** | **Karang Pucung** | **21.71** | **248** | | P | **P** | **01 15 29.0** | **+3.1** |
| | comp=Z,26nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **24.81** | **169** | | P | **P** | **01 15 55.8** | **-1.2** |
| AS31 | | | | | lAmb | lAmb | 01 15 59.8 | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **24.81** | **169** | | P | **P** | **01 15 57.3** | **+0.4** |
| | comp=Z,12nm,0.8s,baz=347,slow=10,SNR=93 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.81** | **169** | | P | **P** | **01 15 56.5** | **-0.5** |
| **MDSI** | **Maura Dua** | **25.47** | **258** | | P | **P** | **01 16 03.7** | **+0.7** |
| **JOW** | **Kunigami** | **25.85** | **358** | | LR | LR | 01 24 31.5 | |
| | comp=Z,1µm,20.5s,baz=254,slow=32 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.63** | **161** | | P | **P** | **01 17 24.0** | **0.0** |
| | comp=Z,2.9nm,0.7s,baz=329,slow=8.5,SNR=6.0 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.63** | **161** | | P | **P** | **01 17 23.3** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **36.50** | **12** | | P | **P** | **01 17 43.0** | **+3.0** |
| | comp=Z,2.6nm,0.8s,baz=186,slow=9.2,SNR=4.4 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.50** | **12** | | P | **P** | **01 17 40.4** | **+0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **40.83** | **62** | | T | T | 02 01 45.3 | |
| | baz=248,slow=75,SNR=47 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.84** | **62** | | T | T | 02 01 45.9 | |
| | baz=248,slow=75,SNR=55 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.84** | **62** | | T | T | 02 01 45.9 | |
| | baz=248,slow=75,SNR=54 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.45** | **61** | | T | T | 02 02 31.8 | |
| | baz=247,slow=75,SNR=216 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.47** | **61** | | T | T | 02 02 32.7 | |
| | baz=247,slow=75,SNR=126 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.47** | **61** | | T | T | 02 02 33.3 | |
| | baz=247,slow=75,SNR=162 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.26** | **325** | | P | **P** | **01 20 49.4** | **-0.6** |
| | comp=Z,0.6nm,0.4s,baz=119,slow=7.9,SNR=8.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.26** | **325** | | P | **P** | **01 20 49.2** | **-0.7** |
| **SEY** | **Seymchan** | **64.32** | **12** | | P | **P** | **01 21 11.3** | **+1.4** |
| | comp=Z,0.7nm,0.3s,baz=169,slow=5.2,SNR=1.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.61** | **321** | | LR | LR | 02 13 05.7 | |
| | comp=Z,162nm,18.7s,baz=186,slow=39 | | | | | | | |

*IDC **18** 01:12:55.5±1.4,22.°78N×121.°02E,h0km,mb3.8/6, mb1 3.9/7,mb1mx3.5/68,mbtmp3.8/7,ML3.3/1,Error ellipse: s-maj=37.2km s-min=27.7km az=77.0*
*TAP **18** 01:12:56.3,23.°02N×120.°87E,h5km,ML4.0,C*
**ISC 18 01:12:56.9±1.0,22.°98N±0.°01×120.°89E±0.°01,h5km±7km, n156,σ1§16/208,mb3.7/6,18C-3D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.21** | **330** | *i* | P | **Pg** | **01 13 00.3** | **-0.8** |
| | baz=329 | | | | | | | |
| STYH | | | | *i* | S | **Sg** | **01 13 03.2** | **-0.8** |
| | baz=329 | | | | | | | |
| **STYT** | **Tauyuan** | **0.22** | **325** | *i* | P | **Pg** | **01 13 00.2** | **-1.0** |
| | baz=325 | | | | | | | |
| STYT | | | | *i* | S | **Sg** | **01 13 02.7** | **-1.4** |
| | baz=325 | | | | | | | |
| **LONT** | **Longtian** | **0.23** | **109** | ⇑ *i* | P | **Pg** | **01 13 02.6** | **+1.1** |
| | baz=117 | | | | | | | |
| LONT | | | | | S | **Sg** | **01 13 06.5** | **+2.0** |
| | baz=117 | | | | | | | |
| **ELDTW** | **Lidau** | **0.23** | **30** | ⇑ *i* | P | **Pg** | **01 13 01.1** | **-0.5** |
| | baz=41 | | | | | | | |
| ELDTW | | | | *i* | S | **Sg** | **01 13 04.1** | **-0.6** |
| | baz=41 | | | | | | | |
| **TWGBT** | **Beinan** | **0.24** | **133** | ⇓ *i* | P | **Pg** | **01 13 02.6** | **+1.1** |
| | baz=138 | | | | | | | |
| TWGBT | | | | *i* | S | **Sg** | **01 13 06.4** | **+1.6** |
| | baz=138 | | | | | | | |
| **SGST** | **Jiashian** | **0.30** | **289** | *eP* | | **Pg** | **01 13 01.6** | **-1.1** |
| | baz=283 | | | | | | | |
| SGST | | | | *eS* | | **Sg** | **01 13 05.8** | **-1.0** |
| | baz=283 | | | | | | | |
| **ECS** | **Chishang** | **0.32** | **70** | ⇑ *i* | P | **Pb** | **01 13 03.8** | **-1.3** |
| | baz=73 | | | | | | | |
| ECS | | | | *i* | S | **Sb** | **01 13 08.4** | **-2.2** |
| | baz=73 | | | | | | | |
| **TTN** | **Taitung** | **0.33** | **134** | | P | **Pg** | **01 13 05.0** | **+1.7** |
| | baz=136 | | | | | | | |
| TTN | | | | | S | **Sg** | **01 13 11.1** | **+3.5** |
| | baz=136 | | | | | | | |
| **SSD** | **Sandimen** | **0.34** | **225** | ⇑ *eP* | | **Pb** | **01 13 03.4** | **-2.0** |
| | baz=217 | | | | | | | |
| SSD | | | | *eS* | | **Sg** | **01 13 07.3** | **-0.5** |
| | baz=217 | | | | | | | |
| **WTP** | **Ta-pu** | **0.36** | **316** | *i* | P | **Pg** | **01 13 03.8** | **-0.2** |
| | baz=314 | | | | | | | |
| WTP | | | | *i* | S | **Sg** | **01 13 08.8** | **0.0** |
| | baz=314 | | | | | | | |
| **SCST** | **Cishan** | **0.38** | **255** | | P | **Pg** | **01 13 04.7** | **+0.5** |
| | baz=248 | | | | | | | |
| **EDH** | **Donghe** | **0.38** | **92** | *eP* | | **Pb** | **01 13 05.5** | **-0.6** |
| | baz=98 | | | | | | | |
| EDH | | | | *eS* | | **Sb** | **01 13 11.7** | **-0.6** |
| | baz=98 | | | | | | | |
| **ECL** | **Taimali** | **0.39** | **171** | *i* | P | **Pb** | **01 13 05.1** | **-1.1** |
| | baz=168 | | | | | | | |
| ECL | | | | *i* | S | **Sb** | **01 13 10.7** | **-1.8** |
| | baz=168 | | | | | | | |
| **CHN1** | **Nanshi** | **0.39** | **301** | *eP* | | **Pg** | **01 13 04.6** | **+0.1** |
| | baz=297 | | | | | | | |
| CHN1 | | | | | S | **Sg** | **01 13 10.3** | **+0.8** |
| | baz=297 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.40** | **323** | *i* | P | **Pg** | **01 13 04.4** | **-0.2** |
| | baz=321 | | | | | | | |
| TPUB | | | | *i* | S | **Sg** | **01 13 09.5** | **-0.3** |
| | baz=321 | | | | | | | |
| **FULB** | **Fuli** | **0.43** | **60** | ⇑ *i* | P | **Pb** | **01 13 05.8** | **-1.1** |
| | baz=67 | | | | | | | |
| FULB | | | | *i* | S | **Sb** | **01 13 12.4** | **-1.3** |
| | baz=67 | | | | | | | |
| **SNST** | **Tainan City** | **0.43** | **303** | *eP* | | **Pg** | **01 13 05.8** | **+0.5** |
| | baz=299 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.44** | **213** | ⇑ *i* | P | **Pb** | **01 13 05.4** | **-1.7** |
| | baz=210 | | | | | | | |
| MASBT | | | | | S | **Sb** | **01 13 12.1** | **-1.9** |
| | baz=210 | | | | | | | |
| **SGLT** | **Jiouru** | **0.45** | **235** | ⇑ *i* | P | **Pb** | **01 13 06.6** | **-0.7** |
| | baz=225 | | | | | | | |
| **CHKT** | **Chengkung** | **0.45** | **75** | ⇑ *i* | P | **Pb** | **01 13 06.9** | **-0.4** |
| | baz=82 | | | | | | | |
| CHKT | | | | *i* | S | **Sb** | **01 13 14.1** | **-0.2** |
| | baz=82 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.46** | **323** | ⇓ *eP* | | **Pg** | **01 13 05.7** | **0.0** |
| | baz=322 | | | | | | | |
| **TWM1** | **Shoushan** | **0.46** | **250** | *i* | P | **Pb** | **01 13 06.7** | **-0.8** |
| | baz=243 | | | | | | | |
| **TWK** | **Hsinying** | **0.47** | **307** | *i* | P | **Pg** | **01 13 06.3** | **+0.4** |
| | baz=312 | | | | | | | |
| TWK | | | | *i* | S | **Sg** | **01 13 12.9** | **+0.9** |
| | baz=312 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.47** | **230** | | P | **Pb** | **01 13 07.0** | **-0.7** |
| | baz=225 | | | | | | | |
| **CHN3** | **Shinhua** | **0.49** | **281** | | P | **Pb** | **01 13 07.9** | **-0.2** |
| | baz=276 | | | | | | | |
| **SHHT** | **Tainan City** | **0.50** | **274** | *eP* | | **Pb** | **01 13 08.8** | **+0.6** |
| | baz=270 | | | | | | | |
| SHHT | | | | *eS* | | **Sb** | **01 13 18.2** | **+2.4** |
| | baz=270 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.51** | **6** | ⇑ *i* | P | **Pg** | **01 13 05.8** | **-0.9** |
| | baz=19 | | | | | | | |
| YUS | | | | *i* | S | **Sg** | **01 13 12.4** | **-1.0** |
| | baz=19 | | | | | | | |
| **TWF1** | **Yuli** | **0.52** | **45** | ⇑ *i* | P | **Pg** | **01 13 06.6** | **-0.3** |
| | baz=51 | | | | | | | |
| TWF1 | | | | *eS* | | **Sg** | **01 13 13.1** | **-0.7** |
| | baz=51 | | | | | | | |
| **ALS** | **Alishan** | **0.53** | **351** | ⇑ *i* | P | **Pg** | **01 13 06.3** | **-0.8** |
| | baz=354 | | | | | | | |
| ALS | | | | | S | **Sg** | **01 13 13.9** | **-0.2** |
| | baz=354 | | | | | | | |
| **EYUL** | **Yuli** | **0.54** | **47** | *i* | P | **Pg** | **01 13 06.9** | **-0.3** |
| | baz=53 | | | | | | | |
| **YULB** | **Yu-li** | **0.55** | **42** | ⇑ *i* | P | **Pg** | **01 13 06.8** | **-0.8** |
| | baz=47 | | | | | | | |
| YULB | | | | | *eS* | **Sg** | **01 13 13.5** | **-1.3** |
| | baz=47 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.56** | **246** | *eP* | | **Pb** | **01 13 09.8** | **+0.6** |
| | baz=241 | | | | | | | |
| **SSHA** | **Shanhua** | **0.58** | **285** | *eP* | | **Pb** | **01 13 09.5** | **0.0** |
| | baz=292 | | | | | | | |
| **SSPT** | **Xinbi** | **0.58** | **211** | ⇑ *i* | P | **Pb** | **01 13 08.7** | **-0.8** |
| | baz=197 | | | | | | | |
| **EAST** | **Anshuo** | **0.60** | **184** | ⇑ *i* | P | **Pb** | **01 13 09.0** | **-0.9** |
| | baz=171 | | | | | | | |
| **ECBN** | **Changbin** | **0.61** | **57** | | P | **Pb** | **01 13 09.6** | **-0.5** |
| | baz=62 | | | | | | | |
| ECBN | | | | | *eS* | **Sb** | **01 13 18.8** | **-0.2** |
| | baz=62 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.61** | **275** | *eP* | | **Pb** | **01 13 10.6** | **+0.5** |
| | baz=271 | | | | | | | |
| **LDUT** | **Ludao** | **0.62** | **120** | *eP* | | **Pn** | **01 13 09.8** | **-2.4** |
| | baz=122 | | | | | | | |
| **TAW** | **Tawu** | **0.62** | **180** | *eP* | | **Pn** | **01 13 09.3** | **-3.0** |
| | baz=177 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.64** | **180** | ⇑ *i* | P | **Pn** | **01 13 09.7** | **-2.9** |
| | baz=178 | | | | | | | |
| TAWH | | | | | *eS* | **Sb** | **01 13 18.5** | **-1.2** |
| | baz=178 | | | | | | | |
| **EHY** | **Hungye** | **0.65** | **37** | ⇑ *i* | P | **Pg** | **01 13 08.7** | **-0.8** |
| | baz=42 | | | | | | | |
| **SCZT** | **Fangliau** | **0.66** | **202** | ⇑ *i* | P | **Pb** | **01 13 09.8** | **-1.1** |
| | baz=189 | | | | | | | |
| **CHN2** | **Minshiung** | **0.67** | **325** | *eP* | | **Pg** | **01 13 09.8** | **+0.1** |
| | baz=325 | | | | | | | |
| CHN2 | | | | | *eS* | **Sg** | **01 13 20.0** | **+1.6** |
| | baz=325 | | | | | | | |
| **CHY** | **Chiayi** | **0.67** | **320** | *eP* | | **Pg** | **01 13 09.6** | **-0.2** |
| | baz=320 | | | | | | | |
| CHY | | | | | *eS* | **Sg** | **01 13 20.6** | **+2.1** |
| | baz=320 | | | | | | | |
| **SCLT** | **Jiali** | **0.67** | **287** | *eP* | | **Pb** | **01 13 11.5** | **+0.4** |
| | baz=300 | | | | | | | |
| **ICHU** | **Yijhu** | **0.68** | **304** | *eP* | | **Pb** | **01 13 10.8** | **+0.8** |
| | baz=302 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.68** | **233** | *eP* | | **Pn** | **01 13 12.7** | **-0.5** |
| | baz=249 | | | | | | | |
| **HGSD** | **Ruisui** | **0.70** | **44** | | P | **Pg** | **01 13 10.4** | **0.0** |
| | baz=41 | | | | | | | |
| HGSD | | | | | S | **Sg** | **01 13 20.2** | **+0.6** |
| | baz=41 | | | | | | | |
| **CHN8** | **Yiju** | **0.72** | **300** | *eP* | | **Pg** | **01 13 11.5** | **+0.7** |
| | baz=298 | | | | | | | |
| **WGK** | **Gukeng** | **0.76** | **337** | *eP* | | **Pg** | **01 13 12.0** | **+0.5** |
| | baz=338 | | | | | | | |
| WGK | | | | | *eS* | **Sg** | **01 13 22.6** | **+1.2** |
| | baz=338 | | | | | | | |
| **SLIU** | **Shizi** | **0.77** | **186** | ⇑ | P | **Pn** | **01 13 12.0** | **-2.4** |
| | baz=184 | | | | | | | |
| **WDLH** | **Douliu** | **0.77** | **335** | *eP* | | **Pg** | **01 13 12.2** | **+0.5** |
| | baz=336 | | | | | | | |
| **WLCH** | **Liuqiu** | **0.79** | **217** | *eP* | | **Pn** | **01 13 15.3** | **+0.7** |
| | baz=214 | | | | | | | |
| **VWDT** | **VWDT** | **0.80** | **17** | *eP* | | **Pg** | **01 13 10.8** | **-1.4** |
| | baz=23 | | | | | | | |
| VWDT | | | | | *eS* | **Sg** | **01 13 23.8** | **+1.1** |
| | baz=23 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.80** | **218** | *eP* | | **Pn** | **01 13 15.4** | **+0.6** |
| | baz=214 | | | | | | | |
| **SSLB** | **Suanglung** | **0.80** | **4** | *eP* | | **Pg** | **01 13 10.8** | **-1.5** |
| | baz=15 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.81** | **311** | *eP* | | **Pg** | **01 13 13.0** | **+0.5** |
| | baz=310 | | | | | | | |
| **WTK** | **Tuku** | **0.84** | **327** | *eP* | | **Pg** | **01 13 13.2** | **+0.2** |
| | baz=327 | | | | | | | |
| WTK | | | | | *eS* | **Sg** | **01 13 25.8** | **+1.8** |
| | baz=327 | | | | | | | |
| **WJS** | **Zhushan** | **0.85** | **350** | *eP* | | **Pg** | **01 13 13.6** | **+0.4** |
| | baz=351 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.90** | **1** | *eP* | | **Pg** | **01 13 13.2** | **-0.9** |
| | baz=12 | | | | | | | |
| SMLT | | | | | *eS* | **Sg** | **01 13 27.5** | **+1.8** |
| | baz=12 | | | | | | | |
| **WSF** | **Szhu** | **0.90** | **317** | *eP* | | **Pg** | **01 13 14.1** | **0.0** |
| | baz=317 | | | | | | | |
| WSF | | | | | S | **Sg** | **01 13 27.2** | **+1.5** |
| | baz=317 | | | | | | | |
| **WNT** | **Mingjian** | **0.91** | **348** | *eP* | | **Pg** | **01 13 14.2** | **-0.1** |
| | baz=350 | | | | | | | |
| **TYC** | **Yuchr** | **0.92** | **358** | | P | **Pg** | **01 13 14.1** | **-0.4** |
| | baz=7.0 | | | | | | | |
| TYC | | | | | S | **Sg** | **01 13 27.9** | **+1.5** |
| | baz=7.0 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.94** | **39** | *eP* | | **Pg** | **01 13 14.4** | **-0.5** |
| | baz=44 | | | | | | | |
| **WNT1** | **Nantou City** | **0.94** | **348** | *eP* | | **Pg** | **01 13 15.2** | **+0.2** |
| | baz=350 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.96** | **183** | *eP* | | **Pn** | **01 13 16.8** | **-0.1** |
| | baz=181 | | | | | | | |
| **ESL** | **Shilin** | **0.96** | **31** | *eP* | | **Pg** | **01 13 14.1** | **-1.3** |
| | baz=41 | | | | | | | |
| ESL | | | | | *eS* | **Sg** | **01 13 28.9** | **+0.9** |
| | baz=41 | | | | | | | |
| **HEN** | **Hengchun** | **0.98** | **188** | *eP* | | **Pn** | **01 13 18.0** | **+0.7** |
| | baz=186 | | | | | | | |
| **WUSB** | **Renai** | **1.02** | **12** | *eP* | | **Pg** | **01 13 14.9** | **-1.7** |
| | baz=13 | | | | | | | |
| WUSB | | | | | *eS* | **Sg** | **01 13 31.0** | **+1.1** |
| | baz=13 | | | | | | | |
| **WPL** | **Puli Township** | **1.03** | **3** | *eP* | | **Pg** | **01 13 15.6** | **-1.0** |
| | baz=6.0 | | | | | | | |
| **SNW** | **Nanwan** | **1.03** | **187** | *eP* | | **Pn** | **01 13 19.6** | **+1.7** |
| | baz=185 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.03** | **333** | *eP* | | **Pg** | **01 13 16.5** | **-0.1** |
| | baz=334 | | | | | | | |
| **TWK1** | **Hengchun** | **1.04** | **184** | *eP* | | **Pn** | **01 13 18.6** | **+0.5** |
| | baz=167 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.04** | **328** | *eP* | | **Pg** | **01 13 16.1** | **-0.8** |
| | baz=328 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.04** | **184** | *eP* | | **Pn** | **01 13 18.3** | **+0.2** |
| | baz=167 | | | | | | | |
| **DPDB** | **Guoxing** | **1.05** | **2** | *eP* | | **Pg** | **01 13 16.6** | **-0.4** |
| | baz=5.0 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.07** | **1** | *eP* | | **Pg** | **01 13 16.6** | **-0.8** |
| | baz=19 | | | | | | | |
| **WWF** | **Wufeng** | **1.07** | **351** | *eP* | | **Pg** | **01 13 17.4** | **0.0** |
| | baz=337 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.08** | **180** | *eP* | | **Pn** | **01 13 18.6** | **0.0** |
| | baz=164 | | | | | | | |
| TSEB | | | | | *eS* | **Sn** | **01 13 37.0** | **+3.1** |
| | baz=164 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.09** | **36** | *eP* | | **Pg** | **01 13 17.7** | **-0.2** |
| | baz=39 | | | | | | | |
| **CHGB** | **Renai** | **1.10** | **14** | *eP* | | **Pg** | **01 13 17.2** | **-0.8** |
| | baz=25 | | | | | | | |
| **LAY** | **Lan-yu** | **1.12** | **147** | *eP* | | **Pn** | **01 13 19.6** | **+0.3** |
| | baz=146 | | | | | | | |
| **ETM** | **Tongmen** | **1.12** | **29** | *eP* | | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWT** | **Tachien** baz=14 | **1.29** | **12** | *e*P | **Pn** | **01 13 20.9** | **-0.8** |
| **FUSS** | **Fushou** baz=18 | **1.30** | **14** | *e*P | **Pg** | **01 13 20.4** | **-1.4** |
| **PHUB** | **P'eng-hu** baz=293 | **1.32** | **294** | P | **Pn** | **01 13 20.6** | **-1.4** |
| PHUB | baz=293 | | | S | **Sg** | **01 13 37.2** | **-2.2** |
| **ETLH** | **Xiulin Townshi** baz=45 | **1.33** | **24** | *e*P | **Pn** | **01 13 20.9** | **-1.3** |
| **ETL** | **Fush Village** baz=49 | **1.35** | **30** | *e*P | **Pn** | **01 13 21.5** | **-0.9** |
| **NACB** | **Ninganchiao** baz=49 | **1.35** | **28** | *e*P | **Pn** | **01 13 21.2** | **-1.2** |
| **PNG** | **Penghu** baz=295 | **1.36** | **296** | P | **Pn** | **01 13 21.0** | **-1.4** |
| PNG | baz=295 | | | *e*S | **Sb** | **01 13 39.2** | **-1.3** |
| **TWQ1** | **Liyutan** baz=359 | **1.36** | **355** | *e*P | **Pn** | **01 13 22.2** | **-0.3** |
| **VCHM** | **Qimei** baz=294 | **1.36** | **280** | *e*P | **Pn** | **01 13 21.0** | **-1.6** |
| VCHM | baz=294 | | | *e*S | **Sg** | **01 13 38.5** | **-2.3** |
| **WDJ** | **Dajia District** baz=341 | **1.38** | **350** | *e*P | **Pn** | **01 13 21.9** | **-0.8** |
| **NSY** | **Sanyi** baz=339 | **1.43** | **355** | *e*P | **Pn** | **01 13 23.7** | **+0.2** |
| NSY | baz=339 | | | *e*S | **Sn** | **01 13 43.2** | **+0.5** |
| **NNSB** | **Datong** baz=16 | **1.51** | **17** | *e*P | **Pn** | **01 13 24.4** | **-0.2** |
| NNSB | baz=16 | | | *e*S | **Sn** | **01 13 45.4** | **+0.7** |
| **NNS** | **Nan Shan** baz=16 | **1.52** | **17** | *e*P | **Pn** | **01 13 24.2** | **-0.5** |
| NNS | baz=16 | | | *e*S | **Sn** | **01 13 46.2** | **+1.3** |
| **NMLH** | **Miaoli** baz=340 | **1.55** | **357** | *e*P | **Pn** | **01 13 25.6** | **+0.5** |
| **ENA** | **Nanau** baz=46 | **1.64** | **28** | *e*P | **Pn** | **01 13 26.1** | **-0.2** |
| **NSTT** | **Nanjuang** baz=349 | **1.64** | **3** | *e*P | **Pn** | **01 13 27.2** | **+0.8** |
| **LATG** | **Datong** baz=24 | **1.65** | **21** | *e*P | **Pn** | **01 13 26.7** | **+0.1** |
| **NFF** | **Wufeng Townshi** baz=12 | **1.65** | **7** | *e*P | **Pn** | **01 13 27.2** | **+0.6** |
| **LIOB** | **Emei** baz=349 | **1.66** | **4** | *e*P | **Pn** | **01 13 26.8** | **+0.1** |
| **EWUT** | **Wuta** baz=46 | **1.67** | **29** | *e*P | **Pn** | **01 13 26.9** | **+0.2** |
| **NDT** | **Datong Townshi** baz=23 | **1.71** | **19** | *e*P | **Pb** | **01 13 28.5** | **-0.3** |
| **YHNB** | **Yeheng** baz=18 | **1.74** | **15** | *e*P | **Pn** | **01 13 28.2** | **+0.5** |
| **NSK** | **Sanguang** baz=18 | **1.74** | **14** | *e*P | **Pn** | **01 13 28.4** | **+0.6** |
| **ENTT** | **Nioudou** baz=33 | **1.76** | **20** | P | **Pn** | **01 13 28.6** | **+0.6** |
| ENTT | baz=33 | | | *e*S | **Sg** | **01 13 54.0** | **+0.5** |
| **HSN1** | **Hsinchu** baz=350 | **1.79** | **4** | *e*P | **Pb** | **01 13 30.4** | **+0.3** |
| **SBCB** | **Hsinchu** baz=349 | **1.80** | **3** | *e*P | **Pb** | **01 13 31.1** | **+0.7** |
| **NDS** | **Dongshan** baz=43 | **1.81** | **25** | *e*P | **Pb** | **01 13 29.9** | **-0.5** |
| **TWC** | **Suao** baz=46 | **1.84** | **28** | *e*P | **Pb** | **01 13 30.1** | **-0.9** |
| **TWE** | **Neicheng** baz=34 | **1.87** | **22** | *e*P | **Pb** | **01 13 30.7** | **-0.8** |
| TWE | baz=34 | | | *e*S | **Sb** | **01 13 56.5** | **+1.4** |
| **NWLT** | **Wulai** baz=21 | **1.87** | **17** | *e*P | **Pn** | **01 13 30.5** | **+0.9** |
| **FUSB** | **Fushanzhiwuyua** baz=18 | **1.88** | **20** | *e*P | **Pb** | **01 13 31.4** | **-0.3** |
| FUSB | baz=18 | | | *e*S | **Sb** | **01 13 57.2** | **+1.6** |
| **NCUH** | **Zhongli** baz=12 | **1.99** | **8** | *e*P | **Pb** | **01 13 34.6** | **+0.9** |
| **NTC** | **Toucheng** baz=43 | **2.05** | **25** | *e*P | **Pb** | **01 13 34.0** | **-0.6** |
| **NHDH** | **Xindian Distri** baz=20 | **2.05** | **16** | *e*P | **Pb** | **01 13 35.0** | **+0.4** |
| **TATO** | **Taipei** baz=14 | **2.06** | **15** | *e*P | **Pb** | **01 13 34.4** | **-0.4** |
| TATO | baz=14 | | | *e*S | **Sb** | **01 14 02.1** | **+1.6** |
| **EGS** | baz=43 | **2.08** | **27** | *e*P | **Pn** | **01 13 33.0** | **+0.5** |
| **TWA** | **Mucha** baz=5.0 | **2.09** | **18** | *e*P | **Pb** | **01 13 35.1** | **-0.1** |
| **TIPB** | **Shuangxi** baz=40 | **2.16** | **23** | *e*P | **Pn** | **01 13 34.9** | **+1.4** |
| **TWS1** | **Kuangyinshan** baz=25 | **2.16** | **13** | *e*P | **Pb** | **01 13 37.2** | **+0.7** |
| **NTST** | **Danshui** baz=18 | **2.23** | **13** | *e*P | **Pb** | **01 13 36.9** | **-0.8** |
| **NWF** | **Wu-fen Shan** baz=42 | **2.23** | **21** | *e*P | **Pb** | **01 13 36.4** | **-1.4** |
| **WFSB** | **Wu-fen Shan** baz=42 | **2.23** | **21** | *e*P | **Pn** | **01 13 35.5** | **+1.0** |
| **TWB1** | **Santiao Chiao** baz=42 | **2.25** | **26** | *e*P | **Pn** | **01 13 35.4** | **+0.6** |
| **YM08** | **YM08** baz=21 | **2.29** | **16** | *e*P | **Pb** | **01 13 38.2** | **-0.4** |
| **SXI1** | **Grass Mountain** baz=42 | **2.29** | **23** | *e*P | **Pn** | **01 13 36.9** | **+1.6** |
| **TWY** | **Chenhua** baz=20 | **2.37** | **16** | *e*P | **Pb** | **01 13 39.0** | **-1.0** |
| **YOJ** | **Yonaguni jima** baz=55 | **2.44** | **52** | *e*P | **Pn** | **01 13 36.2** | **-1.2** |
| **PTMZ** | **Houxiangcun** baz=324 | **2.61** | **322** | *e*P | **Pn** | **01 13 38.3** | **-1.4** |
| **KNM** | **Kinmen** baz=301 | **2.67** | **303** | *e*P | **Pn** | **01 13 41.1** | **+0.6** |
| **KNMB** | **Chin-men Tao** baz=303 | **2.73** | **303** | *e*P | **Pn** | **01 13 39.9** | **-1.4** |
| **PCYT** | **Pengchaiyu** baz=40 | **2.85** | **22** | *e*P | **Pn** | **01 13 44.6** | **+1.7** |
| **ZPLA** | **Ao Xicun** baz=288 | **3.04** | **289** | *e*P | **Pn** | **01 13 44.8** | **-0.7** |
| **MATB** | **Ma-tsu** baz=351 | **3.27** | **345** | *e*P | **Pn** | **01 13 47.5** | **-1.3** |
| **AXDP** | **Jialang** baz=307 | **3.28** | **306** | *e*P | **Pn** | **01 13 47.8** | **-1.2** |
| **MSUT** | **Lienchiang** baz=351 | **3.29** | **345** | *e*P | **Pn** | **01 13 48.2** | **-0.8** |
| **MHZQ** | **Yeshan** baz=335 | **3.54** | **332** | *e*P | **Pn** | **01 13 51.6** | **-0.8** |
| **VDOS** | **Pratas Island** baz=243 | **4.48** | **240** | *e*P | **Pn** | **01 14 07.0** | **+1.5** |
| **JOW** | **Kunigami** 1.1nm,0.3s,baz=267,slow=17,SNR=1.6 | **7.72** | **59** | Pn | **Pn** | **01 14 48.7** | **-1.3** |
| JOW | 0.5nm,0.3s,baz=23,slow=29,SNR=1.3 | | | Sn | **Sn** | **01 16 13.5** | **-4.3** |
| **SONM** | **Songino Array** 2.1nm,1.0s,baz=151,slow=9.4,SNR=4.6 | **27.37** | **338** | P | **P** | **01 18 44.3** | **+1.2** |
| **KLR** | **Kul'dur** 2.0nm,0.9s,baz=173,slow=8.1,SNR=3.4 | **27.57** | **15** | P | **P** | **01 18 46.1** | **+1.5** |
| **MKAR** | **Makanchi Array** 0.6nm,0.7s,baz=106,slow=8.7,SNR=1.3 | **39.02** | **317** | P | **P** | **01 20 26.3** | **+1.9** |
| **FITZ** | **Fitzroy Crossi** 2.9nm,0.9s,baz=344,slow=8.2,SNR=2.5 | **41.09** | **173** | P | **P** | **01 20 39.2** | **-2.6** |
| **ZALV** | **Zalesovo Beam** 0.7nm,0.6s,baz=109,slow=7.9,SNR=2.2 | **41.11** | **328** | P | **P** | **01 20 41.9** | **+0.3** |
| **ILAR** | **Eielson Array** 0.2nm,0.7s,baz=280,slow=5.3,SNR=1.0 | **70.40** | **27** | P | **P** | **01 24 12.2** | **+0.5** |

**TAP 18 01:17:45.8, 23.05N×120.88E, h6km, ML1.8, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** baz=321 | **0.16** | **321** | P | Pg | 01 17 49.6 | +0.6 |
| STYH | baz=321 | | | *e*S | Sg | 01 17 52.2 | +1.1 |
| **STYT** | **Tauyuan** baz=316 | **0.16** | **315** | *i* P | Pg | 01 17 49.5 | +0.4 |
| STYT | baz=316 | | | S | Sg | 01 17 52.2 | +0.9 |
| **ELDTW** | **Lidau** baz=43 | **0.19** | **41** | *i* P | Pg | 01 17 50.2 | +0.7 |
| ELDTW | baz=43 | | | *i* S | Sg | 01 17 53.1 | +1.0 |
| **LONT** | **Longtian** baz=123 | **0.27** | **122** | P | Pg | 01 17 51.7 | +0.7 |
| LONT | baz=123 | | | *i* S | Sg | 01 17 55.9 | +1.3 |
| **SGST** | **Jiashian** baz=277 | **0.28** | **277** | *e*P | Pg | 01 17 51.7 | +0.4 |
| **TWG** | **Pinlang** baz=142 | **0.28** | **142** | *e*P | Pg | 01 17 52.0 | +0.6 |
| TWG | baz=142 | | | *e*S | Sg | 01 17 55.9 | +0.8 |
| **TWGBT** | **Beinan** baz=142 | **0.29** | **141** | P | Pg | 01 17 51.9 | +0.5 |
| TWGBT | baz=142 | | | *e*S | Sg | 01 17 56.2 | +0.8 |
| **ECS** | **Chishang** baz=77 | **0.31** | **81** | *e*P | Pb | 01 17 53.3 | -0.5 |
| ECS | baz=77 | | | S | Sb | 01 17 57.9 | -1.3 |
| **WTP** | **Ta-pu** baz=309 | **0.32** | **309** | P | Pb | 01 17 53.0 | -0.9 |
| WTP | baz=309 | | | S | Sb | 01 17 58.1 | -1.3 |
| **TPUB** | **Ta-pu** baz=317 | **0.34** | **317** | *e*P | Pb | 01 17 53.7 | -0.6 |
| TPUB | baz=317 | | | S | Sb | 01 17 59.0 | -1.1 |
| **CHN1** | **Nanshi** baz=293 | **0.35** | **293** | *e*P | Pb | 01 17 53.9 | -0.7 |
| **SSD** | **Sandimen** baz=216 | **0.38** | **218** | P | Pg | 01 17 52.7 | -0.4 |
| **EDH** | **Donghe** baz=101 | **0.40** | **101** | *e*P | Pg | 01 17 54.3 | +0.8 |
| **CHN4** | **Tsaushan** baz=330 | **0.40** | **319** | *e*P | Pb | 01 17 54.7 | -0.6 |
| **FULB** | **Fuli** baz=68 | **0.41** | **68** | P | Pb | 01 17 55.0 | -0.4 |
| FULB | baz=68 | | | S | Sb | 01 18 01.5 | -0.4 |
| **TWK** | **Hsinying** baz=302 | **0.42** | **301** | *e*P | Pb | 01 17 55.8 | 0.0 |
| **YUS** | **Yu-Shan** baz=18 | **0.45** | **8** | P | Pg | 01 17 55.0 | +0.5 |
| YUS | baz=18 | | | S | Sg | 01 18 01.4 | +1.0 |
| **ECL** | **Taimali** baz=170 | **0.45** | **172** | *e*P | Pg | 01 17 54.3 | -0.2 |
| **ALS** | **Alishan** baz=352 | **0.47** | **351** | *e*P | Pg | 01 17 55.6 | +0.7 |
| ALS | baz=352 | | | *e*S | Sb | 01 18 03.6 | -0.3 |
| **TWF1** | **Yuli** baz=52 | **0.49** | **51** | P | Pg | 01 17 55.8 | +0.6 |
| TWF1 | baz=52 | | | S | Sb | 01 18 03.4 | -0.8 |
| **MASBT** | **Mashibuluo** baz=213 | **0.49** | **208** | *e*P | Pg | 01 17 54.7 | -0.6 |
| **YULB** | **Yu-li** baz=46 | **0.51** | **48** | P | Pg | 01 17 55.8 | +0.1 |
| YULB | baz=46 | | | S | Sg | 01 18 03.0 | +0.6 |
| **EHY** | **Hungye** baz=43 | **0.61** | **41** | *e*P | Pb | 01 17 58.6 | -0.3 |
| **EAST** | **Anshuo** baz=172 | **0.66** | **183** | *e*P | Pb | 01 17 59.6 | -0.1 |
| **HGSD** | **Ruisui** baz=41 | **0.67** | **48** | *e*P | Pb | 01 17 59.7 | -0.2 |
| HGSD | baz=41 | | | *e*S | Sb | 01 18 10.4 | +1.1 |

*IDC* ***18*** *01:18:31.3±0.4, 22.91N×120.93E, h0km, mb4.5/33, mb1 4.6/36, mb1mx4.5/73, mbtmp4.5/36, ML4.1/2, MS4.1/7, Ms1 4.2/7, ms1mx3.5/88, Error ellipse: s-maj=14.3km s-min=10.5km az=66.0*

*TAP* ***18*** *01:18:32.0, 23.03N×120.88E, h4km, ML5.1, C*

*JMA* ***18*** *01:18:32.6±0.4, 22.95N×121.15E, h0km, M4.5*

*NIED* ***18*** *01:18:32.6, 22.95N×121.15E, h0km, MW4.7, Moment Tensor Solution. s3 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.49; $M_{\theta\theta}$1.04; $M_{\phi\phi}$0.45; $M_{r\theta}$0.25; $M_{\theta\phi}$-0.49; $M_{\phi r}$-0.12; Fault plane solution: $M_0$1.43000×10$^{16}$ NP1: $\phi_s$299.00000°, δ50.00000°, λ-91.00000°. NP2: $\phi_s$120.00000°, δ40.00000°, λ-89.00000°.*

*NEIC* ***18*** *01:18:32.5±1.8, 23.01N±0.01×120.90E±0.04, h9km±4km, mb4.9/44, Mwr4.7/24, ML4.7(TAP) Error ellipse: s-maj=6.0km s-min=2.0km az=93.0*

*ASIES* ***18*** *01:18:32.2, 23.02N×120.90E, h14km, MW4.5*

*BJI* ***18*** *01:18:32.4±0.0, 23.01N×120.91E, h11km, mb4.4/53, mB5.1/23, ML4.7/10, Ms4.7/34, Ms7 4.5/31*

*NEIC* ***18*** *01:18:33.5, 23.03N×120.91E, h8km, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.02; $M_{\theta\theta}$0.59; $M_{\phi\phi}$0.43; $M_{r\theta}$-0.28; $M_{\theta\phi}$-0.61; $M_{\phi r}$0.67; Fault plane solution: $M_0$1.30000×10$^{16}$ NP1:$\phi_s$145.83000°, δ62.23000°, λ-75.03000°. NP2:$\phi_s$295.98000°, δ31.26000°, λ-116.13000°. Principal axes: T 1.3116, Plg16.0000°, Azm225.0000°; N -0.0274, Plg13.0000°, Azm319.0000°; P -1.2842, Plg69.0000°, Azm87.0000°;*

*BGR* ***18*** *01:18:44.6±0.0, 24.43N×120.74E, h33km, mb5.1*

**ISC 18 01:18:32.8±0.8, 23.01N±0.01×120.90E±0.01, h9km±5km, n390, σ1$43/512, mb4.8/79, MS4.4/8, 61C-19D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** baz=328 | **0.19** | **324** | *i* P | **Pg** | **01 18 36.1** | **-0.7** |
| STYH | baz=328 | | | *i* S | **Sg** | **01 18 38.6** | **-0.8** |
| **STYT** | **Tauyuan** baz=324 | **0.20** | **319** | ⇓*i* P | **Pg** | **01 18 35.8** | **-1.1** |
| STYT | baz=324 | | | *i* S | **Sg** | **01 18 38.5** | **-1.2** |
| **ELDTW** | **Lidau** baz=41 | **0.21** | **32** | *i* P | **Pg** | **01 18 36.8** | **-0.3** |
| ELDTW | baz=41 | | | *i* S | **Sg** | **01 18 39.7** | **-0.3** |
| **LONT** | **Longtian** baz=117 | **0.24** | **117** | P | **Pg** | **01 18 38.0** | **+0.4** |
| LONT | baz=117 | | | S | **Sg** | **01 18 42.5** | **+1.6** |
| **TWG** | **Pinlang** | **0.25** | **140** | Pg | **Pg** | **01 18 38.1** | **+0.3** |
| TWG | | | | Sg | **Sg** | **01 18 41.7** | **+0.5** |
| **TWGBT** | **Beinan** baz=138 | **0.26** | **139** | *i* P | **Pg** | **01 18 38.2** | **+0.3** |
| TWGBT | baz=138 | | | *i* S | **Sg** | **01 18 42.6** | **+1.2** |
| **SGST** | **Jiashian** baz=287 | **0.30** | **283** | ⇑*e*P | **Pg** | **01 18 37.2** | **-1.6** |
| SGST | baz=287 | | | *i* S | **Sg** | **01 18 41.7** | **-1.0** |
| **ECS** | **Chishang** baz=78 | **0.31** | **75** | *i* P | **Pg** | **01 18 39.3** | **+0.4** |
| ECS | baz=78 | | | *i* S | **Sg** | **01 18 44.2** | **+1.2** |
| **TTN** | **Taitung** baz=136 | **0.35** | **138** | ⇓P | **Pb** | **01 18 40.8** | **-0.4** |
| TTN | baz=136 | | | *i* S | **Sb** | **01 18 47.5** | **+0.7** |
| **WTP** | **Ta-pu** baz=318 | **0.35** | **312** | ⇓*i* P | **Pg** | **01 18 39.3** | **-0.4** |
| WTP | baz=318 | | | *i* S | **Sg** | **01 18 44.7** | **+0.3** |
| **SSD** | **Sandimen** baz=217 | **0.36** | **223** | ⇑*i* P | **Pg** | **01 18 38.9** | **-1.0** |
| SSD | baz=217 | | | *i* S | **Sg** | **01 18 43.5** | **-1.2** |
| **EDH** | **Donghe** baz=98 | **0.38** | **96** | ⇑*i* P | **Pb** | **01 18 41.2** | **-0.5** |
| EDH | baz=98 | | | *e*S | **Sb** | **01 18 47.1** | **-0.5** |
| **TPUB** | **Ta-pu** | **0.38** | **319** | | **Pg** | **01 18 39.7** | **-0.6** |
| TPUB | | | | Sg | **Sg** | **01 18 45.4** | **+0.2** |
| **TPUB** | **Ta-pu** baz=321 | **0.38** | **319** | ⇓*i* P | **Pg** | **01 18 39.9** | **-0.3** |
| TPUB | baz=321 | | | *i* S | **Sg** | **01 18 45.4** | **+0.2** |
| **CHN1** | **Nanshi** baz=305 | **0.38** | **297** | ⇓*i* P | **Pg** | **01 18 40.4** | **+0.1** |
| CHN1 | baz=305 | | | *i* S | **Sg** | **01 18 46.4** | **+1.0** |
| **TSMG** | **Majia** baz=221 | **0.39** | **217** | P | **Pg** | **01 18 39.3** | **-1.0** |
| TSMG | baz=221 | | | *e*S | **Sg** | **01 18 44.4** | **-1.0** |
| **SCST** | **Cishan** baz=248 | **0.39** | **251** | *e*P | **Pg** | **01 18 40.4** | **-0.1** |
| SCST | | | | *e*S | **Sb** | **01 18 47.0** | **-1.2** |
| **FULB** | **Fuli** baz=66 | **0.41** | **63** | ⇑*i* P | **Pb** | **01 18 41.5** | **-0.8** |
| FULB | | | | S | **Sb** | **01 18 47.8** | **-0.9** |
| **ECL** | **Taimali** baz=168 | **0.42** | **173** | ⇓*e*P | **Pg** | **01 18 41.0** | **0.0** |
| ECL | baz=168 | | | *i* S | **Sg** | **01 18 46.6** | **+0.1** |
| **SNST** | **Tainan City** baz=300 | **0.42** | **299** | ⇓*i* P | **Pg** | **01 18 41.3** | **+0.3** |
| SNST | baz=300 | | | *e*S | **Sb** | **01 18 47.8** | **-1.2** |
| **CHN4** | **Tsaushan** baz=332 | **0.44** | **320** | *e*P | **Pg** | **01 18 41.3** | **-0.1** |
| CHN4 | baz=332 | | | *e*S | **Sg** | **01 18 47.4** | **+0.3** |
| **CHKT** | **Chengkung** baz=81 | **0.44** | **79** | ⇑*i* P | **Pb** | **01 18 42.5** | **-0.2** |
| CHKT | baz=81 | | | S | **Sb** | **01 18 50.1** | **+0.7** |
| **TWK** | **Hsinying** baz=305 | **0.45** | **304** | ⇓*i* P | **Pg** | **01 18 41.9** | **+0.3** |
| TWK | baz=305 | | | *i* S | **Sb** | **01 18 48.8** | **-1.2** |
| **MASBT** | **Mashibuluo** baz=208 | **0.47** | **211** | ⇑*i* P | **Pg** | **01 18 41.0** | **-1.0** |
| MASBT | baz=208 | | | S | **Sg** | **01 18 47.6** | **-0.5** |
| **SGLT** | **Jiouru** baz=222 | **0.47** | **233** | ⇑*i* P | **Pg** | **01 18 42.3** | **+0.3** |
| **YUS** | **Yu-Shan** baz=19 | **0.48** | **6** | ⇑*i* P | **Pg** | **01 18 41.6** | **-0.6** |
| YUS | baz=19 | | | *i* S | **Sg** | **01 18 47.7** | **-0.8** |
| **TWM1** | **Shoushan** baz=243 | **0.48** | **247** | ⇑*i* P | **Pb** | **01 18 42.8** | **-0.6** |
| **CHN3** | **Shinhua** baz=277 | **0.49** | **277** | P | **Pb** | **01 18 44.0** | **+0.3** |
| CHN3 | baz=277 | | | *e*S | **Sb** | **01 18 53.5** | **+2.4** |
| **TWF1** | **Yuli** baz=51 | **0.50** | **47** | ⇑P | **Pg** | **01 18 42.2** | **-0.3** |
| TWF1 | baz=51 | | | S | **Sg** | **01 18 48.9** | **-0.2** |
| **TSPT** | **Pingtung City** baz=222 | **0.50** | **228** | P | **Pg** | **01 18 42.8** | **+0.3** |
| **ALS** | **Alishan** baz=354 | **0.50** | **350** | ⇑*i* P | **Pg** | **01 18 42.2** | **-0.4** |
| ALS | baz=354 | | | *i* S | **Sg** | **01 18 50.2** | **+1.0** |
| **SHHT** | **Tainan City** baz=270 | **0.51** | **271** | ⇑*i* P | **Pb** | **01 18 44.7** | **+0.8** |
| SHHT | baz=270 | | | *e*S | **Sn** | **01 18 54.0** | **-1.2** |
| **EYUL** | **Yuli** baz=61 | **0.51** | **49** | *e*P | **Pg** | **01 18 42.5** | **-0.2** |
| **YULB** | **Yu-li** | **0.53** | **44** | Pg | **Pg** | **01 18 42.4** | **-0.6** |
| YULB | | | | Sg | **Sg** | **01 18 49.8** | **-0.2** |
| **YULB** | **Yu-li** baz=47 | **0.53** | **44** | ⇑*i* P | **Pg** | **01 18 42.4** | **-0.6** |
| YULB | baz=47 | | | *e*S | **Sg** | **01 18 49.3** | **-0.7** |
| **SSHA** | **Shanhua** baz=294 | **0.57** | **282** | *e*P | **Pb** | **01 18 45.2** | **+0.2** |
| **SNJT** | **Kaohsiung City** baz=231 | **0.58** | **244** | *e*P | **Pn** | **01 18 46.1** | **-1.1** |
| **ECBN** | **Changbin** baz=62 | **0.59** | **59** | ⇑P | **Pb** | **01 18 45.2** | **-0.1** |
| ECBN | baz=62 | | | *e*S | **Sb** | **01 18 54.9** | **+1.0** |
| **SSPT** | **Xinbi** baz=197 | **0.61** | **210** | *e*P | **Pg** | **01 18 44.4** | **-0.2** |
| **TAI1** | **Yung-k'ang** baz=271 | **0.62** | **273** | *e*P | **Pn** | **01 18 46.8** | **-0.9** |
| TAI1 | baz=271 | | | *e*S | **Sn** | **01 18 58.2** | **+0.4** |
| **EHY** | **Hungye** baz=34 | **0.63** | **39** | ⇑*i* P | **Pg** | **01 18 44.3** | **-0.6** |
| EHY | baz=34 | | | *e*S | **Sb** | **01 18 54.3** | **-0.6** |
| **LDUT** | **Ludao** baz=123 | **0.63** | **123** | *e*P | **Pg** | **01 18 44.9** | **0.0** |
| LDUT | baz=123 | | | *e*S | **Sb** | **01 18 55.1** | **+0.3** |
| **EAST** | **Anshuo** baz=171 | **0.63** | **184** | ⇑P | **Pg** | **01 18 45.0** | **0.0** |
| EAST | baz=171 | | | *e*S | **Sg** | **01 18 52.5** | **-0.7** |
| **CHN2** | **Minshiung** baz=324 | **0.65** | **323** | *e*P | **Pb** | **01 18 45.9** | **-0.4** |
| CHN2 | baz=324 | | | S | **Sb** | **01 18 56.1** | **+0.7** |
| **CHY** | **Chiayi** baz=320 | **0.65** | **318** | *e*P | **Pb** | **01 18 45.9** | **-0.5** |
| CHY | baz=320 | | | *e*S | **Sb** | **01 18 55.3** | **-0.2** |
| **TAW** | **Tawu** baz=178 | **0.65** | **180** | *e*P | **Pg** | **01 18 45.4** | **-0.1** |
| **ICHU** | **Yijhu** baz=301 | **0.67** | **301** | *e*P | **Pb** | **01 18 46.4** | **-0.3** |
| **SCLT** | **Jiali** baz=300 | **0.67** | **284** | *e*P | **Pb** | **01 18 46.9** | **+0.3** |
| SCLT | baz=300 | | | *i* S | **Sn** | **01 18 57.8** | **-1.2** |
| **TAWH** | **Dawu Township** baz=179 | **0.67** | **181** | P | **Pg** | **01 18 45.5** | **-0.2** |
| **HGSD** | **Ruisui** baz=41 | **0.68** | **45** | ⇑*i* P | **Pg** | **01 18 46.2** | **+0.3** |
| HGSD | baz=41 | | | *i* S | **Sb** | **01 18 56.5** | **+0.2** |
| **SCZT** | **Fangliau** baz=189 | **0.69** | **202** | ⇑*i* P | **Pg** | **01 18 45.3** | **-0.8** |
| SCZT | baz=189 | | | *e*S | **Sg** | **01 18 54.4** | **-0.6** |
| **KAU** | **Kaohsiung** baz=249 | **0.70** | **231** | *e*P | **Pb** | **01 18 47.7** | **+0.5** |
| **CHN8** | **Yiju** baz=299 | **0.71** | **298** | *e*P | **Pb** | **01 18 47.3** | **-0.1** |
| CHN8 | baz=299 | | | *e*S | **Sb** | **01 18 58.4** | **+1.1** |
| **WGK** | **Gukeng** baz=338 | **0.74** | **335** | ⇑*i* P | **Pb** | **01 18 47.7** | **-0.1** |
| WGK | baz=338 | | | S | **Sb** | **01 18 58.8** | **+0.8** |
| **WDLH** | **Douliu** baz=335 | **0.75** | **334** | *e*P | **Pb** | **01 18 47.9** | **-0.1** |
| WDLH | baz=335 | | | *e*S | **Sb** | **01 18 59.2** | **+0.8** |
| **VWDT** | **VWDT** baz=19 | **0.77** | **17** | ⇑*i* P | **Pg** | **01 18 46.6** | **-1.1** |
| VWDT | baz=19 | | | *e*S | **Sb** | **01 18 58.5** | **-0.5** |
| **SSLB** | **Suanglung** | **0.77** | **4** | | **Pg** | **01 18 46.5** | **-1.1** |
| SSLB | | | | Sg | **Sg** | **01 18 58.2** | **+0.4** |
| **SSLB** | **Suanglung** baz=13 | **0.77** | **4** | ⇑*i* P | **Pg** | **01 18 46.6** | **-1.1** |
| SSLB | baz=13 | | | S | **Sb** | **01 18 58.4** | **-0.7** |
| **WSL** | **Shuilin Townsh** baz=310 | **0.80** | **310** | *e*P | **Pb** | **01 18 48.9** | **0.0** |
| **SLIU** | **Shizi** baz=185 | **0.80** | **187** | *e*P | **Pg** | **01 18 47.4** | **-0.8** |
| **WLCH** | **Liuqiu** baz=212 | **0.82** | **216** | *e*P | **Pn** | **01 18 51.4** | **+0.9** |
| **WTK** | **Tuku** baz=327 | **0.82** | **325** | *e*P | **Pg** | **01 18 48.7** | **+0.1** |
| WTK | baz=327 | | | *e*S | **Sb** | **01 19 01.1** | **+0.8** |
| **WJS** | **Zhushan** baz=1.0 | **0.82** | **349** | ⇑*e*P | **Pb** | **01 18 49.1** | **-0.1** |
| WJS | baz=1.0 | | | *e*S | **Sb** | **01 19 01.2** | **+0.7** |
| **TWP** | **Hsiaoliuchiu** baz=212 | **0.83** | **217** | *e*P | **Pn** | **01 18 50.8** | **+0.2** |
| **SMLT** | **Sun Moon Lake** baz=10.0 | **0.86** | **0** | ⇑*i* P | **Pg** | **01 18 49.0** | **-0.5** |
| SMLT | baz=10.0 | | | S | **Sb** | **01 19 02.3** | **+0.5** |
| **WSF** | **Szhu** baz=317 | **0.88** | **315** | *e*P | **Pg** | **01 18 49.8** | **+0.1** |
| WSF | baz=317 | | | S | **Sb** | **01 19 02.8** | **+0.7** |
| **WNT** | **Mingjian** baz=334 | **0.88** | **347** | ⇑*i* P | **Pb** | **01 18 50.4** | **+0.1** |
| WNT | baz=334 | | | *e*S | **Sb** | **01 19 02.6** | **+0.4** |
| **TYC** | **Yuchr** | **0.89** | **358** | ⇑P | **Pg** | **01 18 49.6** | **-0.3** |

baz=8.0
TYC S Sn 01 19 03.5 -1.0
baz=8.0
**TEGC Jichi Village** 0.91 40 eP Pg 01 18 50.1 -0.2
baz=43
**WNT1 Nantou City** 0.91 347 ⇑P Pb 01 18 50.7 -0.1
baz=349
WNT1 eS Sb 01 19 04.0 +1.0
baz=349
**ESL Shilin** 0.94 32 ⇑P Pg 01 18 49.7 -1.1
baz=48
**WYL Yuanlin Townsh** 0.99 343 P Pg 01 18 51.5 -0.3
baz=345
WYL S Sb 01 19 06.0 +0.7
baz=345
**SMST Manzhou Townsh** 0.99 183 eP Pg 01 18 51.8 0.0
baz=191
**WUSB Renai** 0.99 12⇑eP Pg 01 18 50.3 -1.7
baz=14
WUSB eS Sn 01 19 07.4 0.0
baz=14
**WPL Puli Township** 0.99 3 eP Pg 01 18 50.7 -1.3
baz=15
WPL eS Sb 01 19 06.1 +0.6
baz=15
**WMLT Mailiao** 1.00 322 eP Pg 01 18 51.8 -0.3
baz=323
WMLT S Sb 01 19 05.8 +0.2
baz=323
**WRL Guolierlin Hig** 1.00 332 eP Pg 01 18 51.8 -0.3
baz=333
**DPDB Guoxing** 1.01 2 eP Pg 01 18 51.2 -1.1
baz=3.0
DPDB eS Sn 01 19 07.2 -0.6
baz=3.0
**HEN Hengchun** 1.01 188 eP Pn 01 18 53.7 +0.5
baz=186
**WTCT Ta-ch'eng** 1.02 326 P Pg 01 18 52.0 -0.4
baz=328
WTCT S Sb 01 19 06.8 +0.7
baz=328
**WCS Beigang Elemen** 1.04 1 eP Pg 01 18 51.9 -0.9
baz=3.0
**WWF Wufeng** 1.04 350 eP Pb 01 18 52.9 -0.1
baz=337
WWF eS Sn 01 19 08.2 -0.1
baz=337
**SNW Nanwan** 1.06 187 eP Pn 01 18 55.3 +1.5
baz=169
**TEYL Yanliau Villag** 1.07 37 eP Pg 01 18 53.0 -0.3
baz=47
TEYL eS Sn 01 19 09.4 +0.5
baz=47
**TWK1 Hengchun** 1.07 185 eP Pg 01 18 53.0 -0.4
baz=170
TWK1 eS Sn 01 19 11.4 +2.4
baz=170
**TWKBT Hengchun** 1.07 184 ⇑P Pb 01 18 53.6 0.0
baz=170
TWKBT eS Sn 01 19 09.2 +0.1
baz=170
**CHGB Renai** 1.07 14⇑eP Pg 01 18 51.7 -1.7
baz=15
CHGB eS Sn 01 19 09.5 +0.1
baz=15
**ETM Tongmen** 1.09 30 eP Pg 01 18 52.6 -1.3
baz=23
ETM eS Sg 01 19 07.6 -0.4
baz=23
**WCHH Zhanghua** 1.10 344 eP Pg 01 18 53.6 -0.5
baz=345
WCHH eS Sn 01 19 09.6 -0.3
baz=345
**TSEB Hengchuen, Pin** 1.11 180 eP Pg 01 18 53.9 -0.2
baz=163
TSEB eS Sn 01 19 14.1 +4.2
baz=163
**LAY Lan-yu** 1.14 148 eP Pg 01 18 53.4 -1.4
baz=147
**TCU Taichung** 1.15 350 eP Pg 01 18 54.4 -0.4
baz=338
TCU eS Sn 01 19 11.4 +0.5
baz=338
**HWA Hwalien** 1.16 34 eP Pg 01 18 54.5 -0.6
baz=25
HWA eS Sn 01 19 12.0 +0.8
baz=25
**WDGT Dungji** 1.17 282⇑iP Pb 01 18 54.2 -1.0
baz=282
WDGT iS Sg 01 19 10.2 -0.1
baz=282
**WHF Hehuan Shan** 1.18 17 eP Pg 01 18 54.1 -1.4
baz=18
WHF eS Sn 01 19 11.8 -0.5
baz=18
**LYUB Lan-yu** 1.19 148 eP Pb 01 18 52.2 -3.4
baz=147
**TWD Chiawan** 1.24 31 P Pn 01 18 55.9 -0.5
baz=24
TWD S Sn 01 19 13.2 -0.1
baz=24
**TDCB Techi** 1.26 11⇑eP Pn 01 18 55.0 -1.8
baz=14
**WHP Taichung City** 1.26 2⇑eP Pn 01 18 56.0 -0.8
baz=13
WHP S Sn 01 19 15.2 +1.3
baz=13
**TWT Tachien** 1.26 12⇑eP Pn 01 18 54.6 -2.2
baz=13
TWT S Sg 01 19 13.5 +0.1
baz=13
**FUSS Fushou** 1.27 14⇑eP Pn 01 18 55.2 -1.7
baz=16
FUSS eS Sn 01 19 14.2 -0.1
baz=16
**PHUB P'eng-hu** 1.32 292⇑iP Pn 01 18 56.1 -1.3
baz=293
PHUB iS Sb 01 19 13.5 -1.2
baz=293
**NACB Ninganchiao** 1.32 29 Pn 01 18 55.4 -2.0
**TWQ1 Liyutan** 1.33 355 P Pn 01 18 57.4 -0.3
baz=357
TWQ1 S Sg 01 19 16.2 +0.4
baz=357
**WDJ Dajia District** 1.35 350 P Pg 01 18 58.6 -0.1
baz=353
WDJ S Sg 01 19 17.4 +1.2
baz=353
**PNG Penghu** 1.35 294⇑iP Pn 01 18 56.8 -1.1
baz=295
PNG iS Sb 01 19 14.1 -1.6
baz=295
**VCHM Qimei** 1.36 278 ⇑P Pn 01 18 56.8 -1.3
baz=294
VCHM eS Sb 01 19 14.2 -1.9
baz=294
**NSY Sanyi** 1.40 355 ⇑P Pb 01 18 59.3 +0.1
baz=338
NSY eS Sg 01 19 19.0 +1.0
baz=338
**NNSB Datong** 1.48 17⇑eP Pn 01 18 58.8 -0.9
baz=17
NNSB S Sg 01 19 21.0 +0.6
baz=17
**NNS Nan Shan** 1.48 17⇑eP Pn 01 18 58.9 -1.0
baz=17
NNS S Sg 01 19 20.9 +0.3
baz=17
**NMLH Miaoli** 1.52 356 ⇑P Pb 01 19 01.1 -0.1
baz=341
NMLH eS Sg 01 19 21.4 -0.3
baz=341
**ENA Nanau** 1.61 29 eP Pn 01 19 01.2 -0.2
baz=46
**NSTT Nanjuang** 1.61 3 eP Pn 01 19 02.0 +0.6
baz=3.0
NSTT eS Sg 01 19 24.5 -0.2
baz=3.0
**LATG Datong** 1.62 21⇑eP Pn 01 19 01.8 +0.1
baz=24
**NFF Wufeng Townshi** 1.62 7 eP Pb 01 19 02.5 -0.5
baz=6.0
NFF eS Sg 01 19 24.7 -0.3
baz=6.0
**LIOB Emei** 1.63 4 eP Pb 01 19 02.6 -0.4
baz=349
**EWUT Wuta** 1.64 29 eP Pn 01 19 02.3 +0.5
baz=46

**NDT Datong Townshi** 1.68 20 eP Pn 01 19 02.6 +0.1
baz=22
**YHNB Yeheng** 1.71 15 Pn 01 19 02.9 +0.1
**YHNB Yeheng** 1.71 15⇑eP Pn 01 19 03.0 +0.1
baz=18
**NSK Sanguang** 1.71 14 eP Pn 01 19 03.2 +0.3
baz=15
NSK eS Sg 01 19 27.1 -0.6
baz=15
**ENTT Nioudou** 1.73 21 eP Pb 01 19 04.2 -0.6
baz=35
ENTT eS Sg 01 19 28.4 -0.1
baz=35
**HSN1 Hsinchu** 1.76 4 eP Pg 01 19 06.7 +0.2
baz=3.0
HSN1 eS Sb 01 19 27.4 -0.2
baz=3.0
**SBCB Hsinchu** 1.77 3 eP Pn 01 19 03.8 +0.1
baz=2.0
SBCB eS Sb 01 19 27.4 -0.4
baz=2.0
**NDS Dongshan** 1.78 25⇑eP Pb 01 19 05.1 -0.5
baz=40
NDS eS Sb 01 19 28.5 +0.5
baz=40
**HSN Hsinchu** 1.78 2 eP Pg 01 19 06.6 -0.4
baz=349
**TWC Suao** 1.81 29 ⇑P Pb 01 19 05.6 -0.6
baz=28
TWC eS Sb 01 19 29.0 0.0
baz=28
**NWLT Wulai** 1.84 17 eP Pb 01 19 05.7 -1.0
baz=16
NWLT eS Sg 01 19 31.2 -0.8
baz=16
**TWE Neicheng** 1.84 22 P Pb 01 19 06.9 +0.3
baz=36
TWE eS Sg 01 19 31.8 -0.2
baz=36
**FUSB Fushanzhiwuyua** 1.85 20⇑eP Pn 01 19 05.4 +0.6
baz=9.0
**ILA Ilan** 1.91 24⇓eP Pb 01 19 07.9 0.0
baz=42
**NCUH Zhongli** 1.96 8 eP Pb 01 19 09.0 +0.3
baz=12
**NCU National Centr** 1.96 8 eP Pb 01 19 09.4 +0.6
baz=12
**NHW Xinwu Township** 1.99 4 eP Pb 01 19 08.8 -0.4
baz=8.0
**NTC Toucheng** 2.02 25 eP Pb 01 19 08.8 -1.0
baz=38
NTC eS Sg 01 19 36.5 -1.3
baz=38
**NHDH Xindian Distri** 2.02 16 eP Pb 01 19 10.5 +0.7
baz=19
**TATO Taipei** 2.03 15 Pn 01 19 07.1 -0.1
**TATO Taipei** 2.03 15 ⇑P Pb 01 19 09.5 -0.3
baz=13
TATO S Sg 01 19 38.3 +0.3
baz=13
**EGS** 2.05 27 eP Pb 01 19 09.7 -0.6
baz=40
EGS eS Sg 01 19 38.9 +0.1
baz=40
**TWA Mucha** 2.06 18 eP Pb 01 19 10.6 +0.3
baz=16
TWA eS Sg 01 19 38.0 -0.9
baz=16
**TAP Taipei** 2.09 15 eP Pb 01 19 11.3 +0.4
baz=13
TAP eS Sg 01 19 39.6 -0.5
baz=13
**TAP1 Taipei** 2.10 16 eP Pb 01 19 10.6 -0.4
baz=3.0
**NHY Taipei** 2.11 17 eP Pb 01 19 10.1 -1.1
baz=3.0
**TIPB Shuangxi** 2.13 23 eP Pb 01 19 10.4 -1.1
baz=36
TIPB eS Sb 01 19 38.1 0.0
baz=36
**TWS1 Kuangyinshan** 2.13 13 eP Pb 01 19 12.5 +0.9
baz=10.0
TWS1 eS Sg 01 19 41.8 +0.4
baz=10.0
**NTST Danshui** 2.20 13 eP Pb 01 19 11.2 -1.6
baz=17
**NWF Wu-fen Shan** 2.20 21 eP Pb 01 19 11.9 -1.0
baz=42
**WFSB Wu-fen Shan** 2.20 21 eP Pn 01 19 10.8 +1.2
baz=42
**TWB1 Santiao Chiao** 2.22 26 eP Pn 01 19 10.9 +1.0
baz=38
TWB1 eS Sg 01 19 42.5 -1.7
baz=38
**ANP Anpu** 2.24 15 eP Pb 01 19 12.3 -1.1
baz=18
**YM08 YM08** 2.25 16 eP Pb 01 19 12.2 -1.5
baz=1.0
YM08 eS Sb 01 19 43.0 +1.2
baz=1.0
**SXI1 Grass Mountain** 2.26 23 eP Pb 01 19 12.2 -1.6
baz=2.0
SXI1 eS Sb 01 19 43.0 +1.2
baz=2.0
**TNOU National Taiwa** 2.27 20 eP Pb 01 19 12.7 -1.3
baz=35
TNOU eS Sn 01 19 39.8 +1.1
baz=35
**TWY Chenhua** 2.34 16 eP Pb 01 19 14.9 -0.3
baz=2.0
TWY eS Sb 01 19 45.1 +0.8
baz=2.0
**JYNG Yonagunijimaku** 2.36 52 P Pn 01 19 12.0 +0.2
JYNG S Sn 01 19 40.5 -0.4
**YOJ Yonaguni jima** 2.41 53 P Pn 01 19 12.7 +0.2
YOJ eS Sn 01 19 41.3 -0.9
**YOJ Yonaguni jima** 2.41 53 Pn Pn 01 19 12.7 +0.2
**YOJ Yonaguni jima** 2.41 53 eP Pn 01 19 12.3 -0.2
baz=68
YOJ eS Sn 01 19 41.2 -0.9
baz=68
**PTMZ Houxiangcun** 2.59 321 eP Pn 01 19 13.9 -1.0
baz=324
**KNM Kinmen** 2.66 302 eP Pn 01 19 16.7 +0.9
baz=300
**KNMB Chin-men Tao** 2.71 303 Pn Pn 01 19 16.6 0.0
**KNMB Chin-men Tao** 2.71 303 eP Pn 01 19 16.0 -0.6
baz=302
**PCYT Pengchaiyu** 2.81 22 eP Pb 01 19 21.6 -1.7
baz=41
**QZH Quanzhou** 2.85 313⇑iPn Pn 01 19 18.6 +0.1
QZH Sn Sn 01 19 51.3 -1.7
QZH smax smax
comp=N,1μm,1.0s
QZH smax smax
comp=E,1μm,0.8s
QZH LR LR
comp=Z,4μm,10.4s
**HATJ Hateruma jima** 2.86 68 S Sn 01 19 51.3 -2.0
**IRIF Iriomote-Funau** 2.91 63 P Pn 01 19 19.2 -0.1
IRIF eS Sn 01 19 52.9 -1.6
**ZPLA Ao Xicun** 3.03 288 eP Pn 01 19 19.7 -1.3
baz=286
**JKRS Kuro-shima** 3.10 66 P Pn 01 19 21.6 -0.4
JKRS eS Sn 01 19 58.3 -0.9
**MATB Ma-tsu** 3.24 345 eP Pn 01 19 23.2 -0.7
baz=351
**JIJ Ishigaki jima** 3.26 65 P Pn 01 19 23.5 -0.7
JIJ eS Sn 01 20 00.0 -3.2
**AXDP Jialang** 3.27 306 eP Pn 01 19 23.7 -0.6
baz=305
**JISG Ishigakijimahi** 3.50 63 P Pn 01 19 26.7 -0.7
JISG eS Sn 01 20 06.5 -2.4
**MHZQ Yeshan** 3.51 331 eP Pn 01 19 27.5 -0.1
baz=334
**LYJJ Jianjiangzhen** 3.67 344 eP Pn 01 19 29.4 -0.4
baz=351
**JTJ Tarama** 3.84 64 eS Sn 01 20 16.5 -1.0
**XPSS Dashiqiu** 3.95 351 eP Pn 01 19 32.8 -0.8
baz=359
**JIRB Irabujima** 4.31 64 eS Sn 01 20 26.3 -2.7
**JMJ Miyako jima 2** 4.40 65 eP Pn 01 19 39.2 -0.7
baz=72
JMJ eS Sn 01 20 30.2 -1.1
baz=72
**JMJ2 Miyako jima3** 4.41 66 eS Sn 01 20 29.2 -2.2
**JIKM Ikemajima** 4.41 64 S Sn 01 20 28.7 -2.8

**SXFK Yanhouchang** 4.48 319 eP Pn 01 19 39.8 -1.2
baz=317
**VDOS Pratas Island** 4.50 240 eP Pn 01 19 42.1 +0.8
baz=241
**CVP Callao Caves** 5.36 171 eP Pn 01 19 50.4 -2.5
**HKPS Hong Kong Po S** 6.28 265 Pn 01 20 06.0 +0.3
**HKPS Hong Kong Po S** 6.28 265 eP Pn 01 20 05.0 -0.8
baz=264
**GZH Guangzhou** 6.96 272 P Pn 01 20 11.4 -3.6
GZH S Sn 01 21 29.0 -5.3
GZH smax smax
comp=N,320nm,1.1s
GZH smax smax
comp=E,190nm,0.9s
**JOW Kunigami** 7.70 59 Pn Pn 01 20 25.4 +0.2
baz=238,slow=13,SNR=0.6
JOW Sn Sn 01 21 49.0 -3.6
1.4nm,0.3s,baz=122,slow=29,SNR=1.5
**JOW Kunigami** 7.70 59 Pn 01 20 24.1 -1.0
**SSE Sheshan** 8.05 2 P Pn 01 20 29.8 -0.2
SSE S Sn 01 22 02.1 +0.9
SSE pmax pmax
comp=Z,9.0nm,0.8s
SSE pmax pmax
comp=Z,310nm,8.3s
SSE smax smax
comp=N,110nm,1.0s
SSE smax smax
comp=E,140nm,1.1s
**CNSH ChangSha** 8.84 307 S Sn 01 22 09.3 -11
**CNSH ChangSha** 8.84 307 ⇓P Pn 01 20 33.9 -6.9
**LQP Lukban** 8.88 176⇑eP Pn 01 20 43.9 +2.4
**NJ2 Nanjing** 9.18 349 ⇓P Pn 01 20 45.1 -0.4
NJ2 pP 01 20 48.1
NJ2 sP 01 20 51.3
NJ2 S Sn 01 22 28.1 -0.9
NJ2 sS 01 22 34.8
NJ2 pmax pmax
comp=Z,49nm,1.1s
NJ2 smax smax
comp=N,300nm,1.3s
NJ2 smax smax
comp=E,200nm,1.4s
NJ2 LR LR
comp=N,2μm,4.7s
NJ2 LR LR
comp=E,2μm,6.2s
NJ2 LR LR
comp=Z,2μm,7.8s
**WHN Wuhan** 9.51 323 ⇓P Pn 01 20 50.3 +0.3
WHN S Sn 01 22 36.3 -0.7
WHN LR LR
comp=N,4μm,6.2s
WHN LR LR
comp=E,5μm,7.6s
WHN LR LR
comp=Z,4μm,7.4s
**QIZ Qiongzhong** 11.06 251 P Pn 01 21 11.6 +0.3
QIZ S Sn 01 23 16.5 +1.3
QIZ LR LR
comp=N,3μm,14.3s
QIZ LR LR
comp=E,3μm,13.7s
QIZ LR LR
comp=Z,3μm,12.5s
**GYA Guiyang** 13.38 288 ⇑P Pn 01 21 46.8 +3.7
GYA S Sn 01 24 16.9 +4.7
GYA pmax pmax
comp=Z,10.0nm,0.8s
GYA LR LR
comp=N,1μm,5.0s
GYA LR LR
comp=E,2μm,7.8s
GYA LR LR
comp=Z,2μm,8.6s
**LYN LuoYang** 13.66 329 eP Pn 01 21 48.8 +2.1
LYN PP P 01 21 59.3 +3.6
LYN S Sn 01 24 24.8 +6.2
LYN SS S 01 24 36.8 -4.9
LYN pmax pmax
comp=Z,310nm,10.7s
LYN LR LR
comp=E,2μm,9.2s
LYN LR LR
comp=Z,860nm,9.9s
**XAN Xi'an** 15.20 319 P Pn 01 22 10.0 +2.2
XAN S Sn 01 25 02.0 +5.7
XAN pmax pmax
comp=Z,18nm,1.9s
XAN LR LR
comp=N,2μm,6.0s
XAN LR LR
comp=E,2μm,7.0s
XAN LR LR
comp=Z,2μm,10.2s
**HNS HongShan** 15.30 341 ⇑P P 01 22 15.8 +2.0
HNS S S 01 25 16.8 +1.6
HNS pmax pmax
comp=Z,52nm,1.5s
HNS LR LR
comp=N,1μm,12.8s
HNS LR LR
comp=E,3μm,11.6s
HNS LR LR
comp=Z,2μm,12.3s
**KSAR Wonju Array Be** 15.59 21 P Pn 01 22 14.3 +1.6
**KSRS Korea Array** 15.61 21 Pn P 01 22 15.7 -1.7
comp=Z,0.3nm,0.3s,baz=202,slow=12,SNR=20
KSRS LR LR 01 28 50.0
comp=Z,390nm,20.8s,baz=205,slow=40
**DL2 Dalian** 15.85 2 P P 01 22 22.3 +2.3
DL2 eS S 01 25 21.3 -5.3
DL2 pmax pmax
comp=Z,80nm,1.4s
DL2 pmax pmax
comp=Z,660nm,5.9s
DL2 LR LR
comp=N,810nm,13.5s
DL2 LR LR
comp=E,1μm,10.7s
DL2 LR LR
comp=Z,2μm,11.7s
**KMI Kunming** 16.72 281 ⇓P P 01 22 29.5 -0.4
KMI pmax pmax
comp=Z,13nm,1.4s
**CD2 Chengdu** 17.17 301 P P 01 22 35.4 +0.6
CD2 pmax pmax
comp=Z,30nm,1.3s
CD2 LR LR
comp=Z,190nm,10.2s
CD2 LR LR
comp=Z,1μm,12.0s
CD2 LR LR
comp=Z,2μm,12.8s
**BJT Baijiatuau** 17.42 348 Pn 01 22 35.6 -0.5
**PZH PanZhiHua** 17.74 285 P P 01 22 44.8 +3.6
PZH pmax pmax
comp=Z,10.0nm,0.9s
**JHJ Hachijo jima 2** 19.44 55 P Pn 01 23 02.0 +1.2
comp=Z,7.0nm,0.3s,baz=218,slow=5.1,SNR=2.6
JHJ LR LR 01 30 50.3
comp=Z,245nm,18.2s,baz=306,slow=38
**HHC Hu-ho-hao-te** 19.44 338 eP Pn 01 23 03.1 +2.2
HHC S S 01 26 42.1 +2.3
HHC pmax pmax
comp=Z,15nm,1.1s
HHC pmax pmax
comp=Z,1μm,7.4s
HHC LR LR
comp=Z,1μm,13.2s
HHC LR LR
comp=Z,480nm,13.2s
HHC LR LR
comp=Z,1μm,14.9s
**LZH Lanzhou** 19.70 315 eP Pn 01 23 11.8 +7.6
LZH pP sP 01 23 25.3 +18
LZH pmax pmax
comp=Z,50nm,1.4s
**MAT Matsushiro** 20.14 44 P Pn 01 23 11.7 +2.5
**MJAR Matsushiro Arr** 20.14 44 P Pn 01 23 09.6 +0.4
comp=Z,31nm,1.0s,baz=233,slow=8.3,SNR=38
**MJAR Matsushiro Arr** 20.14 44 P P 01 23 05.6 -1.8
**CMAR Chiang Mai Arr** 21.02 262 P P 01 23 18.8 +1.7
comp=Z,1.9nm,0.5s,baz=65,slow=8.8,SNR=13
CMAR LR LR 01 33 15.5
comp=Z,587nm,18.2s,baz=85,slow=42

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.02 | 262 | P | | P | | 01 23 14.5 | -2.5 |
| CN2 | Changchun | 21.07 | 9 | *e*P | | P | | 01 23 17.0 | -0.3 |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,1μm,11.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,500nm,11.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,1μm,12.0s | | | | | | | | |
| XLT | XiLinHaoTe | 21.21 | 350 | *e*P | | P | | 01 23 19.1 | +0.2 |
| XLT | | | | | pP | sP | | 01 23 23.3 | 0.0 |
| XLT | | | | | sP | pP | | 01 23 25.8 | +3.9 |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| TOLI2 | Tolitoli | 21.77 | 180 | P | | P | | 01 23 25.0 | 0.0 |
| TOLI2 | | | | | IAmb | IAmb | | 01 23 30.7 | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| SBUM | Sibu | 22.11 | 204 | P | | P | | 01 23 24.0 | -4.6 |
| GTOI | Gorontalo | 22.34 | 174 | P | | P | | 01 23 30.6 | -0.5 |
| | comp=Z,342nmcomp=Z,20nm,0.8s | | | | | | | | |
| MRSI | Marisa | 22.43 | 177 | P | | P | | 01 23 34.1 | +2.1 |
| | comp=Z,86nm,0.8s | | | | | | | | |
| MPSI | Mapaga | 22.56 | 183 | P | | P | | 01 23 37.7 | +4.2 |
| | comp=Z,17nm,1.0s | | | | | | | | |
| MDJ | Mudanjiang | 22.70 | 16 | P | | P | | 01 23 31.0 | -3.8 |
| MDJ | Mudanjiang | 22.70 | 16 | P | | P | | 01 23 35.9 | +1.1 |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,400nm,7.4s | | | | | | | | |
| USRK | Ussuriysk Ar. | 23.02 | 21 | P | | P | | 01 23 37.8 | -0.3 |
| | comp=Z,4.4nm,0.7s,baz=231,slow=11,SNR=6.1 | | | | | | | | |
| USRK | Ussuriysk Ar. | 23.02 | 21 | P | | P | | 01 23 37.9 | -0.2 |
| GTA | Gaotai | 24.25 | 317 | ⇑P | | P | | 01 23 51.3 | +1.0 |
| GTA | | | | | pP | sP | | 01 23 56.6 | +1.6 |
| GTA | | | | | sP | pP | | 01 24 00.8 | +7.2 |
| GTA | | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.4s | | | | | | | | |
| GTA | | | | | pmax | pmax | | | |
| | comp=Z,200nm,5.8s | | | | | | | | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,420nm,13.4s | | | | | | | | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,710nm,16.0s | | | | | | | | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,690nm,14.2s | | | | | | | | |
| MTKI | Muara Teweh, K | 24.52 | 195 | P | | P | | 01 23 55.0 | +2.2 |
| GUMO | Guam | 24.58 | 108 | P | | P | | 01 23 54.0 | +0.5 |
| | comp=Z,131nm,0.8s,baz=263,slow=5.7,SNR=4.0 | | | | | | | | |
| GUMO | Guam | 24.58 | 108 | P | | P | | 01 23 53.2 | -0.2 |
| STKI | Sintang | 24.58 | 203 | P | | P | | 01 23 58.3 | +4.9 |
| SANI | Sanana | 25.40 | 168 | P | | P | | 01 24 02.3 | +1.5 |
| | comp=Z,49nm,1.0s | | | | | | | | |
| GOMU | GeErMu | 26.11 | 306 | P | | P | | 01 24 08.9 | +1.3 |
| GOMU | | | | | pP | sP | | 01 24 11.4 | -0.8 |
| GOMU | | | | | sP | pP | | 01 24 14.6 | +3.7 |
| GOMU | | | | | S | S | | 01 28 33.8 | -5.7 |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,250nm,5.8s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,550nm,11.1s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,680nm,11.7s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,790nm,11.4s | | | | | | | | |
| HIA | Hailar | 26.22 | 358 | P | | P | | 01 24 07.1 | -0.8 |
| HIA | | | | | IAmb | IAmb | | 01 24 14.4 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| SHL | Shillong | 26.55 | 281 | P | | P | | 01 24 11.6 | +0.3 |
| SHL | | | | | IAmb | IAmb | | 01 24 28.0 | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| ULN | Ulaanbaatar | 27.16 | 339 | P | | P | | 01 24 16.6 | 0.0 |
| SONM | Songino Array | 27.35 | 338 | P | | P | | 01 24 18.2 | -0.1 |
| | comp=Z,3.6nm,0.7s,baz=156,slow=8.4,SNR=15 | | | | | | | | |
| SONM | Songino Array | 27.35 | 338 | P | | P | | 01 24 16.8 | -1.5 |
| LSA | Lhasa | 27.43 | 290 | P | | P | | 01 24 21.6 | +2.0 |
| LSA | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| KLR | Kul'dur | 27.53 | 15 | P | | P | | 01 24 19.9 | +0.1 |
| | comp=Z,2.7nm,0.7s,baz=209,slow=8.9,SNR=9.8 | | | | | | | | |
| PSI | Prapat | 29.27 | 230 | P | | P | | 01 24 36.8 | +1.0 |
| | comp=Z,5.6nm,0.8s,baz=348,slow=9.3,SNR=6.7 | | | | | | | | |
| MNSI | Mandailing Nat | 30.28 | 226 | P | | P | | 01 24 47.8 | +3.3 |
| | comp=Z,2μmcomp=Z,13nm,0.5s | | | | | | | | |
| KLSI | | 31.74 | 212 | P | | P | | 01 25 02.4 | +5.0 |
| | comp=Z,10nm,1.0s | | | | | | | | |
| MDSI | Maura Dua | 31.84 | 213 | P | | P | | 01 25 01.4 | +3.1 |
| | comp=Z,2μmcomp=Z,839nmcomp=Z,16nm,1.1s | | | | | | | | |
| KPJI | Karang Pucung | 32.35 | 203 | P | | P | | 01 25 04.4 | +1.7 |
| | comp=Z,26nm,1.6s | | | | | | | | |
| KASI | Kota Agung | 32.58 | 211 | P | | P | | 01 25 07.5 | +2.7 |
| | comp=Z,26nm,1.0s | | | | | | | | |
| BATI | Baumata | 33.13 | 175 | P | | P | | 01 25 07.5 | -2.1 |
| | comp=Z,28nm,0.6s,baz=350,slow=11,SNR=4.1 | | | | | | | | |
| WMQ | Urumqi | 34.28 | 315 | *e*P | | P | | 01 25 21.8 | +2.3 |
| WMQ | | | | | pP | sP | | 01 25 27.4 | +3.2 |
| WMQ | | | | | sP | pP | | 01 25 30.8 | +8.0 |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | | |
| MK31 | Makanchi Array | 39.00 | 317 | P | | P | | 01 25 58.0 | -1.7 |
| MKAR | Makanchi Array | 39.00 | 317 | P | | P | | 01 26 00.4 | +0.7 |
| | comp=Z,7.7nm,0.9s,baz=112,slow=9.7,SNR=23 | | | | | | | | |
| MKAR | | | | | PcP | PcP | | 01 28 11.8 | +2.0 |
| | comp=Z,3.0nm,0.8s,baz=96,slow=4.5,SNR=2.9 | | | | | | | | |
| MKAR | Makanchi Array | 39.00 | 317 | P | | P | | 01 25 58.3 | -1.3 |
| MKAR | | | | | | PcP | | 01 28 09.1 | -0.7 |
| MAKZ | Makanchi | 39.20 | 317 | P | | P | | 01 25 59.3 | -2.0 |
| PETK | Petropavlovsk- | 40.98 | 33 | P | | P | | 01 26 18.1 | +2.2 |
| | comp=Z,5.0nm,0.8s,baz=219,slow=8.5,SNR=3.8 | | | | | | | | |
| PETK | Petropavlovsk- | 40.98 | 33 | P | | P | | 01 26 15.9 | 0.0 |
| ZAA0 | Zalesovo Array | 41.09 | 328 | P | | P | | 01 26 16.4 | -0.4 |
| ZAA0 | | | | | IAmb | IAmb | | 01 26 25.0 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| ZALV | Zalesovo Beam | 41.09 | 328 | P | | P | | 01 26 16.7 | -0.1 |
| | comp=Z,10nm,0.8s,baz=116,slow=8.4,SNR=32 | | | | | | | | |
| ZALV | Zalesovo Beam | 41.09 | 328 | P | | P | | 01 26 17.1 | +0.3 |
| ZALV | Zalesovo Beam | 41.09 | 328 | *i* PKHKP | | PKPpre | | 01 26 16.8 | |
| FITZ | Fitzroy Crossi | 41.12 | 173 | P | | P | | 01 26 15.1 | -2.3 |
| | comp=Z,7.4nm,0.7s,baz=349,slow=7.1,SNR=5.5 | | | | | | | | |
| FITZ | Fitzroy Crossi | 41.12 | 173 | P | | P | | 01 26 15.4 | -2.0 |
| FITZ | | | | | IAmb | IAmb | | 01 26 16.3 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| PET | Petropavlovsk | 41.42 | 34 | P | | P | | 01 26 18.9 | -0.7 |
| COEN | Coen | 42.73 | 147 | P | | P | | 01 26 29.9 | -0.8 |
| COEN | | | | | IAmb | IAmb | | 01 26 35.0 | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.83 | 85 | T | | T | | 02 11 45.7 | |
| | baz=282,slow=74,SNR=14 | | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.83 | 85 | T | | T | | 02 11 45.9 | |
| | baz=282,slow=74,SNR=18 | | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.84 | 85 | T | | T | | 02 11 49.3 | |
| | baz=282,slow=74,SNR=18 | | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.92 | 87 | T | | T | | 02 11 55.5 | |
| | baz=284,slow=74,SNR=11 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.93 | 87 | T | | T | | 02 11 55.6 | |
| | baz=284,slow=74,SNR=5.9 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.94 | 87 | T | | T | | 02 11 57.0 | |
| | baz=284,slow=74,SNR=4.7 | | | | | | | | |
| PSA00 | Pilbara Seismi | 44.33 | 181 | P | | P | | 01 26 43.2 | -0.1 |
| PSA00 | | | | | IAmb | IAmb | | 01 26 44.6 | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| PSA00 | Pilbara Seismi | 44.33 | 181 | P | | P | | 01 26 43.3 | -0.1 |
| PSA00 | | | | | IAmb | IAmb | | 01 26 44.6 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| WRA | Warramunga Arr | 44.66 | 162 | P | | P | | 01 26 44.1 | -2.1 |
| | comp=Z,4.3nm,0.6s,baz=345,slow=8.9,SNR=7.2 | | | | | | | | |
| WRA | Warramunga Arr | 44.66 | 162 | P | | P | | 01 26 45.0 | -1.1 |
| KBL | Kabul | 46.43 | 296 | P | | P | | 01 26 59.3 | -1.1 |
| KBL | | | | | IAmb | IAmb | | 01 27 08.5 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| ASAR | Alice Springs | 48.09 | 164 | P | | P | | 01 27 11.2 | -1.8 |
| | comp=Z,1.1nm,0.5s,baz=356,slow=14,SNR=9.4 | | | | | | | | |
| ASAR | Alice Springs | 48.09 | 164 | P | | P | | 01 27 12.0 | -1.0 |
| CTA | Charters Tower | 49.47 | 148 | P | | P | | 01 27 22.5 | -1.2 |
| | comp=Z,4.2nm,0.8s,baz=332,slow=11,SNR=3.3 | | | | | | | | |
| FORT | Forrest | 53.93 | 172 | P | | P | | 01 27 55.8 | -1.0 |
| ARU | Arti | 55.88 | 324 | P | | P | | 01 28 11.4 | +0.6 |
| | comp=Z,1.6nm,0.4s,baz=82,slow=7.8,SNR=2.1 | | | | | | | | |
| ARU | Arti | 55.88 | 324 | P | | P | | 01 28 09.5 | -1.3 |
| ARU | | | | | IAmb | IAmb | | 01 28 20.3 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| BBOO | Buckleboo | 57.37 | 165 | P | | P | | 01 28 20.5 | -1.0 |
| BBOO | | | | | IAmb | IAmb | | 01 28 23.9 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| STKA | Stephens Creek | 58.06 | 159 | P | | P | | 01 28 25.4 | -1.0 |
| | comp=Z,5.1nm,0.8s,baz=334,slow=7.6,SNR=6.4 | | | | | | | | |
| STKA | Stephens Creek | 58.06 | 159 | P | | P | | 01 28 24.0 | -2.4 |
| KIRV | Kirov | 61.02 | 325 | P | | P | | 01 28 47.9 | +1.3 |
| | comp=Z,16nm,0.7s,baz=55,slow=12,SNR=4.1 | | | | | | | | |
| GNI | Garni | 65.25 | 305 | P | | P | | 01 29 16.0 | +0.8 |
| | comp=Z,5.5nm,1.1s,baz=43,slow=18,SNR=2.7 | | | | | | | | |
| AKH | Akhalkalaki | 65.97 | 307 | ⇓P | | P | | 01 29 20.4 | +0.5 |
| KBZ | Khabaz | 66.01 | 309 | P | | P | | 01 29 20.9 | +1.1 |
| | comp=Z,6.5nm,1.0s,baz=132,slow=2.8,SNR=5.3 | | | | | | | | |
| KLMR | Klimovskoe | 66.01 | 328 | *e*P | | P | | 01 29 17.8 | -1.7 |
| KLMR | | | | | AMP | | | 01 29 22.8 | |
| | comp=Z,37nm,1.3s | | | | | | | | |
| KIV | Kislovodsk | 66.12 | 309 | ⇑P | | P | | 01 29 22.3 | +1.6 |
| KIV | Kislovodsk | 66.12 | 309 | P | | P | | 01 29 18.7 | -2.0 |
| KIV | | | | | IAmb | IAmb | | 01 29 31.2 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| GEVA | Gevas | 66.88 | 303 | P | | P | | 01 29 23.3 | -2.5 |
| GEVA | | | | | IAmb | IAmb | | 01 29 30.4 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| SIRT | Sirnak | 67.53 | 303 | | | P | | 01 29 27.3 | -2.5 |
| RAYN | Ar Rayn | 68.44 | 287 | P | | P | | 01 29 35.1 | -0.6 |
| RAYN | | | | | IAmb | IAmb | | 01 29 39.6 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| MARD | Mardin | 68.86 | 303 | P | | P | | 01 29 36.2 | -2.0 |
| MSVF | Nonsavu | 68.98 | 121 | P | | P | | 01 29 38.8 | -0.3 |
| | comp=Z,15nm,1.0s,baz=270,slow=11,SNR=4.6 | | | | | | | | |
| MSVF | Nonsavu | 68.98 | 121 | P | | P | | 01 29 37.5 | -1.6 |
| FINES | FINESS Array B | 72.32 | 330 | P | | P | | 01 29 59.1 | +0.5 |
| | comp=Z,8.3nm,0.9s,baz=116,slow=8.7,SNR=5.3 | | | | | | | | |
| FINES | FINESS Array B | 72.32 | 330 | P | | P | | 01 29 57.7 | -0.9 |
| ASF | Jabal al Asfar | 73.28 | 298 | P | | P | | 01 30 06.6 | +1.5 |
| | comp=Z,1.7nm,0.6s,baz=51,slow=8.4,SNR=3.7 | | | | | | | | |
| MNK | Minsk | 73.29 | 323 | *i* P | | P | | 01 30 05.8 | +1.2 |
| MNK | | | | *i* P | | P | | 01 30 05.8 | +1.2 |
| MNK | | | | *i* P | | P | | 01 30 05.8 | +1.2 |
| | comp=Z,21nm,1.1s,baz=254 | | | | | | | | |
| MNK | | | | *i* PP | | PP | | 01 32 49.9 | +2.4 |
| MNK | | | | *i* PPP | | PPP | | 01 34 34.8 | |
| MNK | | | | *i* S | | SKiKP | | 01 39 37.6 | +1.1 |
| MNK | | | | *i* SS | | SS | | 01 44 21.7 | +7.3 |
| MNK | | | | *i* SSS | | SSS | | 01 47 43.0 | |
| AKASG | Malin Array Be | 73.57 | 318 | P | | P | | 01 30 05.6 | -0.7 |
| | comp=Z,2.0nm,0.7s,baz=60,slow=5.8,SNR=6.7 | | | | | | | | |
| AKASG | Malin Array Be | 73.57 | 318 | P | | P | | 01 30 05.5 | -0.7 |
| BARN | Barnard Glacie | 73.64 | 30 | P | | P | | 01 30 05.2 | -1.6 |
| BRTR | Keskin Array B | 73.65 | 307 | P | | P | | 01 30 07.0 | -0.1 |
| | comp=Z,3.2nm,1.0s,baz=117,slow=5.0,SNR=4.3 | | | | | | | | |
| MMAI | Mount Meron Ar | 74.24 | 300 | P | | P | | 01 30 11.7 | +1.0 |
| | comp=Z,0.6nm,0.6s,baz=53,slow=8.5,SNR=3.6 | | | | | | | | |
| CSS | Mathiatis | 75.29 | 302 | P | | P | | 01 30 15.5 | -1.1 |
| CSS | | | | | IAmb | IAmb | | 01 30 21.6 | |
| | comp=Z,7.3nm,0.9s | | | | | | | | |
| AFI | Afiamalu | 75.40 | 112 | LR | | LR | | 01 58 41.4 | |
| | comp=Z,338nm,19.2s,baz=248,slow=32 | | | | | | | | |
| TESR | Tescani | 76.47 | 315 | ⇓P | | P | | 01 30 23.5 | +0.4 |
| VRI | Vrincioaia | 76.63 | 314 | ⇓P | | P | | 01 30 25.8 | +1.7 |
| BURAR | Bucovina Array | 77.02 | 316 | ⇑P | | P | | 01 30 26.8 | +0.4 |
| BUR08 | Bucovina Ar. S | 77.02 | 316 | P | | P | | 01 30 25.7 | -0.7 |
| BUR08 | | | | | IAmb | IAmb | | 01 30 37.1 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| NEHR | Nehoiu | 77.06 | 314 | ⇑P | | P | | 01 30 28.5 | +2.0 |
| OZUR | | 77.17 | 315 | ⇑P | | P | | 01 30 28.5 | +1.3 |
| MLR | Muntele Rosu | 77.27 | 314 | ⇑P | | P | | 01 30 28.8 | +1.0 |
| MLR | Muntele Rosu | 77.27 | 314 | P | | P | | 01 30 28.4 | +0.6 |
| | comp=Z,6.0nm,0.9s,baz=78,slow=3.2,SNR=4.5 | | | | | | | | |
| MLR | | | | | LR | LR | | 02 09 49.7 | |
| | comp=Z,253nm,19.7s,baz=220,slow=40 | | | | | | | | |
| MLR | Muntele Rosu | 77.27 | 314 | P | | P | | 01 30 26.8 | -1.0 |
| MLR | | | | | IAmb | IAmb | | 01 30 35.1 | |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| ELL | Elmali | 77.36 | 305 | P | | P | | 01 30 26.8 | -1.7 |
| KWP | Kalwaria Pacla | 77.88 | 319 | P | | P | | 01 30 29.7 | -1.3 |
| ARR | Arges | 78.18 | 314 | ⇑P | | P | | 01 30 33.9 | +1.1 |
| HFS | Hagfors | 78.45 | 331 | P | | P | | 01 30 33.6 | -0.3 |
| | comp=Z,8.9nm,0.9s,baz=90,slow=7.4,SNR=6.3 | | | | | | | | |
| NC405 | NORSAR Array S | 78.88 | 332 | P | | P | | 01 30 34.2 | -2.1 |
| DRGR | | 78.91 | 316 | ⇓P | | P | | 01 30 38.0 | +1.1 |
| NB2 | NORSAR Subarra | 79.13 | 332 | P | | P | | 01 30 37.0 | -0.7 |
| | comp=Z,26nm,1.2s,baz=61,slow=5.6 | | | | | | | | |
| NB2 | NORSAR Subarra | 79.13 | 332 | P | | P | | 01 30 37.0 | -0.7 |
| | baz=61,slow=5.6 | | | | | | | | |
| NOA | NORSAR Array B | 79.13 | 332 | P | | P | | 01 30 37.1 | -0.6 |
| | comp=Z,3.7nm,0.8s,baz=60,slow=5.5,SNR=9.6 | | | | | | | | |
| OJC | Ojcow | 79.40 | 320 | P | | P | | 01 30 38.7 | -0.6 |
| OJC | | | | | IAmb | IAmb | | 01 30 44.0 | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| VTS | Vitosha | 80.12 | 312 | ⇑P | | P | | 01 30 45.0 | +1.3 |
| VTS | Vitosha | 80.12 | 312 | P | | P | | 01 30 42.9 | -0.7 |
| VTS | | | | | IAmb | IAmb | | 01 30 51.3 | |
| | comp=Z,8.1nm,0.9s | | | | | | | | |
| VYHS | Vyhne | 80.67 | 319 | *e*P | | P | | 01 30 47.1 | +0.8 |
| KOLL | Kolacno | 80.89 | 319 | *e*P | | P | | 01 30 49.0 | +1.6 |
| MORC | Moravsky Berou | 80.91 | 320 | ⇓P | | P | | 01 30 48.0 | +0.4 |
| MORC | Moravsky Berou | 80.91 | 320 | P | | P | | 01 30 45.9 | -1.6 |
| MORC | | | | | IAmb | IAmb | | 01 30 51.7 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| MORC | Moravsky Berou | 80.91 | 320 | *e*P | | P | | 01 30 48.2 | +0.6 |
| JAVC | Velka Javorina | 81.22 | 319 | *e*P | | P | | 01 30 51.4 | +2.1 |
| OSTC | Ostrc | 81.35 | 321 | *e*P | | P | | 01 30 50.7 | +0.8 |
| DPC | Dobruska-Polom | 81.38 | 321 | *e*P | | P | | 01 30 50.8 | +0.7 |
| FRGS | Fruska Gora | 81.41 | 315 | ⇓P | | P | | 01 30 50.3 | 0.0 |
| SMOL | Smolenice | 81.51 | 319 | *e*P | | P | | 01 30 51.8 | +1.1 |
| SMOL | | | | *e* | | | | 01 36 39.9 | |
| VRAC | Vranov | 81.67 | 320 | ⇑P | | P | | 01 30 53.0 | +1.4 |
| VRAC | Vranov | 81.67 | 320 | P | | P | | 01 30 52.8 | +1.2 |
| | comp=Z,10nm,1.0s,baz=62,slow=5.0,SNR=8.6 | | | | | | | | |
| VRAC | Vranov | 81.67 | 320 | *e*P | | P | | 01 30 52.7 | +1.2 |
| BRG | Berggiesshubel | 82.50 | 322 | *e*P | | P | | 01 30 56.6 | +0.7 |
| BRG | | | | | Amp | | | 01 30 60.0 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| PRU | Pruhonice | 82.56 | 321 | *e*P | | P | | 01 30 56.5 | +0.3 |
| CONA | Conrad Observa | 82.71 | 319 | *e*P | | P | | 01 30 58.1 | +0.9 |
| | comp=Z,9.4nm,1.1s | | | | | | | | |
| CLL | Collm | 82.82 | 323 | *e*P | | P | | 01 30 58.0 | +0.5 |
| | comp=Z,32nm,1.5s | | | | | | | | |
| CLL | Collm | 82.82 | 323 | P | | P | | 01 30 56.4 | -1.1 |
| CKRC | Cesky Krumlov | 83.23 | 320 | *e*P | | P | | 01 31 00.4 | +0.6 |
| KHC | Kasperske Hory | 83.51 | 321 | *e*P | | P | | 01 31 01.9 | +0.7 |
| KHC | Kasperske Hory | 83.51 | 321 | P | | P | | 01 31 01.5 | +0.2 |
| KHC | | | | | IAmb | IAmb | | 01 31 06.2 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| GEC2 | GERESS Array S | 83.58 | 321 | P | | P | | 01 30 59.6 | -2.0 |
| GEC2 | | | | | IAmb | IAmb | | 01 31 05.4 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| GERES | GERESS Array B | 83.58 | 321 | P | | P | | 01 31 01.7 | +0.1 |
| | comp=Z,3.9nm,0.9s,baz=58,slow=3.3,SNR=13 | | | | | | | | |
| GERES | GERESS Array B | 83.58 | 321 | P | | P | | 01 31 00.5 | -1.2 |
| NKC | Novy Kostel | 83.64 | 322 | *e*P | | P | | 01 31 02.3 | +0.4 |
| MOA | Molln | 83.70 | 320 | *e*P | | P | | 01 31 04.5 | +2.3 |
| | comp=Z,13nm,1.4s | | | | | | | | |
| SOKA | Soboth | 83.77 | 318 | *e*P | | P | | 01 31 03.3 | +0.6 |
| | comp=Z,13nm,2.1s | | | | | | | | |
| YKA | Yellowknife Ar | 84.14 | 23 | P | | P | | 01 31 03.0 | -1.1 |
| | comp=Z,2.5nm,0.7s,baz=312,slow=4.7,SNR=7.0 | | | | | | | | |
| KMBO | Kilima Mbogo | 84.58 | 266 | P | | P | | 01 31 09.2 | +1.7 |
| | comp=Z,3.5nm,1.0s,baz=46,slow=4.7,SNR=8.1 | | | | | | | | |
| GRF | Grafenberg Arr | 84.60 | 322 | *e*P | | P | | 01 31 07.9 | +1.2 |
| | comp=Z,18nm,1.3s,baz=67,slow=5.3 | | | | | | | | |
| KBA | Koelnbreinsper | 84.61 | 319 | *e*P | | P | | 01 31 09.9 | +2.8 |
| | comp=Z,8.5nm,1.2s | | | | | | | | |
| ABTA | Abfaltersbach | 85.27 | 319 | *e*P | | P | | 01 31 12.6 | +2.4 |
| | comp=Z,10nm,1.2s | | | | | | | | |
| WTTA | Wattenberg | 85.55 | 320 | *e*P | | P | | 01 31 12.6 | +0.8 |
| | comp=Z,7.8nm,1.0s | | | | | | | | |
| WATA | Walderalm | 85.55 | 320 | P | | P | | 01 31 14.9 | +3.1 |
| | comp=Z,10.0nm,1.5s | | | | | | | | |
| SQTA | Sankt Quirin | 85.82 | 320 | *e*P | | P | | 01 31 13.2 | +0.2 |
| | comp=Z,8.5nm,1.1s | | | | | | | | |
| MOTA | Moosalm | 85.82 | 320 | *e*P | | P | | 01 31 12.0 | -1.1 |
| | comp=Z,7.3nm,1.4s | | | | | | | | |
| FETA | Feichten | 86.21 | 320 | *e*P | | P | | 01 31 15.2 | +0.2 |
| | comp=Z,6.4nm,1.4s | | | | | | | | |
| EKA | Eskdalemuir Ar | 88.61 | 332 | P | | P | | 01 31 26.2 | 0.0 |
| | comp=Z,1.6nm,0.7s,baz=28,slow=3.8,SNR=3.1 | | | | | | | | |
| ELK | Elko | 97.89 | 40 | LR | | LR | | 02 17 11.1 | |
| | comp=Z,79nm,18.4s,baz=74,slow=36 | | | | | | | | |
| PDAR | Pinedale Array | 99.73 | 35 | LR | | LR | | 02 20 33.0 | |
| | comp=Z,71nm,18.3s,baz=26,slow=37 | | | | | | | | |
| MOTC | Monteria, Cord | 144.49 | 29 | *e*P | | PKPab | | 01 38 06.5 | -2.3 |
| UREC | San Jos de Ur | 145.45 | 30 | *e*P | | PKPbc | | 01 38 10.4 | -1.8 |
| DBBC | Dabeiba | 145.78 | 31 | *e*P | | PKPdf | | 01 38 12.4 | -0.6 |
| OCAC | Ocana | 145.97 | 26 | *e*P | | PKPdf | | 01 38 09.4 | -3.9 |
| ZARC | Zaragoza, Cauc | 145.99 | 29 | *e*P | | PKPdf | | 01 38 11.4 | -1.8 |
| SDV | Santo Domingo | 146.35 | 21 | *e*P | | PKPbc | | 01 38 15.3 | +0.1 |
| SOCV | Socops | 146.84 | 22 | *e*P | | PKPdf | | 01 38 13.4 | -1.3 |
| CBOC | Ciudad Bolivar | 146.88 | 32 | *e*P | | PKPdf | | 01 38 15.3 | +0.4 |
| PTBC | PUERTO BERRIO | 147.01 | 29 | *e*P | | PKPdf | | 01 38 13.4 | -1.6 |
| PAMC | Pamplona, Colo | 147.03 | 25 | *e*P | | PKPdf | | 01 38 16.3 | +0.7 |
| BARC | Barichara | 147.51 | 27 | *e*P | | PKPdf | | 01 38 16.3 | +0.2 |
| PLMC | San Jos del P | 147.57 | 33 | *e*P | | PKPdf | | 01 38 15.3 | -0.7 |
| NORC | Norcasia | 147.69 | 30 | *e*P | | PKPdf | | 01 38 17.3 | +1.1 |
| GUY2C | Guyana, Caldas | 147.75 | 32 | *e*P | | PKPdf | | 01 38 17.3 | +0.5 |
| SPBC | San Pablo de B | 147.97 | 29 | *e*P | | PKPdf | | 01 38 17.3 | +0.6 |
| RUSC | La Rusia | 148.19 | 27 | *e*P | | PKPbc | | 01 38 19.2 | -1.5 |
| YOTC | Yotoco, Valle | 148.32 | 34 | *e*P | | PKPdf | | 01 38 18.3 | +1.0 |
| ELOV | Elorza | 148.49 | 20 | *e*P | | PKPbc | | 01 38 19.2 | -1.7 |
| ROSC | El Rosal | 148.58 | 30 | PKPbc | | PKPbc | | 01 38 21.4 | -0.3 |
| | comp=Z,5.8nm,0.4s,baz=57,slow=6.6,SNR=5.6 | | | | | | | | |
| ORTC | Ortega, Tolima | 148.94 | 33 | *e*P | | PKPdf | | 01 38 18.3 | 0.0 |
| POPC | Popayan, Colom | 149.36 | 36 | *e*P | | PKPdf | | 01 38 20.2 | +1.1 |
| VILC | Villavicencio, | 149.51 | 30 | *e*P | | PKPdf | | 01 38 20.2 | +1.0 |
| PLCA | Paso Flores | 159.87 | 154 | PKPab | | PKPab | | 01 39 12.2 | +0.5 |
| | comp=Z,2.2nm,0.8s,baz=231,slow=5.0,SNR=3.8 | | | | | | | | |
| LPAZ | La Paz | 169.18 | 53 | PKP | | PKPdf | | 01 38 41.3 | -0.9 |
| | comp=Z,1.4nm,0.5s,baz=248,slow=1.8,SNR=1.4 | | | | | | | | |

*IASPEI* ***18*** *01:22:53.9±0.8,38.39N±0.02×26.66E±0.03,h16km±5km, Error ellipse: s-maj=4.0km s-min=2.9km az=82.8,GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*ISK* ***18*** *01:22:53.7,38.39N×26.71E,h13km, ML3.4/7*

*ATH* ***18*** *01:22:53.6,38.36N×26.63E,h30km±3km, ML3.0/5, Error ellipse: s-maj=6.5km s-min=1.1km az=230.0*

*DDA* ***18*** *01:22:54.6±0.0,38.38N×26.65E,h13km, ML3.0*

*THE* ***18*** *01:22:54.7,38.34N×26.61E,h17km±1km, ML2.9/7, Error ellipse: s-maj=2.0km s-min=0.4km az=246.0*

**ISC 18 01:22:54.0±0.8, 38.39N±0.02×26.65E±0.02, h15km±5km, n55, σ0.967/80, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URLA | Izmir | 0.05 | 239 | PG | Pg | 01 22 56.8 | -0.2 |
| URLA | | | | SG | Sg | 01 22 59.1 | +0.2 |
| URLA | Izmir | 0.05 | 239 | P | Pg | 01 22 56.8 | -0.2 |
| URLA | | | | S | Sg | 01 22 58.9 | 0.0 |
| URLA | | | | *i* AML | AML | 01 22 59.0 | |
| | comp=N,2μm,0.3s | | | | | | |
| URLA | | | | *i* AML | AML | 01 23 00.0 | |
| | comp=E,7μm,0.4s | | | | | | |
| ZEYE | Izmir, Urla-Ze | 0.19 | 218 | P | Pg | 01 22 58.6 | +0.1 |
| ZEYE | | | | S | Sg | 01 23 02.0 | +0.5 |
| ZEYE | | | | *i* AML | AML | 01 23 02.0 | |
| | comp=N,4μm,0.2s | | | | | | |
| ZEYE | | | | *i* AML | AML | 01 23 02.0 | |
| | comp=E,6μm,0.3s | | | | | | |
| FOCM | Foa | 0.33 | 11 | PG | Pg | 01 23 00.7 | -0.2 |
| FOCM | | | | SG | Sg | 01 23 05.9 | +0.3 |
| CHOS | Chios island | 0.47 | 270 | P | Pg | 01 23 03.6 | +0.2 |
| CHOS | | | | S | Sg | 01 23 10.4 | +0.6 |
| | 2μm,0.4s | | | | | | |
| CHOS | Chios island | 0.47 | 270 | P | Pg | 01 23 03.6 | +0.2 |
| CHOS | | | | S | Sg | 01 23 10.4 | +0.6 |
| CHOS | | | | AML | AML | 01 23 11.0 | |
| | comp=E,2766μm,0.4s | | | | | | |
| CHOS | | | | AML | AML | 01 23 11.4 | |
| | comp=N,2682μm,0.4s | | | | | | |
| CAND | Candarli | 0.58 | 12 | PG | Pg | 01 23 05.2 | -0.3 |
| ZEDA | zmir-Bergama | 0.67 | 30 | P | Pg | 01 23 06.3 | -0.8 |
| ZEDA | | | | S | Sg | 01 23 16.8 | +0.8 |
| ZEDA | | | | *i* AML | AML | 01 23 20.0 | |
| | comp=N,607nm,0.2s | | | | | | |
| ZEDA | | | | *i* AML | AML | 01 23 21.0 | |
| | comp=N,640nm,0.2s | | | | | | |
| SMG | Samos | 0.69 | 168 | P | Pb | 01 23 07.1 | -0.7 |
| SMG | | | | S | Sg | 01 23 17.2 | +0.5 |
| | comp=N,3μm,0.5s | | | | | | |
| S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SKY** | **Skiros Island** | **1.72** | **287** | P | | **Pn** | **01 23 22.9** | **-0.4** |
| **MULA** | **Mugla, Merkez-** | **1.74** | **130** | P | | **Pb** | **01 23 26.8** | **+1.1** |
| **DEMI** | **Demirci** | **1.74** | **67** | P | | **Pn** | **01 23 24.9** | **+1.1** |
| **NISR** | **Nisiros** | **1.81** | **168** | P | | **Pn** | **01 23 24.8** | **+0.2** |
| **DURS** | **Dursunbey** | **1.87** | **49** | P | | **Pn** | **01 23 24.8** | **-0.6** |
| **USAK** | **Uak-Merkez** | **1.88** | **79** | P | | **Pn** | **01 23 25.6** | **-0.1** |
| **LIA** | **Limnos Island** | **1.89** | **323** | P | | **Pn** | **01 23 25.6** | **-0.1** |
| LIA | | | | S | | **Sn** | **01 23 48.5** | **-0.8** |
| | comp=E,102nm,0.5s | | | | | | | |
| **LIA** | **Limnos Island** | **1.89** | **323** | P | | **Pn** | **01 23 25.7** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.89** | **342** | P | | **Pn** | **01 23 25.3** | **-0.5** |
| GADA | | | | S | | **Sn** | **01 23 49.0** | **-0.3** |
| | comp=E,120nm,0.6s | | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **2.01** | **117** | P | | **Pn** | **01 23 27.8** | **+0.3** |
| **TURN** | **Turunc** | **2.05** | **141** | P | | **Pn** | **01 23 27.1** | **-0.7** |
| **PASA** | **Karahalli, USA** | **2.23** | **90** | P | | **Pn** | **01 23 30.6** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **2.25** | **338** | P | | **Pn** | **01 23 30.1** | **-0.6** |
| SMTH | | | | S | | **Sn** | **01 23 57.7** | **-0.6** |
| | comp=E,48nm,0.6s | | | | | | | |
| **KESN** | **Edirne-Kesan** | **2.44** | **1** | P | | **Pn** | **01 23 32.9** | **-0.7** |
| KESN | | | | *i* AML | | AML | 01 24 12.0 | |
| | comp=E,86nm,0.4s | | | | | | | |
| KESN | | | | *i* AML | | AML | 01 24 14.0 | |
| | comp=E,82nm,0.3s | | | | | | | |
| **ARG** | **Arkhangelos** | **2.46** | **151** | P | | **Pn** | **01 23 33.4** | **-0.2** |
| **ARG** | **Arkhangelos** | **2.46** | **151** | P | | **Pn** | **01 23 33.4** | **-0.2** |
| ARG | | | | AML | | AML | 01 24 21.0 | |
| | comp=E,130µm,1.0s | | | | | | | |
| ARG | | | | AML | | AML | 01 24 28.1 | |
| | comp=N,116µm,1.2s | | | | | | | |
| **YYLC** | **Yaylacik** | **2.55** | **41** | P | | **Pg** | **01 23 41.8** | **-1.1** |
| **ALN** | **Alexandroupoli** | **2.55** | **350** | P | | **Pn** | **01 23 34.7** | **-0.1** |
| **GOLH** | **Golhisar** | **2.58** | **116** | P | | **Pn** | **01 23 36.4** | **+1.2** |
| **FETY** | **Fethiye** | **2.61** | **131** | P | | **Pn** | **01 23 36.2** | **+0.6** |
| **AVDN** | **Avdancik/Bursa** | **2.72** | **45** | P | | **Pn** | **01 23 40.0** | **+2.8** |
| **KZIL** | **AFYON_Kizioren** | **2.75** | **92** | P | | **Pn** | **01 23 38.1** | **+0.5** |
| **BRDR** | **BURDUR-Merkez** | **2.78** | **103** | P | | **Pn** | **01 23 38.1** | **+0.1** |

*IDC* ***18*** *01:28:28.3±1.1, 12°.75N×124°.90E, h0km, mb3.9/6, mb1 4.0/6, mb1mx3.6/56, mbtmp3.9/6, Error ellipse: s-maj=88.0km s-min=20.0km az=73.0*
*MAN* ***18*** *01:28:31.5, 12°.94N×125°.00E, h23km, mb4.5, ML3.4, MS3.2*
**ISC 18 01:28:33.9±1.0, 12°.9N±0°.1×125°.0E±0°.1, h41km, n8, σ1§47/9, mb3.8/6, 1C-1D, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCP** | **Roxas** | **2.58** | **240** | ⇓*eP* | **Pn** | **01 29 13.0** | **-0.2** |
| RCP | | | | *eS* | **Sn** | **01 29 44.1** | **+0.7** |
| **LQP** | **Lukban** | **3.60** | **290** | ⇓*eP* | **Pn** | **01 29 26.2** | **-1.3** |
| **KSRS** | **Korea Array** | **24.62** | **6** | P | **P** | **01 33 51.4** | **+1.0** |
| | 0.6nm,0.4s,baz=189,slow=11,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.88** | **164** | P | **P** | **01 35 11.0** | **-1.9** |
| | 0.5nm,0.5s,baz=344,slow=9.4,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **37.34** | **166** | P | **P** | **01 35 41.5** | **-1.2** |
| | 0.4nm,0.3s,baz=345,slow=6.7,SNR=6.4 | | | | | | |
| **STKA** | **Stephens Creek** | **47.25** | **161** | P | **P** | **01 37 04.5** | **+1.3** |
| | 1.0nm,0.5s,baz=344,slow=10,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.77** | **331** | P | **P** | **01 37 36.8** | **-0.6** |
| | 1.0nm,0.6s,baz=126,slow=7.3,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.25** | **325** | P | **P** | **01 37 50.0** | **+1.6** |
| | 0.6nm,0.6s,baz=120,slow=7.6,SNR=2.5 | | | | | | |

*AEIC* ***18*** *01:29:40±1.2, 63°.07N±0°.02×150°.16W±0°.05, h10km±6km, ML3.1, ML3.3/102(NEIC), Error ellipse: s-maj=3.1km s-min=2.2km az=67.0*
*ANF* ***18*** *01:29:40.7±0.3, 63°.08N×150°.21W, h8km±2km, ML3.5/51, Error ellipse: s-maj=1.6km s-min=1.5km az=85.0*
*NEIC* ***18*** *01:29:41.6±1.6, 63°.09N±0°.02×150°.17W±0°.05, h15km±4km, Error ellipse: s-maj=3.2km s-min=2.1km az=70.0*
**ISC 18 01:29:40.8±1.0, 63°.07N±0°.02×150°.16W±0°.02, h10km±9km, n154, σ0§78/159, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRF** | **Thorofare Moun** | **0.38** | **351** | | **Pg** | **01 29 48.8** | **+0.4** |
| TRF | | | | | **Sg** | **01 29 54.1** | **+0.7** |
| **TRF** | **Thorofare Moun** | **0.38** | **351** | IAML | | 01 29 54.8 | |
| | comp=N,3µm,0.3s | | | | | | |
| TRF | | | | IAML | | 01 29 54.9 | |
| | comp=E,3µm,0.6s | | | | | | |
| **TRF** | **Thorofare Moun** | **0.38** | **351** | P | **Pg** | **01 29 48.8** | **+0.4** |
| | baz=171,SNR=132 | | | | | | |
| TRF | | | | S | **Sg** | **01 29 54.2** | **+0.7** |
| | baz=171 | | | | | | |
| **KTH** | **Kantishna Hill** | **0.59** | **325** | | **Pg** | **01 29 52.1** | **-0.2** |
| KTH | | | | | **Sg** | **01 29 60.0** | **-0.1** |
| **CUT** | **Chulitna** | **0.67** | **184** | | **Pb** | **01 29 54.2** | **-0.4** |
| CUT | | | | | **Sg** | **01 30 03.2** | **+0.7** |
| **CUT** | **Chulitna** | **0.67** | **184** | IAML | | 01 30 03.7 | |
| | comp=E,2µm,0.6s | | | | | | |
| CUT | | | | IAML | | 01 30 03.8 | |
| | comp=N,3µm,0.3s | | | | | | |
| **CUT** | **Chulitna** | **0.67** | **184** | P | **Pb** | **01 29 54.2** | **-0.4** |
| | baz=4.0,SNR=21 | | | | | | |
| CUT | | | | S | **Sg** | **01 30 03.2** | **+0.7** |
| | baz=4.0 | | | | | | |
| **RND** | **Reindeer** | **0.68** | **60** | | **Pg** | **01 29 53.7** | **-0.2** |
| **MCK** | **McKinley** | **0.86** | **39** | | **Pg** | **01 29 57.2** | **-0.1** |
| MCK | | | | | **Sg** | **01 30 08.5** | **0.0** |
| **MCK** | **McKinley** | **0.86** | **39** | IAML | | 01 30 09.7 | |
| | comp=N,797nm,0.4s | | | | | | |
| MCK | | | | IAML | | 01 30 10.3 | |
| | comp=E,663nm,0.5s | | | | | | |
| **MCK** | **McKinley** | **0.86** | **39** | P | **Pg** | **01 29 57.3** | **-0.1** |
| | baz=220,SNR=12 | | | | | | |
| MCK | | | | S | **Sg** | **01 30 08.5** | **0.0** |
| | baz=220 | | | | | | |
| **CAST** | **Castle Rocks** | **0.94** | **293** | | **Pg** | **01 29 58.0** | **-0.8** |
| **CAST** | **Castle Rocks** | **0.94** | **293** | IAML | | 01 30 13.6 | |
| | comp=N,1µm,0.3s | | | | | | |
| CAST | | | | IAML | | 01 30 13.7 | |
| | comp=E,901nm,0.3s | | | | | | |
| **CAST** | **Castle Rocks** | **0.94** | **293** | P | **Pg** | **01 29 58.1** | **-0.8** |
| | baz=111,SNR=59 | | | | | | |
| CAST | | | | S | **Sg** | **01 30 10.6** | **-0.3** |
| | baz=111 | | | | | | |
| **PPLA** | **Purkeypile** | **0.94** | **260** | | **Pg** | **01 29 58.5** | **-0.4** |
| **PPLA** | **Purkeypile** | **0.94** | **260** | P | **Pg** | **01 29 58.6** | **-0.4** |
| | baz=78,SNR=49 | | | | | | |
| PPLA | | | | S | **Sg** | **01 30 10.5** | **-0.7** |
| | baz=78 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.09** | **341** | | **Pg** | **01 30 01.3** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **1.09** | **341** | IAML | | 01 30 17.1 | |
| | comp=N,643nm,0.4s | | | | | | |
| BPAW | | | | IAML | | 01 30 17.3 | |
| | comp=E,853nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.09** | **341** | P | **Pg** | **01 30 01.3** | **-0.5** |
| | baz=160,SNR=22 | | | | | | |
| BPAW | | | | S | **Sg** | **01 30 15.5** | **-0.5** |
| | baz=160 | | | | | | |
| **BWN** | **Browne** | **1.15** | **15** | | **Pn** | **01 30 03.1** | **+0.2** |
| **BWN** | **Browne** | **1.15** | **15** | IAML | | 01 30 24.8 | |
| | comp=N,821nm,0.7s | | | | | | |
| **WAT6** | **Susitna Watana** | **1.22** | **113** | | **Pb** | **01 30 03.1** | **-0.8** |
| WAT6 | | | | | **Sb** | **01 30 19.2** | **-0.5** |
| **WAT6** | **Susitna Watana** | **1.22** | **113** | P | **Pb** | **01 30 03.2** | **-0.7** |
| | baz=295,SNR=62 | | | | | | |
| WAT6 | | | | S | **Sb** | **01 30 19.3** | **-0.5** |
| | baz=295 | | | | | | |
| **CHUM** | **Lake Minchumin** | **1.26** | **311** | | **Pn** | **01 30 04.3** | **-0.2** |
| **CHUM** | **Lake Minchumin** | **1.26** | **311** | P | **Pn** | **01 30 04.3** | **-0.2** |
| | baz=129,SNR=44 | | | | | | |
| CHUM | | | | S | **Sb** | **01 30 20.8** | **-0.2** |
| | baz=129 | | | | | | |
| **DHY** | **Denali Highway** | **1.27** | **89** | | **Pn** | **01 30 04.0** | **-0.7** |
| **DHY** | **Denali Highway** | **1.27** | **89** | IAML | | 01 30 23.2 | |
| | comp=E,668nm,0.4s | | | | | | |
| **DHY** | **Denali Highway** | **1.27** | **89** | P | **Pn** | **01 30 04.2** | **-0.5** |
| | baz=271,SNR=35 | | | | | | |
| DHY | | | | S | **Sg** | **01 30 21.6** | **+0.2** |
| | baz=271 | | | | | | |
| **M22K** | **Willow** | **1.33** | **179** | | **Pn** | **01 30 04.7** | **-0.6** |
| **M22K** | **Willow** | **1.33** | **179** | P | **Pn** | **01 30 04.8** | **-0.6** |
| | baz=359,SNR=11 | | | | | | |
| M22K | | | | S | **Sb** | **01 30 22.6** | **-0.1** |
| | baz=359 | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.43** | **156** | | **Pn** | **01 30 06.4** | **-0.4** |
| GHO | | | | | **Sn** | **01 30 24.9** | **-0.8** |
| **SML** | **Sawmill** | **1.53** | **145** | | **Pn** | **01 30 07.9** | **-0.2** |
| **SML** | **Sawmill** | **1.53** | **145** | IAML | | 01 30 29.3 | |
| | comp=N,449nm,0.6s | | | | | | |
| SML | | | | IAML | | 01 30 32.7 | |
| | comp=E,440nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **1.53** | **145** | P | **Pn** | **01 30 08.0** | **-0.2** |
| | baz=327,SNR=20 | | | | | | |
| SML | | | | S | **Sn** | **01 30 27.8** | **-0.3** |
| | baz=327 | | | | | | |
| **PMR** | **Palmer** | **1.56** | **162** | | **Pn** | **01 30 08.6** | **0.0** |
| **PMR** | **Palmer** | **1.56** | **162** | IAML | | 01 30 32.3 | |
| | comp=N,260nm,0.4s | | | | | | |
| **PMR** | **Palmer** | **1.56** | **162** | P | **Pn** | **01 30 08.6** | **0.0** |
| | baz=342,SNR=24 | | | | | | |
| PMR | | | | S | **Sn** | **01 30 29.0** | **+0.2** |
| | baz=342 | | | | | | |
| **NEA2** | **Nenana** | **1.60** | **17** | | **Pn** | **01 30 08.7** | **-0.4** |
| **NEA2** | **Nenana** | **1.60** | **17** | P | **Pn** | **01 30 08.7** | **-0.4** |
| | baz=198 | | | | | | |
| **WRH** | **Wood River Hil** | **1.68** | **32** | | **Pn** | **01 30 10.1** | **-0.1** |
| **STLK** | **Strandline Lak** | **1.76** | **207** | | **Pn** | **01 30 11.4** | **0.0** |
| **K20K** | **Telida** | **1.79** | **281** | Pn | **Pn** | **01 30 10.9** | **-0.9** |
| K20K | | | | IAML | | 01 30 38.0 | |
| | comp=E,360nm,0.7s | | | | | | |
| K20K | | | | IAML | | 01 30 38.0 | |
| | comp=N,346nm,0.6s | | | | | | |
| **K20K** | **Telida** | **1.79** | **281** | P | **Pn** | **01 30 11.7** | **-0.2** |
| | baz=98 | | | | | | |
| K20K | | | | S | **Sn** | **01 30 33.9** | **-0.8** |
| | baz=98 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.81** | **132** | | **Pn** | **01 30 11.5** | **-0.6** |
| **SCM** | **Sheep Creek Mo** | **1.81** | **132** | IAML | | 01 30 41.2 | |
| | comp=N,335nm,0.9s | | | | | | |
| SCM | | | | IAML | | 01 30 42.0 | |
| | comp=E,354nm,0.6s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.81** | **132** | P | **Pn** | **01 30 11.9** | **-0.2** |
| | baz=315,SNR=15 | | | | | | |
| **L20K** | **Farewell, AK** | **1.81** | **252** | | **Pn** | **01 30 12.2** | **+0.1** |
| **L20K** | **Farewell, AK** | **1.81** | **252** | P | **Pn** | **01 30 11.8** | **-0.3** |
| | baz=69 | | | | | | |
| L20K | | | | Sb | **Sb** | **01 30 37.3** | **+0.5** |
| | baz=69 | | | | | | |
| **KNK** | **Knik Glacier** | **1.85** | **154** | P | **Pn** | **01 30 13.0** | **+0.4** |
| | baz=335,SNR=16 | | | | | | |
| KNK | | | | S | **Sn** | **01 30 36.7** | **+0.8** |
| | baz=335 | | | | | | |
| **CCB** | **Clear Creek Bu** | **1.89** | **32** | | **Pn** | **01 30 13.0** | **-0.2** |
| **HDA** | **Harding Lake** | **1.96** | **45** | | **Pn** | **01 30 14.5** | **+0.5** |
| **HDA** | **Harding Lake** | **1.96** | **45** | IAML | | 01 30 42.5 | |
| | comp=E,196nm,0.6s | | | | | | |
| HDA | | | | IAML | | 01 30 44.2 | |
| | comp=N,304nm,0.5s | | | | | | |
| **HDA** | **Harding Lake** | **1.96** | **45** | P | **Pn** | **01 30 14.1** | **0.0** |
| | baz=228,SNR=18 | | | | | | |
| **MLY** | **Manley** | **1.98** | **353** | P | **Pn** | **01 30 14.4** | **-0.1** |
| | baz=172 | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.99** | **207** | | **Pn** | **01 30 14.9** | **+0.3** |
| **RC01** | **Rabbit Creek A** | **2.00** | **174** | | **Pn** | **01 30 15.1** | **+0.5** |
| **RC01** | **Rabbit Creek A** | **2.00** | **174** | IAML | | 01 30 45.0 | |
| | comp=N,206nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 01 30 49.1 | |
| | comp=E,211nm,0.5s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.00** | **174** | P | **Pn** | **01 30 15.1** | **+0.5** |
| | baz=354 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **2.07** | **28** | | **Pn** | **01 30 15.6** | **+0.1** |
| **TCOL** | **CIGO, UAF Yank** | **2.07** | **28** | P | **Pn** | **01 30 15.5** | **-0.1** |
| | baz=210 | | | | | | |
| TCOL | | | | S | **Sn** | **01 30 42.2** | **+0.8** |
| | baz=210 | | | | | | |
| **COLA** | **College** | **2.07** | **28** | | **Pn** | **01 30 15.6** | **0.0** |
| **COLA** | **College** | **2.07** | **28** | P | **Pn** | **01 30 15.6** | **0.0** |
| | baz=210 | | | | | | |
| COLA | | | | Sb | **Sg** | **01 30 45.9** | **-1.5** |
| | baz=210 | | | | | | |
| **MDM** | **Murphy Dome** | **2.08** | **23** | | **Pn** | **01 30 15.7** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **2.08** | **116** | | **Pn** | **01 30 16.3** | **+0.5** |
| **M24K** | **Tolsona, Glenn** | **2.08** | **116** | IAML | | 01 30 51.0 | |
| | comp=E,281nm,0.9s | | | | | | |
| M24K | | | | IAML | | 01 30 56.0 | |
| | comp=N,243nm,1.1s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **2.08** | **116** | P | **Pn** | **01 30 16.1** | **+0.3** |
| | baz=299,SNR=12 | | | | | | |
| M24K | | | | Sb | **Sg** | **01 30 46.3** | **-1.3** |
| | baz=299 | | | | | | |
| **SPCN** | **Chakachatna No** | **2.08** | **208** | | **Pn** | **01 30 16.6** | **+0.8** |
| **SPNN** | **North Nagishla** | **2.09** | **216** | | **Pn** | **01 30 16.5** | **+0.6** |
| **PS08** | **TAPS Pump Stn8** | **2.09** | **44** | | **Pn** | **01 30 15.4** | **-0.5** |
| **SPBG** | **Spurr Blockage** | **2.10** | **211** | | **Pn** | **01 30 16.8** | **+0.7** |
| **J20K** | **Nowinta River** | **2.10** | **304** | | **Pn** | **01 30 16.0** | **+0.1** |
| J20K | | | | IAML | | 01 30 50.4 | |
| | comp=N,147nm,0.6s | | | | | | |
| J20K | | | | IAML | | 01 30 54.3 | |
| | comp=E,151nm,0.5s | | | | | | |
| **J20K** | **Nowinta River** | **2.10** | **304** | P | **Pn** | **01 30 15.8** | **-0.2** |
| | baz=120 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **2.11** | **9** | | **Pn** | **01 30 16.2** | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **2.11** | **9** | P | **Pn** | **01 30 16.3** | **+0.1** |
| | baz=190 | | | | | | |
| I23K | | | | Sb | **Sb** | **01 30 46.4** | **+1.1** |
| | baz=190 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **2.11** | **208** | | **Pn** | **01 30 17.2** | **+1.0** |
| **SPCR** | **Spurr Chakacha** | **2.11** | **208** | Sb | **Sb** | **01 30 46.3** | **+0.8** |
| | baz=26 | | | | | | |
| **PAX** | **Paxson** | **2.14** | **91** | | **Pn** | **01 30 16.7** | **+0.1** |
| **PAX** | **Paxson** | **2.14** | **91** | P | **Pn** | **01 30 16.7** | **+0.1** |
| | baz=275,SNR=9.5 | | | | | | |
| **IL31** | | **2.23** | **39** | | **Pn** | **01 30 17.9** | **+0.1** |
| **I21K** | **Tanana** | **2.26** | **340** | | **Pn** | **01 30 18.4** | **+0.2** |
| **I21K** | **Tanana** | **2.26** | **340** | IAML | | 01 30 52.5 | |
| | comp=E,117nm,0.7s | | | | | | |
| **I21K** | **Tanana** | **2.26** | **340** | P | **Pn** | **01 30 18.3** | **+0.1** |
| | baz=158 | | | | | | |
| I21K | | | | Sb | **Sb** | **01 30 50.8** | **+1.1** |
| | baz=158 | | | | | | |
| **M19K** | **Big River Lodg** | **2.29** | **241** | | **Pn** | **01 30 18.6** | **0.0** |
| **M19K** | **Big River Lodg** | **2.29** | **241** | P | **Pn** | **01 30 18.5** | **-0.2** |
| | baz=57 | | | | | | |
| M19K | | | | Sb | **Sb** | **01 30 51.1** | **+0.6** |
| | baz=57 | | | | | | |
| **L19K** | **White Mountain** | **2.35** | **250** | | **Pn** | **01 30 19.4** | **-0.1** |
| **L19K** | **White Mountain** | **2.35** | **250** | IAML | | 01 30 55.3 | |
| | comp=N,123nm,1.1s | | | | | | |
| L19K | | | | IAML | | 01 30 58.1 | |
| | comp=E,126nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **2.35** | **250** | P | **Pn** | **01 30 19.3** | **-0.1** |
| | baz=66,SNR=11 | | | | | | |
| **POKR** | **Poker Plat Res** | **2.38** | **29** | | **Pn** | **01 30 19.7** | **-0.1** |
| **POKR** | **Poker Plat Res** | **2.38** | **29** | P | **Pn** | **01 30 19.5** | **-0.3** |
| | baz=211 | | | | | | |
| **PWL** | **Port Wells** | **2.38** | **158** | | **Pn** | **01 30 21.5** | **+1.6** |
| **PWL** | **Port Wells** | **2.38** | **158** | IAML | | 01 30 56.7 | |
| | comp=E,175nm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **2.38** | **158** | P | **Pn** | **01 30 21.4** | **+1.6** |
| | baz=340 | | | | | | |
| **PS11** | **TAPS Pump St11** | **2.39** | **113** | | **Pn** | **01 30 21.2** | **+1.3** |
| **HARP** | **HAARP** | **2.40** | **104** | | **Pn** | **01 30 21.2** | **+1.1** |
| **HARP** | **HAARP** | **2.40** | **104** | P | **Pn** | **01 30 21.2** | **+1.1** |
| | baz=288,SNR=17 | | | | | | |
| **RIDG** | **Independent Ri** | **2.48** | **72** | P | **Pn** | **01 30 22.0** | **+0.7** |
| | baz=257,SNR=7.2 | | | | | | |
| **KLU** | **Klutina** | **2.54** | **127** | | **Pn** | **01 30 22.7** | **+0.6** |
| **KLU** | **Klutina** | **2.54** | **127** | IAML | | 01 31 04.3 | |
| | comp=E,138nm,0.3s | | | | | | |
| KLU | | | | IAML | | 01 31 05.3 | |
| | comp=N,132nm,0.4s | | | | | | |
| **KLU** | **Klutina** | **2.54** | **127** | P | **Pn** | **01 30 22.6** | **+0.6** |
| | baz=310 | | | | | | |
| **SLKM** | **Skilak Lake** | **2.58** | **181** | | **Pn** | **01 30 24.4** | **+1.9** |
| **O22K** | **Cooper Landing** | **2.61** | **175** | Pn | **Pn** | **01 30 22.3** | **-0.7** |
| **J25K** | **Salcha River,** | **2.62** | **52** | | **Pn** | **01 30 23.4** | **+0.2** |
| **J25K** | **Salcha River,** | **2.62** | **52** | IAML | | 01 31 04.2 | |
| | comp=E,95nm,0.5s | | | | | | |
| J25K | | | | IAML | | 01 31 04.7 | |
| | comp=N,98nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **2.62** | **52** | P | **Pn** | **01 30 23.5** | **+0.2** |
| | baz=236 | | | | | | |
| **JPK** | **Jack Peak** | **2.63** | **139** | | **Pn** | **01 30 24.9** | **+1.6** |
| **GLI** | **Glacier Island** | **2.63** | **145** | | **Pn** | **01 30 24.8** | **+1.4** |
| **GLI** | **Glacier Island** | **2.63** | **145** | P | **Pn** | **01 30 24.6** | **+1.2** |
| | baz=328 | | | | | | |
| **TTA** | **Tatalina** | **2.67** | **270** | | **Pn** | **01 30 23.8** | **-0.2** |
| **TTA** | **Tatalina** | **2.67** | **270** | P | **Pn** | **01 30 23.6** | **-0.4** |
| | baz=84,SNR=13 | | | | | | |
| **TT01** | **Tatalina** | **2.68** | **269** | | **Pn** | **01 30 23.8** | **-0.2** |
| **PS06** | **TAPS Pump Stn6** | **2.80** | **4** | | **Pn** | **01 30 25.9** | **+0.4** |
| **DOT** | **Dot Lake** | **2.81** | **75** | | **Pn** | **01 30 26.9** | **+1.2** |
| **H21K** | **Melozitna Rive** | **2.84** | **337** | | **Pn** | **01 30 26.3** | **+0.2** |
| **H21K** | **Melozitna Rive** | **2.84** | **337** | P | **Pn** | **01 30 26.7** | **+0.5** |
| | baz=155 | | | | | | |
| **DIV** | **Divide** | **2.84** | **131** | | **Pn** | **01 30 27.2** | **+1.1** |
| **RSO** | **Redoubt South** | **2.90** | **206** | Pn | **Pn** | **01 30 26.3** | **-0.8** |
| **FID** | **Port Fidalgo** | **2.91** | **142** | | **Pn** | **01 30 28.3** | **+1.2** |
| **FID** | **Port Fidalgo** | **2.91** | **142** | IAML | | 01 31 12.3 | |
| | comp=N,106nm,0.5s | | | | | | |
| FID | | | | IAML | | 01 31 13.0 | |
| | comp=E,110nm,0.5s | | | | | | |
| **SCRK** | **Sand Creek** | **2.91** | **69** | | **Pn** | **01 30 27.3** | **0.0** |
| **SCRK** | **Sand Creek** | **2.91** | **69** | IAML | | 01 31 15.3 | |
| | comp=N,92nm,0.5s | | | | | | |
| SCRK | | | | IAML | | 01 31 15.3 | |
| | comp=E,80nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **2.91** | **69** | P | **Pn** | **01 30 27.3** | **0.0** |
| | baz=254,SNR=11 | | | | | | |
| **H24K** | **Noodor Dome** | **2.95** | **19** | | **Pn** | **01 30 28.0** | **+0.4** |
| **H24K** | **Noodor Dome** | **2.95** | **19** | P | **Pn** | **01 30 28.1** | **+0.4** |
| | baz=201 | | | | | | |
| **N25K** | **Chitina, Valde** | **2.98** | **117** | P | **Pn** | **01 30 30.1** | **+2.0** |
| | baz=302 | | | | | | |
| **N19K** | **Bonanza Creek** | **3.05** | **224** | Pn | **Pn** | **01 30 31.3** | **+2.2** |
| N19K | | | | IAML | | 01 31 22.1 | |
| | comp=N,57nm,0.6s | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.10** | **88** | P | **Pn** | **01 30 31.7** | **+1.9** |
| | baz=274 | | | | | | |
| **PRP** | **Porcupine Dome** | **3.18** | **37** | | **Pn** | **01 30 31.7** | **+0.7** |
| **PRP** | **Porcupine Dome** | **3.18** | **37** | IAML | | 01 31 20.6 | |
| | comp=E,55nm,0.6s | | | | | | |
| PRP | | | | IAML | | 01 31 31.4 | |
| | comp=N,52nm,0.6s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.18** | **37** | P | **Pn** | **01 30 31.4** | **+0.5** |
| | baz=222 | | | | | | |
| **SVW2** | **Sparrevohn** | **3.23** | **235** | Pn | **Pn** | **01 30 31.8** | **+0.3** |
| SVW2 | | | | IAML | | 01 31 22.4 | |
| | comp=E,98nm,0.4s | | | | | | |
| SVW2 | | | | IAML | | 01 31 27.6 | |
| | comp=N,95nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **3.26** | **61** | P | **Pn** | **01 30 32.6** | **+0.6** |
| | baz=247 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.29** | **138** | Pn | **Pn** | **01 30 33.1** | **+0.9** |
| **IM03** | | **3.31** | **334** | | **Pn** | **01 30 32.8** | **+0.3** |
| **IMAR** | **Indian Mountai** | **3.31** | **334** | | **Pn** | **01 30 32.8** | **+0.3** |
| **BMRM** | **Bremner River** | **3.36** | **126** | Pn | **Pn** | **01 30 34.6** | **+1.2** |
| BMRM | | | | IAML | | 01 31 28.8 | |
| | comp=E,62nm,1.1s | | | | | | |
| BMRM | | | | IAML | | 01 31 31.0 | |
| | comp=N,72nm,0.9s | | | | | | |
| **BMRM** | **Bremner River** | **3.36** | **126** | P | **Pn** | **01 30 34.3** | **+0.9** |
| | baz=311 | | | | | | |
| **M26K** | **Nabesna, AK** | **3.36** | **98** | Pn | **Pn** | **01 30 34.1** | **+0.7** |
| M26K | | | | IAML | | 01 31 31.8 | |
| | comp=E,72nm,0.5s | | | | | | |
| **M26K** | **Nabesna, AK** | **3.36** | **98** | P | **Pn** | **01 30 34.4** | **+1.0** |
| | baz=285 | | | | | | |
| **GLB** | **Gilahina Butte** | **3.39** | **116** | | **Pn** | **01 30 35.9** | **+2.2** |
| GLB | | | | IAML | | 01 31 30.7 | |
| | comp=N,73nm,1.0s | | | | | | |
| **VRDI** | **Verde Repeater** | **3.65** | **117** | Pn | **Pn** | **01 30 38.8** | **+1.4** |
| VRDI | | | | IAML | | 01 31 39.8 | |
| | comp=N,37nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **3.79** | **86** | | **Pn** | **01 30 40.2** | **+0.9** |
| **L27K** | **Beaver Creek,** | **3.79** | **86** | IAML | | 01 31 45.8 | |
| | comp=N,33nm,0.6s | | | | | | |
| **L27K** | **Beaver Creek,** | **3.79** | **86** | P | **Pn** | **01 30 40.1** | **+0.9** |
| | baz=274 | | | | | | |
| **COLD** | **Coldfoot** | **4.17** | **360** | P | **Pn** | **01 30 45.1** | **+0.7** |
| | baz=180 | | | | | | |
| **EGAK** | **Eagle** | **4.33** | **63** | P | **Pn** | **01 30 47.1** | **+0.5** |
| | baz=251 | | | | | | |
| **WAX** | **Waxell Ridge** | **4.36** | **124** | Pn | **Pn** | **01 30 49.4** | **+2.3** |
| **DAWY** | **Dawson** | **4.91** | **74** | Pn | **Pn** | **01 30 55.0** | **+0.4** |
| DAWY | | | | IAML | | 01 32 18.9 | |
| | comp=E,27nm,0.7s | | | | | | |
| DAWY | | | | IAML | | 01 32 33.4 | |
| | comp=N,25nm,0.9s | | | | | | |
| **DAWY** | **Dawson** | **4.91** | **74** | P | **Pn** | **01 30 55.0** | **+0.4** |
| | baz=263 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **5.60** | **2** | P | **Pn** | **01 31 05.6** | **+1.5** |
| | baz=183 | | | | | | |
| **YUK6** | **Outpost Mounta** | **5.95** | **106** | P | **Pn** | **01 31 11.0** | **+1.9** |
| | baz=296 | | | | | | |
| **PNL** | **Peninsula** | **6.20** | **119** | P | **Pn** | **01 31 13.8** | **+1.5** |
| | baz=308 | | | | | | |
| **ANM** | **Nome** | **6.90** | **289** | Pn | **Pn** | **01 31 22.5** | **+0.7** |
| **ANM** | **Nome** | **6.90** | **289** | P | **Pn** | **01 31 22.6** | **+0.8** |
| | baz=96 | | | | | | |
| **TNA** | **Tin City** | **8.10** | **296** | P | **Pn** | **01 31 39.3** | **+1.0** |
| | baz=100 | | | | | | |

*GUC* ***18*** *01:32:31.4±0.6, 30°.59S×71°.39W, h51km±1km, ML4.2*
*NEIC* ***18*** *01:32:31.2±1.6, 30°.58S±0°.04×71°.5W±0°.1, h51km±8km, mb4.6/5, ML4.2(GUC), Error ellipse: s-maj=13.5km s-min=3.9km az=75.0*
*IDC* ***18*** *01:32:37.7±5.4, 29°.94S×71°.18W, h70km±56km, mb3.3/2, mb1 3.6/4, mb1mx3.4/26, mbtmp3.6/4, ML4.0/2, Error ellipse: s-maj=61.9km s-min=35.7km az=145.0*
**ISC 18 01:32:31.2±0.8, 30°.59S±0°.03×71°.43W±0°.05, h46km±6km, n54, σ1§17/72, mb3.8/3, 5C-10D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.19** | **245** | | **Pn** | **01 32 39.5** | **+0.4** |
| CO06 | | | | Sn | **Sn** | **01 32 45.6** | **+1.0** |
| **CO06** | **Fray Jorge** | **0.19** | **245** | ⇑*iP* | **Pn** | **01 32 39.5** | **+0.4** |
| CO06 | | | | *i* S | **Sn** | **01 32 45.7** | **+1.1** |
| CO06 | | | | IAML | | 01 32 47.2 | |
| | comp=E,21µm,0.7s | | | | | | |
| **CO03** | **El Pedregal** | **0.68** | **111** | | **Pn** | **01 32 44.9** | **+0.1** |
| CO03 | | | | Sn | **Sn** | **01 32 54.7** | **+0.3** |
| **CO03** | **El Pedregal** | **0.68** | **111** | ⇓*iP* | **Pn** | **01 32 44.8** | **+0.1** |
| CO03 | | | | *i* S | **Sn** | **01 32

comp=E,906nm,0.2s
**MT02 Curacav 2.67 175 Pn 01 33 12.3 +0.5**
**MT02 Curacav 2.67 175⇑*iP* Pn 01 33 12.3 +0.5**
MT02 *i* S **Sn 01 33 45.1 +2.2**
MT02 IAML 01 33 58.0
comp=E,482nm,0.3s
**MT05 Renca 2.85 168 Pn 01 33 14.9 +0.6**
**MT05 Renca 2.85 168 *e*P Pn 01 33 16.1 +1.7**
MT05 *i* S **Sn 01 33 49.4 +1.9**
MT05 IAML 01 34 03.3
comp=E,2µm,0.5s
**VA05 Santo Domingo 3.06 183 Pn 01 33 16.5 -0.6**
**VA05 Santo Domingo 3.06 183⇑*iP* Pn 01 33 17.1 0.0**
VA05 IAML 01 34 08.0
comp=E,1µm,0.3s
**GO03 Copiap 3.17 20 Pn 01 33 19.7 +1.1**
**MT09 Talagante 3.20 173 Pn 01 33 19.9 +0.8**
**MT09 Talagante 3.20 173⇓*iP* Pn 01 33 20.3 +1.2**
MT09 IAML 01 34 09.1
comp=E,665nm,0.3s
**MT01 Popeta 3.27 177 Pn 01 33 20.4 +0.4**
**MT01 Popeta 3.27 177 *e*P Pn 01 33 20.5 +0.6**
MT01 IAML 01 34 09.5
comp=E,687nm,0.8s
**LMEL Las Melosas 3.41 163 Pn 01 33 23.8 +1.8**
**LMEL Las Melosas 3.41 163⇑*iP* Pn 01 33 24.8 +2.8**
LMEL IAML 01 34 17.7
comp=N,653nm,0.2s
**BO04 La Punta 3.46 169 Pn 01 33 23.6 +1.0**
**BO04 La Punta 3.46 169⇓*iP* Pn 01 33 24.0 +1.4**
BO04 *i* S **Sn 01 34 03.6 +1.3**
BO04 IAML 01 34 17.0
comp=N,367nm,0.5s
**BO01 Tunca 3.80 176 Pn 01 33 27.6 +0.3**
**BO01 Tunca 3.80 176 *e*P Pn 01 33 27.8 +0.5**
**BO02 Sierra Bellavi 4.22 173 Pn 01 33 34.2 +1.0**
**BO02 Sierra Bellavi 4.22 173 *e*P Pn 01 33 34.3 +1.2**
BO02 *i* S **Sn 01 34 21.4 +0.2**
**AC02 Maricunga 4.25 29 Pn 01 33 35.7 +1.7**
**GO05 Huala 4.42 185 Pn 01 33 34.9 -1.0**
**PLCA Paso Flores 10.14 176** P Pn 01 35 09.7 +15
comp=N,0.3nm,0.3s,baz=349,slow=13,SNR=6.0
**CPUP Villa Florida 13.11 75** P **Pn 01 35 35.0 +0.2**
comp=N,0.2nm,0.3s,baz=233,slow=10,SNR=1.3
**CPUP Villa Florida 13.11 75 Pn 01 35 34.1 -0.7**
**GO08 Villa O'Higgin 17.87 182** Pn Pn **01 36 33.1 -3.2**
GO08 IAmb IAmb 01 36 52.8
comp=Z,46nm,1.4s
**MG02 Cerro Sombrero 22.23 176** P **P 01 37 20.1 -3.7**
**BDFB Brasilia 26.10 60** P **P 01 38 01.0 0.0**
comp=Z,1.7nm,0.6s,baz=237,slow=12,SNR=3.9
**SNAA Sanae 54.55 159** P **P 01 41 55.5 +1.1**
SNAA IAmb IAmb 01 42 13.4
comp=Z,14nm,1.3s
**TXAR Lajitas Array 67.04 330** P **P 01 43 20.7 +0.9**
comp=Z,0.2nm,0.8s,baz=156,slow=6.9,SNR=2.3
**ZALV Zalesovo Beam 151.04 29** PKPbc **PKiKP 01 52 19.2 0.0**
comp=Z,0.7nm,0.5s,baz=305,slow=2.0,SNR=4.5
ZALV PKPab **pPKPdf 01 52 27.8 +0.7**
comp=Z,0.4nm,0.5s,baz=333,slow=4.8,SNR=1.7

*IDC **18** 01:34:31.2±6.2, 0.°20S×17.°09W, h0km, mb3.9/4, mb1 4.3/5, mb1mx3.7/37, mbtmp4.1/5, ML4.7/1, Error ellipse: s-maj=196.0km s-min=36.8km az=164.0*
**ISC 18 01:34:34.5±4.6, 0.°1N±1.°0×17.°2W±0.°3, h13km, n14, σ0.°73/8, mb3.8/4, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR 8.30 161** | | | T | T | 01 45 35.8 | |
| | baz=340,slow=74,SNR=103 | | | | | | |
| **H10N3** | **ASCENSION HYDR 8.30 161** | | | T | T | 01 45 34.3 | |
| | baz=340,slow=74,SNR=94 | | | | | | |
| **H10N1** | **ASCENSION HYDR 8.32 161** | | | T | T | 01 45 37.6 | |
| | baz=340,slow=74,SNR=176 | | | | | | |
| **H10S3** | **ASCENSION HYDR 9.31 165** | | | T | T | 01 46 50.2 | |
| | baz=343,slow=74,SNR=56 | | | | | | |
| **H10S2** | **ASCENSION HYDR 9.32 164** | | | T | T | 01 46 51.9 | |
| | baz=237,slow=74,SNR=31 | | | | | | |
| **LIC** | **Lamto 13.57 63** | | *e*P | **Pn** | | **01 37 47.9 +1.0** | |
| | 9.9nm,0.3s | | | | | | |
| **TIC** | **Toumodi 13.76 61** | | *e*P | **Pn** | | **01 37 49.4 -0.2** | |
| **KIC** | **Kosan Boka 13.88 63** | | *e*P | **Pn** | | **01 37 51.2 0.0** | |
| | 11nm,0.3s | | | | | | |
| **DBIC** | **Dimbokro 13.92 62** | | Pn | **Pn** | | **01 37 50.5 -1.2** | |
| | 3.6nm,0.3s,baz=254,slow=15,SNR=46 | | | | | | |
| DBIC | | | Sn | Sn | | 01 40 14.0 -12 | |
| | 1.5nm,0.3s,baz=170,slow=17,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea 22.76 54** | | P | **P** | | **01 39 36.6 -0.3** | |
| | 4.2nm,0.7s,baz=237,slow=10,SNR=18 | | | | | | |
| **H09N1** | **TRISTAN DA CUN 37.23 174** | | T | T | | 02 21 48.6 | |
| | SNR=4.9 | | | | | | |
| **GERES** | **GERESS Array B 55.38 24** | | P | **P** | | **01 44 08.7 +0.1** | |
| | 0.4nm,0.6s,baz=201,slow=7.1,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B 69.44 21** | | P | **P** | | **01 45 42.5 +0.3** | |
| | 6.9nm,1.1s,baz=216,slow=5.3,SNR=6.5 | | | | | | |
| **TXAR** | **Lajitas Array 86.91 299** | | P | **P** | | **01 47 19.6 -0.2** | |
| | 0.1nm,0.4s,baz=101,slow=5.8,SNR=3.5 | | | | | | |

**IDC 18 01:38:11.1±1.4, 0.°94N×129.°12E, h0km, mb3.7/3, mb1 3.9/4, mb1mx3.3/42, mbtmp3.7/4, ML3.5/1, MS3.6/1, Ms1 3.6/1, ms1mx2.7/67, Error ellipse: s-maj=60.0km s-min=20.9km az=57.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong 2.80 130** | | | Pn | Pn | 01 38 58.3 | +1.0 |
| | 7.1nm,0.3s,baz=317,slow=18,SNR=6.0 | | | | | | |
| SIJI | | | | Sn | Sn | 01 39 31.3 | -0.5 |
| | 5.2nm,0.3s,baz=16,slow=23,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr 21.38 166** | | | P | P | 01 43 00.1 | -0.3 |
| | 1.2nm,0.5s,baz=347,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs 24.90 170** | | | P | P | 01 43 36.0 | 0.0 |
| | 2.5nm,0.8s,baz=348,slow=10,SNR=22 | | | | | | |
| **JHJ** | **Hachijo jima 2 33.54 16** | | LR | LR | | 01 56 58.4 | |
| | comp=Z,91nm,19.1s,baz=59,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array 61.19 325** | | P | P | | 01 48 27.8 | 0.0 |
| | 0.4nm,0.4s,baz=116,slow=8.6,SNR=11 | | | | | | |

*IDC **18** 01:41:32.6±1.3, 22.°12N×143.°23E, h0km, mb3.5/7, mb1 3.7/7, mb1mx3.3/47, mbtmp3.5/7, Error ellipse: s-maj=45.3km s-min=28.1km az=92.0*
**ISC 18 01:41:37.9±1.2, 22.°1N±0.°2×143.°2E±0.°3, h35km, n7, σ1.°47/7, mb3.5/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLR** | **Kul'dur 28.53 344** | | | P | **P** | **01 47 29.9** | **-0.1** |
| | 0.7nm,0.6s,baz=114,slow=9.8,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr 42.69 192** | | | P | **P** | **01 49 31.3** | **-0.2** |
| | 0.5nm,1.0s,baz=18,slow=8.2,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam 53.87 321** | | | P | **P** | **01 50 55.7** | **-1.7** |
| | 0.3nm,0.4s,baz=87,slow=7.5,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array 54.41 312** | | | P | **P** | **01 51 03.6** | **+2.2** |
| | 0.2nm,0.4s,baz=93,slow=7.8,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array 61.57 27** | | | P | **P** | **01 51 52.3** | **+0.3** |
| | 0.3nm,0.7s,baz=257,slow=5.5,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar 76.08 28** | | | P | **P** | **01 53 22.1** | **+0.4** |
| | 0.1nm,0.5s,baz=295,slow=5.8,SNR=2.9 | | | | | | |
| **FINES** | **FINESS Array B 82.80 334** | | | P | **P** | **01 53 57.4** | **-0.7** |
| | 1.1nm,0.8s,baz=62,slow=4.9,SNR=4.4 | | | | | | |

**IDC 18 01:51:15.2±1.5, 1.°04N×129.°20E, h0km, mb3.9/3, mb1 4.1/4, mb1mx3.6/35, mbtmp3.9/4, ML3.5/1, Error ellipse: s-maj=63.6km s-min=22.2km az=57.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong 2.80 133** | | | Pn | Pn | 01 52 01.2 | -0.2 |
| | 7.0nm,0.3s,baz=330,slow=20,SNR=6.6 | | | | | | |
| SIJI | | | | Sn | Sn | 01 52 36.5 | +0.6 |
| | 3.3nm,0.3s,baz=190,slow=23,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr 21.45 167** | | | P | P | 01 56 06.0 | +0.6 |
| | 2.0nm,0.7s,baz=345,slow=11,SNR=22 | | | | | | |
| WRA | | | | PcP | PcP | 02 00 05.8 | -3.3 |
| | 0.5nm,0.7s,baz=355,slow=2.5,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs 24.98 170** | | | P | P | 01 56 41.5 | +0.7 |
| | 8.9nm,0.8s,baz=351,slow=13,SNR=84 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 40.66 62** | | | T | T | 02 42 34.1 | |
| | baz=248,slow=75,SNR=83 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 40.67 62** | | | T | T | 02 42 34.2 | |
| | baz=248,slow=75,SNR=82 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 40.68 62** | | | T | T | 02 42 34.5 | |
| | baz=248,slow=75,SNR=94 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 41.28 61** | | | T | T | 02 43 16.8 | |
| | baz=247,slow=75,SNR=99 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 41.30 61** | | | T | T | 02 43 17.7 | |
| | baz=247,slow=75,SNR=90 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 41.30 61** | | | T | T | 02 43 18.2 | |
| | baz=247,slow=75,SNR=72 | | | | | | |
| **MKAR** | **Makanchi Array 61.16 325** | | | P | P | 02 01 32.5 | +0.8 |
| | 0.3nm,0.4s,baz=119,slow=7.9,SNR=5.2 | | | | | | |

**IDC 18 02:06:30.0±1.2, 0.°83N×128.°93E, h0km, mb3.6/4, mb1 3.8/5, mb1mx3.2/39, mbtmp3.6/5, ML3.3/1, Error ellipse: s-maj=66.2km s-min=20.6km az=61.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong 2.88 126** | | | Pn | Pn | 02 07 15.8 | -1.4 |
| | 4.0nm,0.3s,baz=348,slow=17,SNR=6.6 | | | | | | |
| SIJI | | | | Sn | Sn | 02 07 49.1 | -3.5 |
| | 2.4nm,0.3s,baz=345,slow=21,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr 21.31 166** | | | P | P | 02 11 18.3 | -0.3 |
| | 1.1nm,0.8s,baz=344,slow=11,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs 24.82 169** | | | P | P | 02 11 54.9 | +0.7 |
| | 3.0nm,0.8s,baz=347,slow=10,SNR=23 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 41.00 62** | | | T | T | 02 57 47.3 | |
| | baz=248,slow=75,SNR=43 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 41.01 62** | | | T | T | 02 57 47.1 | |
| | baz=248,slow=75,SNR=47 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 41.02 62** | | | T | T | 02 57 46.0 | |
| | baz=248,slow=75,SNR=32 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 41.63 61** | | | T | T | 02 58 30.4 | |
| | baz=247,slow=75,SNR=84 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 41.64 61** | | | T | T | 02 58 28.7 | |
| | baz=247,slow=75,SNR=71 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 41.64 61** | | | T | T | 02 58 33.4 | |
| | baz=247,slow=75,SNR=100 | | | | | | |
| **MKAR** | **Makanchi Array 61.18 325** | | | P | P | 02 16 46.7 | +0.1 |
| | 0.2nm,0.5s,baz=116,slow=8.6,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra 65.35 327** | | | P | P | 02 17 14.0 | -0.2 |
| | 0.4nm,0.5s,baz=127,slow=6.1,SNR=5.7 | | | | | | |

*SNET **18** 02:17:58.0±1.6, 13.°47N×90.°75W, h14km, ML3.4*
*GCG **18** 02:18:02.6±0.3, 13.°75N×90.°86W, h28km, MD3.9*
**ISC 18 02:17:54.2±3.7, 13.°2N±0.°1×90.°8W±0.°1, h33km, n24, σ0.°71/26, 1C-3D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCG** | **Pacaya 1.18 11** | | *e*P | **Pb** | | **02 18 16.3 0.0** | |
| **FUG** | **Fuego 3 1.22 360** | | *e*P | **Pb** | | **02 18 16.4 -0.5** | |
| **NUBE** | **Las Nubes 1.23 57** | | ⇓*iP* | **Pb** | | **02 18 16.5 -0.6** | |
| NUBE | | | IAML | | | 02 18 43.9 | |
| | comp=Z,326nm,0.5s | | | | | | |
| **SLOZ** | **Alcaldia de Sa 1.30 52** | | *e*P | **Pb** | | **02 18 17.6 -0.5** | |
| SLOZ | | | *e*S | **Sn** | | **02 18 33.3 +0.9** | |
| SLOZ | | | *e*S | **Sb** | | **02 18 35.1 +0.5** | |
| SLOZ | | | IAML | | | 02 18 39.6 | |
| | comp=Z,482nm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde 1.33 63** | | *e*P | **Pb** | | **02 18 18.6 -0.2** | |
| CEVE | | | IAML | | | 02 18 47.3 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **SBLS** | **San Blas 1.33 63** | | *e*P | **Pb** | | **02 18 18.6 -0.2** | |
| **RTR** | **El Retiro 1.34 60** | | ⇓*e*P | **Pb** | | **02 18 18.8 -0.2** | |
| **SNJE** | **San Jose 1.36 62** | | *e*P | **Pb** | | **02 18 19.0 -0.3** | |
| **JAYA** | **Jayaque - finc 1.42 72** | | *e*P | **Pb** | | **02 18 19.9 -0.4** | |
| JAYA | | | IAML | | | 02 18 42.1 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **NBG** | **Las Nubes 1.44 19** | | *e*P | **Pb** | | **02 18 21.2 +0.6** | |
| **LALI** | **Alcalda de L 1.50 80** | | *e*P | **Pb** | | **02 18 22.4 +0.9** | |
| **CEDA** | **San Andres 1.52 68** | | *e*P | **Pb** | | **02 18 21.9 0.0** | |
| **BOQS** | **Boqueron 1.60 71** | | *e*P | **Pb** | | **02 18 23.4 0.0** | |
| **TACO** | **Tacachico 1.62 63** | | ⇓*e*P | **Pb** | | **02 18 22.8 -0.9** | |
| **SNET** | **Serv Nac Est T 1.63 73** | | *e*P | **Pb** | | **02 18 24.0 +0.2** | |
| **LFRS** | **El Faro 1.77 77** | | *e*P | **Pb** | | **02 18 26.3 0.0** | |
| **SJTE** | **Alcalda de S 1.83 78** | | *e*P | **Pb** | | **02 18 26.8 -0.3** | |
| **MTO3** | **Montecristo 1.85 51** | | *e*P | **Pb** | | **02 18 26.4 -1.2** | |
| **PAVA** | **Las Pavas 1.91 75** | | *e*P | **Pb** | | **02 18 28.6 0.0** | |
| **COEG** | **Centro de Oper 1.95 78** | | *e*P | **Pb** | | **02 18 28.6 -0.5** | |
| **ESQI** | **Esquipulas 1.97 47** | | *e*P | **Pb** | | **02 18 28.4 -1.1** | |
| **SCLA** | **Alcaldia de Sa 2.11 77** | | *e*P | **Pb** | | **02 18 30.6 -1.3** | |
| **MRL** | **Marmol 2.16 31** | | ⇑*e*P | **Pb** | | **02 18 31.8 -1.1** | |
| **COEB** | **Comit de Eme 2.27 83** | | *e*P | **Pb** | | **02 18 33.5 -1.1** | |

*BEO **18** 02:21:25.9±0.8, 41.°31N×24.°50E, h4km±3km, ML2.6/11*
*THE **18** 02:21:25.7, 41.°30N×24.°45E, h4km±1km, ML2.4/11, Error ellipse: s-maj=1.9km s-min=0.5km az=206.0*
*ATH **18** 02:21:25.8, 41.°33N×24.°45E, h6km±2km, ML2.5/5, Error ellipse: s-maj=2.5km s-min=0.8km az=37.0*
*ISK **18** 02:21:26.1, 41.°31N×24.°53E, h9km, ML2.5/6*
*DDA **18** 02:21:28.2±0.0, 40.°97N×24.°35E, h8km±3km, ML2.6*
**ISC 18 02:21:25.7±1.0, 41.°31N±0.°02×24.°46E±0.°02, h6km±9km, n59, σ0.°93/102, 4C-3D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAVA** | **Kavala 0.32 172** | | | P | **Pg** | **02 21 32.0 +0.1** | |
| KAVA | | | | S | **Sg** | **02 21 36.8 +0.8** | |
| **KAVA** | **Kavala 0.32 172** | | | P | **Pg** | **02 21 32.0 +0.1** | |
| KAVA | | | | S | **Sg** | **02 21 36.8 +0.8** | |
| **KVLA** | **Kavala 0.38 188** | | | P | **Pg** | **02 21 33.0 0.0** | |
| KVLA | | | | S | **Sg** | **02 21 38.2 +0.3** | |
| **NVR** | **Nevrokopi 0.45 275** | | | P | **Pg** | **02 21 34.2 -0.3** | |
| NVR | | | | S | **Sg** | **02 21 40.5 +0.2** | |
| | 338nm,0.1s | | | | | | |
| **NVR** | **Nevrokopi 0.45 275** | | | P | **Pg** | **02 21 34.2 -0.3** | |
| NVR | | | | S | **Sg** | **02 21 40.0 -0.3** | |
| NVR | | | | AML | AML | 02 21 44.1 | |
| | comp=N,596µm,0.1s | | | | | | |
| NVR | | | | AML | AML | 02 21 44.5 | |
| | comp=E,726µm,0.1s | | | | | | |
| **KOKK** | **Kokkinochori, 0.60 215** | | | P | **Pg** | **02 21 36.9 -0.4** | |
| KOKK | | | | S | **Sg** | **02 21 45.2 +0.1** | |
| | comp=E,460nm,0.2s | | | | | | |
| **KOKK** | **Kokkinochori, 0.60 215** | | | P | **Pg** | **02 21 36.9 -0.4** | |
| KOKK | | | | S | **Sg** | **02 21 45.2 +0.1** | |
| **SRS** | **Serrai 0.68 254** | | | P | **Pg** | **02 21 38.6 -0.2** | |
| SRS | | | | S | **Sg** | **02 21 48.2 +0.5** | |
| | comp=E,280nm,0.1s | | | | | | |
| **SRS** | **Serrai 0.68 254** | | | P | **Pg** | **02 21 38.6 -0.2** | |
| SRS | | | | S | **Sg** | **02 21 48.2 +0.5** | |
| **THAS** | **Thassos island 0.73 164** | | | P | **Pg** | **02 21 39.6 -0.1** | |
| THAS | | | | S | **Sg** | **02 21 49.4 +0.2** | |
| | comp=E,868nm,0.4s | | | | | | |
| **THAS** | **Thassos island 0.73 164** | | | P | **Pg** | **02 21 39.6 -0.1** | |
| THAS | | | | S | **Sg** | **02 21 49.4 +0.2** | |
| THAS | | | | AML | AML | 02 21 52.9 | |
| | comp=E,1290µm,0.4s | | | | | | |
| THAS | | | | AML | AML | 02 21 53.3 | |
| | comp=N,2169µm,0.5s | | | | | | |
| **PLD** | **Plovdiv 0.82 13** | | | PG | **Pb** | **02 21 42.1 -0.2** | |
| **RDO** | **Rodhopi 0.83 101** | | | P | **Pg** | **02 21 41.4 -0.3** | |
| RDO | | | | S | **Sg** | **02 21 53.0 +0.5** | |
| | comp=N,398nm,0.2s | | | | | | |
| **RDO** | **Rodhopi 0.83 101** | | | P | **Pg** | **02 21 41.3 -0.3** | |
| RDO | | | | S | **Sg** | **02 21 53.0 +0.5** | |
| RDO | | | | AML | AML | 02 21 56.8 | |
| | comp=E,790µm,0.2s | | | | | | |
| RDO | | | | AML | AML | 02 21 56.9 | |
| | comp=N,787µm,0.3s | | | | | | |
| **RDO** | **Rodhopi 0.83 101** | | | PG | **Pg** | **02 21 41.4 -0.3** | |
| **SOH** | **Sokhos 0.97 240** | | | P | **Pg** | **02 21 43.9 -0.4** | |
| SOH | | | | S | **Sb** | **02 21 57.8 -0.1** | |
| | comp=N,325nm,0.4s | | | | | | |
| **SOH** | **Sokhos 0.97 240** | | | P | **Pg** | **02 21 43.9 -0.4** | |
| SOH | | | | AML | AML | 02 21 60.0 | |
| | comp=E,1025µm,0.3s | | | | | | |
| SOH | | | | AML | AML | 02 22 01.2 | |
| | comp=N,625µm,0.3s | | | | | | |
| **SMTH** | **Samothraki Isl 1.17 135** | | | P | **Pg** | **02 21 47.7 -0.4** | |
| SMTH | | | | S | **Sb** | **02 22 04.1 +0.4** | |
| | comp=N,72nm,0.2s | | | | | | |
| **SMTH** | **Samothraki Isl 1.17 135** | | | P | **Pg** | **02 21 47.7 -0.4** | |
| SMTH | | | | S | **Sg** | **02 22 03.6 +0.3** | |
| **KNT** | **Kendrikon 1.19 263** | | | P | **Pg** | **02 21 48.1 -0.4** | |
| KNT | | | | S | **Sg** | **02 22 04.0 +0.2** | |
| | comp=N,228nm,0.2s | | | | | | |
| **PLG** | **Polygyros 1.21 220** | | | P | **Pg** | **02 21 48.8 -0.1** | |
| PLG | | | | S | **Sg** | **02 22 04.9 +0.3** | |
| **ALN** | **Alexandroupoli 1.27 108** | | | P | **Pg** | **02 21 49.3 -0.8** | |
| ALN | | | | S | **Sn** | **02 22 08.5 +1.2** | |
| | comp=N,60nm,0.5s | | | | | | |
| **ALN** | **Alexandroupoli 1.27 108** | | | P | **Pg** | **02 21 49.3 -0.8** | |
| **THE** | **Thessaloniki 1.32 240** | | | P | **Pg** | **02 21 50.4 -0.6** | |
| THE | | | | S | **Sg** | **02 22 07.9 -0.1** | |
| **THE** | **Thessaloniki 1.32 240** | | | P | **Pg** | **02 21 50.4 -0.6** | |
| THE | | | | S | **Sg** | **02 22 07.9 -0.1** | |
| THE | | | | AML | AML | 02 22 10.7 | |
| | comp=E,303µm,0.7s | | | | | | |
| THE | | | | AML | AML | 02 22 10.8 | |
| | comp=N,286µm,0.3s | | | | | | |
| **ENEZ** | **Enez 1.41 113** | | | PN | **Pn** | **02 21 51.6 -0.2** | |
| ENEZ | | | | SN | **Sg** | **02 22 10.3 -0.6** | |
| **VAY** | **Valandovo 1.42 271** | | *e*Pg | **Pg** | | **02 21 52.7 -0.3** | |
| VAY | | | *e*Sg | **Sn** | | **02 22 12.0 +0.9** | |
| **VAY** | **Valandovo 1.42 271** | | *i* Pn | **Pg** | | **02 21 52.7 -0.3** | |
| VAY | | | *i* Sn | **Sn** | | **02 22 12.3 +1.2** | |
| **CAVK** | **Edirne/Enez-Ca 1.43 115** | | P | **Pn** | | **02 21 52.7 +0.4** | |
| CAVK | | | S | **Sn** | | **02 22 13.2 +1.8** | |
| CAVK | | | *i* AML | AML | | 02 22 20.0 | |
| | comp=N,83nm,0.7s | | | | | | |
| CAVK | | | *i* AML | AML | | 02 22 21.0 | |
| | comp=N,104nm,1.2s | | | | | | |
| **PAIG** | **Paliouri 1.50 203** | | P | **Pn** | | **02 21 51.9 -1.3** | |
| **PAIG** | **Paliouri 1.50 203** | | P | **Pn** | | **02 21 51.9 -1.3** | |
| **LIA** | **Limnos Island 1.51 158** | | P | **Pn** | | **02 21 53.0 -0.3** | |
| LIA | | | S | **Sn** | | **02 22 13.0 -0.3** | |
| | comp=N,178nm,0.4s | | | | | | |
| **LIA** | **Limnos Island 1.51 158** | | P | **Pn** | | **02 21 53.8 +0.5** | |
| LIA | | | S | **Sg** | | **02 22 14.9 +0.5** | |
| **GADA** | **Gvkgeada 1.56 135** | | PN | **Pn** | | **02 21 54.1 +0.1** | |
| GADA | | | SN | **Sn** | | **02 22 14.5 -0.1** | |
| **GOKA** | **anakkale-Gk 1.57 135** | | P | **Pg** | | **02 21 55.8 0.0** | |
| GOKA | | | *i* AML | AML | | 02 22 19.0 | |
| | comp=N,99nm,0.2s | | | | | | |
| **VTS** | **Vitosha 1.59 326** | | *e*Pg | **Pn** | | **02 21 55.0 +0.4** | |
| VTS | | | *e*Sg | **Sb** | | **02 22 16.5 +0.4** | |
| **KESN** | **Edirne-Kesan 1.75 105** | | P | **Pb** | | **02 21 59.0 +0.6** | |
| KESN | | | S | **Sg** | | **02 22 22.0 +0.1** | |
| KESN | | | *i* AML | AML | | 02 22 30.0 | |
| | comp=N,50nm,0.4s | | | | | | |
| **GELI** | **Tayfur-Gelibol 1.78 120** | | PN | **Pn** | | **02 21 57.2 +0.2** | |
| GELI | | | SN | **Sn** | | **02 22 19.4 -0.5** | |
| **BOSS** | **Bosilegrad 1.89 309** | | *e*Pn | **Pn** | | **02 21 59.3 +0.7** | |
| BOSS | | | *e*Sn | **Sb** | | **02 22 24.3 -0.3** | |
| **BOZC** | **Bozcaada 1.90 140** | | PN | **Pn** | | **02 21 59.1 +0.4** | |
| **BOZC** | **Bozcaada 1.90 140** | | P | **Pn** | | **02 21 58.6 -0.1** | |
| BOZC | | | S | **Sn** | | **02 22 21.0 -2.0** | |
| **EZN** | **Ezine 2.06 136** | | PN | **Pn** | | **02 22 01.2 +0.4** | |
| EZN | | | SN | **Sn** | | **02 22 25.9 -0.8** | |
| **PRVS** | **Prvonek 2.14 305** | | *e*Pn | **Pn** | | **02 22 02.7 +0.6** | |
| PRVS | | | *e*Sn | **Sn** | | **02 22 30.5 +1.5** | |
| **KOCA** | **Canakkale, Ayv 2.21 144** | | P | **Pn** | | **02 22 03.3 +0.3** | |
| **ZAPS** | **Zavoj 2.38 326** | | *e*Pn | **Pn** | | **02 22 06.4 +1.0** | |
| ZAPS | | | *e*Sn | **Sn** | | **02 22 36.1 +1.2** | |
| **BARS** | **Barje 2.48 308** | | *e*Pn | **Pn** | | **02 22 07.2 +0.6** | |
| **BARS** | **Barje 2.48 308** | | *e*Pn | Pg | | 02 22 19.7 +6.5 | |
| BARS | | | *e*Sn | **Sn** | | **02 22 39.8 +2.6** | |
| BARS | | | *e*Sn | Sg | | 02 22 57.8 +12 | |
| **VLAD** | **Vladila 2.69 359** | | ⇓S | **Sg** | | **02 22 53.7 +1.6** | |
| **BUHA** | **Balikesir, Bur 2.69 131** | | P | **Pn** | | **02 22 09.9 +0.3** | |
| BUHA | | | S | **Sn** | | **02 22 40.2 -2.3** | |
| **ZAGS** | **Zajecar 2.99 327** | | *e*Pn | **Pn** | | **02 22 15.6 +1.9** | |
| ZAGS | | | *e*Sn | **Sn** | | **02 22 39.4 +0.5** | |
| **SELS** | **Selova 3.13 309** | | *e*Pn | **Pn** | | **02 22 16.0 +0.4** | |
| SELS | | | *e*Sn | **Sn** | | **02 22 53.8 +0.6** | |
| **GRUS** | **Gruza 3.78 314** | | *e*Pn | **Pn** | | **02 22 23.5 -1.0** | |
| GRUS | | | *e*Sn | **Sn** | | **02 23 09.0 -0.2** | |
| **IVAS** | **Ivanjica 3.91 307** | | *e*Pn | **Pn** | | **02 22 25.1 -1.2** | |
| IVAS | | | *e*Sn | **Sn** | | **02 23 12.1 -0.5** | |
| **AMRR** | **Amara 3.92 32** | | ⇓P | **Pn** | | **02 22 23.8 -2.6** | |
| **NEHR** | **Nehoiu 4.33 17** | | ⇑P | **Pn** | | **02 22 34.3 +2.2** | |
| **BZS** | **Buzias 4.78 335** | | ⇑P | **Pg** | | **02 22 54.1 -3.1** | |
| BZS | | | ⇑S | **Sg** | | **02 23 56.7 -2.3** | |
| **PLOR** | **Plostina 4.81 19** | | ⇓P | **Pn** | | **02 22 40.1 +1.4** | |
| **VRI** | **Vrincioaia 4.84 19** | | ⇑P | **Pn** | | **02 22 41.2 +2.1** | |

*KRNET **18** 02:34:57.6±0.1, 39.°16N×71.°67E, h12km, mb3.3*
*NNC **18** 02:35:00.1±3.2, 39.°25N×71.°96E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=24.5km s-min=13.9km az=174.0*
*ISU **18** 02:35:01.39.°40N×72.°00E, h5km*
*SOME **18** 02:35:05.0, 39.°58N×71.°55E, h15km*
**ISC 18 02:35:00.5±2.0, 39.°30N±0.°09×71.°86E±0.°03, h5km±9km, n52, σ2.°24/81, 19C-14D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRK** | **Karamyk 0.19 345** | | ⇓*iP* | **Pg** | | **02 35 04.2 -0.1** | |
| | baz=18 | | | | | | |
| DRK | | | ⇓*iS* | **Sg** | | **02 35 09.2 +2.3** | |
| | baz=18 | | | | | | |
| **FRG** | **Fergana 1.08 357** | | *e*P | **Pn** | | **02 35 22.0 -0.2** | |
| FRG | | | *e*S | **Sn** | | **02 35 38.0 +0.4** | |
| **BTK** | **Batken 1.11 314** | | ⇓*iP* | **Pb** | | **02 35 18.5 -3.7** | |
| | baz=24 | | | | | | |
| BTK | | | ⇓*iS* | **Sb** | | **02 35 34.1 -2.8** | |
| | baz=24 | | | | | | |
| **TSTA** | **Tashata 1.36 20** | | *e*P | **Pg** | | **02 35 28.0 +1.4** | |
| TSTA | | | *e*S | **Sg** | | **02 35 47.0 +2.7** | |
| **OHH** | **Osh 1.41 30** | | ⇑*e*P | **Pg** | | **02 35 27.3 -0.3** | |
| | baz=32 | | | | | | |
| OHH | | | ⇑*iS* | **Sg** | | **02 35 49.4 +3.4** | |
| | baz=32 | | | | | | |
| **SALK** | **Salom-Alik 2.18 43** | | ⇓*e*P | **Pb** | | **02 35 39.6 -0.9** | |
| | baz=43 | | | | | | |
| SALK | | | ⇓*e*S | **Sg** | | **02 36 10.1 -0.4** | |
| | baz=43 | | | | | | |
| **TRKS** | **Terek-Say 2.30 346** | | ⇑*iP* | **Pn** | | **02 35 38.8 -0.3** | |
| | baz=51 | | | | | | |
| TRKS | | | ⇑*iS* | **Sn** | | **02 36 09.0 +1.1** | |
| | baz=51 | | | | | | |
| **ARK** | **Arkit 2.50 2** | | *e*P | **Pb** | | **02 35 44.0 -1.9** | |
| ARK | | | *e*S | **Sg** | | **02 36 21.0 +0.2** | |
| **ARK** | **Arkit 2.50 2** | | ⇑*iP

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **3.88** | **30** | P | | **Pb** | **02 36 05.9** | **-3.7** |
| | SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.88** | **30** | ⇓Pn | | **Pn** | **02 36 02.7** | **+1.8** |
| | 5.7nm,0.7s | | | | | | | |
| AAK | | | | ⇑Sn | | **Sn** | **02 36 49.7** | **+2.7** |
| | 9.0nm,0.5s | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 02 37 05.0 | |
| | 15nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.88** | **30** | ⇓*i*P | | **Pn** | **02 36 03.0** | **+2.0** |
| | baz=31. | | | | | | | |
| AAK | | | | ⇓*i*S | | **Sn** | **02 36 50.4** | **+3.4** |
| | baz=31 | | | | | | | |
| **KK02** | **Karatay Array** | **3.94** | **345** | ⇑Pn | | **Pn** | **02 36 03.4** | **+1.8** |
| | 2.3nm,0.4s,baz=165,slow=12 | | | | | | | |
| KK02 | | | | ⇑Pg | | **Pb** | **02 36 12.6** | **+2.3** |
| | 5.9nm,0.5s | | | | | | | |
| KK02 | | | | ⇑Sn | | **Sn** | **02 36 52.7** | **+4.7** |
| | 6.0nm,0.5s,baz=170,slow=24 | | | | | | | |
| KK02 | | | | ⇑Lg | | Lg | 02 37 06.9 | |
| | 13nm,0.6s,baz=161,slow=31 | | | | | | | |
| **BRLS** | **Borolday** | **4.03** | **338** | *e*P | | **Pn** | **02 36 06.2** | **+3.4** |
| | 3.1nm,0.3s | | | | | | | |
| BRLS | | | | *e*S | | **Sn** | **02 36 50.1** | **-0.3** |
| | 7.3nm,0.3s | | | | | | | |
| **BRLS** | **Borolday** | **4.03** | **338** | Pg | | **Pn** | **02 36 04.2** | **+1.3** |
| | 3.5nm,0.2s | | | | | | | |
| BRLS | | | | Lg | | Lg | 02 36 52.8 | |
| | 7.3nm,0.3s | | | | | | | |
| **KBK** | **Karagaybulak** | **4.09** | **34** | P | | **Pb** | **02 36 09.3** | **-3.6** |
| | SNR=5.9 | | | | | | | |
| **CHMS** | **Chumysh** | **4.29** | **30** | P | | Pb | 02 36 10.7 | -5.7 |
| | SNR=18 | | | | | | | |
| **USP** | **Ospenovka** | **4.43** | **26** | P | | Pn | 02 36 12.7 | +4.3 |
| | SNR=13 | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **37** | P | | Pb | 02 36 15.4 | -6.2 |
| | SNR=7.2 | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **37** | ⇑Pn | | **Pn** | **02 36 13.8** | **+3.2** |
| | 3.3nm,0.5s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | **02 37 07.6** | **+3.2** |
| | 4.2nm,0.7s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 02 37 27.1 | |
| | 6.1nm,0.6s | | | | | | | |
| **KST** | **Kastek** | **4.85** | **38** | *e*P | | **Pg** | **02 36 32.2** | **-1.3** |
| | 2.6nm,0.5s | | | | | | | |
| KST | | | | *e*S | | **Sg** | **02 37 34.3** | **-2.1** |
| | 14nm,1.1s | | | | | | | |
| **KST** | **Kastek** | **4.85** | **38** | Pg | | **Pb** | **02 36 26.0** | **0.0** |
| | 3.2nm,0.7s | | | | | | | |
| KST | | | | Lg | | Lg | 02 37 30.3 | |
| | 5.5nm,0.8s | | | | | | | |
| **DGS** | **Degeres** | **4.92** | **36** | *e*P | | **Pg** | **02 36 34.4** | **-0.3** |
| | 5.7nm,0.6s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **02 37 38.5** | **+0.1** |
| | 14nm,0.5s | | | | | | | |
| **DGS** | **Degeres** | **4.92** | **36** | Pg | | **Pb** | **02 36 27.0** | **-0.1** |
| | 6.7nm,0.3s | | | | | | | |
| DGS | | | | Lg | | Lg | 02 37 31.9 | |
| | 19nm,0.4s | | | | | | | |
| **MTBS** | **Maitube** | **5.15** | **40** | *e*P | | **Pg** | **02 36 38.6** | **-0.5** |
| | 3.7nm,0.5s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **02 37 46.0** | **+0.2** |
| | 5.7nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **5.15** | **40** | Pg | | **Pb** | **02 36 31.5** | **+0.5** |
| | 3.7nm,0.5s | | | | | | | |
| MTBS | | | | Lg | | Lg | 02 37 39.4 | |
| | 5.7nm,0.5s | | | | | | | |
| **KRBS** | **Karabastau** | **5.24** | **32** | *e*P | | **Pg** | **02 36 40.0** | **-0.9** |
| | 2.7nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **02 37 47.4** | **-1.5** |
| | 5.3nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **5.24** | **32** | Pg | | **Pb** | **02 36 33.2** | **+0.6** |
| | 3.8nm,0.2s | | | | | | | |
| KRBS | | | | Lg | | Lg | 02 37 42.3 | |
| | 5.3nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.35** | **44** | *e*P | | **Pg** | **02 36 43.5** | **+0.4** |
| | 1.5nm,0.5s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **02 37 54.0** | **+1.6** |
| | 2.9nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.35** | **44** | Pg | | **Pb** | **02 36 37.7** | **+3.0** |
| | 3.4nm,0.6s | | | | | | | |
| TNSS | | | | Lg | | Lg | 02 37 50.0 | |
| | 2.9nm,0.4s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.58** | **43** | *e*P | | **Pg** | **02 36 46.7** | **-0.6** |
| | 2.3nm,0.5s | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **02 37 59.5** | **-0.1** |
| | 10nm,0.5s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.58** | **43** | Pg | | **Pb** | **02 36 41.3** | **+3.0** |
| | 4.2nm,0.3s | | | | | | | |
| KOTS | | | | Lg | | Lg | 02 37 56.4 | |
| | 10nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | **5.69** | **35** | *e*P | | **Pg** | **02 36 48.1** | **-1.3** |
| | 1.4nm,0.5s | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **02 38 01.9** | **-1.1** |
| | 6.6nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | **5.69** | **35** | Pg | | **Pb** | **02 36 43.5** | **+3.3** |
| | 3.3nm,0.7s | | | | | | | |
| KUU | | | | Lg | | Lg | 02 38 00.1 | |
| | 6.6nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **5.70** | **38** | *e*P | | **Pg** | **02 36 48.1** | **-1.6** |
| | 1.4nm,0.7s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **02 38 02.0** | **-1.5** |
| | 9.0nm,0.9s | | | | | | | |
| **KTBS** | **Karatobe** | **5.70** | **38** | Pg | | **Pb** | **02 36 43.9** | **+3.5** |
| | 1.7nm,0.3s | | | | | | | |
| KTBS | | | | Lg | | Lg | 02 38 00.8 | |
| | 9.0nm,0.9s | | | | | | | |
| **BTLS** | **Baital** | **5.96** | **15** | *e*P | | **Pg** | **02 36 54.0** | **-0.7** |
| | 3.6nm,1.1s | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **02 38 11.8** | **-0.1** |
| | 2.2nm,0.3s | | | | | | | |
| **BTLS** | **Baital** | **5.96** | **15** | Pg | | **Pb** | **02 36 47.6** | **+2.8** |
| | 3.5nm,0.8s | | | | | | | |
| BTLS | | | | Lg | | Lg | 02 38 07.1 | |
| | 2.2nm,0.3s | | | | | | | |
| **AB31** | **Akbulak array** | **13.10** | **323** | ⇑P | | **Pn** | **02 38 03.9** | **-3.1** |
| | 0.2nm,0.5s | | | | | | | |

*BJI* ***18*** *02:40:19.0±0.0,34°.80N×26°.40E,h10km,mb4.7/22, mB5.1/10,Ms4.6/1,Ms7 4.3/1*

*NIC* ***18*** *02:40:21.9±0.0,34°.89N×26°.47E,h2km±2km,Ml5.0/5*

*MED_RC* ***18*** *02:40:22.0±1.0,34°.96N×26°.41E,h26km±2km, MW4.7/15, Moment Tensor Solution.Mantle waves: s15,c23; Duration: 1§1 Moment tensor: Scale 10^16Nm; Mrr-1.08±.17; Mθθ-0.13±.09; Mϕϕ1.21±.10; Mrθ0.43±.14; Mθϕ-0.57±.06; Mϕr0.64±.14; Best double couple: M₀1.50000×10^16 NP1:ϕs185.00000°,δ61.00000°, λ-59.00000°. NP2:ϕs314.00000°,δ42.00000°, λ-133.00000°. Principal axes: T 1.5100, Plg11.0000°, Azm253.0000°; N -0.0300, Plg27.0000°, Azm349.0000°; P -1.4900, Plg61.0000°, Azm144.0000°: nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*

*ISK* ***18*** *02:40:23.4,35°.15N×26°.33E,h5km,ML4.6/16*

*DDA* ***18*** *02:40:23.9±0.0,35°.22N×26°.35E,h20km±4km,MW4.6*

*HLW* ***18*** *02:40:23.2,34°.98N×26°.55E,h11km±29km,Md4.4,Ml4.5*

*ATH* ***18*** *02:40:24.2,35°.18N×26°.32E,h26km,ML4.7/12,Error ellipse: s-maj=2.7km s-min=1.0km az=161.0*

*NEIC* ***18*** *02:40:24.8±2.0,34°.91N±0°.08×26°.30E±0°.06,h38km±7km, mb4.4/39,ML4.7(ATH),Error ellipse: s-maj=11.8km s-min=6.6km az=185.0*

*MOS* ***18*** *02:40:25.5±1.2,35°.03N×26°.25E,h39km,mb4.8/31,Error ellipse: s-maj=4.6km s-min=2.7km az=90.3*

*THE* ***18*** *02:40:26.4,35°.26N×26°.20E,h4km±4km,ML4.7/5,Error ellipse: s-maj=4.3km s-min=1.2km az=172.0*

*GII* ***18*** *02:40:26.6±0.0,34°.65N×26°.80E,h1km±1km,mb4.5/4, MD4.4/4,Mm4.4/4*

*IDC* ***18*** *02:40:28.5±1.0,35°.21N×26°.18E,h69km±9km,mb4.0/30, mb1 4.1/38,mb1mx4.0/48,mbtmp4.3/38,MS3.8/34, Ms1 3.8/34,ms1mx3.6/88,Error ellipse: s-maj=13.2km s-min=9.2km az=150.0*

**ISC 18 02:40:23.8±0.7,34°.96N±0°.03×26°.36E±0°.02,h29km±4km, n603,σ2§10/660,mb4.6/78,MS3.9/27,48C-29D,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.20** | **323** | P | | **Pb** | **02 40 29.4** | **-0.5** |
| ZKR | | | | S | | **Sb** | **02 40 33.1** | **-1.0** |
| | 551µm,0.4s | | | | | | | |
| **ZKR** | **Zakros** | **0.20** | **323** | P | | **Pb** | **02 40 29.3** | **-0.7** |
| ZKR | | | | S | | **Sb** | **02 40 33.3** | **-0.8** |
| ZKR | | | | AML | | AML | 02 40 33.7 | |
| ZKR | | | | AML | | AML | 02 40 34.1 | |
| **ZKR** | **Zakros** | **0.20** | **323** | P | | **Pb** | **02 40 27.3** | **-2.6** |
| ZKR | | | | | | AMI | 02 40 32.5 | |
| | 905nm,0.5s | | | | | | | |
| ZKR | | | | | | AMI | 02 40 32.5 | |
| | 905nm,0.5s | | | | | | | |
| ZKR | | | | | | AMI | 02 40 32.7 | |
| | 1µm,0.3s | | | | | | | |
| ZKR | | | | | | AMI | 02 40 32.7 | |
| | 1µm,0.3s | | | | | | | |
| ZKR | | | | S | | **Sb** | **02 40 33.5** | **-0.6** |
| **FRMA** | **Ierapetra Chan** | **0.52** | **277** | P | | **Pb** | **02 40 32.5** | **-2.0** |
| FRMA | | | | S | | **Sb** | **02 40 38.9** | **-2.9** |
| | 87µm,0.4s | | | | | | | |
| **NPS** | **Neapolis** | **0.69** | **297** | P | | **Pb** | **02 40 36.5** | **-0.8** |
| NPS | | | | S | | **Sb** | **02 40 44.2** | **-2.3** |
| | 167µm,0.5s | | | | | | | |
| **NPS** | **Neapolis** | **0.69** | **297** | P | | **Pb** | **02 40 36.3** | **-1.0** |
| NPS | | | | S | | **Sb** | **02 40 45.0** | **-1.4** |
| NPS | | | | AML | | AML | 02 40 46.2 | |
| NPS | | | | AML | | AML | 02 40 46.5 | |
| **NPS** | **Neapolis** | **0.69** | **297** | P | | **Pb** | **02 40 36.5** | **-0.8** |
| NPS | | | | S | | **Sb** | **02 40 45.0** | **-1.4** |
| **HRKL** | **Herakleio** | **1.09** | **289** | P | | **Pn** | **02 40 43.5** | **+0.4** |
| **HRKL** | **Herakleio** | **1.09** | **289** | PG | | **Pb** | **02 40 43.8** | **-0.3** |
| HRKL | | | | SG | | **Sb** | **02 40 57.8** | **-0.1** |
| **KSTL** | **Kastelli Herak** | **1.11** | **289** | P | | **Pn** | **02 40 39.7** | **-3.7** |
| KSTL | | | | S | | **Sn** | **02 40 51.7** | **-6.1** |
| **IACM** | **Heraklion** | **1.11** | **289** | P | | **Pn** | **02 40 43.8** | **+0.4** |
| IACM | | | | S | | **Sn** | **02 40 56.9** | **-0.9** |
| **IACM** | **Heraklion** | **1.11** | **289** | P | | **Pn** | **02 40 43.9** | **+0.5** |
| IACM | | | | S | | **Sb** | **02 40 58.9** | **+0.3** |
| **IDI** | **Anoyia** | **1.25** | **286** | ⇓P | | **Pn** | **02 40 44.8** | **-0.6** |
| IDI | | | | ⇓S | | **Sn** | **02 41 01.2** | **-0.1** |
| **IDI** | **Anoyia** | **1.25** | **286** | P | | **Pb** | **02 40 46.2** | **-0.6** |
| | 226nm,0.3s,baz=103,slow=16,SNR=1374 | | | | | | | |
| IDI | | | | LR | | LR | 02 41 02.5 | |
| | comp=Z,529nm,19.3s,baz=60,slow=32 | | | | | | | |
| IDI | | | | S | | **Sb** | **02 41 02.9** | **+0.3** |
| | 755nm,0.3s,baz=350,slow=17,SNR=7.2 | | | | | | | |
| **IDI** | **Anoyia** | **1.25** | **286** | P | | **Pn** | **02 40 45.7** | **+0.3** |
| **IDI** | **Anoyia** | **1.25** | **286** | P | | **Pn** | **02 40 46.1** | **+0.6** |
| IDI | | | | S | | **Sb** | **02 41 02.4** | **-0.2** |
| **IDI** | **Anoyia** | **1.25** | **286** | PN | | **Pn** | **02 40 46.0** | **+0.6** |
| IDI | | | | SN | | **Sb** | **02 41 03.2** | **+0.6** |
| **IDI** | **Anoyia** | **1.25** | **286** | | | **Pn** | **02 40 45.2** | **-0.2** |
| IDI | | | | Sn | | **Sn** | **02 41 01.3** | **0.0** |
| **SIVA** | **Sivas** | **1.27** | **273** | P | | **Pb** | **02 40 47.1** | **-0.1** |
| SIVA | | | | S | | **Sb** | **02 41 03.6** | **+0.4** |
| | 55µm,0.6s | | | | | | | |
| **SIVA** | **Sivas** | **1.27** | **273** | P | | **Pb** | **02 40 47.1** | **-0.1** |
| SIVA | | | | S | | **Sb** | **02 41 05.1** | **+2.0** |
| SIVA | | | | AML | | AML | 02 41 07.1 | |
| SIVA | | | | AML | | AML | 02 41 08.7 | |
| **TMBK** | **Timbaki Herakl** | **1.31** | **276** | P | | **Pb** | **02 40 47.2** | **-0.6** |
| TMBK | | | | S | | **Sb** | **02 41 05.8** | **+1.5** |
| | 22µm,0.9s | | | | | | | |
| **PRNS** | **Prines Rethymn** | **1.58** | **286** | P | | **Pb** | **02 40 52.2** | **-0.1** |
| **THR6** | **Thira Island,** | **1.60** | **331** | P | | **Pn** | **02 40 49.7** | **-0.5** |
| **THR6** | **Thira Island,** | **1.60** | **331** | P | | **Pn** | **02 40 49.7** | **-0.5** |
| **THR8** | **Santorini-Mono** | **1.62** | **334** | P | | **Pn** | **02 40 49.6** | **-0.8** |
| **THR9** | **Santorini-Faro** | **1.62** | **330** | P | | **Pn** | **02 40 49.7** | **-0.8** |
| **THR3** | **Thira Island,** | **1.65** | **332** | P | | **Pn** | **02 40 50.0** | **-0.8** |
| **THR3** | **Thira Island,** | **1.65** | **332** | P | | **Pn** | **02 40 50.0** | **-0.8** |
| **THR2** | **Thira Island,** | **1.67** | **333** | P | | **Pn** | **02 40 50.5** | **-0.6** |
| **THR2** | **Thira Island,** | **1.67** | **333** | P | | **Pn** | **02 40 51.0** | **-0.1** |
| **THR5** | **Thira Island,** | **1.68** | **331** | P | | **Pn** | **02 40 50.8** | **-0.4** |
| **THR5** | **Thira Island,** | **1.68** | **331** | P | | **Pn** | **02 40 50.8** | **-0.4** |
| **NISR** | **Nisiros** | **1.77** | **20** | P | | **Pn** | **02 40 52.5** | **+0.1** |
| NISR | | | | AML | | AML | 02 41 26.3 | |
| | comp=E,26472µm,0.7s | | | | | | | |
| NISR | | | | AML | | AML | 02 41 28.6 | |
| | comp=N,21064µm,0.8s | | | | | | | |
| **VAM** | **Vamos** | **1.83** | **285** | P | | **Pb** | **02 40 55.6** | **-1.0** |
| **VAM** | **Vamos** | **1.83** | **285** | P | | **Pb** | **02 40 55.2** | **-1.3** |
| VAM | | | | AML | | AML | 02 41 26.5 | |
| | comp=N,35858µm,0.7s | | | | | | | |
| VAM | | | | AML | | AML | 02 41 28.7 | |
| | comp=E,35129µm,1.1s | | | | | | | |
| **VAM** | **Vamos** | **1.83** | **285** | P | | **Pb** | **02 40 55.2** | **-1.3** |
| **KOSK** | **Kos Island** | **1.86** | **15** | P | | **Pn** | **02 40 54.0** | **+0.3** |
| **KOSK** | **Kos Island** | **1.86** | **15** | PN | | **Pn** | **02 40 54.2** | **+0.5** |
| **GVD** | **Gavdhos** | **1.87** | **267** | P | | **Pb** | **02 40 57.1** | **-0.2** |
| **GVD** | **Gavdhos** | **1.87** | **267** | P | | **Pb** | **02 40 56.2** | **-1.2** |
| GVD | | | | S | | **Sb** | **02 41 20.2** | **-0.1** |
| GVD | | | | AML | | AML | 02 41 41.9 | |
| | comp=E,23595µm,0.6s | | | | | | | |
| GVD | | | | AML | | AML | 02 41 42.9 | |
| | comp=N,17441µm,0.7s | | | | | | | |
| **GVD** | **Gavdhos** | **1.87** | **267** | PN | | **Pb** | **02 40 56.9** | **-0.4** |
| **ARG** | **Arkhangelos** | **1.91** | **48** | P | | **Pb** | **02 40 56.8** | **-1.2** |
| **ARG** | **Arkhangelos** | **1.91** | **48** | P | | **Pn** | **02 40 55.7** | **+1.2** |
| ARG | | | | AML | | AML | 02 41 36.1 | |
| | comp=E,13234µm,0.6s | | | | | | | |
| ARG | | | | AML | | AML | 02 41 37.5 | |
| | comp=N,13963µm,0.7s | | | | | | | |
| **ARG** | **Arkhangelos** | **1.91** | **48** | P | | **Pb** | **02 40 56.8** | **-1.2** |
| **ARG** | **Arkhangelos** | **1.91** | **48** | PN | | **Pn** | **02 40 55.9** | **+1.4** |
| **ARG** | **Arkhangelos** | **1.91** | **48** | P | | **Pn** | **02 40 55.8** | **+1.4** |
| ARG | | | | S | | **Sb** | **02 41 20.7** | **-0.8** |
| **IMMV** | **Iera Moni Meta** | **2.01** | **285** | P | | **Pn** | **02 40 57.6** | **+1.8** |
| **IMMV** | **Iera Moni Meta** | **2.01** | **285** | P | | **Pb** | **02 40 57.9** | **-1.8** |
| IMMV | | | | S | | **Sn** | **02 41 21.7** | **+1.6** |
| IMMV | | | | AML | | AML | 02 41 39.4 | |
| | comp=N,33253µm,0.9s | | | | | | | |
| IMMV | | | | AML | | AML | 02 41 40.1 | |
| | comp=E,37964µm,0.8s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.01** | **285** | PN | | **Pb** | **02 40 57.9** | **-1.8** |
| **KNDR** | **Palaiochora Ch** | **2.21** | **278** | P | | **Pb** | **02 41 01.6** | **-1.5** |
| **KNDR** | **Palaiochora Ch** | **2.21** | **278** | PN | | **Pb** | **02 41 01.8** | **-1.3** |
| **BODT** | **Bodrum** | **2.24** | **20** | PN | | **Pn** | **02 40 59.5** | **+0.5** |
| **BODT** | **Bodrum** | **2.24** | **20** | P | | **Pn** | **02 40 59.3** | **+0.4** |
| BODT | | | | S | | **Sn** | **02 41 26.4** | **+0.7** |
| **YKAV** | **Yalikavak-Bodr** | **2.29** | **19** | PN | | **Pn** | **02 41 00.4** | **+0.8** |
| **YKAV** | **Yalikavak-Bodr** | **2.29** | **19** | P | | **Pn** | **02 41 00.7** | **+1.1** |
| **MRSB** | **Marmaris-Mugla** | **2.31** | **40** | PN | | **Pn** | **02 41 01.2** | **+1.3** |
| **MRSB** | **Marmaris-Mugla** | **2.31** | **40** | P | | **Pn** | **02 41 01.2** | **+1.3** |
| MRSB | | | | S | | **Sn** | **02 41 26.9** | **-0.4** |
| **MHLO** | **Agia Marina, M** | **2.35** | **318** | P | | **Pn** | **02 41 01.1** | **-1.1** |
| **MHLO** | **Agia Marina, M** | **2.35** | **318** | P | | **Pn** | **02 41 01.1** | **+0.6** |
| MHLO | | | | AML | | AML | 02 41 39.2 | |
| | comp=N,38472µm,0.7s | | | | | | | |
| MHLO | | | | AML | | AML | 02 41 48.0 | |
| | comp=E,29539µm,0.8s | | | | | | | |
| **TURN** | **Turunc** | **2.37** | **40** | PN | | **Pn** | **02 41 02.3** | **+1.5** |
| **TURN** | **Turunc** | **2.37** | **40** | P | | **Pn** | **02 41 02.1** | **+1.3** |
| TURN | | | | S | | **Sn** | **02 41 27.7** | **-1.2** |
| **DIDI** | **Didim-Aydin** | **2.52** | **16** | PN | | **Pn** | **02 41 03.9** | **+1.1** |
| **DDIM** | **Aydin, Didim** | **2.60** | **16** | P | | **Pn** | **02 41 04.8** | **+0.9** |
| **MLSB** | **Milas** | **2.60** | **26** | PN | | **Pn** | **02 41 05.1** | **+1.1** |
| **MLSB** | **Milas** | **2.60** | **26** | P | | **Pn** | **02 41 05.3** | **+1.4** |
| MLSB | | | | S | | **Sn** | **02 41 30.4** | **-4.2** |
| **DALY** | **Dalyan (Mula)** | **2.63** | **44** | PN | | **Pn** | **02 41 06.3** | **+2.0** |
| **ANKY** | **Antikythira Is** | **2.66** | **291** | P | | **Pn** | **02 41 06.1** | **+1.4** |
| ANKY | | | | AML | | AML | 02 41 51.1 | |
| | comp=N,7878µm,0.6s | | | | | | | |
| ANKY | | | | AML | | AML | 02 41 56.9 | |
| | comp=E,10427µm,0.7s | | | | | | | |
| **YER** | **Yerkesik** | **2.67** | **35** | P | | **Pn** | **02 41 06.6** | **+1.6** |
| **YER** | **Yerkesik** | **2.67** | **35** | PN | | **Pn** | **02 41 06.6** | **+1.6** |
| **YER** | **Yerkesik** | **2.67** | **35** | P | | **Pn** | **02 41 06.7** | **+1.6** |
| YER | | | | S | | **Sn** | **02 41 35.0** | **-1.4** |
| **TNSA** | **Tinos** | **2.75** | **340** | P | | **Pn** | **02 41 06.0** | **0.0** |
| **SMG** | **Samos** | **2.77** | **8** | P | | **Pn** | **02 41 06.3** | **0.0** |
| **FETY** | **Fethiye** | **2.78** | **52** | PN | | **Pn** | **02 41 07.9** | **+1.5** |
| **FETY** | **Fethiye** | **2.78** | **52** | P | | **Pn** | **02 41 07.9** | **+1.5** |
| **MULA** | **Mugla, Merkez-** | **2.79** | **34** | P | | **Pn** | **02 41 08.3** | **+1.7** |
| MULA | | | | S | | **Sn** | **02 41 35.2** | **-4.2** |
| **GCAM** | **G?zelcaml?** | **2.83** | **14** | PN | | **Pn** | **02 41 07.9** | **+0.9** |
| **GCAM** | **G?zelcaml?** | **2.83** | **14** | P | | **Pn** | **02 41 07.8** | **+0.7** |
| GCAM | | | | S | | **Sn** | **02 41 35.9** | **-4.3** |
| **KSL** | **Kastellorizon** | **2.88** | **65** | P | | **Pn** | **02 41 09.5** | **+1.6** |
| **KSL** | **Kastellorizon** | **2.88** | **65** | P | | **Pn** | **02 41 09.0** | **+1.2** |
| KSL | | | | S | | **Sn** | **02 41 44.5** | **+2.9** |
| KSL | | | | AMI | | | 02 41 59.3 | |
| | comp=E,3.5nm,2.0s | | | | | | | |
| KSL | | | | AMI | | | 02 41 59.3 | |
| | comp=E,3.5nm,2.0s | | | | | | | |
| KSL | | | | AMI | | | 02 42 14.9 | |
| | comp=E,2.9nm,2.0s | | | | | | | |
| KSL | | | | AMI | | | 02 42 14.9 | |
| | comp=E,2.9nm,2.0s | | | | | | | |
| **AKAS** | **Kas** | **2.94** | **63** | PN | | **Pn** | **02 41 10.5** | **+1.8** |
| **AKAS** | **Kas** | **2.94** | **63** | | | **Pn** | **02 41 10.5** | **+1.8** |
| AKAS | | | | Sn | | **Sn** | **02 41 46.3** | **+3.3** |
| **AKAS** | **Kas** | **2.94** | **63** | P | | **Pn** | **02 41 10.0** | **+1.4** |
| AKAS | | | | S | | **Sn** | **02 41 38.6** | **-4.4** |
| **KTHA** | **Kythira Island** | **2.98** | **297** | P | | **Pn** | **02 41 09.6** | **+0.4** |
| KTHA | | | | AML | | AML | 02 42 05.9 | |
| | comp=N,5006µm,0.6s | | | | | | | |
| KTHA | | | | AML | | AML | 02 42 15.3 | |
| | comp=E,6454µm,1.4s | | | | | | | |
| **CAME** | **Cameli-Denizli** | **3.10** | **49** | PN | | **Pn** | **02 41 13.0** | **+2.0** |
| **DGB** | **zmir** | **3.12** | **8** | P | | **Pn** | **02 41 11.1** | **0.0** |
| **MNVA** | **Monemvasia** | **3.21** | **304** | P | | **Pn** | **02 41 12.9** | **+0.7** |
| **CAEL** | **Denizli, Camel** | **3.23** | **47** | P | | **Pn** | **02 41 14.9** | **+2.2** |
| **TAVA** | **DENIZLI_Tavas** | **3.25** | **39** | P | | **Pn** | **02 41 14.3** | **+1.4** |
| TAVA | | | | S | | **Sn** | **02 41 50.6** | **0.0** |
| **ZEYE** | **Izmir, Urla-Ze** | **3.28** | **2** | P | | **Pn** | **02 41 12.7** | **-0.5** |
| **VLI** | **Veliai** | **3.29** | **303** | P | | **Pn** | **02 41 13.7** | **+0.3** |
| VLI | | | | AML | | AML | 02 42 05.1 | |
| | comp=N,5729µm,0.7s | | | | | | | |
| VLI | | | | AML | | AML | 02 42 06.5 | |
| | comp=E,3650µm,0.7s | | | | | | | |
| **ELL** | **Elmali** | **3.39** | **57** | P | | **Pn** | **02 41 17.2** | **+2.3** |
| **ELL** | **Elmali** | **3.39** | **57** | PN | | **Pn** | **02 41 17.2** | **+2.3** |
| **ELL** | **Elmali** | **3.39** | **57** | Pn | | **Pn** | **02 41 17.2** | **+2.3** |
| **ELL** | **Elmali** | **3.39** | **57** | P | | **Pn** | **02 41 17.3** | **+2.4** |
| **URLA** | **Izmir** | **3.40** | **3** | PN | | **Pn** | **02 41 15.0** | **0.0** |
| **URLA** | **Izmir** | **3.40** | **3** | P | | **Pn** | **02 41 14.6** | **-0.4** |
| URLA | | | | S | | **Sn** | **02 41 51.4** | **-3.0** |
| **GOLH** | **Golhisar** | **3.45** | **48** | P | | **Pn** | **02 41 17.9** | **+2.2** |
| **AKUM** | **Antalya-Kumluc** | **3.52** | **66** | P | | **Pn** | **02 41 17.8** | **+1.3** |
| AKUM | | | | S | | **Sn** | **02 41 55.3** | **-1.9** |
| **SLUM** | **Salum** | **3.59** | **196** | ⇓P | | **Pn** | **02 41 19.8** | **+2.4** |
| | baz=199 | | | | | | | |
| SLUM | | | | S | | **Sn** | **02 41 57.5** | **-1.4** |
| | baz=199 | | | | | | | |
| **MATC** | **Matruh** | **3.67** | **168** | P | | **Pn** | **02 41 20.9** | **+2.2** |
| | baz=170 | | | | | | | |
| **FOCM** | **Foa** | **3.76** | **4** | P | | **Pn** | **02 41 16.8** | **-3.1** |
| **KORT** | **Korkueli** | **3.83** | **57** | P | | **Pn** | **02 41 21.1** | **+0.2** |
| **KULA** | **Kula-Manisa** | **4.00** | **27** | P | | **Pn** | **02 41 24.7** | **+1.4** |
| KULA | | | | S | | **Sn** | **02 42 04.7** | **-4.6** |
| **ZEDA** | **zmir-Bergama** | **4.04** | **8** | P | | **Pn** | **02 41 23.9** | **+0.1** |
| ZEDA | | | | S | | **Sn** | **02 42 09.9** | **-0.3** |
| **BRDR** | **BURDUR-Merkez** | **4.05** | **46** | P | | **Pn** | **02 41 25.5** | **+1.6** |
| **AKHS** | **Akhisar** | **4.08** | **16** | P | | **Pn** | **02 41 26.0** | **+1.7** |
| **DKL** | **Dikili** | **4.13** | **6** | P | | **Pn** | **02 41 25.2** | **+0.3** |
| **BUCA** | **Burdur, Bucak-** | **4.14** | **54** | P | | **Pn** | **02 41 26.9** | **+1.7** |
| **PASA** | **Karahalli, USA** | **4.22** | **36** | P | | **Pn** | **02 41 27.1** | **+0.9** |
| PASA | | | | S | | **Sn** | **02 42 14.2** | **-0.3** |
| **ITM** | **Ithomi** | **4.22** | **303** | Pn | | **Pn** | **02 41 26.9** | **+0.6** |
| **USAK** | **Uak-Merkez** | **4.31** | **29** | P | | **Pn** | **02 41 28.8** | **+1.2** |
| **OSC1** | **CSNet OBS 1** | **4.32** | **108** | P | | **Pn** | **02 41 27.4** | **-0.2** |
| OSC1 | | | | S | | **Sn** | **02 42 19.1** | **+2.1** |
| **AYVA** | **Ayvalik** | **4.35** | **3** | P | | **Pn** | **02 41 27.1** | **-0.8** |
| **ISP** | **Isparta** | **4.41** | **48** | P | | **Pn** | **02 41 31.3** | **+2.4** |
| **ISP** | **Isparta** | **4.41** | **48** | Pn | | **Pn** | **02 41 31.3** | **+2.4** |
| **KZIL** | **AFYON_Kizioren** | **4.48** | **42** | P | | **Pn** | **02 41 31.0** | **+1.0** |
| **DEMI** | **Demirci** | **4.49** | **24** | P | | **Pn** | **02 41 31.2** | **+1.2** |
| **KOCA** | **Canakkale, Ayv** | **4.54** | **358** | P | | **Pn** | **02 41 29.6** | **-1.0** |
| **STEP** | **BALIKESIR_Sava** | **4.54** | **13** | P | | **Pn** | **02 41 31.8** | **+1.1** |
| **BUHA** | **Balikesir, Bur** | **4.57** | **7** | P | | **Pn** | **02 41 31.3** | **+0.2** |
| **SIMA** | **Simav-Kutahya** | **4.62** | **26** | P | | **Pn** | **02 41 33.0** | **+1.2** |
| **KEPZ** | **Antalya-Kepez** | **4.68** | **64** | P | | **Pn** | **02 41 34.3** | **+1.8** |
| **GEDZ** | **Gediz** | **4.75** | **30** | P | | **Pn** | **02 41 36.4** | **+2.8** |
| **EZN** | **Ezine** | **4.86** | **360** | P | | **Pn** | **02 41 35.6** | **+0.6** |
| **EZN** | **Ezine** | **4.86** | **360** | P | | **Pn** | **02 41 34.6** | **-0.4** |
| **BALY** | **Balya** | **4.88** | **11** | P | | **Pn** | **02 41 37.2** | **+1.9** |
| **BOZC** | **Bozcaada** | **4.88** | **357** | P | | **Pn** | **02 41 35.5** | **+0.2** |
| **AKMS** | **Akamas** | **4.91** | **88** | P | | **Pn** | **02 41 35.7** | **+0.1** |
| AKMS | | | | AMI | | | 02 42 34.0 | |
| | comp=E,6.5nm,0.8s | | | | | | | |
| AKMS | | | | AMI | | | 02 42 34.4 | |
| | comp=E,4.2nm,0.9s | | | | | | | |
| **SHUT** | **Suhut-Afyon** | **4.92** | **42** | P | | **Pn** | **02 41 36.8** | **+0.9** |
| **DURS** | **Dursunbey** | **4.93** | **19** | P | | **Pn** | **02 41 37.2** | **+1.2** |
| **AFYO** | **Afyonkarahisar** | **4.96** | **38** | P | | **Pn** | **02 41 40.2** | **+3.8** |
| **GAZI** | **Gazipasa** | **5.02** | **74** | P | | **Pn** | **02 41 36.0** | **-1.2** |
| GAZI | | | | S | | **Sn** | **02 42 29.7** | **-4.5** |
| **SEDI** | **Konya, Seydise** | **5.02** | **59** | P | | **Pn** | **02 41 40.4** | **+3.0** |
| **ALFC** | **Alefka** | **5.12** | **86** | P | | **Pn** | **02 41 39.0** | **+0.4** |
| ALFC | | | | AMI | | | 02 42 37.1 | |
| | comp=E,9.5nm,0.7s | | | | | | | |
| ALFC | | | | AMI | | | 02 42 37.6

BRTR LR LR 02 45 53.6
comp=Z,2µm,20.1s,baz=232,slow=44
**BRTR Keskin Array B 7.50 48** *i* P **Pn 02 42 14.8 +3.4**
BRTR pmax pmax
comp=Z,6.0nm,0.5s
**BRTR Keskin Array B 7.50 48** Pn **Pn 02 42 12.1 +0.7**
**KDZE Karadeniz Ereo 7.50 31** ⇑P **Pn 02 42 13.7 +2.5**
**OFRI `Ofer 7.55 106** Pn **Pn 02 42 12.8 +0.8**
**HNTI Hanita 7.55 102** Pn **Pn 02 42 12.6 +0.6**
**NBNS Bani Suef 7.58 145** P **Pn 02 42 14.3 +1.9**
baz=146
**DQRL Deir Qamar 7.72 97** *e*P **Pn 02 42 13.4 -0.9**
**SLTI Sal'it 7.73 108** Pn **Pn 02 42 14.5 +0.1**
**BHL Bhannes 7.75 95** *e*P **Pn 02 42 15.5 +0.7**
**MMA0B Mount Meron ar 7.76 102** Pn **Pn 02 42 16.0 +1.2**
MMA0B Sn **Sn 02 43 40.7 -1.0**
**MMAI Mount Meron Ar 7.76 102** P **Pn 02 42 14.4 -0.4**
comp=Z,5.9nm,0.3s,baz=323,slow=14,SNR=34
MMAI S **Sn 02 43 40.9 -0.9**
comp=Z,19nm,0.3s,baz=304,slow=31,SNR=11
MMAI LR LR 02 46 55.5
comp=Z,452nm,21.6s,baz=100,slow=49
**KZIT Kziot 7.87 119** Pn **Pn 02 42 16.2 -0.1**
KZIT Sn **Sn 02 43 41.4 -3.0**
**GEM Giv'at Ha'Em 7.91 100** Pn **Pn 02 42 16.4 -0.5**
GEM Sn **Sn 02 43 43.6 -1.9**
**HWQ Hawqa 7.93 92** *e*P **Pn 02 42 17.2 -0.1**
**AMAZ Amatzia 7.94 113** Pn **Pn 02 42 17.3 0.0**
AMAZ Sn **Sn 02 43 43.5 -2.6**
**SHBL Chebaa 7.94 99** *e*P **Pn 02 42 16.5 -1.0**
**MMLI Mount Malkishu 7.96 106** Pn **Pn 02 42 17.3 -0.3**
MMLI Sn **Sn 02 43 44.9 -1.7**
**NATI Neve Ativ 7.96 100** Pn **Pn 02 42 17.8 +0.3**
NATI Sn **Sn 02 43 45.3 -1.2**
**HFRF Wahat Farafira 7.96 167** P **Pn 02 42 19.8 +2.2**
baz=168
**RCY Rachaya 7.98 98** *e*P **Pn 02 42 17.4 -0.6**
**VTS Vitosha 8.03 343** ⇑P **Pn 02 42 20.5 +1.9**
**VTS Vitosha 8.03 343** ⇑P **Pn 02 42 20.5 +1.9**
**VTS Vitosha 8.03 343** Pn **Pn 02 42 19.8 +1.1**
**VTS Vitosha 8.03 343** P **Pn 02 42 20.9 +2.3**
**HMDT Nahal Hemdat 8.11 107** Pn **Pn 02 42 19.4 -0.2**
HMDT Sn **Sn 02 43 48.8 -1.5**
**YTIR Yattir 8.17 114** Pn **Pn 02 42 20.5 0.0**
YTIR Sn **Sn 02 43 48.9 -3.0**
**TAMRE El Minia 8.23 151** ⇓P **Pn 02 42 22.4 +1.1**
baz=151
**DSI Dead Sea 8.27 112** Pn **Pn 02 42 22.4 +0.5**
DSI Sn **Sn 02 43 51.8 -2.6**
**RMNI Mount Ramon 8.30 119** Pn **Pn 02 42 23.0 +0.7**
**BNN Bunyan 8.53 60** Pn **Pn 02 42 28.3 +2.8**
**GHAJ Ghor Haditha 8.54 113** **Pn 02 42 26.6 +0.5**
**KRMI Paran Flat 8.55 122** Pn **Pn 02 42 25.5 -0.2**
KRMI Sn **Sn 02 43 57.4 -3.8**
**HRDS Abu Rudays 8.57 135** ⇓P **Pn 02 42 26.5 +0.4**
baz=135
**RAZG Razgrad 8.60 1** ⇓P **Pn 02 42 28.6 +2.3**
**PRNI Paran 8.61 120** Pn **Pn 02 42 26.3 -0.2**
PRNI Sn **Sn 02 43 58.7 -4.0**
**ZFRI Zfri 8.62 118** Pn **Pn 02 42 26.6 -0.1**
ZFRI Sn **Sn 02 43 59.6 -3.4**
**GRB Gharib 8.63 139** ⇓P **Pn 02 42 26.9 +0.2**
baz=139
**MPEP Malo Peshtene 8.63 347** P Pn 02 42 34.5 +7.8
**TIP Timpagrande 8.75 302** ⇑P **Pn 02 42 26.8 -1.7**
**TIP Timpagrande 8.75 302** Pn **Pn 02 42 26.8 -1.7**
**HRFI Mount Harif 8.82 121** Pn **Pn 02 42 29.9 +0.5**
HRFI Sn **Sn 02 44 04.0 -3.8**
**MBRI Mt Berech 8.88 123** Pn **Pn 02 42 30.6 +0.4**
MBRI Sn **Sn 02 44 06.8 -2.5**
**EIL Elat 8.98 124** P **Pn 02 42 31.8 +0.2**
comp=Z,6.4nm,0.3s,baz=225,slow=1.6,SNR=153
EIL S **Sn 02 44 04.5 -7.1**
comp=Z,2.1nm,0.3s,baz=359,slow=15,SNR=3.7
**EIL Elat 8.98 124** Pn **Pn 02 42 32.1 +0.6**
**ICOR Ion Corvin 9.22 6** ⇓P **Pn 02 42 37.3 +2.5**
**ASF Jabal al Asfar 9.22 105** P **Pn 02 42 34.9 -0.1**
comp=Z,1.2nm,0.3s,baz=298,slow=10,SNR=10
ASF S **Sn 02 44 15.6 -2.2**
comp=Z,0.9nm,0.3s,baz=264,slow=20,SNR=1.0
**PDG Podgorica 9.30 325** ⇑P **Pn 02 42 36.1 +0.3**
**PDG Podgorica 9.30 325** Pn **Pn 02 42 36.5 +0.6**
**PDG Podgorica 9.30 325** *e*Pn **Pn 02 42 33.4 -2.5**
**BOVS Bovan 9.38 339** ⇑P **Pn 02 42 39.0 +2.0**
**MATE Matera 9.52 309** ⇑P **Pn 02 42 37.9 -0.9**
**HUMR Humele 9.62 354** ⇑P **Pn 02 42 42.4 +2.1**
**TIRR Tirgusor 9.62 9** ⇑P **Pn 02 42 42.7 +2.4**
**TIRR Tirgusor 9.62 9** ⇑P **Pn 02 42 42.7 +2.4**
**TIRR Tirgusor 9.62 9** Pn **Pn 02 42 42.3 +2.0**
**TLBR Topalu 9.66 7** ⇑P **Pn 02 42 42.7 +1.9**
**HCY Herceg Novi 9.68 323** *e*Pn **Pn 02 42 36.6 -4.5**
**HDK1 Dakhla 9.74 164** P **Pn 02 42 44.5 +2.4**
baz=164
**TREB Trebinje 9.95 324** *e*Pn **Pn 02 42 41.6 -3.2**
**RAFF Raffo Rosso 9.97 287** **Pn 02 42 44.9 -0.3**
**VAE Valguarnera 9.98 288** P **Pn 02 42 46.5 +1.2**
comp=Z,1.1nm,0.3s,baz=114,slow=16,SNR=1.8
VAE S **Sn 02 44 27.6 -8.6**
comp=Z,0.9nm,0.3s,baz=16,slow=2.9,SNR=1.9
VAE LR LR 02 47 13.3
comp=Z,428nm,20.0s,baz=96,slow=41
**TPGR Topolog 10.01 8** ⇑P **Pn 02 42 48.4 +2.7**
**UPM Unac-Piva 10.06 327** *e*Pn **Pn 02 42 43.8 -2.8**
**AKRG Al Kharijah 10.08 158** P **Pn 02 42 47.3 +0.7**
baz=159
**ISR Istrita 10.15 1** ⇓P **Pn 02 42 49.9 +2.3**
**ISR Istrita 10.15 1** ⇓P **Pn 02 42 49.9 +2.3**
**RUDO Rudo 10.20 330** *e*Pn **Pn 02 42 46.0 -2.3**
**CFR Carcaliu 10.30 7** ⇑P **Pn 02 42 51.3 +1.7**
**CFR Carcaliu 10.30 7** P **Pn 02 42 51.2 +1.7**
**HERR Herculane 10.36 344** ⇓P **Pn 02 42 52.4 +1.9**
**DIVS Divibare 10.37 334** Pn **Pn 02 42 51.4 +0.8**
**DIVS Divibare 10.37 334** *e*Pn **Pn 02 42 53.5 +2.9**
**STON Ston 10.39 322** *e*Pn **Pn 02 42 49.5 -1.2**
**STON Ston 10.39 322** *e*Pn **Pn 02 42 46.2 -4.5**
STON Sn 02 44 29.6 -16
**TLCR 10.39 10** ⇓P **Pn 02 42 53.4 +2.6**
**TLCR 10.39 10** ⇓P **Pn 02 42 53.4 +2.6**
**BBLS Lazići 10.39 331** *e*Pn **Pn 02 42 53.4 +2.5**
**NEHR Nehoiu 10.46 360** ⇑P **Pn 02 42 53.3 +1.6**
**ARRI Arges 10.48 353** ⇑P **Pn 02 42 54.2 +2.0**
**VOIR 10.52 355** ⇑P **Pn 02 42 55.4 +2.8**
**VOIR 10.52 355** ⇑P **Pn 02 42 55.4 +2.8**
**MLR Muntele Rosu 10.53 358** ⇑P **Pn 02 42 55.3 +2.5**
**MLR Muntele Rosu 10.53 358** P **Pn 02 42 52.9 +0.1**
comp=Z,0.1nm,0.3s,baz=168,slow=14,SNR=2.2
MLR LR LR 02 47 40.7
comp=Z,400nm,19.5s,baz=182,slow=42
**MLR Muntele Rosu 10.53 358** ⇑P **Pn 02 42 55.3 +2.5**
**MLR Muntele Rosu 10.53 358** Pn **Pn 02 42 54.6 +1.8**
**BISRR Bisoca 10.58 1** ⇑P **Pn 02 42 56.6 +3.1**
**LOT Lotru 10.66 350** ⇑P **Pn 02 42 56.5 +1.8**
**GZR Gura Zlata 10.78 346** ⇑P **Pn 02 42 58.0 +1.8**
**GZR Gura Zlata 10.78 346** ⇑P **Pn 02 42 58.0 +1.8**
**COVR Voineasa-Covas 10.88 359** ⇑P **Pn 02 42 59.8 +2.3**
**PLOR Plostina 10.88 1** ⇑P **Pn 02 43 00.8 +3.1**
**PLOR Plostina 10.88 1** ⇑P **Pn 02 43 00.8 +3.1**
**VRI Vrincioaia 10.90 1** ⇑P **Pn 02 43 00.7 +2.9**
**VRI Vrincioaia 10.90 1** ⇑P **Pn 02 43 00.7 +2.9**
**VLDR Vladesti 10.96 6** ⇑P **Pn 02 43 00.6 +2.1**
**DOPR Dopca 11.02 356** ⇑P **Pn 02 43 02.1 +2.6**
**MAKA Makarska 11.03 322** *e*Pn **Pn 02 42 56.2 -3.3**
MAKA Sn Sn 02 44 43.7 -18
**RICI Ricice 11.12 323** *e*Pn **Pn 02 42 56.3 -4.6**
RICI Sn Sn 02 44 47.1 -17
**DEV Deva 11.23 348** ⇓P **Pn 02 43 04.8 +2.6**
**DEV Deva 11.23 348** ⇓P **Pn 02 43 04.8 +2.6**
**BZS Buzias 11.24 343** ⇑P **Pn 02 43 03.6 +1.1**
**BZS Buzias 11.24 343** ⇑P **Pn 02 43 03.6 +1.1**
**HVAR Hvar 11.25 320** *e*Pn **Pn 02 42 58.3 -4.3**
HVAR Sn Sn 02 44 47.7 -20
**FRGS Fruska Gora 11.35 336** ⇓P **Pn 02 43 05.7 +1.7**
**FRGS Fruska Gora 11.35 336** *e*Pn **Pn 02 43 05.5 +1.5**
**TESR Tescani 11.55 1** ⇓P **Pn 02 43 09.5 +2.9**
**MGRS Mrkonjic Grad 11.84 326** *e*Pn Pn 02 43 15.6 +4.9
**KIJV Kijevo 11.86 323** *e*Pn **Pn 02 43 07.3 -3.7**
KIJV Sn Sn 02 45 05.5 -17
**ZIRJ Zirje 12.00 320** *e*Pn **Pn 02 43 08.2 -4.7**
ZIRJ Sn Sn 02 45 08.7 -17
**BLY Banja Luka 12.05 327** *e*Pn **Pn 02 43 12.5 -1.0**
**MILM Milestii Mici 12.09 8** ⇑P **Pn 02 43 16.5 +2.4**
**MILM Milestii Mici 12.09 8** ⇑P **Pn 02 43 16.5 +2.4**
**MORI Morici 12.12 320** *e*Pn **Pn 02 43 11.5 -2.9**
**DRGR 12.14 348** ⇓P **Pn 02 43 16.9 +2.1**
**DRGR 12.14 348** ⇓P **Pn 02 43 16.9 +2.1**
**MRAK Mrakovica 12.38 327** *e*Pn **Pn 02 43 15.9 -2.2**
**AQU L'Aquila 12.53 310** *e*Pn P 02 43 26.3 -5.2
**DUGI Dugi Otok 12.54 319** *e*Pn **Pn 02 43 17.2 -3.1**
DUGI Sn Sn 02 45 20.0 -19
**MORH Mrgy, Hungar 12.68 335** *e*Pn **Pn 02 43 23.3 +1.3**
**BURAR Bucovina Array 12.68 356** ⇑P **Pn 02 43 24.4 +2.2**
**BURAR Bucovina Array 12.68 356** ⇑P **Pn 02 43 24.4 +2.2**
**KOVH Kovagotottos 12.76 333** P **Pn 02 43 27.1 +3.9**
**NRCA Norcia 12.96 311** **Pn 02 43 25.8 -0.3**
**NVLJ Novalja 13.03 321** *e*Pn **Pn 02 43 22.6 -4.3**
**GURO Guroymak-BITLI 13.07 69** **Pn 02 43 28.9 +1.3**
**SOC Sochi 13.45 46** *e*P **Pn 02 43 33.3 +0.7**
SOC *e* 02 46 06.0
SOC MLR MLR
comp=Z,217nm,16.0s
**TRPA Tarpa 13.47 349** ⇑P **Pn 02 43 35.1 +2.2**
**TRPA Tarpa 13.47 349** P **P 02 43 40.2 -1.6**
**CRES Cresnjev 13.66 326** *e*Pn **Pn 02 43 32.7 -2.8**
**CSKK Cskako 13.80 336** P **Pn 02 43 40.2 +2.8**
**BRJN Brijuni 13.85 320** *e*Pn **Pn 02 43 33.4 -4.7**
**MPLH Magyarpolny 13.88 334** P **P 02 43 45.6 -0.8**
**KEST Kesra 13.91 278** P **Pn 02 43 41.6 +2.5**
comp=Z,0.3nm,0.3s,baz=319,slow=19,SNR=2.4
KEST S **Sn 02 46 06.8 -5.8**
comp=Z,0.2nm,0.3s,baz=202,slow=23,SNR=1.1
KEST LR LR 02 50 46.6
comp=Z,248nm,18.7s,baz=30,slow=45
**UZH Uzhgorod 13.99 349** *e*P **P 02 43 46.5 -1.1**
**CEY Cerknica 14.08 323** *e*Pn **Pn 02 43 40.5 -0.8**
**SKDS Skadanscina 14.15 322** *e*Pn **P 02 43 47.7 -1.8**
**SRO Srobarova 14.18 337** *e*P P 02 44 00.5 +11
**KARS Kars 14.37 62** P **Pn 02 43 46.8 +1.3**
**KARS Kars 14.37 62** **Pn 02 43 46.8 +1.3**
**CRVS Cervenica-Dubn 14.40 347** *e*P P 02 43 59.4 +7.2
**OSSC Osservatorio P 14.49 311** P **Pn 02 43 48.0 +1.2**
**SOKA Soboth 14.49 327** *e*Pn **Pn 02 43 49.7 +2.7**
comp=Z,3.6nm,0.7s
**VYHS Vyhne 14.63 340** *e*P **Pn 02 43 50.8 +2.0**
**VYHS Vyhne 14.63 340** *e*PN **Pn 02 43 50.8 +2.0**
**SOP Sopron 14.68 333** P **P 02 43 56.0 +0.8**
SOP pmax pmax
comp=Z,14nm,1.4s
**SOP Sopron 14.68 333** P **P 02 43 56.6 +1.3**
**ARSA Arzberg 14.73 330** *i* Pn **Pn 02 43 51.1 +0.9**
comp=Z,2.6nm,0.4s
**KOLL Kolacno 14.84 339** *e*PN **Pn 02 43 51.6 +0.1**
**KWP Kalwaria Pacla 14.91 351** P **Pn 02 43 54.6 +2.1**
**KWP Kalwaria Pacla 14.91 351** P **Pn 02 43 54.6 +2.1**
**AKH Akhalkalaki 14.93 59** ⇑P **Pn 02 43 54.2 +1.3**
**AKH Akhalkalaki 14.93 59** P **P 02 43 56.5 -1.7**
**LVV L'vov 14.95 354** *e*P P 02 44 05.3 +7.0
**MODS Modra-Piesok 15.01 336** *e*P **P 02 44 04.0 +5.0**
**MODS Modra-Piesok 15.01 336** *e*P **P 02 44 04.0 +5.0**
**SMOL Smolenice 15.08 337** *e*P **Pn 02 43 56.8 +2.0**
**SMOL Smolenice 15.08 337** *e*PN **Pn 02 43 56.8 +2.0**
**ZCCA Zocca 15.09 313** Pn **Pn 02 43 56.8 +1.8**
**CONA Conrad Observa 15.14 332** *e*Pn **P 02 44 01.0 +0.5**
comp=Z,2.6nm,0.8s
**TEOL Teolo 15.28 317** Pn **Pn 02 43 59.3 +2.0**
TEOL lAmb lAmb 02 44 12.1
comp=Z,17nm,0.8s
**STAL STALIGIAL 15.30 322** Pn **Pn 02 43 59.0 +1.3**
**ONI Oni 15.34 55** P **Pn 02 43 59.3 +1.0**
ONI pmax pmax
comp=Z,27nm,1.1s
**ONI Oni 15.34 55** P **Pn 02 43 59.3 +1.0**
ONI lAmb lAmb 02 44 17.2
comp=Z,27nm,1.1s
**KIV Kislovodsk 15.46 50** *e*P **P 02 44 03.2 -0.9**
KIV pmax pmax
comp=Z,24nm,1.0s
KIV MLR MLR
comp=Z,105nm,13.0s
**KIV Kislovodsk 15.46 50** P **P 02 44 03.1 -1.1**
KIV lAmb lAmb 02 44 17.6
comp=Z,42nm,0.9s
**GNI Garni 15.47 65** P **P 02 44 03.2 -1.1**
comp=Z,0.6nm,0.3s,baz=288,slow=1.2,SNR=7.2
GNI LR LR 02 51 14.6
comp=Z,836nm,19.5s,baz=270,slow=42
**GNI Garni 15.47 65**⇓ *e*P **P 02 44 03.6 -0.7**
GNI pmax pmax
comp=Z,21nm,1.7s
**GNI Garni 15.47 65** P **Pn 02 44 01.4 +1.4**
GNI lAmb lAmb 02 44 18.8
comp=Z,27nm,1.4s
**KBZ Khabaz 15.48 51** P **P 02 44 05.3 +1.1**
comp=Z,0.5nm,0.3s,baz=208,slow=8.1,SNR=15
KBZ LR LR 02 51 39.1
comp=Z,205nm,19.9s,baz=238,slow=43
**KBZ Khabaz 15.48 51***c i*P **P 02 44 05.3 +1.1**
KBZ pmax pmax
comp=Z,38nm,1.2s
**PGF Pioggiola 15.51 304** P **P 02 44 06.1 +1.5**
PGF pmax pmax
comp=Z,28nm,1.0s
**KBA Koelnbreinsper 15.57 325** *e*Pn **P 02 44 05.8 +0.4**
comp=Z,2.5nm,0.8s
**KBA Koelnbreinsper 15.57 325** P **P 02 44 06.1 +0.8**
KBA pmax pmax
comp=Z,16nm,1.1s
**CTI Castel Tesino 15.72 319** P **Pn 02 44 04.2 +1.0**
CTI pmax pmax
comp=Z,10.0nm,0.7s
**CTI Castel Tesino 15.72 319** **Pn 02 44 04.2 +1.0**
**ZEI Tsey 15.72 55** *e*P **P 02 44 05.6 -1.5**
ZEI pmax pmax
comp=Z,28nm,1.2s
**MOA Molln 15.73 329** *e*Pn **P 02 44 06.7 -0.3**
comp=Z,2.6nm,0.6s
**ABTA Abfaltersbach 15.74 323** *e*Pn **P 02 44 05.5 -1.7**
comp=Z,5.5nm,0.7s
**NAX Nakhchivan 15.84 69** P **P 02 44 07.4 -0.9**
**AKASG Malin Array Be 15.87 7** P **Pn 02 44 05.3 +0.3**
comp=Z,2.6nm,0.3s,baz=197,slow=10,SNR=14
AKASG S **Sn 02 46 58.1 -1.9**
baz=194,slow=21,SNR=1.5
AKASG LR LR 02 50 22.5
comp=Z,223nm,20.1s,baz=174,slow=38
**AKASG Malin Array Be 15.87 7** *i* P **Pn 02 44 06.4 +1.4**
AKASG pmax pmax
comp=Z,2.0nm,0.4s
**AKASG Malin Array Be 15.87 7** P **Pn 02 44 05.6 +0.6**
AKASG lAmb lAmb 02 44 16.3
comp=Z,23nm,0.8s
**AKBB Malin Array Si 15.87 7**⇓ *e*P **Pn 02 44 06.6 +1.6**
**KRUC Moravsky 15.90 335** *e*PN **Pn 02 44 06.4 +1.0**
**OJC Ojcow 15.99 345** P **Pn 02 44 07.6 +1.0**
OJC pmax pmax
comp=Z,11nm,0.7s
**OJC Ojcow 15.99 345** **Pn 02 44 07.6 +1.0**
**VRAC Vranov 16.05 336** ⇑P **Pn 02 44 08.0 +0.7**
**VRAC Vranov 16.05 336** P **Pn 02 44 06.4 -0.9**
comp=Z,1.4nm,0.3s,baz=181,slow=8.3,SNR=7.1
**VRAC Vranov 16.05 336** ⇑P **Pn 02 44 08.0 +0.7**
**VRAC Vranov 16.05 336** *e*PN **Pn 02 44 07.7 +0.4**
**MORC Moravsky Berou 16.16 339** P **Pn 02 44 09.2 +0.4**
MORC pmax pmax
comp=Z,14nm,1.1s
**MORC Moravsky Berou 16.16 339** **Pn 02 44 09.2 +0.4**
**MORC Moravsky Berou 16.16 339** *e*PN **Pn 02 44 08.5 -0.3**
**GOF Gofitskoye 16.25 47**⇑ *e*P **P 02 44 13.6 +0.8**
GOF pmax pmax
comp=Z,20nm,0.7s
**TREC Trest 16.41 334** *e*P **Pn 02 44 12.4 +0.4**
**TREC Trest 16.41 334** *e*P **Pn 02 44 12.4 +0.4**
**CKRC Cesky Krumlov 16.47 331** *e*P **Pn 02 44 12.7 -0.1**
**WTTA Wattenberg 16.53 323** *e*Pn **P 02 44 17.1 +1.1**
comp=Z,8.4nm,0.7s
**WTTA Wattenberg 16.53 323** P **P 02 44 20.2 +4.2**
WTTA pmax pmax
comp=Z,27nm,1.0s
**WATA Walderalm 16.61 323** *e*Pn **P 02 44 22.8 +6.0**
comp=Z,6.7nm,0.6s
**KRLC Kraliky 16.66 338** *e*P **Pn 02 44 14.0 -1.1**
**KRLC Kraliky 16.66 338** *e*P **Pn 02 44 14.0 -1.1**
**GEC2 GERESS Array S 16.74 330** P **Pn 02 44 17.0 +0.7**
**GERES GERESS Array B 16.74 330** P **Pn 02 44 15.2 -1.1**
comp=Z,0.2nm,0.3s,baz=142,slow=13,SNR=18
GERES LR LR 02 51 35.6
comp=Z,108nm,20.6s,baz=154,slow=41
**GERES GERESS Array B 16.74 330** P **Pn 02 44 16.9 +0.7**
**GERES GERESS Array B 16.74 330** **Pn 02 44 16.9 +0.7**
**GANJ Ganja 16.76 64** P **P 02 44 18.7 +0.3**
**DDFL Dedoflistskaro 16.81 61** P **P 02 44 22.4 +3.3**
**FETA Feichten 16.83 320** *e*Pn **P 02 44 21.1 +1.8**
comp=Z,5.5nm,0.6s
FETA *e*Sn **Sn 02 47 25.9 +2.4**
comp=Z,1.5nm,0.6s
**MOTA Moosalm 16.85 322** *e*Pn **P 02 44 21.9 +2.4**
comp=Z,4.1nm,0.6s
**KHC Kasperske Hory 17.02 330**⇓ *e*P **Pn 02 44 18.8 -0.8**
KHC pmax pmax
comp=Z,5.0nm,0.6s
**KHC Kasperske Hory 17.02 330** *e*P **Pn 02 44 18.0 -1.6**
KHC *ex* P **02 44 24.0 +2.8**
KHC *ex* x 02 45 04.0
**KHC Kasperske Hory 17.02 330** **P 02 44 20.4 -0.8**
**DPC Dobruska-Polom 17.04 338** *e*P **Pn 02 44 19.0 -0.9**
**DPC Dobruska-Polom 17.04 338** *e*P **Pn 02 44 19.0 -0.9**
**SBF Sospel 17.09 307** *e*P **P 02 44 28.7 +6.6**
SBF pmax pmax
comp=Z,40nm,0.8s
**RETA Reutte 17.12 322** *e*Pn **P 02 44 22.0 -0.4**
comp=Z,1.9nm,0.4s
**GROC Groznyy 17.16 56** *e*P **P 02 44 23.7 +0.8**
GROC pmax pmax
comp=Z,32nm,1.2s
**ZKTA Zakatala 17.23 61** P **P 02 44 23.1 -0.5**
**TUE Stuetta 17.24 317** **Pn 02 44 23.1 +0.5**
TUE lAmb lAmb 02 44 36.7
comp=Z,19nm,0.7s
**OSTC Ostas 17.25 338** *e*P **Pn 02 44 22.0 -0.5**
**UPC Upice 17.27 337** *e*P **Pn 02 44 22.7 -0.1**
**UPC Upice 17.27 337** *e*P **Pn 02 44 22.7 -0.1**
**WET Wettzell 17.32 329** P **P 02 44 27.8 +3.3**
WET pmax pmax
comp=Z,10.0nm,0.8s
**CHVC Chvalec 17.33 337** *e*P **P 02 44 25.6 +0.9**
**PRU Pruhonice 17.33 334** *e*P **Pn 02 44 23.0 -0.5**
**PRU Pruhonice 17.33 334** *e*P **Pn 02 44 23.0 -0.5**
**MNGR Mingechevir, A 17.35 64** P **P 02 44 26.0 +1.1**
**DAVA Damuels 17.45 320** *e*Pn **P 02 44 25.9 -0.2**
comp=Z,3.6nm,0.4s
DAVA *e*Sn S 02 48 10.5 +24
comp=Z,3.9nm,0.5s
**KSP Ksiaz 17.48 338** P **P 02 44 26.4 +0.1**
KSP pmax pmax
comp=Z,18nm,2.5s
**FRF La Foret Royal 17.49 305** *e*P **P 02 44 31.3 +4.8**
FRF pmax pmax
comp=Z,24nm,1.2s
**LMR La Mourre 17.50 304** P **P 02 44 32.7 +6.2**
LMR pmax pmax
comp=Z,31nm,1.3s
**SEKA Sheki 17.54 63** P **P 02 44 29.3 +2.2**
**PVCC Panska Ves 17.77 335** *e*P **P 02 44 29.8 +0.3**
**PVCC Panska Ves 17.77 335** *e*P **P 02 44 29.8 +0.3**
**MBDF Montbardon 17.89 309** *e*P **P 02 44 32.7 +1.6**
MBDF pmax pmax
comp=Z,12nm,0.8s
**GRB1 Grafenberg Arr 18.03 328** P **P 02 44 36.4 +4.0**
GRB1 pmax pmax
comp=Z,20nm,1.0s
**BNI Bardonecchia 18.10 310** P **P 02 44 33.9 +0.6**
BNI pmax pmax
comp=Z,31nm,1.4s
**BNI Bardonecchia 18.10 310** **P 02 44 33.9 +0.6**
BNI lAmb lAmb 02 44 50.4
comp=Z,31nm,1.4s
**BRG Berggiesshubel 18.28 334** *e*P **P 02 44 34.1 -1.0**
BRG Amp 02 44 40.2
comp=Z,23nm,1.7s
**BRG Berggiesshubel 18.28 334** *e*P **P 02 44 34.1 -1.0**
BRG pmax pmax
comp=Z,23nm,1.7s
**LKRN Lenkeran, Azer 18.32 72** P **Pn 02 44 37.9 +2.1**
**NKC Novy Kostel 18.34 331** *e*P **P 02 44 35.0 -0.8**
**NKC Novy Kostel 18.34 331** *e*P **P 02 44 35.0 -0.8**
**SENIN Lac Senin/Sane 18.36 314** P **P 02 44 36.2 -0.1**
SENIN lAmb lAmb 02 44 45.7
comp=Z,24nm,0.8s
**GRA1 Grafenberg Arr 18.44 328** P **P 02 44 36.7 -0.2**
GRA1 lAmb lAmb 02 44 54.0
comp=Z,46nm,1.4s
**GRF Grafenberg Arr 18.44 328** P **P 02 44 36.7 -0.2**
GRF pmax pmax
comp=Z,46nm,1.4s
**GRF Grafenberg Arr 18.44 328** *e*P **Pn 02 44 41.0 +3.8**
comp=Z,18nm,1.4s,baz=138,slow=12
**GRFO Grafenberg 18.44 328** P **P 02 44 36.4 -0.5**
GRFO pmax pmax
comp=Z,35nm,1.3s
**GRFO Grafenberg 18.44 328** P **P 02 44 36.4 -0.5**
GRFO lAmb lAmb 02 44 53.9
comp=Z,35nm,1.3s
**SLE Schleitheim 18.48 319** P **Pn 02 44 43.7 +6.0**
SLE pmax pmax
comp=Z,14nm,1.2s
**ORIF Oris-en-Rattie 18.55 309** P **Pn 02 44 44.9 +6.4**
ORIF pmax pmax
comp=Z,15nm,1.0s
**VORD Divnogorie 18.55 26** *e*P **Pn 02 44 40.7 +2.4**
VORD pmax pmax
comp=Z,7.0nm,0.9s
**VSR Storozhevoye 18.70 26** *e*P **Pn 02 44 41.7 +1.4**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**CLL Collm 18.98 334** *e*P **P 02 44 42.0 -0.8**
**CLL Collm 18.98 334** *e*P **P 02 44 42.0 -0.8**
CLL *ex* x 02 44 47.0
**CLL Collm 18.98 334** P **P 02 44 41.8 -1.0**
**MOX Moxa 18.99 330** P **Pn 02 44 50.4 +6.6**
MOX pmax pmax
comp=Z,15nm,0.9s
**VORR Voronezh 19.10 25** *e*P **P 02 44 38.5 -5.5**
VORR pmax pmax
comp=Z,10.0nm,0.4s
**SUW Suwalki 19.18 354** P **P 02 44 44.0 -1.0**
SUW pmax pmax
comp=Z,59nm,0.8s
**SUW Suwalki 19.18 354** P **P 02 44 44.0 -1.0**
**SUW Suwalki 19.18 354** *e*P **Pn 02 44 47.4 +1.3**
**VIVF Saint-Julien-l 19.30 307** *e*P **Pn 02 44 52.3 +4.7**
VIVF pmax pmax
comp=Z,19nm,1.0s
**HINF Hinteralfeld 19.41 317** *e*P **P 02 44 47.2 -0.4**
HINF pmax pmax
comp=Z,17nm,1.4s
**GKP Gorka Klasztor 19.42 343** P **P 02 44 48.0 +0.5**
GKP pmax pmax
comp=Z,41nm,0.8s
**GKP Gorka Klasztor 19.42 343** *e*P **Pn 02 44 50.7 +1.9**
**MNK Minsk 19.57 3** *i* P **Pn 02 44 53.1 +2.5**
MNK pmax pmax
comp=N,18nm,0.9s
MNK pmax pmax
comp=Z,12nm,0.7s
MNK MLR MLR
comp=Z,182nm,15.0s
MNK MLR MLR
comp=E,51nm,23.0s
MNK MLR MLR
comp=N,417nm,21.0s
**MNK Minsk 19.57 3** *i* P **Pn 02 44 53.2 +2.5**
MNK *i* P **Pn 02 44 53.2 +2.5**
comp=N,18nm,0.9s,baz=183
MNK *i* P **Pn 02 44 53.2 +2.5**
comp=Z,12nm,0.7s
MNK *i* PP **PnPn 02 45 08.4 +4.0**
MNK *i* S **Sn 02 48 36.6 +7.1**
MNK *i* SS **SnSn 02 48 53.5 +10**
MNK *i* LQ LQ 02 50 51.0
MNK *i* LR LR 02 52 21.4
MNK *i* LRM MLR 02 53 45.0
comp=Z,182nm,15.2s
MNK *i* LRM MLR 02 54 06.7
comp=E,51nm,23.0s
MNK *i* LRM MLR 02 54 11.8
comp=N,417nm,21.1s
**VRH Novokhopyorsk 19.67 30** *e*P **P 02 44 48.0 -2.3**
VRH pmax pmax
comp=Z,20nm,0.5s
**LPSR Galich'ya Gora 19.78 23** *e*P **P 02 44 51.6 +0.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LPSR | | | | | pmax | pmax | | |
| | comp=Z,40nm,1.4s | | | | | | | |
| **HAU** | **Haudompre** | **19.79** | **317** | *eP* | **P** | **P** | **02 44 51.2** | **-0.6** |
| HAU | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| NACGM | **Naroch** | **19.95** | **1** | *i* P | **Pn** | | 02 44 55.3 | +0.2 |
| **RAYN** | **Ar Rayn** | **20.18** | **119** | P | **P** | | **02 44 55.5** | **-0.7** |
| RAYN | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **RAYN** | **Ar Rayn** | **20.18** | **119** | P | **P** | | **02 44 55.5** | **-0.7** |
| RAYN | | | | | IAmb | IAmb | 02 45 12.1 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **IDID** | **Didziasalis** | **20.36** | **1** | *e*P | Pn | | 02 45 01.1 | +1.2 |
| IDID | | | | | IAmb | IAmb | 02 45 17.1 | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **IIGN** | **Ignalina** | **20.39** | **360** | *e*P | Pn | | 02 45 01.3 | +1.0 |
| IIGN | | | | | IAmb | IAmb | 02 45 14.1 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **PABE** | **Paberze** | **20.62** | **356** | P | **P** | | **02 45 01.3** | **+0.8** |
| PABE | | | | | IAmb | IAmb | 02 45 18.8 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **PABE** | **Paberze** | **20.62** | **356** | *e*P | Pn | | 02 45 04.0 | +1.1 |
| **LOR** | **Lormes** | **20.86** | **313** | *e*P | **P** | | **02 45 01.0** | **-2.3** |
| LOR | | | | | pmax | pmax | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **SSF** | **Saint Saulge** | **20.98** | **312** | *e*P | **P** | | **02 45 03.1** | **-1.5** |
| SSF | | | | | pmax | pmax | | |
| | comp=Z,120nm,0.9s | | | | | | | |
| **CAF** | **Calviac** | **21.05** | **306** | *e*P | **P** | | **02 45 12.5** | **+7.1** |
| CAF | | | | | pmax | pmax | | |
| | comp=Z,35nm,1.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **21.16** | **310** | *e*P | **P** | | **02 45 07.1** | **+0.5** |
| BGF | | | | | pmax | pmax | | |
| | comp=Z,57nm,1.0s | | | | | | | |
| **OBN** | **Obninsk** | **21.36** | **16** | P | **P** | | **02 45 08.8** | **+0.2** |
| | comp=Z,1.9nm,0.4s,baz=136,slow=20,SNR=2.2 | | | | | | | |
| **OBN** | **Obninsk** | **21.36** | **16**‖ | *e*P | **P** | | **02 45 08.8** | **+0.2** |
| OBN | | | | *e* | | | 02 45 26.3 | |
| OBN | | | | PPP | PPP | | 02 45 37.0 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,148nm,11.0s | | | | | | | |
| **OBN** | **Obninsk** | **21.36** | **16** | P | **P** | | **02 45 09.1** | **+0.5** |
| OBN | | | | IAmb | IAmb | | 02 45 27.5 | |
| | comp=Z,52nm,1.4s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **21.46** | **309** | *e*P | **P** | | **02 45 09.6** | **-0.2** |
| TCF | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **MEM** | **Membach** | **21.52** | **323** | P | **P** | | **02 45 11.2** | **+0.8** |
| MEM | | | | | pmax | pmax | | |
| | comp=Z,45nm,0.9s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **21.55** | **306** | *e*P | **P** | | **02 45 17.3** | **+6.6** |
| RJF | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **EPF** | **Esparros** | **21.71** | **300** | *e*P | **P** | | **02 45 18.9** | **+6.4** |
| EPF | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **BSEG** | **Bad Segeberg** | **22.07** | **334** | P | **P** | | **02 45 18.3** | **+2.1** |
| BSEG | | | | | pmax | pmax | | |
| | comp=Z,25nm,2.1s | | | | | | | |
| **ETSF** | **Etsaut** | **22.33** | **299** | *e*P | **P** | | **02 45 22.9** | **+3.7** |
| ETSF | | | | | pmax | pmax | | |
| | comp=Z,53nm,1.8s | | | | | | | |
| **SJPF** | **Ste Jean** | **22.85** | **299** | *e*P | **P** | | **02 45 29.9** | **+5.2** |
| SJPF | | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **MFF** | **Saint Martin d** | **23.09** | **308** | *e*P | **P** | | **02 45 27.9** | **+0.9** |
| MFF | | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **LDF** | **La Druitiere** | **23.85** | **313** | *e*P | **P** | | **02 45 33.5** | **-0.9** |
| LDF | | | | | pmax | pmax | | |
| | comp=Z,87nm,1.6s | | | | | | | |
| **FLN** | **La Foliniere** | **24.13** | **313** | *e*P | **P** | | **02 45 34.9** | **-2.2** |
| FLN | | | | | pmax | pmax | | |
| | comp=Z,45nm,1.0s | | | | | | | |
| **GRR** | **Gorron** | **24.21** | **312** | *e*P | **P** | | **02 45 35.5** | **-2.3** |
| GRR | | | | | pmax | pmax | | |
| | comp=Z,141nm,1.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **24.51** | **290** | P | **P** | | **02 45 39.6** | **-1.1** |
| | comp=Z,4.1nm,0.7s,baz=82,slow=9.6,SNR=18 | | | | | | | |
| ESDC | | | | | LR | LR | 02 55 21.9 | |
| | comp=Z,80nm,21.3s,baz=59,slow=37 | | | | | | | |
| **ESDC** | **Sonseca Array** | **24.51** | **290** | P | **P** | | **02 45 40.2** | **-0.5** |
| ESDC | | | | | IAmb | IAmb | 02 45 50.2 | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **MDT** | **Midelt** | **25.75** | **274** | P | **P** | | **02 45 50.9** | **-1.2** |
| | comp=Z,3.7nm,1.0s,baz=69,slow=10,SNR=3.3 | | | | | | | |
| MDT | | | | | LR | LR | 02 58 18.4 | |
| | comp=Z,307nm,20.9s,baz=78,slow=42 | | | | | | | |
| **HFS** | **Hagfors** | **26.51** | **346** | P | **P** | | **02 45 55.8** | **-2.6** |
| | comp=Z,1.8nm,0.6s,baz=152,slow=9.9,SNR=7.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.51** | **360** | P | **P** | | **02 45 55.8** | **-2.7** |
| | comp=Z,0.9nm,0.3s,baz=163,slow=13,SNR=11 | | | | | | | |
| FINES | | | | PcP | | **PcP** | **02 49 21.4** | **-1.2** |
| | comp=Z,0.8nm,0.4s,baz=134,slow=4.0,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.51** | **360** | P | **P** | | **02 45 55.9** | **-2.6** |
| **FINES** | **FINESS Array B** | **26.51** | **360** | P | **P** | | **02 45 55.9** | **-2.6** |
| FINES | | | | | | **PcP** | **02 49 21.6** | **-0.9** |
| **MVO** | **Moncorvo** | **26.90** | **293** | *e*P | **P** | | **02 46 09.0** | **+6.6** |
| | comp=Z,62nm,2.1s | | | | | | | |
| **PMRV** | **Marv??o** | **27.16** | **289** | *e*P | **P** | | **02 46 07.1** | **+2.5** |
| | comp=Z,50nm,1.4s | | | | | | | |
| **KLMR** | **Klimovskoe** | **27.27** | **14** | *e*P | **P** | | **02 46 01.5** | **-3.7** |
| KLMR | | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **KLMR** | **Klimovskoe** | **27.27** | **14** | *e*P | **P** | | **02 46 01.6** | **-3.7** |
| KLMR | | | | AMP | | | 02 46 03.4 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| NORES | **NORESS Array B** | **27.51** | **344** | P | **P** | | **02 46 07.2** | **-0.3** |
| **PBEJ** | **Beja** | **27.60** | **286** | *e*P | **P** | | **02 46 14.3** | **+5.7** |
| **AKTO** | **Aktyubinsk** | **27.67** | **46** | P | **P** | | **02 46 08.8** | **-0.3** |
| | comp=Z,7.4nm,0.7s,baz=249,slow=8.9,SNR=17 | | | | | | | |
| **NOA** | **NORSAR Array B** | **27.86** | **344** | P | **P** | | **02 46 08.8** | **-1.8** |
| | comp=Z,0.3nm,0.5s,baz=152,slow=8.4,SNR=1.3 | | | | | | | |
| NOA | | | | | LR | LR | 02 58 40.3 | |
| | comp=Z,102nm,18.8s,baz=160,slow=40 | | | | | | | |
| **KIRV** | **Kirov** | **28.15** | **26** | P | **P** | | **02 46 11.9** | **-1.2** |
| | comp=Z,4.4nm,0.5s,baz=188,slow=7.1,SNR=2.2 | | | | | | | |
| **KIRV** | **Kirov** | **28.15** | **26**‖ | *i*P | **P** | | **02 46 16.4** | **+3.2** |
| **AB31** | **Akbulak array** | **28.45** | **50** | P | **P** | | **02 46 15.6** | **-0.4** |
| ABKAR | **Akbulak array** | **28.45** | **50** | P | **P** | | **02 46 15.5** | **-0.6** |
| ABKAR | **Akbulak array** | **28.45** | **50** | P | **P** | | **02 46 15.9** | **-0.2** |
| ABKAR | | | | | IAmb | IAmb | 02 46 32.7 | |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **28.78** | **324** | P | **P** | | **02 46 16.2** | **-2.6** |
| | comp=Z,1.9nm,0.5s,baz=125,slow=9.9,SNR=12 | | | | | | | |
| **PRGR** | **Permogore** | **29.38** | **19** | *e*P | **P** | | **02 46 19.6** | **-4.5** |
| PRGR | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **30.64** | **36** | P | **P** | | **02 46 34.2** | **-1.2** |
| ARU | | | | | S | **S** | **02 51 36.9** | **+1.2** |
| ARU | | | | | SS | **ScP** | **02 53 11.7** | **-1.8** |
| **TORD** | **Torodi Ar. Bea** | **31.12** | **232** | P | **P** | | **02 46 40.6** | **+0.6** |
| | comp=Z,6.9nm,0.5s,baz=38,slow=7.8,SNR=74 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.12** | **232** | P | **P** | | **02 46 41.0** | **+1.0** |
| **KOWA** | **Kowa** | **34.08** | **241** | P | **P** | | **02 47 06.2** | **+0.3** |
| KOWA | | | | | IAmb | IAmb | 02 47 21.1 | |
| | comp=Z,3.7nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.64** | **359** | P | **P** | | **02 47 07.3** | **-2.8** |
| | comp=Z,1.5nm,0.4s,baz=180,slow=8.7,SNR=23 | | | | | | | |
| ARCES | | | | | LR | LR | 03 01 18.6 | |
| | comp=Z,204nm,20.2s,baz=120,slow=36 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.64** | **359** | P | **P** | | **02 47 07.2** | **-2.9** |
| **KK31** | **Karatay Array** | **34.92** | **63** | P | **P** | | **02 47 13.3** | **+0.4** |
| **KKAR** | **Karatay Array** | **34.92** | **63** | P | **P** | | **02 47 12.5** | **-0.5** |
| **KKAR** | **Karatay Array** | **34.92** | **63** | P | **P** | | **02 47 12.5** | **-0.5** |
| **MBAR** | **Mbarara** | **35.61** | **172** | P | **P** | | **02 47 22.0** | **+2.8** |
| | comp=Z,0.8nm,0.2s,baz=27,slow=2.3,SNR=1.5 | | | | | | | |
| MBAR | | | | | LR | LR | 03 02 58.0 | |
| | comp=Z,88nm,19.1s,baz=342,slow=38 | | | | | | | |
| **BRVK** | **Borovoye** | **35.72** | **46**‖ | *i*P | **P** | | **02 47 20.1** | **+0.4** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **BRVK** | **Borovoye** | **35.72** | **46** | P | **P** | | **02 47 19.2** | **-0.5** |
| **BVAR** | **Borovoye Array** | **35.78** | **46** | P | **P** | | **02 47 20.4** | **+0.2** |
| | comp=Z,2.0nm,0.5s,baz=4.3,slow=5.9,SNR=19 | | | | | | | |
| **OTUK** | **Ortayu** | **36.31** | **54** | P | **P** | | **02 47 25.3** | **+0.4** |
| **AAK** | **Ala-Archa** | **37.87** | **64** | P | **P** | | **02 47 39.6** | **+1.3** |
| | comp=Z,4.1nm,0.5s,baz=234,slow=5.5,SNR=15 | | | | | | | |
| **AAK** | **Ala-Archa** | **37.87** | **64**‖ | *e*P | **P** | | **02 47 40.0** | **+1.7** |
| AAK | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **37.87** | **64** | P | **P** | | **02 47 38.4** | **+0.1** |
| AAK | | | | | IAmb | IAmb | 02 47 54.7 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **39.36** | **68** | P | **P** | | **02 47 50.4** | **-0.4** |
| KSH | | | | | sP | pP | 02 47 57.3 | -1.8 |
| KSH | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **MDOK** | **Medeo** | **39.69** | **62** | P | **P** | | **02 47 51.0** | **-2.5** |
| **DBIC** | **Dimbokro** | **40.22** | **233** | P | **P** | | **02 47 58.3** | **+0.3** |
| | comp=Z,4.6nm,0.5s,baz=54,slow=8.1,SNR=12 | | | | | | | |
| DBIC | | | | | LR | LR | 03 08 33.8 | |
| | comp=Z,125nm,19.9s,baz=46,slow=42 | | | | | | | |
| **DBIC** | **Dimbokro** | **40.22** | **233** | P | **P** | | **02 47 57.2** | **-0.7** |
| DBIC | | | | | IAmb | IAmb | 02 48 14.4 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **TIC** | **Toumodi** | **40.34** | **233** | *e*P | **P** | | **02 47 59.8** | **+0.7** |
| **KIC** | **Kosan Boka** | **40.38** | **232** | *e*P | **P** | | **02 48 00.7** | **+1.4** |
| | comp=Z,18nm,0.5s | | | | | | | |
| KURBB | **Kurchatov Arra** | **40.48** | **51** | P | **P** | | **02 48 00.3** | **+0.5** |
| | comp=Z,11nm,0.5s,baz=275,slow=8.7,SNR=129 | | | | | | | |
| KURBB | **Kurchatov Arra** | **40.48** | **51** | P | **P** | | **02 47 59.3** | **-0.5** |
| **KURK** | **Kurchatov** | **40.55** | **51** | *d*/*i*P | **P** | | **02 48 00.5** | **+0.2** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **40.55** | **51** | P | **P** | | **02 48 00.1** | **-0.2** |
| **LIC** | **Lamto** | **40.66** | **233** | *e*P | **P** | | **02 48 03.2** | **+1.5** |
| | comp=Z,22nm,0.8s | | | | | | | |
| **PDGK** | **Podgornoye** | **41.44** | **62** | *i* P | **P** | | **02 48 08.2** | **+0.2** |
| PDGK | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **MAKZ** | **Makanchi** | **42.85** | **56** | P | **P** | | **02 48 19.2** | **-0.1** |
| MAKZ | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **42.85** | **56** | P | **P** | | **02 48 19.2** | **-0.1** |
| MAKZ | | | | | IAmb | IAmb | 02 48 30.7 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **43.07** | **56** | *i* P | **P** | | **02 48 21.6** | **+0.5** |
| MK31 | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **43.07** | **56** | P | **P** | | **02 48 20.6** | **-0.5** |
| MK31 | | | | | IAmb | IAmb | 02 48 32.4 | |
| | comp=Z,9.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.07** | **56** | P | **P** | | **02 48 21.8** | **+0.7** |
| | comp=Z,12nm,0.7s,baz=279,slow=6.7,SNR=112 | | | | | | | |
| MKAR | | | | | LR | LR | 03 08 13.0 | |
| | comp=Z,149nm,20.1s,baz=280,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.07** | **56** | P | **P** | | **02 48 21.3** | **+0.3** |
| **SPITS** | **Spitsbergen Ar** | **43.54** | **357** | P | **P** | | **02 48 22.1** | **-2.4** |
| | comp=Z,4.1nm,0.7s,baz=167,slow=20,SNR=5.1 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **44.44** | **46** | P | **P** | | **02 48 31.4** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **44.44** | **46** | P | **P** | | **02 48 31.5** | **-0.4** |
| | comp=Z,8.5nm,0.5s,baz=269,slow=8.4,SNR=36 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.44** | **46** | P | **P** | | **02 48 31.4** | **-0.5** |
| **DGZ** | **Jazzator, Alta** | **46.23** | **52** | *d*/*i*P | **P** | | **02 48 47.0** | **+0.6** |
| DGZ | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **NRIK** | **Noril'sk** | **47.65** | **25** | P | **P** | | **02 48 56.9** | **-0.1** |
| | comp=Z,2.2nm,0.4s,baz=253,slow=16,SNR=2.1 | | | | | | | |
| **NRIK** | **Noril'sk** | **47.65** | **25**‖ | *e*P | **P** | | **02 48 59.7** | **+2.7** |
| **PYUN** | **Piuthan** | **48.21** | **82** | *e*P | **P** | | **02 49 03.4** | **+1.2** |
| | comp=Z,18nm,0.6s | | | | | | | |
| **DANN** | **Dangsing** | **48.74** | **81** | *e*P | **P** | | **02 49 07.6** | **+1.2** |
| | comp=Z,58nm,0.8s | | | | | | | |
| **KOLN** | **Koldanda** | **48.84** | **82** | *e*P | **P** | | **02 49 07.6** | **+0.6** |
| | comp=Z,25nm,0.9s | | | | | | | |
| **SUMG** | **Summit** | **49.52** | **339** | *i* P | **P** | | **02 49 09.0** | **-2.8** |
| **GKN** | **Gorkha** | **49.59** | **81** | *e*P | **P** | | **02 49 13.2** | **+0.5** |
| | comp=Z,13nm,0.4s | | | | | | | |
| **DMN** | **Daman** | **50.12** | **81** | *e*P | **P** | | **02 49 17.6** | **+0.7** |
| | comp=Z,15nm,0.6s | | | | | | | |
| **KKN** | **Kakani** | **50.19** | **81** | *e*P | **P** | | **02 49 17.9** | **+0.5** |
| **PKIN** | **Phulchoki** | **50.37** | **81** | *e*P | **P** | | **02 49 19.2** | **+0.4** |
| | comp=Z,9.3nm,0.4s | | | | | | | |
| **PKI** | **Pulchoki** | **50.39** | **81** | *e*P | **P** | | **02 49 19.3** | **+0.3** |
| | comp=Z,26nm,0.9s | | | | | | | |
| **GUN** | **Gumba** | **50.63** | **81** | *e*P | **P** | | **02 49 21.2** | **+0.4** |
| | comp=Z,32nm,0.8s | | | | | | | |
| **JIRN** | **Jiri** | **50.98** | **81** | *e*P | **P** | | **02 49 24.1** | **+0.6** |
| | comp=Z,26nm,0.8s | | | | | | | |
| **RAMN** | **Ramite** | **51.61** | **81** | *e*P | **P** | | **02 49 27.9** | **-0.2** |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| **ODAN** | **Odare** | **52.29** | **81** | *e*P | **P** | | **02 49 33.4** | **+0.3** |
| **TAPN** | **Taplejung** | **52.34** | **80** | *e*P | **P** | | **02 49 34.1** | **+0.5** |
| **GOMU** | **GeErMu** | **54.59** | **67** | P | **P** | | **02 49 51.9** | **+1.8** |
| GOMU | | | | | pP | pP | 02 49 53.4 | -4.9 |
| GOMU | | | | | sP | pwP | 02 49 56.0 | -5.0 |
| GOMU | | | | | PcP | **PcP** | **02 50 51.4** | **-1.6** |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,140nm,4.9s | | | | | | | |
| **ZAK** | **Zakamensk** | **56.14** | **49** | *e*P | **P** | | **02 50 00.6** | **-0.1** |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| **SHL** | **Shillong** | **56.48** | **80** | P | **P** | | **02 50 03.3** | **-0.3** |
| SHL | | | | | pmax | pmax | | |
| | comp=Z,24nm,0.3s | | | | | | | |
| **SHL** | **Shillong** | **56.48** | **80** | P | **P** | | **02 50 03.3** | **-0.3** |
| **PALK** | **Pallekele** | **56.86** | **106** | LR | LR | | 03 17 47.0 | |
| | comp=Z,104nm,19.1s,baz=52,slow=39 | | | | | | | |
| **GTA** | **Gaotai** | **57.19** | **62** | *e*P | **P** | | **02 50 08.8** | **+0.4** |
| GTA | | | | | pP | sP | 02 50 19.6 | -0.2 |
| GTA | | | | | sP | pP | 02 50 23.9 | +6.9 |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,140nm,5.3s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,110nm,16.4s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,230nm,17.8s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,230nm,16.7s | | | | | | | |
| **SONM** | **Songino Array** | **58.85** | **51** | P | **P** | | **02 50 20.5** | **+0.6** |
| | comp=Z,4.1nm,0.6s,baz=290,slow=7.5,SNR=29 | | | | | | | |
| **SONM** | **Songino Array** | **58.85** | **51** | P | **P** | | **02 50 19.0** | **-0.9** |
| **ULN** | **Ulaanbaatar** | **59.26** | **51** | *d*e*P* | **P** | | **02 50 23.1** | **+0.4** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.26** | **51** | P | **P** | | **02 50 22.1** | **-0.7** |
| **LBTB** | **Lobatse** | **59.65** | **181** | LR | LR | | 03 17 13.2 | |
| | comp=Z,95nm,18.0s,baz=355,slow=37 | | | | | | | |
| **LZH** | **Lanzhou** | **61.40** | **64** | *e*P | P | | 02 50 49.0 | +11 |
| LZH | | | | | pP | sP | 02 50 55.3 | +6.2 |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **BOSA** | **Boshof** | **63.24** | **181** | P | **P** | | **02 50 51.1** | **+1.5** |
| | comp=Z,2.6nm,1.0s,baz=350,slow=12,SNR=2.0 | | | | | | | |
| BOSA | | | | | LR | LR | 03 19 41.5 | |
| | comp=Z,92nm,21.0s,baz=16,slow=37 | | | | | | | |
| **CD2** | **Chengdu** | **63.54** | **70** | P | **P** | | **02 50 52.4** | **+0.6** |
| CD2 | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **63.97** | **75** | P | **P** | | **02 50 55.1** | **+0.3** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,100nm,7.0s | | | | | | | |
| **SCHQ** | **Schefferville** | **63.98** | **320** | P | **P** | | **02 50 53.5** | **-0.8** |
| | comp=Z,4.2nm,0.4s,baz=45,slow=4.5,SNR=25 | | | | | | | |
| **SCHQ** | **Schefferville** | **63.98** | **320** | P | **P** | | **02 50 52.8** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **65.61** | **84** | P | **P** | | **02 51 06.0** | **+0.5** |
| | comp=Z,1.6nm,0.4s,baz=297,slow=8.1,SNR=12 | | | | | | | |
| CMAR | | | | | LR | LR | 03 25 35.2 | |
| | comp=Z,45nm,19.4s,baz=305,slow=41 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.61** | **84** | *i* P | **P** | | **02 51 06.1** | **+0.6** |
| CMAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **XAN** | **Xi'an** | **66.04** | **64** | P | **P** | | **02 51 08.4** | **+0.4** |
| XAN | | | | | pP | pP | 02 51 10.0 | -6.4 |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **SUR** | **Sutherland** | **67.18** | **185** | LR | LR | | 03 24 29.1 | |
| | comp=Z,132nm,18.5s,baz=358,slow=39 | | | | | | | |
| **A36M** | **Sachs Harbour** | **71.50** | **351** | P | **P** | | **02 51 39.4** | **-1.9** |
| **BILL** | **Bilibino** | **73.02** | **15**‖ | *e*P | **P** | | **02 51 53.6** | **+3.2** |
| BILL | | | | *e* | | | 02 52 06.2 | |
| BILL | | | | *e* | | | 03 02 03.4 | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **73.27** | **41** | LR | LR | | 03 27 42.0 | |
| | comp=Z,60nm,19.3s,baz=304,slow=39 | | | | | | | |
| **KLR** | **Kul'dur** | **73.27** | **41**‖ | *e*P | **P** | | **02 51 52.3** | **0.0** |
| **INK** | **Inuvik** | **75.95** | **352** | LR | LR | | 03 28 40.6 | |
| | comp=Z,41nm,18.1s,baz=7.0,slow=38 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.28** | **45** | P | **P** | | **02 52 09.5** | **-0.3** |
| | comp=Z,3.9nm,0.6s,baz=294,slow=4.5,SNR=10 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.28** | **45** | P | **P** | | **02 52 09.3** | **-0.5** |
| **KSRS** | **Korea Array** | **77.62** | **53** | P | **P** | | **02 52 17.1** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=308,slow=4.4,SNR=3.5 | | | | | | | |
| KSRS | | | | | LR | LR | 03 31 10.3 | |
| | comp=Z,57nm,19.4s,baz=310,slow=39 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.94** | **343** | P | **P** | | **02 52 17.3** | **-1.4** |
| | comp=Z,0.5nm,0.4s,baz=33,slow=5.2,SNR=15 | | | | | | | |
| **ILAR** | **Eielson Array** | **80.46** | **357** | P | **P** | | **02 52 31.3** | **-1.2** |
| | comp=Z,0.6nm,0.6s,baz=343,slow=4.0,SNR=6.4 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **81.02** | **327** | P | **P** | | **02 52 34.6** | **-1.1** |
| | comp=Z,1.6nm,0.6s,baz=52,slow=4.8,SNR=1.8 | | | | | | | |
| ULM | | | | | LR | LR | 03 31 58.3 | |
| | comp=Z,69nm,18.1s,baz=84,slow=38 | | | | | | | |
| **ASAJ** | **Asahikawa** | **82.29** | **41** | LR | LR | | 03 33 39.5 | |
| | comp=Z,70nm,18.8s,baz=72,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **82.65** | **27** | LR | LR | | 03 32 05.1 | |
| | comp=Z,67nm,18.8s,baz=3.6,slow=38 | | | | | | | |
| **NEW** | **Newport** | **90.96** | **337** | LR | LR | | 03 34 47.3 | |
| | comp=Z,35nm,20.4s,baz=34,slow=36 | | | | | | | |
| **PDAR** | **Pinedale Array** | **92.79** | **329** | P | **P** | | **02 53 31.8** | **-2.0** |
| | comp=Z,0.5nm,0.8s,baz=46,slow=4.3,SNR=3.4 | | | | | | | |
| PDAR | | | | | LR | LR | 03 36 42.7 | |
| | comp=Z,60nm,18.1s,baz=25,slow=36 | | | | | | | |
| **PDAR** | **Pinedale Array** | **92.79** | **329** | P | **P** | | **02 53 32.3** | **-1.6** |
| **ELK** | **Elko** | **96.79** | **332** | LR | LR | | 03 41 35.0 | |
| | comp=Z,84nm,18.4s,baz=42,slow=38 | | | | | | | |
| **SIV** | **San Ignacio** | **96.94** | **255** | LR | LR | | 03 40 28.0 | |
| | comp=Z,34nm,18.8s,baz=12,slow=37 | | | | | | | |
| **ANMO** | **Albuquerque** | **97.67** | **323** | LR | LR | | 03 37 55.9 | |
| | comp=Z,41nm,18.1s,baz=36,slow=35 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **98.58** | **337** | LR | LR | | 03 44 15.1 | |
| | comp=Z,43nm,18.2s,baz=4.0,slow=39 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **99.97** | **333** | LR | LR | | 03 42 41.1 | |
| | comp=Z,53nm,18.5s,baz=83,slow=38 | | | | | | | |
| **ASAR** | **Alice Springs** | **117.04** | **101** | PKP | **PKPdf** | | **02 59 05.9** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=305,slow=1.4,SNR=1.7 | | | | | | | |

*ISK* ***18*** *02:46:14.7,35.31N×26.27E,h5km,ML2.8/11*
*ATH* ***18*** *02:46:16.1,35.21N×26.29E,h21km±4km,ML2.7/3, Error ellipse: s-maj=5.4km s-min=1.2km az=160.0*
*THE* ***18*** *02:46:17.4,35.04N×26.17E,h13km±1km,ML2.5/5, Error ellipse: s-maj=1.9km s-min=0.6km az=161.0*
*DDA* ***18*** *02:46:18.60.0,35.07N×26.71E,h6km±3km,ML2.7*
**ISC 18 02:46:15.3±1.1,35.05N±0.08×26.27E±0.03,h26km±5km, n47,σ1s47/63, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ZKR** | **Zakros** | **0.08** | **325** | P | **Pb** | | **02 46 20.0** | **+0.1** |
| ZKR | | | | S | **Sb** | | **02 46 23.0** | **-0.1** |
| | 12μm,0.2s | | | | | | | |
| **ZKR** | **Zakros** | **0.08** | **325** | P | **Pb** | | **02 46 20.0** | **+0.1** |
| ZKR | | | | S | **Sb** | | **02 46 23.5** | **+0.4** |
| ZKR | | | | AML | AML | | 02 46 23.8 | |
| | comp=N,12187μm,0.1s | | | | | | | |
| ZKR | | | | AML | AML | | 02 46 23.9 | |
| | comp=E,35736μm,0.2s | | | | | | | |
| **ZKR** | **Zakros** | **0.08** | **325** | PG | **Pb** | | **02 46 19.3** | **-0.7** |
| ZKR | | | | SG | **Sb** | | **02 46 23.7** | **+0.6** |
| **FRMA** | **Ierapetra Chan** | **0.44** | **266** | P | **Pb** | | **02 46 23.0** | **-1.6** |
| FRMA | | | | S | **Sb** | | **02 46 27.4** | **-3.5** |
| | comp=E,765nm,0.3s | | | | | | | |
| **NPS** | **Neapolis** | **0.58** | **292** | P | **Pb** | | **02 46 27.1** | **+0.1** |
| NPS | | | | S | **Sb** | | **02 46 35.2** | **+0.4** |
| | comp=E,1μm,0.4s | | | | | | | |
| **NPS** | **Neapolis** | **0.58** | **292** | P | **Pb** | | **02 46 27.1** | **+0.1** |
| NPS | | | | S | **Sb** | | **02 46 34.6** | **-0.2** |
| NPS | | | | AML | AML | | 02 46 37.7 | |
| | comp=N,1899μm,0.3s | | | | | | | |
| NPS | | | | AML | AML | | 02 46 37.9 | |
| | comp=E,2768μm,0.4s | | | | | | | |
| **HRKL** | **Herakleio** | **0.99** | **286** | PG | **Pb** | | **02 46 34.1** | **+0.2** |
| **IACM** | **Heraklion** | **1.02** | **285** | P | **Pb** | | **02 46 34.9** | **+0.7** |
| **IACM** | **Heraklion** | **1.02** | **285** | P | **Pb** | | **02 46 34.9** | **+0.7** |
| **IDI** | **Anoyia** | **1.16** | **282** | P | **Pn** | | **02 46 36.7** | **+0.8** |
| IDI | | | | S | **Sb** | | **02 46 52.0** | **+0.7** |
| | comp=E,155nm,0.4s | | | | | | | |
| **IDI** | **Anoyia** | **1.16** | **282** | P | **Pn** | | **02 46 36.7** | **+0.8** |
| IDI | | | | S | **Sb** | | **02 46 52.0** | **+0.7** |
| IDI | | | | AML | AML | | 02 46 58.9 | |
| | comp=E,213μm,0.6s | | | | | | | |
| IDI | | | | AML | AML | | 02 47 00.5 | |
| | comp=N,254μm,0.6s | | | | | | | |
| **IDI** | **Anoyia** | **1.16** | **282** | PN | **Pn** | | **02 46 36.6** | **+0.8** |
| **THR6** | **Thira Island,** | **1.49** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.07** | **279** | PG | **Pb** | **02 50 49.6** | **-0.3** |
| ZKR | | | | SG | **Sb** | **02 50 53.6** | **+0.3** |
| **FRMA** | **Ierapetra Chan** | **0.47** | **259** | P | **Pb** | **02 50 52.7** | **-2.2** |
| FRMA | | | | S | **Sb** | **02 50 58.7** | **-2.9** |
| | comp=N,2μm,0.6s | | | | | | |
| **NPS** | **Neapolis** | **0.58** | **286** | P | **Pb** | **02 50 56.7** | **0.0** |
| NPS | | | | S | **Sb** | **02 51 04.6** | **-0.1** |
| | comp=N,4μm,0.3s | | | | | | |
| **NPS** | **Neapolis** | **0.58** | **286** | P | **Pb** | **02 50 56.7** | **0.0** |
| NPS | | | | S | **Sb** | **02 51 04.6** | **-0.1** |
| NPS | | | | AML | AML | 02 51 07.5 | |
| | comp=N,6520μm,0.3s | | | | | | |
| NPS | | | | AML | AML | 02 51 07.6 | |
| | comp=E,9722μm,0.3s | | | | | | |
| **HRKL** | **Herakleio** | **1.00** | **282** | PG | **Pb** | **02 51 03.9** | **+0.2** |
| **IACM** | **Heraklion** | **1.02** | **282** | P | **Pb** | **02 51 04.3** | **+0.2** |
| **IACM** | **Heraklion** | **1.02** | **282** | P | **Pb** | **02 51 04.3** | **+0.2** |
| **IDI** | **Anoyia** | **1.17** | **279** | P | **Pn** | **02 51 06.2** | **+0.7** |
| IDI | | | | S | **Sb** | **02 51 21.3** | **0.0** |
| | comp=E,492nm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.17** | **279** | P | **Pb** | **02 51 07.2** | **+0.6** |
| IDI | | | | AML | AML | 02 51 28.3 | |
| | comp=N,1169μm,0.4s | | | | | | |
| IDI | | | | AML | AML | 02 51 28.6 | |
| | comp=E,794μm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **1.17** | **279** | PN | **Pn** | **02 51 06.3** | **+0.7** |
| **THR6** | **Thira Island,** | **1.45** | **330** | P | **Pn** | **02 51 09.8** | **+0.5** |
| **THR6** | **Thira Island,** | **1.45** | **330** | P | **Pn** | **02 51 09.8** | **+0.5** |
| **THR8** | **Santorini-Mono** | **1.46** | **333** | P | **Pn** | **02 51 09.9** | **+0.4** |
| **THR8** | **Santorini-Mono** | **1.46** | **333** | P | **Pn** | **02 51 09.9** | **+0.4** |
| **THR9** | **Santorini-Faro** | **1.47** | **329** | P | **Pn** | **02 51 10.1** | **+0.5** |
| **THR9** | **Santorini-Faro** | **1.47** | **329** | P | **Pn** | **02 51 10.1** | **+0.5** |
| **SNT5** | **Nea Kammeni, S** | **1.49** | **331** | P | **Pn** | **02 51 10.6** | **+0.7** |
| **THR3** | **Thira Island,** | **1.49** | **331** | P | **Pn** | **02 51 10.6** | **+0.7** |
| **THR3** | **Thira Island,** | **1.49** | **331** | P | **Pn** | **02 51 10.6** | **+0.7** |
| **THR2** | **Thira island,** | **1.51** | **333** | P | **Pn** | **02 51 10.8** | **+0.6** |
| **THR2** | **Thira island,** | **1.51** | **333** | P | **Pn** | **02 51 10.8** | **+0.6** |
| **THR5** | **Thira Island,** | **1.52** | **330** | P | **Pn** | **02 51 10.9** | **+0.6** |
| **THR5** | **Thira Island,** | **1.52** | **330** | P | **Pn** | **02 51 10.9** | **+0.6** |
| **CMBO** | **Columbo, Santo** | **1.54** | **332** | P | **Pn** | **02 51 11.4** | **+0.7** |
| **CMBO** | **Columbo, Santo** | **1.54** | **332** | P | **Pn** | **02 51 11.4** | **+0.7** |
| **NISR** | **Nisiros** | **1.65** | **24** | P | **Pn** | **02 51 13.3** | **+1.2** |
| **NISR** | **Nisiros** | **1.65** | **24** | P | **Pn** | **02 51 13.3** | **+1.2** |
| **NIS1** | **Nisyros Isl.** | **1.66** | **25** | P | **Pb** | **02 51 13.8** | **-1.1** |
| **NIS1** | **Nisyros Isl.** | **1.66** | **25** | P | **Pb** | **02 51 13.8** | **-1.1** |
| NIS1 | | | | AML | AML | 02 51 41.8 | |
| | comp=N,1309μm,0.5s | | | | | | |
| NIS1 | | | | AML | AML | 02 51 43.5 | |
| | comp=E,1290μm,0.7s | | | | | | |
| **KOSK** | **Kos Island** | **1.73** | **18** | PN | **Pn** | **02 51 14.3** | **+1.0** |
| **VAM** | **Vamos** | **1.74** | **281** | P | **Pn** | **02 51 14.6** | **+1.2** |
| VAM | | | | S | **Sn** | **02 51 35.3** | **+0.6** |
| **VAM** | **Vamos** | **1.74** | **281** | P | **Pb** | **02 51 17.0** | **+0.7** |
| VAM | | | | AML | AML | 02 51 42.0 | |
| | comp=E,689μm,0.6s | | | | | | |
| VAM | | | | AML | AML | 02 51 44.9 | |
| | comp=N,902μm,0.6s | | | | | | |
| **GVD** | **Gavdhos** | **1.83** | **262** | P | **Pb** | **02 51 18.8** | **+0.9** |
| **GVD** | **Gavdhos** | **1.83** | **262** | PN | **Pb** | **02 51 18.4** | **+0.5** |
| **ARG** | **Arkhangelos** | **1.86** | **53** | P | **Pb** | **02 51 17.5** | **-0.8** |
| ARG | | | | S | **Sb** | **02 51 41.6** | **+0.5** |
| **ARG** | **Arkhangelos** | **1.86** | **53** | P | **Pb** | **02 51 17.5** | **-0.8** |
| ARG | | | | AML | AML | 02 51 44.1 | |
| | comp=E,491μm,0.5s | | | | | | |
| ARG | | | | AML | AML | 02 51 46.1 | |
| | comp=N,435μm,0.6s | | | | | | |
| **ARG** | **Arkhangelos** | **1.86** | **53** | PN | **Pb** | **02 51 18.2** | **-0.1** |
| **IMMV** | **Iera Moni Meta** | **1.93** | **281** | PN | **Pb** | **02 51 18.5** | **-1.0** |
| **BODT** | **Bodrum** | **2.12** | **23** | PN | **Pn** | **02 51 19.6** | **+1.0** |
| **KNDR** | **Palaiochora Ch** | **2.14** | **274** | PN | **Pb** | **02 51 22.9** | **-0.2** |
| **TURN** | **Turunc** | **2.30** | **43** | P | **Pn** | **02 51 22.7** | **+1.7** |
| TURN | | | | S | **Sn** | **02 51 49.5** | **+1.2** |
| **DDIM** | **Aydin, Didim** | **2.47** | **18** | P | **Pn** | **02 51 23.8** | **+0.4** |
| DDIM | | | | S | **Sn** | **02 51 53.6** | **+1.1** |
| **GCAM** | **G?zelcaml?** | **2.70** | **16** | P | **Pb** | **02 51 30.2** | **-2.4** |
| **MULA** | **Mugla, Merkez-** | **2.70** | **37** | P | **Pn** | **02 51 29.5** | **+2.8** |
| MULA | | | | S | **Sn** | **02 51 59.4** | **+1.0** |
| **FETY** | **Fethiye** | **2.73** | **55** | P | **Pn** | **02 51 26.7** | **-0.3** |
| FETY | | | | S | **Sn** | **02 51 59.3** | **+0.1** |
| **AKAS** | **Kas** | **2.92** | **66** | P | **Pn** | **02 51 30.4** | **+0.6** |
| AKAS | | | | S | **Sn** | **02 52 03.8** | **-0.1** |
| AKAS | | | | *i* AML | AML | 02 52 07.0 | |
| | comp=N,119nm,0.4s | | | | | | |
| **DGB** | **zmir** | **2.98** | **9** | P | **Pn** | **02 51 31.6** | **+1.2** |
| DGB | | | | S | **Sn** | **02 52 06.1** | **+0.9** |
| **ZEYE** | **Izmir, Urla-Ze** | **3.13** | **3** | P | **Pn** | **02 51 32.8** | **+0.3** |
| ZEYE | | | | S | **Sn** | **02 52 05.2** | **-3.7** |
| **TAVA** | **DENIZLI_Tavas** | **3.17** | **41** | P | **Pn** | **02 51 35.2** | **+2.1** |
| TAVA | | | | S | **Sn** | **02 52 11.7** | **+1.8** |
| **CAEL** | **Denizli, Camel** | **3.17** | **50** | P | **Pn** | **02 51 35.4** | **+2.2** |
| CAEL | | | | *i* AML | AML | 02 52 43.0 | |
| | comp=N,84nm,1.3s | | | | | | |
| CAEL | | | | *i* AML | AML | 02 52 48.0 | |
| | comp=N,85nm,0.8s | | | | | | |
| **URLA** | **Izmir** | **3.26** | **4** | P | **Pn** | **02 51 35.1** | **+0.8** |
| URLA | | | | S | **Sn** | **02 52 10.1** | **-2.0** |
| **GOLH** | **Golhisar** | **3.39** | **50** | P | **Pn** | **02 51 38.6** | **+2.4** |
| GOLH | | | | S | **Sn** | **02 52 16.6** | **+1.0** |
| GOLH | | | | *i* AML | AML | 02 52 43.0 | |
| | comp=N,44nm,1.0s | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **3.51** | **69** | P | **Pn** | **02 51 38.7** | **+1.0** |
| AKUM | | | | S | **Sn** | **02 52 15.7** | **-2.6** |
| **KORT** | **Korkueli** | **3.79** | **59** | P | **Pn** | **02 51 43.6** | **+1.9** |
| **BRDR** | **BURDUR-Merkez** | **3.99** | **48** | P | **Pn** | **02 51 46.2** | **+1.9** |
| **PASA** | **Karahalli, USA** | **4.13** | **37** | P | **Pn** | **02 51 45.0** | **-1.3** |
| **USAK** | **Uak-Merkez** | **4.21** | **30** | P | **Pn** | **02 51 49.6** | **+2.2** |
| USAK | | | | S | **Sn** | **02 52 35.9** | **+0.3** |
| USAK | | | | *i* AML | AML | 02 52 36.0 | |
| | comp=N,38nm,1.4s | | | | | | |
| **DEMI** | **Demirci** | **4.38** | **26** | P | **Pn** | **02 51 52.1** | **+2.3** |
| **KZIL** | **AFYON_Kizioren** | **4.41** | **43** | P | **Pn** | **02 51 52.7** | **+2.5** |
| **KEPZ** | **Antalya-Kepez** | **4.66** | **66** | P | **Pn** | **02 51 55.1** | **+1.6** |
| KEPZ | | | | S | Sn | 02 52 39.2 | -7.5 |
| **SEDI** | **Konya, Seydise** | **4.99** | **60** | P | **Pn** | **02 52 00.6** | **+2.4** |
| SEDI | | | | S | **Sn** | **02 52 55.4** | **+0.4** |
| SEDI | | | | *i* AML | AML | 02 52 59.0 | |
| | comp=N,15nm,0.6s | | | | | | |
| **GAZI** | **Gazipasa** | **5.03** | **75** | P | **Pn** | **02 51 57.8** | **-0.8** |
| GAZI | | | | S | **Sn** | **02 52 51.9** | **-3.9** |
| **ERMK** | **Ermenek** | **5.59** | **72** | P | **Pn** | **02 52 08.5** | **+2.0** |
| ERMK | | | | S | **Sn** | **02 52 09.3** | **-0.5** |
| ERMK | | | | *i* AML | AML | 02 53 15.0 | |
| | comp=N,16nm,0.7s | | | | | | |
| ERMK | | | | *i* AML | AML | 02 53 21.0 | |
| | comp=N,26nm,0.7s | | | | | | |
| **KKBE** | **Karaman, Kazim** | **5.78** | **67** | P | **Pn** | **02 52 10.6** | **+1.6** |
| KKBE | | | | S | **Sn** | **02 53 13.9** | **-0.4** |
| **KDHN** | **Kadinhani** | **5.78** | **52** | P | **Pn** | **02 52 09.1** | **+0.1** |
| **AKASG** | **Malin Array Be** | **15.73** | **7** | P | **P** | **02 54 28.9** | **+0.7** |
| | comp=N,0.3nm,0.3s,baz=195,slow=11,SNR=1.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **24.41** | **290** | P | **P** | **02 56 00.5** | **-0.6** |
| | comp=N,0.3nm,0.8s,baz=82,slow=9.4,SNR=1.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.18** | **232** | P | **P** | **02 57 01.4** | **-0.4** |
| | comp=N,0.4nm,0.6s,baz=37,slow=8.8,SNR=4.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.49** | **360** | P | P | 02 57 26.9 | -3.3 |
| | comp=N,2.2nm,0.9s,baz=172,slow=8.2,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.03** | **57** | P | **P** | **02 58 42.1** | **+0.1** |
| | comp=N,0.4nm,0.5s,baz=281,slow=7.2,SNR=5.7 | | | | | | |

*NNC **18** 02:57:47.6±0.8, 39°.48N×75°.36E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=5.3km s-min=4.6km az=146.0*
*KRNET **18** 02:57:56.5±0.1, 39°.56N×75°.51E, mb3.0*
*SOME **18** 02:58:04.3, 40°.03N×75°.43E, h10km*

**ISC 18 02:57:57.2±2.0, 39°.79N±0°.09×75°.53E±0°.04, h10km, n42, σ1§51/67, 20C-7D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARLS** | **Aral** | **2.26** | **337** | ⇓*e*P | **Pg** | **02 58 39.9** | **-0.7** |
| | baz=39 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sg** | **02 59 11.6** | **+1.7** |
| | baz=39 | | | | | | |
| **ULHL** | **Ulahol** | **2.51** | **12** | ⇓*i*P | **Pg** | **02 58 43.8** | **-1.6** |
| | baz=11 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sg** | **02 59 18.3** | **+0.3** |
| | baz=11 | | | | | | |
| **UCH** | **Uchtor** | **2.55** | **343** | ⇑*i*P | **Pb** | **02 58 44.2** | **+0.8** |
| | baz=45 | | | | | | |
| UCH | | | | ⇑*i*S | **Sg** | **02 59 19.0** | **-0.3** |
| | baz=45 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.60** | **41** | ⇑*i*P | **Pb** | **02 58 44.4** | **+0.2** |
| | baz=38 | | | | | | |
| TARG | | | | ⇑*i*S | **Sg** | **02 59 19.3** | **-1.5** |
| | baz=38 | | | | | | |
| **KDJ** | **Kajisay** | **2.65** | **28** | ⇑*e*P | **Pb** | **02 58 45.5** | **+0.6** |
| | baz=26 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sg** | **02 59 21.3** | **-1.2** |
| | baz=26 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.71** | **6** | ⇑*e*P | **Pb** | **02 58 46.7** | **+0.7** |
| | baz=6.0 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sg** | **02 59 23.3** | **-1.2** |
| | baz=6.0 | | | | | | |
| **KBK** | **Karagaybulak** | **2.90** | **352** | ⇓*e*P | **Pb** | **02 58 49.1** | **0.0** |
| | baz=52 | | | | | | |
| KBK | | | | ⇓*e*S | **Sg** | **02 59 27.5** | **-2.8** |
| | baz=52 | | | | | | |
| **AAK** | **Ala-Archa** | **2.95** | **345** | ⇑Pg | **Pb** | **02 58 47.1** | **-2.9** |
| | 2.5nm,0.3s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 02 59 29.9 | |
| | 7.5nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **2.95** | **345** | ⇑*e*P | **Pb** | **02 58 49.8** | **-0.2** |
| | baz=46 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **02 59 28.6** | **+2.4** |
| | baz=46 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.13** | **1** | ⇑Pg | **Pb** | **02 58 50.7** | **-2.4** |
| | 2.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 02 59 37.2 | |
| | 20nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **3.16** | **336** | ⇑*e*P | **Pb** | **02 58 52.4** | **-1.1** |
| | baz=38 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **02 59 33.3** | **+1.2** |
| | baz=38 | | | | | | |
| **KST** | **Kastek** | **3.27** | **6** | *e*P | **Pg** | **02 58 58.5** | **-1.3** |
| | 4.0nm,0.7s | | | | | | |
| KST | | | | *e*S | **Sb** | **02 59 37.5** | **+2.2** |
| | 8.9nm,0.4s | | | | | | |
| **KST** | **Kastek** | **3.27** | **6** | Pg | **Pb** | **02 58 52.7** | **-2.7** |
| | 6.2nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 02 59 41.3 | |
| | 8.9nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **3.34** | **14** | *e*P | **Pg** | **02 59 03.1** | **+1.8** |
| | 7.3nm,0.4s | | | | | | |
| IZV | | | | *e*S | **Sg** | **02 59 45.0** | **+0.3** |
| | 9.9nm,0.6s | | | | | | |
| **IZV** | **Izvestkoviy** | **3.34** | **14** | Pg | **Pb** | **02 58 54.9** | **-1.9** |
| | 7.3nm,0.4s | | | | | | |
| IZV | | | | Lg | Lg | 02 59 45.1 | |
| | 9.9nm,0.6s | | | | | | |
| **ANVS** | **Anan'yevo** | **3.40** | **28** | ⇑*i*P | **Pb** | **02 58 55.9** | **-1.8** |
| | baz=26 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sb** | **02 59 39.2** | **+0.1** |
| | baz=26 | | | | | | |
| **MTBS** | **Maitube** | **3.41** | **11** | *e*P | **Pg** | **02 59 03.6** | **+1.1** |
| | 4.3nm,0.5s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **02 59 46.4** | **-0.2** |
| | 6.4nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **3.41** | **11** | Pg | **Pb** | **02 58 55.6** | **-2.2** |
| | 2.4nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 02 59 46.4 | |
| | 6.4nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.42** | **18** | *e*P | **Pg** | **02 59 03.8** | **+1.1** |
| | 5.4nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **02 59 46.5** | **-0.5** |
| | 4.6nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.42** | **18** | Pg | **Pb** | **02 58 55.6** | **-2.5** |
| | 5.4nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 02 59 46.5 | |
| | 4.6nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.42** | **330** | *e*P | **Pg** | **02 59 00.9** | **-2.0** |
| | 1.9nm,0.5s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **02 59 41.9** | **+2.2** |
| | 6.2nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.42** | **330** | Pg | **Pn** | **02 58 53.0** | **+2.3** |
| | 1.5nm,0.2s | | | | | | |
| MRKS | | | | Lg | Lg | 02 59 41.9 | |
| | 6.2nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.45** | **3** | *e*P | **Pg** | **02 59 04.6** | **+1.2** |
| | 3.4nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sg** | **02 59 47.7** | **-0.5** |
| | 13nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **3.45** | **3** | Pg | **Pb** | **02 58 56.3** | **-2.3** |
| | 3.8nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 02 59 47.7 | |
| | 13nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **3.53** | **321** | ⇑*i*P | **Pb** | **02 58 57.2** | **-2.7** |
| | baz=23 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **02 59 41.5** | **-1.4** |
| | baz=23 | | | | | | |
| **MDOK** | **Medeo** | **3.56** | **18** | *e*P | **Pg** | **02 59 06.3** | **+0.9** |
| | 3.8nm,0.4s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **02 59 51.1** | **-0.4** |
| | 13nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.56** | **18** | Pg | **Pb** | **02 58 58.5** | **-1.9** |
| | 3.1nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 02 59 51.1 | |
| | 13nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.64** | **19** | *e*P | **Pg** | **02 59 07.6** | **+0.6** |
| | 3.2nm,0.5s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **02 59 53.2** | **-1.0** |
| | 15nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.64** | **19** | Pg | **Pb** | **02 59 00.3** | **-1.5** |
| | 2.1nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 02 59 54.2 | |
| | 15nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **3.90** | **2** | *e*P | **Pg** | **02 59 12.9** | **+0.9** |
| | 2.2nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **03 00 02.3** | **-0.3** |
| | 4.8nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **3.90** | **2** | Pg | **Pb** | **02 59 04.8** | **-1.4** |
| | 2.1nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 03 00 02.3 | |
| | 4.8nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **4.01** | **12** | *e*P | **Pg** | **02 59 14.3** | **+0.2** |
| | 2.4nm,0.8s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **03 00 05.2** | **-0.9** |
| | 14nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **4.01** | **12** | Pg | **Pb** | **02 59 06.7** | **-1.3** |
| | 2.2nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 03 00 05.4 | |
| | 14nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **4.14** | **8** | *e*P | **Pg** | **02 59 16.6** | **-0.1** |
| | 1.2nm,0.9s | | | | | | |
| KUU | | | | *e*S | **Sg** | **03 00 09.0** | **-1.3** |
| | 7.4nm,0.8s | | | | | | |
| **KUU** | **Kurty** | **4.14** | **8** | Pg | **Pb** | **02 59 09.5** | **-0.8** |
| | 2.9nm,1.3s | | | | | | |
| KUU | | | | Lg | Lg | 03 00 10.2 | |
| | 5.0nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **4.37** | **32** | *e*P | **Pg** | **02 59 20.3** | **-0.6** |
| | 2.3nm,0.5s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **03 00 15.1** | **-2.4** |
| | 6.5nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **4.62** | **39** | Pg | **Pb** | **02 59 17.6** | **-0.8** |
| | 1.3nm,0.6s | | | | | | |
| PDGK | | | | Lg | Lg | 03 00 24.1 | |
| | 3.7nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **4.62** | **39** | ⇑Lg | **Pg** | **03 00 23.5** | |
| | 14nm,1.3s | | | | | | |
| **ARXS** | **Arharly** | **4.74** | **20** | *e*P | **Pg** | **02 59 26.7** | **-1.3** |
| | 1.9nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **03 00 26.5** | **-2.9** |
| | 3.7nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.74** | **20** | Pg | **Pb** | **02 59 20.5** | **+0.1** |
| | 1.9nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 03 00 29.2 | |
| | 3.7nm,0.5s | | | | | | |
| **IUG** | **luzhnay** | **4.78** | **301** | *e*P | **Pg** | **02 59 29.1** | **+0.3** |
| | 48nm,0.8s | | | | | | |
| IUG | | | | *e*S | **Sg** | **03 00 29.9** | **-0.8** |
| | 7.3nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **5.36** | **349** | *e*P | **Pg** | **02 59 39.9** | **0.0** |
| | 1.6nm,0.7s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **03 00 48.3** | **-1.0** |
| | 3.4nm,0.5s | | | | | | |

**IDC 18 03:05:52.7±7.8, 22°.67S×177°.76W, h0km, mb3.7/3, mb1 4.0/3, mb1mx3.4/24, mbtmp3.7/3, Error ellipse: s-maj=330.2km s-min=56.0km az=147.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **44.28** | **259** | P | P | 03 14 04.2 | -0.3 |
| | 0.4nm,0.4s,baz=88,slow=6.6,SNR=9.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **264** | P | P | 03 14 05.9 | -0.9 |
| | 0.4nm,0.4s,baz=102,slow=8.2,SNR=8.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.99** | **264** | P | P | 03 15 12.5 | +1.0 |
| | 1.7nm,0.9s,baz=83,slow=8.1,SNR=2.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.00** | **330** | PKPbc | PKPbc | 03 25 30.3 | -0.7 |
| | 1.0nm,0.5s,baz=44,slow=4.2,SNR=8.3 | | | | | | |

*TIR **18** 03:09:03.0, 40°.34N×19°.35E, h8km±2km, Md2.9, Ml3.5*
*ATH **18** 03:09:03.0, 40°.28N×19°.23E, h18km±3km, ML2.8/4, Error ellipse: s-maj=4.6km s-min=2.3km az=106.0*
*THE **18** 03:09:03.8, 40°.30N×19°.33E, h1km±5km, ML2.7/4, Error ellipse: s-maj=6.4km s-min=0.9km az=273.0*

**ISC 18 03:09:02.0±1.2, 40°.31N±0°.03×19°.23E±0°.04, h7km±9km, n48, σ1§66/70, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VLO** | **Vlora** | **0.26** | **51** | P | **Pg** | **03 09 07.6** | **+0.4** |
| VLO | | | | S | **Sg** | **03 09 10.6** | **-0.1** |
| | 22μm,0.2s | | | | | | |
| **VLO** | **Vlora** | **0.26** | **51** | P | **Pg** | **03 09 07.2** | **0.0** |
| | baz=41 | | | | | | |
| VLO | | | | S | **Sg** | **03 09 10.2** | **-0.5** |
| | baz=41 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=N,109nm,0.2s,baz=41 | | | | | | |
| **HIMA** | **Himara** | **0.46** | **118** | P | **Pg** | **03 09 10.4** | **-0.6** |
| | baz=128 | | | | | | |
| HIMA | | | | S | **Sg** | **03 09 16.6** | **-0.4** |
| | baz=128 | | | | | | |
| **FIER** | **Fieri** | **0.48** | **32** | P | **Pg** | **03 09 10.8** | **-0.6** |
| | baz=23 | | | | | | |
| FIER | | | | S | **Sg** | **03 09 17.4** | **-0.4** |
| | baz=23 | | | | | | |
| **TPE** | **Tepelena** | **0.60** | **91** | P | **Pg** | **03 09 12.8** | **-0.8** |
| | baz=95 | | | | | | |
| TPE | | | | S | **Sg** | **03 09 20.8** | **-0.6** |
| | baz=95 | | | | | | |
| **KEK** | **Kerkira** | **0.74** | **143** | P | **Pg** | **03 09 16.5** | **+0.3** |
| KEK | | | | S | **Sg** | **03 09 26.1** | **+0.3** |
| | comp=N,402nm,0.3s | | | | | | |
| **KEK** | **Kerkira** | **0.74** | **143** | P | **Pb** | **03 09 17.2** | **0.0** |
| KEK | | | | S | **Sg** | **03 09 26.1** | **+0.3** |
| KEK | | | | AML | AML | 03 09 35.2 | |
| | comp=N,750μm,0.4s | | | | | | |
| KEK | | | | AML | AML | 03 09 36.4 | |
| | comp=E,854μm,0.2s | | | | | | |
| **KASA** | **Kassiopi** | **0.78** | **136** | P | **Pb** | **03 09 18.4** | **+0.6** |
| **IGT** | **Igoumenitsa** | **1.15** | **132** | P | **Pg** | **03 09 23.6** | **-0.5** |
| IGT | | | | S | **Sn** | **03 09 40.6** | **+0.2** |
| | comp=E,288nm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.15** | **132** | P | **Pg** | **03 09 23.6** | **-0.5** |
| IGT | | | | AML | AML | 03 09 44.0 | |
| | comp=N,529μm,0.4s | | | | | | |
| IGT | | | | AML | AML | 03 09 46.7 | |
| | comp=E,624μm,0.6s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.15** | **132** | P | **Pn** | **03 09 24.9** | **+0.4** |
| | baz=136 | | | | | | |
| IGT | | | | S | **Sn** | **03 09 41.2** | **+0.8** |
| | baz=136 | | | | | | |
| **KBN** | **Korca** | **1.23** | **75** | P | **Pn** | **03 09 25.9** | **+0.2** |
| KBN | | | | S | **Sn** | **03 09 41.6** | **-1.0** |
| | comp=E,310nm,0.9s | | | | | | |
| **KBN** | **Korca** | **1.23** | **75** | P | **Pn** | **03 09 25.7** | **0.0** |
| | baz=75 | | | | | | |
| KBN | | | | S | **Sn** | **03 09 42.1** | **-0.5** |
| | baz=75 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,1.3nm,0.9s,baz=75 | | | | | | |
| **NEST** | **Nestorio** | **1.40** | **85** | P | **Pg** | **03 09 28.9** | **+0.1** |
| **NEST** | **Nestorio** | **1.40** | **85** | P | **Pg** | **03 09 28.9** | **+0.1** |
| **JAN** | **Janina** | **1.41** | **117** | P | **Pb** | **03 09 28.3** | **-0.3** |
| **JAN** | **Janina** | **1.41** | **117** | P | **Pb** | **03 09 28.3** | **-0.3** |
| JAN | | | | AML | AML | 03 09 51.8 | |
| | comp=N,1135μm,0.6s | | | | | | |
| JAN | | | | AML | AML | 03 09 52.2 | |
| | comp=E,1617μm,0.3s | | | | | | |
| **OHR** | **Ohrid** | **1.44** | **56** | *i* Pn | **Pg** | **03 09 31.2** | **+1.6** |
| OHR | | | | *i* Sn | **Sg** | **03 09 50.7** | **+2.4** |
| **PENT** | **Pentalofos** | **1.47** | **94** | P | **Pg** | **03 09 30.1** | **-0.1** |
| **PENT** | **Pentalofos** | **1.47** | **94** | P | **Pg** | **03 09 30.8** | **+0.6** |
| **KPRO** | **Kipourio** | **1.67** | **101** | P | **Pg** | **03 09 33.9** | **-0.3** |
| KPRO | | | | AML | AML | 03 10 02.4 | |
| | comp=E,576μm,0.8s | | | | | | |
| KPRO | | | | AML | AML | 03 10 03.7 | |
| | comp=N,451μm,0.4s | | | | | | |
| **FNA** | **Florina** | **1.71** | **73** | P | **Pb** | **03 09 33.5** | **-0.2** |
| **FNA** | **Florina** | **1.71** | **73** | P | **Pb** | **03 09 33.5** | **-0.2** |
| **FNA** | **Florina** | **1.71** | **73** | P | **Pg** | **03 09 34.1** | **-0.7** |
| | baz=73 | | | | | | |
| FNA | | | | S | **Sg** | **03 09 57.0** | **+0.1** |
| | baz=73 | | | | | | |
| **NOCI** | **Noci** | **1.72** | **287** | P | **Pn** | **03 09 34.1** | **+1.7** |
| **TSLK** | **Tsoukalades, L** | **1.84** | **143** | P | **Pb** | **03 09 35.3** | **-0.8** |
| **TSLK** | **Tsoukalades, L** | **1.84** | **143** | P | **Pb** | **03 09 35.3** | **-0.8** |
| **EVR** | **Evrytania** | **2.43** | **124** | P | **Pb** | **03 09 44.7** | **-1.4** |
| **MAKR** | **Makrakomi, Fth** | **2.59** | **119** | P | **Pb** | **03 09 47.1** | **-1.6** |
| **VAY** | **Valandovo** | **2.73** | **67** | *i* Pn | Pn | 03 09 37.8 | -8.4 |
| **STON** | **Ston** | **2.81** | **336** | *e*Pn | **Pn** | **03 09 47.0** | **-0.3** |
| STON | | | | Sn | **Sn** | **03 10 17.4** | **-3.9** |
| **LAKA** | **Lakka** | **2.97** | **133** | P | **Pn** | **03 09 51.3** | **+1.7** |
| **LAKA** | **Lakka** | **2.97** | **133** | P | **Pn** | **03 09 51.3** | **+1.7** |
| **LSTV** | **Lastovo** | **3.02** | **325** | *e*Pn | **Pn** | **03 09 51.5** | **+1.3** |
| LSTV | | | | Sn | **Sn** | **03 10 24.2** | **-2.4** |
| **MAKA** | **Makarska** | **3.41** | **332** | *e*Pn | **Pn** | **03 09 57.3** | **+1.8** |
| **HVAR** | **Hvar** | **3.54** | **325** | *e*Pn | **Pn** | **03 09 58.6** | **+1.2** |
| HVAR | | | | Sn | **Sn** | **03 10 37.1** | **-2.5** |
| **RICI** | **Ricice** | **3.55** | **335** | *e*Pn | **Pn** | **03 09 57.9** | **+0.3** |
| RICI | | | | Sn | **Sn** | **03 10 37.7** | **-2.0** |
| **KIJV** | **Kijevo** | **4.25** | **331** | *e*Pn | **Pn** | **03 10 08.7** | **+1.5** |
| KIJV | | | | Sn | **Sn** | **03 10 55.2** | **-1.8** |
| **ZIRJ** | **Zirje** | **4.28** | **323** | *e*Pn | **Pn** | **03 10 08.1** | **+0.6** |
| ZIRJ | | | | Sn | **Sn** | **03 10 55.4** | **-2.3** |
| **MORI** | **Morici** | **4.42** | **325** | *e*Pn | **Pn** | **03 10 10.8** | **+1.4** |
| MORI |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.71** | **197** | Pn | Pn | 03 17 25.6 | +0.1 |
| | 0.7nm,0.3s,baz=18,slow=12,SNR=26 | | | | | | |
| FITZ | | | | Sn | Sn | 03 19 23.7 | -13 |
| | 0.8nm,0.3s,baz=91,slow=9.3,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.94** | **160** | Pn | Pn | 03 17 55.8 | -0.2 |
| | 0.3nm,0.3s,baz=342,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 03 20 18.2 | -13 |
| | 0.8nm,0.3s,baz=333,slow=23,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **17.32** | **165** | P | Pn | 03 18 40.5 | +0.1 |
| | 0.2nm,0.3s,baz=343,slow=10,SNR=8.2 | | | | | | |
| ASAR | | | | S | Sn | 03 21 38.4 | -16 |
| | 0.2nm,0.3s,baz=320,slow=19,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.67** | **327** | P | P | 03 25 36.1 | 0.0 |
| | 0.1nm,0.3s,baz=132,slow=8.3,SNR=4.8 | | | | | | |

*KRNET **18** 03:29:12.3±0.1,39.15N×71.70E,h16km,mb3.1*
*NNC **18** 03:29:13.3±4.0,39.19N×71.60E,h0km,mb4.0,mpv3.7,*
*Error ellipse: s-maj=31.5km s-min=18.1km az=9.0*
*ISU **18** 03:29:16,39.40N×71.60E,h5km*
*SOME **18** 03:29:19.3,39.55N×71.57E,h15km*
**ISC 18 03:29:17.3±1.3,39.48N±0.06×71.56E±0.03,h10km,n41,**
**σ2s65/69,24C-7D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **0.18** | **89** | ⇑*i*P | **Pg** | **03 29 19.2** | **-2.2** |
| | baz=14 | | | | | | |
| DRK | | | | ⇑*i*S | **Sg** | **03 29 24.3** | **0.0** |
| | baz=14 | | | | | | |
| **BTK** | **Batken** | **0.82** | **315** | *e*P | **Pg** | **03 29 33.0** | **-0.1** |
| BTK | | | | *e*S | **Sn** | **03 29 51.0** | **+3.8** |
| **BTK** | **Batken** | **0.82** | **315** | ⇓*i*P | **Pb** | **03 29 33.6** | **-0.1** |
| | baz=24 | | | | | | |
| BTK | | | | ⇓*i*S | **Sn** | **03 29 49.1** | **+1.9** |
| | baz=24 | | | | | | |
| **FRG** | **Fergana** | **0.91** | **11** | *e*P | **Pb** | **03 29 35.0** | **-0.3** |
| FRG | | | | *e*S | **Sn** | **03 29 52.0** | **+2.5** |
| **TSTA** | **Tashata** | **1.30** | **32** | *e*P | **Pg** | **03 29 43.0** | **+0.6** |
| TSTA | | | | *e*S | **Sg** | **03 30 02.0** | **+2.7** |
| **OHH** | **Osh** | **1.40** | **42** | ⇑*i*P | **Pn** | **03 29 41.9** | **-1.2** |
| | baz=31 | | | | | | |
| OHH | | | | ⇑*i*S | **Sg** | **03 30 03.5** | **+1.0** |
| | baz=31 | | | | | | |
| **ANR** | **Andizhan** | **1.41** | **25** | *e*P | **Pg** | **03 29 46.0** | **+1.5** |
| ANR | | | | *e*S | **Sg** | **03 30 10.0** | **+7.2** |
| **TRKS** | **Terek-Say** | **2.08** | **351** | ⇓*i*P | **Pn** | **03 29 53.1** | **+0.7** |
| | baz=50 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sg** | **03 30 22.9** | **-1.1** |
| | baz=50 | | | | | | |
| **SALK** | **Salom-Alik** | **2.23** | **50** | ⇑*e*P | **Pn** | **03 29 53.6** | **-0.8** |
| | baz=43 | | | | | | |
| SALK | | | | ⇑*e*S | **Sb** | **03 30 24.1** | **-1.3** |
| | baz=43 | | | | | | |
| **ARK** | **Arkit** | **2.34** | **7** | ⇑*i*P | **Pb** | **03 29 57.5** | **-2.1** |
| | baz=4.0 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **03 30 30.5** | **-1.9** |
| | baz=4.0 | | | | | | |
| **IUG** | **Iuzhnay** | **2.91** | **337** | *e*P | **Pg** | **03 30 11.9** | **-1.2** |
| | 438nm,0.3s | | | | | | |
| IUG | | | | *e*S | **Sg** | **03 30 48.5** | **-2.3** |
| | 97nm,0.5s | | | | | | |
| **IUG** | **Iuzhnay** | **2.91** | **337** | Pg | **Pb** | **03 30 08.9** | **-0.4** |
| | 438nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 03 30 48.5 | |
| | 97nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **3.09** | **13** | ⇑*e*P | **Pn** | **03 30 07.7** | **+1.4** |
| | baz=10.0 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **03 30 47.8** | **-2.5** |
| | baz=10.0 | | | | | | |
| **AML** | **Almayashu** | **3.10** | **31** | P | **Pb** | **03 30 09.5** | **-3.4** |
| | SNR=22 | | | | | | |
| **ARLS** | **Aral** | **3.17** | **41** | ⇑*i*P | **Pn** | **03 30 07.2** | **-0.3** |
| | baz=36 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **03 30 47.2** | **+1.7** |
| | baz=36 | | | | | | |
| **MRKS** | **Merke** | **3.50** | **21** | *e*P | **Pb** | **03 30 19.8** | **+0.4** |
| | 5.2nm,0.7s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **03 31 01.8** | **-0.2** |
| | 20nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **3.50** | **21** | Pg | **Pb** | **03 30 16.6** | **-2.8** |
| | 6.3nm,0.6s | | | | | | |
| MRKS | | | | Lg | Lg | 03 31 01.8 | |
| | 20nm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **3.54** | **38** | P | **Pn** | **03 30 15.7** | **+2.9** |
| | SNR=22 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.59** | **27** | P | **Pb** | **03 30 17.1** | **-3.9** |
| | SNR=23 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.59** | **27** | ⇑*e*P | **Pn** | **03 30 14.0** | **+0.8** |
| | baz=24 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **03 30 59.1** | **+3.3** |
| | baz=24 | | | | | | |
| **KK02** | **Karatay Array** | **3.71** | **348** | ⇑Pn | **Pn** | **03 30 16.9** | **+2.3** |
| | 1.9nm,0.3s | | | | | | |
| KK02 | | | | ⇑Pg | **Pg** | **03 30 27.3** | **-1.1** |
| | 4.3nm,0.5s | | | | | | |
| KK02 | | | | ⇓Sn | **Sb** | **03 31 05.2** | **-2.7** |
| | 6.3nm,0.4s | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 03 31 20.2 | |
| | 12nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **3.78** | **340** | *e*P | **Pb** | **03 30 22.1** | **-2.1** |
| | 3.6nm,0.2s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **03 31 06.0** | **-4.0** |
| | 5.9nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.86** | **34** | P | **Pb** | **03 30 20.8** | **-4.8** |
| | SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **3.86** | **34** | ⇑Pn | **Pn** | **03 30 19.2** | **+2.3** |
| | 6.1nm,0.5s | | | | | | |
| AAK | | | | ⇑Pg | **Pg** | **03 30 29.2** | **-2.0** |
| | 6.5nm,0.7s | | | | | | |
| AAK | | | | ⇓Sn | **Sb** | **03 31 08.3** | **-4.1** |
| | 4.8nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 03 31 23.3 | |
| | 14nm,0.7s | | | | | | |
| **KBK** | **Karagaybulak** | **4.08** | **38** | P | **Pn** | **03 30 23.9** | **+4.0** |
| | SNR=9.1 | | | | | | |
| **CHMS** | **Chumysh** | **4.26** | **33** | P | **Pn** | **03 30 25.9** | **+3.6** |
| | SNR=20 | | | | | | |
| **USP** | **Ospenovka** | **4.38** | **29** | P | **Pn** | **03 30 27.6** | **+3.6** |
| | SNR=19 | | | | | | |
| **SGDS** | **Sogindy** | **4.59** | **29** | *e*P | **Pg** | **03 30 43.8** | **-1.4** |
| | 2.5nm,0.2s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **03 31 43.0** | **-1.7** |
| | 8.8nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **40** | P | **Pn** | **03 30 30.3** | **+3.3** |
| | SNR=7.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **40** | ⇓Pn | **Pn** | **03 30 28.3** | **+1.3** |
| | 3.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Pg | **Pg** | **03 30 41.7** | **-3.5** |
| | 3.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sn** | **03 31 25.1** | **+4.6** |
| | 4.5nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 03 31 46.2 | |
| | 7.4nm,0.8s | | | | | | |
| **KST** | **Kastek** | **4.87** | **42** | *e*P | **Pb** | **03 30 45.3** | **+2.6** |
| | 5.5nm,1.1s | | | | | | |
| KST | | | | *e*S | **Sb** | **03 31 46.2** | **+4.9** |
| | 4.8nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.87** | **42** | Pg | **Pb** | **03 30 40.9** | **-1.8** |
| | 6.6nm,0.8s | | | | | | |
| KST | | | | Lg | Lg | 03 31 43.3 | |
| | 4.8nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.92** | **39** | *e*P | **Pg** | **03 30 49.4** | **-2.1** |
| | 10nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **03 31 53.0** | **-2.1** |
| | 15nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.92** | **39** | Pg | **Pb** | **03 30 42.7** | **-0.9** |
| | 10nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 03 31 46.5 | |
| | 15nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **5.22** | **35** | *e*P | **Pg** | **03 30 54.5** | **-2.8** |
| | 1.7nm,0.7s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **03 32 01.3** | **-3.6** |
| | 5.1nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **5.22** | **35** | Pg | **Pb** | **03 30 51.2** | **+2.4** |
| | 2.5nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 03 32 01.3 | |
| | 5.1nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.39** | **47** | *e*P | **Pg** | **03 30 58.1** | **-2.5** |
| | 2.4nm,0.6s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **03 32 07.8** | **-2.7** |
| | 3.1nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.39** | **47** | Pg | **Pb** | **03 30 54.0** | **+2.1** |
| | 3.3nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 03 32 05.9 | |
| | 3.1nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.61** | **46** | *e*P | **Pg** | **03 31 02.2** | **-2.6** |
| | 2.6nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **03 32 15.1** | **-2.4** |
| | 8.6nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.61** | **46** | Pg | **Pb** | **03 30 58.6** | **+3.1** |
| | 4.3nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 03 32 13.7 | |
| | 8.6nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **12.82** | **323** | ⇑Pn | **Pn** | **03 32 19.4** | **0.0** |
| | 0.3nm,0.5s,baz=130,slow=13,SNR=11 | | | | | | |

*NEIC **18** 03:52:05.3±1.5,30.39S±0.03×71.71W±0.03,h23km±12km,*
*mb4.1/1,ML4.0(GUC),Error ellipse: s-maj=5.7km*
*s-min=2.6km az=136.0*
*GUC **18** 03:52:06.0±0.7,30.42S×71.66W,h27km±4km,ML4.0*
**ISC 18 03:52:05.4±1.1,30.43S±0.03×71.68W±0.07,h27km±9km,**
**n45,σ0s88/54,3C-5D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.25** | **171** | Pg | **Pb** | **03 52 12.0** | **+0.1** |
| CO06 | | | | Sg | **Sb** | **03 52 16.3** | **0.0** |
| **CO06** | **Fray Jorge** | **0.25** | **171** | ⇑*i*P | **Pb** | **03 52 12.0** | **+0.1** |
| CO06 | | | | *i* S | **Sb** | **03 52 16.4** | **0.0** |
| CO06 | | | | IAML | | 03 52 16.8 | |
| | comp=N,51μm,0.3s | | | | | | |
| **CO05** | **La Serena** | **0.63** | **37** | | **Pb** | **03 52 18.0** | **+0.1** |
| CO05 | | | | Sg | **Sb** | **03 52 25.4** | **-1.0** |
| **CO05** | **La Serena** | **0.63** | **37** | ⇓*i*P | **Pb** | **03 52 18.1** | **+0.2** |
| CO05 | | | | *i* S | **Sb** | **03 52 26.1** | **-0.3** |
| CO05 | | | | IAML | | 03 52 30.7 | |
| | comp=E,5μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **0.80** | **72** | | **Pb** | **03 52 20.9** | **0.0** |
| GO04 | | | | Sg | **Sb** | **03 52 31.5** | **0.0** |
| **GO04** | **Tololo Observa** | **0.80** | **72** | ⇓*i*P | **Pb** | **03 52 21.9** | **0.0** |
| GO04 | | | | *i* S | **Sb** | **03 52 31.2** | **-0.3** |
| **CO03** | **El Pedregal** | **0.95** | **116** | | **Pn** | **03 52 22.5** | **-0.6** |
| CO03 | | | | Sg | **Sb** | **03 52 35.5** | **0.0** |
| **CO03** | **El Pedregal** | **0.95** | **116** | ⇓*i*P | **Pn** | **03 52 22.7** | **-0.4** |
| CO03 | | | | *i* S | **Sb** | **03 52 35.5** | **0.0** |
| CO03 | | | | IAML | | 03 52 36.0 | |
| | comp=E,5μm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **0.97** | **143** | | **Pn** | **03 52 23.0** | **-0.4** |
| **CO02** | **Combarbal** | **0.97** | **143** | ⇓*i*P | **Pn** | **03 52 23.1** | **-0.4** |
| CO02 | | | | *i* S | **Sb** | **03 52 36.5** | **+0.3** |
| CO02 | | | | IAML | | 03 52 39.7 | |
| | comp=N,13μm,0.4s | | | | | | |
| **LCO** | **Las Campanas** | **1.65** | **31** | Pn | **Pn** | **03 52 33.5** | **+0.7** |
| **LCO** | **Las Campanas** | **1.65** | **31** | ⇑*i*P | **Pn** | **03 52 33.9** | **+1.0** |
| LCO | | | | *i* S | **Sb** | **03 52 55.9** | **+0.2** |
| **VA06** | **Catapilco** | **2.15** | **171** | Pn | **Pn** | **03 52 40.2** | **+0.6** |
| **VA06** | **Catapilco** | **2.15** | **171** | *e*P | **Pn** | **03 52 39.8** | **+0.2** |
| VA06 | | | | IAML | | 03 53 14.9 | |
| | comp=E,2μm,0.7s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.28** | **14** | Pn | **Pn** | **03 52 41.5** | **+0.2** |
| **AC04** | **Llanos de Chal** | **2.28** | **14** | *e*P | **Pn** | **03 52 41.4** | **+0.2** |
| AC04 | | | | IAML | | 03 53 23.6 | |
| | comp=E,626nm,0.8s | | | | | | |
| **VA03** | **San Esteban** | **2.52** | **158** | | **Pn** | **03 52 46.1** | **+1.3** |
| **VA03** | **San Esteban** | **2.52** | **158** | *e*P | **Pn** | **03 52 47.0** | **+2.2** |
| VA03 | | | | IAML | | 03 53 29.3 | |
| | comp=E,848nm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **2.60** | **168** | *e*P | **Pn** | **03 52 46.6** | **+0.6** |
| ROCH | | | | IAML | | 03 53 26.6 | |
| | comp=N,616nm,0.3s | | | | | | |
| ROCH | | | | IAML | | 03 53 28.0 | |
| | comp=N,778nm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **2.60** | **168** | | **Pn** | **03 52 46.2** | **+0.2** |
| **PEL** | **Peldehue** | **2.84** | **163** | | **Pn** | **03 52 50.2** | **+1.1** |
| **PEL** | **Peldehue** | **2.84** | **163** | ⇓*i*P | **Pn** | **03 52 50.2** | **+1.1** |
| PEL | | | | IAML | | 03 53 34.5 | |
| | comp=E,341nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **2.86** | **171** | | **Pn** | **03 52 50.9** | **+1.5** |
| **MT02** | **Curacav** | **2.86** | **171** | *e*P | **Pn** | **03 52 49.8** | **+0.5** |
| MT02 | | | | IAML | | 03 53 40.7 | |
| | comp=E,231nm,0.4s | | | | | | |
| **MT05** | **Renca** | **3.06** | **165** | | **Pn** | **03 52 54.2** | **+2.0** |
| **MT05** | **Renca** | **3.06** | **165** | *e*P | **Pn** | **03 52 54.6** | **+2.4** |
| MT05 | | | | IAML | | 03 53 44.9 | |
| | comp=E,969nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.09** | **25** | Pn | **Pn** | **03 52 53.5** | **+1.0** |
| **GO03** | **Copiap** | **3.09** | **25** | *e*P | **Pn** | **03 52 53.0** | **+0.5** |
| **VA05** | **Santo Domingo** | **3.22** | **179** | | **Pn** | **03 52 54.7** | **+0.5** |
| **VA05** | **Santo Domingo** | **3.22** | **179** | IAML | | 03 53 52.0 | |
| | comp=N,444nm,0.3s | | | | | | |
| **MT09** | **Talagante** | **3.39** | **170** | | **Pn** | **03 52 57.6** | **+0.9** |
| **MT09** | **Talagante** | **3.39** | **170** | ⇑*i*P | **Pn** | **03 52 57.7** | **+0.9** |
| MT09 | | | | IAML | | 03 53 57.3 | |
| | comp=N,269nm,0.4s | | | | | | |
| **MT01** | **Popeta** | **3.45** | **174** | | **Pn** | **03 52 58.2** | **+0.8** |
| **MT01** | **Popeta** | **3.45** | **174** | *e*P | **Pn** | **03 52 57.6** | **+0.2** |
| MT01 | | | | IAML | | 03 53 54.3 | |
| | comp=E,223nm,0.6s | | | | | | |
| **LMEL** | **Las Melosas** | **3.63** | **160** | Pn | **Pn** | **03 53 01.3** | **+1.2** |
| **BO04** | **La Punta** | **3.67** | **166** | | **Pn** | **03 53 01.3** | **+0.8** |
| **BO01** | **Tunca** | **3.99** | **173** | | **Pn** | **03 53 06.0** | **+1.2** |
| **BO01** | **Tunca** | **3.99** | **173** | *e*P | **Pn** | **03 53 05.3** | **+0.6** |
| **AC02** | **Maricunga** | **4.22** | **33** | Pn | **Pn** | **03 53 08.5** | **0.0** |
| **BO02** | **Sierra Bellavi** | **4.42** | **170** | | **Pn** | **03 53 12.1** | **+1.3** |
| **BO02** | **Sierra Bellavi** | **4.42** | **170** | *e*P | **Pn** | **03 53 11.3** | **+0.5** |
| **GO05** | **Huala** | **4.58** | **183** | Pn | **Pn** | **03 53 11.7** | **-1.2** |
| **ML02** | **Panimavida** | **5.33** | **178** | Pn | **Pn** | **03 53 23.9** | **+0.7** |
| **PB15** | **IPOC Station P** | **7.45** | **16** | Pn | **Pn** | **03 53 51.4** | **-1.3** |
| **BDFB** | **Brasilia** | **26.21** | **61** | P | **P** | **03 57 37.7** | **-0.6** |
| BDFB | | | | IAmb | IAmb | 03 57 42.8 | |
| | comp=Z,6.9nm,1.3s | | | | | | |

*IDC **18** 03:57:51.8±1.7,7.42S×128.32E,h135km±16km,mb3.7/6,*
*mb1 3.8/9,mb1mx3.4/36,mbtmp4.3/9,Error ellipse:*
*s-maj=18.9km s-min=13.4km az=114.0*
*DJA **18** 03:57:59.0±0.4,8°S×12°8E±°,h86km±11km,M4.7/6,*
*mb4.7/5,mB5.5/3,MLv4.7/6,Mw(mB)5.0/3*
**ISC 18 03:57:52.5±0.6,7.48S±0.06×128.35E±0.05,h150km,n46,**
**σ2s19/48,mb4.0/7,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.97** | **100** | P | **Pn** | **03 58 43.6** | **+4.1** |
| SAUI | | | | S | **Sn** | **03 59 12.6** | **-3.2** |
| **SOEI** | **Soe** | **4.62** | **240** | P | **Pn** | **03 59 01.6** | **+0.5** |
| SOEI | | | | S | **Sn** | **03 59 50.5** | **-4.0** |
| **SOEI** | **Soe** | **4.62** | **240** | P | **Pn** | **03 59 02.3** | **+1.2** |
| **BATI** | **Baumata** | **5.36** | **239** | P | **Pn** | **03 59 10.1** | **-0.7** |
| | 26nm,0.3s,baz=160,slow=4.9,SNR=5.2 | | | | | | |
| BATI | | | | S | **Sn** | **04 00 11.4** | **-0.6** |
| | 55nm,0.3s,baz=124,slow=22,SNR=13 | | | | | | |
| **BATI** | **Baumata** | **5.36** | **239** | P | **Pn** | **03 59 10.9** | **+0.1** |
| BATI | | | | S | **Sn** | **04 00 09.4** | **-2.6** |
| **DRS** | **Darwin Rock St** | **5.53** | **153** | P | **Pn** | **03 59 12.0** | **-1.0** |
| **FAKI** | **Fak Fak** | **5.97** | **41** | P | Pn | 03 59 35.6 | +17 |
| | 0.2nm33nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **5.97** | **41** | P | **Pn** | **03 59 17.1** | **-1.8** |
| **MTN** | **Manton Dam** | **6.00** | **153** | P | **Pn** | **03 59 18.6** | **-0.6** |
| **KDU** | **Kakadu** | **6.58** | **142** | P | **Pn** | **03 59 25.8** | **-1.2** |
| **SIJI** | **Sorong** | **7.18** | **24** | P | **Pn** | **03 59 33.7** | **-1.4** |
| | 5.5nm,0.3s,baz=206,slow=23,SNR=8.4 | | | | | | |
| SIJI | | | | S | **Sn** | **04 00 54.2** | **-1.4** |
| | 1.7nm,0.3s,baz=143,slow=13,SNR=2.3 | | | | | | |
| **KNRA** | **Kununurra** | **8.16** | **177** | P | **Pn** | **03 59 46.9** | **-1.2** |
| **PLAI** | **Plampang** | **10.55** | **262** | P | **Pn** | **04 00 19.2** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **194** | P | **Pn** | **04 00 20.8** | **-3.4** |
| | 5.3nm,0.3s,baz=31,slow=9.1,SNR=94 | | | | | | |
| FITZ | | | | S | Sn | 04 02 14.7 | -10 |
| | 3.9nm,0.3s,baz=84,slow=18,SNR=8.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **194** | P | **Pn** | **04 00 22.7** | **-1.5** |
| **WAMI** | **Wamena** | **10.91** | **71** | P | Pn | 04 00 40.7 | +16 |
| **WRAB** | **Tennant Creek** | **13.68** | **155** | P | **Pn** | **04 00 59.6** | **-0.9** |
| **WRA** | **Warramunga Arr** | **13.69** | **155** | P | **Pn** | **04 00 57.6** | **-3.0** |
| | 3.2nm,0.3s,baz=342,slow=13,SNR=60 | | | | | | |
| WRA | | | | S | Sn | 04 03 21.0 | -11 |
| | 3.9nm,0.3s,baz=332,slow=22,SNR=9.0 | | | | | | |
| **COEN** | **Coen** | **15.92** | **115** | P | **Pn** | **04 01 28.5** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **16.24** | **209** | P | **P** | **04 01 32.8** | **+0.3** |
| **ASAR** | **Alice Springs** | **16.96** | **162** | P | **Pn** | **04 01 41.0** | **0.0** |
| | 1.3nm,0.3s,baz=343,slow=11,SNR=53 | | | | | | |
| ASAR | | | | S | **S** | **04 04 42.3** | **-7.3** |
| | 1.3nm,0.3s,baz=316,slow=18,SNR=5.5 | | | | | | |
| **QIS** | **Mount Isa** | **16.97** | **141** | P | **Pn** | **04 01 42.3** | **+1.2** |
| **PBKI** | **Pangkalan Bun** | **17.27** | **285** | P | Pn | 04 01 58.5 | +14 |
| **WRKA** | **Warakurna** | **17.46** | **180** | P | **Pn** | **04 01 48.5** | **+1.5** |
| **MTSU** | **Mount Surprise** | **18.81** | **126** | P | **Pn** | **04 02 02.6** | **-0.5** |
| **MEEK** | **Meekatharra** | **21.18** | **205** | P | **P** | **04 02 28.9** | **+2.7** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **OOD** | **Oodnadatta** | **21.37** | **162** | P | **P** | **04 02 30.0** | **+1.8** |
| **FORT** | **Forrest** | **23.18** | **181** | P | **P** | **04 02 48.0** | **+2.0** |
| **MULG** | **Mulgathing** | **23.31** | **167** | P | **P** | **04 02 49.1** | **+2.0** |
| **MORW** | **Morawa** | **24.41** | **207** | P | **P** | **04 03 00.0** | **+2.8** |
| **LCRK** | **Leigh Creek** | **24.65** | **159** | P | **P** | **04 03 01.5** | **+2.1** |
| **TPRI** | **Tanjung Pinang** | **25.18** | **288** | P | P | 04 03 18.6 | +14 |
| **BLDU** | **Ballidu** | **25.47** | **204** | P | **P** | **04 03 10.7** | **+3.9** |
| **BBOO** | **Buckleboo** | **26.20** | **165** | P | **P** | **04 03 15.1** | **+1.7** |
| **STKA** | **Stephens Creek** | **27.24** | **155** | P | **P** | **04 03 24.1** | **+1.5** |
| | 1.7nm,0.5s,baz=324,slow=10,SNR=8.4 | | | | | | |
| **HTT** | **Hallett** | **27.62** | **161** | P | **P** | **04 03 28.4** | **+2.3** |
| **CMSA** | **Cobar Meteorol** | **28.90** | **148** | P | **P** | **04 03 39.7** | **+2.3** |
| **PSI** | **Prapat** | **31.08** | **288** | P | **P** | **04 03 57.4** | **+0.3** |
| | 3.8nm,0.7s,baz=145,slow=12,SNR=4.0 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.64** | **159** | P | **P** | **04 04 04.1** | **+2.6** |
| **SONM** | **Songino Array** | **58.39** | **343** | P | **P** | **04 07 32.9** | **+0.6** |
| | 1.2nm,0.8s,baz=163,slow=7.0,SNR=8.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.74** | **328** | P | **P** | **04 08 34.6** | **+0.7** |
| | 0.5nm,0.4s,baz=119,slow=7.9,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.30** | **335** | P | **P** | **04 08 55.5** | **-0.1** |
| | 1.2nm,0.5s,baz=120,slow=5.6,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Array** | **72.07** | **329** | P | **P** | **04 09 01.0** | **+0.8** |
| | 3.1nm,0.8s,baz=128,slow=4.9,SNR=26 | | | | | | |
| **BVAR** | **Borovoye Array** | **77.60** | **328** | P | **P** | **04 09 32.6** | **+0.6** |
| | 1.2nm,0.7s,baz=68,slow=13,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **126.58** | **59** | PKP | **PKiKP** | **04 16 39.8** | **+0.6** |
| | 0.1nm,0.4s,baz=220,slow=2.4,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.29** | **281** | PKP | **PKiKP** | **04 16 40.8** | **0.0** |
| | 0.6nm,0.7s,baz=104,slow=1.8,SNR=3.5 | | | | | | |

*ATH **18** 04:16:04.9,35.66N×21.82E,h19km±2km,ML3.5/9,Error*
*ellipse: s-maj=5.6km s-min=1.5km az=44.0*
*NEIC **18** 04:16:07.3±2.0,35.60N±0.02×21.81E±0.06,h36km±13km,*
*mb4.0/2,ML3.5(THE),Error ellipse: s-maj=6.7km*
*s-min=2.2km az=102.0*
*THE **18** 04:16:07.1,35.75N×21.91E,h0km±1km,ML3.5/8,Error*
*ellipse: s-maj=2.1km s-min=0.8km az=221.0*
*IDC **18** 04:16:09.8±4.9,35.94N×22.02E,h32km±41km,mb3.8/9,*
*mb1 3.8/14,mb1mx3.5/61,mbtmp3.8/14,ML3.4/5,MS3.3/5,*
*Ms1 3.3/5,ms1mx2.8/91,Error ellipse: s-maj=22.5km*
*s-min=18.3km az=7.0*
**ISC 18 04:16:05.1±1.5,35.72N±0.05×21.87E±0.04,h8km±10km,**
**n114,σ1s51/128,mb4.1/9,Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTHR** | **Kythira** | **1.07** | **59** | P | **Pg** | **04 16 25.7** | **+0.1** |
| KTHR | | | | S | **Sb** | **04 16 40.4** | **+0.5** |
| | 3μm,0.6s | | | | | | |
| **KTHR** | **Kythira** | **1.07** | **59** | | **Pg** | **04 16 25.7** | **+0.1** |
| KTHR | | | | | **Sb** | **04 16 40.4** | **+0.5** |
| **KTHA** | **Kythira Island** | **1.11** | **61** | P | **Pg** | **04 16 26.4** | **0.0** |
| KTHA | | | | S | **Sn** | **04 16 43.2** | **+0.9** |
| | 3μm,0.3s | | | | | | |
| **KTHA** | **Kythira Island** | **1.11** | **61** | P | **Pg** | **04 16 26.4** | **0.0** |
| KTHA | | | | AML | AML | 04 16 46.7 | |
| | comp=E,8205μm,0.6s | | | | | | |
| KTHA | | | | AML | AML | 04 16 47.2 | |
| | comp=N,3838μm,0.8s | | | | | | |
| **KTHA** | **Kythira Island** | **1.11** | **61** | | **Pg** | **04 16 26.4** | **0.0** |
| KTHA | | | | | **Sn** | **04 16 43.2** | **+0.9** |
| **ANKY** | **Antikythira Is** | **1.17** | **82** | P | **Pn** | **04 16 28.4** | **+0.7** |
| ANKY | | | | S | **Sn** | **04 16 45.3** | **+1.4** |
| | comp=N,4μm,0.6s | | | | | | |
| **ANKY** | **Antikythira Is** | **1.17** | **82** | P | **Pn** | **04 16 28.4** | **+0.7** |
| ANKY | | | | S | **Sn** | **04 16 45.3** | **+1.4** |
| ANKY | | | | AML | AML | 04 16 49.2 | |
| | comp=N,6767μm,0.7s | | | | | | |
| ANKY | | | | AML | AML | 04 16 52.4 | |
| | comp=E,10383μm,0.7s | | | | | | |
| **ANKY** | **Antikythira Is** | **1.17** | **82** | | **Pn** | **04 16 28.4** | **+0.7** |
| ANKY | | | | | **Sn** | **04 16 45.3** | **+1.4** |
| **PYL** | **PYLOS** | **1.18** | **355** | P | **Pn** | **04 16 28.1** | **+0.2** |
| PYL | | | | S | **Sn** | **04 16 45.8** | **+1.7** |
| | comp=E,1μm,0.5s | | | | | | |
| **PYL** | **PYLOS** | **1.18** | **355** | P | **Pn** | **04 16 28.1** | **+0.2** |
| PYL | | | | AML | AML | 04 16 56.7 | |
| | comp=E,3676μm,0.6s | | | | | | |
| PYL | | | | AML | AML | 04 17 00.2 | |
| | comp=N,1217μm,0.5s | | | | | | |
| **PYL** | **PYLOS** | **1.18** | **355** | | **Pn** | **04 16 28.1** | **+0.2** |
| PYL | | | | | **Sn** | **04 16 45.8** | **+1.7** |
| **VLI** | **Veliai** | **1.32** | **41** | P | **Pb** | **04 16 31.1** | **+1.0** |
| VLI | | | | S | **Sn** | **04 16 49.0** | **+1.5** |
| | comp=N,2μm,1.1s | | | | | | |
| **VLI** | **Veliai** | **1.32** | **41** | P | **Pb** | **04 16 31.1** | **+1.0** |
| VLI | | | | AML | AML | 04 16 57.8 | |
| | comp=E,4141μm,0.8s | | | | | | |
| VLI | | | | AML | AML | 04 16 58.0 | |
| | comp=N,4076μm,1.3s | | | | | | |
| **VLI** | **Veliai** | **1.32** | **41** | | **Pb** | **04 16 31.1** | **+1.0** |
| VLI | | | | | **Sn** | **04 16 49.0** | **+1.5** |
| **MNVA** | **Monemvasia** | **1.35** | **44** | P | **Pb** | **04 16 32.3** | **+1.6** |
| **ITM** | **Ithomi** | **1.46** | **2** | P | **Pg** | **04 16 33.6** | **+0.5** |
| ITM | | | | S | **Sn** | **04 16 54.2** | **+3.2** |
| | comp=N,1μm,0.5s | | | | | | |
| **ITM** | **Ithomi** | **1.46** | **2** | P | **Pg** | **04 16 33.6** | **+0.5** |
| ITM | | | | AML | AML | 04 16 59.3 | |
| | comp=N,1599μm,0.3s | | | | | | |
| 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OHR | Ohrid | 5.45 | 351 | *i* Pn | | Pn | 04 17 28.0 | +1.4 |
| VAY | Valandovo | 5.62 | 5 | *i* Pn | | Pn | 04 17 30.8 | +1.9 |
| VAE | Valguarnera | 6.25 | 289 | Pn | | Pn | 04 17 36.0 | -1.6 |
| | comp=E,1.8nm,0.3s,baz=164,slow=18,SNR=1.7 | | | | | | | |
| SKO | Skopje | 6.25 | 357 | *i* Pn | | Pn | 04 17 38.3 | +0.7 |
| ELL | Elmali | 6.58 | 79 | | | Pn | 04 17 40.9 | -1.3 |
| VTS | Vitosha | 6.97 | 8 | | | Pn | 04 17 49.0 | +1.4 |
| PDG | Podgorica | 7.00 | 344 | | | Pn | 04 17 47.8 | -0.1 |
| PDG | Podgorica | 7.00 | 344 | *e*Pn | | Pn | 04 17 46.7 | -1.2 |
| HCY | Herceg Novi | 7.21 | 340 | *e*Pn | | Pn | 04 17 49.2 | -1.6 |
| TREB | Trebinje | 7.50 | 340 | *e*Pn | | Pn | 04 17 53.6 | -1.1 |
| BRY | Bratogost | 7.62 | 341 | *e*Pn | | Pn | 04 17 55.4 | -1.1 |
| UPM | Unac-Piva | 7.82 | 344 | *e*Pn | | Pn | 04 17 59.7 | +0.5 |
| STON | Ston | 7.84 | 337 | *e*Pn | | Pn | 04 17 57.6 | -1.7 |
| STON | Ston | 7.84 | 337 | *e*Pn | | Pn | 04 17 57.8 | -1.5 |
| STON | | | | Sn | | Sn | 04 19 16.8 | -11 |
| LSTV | Lastovo | 8.03 | 333 | *e*Pn | | Pn | 04 18 00.6 | -1.4 |
| LSTV | | | | Sn | | Sn | 04 19 20.2 | -13 |
| RUDO | Rudo | 8.12 | 347 | *e*Pn | | Pn | 04 18 00.4 | -2.8 |
| BBLS | Lazići | 8.36 | 348 | *e*Pn | | Pn | 04 18 05.8 | -0.7 |
| DIVS | Divibare | 8.49 | 351 | | | Pn | 04 18 08.0 | -0.4 |
| DIVS | Divibare | 8.49 | 351 | *e*Pn | | Pn | 04 18 07.1 | -1.3 |
| HVAR | Hvar | 8.55 | 332 | *e*Pn | | Pn | 04 18 07.8 | -1.2 |
| RICI | Ricice | 8.58 | 336 | *e*Pn | | Pn | 04 18 08.2 | -1.4 |
| RICI | | | | Sn | | Sn | 04 19 35.6 | -11 |
| ZIRJ | Zirje | 9.26 | 331 | *e*Pn | | Pn | 04 18 17.5 | -1.3 |
| ZIRJ | | | | Sn | | Sn | 04 19 50.1 | -13 |
| KIJV | Kijevo | 9.28 | 335 | *e*Pn | | Pn | 04 18 18.8 | -0.3 |
| KIJV | | | | Sn | | Sn | 04 19 52.4 | -11 |
| MORI | Morici | 9.41 | 332 | *e*Pn | | Pn | 04 18 20.3 | -0.6 |
| MORI | | | | Sn | | Sn | 04 19 54.2 | -13 |
| MGRS | Mrkonjic Grad | 9.43 | 339 | *e*Pn | | Pn | 04 18 20.9 | -0.3 |
| FRGS | Fruska Gora | 9.56 | 351 | *e*Pn | | Pn | 04 18 20.1 | -2.8 |
| BLY | Banja Luka | 9.70 | 340 | *e*Pn | | Pn | 04 18 23.4 | -1.5 |
| DUGI | Dugi Otok | 9.78 | 330 | *e*Pn | | Pn | 04 18 25.6 | -0.3 |
| DUGI | | | | Sn | | Sn | 04 20 03.8 | -12 |
| MRAK | Mrakovica | 10.03 | 339 | *e*Pn | | Pn | 04 18 26.3 | -3.1 |
| BRTR | Keskin Array B | 10.14 | 63 | Pn | | Pn | 04 18 31.1 | 0.0 |
| | comp=E,0.1nm,0.3s,baz=251,slow=12,SNR=3.6 | | | | | | | |
| BRTR | | | | LR | | LR | 04 23 11.2 | |
| | comp=E,111nm,20.5s,baz=285,slow=42 | | | | | | | |
| BRTR | Keskin Array B | 10.14 | 63 | | | Pn | 04 18 29.1 | -2.0 |
| A252A | Venje | 10.18 | 344 | *e*Pn | | Pn | 04 18 29.7 | -1.7 |
| MLR | Muntele Rosu | 10.24 | 16 | LR | | LR | 04 23 32.7 | |
| | comp=E,200nm,20.0s,baz=340,slow=44 | | | | | | | |
| NVLJ | Novalja | 10.33 | 331 | *e*Pn | | Pn | 04 18 33.4 | 0.0 |
| MOSL | Moslavina | 10.62 | 340 | *e*Pn | | Pn | 04 18 35.3 | -2.1 |
| MORH | Mrgy, Hungar | 10.77 | 348 | *e*Pn | | Pn | 04 18 35.1 | -4.3 |
| BRJN | Brijuni | 11.07 | 328 | *e*Pn | | Pn | 04 18 43.1 | -0.4 |
| CRES | Cresnjev | 11.20 | 336 | *e*Pn | | Pn | 04 18 42.9 | -2.5 |
| SKDS | Skadanscina | 11.48 | 331 | *e*Pn | | Pn | 04 18 49.0 | -0.3 |
| CEY | Cerknica | 11.49 | 333 | *e*Pn | | Pn | 04 18 48.2 | -1.1 |
| OBKA | Obir | 12.10 | 335 | *e*Pn | | Pn | 04 18 59.3 | +1.5 |
| | comp=E,1.7nm,0.4s | | | | | | | |
| OBKA | | | | *e*Sn | | Sn | 04 21 12.2 | -0.8 |
| | comp=E,4.8nm,0.7s | | | | | | | |
| MOA | Molln | 13.37 | 337 | *e*Pn | | Pn | 04 19 16.7 | +1.6 |
| | comp=E,0.8nm,0.3s | | | | | | | |
| GERES | GERESS Array B | 14.43 | 338 | Pn | | Pn | 04 19 29.7 | +0.1 |
| | comp=E,0.1nm,0.3s,baz=161,slow=13,SNR=7.9 | | | | | | | |
| GERES | GERESS Array B | 14.43 | 338 | | | Pn | 04 19 29.1 | -0.6 |
| AKASG | Malin Array Be | 15.89 | 17 | Pn | | Pn | 04 19 47.2 | -1.7 |
| | comp=E,0.6nm,0.3s,baz=333,slow=18,SNR=2.8 | | | | | | | |
| KBZ | Khabaz | 18.01 | 57 | P | | Pn | 04 20 15.8 | +0.1 |
| | comp=E,0.1nm,0.3s,baz=54,slow=14,SNR=5.4 | | | | | | | |
| KBZ | | | | LR | | LR | 04 28 11.8 | |
| | comp=E,79nm,18.6s,baz=306,slow=41 | | | | | | | |
| ESDC | Sonseca Array | 20.79 | 289 | P | | P | 04 20 46.9 | +0.2 |
| | comp=E,2.0nm,1.0s,baz=81,slow=14,SNR=6.4 | | | | | | | |
| ESDC | Sonseca Array | 20.79 | 289 | P | | P | 04 20 45.3 | -1.4 |
| ESDC | | | | IAmb | | IAmb | 04 20 56.4 | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| HFS | Hagfors | 25.00 | 350 | P | | P | 04 21 29.4 | +0.3 |
| | comp=Z,2.9nm,0.8s,baz=160,slow=10,SNR=5.8 | | | | | | | |
| FINES | FINESS Array B | 25.88 | 5 | P | | P | 04 21 36.6 | -0.4 |
| | comp=Z,2.4nm,0.8s,baz=177,slow=13,SNR=3.4 | | | | | | | |
| FINES | FINESS Array B | 25.88 | 5 | P | | P | 04 21 36.4 | -0.6 |
| EKA | Eskdalemuir Ar | 26.07 | 327 | P | | P | 04 21 39.4 | +0.7 |
| | comp=Z,2.7nm,0.6s,baz=130,slow=8.5,SNR=13 | | | | | | | |
| NOA | NORSAR Array B | 26.24 | 348 | P | | P | 04 21 38.9 | -1.5 |
| | comp=Z,0.8nm,0.9s,baz=38,slow=23,SNR=3.3 | | | | | | | |
| TORD | Torodi Ar. Bea | 28.91 | 224 | P | | P | 04 22 08.9 | +4.3 |
| | comp=Z,0.4nm,0.6s,baz=29,slow=9.4,SNR=4.1 | | | | | | | |
| ARCES | ARCESS Array B | 33.93 | 2 | P | | P | 04 22 47.5 | -0.8 |
| | comp=Z,2.7nm,0.8s,baz=189,slow=9.6,SNR=9.5 | | | | | | | |
| MK31 | Makanchi Array | 45.71 | 57 | P | | P | 04 24 25.0 | -1.5 |
| MK31 | | | | IAmb | | IAmb | 04 24 26.0 | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| MKAR | Makanchi Array | 45.71 | 57 | P | | P | 04 24 25.2 | -1.3 |
| | comp=Z,2.8nm,0.5s,baz=276,slow=7.2,SNR=40 | | | | | | | |
| MKAR | Makanchi Array | 45.71 | 57 | P | | P | 04 24 25.0 | -1.5 |
| ZALV | Zalesovo Beam | 46.56 | 46 | P | | P | 04 24 31.9 | -1.1 |
| | comp=Z,0.7nm,0.3s,baz=281,slow=8.8,SNR=4.3 | | | | | | | |
| ZALV | Zalesovo Beam | 46.56 | 46 | P | | P | 04 24 31.0 | -2.0 |
| ELK | Elko | 94.31 | 329 | LR | | LR | 05 15 59.6 | |
| | comp=Z,40nm,19.7s,baz=205,slow=38 | | | | | | | |

*ISK* ***18*** *04:34:14.9, 35˚.33N×26˚.22E, h5km, ML3.9/7*
*ATH* ***18*** *04:34:15.2, 35˚.16N×26˚.31E, h29km±3km, ML3.8/10, Error ellipse: s-maj=4.4km s-min=1.6km az=153.0*
*THE* ***18*** *04:34:16.9, 35˚.25N×26˚.19E, h0km±2km, ML3.6/5, Error ellipse: s-maj=2.4km s-min=1.2km az=47.0*
*NEIC* ***18*** *04:34:17.2±1.4, 35˚.05N±0˚.07×26˚.32E±0˚.06, h49km±5km, mb4.0/10, Mwr4.3/11, ML3.8(ATH), Error ellipse: s-maj=10.9km s-min=6.5km az=170.0*
*NEIC* ***18*** *04:34:17.2, 35˚.05N×26˚.32E, h40km, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr=-0.81; Mθθ 1.25; Mφφ -0.44; Mrθ 0.99; Mrφ 2.39; Mθφ -1.18; Fault plane solution: M0 3.05000×10^15^ NP1:ϕ=274.64000°, δ=68.72000°, λ=-26.51000°. NP2:ϕ=14.90000°, δ=65.43000°, λ=-156.47000°. Principal axes: T 2.9477, Plg2.0000°, Azm325.0000°; N 0.1970, Plg56.0000°, Azm59.0000°; P -3.1447, Plg33.0000°, Azm234.0000°;*
*IDC* ***18*** *04:34:18.9±1.8, 35˚.33N×26˚.10E, h61km±16km, mb3.5/13, mb1 3.6/16,mb1mx3.5/40,mbtmp3.8/16,MS3.2/4, Ms1 3.2/4,ms1mx2.8/65 Error ellipse: s-maj=26.6km s-min=15.3km az=159.0*
*DDA* ***18*** *04:34:18.4±0.0, 35˚.38N×26˚.34E, h10km±4km, MW3.9*

**ISC 18 04:34:14.6±0.7, 35°.05N±0'.05×26°.31E±0'.03, h31km±4km, n115, σ1§79/134, mb3.9/16, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 0.10 | 311 | P | | Pb | 04 34 20.1 | -0.1 |
| ZKR | | | | S | | Sb | 04 34 23.8 | -0.1 |
| | 69µm,0.3s | | | | | | | |
| ZKR | Zakros | 0.10 | 311 | P | | Pb | 04 34 19.8 | -0.4 |
| ZKR | | | | S | | Sb | 04 34 23.9 | -0.1 |
| ZKR | | | | AML | | AML | 04 34 24.2 | |
| ZKR | | | | AML | | AML | 04 34 24.4 | |
| | comp=N,63622µm,0.3s | | | | | | | |
| ZKR | Zakros | 0.10 | 311 | PG | | Pb | 04 34 19.7 | -0.4 |
| ZKR | | | | SG | | Sb | 04 34 24.2 | +0.3 |
| FRMA | Ierapetra Chan | 0.47 | 266 | P | | Pb | 04 34 23.2 | -1.5 |
| FRMA | | | | S | | Sb | 04 34 29.6 | -1.9 |
| | comp=N,8µm,0.5s | | | | | | | |
| NPS | Neapolis | 0.61 | 291 | P | | Pb | 04 34 27.1 | +0.2 |
| NPS | | | | S | | Sb | 04 34 34.7 | -0.5 |
| | comp=N,13µm,0.3s | | | | | | | |
| NPS | Neapolis | 0.61 | 291 | P | | Pb | 04 34 26.9 | 0.0 |
| NPS | | | | S | | Sb | 04 34 34.8 | -0.5 |
| NPS | | | | AML | | AML | 04 34 38.1 | |
| | comp=N,22588µm,0.3s | | | | | | | |
| NPS | | | | AML | | AML | 04 34 38.2 | |
| | comp=E,29942µm,0.3s | | | | | | | |
| HRKL | Herakleio | 1.02 | 285 | P | | Pn | 04 34 34.1 | +1.3 |
| HRKL | Herakleio | 1.02 | 285 | PG | | Pn | 04 34 33.8 | +1.0 |
| IACM | Heraklion | 1.04 | 285 | P | | Pn | 04 34 34.3 | +1.2 |
| IACM | Heraklion | 1.04 | 285 | P | | Pn | 04 34 34.3 | +1.2 |
| KSTL | Kastelli Herak | 1.04 | 284 | P | | Pn | 04 34 30.2 | -2.9 |
| KSTL | | | | S | | Sn | 04 34 41.8 | -4.8 |
| | comp=E,2µm,0.6s | | | | | | | |
| IDI | Anoyia | 1.19 | 282 | P | | Pb | 04 34 36.8 | +0.2 |
| | comp=E,86nm,0.3s,baz=100,slow=16,SNR=299 | | | | | | | |
| IDI | | | | LR | | LR | 04 34 48.5 | |
| | comp=E,57nm,21.9s,baz=71,slow=30 | | | | | | | |
| IDI | | | | S | | Sb | 04 34 54.1 | +2.5 |
| | comp=E,144nm,0.3s,baz=348,slow=15,SNR=6.7 | | | | | | | |
| IDI | Anoyia | 1.19 | 282 | P | | Pn | 04 34 36.4 | +1.3 |
| IDI | Anoyia | 1.19 | 282 | P | | Pn | 04 34 36.6 | +1.5 |
| IDI | | | | AML | | AML | 04 34 58.8 | |
| | comp=N,5319µm,0.5s | | | | | | | |
| IDI | | | | AML | | AML | 04 35 01.7 | |
| | comp=E,3601µm,0.3s | | | | | | | |
| IDI | Anoyia | 1.19 | 282 | PN | | Pn | 04 34 36.5 | +1.3 |
| IDI | Anoyia | 1.19 | 282 | | | Pb | 04 34 37.0 | +0.4 |
| IDI | | | | Sn | | Sb | 04 34 53.6 | +2.0 |
| SIVA | Sivas | 1.23 | 269 | P | | Pb | 04 34 38.0 | +0.7 |
| SIVA | Sivas | 1.23 | 269 | P | | Pn | 04 34 37.1 | +1.5 |
| SIVA | | | | S | | Sb | 04 34 53.6 | +0.8 |
| SIVA | | | | AML | | AML | 04 35 03.5 | |
| | comp=E,11918µm,0.5s | | | | | | | |
| SIVA | | | | AML | | AML | 04 35 08.4 | |
| | comp=N,8631µm,0.5s | | | | | | | |
| THR6 | Thira Island, | 1.50 | 331 | P | | Pn | 04 34 40.5 | +1.1 |
| THR6 | Thira Island, | 1.50 | 331 | P | | Pb | 04 34 41.1 | -0.8 |
| PRNS | Prines Rethymn | 1.51 | 283 | P | | Pb | 04 34 43.5 | +1.5 |
| THR8 | Santorini-Mono | 1.51 | 334 | P | | Pn | 04 34 40.3 | +0.7 |
| THR9 | Santorini-Faro | 1.52 | 330 | P | | Pn | 04 34 40.7 | +1.0 |
| THR3 | Thira Island, | 1.54 | 332 | P | | Pn | 04 34 41.0 | +1.0 |
| THR3 | Thira Island, | 1.54 | 332 | P | | Pn | 04 34 41.0 | +1.0 |
| THR2 | Thira island, | 1.56 | 333 | P | | Pn | 04 34 41.8 | +1.5 |
| THR5 | Thira Island, | 1.57 | 331 | P | | Pn | 04 34 41.5 | +1.1 |
| THR5 | Thira Island, | 1.57 | 331 | P | | Pn | 04 34 41.5 | +1.1 |
| SAP3 | Santorini-Thir | 1.59 | 331 | P | | Pn | 04 34 41.4 | +0.8 |
| NISR | Nisiros | 1.70 | 23 | P | | Pb | 04 34 43.5 | -1.6 |
| NISR | | | | AML | | AML | 04 35 12.4 | |
| | comp=E,5620µm,0.6s | | | | | | | |
| NISR | | | | AML | | AML | 04 35 14.4 | |
| | comp=N,4329µm,0.7s | | | | | | | |
| VAM | Vamos | 1.76 | 282 | P | | Pb | 04 34 47.0 | +0.7 |
| VAM | | | | S | | Sb | 04 35 08.6 | +0.6 |
| | comp=N,2µm,0.7s | | | | | | | |
| VAM | Vamos | 1.76 | 282 | P | | Pb | 04 34 46.7 | +0.4 |
| VAM | | | | AML | | AML | 04 35 24.9 | |
| | comp=E,3341µm,0.8s | | | | | | | |
| VAM | | | | AML | | AML | 04 35 26.5 | |
| | comp=N,3767µm,0.6s | | | | | | | |
| KOSK | Kos Island | 1.78 | 18 | P | | Pb | 04 34 45.2 | -1.5 |
| KOSK | Kos Island | 1.78 | 18 | PN | | Pn | 04 34 44.5 | +1.2 |
| GVD | Gavdhos | 1.84 | 264 | P | | Pb | 04 34 47.4 | -0.1 |
| GVD | | | | AML | | AML | 04 35 27.9 | |
| | comp=E,1488µm,0.7s | | | | | | | |
| GVD | | | | AML | | AML | 04 35 28.9 | |
| | comp=N,2490µm,0.6s | | | | | | | |
| GVD | Gavdhos | 1.84 | 264 | PN | | Pb | 04 34 48.6 | +1.1 |
| ARG | Arkhangelos | 1.88 | 51 | P | | Pb | 04 34 48.2 | -0.2 |
| ARG | Arkhangelos | 1.88 | 51 | P | | Pb | 04 34 47.3 | -1.0 |
| ARG | | | | AML | | AML | 04 35 15.8 | |
| | comp=E,3126µm,0.8s | | | | | | | |
| ARG | | | | AML | | AML | 04 35 29.5 | |
| | comp=N,2035µm,1.0s | | | | | | | |
| ARG | Arkhangelos | 1.88 | 51 | PN | | Pb | 04 34 48.2 | -0.2 |
| IMMV | Iera Moni Meta | 1.95 | 283 | P | | Pb | 04 34 49.0 | -0.4 |
| IMMV | Iera Moni Meta | 1.95 | 283 | P | | Pb | 04 34 48.4 | -1.0 |
| IMMV | | | | AML | | AML | 04 35 30.0 | |
| | comp=N,2972µm,0.6s | | | | | | | |
| IMMV | | | | AML | | AML | 04 35 32.5 | |
| | comp=E,2498µm,1.0s | | | | | | | |
| IMMV | Iera Moni Meta | 1.95 | 283 | PN | | Pb | 04 34 49.1 | -0.4 |
| KNDR | Palaiochora Ch | 2.16 | 276 | PN | | Pb | 04 34 52.9 | -0.1 |
| BODT | Bodrum | 2.17 | 22 | PN | | Pn | 04 34 50.7 | +2.1 |
| MHLO | Agia Marina, M | 2.25 | 317 | P | | Pn | 04 34 52.2 | +2.5 |
| MHLO | | | | AML | | AML | 04 35 29.6 | |
| | comp=E,7414µm,0.7s | | | | | | | |
| MHLO | | | | AML | | AML | 04 35 29.7 | |
| | comp=N,6000µm,0.7s | | | | | | | |
| TURN | Turunc | 2.33 | 42 | P | | Pn | 04 34 53.1 | +2.3 |
| TURN | | | | S | | Sn | 04 35 20.1 | +1.8 |
| DDIM | Aydin, Didim | 2.52 | 17 | P | | Pn | 04 34 55.5 | +2.1 |
| DDIM | | | | S | | Sn | 04 35 32.3 | -0.7 |
| SMG | Samos | 2.69 | 9 | P | | Pn | 04 34 57.1 | +1.4 |
| MULA | Mugla, Merkez- | 2.74 | 36 | P | | Pn | 04 34 59.5 | +3.0 |
| MULA | | | | S | | Sn | 04 35 29.4 | +0.8 |
| GCAM | G?zelcaml? | 2.75 | 15 | P | | Pn | 04 34 58.6 | +2.1 |
| GCAM | | | | S | | Sn | 04 35 28.8 | +0.1 |
| FETY | Fethiye | 2.75 | 54 | P | | Pn | 04 34 58.5 | +1.8 |
| FETY | | | | S | | Sn | 04 35 24.1 | -4.8 |
| AKAS | Kas | 2.93 | 65 | | | Pn | 04 35 01.3 | +2.1 |
| AKAS | Kas | 2.93 | 65 | P | | Pn | 04 35 00.6 | +1.4 |
| ZEYE | Izmir, Urla-Ze | 3.19 | 3 | P | | Pn | 04 35 03.4 | +0.9 |
| ZEYE | | | | S | | Sn | 04 35 37.7 | -1.8 |
| CAEL | Denizli, Camel | 3.20 | 49 | P | | Pn | 04 35 04.7 | +1.8 |
| CAEL | | | | S | | Sn | 04 35 38.7 | -1.3 |
| TAVA | DENIZLI_Tavas | 3.20 | 40 | P | | Pn | 04 35 05.7 | +2.9 |
| TAVA | | | | S | | Sn | 04 35 39.5 | -0.5 |
| VLI | Veliai | 3.20 | 302 | P | | Pn | 04 35 04.4 | +1.6 |
| URLA | Izmir | 3.31 | 4 | P | | Pn | 04 35 05.6 | +1.2 |
| URLA | | | | S | | Sn | 04 35 43.6 | +1.0 |
| ELL | Elmali | 3.38 | 59 | | | Pn | 04 34 06.8 | +1.5 |
| GOLH | Golhisar | 3.42 | 49 | P | | Pn | 04 35 08.9 | +3.0 |
| AKUM | Antalya-Kumluc | 3.52 | 68 | P | | Pn | 04 35 08.1 | +0.9 |
| AKUM | | | | S | | Sn | 04 35 45.8 | -1.9 |
| ZEDA | zmir-Bergama | 3.96 | 9 | P | | Pn | 04 35 14.6 | +1.4 |
| AKHS | Akhisar | 4.01 | 17 | P | | Pn | 04 35 16.3 | +2.4 |
| BRDR | BURDUR-Merkez | 4.02 | 48 | P | | Pb | 04 35 19.4 | -5.3 |
| BRDR | | | | S | | Sn | 04 35 52.1 | -8.1 |
| BUCA | Burdur, Bucak- | 4.12 | 55 | P | | Pn | 04 35 18.9 | +3.4 |
| ITM | Ithomi | 4.13 | 302 | | | Pn | 04 35 17.9 | +2.3 |
| PASA | Karahalli, USA | 4.17 | 37 | P | | Pn | 04 35 17.9 | +1.7 |
| USAK | Uak-Merkez | 4.25 | 30 | P | | Pn | 04 35 19.9 | +2.6 |
| ISP | Isparta | 4.38 | 50 | Pn | | Pn | 04 35 20.3 | +1.2 |
| BUHA | Balikesir, Bur | 4.49 | 8 | P | | Pn | 04 35 22.2 | +1.8 |
| BALY | Balya | 4.80 | 12 | P | | Pn | 04 35 27.3 | +2.5 |
| DURS | Dursunbey | 4.86 | 20 | P | | Pn | 04 35 28.2 | +2.5 |
| AGG | Agios Georgios | 5.08 | 322 | | | Pn | 04 35 32.0 | +3.3 |
| CSS | Mathiatis | 5.76 | 89 | Pn | | Pn | 04 35 40.1 | +2.1 |
| ALN | Alexandroupoli | 5.84 | 358 | Pn | | Pn | 04 35 40.2 | +1.2 |
| LIT | Litokhoron | 5.88 | 330 | | | Pn | 04 35 42.4 | +2.8 |
| FNA | Florina | 6.92 | 327 | | | Pn | 04 35 56.0 | +2.0 |
| BRTR | Keskin Array B | 7.47 | 49 | P | | Pn | 04 36 05.0 | +3.5 |
| | comp=N,0.3nm,0.3s,baz=309,slow=38,SNR=1.5 | | | | | | | |
| MMAI | Mount Meron Ar | 7.82 | 102 | P | | Pn | 04 36 08.4 | +2.2 |
| | comp=N,1.4nm,0.3s,baz=297,slow=12,SNR=3.9 | | | | | | | |
| MMAI | | | | LR | | LR | 04 40 57.4 | |
| | comp=N,79nm,20.3s,baz=68,slow=50 | | | | | | | |
| VTS | Vitosha | 7.93 | 343 | | | Pn | 04 36 10.8 | +3.0 |
| TIP | Timpagrande | 8.67 | 301 | Pn | | Pn | 04 36 17.8 | -0.1 |
| EIL | Elat | 9.06 | 124 | P | | Pn | 04 36 25.7 | +2.4 |
| | comp=N,0.7nm,0.3s,baz=236,slow=3.5,SNR=11 | | | | | | | |
| RAFF | Raffo Rosso | 9.90 | 286 | Pn | | Pn | 04 36 37.0 | +2.2 |
| MLR | Muntele Rosu | 10.43 | 359 | LR | | LR | 04 41 54.7 | |
| | comp=N,179nm,19.4s,baz=320,slow=45 | | | | | | | |
| SGRT | San Giovanni R | 10.65 | 312 | Pn | | Pn | 04 36 46.6 | +1.6 |
| KBZ | Khabaz | 15.46 | 51 | P | | Pn | 04 37 56.9 | +2.4 |
| | comp=N,0.1nm,0.3s,baz=225,slow=4.7,SNR=5.9 | | | | | | | |
| GNI | Garni | 15.47 | 65 | LR | | LR | 04 45 05.9 | |
| | comp=N,65nm,20.9s,baz=245,slow=42 | | | | | | | |
| AKASG | Malin Array Be | 15.79 | 7 | P | | Pn | 04 37 55.9 | +1.4 |
| | comp=N,1.0nm,0.3s,baz=199,slow=11,SNR=5.9 | | | | | | | |
| GERES | GERESS Array B | 16.64 | 330 | P | | Pn | 04 38 04.5 | -1.0 |
| | comp=N,0.1nm,0.3s,baz=354,slow=40,SNR=2.3 | | | | | | | |
| GERES | | | | LR | | LR | 04 44 30.0 | |
| | comp=N,153nm,18.6s,baz=266,slow=38 | | | | | | | |
| SENIN | Lac Senin/Sane | 18.26 | 314 | P | | Pn | 04 38 26.3 | +0.6 |
| ESDC | Sonseca Array | 24.44 | 290 | P | | P | 04 39 30.2 | -0.3 |
| | comp=N,0.5nm,0.5s,baz=83,slow=8.6,SNR=6.6 | | | | | | | |
| ESDC | Sonseca Array | 24.44 | 290 | P | | P | 04 39 30.4 | -0.1 |
| ESDC | | | | IAmb | | IAmb | 04 39 38.9 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| FINES | FINESS Array B | 26.41 | 360 | P | | P | 04 39 46.6 | -1.5 |
| | comp=Z,3.4nm,1.1s,baz=224,slow=5.3,SNR=1.3 | | | | | | | |
| AKTO | Aktyubinsk | 27.64 | 46 | P | | P | 04 39 59.9 | +0.6 |
| | comp=Z,0.9nm,0.5s,baz=245,slow=8.7,SNR=4.4 | | | | | | | |
| NOA | NORSAR Array B | 27.75 | 344 | P | | P | 04 39 58.1 | -2.2 |
| | comp=Z,0.4nm,0.7s,baz=119,slow=4.1,SNR=3.3 | | | | | | | |
| ABKAR | Akbulak array | 28.42 | 50 | P | | P | 04 40 07.0 | +0.7 |
| EKA | Eskdalemuir Ar | 28.68 | 324 | P | | P | 04 40 06.8 | -1.7 |
| | comp=Z,1.1nm,0.7s,baz=124,slow=10,SNR=1.9 | | | | | | | |
| TORD | Torodi Ar. Bea | 31.15 | 232 | P | | P | 04 40 31.9 | +1.2 |
| | comp=Z,0.6nm,0.5s,baz=36,slow=8.9,SNR=7.8 | | | | | | | |
| TORD | Torodi Ar. Bea | 31.15 | 232 | P | | P | 04 40 31.4 | +0.7 |
| TORD | | | | IAmb | | IAmb | 04 40 40.2 | |
| | comp=Z,2.3nm,1.3s | | | | | | | |
| ARCES | ARCESS Array B | 34.54 | 360 | P | | P | 04 40 57.6 | -2.2 |
| | comp=Z,0.7nm,0.4s,baz=172,slow=7.6,SNR=11 | | | | | | | |
| KURK | Kurchatov | 40.52 | 51 | P | | P | 04 41 50.8 | +0.2 |
| KURK | | | | IAmb | | IAmb | 04 41 52.2 | |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| MK31 | Makanchi Array | 43.05 | 57 | P | | P | 04 42 12.4 | +1.0 |
| MK31 | | | | IAmb | | IAmb | 04 42 13.2 | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| MKAR | Makanchi Array | 43.05 | 57 | P | | P | 04 42 12.7 | +1.3 |
| | comp=Z,2.0nm,0.7s,baz=279,slow=6.2,SNR=21 | | | | | | | |
| ZAA0 | Zalesovo Array | 44.40 | 46 | P | | P | 04 42 22.2 | +0.1 |
| ZAA0 | | | | IAmb | | IAmb | 04 42 22.6 | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| ZALV | Zalesovo Beam | 44.40 | 46 | P | | P | 04 42 22.1 | 0.0 |
| | comp=Z,2.0nm,0.5s,baz=270,slow=8.3,SNR=9.4 | | | | | | | |
| ZALV | Zalesovo Beam | 44.40 | 46 | P | | P | 04 42 22.2 | +0.1 |
| PALK | Pallekele | 56.92 | 106 | P | | P | 04 43 56.7 | -0.4 |
| SONM | Songino Array | 58.83 | 51 | P | | P | 04 44 11.3 | +1.1 |
| | comp=Z,0.7nm,0.4s,baz=290,slow=7.2,SNR=7.1 | | | | | | | |
| SONM | Songino Array | 58.83 | 51 | P | | P | 04 44 10.8 | +0.6 |
| SONM | | | | IAmb | | IAmb | 04 44 11.5 | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| SCHQ | Schefferville | 63.88 | 320 | P | | P | 04 44 43.8 | -0.3 |
| | comp=Z,2.0nm,0.9s,baz=66,slow=4.8,SNR=6.7 | | | | | | | |
| SCHQ | Schefferville | 63.88 | 320 | P | | P | 04 44 43.9 | -0.2 |
| YKA | Yellowknife Ar | 77.84 | 343 | P | | P | 04 46 07.4 | -1.2 |
| | comp=Z,0.2nm,0.4s,baz=29,slow=5.2,SNR=5.7 | | | | | | | |
| YKA | Yellowknife Ar | 77.84 | 343 | P | | P | 04 46 08.6 | -0.1 |
| ILAR | Eielson Array | 80.36 | 357 | P | | P | 04 46 21.3 | -1.2 |
| | comp=Z,0.2nm,0.5s,baz=341,slow=4.2,SNR=4.6 | | | | | | | |
| ILAR | Eielson Array | 80.36 | 357 | P | | P | 04 46 22.0 | -0.5 |

*IDC* ***18*** *04:45:52.5±2.5, 14˚.38N×87˚.92W, h0km, mb3.8/5, mb1 4.3/8, mb1mx3.9/32, mbtmp3.9/8, ML3.4/3, MS3.2/9, Ms1 3.2/9, ms1mx2.9/65, Error ellipse: s-maj=62.7km s-min=28.4km az=16.0*
*SNET* ***18*** *04:45:54.9±0.7, 12˚.99N×88˚.81W, h56km±6km, ML4.3*
*INET* ***18*** *04:45:55.2±1.0, 12˚.97N×88˚.78W, h48km±20km, MW4.1*
*UCR* ***18*** *04:45:55.3±1.1, 13˚.03N×88˚.81W, h58km±8km, ML4.3, MW4.0, mb4.3(NEIC)*
*NEIC* ***18*** *04:45:56±1.3, 13˚.10N±0˚.08×88˚.67W±0˚.06, h70km±9km, mb4.3/19, Md4.4(SNET), Error ellipse: s-maj=13.2km s-min=3.7km az=213.0*
*GCG* ***18*** *04:45:56.9±0.4, 13˚.07N×88˚.80W, h36km±999km, MD4.3*

**ISC 18 04:45:54.5±0.9, 13°.05N±0'.06×88°.75W±0'.04, h65km±6km, n167, σ1§12/179, mb4.3/16, 10C-51D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ALJI | Alcalda de J | 0.33 | 32 | ⇓*i*P | | Pn | 04 46 05.8 | +0.3 |
| ALJI | | | | IAML | | | 04 46 06.3 | |
| | comp=Z,17µm,0.1s | | | | | | | |
| ALJI | | | | *e*S | | Sn | 04 46 14.5 | +1.1 |
| ALJI | Alcalda de J | 0.33 | 32 | ⇓*i*P | | Pn | 04 46 05.8 | +0.3 |
| ALJI | | | | IAML | | | 04 46 06.3 | |
| | comp=Z,17µm,0.1s | | | | | | | |
| ALJI | | | | *e*S | | Sn | 04 46 14.5 | +1.1 |
| TECO | Alcaldia de Te | 0.49 | 357 | ⇓*i*P | | Pn | 04 46 07.2 | +0.3 |
| TECO | | | | *e*S | | Sn | 04 46 16.6 | +0.7 |
| TECO | Alcaldia de Te | 0.49 | 357 | ⇓*i*P | | Pn | 04 46 07.2 | +0.3 |
| TECO | | | | *e*S | | Sn | 04 46 16.6 | +0.7 |
| COEB | Comit de Eme | 0.50 | 25 | ⇓*i*P | | Pn | 04 46 07.6 | +0.5 |
| COEB | | | | *e*S | | Sn | 04 46 17.8 | +1.6 |
| COEB | Comit de Eme | 0.50 | 25 | ⇓*i*P | | Pn | 04 46 07.6 | +0.5 |
| COEB | | | | *e*S | | Sn | 04 46 17.8 | +1.6 |
| SNVI | San Vicente | 0.57 | 351 | *e*P | | Pn | 04 46 08.2 | +0.4 |
| SNVI | San Vicente | 0.57 | 351 | *e*P | | Pn | 04 46 08.2 | +0.4 |
| LCY | Lacayo | 0.58 | 50 | *e*P | | Pn | 04 46 08.5 | +0.6 |
| LCY | Lacayo | 0.58 | 50 | *e*P | | Pn | 04 46 08.5 | +0.6 |
| COEG | Centro de Oper | 0.58 | 348 | ⇓*i*P | | Pn | 04 46 08.2 | +0.3 |
| COEG | | | | IAML | | | 04 46 24.8 | |
| | comp=Z,10µm,0.4s | | | | | | | |
| COEG | Centro de Oper | 0.58 | 348 | ⇓*i*P | | Pn | 04 46 08.2 | +0.3 |
| COEG | | | | IAML | | | 04 46 24.8 | |
| | comp=Z,10µm,0.4s | | | | | | | |
| UESV | Universidad de | 0.59 | 357 | *e*P | | Pn | 04 46 08.5 | +0.6 |
| UESV | | | | *e*S | | Sn | 04 46 19.4 | +1.7 |
| UESV | Universidad de | 0.59 | 357 | *e*P | | Pn | 04 46 08.5 | +0.6 |
| UESV | | | | *e*S | | Sn | 04 46 19.4 | +1.7 |
| PACA | Pacayal | 0.59 | 45 | *e*P | | Pn | 04 46

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NUBE** | **Las Nubes** | **1.31** | **311** | ⇓*iP* | **Pn** | **04 46 17.4** | **+0.3** |
| **NUBE** | **Las Nubes** | **1.31** | **311** | ⇓*iP* | **Pn** | **04 46 17.4** | **+0.3** |
| **LOAL** | **Lomas de Alarc** | **1.38** | **314** | *eP* | **Pn** | **04 46 18.6** | **+0.7** |
| **LOAL** | **Lomas de Alarc** | **1.38** | **314** | *eP* | **Pn** | **04 46 18.6** | **+0.7** |
| **SLOZ** | **Alcaldia de Sa** | **1.40** | **314** | ⇓*iP* | **Pn** | **04 46 18.6** | **+0.6** |
| **MTO3** | **Montecristo** | **1.47** | **336** | Pn | **Pn** | **04 46 20.1** | **+0.8** |
| MTO3 | | | | Sn | **Sn** | **04 46 38.7** | **+1.0** |
| **MTO3** | **Montecristo** | **1.47** | **336** | ⇓*iP* | **Pn** | **04 46 20.1** | **+0.8** |
| **MTO3** | **Montecristo** | **1.47** | **336** | *eP* | **Pn** | **04 46 20.0** | **+0.8** |
| **MTO3** | **Montecristo** | **1.47** | **336** | ⇓*iP* | **Pn** | **04 46 20.1** | **+0.8** |
| **ESQI** | **Esquipulas** | **1.61** | **339** | | **Pn** | **04 46 22.2** | **+1.2** |
| ESQI | | | | Sn | **Sn** | **04 46 43.4** | **+2.5** |
| **ESQI** | **Esquipulas** | **1.61** | **339** | ⇓*iP* | **Pn** | **04 46 22.4** | **+1.4** |
| **CRIN** | **San Cristobal** | **1.69** | **101** | *eP* | **Pn** | **04 46 23.0** | **+1.0** |
| **TGUH** | **Tegucigalpa,Un** | **1.75** | **55** | Pn | **Pn** | **04 46 24.2** | **+1.3** |
| **TGUH** | **Tegucigalpa,Un** | **1.75** | **55** | ⇓*iP* | **Pn** | **04 46 24.1** | **+1.3** |
| **TGUH** | **Tegucigalpa,Un** | **1.75** | **55** | *eP* | **Pn** | **04 46 24.2** | **+1.3** |
| **TGUH** | **Tegucigalpa,Un** | **1.75** | **55** | ⇓*iP* | **Pn** | **04 46 24.1** | **+1.3** |
| **TELN** | **Telica** | **1.92** | **103** | *eP* | **Pn** | **04 46 25.6** | **+0.5** |
| TELN | | | | *eS* | **Sn** | **04 46 48.1** | **-0.3** |
| **CNGN** | **Cerro Negro** | **2.07** | **105** | *eP* | **Pn** | **04 46 27.4** | **+0.3** |
| **NBG** | **Las Nubes** | **2.18** | **315** | ⇓*eP* | **Pn** | **04 46 30.9** | **+2.1** |
| **MRL** | **Marmol** | **2.22** | **336** | ⇓*eP* | **Pn** | **04 46 31.6** | **+2.3** |
| **PCG** | **Pacaya** | **2.25** | **307** | *eS* | **Sn** | **04 46 59.2** | **+2.7** |
| **MOMN** | **Momotombo** | **2.25** | **106** | *eP* | **Pn** | **04 46 29.7** | **+0.2** |
| **FUG** | **Fuego 3** | **2.46** | **305** | *eP* | **Pn** | **04 46 34.7** | **+2.2** |
| FUG | | | | *eS* | **Sn** | **04 47 05.3** | **+3.6** |
| **APG** | **El Apazote** | **2.56** | **320** | Pn | **Pn** | **04 46 35.3** | **+1.3** |
| | comp=Z,7.1nm,0.3s,baz=127,slow=11,SNR=121 | | | | | | |
| APG | | | | Sn | **Sn** | **04 47 05.0** | **+0.9** |
| | comp=Z,16nm,0.3s,baz=111,slow=17,SNR=4.2 | | | | | | |
| **TISN** | **Laguna Tiscapa** | **2.58** | **110** | *eP* | **Pn** | **04 46 34.1** | **+0.1** |
| **MATN** | **Matagalpa** | **2.76** | **92** | *eP* | **Pn** | **04 46 36.5** | **0.0** |
| **BOAB** | **BOACO BROADBAN** | **3.07** | **101** | *eP* | **Pn** | **04 46 40.7** | **+0.1** |
| **RTAL** | **Retalhuleu** | **3.22** | **298** | Pn | **Pn** | **04 46 45.0** | **+2.3** |
| **HZTE** | **Horizontes, Gu** | **3.86** | **127** | *eP* | **Pn** | **04 46 53.3** | **+1.8** |
| **ORTG** | **Ortega, Santa** | **4.18** | **129** | *eP* | **Pn** | **04 46 57.8** | **+1.8** |
| **PLVR** | **Palo Verde** | **4.27** | **128** | *eP* | **Pn** | **04 46 59.3** | **+2.0** |
| **JTS** | **Las Juntas de** | **4.62** | **126** | Pn | **Pn** | **04 47 03.2** | **+1.4** |
| | comp=Z,3.7nm,0.3s,baz=180,slow=22,SNR=21 | | | | | | |
| JTS | | | | Sn | **Sn** | **04 47 51.9** | **-2.4** |
| | baz=260,slow=22,SNR=1.1 | | | | | | |
| JTS | | | | Lg | Lg | 04 48 10.4 | |
| | comp=Z,7.9nm,0.3s,baz=188,slow=21,SNR=7.5 | | | | | | |
| **JTS** | **Las Juntas de** | **4.62** | **126** | Pn | **Pn** | **04 47 02.5** | **+0.7** |
| JTS | | | | | **Sn** | **04 47 53.2** | **-1.1** |
| **JTS** | **Las Juntas de** | **4.62** | **126** | *eP* | **Pn** | **04 47 02.8** | **+0.9** |
| **ARE1** | **Arenal 1** | **4.71** | **123** | *eP* | **Pn** | **04 47 05.4** | **+2.3** |
| **CAO2** | **Cobano, Puntar** | **4.89** | **133** | *eP* | **Pn** | **04 47 06.8** | **+1.2** |
| **JACO** | **JACO, Garabito** | **5.23** | **130** | *eP* | **Pn** | **04 47 12.2** | **+1.9** |
| **OCM** | **Ochomogo** | **5.64** | **123** | *eP* | **Pn** | **04 47 19.0** | **+2.9** |
| **LCR2** | **La Lucha 2** | **5.69** | **125** | *eP* | **Pn** | **04 47 18.4** | **+1.6** |
| **RIMA** | **Rio Macho** | **5.79** | **124** | *eP* | **Pn** | **04 47 20.1** | **+1.9** |
| **CDM** | **Cerro de Muert** | **6.00** | **125** | *eP* | **Pn** | **04 47 23.7** | **+2.6** |
| **MRVA** | **Moravia de Chi** | **6.11** | **121** | *eP* | **Pn** | **04 47 26.2** | **+3.8** |
| **SRBA** | **San Rafael, Bu** | **6.51** | **125** | *eP* | **Pn** | **04 47 29.8** | **+2.0** |
| **PIRO** | **Carate, Puerto** | **7.04** | **130** | *eP* | **Pn** | **04 47 36.9** | **+1.8** |
| **CMIG** | **Matias Romero** | **7.16** | **305** | Pn | **Pn** | **04 47 38.3** | **+1.7** |
| | comp=Z,2.4nm,0.3s,baz=145,slow=7.0,SNR=26 | | | | | | |
| CMIG | | | | Sn | **Sn** | **04 48 57.3** | **+0.7** |
| | comp=Z,2.5nm,0.3s,baz=254,slow=20,SNR=2.3 | | | | | | |
| CMIG | | | | LR | LR | 04 50 54.0 | |
| | comp=Z,70nm,20.1s,baz=135,slow=42 | | | | | | |
| **SDV** | **Santo Domingo** | **18.26** | **101** | P | **P** | **04 50 02.7** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=4.3,slow=2.7,SNR=2.8 | | | | | | |
| **JCT** | **Junction City** | **20.13** | **331** | P | **P** | **04 50 23.6** | **+0.3** |
| JCT | | | | IAmb | IAmb | 04 50 25.6 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **Y52A** | **Lilburn** | **21.16** | **11** | P | **P** | **04 50 35.1** | **+0.7** |
| Y52A | | | | IAmb | IAmb | 04 50 38.4 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **21.32** | **322** | P | **P** | **04 50 37.5** | **+1.3** |
| | comp=Z,1.9nm,0.6s,baz=142,slow=9.1,SNR=22 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **21.32** | **322** | P | **P** | **04 50 36.0** | **-0.2** |
| TX31 | | | | IAmb | IAmb | 04 50 39.5 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TX32** | **Lajitas Array** | **21.32** | **322** | P | **P** | **04 50 37.3** | **+1.1** |
| **MIAR** | **Mount Ida** | **21.81** | **349** | P | **P** | **04 50 41.0** | **-0.6** |
| **ATAH** | **Atahualpa** | **22.53** | **152** | LR | LR | 04 58 46.3 | |
| | comp=Z,29nm,18.9s,baz=296,slow=33 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.96** | **10** | P | **P** | **04 50 53.2** | **-0.3** |
| | comp=Z,3.5nm,0.9s,baz=198,slow=13,SNR=3.6 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.96** | **10** | P | **P** | **04 50 53.4** | **-0.1** |
| TKL | | | | IAmb | IAmb | 04 51 03.0 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **LCAR** | **Lake Charles** | **23.03** | **355** | P | **P** | **04 50 54.1** | **-0.1** |
| **FNO** | **Franklin** | **23.46** | **342** | P | **P** | **04 50 58.8** | **+0.5** |
| **U40A** | **Yellville** | **23.50** | **352** | P | **P** | **04 50 59.0** | **+0.4** |
| U40A | | | | IAmb | IAmb | 04 51 01.1 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **24.05** | **323** | P | **P** | **04 51 04.1** | **+0.4** |
| **MSTX** | **Muleshoe** | **24.43** | **331** | P | **P** | **04 51 06.8** | **-0.4** |
| MSTX | | | | IAmb | IAmb | 04 51 07.9 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **24.88** | **351** | P | **P** | **04 51 11.4** | **+0.2** |
| S39A | | | | IAmb | IAmb | 04 51 29.9 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **25.01** | **355** | P | **P** | **04 51 12.1** | **-0.2** |
| CCM | | | | IAmb | IAmb | 04 51 29.9 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **27.06** | **327** | LR | LR | 05 02 48.4 | |
| | comp=Z,18nm,21.5s,baz=106,slow=38 | | | | | | |
| **SADO** | **Sadowa** | **32.66** | **13** | LR | LR | 05 05 59.6 | |
| | comp=Z,44nm,18.1s,baz=244,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **34.66** | **333** | P | **P** | **04 52 38.2** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=134,slow=11,SNR=4.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **34.66** | **333** | P | **P** | **04 52 38.6** | **+0.5** |
| **REDW** | **Red Top Meadow** | **35.71** | **332** | P | **P** | **04 52 47.9** | **+0.8** |
| **SNOW** | **Snow King Moun** | **35.74** | **332** | P | **P** | **04 52 47.0** | **-0.4** |
| SNOW | | | | IAmb | IAmb | 04 52 48.7 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **36.42** | **319** | P | **P** | **04 52 55.7** | **+2.5** |
| | comp=Z,0.3nm,0.4s,baz=126,slow=7.5,SNR=2.1 | | | | | | |
| **RLMT** | **Red Lodge** | **36.43** | **335** | P | **P** | **04 52 52.6** | **-0.6** |
| RLMT | | | | IAmb | IAmb | 04 53 08.8 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **YMR** | **Madison River** | **36.78** | **333** | P | **P** | **04 52 56.9** | **+0.6** |
| YMR | | | | IAmb | IAmb | 04 53 03.9 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.56** | **352** | LR | LR | 05 08 27.0 | |
| | comp=Z,66nm,20.7s,baz=106,slow=37 | | | | | | |
| **DGMT** | **Dagmar** | **37.58** | **343** | P | **P** | **04 53 03.3** | **+0.6** |
| **EGMT** | **Eagleton** | **39.02** | **338** | P | **P** | **04 53 15.0** | **+0.2** |
| **NEW** | **Newport** | **42.28** | **332** | LR | LR | 05 16 23.8 | |
| | comp=Z,41nm,18.8s,baz=65,slow=44 | | | | | | |
| **SCHQ** | **Schefferville** | **45.09** | **18** | P | **P** | **04 54 00.3** | **-3.7** |
| | comp=Z,1.3nm,0.8s,baz=252,slow=9.0,SNR=3.7 | | | | | | |
| **SCHQ** | **Schefferville** | **45.09** | **18** | P | **P** | **04 54 01.5** | **-2.5** |
| **FRB** | **Frobisher Bay** | **52.58** | **11** | LR | LR | 05 15 46.4 | |
| | comp=Z,41nm,19.3s,baz=228,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.71** | **345** | P | **P** | **04 55 01.1** | **-1.2** |
| | comp=Z,7.4nm,1.0s,baz=139,slow=7.9,SNR=52 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.71** | **345** | P | **P** | **04 55 01.3** | **-0.9** |
| **RES** | **Resolute Bay** | **61.73** | **358** | LR | LR | 05 26 29.2 | |
| | comp=Z,46nm,19.3s,baz=104,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **64.97** | **336** | P | **P** | **04 56 26.1** | **-1.1** |
| | comp=Z,1.2nm,0.9s,baz=142,slow=4.7,SNR=12 | | | | | | |
| **MDT** | **Midelt** | **78.19** | **59** | LR | LR | 05 27 00.3 | |
| | comp=Z,38nm,20.6s,baz=347,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **138.21** | **255** | PKhKP | PKPpre | 05 05 17.0 | |
| | comp=Z,0.3nm,0.5s,baz=75,slow=1.7,SNR=1.7 | | | | | | |
| WRA | | | | PKP | pPKPdf | 05 05 24.3 | **-7.8** |
| | comp=Z,0.4nm,0.8s,baz=87,slow=2.2,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **138.30** | **249** | PKhKP | PKPpre | 05 05 16.8 | |
| | comp=Z,0.1nm,0.5s,baz=227,slow=38,SNR=1.9 | | | | | | |

**TRN 18 05:26:04.7,11.97N×59.66W,h45km,MD3.7,North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TOSP** | **Speyside** | **1.09** | **232** | *eP* | Pn | 05 26 24.5 | +1.0 |
| TOSP | | | | *eS* | Sn | 05 26 39.5 | +2.1 |
| **BBSP** | **Saint Philip** | **1.15** | **10** | *eP* | Pn | 05 26 27.0 | +2.6 |
| BBSP | | | | *eS* | Sn | 05 26 38.5 | -0.4 |
| **BBGH** | **Gun Hill** | **1.17** | **5** | *eP* | Pn | 05 26 27.8 | +3.0 |
| BBGH | | | | *eS* | Sn | 05 26 40.1 | +0.5 |
| **GCMP** | **Grenada, Carri** | **1.80** | **287** | *eP* | Pn | 05 26 34.1 | +0.7 |
| GCMP | | | | *eS* | Sn | 05 26 56.9 | +1.8 |
| **SVOC** | **Richmond Hill,** | **1.93** | **308** | *eP* | Pn | 05 26 36.5 | +1.4 |
| **GRSS** | **Sisters** | **1.94** | **280** | *eP* | Pn | 05 26 37.4 | +2.1 |
| **GRHS** | **Sauteurs** | **1.96** | **278** | *eP* | Pn | 05 26 37.5 | +2.0 |
| GRHS | | | | *eS* | Sn | 05 27 01.8 | +3.0 |
| **GRGR** | **Grenville** | **1.96** | **275** | *eP* | Pn | 05 26 36.2 | +0.7 |
| GRGR | | | | *eS* | Sn | 05 27 00.3 | +1.4 |
| **SVB** | **Belmont** | **2.03** | **310** | *eP* | Pn | 05 26 37.2 | +0.8 |
| SVB | | | | *eS* | Sn | 05 27 03.0 | +2.5 |
| **SVV** | **Soufriere Volc** | **2.03** | **312** | *eP* | Pn | 05 26 38.5 | +2.1 |
| **GRFF** | **Grenada Fort F** | **2.04** | **272** | *eP* | Pn | 05 26 37.7 | +1.2 |
| GRFF | | | | *eS* | Sn | 05 27 01.3 | +0.5 |
| **MCLT** | **Moule a Chique** | **2.14** | **324** | *eP* | Pn | 05 26 39.5 | +1.6 |
| MCLT | | | | *eS* | Sn | 05 27 05.2 | +2.0 |
| **TRN** | **Trinidad (W)** | **2.16** | **233** | *eP* | Pn | 05 26 39.5 | +1.4 |
| TRN | | | | *eS* | Sn | 05 27 03.6 | -0.2 |
| **SLCP** | **Castries, St.** | **2.41** | **328** | *eP* | Pn | 05 26 42.5 | +0.8 |
| SLCP | | | | *eS* | Sn | 05 27 11.0 | +1.1 |
| **SLBI** | **Saint Lucia, B** | **2.41** | **328** | *eP* | Pn | 05 26 42.8 | +1.1 |
| SLBI | | | | *eS* | Sn | 05 27 09.8 | -0.3 |
| SLBI | | | | | Sn | 05 27 11.1 | +1.0 |
| **MPOM** | **Morne Pois Mar** | **2.73** | **335** | *eP* | Pn | 05 26 47.1 | +1.1 |
| MPOM | | | | *eS* | Sn | 05 27 18.6 | +0.9 |
| **MVM** | **Montagne Vaucl** | **2.84** | **335** | *eP* | Pn | 05 26 49.5 | +1.8 |
| **BIM** | **Bigot** | **2.88** | **332** | *eP* | Pn | 05 26 50.0 | +1.7 |
| BIM | | | | *eS* | Sn | 05 27 22.6 | +0.9 |
| **TRMF** | **Trois Ilets** | **2.89** | **332** | *eP* | Pn | 05 26 49.8 | +1.5 |
| **ZAM** | **Aeronautique** | **2.91** | **333** | *eP* | Pn | 05 26 50.3 | +1.7 |
| **FDF** | **Fort de France** | **3.11** | **332** | *eP* | Pn | 05 26 53.6 | +2.3 |
| FDF | | | | *eS* | Sn | 05 27 29.0 | +1.7 |
| **PML** | **Morne Lenard** | **3.17** | **332** | *eP* | Pn | 05 26 54.4 | +2.3 |
| **GBMF** | **Grand Be** | **3.17** | **333** | *eP* | Pn | 05 26 54.8 | +2.5 |
| **BAMF** | **Morne Balai** | **3.18** | **333** | *eP* | Pn | 05 26 54.9 | +2.5 |
| **PCM** | **Pelee Case Pet** | **3.21** | **332** | *eP* | Pn | 05 26 55.0 | +2.3 |
| **SVN** | **Savane Anatole** | **3.21** | **333** | *eP* | Pn | 05 26 55.4 | +2.6 |
| **DSLB** | **Salisbury** | **3.85** | **334** | *eP* | Pn | 05 27 03.6 | +2.1 |
| DSLB | | | | *eS* | Sn | 05 27 46.2 | +0.6 |
| **MDCT** | **Cottage Hill,** | **4.03** | **334** | *eP* | Pn | 05 27 05.0 | +1.1 |
| **MAGL** | **Barre de l'ile** | **4.26** | **338** | *eP* | Pn | 05 27 08.5 | +1.4 |
| **MAGL** | **Barre de l'ile** | **4.26** | **338** | *eS* | Sn | 05 27 55.1 | -0.5 |
| **TDBA** | **Terre de Bas,** | **4.31** | **334** | *eP* | Pn | 05 27 09.6 | +1.8 |
| **TDBA** | **Terre de Bas,** | **4.31** | **334** | *eS* | Sn | 05 27 58.0 | +1.2 |
| **CBE** | **Ff, Capester** | **4.50** | **335** | *eP* | Pn | 05 27 12.0 | +1.6 |
| **CBE** | **Ff, Capester** | **4.50** | **335** | *eS* | Sn | 05 28 00.5 | -0.9 |
| **ANBD** | **Bethesda, Anti** | **5.45** | **338** | *eP* | Pn | 05 27 24.8 | +1.4 |
| **ANBD** | **Bethesda, Anti** | **5.45** | **338** | *eS* | Sn | 05 28 23.3 | -1.5 |

**IDC 18 05:31:47.5±1.4,0.84N×129.05E,h0km,mb4.2/3, mb1 4.3/4,mb1mx3.6/32,mbtmp4.2/4,ML4.0/1,Error ellipse: s-maj=55.9km s-min=20.4km az=57.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **2.80** | **127** | Pn | Pn | 05 32 32.6 | -1.0 |
| | 23nm,0.3s,baz=325,slow=14,SNR=18 | | | | | | |
| SIJI | | | | Sn | Sn | 05 33 07.1 | -0.9 |
| | 13nm,0.3s,baz=219,slow=22,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.30** | **166** | P | P | 05 36 36.1 | +0.2 |
| | 270nm,0.4s,baz=344,slow=11,SNR=164 | | | | | | |
| **ASAR** | **Alice Springs** | **24.82** | **169** | P | P | 05 37 12.2 | +0.6 |
| | 7.7nm,0.7s,baz=349,slow=11,SNR=59 | | | | | | |
| **STKA** | **Stephens Creek** | **34.65** | **161** | P | P | 05 38 38.6 | -0.2 |
| | 2.8nm,0.5s,baz=341,slow=9.2,SNR=9.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.23** | **325** | P | P | 05 42 04.3 | -0.1 |
| | 0.4nm,0.4s,baz=115,slow=7.8,SNR=9.5 | | | | | | |

*IDC **18** 05:52:02.2±6.8,24.89S×177.01W,h112km±54km,mb3.5/5, mb1 4.0/6,mb1mx3.7/24,mbtmp4.0/6,MS3.3/1,Ms1 3.3/1, ms1mx2.6/39,Error ellipse: s-maj=57.9km s-min=23.8km az=147.0*

**ISC 18 05:52:01.1±0.9,24.9S±0.2×176.9W±0.1,h100km,n14, σ1s31/12,mb3.9/5,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.55** | **326** | P | **Pn** | **05 54 01.7** | **-0.4** |
| | 3.3nm,0.3s,baz=139,slow=13,SNR=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.52** | **277** | P | **P** | **05 55 38.4** | **+1.7** |
| | 0.7nm,0.3s,baz=81,slow=18,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **44.63** | **261** | P | **P** | **06 00 04.2** | **+0.3** |
| | 0.9nm,0.3s,baz=91,slow=7.1,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.13** | **266** | P | **P** | **06 00 06.8** | **-1.1** |
| | 1.6nm,0.5s,baz=98,slow=8.5,SNR=24 | | | | | | |
| **KSRS** | **Korea Array** | **80.84** | **319** | LR | LR | 06 36 49.3 | |
| | comp=Z,16nm,20.1s,baz=205,slow=33 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.58** | **42** | P | **P** | **06 04 19.4** | **+0.9** |
| | 0.5nm,0.5s,baz=216,slow=8.9,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.62** | **57** | P | **P** | **06 04 44.6** | **+1.3** |
| | 0.4nm,0.8s,baz=318,slow=1.2,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **92.39** | **12** | P | **P** | **06 04 58.2** | **-1.6** |
| | 0.3nm,0.5s,baz=220,slow=6.0,SNR=4.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.43** | **349** | PKP | **PKPdf** | **06 11 04.2** | **-0.5** |
| | 3.3nm,0.9s,baz=288,slow=0.8,SNR=7.0 | | | | | | |
| **FINES** | **FINESS Array B** | **140.27** | **343** | PKhKP | PKPpre | 06 11 10.8 | |
| | 3.2nm,1.0s,baz=64,slow=4.4,SNR=4.1 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **06 11 18.4** | **+0.8** |
| | 1.6nm,0.9s,baz=86,slow=2.7,SNR=7.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.47** | **353** | PKhKP | PKPpre | 06 11 17.2 | |
| | 0.7nm,0.8s,baz=220,slow=18,SNR=3.4 | | | | | | |
| **HFS** | **Hagfors** | **144.04** | **351** | PKP | **PKPab** | **06 11 21.0** | **-1.0** |
| | 1.1nm,0.4s,baz=108,slow=4.8,SNR=9.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **147.32** | **329** | PKPbc | **PKPdf** | **06 11 31.2** | **+1.0** |
| | 3.0nm,0.4s,baz=45,slow=4.4,SNR=25 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.22** | **173** | PKPab | **PKPab** | **06 13 03.4** | **-1.7** |
| | 0.4nm,0.5s,baz=260,slow=4.8,SNR=2.3 | | | | | | |

**IDC 18 05:59:24.4±2.5,65.72N×111.51E,h0km,mb3.3/2, mb1 3.6/4,mb1mx3.3/53,mbtmp3.5/4,ML5.2/1,Error ellipse: s-maj=184.9km s-min=17.4km az=139.0, Northern and central Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIXI** | **Tiksi** | **8.65** | **39** | Pn | Pn | 06 01 28.4 | -2.2 |
| | 0.8nm,0.3s,baz=98,slow=22,SNR=6.0 | | | | | | |
| TIXI | | | | Sn | Sn | 06 03 04.8 | -3.8 |
| | 0.6nm,0.3s,baz=270,slow=23,SNR=1.8 | | | | | | |
| TIXI | | | | Lg | Lg | 06 03 46.9 | |
| | 0.5nm,0.3s,baz=273,slow=24,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.68** | **241** | P | P | 06 03 33.2 | +0.6 |
| | 0.2nm,0.3s,baz=57,slow=10,SNR=3.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **22.65** | **244** | P | P | 06 04 25.9 | -0.9 |
| | 1.3nm,0.7s,baz=38,slow=11,SNR=8.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.56** | **234** | P | P | 06 04 45.9 | +0.3 |
| | 0.2nm,0.5s,baz=43,slow=7.5,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **38.10** | **43** | P | P | 06 06 44.2 | -0.1 |
| | 0.4nm,0.7s,baz=310,slow=6.6,SNR=6.5 | | | | | | |

**GUC 18 06:00:48.2±0.7,24.20S×69.55W,h72km±8km,ML3.7,8C, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB14** | **IPOC Station P** | **0.89** | **241** | ⇑*iP* | Pn | 06 01 05.9 | 0.0 |
| PB14 | | | | *i* S | Sn | 06 01 19.5 | +0.6 |
| **PB15** | **IPOC Station P** | **0.99** | **4** | ⇑*iP* | Pn | 06 01 07.1 | +0.2 |
| PB15 | | | | *i* S | Sn | 06 01 21.4 | +0.6 |
| **PB10** | **IPOC Station P** | **1.15** | **306** | *eP* | Pn | 06 01 08.2 | -0.4 |
| PB10 | | | | *i* S | Sn | 06 01 23.8 | -0.2 |
| **PB06** | **IPOC Station P** | **1.49** | **359** | ⇑*iP* | Pn | 06 01 13.1 | -0.2 |
| PB06 | | | | *i* S | Sn | 06 01 32.5 | +0.4 |
| PB06 | | | | IAML | | 06 01 34.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **1.69** | **20** | *eP* | Pn | 06 01 15.9 | -0.1 |
| LVC | | | | *i* S | Sn | 06 01 37.4 | +0.3 |
| **PB04** | **IPOC Station P** | **1.94** | **343** | ⇑*iP* | Pn | 06 01 18.2 | -1.1 |
| PB04 | | | | IAML | | 06 01 49.4 | |
| | comp=E,701nm,0.2s | | | | | | |
| **PB03** | **IPOC Station P** | **2.15** | **355** | ⇑*iP* | Pn | 06 01 21.3 | -0.8 |
| PB03 | | | | *i* S | Sn | 06 01 47.5 | -0.4 |
| PB03 | | | | IAML | | 06 01 53.7 | |
| | comp=E,441nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.41** | **7** | *eP* | Pn | 06 01 26.1 | +0.5 |
| PB09 | | | | IAML | | 06 02 02.2 | |
| | comp=N,293nm,0.6s | | | | | | |
| **PB07** | **IPOC Station P** | **2.48** | **353** | ⇑*iP* | Pn | 06 01 25.5 | -1.0 |
| PB07 | | | | IAML | | 06 02 05.5 | |
| | comp=E,298nm,0.2s | | | | | | |
| **AC02** | **Maricunga** | **2.65** | **172** | ⇑*iP* | Pn | 06 01 31.2 | +2.0 |
| AC02 | | | | IAML | | 06 02 10.5 | |
| | comp=E,251nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **2.88** | **353** | *eP* | Pn | 06 01 30.6 | -1.4 |
| PB02 | | | | IAML | | 06 02 18.6 | |
| | comp=E,372nm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **3.14** | **1** | ⇑*iP* | Pn | 06 01 34.4 | -1.1 |
| **PATCX** | **Punta Patache** | **3.41** | **350** | *eP* | Pn | 06 01 36.7 | -2.4 |
| PATCX | | | | IAML | | 06 02 37.1 | |
| | comp=N,172nm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **3.91** | **355** | *eP* | Pn | 06 01 43.9 | -2.1 |
| **AC04** | **Llanos de Chal** | **4.22** | **199** | *eP* | Pn | 06 01 47.4 | -2.7 |

*IDC **18** 06:04:57.8±0.8,41.17N×71.92E,h0km,mb3.9/13, mb1 4.0/18,mb1mx3.8/65,mbtmp3.9/18,ML3.2/6,Error ellipse: s-maj=16.2km s-min=9.7km az=157.0*
*SOME **18** 06:04:58.9,41.23N×72.05E,h10km*
*MOS **18** 06:04:58.7±1.4,41.26N×71.76E,h9km,mb4.2/6,Error ellipse: s-maj=6.3km s-min=4.3km az=75.0*
*MOS Felt (IV) at Kyzyl-Dzhar; (III-IV) at Atana; (III) at Kum, Sary-Kashka, Semet, Tash-Kumyr, Uluk; (II) at Ak-Say, Ak-Suu, Kerben, Shamaldy-Say.*
*ISU **18** 06:04:59,41.28N×72.18E,h25km*
*KRNET **18** 06:04:59.7±0.1,41.30N×71.93E,h14km,mb4.2*
*NNC **18** 06:05:01.3±1.1,41.30N×72.07E,h0km,mb4.4,mpv4.1, Error ellipse: s-maj=10.3km s-min=3.7km az=8.0*

**ISC 18 06:04:59.6±1.0,41.29N±0.02×71.90E±0.01,h6km±7km, n178,σ2s20/254,mb3.8/15,47C-24D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **0.52** | **5** | ⇓*eP*G | **Pg** | **06 05 09.5** | **-0.1** |
| ARK | | | | *eS* | **Sg** | **06 05 16.4** | **+0.1** |
| **ARK** | **Arkit** | **0.52** | **5** | *eP* | **Pg** | **06 05 10.0** | **+0.4** |
| ARK | | | | *eS* | **Sg** | **06 05 17.0** | **+0.7** |
| **ARK** | **Arkit** | **0.52** | **5** | ⇓*eP* | **Pg** | **06 05 09.5** | **-0.1** |
| | baz=3.0 | | | | | | |
| ARK | | | | ⇓*eS* | **Sg** | **06 05 16.4** | **+0.1** |
| | baz=3.0 | | | | | | |
| **TRKS** | **Terek-Say** | **0.62** | **293** | ⇓*i*PG | **Pg** | **06 05 11.1** | **-0.5** |
| TRKS | | | | *i* S | **Sg** | **06 05 19.8** | **+0.1** |
| **TRKS** | **Terek-Say** | **0.62** | **293** | ⇓*iP* | **Pg** | **06 05 11.1** | **-0.5** |
| | baz=86 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sg** | **06 05 19.8** | **+0.1** |
| | baz=86 | | | | | | |
| **TSTA** | **Tashata** | **0.83** | **148** | *eP* | **Pg** | **06 05 15.0** | **-0.6** |
| TSTA | | | | *eS* | **Sg** | **06 05 26.0** | **-0.4** |
| **FRG** | **Fergana** | **0.91** | **185** | *eP* | **Pn** | **06 05 20.0** | **+1.0** |
| FRG | | | | *eS* | **Sn** | **06 05 36.0** | **+3.5** |
| **OHH** | **Osh** | **1.01** | **138** | *i* PG | **Pg** | **06 05 18.8** | **-0.3** |
| OHH | | | | *i* S | **Sg** | **06 05 32.8** | **+0.5** |
| **OHH** | **Osh** | **1.01** | **138** | ⇑*iP* | **Pg** | **06 05 18.8** | **-0.3** |
| | baz=40 | | | | | | |
| OHH | | | | ⇑*i*S | **Sg** | **06 05 32.8** | **+0.5** |
| | baz=40 | | | | | | |
| **MNAS** | **Manas** | **1.28** | **20** | *i* PG | **Pn** | **06 05 23.5** | **-0.7** |
| MNAS | | | | *i* S | **Sb** | **06 05 41.2** | **+0.1** |
| **MNAS** | **Manas** | **1.28** | **20** | ⇑*iP* | **Pn** | **06 05 23.5** | **-0.7** |
| | baz=20 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **06 05 41.2** | **+0.1** |
| | baz=20 | | | | | | |
| **BTK** | **Batken** | **1.48** | **214** | *e*PG | **Pn** | **06 05 23.1** | **-3.7** |
| BTK | | | | *i* S | **Sg** | **06 05 48.6** | **+1.6** |
| **BTK** | **Batken** | **1.48** | **214** | *i* P | **Pg** | **06 05 28.0** | **+0.1** |
| BTK | | | | *i* S | **S

baz=54
AAK ⇑*i*S **Sb** **06 06 11.7 -0.4**
baz=54
**FRU1 Bishkek 2.54 52** *e*PN **Pn** **06 05 43.9 +2.4**
FRU1 *i* S **Sb** **06 06 15.8 -1.4**
**FRU1 Bishkek 2.54 52**⇑*e*P **Pn** **06 05 43.9 +2.4**
baz=52
FRU1 ⇑*i*S **Sb** **06 06 15.8 -1.4**
baz=52
**KBK Karagaybulak 2.66 58** P **Pb** **06 05 46.3 -1.4**
SNR=53
**KBK Karagaybulak 2.66 58** *i* PN **Pn** **06 05 45.3 +2.2**
KBK *i* S **Sn** **06 06 18.4 +2.7**
**KBK Karagaybulak 2.66 58**⇑*i*P **Pn** **06 05 45.3 +2.2**
baz=58
KBK ⇑*i*S **Sn** **06 06 18.4 +2.7**
baz=58
**CHMS Chumysh 2.73 50** P **Pn** **06 05 46.9 +2.9**
SNR=52
**CHMS Chumysh 2.73 50** *i* PN **Pn** **06 05 46.1 +2.1**
CHMS *i* S **Sn** **06 06 20.2 +2.9**
**CHMS Chumysh 2.73 50**⇑*i*P **Pn** **06 05 46.1 +2.1**
baz=50
CHMS ⇑*i*S **Sn** **06 06 20.2 +2.9**
baz=50
**USP Ospenovka 2.77 43** P **Pn** **06 05 47.4 +2.8**
SNR=27
**USP Ospenovka 2.77 43** *i* PN **Pn** **06 05 46.8 +2.3**
USP *i* S **Sn** **06 06 21.2 +2.9**
**USP Ospenovka 2.77 43**⇑*i*P **Pn** **06 05 46.8 +2.3**
baz=43
USP ⇑*i*S **Sn** **06 06 21.2 +2.9**
baz=43
**SGDS Sogindy 2.96 42** *e*PN **Pn** **06 05 49.7 +2.4**
**SGDS Sogindy 2.96 42** *e*P **Pb** **06 05 50.8 -2.0**
18nm,0.4s
SGDS *e*S **Sb** **06 06 27.8 -1.6**
389nm,0.4s
**SGDS Sogindy 2.96 42** *e*Pg **Pg** **06 05 55.6 -0.8**
baz=42
SGDS *e*Sn **Sn** **06 06 25.0 +1.8**
baz=42
**SGDS Sogindy 2.96 42** Pg **Pb** **06 05 52.1 -0.8**
20nm,0.3s
SGDS Lg Lg 06 06 31.4
389nm,0.4s
**TKM2 Tokmak 2 3.20 58** P **Pn** **06 05 53.2 +2.5**
SNR=21
**TKM2 Tokmak 2 3.20 58** *e*PN **Pn** **06 05 53.0 +2.3**
**TKM2 Tokmak 2 3.20 58** ⇑Pn **Pn** **06 05 52.0 +1.3**
9.6nm,0.4s
TKM2 ⇑Pg **Pb** **06 05 58.7 +1.7**
47nm,0.5s
TKM2 ⇑Lg Lg 06 06 38.9
138nm,0.5s
**TKM2 Tokmak 2 3.20 58**⇑*e*P **Pn** **06 05 53.0 +2.3**
baz=58
TKM2 ⇑*i*S **Sn** **06 06 31.9 +2.7**
baz=58
**BOOM Boomskoye usch 3.25 67** *e*PN **Pn** **06 05 53.5 +2.2**
BOOM *i* S **Sn** **06 06 32.9 +2.5**
**BOOM Boomskoye usch 3.25 67**⇑*e*P **Pn** **06 05 53.5 +2.2**
baz=67
BOOM ⇑*i*S **Sn** **06 06 32.9 +2.5**
baz=67
**ULHL Ulahol 3.39 72** P **Pn** **06 05 55.5 +2.3**
SNR=6.9
**ULHL Ulahol 3.39 72**⇓*e*PN **Pn** **06 05 55.4 +2.2**
ULHL *i* S **Sn** **06 06 36.0 +2.2**
**ULHL Ulahol 3.39 72**⇓*e*P **Pn** **06 05 55.4 +2.2**
baz=72
ULHL ⇓*i*S **Sn** **06 06 36.0 +2.2**
baz=72
**DGS Degeres 3.48 54** *e*P **Pb** **06 06 02.2 +0.6**
17nm,0.3s
DGS *e*S **Sb** **06 06 48.1 +3.9**
293nm,0.6s
**DGS Degeres 3.48 54** Pg **Pb** **06 06 02.2 +0.6**
17nm,0.3s
DGS Lg Lg 06 06 48.1
293nm,0.6s
**KST Kastek 3.50 58** *e*P **Pb** **06 06 02.5 +0.5**
36nm,0.5s
KST *e*S **Sb** **06 06 48.4 +3.7**
108nm,0.8s
**KST Kastek 3.50 58** Pg **Pb** **06 06 02.5 +0.5**
36nm,0.5s
KST Lg Lg 06 06 48.4
108nm,0.8s
**KSH Kashi 3.58 118** P **Pn** **06 05 57.4 +1.6**
KSH S **Sn** **06 06 37.1 -1.3**
KSH pmax pmax
comp=Z,10.0nm,0.4s
KSH smax smax
comp=N,170nm,0.5s
KSH smax smax
comp=E,290nm,0.9s
**KRBS Karabastau 3.69 48** *e*P **Pb** **06 06 04.6 -0.6**
comp=E,20nm,0.4s
KRBS *e*S **Sb** **06 06 52.1 +1.9**
comp=E,213nm,0.6s
**KRBS Karabastau 3.69 48** Pg **Pb** **06 06 04.6 -0.6**
comp=E,20nm,0.4s
KRBS Lg Lg 06 06 52.1
comp=E,213nm,0.6s
**MTBS Maitube 3.84 60** *e*P **Pb** **06 06 08.3 +0.5**
comp=E,10nm,0.3s
MTBS *e*S **Sb** **06 06 59.0 +4.5**
comp=E,184nm,0.4s
**MTBS Maitube 3.84 60** Pg **Pb** **06 06 08.3 +0.5**
comp=E,10nm,0.3s
MTBS Lg Lg 06 06 59.0
comp=E,184nm,0.4s
**KDJ Kajisay 4.04 76**⇓*i*P **Pn** **06 06 04.3 +2.1**
baz=76
KDJ ⇓*i*S **Sn** **06 06 52.0 +2.0**
baz=76
**BTLS Baital 4.07 22** *e*PN **Pn** **06 06 03.8 +1.4**
BTLS *e* 06 06 15.4
BTLS *e* 06 06 52.1
**BTLS Baital 4.07 22** *e*P **Pb** **06 06 13.0 +1.4**
comp=E,17nm,0.3s
BTLS *e*S **Sb** **06 07 06.5 +5.4**
comp=E,170nm,0.6s
**BTLS Baital 4.07 22** *e*Pn **Pn** **06 06 03.9 +1.4**
baz=22
BTLS *e*Pg **Pg** **06 06 15.5 -2.1**
baz=22
BTLS *e*Sn **Sn** **06 06 52.1 +1.8**
baz=22
BTLS *e*Lg Lg 06 07 12.3
baz=22
**BTLS Baital 4.07 22** Pg **Pb** **06 06 13.0 +1.4**
comp=E,17nm,0.3s
BTLS Lg Lg 06 07 06.5
comp=E,170nm,0.6s
**TNSS Tian-Shan 4.14 63** *e*P **Pb** **06 06 14.2 +1.1**
comp=E,16nm,0.4s
TNSS *e*S **Sg** **06 07 09.3 -3.3**
comp=E,42nm,0.7s
**TNSS Tian-Shan 4.14 63** *e*Pg **Pg** **06 06 17.6 -1.4**
baz=62
**TNSS Tian-Shan 4.14 63** Pg **Pb** **06 06 14.2 +1.1**
comp=E,16nm,0.4s
TNSS Lg Lg 06 07 09.3
comp=E,42nm,0.7s
**KUU Kurty 4.19 50** *e*P **Pb** **06 06 14.0 +0.3**
comp=E,50nm,0.7s
KUU *e*S **Sb** **06 07 09.2 +4.7**
comp=E,218nm,0.6s
**KUU Kurty 4.19 50** *e*Pg **Pb** **06 06 17.6 +3.9**
baz=50
**KUU Kurty 4.19 50** Pg **Pb** **06 06 14.0 +0.3**
comp=E,50nm,0.7s
KUU Lg Lg 06 07 09.2
comp=E,218nm,0.6s
**AAA Alma-Ata 4.19 61** *e*Pg **Pg** **06 06 18.5 -1.4**
baz=60
**AGL Agalyk 4.22 247** *e*P **Sg** **06 07 10.0 -5.1**
**KNDC Almaty 4.23 61** PN **Pg** **06 06 18.5 -2.1**
**KNDC Almaty 4.23 61** ⇑Pg **Pb** **06 06 15.1 +0.6**
comp=E,156nm,0.9s
KNDC ⇓Lg Lg 06 07 12.7
comp=E,402nm,0.7s
**MDOK Medeo 4.26 62** PN **Pn** **06 06 07.7 +2.5**
**MDOK Medeo 4.26 62** *e*P **Pb** **06 06 16.7 +1.7**
comp=E,24nm,0.4s
MDOK *e*S **Sg** **06 07 13.0 -3.4**
comp=E,118nm,0.8s
**MDOK Medeo 4.26 62** *e*Pg **Pg** **06 06 19.1 -2.2**
baz=61
**MDOK Medeo 4.26 62** ⇓Pn **Pn** **06 06 07.7 +2.5**
comp=E,19nm,0.6s
MDOK ⇓Pg **Pb** **06 06 17.1 +2.1**
comp=E,34nm,0.4s
MDOK ⇑Lg Lg 06 07 12.9
comp=E,182nm,1.0s
**MDOK Medeo 4.26 62** Pg **Pb** **06 06 16.7 +1.7**
comp=E,24nm,0.4s
MDOK Lg Lg 06 07 13.0
comp=E,118nm,0.8s
**KTBS Karatobe 4.29 54** *e*P **Pb** **06 06 16.2 +0.7**
comp=E,12nm,0.5s
KTBS *e*S **Sb** **06 07 11.8 +4.4**
comp=E,175nm,0.6s
**KTBS Karatobe 4.29 54** Pg **Pb** **06 06 16.2 +0.7**
comp=E,12nm,0.5s
KTBS Lg Lg 06 07 11.8
comp=E,175nm,0.6s
**KOTS Kotyrbulak 4.33 62** *e*P **Pb** **06 06 19.0 +2.7**
comp=E,30nm,0.5s
KOTS *e*S **Sg** **06 07 16.8 -2.0**
comp=E,202nm,0.9s
**KOTS Kotyrbulak 4.33 62** Pg **Pb** **06 06 19.0 +2.7**
comp=E,30nm,0.5s
KOTS Lg Lg 06 07 16.8
comp=E,202nm,0.9s
**KTAB Kitab 4.40 242** *e*P **Sb** **06 07 09.0 -1.6**
**ANVS Anan'yevo 4.55 69**⇑*i*P **Pn** **06 06 11.4 +2.2**
baz=69
ANVS ⇑*i*S **Sn** **06 07 03.6 +1.1**
baz=69
**CHKK Chushkaly 4.55 54** *e*P **Pb** **06 06 21.1 +1.2**
comp=E,14nm,0.5s
CHKK *e*S **Sb** **06 07 21.3 +6.3**
comp=E,137nm,0.5s
**CHKK Chushkaly 4.55 54** *e*Pg **Pb** **06 06 24.0 +4.1**
baz=53
**CHKK Chushkaly 4.55 54** Pg **Pb** **06 06 21.1 +1.2**
comp=E,14nm,0.5s
CHKK Lg Lg 06 07 21.3
comp=E,137nm,0.5s
**KURS Kuram 5.14 63** *e*P **Pb** **06 06 32.4 +2.4**
comp=E,10.0nm,0.7s
KURS *e*S **Sg** **06 07 39.6 -5.1**
comp=E,81nm,1.6s
**KURS Kuram 5.14 63** Pg **Pb** **06 06 32.4 +2.4**
comp=E,10.0nm,0.7s
KURS Lg Lg 06 07 39.6
comp=E,81nm,1.6s
**SATY Saty 5.15 68** *e*P **Pb** **06 06 32.5 +2.3**
comp=E,8.1nm,0.5s
SATY *e*S **Sg** **06 07 41.1 -3.9**
comp=E,66nm,0.5s
**SATY Saty 5.15 68** *e*Pg **Pg** **06 06 35.4 -2.9**
baz=67
**SATY Saty 5.15 68** Pg **Pb** **06 06 32.5 +2.3**
comp=E,8.1nm,0.5s
SATY Lg Lg 06 07 41.1
comp=E,66nm,0.5s
**ZHN Zhinishke 5.21 67** *e*Pg **Pb** **06 06 35.1 +4.0**
baz=66
**ARXS Arharly 5.25 54** *e*PN **Pb** **06 06 33.5 +1.6**
**ARXS Arharly 5.25 54** *e*P **Pb** **06 06 34.3 +2.4**
comp=E,5.8nm,0.4s
ARXS *e*S **Sg** **06 07 42.9 -5.5**
comp=E,168nm,0.6s
**ARXS Arharly 5.25 54** Pg **Pb** **06 06 34.3 +2.4**
comp=E,5.8nm,0.4s
ARXS Lg Lg 06 07 42.9
comp=E,168nm,0.6s
**KPKS Kokpek 5.48 64** *e*P **Pb** **06 06 38.7 +2.9**
comp=E,8.3nm,0.5s
KPKS *e*S **Sg** **06 07 50.3 -5.2**
comp=E,91nm,0.5s
**KPKS Kokpek 5.48 64** *e*Pn **Pn** **06 06 22.9 +1.0**
baz=64
**BLB Baldybastay 5.60 58** *e*P **Pb** **06 06 40.5 +2.6**
comp=E,6.1nm,0.2s
BLB *e*S **Sg** **06 07 53.5 -6.0**
comp=E,82nm,0.6s
**BLB Baldybastay 5.60 58** Pg **Pb** **06 06 40.5 +2.6**
comp=E,6.1nm,0.2s
BLB Lg Lg 06 07 53.5
comp=E,82nm,0.6s
**UZB Uzynbulak 5.61 68** *e*P **Pb** **06 06 40.2 +2.3**
comp=E,9.8nm,0.4s
UZB *e*S **Sb** **06 07 52.9 +7.4**
comp=E,60nm,0.6s
**UZB Uzynbulak 5.61 68** *e*Pg **Pb** 06 06 43.0 +5.0
baz=68
**UZB Uzynbulak 5.61 68** Pg **Pb** **06 06 40.2 +2.3**
comp=E,9.8nm,0.4s
UZB Lg Lg 06 07 52.9
comp=E,60nm,0.6s
**BUXR Bukhara 5.96 257** *e*P **Sn** **06 07 31.0 -5.9**
BUXR *e*S **Sg** **06 08 09.0 -1.9**
**PDGK Podgornoye 5.99 68** PN **Pn** **06 06 30.3 +1.4**
**PDGK Podgornoye 5.99 68** Pg **Pb** **06 06 47.7 +3.3**
comp=E,2.3nm,0.6s
PDGK Lg Lg 06 08 05.8
comp=E,23nm,0.8s
**PDGK Podgornoye 5.99 68** ⇑Pn **Pn** **06 06 30.3 +1.4**
comp=E,1.9nm,0.7s
PDGK ⇓Pg Pg 06 06 50.3 -4.0
comp=E,12nm,0.9s
PDGK ⇑Lg Lg 06 08 07.9
comp=E,112nm,0.8s
**TDK Taldyqorghan 6.04 50** *e*PN **Pn** **06 06 29.9 +0.5**
TDK *e* 06 06 51.0
**TDK Taldyqorghan 6.04 50** *e*Pn **Pn** **06 06 30.0 +0.5**
baz=50
TDK *e*Pg Pg 06 06 51.1 -4.1
baz=50
**DJR Jarkent 6.55 60** *e*P **Pb** **06 06 58.4 +4.3**
comp=E,2.7nm,0.3s
DJR *e*S **Sg** **06 08 24.1 -5.9**
comp=E,33nm,0.8s
**DJR Jarkent 6.55 60** Pg **Pb** **06 06 58.4 +4.3**
comp=E,2.7nm,0.3s
DJR Lg Lg 06 08 24.1
comp=E,33nm,0.8s
**OTUK Ortayu 6.97 2** PN **Pn** **06 06 43.5 +1.3**
**OTUK Ortayu 6.97 2** ⇓Pn **Pn** **06 06 43.6 +1.3**
comp=E,3.5nm,0.4s
OTUK ⇓Pg Pg 06 07 09.0 -3.9
comp=E,13nm,0.8s
OTUK ⇑Lg Lg 06 08 41.9
comp=E,134nm,0.8s
**BRZS Berezniki 8.71 3** *e*P **Pn** **06 07 06.2 +0.1**
**BRZS Berezniki 8.71 3** *e*Pn **Pn** **06 07 06.2 +0.1**
baz=3.5
**MAKZ Makanchi 9.12 49** ⇑Lg Lg 06 09 50.7
comp=E,30nm,1.3s
**MK31 Makanchi Array 9.29 50** *e*P **Pn** **06 07 15.7 +1.7**
MK31 06 09 13.6
**MK31 Makanchi Array 9.29 50** ⇑Pn **Pn** **06 07 15.8 +1.7**
comp=E,2.0nm,0.6s,baz=236,slow=16,SNR=19
MK31 ⇑Lg Lg 06 09 55.3
comp=E,37nm,1.1s
**MKAR Makanchi Array 9.29 50** Pn **Pn** **06 07 16.1 +2.0**
comp=E,0.3nm,0.3s,baz=235,slow=13,SNR=25
MKAR Lg Lg 06 09 57.5
comp=E,0.8nm,0.3s,baz=236,slow=26,SNR=4.3
**KURBB Kurchatov Arra 10.41 24** Pn **Pn** **06 07 27.5 -1.8**
comp=E,0.1nm,0.3s,baz=216,slow=12,SNR=7.5
KURBB Lg Lg 06 10 28.6
comp=E,0.4nm,0.3s,baz=323,slow=40,SNR=3.5
**KURBB Kurchatov Arra 10.41 24** P **Pn** **06 07 27.6 -1.8**
KURBB 06 09 30.2
**KURBB Kurchatov Arra 10.41 24** ⇓Pn **Pn** **06 07 27.7 -1.7**
comp=E,4.2nm,1.1s
KURBB ⇑Pg 06 08 09.8
comp=E,5.0nm,0.9s
KURBB ⇓Sn **Sn** **06 09 30.3 +4.0**
comp=E,10nm,0.7s
KURBB ⇑Lg Lg 06 10 29.5
comp=E,54nm,0.7s
**KURK Kurchatov 10.52 24** *i* P **Pn** **06 07 32.5 +1.6**
**AB31 Akbulak array 11.58 317** P **Pn** **06 07 44.3 -1.1**
**AB31 Akbulak array 11.58 317** ⇑P **Pn** **06 07 44.4 -1.1**
comp=E,1.8nm,0.5s,baz=129,slow=12,SNR=64
**BVAR Borovoye Array 11.79 356** Pn **Pn** **06 07 47.6 -0.6**
comp=E,0.4nm,0.3s,baz=130,slow=13,SNR=5.1
**BRVK Borovoye 11.83 355** *i* P **Pn** **06 07 49.0 +0.3**
**AKTO Aktyubinsk 13.30 318** Pn **Pn** **06 08 08.3 -0.5**
comp=E,0.4nm,0.3s,baz=137,slow=15,SNR=4.5
**DGZ Jazzator, Alta 13.75 47** *i* P **Pn** **06 08 17.3 +2.2**
**ZALV Zalesovo Beam 15.34 30** Pn **P** **06 08 40.2 -1.2**
comp=E,1.0nm,0.3s,baz=226,slow=11,SNR=11
**ZALV Zalesovo Beam 15.34 30** *e*P **P** **06 08 41.4 +0.1**
ZALV pmax pmax
comp=Z,1.0nm,0.3s
**ARU Arti 17.46 335** P **Pn** **06 09 02.8 -0.8**
comp=Z,0.0nm,0.3s,baz=244,slow=12,SNR=1.1
**MAK Makhachkala 18.16 283** *e*P **Pn** **06 09 08.9 -3.4**
MAK *e*S **Sn** **06 12 30.6 -4.5**
MAK pmax pmax
comp=Z,307nm,1.4s
MAK MLR MLR
comp=Z,482nm,8.0s
**WSAR Wadi Sarin 21.16 216** P **P** **06 09 44.4 -1.1**
comp=Z,3.7nm,0.7s,baz=21,slow=7.9,SNR=2.2
**KBZ Khabaz 21.47 286** *e*P **P** **06 09 50.4 +1.7**
KBZ pmax pmax
comp=Z,1.0nm,0.3s
**KIV Kislovodsk 21.61 287** *e*P **P** **06 09 48.5 -1.8**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**SONM Songino Array 25.29 63** P **P** **06 10 27.1 +0.3**
comp=Z,0.4nm,0.6s,baz=273,slow=11,SNR=3.3
**BRTR Keskin Array B 28.98 280** P **P** **06 11 00.6 +0.5**
comp=Z,1.0nm,0.8s,baz=88,slow=8.7,SNR=4.5
**BRTR Keskin Array B 28.98 280** *e*P **P** **06 11 01.0 +0.9**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**FINES FINESS Array B 34.02 322** P **P** **06 11 43.9 0.0**
comp=Z,1.8nm,0.6s,baz=116,slow=11,SNR=5.7
**WHN Wuhan 35.70 94** ⇑P **P** **06 12 00.8 +2.0**
**ARCES ARCESS Array B 37.05 335** P **P** **06 12 10.1 +0.2**
comp=Z,2.9nm,0.5s,baz=109,slow=8.6,SNR=26
**ARCES ARCESS Array B 37.05 335** *e*P **P** **06 12 09.5 -0.4**
ARCES pmax pmax
comp=Z,3.0nm,0.5s
**HFS Hagfors 39.84 318** P **P** **06 12 33.5 0.0**
comp=Z,7.4nm,0.9s,baz=100,slow=12,SNR=7.0
**GERES GERESS Array B 40.90 301** P **P** **06 12 42.9 +0.3**
comp=Z,0.2nm,0.3s,baz=94,slow=9.9,SNR=2.5
**NB2 NORSAR Subarra 41.08 320** P **P** **06 12 43.5 -0.3**
comp=Z,0.5nm,0.5s,baz=92,slow=8.6
**NOA NORSAR Array B 41.08 320** P **P** **06 12 43.4 -0.3**
comp=Z,0.6nm,0.5s,baz=90,slow=8.4,SNR=3.6
**TORD Torodi Ar. Bea 66.60 267** P **P** **06 15 49.4 -1.6**
comp=Z,0.5nm,0.7s,baz=59,slow=6.4,SNR=3.8
**ILAR Eielson Array 70.00 17** P **P** **06 16 10.7 -0.9**
comp=Z,0.9nm,0.8s,baz=320,slow=5.4,SNR=11
**YKA Yellowknife Ar 76.44 3** P **P** **06 16 49.0 -0.6**
comp=Z,1.5nm,0.7s,baz=352,slow=6.0,SNR=33
**WRA Warramunga Arr 83.96 123** P **P** **06 17 29.3 -1.4**
comp=Z,0.3nm,0.7s,baz=322,slow=4.7,SNR=4.8
**WRA Warramunga Arr 83.96 123** *e*P **P** **06 17 30.3 -0.5**
**ASAR Alice Springs 86.45 126** P **P** **06 17 41.0 -2.2**
comp=Z,0.5nm,0.7s,baz=309,slow=4.5,SNR=4.4

*NIED* ***18*** *06:05:01.8,31.71N×128.95E,h18km,MW3.7,Moment Tension Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.32; $M_{\theta\theta}$0.94; $M_{\phi\phi}$0.38; $M_{r\theta}$-0.12; $M_{\theta\phi}$2.84; $M_{\phi r}$-1.83; Fault plane solution: $M_o$3.53000×$10^{14}$ NP1:$\phi_s$10.00000°, δ75.00000°,λ-140.00000°. NP2:$\phi_s$268.00000°, δ52.00000°,λ-19.00000°.*
*JMA* ***18*** *06:05:01.8±0.2,31.71N×128.95E,h18km±2km,M3.8*
*JMA Felt I J1.*

**ISC 18 06:05:00.9±2.0,31.71N±0.09×129.0E±0.1,h10km,n5, σ0$^s$35/8,Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSJ** | **Shimokoshiki** | **0.66** | **93** | P | **Pg** | **06 05 13.9** | **+0.3** |
| JSJ | | | | *e*S | **Sg** | **06 05 22.6** | **+0.4** |
| **JFU** | **Fukue jima 2** | **0.96** | **350** | P | **Pb** | **06 05 19.6** | **0.0** |
| JFU | | | | *e*S | **Sb** | **06 05 32.5** | **+0.2** |
| **NGSJ** | **Nagasakinomoza** | **1.17** | **38** | P | **Pb** | **06 05 22.7** | **-0.5** |
| NGSJ | | | | *e*S | **Sg** | **06 05 38.6** | **+0.1** |
| **JSU** | **Suzuyama** | **1.30** | **99** | P | **Pn** | **06 05 25.1** | **-0.1** |
| **JTN** | **Tanegashima 3** | **2.04** | **121** | P | **Pn** | **06 05 35.0** | **-0.3** |

*MOS* ***18*** *06:06:05.2±0.9,36.47N×70.34E,h211km,mb4.3/25,Error ellipse: s-maj=9.4km s-min=5.5km az=85.2*
*BJI* ***18*** *06:06:06.2±0.0,36.52N×70.29E,h224km,mb4.5/30, mB4.7/17*
*SOME* ***18*** *06:06:06.6,37.87N×71.33E,h10km,MS3.3*
*IDC* ***18*** *06:06:07.0±0.7,36.41N×70.39E,h220km±6km,mb3.9/32, mb1 3.9/37,mb1mx3.8/67,mbtmp4.5/37,Error ellipse: s-maj=9.7km s-min=7.7km az=156.0*
*NEIC* ***18*** *06:06:07.1±1.7,36.50N±0.06×70.34E±0.10,h214km±4km, mb4.4/52, Error ellipse: s-maj=11.4km s-min=8.3km az=102.0*

**ISC 18 06:06:06.6±0.4,36.45N±0.04×70.43E±0.04,h214km±4km, h214km:pP-P,n204,σ1967/232,mb4.3/66,13C-7D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.21** | **211** | PN | **Pn** | **06 06 49.3** | **+0.7** |
| KBL | | | | | | 06 07 20.2 | |
| **KBL** | **Kabul** | **2.21** | **211** | Pn | **Pn** | **06 06 49.3** | **+0.7** |
| KBL | | | | Sn | **S** | **06 07 20.2** | **-0.8** |
| **CEP** | **Cherat** | **2.88** | **155** | P | **Pn** | **06 06 57.6** | **+1.7** |
| CEP | | | | S | **S** | **06 07 35.0** | **+1.0** |
| **NIL** | **Nilore** | **3.63** | **140** | PN | **Pn** | **06 07 06.5** | **+2.1** |
| **NIL** | **Nilore** | **3.63** | **140** | | **Pn** | **06 07 06.5** | **+2.1** |
| **THW** | **Thamme Wali** | **3.80** | **163** | P | **Pn** | **06 07 07.9** | **+1.3** |
| **KTAB** | **Kitab** | **3.88** | **315** | *e*S | **S** | **06 07 53.0** | **-2.0** |
| **AGL** | **Agalyk** | **4.15** | **319** | *e*S | **S** | **06 07 57.0** | **-4.1** |
| **SARP** | **Sargodha** | **4.88** | **157** | P | **Pn** | **06 07 20.6** | **+0.7** |
| **TAS** | **Tashkent** | **4.95** | **350** | PN | **Pn** | **06 07 20.5** | **-0.1** |
| **TAS** | **Tashkent** | **4.95** | **350** | Pn | **Pn** | **06 07 20.5** | **-0.1** |
| **JMU** | **Jammu** | **5.24** | **134** | *e*P | **Pn** | **06 07 24.4** | **+0.1** |
| JMU | | | | *e*S | **S** | **06 08 21.1** | **-4.5** |
| **KSH** | **Kashi** | **5.34** | **53** | P | **Pn** | **06 07 22.4** | **-3.3** |
| KSH | | | | S | S | 06 08 15.8 | -12 |
| KSH | | | | smax | smax | | |
| | comp=N,440nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,300nm,0.6s | | | | | | |
| **CHM** | **Chimkent** | **5.90** | **354** | *e*P | **Pn** | **06 07 33.6** | **+0.9** |
| | 412nm,0.3s | | | | | | |
| CHM | | | | *e*S | **S** | **06 08 36.1** | **-4.8** |
| | 706nm,0.5s | | | | | | |
| **THN** | **Thein Dam** | **5.92** | **131** | *e*P | **Pn** | **06 07 33.5** | **+0.5** |
| THN | | | | *e*S | **S** | **06 08 41.3** | **-0.2** |
| **DZA** | **Taraz** | **6.47** | **6** | *e*P | **Pn** | **06 07 40.8** | **+0.7** |
| | 324nm,0.2s | | | | | | |
| DZA | | | | *e*S | **S** | **06 08 48.8** | **-5.5** |
| | 651nm,0.7s | | | | | | |
| **BRLS** | **Boroldaу** | **6.59** | **356** | *e*P | **Pn** | **06 07 38.8** | **-2.7** |
| | 38nm,0.4s | | | | | | |
| BRLS | | | | *e*S | S | 06 08 45.1 | -12 |
| | 89nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **6.65** | **1** | PN | **Pn** | **06 07 41.7** | **-0.6** |
| **KKAR** | **Karatay Array** | **6.65** | **1** | Pn | **Pn** | **06 07 41.6** | **-0.6** |
| **MRKS** | **Merke** | **6.65** | **18** | *e*P | **Pn** | **06 07 44.7** | **+2.3** |
| | 89nm,0.6s | | | | | | |
| MRKS | | | | *e*S | **S** | **06 08 55.2** | **-3.3** |
| | 219nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **6.93** | **26** | P | **Pn** | **06 07 45.8** | **-0.3** |
| | 26nm,0.3s,baz=167,slow=10,SNR=3.5 | | | | | | |
| AAK | | | | S | **S** | **06 09 02.3** | **-3.0** |
| | 8.3nm,0.3s,baz=327,slow=22,SNR=7.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.93** | **26** | *de*PN | **Pn** | **06 07 46.5** | **+0.4** |
| **BHK** | **Bhakra** | **7.06** | **134** | *e*P | **Pn** | **06 07 47.8** | **0.0** |
| BHK | | | | *e*S | **S** | **06 09 03.1** | **-5.2** |
| **SMLA** | **Simla** | **7.72** | **132** | *e*P | **Pn** | **06 07 56.5** | **+0.3** |
| SMLA | | | | *e*P | **S** | **06 09 21.0** | **-2.6** |
| SMLA | | | | IAML | | 06 09 24.0 | |
| | comp=N,388nm,0.3s | | | | | | |
| **KST** | **Kastek** | **7.84** | **31** | *e*P | **Pn** | **06 08 01.5** | **+3.6** |
| | comp=N,52nm,0.7s | | | | | | |
| KST | | | | *e*S | **S** | **06 09 24.0** | **-2.6** |
| | comp=N,99nm,0.0s | | | | | | |
| **DGS** | **Degeres** | **7.93** | **30** | *e*P | Pn | 06 08 04.7 | +5.8 |
| | comp=N,35nm,0.5s | | | | | | |
| DGS | | | | *e*S | **S** | **06 09 29.8** | **+1.2** |
| | comp=N,36nm,0.8s | | | | | | |
| **DDI** | **Dehra Dun** | **8.83** | **132** | *e*P | **Pn** | **06 08 11.2** | **+0.6** |
| DDI | | | | *e*S | **S** | **06 09 46.0** | **-4.0** |

DDI IAML 06 09 48.2
comp=N,325nm,0.3s
**KHET Khetri 9.51 150** *eP* **Pn** **06 08 18.2 -1.1**
KHET *eS* **S** **06 10 02.2 -3.9**
**NDI New Delhi 9.63 142** *eP* **Pn** **06 08 18.4 -2.5**
NDI *eP* P 06 08 20.5 -8.3
**KUDL Kundal 9.73 147**⇓ *eP* **Pn** **06 08 22.3 +0.1**
**AYAN Aya Nagar 9.75 143**⇓ *eP* **Pn** **06 08 23.0 +0.6**
AYAN *eS* **S** **06 10 06.3 -5.4**
**SONA Sohna 9.92 144** *eP* **Pn** **06 08 24.8 +0.2**
**AJM Ajmer 10.57 159** *eP* **Pn** **06 08 32.8 -0.2**
AJM *eS* **S** **06 10 27.4 -4.1**
**PTH Pithoragarh 10.71 127** *eP* **Pn** **06 08 33.0 -1.9**
PTH *eS* **S** **06 10 27.6 -7.4**
**LGTI Lohaghat 10.80 127** *eP* **Pn** **06 08 34.2 -1.6**
**JHNI Jhansi 12.96 145** *eP* **Pn** **06 09 02.8 -0.5**
JHNI *eS* **S** **06 11 20.2 -6.7**
**MAKZ Makanchi 13.46 36** P **Pn** **06 09 09.3 +0.1**
**MAKZ Makanchi 13.46 36** Pn **Pn** **06 09 09.3 +0.1**
**PYUN Piuthan 13.49 125** *eP* **Pn** **06 09 09.0 -0.9**
comp=N,93nm,0.4s
**MK31 Makanchi Array 13.60 37** P **Pn** **06 09 11.0 0.0**
**MK31 Makanchi Array 13.60 37** Pn **Pn** **06 09 11.0 0.0**
**MKAR Makanchi Array 13.60 37** P **P** **06 09 12.0 -1.0**
comp=N,1.6nm,0.3s,baz=211,slow=12,SNR=11
**DANN Dangsing 13.85 122** *eP* **Pn** **06 09 14.0 -0.4**
comp=N,99nm,0.4s
**KOLN Koldanda 14.11 124** *eP* **Pn** **06 09 17.1 -0.5**
comp=N,55nm,0.4s
**BHPL Bhopal 14.49 153** *eP* **P** **06 09 24.4 +1.4**
BHPL *eS* **S** **06 12 00.7 -1.9**
**GKN Gorkha 14.67 121** *eP* **Pn** **06 09 24.6 +0.2**
comp=N,108nm,0.3s
**ALBI Allahabad 14.77 136** *eS* **S** **06 12 02.6 -6.5**
**ABKAR Akbulak array 14.91 332** **Pn** **06 09 25.4 -1.5**
**ABKAR Akbulak array 14.91 332** **Pn** **06 09 25.6 -1.4**
**WMQ Urumqi 15.10 56** *eP* **P** **06 09 29.9 +0.2**
WMQ sP sP 06 10 27.0 -6.1
WMQ pmax pmax
comp=N,28nm,0.7s
**DMN Daman 15.23 121** *eP* **P** **06 09 31.6 +0.1**
comp=N,99nm,0.5s
**KKN Kakani 15.24 120** *eP* **P** **06 09 31.5 -0.1**
comp=N,142nm,0.4s
**KURBB Kurchatov Arra 15.32 20** P **Pn** **06 09 30.8 -1.1**
comp=N,0.5nm,0.3s,baz=210,slow=11,SNR=8.3
**KURK Kurchatov 15.43 20**⇓ *eP* **P** **06 09 31.8 -1.3**
KURK pmax pmax
comp=Z,10.0nm,1.3s
**KURK Kurchatov 15.43 20** **Pn** **06 09 33.3 +0.1**
**PKIN Phulchoki 15.46 121** *eP* **Pn** **06 09 34.0 -0.1**
comp=Z,144nm,0.5s
**PKI Pulchoki 15.47 121** *eP* **Pn** **06 09 34.3 0.0**
comp=Z,196nm,0.7s
**GUN Gumba 15.59 119** *eP* **Pn** **06 09 35.7 -0.1**
comp=Z,160nm,0.5s
**JIRN Jiri 15.96 119** *eP* **Pn** **06 09 40.9 +0.7**
comp=Z,185nm,0.4s
**BVAR Borovoye Array 16.57 360** P **Pn** **06 09 46.8 -0.2**
comp=Z,3.6nm,0.3s,baz=108,slow=14,SNR=18
**AKTO Aktyubinsk 16.60 331** P **P** **06 09 46.0 -0.1**
comp=Z,3.5nm,0.3s,baz=145,slow=8.9,SNR=21
**AKTO Aktyubinsk 16.60 331** P **P** **06 09 46.0 -0.1**
**BRVK Borovoye 16.61 360** *d iP* **P** **06 09 46.5 +0.4**
BRVK pmax pmax
comp=Z,29nm,1.3s
**BRVK Borovoye 16.61 360** P **Pn** **06 09 46.7 -0.6**
BRVK lAmb lAmb 06 09 49.5
comp=Z,17nm,0.7s
**RAMN Ramite 16.68 120** *eP* **Pn** **06 09 49.0 +0.3**
comp=Z,39nm,0.5s
**TAPN Taplejung 17.23 117** *eP* **Pn** **06 09 56.0 +0.8**
comp=Z,69nm,0.5s
**ODAN Odare 17.29 119** *eP* **Pn** **06 09 56.5 +0.6**
comp=Z,103nm,0.5s
**DGZ Jazzator, Alta 18.10 38** *c iP* **Pn** **06 10 04.2 -0.8**
DGZ pmax pmax
comp=Z,27nm,0.9s
**LSA Lhasa 18.61 105** P **Pn** **06 10 12.8 +1.3**
LSA pmax pmax
comp=Z,23nm,1.0s
**GOMU GeErMu 19.64 83** P **P** **06 10 21.3 +1.8**
GOMU pmax pmax
comp=Z,3.0nm,0.8s
GOMU pmax pmax
comp=Z,80nm,5.1s
**ZAA0 Zalesovo Array 20.15 25** P **P** **06 10 24.8 +0.4**
ZAA0 lAmb lAmb 06 10 28.5
comp=Z,11nm,0.8s
**ZALV Zalesovo Beam 20.15 25** P **P** **06 10 24.5 +0.1**
comp=Z,11nm,0.4s,baz=221,slow=10,SNR=21
**ZALV Zalesovo Beam 20.15 25** P **P** **06 10 25.1 +0.7**
**GNI Garni 20.47 288** P **P** **06 10 29.1 +1.0**
comp=Z,9.2nm,0.7s,baz=189,slow=11,SNR=2.5
**GNI Garni 20.47 288**⇓ *eP* **P** **06 10 30.7 +2.5**
GNI pmax pmax
comp=Z,18nm,1.3s
**SHL Shillong 21.30 115** P **P** **06 10 37.9 +0.9**
SHL pmax pmax
comp=Z,17nm,0.7s
**SHL Shillong 21.30 115** P **P** **06 10 37.9 +0.9**
**ARU Arti 21.54 342** P **P** **06 10 38.6 -0.2**
comp=Z,3.2nm,0.4s,baz=178,slow=4.0,SNR=10
**ARU Arti 21.54 342** *c iP* **P** **06 10 38.8 0.0**
ARU *PP **pP** **06 11 12.9 -2.4**
ARU 06 11 21.2
ARU S **S** **06 14 23.1 +0.3**
ARU pmax pmax
comp=Z,7.0nm,0.6s
**ARU Arti 21.54 342** P **P** **06 10 38.6 -0.2**
**KIV Kislovodsk 22.41 298** *eP* **P** **06 10 47.7 +0.3**
KIV pmax pmax
comp=Z,5.0nm,1.0s
**GTA Gaotai 23.32 74** ⇑P **P** **06 10 57.0 +1.3**
GTA pmax pmax
comp=Z,11nm,1.2s
**RAYN Ar Rayn 25.06 246** P **P** **06 11 11.0 -0.5**
RAYN pmax pmax
comp=Z,6.0nm,1.0s
**RAYN Ar Rayn 25.06 246** P **P** **06 11 11.0 -0.5**
**KIRV Kirov 26.09 335**⇓ *eP* **P** **06 11 21.1 +0.8**
**ANN Anapa 26.26 299** *eP* **P** **06 11 21.4 -0.6**
ANN pmax pmax
comp=Z,42nm,0.8s
**LZH Lanzhou 26.87 81** *eP* **P** **06 11 28.3 +0.5**
LZH sP sP 06 12 39.4 +2.1
LZH pmax pmax
comp=Z,8.0nm,1.3s
**ZAK Zakamensk 27.37 49** *eP* **P** **06 11 33.3 +1.3**
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**CD2 Chengdu 28.19 92** P **P** **06 11 41.4 +2.0**
**PZH PanZhiHua 28.38 102** P **P** **06 11 42.8 +1.6**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,80nm,6.3s
**SONM Songino Array 28.74 55** P **P** **06 11 46.1 +1.9**
comp=Z,5.3nm,0.7s,baz=265,slow=9.3,SNR=31
SONM PcP **PcP** **06 14 48.5 -0.1**
comp=Z,0.5nm,0.6s,baz=263,slow=3.8,SNR=2.9
**SONM Songino Array 28.74 55** P **P** **06 11 45.6 +1.3**
**MMAI Mount Meron Ar 28.89 274** P **P** **06 11 47.0 +1.3**
comp=Z,3.1nm,0.5s,baz=76,slow=7.7,SNR=8.3
**BRTR Keskin Array B 29.01 288** P **P** **06 11 45.5 -1.3**
comp=Z,1.0nm,0.5s,baz=152,slow=5.9,SNR=4.8
**ULN Ulaanbaatar 29.18 55** *c iP* **P** **06 11 49.5 +1.3**
ULN *i* *PP **pP** **06 12 35.9 +3.4**
ULN pmax pmax
comp=Z,2.0nm,0.6s
**ULN Ulaanbaatar 29.18 55** P **P** **06 11 49.4 +1.2**
ULN lAmb lAmb 06 11 50.5
comp=Z,4.7nm,0.7s
**CMAR Chiang Mai Arr 30.83 118** P **P** **06 12 03.9 +1.1**
comp=Z,1.4nm,0.5s,baz=299,slow=8.1,SNR=5.8
**XAN Xi'an 31.39 83** P **P** **06 12 08.8 +1.2**
XAN pmax pmax
comp=Z,6.0nm,0.6s
**HHC Hu-ho-hao-te 32.21 69** *eP* **P** **06 12 15.9 +1.2**
HHC pmax pmax
comp=Z,5.0nm,1.0s
HHC pmax pmax
comp=Z,100nm,7.6s
**ELL Elmali 32.37 283** P **P** **06 12 13.1 -3.1**
ELL pmax pmax
comp=Z,45nm,0.6s
**ELL Elmali 32.37 283** PG **P** **06 12 13.3 -2.8**
**ELL Elmali 32.37 283** P **P** **06 12 13.1 -3.1**
**AKASG Malin Array Be 32.62 309** P **P** **06 12 17.4 -0.7**
comp=Z,0.6nm,0.5s,baz=85,slow=6.7,SNR=5.3
AKASG pP **pP** **06 13 03.7 +2.1**
comp=Z,2.8nm,0.9s,baz=86,slow=7.8,SNR=2.7
AKASG PcP **PcP** **06 14 56.2 -2.5**
comp=Z,0.5nm,0.4s,baz=74,slow=3.0,SNR=4.6
**NRIK Noril'sk 34.26 11** P **P** **06 12 32.7 +0.8**
comp=Z,10nm,0.5s,baz=206,slow=5.4,SNR=16
**NRIK Noril'sk 34.26 11** *ceP* **P** **06 12 32.9 +1.0**
NRIK pmax pmax
comp=Z,8.0nm,0.6s
**NRIK Noril'sk 34.26 11** P **P** **06 12 32.7 +0.8**
**XLT XiLinHaoTe 35.30 63** *eP* **P** **06 12 41.9 +0.6**
XLT pP pP 06 13 25.8 -0.8
XLT pmax pmax
comp=Z,5.0nm,1.0s
XLT pmax pmax
comp=Z,140nm,4.9s
**IDI Anoyia 36.66 282** P **P** **06 12 52.3 -0.6**
comp=Z,4.4nm,0.7s,baz=31,slow=5.9,SNR=1.6
**IDI Anoyia 36.66 282** P **P** **06 12 51.1 -1.8**
IDI lAmb lAmb 06 13 19.8
comp=Z,17nm,1.1s
**SUW Suwalki 36.82 314** P **P** **06 12 52.8 -1.1**
SUW pmax pmax
comp=Z,19nm,0.8s
**SUW Suwalki 36.82 314** P **P** **06 12 52.8 -1.1**
**FIA1 FINESS Array S 37.27 326** P **P** **06 12 56.6 -0.9**
FIA1 lAmb lAmb 06 12 59.0
comp=Z,20nm,1.2s
**FINES FINESS Array B 37.27 326** P **P** **06 12 57.5 0.0**
comp=Z,1.8nm,0.6s,baz=119,slow=9.8,SNR=8.4
**FINES FINESS Array B 37.27 326** P **P** **06 12 57.2 -0.4**
**LVZ Lovozero 37.34 339** P **P** **06 12 57.6 -0.5**
LVZ pmax pmax
comp=Z,15nm,0.9s
**LVZ Lovozero 37.34 339** P **P** **06 12 57.6 -0.5**
LVZ lAmb lAmb 06 13 03.0
comp=Z,15nm,0.9s
**KEV Kevo 40.68 338** P **P** **06 13 26.0 +0.4**
KEV pmax pmax
comp=Z,21nm,1.3s
**KEV Kevo 40.68 338** P **P** **06 13 26.0 +0.4**
KEV lAmb lAmb 06 13 37.4
comp=Z,21nm,1.3s
**ARCES ARCESS Array B 41.02 338** P **P** **06 13 28.8 +0.3**
comp=Z,4.0nm,0.6s,baz=131,slow=6.9,SNR=14
**ARCES ARCESS Array B 41.02 338** P **P** **06 13 29.3 +0.8**
ARCES pmax pmax
comp=Z,4.0nm,1.2s
**ARCES ARCESS Array B 41.02 338** P **P** **06 13 29.3 +0.8**
**HFS Hagfors 42.83 322** P **P** **06 13 43.1 -0.1**
comp=Z,1.3nm,0.3s,baz=107,slow=9.3,SNR=11
HFS pP **pP** **06 14 31.2 +2.4**
comp=Z,4.3nm,0.7s,baz=92,slow=8.9,SNR=3.1
**NC602 NORSAR Array S 43.95 323** P **P** **06 13 51.4 -0.8**
**NB201 NORSAR Array S 44.11 323** P **P** **06 13 52.4 -1.1**
**NB2 NORSAR Subarra 44.15 323** P **P** **06 13 53.1 -0.6**
comp=Z,2.2nm,0.5s,baz=98,slow=7.9
**NOA NORSAR Array B 44.15 323** P **P** **06 13 53.3 -0.5**
comp=Z,2.3nm,0.7s,baz=101,slow=8.0,SNR=8.4
**YAK Yakutsk 44.27 35** P **P** **06 13 54.7 +0.1**
comp=Z,16nm,0.4s,baz=226,slow=2.7,SNR=4.1
**YAK Yakutsk 44.27 35** *eP* **P** **06 13 55.0 +0.4**
YAK pmax pmax
comp=Z,16nm,0.7s
**YAK Yakutsk 44.27 35** P **P** **06 13 54.4 -0.3**
**NC204 NORSAR Array S 44.39 323** P **P** **06 13 54.5 -1.2**
**KSRS Korea Array 45.33 71** P **P** **06 14 03.2 -0.1**
comp=Z,1.9nm,0.6s,baz=273,slow=7.4,SNR=6.2
**KLR Kul'dur 45.54 54** P **P** **06 14 05.4 +0.5**
comp=Z,4.3nm,0.6s,baz=278,slow=7.3,SNR=19
**KLR Kul'dur 45.54 54** *c iP* **P** **06 14 05.6 +0.7**
KLR pmax pmax
comp=Z,3.0nm,0.6s
**TIXI Tiksi 45.99 22** P **P** **06 14 08.3 +0.3**
comp=Z,9.9nm,0.3s,baz=269,slow=7.7,SNR=9.4
**TIXI Tiksi 45.99 22** *c iP* **P** **06 14 08.4 +0.3**
TIXI pmax pmax
comp=Z,8.0nm,1.0s
**SPITS Spitsbergen Ar 47.44 347** P **P** **06 14 20.4 +1.2**
comp=Z,4.5nm,0.7s,baz=131,slow=4.0,SNR=11
**KMBO Kilima Mbogo 48.46 227** P **P** **06 14 28.4 +0.3**
comp=Z,2.5nm,0.5s,baz=36,slow=12,SNR=8.5
**KMBO Kilima Mbogo 48.46 227**⇑ *eP* **P** **06 14 29.9 +1.8**
**JHS Saijyo 50.10 72** P **P** **06 14 39.6 -0.4**
**MJAR Matsushiro Arr 53.40 68** P **P** **06 15 03.7 -0.7**
comp=Z,1.6nm,0.6s,baz=292,slow=12,SNR=5.1
**MA2 Magadan 54.69 38**⇓ *eP* **P** **06 15 14.0 +0.8**
MA2 pmax pmax
comp=Z,15nm,2.5s
**SEY Seymchan 54.72 34** P **P** **06 15 14.1 +0.7**
comp=Z,2.3nm,0.4s,baz=276,slow=9.4,SNR=8.6
**SEY Seymchan 54.72 34**⇓ *eP* **P** **06 15 13.5 +0.1**
**SUMG Summit 60.96 341** P **P** **06 15 58.2 +1.1**
**SUMG Summit 60.96 341** P **P** **06 15 58.2 +1.1**
**SHO Shikotan 56.93 57** *eP* **P** **06 15 30.9 +1.5**
**VOI Vohitsoka 62.19 205** P **P** **06 16 06.9 +1.4**
**BILL Bilibino 58.85 26**⇑ *eP* **P** **06 15 43.7 +1.3**
BILL 06 17 56.0
BILL pmax pmax
comp=Z,4.0nm,1.2s
**SUMG Summit 60.96 341** P **P** **06 15 58.2 +1.1**
**SUMG Summit 60.96 341** P **P** **06 15 58.2 +1.1**
**VOI Vohitsoka 62.19 205** P **P** **06 16 06.9 +1.4**
**TULEG Thule 64.41 350** P **P** **06 16 19.6 +0.3**
TULEG lAmb lAmb 06 16 47.4
comp=Z,4.4nm,0.6s
**TORD Torodi Ar. Bea 65.26 268** P **P** **06 16 23.7 -2.0**
comp=Z,2.0nm,0.5s,baz=50,slow=5.9,SNR=14
TORD pP **pP** **06 17 15.2 -0.2**
comp=Z,1.3nm,0.8s,baz=41,slow=6.2,SNR=2.9
**TORD Torodi Ar. Bea 65.26 268** P **P** **06 16 24.2 -1.5**
**KOWA Kowa 69.11 273** P **P** **06 16 48.9 -1.1**
KOWA lAmb lAmb 06 16 49.4
comp=Z,2.8nm,0.6s
**ANM Nome 70.26 22** P **P** **06 16 57.0 +0.9**
ANM pmax pmax
comp=Z,8.0nm,1.5s
**ANM Nome 70.26 22** P **P** **06 16 57.0 +0.9**
ANM lAmb lAmb 06 16 57.9
comp=Z,8.2nm,1.5s
**TOLK Toolik Lake Re 71.09 14** P **P** **06 17 01.9 +0.8**
TOLK lAmb lAmb 06 17 02.7
comp=Z,16nm,1.5s
**A36M Sachs Harbour 71.30 5** P **P** **06 17 03.0 +0.7**
A36M lAmb lAmb 06 17 03.7
comp=Z,6.2nm,0.8s
**COLD Coldfoot 72.14 15** P **P** **06 17 07.8 +0.4**
**IMAR Indian Mountai 72.36 17** P **P** **06 17 08.6 -0.1**
**H21K Melozitna Rive 72.85 17** P **P** **06 17 12.1 +0.5**
H21K lAmb lAmb 06 17 12.8
comp=Z,7.4nm,1.2s
**BMAR Burnt Mountain 73.10 13** P **P** **06 17 14.4 +1.3**
**C36M Paulatuk 73.97 5** P **P** **06 17 18.1 +0.1**
**INK Inuvik 74.03 9** P **P** **06 17 18.2 -0.2**
comp=Z,4.7nm,1.0s,baz=1.4,slow=6.9,SNR=9.4
**INK Inuvik 74.03 9** P **P** **06 17 19.2 +0.9**
INK pmax pmax
comp=Z,11nm,1.4s
**INK Inuvik 74.03 9** P **P** **06 17 19.2 +0.9**
INK lAmb lAmb 06 17 20.4
comp=Z,11nm,1.4s
**PSA00 Pilbara Seismi 74.22 133** P **P** **06 17 20.1 +0.1**
**TTA Tatalina 74.23 20** P **P** **06 17 20.8 +1.0**
TTA pmax pmax
comp=Z,6.0nm,1.4s
**TTA Tatalina 74.23 20** P **P** **06 17 20.8 +1.0**
**DBIC Dimbokro 74.24 267** P **P** **06 17 18.9 -1.5**
comp=Z,2.9nm,0.5s,baz=33,slow=8.4,SNR=6.7
**DBIC Dimbokro 74.24 267** P **P** **06 17 19.0 -1.5**
**DBIC Dimbokro 74.24 267** P **P** **06 17 19.0 -1.5**
DBIC lAmb lAmb 06 17 29.9
comp=Z,10nm,1.4s
**LBTB Lobatse 74.33 222** P **P** **06 17 21.5 +0.7**
LBTB pmax pmax
comp=Z,7.0nm,0.7s
**LBTB Lobatse 74.33 222** P **P** **06 17 21.5 +0.7**
LBTB lAmb lAmb 06 17 22.2
comp=Z,6.5nm,0.7s
**MDM Murphy Dome 74.50 16** P **P** **06 17 21.7 +0.5**
MDM lAmb lAmb 06 17 22.6
comp=Z,5.4nm,0.9s
**TCOL CIGO, UAF Yank 74.65 16** P **P** **06 17 22.7 +0.7**
TCOL lAmb lAmb 06 17 23.3
comp=Z,13nm,1.1s
**COLA College 74.65 16**⇓ *iP* **P** **06 17 22.2 +0.2**
COLA pmax pmax
comp=Z,31nm,2.6s
**COLA College 74.65 16** P **P** **06 17 22.7 +0.7**
COLA lAmb lAmb 06 17 23.3
comp=Z,13nm,1.1s
**CAST Castle Rocks 74.88 18** P **P** **06 17 23.9 +0.5**
CAST lAmb lAmb 06 17 24.8
comp=Z,9.4nm,0.9s
**IL31 74.95 16** P **P** **06 17 23.1 -0.6**
**ILAR Eielson Array 74.95 16** P **P** **06 17 23.4 -0.3**
comp=Z,1.7nm,0.8s,baz=318,slow=4.5,SNR=14
ILAR pP **pP** **06 18 16.2 +1.0**
comp=Z,1.0nm,0.9s,baz=326,slow=5.2,SNR=4.6
**BOSA Boshof 77.41 220** P **P** **06 17 37.6 -0.5**
comp=Z,2.2nm,0.4s,baz=20,slow=4.2,SNR=8.3
**BOSA Boshof 77.41 220** P **P** **06 17 38.1 -0.1**
BOSA pmax pmax
comp=Z,12nm,1.4s
**BOSA Boshof 77.41 220** P **P** **06 17 38.1 -0.1**
BOSA lAmb lAmb 06 18 01.4
comp=Z,12nm,1.4s
**M24K Tolsona, Glenn 77.43 17** P **P** **06 17 38.9 +1.0**
**YKA Yellowknife Ar 81.32 2** P **P** **06 17 58.8 +0.1**
comp=Z,1.8nm,0.5s,baz=348,slow=5.2,SNR=28
YKA pP **pP** **06 18 50.8 0.0**
comp=Z,1.1nm,0.6s,baz=350,slow=5.5,SNR=4.5
**P33M Teslin, Yukon 81.80 11** P **P** **06 18 01.7 +0.3**
P33M lAmb lAmb 06 18 02.2
comp=Z,5.9nm,0.8s
**SCHQ Schefferville 81.96 337** P **P** **06 18 02.1 -0.1**
comp=Z,4.9nm,0.9s,baz=43,slow=9.6,SNR=3.7
**WB0 Warramunga Arr 82.27 121** P **P** **06 18 03.1 -1.2**
WB0 lAmb lAmb 06 18 03.8
comp=Z,6.6nm,0.9s
**WRA Warramunga Arr 82.35 122** P **P** **06 18 03.6 -1.2**
comp=Z,4.4nm,0.7s,baz=326,slow=4.9,SNR=45
**WRA Warramunga Arr 82.35 122** P **P** **06 18 03.8 -0.9**
**WRA Warramunga Arr 82.35 122** P **P** **06 18 03.8 -0.9**
**WRAB Tennant Creek 82.36 122**⇑ *eP* **P** **06 18 03.6 -1.1**
WRAB pmax pmax
comp=Z,13nm,2.5s
**WRAB Tennant Creek 82.36 122** P **P** **06 18 03.9 -0.9**
WRAB lAmb lAmb 06 18 04.3
comp=Z,6.3nm,0.9s
**WB2 Warramunga Arr 82.36 122** P **P** **06 18 03.9 -0.9**
WB2 lAmb lAmb 06 18 04.3
comp=Z,7.9nm,1.0s
**WR0 Warramunga Arr 82.50 121** P **P** **06 18 04.3 -1.2**
WR0 lAmb lAmb 06 18 05.0
comp=Z,4.6nm,0.9s
**AS31 Alice Springs 84.60 125** P **P** **06 18 15.5 -0.6**
**ASAR Alice Springs 84.60 125** P **P** **06 18 15.1 -1.1**
comp=Z,3.5nm,0.6s,baz=310,slow=4.8,SNR=41
**ASAR Alice Springs 84.60 125** P **P** **06 18 15.5 -0.6**
**ASAR Alice Springs 84.60 125** P **P** **06 18 15.5 -0.6**
**COEN Coen 84.81 111** P **P** **06 18 16.6 -0.7**
**FORT Forrest 85.97 133** P **P** **06 18 22.5 -0.1**
**CTA Charters Tower 90.94 114** P **P** **06 18 45.4 -1.0**
comp=Z,2.4nm,0.7s,baz=333,slow=5.4,SNR=2.5
**QSPA South Pole Qui 126.25 180** PKP **PKPdf** **06 24 41.9 -0.7**
comp=Z,2.4nm,0.7s,baz=273,slow=5.6,SNR=10
**PLCA Paso Flores 149.38 250** PKPbc **PKPbc** **06 25 29.7 -0.4**
comp=Z,1.2nm,0.6s,baz=105,slow=10,SNR=9.7
**PLCA Paso Flores 149.38 250** **PKPbc** **06 25 30.4 +0.3**

**IDC 18 06:09:42.2±2.6, 0.57N×128.64E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.0/54, mbtmp3.3/3, Error ellipse: s-maj=186.4km s-min=29.2km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.14** | **165** | P | P | 06 14 27.8 | -1.1 |
| | 0.3nm,0.5s,baz=345,slow=11,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **24.63** | **168** | P | P | 06 15 05.2 | +0.5 |
| | 1.5nm,0.8s,baz=349,slow=11,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.38** | **62** | T | T | 07 00 55.5 | |
| | baz=248,slow=75,SNR=25 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.39** | **62** | T | T | 07 00 54.4 | |
| | baz=248,slow=75,SNR=31 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.39** | **62** | T | T | 07 00 54.0 | |
| | baz=248,slow=75,SNR=28 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.01** | **61** | T | T | 07 01 41.0 | |
| | baz=246 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.02** | **61** | T | T | 07 01 40.8 | |
| | baz=246 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.02** | **61** | T | T | 07 01 41.3 | |
| | baz=246 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.22** | **325** | P | P | 06 19 59.1 | 0.0 |
| | 0.1nm,0.5s,baz=132,slow=8.5,SNR=2.5 | | | | | | |

*IDC **18** 06:11:48.6±1.5, 12.27N×124.61E, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.4/63, mbtmp3.8/6, MS3.6/3, Ms1 3.6/3, ms1mx2.8/81, Error ellipse: s-maj=123.0km s-min=19.8km az=70.0*

*MAN **18** 06:11:52.0, 12.74N×125.17E, h68km, mb4.8, ML3.7, MS3.7*

**ISC 18 06:11:51.7±0.8, 12.68N±0.04×125.28E±0.07, h33km, n28, σ1s54/27, mb3.9/6, MS3.8/3, 12D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PVCP** | **Virac** | **1.43** | **310**⇓ | *iP* | **Pn** | **06 12 13.6** | **-1.6** |
| PVCP | | | | *i* S | **Sb** | **06 12 33.8** | **-1.8** |
| **OCLP** | **Ormoc** | **1.74** | **202** | *i* S | **Sb** | **06 12 43.4** | **-1.2** |
| **OCLP** | **Ormoc** | **1.74** | **202**⇓ | *iP* | **Pb** | **06 12 22.2** | **-0.8** |
| **MSLP** | **Maasin** | **2.56** | **189**⇓ | *eP* | **Pb** | **06 12 34.3** | **-2.6** |
| MSLP | | | | *eS* | **Sn** | **06 13 02.0** | **+1.1** |
| **LLP** | **Lapu-Lapu** | **2.67** | **209**⇓ | *eP* | **Pb** | **06 12 37.0** | **-1.8** |
| LLP | | | | *i* S | **Sn** | **06 13 05.3** | **+1.6** |
| **RCP** | **Roxas** | **2.71** | **246**⇓ | *eP* | **Pn** | **06 12 33.4** | **+0.4** |
| **JCNP** | **Jose Panganiba** | **2.98** | **303**⇓ | *eP* | **Pn** | **06 12 38.4** | **+1.7** |
| JCNP | | | | *eS* | **Sn** | **06 13 10.0** | **-1.2** |
| **GLSP** | **General Luna,** | **2.99** | **164**⇓ | *eP* | **Pn** | **06 12 37.0** | **+0.2** |
| GLSP | | | | *eS* | **Sb** | **06 13 18.6** | **-1.9** |
| **GLSP** | **General Luna,** | **2.99** | **164**⇓ | *eP* | **Pn** | **06 12 37.9** | **+1.0** |
| GLSP | | | | *eS* | **Sn** | **06 13 10.5** | **-1.1** |
| **CNOP** | **Candoni, Negro** | **3.83** | **223**⇓ | *eP* | **Pn** | **06 12 48.9** | **+0.4** |
| CNOP | | | | *eS* | **Sn** | **06 13 33.6** | **+1.2** |
| **LQP** | **Lukban** | **3.91** | **292**⇓ | *eP* | **Pn** | **06 12 50.7** | **+1.1** |
| **CAUP** | **Cauayan** | **5.40** | **322**⇓ | *eP* | **Pn** | **06 13 10.4** | **+0.5** |
| CAUP | | | | *i* S | **Sn** | **06 14 09.8** | **-1.2** |
| **CVP** | **Callao Caves** | **6.01** | **327**⇓ | *eP* | **Pn** | **06 13 18.0** | **-0.3** |
| **LEM** | **Lembang** | **26.14** | **223** | LR | LR | 06 28 05.0 | |
| | comp=Z,70nm,18.2s,baz=158,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.58** | **179** | P | **P** | **06 18 01.1** | **-1.4** |
| | 2.0nm,0.7s,baz=9.5,slow=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.62** | **164** | P | **P** | **06 18 28.1** | **-1.1** |
| | 0.7nm,0.6s,baz=344,slow=9.3,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **37.09** | **167** | P | **P** | **06 18 58.5** | **-0.6** |
| | 1.1nm,0.4s,baz=349,slow=7.8,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **38.44** | **339** | P | **P** | **06 19 14.2** | **+3.8** |
| | 0.8nm,1.0s,baz=141,slow=7.4,SNR=3.7 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.24** | **76** | T | T | 07 02 28.2 | |
| | baz=268,slow=75,SNR=13 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.25** | **76** | T | T | 07 02 28.8 | |
| | baz=268,slow=75,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.49** | **76** | T | T | 07 02 29.5 | |
| | baz=268,slow=75,SNR=17 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.49** | **74** | T | T | 07 02 48.7 | |
| | baz=266,slow=75,SNR=33 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.50** | **74** | T | T | 07 02 48.5 | |
| | baz=266,slow=75,SNR=39 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.51** | **74** | T | T | 07 02 50.1 | |
| | baz=266,slow=75,SNR=42 | | | | | | |
| **STKA** | **Stephens Creek** | **46.98** | **161** | P | **P** | **06 20 21.1** | **+1.4** |
| | 1.0nm,0.5s,baz=327,slow=12,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.54** | **322** | P | **P** | **06 20 39.7** | **+0.3** |
| | 0.4nm,0.7s,baz=112,slow=8.8,SNR=4.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.55** | **325** | LR | LR | 06 44 21.3 | |
| | comp=Z,79nm,18.7s,baz=310,slow=36 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.32** | **268** | LR | LR | 07 03 53.9 | |
| | comp=Z,33nm,18.4s,baz=95,slow=36 | | | | | | |

*DDA **18** 06:11:55.8±0.0, 36.00N×29.26E, h17km, ML2.0*

**ISK 18 06:11:56.3, 36.07N×29.27E, h17km, ML2.1/9, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKAS** | **Kas** | **0.32** | **59** | PG | Pg | 06 12 03.2 | 0.0 |
| AKAS | | | | SG | Sb | 06 12 08.9 | +0.3 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AKAS** | **Kas** | **0.32** | **59** | P | Pg | 06 12 03.3 | +0.1 | | |
| AKAS | | | | S | Sb | 06 12 08.7 | +0.1 | | |
| AKAS | | | | *i* AML | AML | 06 12 10.0 | | | |
| | comp=E,194nm,0.3s | | | | | | | | |
| AKAS | | | | *i* AML | AML | 06 12 14.0 | | | |
| | comp=N,290nm,0.4s | | | | | | | | |
| **FETY** | **Fethiye** | **0.59** | **345** | PG | Pb | 06 12 08.5 | +0.4 | | |
| **FETY** | **Fethiye** | **0.59** | **345** | P | Pb | 06 12 08.4 | +0.3 | | |
| FETY | | | | S | Sn | 06 12 18.2 | -0.9 | | |
| FETY | | | | *i* AML | AML | 06 12 20.0 | | | |
| | comp=E,253nm,0.3s | | | | | | | | |
| FETY | | | | *i* AML | AML | 06 12 22.0 | | | |
| | comp=N,76nm,0.3s | | | | | | | | |
| **CAME** | **Cameli-Denizli** | **0.88** | **2** | PG | Pg | 06 12 13.4 | 0.0 | | |
| **DALY** | **Dalyan (Mula)** | **0.90** | **327** | PG | Pg | 06 12 13.8 | 0.0 | | |
| **AKUM** | **Antalya-Kumluc** | **0.91** | **73** | P | Pb | 06 12 12.8 | -0.8 | | |
| **ARG** | **Arkhangelos** | **0.94** | **279** | PG | Pn | 06 12 15.2 | +0.5 | | |
| **CAEL** | **Denizli, Camel** | **1.05** | **2** | P | Pg | 06 12 17.0 | +0.3 | | |
| CAEL | | | | *i* AML | AML | 06 12 39.0 | | | |
| | comp=E,44nm,0.6s | | | | | | | | |
| CAEL | | | | *i* AML | AML | 06 12 39.0 | | | |
| | comp=N,22nm,0.9s | | | | | | | | |
| **TURN** | **Turunc** | **1.09** | **311** | PN | Pg | 06 12 17.3 | 0.0 | | |
| **TURN** | **Turunc** | **1.09** | **311** | P | Pg | 06 12 17.1 | -0.3 | | |
| TURN | | | | S | Sg | 06 12 31.6 | 0.0 | | |
| **GOLH** | **Golhisar** | **1.19** | **11** | P | Pg | 06 12 19.2 | -0.1 | | |
| GOLH | | | | S | Sg | 06 12 35.5 | +0.6 | | |
| GOLH | | | | *i* AML | AML | 06 12 39.0 | | | |
| | comp=N,30nm,0.3s | | | | | | | | |
| **KORT** | **Korkueli** | **1.28** | **43** | PN | Pb | 06 12 19.9 | -0.1 | | |
| **KORT** | **Korkueli** | **1.28** | **43** | P | Pn | 06 12 19.6 | +0.1 | | |
| KORT | | | | S | Sg | 06 12 37.7 | +0.1 | | |
| KORT | | | | *i* AML | AML | 06 12 41.0 | | | |
| | comp=E,21nm,0.6s | | | | | | | | |
| KORT | | | | *i* AML | AML | 06 12 43.0 | | | |
| | comp=N,19nm,0.6s | | | | | | | | |
| **YER** | **Yerkesik** | **1.33** | **324** | PN | Pb | 06 12 20.7 | -0.1 | | |
| **MULA** | **Mugla, Merkez-** | **1.41** | **328** | P | Pb | 06 12 22.7 | +0.5 | | |
| **TAVA** | **DENIZLI_Tavas** | **1.43** | **349** | P | Pb | 06 12 22.6 | +0.2 | | |
| TAVA | | | | S | Sg | 06 12 42.3 | 0.0 | | |
| TAVA | | | | *i* AML | AML | 06 12 46.0 | | | |
| | comp=N,16nm,0.4s | | | | | | | | |

**IDC 18 06:16:34.4±2.9, 54°.15N×86°.50E, h0km, mb1 2.6/1, mb1mx1.9/63, mbtmp2.6/1, ML2.5/2, Error ellipse: s-maj=22.3km s-min=13.4km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.01** | **259** | *i* | | 06 22 20.0 | |
| | baz=80,slow=350,SNR=17 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.01** | **259** | Pg | Pg | 06 16 52.5 | -1.2 |
| | 0.7nm,0.3s,baz=78,slow=17,SNR=9.5 | | | | | | |
| ZALV | | | | Lg | Lg | 06 17 07.8 | |
| | 1.4nm,0.3s,baz=76,slow=27,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.02** | **237** | Pn | Pn | 06 18 05.6 | +0.9 |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 06 19 49.6 | |
| | 0.0nm,0.3s,baz=52,slow=30,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.84** | **202** | Pn | Pn | 06 18 30.6 | +1.0 |
| | 0.1nm,0.3s,baz=20,slow=12,SNR=1.9 | | | | | | |

*WEL **18** 06:17:00, 43°.48S×172°.82E, h2km, ML4.3, Mw4.2, Moment Tensor Solution. s6 Moment tensor: Scale 10^15 Nm; Mrr1.78; Mθθ-0.30; Mϕϕ-1.48; Mrθ0.36; Mθϕ-1.03; Mϕr0.16; Fault plane solution: M0 1.97000×10^15 NP1: ϕs201.00000°, δ41.00000°, λ77.00000°. NP2: ϕs38.00000°, δ50.00000°, λ101.00000°. Principal axes: T -210.3400, Plg80.0000°, Azm2.0000°; N 26.5300, Plg8.0000°, Azm210.0000°; P 183.8100, Plg5.0000°, Azm120.0000°;*

*IDC **18** 06:17:40.8±0.9, 43°.22S×172°.76E, h0km, mb4.2/3, mb1 4.4/4, mb1mx3.8/36, mbtmp4.3/4, ML3.9/1, MS3.5/6, Ms1 3.5/6, ms1mx3.1/45 Error ellipse: s-maj=28.3km s-min=14.3km az=151.0*

*WEL **18** 06:17:41.6±0.3, 43°.S×17°.3E±°, h13km±2km, M4.3/39, ML4.6/39, MLv4.3/39, Error ellipse: s-maj=0.0km s-min=0.0km az=136.2*

*NEIC **18** 06:17:41.4±1.8, 43°.49S±0°.05×172°.86E±0°.05, h10km±1km, mb4.3/9, Mwr4.0/19, Error ellipse: s-maj=7.8km s-min=6.0km az=1.0*

*NEIC **18** 06:17:41.4, 43°.45S×172°.86E, h2km, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr1.19; Mθθ-0.25; Mϕϕ-0.95; Mrθ0.31; Mθϕ-0.64; Mϕr0.17; Fault plane solution: M0 1.32000×10^15 NP1: ϕs201.15000°, δ39.02000°, λ75.35000°. NP2: ϕs39.74000°, δ52.47000°, λ101.58000°. Principal axes: T 1.2612, Plg79.0000°, Azm355.0000°; N 0.1074, Plg9.0000°, Azm213.0000°; P -1.3686, Plg7.0000°, Azm122.0000°;*

*NOU **18** 06:17:42.1, 43°.54S×172°.91E, h19km, MLv4.8/9, South Island, New Zealand*

**ISC 18 06:17:41.8±1.1, 43°.48S±0°.03×172°.84E±0°.03, h11km±7km, n174, σ1°.915/181, mb4.3/8, MS3.5/5, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MQZ** | **McQueen's Vall** | **0.26** | **210** | Pg | **Pg** | **06 17 47.4** | **+0.2** |
| **MQZ** | **McQueen's Vall** | **0.26** | **210** | P | **Pg** | **06 17 47.5** | **+0.2** |
| **OKCZ** | **Okains Bay** | **0.30** | **147** | P | **Pb** | **06 17 49.7** | **+0.5** |
| **AMCZ** | **Amberley** | **0.33** | **336** | P | **Pg** | **06 17 48.5** | **+0.2** |
| **AKCZ** | **Akaroa Harbour** | **0.40** | **172** | P | **Pb** | **06 17 51.1** | **+0.1** |
| **GVZ** | **Greta Valley S** | **0.53** | **16** | P | **Pb** | **06 17 53.4** | **+0.3** |
| GVZ | | | | S | **Sn** | **06 18 02.9** | **-1.4** |
| **RACZ** | **Rakaia** | **0.56** | **243** | P | **Pg** | **06 17 52.8** | **0.0** |
| **OXZ** | **Oxford** | **0.60** | **284** | | **Pg** | **06 17 52.8** | **-0.7** |
| OXZ | | | | Sg | **Sg** | **06 18 00.4** | **-0.9** |
| **OXZ** | **Oxford** | **0.60** | **284** | P | **Pg** | **06 17 52.7** | **-0.7** |
| OXZ | | | | S | **Sg** | **06 18 00.7** | **-0.6** |
| **LTZ** | **Lake Taylor** | **0.81** | **329** | Pg | **Pg** | **06 17 57.3** | **-0.1** |
| LTZ | | | | Sg | **Sb** | **06 18 08.7** | **-0.2** |
| **LTZ** | **Lake Taylor** | **0.81** | **329** | P | **Pg** | **06 17 57.3** | **-0.1** |
| LTZ | | | | S | **Sb** | **06 18 08.6** | **-0.2** |
| **WACZ** | **Wakanui South** | **0.86** | **237** | P | **Pb** | **06 17 58.6** | **-0.1** |
| WACZ | | | | S | **Sb** | **06 18 10.8** | **+0.5** |
| **MHCZ** | **Mount Hutt** | **0.92** | **266** | P | **Pg** | **06 17 59.2** | **-0.3** |
| MHCZ | | | | S | **Sg** | **06 18 11.8** | **+0.2** |
| **KHZ** | **Kahutara** | **1.18** | **26** | | **Pb** | **06 18 04.0** | **-0.2** |
| **KHZ** | **Kahutara** | **1.18** | **26** | P | **Pb** | **06 18 03.6** | **-0.6** |
| **KHZ** | **Kahutara** | **1.18** | **26** | P | **Pn** | **06 18 04.2** | **0.0** |
| **INZ** | **Inchbonnie** | **1.27** | **306** | P | **Pn** | **06 18 04.7** | **-0.8** |
| **ARCZ** | **Arundel** | **1.29** | **248** | P | **Pn** | **06 18 04.6** | **-1.2** |
| **RPZ** | **Rata Peaks** | **1.31** | **259** | Pg | **Pn** | **06 18 05.4** | **-0.8** |
| | 200nm,0.3s,baz=130,slow=2.2,SNR=234 | | | | | | |
| RPZ | | | | Lg | Lg | 06 18 23.7 | |
| | 678nm,0.3s,baz=8.0,slow=21,SNR=12 | | | | | | |
| **RPZ** | **Rata Peaks** | **1.31** | **259** | Pn | **Pn** | **06 18 05.2** | **-0.9** |
| RPZ | | | | | **Sb** | **06 18 23.5** | **+0.1** |
| **RPZ** | **Rata Peaks** | **1.31** | **259** | P | **Pn** | **06 18 04.8** | **-1.4** |
| RPZ | | | | S | **Sb** | **06 18 23.6** | **+0.1** |
| **RPZ** | **Rata Peaks** | **1.31** | **259** | P | **Pn** | **06 18 05.4** | **-0.8** |
| **WVZ** | **Waitaha Valley** | **1.58** | **284** | P | **Pn** | **06 18 09.3** | **-0.5** |
| **TMZ** | **Timaru** | **1.60** | **235** | P | **Pn** | **06 18 09.1** | **-1.0** |
| **THZ** | **Tophouse** | **1.71** | **2** | Pn | **Pn** | **06 18 11.2** | **-0.5** |
| **THZ** | **Tophouse** | **1.71** | **2** | P | **Pn** | **06 18 11.2** | **-0.5** |
| **GCSZ** | **Gaunt Creek Bo** | **1.83** | **274** | P | **Pn** | **06 18 13.3** | **0.0** |
| **DSZ** | **Denniston Nort** | **1.89** | **336** | P | **Pn** | **06 18 13.7** | **-0.4** |
| **BSWZ** | **Blackbirch Sta** | **1.92** | **24** | | **Pn** | **06 18 14.5** | **+0.1** |
| **BSWZ** | **Blackbirch Sta** | **1.92** | **24** | P | **Pn** | **06 18 14.5** | **+0.1** |
| **MRNZ** | **Matariki Terra** | **2.08** | **358** | P | **Pn** | **06 18 17.0** | **+0.4** |
| **LBZ** | **Lake Benmore** | **2.12** | **244** | Pn | **Pn** | **06 18 16.7** | **-0.6** |
| **LBZ** | **Lake Benmore** | **2.12** | **244** | P | **Pn** | **06 18 16.6** | **-0.6** |
| **FOZ** | **Fox Glacier** | **2.20** | **268** | Pn | **Pn** | **06 18 19.0** | **+0.7** |
| **FOZ** | **Fox Glacier** | **2.20** | **268** | P | **Pn** | **06 18 18.9** | **+0.7** |
| **TUWZ** | **Tuamarina** | **2.20** | **22** | Pn | **Pn** | **06 18 18.0** | **-0.3** |
| **ODZ** | **Otahua Downs** | **2.22** | **224** | | **Pn** | **06 18 17.9** | **-0.7** |
| **ODZ** | **Otahua Downs** | **2.22** | **224** | P | **Pn** | **06 18 17.7** | **-0.9** |
| **ODZ** | **Otahua Downs** | **2.22** | **224** | P | **Pn** | **06 18 18.3** | **-0.3** |
| **NNZ** | **Nelson** | **2.29** | **10** | Pn | **Pn** | **06 18 20.0** | **+0.4** |
| **NNZ** | **Nelson** | **2.29** | **10** | P | **Pn** | **06 18 19.8** | **+0.3** |
| **TCW** | **Tory Channel** | **2.50** | **26** | P | **Pn** | **06 18 21.9** | **-0.5** |
| **BHW** | **Baring Head** | **2.56** | **37** | | **Pn** | **06 18 22.9** | **-0.4** |
| **BHW** | **Baring Head** | **2.56** | **37** | P | **Pn** | **06 18 22.7** | **-0.5** |
| **SNZO** | **South Karori** | **2.57** | **33** | | **Pn** | **06 18 22.8** | **-0.6** |
| **SNZO** | **South Karori** | **2.57** | **33** | P | **Pn** | **06 18 22.8** | **-0.6** |
| **PLWZ** | **Palliser** | **2.61** | **44** | | **Pn** | **06 18 23.2** | **-0.8** |
| **PLWZ** | **Palliser** | **2.61** | **44** | P | **Pn** | **06 18 23.2** | **-0.8** |
| **WEL** | **Wellington** | **2.62** | **34** | P | **Pn** | **06 18 23.7** | **-0.4** |
| **QRZ** | **Quartz Range** | **2.66** | **355** | Pn | **Pn** | **06 18 24.4** | **-0.2** |
| **QRZ** | **Quartz Range** | **2.66** | **355** | P | **Pn** | **06 18 24.3** | **-0.3** |
| **QRZ** | **Quartz Range** | **2.66** | **355** | P | **Pn** | **06 18 24.8** | **+0.2** |
| **MSWZ** | **Moikau Station** | **2.73** | **42** | P | **Pn** | **06 18 24.8** | **-0.8** |
| **DUWZ** | **D'Urville Isla** | **2.79** | **17** | P | **Pn** | **06 18 26.9** | **+0.4** |
| **PAWZ** | **Paruwai Farm** | **2.84** | **43** | P | **Pn** | **06 18 26.3** | **-0.8** |
| **HHSZ** | **Highcliff Hill** | **2.89** | **213** | P | **Pn** | **06 18 27.0** | **-0.7** |
| **CAW** | **Cannon Point** | **2.89** | **36** | P | **Pn** | **06 18 27.0** | **-0.8** |
| **TRWZ** | **Traveller** | **2.96** | **46** | P | **Pn** | **06 18 28.0** | **-0.8** |
| **JCZ** | **Jackson Bay** | **2.99** | **257** | P | **Pn** | **06 18 29.0** | **-0.3** |
| **KIW** | **Kapiti Island** | **3.04** | **31** | P | **Pn** | **06 18 29.3** | **-0.5** |
| **WKZ** | **Wanaka** | **3.06** | **243** | Pn | **Pn** | **06 18 29.7** | **-0.5** |
| **WKZ** | **Wanaka** | **3.06** | **243** | P | **Pn** | **06 18 29.6** | **-0.5** |
| **EAZ** | **Earnscleugh** | **3.08** | **234** | P | **Pn** | **06 18 29.4** | **-0.9** |
| **OGWZ** | **Otaki Gorge** | **3.17** | **34** | P | **Pn** | **06 18 30.8** | **-0.9** |
| **TMWZ** | **Te Maipa** | **3.28** | **45** | P | **Pn** | **06 18 33.1** | **-0.1** |
| **TUZ** | **Tuapeka** | **3.37** | **222** | P | **Pn** | **06 18 33.6** | **-0.8** |
| **MRZ** | **Mangatainoka R** | **3.48** | **37** | P | **Pn** | **06 18 35.0** | **-0.8** |
| **PRWZ** | **Pori Road** | **3.74** | **40** | P | **Pn** | **06 18 39.4** | **0.0** |
| **BFZ** | **Birch Farm** | **3.77** | **43** | | **Pn** | **06 18 38.6** | **-1.3** |
| **BFZ** | **Birch Farm** | **3.77** | **43** | P | **Pn** | **06 18 38.6** | **-1.3** |
| **BFZ** | **Birch Farm** | **3.77** | **43** | P | **Pn** | **06 18 38.8** | **-1.1** |
| **POWZ** | **Post Office Ro** | **3.78** | **36** | P | **Pn** | **06 18 40.2** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **3.87** | **239** | Pn | **Pn** | **06 18 40.4** | **-0.9** |
| **MLZ** | **Mavora Lakes** | **3.87** | **239** | P | **Pn** | **06 18 40.2** | **-1.1** |
| **SYZ** | **Scrubby Hill** | **4.03** | **219** | P | **Pn** | **06 18 43.0** | **-0.4** |
| **DVHZ** | **Dannevirke** | **4.03** | **39** | P | **Pn** | **06 18 41.9** | **-1.6** |
| **WAZ** | **Wanganui** | **4.05** | **24** | P | **Pn** | **06 18 46.9** | **+3.1** |
| **ANWZ** | **Angora Road** | **4.06** | **43** | P | **Pn** | **06 18 43.0** | **-0.8** |
| **NMEZ** | **Namu Road** | **4.13** | **11** | P | **Pn** | **06 18 48.0** | **+3.2** |
| **LREZ** | **Lake Rotokare** | **4.18** | **17** | P | **Pn** | **06 18 50.1** | **+4.6** |
| **WHZ** | **Wether Hill Ro** | **4.24** | **234** | | **Pn** | **06 18 44.5** | **-1.8** |
| **WHZ** | **Wether Hill Ro** | **4.24** | **234** | P | **Pn** | **06 18 44.6** | **-1.8** |
| **PREZ** | **Palmer Road** | **4.25** | **14** | P | **Pn** | **06 18 49.1** | **+2.5** |
| **KHEZ** | **Kahui Hut** | **4.27** | **12** | P | **Pn** | **06 18 50.0** | **+3.1** |
| **NBEZ** | **Newall Road No** | **4.28** | **11** | P | **Pn** | **06 18 48.4** | **+1.6** |
| **PRHZ** | **Porangahau** | **4.28** | **43** | P | **Pn** | **06 18 46.8** | **-0.2** |
| **NEZ** | **North Egmont** | **4.31** | **13** | P | **Pn** | **06 18 49.8** | **+2.4** |
| **WPHZ** | **Waipukurau** | **4.35** | **40** | P | **Pn** | **06 18 48.2** | **+0.4** |
| **PNHZ** | **Pukenui** | **4.36** | **36** | P | **Pn** | **06 18 47.5** | **-0.5** |
| **PKE** | **Pukeiti** | **4.37** | **12** | P | **Pn** | **06 18 50.2** | **+2.1** |
| **DREZ** | **Durham Road** | **4.41** | **14** | P | **Pn** | **06 18 50.3** | **+1.7** |
| **DCZ** | **Deep Cove** | **4.53** | **242** | Pn | **Pn** | **06 18 49.0** | **-1.2** |
| **DCZ** | **Deep Cove** | **4.53** | **242** | P | **Pn** | **06 18 49.4** | **-0.9** |
| **MHEZ** | **Mangahewa** | **4.54** | **15** | P | **Pn** | **06 18 52.8** | **+2.4** |
| **VRZ** | **Vera Road** | **4.58** | **19** | P | **Pn** | **06 18 53.0** | **+1.9** |
| **PKVZ** | **Pokaka** | **4.59** | **25** | P | **Pn** | **06 18 53.1** | **+1.9** |
| **MOVZ** | **Moawhango** | **4.62** | **29** | P | **Pn** | **06 18 51.4** | **-0.3** |
| **WNVZ** | **Wahianoa** | **4.64** | **28** | P | **Pn** | **06 18 53.3** | **+1.4** |
| **TRVZ** | **Turoa** | **4.65** | **27** | P | **Pn** | **06 18 54.2** | **+2.1** |
| **KRHZ** | **Kereru** | **4.66** | **36** | P | **Pn** | **06 18 50.4** | **-1.8** |
| **BHHZ** | **Black Hill Sta** | **4.66** | **32** | P | **Pn** | **06 18 51.7** | **-0.5** |
| **KAHZ** | **Kahuranaki** | **4.76** | **41** | P | **Pn** | **06 18 52.4** | **-1.2** |
| **NGZ** | **Ngauruhoe** | **4.78** | **27** | P | **Pn** | **06 18 55.5** | **+1.6** |
| **SNVZ** | **South Ngauruho** | **4.78** | **27** | P | **Pn** | **06 18 55.7** | **+1.8** |
| **APZ** | **The Paps** | **4.80** | **224** | P | **Pn** | **06 18 52.9** | **-1.1** |
| **OTVZ** | **Oturere** | **4.81** | **27** | P | **Pn** | **06 18 55.0** | **+0.8** |
| **NNVZ** | **North Ngauruho** | **4.82** | **27** | P | **Pn** | **06 18 55.5** | **+1.0** |
| **TWVZ** | **Taurewa** | **4.82** | **25** | P | **Pn** | **06 18 55.1** | **+0.7** |
| **WTVZ** | **West Tongariro** | **4.83** | **26** | P | **Pn** | **06 18 55.6** | **+1.1** |
| **ETVZ** | **East Tongariro** | **4.85** | **28** | P | **Pn** | **06 18 55.6** | **+0.8** |
| **KRVZ** | **Karewarewa** | **4.86** | **27** | P | **Pn** | **06 18 55.8** | **+0.8** |
| **TMVZ** | **Te Maari** | **4.86** | **27** | P | **Pn** | **06 18 55.9** | **+0.9** |
| **KWHZ** | **Kaweka Forest** | **4.86** | **35** | P | **Pn** | **06 18 54.5** | **-0.5** |
| **NTVZ** | **North Tongarir** | **4.87** | **27** | P | **Pn** | **06 18 56.3** | **+1.2** |
| **MCHZ** | **McNeil Hill** | **4.96** | **37** | P | **Pn** | **06 18 56.4** | **+0.1** |
| **RITZ** | **Rihia Road** | **5.04** | **28** | P | **Pn** | **06 18 59.1** | **+0.7** |
| **RATZ** | **Rangitua** | **5.11** | **27** | P | **Pn** | **06 18 59.2** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **5.11** | **34** | Pn | **Pn** | **06 18 57.1** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **5.11** | **34** | P | **Pn** | **06 18 57.3** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **5.11** | **34** | P | **Pn** | **06 18 57.2** | **-1.2** |
| **PYZ** | **Puysegur Point** | **5.14** | **236** | Pn | **Pn** | **06 18 57.9** | **-0.7** |
| **PYZ** | **Puysegur Point** | **5.14** | **236** | P | **Pn** | **06 18 57.0** | **-1.6** |
| **HIZ** | **Hauiti** | **5.19** | **18** | Pn | **Pn** | **06 18 59.2** | **-0.2** |
| **HIZ** | **Hauiti** | **5.19** | **18** | P | **Pn** | **06 19 00.2** | **+0.9** |
| **HIZ** | **Hauiti** | **5.19** | **18** | P | **Pn** | **06 18 59.6** | **+0.2** |
| **ARHZ** | **Aropaoanui** | **5.25** | **38** | P | **Pn** | **06 19 00.4** | **+0.2** |
| **NMHZ** | **Naumai** | **5.30** | **36** | P | **Pn** | **06 19 00.3** | **-0.7** |
| **MTHZ** | **Maungataniwha** | **5.52** | **35** | P | **Pn** | **06 19 04.1** | **+0.2** |
| **TLZ** | **Tolley Road** | **5.54** | **23** | P | **Pn** | **06 19 06.1** | **+1.9** |
| **RAHZ** | **Arahi** | **5.57** | **37** | P | **Pn** | **06 19 05.8** | **+1.1** |
| **ALRZ** | **Allen Road** | **5.58** | **30** | P | **Pn** | **06 19 03.8** | **-1.0** |
| **PRRZ** | **Plateau Road** | **5.65** | **30** | P | **Pn** | **06 19 04.6** | **-1.1** |
| **PRGZ** | **Paritu Road** | **5.93** | **42** | P | **Pn** | **06 19 08.6** | **-1.0** |
| **TOZ** | **Tahuroa Road** | **6.09** | **20** | Pn | **Pn** | **06 19 11.3** | **-0.4** |
| **URZ** | **Urewera** | **6.14** | **33** | Pn | **Pn** | **06 19 10.5** | **-1.9** |
| | 3.1nm,0.3s,baz=208,slow=6.9,SNR=8.4 | | | | | | |
| URZ | | | | Sn | **Sn** | **06 20 18.3** | **-4.3** |
| | 1.8nm,0.3s,baz=72,slow=16,SNR=2.1 | | | | | | |
| URZ | | | | LR | LR | 06 22 06.7 | |
| | comp=Z,171nm,19.6s,baz=204,slow=45 | | | | | | |
| **URZ** | **Urewera** | **6.14** | **33** | Pn | **Pn** | **06 19 10.8** | **-1.5** |
| **URZ** | **Urewera** | **6.14** | **33** | P | **Pn** | **06 19 11.1** | **-1.3** |
| **URZ** | **Urewera** | **6.14** | **33** | P | **Pn** | **06 19 12.4** | **0.0** |
| **MWZ** | **Matawai** | **6.25** | **36** | P | **Pn** | **06 19 11.7** | **-2.2** |
| **TKGZ** | **Te Karaka** | **6.30** | **39** | P | **Pn** | **06 19 15.8** | **+1.1** |
| **AWAZ** | **Awhitu Peninsu** | **6.55** | **13** | P | **Pn** | **06 19 14.7** | **+0.6** |
| **TWGZ** | **Tauwhareparae** | **6.58** | **38** | P | **Pn** | **06 19 18.2** | **-0.3** |
| **WTAZ** | **Waiatarua** | **6.67** | **12** | P | **Pn** | **06 19 21.7** | **+2.0** |
| **ETAZ** | **East Tamaki Re** | **6.71** | **15** | P | **Pn** | **06 19 21.0** | **+0.7** |
| **HAZ** | **Te Kaha** | **6.84** | **35** | P | **Pn** | **06 19 20.2** | **-1.9** |
| **PKGZ** | **Pakihiroa** | **6.86** | **37** | P | **Pn** | **06 19 21.8** | **-0.6** |
| **MBAZ** | **Motutapu North** | **6.88** | **14** | P | **Pn** | **06 19 23.5** | **+0.8** |
| **WCZ** | **Waipu Caves** | **7.62** | **9** | P | **Pn** | **06 19 34.3** | **+1.6** |
| **DZM** | **Mont Dzumac** | **22.00** | **344** | LR | LR | 06 30 53.8 | |
| | comp=Z,84nm,18.7s,baz=164,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **27.15** | **285** | LR | LR | 06 32 27.8 | |
| | comp=Z,105nm,18.1s,baz=202,slow=33 | | | | | | |
| **BBOO** | **Buckleboo** | **30.60** | **278** | P | **P** | **06 23 55.2** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 06 24 07.6 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **37.45** | **275** | P | **P** | **06 24 54.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **37.54** | **289** | P | **P** | **06 24 55.7** | **-0.4** |
| | comp=Z,1.5nm,0.6s,baz=130,slow=7.6,SNR=4.2 | | | | | | |
| ASAR | | | | LR | LR | 06 39 40.4 | |
| | comp=Z,63nm,19.4s,baz=178,slow=35 | | | | | | |
| **COEN** | **Coen** | **38.88** | **310** | P | **P** | **06 25 07.9** | **+0.6** |
| **WB2** | **Warramunga Arr** | **39.78** | **294** | P | **P** | **06 25 14.7** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 06 25 15.3 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.78** | **294** | P | **P** | **06 25 14.8** | **-0.1** |
| | comp=Z,2.8nm,0.7s,baz=132,slow=7.8,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.78** | **294** | P | **P** | **06 25 15.1** | **+0.2** |
| **WRAB** | **Tennant Creek** | **39.78** | **294** | P | **P** | **06 25 14.6** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 06 25 15.4 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.87** | **294** | P | **P** | **06 25 15.5** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 06 25 18.7 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **46.65** | **180** | P | **P** | **06 26 13.0** | **+2.9** |
| | comp=Z,4.4nm,0.9s,baz=346,slow=2.6,SNR=7.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.99** | **287** | P | **P** | **06 26 11.9** | **-1.1** |
| FITZ | | | | IAmb | IAmb | 06 26 23.4 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **47.04** | **298** | P | **P** | **06 26 13.7** | **+0.3** |
| **BATI** | **Baumata** | **53.90** | **293** | LR | LR | 06 48 54.1 | |
| | comp=Z,79nm,21.6s,baz=188,slow=35 | | | | | | |
| **LEM** | **Lembang** | **67.42** | **282** | LR | LR | 06 57 34.8 | |
| | comp=Z,50nm,19.9s,baz=166,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **120.39** | **31** | PKP | **PKPdf** | **06 36 32.0** | **-0.1** |
| | comp=Z,0.8nm,0.9s,baz=246,slow=1.6,SNR=7.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **120.39** | **31** | | **PKiKP** | **06 36 32.1** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **148.83** | **197** | PKPbc | **PKiKP** | **06 37 30.8** | **-0.4** |
| | comp=Z,1.8nm,1.0s,baz=150,slow=0.5,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.83** | **197** | | **PKiKP** | **06 37 31.3** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **149.02** | **338** | PKPbc | **PKPbc** | **06 37 28.5** | **-0.1** |
| | comp=Z,3.2nm,0.8s,baz=47,slow=1.6,SNR=8.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **149.02** | **338** | | **PKPbc** | **06 37 29.0** | **+0.3** |
| **BRTR** | **Keskin Array B** | **149.47** | **277** | PKPbc | **PKPbc** | **06 37 30.9** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=142,slow=5.7,SNR=7.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.47** | **277** | | **PKiKP** | **06 37 31.7** | **-0.3** |
| **FINES** | **FINESS Array B** | **153.36** | **324** | PKPbc | **PKPbc** | **06 37 38.8** | **-0.1** |
| | comp=Z,1.1nm,0.5s,baz=79,slow=3.5,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **153.36** | **324** | | **PKiKP** | **06 37 39.4** | **+0.3** |
| FINES | | | | PKPab | **PKPab** | **06 37 52.1** | **+1.0** |

*IDC **18** 06:17:59.5±0.8, 7°.27N×126°.88E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.5/49, mbtmp3.8/8, MS3.6/10, Ms1 3.6/10, ms1mx3.1/76, Error ellipse: s-maj=57.6km s-min=18.0km az=77.0*

*MAN **18** 06:18:04.5, 7°.01N×126°.99E, h9km, mb4.9, ML3.9, MS3.9*

**ISC 18 06:18:02.6±1.9, 6°.99N±0°.05×127°.12E±0°.07, h13km±11km, n26, σ1°.992/24, mb3.9/8, MS3.7/8, 4C-4D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.85** | **267** | *ieP* | **Pg** | **06 18 18.6** | **-0.5** |
| MATI | | | | *i* S | **Sg** | **06 18 28.6** | **-1.8** |
| **BIPH** | **Bislig** | **1.40** | **328** | *ipP* | **Pg** | **06 18 32.4** | **+2.7** |
| BIPH | | | | *i* S | **Sg** | **06 18 47.5** | **-0.4** |
| **DDMP** | **Don Marcelino,** | **1.65** | **238** | *ipP* | **Pb** | **06 18 32.4** | **-0.5** |
| DDMP | | | | *i* S | **Sb** | **06 18 53.8** | **+0.2** |
| **BUKP** | **Musuan** | **2.22** | **294** | *ieP* | **Pn** | **06 18 40.1** | **+0.9** |
| BUKP | | | | *i* S | **Sb** | **06 19 10.4** | **+0.3** |
| **BUTP** | **Butuan** | **2.46** | **323** | *ieP* | **Pn** | **06 18 44.3** | **+1.9** |
| BUTP | | | | *i* S | **Sb** | **06 19 15.8** | **-1.2** |
| **CTBH** | **Cotabato--PC H** | **2.86** | **275** | *ipP* | **Pn** | **06 18 49.2** | **+1.3** |
| **GLSP** | **General Luna,** | **2.94** | **341** | *ieP* | **Pn** | **06 18 47.8** | **-1.3** |
| GLSP | | | | *i* S | **Sb** | **06 19 31.1** | **+0.2** |
| **LLP** | **Lapu-Lapu** | **4.54** | **317** | *ieP* | **Pn** | **06 19 08.8** | **-2.3** |
| LLP | | | | *e*S | **Sn** | **06 20 07.9** | **+4.1** |
| **JAY** | **Jayapura** | **16.52** | **124** | LR | LR | 06 29 40.0 | |
| | comp=Z,104nm,18.8s,baz=332,slow=42 | | | | | | |
| **GUMO** | **Guam** | **18.65** | **68** | LR | LR | 06 28 49.4 | |
| | comp=Z,117nm,21.2s,baz=104,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.97** | **183** | P | **P** | **06 23 27.3** | **+1.3** |
| | 3.1nm,0.8s,baz=6.4,slow=11,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.69** | **165** | P | **P** | **06 23 51.4** | **+0.8** |
| | 0.6nm,0.3s,baz=345,slow=10,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.70** | **295** | LR | LR | 06 36 42.3 | |
| | comp=Z,87nm,18.4s,baz=115,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **31.18** | **168** | P | **P** | **06 24 22.4** | **+0.8** |
| | 0.2nm,0.4s,baz=342,slow=7.5,SNR=6.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 27 15.6** | **-1.0** |
| | 0.5nm,0.6s,baz=354,slow=2.2,SNR=4.3 | | | | | | |
| **STKA** | **Stephens Creek** | **41.05** | **161** | P | **P** | **06 25 49.4** | **+

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **64.48** | **26** | P | | **P** | **06 34 59.6** | **-1.7** |
| | comp=Z,0.5nm,0.5s,baz=255,slow=5.3,SNR=5.5 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **65.97** | **23** | P | | **P** | **06 35 12.2** | **+1.3** |
| **A36M** | **Sachs Harbour** | **72.96** | **19** | P | | **P** | **06 35 53.4** | **-0.1** |
| A36M | | | | IAmb | | IAmb | 06 36 06.7 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **ABKAR** | **Akbulak array** | **74.01** | **317** | P | | **P** | **06 35 59.4** | **-0.7** |
| **YKA** | **Yellowknife Ar** | **78.81** | **28** | P | | **P** | **06 36 25.4** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=289,slow=5.8,SNR=4.9 | | | | | | | |
| **B08A** | **Colville Reser** | **80.17** | **42** | P | | **P** | **06 36 35.0** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **83.72** | **52** | P | | **P** | **06 36 53.9** | **+0.5** |
| | comp=Z,1.5nm,0.7s,baz=271,slow=5.4,SNR=6.1 | | | | | | | |
| **SRU** | **San Rafael Swe** | **89.21** | **49** | P | | **P** | **06 37 20.7** | **+0.8** |

*IDC **18** 06:41:48.2±0.9,35°.46N×3°.84W, h0km, mb3.7/6, mb1 3.8/10,mb1mx3.6/54, mbtmp3.6/10, ML3.8/4, Error ellipse: s-maj=32.1km s-min=13.2km az=101.0*
*SFS **18** 06:41:49.0,35°.40N×3°.80W, ML3.3, ALBORAN SUR*
*MDD **18** 06:41:49.4±0.8,35°.48N×3°.87W, h0km, mbLg3.3/3, Error ellipse: s-maj=8.9km s-min=4.4km az=19.0*
*MDD EMS: II INTENSIDAD MAXIMA.*
*CNRM **18** 06:41:51.8,35°.51N×3°.83W, h30km, ml3.6*
*LDG **18** 06:41:51.1±0.2,35°.38N×3°.77W, h10km, Ml3.0/3*
*INMG **18** 06:41:51.4±1.4,35°.50N×3°.79W, h18km±8km, ML3.1, Error ellipse: s-maj=3.5km s-min=3.3km az=107.0*
*IGIL **18** 06:41:52.1,35°.48N×3°.87W, h12km, ML3.4*

**ISC 18 06:41:50.1±1.0,35°.49N±0°.02×3°.75W±0°.02,h15km±7km, n102,σ2s09/156,mb3.9/7,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.32** | **210** | P | | **Pg** | **Pg** | **06 41 56.3** | **-0.5** |
| PALE | | | | S | | **Sg** | **Sg** | **06 42 00.2** | **-1.1** |
| **EMEL** | **Melilla** | **0.67** | **106** | Pg | | **Pg** | **Pg** | **06 42 03.0** | **-0.3** |
| | 1μm,0.1s,SNR=7.9 | | | | | | | | |
| EMEL | | | | Lg | | Lg | Lg | 06 42 13.9 | |
| | 410nm,0.4s,SNR=7.9 | | | | | | | | |
| **EALB** | **Alboran** | **0.73** | **52** | Pg | | **Pg** | **Pg** | **06 42 04.4** | **0.0** |
| | 98nm,0.2s,SNR=7.9 | | | | | | | | |
| EALB | | | | Lg | | Lg | Lg | 06 42 15.0 | |
| | 2μm,0.2s,SNR=7.9 | | | | | | | | |
| **AKLM** | **AKL** | **0.99** | **186** | P | | **Pb** | **Pb** | **06 42 08.0** | **-1.0** |
| AKLM | | | | S | | **Sb** | **Sb** | **06 42 20.5** | **-1.3** |
| **CHAS** | **Isla Isabel II** | **1.12** | **106** | P | | **Pb** | **Pb** | **06 42 09.0** | **-2.2** |
| CHAS | | | | S | | **Sb** | **Sb** | **06 42 23.1** | **-2.4** |
| **TAF** | **Taforalt** | **1.28** | **121** | P | | **Pg** | **Pg** | **06 42 15.0** | **+0.1** |
| TAF | | | | S | | **Sb** | **Sb** | **06 42 30.1** | **-0.3** |
| **TAF** | **Taforalt** | **1.28** | **121** | P | | **Pg** | **Pg** | **06 42 15.0** | **+0.1** |
| **SMIR** | **Smir Dam** | **1.35** | **279** | P | | **Pg** | **Pg** | **06 42 17.3** | **+1.2** |
| **SMIR** | **Smir Dam** | **1.35** | **279** | P | | Pg | 06 42 24.0 | +7.9 | |
| **EMIJ** | **Mijas** | **1.35** | **322** | Pg | | **Pn** | **Pn** | **06 42 12.9** | **-1.7** |
| | 5.5nm,0.3s,SNR=7.9 | | | | | | | | |
| EMIJ | | | | Lg | | Lg | Lg | 06 42 30.0 | |
| | 102nm,0.2s,SNR=7.9 | | | | | | | | |
| **CHEFC** | **Chefchaouen** | **1.36** | **254** | P | | **Pn** | **Pn** | **06 42 14.0** | **-0.6** |
| CHEFC | | | | S | | **Sn** | **Sn** | **06 42 31.8** | **-0.7** |
| **EMAL** | **Malaga-Limoner** | **1.38** | **337** | P | | **Pn** | **Pn** | **06 42 13.4** | **-1.5** |
| EMAL | | | | S | | **Sn** | **Sn** | **06 42 32.2** | **-0.6** |
| EMAL | | | | *e*Cod | | | | 06 43 27.4 | |
| **CEU** | **Ceuta** | **1.39** | **287** | P | | | Pn | 06 42 01.9 | -13 |
| CEU | | | | S | | | Sn | 06 42 17.6 | -15 |
| CEU | | | | *e*Cod | | | | 06 43 11.5 | |
| **JBK** | **JBK** | **1.51** | **140** | P | | **Pb** | **Pb** | **06 42 18.0** | **0.0** |
| JBK | | | | S | | **Sn** | **Sn** | **06 42 31.9** | **-4.4** |
| **JBK** | **JBK** | **1.51** | **140** | P | | **Pg** | **Pg** | **06 42 21.0** | **+1.8** |
| **EJIF** | **Jimena Fronter** | **1.69** | **305** | Pg | | **Pn** | **Pn** | **06 42 17.2** | **-1.9** |
| | 47μm,0.2s,SNR=7.9 | | | | | | | | |
| EJIF | | | | Lg | | Lg | Lg | 06 42 39.8 | |
| | 754μm,0.6s,SNR=7.9 | | | | | | | | |
| **SICH** | **Sidi Chahed** | **1.90** | **223** | P | | **Pn** | **Pn** | **06 42 21.8** | **-0.2** |
| SICH | | | | S | | Sn | Sn | 06 42 30.0 | -16 |
| **SICH** | **Sidi Chahed** | **1.90** | **223** | P | | **Pg** | **Pg** | **06 42 27.0** | **+0.5** |
| **LIJA** | **Lijar** | **1.95** | **317** | P | | **Pg** | **Pg** | **06 42 26.9** | **-0.6** |
| LIJA | | | | S | | **Sg** | **Sg** | **06 42 53.0** | **+0.3** |
| **LCRM** | **LCR** | **2.02** | **207** | P | | **Pn** | **Pn** | **06 42 25.0** | **+1.1** |
| LCRM | | | | S | | **Sn** | **Sn** | **06 42 49.8** | **+0.9** |
| **CNIL** | **Conil** | **2.07** | **296** | P | | Pg | 06 42 38.1 | +8.3 | |
| **IFR** | **Ifrane** | **2.28** | **210** | Pn | | **Pn** | **Pn** | **06 42 26.2** | **-1.2** |
| **IFR** | **Ifrane** | **2.28** | **210** | Pg | | **Pb** | **Pb** | **06 42 31.5** | **+0.4** |
| IFR | | | | S | | **Sn** | **Sn** | **06 42 52.9** | **-2.4** |
| **CZD** | **Col de Zad** | **2.68** | **204** | P | | **Pn** | **Pn** | **06 42 33.0** | **0.0** |
| **CZD** | **Col de Zad** | **2.68** | **204** | P | | **Pg** | **Pg** | **06 42 46.0** | **+4.4** |
| **MD31** | **MD31** | **2.75** | **198** | P | | **Pn** | **Pn** | **06 42 33.5** | **-0.3** |
| **MDT** | **Midelt** | **2.77** | **195** | Pn | | **Pn** | **Pn** | **06 42 33.5** | **-0.5** |
| | 3.2nm,0.3s,baz=192,slow=7.4,SNR=66 | | | | | | | | |
| MDT | | | | | | Sn | **Sn** | **06 43 06.2** | **-1.1** |
| | 11nm,0.3s,baz=51,slow=14,SNR=6.5 | | | | | | | | |
| MDT | | | | Lg | | Lg | Lg | 06 43 16.1 | |
| | 10nm,0.3s,baz=55,slow=15,SNR=5.7 | | | | | | | | |
| **MDT** | **Midelt** | **2.77** | **195** | P | | **Pn** | **Pn** | **06 42 34.6** | **+0.6** |
| **MDT** | **Midelt** | **2.77** | **195** | P | | **Pg** | **Pg** | **06 42 45.8** | **+2.6** |
| **TDRA** | **Tendrara** | **2.83** | **149** | P | | **Pn** | **Pn** | **06 42 35.0** | **0.0** |
| **EZAR** | **Zarzadilla de** | **2.89** | **34** | Pn | | **Pn** | **Pn** | **06 42 34.4** | **-1.4** |
| | 13nm,0.4s,SNR=7.9 | | | | | | | | |
| EZAR | | | | | | Sn | **Sn** | **06 43 09.8** | **-0.5** |
| | 42nm,0.3s,SNR=7.9 | | | | | | | | |
| **ARNO** | **Arenosillo** | **2.90** | **304** | S | | **Sn** | **Sn** | **06 43 09.5** | **-0.7** |
| **CART** | **Cartagena** | **3.04** | **46** | P | | **Pn** | **Pn** | **06 42 40.7** | **+3.1** |
| CART | | | | S | | **Sn** | **Sn** | **06 43 09.2** | **-4.6** |
| **CART** | **Cartagena** | **3.04** | **46** | P | | **Pn** | **Pn** | **06 42 35.8** | **-1.8** |
| CART | | | | S | | **Sn** | **Sn** | **06 43 10.0** | **-3.8** |
| **ETOB** | **Tobarra** | **3.60** | **29** | Pn | | **Pn** | **Pn** | **06 42 47.4** | **+1.9** |
| | 14nm,0.2s,SNR=7.9 | | | | | | | | |
| ETOB | | | | | | Sn | **Sn** | **06 43 29.4** | **+1.6** |
| | 22nm,0.3s,SNR=7.9 | | | | | | | | |
| **EGRO** | **El Granado** | **3.63** | **305** | Pn | | **Pn** | **Pn** | **06 42 45.4** | **-0.5** |
| | 8.5nm,0.1s,SNR=31 | | | | | | | | |
| EGRO | | | | | | Sn | **Sn** | **06 43 25.9** | **-2.6** |
| | 32nm,0.2s,SNR=9.4 | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | *e*Pn | | **Pn** | **Pn** | **06 42 46.6** | **-0.5** |
| PVAQ | | | | *e*Sn | | **Sn** | **Sn** | **06 43 28.1** | **-2.6** |
| PVAQ | | | | A | | A | A | 06 43 29.7 | |
| | 97nm,0.6s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **302** | P | | **Pn** | **Pn** | **06 42 46.7** | **-0.4** |
| PVAQ | | | | S | | **Sn** | **Sn** | **06 43 29.2** | **-1.5** |
| **AVE** | **Averroes** | **3.74** | **235** | P | | **Pn** | **Pn** | **06 42 46.5** | **-0.8** |
| **FIGM** | **Figuig** | **3.94** | **148** | P | | **Pn** | **Pn** | **06 42 49.8** | **-0.4** |
| **PCVE** | **Castro Verde** | **4.06** | **303** | *e*Pn | | **Pn** | **Pn** | **06 42 51.3** | **-0.4** |
| PCVE | | | | *e*Sn | | **Sn** | **Sn** | **06 43 35.7** | **-3.3** |
| PCVE | | | | A | | A | A | 06 43 39.6 | |
| | 43nm,0.4s | | | | | | | | |
| **AFON** | **Font Roja** | **4.07** | **38** | Pn | | **Pn** | **Pn** | **06 42 52.3** | **+0.3** |
| | 9.8nm,0.3s,SNR=7.9 | | | | | | | | |
| AFON | | | | | | Sn | **Sn** | **06 43 39.9** | **+0.5** |
| | 8.9nm,0.7s,SNR=7.9 | | | | | | | | |
| **PAB** | **San Pablo** | **4.07** | **353** | Pn | | **Pn** | **Pn** | **06 42 52.9** | **+0.9** |
| | 17nm,0.3s,SNR=7.9 | | | | | | | | |
| PAB | | | | | | Sn | **Sn** | **06 43 37.1** | **-2.4** |
| | 5.1nm,0.3s,SNR=7.9 | | | | | | | | |
| **PAB** | **San Pablo** | **4.07** | **353** | P | | **Pn** | **Pn** | **06 42 52.9** | **+0.9** |
| **PBEJ** | **Beja** | **4.16** | **309** | *e*Pn | | **Pn** | **Pn** | **06 42 53.5** | **+0.4** |
| PBEJ | | | | *e*Sn | | **Sn** | **Sn** | **06 43 38.9** | **-2.6** |
| PBEJ | | | | A | | A | A | 06 43 42.6 | |
| | 25nm,0.6s | | | | | | | | |
| **EBAD** | **Badajoz** | **4.17** | **322** | Pn | | **Pn** | **Pn** | **06 42 52.8** | **-0.4** |
| | 5.7nm,0.3s,SNR=7.9 | | | | | | | | |
| EBAD | | | | | | Sn | **Sn** | **06 43 39.2** | **-2.5** |
| | 42nm,0.2s,SNR=6.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | Pn | | **Pn** | **Pn** | **06 42 54.4** | **+1.0** |
| | 2.9nm,0.3s,baz=178,slow=12,SNR=78 | | | | | | | | |
| ESDC | | | | | | Sn | **Sn** | **06 43 36.4** | **-5.6** |
| | 1.0nm,0.3s,baz=183,slow=23,SNR=3.2 | | | | | | | | |
| ESDC | | | | Lg | | Lg | Lg | 06 43 57.5 | |
| | 2.0nm,0.3s,baz=177,slow=26,SNR=5.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | Pn | | **Pn** | **Pn** | **06 42 54.8** | **+1.5** |
| | 9.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.18** | **358** | Pn | | **Pn** | **Pn** | **06 42 54.5** | **+1.2** |
| | 2.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*P | | **Pn** | **Pn** | **06 42 54.3** | **-0.5** |
| MESJ | | | | *e*S | | **Sn** | **Sn** | **06 43 40.0** | **-4.7** |
| MESJ | | | | IAML | | | | 06 43 47.4 | |
| | comp=N,66nm,0.3s | | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **304** | *e*Pn | | **Pn** | **Pn** | **06 42 54.4** | **-0.5** |
| MESJ | | | | *e*Sn | | **Sn** | **Sn** | **06 43 41.7** | **-3.0** |
| MESJ | | | | A | | A | A | 06 43 44.8 | |
| | comp=N,29nm,0.5s | | | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **296** | *e*P | | **Pn** | **Pn** | **06 42 54.9** | **-0.9** |
| MORF | | | | *e*S | | **Sn** | **Sn** | **06 43 41.3** | **-5.0** |
| MORF | | | | IAML | | | | 06 43 47.3 | |
| | comp=N,93nm,0.5s | | | | | | | | |
| **MORF** | **Marmelete** | **4.35** | **296** | *e*Pn | | **Pn** | **Pn** | **06 42 55.3** | **-0.5** |
| MORF | | | | *e*Sn | | **Sn** | **Sn** | **06 43 43.4** | **-2.8** |
| MORF | | | | A | | A | A | 06 43 47.5 | |
| | comp=N,36nm,0.2s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | *e*Pn | | **Pn** | **Pn** | **06 42 56.7** | **+0.1** |
| PFVI | | | | *e*Sn | | **Sn** | **Sn** | **06 43 44.6** | **-3.2** |
| PFVI | | | | A | | A | A | 06 43 52.2 | |
| | comp=N,47nm,0.5s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | Pn | | **Pn** | **Pn** | **06 42 55.7** | **-0.9** |
| | comp=N,16nm,0.4s,SNR=7.9 | | | | | | | | |
| PFVI | | | | Sn | | **Sn** | **Sn** | **06 43 44.2** | **-3.6** |
| | comp=N,2.2nm,0.2s,SNR=7.9 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **293** | P | | **Pn** | **Pn** | **06 42 57.0** | **+0.4** |
| **PTEO** | **Sao Teotonio** | **4.50** | **299** | *e*Pn | | **Pn** | **Pn** | **06 42 57.4** | **-0.4** |
| PTEO | | | | *e*Sn | | **Sn** | **Sn** | **06 43 46.2** | **-3.7** |
| PTEO | | | | A | | A | A | 06 43 49.2 | |
| | comp=N,38nm,0.3s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **319** | *e*Pn | | **Pn** | **Pn** | **06 42 58.7** | **+0.2** |
| PESTR | | | | *e*Sn | | **Sn** | **Sn** | **06 43 48.3** | **-3.0** |
| PESTR | | | | A | | A | A | 06 44 00.2 | |
| | comp=N,16nm,0.6s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **319** | P | | **Pn** | **Pn** | **06 42 58.2** | **-0.4** |
| **EVO** | **Evora** | **4.57** | **313** | P | | **Pn** | **Pn** | **06 42 58.1** | **-0.6** |
| EVO | | | | S | | **Sn** | **Sn** | **06 43 49.2** | **-2.2** |
| **EVO** | **Evora** | **4.57** | **313** | *e*Pn | | **Pn** | **Pn** | **06 42 58.9** | **+0.2** |
| EVO | | | | *e*Sn | | **Sn** | **Sn** | **06 43 48.0** | **-3.5** |
| EVO | | | | A | | A | A | 06 43 54.1 | |
| | comp=N,31nm,0.3s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64** | **306** | *e*Pn | | **Pn** | **Pn** | **06 42 59.2** | **-0.5** |
| PNCL | | | | *e*Sn | | **Sn** | **Sn** | **06 43 49.8** | **-3.5** |
| PNCL | | | | A | | A | A | 06 43 52.1 | |
| | comp=N,6.6nm,1.9s | | | | | | | | |
| **UCM** | **Universidad Co** | **4.82** | **5** | P | | **Pn** | **Pn** | **06 43 04.3** | **+2.0** |
| UCM | | | | S | | **Sb** | **Sb** | **06 44 17.6** | **+5.4** |
| **PMRV** | **Marv??o** | **4.88** | **325** | *e*Pn | | **Pn** | **Pn** | **06 43 03.5** | **+0.5** |
| PMRV | | | | *e*Sn | | **Sn** | **Sn** | **06 43 56.1** | **-3.2** |
| PMRV | | | | A | | A | A | 06 44 12.2 | |
| | comp=N,17nm,0.5s | | | | | | | | |
| **EPLA** | **Plasencia** | **4.92** | **339** | Pn | | **Pn** | **Pn** | **06 43 04.8** | **+1.2** |
| | comp=N,3.6nm,0.2s,SNR=7.9 | | | | | | | | |
| EPLA | | | | | | Sn | **Sn** | **06 43 57.3** | **-3.0** |
| | comp=N,4.5nm,0.2s,SNR=7.9 | | | | | | | | |
| **TZRR** | **Tazzarine** | **4.94** | **199** | P | | **Pn** | **Pn** | **06 43 03.6** | **-0.2** |
| **PMTG** | **Montargil** | **5.05** | **316** | *e*Pn | | **Pn** | **Pn** | **06 43 05.4** | **+0.1** |
| PMTG | | | | *e*Sn | | **Sn** | **Sn** | **06 44 00.4** | **-3.0** |
| PMTG | | | | A | | A | A | 06 44 09.2 | |
| | comp=N,15nm,0.5s | | | | | | | | |
| **PACT** | **Alcochete** | **5.22** | **310** | *e*Pn | | **Pn** | **Pn** | **06 43 08.1** | **+0.5** |
| PACT | | | | *e*Sn | | **Sn** | **Sn** | **06 44 04.6** | **-2.8** |
| PACT | | | | A | | A | A | 06 44 06.8 | |
| | comp=N,29nm,0.4s | | | | | | | | |
| **OUZM** | **OUZ** | **5.22** | **210** | P | | **Pn** | **Pn** | **06 43 09.0** | **+1.2** |
| **PCBR** | **Castelo Branco** | **5.25** | **327** | *e*Pn | | **Pn** | **Pn** | **06 43 08.5** | **+0.4** |
| PCBR | | | | *e*Sn | | **Sn** | **Sn** | **06 44 05.3** | **-3.1** |
| PCBR | | | | A | | A | A | 06 44 09.5 | |
| | comp=N,11nm,0.2s | | | | | | | | |
| **ETOR** | **Torete** | **5.48** | **14** | Pn | | **Pn** | **Pn** | **06 43 12.3** | **+1.0** |
| | comp=N,8.6nm,0.4s,SNR=7.9 | | | | | | | | |
| ETOR | | | | | | Sn | **Sn** | **06 44 13.2** | **-0.9** |
| | comp=N,9.0nm,0.4s,SNR=7.9 | | | | | | | | |
| **OUK** | **Oukaimeden** | **5.49** | **220** | P | | **Pn** | **Pn** | **06 43 10.1** | **-1.6** |
| **ZGR** | **Zagora** | **5.59** | **197** | P | | **Pn** | **Pn** | **06 43 11.9** | **-0.9** |
| **PMAFR** | **Mafra** | **5.61** | **310** | *e*Pn | | **Pn** | **Pn** | **06 43 13.2** | **+0.2** |
| PMAFR | | | | *e*Sn | | **Sn** | **Sn** | **06 44 13.8** | **-3.4** |
| PMAFR | | | | A | | A | A | 06 44 15.9 | |
| | comp=N,29nm,0.7s | | | | | | | | |
| **PMAFR** | **Mafra** | **5.61** | **310** | Pn | | **Pn** | **Pn** | **06 43 13.1** | **+0.1** |
| | comp=N,4.0nm,0.2s,SNR=7.9 | | | | | | | | |
| PMAFR | | | | | | Sn | **Sn** | **06 44 12.4** | **-4.7** |
| | comp=N,9.0nm,0.2s,SNR=7.9 | | | | | | | | |
| **PSBE** | **So Bento** | **5.68** | **316** | *e*Pn | | **Pn** | **Pn** | **06 43 14.4** | **+0.5** |
| PSBE | | | | *e*Sn | | **Sn** | **Sn** | **06 44 15.7** | **-3.2** |
| PSBE | | | | A | | A | A | 06 44 22.1 | |
| | comp=N,16nm,0.3s | | | | | | | | |
| **MTE** | **Manteigas** | **5.74** | **330** | *e*Pn | | **Pn** | **Pn** | **06 43 15.5** | **+0.6** |
| MTE | | | | *e*Sn | | **Sn** | **Sn** | **06 44 18.3** | **-2.3** |
| MTE | | | | A | | A | A | 06 44 25.9 | |
| | comp=N,13nm,0.5s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **5.91** | **322** | *e*Pn | | **Pn** | **Pn** | **06 43 18.9** | **+1.8** |
| PCAS | | | | *e*Sn | | **Sn** | **Sn** | **06 44 21.8** | **-2.7** |
| PCAS | | | | A | | A | A | 06 44 28.4 | |
| | comp=N,11nm,0.2s | | | | | | | | |
| **PVIS** | **Viseu** | **6.16** | **329** | *e*Pn | | **Pn** | **Pn** | **06 43 21.4** | **+0.9** |
| PVIS | | | | *e*Sn | | **Sn** | **Sn** | **06 44 27.8** | **-2.9** |
| PVIS | | | | A | | A | A | 06 44 33.5 | |
| | comp=N,12nm,0.8s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.22** | **336** | *e*Pn | | **Pn** | **Pn** | **06 43 22.5** | **+1.0** |
| MVO | | | | *e*Sn | | **Sn** | **Sn** | **06 44 30.6** | **-1.8** |
| MVO | | | | A | | A | A | 06 44 36.1 | |
| | comp=N,15nm,0.6s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.22** | **336** | Pn | | **Pn** | **Pn** | **06 43 22.3** | **+0.8** |
| | comp=N,12nm,0.2s,SNR=7.9 | | | | | | | | |
| MVO | | | | | | Sn | **Sn** | **06 44 29.4** | **-2.9** |
| | comp=N,7.3nm,0.3s,SNR=7.9 | | | | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.31** | **220** | P | | **Pn** | **Pn** | **06 43 19.7** | **-3.1** |
| **PVRL** | **Vila Real** | **6.56** | **333** | *e*Pn | | **Pn** | **Pn** | **06 43 27.0** | **+0.9** |
| PVRL | | | | *e*Sn | | **Sn** | **Sn** | **06 44 38.4** | **-2.3** |
| PVRL | | | | A | | A | A | 06 44 41.2 | |
| | comp=N,15nm,0.2s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.67** | **333** | *e*Pn | | **Pn** | **Pn** | **06 43 28.5** | **+0.8** |
| POLO | | | | *e*Sn | | **Sn** | **Sn** | **06 44 40.7** | **-2.9** |
| POLO | | | | A | | A | A | 06 44 48.9 | |
| | comp=N,5.5nm,0.5s | | | | | | | | |
| **PBRG** | **Braganca** | **6.72** | **341** | *e*Pn | | **Pn** | **Pn** | **06 43 29.1** | **+0.8** |
| **PCAB** | **Cabril** | **7.05** | **333** | *e*Pn | | **Pn** | **Pn** | **06 43 32.7** | **-0.2** |
| PCAB | | | | *e*Sn | | **Sn** | **Sn** | **06 44 50.6** | **-2.2** |
| PCAB | | | | A | | A | A | 06 45 03.2 | |
| | comp=N,9.4nm,0.2s | | | | | | | | |
| **ELOB** | **Lobios** | **7.20** | **333** | Pn | | **Pn** | **Pn** | **06 43 34.7** | **-0.2** |
| | comp=N,7.8nm,0.5s,SNR=7.9 | | | | | | | | |
| ELOB | | | | | | Sn | **Sn** | **06 44 50.9** | **-5.6** |
| | comp=N,7.1nm,0.4s,SNR=7.9 | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.37** | **333** | *e*Sn | | **Sn** | **Sn** | **06 44 57.8** | **-2.7** |
| PGAV | | | | A | | A | A | 06 45 07.1 | |
| | comp=N,9.1nm,0.9s | | | | | | | | |
| **ETSF** | **Etsaut** | **7.80** | **18** | *e*Pn | | **Pn** | **Pn** | **06 43 44.9** | **+1.8** |
| ETSF | | | | *e*Sn | | **Sn** | **Sn** | **06 45 08.0** | **-3.1** |
| | comp=N,0.9nm,0.3s | | | | | | | | |
| **SJPF** | **Ste Jean** | **7.86** | **14** | *e*Pn | | **Pn** | **Pn** | **06 43 44.9** | **+1.1** |
| SJPF | | | | *e*Sn | | **Sn** | **Sn** | **06 45 09.5** | **-3.0** |
| | comp=N,1.2nm,0.3s | | | | | | | | |
| **EPF** | **Esparros** | **8.17** | **22** | *e*Pn | | **Pn** | **Pn** | **06 43 48.9** | **+0.8** |
| EPF | | | | *e*Sn | | **Sn** | **Sn** | **06 45 16.8** | **-3.4** |
| | comp=N,3.2nm,0.5s | | | | | | | | |
| **QUIF** | **Quistinic** | **12.42** | **2** | *e*Pn | | **Pn** | **Pn** | **06 44 46.8** | **+0.5** |
| **ROSF** | **Rostrenen** | **12.84** | **1** | *e*Pn | | **Pn** | **Pn** | **06 44 52.2** | **+0.2** |
| **GERES** | **GERESS Array B** | **18.52** | **39** | P | | **Pn** | **Pn** | **06 46 08.9** | **+2.7** |
| | comp=N,0.1nm,0.3s,baz=234,slow=13,SNR=1.7 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **19.85** | **1** | P | | | **Pn** | **06 46 22.3** | **+0.4** |
| | baz=171,slow=10,SNR=5.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.78** | **166** | P | | | **P** | **06 46 51.9** | **-0.3** |
| | comp=N,0.8nm,0.9s,baz=346,slow=7.8,SNR=3.4 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **37.67** | **16** | P | | | **P** | **06 49 06.2** | **+1.8** |
| | comp=N,1.9nm,0.9s,baz=222,slow=9.3,SNR=3.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.97** | **47** | P | | | **P** | **06 51 49.0** | **+0.2** |
| | comp=N,63nm,0.6s,baz=296,slow=7.6,SNR=2.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **50** | P | | | **P** | **06 52 14.7** | **+0.4** |
| | comp=N,0.5nm,0.7s,baz=284,slow=6.4,SNR=5.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.85** | **332** | P | | | **P** | **06 52 47.2** | **-0.2** |
| | comp=N,0.5nm,0.6s,baz=61,slow=6.4,SNR=8.0 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.86** | **313** | P | | | **P** | **06 53 40.8** | **-1.0** |
| | comp=N,0.3nm,0.6s,baz=64,slow=4.1,SNR=2.4 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.75** | **314** | P | | | **P** | **06 54 26.2** | **+2.1** |
| | comp=N,0.3nm,0.4s,baz=80,slow=5.6,SNR=1.5 | | | | | | | | |

*NOU **18** 07:11:26.4,38°.81S×178°.60E, h7km, mb4.3/7, Off E. Coast of N. Island, N.Z.*
*WEL **18** 07:11:28.5±0.9,39°.5±4°×17°.8E±°, h33km, M3.6/19, ML3.9/19, MLv3.6/19, Error ellipse: s-maj=0.0km s-min=0.0km az=105.8*

**ISC 18 07:11:23.7±1.9,38°.80S±0°.04×178°.75E±0°.07,h5km±14km, n91,σ1s10/97,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNGZ** | **Carnagh Statio** | **0.53** | **306** | P | | **Pb** | **Pb** | **07 11 36.1** | **+0.6** |
| **PRGZ** | **Paritu Road** | **0.69** | **259** | P | | **Pn** | **Pn** | **07 11 40.2** | **0.0** |
| PRGZ | | | | S | | **Sn** | **Sn** | **07 11 50.2** | **-1.1** |
| **MHGZ** | **Mahia Peninsul** | **0.75** | **241** | P | | **Pn** | **Pn** | **07 11 42.2** | **+1.2** |
| **RIGZ** | **Rimuhau** | **0.78** | **276** | P | | **Pb** | **Pb** | **07 11 40.6** | **+0.8** |
| **TKGZ** | **Te Karaka** | **0.79** | **296** | P | | **Pg** | **Pg** | **07 11 40.0** | **+1.0** |
| TKGZ | | | | S | | **Sg** | **Sg** | **07 11 49.1** | **-0.2** |
| **PUZ** | **Puketiti** | **0.82** | **332** | P | | **Pg** | **Pg** | **07 11 40.6** | **+1.1** |
| **TWGZ** | **Tauwhareparae** | **0.87** | **315** | P | | **Pg** | **Pg** | **07 11 41.3** | **+0.9** |
| TWGZ | | | | S | | **Sg** | **Sg** | **07 11 51.6** | **0.0** |
| **KNZ** | **Kokohu** | **0.87** | **255** | P | | **Pb** | **Pb** | **07 11 42.6** | **+1.3** |
| **WMGZ** | **Waiomatatini S** | **1.01** | **345** | P | | **Pg** | **Pg** | **07 11 44.5** | **+1.4** |
| **PKGZ** | **Pakihiroa** | **1.05** | **329** | P | | **Pg** | **Pg** | **07 11 44.3** | **+0.4** |
| PKGZ | | | | S | | **Sg** | **Sg** | **07 11 56.9** | **-0.6** |
| **MWZ** | **Matawai** | **1.06** | **295** | P | | **Pg** | **Pg** | **07 11 43.9** | **-0.3** |
| MWZ | | | | S | | **Sg** | **Sg** | **07 11 55.4** | **-2.6** |
| **RAGZ** | **Rawiri** | **1.09** | **286** | P | | **Pg** | **Pg** | **07 11 44.7** | **+0.1** |
| RAGZ | | | | S | | **Sg** | **Sg** | **07 11 56.9** | **-1.9** |
| **SNGZ** | **Shannon Statio** | **1.10** | **270** | P | | **Pg** | **Pg** | **07 11 45.3** | **+0.4** |
| **RUGZ** | **Raukumara Rang** | **1.18** | **314** | P | | **Pg** | **Pg** | **07 11 45.5** | **-1.0** |
| RUGZ | | | | S | | **Sg** | **Sg** | **07 11 59.3** | **-2.5** |
| **MXZ** | **Matakaoa Point** | **1.28** | **344** | P | | **Pg** | **Pg** | **07 11 48.5** | **+0.2** |
| **HAZ** | **Te Kaha** | **1.29** | **323** | P | | **Pg** | **Pg** | **07 11 47.1** | **-1.3** |
| **RAHZ** | **Arahi** | **1.31** | **264** | P | | **Pg** | **Pg** | **07 11 48.4** | **-0.4** |
| **URZ** | **Urewera** | **1.39** | **292** | P | | **Pn** | **Pn** | **07 11 49.4** | **-0.4** |
| **URZ** | **Urewera** | **1.39** | **292** | P | | **Pn** | **Pn** | **07 11 50.0** | **+0.2** |
| **RTZ** | **Ruatahuna** | **1.40** | **277** | P | | **Pn** | **Pn** | **07 11 49.4** | **-0.5** |
| **ARHZ** | **Aropaoanui** | **1.45** | **251** | P | | **Pn** | **Pn** | **07 11 51.1** | **+0.5** |
| **MTHZ** | **Maungataniwha** | **1.49** | **267** | P | | **Pn** | **Pn** | **07 11 50.7** | **-0.6** |
| **NMHZ** | **Naumai** | **1.55** | **258** | P | | **Pn** | **Pn** | **07 11 52.1** | **+0.1** |
| **CKHZ** | **Cape Kidnapper** | **1.56** | **236** | P | | **Pn** | **Pn** | **07 11 52.8** | **+0.6** |
| **MUGZ** | **Murupara** | **1.58** | **281** | P | | **Pn** | **Pn** | **07 11 51.5** | **-0.9** |
| **MCHZ** | **McNeill Hill** | **1.72** | **247** | P | | **Pn** | **Pn** | **07 11 54.9** | **+0.5** |
| **KAHZ** | **Kahuranaki** | **1.76** | **235** | P | | **Pn** | **Pn** | **07 11 55.8** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **1.80** | **257** | P | | **Pn** | **Pn** | **07 11 55.6** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **1.80** | **257** | P | | **Pn** | **Pn** | **07 11 56.2** | **+0.7** |
| **RRRZ** | **Republican Roa** | **1.81** | **284** | P | | **Pn** | **Pn** | **07 11 57.1** | **+1.5** |
| **MRHZ** | **Matea Rd** | **1.82** | **268** | P | | **Pn** | **Pn** | **07 11 56.2** | **+0.4** |
| **TARZ** | **Mount T

2.5nm,0.7s,baz=68,slow=4.8,SNR=7.3

**IDC 18 07:54:44.2±2.8, 54°39N×86°89E, h0km, mb1 3.3/2, mb1mx3.1/50, mbtmp3.3/2, ML2.7/2, Error ellipse: s-maj=22.9km s-min=15.3km az=61.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.29** | **251** | *i* | | 08 01 53.1 | |
| | baz=69,slow=348,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.29** | **251** | Pg | Pg | 07 55 07.2 | -1.8 |
| | 1.7nm,0.3s,baz=67,slow=16,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 07 55 26.1 | |
| | 2.2nm,0.3s,baz=70,slow=26,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.34** | **237** | Pn | Pn | 07 56 20.1 | +1.2 |
| | 0.2nm,0.3s,baz=54,slow=14,SNR=10 | | | | | | |
| KURBB | | | | Sn | Sn | 07 57 30.6 | -1.4 |
| | 0.0nm,0.3s,baz=107,slow=30,SNR=0.8 | | | | | | |
| KURBB | | | | Lg | Lg | 07 58 07.2 | |
| | 0.1nm,0.3s,baz=51,slow=31,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.14** | **203** | Pn | Pn | 07 56 44.7 | +1.1 |
| | 0.1nm,0.3s,baz=21,slow=14,SNR=6.3 | | | | | | |
| MKAR | | | | Sn | Sn | 07 58 15.3 | -1.1 |
| | 0.1nm,0.3s,baz=28,slow=27,SNR=4.9 | | | | | | |
| MKAR | | | | Lg | Lg | 07 59 03.6 | |
| | 0.0nm,0.3s,baz=23,slow=34,SNR=10 | | | | | | |

*DDA 18 07:56:48.9±0.0, 39°.01N×35°.84E, h5km±2km, MW4.1*
*NEIC 18 07:56:50.0±2.0, 39°.04N±0°.04×35°.85E±0°.06, h5km±6km, Error ellipse: s-maj=7.4km s-min=3.5km az=122.0*
*ISK 18 07:56:49.6, 39°.02N×35°.85E, h4km, ML4.1/20*
*IDC 18 07:56:50.2±1.1, 39°.14N×35°.81E, h0km, mb3.8/9, mb1 3.8/13, mb1mx3.6/44, mbtmp3.7/13, ML3.7/4, MS3.5/3, Ms1 3.5/3, ms1mx2.8/87, Error ellipse: s-maj=20.5km s-min=12.1km az=1.0*

**ISC 18 07:56:49.7±1.1, 39°.06N±0°.01×35°.89E±0°.01, h3km±8km, n101, σ1§29/144, mb3.8/11, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNN** | **Bunyan** | **0.21** | **188** | Pg | **Pg** | **07 56 53.6** | **-0.1** |
| BNN | | | | Sg | **Sg** | **07 56 56.9** | **+0.4** |
| **BNN** | **Bunyan** | **0.21** | **188** | | **Pg** | **07 56 53.5** | **-0.3** |
| BNN | | | | Sg | **Sg** | **07 56 56.4** | **-0.1** |
| **GUNE** | **Kayseri** | **0.26** | **233** | P | **Pg** | **07 56 54.8** | **+0.2** |
| GUNE | | | | S | **Sg** | **07 56 59.6** | **+1.7** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.46** | **38** | P | **Pb** | **07 56 59.2** | **-1.3** |
| CUSAR | | | | S | **Sb** | **07 57 06.5** | **-1.2** |
| **SIRC** | **Yozgat** | **0.64** | **296** | P | **Pg** | **07 57 01.5** | **-0.4** |
| SIRC | | | | S | **Sg** | **07 57 10.7** | **+0.5** |
| **CUAYA** | **Sivas-Altinyay** | **0.70** | **73** | P | **Pb** | **07 57 03.5** | **-1.2** |
| CUAYA | | | | S | **Sb** | **07 57 15.4** | **+0.7** |
| **SARI** | **SarD1z-Kayseri** | **0.77** | **147** | PG | **Pg** | **07 57 04.5** | **0.0** |
| SARI | | | | SG | **Sg** | **07 57 15.3** | **+0.8** |
| **KOZK** | **Kozakli-Nevseh** | **0.81** | **281** | PG | **Pg** | **07 57 04.6** | **-0.5** |
| **AVNS** | **Nevsehir-Avano** | **0.85** | **253** | P | **Pg** | **07 57 04.7** | **-1.2** |
| AVNS | | | | S | **Sg** | **07 57 17.3** | **+0.4** |
| **YAHY** | **KAYSERI_Yahyal** | **1.04** | **203** | P | **Pg** | **07 57 08.0** | **-1.7** |
| YAHY | | | | S | **Sg** | **07 57 22.2** | **-1.1** |
| **CKRK** | **Yozgat, Cekere** | **1.06** | **344** | P | **Pb** | **07 57 10.3** | **-0.4** |
| CKRK | | | | S | **Sn** | **07 57 25.5** | **-1.3** |
| **SAIM** | **ADANA** | **1.09** | **172** | P | **Pg** | **07 57 09.4** | **-1.2** |
| SAIM | | | | S | **Sg** | **07 57 24.8** | **+0.1** |
| **CUGUR** | **Gurin_SVAS** | **1.13** | **107** | P | **Pg** | **07 57 11.7** | **-0.3** |
| CUGUR | | | | S | **Sn** | **07 57 31.0** | **+2.3** |
| **SCER** | **sogukcermik** | **1.25** | **50** | P | **Pg** | **07 57 12.8** | **-0.9** |
| SCER | | | | S | **Sn** | **07 57 31.7** | **0.0** |
| **CUKAN** | **kangal_SIVAS** | **1.26** | **78** | P | **Pg** | **07 57 12.6** | **-1.1** |
| CUKAN | | | | S | **Sn** | **07 57 33.0** | **+1.2** |
| **CDAG** | **Cicekdag** | **1.30** | **296** | P | **Pg** | **07 57 13.2** | **-1.4** |
| CDAG | | | | S | **Sn** | **07 57 33.2** | **+0.4** |
| **TOKA** | **Tokat** | **1.34** | **20** | | **Pn** | **07 57 14.8** | **-0.6** |
| **TOKA** | **Tokat** | **1.34** | **20** | P | **Pg** | **07 57 14.7** | **-0.8** |
| TOKA | | | | S | **Sn** | **07 57 34.8** | **+1.0** |
| **NIDE** | **Nigde/Merkez-G** | **1.37** | **220** | P | **Pn** | **07 57 14.1** | **-1.8** |
| NIDE | | | | S | **Sg** | **07 57 34.4** | **+0.8** |
| **COAL** | **Corum-Alaca** | **1.38** | **330** | P | **Pn** | **07 57 15.3** | **-0.7** |
| COAL | | | | S | **Sn** | **07 57 36.3** | **+1.4** |
| **GULA** | **Gulagac** | **1.47** | **242** | PN | **Pn** | **07 57 16.7** | **-0.5** |
| GULA | | | | SN | **Sb** | **07 57 36.9** | **-0.1** |
| **CORM** | **Corum** | **1.48** | **320** | PN | **Pb** | **07 57 17.5** | **-0.4** |
| CORM | | | | SN | **Sn** | **07 57 38.5** | **+1.2** |
| **ANDN** | **Andirin** | **1.52** | **166** | P | **Pn** | **07 57 17.5** | **-0.3** |
| ANDN | | | | S | **Sn** | **07 57 38.4** | **+0.2** |
| **KIRS** | **Kirsehir-Merke** | **1.53** | **273** | P | **Pn** | **07 57 16.6** | **-1.5** |
| KIRS | | | | S | **Sn** | **07 57 38.1** | **-0.4** |
| **CMRD** | **Camardi-Nigde** | **1.56** | **207** | PN | **Pn** | **07 57 18.1** | **-0.3** |
| CMRD | | | | SN | **Sn** | **07 57 39.3** | **+0.1** |
| **KOZT** | **Kozan** | **1.58** | **182** | PN | **Pn** | **07 57 18.1** | **-0.4** |
| KOZT | | | | SN | **Sn** | **07 57 39.5** | **0.0** |
| **AMSY** | **Amasya-Merkez** | **1.58** | **359** | P | **Pg** | **07 57 20.1** | **+0.1** |
| AMSY | | | | S | **Sg** | **07 57 43.1** | **+2.7** |
| **AKO** | **Adana** | **1.63** | **192** | P | **Pn** | **07 57 19.3** | **-0.1** |
| AKO | | | | S | **Sn** | **07 57 40.9** | **0.0** |
| **CUZAR** | **Zara_SIVAS** | **1.68** | **60** | P | **Pg** | **07 57 21.1** | **-0.8** |
| CUZAR | | | | S | **Sg** | **07 57 46.2** | **+2.5** |
| **AKSY** | **AKSARAY - Alti** | **1.71** | **257** | P | **Pn** | **07 57 19.9** | **-0.6** |
| AKSY | | | | S | **Sn** | **07 57 43.4** | **+0.6** |
| **KAMT** | **Kaman** | **1.72** | **281** | PN | **Pn** | **07 57 20.5** | **-0.1** |
| KAMT | | | | SN | **Sb** | **07 57 43.8** | **-0.1** |
| **RSDY** | **Resadiye-TOKAT** | **1.74** | **39** | PN | **Pg** | **07 57 22.0** | **-1.0** |
| **ERBA** | **Erbaa** | **1.75** | **22** | P | **Pg** | **07 57 22.3** | **-1.0** |
| ERBA | | | | S | **Sg** | **07 57 47.0** | **+1.0** |
| **KAHM** | **Kahramanmaras,** | **1.77** | **150** | P | **Pn** | **07 57 21.4** | **+0.2** |
| KAHM | | | | S | **Sb** | **07 57 45.4** | **0.0** |
| **AKCD** | **Akcadag** | **1.77** | **115** | P | **Pb** | **07 57 22.1** | **-0.7** |
| AKCD | | | | S | **Sg** | **07 57 50.2** | **+3.7** |
| **DELI** | **KIRIKKALE** | **1.79** | **302** | P | **Pn** | **07 57 21.8** | **+0.2** |
| DELI | | | | S | **Sg** | **07 57 47.5** | **+0.5** |
| **CTAK** | **Corum_Osmancik** | **1.80** | **332** | P | **Pg** | **07 57 23.4** | **-0.8** |
| CTAK | | | | S | **Sg** | **07 57 49.5** | **+2.1** |
| **SERE** | **Sereflikochisa** | **1.81** | **267** | PN | **Pn** | **07 57 22.1** | **+0.2** |
| **BR131** | **Keskin Array S** | **1.86** | **292** | | **Pn** | **07 57 22.7** | **+0.1** |
| **BRTR** | **Keskin Array B** | **1.86** | **292** | Pn | **Pb** | **07 57 23.8** | **-0.7** |
| | 65nm,0.3s,baz=122,slow=17,SNR=1.130 | | | | | | |
| BRTR | | | | Sn | **Sb** | **07 57 48.0** | **-0.2** |
| | 163nm,0.3s,baz=125,slow=17,SNR=24 | | | | | | |
| **BRTR** | **Keskin Array B** | **1.86** | **292** | PN | **Pn** | **07 57 22.9** | **+0.3** |
| **BRTR** | **Keskin Array B** | **1.86** | **292** | | **Pn** | **07 57 22.4** | **-0.2** |
| **YARM** | **Yarimca-Ladik(** | **1.86** | **359** | PN | **Pg** | **07 57 24.3** | **-1.1** |
| **ARPR** | **Arapgir-MALATY** | **1.91** | **88** | PN | **Pb** | **07 57 24.7** | **-0.5** |
| **KARA** | **Karaisali** | **1.91** | **200** | PN | **Pn** | **07 57 23.7** | **+0.6** |
| **KAMA** | **Osmaniye** | **1.97** | **161** | P | **Pb** | **07 57 25.6** | **-0.6** |
| KAMA | | | | S | **Sg** | **07 57 52.4** | **-0.5** |
| **HAVZ** | **Havza** | **2.02** | **356** | P | **Pb** | **07 57 26.4** | **-0.7** |
| HAVZ | | | | S | **Sg** | **07 57 57.2** | **+2.7** |
| **KVT** | **Kavak** | **2.02** | **3** | PN | **Pb** | **07 57 26.3** | **-0.8** |
| **KEMA** | **Kemaliye** | **2.04** | **83** | P | **Pb** | **07 57 26.0** | **-1.4** |
| KEMA | | | | S | **Sg** | **07 57 55.6** | **+0.4** |
| **SULT** | **Sultanhani-AKS** | **2.04** | **246** | PN | **Pn** | **07 57 25.6** | **+0.5** |
| **CEYT** | **Ceyhan** | **2.05** | **183** | PN | **Pn** | **07 57 25.7** | **+0.7** |
| **YESY** | **Yesilyurt** | **2.11** | **234** | PN | **Pn** | **07 57 26.6** | **+0.6** |
| **ILIC** | **ilic-Erzincan** | **2.12** | **78** | PN | **Pb** | **07 57 27.8** | **-1.0** |
| ILIC | | | | SN | **Sb** | **07 57 55.1** | **-0.5** |
| **GZT** | **Gaziantep** | **2.15** | **142** | P | **Pn** | **07 57 26.4** | **-0.2** |
| GZT | | | | S | **Sg** | **07 57 59.1** | **+0.2** |
| **BBAL** | **Bala** | **2.20** | **284** | P | **Pn** | **07 57 27.9** | **+0.7** |
| BBAL | | | | S | **Sb** | **07 57 59.1** | **+1.3** |
| **AFSR** | **Afar-Bala (An** | **2.22** | **281** | PN | **Pn** | **07 57 28.4** | **+0.9** |
| **YURE** | **YUREGIR** | **2.24** | **185** | P | **Pb** | **07 57 30.3** | **-0.5** |
| YURE | | | | S | **Sg** | **07 58 01.7** | **+0.2** |
| **KKUL** | **Konya-Kulu** | **2.31** | **274** | P | **Pn** | **07 57 29.5** | **+0.7** |
| KKUL | | | | S | **Sg** | **07 58 03.2** | **-0.7** |
| **ELDT** | **Eldivan** | **2.37** | **308** | P | **Pn** | **07 57 31.0** | **+1.3** |
| ELDT | | | | S | **Sb** | **07 58 02.2** | **-0.8** |
| **CHBY** | **Cihanbeyli** | **2.39** | **259** | PN | **Pn** | **07 57 31.2** | **+1.4** |
| **MERS** | **Mersin** | **2.44** | **207** | PN | **Pn** | **07 57 31.2** | **+0.7** |
| **ANTO** | **Ankara** | **2.53** | **290** | PN | **Pn** | **07 57 32.3** | **+0.6** |
| **ANTO** | **Ankara** | **2.53** | **290** | | **Pn** | **07 57 30.7** | **-1.0** |
| **BR231** | **Keskin MP Arra** | **2.53** | **289** | | **Pn** | **07 57 31.4** | **-0.4** |
| **LOD** | **Lodumlu** | **2.55** | **290** | PN | **Pn** | **07 57 33.6** | **+1.5** |
| **ILGA** | **Ilgaz** | **2.59** | **321** | | **Pn** | **07 57 33.2** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **2.69** | **175** | PN | **Pn** | **07 57 34.9** | **+1.1** |
| **KKBE** | **Karaman, Kazim** | **2.96** | **233** | P | **Pn** | **07 57 40.3** | **+2.6** |
| KKBE | | | | S | **Sg** | **07 58 32.2** | **+7.5** |
| **SNOP** | **Sinop** | **3.00** | **350** | Pn | **Pn** | **07 57 39.4** | **+1.2** |
| **BZK** | **Bozkurt** | **3.23** | **334** | | **Pn** | **07 57 39.1** | **-2.2** |
| **KIBS** | **BOLU** | **3.39** | **295** | P | **Pn** | **07 57 45.4** | **+1.7** |
| **GULN** | **MERSIN_Gulnar** | **3.42** | **214** | P | **Pn** | **07 57 45.9** | **+2.1** |
| **MDUB** | **Mudurnu** | **3.88** | **293** | Pn | **Pn** | **07 57 47.8** | **-2.5** |
| **MARD** | **Mardin** | **4.23** | **113** | | **Pn** | **07 57 55.7** | **+0.5** |
| **BORA** | **Eskisehir** | **4.28** | **283** | | **Pn** | **07 57 56.3** | **+0.4** |
| **GURO** | **Guroymak-BITLI** | **4.83** | **94** | | **Pn** | **07 58 02.8** | **-0.6** |
| **ELL** | **Elmali** | **5.26** | **246** | Pn | **Pn** | **07 58 08.1** | **-1.2** |
| **SIRT** | **Sirnak** | **5.39** | **105** | Pn | **Pn** | **07 58 10.9** | **-0.1** |
| **GEVA** | **Gevas** | **5.66** | **95** | | **Pn** | **07 58 15.3** | **+0.4** |
| **MMAI** | **Mount Meron Ar** | **6.04** | **184** | Pn | **Pn** | **07 58 22.6** | **+2.6** |
| | 2.8nm,0.3s,baz=13,slow=19,SNR=6.8 | | | | | | |
| MMAI | | | | LR | LR | 08 01 03.2 | |
| | comp=Z,90nm,20.2s,baz=156,slow=41 | | | | | | |
| **BURAR** | **Bucovina Array** | **11.54** | **321** | Pn | **Pn** | **07 59 36.0** | **+0.6** |
| **BUR08** | **Bucovina Ar. S** | **11.57** | **321** | Pn | **Pn** | **07 59 34.0** | **-1.8** |
| **AKASG** | **Malin Array Be** | **12.56** | **340** | Pn | **Pn** | **07 59 46.2** | **-2.9** |
| | 0.9nm,0.3s,baz=165,slow=13,SNR=1.7 | | | | | | |
| **GERES** | **GERESS Array B** | **18.67** | **309** | P | **Pn** | **08 01 10.1** | **+1.0** |
| | 0.1nm,0.3s,baz=114,slow=12,SNR=2.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **19.32** | **47** | P | **Pn** | **08 01 18.5** | **+1.6** |
| | 0.1nm,0.3s,baz=250,slow=16,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **23.22** | **348** | P | **P** | **08 01 58.5** | **+0.9** |
| | 2.2nm,0.7s,baz=148,slow=11,SNR=6.5 | | | | | | |
| **FINES** | **FINESS Array B** | **23.22** | **348** | P | **P** | **08 01 58.0** | **+0.4** |
| **HFS** | **Hagfors** | **25.30** | **334** | P | **P** | **08 02 17.4** | **+0.3** |
| | 2.5nm,0.7s,baz=123,slow=11,SNR=5.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **26.80** | **333** | P | **P** | **08 02 29.9** | **-0.9** |
| | 0.4nm,0.6s,baz=130,slow=9.7,SNR=2.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.04** | **353** | P | **P** | **08 03 08.7** | **+0.3** |
| | 2.0nm,0.7s,baz=174,slow=9.7,SNR=8.9 | | | | | | |
| ARCES | | | | LR | LR | 08 17 29.4 | |
| | comp=Z,270nm,18.1s,baz=258,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **31.95** | **55** | P | **P** | **08 03 17.6** | **+1.1** |
| | 1.1nm,0.3s,baz=271,slow=9.2,SNR=4.8 | | | | | | |
| **KURK** | **Kurchatov** | **32.01** | **54** | P | **P** | **08 03 17.6** | **+0.5** |
| **KURK** | **Kurchatov** | **32.01** | **54** | IAmb | IAmb | 08 04 10.9 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **34.43** | **62** | P | **P** | **08 03 38.8** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 08 03 50.3 | |
| | comp=Z,3.2nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **34.43** | **62** | P | **P** | **08 03 39.2** | **+0.9** |
| | comp=Z,0.5nm,0.5s,baz=278,slow=7.5,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **34.43** | **62** | P | **P** | **08 03 38.2** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **36.05** | **49** | P | **P** | **08 03 54.3** | **+2.2** |
| | comp=Z,0.9nm,0.5s,baz=279,slow=9.9,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **36.05** | **49** | P | **P** | **08 03 50.6** | **-1.5** |
| **TORD** | **Torodi Ar. Bea** | **39.72** | **239** | P | **P** | **08 04 23.7** | **+0.2** |
| | comp=Z,0.9nm,0.7s,baz=40,slow=7.9,SNR=5.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **67.89** | **51** | LR | LR | 08 38 31.9 | |
| | comp=Z,41nm,18.5s,baz=187,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.04** | **346** | P | **P** | **08 08 36.8** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=21,slow=5.2,SNR=6.9 | | | | | | |

*SOME 18 07:58:15.1, 40°.10N×75°.93E, h10km*
*NNC 18 07:58:15.0±2.2, 40°.15N×76°.06E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=16.2km s-min=13.2km az=162.0*
*KRNET 18 07:58:16.3±0.1, 40°.18N×75°.89E, mb3.5*

**ISC 18 07:58:17.4±1.9, 40°26N±0°.08×76°00E±0°.03, h10km, n67, σ1§60/104, 22C-11D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULHL** | **Ulahol** | **1.99** | **5** | P | **Pg** | **07 58 55.0** | **-0.7** |
| | SNR=18 | | | | | | |
| **ULHL** | **Ulahol** | **1.99** | **5** | ⇓*iP* | **Pg** | **07 58 54.8** | **-0.8** |
| | baz=7.0 | | | | | | |
| ULHL | | | | ⇓*iS* | **Sg** | **07 59 22.8** | **+1.3** |
| | baz=7.0 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.01** | **42** | ⇑*iP* | **Pg** | **07 58 55.4** | **-0.5** |
| | baz=42 | | | | | | |
| TARG | | | | ⇑*eS* | **Sg** | **07 59 23.7** | **+1.7** |
| | baz=42 | | | | | | |
| **ARLS** | **Aral** | **2.04** | **322** | ⇓*iP* | **Pb** | **07 58 54.1** | **-0.6** |
| | baz=25 | | | | | | |
| ARLS | | | | ⇓*iS* | **Sb** | **07 59 21.9** | **+1.8** |
| | baz=25 | | | | | | |
| **KDJ** | **Kajisay** | **2.07** | **25** | ⇑*iP* | **Pg** | **07 58 56.1** | **-1.0** |
| | baz=26 | | | | | | |
| KDJ | | | | ⇑*iS* | **Sg** | **07 59 25.2** | **+1.2** |
| | baz=26 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.23** | **359** | ⇑*iP* | **Pb** | **07 58 57.8** | **-0.1** |
| | baz=1.0 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sb** | **07 59 28.2** | **+2.6** |
| | baz=1.0 | | | | | | |
| **UCH** | **Uchtor** | **2.26** | **331** | P | **Pb** | **07 58 58.3** | **-0.3** |
| | SNR=39 | | | | | | |
| **UCH** | **Uchtor** | **2.26** | **331** | ⇑*eP* | **Pb** | **07 58 57.8** | **-0.8** |
| | baz=34 | | | | | | |
| UCH | | | | ⇑*iS* | **Sb** | **07 59 27.9** | **+1.1** |
| | baz=34 | | | | | | |
| **KBK** | **Karagaybulak** | **2.52** | **342** | P | **Pb** | **07 59 02.7** | **-0.2** |
| | SNR=20 | | | | | | |
| **KBK** | **Karagaybulak** | **2.52** | **342** | ⇑*iP* | **Pb** | **07 59 01.3** | **-1.6** |
| | baz=44 | | | | | | |
| KBK | | | | ⇑*iS* | **Sb** | **07 59 34.6** | **+0.6** |
| | baz=44 | | | | | | |
| **AML** | **Almayashu** | **2.55** | **318** | P | **Pb** | **07 59 01.6** | **-1.9** |
| | SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **2.63** | **335** | P | **Pb** | **07 59 03.6** | **-1.1** |
| | SNR=5.9 | | | | | | |
| **AAK** | **Ala-Archa** | **2.63** | **335** | ⇓Pn | **Pb** | **07 59 03.2** | **-1.5** |
| | 11nm,0.6s | | | | | | |
| AAK | | | | ⇑Pg | **Pg** | **07 59 08.5** | **+0.6** |
| | 23nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 07 59 42.1 | |
| | 45nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.67** | **354** | P | **Pb** | **07 59 04.9** | **-0.6** |
| | SNR=13 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.67** | **354** | ⇑Pn | **Pb** | **07 59 04.4** | **-1.1** |
| | 7.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Pg | **Pg** | **07 59 08.6** | **-0.1** |
| | 18nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 07 59 45.2 | |
| | 28nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.67** | **354** | ⇑*iP* | **Pb** | **07 59 04.0** | **-1.5** |
| | baz=55 | | | | | | |
| TKM2 | | | | ⇑*iS* | **Sb** | **07 59 38.7** | **+0.2** |
| | baz=55 | | | | | | |
| **KST** | **Kastek** | **2.78** | **360** | *eP* | **Pg** | **07 59 09.6** | **-1.1** |
| | 21nm,0.5s | | | | | | |
| KST | | | | *eS* | **Sg** | **07 59 48.7** | **+2.0** |
| | 32nm,0.4s | | | | | | |
| **KST** | **Kastek** | **2.78** | **360** | Pg | **Pb** | **07 59 05.9** | **-1.4** |
| | 17nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 07 59 49.0 | |
| | 32nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **2.81** | **9** | *eP* | **Pg** | **07 59 10.0** | **-1.3** |
| | 19nm,0.8s | | | | | | |
| IZV | | | | *eS* | **Sg** | **07 59 49.6** | **+1.8** |
| | 42nm,0.5s | | | | | | |
| **IZV** | **Izvestkoviy** | **2.81** | **9** | Pg | **Pb** | **07 59 06.9** | **-0.9** |
| | 8.4nm,0.3s | | | | | | |
| IZV | | | | Lg | Lg | 07 59 50.2 | |
| | 42nm,0.5s | | | | | | |
| **ANVS** | **Anan'yevo** | **2.81** | **26** | ⇓*iP* | **Pb** | **07 59 06.5** | **-1.4** |
| | baz=27 | | | | | | |
| ANVS | | | | ⇓*iS* | **Sb** | **07 59 43.0** | **+0.5** |
| | baz=27 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.86** | **14** | *eP* | **Pg** | **07 59 11.3** | **-1.1** |
| | 6.2nm,0.4s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **07 59 51.6** | **+2.1** |
| | 15nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.86** | **14** | Pg | **Pb** | **07 59 07.6** | **-1.3** |
| | 18nm,0.5s | | | | | | |
| TNSS | | | | Lg | Lg | 07 59 51.6 | |
| | 15nm,0.5s | | | | | | |
| **PRZ** | **Przheval'sk** | **2.87** | **38** | ⇑*iP* | **Pb** | **07 59 07.1** | **-1.7** |
| | baz=38 | | | | | | |
| PRZ | | | | ⇑*iS* | **Sb** | **07 59 44.6** | **+0.7** |
| | baz=38 | | | | | | |
| **MTBS** | **Maitube** | **2.88** | **6** | *eP* | **Pg** | **07 59 11.3** | **-1.5** |
| | 12nm,0.4s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **07 59 51.8** | **+1.7** |
| | 31nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.88** | **6** | Pg | **Pb** | **07 59 08.0** | **-1.1** |
| | 9.5nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 07 59 52.5 | |
| | 31nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **2.89** | **342** | P | **Sg** | **07 59 50.6** | **+0.4** |
| | SNR=5.2 | | | | | | |
| **CHMS** | **Chumysh** | **2.89** | **342** | ⇑*iP* | **Pb** | **07 59 06.7** | **-2.4** |
| | baz=43 | | | | | | |
| CHMS | | | | ⇑*eS* | **Sb** | **07 59 43.5** | **-1.0** |
| | baz=43 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.92** | **326** | P | **Pb** | **07 59 07.9** | **-1.8** |
| | SNR=5.2 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.92** | **326** | ⇓*iP* | **Pb** | **07 59 06.8** | **-2.9** |
| | baz=28 | | | | | | |
| EKS2 | | | | ⇓*iS* | **Sb** | **07 59 43.7** | **-1.8** |
| | baz=28 | | | | | | |
| **DGS** | **Degeres** | **2.98** | **357** | *eP* | **Pg** | **07 59 12.8** | **-1.8** |
| | 12nm,0.7s | | | | | | |
| DGS | | | | *eS* | **Sg** | **07 59 54.2** | **+1.0** |
| | 35nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.98** | **357** | Pg | **Pb** | **07 59 08.8** | **-1.9** |
| | 15nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 07 59 54.2 | |
| | 35nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.00** | **15** | *eP* | **Pg** | **07 59 13.0** | **-2.0** |
| | 12nm,0.7s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **07 59 54.8** | **+0.9** |
| | 31nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.00** | **15** | Pn | **Pb** | **07 59 09.2** | **-1.9** |
| | 3.7nm,0.5s | | | | | | |
| MDOK | | | | Pg | **Pg** | **07 59 14.5** | **-0.5** |
| | 8.1nm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 07 59 55.4 | |
| | 25nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.00** | **15** | Pg | **Pb** | **07 59 09.4** | **-1.8** |
| | 5.9nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 07 59 54.8 | |
| | 31nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.09** | **15** | *eP* | **Pg** | **07 59 14.4** | **-2.2** |
| | 8.5nm,0.8s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **07 59 57.4** | **+0.8** |
| | 65nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.09** | **15** | Pg | **Pb** | **07 59 10.7** | **-1.8** |
| | 8.4nm,0.6s | | | | | | |
| KOTS | | | | Lg | Lg | 07 59 57.4 | |
| | 65nm,0.5s | | | | | | |
| **USP** | **Ospenovka** | **3.21** | **340** | P | **Pb** | **07 59 11.7** | **-2.8** |
| | SNR=9.3 | | | | | | |
| **MRKS** | **Merke** | **3.24** | **321** | *eP* | **Pb** | **07 59 16.1** | **+1.0** |
| | 8.9nm,1.4s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **08 00 00.2** | **-1.2** |
| | 12nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.24** | **321** | Pg | **Pb** | **07 59 12.6** | **-2.4** |
| | 6.9nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 08 00 00.2 | |
| | 12nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.33** | **32** | *eP* | **Pg** | **07 59 18.9** | **-2.2** |
| | 4.8nm,0.5s | | | | | | |
| SATY | | | | *eS* | **Sg** | **08 00 05.3** | **+1.0** |
| | 16nm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.33** | **32** | Pg | **Pb** | **07 59 15.7** | **-0.9** |
| | 1.6nm,0.4s | | | | | | |
| SATY | | | | Lg | Lg | 08 00 05.4 | |
| | 16nm,0.6s | | | | | | |
| **SGDS** | **Sogindy** | **3.35** | **343** | *eP* | **Pb** | **07 59 18.7** | **+1.8** |
| | 3.4nm,0.2s | | | | | | |
| SGDS | | | | *eS* | **Sg** | **08 00 05.1** | **+0.2** |
| | 16nm,0.3s | | | | | | |
| **SGDS** | **Sogindy** | **3.35** | **343** | Pg | **Pb** | **07 59 15.6** | **-1.3** |
| | 1.2nm,0.2s | | | | | | |
| SGDS | | | | Lg | Lg | 08 00 05.1 | |
| | 16nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.43** | **31** | *eP* | **Pg** | **07 59 20.8** | **-2.4** |
| | 4.9nm,0.2s | | | | | | |
| ZHN | | | | *eS* | **Sg** | **08 00 08.3** | **+0.7** |
| | 14nm,0.6s | | | | | | |
| **ZHN** | **Zhinishke** | **3.43** | **31** | Pg | **Pb** | **07 59 17.5** | **-0.9** |
| | 4.8nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 08 00 08.3 | |
| | 14nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.44** | **356** | *eP* | **Pb** | **07 59 20.6** | **+2.1** |
| | 4.5nm,0.5s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **08 00 08.0** | **0.0** |
| | 36nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.44** | **356** | Pg | **Pb** | **07 59 17.0** | **-1.5** |
| | 4.5nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 08 00 08.0 | |
| | 36nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **3.49** | **8** | *eP* | **Pg** | **07 59 22.4** | **-1.9** |
| | 11nm,0.4s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **08 00 10.7** | **+1.3** |
| | 65nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.49** | **8** | Pg | **Pb** | **07 59 18.3** | **-0.9** |
| | 11nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 08 00 10.7 | |
| | 65nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **3.61** | **26** | *eP* | **Pg** | **07 59 23.6** | **-3.0** |
| | 4.5nm,0.7s | | | | | | |
| KURS | | | | *eS* | **Sg** | **08 00 13.2** | **-0.2** |
| | 17nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **3.61** | **26** | Pg | **Pb** | **07 59 19.9** | **-1.4** |
| | 2.2nm,0.6s | | | | | | |
| KURS | | | | Lg | Lg | 08 00 13.2 | |
| | 17nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.64** | **4** | *eP* | **Pg** | **07 59 24.5** | **-2.6** |
| | 3.9nm,0.4s | | | | | | |
| KUU | | | | *eS* | **Sg** | **08 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DDMP** | **Don Marcelino,** | **0.58** | **223**⇑ | *eP* | **Pn** | **08 26 36.6** | **+1.1** |
| DDMP | | | | *eS* | **Sn** | **08 26 47.6** | **+2.5** |
| **DAV** | **Davao City (W)** | **0.75** | **316** | P | **Pn** | **08 26 38.2** | **+0.6** |
| | 398nm,0.3s,baz=310,slow=0.9,SNR=15 | | | | | | |
| DAV | | | | S | **Sn** | **08 26 50.1** | **+1.4** |
| | 434nm,0.3s,baz=16,slow=3.9,SNR=7.8 | | | | | | |
| **KCP** | **Kidapawan** | **1.12** | **295**⇑ | *iP* | **Pn** | **08 26 41.7** | **-0.6** |
| KCP | | | | *i* S | **Sn** | **08 26 57.1** | **+0.1** |
| **GSPH** | **General Santos** | **1.23** | **249**⇑ | *eP* | **Pn** | **08 26 43.4** | **-0.4** |
| GSPH | | | | *i* S | **Sn** | **08 26 59.8** | **0.0** |
| **BIPH** | **Bislig** | **1.66** | **9**⇑ | *iP* | Pn | 08 26 55.2 | +5.7 |
| BIPH | | | | *i* S | **Sn** | **08 27 14.8** | **+4.9** |
| **BUKP** | **Musuan** | **1.70** | **322**⇑ | *eP* | **Pn** | **08 26 49.9** | **-0.1** |
| BUKP | | | | *eS* | **Sn** | **08 27 11.4** | **+0.7** |
| **BUTP** | **Butuan** | **2.47** | **349**⇑ | *iP* | **Pn** | **08 27 03.0** | **+2.5** |
| BUTP | | | | *eS* | Sn | 08 27 39.5 | +10 |
| **PAGZ** | **Pagadian** | **3.01** | **296**⇑ | *iP* | **Pn** | **08 27 09.2** | **+1.5** |
| **GLSP** | **General Luna,** | **3.23** | **0**⇑ | *iP* | **Pn** | **08 27 12.4** | **+1.5** |
| GLSP | | | | *eS* | **Sn** | **08 27 48.8** | **+0.6** |
| **MSLP** | **Maasin** | **3.79** | **341**⇑ | *iP* | Pn | 08 27 02.0 | -16 |
| **GUMO** | **Guam** | **19.75** | **68** | LR | LR | 08 38 55.4 | |
| | comp=Z,21nm,19.3s,baz=80,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.48** | **181** | P | **P** | **08 31 37.4** | **+1.6** |
| | 2.1nm,0.5s,baz=358,slow=4.9,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.52** | **163** | P | **P** | **08 32 04.3** | **+0.9** |
| | 0.3nm,0.5s,baz=341,slow=11,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **297** | LR | LR | 08 43 47.3 | |
| | comp=Z,7.7nm,20.6s,baz=255,slow=36 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **29.35** | **24** | LR | LR | 08 42 16.9 | |
| | comp=Z,14nm,20.5s,baz=66,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **30.96** | **166** | P | **P** | **08 32 35.2** | **+1.3** |
| | 0.7nm,0.5s,baz=344,slow=7.2,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 35 29.6** | **+0.5** |
| | 0.4nm,0.5s,baz=0.4,slow=2.9,SNR=7.9 | | | | | | |
| **STKA** | **Stephens Creek** | **40.95** | **160** | P | **P** | **08 33 59.1** | **0.0** |
| | 1.7nm,0.6s,baz=344,slow=8.1,SNR=6.3 | | | | | | |
| **SONM** | **Songino Array** | **44.47** | **341** | P | **P** | **08 34 26.2** | **-1.3** |
| | 1.1nm,0.8s,baz=162,slow=4.9,SNR=4.9 | | | | | | |
| SONM | | | | PcP | **PcP** | **08 36 09.6** | **-0.6** |
| | 0.5nm,0.6s,baz=166,slow=3.6,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.93** | **324** | P | **P** | **08 35 46.5** | **-0.5** |
| | 3.2nm,0.5s,baz=118,slow=8.0,SNR=48 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.83** | **333** | P | **P** | **08 36 07.5** | **+0.1** |
| | 1.0nm,0.4s,baz=125,slow=7.4,SNR=6.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.10** | **321** | LR | LR | 09 09 34.1 | |
| | comp=Z,42nm,18.8s,baz=331,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **82.86** | **26** | P | P | 08 38 37.3 | -2.7 |
| | 0.4nm,0.6s,baz=246,slow=4.7,SNR=9.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.63** | **340** | P | **P** | **08 39 01.5** | **-2.1** |
| | 0.9nm,0.6s,baz=80,slow=5.0,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **89.09** | **332** | P | **P** | **08 39 10.6** | **0.0** |
| | 1.3nm,0.7s,baz=77,slow=6.0,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.22** | **24** | P | **P** | **08 39 46.3** | **-1.7** |
| | 0.3nm,0.6s,baz=296,slow=4.5,SNR=7.3 | | | | | | |

*IDC **18** 08:41:01.9±0.8, 16°.55N×61°.44W, h80$^{km}_{\pm}$18$^{km}$, mb3.3/4, mb1 3.7/5, mb1mx3.4/35, mbtmp3.7/5, MS2.6/2, Ms1 2.6/2, ms1mx2.4/33, Error ellipse: s-maj=103.0km s-min=13.8km az=18.0*

*TRN **18** 08:41:02.0, 16°.63N×61°.44W, h79$^{km}$, MD4.0*

*NEIC **18** 08:41:03.8±0.9, 16°.65N±0°.07×61°.46W±0°.10, h72$^{km}_{\pm}$8$^{km}$, mb4.3/6, Error ellipse: s-maj=15.7km s-min=7.4km az=57.0*

**ISC 18 08:41:03.0±0.8, 16°.66N±0°.04×61°.42W±0°.05, h81$^{km}_{\pm}$6$^{km}$, n81, σ0$^{s}$75/98, mb4.0/7, 3C, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ABD** | **La Joyeuse, An** | **0.20** | **200** | | Pn | **Pn** | | **08 41 15.0** | **+0.1** |
| **ABD** | **La Joyeuse, An** | **0.20** | **200**⇑ | *iP* | | **Pn** | | **08 41 15.0** | **+0.1** |
| ABD | | | | *eS* | | **Sn** | | **08 41 23.9** | **+0.2** |
| **GDD** | **La Dsirade Is** | **0.48** | **136** | | Pn | **Pn** | | **08 41 16.9** | **+0.1** |
| **H05N1** | **Guadeloupe/Mar** | **0.49** | **135** | P | | **Pn** | | **08 41 16.7** | **-0.1** |
| H05N1 | | | | S | | **Sn** | | **08 41 27.1** | **+0.1** |
| **GDHS** | **Morne Mazeau,** | **0.51** | **221** | | Pn | **Pn** | | **08 41 16.6** | **-0.4** |
| **CBE** | **Ff, Capester** | **0.61** | **197** | | Pn | **Pn** | | **08 41 17.9** | **-0.1** |
| **CBE** | **Ff, Capester** | **0.61** | **197** | *eP* | | **Pn** | | **08 41 17.9** | **-0.1** |
| CBE | | | | *eS* | | **Sn** | | **08 41 29.4** | **+0.4** |
| **MAGL** | **Barre de l'ile** | **0.72** | **170** | | Pn | **Pn** | | **08 41 18.9** | **-0.1** |
| **MAGL** | **Barre de l'ile** | **0.72** | **170** | *eP* | | **Pn** | | **08 41 19.5** | **+0.5** |
| MAGL | | | | *eS* | | **Sn** | | **08 41 31.5** | **+0.6** |
| **TBG** | **Guadaloupe-3** | **0.83** | **195**⇑ | *iP* | | **Pn** | | **08 41 20.3** | **0.0** |
| TBG | | | | *eS* | | **Sn** | | **08 41 33.6** | **+0.5** |
| **TDBA** | **Terre de Bas,** | **0.83** | **195** | | Pn | **Pn** | | **08 41 20.0** | **-0.3** |
| **TDBA** | **Terre de Bas,** | **0.83** | **195**⇑ | *iP* | | **Pn** | | **08 41 20.4** | **+0.1** |
| TDBA | | | | *eS* | | **Sn** | | **08 41 33.0** | **-0.1** |
| **MDCT** | **Cottage Hill,** | **1.04** | **182** | *eP* | | **Pn** | | **08 41 22.8** | **+0.2** |
| MDCT | | | | *eS* | | **Sn** | | **08 41 37.4** | **+0.1** |
| **MDVC** | **Dominica, Viel** | **1.04** | **179** | *eP* | | **Pn** | | **08 41 22.7** | **+0.1** |
| MDVC | | | | *eS* | | **Sn** | | **08 41 36.9** | **-0.4** |
| **ANWB** | **Willy Bob** | **1.06** | **341** | | | | | | |
| **ANWB** | **Willy Bob** | **1.06** | **341** | *eP* | | **Pn** | | **08 41 22.7** | **-0.2** |
| ANWB | | | | *eS* | | **Sn** | | **08 41 38.8** | **+1.0** |
| **DSLB** | **Salisbury** | **1.22** | **180** | *eP* | | **Pn** | | **08 41 25.0** | **+0.2** |
| DSLB | | | | *eS* | | **Sn** | | **08 41 40.6** | **-0.6** |
| **NVDO** | **Nevis, Disaste** | **1.24** | **292** | *eP* | | **Pn** | | **08 41 25.5** | **+0.5** |
| NVDO | | | | *eS* | | **Sn** | | **08 41 42.2** | **+0.6** |
| **DLPL** | **La Plaine** | **1.33** | **173** | | | **Pn** | | **08 41 26.6** | **+0.3** |
| **DLPL** | **La Plaine** | **1.33** | **173** | *eP* | | **Pn** | | **08 41 26.5** | **+0.3** |
| DLPL | | | | *eS* | | **Sn** | | **08 41 43.5** | **-0.3** |
| **MDN** | **Morne-Daniel** | **1.33** | **179** | *eP* | | **Pn** | | **08 41 26.9** | **+0.6** |
| MDN | | | | *eS* | | **Sn** | | **08 41 44.5** | **+0.7** |
| **SEUS** | **St. Eustatius** | **1.71** | **299** | | Pn | **Pn** | | **08 41 31.8** | **+0.7** |
| **SEUS** | **St. Eustatius** | **1.71** | **299** | *eP* | | **Pn** | | **08 41 31.9** | **+0.7** |
| SEUS | | | | *eS* | | **Sn** | | **08 41 53.2** | **+0.7** |
| **SVN** | **Savane Anatole** | **1.82** | **172** | | | **Pn** | | **08 41 32.8** | **+0.1** |
| **FDF** | **Fort de France** | **1.93** | **172** | | | **Pn** | | **08 41 34.3** | **+0.2** |
| **FDF** | **Fort de France** | **1.93** | **172** | *eP* | | **Pn** | | **08 41 34.2** | **0.0** |
| FDF | | | | *eS* | | **Sn** | | **08 41 56.6** | **-1.2** |
| **ILAM** | **Ilet Lapin Mar** | **1.95** | **164** | | Pn | **Pn** | | **08 41 34.1** | **-0.2** |
| **ILAM** | **Ilet Lapin Mar** | **1.95** | **164** | *eP* | | **Pn** | | **08 41 34.2** | **0.0** |
| ILAM | | | | *eS* | | **Sn** | | **08 41 57.0** | **-1.0** |
| **SMRT** | **St. Maarten** | **2.10** | **311** | | | **Pn** | | **08 41 36.4** | **0.0** |
| **SMRT** | **St. Maarten** | **2.10** | **311** | *eP* | | **Pn** | | **08 41 36.1** | **-0.2** |
| SMRT | | | | *eS* | | **Sn** | | **08 42 02.1** | **+0.3** |
| **BIM** | **Bigot** | **2.16** | **171** | | | **Pn** | | **08 41 37.6** | **+0.5** |
| **BIM** | **Bigot** | **2.16** | **171** | *eP* | | **Pn** | | **08 41 37.7** | **+0.6** |
| BIM | | | | *eS* | | **Sn** | | **08 42 02.8** | **-0.3** |
| **MPOM** | **Morne Pois Mar** | **2.27** | **166** | | Pn | **Pn** | | **08 41 38.9** | **+0.3** |
| **MPOM** | **Morne Pois Mar** | **2.27** | **166** | *eP* | | **Pn** | | **08 41 38.7** | **+0.2** |
| MPOM | | | | *eS* | | **Sn** | | **08 42 05.2** | **-0.5** |
| **H05S1** | **Guadeloupe/Mar** | **2.29** | **166** | P | | **Pn** | | **08 41 39.3** | **+0.5** |
| | SNR=720 | | | | | | | | |
| H05S1 | | | | S | | **Sn** | | **08 42 05.7** | **-0.6** |
| **SLBI** | **Saint Lucia, B** | **2.66** | **171** | *eP* | | **Pn** | | **08 41 44.4** | **+0.6** |
| SLBI | | | | *eS* | | **Sn** | | **08 42 15.2** | **+0.1** |
| **SLCP** | **Castries, St.** | **2.67** | **171** | *eP* | | **Pn** | | **08 41 44.6** | **+0.7** |
| SLCP | | | | *eS* | | **Sn** | | **08 42 15.7** | **+0.4** |
| **MCLT** | **Moule a Chique** | **2.97** | **171** | | Pn | **Pn** | | **08 41 49.4** | **+1.3** |
| **MCLT** | **Moule a Chique** | **2.97** | **171** | *eP* | | **Pn** | | **08 41 48.3** | **+0.3** |
| MCLT | | | | *eS* | | **Sn** | | **08 42 22.0** | **-0.6** |
| **SVB** | **Belmont** | **3.37** | **177** | | | **Pn** | | **08 41 54.7** | **+1.2** |
| **SVB** | **Belmont** | **3.37** | **177** | *e* | | **Pn** | | **08 41 55.3** | **+1.8** |
| **STVI** | **Saint Thomas** | **3.77** | **297** | | Pn | **Pn** | | **08 41 58.9** | **0.0** |
| **CUPR** | **Culebra, Puert** | **4.04** | **295** | | Pn | **Pn** | | **08 42 02.5** | **+0.1** |
| **GCMP** | **Grenada, Carri** | **4.15** | **180** | *e* | | Pn | | 08 42 09.9 | +5.9 |
| **GCMP** | **Grenada, Carri** | **4.15** | **180** | *e* | | Pn | | 08 42 10.4 | +6.4 |
| **MTP** | **Monte Pirata** | **4.20** | **291** | | | **Pn** | | **08 42 05.4** | **+0.7** |
| **HUMP** | **Col San Antoni** | **4.48** | **290** | | | **Pn** | | **08 42 09.2** | **+0.7** |
| **GRGR** | **Grenville** | **4.51** | **183** | *e* | | **Pn** | | **08 42 10.7** | **+1.7** |
| **GRGR** | **Grenville** | **4.51** | **183** | *e* | | **Pn** | | **08 42 11.5** | **+2.6** |
| **PDPR** | **Patillas Dam,** | **4.60** | **288** | | Pn | **Pn** | | **08 42 09.5** | **-0.6** |
| **SJG** | **San Juan** | **4.74** | **288** | P | | **Pn** | | **08 42 10.4** | **-1.7** |
| | 8.4nm,0.3s,baz=330,slow=23,SNR=4.5 | | | | | | | | |
| SJG | | | | S | | **Sn** | | **08 43 05.1** | **-0.8** |
| | 5.2nm,0.3s,baz=333,slow=18,SNR=1.9 | | | | | | | | |
| SJG | | | | LR | | LR | | 08 44 34.8 | |
| | comp=Z,16nm,18.2s,baz=95,slow=45 | | | | | | | | |
| **GCPR** | **Guaynabo City** | **4.75** | **291** | | | **Pn** | | **08 42 13.1** | **+0.9** |
| **ICMP** | **Isla Caja de M** | **5.03** | **285** | | Pn | **Pn** | | **08 42 16.3** | **+0.3** |
| **CELP** | **Cerrillos** | **5.13** | **287** | | | **Pn** | | **08 42 17.7** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **5.14** | **286** | | | **Pn** | | **08 42 17.1** | **-0.5** |
| **AOPR** | **Arecibo Observ** | **5.36** | **289** | | | **Pn** | | **08 42 21.5** | **+0.9** |
| **AOPR** | **Arecibo Observ** | **5.36** | **289** | *eP* | | **Pn** | | **08 42 20.4** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **5.53** | **284** | | Pn | **Pn** | | **08 42 21.2** | **-1.6** |
| **CRPR** | **Cabo Rojo, PR** | **5.60** | **285** | | Pn | **Pn** | | **08 42 23.3** | **-0.5** |
| **AGPR** | **Aguadilla, PR** | **5.72** | **289** | | Pn | **Pn** | | **08 42 25.7** | **+0.2** |
| **TRN** | **Trinidad (W)** | **5.98** | **180** | *e* | | **Pn** | | **08 42 31.3** | **+2.3** |
| **TRN** | **Trinidad (W)** | **5.98** | **180** | *e* | | Pn | | 08 42 37.5 | +8.5 |
| **BIRV** | **Birongo** | **7.75** | **218** | | Pn | **Pn** | | **08 42 52.5** | **-0.7** |
| **DR12** | **Loma Pena Alta** | **7.88** | **287** | | Pn | **Pn** | | **08 42 53.9** | **-1.1** |
| **OCAC** | **Ocana** | **14.31** | **236** | | | **Pn** | | **08 44 21.7** | **-0.3** |
| **SJCC** | **San Jacinto, C** | **14.98** | **245** | | Pn | **Pn** | | **08 44 30.3** | **-0.2** |
| **ZARC** | **Zaragoza, Cauc** | **15.98** | **237** | | | **Pn** | | **08 44 43.1** | **-0.1** |
| **SRBA** | **San Rafael, Bu** | **22.61** | **254** | P | | **P** | | **08 45 57.8** | **+0.4** |
| SRBA | | | | IAmb | | IAmb | | 08 45 59.0 | |
| | comp=Z,4.6nm,0.7s | | | | | | | | |
| **RIOS** | **Rincon, Osa** | **22.95** | **253** | P | | **P** | | **08 46 01.0** | **+0.2** |
| **APG** | **El Apazote** | **27.98** | **271** | LR | | LR | | 08 58 00.4 | |
| | comp=Z,55nm,20.2s,baz=306,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **40.67** | **296** | P | | **P** | | **08 48 34.8** | **-1.0** |
| | comp=Z,0.1nm,0.4s,baz=114,slow=8.1,SNR=7.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **40.67** | **296** | P | | **P** | | **08 48 35.4** | **-0.4** |
| **TX31** | **Lajitas Ar. Si** | **40.67** | **296** | P | | **P** | | **08 48 35.7** | **-0.1** |
| **PDAR** | **Pinedale Array** | **48.41** | **313** | P | | **P** | | **08 49 37.3** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=110,slow=7.8,SNR=9.8 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **52.40** | **114** | T | | T | | 09 46 23.8 | |
| | baz=296,slow=75,SNR=6.0 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **52.41** | **114** | T | | T | | 09 46 24.3 | |
| | baz=296,slow=75,SNR=8.2 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **52.42** | **114** | T | | T | | 09 46 25.4 | |
| | baz=296,slow=75,SNR=10 | | | | | | | | |
| **KOWA** | **Kowa** | **55.17** | **84** | P | | **P** | | **08 50 29.9** | **+2.1** |
| KOWA | | | | IAmb | | IAmb | | 08 50 45.5 | |
| | comp=Z,5.2nm,1.3s | | | | | | | | |
| **DBIC** | **Dimbokro** | **56.11** | **93** | P | | **P** | | **08 50 34.9** | **+0.3** |
| DBIC | | | | IAmb | | IAmb | | 08 50 46.8 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **58.73** | **334** | P | | **P** | | **08 50 51.8** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=104,slow=7.5,SNR=11 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.88** | **84** | P | | **P** | | **08 51 06.0** | **-1.7** |
| | comp=Z,0.7nm,0.6s,baz=291,slow=5.3,SNR=4.2 | | | | | | | | |

*NNC **18** 08:59:28.0±4.8, 54°.35N×86°.12E, h0$^{km}$, mb3.5, mpv2.8, Error ellipse: s-maj=126.4km s-min=25.9km az=157.0, Suspected Mining explosion.*

*IDC **18** 08:59:31.2±2.3, 54°.27N×85°.92E, h0$^{km}$, mb1 4.0/2, mb1mx3.3/35, mbtmp4.0/2, ML3.1/2, Error ellipse: s-maj=17.1km s-min=10.4km az=52.0*

**ISC 18 08:59:33.0±4.9, 54°.2N±0°.2×85°.7E±0°.2, h0$^{km}$, n8, σ1$^{s}$45/10, 2C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.59** | **243** | *i* | | | | 09 04 20.0 | |
| | baz=66,slow=349,SNR=15 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.59** | **243** | ⇓ | P | **Pg** | | **08 59 44.3** | **0.0** |
| | 0.7nm,0.3s | | | | | | | | |
| ZAA0 | | | | ⇓ | S | **Sn** | | **08 59 56.8** | **-2.1** |
| | 2.3nm,0.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.59** | **243** | Pg | | **Pg** | | **08 59 44.4** | **+0.1** |
| | 2.5nm,0.3s,baz=61,slow=17,SNR=25 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 08 59 55.3 | |
| | 6.0nm,0.3s,baz=61,slow=27,SNR=17 | | | | | | | | |
| **KURK** | **Kurchatov** | **5.58** | **234** | ⇑ | Pn | **Pn** | | **09 00 58.6** | **+1.5** |
| | 2.4nm,1.1s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.68** | **234** | | Pn | **Pn** | | **09 00 59.9** | **+1.4** |
| | 0.3nm,0.3s,baz=51,slow=13,SNR=22 | | | | | | | | |
| KURBB | | | | | Sn | **Sn** | | **09 02 04.0** | **-0.4** |
| | baz=22,slow=15,SNR=1.3 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.68** | **234** | ⇑ | Pn | **Pn** | | **09 00 58.6** | **0.0** |
| | 2.0nm,0.6s,baz=52,slow=13 | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.75** | **198** | | Pn | **Pn** | | **09 01 25.5** | **-1.5** |
| | 0.1nm,0.2s,baz=26,slow=14,SNR=23 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.75** | **198** | | Pn | **Pn** | | **09 01 26.4** | **-0.6** |
| | 0.5nm,0.3s,baz=22,slow=14,SNR=14 | | | | | | | | |
| MKAR | | | | | Sn | **Sn** | | **09 02 57.2** | **+1.8** |
| | 0.1nm,0.3s,baz=23,slow=18,SNR=2.1 | | | | | | | | |

**IDC 18 09:00:01.1±3.1, 54°.40N×86°.76E, h0$^{km}$, mb1 3.9/2, mb1mx3.3/35, mbtmp3.9/2, ML2.9/2, Error ellipse: s-maj=26.2km s-min=15.4km az=60.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.23** | **249** | *i* | | | | 09 07 13.0 | |
| | baz=66,slow=349,SNR=12 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.23** | **249** | Pg | | Pg | | 09 00 22.9 | -1.7 |
| | 1.6nm,0.3s,baz=72,slow=18,SNR=3.7 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 09 00 41.4 | |
| | baz=68,slow=25,SNR=1.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **236** | Pn | | Pn | | 09 01 36.1 | +1.0 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=5.5 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 09 03 20.8 | |
| | 0.3nm,0.3s,baz=51,slow=28,SNR=2.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.13** | **202** | Pn | | Pn | | 09 02 01.5 | +1.1 |
| | 0.4nm,0.3s,baz=26,slow=13,SNR=7.6 | | | | | | | | |
| MKAR | | | | Sn | | Sn | | 09 03 32.2 | -0.7 |
| | 0.1nm,0.3s,baz=23,slow=27,SNR=4.5 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 09 04 19.1 | |
| | baz=21,slow=25,SNR=1.7 | | | | | | | | |

**IDC 18 09:15:40.2±2.5, 54°.29N×85°.94E, h0$^{km}$, mb1 2.8/2, mb1mx2.8/40, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=17.8km s-min=9.6km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.74** | **243** | *i* | | | | 09 20 20.0 | |
| | baz=62,slow=348,SNR=11 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.74** | **243** | Pg | | Pg | | 09 15 53.3 | -1.1 |
| | 0.7nm,0.3s,baz=61,slow=17,SNR=7.1 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 09 16 05.4 | |
| | 3.2nm,0.3s,baz=62,slow=30,SNR=31 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.83** | **234** | Pn | | Pn | | 09 17 09.3 | +1.4 |
| | 0.1nm,0.3s,baz=49,slow=14,SNR=8.6 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 09 18 45.5 | |
| | 0.0nm,0.3s,baz=42,slow=26,SNR=1.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.85** | **199** | Pn | | Pn | | 09 17 36.4 | +0.7 |
| | 0.2nm,0.3s,baz=22,slow=14,SNR=5.9 | | | | | | | | |
| MKAR | | | | Sn | | Sn | | 09 19 02.6 | -2.6 |
| | 0.0nm,0.3s,baz=10,slow=20,SNR=1.4 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 09 19 52.1 | |
| | 0.0nm,0.3s,baz=16,slow=28,SNR=2.2 | | | | | | | | |

**NOU 18 09:18:06.5, 14°.32S×167°.28E, h141$^{km}$, MLv4.9/10, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **1.12** | **184** | P | | Pn | | 09 18 31.7 | +0.1 |
| **DVP** | **Devils Point** | **3.50** | **166** | P | | Pn | | 09 18 59.9 | 0.0 |
| **RTV** | **Rentapao** | **3.62** | **162** | P | | Pn | | 09 19 02.0 | +0.4 |
| **YATNC** | **Mamie plateau,** | **7.71** | **183** | P | | Pn | | 09 19 55.8 | -0.2 |
| **DZM** | **Mont Dzumac** | **7.75** | **186** | P | | Pn | | 09 19 56.5 | -0.2 |
| **OUENC** | **Ouen Island, N** | **8.07** | **183** | P | | Pn | | 09 20 01.2 | +0.4 |

*SJA **18** 09:18:40.6±0.8, 20°.30S×69°.20W, h110$^{km}_{\pm}$3$^{km}$, ML4.5, MW4.4*

*IDC **18** 09:18:41.0±1.3, 20°.21S×68°.96W, h92$^{km}_{\pm}$13$^{km}$, mb3.9/13, mb1 4.1/18, mb1mx4.0/30, mbtmp4.3/18, MS3.3/4, Ms1 3.3/4, ms1mx3.0/55, Error ellipse: s-maj=15.4km s-min=11.3km az=102.0*

*NEIC **18** 09:18:41.9±1.7, 20°.31S±0°.04×69°.14W±0°.07, h96$^{km}_{\pm}$4$^{km}$, Error ellipse: s-maj=9.2km s-min=5.6km az=91.0*

*GUC **18** 09:18:42.7±0.8, 20°.31S×69°.17W, h100$^{km}_{\pm}$3$^{km}$, ML4.5*

*VAO **18** 09:18:42.4±0.4, 20°.21S×69°.07W, h103$^{km}$, mb4.5*

**ISC 18 09:18:41.4±0.5, 20°.29S±0°.03×69°.18W±0°.04, h99$^{km}_{\pm}$4$^{km}$, n182, σ1$^{s}$25/217, mb4.3/19, 13C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PB08** | **IPOC Station P** | **0.15** | **8** | | | **Pn** | | **09 18 56.9** | **+1.1** |
| **PB08** | **IPOC Station P** | **0.15** | **8** | ⇓ | *iP* | **Pn** | | **09 18 57.2** | **+1.2** |
| PB08 | | | | | *i* S | **Sn** | | **09 19 08.0** | **+1.4** |
| PB08 | | | | | IAML | | | 09 19 09.4 | |
| | comp=N,48μm,0.1s | | | | | | | | |
| **PB08** | **IPOC Station P** | **0.15** | **8** | *eP* | | **Pn** | | **09 18 57.1** | **+1.2** |
| PB08 | | | | *eS* | | **Sn** | | **09 19 08.6** | **+2.0** |
| PB08 | | | | | IAML | | | 09 19 13.7 | |
| | comp=Z,12μm,0.6s | | | | | | | | |
| **GO01** | **Chusmiza** | **0.62** | **358** | | | **Pn** | | **09 19 00.1** | **+1.4** |
| GO01 | | | | | Sn | **Sn** | | **09 19 13.4** | **+1.9** |
| **GO01** | **Chusmiza** | **0.62** | **358** | ⇑ | *iP* | **Pn** | | **09 19 00.1** | **+1.4** |
| GO01 | | | | | *i* S | **Sn** | | **09 19 13.0** | **+1.5** |
| **GO01** | **Chusmiza** | **0.62** | **358** | *eP* | | **Pn** | | **09 18 59.9** | **+1.2** |
| GO01 | | | | *eP* | | **Pn** | | **09 19 00.0** | **+1.4** |
| GO01 | | | | *eS* | | **Sn** | | **09 19 13.9** | **+2.5** |
| **HMBC** | **Humberstone** | **0.67** | **271**⇑ | *iP* | | **Pn** | | **09 18 59.4** | **+0.8** |
| HMBC | | | | *i* S | | **Sn** | | **09 19 12.3** | **+0.8** |
| HMBC | | | | IAML | | | | 09 19 16.0 | |
| | comp=N,15μm,0.1s | | | | | | | | |
| **PB11** | **IPOC Station P** | **0.70** | **320** | | | **Pn** | | **09 18 59.6** | **+0.7** |
| **PB11** | **IPOC Station P** | **0.70** | **320**⇑ | *iP* | | **Pn** | | **09 19 00.1** | **+1.2** |
| PB11 | | | | *i* S | | **Sn** | | **09 19 13.6** | **+1.6** |
| **PB11** | **IPOC Station P** | **0.70** | **320** | *eP* | | **Pn** | | **09 19 00.0** | **+1.1** |
| PB11 | | | | *eS* | | **Sn** | | **09 19 14.1** | **+2.1** |
| PB11 | | | | IAML | | | | 09 19 16.1 | |
| | comp=Z,25μm,0.3s | | | | | | | | |
| **PB01** | **IPOC Station P** | **0.80** | **201** | | | **Pn** | | **09 19 00.9** | **+1.1** |
| **PB01** | **IPOC Station P** | **0.80** | **201**⇑ | *iP* | | **Pn** | | **09 19 00.8** | **+1.1** |
| PB01 | | | | *i* S | | **Sn** | | **09 19 15.0** | **+1.4** |
| PB01 | | | | IAML | | | | 09 19 15.8 | |
| | comp=E,32μm,0.3s | | | | | | | | |
| **PB01** | **IPOC Station P** | **0.80** | **201** | *eP* | | **Pn** | | **09 19 00.0** | **+0.2** |
| PB01 | | | | *eP* | | **Pn** | | **09 19 00.8** | **+1.0** |
| PB01 | | | | *eS* | | **Sn** | | **09 19 15.4** | **+1.8** |
| PB01 | | | | IAML | | | | 09 19 17.3 | |
| | comp=Z,12μm,0.2s | | | | | | | | |
| **TA02** | **Huaiquique** | **0.90** | **271** | | | **Pn** | | **09 19 01.5** | **+0.9** |
| **TA02** | **Huaiquique** | **0.90** | **271**⇑ | *iP* | | **Pn** | | **09 19 01.6** | **+0.9** |
| TA02 | | | | *i* S | | **Sn** | | **09 19 16.1** | **+1.0** |
| TA02 | | | | IAML | | | | 09 19 18.0 | |
| | comp=E,29μm,0.1s | | | | | | | | |
| **TA02** | **Huaiquique** | **0.90** | **271** | *eP* | | **Pn** | | **09 19 01.0** | **+0.4** |
| TA02 | | | | *eS* | | **Sn** | | **09 19 16.6** | **+1.5** |
| TA02 | | | | IAML | | | | 09 19 19.2 | |
| | comp=Z,12μm,0.1s | | | | | | | | |
| **TA01** | **Diego Aracena** | **0.98** | **254** | | | **Pn** | | **09 19 02.0** | **+0.6** |
| **TA01** | **Diego Aracena** | **0.98** | **254**⇑ | *iP* | | **Pn** | | **09 19 02.1** | **+0.6** |
| TA01 | | | | *i* S | | **Sn** | | **09 19 16.9** | **+0.2** |
| **TA01** | **Diego Aracena** | **0.98** | **254** | *eP* | | **Pn** | | **09 19 02.2** | **+0.7** |
| TA01 | | | | *eS* | | **Sn** | | **09 19 17.6** | **+1.0** |
| **PATCX** | **Punta Patache** | **1.05** | **240** | | | **Pn** | | **09 19 03.2** | **+0.8** |
| **PATCX** | **Punta Patache** | **1.05** | **240**⇑ | *iP* | | **Pn** | | **09 19 03.3** | **+0.8** |
| PATCX | | | | *i* S | | **Sn** | | **09 19 18.9** | **+0.6** |
| PATCX | | | | IAML | | | | 09 19 20.3 | |
| | comp=N,12μm,0.3s | | | | | | | | |
| **PATCX** | **Punta Patache** | **1.05** | **240** | *eP* | | **Pn** | | **09 19 03.0** | **+0.6** |
| PATCX | | | | *eS* | | **Sn** | | **09 19 19.8** | **+1.5** |
| PATCX | | | | IAML | | | | 09 19 20.2 | |
| | comp=Z,5μm,1.1s | | | | | | | | |
| **PB02** | **IPOC Station P** | **1.22** | **213** | | | **Pn** | | **09 19 05.5** | **+1.1** |
| **PB02** | **IPOC Station P** | **1.22** | **213**⇑ | *iP* | | **Pn** | | **09 19 05.3** | **+1.0** |
| PB02 | | | | *i* S | | **Sn** | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CPUP | | | | LR | LR | 09 26 58.6 | | | |
| | comp=Z,83nm,20.0s,baz=274,slow=40 | | | | | | | | |
| **CPUP** | **Villa Florida** | **12.43** | **121** | Pn | **Pn** | **09 21 34.0** | **-0.7** | | |
| **CPUP** | **Villa Florida** | **12.43** | **121** | *eP* | **Pn** | **09 21 34.8** | **0.0** | | |
| **AQDB** | **Aquidauana** | **12.64** | **93** | Pn | **Pn** | **09 21 36.0** | **-1.6** | | |
| **AQDB** | **Aquidauana** | **12.64** | **93** | *eP* | **Pn** | **09 21 36.5** | **-1.1** | | |
| **ROC1** | **El Roble** | **12.74** | **187** | Pn | **Pn** | **09 21 35.9** | **-3.2** | | |
| **SALV** | **Santo Antonio** | **13.54** | **73** | *eP* | **Pn** | **09 21 48.4** | **-1.1** | | |
| **MT01** | **Popeta** | **13.64** | **187** | | **Pn** | **09 21 50.4** | **-0.3** | | |
| **PP1B** | **Ponte de Pedra** | **13.79** | **81** | *eP* | **Pn** | **09 21 51.3** | **-1.4** | | |
| **ITQB** | **Itaqui** | **14.71** | **132** | *eP* | **Pn** | **09 22 05.2** | **+0.8** | | |
| **PDRB** | **Porto dos Gac** | **14.75** | **56** | *eP* | **Pn** | **09 22 04.4** | **-0.7** | | |
| **ML02** | **Panimavida** | **15.54** | **187** | | **Pn** | **09 22 14.2** | **-0.7** | | |
| **ATAH** | **Atahualpa** | **15.84** | **324** | P | **P** | **09 22 21.2** | **+0.2** | | |
| | comp=Z,0.1nm,0.3s,baz=150,slow=20,SNR=1.6 | | | | | | | | |
| **CLDB** | **Colider** | **15.92** | **56** | *eP* | **Pn** | **09 22 19.3** | **-0.5** | | |
| **TBTG** | **Tabatinga, AM** | **16.03** | **357** | *eP* | **Pn** | **09 22 20.6** | **-0.5** | | |
| **PTGB** | **Pitanga** | **16.41** | **109** | *eP* | **P** | **09 22 27.1** | **+0.2** | | |
| **PCMB** | **Pacaembu** | **16.79** | **98** | *eP* | **P** | **09 22 30.8** | **-0.2** | | |
| **ITAB** | **Concordia** | **17.05** | **117** | P | **P** | **09 22 33.9** | **0.0** | | |
| ITAB | | | | IAmb | IAmb | 09 22 37.8 | | | |
| | comp=Z,53nm,1.3s | | | | | | | | |
| **ITAB** | **Concordia** | **17.05** | **117** | *eP* | **Pn** | **09 22 33.0** | **-0.8** | | |
| **ARAG** | **Araguaiana, MT** | **17.13** | **77** | *eP* | **Pn** | **09 22 33.7** | **-1.0** | | |
| **CPSB** | **Cacapava Do Su** | **17.41** | **128** | *eP* | **P** | **09 22 37.8** | **0.0** | | |
| **ITRB** | **Iturama** | **17.70** | **91** | *eP* | **P** | **09 22 40.4** | **-0.7** | | |
| **PLTB** | **Pedras Altas** | **18.04** | **132** | P | **P** | **09 22 43.9** | **-0.9** | | |
| **PLTB** | **Pedras Altas** | **18.04** | **132** | *eP* | **Pn** | **09 22 45.9** | **+0.3** | | |
| **FRTB** | **Fartura** | **18.46** | **103** | *eP* | **P** | **09 22 49.4** | **-0.1** | | |
| **LC01** | **Cunco** | **18.69** | **187** | P | **P** | **09 22 52.0** | **+0.2** | | |
| **NPGB** | **Novo Progresso** | **18.79** | **47** | *eP* | **P** | **09 22 51.7** | **-1.3** | | |
| **MACA** | **Manacapuru-AM** | **18.94** | **27** | *eP* | **P** | **09 22 53.7** | **-0.9** | | |
| **SNDB** | **Serra Nova Dou** | **19.05** | **67** | *eP* | **P** | **09 22 55.6** | **-0.4** | | |
| **TIJ01** | **Guaruva-PR** | **19.25** | **109** | *eP* | **P** | **09 22 58.1** | **0.0** | | |
| **BB19B** | **Bebedouro** | **19.34** | **96** | *eP* | **P** | **09 22 58.8** | **-0.3** | | |
| **LR03** | **Panguipulli** | **19.46** | **187** | P | **P** | **09 23 00.0** | **-0.2** | | |
| LR03 | | | | IAmb | IAmb | 09 23 05.8 | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| **IPMB** | **Ipameri, GO** | **19.94** | **87** | *eP* | **P** | **09 23 05.0** | **-0.6** | | |
| **TER01** | **Tubaro-SC** | **19.99** | **118** | *eP* | **P** | **09 23 06.7** | **+0.6** | | |
| **RCLB** | **Rio Claro- Sao** | **20.27** | **100** | *eP* | **P** | **09 23 08.2** | **-1.0** | | |
| **PLCA** | **Paso Flores** | **20.41** | **183** | P | **P** | **09 23 11.8** | **+1.3** | | |
| | comp=Z,16nm,0.9s,baz=3,8,slow=12,SNR=37 | | | | | | | | |
| **PLCA** | **Paso Flores** | **20.41** | **183** | P | **P** | **09 23 11.0** | **+0.5** | | |
| PLCA | | | | IAmb | IAmb | 09 23 13.1 | | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **PLCA** | **Paso Flores** | **20.41** | **183** | *eP* | **P** | **09 23 11.8** | **+1.3** | | |
| **ITTB** | **Itaituba** | **20.54** | **41** | *eP* | **P** | **09 23 10.8** | **-1.2** | | |
| **PET01** | **Itanhaem-SP** | **20.65** | **105** | *eP* | **P** | **09 23 13.4** | **+0.3** | | |
| **BDFB** | **Brasilia** | **20.65** | **80** | P | **P** | **09 23 11.0** | **-2.3** | | |
| | comp=Z,11nm,0.7s,baz=265,slow=13,SNR=10 | | | | | | | | |
| **BDFB** | **Brasilia** | **20.65** | **80** | P | **P** | **09 23 12.6** | **-0.8** | | |
| **LL04** | **Puerto Octay** | **20.73** | **187** | P | **P** | **09 23 13.6** | **-0.3** | | |
| LL04 | | | | IAmb | IAmb | 09 23 19.5 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **VAO** | **Valinhos** | **20.82** | **101** | *eP* | **P** | **09 23 14.3** | **-0.8** | | |
| **PTGA** | **Pitinga** | **21.43** | **26** | P | **P** | **09 23 19.7** | **-1.9** | | |
| | comp=Z,2.9nm,0.3s,baz=203,slow=18,SNR=27 | | | | | | | | |
| **PEXB** | **Peixe** | **21.62** | **71** | *eP* | **P** | **09 23 22.4** | **-1.2** | | |
| **PARB** | **Paraibuna** | **22.07** | **102** | *eP* | **P** | **09 23 26.8** | **-1.7** | | |
| **OTAV** | **Otavalo** | **22.34** | **335** | P | **P** | **09 23 29.6** | **-2.0** | | |
| **OTAV** | **Otavalo** | **22.34** | **335** | *eP* | **P** | **09 23 31.3** | **-0.4** | | |
| **BSCB** | **Bom Sucesso** | **22.84** | **96** | *eP* | **P** | **09 23 35.6** | **-0.9** | | |
| **MALB** | **Monte Alegre** | **23.41** | **40** | *eP* | **P** | **09 23 40.8** | **-1.0** | | |
| **PRPB** | **Paraupebas** | **23.46** | **56** | *eP* | **P** | **09 23 40.9** | **-1.3** | | |
| **SMTB** | **Santa Maria do** | **23.75** | **65** | *eP* | **P** | **09 23 44.6** | **-0.2** | | |
| **BOAV** | **Boa Vista** | **24.09** | **22** | *eP* | **P** | **09 23 48.0** | **+0.1** | | |
| **DIAM** | **Diamantina, MG** | **24.15** | **93** | *eP* | **P** | **09 23 48.9** | **+0.5** | | |
| **JANB** | **Janauba** | **24.15** | **92** | *eP* | **P** | **09 23 49.0** | **-0.4** | | |
| **SDBA** | **SAO DESIDERIO** | **24.55** | **75** | *eP* | **P** | **09 23 51.9** | **-0.2** | | |
| **COYC** | **Coyhaique** | **25.32** | **185** | P | **P** | **09 23 59.8** | **+1.0** | | |
| COYC | | | | IAmb | IAmb | 09 24 03.3 | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **ALF01** | **Guarapari-ES** | **26.65** | **96** | *eP* | **P** | **09 24 11.7** | **+0.7** | | |
| **NAN01** | **Guarapari, ES** | **27.55** | **90** | *eP* | **P** | **09 24 19.0** | **-0.1** | | |
| **GUA01** | **Guaratinga, BA** | **28.09** | **87** | *eP* | **P** | **09 24 24.6** | **+0.7** | | |
| **ZARC** | **Zaragoza, Cauc** | **28.17** | **348** | P | **P** | **09 24 24.0** | **-0.6** | | |
| ZARC | | | | IAmb | IAmb | 09 24 47.7 | | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **NBIT** | **Itapeh - BA** | **28.82** | **84** | *eP* | **P** | **09 24 30.9** | **+0.5** | | |
| **GDU01** | **Guandu, BA** | **29.02** | **82** | *eP* | **P** | **09 24 32.3** | **+0.1** | | |
| **SDV** | **Santo Domingo** | **29.03** | **357** | P | **P** | **09 24 32.5** | **0.0** | | |
| | comp=Z,1.6nm,0.3s,baz=259,slow=4.7,SNR=1.6 | | | | | | | | |
| **NBPN** | **Ponto Novo - B** | **29.41** | **76** | *eP* | **P** | **09 24 36.0** | **+0.4** | | |
| **MDP** | **Montagnes des** | **30.02** | **35** | LR | LR | 09 37 54.9 | | | |
| | comp=Z,34nm,19.0s,baz=254,slow=39 | | | | | | | | |
| **NBLA** | **Lagarto - SE** | **31.56** | **78** | *eP* | **P** | **09 24 54.2** | **-0.4** | | |
| **NBMA** | **Muriti-CE** | **32.13** | **71** | *eP* | **P** | **09 25 00.1** | **+0.4** | | |
| **NBPB** | **Pedra_Branca-C** | **32.27** | **67** | *eP* | **P** | **09 25 00.7** | **-0.2** | | |
| **NBAN** | **Anadia - AL** | **33.43** | **76** | *eP* | **P** | **09 25 11.4** | **+0.4** | | |
| **NBCL** | **Cascavel-CE** | **34.04** | **66** | *eP* | **P** | **09 25 16.8** | **+0.5** | | |
| **MTO3** | **Montecristo** | **39.78** | **328** | P | **P** | **09 26 06.0** | **+1.0** | | |
| **APG** | **El Apazote** | **40.84** | **328** | P | **P** | **09 26 15.0** | **+1.1** | | |
| | comp=Z,1.5nm,0.6s,baz=120,slow=20,SNR=2.0 | | | | | | | | |
| **BIRD** | **Birdtown, Kers** | **55.68** | **349** | P | **P** | **09 28 08.4** | **+1.1** | | |
| **WVT** | **Waverly** | **58.83** | **342** | P | **P** | **09 28 29.2** | **-0.2** | | |
| WVT | | | | | **pP** | **09 28 54.4** | **-0.4** | | |
| **T47A** | **Sharon Grove** | **59.43** | **343** | | pP | 09 28 59.1 | +0.2 | | |
| **TXAR** | **Lajitas Array** | **59.50** | **325** | P | **P** | **09 28 35.0** | **+0.7** | | |
| | comp=Z,0.4nm,0.5s,baz=153,slow=8.1,SNR=7.2 | | | | | | | | |
| **W39A** | **Magazine** | **59.93** | **337** | P | **P** | **09 28 37.1** | **+0.1** | | |
| **FVM** | **French Village** | **61.32** | **341** | P | **P** | **09 28 47.0** | **+0.5** | | |
| **S39A** | **Bolivar** | **61.99** | **338** | P | **P** | **09 28 51.4** | **+0.4** | | |
| **MNTX** | **Cornudas Mount** | **62.27** | **325** | P | **P** | **09 28 53.5** | **+0.5** | | |
| MNTX | | | | | **pP** | **09 29 18.5** | **+0.2** | | |
| **P43A** | **Skaggs, Pawnee** | **62.58** | **342** | | pP | 09 29 20.2 | -0.3 | | |
| **SNAA** | **Sanae** | **63.49** | **161** | P | **P** | **09 29 02.0** | **+1.4** | | |
| SNAA | | | | IAmb | IAmb | 09 29 18.8 | | | |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **319A** | **Douglas** | **64.19** | **322** | P | **P** | **09 29 05.8** | **0.0** | | |
| 319A | | | | IAmb | IAmb | 09 29 08.6 | | | |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| **DBIC** | **Dimbokro** | **68.64** | **74** | P | **P** | **09 29 32.9** | **-1.6** | | |
| | comp=Z,2.2nm,0.8s,baz=224,slow=5.9,SNR=3.4 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **69.89** | **180** | P | **P** | **09 29 43.3** | **+1.8** | | |
| QSPA | | | | IAmb | IAmb | 09 29 44.2 | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **72.95** | **330** | P | **P** | **09 30 00.8** | **+0.6** | | |
| | comp=Z,0.6nm,0.9s,baz=182,slow=5.2,SNR=3.8 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **74.10** | **343** | P | **P** | **09 30 06.2** | **-0.3** | | |
| | comp=Z,1.0nm,0.4s,baz=135,slow=3.6,SNR=3.5 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.39** | **322** | P | **P** | **09 30 09.0** | **+0.2** | | |
| | comp=Z,1.9nm,0.9s,baz=154,slow=8.9,SNR=6.0 | | | | | | | | |
| **SCHQ** | **Schefferville** | **74.85** | **1** | P | **P** | **09 30 10.9** | **+0.2** | | |
| | comp=Z,1.9nm,0.8s,baz=186,slow=5.3,SNR=5.7 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.19** | **71** | P | **P** | **09 30 24.2** | **-0.8** | | |
| | comp=Z,1.4nm,0.5s,baz=258,slow=5.5,SNR=18 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.19** | **71** | IAmb | IAmb | 09 30 52.9 | | | |
| | comp=Z,9.4nm,1.1s | | | | | | | | |
| **PLID** | **Pearl Lake** | **77.78** | **328** | P | **P** | **09 30 28.5** | **+0.6** | | |
| PLID | | | | IAmb | IAmb | 09 30 30.6 | | | |
| | comp=Z,5.7nm,1.1s | | | | | | | | |
| **WDC** | **Whiskeytown Da** | **78.28** | **321** | P | **P** | **09 30 30.7** | **+0.3** | | |
| WDC | | | | IAmb | IAmb | 09 30 34.9 | | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **EDM** | **Edmonton** | **82.57** | **335** | P | **P** | **09 30 53.7** | **+0.6** | | |
| EDM | | | | IAmb | IAmb | 09 30 53.9 | | | |
| | comp=Z,8.2nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.97** | **341** | P | **P** | **09 31 29.9** | **+0.8** | | |
| | comp=Z,6.1nm,0.8s,baz=134,slow=4.7,SNR=104 | | | | | | | | |
| **INK** | **Inuvik** | **99.73** | **340** | LR | LR | 10 23 26.9 | | | |
| | comp=Z,65nm,18.6s,baz=319,slow=39 | | | | | | | | |
| **CTA** | **Charters Tower** | **126.95** | **223** | PKP | **PKiKP** | **09 37 35.1** | **+0.1** | | |
| | comp=Z,1.5nm,0.8s,baz=153,slow=2.3,SNR=1.6 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **127.47** | **278** | T | T | 11 57 27.0 | | | |
| | baz=101,slow=75,SNR=64 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **127.48** | **278** | T | T | 11 57 24.1 | | | |
| | baz=101,slow=75,SNR=49 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **127.49** | **278** | T | T | 11 57 23.3 | | | |
| | baz=101,slow=75,SNR=47 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **127.52** | **280** | T | T | 11 57 30.9 | | | |
| | baz=102,slow=75,SNR=33 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **127.53** | **280** | T | T | 11 57 34.0 | | | |
| | baz=102,slow=75,SNR=22 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **127.54** | **280** | T | T | 11 57 32.0 | | | |
| | baz=102,slow=75,SNR=20 | | | | | | | | |
| **ASAR** | **Alice Springs** | **130.85** | **208** | PKP | **PKPdf** | **09 37 42.1** | **+0.2** | | |
| | comp=Z,1.0nm,0.9s,baz=141,slow=3.0,SNR=7.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.85** | **211** | PKP | **PKPdf** | **09 37 48.3** | **+0.6** | | |
| | comp=Z,0.7nm,0.7s,baz=159,slow=1.9,SNR=8.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **140.97** | **24** | PKP | **PKPdf** | **09 37 60.0** | **+0.4** | | |
| | comp=Z,0.9nm,0.5s,baz=305,slow=5.2,SNR=4.3 | | | | | | | | |
| **KSH** | **Kashi** | **144.53** | **50** | PKPbc | **PKPdf** | **09 38 07.3** | **+0.7** | | |
| KSH | | | | pPKP | pPKPdf | 09 38 34.5 | -0.4 | | |
| **MKAR** | **Makanchi Array** | **144.80** | **35** | PKP | **PKPdf** | **09 38 06.5** | **-0.2** | | |
| | comp=Z,1.9nm,0.8s,baz=329,slow=2.9,SNR=15 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **151.12** | **310** | PKPbc | **PKPbc** | **09 38 23.1** | **-0.2** | | |
| | comp=Z,1.0nm,0.4s,baz=101,slow=1.0,SNR=5.1 | | | | | | | | |
| **SONM** | **Songino Array** | **152.29** | **6** | PKP | **PKPdf** | **09 38 19.6** | **+0.7** | | |
| | comp=Z,1.7nm,0.6s,baz=90,slow=1.8,SNR=3.7 | | | | | | | | |
| SONM | | | | PKPbc | **PKiKP** | **09 38 26.7** | **+0.7** | | |
| | comp=Z,1.5nm,0.5s,baz=282,slow=1.3,SNR=15 | | | | | | | | |
| **KSRS** | **Korea Array** | **157.34** | **323** | PKPab | **PKPab** | **09 38 58.4** | **+0.9** | | |
| | comp=Z,0.9nm,0.6s,baz=62,slow=4.2,SNR=2.6 | | | | | | | | |
| **PZH** | **PanZhiHua** | **169.62** | **52** | PKP | **PKPdf** | **09 38 36.0** | **-1.9** | | |

**IDC 18 09:23:23.6±13.0, 22°08N×143°38E, h234km±112km, mb2.9/6, mb1 3.0/6, mb1mx2.9/42, mbtmp3.5/6, MS3.3/1, Ms1 3.3/1, ms1mx2.4/12, Error ellipse: s-maj=171.8km s-min=18.6km az=78.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSRS** | **Korea Array** | **20.32** | **322** | P | P | 09 27 42.1 | +0.1 |
| | 1.3nm,0.8s,baz=132,slow=8.9,SNR=3.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.98** | **340** | LR | LR | 09 38 33.9 | |
| | comp=Z,67nm,18.4s,baz=0.4,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **39.16** | **320** | P | P | 09 30 29.0 | +0.1 |
| | 0.3nm,0.5s,baz=121,slow=6.5,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.69** | **193** | P | P | 09 30 58.4 | +0.6 |
| | 0.3nm,0.5s,baz=11,slow=8.1,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **46.40** | **192** | P | P | 09 31 26.3 | -0.7 |
| | 0.2nm,0.9s,baz=13,slow=13,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.57** | **312** | P | P | 09 32 27.6 | -0.2 |
| | 0.2nm,0.5s,baz=88,slow=8.4,SNR=2.3 | | | | | | |
| **FINES** | **FINESS Array B** | **82.91** | **335** | P | P | 09 35 22.0 | 0.0 |
| | 1.3nm,0.6s,baz=39,slow=5.3,SNR=4.8 | | | | | | |

**IDC 18 09:49:32.8±3.5, 54°19N×87°41E, h0km, mb1 2.5/1, mb1mx1.8/50, mbtmp2.5/1, ML2.3/2, Error ellipse: s-maj=30.2km s-min=19.1km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.54** | **262** | *i* | | 09 57 36.0 | |
| | baz=80,slow=348,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.54** | **262** | Pg | Pn | 09 50 00.8 | -0.7 |
| | 0.7nm,0.3s,baz=83,slow=16,SNR=7.7 | | | | | | |
| ZALV | | | | Lg | Lg | 09 50 21.7 | |
| | 0.8nm,0.3s,baz=78,slow=28,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.50** | **240** | Pn | Pn | 09 51 10.5 | +0.9 |
| | 0.0nm,0.3s,baz=56,slow=14,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.09** | **206** | Pn | Pn | 09 51 32.0 | +0.6 |
| | 0.1nm,0.3s,baz=21,slow=15,SNR=3.2 | | | | | | |
| MKAR | | | | Lg | Lg | 09 53 50.4 | |
| | 0.0nm,0.3s,baz=19,slow=32,SNR=2.9 | | | | | | |

*NEIC **18** 09:54:49.3±1.1, 5°.57S±0°.08×129°.1E±0°.1, h235km±13km, mb4.4/11, Error ellipse: s-maj=17.3km s-min=12.1km az=97.0*
*IDC **18** 09:54:50.4±4.5, 5°.84S×128°.78E, h244km±49km, mb3.2/1, mb1 4.1/3, mb1mx3.2/37, mbtmp4.5/3, Error ellipse: s-maj=118.4km s-min=16.0km az=70.0*
*DJA **18** 09:54:50.2±0.3, 6°S±5°×12°9E±°, h219km±9km, M4.5/7, mB5.3/3, mb4.2/7, MLv4.7/3, Mw(mB)4.7/3*

**ISC 18 09:54:49.3±0.8, 5°.58S±0°.06×129°.28E±0°.08, h250km, n34, σ1°47/40, mb4.2/3, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **2.17** | **330** | P | **Pn** | **09 55 34.8** | **+1.4** |
| **MSAI** | **Masohi** | **2.25** | **351** | P | **Pn** | **09 55 34.1** | **0.0** |
| MSAI | | | | S | **S** | **09 56 07.0** | **-2.5** |
| **SAUI** | **Saumlaki** | **3.12** | **140** | Pn | **Pn** | **09 55 43.8** | **+0.7** |
| **FAKI** | **Fak Fak** | **3.97** | **48** | | **Pn** | **09 55 53.4** | **+0.6** |
| **FAKI** | **Fak Fak** | **3.97** | **48** | P | **Pn** | **09 55 53.2** | **+0.4** |
| FAKI | | | | S | **S** | **09 56 39.9** | **-3.3** |
| **SANI** | **Sanana** | **4.80** | **317** | P | **Pn** | **09 56 03.4** | **+0.6** |
| **SANI** | **Sanana** | **4.80** | **317** | P | **Pn** | **09 56 03.6** | **+0.8** |
| **SOEI** | **Soe** | **6.47** | **230** | Pn | **Pn** | **09 56 21.4** | **-2.2** |
| **DRS** | **Darwin Rock St** | **6.99** | **167** | P | **Pn** | **09 56 30.5** | **+0.6** |
| **BATI** | **Baumata** | **7.22** | **230** | P | **Pn** | **09 56 34.1** | **+1.3** |
| **MTN** | **Manton Dam** | **7.45** | **166** | | **Pn** | **09 56 35.9** | **+0.2** |
| **MTN** | **Manton Dam** | **7.45** | **166** | P | **Pn** | **09 56 35.9** | **+0.2** |
| **KDU** | **Kakadu** | **7.73** | **156** | P | **Pn** | **09 56 39.7** | **+0.4** |
| **KNRA** | **Kununurra** | **10.05** | **183** | | **Pn** | **09 57 08.4** | **-0.1** |
| KNRA | | | | | **S** | **09 58 59.4** | **-2.2** |
| **KNRA** | **Kununurra** | **10.05** | **183** | P | **Pn** | **09 57 08.3** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **12.94** | **196** | P | **Pn** | **09 57 43.9** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.94** | **196** | P | **Pn** | **09 57 44.9** | **+0.3** |
| **WB0** | **Warramunga Arr** | **14.96** | **161** | P | **P** | **09 58 09.6** | **+0.8** |
| **WRAB** | **Tennant Creek** | **15.10** | **161** | P | **P** | **09 58 11.2** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 09 58 11.8 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.10** | **161** | P | **P** | **09 58 11.2** | **+0.9** |
| **WRA** | **Warramunga Arr** | **15.10** | **161** | P | **P** | **09 58 11.1** | **+0.7** |
| | comp=Z,3.9nm,0.3s,baz=342,slow=13,SNR=130 | | | | | | |
| WRA | | | | S | **S** | **10 00 54.8** | **-2.6** |
| | comp=Z,0.8nm,0.3s,baz=337,slow=22,SNR=7.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.10** | **161** | P | **P** | **09 58 09.9** | **-0.4** |
| **WB2** | **Warramunga Arr** | **15.11** | **161** | P | **P** | **09 58 11.3** | **+0.9** |
| WB2 | | | | IAmb | IAmb | 09 58 11.9 | |
| | comp=Z,28nm,0.9s | | | | | | |
| WB2 | | | | | **S** | **10 00 55.2** | **-2.2** |
| **WR0** | **Warramunga Arr** | **15.18** | **161** | P | **P** | **09 58 12.0** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 09 58 12.7 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **COEN** | **Coen** | **16.02** | **122** | P | **Pn** | **09 58 23.4** | **+1.7** |
| COEN | | | | IAmb | IAmb | 09 58 24.4 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **18.34** | **209** | P | **Pn** | **09 58 46.4** | **-2.5** |
| PSA00 | | | | IAmb | IAmb | 09 58 48.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **18.53** | **167** | P | **P** | **09 58 49.9** | **+2.2** |
| **ASAR** | **Alice Springs** | **18.53** | **167** | P | **P** | **09 58 49.7** | **+2.0** |
| | comp=Z,5.8nm,0.3s,baz=349,slow=12,SNR=474 | | | | | | |
| ASAR | | | | S | **S** | **10 02 05.0** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=347,slow=22,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **18.53** | **167** | P | **Pn** | **09 58 50.1** | **-1.1** |
| **WRKA** | **Warakurna** | **19.37** | **183** | P | **P** | **09 58 58.7** | **+1.9** |
| **FORT** | **Forrest** | **25.09** | **182** | P | **P** | **09 59 53.0** | **+1.6** |
| FORT | | | | IAmb | IAmb | 10 00 06.7 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **27.82** | **168** | P | **P** | **10 00 17.0** | **+1.3** |
| BBOO | | | | IAmb | IAmb | 10 00 17.7 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **28.59** | **158** | P | **P** | **10 00 24.0** | **+1.5** |
| **MKAR** | **Makanchi Array** | **66.65** | **327** | P | **P** | **10 05 13.9** | **+0.6** |
| | comp=Z,0.3nm,0.3s,baz=113,slow=7.3,SNR=1.8 | | | | | | |

*KRSC **18** 09:55:08.2±2.3, 48°.58N×156°.25E, h31km±28km, ML5.5*
*BJI **18** 09:55:08.5±0.0, 48°.89N×155°.38E, h68km, mb4.4/43, mB4.8/24, Ms4.2/8, Ms7 4.0/9*
*SKHL **18** 09:55:09.8±0.2, 48°.60N×155°.50E, h60km±5km, mb5.7/5, mbv5.5/3, msh5.4/4*
*MOS **18** 09:55:10.6±1.3, 48°.80N×155°.09E, h69km, mb4.7/28, MS3.6/11, Error ellipse: s-maj=7.3km s-min=3.0km az=73.5*
*NEIC **18** 09:55:12.9±1.7, 48°.88N±0°.09×154°.9E±0°.1, h61km±7km, mb4.8/100, Error ellipse: s-maj=15.3km s-min=9.5km az=132.0*
*IDC **18** 09:55:13.1±2.6, 48°.88N×154°.77E, h70km±23km, mb3.9/32, mb1 4.0/38, mb1mx4.0/57, mbtmp4.2/38, MS3.8/48, Ms1 3.8/48, ms1mx3.6/91, Error ellipse: s-maj=15.2km s-min=10.2km az=150.0*

**ISC 18 09:55:12.4±0.7, 48°.74N±0°.05×155°.12E±0°.05, h69km±5km, n479, σ1°45/460, mb4.7/122, 13C-6D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.05** | **18** | *i* | P**n** | **09 55 42.1** | **-2.6** |
| SKR | | | | *eS* | **Sn** | **09 56 07.6** | **-1.7** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,3μm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,13μm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,28μm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.05** | **18** | *eP* | **Pn** | **09 55 42.4** | **-2.3** |
| SKR | | | | *eS* | **Sn** | **09 56 08.2** | **-1.1** |
| **SKR** | **Severo-Kuril's** | **2.05** | **18** | *i* P | **Pn** | **09 55 42.7** | **-2.0** |
| SKR | | | | AMB | AMB | 09 55 43.4 | |
| | comp=N,3μm,0.5s | | | | | | |
| SKR | | | | *i* S | **Sn** | **09 56 07.3** | **-2.0** |
| SKR | | | | A | A | 09 56 12.2 | |
| | comp=N,28μm,0.5s | | | | | | |
| SKR | | | | A | A | 09 56 12.2 | |
| | comp=N,13μm,0.5s | | | | | | |
| **PAU** | **Pauzhetka** | **2.94** | **21** | PN | **Pn** | **09 55 55.4** | **-1.3** |
| PAU | | | | S | **Sn** | **09 56 30.9** | **0.0** |
| **PAU** | **Pauzhetka** | **2.94** | **21** | *eP* | **Pn** | **09 55 55.4** | **-1.3** |
| PAU | | | | *eS* | **Sn** | **09 56 30.9** | **0.0** |
| **PAU** | **Pauzhetka** | **2.94** | **21** | *eP* | **Pn** | **09 55 55.6** | **-1.1** |
| PAU | | | | AMB | AMB | 09 55 57.3 | |
| | comp=N,620nm,0.4s | | | | | | |
| PAU | | | | *eS* | **Sn** | **09 56 30.1** | **-0.8** |
| PAU | | | | A | A | 09 56 31.9 | |
| | comp=N,2μm,0.2s | | | | | | |
| PAU | | | | A | A | 09 56 31.9 | |
| | comp=N,4μm,0.2s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.62** | **31** | PN | **Pn** | **09 56 03.6** | **-2.3** |
| KDTR | | | | S | **Sn** | **09 56 45.0** | **-2.3** |
| **KDTR** | **Khodutka, Kamc** | **3.62** | **31** | *eP* | **Pn** | **09 56 03.6** | **-2.3** |
| KDTR | | | | *eS* | **Sn** | **09 56 45.0** | **-2.3** |
| **MTVR** | **Mutnovka** | **4.23** | **26** | PN | **Pn** | **09 56 13.9** | **-0.5** |
| MTVR | | | | S | **Sn** | **09 57 01.7** | **-0.9** |
| **MTVR** | **Mutnovka** | **4.23** | **26** | *eP* | **Pn** | **09 56 13.9** | **-0.5** |
| MTVR | | | | *eS* | **Sn** | **09 57 01.7** | **-0.9** |
| **GRL** | **Gorelyy** | **4.26** | **25** | PN | **Pn** | **09 56 14.9** | **+0.1** |
| **GRL** | **Gorelyy** | **4.26** | **25** | *eP* | **Pn** | **09 56 14.9** | **+0.1** |
| **RUS** | **Russkaya** | **4.29** | **29** | PN | **Pn** | **09 56 13.5** | **-1.6** |
| RUS | | | | S | **Sn** | **09 57 01.6** | **-2.1** |
| **RUS** | **Russkaya** | **4.29** | **29** | *eP* | **Pn** | **09 56 13.5** | **-1.6** |
| RUS | | | | *eS* | **Sn** | **09 57 01.6** | **-2.1** |
| **RUS** | **Russkaya** | **4.29** | **29** | *eP* | **Pn** | **09 56 13.5** | **-1.6** |
| **APC** | **Apacha** | **4.39** | **16** | PN | **Pn** | **09 56 17.3** | **+0.9** |
| **APC** | **Apacha** | **4.39** | **16** | *eP* | **Pn** | **09 56 17.3** | **+0.9** |
| **KRMR** | **Karymshinskiy** | **4.52** | **24** | PN | **Pn** | **09 56 18.0** | **-0.3** |
| **KRMR** | **Karymshinskiy** | **4.52** | **24** | *eP* | **Pn** | **09 56 18.0** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **4.67** | **19** | *e*PN | **Pn** | **09 56 20.4** | **+0.1** |
| **PEA0B** | **Petropavlovsk-** | **4.67** | **19** | Pn | **Pn** | **09 56 20.7** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **4.67** | **19** | P | **Pn** | **09 56 20.2** | **-0.1** |
| | comp=N,14nm,0.3s,baz=172,slow=13,SNR=92 | | | | | | |
| PETK | | | | S | **Sn** | **09 57 18.9** | **+5.7** |
| | comp=N,6.1nm,0.3s,baz=196,slow=36,SNR=1.9 | | | | | | |
| PETK | | | | L

**LGNR Loginova 8.11 23** PN **Pn** **09 57 08.0 +0.5**
**LGNR Loginova 8.11 23** *e*P **Pn** **09 57 08.0 +0.5**
**CIRR Tsirk 8.15 23** PN **Pn** **09 57 08.7 +0.7**
**CIRR Tsirk 8.15 23** *e*P **Pn** **09 57 08.7 +0.7**
**KRSR Krestovskiy 8.20 22** PN **Pn** **09 57 08.5 0.0**
**KRSR Krestovskiy 8.20 22** *e*P **Pn** **09 57 08.5 0.0**
**RUSJ Misakicho 8.24 239** ⇓ *i* PN **Pn** **09 57 11.4 +2.3**
RUSJ *e*S **Sn** **09 58 44.9 +4.3**
**KLY Klyuchi 8.30 22** PN **Pn** **09 57 10.2 +0.3**
**KLY Klyuchi 8.30 22** *e*P **Pn** **09 57 10.2 +0.3**
**TYV Tymovskoe 8.34 289** *e*PN **Pn** **09 57 13.9 +3.5**
TYV *e*S **Sn** **09 58 46.4 +3.5**
TYV pmax pmax
comp=Z,23nm,0.9s
TYV pmax pmax
comp=Z,300nm,3.8s
TYV smax smax
comp=N,10.0nm,0.8s
TYV smax smax
comp=E,9.0nm,0.8s
TYV smax smax
comp=N,300nm,6.1s
**TYV Tymovskoe 8.34 289** *e*P **Pn** **09 57 13.5 +3.1**
TYV AMB AMB 09 57 14.4
comp=N,20nm,0.8s
TYV AMB AMB 09 57 15.9
comp=N,300nm,3.8s
TYV *e*S **Sn** **09 58 46.0 +3.1**
TYV A A 09 58 46.6
comp=N,20nm,0.8s
TYV A A 09 58 46.6
comp=N,30nm,0.8s
TYV A A 09 58 47.5
comp=N,300nm,6.0s
TYV A A 09 58 47.5
comp=N,500nm,6.0s
**NMR Nemuro--Hokkai 8.45 234** *e*PN **Pn** **09 57 08.5 -3.4**
**NMR Nemuro--Hokkai 8.45 234** *e*P **Pn** **09 57 09.1 -2.8**
**YSS Yuzh-Sakhalins 8.51 263** *e*PN **Pn** **09 57 14.0 +1.3**
YSS *e*S **Sn** **09 58 53.2 +6.2**
YSS pmax pmax
comp=Z,30nm,0.8s
YSS MLR MLR
comp=Z,400nm,16.0s
**YSS Yuzh-Sakhalins 8.51 263** Pn **Pn** **09 57 10.0 -2.7**
**YSS Yuzh-Sakhalins 8.51 263** *i* P **Pn** **09 57 14.3 +1.6**
YSS AMB AMB 09 57 17.0
comp=Z,30nm,0.8s
YSS *e*S **Sn** **09 58 48.6 +1.6**
**UGL Uglegorsk 8.61 277** *e*PN **Pn** **09 57 15.8 +1.7**
UGL pmax pmax
comp=Z,70nm,1.0s
**UGL Uglegorsk 8.61 277** *e*P **Pn** **09 57 16.5 +2.4**
UGL AMB AMB 09 57 19.0
comp=Z,70nm,0.8s
**SRKR Sorokina 8.74 23** PN **Pn** **09 57 15.3 -0.6**
**SRKR Sorokina 8.74 23** *e*P **Pn** **09 57 15.3 -0.6**
**KBTR Krutoberegovo 8.83 29** PN **Pn** **09 57 14.5 -2.6**
**KBTR Krutoberegovo 8.83 29** *e*P **Pn** **09 57 14.5 -2.6**
**KBG Krutoberegovo 8.83 29** PN **Pn** **09 57 16.2 -0.9**
**KBG Krutoberegovo 8.83 29** *e*P **Pn** **09 57 16.2 -0.9**
**OKH Okha 9.04 307** *e*P **Pn** **09 57 23.7 +3.7**
OKH AMB AMB 09 57 25.4
comp=Z,10.0nm,0.6s
**BKI Bering 9.31 42** PN **Pn** **09 57 21.8 -1.8**
**BKI Bering 9.31 42** *e*P **Pn** **09 57 21.8 -1.8**
BKI *e*S Sn 09 58 55.4 -11
**JKA Kamikawa-asahi 9.80 247** Pn **Pn** **09 57 31.8 +1.4**
**JKA Kamikawa-asahi 9.80 247** *e*P **Pn** **09 57 31.8 +1.4**
**ASAJ Asahikawa 9.80 247** P **Pn** **09 57 32.3 +1.9**
comp=Z,3.2nm,0.3s,baz=80,slow=17,SNR=45
ASAJ LR LR 10 01 02.8
comp=Z,186nm,20.2s,baz=16,slow=36
**ASAJ Asahikawa 9.80 247** PN **Pn** **09 57 31.8 +1.4**
**NKL Nikolayevsk 10.12 301** *i* P **Pn** **09 57 37.7 +3.0**
NKL AMB AMB 09 57 38.7
comp=Z,180nm,0.9s
**ERM Erimo 10.76 236** *i* PN **Pn** **09 57 41.5 -2.0**
**ERM Erimo 10.76 236** Pn **Pn** **09 57 43.3 -0.2**
**MA2 Magadan 11.15 348** *ce*PN **Pn** **09 57 47.6 -1.2**
MA2 pmax pmax
comp=Z,19nm,0.6s
MA2 MLR MLR
comp=Z,437nm,16.0s
**MA2 Magadan 11.15 348** Pn **Pn** **09 57 47.4 -1.4**
**MA2 Magadan 11.15 348** *e*P **Pn** **09 57 47.6 -1.2**
**JEW Eniwo 11.21 243** Pn **Pn** **09 57 50.6 +1.0**
**OSSR Ossora 11.51 21** PN **Pn** **09 57 53.2 -0.4**
**OSSR Ossora 11.51 21** *e*P **Pn** **09 57 53.2 -0.4**
**GRNR Gornyy 12.26 287** ⇑ *i* PN **Pn** **09 58 03.0 -0.9**
GRNR pmax pmax
comp=Z,2.0nm,0.9s
GRNR MLR MLR
comp=E,230nm,15.0s
GRNR MLR MLR
comp=N,130nm,13.0s
GRNR MLR MLR
comp=Z,330nm,13.0s
**GRNR Gornyy 12.26 287** *e*P **Pn** **09 58 03.1 -0.9**
GRNR AMB AMB 09 58 03.4
comp=Z,10.0nm,0.8s
**TEY Ternei 13.19 261** *e*P **Pn** **09 58 17.1 +0.6**
TEY AMB AMB 09 58 24.6
comp=Z,30nm,0.8s
**KHBR Khabarovsk 13.28 276** *e*P **Pn** **09 58 17.9 +0.2**
KHBR AMB AMB 09 58 18.9
comp=Z,10.0nm,0.4s
**TILK Tilichiki 13.34 24** PN **Pn** **09 58 16.3 -2.1**
**TILK Tilichiki 13.34 24** *e*P **Pn** **09 58 16.3 -2.1**
**SEY Seymchan 14.31 355** P **Pn** **09 58 30.6 -0.6**
comp=Z,0.3nm,0.3s,baz=162,slow=11,SNR=20
SEY LR LR 10 04 05.5
comp=Z,316nm,20.8s,baz=146,slow=38
**SEY Seymchan 14.31 355** *i* P **Pn** **09 58 30.8 -0.4**
**SEY Seymchan 14.31 355** *i* P **Pn** **09 58 30.8 -0.4**
**KLR Kul'dur 15.34 281** P **Pn** **09 58 43.1 -1.5**
comp=Z,0.0nm,0.3s,baz=233,slow=20,SNR=1.3
KLR LR LR 10 04 58.8
comp=Z,266nm,18.4s,baz=85,slow=39
**KLR Kul'dur 15.34 281** *ce*P **Pn** **09 58 44.2 -0.4**
KLR pmax pmax
comp=Z,7.0nm,0.7s
KLR MLR MLR
comp=Z,167nm,13.0s
**KLR Kul'dur 15.34 281** *e*P **Pn** **09 58 44.2 -0.4**
KLR AMB AMB 09 58 54.0
comp=Z,10.0nm,0.4s
**USA0B Ussuriysk Arra 16.54 263** P **P** **09 59 01.6 +0.3**
USA0B pmax pmax
comp=Z,13nm,1.1s
**USA0B Ussuriysk Arra 16.54 263** **P** **09 59 01.6 +0.3**
**USRK Ussuriysk Ar. 16.54 263** P **Pn** **09 58 58.8 -1.0**
baz=68,slow=11,SNR=7.4
USRK LR LR 10 04 44.2
comp=Z,113nm,21.7s,baz=54,slow=35
**USRK Ussuriysk Ar. 16.54 263** P **P** **09 59 01.3 0.0**
**USRK Ussuriysk Ar. 16.54 263** P **P** **09 59 01.3 0.0**
**GRTR Gornotajezhnoj 16.64 261** *e*P **Pn** **09 58 59.6 -1.4**
GRTR AMB AMB 09 59 04.0
comp=Z,10.0nm,0.6s
**MAJO Matsushiro 17.37 232** *i* P **Pn** **09 59 07.1 -2.9**
**MAT Matsushiro 17.37 232** P **Pn** **09 59 06.8 -3.2**
MAT *e*S **S** **10 02 26.0 -1.0**
**MJAR Matsushiro Arr 17.37 232** P **Pn** **09 59 07.6 -2.4**
comp=Z,0.0nm,0.3s,baz=31,slow=13,SNR=7.6
MJAR LR LR 10 05 26.6
comp=Z,75nm,18.7s,baz=36,slow=36
**MDJ Mudanjiang 17.96 266** P **P** **09 59 16.3 -0.6**
**MDJ Mudanjiang 17.96 266** P **P** **09 59 16.4 -0.5**
MDJ pmax pmax
comp=Z,11nm,0.9s
MDJ pmax pmax
comp=Z,160nm,3.5s
**ZEA Zeya 18.09 297** *e*P **Pn** **09 59 23.6 +4.9**
ZEA pmax pmax
comp=Z,10.0nm,1.3s
ZEA MLR MLR
comp=Z,200nm,14.0s
**ZEA Zeya 18.09 297** *e*P **Pn** **09 59 21.3 +2.6**
ZEA AMB AMB 09 59 24.7
comp=Z,10.0nm,0.8s
**BNX BinXian 19.01 271** ⇑ P **Pn** **09 59 30.4 +0.6**
BNX pmax pmax
comp=Z,7.0nm,0.7s
BNX pmax pmax
comp=Z,230nm,4.1s
**YAK Yakutsk 19.47 323** P **P** **09 59 31.5 -1.7**
comp=Z,0.2nm,0.3s,baz=122,slow=3.3,SNR=11
YAK LR LR 10 06 45.2
comp=Z,208nm,21.8s,baz=77,slow=36
**YAK Yakutsk 19.47 323** *e*P **Pn** **09 59 35.0 0.0**
YAK *e*S **S** **10 03 07.9 -1.4**
YAK pmax pmax
comp=Z,58nm,0.8s
YAK pmax pmax
comp=N,9.0nm,0.9s
YAK pmax pmax
comp=E,18nm,1.1s
YAK smax smax
comp=E,54nm,2.5s
**YAK Yakutsk 19.47 323** Pn **Pn** **09 59 34.5 -0.5**
YAK IAmb IAmb 09 59 37.6
comp=Z,74nm,1.0s
**BILL Bilibino 20.16 12** *c i* P **P** **09 59 38.5 -2.2**
BILL *e**SP **sP** **10 00 02.3 -1.4**
BILL S **S** **10 03 25.0 +2.2**
BILL *e**SS **sS** **10 03 48.2 +2.0**
BILL pmax pmax
comp=Z,24nm,0.7s
BILL MLR MLR
comp=Z,136nm,18.0s
**BILL Bilibino 20.16 12** P **P** **09 59 38.9 -1.8**
BILL IAmb IAmb 09 59 40.1
comp=Z,24nm,0.7s
**CN2 Changchun 21.02 268** *e*P **P** **09 59 48.3 -1.9**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
**KSRS Korea Array 22.71 250** P **P** **10 00 08.1 -0.2**
comp=Z,3.0nm,0.6s,baz=53,slow=11,SNR=8.3
KSRS LR LR 10 08 25.9
comp=Z,42nm,18.8s,baz=60,slow=35
**KSAR Wonju Array Be 22.74 250** P **P** **10 00 09.5 +0.9**
**KSAR Wonju Array Be 22.74 250** P **P** **10 00 09.5 +0.9**
**KSAR Wonju Array Be 22.74 250** *e*P **P** **10 00 09.5 +0.9**
**TJN Taejon 23.74 249** *i* P **P** **10 00 16.7 -1.4**
**TNA Tin City 25.63 35** P **P** **10 00 37.6 +2.6**
TNA IAmb IAmb 10 00 38.6
comp=Z,30nm,0.8s
**TNA Tin City 25.63 35** P **P** **10 00 36.1 +1.1**
baz=248,SNR=24
**BOD Bodaibo 25.83 306** *e*P P 10 00 49.9 +13
BOD pmax pmax
comp=Z,12nm,1.1s
**TIXI Tiksi 25.98 341** P **P** **10 00 36.2 -1.9**
comp=Z,7.9nm,0.8s,baz=269,slow=24,SNR=20
TIXI LR LR 10 12 13.9
comp=Z,116nm,18.7s,baz=9.5,slow=40
**TIXI Tiksi 25.98 341** *ce*P **P** **10 00 35.7 -2.4**
TIXI pmax pmax
comp=Z,15nm,1.0s
TIXI MLR MLR
comp=Z,117nm,17.0s
**TIXI Tiksi 25.98 341** P **P** **10 00 36.5 -1.6**
TIXI IAmb IAmb 10 00 54.5
comp=Z,25nm,0.9s
**ANM Nome 26.29 38** P **P** **10 00 42.1 +1.1**
ANM pmax pmax
comp=Z,11nm,0.8s
**ANM Nome 26.29 38** P **P** **10 00 42.1 +1.1**
**ANM Nome 26.29 38** P **P** **10 00 41.5 +0.5**
baz=252
**XLT XiLinHaoTe 27.18 275** *e*P **P** **10 00 47.8 -1.5**
XLT pP pP 10 01 04.3 -1.2
XLT sP sP 10 01 13.3 -0.2
XLT pmax pmax
comp=Z,7.0nm,1.2s
XLT pmax pmax
comp=Z,100nm,4.6s
**CHNA Chernabura Isl 28.27 60** P **P** **10 01 00.1 +1.3**
baz=277
**RDOG Red Dog Mine 28.42 32** P **P** **10 01 01.1 +1.1**
RDOG IAmb IAmb 10 01 01.4
comp=Z,30nm,1.4s
**RDOG Red Dog Mine 28.42 32** P **P** **10 00 59.8 -0.2**
baz=249,SNR=10.0
**TTA Tatalina 30.04 44** P **P** **10 01 15.8 +1.3**
TTA pmax pmax
comp=Z,8.0nm,0.8s
**TTA Tatalina 30.04 44** P **P** **10 01 15.8 +1.3**
**TTA Tatalina 30.04 44** P **P** **10 01 15.1 +0.6**
baz=265
**H11N2 WAKE ISLAND Hy 30.46 158** T T 10 33 14.5
baz=344,slow=74
**H11N1 WAKE ISLAND Hy 30.47 158** T T 10 33 12.8
baz=344
**H11N3 WAKE ISLAND Hy 30.47 158** T T 10 33 41.6
baz=344,slow=74
**L19K White Mountain 30.53 45** P **P** **10 01 19.7 +1.0**
**M19K Big River Lodg 30.73 46** P **P** **10 01 22.3 +1.7**
**K20K Telida 30.95 43** P **P** **10 01 22.9 +0.4**
baz=266
**J20K Nowinta River 30.99 41** P **P** **10 01 23.1 +0.4**
baz=265
**L20K Farewell, AK 30.99 45** P **P** **10 01 23.4 +0.6**
baz=268
**Q19K Cape Douglas, 31.16 51** P **P** **10 01 24.4 +0.1**
baz=274
**HNS HongShan 31.27 264** ⇑ P **P** **10 01 25.8 +0.3**
HNS pmax pmax
comp=Z,8.0nm,0.8s
**HHC Hu-ho-hao-te 31.54 272** *e*P **P** **10 01 28.4 +0.5**
HHC pmax pmax
comp=Z,9.0nm,1.1s
HHC pmax pmax
comp=Z,120nm,7.1s
**ULN Ulaanbaatar 31.57 287** *i* P **P** **10 01 26.1 -2.1**
ULN pmax pmax
comp=Z,4.0nm,1.4s
**H11S1 WAKE ISLAND Hy 31.58 159** T T 10 34 45.8
baz=345,slow=76,SNR=3086
**H11S3 WAKE ISLAND Hy 31.59 159** T T 10 35 02.7
baz=345,slow=76,SNR=4685
**H11S2 WAKE ISLAND Hy 31.60 159** T T 10 35 00.4
baz=345,slow=76,SNR=2154
**A21K Barrow 31.62 27** P **P** **10 01 28.0 -0.2**
baz=251
**H21K Melozitna Rive 31.71 38** P **P** **10 01 29.6 +0.5**
baz=264
**SPCR Spurr Chakacha 31.77 47** P **P** **10 01 31.3 +1.5**
baz=272
**NJ2 Nanjing 31.89 252** *e*P **P** **10 01 31.5 +0.6**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**SONM Songino Array 31.99 287** P **P** **10 01 30.2 -1.7**
comp=Z,0.7nm,0.9s,baz=79,slow=7.7,SNR=3.8
SONM PcP **PcP** **10 04 20.1 -0.1**
comp=Z,1.0nm,0.9s,baz=72,slow=4.7,SNR=4.9
SONM LR LR 10 15 47.2
comp=Z,213nm,18.1s,baz=52,slow=39
**I21K Tanana 32.01 39** P **P** **10 01 32.9 +1.2**
baz=266
**BPAW Bear Paw Mtn. 32.37 42** P **P** **10 01 36.1 +1.2**
baz=268
**KTH Kantishna Hill 32.38 43** IAmb IAmb 10 01 38.1
comp=Z,22nm,1.1s
**MLY Manley 32.52 40** P **P** **10 01 36.9 +0.6**
baz=267
**BRSE Bradley Lake S 32.58 50** P **P** **10 01 38.0 +1.3**
baz=275
**TRF Thorofare Moun 32.66 43** IAmb IAmb 10 01 47.0
comp=Z,15nm,1.2s
**TRF Thorofare Moun 32.66 43** P **P** **10 01 38.3 +0.7**
baz=270
**COLD Coldfoot 32.93 36** IAmb IAmb 10 01 41.5
comp=Z,8.4nm,0.7s
**COLD Coldfoot 32.93 36** P **P** **10 01 40.4 +0.7**
baz=264,SNR=10
**BWN Browne 33.03 41** P **P** **10 01 40.0 -0.7**
**ZAK Zakamensk 33.11 293** *e*P **P** **10 01 39.8 -1.8**
ZAK pmax pmax
comp=Z,6.0nm,1.2s
**I23K Minto, Yukon-K 33.11 40** P **P** **10 01 42.0 +0.7**
baz=268
**NEA2 Nenana 33.22 41** IAmb IAmb 10 01 57.7
comp=Z,14nm,0.7s
**NEA2 Nenana 33.22 41** P **P** **10 01 43.0 +0.8**
baz=269,SNR=8.2
**MCK McKinley 33.27 42** IAmb IAmb 10 01 57.6
comp=Z,15nm,1.0s
**MCK McKinley 33.27 42** P **P** **10 01 43.2 +0.5**
baz=271,SNR=6.1
**RND Reindeer 33.30 43** IAmb IAmb 10 01 57.2
comp=Z,18nm,0.9s
**TOLK Toolik Lake Re 33.34 33** P **P** **10 01 44.1 +0.7**
TOLK IAmb IAmb 10 01 45.1
comp=Z,13nm,0.7s
**TOLK Toolik Lake Re 33.34 33** P **P** **10 01 44.0 +0.6**
baz=262,SNR=12
**KNK Knik Glacier 33.57 46** P **P** **10 01 46.1 +0.7**
**KNK Knik Glacier 33.57 46** P **P** **10 01 46.0 +0.6**
baz=275,SNR=6.9
**MDM Murphy Dome 33.58 40** IAmb IAmb 10 02 00.7
comp=Z,10nm,0.8s
**SML Sawmill 33.61 46** P **P** **10 01 46.3 +0.6**
baz=274,SNR=8.6
**TCOL CIGO, UAF Yank 33.74 40** P **P** **10 01 47.8 +1.1**
baz=270,SNR=9.1
**COLA College 33.74 40** *i* P **P** **10 01 45.2 -1.6**
COLA pmax pmax
comp=Z,19nm,0.8s
**COLA College 33.74 40** P **P** **10 01 47.4 +0.7**
**COLA College 33.74 40** P **P** **10 01 47.4 +0.7**
baz=270
**H24K Noodor Dome 33.75 38** IAmb IAmb 10 02 01.6
comp=Z,6.5nm,0.8s
**H24K Noodor Dome 33.75 38** P **P** **10 01 48.0 +1.0**
baz=268
**CCB Clear Creek Bu 33.76 41** IAmb IAmb 10 02 01.6
comp=Z,10nm,0.8s
**WAT6 Susitna Watana 33.84 44** P **P** **10 01 49.0 +1.2**
baz=273
**POKR Poker Plat Res 33.92 40** P **P** **10 01 49.2 +0.9**
baz=270,SNR=6.3
**DHY Denali Highway 33.98 43** IAmb IAmb 10 01 51.7
comp=Z,17nm,1.3s
**DHY Denali Highway 33.98 43** P **P** **10 01 49.8 +0.7**
baz=273
**SCM Sheep Creek Mo 34.08 46** P **P** **10 01 50.9 +1.1**
baz=275
**HDA Harding Lake 34.13 41** IAmb IAmb 10 02 03.9
comp=Z,10nm,0.6s
**HDA Harding Lake 34.13 41** P **P** **10 01 50.9 +0.7**
baz=271
**34.16 40** IAmb IAmb 10 02 04.7
comp=Z,11nm,0.8s
**IL31 Eielson Array 34.16 40** P **P** **10 01 51.1 +0.7**
comp=Z,4.7nm,0.8s,baz=257,slow=7.7,SNR=27
ILAR LR LR 10 17 44.9
comp=Z,58nm,18.0s,baz=304,slow=40
**GLI Glacier Island 34.28 47** P **P** **10 01 51.9 +0.4**
baz=276
**KLU Klutina 34.78 46** IAmb IAmb 10 02 04.2
comp=Z,18nm,1.2s
**KLU Klutina 34.78 46** P **P** **10 01 56.1 +0.2**
baz=276
**J25K Salcha River, 34.81 41** IAmb IAmb 10 02 09.4
comp=Z,10nm,0.8s
**J25K Salcha River, 34.81 41** P **P** **10 01 55.7 -0.5**
baz=272,SNR=5.7
**Q23K Middleton Isla 34.83 50** P **P** **10 01 56.7 +0.5**
baz=279
**PAX Paxson 34.86 43** IAmb IAmb 10 02 00.7
comp=Z,12nm,1.3s
**PAX Paxson 34.86 43** P **P** **10 01 57.1 +0.5**
baz=275
**EYAK Cordova Ski Ar 34.97 48** P **P** **10 01 58.7 +1.2**
baz=278
**HARP HAARP 35.05 44** P **P** **10 01 59.2 +1.1**
baz=276
**RIDG Independent Ri 35.08 42** IAmb IAmb 10 02 12.4
comp=Z,16nm,0.9s
**RIDG Independent Ri 35.08 42** P **P** **10 01 58.5 0.0**
baz=274
**N25K Chitina, Valde 35.40 46** P **P** **10 02 01.3 +0.1**
baz=277
**DOT Dot Lake 35.44 42** IAmb IAmb 10 02 15.2
comp=Z,7.0nm,0.7s
**SCRK Sand Creek 35.45 42** IAmb IAmb 10 02 15.8
comp=Z,11nm,0.9s
**SCRK Sand Creek 35.45 42** P **P** **10 02 01.7 +0.1**
baz=275,SNR=7.1
**BMRM Bremner River 35.48 47** P **P** **10 02 02.2 +0.3**
baz=278
**L26K Log Cabin Wild 35.82 43** P **P** **10 02 05.8 +1.1**
baz=276
**M26K Nabesna, AK 36.05 44** IAmb IAmb 10 02 23.2
comp=Z,14nm,1.1s
**M26K Nabesna, AK 36.05 44** P **P** **10 02 08.3 +1.5**
baz=278,SNR=9.1
**GUMO Guam 36.06 197** LR LR 10 15 09.5
comp=Z,58nm,20.5s,baz=58,slow=33
**L27K Beaver Creek, 36.50 43** P **P** **10 02 12.2 +1.6**
baz=278
**M27K Edge Creek, AK 36.57 44** IAmb IAmb 10 02 27.9
comp=Z,17nm,1.1s
**M27K Edge Creek, AK 36.57 44** P **P** **10 02 12.3 +1.0**
baz=278,SNR=6.2
**EGAK Eagle 36.60 40** IAmb IAmb 10 02 25.5
comp=Z,17nm,1.0s
**EGAK Eagle 36.60 40** P **P** **10 02 11.7 +0.3**
baz=276,SNR=8.7
**BARN Barnard Glacie 36.88 46** IAmb IAmb 10 02 16.8
comp=Z,12nm,1.0s
**BVCY Beaver Creek 37.03 44** P **P** **10 02 16.3 +1.2**
baz=279,SNR=6.8
**YUK3 Moose Creek 37.32 45** P **P** **10 02 18.8 +1.0**
baz=280
**DAWY Dawson 37.45 41** P **P** **10 02 20.2 +1.6**
**I29M Ogilvie Camp, 37.74 39** IAmb IAmb 10 02 36.1
comp=Z,12nm,1.1s
**I29M Ogilvie Camp, 37.74 39** P **P** **10 02 22.3 +1.2**
baz=278,SNR=5.6
**NRIK Noril'sk 37.78 328** LR LR 10 17 34.3
comp=Z,133nm,20.5s,baz=74,slow=36
**NRIK Noril'sk 37.78 328** *i* P **P** **10 02 21.3 0.0**
NRIK pmax pmax
comp=Z,3.0nm,1.3s
**EPYK Eagle Plains 38.27 37** P **P** **10 02 26.6 +1.1**
baz=278
**YUK6 Outpost Mounta 38.48 46** P **P** **10 02 28.5 +1.0**
baz=283
**HYT Haines Junctio 38.91 46** P **P** **10 02 33.3 +2.2**
**HYT Haines Junctio 38.91 46** P **P** **10 02 33.1 +2.1**
baz=284,SNR=6.0
**INK Inuvik 39.25 34** P **P** **10 02 34.2 +0.7**
comp=Z,6.6nm,0.6s,baz=282,slow=7.2,SNR=20
**INK Inuvik 39.25 34** P **P** **10 02 34.9 +1.4**
INK IAmb IAmb 10 02 48.6
comp=Z,10nm,0.9s
**INK Inuvik 39.25 34** P **P** **10 02 34.9 +1.4**
baz=278,SNR=6.4
**GTA Gaotai 40.02 278** ⇑ P **P** **10 02 40.3 -0.2**
GTA pP pP 10 02 58.4 +1.2
GTA sP sP 10 03 08.0 +2.9
GTA pmax pmax
comp=Z,3.0nm,1.2s
**M31M Drury Creek, Y 40.03 43** IAmb IAmb 10 02 44.5
comp=Z,8.5nm,0.9s
**M31M Drury Creek, Y 40.03 43** P **P** **10 02 42.2 +2.0**
baz=284,SNR=7.1
**WHY Whitehorse 40.20 46** P **P** **10 02 44.1 +2.4**
**WHY Whitehorse 40.20 46** P **P** **10 02 43.6 +1.8**
baz=286
**SKAG Skagway 40.32 48** P **P** **10 02 44.6 +2.1**
baz=287
**FARO Faro, Yukon 40.50 43** P **P** **10 02 45.9 +1.8**
baz=285,SNR=6.2
**P33M Teslin, Yukon 41.31 46** IAmb IAmb 10 02 54.6
comp=Z,14nm,1.1s
**P33M Teslin, Yukon 41.31 46** P **P** **10 02 53.0 +2.1**
baz=288,SNR=10
**MMPY Sheldon Lake, 41.33 42** P **P** **10 02 52.5 +1.5**
baz=286
**A36M Sachs Harbour 41.47 28** P **P** **10 02 53.1 +1.3**
baz=281,SNR=36
**CD2 Chengdu 42.40 265** P **P** **10 03 01.6 +1.6**
**C36M Paulatuk 42.42 31** P **P** **10 03 00.7 +1.1**
baz=285,SNR=19
**ZALV Zalesovo Beam 42.57 305** P **P** **10 03 00.6 -0.5**
comp=Z,1.3nm,0.5s,baz=60,slow=6.4,SNR=3.8
ZALV PcP **PcP** **10 04 52.3 +0.2**
comp=Z,1.0nm,0.6s,baz=149,slow=3.5,SNR=5.1
ZALV LR LR 10 20 30.1
comp=Z,125nm,21.1s,baz=59,slow=36
**DGZ Jazzator, Alta 42.84 298** *i* P **P** **10 03 01.2 -2.3**
DGZ pmax pmax
comp=Z,3.0nm,1.1s
DGZ MLR MLR
comp=Z,160nm,17.0s

**GYA Guiyang 43.47 257** ⇑P **P 10 03 09.0 +0.2**
GYA pmax pmax
comp=Z,15nm,1.1s
**GOMU GeErMu 45.09 277** P **P 10 03 21.3 -0.6**
GOMU PcP **PcP 10 05 02.9 +1.4**
GOMU pmax pmax
comp=Z,4.0nm,0.9s
GOMU pmax pmax
comp=Z,88nm,4.7s
**GRNB Grenville Isla 45.11 54** P **P 10 03 24.7 +3.3**
**WMQ Urumqi 45.48 290** *e*P **P 10 03 25.3 +0.7**
WMQ pmax pmax
comp=Z,11nm,0.7s
WMQ LR LR
comp=Z,140nm,19.9s
**PZH PanZhiHua 46.64 262** P **P 10 03 33.4 -0.5**
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,130nm,5.9s
**MK31 Makanchi Array 47.24 297** P **P 10 03 37.4 -0.9**
MK31 pmax pmax
comp=Z,1.0nm,0.7s
**MK31 Makanchi Array 47.24 297** P **P 10 03 37.4 -0.9**
**MKAR Makanchi Array 47.24 297** P **P 10 03 36.5 -1.8**
comp=Z,0.6nm,0.6s,baz=72,slow=6.1,SNR=3.9
MKAR LR LR 10 24 45.3
comp=Z,160nm,19.4s,baz=36,slow=38
**MKAR Makanchi Array 47.24 297** P **P 10 03 37.0 -1.3**
**MKAR Makanchi Array 47.24 297** P **P 10 03 37.0 -1.3**
**KURK Kurchatov 47.40 303** *i* P **P 10 03 38.6 -0.8**
KURK pmax pmax
comp=Z,2.0nm,0.7s
KURK MLR MLR
comp=Z,171nm,19.8s
**KURK Kurchatov 47.40 303** P **P 10 03 39.2 -0.2**
KURK IAmb IAmb 10 03 55.6
comp=Z,12nm,1.5s
**KURBB Kurchatov Arra 47.50 303** P **P 10 03 38.6 -1.6**
comp=Z,2.8nm,0.7s,baz=62,slow=8.9,SNR=19
KURBB LR LR 10 24 35.6
comp=Z,149nm,18.5s,baz=44,slow=37
**RES Resolute Bay 48.52 19** P **P 10 03 47.7 0.0**
comp=Z,5.2nm,0.7s,baz=291,slow=8.7,SNR=13
RES LR LR 10 27 11.5
comp=Z,65nm,18.1s,baz=304,slow=40
**YKA Yellowknife A 48.52 38** P **P 10 03 49.1 +1.2**
comp=Z,7.2nm,0.9s,baz=297,slow=7.6,SNR=63
YKA PcP **PcP 10 05 13.7 +1.0**
comp=Z,0.7nm,0.9s,baz=299,slow=2.9,SNR=3.9
**NOR Nord 49.84 358** *i* P **P 10 03 56.2 -1.5**
**BVAR Borovoye Array 50.65 309** P **P 10 04 02.4 -1.8**
comp=Z,0.6nm,0.4s,baz=47,slow=4.9,SNR=2.4
BVAR PcP **PcP 10 05 20.4 -0.2**
comp=Z,1.6nm,0.8s,baz=49,slow=15,SNR=4.9
**KBS Kingsbay 50.74 351** P **P 10 04 03.5 -1.0**
KBS pmax pmax
comp=Z,56nm,1.4s
**KBS Kingsbay 50.74 351** P **P 10 04 03.5 -1.0**
**SPITS Spitsbergen Ar 50.90 350** P **P 10 04 03.7 -2.0**
comp=Z,7.4nm,1.0s,baz=53,slow=7.6,SNR=1.8
**TULEG Thule 51.91 12** P **P 10 04 13.5 +0.2**
TULEG IAmb IAmb 10 04 13.8
comp=Z,9.1nm,0.8s
**NEEM North Greenlan 53.03 7** *i* P **P 10 04 19.9 -2.1**
NEEM IAmb IAmb 10 04 21.4
comp=Z,10nm,1.0s
**CHTO Chiang Mai 53.89 257** P **P 10 04 29.4 +0.8**
CHTO pmax pmax
comp=Z,15nm,1.1s
**CHTO Chiang Mai 53.89 257** P **P 10 04 29.4 +0.8**
CHTO IAmb IAmb 10 04 30.8
comp=Z,15nm,1.1s
**EDM Edmonton 53.97 48** P **P 10 04 30.3 +1.4**
EDM pmax pmax
comp=Z,15nm,0.8s
**EDM Edmonton 53.97 48** P **P 10 04 30.3 +1.4**
**CM31 Chiang Mai Arr 54.15 257** P **P 10 04 31.4 +0.9**
CM31 IAmb IAmb 10 04 32.4
comp=Z,9.0nm,0.8s
**CMAR Chiang Mai Arr 54.15 257** P **P 10 04 31.1 +0.6**
comp=Z,7.2nm,0.9s,baz=30,slow=7.6,SNR=30
**CMAR Chiang Mai Arr 54.15 257** P **P 10 04 31.7 +1.2**
**CMAR Chiang Mai Arr 54.15 257** P **P 10 04 31.7 +1.2**
**AAK Ala-Archa 54.17 296** P **P 10 04 29.8 -0.7**
comp=Z,0.6nm,0.4s,baz=90,slow=1.0,SNR=2.3
AAK LR LR 10 28 17.8
comp=Z,123nm,19.8s,baz=39,slow=37
**AAK Ala-Archa 54.17 296** *ce*P **P 10 04 28.5 -2.1**
AAK pmax pmax
comp=Z,10.0nm,3.7s
AAK MLR MLR
comp=Z,105nm,20.0s
**ARU Arti 54.47 317** P **P 10 04 30.1 -2.2**
comp=Z,1.2nm,0.5s,baz=302,slow=2.9,SNR=6.0
ARU LR LR 10 32 37.4
comp=Z,88nm,19.4s,baz=31,slow=41
**ARU Arti 54.47 317** *d i* P **P 10 04 30.3 -2.0**
ARU 10 05 33.7
ARU S **S 10 12 04.0 -1.5**
ARU SS **SS 10 15 48.3 +0.3**
ARU pmax pmax
comp=Z,36nm,3.9s
**ARU Arti 54.47 317** P **P 10 04 32.2 -0.1**
ARU IAmb IAmb 10 04 33.8
comp=Z,11nm,1.2s
**KSH Kashi 55.15 292** P **P 10 04 41.5 +3.8**
**WALA Waterton Lakes 56.14 52** P **P 10 04 46.3 +1.7**
**ARCES ARCESS Array B 56.42 341** P **P 10 04 44.0 -2.1**
comp=Z,4.2nm,1.0s,baz=42,slow=8.6,SNR=1.8
ARCES LR LR 10 32 48.8
comp=Z,171nm,18.7s,baz=48,slow=40
**PRGR Permogore 56.42 327** *e*P P 10 04 37.0 -9.2
PRGR pmax pmax
comp=Z,60nm,1.5s
**O02D Mt. Diablo Mer 56.54 65** P **P 10 04 49.3 +1.7**
baz=309
**KIRV Kirov 57.00 323** LR LR 10 33 36.6
comp=Z,238nm,20.0s,baz=23,slow=41
**PLID Pearl Lake 57.44 57** P **P 10 04 56.2 +2.2**
PLID IAmb IAmb 10 05 12.7
comp=Z,7.9nm,1.0s
**HNR Honiara 58.07 174** LR LR 10 26 23.2
comp=Z,63nm,21.8s,baz=6.5,slow=32
**ABKAR Akbulak array 58.19 310** P **P 10 04 57.6 -1.3**
**PMG Port Moresby 58.31 189** LR LR 10 29 36.9
comp=Z,40nm,18.4s,baz=334,slow=35
**FFC Flin Flon 58.35 42** P **P 10 05 02.1 +2.2**
FFC pmax pmax
comp=Z,20nm,1.5s
**FFC Flin Flon 58.35 42** P **P 10 05 02.1 +2.2**
**AKTO Aktyubinsk 58.41 312** LR LR 10 30 53.2
comp=Z,154nm,18.2s,baz=18,slow=37
**SUMG Summit 58.62 5** P **P 10 05 02.4 +0.4**
SUMG pmax pmax
comp=Z,22nm,1.0s
**SUMG Summit 58.62 5** *i* P **P 10 05 01.0 -1.0**
SUMG IAmb IAmb 10 05 02.6
comp=Z,9.4nm,0.9s
**SUMG Summit 58.62 5** P **P 10 05 02.4 +0.4**
**EGMT Eagleton 58.95 51** P **P 10 05 06.7 +2.4**
baz=310
**KLMR Klimovskoe 59.10 329** *e*P **P 10 05 02.5 -2.5**
KLMR pmax pmax
comp=Z,22nm,1.5s
**KLMR Klimovskoe 59.10 329** *e*P **P 10 05 02.5 -2.5**
KLMR AMP 10 05 08.1
comp=Z,22nm,1.5s
**HLID Hailey 59.29 58** P **P 10 05 09.2 +2.3**
baz=310
**NVAR Mina Array Bea 60.34 64** P **P 10 05 16.4 +2.2**
comp=Z,0.8nm,0.6s,baz=295,slow=8.9,SNR=4.3
**RLMT Red Lodge 61.09 54** P **P 10 05 21.1 +1.9**
baz=312
**DGMT Dagmar 61.47 48** P **P 10 05 22.5 +1.0**
**DGMT Dagmar 61.47 48** P **P 10 05 22.8 +1.3**
baz=313
**LAO LASA Array 61.64 51** P **P 10 05 24.5 +1.9**
LAO IAmb IAmb 10 05 26.4
comp=Z,8.7nm,0.9s
**LAO LASA Array 61.64 51** P **P 10 05 24.1 +1.4**
baz=312,SNR=5.2
**ICESG Greenland Ices 61.98 6** *i* P **P 10 05 24.1 -0.8**
ICESG IAmb IAmb 10 05 25.5
comp=Z,22nm,0.7s
**DUG Dugway, Tooele 62.39 60** P **P 10 05 29.2 +1.3**
baz=312
**FURC Furnace Creek, 62.49 65** P **P 10 05 30.5 +2.1**
baz=312
**BW06 Boulder Array 62.50 56** P **P 10 05 29.5 +0.8**
baz=312
**PD31 Pinedale Array 62.50 56** P **P 10 05 30.3 +1.6**
**PDAR Pinedale Array 62.50 56** P **P 10 05 30.8 +2.1**
comp=Z,1.8nm,0.8s,baz=313,slow=2.0,SNR=14
**PDAR Pinedale Array 62.50 56** P **P 10 05 30.1 +1.4**
**KBL Kabul 62.58 292** P **P 10 05 29.4 +0.1**
KBL pmax pmax
comp=Z,5.0nm,1.0s
**KBL Kabul 62.58 292** P **P 10 05 29.4 +0.1**
KBL IAmb IAmb 10 05 30.8
comp=Z,5.0nm,1.0s
**FRB Frobisher Bay 62.72 20** LR LR 10 34 23.6
comp=Z,69nm,18.7s,baz=20,slow=38
**FRB Frobisher Bay 62.72 20** P **P 10 05 29.4 -0.1**
**FINES FINESS Array B 62.81 335** P **P 10 05 28.7 -1.4**
comp=Z,3.1nm,0.9s,baz=28,slow=8.6,SNR=9.3
FINES LR LR 10 35 07.2
comp=Z,205nm,19.6s,baz=55,slow=38
**FINES FINESS Array B 62.81 335** *i* P **P 10 05 30.0 -0.1**
FINES pmax pmax
comp=Z,1.0nm,0.6s
**FINES FINESS Array B 62.81 335** P **P 10 05 29.5 -0.6**
**PSUT Pine Spring 62.89 62** P **P 10 05 33.5 +2.1**
**SFJD Kangerlussuaq 62.95 11** LR LR 10 34 52.8
comp=Z,74nm,18.2s,baz=6.5,slow=38
**SFJD Kangerlussuaq 62.95 11** P **P 10 05 31.2 +0.2**
SFJD pmax pmax
comp=Z,25nm,1.3s
**SFJD Kangerlussuaq 62.95 11** P **P 10 05 31.2 +0.2**
**NLU North Lily Min 62.97 60** P **P 10 05 34.2 +2.4**
**DY2G Dye2 63.96 9** *i* P **P 10 05 36.6 -1.4**
DY2G IAmb IAmb 10 05 51.3
comp=Z,7.0nm,0.6s
**ULM Lac du Bonnet 64.14 42** P **P 10 05 39.3 +0.2**
comp=Z,3.5nm,0.7s,baz=270,slow=5.3,SNR=4.9
ULM LR LR 10 33 06.8
comp=Z,20nm,21.3s,baz=39,slow=35
**ULM Lac du Bonnet 64.14 42** IAmb IAmb 10 05 52.1
comp=Z,13nm,1.5s
**GMRC Granite Mounta 64.34 66** P **P 10 05 42.6 +1.7**
baz=313
**SRU San Rafael Swe 64.42 59** P **P 10 05 43.2 +1.8**
SRU pmax pmax
comp=Z,5.0nm,0.7s
**SRU San Rafael Swe 64.42 59** P **P 10 05 43.2 +1.8**
SRU IAmb IAmb 10 05 45.6
comp=Z,5.2nm,0.7s
**RSSD Black Hills 64.52 52** P **P 10 05 43.2 +1.2**
RSSD pmax pmax
comp=Z,14nm,1.3s
**RSSD Black Hills 64.52 52** P **P 10 05 43.2 +1.2**
RSSD IAmb IAmb 10 05 44.3
comp=Z,14nm,1.3s
**RSSD Black Hills 64.52 52** P **P 10 05 42.9 +0.9**
baz=314
**PFO Pinyon Flats O 64.65 67** LR LR 10 33 30.2
comp=Z,52nm,18.2s,baz=159,slow=35
**VSU Vasula 65.07 333** *i* P **P 10 05 41.0 -4.0**
**AGMN Agassiz Nation 65.56 44** P **P 10 05 48.8 +0.4**
baz=317
**N23A Red Feather La 65.75 55** P **P 10 05 49.4 -0.7**
**N23A Red Feather La 65.75 55** P **P 10 05 49.9 -0.2**
baz=315
**WUAZ Wupatki 66.40 63** P **P 10 05 55.9 +1.8**
baz=314
**NC405 NORSAR Array S 66.60 342** P **P 10 05 54.3 -0.6**
**NC204 NORSAR Array S 66.65 342** P **P 10 05 55.7 +0.4**
**ISCO Idaho Springs 66.69 56** P **P 10 05 57.1 +0.9**
ISCO pmax pmax
comp=Z,3.0nm,0.9s
**ISCO Idaho Springs 66.69 56** P **P 10 05 57.1 +0.9**
**ISCO Idaho Springs 66.69 56** P **P 10 05 57.0 +0.9**
baz=315
**NB2 NORSAR Subarra 66.77 342** P **P 10 05 55.0 -1.0**
comp=Z,2.8nm,0.8s,baz=26,slow=6.5
**NOA NORSAR Array B 66.77 342** P **P 10 05 55.2 -0.8**
comp=Z,1.8nm,0.8s,baz=25,slow=6.5,SNR=5.3
NOA LR LR 10 38 43.6
comp=Z,106nm,18.2s,baz=15,slow=39
**HFS Hagfors 67.06 340** P **P 10 05 56.8 -0.9**
comp=Z,4.3nm,0.8s,baz=76,slow=6.3,SNR=5.9
HFS LR LR 10 40 56.3
comp=Z,78nm,19.3s,baz=355,slow=41
**S22A 4UR Ranch, Cre 67.46 58** P **P 10 06 02.5 +1.4**
baz=315
**EYMN Ely 67.78 42** P **P 10 06 02.6 0.0**
baz=319
**NACGM Naroch 67.99 331** *i* P **P 10 06 04.7 +1.0**
**KNRA Kununurra 68.27 207** P **P 10 06 07.8 +2.0**
KNRA IAmb IAmb 10 06 08.3
comp=Z,8.8nm,1.0s
**ECSD EROS Data Cent 68.54 48** P **P 10 06 08.3 +0.9**
**ECSD EROS Data Cent 68.54 48** P **P 10 06 08.0 +0.7**
baz=318
**E38A The Farm, Brul 68.77 43** P **P 10 06 09.8 +1.1**
E38A IAmb IAmb 10 06 10.6
comp=Z,12nm,1.3s
**CTA Charters Tower 68.97 189** LR LR 10 31 54.9
comp=Z,28nm,21.6s,baz=68,slow=32
**SPMN Marine on St. 69.24 44** P **P 10 06 11.8 +0.1**
baz=319
**MSVF Nonsavu 69.26 157** LR LR 10 33 27.4
comp=Z,38nm,21.5s,baz=156,slow=33
**ANMO Albuquerque 69.66 60** *i* P **P 10 06 11.9 -2.7**
ANMO pmax pmax
comp=Z,11nm,2.9s
**ANMO Albuquerque 69.66 60** P **P 10 06 16.0 +1.3**
baz=316
**KIV Kislovodsk 70.37 315** *e*P **P 10 06 15.7 -3.0**
KIV pmax pmax
comp=Z,7.0nm,1.0s
KIV MLR MLR
comp=Z,82nm,17.0s
**KBZ Khabaz 70.44 315** LR LR 10 39 30.5
comp=Z,119nm,18.6s,baz=22,slow=38
**319A Douglas 70.55 65** P **P 10 06 21.1 +1.1**
**AKASG Malin Array Be 70.63 327** P **P 10 06 18.8 -1.3**
comp=Z,1.1nm,0.5s,baz=31,slow=6.4,SNR=5.5
AKASG LR LR 10 40 20.8
comp=Z,161nm,18.1s,baz=5.5,slow=38
**AKASG Malin Array Be 70.63 327** *i* P **P 10 06 21.1 +1.0**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**WRAB Tennant Creek 70.83 201** P **P 10 06 22.4 +0.9**
WRAB pmax pmax
comp=Z,9.0nm,1.3s
**WRAB Tennant Creek 70.83 201** P **P 10 06 22.4 +0.9**
**WRA Warramunga Arr 70.84 201** P **P 10 06 21.8 +0.2**
comp=Z,2.0nm,0.9s,baz=15,slow=6.2,SNR=5.5
**SCHQ Schefferville 70.95 24** P **P 10 06 22.6 +0.7**
comp=Z,2.3nm,0.4s,baz=330,slow=4.7,SNR=20
**DZM Mont Dzumac 71.21 169** LR LR 10 30 50.6
comp=Z,108nm,20.5s,baz=34,slow=30
**GNI Garni 72.26 311** LR LR 10 43 48.2
comp=Z,95nm,18.1s,baz=9.0,slow=40
**MSTX Muleshoe 72.46 58** P **P 10 06 32.9 +1.4**
baz=318
**MNTX Cornudas Mount 72.62 62** P **P 10 06 34.1 +1.8**
baz=317
**P38A Dawn 73.15 49** P **P 10 06 36.1 +0.8**
**VLDQ Val d'Or 73.34 34** P **P 10 06 36.1 -0.2**
VLDQ IAmb IAmb 10 06 36.6
comp=Z,14nm,1.2s
**ASAR Alice Springs 74.53 200** P **P 10 06 43.5 +0.1**
comp=Z,0.9nm,0.8s,baz=15,slow=5.5,SNR=6.6
**BUR08 Bucovina Ar. S 74.64 327** P **P 10 06 43.6 -0.4**
**BURAR Bucovina Array 74.66 327** P **P 10 06 44.4 +0.3**
BURAR pmax pmax
comp=Z,4.0nm,1.1s
**BURAR Bucovina Array 74.66 327** P **P 10 06 44.4 +0.3**
**EKA Eskdalemuir Ar 74.71 347** P **P 10 06 43.9 -0.2**
comp=Z,2.5nm,0.7s,baz=21,slow=5.3,SNR=7.5
**DPC Dobruska-Polom 75.14 334** *e*P **P 10 06 46.9 +0.1**
**DPC Dobruska-Polom 75.14 334** *e*P **P 10 06 46.9 +0.1**
**CLL Collm 75.20 337** *e*P **P 10 06 47.0 0.0**
**LANS Liptovska Anna 75.26 332** *e*P **P 10 06 48.9 +1.4**
**LANS Liptovska Anna 75.26 332** *e*P **P 10 06 48.9 +1.4**
**MORC Moravsky Berou 75.30 333** P **P 10 06 47.8 +0.1**
MORC pmax pmax
comp=Z,10.0nm,1.2s
**MORC Moravsky Berou 75.30 333** P **P 10 06 47.8 +0.1**
MORC IAmb IAmb 10 06 49.5
comp=Z,9.8nm,1.2s
**MORC Moravsky Berou 75.30 333** *e*P **P 10 06 48.2 +0.5**
**TX31 Lajitas Ar. Si 75.35 62** IAmb IAmb 10 06 52.1
comp=Z,10nm,1.1s
**TXAR Lajitas Array 75.35 62** P **P 10 06 50.0 +1.6**
comp=Z,1.4nm,0.6s,baz=299,slow=4.1,SNR=22
**VRAC Vranov 75.99 333** LR LR 10 43 06.8
comp=Z,195nm,18.4s,baz=360,slow=38
**VRAC Vranov 75.99 333** *e*P **P 10 06 51.5 -0.2**
**U40A Yellville 76.00 50** P **P 10 06 52.6 +0.6**
**U40A Yellville 76.00 50** P **P 10 06 52.5 +0.5**
baz=321
**VYHS Vyhne 76.03 332** *e*P **P 10 06 53.0 +1.1**
**VYHS Vyhne 76.03 332** *e*P **P 10 06 53.0 +1.1**
**JAVC Velka Javorina 76.07 333** *e*P **P 10 06 53.7 +1.5**
**MLR Muntele Rosu 76.20 326** LR LR 10 43 36.7
comp=Z,137nm,18.6s,baz=357,slow=38
**KRUC Moravsky 76.27 333** *e*P **P 10 06 53.5 +0.3**
**W39A Magazine 76.42 52** P **P 10 06 54.9 +0.6**
baz=321
**O48B Farmland 76.63 43** P **P 10 06 55.9 +0.5**
baz=324
**JCT Junction City 76.73 59** P **P 10 06 57.0 +0.9**
baz=319
**WSAR Wadi Sarin 76.98 290** LR LR 10 44 58.6
comp=Z,70nm,19.0s,baz=64,slow=39
**KHC Kasperske Hory 77.02 335** *e*P **P 10 06 58.2 +0.7**
**KHC Kasperske Hory 77.02 335** *e*P **P 10 06 58.2 +0.7**
**MIAR Mount Ida 77.03 52** P **P 10 06 58.7 +1.0**
baz=321
**W41B Gary Mavity, V 77.23 51** P **P 10 06 59.8 +0.9**
baz=322
**GERES GERESS Array B 77.24 335** P **P 10 06 58.3 -0.5**
comp=Z,0.5nm,0.6s,baz=72,slow=5.7,SNR=5.0
GERES LR LR 10 44 28.5
comp=Z,204nm,19.4s,baz=1.0,slow=38
**P49A Miami Univ. Ec 77.42 43** P **P 10 07 00.6 +0.8**
baz=324
**CONA Conrad Observa 77.45 333** *e*P **P 10 07 01.5 +1.5**
comp=Z,3.8nm,0.8s
**MEM Membach 77.55 340** *d*P **P 10 06 59.5 -0.8**
**ACSO Alum Creek Sta 77.62 42** P **P 10 07 01.3 +0.4**
baz=325
**M53A WI Miller and 77.62 40** P **P 10 07 01.5 +0.5**
baz=326
**WCI Wyandotte Cave 77.74 45** P **P 10 07 03.1 +1.5**
WCI pmax pmax
comp=Z,9.0nm,0.9s
**WCI Wyandotte Cave 77.74 45** P **P 10 07 02.3 +0.6**
baz=324
**BRTR Keskin Array B 77.85 318** P **P 10 07 02.0 -0.4**
comp=Z,2.5nm,1.1s,baz=46,slow=4.2,SNR=4.1
BRTR LR LR 10 45 12.9
comp=Z,85nm,18.1s,baz=342,slow=39
**MOA Molln 77.98 334** *e*P **P 10 07 02.8 -0.1**
comp=Z,8.8nm,1.6s
**BMRD Maredsous 78.10 341** *d*P **P 10 07 02.8 -0.6**
**RCHB Rochefort 78.14 341** *d*P **P 10 07 03.3 -0.3**
**N54A Moraine State 78.31 39** P **P 10 07 05.2 +0.4**
baz=327
**SOKA Soboth 78.82 333** *e*P **P 10 07 08.2 +0.6**
comp=Z,9.7nm,1.2s
**KBA Koelnbreinsper 78.95 334** *e*P **P 10 07 09.6 +1.2**
comp=Z,11nm,0.9s
**WATA Walderalm 79.21 336** *e*P **P 10 07 11.5 +1.7**
comp=Z,16nm,1.5s
**WTTA Wattenberg 79.26 336** *e*P **P 10 07 11.4 +1.3**
comp=Z,11nm,1.0s
**MOTA Moosalm 79.33 336** *e*P **P 10 07 10.0 -0.4**
comp=Z,18nm,1.5s
**ABTA Abfaltersbach 79.49 335** *e*P **P 10 07 12.3 +1.1**
comp=Z,9.4nm,1.5s
**VTS Vitosha 79.67 326** P **P 10 07 12.8 +0.5**
VTS pmax pmax
comp=Z,8.0nm,1.3s
**DAVA Damuels 79.70 337** *e*P **P 10 07 13.6 +1.2**
comp=Z,2.5nm,0.5s
**FETA Feichten 79.72 336** *e*P **P 10 07 14.3 +1.7**
comp=Z,9.4nm,1.2s
**N59A State Game Lan 80.07 37** P **P 10 07 14.6 +0.2**
baz=329
**TUE Stuetta 80.60 337** P **P 10 07 18.1 +0.7**
TUE IAmb IAmb 10 07 19.5
comp=Z,10nm,1.0s
**PAL Palisades 80.72 35** P **P 10 07 17.4 -0.4**
baz=330
**STKA Stephens Creek 81.16 192** P **P 10 07 20.8 +0.8**
comp=Z,2.1nm,0.9s,baz=6.8,slow=18,SNR=3.3
STKA LR LR 10 43 38.1
comp=Z,23nm,20.1s,baz=23,slow=36
**MMAI Mount Meron Ar 82.49 313** P **P 10 07 27.0 -0.4**
comp=Z,1.2nm,0.4s,baz=33,slow=6.3,SNR=6.5
MMAI LR LR 10 47 18.9
comp=Z,49nm,18.6s,baz=156,slow=38
**RAYN Ar Rayn 84.64 300** P **P 10 07 39.0 +0.5**
RAYN pmax pmax
comp=Z,8.0nm,1.2s
**RAYN Ar Rayn 84.64 300** P **P 10 07 39.0 +0.5**
RAYN IAmb IAmb 10 07 39.5
comp=Z,7.7nm,1.2s
**NHSC New Hope 84.78 44** P **P 10 07 38.7 -0.3**
baz=327
**IDI Anoyia 85.34 321** LR LR 10 49 01.8
comp=Z,54nm,19.0s,baz=274,slow=38
**EIL Elat 85.44 311** P **P 10 07 41.9 -0.5**
comp=Z,3.1nm,0.6s,baz=195,slow=4.2,SNR=4.8
EIL LR LR 10 49 20.1
comp=Z,61nm,19.7s,baz=66,slow=38
**CMIG Matias Romero 89.86 64** LR LR 10 50 13.6
comp=Z,32nm,18.2s,baz=330,slow=37
**ESDC Sonseca Array 90.04 344** LR LR 10 52 49.8
comp=Z,103nm,20.3s,baz=338,slow=38
**H03N2 Juan Fernandez 137.40 90** T T 12 47 36.0
baz=310,slow=77,SNR=44
**H03N1 Juan Fernandez 137.41 90** T T 12 47 37.4
baz=310,slow=77,SNR=16
**H03N3 Juan Fernandez 137.41 90** T T 12 47 37.7
baz=310,slow=77,SNR=23

**IDC 18 10:07:29.7±2.0, 2°21.N×126°.68E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.2/30, mbtmp3.3/4, Error ellipse: s-maj=121.9km s-min=25.4km az=69.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.20** | **183** | P | P | 10 12 06.3 | +0.1 |
| | 1.0nm,0.7s,baz=17,slow=11,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.26** | **161** | P | P | 10 12 38.2 | -0.9 |
| | 0.8nm,0.5s,baz=340,slow=11,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **26.66** | **165** | P | P | 10 13 11.8 | +1.3 |
| | 0.2nm,0.4s,baz=343,slow=11,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.77** | **326** | P | P | 10 17 29.4 | -0.3 |
| | 0.1nm,0.3s,baz=128,slow=7.8,SNR=4.8 | | | | | | |

**TAP 18 10:13:09.4, 23°.01N×120°.83E, h5km±2km, ML0.9, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYT** | **Tauyuan** | **0.17** | **336** | P | Pg | 10 13 13.5 | +0.7 |
| | baz=338 | | | | | | |
| STYT | | | | S | Sg | 10 13 15.4 | +0.4 |
| | baz=338 | | | | | | |
| **STYH** | **Taoyuan** | **0.17** | **342** | P | Pg | 10 13 13.3 | +0.6 |
| | baz=342 | | | | | | |
| STYH | | | | S | Sg | 10 13 15.8 | +0.8 |
| | baz=342 | | | | | | |
| **SLGT** | **Liugui** | **0.17** | **264** | *e*P | Pg | 10 13 13.7 | +0.9 |
| | baz=264 | | | | | | |
| **ELDTW** | **Lidau** | **0.25** | **44** | *e*P | Pg | 10 13 15.0 | +0.7 |
| | baz=45 | | | | | | |
| **LONT** | **Longtian** | **0.29** | **111** | *e*P | Pg | 10 13 15.6 | +0.4 |
| | baz=111 | | | | | | |
| **SSD** | **Sandimen** | **0.32** | **215** | *e*P | Pb | 10 13 16.7 | -0.9 |
| | baz=213 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.44** | **205** | *e*P | Pg | 10 13 18.4 | +0.5 |
| | baz=211 | | | | | | |

**TAP 18 10:13:13.3, 23°.04N×120°.79E, h12km±1km, ML1.0, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYT** | **Tauyuan** | **0.13** | **348** | *e*P | Pb | 10 13 17.3 | -0.5 |

baz=351
STYT eS Sg 10 13 19.3 +0.3
baz=351
**SLGT Liugui 0.14 252** eP Pg 10 13 16.7 +0.1
baz=253
SLGT S Sg 10 13 19.9 +0.9
baz=253
**SLGT Liugui 0.14 252** eS Pg 10 13 16.2 -0.4
baz=264
**STYH Taoyuan 0.14 356** eP Pb 10 13 17.3 -0.5
baz=355
STYH S Sg 10 13 19.6 +0.6
baz=355
**ELDTW Lidau 0.26 54** eP Pg 10 13 18.8 0.0
baz=54
ELDTW eS Sg 10 13 22.6 +0.1
baz=54
**ELDTW Lidau 0.26 54** eS Pg 10 13 18.8 0.0
baz=45
**WTP Ta-pu 0.26 323** eP Pb 10 13 20.4 +0.4
baz=324
**TPUB Ta-pu 0.30 331** eP Pg 10 13 19.8 +0.3
baz=331
**SSD Sandimen 0.32 206** eP Pb 10 13 20.4 -0.6
baz=203
**CHN4 Tsaushan 0.36 331** eP Pg 10 13 20.1 -0.4
baz=330
**MASBT Mashibuluo 0.44 199** eP Pg 10 13 22.5 +0.5
baz=201

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*CNRM **18** 10:17:54.5, 35°.54N×3°.80W, h20km, ml2.8*
*SFS **18** 10:17:56.0, 35°.45N×3°.77W, h34km, ML2.7, ALBORAN S.*
**ISC 18 10:17:53.5±1.2, 35°.55N±0°.03×3°.72W±0°.04, h13km±9km, n13, σ1§15/23, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.38** | **209** | P | **Pg** | **10 18 01.0** | **-0.1** |
| PALE | | | | S | **Sg** | **10 18 06.6** | **+0.2** |
| **GOG** | **Mont Gurugu** | **0.68** | **119** | P | **Pn** | **10 18 10.0** | **+1.1** |
| GOG | | | | S | **Sn** | **10 18 18.6** | **-0.8** |
| **CHAS** | **Isla Isabel II** | **1.11** | **109** | P | **Pn** | **10 18 15.4** | **+0.6** |
| CHAS | | | | S | **Sn** | **10 18 31.1** | **+1.0** |
| **TAF** | **Taforalt** | **1.30** | **124** | P | **Pg** | **10 18 18.4** | **-0.1** |
| TAF | | | | S | **Sn** | **10 18 34.2** | **-0.5** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **335** | P | **Pg** | **10 18 19.3** | **+0.1** |
| EMAL | | | | S | **Sg** | **10 18 36.2** | **-0.4** |
| EMAL | | | | eCod | | 10 19 31.6 | |
| **CEU** | **Ceuta** | **1.39** | **285** | P | Pn | 10 18 08.5 | -10 |
| CEU | | | | S | Sn | 10 18 21.4 | -15 |
| **JBK** | **JBK** | **1.54** | **142** | P | **Pg** | **10 18 21.6** | **-1.5** |
| JBK | | | | S | **Sg** | **10 18 42.5** | **-0.6** |
| **IFR** | **Ifrane** | **2.34** | **210** | P | **Pg** | **10 18 38.5** | **+0.1** |
| IFR | | | | S | **Sn** | **10 18 59.3** | **-1.3** |
| **MD31** | **MD31** | **2.81** | **198** | P | **Pn** | **10 18 39.4** | **+1.1** |
| MD31 | | | | S | **Sn** | **10 19 11.7** | **-0.5** |
| **MDT** | **Midelt** | **2.83** | **195** | P | **Pn** | **10 18 39.8** | **+1.2** |
| MDT | | | | S | **Sn** | **10 19 12.5** | **-0.1** |
| **PVAQ** | **Vaqueiros** | **3.72** | **301** | ePn | **Pn** | **10 18 52.7** | **+2.1** |
| PVAQ | | | | eSn | **Sn** | **10 19 32.5** | **-1.8** |
| PVAQ | | | | A | A | 10 19 48.0 | |
| | 4.5nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **301** | P | **Pn** | **10 18 50.7** | **0.0** |
| PVAQ | | | | S | **Sn** | **10 19 32.1** | **-2.2** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **305** | ePn | **Pn** | **10 19 04.7** | **+1.5** |
| PNCL | | | | A | A | 10 19 57.7 | |
| | 1.2nm,0.8s | | | | | | |

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*DNK **18** 10:25:47.5±0.9, 59°.86N×24°.35E, h0km, ML2.1, Suspected explosion*
*NAO **18** 10:25:49.9±1.3, 59°.87N×24°.20E, ML2.3*
*HEL **18** 10:25:50.0, 59°.84N×24°.10E, h0km, ML2.4, Explosion*
*UPP **18** 10:25:50.0±2.7, 59°.94N×24°.04E, h0km, ML2.6, Suspected explosion*
*BER **18** 10:25:51.9±4.0, 59°.83N×24°.05E, h0km, ML2.0, ML2.4(HEL), Suspected explosion*
*IDC **18** 10:25:51.8±1.0, 59°.99N×23°.99E, h0km, mb1 3.2/4, mb1mx3.0/41, mbtmp3.1/4, ML2.9/4, Error ellipse: s-maj=11.9km s-min=5.6km az=146.0*
**ISC 18 10:25:47.9±0.6, 59°.84N±0°.02×24°.02E±0°.02, h0km, n71, σ1§61/110, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.42** | **26** | eP | **Pg** | **10 25 57.1** | **+1.1** |
| MEF | | | | eS | **Sg** | **10 26 02.5** | **+1.0** |
| **EE01** | **Perakula, Nova** | **0.67** | **198** | eP | **Pg** | **10 26 01.6** | **+1.0** |
| EE01 | | | | eS | **Sg** | **10 26 10.1** | **+0.9** |
| **EE02** | **Kiisa, Saku** | **0.74** | **152** | eP | **Pg** | **10 26 02.7** | **+0.7** |
| EE02 | | | | eS | **Sg** | **10 26 12.0** | **+0.6** |
| **NUR** | **Nurmijrvi** | **0.74** | **25** | eP | **Pg** | **10 26 02.8** | **+0.7** |
| NUR | | | | eS | **Sg** | **10 26 12.2** | **+0.6** |
| **EE06** | **Soera, Palade,** | **1.06** | **215** | eP | **Pb** | **10 26 09.1** | **+0.1** |
| EE06 | | | | eS | **Sb** | **10 26 23.1** | **-0.2** |
| **ARBE** | **Arbavere** | **1.08** | **111** | eP | **Pg** | **10 26 08.8** | **+0.3** |
| ARBE | | | | eS | **Sg** | **10 26 22.4** | **-0.1** |
| **MTSE** | **Matsula** | **1.13** | **185** | eP | **Pg** | **10 26 09.7** | **+0.1** |
| **MTSE** | **Matsula** | **1.13** | **185** | eP | **Pb** | **10 26 10.3** | **0.0** |
| MTSE | | | | eS | **Sg** | **10 26 24.8** | **+0.6** |
| **PVF** | **Pernaja** | **1.16** | **52** | eP | **Pg** | **10 26 10.2** | **+0.1** |
| PVF | | | | eS | **Sg** | **10 26 24.7** | **-0.4** |
| **EE03** | **Tooma soojaam,** | **1.51** | **129** | eP | **Pn** | **10 26 16.4** | **+0.3** |
| EE03 | | | | eS | **Sg** | **10 26 35.5** | **-0.8** |
| **RAF** | **Rauma** | **1.63** | **318** | eP | **Pb** | **10 26 19.3** | **+0.5** |
| RAF | | | | eS | **Sg** | **10 26 41.2** | **+1.0** |
| RAF | | | | MSG | | 10 26 46.5 | |
| | comp=Z,47nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **1.90** | **67** | eP | **Pb** | **10 26 22.6** | **-0.7** |
| VJF | | | | eSG | **Sb** | **10 26 47.6** | **0.0** |
| VJF | | | | MSG | | 10 26 51.4 | |
| | comp=Z,26nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.90** | **31** | Pn | **Pb** | **10 26 23.6** | **+0.2** |
| | baz=194,slow=16 | | | | | | |
| FIA0 | | | | Sn | **Sb** | **10 26 47.9** | **+0.2** |
| **FIA0** | **FINESS Array S** | **1.90** | **31** | Pn | **Pb** | **10 26 23.6** | **+0.2** |
| | baz=194,slow=16 | | | | | | |
| FIA0 | | | | Sn | **Sb** | **10 26 47.9** | **+0.2** |
| **FIA0** | **FINESS Array S** | **1.90** | **31** | ePG | **Pb** | **10 26 23.5** | **+0.1** |
| FIA0 | | | | eSG | **Sb** | **10 26 47.7** | **+0.1** |
| FIA0 | | | | MSG | | 10 26 52.0 | |
| | comp=Z,27nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **1.90** | **31** | Pg | **Pb** | **10 26 23.5** | **+0.1** |
| | comp=Z,4.6nm,0.3s,baz=211,slow=16,SNR=79 | | | | | | |
| FINES | | | | Lg | Lg | 10 26 47.4 | |
| | comp=Z,16nm,0.3s,baz=209,slow=29,SNR=34 | | | | | | |
| **VSU** | **Vasula** | **1.97** | **133** | Pn | **Pb** | **10 26 24.5** | **+0.1** |
| VSU | | | | Sn | **Sb** | **10 26 49.6** | **+0.1** |
| **VSU** | **Vasula** | **1.97** | **133** | eP | **Pb** | **10 26 24.7** | **+0.2** |
| VSU | | | | IAML | | 10 26 53.2 | |
| | comp=Z,145nm,0.4s | | | | | | |
| **VSU** | **Vasula** | **1.97** | **133** | Pn | **Pb** | **10 26 24.5** | **+0.1** |
| VSU | | | | Sn | **Sb** | **10 26 49.6** | **+0.1** |
| **VSU** | **Vasula** | **1.97** | **133** | ePG | **Pb** | **10 26 24.9** | **+0.4** |
| VSU | | | | eSG | **Sg** | **10 26 50.3** | **-0.7** |
| **EE04** | **Vaivara Sinima** | **2.02** | **102** | ePG | **Pb** | **10 26 25.6** | **+0.3** |
| EE04 | | | | eSG | **Sb** | **10 26 50.8** | **-0.1** |
| **EE05** | **Udria, Vaivara** | **2.03** | **101** | ePG | **Pb** | **10 26 25.8** | **+0.1** |
| EE05 | | | | eSG | **Sb** | **10 26 51.4** | **-0.1** |
| **AAL** | **Aland** | **2.05** | **281** | P | **Pb** | **10 26 25.9** | **0.0** |
| AAL | | | | S | **Sb** | **10 26 53.1** | **+1.2** |
| **AAL** | **Aland** | **2.05** | **281** | ePB | **Pb** | **10 26 26.6** | **+0.7** |
| AAL | | | | eSG | **Sg** | **10 26 53.5** | **-0.2** |
| **SLIT** | **Slitere, Latvi** | **2.39** | **203** | eP | **Pb** | **10 26 31.2** | **-0.5** |
| SLIT | | | | IAML | | 10 26 52.8 | |
| | comp=Z,68nm,0.6s | | | | | | |
| **NRTU** | **Norrtaelje** | **2.73** | **269** | P | **Pn** | **10 26 35.2** | **+2.3** |
| **NRTU** | **Norrtaelje** | **2.73** | **269** | P | **Pn** | **10 26 35.2** | **+2.3** |
| **NRTU** | **Norrtaelje** | **2.73** | **269** | eP | **Pn** | **10 26 35.2** | **+2.3** |
| **GRAU** | **Graesoe** | **2.79** | **283** | P | **Pn** | **10 26 35.3** | **+1.6** |
| **GRAU** | **Graesoe** | **2.79** | **283** | P | **Pn** | **10 26 35.3** | **+1.6** |
| **GRAU** | **Graesoe** | **2.79** | **283** | eP | **Pn** | **10 26 35.3** | **+1.6** |
| **FLYU** | **Flymyra** | **3.10** | **278** | P | **Pn** | **10 26 39.6** | **+1.7** |
| **FLYU** | **Flymyra** | **3.10** | **278** | P | **Pn** | **10 26 39.6** | **+1.7** |
| **FLYU** | **Flymyra** | **3.10** | **278** | eP | **Pn** | **10 26 39.6** | **+1.7** |
| **NYNU** | **Nynaeshamn** | **3.19** | **257** | P | **Pn** | **10 26 41.9** | **+2.8** |
| **NYNU** | **Nynaeshamn** | **3.19** | **257** | P | **Pn** | **10 26 41.9** | **+2.8** |
| **NYNU** | **Nynaeshamn** | **3.19** | **257** | eP | **Pn** | **10 26 41.9** | **+2.8** |
| **FIBU** | **Brunna** | **3.36** | **274** | P | **Pn** | **10 26 43.9** | **+2.3** |
| **FIBU** | **Brunna** | **3.36** | **274** | P | **Pn** | **10 26 43.9** | **+2.3** |
| **OSTU** | **Oestervaala** | **3.48** | **279** | P | **Pn** | **10 26 45.0** | **+1.9** |
| **OSTU** | **Oestervaala** | **3.48** | **279** | eP | **Pn** | **10 26 45.0** | **+1.9** |
| **BACU** | **Backbrunna** | **3.49** | **273** | P | **Pn** | **10 26 45.9** | **+2.6** |
| **BACU** | **Backbrunna** | **3.49** | **273** | P | **Pn** | **10 26 45.9** | **+2.6** |
| **BACU** | **Backbrunna** | **3.49** | **273** | eP | **Pn** | **10 26 45.9** | **+2.6** |
| **IGGU** | **Iggoen** | **3.49** | **290** | P | **Pn** | **10 26 45.7** | **+2.4** |
| **IGGU** | **Iggoen** | **3.49** | **290** | P | **Pn** | **10 26 45.7** | **+2.4** |
| **IGGU** | **Iggoen** | **3.49** | **290** | eP | **Pn** | **10 26 45.7** | **+2.4** |
| **VIKU** | **Vikbolandet** | **4.00** | **254** | eP | **Pb** | **10 26 55.8** | **-3.3** |
| **HFS** | **Hagfors** | **5.19** | **278** | Pn | **Pn** | **10 27 08.6** | **+1.9** |
| | comp=Z,0.8nm,0.3s,baz=107,slow=14,SNR=20 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 28 08.0** | **+0.8** |
| | comp=Z,0.9nm,0.3s,baz=86,slow=27,SNR=7.6 | | | | | | |
| HFS | | | | Lg | Lg | 10 28 31.7 | |
| | comp=Z,1.5nm,0.3s,baz=103,slow=31,SNR=7.1 | | | | | | |
| **HFS** | **Hagfors** | **5.19** | **278** | Pn | **Pn** | **10 27 09.1** | **+2.4** |
| | baz=104,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 28 08.2** | **+1.0** |
| | baz=99,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **5.19** | **278** | Pn | **Pn** | **10 27 09.1** | **+2.4** |
| | baz=104,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 28 08.2** | **+1.0** |
| | baz=99,slow=28 | | | | | | |
| **BLEU** | **Blekinge** | **5.61** | **234** | *i* P | **Pn** | **10 27 13.9** | **+1.4** |
| BLEU | | | | *i* S | **Sn** | **10 28 16.9** | **-0.7** |
| **BORU** | **Boraas** | **6.26** | **254** | *i* P | **Pn** | **10 27 22.7** | **+1.3** |
| BORU | | | | *i* S | **Sn** | **10 28 33.0** | **-0.5** |
| **NC602** | **NORSAR Array S** | **6.27** | **284** | eP | **Pn** | **10 27 22.6** | **+1.1** |
| NC602 | | | | eS | **Sn** | **10 28 30.7** | **-3.0** |
| NC602 | | | | IAML | | 10 29 08.5 | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **NRA0** | **NORESS Array S** | **6.27** | **284** | Pn | **Pn** | **10 27 22.5** | **+1.0** |
| | baz=74,slow=12 | | | | | | |
| NRA0 | | | | Sn | **Sn** | **10 28 33.1** | **-0.6** |
| | baz=84,slow=22 | | | | | | |
| **NRA0** | **NORESS Array S** | **6.27** | **284** | Pn | **Pn** | **10 27 22.5** | **+1.0** |
| | baz=74,slow=12 | | | | | | |
| NRA0 | | | | Sn | **Sn** | **10 28 33.1** | **-0.6** |
| | baz=84,slow=22 | | | | | | |
| **DEL** | **Delary** | **6.34** | **242** | *i* P | **Pn** | **10 27 24.4** | **+1.9** |
| DEL | | | | *i* S | **Sn** | **10 28 34.0** | **-1.6** |
| **NB2** | **NORSAR Subarra** | **6.45** | **286** | Pn | **Pn** | **10 27 24.9** | **+0.8** |
| | baz=90,slow=14 | | | | | | |
| NB2 | | | | Sn | **Sn** | **10 28 37.6** | **-0.6** |
| | baz=91,slow=28 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.45** | **286** | Pn | **Pn** | **10 27 24.9** | **+0.8** |
| | baz=90,slow=14 | | | | | | |
| NB2 | | | | Sn | **Sn** | **10 28 37.6** | **-0.6** |
| | baz=91,slow=28 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.45** | **286** | Pn | **Pn** | **10 27 24.9** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=92,slow=13,SNR=44 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 28 37.6** | **-0.6** |
| | comp=Z,0.1nm,0.3s,baz=63,slow=6.4,SNR=4.1 | | | | | | |
| NOA | | | | Lg | Lg | 10 29 09.4 | |
| | comp=Z,0.1nm,0.3s,baz=150,slow=4.9,SNR=2.0 | | | | | | |
| **STRU** | **Stroemstad** | **6.60** | **269** | *i* P | **Pn** | **10 27 26.9** | **+1.0** |
| STRU | | | | *i* S | **Sn** | **10 28 40.5** | **-1.3** |
| **BSD** | **Bornholm Skovb** | **6.82** | **230** | *i* S | **Sn** | **10 28 45.0** | **-2.2** |
| BSD | | | | IAML | | 10 28 45.4 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **DOMB** | **Dombas** | **7.61** | **293** | eP | **Pn** | **10 27 40.6** | **+0.8** |
| DOMB | | | | eS | **Sn** | **10 29 00.8** | **-6.0** |
| DOMB | | | | IAML | | 10 29 08.8 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **SKAR** | **Skarslia** | **7.86** | **283** | eP | **Pn** | **10 27 43.7** | **+0.4** |
| SKAR | | | | eS | **Sn** | **10 29 08.3** | **-4.6** |
| SKAR | | | | IAML | | 10 29 09.6 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **APA0** | **Apatity Array** | **8.74** | **23** | Pn | **Pn** | **10 27 56.2** | **+0.9** |
| | baz=205,slow=16 | | | | | | |
| APA0 | | | | Sn | **Sn** | **10 29 33.3** | **-1.1** |
| | baz=200,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **8.74** | **23** | Pn | **Pn** | **10 27 56.2** | **+0.9** |
| | baz=205,slow=16 | | | | | | |
| APA0 | | | | Sn | **Sn** | **10 29 33.3** | **-1.1** |
| | baz=200,slow=28 | | | | | | |
| **AKASG** | **Malin Array Be** | **9.62** | **160** | Pn | **Pn** | **10 28 08.0** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=340,slow=13,SNR=3.6 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.76** | **3** | Pn | **Pn** | **10 28 09.4** | **+0.2** |
| | baz=177,slow=16 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.76** | **3** | Pn | **Pn** | **10 28 09.4** | **+0.2** |
| | baz=177,slow=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.76** | **3** | Pn | **Pn** | **10 28 09.1** | **-0.1** |
| | baz=178,slow=14,SNR=13 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 29 54.6** | **-4.8** |
| | baz=182,slow=24,SNR=1.3 | | | | | | |
| ARCES | | | | Lg | Lg | 10 30 53.8 | |
| | baz=178,slow=29,SNR=1.3 | | | | | | |

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**IDC 18 10:41:47.3±8.3, 3°.86S×147°.24E, h0km, mb3.0/3, mb1 3.2/3, mb1mx2.7/35, mbtmp3.0/3, Error ellipse: s-maj=274.0km s-min=37.0km az=100.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.34** | **217** | P | P | 10 46 25.8 | +0.3 |
| | 0.3nm,0.8s,baz=38,slow=12,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **23.53** | **212** | P | P | 10 46 59.4 | 0.0 |
| | 0.3nm,0.7s,baz=48,slow=9.5,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.02** | **320** | P | P | 10 53 36.5 | -0.1 |
| | 0.1nm,0.4s,baz=107,slow=7.7,SNR=2.5 | | | | | | |

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*IDC **18** 10:42:50.5±2.2, 59°.81N×24°.21E, h0km, mb1 3.2/3, mb1mx2.7/59, mbtmp3.1/3, ML2.3/3, Error ellipse: s-maj=24.4km s-min=6.4km az=146.0*
*HEL **18** 10:42:50.8±0.0, 59°.84N×24°.08E, h0km, ML2.1, Explosion*
**ISC 18 10:42:49.2±0.7, 59°.84N±0°.02×24°.06E±0°.02, h0km, n24, σ1§00/42, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.41** | **24** | eP | **Pg** | **10 42 57.9** | **+0.9** |
| MEF | | | | eS | **Sg** | **10 43 03.6** | **+1.2** |
| **EE01** | **Perakula, Nova** | **0.68** | **199** | eP | **Pg** | **10 43 02.7** | **+0.6** |
| EE01 | | | | eS | **Sg** | **10 43 11.1** | **+0.3** |
| **NUR** | **Nurmijrvi** | **0.73** | **24** | eP | **Pg** | **10 43 03.6** | **+0.5** |
| NUR | | | | eS | **Sg** | **10 43 13.0** | **+0.4** |
| **EE02** | **Kiisa, Saku** | **0.73** | **153** | eP | **Pg** | **10 43 03.6** | **+0.5** |
| EE02 | | | | eS | **Sg** | **10 43 12.8** | **+0.2** |
| **ARBE** | **Arbavere** | **1.06** | **112** | eSB | **Sg** | **10 43 23.6** | **+0.5** |
| **EE06** | **Soera, Palade,** | **1.07** | **216** | eP | **Pg** | **10 43 09.8** | **+0.2** |
| EE06 | | | | eS | **Sg** | **10 43 23.9** | **+0.4** |
| **MTSE** | **Matsula** | **1.14** | **186** | eP | **Pg** | **10 43 10.9** | **0.0** |
| **MTSE** | **Matsula** | **1.14** | **186** | eP | **Pg** | **10 43 11.2** | **+0.2** |
| MTSE | | | | eS | **Sg** | **10 43 26.2** | **+0.5** |
| **PVF** | **Pernaja** | **1.14** | **51** | eP | **Pg** | **10 43 11.0** | **0.0** |
| PVF | | | | eS | **Sg** | **10 43 25.5** | **-0.3** |
| **EE03** | **Tooma soojaam,** | **1.49** | **130** | ePG | **Pn** | **10 43 17.5** | **+0.3** |
| EE03 | | | | eS | **Sg** | **10 43 36.2** | **-0.9** |
| **RAF** | **Rauma** | **1.64** | **317** | eP | **Pb** | **10 43 20.3** | **0.0** |
| RAF | | | | eS | **Sb** | **10 43 41.7** | **+0.3** |
| RAF | | | | MSG | | 10 43 47.0 | |
| | comp=Z,18nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **1.88** | **67** | eP | **Pn** | **10 43 23.4** | **+0.9** |
| VJF | | | | eSG | **Sg** | **10 43 49.8** | **+0.3** |
| VJF | | | | MSG | | 10 43 53.3 | |
| | comp=Z,9.3nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.89** | **31** | eP | **Pb** | **10 43 24.5** | **0.0** |
| FIA0 | | | | eSG | **Sg** | **10 43 49.9** | **+0.1** |
| FIA0 | | | | MSG | | 10 43 52.9 | |
| | comp=Z,10nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **1.89** | **31** | Pg | **Pn** | **10 43 23.6** | **+1.0** |
| | comp=Z,1.5nm,0.3s,baz=205,slow=37,SNR=30 | | | | | | |
| FINES | | | | Lg | Lg | 10 43 49.7 | |
| | comp=Z,5.6nm,0.3s,baz=211,slow=25,SNR=28 | | | | | | |
| **VSU** | **Vasula** | **1.95** | **134** | eP | **Pb** | **10 43 25.5** | **-0.1** |
| **VSU** | **Vasula** | **1.95** | **134** | ePG | **Pb** | **10 43 25.6** | **+0.1** |
| VSU | | | | eSG | **Sg** | **10 43 51.7** | **-0.2** |
| **EE04** | **Vaivara Sinima** | **2.00** | **102** | ePG | **Pb** | **10 43 26.5** | **+0.2** |
| EE04 | | | | eSG | **Sb** | **10 43 52.0** | **+0.3** |
| **EE05** | **Udria, Vaivara** | **2.01** | **101** | ePG | **Pb** | **10 43 26.8** | **+0.2** |
| EE05 | | | | eSG | **Sb** | **10 43 52.6** | **+0.5** |
| **AAL** | **Aland** | **2.07** | **281** | ePB | **Pb** | **10 43 27.5** | **0.0** |
| AAL | | | | eS | **Sb** | **10 43 52.8** | **-1.0** |
| **SLIT** | **Slitere, Latvi** | **2.41** | **203** | eP | **Pb** | **10 43 32.4** | **-0.9** |
| **VIKU** | **Vikbolandet** | **4.02** | **254** | eP | **Pn** | **10 43 55.1** | **+3.2** |
| **HFS** | **Hagfors** | **5.21** | **278** | Pn | **Pn** | **10 44 09.7** | **+1.4** |
| | comp=Z,0.3nm,0.3s,baz=108,slow=13,SNR=6.9 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 45 09.1** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=68,slow=20,SNR=2.0 | | | | | | |
| HFS | | | | Lg | Lg | 10 45 33.6 | |
| | comp=Z,0.6nm,0.3s,baz=92,slow=33,SNR=6.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.47** | **286** | Pn | **Pn** | **10 44 25.9** | **+0.3** |
| | comp=Z,0.0nm,0.3s,baz=94,slow=13,SNR=13 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 45 38.3** | **-1.8** |
| | comp=Z,0.0nm,0.3s,baz=70,slow=18,SNR=1.3 | | | | | | |
| NOA | | | | Lg | Lg | 10 46 10.4 | |
| | comp=Z,0.0nm,0.3s,baz=310,slow=18,SNR=1.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.75** | **3** | Pn | **Pn** | **10 45 10.3** | **-0.2** |
| | baz=176,slow=15,SNR=1.7 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 46 56.8** | **-3.8** |
| | baz=172,slow=26,SNR=2.7 | | | | | | |

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*DNK **18** 10:46:32.4±0.8, 59°.89N×24°.40E, h0km, ML2.5(UPP), Suspected explosion*
*UPP **18** 10:46:34.3±2.5, 59°.92N×24°.18E, h0km, ML2.5, Suspected explosion*
*IDC **18** 10:46:35.6±2.0, 59°.85N×24°.15E, h0km, mb1 3.3/3, mb1mx2.7/58, mbtmp3.2/3, ML2.5/3, Error ellipse: s-maj=22.8km s-min=6.1km az=147.0*
*HEL **18** 10:46:35.1±0.0, 59°.84N×24°.08E, h0km, ML2.3, ML2.5(UPP), Explosion*
**ISC 18 10:46:33.5±0.7, 59°.84N±0°.02×24°.11E±0°.03, h0km, n45, σ1§21/67, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.40** | **21** | eP | **Pg** | **10 46 42.4** | **+1.1** |
| MEF | | | | eS | **Sg** | **10 46 47.9** | **+1.4** |
| **EE01** | **Perakula, Nova** | **0.68** | **202** | eP | **Pg** | **10 46 46.8** | **+0.2** |
| EE01 | | | | eS | **Sg** | **10 46 55.3** | **-0.1** |
| **EE02** | **Kiisa, Saku** | **0.72** | **155** | eP | **Pg** | **10 46 48.0** | **+0.7** |
| EE02 | | | | eS | **Sg** | **10 46 57.5** | **+0.9** |
| **NUR** | **Nurmijrvi** | **0.72** | **22** | eP | **Pg** | **10 46 48.0** | **+0.7** |
| NUR | | | | eS | **Sg** | **10 46 57.7** | **+1.0** |
| **ARBE** | **Arbavere** | **1.03** | **112** | ePB | **Pb** | **10 46 54.3** | **0.0** |
| ARBE | | | | eSB | **Sb** | **10 47 08.0** | **-0.4** |
| **EE06** | **Soera, Palade,** | **1.09** | **217** | eP | **Pg** | **10 46 54.3** | **0.0** |
| EE06 | | | | eS | **Sg** | **10 47 08.1** | **-0.2** |
| **PVF** | **Pernaja** | **1.12** | **50** | eP | **Pg** | **10 46 55.5** | **+0.4** |
| PVF | | | | eS | **Sg** | **10 47 10.0** | **+0.4** |
| **MTSE** | **Matsula** | **1.14** | **188** | eP | **Pg** | **10 46 54.9** | **-0.5** |
| **MTSE** | **Matsula** | **1.14** | **188** | eP | **Pg** | **10 46 55.5** | **+0.1** |
| MTSE | | | | eS | **Sg** | **10 47 09.9** | **-0.1** |
| **EE03** | **Tooma soojaam,** | **1.47** | **130** | ePG | **Pn** | **10 47 01.8** | **+0.5** |
| EE03 | | | | eS | **Sg** | **10 47 20.8** | **0.0** |
| **RAF** | **Rauma** | **1.66** | **317** | eP | **Pn** | **10 47 04.7** | **+0.8** |
| RAF | | | | eS | **Sn** | **10 47 26.1** | **+0.3** |
| RAF | | | | MSG | | 10 47 31.8 | |
| | comp=Z,19nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **1.86** | **66** | eP | **Pb** | **10 47 07.9** | **-0.4** |
| VJF | | | | eSG | **Sg** | **10 47 34.0** | **+0.8** |
| VJF | | | | MSG | | 10 47 37.2 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | ePG | **Pb** | **10 47 08.8** | **+0.1** |
| FIA0 | | | | eS | **Sb** | **10 47 32.4** | **-0.2** |
| FIA0 | | | | MSG | | 10 47 37.2 | |
| | comp=Z,27nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **1.88** | **30** | Pg | **Pb** | **10 47 08.7** | **+0.1** |
| | comp=Z,2.6nm,0.3s,baz=207,slow=14,SNR=67 | | | | | | |
| FINES | | | | Lg | Lg | 10 47 34.0 | |
| | comp=Z,10nm,0.3s,baz=212,slow=24,SNR=32 | | | | | | |
| **VSU** | **Vasula** | **1.93** | **135** | eP | **Pn** | **10 47 08.6** | **+1.0** |
| **VSU** | **Vasula** | **1.93** | **135** | ePG | **Pb** | **10 47 10.3** | **+0.7** |
| VSU | | | | eSG | **Sg** | **10 47 35.6** | **0.0** |
| **EE04** | **Vaivara Sinima** | **1.97** | **102** | ePG | **Pb** | **10 47 11.0** | **+0.8** |
| EE04 | | | | eSG | **Sg** | **10 47 36.3** | **-0.5** |
| **EE05** | **Udria, Vaivara** | **1.99** | **101** | ePG | **Pb** | **10 47 11.0** | **+0.5** |
| EE05 | | | | eSG | **Sg** | **10 47 36.6** | **-0.7** |
| **AAL** | **Aland** | **2.10** | **281** | P | **Pn** | **10 47 11.1** | **+1.3** |
| AAL | | | | S | **Sb** | **10 47 39.1** | **+0.3** |
| **AAL** | **Aland** | **2.10** | **281** | eP | **Pn** | **10 47 11.2** | **+1.4** |
| AAL | | | | eSG | **Sb** | **10 47 39.1** | **+0.3** |
| **SLIT** | **Slitere, Latvi** | **2.41** | **204** | eP | **Pn** | **10 47 16.3** | **+2.2** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | P | **Pn** | **10 47 20.2** | **+1.0** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | P | **Pn** | **10 47 20.2** | **+1.0** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | eP | **Pn** | **10 47 20.2** | **+1.0** |
| **FLYU** | **Flymyra** | **3.14** | **278** | P | **Pn** | **10 47 24.7** | **+0.5** |
| **FLYU** | **Flymyra** | **3.14** | **278** | P | **Pn** | **10 47 24.7** | **+0.5** |
| **FLYU** | **Flymyra** | **3.14** | **278** | eP | **Pn** | **10 47 24.7** | **+0.5** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | P | **Pn** | **10 47 27.2** | **+1.8** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | P | **Pn** | **10 47 27.2** | **+1.8** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | eP | **Pn** | **10 47 27.2** | **+1.8** |
| **FIBU** | **Brunna** | **3.41** | **274** | P | **Pn** | **10 47 28.9** | **+1.1** |
| FIBU | | | | S | **Sn** | **10 48 10.1** | **+1.1** |
| **FIBU** | **Brunna** | **3.41** | **274** | P | **Pn** | **10 47 28.9** | **+1.1** |
| FIBU | | | | S | **Sn** | **10 48 10.1** | **+1.1** |
| **OSTU** | **Oestervaala** | **3.52** | **279** | P | **Pn** | **10 47 30.2** | **+0.8** |
| **OSTU** | **Oestervaala** | **3.52** | **279** | P | **Pn** | **10 47 30.2** | **+0.8** |
| **OSTU** | **Oestervaala** | **3.52** | **279** | eP | **Pn** | **10 47 30.2** | **+0.8** |
| **IGGU** | **Iggoen** | **3.53** | **290** | P | **Pn** | **10 47 30.7** | **+1.2** |
| **IGGU** | **Iggoen** | **3.53** | **290** | P | **Pn** | **10 47 30.7** | **+1.2** |
| **IGGU** | **Iggoen** | **3.53** | **290** | eP | **Pn** | **10 47 30.7** | **+1.2** |
| **BACU** | **Backbrunna** | **3.53** | **273** | P | **Pn** | **10 47 30.8** | **+1.3** |
| **BACU** | **Backbrunna** | **3.53** | **273

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **51.43** | **331** | P | | **P** | **11 02 47.3** | **-0.8** |
| | 0.7nm,0.6s,baz=110,slow=7.8,SNR=2.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.92** | **24** | P | | **P** | **11 06 52.5** | **+1.1** |
| | 0.1nm,0.5s,baz=300,slow=4.2,SNR=2.5 | | | | | | | |

*SOME **18** 10:58:34.2, 43°.30N × 74°.67E*
*KNET **18** 10:58:35.2±0.5, 43°.30N × 74°.68E, h4km±10km, ml1.3, Error ellipse: s-maj=3.0km s-min=2.8km az=21.0*
*NNC **18** 10:58:35.4±0.3, 43°.28N × 74°.70E, h0km, mpv2.5, Error ellipse: s-maj=2.3km s-min=1.7km az=132.0, Suspected Mining explosion.*

**ISC 18 10:58:35.3±0.9, 43°.31N±0°.02 × 74°.69E±0°.02, h0km, n17, σ0s57/33, 8C-6D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **USP** | **Ospenovka** | **0.15** | **253** | P | | | **Pg** | **10 58 38.0** | **-0.1** |
| | 65nm,0.1s,SNR=185 | | | | | | | | |
| USP | | | | ⇓S | | | **Sg** | **10 58 40.1** | **+0.1** |
| | 90nm,0.3s | | | | | | | | |
| **SGDS** | **Sogindy** | **0.15** | **342** | P | | | **Pg** | **10 58 38.5** | **+0.3** |
| | 19nm,0.1s | | | | | | | | |
| SGDS | | | | S | | | **Sg** | **10 58 40.9** | **+0.8** |
| | 83nm,0.3s | | | | | | | | |
| **CHMS** | **Chumysh** | **0.32** | **172** | ⇑P | | | **Pg** | **10 58 41.4** | **+0.1** |
| | 4.1nm,0.1s,SNR=15 | | | | | | | | |
| CHMS | | | | ⇓S | | | **Sg** | **10 58 45.8** | **+0.4** |
| | 7.2nm,0.1s | | | | | | | | |
| **KBK** | **Karagaybulak** | **0.68** | **164** | ⇑P | | | **Pg** | **10 58 48.5** | **+0.2** |
| | 3.5nm,0.1s,SNR=14 | | | | | | | | |
| KBK | | | | ⇓S | | | **Sg** | **10 58 58.3** | **+1.2** |
| | 16nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.69** | **192** | ⇑P | | | **Pg** | **10 58 48.5** | **0.0** |
| | 2.6nm,0.2s,SNR=9.3 | | | | | | | | |
| AAK | | | | ⇓S | | | **Sg** | **10 58 58.1** | **+0.7** |
| | 8.1nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.69** | **192** | ⇑P | | | **Pg** | **10 58 48.5** | **0.0** |
| | 3.9nm,0.6s | | | | | | | | |
| AAK | | | | ⇑S | | | **Sg** | **10 58 57.9** | **+0.5** |
| | 4.7nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.77** | **120** | ⇑P | | | **Pg** | **10 58 49.7** | **-0.4** |
| | 1.3nm,0.1s,SNR=11 | | | | | | | | |
| TKM2 | | | | ⇑S | | | **Sg** | **10 59 00.7** | **+0.7** |
| | 4.8nm,0.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.77** | **120** | ⇓P | | | **Pg** | **10 58 49.2** | **-0.8** |
| | 0.6nm,0.4s | | | | | | | | |
| TKM2 | | | | ⇓S | | | **Sg** | **10 59 00.7** | **+0.7** |
| | 4.9nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **0.79** | **95** | P | | | **Pg** | **10 58 50.6** | **+0.1** |
| | 0.9nm,0.2s | | | | | | | | |
| DGS | | | | S | | | **Sg** | **10 59 01.8** | **+1.0** |
| | 3.9nm,0.1s | | | | | | | | |
| **KRBS** | **Karabastau** | **0.81** | **61** | P | | | **Pg** | **10 58 51.2** | **+0.3** |
| | 0.5nm,0.1s | | | | | | | | |
| KRBS | | | | S | | | **Sb** | **10 59 02.9** | **-1.1** |
| | 2.9nm,0.2s | | | | | | | | |
| **KST** | **Kastek** | **0.97** | **106** | P | | | **Pg** | **10 58 54.1** | **+0.2** |
| | 2.4nm,0.2s | | | | | | | | |
| KST | | | | S | | | **Sb** | **10 59 07.8** | **-0.6** |
| | 4.9nm,0.3s | | | | | | | | |
| **UCH** | **Uchtor** | **1.09** | **187** | ⇑P | | | **Pg** | **10 58 56.0** | **-0.2** |
| | 1.1nm,0.1s,SNR=6.4 | | | | | | | | |
| **MRKS** | **Merke** | **1.21** | **243** | P | | | **Pg** | **10 58 58.2** | **-0.4** |
| | 1.5nm,0.2s | | | | | | | | |
| MRKS | | | | S | | | **Sg** | **10 59 14.7** | **+0.4** |
| | 2.6nm,0.1s | | | | | | | | |
| **KUU** | **Kurty** | **1.33** | **64** | P | | | **Pg** | **10 59 00.3** | **-0.5** |
| | 1.1nm,0.2s | | | | | | | | |
| KUU | | | | S | | | **Sb** | **10 59 18.5** | **-0.3** |
| | 3.4nm,0.4s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.50** | **74** | P | | | **Pn** | **10 59 03.6** | **0.0** |
| | 1.0nm,0.1s | | | | | | | | |
| KTBS | | | | S | | | **Sg** | **10 59 23.0** | **-0.6** |
| | 6.7nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.67** | **99** | P | | | **Pb** | **10 59 07.1** | **-0.1** |
| | 1.5nm,0.2s | | | | | | | | |
| TNSS | | | | S | | | **Sg** | **10 59 30.0** | **+1.0** |
| | 1.6nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **1.79** | **345** | P | | | **Pb** | **10 59 08.9** | **-0.1** |
| | 0.9nm,0.1s | | | | | | | | |
| BTLS | | | | S | | | **Sg** | **10 59 33.4** | **+0.6** |
| | 2.5nm,0.3s | | | | | | | | |

**TAP 18 11:06:00.3, 24°.02N × 121°.60E, h8km, ML1.8, 5D, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HWA** | **Hwalien** | **0.04** | **169** | *i* P | | | Pg | 11 06 02.4 | +0.5 |
| | baz=158 | | | | | | | | |
| HWA | | | | *i* S | | | Sg | 11 06 04.0 | +1.0 |
| | baz=158 | | | | | | | | |
| **TWD** | **Chiawan** | **0.07** | **359** | *i* P | | | Pg | 11 06 02.6 | +0.4 |
| | baz=7.0 | | | | | | | | |
| TWD | | | | *i* S | | | Sg | 11 06 04.2 | +0.6 |
| | baz=7.0 | | | | | | | | |
| **ETM** | **Tongmen** | **0.11** | **243** | *i* P | | | Pg | 11 06 03.2 | +0.4 |
| | baz=243 | | | | | | | | |
| ETM | | | | *i* S | | | Sg | 11 06 05.1 | +0.5 |
| | baz=243 | | | | | | | | |
| **ETL** | **Fush Village** | **0.14** | **9** | ⇓*i* P | | | Pg | 11 06 03.8 | +0.4 |
| | baz=9.0 | | | | | | | | |
| ETL | | | | *i* S | | | Sg | 11 06 06.2 | +0.5 |
| | baz=9.0 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.15** | **180** | *i* P | | | Pg | 11 06 03.7 | +0.2 |
| | baz=178 | | | | | | | | |
| TEYL | | | | S | | | Sg | 11 06 06.6 | +1.0 |
| | baz=178 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.16** | **359** | ⇓*i* P | | | Pg | 11 06 04.0 | +0.4 |
| | baz=7.0 | | | | | | | | |
| NACB | | | | *i* S | | | Sg | 11 06 06.3 | +0.3 |
| | baz=7.0 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.22** | **331** | ⇓*i* P | | | Pg | 11 06 05.4 | +0.6 |
| | baz=331 | | | | | | | | |
| ETLH | | | | *i* S | | | Sg | 11 06 08.6 | +0.8 |
| | baz=331 | | | | | | | | |
| **ESL** | **Shilin** | **0.25** | **217** | ⇓*i* P | | | Pg | 11 06 05.5 | +0.2 |
| | baz=225 | | | | | | | | |
| ESL | | | | S | | | Sg | 11 06 09.1 | +0.4 |
| | baz=225 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.33** | **293** | ⇓*i* P | | | Pg | 11 06 07.6 | +0.6 |
| | baz=293 | | | | | | | | |
| WHF | | | | *i* S | | | Sg | 11 06 12.4 | +1.1 |
| | baz=293 | | | | | | | | |
| **CHGB** | **Renai** | **0.39** | **277** | P | | | Pb | 11 06 09.0 | -0.6 |
| | baz=266 | | | | | | | | |
| CHGB | | | | *e*S | | | Sb | 11 06 14.6 | -1.3 |
| | baz=266 | | | | | | | | |
| **FUSS** | **Fushou** | **0.40** | **306** | *i* P | | | Pb | 11 06 09.1 | -0.6 |
| | baz=306 | | | | | | | | |
| FUSS | | | | *e*S | | | Sb | 11 06 14.9 | -1.2 |
| | baz=306 | | | | | | | | |
| **ENA** | **Nanau** | **0.43** | **18** | *e*P | | | Pg | 11 06 09.0 | +0.3 |
| | baz=19 | | | | | | | | |
| ENA | | | | *e*S | | | Sg | 11 06 14.9 | +0.5 |
| | baz=19 | | | | | | | | |
| **WUSB** | **Renai** | **0.44** | **267** | *e*P | | | Pb | 11 06 10.2 | -0.2 |
| | baz=267 | | | | | | | | |
| WUSB | | | | *e*S | | | Sb | 11 06 16.2 | -1.0 |
| | baz=267 | | | | | | | | |
| **NNSB** | **Datong** | **0.46** | **335** | *i* P | | | Pb | 11 06 10.1 | -0.6 |
| | baz=335 | | | | | | | | |
| NNSB | | | | S | | | Sg | 11 06 16.2 | +0.9 |
| | baz=335 | | | | | | | | |
| **EWUT** | **Wuta** | **0.46** | **21** | P | | | Pg | 11 06 09.4 | +0.2 |
| | baz=22 | | | | | | | | |
| EWUT | | | | *e*S | | | Sg | 11 06 15.8 | +0.5 |
| | baz=22 | | | | | | | | |
| **VWDT** | **VWDT** | **0.49** | **238** | *e*P | | | Pb | 11 06 11.1 | -0.1 |
| | baz=230 | | | | | | | | |
| VWDT | | | | *e*S | | | Sb | 11 06 18.2 | -0.3 |
| | baz=230 | | | | | | | | |
| **LATG** | **Datong** | **0.52** | **353** | *i* P | | | Pg | 11 06 10.9 | +0.5 |
| | baz=353 | | | | | | | | |
| LATG | | | | *e*S | | | Sg | 11 06 18.3 | +1.0 |
| | baz=353 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.54** | **197** | *e*P | | | Pb | 11 06 12.1 | 0.0 |
| | baz=217 | | | | | | | | |
| **EHY** | **Hungye** | **0.57** | **206** | *e*P | | | Pg | 11 06 11.4 | +0.2 |
| | baz=215 | | | | | | | | |
| EHY | | | | *e*S | | | Sb | 11 06 21.2 | +0.5 |
| | baz=215 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.59** | **353** | *e*P | | | Pb | 11 06 12.5 | -0.4 |
| | baz=344 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.62** | **357** | P | | | Pb | 11 06 13.1 | -0.3 |
| | baz=358 | | | | | | | | |
| ENTT | | | | *e*S | | | Sb | 11 06 21.8 | -0.6 |
| | baz=358 | | | | | | | | |
| **NDS** | **Dongshan** | **0.62** | **10** | *e*P | | | Pg | 11 06 12.8 | +0.4 |
| | baz=10.0 | | | | | | | | |
| NDS | | | | *e*S | | | Sg | 11 06 21.4 | +0.8 |
| | baz=10.0 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.63** | **249** | *e*P | | | Pb | 11 06 13.6 | 0.0 |
| | baz=261 | | | | | | | | |
| SSLB | | | | *e*S | | | Sg | 11 06 21.1 | +0.4 |
| | baz=261 | | | | | | | | |
| **TWC** | **Suao** | **0.64** | **21** | *e*P | | | Pg | 11 06 13.1 | +0.5 |
| | baz=14 | | | | | | | | |
| **WHP** | **Taichung City** | **0.65** | **294** | *e*P | | | Pb | 11 06 14.4 | +0.4 |
| | baz=287 | | | | | | | | |
| WHP | | | | *e*S | | | Sb | 11 06 23.7 | +0.5 |
| | baz=287 | | | | | | | | |
| **YULB** | **Yu-li** | **0.68** | **204** | *e*P | | | Pg | 11 06 13.5 | +0.2 |
| | baz=206 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.68** | **343** | *e*P | | | Pb | 11 06 14.5 | 0.0 |
| | baz=343 | | | | | | | | |
| YHNB | | | | *e*S | | | Sb | 11 06 23.7 | -0.5 |
| | baz=343 | | | | | | | | |
| **NSK** | **Sanguang** | **0.69** | **342** | *e*P | | | Pb | 11 06 14.5 | -0.2 |
| | baz=343 | | | | | | | | |
| NSK | | | | *e*S | | | Sb | 11 06 24.4 | 0.0 |
| | baz=343 | | | | | | | | |
| **TWE** | **Neicheng** | **0.71** | **5** | *e*P | | | Pb | 11 06 14.6 | -0.2 |
| | baz=357 | | | | | | | | |
| **EYUL** | **Yuli** | **0.71** | **201** | *e*P | | | Pg | 11 06 14.4 | +0.4 |
| | baz=212 | | | | | | | | |
| EYUL | | | | *e*S | | | Sg | 11 06 23.5 | +0.2 |
| | baz=212 | | | | | | | | |
| **TWF1** | **Yuli** | **0.71** | **203** | *e*P | | | Pb | 11 06 15.2 | +0.2 |
| | baz=210 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.74** | **359** | *e*P | | | Pb | 11 06 15.4 | -0.1 |
| | baz=359 | | | | | | | | |
| **NWLT** | **Wulai** | **0.76** | **354** | *e*P | | | Pb | 11 06 15.8 | 0.0 |
| | baz=341 | | | | | | | | |

**TAP 18 11:06:06.6, 23°.05N × 120°.87E, h4km±1km, ML1.2, 1D, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.15** | **325** | *i* P | | | Pg | 11 06 10.1 | +0.5 |
| | baz=328 | | | | | | | | |
| STYH | | | | S | | | Sg | 11 06 12.2 | +0.7 |
| | baz=328 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.15** | **318** | ⇓*i* P | | | Pg | 11 06 10.0 | +0.4 |
| | baz=320 | | | | | | | | |
| STYT | | | | *i* S | | | Sg | 11 06 12.2 | +0.5 |
| | baz=320 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **45** | *i* P | | | Pg | 11 06 11.1 | +0.6 |
| | baz=46 | | | | | | | | |
| ELDTW | | | | *i* S | | | Sg | 11 06 13.7 | +0.6 |
| | baz=46 | | | | | | | | |
| **SLGT** | **Liugui** | **0.21** | **255** | *i* P | | | Pg | 11 06 11.4 | +0.6 |
| | baz=255 | | | | | | | | |
| SLGT | | | | S | | | Sg | 11 06 14.2 | +0.7 |
| | baz=255 | | | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **277** | *e*P | | | Pg | 11 06 12.4 | +0.6 |
| | baz=277 | | | | | | | | |
| SGST | | | | *e*S | | | Sg | 11 06 16.4 | +1.1 |
| | baz=277 | | | | | | | | |
| **LONT** | **Longtian** | **0.28** | **120** | *e*P | | | Pg | 11 06 13.1 | +1.1 |
| | baz=120 | | | | | | | | |
| LONT | | | | *e*S | | | Sg | 11 06 17.4 | +1.6 |
| | baz=120 | | | | | | | | |
| **TWG** | **Pinlang** | **0.29** | **140** | *e*P | | | Pb | 11 06 13.5 | -0.9 |
| | baz=140 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.30** | **140** | *e*P | | | Pb | 11 06 13.5 | -1.1 |
| | baz=140 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.30** | **310** | *i* P | | | Pb | 11 06 13.6 | -1.0 |
| | baz=311 | | | | | | | | |
| WTP | | | | *e*S | | | Sb | 11 06 18.6 | -1.4 |
| | baz=311 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.33** | **319** | *e*P | | | Pb | 11 06 14.3 | -0.9 |
| | baz=319 | | | | | | | | |
| TPUB | | | | *e*S | | | Sb | 11 06 19.3 | -1.5 |
| | baz=319 | | | | | | | | |
| **SSD** | **Sandimen** | **0.37** | **216** | *i* P | | | Pg | 11 06 14.1 | +0.3 |
| | baz=215 | | | | | | | | |
| SSD | | | | *e*S | | | Sg | 11 06 19.1 | +0.5 |
| | baz=215 | | | | | | | | |
| **TSMG** | **Majia** | **0.40** | **211** | *e*P | | | Pg | 11 06 14.6 | +0.2 |
| | baz=211 | | | | | | | | |
| TSMG | | | | *e*S | | | Sg | 11 06 19.5 | -0.1 |
| | baz=211 | | | | | | | | |
| **FULB** | **Fuli** | **0.42** | **69** | *e*P | | | Pb | 11 06 16.2 | -0.4 |
| | baz=69 | | | | | | | | |
| FULB | | | | *e*S | | | Sb | 11 06 22.6 | -0.7 |
| | baz=69 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.45** | **10** | *e*P | | | Pg | 11 06 15.8 | +0.4 |
| | baz=241 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.45** | **10** | P | | | Pg | 11 06 15.7 | +0.4 |
| | baz=11 | | | | | | | | |
| YUS | | | | *e*S | | | Sg | 11 06 21.7 | +0.5 |
| | baz=11 | | | | | | | | |
| **ALS** | **Alishan** | **0.46** | **353** | *e*P | | | Pg | 11 06 16.3 | +0.7 |
| | baz=354 | | | | | | | | |
| ALS | | | | *e*S | | | Sg | 11 06 23.2 | +1.5 |
| | baz=354 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.49** | **207** | *e*P | | | Pg | 11 06 16.2 | +0.3 |
| | baz=207 | | | | | | | | |
| **TWF1** | **Yuli** | **0.50** | **53** | *e*P | | | Pg | 11 06 16.3 | +0.1 |
| | baz=53 | | | | | | | | |

*IDC **18** 11:14:11.7±0.6, 3°.00S × 129°.50E, h0km, mb4.3/12, mb1 4.5/14, mb1mx4.2/36, mbtmp4.4/14, ML4.5/2, MS3.4/14, Ms1 3.4/14, ms1mx3.2/71, Error ellipse: s-maj=21.6km s-min=14.3km az=73.0*
*NEIC **18** 11:14:16.6±2.1, 2°.96S±0°.06 × 129°.50E±0°.06, h28km±5km, mb4.5/25, Error ellipse: s-maj=8.9km s-min=8.5km az=225.0*
*DJA **18** 11:14:17.1±0.2, 3°S±2° × 12°9E±°, h62km±4km, M4.5/23, mB5.1/7, mb4.8/23, MLv4.5/10, Mw(mB)4.4/7*

**ISC 18 11:14:16.1±0.4, 3°.02S±0°.04 × 129°.47E±0°.04, h28km, n121, σ1s55/115, mb4.5/30, MS3.3/10, 1D, Seram**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **0.63** | **239** | P | | | **Pn** | **11 14 29.6** | **+0.4** |
| **AAI** | **Ambon** | **1.44** | **242** | P | | | **Pb** | **11 14 42.7** | **+0.5** |
| AAI | | | | S | | | **Sb** | **11 15 04.8** | **+4.7** |
| **BNDI** | **Bandanaira** | **1.56** | **164** | P | | | **Pb** | **11 14 45.6** | **+1.3** |
| **FAKI** | **Fak Fak** | **2.78** | **88** | Pn | | | **Pn** | **11 14 59.8** | **+1.0** |
| **FAKI** | **Fak Fak** | **2.78** | **88** | P | | | **Pn** | **11 14 59.4** | **+0.7** |
| **FAKI** | **Fak Fak** | **2.78** | **88** | P | | | **Pn** | **11 14 59.9** | **+1.2** |
| **SIJI** | **Sorong** | **2.79** | **40** | Pn | | | **Pn** | **11 14 58.8** | **-0.1** |
| | 82nm,0.3s,baz=213,slow=8.2,SNR=181 | | | | | | | | |
| SIJI | | | | Sn | | | **Sn** | **11 15 30.4** | **-1.2** |
| | 124nm,0.3s,baz=206,slow=23,SNR=6.8 | | | | | | | | |
| **SANI** | **Sanana** | **3.61** | **285** | P | | | **Pn** | **11 15 08.7** | **-1.5** |
| SANI | | | | S | | | **Sn** | **11 15 49.2** | **-2.7** |
| **SANI** | **Sanana** | **3.61** | **285** | P | | | **Pn** | **11 15 09.1** | **-1.1** |
| **TNTI** | **Ternate** | **4.31** | **331** | Pn | | | **Pn** | **11 15 19.4** | **-0.4** |
| **TNTI** | **Ternate** | **4.31** | **331** | P | | | Pn | 11 15 14.6 | -5.2 |
| **TNTI** | **Ternate** | **4.31** | **331** | P | | | **Pn** | **11 15 19.7** | **-0.1** |
| **KMSI** | **Cibinong** | **6.54** | **303** | P | | | **Pn** | **11 15 48.7** | **-1.8** |
| | 0.7nm143nm,0.5s | | | | | | | | |
| **BAKI** | **Biak** | **6.88** | **75** | P | | | **Pn** | **11 15 56.4** | **+1.3** |
| | 139nm,0.8s | | | | | | | | |
| **LUWI** | **Luwuk** | **6.97** | **286** | Pn | | | **Pn** | **11 15 57.5** | **+1.0** |
| **LUWI** | **Luwuk** | **6.97** | **286** | P | | | **Pn** | **11 15 56.4** | **-0.1** |
| **APSI** | **Ampana** | **8.09** | **285** | P | | | **Pn** | **11 16 11.8** | **0.0** |
| | 1µm84nm,0.5s | | | | | | | | |
| **MRSI** | **Marisa** | **8.29** | **295** | P | | | **Pn** | **11 16 12.4** | **-2.1** |
| | 1µm61nm,0.9s | | | | | | | | |
| **BATI** | **Baumata** | **9.18** | **219** | LR | | | LR | 11 20 05.7 | |
| | comp=Z,660nm,21.6s,baz=30,slow=38 | | | | | | | | |
| **BNSI** | **Bone** | **9.44** | **261** | P | | | **Pn** | **11 16 29.9** | **-0.5** |
| | 18nm,0.7s | | | | | | | | |
| **DRS** | **Darwin Rock St** | **9.46** | **171** | P | | | **Pn** | **11 16 33.1** | **+2.5** |
| **BKSI** | **Bulukumba** | **9.60** | **256** | P | | | **Pn** | **11 16 34.4** | **+1.9** |
| | 29nm,0.7s | | | | | | | | |
| **TOLI2** | **Tolitoli** | **9.60** | **295** | Pn | | | **Pn** | **11 16 32.4** | **-0.2** |
| **TOLI2** | **Tolitoli** | **9.60** | **295** | P | | | **Pn** | **11 16 32.2** | **-0.4** |
| **KAPI** | **Kappang** | **9.89** | **258** | Pn | | | **Pn** | **11 16 40.5** | **+4.0** |
| | 1.4nm,0.3s,baz=102,slow=6.0,SNR=7.3 | | | | | | | | |
| KAPI | | | | LR | | | LR | 11 21 05.5 | |
| | comp=Z,254nm,21.3s,baz=110,slow=42 | | | | | | | | |
| **KAPI** | **Kappang** | **9.89** | **258** | Pn | | | **Pn** | **11 16 37.6** | **+1.1** |
| **MTN** | **Manton Dam** | **9.90** | **171** | Pn | | | **Pn** | **11 16 38.0** | **+1.4** |
| **KDU** | **Kakadu** | **10.06** | **163** | P | | | **Pn** | **11 16 40.0** | **+1.2** |
| **MPSI** | **Mapaga** | **10.13** | **289** | P | | | **Pn** | **11 16 36.7** | **-3.1** |
| | 22nm,0.6s | | | | | | | | |
| **JAY** | **Jayapura** | **11.23** | **88** | Pn | | | **Pn** | **11 16 56.7** | **+1.7** |
| | 0.8nm,0.3s,baz=285,slow=20,SNR=1.9 | | | | | | | | |
| **KNRA** | **Kununurra** | **12.60** | **183** | Pn | | | **Pn** | **11 17 12.3** | **-1.3** |
| **PLAI** | **Plampang** | **12.98** | **243** | P | | | **Pn** | **11 17 19.3** | **+0.5** |
| | 41nm,0.7s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.45** | **194** | Pn | | | **Pn** | **11 17 51.9** | **-0.3** |
| | 1.6nm,0.3s,baz=8.1,slow=14,SNR=13 | | | | | | | | |
| FITZ | | | | LR | | | LR | 11 24 25.2 | |
| | comp=Z,123nm,19.3s,baz=21,slow=40 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.45** | **194** | Pn | | | **Pn** | **11 17 52.9** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **15.45** | **194** | P | | | **Pn** | **11 17 52.9** | **+0.7** |
| **ABJI** | **Asem Bagus** | **15.89** | **252** | P | | | **Pn** | **11 17 59.0** | **+1.1** |
| | 76nm,0.9s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.17** | **250** | Pn | | | **Pn** | **11 18 01.3** | **-0.2** |
| JAGI | | | | IAmb | | | IAmb | 11 18 23.4 | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.17** | **250** | P | | | **P** | **11 18 03.1** | **-1.4** |
| | comp=Z,46nm,1.0s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.17** | **250** | P | | | **Pn** | **11 18 01.7** | **+0.2** |
| **BLJI** | **Banyuglugur** | **16.48** | **253** | P | | | **P** | **11 18 07.3** | **-0.7** |
| | comp=Z,1µmcomp=Z,41nm,0.5s | | | | | | | | |
| **COEN** | **Coen** | **17.36** | **130** | Pn | | | **Pn** | **11 18 14.8** | **-1.8** |
| **COEN** | **Coen** | **17.36** | **130** | P | | | **P** | **11 18 18.0** | **+0.3** |
| **WRAB** | **Tennant Creek** | **17.48** | **165** | | | | **Pn** | **11 18 14.2** | **-3.8** |
| WRAB | | | | IAmb | | | IAmb | 11 18 20.3 | |
| | comp=Z,53nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **165** | P | | | **Pn** | **11 18 13.6** | **-4.5** |
| | comp=Z,1.2nm,0.3s,baz=344,slow=13,SNR=36 | | | | | | | | |
| WRA | | | | S | | | **Sn** | **11 21 32.3** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=332,slow=23,SNR=2.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **165** | | | | **Pn** | **11 18 15.2** | **-2.8** |
| **WB2** | **Warramunga Arr** | **17.48** | **165** | Pn | | | **Pn** | **11 18 13.4** | **-4.7** |
| **WR0** | **Warramunga Arr** | **17.55** | **164** | Pn | | | **Pn** | **11 18 14.8** | **-4.1** |
| **PWJI** | **Pagerwojo** | **18.27** | **253** | P | | | **P** | **11 18 25.5** | **-2.2** |
| | comp=Z,63nm,0.7s | | | | | | | | |
| **PMG** | **Port Moresby** | **18.69** | **111** | LR | | | LR | 11 28 06.4 | |
| | comp=Z,84nm,19.0s,baz=339,slow=45 | | | | | | | | |
| **PCJI** | **Pacitan** | **18.91** | **253** | P | | | **P** | **11 18 32.0** | **-2.8** |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **QIS** | **Mount Isa** | **20.04** | **151** | P | | | Pn | 11 18 47.6 | -1.4 |
| **PSA00** | **Pilbara Seismi** | **20.68** | **206** | P | | | **P** | **11 18 52.9** | **-1.1** |
| PSA00 | | | | IAmb | | | IAmb | 11 18 57.6 | |
| | comp=Z,30nm,1.3s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **20.68** | **206** | P | | | **P** | **11 18 52.9** | **-1.1** |
| **KPJI** | **Karang Pucung** | **20.89** | **257** | P | | | **P** | **11 18 54.9** | **-1.5** |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **MTSU** | **Mount Surprise** | **20.91** | **137** | P | | | Pn | 11 18 57.6 | -1.7 |
| **ASAR** | **Alice Springs** | **20.97** | **169** | P | | | **P** | **11 18 56.5** | **-0.7** |
| | comp=Z,25nm,0.4s,baz=347,slow=9.8,SNR=100 | | | | | | | | |
| ASAR | | | | S | | | **S** | **11 22 46.0** | **-3.6** |
| | comp=Z,1.8nm,0.8s,baz=353,slow=20,SNR=4.4 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **11 23 04.0** | **-0.3** |
| | comp=Z,2.2nm,0.6s,baz=355,slow=0.7,SNR=8.4 | | | | | | | | |
| **WRKA** | **Warakurna** | **21.92** | **183** | P | | | **P** | **11 19 07.0** | **-0.4** |
| **LEM** | **Lembang** | **22.09** | **259** | LR | | | LR | 11 29 15.7 | |
| | comp=Z,219nm,18.5s,baz=119,slow=41 | | | | | | | | |
| **LEM** | **Lembang** | **22.09** | **259** | P | | | **P** | **11 19 07.3** | **-2.2** |
| **GUMO** | **Guam** | **22.49** | **42** | LR | | | LR | 11 27 34.0 | |
| | comp=Z,22nm,19.9s,baz=337,slow=36 | | | | | | | | |
| **CTA** | **Charters Tower** | **23.58** | **137** | P | | | **P** | **11 19 24.3** | **-0.4** |
| | comp=Z,8.2nm,0.8s,baz=326,slow=12,SNR=8.1 | | | | | | | | |
| CTA | | | | LR | | | LR | 11 31 17.0 | |
| | comp=Z,130nm,18.4s,baz=292,slow=44 | | | | | | | | |
| **OOD** | **Oodnadatta** | **25.34** | **167** | P | | | **P** | **11 19 42.2** | **+1.4** |
| **FORT** | **Forrest** | **27.64** | **183** | P | | | **P** | **11 20 00.8** | **-0.7** |
| **LCRK** | **Leigh Creek** | **28.51** | **164** | P | | | **P** | **11 20 10.2** | **+1.0** |
| **MORW** | **Morawa** | **28.89** | **205** | P | | | **P** | **11 20 11.8** | **-0.8** |
| **JOW** | **Kunigami** | **29.70** | **358** | LR | | | LR | 11 30 25.4 | |
| | comp=Z,87nm,21.3s,baz=180,slow=33 | | | | | | | | |
| **KULM** | **Kulim** | **29.95** | **286** | P | | | **P** | **11 20 24.6** | **+2.3** |
| **BBOO** | **Buckleboo** | **30.28** | **169** | P | | | **P** | **11 20 24.2** | **-0.7** |
| BBOO | | | | IAmb | | | IAmb | 11 20 24.9 | |
| | comp=Z,7.4nm,0.7s | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.28** | **169** | P | | | **P** | **11 20 24.4** | **-0.5** |
| **STKA** | **Stephens Creek** | **30.89** | **160** | P | | | **P** | **11 20 30.1** | **-0.3** |
| | comp=Z,2.1nm,0.5s,baz=319,slow=7.0,SNR=5.7 | | | | | | | | |
| STKA | | | | LR | | | LR | 11 34 13.2 | |
| | comp=Z,152nm,19.2s,baz=6.2,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | **30.89** | **160** | IAmb | | | IAmb | 11 20 34.7 | |
| | comp=Z,1.6nm,1.2s | | | | | | | | |
| **HNR** | **Honiara** | **30.94** | **103** | LR | | | LR | 11 34 45.2 | |
| | comp=Z,78nm,18.7s,baz=104,slow=40 | | | | | | | | |
| **RPSI** | **Rantau Prapat** | **31.05** | **280** | P | | | **P** | **11 20 32.4** | **+0.3** |
| **PSI** | **Prapat** | **31.07** | **280** | P | | | **P** | **11 20 32.4** | **0.0** |
| | comp=Z,12nm,0.8s,baz=71,slow=3.8,SNR=8.2 | | | | | | | | |
| **GSI** | **Gunungsitoli** | **32.17** | **277** | P | | | **P** | **11 20 40.3** | **-1.6** |
| **CMSA** | **Cobar Meteorol** | **32.23** | **153** | P | | | **P** | **11 20 41.8** | **-0.3** |
| **ARPS** | **Mount Arapiles** | **35.47** | **163** | P | | | **P** | **11 21 10.6** | **+0.4** |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **36.30** | **345** | *e*P | | | **P** | **11 21 20.4** | **+3.0** |
| NJ2 | | | | pmax | | | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **36.86** | **307** | P | | | **P** | **11 21 23.9** | **+1.5** |
| CM31 | | | | IAmb | | | IAmb | 11 21 24.5 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.86** | **307** | P | | | **P** | **11 21 22.9** | **+0.5** |
| | comp=Z,2.6nm,0.8s,baz=136,slow=7.3,SNR=25 | | | | | | | | |
| CMAR | | | | PcP | | | **PcP** | **11 23 44.8** | **+0.8** |
| | comp=Z,1.2nm,0.4s,baz=171,slow=2.9,SNR=10 | | | | | | | | |
| CMAR | | | | LR | | | LR | 11 38 21.9 | |
| | comp=Z,32nm,18.4s,baz=100,slow=39 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.86** | **307** | P | | | **P** | **11 21 23.3** | **+0.9** |
| **CHTO** | **Chiang Mai** | **37.05** | **307** | P | | | **P** | **11 21 25.0** | **+1.0** |
| CHTO | | | | IAmb | | | IAmb | 11 21 26.0 | |
| | comp

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MA2 | | | | | IAmb | IAmb | 11 24 52.8 | |
| | comp=Z,6.3nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **64.64** | **326** | P | | **P** | **11 24 50.9** | **-0.3** |
| MK31 | | | | | IAmb | IAmb | 11 24 52.0 | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.64** | **326** | P | | **P** | **11 24 51.0** | **-0.2** |
| | comp=Z,1.3nm,0.3s,baz=112,slow=7.8,SNR=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.64** | **326** | P | | **P** | **11 24 51.1** | **-0.1** |
| **KSH** | **Kashi** | **64.76** | **317** | P | | **P** | **11 24 54.0** | **+1.6** |
| KSH | | | | pP | | sP | 11 25 07.6 | +3.1 |
| **YAK** | **Yakutsk** | **64.87** | **0** | P | | **P** | **11 24 52.5** | **+0.1** |
| **AAK** | **Ala-Archa** | **67.19** | **319** | P | | **P** | **11 25 08.6** | **+0.6** |
| AAK | | | | | IAmb | IAmb | 11 25 09.2 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.81** | **333** | P | | **P** | **11 25 10.5** | **-0.9** |
| ZAA0 | | | | | IAmb | IAmb | 11 25 11.6 | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.81** | **333** | P | | **P** | **11 25 10.5** | **-0.9** |
| | comp=Z,1.5nm,0.4s,baz=104,slow=6.3,SNR=12 | | | | | | | |
| **KURK** | **Kurchatov** | **68.87** | **328** | P | | **P** | **11 25 18.0** | **-0.2** |
| **KKAR** | **Karatay Array** | **70.03** | **318** | P | | **P** | **11 25 25.2** | **-0.3** |
| **TIXI** | **Tiksi** | **74.53** | **360** | P | | **P** | **11 25 50.9** | **-0.9** |
| TIXI | | | | | IAmb | IAmb | 11 25 52.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **NRIK** | **Noril'sk** | **77.59** | **346** | P | | **P** | **11 26 09.4** | **+0.2** |
| | comp=Z,3.4nm,0.7s,baz=129,slow=7.0,SNR=6.1 | | | | | | | |
| **NRIK** | **Noril'sk** | **77.59** | **346** | P | | **P** | **11 26 09.7** | **+0.5** |
| NRIK | | | | | IAmb | IAmb | 11 26 10.0 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **RAYN** | **Ar Rayn** | **85.66** | **294** | P | | **P** | **11 26 53.0** | **+0.1** |
| **GEVA** | **Gevas** | **89.03** | **308** | P | | **P** | **11 27 10.5** | **+1.4** |
| **ILAR** | **Eielson Array** | **89.99** | **25** | P | | **P** | **11 27 11.3** | **-1.4** |
| | comp=Z,0.6nm,0.8s,baz=252,slow=4.6,SNR=6.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **104.42** | **26** | PKKPbc | | PKKPbc | 11 44 03.9 | -3.0 |
| | comp=Z,0.2nm,0.5s,baz=116,slow=3.5,SNR=5.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **123.27** | **57** | PKP | | **PKiKP** | **11 33 10.6** | **-0.9** |
| | comp=Z,0.3nm,0.9s,baz=116,slow=2.1,SNR=2.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.42** | **284** | PKP | | **PKPdf** | **11 33 18.7** | **-0.7** |
| | comp=Z,1.1nm,0.8s,baz=99,slow=2.8,SNR=4.3 | | | | | | | |
| **PLCA** | **Paso Flores** | **132.77** | **159** | PKP | | **PKiKP** | **11 33 29.9** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=180,slow=2.9,SNR=5.1 | | | | | | | |
| **CPUP** | **Villa Florida** | **150.09** | **168** | PKPbc | | **PKiKP** | **11 34 05.2** | **-0.7** |
| | comp=Z,6.1nm,0.7s,baz=251,slow=2.3,SNR=14 | | | | | | | |
| **CPUP** | **Villa Florida** | **150.09** | **168** | | | **PKiKP** | **11 34 05.0** | **-0.9** |

**DJA 18 11:14:45.3±2.1, 8°S±5°×12°3E±1°2, h207km±32km, M3.7/9, mb3.7/2, MLv3.7/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **2.07** | **154** | P | | Pn | 11 15 25.7 | +0.5 |
| **BATI** | **Baumata** | **2.32** | **172** | P | | Pn | 11 15 28.7 | +0.9 |
| **BBSI** | **Bau Bau** | **2.51** | **342** | P | | Pn | 11 15 29.6 | -0.1 |
| **BSSI** | **Bau Bau, Buton** | **3.32** | **301** | P | | Pn | 11 15 39.9 | +0.8 |
| **BASI** | **Baing, Sumba** | **3.58** | **229** | P | | Pn | 11 15 42.3 | +0.1 |
| **BKSI** | **Bulukumba** | **4.09** | **308** | P | | Pn | 11 15 47.9 | -0.6 |
| **BNSI** | **Bone** | **4.73** | **317** | P | | Pn | 11 15 57.5 | +1.0 |
| **SPSI** | **Sidrap Palu** | **5.27** | **317** | P | | Pn | 11 16 03.6 | +0.2 |
| | 0.1nm8.8nm,0.8s | | | | | | | |
| **PLAI** | **Plampang** | **5.58** | **260** | P | | Pn | 11 16 06.3 | -1.1 |

**TAP 18 11:26:01.9, 23°04N×120°87E, h5km±1km, ML1.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.16** | **325** | *i* P | | Pg | 11 26 05.7 | +0.7 |
| | baz=324 | | | | | | | |
| STYH | | | | S | | Sg | 11 26 07.9 | +0.7 |
| | baz=324 | | | | | | | |
| **STYT** | **Tauyuan** | **0.16** | **318** | *i* P | | Pg | 11 26 05.6 | +0.5 |
| | baz=320 | | | | | | | |
| STYT | | | | *i* S | | Sg | 11 26 07.8 | +0.5 |
| | baz=320 | | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **42** | P | | Pg | 11 26 06.6 | +0.8 |
| | baz=44 | | | | | | | |
| ELDTW | | | | S | | Sg | 11 26 09.4 | +0.9 |
| | baz=44 | | | | | | | |
| **SLGT** | **Liugui** | **0.22** | **257** | P | | Pg | 11 26 07.0 | +0.8 |
| | baz=257 | | | | | | | |
| SLGT | | | | *e*S | | Sg | 11 26 09.9 | +0.9 |
| | baz=257 | | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **278** | *e*S | | Sg | 11 26 11.3 | +0.5 |
| | baz=279 | | | | | | | |
| **LONT** | **Longtian** | **0.27** | **120** | *e*P | | Pb | 11 26 08.5 | -0.8 |
| | baz=111 | | | | | | | |
| **WTP** | **Ta-pu** | **0.31** | **310** | P | | Pb | 11 26 09.3 | -0.8 |
| | baz=311 | | | | | | | |
| WTP | | | | S | | Sb | 11 26 14.3 | -1.3 |
| | baz=311 | | | | | | | |
| **WTP** | **Ta-pu** | **0.31** | **310** | *e*P | | Pb | 11 26 09.3 | -0.8 |
| | baz=213 | | | | | | | |
| WTP | | | | *e*S | | Sb | 11 26 14.3 | -1.2 |
| | baz=213 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.34** | **319** | *e*P | | Pb | 11 26 09.8 | -0.7 |
| | baz=319 | | | | | | | |
| TPUB | | | | *e*S | | Sb | 11 26 15.5 | -0.8 |
| | baz=319 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.34** | **319** | *e*P | | Pb | 11 26 09.7 | -0.8 |
| | baz=214 | | | | | | | |
| **CHN1** | **Nanshi** | **0.35** | **294** | *e*P | | Pb | 11 26 09.9 | -0.7 |
| | baz=294 | | | | | | | |
| CHN1 | | | | *e*S | | Sb | 11 26 16.1 | -0.4 |
| | baz=294 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.40** | **320** | *e*P | | Pg | 11 26 10.2 | +0.5 |
| | baz=320 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.40** | **320** | P | | Pg | 11 26 10.2 | +0.5 |
| | baz=225 | | | | | | | |
| **FULB** | **Fuli** | **0.42** | **68** | *e*S | | Sb | 11 26 18.1 | -0.3 |
| | baz=68 | | | | | | | |
| **TWK** | **Hsinying** | **0.42** | **302** | *e*P | | Pb | 11 26 11.8 | 0.0 |
| | baz=310 | | | | | | | |
| TWK | | | | *e*S | | Sb | 11 26 18.7 | +0.2 |
| | baz=310 | | | | | | | |
| **TWK** | **Hsinying** | **0.42** | **302** | *e*P | | Pb | 11 26 12.1 | +0.2 |
| | baz=229 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.48** | **207** | *e*P | | Pg | 11 26 11.9 | +0.7 |
| | baz=212 | | | | | | | |

**TAP 18 11:26:05.4, 23°47N×120°76E, h5km, ML0.9, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ALS** | **Alishan** | **0.06** | **44** | P | | Pg | 11 26 07.7 | +0.5 |
| | baz=50 | | | | | | | |
| ALS | | | | S | | Sg | 11 26 09.3 | +0.9 |
| | baz=50 | | | | | | | |
| **CHN5** | **Tsauling** | **0.15** | **330** | P | | Pg | 11 26 09.2 | +0.8 |
| | baz=330 | | | | | | | |
| CHN5 | | | | S | | Sg | 11 26 11.9 | +1.4 |
| | baz=330 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.18** | **83** | *e*P | | Pg | 11 26 09.5 | +0.4 |
| | baz=84 | | | | | | | |
| YUS | | | | *e*S | | Sg | 11 26 13.4 | +1.9 |
| | baz=84 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.19** | **233** | *e*S | | Sg | 11 26 13.9 | +2.2 |
| | baz=225 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.20** | **216** | *e*S | | Sg | 11 26 14.9 | +2.9 |
| | baz=214 | | | | | | | |

*ISK **18** 11:39:45.1, 38°23N×26°46E, h5km, ML3.0/14*
*ATH **18** 11:39:46.0, 38°21N×26°51E, h29km±6km, ML2.9/4, Error ellipse: s-maj=9.5km s-min=1.2km az=225.0*
*DDA **18** 11:39:46.1±0.0, 38°24N×26°54E, h11km, ML2.7*
*THE **18** 11:39:47.0, 38°10N×26°33E, h29km±2km, ML2.9/4, Error ellipse: s-maj=6.3km s-min=0.6km az=232.0*

**ISC 18 11:39:46.4±0.8, 38°25N±0°02×26°53E±0°03, h11km±5km, n35, σ0°58/55, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZEYE** | **Izmir, Urla-Ze** | **0.02** | **250** | P | | Pg | 11 39 48.3 | -0.1 |
| ZEYE | | | | S | | Sg | 11 39 49.8 | +0.2 |
| **URLA** | **Izmir** | **0.12** | **24** | PG | | Pg | 11 39 49.4 | -0.1 |
| URLA | | | | SG | | Sg | 11 39 51.8 | +0.1 |
| **DGB** | **zmir** | **0.34** | **125** | P | | Pg | 11 39 52.9 | -0.3 |
| DGB | | | | S | | Sg | 11 39 57.8 | +0.1 |
| DGB | | | | *i* AML | | AML | 11 39 58.0 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **CHOS** | **Chios island** | **0.40** | **291** | P | | Pg | 11 39 54.8 | +0.5 |
| CHOS | | | | S | | Sb | 11 40 01.5 | -0.3 |
| | 1μm,0.2s | | | | | | | |
| **CHOS** | **Chios island** | **0.40** | **291** | P | | Pg | 11 39 54.8 | +0.5 |
| CHOS | | | | S | | Sb | 11 40 01.5 | -0.3 |
| CHOS | | | | | AML | AML | 11 40 04.2 | |
| | comp=N,1969μm,0.3s | | | | | | | |
| CHOS | | | | | AML | AML | 11 40 04.7 | |
| | comp=E,2091μm,0.2s | | | | | | | |
| **FOCM** | **Foa** | **0.49** | **19** | PG | | Pg | 11 39 55.7 | -0.3 |
| FOCM | | | | SG | | Sg | 11 40 03.3 | +0.7 |
| **SMG** | **Samos** | **0.59** | **156** | P | | Pg | 11 39 57.7 | -0.2 |
| SMG | | | | S | | Sb | 11 40 06.6 | -0.5 |
| | comp=E,3μm,0.2s | | | | | | | |
| **SMG** | **Samos** | **0.59** | **156** | P | | Pg | 11 39 57.7 | -0.2 |
| SMG | | | | S | | Sb | 11 40 06.6 | -0.5 |
| SMG | | | | | AML | AML | 11 40 09.3 | |
| | comp=E,6694μm,0.3s | | | | | | | |
| SMG | | | | | AML | AML | 11 40 09.5 | |
| | comp=N,5780μm,0.2s | | | | | | | |
| **CAND** | **Candarli** | **0.74** | **17** | PG | | Pg | 11 40 00.2 | -0.5 |
| **GCAM** | **G?zelcaml?** | **0.78** | **134** | PG | | Pg | 11 40 01.1 | -0.4 |
| GCAM | | | | SG | | Sb | 11 40 12.2 | -0.4 |
| **PSRA** | **Psara** | **0.81** | **291** | P | | Pg | 11 40 02.3 | +0.1 |
| PSRA | | | | S | | Sb | 11 40 13.7 | +0.1 |
| **ZEDA** | **zmir-Bergama** | **0.84** | **31** | P | | Pg | 11 40 01.8 | -0.8 |
| ZEDA | | | | S | | Sg | 11 40 13.9 | +0.4 |
| ZEDA | | | | | *i* AML | AML | 11 40 17.0 | |
| | comp=N,246nm,0.5s | | | | | | | |
| **DKL** | **Dikili** | **0.87** | **19** | PG | | Pg | 11 40 02.7 | -0.6 |
| DKL | | | | SG | | Sb | 11 40 16.1 | +0.7 |
| **DDIM** | **Aydin, Didim** | **0.97** | **144** | P | | Pg | 11 40 04.7 | -0.4 |
| DDIM | | | | S | | Sb | 11 40 18.3 | +0.3 |
| DDIM | | | | | *i* AML | AML | 11 40 25.0 | |
| | comp=N,157nm,0.7s | | | | | | | |
| **PRK** | **Paraskevi** | **1.02** | **349** | P | | Pg | 11 40 06.5 | +0.5 |
| PRK | | | | S | | Sn | 11 40 21.1 | +0.1 |
| | comp=N,865nm,0.4s | | | | | | | |
| **PRK** | **Paraskevi** | **1.02** | **349** | P | | Pg | 11 40 06.5 | +0.5 |
| PRK | | | | S | | Sn | 11 40 21.1 | +0.1 |
| PRK | | | | | AML | AML | 11 40 23.2 | |
| | comp=N,1329μm,0.4s | | | | | | | |
| PRK | | | | | AML | AML | 11 40 25.7 | |
| | comp=E,2128μm,0.5s | | | | | | | |
| **SIGR** | **SIGRI** | **1.10** | **331** | P | | Pb | 11 40 07.1 | -0.4 |
| SIGR | | | | S | | Sb | 11 40 21.4 | -0.4 |
| | comp=E,275nm,0.4s | | | | | | | |
| **SIGR** | **SIGRI** | **1.10** | **331** | P | | Pb | 11 40 07.1 | -0.4 |
| SIGR | | | | | AML | AML | 11 40 21.9 | |
| | comp=N,573μm,0.4s | | | | | | | |
| SIGR | | | | | AML | AML | 11 40 22.6 | |
| | comp=E,528μm,0.4s | | | | | | | |
| **GOMA** | **Golmarmara-Man** | **1.18** | **67** | PN | | Pn | 11 40 09.2 | +0.3 |
| **AKHS** | **Akhisar** | **1.19** | **58** | P | | Pn | 11 40 08.3 | -0.7 |
| AKHS | | | | S | | Sb | 11 40 24.4 | -0.1 |
| AKHS | | | | | *i* AML | AML | 11 40 26.0 | |
| | comp=E,258nm,0.5s | | | | | | | |
| **AKS** | **Akhisar** | **1.19** | **57** | PN | | Pn | 11 40 09.2 | +0.2 |
| **GPNR** | **Gulpinar-Canak** | **1.25** | **346** | PN | | Pn | 11 40 09.3 | -0.5 |
| **BUHA** | **Balkesir, Bur** | **1.32** | **19** | P | | Pn | 11 40 09.5 | -1.4 |
| BUHA | | | | S | | Sb | 11 40 28.0 | -0.3 |
| **BODT** | **Bodrum** | **1.33** | **152** | PN | | Pb | 11 40 11.2 | -0.3 |
| **MLSB** | **Milas** | **1.37** | **134** | PN | | Pn | 11 40 11.8 | +0.2 |
| **STEP** | **BALIKESIR_Sava** | **1.46** | **39** | P | | Pn | 11 40 13.3 | +0.5 |
| STEP | | | | S | | Sg | 11 40 34.2 | +0.8 |
| STEP | | | | | *i* AML | AML | 11 40 35.0 | |
| | comp=E,129nm,0.4s | | | | | | | |
| **EZN** | **Ezine** | **1.58** | **354** | PN | | Pn | 11 40 14.5 | 0.0 |
| **BOZC** | **Bozcaada** | **1.64** | **347** | PN | | Pn | 11 40 14.2 | -1.0 |
| **KULA** | **Kula-Manisa** | **1.69** | **80** | PN | | Pn | 11 40 17.0 | +0.9 |
| **YER** | **Yerkesik** | **1.78** | **128** | PN | | Pn | 11 40 17.9 | +0.7 |
| **USAK** | **Uak-Merkez** | **2.01** | **76** | P | | Pb | 11 40 22.4 | -0.6 |
| USAK | | | | S | | Sb | 11 40 50.0 | +2.0 |
| **GONE** | **Gonen-Balikesi** | **2.01** | **26** | PN | | Pn | 11 40 21.0 | +0.7 |
| **GELI** | **Tayfur-Gelibol** | **2.15** | **359** | PN | | Pn | 11 40 22.3 | +0.1 |
| **DALY** | **Dalyan (Mula)** | **2.21** | **130** | PN | | Pn | 11 40 23.9 | +0.8 |
| **KRBG** | **Karabiga-Canak** | **2.23** | **15** | PN | | Pn | 11 40 23.8 | +0.5 |

*TUL **18** 11:56:57.7±0.5, 36°52N±0°02×98°61W±0°02, h5km±3km, ML2.9, mb_Lg2.6/31(NEIC), Error ellipse: s-maj=3.0km s-min=1.4km az=155.0*

**NEIC 18 11:56:58.5±0.4, 36°52N±0°02×98°61W±0°03, h5km±3km, Error ellipse: s-maj=4.1km s-min=1.4km az=124.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.34** | **247** | | Pg | 11 57 04.8 | -0.3 |
| U32A | | | | Sg | Sg | 11 57 10.0 | +0.3 |
| **FNO** | **Franklin** | **1.59** | **142** | | Pn | 11 57 26.8 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.73** | **76** | Pn | Pn | 11 57 29.1 | -0.1 |
| **WMOK** | **Wichita Mounta** | **1.78** | **185** | | Pn | 11 57 29.3 | -0.6 |
| **R32A** | **Long Quarter,** | **1.91** | **358** | Pn | Pn | 11 57 32.0 | +0.3 |
| **W35A** | **Tecumseh** | **1.96** | **133** | | Pn | 11 57 32.1 | -0.2 |
| **X34A** | **Smith Ranch, M** | **2.01** | **161** | Pn | Pn | 11 57 34.3 | +1.2 |
| X34A | | | | IAmb_Lg | | 11 58 07.0 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **TUL1** | **Leonard** | **2.36** | **104** | IAmb_Lg | | 11 58 14.6 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.27** | **125** | Pn | Pn | 11 57 50.1 | -0.2 |
| X37A | | | | IAmb_Lg | | 11 58 48.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **3.41** | **90** | Pn | Pn | 11 57 52.3 | +0.1 |
| **HHAR** | **Hobbs** | **3.77** | **92** | Pn | Pn | 11 57 56.4 | -0.9 |
| HHAR | | | | IAmb_Lg | | 11 59 02.8 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.04** | **309** | IAmb_Lg | | 11 59 10.9 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.25** | **234** | IAmb_Lg | | 11 59 16.5 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.39** | **73** | IAmb_Lg | | 11 59 15.8 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **4.55** | **114** | IAmb_Lg | | 11 59 34.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **U40A** | **Yellville** | **4.64** | **90** | IAmb_Lg | | 11 59 23.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.70** | **279** | IAmb_Lg | | 11 59 33.3 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.35** | **69** | IAmb_Lg | | 11 59 49.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.99** | **43** | IAmb_Lg | | 12 00 10.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **6.04** | **92** | IAmb_Lg | | 12 00 11.5 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.07** | **73** | IAmb_Lg | | 12 00 11.9 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.10** | **190** | IAmb_Lg | | 12 00 14.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **FVM** | **French Village** | **6.69** | **75** | IAmb_Lg | | 12 00 33.6 | |
| | comp=Z,11nm,0.8s | | | | | | |

**IDC 18 11:57:34.8±2.7, 5°48S×152°53E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.1/33, mbtmp3.3/3, Error ellipse: s-maj=210.2km s-min=32.6km az=128.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.80** | **229** | P | P | 12 02 39.3 | 0.0 |
| | 0.2nm,0.5s,baz=53,slow=9.9,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **25.47** | **223** | P | P | 12 03 04.8 | -0.1 |
| | 0.3nm,0.4s,baz=58,slow=8.7,SNR=8.1 | | | | | | |
| **ILAR** | **Eielson Array** | **82.89** | **22** | P | P | 12 10 01.2 | +0.2 |
| | 0.4nm,0.7s,baz=250,slow=4.7,SNR=2.3 | | | | | | |

*IDC **18** 12:08:45.7±1.8, 35°70N×4°22W, h0km, mb3.2/2, mb1 3.5/3, mb1mx3.2/32, mbtmp3.2/3, ML3.4/1, Error ellipse: s-maj=49.9km s-min=20.3km az=86.0*
*CNRM **18** 12:08:45.4, 35°52N×3°83W, h17km, ml3.1*
*SFS **18** 12:08:45.0, 35°37N×3°84W, h10km, ML3.3, ALBORAN SUR*
*IGIL **18** 12:08:46.3, 35°43N×4°01W, h0km, ML2.7*

**ISC 18 12:08:45.1±1.1, 35°52N±0°03×3°80W±0°03, h12km±9km, n29, σ1°98/46, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.33** | **200** | P | **Pg** | **12 08 50.2** | **-1.5** |
| **PALE** | **Palemas** | **0.33** | **200** | P | **Pg** | **12 08 50.0** | **-1.8** |
| PALE | | | | S | **Sb** | **12 08 58.3** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.73** | **114** | P | **Pg** | **12 08 57.6** | **-1.6** |
| GOG | | | | S | **Sn** | **12 09 12.5** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.17** | **106** | P | **Pn** | **12 09 05.0** | **-2.3** |
| CHAS | | | | S | **Sb** | **12 09 19.9** | **-2.6** |
| **CHEFC** | **Chefchaouen** | **1.32** | **252** | P | **Pg** | **12 09 12.0** | **+1.4** |
| **CHEFC** | **Chefchaouen** | **1.32** | **252** | P | **Pn** | **12 09 08.9** | **-0.6** |
| CHEFC | | | | S | **Sn** | **12 09 26.1** | **-1.0** |
| **CEU** | **Ceuta** | **1.33** | **287** | P | **Pn** | **12 09 06.5** | **-3.1** |
| CEU | | | | S | **Sn** | **12 09 21.8** | **-5.4** |
| CEU | | | | *e*Cod | | 12 10 18.8 | |
| **EMAL** | **Malaga-Limoner** | **1.33** | **338** | Pn | **Pn** | **12 09 09.1** | **-0.5** |
| **EMAL** | **Malaga-Limoner** | **1.33** | **338** | Pg | **Pg** | **12 09 10.8** | **-0.1** |
| EMAL | | | | S | **Sg** | **12 09 28.4** | **+0.2** |
| EMAL | | | | *e*Cod | | 12 10 21.1 | |
| **TAF** | **Taforalt** | **1.34** | **121** | P | **Pg** | **12 09 12.0** | **+1.1** |
| **TAF** | **Taforalt** | **1.34** | **121** | P | **Pn** | **12 09 08.3** | **-1.5** |
| TAF | | | | S | **Sg** | **12 09 30.8** | **+2.4** |
| **JBK** | **JBK** | **1.56** | **139** | P | **Pb** | **12 09 15.0** | **+0.8** |
| **JBK** | **JBK** | **1.56** | **139** | P | **Pn** | **12 09 10.8** | **-2.1** |
| JBK | | | | S | **Sn** | **12 09 29.4** | **-3.8** |
| **SICH** | **Sidi Chahed** | **1.89** | **222** | S | Sn | 12 09 26.0 | -15 |
| **SICH** | **Sidi Chahed** | **1.89** | **222** | P | **Pn** | **12 09 17.8** | **+0.6** |
| SICH | | | | S | **Sb** | **12 09 42.9** | **-0.2** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pg** | **12 09 23.0** | **-1.1** |
| **LCRM** | **LCR** | **2.03** | **206** | P | **Pb** | **12 09 21.0** | **-1.1** |
| LCRM | | | | S | **Sb** | **12 09 46.7** | **-0.6** |
| **IFR** | **Ifrane** | **2.28** | **209** | Pn | **Pn** | **12 09 22.5** | **-0.3** |
| **IFR** | **Ifrane** | **2.28** | **209** | Pg | **Pb** | **12 09 26.8** | **+0.4** |
| IFR | | | | S | **Sn** | **12 09 47.4** | **-3.5** |
| **CZD** | **Col de Zad** | **2.69** | **203** | P | **Pn** | **12 09 29.3** | **+0.8** |
| CZD | | | | S | **Sn** | **12 10 01.4** | **+0.2** |
| **MD31** | **MD31** | **2.77** | **197** | P | **Pn** | **12 09 28.4** | **-0.9** |
| MD31 | | | | S | **Sn** | **12 10 02.5** | **-0.3** |
| **MDT** | **Midelt** | **2.78** | **194** | P | **Pn** | **12 09 30.7** | **+1.0** |
| **MDT** | **Midelt** | **2.78** | **194** | P | **Pn** | **12 09 30.7** | **+1.0** |
| MDT | | | | S | **Sn** | **12 10 02.9** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.67** | **302** | P | **Pn** | **12 09 41.0** | **-0.7** |
| PVAQ | | | | S | **Sn** | **12 10 24.1** | **-0.8** |
| **ESDC** | **Sonseca Array** | **4.14** | **358** | Pn | **Pn** | **12 09 49.2** | **+0.9** |
| | 1.3nm,0.3s,baz=179,slow=12,SNR=30 | | | | | | |
| ESDC | | | | | Sn | **Sn** | **12 10 35.9** | **-0.9** |
| | 0.3nm,0.3s,baz=180,slow=17,SNR=1.3 | | | | | | |
| ESDC | | | | | Lg | Lg | 12 10 52.1 | |
| | 0.5nm,0.3s,baz=184,slow=25,SNR=4.8 | | | | | | |
| **MESJ** | **Messejana** | **4.24** | **304** | *e*P | | **Pn** | **12 09 49.0** | **-0.5** |
| MESJ | | | | *e*S | | **Sn** | **12 10 34.9** | **-4.0** |
| MESJ | | | | IAML | | | 12 10 46.0 | |
| | comp=N,17nm,0.8s | | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **319** | P | | **Pn** | **12 09 55.7** | **+2.5** |
| PESTR | | | | S | | **Sn** | **12 10 44.3** | **-1.2** |
| **TORD** | **Torodi Ar. Bea** | **22.83** | **166** | P | | **P** | **12 13 53.3** | **+5.2** |
| | comp=N,0.5nm,0.8s,baz=334,slow=10,SNR=2.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.80** | **332** | P | | **P** | **12 19 42.7** | **+0.1** |
| | comp=N,0.2nm,0.8s,baz=58,slow=5.9,SNR=4.2 | | | | | | | |

*DNK **18** 12:24:17.3±2.3, 59°82N×24°43E, h0km, Mc3.8, Suspected explosion*
*UPP **18** 12:24:18.0±2.1, 59°57N×24°28E, h0km, ML2.7, Suspected explosion*
*NAO **18** 12:24:20.5±1.2, 59°82N×24°24E, ML2.4*
*IDC **18** 12:24:20.1±2.2, 59°79N×24°23E, h0km, mb1 3.3/3, mb1mx3.1/40, mbtmp3.3/3, ML2.7/3, Error ellipse: s-maj=26.2km s-min=6.5km az=145.0*
*HEL **18** 12:24:20.4±0.0, 59°84N×24°08E, h0km, ML2.3, ML2.7(UPP), Explosion*
*BER **18** 12:24:22.2±3.3, 59°88N×23°96E, h0km, ML2.4(NAO), Suspected explosion*

**ISC 18 12:24:18.8±0.7, 59°83N±0°02×24°13E±0°02, h0km, n75, σ1°63/124, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.41** | **19** | *e*P | | **Pg** | **12 24 27.7** | **+1.0** |
| MEF | | | | *e*S | | **Sg** | **12 24 33.1** | **+1.0** |
| **EE01** | **Perakula, Nova** | **0.68** | **203** | *e*P | | **Pg** | **12 24 32.2** | **+0.5** |
| EE01 | | | | *e*S | | **Sg** | **12 24 40.7** | **+0.2** |
| **EE02** | **Kiisa, Saku** | **0.70** | **155** | *e*P | | **Pg** | **12 24 33.2** | **+1.0** |
| EE02 | | | | *e*S | | **Sg** | **12 24 42.6** | **+1.3** |
| **NUR** | **Nurmijrvi** | **0.73** | **21** | *e*P | | **Pg** | **12 24 33.5** | **+0.6** |
| NUR | | | | *e*S | | **Sg** | **12 24 42.6** | **+0.3** |
| **ARBE** | **Arbavere** | **1.02** | **112** | *e*PB | | **Pb** | **12 24 39.7** | **+0.3** |
| ARBE | | | | *e*S | | **Sb** | **12 24 52.9** | **-0.5** |
| **EE06** | **Soera, Palade,** | **1.08** | **218** | *e*P | | **Pg** | **12 24 39.6** | **+0.1** |
| EE06 | | | | *e*S | | **Sg** | **12 24 53.8** | **+0.3** |
| **PVF** | **Pernaja** | **1.13** | **50** | *e*P | | **Pg** | **12 24 40.8** | **+0.4** |
| PVF | | | | *e*S | | **Sg** | **12 24 55.3** | **+0.3** |
| **MTSE** | **Matsula** | **1.13** | **188** | *e*P | | **Pg** | **12 24 40.0** | **-0.4** |
| **MTSE** | **Matsula** | **1.13** | **188** | *e*P | | **Pg** | **12 24 40.9** | **+0.4** |
| MTSE | | | | *e*S | | **Sg** | **12 24 55.2** | **+0.2** |
| **EE03** | **Tooma soojaam,** | **1.46** | **130** | *e*P | | **Pg** | **12 24 47.1** | **+0.3** |
| EE03 | | | | *e*S | | **Sb** | **12 25 06.2** | **+0.3** |
| **RAF** | **Rauma** | **1.68** | **317** | *e*P | | **Pn** | **12 24 50.0** | **+0.7** |
| RAF | | | | *e*S | | **Sn** | **12 25 12.0** | **+0.5** |
| RAF | | | | MSG | | | 12 25 17.4 | |
| | comp=Z,39nm,0.2s | | | | | | | |
| **VJF** | **Virojoki** | **1.86** | **66** | *e*P | | **Pn** | **12 24 53.2** | **+1.3** |
| VJF | | | | *e*S | | **Sg** | **12 25 18.4** | **0.0** |
| VJF | | | | MSG | | | 12 25 21.6 | |
| | comp=Z,17nm,0.2s | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | Pn | | **Pb** | **12 24 54.2** | **+0.1** |
| | baz=200,slow=16 | | | | | | | |
| FIA0 | | | | | Sn | **Sg** | **12 25 19.6** | **+0.3** |
| | baz=214,slow=28 | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | Pn | | **Pb** | **12 24 54.2** | **+0.1** |
| | baz=200,slow=16 | | | | | | | |
| FIA0 | | | | | Sn | **Sg** | **12 25 19.6** | **+0.3** |
| | baz=214,slow=28 | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | *e*P | | **Pb** | **12 24 54.1** | **+0.1** |
| FIA0 | | | | *e*SG | | **Sb** | **12 25 19.4** | **+1.3** |
| FIA0 | | | | MSG | | | 12 25 24.0 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BACU** | **Backbrunna** | **3.54** | **273** | | P | | **Pn** | **12 25 16.2** | **+1.2** |
| BACU | | | | | S | | **Sn** | **12 25 58.3** | **+0.8** |
| **BACU** | **Backbrunna** | **3.54** | **273** | *eP* | | | **Pn** | **12 25 16.2** | **+1.2** |
| BACU | | | | *eS* | | | **Sn** | **12 25 58.3** | **+0.8** |
| **IGGU** | **Iggoen** | **3.54** | **290** | | P | | **Pn** | **12 25 16.4** | **+1.4** |
| **IGGU** | **Iggoen** | **3.54** | **290** | | P | | **Pn** | **12 25 16.4** | **+1.4** |
| **IGGU** | **Iggoen** | **3.54** | **290** | *eP* | | | **Pn** | **12 25 16.4** | **+1.4** |
| **ARNU** | **Arnoeviken** | **3.80** | **302** | | P | | **Pn** | **12 25 19.7** | **+1.1** |
| **ARNU** | **Arnoeviken** | **3.80** | **302** | | P | | **Pn** | **12 25 19.7** | **+1.1** |
| **ARNU** | **Arnoeviken** | **3.80** | **302** | *eP* | | | **Pn** | **12 25 19.7** | **+1.1** |
| **VIKU** | **Vikbolandet** | **4.05** | **254** | *eP* | | | **Pn** | **12 25 23.9** | **+1.9** |
| **PABE** | **Paberze** | **4.34** | **181** | *eP* | | | **Pn** | **12 25 27.6** | **+1.7** |
| **IIGN** | **Ignalina** | **4.63** | **165** | *eP* | | | **Pn** | **12 25 32.2** | **+2.2** |
| IIGN | | | | | IAML | | | 12 26 45.1 | |
| | comp=Z,3.8nm,0.3s | | | | | | | | |
| **HFS** | **Hagfors** | **5.25** | **278** | | Pn | | **Pn** | **12 25 38.8** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=107,slow=14,SNR=26 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **12 26 39.7** | **+0.1** |
| | comp=Z,0.9nm,0.3s,baz=93,slow=27,SNR=8.7 | | | | | | | | |
| **HFS** | **Hagfors** | **5.25** | **278** | | Pn | | **Pn** | **12 25 39.7** | **+1.3** |
| | baz=91,slow=16 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **12 26 39.3** | **-0.3** |
| | baz=99,slow=28 | | | | | | | | |
| **HFS** | **Hagfors** | **5.25** | **278** | | Pn | | **Pn** | **12 25 39.7** | **+1.3** |
| | baz=91,slow=16 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **12 26 39.3** | **-0.3** |
| | baz=99,slow=28 | | | | | | | | |
| **BLEU** | **Blekinge** | **5.65** | **235** | *i* | P | | **Pn** | **12 25 43.3** | **-0.7** |
| BLEU | | | | *i* | S | | **Sn** | **12 26 48.8** | **-0.6** |
| **NRA0** | **NORESS Array S** | **6.33** | **284** | | Pn | | **Pn** | **12 25 53.4** | **+0.2** |
| | baz=99,slow=12 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | **12 27 03.9** | **-2.2** |
| | baz=85,slow=22 | | | | | | | | |
| NRA0 | | | | | Lg | | Lg | 12 27 33.8 | |
| | baz=95,slow=37 | | | | | | | | |
| **NRA0** | **NORESS Array S** | **6.33** | **284** | | Pn | | **Pn** | **12 25 53.4** | **+0.2** |
| | baz=99,slow=12 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | **12 27 03.9** | **-2.2** |
| | baz=85,slow=22 | | | | | | | | |
| NRA0 | | | | | Sg | | **Sb** | **12 27 33.8** | **+8.0** |
| | baz=95,slow=37 | | | | | | | | |
| **DEL** | **Delary** | **6.39** | **243** | *i* | P | | **Pn** | **12 25 53.2** | **-0.8** |
| DEL | | | | *i* | S | | **Sn** | **12 27 04.4** | **-3.2** |
| **DEL** | **Delary** | **6.39** | **243** | *eP* | | | **Pn** | **12 25 52.9** | **-1.1** |
| **NB2** | **NORSAR Subarra** | **6.51** | **286** | | Pn | | **Pn** | **12 25 55.6** | **-0.2** |
| | baz=90,slow=14 | | | | | | | | |
| NB2 | | | | | Sn | | **Sn** | **12 27 09.9** | **-0.7** |
| | baz=97,slow=22 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.51** | **286** | | Pn | | **Pn** | **12 25 55.6** | **-0.2** |
| | baz=90,slow=14 | | | | | | | | |
| NB2 | | | | | Sn | | **Sn** | **12 27 09.9** | **-0.7** |
| | baz=97,slow=22 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **6.51** | **286** | | Pn | | **Pn** | **12 25 55.2** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=92,slow=13,SNR=38 | | | | | | | | |
| NOA | | | | | Sn | | **Sn** | **12 27 06.6** | **-4.0** |
| | comp=Z,0.1nm,0.3s,baz=134,slow=14,SNR=4.7 | | | | | | | | |
| NOA | | | | | Lg | | Lg | 12 27 42.5 | |
| | comp=Z,0.1nm,0.3s,baz=106,slow=1.6,SNR=1.9 | | | | | | | | |
| **STRU** | **Stroemstad** | **6.65** | **269** | *i* | P | | **Pn** | **12 25 56.2** | **-1.5** |
| STRU | | | | *i* | S | | **Sn** | **12 27 08.6** | **-5.5** |
| **TJOU** | **Tjoern** | **6.72** | **260** | *i* | P | | **Pn** | **12 26 01.0** | **+2.4** |
| TJOU | | | | *i* | S | | **Sn** | **12 27 14.0** | **-1.7** |
| **APA0** | **Apatity Array** | **8.73** | **23** | | Pn | | **Pn** | **12 26 28.1** | **+2.0** |
| | baz=201,slow=14 | | | | | | | | |
| APA0 | | | | | Sn | | **Sn** | **12 28 00.2** | **-5.0** |
| | baz=207,slow=28 | | | | | | | | |
| **APA0** | **Apatity Array** | **8.73** | **23** | | Pn | | **Pn** | **12 26 28.1** | **+2.0** |
| | baz=201,slow=14 | | | | | | | | |
| APA0 | | | | | Sn | | **Sn** | **12 28 00.2** | **-5.0** |
| | baz=207,slow=28 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.77** | **3** | | Pn | | **Pn** | **12 26 40.0** | **-0.3** |
| | baz=175,slow=16 | | | | | | | | |
| ARA0 | | | | | Sn | | **Sn** | **12 28 26.5** | **-4.1** |
| | baz=182,slow=28 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.77** | **3** | | Pn | | **Pn** | **12 26 40.0** | **-0.3** |
| | baz=175,slow=16 | | | | | | | | |
| ARA0 | | | | | Sn | | **Sn** | **12 28 26.5** | **-4.1** |
| | baz=182,slow=28 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.77** | **3** | | Pn | | **Pn** | **12 26 40.0** | **-0.3** |
| | baz=176,slow=14,SNR=15 | | | | | | | | |

*MAN **18** 12:38:17.8, 5.°57N × 126.°43E, h114km, mb5.0, ML3.9, MS3.9*
*IDC **18** 12:38:21.6± 0.9, 5.°73N × 126.°29E, h122km ± 8km, mb3.8/11, mb1 4.0/13, mb1mx3.6/49, mbtmp4.2/13, MS4.1/1, Ms1 4.1/1, ms1mx2.5/77, Error ellipse: s-maj=33.4km s-min=9.7km az=68.0*
*NEIC **18** 12:38:21.8± 1.7, 5.°76N ± 0.°06 × 126.°4E ± 0.°1, h117km ± 8km, mb4.4/20, Error ellipse: s-maj=19.5km s-min=5.3km az=70.0*
*DJA **18** 12:38:21.1± 0.3, 6.°1N ± 3.°3 × 12.°7E ± °, h110km ± 4km, M4.5/12, mB4.9/4, mb4.5/12, MLv4.7/11, Mw(mB)4.2/4*

**ISC 18 12:38:19.8**±0.5, **5.°75N**±0.°05×**126.°32E**±0.°07, **h100km**, **n60,** σ1**99**/67, **mb4.3**/21, **11C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **DDMP** | **Don Marcelino,** | **0.70** | **300** | *eP* | | **Pn** | **12 38 38.2** | **+0.9** |
| **MATI** | **Mati** | **1.19** | **357** | *eP* | | **Pn** | **12 38 45.1** | **+2.7** |
| **GSPH** | **General Santos** | **1.41** | **284** | *eP* | | **Pn** | **12 38 44.6** | **-0.5** |
| GSPH | | | | *i* | S | **Sn** | **12 39 03.5** | **-0.7** |
| **DAV** | **Davao City (W)** | **1.50** | **331** | | P | **Pn** | **12 38 49.4** | **+3.2** |
| | 222nm,0.3s,baz=293,slow=3.9,SNR=11 | | | | | | | |
| DAV | | | | | LR | LR | 12 38 59.7 | |
| | comp=Z,116nm,18.6s,baz=352,slow=25 | | | | | | | |
| DAV | | | | | S | **Sn** | **12 39 10.4** | **+4.2** |
| | 388nm,0.3s,baz=96,slow=23,SNR=5.0 | | | | | | | |
| **DAV** | **Davao City (W)** | **1.50** | **331** | | | **Pn** | **12 38 49.8** | **+3.6** |
| **SGSI** | **Sangihe** | **2.20** | **201** | | P | **Pn** | **12 38 57.5** | **+2.5** |
| SGSI | | | | | S | **Sn** | **12 39 25.2** | **+3.3** |
| **BIPH** | **Bislig** | **2.42** | **1** | *eP* | | Pn | 12 39 06.6 | +8.7 |
| BIPH | | | | *i* | S | Sn | 12 39 38.1 | +11 |
| **BUKP** | **Musuan** | **2.46** | **329** | *eP* | | **Pn** | **12 39 01.6** | **+3.1** |
| **CTBH** | **Cotabato--PC H** | **2.53** | **305** | *eP* | | **Pn** | **12 39 00.8** | **+1.4** |
| CTBH | | | | *i* | S | **Sn** | **12 39 31.5** | **+1.9** |
| **BUTP** | **Butuan** | **3.27** | **348** | *eP* | | **Pn** | **12 39 14.0** | **+4.7** |
| **PAGZ** | **Pagadian** | **3.59** | **306** | *eP* | | **Pn** | **12 39 15.3** | **+1.8** |
| **GLSP** | **General Luna,** | **4.01** | **357** | *eP* | | **Pn** | **12 39 22.8** | **+3.6** |
| **MSLP** | **Maasin** | **4.59** | **342** | *eP* | | **Pn** | **12 39 29.8** | **+2.8** |
| **TBP** | **Tagbilaran** | **4.61** | **328** | *eP* | | **Pn** | **12 39 28.7** | **+1.3** |
| **TNTI** | **Ternate** | **5.05** | **168** | | | **Pn** | **12 39 33.6** | **+0.3** |
| **TNTI** | **Ternate** | **5.05** | **168** | P | | **Pn** | **12 39 33.4** | **+0.1** |
| **KMSI** | **Cibinong** | **5.65** | **205** | P | | **Pn** | **12 39 44.9** | **+3.5** |
| | 0.5nm3um96nm,0.5s | | | | | | | |
| **GTOI** | **Gorontalo** | **6.06** | **213** | P | | **Pn** | **12 39 48.5** | **+1.5** |
| | 0.1nm356nm26nm,0.6s | | | | | | | |
| **RCP** | **Roxas** | **6.77** | **329** | *eP** | | **Pn** | **12 40 00.8** | **+4.2** |
| **MRSI** | **Marisa** | **6.82** | **220** | P | | **Pn** | **12 40 00.6** | **+3.2** |
| | 0.2nm62nm,0.6s | | | | | | | |
| **TOLI2** | **Tolitoli** | **7.20** | **230** | | | **Pn** | **12 40 02.9** | **+0.4** |
| **LUWI** | **Luwuk** | **7.62** | **208** | Pn | | **Pn** | **12 40 12.2** | **+4.0** |
| **SANI** | **Sanana** | **7.75** | **182** | P | | **Pn** | **12 40 08.5** | **-1.6** |
| | 0.4nm2um21nm,0.5s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **7.81** | **266** | Pn | | **Pn** | **12 40 13.8** | **+3.0** |
| **APSI** | **Ampana** | **8.10** | **215** | P | | **Pn** | **12 40 17.8** | **+3.1** |
| | 30nm,1.0s | | | | | | | |
| **SIJI** | **Sorong** | **8.22** | **143** | P | | **Pn** | **12 40 16.6** | **+0.2** |
| | 1.7nm,0.3s,baz=266,slow=24,SNR=2.0 | | | | | | | |
| **FAKI** | **Fak Fak** | **10.45** | **145** | Pn | | **Pn** | **12 40 48.4** | **+1.7** |
| **BATI** | **Baumata** | **16.07** | **189** | P | | **Pn** | **12 41 60.0** | **-0.2** |
| | 3.0nm,0.3s,baz=154,slow=23,SNR=2.3 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.62** | **221** | P | | **P** | **12 42 30.0** | **+0.3** |
| JAGI | | | | | IAmb | IAmb | 12 43 15.0 | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **KNRA** | **Kununurra** | **21.43** | **174** | P | | **P** | **12 42 60.0** | **0.0** |
| KNRA | | | | | IAmb | IAmb | 12 43 00.5 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.71** | **182** | P | | **P** | **12 43 22.1** | **-0.7** |
| | comp=Z,2.5nm,0.4s,baz=11,slow=8.0,SNR=28 | | | | | | | |
| **PMG** | **Port Moresby** | **25.65** | **126** | P | | **P** | **12 43 39.7** | **-0.7** |
| | comp=Z,5.1nm,0.6s,baz=306,slow=14,SNR=2.1 | | | | | | | |
| **COEN** | **Coen** | **25.75** | **140** | P | | **P** | **12 43 41.4** | **0.0** |
| **WB0** | **Warramunga Arr** | **26.57** | **163** | P | | **P** | **12 43 48.2** | **-0.5** |
| WB0 | | | | | IAmb | IAmb | 12 44 21.2 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.72** | **163** | P | | **P** | **12 43 49.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **26.72** | **163** | P | | **P** | **12 43 49.5** | **-0.6** |
| | comp=Z,1.8nm,0.3s,baz=342,slow=10,SNR=31 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **12 47 10.7** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=352,slow=2.9,SNR=2.0 | | | | | | | |
| **WB2** | **Warramunga Arr** | **26.73** | **163** | P | | **P** | **12 43 49.5** | **-0.6** |
| WB2 | | | | | IAmb | IAmb | 12 44 20.1 | |
| | comp=Z,5.9nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **26.80** | **163** | P | | **P** | **12 43 50.2** | **-0.5** |
| WR0 | | | | | IAmb | IAmb | 12 44 05.8 | |
| | comp=Z,19nm,1.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.89** | **193** | P | | **P** | **12 43 59.8** | **-0.6** |
| PSA00 | | | | | IAmb | IAmb | 12 44 00.3 | |
| | comp=Z,27nm,1.6s | | | | | | | |
| **AS31** | **Alice Springs** | **30.16** | **166** | P | | **P** | **12 44 20.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **30.16** | **166** | P | | **P** | **12 44 20.3** | **-0.3** |
| | comp=Z,2.4nm,0.4s,baz=345,slow=7.2,SNR=65 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **12 47 19.7** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=355,slow=1.9,SNR=5.3 | | | | | | | |
| ASAR | | | | | ScP | **ScP** | **12 50 51.2** | **-2.0** |
| | comp=Z,0.4nm,1.0s,baz=337,slow=4.0,SNR=1.6 | | | | | | | |
| **BBOO** | **Buckleboo** | **39.45** | **167** | P | | **P** | **12 45 40.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **40.15** | **160** | P | | **P** | **12 45 46.5** | **+0.4** |
| | comp=Z,5.2nm,0.4s,baz=336,slow=8.4,SNR=21 | | | | | | | |
| **STKA** | **Stephens Creek** | **40.15** | **160** | P | | **P** | **12 45 46.6** | **+0.4** |
| **ARMA** | **Armidale** | **43.37** | **147** | P | | **P** | **12 46 13.3** | **+0.7** |
| **SONM** | **Songino Array** | **45.27** | **341** | P | | **P** | **12 46 28.0** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=8.2,SNR=1.7 | | | | | | | |
| **CAN** | **Canberra** | **46.09** | **154** | P | | **P** | **12 46 35.6** | **+1.5** |
| **TOO** | **Toolangi** | **46.66** | **159** | P | | **P** | **12 46 38.3** | **-0.2** |
| **MK31** | **Makanchi Array** | **55.68** | **325** | P | | **P** | **12 47 45.0** | **-0.8** |
| MK31 | | | | | IAmb | IAmb | 12 48 05.1 | |
| | comp=Z,5.6nm,1.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.68** | **325** | P | | **P** | **12 47 45.0** | **-0.9** |
| | comp=Z,0.4nm,0.3s,baz=121,slow=7.0,SNR=16 | | | | | | | |
| MKAR | | | | | ScP | **ScP** | **12 52 30.9** | **-3.2** |
| | comp=Z,0.3nm,0.8s,baz=127,slow=4.5,SNR=2.4 | | | | | | | |
| **MAKZ** | **Makanchi** | **55.87** | **325** | P | | **P** | **12 47 46.8** | **-0.4** |
| MAKZ | | | | | IAmb | IAmb | 12 48 21.0 | |
| | comp=Z,7.8nm,1.9s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **55.99** | **317** | P | | **P** | **12 47 50.4** | **+1.8** |
| TARG | | | | | IAmb | IAmb | 12 48 28.4 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| **KURK** | **Kurchatov** | **59.83** | **327** | P | | **P** | **12 48 14.2** | **-0.6** |
| KURK | | | | | IAmb | IAmb | 12 49 48.3 | |
| | comp=Z,12nm,1.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.42** | **327** | P | | **P** | **12 48 49.7** | **-2.1** |
| | comp=Z,0.3nm,0.4s,baz=93,slow=11,SNR=2.1 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.84** | **321** | P | | **P** | **12 49 30.9** | **-0.9** |
| | comp=Z,0.5nm,0.4s,baz=101,slow=10,SNR=1.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.47** | **26** | P | | **P** | **12 50 35.0** | **-1.1** |
| | comp=Z,0.5nm,0.5s,baz=250,slow=4.6,SNR=9.3 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.42** | **340** | P | | **P** | **12 50 58.1** | **-2.4** |
| | comp=Z,4.0nm,1.1s,baz=90,slow=9.3,SNR=1.4 | | | | | | | |
| ARCES | | | | | LR | LR | 13 38 39.8 | |
| | comp=Z,92nm,18.1s,baz=290,slow=41 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.84** | **24** | P | | **P** | **12 51 44.0** | **+0.1** |
| | comp=Z,0.1nm,0.5s,baz=306,slow=4.5,SNR=4.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.67** | **51** | PKP | | **PKPdf** | **12 57 00.8** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=210,slow=1.0,SNR=3.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.89** | **289** | PKP | | **PKPdf** | **12 57 01.9** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=77,slow=1.7,SNR=4.9 | | | | | | | |

*HEL **18** 12:40:44.6± 0.1, 59.°84N × 24.°07E, h0km, ML1.8, Explosion*
*IDC **18** 12:40:45.9± 3.0, 59.°96N × 24.°11E, h0km, mb1 3.0/3, mb1mx2.8/40, mbtmp2.9/3, ML1.9/3, Error ellipse: s-maj=40.2km s-min=6.9km az=145.0*

**ISC 18 12:40:43.5**±0.8, **59.°83N**±0.°02×**24.°07E**±0.°03, **h0km**, **n19,** σ0**51**/32, **Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **MEF** | **Metsahovi** | **0.42** | **22** | *eP* | | **Pg** | **12 40 51.8** | **+0.3** |
| MEF | | | | *eS* | | **Sg** | **12 40 57.3** | **+0.3** |
| **EE01** | **Perakula, Nova** | **0.67** | **200** | *eP* | B | **Pb** | **12 40 57.9** | **0.0** |
| EE01 | | | | *eS* | | **Sg** | **12 41 05.0** | **+0.1** |
| **EE02** | **Kiisa, Saku** | **0.72** | **153** | *eP* | | **Pg** | **12 40 57.5** | **+0.3** |
| EE02 | | | | *eS* | | **Sg** | **12 41 06.6** | **+0.1** |
| **NUR** | **Nurmijrvi** | **0.74** | **23** | *eP* | | **Pg** | **12 40 57.5** | **-0.2** |
| NUR | | | | *eS* | | **Sg** | **12 41 07.0** | **-0.2** |
| **ARBE** | **Arbavere** | **1.05** | **111** | *eP* | N | **Pn** | **12 41 06.8** | **+1.4** |
| **EE06** | **Soera, Palade,** | **1.07** | **217** | *eP* | | **Pg** | **12 41 03.8** | **-0.1** |
| **MTSE** | **Matsula** | **1.13** | **187** | *eP* | | **Pg** | **12 41 05.4** | **+0.4** |
| MTSE | | | | *eS* | | **Sg** | **12 41 19.1** | **-0.6** |
| **PVF** | **Pernaja** | **1.15** | **50** | *eP* | | **Pg** | **12 41 05.1** | **-0.3** |
| PVF | | | | *eS* | | **Sg** | **12 41 19.6** | **-0.6** |
| **EE03** | **Tooma soojaam,** | **1.48** | **130** | *eP* | G | **Pg** | **12 41 11.5** | **-0.3** |
| EE03 | | | | *eS* | | **Sg** | **12 41 30.1** | **-0.9** |
| **RAF** | **Rauma** | **1.66** | **317** | *eP* | N | **Pg** | **12 41 15.7** | **+0.5** |
| RAF | | | | *eS* | | **Sn** | **12 41 36.0** | **+0.3** |
| RAF | | | | | MSG | | 12 41 40.9 | |
| | comp=Z,7.7nm,0.2s | | | | | | | |
| **VJF** | **Virojoki** | **1.88** | **66** | *eP* | | **Pn** | **12 41 17.4** | **+0.6** |
| VJF | | | | *eS* | G | **Sg** | **12 41 43.5** | **-0.3** |
| VJF | | | | | MSG | | 12 41 47.6 | |
| | comp=Z,4.4nm,0.2s | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.90** | **31** | *eP* | G | **Pb** | **12 41 19.1** | **+0.2** |
| FIA0 | | | | *eS* | | **Sn** | **12 41 42.0** | **+0.4** |
| FIA0 | | | | | MSG | | 12 41 46.6 | |
| | comp=Z,5.6nm,0.2s | | | | | | | |
| **FINES** | **FINESS Array B** | **1.90** | **31** | Pg | | **Pb** | **12 41 18.4** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=209,slow=13,SNR=19 | | | | | | | |
| FINES | | | | | Lg | Lg | 12 41 41.0 | |
| | comp=Z,1.2nm,0.3s,baz=223,slow=26,SNR=15 | | | | | | | |
| **VSU** | **Vasula** | **1.94** | **134** | *eP* | G | **Pb** | **12 41 19.4** | **-0.3** |
| **EE04** | **Vaivara Sinima** | **1.99** | **102** | *eP* | G | **Pb** | **12 41 20.4** | **0.0** |
| EE04 | | | | *eS* | B | **Sb** | **12 41 45.1** | **-0.6** |
| **EE05** | **Udria, Vaivara** | **2.00** | **101** | *eP* | G | **Pb** | **12 41 20.6** | **-0.1** |
| EE05 | | | | *eS* | G | **Sb** | **12 41 46.5** | **+0.3** |
| **HFS** | **Hagfors** | **5.22** | **278** | Pn | | **Pn** | **12 42 03.4** | **+0.7** |
| | comp=Z,0.0nm,0.3s,baz=96,slow=14,SNR=6.0 | | | | | | | |
| HFS | | | | | Sn | **Sn** | **12 43 02.7** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=94,slow=22,SNR=1.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **6.48** | **286** | Pn | | **Pn** | **12 42 19.4** | **-0.6** |
| | comp=Z,0.0nm,0.3s,baz=92,slow=13,SNR=8.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.76** | **3** | Pn | | **Pn** | **12 43 04.8** | **-0.2** |
| | baz=183,slow=14,SNR=1.1 | | | | | | | |

*DNK **18** 12:44:41.9± 1.9, 59.°84N × 24.°58E, h0km, ML2.1, Suspected explosion*
*IDC **18** 12:44:45.3± 2.1, 59.°76N × 24.°25E, h0km, mb1 3.4/3, mb1mx3.0/38, mbtmp3.3/3, ML2.8/3, Error ellipse: s-maj=24.7km s-min=6.5km az=145.0*
*HEL **18** 12:44:45.5± 0.0, 59.°84N × 24.°05E, h0km, ML2.5, ML2.7(UPP), Explosion*
*NAO **18** 12:44:45.7± 1.2, 59.°85N × 24.°24E, ML2.4*
*UPP **18** 12:44:47.1± 2.5, 59.°90N × 23.°85E, h0km, ML2.7, Suspected explosion*
*BER **18** 12:44:47.8± 4.0, 59.°85N × 24.°08E, h0km, ML2.4(NAO), Suspected explosion*

**ISC 18 12:44:44.0**±0.7, **59.°83N**±0.°02×**24.°12E**±0.°03, **h0km**, **n82,** σ1**25**/119, **Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **MEF** | **Metsahovi** | **0.41** | **20** | *eP* | | **Pg** | **12 44 52.9** | **+1.0** |
| MEF | | | | *eS* | | **Sg** | **12 44 58.4** | **+1.2** |
| **EE01** | **Perakula, Nova** | **0.68** | **202** | *eP* | | **Pg** | **12 44 57.4** | **+0.5** |
| EE01 | | | | *eS* | | **Sg** | **12 45 05.8** | **+0.1** |
| **EE02** | **Kiisa, Saku** | **0.71** | **155** | *eP* | | **Pg** | **12 44 58.4** | **+0.9** |
| EE02 | | | | *eS* | | **Sg** | **12 45 08.1** | **+1.4** |
| **NUR** | **Nurmijrvi** | **0.73** | **21** | *eP* | | **Pg** | **12 44 58.6** | **+0.6** |
| NUR | | | | *eS* | | **Sg** | **12 45 07.9** | **+0.6** |
| **ARBE** | **Arbavere** | **1.03** | **112** | *eP* | | **Pb** | **12 45 04.6** | **0.0** |
| ARBE | | | | *eS* | | **Sb** | **12 45 17.9** | **-0.7** |
| **EE06** | **Soera, Palade,** | **1.08** | **217** | *eP* | | **Pg** | **12 45 04.6** | **-0.1** |
| EE06 | | | | *eS* | B | **Sg** | **12 45 19.0** | **+0.2** |
| **PVF** | **Pernaja** | **1.13** | **50** | *eP* | | **Pb** | **12 45 06.1** | **-0.3** |
| PVF | | | | *eS* | | **Sb** | **12 45 21.1** | **-0.3** |
| **MTSE** | **Matsula** | **1.13** | **188** | *eP* | | **Pg** | **12 45 05.1** | **-0.6** |
| **MTSE** | **Matsula** | **1.13** | **188** | *eP* | | **Pg** | **12 45 06.0** | **+0.3** |
| MTSE | | | | *eS* | | **Sg** | **12 45 20.6** | **+0.2** |
| **EE03** | **Tooma soojaam,** | **1.46** | **130** | *eP* | | **Pg** | **12 45 12.3** | **+0.2** |
| EE03 | | | | *eS* | | **Sb** | **12 45 31.4** | **+0.2** |
| **RAF** | **Rauma** | **1.67** | **317** | *eP* | | **Pn** | **12 45 15.1** | **+0.6** |
| RAF | | | | *eS* | | **Sn** | **12 45 37.4** | **+0.8** |
| RAF | | | | | MSG | | 12 45 42.5 | |
| | comp=Z,48nm,0.2s | | | | | | | |
| **VJF** | **Virojoki** | **1.86** | **66** | *eP* | | **Pb** | **12 45 18.4** | **-0.4** |
| VJF | | | | *eS* | | **Sg** | **12 45 43.8** | **+0.2** |
| VJF | | | | | MSG | | 12 45 48.4 | |
| | comp=Z,29nm,0.2s | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | Pn | | **Pb** | **12 45 19.2** | **+0.1** |
| | baz=207,slow=16 | | | | | | | |
| FIA0 | | | | | Sn | **Sg** | **12 45 44.6** | **+0.2** |
| | baz=209,slow=28 | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | Pn | | **Pb** | **12 45 19.2** | **+0.1** |
| | baz=207,slow=16 | | | | | | | |
| FIA0 | | | | | Sn | **Sg** | **12 45 44.6** | **+0.2** |
| | baz=209,slow=28 | | | | | | | |
| **FIA0** | **FINESS Array S** | **1.88** | **30** | *eP* | | **Pb** | **12 45 19.3** | **+0.1** |
| FIA0 | | | | *eS* | | **Sg** | **12 45 44.0** | **-0.4** |
| FIA0 | | | | | MSG | | 12 45 49.3 | |
| | comp=Z,39nm,0.2s | | | | | | | |
| **FINES** | **FINESS Array B** | **1.88** | **30** | Pg | | **Pb** | **12 45 19.3** | **+0.1** |
| | comp=Z,5.9nm,0.3s,baz=210,slow=16,SNR=126 | | | | | | | |
| FINES | | | | | Lg | Lg | 12 45 46.0 | |
| | comp=Z,15nm,0.3s,baz=205,slow=23,SNR=9.9 | | | | | | | |
| **VSU** | **Vasula** | **1.93** | **134** | Pn | | **Pb** | **12 45 20.0** | **+0.1** |
| VSU | | | | Sn | | **Sg** | **12 45 46.0** | **+0.2** |
| **VSU** | **Vasula** | **1.93** | **134** | *eP* | | **Pb** | **12 45 19.5** | **-0.4** |
| **VSU** | **Vasula** | **1.93** | **134** | Pn | | **Pb** | **12 45 20.0** | **+0.1** |
| VSU | | | | Sn | | **Sg** | **12 45 46.0** | **+0.2** |
| **VSU** | **Vasula** | **1.93** | **134** | *eP* | G | **Pb** | **12 45 20.8** | **+0.8** |
| VSU | | | | *eS* | G | **Sg** | **12 45 46.7** | **+0.9** |
| **EE04** | **Vaivara Sinima** | **1.96** | **102** | *eP* | G | **Pg** | **12 45 21.4** | **-0.2** |
| EE04 | | | | *eS* | G | **Sg** | **12 45 47.2** | **+0.1** |
| **EE05** | **Udria, Vaivara** | **1.98** | **101** | *eP* | G | **Pb** | **12 45 21.6** | **+0.7** |
| EE05 | | | | *eS* | G | **Sg** | **12 45 47.5** | **-0.1** |
| **AAL** | **Aland** | **2.10** | **281** | P | | **Pn** | **12 45 21.7** | **+1.3** |
| AAL | | | | S | | **Sn** | **12 45 48.4** | **+1.3** |
| **AAL** | **Aland** | **2.10** | **281** | *eP* | | **Pn** | **12 45 21.8** | **+1.3** |
| AAL | | | | *eS* | G | **Sn** | **12 45 48.9** | **+1.7** |
| **SLIT** | **Slitere, Latvi** | **2.41** | **204** | *eP* | | **Pn** | **12 45 26.9** | **+2.3** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | P | | **Pn** | **12 45 30.8** | **+1.0** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | P | | **Pn** | **12 45 30.8** | **+1.0** |
| **NRTU** | **Norrtaelje** | **2.78** | **269** | *eP* | | **Pn** | **12 45 30.8** | **+1.0** |
| **GRAU** | **Graesoe** | **2.84** | **283** | P | | **Pn** | **12 45 31.2** | **+0.6** |
| **GRAU** | **Graesoe** | **2.84** | **283** | P | | **Pn** | **12 45 31.2** | **+0.6** |
| **GRAU** | **Graesoe** | **2.84** | **283** | *eP* | | **Pn** | **12 45 31.2** | **+0.6** |
| **FLYU** | **Flymyra** | **3.15** | **278** | P | | **Pn** | **12 45 36.1** | **+1.3** |
| **FLYU** | **Flymyra** | **3.15** | **278** | P | | **Pn** | **12 45 36.1** | **+1.3** |
| **FLYU** | **Flymyra** | **3.15** | **278** | *eP* | | **Pn** | **12 45 36.1** | **+1.3** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | P | | **Pn** | **12 45 37.8** | **+1.8** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | P | | **Pn** | **12 45 37.8** | **+1.8** |
| **NYNU** | **Nynaeshamn** | **3.23** | **258** | *eP* | | **Pn** | **12 45 37.8** | **+1.8** |
| **FIBU** | **Brunna** | **3.41** | **274** | P | | **Pn** | **12 45 39.6** | **+1.2** |
| **FIBU** | **Brunna** | **3.41** | **274** | P | | **Pn** | **12 45 39.6** | **+1.2** |
| **OSTU** | **Oestervaala** | **3.53** | **279** | P | | **Pn** | **12 45 40.7** | **+0.8** |
| **OSTU** | **Oestervaala** | **3.53** | **279** | P | | **Pn** | **12 45 40.7** | **+0.8** |
| **OSTU** | **Oestervaala** | **3.53** | **279** | *eP* | | **Pn** | **12 45 40.7** | **+0.8** |
| **IGGU** | **Iggoen** | **3.54** | **290** | P | | **Pn** | **12 45 41.4** | **+1.3** |
| **IGGU** | **Iggoen** | **3.54** | **290** | P | | **Pn** | **12 45 41.4** | **+1.3** |
| **IGGU** | **Iggoen** | **3.54** | **290** | *eP* | | **Pn** | **12 45 41.4** | **+1.3** |
| **BACU** | **Backbrunna** | **3.54** | **273** | P | | **Pn** | **12 45 41.3** | **+1.2** |
| **BACU** | **Backbrunna** | **3.54** | **273** | P | | **Pn** | **12 45 41.3** | **+1.2** |
| **BACU** | **Backbrunna** | **3.54** | **273** | *eP* | | **Pn** | **12 45 41.3** | **+1.2** |

**IDC 18 12:55:39.8±842.0, 52°.77N×33°.70E, h0km, Error ellipse: s-maj=345.7km s-min=96.4km az=30.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON 4.45** | | **26** | *i* | | 13 22 55.6 | |
| | baz=209,slow=330,SNR=1.1 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF 15.29** | | **89** | *i* | | 14 27 20.0 | |
| | baz=289,slow=334,SNR=2.0 | | | | | | |
| **I46RU** | **ZALESOVO INFRA29.99** | | **67** | *i* | | 16 01 10.0 | |
| | baz=289,slow=329,SNR=1.2 | | | | | | |

**VIE 18 12:58:58.1±0.6, 47°.41N×14°.85E, h0km, ml1.2/3, Error ellipse: s-maj=6.0km s-min=2.5km az=21.0 2 km NE of Mautern Suspected Mining explosion., Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARSA** | **Arzberg** | **0.49** | **109** | *e*Pg | Pg | 12 59 07.8 | +0.3 |
| ARSA | | | | *e*Sg | Sg | 12 59 14.9 | +1.2 |
| | 1.3nm,0.2s | | | | | | |
| **MOA** | **Molln** | **0.59** | **319** | *e*Pg | Pg | 12 59 08.9 | -0.6 |
| | 0.5nm,0.1s | | | | | | |
| MOA | | | | *e*Sg | Sb | 12 59 19.1 | -1.2 |
| | 3.7nm,0.3s | | | | | | |
| **CONA** | **Conrad Observa** | **0.86** | **52** | *e*Pg | Pg | 12 59 13.6 | -1.0 |
| | 0.2nm,0.1s | | | | | | |
| CONA | | | | *e*Sg | Sb | 12 59 27.3 | -0.8 |
| | 0.8nm,0.1s | | | | | | |

**LJU 18 12:59:15.2, 46°.05N×13°.62E, h0km, ML0.2, 2C, Explosion, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SABO** | **M.te Sabotino** | **0.07** | **189**⇑ | *e*Pg | Pg | 12 59 16.6 | +0.1 |
| **DRE** | **Drenchia** | **0.13** | **9**⇑ | *e*Pg | Pg | 12 59 17.3 | -0.3 |
| **VOJS** | **Vojsko** | **0.19** | **95** | *i* Pg | Pg | 12 59 18.7 | -0.1 |
| VOJS | | | | IAML | | 12 59 23.1 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **CADS** | **Cadrg** | **0.20** | **25** | *e*Pg | Pg | 12 59 18.8 | -0.2 |
| CADS | | | | IAML | | 12 59 23.6 | |
| | comp=Z,1.3nm,0.1s | | | | | | |
| **ROBS** | **Robic** | **0.21** | **340** | *e*Pg | Pg | 12 59 19.5 | +0.3 |

**IDC 18 13:01:57.5±1.8, 0°.96N×129°.20E, h0km, mb3.4/3, mb1 3.7/4, mb1mx3.4/41, mbtmp3.5/4, ML3.3/1, MS3.2/1, Ms1 3.2/1, ms1mx2.3/37, Error ellipse: s-maj=66.6km s-min=24.2km az=55.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.75** | **131** | Pn | Pn | 13 02 43.1 | +0.2 |
| | 4.7nm,0.3s,baz=336,slow=12,SNR=14 | | | | | | |
| SIJI | | | | Sn | Sn | 13 03 16.9 | -0.1 |
| | 2.8nm,0.3s,baz=232,slow=23,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.38** | **167** | P | P | 13 06 46.0 | -0.8 |
| | 0.7nm,0.7s,baz=346,slow=10,SNR=5.2 | | | | | | |
| **LEM** | **Lembang** | **22.89** | **250** | LR | LR | 13 17 55.2 | |
| | comp=Z,62nm,20.8s,baz=78,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **24.90** | **170** | P | P | 13 07 22.9 | +0.5 |
| | 3.7nm,1.0s,baz=350,slow=11,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.22** | **325** | P | P | 13 12 14.2 | -0.1 |
| | 0.1nm,0.4s,baz=119,slow=8.4,SNR=2.1 | | | | | | |

*IDC **18** 13:09:36.0±1.7, 34°.98N×32°.51E, h0km, mb3.6/4, mb1 3.7/8, mb1mx3.5/28, mbtmp3.6/8, ML3.7/4, MS3.1/4, Ms1 3.1/4, ms1mx2.6/83, Error ellipse: s-maj=47.1km s-min=19.1km az=59.0*
*DDA **18** 13:09:37.0±0.0, 34°.89N×32°.56E, h4km±14km, MW3.7*
*ISK **18** 13:09:38.6, 34°.79N×32°.54E, h22km, ML3.5/32*
*NIC **18** 13:09:40.9±0.0, 34°.86N×32°.60E, h10km±15km, Ml3.6/7*
*GII **18** 13:09:40.6±0.0, 34°.69N×32°.63E, h10km, MD2.9/4, Mm3.2/3*

**ISC 18 13:09:39.7±0.9, 34°.82N±0°.02×32°.54E±0°.03, h25km±6km, n92, σ1s26/123, mb3.5/4, 2C-1D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKMS** | **Akamas** | **0.26** | **319**⇑ | *e*P | **Pb** | **13 09 46.8** | **+0.5** |
| AKMS | | | | S | **Sb** | **13 09 51.1** | **+0.5** |
| AKMS | | | | AMI | | 13 09 53.0 | |
| | 31nm,0.8s | | | | | | |
| AKMS | | | | AMI | | 13 09 53.0 | |
| | 31nm,0.8s | | | | | | |
| AKMS | | | | AMI | | 13 09 55.9 | |
| | 27nm,0.5s | | | | | | |
| AKMS | | | | AMI | | 13 09 55.9 | |
| | 27nm,0.5s | | | | | | |
| **SZAC** | **Souni** | **0.29** | **103**⇑ | *e*P | **Pb** | **13 09 46.5** | **-0.1** |
| SZAC | | | | S | **Sb** | **13 09 50.9** | **-0.4** |
| SZAC | | | | AMI | | 13 09 56.8 | |
| | 34nm,0.6s | | | | | | |
| SZAC | | | | AMI | | 13 09 56.8 | |
| | 34nm,0.6s | | | | | | |
| SZAC | | | | AMI | | 13 09 56.9 | |
| | 44nm,0.5s | | | | | | |
| SZAC | | | | AMI | | 13 09 56.9 | |
| | 44nm,0.5s | | | | | | |
| **ALFC** | **Alefka** | **0.34** | **8**⇓ | *i*P | **Pb** | **13 09 46.9** | **-0.4** |
| ALFC | | | | S | **Sb** | **13 09 52.1** | **-0.5** |
| ALFC | | | | AMI | | 13 09 52.6 | |
| | 32nm,0.3s | | | | | | |
| ALFC | | | | AMI | | 13 09 52.6 | |
| | 32nm,0.3s | | | | | | |
| ALFC | | | | AMI | | 13 09 53.4 | |
| | 30nm,0.3s | | | | | | |
| ALFC | | | | AMI | | 13 09 53.4 | |
| | 30nm,0.3s | | | | | | |
| **LEF** | **Lefka** | **0.41** | **44** | PG | **Pb** | **13 09 47.5** | **-1.0** |
| LEF | | | | SG | **Sb** | **13 09 54.3** | **-0.2** |
| **ASGA** | **Asgata** | **0.58** | **93** | P | **Pb** | **13 09 51.4** | **+0.1** |
| ASGA | | | | S | **Sb** | **13 09 59.9** | **+0.7** |
| ASGA | | | | AMI | | 13 10 01.7 | |
| | 50nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 13 10 01.7 | |
| | 50nm,0.3s | | | | | | |
| ASGA | | | | AMI | | 13 10 01.9 | |
| | 45nm,0.6s | | | | | | |
| ASGA | | | | AMI | | 13 10 01.9 | |
| | 45nm,0.6s | | | | | | |
| **AKDN** | **Akdeniz- Kıbrı** | **0.59** | **36** | PG | **Pb** | **13 09 51.7** | **+0.3** |
| **CSS** | **Mathiatis** | **0.66** | **78** | PG | **Pb** | **13 09 52.8** | **+0.1** |
| CSS | | | | SG | **Sb** | **13 10 02.4** | **+0.9** |
| **CSS** | **Mathiatis** | **0.66** | **78** | P | **Pb** | **13 09 52.6** | **-0.1** |
| CSS | | | | S | **Sn** | **13 10 02.9** | **-0.1** |
| **CSS** | **Mathiatis** | **0.66** | **78** | Pg | **Pb** | **13 09 52.3** | **-0.4** |
| CSS | | | | Sg | **Sn** | **13 10 02.8** | **-0.3** |
| **ATHAL** | **Athalassa** | **0.77** | **65** | P | **Pn** | **13 09 54.9** | **0.0** |
| ATHAL | | | | S | **Sn** | **13 10 06.9** | **+1.2** |
| ATHAL | | | | AMI | | 13 10 12.7 | |
| | 14nm,0.5s | | | | | | |
| ATHAL | | | | AMI | | 13 10 12.7 | |
| | 14nm,0.5s | | | | | | |
| ATHAL | | | | AMI | | 13 10 13.5 | |
| | 14nm,0.8s | | | | | | |
| ATHAL | | | | AMI | | 13 10 13.5 | |
| | 14nm,0.8s | | | | | | |
| **LFK** | **Lefkose** | **0.93** | **60** | PG | **Pb** | **13 09 57.8** | **+0.6** |
| LFK | | | | SG | **Sb** | **13 10 10.8** | **+1.6** |
| **PARAL** | **Paralimni** | **1.24** | **82** | P | **Pb** | **13 10 03.6** | **+1.1** |
| PARAL | | | | S | **Sb** | **13 10 22.2** | **+4.1** |
| PARAL | | | | AMI | | 13 10 24.2 | |
| | 7.6nm,0.7s | | | | | | |
| PARAL | | | | AMI | | 13 10 24.2 | |
| | 7.6nm,0.7s | | | | | | |
| PARAL | | | | AMI | | 13 10 27.1 | |
| | 8.2nm,0.8s | | | | | | |
| PARAL | | | | AMI | | 13 10 27.1 | |
| | 8.2nm,0.8s | | | | | | |
| **BOZY** | **Bozyazi-Mersin** | **1.33** | **15** | PN | **Pn** | **13 10 03.3** | **+0.7** |
| BOZY | | | | SN | **Sb** | **13 10 20.5** | **-0.1** |
| **TEKE** | **Tekeli-Mersin** | **1.40** | **19** | PN | **Pn** | **13 10 04.0** | **+0.4** |
| TEKE | | | | SN | **Sb** | **13 10 22.3** | **-0.3** |
| **GAZI** | **Gazipasa** | **1.42** | **353** | PN | **Pn** | **13 10 03.8** | **-0.1** |
| GAZI | | | | SN | **Sn** | **13 10 22.8** | **+0.9** |
| **GAZI** | **Gazipasa** | **1.42** | **353** | P | **Pn** | **13 10 03.5** | **-0.5** |
| GAZI | | | | S | **Sb** | **13 10 23.5** | **+0.2** |
| **EREN** | **Erenkoy** | **1.51** | **62** | PN | **Pn** | **13 10 05.5** | **+0.4** |
| **AKK2** | **Akkuyu-Mersin** | **1.55** | **32** | PN | **Pn** | **13 10 06.1** | **+0.5** |
| **AKKU** | **Akkuyu-Mersin** | **1.57** | **31** | PN | **Pn** | **13 10 06.3** | **+0.4** |
| **GULN** | **MERSIN_Gulnar** | **1.58** | **31** | P | **Pn** | **13 10 06.1** | **0.0** |
| **BERE** | **Bereket-Mersin** | **1.62** | **20** | PN | **Pn** | **13 10 07.2** | **+0.4** |
| **TEPK** | **Tepekoy-MERSIN** | **1.62** | **30** | PN | **Pn** | **13 10 06.9** | **+0.2** |
| **TISA** | **Tisan-Mersin** | **1.63** | **34** | PN | **Pn** | **13 10 06.9** | **+0.2** |
| **YESI** | **Yesilovacik-Me** | **1.64** | **33** | PN | **Pn** | **13 10 07.3** | **+0.4** |
| **KARG** | **Kargicak-Mersi** | **1.67** | **34** | PN | **Pn** | **13 10 07.7** | **+0.3** |
| **OSC1** | **CSNet OBS 1** | **1.69** | **219** | P | **Pn** | **13 10 08.2** | **+0.7** |
| OSC1 | | | | S | **Sn** | **13 10 30.3** | **+2.0** |
| **IKL** | **Isikli** | **1.69** | **33** | PN | **Pn** | **13 10 08.3** | **+0.7** |
| **OSC2** | **CSNet OBS 4** | **1.76** | **188** | P | **Pn** | **13 10 08.1** | **-0.4** |
| OSC2 | | | | S | **Sb** | **13 10 33.6** | **+0.7** |
| OSC2 | | | | AMI | | 13 10 41.6 | |
| | 0.6nm,0.5s | | | | | | |
| OSC2 | | | | AMI | | 13 10 41.6 | |
| | 0.6nm,0.5s | | | | | | |
| OSC2 | | | | AMI | | 13 10 46.9 | |
| | 0.5nm,0.5s | | | | | | |
| OSC2 | | | | AMI | | 13 10 46.9 | |
| | 0.5nm,0.5s | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **1.77** | **24** | PN | **Pn** | **13 10 09.4** | **+0.6** |
| **ERMK** | **Ermenek** | **1.84** | **9** | P | **Pn** | **13 10 10.9** | **+1.0** |
| ERMK | | | | S | **Sb** | **13 10 36.5** | **+1.0** |
| **KEBE** | **Keben-Mersin** | **1.88** | **30** | PN | **Pn** | **13 10 10.8** | **+0.5** |
| **SILI** | **Silifke-Mersin** | **1.91** | **36** | PN | **Pn** | **13 10 11.2** | **+0.6** |
| **SLFK** | **Silifke-Mersin** | **1.94** | **36** | PN | **Pn** | **13 10 11.7** | **+0.7** |
| **KIZK** | **Mersin** | **2.11** | **38** | PN | **Pn** | **13 10 14.1** | **+0.8** |
| **KIZK** | **Mersin** | **2.11** | **38** | P | **Pn** | **13 10 14.8** | **+1.5** |
| **HDMB** | **Hadim** | **2.14** | **359** | PN | **Pn** | **13 10 14.7** | **+0.7** |
| **KEPZ** | **Antalya-Kepez** | **2.21** | **340** | P | **Pn** | **13 10 16.2** | **+1.4** |
| **KKBE** | **Karaman, Kazim** | **2.41** | **8** | P | **Pn** | **13 10 20.5** | **+2.8** |
| **MERS** | **Mersin** | **2.60** | **38** | PN | **Pn** | **13 10 20.4** | **+0.2** |
| **SEYD** | **Seydisehir-KON** | **2.64** | **348** | PN | **Pn** | **13 10 21.9** | **+1.1** |
| **AKAS** | **Kas** | **2.78** | **301** | PN | **Pn** | **13 10 23.5** | **+0.8** |
| **HNTI** | **Hanita** | **2.79** | **128** | Pn | **Pn** | **13 10 23.4** | **+0.6** |
| HNTI | | | | Sn | **Sn** | **13 10 55.4** | **-0.2** |
| **KORT** | **Korkueli** | **2.81** | **321** | PN | **Pn** | **13 10 23.5** | **+0.4** |
| **KERG** | **Konya-Eregli** | **2.89** | **26** | P | **Pn** | **13 10 27.7** | **+3.5** |
| **SUTC** | **Sutluce-Ispart** | **2.93** | **335** | PN | **Pn** | **13 10 25.9** | **+1.1** |
| **KMER** | **Konya-Meram** | **2.94** | **357** | P | **Pn** | **13 10 28.0** | **+3.0** |
| **MMA0B** | **Mount Meron ar** | **2.98** | **126** | Pn | **Pn** | **13 10 26.1** | **+0.6** |
| MMA0B | | | | Sn | **Sn** | **13 11 00.3** | **-0.2** |
| **MMAI** | **Mount Meron Ar** | **2.98** | **126** | Pn | **Pn** | **13 10 25.9** | **+0.5** |
| | 15nm,0.3s,baz=320,slow=14,SNR=33 | | | | | | |
| MMAI | | | | Sn | **Sn** | **13 10 58.9** | **-1.6** |
| | 51nm,0.3s,baz=322,slow=26,SNR=23 | | | | | | |
| MMAI | | | | LR | LR | 13 12 08.0 | |
| | comp=Z,64nm,20.9s,baz=86,slow=49 | | | | | | |
| **BLGI** | **Bet Lehem HaGe** | **3.03** | **133** | Pn | **Pn** | **13 10 26.8** | **+0.7** |
| BLGI | | | | Sn | **Sn** | **13 11 01.2** | **-0.4** |
| **GEM** | **Giv'at Ha'Em** | **3.05** | **121** | Pn | **Pn** | **13 10 27.1** | **+0.8** |
| GEM | | | | Sn | **Sn** | **13 11 01.8** | **-0.2** |
| **NATI** | **Neve Ativ** | **3.07** | **120** | Pn | **Pn** | **13 10 27.7** | **+1.1** |
| NATI | | | | Sn | **Sn** | **13 11 03.2** | **+0.6** |
| **YESY** | **Yesilyurt** | **3.11** | **18** | PN | **Pn** | **13 10 28.3** | **+1.1** |
| **KONT** | **Konya--Tatoy** | **3.12** | **357** | PN | **Pn** | **13 10 28.8** | **+1.5** |
| **YAYL** | **Yayladag** | **3.15** | **66** | PN | **Pn** | **13 10 28.3** | **+0.5** |
| **KARA** | **Karaisali** | **3.17** | **39** | PN | **Pn** | **13 10 28.3** | **+0.3** |
| **YURE** | **YUREGIR** | **3.21** | **51** | P | **Pn** | **13 10 29.4** | **+0.8** |
| **FETY** | **Fethiye** | **3.35** | **304** | PN | **Pn** | **13 10 31.7** | **+1.3** |
| **FETY** | **Fethiye** | **3.35** | **304** | P | **Pn** | **13 10 31.7** | **+1.3** |
| **TAHT** | **Tahtakopru-Hat** | **3.35** | **61** | PN | **Pn** | **13 10 31.6** | **+1.2** |
| **LADK** | **Ladik-KONYA** | **3.37** | **358** | PN | **Pn** | **13 10 31.6** | **+0.7** |
| **CAME** | **Cameli-Denizli** | **3.38** | **310** | PN | **Pn** | **13 10 31.8** | **+0.9** |
| **MMLI** | **Mount Malkishu** | **3.38** | **134** | PN | **Pn** | **13 10 30.4** | **-0.5** |
| **MMLI** | **Mount Malkishu** | **3.38** | **134** | Pn | **Pn** | **13 10 31.4** | **+0.5** |
| MMLI | | | | Sn | **Sn** | **13 11 10.5** | **+0.3** |
| **CMRD** | **Camardi-Nigde** | **3.46** | **34** | PN | **Pn** | **13 10 33.2** | **+1.2** |
| **ALIN** | **Konya, Altinte** | **3.48** | **4** | P | **Pn** | **13 10 35.0** | **+2.6** |
| **AKO** | **Adana** | **3.53** | **41** | P | **Pn** | **13 10 35.6** | **+2.7** |
| **HMDT** | **Nahal Hemdat** | **3.57** | **135** | Pn | **Pn** | **13 10 34.3** | **+0.8** |
| HMDT | | | | Sn | **Sn** | **13 11 15.4** | **+0.5** |
| **YVAC** | **Isparta, Yalva** | **3.60** | **343** | P | **Pn** | **13 10 37.7** | **+3.7** |
| **KOZT** | **Kozan** | **3.75** | **44** | PN | **Pn** | **13 10 37.7** | **+1.7** |
| **CHBY** | **Cihanbeyli** | **3.76** | **4** | PN | **Pn** | **13 10 38.3** | **+2.1** |
| **TAVA** | **DENIZLI_Tavas** | **3.95** | **313** | P | **Pn** | **13 10 40.2** | **+1.4** |
| **DSI** | **Dead Sea** | **4.02** | **143** | Pn | **Pn** | **13 10 40.6** | **+0.9** |
| DSI | | | | Sn | **Sn** | **13 11 26.2** | **+0.2** |
| **YTIR** | **Yattir** | **4.07** | **147** | Pn | **Pn** | **13 10 40.9** | **+0.5** |
| **MDBI** | **Mazsada** | **4.22** | **145** | Pn | **Pn** | **13 10 43.5** | **+1.1** |
| **MSBI** | **Mazada** | **4.22** | **145** | Pn | **Pn** | **13 10 43.6** | **+1.2** |
| **ASF** | **Jabal al Asfar** | **4.50** | **125** | Pn | **Pn** | **13 10 47.1** | **+0.8** |
| | 1.2nm,0.3s,baz=44,slow=19,SNR=2.3 | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **4.75** | **40** | PN | **Pn** | **13 10 51.4** | **+1.6** |
| **PRNI** | **Paran** | **4.92** | **154** | Pn | **Pn** | **13 10 52.9** | **+0.9** |
| PRNI | | | | Sn | **Sn** | **13 11 48.0** | **-0.1** |
| **BRTR** | **Keskin Array B** | **4.97** | **10** | Pn | **Pn** | **13 10 51.0** | **-1.8** |
| | 0.0nm,0.3s,baz=186,slow=14,SNR=1.4 | | | | | | |
| BRTR | | | | Sn | **Sn** | **13 11 44.7** | **-4.9** |
| | 0.3nm,0.3s,baz=50,slow=15,SNR=2.0 | | | | | | |
| BRTR | | | | LR | LR | 13 13 01.7 | |
| | comp=Z,104nm,18.6s,baz=196,slow=43 | | | | | | |
| **KRMI** | **Paran Flat** | **5.04** | **158** | Pn | **Pn** | **13 10 54.2** | **+0.5** |
| KRMI | | | | Sn | **Sn** | **13 11 50.8** | **-0.4** |
| **HRFI** | **Mount Harif** | **5.22** | **155** | Pn | **Pn** | **13 10 56.7** | **+0.6** |
| HRFI | | | | Sn | **Sn** | **13 11 54.9** | **-0.6** |
| **MBRI** | **Mt Berech** | **5.40** | **158** | Pn | **Pn** | **13 10 59.4** | **+0.7** |
| **EIL** | **Elat** | **5.53** | **158** | Pn | **Pn** | **13 11 01.3** | **+0.9** |
| | 2.2nm,0.3s,baz=336,slow=10.0,SNR=25 | | | | | | |
| EIL | | | | Sn | **Sn** | **13 12 01.0** | **-2.1** |
| | 2.4nm,0.3s,baz=173,slow=16,SNR=8.4 | | | | | | |
| **EIL** | **Elat** | **5.53** | **158** | PN | **Pn** | **13 11 01.3** | **+0.9** |
| **EIL** | **Elat** | **5.53** | **158** | Pn | **Pn** | **13 11 01.0** | **+0.6** |
| EIL | | | | Sn | **Sn** | **13 12 02.4** | **-0.7** |
| **GERES** | **GERESS Array B** | **19.76** | **321** | P | **P** | **13 14 07.6** | **-0.2** |
| | 0.2nm,0.3s,baz=106,slow=6.2,SNR=2.4 | | | | | | |
| **ATD** | **Arta Tunnel** | **25.01** | **156** | LR | LR | 13 24 09.9 | |
| | comp=Z,49nm,18.4s,baz=51,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **26.96** | **353** | P | **P** | **13 15 16.9** | **-1.9** |
| | 3.0nm,0.8s,baz=158,slow=12,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.98** | **356** | P | **P** | **13 16 26.9** | **-2.7** |
| | 2.0nm,0.8s,baz=162,slow=8.1,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.90** | **57** | P | **P** | **13 17 03.6** | **+0.6** |
| | 0.2nm,0.6s,baz=245,slow=10,SNR=2.3 | | | | | | |
| **SUR** | **Sutherland** | **67.75** | **191** | LR | LR | 13 52 53.8 | |
| | comp=Z,82nm,18.7s,baz=182,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.48** | **345** | P | **P** | **13 21 43.3** | **-0.3** |
| | 0.1nm,0.6s,baz=35,slow=5.5,SNR=1.9 | | | | | | |

*MCSM **18** 13:10:08.7±0.5, 46°.N±6°.×2°.7E±°., h85km, ML3.8/2, MLv3.1/4*
*BEO **18** 13:10:08.9±1.5, 45°.48N×26°.83E, h61km±7km, ML3.2/9*
*BUC **18** 13:10:09.4±0.2, 45°.74N×26°.59E, h85km±2km, ml3.8/40, Error ellipse: s-maj=1.8km s-min=1.3km az=167.0*
*SOF **18** 13:10:09.7, 45°.69N×26°.58E, h50km, MD3.6*

**ISC 18 13:10:08.0±1.2, 45°.73N±0°.03×26°.56E±0°.02, h98km±5km, n76, σ1s33/113, 49C-33D, Romania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLOR** | **Plostina** | **0.14** | **28** | ⇓P | **Pn** | **13 10 21.8** | **0.0** |
| PLOR | | | | ⇑S | **Sn** | **13 10 31.3** | **-0.9** |
| **VRI** | **Vrincioaia** | **0.18** | **41** | ⇓P | **Pn** | **13 10 22.1** | **+0.1** |
| VRI | | | | ⇓S | **Sn** | **13 10 31.2** | **-1.2** |
| **BISRR** | **Bisoca** | **0.21** | **149** | ⇓P | **Pn** | **13 10 22.7** | **+0.5** |
| BISRR | | | | ⇓S | **Sn** | **13 10 31.9** | **-0.7** |
| **COVR** | **Voineasa-Covas** | **0.27** | **295** | ⇑P | **Pn** | **13 10 22.5** | **+0.2** |
| COVR | | | | ⇑S | **Sn** | **13 10 31.6** | **-1.4** |
| **ODBI** | **Odobesti** | **0.35** | **84** | ⇓S | **Sn** | **13 10 33.2** | **-0.3** |
| **NEHR** | **Nehoiu** | **0.35** | **211** | ⇓P | **Pn** | **13 10 23.7** | **+1.0** |
| NEHR | | | | ⇑S | **Sn** | **13 10 33.9** | **+0.2** |
| **PANC** | **Panciu** | **0.44** | **71** | ⇑P | **Pn** | **13 10 23.7** | **+0.6** |
| PANC | | | | ⇓S | **Sn** | **13 10 33.8** | **-0.6** |
| **MLR** | **Muntele Rosu** | **0.49** | **241** | ⇓P | **Pn** | **13 10 24.6** | **+0.9** |
| MLR | | | | ⇓S | **Sn** | **13 10 35.3** | **-0.1** |
| **MLR** | **Muntele Rosu** | **0.49** | **241** | *e*Pg | **Pn** | **13 10 24.5** | **+0.9** |
| MLR | | | | *e*Sg | **Sn** | **13 10 35.3** | **-0.1** |
| **MLR** | **Muntele Rosu** | **0.49** | **241** | P | **Pn** | **13 10 24.6** | **+0.9** |
| MLR | | | | S | **Sn** | **13 10 35.3** | **-0.1** |
| **ISR** | **Istrita** | **0.61** | **181** | ⇑P | **Pn** | **13 10 25.7** | **+1.1** |
| **OZUR** | | **0.65** | **304** | ⇑P | **Pn** | **13 10 24.4** | **-0.5** |
| OZUR | | | | ⇑S | **Sn** | **13 10 36.2** | **-1.2** |
| **SECR** | | **0.78** | **207** | ⇓S | **Sn** | **13 10 39.0** | **-0.4** |
| **TESR** | **Tescani** | **0.78** | **5** | ⇑P | **Pn** | **13 10 26.4** | **+0.3** |
| TESR | | | | ⇓S | **Sn** | **13 10 38.5** | **-1.1** |
| **TUDR** | | **0.79** | **100** | ⇑P | **Pn** | **13 10 26.2** | **+0.1** |
| TUDR | | | | ⇑S | **Sn** | **13 10 38.3** | **-1.3** |
| **DOPR** | **Dopca** | **0.85** | **287** | ⇑P | **Pn** | **13 10 27.6** | **+0.9** |
| DOPR | | | | ⇑S | **Sn** | **13 10 41.1** | **+0.3** |
| **SLCR** | **Slobozia Conac** | **0.86** | **99** | ⇓P | **Pn** | **13 10 26.6** | **-0.2** |
| SLCR | | | | ⇓S | **Sn** | **13 10 39.2** | **-1.7** |
| **IZVR** | **Izvoarele** | **0.87** | **102** | ⇑P | **Pn** | **13 10 39.3** | **-1.7** |
| **PGOR** | **Pogoanele** | **0.88** | **160** | ⇑P | **Pn** | **13 10 27.9** | **+1.0** |
| PGOR | | | | ⇓S | **Sn** | **13 10 41.6** | **+0.4** |
| **BIR** | **Birlad** | **0.92** | **54** | ⇑P | **Pn** | **13 10 27.9** | **+0.5** |
| BIR | | | | ⇑S | **Sn** | **13 10 41.4** | **-0.5** |
| **VARL** | **Varlezi** | **0.92** | **79** | ⇓P | **Pn** | **13 10 28.2** | **+0.8** |
| VARL | | | | ⇓S | **Sn** | **13 10 41.4** | **-0.5** |
| **SCHL** | **Schela** | **0.92** | **104** | ⇑P | **Pn** | **13 10 28.4** | **+1.0** |
| **SCTR** | **Scanteiesti** | **1.01** | **93** | ⇑P | **Pn** | **13 10 29.2** | **+0.9** |
| SCTR | | | | ⇑S | **Sn** | **13 10 43.1** | **-0.6** |
| **TATR** | **Tatarca** | **1.06** | **97** | ⇑P | **Pn** | **13 10 29.7** | **+0.8** |
| TATR | | | | ⇑S | **Sn** | **13 10 43.9** | **-0.6** |
| **SULR** | | **1.07** | **192** | ⇓P | **Pn** | **13 10 30.5** | **+1.4** |
| SULR | | | | ⇓S | **Sn** | **13 10 45.1** | **+0.2** |
| **VLDR** | **Vladesti** | **1.07** | **83** | ⇑P | **Pn** | **13 10 29.8** | **+0.7** |
| VLDR | | | | ⇓S | **Sn** | **13 10 44.4** | **-0.6** |
| **GISR** | **Galati** | **1.09** | **105** | ⇓S | **Sn** | **13 10 44.3** | **-1.0** |
| **VOIR** | | **1.10** | **255** | ⇓P | **Pn** | **13 10 30.4** | **+0.9** |
| **VOIR** | | **1.10** | **255** | P | **Pn** | **13 10 30.3** | **+0.9** |
| **GIUM** | **Giurgiulesti** | **1.19** | **101** | ⇑P | **Pn** | **13 10 31.4** | **+1.0** |
| GIUM | | | | ⇑S | **Sn** | **13 10 47.0** | **-0.2** |
| **AMRR** | **Amara** | **1.25** | **154** | ⇑P | **Pn** | **13 10 31.8** | **+0.8** |
| AMRR | | | | ⇓S | **Sn** | **13 10 48.9** | **+0.4** |
| **VASR** | **Vaslui** | **1.25** | **43** | ⇑P | **Pn** | **13 10 31.8** | **+0.7** |
| VASR | | | | ⇓S | **Sn** | **13 10 48.7** | **0.0** |
| **LEHL** | **Lehliu** | **1.27** | **171** | ⇑P | **Pn** | **13 10 32.6** | **+1.2** |
| LEHL | | | | ⇑S | **Sn** | **13 10 49.9** | **+1.0** |
| **LEOM** | **Leova** | **1.39** | **57** | ⇑P | **Pn** | **13 10 33.5** | **+0.7** |
| LEOM | | | | ⇓S | **Sn** | **13 10 51.5** | **0.0** |
| **ARR** | **Arges** | **1.40** | **256** | ⇑P | **Pn** | **13 10 34.5** | **+1.6** |
| ARR | | | | ⇓S | **Sn** | **13 10 52.7** | **+0.8** |
| **STFAR** | **Stefanesti-Arg** | **1.42** | **233** | ⇑P | **Pn** | **13 10 34.3** | **+1.1** |
| STFAR | | | | ⇑S | **Sn** | **13 10 52.9** | **+0.6** |
| **HARR** | **Harsova** | **1.42** | **136** | ⇑P | **Pn** | **13 10 33.7** | **+0.5** |
| **BUC1** | **Bucharest** | **1.43** | **195** | ⇓P | **Pn** | **13 10 33.2** | **-0.1** |
| **TPGR** | **Topolog** | **1.58** | **123** | ⇑S | **Sn** | **13 10 54.5** | **-1.3** |
| **TLBR** | **Topalu** | **1.59** | **138** | ⇑P | **Pn** | **13 10 35.9** | **+0.7** |
| TLBR | | | | ⇑S | **Sn** | **13 10 55.8** | **-0.1** |
| **HUMR** | **Humele** | **1.64** | **223** | ⇑P | **Pn** | **13 10 37.0** | **+1.1** |
| HUMR | | | | ⇓S | **Sn** | **13 10 57.5** | **+0.4** |
| **TLCR** | | **1.68** | **108** | ⇑P | **Pn** | **13 10 37.3** | **+0.9** |
| TLCR | | | | ⇑S | **Sn** | **13 10 57.5** | **-0.5** |
| **CVDA** | **Cernavoda** | **1.75** | **143** | ⇑P | **Pn** | **13 10 38.1** | **+0.9** |
| **ICOR** | **Ion Corvin** | **1.84** | **151** | ⇓P | **Pn** | **13 10 39.5** | **+1.1** |
| **MILM** | **Milestii Mici** | **1.96** | **52** | ⇑P | **Pn** | **13 10 40.8** | **+0.8** |
| **LOT** | **Lotru** | **1.98** | **263** | ⇓P | **Pn** | **13 10 41.5** | **+1.2** |
| **KIS** | **Kishinev** | **2.02** | **50** | *e*P | **Pn** | **13 10 41.5** | **+0.8** |
| | 180nm,0.1s | | | | | | |
| KIS | | | | *e*S | **Sn** | **13 11 04.7** | **-0.9** |
| | 170nm,0.1s | | | | | | |
| **BUR01** | **Bucovina Ar. S** | **2.10** | **334** | ⇓P | **Pn** | **13 10 42.6** | **+0.7** |
| **BURAR** | **Bucovina Array** | **2.10** | **334** | P | **Pn** | **13 10 43.9** | **+2.0** |
| **RAZG** | **Razgrad** | **2.16** | **181** | ⇓P | **Pn** | **13 10 43.5** | **+0.9** |
| **ZIMR** | | **2.24** | **203** | ⇑P | **Pn** | **13 10 44.9** | **+1.3** |
| **VLAD** | **Vladila** | **2.31** | **222** | ⇑P | **Pn** | **13 10 45.4** | **+0.8** |
| **PSN** | **Preselentsi** | **2.35** | **150** | *i* P | **Pn** | **13 10 46.5** | **+1.4** |
| **SZH** | **Strazhica** | **2.50** | **190** | P | **Pn** | **13 10 48.0** | **+0.9** |
| **DEV** | **Deva** | **2.56** | **275** | P | **Pn** | **13 10 49.7** | **+1.9** |
| **SRE** | **Strehaia** | **2.60** | **247** | ⇓P | **Pn** | **13 10 49.8** | **+1.5** |
| SRE | | | | ⇓S | **Sn** | **13 11 20.8** | **+1.5** |
| **PRD** | **Provadia** | **2.60** | **166** | *i* P | **Pn** | **13 10 50.2** | **+1.8** |
| **GZR** | **Gura Zlata** | **2.68** | **264** | ⇑P | **Pn** | **13 10 51.0** | **+1.6** |
| **GZR** | **Gura Zlata** | **2.68** | **264** | *e*Pn | **Pn** | **13 10 51.1** | **+1.6** |
| GZR | | | | *e*Sn | **Sn** | **13 11 22.7** | **+1.4** |
| **ROIA** | **ROIAK** | **2.70** | **167** | P | **Pn** | **13 10 51.2** | **+1.5** |
| **SORM** | **Soroca** | **2.70** | **26** | ⇑P | **Pn** | **13 10 49.8** | **+0.2** |
| **KMPD** | **K-Podol'skiy** | **2.83** | **359** | P | **Pn** | **13 10 52.9** | **+1.5** |
| **HERR** | **Herculane** | **3.04** | **255** | ⇑P | **Pn**

1.2nm,0.4s,baz=113,slow=7.9,SNR=43
SNAA Sanae 76.26 179 P P 13 23 50.5 -0.8
VNA3 Neumayer Olymp 76.49 177 P P 13 23 51.1 -1.4
VNA2 Neumayer--Watz 76.90 178 P P 13 23 53.8 -1.0
baz=175,slow=5.6
VNA1 Neumayer--Stat 77.15 177 P P 13 23 54.9 -1.2
MKAR Makanchi Array 117.51 310 PKP PKPdf 13 30 45.5 -2.3
0.1nm,0.6s,baz=202,slow=2.9,SNR=2.1
FINES FINESS Array B 146.23 337 PKPbc PKPdf 13 31 40.6 -0.2
2.4nm,0.6s,baz=59,slow=4.9,SNR=12
BRTR Keskin Array B 151.71 295 PKPbc PKPbc 13 31 55.2 -1.8
0.6nm,0.4s,baz=159,slow=4.2,SNR=2.9
TORD Torodi Ar. Bea 160.81 186 PKPab PKPab 13 32 43.6 -1.8
0.9nm,0.6s,baz=174,slow=2.7,SNR=5.7

*IDC **18** 13:20:30.6±2.5,59°.77N×24°.40E,h0km,mb1 3.4/3, mb1mx3.0/36,mbtmp3.3/3,ML2.2/3, Error ellipse: s-maj=29.5km s-min=7.2km az=142.0*
*HEL **18** 13:20:31.7±0.1,59°.84N×24°.09E,h0km,ML1.9, Explosion*
**ISC 18 13:20:30.5±0.8, 59°.83N±0°.02×24°.08E±0°.03, h0km, n20, σ0s 46/35, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.42 | 22 | eP | | Pg | 13 20 38.8 | +0.3 |
| MEF | | | | eS | | Sg | 13 20 44.3 | +0.4 |
| EE01 | Perakula, Nova | 0.67 | 201 | eP | | Pg | 13 20 43.5 | +0.1 |
| EE01 | | | | eS | | Sg | 13 20 51.7 | -0.3 |
| EE02 | Kiisa, Saku | 0.72 | 154 | eP | | Pg | 13 20 44.4 | +0.2 |
| EE02 | | | | eS | | Sg | 13 20 53.9 | +0.4 |
| NUR | Nurmijrvi | 0.74 | 23 | eP | | Pg | 13 20 44.6 | 0.0 |
| NUR | | | | eS | | Sg | 13 20 54.0 | -0.1 |
| ARBE | Arbavere | 1.05 | 112 | eP | | Pg | 13 20 49.7 | -0.8 |
| ARBE | | | | eSB | | Sg | 13 21 04.4 | +0.4 |
| EE06 | Soera, Palade, | 1.07 | 217 | eP | | Pg | 13 20 50.9 | -0.1 |
| EE06 | | | | eS | | Sg | 13 21 05.0 | +0.1 |
| MTSE | Matsula | 1.13 | 187 | eP | | Pg | 13 20 52.0 | -0.1 |
| MTSE | | | | eS | | Sg | 13 21 06.6 | -0.2 |
| PVF | Pernaja | 1.14 | 50 | eP | | Pg | 13 20 52.0 | -0.3 |
| PVF | | | | eS | | Sg | 13 21 06.5 | -0.7 |
| EE03 | Tooma soojaam, | 1.48 | 130 | ePG | | Pn | 13 20 58.4 | +0.1 |
| EE03 | | | | eS | | Sg | 13 21 17.4 | -0.5 |
| RAF | Rauma | 1.66 | 317 | eP | | Pn | 13 21 01.2 | +0.4 |
| RAF | | | | eS | | Sn | 13 21 22.8 | +0.1 |
| RAF | | | | MSG | | | 13 21 28.2 | |
| | comp=Z,11nm,0.2s | | | | | | | |
| VJF | Virojoki | 1.88 | 66 | eP | | Pn | 13 21 04.3 | +0.5 |
| VJF | | | | eSG | | Sb | 13 21 29.7 | +0.2 |
| VJF | | | | MSG | | | 13 21 32.7 | |
| | comp=Z,7.6nm,0.2s | | | | | | | |
| FIA0 | FINESS Array S | 1.89 | 30 | ePG | | Pb | 13 21 05.3 | -0.5 |
| FIA0 | | | | eSG | | Sb | 13 21 30.3 | +0.3 |
| FIA0 | | | | MSG | | | 13 21 33.1 | |
| | comp=Z,8.7nm,0.2s | | | | | | | |
| FINES | FINESS Array B | 1.89 | 30 | Pg | | Pn | 13 21 04.9 | +0.9 |
| | comp=Z,1.5nm,0.3s,baz=203,slow=14,SNR=39 | | | | | | | |
| FINES | | | | Lg | | Lg | 13 21 29.1 | |
| | comp=Z,4.2nm,0.3s,baz=202,slow=23,SNR=27 | | | | | | | |
| VSU | Vasula | 1.94 | 134 | eSG | | Sb | 13 21 31.9 | +0.5 |
| EE04 | Vaivara Sinima | 1.98 | 102 | eSG | | Sb | 13 21 33.2 | +0.6 |
| EE05 | Udria, Vaivara | 2.00 | 101 | ePG | | Pb | 13 21 07.5 | -0.2 |
| EE05 | | | | eSG | | Sb | 13 21 33.4 | +0.3 |
| AAL | Aland | 2.08 | 281 | ePB | | Pb | 13 21 08.4 | -0.6 |
| AAL | | | | eSG | | Sb | 13 21 36.0 | +0.5 |
| HFS | Hagfors | 5.22 | 278 | Pn | | Pn | 13 21 50.7 | +0.9 |
| | comp=Z,0.2nm,0.3s,baz=99,slow=15,SNR=8.8 | | | | | | | |
| HFS | | | | Sn | | Sn | 13 22 50.4 | -0.3 |
| | comp=Z,0.3nm,0.3s,baz=93,slow=30,SNR=6.3 | | | | | | | |
| HFS | | | | Lg | | Lg | 13 23 13.8 | |
| | comp=Z,0.6nm,0.3s,baz=98,slow=30,SNR=6.9 | | | | | | | |
| NOA | NORSAR Array B | 6.48 | 286 | Pn | | Pn | 13 22 06.7 | -0.4 |
| | comp=Z,0.0nm,0.3s,baz=92,slow=13,SNR=8.6 | | | | | | | |
| ARCES | ARCESS Array B | 9.76 | 3 | Pn | | Pn | 13 22 51.5 | -0.5 |
| | baz=183,slow=14,SNR=2.6 | | | | | | | |

*DNK **18** 13:24:09.1±1.7,59°.84N×24°.48E,h0km,Mc3.8, Suspected explosion*
*HEL **18** 13:24:12.4±0.0,59°.84N×24°.07E,h0km,ML2.3, ML2.7(UPP), Explosion*
*IDC **18** 13:24:13.5±2.2,59°.88N×24°.13E,h0km,mb1 3.4/3, mb1mx3.0/37,mbtmp3.3/3,ML2.7/3, Error ellipse: s-maj=27.1km s-min=6.4km az=147.0*
*UPP **18** 13:24:14.3±2.7,59°.93N×23°.79E,h0km,ML2.7, Suspected explosion*
**ISC 18 13:24:11.3±0.7, 59°.83N±0°.02×24°.09E±0°.03, h0km, n52, σ0s 94/75, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.41 | 22 | eP | | Pg | 13 24 19.7 | +0.4 |
| MEF | | | | eS | | Sg | 13 24 25.1 | +0.5 |
| EE01 | Perakula, Nova | 0.67 | 201 | eP | | Pg | 13 24 24.2 | +0.1 |
| EE01 | | | | eS | | Sg | 13 24 32.8 | 0.0 |
| EE02 | Kiisa, Saku | 0.72 | 154 | eP | | Pg | 13 24 25.3 | +0.3 |
| EE02 | | | | eS | | Sg | 13 24 34.7 | +0.5 |
| NUR | Nurmijrvi | 0.73 | 22 | eP | | Pg | 13 24 25.4 | 0.0 |
| NUR | | | | eS | | Sg | 13 24 34.6 | -0.2 |
| ARBE | Arbavere | 1.04 | 112 | eP | | Pg | 13 24 31.4 | +0.1 |
| ARBE | | | | eS | | Sg | 13 24 45.3 | +0.5 |
| EE06 | Soera, Palade, | 1.07 | 217 | eP | | Pg | 13 24 31.6 | -0.3 |
| EE06 | | | | eS | | Sg | 13 24 45.9 | +0.1 |
| MTSE | Matsula | 1.13 | 187 | eP | | Pg | 13 24 33.1 | +0.1 |
| MTSE | Matsula | 1.13 | 187 | eP | | Pg | 13 24 32.7 | -0.2 |
| MTSE | | | | eS | | Sg | 13 24 47.3 | -0.3 |
| PVF | Pernaja | 1.14 | 50 | eP | | Pg | 13 24 32.8 | -0.3 |
| PVF | | | | eS | | Sg | 13 24 47.4 | -0.5 |
| EE03 | Tooma soojaam, | 1.48 | 130 | eP | | Pn | 13 24 39.1 | -0.1 |
| EE03 | | | | eSB | | Sg | 13 24 58.3 | -0.5 |
| RAF | Rauma | 1.66 | 317 | eP | | Pn | 13 24 41.9 | +0.3 |
| RAF | | | | eS | | Sn | 13 25 04.1 | +0.5 |
| RAF | | | | MSG | | | 13 25 09.4 | |
| | comp=Z,41nm,0.2s | | | | | | | |
| VJF | Virojoki | 1.87 | 66 | eP | | Pn | 13 24 45.2 | +0.7 |
| VJF | | | | eS | | Sb | 13 25 10.3 | 0.0 |
| VJF | | | | MSG | | | 13 25 13.7 | |
| | comp=Z,22nm,0.2s | | | | | | | |
| FIA0 | FINESS Array S | 1.89 | 30 | eP | | Pb | 13 24 46.1 | -0.6 |
| FIA0 | | | | eS | | Sb | 13 25 11.2 | +0.4 |
| FIA0 | | | | MSG | | | 13 25 14.3 | |
| | comp=Z,21nm,0.2s | | | | | | | |
| FINES | FINESS Array B | 1.89 | 30 | Pg | | Pb | 13 24 46.1 | -0.6 |
| | comp=Z,5.0nm,0.3s,baz=214,slow=14,SNR=90 | | | | | | | |
| FINES | | | | Lg | | Lg | 13 25 11.2 | |
| | comp=Z,15nm,0.3s,baz=211,slow=24,SNR=34 | | | | | | | |
| VSU | Vasula | 1.94 | 134 | eP | | Pn | 13 24 45.6 | +0.1 |
| VSU | Vasula | 1.94 | 134 | ePG | | Pb | 13 24 47.4 | 0.0 |
| VSU | | | | eSG | | Sb | 13 25 12.7 | +0.6 |
| EE04 | Vaivara Sinima | 1.98 | 102 | ePG | | Pb | 13 24 48.1 | -0.1 |
| EE04 | | | | eSG | | Sb | 13 25 13.7 | +0.3 |
| EE05 | Udria, Vaivara | 2.00 | 101 | ePG | | Pb | 13 24 48.4 | -0.1 |
| EE05 | | | | eSG | | Sb | 13 25 13.8 | -0.1 |
| AAL | Aland | 2.08 | 281 | P | | Pn | 13 24 48.5 | +1.1 |
| AAL | Aland | 2.08 | 281 | ePB | | Pn | 13 24 49.0 | +1.6 |
| AAL | | | | eS | | Sn | 13 25 14.9 | +0.9 |
| SLIT | Slitere, Latvi | 2.40 | 204 | eP | | Pn | 13 24 53.0 | +1.1 |
| NRTU | Norrtaelje | 2.77 | 269 | P | | Pn | 13 24 57.8 | +1.0 |
| NRTU | Norrtaelje | 2.77 | 269 | P | | Pn | 13 24 57.8 | +1.0 |
| NRTU | Norrtaelje | 2.77 | 269 | eP | | Pn | 13 24 57.8 | +1.0 |
| GRAU | Graesoe | 2.82 | 283 | P | | Pn | 13 24 57.9 | +0.2 |
| GRAU | | | | S | | Sn | 13 25 33.1 | +0.8 |
| GRAU | Graesoe | 2.82 | 283 | P | | Pn | 13 24 57.9 | +0.2 |
| GRAU | | | | S | | Sn | 13 25 33.1 | +0.8 |
| GRAU | Graesoe | 2.82 | 283 | eP | | Pn | 13 24 57.9 | +0.2 |
| GRAU | | | | eS | | Sn | 13 25 33.1 | +0.8 |
| FORU | Forsmark | 3.01 | 283 | P | | Pn | 13 25 00.9 | +0.8 |
| FORU | Forsmark | 3.01 | 283 | P | | Pn | 13 25 00.9 | +0.8 |
| FORU | Forsmark | 3.01 | 283 | eP | | Pn | 13 25 00.9 | +0.8 |
| FLYU | Flymyra | 3.13 | 278 | P | | Pn | 13 25 02.6 | +0.7 |
| FLYU | Flymyra | 3.13 | 278 | P | | Pn | 13 25 02.6 | +0.7 |
| FLYU | Flymyra | 3.13 | 278 | eP | | Pn | 13 25 02.6 | +0.7 |
| NYNU | Nynaeshamn | 3.22 | 258 | P | | Pn | 13 25 04.6 | +1.6 |
| NYNU | Nynaeshamn | 3.22 | 258 | P | | Pn | 13 25 04.6 | +1.6 |
| NYNU | Nynaeshamn | 3.22 | 258 | eP | | Pn | 13 25 04.6 | +1.6 |
| FIBU | Brunna | 3.40 | 274 | P | | Pn | 13 25 06.7 | +1.2 |
| FIBU | Brunna | 3.40 | 274 | P | | Pn | 13 25 06.7 | +1.2 |
| OSTU | Oestervaala | 3.51 | 279 | P | | Pn | 13 25 07.7 | +0.7 |
| OSTU | Oestervaala | 3.51 | 279 | P | | Pn | 13 25 07.7 | +0.7 |
| OSTU | Oestervaala | 3.51 | 279 | eP | | Pn | 13 25 07.7 | +0.7 |
| ARNU | Arnoeviken | 3.78 | 302 | P | | Pn | 13 25 11.7 | +0.9 |
| ARNU | Arnoeviken | 3.78 | 302 | eP | | Pn | 13 25 11.7 | +0.9 |
| VIKU | Vikbolandet | 4.03 | 254 | eP | | Pn | 13 25 15.6 | +1.4 |
| IDID | Didziasalis | 4.75 | 161 | eP | | Pn | 13 25 26.6 | +2.5 |
| HFS | Hagfors | 5.23 | 278 | Pn | | Pn | 13 25 31.6 | +1.0 |
| | comp=Z,0.8nm,0.3s,baz=81,slow=14,SNR=10 | | | | | | | |
| HFS | | | | Sn | | Sn | 13 26 30.7 | -0.8 |
| | comp=Z,0.9nm,0.3s,baz=101,slow=29,SNR=6.5 | | | | | | | |
| BLEU | Blekinge | 5.64 | 235 | iP | | Pn | 13 25 34.5 | -1.8 |
| BLEU | | | | iS | | Sn | 13 26 40.3 | -1.3 |
| DEL | Delary | 6.37 | 242 | iP | | Pn | 13 25 47.0 | +0.7 |
| NOA | NORSAR Array B | 6.49 | 286 | Pn | | Pn | 13 25 47.8 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=92,slow=13,SNR=15 | | | | | | | |
| NOA | | | | Sn | | Sn | 13 26 59.2 | -3.4 |
| | comp=Z,0.1nm,0.3s,baz=137,slow=13,SNR=4.0 | | | | | | | |
| NOA | | | | Lg | | Lg | 13 27 31.4 | |
| | comp=Z,0.1nm,0.3s,baz=39,slow=10.0,SNR=1.6 | | | | | | | |
| STRU | Stroemstad | 6.63 | 269 | iP | | Pn | 13 25 48.8 | -1.0 |
| STRU | | | | iS | | Sn | 13 27 04.2 | -1.9 |
| ARCES | ARCESS Array B | 9.76 | 3 | Pn | | Pn | 13 26 32.4 | -0.3 |
| | baz=175,slow=15,SNR=12 | | | | | | | |

*BEO **18** 13:33:43.6±0.9,40°.79N×20°.78E,h0km, ML2.3/7*
*ATH **18** 13:33:43.5,41°.10N×20°.63E,h8km±5km, ML2.7/2, Error ellipse: s-maj=7.4km s-min=3.9km az=144.0*
*SKO **18** 13:33:44.6,40°.91N×20°.74E,h15km*
*TIR **18** 13:33:45.2,40°.86N×20°.75E,h8km,Md2.9,Ml2.7*
*THE **18** 13:33:46.4,40°.94N×20°.75E,h0km±7km, ML2.4/4, Error ellipse: s-maj=8.5km s-min=1.4km az=310.0*
**ISC 18 13:33:45.1±1.0, 40°.92N±0°.02×20°.74E±0°.03, h8km±9km, n32, σ0s 83/52, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| OHR | Ohrid | 0.20 | 14 | ePg | | Pg | 13 33 49.0 | -0.2 |
| OHR | | | | eSg | | Sg | 13 33 52.3 | +0.3 |
| OHR | Ohrid | 0.20 | 14 | iPg | | Pg | 13 33 49.2 | 0.0 |
| OHR | | | | iSg | | Sg | 13 33 52.8 | +0.8 |
| OHR | | | | eLg | | Lg | 13 33 53.0 | |
| | comp=E,478nm,0.4s | | | | | | | |
| KBN | Korca | 0.29 | 172 | P | | Pb | 13 33 52.6 | 0.0 |
| KBN | | | | S | | Sb | 13 33 57.1 | -0.6 |
| | comp=E,835nm,0.3s | | | | | | | |
| KBN | Korca | 0.29 | 172 | P | | Pb | 13 33 52.5 | -0.2 |
| | baz=173 | | | | | | | |
| KBN | | | | S | | Sb | 13 33 57.7 | 0.0 |
| | baz=173 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=N,3.9nm,0.3s,baz=173 | | | | | | | |
| FNA | Florina | 0.50 | 105 | P | | Pb | 13 33 55.8 | -0.4 |
| FNA | | | | S | | Sb | 13 34 04.5 | +0.8 |
| | comp=N,1μm,0.2s | | | | | | | |
| FNA | Florina | 0.50 | 105 | P | | Pb | 13 33 55.9 | -0.4 |
| FNA | | | | S | | Sb | 13 34 04.9 | +1.2 |
| FNA | | | | AML | AML | | 13 34 07.5 | |
| | comp=E,2091μm,0.2s | | | | | | | |
| FNA | | | | AML | AML | | 13 34 08.3 | |
| | comp=N,2282μm,0.3s | | | | | | | |
| FNA | Florina | 0.50 | 105 | P | | Pb | 13 33 55.9 | -0.4 |
| | baz=98 | | | | | | | |
| FNA | | | | S | | Sb | 13 34 04.0 | +0.3 |
| | baz=98 | | | | | | | |
| NEST | Nestorio | 0.55 | 154 | P | | Pb | 13 33 57.0 | -0.1 |
| NEST | | | | S | | Sb | 13 34 05.3 | +0.1 |
| | comp=N,400nm,0.3s | | | | | | | |
| NEST | Nestorio | 0.55 | 154 | P | | Pb | 13 33 57.2 | +0.1 |
| NEST | | | | S | | Sn | 13 34 08.1 | -0.8 |
| NEST | | | | AML | AML | | 13 34 08.4 | |
| | comp=E,956μm,0.2s | | | | | | | |
| NEST | | | | AML | AML | | 13 34 10.6 | |
| | comp=N,981μm,0.3s | | | | | | | |
| PENT | Pentalofos | 0.78 | 157 | P | | Pn | 13 34 02.5 | 0.0 |
| PENT | Pentalofos | 0.78 | 157 | P | | Pn | 13 34 02.4 | 0.0 |
| KZN | Kozani | 1.00 | 127 | P | | Pn | 13 34 04.9 | -0.5 |
| KZN | | | | S | | Sn | 13 34 20.1 | +0.4 |
| | comp=N,205nm,0.4s | | | | | | | |
| KZN | Kozani | 1.00 | 127 | P | | Pn | 13 34 04.9 | -0.5 |
| KPRO | Kipourio | 1.07 | 153 | P | | Pn | 13 34 07.1 | +0.6 |
| KPRO | Kipourio | 1.07 | 153 | P | | Pn | 13 34 07.3 | +0.8 |
| SKO | Skopje | 1.18 | 26 | iPg | | Pn | 13 34 08.0 | +0.1 |
| SKO | | | | iSg | | Sn | 13 34 24.8 | +0.6 |
| SKO | | | | eLg | | Lg | 13 34 26.7 | |
| | comp=N,6.2nm,0.3s | | | | | | | |
| GRG | Griva | 1.26 | 88 | P | | Pg | 13 34 09.2 | -0.1 |
| GRG | | | | S | | Sn | 13 34 28.2 | +1.9 |
| IGT | Igoumenitsa | 1.42 | 193 | S | | Sg | 13 34 29.9 | -0.6 |
| | baz=194 | | | | | | | |
| VAY | Valandovo | 1.44 | 73 | iPg | | Pg | 13 34 12.0 | -0.8 |
| VAY | | | | iSg | | Sg | 13 34 31.7 | +0.2 |
| VAY | | | | eLg | | Lg | 13 34 35.9 | |
| | comp=E,30nm,0.5s | | | | | | | |
| ULC | Ulcinj | 1.53 | 314 | iPn | | Pb | 13 34 13.5 | -0.2 |
| LIT | Litokhoron | 1.57 | 121 | P | | Pg | 13 34 15.2 | +0.2 |
| LIT | Litokhoron | 1.57 | 121 | P | | Pg | 13 34 15.3 | +0.2 |
| THL | Klokotos Trika | 1.67 | 144 | P | | Pg | 13 34 16.9 | -0.1 |
| PDG | Podgorica | 1.88 | 324 | ePn | | Pb | 13 34 19.0 | -0.6 |
| PDG | | | | eSn | | Sg | 13 34 45.1 | -0.2 |
| PDG | Podgorica | 1.88 | 324 | iPn | | Pb | 13 34 19.4 | -0.2 |
| PDG | | | | iSn | | Sg | 13 34 48.6 | +3.3 |
| PRVS | Prvonek | 1.88 | 32 | ePn | | Pb | 13 34 18.2 | -1.5 |
| PRVS | | | | eSn | | Sg | 13 34 44.4 | -1.1 |
| BOSS | Bosilegrad | 2.05 | 39 | ePn | | Pn | 13 34 20.7 | +0.8 |
| BOSS | | | | eSn | | Sb | 13 34 47.2 | -1.0 |
| BARS | Barje | 2.06 | 23 | ePn | | Pn | 13 34 20.6 | +0.5 |
| BARS | | | | eSn | | Sb | 13 34 49.0 | +0.4 |
| LKD2 | Lefkada island | 2.12 | 182 | P | | Pb | 13 34 22.4 | -1.4 |
| | baz=183 | | | | | | | |
| SELS | Selova | 2.32 | 7 | ePn | | Pn | 13 34 23.3 | -0.3 |
| SJES | Sjenica | 2.41 | 347 | ePn | | Pn | 13 34 25.5 | +0.6 |
| SJES | | | | eSn | | Sb | 13 34 58.1 | -0.6 |
| IVAS | Ivanjica | 2.69 | 351 | ePn | | Pn | 13 34 28.7 | -0.1 |
| IVAS | | | | eSn | | Sb | 13 35 05.5 | -1.3 |

*SFS **18** 13:38:20.0,35°.39N×3°.84W, ML2.4, ALBORAN SUR*
*CNRM **18** 13:38:20.3,35°.62N×3°.81W,h24km, ml2.8*
**ISC 18 13:38:20.3±1.4, 35°.53N±0°.04×3°.79W±0°.03, h9km±12km, n11, σ1s 36/22, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.33 | 201 | P | | Pb | 13 38 29.1 | +0.7 |
| PALE | | | | S | | Sb | 13 38 34.3 | +0.5 |
| GOG | Mont Gurugu | 0.72 | 115 | P | | Pb | 13 38 35.6 | +0.5 |
| GOG | | | | S | | Sb | 13 38 45.4 | +0.4 |
| CHAS | Isla Isabel II | 1.17 | 107 | P | | Pg | 13 38 42.3 | -0.4 |
| CHAS | | | | S | | Sg | 13 38 56.4 | -1.4 |
| CHEFC | Chefchaouen | 1.33 | 252 | P | | Pn | 13 38 43.5 | -1.7 |
| CHEFC | | | | S | | Sb | 13 38 59.6 | -3.1 |
| EMAL | Malaga-Limoner | 1.33 | 338 | P | | Pg | 13 38 47.2 | +1.3 |
| EMAL | | | | S | | Sn | 13 39 04.2 | +1.2 |
| TAF | Taforalt | 1.34 | 122 | P | | Pn | 13 38 44.7 | -0.5 |
| TAF | | | | S | | Sb | 13 39 01.0 | -1.7 |
| CEU | Ceuta | 1.34 | 287 | P | | Pb | 13 38 46.0 | +0.5 |
| CEU | | | | S | | Sb | 13 39 01.5 | -1.3 |
| IFR | Ifrane | 2.29 | 209 | P | | Pg | 13 39 04.8 | +0.7 |
| IFR | | | | S | | Sn | 13 39 25.4 | -1.3 |
| CZD | Col de Zad | 2.69 | 203 | P | | Pn | 13 39 03.7 | -0.3 |
| CZD | | | | S | | Sn | 13 39 36.7 | -0.2 |
| MD31 | MD31 | 2.77 | 197 | P | | Pn | 13 39 06.8 | +1.8 |
| MD31 | | | | S | | Sn | 13 39 39.8 | +1.2 |
| MDT | Midelt | 2.79 | 194 | P | | Pn | 13 39 06.1 | +0.9 |
| MDT | | | | S | | Sn | 13 39 40.3 | +1.3 |

*IDC **18** 13:38:25.4±3.0,59°.67N×24°.45E,h0km,mb1 3.3/2, mb1mx3.0/33,mbtmp3.1/2,ML2.3/2, Error ellipse: s-maj=37.6km s-min=10.3km az=137.0*
*HEL **18** 13:38:26.8±0.0,59°.84N×24°.08E,h0km,ML1.6, Explosion*
**ISC 18 13:38:25.4±0.7, 59°.82N±0°.02×24°.08E±0°.03, h0km, n19, σ0s 56/33, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.43 | 22 | eP | | Pg | 13 38 34.0 | +0.5 |
| MEF | | | | eS | | Sg | 13 38 39.5 | +0.4 |
| EE01 | Perakula, Nova | 0.66 | 201 | eP | | Pg | 13 38 38.4 | +0.3 |
| EE01 | | | | eS | | Sg | 13 38 46.8 | +0.2 |
| EE02 | Kiisa, Saku | 0.71 | 153 | eP | | Pg | 13 38 39.9 | -0.7 |
| EE02 | | | | eS | | Sb | 13 38 49.3 | -1.5 |
| NUR | Nurmijrvi | 0.74 | 22 | eP | | Pg | 13 38 39.7 | +0.1 |
| NUR | | | | eS | | Sg | 13 38 49.0 | -0.3 |
| ARBE | Arbavere | 1.04 | 111 | eSB | | Sb | 13 38 59.7 | -0.7 |
| EE06 | Soera, Palade, | 1.06 | 217 | eP | | Pg | 13 38 45.9 | +0.2 |
| EE06 | | | | eS | | Sg | 13 38 59.7 | +0.2 |
| MTSE | Matsula | 1.12 | 187 | eP | | Pb | 13 38 47.2 | -0.4 |
| MTSE | | | | eS | | Sg | 13 39 01.2 | -0.1 |
| PVF | Pernaja | 1.15 | 50 | eP | | Pg | 13 38 47.1 | -0.2 |
| PVF | | | | eS | | Sg | 13 39 01.7 | -0.5 |
| EE03 | Tooma soojaam, | 1.47 | 129 | ePG | | Pb | 13 38 53.5 | -0.1 |
| EE03 | | | | eSB | | Sn | 13 39 12.7 | -0.4 |
| RAF | Rauma | 1.66 | 317 | eP | | Pb | 13 38 56.7 | -0.2 |
| RAF | | | | eS | | Sn | 13 39 17.7 | -0.1 |
| RAF | | | | MSG | | | 13 39 23.0 | |
| | comp=Z,6.9nm,0.2s | | | | | | | |
| VJF | Virojoki | 1.88 | 66 | eP | | Pn | 13 38 59.4 | +0.7 |
| VJF | | | | eSG | | Sb | 13 39 24.3 | -0.2 |
| VJF | | | | MSG | | | 13 39 27.6 | |
| | comp=Z,1.9nm,0.2s | | | | | | | |
| FIA0 | FINESS Array S | 1.90 | 30 | ePG | | Pb | 13 39 00.4 | -0.5 |
| FIA0 | | | | eSG | | Sb | 13 39 24.8 | -0.4 |
| FIA0 | | | | MSG | | | 13 39 29.9 | |
| | comp=Z,3.1nm,0.2s | | | | | | | |
| FINES | FINESS Array B | 1.90 | 30 | Pg | | Pb | 13 39 00.5 | -0.4 |
| | comp=Z,0.6nm,0.3s,baz=205,slow=14,SNR=15 | | | | | | | |
| FINES | | | | Lg | | Lg | 13 39 26.6 | |
| | comp=Z,1.6nm,0.3s,baz=202,slow=22,SNR=16 | | | | | | | |
| VSU | Vasula | 1.93 | 134 | ePG | | Pg | 13 39 03.0 | +0.6 |
| VSU | | | | eSG | | Sg | 13 39 28.3 | +0.9 |
| EE04 | Vaivara Sinima | 1.98 | 102 | eS | | Sb | 13 39 26.4 | -1.1 |
| EE05 | Udria, Vaivara | 2.00 | 101 | ePG | | Pb | 13 39 02.8 | +0.2 |
| EE05 | | | | eSG | | Sb | 13 39 28.4 | +0.4 |
| AAL | Aland | 2.08 | 282 | ePB | | Pb | 13 39 03.3 | -0.7 |
| AAL | | | | eSG | | Sb | 13 39 30.9 | +0.4 |
| NOA | NORSAR Array B | 6.49 | 286 | Pn | | Pn | 13 40 02.0 | -0.1 |
| | comp=Z,0.0nm,0.3s,baz=93,slow=13,SNR=6.9 | | | | | | | |
| ARCES | ARCESS Array B | 9.77 | 3 | Pn | | Pn | 13 40 47.4 | +0.4 |
| | baz=184,slow=14,SNR=1.1 | | | | | | | |

**JMA 18 13:56:23.4±0.3, 42°.08N×142°.19E, h72km±4km, M1.3, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JNBK | Urakawa-nobuka | 0.46 | 64 | P | | Pn | 13 56 36.0 | 0.0 |
| JBT2 | Biratori 2 | 0.71 | 10 | P | | Pn | 13 56 38.5 | -0.1 |
| JBT2 | | | | eS | | Sn | 13 56 49.2 | -0.5 |
| JKB | Kayabe | 0.88 | 258 | P | | Pn | 13 56 40.7 | +0.2 |
| JKB | | | | eS | | Sn | 13 56 53.6 | +0.3 |
| JNB | Noboribetsu | 0.94 | 295 | P | | Pn | 13 56 40.8 | -0.4 |
| JNB | | | | eS | | Sn | 13 56 53.6 | -0.9 |
| JCH | Churui | 1.02 | 58 | P | | Pn | 13 56 42.4 | +0.2 |
| JCH | | | | eS | | Sn | 13 56 56.5 | +0.3 |
| JOT | Ohata | 1.10 | 231 | P | | Pn | 13 56 43.8 | +0.5 |
| JOT | | | | eS | | Sn | 13 56 58.6 | +0.5 |
| JOB | Onbets | 1.47 | 55 | P | | Pn | 13 56 49.0 | +1.0 |
| JAR | Ashorobuto | 1.68 | 43 | P | | Pn | 13 56 51.1 | +0.3 |
| JAR | | | | eS | | Sn | 13 57 11.8 | +0.2 |

*SKHL **18** 13:57:12.6±0.3,48°.40N×148°.80E,h354km±14km,mb4.6/8, mbv5.2/2,msh4.9/2,msha5.5/5*
*IDC **18** 13:57:18.1±1.9,48°.03N×146°.45E,h481km±23km, mb2.9/15,mb1 3.2/19,mb1mx3.1/53,mbtmp3.8/19,Error ellipse: s-maj=17.6km s-min=12.1km az=163.0*
**ISC 18 13:57:17.6±0.6, 47°.99N±0°.07×146°.50E±0°.09, h483km, n49, σ1s 69/40, mb3.5/15, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| YSS | Yuzh-Sakhalins | 2.74 | 249 | eP | | P | 13 58 25.5 | 0.0 |
| YSS | | | | AMB | AMB | | 13 58 26.4 | |
| | 90nm,0.7s | | | | | | | |
| YSS | | | | eS | | S | 13 59 22.1 | +1.4 |
| YSS | | | | A | A | | 13 59 37.3 | |
| | 20nm,0.4s | | | | | | | |
| YSS | | | | A | A | | 13 59 37.3 | |
| | 10.0nm,0.4s | | | | | | | |
| KUR | Kuril'sk | 2.91 | 161 | eP | | P | 13 58 14.7 | -12 |
| KUR | | | | AMB | AMB | | 13 58 16.8 | |
| | 40nm,0.8s | | | | | | | |
| KUR | | | | AMB | AMB | | 13 58 27.0 | |
| | 900nm,3.0s | | | | | | | |
| KUR | | | | eS | S | | 13 59 03.4 | -19 |
| KUR | | | | A | A | | 13 59 06.0 | |
| | 1μm,4.0s | | | | | | | |
| KUR | | | | A | A | | 13 59 06.0 | |
| | 2μm,4.0s | | | | | | | |
| KUR | | | | A | A | | 13 59 11.2 | |
| | 20nm,0.5s | | | | | | | |
| KUR | | | | A | A | | 13 59 11.2 | |
| | 60nm,0.5s | | | | | | | |
| TYV | Tymovskoe | 3.82 | 320 | eP | | P | 13 58 30.3 | -2.9 |
| TYV | | | | AMB | AMB | | 13 58 32.1 | |
| | 100nm,0.5s | | | | | | | |
| TYV | | | | eS | | S | 13 59 29.4 | -5.6 |
| TYV | | | | A | A | | 13 59 44.6 | |
| | 30nm,0.7s | | | | | | | |
| TYV | | | | A | A | | 13 59 44.6 | |
| | 10.0nm,0.7s | | | | | | | |
| YUK | Yuzh-Kuril'sk | 3.98 | 187 | eP | | P | 13 58 31.5 | -3.3 |
| YUK | | | | AMB | AMB | | 13 58 32.5 | |
| | 60nm,0.3s | | | | | | | |
| YUK | | | | eS | | S | 13 59 33.8 | -3.7 |
| YUK | | | | A | A | | 13 59 41.7 | |
| | 50nm,0.5s | | | | | | | |
| YUK | | | | A | A | | 13 59 41.7 | |
| | 260nm,0.5s | | | | | | | |
| JSE | Soyaes | 4.06 | 223 | P | | P | 13 58 35.1 | -0.3 |
| SHO | Shikotan | 4.12 | 177 | iP | | P | 13 58 30.5 | -5.5 |
| SHO | | | | AMB | AMB | | 13 58 31.8 | |
| | 500nm,2.0s | | | | | | | |
| SHO | | | | AMB | AMB | | 13 58 33.0 | |
| | 40nm,0.3s | | | | | | | |
| SHO | | | | eS | S | | 13 59 31.3 | -8.4 |
| SHO | | | | A | A | | 13 59 33.3 | |
| | 160nm,0.6s | | | | | | | |
| SHO | | | | A | A | | 13 59 33.3 | |
| | 280nm,0.6s | | | | | | | |
| SHO | | | | A | A | | 13 59 33.5 | |
| | 500nm,2.0s | | | | | | | |
| SHO | | | | A | A | | 13 59 33.5 | |
| | 500nm,2.0s | | | | | | | |
| JWK2 | Keihoku | 4.14 | 232 | P | | P | 13 58 36.7 | +0.6 |
| GLVR | Golovnino | 4.30 | 190 | eP | | P | 13 58 35.7 | -1.8 |
| GLVR | | | | eS | | S | 13 59 41.1 | -1.4 |
| GLVR | | | | A | A | | 13 59 45.5 | |
| | 270nm,0.6s | | | | | | | |
| GLVR | | | | A | A | | 13 59 45.5 | |
| | 120nm,0.6s | | | | | | | |
| JTKR | Abashiri--Toko | 4.40 | 205 | P | | P | 13 58 36.9 | -1.5 |
| NMR | Nemuro--Hokkai | 4.65 | 187 | iP | | P | 13 58 36.6 | -4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAT** | **Matsushiro** | **12.97** | **211** | P | **P** | **14 00 07.1** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **12.97** | **211** | P | **P** | **14 00 07.1** | **+0.5** |
| | 0.3nm,0.3s,baz=19,slow=12,SNR=14 | | | | | | |
| **SEY** | **Seymchan** | **15.34** | **10** | P | **P** | **14 00 31.9** | **+0.7** |
| | 0.6nm,0.3s,baz=182,slow=10,SNR=20 | | | | | | |
| **SONM** | **Songino Array** | **26.68** | **285** | P | **P** | **14 02 16.7** | **-0.1** |
| | 0.2nm,0.3s,baz=78,slow=7.5,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.20** | **303** | P | **P** | **14 03 54.5** | **-0.2** |
| | 0.6nm,0.3s,baz=75,slow=6.4,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **38.41** | **39** | P | **P** | **14 03 56.1** | **-0.2** |
| | 1.5nm,0.7s,baz=273,slow=8.1,SNR=18 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.35** | **293** | P | **P** | **14 04 28.8** | **+0.6** |
| | 1.6nm,0.5s,baz=67,slow=7.1,SNR=19 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.57** | **35** | P | **P** | **14 05 44.7** | **0.0** |
| | 0.6nm,0.7s,baz=303,slow=6.9,SNR=9.8 | | | | | | |
| **AKTO** | **Aktyubinsk** | **54.49** | **308** | P | **P** | **14 05 58.5** | **-0.2** |
| | 0.8nm,0.5s,baz=66,slow=12,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.13** | **338** | P | **P** | **14 06 02.7** | **-0.2** |
| | 4.2nm,0.9s,baz=26,slow=6.7,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **60.91** | **332** | P | **P** | **14 06 42.2** | **-0.1** |
| | 1.8nm,0.6s,baz=53,slow=7.4,SNR=9.7 | | | | | | |
| **NB2** | **NORSAR Subarra** | **65.50** | **338** | P | **P** | **14 07 12.0** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=38,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.50** | **338** | P | **P** | **14 07 12.1** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=31,slow=6.7,SNR=8.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.75** | **59** | P | **P** | **14 07 15.8** | **+1.7** |
| | comp=Z,0.3nm,0.5s,baz=312,slow=6.8,SNR=3.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **67.54** | **51** | P | **P** | **14 07 26.2** | **+1.1** |
| | comp=Z,0.6nm,0.5s,baz=309,slow=1.8,SNR=7.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **67.92** | **322** | P | **P** | **14 07 26.9** | **-0.1** |
| | comp=Z,0.5nm,0.4s,baz=39,slow=6.0,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.49** | **192** | P | **P** | **14 07 30.2** | **-0.6** |
| | comp=Z,0.3nm,0.9s,baz=3.7,slow=6.8,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **72.22** | **192** | P | **P** | **14 07 54.3** | **+1.4** |
| | comp=Z,0.2nm,0.7s,baz=10,slow=5.7,SNR=1.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.67** | **56** | P | **P** | **14 08 41.0** | **+1.3** |
| | comp=Z,0.3nm,0.6s,baz=290,slow=3.2,SNR=6.1 | | | | | | |

*IDC* ***18*** *13:59:27.7±2.3, 48.˚88S×164.˚74E, h0km, mb3.6/2, mb1 4.0/3, mb1mx3.7/35, mbtmp3.8/3, ML3.5/1, Error ellipse: s-maj=60.7km s-min=33.2km az=158.0*

**ISC 18 13:59:30.4**±1.4**, 49.˚0S**±0.˚1×**164.˚58E**±0.˚09**, h18**km**, n24,** σ1§**60/42, Auckland Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **APZ** | **The Paps** | **3.18** | **47** | P | | **Pn** | **14 00 19.7** | **+0.2** |
| APZ | | | | S | | **Sn** | **14 00 57.5** | **+0.5** |
| **PYZ** | **Puysegur Point** | **3.21** | **27** | P | | **Pn** | **14 00 19.4** | **-0.5** |
| PYZ | | | | S | | **Sn** | **14 00 54.2** | **-3.4** |
| **WHZ** | **Wether Hill Ro** | **3.89** | **37** | P | | **Pn** | **14 00 29.5** | **+0.2** |
| WHZ | | | | S | | **Sn** | **14 01 14.5** | **+0.1** |
| **SYZ** | **Scrubby Hill** | **3.96** | **53** | P | | **Pn** | **14 00 30.8** | **+0.5** |
| SYZ | | | | S | | **Sn** | **14 01 15.5** | **-0.7** |
| **DCZ** | **Deep Cove** | **3.98** | **27** | P | | **Pn** | **14 00 29.6** | **-0.8** |
| DCZ | | | | S | | **Sn** | **14 01 15.4** | **-1.3** |
| **MLZ** | **Mavora Lakes** | **4.40** | **35** | P | | **Pn** | **14 00 37.7** | **+1.5** |
| MLZ | | | | S | | **Sn** | **14 01 29.0** | **+2.0** |
| **TUZ** | **Tuapeka** | **4.61** | **50** | P | | **Pn** | **14 00 39.6** | **+0.5** |
| TUZ | | | | S | | **Sn** | **14 01 32.4** | **+0.2** |
| **MSZ** | **Milford Sound** | **4.94** | **29** | P | | **Pn** | **14 00 44.9** | **+1.3** |
| MSZ | | | | S | | **Sn** | **14 01 42.9** | **+2.8** |
| **EAZ** | **Earnscleugh** | **4.99** | **42** | P | | **Pn** | **14 00 44.6** | **+0.2** |
| EAZ | | | | S | | **Sn** | **14 01 43.8** | **+2.2** |
| **HHSZ** | **Highcliff Hill** | **5.16** | **55** | P | | **Pn** | **14 00 47.5** | **+0.9** |
| HHSZ | | | | S | | **Sn** | **14 01 46.3** | **+0.6** |
| **WKZ** | **Wanaka** | **5.20** | **37** | P | | **Pn** | **14 00 49.1** | **+1.9** |
| WKZ | | | | S | | **Sn** | **14 01 48.9** | **+2.3** |
| **JCZ** | **Jackson Bay** | **5.75** | **32** | P | | **Pn** | **14 00 58.1** | **+3.2** |
| **ODZ** | **Otahua Downs** | **5.76** | **48** | P | | **Pn** | **14 00 54.2** | **-0.7** |
| **LBZ** | **Lake Benmore** | **6.04** | **42** | P | | **Pn** | **14 00 57.7** | **-1.1** |
| **RPZ** | **Rata Peaks** | **6.96** | **42** | Pn | | **Pn** | **14 01 08.7** | **-2.6** |
| | 0.9nm,0.3s,baz=315,slow=20,SNR=2.9 | | | | | | | |
| RPZ | | | | Sn | | **Sn** | **14 02 27.2** | **-2.8** |
| | 3.2nm,0.3s,baz=347,slow=18,SNR=8.3 | | | | | | | |
| **RPZ** | **Rata Peaks** | **6.96** | **42** | P | | **Pn** | **14 01 08.9** | **-2.5** |
| RPZ | | | | S | | **Sn** | **14 02 27.1** | **-2.8** |
| **MOZ** | **McQueen's Vall** | **7.72** | **49** | P | | **Pn** | **14 01 21.7** | **0.0** |
| **AKCZ** | **Akaroa Harbour** | **7.73** | **51** | P | | **Pn** | **14 01 23.3** | **+1.4** |
| AKCZ | | | | S | | **Sn** | **14 02 49.5** | **+0.5** |
| **LTZ** | **Lake Taylor** | **8.24** | **43** | P | | **Pn** | **14 01 27.5** | **-1.5** |
| LTZ | | | | S | | **Sn** | **14 02 59.7** | **-1.9** |
| **THZ** | **Tophouse** | **9.34** | **42** | P | | **Pn** | **14 01 45.6** | **+1.6** |
| THZ | | | | S | | **Sn** | **14 03 28.7** | **+0.2** |
| **MRNZ** | **Matariki Terra** | **9.57** | **40** | P | | **Pn** | **14 01 48.0** | **+0.8** |
| **ASAR** | **Alice Springs** | **34.97** | **305** | P | | **P** | **14 06 21.8** | **+0.3** |
| | 0.6nm,0.6s,baz=136,slow=7.8,SNR=20 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **14 08 53.2** | **-0.3** |
| | 0.2nm,0.8s,baz=129,slow=3.0,SNR=1.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.80** | **309** | P | | **P** | **14 06 45.1** | **-0.6** |
| | 0.8nm,0.8s,baz=140,slow=7.5,SNR=5.3 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **14 09 02.5** | **+0.4** |
| | 0.6nm,0.8s,baz=133,slow=3.1,SNR=3.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.50** | **291** | PKPbc | | **PKiKP** | **14 19 22.5** | **-0.2** |
| | 0.4nm,0.4s,baz=86,slow=2.5,SNR=4.8 | | | | | | | |

*NIED* ***18*** *14:05:33.9, 31.˚34N×128.˚63E, h12km, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr-1.02; Mθθ2.58; Mϕϕ-1.56; Mrθ-0.87; Mθϕ5.15; Mϕr-2.41; Fault plane solution: M₀6.11000×10¹⁵ NP1:ϕs12.00000°, δ87.00000°, λ-155.00000°. NP2:ϕs281.00000°, δ65.00000°, λ-3.00000°.*

*JMA* ***18*** *14:05:33.8±0.2, 31.˚34N×128.˚63E, h12km±2km, M4.4*
*JMA Felt I J1.*

*IDC* ***18*** *14:05:34.8±0.7, 31.˚28N×128.˚76E, h0km, mb3.9/22, mb1 4.0/27, mb1mx3.9/59, mbtmp3.9/27, ML3.4/5, MS3.8/40, Ms1 3.8/40, ms1mx3.6/78, Error ellipse: s-maj=15.7km s-min=12.0km az=126.0*

**ISC 18 14:05:36.6**±0.5**, 31.˚31N**±0.˚05×**128.˚89E**±0.˚04**, h10**km**, n76,** α2§**21/58, mb3.9/29, MS3.9/38, 5C-2D, Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JSJ** | **Shimokoshiki** | **0.80** | **62** | ⇓P | | **Pg** | **14 05 52.0** | **0.0** |
| JSJ | | | | *e*S | | **Sn** | **14 06 05.2** | **-0.7** |
| **JFU** | **Fukue jima 2** | **1.35** | **355** | P | | **Pn** | **14 05 58.1** | **-3.5** |
| JFU | | | | eS | | **Sb** | **14 06 16.1** | **-3.3** |
| **JSU** | **Suzuyama** | **1.35** | **81** | ⇓P | | **Pn** | **14 06 02.0** | **+0.4** |
| **JNN** | **Nakanoshima** | **1.69** | **150** | P | | **Pn** | **14 06 05.5** | **-0.7** |
| **JYAK** | **Yakushimahirau** | **1.75** | **127** | P | | **Pn** | **14 06 06.7** | **-0.4** |
| **JTN** | **Tanegashima 3** | **1.91** | **109** | ⇑P | | **Pn** | **14 06 09.6** | **+0.4** |
| **JMTN** | **Minamitane** | **1.95** | **117** | P | | **Pn** | **14 06 10.1** | **+0.3** |
| **JTZ** | **Takazaki** | **1.97** | **72** | P | | **Pn** | **14 06 10.5** | **+0.5** |
| **JNU** | **Nakatsue** | **2.48** | **42** | Pn | | **Pn** | **14 06 18.1** | **+1.1** |
| | 47nm,0.3s,baz=264,slow=7.8,SNR=76 | | | | | | | |
| JNU | | | | Pg | | **Pb** | **14 06 22.2** | **+1.0** |
| | 62nm,0.3s,baz=233,slow=6.7,SNR=66 | | | | | | | |
| JNU | | | | Lg | | Lg | 14 06 57.5 | |
| | 32nm,0.3s,baz=182,slow=19,SNR=5.8 | | | | | | | |
| **JII** | **Iki** | **2.58** | **16** | P | | **Pn** | **14 06 17.1** | **-1.4** |
| **JOW** | **Kunigami** | **4.49** | **187** | Pn | | **Pn** | **14 06 44.5** | **-0.2** |
| | 2.1nm,0.3s,baz=149,slow=29,SNR=2.6 | | | | | | | |
| JOW | | | | LR | | LR | 14 08 42.5 | |
| | comp=Z,641nm,18.4s,baz=73,slow=42 | | | | | | | |
| **KSRS** | **Korea Array** | **6.19** | **353** | Pn | | **Pn** | **14 07 06.5** | **-1.4** |
| | 2.9nm,0.3s,baz=173,slow=14,SNR=23 | | | | | | | |
| KSRS | | | | Sn | | **Sn** | **14 08 14.2** | **-4.5** |
| | 2.6nm,0.3s,baz=283,slow=6.4,SNR=5.7 | | | | | | | |
| KSRS | | | | Lg | | Lg | 14 08 41.4 | |
| | 7.8nm,0.3s,baz=178,slow=30,SNR=7.4 | | | | | | | |
| KSRS | | | | LR | | LR | 14 09 47.7 | |
| | comp=Z,665nm,19.0s,baz=175,slow=41 | | | | | | | |
| **SSE** | **Sheshan** | **6.60** | **270** | Pn | | **Pn** | **14 07 14.3** | **+0.6** |
| SSE | | | | Sn | | **Sn** | **14 08 28.4** | **-0.6** |
| SSE | | | | LR | | LR | | |
| | comp=N,2μm,10.1s | | | | | | | |
| SSE | | | | LR | | LR | | |
| | comp=E,490nm,9.6s | | | | | | | |
| **NJ2** | **Nanjing** | **8.58** | **278** | ⇑P | | **Pn** | **14 07 42.3** | **+1.4** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | | |
| NJ2 | | | | smax | | smax | | |
| | comp=N,71nm,1.1s | | | | | | | |
| NJ2 | | | | smax | | smax | | |
| | comp=E,78nm,1.0s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=N,1μm,10.9s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=E,430nm,9.0s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=Z,980nm,11.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **9.34** | **53** | Pn | | **Pn** | **14 07 53.6** | **+2.3** |
| | 0.1nm,0.3s,baz=244,slow=13,SNR=2.5 | | | | | | | |
| MJAR | | | | LR | | LR | 14 11 52.7 | |
| | comp=Z,658nm,18.2s,baz=223,slow=40 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **9.41** | **76** | LR | | LR | 14 11 35.6 | |
| | comp=Z,336nm,19.0s,baz=272,slow=38 | | | | | | | |
| **TIA** | **Tai'an** | **10.94** | **300** | *e*P | | Pn | 14 08 22.9 | +10 |
| TIA | | | | LR | | LR | | |
| | comp=N,1μm,10.9s | | | | | | | |
| TIA | | | | LR | | LR | | |
| | comp=E,980nm,12.8s | | | | | | | |
| TIA | | | | LR | | LR | | |
| | comp=Z,1μm,12.9s | | | | | | | |
| **WHN** | **Wuhan** | **12.51** | **270** | ⇑P | | Pn | 14 08 43.3 | +8.6 |
| WHN | | | | S | | Sn | 14 11 07.6 | +14 |
| WHN | | | | LR | | LR | | |
| | comp=Z,5μm,10.0s | | | | | | | |
| WHN | | | | LR | | LR | | |
| | comp=Z,1μm,5.6s | | | | | | | |
| WHN | | | | LR | | LR | | |
| | comp=Z,2μm,9.3s | | | | | | | |
| **CN2** | **Changchun** | **12.77** | **349** | *e*P | | **Pn** | **14 08 42.5** | **+4.3** |
| CN2 | | | | S | | **Sn** | **14 11 04.6** | **+4.3** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,200nm,3.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,1μm,11.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,4μm,11.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,1μm,11.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **13.10** | **10** | LR | | LR | 14 13 17.0 | |
| | comp=Z,91nm,19.8s,baz=177,slow=35 | | | | | | | |
| **MDJ** | **Mudanjiang** | **13.30** | **2** | P | | P | 14 09 01.5 | +6.2 |
| MDJ | | | | S | | Sn | 14 10 52.8 | -21 |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.6s | | | | | | | |
| MDJ | | | | LR | | LR | | |
| | comp=N,920nm,10.8s | | | | | | | |
| MDJ | | | | LR | | LR | | |
| | comp=E,2μm,11.2s | | | | | | | |
| MDJ | | | | LR | | LR | | |
| | comp=Z,820nm,10.6s | | | | | | | |
| **LYN** | **LuoYang** | **14.17** | **288** | *e*P | | **P** | **14 09 02.8** | **-2.1** |
| LYN | | | | S | | **Sn** | **14 11 39.8** | **+5.2** |
| LYN | | | | LR | | LR | | |
| | comp=Z,2μm,15.6s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,820nm,15.1s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,460nm,13.1s | | | | | | | |
| **ASAJ** | **Asahikawa** | **16.74** | **36** | Pn | | **Pn** | **14 09 31.3** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=252,slow=16,SNR=4.0 | | | | | | | |
| ASAJ | | | | LR | | LR | 14 15 34.2 | |
| | comp=Z,305nm,18.1s,baz=215,slow=36 | | | | | | | |
| **XAN** | **Xi'an** | **17.03** | **285** | P | | **P** | **14 09 36.8** | **0.0** |
| XAN | | | | S | | **S** | **14 12 55.8** | **+1.5** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.4s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,2μm,14.7s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,1μm,15.1s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,650nm,12.9s | | | | | | | |
| **KLR** | **Kul'dur** | **18.04** | **6** | P | | **P** | **14 09 50.2** | **+2.5** |
| | comp=Z,0.2nm,0.3s,baz=204,slow=7.2,SNR=11 | | | | | | | |
| **LZH** | **Lanzhou** | **21.35** | **290** | ⇑P | | **P** | **14 10 29.9** | **+5.7** |
| LZH | | | | pP | | sP | 14 10 37.8 | +10 |
| LZH | | | | sP | | pP | 14 10 43.8 | +17 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=Z,1μm,13.0s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=Z,920nm,13.0s | | | | | | | |
| LZH | | | | LR | | LR | | |
| | comp=Z,1μm,15.2s | | | | | | | |
| **CD2** | **Chengdu** | **21.51** | **276** | P | | **P** | **14 10 28.0** | **+2.2** |
| CD2 | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.4s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,140nm,10.2s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,1μm,10.6s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,860nm,15.7s | | | | | | | |
| **GUMO** | **Guam** | **22.95** | **137** | LR | | LR | 14 18 36.5 | |
| | comp=Z,134nm,19.0s,baz=320,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **23.81** | **320** | P | | **P** | **14 10 48.2** | **-1.5** |
| | comp=Z,2.2nm,0.8s,baz=139,slow=10.0,SNR=15 | | | | | | | |
| SONM | | | | LR | | LR | 14 20 35.1 | |
| | comp=Z,386nm,19.8s,baz=146,slow=38 | | | | | | | |
| **PZH** | **PanZhiHua** | **24.21** | **265** | P | | **P** | **14 10 52.8** | **-0.9** |
| PZH | | | | S | | **S** | **14 15 05.4** | **-6.8** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,5.9s | | | | | | | |
| PZH | | | | LR | | LR | | |
| | comp=Z,740nm,14.1s | | | | | | | |
| PZH | | | | LR | | LR | | |
| | comp=Z,560nm,14.1s | | | | | | | |
| PZH | | | | LR | | LR | | |
| | comp=Z,570nm,14.1s | | | | | | | |
| **GTA** | **Gaotai** | **24.97** | **297** | ⇑P | | **P** | **14 11 04.8** | **+4.3** |
| GTA | | | | pP | | sP | 14 11 13.4 | +8.9 |
| GTA | | | | sP | | pP | 14 11 17.8 | +14 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.5s | | | | | | | |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,93nm,5.8s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=Z,710nm,13.5s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=Z,760nm,14.5s | | | | | | | |
| GTA | | | | LR | | LR | | |
| | comp=Z,680nm,12.7s | | | | | | | |
| **GOMU** | **GeErMu** | **28.66** | **289** | P | | **P** | **14 11 35.9** | **+1.9** |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,120nm,6.3s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.92** | **252** | P | | **P** | **14 11 44.0** | **-0.9** |
| | comp=Z,0.4nm,0.3s,baz=42,slow=8.2,SNR=1.4 | | | | | | | |
| CMAR | | | | LR | | LR | 14 24 52.9 | |
| | comp=Z,170nm,19.4s,baz=55,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.15** | **35** | LR | | LR | 14 23 28.5 | |
| | comp=Z,160nm,19.0s,baz=214,slow=36 | | | | | | | |
| **SIJI** | **Sorong** | **32.08** | **176** | LR | | LR | 14 23 00.2 | |
| | comp=Z,125nm,20.9s,baz=68,slow=33 | | | | | | | |
| **SEY** | **Seymchan** | **35.03** | **19** | P | | **P** | **14 12 28.9** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=252,slow=19,SNR=2.2 | | | | | | | |
| **JAY** | **Jayapura** | **35.46** | **159** | LR | | LR | 14 25 59.7 | |
| | comp=Z,126nm,18.8s,baz=350,slow=34 | | | | | | | |
| **KAPI** | **Kappang** | **37.15** | **195** | LR | | LR | 14 28 11.3 | |
| | comp=Z,48nm,20.1s,baz=20,slow=37 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.69** | **319** | P | | **P** | **14 13 01.4** | **+1.0** |
| | comp=Z,0.4nm,0.4s,baz=113,slow=11,SNR=1.4 | | | | | | | |
| ZALV | | | | LR | | LR | 14 30 19.4 | |
| | comp=Z,250nm,18.7s,baz=118,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.76** | **307** | P | | **P** | **14 13 01.9** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=93,slow=11,SNR=7.3 | | | | | | | |
| MKAR | | | | LR | | LR | 14 28 10.2 | |
| | comp=Z,104nm,21.7s,baz=96,slow=35 | | | | | | | |
| **PSI** | **Prapat** | **40.02** | **231** | LR | | LR | 14 30 19.2 | |
| | comp=Z,95nm,19.0s,baz=44,slow=37 | | | | | | | |
| **TIXI** | **Tiksi** | **40.40** | **360** | P | | **P** | **14 13 13.8** | **-0.6** |
| | comp=Z,0.5nm,0.2s,baz=271,slow=24,SNR=1.7 | | | | | | | |
| **BATI** | **Baumata** | **41.58** | **188** | LR | | LR | 14 29 22.0 | |
| | comp=Z,46nm,21.1s,baz=174,slow=34 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.72** | **313** | P | | **P** | **14 13 24.8** | **-0.8** |
| | comp=Z,0.4nm,0.2s,baz=100,slow=9.2,SNR=3.8 | | | | | | | |
| KURBB | | | | LR | | LR | 14 32 15.1 | |
| | comp=Z,500nm,18.6s,baz=78,slow=38 | | | | | | | |
| **KSH** | **Kashi** | **43.37** | **296** | P | | P | 14 13 46.8 | +7.5 |
| KSH | | | | sP | | sP | 14 13 59.3 | +16 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.6s | | | | | | | |
| **PMG** | **Port Moresby** | **44.10** | **154** | LR | | LR | 14 30 28.8 | |
| | comp=Z,127nm,20.0s,baz=340,slow=34 | | | | | | | |
| **AAK** | **Ala-Archa** | **44.22** | **301** | P | | **P** | **14 13 45.2** | **-1.0** |
| | comp=Z,1.3nm,0.6s,baz=230,slow=11,SNR=2.1 | | | | | | | |
| AAK | | | | LR | | LR | 14 33 51.1 | |
| | comp=Z,129nm,18.5s,baz=88,slow=38 | | | | | | | |
| **NRIK** | **Noril'sk** | **44.64** | **341** | P | | **P** | **14 13 49.4** | **+0.4** |
| | comp=Z,2.3nm,0.5s,baz=115,slow=6.6,SNR=8.1 | | | | | | | |
| **BVAR** | **Borovoye Array** | **46.98** | **315** | P | | **P** | **14 14 06.8** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=40,slow=53,SNR=4.4 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **49.22** | **184** | P | | **P** | **14 14 24.4** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=320,slow=17,SNR=1.2 | | | | | | | |
| **PALK** | **Pallekele** | **50.86** | **252** | LR | | LR | 14 35 54.6 | |
| | comp=Z,51nm,21.4s,baz=167,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.22** | **173** | P | | **P** | **14 14 40.1** | **-0.3** |
| | comp=Z,1.3nm,0.8s,baz=352,slow=7.7,SNR=3.1 | | | | | | | |
| WRA | | | | LR | | LR | 14 36 16.6 | |
| | comp=Z,39nm,21.3s,baz=348,slow=36 | | | | | | | |
| **CTA** | **Charters Tower** | **53.75** | **160** | LR | | LR | 14 37 29.4 | |
| | comp=Z,62nm,18.9s,baz=1.0,slow=36 | | | | | | | |
| **ARU** | **Arti** | **53.84** | **320** | P | | **P** | **14 14 57.5** | **-2.0** |
| | comp=Z,0.5nm,0.3s,baz=75,slow=23,SNR=1.7 | | | | | | | |
| ARU | | | | LR | | LR | 14 40 17.7 | |
| | comp=Z,486nm,18.5s,baz=52,slow=39 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **54.77** | **312** | LR | | LR | 14 40 04.1 | |
| | comp=Z,362nm,20.0s,baz=89,slow=38 | | | | | | | |
| **ASAR** | **Alice Springs** | **54.87** | **174** | P | | **P** | **14 15 07.1** | **-0.2** |
| | comp=Z,0.7nm,0.6s,baz=2.9,slow=14,SNR=8.4 | | | | | | | |
| ASAR | | | | LR | | LR | 14 38 19.9 | |
| | comp=Z,54nm,20.8s,baz=355,slow=36 | | | | | | | |
| **KDAK** | **Kodiak Island** | **58.14** | **38** | LR | | LR | 14 40 57.3 | |
| | comp=Z,71nm,20.2s,baz=281,slow=36 | | | | | | | |
| **KIRV** | **Kirov** | **58.51** | **323** | LR | | LR | 14 43 14.3 | |
| | comp=Z,200nm,18.3s,baz=42,slow=39 | | | | | | | |
| **ILAR** | **Eielson Array** | **59.73** | **30** | P | | **P** | **14 15 41.5** | **+0.3** |
| | comp=Z,0.6nm,0.9s,baz=272,slow=7.4,SNR=2.7 | | | | | | | |
| ILAR | | | | LR | | LR | 14 40 58.2 | |
| | comp=Z,43nm,20.8s,baz=317,slow=36 | | | | | | | |
| **KLMR** | **Klimovskoe** | **62.91** | **327** | *e*P | | **P** | **14 16 05.5** | **+2.8** |
| KLMR | | | | AMP | | | 14 16 07.8 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **63.98** | **168** | LR | | LR | 14 43 29.1 | |
| | comp=Z,40nm,20.5s,baz=24,slow=36 | | | | | | | |
| **INK** | **Inuvik** | **64.03** | **24** | LR | | LR | 14 46 18.6 | |
| | comp=Z,48nm,18.8s,baz=234,slow=38 | | | | | | | |
| **FINES** | **FINESS Array B** | **68.76** | **330** | P | | **P** | **14 16 38.6** | **-1.8** |
| | comp=Z,5.1nm,1.1s,baz=65,slow=7.8,SNR=2.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.08** | **319** | P | | **P** | **14 16 59.7** | **-1.2** |
| | comp=Z,0.3nm,0.2s,baz=49,slow=6.4,SNR=1.7 | | | | | | | |
| AKASG | | | | LR | | LR | 14 50 16.0 | |
| | comp=Z,240nm,18.9s,baz=32,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **73.71** | **26** | P | | **P** | **14 17 11.0** | **+0.6** |
| | comp=Z,0.2nm,0.6s,baz=303,slow=6.0,SNR=4.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.41** | **307** | P | | **P** | **14 17 14.8** | **-0.3** |
| | comp=Z,1.8nm,1.0s,baz=7.3,slow=14,SNR=3.3 | | | | | | | |
| BRTR | | | | LR | | LR | 14 54 41.6 | |
| | comp=Z,64nm,19.8s,baz=32,slow=40 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.04** | **334** | P | | **P** | **14 17 17.6** | **-0.6** |
| | comp=Z,1.8nm,0.9s,baz=51,slow=5.6,SNR=3.6 | | | | | | | |
| **MLR** | **Muntele Rosu** | **76.55** | **315** | LR | | LR | 14 51 59.5 | |
| | comp=Z,170nm,19.1s,baz=23,slow=36 | | | | | | | |
| **EIL** | **Elat** | **78.26** | **298** | LR | | LR | 14 58 14.0 | |
| | comp=Z,59nm,18.6s,baz=95,slow=40 | | | | | | | |
| **NEW** | **Newport** | **81.25** | **38** | LR | | LR | 14 55 00.3 | |
| | comp=Z,49nm,18.4s,baz=33,slow=36 | | | | | | | |
| **IDI** | **Anoyia** | **82.65** | **307** | LR | | LR | 15 01 50.6 | |
| | comp=Z,53nm,18.4s,baz=150,slow=41 | | | | | | | |
| **FRB** | **Frobisher Bay** | **84.27** | **8** | LR | | LR | 14 59 53.9 | |
| | comp=Z,63nm,18.3s,baz=17,slow=39 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.59** | **46** | P | | **P** | **14 18 20.2** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=327,slow=6.5,SNR=2.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.86** | **39** | P | | **P** | **14 18 31.3** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=316,slow=7.7,SNR=4.3 | | | | | | | |
| PDAR | | | | LR | | LR | 15 00 39.4 | |
| | comp=Z,24nm,18.1s,baz=18,slow=37 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **89.64** | **27** | P | | **P** | **14 18 33.9** | **-0.7** |
| | comp=Z,1.3nm,0.4s,baz=135,slow=4.3,SNR=1.6 | | | | | | | |
| **SCHQ** | **Schefferville** | **93.15** | **9** | LR | | LR | 15 03 24.4 | |
| | comp=Z,40nm,18.5s,baz=72,slow=37 | | | | | | | |

*MOS* ***18*** *14:09:17.7±0.8, 42.˚19N×144.˚75E, h47km, mb4.4/4, Error ellipse: s-maj=12.6km s-min=6.9km az=79.8*

*IDC* ***18*** *14:09:19.7±2.5, 42.˚25N×144.˚64E, h42km±23km, mb3.7/17, mb1 3.9/20, mb1mx3.7/58, mbtmp4.0/20, ML3.8/3, Error ellipse: s-maj=20.0km s-min=17.4km az=172.0*

*NIED* ***18*** *14:09:19.2, 42.˚34N×144.˚67E, h35km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr5.95; Mθθ-5.03; Mϕϕ-0.92; Mrθ3.40; Mθϕ-3.03; Mϕr1.77; Fault plane solution: M₀7.37000×10¹⁴ NP1:ϕs62.00000°, δ61.00000°, λ90.00000°. NP2:ϕs242.00000°, δ29.00000°, λ90.00000°.*

*SKHL* ***18*** *14:09:19.3±0.2, 42.˚30N×144.˚70E, h57km±2km, mb5.0/10*
*JMA* ***18*** *14:09:19.2, 42.˚34N×144.˚67E, h35km±1km, M4.0*
*JMA Felt I J1.*

*NEIC* ***18*** *14:09:21.3±2.5, 42.˚13N±0.˚05×144.˚6E±0.˚1, h71km±8km, mb4.4/27, Error ellipse: s-maj=14.7km s-min=6.2km az=108.0*

**ISC 18 14:09:17.7**±1.2**, 42.˚24N**±0.˚05×**144.˚71E**±0.˚04**, h32**km±8km**, n119,** σ1§**36/134, mb4.2/34, 1C-10D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---

YUK smax smax
comp=N,1μm,0.4s
YUK smax smax
comp=E,2μm,0.4s
**YUK Yuzh-Kuril'sk 1.98 25** *e*P **Pn 14 09 49.6 +0.6**
YUK AMB AMB 14 09 51.5
comp=E,230nm,0.3s
YUK AMB AMB 14 09 51.5
comp=E,190nm,0.3s
YUK AMB AMB 14 09 51.5
comp=E,570nm,0.3s
YUK *e*S **Sn 14 10 12.4 -0.3**
YUK A A 14 10 17.1
comp=E,1μm,0.4s
YUK A A 14 10 17.1
comp=E,2μm,0.4s
**SHO Shikotan 2.25 43***c i*PN **Pn 14 09 53.6 +0.9**
SHO *e*S **Sn 14 10 19.1 -0.2**
SHO pmax pmax
comp=Z,97nm,0.2s
SHO pmax pmax
comp=N,32nm,0.1s
SHO smax smax
comp=N,460nm,0.3s
SHO smax smax
comp=E,853nm,0.3s
**SHO Shikotan 2.25 43** *i*P **Pn 14 09 53.5 +0.9**
SHO AMB AMB 14 09 55.6
comp=E,100nm,0.2s
SHO *e*S **Sn 14 10 19.1 -0.2**
SHO A A 14 10 23.1
comp=E,460nm,0.3s
SHO A A 14 10 23.1
comp=E,850nm,0.3s
**JKA Kamikawa-asahi 2.43 321** Pn **Pn 14 09 57.4 +2.3**
**JKA Kamikawa-asahi 2.43 321** *e*P **Pn 14 09 57.4 +2.3**
**ASAJ Asahikawa 2.43 321** P **Pn 14 09 57.0 +1.8**
comp=E,24nm,0.3s,baz=140,slow=12,SNR=127
ASAJ S **Sb 14 10 28.9 -1.3**
comp=E,29nm,0.3s,baz=292,slow=17,SNR=22
**ASAJ Asahikawa 2.43 321** PN **Pn 14 09 57.4 +2.3**
**JEW Eniwo 2.48 285** **Pn 14 09 58.8 +2.9**
**JTM Tenmabayashi 3.10 243** **Pn 14 10 06.5 +2.1**
**KUR Kuril'sk 3.77 36** *e*PN **Pn 14 10 16.3 +2.8**
KUR *i* S **Sn 14 10 59.2 +2.5**
KUR pmax pmax
comp=Z,88nm,0.4s
KUR pmax pmax
comp=N,40nm,0.2s
KUR pmax pmax
comp=E,33nm,0.2s
KUR smax smax
comp=N,91nm,0.2s
KUR smax smax
comp=E,142nm,0.2s
**KUR Kuril'sk 3.77 36** *e*P **Pn 14 10 15.3 +1.8**
KUR AMB AMB 14 10 18.0
comp=E,90nm,0.2s
KUR *e*S **Sn 14 10 57.0 +0.3**
KUR A A 14 11 04.6
comp=E,90nm,0.2s
KUR A A 14 11 04.6
comp=E,140nm,0.2s
**YSS Yuzh-Sakhalins 4.91 344** *e*PN **Pn 14 10 31.6 +2.3**
YSS pmax pmax
comp=Z,20nm,0.7s
YSS MLR MLR
comp=Z,300nm,15.0s
**YSS Yuzh-Sakhalins 4.91 344** Pn **Pn 14 10 30.7 +1.5**
**YSS Yuzh-Sakhalins 4.91 344** *e*P **Pn 14 10 31.6 +2.3**
YSS AMB AMB 14 10 32.3
comp=Z,20nm,0.7s
**JMM Marumori 5.30 216** Pn **Pn 14 10 35.1 +0.5**
**JSD Sado 6.48 232** Pn **Pn 14 10 52.3 +1.5**
**TEY Ternei 6.51 298** *e*P **Pn 14 10 53.4 +2.2**
TEY AMB AMB 14 10 58.4
**JYT Yasato 6.95 212** Pn **Pn 14 10 57.1 -0.2**
**MJB9 Matsu-Tunnel 7.60 224** Pn **Pn 14 11 08.0 +1.8**
**MAJO Matsushiro 7.60 224** PN **Pn 14 11 08.0 +1.8**
**MAJO Matsushiro 7.60 224** Pn **Pn 14 11 08.0 +1.8**
**MJAR Matsushiro Arr 7.60 224** P **Pn 14 11 07.9 +1.7**
comp=Z,0.2nm,0.3s,baz=33,slow=13,SNR=8.8
**MJAR Matsushiro Arr 7.60 224** Pn **Pn 14 11 05.6 -0.6**
**TYV Tymovskoe 8.74 351** *e*P **Pn 14 11 24.2 +2.5**
TYV AMB AMB 14 11 27.4
comp=Z,30nm,0.4s
**JHJ2 Mitsune 9.90 205** Pn **Pn 14 11 37.7 -0.1**
**JHJ Hachijo jima 2 9.91 205** P **Pn 14 11 37.5 -0.3**
comp=Z,7.1nm,0.3s,baz=62,slow=20,SNR=1.8
JHJ S **Sn 14 13 22.5 -5.4**
comp=Z,5.9nm,0.3s,baz=105,slow=24,SNR=1.1
**GRNR Gornyy 10.26 329** *e*P **Pn 14 11 44.5 +1.9**
GRNR AMB AMB 14 11 57.8
comp=Z,10.0nm,0.8s
**JSU Suzuyama 15.63 231** Pn **Pn 14 12 53.1 -2.4**
JSU IAmb IAmb 14 13 05.2
comp=Z,41nm,1.5s
**ZEA Zeya 16.34 321** *e*P **Pn 14 13 03.5 -1.1**
**KROS Kirovskiy 16.90 322** *e*P **Pn 14 13 09.3 -2.4**
**SEY Seymchan 21.21 10** P **P 14 13 58.6 -1.8**
comp=Z,0.8nm,0.5s,baz=191,slow=12,SNR=7.3
**SONM Songino Array 27.44 295** P **P 14 15 00.9 +0.2**
comp=Z,1.3nm,0.7s,baz=72,slow=6.5,SNR=9.2
**SONM Songino Array 27.44 295** P **P 14 14 59.7 -0.9**
**H11N2 WAKE ISLAND Hy 29.25 133** T T 14 46 35.6
baz=320
**H11N1 WAKE ISLAND Hy 29.26 133** T T 14 46 39.4
baz=320
**H11N3 WAKE ISLAND Hy 29.27 133** T T 14 46 35.5
baz=320
**ZAK Zakamensk 29.43 300** *e*P **P 14 15 14.1 -4.2**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**H11S1 WAKE ISLAND Hy 30.15 135** T T 14 47 46.9
baz=322
**H11S3 WAKE ISLAND Hy 30.16 135** T T 14 47 48.0
baz=322
**H11S2 WAKE ISLAND Hy 30.17 135** T T 14 47 45.6
baz=322
**ZALV Zalesovo Beam 40.50 308** P **P 14 16 54.3 +1.0**
comp=Z,2.1nm,0.6s,baz=90,slow=8.9,SNR=8.4
ZALV PcP **PcP 14 18 56.8 +1.4**
comp=Z,1.0nm,0.4s,baz=78,slow=3.0,SNR=2.7
**ZALV Zalesovo Beam 40.50 308** P **P 14 16 54.9 +1.6**
**ZALV Zalesovo Beam 40.50 308** P **P 14 16 54.9 +1.6**
**J20K Nowinta River 40.62 36** P **P 14 16 55.6 +1.4**
J20K IAmb IAmb 14 16 59.1
comp=Z,7.7nm,1.2s
**IMAR Indian Mountai 40.89 33** P **P 14 16 56.3 -0.1**
**H21K Melozitna Rive 41.26 34** P **P 14 16 59.9 +0.5**
H21K IAmb IAmb 14 17 12.0
comp=Z,9.1nm,1.5s
**COLD Coldfoot 42.38 32** P **P 14 17 08.5 -0.1**
**H23K Yukon River 42.61 34** P **P 14 17 12.6 +2.1**
**TOLK Toolik Lake Re 42.69 30** P **P 14 17 10.9 -0.2**
TOLK IAmb IAmb 14 17 23.8
comp=Z,9.9nm,1.5s
**RND Reindeer 42.97 37** P **P 14 17 13.5 0.0**
RND pmax pmax
comp=Z,11nm,1.5s
**RND Reindeer 42.97 37** P **P 14 17 13.5 0.0**
RND IAmb IAmb 14 17 19.4
comp=Z,11nm,1.5s
**WRH Wood River Hil 43.25 36** P **P 14 17 16.4 +0.7**
WRH IAmb IAmb 14 17 20.2
comp=Z,11nm,1.5s
**KNK Knik Glacier 43.30 40** P **P 14 17 17.6 +1.5**
**SML Sawmill 43.33 40** P **P 14 17 18.0 +1.6**
**DHY Denali Highway 43.66 38** P **P 14 17 20.4 +1.3**
DHY IAmb IAmb 14 17 38.6
comp=Z,5.7nm,1.2s
**MK31 Makanchi Array 43.71 298** P **P 14 17 19.5 -0.1**
MK31 pmax pmax
comp=Z,1.0nm,0.9s
**MK31 Makanchi Array 43.71 298** P **P 14 17 19.5 -0.1**
**MKAR Makanchi Array 43.71 298** P **P 14 17 20.4 +0.7**
comp=Z,0.6nm,0.6s,baz=82,slow=9.9,SNR=10
MKAR PcP **PcP 14 19 07.6 +1.4**
comp=Z,0.3nm,0.5s,baz=82,slow=3.8,SNR=1.4
**MKAR Makanchi Array 43.71 298** P **P 14 17 19.6 0.0**
**HDA Harding Lake 43.75 36** P **P 14 17 20.0 +0.3**
HDA IAmb IAmb 14 17 44.0
comp=Z,8.0nm,1.4s
**IL31 43.76 35** P **P 14 17 20.0 +0.3**
**ILAR Eielson Array 43.76 35** P **P 14 17 20.8 +1.0**
comp=Z,1.4nm,0.9s,baz=248,slow=5.3,SNR=9.8
**ILAR Eielson Array 43.76 35** P **P 14 17 20.1 +0.3**
**BMAR Burnt Mountain 44.56 31** P **P 14 17 27.7 +1.5**
**KURK Kurchatov 44.90 305** P **P 14 17 29.9 +0.9**
**KURK Kurchatov 44.90 305** P **P 14 17 28.9 -0.1**
**KURK Kurchatov 44.90 305** *e*P **P 14 17 29.9 +0.9**
**KURBB Kurchatov Arra 44.98 304** P **P 14 17 29.9 +0.2**
comp=Z,39nm,0.6s,baz=72,slow=8.9,SNR=2.9
**SCRK Sand Creek 45.08 36** P **P 14 17 31.1 +0.6**
SCRK IAmb IAmb 14 17 59.9
comp=Z,4.8nm,1.4s
**BCAR Beaver Creek A 46.19 37** P **P 14 17 40.0 +0.9**
**EGAK Eagle 46.20 35** P **P 14 17 37.7 -1.5**
**BARN Barnard Glacie 46.61 40** P **P 14 17 43.3 +0.7**
BARN IAmb IAmb 14 17 56.5
comp=Z,5.6nm,1.1s
**INK Inuvik 48.60 29** P **P 14 17 58.8 +1.1**
comp=Z,0.8nm,0.3s,baz=283,slow=6.9,SNR=12
**INK Inuvik 48.60 29** P **P 14 17 58.1 +0.4**
INK IAmb IAmb 14 18 14.1
comp=Z,7.3nm,1.5s
**BVAR Borovoye Array 49.08 310** P **P 14 18 02.1 +0.5**
comp=Z,1.6nm,0.4s,baz=138,slow=37,SNR=10
**BRVK Borovoye 49.13 310** P **P 14 18 02.0 0.0**
BRVK pmax pmax
comp=Z,6.0nm,1.3s
**BRVK Borovoye 49.13 310** P **P 14 18 02.0 0.0**
BRVK IAmb IAmb 14 18 04.4
comp=Z,6.2nm,1.3s
**BRVK Borovoye 49.13 310** *e*P **P 14 18 02.0 0.0**
**C36M Paulatuk 51.64 27** P **P 14 18 21.6 +0.9**
C36M IAmb IAmb 14 18 22.3
comp=Z,3.9nm,1.3s
**EUNU Eureka 54.65 10** P **P 14 18 42.7 -0.1**
EUNU IAmb IAmb 14 19 06.6
comp=Z,6.5nm,1.2s
**ABKAR Akbulak array 56.61 309** P **P 14 18 57.3 0.0**
**HOLB Holberg 57.32 49** P **P 14 19 03.3 +0.9**
**YKA Yellowknife Ar 58.04 33** P **P 14 19 07.9 +0.7**
comp=Z,0.4nm,0.7s,baz=302,slow=7.2,SNR=2.1
**ARCES ARCESS Array B 60.03 339** P **P 14 19 21.1 +0.2**
comp=Z,1.5nm,0.6s,baz=35,slow=4.4,SNR=5.7
**ARCES ARCESS Array B 60.03 339** P **P 14 19 20.8 -0.1**
**WB0 Warramunga Arr 62.43 191** P **P 14 19 34.6 -3.0**
WB0 IAmb IAmb 14 19 52.2
comp=Z,9.4nm,1.4s
**FIA1 FINESS Array S 65.39 332** P **P 14 19 54.6 -2.0**
**FINES FINESS Array B 65.39 332** P **P 14 19 56.6 0.0**
comp=Z,1.7nm,0.5s,baz=42,slow=8.0,SNR=16
**FINES FINESS Array B 65.39 332** P **P 14 19 55.6 -1.0**
**ASAR Alice Springs 66.33 191** P **P 14 20 03.6 +0.5**
comp=Z,0.5nm,1.0s,baz=10,slow=5.7,SNR=2.5
**ASAR Alice Springs 66.33 191** P **P 14 20 01.1 -2.1**
**NVAR Mina Array Bea 69.90 56** P **P 14 20 26.4 +0.6**
comp=Z,0.8nm,0.8s,baz=316,slow=6.2,SNR=3.9
**NB2 NORSAR Subarra 70.34 338** P **P 14 20 28.3 +0.4**
comp=Z,0.3nm,0.3s,baz=34,slow=6.5
**NOA NORSAR Array B 70.34 338** P **P 14 20 27.6 -0.3**
comp=Z,0.7nm,0.6s,baz=292,slow=8.3,SNR=5.0
**HFS Hagfors 70.37 336** P **P 14 20 28.0 0.0**
comp=Z,0.9nm,0.4s,baz=49,slow=6.7,SNR=7.2
**AKASG Malin Array Be 71.72 323** P **P 14 20 36.5 +0.2**
comp=Z,0.6nm,0.4s,baz=45,slow=6.2,SNR=6.3
**PDAR Pinedale Array 72.25 48** P **P 14 20 40.9 +0.9**
comp=Z,0.5nm,0.7s,baz=245,slow=1.7,SNR=4.5
**EKA Eskdalemuir Ar 79.02 342** P **P 14 21 19.2 +1.0**
comp=Z,0.3nm,0.3s,baz=15,slow=5.9,SNR=1.9
**TXAR Lajitas Array 84.98 55** P **P 14 21 52.3 +2.2**
comp=Z,0.4nm,0.6s,baz=291,slow=3.3,SNR=5.6

*MOS **18** 14:10:26.7±0.9, 42°.23N×144°.62E, h45km, mb4.5/9, Error ellipse: s-maj=10.5km s-min=6.3km az=80.2*
*NIED **18** 14:10:27.8, 42°.34N×144°.68E, h33km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; $M_{rr}$1.08; $M_{\theta\theta}$-0.90; $M_{\phi\phi}$-0.18; $M_{r\theta}$0.24; $M_{\theta\phi}$-0.44; $M_{\phi r}$0.33; Fault plane solution: $M_0$1.17000×10¹⁵ NP1:$\phi_s$55.00000°, δ55.00000°, λ.78.00000°. NP2:$\phi_s$254.00000°, δ37.00000°, λ.106.00000°.*
*SKHL **18** 14:10:27.3±0.1, 42°.20N×144°.70E, h54km±2km, mb5.1/9*
*JMA **18** 14:10:27.7, 42°.34N×144°.68E, h33km±1km, M4.1*
*JMA Felt I J1.*
*IDC **18** 14:10:28.3±2.6, 42°.29N×144°.65E, h40km±23km, mb3.7/18, mb1 3.9/22, mb1mx3.7/59, mbtmp4.0/22, ML3.9/3, MS3.3/1, Ms1 3.3/1, ms1mx2.5/81, Error ellipse: s-maj=17.6km s-min=17.0km az=99.0*
*NEIC **18** 14:10:30.5±1.9, 42°.23N±0°.08×144°.5E±0°.1, h64km±8km, mb4.4/33, Error ellipse: s-maj=15.6km s-min=11.5km az=114.0*

**ISC 18 14:10:26.9±1.3, 42°.29N±0°.05×144°.68E±0°.04, h31**km±9km**, n125,σ1°§12/138, mb4.3/42, 3C-3D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAK** | **Akkeshi** | **0.71** | **1** | P | **Pb** | **14 10 40.4** | **-0.4** |
| JAK | | | | *e*S | **Sb** | **14 10 50.3** | **0.0** |
| **AKK** | **Akkeshi** | **0.74** | **9** | *i* P | **Pb** | **14 10 41.1** | **-0.2** |
| AKK | | | | AMB | AMB | 14 10 42.1 | |
| | 3μm,0.4s | | | | | | |
| AKK | | | | *i* S | **Sb** | **14 10 51.1** | **0.0** |
| AKK | | | | A | A | 14 10 54.3 | |
| | 10μm,0.6s | | | | | | |
| AKK | | | | A | A | 14 10 54.3 | |
| | 6μm,0.6s | | | | | | |
| **JKHN** | **Kushirohamanak** | **0.87** | **24** | ⇓P | **Pn** | **14 10 43.4** | **+0.4** |
| JKHN | | | | *e*S | **Sn** | **14 10 55.4** | **+0.8** |
| **JOB** | **Onbets** | **0.88** | **315** | P | **Pb** | **14 10 43.3** | **-0.3** |
| **JTHR** | **Tokachihiroo** | **1.03** | **271** | P | **Pb** | **14 10 46.3** | **+0.2** |
| **JCH** | **Churui** | **1.03** | **289** | P | **Pb** | **14 10 46.0** | **-0.2** |
| JCH | | | | *e*S | **Sn** | **14 10 59.6** | **+1.1** |
| **ERM** | **Erimo** | **1.17** | **257** | PN | **Pb** | **14 10 48.4** | **-0.1** |
| **ERM** | **Erimo** | **1.17** | **257** | Pn | **Pb** | **14 10 48.4** | **-0.1** |
| **JAR** | **Ashorobuto** | **1.21** | **327** | P | **Pn** | **14 10 47.5** | **-0.2** |
| **JNK** | **Nakash** | **1.30** | **1** | P | **Pn** | **14 10 48.5** | **-0.4** |
| JNK | | | | *e*S | **Sn** | **14 11 03.9** | **-1.2** |
| **NMR** | **Nemuro--Hokkai** | **1.33** | **35** | ⇑*i* PN | **Pn** | **14 10 49.5** | **+0.3** |
| NMR | | | | *i* S | **Sn** | **14 11 06.8** | **+0.9** |
| **NMR** | **Nemuro--Hokkai** | **1.33** | **35** | *i* P | **Pn** | **14 10 49.6** | **+0.3** |
| NMR | | | | AMB | AMB | 14 10 50.7 | |
| | 470nm,0.2s | | | | | | |
| NMR | | | | *i* S | **Sn** | **14 11 06.4** | **+0.5** |
| NMR | | | | A | A | 14 11 08.0 | |
| | 1μm,0.2s | | | | | | |
| NMR | | | | A | A | 14 11 08.0 | |
| | 3μm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.33** | **36** | P | **Pn** | **14 10 49.4** | **+0.1** |
| NEM2 | | | | *e*S | **Sn** | **14 11 05.5** | **-0.4** |
| **GLVR** | **Golovnino** | **1.57** | **23** | ⇓*i* PN | **Pn** | **14 10 53.4** | **+0.7** |
| GLVR | | | | *e*S | **Sn** | **14 11 12.7** | **+0.7** |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,561nm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,4μm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,4μm,0.4s | | | | | | |
| **GLVR** | **Golovnino** | **1.57** | **23** | *i* P | **Pn** | **14 10 53.4** | **+0.7** |
| GLVR | | | | AMB | AMB | 14 10 54.6 | |
| | comp=N,560nm,0.4s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **14 11 13.0** | **+1.0** |
| GLVR | | | | A | A | 14 11 14.3 | |
| | comp=N,4μm,0.5s | | | | | | |
| GLVR | | | | A | A | 14 11 14.3 | |
| | comp=N,4μm,0.5s | | | | | | |
| **JRA** | **Rausu** | **1.68** | **11** | P | **Pn** | **14 10 54.3** | **+0.2** |
| **RUSJ** | **Misakicho** | **1.86** | **13** | ⇑*i* PN | **Pn** | **14 10 57.7** | **+1.1** |
| RUSJ | | | | *e*S | **Sn** | **14 11 21.1** | **+2.0** |
| **YUK** | **Yuzh-Kuril'sk** | **1.95** | **26** | ⇓*i* PN | **Pn** | **14 10 58.5** | **+0.7** |
| YUK | | | | *i* S | **Sn** | **14 11 21.9** | **+0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,647nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,170nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,74nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,1μm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.95** | **26** | *i* P | **Pn** | **14 10 58.5** | **+0.7** |
| YUK | | | | AMB | AMB | 14 10 59.1 | |
| | comp=E,170nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 14 10 59.1 | |
| | comp=E,70nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 14 10 59.1 | |
| | comp=E,650nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **14 11 21.9** | **+0.7** |
| YUK | | | | A | A | 14 11 25.7 | |
| | comp=E,1μm,0.5s | | | | | | |
| YUK | | | | A | A | 14 11 25.7 | |
| | comp=E,3μm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.23** | **44***c i* PN | | **Pn** | **14 11 02.7** | **+1.0** |
| SHO | | | | *e*S | **Sn** | **14 11 28.5** | **+0.3** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,141nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,20nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,86nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,902nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,556nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.23** | **44** | *i* P | **Pn** | **14 11 02.3** | **+0.6** |
| SHO | | | | AMB | AMB | 14 11 04.2 | |
| | comp=E,140nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **14 11 28.4** | **+0.3** |
| SHO | | | | A | A | 14 11 33.0 | |
| | comp=E,900nm,0.4s | | | | | | |
| SHO | | | | A | A | 14 11 33.0 | |
| | comp=E,560nm,0.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.38** | **321** | Pn | **Pn** | **14 11 06.3** | **+2.6** |
| **JKA** | **Kamikawa-asahi** | **2.38** | **321** | *e*P | **Pn** | **14 11 06.3** | **+2.6** |
| **ASAJ** | **Asahikawa** | **2.38** | **321** | P | **Pn** | **14 11 05.7** | **+2.0** |
| | comp=E,38nm,0.3s,baz=142,slow=12,SNR=6.5 | | | | | | |
| ASAJ | | | | S | **Sb** | **14 11 35.8** | **-2.2** |
| | comp=E,28nm,0.3s,baz=4.4,slow=30,SNR=10 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.38** | **321** | PN | **Pn** | **14 11 06.3** | **+2.5** |
| **JEW** | **Eniwo** | **2.45** | **284** | Pn | **Pn** | **14 11 07.3** | **+2.6** |
| **KUR** | **Kuril'sk** | **3.74** | **37** | PN | **Pn** | **14 11 25.7** | **+3.3** |
| KUR | | | | S | **Sn** | **14 12 07.5** | **+2.1** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,121nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,133nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,191nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **3.74** | **37** | *e*P | **Pn** | **14 11 24.0** | **+1.6** |
| KUR | | | | AMB | AMB | 14 11 34.7 | |
| | comp=E,120nm,0.3s | | | | | | |
| KUR | | | | *e*S | **Sn** | **14 12 05.9** | **+0.5** |
| KUR | | | | A | A | 14 12 13.6 | |
| | comp=E,130nm,0.4s | | | | | | |
| KUR | | | | A | A | 14 12 13.6 | |
| | comp=E,190nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.86** | **344** | *e*PN | **Pn** | **14 11 40.6** | **+2.7** |
| YSS | | | | MLR | MLR | | |
| | comp=Z,400nm,14.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.86** | **344** | *e*P | **Pn** | **14 11 40.6** | **+2.7** |
| YSS | | | | AMB | AMB | 14 11 41.3 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **JSD** | **Sado** | **6.50** | **231** | Pn | **Pn** | **14 12 01.5** | **+1.2** |
| **MJB9** | **Matsu-Tunnel** | **7.62** | **223** | Pn | **Pn** | **14 12 16.2** | **+0.5** |
| **MAJO** | **Matsushiro** | **7.62** | **223** | PN | **Pn** | **14 12 16.1** | **+0.3** |
| **MAJO** | **Matsushiro** | **7.62** | **223** | Pn | **Pn** | **14 12 16.1** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **7.62** | **223** | P | **Pn** | **14 12 16.4** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=31,slow=13,SNR=9.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.62** | **223** | | **Pn** | **14 12 16.1** | **+0.4** |
| **TYV** | **Tymovskoe** | **8.69** | **351** | *e*P | **Pn** | **14 12 33.2** | **+2.9** |
| **INU** | **Inuyama** | **9.15** | **223** | Pn | **Pn** | **14 12 37.7** | **+1.0** |
| **JHJ** | **Hachijo jima 2** | **9.94** | **205** | P | **Pn** | **14 12 46.6** | **-0.9** |
| | comp=Z,6.0nm,0.3s,baz=348,slow=20,SNR=1.4 | | | | | | |
| JHJ | | | | S | Sn | 14 14 29.4 | -8.6 |
| | comp=Z,15nm,0.3s,baz=79,slow=23,SNR=5.7 | | | | | | |
| **GRNR** | **Gornyy** | **10.21** | **329** | *e*P | **Pn** | **14 12 53.7** | **+2.5** |
| **KLR** | **Kul'dur** | **11.38** | **312** | P | **Pn** | **14 13 07.5** | **+0.3** |
| | comp=Z,0.0nm,0.3s,baz=236,slow=7.0,SNR=1.9 | | | | | | |
| **KLR** | **Kul'dur** | **11.38** | **312** | *e*P | **Pn** | **14 13 08.6** | **+1.4** |
| **SEY** | **Seymchan** | **21.17** | **10** | P | **P** | **14 15 06.8** | **-2.5** |
| | comp=Z,1.2nm,0.4s,baz=180,slow=11,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **27.40** | **295** | P | **P** | **14 16 09.7** | **+0.1** |
| | comp=Z,2.4nm,0.8s,baz=76,slow=7.9,SNR=7.2 | | | | | | |
| **SONM** | **Songino Array** | **27.40** | **295** | P | **P** | **14 16 08.2** | **-1.5** |
| **H11N2** | **WAKE ISLAND Hy** | **29.30** | **133** | T | T | 14 47 43.2 | |
| | baz=324 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.31** | **133** | T | T | 14 47 47.6 | |
| | baz=324,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.32** | **133** | T | T | 14 47 46.4 | |
| | baz=324,slow=74 | | | | | | |
| **ZAK** | **Zakamensk** | **29.39** | **300** | *e*P | **P** | **14 16 25.6** | **-1.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.20** | **135** | T | T | 14 48 53.3 | |
| | baz=328,slow=76 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.20** | **135** | T | T | 14 48 53.7 | |
| | baz=328,slow=76 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.22** | **135** | T | T | 14 48 53.8 | |
| | baz=328,slow=76 | | | | | | |
| **TTA** | **Tatalina** | **39.70** | **38** | P | **P** | **14 17 56.3** | **+0.3** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | |
| **TTA** | **Tatalina** | **39.70** | **38** | P | **P** | **14 17 56.3** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **40.45** | **308** | P | **P** | **14 18 02.4** | **+0.2** |
| | comp=Z,2.1nm,0.4s,baz=79,slow=7.7,SNR=8.7 | | | | | | |
| ZALV | | | | PcP | **PcP** | **14 20 05.3** | **+0.8** |
| | comp=Z,1.1nm,0.4s,baz=93,slow=2.9,SNR=4.2 | | | | | | |
| **J20K** | **Nowinta River** | **40.59** | **36** | P | **P** | **14 18 04.2** | **+1.0** |
| J20K | | | | IAmb | IAmb | 14 18 18.7 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **A21K** | **Barrow** | **40.64** | **25** | P | **P** | **14 18 03.3** | **-0.2** |
| **IMAR** | **Indian Mountai** | **40.87** | **33** | P | **P** | **14 18 05.4** | **-0.1** |
| **H21K** | **Melozitna Rive** | **41.23** | **34** | P | **P** | **14 18 09.7** | **+1.2** |
| **CAST** | **Castle Rocks** | **41.49** | **37** | P | **P** | **14 18 11.7** | **+1.0** |
| CAST | | | | IAmb | IAmb | 14 18 22.9 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **BRLK** | **Bradley Lake** | **42.25** | **43** | P | **P** | **14 18 18.1** | **+1.2** |
| **H23K** | **Yukon River** | **42.58** | **34** | P | **P** | **14 18 19.8** | **+0.2** |
| H23K | | | | IAmb | IAmb | 14 18 31.1 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **42.66** | **30** | P | **P** | **14 18 21.1** | **+1.0** |
| TOLK | | | | IAmb | IAmb | 14 18 22.7 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **42.66** | **35** | P | **P** | **14 18 21.7** | **+1.5** |
| I23K | | | | IAmb | IAmb | 14 18 25.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **42.89** | **37** | P | **P** | **14 18 23.2** | **+1.1** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **MCK** | **McKinley** | **42.89** | **37** | P | **P** | **14 18 23.2** | **+1.1** |
| MCK | | | | IAmb | IAmb | 14 18 35.6 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **RND** | **Reindeer** | **42.95** | **37** | P | **P** | **14 18 23.5** | **+0.9** |
| RND | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **42.95** | **37** | P | **P** | **14 18 23.5** | **+0.9** |
| RND | | | | IAmb | IAmb | 14 18 37.5 | |
| | comp=Z,8.8nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **43.27** | **34** | P | **P** | **14 18 25.4** | **+0.3** |
| **SML** | **Sawmill** | **43.30** | **40** | P | **P** | **14 18 25.9** | **+0.4** |
| **DHY** | **Denali Highway** | **43.63** | **38** | P | **P** | **14 18 29.1** | **+0.8** |
| DHY | | | | IAmb | IAmb | 14 18 34.9 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **43.67** | **298** | P | **P** | **14 18 28.9** | **+0.3** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **43.67** | **298** | P | **P** | **14 18 28.9** | **+0.3** |
| **MKAR** | **Makanchi Array** | **43.67** | **298** | P | **P** | **14 18 28.8** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=80,slow=10,SNR=6.0 | | | | | | |
| MKAR | | | | PcP | **PcP** | **14 20 15.7** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=70,slow=3.3,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.67** | **298** | P | **P** | **14 18 28.1** | **-0.5** |
| **IL31** | | **43.73** | **35** | P | **P** | **14 18 30.7** | **+1.9** |
| **ILAR** | **Eielson Array** | **43.73** | **35** | P | **P** | **14 18 29.6** | **+0.8** |
| | comp=Z,1.8nm,0.9s,baz=276,slow=6.6,SNR=7.2 | | | | | | |
| **ILAR** | **Eielson Array** | **43.73** | **35** | P | **P** | **14 18 30.3** | **+1.5** |
| **ILAR** | **Eielson Array** | **43.73** | **35** | P | **P** | **14 18 30.3** | **+1.5** |
| **SCM** | **Sheep Creek Mo** | **43.77** | **39** | P | **P** | **14 18 30.4** | **+1.1** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **43.77** | **39** | P | **P** | **14 18 30.4** | **+1.1** |
| **MAKZ** | **Makanchi** | **43.87** | **298** | P | **P** | **14 18 30.1** | **-0.1** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MAKZ** | **Makanchi** | **43.87** | **298** | P | **P** | **14 18 30.1** | **-0.1** |
| **KURK** | **Kurchatov** | **44.85** | **305** | P | **P** | **14 18 38.8** | **+0.8** |
| **KURK** | **Kurchatov** | **44.85** | **305** | P | **P** | **14 18 38.2** | **+0.2** |
| KURK | | | | IAmb | IAmb | 14 18 41.2 | |
| | comp=Z,5.6nm,1.1s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KURK | Kurchatov | 44.85 | 305 | *e*P | | P | | 14 18 38.8 +0.8 |
| KURBB | Kurchatov Arra | 44.94 | 304 | P | | P | | 14 18 38.8 +0.1 |
| | comp=Z,2.3nm,0.5s,baz=73,slow=8.8,SNR=4.9 | | | | | | | |
| SCRK | Sand Creek | 45.06 | 36 | P | | P | | 14 18 39.7 +0.1 |
| M26K | Nabesna, AK | 45.72 | 38 | P | | P | | 14 18 45.6 +0.8 |
| M26K | | | | IAmb | | IAmb | | 14 18 52.5 |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| WAX | Waxell Ridge | 46.13 | 41 | P | | P | | 14 18 49.7 +1.6 |
| BCAR | Beaver Creek A | 46.16 | 37 | P | | P | | 14 18 49.1 +0.9 |
| M27K | Edge Creek, AK | 46.24 | 38 | P | | P | | 14 18 50.3 +1.3 |
| M27K | | | | IAmb | | IAmb | | 14 19 00.1 |
| | comp=Z,5.5nm,1.2s | | | | | | | |
| EPYK | Eagle Plains | 47.73 | 32 | P | | P | | 14 19 01.4 +0.9 |
| EPYK | | | | IAmb | | IAmb | | 14 19 25.9 |
| | comp=Z,7.6nm,1.3s | | | | | | | |
| INK | Inuvik | 48.57 | 29 | P | | P | | 14 19 07.3 +0.5 |
| | comp=Z,0.9nm,0.3s,baz=198,slow=4.7,SNR=8.0 | | | | | | | |
| INK | Inuvik | 48.57 | 29 | P | | P | | 14 19 06.1 -0.7 |
| BVAR | Borovoye Array | 49.03 | 310 | P | | P | | 14 19 11.1 +0.4 |
| | comp=Z,2.6nm,0.4s,baz=57,slow=20,SNR=17 | | | | | | | |
| BRVK | Borovoye | 49.08 | 310 | P | | P | | 14 19 11.2 +0.2 |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| BRVK | Borovoye | 49.08 | 310 | P | | P | | 14 19 11.2 +0.2 |
| BRVK | | | | IAmb | | IAmb | | 14 19 12.9 |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| BRVK | Borovoye | 49.08 | 310 | *e*P | | P | | 14 19 11.2 +0.2 |
| C36M | Paulatuk | 51.61 | 27 | P | | P | | 14 19 29.8 0.0 |
| C36M | | | | IAmb | | IAmb | | 14 19 55.4 |
| | comp=Z,5.3nm,1.5s | | | | | | | |
| KKAR | Karatay Array | 52.79 | 298 | P | | P | | 14 19 38.6 -0.5 |
| KKAR | Karatay Array | 52.79 | 298 | P | | P | | 14 19 38.6 -0.5 |
| HNR | Honiara | 53.34 | 161 | LR | | LR | | 14 44 14.8 |
| | comp=Z,25nm,18.0s,baz=324,slow=38 | | | | | | | |
| EUNU | Eureka | 54.61 | 10 | P | | P | | 14 19 51.6 -0.2 |
| EUNU | | | | IAmb | | IAmb | | 14 19 52.2 |
| | comp=Z,6.1nm,1.4s | | | | | | | |
| ABKAR | Akbulak array | 56.56 | 309 | P | | P | | 14 20 06.4 +0.2 |
| HOLB | Holberg | 57.31 | 49 | P | | P | | 14 20 11.2 -0.3 |
| YKA | Yellowknife Ar | 58.01 | 33 | P | | P | | 14 20 15.4 -0.9 |
| | comp=Z,0.4nm,0.5s,baz=196,slow=18,SNR=4.7 | | | | | | | |
| ARCES | ARCESS Array B | 59.98 | 339 | P | | P | | 14 20 29.6 -0.2 |
| | comp=Z,1.1nm,0.6s,baz=35,slow=8.0,SNR=1.6 | | | | | | | |
| WB0 | Warramunga Ar | 62.47 | 191 | P | | P | | 14 20 44.8 -2.4 |
| WB0 | | | | IAmb | | IAmb | | 14 20 47.6 |
| | comp=Z,5.4nm,1.2s | | | | | | | |
| WRA | Warramunga Ar | 62.65 | 191 | P | | P | | 14 20 48.1 -0.3 |
| | comp=Z,0.4nm,0.7s,baz=7.2,slow=7.0,SNR=2.2 | | | | | | | |
| FIA1 | FINESS Array S | 65.34 | 332 | P | | P | | 14 21 04.9 -0.7 |
| FINES | FINESS Array B | 65.34 | 332 | P | | P | | 14 21 05.4 -0.2 |
| | comp=Z,2.7nm,0.5s,baz=47,slow=7.7,SNR=12 | | | | | | | |
| FINES | FINESS Array B | 65.34 | 332 | P | | P | | 14 21 04.9 -0.7 |
| SUMG | Summit | 65.42 | 1 | P | | P | | 14 21 06.1 -0.3 |
| SUMG | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| SUMG | Summit | 65.42 | 1 | P | | P | | 14 21 06.1 -0.3 |
| SUMG | | | | IAmb | | IAmb | | 14 21 08.9 |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| ASAR | Alice Springs | 66.38 | 191 | P | | P | | 14 21 13.5 +0.8 |
| | comp=Z,0.4nm,0.8s,baz=0.9,slow=5.4,SNR=2.3 | | | | | | | |
| ASAR | Alice Springs | 66.38 | 191 | P | | P | | 14 21 10.4 -2.3 |
| NVAR | Mina Array Bea | 69.89 | 56 | P | | P | | 14 21 35.2 +0.1 |
| | comp=Z,0.5nm,0.6s,baz=294,slow=9.6,SNR=3.5 | | | | | | | |
| NB2 | NORSAR Subarra | 70.29 | 338 | P | | P | | 14 21 36.4 -0.5 |
| | comp=Z,0.9nm,0.4s,baz=34,slow=6.5 | | | | | | | |
| NOA | NORSAR Array B | 70.29 | 338 | P | | P | | 14 21 36.1 -0.8 |
| | comp=Z,0.1nm,0.3s,baz=289,slow=8.5,SNR=6.1 | | | | | | | |
| HFS | Hagfors | 70.32 | 336 | P | | P | | 14 21 36.9 -0.1 |
| | comp=Z,1.4nm,0.3s,baz=54,slow=7.5,SNR=9.0 | | | | | | | |
| AKASG | Malin Array Be | 71.67 | 323 | P | | P | | 14 21 45.1 -0.2 |
| | comp=Z,0.9nm,0.4s,baz=43,slow=6.2,SNR=6.9 | | | | | | | |
| PDAR | Pinedale Array | 72.23 | 48 | P | | P | | 14 21 49.5 +0.3 |
| | comp=Z,0.6nm,0.7s,baz=270,slow=3.9,SNR=4.9 | | | | | | | |
| EKA | Eskdalemuir Ar | 78.97 | 342 | P | | P | | 14 22 27.4 +0.2 |
| | comp=Z,0.2nm,0.3s,baz=29,slow=5.2,SNR=1.4 | | | | | | | |
| TXAR | Lajitas Array | 84.97 | 55 | P | | P | | 14 23 00.6 +1.3 |
| | comp=Z,0.7nm,0.7s,baz=293,slow=3.4,SNR=6.7 | | | | | | | |

*IDC* ***18*** *14:26:51.6±1.8,5.68S×151.15E,h0km,mb4.1/4, mb1 4.4/5,mb1mx3.6/37,mbtmp4.1/5,ML2.0/1,Error ellipse: s-maj=101.1km s-min=24.1km az=129.0*

**ISC 18 14:27:00.5±2.3,5.7S±0.7×150.8E±0.9,h65km,n6,σ1§38/7, mb4.0/4,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 5.15 | 225 | Pn | Pn | 14 28 15.3 | +0.2 |
| | 3.2nm,0.3s,baz=47,slow=10,SNR=11 | | | | | | |
| PMG | | | | Sn | Sn | 14 29 11.4 | -1.8 |
| | 0.9nm,0.3s,baz=225,slow=16,SNR=2.0 | | | | | | |
| WRA | Warramunga Arr | 21.36 | 227 | P | P | 14 31 43.4 | +0.7 |
| | 3.6nm,0.5s,baz=53,slow=11,SNR=53 | | | | | | |
| ASAR | Alice Springs | 24.15 | 221 | P | P | 14 32 11.8 | +1.1 |
| | 4.1nm,0.6s,baz=57,slow=8.9,SNR=97 | | | | | | |
| FITZ | Fitzroy Crossi | 27.49 | 241 | P | P | 14 32 42.2 | +1.3 |
| | 2.4nm,0.6s,baz=68,slow=9.4,SNR=13 | | | | | | |
| ILAR | Eielson Array | 83.77 | 22 | P | P | 14 39 21.3 | -1.0 |
| | 0.6nm,0.5s,baz=253,slow=5.2,SNR=8.6 | | | | | | |
| TORD | Torodi Ar. Bea | 148.70 | 286 | PKPbc | PKiKP | 14 46 43.0 | 0.0 |
| | 1.1nm,0.8s,baz=76,slow=3.7,SNR=5.6 | | | | | | |

*TUL* ***18*** *14:33:01.0±0.8,35.72N±0.02×97.17W±0.02,h7km±7km, ML3.5,mb_Lg3.1/66(NEIC),Error ellipse: s-maj=2.7km s-min=2.0km az=123.0*

**NEIC 18 14:33:01.2±1.5,35.74N±0.02×97.15W±0.02,h8km±7km, Error ellipse: s-maj=2.7km s-min=2.2km az=128.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK005 | Luther M Schoo | 0.10 | 202 | Pg | Pg | 14 33 03.0 | -0.5 |
| OK001 | Jones High Sch | 0.22 | 213 | Pg | Pg | 14 33 05.2 | -0.4 |
| OK001 | | | | Sg | Sg | 14 33 08.3 | -0.1 |
| OKCFA | Oklahoma City | 0.41 | 217 | | Pg | 14 33 08.8 | -0.4 |
| OKCSW | OKLAHOMA CITY | 0.41 | 215 | Pg | Pg | 14 33 08.8 | -0.5 |
| FNO | Franklin | 0.53 | 203 | Pg | Pg | 14 33 10.9 | -0.5 |
| W35A | Tecumseh | 0.63 | 159 | Pg | Pg | 14 33 12.8 | -0.5 |
| TUL1 | Leonard | 1.11 | 81 | Pg | Pg | 14 33 21.5 | -1.1 |
| X34A | Smith Ranch, M | 1.27 | 206 | | Pn | 14 33 24.5 | -0.8 |
| T35A | Sooner Cattle | 1.28 | 23 | | Pn | 14 33 24.8 | -0.6 |
| WMOK | Wichita Mounta | 1.67 | 234 | | Pn | 14 33 30.8 | -0.1 |
| X37A | Clayton | 1.85 | 128 | Pn | Pn | 14 33 33.9 | +0.6 |
| Z35A | Perchaven, San | 2.41 | 182 | Pn | Pn | 14 33 41.5 | +0.6 |
| W39A | Magazine | 2.80 | 100 | Pn | Pn | 14 33 47.0 | +0.7 |
| Z38A | Mt. Pleasant | 3.05 | 144 | IAmb_Lg | | 14 34 44.2 | |
| | comp=Z,64nm,0.9s | | | | | | |
| MIAR | Mount Ida | 3.16 | 111 | Pn | Pn | 14 33 52.3 | +1.0 |
| KSU1 | Kansas State U | 3.38 | 7 | IAmb_Lg | | 14 34 53.4 | |
| | comp=Z,45nm,0.9s | | | | | | |
| S39A | Bolivar | 3.64 | 57 | Pn | Pn | 14 33 58.9 | +1.0 |
| S39A | | | | IAmb_Lg | | 14 35 01.7 | |
| | comp=Z,37nm,0.7s | | | | | | |
| X40A | Basin Creek Fa | 3.75 | 108 | Pn | Pn | 14 34 00.5 | +1.1 |
| X40A | | | | IAmb_Lg | | 14 35 03.0 | |
| | comp=Z,31nm,0.8s | | | | | | |
| WHAR | Wooly Hollow | 3.99 | 95 | Pn | Pn | 14 34 03.1 | +0.5 |
| WHAR | | | | IAmb_Lg | | 14 35 16.5 | |
| | comp=Z,29nm,0.9s | | | | | | |
| W41B | Gary Mavity, V | 4.04 | 97 | Pn | Pn | 14 34 04.0 | +0.6 |
| FCAR | Ozark Folk Cen | 4.08 | 86 | Pn | Pn | 14 34 04.6 | +0.6 |
| FCAR | | | | IAmb_Lg | | 14 35 15.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| MGMO | Mountain Grove | 4.18 | 69 | IAmb_Lg | | 14 35 20.4 | |
| | comp=Z,62nm,1.0s | | | | | | |
| Z41A | Richland Creek | 4.36 | 123 | IAmb_Lg | | 14 35 27.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| R40A | Maddies Statio | 4.66 | 55 | IAmb_Lg | | 14 35 36.1 | |
| | comp=Z,22nm,0.7s | | | | | | |
| P38A | Dawn | 4.82 | 35 | IAmb_Lg | | 14 35 31.4 | |
| | comp=Z,21nm,0.9s | | | | | | |
| 435B | Jarrell | 4.96 | 184 | IAmb_Lg | | 14 35 49.1 | |
| | comp=Z,21nm,0.9s | | | | | | |
| N35A | Tabor | 5.25 | 13 | IAmb_Lg | | 14 36 02.4 | |
| | comp=Z,52nm,0.9s | | | | | | |
| CCM | Cathedral Cave | 5.26 | 62 | IAmb_Lg | | 14 35 48.6 | |
| | comp=Z,35nm,0.8s | | | | | | |
| KSCO | Kaye Shedlock' | 5.45 | 308 | IAmb_Lg | | 14 36 01.6 | |
| | comp=Z,25nm,0.7s | | | | | | |
| PBMO | Poplar Bluff | 5.53 | 77 | IAmb_Lg | | 14 36 00.2 | |
| | comp=Z,49nm,0.8s | | | | | | |
| P40A | Paris | 5.54 | 45 | IAmb_Lg | | 14 36 00.4 | |
| | comp=Z,39nm,0.7s | | | | | | |
| JCT | Junction City | 5.70 | 204 | IAmb_Lg | | 14 36 07.1 | |
| | comp=Z,36nm,0.9s | | | | | | |
| BGNE | Belgrade | 5.71 | 352 | IAmb_Lg | | 14 36 13.7 | |
| | comp=Z,43nm,0.8s | | | | | | |
| FVM | French Village | 5.83 | 65 | IAmb_Lg | | 14 36 07.5 | |
| | comp=Z,28nm,0.8s | | | | | | |
| T25A | Trinidad | 6.02 | 286 | IAmb_Lg | | 14 36 16.4 | |
| | comp=Z,21nm,0.8s | | | | | | |
| SLM | Saint Louis | 6.23 | 60 | IAmb_Lg | | 14 36 18.1 | |
| | comp=Z,42nm,0.8s | | | | | | |
| OGNE | Ogallala | 6.46 | 325 | IAmb_Lg | | 14 36 40.5 | |
| | comp=Z,41nm,0.8s | | | | | | |
| SCIA | State Center | 6.88 | 25 | IAmb_Lg | | 14 36 43.5 | |
| | comp=Z,30nm,0.8s | | | | | | |
| K31A | O'Neill | 6.98 | 350 | IAmb_Lg | | 14 36 47.3 | |
| | comp=Z,28nm,0.8s | | | | | | |
| SDCO | Great Sand Dun | 7.00 | 289 | Pn | Pn | 14 34 44.9 | +0.6 |
| Q24A | Divide | 7.14 | 299 | IAmb_Lg | | 14 36 57.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| L40A | Anamosa | 7.82 | 34 | IAmb_Lg | | 14 37 13.2 | |
| | comp=Z,18nm,0.7s | | | | | | |
| USIN | University of | 7.92 | 71 | IAmb_Lg | | 14 37 17.8 | |
| | comp=Z,33nm,1.0s | | | | | | |
| N23A | Red Feather La | 8.62 | 309 | IAmb_Lg | | 14 37 38.7 | |
| | comp=Z,22nm,0.9s | | | | | | |
| JFWS | Jewell Farm | 8.93 | 35 | IAmb_Lg | | 14 37 46.6 | |
| | comp=Z,21nm,0.9s | | | | | | |
| I40A | Norwalk | 9.56 | 30 | IAmb_Lg | | 14 38 04.4 | |
| | comp=Z,17nm,1.1s | | | | | | |
| RSSD | Black Hills | 9.89 | 330 | IAmb_Lg | | 14 38 38.1 | |
| | comp=Z,9.4nm,1.0s | | | | | | |

*IDC* ***18*** *14:36:06.6±4.5,8.34S×159.18E,h66km±59km,mb3.4/7, mb1 3.5/7,mb1mx3.1/43,mbtmp3.7/7,Error ellipse: s-maj=55.0km s-min=27.7km az=121.0*

**ISC 18 14:36:05.3±1.2,8.3S±0.2×159.1E±0.2,h50km,n15, σ0§62/10,mb3.7/7,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HNR | Honiara | 1.41 | 144 | P | Pn | 14 36 29.0 | +0.3 |
| | 235nm,0.3s,baz=191,slow=4.8,SNR=107 | | | | | | |
| HNR | | | | S | Sn | 14 36 46.0 | -0.1 |
| | 268nm,0.3s,baz=360,slow=22,SNR=9.4 | | | | | | |
| DZM | Mont Dzumac | 15.42 | 154 | P | P | 14 39 43.3 | -0.3 |
| | 0.2nm,0.3s,baz=325,slow=14,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 26.62 | 242 | P | P | 14 41 39.3 | -0.1 |
| | 0.2nm,0.4s,baz=65,slow=9.0,SNR=8.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 27.64 | 16 | T | T | 15 10 18.8 | |
| | baz=196,slow=76,SNR=82 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 27.64 | 16 | T | T | 15 10 17.6 | |
| | baz=196,slow=76,SNR=44 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 27.66 | 16 | T | T | 15 10 23.4 | |
| | baz=196,slow=76,SNR=65 | | | | | | |
| STKA | Stephens Creek | 28.57 | 212 | P | P | 14 41 57.0 | +0.3 |
| | 0.6nm,0.3s,baz=35,slow=15,SNR=4.1 | | | | | | |
| ASAR | Alice Springs | 28.57 | 235 | P | P | 14 41 57.0 | +0.1 |
| | 0.1nm,0.3s,baz=62,slow=10.0,SNR=12 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.86 | 15 | T | T | 15 11 47.3 | |
| | baz=196,slow=76,SNR=146 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.87 | 15 | T | T | 15 11 50.7 | |
| | baz=196,slow=76,SNR=115 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.88 | 15 | T | T | 15 11 51.4 | |
| | baz=196,slow=76,SNR=136 | | | | | | |
| FITZ | Fitzroy Crossi | 33.95 | 250 | P | P | 14 42 43.7 | -0.5 |
| | 1.5nm,0.8s,baz=80,slow=12,SNR=1.9 | | | | | | |
| CMAR | Chiang Mai Arr | 65.02 | 295 | P | P | 14 46 41.6 | +0.8 |
| | 0.5nm,0.8s,baz=96,slow=6.4,SNR=2.1 | | | | | | |
| SONM | Songino Array | 72.65 | 326 | P | P | 14 47 28.4 | +0.5 |
| | 0.7nm,0.7s,baz=143,slow=6.0,SNR=6.2 | | | | | | |
| MKAR | Makanchi Array | 87.07 | 318 | P | P | 14 48 44.6 | -1.1 |
| | 0.3nm,0.5s,baz=93,slow=6.3,SNR=6.8 | | | | | | |

*IDC* ***18*** *15:12:28.9±0.8,39.26N×89.82E,h0km,mb3.6/9, mb1 3.7/14,mb1mx3.6/45,mbtmp3.6/14,ML3.3/5,MS3.1/2, Ms1 3.1/2,ms1mx2.6/83,Error ellipse: s-maj=33.8km s-min=13.5km az=47.0*

*NNC* ***18*** *15:12:38.0±3.3,39.66N×89.12E,h0km,mb4.1,mpv3.8, Error ellipse: s-maj=27.6km s-min=26.4km az=39.0*

**ISC 18 15:12:34.2±0.8,39.39N±0.09×89.73E±0.08,h35km,n22, σ1§61/27,mb3.6/9,5C-3D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDGK | Podgornoye | 8.65 | 300 | ⇑Pn | Pn | 15 14 37.2 | +0.3 |
| | 0.9nm,0.3s | | | | | | |
| PDGK | | | | ⇑Sn | Sn | 15 16 08.7 | -4.5 |
| | 8.9nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 9.19 | 326 | Pn | Pn | 15 14 44.4 | +0.3 |
| | 1.3nm,0.3s,baz=143,slow=14,SNR=121 | | | | | | |
| MK31 | | | | Sn | Sn | 15 16 24.6 | -1.6 |
| | 1.5nm,0.5s,baz=141,slow=25,SNR=5.0 | | | | | | |
| MKAR | Makanchi Array | 9.19 | 326 | Pn | Pn | 15 14 44.3 | +0.2 |
| | 0.8nm,0.3s,baz=140,slow=14,SNR=41 | | | | | | |
| MKAR | | | | Sn | Sn | 15 16 25.1 | -1.1 |
| | 1.2nm,0.3s,baz=138,slow=26,SNR=4.7 | | | | | | |
| MKAR | | | | Lg | Lg | 15 17 24.9 | |
| | baz=132,slow=27,SNR=1.2 | | | | | | |
| MAKZ | Makanchi | 9.33 | 325 | ⇓Pn | Pn | 15 14 47.6 | +1.5 |
| | 1.7nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Sn | Sn | 15 16 29.8 | 0.0 |
| | 1.7nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 11.23 | 293 | ⇑Pn | Pn | 15 15 12.1 | -0.1 |
| | 5.2nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 15 17 17.2 | +0.6 |
| | 4.8nm,1.1s | | | | | | |
| AAK | Ala-Archa | 11.96 | 291 | Pn | Pn | 15 15 22.9 | +0.7 |
| | 0.3nm,0.3s,baz=108,slow=5.4,SNR=4.9 | | | | | | |
| AAK | | | | Sn | Sn | 15 17 37.5 | +3.1 |
| | 0.1nm,0.3s,baz=312,slow=6.2,SNR=1.9 | | | | | | |
| AAK | | | | Lg | Lg | 15 18 53.4 | |
| | 0.1nm,0.3s,baz=240,slow=11,SNR=1.3 | | | | | | |
| KURBB | Kurchatov Arra | 13.73 | 329 | Pn | Pn | 15 15 46.8 | +0.6 |
| | 0.0nm,0.3s,baz=151,slow=12,SNR=1.9 | | | | | | |
| KURBB | | | | Sn | Sn | 15 18 13.8 | -3.5 |
| | 0.0nm,0.3s,baz=164,slow=27,SNR=1.7 | | | | | | |
| KURBB | | | | Lg | Lg | 15 19 46.6 | |
| | baz=53,slow=46,SNR=2.7 | | | | | | |
| KURBB | Kurchatov Arra | 13.73 | 329 | ⇑Pn | Pn | 15 15 47.3 | +1.1 |
| | 1.3nm,0.5s | | | | | | |
| SONM | Songino Array | 14.71 | 50 | Pn | Pn | 15 15 60.0 | +0.3 |
| | 0.1nm,0.3s,baz=240,slow=14,SNR=1.5 | | | | | | |
| SONM | | | | Lg | Lg | 15 20 12.9 | |
| | 0.1nm,0.3s,baz=225,slow=29,SNR=3.7 | | | | | | |
| ZALV | Zalesovo Beam | 14.95 | 349 | Pn | Pn | 15 16 05.0 | +2.4 |
| | 0.2nm,0.3s,baz=170,slow=11,SNR=4.7 | | | | | | |
| BVAR | Borovoye Array | 19.03 | 322 | P | Pn | 15 16 53.8 | -0.1 |
| | 0.2nm,0.3s,baz=130,slow=8.5,SNR=2.7 | | | | | | |
| CMAR | Chiang Mai Arr | 22.33 | 156 | P | P | 15 17 27.1 | -1.8 |
| | 0.2nm,0.3s,baz=327,slow=9.7,SNR=2.1 | | | | | | |
| AKTO | Aktyubinsk | 24.84 | 307 | P | P | 15 17 53.1 | 0.0 |
| | 0.9nm,0.4s,baz=110,slow=6.0,SNR=5.4 | | | | | | |
| KSRS | Korea Array | 29.84 | 81 | LR | LR | 15 32 33.9 | |
| | comp=Z,26nm,18.0s,baz=340,slow=40 | | | | | | |
| PSI | Prapat | 37.36 | 165 | LR | LR | 15 37 50.1 | |
| | comp=Z,40nm,19.1s,baz=180,slow=41 | | | | | | |
| FINES | FINESS Array B | 43.99 | 322 | P | P | 15 20 38.5 | +0.9 |
| | 2.7nm,1.0s,baz=71,slow=7.9,SNR=3.8 | | | | | | |
| HFS | Hagfors | 50.15 | 321 | P | P | 15 21 26.7 | +0.9 |
| | 0.7nm,0.5s,baz=120,slow=11,SNR=5.3 | | | | | | |
| NOA | NORSAR Array B | 51.16 | 322 | P | P | 15 21 33.6 | +0.2 |
| | 0.4nm,0.4s,baz=76,slow=7.7,SNR=2.1 | | | | | | |
| GERES | GERESS Array B | 53.27 | 307 | P | P | 15 21 50.1 | +0.8 |
| | 0.3nm,0.4s,baz=86,slow=7.0,SNR=2.3 | | | | | | |
| WRA | Warramunga Arr | 72.25 | 136 | P | P | 15 23 55.3 | -0.6 |
| | 0.4nm,0.8s,baz=335,slow=6.0,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 75.08 | 139 | P | P | 15 24 12.3 | -0.2 |
| | 0.3nm,0.6s,baz=324,slow=5.4,SNR=8.6 | | | | | | |
| YKA | Yellowknife Ar | 76.59 | 11 | P | P | 15 24 20.7 | +0.2 |
| | 0.1nm,0.6s,baz=330,slow=5.6,SNR=5.1 | | | | | | |

*IGIL* ***18*** *15:18:14.3,35.47N×3.84W,h0km,ML2.7*

*SFS* ***18*** *15:18:14.0,35.40N×3.80W,ML3.4,ALBORAN SUR*

*IDC* ***18*** *15:18:15.4±1.6,35.67N×4.09W,h0km,mb3.1/2,mb1 3.2/4, mb1mx3.0/44,mbtmp3.1/4,ML2.8/2,MS2.7/1,Ms1 2.7/1, ms1mx2.5/28,Error ellipse: s-maj=45.9km s-min=13.4km az=98.0*

*INMG* ***18*** *15:18:15.6±1.1,35.58N×3.85W,h0km,ML2.8,Error ellipse: s-maj=3.8km s-min=2.4km az=19.0*

*CNRM* ***18*** *15:18:20.9,35.28N×3.45W,h26km,ml3.2*

**ISC 18 15:18:14.8±1.3,35.59N±0.03×3.82W±0.03,h10km±10km, n44,σ1§82/66,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.39 | 194 | P | Pb | 15 18 22.9 | -0.8 |
| PALE | | | | S | Sb | 15 18 29.3 | -0.5 |
| GOG | Mont Gurugu | 0.77 | 119 | P | Pg | 15 18 29.0 | -0.6 |
| GOG | | | | S | Sb | 15 18 39.9 | -1.1 |
| CHAS | Isla Isabel II | 1.21 | 109 | P | Pn | 15 18 35.3 | -2.4 |
| CHAS | | | | S | Sb | 15 18 50.2 | -3.2 |
| EMAL | Malaga-Limoner | 1.27 | 337 | P | Pn | 15 18 37.5 | -1.1 |
| EMAL | | | | S | Sb | 15 18 53.5 | -1.6 |
| EMAL | | | | *e*Cod | | 15 19 50.5 | |
| SMIR | Smir Dam | 1.27 | 274 | P | Pg | 15 18 48.0 | +8.8 |
| CEU | Ceuta | 1.30 | 284 | P | Pn | 15 18 37.0 | -1.9 |
| CEU | | | | S | Sb | 15 18 53.0 | -3.0 |
| CEU | | | | *e*Cod | | 15 19 49.8 | |
| CHEFC | Chefchaouen | 1.33 | 249 | P | Pg | 15 18 47.0 | +6.6 |
| TAF | Taforalt | 1.39 | 124 | P | Pn | 15 18 39.0 | -1.4 |
| TAF | | | | S | Sg | 15 19 03.9 | +4.4 |
| JBK | JBK | 1.62 | 140 | P | Pn | 15 18 42.0 | -1.7 |
| JBK | | | | S | Sg | 15 19 15.7 | +8.6 |
| LIJA | Lijar | 1.83 | 316 | P | Pg | 15 18 49.0 | -0.9 |
| LIJA | | | | S | Sg | 15 19 12.5 | -1.1 |
| LCRM | LCR | 2.09 | 204 | P | Pg | 15 18 55.0 | +0.2 |
| IFR | Ifrane | 2.33 | 208 | P | Pb | 15 18 54.3 | -2.8 |
| IFR | | | | S | Sn | 15 19 16.4 | -5.9 |
| CZD | Col de Zad | 2.75 | 202 | P | Pb | 15 19 03.0 | -1.2 |
| MDT | Midelt | 2.85 | 193 | Pn | Pn | 15 19 01.1 | +0.7 |
| | 0.8nm,0.3s,baz=190,slow=11,SNR=19 | | | | | | |
| MDT | | | | Pg | Pg | 15 19 09.0 | -0.3 |
| | 4.8nm,0.3s,baz=139,slow=17,SNR=21 | | | | | | |
| MDT | | | | Sn | Sn | 15 19 35.3 | +0.4 |
| | 2.7nm,0.3s,baz=178,slow=22,SNR=2.5 | | | | | | |
| MDT | | | | Lg | Lg | 15 19 46.9 | |
| | 4.3nm,0.3s,baz=92,slow=22,SNR=6.9 | | | | | | |
| MDT | | | | LR | LR | 15 20 21.5 | |
| | comp=Z,136nm,19.3s,baz=4.5,slow=44 | | | | | | |
| MDT | Midelt | 2.85 | 193 | P | Pn | 15 19 01.3 | +0.9 |
| ZHG | ZHG | 3.16 | 228 | P | Pn | 15 19 06.7 | +1.9 |
| PVAQ | Vaqueiros | 3.62 | 301 | *e*Pn | Pn | 15 19 11.5 | +0.6 |
| PVAQ | | | | *e*Sn | Sn | 15 19 53.7 | -0.1 |
| PVAQ | | | | A | A | 15 20 01.4 | |
| | 18nm,0.6s | | | | | | |
| PVAQ | Vaqueiros | 3.62 | 301 | P | Pn | 15 19 11.4 | +0.4 |
| PCVE | Castro Verde | 3.96 | 302 | *e*Pn | Pn | 15 19 16.5 | +1.0 |
| PCVE | | | | *e*Sn | Sn | 15 20 03.4 | +1.4 |
| PCVE | | | | A | A | 15 20 11.7 | |
| | 10nm,0.4s | | | | | | |
| PBEJ | Beja | 4.05 | 308 | *e*Pn | Pn | 15 19 17.9 | +1.0 |
| ESDC | Sonseca Array | 4.08 | 358 | Pn | Pn | 15 19 18.2 | +1.0 |
| | 0.4nm,0.3s,baz=180,slow=12,SNR=15 | | | | | | |
| ESDC | | | | Sn | Sn | 15 20 03.9 | -1.2 |
| | 0.6nm,0.3s,baz=182,slow=19,SNR=4.8 | | | | | | |
| ESDC | | | | Lg | Lg | 15 20 22.5 | |
| | 1.1nm,0.3s,baz=181,slow=31,SNR=5.1 | | | | | | |
| MESJ | Messejana | 4.18 | 304 | *e*P | Pn | 15 19 18.0 | -0.6 |
| MESJ | | | | *e*S | Sn | 15 20 05.2 | -2.4 |
| MESJ | | | | IAML | | 15 20 12.0 | |
| | comp=N,14nm,0.8s | | | | | | |
| MESJ | Messejana | 4.18 | 304 | *e*Pn | Pn | 15 19 19.8 | +1.1 |
| MESJ | | | | *e*Sn | Sn | 15 20 07.4 | -0.2 |
| MESJ | | | | A | A | 15 20 11.9 | |
| | comp=N,11nm,0.5s | | | | | | |
| PTEO | Sao Teotonio | 4.40 | 298 | *e*Pn | Pn | 15 19 22.8 | +1.2 |
| PTEO | | | | *e*Sn | Sn | 15 20 12.1 | -0.9 |
| PESTR | Estremoz | 4.44 | 318 | *e*Pn | Pn | 15 19 23.1 | +0.9 |
| PESTR | | | | *e*Sn | Sn | 15 20 13.1 | -0.9 |
| PESTR | | | | A | A | 15 20 46.3 | |
| | comp=N,12nm,0.6s | | | | | | |
| PESTR | Estremoz | 4.44 | 318 | P | Pn | 15 19 21.9 | -0.4 |
| EVO | Evora | 4.45 | 312 | P | Pn | 15 19 23.1 | +0.7 |
| EVO | | | | S | Sn | 15 20 12.3 | -1.9 |
| EVO | Evora | 4.45 | 312 | *e*Pn | Pn | 15 19 23.6 | +1.2 |
| EVO | | | | *e*Sn | Sn | 15 20 12.9 | -1.4 |
| EVO | | | | A | A | 15 20 24.7 | |
| | comp=N,10nm,0.4s | | | | | | |
| PNCL | Nicolau / Gran | 4.53 | 305 | *e*Pn | Pn | 15 19 24.3 | +0.8 |
| PNCL | | | | *e*Sn | Sn | 15 20 15.3 | -1.0 |
| PNCL | | | | A | A | 15 20 32.0 | |
| | comp=N,8.0nm,0.6s | | | | | | |
| PMRV | Marv??o | 4.76 | 325 | *e*Pn | Pn | 15 19 27.5 | +0.8 |
| PMRV | | | | *e*Sn | Sn | 15 20 20.6 | -1.4 |
| PMRV | | | | A | A | 15 20 58.3 | |
| | comp=N,14nm,0.6s | | | | | | |
| PMTG | Montargil | 4.93 | 316 | *e*Pn | Pn | 15 19 30.3 | +1.3 |
| PMTG | | | | *e*Sn | Sn | 15 20 25.6 | -0.5 |
| PMTG | | | | A | A | 15 20 51.6 | |
| | comp=N,7.9nm,0.5s | | | | | | |
| PACT | Alcochete | 5.10 | 310 | *e*Pn | Pn | 15 19 32.7 | +1.4 |
| PCBR | Castelo Branco | 5.13 | 327 | *e*Sn | Sn | 15 20 30.4 | -0.7 |
| OUZM | OUZ | 5.28 | 209 | P | Pn | 15 19 35.3 | +1.4 |
| PSBE | So Bento | 5.56 | 316 | *e*Pn | Pn | 15 19 39.1 | +1.5 |
| PCAS | Casmilo, Conde | 5.79 | 322 | *e*Pn | Pn | 15 19 41.8 | +1.1 |
| PVIS | Viseu | 6.04 | 329 | *e*Sn | Sn | 15 20 53.2 | -0.2 |
| MVO | Moncorvo | 6.11 | 337 | *e*Pn | Pn | 15 19 47.0 | +1.9 |
| MVO | | | | *e*Sn | Sn | 15 20 53.5 | -1.6 |
| PVRL | Vila Real | 6.44 | 333 | *e*Sn | Sn | 15 21 02.1 | -1.3 |
| POLO | Lamas de Olo | 6.56 | 333 | *e*Sn | Sn | 15 21 03.5 | -2.8 |
| POLO | | | | A | A | 15 21 14.4 | |
| | comp=N,4.0nm,0.1s | | | | | | |
| PBRG | Braganca | 6.61 | 341 | *e*P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SDPT | Sand Point | 3.05 | 55 | | | Pn | | 15 44 12.4 | +1.1 |
| OHAK | Old Harbor | 7.47 | 57 | Pn | | Pn | | 15 45 11.4 | -0.4 |
| P18K | Big Mountain, | 7.80 | 39 | Pn | | Pn | | 15 45 18.2 | +1.8 |
| KDAK | Kodiak Island | 8.05 | 54 | Pn | | Pn | | 15 45 18.7 | -1.0 |
| | 0.4nm,0.3s,baz=89,slow=21,SNR=2.2 | | | | | | | | |
| KDAK | | | | | Sn | Sn | | 15 46 45.2 | -3.9 |
| | baz=168,slow=12,SNR=1.4 | | | | | | | | |
| KDAK | Kodiak Island | 8.05 | 54 | | | Pn | | 15 45 19.6 | -0.1 |
| O18K | Koktuh Hills | 8.13 | 37 | Pn | | Pn | | 15 45 20.9 | 0.0 |
| O19K | Cape Douglas, | 8.14 | 45 | Pn | | Pn | | 15 45 22.9 | +1.8 |
| SVW2 | Sparrevohn | 8.95 | 30 | Pn | | Pn | | 15 45 32.5 | +0.5 |
| N19K | Bonanza Creek | 9.08 | 34 | Pn | | Pn | | 15 45 35.6 | +1.7 |
| RSO | Redoubt South | 9.45 | 39 | Pn | | Pn | | 15 45 41.0 | +2.0 |
| CNPM | China Poot | 9.51 | 47 | Pn | | Pn | | 15 45 39.9 | +0.2 |
| BRLK | Bradley Lake | 9.79 | 46 | Pn | | Pn | | 15 45 42.6 | -0.9 |
| M19K | Big River Lodg | 9.94 | 30 | Pn | | Pn | | 15 45 48.4 | +2.8 |
| L19K | White Mountain | 10.02 | 28 | Pn | | Pn | | 15 45 48.8 | +2.1 |
| TTA | Tatalina | 10.35 | 23 | Pn | | Pn | | 15 45 52.4 | +1.1 |
| SEW | Seward | 10.58 | 46 | Pn | | Pn | | 15 45 54.9 | +0.6 |
| K20K | Telida | 11.19 | 26 | Pn | | Pn | | 15 46 03.0 | +0.3 |
| PPLA | Purkeypile | 11.36 | 31 | Pn | | Pn | | 15 46 06.7 | +1.7 |
| PWL | Port Wells | 11.45 | 45 | Pn | | Pn | | 15 46 05.8 | -0.3 |
| KNK | Knik Glacier | 11.70 | 42 | Pn | | Pn | | 15 46 07.9 | -1.6 |
| GHO | Glory Hole Cre | 11.72 | 40 | Pn | | Pn | | 15 46 09.5 | -0.4 |
| CAST | Castle Rocks | 11.79 | 29 | Pn | | Pn | | 15 46 10.5 | -0.3 |
| J20K | Nowinta River | 11.86 | 23 | Pn | | Pn | | 15 46 10.9 | -0.8 |
| SML | Sawmill | 11.97 | 41 | Pn | | Pn | | 15 46 12.2 | -1.1 |
| GLI | Glacier Island | 11.98 | 46 | Pn | | Pn | | 15 46 12.4 | -1.0 |
| FID | Port Fidalgo | 12.18 | 47 | Pn | | Pn | | 15 46 14.9 | -1.3 |
| SCM | Sheep Creek Mo | 12.38 | 42 | Pn | | Pn | | 15 46 17.2 | -1.7 |
| EYAK | Cordova Ski Ar | 12.42 | 49 | Pn | | Pn | | 15 46 19.2 | -0.1 |
| KLU | Klutina | 12.77 | 45 | | | Pn | | 15 46 22.9 | -1.4 |
| RND | Reindeer | 12.79 | 34 | Pn | | Pn | | 15 46 24.4 | 0.0 |
| KAIM | Kayak Island | 12.79 | 53 | Pn | | Pn | | 15 46 25.3 | +0.9 |
| M24K | Tolsona, Glenn | 12.98 | 42 | Pn | | Pn | | 15 46 26.0 | -1.1 |
| HMT | Hamilton | 13.01 | 51 | Pn | | Pn | | 15 46 27.0 | -0.5 |
| DHY | Denali Highway | 13.09 | 37 | Pn | | Pn | | 15 46 27.4 | -1.2 |
| BMRM | Bremner River | 13.10 | 48 | Pn | | Pn | | 15 46 28.0 | -0.8 |
| BERG | Berg Lake | 13.29 | 51 | Pn | | Pn | | 15 46 29.5 | -1.7 |
| N25K | Chitina, Valde | 13.39 | 46 | Pn | | Pn | | 15 46 31.9 | -0.7 |
| H21K | Melozitna Rive | 13.42 | 22 | Pn | | Pn | | 15 46 33.0 | 0.0 |
| IMAR | Indian Mountai | 13.50 | 20 | Pn | | Pn | | 15 46 34.9 | +0.8 |
| SNH | Sunshine Point | 13.62 | 53 | Pn | | Pn | | 15 46 36.7 | +0.9 |
| GLB | Gilahina Butte | 13.65 | 47 | Pn | | Pn | | 15 46 36.1 | -0.1 |
| WAX | Waxell Ridge | 13.71 | 52 | Pn | | Pn | | 15 46 36.2 | -0.8 |
| VRDI | Verde Repeater | 13.72 | 48 | Pn | | Pn | | 15 46 35.6 | -1.7 |
| ISLE | Juniper Island | 13.99 | 51 | Pn | | Pn | | 15 46 39.7 | -1.2 |
| H23K | Yukon River | 14.35 | 26 | Pn | | P | | 15 46 46.9 | -3.9 |
| ILAR | Eielson Array | 14.35 | 32 | Pn | | Pn | | 15 46 43.6 | -1.8 |
| | baz=224,slow=13,SNR=1.5 | | | | | | | | |
| M26K | Nabesna, AK | 14.42 | 44 | Pn | | Pn | | 15 46 46.0 | -0.5 |
| TABL | Table Mountain | 14.51 | 53 | Pn | | Pn | | 15 46 45.3 | -2.4 |
| J25K | Salcha River, | 14.74 | 34 | Pn | | Pn | | 15 46 48.2 | -2.4 |
| SCRK | Sand Creek | 14.85 | 38 | Pn | | Pn | | 15 46 48.8 | -3.2 |
| M27K | Edge Creek, AK | 14.87 | 45 | Pn | | Pn | | 15 46 51.0 | -1.4 |
| BCAR | Beaver Creek A | 15.23 | 43 | Pn | | Pn | | 15 46 55.3 | -1.5 |
| BMAR | Burnt Mountain | 16.87 | 27 | Pn | | P | | 15 47 18.9 | +0.1 |
| WHY | Whitehorse | 17.56 | 55 | Pn | | P | | 15 47 25.8 | -0.8 |
| M31M | Drury Creek, Y | 18.12 | 50 | P | | Pn | | 15 47 33.0 | +0.2 |
| M31M | | | | IAmb | | IAmb | | 15 48 12.8 | |
| | comp=Z,19nm,1.9s | | | | | | | | |
| P33M | Teslin, Yukon | 18.51 | 57 | P | | Pn | | 15 47 38.1 | +0.4 |
| P33M | | | | IAmb | | IAmb | | 15 47 43.2 | |
| | comp=Z,5.7nm,1.1s | | | | | | | | |
| INK | Inuvik | 20.75 | 33 | P | | P | | 15 48 00.3 | -0.8 |
| | comp=Z,0.9nm,0.6s,baz=203,slow=8.6,SNR=5.8 | | | | | | | | |
| INK | Inuvik | 20.75 | 33 | IAmb | | IAmb | | 15 48 52.4 | |
| | comp=Z,13nm,1.7s | | | | | | | | |
| PETK | Petropavlovsk- | 22.16 | 284 | P | | P | | 15 48 17.8 | +1.4 |
| | comp=Z,4.0nm,0.9s,baz=83,slow=14,SNR=2.0 | | | | | | | | |
| YKA | Yellowknife Ar | 27.31 | 51 | P | | P | | 15 49 06.3 | +2.0 |
| | comp=Z,0.2nm,0.4s,baz=278,slow=10,SNR=3.1 | | | | | | | | |
| NVAR | Mina Array Bea | 35.04 | 97 | P | | P | | 15 50 15.8 | +3.0 |
| | comp=Z,1.2nm,0.8s,baz=294,slow=8.5,SNR=7.0 | | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.24 | 224 | T | | T | | 16 33 48.2 | |
| | baz=25,slow=76,SNR=16 | | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.25 | 224 | T | | T | | 16 33 45.4 | |
| | baz=25,slow=76,SNR=10 | | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.26 | 224 | T | | T | | 16 33 47.2 | |
| | baz=25,slow=76,SNR=10 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.42 | 223 | T | | T | | 16 35 13.1 | |
| | baz=25,slow=76,SNR=23 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.43 | 223 | T | | T | | 16 35 15.6 | |
| | baz=25,slow=76,SNR=13 | | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.44 | 223 | T | | T | | 16 35 14.8 | |
| | baz=25,slow=76,SNR=9.5 | | | | | | | | |
| TXAR | Lajitas Array | 50.06 | 94 | P | | P | | 15 52 17.9 | +3.4 |
| | comp=Z,1.0nm,0.6s,baz=297,slow=5.5,SNR=15 | | | | | | | | |
| ARCES | ARCESS Array B | 16.85 | 356 | P | | P | | 15 53 04.2 | +0.7 |
| | comp=Z,1.9nm,0.9s,baz=358,slow=8.2,SNR=1.3 | | | | | | | | |
| FINES | FINESS Array B | 64.88 | 354 | P | | P | | 15 53 58.4 | +0.3 |
| | comp=Z,2.3nm,0.9s,baz=355,slow=4.7,SNR=1.9 | | | | | | | | |
| H03N2 | Juan Fernandez | 113.93 | 114 | T | | T | | 18 06 43.9 | |
| | baz=322,slow=77,SNR=5.4 | | | | | | | | |
| H03N1 | Juan Fernandez | 113.95 | 114 | T | | T | | 18 06 44.3 | |
| | baz=322,slow=77,SNR=2.9 | | | | | | | | |
| H03N3 | Juan Fernandez | 113.95 | 114 | T | | T | | 18 06 43.2 | |
| | baz=322,slow=77,SNR=6.2 | | | | | | | | |

*TIR **18** 15:43:53.7,40°.31N×19°.27E,h12km±1km,Md2.6,Ml3.1*
*THE **18** 15:43:53.5,40°.30N×19°.15E,h0km±3km,ML2.4/7,Error ellipse: s-maj=5.0km s-min=1.6km az=272.0*
*ATH **18** 15:43:55.5,40°.24N×19°.20E,h33km±8km,ML2.5/5,Error ellipse: s-maj=8.5km s-min=1.8km az=307.0*

**ISC 18 15:43:54.0±1.0,40°.32N±0°.03×19°.22E±0°.03,h13km±8km, n31,σ1°12/50,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| VLO | Vlora | 0.26 | 54 | P | Pg | 15 43 58.7 | -0.8 |
| VLO | Vlora | 0.26 | 54 | P | Pg | 15 43 59.1 | -0.5 |
| | baz=47 | | | | | | |
| VLO | | | | S | Sg | 15 44 02.7 | -0.5 |
| | baz=47 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=E,40nm,0.2s,baz=47 | | | | | | |
| KEK | Kerkira | 0.75 | 143 | P | Pg | 15 44 07.5 | -1.1 |
| KEK | | | | S | Sb | 15 44 19.1 | +0.1 |
| | comp=E,175nm,0.4s | | | | | | |
| KEK | Kerkira | 0.75 | 143 | P | Pn | 15 44 09.7 | -0.6 |
| KEK | | | | S | Sn | 15 44 20.2 | -1.3 |
| KEK | | | | AML | AML | 15 44 24.9 | |
| | comp=N,393μm,0.3s | | | | | | |
| KEK | | | | AML | AML | 15 44 27.5 | |
| | comp=E,370μm,0.3s | | | | | | |
| KASA | Kassiopi | 0.79 | 136 | P | Pn | 15 44 10.2 | -0.6 |
| KASA | | | | S | Sn | 15 44 21.5 | -1.0 |
| KASA | | | | AML | AML | 15 44 23.7 | |
| | comp=E,563μm,0.3s | | | | | | |
| KASA | | | | AML | AML | 15 44 24.7 | |
| | comp=N,479μm,0.2s | | | | | | |
| IGT | Igoumenitsa | 1.16 | 132 | P | Pb | 15 44 15.4 | -0.5 |
| IGT | | | | S | Sn | 15 44 34.0 | +2.4 |
| | comp=N,142nm,0.4s | | | | | | |
| IGT | Igoumenitsa | 1.16 | 132 | P | Pg | 15 44 16.2 | -0.1 |
| IGT | | | | AML | AML | 15 44 35.2 | |
| | comp=N,250μm,0.4s | | | | | | |
| IGT | | | | AML | AML | 15 44 37.3 | |
| | comp=E,321μm,0.6s | | | | | | |
| IGT | Igoumenitsa | 1.16 | 132 | P | Pb | 15 44 15.5 | -0.5 |
| | baz=133 | | | | | | |
| IGT | | | | S | Sn | 15 44 32.4 | +0.7 |
| | baz=133 | | | | | | |
| KBN | Korca | 1.24 | 75 | P | Pg | 15 44 18.5 | +0.7 |
| KBN | | | | S | Sg | 15 44 36.0 | +2.1 |
| | comp=E,138nm,0.9s | | | | | | |
| KBN | Korca | 1.24 | 75 | P | Pn | 15 44 16.9 | -0.1 |
| | baz=74 | | | | | | |
| KBN | | | | S | Sg | 15 44 34.5 | +0.5 |
| | baz=74 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,0.5nm,0.9s,baz=74 | | | | | | |
| NEST | Nestorio | 1.40 | 85 | P | Pb | 15 44 20.4 | +0.3 |
| NEST | | | | S | Sg | 15 44 41.7 | +2.5 |
| | comp=N,70nm,0.8s | | | | | | |
| NEST | Nestorio | 1.40 | 85 | P | Pg | 15 44 21.3 | +0.3 |
| JAN | Janina | 1.42 | 117 | P | Pb | 15 44 20.0 | -0.3 |
| JAN | | | | S | Sg | 15 44 40.1 | +0.4 |
| | comp=N,235nm,0.4s | | | | | | |
| JAN | Janina | 1.42 | 117 | P | Pb | 15 44 20.1 | -0.2 |
| JAN | | | | AML | AML | 15 44 42.8 | |
| | comp=N,438μm,0.4s | | | | | | |
| JAN | | | | AML | AML | 15 44 43.5 | |
| | comp=E,516μm,0.4s | | | | | | |
| PENT | Pentalofos | 1.48 | 94 | P | Pg | 15 44 22.1 | -0.3 |
| KPRO | Kipourio | 1.69 | 102 | P | Pb | 15 44 24.7 | -0.1 |
| KPRO | | | | S | Sg | 15 44 48.0 | -0.2 |
| | comp=E,122nm,0.6s | | | | | | |
| KPRO | Kipourio | 1.69 | 102 | P | Pb | 15 44 24.8 | -0.1 |
| NOCI | Noci | 1.71 | 287 | P | Pb | 15 44 25.2 | 0.0 |
| NOCI | Noci | 1.71 | 287 | P | Pg | 15 44 25.9 | -0.9 |
| | baz=287 | | | | | | |
| NOCI | | | | S | Sg | 15 44 51.6 | +2.6 |
| | baz=287 | | | | | | |
| FNA | Florina | 1.71 | 73 | P | Pb | 15 44 25.0 | -0.3 |
| FNA | | | | S | Sg | 15 44 48.8 | -0.3 |
| | comp=E,158nm,0.4s | | | | | | |
| FNA | Florina | 1.71 | 73 | P | Pb | 15 44 25.3 | 0.0 |
| FNA | | | | AML | AML | 15 44 51.5 | |
| | comp=E,320μm,0.4s | | | | | | |
| FNA | | | | AML | AML | 15 44 51.7 | |
| | comp=N,319μm,0.5s | | | | | | |
| FNA | Florina | 1.71 | 73 | P | Pb | 15 44 25.1 | -0.3 |
| | baz=73 | | | | | | |
| FNA | | | | S | Sg | 15 44 48.3 | -0.8 |
| | baz=73 | | | | | | |
| LKD2 | Lefkada island | 1.89 | 143 | P | Pn | 15 44 26.6 | +0.6 |
| LKD2 | Lefkada island | 1.89 | 143 | P | Pb | 15 44 28.8 | +0.5 |
| | baz=144 | | | | | | |
| LSTV | Lastovo | 3.01 | 325 | *e*Pn | Pn | 15 44 41.3 | 0.0 |
| LSTV | | | | Sn | Sn | 15 45 15.4 | -1.8 |
| RICI | Ricice | 3.54 | 335 | *e*Pn | Pn | 15 44 50.3 | +1.7 |
| RICI | | | | Sn | Sn | 15 45 28.8 | -1.5 |
| KLJV | Kijevo | 4.24 | 331 | *e*Pn | Pn | 15 45 00.1 | +1.9 |
| KLJV | | | | Sn | Sn | 15 45 45.8 | -1.7 |
| ZIRJ | Zirje | 4.27 | 323 | *e*Pn | Pn | 15 44 60.0 | +1.4 |
| ZIRJ | | | | Sn | Sn | 15 45 46.3 | -2.0 |
| MORI | Morici | 4.41 | 325 | *e*Pn | Pn | 15 45 01.6 | +1.1 |
| MORI | | | | Sn | Sn | 15 45 50.4 | -1.3 |
| NVLJ | Novalja | 5.32 | 324 | *e*Pn | Pn | 15 45 14.0 | +0.9 |
| BRJN | Brijuni | 6.11 | 320 | *e*Pn | Pn | 15 45 24.1 | +0.2 |

*IDC **18** 15:53:12.2±4.3,3°.31S×139°.92E,h0km,mb4.7/2, mb1 4.6/3,mb1mx3.8/18,mbtmp4.5/3,ML3.9/1,MS3.1/2, Ms1 3.1/2,ms1mx2.6/60,Error ellipse: s-maj=158.3km s-min=32.7km az=88.0*
*NEIC **18** 15:53:19.8±2.2,3°.7S±0°.1×139°.6E±0°.1,h35km±23km, mb4.0/9,Error ellipse: s-maj=20.6km s-min=13.1km az=205.0*

**ISC 18 15:53:18.0±0.8,3°.42S±0°.09×139°.67E±0°.07,h37km,n29, σ1°96/25,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GENI | Genyem | 0.96 | 31 | P | Pn | 15 53 32.4 | -2.5 |
| FAKI | Fak Fak | 7.42 | 274 | Pn | Pn | 15 55 03.7 | -0.1 |
| FAKI | Fak Fak | 7.42 | 274 | P | Pn | 15 55 01.2 | -2.6 |
| SIJI | Sorong | 8.77 | 287 | LR | LR | 15 59 12.6 | |
| | comp=Z,76nm,19.6s,baz=266,slow=40 | | | | | | |
| PMG | Port Moresby | 9.53 | 129 | Pn | Pn | 15 55 32.4 | -0.3 |
| COEN | Coen | 11.03 | 162 | Pn | Pn | 15 55 52.4 | -0.9 |
| COEN | Coen | 11.03 | 162 | P | Pn | 15 55 57.5 | +4.2 |
| KDU | Kakadu | 11.64 | 217 | P | Pn | 15 56 03.6 | +2.0 |
| RABL | Rabaul | 12.49 | 94 | Pn | Pn | 15 56 16.6 | +3.3 |
| MTN | Manton Dam | 12.61 | 222 | Pn | Pn | 15 56 12.0 | -2.8 |
| MTN | Manton Dam | 12.61 | 222 | P | Pn | 15 56 16.1 | +1.2 |
| MTSU | Mount Surprise | 15.32 | 163 | P | P | 15 56 56.2 | +0.3 |
| KNRA | Kununurra | 16.24 | 221 | P | P | 15 57 04.5 | -1.6 |
| KNRA | | | | IAmb | IAmb | 15 57 12.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| KNRA | Kununurra | 16.24 | 221 | P | P | 15 57 04.7 | -1.4 |
| QIS | Mount Isa | 17.04 | 180 | P | P | 15 57 18.5 | +3.5 |
| WB0 | Warramunga Arr | 17.05 | 197 | P | Pn | 15 57 12.5 | -1.1 |
| WB0 | | | | IAmb | IAmb | 15 57 20.1 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| WR0 | Warramunga Arr | 17.19 | 197 | P | Pn | 15 57 13.6 | -1.7 |
| WR0 | | | | IAmb | IAmb | 15 57 21.1 | |
| | comp=Z,14nm,1.2s | | | | | | |
| WRAB | Tennant Creek | 17.22 | 197 | P | Pn | 15 57 14.7 | -1.1 |
| WRAB | | | | IAmb | IAmb | 15 57 22.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WB2 | Warramunga Arr | 17.23 | 197 | P | Pn | 15 57 14.1 | -1.8 |
| WRA | Warramunga Arr | 17.23 | 197 | P | Pn | 15 57 15.2 | -0.7 |
| | comp=Z,0.5nm,0.3s,baz=17,slow=12,SNR=22 | | | | | | |
| WRA | | | | LR | LR | 16 04 21.5 | |
| | comp=Z,104nm,18.4s,baz=18,slow=38 | | | | | | |
| WRA | Warramunga Arr | 17.23 | 197 | P | Pn | 15 57 13.4 | -2.5 |
| TOLI2 | Tolitoli | 19.41 | 283 | | Pn | 15 57 44.4 | +1.9 |
| FITZ | Fitzroy Crossi | 20.04 | 222 | P | P | 15 57 48.2 | +0.2 |
| FITZ | | | | IAmb | IAmb | 15 57 55.9 | |
| | comp=Z,15nm,1.6s | | | | | | |
| FITZ | Fitzroy Crossi | 20.04 | 222 | P | Pn | 15 57 50.0 | 0.0 |
| AS31 | Alice Springs | 20.89 | 195 | P | P | 15 57 57.1 | -0.1 |
| ASAR | Alice Springs | 20.89 | 195 | P | Pn | 15 57 58.4 | -1.4 |
| | comp=Z,5.2nm,0.7s,baz=25,slow=11,SNR=41 | | | | | | |
| ASAR | Alice Springs | 20.89 | 195 | P | P | 15 57 55.8 | -1.4 |
| WRKA | Warakurna | 24.12 | 206 | P | P | 15 58 33.4 | +2.9 |
| MKAR | Makanchi Array | 70.93 | 322 | P | P | 16 04 32.1 | +0.6 |
| | comp=Z,14nm,0.3s,baz=109,slow=6.6,SNR=1.9 | | | | | | |

**IDC 18 16:26:49.5±870.0,52°.72N×33°.28E,h0km,Error ellipse: s-maj=352.9km s-min=97.7km az=33.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I43RU | DUBNA INFRASON | 4.62 | 28 | *i* | | 16 53 20.0 | |
| | baz=211,slow=331,SNR=0.8 | | | | | | |
| I31KZ | AKTYUBINSK INF | 15.55 | 89 | *i* | | 18 01 00.0 | |
| | baz=288,slow=338,SNR=0.9 | | | | | | |
| I46RU | ZALESOVO INFRA | 30.25 | 67 | *i* | | 19 35 30.0 | |
| | baz=288,slow=330,SNR=2.7 | | | | | | |

*BJI **18** 16:38:51.3±0.0,6°.07N×127°.23E,h90km,mb4.8/59, mB5.0/26,Ms4.4/10,Ms7 4.1/10*
*DJA **18** 16:38:54.7±0.4,7°.N±3°×12°.7E±°,h65km±4km,M4.8/43, mB5.2/11,mb4.8/43,MLv5.1/8,Mw(mB)4.6/11*
*MAN **18** 16:38:57.4,6°.55N×126°.94E,h55km,mb5.4,ML4.3,MS4.5*
*NEIC **18** 16:38:58.5±1.8,6°.53N±0°.07×126°.97E±0°.07,h97km±6km, mb4.8/161,Error ellipse: s-maj=12.4km s-min=8.5km az=47.0*
*IDC **18** 16:38:59.8±0.9,6°.52N×126°.91E,h111km±8km,mb4.2/32, mb1 4.3/35,mb1mx4.2/45,mbtmp4.6/35,MS3.4/28, Ms1 3.4/28,ms1mx3.3/76,Error ellipse: s-maj=12.8km s-min=7.8km az=75.0*

**ISC 18 16:38:57.3±0.7,6°.47N±0°.03×126°.99E±0°.05,h91km±6km, n362,σ1°38/379,mb4.8/142,13C-11D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MATI | Mati | 0.87 | 303 | *i*P | Pn | 16 39 13.4 | -2.2 |
| DDMP | Don Marcelino, | 1.32 | 254 | *i*P | Pn | 16 39 19.8 | -1.1 |
| DAV | Davao City (W) | 1.52 | 293 | P | Pn | 16 39 24.1 | +0.7 |
| | 2μm,0.3s,baz=165,slow=0.4,SNR=275 | | | | | | |
| DAV | | | | S | Sn | 16 39 45.8 | +2.7 |
| | 1μm,0.3s,baz=73,slow=19,SNR=48 | | | | | | |
| DAV | | | | LR | LR | 16 39 59.4 | |
| | comp=Z,1μm,19.7s,baz=126,slow=42 | | | | | | |
| DAV | Davao City (W) | 1.52 | 293 | Pn | Pn | 16 39 23.8 | +0.4 |
| DAV | Davao City (W) | 1.52 | 293 | P | Pn | 16 39 24.6 | +1.2 |
| BIPH | Bislig | 1.81 | 340 | *i*P | Pn | 16 39 31.2 | +4.1 |
| BIPH | | | | *i* S | Sn | 16 39 51.7 | +1.9 |
| KCP | Kidapawan | 1.96 | 286 | *i*P | Pn | 16 39 27.7 | -1.4 |
| KCP | | | | *i* S | Sn | 16 39 52.6 | -0.7 |
| GSPH | General Santos | 2.06 | 260 | *e*P | Pn | 16 39 27.8 | -2.7 |
| GSPH | | | | *i* S | Sn | 16 39 51.6 | -4.2 |
| CTBH | Cotabato--PC H | 2.82 | 286 | *i*P | Pn | 16 39 40.2 | -0.3 |
| CTBH | | | | *i* S | Sn | 16 40 13.1 | -0.7 |
| BUTP | Butuan | 2.83 | 332 | *i*P | Pn | 16 39 42.2 | +1.6 |
| BUTP | | | | *i* S | Sn | 16 40 18.3 | +4.4 |
| SGSI | Sangihe | 3.12 | 208 | P | Pn | 16 39 45.4 | +0.8 |
| SGSI | | | | S | Sn | 16 40 23.3 | +2.3 |
| GLSP | General Luna, | 3.40 | 346 | *i*P | Pn | 16 39 47.4 | -0.9 |
| GLSP | | | | *i* S | Sn | 16 40 23.8 | -3.9 |
| SCPH | Surigao | 3.61 | 336 | *i*P | Pn | 16 39 52.0 | +0.8 |
| PAGZ | Pagadian | 3.83 | 291 | *i*P | Pn | 16 39 54.3 | +0.2 |
| MSLP | Maasin | 4.21 | 330 | *i*P | Pn | 16 39 59.1 | -0.2 |
| MSLP | | | | *i* S | Sn | 16 40 47.9 | +0.6 |
| TBP | Tagbilaran | 4.45 | 316 | *i*P | Pn | 16 40 01.9 | -0.6 |
| TBP | | | | *i* S | Sn | 16 40 50.4 | -2.9 |
| SNPH | Sibulan | 4.69 | 308 | *i*P | Pn | 16 40 06.3 | +0.5 |
| SNPH | | | | *e*S | Sn | 16 40 59.1 | +0.1 |
| LLP | Lapu-Lapu | 4.85 | 322 | *i*P | Pn | 16 40 08.8 | +0.7 |
| LLP | | | | *i* S | Sn | 16 41 03.0 | +0.1 |
| CNOP | Candoni, Negro | 5.45 | 308 | *i*P | Pn | 16 40 15.7 | -0.3 |
| CNOP | | | | *i* S | Sn | 16 41 18.9 | +1.5 |
| TNTI | Ternate | 5.67 | 176 | Pn | Pn | 16 40 20.2 | +1.1 |
| TNTI | Ternate | 5.67 | 176 | P | Pn | 16 40 16.9 | -2.3 |
| | 0.9nm1μm132nm,0.9s | | | | | | |
| TNTI | Ternate | 5.67 | 176 | P | Pn | 16 40 21.2 | +2.0 |
| RCP | Roxas | 6.57 | 321 | *e*P | Pn | 16 40 31.7 | +0.3 |
| KMSI | Cibinong | 6.58 | 207 | P | Pn | 16 40 31.6 | +0.1 |
| | 0.8nm2μm180nm,0.8s | | | | | | |
| GTOI | Gorontalo | 7.02 | 215 | P | Pn | 16 40 38.4 | +0.8 |
| | 0.3nm784nm74nm,0.6s | | | | | | |
| MRSI | Marisa | 7.80 | 220 | P | Pn | 16 40 48.3 | +0.2 |
| | 2μm158nm,0.7s | | | | | | |
| TOLI2 | Tolitoli | 8.16 | 230 | Pn | Pn | 16 40 51.6 | -1.6 |
| SIJI | Sorong | 8.45 | 149 | P | Pn | 16 40 57.6 | +0.6 |
| | 8.7nm,0.3s,baz=338,slow=16,SNR=34 | | | | | | |
| SIJI | | | | S | Sn | 16 42 23.8 | -7.0 |
| | 9.7nm,0.3s,baz=308,slow=19,SNR=10 | | | | | | |
| SIJI | | | | LR | LR | 16 44 35.0 | |
| | comp=Z,199nm,21.8s,baz=350,slow=39 | | | | | | |
| SANI | Sanana | 8.52 | 187 | P | Pn | 16 40 57.3 | -0.7 |
| | 51nm,0.7s | | | | | | |
| MYLDM | Lahad Datu | 8.54 | 262 | Pn | Pn | 16 40 59.2 | +0.9 |
| LUWI | Luwuk | 8.56 | 210 | | Pn | 16 41 02.2 | +3.6 |
| LUWI | Luwuk | 8.56 | 210 | P | Pn | 16 40 57.0 | -1.6 |
| | 3μm152nm,0.7s | | | | | | |
| LUWI | Luwuk | 8.56 | 210 | P | Pn | 16 41 03.0 | +4.4 |
| LQP | Lukban | 9.29 | 325 | *e*P | Pn | 16 41 13.7 | +4.9 |
| MPSI | Mapaga | 9.33 | 230 | P | Pn | 16 41 10.1 | +1.0 |
| | 18nm,0.8s | | | | | | |
| FAKI | Fak Fak | 10.70 | 150 | Pn | Pn | 16 41 27.6 | -0.2 |
| FAKI | Fak Fak | 10.70 | 150 | P | Pn | 16 41 25.4 | -2.4 |
| | 51nm,1.2s | | | | | | |
| KKM | Kota Kinabalu | 10.72 | 268 | Pn | Pn | 16 41 30.3 | +2.2 |
| TTSI | Tana Toraja | 11.85 | 217 | P | Pn | 16 41 43.8 | +0.5 |
| | 52nm,0.9s | | | | | | |
| BAKI | Biak | 11.87 | 130 | P | Pn | 16 41 39.2 | -4.3 |
| SPSI | Sidrap Palu | 12.62 | 215 | P | Pn | 16 41 55.6 | +2.0 |
| | 20nm,0.9s | | | | | | |
| BNSI | Bone | 12.80 | 213 | P | Pn | 16 41 57.4 | +1.4 |
| | 29nm,1.0s | | | | | | |
| KAPI | Kappang | 13.50 | 213 | P | Pn | 16 42 05.8 | +0.6 |
| | 0.4nm,0.3s,baz=15,slow=11,SNR=4.0 | | | | | | |
| KAPI | | | | LR | LR | 16 48 31.5 | |
| | comp=Z,62nm,18.1s,baz=56,slow=42 | | | | | | |
| MTKI | Muara Teweh, K | 14.14 | 239 | P | Pn | 16 42 16.1 | +2.6 |
| KBKI | Kotabaru | 14.52 | 228 | P | P | 16 42 29.8 | +7.2 |
| SBUM | Sibu | 15.25 | 255 | | P | 16 42 30.7 | +0.1 |
| SBUM | | | | IAmb | IAmb | 16 42 34.7 | |
| | comp=Z,67nm,0.8s | | | | | | |
| SOEI | Soe | 16.34 | 190 | P | P | 16 42 45.4 | +2.5 |
| SOEI | | | | IAmb | IAmb | 16 43 25.1 | |
| | comp=Z,42nm,0.9s | | | | | | |
| JAY | Jayapura | 16.35 | 123 | P | P | 16 42 44.9 | +2.0 |
| | comp=Z,1.0nm,0.3s,baz=306,slow=14,SNR=2.2 | | | | | | |
| JAY | | | | LR | LR | 16 48 43.8 | |
| | comp=Z,110nm,19.8s,baz=268,slow=36 | | | | | | |
| JAY | Jayapura | 16.35 | 123 | P | Pn | 16 42 38.6 | -3.0 |
| | comp=Z,22nm,1.0s | | | | | | |
| STKI | Sintang | 16.73 | 248 | P | P | 16 42 49.5 | +2.4 |
| | comp=Z,2μmcomp=Z,14nm,0.5s | | | | | | |
| BATI | Baumata | 16.89 | 191 | P | P | 16 42 51.5 | +2.6 |
| | comp=Z,2.6nm,0.3s,baz=12,slow=1.7,SNR=7.8 | | | | | | |
| BATI | Baumata | 16.89 | 191 | P | P | 16 42 49.5 | +0.6 |
| | comp=Z,20nm,0.6s | | | | | | |
| KSM | Kuching | 17.36 | 254 | P | P | 16 42 55.0 | +1.0 |
| PLAI | Plampang | 17.75 | 211 | P | Pn | 16 43 00.6 | +1.8 |
| | comp=Z,50nm,0.9s | | | | | | |
| PBKI | Pangkalan Bun | 17.80 | 240 | P | Pn | 16 43 00.3 | +0.9 |
| | comp=Z,84nm,1.0s | | | | | | |
| TPUB | Ta-pu | 17.82 | 341 | P | P | 16 42 53.5 | -5.5 |
| TPUB | | | | IAmb | IAmb | 16 43 05.7 | |
| | comp=Z,79nm,1.5s | | | | | | |
| GUMO | Guam | 18.97 | 67 | LR | LR | 16 49 54.6 | |
| | comp=Z,53nm,19.2s,baz=252,slow=34 | | | | | | |
| DLV | T Lat | 19.05 | 288 | P | Pn | 16 43 14.4 | -0.1 |
| DLV | | | | IAmb | IAmb | 16 43 15.4 | |
| | comp=Z,57nm,0.7s | | | | | | |
| DLV | T Lat | 19.05 | 288 | P | Pn | 16 43 15.0 | +0.5 |
| | comp=Z,88nm,0.9s | | | | | | |
| DRS | Darwin Rock St | 19.18 | 168 | P | Pn | 16 43 17.0 | +1.3 |
| | comp=Z,22nm,0.8s | | | | | | |
| JAGI | Jajag, Banyuwa | 19.59 | 221 | P | Pn | 16 43 20.8 | +0.1 |
| MTN | Manton Dam | 19.62 | 168 | | P | 16 43 19.3 | +0.5 |
| KNMB | Chin-men Tao | 19.70 | 336 | P | P | 16 43 18.5 | -1.1 |
| KDU | Kakadu | 19.80 | 164 | P | P | 16 43 21.8 | +1.1 |
| HKPS | Hong Kong Po S | 20.02 | 323 | P | P | 16 43 21.7 | -1.3 |
| HKPS | | | | IAmb | IAmb | 16 43 24.4 | |
| | comp=Z,44nm,0.8s | | | | | | |
| JOW | Kunigami | 20.29 | 3 | P | Pn | 16 43 27.2 | -1.4 |
| | comp=Z,41nm,0.7s,baz=181,slow=8.1,SNR=14 | | | | | | |
| JOW | | | | LR | LR | 16 53 15.7 | |
| | comp=Z,46nm,18.1s,baz=278,slow=42 | | | | | | |
| JOW | Kunigami | 20.29 | 3 | P | Pn | 16 43 27.2 | -1.5 |
| JOW | | | | IAmb | IAmb | 16 43 28.2 | |
| | comp=Z,55nm,0.9s | | | | | | |
| JOW | Kunigami | 20.29 | 3 | P | Pn | 16 43 27.4 | -1.3 |
| QIZ | Qiongzhong | 20.84 | 308 | P | P | 16 43 31.8 | -0.2 |
| QIZ | | | | IAmb | IAmb |

comp=Z,21nm,0.8s
**WRAB Tennant Creek 27.22 165** P **P** **16 44 32.7 -0.2**
WRAB IAmb IAmb 16 45 03.0
comp=Z,28nm,1.5s
**WRA Warramunga Arr 27.22 165** P **P** **16 44 33.3 +0.3**
comp=Z,3.4nm,0.7s,baz=349,slow=9.8,SNR=35
WRA LR LR 16 57 01.8
comp=Z,94nm,19.4s,baz=349,slow=40
**WRA Warramunga Arr 27.22 165** P **P** **16 44 32.7 -0.3**
**WB2 Warramunga Arr 27.23 165** P **P** **16 44 33.0 0.0**
**SRIT Nakonsritamara 27.23 276** P **P** **16 44 31.8 -1.3**
**WR0 Warramunga Arr 27.29 164** P **P** **16 44 33.3 -0.2**
**GYA Guiyang 27.75 318** ⇓P **P** **16 44 40.6 +2.8**
GYA pP pwP 16 45 01.0 +3.1
GYA PcP **PcP** **16 47 53.5 +1.0**
GYA S **S** **16 49 18.9 +4.8**
GYA SS **SnSn** **16 50 41.6 +5.3**
GYA pmax pmax
comp=Z,4.0nm,1.3s
GYA pmax pmax
comp=Z,140nm,5.2s
GYA LR LR
comp=Z,160nm,4.9s
GYA LR LR
comp=Z,80nm,5.8s
GYA LR LR
comp=Z,120nm,5.0s
**JMN Monobe 27.87 12** P **P** **16 44 36.7 -1.9**
JMN IAmb IAmb 16 44 54.1
comp=Z,33nm,1.1s
**PSI Prapat 28.20 264** P **P** **16 44 41.6 -0.3**
comp=Z,1.8nm,0.4s,baz=83,slow=16,SNR=1.4
PSI LR LR 16 57 39.5
comp=Z,70nm,19.9s,baz=66,slow=40
**RPSI Rantau Prapat 28.22 264** P **P** **16 44 41.6 -0.3**
**PSA00 Pilbara Seismi 28.73 194** P **P** **16 44 45.8 -0.6**
**PSA00 Pilbara Seismi 28.73 194** P **P** **16 44 46.0 -0.4**
PSA00 IAmb IAmb 16 45 23.3
comp=Z,7.6nm,1.2s
**ENH Enshi 28.83 327** P **P** **16 44 45.7 -1.6**
ENH IAmb IAmb 16 44 48.6
comp=Z,30nm,1.0s
**JHS Saijyo 28.95 10** P **P** **16 44 46.9 -1.3**
**JHJ2 Mitsune 29.07 23** P **P** **16 44 48.3 -1.0**
**QIS Mount Isa 29.58 156** P **P** **16 44 55.1 +1.1**
**JWT Wachi 29.70 14** P **P** **16 44 53.4 -1.4**
**KMI Kunming 29.71 311** ⇓P **P** **16 44 56.3 +1.0**
KMI pP pwP 16 45 16.4 -1.9
KMI sP sP 16 45 29.0 +3.6
KMI pmax pmax
comp=Z,12nm,1.0s
KMI LR LR
comp=Z,88nm,15.4s
KMI LR LR
comp=Z,86nm,15.4s
KMI LR LR
comp=Z,200nm,24.9s
**GSI Gunungsitoli 29.78 261** P **P** **16 44 54.9 -1.0**
GSI IAmb IAmb 16 45 13.9
comp=Z,16nm,0.8s
**CMAR Chiang Mai Arr 29.81 296** P **P** **16 44 56.4 +0.4**
comp=Z,1.1nm,0.6s,baz=95,slow=7.3,SNR=18
CMAR PcP **PcP** **16 47 58.6 +1.0**
comp=Z,1.2nm,0.8s,baz=132,slow=1.0,SNR=8.1
CMAR LR LR 16 56 46.1
comp=Z,74nm,22.0s,baz=110,slow=36
**CMAR Chiang Mai Arr 29.81 296** P **P** **16 44 55.6 -0.4**
CMAR **PcP** **16 47 58.2 +0.6**
**CM31 Chiang Mai Arr 29.81 296** P **P** **16 44 55.6 -0.4**
**MTSU Mount Surprise 29.84 145** P **P** **16 44 57.5 +1.3**
**CHTO Chiang Mai 29.93 297** P **P** **16 44 56.7 -0.4**
**CHTO Chiang Mai 29.93 297** P **P** **16 44 58.3 +1.2**
comp=Z,2.3nm,0.6s
**INU Inuyama 30.19 16** P **P** **16 44 58.6 -0.5**
INU IAmb IAmb 16 45 00.1
comp=Z,17nm,0.8s
**JGF Kuroka 30.52 17** P **P** **16 45 03.1 +1.0**
**AS31 Alice Springs 30.70 168** P **P** **16 45 03.7 -0.1**
**ASAR Alice Springs 30.70 168** P **P** **16 45 04.1 +0.3**
comp=Z,0.7nm,0.3s,baz=338,slow=7.1,SNR=43
ASAR PcP **PcP** **16 48 00.6 +0.7**
comp=Z,1.6nm,0.5s,baz=348,slow=2.5,SNR=7.4
ASAR LR LR 16 59 53.7
comp=Z,48nm,20.8s,baz=321,slow=41
**ASAR Alice Springs 30.70 168** P **P** **16 45 04.4 +0.5**
**KSRS Korea Array 30.86 1** P **P** **16 45 04.6 -0.3**
comp=Z,4.4nm,0.7s,baz=182,slow=9.8,SNR=19
KSRS LR LR 16 59 36.5
comp=Z,22nm,18.1s,baz=180,slow=40
**KS19 Wonju Array Si 30.90 1** P **P** **16 45 05.1 -0.3**
**PZH PanZhiHua 31.23 313** P **P** **16 45 08.6 0.0**
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,100nm,5.5s
**MAJO Matsushiro 31.64 17** P **P** **16 45 11.0 -1.0**
MAJO IAmb IAmb 16 45 11.8
comp=Z,11nm,0.8s
**MAT Matsushiro 31.64 17** P **P** **16 45 10.6 -1.4**
**MJAR Matsushiro Arr 31.64 17** P **P** **16 45 10.8 -1.2**
comp=Z,6.4nm,0.8s,baz=196,slow=8.8,SNR=12
MJAR LR LR 16 57 13.5
comp=Z,38nm,21.9s,baz=185,slow=35
**MJAR Matsushiro Arr 31.64 17** P **P** **16 45 10.5 -1.5**
**MJB9 Matsu-Tunnel 31.65 17** P **P** **16 45 10.9 -1.1**
MJB9 IAmb IAmb 16 45 11.8
comp=Z,11nm,0.9s
**JYT Yasato 32.00 20** P **P** **16 45 12.8 -2.2**
JYT IAmb IAmb 16 45 15.1
comp=Z,16nm,0.6s
**XAN Xi'an 32.13 331** P **P** **16 45 15.3 -1.0**
XAN pP pwP 16 45 38.3 -2.5
XAN pmax pmax
comp=Z,20nm,0.7s
**CTA Charters Tower 32.49 145** P **P** **16 45 20.7 +1.1**
comp=Z,7.7nm,0.7s,baz=318,slow=9.6,SNR=15
CTA LR LR 17 00 35.1
comp=Z,84nm,18.4s,baz=316,slow=40
**CD2 Chengdu 32.64 321** P **P** **16 45 20.8 0.0**
CD2 pmax pmax
comp=Z,20nm,0.7s
**HNS HongShan 32.76 342** ⇓P **P** **16 45 21.3 -0.4**
HNS pmax pmax
comp=Z,22nm,0.9s
**JSD Sado 33.05 16** P **P** **16 45 23.0 -1.2**
**JMM Marumori 33.68 20** P **P** **16 45 29.2 -0.5**
**BJT Baijiatuau 34.79 345** P **P** **16 45 37.3 -2.0**
BJT IAmb IAmb 16 46 05.1
comp=Z,16nm,1.0s
**BJI Beijing 34.81 345** P **P** **16 45 38.3 -1.1**
BJI pP **pwP** **16 46 04.4 -0.7**
BJI pmax pmax
comp=Z,16nm,0.9s
**LZH Lanzhou 36.31 327** ⇑P **P** **16 45 53.4 +0.8**
LZH pP pP 16 46 17.4 +5.0
LZH pmax pmax
comp=Z,44nm,1.4s
**HNR Honiara 36.44 115** LR LR 17 00 01.7
comp=Z,50nm,20.8s,baz=308,slow=34
**INKA Innaminka 36.52 159** P **P** **16 45 55.4 +1.2**
**QLP Quilpie 36.87 154** P **P** **16 45 57.9 +0.7**
**MORW Morawa 36.87 196** P **P** **16 45 58.0 +0.8**
MORW IAmb IAmb 16 46 02.1
comp=Z,24nm,1.2s
**HHC Hu-ho-hao-te 36.91 340** eP **P** **16 45 57.5 0.0**
HHC pmax pmax
comp=Z,18nm,1.1s
HHC pmax pmax
comp=Z,130nm,5.0s
**FORT Forrest 37.05 178** P **P** **16 45 59.7 +1.1**
**CN2 Changchun 37.21 358** eP **P** **16 45 59.0 -0.9**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
**USA0B Ussuriysk Arra 37.84 6** P **P** **16 46 05.0 -0.2**
USA0B IAmb IAmb 16 46 07.9
comp=Z,9.6nm,0.8s
**USRK Ussuriysk Ar. 37.84 6** P **P** **16 46 05.4 +0.3**
comp=Z,8.5nm,0.6s,baz=176,slow=7.9,SNR=38
**USRK Ussuriysk Ar. 37.84 6** P **P** **16 46 04.4 -0.8**
**MDJ Mudanjiang 38.07 3** P **P** **16 46 06.3 -0.8**
**MDJ Mudanjiang 38.07 3** P **P** **16 46 08.0 +0.9**
MDJ pmax pmax
comp=Z,27nm,0.9s
MDJ pmax pmax
comp=Z,120nm,3.9s

**MDJ Mudanjiang 38.07 3** P **P** **16 46 07.8 +0.7**
comp=Z,26nm,1.0s
**LCRK Leigh Creek 38.25 164** P **P** **16 46 10.7 +1.9**
**XLT XiLinHaoTe 38.49 347** eP **P** **16 46 10.4 -0.4**
XLT pP pwP 16 46 35.3 -1.3
XLT sP sP 16 46 47.8 +7.4
XLT pmax pmax
comp=Z,12nm,1.2s
XLT pmax pmax
comp=Z,180nm,5.5s
**SHL Shillong 38.53 304** P **P** **16 46 10.5 -1.0**
**BNX BinXian 39.12 0** ⇑P **P** **16 46 15.9 0.0**
BNX pmax pmax
comp=Z,16nm,1.0s
BNX pmax pmax
comp=Z,150nm,5.4s
**EIDS Eidsvold 39.38 144** P **P** **16 46 18.0 -0.3**
**ASAJ Asahikawa 39.92 18** P **P** **16 46 23.7 +1.2**
comp=Z,7.9nm,0.6s,baz=234,slow=10,SNR=12
ASAJ LR LR 17 01 54.8
comp=Z,36nm,21.5s,baz=234,slow=34
**JKA Kamikawa-asahi 39.92 18** P **P** **16 46 21.8 -0.8**
JKA IAmb IAmb 16 46 24.5
comp=Z,17nm,1.0s
**BBOO Buckleboo 40.00 168** P **P** **16 46 24.3 +0.9**
BBOO IAmb IAmb 16 46 43.0
comp=Z,11nm,0.9s
**STKA Stephens Creek 40.60 161** P **P** **16 46 29.3 +1.0**
comp=Z,7.1nm,0.6s,baz=333,slow=8.7,SNR=17
STKA LR LR 17 07 24.1
comp=Z,53nm,19.4s,baz=16,slow=42
**STKA Stephens Creek 40.60 161** P **P** **16 46 29.1 +0.8**
**STKA Stephens Creek 40.60 161** P **P** **16 46 30.0 +1.7**
**LSA Lhasa 40.88 309** P **P** **16 46 31.8 +0.5**
LSA pmax pmax
comp=Z,16nm,1.3s
**GTA Gaotai 40.92 327** ⇑P **P** **16 46 31.3 +0.2**
GTA pP pP 16 46 47.8 -3.5
GTA PcP **PcP** **16 48 31.4 +1.4**
GTA pmax pmax
comp=Z,15nm,1.1s
**GOMU GeErMu 41.74 320** P **P** **16 46 38.8 +0.7**
GOMU PcP **PcP** **16 48 34.3 +1.2**
GOMU pmax pmax
comp=Z,4.0nm,1.0s
GOMU pmax pmax
comp=Z,130nm,5.0s
**TAPN Taplejung 42.66 304** eP **P** **16 46 45.0 -0.7**
comp=Z,72nm,0.9s
**ODAN Odare 42.75 303** eP **P** **16 46 46.0 -0.3**
comp=Z,93nm,0.8s
**RAMN Ramite 43.44 303** eP **P** **16 46 51.6 -0.3**
comp=Z,14nm,0.6s
**CHLP Challavanipeta 43.47 290** eP **P** **16 46 52.6 +0.7**
**ARMA Armidale 43.63 149** P **P** **16 46 54.0 +0.9**
ARMA IAmb IAmb 16 47 17.8
comp=Z,34nm,1.5s
**JIRN Jiri 44.03 304** eP **P** **16 46 56.5 -0.3**
comp=Z,112nm,0.7s
**GUN Gumba 44.38 304** eP **P** **16 46 58.9 -0.6**
comp=Z,118nm,0.7s
**ULN Ulaanbaatar 44.62 341** P **P** **16 47 00.4 -0.5**
ULN IAmb IAmb 16 47 01.8
comp=Z,12nm,1.0s
**PKI Pulchoki 44.65 303** eP **P** **16 47 00.6 -1.1**
comp=Z,47nm,0.7s
**PKIN Phulchoki 44.66 303** eP **P** **16 47 00.6 -1.1**
comp=Z,42nm,0.7s
**SONM Songino Array 44.81 340** P **P** **16 47 01.9 -0.5**
comp=Z,3.8nm,1.0s,baz=155,slow=7.4,SNR=21
SONM PcP **PcP** **16 48 42.9 +0.1**
comp=Z,1.4nm,0.7s,baz=172,slow=3.9,SNR=4.9
SONM LR LR 17 05 47.2
comp=Z,69nm,19.8s,baz=162,slow=36
**SONM Songino Array 44.81 340** P **P** **16 47 01.7 -0.6**
**KKN Kakani 44.83 303** eP **P** **16 47 02.0 -1.0**
comp=Z,67nm,0.8s
**DMN Daman 44.92 303** eP **P** **16 47 02.9 -0.8**
comp=Z,66nm,0.8s
**SANVU Saraoutou 45.40 119** P **P** **16 47 08.4 +1.1**
SANVU IAmb IAmb 16 47 35.2
comp=Z,28nm,1.3s
**GKN Gorkha 45.44 303** eP **P** **16 47 06.6 -1.1**
comp=Z,38nm,0.7s
**PVM Polavaram 45.56 288** eP **P** **16 47 08.9 +0.3**
**PALK Pallekele 45.95 274** LR LR 17 09 27.7
comp=Z,14nm,18.1s,baz=191,slow=40
**KOLN Koldanda 46.23 303** eP **P** **16 47 13.5 -0.5**
comp=Z,143nm,0.7s
**DANN Dangsing 46.29 303** eP **P** **16 47 13.7 -0.8**
comp=Z,150nm,0.7s
**MYLAV Mylavaram 46.43 287** eP **P** **16 47 16.0 +0.6**
**CAN Canberra 46.45 155** P **P** **16 47 17.2 +1.8**
CAN IAmb IAmb 16 47 37.8
comp=Z,41nm,1.6s
**PYUN Piuthan 46.85 303** eP **P** **16 47 18.4 -0.4**
comp=Z,123nm,0.9s
**SKHT Srikalahasti 47.03 283** eP **P** **16 47 20.6 +0.5**
**TOO Toolangi 47.09 160** P **P** **16 47 20.5 +0.2**
TOO IAmb IAmb 16 47 52.3
comp=Z,18nm,1.4s
**NJS Nagarjunasagar 47.67 286** eP **P** **16 47 25.3 +0.1**
**RCLA Racherla 47.90 285** eP **P** **16 47 26.1 -0.8**
**DZM Mont Dzumac 47.94 127** LR LR 17 09 40.6
comp=Z,88nm,18.4s,baz=300,slow=38
**DZM Mont Dzumac 47.94 127** P **P** **16 47 26.8 -0.4**
**RPR Rampur 47.98 289** eP **P** **16 47 27.4 -0.1**
**SRLM Srisailam 48.02 286** eP **P** **16 47 27.4 -0.5**
**CUPL Choutuppal 48.13 287** eP **P** **16 47 28.1 -0.5**
**HYBB Hyderabad (bro 48.49 287** eP **P** **16 47 31.1 -0.3**
**SRSP Sriramsagar 48.88 289** eP **P** **16 47 34.1 -0.3**
**KLRI Killari 50.42 288** eP **P** **16 47 45.9 -0.2**
**WMQ Urumqi 50.66 324** eP **P** **16 47 48.3 +0.7**
WMQ pmax pmax
comp=Z,16nm,0.7s
**PEA0B Petropavlovsk- 52.82 23** P **P** **16 48 04.3 +0.9**
**PETK Petropavlovsk- 52.82 23** P **P** **16 48 04.8 +1.4**
comp=Z,14nm,0.6s,baz=187,slow=3.1,SNR=13
**PETK Petropavlovsk- 52.82 23** P **P** **16 48 03.7 +0.4**
**PET Petropavlovsk 53.12 23** P **P** **16 48 04.3 -1.3**
**ZSN Zaisan 54.38 326** eP **P** **16 48 13.1 -1.8**
baz=326
**MK31 Makanchi Array 55.48 324** P **P** **16 48 22.9 -0.1**
MK31 IAmb IAmb 16 48 23.8
comp=Z,8.2nm,0.7s
MK31 PcP **PcP** **16 49 21.4 -0.6**
**MKAR Makanchi Array 55.48 324** P **P** **16 48 22.9 -0.1**
comp=Z,9.8nm,0.6s,baz=124,slow=8.1,SNR=148
MKAR PcP **PcP** **16 49 21.9 -0.1**
comp=Z,4.0nm,0.7s,baz=118,slow=3.6,SNR=7.7
**MKAR Makanchi Array 55.48 324** P **P** **16 48 23.0 0.0**
MKAR PcP **PcP** **16 49 21.8 -0.2**
**MAKZ Makanchi 55.67 324** P **P** **16 48 24.0 -0.2**
MAKZ IAmb IAmb 16 48 25.1
comp=Z,11nm,0.8s
MAKZ PcP **PcP** **16 49 22.2 -0.5**
**MA2 Magadan 56.00 14** P **P** **16 48 27.0 +0.7**
MA2 IAmb IAmb 16 48 27.9
comp=Z,6.7nm,0.8s
**KPKS Kokpek 56.08 319** eP **P** **16 48 25.4 -2.0**
comp=Z,4.7nm,0.7s,baz=319
**SATY Saty 56.09 319** eP **P** **16 48 25.8 -1.6**
comp=Z,7.5nm,0.9s,baz=319
**ZHN Zhinishke 56.11 319** eP **P** **16 48 24.9 -2.7**
baz=319
**KSH Kashi 56.32 314** P **P** **16 48 30.8 +1.6**
KSH PcP **PcP** **16 49 27.3 +1.8**
KSH PP **PP** **16 50 39.0 +3.5**
KSH pmax pmax
comp=Z,6.0nm,1.2s
**NIL Nilore 56.49 306** P **P** **16 48 30.0 -0.3**
**TDK Taldyorghan 56.96 321** eP **P** **16 48 31.8 -1.6**
comp=Z,7.1nm,0.6s,baz=321
**MDOK Medeo 57.03 318** eP **P** **16 48 31.7 -2.4**
baz=318
**AAA Alma-Ata 57.13 318** eP **P** **16 48 32.4 -2.4**
baz=318
**CHKK Chushkaly 57.36 319** eP **P** **16 48 33.9 -2.4**
baz=319
**KUU Kurty 57.80 319** eP **P** **16 48 36.9 -2.5**
comp=Z,26nm,1.1s,baz=319
**TKM2 Tokmak 2 57.90 317** P **P** **16 48 40.3 0.0**
SNR=5.1
**ZAA0 Zalesovo Array 58.29 332** P **P** **16 48 41.2 -1.3**
ZAA0 IAmb IAmb 16 48 42.5

comp=Z,14nm,0.9s
**ZALV Zalesovo Beam 58.29 332** P **P** **16 48 41.6 -1.0**
comp=Z,9.3nm,0.7s,baz=116,slow=6.8,SNR=41
ZALV PcP **PcP** **16 49 31.5 -1.2**
comp=Z,2.7nm,0.7s,baz=141,slow=5.0,SNR=3.7
ZALV LR LR 17 15 07.3
comp=Z,40nm,18.8s,baz=346,slow=37
**ZALV Zalesovo Beam 58.29 332** P **P** **16 48 40.6 -1.9**
ZALV PcP **PcP** **16 49 30.0 -2.7**
**UCH Uchtor 58.37 316** P **P** **16 48 44.3 +0.4**
SNR=14
**AAK Ala-Archa 58.53 317** P **P** **16 48 44.8 +0.1**
comp=Z,1.8nm,0.6s,baz=166,slow=9.0,SNR=10.0
AAK PcP **PcP** **16 49 34.3 +0.1**
comp=Z,1.9nm,0.7s,baz=154,slow=8.2,SNR=5.2
AAK LR LR 17 15 48.4
comp=Z,45nm,20.6s,baz=78,slow=38
**AAK Ala-Archa 58.53 317** P **P** **16 48 44.1 -0.6**
AAK PcP **PcP** **16 49 34.0 -0.3**
**SEM Semipalatinsk 58.55 327** eP **P** **16 48 42.2 -2.5**
baz=327
**SGDS Sogindy 58.76 318** eP **P** **16 48 43.4 -2.8**
baz=318
**USP Ospenovka 58.77 317** P **P** **16 48 46.0 -0.2**
SNR=7.4
**AML Almayashu 58.89 316** P **P** **16 48 47.8 +0.3**
SNR=11
**EKS2 Erkin-Say 59.03 316** P **P** **16 48 48.5 +0.4**
SNR=10
**SEY Seymchan 59.32 13** P **P** **16 48 50.8 +1.3**
comp=Z,4.2nm,0.9s,baz=215,slow=4.7,SNR=17
**KURK Kurchatov 59.60 327** P **P** **16 48 51.1 -0.5**
**KURBB Kurchatov Arra 59.60 326** P **P** **16 48 50.9 -0.8**
comp=Z,21nm,0.4s,baz=130,slow=5.1,SNR=4.8
**BTLS Baital 59.77 319** eP **P** **16 48 50.8 -2.2**
baz=319
**KBL Kabul 60.10 306** P **P** **16 48 55.0 -0.7**
**DZA Taraz 60.80 316** eP **P** **16 48 58.2 -1.8**
baz=316
**KKAR Karatay Array 61.44 316** P **P** **16 49 03.6 -0.8**
**BRLS Borolday 61.88 316** eP **P** **16 49 05.5 -1.8**
baz=315
**BRZS Berezniki 62.63 324** eP **P** **16 49 10.5 -1.7**
comp=Z,4.2nm,0.9s,baz=324
**TIXI Tiksi 65.12 1** P **P** **16 49 27.2 -0.9**
TIXI IAmb IAmb 16 49 28.1
comp=Z,6.4nm,0.7s
**BRVK Borovoye 65.26 326** P **P** **16 49 29.1 -0.3**
**HRA Herat 65.57 305** P **P** **16 49 30.6 -1.4**
HRA IAmb IAmb 16 49 32.4
comp=Z,8.9nm,0.6s
**MCQ Macquarie Isla 66.37 160** P **P** **16 49 37.8 +1.4**
**BILL Bilibino 66.86 15** P **P** **16 49 39.4 0.0**
**WSAR Wadi Sarin 67.60 292** LR LR 17 24 11.5
comp=Z,31nm,18.2s,baz=114,slow=40
**NRIK Noril'sk 67.85 346** P **P** **16 49 45.0 -0.6**
comp=Z,6.5nm,0.6s,baz=122,slow=6.7,SNR=16
**NRIK Noril'sk 67.85 346** P **P** **16 49 44.6 -1.0**
NRIK IAmb IAmb 16 49 45.8
comp=Z,6.8nm,0.7s
**UOSS Minazif 69.89 294** P **P** **16 49 58.2 -0.9**
UOSS IAmb IAmb 16 50 13.1
comp=Z,14nm,1.1s
**ABKAR Akbulak array 70.22 320** P **P** **16 49 60.0 -0.6**
**UNV Unalaska Valle 71.04 35** P **P** **16 50 06.2 +0.7**
**AKUT Akutan 71.54 35** P **P** **16 50 09.2 +0.7**
**AKTO Aktyubinsk 71.69 321** LR LR 17 22 34.5
comp=Z,75nm,18.3s,baz=243,slow=36
**ARU Arti 72.78 327** LR LR 17 22 35.2
comp=Z,96nm,18.5s,baz=325,slow=36
**ARU Arti 72.78 327** P **P** **16 50 14.9 -0.9**
**CASY Casey 73.55 187** P **P** **16 50 21.3 +1.3**
CASY IAmb IAmb 16 50 42.8
comp=Z,32nm,1.4s
**O18K Koktuh Hills 78.31 30** P **P** **16 50 47.5 +0.1**
**TTA Tatalina 78.36 27** P **P** **16 50 48.9 +1.2**
**L19K White Mountain 78.78 28** P **P** **16 50 50.7 +0.7**
L19K IAmb IAmb 16 50 53.3
comp=Z,44nm,1.7s
**N19K Bonanza Creek 78.79 29** P **P** **16 50 51.7 +1.5**
N19K IAmb IAmb 16 51 02.0
comp=Z,40nm,1.6s
**M19K Big River Lodg 78.97 28** P **P** **16 50 52.6 +1.7**
M19K IAmb IAmb 16 51 22.8
comp=Z,34nm,1.6s
**OHAK Old Harbor 79.03 33** P **P** **16 50 51.3 0.0**
**K20K Telida 79.29 27** P **P** **16 50 54.6 +1.8**
**J20K Nowinta River 79.36 26** P **P** **16 50 54.0 +0.9**
J20K IAmb IAmb 16 50 56.3
comp=Z,17nm,1.6s
**KDAK Kodiak Island 79.45 33** LR LR 17 20 57.5
comp=Z,34nm,21.8s,baz=218,slow=32
**KDAK Kodiak Island 79.45 33** P **P** **16 50 54.7 +1.1**
**RAYN Ar Rayn 79.66 293** P **P** **16 50 55.3 -0.3**
RAYN IAmb IAmb 16 50 56.0
comp=Z,9.9nm,0.9s
**IMAR Indian Mountai 79.75 24** P **P** **16 50 56.2 +1.0**
**PPLA Purkeypile 80.09 27** P **P** **16 50 57.1 -0.2**
PPLA IAmb IAmb 16 51 10.3
comp=Z,37nm,1.6s
**H21K Melozitna Rive 80.10 24** P **P** **16 50 57.8 +0.7**
**CAST Castle Rocks 80.19 27** P **P** **16 50 57.6 0.0**
**CNPM China Poot 80.29 31** P **P** **16 50 59.0 +0.8**
**I21K Tanana 80.39 25** P **P** **16 50 59.1 +0.5**
I21K IAmb IAmb 16 51 01.1
comp=Z,11nm,1.1s
**BRLK Bradley Lake 80.48 31** P **P** **16 50 58.0 -1.2**
**ONI Oni 80.90 312** P **P** **16 51 02.3 +0.4**
ONI IAmb IAmb 16 51 20.6
comp=Z,18nm,1.5s
**MLY Manley 80.91 25** P **P** **16 51 02.5 +1.0**
**M22K Willow 80.97 29** P **P** **16 51 02.3 +0.6**
**TRF Thorofare Moun 80.99 27** P **P** **16 51 01.0 -1.1**
TRF IAmb IAmb 16 51 03.9
comp=Z,13nm,1.1s
**RC01 Rabbit Creek A 81.12 29** P **P** **16 51 02.3 -0.2**
RC01 IAmb IAmb 16 51 25.5
comp=Z,37nm,1.6s
**GEVA Gevas 81.27 308** P **P** **16 51 04.2 +0.1**
GEVA IAmb IAmb 16 51 08.0
comp=Z,9.9nm,0.8s
**COLD Coldfoot 81.29 23** P **P** **16 51 04.6 +1.2**
**KBZ Khabaz 81.30 313** P **P** **16 51 03.7 -0.2**
comp=Z,4.5nm,1.0s,baz=136,slow=16,SNR=4.6
**KIV Kislovodsk 81.45 313** P **P** **16 51 04.0 -0.9**
**I23K Minto, Yukon-K 81.50 25** P **P** **16 51 05.8 +1.3**
**NEA2 Nenana 81.59 26** P **P** **16 51 05.1 0.0**
NEA2 IAmb IAmb 16 51 07.6
comp=Z,12nm,1.0s
**MCK McKinley 81.61 27** P **P** **16 51 05.3 +0.1**
MCK IAmb IAmb 16 51 07.0
comp=Z,16nm,1.0s
**TOLK Toolik Lake Re 81.62 22** P **P** **16 51 06.0 +0.9**
**RND Reindeer 81.64 27** P **P** **16 51 05.3 -0.1**
RND IAmb IAmb 16 51 07.1
comp=Z,26nm,1.6s
**SIRT Sirnak 81.78 307** P **P** **16 51 05.0 -1.7**
**PWL Port Wells 81.80 29** P **P** **16 51 06.9 +0.7**
PWL IAmb IAmb 16 51 07.8
comp=Z,18nm,0.9s
**SML Sawmill 81.82 29** P **P** **16 51 07.4 +1.0**
**MDM Murphy Dome 81.97 25** P **P** **16 51 05.6 -1.4**
MDM IAmb IAmb 16 51 09.4
comp=Z,21nm,1.6s
**WRH Wood River Hil 82.01 26** P **P** **16 51 06.4 -0.8**
WRH IAmb IAmb 16 51 27.4
comp=Z,14nm,1.4s
**GURO Guroymak-BITLI 82.07 308** P **P** **16 51 06.5 -1.7**
GURO IAmb IAmb 16 51 11.5
comp=Z,14nm,0.9s
**CCB Clear Creek Bu 82.14 26** P **P** **16 51 07.5 -0.3**
**H24K Noodor Dome 82.14 24** P **P** **16 51 08.9 +1.0**
H24K IAmb IAmb 16 51 11.0
comp=Z,15nm,1.2s
**HDA Harding Lake 82.51 26** P **P** **16 51 09.4 -0.4**
**IL31 82.54 26** P **P** **16 51 09.4 -0.4**
**ILAR Eielson Array 82.54 26** P **P** **16 51 09.4 -0.6**
comp=Z,1.8nm,0.6s,baz=242,slow=5.1,SNR=10
**ILAR Eielson Array 82.54 26** P **P** **16 51 08.6 -1.4**
**KLU Klutina 82.97 29** P **P** **16 51 13.5 +1.2**
KLU IAmb IAmb 16 51 38.6
comp=Z,36nm,1.8s
**DIV Divide 83.05 29** P **P** **16 51 12.4 -0.4**
DIV IAmb IAmb 16 51 15.6
comp=Z,21nm,1.2s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MARD** | **Mardin** | **83.11** | **307** | P | **P** | **16 51 13.4** | **-0.3** |
| MARD | | | | IAmb | IAmb | 16 51 14.7 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **KLMR** | **Klimovskoe** | **83.16** | **330** | *e*P | **P** | **16 51 11.9** | **-1.3** |
| KLMR | | | | AMP | | 16 51 13.2 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **PAX** | **Paxson** | **83.17** | **27** | P | **P** | **16 51 13.5** | **+0.2** |
| **VOI** | **Vohitsoka** | **83.36** | **247** | P | **P** | **16 51 14.4** | **-0.7** |
| VOI | | | | IAmb | IAmb | 16 51 15.9 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **RIDG** | **Independent Ri** | **83.43** | **27** | P | **P** | **16 51 14.2** | **-0.5** |
| **BMAR** | **Burnt Mountain** | **83.47** | **23** | P | **P** | **16 51 14.8** | **0.0** |
| **RAGM** | **Ragged Mountai** | **83.60** | **30** | P | **P** | **16 51 16.3** | **+0.8** |
| **N25K** | **Chitina, Valde** | **83.60** | **29** | P | **P** | **16 51 16.4** | **+0.7** |
| N25K | | | | IAmb | IAmb | 16 51 18.7 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **BMRM** | **Bremner River** | **83.62** | **29** | P | **P** | **16 51 16.7** | **+1.0** |
| BMRM | | | | IAmb | IAmb | 16 51 17.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KAIM** | **Kayak Island** | **83.75** | **30** | P | **P** | **16 51 16.1** | **-0.2** |
| **DOT** | **Dot Lake** | **83.78** | **27** | P | **P** | **16 51 16.1** | **-0.3** |
| DOT | | | | IAmb | IAmb | 16 51 18.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **HMT** | **Hamilton** | **83.81** | **30** | P | **P** | **16 51 17.0** | **+0.4** |
| **MENT** | **Mentasta** | **83.97** | **27** | P | **P** | **16 51 18.2** | **+0.8** |
| MENT | | | | IAmb | IAmb | 16 51 19.5 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.98** | **29** | P | **P** | **16 51 17.5** | **-0.1** |
| GLB | | | | IAmb | IAmb | 16 51 19.7 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **L26K** | **Log Cabin Wild** | **84.13** | **27** | P | **P** | **16 51 19.1** | **+0.8** |
| **VRDI** | **Verde Repeater** | **84.17** | **29** | P | **P** | **16 51 19.1** | **+0.4** |
| VRDI | | | | IAmb | IAmb | 16 51 21.2 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **M26K** | **Nabesna, AK** | **84.32** | **28** | P | **P** | **16 51 19.9** | **+0.6** |
| **WAX** | **Waxell Ridge** | **84.50** | **30** | P | **P** | **16 51 21.1** | **+0.9** |
| WAX | | | | IAmb | IAmb | 16 51 22.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SNH** | **Sunshine Point** | **84.53** | **30** | P | **P** | **16 51 19.6** | **-0.6** |
| **ISLE** | **Juniper Island** | **84.75** | **30** | P | **P** | **16 51 21.2** | **-0.3** |
| ISLE | | | | IAmb | IAmb | 16 51 53.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **L27K** | **Beaver Creek,** | **84.82** | **27** | P | **P** | **16 51 22.2** | **+0.5** |
| L27K | | | | IAmb | IAmb | 16 51 24.9 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **BCAR** | **Beaver Creek A** | **84.84** | **27** | P | **P** | **16 51 22.2** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **84.85** | **28** | P | **P** | **16 51 22.5** | **+0.5** |
| M27K | | | | IAmb | IAmb | 16 51 57.6 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **OBN** | **Obninsk** | **84.98** | **325** | P | **P** | **16 51 21.6** | **-0.9** |
| **EGAK** | **Eagle** | **84.99** | **25** | P | **P** | **16 51 22.2** | **-0.2** |
| **BARN** | **Barnard Glacie** | **85.05** | **29** | P | **P** | **16 51 23.1** | **0.0** |
| BARN | | | | IAmb | IAmb | 16 51 25.8 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **YAH** | **Yahtse** | **85.06** | **30** | P | **P** | **16 51 23.8** | **+0.7** |
| YAH | | | | IAmb | IAmb | 16 51 26.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **TABL** | **Table Mountain** | **85.35** | **30** | P | **P** | **16 51 25.2** | **+0.6** |
| TABL | | | | IAmb | IAmb | 16 51 27.3 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **BNN** | **Bunyan** | **86.88** | **309** | P | **P** | **16 51 31.5** | **-1.0** |
| **GHAJ** | **Ghor Haditha** | **87.89** | **301** | P | **P** | **16 51 36.6** | **-0.8** |
| GHAJ | | | | IAmb | IAmb | 16 51 38.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.98** | **340** | P | **P** | **16 51 35.8** | **-1.2** |
| | comp=Z,2.5nm,0.5s,baz=84,slow=5.7,SNR=19 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.98** | **340** | IAmb | IAmb | 16 51 47.2 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **BR131** | **Keskin Array S** | **88.48** | **310** | P | **P** | **16 51 38.6** | **-1.6** |
| BR131 | | | | IAmb | IAmb | 16 51 40.9 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **88.48** | **310** | P | **P** | **16 51 39.3** | **-0.9** |
| | comp=Z,4.2nm,0.9s,baz=115,slow=5.0,SNR=15 | | | | | | |
| **BRTR** | **Keskin Array B** | **88.48** | **310** | P | **P** | **16 51 38.6** | **-1.6** |
| **CSS** | **Mathiatis** | **89.32** | **305** | P | **P** | **16 51 43.3** | **-0.8** |
| **FINES** | **FINESS Array B** | **89.56** | **332** | P | **P** | **16 51 43.3** | **-1.2** |
| | comp=Z,3.0nm,0.8s,baz=83,slow=5.2,SNR=12 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.86** | **269** | P | **P** | **16 51 46.9** | **-0.4** |
| | comp=Z,1.4nm,0.6s,baz=41,slow=13,SNR=3.5 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.86** | **269** | IAmb | IAmb | 16 51 48.3 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **89.94** | **321** | P | **P** | **16 51 45.1** | **-1.4** |
| | comp=Z,4.5nm,0.7s,baz=69,slow=4.6,SNR=24 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **93.14** | **318** | P | **P** | **16 52 00.1** | **-1.5** |
| **CRVS** | **Cervenica-Dubn** | **95.25** | **320** | *e*PDIFF | **P** | **16 52 11.8** | **+0.7** |
| **NB2** | **NORSAR Subarra** | **96.46** | **334** | P | **P** | **16 52 14.3** | **-2.1** |
| | comp=Z,6.0nm,1.1s,baz=67,slow=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **96.46** | **334** | P | **P** | **16 52 14.4** | **-2.0** |
| | comp=Z,0.8nm,0.9s,baz=110,slow=4.1,SNR=3.0 | | | | | | |
| NOA | | | | LR | LR | 17 43 18.1 | |
| | comp=Z,41nm,18.3s,baz=85,slow=40 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.91** | **24** | P | **P** | **16 52 18.2** | **-0.2** |
| | comp=Z,1.5nm,1.0s,baz=299,slow=4.6,SNR=11 | | | | | | |
| **GERES** | **GERESS Array B** | **100.11** | **322** | P | **Pdif** | **16 52 32.9** | **-0.2** |
| | comp=Z,0.9nm,0.7s,baz=76,slow=5.6,SNR=7.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **119.71** | **51** | PKP | **PKiKP** | **16 57 38.9** | **+1.0** |
| | comp=Z,0.1nm,0.6s,baz=230,slow=1.0,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.27** | **290** | PKP | **PKPdf** | **16 57 42.7** | **-0.1** |
| | comp=Z,1.8nm,0.7s,baz=32,slow=2.0,SNR=11 | | | | | | |
| **DBIC** | **Dimbokro** | **130.21** | **284** | PKP | **PKPdf** | **16 57 57.0** | **-1.1** |
| | comp=Z,1.4nm,0.6s,baz=53,slow=5.1,SNR=3.6 | | | | | | |

*TEH **18** 16:42:22.7,28°.86N×57°.41E,h8km,ML3.4*
*OMAN **18** 16:42:28.7±0.1,28°.74N×57°.37E,h36km±18km,mb4.6/3, ml3.4/8,Error ellipse: s-maj=3.5km s-min=2.6km az=345.0*

**ISC 18 16:42:24.0±0.8,28°.84N±0°.03×57°.43E±0°.04,h10km,n42, σ1s31/55,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KHNJ** | **Kahnooj** | **0.92** | **165** | *e*Pg | | **Pg** | **16 42 41.1** | **-0.6** |
| **KBAM** | **BAM** | **0.94** | **71** | *e*Pg | | **Pg** | **16 42 42.0** | **-0.2** |
| KBAM | | | | *e*Sg | | **Sg** | **16 42 54.5** | **0.0** |
| KBAM | | | | *e* | | | 16 42 55.9 | |
| | comp=Z,21μm,0.2s | | | | | | | |
| **NGRK** | **Negar Kerman** | **1.01** | **323** | *e*Pg | | **Pg** | **16 42 42.3** | **-1.2** |
| NGRK | | | | *e*Sg | | **Sg** | **16 42 56.1** | **-0.6** |
| NGRK | | | | *e* | | | 16 42 57.0 | |
| | comp=Z,38μm,0.2s | | | | | | | |
| **CHMN** | **Cheshme madani** | **1.02** | **5** | *e*Pg | | **Pg** | **16 42 43.0** | **-0.8** |
| CHMN | | | | *e*Sg | | **Sg** | **16 42 57.0** | **-0.1** |
| CHMN | | | | *e* | | | 16 42 57.5 | |
| | comp=Z,14μm,0.2s | | | | | | | |
| **KRBR** | **Kerman** | **1.28** | **333** | *e*Pg | | **Pn** | **16 42 47.4** | **-0.9** |
| **TVBK** | **TV Kerman** | **1.29** | **333** | *e*Pg | | **Pn** | **16 42 47.5** | **-0.8** |
| TVBK | | | | *e*Sg | | **Sg** | **16 43 04.8** | **-0.7** |
| **KHGB** | **Koh Gabri** | **1.74** | **332** | *e*Pg | | **Pn** | **16 42 54.9** | **+0.4** |
| KHGB | | | | *e* | | | 16 43 19.8 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| **GENO** | **Geno** | **1.81** | **218** | *e*Pg | | **Pb** | **16 42 56.5** | **-0.9** |
| GENO | | | | *e* | | | 16 43 27.3 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| **SHME** | **Shamm** | **3.00** | **203** | P | | **Pn** | **16 43 12.4** | **+0.7** |
| | SNR=14 | | | | | | | |
| SHME | | | | S | | **Sn** | **16 43 47.0** | **-0.7** |
| **ZHDN** | **Zahedan** | **3.01** | **78** | *e*Pn | | **Pn** | **16 43 12.9** | **+1.0** |
| ZHDN | | | | *e* | | | 16 43 13.2 | |
| | comp=Z,608nm,0.3s | | | | | | | |
| **ZHSF** | **Zahedan** | **3.02** | **74** | *e*Pn | | **Pn** | **16 43 13.1** | **+1.0** |
| **BANOM** | **Banah** | **3.07** | **199** | P | | **Pn** | **16 43 13.2** | **+0.6** |
| | SNR=29 | | | | | | | |
| BANOM | | | | S | | **Sn** | **16 43 48.4** | **-1.1** |
| **IBAF** | **Bafgh** | **3.18** | **330** | *e* | | Sg | 16 44 16.9 | +11 |
| | comp=Z,597nm,0.6s | | | | | | | |
| **NHDN** | **Nehbandan** | **3.41** | **41** | *e*Pn | | **Pn** | **16 43 18.2** | **+0.8** |
| NHDN | | | | *e* | | | 16 44 22.4 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **IMEH** | **Mehriz** | **3.53** | **317** | *e* | | **Sg** | **16 44 21.6** | **+4.3** |
| | comp=Z,406nm,0.5s | | | | | | | |
| **MASF** | **Masafi** | **3.63** | **198** | P | | **Pn** | **16 43 22.3** | **+1.9** |
| MASF | | | | S | | **Sn** | **16 44 03.4** | **+0.1** |
| **IKOO** | **Kooshah** | **3.82** | **20** | *e*Pn | | **Pn** | **16 43 23.5** | **+0.3** |
| IKOO | | | | *e* | | | 16 43 40.0 | |
| | comp=Z,434nm,0.3s | | | | | | | |
| **GHIR** | **Ghir-Karzin** | **3.95** | **263** | *e*Pn | | **Pn** | **16 43 27.1** | **+2.4** |
| **UOSS** | **Minazif** | **4.03** | **196** | P | | **Pn** | **16 43 28.6** | **+2.9** |
| UOSS | | | | S | | **Sn** | **16 44 11.5** | **-1.5** |
| **NAZ** | **Nazwa, Dubai** | **4.15** | **203** | P | | **Pn** | **16 43 28.7** | **+1.3** |
| NAZ | | | | S | | **Sn** | **16 44 14.6** | **-1.3** |
| **TPRV** | **Parvadeh(Tabas** | **4.23** | **351** | *e*Pn | | **Pn** | **16 43 29.6** | **+1.0** |
| **YZKH** | **Yazd** | **4.30** | **326** | *e*Pn | | **Pn** | **16 43 31.5** | **+1.9** |
| **ASHO** | **Ashiyiah** | **4.31** | **197** | P | | **Pn** | **16 43 30.4** | **+0.6** |
| **FAQ** | **Al Faqa, Dubai** | **4.39** | **202** | P | | **Pn** | **16 43 31.8** | **+1.0** |
| FAQ | | | | S | | **Sn** | **16 44 21.5** | **-0.5** |
| **ISAD** | **Sadrabad** | **4.46** | **314** | *e*Pn | | **Pn** | **16 43 33.0** | **+1.1** |
| **ASUD** | **Al Ashush, Dub** | **4.60** | **205** | P | | **Pn** | **16 43 35.0** | **+1.5** |
| | SNR=7.2 | | | | | | | |
| ASUD | | | | S | | **Sn** | **16 44 25.3** | **-1.7** |
| **SRVN** | **Saravan** | **4.61** | **107** | *e*Pn | | **Pn** | **16 43 36.5** | **+2.6** |
| **IMON** | **Monand** | **4.75** | **23** | *e*Pn | | **Pn** | **16 43 37.0** | **+1.2** |
| **AFRZ** | **Afriz** | **4.77** | **16** | *e*Pn | | **Pn** | **16 43 36.7** | **+0.6** |
| **TABS** | **Tabas** | **4.80** | **357** | *e*Pn | | **Pn** | **16 43 38.1** | **+1.6** |
| **HOQ** | **Hoqain** | **5.23** | **181** | P | | **Pn** | **16 43 42.0** | **-0.4** |
| | SNR=9.3 | | | | | | | |
| **ARQ** | **Araqi** | **5.54** | **189** | P | | **Pn** | **16 43 48.3** | **+1.8** |
| ARQ | | | | S | | **Sn** | **16 44 50.2** | **-0.1** |
| **SMDO** | **Samad** | **5.78** | **174** | P | | **Pn** | **16 43 50.8** | **+0.9** |
| SMDO | | | | S | | **Sn** | **16 44 55.3** | **-1.1** |
| **BSY** | **Bisya** | **6.07** | **182** | P | | **Pn** | **16 43 56.1** | **+2.3** |
| BSY | | | | S | | **Sn** | **16 45 02.7** | **-0.8** |
| **WBK** | **Wadi Bani Khal** | **6.35** | **167** | P | | **Pn** | **16 43 58.0** | **+0.2** |
| | SNR=13 | | | | | | | |
| **JMDO** | **Jabal Madar** | **6.47** | **174** | P | | **Pn** | **16 44 00.4** | **+1.1** |
| **SHMA** | **Al-Shehemyia** | **6.47** | **244** | P | | **Pn** | **16 43 59.9** | **+0.6** |
| **SAKB** | **Bahrain** | **6.76** | **247** | P | | **Pn** | **16 44 03.2** | **-0.1** |
| **MZR** | **Muzera** | **6.81** | **212** | P | | **Pn** | **16 44 04.5** | **+0.4** |
| **JLN** | **Jalan Bani Buh** | **6.89** | **165** | P | | **Pn** | **16 44 05.0** | **-0.1** |
| **TRNA** | **Turayna** | **6.90** | **235** | P | | **Pn** | **16 44 04.6** | **-0.5** |
| **MHTO** | **MHTO** | **7.83** | **176** | P | | **Pn** | **16 44 18.1** | **+0.1** |

*IDC **18** 16:54:08.7±1.4,3°.06S×139°.48E,h0km,mb3.2/3, mb1 3.5/4,mb1mx3.0/31,mbtmp3.3/4,ML3.2/1,Error ellipse: s-maj=40.4km s-min=22.7km az=132.0*
*DJA **18** 16:54:13.5±0.6,3°.5S±8°×14°.0E±°,h47km±17km,M3.6/3, MLv3.6/3*

**ISC 18 16:54:13.1±0.9,3°.4S±0°.1×139°.8E±0°.1,h50km,n8, σ2s78/12,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **0.87** | **22** | P | | **Pn** | **16 54 28.3** | **-0.9** |
| GENI | | | | S | | **Sn** | **16 54 40.1** | **-0.8** |
| **WAMI** | **Wamena** | **1.22** | **247** | P | | **Pn** | **16 54 33.5** | **-0.4** |
| WAMI | | | | S | | **Sn** | **16 54 49.0** | **-0.3** |
| **JAY** | **Jayapura** | **1.24** | **44** | Pg | | **Pn** | **16 54 33.9** | **-0.2** |
| | 13nm,0.3s,baz=214,slow=11,SNR=75 | | | | | | | |
| JAY | | | | Lg | | Lg | 16 54 50.1 | |
| | 40nm,0.3s,baz=143,slow=20,SNR=12 | | | | | | | |
| **JAY** | **Jayapura** | **1.24** | **44** | P | | **Pn** | **16 54 33.8** | **-0.3** |
| JAY | | | | S | | **Sn** | **16 54 49.3** | **-0.4** |
| **WRA** | **Warramunga Arr** | **17.29** | **198** | P | | **P** | **16 58 14.1** | **+2.1** |
| | 0.1nm,0.3s,baz=20,slow=12,SNR=1.8 | | | | | | | |
| WRA | | | | S | | **Sn** | **17 01 16.2** | **-6.5** |
| | 0.1nm,0.3s,baz=17,slow=23,SNR=1.2 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.17** | **223** | P | | **P** | **16 58 44.8** | **+1.3** |
| | 0.8nm,0.8s,baz=34,slow=11,SNR=1.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.94** | **195** | P | | **P** | **16 58 56.2** | **+4.3** |
| | 0.6nm,0.8s,baz=24,slow=9.9,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **71.03** | **322** | P | | **P** | **17 05 25.6** | **-0.3** |
| | 0.2nm,0.5s,baz=110,slow=7.2,SNR=2.8 | | | | | | | |

**IDC 18 17:10:50.2±19.0,4°.53S×151°.12E,h390km±166km, mb2.5/4,mb1 2.6/4,mb1mx2.2/43,mbtmp3.2/4,Error ellipse: s-maj=198.6km s-min=41.2km az=92.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.40** | **225** | P | | P | 17 15 17.9 | +0.6 |
| | 0.2nm,0.3s,baz=49,slow=9.9,SNR=6.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.25** | **219** | P | | P | 17 15 42.2 | -0.7 |
| | 0.1nm,0.6s,baz=52,slow=8.4,SNR=4.2 | | | | | | | |
| **SONM** | **Songino Array** | **65.21** | **329** | P | | P | 17 20 51.0 | -0.4 |
| | 0.2nm,0.4s,baz=142,slow=5.4,SNR=4.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **79.02** | **319** | P | | P | 17 22 12.9 | +0.7 |
| | 0.2nm,0.6s,baz=101,slow=6.0,SNR=5.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.63** | **288** | PKPbc | | PKPbc | 17 29 51.9 | -1.1 |
| | 0.4nm,0.5s,baz=64,slow=3.4,SNR=2.4 | | | | | | | |

**TAP 18 17:16:53.5,23°.06N×120°.85E,h6km,ML1.1,2C,C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.13** | **329** | P | | Pg | 17 16 57.3 | +0.9 |
| | baz=332 | | | | | | | |
| STYH | | | | S | | Sg | 17 16 59.3 | +1.0 |
| | baz=332 | | | | | | | |
| **STYT** | **Tauyuan** | **0.14** | **321** | *i* P | | Pg | 17 16 57.2 | +0.8 |
| | baz=323 | | | | | | | |
| STYT | | | | S | | Sg | 17 16 59.8 | +1.4 |
| | baz=323 | | | | | | | |
| **SLGT** | **Liugui** | **0.20** | **252** | ⇑P | | Pg | 17 16 58.0 | +0.6 |
| | baz=252 | | | | | | | |
| SLGT | | | | *e*S | | Sg | 17 17 01.4 | +1.2 |
| | baz=252 | | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **49** | ⇑*i* P | | Pg | 17 16 58.8 | +1.2 |
| | baz=50 | | | | | | | |
| ELDTW | | | | *i* S | | Sg | 17 17 02.0 | +1.6 |
| | baz=50 | | | | | | | |
| **SGST** | **Jiashian** | **0.25** | **276** | *i* P | | Pg | 17 16 59.3 | +0.9 |
| | baz=276 | | | | | | | |
| **WTP** | **Ta-pu** | **0.29** | **311** | *i* P | | Pb | 17 17 00.8 | -0.4 |
| | baz=311 | | | | | | | |
| **LONT** | **Longtian** | **0.30** | **120** | *e*P | | Pb | 17 17 01.3 | 0.0 |
| | baz=119 | | | | | | | |
| LONT | | | | *e*S | | Sb | 17 17 05.9 | -0.5 |
| | baz=119 | | | | | | | |
| **TWG** | **Pinlang** | **0.31** | **139** | P | | Pb | 17 17 01.1 | -0.4 |
| | baz=138 | | | | | | | |
| **TWGBT** | **Beinan** | **0.32** | **138** | *e*P | | Pb | 17 17 00.8 | -0.8 |
| | baz=138 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.32** | **320** | P | | Pb | 17 17 01.4 | -0.3 |
| | baz=320 | | | | | | | |
| **CHN1** | **Nanshi** | **0.32** | **294** | P | | Pb | 17 17 01.3 | -0.4 |
| | baz=293 | | | | | | | |
| CHN1 | | | | S | | Sb | 17 17 07.1 | -0.1 |
| | baz=293 | | | | | | | |
| **ECS** | **Chishang** | **0.34** | **83** | *e*P | | Pb | 17 17 01.6 | -0.5 |
| | baz=83 | | | | | | | |
| ECS | | | | *e*S | | Sb | 17 17 07.5 | -0.2 |
| | baz=83 | | | | | | | |
| **SSD** | **Sandimen** | **0.37** | **213** | *i* P | | Pb | 17 17 02.4 | -0.1 |
| | baz=212 | | | | | | | |
| **SCST** | **Cishan** | **0.37** | **243** | *e*P | | Pb | 17 17 02.5 | 0.0 |
| | baz=242 | | | | | | | |
| SCST | | | | *e*S | | Sb | 17 17 08.5 | 0.0 |
| | baz=242 | | | | | | | |
| **TWK** | **Hsinying** | **0.39** | **302** | *i* P | | Pb | 17 17 03.3 | +0.3 |
| | baz=302 | | | | | | | |
| TWK | | | | S | | Sb | 17 17 08.7 | -0.6 |
| | baz=302 | | | | | | | |
| **TSMG** | **Majia** | **0.40** | **209** | *e*P | | Pb | 17 17 02.6 | -0.4 |
| | baz=208 | | | | | | | |
| **TTN** | **Taitung** | **0.41** | **138** | P | | Pg | 17 17 01.9 | +0.5 |
| | baz=136 | | | | | | | |
| TTN | | | | *e*S | | Sb | 17 17 09.2 | -0.3 |
| | baz=136 | | | | | | | |
| **FULB** | **Fuli** | **0.43** | **71** | P | | Pb | 17 17 04.0 | +0.4 |
| | baz=70 | | | | | | | |
| FULB | | | | S | | Sb | 17 17 10.3 | -0.1 |
| | baz=70 | | | | | | | |
| **ALS** | **Alishan** | **0.46** | **355** | *i* P | | Pb | 17 17 03.5 | -0.7 |
| | baz=355 | | | | | | | |
| ALS | | | | *i* S | | Sb | 17 17 10.6 | -0.7 |
| | baz=355 | | | | | | | |
| **SHHT** | **Tainan City** | **0.46** | **266** | *e*P | | Pb | 17 17 03.5 | -0.6 |
| | baz=265 | | | | | | | |
| SHHT | | | | *e*S | | Sb | 17 17 11.0 | -0.2 |
| | baz=265 | | | | | | | |
| **SGLT** | **Jiouru** | **0.47** | **225** | *e*P | | Pb | 17 17 04.0 | -0.1 |
| | baz=224 | | | | | | | |
| SGLT | | | | S | | Sb | 17 17 11.3 | +0.1 |
| | baz=224 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.48** | **204** | P | | Pb | 17 17 04.1 | -0.3 |
| | baz=204 | | | | | | | |
| MASBT | | | | *e*S | | Sb | 17 17 12.0 | +0.2 |
| | baz=204 | | | | | | | |
| **TWF1** | **Yuli** | **0.51** | **54** | *e*P | | Pb | 17 17 04.5 | -0.3 |
| | baz=54 | | | | | | | |
| **EYUL** | **Yuli** | **0.52** | **56** | *e*P | | Pb | 17 17 04.7 | -0.4 |
| | baz=55 | | | | | | | |
| EYUL | | | | *e*S | | Sb | 17 17 12.8 | 0.0 |
| | baz=55 | | | | | | | |
| **SSHA** | **Shanhua** | **0.52** | **279** | *e*P | | Pb | 17 17 04.7 | -0.5 |
| | baz=278 | | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **51** | P | | Pb | 17 17 04.8 | -0.4 |
| | baz=50 | | | | | | | |
| YULB | | | | *e*S | | Sb | 17 17 13.1 | -0.1 |
| | baz=50 | | | | | | | |
| **CHN5** | **Tsauling** | **0.56** | **344** | *e*P | | Pb | 17 17 06.2 | +0.3 |
| | baz=343 | | | | | | | |
| CHN5 | | | | *e*S | | Sb | 17 17 14.6 | +0.4 |
| | baz=343 | | | | | | | |

**TAP 18 17:16:58.4,23°.07N×120°.84E,h5km,ML1.1,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.12** | **329** | *e*P | | Pg | 17 17 01.5 | +0.6 |
| | baz=333 | | | | | | | |
| STYH | | | | S | | Sg | 17 17 04.4 | +1.8 |
| | baz=333 | | | | | | | |
| **STYT** | **Tauyuan** | **0.12** | **320** | *i* P | | Pg | 17 17 01.9 | +0.9 |
| | baz=322 | | | | | | | |
| STYT | | | | *i* S | | Sg | 17 17 04.0 | +1.2 |
| | baz=322 | | | | | | | |
| **SLGT** | **Liugui** | **0.20** | **248** | P | | Pg | 17 17 03.1 | +0.8 |
| | baz=248 | | | | | | | |
| **ELDTW** | **Lidau** | **0.20** | **52** | P | | Pg | 17 17 03.6 | +1.3 |
| | baz=54 | | | | | | | |
| ELDTW | | | | *i* S | | Sg | 17 17 06.3 | +1.2 |
| | baz=54 | | | | | | | |
| **SGST** | **Jiashian** | **0.24** | **274** | P | | Pg | 17 17 03.6 | +0.6 |
| | baz=273 | | | | | | | |
| SGST | | | | S | | Sg | 17 17 08.1 | +1.8 |
| | baz=273 | | | | | | | |
| **SGST** | **Jiashian** | **0.24** | **274** | *i* S | | Pg | 17 17 03.4 | +0.3 |
| | baz=276 | | | | | | | |
| **WTP** | **Ta-pu** | **0.28** | **310** | P | | Pb | 17 17 05.1 | -0.8 |
| | baz=311 | | | | | | | |
| WTP | | | | S | | Sb | 17 17 09.4 | -1.4 |
| | baz=311 | | | | | | | |
| **WTP** | **Ta-pu** | **0.28** | **310** | *i* S | | Pg | 17 17 05.0 | +1.2 |
| | baz=311 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.31** | **320** | *e*P | | Pb | 17 17 05.7 | -0.6 |
| | baz=319 | | | | | | | |
| TPUB | | | | *e*S | | Sb | 17 17 11.0 | -0.7 |
| | baz=319 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.31** | **320** | S | | Pg | 17 17 06.0 | +1.7 |
| | baz=320 | | | | | | | |
| **LONT** | **Longtian** | **0.31** | **121** | *e*P | | Pb | 17 17 05.4 | -1.0 |
| | baz=120 | | | | | | | |
| LONT | | | | *e*S | | Sb | 17 17 11.1 | -0.6 |
| | baz=120 | | | | | | | |
| **CHN1** | **Nanshi** | **0.31** | **292** | P | | Pb | 17 17 05.7 | -0.7 |
| | baz=292 | | | | | | | |
| CHN1 | | | | S | | Sb | 17 17 11.2 | -0.7 |
| | baz=292 | | | | | | | |
| **TWG** | **Pinlang** | **0.32** | **139** | *e*P | | Pb | 17 17 06.2 | -0.4 |
| | baz=138 | | | | | | | |
| TWG | | | | S | | Sb | 17 17 11.6 | -0.5 |
| | baz=138 | | | | | | | |
| **TWG** | **Pinlang** | **0.32** | **139** | S | | Pg | 17 17 06.4 | +1.8 |
| | baz=138 | | | | | | | |
| **TWGBT** | **Beinan** | **0.33** | **139** | *e*P | | Pb | 17 17 06.3 | -0.4 |
| | baz=138 | | | | | | | |
| TWGBT | | | | *e*S | | Sb | 17 17 11.7 | -0.6 |
| | baz=138 | | | | | | | |
| **TWGBT** | **Beinan** | **0.33** | **139** | *e*S | | Pg | 17 17 06.2 | +1.4 |
| | baz=138 | | | | | | | |
| **SSD** | **Sandimen** | **0.37** | **212** | *e*P | | Pb | 17 17 06.9 | -0.5 |
| | baz=210 | | | | | | | |
| SSD | | | | *e*S | | Sb | 17 17 13.2 | -0.4 |
| | baz=210 | | | | | | | |
| **SSD** | **Sandimen** | **0.37** | **212** | *i* S | | Pg | 17 17 07.1 | +1.5 |
| | baz=212 | | | | | | | |
| **TSMG** | **Majia** | **0.40** | **207** | *e*P | | Pb | 17 17 07.6 | -0.3 |
| | baz=207 | | | | | | | |
| **TSMG** | **Majia** | **0.40** | **207** | *e*S | | Pg | 17 17 07.7 | +1.5 |
| | baz=208 | | | | | | | |
| **EDH** | **Donghe** | **0.43** | **102** | *e*S | | Sb | 17 17 15.4 | +0.1 |
| | baz=102 | | | | | | | |
| **FULB** | **Fuli** | **0.43** | **72** | *e*P | | Pb | 17 17 07.9 | -0.6 |
| | baz=72 | | | | | | | |
| FULB | | | | S | | Sb | 17 17 15.4 | 0.0 |
| | baz=72 | | | | | | | |
| **ALS** | **Alishan** | **0.44** | **355** | P | | Pb | 17 17 08.8 | -0.1 |
| | baz=356 | | | | | | | |
| ALS | | | | S | | Sb | 17 17 14.9 | -1.0 |
| | baz=356 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.49** | **203** | *e*S | | Sb | 17 17 16.7 | -0.3 |
| | baz=203 | | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **52** | *e*P | | Pb | 17 17 10.2 | +0.1 |
| | baz=52 | | | | | | | |
| YULB | | | | *e*S | | Sb | 17 17 18.4 | +0.3 |
| | baz=52 | | | | | | | |

**IDC 18 17:19:41.4±1.8,31°.08S×175°.62W,h0km,mb3.4/2, mb1 3.7/2,mb1mx3.5/20,mbtmp3.4/2,Error ellipse: s-maj=71.4km s-min=45.2km az=13.0,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **45.12** | **267** | P | | P | 17 27 59.6 | -0.1 |
| | 0.2nm,0.5s,baz=103,slow=6.8,SNR=5.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.17** | **272** | P | | P | 17 28 08.0 | -0.1 |
| | 0.3nm,0.4s,baz=112,slow=8.1,SNR=6.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **146.47** | **341** | PKPbc | | PKPdf | 17 39 22.9 | +0.5 |
| | 3.0nm,0.8s,baz=50,slow=2.8,SNR=9.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.98** | **172** | PKPab | | PKPab | 17 40 30.7 | -0.4 |
| | 1.3nm,0.8s,baz=193,slow=4.9,SNR=5.8 | | | | | | | |

*DJA **18** 17:35:56.3±1.8,5°.5S×15°.4E±°,h10km±12km,M4.9/23, mB5.0/4,mb4.7/23,MLv5.2/3,Mw(mB)4.3/4*
*IDC **18** 17:36:13.9±2.2,5°.44S×152°.54E,h48km±20km,mb4.0/14, mb1 4.2/16,mb1mx4.1/33,mbtmp4.3/16,ML2.2/1,MS4.2/23, Ms1 4.2/23,ms1mx3.9/55,Error ellipse: s-maj=21.7km s-min=12.5km az=122.0*
*NE

**DZM Mont Dzumac 21.25 142** P **P** **17 40 56.8 +1.1**
DZM IAmb IAmb 17 41 00.5
comp=Z,28nm,1.1s
**SAUI Saumlaki 21.38 262** P **P** **17 40 59.1 +2.1**
comp=Z,173nm,0.9s
**SIJI Sorong 21.84 281** P **P** **17 41 02.0 +0.1**
comp=Z,4.5nm,0.7s,baz=140,slow=17,SNR=2.0
**MTN Manton Dam 22.50 249** P **P** **17 41 09.8 +0.9**
MTN IAmb IAmb 17 41 39.9
comp=Z,50nm,1.2s
**WB0 Warramunga Arr 22.80 230** P **P** **17 41 11.6 -0.6**
**WR0 Warramunga Arr 22.80 229** P **P** **17 41 11.8 -0.4**
WR0 IAmb IAmb 17 41 17.1
comp=Z,26nm,1.1s
**WRAB Tennant Creek 22.93 229** P **P** **17 41 11.2 -2.3**
WRAB IAmb IAmb 17 41 29.6
comp=Z,35nm,1.4s
**WB2 Warramunga Arr 22.93 229** P **P** **17 41 13.2 -0.4**
WB2 IAmb IAmb 17 41 24.3
comp=Z,49nm,1.5s
**WRA Warramunga Arr 22.94 229** P **P** **17 41 12.0 -1.6**
comp=Z,1.7nm,0.5s,baz=53,slow=9.7,SNR=19
WRA S **S** **17 45 20.4 -0.7**
comp=Z,11nm,1.4s,baz=55,slow=18,SNR=8.8
WRA LR LR 17 51 27.7
comp=Z,429nm,18.1s,baz=351,slow=40
**WRA Warramunga Arr 22.94 229** P **P** **17 41 12.5 -1.1**
**MSAI Masohi 23.76 274** P **P** **17 41 20.7 -1.0**
comp=Z,6.9nm,0.7s
**AAI Ambon 24.46 273** P **P** **17 41 27.3 -0.8**
comp=Z,20nm,1.0s
**KNRA Kununurra 25.59 245** P **P** **17 41 37.1 -1.2**
KNRA IAmb IAmb 17 41 43.9
comp=Z,45nm,1.4s
**AS31 Alice Springs 25.61 223** P **P** **17 41 37.4 -1.1**
**ASAR Alice Springs 25.61 223** P **P** **17 41 37.9 -0.6**
comp=Z,5.6nm,0.8s,baz=54,slow=8.5,SNR=32
**ASAR Alice Springs 25.61 223** P **P** **17 41 36.9 -1.7**
**TNTI Ternate 26.01 283** P **P** **17 41 40.4 -1.8**
comp=Z,22nm,1.0s
**MSVF Nonsavu 27.66 118** LR LR 17 52 21.6
comp=Z,357nm,19.8s,baz=180,slow=35
**STKA Stephens Creek 28.29 200** P **P** **17 42 03.3 +0.8**
comp=Z,3.3nm,1.1s,baz=15,slow=16,SNR=3.9
STKA LR LR 17 54 11.1
comp=Z,522nm,18.1s,baz=11,slow=38
**STKA Stephens Creek 28.29 200** P **P** **17 42 00.8 -1.7**
**BATI Baumata 29.12 259** P **P** **17 42 10.8 +0.7**
comp=Z,16nm,1.4s
**FITZ Fitzroy Crossi 29.25 242** P **P** **17 42 10.0 -1.2**
comp=Z,1.9nm,0.5s,baz=158,slow=7.6,SNR=3.1
**FITZ Fitzroy Crossi 29.25 242** P **P** **17 42 10.8 -0.3**
**KMSI Cibinong 29.26 281** P **P** **17 42 11.0 -0.3**
comp=Z,25nm,0.7s
**BBSI Bau Bau 29.96 268** P **P** **17 42 16.5 -1.0**
**URZ Urewera 39.52 149** LR LR 17 59 13.2
comp=Z,358nm,18.5s,baz=336,slow=35
**RPZ Rata Peaks 41.44 160** LR LR 18 00 40.7
comp=Z,686nm,18.3s,baz=307,slow=35
**KSRS Korea Array 48.49 334** P **P** **17 44 51.5 0.0**
comp=Z,1.3nm,0.8s,baz=146,slow=7.6,SNR=3.1
KSRS LR LR 18 03 50.1
comp=Z,86nm,19.8s,baz=160,slow=34
**QIZ Qiongzhong 48.67 301** P **P** **17 44 53.1 -0.2**
QIZ S **S** **17 51 52.4 -0.8**
QIZ LR LR
comp=N,530nm,15.5s
QIZ LR LR
comp=E,390nm,13.9s
QIZ LR LR
comp=Z,420nm,15.7s
**WHN Wuhan 51.21 317** P **P** **17 45 14.0 +1.7**
**ENH Enshi 54.48 313** P **P** **17 45 34.1 -2.5**
ENH IAmb IAmb 17 45 37.9
comp=Z,13nm,1.0s
**GYA Guiyang 54.67 308** ⇑P **P** **17 45 40.8 +2.7**
GYA pP pwP 17 45 51.4 -1.4
GYA S **S** **17 53 17.8 +2.0**
**GYA Guiyang 54.67 308** SS **SS** **17 57 00.3 +1.0**
GYA pmax pmax
comp=Z,4.0nm,0.5s
GYA pmax pmax
comp=Z,130nm,5.0s
GYA LR LR
comp=N,250nm,13.7s
GYA LR LR
comp=E,100nm,9.2s
GYA LR LR
comp=Z,230nm,13.6s
**HNS HongShan 55.36 323** ⇑P **P** **17 45 43.4 +0.7**
HNS pmax pmax
comp=Z,6.0nm,1.4s
**XAN Xi'an 56.98 317** P **P** **17 45 52.8 -1.6**
XAN pP pP 17 46 04.0 -1.1
XAN S **S** **17 53 42.1 -4.1**
XAN ScS **ScS** **17 55 43.4 +2.5**
**KMI Kunming 57.23 304** ⇑P **P** **17 45 56.8 +0.2**
KMI pP pP 17 46 06.6 -0.7
KMI pmax pmax
comp=Z,9.0nm,1.5s
**PPT2 Papeete2 57.66 107** *e*LR LR 18 02 57.6
comp=Z,95nm,21.8s
**CMAR Chiang Mai Arr 58.02 296** P **P** **17 46 02.4 +0.3**
comp=Z,1.8nm,0.9s,baz=111,slow=5.6,SNR=14
**CMAR Chiang Mai Arr 58.02 296** P **P** **17 46 00.5 -1.6**
**CHTO Chiang Mai 58.14 296** P **P** **17 46 03.1 +0.3**
CHTO IAmb IAmb 17 46 04.4
comp=Z,7.5nm,1.3s
**PETK Petropavlovsk- 58.46 4** LR LR 18 06 04.3
comp=Z,127nm,22.0s,baz=201,slow=31
**PZH PanZhiHua 58.62 305** P **P** **17 46 06.3 +0.1**
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,80nm,5.3s
**CD2 Chengdu 59.04 311** P **P** **17 46 09.0 0.0**
CD2 pmax pmax
comp=Z,10.0nm,1.0s
**XLT XiLinHaoTe 59.13 330** *e*P **P** **17 46 09.0 -0.4**
XLT pP pP 17 46 21.0 +0.8
XLT sP sP 17 46 28.3 +3.8
XLT ScP **ScP** **17 50 55.1 -0.3**
XLT S **S** **17 54 18.6 +4.5**
XLT sS sS 17 54 33.8 +2.1
XLT pmax pmax
comp=Z,7.0nm,1.4s
XLT pmax pmax
comp=Z,150nm,5.7s
XLT LR LR
comp=N,37nm,14.3s
XLT LR LR
comp=E,400nm,15.6s
XLT LR LR
comp=Z,340nm,17.3s
**HHC Hu-ho-hao-te 59.47 325** *e*P **P** **17 46 14.4 +2.6**
HHC pmax pmax
comp=Z,5.0nm,1.2s
HHC pmax pmax
comp=Z,99nm,6.2s
HHC LR LR
comp=N,390nm,15.4s
HHC LR LR
comp=E,180nm,16.3s
HHC LR LR
comp=Z,570nm,19.4s
**LZH Lanzhou 61.58 316** ⇑P **P** **17 46 28.0 +1.6**
LZH pP sP 17 46 39.5 -1.8
LZH sP pwP 17 46 42.5 +0.9
LZH pmax pmax
comp=Z,13nm,1.4s
**MA2 Magadan 64.81 359** P **P** **17 46 46.4 -0.7**
MA2 IAmb IAmb 17 46 48.4
comp=Z,14nm,1.5s
**GTA Gaotai 66.02 317** ⇑P **P** **17 46 55.5 0.0**
GTA pP pP 17 47 05.3 -1.0
GTA sP sP 17 47 09.3 -1.2
GTA PcP **PcP** **17 47 27.9 +2.0**
GTA pmax pmax
comp=Z,3.0nm,1.4s
GTA pmax pmax
comp=Z,67nm,6.7s
GTA LR LR
comp=N,560nm,19.6s
GTA LR LR
comp=E,420nm,20.7s
GTA LR LR
comp=Z,460nm,21.1s
**ULN Ulaanbaatar 66.45 328** P **P** **17 46 57.9 -0.2**
**SHL Shillong 66.51 301** P **P** **17 46 56.4 -2.6**
SHL IAmb IAmb 17 46 59.4
comp=Z,16nm,1.1s
**SONM Songino Array 66.78 328** P **P** **17 47 01.0 +0.8**
comp=Z,0.9nm,0.4s,baz=143,slow=5.3,SNR=12
**SONM Songino Array 66.78 328** P **P** **17 46 59.8 -0.3**
**GOMU GeErMu 68.08 312** P **P** **17 47 06.9 -2.1**
GOMU pP pP 17 47 13.3 -6.6
GOMU PcP **PcP** **17 47 33.4 -1.5**
GOMU S S 17 55 51.3 -15
GOMU pmax pmax
comp=Z,1.0nm,0.9s
GOMU pmax pmax
comp=Z,140nm,5.6s
GOMU LR LR
comp=N,190nm,15.2s
GOMU LR LR
comp=E,160nm,15.4s
GOMU LR LR
comp=Z,130nm,15.9s
**YAK Yakutsk 69.55 349** LR LR 18 19 11.7
comp=Z,77nm,18.5s,baz=216,slow=37
**BILL Bilibino 73.91 5** P **P** **17 47 43.2 0.0**
BILL IAmb IAmb 17 47 45.2
comp=Z,16nm,1.1s
**WMQ Urumqi 76.11 317** *e*P **P** **17 47 56.6 +0.1**
WMQ pmax pmax
comp=Z,12nm,1.3s
WMQ LR LR
comp=N,620nm,12.1s
WMQ LR LR
comp=E,310nm,21.9s
WMQ LR LR
comp=Z,310nm,19.5s
**ANM Nome 76.40 17** P **P** **17 47 57.0 -0.6**
ANM IAmb IAmb 17 48 00.4
comp=Z,19nm,1.2s
**KDAK Kodiak Island 76.78 27** LR LR 18 15 33.7
comp=Z,202nm,20.9s,baz=245,slow=31
**RDOG Red Dog Mine 79.61 16** P **P** **17 48 15.9 +0.6**
**MK31 Makanchi Array 80.70 319** P **P** **17 48 22.0 +0.2**
**MKAR Makanchi Array 80.70 319** P **P** **17 48 21.9 +0.1**
comp=Z,3.0nm,0.9s,baz=100,slow=6.7,SNR=19
**MKAR Makanchi Array 80.70 319** P **P** **17 48 21.6 -0.1**
**SML Sawmill 80.73 24** P **P** **17 48 21.7 +0.1**
**MAKZ Makanchi 80.91 319** P **P** **17 48 23.2 +0.4**
MAKZ IAmb IAmb 17 48 24.2
comp=Z,12nm,1.3s
**IMAR Indian Mountai 81.00 19** P **P** **17 48 24.1 +1.2**
**MCK McKinley 81.48 23** P **P** **17 48 25.6 +0.1**
**KLU Klutina 81.59 25** P **P** **17 48 27.1 +0.9**
**ZAA0 Zalesovo Array 81.59 326** P **P** **17 48 25.5 -0.8**
**ZALV Zalesovo Beam 81.59 326** P **P** **17 48 25.8 -0.4**
comp=Z,1.1nm,0.3s,baz=95,slow=4.8,SNR=9.2
**ZALV Zalesovo Beam 81.59 326** P **P** **17 48 25.1 -1.1**
**GLB Gilahina Butte 82.47 26** P **P** **17 48 31.5 +0.7**
GLB IAmb IAmb 17 48 33.0
comp=Z,15nm,1.1s
**ILAR Eielson Array 82.78 22** P **P** **17 48 31.9 -0.3**
comp=Z,6.4nm,1.1s,baz=257,slow=5.3,SNR=7.2
ILAR LR LR 18 26 10.4
comp=Z,97nm,18.1s,baz=258,slow=36
**ILAR Eielson Array 82.78 22** P **P** **17 48 30.7 -1.5**
**KSH Kashi 83.24 311** P **P** **17 48 37.5 +2.1**
KSH pP pwP 17 48 51.6 +0.6
KSH pmax pmax
comp=Z,8.0nm,1.5s
**BARN Barnard Glacie 83.25 27** P **P** **17 48 36.6 +1.6**
BARN IAmb IAmb 17 48 37.5
comp=Z,16nm,1.2s
**J25K Salcha River, 83.27 23** P **P** **17 48 34.7 -0.2**
J25K IAmb IAmb 17 48 36.7
comp=Z,14nm,1.2s
**M27K Edge Creek, AK 83.69 25** P **P** **17 48 37.9 +0.7**
**TOLK Toolik Lake Re 83.84 18** P **P** **17 48 39.1 +1.3**
TOLK IAmb IAmb 17 49 03.5
comp=Z,9.9nm,1.4s
**L27K Beaver Creek, 84.00 25** P **P** **17 48 38.6 -0.1**
L27K IAmb IAmb 17 48 54.2
comp=Z,16nm,1.4s
**BCAR Beaver Creek A 84.02 25** P **P** **17 48 38.6 -0.1**
**KURK Kurchatov 84.17 322** P **P** **17 48 39.8 +0.1**
KURK IAmb IAmb 17 48 41.5
comp=Z,15nm,1.2s
**TKM2 Tokmak 2 84.26 314** P **P** **17 48 41.1 +0.4**
SNR=7.8
**KBK Karagaybulak 84.67 314** P **P** **17 48 43.3 +0.6**
SNR=6.9
**CHMS Chumysh 84.89 314** P **P** **17 48 44.2 +0.6**
SNR=12
**UCH Uchtor 84.90 313** P **P** **17 48 45.4 +1.2**
SNR=27
**EGAK Eagle 84.97 23** P **P** **17 48 44.0 +0.6**
EGAK IAmb IAmb 17 48 51.2
comp=Z,5.5nm,0.9s
**AAK Ala-Archa 85.00 314** P **P** **17 48 45.4 +1.1**
SNR=12
**AAK Ala-Archa 85.00 314** P **P** **17 48 43.9 -0.4**
**HYT Haines Junctio 85.04 27** P **P** **17 48 44.4 +0.4**
**USP Ospenovka 85.12 314** P **P** **17 48 45.8 +1.0**
SNR=17
**DAWY Dawson 85.40 24** P **P** **17 48 46.8 +1.2**
DAWY IAmb IAmb 17 48 59.4
comp=Z,12nm,1.5s
**AML Almayashu 85.47 313** P **P** **17 48 48.5 +1.5**
SNR=31
**EKS2 Erkin-Say 85.52 313** P **P** **17 48 47.1 +0.2**
SNR=17
**NRIK Noril'sk 86.50 341** P **P** **17 48 50.4 -0.6**
comp=Z,2.5nm,0.6s,baz=109,slow=4.3,SNR=5.6
**NRIK Noril'sk 86.50 341** P **P** **17 48 50.6 -0.3**
NRIK IAmb IAmb 17 48 52.9
comp=Z,8.7nm,1.1s
**M31M Drury Creek, Y 86.90 27** P **P** **17 48 54.9 +1.8**
M31M IAmb IAmb 17 49 07.7
comp=Z,12nm,1.3s
**EPYK Eagle Plains 87.28 22** P **P** **17 48 55.9 +1.0**
**KKAR Karatay Array 87.96 313** P **P** **17 48 58.6 -0.1**
**DLBC Dease Lake 87.97 31** LR LR 18 25 24.1
comp=Z,301nm,18.3s,baz=302,slow=34
**INK Inuvik 89.07 21** LR LR 18 31 26.0
comp=Z,110nm,18.0s,baz=198,slow=37
**INK Inuvik 89.07 21** P **P** **17 49 03.5 +0.3**
**YBH Yreka Blue Hor 89.56 48** LR LR 18 21 22.4
comp=Z,130nm,21.7s,baz=280,slow=30
**NVAR Mina Array Bea 92.56 52** LR LR 18 23 41.9
comp=Z,174nm,21.1s,baz=286,slow=31
**A36M Sachs Harbour 92.66 18** P **P** **17 49 19.9 0.0**
**NEW Newport 94.14 42** LR LR 18 33 12.3
comp=Z,143nm,18.1s,baz=254,slow=36
**YKA Yellowknife Ar 96.03 28** P **P** **17 49 37.1 +1.6**
comp=Z,0.5nm,0.5s,baz=270,slow=4.5,SNR=9.1
YKA LR LR 18 29 10.6
comp=Z,152nm,19.8s,baz=278,slow=33
**ARU Arti 96.75 326** LR LR 18 34 18.9
comp=Z,170nm,20.2s,baz=106,slow=36
**LPIG La Paz 98.59 67** LR LR 18 28 18.4
comp=Z,59nm,18.4s,baz=220,slow=32
**PDAR Pinedale Array 99.36 48** LR LR 18 29 12.8
comp=Z,117nm,18.7s,baz=274,slow=32
**TORD Torodi Ar. Bea 150.37 287** PKPbc **PKPbc** **17 56 00.6 -0.2**
comp=Z,0.8nm,0.4s,baz=91,slow=2.5,SNR=5.4

*MAN **18** 17:49:20.9, 12˚.47N×123˚.56E, h8km, mb5.5, ML4.5, MS4.8*
*MAN INTENSITY IV - MASBATE CITY; TICAO, SAN JACINTO & BALENO, MASBATE; INTENSITY III - BULAN, SORSOGON.*
*IDC **18** 17:49:20.4±0.6, 12˚.47N×123˚.66E, h0km, mb4.1/19, mb1 4.3/23, mb1mx4.2/51, mbtmp4.2/23, ML3.7/4, MS4.0/29, Ms1 4.0/29, ms1mx3.7/81, Error ellipse: s-maj=18.5km s-min=10.8km az=70.0*
*NEIC **18** 17:49:22.0±1.7, 12˚.42N±0˚.07×123˚.67E±0˚.09, h10km±1km, mb4.6/39, Error ellipse: s-maj=15.5km s-min=11.1km az=68.0*
*GCMT **18** 17:49:25.0±0.3, 12˚.58N±0˚.02×123˚.57E±0˚.02, h28km±1km, MW4.9/67, Moment Tensor Solution. s17,c17; s67,c86; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.20±.21; Mθθ2.18±.15; Mϕϕ-1.98±.15; Mrθ0.84±.23; Mθϕ1.78±.10; Mϕr-0.47±.27; Best double couple: Mo2.90600×10¹⁶ NP1:ϕ25.00000°,δ70.00000°,λ-177.00000°. NP2:*

*ϕ294.00000°,δ87.00000°,λ-20.00000°. Principal axes: T 2.9640, Plg11.0000°, Azm341.0000°; N -0.1120, Plg70.0000°, Azm106.0000°; P -2.8470, Plg16.0000°, Azm248.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **18** 17:49:31.0±0.7, 12˚N±4˚×12˚4E±˚, h93km±6km, M4.5/32, mB5.1/6, mb4.5/32, Mw(mB)4.5/6, MwMwp5.2/1, Mwp5.5/1*
**ISC 18 17:49:21.9±0.7, 12˚.47N±0˚.02×123˚.53E±0˚.03, h5km±4km, n163, σ1♀95/161, mb4.5/53, MS4.2/36, 21C-14D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MMPH** | **Masbate** | **0.15** | **140** | ⇑*i*P | | **Pg** | **17 49 24.4** | **-0.5** | |
| MMPH | | | | *e*S | | **Sg** | **17 49 26.9** | **0.0** | |
| **RCP** | **Roxas** | **1.19** | **220** | ⇑*e*P | | **Pg** | **17 49 43.5** | **-1.2** | |
| RCP | | | | *e*S | | **Sb** | **17 50 00.8** | **+0.2** | |
| **PVCP** | **Virac** | **1.27** | **29** | ⇑*e*P | | **Pn** | **17 49 43.5** | **-2.9** | |
| PVCP | | | | *e*S | | **Sg** | **17 50 01.2** | **-1.8** | |
| **GQP** | **Guinayangan** | **1.77** | **324** | ⇓*i*P | | **Pn** | **17 49 52.7** | **-0.6** | |
| GQP | | | | *e*S | | **Sg** | **17 50 18.5** | **-0.4** | |
| **BOAC** | **Boac** | **1.91** | **301** | ⇓*i*P | | **Pn** | **17 49 54.0** | **-1.2** | |
| BOAC | | | | *e*S | | **Sn** | **17 50 17.4** | **-2.3** | |
| **JCNP** | **Jose Panganiba** | **1.98** | **336** | ⇓*i*P | | **Pn** | **17 49 54.4** | **-1.8** | |
| JCNP | | | | *e*S | | **Sb** | **17 50 24.3** | **+0.9** | |
| **LLP** | **Lapu-Lapu** | **2.19** | **169** | ⇑*e*P | | **Pn** | **17 49 57.8** | **-1.3** | |
| LLP | | | | *i* S | | **Sn** | **17 50 25.7** | **-0.8** | |
| **LQP** | **Lukban** | **2.53** | **310** | ⇓*e*P | | **Pn** | **17 50 03.8** | **-0.2** | |
| LQP | | | | *e*S | | **Sn** | **17 50 32.8** | **-2.4** | |
| **MSLP** | **Maasin** | **2.67** | **151** | ⇓*e*P | | **Pn** | **17 50 03.9** | **-1.7** | |
| **PGP** | **Puerto Galera** | **2.71** | **292** | ⇑*e*P | | **Pn** | **17 50 04.0** | **-2.3** | |
| **CNOP** | **Candoni, Negro** | **2.77** | **198** | ⇓*e*P | | **Pn** | **17 50 07.5** | **+0.4** | |
| **TBP** | **Tagbilaran** | **2.78** | **173** | ⇓*e*P | | **Pn** | **17 50 06.3** | **-0.9** | |
| TBP | | | | *i* S | | **Sn** | **17 50 40.9** | **-0.3** | |
| **CUYO** | **Cuyo Island** | **2.94** | **237** | ⇓*e*P | | **Pn** | **17 50 09.0** | **-0.4** | |
| **TGY** | **Tagaytay City** | **3.00** | **303** | Pn | | **Pn** | **17 50 10.9** | **+0.7** | |
| | 50nm,0.3s,baz=147,slow=9.3,SNR=9.4 | | | | | | | | |
| TGY | | | | Lg | | Lg | 17 50 57.5 | | |
| | 33nm,0.3s,baz=123,slow=18,SNR=3.4 | | | | | | | | |
| **TGY** | **Tagaytay City** | **3.00** | **303** | ⇑*e*P | | **Pb** | **17 50 15.1** | **-0.9** | |
| **SNPH** | **Sibulan** | **3.12** | **185** | ⇓*i*P | | **Pn** | **17 50 11.9** | **0.0** | |
| SNPH | | | | *i* S | | **Sn** | **17 50 49.0** | **-0.7** | |
| **MACP** | **Maragondon, Ca** | **3.26** | **303** | ⇑*e*P | | **Pb** | **17 50 17.3** | **-3.0** | |
| MACP | | | | *i* S | | **Sg** | **17 51 08.4** | **+1.6** | |
| **BUSP** | **Coron** | **3.29** | **262** | ⇑*e*P | | **Pn** | **17 50 13.9** | **-0.3** | |
| **SCPH** | **Surigao** | **3.29** | **144** | ⇑*e*P | | **Pn** | **17 50 13.8** | **-0.5** | |
| **LUBP** | **Lubang** | **3.43** | **292** | ⇑*e*P | | **Pn** | **17 50 16.7** | **+0.5** | |
| **GLSP** | **General Luna,** | **3.69** | **136** | ⇑*e*P | | **Pn** | **17 50 19.4** | **-0.3** | |
| GLSP | | | | *i* S | | **Sn** | **17 51 05.3** | **+1.5** | |
| **BALP** | **Baler** | **3.76** | **330** | ⇑*e*P | | **Pn** | **17 50 20.3** | **-0.4** | |
| **PCPH** | **Palayan** | **3.87** | **323** | ⇑*e*P | | **Pn** | **17 50 22.6** | **+0.4** | |
| PCPH | | | | *e*S | | **Sn** | **17 51 11.3** | **+3.2** | |
| **BUTP** | **Butuan** | **4.04** | **149** | ⇑*e*P | | **Pn** | **17 50 27.4** | **+2.8** | |
| **ENPP** | **El Nido** | **4.21** | **253** | ⇑*e*P | | **Pn** | **17 50 26.7** | **-0.2** | |
| **SMPP** | **San Manuel, Pa** | **4.58** | **323** | ⇑*e*P | | **Pn** | **17 50 32.1** | **+0.2** | |
| **PAGZ** | **Pagadian** | **4.60** | **182** | ⇑*e*P | | **Pn** | **17 50 32.7** | **+0.5** | |
| PAGZ | | | | *i* S | | **Sn** | **17 51 27.4** | **+1.4** | |
| **CAUP** | **Cauayan** | **4.74** | **340** | ⇑*e*P | | **Pn** | **17 50 32.5** | **-1.6** | |
| **SAMP** | **Sagada Mountai** | **5.24** | **331** | ⇑*e*P | | **Pn** | **17 50 41.0** | **0.0** | |
| SAMP | | | | *i* S | | **Sb** | **17 52 01.3** | **+4.0** | |
| **CTBH** | **Cotabato--PC H** | **5.27** | **172** | ⇓*i*P | | **Pn** | **17 50 41.5** | **+0.1** | |
| CTBH | | | | *i* S | | **Sn** | **17 51 43.2** | **+0.7** | |
| **DAV** | **Davao City (W)** | **5.74** | **159** | Pn | | **Pn** | **17 50 45.9** | **-2.0** | |
| | 20nm,0.3s,baz=328,slow=15,SNR=1.3 | | | | | | | | |
| DAV | | | | Lg | | Lg | 17 52 22.3 | | |
| | 26nm,0.3s,baz=252,slow=17,SNR=1.2 | | | | | | | | |
| DAV | | | | LR | | LR | 17 53 22.2 | | |
| | comp=Z,1μm,19.4s,baz=353,slow=42 | | | | | | | | |
| **DAV** | **Davao City (W)** | **5.74** | **159** | Pn | | **Pn** | **17 50 43.4** | **-4.5** | |
| DAV | | | | Pg | | **Pb** | **17 51 04.7** | **+2.1** | |
| **MATI** | **Mati** | **6.12** | **154** | ⇓*i*P | | **Pn** | **17 50 55.3** | **+2.2** | |
| MATI | | | | *i* S | | **Sn** | **17 52 09.4** | **+5.9** | |
| **MYLDM** | **Lahad Datu** | **8.78** | **215** | Pn | | **Pn** | **17 51 27.7** | **-2.1** | |
| **GTOI** | **Gorontalo** | **11.77** | **183** | P | | **Pn** | **17 52 13.9** | **+3.2** | |
| | 14nm,1.4s | | | | | | | | |
| **LUWI** | **Luwuk** | **13.45** | **183** | P | | **P** | **17 52 39.9** | **-3.2** | |
| | 1μm90nm,1.2s | | | | | | | | |
| **SANI** | **Sanana** | **14.63** | **170** | P | | **Pn** | **17 52 52.0** | **+2.2** | |
| | 33nm,1.0s | | | | | | | | |
| **JOW** | **Kunigami** | **14.96** | **17** | Pn | | **Pn** | **17 52 52.7** | **-1.6** | |
| | 0.1nm,0.3s,baz=114,slow=15,SNR=1.4 | | | | | | | | |
| **JOW** | **Kunigami** | **14.96** | **17** | Pn | | **Pn** | **17 52 51.6** | **-2.7** | |
| **SBUM** | **Sibu** | **14.98** | **229** | | | **Pn** | **17 52 54.1** | **-0.5** | |
| SBUM | | | | IAmb | | IAmb | 17 53 06.8 | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **TTSI** | **Tana Toraja** | **15.85** | **194** | P | | P | 17 53 24.8 | +15 | |
| **MSAI** | **Masohi** | **16.61** | **161** | P | | **P** | **17 53 19.1** | **+0.8** | |
| | comp=Z,321nmcomp=Z,16nm,1.1s | | | | | | | | |
| **AAI** | **Ambon** | **16.71** | **164** | P | | **P** | **17 53 19.0** | **-0.4** | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| **BNSI** | **Bone** | **17.10** | **192** | P | | **P** | **17 53 25.6** | **+1.8** | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **STKI** | **Sintang** | **17.17** | **225** | P | | **P** | **17 53 24.8** | **+0.3** | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **UBPT** | **Khong Chiam** | **17.75** | **281** | P | | **P** | **17 53 31.7** | **+0.7** | |
| **KAPI** | **Kappang** | **17.77** | **192** | P | | **P** | **17 53 31.1** | **-0.1** | |
| | comp=Z,0.3nm,0.3s,baz=56,slow=23,SNR=3.1 | | | | | | | | |
| **KAPI** | **Kappang** | **17.77** | **192** | | | **Pn** | **17 53 28.4** | **-2.0** | |
| KAPI | | | | IAmb | | IAmb | 17 53 51.0 | | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| **BKSI** | **Bulukumba** | **18.00** | **191** | P | | **P** | **17 53 35.2** | **+1.5** | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **BAKI** | **Biak** | **18.45** | **137** | P | | **Pn** | **17 53 39.8** | **+1.2** | |
| **WHN** | **Wuhan** | **19.89** | **336** | P | | **Pn** | **17 53 58.0** | **+2.1** | |
| **NJ2** | **Nanjing** | **19.95** | **348** | ⇓P | | **Pn** | **17 53 55.8** | **-0.9** | |
| NJ2 | | | | pP | | **sP** | **17 54 00.9** | **+4.0** | |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=N,540nm,15.2s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=E,490nm,10.4s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=Z,510nm,13.3s | | | | | | | | |
| **JSU** | **Suzuyama** | **19.99** | **18** | P | | **P** | **17 53 54.4** | **-1.1** | |
| JSU | | | | IAmb | | IAmb | 17 54 02.8 | | |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **GUMO** | **Guam** | **20.82** | **85** | LR | | LR | 18 01 18.5 | | |
| | comp=Z,92nm,20.3s,baz=269,slow=35 | | | | | | | | |
| **SOEI** | **Soe** | **22.09** | **178** | P | | **P** | **17 54 17.0** | **-1.4** | |
| SOEI | | | | IAmb | | IAmb | 17 54 37.8 | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **BATI** | **Baumata** | **22.53** | **180** | P | | **P** | **17 54 23.1** | **+0.1** | |
| | comp=Z,22nm,0.7s,baz=356,slow=3.1,SNR=8.0 | | | | | | | | |
| **BATI** | **Baumata** | **22.53** | **180** | P | | **P** | **17 54 22.8** | **-0.2** | |
| **JAGI** | **Jajag, Banyuwa** | **22.80** | **205** | P | | **P** | **17 54 24.6** | **-1.2** | |
| **JAGI** | **Jajag, Banyuwa** | **22.80** | **205** | P | | **P** | **17 54 25.3** | **-0.5** | |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **KMI** | **Kunming** | **23.31** | **306** | ⇑P | | **P** | **17 54 33.3** | **+2.0** | |
| KMI | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| **IPM** | **Ipoh** | **23.61** | **252** | P | | **P** | **17 54 33.2** | **-0.9** | |
| IPM | | | | IAmb | | IAmb | 17 54 35.5 | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **KULM** | **Kulim** | **23.69** | **254** | P | | **P** | **17 54 34.9** | **0.0** | |
| **PCJI** | **Pacitan** | **23.92** | **211** | P | | **P** | **17 54 36.0** | **-1.1** | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **UGM** | **Wanagama** | **24.02** | **213** | P | | P | 17 54 52.9 | +15 | |
| **LYN** | **LuoYang** | **24.17** | **337** | *e*P | | **P** | **17 54 40.8** | **+1.5** | |
| LYN | | | | sP | | sP | 17 54 47.9 | +6.6 | |
| LYN | | | | S | | **S** | **17 59 02.0** | **+4.1** | |
| LYN | | | | sS | | sS | 17 59 10.9 | +11 | |
| LYN | | | | SS | | SnSn | 17 59 18.4 | -21 | |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,120nm,4.6s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=N,370nm,14.5s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,390nm,18.4s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.41** | **287** | P | | **P** | **17 54 41.6** | **-0.1** | |
| | comp=Z,1.5nm,0.8s,baz=95,slow=7.7,SNR=6.1 | | | | | | | | |
| CMAR | | | | LR | | LR | 18 05 05.0 | | |
| | comp=Z,185nm,18.2s,baz=100,slow=38 | | | | | | | | |
| **KPJI** | **Karang Pucung** | **24.45** | **217** | P | | **P** | **17 54 41.8** | **-0.2** | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **PZH** | **PanZhiHua** | **24.77** | **307** | P | | **P** | **17 54 47.8** | **+2.8** | |
| PZH | | | | S | | **S** | **17 59 09.3** | **+1.2** | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,120nm,4.5s | | | | | | | | |

PZH LR LR
comp=N,660nm,18.8s
PZH LR LR
comp=E,470nm,19.1s
PZH LR LR
comp=Z,730nm,19.6s
**LEM Lembang 24.85 220** P **P** **17 54 46.3 +0.5**
comp=Z,10nm,0.5s,baz=6,2,slow=16,SNR=4.0
**KSRS Korea Array 25.19 8** P **P** **17 54 47.3 -1.1**
comp=Z,1.7nm,0.8s,baz=187,slow=9.4,SNR=5.0
**XAN Xi'an 25.26 331** P **P** **17 54 47.9 -1.3**
XAN pP sP 17 54 51.6 +0.3
XAN S **S** **17 59 21.0 +5.5**
XAN SS **SnSn** **18 00 13.3 +7.2**
XAN pmax pmax
comp=Z,12nm,0.7s
XAN LR LR
comp=N,670nm,18.5s
XAN LR LR
comp=E,880nm,17.7s
XAN LR LR
comp=Z,660nm,16.9s
**JHJ Hachijo jima 2 25.37 33** LR LR 18 04 13.1
comp=Z,234nm,18.8s,baz=16,slow=35
**CNJI Cibinong 25.53 221** P **P** **17 54 50.1 -1.7**
comp=Z,42nm,1.2s
**MDSI Maura Dua 25.57 230** P **P** **17 54 51.7 -0.4**
comp=Z,5.1nm,1.8s
**INU Inuyama 25.84 26** P **P** **17 54 52.5 -1.9**
INU IAmb IAmb 17 54 55.8
comp=Z,14nm,1.0s
**HNS HongShan 26.05 344** ⇓P **P** **17 54 58.6 +2.3**
HNS *e*S **S** **17 59 33.3 +5.5**
HNS LR LR
comp=N,410nm,16.3s
HNS LR LR
comp=E,640nm,17.6s
HNS LR LR
comp=Z,320nm,14.7s
**PSI Prapat 26.18 250** P **P** **17 54 57.3 -0.6**
comp=Z,2.4nm,0.5s,baz=66,slow=6.3,SNR=3.7
PSI LR LR 18 05 43.6
comp=Z,658nm,19.0s,baz=74,slow=37
**RPSI Rantau Prapat 26.22 250** P **P** **17 54 57.3 -0.8**
**PPI Padang Panjang 26.30 242** P **P** **17 54 59.2 +0.4**
**LZH Lanzhou 29.45 326** ⇓P P 17 55 33.3 +6.3
LZH pP sP 17 55 38.5 +9.4
LZH sP pP 17 55 42.1 +14
LZH S S 18 01 02.9 +41
LZH pmax pmax
comp=Z,14nm,1.5s
LZH pmax pmax
comp=Z,130nm,4.3s
LZH LR LR
comp=N,770nm,16.3s
LZH LR LR
comp=E,660nm,14.6s
LZH LR LR
comp=Z,690nm,16.3s
**HHC Hu-ho-hao-te 30.16 342** *e*P **P** **17 55 35.8 +2.7**
HHC pmax pmax
comp=Z,9.0nm,1.0s
HHC pmax pmax
comp=Z,120nm,5.6s
HHC LR LR
comp=N,420nm,17.7s
HHC LR LR
comp=E,280nm,13.4s
HHC LR LR
comp=Z,390nm,14.1s
**FITZ Fitzroy Crossi 30.45 176** P **P** **17 55 33.6 -2.1**
FITZ IAmb IAmb 17 55 41.5
comp=Z,15nm,1.4s
**XLT XiLinHaoTe 31.97 350** *e*P **P** **17 55 50.0 +1.0**
XLT pP sP 17 55 53.8 +2.7
XLT sP pP 17 55 55.5 +5.0
XLT pmax pmax
comp=Z,7.0nm,1.0s
XLT pmax pmax
comp=Z,110nm,4.6s
**USRK Ussuriysk Ar. 32.44 11** LR LR 18 10 55.7
comp=Z,104nm,18.2s,baz=168,slow=40
**MDJ Mudanjiang 32.45 8** P **P** **17 55 54.3 +1.1**
MDJ pmax pmax
comp=Z,35nm,1.3s
MDJ pmax pmax
comp=Z,150nm,4.0s
**SHL Shillong 32.53 298** P **P** **17 55 53.3 -1.0**
**WB0 Warramunga Arr 33.78 161** P **P** **17 56 02.4 -2.6**
WB0 IAmb IAmb 17 56 13.3
comp=Z,5.3nm,0.8s
**WRA Warramunga AR 33.92 162** P **P** **17 56 03.3 -3.0**
comp=Z,1.1nm,0.6s,baz=333,slow=10,SNR=10
**WRA Warramunga Arr 33.92 162** P **P** **17 56 02.6 -3.7**
**WB2 Warramunga Arr 33.93 162** P **P** **17 56 04.4 -1.9**
WB2 IAmb IAmb 17 56 20.5
comp=Z,15nm,1.4s
**WR0 Warramunga Arr 34.00 161** P **P** **17 56 05.8 -1.2**
WR0 IAmb IAmb 17 56 15.9
comp=Z,12nm,1.4s
**GTA Gaotai 34.06 326** ⇑P **P** **17 56 07.0 -0.4**
GTA pP sP 17 56 12.4 +2.9
GTA sP pP 17 56 16.3 +7.4
GTA PcP **PcP** **17 58 50.6 +5.4**
GTA sS sS 18 01 37.3 +1.2
GTA pmax pmax
comp=Z,5.0nm,1.2s
GTA pmax pmax
comp=Z,75nm,5.1s
GTA LR LR
comp=N,560nm,18.5s
GTA LR LR
comp=E,420nm,20.4s
GTA LR LR
comp=Z,450nm,20.7s
**GOMU GeErMu 35.01 317** P **P** **17 56 13.9 -2.1**
GOMU pP pP 17 56 18.0 +0.5
GOMU sP sP 17 56 19.3 +1.2
GOMU S **S** **18 01 54.6 +5.6**
GOMU pmax pmax
comp=Z,3.0nm,1.0s
GOMU pmax pmax
comp=Z,160nm,4.8s
GOMU LR LR
comp=N,280nm,15.7s
GOMU LR LR
comp=E,180nm,15.6s
GOMU LR LR
comp=Z,120nm,16.6s
**KLR Kul'dur 37.27 9** P **P** **17 56 32.8 -2.0**
comp=Z,3.4nm,1.0s,baz=195,slow=4.9,SNR=6.4
**AS31 Alice Springs 37.32 164** P **P** **17 56 33.6 -1.8**
**ASAR Alice Springs 37.32 164** P **P** **17 56 33.6 -1.8**
comp=Z,4.6nm,0.6s,baz=346,slow=6.4,SNR=53
**ASAR Alice Springs 37.32 164** P **P** **17 56 32.8 -2.7**
**ULN Ulaanbaatar 37.88 342** P **P** **17 56 39.4 -0.6**
**SONM Songino Array 38.05 341** P **P** **17 56 40.6 -1.0**
comp=Z,0.4nm,0.9s,baz=100,slow=26,SNR=2.9
**SONM Songino Array 38.05 341** P **P** **17 56 39.9 -1.7**
**H11N1 WAKE ISLAND Hy 42.19 74** T T 18 41 22.6
baz=267,slow=75,SNR=10
**H11N2 WAKE ISLAND Hy 42.20 74** T T 18 41 20.7
baz=267,slow=75,SNR=8.9
**H11N3 WAKE ISLAND Hy 42.21 74** T T 18 41 31.1
baz=267,slow=75,SNR=11
**HNR Honiara 42.23 119** LR LR 18 13 40.1
comp=Z,49nm,19.0s,baz=295,slow=35
**PALK Pallekele 42.47 267** LR LR 18 16 52.2
comp=Z,96nm,18.1s,baz=197,slow=39
**MK31 Makanchi Array 48.66 323** P **P** **17 58 06.5 -0.5**
MK31 IAmb IAmb 17 58 20.1
comp=Z,3.8nm,1.1s
**MKAR Makanchi Array 48.66 323** P **P** **17 58 07.1 0.0**
comp=Z,2.7nm,0.8s,baz=124,slow=7.6,SNR=13
**MKAR Makanchi Array 48.66 323** P **P** **17 58 06.5 -0.5**
**MAKZ Makanchi 48.85 323** P **P** **17 58 08.4 -0.1**
MAKZ IAmb IAmb 17 58 21.6
comp=Z,10nm,1.3s
**KSH Kashi 49.77 312** P **P** **17 58 18.1 +2.3**
KSH pP sP 17 58 24.6 +6.7
KSH pmax pmax
comp=Z,2.0nm,1.1s
**NIL Nilore 50.28 303** P **P** **17 58 19.6 -0.1**
NIL IAmb IAmb 17 58 34.7
comp=Z,6.3nm,0.6s
**ZAA0 Zalesovo Array 51.42 332** P **P** **17 58 26.8 -1.0**
**ZALV Zalesovo Beam 51.42 332** P **P** **17 58 27.5 -0.4**
comp=Z,0.8nm,0.6s,baz=111,slow=8.9,SNR=3.5
ZALV LR LR 18 22 42.9
comp=Z,131nm,18.4s,baz=113,slow=39
**ZALV Zalesovo Beam 51.42 332** P **P** **17 58 26.3 -1.6**
**AAK Ala-Archa 51.88 315** P **P** **17 58 32.1 +0.4**
comp=Z,0.2nm,0.3s,baz=163,slow=11,SNR=1.8
**AAK Ala-Archa 51.88 315** P **P** **17 58 33.0 +1.3**
**KURK Kurchatov 52.74 326** P **P** **17 58 37.7 0.0**
**KURBB Kurchatov Arra 52.74 326** P **P** **17 58 37.8 0.0**
comp=Z,2.3nm,0.8s,baz=120,slow=5.5,SNR=3.2
**KBL Kabul 53.88 304** P **P** **17 58 46.8 +0.1**
KBL IAmb IAmb 17 58 54.4
comp=Z,8.8nm,1.1s
**KKAR Karatay Array 54.80 314** P **P** **17 58 52.8 -0.3**
**BRVK Borovoye 58.41 325** P **P** **17 59 20.0 +1.5**
**TIXI Tiksi 59.23 2** P **P** **17 59 22.0 -1.9**
**HRA Herat 59.42 303** P **P** **17 59 25.9 -0.3**
HRA IAmb IAmb 17 59 35.3
comp=Z,4.0nm,0.8s
**NRIK Noril'sk 61.24 346** P **P** **17 59 37.8 +0.1**
comp=Z,3.7nm,0.9s,baz=169,slow=10,SNR=1.6
**NRIK Noril'sk 61.24 346** P **P** **17 59 37.7 0.0**
NRIK IAmb IAmb 17 59 45.9
comp=Z,5.4nm,0.9s
**WSAR Wadi Sarin 62.27 290** LR LR 18 30 39.6
comp=Z,46nm,18.2s,baz=104,slow=40
**ABKAR Akbulak array 63.46 319** P **P** **17 59 51.8 -1.1**
**ARU Arti 65.92 327** P **P** **18 00 06.9 -2.0**
ARU IAmb IAmb 18 00 21.7
comp=Z,5.5nm,1.0s
**RPZ Rata Peaks 70.70 145** LR LR 18 31 44.9
comp=Z,49nm,20.8s,baz=283,slow=36
**KIRV Kirov 71.16 328** LR LR 18 35 07.0
comp=Z,201nm,18.1s,baz=101,slow=38
**GNI Garni 73.53 308** LR LR 18 35 53.0
comp=Z,51nm,18.1s,baz=70,slow=38
**RAYN Ar Rayn 74.27 291** P **P** **18 01 00.3 -0.5**
**KBZ Khabaz 74.75 312** P **P** **18 01 04.9 +1.8**
comp=Z,3.5nm,0.9s,baz=95,slow=3.3,SNR=2.2
**KIV Kislovodsk 74.89 312** P **P** **18 01 04.3 +0.2**
**GEVA Gevas 74.95 307** P **P** **18 01 04.4 -0.3**
GEVA IAmb IAmb 18 01 25.1
comp=Z,8.0nm,1.3s
**SIRT Sirnak 75.50 306** P **P** **18 01 06.2 -1.6**
**GURO Guroymak-BITLI 75.73 307** P **P** **18 01 08.8 -0.4**
GURO IAmb IAmb 18 01 21.6
comp=Z,8.0nm,1.0s
**KLMR Klimovskoe 76.29 330** *e*P **P** **18 01 15.8 +4.2**
KLMR AMP 18 01 22.7
comp=Z,22nm,1.4s
**CAST Castle Rocks 76.43 27** P **P** **18 01 12.1 -0.4**
CAST IAmb IAmb 18 01 18.6
comp=Z,7.3nm,0.9s
**ILAR Eielson Array 78.64 26** P **P** **18 01 23.9 -0.9**
comp=Z,0.8nm,0.9s,baz=249,slow=4.7,SNR=3.8
**BMAR Burnt Mountain 79.31 23** P **P** **18 01 28.6 +0.1**
**ARCES ARCESS Array B 81.20 339** LR LR 18 39 39.3
comp=Z,144nm,18.7s,baz=332,slow=37
**SPITS Spitsbergen Ar 81.34 349** LR LR 18 40 37.7
comp=Z,160nm,18.4s,baz=140,slow=38
**BRTR Keskin Array B 82.06 309** P **P** **18 01 43.1 -0.8**
comp=Z,1.0nm,0.9s,baz=70,slow=4.1,SNR=3.9
BRTR LR LR 18 45 08.4
comp=Z,70nm,18.3s,baz=74,slow=41
**BRTR Keskin Array B 82.06 309** P **P** **18 01 42.5 -1.5**
**FINES FINESS Array B 82.68 331** P **P** **18 01 45.6 -0.8**
comp=Z,2.4nm,0.9s,baz=79,slow=7.2,SNR=1.7
FINES LR LR 18 42 43.9
comp=Z,199nm,18.7s,baz=52,slow=39
**AKASG Malin Array Be 83.16 320** LR LR 18 40 16.9
comp=Z,94nm,18.5s,baz=12,slow=37
**BUR08 Bucovina Ar. S 86.42 318** P **P** **18 02 05.7 -0.2**
BUR08 IAmb IAmb 18 02 17.1
comp=Z,5.6nm,1.0s
**MLR Muntele Rosu 86.45 316** LR LR 18 44 43.2
comp=Z,181nm,18.1s,baz=45,slow=38
**KMBO Kilima Mbogo 86.60 268** P **P** **18 02 07.5 -0.1**
comp=Z,1.4nm,0.6s,baz=61,slow=4.1,SNR=4.3
KMBO LR LR 18 40 26.9
comp=Z,73nm,18.0s,baz=92,slow=35
**HFS Hagfors 88.86 332** LR LR 18 45 33.6
comp=Z,182nm,18.2s,baz=38,slow=38
**NOA NORSAR Array B 89.60 333** LR LR 18 45 31.6
comp=Z,168nm,19.1s,baz=70,slow=38
**IDI Anoyia 89.80 306** LR LR 18 49 19.6
comp=Z,56nm,18.2s,baz=79,slow=40
**JMIC Jan Mayen 90.66 346** LR LR 18 46 59.3
comp=Z,81nm,18.2s,baz=91,slow=38
**VNDA Vanda 92.45 172** LR LR 18 46 16.5
comp=Z,79nm,19.0s,baz=252,slow=37
**YKA Yellowknife Ar 92.83 20** P **P** **18 02 34.1 -1.4**
comp=Z,0.9nm,0.9s,baz=300,slow=4.7,SNR=6.9
**MBAR Mbarara 92.85 270** LR LR 18 40 52.6
comp=Z,64nm,21.4s,baz=98,slow=33
**LSZ Lusaka 98.27 256** LR LR 18 42 58.2
comp=Z,75nm,19.3s,baz=132,slow=33
**BORG Borgarnes 98.55 346** LR LR 18 50 51.6
comp=Z,65nm,20.9s,baz=36,slow=37
**EKA Eskdalemuir Ar 99.05 332** LR LR 18 54 35.0
comp=Z,238nm,21.7s,baz=19,slow=40
**TXAR Lajitas Array 118.35 47** PKP **PKPdf** **18 08 10.3 -1.1**
comp=Z,0.5nm,1.0s,baz=339,slow=3.2,SNR=3.8
**PLCA Paso Flores 149.25 159** PKPbc **PKiKP** **18 09 13.0 -0.5**
comp=Z,1.7nm,0.8s,baz=206,slow=1.7,SNR=3.4
**LPAZ La Paz 168.09 110** PKP **PKPdf** **18 09 30.7 -0.8**
comp=Z,2.2nm,0.9s,baz=64,slow=1.8,SNR=5.9

**IDC 18 17:49:33.1±57.0, 18°07'S×177°61'W, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.5/33, mbtmp3.6/3, Error ellipse: s-maj=1043.0km s-min=178.3km az=80.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.22** | **242** | P | P | 17 57 03.5 | +0.1 |
| | 0.8nm,0.8s,baz=85,slow=12,SNR=1.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.35** | **260** | P | P | 17 57 53.4 | -0.1 |
| | 0.3nm,0.4s,baz=96,slow=8.1,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **45.48** | **254** | P | P | 17 57 54.2 | -0.3 |
| | 0.4nm,0.4s,baz=85,slow=8.5,SNR=6.4 | | | | | | |

*IDC **18** 17:50:12.9±3.2, 17°07'S×174°64'W, h110km±22km, mb3.6/6, mb1 3.9/8, mb1mx3.7/34, mbtmp4.0/8, Error ellipse: s-maj=80.5km s-min=12.9km az=146.0*

**ISC 18 17:50:16.8±1.5, 16°55'S×174°9'W±0°3, h150km, n11, σ1°17/11, mb3.7/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.97** | **50** | P | **Pn** | **17 51 16.5** | **-0.3** |
| | 8.6nm,0.3s,baz=206,slow=4.6,SNR=9.6 | | | | | | |
| AFI | | | | S | **Sn** | **17 52 02.1** | **-1.2** |
| | 58nm,0.3s,baz=310,slow=23,SNR=12 | | | | | | |
| **MSVF** | **Nonsavu** | **6.86** | **259** | P | **Pn** | **17 51 54.8** | **-0.2** |
| | 1.6nm,0.3s,baz=189,slow=5.8,SNR=6.2 | | | | | | |
| **STKA** | **Stephens Creek** | **42.24** | **241** | P | **P** | **17 57 54.6** | **-0.8** |
| | 4.4nm,0.9s,baz=89,slow=9.4,SNR=6.6 | | | | | | |
| **STKA** | **Stephens Creek** | **42.24** | **241** | P | **P** | **17 57 54.6** | **-0.8** |
| **WRA** | **Warramunga Arr** | **46.20** | **258** | P | **P** | **17 58 43.1** | **+0.6** |
| | 0.8nm,0.6s,baz=96,slow=7.1,SNR=10.0 | | | | | | |
| **ASAR** | **Alice Springs** | **48.41** | **253** | P | **P** | **17 58 44.1** | **0.0** |
| | 5.9nm,0.8s,baz=90,slow=8.0,SNR=27 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 00 08.6** | **+0.3** |
| | 0.8nm,0.7s,baz=98,slow=4.2,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **82.42** | **57** | P | P | 18 02 24.4 | +1.7 |
| | 0.4nm,0.7s,baz=212,slow=4.4,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.81** | **12** | P | P | 18 02 32.6 | +3.7 |
| | 0.6nm,0.5s,baz=233,slow=5.7,SNR=10 | | | | | | |
| **PDAR** | **Pinedale Array** | **84.05** | **42** | P | **P** | **18 02 33.0** | **+2.0** |
| | 0.7nm,0.7s,baz=169,slow=1.5,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.07** | **319** | PKPbc | **PKiKP** | **18 09 41.2** | **-1.6** |
| | 1.5nm,1.0s,baz=341,slow=3.1,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.00** | **350** | PKPbc | **PKPab** | **18 09 44.6** | **+0.9** |
| | 0.7nm,0.7s,baz=338,slow=2.9,SNR=5.2 | | | | | | |

**IDC 18 17:50:52.7±1.2, 26°97N×100°76E, h0km, mb3.5/4, mb1 3.7/5, mb1mx3.4/51, mbtmp3.5/5, ML3.5/1, Error ellipse: s-maj=43.5km s-min=19.8km az=80.0, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **8.63** | **192** | Pn | Pn | 17 52 59.6 | +0.6 |
| | 0.1nm,0.3s,baz=5.5,slow=12,SNR=13 | | | | | | |
| CMAR | | | | Pg | Pg | 17 53 33.5 | -4.7 |
| | 0.7nm,0.3s,baz=0.1,slow=18,SNR=26 | | | | | | |
| CMAR | | | | Lg | Lg | 17 55 24.9 | |
| | 0.2nm,0.3s,baz=11,slow=26,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **21.29** | **11** | P | P | 17 55 41.3 | +0.3 |
| | 0.9nm,0.9s,baz=191,slow=12,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.58** | **328** | P | P | 17 56 13.8 | -0.6 |
| | 0.3nm,0.5s,baz=136,slow=9.6,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.87** | **142** | P | P | 18 00 39.5 | 0.0 |
| | 1.1nm,0.5s,baz=332,slow=7.6,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **59.66** | **144** | P | P | 18 00 59.1 | +0.1 |
| | 0.7nm,0.5s,baz=327,slow=6.6,SNR=10 | | | | | | |

*TEH **18** 17:51:58.9, 36°83N×54°64E, h8km, ML3.5*
*AZER **18** 17:52:05.0±1.5, 36°92N×54°30E, h60km, Error ellipse: s-maj=25.4km s-min=13.0km az=27.0*

**ISC 18 17:52:00.4±1.0, 36°92N±0°05×54°62E±0°05, h30km, n63, σ2°37/77, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IMND** | **Minoodasht** | **0.71** | **62** | *e*Pg | **Pn** | **17 52 12.8** | **-1.6** |
| **IGLO** | **Ghaloghah** | **0.76** | **237** | *e*Pg | **Pb** | **17 52 13.2** | **-2.0** |
| IGLO | | | | *e* | | 17 52 29.1 | |
| | comp=Z,19μm,0.3s | | | | | | |
| **MRVT** | **Maraveh tapeh** | **1.38** | **57** | *e*Pn | **Pn** | **17 52 25.3** | **+1.6** |
| **SHRO** | **Shahrood** | **1.46** | **129** | *e*Pn | **Pn** | **17 52 25.1** | **+0.4** |
| **ISHM** | **Shahmirzad** | **1.54** | **224** | *e*Pg | **Pb** | **17 52 27.2** | **-1.3** |
| ISHM | | | | *e* | | 17 52 59.4 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **IANJ** | **Anjilo** | **1.56** | **202** | *e*Pg | **Pn** | **17 52 26.6** | **+0.3** |
| IANJ | | | | *e*Sg | **Sb** | **17 52 47.4** | **-0.7** |
| IANJ | | | | *e* | | 17 52 51.7 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **IPRN** | **Peran** | **1.96** | **250** | *e*Pn | **Pb** | **17 52 34.3** | **-1.1** |
| **IFIR** | **Firoozkooh** | **1.98** | **230** | *e*Pn | **Pb** | **17 52 34.8** | **-1.0** |
| IFIR | | | | *e* | | 17 53 06.4 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **ILAS** | **Lasjerd** | **2.04** | **222** | *e*Pn | **Pb** | **17 52 36.1** | **-0.8** |
| ILAS | | | | *e* | | 17 53 10.8 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **BJRD** | **Bojnurd** | **2.35** | **70** | *e*Pn | **Pn** | **17 52 39.6** | **+2.5** |
| **SBZV** | **Sabzevar** | **2.46** | **102** | *e*Pn | **Pn** | **17 52 41.1** | **+2.4** |
| **IDMV** | **Damavand** | **2.48** | **238** | *e* | Sb | 17 53 22.4 | +7.6 |
| | comp=Z,2μm,0.5s | | | | | | |
| **DAMV** | **Damavand** | **2.50** | **240** | *e*Pn | **Pb** | **17 52 44.3** | **-0.4** |
| **ISFR** | **Sfrayin** | **2.71** | **86** | *e*Pn | **Pn** | **17 52 45.3** | **+3.2** |
| ISFR | | | | *e* | | 17 53 33.5 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **CHTH** | **Charan** | **2.99** | **251** | *e*Pn | **Pb** | **17 52 51.2** | **-1.9** |
| **IVRN** | **Varamin** | **3.03** | **232** | *e*Pn | **Pn** | **17 52 49.0** | **+2.6** |
| IVRN | | | | *e* | | 17 53 37.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IHSB** | **Hasanabad** | **3.08** | **242** | *e*Pn | **Pn** | **17 52 49.7** | **+2.6** |
| **ISFB** | **Sefidab** | **3.21** | **218** | *e*Pn | **Pn** | **17 52 51.1** | **+2.2** |
| **QALM** | **Alamut, Qazvin** | **3.23** | **262** | *e*Pn | **Pn** | **17 52 52.4** | **+3.1** |
| QALM | | | | *e* | | 17 53 46.3 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **IAKL** | **Akhelmad** | **3.34** | **94** | *e*Pn | **Pn** | **17 52 53.8** | **+3.0** |
| IAKL | | | | *e* | | 17 53 47.0 | |
| | comp=N,780nm,0.4s | | | | | | |
| **TNSJ** | **Nastanj** | **3.37** | **151** | *e*Pn | **Pn** | **17 52 52.9** | **+1.9** |
| TNSJ | | | | *e* | | 17 53 43.8 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **IPAY** | **Payeh** | **3.55** | **96** | *e*Pn | **Pn** | **17 52 56.9** | **+3.3** |
| **IQOM** | **Qom** | **3.55** | **235** | *e*Pn | **Pn** | **17 52 57.1** | **+3.4** |
| IQOM | | | | *e* | | 17 53 13.8 | |
| | comp=Z,628nm,0.6s | | | | | | |
| **KRSH** | **Karshahi** | **3.58** | **215** | *e*Pn | **Pn** | **17 52 55.9** | **+2.0** |
| KRSH | | | | *e* | | 17 54 01.1 | |
| | comp=Z,711nm,0.6s | | | | | | |
| **TABS** | **Tabas** | **3.85** | **147** | *e*Pn | **Pn** | **17 52 59.9** | **+2.2** |
| **TKDS** | **Koohdasht(Taba** | **3.88** | **147** | *e*Pn | **Pn** | **17 52 59.7** | **+1.6** |
| TKDS | | | | *e* | | 17 54 07.0 | |
| | comp=Z,647nm,0.6s | | | | | | |
| **IKRD** | **Kardeh** | **3.93** | **91** | *e*Pn | **Pn** | **17 53 02.6** | **+3.7** |
| **IRAZ** | **Razeghan** | **4.09** | **250** | *e*Pn | **Pn** | **17 53 05.0** | **+4.0** |
| **TPRV** | **Parvadeh(Tabas** | **4.24** | **156** | *e*Pn | **Pn** | **17 53 04.9** | **+1.9** |
| TPRV | | | | *e* | | 17 54 28.1 | |
| | comp=Z,467nm,0.6s | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **4.24** | **255** | *e*Pn | **Pn** | **17 53 06.8** | **+3.6** |
| QABG | | | | *e* | | 17 54 12.3 | |
| | comp=Z,341nm,0.6s | | | | | | |
| **IKLH** | **Kolahrood** | **4.37** | **216** | *e* | | 17 54 36.0 | |
| | comp=Z,294nm,0.7s | | | | | | |
| **ASAO** | **Ashtian** | **4.42** | **239** | *e*Pn | Pn | 17 53 10.0 | +4.3 |
| **IMYA** | **Miami** | **4.45** | **96** | *e*Pn | **Pn** | **17 53 08.3** | **+2.4** |
| **JRKH** | **Jarkhoshk** | **4.73** | **101** | *e*Pn | **Pn** | **17 53 12.3** | **+2.5** |
| **ASTR** | **Astara** | **4.90** | **291** | P | **Pn** | **17 53 12.9** | **+1.0** |
| ASTR | | | | S | **Sn** | **17 54 04.8** | **-2.8** |
| **TBJM** | **Torbat-e-JAM** | **4.91** | **108** | *e*Pn | **Pn** | **17 53 14.7** | **+2.4** |
| **LKRN** | **Lenkeran, Azer** | **4.96** | **293** | P | **Pn** | **17 53 14.0** | **+1.3** |
| LKRN | | | | S | **Sn** | **17 54 10.9** | **+1.9** |
| **AFRZ** | **Afriz** | **5.01** | **133** | *e*Pn | **Pn** | **17 53 15.7** | **+2.0** |
| **ITEG** | **Tejag** | **5.26** | **139** | *e*Pn | **Pn** | **17 53 19.4** | **+2.3** |
| **LRK** | **Lerik** | **5.26** | **291** | P | **Pn** | **17 53 18.0** | **+0.9** |
| LRK | | | | S | **Sn** | **17 54 16.0** | **-0.8** |
| **YRD** | **Yardimli** | **5.42** | **293** | P | **Pn** | **17 53 19.1** | **-0.3** |
| YRD | | | | S | **Sn** | **17 54 19.2** | **-1.6** |
| **GLBA** | **Clilabad** | **5.43** | **297** | P | **Pn** | **17 53 21.9** | **+2.6** |
| GLBA | | | | *S* | **Sn** | **17 54 19.4** | **-1.3** |
| **IMON** | **Monand** | **5.56** | **130** | *e*Pn | **Pn** | **17 53 23.5** | **+2.2** |
| IMON | | | | *e* | | 17 53 30.1 | |
| | comp=Z,300nm,0.2s | | | | | | |
| **SHRT** | **Shahrakht** | **5.67** | **124** | *e*Pn | **Pn** | **17 53 25.0** | **+2.3** |
| **IKOO** | **Kooshah** | **5.76** | **140** | *e*Pn | **Pn** | **17 53 26.1** | **+2.1** |
| **ATGJ** | **Altiaghaj** | **5.92** | **313** | S | **Sn** | **17 54 35.2** | **+2.1** |
| **IDAH** | **Dahanechah** | **6.00** | **133** | *e*Pn | **Pn** | **17 53 29.6** | **+2.2** |
| IDAH | | | | *e* | | 17 53 31.0 | |
| | comp=N,392nm,0.2s | | | | | | |
| **PQL** | **Pirkuli** | **6.08** | **311** | P | **Pn** | **17 53 29.5** | **+1.2** |
| PQL | | | | S | **Sn** | **17 54 39.1** | **+2.1** |
| **SIZA** | **Siyzn** | **6.09** | **315** | P | **Pn** | **17 53 33.1** | **+4.8** |
| SIZA | | | | S | **Sn** | **17 54 39.8** | **+2.8** |
| **BSRN** | **Basiran** | **6.19** | **142** | *e*Pn | **Pn** | **17 53 32.0** | **+2.2** |
| **IML** | **Ismayilli** | **6.34** | **310** | P | **Pn** | **17 53 34.4** | **+2.6** |
| IML | | | | S | **Sn** | **17 54 44.9** | **+1.8** |
| **QUBA** | **Quba, Azerbaij** | **6.50** | **315** | P | **Pn** | **17 53 33.7** | **-0.3** |
| QUBA | | | | S | **Sn** | **17 54 49.6** | **+2.5** |
| **XNQ** | **Khinaliq** | **6.59** | **312** | P | **Pn** | **17 53 36.7** | **+1.3** |
| XNQ | | | | S | **Sn** | **17 54 48.4** | **-1.2** |
| **QBL** | **Gabala** | **6.64** | **309** | P | **Pn** | **17 53 38.3** | **+2.4** |
| QBL | | | | S | **Sn** | **17 54 49.4** | **-1.2** |
| **QSAR** | **Qusar** | **6.74** | **315** | P | **Pn** | **17 53 39.5** | **+2.3** |
| QSAR | | | | S | **Sn** | **17 54 53.5** | **+0.6** |
| **ORD** | **Ordubad** | **7.11** | **289** | P | **Pn** | **17 53 42.3** | **-0.1** |
| ORD | | | | S | **Sn** | **17 54 58.8** | **-3.3** |
| **NHDN** | **Nehbandan** | **7.12** | **139** | *e*Pn | **Pn** | **17 53 44.8** | **+2.2** |
| **SEKA** | **Sheki** | **7.19** | **309** | S | **Sn** | **17 54 59.9** | **-4.1** |
| **GANJ** | **Ganja** | **7.47** | **302** | P | **Pn** | **17 53 49.1** | **+1.8** |
| GANJ | | | | S | **Sn** | **17 55 10.9** | **-0.1** |
| **NAX** | **Nakhchivan** | **7.54** | **290** | P | **Pn** | **17 53 47.4** | **-0.9** |
| **ZKTA** | **Zakatala** | **7.79** | **310** | P | **Pn** | **17 53 51.6** | **0.0** |
| ZKTA | | | | S | **Sn** | **17 55 14.8** | **-3.9** |
| **GDB** | **GEDABAY** | **7.89** | **301** | P | **Pn** | **17 53 53.7** | **+0.5** |
| GDB | | | | S | **Sn** | **17 55 17.2** | **-4.3** |
| **QZX** | **Qazax, Azerbai** | **8.30** | **303** | S | **Sn** | **17 55 26.0** | **-5.4** |

**IDC 18 17:52:34.4±8.4, 11°49S×167°93E, h0km, mb3.7/5, mb1 3.9/5, mb1mx3.7/35, mbtmp3.7/5, MS3.8/4, Ms1 3.8/4, ms1mx3.1/61, Error ellipse: s-maj=240.1km s-min=44.8km az=123.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **8.11** | **284** | LR | LR | 17 57 13.7 | |
| | comp=Z,478nm,21.4s,baz=101,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **20.53** | **274** | LR | LR | 18 04 10.7 | |
| | comp=Z,252nm,19.4s,baz=64,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.35** | **251** | P | P | 17 59 14.0 | -0.6 |
| | 0.6nm,0.7s,baz=82,slow=8.9,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **34.52** | **245** | P | P | 17 59 25.6 | +0.8 |
| | 0.9nm,0.8s,baz=75,slow=9.7,SNR=1.7 | | | | | | |
| ASAR | | | | LR | LR | 18 13 30.8 | |
| | comp=Z,122nm,18.7s,baz=355,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **74.25** | **293** | P | P | 18 04 13.5 | -0.5 |
| | 0.2nm,0.3s,baz=93,slow=4.5,SNR=1.3 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.22** | **21** | LR | LR | 18 30 45.7 | |
| | comp=Z,69nm,19.5s,baz=236,slow=30 | | | | | | |
| **SONM** | **Songino Array** | **80.29** | **323** | P | P | 18 04 48.6 | +1.1 |
| | 0.2nm,0.4s,baz=131,slow=5.9,SNR=2.0 | | | | | | |

**MKAR Makanchi Array 95.31 317** P P 18 05 59.7 -0.8
0.8nm,0.8s,baz=102,slow=5.7,SNR=8.3

**DJA 18 17:55:19.9±0.4,10°S±7°×11°7E±°, h59km±14km, M3.7/11, mb4.0/1, MLv3.6/11, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **0.96** | **46** | P | Pn | 17 55 37.9 | +0.5 |
| PLAI | | | | S | Sn | 17 55 50.6 | +0.3 |
| **IGBI** | **Denpasar** | **2.03** | **289** | P | Pn | 17 55 52.5 | +0.8 |
| IGBI | | | | S | Sn | 17 56 16.5 | +0.6 |
| **WBSI** | **Waikabubak, Su** | **2.28** | **94** | P | Pn | 17 55 55.2 | -0.1 |
| WBSI | | | | S | Sn | 17 56 22.6 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **3.07** | **289** | P | Pn | 17 56 05.7 | -0.3 |
| JAGI | | | | S | Sn | 17 56 41.3 | -0.2 |
| **ABJI** | **Asem Bagus** | **3.28** | **301** | P | Pn | 17 56 09.3 | +0.4 |
| **BASI** | **Baing, Sumba** | **3.52** | **102** | P | Pn | 17 56 12.9 | +0.8 |
| **GMJI** | **Gumukmas** | **3.79** | **288** | P | Pn | 17 56 15.3 | -0.6 |
| **BLJI** | **Banyuglugur** | **3.86** | **297** | P | Pn | 17 56 16.8 | 0.0 |
| **BSSI** | **Bau Bau, Buton** | **4.75** | **46** | P | Pn | 17 56 29.8 | +0.8 |
| **BKSI** | **Bulukumba** | **5.13** | **36** | P | Pn | 17 56 33.8 | -0.4 |

**IDC 18 18:14:18.3±2.8,5°83S×130°61E, h0km, mb3.3/1, mb1 3.3/3, mb1mx3.1/23, mbtmp3.1/3, ML2.8/2, Error ellipse: s-maj=162.6km s-min=33.9km az=71.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.49** | **166** | Pn | Pn | 18 17 44.3 | -0.6 |
| | 0.0nm,0.3s,baz=349,slow=13,SNR=1.3 | | | | | | |
| WRA | | | | Sn | Sn | 18 20 13.7 | -13 |
| | 0.1nm,0.3s,baz=340,slow=22,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.02** | **170** | P | Pn | 18 18 30.6 | +0.1 |
| | 0.0nm,0.3s,baz=351,slow=10,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.59** | **326** | P | P | 18 25 16.9 | +0.1 |
| | 0.2nm,0.7s,baz=113,slow=7.6,SNR=2.2 | | | | | | |

**IDC 18 18:17:38.0±2.2,6°66S×130°16E, h0km, mb3.6/1, mb1 3.5/3, mb1mx3.3/21, mbtmp3.4/3, ML3.5/2, Error ellipse: s-maj=141.8km s-min=31.3km az=70.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.82** | **163** | Pn | Pn | 18 20 54.8 | -0.5 |
| | 0.3nm,0.3s,baz=346,slow=13,SNR=6.7 | | | | | | |
| WRA | | | | Sn | Sn | 18 23 15.7 | -14 |
| | 0.8nm,0.3s,baz=338,slow=22,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **17.29** | **168** | P | Pn | 18 21 41.4 | +0.4 |
| | 0.1nm,0.3s,baz=342,slow=8.7,SNR=7.1 | | | | | | |
| ASAR | | | | S | Sn | 18 24 40.2 | -14 |
| | 0.2nm,0.3s,baz=349,slow=24,SNR=7.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.03** | **327** | P | P | 18 28 39.3 | 0.0 |
| | 0.2nm,0.3s,baz=120,slow=7.9,SNR=10 | | | | | | |

**GUC 18 18:53:12.0±0.8,24°21S×67°47W, h210km±14km, ML3.6, 2C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.07** | **320** | *i* P | Pn | 18 53 52.0 | -0.4 |
| LVC | | | | *e*S | S | 18 54 22.2 | -1.2 |
| **PB15** | **IPOC Station P** | **2.09** | **298** | ↑ *i* P | Pn | 18 53 52.6 | +0.2 |
| PB15 | | | | *e*S | S | 18 54 23.6 | +0.2 |
| **PB06** | **IPOC Station P** | **2.44** | **307** | ↑ *i* P | Pn | 18 53 56.4 | +0.3 |
| PB06 | | | | *e*S | S | 18 54 29.7 | -0.3 |
| PB06 | | | | IAML | | 18 54 32.6 | |
| | comp=E,149nm,0.2s | | | | | | |
| **PB14** | **IPOC Station P** | **2.71** | **260** | *e*P | Pn | 18 53 59.2 | +0.1 |
| PB14 | | | | *e*S | S | 18 54 35.0 | -0.5 |
| **PB09** | **IPOC Station P** | **2.90** | **325** | *e*P | Pn | 18 54 01.7 | +0.5 |
| PB09 | | | | *e*S | S | 18 54 39.3 | 0.0 |
| PB09 | | | | IAML | | 18 54 41.8 | |
| | comp=N,77nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **2.91** | **283** | *e*P | Pn | 18 54 01.8 | +0.7 |
| **PB03** | **IPOC Station P** | **3.00** | **315** | *e*P | Pn | 18 54 02.4 | 0.0 |
| PB03 | | | | *e*S | S | 18 54 40.5 | -0.9 |
| PB03 | | | | IAML | | 18 54 42.9 | |
| | comp=N,86nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **3.09** | **307** | *e*P | Pn | 18 54 03.8 | +0.3 |
| PB04 | | | | *e*S | S | 18 54 42.6 | -0.6 |
| **PB07** | **IPOC Station P** | **3.32** | **317** | *e*P | Pn | 18 54 06.1 | -0.1 |
| PB07 | | | | *e*S | S | 18 54 46.8 | -1.4 |
| **PB02** | **IPOC Station P** | **3.64** | **322** | *e*P | Pn | 18 54 09.4 | -0.5 |
| PB02 | | | | *e*S | S | 18 54 52.6 | -2.3 |
| **PB01** | **IPOC Station P** | **3.66** | **329** | *e*P | Pn | 18 54 09.8 | -0.4 |
| PB01 | | | | *e*S | S | 18 54 53.3 | -2.0 |
| **GO03** | **Copiap** | **4.19** | **216** | *e*S | S | 18 55 04.8 | -2.4 |

*IDC **18** 18:56:31.3±3.3, 4.°82S×144.°93E, h0km, mb3.5/3, mb1 3.8/6, mb1mx3.4/35, mbtmp3.6/6, ML3.5/2, Error ellipse: s-maj=58.6km s-min=31.7km az=65.0*
**ISC 18 18:56:37.8±2.4,5.°0S±0.°2×145.°0E±0.°3, h54km, n6, σ1°03/7, mb3.6/3, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.87** | **155** | Pn | **Pn** | **18 57 49.3** | **+0.8** |
| | 1.0nm,0.3s,baz=326,slow=11,SNR=2.6 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 58 42.1** | **-1.5** |
| | 1.1nm,0.3s,baz=299,slow=23,SNR=7.3 | | | | | | |
| **CTA** | **Charters Tower** | **15.06** | **176** | Pn | **Pn** | **19 00 08.3** | **+1.0** |
| | 0.1nm,0.3s,baz=355,slow=12,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.12** | **214** | P | **P** | **19 00 45.8** | **-0.1** |
| | 0.2nm,0.3s,baz=39,slow=12,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **21.46** | **209** | P | **P** | **19 01 21.5** | **-0.3** |
| | 1.1nm,0.7s,baz=32,slow=13,SNR=16 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.01** | **234** | P | **P** | **19 01 38.5** | **+0.1** |
| | 1.6nm,0.6s,baz=46,slow=9.5,SNR=7.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **51.05** | **298** | P | **P** | **19 05 34.6** | **-0.5** |
| | 0.4nm,0.5s,baz=116,slow=5.5,SNR=2.7 | | | | | | |

*ATH **18** 19:10:14.3, 38.°45N×25.°43E, h11km±3km, ML2.5/1, Error ellipse: s-maj=5.8km s-min=2.2km az=60.0*
*THE **18** 19:10:15.1, 38.°49N×25.°51E, h0km±4km, ML1.2/1, Error ellipse: s-maj=6.5km s-min=0.7km az=243.0*
**ISC 18 19:10:15.2±2.7, 38°48N±0.°08×25°5E±0.°1, h12km±8km, n6, σ0°54/11, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSRA** | **Psara** | **0.09** | **49** | P | **Pg** | **19 10 18.0** | **+0.1** |
| PSRA | | | | S | **Sg** | **19 10 19.7** | **-0.1** |
| PSRA | | | | AML | AML | 19 10 19.9 | |
| | comp=N,7173μm,0.2s | | | | | | |
| PSRA | | | | AML | AML | 19 10 20.1 | |
| | comp=E,4944μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.46** | **102** | P | **Pg** | **19 10 23.8** | **-0.5** |
| CHOS | | | | S | **Sg** | **19 10 30.5** | **0.0** |
| | comp=E,50nm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.46** | **102** | P | **Pg** | **19 10 23.9** | **-0.5** |
| CHOS | | | | S | **Sg** | **19 10 30.7** | **+0.2** |
| **SIGR** | **SIGRI** | **0.78** | **22** | P | **Pg** | **19 10 29.7** | **-0.7** |
| SIGR | | | | S | **Sb** | **19 10 41.9** | **+0.5** |
| **SIGR** | **SIGRI** | **0.78** | **22** | P | **Pg** | **19 10 29.8** | **-0.6** |
| SIGR | | | | S | **Sb** | **19 10 42.1** | **+0.6** |
| **SMG** | **Samos** | **1.32** | **125** | P | **Pn** | **19 10 39.7** | **+0.2** |

*IDC **18** 19:41:50.5±1.9, 3.°87S×133.°79E, h0km, mb3.3/2, mb1 3.6/6, mb1mx3.4/34, mbtmp3.4/6, ML3.2/4, Error ellipse: s-maj=64.4km s-min=23.4km az=67.0*
**ISC 18 19:41:55.7±1.3, 4°10S±0.°09×133°3E±0.°2, h35km, n6, σ0°94/8, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **3.81** | **327** | Pn | **Pn** | **19 42 52.2** | **+0.3** |
| | 0.7nm,0.3s,baz=244,slow=21,SNR=12 | | | | | | |
| SIJI | | | | Sn | **Sn** | **19 43 34.9** | **-0.8** |
| | 0.6nm,0.3s,baz=148,slow=23,SNR=1.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.78** | **176** | Pn | **Pn** | **19 45 36.1** | **+0.7** |
| | 0.1nm,0.3s,baz=359,slow=12,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.82** | **208** | Pn | **P** | **19 45 38.8** | **-0.5** |
| | 0.1nm,0.3s,baz=40,slow=14,SNR=1.5 | | | | | | |
| FITZ | | | | Sn | **Sn** | **19 48 29.8** | **-0.4** |
| | 0.1nm,0.3s,baz=114,slow=23,SNR=3.0 | | | | | | |

**ASAR Alice Springs 19.46 178** P **Pn 19 46 22.0 +1.1**
0.1nm,0.3s,baz=3.1,slow=12,SNR=18
**CTA Charters Tower 20.28 143** P **P 19 46 27.3 -1.2**
0.9nm,0.5s,baz=345,slow=12,SNR=1.7
**MKAR Makanchi Array 67.71 325** P **P 19 52 50.1 +0.6**
0.2nm,0.7s,baz=114,slow=8.0,SNR=2.7

*IDC **18** 19:45:16.1±0.7, 22.°10N×145.°04E, h0km, mb3.8/14, mb1 4.0/14, mb1mx3.9/57, mbtmp3.8/14, ML5.1/1, MS3.3/9, Ms1 3.3/9, ms1mx2.9/86, Error ellipse: s-maj=25.4km s-min=16.6km az=86.0*
*NEIC **18** 19:45:17.4±1.6, 22.°23N±0.°09×145.°0E±0.°2, h10km±1km, mb4.1/7, Error ellipse: s-maj=27.5km s-min=15.5km az=87.0*
**ISC 18 19:45:17.7±0.7, 22°2N±0.°1×144°9E±0.°2, h10km, n32, σ1°27/25, mb3.8/18, MS3.2/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **5.49** | **333** | Pn | **Pn** | **19 46 37.5** | **-2.1** |
| JCJ | | | | Sn | **Sn** | **19 47 41.5** | **-1.3** |
| **GUMO** | **Guam** | **8.55** | **180** | LR | LR | 19 50 14.9 | |
| | comp=Z,164nm,20.6s,baz=38,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.46** | **339** | LR | LR | 19 53 13.0 | |
| | comp=Z,21nm,20.6s,baz=155,slow=31 | | | | | | |
| **JNU** | **Nakatsue** | **16.53** | **314** | Pn | **P** | **19 49 11.2** | **-1.0** |
| | 5.6nm,0.3s,baz=138,slow=12,SNR=15 | | | | | | |
| **KSRS** | **Korea Array** | **21.15** | **320** | P | **P** | **19 50 06.2** | **+3.4** |
| | 2.3nm,0.7s,baz=136,slow=12,SNR=7.8 | | | | | | |
| KSRS | | | | LR | LR | 19 57 45.7 | |
| | comp=Z,111nm,21.0s,baz=130,slow=35 | | | | | | |
| **DAV** | **Davao City (W)** | **23.96** | **234** | LR | LR | 19 58 16.1 | |
| | comp=Z,85nm,21.7s,baz=322,slow=32 | | | | | | |
| **KLR** | **Kul'dur** | **28.95** | **342** | P | **P** | **19 51 18.3** | **+1.3** |
| | 1.9nm,0.6s,baz=138,slow=7.4,SNR=11 | | | | | | |
| KLR | | | | LR | LR | 20 04 05.0 | |
| | comp=Z,49nm,18.5s,baz=176,slow=39 | | | | | | |
| **HNR** | **Honiara** | **34.70** | **153** | LR | LR | 20 05 28.5 | |
| | comp=Z,68nm,20.3s,baz=318,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **40.02** | **319** | P | **P** | **19 52 53.5** | **+0.7** |
| | 0.3nm,0.5s,baz=130,slow=7.2,SNR=4.5 | | | | | | |
| SONM | | | | LR | LR | 20 09 48.4 | |
| | comp=Z,87nm,19.0s,baz=131,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **40.02** | **319** | IAmb | IAmb | 19 53 09.5 | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.95** | **195** | P | **P** | **19 53 14.9** | **-2.0** |
| WB0 | | | | IAmb | IAmb | 19 53 17.4 | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.10** | **194** | P | **P** | **19 53 17.1** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 19 53 21.1 | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.12** | **195** | P | **P** | **19 53 17.7** | **-0.7** |
| **WB2** | **Warramunga Arr** | **43.12** | **195** | | **P** | **19 53 17.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 19 53 25.1 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.13** | **195** | P | **P** | **19 53 18.4** | **-0.1** |
| | comp=Z,1.7nm,0.7s,baz=12,slow=8.6,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.13** | **195** | IAmb | IAmb | 19 53 19.6 | |
| | comp=Z,0.4nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.16** | **274** | LR | LR | 20 10 27.4 | |
| | comp=Z,18nm,20.1s,baz=150,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.26** | **207** | P | **P** | **19 53 26.9** | **-0.6** |
| | comp=Z,1.6nm,0.7s,baz=5.2,slow=11,SNR=1.9 | | | | | | |
| **AS31** | **Alice Springs** | **46.82** | **194** | P | **P** | **19 53 47.7** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 19 54 05.3 | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **46.82** | **194** | P | **P** | **19 53 47.0** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=14,slow=9.3,SNR=12 | | | | | | |
| **DZM** | **Mont Dzumac** | **48.73** | **153** | LR | LR | 20 13 42.5 | |
| | comp=Z,111nm,18.2s,baz=32,slow=35 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.84** | **321** | P | **P** | **19 54 48.0** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=80,slow=10,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.57** | **312** | P | **P** | **19 54 54.3** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=90,slow=9.2,SNR=7.3 | | | | | | |
| **IMAR** | **Indian Mountai** | **58.36** | **25** | P | **P** | **19 55 11.3** | **-1.5** |
| **ILAR** | **Eielson Array** | **60.87** | **27** | P | **P** | **19 55 29.7** | **-0.4** |
| | comp=Z,0.6nm,0.8s,baz=248,slow=4.8,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.27** | **28** | P | **P** | **19 57 00.9** | **+0.3** |
| | comp=Z,0.4nm,0.8s,baz=290,slow=5.5,SNR=4.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.57** | **52** | P | **P** | **19 57 36.7** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=259,slow=9.1,SNR=1.1 | | | | | | |
| **ELK** | **Elko** | **82.89** | **49** | P | **P** | **19 57 43.8** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=243,slow=4.5,SNR=3.5 | | | | | | |
| **KBZ** | **Khabaz** | **83.20** | **314** | P | **P** | **19 57 46.0** | **+1.8** |
| | comp=Z,2.3nm,0.9s,baz=146,slow=3.6,SNR=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **83.44** | **335** | P | **P** | **19 57 44.7** | **-0.5** |
| | comp=Z,0.9nm,0.6s,baz=90,slow=11,SNR=3.8 | | | | | | |
| **PLCA** | **Paso Flores** | **144.84** | **130** | PKP | **PKPdf** | **20 04 54.9** | **-0.3** |
| | comp=Z,5.2nm,0.9s,baz=237,slow=2.9,SNR=5.6 | | | | | | |
| **LPAZ** | **La Paz** | **148.28** | **85** | PKPbc | **PKPbc** | **20 05 05.0** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=322,slow=3.1,SNR=2.9 | | | | | | |

**JMA 18 19:47:23.6±0.2, 38°29N×144°50E, h44km, M3.6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **2.35** | **290** | P | Pn | 19 48 01.1 | +1.4 |
| OFUJ | | | | S | Sn | 19 48 29.0 | +1.6 |
| **JIKH** | **Ishinomakikobu** | **2.39** | **271** | P | Pn | 19 48 01.3 | +1.1 |
| JIKH | | | | S | Sn | 19 48 29.3 | +1.1 |
| **JKMT** | **Kesennumamotoy** | **2.43** | **283** | P | Pn | 19 48 02.3 | +1.5 |
| **MIYJ** | **Miyakonagasawa** | **2.45** | **302** | P | Pn | 19 48 02.4 | +1.3 |
| MIYJ | | | | S | Sn | 19 48 31.0 | +1.1 |
| **JIO** | **Ouri** | **2.48** | **275** | P | Pn | 19 48 03.0 | +1.5 |
| JIO | | | | S | Sn | 19 48 32.2 | +1.7 |
| **JMK** | **Ichinoseki** | **2.65** | **285** | P | Pn | 19 48 05.9 | +2.1 |
| JMK | | | | S | Sn | 19 48 36.8 | +2.0 |
| **JOM** | **Ohasama** | **2.77** | **296** | P | Pn | 19 48 07.2 | +1.8 |
| JOM | | | | *e*S | Sn | 19 48 40.0 | +2.4 |
| **JANG** | **Nango** | **3.11** | **313** | P | Pn | 19 48 11.2 | +1.0 |
| JANG | | | | *e*S | Sn | 19 48 47.0 | +0.9 |
| **JYK** | **Kaneyama** | **3.30** | **282** | P | Pn | 19 48 15.3 | +2.5 |
| JYK | | | | *e*S | Sn | 19 48 53.8 | +3.0 |
| **JFT** | **Otama** | **3.38** | **258** | P | Pn | 19 48 15.8 | +1.9 |
| JFT | | | | S | Sn | 19 48 54.6 | +1.8 |
| **JOT** | **Ohata** | **4.07** | **320** | S | Sn | 19 49 10.2 | +0.5 |
| **JCH** | **Churui** | **4.41** | **349** | P | Pn | 19 48 27.4 | -0.5 |
| JCH | | | | S | Sn | 19 49 16.4 | -1.5 |
| **JKB** | **Kayabe** | **4.47** | **325** | P | Pn | 19 48 30.8 | +2.0 |
| JKB | | | | *e*S | Sn | 19 49 20.1 | +0.6 |
| **JRY** | **Ryogami san** | **5.01** | **245** | P | Pn | 19 48 37.4 | +1.1 |
| JRY | | | | S | Sn | 19 49 32.5 | -0.5 |
| **NEM2** | **Nemuro 2** | **5.16** | **10** | P | Pn | 19 48 35.6 | -2.6 |
| NEM2 | | | | *e*S | Sn | 19 49 29.5 | -6.9 |
| **JTKR** | **Abashiri--Toko** | **5.69** | **356** | P | Pn | 19 48 44.9 | -0.6 |
| JTKR | | | | *e*S | Sn | 19 49 45.8 | -3.8 |
| **JHR** | **Hokuryu** | **5.84** | **340** | P | Pn | 19 48 50.0 | +2.5 |
| JHR | | | | *e*S | Sn | 19 49 54.5 | +1.3 |

*IDC **18** 20:04:54.8±1.6, 6.°48S×128.°81E, h0km, mb3.9/1, mb1 3.8/4, mb1mx3.2/47, mbtmp3.7/4, ML3.8/3, Error ellipse: s-maj=63.5km s-min=28.1km az=77.0*
**ISC 18 20:05:07.2±0.9, 6°24S±0.°07×130°6E±0.°1, h150km, n13, σ1°87/13, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.85** | **337** | P | **Pn** | **20 05 42.9** | **+2.3** |
| **SIJI** | **Sorong** | **5.37** | **7** | Pn | **Pn** | **20 06 26.1** | **+0.6** |
| | 3.7nm,0.3s,baz=215,slow=22,SNR=28 | | | | | | |
| SIJI | | | | Sn | **Sn** | **20 07 23.9** | **-2.9** |
| | 3.4nm,0.3s,baz=238,slow=23,SNR=12 | | | | | | |
| **DRS** | **Darwin Rock St** | **6.16** | **178** | P | **Pn** | **20 06 37.3** | **+1.2** |
| **MTN** | **Manton Dam** | **6.58** | **176** | P | **Pn** | **20 06 43.2** | **+1.5** |
| **KDU** | **Kakadu** | **6.66** | **164** | P | **Pn** | **20 06 43.9** | **+1.1** |
| **SOEI** | **Soe** | **7.21** | **241** | P | **Pn** | **20 06 47.9** | **-2.3** |
| **TNTI** | **Ternate** | **7.69** | **335** | P | **Pn** | **20 06 58.2** | **+1.7** |
| **KNRA** | **Kununurra** | **9.56** | **191** | P | **Pn** | **20 07 20.3** | **-1.1** |
| **WRAB** | **Tennant Creek** | **14.09** | **165** | P | **P** | **20 08 23.0** | **-0.3** |
| **WRA** | **Warramunga Arr** | **14.09** | **166** | Pn | **Pn** | **20 08 18.5** | **-1.9** |
| | 0.4nm,0.3s,baz=334,slow=13,SNR=13 | | | | | | |
| WRA | | | | Sn | Sn | 20 10 47.9 | -8.8 |
| | 0.4nm,0.3s,baz=353,slow=24,SNR=8.6 | | | | | | |
| **COEN** | **Coen** | **14.53** | **123** | P | P | 20 08 32.8 | +4.5 |
| **ASAR** | **Alice Springs** | **17.61** | **170** | P | **Pn** | **20 09 05.2** | **+1.6** |
| | 0.2nm,0.3s,baz=345,slow=8.6,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.94** | **326** | P | **P** | **20 15 50.6** | **+0.8** |
| | 0.5nm,0.4s,baz=114,slow=8.2,SNR=18 | | | | | | |

*NIED **18** 20:08:56.6, 28.°12N×128.°06E, h10km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.65; $M_{\theta\theta}$=2.91; $M_{\phi\phi}$=-2.26; $M_{r\theta}$=1.50; $M_{r\phi}$=3.65; $M_{\theta\phi}$=0.33; Fault plane solution: $M_0$=4.69000×$10^{14}$ NP1: $\phi_s$=288.00000°, $\delta$=85.00000°, $\lambda$=15.00000°. NP2: $\phi_s$=197.00000°, $\delta$=75.00000°, $\lambda$=175.00000°.*
**JMA 18 20:08:56.6±0.2, 28°12N×128°06E, h10km±2km, M3.6, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTK** | **Tokunoshima** | **0.85** | **113** | P | Pg | 20 09 12.7 | -0.4 |
| JTK | | | | *e*S | Sg | 20 09 24.3 | +0.1 |
| **JOKE** | **Okinoerabujima** | **0.88** | **149** | P | Pg | 20 09 13.4 | -0.2 |
| JOKE | | | | *e*S | Sg | 20 09 25.3 | +0.2 |
| **JAMN** | **Amaminishikomi** | **0.99** | **83** | P | Pg | 20 09 15.4 | -0.3 |
| JAMN | | | | *e*S | Sb | 20 09 28.9 | -0.1 |
| **JIH** | **Iheya** | **1.08** | **184** | P | Pb | 20 09 16.8 | -0.6 |
| JIH | | | | *e*S | Sg | 20 09 31.3 | -0.2 |
| **JYRO** | **Yoronjima** | **1.15** | **162** | P | Pb | 20 09 18.1 | -0.4 |
| JYRO | | | | *e*S | Sb | 20 09 32.3 | -1.1 |
| **JOW** | **Kunigami** | **1.30** | **172** | P | Pn | 20 09 20.3 | -0.5 |
| JOW | | | | *e*S | Sb | 20 09 36.9 | -0.9 |
| **JAM** | **Amami Oshima** | **1.39** | **78** | P | Pn | 20 09 22.1 | 0.0 |
| JAM | | | | *e*S | Sn | 20 09 40.4 | -0.2 |
| **JTAJ** | **Takarajima** | **1.44** | **44** | P | Pn | 20 09 22.6 | -0.1 |
| **JNTH** | **Nagotoyohara** | **1.60** | **181** | P | Pn | 20 09 24.9 | 0.0 |
| JNTH | | | | *e*S | Sn | 20 09 45.5 | 0.0 |
| **JAGN** | **Aguni-jima** | **1.69** | **206** | P | Pn | 20 09 26.7 | +0.5 |
| **JZK** | **Kikaishima** | **1.70** | **83** | P | Pb | 20 09 27.7 | -0.2 |
| JZK | | | | *e*S | Sb | 20 09 49.2 | -0.2 |
| **JJT3** | **Tamagusuku3** | **1.98** | **187** | P | Pn | 20 09 31.3 | +1.1 |
| **JKE** | **Kume jima 2** | **2.12** | **213** | P | Pn | 20 09 32.2 | +0.1 |
| **JNN** | **Nakanoshima** | **2.34** | **42** | P | Pn | 20 09 36.1 | +1.0 |
| **JYAK** | **Yakushimahirau** | **3.01** | **45** | P | Pn | 20 09 45.5 | +1.2 |

*IDC **18** 20:24:05.0±1.5, 16.°43S×173.°34W, h0km, mb4.0/8, mb1 4.3/8, mb1mx4.0/38, mbtmp4.0/8, MS3.4/2, Ms1 3.4/2, ms1mx2.9/67, Error ellipse: s-maj=97.1km s-min=19.2km az=147.0*
*NEIC **18** 20:24:09.4±2.6, 16.°30S±0.°08×173.°1W±0.°1, h35km±2km, mb4.2/7, Error ellipse: s-maj=21.1km s-min=13.9km az=90.0*
**ISC 18 20:24:08.9±0.5, 16°41S±0.°08×173°1W±0.°1, h32km, n48, σ1°20/39, mb4.0/11, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **2.81** | **28** | Pn | Pn | 20 24 48.2 | -3.5 |
| | 11nm,0.3s,baz=147,slow=9.6,SNR=2.6 | | | | | | |
| AFI | | | | Sn | Sn | 20 25 15.7 | -8.8 |
| | 50nm,0.3s,baz=39,slow=22,SNR=15 | | | | | | |
| **AFI** | **Afiamalu** | **2.81** | **28** | | **Pn** | **20 24 49.3** | **-2.4** |
| **NIUE** | **Niue** | **4.04** | **132** | Pn | **Pn** | **20 25 09.5** | **+0.9** |
| NIUE | | | | | **Sn** | **20 25 51.0** | **-3.8** |
| **MSVF** | **Nonsavu** | **8.54** | **260** | LR | LR | 20 28 56.1 | |
| | comp=Z,297nm,19.1s,baz=156,slow=35 | | | | | | |
| **PPT** | **Papeete** | **22.55** | **96** | LR | LR | 20 36 22.3 | |
| | comp=Z,58nm,18.5s,baz=187,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.96** | **329** | T | T | 21 13 17.3 | |
| | SNR=3.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.98** | **329** | T | T | 21 13 37.0 | |
| **H11S1** | **WAKE ISLAND Hy** | **39.98** | **329** | T | T | 21 13 37.0 | |
| **H11N3** | **WAKE ISLAND Hy** | **40.92** | **331** | T | T | 21 14 55.4 | |
| | baz=149,slow=76,SNR=9.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.92** | **331** | T | T | 21 14 56.7 | |
| | baz=149,slow=76,SNR=8.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.93** | **331** | T | T | 21 14 57.7 | |
| | baz=149,slow=76,SNR=10 | | | | | | |
| **TAU** | **Tasmania Unive** | **42.77** | **224** | P | **P** | **20 32 03.6** | **+0.2** |
| **STKA** | **Stephens Creek** | **43.77** | **241** | P | **P** | **20 32 10.3** | **-1.5** |
| | 2.5nm,0.7s,baz=121,slow=18,SNR=7.4 | | | | | | |
| **STKA** | **Stephens Creek** | **43.77** | **241** | IAmb | IAmb | 20 32 12.0 | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.88** | **258** | P | **P** | **20 32 59.0** | **-0.8** |
| | comp=Z,1.0nm,0.9s,baz=93,slow=6.7,SNR=11 | | | | | | |
| **AS31** | **Alice Springs** | **50.06** | **253** | P | **P** | **20 32 59.9** | **-1.2** |
| AS31 | | | | IAmb | IAmb | 20 33 01.6 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **50.06** | **253** | P | **P** | **20 33 00.3** | **-0.8** |
| | comp=Z,3.9nm,0.8s,baz=89,slow=8.3,SNR=58 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.64** | **180** | P | **P** | **20 35 38.5** | **-0.7** |
| QSPA | | | | IAmb | IAmb | 20 35 38.8 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.90** | **42** | P | **P** | **20 35 49.0** | **+2.0** |
| | comp=Z,1.8nm,0.8s,baz=225,slow=9.4,SNR=6.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.95** | **56** | P | **P** | **20 36 23.1** | **+2.3** |
| | comp=Z,0.7nm,1.0s,baz=233,slow=5.6,SNR=4.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.95** | **56** | P | **P** | **20 36 20.4** | **-0.3** |
| **PDAR** | **Pinedale Array** | **82.84** | **42** | P | **P** | **20 36 32.4** | **+1.8** |
| | comp=Z,1.8nm,0.8s,baz=209,slow=2.7,SNR=7.8 | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.10** | **11** | P | **P** | **20 36 31.8** | **+0.7** |
| CCB | | | | IAmb | IAmb | 20 36 32.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **83.38** | **11** | P | **P** | **20 36 33.0** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=233,slow=6.2,SNR=11

MHTO S **Sn** **20 31 28.9 -2.3**
**SHAO** **Shalim** **4.23 281** P **Pn** **20 30 44.2 +0.5**
SNR=402
SHAO S **Sn** **20 31 32.2 -0.9**
**SHAO** **Shalim** **4.23 281** *i* P **Pn** **20 30 43.1 -0.6**
SNR=403
**DMTO** **DMTO** **4.83 276** P **Pn** **20 30 52.0 0.0**
SNR=319
DMTO S **Sn** **20 31 45.0 -3.1**
**JLN** **Jalan Bani Buh** **4.87 354** P **Pn** **20 30 52.1 -0.4**
SNR=145
JLN P **Pn** **20 30 52.1 -0.4**
SNR=145
JLN S **Sn** **20 31 46.1 -2.9**
JLN S **Sn** **20 31 46.1 -2.9**
**JMDO** **Jabal Madar** **5.36 341** P **Pn** **20 30 59.7 +0.4**
SNR=83
JMDO S **Sn** **20 32 00.2 -0.9**
**WBK** **Wadi Bani Khal** **5.38 350** P **Pn** **20 31 01.1 +1.5**
SNR=147
WBK S **Sn** **20 32 00.2 -1.5**
**RBK** **Rabkut** **5.53 273** P **Pn** **20 31 02.5 +0.9**
SNR=94
RBK P **Pn** **20 31 02.5 +0.9**
SNR=94
RBK S **Sn** **20 32 03.9 -1.4**
RBK S **Sn** **20 32 03.9 -1.4**
**DOK** **Doka** **5.74 284** P **Pn** **20 31 04.8 +0.4**
SNR=195
DOK S **Sn** **20 32 07.6 -2.7**
**WHFO** **Wadi Hawf** **5.97 277** P **Pn** **20 31 08.2 +0.6**
SNR=294
WHFO S **Sn** **20 32 13.3 -2.8**
**SMDO** **Samad** **6.03 343** P **Pn** **20 31 08.6 +0.1**
SNR=137
SMDO S **Sn** **20 32 14.6 -3.0**
**BSY** **Bisya** **6.03 335** P **Pn** **20 31 09.1 +0.6**
SNR=51
BSY S **Sn** **20 32 16.2 -1.4**
**WSAR** **Wadi Sarin** **6.06 348** Pn **Pn** **20 31 09.4 +0.6**
8.6nm,0.3s,baz=225,slow=6.8,SNR=72
WSAR Sn **Sn** **20 32 15.0 -3.3**
39nm,0.3s,baz=279,slow=22,SNR=9.4
WSAR LR LR 20 33 17.8
comp=Z,640nm,18.5s,baz=182,slow=35
**ABTO** **Aybut** **6.40 272** P **Pn** **20 31 14.1 +0.6**
SNR=95
ABTO S **Sn** **20 32 24.5 -2.2**
**BIDO** **Bidbid** **6.45 345** P **Pn** **20 31 15.4 +1.3**
BIDO S **Sn** **20 32 26.0 -1.9**
**HOQ** **Hoqain** **6.75 339** P **Pn** **20 31 20.0 +1.6**
SNR=22
HOQ S **Sn** **20 32 31.9 -3.4**
**ARQ** **Araqi** **6.84 332** P **Pn** **20 31 20.3 +0.6**
SNR=88
ARQ S **Sn** **20 32 35.0 -2.6**
**UMZA** **Um Al Zommool** **7.06 321** P **Pn** **20 31 22.5 -0.1**
**SOCY** **Socotra** **7.71 230** Pn **Pn** **20 31 27.9 -3.6**
**SOCY** **Socotra** **7.71 230** P **Pn** **20 31 30.6 -1.0**
**ALNE** **Al Ain** **7.82 330** P **Pn** **20 31 33.7 +0.7**
ALNE S **Sn** **20 32 59.4 -2.2**
**ALNE** **Al Ain** **7.82 330** *i* P **Pn** **20 31 32.9 -0.1**
SNR=31
**ASHO** **Ashiyiah** **8.23 334** P **Pn** **20 31 40.0 +1.3**
SNR=19
ASHO S **Sn** **20 33 08.3 -3.5**
**ASHO** **Ashiyiah** **8.23 334** *i* P **Pn** **20 31 38.2 -0.5**
SNR=19
ASHO S **Sn** **20 33 05.6 -6.2**
**MZR** **Muzera** **8.35 314** *i* P **Pn** **20 31 41.1 +0.8**
SNR=7.7
**UOSS** **Minazif** **8.40 336** Pn **Pn** **20 31 41.0 0.0**
**UOSS** **Minazif** **8.40 336** P **Pn** **20 31 41.9 +0.8**
UOSS P **Pn** **20 31 41.9 +0.8**
UOSS S **Sn** **20 33 13.0 -3.0**
UOSS S **Sn** **20 33 13.0 -3.0**
**UOSS** **Minazif** **8.40 336** *i* P **Pn** **20 31 40.9 -0.1**
SNR=9.3
**FAQ** **Al Faqa, Dubai** **8.48 332** P **Pn** **20 31 42.3 +0.2**
SNR=19
FAQ S **Sn** **20 33 14.2 -3.8**
**FAQ** **Al Faqa, Dubai** **8.48 332** *i* P **Pn** **20 31 41.7 -0.4**
SNR=19
**ASUD** **Al Ashush, Dub** **8.51 330** P **Pn** **20 31 43.0 +0.6**
SNR=60
ASUD S **Sn** **20 33 15.8 -2.7**
**ASUD** **Al Ashush, Dub** **8.51 330** *i* P **Pn** **20 31 42.4 0.0**
SNR=60
**AJN** **Ajban** **8.62 328** P **Pn** **20 31 46.0 +2.0**
AJN S **Sn** **20 33 17.9 -3.4**
**MZWR** **Madinat Zayed** **8.62 319** P **Pn** **20 31 44.5 +0.5**
MZWR S **Sn** **20 33 16.7 -4.6**
**NAZ** **Nazwa, Dubai** **8.66 333** P **Pn** **20 31 47.0 +2.4**
NAZ P **Pn** **20 31 47.0 +2.4**
**NAZ** **Nazwa, Dubai** **8.66 333** *i* P **Pn** **20 31 45.3 +0.7**
SNR=11
**MSFE** **Esma-Masafi** **8.79 337** *i* P **Pn** **20 31 46.9 +0.4**
SNR=17
**MASF** **Masafi** **8.80 337** P **Pn** **20 31 48.6 +2.1**
MASF P **Pn** **20 31 48.6 +2.1**
MASF S **Sn** **20 33 22.1 -3.8**
MASF S **Sn** **20 33 22.1 -3.8**
**BANOM** **Banah** **9.26 339** P **Pn** **20 31 54.4 +1.7**
BANOM P **Pn** **20 31 54.4 +1.7**
**GHWR** **Ruwais** **9.41 316** P **Pn** **20 31 54.3 -0.5**
**SHME** **Shamm** **9.43 338** P **Pn** **20 31 56.8 +1.7**
**SLWR** **Sila** **10.29 312** P **Pn** **20 32 07.2 +0.3**
SLWR P **Pn** **20 32 07.2 +0.3**
**TRNA** **Turayna** **11.05 314** P **Pn** **20 32 17.9 +0.6**
**KHOR** **Al-Khor Airpor** **11.45 318** P **Pn** **20 32 23.3 +0.6**
**SHMA** **Al-Shehemyia** **11.97 317** P **Pn** **20 32 29.9 +0.1**
**KAD** **Karad** **13.55 88** *eP* **Pn** **20 32 50.3 -1.3**
**RAYN** **Ar Rayn** **14.93 297** Pn **Pn** **20 33 06.6 -3.8**
RAYN IAmb IAmb 20 33 28.8
comp=Z,77nm,0.8s
**RAYN** **Ar Rayn** **14.93 297** *i* P **Pn** **20 33 06.1 -4.3**
SNR=31
**AJM** **Ajmer** **16.38 54** *eP* **P** **20 33 33.5 +1.4**
**URV** **Uravakonda** **16.75 96** *eP* **Pn** **20 33 34.1 0.0**
**HRA** **Herat** **17.15 6** Pn **Pn** **20 33 37.9 -1.3**
**SRSP** **Sriramsagar** **17.52 82** *eP* **Pn** **20 33 43.7 0.0**
**ATD** **Arta Tunnel** **17.56 253** P **P** **20 33 46.3 +1.0**
comp=Z,0.7nm,0.3s,baz=84,slow=9.6,SNR=3.0
ATD LR LR 20 38 43.1
comp=Z,1μm,19.9s,baz=92,slow=31
**ATD** **Arta Tunnel** **17.56 253** **Pn** **20 33 43.8 -0.4**
**HYBB** **Hyderabad (bro** **17.72 87** *eP* **Pn** **20 33 44.8 -1.4**
**CUPL** **Choutuppal** **18.08 87** *eP* **P** **20 33 51.0 +0.1**
**SRLM** **Srisailam** **18.14 91** *eP* **Pn** **20 33 51.0 -0.5**
**RCLA** **Racherla** **18.29 93** *eP* **Pn** **20 33 52.6 -0.5**
**RPR** **Rampur** **18.42 82** *eP* **P** **20 33 54.2 -0.5**
**NJS** **Nagarjunasagar** **18.50 89** *eP* **P** **20 33 54.1 -1.4**
**KUDL** **Kundal** **18.64 52** *eP* **P** **20 33 55.7 -1.4**
**THW** **Thamme Wali** **18.73 32** P **Pn** **20 34 00.1 +1.6**
**KBL** **Kabul** **19.00 24** P **Pn** **20 34 02.2 +0.3**
KBL pmax pmax
comp=Z,53nm,0.8s
**KBL** **Kabul** **19.00 24** P **Pn** **20 34 02.2 +0.3**
KBL IAmb IAmb 20 34 07.3
comp=Z,53nm,0.8s
**KBL** **Kabul** **19.00 24** P **Pn** **20 34 04.7 +2.8**
**JHNI** **Jhansi** **19.08 62** *eP* **P** **20 34 00.5 -1.5**
**ADKI** **Addanki** **19.20 91** *eP* **P** **20 34 03.9 +0.5**
**AYAN** **Aya Nagar** **19.30 52** *eP* **P** **20 34 04.5 +0.2**
**SKHT** **Srikalahasti** **19.32 98** *eP* **P** **20 34 05.2 +0.5**
**NDI** **New Delhi** **19.47 51** *eP* **Pn** **20 34 07.5 +0.1**
NDI *eP* **pP** **20 34 08.2 0.0**
**CEP** **Cherat** **19.64 31** P **Pn** **20 34 10.5 +1.0**
CEP S **S** **20 37 46.0 -3.9**
**MYLAV** **Mylavaram** **19.75 88** *eP* **P** **20 34 09.9 +0.6**
**NIL** **Nilore** **20.19 34** P Pn 20 34 15.6 -0.3
NIL pmax pmax
comp=Z,78nm,0.8s
**NIL** **Nilore** **20.19 34** P Pn 20 34 15.6 -0.3
NIL IAmb IAmb 20 34 17.7
comp=Z,78nm,0.8s
**BHK** **Bhakra** **20.50 44** *eP* Pn 20 34 19.9 +0.3
**PVM** **Polavaram** **20.66 87** *eP* **P** **20 34 19.9 +0.7**
**THN** **Thein Dam** **20.72 40** *eP* Pn 20 34 22.6 +0.4
**LGTI** **Lohaghat** **22.15 53** *eP* **P** **20 34 32.2 -2.9**
**PTH** **Pithoragarh** **22.17 53** *eP* **P** **20 34 35.9 +0.3**
**RAGD** **RAYAGADA** **22.37 81** *eP* **P** **20 34 38.7 +1.1**
**PALK** **Pallekele** **22.52 114** P **P** **20 34 38.8 -0.5**
comp=Z,23nm,1.0s,baz=50,slow=10,SNR=4.7
PALK LR LR 20 42 22.6
comp=Z,791nm,19.1s,baz=41,slow=34
**PALK** **Pallekele** **22.52 114** P **P** **20 34 38.9 -0.5**
PALK pmax pmax
comp=Z,38nm,1.1s
**PALK** **Pallekele** **22.52 114** P **P** **20 34 38.9 -0.5**
PALK IAmb IAmb 20 34 42.2
comp=Z,38nm,1.1s
**CHLP** **Challavanipeta** **22.93 83** *eP* **P** **20 34 43.8 +0.2**
**LKRN** **Lenkeran, Azer** **23.49 338** P **P** **20 34 52.4 +3.3**
**PYUN** **Piuthan** **23.75 59** *eP* **P** **20 34 53.5 +1.5**
comp=Z,40nm,0.6s
**KOLN** **Koldanda** **24.13 60** *eP* **P** **20 34 57.0 +1.4**
comp=Z,42nm,0.9s
**DANN** **Dangsing** **24.47 59** *eP* **P** **20 35 00.3 +1.4**
comp=Z,92nm,1.0s
**GKN** **Gorkha** **25.07 60** *eP* **P** **20 35 05.5 +1.4**
comp=Z,58nm,0.8s
**NAX** **Nakhchivan** **25.21 333** P **P** **20 35 07.9 +2.8**
**TAS** **Tashkent** **25.26 17** P **P** **20 35 08.8 +3.3**
TAS pmax pmax
comp=Z,43nm,0.6s
**DMN** **Daman** **25.34 62** *eP* **P** **20 35 08.4 +1.8**
comp=Z,162nm,1.1s
**SIRT** **Sirnak** **25.38 326** P **P** **20 35 08.9 +2.2**
**KKN** **Kakani** **25.54 61** *eP* **P** **20 35 10.1 +1.7**
comp=Z,105nm,1.0s
**PKIN** **Phulchoki** **25.57 62** *eP* **P** **20 35 10.0 +1.2**
comp=Z,178nm,1.5s
**PKI** **Pulchoki** **25.58 62** *eP* **P** **20 35 10.0 +1.1**
comp=Z,101nm,1.1s
**ASF** **Jabal al Asfar** **25.61 310** P **P** **20 35 11.8 +3.0**
comp=Z,45nm,0.8s,baz=109,slow=6.2,SNR=54
**GEVA** **Gevas** **25.67 328** P **P** **20 35 09.9 +0.5**
GEVA IAmb IAmb 20 35 15.8
comp=Z,37nm,1.1s
**MNGR** **Mingechevir, A** **25.93 337** P **P** **20 35 14.2 +2.7**
**EIL** **Elat** **26.00 303** P **P** **20 35 14.7 +2.4**
comp=Z,15nm,0.8s,baz=123,slow=2.9,SNR=20
EIL LR LR 20 46 48.8
comp=Z,325nm,20.2s,baz=108,slow=39
**GUN** **Gumba** **26.08 62** *eP* **P** **20 35 15.1 +1.6**
comp=Z,234nm,1.1s
**GANJ** **Ganja** **26.11 336** P **P** **20 35 15.1 +1.9**
**KSH** **Kashi** **26.15 29** P **P** **20 35 11.6 -2.2**
KSH pP pP 20 35 15.6 -0.2
KSH sP sP 20 35 18.6 +2.0
KSH PP **PnPn** **20 35 51.8 -0.4**
KSH pmax pmax
comp=Z,63nm,0.9s
KSH LR LR
comp=Z,490nm,13.4s
KSH LR LR
comp=Z,380nm,17.9s
KSH LR LR
comp=Z,460nm,17.2s
**MARD** **Mardin** **26.16 323** P **P** **20 35 15.2 +1.3**
MARD IAmb IAmb 20 35 20.1
comp=Z,46nm,0.8s
**GHAJ** **Ghor Haditha** **26.20 307** P **P** **20 35 16.4 +2.3**
**SEKA** **Sheki** **26.27 338** P **P** **20 35 16.9 +2.2**
**JIRN** **Jiri** **26.27 62** *eP* **P** **20 35 16.3 +1.1**
comp=Z,152nm,1.1s
**GNI** **Garni** **26.34 333** P **P** **20 35 18.0 +2.6**
comp=Z,46nm,0.9s,baz=38,slow=1.9,SNR=14
GNI LR LR 20 47 35.1
comp=Z,425nm,18.5s,baz=135,slow=41
**GNI** **Garni** **26.34 333** *i* P **P** **20 35 17.6 +2.1**
GNI pmax pmax
comp=Z,47nm,1.0s
**GNI** **Garni** **26.34 333** P **P** **20 35 17.4 +1.9**
**GNI** **Garni** **26.34 333** P **P** **20 35 16.4 +0.9**
**GNI** **Garni** **26.34 333** P **P** **20 35 17.6 +2.1**
**GURO** **Guroymak-BITLI** **26.38 327** P **P** **20 35 17.6 +1.8**
GURO IAmb IAmb 20 35 23.1
comp=Z,27nm,1.1s
**RAMN** **Ramite** **26.41 64** *eP* **P** **20 35 18.2 +1.8**
comp=Z,6.1nm,0.7s
**ZKTA** **Zakatala** **26.85 337** P **P** **20 35 22.6 +2.7**
**BRLS** **Borolday** **27.00 16** *eP* **P** **20 35 19.8 -1.4**
**BRLS** **Borolday** **27.00 16** *eP* **P** **20 35 19.8 -1.4**
baz=16
BRLS *i* S **S** **20 39 56.5 -2.1**
baz=16
**SHBL** **Chebaa** **27.04 311** *eP* **P** **20 35 24.5 +2.7**
**ODAN** **Odare** **27.07 65** *eP* **P** **20 35 23.9 +1.6**
comp=Z,83nm,0.9s
**MMAI** **Mount Meron Ar** **27.12 310** P **P** **20 35 25.4 +2.9**
comp=Z,8.4nm,0.7s,baz=99,slow=10,SNR=32
MMAI LR LR 20 47 52.6
comp=Z,761nm,18.4s,baz=286,slow=40
**LGD** **Lagodekhi** **27.16 337** P **P** **20 35 24.9 +2.2**
**KKAR** **Karatay Array** **27.25 17** P **P** **20 35 25.2 +1.7**
**KKAR** **Karatay Array** **27.25 17** P **P** **20 35 25.2 +1.7**
**DZA** **Taraz** **27.29 18** *eP* **P** **20 35 25.2 +1.4**
**DZA** **Taraz** **27.29 18** *eP* **P** **20 35 25.3 +1.4**
baz=18
**BHL** **Bhannes** **27.38 312** *eP* **P** **20 35 27.8 +2.9**
**AML** **Almayashu** **27.40 23** P **P** **20 35 30.9 +5.6**
SNR=32
**AML** **Almayashu** **27.40 23** P **P** **20 35 27.9 +2.6**
**AML** **Almayashu** **27.40 23** *i* P **P** **20 35 27.8 +2.6**
SNR=32
**KARS** **Kars** **27.47 331** P **P** **20 35 27.7 +2.1**
KARS pmax pmax
comp=Z,59nm,0.8s
**KARS** **Kars** **27.47 331** P **P** **20 35 27.7 +2.1**
**TAPN** **Taplejung** **27.47 64** *eP* **P** **20 35 27.4 +1.4**
comp=Z,52nm,0.9s
**SEAG** **Tbilisi Sea** **27.66 335** P **P** **20 35 29.6 +2.4**
**MAK** **Makhachkala** **27.71 340** *eP* **P** **20 35 23.4 -4.2**
MAK *e* 20 36 11.6
MAK *eS* **S** **20 40 04.8 -5.0**
MAK pmax pmax
comp=Z,217nm,1.1s
MAK MLR MLR
comp=Z,181nm,17.0s
**UCH** **Uchtor** **27.79 24** P **P** **20 35 35.2 +6.3**
SNR=11
**LODK** **Lodwar** **27.82 243** P **P** **20 35 30.6 +1.7**
**LODK** **Lodwar** **27.82 243** P **P** **20 35 32.1 +3.2**
**EKS2** **Erkin-Say** **27.89 22** P **P** **20 35 32.8 +3.4**
SNR=64
**AKH** **Akhalkalaki** **27.92 333** P **P** **20 35 32.1 +2.4**
**AAK** **Ala-Archa** **28.14 23** P **P** **20 35 33.5 +1.9**
comp=Z,14nm,1.1s,baz=202,slow=6.9,SNR=40
**AAK** **Ala-Archa** **28.14 23** P **P** **20 35 34.8 +3.2**
SNR=20
**AAK** **Ala-Archa** **28.14 23** *i* P **P** **20 35 34.0 +2.4**
AAK pmax pmax
comp=Z,25nm,1.3s
**AAK** **Ala-Archa** **28.14 23** P **P** **20 35 33.9 +2.3**
AAK IAmb IAmb 20 35 50.1
comp=Z,16nm,1.0s
**AAK** **Ala-Archa** **28.14 23** P **P** **20 35 34.9 +3.3**
**AAK** **Ala-Archa** **28.14 23** *i* P **P** **20 35 34.8 +3.2**
SNR=22
**GTK** **Tadong** **28.23 64** *eP* **P** **20 35 33.1 +0.6**
GTK IAmb IAmb 20 35 39.2
comp=Z,7.6nm,0.7s
**KBK** **Karagaybulak** **28.32 24** P **P** **20 35 36.6 +3.4**
SNR=7.6
**GROC** **Groznyy** **28.51 338** *eP* **P** **20 35 37.1 +2.4**
GROC *e* 20 38 49.4
GROC *eS* **S** **20 40 26.0 +3.5**
GROC pmax pmax
comp=Z,47nm,0.7s
**CHMS** **Chumysh** **28.54 23** P **P** **20 35 37.9 +2.9**
SNR=5.3
**USP** **Ospenovka** **28.68 22** P **P** **20 35 38.8 +2.4**
SNR=7.6
**TKM2** **Tokmak 2** **28.80 24** P **P** **20 35 39.6 +2.1**
SNR=5.1
**ZEI** **Tsey** **28.88 335** *eP* **P** **20 35 38.4 +0.1**
ZEI pmax pmax
comp=Z,12nm,1.0s
**SGDS** **Sogindy** **28.89 22** *eP* **P** **20 35 39.5 +1.3**
baz=22
**ONI** **Oni** **28.90 334** P **P** **20 35 40.2 +1.9**
ONI pmax pmax
comp=Z,13nm,1.2s
**ONI** **Oni** **28.90 334** P **P** **20 35 40.2 +1.9**
**KMBO** **Kilima Mbogo** **28.93 233** P **P** **20 35 40.3 +1.3**
comp=Z,1.7nm,0.8s,baz=44,slow=13,SNR=4.9
KMBO LR LR 20 47 23.5
comp=Z,914nm,18.2s,baz=92,slow=37
**KMBO** **Kilima Mbogo** **28.93 233** P **P** **20 35 39.7 +0.7**
KMBO pmax pmax
comp=Z,5.0nm,1.1s
**KMBO** **Kilima Mbogo** **28.93 233** P **P** **20 35 39.7 +0.7**
**DHUB** **DHUBRI** **29.15 67** *eP* **P** **20 35 42.1 +1.4**
DHUB IAmb IAmb 20 35 43.4
comp=Z,17nm,0.9s
**TNSS** **Tian-Shan** **29.44 26** *eP* **P** **20 35 45.6 +2.1**
baz=26
**AAA** **Alma-Ata** **29.57 26** *eP* **P** **20 35 46.1 +1.9**
AAA pmax pmax
comp=Z,9.0nm,0.7s
**AAA** **Alma-Ata** **29.57 26** *eP* **P** **20 35 46.1 +1.9**
comp=Z,9.3nm,0.7s,baz=25
**CSS** **Mathiatis** **29.57 312** P **P** **20 35 45.2 +0.9**
**MDOK** **Medeo** **29.59 26** *eP* **P** **20 35 45.4 +1.0**
**MDOK** **Medeo** **29.59 26** *eP* **P** **20 35 45.5 +1.0**
baz=26
**NCK** **Nalchik** **29.60 335** *i* P **P** **20 35 45.0 +0.6**
NCK pmax pmax
comp=Z,4.0nm,0.4s
**NEY** **Neytrino** **29.75 334** *i* P **P** **20 35 47.3 +1.4**
NEY pmax pmax
comp=Z,4.0nm,0.8s
**KUU** **Kurty** **29.91 24** *eP* **P** **20 35 48.2 +1.1**
KUU pmax pmax
comp=Z,9.0nm,0.7s
**KUU** **Kurty** **29.91 24** *eP* **P** **20 35 48.2 +1.1**
comp=Z,9.1nm,0.7s,baz=24
**KBZ** **Khabaz** **30.07 335** P **P** **20 35 50.1 +1.6**
comp=Z,12nm,0.8s,baz=144,slow=8.8,SNR=21
KBZ LR LR 20 50 03.4
comp=Z,120nm,18.9s,baz=144,slow=40
**KBZ** **Khabaz** **30.07 335** *ceP* **P** **20 35 49.9 +1.4**
KBZ pmax pmax
comp=Z,16nm,0.9s
**BTLS** **Baital** **30.08 20** *eP* **P** **20 35 49.7 +1.1**
**BTLS** **Baital** **30.08 20** *eP* **P** **20 35 49.7 +1.1**
baz=20
**SATY** **Saty** **30.09 28** *eP* **P** **20 35 49.6 +0.8**
SATY pmax pmax
comp=Z,19nm,0.8s
**SATY** **Saty** **30.09 28** *eP* **P** **20 35 49.6 +0.8**
comp=Z,19nm,0.8s,baz=27
**BNN** **Bunyan** **30.09 320** P **P** **20 35 50.8 +1.8**
**CHKK** **Chushkaly** **30.13 25** *eP* **P** **20 35 50.4 +1.3**
baz=25
**SHA1** **Shidzhatmaz** **30.18 335** *eP* **P** **20 35 51.4 +1.6**
**ZHN** **Zhinishke** **30.18 27** *eP* **P** **20 35 50.7 +1.0**
**ZHN** **Zhinishke** **30.18 27** *eP* **P** **20 35 50.8 +1.0**
baz=27
**KIV** **Kislovodsk** **30.34 335** *eP* **P** **20 35 52.6 +1.5**
KIV pmax pmax
comp=Z,20nm,1.1s
KIV MLR MLR
comp=Z,89nm,15.0s
**KIV** **Kislovodsk** **30.34 335** P **P** **20 35 52.4 +1.3**
KIV IAmb IAmb 20 35 53.8
comp=Z,14nm,0.7s
**KIV** **Kislovodsk** **30.34 335** P **P** **20 35 53.1 +2.0**
**KIV** **Kislovodsk** **30.34 335** P **P** **20 35 52.4 +1.3**
**KPKS** **Kokpek** **30.53 27** *eP* **P** **20 35 53.5 +0.7**
KPKS pmax pmax
comp=Z,13nm,1.0s
**KPKS** **Kokpek** **30.53 27** *eP* **P** **20 35 53.5 +0.7**
comp=Z,13nm,1.0s,baz=27
**SHL** **Shillong** **30.75 69** P **P** **20 35 55.5 +0.5**
SHL pmax pmax
comp=Z,29nm,0.9s
**SHL** **Shillong** **30.75 69** P **P** **20 35 55.5 +0.5**
SHL IAmb IAmb 20 35 56.9
comp=Z,30nm,0.9s
**PDGK** **Podgornoye** **30.78 28** *i* P **P** **20 35 55.9 +0.9**
PDGK pmax pmax
comp=Z,37nm,0.8s
**LSA** **Lhasa** **31.03 61** P **P** **20 35 57.9 +0.1**
**GOF** **Gofitskoye** **31.12 336** *eP* **P** **20 35 59.3 +1.5**
**TDK** **Taldyqorghan** **31.66 25** *eP* **P** **20 36 03.5 +0.9**
TDK pmax pmax
comp=Z,29nm,0.8s
**TDK** **Taldyqorghan** **31.66 25** *eP* **P** **20 36 03.5 +0.9**
comp=Z,28nm,0.8s,baz=25
**AB31** **Akbulak array** **31.89 360** *i* P **P** **20 36 05.6 +1.1**
AB31 pmax pmax
comp=Z,6.0nm,0.6s
**ABKAR** **Akbulak array** **31.89 360** P **P** **20 36 05.2 +0.7**
**BRTR** **Keskin Array B** **31.98 320** P **P** **20 36 07.5 +1.8**
comp=Z,11nm,0.8s,baz=138,slow=10,SNR=56
BRTR LR LR 20 51 17.0
comp=Z,380nm,19.2s,baz=128,slow=40
**BRTR** **Keskin Array B** **31.98 320** P **P** **20 36 06.8 +1.2**
**BR131** **Keskin Array S** **31.98 320** *i* P **P** **20 36 07.4 +1.8**
**BR131** **Keskin Array S** **31.98 320** P **P** **20 36 06.9 +1.2**
BR131 IAmb IAmb 20 36 08.6
comp=Z,22nm,0.8s
**OTUK** **Ortayu** **32.49 15** *i* P **P** **20 36 11.5 +1.6**
OTUK pmax pmax
comp=Z,12nm,0.6s
**IMP** **Imphal** **32.50 71** *eP* **P** **20 36 12.7 +2.4**
IMP IAmb IAmb 20 36 13.9
comp=Z,18nm,0.9s
**ANTO** **Ankara** **32.59 319** P **P** **20 36 10.8 -0.1**
ANTO pmax pmax
comp=Z,20nm,0.8s
**ANTO** **Ankara** **32.59 319** P **P** **20 36 10.8 -0.1**
ANTO IAmb IAmb 20 36 14.7
comp=Z,20nm,0.8s
**KOHI** **KOHIMA** **32.76 69** *eP* **P** **20 36 14.1 +1.5**
KOHI IAmb IAmb 20 36 15.5
comp=Z,32nm,0.8s
**ELL** **Elmali** **32.87 312** P **P** **20 36 15.6 +2.1**
ELL pmax pmax
comp=Z,119nm,0.8s
**ELL** **Elmali** **32.87 312** P **P** **20 36 15.6 +2.1**
**AKTO** **Aktyubinsk** **33.11 358** P **P** **20 36 15.9 +0.7**
AKTO pmax pmax
comp=Z,12nm,0.9s
**ANN** **Anapa** **33.33 330** *eP* **P** **20 36 18.1 +0.9**
ANN *eS* **S** **20 41 38.5 +0.7**
ANN pmax pmax
comp=Z,42nm,0.8s
**MBAR** **Mbarara** **33.86 241** LR LR 20 50 07.7
comp=Z,190nm,18.4s,baz=56,slow=36
**BRZS** **Berezniki** **34.19 15** *eP* **P** **20 36 25.9 +1.3**
**BRZS** **Berezniki** **34.19 15** *eP* **P** **20 36 26.0 +1.3**
baz=14
**MAKZ** **Makanchi** **34.60 27** P **P** **20 36 29.7 +1.4**
MAKZ pmax pmax
comp=Z,25nm,0.9s
**MAKZ** **Makanchi** **34.60 27** P **P** **20 36 29.7 +1.4**
MAKZ IAmb IAmb 20 36 31.1
comp=Z,25nm,0.9s
**MK31** **Makanchi Array** **34.73 27** *i* P **P** **20 36 30.4 +1.0**
MK31 pmax pmax
comp=Z,15nm,0.6s
**MK31** **Makanchi Array** **34.73 27** P **P** **20 36 30.2 +0.9**
MK31 IAmb IAmb 20 36 31.9
comp=Z,16nm,0.7s
**MKAR** **Makanchi Array** **34.73 27** P **P** **20 36 31.0 +1.6**
comp=Z,17nm,0.6s,baz=211,slow=8.9,SNR=217
MKAR PcP **PcP** **20 39 03.3 +0.2**
comp=Z,1.4nm,0.7s,baz=206,slow=2.2,SNR=3.3
MKAR LR LR 20 53 07.5
comp=Z,269nm,18.5s,baz=216,slow=40
**MKAR** **Makanchi Array** **34.73 27** P **P** **20 36 30.5 +1.1**
**WMQ** **Urumqi** **35.31 36** *eP* **P** **20 36 37.3 +2.8**
WMQ sP pwP 20 36 46.8 +5.7
WMQ pmax pmax
comp=Z,32nm,1.5s
WMQ LR LR
comp=Z,180nm,15.9s
**IDI** **Anoyia** **35.98 307** LR LR 20 53 55.8
comp=Z,207nm,21.3s,baz=88,slow=40
**IDI** **Anoyia** **35.98 307** P **P** **20 36 42.6 +2.2**
**GOMU** **GeErMu** **36.10 52** P **P** **20 36 41.4 -0.3**
GOMU pP sP 20 36 46.0 +1.4
GOMU PcP **PcP** **20 39 08.6 +0.8**
GOMU S **S** **20 42 27.1 +5.6**
GOMU pmax pmax
comp=Z,7.0nm,0.9s
GOMU pmax pmax
comp=Z,84nm,4.5s
GOMU LR LR
comp=Z,180nm,15.3s

GOMU LR LR
comp=Z,180nm,15.4s
GOMU LR LR
comp=Z,300nm,15.6s
**ZSN Zaisan 36.38 29** *e*P **P 20 36 43.7 +0.2**
**ZSN Zaisan 36.38 29** *e*P **P 20 36 43.8 +0.2**
baz=29
**KURBB Kurchatov Arra 36.43 20** LR LR 20 53 28.9
comp=Z,191nm,19.5s,baz=187,slow=39
**KURK Kurchatov 36.53 20***ce*P **P 20 36 45.0 +0.2**
KURK pmax pmax
comp=Z,11nm,0.8s
**KURK Kurchatov 36.53 20** P **P 20 36 45.7 +0.9**
**KURK Kurchatov 36.53 20** P **P 20 36 46.6 +1.8**
**BRVK Borovoye 36.60 10** *i* P **P 20 36 46.3 +1.0**
BRVK pmax pmax
comp=Z,5.0nm,0.7s
**BRVK Borovoye 36.60 10** P **P 20 36 46.2 +1.0**
**BRVK Borovoye 36.60 10** P **P 20 36 47.7 +2.4**
**SEM Semipalatinsk 36.83 22** *e*P **P 20 36 48.2 +0.7**
SEM pmax pmax
comp=Z,10.0nm,0.8s
**SEM Semipalatinsk 36.83 22** *e*P **P 20 36 48.3 +0.7**
comp=Z,10nm,0.8s,baz=22
**VRH Novokhopyorsk 36.84 341** *e*P **P 20 36 47.2 -0.2**
VRH pmax pmax
comp=Z,30nm,0.8s
**CHTO Chiang Mai 37.02 82** P **P 20 36 49.3 -0.1**
CHTO pmax pmax
comp=Z,9.0nm,1.2s
**CHTO Chiang Mai 37.02 82** P **P 20 36 49.3 -0.1**
**CM31 Chiang Mai Arr 37.04 82** P **P 20 36 50.0 +0.4**
CM31 IAmb IAmb 20 36 52.1
comp=Z,32nm,1.1s
**CMAR Chiang Mai Arr 37.04 82** P **P 20 36 50.1 +0.5**
comp=Z,17nm,0.9s,baz=277,slow=9.8,SNR=120
CMAR PcP **PcP 20 39 10.6 +0.1**
comp=Z,1.5nm,0.7s,baz=268,slow=4.5,SNR=7.6
**CMAR Chiang Mai Arr 37.04 82** P **P 20 36 50.3 +0.7**
**CMAR Chiang Mai Arr 37.04 82** P **P 20 36 50.3 +0.7**
**VORD Divnogorie 37.45 338** *e*P **P 20 36 52.7 +0.2**
VORD pmax pmax
comp=Z,10.0nm,0.6s
**VSR Storozhevoye 37.70 339** *e*P **P 20 36 54.0 -0.7**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**VORR Voronezh 38.07 339** *e*P **P 20 36 56.6 -1.2**
VORR pmax pmax
comp=Z,50nm,0.5s
**LHMI Lhok Sumawe 38.09 104** P **P 20 36 56.8 -1.6**
comp=Z,88nm,1.0s
**LPSR Galich'ya Gora 38.94 340** *e*P **P 20 37 05.6 +0.5**
LPSR pmax pmax
comp=Z,40nm,0.7s
**ARU Arti 39.09 359***d i*P **P 20 37 07.5 +1.2**
ARU 20 39 13.5
ARU S **S 20 43 10.3 +4.6**
ARU SS **SnSn 20 45 54.2 -3.4**
ARU pmax pmax
comp=Z,12nm,0.8s
**ARU Arti 39.09 359** P **P 20 37 07.5 +1.2**
**MILM Milestii Mici 39.17 326** ⇓P **P 20 37 08.0 +0.9**
**MILM Milestii Mici 39.17 326** ⇓P **P 20 37 08.0 +0.9**
**DGZ Jazzator, Alta 39.18 28** *i* P **P 20 37 08.4 +1.0**
DGZ pmax pmax
comp=Z,8.0nm,0.8s
**ODBI Odobesti 39.45 323** ⇑P **P 20 37 12.4 +2.9**
**SVE Sverdlovsk 39.48 1** *e*P **P 20 37 11.1 +1.6**
SVE pmax pmax
comp=Z,17nm,1.3s
**BISRR Bisoca 39.52 323** ⇑P **P 20 37 13.3 +3.0**
**PZH PanZhiHua 39.66 69** P **P 20 37 12.3 +0.6**
PZH PcP **PcP 20 39 18.6 0.0**
PZH S **S 20 43 20.4 +5.0**
PZH pmax pmax
comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,150nm,5.1s
PZH LR LR
comp=Z,390nm,16.5s
PZH LR LR
comp=Z,290nm,17.5s
PZH LR LR
comp=Z,520nm,21.1s
**NEHR Nehoiu 39.70 322** ⇓P **P 20 37 14.4 +2.8**
**PLOR Plostina 39.73 323** ⇓P **P 20 37 14.2 +2.3**
**PLOR Plostina 39.73 323** ⇓P **P 20 37 14.2 +2.3**
**MLR Muntele Rosu 39.94 322** ⇓P **P 20 37 16.3 +2.6**
**MLR Muntele Rosu 39.94 322** LR LR 20 57 31.9
comp=Z,190nm,18.1s,baz=130,slow=42
**MLR Muntele Rosu 39.94 322** ⇓P **P 20 37 16.3 +2.6**
**MLR Muntele Rosu 39.94 322** P **P 20 37 16.0 +2.3**
**COVR Voineasa-Covas 39.99 323** ⇑P **P 20 37 16.0 +2.0**
**TESR Tescani 40.11 324** ⇓P **P 20 37 16.5 +1.5**
**VTS Vitosha 40.16 317** ⇓P **P 20 37 17.5 +1.9**
**VTS Vitosha 40.16 317** ⇓P **P 20 37 17.5 +1.9**
**VTS Vitosha 40.16 317** P **P 20 37 17.1 +1.5**
VTS IAmb IAmb 20 37 18.2
comp=Z,20nm,0.8s
**SORM Soroca 40.17 327** ⇓P **P 20 37 15.9 +0.5**
**SORM Soroca 40.17 327** ⇓P **P 20 37 15.9 +0.5**
**VOIR 40.44 322** ⇓P **P 20 37 19.7 +1.9**
**VOIR 40.44 322** ⇓P **P 20 37 19.7 +1.9**
**KMI Kunming 40.48 71** ⇑P **P 20 37 19.8 +1.2**
KMI pP sP 20 37 23.0 +1.5
KMI PP **PnPn 20 38 57.8 +2.2**
KMI pmax pmax
comp=Z,12nm,0.9s
KMI LR LR
comp=Z,180nm,16.7s
KMI LR LR
comp=Z,300nm,18.3s
KMI LR LR
comp=Z,340nm,20.4s
**DOPR Dopca 40.53 322** ⇑P **P 20 37 19.8 +1.3**
**FNA Florina 40.62 313** P **P 20 37 19.2 -0.2**
FNA pmax pmax
comp=Z,14nm,1.0s
**FNA Florina 40.62 313** P **P 20 37 19.2 -0.2**
**PSI Prapat 40.83 106** LR LR 20 53 21.0
comp=Z,494nm,19.4s,baz=284,slow=35
**GTA Gaotai 40.96 49** ⇓P **P 20 37 23.4 +1.1**
GTA pP pwP 20 37 30.4 +1.6
GTA sP sP 20 37 33.4 +8.2
GTA pmax pmax
comp=Z,7.0nm,1.1s
GTA pmax pmax
comp=Z,38nm,5.1s
GTA LR LR
comp=Z,230nm,17.1s
GTA LR LR
comp=Z,440nm,18.9s
GTA LR LR
comp=Z,530nm,18.5s
**KBN Korca 40.97 313** P **P 20 37 23.2 +0.9**
KBN pmax pmax
comp=Z,13nm,1.0s
**KBN Korca 40.97 313** P **P 20 37 23.2 +0.9**
**SRE Strehaia 41.16 320** ⇓P **P 20 37 26.2 +2.5**
**SRE Strehaia 41.16 320** ⇓P **P 20 37 26.2 +2.5**
**LOT Lotru 41.21 321** ⇑P **P 20 37 25.0 +0.8**
**ZAA0 Zalesovo Array 41.35 22** P **P 20 37 25.7 +0.6**
ZAA0 IAmb IAmb 20 37 27.4
comp=Z,20nm,0.8s
**ZALV Zalesovo Beam 41.35 22** P **P 20 37 26.1 +1.0**
comp=Z,23nm,0.7s,baz=225,slow=9.0,SNR=103
ZALV LR LR 20 56 16.4
comp=Z,172nm,22.0s,baz=214,slow=39
**ZALV Zalesovo Beam 41.35 22** P **P 20 37 25.7 +0.6**
**AKASG Malin Array Be 41.42 331** P **P 20 37 25.9 +0.3**
comp=Z,5.9nm,0.8s,baz=128,slow=7.3,SNR=30
AKASG LR LR 20 58 26.1
comp=Z,112nm,19.0s,baz=170,slow=42
**AKASG Malin Array Be 41.42 331** P **P 20 37 24.6 -1.1**
**AKASG Malin Array Be 41.42 331** P **P 20 37 24.6 -1.1**
**AKBB Malin Array Si 41.42 331***ce*P **P 20 37 26.0 +0.3**
**AKBB Malin Array Si 41.42 331** P **P 20 37 25.6 0.0**
AKBB IAmb IAmb 20 37 27.0
comp=Z,16nm,0.8s
**BUR01 Bucovina Ar. S 41.55 324** ⇓P **P 20 37 28.7 +1.7**
**BURAR Bucovina Array 41.55 324** P **P 20 37 28.6 +1.7**
BURAR pmax pmax
comp=Z,4.0nm,0.8s
**BURAR Bucovina Array 41.55 324** P **P 20 37 28.6 +1.7**

**BUR08 Bucovina Ar. S 41.57 324** P **P 20 37 28.1 +0.9**
**ARCR ARCALIA 41.74 323** ⇓P **P 20 37 30.0 +1.6**
**GZR Gura Zlata 41.78 320** ⇑P **P 20 37 30.0 +1.1**
**OBN Obninsk 41.81 340** ⇓*i*P **P 20 37 30.1 +1.3**
OBN *i* 20 37 40.6
OBN 20 39 07.0
OBN SSS SSS 20 47 26.0
OBN pmax pmax
comp=Z,68nm,2.5s
OBN MLR MLR
comp=Z,85nm,11.0s
**OBN Obninsk 41.81 340** P **P 20 37 29.9 +1.1**
OBN IAmb IAmb 20 37 31.1
comp=Z,20nm,0.6s
**CD2 Chengdu 41.93 63** P **P 20 37 30.0 -0.3**
CD2 pmax pmax
comp=Z,10.0nm,0.7s
CD2 LR LR
comp=Z,20nm,13.6s
CD2 LR LR
comp=Z,180nm,14.5s
CD2 LR LR
comp=Z,140nm,16.2s
**KIRV Kirov 41.97 352***ce*P **P 20 37 31.3 +1.2**
**MOS Moscow 41.99 341** *e*P **P 20 37 29.2 -1.1**
MOS *e* 20 37 40.4
**DRGR 42.53 322** ⇓P **P 20 37 36.8 +1.8**
**DRGR 42.53 322** ⇓P **P 20 37 36.8 +1.8**
**BZS Buzias 42.61 320** ⇑P **P 20 37 36.3 +0.8**
**BZS Buzias 42.61 320** ⇑P **P 20 37 36.3 +0.8**
**DIVS Divibare 42.94 317** P **P 20 37 38.6 +0.3**
DIVS IAmb IAmb 20 37 39.9
comp=Z,15nm,0.9s
**LZH Lanzhou 43.01 55** ⇓P **P 20 37 39.8 +0.7**
LZH pP pwP 20 37 44.6 -1.0
LZH sP sP 20 37 47.3 +5.3
LZH PP **PP 20 39 19.3 +0.4**
LZH pmax pmax
comp=Z,9.0nm,1.4s
LZH pmax pmax
comp=Z,190nm,5.4s
LZH LR LR
comp=Z,270nm,14.6s
LZH LR LR
comp=Z,280nm,15.7s
LZH LR LR
comp=Z,380nm,15.7s
**TRPA Tarpa 43.34 324** ⇓P **P 20 37 42.9 +1.5**
**TRPA Tarpa 43.34 324** P **P 20 37 42.2 +0.9**
**FRGS Fruska Gora 43.52 318** ⇓P **P 20 37 45.0 +2.1**
**UBPT Khong Chiam 43.62 86** P **P 20 37 43.6 -0.5**
UBPT IAmb IAmb 20 37 44.9
comp=Z,18nm,1.0s
**KWP Kalwaria Pacla 44.06 325** P **P 20 37 48.3 +1.1**
KWP pmax pmax
comp=Z,149nm,1.1s
**KWP Kalwaria Pacla 44.06 325** P **P 20 37 48.3 +1.1**
**GYA Guiyang 44.06 70** ⇑P **P 20 37 48.0 +0.3**
GYA S **S 20 44 20.3 -0.2**
GYA pmax pmax
comp=Z,29nm,1.1s
GYA pmax pmax
comp=Z,270nm,6.1s
GYA LR LR
comp=Z,110nm,5.0s
GYA LR LR
comp=Z,91nm,6.2s
GYA LR LR
comp=Z,54nm,4.4s
**BSZH Besenyszg 44.24 321** P **P 20 37 51.2 +2.6**
**CRVS Cervenica-Dubn 44.35 324** *e*P **P 20 37 51.3 +1.7**
CRVS pmax pmax
comp=Z,19nm,0.9s
**CRVS Cervenica-Dubn 44.35 324** *e*P **P 20 37 51.3 +1.7**
**MNK Minsk 44.61 334** *i* P **P 20 37 52.0 +0.6**
MNK *i* 20 39 36.2
MNK *i* PPP PPP 20 40 13.3
MNK *i* S **S 20 44 25.8 -1.6**
MNK *i* SS **SS 20 47 46.6 -0.7**
MNK pmax pmax
comp=Z,22nm,0.8s
MNK pmax pmax
comp=E,4.0nm,1.2s
MNK pmax pmax
comp=N,13nm,1.1s
MNK MLR MLR
comp=N,276nm,15.0s
MNK MLR MLR
comp=E,98nm,24.0s
MNK MLR MLR
comp=Z,178nm,19.0s
**MNK Minsk 44.61 334** *i* P **P 20 37 52.1 +0.6**
comp=E,4.0nm,1.2s
MNK *i* P **P 20 37 52.1 +0.6**
comp=N,13nm,1.1s
MNK *i* P **P 20 37 52.1 +0.6**
comp=Z,22nm,0.8s,baz=314
MNK *i* PP **PP 20 39 36.2 +0.6**
MNK *i* PPP PPP 20 40 13.4
MNK *i* S **S 20 44 25.8 -1.6**
MNK *i* SS **SS 20 47 46.6 -0.7**
MNK *i* SSS SSS 20 48 29.6
MNK *i* LQ LQ 20 53 16.3
MNK *i* LR LR 20 56 39.4
MNK *i* LRM MLR 20 58 07.8
comp=N,276nm,15.3s
MNK *i* LRM MLR 20 58 23.4
comp=E,98nm,24.1s
MNK *i* LRM MLR 20 58 23.4
comp=Z,178nm,18.9s
**MORH Mrgy, Hungar 44.72 319** ⇓P **P 20 37 53.8 +1.3**
**MORH Mrgy, Hungar 44.72 319** P **P 20 37 53.4 +0.9**
**PSZ Piszkesteto 44.76 322** P **P 20 37 53.0 +0.1**
PSZ pmax pmax
comp=Z,7.0nm,0.8s
**PSZ Piszkesteto 44.76 322** P **P 20 37 53.0 +0.1**
**PSZ Piszkesteto 44.76 322** P **P 20 37 54.2 +1.4**
**KOVH Kovagotottos 45.01 319** P **P 20 37 55.8 +1.0**
**LSZ Lusaka 45.06 226** P **P 20 37 56.7 +1.0**
comp=Z,0.6nm,0.3s,baz=47,slow=15,SNR=4.1
**NACGM Naroch 45.35 334** *i* P **P 20 37 58.4 +1.1**
**PRGR Permogore 45.46 350** *e*P **P 20 37 57.5 -0.6**
PRGR pmax pmax
comp=Z,21nm,0.7s
**CSKK Cskako 45.47 321** P **P 20 37 59.9 +1.4**
**LANS Liptovska Anna 45.61 323** *e*P **P 20 38 01.3 +1.7**
LANS pmax pmax
comp=Z,18nm,0.7s
**LANS Liptovska Anna 45.61 323** *e*P **P 20 38 01.3 +1.7**
**IDID Didziasalis 45.65 334** *e*P **P 20 38 01.2 +1.4**
**VYHS Vyhne 45.65 322** *e*P **P 20 38 02.3 +2.4**
**VYHS Vyhne 45.65 322** *e*P **P 20 38 02.3 +2.4**
**MPLH Magyarpolny 45.83 320** P **P 20 38 02.6 +1.3**
**IIGN Ignalina 45.89 334** *e*P **P 20 38 03.0 +1.3**
**KLMR Klimovskoe 45.92 346** *e*P **P 20 37 59.7 -2.1**
KLMR *e* 20 39 45.5
KLMR pmax pmax
comp=Z,34nm,1.2s
**KLMR Klimovskoe 45.92 346** *e*P **P 20 37 59.7 -2.1**
KLMR AMP 20 38 03.3
comp=Z,34nm,1.2s
KLMR *e*PP **PP 20 39 45.5 -3.8**
**OJC Ojcow 45.96 325** P **P 20 38 02.9 +0.6**
OJC pmax pmax
comp=Z,11nm,0.7s
**OJC Ojcow 45.96 325** P **P 20 38 02.9 +0.6**
OJC IAmb IAmb 20 38 04.0
comp=Z,11nm,0.7s
**EGYH Egyhazaskeszo 46.06 320** P **P 20 38 05.1 +2.0**
**KOGS Kog 46.32 319** *i* P **P 20 38 06.1 +0.9**
**SUW Suwalki 46.38 331** P **P 20 38 05.8 +0.3**
SUW pmax pmax
comp=Z,23nm,0.9s
**SUW Suwalki 46.38 331** P **P 20 38 05.8 +0.3**
**SMOL Smolenice 46.49 322** *e*P **P 20 38 08.8 +2.3**
**SMOL Smolenice 46.49 322** *e*P **P 20 38 08.8 +2.3**
**JAVC Velka Javorina 46.51 322** *e*P **P 20 38 08.2 +1.5**
**MODS Modra-Piesok 46.52 321** *e*P **P 20 38 10.9 +4.2**
**MODS Modra-Piesok 46.52 321** *e*P **P 20 38 10.9 +4.2**
**SOP Sopron 46.65 320** P **P 20 38 09.3 +1.6**
**SOP Sopron 46.65 320** P **P 20 38 09.3 +1.6**
**XAN Xi'an 46.70 59** P **P 20 38 08.5 0.0**
XAN pP sP 20 38 12.3 +0.9
XAN pmax pmax
comp=Z,19nm,0.9s
XAN LR LR
comp=Z,320nm,15.8s
XAN LR LR
comp=Z,170nm,16.5s
XAN LR LR
comp=Z,220nm,15.1s
**PABE Paberze 46.97 333** P **P 20 38 09.9 -0.1**
**PABE Paberze 46.97 333** *e*P **P 20 38 10.7 +0.7**
**MORC Moravsky Berou 47.01 323** ⇑P **P 20 38 11.5 +0.9**
**MORC Moravsky Berou 47.01 323** ⇑P **P 20 38 11.5 +0.9**
**MORC Moravsky Berou 47.01 323** P **P 20 38 11.3 +0.7**
**MORC Moravsky Berou 47.01 323** *e*P **P 20 38 11.3 +0.7**
**ARSA Arzberg 47.11 319** *i* P **P 20 38 12.4 +1.1**
comp=Z,7.1nm,0.7s
**NRCA Norcia 47.12 313** P **P 20 38 12.7 +1.0**
NRCA IAmb IAmb 20 38 14.2
comp=Z,15nm,0.9s
**MOY Mondy 47.15 34** *e*P **P 20 38 13.6 +1.9**
MOY pmax pmax
comp=Z,19nm,1.6s
**CONA Conrad Observa 47.18 320** *e*P **P 20 38 12.6 +0.6**
comp=Z,12nm,1.0s
**SOKA Soboth 47.19 318** *e*P **P 20 38 12.9 +0.9**
comp=Z,12nm,0.9s
**LJU Ljubljana 47.27 317** *i* P **P 20 38 13.7 +1.0**
**GBAS Gorenja Brezov 47.28 317** *i* P **P 20 38 13.4 +0.7**
**VRAC Vranov 47.34 322** ⇑P **P 20 38 14.4 +1.2**
**VRAC Vranov 47.34 322** LR LR 21 02 41.7
comp=Z,159nm,18.1s,baz=108,slow=42
**VRAC Vranov 47.34 322** ⇑P **P 20 38 14.4 +1.2**
**VRAC Vranov 47.34 322** *e*P **P 20 38 14.3 +1.2**
**KRUC Moravsky 47.35 322** *e*P **P 20 38 14.0 +0.8**
**OBKA Obir 47.43 318** *e*P **P 20 38 14.8 +0.8**
comp=Z,9.5nm,0.7s
**KRLC Kraliky 47.59 323** *e*P **P 20 38 15.2 +0.1**
**KRLC Kraliky 47.59 323** *e*P **P 20 38 15.2 +0.1**
**TRI Trieste 47.64 317** P **P 20 38 15.2 -0.3**
TRI pmax pmax
comp=Z,24nm,0.7s
**TRI Trieste 47.64 317** P **P 20 38 15.2 -0.3**
**MURB Monte Urbino 47.66 313** P **P 20 38 14.4 -1.4**
MURB IAmb IAmb 20 38 18.9
comp=Z,19nm,0.9s
**ZAK Zakamensk 47.77 36** *e*P **P 20 38 17.5 +0.9**
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**VSU Vasula 47.84 337** *e*P **P 20 38 17.2 +0.3**
**DPC Dobruska-Polom 47.97 323** *e*P **P 20 38 18.3 +0.2**
**DPC Dobruska-Polom 47.97 323** *e*P **P 20 38 18.3 +0.2**
**TREC Trest 47.99 322** *e*P **P 20 38 19.1 +0.9**
**TREC Trest 47.99 322** *e*P **P 20 38 19.1 +0.9**
**MYKA Terra Mystica 48.05 318** *e*P **P 20 38 20.3 +1.5**
comp=Z,12nm,0.7s
**MOA Molln 48.13 320** *i* P **P 20 38 20.1 +0.8**
comp=Z,5.6nm,0.6s
**OSTC Ostas 48.13 324** *e*P **P 20 38 19.8 +0.5**
**UPC Upice 48.22 324** *e*P **P 20 38 20.8 +0.8**
**UPC Upice 48.22 324** *e*P **P 20 38 20.8 +0.8**
**CHVC Chvalec 48.24 324** *e*P **P 20 38 21.0 +0.9**
**KEST Kesra 48.35 303** P **P 20 38 22.6 +1.3**
comp=Z,6.9nm,1.1s,baz=340,slow=7.0,SNR=3.7
KEST LR LR 21 02 00.6
comp=Z,199nm,18.9s,baz=205,slow=40
**KEST Kesra 48.35 303** P **P 20 38 20.8 -0.5**
KEST IAmb IAmb 20 38 48.1
comp=Z,30nm,1.5s
**CKRC Cesky Krumlov 48.49 321** *e*P **P 20 38 22.1 0.0**
**STAL STALIGIAL 48.52 317** P **P 20 38 22.0 -0.4**
STAL IAmb IAmb 20 38 23.3
comp=Z,22nm,1.0s
**SONM Songino Array 48.54 41** P **P 20 38 24.1 +1.4**
comp=Z,8.4nm,0.8s,baz=240,slow=7.8,SNR=63
SONM LR LR 21 03 19.9
comp=Z,198nm,18.1s,baz=252,slow=42
**SONM Songino Array 48.54 41** P **P 20 38 22.7 +0.1**
SONM pmax pmax
comp=Z,16nm,1.2s
**SONM Songino Array 48.54 41** P **P 20 38 22.7 +0.1**
SONM IAmb IAmb 20 38 25.2
comp=Z,16nm,1.2s
**BTO Baotou 48.80 51** *e*P **P 20 38 24.3 -0.4**
BTO S **S 20 45 28.0 0.0**
BTO LR LR
BTO comp=Z,610nm,8.3s LR LR
comp=Z,1μm,8.8s
**ABTA Abfaltersbach 48.82 318** *e*P **P 20 38 25.1 +0.4**
comp=Z,19nm,0.9s,SNR=9.1
**PRU Pruhonice 48.84 322** *e*P **P 20 38 25.2 +0.5**
**PRU Pruhonice 48.84 322** *e*P **P 20 38 25.2 +0.5**
**GEC2 GERESS Array S 48.87 321** P **P 20 38 24.9 -0.2**
**GEC2 GERESS Array S 48.87 321** *e*P **P 20 38 25.1 +0.1**
comp=Z,3.6nm,0.7s,baz=114,slow=7.6
**GERES GERESS Array B 48.87 321** P **P 20 38 25.3 +0.2**
comp=Z,2.2nm,0.6s,baz=120,slow=6.3,SNR=26
**TEOL Teolo 48.91 316** P **P 20 38 24.5 -0.8**
TEOL IAmb IAmb 20 38 26.7
comp=Z,16nm,0.8s
**ULN Ulaanbaatar 48.96 41***ce*P **P 20 38 26.6 +0.7**
ULN pmax pmax
comp=Z,15nm,1.7s
**ULN Ulaanbaatar 48.96 41** P **P 20 38 26.0 +0.1**
ULN IAmb IAmb 20 38 28.0
comp=Z,8.7nm,1.1s
**RJOB Jochberg 49.00 319** *e*P **P 20 38 26.1 +0.1**
comp=Z,16nm,0.8s,baz=114,slow=7.6
**KHC Kasperske Hory 49.06 321** *i* P **P 20 38 26.2 -0.2**
KHC pmax pmax
comp=Z,29nm,0.8s
**KHC Kasperske Hory 49.06 321** *e*P **P 20 38 26.2 -0.2**
**KHC Kasperske Hory 49.06 321** P **P 20 38 26.7 +0.3**
KHC IAmb IAmb 20 38 27.7
comp=Z,16nm,0.7s
**PVCC Panska Ves 49.06 323** *e*P **P 20 38 27.0 +0.6**
**PVCC Panska Ves 49.06 323** *e*P **P 20 38 27.0 +0.6**
**ZCCA Zocca 49.06 314** P **P 20 38 28.1 +1.5**
ZCCA IAmb IAmb 20 38 44.2
comp=Z,17nm,1.1s
**CTI Castel Tesino 49.14 317** P **P 20 38 27.2 0.0**
CTI pmax pmax
comp=Z,12nm,0.7s
**CTI Castel Tesino 49.14 317** P **P 20 38 27.2 0.0**
CTI IAmb IAmb 20 38 28.2
comp=Z,12nm,0.7s
**WTTA Wattenberg 49.56 318** *e*P **P 20 38 30.2 -0.3**
comp=Z,20nm,0.6s,SNR=9.4
**BRG Berggiesshubel 49.56 323** *e*P **P 20 38 31.0 +0.8**
BRG Amp 20 38 32.1
comp=Z,9.9nm,0.9s
**BRG Berggiesshubel 49.56 323** *e*P **P 20 38 31.0 +0.8**
BRG pmax pmax
comp=Z,10.0nm,0.9s
**BRG Berggiesshubel 49.56 323** *e*P **P 20 38 31.0 +0.8**
comp=Z,9.9nm,0.9s,baz=114,slow=7.6
**WATA Walderalm 49.63 318** *e*P **P 20 38 30.4 -0.6**
comp=Z,8.2nm,0.7s,SNR=6.8
**LYN LuoYang 49.68 59** ⇓P **P 20 38 31.4 0.0**
LYN pmax pmax
comp=Z,10.0nm,0.8s
LYN pmax pmax
comp=Z,130nm,5.4s
LYN LR LR
comp=Z,280nm,11.0s
LYN LR LR
comp=Z,270nm,14.9s
LYN LR LR
comp=Z,240nm,17.1s
**MOTA Moosalm 49.93 318** *e*P **P 20 38 32.8 -0.5**
comp=Z,22nm,0.8s,SNR=10
**HHC Hu-ho-hao-te 49.99 51**⇑*i*P **P 20 38 35.6 +1.8**
HHC pmax pmax
comp=Z,23nm,1.1s
HHC pmax pmax
comp=Z,200nm,5.0s
HHC LR LR
comp=Z,240nm,18.6s
HHC LR LR
comp=Z,430nm,20.4s
HHC LR LR
comp=Z,610nm,19.3s
**FETA Feichten 50.06 317** *i* P **P 20 38 34.1 -0.2**
comp=Z,10nm,0.9s
**TIY Taiyuan 50.08 55** P **P 20 38 34.8 +0.3**
TIY pmax pmax

FUR **Furstenfeldbru** 50.11 319 *e*P P 20 38 34.5 0.0
comp=Z,54nm,0.8s,baz=114,slow=7.6
ROTZ **Rotzenmuhle** 50.13 321 *e*P P 20 38 35.1 +0.5
comp=Z,2.8nm,0.9s,baz=114,slow=7.6
NKC **Novy Kostel** 50.17 322 *e*P P 20 38 35.1 +0.2
NKC **Novy Kostel** 50.17 322 *e*P P 20 38 35.1 +0.2
RETA **Reutte** 50.20 318 *i* P P 20 38 34.7 -0.5
comp=Z,8.2nm,0.6s
FIA1 **FINESS Array S** 50.21 340 P P 20 38 35.2 +0.2
FINES **FINESS Array B** 50.21 340 P P 20 38 35.5 +0.5
comp=Z,21nm,0.6s,baz=127,slow=9.5,SNR=66
FINES **FINESS Array B** 50.21 340 *i* P P 20 38 35.5 +0.5
FINES pmax pmax
comp=Z,22nm,0.6s
FINES **FINESS Array B** 50.21 340 P P 20 38 35.0 +0.1
WERN **Wernitzgruen** 50.23 322 *e*P P 20 38 36.3 +0.9
comp=Z,12nm,1.1s,baz=114,slow=7.6
MANZ **Manzenberg** 50.27 321 *e*P P 20 38 36.4 +0.7
comp=Z,2.1nm,0.8s,baz=114,slow=7.6
CLL **Collm** 50.29 323 *i* P P 20 38 36.8 +1.1
CLL pmax pmax
comp=Z,27nm,0.8s
CLL **Collm** 50.29 323 *i* P P 20 38 36.8 +1.1
comp=Z,27nm,0.8s
CLL **Collm** 50.29 323 P P 20 38 36.4 +0.7
CLL **Collm** 50.29 323 *e*P P 20 38 36.9 +1.1
comp=Z,27nm,0.8s,baz=114,slow=7.6
RUE **Ruedersdorf** 50.36 325 *e*P P 20 38 37.3 +1.1
comp=Z,16nm,0.8s,baz=114,slow=7.6
UBR **Ueberruh** 50.68 318 *e*P P 20 38 38.6 -0.3
comp=Z,9.2nm,0.8s,baz=114,slow=7.6
GRA1 **Grafenberg Arr** 50.69 321 P P 20 38 39.0 +0.1
GRF **Grafenberg Arr** 50.69 321 P P 20 38 39.0 +0.1
GRF pmax pmax
comp=Z,23nm,0.7s
GRF **Grafenberg Arr** 50.69 321 *e*P P 20 38 39.2 +0.3
comp=Z,26nm,0.8s,baz=114,slow=7.6
GRFO **Grafenberg** 50.69 321 P P 20 38 39.0 +0.2
GRFO pmax pmax
comp=Z,23nm,0.8s
GRFO **Grafenberg** 50.69 321 P P 20 38 39.0 +0.2
GRFO IAmb IAmb 20 38 40.1
comp=Z,23nm,0.8s
DAVA **Damuels** 50.70 318 *e*P P 20 38 38.6 -0.5
comp=Z,24nm,0.6s,SNR=7.8
TUE **Stuetta** 50.79 316 P P 20 38 39.6 -0.3
MOX **Moxa** 50.82 322 *e*P P 20 38 40.7 +0.9
comp=Z,6.8nm,0.7s,baz=114,slow=7.6
NEUB **Neuenburg** 50.95 323 *e*P P 20 38 41.9 +1.2
comp=Z,41nm,0.9s,baz=114,slow=7.6
CGJI **Cibinong** 51.02 114 P P 20 38 40.2 -1.5
comp=Z,33nm,0.7s
SBF **Sospel** 51.39 313 *e*P P 20 38 44.4 +0.2
SBF pmax pmax
comp=Z,31nm,0.8s
FLTG **Flechtingen** 51.71 324 *e*P P 20 38 47.1 +0.7
comp=Z,24nm,0.8s,baz=114,slow=7.6
HNS **HongShan** 51.82 56 ⇓P P 20 38 48.0 +0.5
HNS pmax pmax
comp=Z,17nm,1.0s
UBBA **Unterbreizbach** 51.84 322 *e*P P 20 38 48.0 +0.8
comp=Z,5.5nm,0.8s,baz=114,slow=7.6
ASSE **Asse, Remlinge** 51.95 324 *e*P P 20 38 49.0 +0.9
comp=Z,8.0nm,0.9s,baz=114,slow=7.6
VIKU **Vikbolandet** 51.95 333 *e*P P 20 38 48.6 +0.6
CLZ **Clausthal** 52.00 323 *e*P P 20 38 50.0 +1.3
comp=Z,39nm,0.8s,baz=114,slow=7.6
BFO **Black Forest** 52.02 318 P P 20 38 49.3 +0.5
BFO pmax pmax
comp=Z,9.0nm,1.1s
BFO **Black Forest** 52.02 318 P P 20 38 49.3 +0.5
BFO **Black Forest** 52.02 318 *e*P P 20 38 48.9 +0.1
comp=Z,8.5nm,1.0s,baz=114,slow=7.6
MBDF **Montbardon** 52.06 314 *e*P P 20 38 49.1 -0.2
MBDF pmax pmax
comp=Z,7.0nm,0.6s
GTTG **Gottingen** 52.13 323 *e*P P 20 38 50.8 +1.3
comp=Z,28nm,0.8s,baz=114,slow=7.6
DEL **Delary** 52.18 330 *e*P P 20 38 50.5 +0.6
BNI **Bardonecchia** 52.20 314 P P 20 38 50.5 +0.1
BNI pmax pmax
comp=Z,9.0nm,0.9s
BNI **Bardonecchia** 52.20 314 P P 20 38 50.5 +0.1
LPG **La Plagne** 52.26 315 *e*P P 20 38 50.2 -0.8
LPG pmax pmax
comp=Z,7.0nm,0.8s
LPL **La Plagne** 52.28 315 *e*P P 20 38 50.2 -0.9
LPL pmax pmax
comp=Z,7.0nm,0.6s
UPP **Uppsala** 52.33 335 *e*P P 20 38 50.5 -0.4
NRDL **Niedersach Rie** 52.41 324 *e*P P 20 38 53.0 +1.5
comp=Z,28nm,0.9s,baz=114,slow=7.6
CDF **Champ du Feu** 52.71 318 *e*P P 20 38 53.3 -0.8
CDF pmax pmax
comp=Z,10.0nm,0.8s
ORIF **Oris-en-Rattie** 52.72 314 *e*P P 20 38 53.7 -0.5
ORIF pmax pmax
comp=Z,34nm,1.9s
ECH **Echery** 52.73 318 P P 20 38 53.8 -0.3
ECH pmax pmax
comp=Z,7.0nm,0.8s
ECH **Echery** 52.73 318 P P 20 38 53.8 -0.3
HINF **Hinteralfeld** 52.81 317 *e*P P 20 38 53.8 -1.0
HINF pmax pmax
comp=Z,21nm,1.7s
KASTN **Kahler Asten** 52.91 322 *e*P P 20 38 56.4 +1.0
comp=Z,8.4nm,0.9s,baz=114,slow=7.6
RETH **Rethem/Aller,** 52.92 324 *e*P P 20 38 56.4 +1.0
comp=Z,10nm,1.0s,baz=114,slow=7.6
CABF **La Chapelle** 52.99 316 *e*P P 20 38 55.9 -0.3
CABF pmax pmax
comp=Z,15nm,0.7s
HAU **Haudompre** 53.19 318 *e*P P 20 38 56.3 -1.2
HAU pmax pmax
comp=Z,92nm,2.3s
BJI **Beijing** 53.31 53 P P 20 38 58.8 +0.3
BJI pmax pmax
comp=Z,15nm,0.8s
BJI LR LR
comp=Z,300nm,16.9s
BJI LR LR
comp=Z,290nm,15.2s
BJI LR LR
comp=Z,330nm,17.4s
AHRW **Bad Neuenahr-A** 53.49 321 *e*P P 20 39 01.6 +2.0
comp=Z,15nm,0.8s,baz=114,slow=7.6
TIA **Tai'an** 53.63 58 ⇓P P 20 39 00.6 -0.3
TIA pmax pmax
comp=Z,15nm,0.8s
BUG **Bochum--Univer** 53.67 322 *e*P P 20 39 01.8 +0.9
comp=Z,14nm,1.0s,baz=114,slow=7.6
LBTB **Lobatse** 53.77 219 LR LR 20 59 57.3
comp=Z,166nm,19.8s,baz=44,slow=34
WLF **Walferdange** 53.79 319 P P 20 39 01.7 -0.1
WLF pmax pmax
comp=Z,12nm,0.8s
WLF **Walferdange** 53.79 319 P P 20 39 01.7 -0.1
WLF IAmb IAmb 20 39 03.1
comp=Z,12nm,0.8s
WLF **Walferdange** 53.79 319 *d*P P 20 39 02.4 +0.5
comp=Z,9.2nm,0.9s
XLT **XiLinHaoTe** 53.89 48 *e*P P 20 39 03.0 +0.2
XLT pP sP 20 39 06.8 +1.1
XLT sP pwP 20 39 09.5 0.0
XLT PcS **PcS** 20 44 07.9 +0.4
XLT pmax pmax
comp=Z,8.0nm,1.1s
XLT pmax pmax
comp=Z,140nm,5.1s
XLT LR LR
comp=Z,150nm,13.1s
XLT LR LR
comp=Z,220nm,16.0s
BTNL **Ternell** 54.08 321 *d*P P 20 39 05.4 +1.4
comp=Z,5.1nm,1.0s
HFS **Hagfors** 54.12 333 LR LR 21 03 52.0
comp=Z,225nm,18.4s,baz=22,slow=38
MEM **Membach** 54.16 321 *d*P P 20 39 05.3 +0.8
comp=Z,6.7nm,0.8s
BSTI **Sart Tilman** 54.42 320 *d*P P 20 39 07.1 +0.6
RCHB **Rochefort** 54.50 320 *d*P P 20 39 07.8 +0.7
comp=Z,5.7nm,0.8s
BCLA **Clavier** 54.53 320 *d*P P 20 39 07.9 +0.6
comp=Z,6.9nm,0.9s
LOR **Lormes** 54.63 316 *e*P P 20 39 07.6 -0.5
LOR pmax pmax
comp=Z,11nm,0.8s
BGES **Geves** 54.66 320 *d*P P 20 39 09.1 +0.9
comp=Z,6.8nm,0.9s
BMRD **Maredsous** 54.83 320 *d*P P 20 39 09.4 0.0
comp=Z,3.8nm,1.1s
AVF **Avril sur Loir** 54.86 315 *e*P P 20 39 09.1 -0.6
AVF pmax pmax
comp=Z,7.0nm,0.8s
NJ2 **Nanjing** 54.87 63 *e*P P 20 39 09.6 -0.4
NJ2 pmax pmax
comp=Z,11nm,0.6s
BAIF **Baives** 55.11 319 *e*P P 20 39 11.6 +0.2
BAIF pmax pmax
comp=Z,13nm,0.8s
TSUM **Tsumeb** 55.24 231 LR LR 21 03 06.0
comp=Z,549nm,18.2s,baz=58,slow=36
NC602 **NORSAR Array S** 55.35 333 P P 20 39 12.8 -0.2
NORES **NORESS Array B** 55.35 333 P P 20 39 15.5 +2.5
CAF **Calviac** 55.37 313 *e*P P 20 39 13.8 +0.3
CAF pmax pmax
comp=Z,29nm,1.7s
NC405 **NORSAR Array S** 55.47 334 P P 20 39 13.5 -0.3
NC405 IAmb IAmb 20 39 39.9
comp=Z,20nm,1.2s
NB2 **NORSAR Subarra** 55.64 334 P P 20 39 14.5 -0.6
comp=Z,11nm,0.8s,baz=118,slow=7.9
NOA **NORSAR Array B** 55.64 334 P P 20 39 15.1 -0.1
comp=Z,5.6nm,0.8s,baz=117,slow=7.5,SNR=20
NOA LR 21 05 04.4
comp=Z,58nm,20.4s,baz=280,slow=38
NBO00 **NORSAR Array S** 55.82 334 P P 20 39 16.8 +0.4
NBO00 IAmb IAmb 20 39 17.4
comp=Z,19nm,0.9s
RJF **Les Rejaudoux** 55.82 313 *e*P P 20 39 17.0 +0.3
RJF pmax pmax
comp=Z,8.0nm,0.8s
NC204 **NORSAR Array S** 55.95 334 P P 20 39 17.9 +0.6
NC204 IAmb IAmb 20 39 35.1
comp=Z,12nm,0.8s
TORD **Torodi Ar. Bea** 56.23 274 P P 20 39 20.1 0.0
comp=Z,18nm,0.9s,baz=76,slow=6.1,SNR=81
TORD **Torodi Ar. Bea** 56.23 274 P P 20 39 19.9 -0.2
TORD IAmb IAmb 20 39 21.2
comp=Z,15nm,1.0s
ARCES **ARCESS Array B** 56.40 346 P P 20 39 20.3 0.0
comp=Z,8.4nm,0.7s,baz=127,slow=3.2,SNR=15
ARCES **ARCESS Array B** 56.40 346 P P 20 39 20.4 0.0
ARCES **ARCESS Array B** 56.40 346 P P 20 39 20.4 0.0
BOD **Bodaibo** 56.64 31 *e*P P 20 39 22.2 -0.1
BOD pmax pmax
comp=Z,11nm,0.9s
BOSA **Boshof** 56.66 217 P P 20 39 22.2 -0.7
comp=Z,4.5nm,1.0s,baz=31,slow=5.4,SNR=6.1
BOSA LR LR 21 01 17.3
comp=Z,190nm,19.9s,baz=26,slow=34
HIA **Hailar** 57.42 42 *i* P P 20 39 28.3 +0.3
HIA pmax pmax
comp=Z,13nm,1.1s
SJPF **Ste Jean** 57.45 310 *e*P P 20 39 28.5 +0.1
SJPF pmax pmax
comp=Z,32nm,1.1s
LDF **La Druitiere** 57.53 317 *e*P P 20 39 28.1 -0.6
LDF pmax pmax
comp=Z,14nm,0.8s
FLN **La Foliniere** 57.80 317 *e*P P 20 39 29.9 -0.7
FLN pmax pmax
comp=Z,17nm,1.1s
SGMF **Saint Gilles** 59.07 316 *e*P P 20 39 39.0 -0.5
SGMF pmax pmax
comp=Z,11nm,0.8s
ESBB **Sonseca Array** 59.23 306 P P 20 39 40.9 0.0
ESDC **Sonseca Array** 59.23 306 P P 20 39 40.8 -0.1
comp=Z,12nm,0.7s,baz=80,slow=5.7,SNR=87
ESDC LR LR 21 09 45.0
comp=Z,114nm,18.2s,baz=76,slow=40
ESDC **Sonseca Array** 59.23 306 P P 20 39 40.3 -0.6
ESDC IAmb IAmb 20 39 41.6
comp=Z,9.7nm,0.8s
QUIF **Quistinic** 59.42 316 *e*P P 20 39 41.1 -0.9
QUIF pmax pmax
comp=Z,102nm,1.8s
PAB **San Pablo** 59.53 306 P P 20 39 42.7 -0.2
PAB pmax pmax
comp=Z,13nm,0.8s
PAB **San Pablo** 59.53 306 P P 20 39 42.7 -0.2
PAB IAmb IAmb 20 39 43.7
comp=Z,12nm,0.8s
ROSF **Rostrenen** 59.55 316 *e*P P 20 39 42.0 -0.9
ROSF pmax pmax
comp=Z,20nm,0.8s
MDT **Midelt** 59.71 298 P P 20 39 45.3 +1.0
comp=Z,9.2nm,0.8s,baz=101,slow=7.2,SNR=13
MDT LR LR 21 08 27.3
comp=Z,442nm,18.1s,baz=112,slow=39
EKA **Eskdalemuir Ar** 60.73 324 P P 20 39 49.9 -0.9
MPSI **Mapaga** 61.26 99 P P 20 39 54.4 -0.7
comp=Z,29nm,1.0s
KOWA **Kowa** 61.38 277 P P 20 39 56.2 +0.3
KOWA IAmb IAmb 20 39 57.3
comp=Z,13nm,0.7s
PBRG **Braganca** 61.43 309 *e*P P 20 39 56.1 +0.2
comp=Z,38nm,1.8s
MVO **Moncorvo** 61.63 308 *e*P P 20 39 57.1 -0.1
TOLI2 **Tolitoli** 61.84 98 P P 20 39 58.1 -1.0
PMRV **Marv??o** 61.88 306 *e*P P 20 39 58.6 -0.3
PCBR **Castelo Branco** 61.95 306 *e*P P 20 39 59.2 -0.1
comp=Z,42nm,1.9s
MTE **Manteigas** 62.00 307 *e*P P 20 40 02.8 +3.0
comp=Z,46nm,1.7s
SUR **Sutherland** 62.01 217 LR LR 21 04 27.0
comp=Z,157nm,20.1s,baz=52,slow=34
BNX **BinXian** 62.11 47 ⇑P P 20 40 00.0 -0.3
BNX pmax pmax
comp=Z,19nm,0.9s
BNX pmax pmax
comp=Z,320nm,6.0s
POLO **Lamas de Olo** 62.21 308 *e*P P 20 40 01.6 +0.4
PVIS **Viseu** 62.27 307 *e*P P 20 40 02.2 +0.6
comp=Z,48nm,1.5s
KSRS **Korea Array** 62.32 56 P P 20 40 00.5 -1.4
comp=Z,3.5nm,0.6s,baz=270,slow=6.8,SNR=8.9
EVO **Evora** 62.37 305 *e*P P 20 40 02.3 +0.1
PMTG **Montargil** 62.53 305 *e*P P 20 40 02.8 -0.4
MESJ **Messejana** 62.54 304 *e*P P 20 40 03.4 +0.1
comp=Z,65nm,1.7s
PGAV **Gavieira, Arco** 62.57 309 *e*P P 20 40 04.0 +0.4
comp=Z,68nm,1.8s
ZEA **Zeya** 62.81 38 *e*P P 20 40 05.5 +0.7
ZEA pmax pmax
comp=Z,10.0nm,0.7s
KAPI **Kappang** 63.02 105 P P 20 40 05.6 -1.2
comp=Z,22nm,1.1s,baz=248,slow=1.9,SNR=5.0
KAPI LR LR 21 08 26.6
comp=Z,219nm,18.0s,baz=329,slow=37
KAPI **Kappang** 63.02 105 P P 20 40 05.1 -1.7
KAPI pmax pmax
comp=Z,24nm,1.1s
KAPI **Kappang** 63.02 105 P P 20 40 05.1 -1.7
MRSI **Marisa** 63.15 98 P P 20 40 05.9 -1.8
comp=Z,49nm,1.0s
MDJ **Mudanjiang** 63.61 48 P P 20 40 10.8 +0.5
MDJ pmax pmax
comp=Z,4.0nm,1.0s
MDJ pmax pmax
comp=Z,280nm,4.8s
KIC **Kosan Boka** 64.03 269 *e*P P 20 40 13.4 -0.2
comp=Z,15nm,0.7s
DBIC **Dimbokro** 64.06 269 P P 20 40 14.1 +0.3
comp=Z,10.0nm,0.7s,baz=75,slow=5.2,SNR=14
DBIC LR LR 21 07 23.6
comp=Z,120nm,20.2s,baz=87,slow=35
DBIC **Dimbokro** 64.06 269 P P 20 40 13.7 -0.1
DBIC pmax pmax
comp=Z,12nm,0.8s
DBIC **Dimbokro** 64.06 269 P P 20 40 13.7 -0.1
DBIC IAmb IAmb 20 40 14.7
comp=Z,12nm,0.8s
GTOI **Gorontalo** 64.11 98 P P 20 40 10.4 -3.7
comp=Z,12nm,0.7s
TIC **Toumodi** 64.22 269 *e*P P 20 40 14.9 0.0
LIC **Lamto** 64.35 269 *e*P P 20 40 15.1 -0.6
comp=Z,46nm,1.0s
KLR **Kul'dur** 65.23 43 *ce*P P 20 40 20.0 -0.8
KLR pmax pmax
comp=Z,7.0nm,1.0s
USRK **Ussuriysk Ar.** 65.32 49 P P 20 40 21.1 -0.5
comp=Z,5.9nm,0.9s,baz=272,slow=5.7,SNR=6.4
USRK **Ussuriysk Ar.** 65.32 49 P P 20 40 20.7 -0.8
USRK **Ussuriysk Ar.** 65.32 49 P P 20 40 20.7 -0.8
YAK **Yakutsk** 65.37 29 LR LR 21 11 30.3
comp=Z,111nm,19.7s,baz=259,slow=38
YAK **Yakutsk** 65.37 29 *e*P P 20 40 21.2 -0.3
YAK *e* 20 40 54.0
YAK *e*S S 20 48 57.5 -8.0
YAK pmax pmax
comp=Z,38nm,0.8s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=E,8.0nm,0.9s
YAK smax smax
comp=E,101nm,4.7s
YAK smax smax
comp=N,136nm,4.7s
YAK **Yakutsk** 65.37 29 P P 20 40 19.4 -2.1
TIXI **Tiksi** 67.10 19 *ce*P P 20 40 32.6 +0.2
TIXI pmax pmax
comp=Z,18nm,1.7s
TIXI **Tiksi** 67.10 19 P P 20 40 32.3 -0.1
TIXI IAmb IAmb 20 41 01.7
comp=Z,7.4nm,0.8s
GRNR **Gornyy** 68.26 42 ⇑*i*P P 20 40 40.8 +0.6
GRNR pmax pmax
comp=Z,1.0nm,0.9s
GRNR MLR MLR
comp=Z,210nm,16.0s
SOEI **Soe** 68.96 108 P P 20 40 43.2 -2.0
SOEI **Soe** 68.96 108 P P 20 40 43.0 -2.2
comp=Z,44nm,1.6s
INU **Inuyama** 69.79 58 P P 20 40 48.9 -1.1
MAT **Matsushiro** 70.60 57 P P 20 40 53.4 -1.5
MJAR **Matsushiro Arr** 70.60 57 P P 20 40 53.5 -1.4
comp=Z,4.2nm,0.9s,baz=283,slow=6.3,SNR=5.6
NOR **Nord** 71.07 351 *i* P P 20 40 55.5 -1.4
NOR IAmb IAmb 20 41 17.6
comp=Z,2.1nm,0.7s
JYT **Yasato** 72.23 57 P P 20 41 03.2 -1.5
FITZ **Fitzroy Crossi** 73.53 115 P P 20 41 11.2 -1.5
comp=Z,5.2nm,0.9s,baz=255,slow=5.4,SNR=11
KNRA **Kununurra** 75.29 112 P P 20 41 21.8 -1.2
KNRA IAmb IAmb 20 41 22.3
comp=Z,15nm,0.8s
MA2 **Magadan** 75.66 32 *ce*P P 20 41 24.8 +0.3
MA2 pmax pmax
comp=Z,12nm,0.8s
MA2 **Magadan** 75.66 32 P P 20 41 24.7 +0.3
MA2 IAmb IAmb 20 41 25.8
comp=Z,11nm,0.8s
SEY **Seymchan** 75.86 28 *i* P P 20 41 26.5 +1.1
SUMG **Summit** 76.16 342 P P 20 41 28.3 +0.8
SUMG pmax pmax
comp=Z,12nm,1.2s
SUMG **Summit** 76.16 342 *i* P P 20 41 28.0 +0.5
SUMG IAmb IAmb 20 41 30.0
comp=Z,4.2nm,0.9s
SUMG **Summit** 76.16 342 P P 20 41 28.3 +0.8
SUMG IAmb IAmb 20 41 53.2
comp=Z,12nm,1.2s
NEEM **North Greenlan** 77.70 348 *i* P P 20 41 36.4 +0.4
NEEM IAmb IAmb 20 41 37.8
comp=Z,5.7nm,0.8s
BILL **Bilibino** 80.05 22 *ce*P P 20 41 49.5 +0.8
BILL *i* 20 41 56.6
BILL *i* 20 42 02.4
BILL *e*SS SS 20 57 06.4 +4.4
BILL pmax pmax
comp=Z,9.0nm,1.7s
BILL **Bilibino** 80.05 22 P P 20 41 49.5 +0.8
DY2G **Dye2** 80.61 337 *i* P P 20 41 51.6 -0.4
DY2G IAmb IAmb 20 41 53.2
comp=Z,6.0nm,0.7s
WB0 **Warramunga Arr** 81.80 114 P P 20 41 57.2 -1.7
WB0 IAmb IAmb 20 41 58.2
comp=Z,12nm,0.8s
WRA **Warramunga Arr** 81.81 114 P P 20 41 57.6 -1.3
comp=Z,12nm,0.7s,baz=305,slow=4.3,SNR=108
WRA **Warramunga Arr** 81.81 114 *i* P P 20 41 57.5 -1.5
WRA pmax pmax
comp=Z,12nm,0.7s
WRA **Warramunga Arr** 81.81 114 P P 20 41 57.0 -2.0
WRAB **Tennant Creek** 81.82 114 *ce*P P 20 41 57.1 -1.9
WRAB pmax pmax
comp=Z,35nm,1.7s
WRAB **Tennant Creek** 81.82 114 P P 20 41 57.5 -1.5
WB2 **Warramunga Arr** 81.82 114 P P 20 41 57.3 -1.7
WR0 **Warramunga Arr** 82.00 114 P P 20 41 57.9 -2.0
WR0 IAmb IAmb 20 41 59.1
comp=Z,8.5nm,0.7s
AS31 **Alice Springs** 82.83 117 P P 20 42 02.9 -1.3
ASAR **Alice Springs** 82.83 117 P P 20 42 02.6 -1.6
comp=Z,6.0nm,0.8s,baz=292,slow=4.9,SNR=57
ASAR **Alice Springs** 82.83 117 P P 20 42 02.1 -2.1
ASAR **Alice Springs** 82.83 117 P P 20 42 02.1 -2.1
A36M **Sachs Harbour** 90.88 2 P P 20 42 43.8 +1.2
baz=355
ANM **Nome** 91.35 18 P P 20 42 45.3 +0.4
baz=317
TOLK **Toolik Lake Re** 91.70 10 P P 20 42 47.5 +1.0
TOLK **Toolik Lake Re** 91.70 10 P P 20 42 47.9 +1.3
baz=332
CTA **Charters Tower** 92.42 110 P P 20 42 50.3 -0.4
comp=Z,4.1nm,0.9s,baz=334,slow=4.3,SNR=4.3
COLD **Coldfoot** 92.84 11 P P 20 42 49.7 -2.1
COLD IAmb IAmb 20 42 54.6
comp=Z,3.5nm,0.9s
COLD **Coldfoot** 92.84 11 P P 20 42 52.8 +1.0
baz=331
C36M **Paulatuk** 93.56 1 P P 20 42 54.1 -0.9
baz=356
BMAR **Burnt Mountain** 93.61 9 P P 20 42 57.4 +1.9
H21K **Melozitna Rive** 93.68 13 P P 20 42 56.8 +1.1
H21K IAmb IAmb 20 43 03.9
comp=Z,12nm,1.2s
H21K **Melozitna Rive** 93.68 13 P P 20 42 56.9 +1.2
baz=329
INK **Inuvik** 94.09 5 P P 20 42 58.5 +1.0
baz=347
H23K **Yukon River** 94.20 12 P P 20 42 59.2 +1.0
baz=332
I21K **Tanana** 94.27 13 P P 20 42 59.0 +0.6
baz=330
H24K **Noodor Dome** 94.50 11 P P 20 43 00.6 +1.0
baz=333
J20K **Nowinta River** 94.64 14 P P 20 43 01.0 +0.9
baz=327
MLY **Manley** 94.66 13 P P 20 43 01.1 +0.8
MLY IAmb IAmb 20 43 02.0
comp=Z,5.2nm,0.7s
MLY **Manley** 94.66 13 P P 20 43 00.9 +0.7
baz=331
I23K **Minto, Yukon-K** 94.84 12 P P 20 43 02.2 +1.2
baz=332
K20K **Telida** 95.35 15 P P 20 43 04.4 +1.0
baz=327
BPAW **Bear Paw Mtn.** 95.42 13 P P 20 43 04.9 +1.1
baz=330
ILAR **Eielson Array** 95.65 11 P P 20 43 04.5 -0.2
comp=Z,0.5nm,0.7s,baz=321,slow=4.7,SNR=7.4
ILAR PP PP 20 46 56.5 +1.3
comp=Z,0.7nm,0.8s,baz=316,slow=7.4,SNR=6.1
EPYK **Eagle Plains** 95.66 7 P P 20 43 05.2 +0.4
baz=344
CAST **Castle Rocks** 95.77 14 P P 20 43 05.6 +0.3
baz=329
J25K **Salcha River,** 96.07 11 P P 20 43 06.7 0.0
baz=336
TRF **Thorofare Moun** 96.14 13 P P 20 43 07.5 +0.3
baz=331
MCK **McKinley** 96.18 13 P P 20 43 07.4 +0.1
baz=332
PPLA **Purkeypile** 96.19 14 P P 20 43 07.3 -0.2
baz=329
J26L **Joseph Creek** 96.48 10 P P 20 43 07.9 -0.7
baz=337
SCRK **Sand Creek** 96.90 10 P P 20 43 11.2 +0.6
baz=337
DHY **Denali Highway** 97.08 12 P P 20 43 10.8 -0.7
baz=334
N19K **Bonanza Creek** 97.39 16 P P 20 43 12.8 -0.1
baz=327
WAT6 **Susitna Watana** 97.45 13 P P 20 43 13.1 -0.1

baz=333
**DAWY Dawson** 97.53 8 P Pdif 20 43 14.0 +0.6
baz=341
**YKA Yellowknife Ar** 100.38 357 P **Pdif** **20 43 27.5 +1.5**
comp=Z,0.3nm,0.7s,baz=355,slow=4.8,SNR=4.7
YKA PP **PP** **20 47 33.0 +1.6**
comp=Z,1.1nm,0.9s,baz=5.9,slow=7.6,SNR=9.2
**YKA Yellowknife Ar** 100.38 357 *i* P **Pdif** **20 43 26.0 0.0**
**YKA Yellowknife Ar** 100.38 357 **Pdif** **20 43 26.0 0.0**
**NVAR Mina Array Bea** 124.56 358 PKP **PKiKP** **20 48 40.4 +0.5**
comp=Z,0.6nm,0.6s,baz=288,slow=0.9,SNR=4.3
**NVAR Mina Array Bea** 124.56 358 **PKPdf** **20 48 37.9 -1.6**
**TBTG Tabatinga, AM** 129.25 279 *e*P **PKPdf** **20 48 47.8 -1.0**
**LPAZ La Paz** 130.45 263 PKP **PKPdf** **20 48 51.0 -0.6**
comp=Z,1.5nm,1.0s,baz=87,slow=6.9,SNR=4.2
**LPAZ La Paz** 130.45 263 *e*P **PKPdf** **20 48 52.2 +0.5**

*JMA **18** 20:35:33.4±0.1, 24.24N×121.74E, h30km±3km, M3.1*
*TAP **18** 20:35:33.9, 24.34N×121.81E, h12km, ML3.6, C*
**ISC 18 20:35:33.3±0.8, 24.34N±0.01×121.87E±0.02, h13km±5km, n130, σ0.78/215, 16C-12D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.13** | **254** | ⇑ | *i*P | | **Pg** | **20 35 36.6** | **+0.1** |
| | baz=239 | | | | | | | | |
| EHP | | | | | *i*S | | **Sg** | **20 35 38.6** | **-0.3** |
| | baz=239 | | | | | | | | |
| **EWUT** | **Wuta** | **0.13** | **319** | ⇑ | *i*P | | **Pg** | **20 35 37.1** | **+0.4** |
| | baz=346 | | | | | | | | |
| EWUT | | | | | *i*S | | **Sg** | **20 35 39.2** | **+0.1** |
| | baz=346 | | | | | | | | |
| **ENA** | **Nanau** | **0.15** | **305** | ⇑ | *i*P | | **Pg** | **20 35 37.1** | **+0.2** |
| | baz=328 | | | | | | | | |
| ENA | | | | | *i*S | | **Sg** | **20 35 38.9** | **-0.5** |
| | baz=328 | | | | | | | | |
| **TWC** | **Suao** | **0.27** | **355** | ⇓ | *i*P | | **Pb** | **20 35 39.7** | **-0.2** |
| | baz=16 | | | | | | | | |
| TWC | | | | | *i*S | | **Sb** | **20 35 43.3** | **-1.1** |
| | baz=16 | | | | | | | | |
| **ETL** | **Fush Village** | **0.29** | **231** | ⇓ | *i*P | | **Pg** | **20 35 39.2** | **-0.1** |
| | baz=219 | | | | | | | | |
| ETL | | | | | S | | **Sg** | **20 35 43.1** | **-0.4** |
| | baz=219 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.31** | **236** | ⇓ | *i*P | | **Pg** | **20 35 39.3** | **-0.2** |
| | baz=226 | | | | | | | | |
| NACB | | | | | *i*S | | **Sg** | **20 35 43.0** | **-0.8** |
| | baz=226 | | | | | | | | |
| **NDS** | **Dongshan** | **0.32** | **333** | ⇑ | *i*P | | **Pb** | **20 35 40.7** | **-0.3** |
| | baz=344 | | | | | | | | |
| NDS | | | | | *i*S | | **Sb** | **20 35 44.8** | **-1.2** |
| | baz=344 | | | | | | | | |
| **TWD** | **Chiawan** | **0.36** | **224** | ⇓ | *i*P | | **Pg** | **20 35 40.4** | **-0.2** |
| | baz=216 | | | | | | | | |
| TWD | | | | | S | | **Sg** | **20 35 45.1** | **-0.5** |
| | baz=216 | | | | | | | | |
| **LATG** | **Datong** | **0.37** | **301** | ⇑ | *i*P | | **Pb** | **20 35 41.0** | **-0.8** |
| | baz=307 | | | | | | | | |
| LATG | | | | | *i*S | | **Sg** | **20 35 45.2** | **-0.6** |
| | baz=307 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.38** | **249** | ⇓ | *i*P | | **Pg** | **20 35 40.8** | **-0.2** |
| | baz=246 | | | | | | | | |
| ETLH | | | | | *i*S | | **Sg** | **20 35 45.3** | **-0.9** |
| | baz=246 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.41** | **316** | ⇑ | *i*P | | **Pb** | **20 35 42.0** | **-0.4** |
| | baz=324 | | | | | | | | |
| ENTT | | | | | S | | **Sg** | **20 35 46.6** | **-0.2** |
| | baz=324 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.42** | **308** | ⇑ | *i*P | | **Pb** | **20 35 42.1** | **-0.4** |
| | baz=314 | | | | | | | | |
| NDT | | | | | *i*S | | **Sg** | **20 35 47.3** | **+0.1** |
| | baz=314 | | | | | | | | |
| **TWE** | **Neicheng** | **0.42** | **333** | ⇑ | *i*P | | **Pb** | **20 35 42.4** | **-0.2** |
| | baz=343 | | | | | | | | |
| TWE | | | | | S | | **Sg** | **20 35 46.8** | **-0.5** |
| | baz=343 | | | | | | | | |
| **ILA** | **Ilan** | **0.43** | **345** | ⇑ | *i*P | | **Pb** | **20 35 42.9** | **+0.1** |
| | baz=347 | | | | | | | | |
| ILA | | | | | S | | **Sb** | **20 35 49.1** | **-0.2** |
| | baz=347 | | | | | | | | |
| **HWA** | **Hwalien** | **0.44** | **214** | | *e*P | | **Pb** | **20 35 42.8** | **-0.1** |
| | baz=216 | | | | | | | | |
| HWA | | | | | *e*S | | **Sb** | **20 35 48.9** | **-0.5** |
| | baz=216 | | | | | | | | |
| **NNSB** | **Datong** | **0.46** | **281** | ⇑ | *i*P | | **Pg** | **20 35 42.4** | **0.0** |
| | baz=283 | | | | | | | | |
| NNSB | | | | | *i*S | | **Sg** | **20 35 47.5** | **-1.0** |
| | baz=283 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.47** | **282** | ⇑ | *i*P | | **Pg** | **20 35 42.5** | **0.0** |
| | baz=284 | | | | | | | | |
| NNS | | | | | *i*S | | **Sg** | **20 35 47.8** | **-1.0** |
| | baz=284 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.49** | **328** | ⇑ | *i*P | | **Pb** | **20 35 43.7** | **-0.2** |
| | baz=325 | | | | | | | | |
| FUSB | | | | | *i*S | | **Sb** | **20 35 49.8** | **-1.2** |
| | baz=325 | | | | | | | | |
| **NTC** | **Toucheng** | **0.51** | **355** | | *e*P | | **Pb** | **20 35 44.1** | **0.0** |
| | baz=2.0 | | | | | | | | |
| NTC | | | | | *e*S | | **Sb** | **20 35 50.6** | **-0.9** |
| | baz=2.0 | | | | | | | | |
| **NWLT** | **Wulai** | **0.55** | **322** | ⇑ | P | | **Pb** | **20 35 44.8** | **0.0** |
| | baz=327 | | | | | | | | |
| NWLT | | | | | S | | **Sg** | **20 35 51.2** | **-0.2** |
| | baz=327 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.56** | **306** | ⇑ | *i*P | | **Pb** | **20 35 44.7** | **-0.3** |
| | baz=315 | | | | | | | | |
| YHNB | | | | | S | | **Sg** | **20 35 51.0** | **-0.7** |
| | baz=315 | | | | | | | | |
| **NSK** | **Sanguang** | **0.57** | **305** | ⇑ | *i*P | | **Pb** | **20 35 44.9** | **-0.4** |
| | baz=310 | | | | | | | | |
| NSK | | | | | S | | **Sg** | **20 35 51.7** | **-0.5** |
| | baz=310 | | | | | | | | |
| **FUSS** | **Fushou** | **0.58** | **261** | ⇓ | P | | **Pg** | **20 35 44.8** | **0.0** |
| | baz=261 | | | | | | | | |
| FUSS | | | | | S | | **Sg** | **20 35 51.1** | **-1.4** |
| | baz=261 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.59** | **251** | ⇓ | *i*P | | **Pg** | **20 35 44.7** | **-0.3** |
| | baz=249 | | | | | | | | |
| WHF | | | | | S | | **Sg** | **20 35 52.1** | **-0.7** |
| | baz=249 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.63** | **356** | | *e*P | | **Pb** | **20 35 46.7** | **+0.6** |
| | baz=1.0 | | | | | | | | |
| TIPB | | | | | S | | **Sg** | **20 35 53.8** | **0.0** |
| | baz=1.0 | | | | | | | | |
| **TWT** | **Tachien** | **0.64** | **262** | | P | | **Pb** | **20 35 46.3** | **-0.2** |
| | baz=262 | | | | | | | | |
| TWT | | | | | S | | **Sg** | **20 35 54.0** | **-0.4** |
| | baz=262 | | | | | | | | |
| **TDCB** | **Techi** | **0.66** | **262** | ⇓ | *i*P | | **Pb** | **20 35 46.3** | **-0.5** |
| | baz=255 | | | | | | | | |
| TDCB | | | | | S | | **Sg** | **20 35 53.7** | **-1.1** |
| | baz=255 | | | | | | | | |
| **ESL** | **Shilin** | **0.66** | **217** | ⇓ | *i*P | | **Pg** | **20 35 45.7** | **-0.5** |
| | baz=220 | | | | | | | | |
| ESL | | | | | *e*S | | **Sg** | **20 35 53.5** | **-1.4** |
| | baz=220 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.67** | **9** | | P | | **Pb** | **20 35 47.1** | **+0.3** |
| | baz=14 | | | | | | | | |
| TWB1 | | | | | S | | **Sb** | **20 35 55.9** | **-0.2** |
| | baz=14 | | | | | | | | |
| **TWA** | **Mucha** | **0.69** | **337** | ⇑ | *i*P | | **Pb** | **20 35 47.6** | **+0.4** |
| | baz=342 | | | | | | | | |
| TWA | | | | | *e*S | | **Sb** | **20 35 56.0** | **-0.6** |
| | baz=342 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.69** | **333** | | P | | **Pb** | **20 35 47.8** | **+0.6** |
| | baz=337 | | | | | | | | |
| NHDH | | | | | S | | **Sb** | **20 35 56.5** | **-0.2** |
| | baz=337 | | | | | | | | |
| **CHGB** | **Renai** | **0.70** | **246** | ⇓ | *i*P | | **Pg** | **20 35 46.8** | **-0.1** |
| | baz=238 | | | | | | | | |
| CHGB | | | | | *i*S | | **Sg** | **20 35 55.1** | **-1.0** |
| | baz=238 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.73** | **353** | | P | | **Pb** | **20 35 48.7** | **+0.8** |
| | baz=349 | | | | | | | | |
| NWF | | | | | S | | **Sb** | **20 35 57.8** | **-0.1** |
| | baz=349 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.75** | **293** | | P | | **Pb** | **20 35 48.2** | **0.0** |
| | baz=304 | | | | | | | | |
| NFF | | | | | S | | **Sg** | **20 35 57.0** | **-0.6** |
| | baz=304 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.75** | **0** | | P | | **Pb** | **20 35 49.0** | **+0.8** |
| | baz=10.0 | | | | | | | | |
| SXI1 | | | | | *e*S | | **Sb** | **20 35 58.6** | **+0.2** |
| | baz=10.0 | | | | | | | | |
| **TAP** | **Taipei** | **0.77** | **334** | | *e*P | | **Pb** | **20 35 49.1** | **+0.6** |
| | baz=339 | | | | | | | | |
| TAP | | | | | S | | **Sb** | **20 35 59.0** | **+0.1** |
| | baz=339 | | | | | | | | |
| **WUSB** | **Renai** | **0.78** | **243** | ⇓ | *i*P | | **Pg** | **20 35 48.2** | **-0.1** |
| | baz=235 | | | | | | | | |
| WUSB | | | | | S | | **Sg** | **20 35 57.6** | **-0.9** |
| | baz=235 | | | | | | | | |
| **LIOB** | **Emei** | **0.84** | **291** | | *e*P | | **Pb** | **20 35 50.0** | **+0.3** |
| | baz=282 | | | | | | | | |
| LIOB | | | | | S | | **Sb** | **20 36 00.4** | **-0.5** |
| | baz=282 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.84** | **290** | | P | | **Pb** | **20 35 49.9** | **0.0** |
| | baz=292 | | | | | | | | |
| NSTT | | | | | S | | **Sg** | **20 36 00.2** | **-0.6** |
| | baz=292 | | | | | | | | |
| **WHP** | **Taichung City** | **0.85** | **266** | | P | | **Pb** | **20 35 49.9** | **0.0** |
| | baz=266 | | | | | | | | |
| WHP | | | | | S | | **Sg** | **20 36 00.3** | **-0.6** |
| | baz=266 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.86** | **331** | | *e*P | | **Pn** | **20 35 51.4** | **+0.3** |
| | baz=335 | | | | | | | | |
| TWS1 | | | | | *e*S | | **Sn** | **20 36 03.1** | **-0.5** |
| | baz=335 | | | | | | | | |
| **NCU** | **National Centr** | **0.88** | **315** | | *e*P | | **Pg** | **20 35 50.0** | **-0.3** |
| | baz=313 | | | | | | | | |
| NCU | | | | | *e*S | | **Sn** | **20 36 04.0** | **-0.1** |
| | baz=313 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.88** | **315** | | *e*P | | **Pn** | **20 35 51.8** | **+0.4** |
| | baz=318 | | | | | | | | |
| **VWDT** | **VWDT** | **0.89** | **229** | | P | | **Pg** | **20 35 50.1** | **-0.4** |
| | baz=233 | | | | | | | | |
| **ANP** | **Anpu** | **0.90** | **339** | | *e*P | | **Pn** | **20 35 51.6** | **-0.2** |
| | baz=343 | | | | | | | | |
| **NTST** | **Danshui** | **0.90** | **335** | | *e*P | | **Pn** | **20 35 52.2** | **+0.5** |
| | baz=338 | | | | | | | | |
| NTST | | | | | *e*S | | **Sn** | **20 36 05.4** | **+0.8** |
| | baz=338 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.92** | **299** | | *e*P | | **Pn** | **20 35 52.1** | **+0.1** |
| | baz=301 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.92** | **252** | | *e*P | | **Pb** | **20 35 51.3** | **+0.1** |
| | baz=251 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.94** | **299** | | *e*P | | **Pn** | **20 35 52.9** | **+0.7** |
| | baz=304 | | | | | | | | |
| HSN | | | | | *e*S | | **Sb** | **20 36 03.8** | **-0.1** |
| | baz=304 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.94** | **206** | | P | | **Pb** | **20 35 51.9** | **+0.4** |
| | baz=189 | | | | | | | | |
| **TWY** | **Chenhua** | **0.96** | **345** | | *e*P | | **Pn** | **20 35 52.8** | **+0.3** |
| | baz=348 | | | | | | | | |
| TWY | | | | | *e*S | | **Sn** | **20 36 06.2** | **+0.1** |
| | baz=348 | | | | | | | | |
| **EHY** | **Hungye** | **0.97** | **211** | | P | | **Pg** | **20 35 51.5** | **-0.6** |
| | baz=220 | | | | | | | | |
| EHY | | | | | *e*S | | **Sg** | **20 36 03.7** | **-1.1** |
| | baz=220 | | | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.98** | **84** | | P | | **Pn** | **20 35 53.4** | **+0.6** |
| JYNG | | | | | *e*S | | **Sn** | **20 36 06.8** | **+0.2** |
| **SMLT** | **Sun Moon Lake** | **1.00** | **243** | | P | | **Pb** | **20 35 52.6** | **0.0** |
| | baz=234 | | | | | | | | |
| SMLT | | | | | *e*S | | **Sg** | **20 36 05.4** | **-0.3** |
| | baz=234 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.00** | **270** | | *i*P | | **Pn** | **20 35 53.5** | **+0.4** |
| | baz=271 | | | | | | | | |
| TWQ1 | | | | | *e*S | | **Sb** | **20 36 05.8** | **+0.1** |
| | baz=271 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.01** | **281** | | *e*P | | **Pn** | **20 35 53.8** | **+0.7** |
| | baz=282 | | | | | | | | |
| NMLH | | | | | *e*S | | **Sb** | **20 36 05.6** | **-0.1** |
| | baz=282 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.01** | **237** | | *i*P | | **Pg** | **20 35 52.1** | **-0.6** |
| | baz=236 | | | | | | | | |
| SSLB | | | | | S | | **Sg** | **20 36 03.3** | **-2.5** |
| | baz=236 | | | | | | | | |
| **NSY** | **Sanyi** | **1.02** | **274** | | P | | **Pn** | **20 35 54.2** | **+0.9** |
| | baz=275 | | | | | | | | |
| NSY | | | | | *e*S | | **Sn** | **20 36 07.3** | **-0.2** |
| | baz=275 | | | | | | | | |
| **TYC** | **Yuchr** | **1.03** | **245** | | *i*P | | **Pg** | **20 35 52.6** | **-0.5** |
| | baz=244 | | | | | | | | |
| TYC | | | | | *e*S | | **Sg** | **20 36 05.7** | **-0.8** |
| | baz=244 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.04** | **83** | | P | | **Pn** | **20 35 54.4** | **+0.8** |
| YOJ | | | | | S | | **Sn** | **20 36 09.1** | **+1.0** |
| **YOJ** | **Yonaguni jima** | **1.04** | **83** | | P | | **Pn** | **20 35 54.1** | **+0.5** |
| | baz=71 | | | | | | | | |
| YOJ | | | | | *e*S | | **Sn** | **20 36 09.0** | **+1.0** |
| | baz=71 | | | | | | | | |
| **YULB** | **Yu-li** | **1.08** | **209** | | *e*P | | **Pg** | **20 35 53.1** | **-1.0** |
| | baz=218 | | | | | | | | |
| YULB | | | | | *e*S | | **Sb** | **20 36 09.4** | **+1.4** |
| | baz=218 | | | | | | | | |
| **TCU** | **Taichung** | **1.11** | **260** | | P | | **Pn** | **20 35 56.0** | **+1.5** |
| | baz=261 | | | | | | | | |
| TCU | | | | | *e*S | | **Sn** | **20 36 11.4** | **+1.7** |
| | baz=261 | | | | | | | | |
| **EYUL** | **Yuli** | **1.11** | **207** | | *e*P | | **Pb** | **20 35 54.9** | **+0.5** |
| | baz=217 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.12** | **270** | | *e*P | | **Pn** | **20 35 56.2** | **+1.4** |
| | baz=271 | | | | | | | | |
| WDJ | | | | | *e*S | | **Sn** | **20 36 10.9** | **+0.8** |
| | baz=271 | | | | | | | | |
| **WJS** | **Zhushan** | **1.17** | **244** | | P | | **Pn** | **20 35 56.8** | **+1.4** |
| | baz=239 | | | | | | | | |
| WJS | | | | | *e*S | | **Sb** | **20 36 11.4** | **+1.0** |
| | baz=239 | | | | | | | | |
| **WNT** | **Mingjian** | **1.18** | **247** | | P | | **Pn** | **20 35 56.8** | **+1.3** |
| | baz=242 | | | | | | | | |
| WNT | | | | | S | | **Sn** | **20 36 12.8** | **+1.3** |
| | baz=242 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.20** | **225** | | P | | **Pg** | **20 35 55.9** | **-0.5** |
| | baz=224 | | | | | | | | |
| YUS | | | | | *e*S | | **Sb** | **20 36 12.1** | **+0.4** |
| | baz=224 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.23** | **258** | | P | | **Pn** | **20 35 57.7** | **+1.5** |
| | baz=259 | | | | | | | | |
| WCHH | | | | | *e*S | | **Sn** | **20 36 14.0** | **+1.3** |
| | baz=259 | | | | | | | | |
| **FULB** | **Fuli** | **1.26** | **205** | | *e*P | | **Pn** | **20 35 56.9** | **+0.3** |
| | baz=216 | | | | | | | | |
| **ALS** | **Alishan** | **1.28** | **230** | | *e*P | | **Pb** | **20 35 58.0** | **+0.5** |
| | baz=214 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.32** | **236** | | *e*P | | **Pg** | **20 35 59.1** | **+0.4** |
| | baz=235 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.32** | **201** | | *e*P | | **Pn** | **20 35 56.8** | **-0.7** |
| | baz=218 | | | | | | | | |
| CHKT | | | | | *e*S | | **Sb** | **20 36 14.9** | **0.0** |
| | baz=218 | | | | | | | | |
| **WDLH** | **Douliu** | **1.39** | **242** | | P | | **Pg** | **20 36 00.6** | **+0.7** |
| | baz=230 | | | | | | | | |
| WDLH | | | | | *e*S | | **Sg** | **20 36 18.5** | **+0.6** |
| | baz=230 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.39** | **215** | | *e*P | | **Pn** | **20 35 58.4** | **-0.2** |
| | baz=212 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.44** | **252** | | *e*P | | **Pb** | **20 36 00.1** | **+0.1** |
| | baz=253 | | | | | | | | |
| WRL | | | | | *e*S | | **Sg** | **20 36 18.9** | **-0.7** |
| | baz=253 | | | | | | | | |
| **EDH** | **Donghe** | **1.46** | **201** | | *e*P | | **Pn** | **20 35 60.0** | **+0.6** |
| | baz=184 | | | | | | | | |
| **WTK** | **Tuku** | **1.51** | **245** | | P | | **Pg** | **20 36 02.2** | **0.0** |
| | baz=257 | | | | | | | | |
| WTK | | | | | *e*S | | **Sg** | **20 36 22.6** | **+0.8** |
| | baz=257 | | | | | | | | |
| **CHN2** | **Minshiung** | **1.51** | **238** | | P | | **Pg** | **20 36 03.0** | **+0.7** |
| | baz=239 | | | | | | | | |
| CHN2 | | | | | *e*S | | **Sg** | **20 36 22.9** | **+0.8** |
| | baz=239 | | | | | | | | |
| **CHN4** | **Tsaushan** | **1.53** | **230** | | P | | **Pg** | **20 36 02.5** | **-0.2** |
| | baz=218 | | | | | | | | |
| CHN4 | | | | | *e*S | | **Sg** | **20 36 23.0** | **+0.3** |
| | baz=218 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.54** | **221** | | *e*P | | **Pb** | **20 36 02.0** | **+0.3** |
| | baz=220 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.54** | **228** | | *e*P | | **Pb** | **20 36 02.2** | **+0.5** |
| | baz=217 | | | | | | | | |
| TPUB | | | | | *e*S | | **Sg** | **20 36 23.0** | **+0.1** |
| | baz=217 | | | | | | | | |
| **CHY** | **Chiayi** | **1.57** | **238** | | *e*P | | **Pg** | **20 36 03.0** | **-0.5** |
| | baz=238 | | | | | | | | |
| CHY | | | | | *e*S | | **Sg** | **20 36 24.2** | **+0.3** |
| | baz=238 | | | | | | | | |
| **LONT** | **Longtian** | **1.58** | **206** | | *e*P | | **Pn** | **20 36 00.2** | **-0.9** |
| | baz=205 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.59** | **227** | | P | | **Pb** | **20 36 03.0** | **+0.5** |
| | baz=228 | | | | | | | | |
| WTP | | | | | *e*S | | **Sg** | **20 36 25.5** | **+1.0** |
| | baz=228 | | | | | | | | |
| **TWK** | **Hsinying** | **1.66** | **230** | | *e*P | | **Pb** | **20 36 04.2** | **+0.5** |
| | baz=232 | | | | | | | | |
| TWK | | | | | *e*S | | **Sg** | **20 36 27.1** | **+0.3** |
| | baz=232 | | | | | | | | |
| **WSF** | **Szhu** | **1.67** | **245** | | *e*P | | **Pn** | **20 36 03.1** | **+0.9** |
| | baz=255 | | | | | | | | |
| WSF | | | | | *e*S | | **Sg** | **20 36 26.9** | **0.0** |
| | baz=255 | | | | | | | | |
| **TWG** | **Pinlang** | **1.69** | **206** | | P | | **Pn** | **20 36 01.5** | **-1.0** |
| | baz=190 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.69** | **206** | | *e*P | | **Pn** | **20 36 01.5** | **-1.0** |
| | baz=190 | | | | | | | | |
| **SNST** | **Tainan City** | **1.69** | **229** | | *e*P | | **Pb** | **20 36 04.4** | **+0.2** |
| | baz=231 | | | | | | | | |
| SNST | | | | | *e*S | | **Sb** | **20 36 26.2** | **+0.8** |
| | baz=231 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.69** | **227** | | P | | **Pb** | **20 36 04.8** | **+0.5** |
| | baz=229 | | | | | | | | |
| CHN1 | | | | | *e*S | | **Sg** | **20 36 27.4** | **-0.3** |
| | baz=229 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.69** | **90** | | P | | **Pb** | **20 36 03.8** | **-0.5** |
| IRIF | | | | | *e*S | | **Sn** | **20 36 25.4** | **+1.3** |
| **LDUT** | **Ludao** | **1.70** | **193** | | *e*P | | **Pn** | **20 36 01.5** | **-1.2** |
| | baz=181 | | | | | | | | |
| LDUT | | | | | *e*S | | **Sn** | **20 36 22.6** | **-1.7** |
| | baz=181 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.71** | **242** | | *e*P | | **Pb** | **20 36 05.2** | **+0.5** |
| | baz=257 | | | | | | | | |
| WSL | | | | | *e*S | | **Sg** | **20 36 29.0** | **+0.6** |
| | baz=257 | | | | | | | | |
| **SGST** | **Jiashian** | **1.73** | **224** | | P | | **Pb** | **20 36 04.5** | **-0.4** |
| | baz=223 | | | | | | | | |
| **ICHU** | **Yijhu** | **1.76** | **236** | | *e*P | | **Pb** | **20 36 06.2** | **+0.8** |
| | baz=223 | | | | | | | | |
| ICHU | | | | | *e*S | | **Sb** | **20 36 28.4** | **+1.0** |
| | baz=223 | | | | | | | | |
| **CHN8** | **Yiju** | **1.82** | **237** | | *e*P | | **Pb** | **20 36 05.8** | **-0.6** |
| | baz=221 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.87** | **228** | | *e*P | | **Pg** | **20 36 08.4** | **-0.8** |
| | baz=229 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.92** | **227** | | *e*P | | **Pb** | **20 36 08.2** | **0.0** |
| | baz=228 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.95** | **93** | | P | | **Pb** | **20 36 08.0** | **-0.7** |
| JKRS | | | | | *e*S | | **Sb** | **20 36 32.5** | **-0.4** |
| **SSD** | **Sandimen** | **1.96** | **216** | | *e*P | | **Pb** | **20 36 08.0** | **-0.8** |
| | baz=228 | | | | | | | | |
| SSD | | | | | *e*S | | **Sg** | **20 36 35.1** | **-1.2** |
| | baz=228 | | | | | | | | |
| **TSMG** | **Majia** | **1.98** | **215** | | *e*P | | **Pn** | **20 36 08.2** | **+1.7** |
| | baz=216 | | | | | | | | |
| **TWM1** | **Shoushan** | **2.02** | **222** | | *e*P | | **Pb** | **20 36 09.2** | **-0.6** |
| | baz=222 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.07** | **214** | | *e*P | | **Pn** | **20 36 08.7** | **+1.0** |
| | baz=218 | | | | | | | | |
| MASBT | | | | | *e*S | | **Sb** | **20 36 36.9** | **+0.6** |
| | baz=218 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.07** | **89** | | P | | **Pn** | **20 36 08.9** | **+1.2** |
| JIJ | | | | | *e*S | | **Sn** | **20 36 34.1** | **+0.7** |
| **EAST** | **Anshuo** | **2.17** | **206** | | *e*P | | **Pn** | **20 36 08.9** | **-0.2** |
| | baz=194 | | | | | | | | |
| **TAWH** | **Dawu Township** | **2.19** | **205** | | *e*P | | **Pn** | **20 36 07.2** | **-2.2** |
| | baz=193 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.23** | **83** | | P | | **Pn** | **20 36 11.3** | **+1.3** |
| JISG | | | | | *e*S | | **Sn** | **20 36 39.0** | **+1.5** |
| **PNG** | **Penghu** | **2.26** | **250** | | *e*P | | **Pn** | **20 36 10.8** | **+0.5** |
| | baz=253 | | | | | | | | |
| PNG | | | | | *e*S | | **Sn** | **20 36 38.0** | **-0.1** |
| | baz=253 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.26** | **249** | | *e*P | | **Pn** | **20 36 10.4** | **0.0** |
| | baz=249 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.28** | **211** | | *e*P | | **Pn** | **20 36 11.8** | **+1.3** |
| | baz=196 | | | | | | | | |
| **WDGT** | **Dungji** | **2.30** | **242** | | *e*P | | **Pn** | **20 36 11.8** | **+1.0** |
| | baz=243 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.31** | **187** | | *e*P | | **Pn** | **20 36 10.4** | **-0.8** |
| | baz=188 | | | | | | | | |
| **SLIU** | **Shizi** | **2.34** | **205** | | *e*P | | **Pn** | **20 36 11.6** | **+0.2** |
| | baz=194 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.35** | **187** | | *e*P | | **Pn** | **20 36 10.0** | **-1.5** |
| | baz=187 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.51** | **316** | | *e*P | | **Pn** | **20 36 14.9** | **+1.1** |
| | baz=315 | | | | | | | | |
| **VCHM** | **Qimei** | **2.51** | **244** | | *e*P | | **Pn** | **20 36 14.8** | **+1.0** |
| | baz=229 | | | | | | | | |
| **HEN** | **Hengchun** | **2.55** | **204** | | *e*P | | **Pn** | **20 36 17.1** | **+2.7** |
| | baz=195 | | | | | | | | |
| **TWK1** | **Hengchun** | **2.58** | **203** | | *e*P | | **Pn** | **20 36 16.4** | **+1.6** |
| | baz=191 | | | | | | | | |
| **TWKBT** | **Hengchun** | **2.58** | **202** | | *e*P | | **Pn** | **20 36 14.7** | **-0.1** |
| | baz=191 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.60** | **286** | | *e*P | | **Pn** | **20 36 14.9** | **-0.1** |
| | baz=285 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.91** | **319** | | *e*P | | **Pn** | **20 36 19.2** | **-0.1** |
| | baz=319 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.99** | **330** | | *e*P | | **Pn** | **20 36 20.9** | **+0.5** |
| | baz=329 | | | | | | | | |
| **MHZQ** | **Yeshan** | **3.11** | **305** | | *e*P | | **Pn** | **20 36 22.4** | **+0.3** |
| | baz=304 | | | | | | | | |
| **KNM** | **Kinmen** | **3.14** | **272** | | *e*P | | **Pn** | **20 36 24.2** | **+1.8** |
| | baz=272 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.18** | **273** | | *e*P | | **Pn** | **20 36 22.9** | **-0.2** |
| | baz=273 | | | | | | | | |
| **AXDP** | **Jialang** | **3.60** | **280** | | *e*P | | **Pn** | **20 36 29.4** | **+0.7** |
| | baz=279 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **3.79** | **265** | | *e*P | | **Pn** | **20 36 31.4** | **0.0** |
| | baz=264 | | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.34** | **299** | | *e*P | | **Pn** | **20 36 38.6** | **-0.4** |
| | baz=297 | | | | | | | | |
| **CNSH** | **ChangSha** | **8.89** | **297** | ⇓ | P | | **Pg** | **20 38 21.5** | **-1.9** |

*BJI **18** 20:47:33.0±0.0, 5.50S×152.80E, h10km, mb4.6/43, mB5.0/19, Ms4.7/5, Ms7 4.3/5*
*NEIC **18** 20:47:39.7±1.4, 5.50S±0.05×152.70E±0.09, h30km±2km, mb4.8/63, Error ellipse: s-maj=14.5km s-min=4.4km az=68.0*
*DJA **18** 20:47:40.5±0.6, 5°S±3′×15°3E±°, h43km±6km, M5.1/19, mB5.3/4, mb4.7/19, MLv5.4/3, Mw(mB)4.7/4*
*IDC **18** 20:47:42.8±4.1, 5.52S×152.57E, h59km±37km, mb4.2/12, mb1 4.4/13, mb1mx4.1/41, mbtmp4.5/13, ML2.5/1, MS3.9/21, Ms1 3.9/21, ms1mx3.7/56, Error ellipse: s-maj=21.6km s-min=20.4km az=85.0*
*GCMT **18** 20:47:42.7±0.4, 5.60S±0.04×152.52E±0.05, h30km, MW5.0/58, Moment Tensor Solution. s31,c32; s58,c70; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.96±.24; $M_{\theta\theta}$-2.62±.15; $M_{\phi\phi}$-1.34±.15; $M_{r\theta}$1.02±.21; $M_{\theta\phi}$0.18±.14; $M_{\phi r}$0.01±.26; Best double couple: $M_o$3.45500×$10^{16}$ NP1:φ279.00000°, δ37.00000°, λ92.00000°. NP2: φ96.00000°, δ54.00000°, λ88.00000°. Principal axes: T 4.1150, Plg81.0000°, Azm357.0000°; N -1.3190, Plg1.0000°, Azm97.0000°; P -2.7950, Plg9.0000°, Azm187.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 18 20:47:41.0±0.4, 5.45S±0.05×152.62E±0.08, h40km, n158, σ1.8/20/148, mb4.7/69, MS4.1/20, 1C-2D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GUMO | **Guam** | **20.42** | **338** | LR | LR | 21 00 48.3 | | | |
| | comp=Z,176nm,18.4s,baz=162,slow=38 | | | | | | | | |
| LIFNC | **LIFOU** | **20.82** | **138** | P | Pn | 20 52 23.4 | +1.5 | | |
| KDU | **Kakadu** | **21.14** | **249** | P | **P** | **20 52 22.7** | **0.0** | | |
| RMQ | **Roma** | **21.24** | **190** | P | **P** | **20 52 24.9** | **+1.2** | | |
| DZM | **Mont Dzumac** | **21.26** | **142** | P | **P** | **20 52 24.9** | **+0.9** | | |
| | comp=Z,16nm,0.7s,baz=13,slow=4.0,SNR=11 | | | | | | | | |
| DZM | | | | LR | LR | 20 59 59.5 | | | |
| | comp=Z,275nm,18.6s,baz=300,slow=35 | | | | | | | | |
| DZM | **Mont Dzumac** | **21.26** | **142** | *e*P | **P** | **20 52 24.3** | **+0.3** | | |
| | comp=Z,58nm,1.2s | | | | | | | | |
| DZM | | | | *e*LR | LR | 20 57 29.5 | | | |
| | comp=Z,777nm,26.3s | | | | | | | | |
| DZM | **Mont Dzumac** | **21.26** | **142** | P | **P** | **20 52 21.7** | **-2.3** | | |
| DZM | **Mont Dzumac** | **21.26** | **142** | P | **P** | **20 52 27.0** | **+3.0** | | |
| MTN | **Manton Dam** | **22.43** | **249** | P | **P** | **20 52 36.5** | **-0.2** | | |
| MTN | | | | IAmb | IAmb | 20 52 40.7 | | | |
| | comp=Z,51nm,1.1s | | | | | | | | |
| MTN | **Manton Dam** | **22.43** | **249** | P | **P** | **20 52 37.8** | **+1.2** | | |
| QLP | **Quilpie** | **22.48** | **200** | P | **P** | **20 52 39.3** | **+2.2** | | |
| DRS | **Darwin Rock St** | **22.53** | **251** | P | **P** | **20 52 38.6** | **+0.9** | | |
| WB0 | **Warramunga Arr** | **22.74** | **230** | P | **P** | **20 52 38.7** | **-1.1** | | |
| WR0 | **Warramunga Arr** | **22.74** | **229** | P | **P** | **20 52 38.3** | **-1.5** | | |
| WRAB | **Tennant Creek** | **22.87** | **229** | P | **P** | **20 52 39.5** | **-1.7** | | |
| WRAB | **Tennant Creek** | **22.87** | **229** | P | **P** | **20 52 42.4** | **+1.2** | | |
| WB2 | **Warramunga Arr** | **22.87** | **229** | P | **P** | **20 52 40.4** | **-0.8** | | |
| WRA | **Warramunga Arr** | **22.88** | **229** | P | **P** | **20 52 39.8** | **-1.5** | | |
| | comp=Z,5.7nm,0.5s,baz=54,slow=9.8,SNR=54 | | | | | | | | |
| WRA | | | | LR | LR | 21 02 48.1 | | | |
| | comp=Z,211nm,18.1s,baz=4.0,slow=40 | | | | | | | | |
| WRA | **Warramunga Arr** | **22.88** | **229** | P | **P** | **20 52 40.9** | **-0.4** | | |
| INKA | **Innaminka** | **24.88** | **206** | P | **P** | **20 53 02.3** | **+2.3** | | |
| KNRA | **Kununurra** | **25.52** | **245** | P | **P** | **20 53 05.9** | **-0.2** | | |
| KNRA | | | | IAmb | IAmb | 20 53 15.1 | | | |
| | comp=Z,35nm,0.8s | | | | | | | | |
| KNRA | **Kununurra** | **25.52** | **245** | P | **P** | **20 53 07.2** | **+1.1** | | |
| AS31 | **Alice Springs** | **25.55** | **223** | P | **P** | **20 53 05.1** | **-1.1** | | |
| ASAR | **Alice Springs** | **25.55** | **223** | P | **P** | **20 53 05.5** | **-0.8** | | |
| | comp=Z,4.0nm,0.5s,baz=56,slow=9.2,SNR=38 | | | | | | | | |
| ASAR | **Alice Springs** | **25.55** | **223** | P | **P** | **20 53 05.8** | **-0.5** | | |
| STKA | **Stephens Creek** | **28.24** | **200** | P | **P** | **20 53 29.0** | **-1.4** | | |
| | comp=Z,3.4nm,0.9s,baz=25,slow=14,SNR=5.2 | | | | | | | | |
| STKA | | | | LR | LR | 21 05 31.1 | | | |
| | comp=Z,270nm,18.1s,baz=9.7,slow=38 | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **29.19** | **242** | P | **P** | **20 53 37.7** | **-1.2** | | |
| | comp=Z,10nm,1.0s,baz=46,slow=8.3,SNR=27 | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **29.19** | **242** | P | **P** | **20 53 37.4** | **-1.5** | | |
| BNSI | **Bone** | **32.41** | **270** | P | P | 20 54 23.8 | +16 | | |
| FORT | **Forrest** | **34.17** | **220** | P | **P** | **20 54 20.6** | **-2.0** | | |
| URZ | **Urewera** | **39.52** | **149** | LR | LR | 21 09 56.1 | | | |
| | comp=Z,168nm,21.1s,baz=318,slow=34 | | | | | | | | |
| RPZ | **Rata Peaks** | **41.42** | **160** | LR | LR | 21 12 19.2 | | | |
| | comp=Z,324nm,18.3s,baz=304,slow=36 | | | | | | | | |
| NJ2 | **Nanjing** | **49.24** | **321** | *e*P | **P** | **20 56 27.3** | **+1.6** | | |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| GYA | **Guiyang** | **54.65** | **308** | ⇓P | **P** | **20 57 10.3** | **+4.0** | | |
| GYA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| XAN | **Xi'an** | **56.97** | **317** | P | **P** | **20 57 21.8** | **-0.9** | | |
| XAN | | | | pP | pP | 20 57 25.3 | -7.7 | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,330nm,17.9s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,310nm,13.2s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,350nm,19.2s | | | | | | | | |
| KMI | **Kunming** | **57.20** | **304** | ⇓P | **P** | **20 57 25.3** | **+0.6** | | |
| KMI | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| CM31 | **Chiang Mai Arr** | **57.99** | **296** | P | **P** | **20 57 29.6** | **-0.5** | | |
| CM31 | | | | IAmb | IAmb | 20 57 31.1 | | | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **57.99** | **296** | P | **P** | **20 57 30.3** | **+0.2** | | |
| | comp=Z,2.8nm,0.8s,baz=112,slow=5.3,SNR=16 | | | | | | | | |
| CMAR | | | | LR | LR | 21 23 31.8 | | | |
| | comp=Z,28nm,18.8s,baz=80,slow=37 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **57.99** | **296** | P | **P** | **20 57 29.6** | **-0.5** | | |
| CHTO | **Chiang Mai** | **58.10** | **296** | P | **P** | **20 57 30.4** | **-0.5** | | |
| CHTO | | | | IAmb | IAmb | 20 57 31.6 | | | |
| | comp=Z,9.3nm,1.3s | | | | | | | | |
| PETK | **Petropavlovsk-** | **58.50** | **4** | P | **P** | **20 57 33.2** | **+0.2** | | |
| | comp=Z,2.4nm,0.7s,baz=244,slow=22,SNR=4.5 | | | | | | | | |
| PZH | **PanZhiHua** | **58.60** | **305** | P | **P** | **20 57 33.6** | **-0.8** | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,110nm,5.1s | | | | | | | | |
| CD2 | **Chengdu** | **59.02** | **311** | P | **P** | **20 57 36.0** | **-1.2** | | |
| CD2 | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| XLT | **XiLinHaoTe** | **59.14** | **330** | *e*P | **P** | **20 57 36.3** | **-1.4** | | |
| XLT | | | | pP | pP | 20 57 40.6 | -7.9 | | |
| XLT | | | | sP | pwP | 20 57 43.4 | -9.2 | | |
| XLT | | | | PcP | **PcP** | **20 58 24.3** | **-1.7** | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,260nm,4.6s | | | | | | | | |
| HHC | **Hu-ho-hao-te** | **59.47** | **325** | *e*P | **P** | **20 57 42.4** | **+2.3** | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,210nm,5.5s | | | | | | | | |
| LZH | **Lanzhou** | **61.57** | **316** | *e*P | **P** | **20 57 54.5** | **-0.1** | | |
| LZH | | | | pP | pP | 20 57 59.4 | -5.7 | | |
| LZH | | | | sP | sP | 20 58 02.6 | -6.6 | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| MA2 | **Magadan** | **64.84** | **359** | P | **P** | **20 58 14.7** | **-0.9** | | |
| MA2 | | | | IAmb | IAmb | 20 58 15.5 | | | |
| | comp=Z,5.8nm,0.7s | | | | | | | | |
| GTA | **Gaotai** | **66.01** | **318** | ⇑P | **P** | **20 58 23.6** | **-0.2** | | |
| GTA | | | | pP | pP | 20 58 30.5 | -3.8 | | |
| GTA | | | | sP | sP | 20 58 34.3 | -4.1 | | |
| GTA | | | | PcP | **PcP** | **20 58 55.3** | **+1.1** | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| ULN | **Ulaanbaatar** | **66.45** | **328** | | **P** | **20 58 26.1** | **-0.3** | | |
| SHL | **Shillong** | **66.48** | **301** | P | **P** | **20 58 26.2** | **-0.9** | | |
| SONM | **Songino Array** | **66.78** | **328** | P | **P** | **20 58 28.5** | **0.0** | | |
| | comp=Z,1.8nm,0.6s,baz=146,slow=5.0,SNR=8.9 | | | | | | | | |
| SONM | | | | LR | LR | 21 28 49.0 | | | |
| | comp=Z,74nm,18.1s,baz=145,slow=37 | | | | | | | | |
| SONM | **Songino Array** | **66.78** | **328** | P | **P** | **20 58 28.2** | **-0.3** | | |
| GOMU | **GeErMu** | **68.06** | **312** | P | **P** | **20 58 37.3** | **+0.1** | | |
| GOMU | | | | pP | pP | 20 58 40.0 | -7.8 | | |
| GOMU | | | | sP | sP | 20 58 42.0 | -10 | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,140nm,5.5s | | | | | | | | |
| TAPN | **Taplejung** | **70.59** | **301** | *e*P | **P** | **20 58 52.2** | **-0.7** | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| ODAN | **Odare** | **70.72** | **301** | *e*P | **P** | **20 58 52.6** | **-1.0** | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| RAMN | **Ramite** | **71.42** | **301** | *e*P | **P** | **20 58 57.6** | **-0.3** | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| JIRN | **Jiri** | **71.97** | **301** | *e*P | **P** | **20 59 01.1** | **-0.2** | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| GUN | **Gumba** | **72.30** | **301** | *e*P | **P** | **20 59 02.6** | **-0.7** | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| PKI | **Pulchoki** | **72.61** | **301** | *e*P | **P** | **20 59 04.0** | **-1.1** | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| PKIN | **Phulchoki** | **72.62** | **301** | *e*P | **P** | **20 59 04.0** | **-1.1** | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| KKN | **Kakani** | **72.78** | **301** | *e*P | **P** | **20 59 05.6** | **-0.4** | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| DMN | **Daman** | **72.88** | **301** | *e*P | **P** | **20 59 05.7** | **-0.9** | | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| GKN | **Gorkha** | **73.38** | **301** | *e*P | **P** | **20 59 08.7** | **-0.8** | | |
| | comp=Z,42nm,1.2s | | | | | | | | |
| BILL | **Bilibino** | **73.95** | **5** | P | **P** | **20 59 12.1** | **+0.3** | | |
| BILL | | | | IAmb | IAmb | 20 59 13.0 | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| GAMB | **Gambell** | **74.06** | **16** | P | **P** | **20 59 13.1** | **+0.7** | | |
| GAMB | | | | IAmb | IAmb | 20 59 14.1 | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| KOLN | **Koldanda** | **74.21** | **301** | *e*P | **P** | **20 59 13.4** | **-1.0** | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| DANN | **Dangsing** | **74.22** | **301** | *e*P | **P** | **20 59 13.5** | **-1.1** | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| PYUN | **Piuthan** | **74.81** | **301** | *e*P | **P** | **20 59 17.0** | **-0.9** | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| WMQ | **Urumqi** | **76.10** | **318** | *e*P | **P** | **20 59 27.3** | **+2.5** | | |
| ANM | **Nome** | **76.45** | **17** | P | **P** | **20 59 26.6** | **+0.4** | | |
| ANM | | | | IAmb | IAmb | 20 59 28.1 | | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| TNA | **Tin City** | **76.47** | **16** | P | **P** | **20 59 26.3** | **+0.1** | | |
| TNA | | | | IAmb | IAmb | 20 59 27.7 | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| KDAK | **Kodiak Island** | **76.84** | **27** | LR | LR | 21 26 50.6 | | | |
| | comp=Z,155nm,20.6s,baz=269,slow=30 | | | | | | | | |
| L19K | **White Mountain** | **78.42** | **22** | P | **P** | **20 59 37.9** | **+0.6** | | |
| L19K | | | | IAmb | IAmb | 20 59 49.7 | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| CAST | **Castle Rocks** | **80.17** | **22** | P | **P** | **20 59 47.0** | **+0.2** | | |
| CAST | | | | IAmb | IAmb | 20 59 47.4 | | | |
| | comp=Z,9.7nm,1.0s | | | | | | | | |
| PWL | **Port Wells** | **80.31** | **25** | P | **P** | **20 59 47.2** | **-0.4** | | |
| MK31 | **Makanchi Array** | **80.69** | **319** | P | **P** | **20 59 50.0** | **-0.1** | | |
| MKAR | **Makanchi Array** | **80.69** | **319** | P | **P** | **20 59 49.6** | **-0.4** | | |
| | comp=Z,4.7nm,0.9s,baz=107,slow=5.4,SNR=14 | | | | | | | | |
| SML | **Sawmill** | **80.79** | **24** | P | **P** | **20 59 50.2** | **0.0** | | |
| MAKZ | **Makanchi** | **80.90** | **319** | P | **P** | **20 59 51.0** | **-0.2** | | |
| MAKZ | | | | IAmb | IAmb | 20 59 52.0 | | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| IMAR | **Indian Mountai** | **81.06** | **19** | P | **P** | **20 59 52.1** | **+0.6** | | |
| RND | **Reindeer** | **81.39** | **23** | P | **P** | **20 59 52.7** | **-0.7** | | |
| RND | | | | IAmb | IAmb | 20 59 54.9 | | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| MCK | **McKinley** | **81.53** | **23** | P | **P** | **20 59 53.1** | **-1.0** | | |
| MLY | **Manley** | **81.55** | **21** | P | **P** | **20 59 54.5** | **+0.3** | | |
| MLY | | | | IAmb | IAmb | 21 00 06.0 | | | |
| | comp=Z,6.6nm,0.6s | | | | | | | | |
| ZALV | **Zalesovo Beam** | **81.59** | **326** | P | **P** | **20 59 53.3** | **-1.2** | | |
| | comp=Z,2.2nm,0.4s,baz=124,slow=6.1,SNR=7.3 | | | | | | | | |
| ZALV | | | | LR | LR | 21 36 55.5 | | | |
| | comp=Z,52nm,19.4s,baz=100,slow=36 | | | | | | | | |
| KLU | **Klutina** | **81.64** | **25** | P | **P** | **20 59 55.1** | **+0.3** | | |
| DHY | **Denali Highway** | **81.81** | **23** | P | **P** | **20 59 55.2** | **-0.5** | | |
| DHY | | | | IAmb | IAmb | 21 00 07.7 | | | |
| | comp=Z,7.3nm,1.0s | | | | | | | | |
| NEA2 | **Nenana** | **81.93** | **22** | P | **P** | **20 59 56.0** | **-0.2** | | |
| NEA2 | | | | IAmb | IAmb | 20 59 56.5 | | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| WRH | **Wood River Hil** | **82.23** | **22** | P | **P** | **20 59 56.9** | **-0.8** | | |
| WRH | | | | IAmb | IAmb | 21 00 04.1 | | | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| CCB | **Clear Creek Bu** | **82.42** | **22** | P | **P** | **20 59 57.1** | **-1.6** | | |
| CCB | | | | IAmb | IAmb | 21 00 05.5 | | | |
| | comp=Z,8.5nm,1.2s | | | | | | | | |
| GLB | **Gilahina Butte** | **82.52** | **26** | P | **P** | **20 59 59.5** | **+0.1** | | |
| GLB | | | | IAmb | IAmb | 21 00 00.8 | | | |
| | comp=Z,9.4nm,1.0s | | | | | | | | |
| VRDI | **Verde Repeater** | **82.58** | **26** | P | **P** | **20 59 60.0** | **+0.1** | | |
| VRDI | | | | IAmb | IAmb | 21 00 01.2 | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| HDA | **Harding Lake** | **82.63** | **22** | P | **P** | **20 59 58.5** | **-1.3** | | |
| HDA | | | | IAmb | IAmb | 21 00 22.5 | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| IL31 | | **82.83** | **22** | P | **P** | **20 59 59.3** | **-1.5** | | |
| IL31 | | | | IAmb | IAmb | 21 00 00.7 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| ILAR | **Eielson Array** | **82.83** | **22** | P | **P** | **20 59 59.5** | **-1.3** | | |
| | comp=Z,4.1nm,1.0s,baz=256,slow=4.2,SNR=19 | | | | | | | | |
| COLD | **Coldfoot** | **82.93** | **19** | P | **P** | **21 00 01.8** | **+0.4** | | |
| KSH | **Kashi** | **83.22** | **311** | P | **P** | **21 00 05.1** | **+1.5** | | |
| KSH | | | | pP | PcP | 21 00 10.3 | +2.2 | | |
| KSH | | | | sP | pP | 21 00 12.9 | -1.6 | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| BARN | **Barnard Glacie** | **83.30** | **27** | P | **P** | **21 00 03.7** | **+0.1** | | |
| BARN | | | | IAmb | IAmb | 21 00 06.5 | | | |
| | comp=Z,7.4nm,0.7s | | | | | | | | |
| J25K | **Salcha River,** | **83.33** | **23** | P | **P** | **21 00 03.1** | **-0.4** | | |
| J25K | | | | IAmb | IAmb | 21 00 18.1 | | | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| DOT | **Dot Lake** | **83.40** | **24** | P | **P** | **21 00 03.5** | **-0.4** | | |
| DOT | | | | IAmb | IAmb | 21 00 05.6 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| L26K | **Log Cabin Wild** | **83.41** | **24** | P | **P** | **21 00 04.2** | **+0.3** | | |
| L26K | | | | IAmb | IAmb | 21 00 18.9 | | | |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| M27K | **Edge Creek, AK** | **83.74** | **25** | P | **P** | **21 00 06.5** | **+0.7** | | |
| BCAR | **Beaver Creek A** | **84.07** | **25** | P | **P** | **21 00 07.6** | **+0.3** | | |
| NIL | **Nilore** | **84.19** | **305** | P | **P** | **21 00 08.0** | **-0.6** | | |
| TKM2 | **Tokmak 2** | **84.25** | **314** | P | **P** | **21 00 09.7** | **+0.8** | | |
| | SNR=13 | | | | | | | | |
| KBK | **Karagaybulak** | **84.66** | **314** | P | **P** | **21 00 11.8** | **+0.9** | | |
| | SNR=10 | | | | | | | | |
| CHMS | **Chumysh** | **84.87** | **314** | P | **P** | **21 00 12.2** | **+0.4** | | |
| | SNR=18 | | | | | | | | |
| UCH | **Uchtor** | **84.88** | **313** | P | **P** | **21 00 13.2** | **+0.7** | | |
| | SNR=15 | | | | | | | | |
| BMAR | **Burnt Mountain** | **84.92** | **20** | P | **P** | **21 00 11.9** | **+0.4** | | |
| AAK | **Ala-Archa** | **84.98** | **314** | P | **P** | **21 00 13.4** | **+0.9** | | |
| | SNR=14 | | | | | | | | |
| AAK | **Ala-Archa** | **84.98** | **314** | P | **P** | **21 00 12.8** | **+0.2** | | |
| EGAK | **Eagle** | **85.03** | **23** | P | **P** | **21 00 12.3** | **+0.3** | | |
| EGAK | | | | IAmb | IAmb | 21 00 22.4 | | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| HYT | **Haines Junctio** | **85.09** | **28** | P | **P** | **21 00 13.5** | **+0.8** | | |
| USP | **Ospenovka** | **85.11** | **314** | P | **P** | **21 00 13.8** | **+0.8** | | |
| | SNR=20 | | | | | | | | |
| AML | **Almayashu** | **85.46** | **313** | P | **P** | **21 00 16.2** | **+1.0** | | |
| | SNR=34 | | | | | | | | |
| EKS2 | **Erkin-Say** | **85.50** | **313** | P | **P** | **21 00 16.1** | **+1.0** | | |
| | SNR=21 | | | | | | | | |
| I29M | **Ogilvie Camp,** | **86.37** | **23** | P | **P** | **21 00 18.2** | **-0.6** | | |
| I29M | | | | IAmb | IAmb | 21 00 20.8 | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| M31M | **Drury Creek, Y** | **86.95** | **27** | P | **P** | **21 00 22.0** | **+0.3** | | |
| M31M | | | | IAmb | IAmb | 21 00 23.1 | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| EPYK | **Eagle Plains** | **87.34** | **22** | P | **P** | **21 00 23.4** | **0.0** | | |
| BBB | **Bella Bella** | **87.72** | **37** | LR | LR | 21 40 47.4 | | | |
| | comp=Z,43nm,18.4s,baz=316,slow=36 | | | | | | | | |
| KKAR | **Karatay Array** | **87.94** | **313** | P | **P** | **21 00 26.0** | **-0.8** | | |
| DLBC | **Dease Lake** | **88.03** | **31** | LR | LR | 21 36 33.3 | | | |
| | comp=Z,191nm,18.3s,baz=288,slow=33 | | | | | | | | |
| DLBC | **Dease Lake** | **88.03** | **31** | P | **P** | **21 00 28.2** | **+1.2** | | |
| INK | **Inuvik** | **89.12** | **21** | LR | LR | 21 43 47.7 | | | |
| | comp=Z,69nm,18.6s,baz=226,slow=38 | | | | | | | | |
| INK | **Inuvik** | **89.12** | **21** | P | **P** | **21 00 31.6** | **-0.2** | | |
| INK | | | | IAmb | IAmb | 21 00 34.3 | | | |
| | comp=Z,7.8nm,1.1s | | | | | | | | |
| YBH | **Yreka Blue Hor** | **89.62** | **48** | LR | LR | 21 33 01.8 | | | |
| | comp=Z,98nm,20.8s,baz=278,slow=30 | | | | | | | | |
| C36M | **Paulatuk** | **92.70** | **21** | P | **P** | **21 00 47.7** | **-0.7** | | |
| C36M | | | | IAmb | IAmb | 21 00 50.5 | | | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| A36M | **Sachs Harbour** | **92.71** | **18** | P | **P** | **21 00 48.0** | **-0.4** | | |
| NEW | **Newport** | **94.20** | **42** | LR | LR | 21 42 12.9 | | | |
| | comp=Z,89nm,18.1s,baz=270,slow=35 | | | | | | | | |
| ELK | **Elko** | **95.14** | **50** | LR | LR | 21 37 44.0 | | | |
| | comp=Z,75nm,20.1s,baz=291,slow=32 | | | | | | | | |
| YKA | **Yellowknife Ar** | **96.08** | **28** | P | **P** | **21 01 04.4** | **+0.3** | | |
| | comp=Z,1.4nm,0.6s,baz=269,slow=4.8,SNR=19 | | | | | | | | |
| YKA | | | | LR | LR | 21 41 08.3 | | | |
| | comp=Z,112nm,19.5s,baz=295,slow=33 | | | | | | | | |
| ARU | **Arti** | **96.75** | **326** | LR | LR | 21 45 37.2 | | | |
| | comp=Z,85nm,20.4s,baz=76,slow=36 | | | | | | | | |
| PDAR | **Pinedale Array** | **99.42** | **48** | LR | LR | 21 40 32.3 | | | |
| | comp=Z,52nm,19.6s,baz=298,slow=32 | | | | | | | | |
| CKRC | **Cesky Krumlov** | **124.21** | **328** | *e*PKPDF | **PKPdf** | **21 06 35.6** | **+0.1** | | |
| KHC | **Kasperske Hory** | **124.40** | **329** | *e*PKPDF | **PKPdf** | **21 06 35.9** | **0.0** | | |
| GERES | **GERESS Array B** | **124.51** | **328** | PKP | **PKPdf** | **21 06 36.1** | **-0.1** | | |
| | comp=Z,0.6nm,0.7s,baz=50,slow=2.1,SNR=7.5 | | | | | | | | |
| MDT | **Midelt** | | **145.47** | **325** | PKPbc | **PKPab** | **21 07 16.6** | **+0.8** | |
| | comp=Z,7.1nm,1.2s,baz=178,slow=4.1,SNR=4.0 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | | **150.33** | **287** | PKPbc | **PKPbc** | **21 07 28.6** | **-0.5** | |
| | comp=Z,1.9nm,0.6s,baz=66,slow=2.6,SNR=11 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | | **150.33** | **287** | | **PKPbc** | **21 07 27.6** | **-1.5** | |
| BDFB | **Brasilia** | | **150.73** | **136** | PKPbc | **PKPbc** | **21 07 29.2** | **-0.9** | |
| | comp=Z,4.0nm,0.8s,baz=15,slow=5.8,SNR=4.2 | | | | | | | | |
| BDFB | **Brasilia** | | **150.73** | **136** | | **PKPbc** | **21 07 27.4** | **-2.8** | |

*MAN **18** 20:50:02.7, 13˚.05N×124˚.97E, h20km, mb5.4, ML4.4, MS4.6*
*NEIC **18** 20:50:04.4±1.6, 13˚.01N±0˚.07×125˚.3E±0˚.2, h35km±2km, mb4.6/23, Error ellipse: s-maj=28.8km s-min=10.3km az=81.0*
*IDC **18** 20:50:13.7±3.4, 12˚.77N×124˚.91E, h124km±32km, mb3.5/10, mb1 3.7/11, mb1mx3.5/57, mbtmp4.0/11, MS3.7/5, Ms1 3.7/5, ms1mx3.2/53, Error ellipse: s-maj=37.1km s-min=13.0km az=67.0*

**ISC 18 20:50:00.6±1.7, 13˚.02N±0˚.04×125˚.01E±0˚.05, h8km±10km, n72, σ1°95/76, mb4.4/23, MS3.9/3, 14C-4D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PVCP | **Virac** | **1.01** | **305** | ⇑ | *e*P | **Pg** | | **20 50 20.3** | **+0.2** |
| PVCP | | | | | *e*S | **Sn** | | **20 50 37.9** | **+2.2** |
| MMPH | **Masbate** | **1.51** | **244** | ⇓ | *e*P | **Pn** | | **20 50 27.0** | **-0.9** |
| MMPH | | | | | *e*S | **Sn** | | **20 50 43.1** | **-4.8** |
| JCNP | **Jose Panganiba** | **2.58** | **300** | ⇑ | *e*P | **Pb** | | **20 50 45.7** | **-1.5** |
| JCNP | | | | | *e*S | **Sb** | | **20 51 19.2** | **+0.1** |
| GQP | **Guinayangan** | **2.65** | **290** | ⇑ | *e*P | **Pn** | | **20 50 44.6** | **+1.0** |
| GQP | | | | | *e*S | **Sb** | | **20 51 20.9** | **-0.2** |
| RCP | **Roxas** | **2.65** | **237** | ⇑ | *e*P | **Pn** | | **20 50 42.0** | **-1.7** |
| RCP | | | | | *e*S | **Sn** | | **20 51 16.3** | **+0.3** |
| MSLP | **Maasin** | **2.87** | **183** | ⇑ | *e*P | **Pn** | | **20 50 45.8** | **-1.0** |
| MSLP | | | | | *e*S | **Sb** | | **20 51 29.7** | **+2.3** |
| LLP | **Lapu-Lapu** | **2.88** | **201** | ⇑ | *e*P | **Pn** | | **20 50 48.5** | **+1.7** |
| LLP | | | | | *e*S | **Sn** | | **20 51 23.1** | **+1.5** |
| BOAC | **Boac** | **3.12** | **278** | ⇑ | *e*P | **Pn** | | **20 50 52.4** | **+2.3** |
| GLSP | **General Luna,** | **3.40** | **161** | ⇑ | *e*P | **Pn** | | **20 50 53.0** | **-1.0** |
| TBP | **Tagbilaran** | **3.50** | **199** | ⇑ | *e*P | **Pn** | | **20 50 50.8** | **-4.5** |
| TBP | | | | | *i* S | **Sn** | | **20 51 36.4** | **-0.5** |
| LQP | **Lukban** | **3.55** | **288** | ⇓ | *e*P | **Pn** | | **20 50 57.8** | **+1.6** |
| CNOP | **Candoni, Negro** | **3.93** | **217** | ⇓ | *e*P | **Pn** | | **20 51 00.5** | **-0.9** |
| CNOP | | | | | *i* S | **Sn** | | **20 51 52.2** | **+4.4** |
| SNPH | **Sibulan** | **4.05** | **206** | ⇑ | *i*P | **Pn** | | **20 51 05.5** | **+2.5** |
| SNPH | | | | | *i* S | **Sn** | | **20 51 53.2** | **+2.6** |
| BUTP | **Butuan** | **4.07** | **172** | ⇓ | *e*P | **Pn** | | **20 51 04.9** | **+1.7** |
| BUTP | | | | | *i* S | **Sn** | | **20 51 52.6** | **+1.5** |
| TGY | **Tagaytay City** | **4.11** | **286** | | P | **Pb** | | **20 51 16.2** | **+3.0** |
| | 28nm,0.3s,baz=358,slow=3.6,SNR=8.5 | | | | | | | | |
| TGY | **Tagaytay City** | **4.11** | **286** | ⇑ | *e*P | **Pg** | | **20 51 20.0** | **+0.7** |
| BALP | **Baler** | **4.29** | **309** | ⇑ | *e*P | **Pb** | | **20 51 13.8** | **-2.6** |
| BALP | | | | | *i* S | **Sn** | | **20 51 52.8** | **-3.8** |
| PCPH | **Palayan** | **4.56** | **304** | ⇑ | *e*P | **Pn** | | **20 51 10.8** | **+0.8** |
| PCPH | | | | | *e*S | **Sg** | | **20 52 24.3** | **-2.9** |
| CAUP | **Cauayan** | **4.97** | **322** | ⇑ | *e*P | **Pn** | | **20 51 17.9** | **+2.3** |
| CAUP | | | | | *i* S | **Sn** | | **20 52 18.2** | **+4.8** |
| DAV | **Davao City (W)** | **5.94** | **175** | | LR | LR | | 20 53 59.7 | |
| | comp=Z,594nm,20.2s,baz=347,slow=40 | | | | | | | | |
| TWG | **Pinlang** | **10.44** | **340** | | Pn | **Pn** | | **20 52 30.8** | **0.0** |
| YULB | **Yu-li** | **10.90** | **342** | | Pn | **Pn** | | **20 52 39.4** | **+2.3** |
| TPUB | **Ta-pu** | **11.04** | **338** | | Pn | **Pn** | | **20 52 38.2** | **-0.8** |
| TPUB | **Ta-pu** | **11.04** | **338** | | *e*P | **Pn** | | **20 52 38.0** | **-1.0** |
| | baz=316 | | | | | | | | |
| SSLB | **Suanglung** | **11.38** | **341** | | Pn | **Pn** | | **20 52 44.2** | **+0.5** |
| JOW | **Kunigami** | **14.08** | **12** | | LR | LR | | 20 58 03.5 | |
| | comp=Z,152nm,19.0s,baz=163,slow=33 | | | | | | | | |
| JOW | **Kunigami** | **14.08** | **12** | | Pn | **Pn** | | **20 53 21.5** | **+1.0** |
| LUWI | **Luwuk** | **14.14** | **189** | | Pn | **Pn** | | **20 53 23.2** | **+1.8** |
| SBUM | **Sibu** | **16.45** | **231** | | | **P** | | **20 53 56.8** | **+2.1** |
| KSM | **Kuching** | **18.54** | **233** | | P | **Pn** | | **20 54 19.1** | **+1.0** |
| KSM | | | | | IAmb | IAmb | | 20 54 45.5 | |
| | comp=Z,28nm,1.3s | | | | | | | | |
| ENH | **Enshi** | **22.38** | **323** | | P | **P** | | **20 55 02.3** | **+2.8** |
| KSRS | **Korea Array** | **24.47** | **6** | | P | **P** | | **20 55 23.1** | **+2.9** |
| | comp=Z,1.4nm,0.7s,baz=250,slow=32,SNR=4.8 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **25.66** | **286** | | P | **P** | | **20 55 30.4** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=89,slow=7.8,SNR=5.5 | | | | | | | | |
| MTN | **Manton Dam** | **26.40** | **166** | | | **P** | | **20 55 35.5** | **-2.3** |
| MTN | | | | | IAmb | IAmb | | 20 55 59.2 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| PSI | **Prapat** | **27.73** | **251** | | LR | LR | | 21 07 13.7 | |
| | comp=Z,71nm,18.3s,baz=92,slow=37 | | | | | | | | |
| WRAB | **Tennant Creek** | **34.01** | **164** | | P | **P** | | **20 56 42.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=315 | | | | | | | |
| ELDTW | **Lidau** | **0.19** | **38** | P | | Pg | 20 52 34.4 | +1.0 |
| | baz=39 | | | | | | | |
| LONT | **Longtian** | **0.26** | **121** | P | | Pb | 20 52 36.1 | -0.4 |
| | baz=121 | | | | | | | |
| LONT | | | | *e*S | | Sb | 20 52 39.8 | -1.4 |
| | baz=121 | | | | | | | |
| TWG | **Pinlang** | **0.27** | **143** | P | | Pb | 20 52 36.2 | -0.6 |
| | baz=142 | | | | | | | |
| TWG | | | | *e*S | | Sg | 20 52 40.1 | +1.5 |
| | baz=142 | | | | | | | |
| TWGBT | **Beinan** | **0.28** | **142** | P | | Pb | 20 52 36.1 | -0.8 |
| | baz=142 | | | | | | | |
| TWGBT | | | | *e*S | | Sg | 20 52 40.2 | +1.4 |
| | baz=142 | | | | | | | |
| SGST | **Jiashian** | **0.29** | **278** | *e*P | | Pb | 20 52 36.5 | -0.5 |
| | baz=278 | | | | | | | |
| WTP | **Ta-pu** | **0.33** | **309** | *e*P | | Pb | 20 52 37.0 | -0.7 |
| | baz=309 | | | | | | | |
| WTP | | | | *e*S | | Sb | 20 52 42.8 | -0.5 |
| | baz=309 | | | | | | | |
| TPUB | **Ta-pu** | **0.35** | **317** | *e*S | | Sb | 20 52 42.9 | -1.1 |
| | baz=316 | | | | | | | |
| SSD | **Sandimen** | **0.38** | **219** | *e*P | | Pg | 20 52 37.2 | +0.3 |
| | baz=218 | | | | | | | |
| FULB | **Fuli** | **0.40** | **67** | *e*P | | Pb | 20 52 39.0 | 0.0 |
| | baz=66 | | | | | | | |
| FULB | | | | *e*S | | Sb | 20 52 45.3 | 0.0 |
| | baz=66 | | | | | | | |
| TSMG | **Majia** | **0.41** | **214** | P | | Pb | 20 52 38.8 | -0.3 |
| | baz=214 | | | | | | | |
| YUS | **Yu-Shan** | **0.45** | **7** | *e*P | | Pg | 20 52 39.2 | +0.8 |
| | baz=7.0 | | | | | | | |
| YUS | | | | *e*S | | Sb | 20 52 46.1 | -1.1 |
| | baz=7.0 | | | | | | | |
| ALS | **Alishan** | **0.47** | **350** | *e*P | | Pb | 20 52 39.9 | -0.5 |
| | baz=351 | | | | | | | |
| ALS | | | | *e*S | | Sb | 20 52 47.0 | -0.7 |
| | baz=351 | | | | | | | |
| MASBT | **Mashibuluo** | **0.49** | **209** | *e*P | | Pg | 20 52 39.1 | +0.1 |
| | baz=209 | | | | | | | |
| EYUL | **Yuli** | **0.50** | **52** | *e*P | | Pb | 20 52 41.3 | +0.7 |
| | baz=52 | | | | | | | |
| YULB | **Yu-li** | **0.51** | **47** | *e*P | | Pb | 20 52 40.7 | -0.1 |
| | baz=46 | | | | | | | |

**IDC 18 20:53:48.6±20.0, 5°.03'N×172°.80'E, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.5/45, mbtmp3.8/4, MS3.7/2, Ms1 3.7/2, ms1mx2.9/68, Error ellipse: s-maj=379.1km s-min=133.8km az=43.0, Marshall Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | **Port Moresby** | **29.30** | **241** | P | P | 20 59 54.9 | +1.8 |
| | 19nm,0.6s,baz=306,slow=18,SNR=4.5 | | | | | | |
| WRA | **Warramunga Arr** | **45.23** | **236** | P | P | 21 02 06.0 | -2.1 |
| | 0.9nm,0.3s,baz=53,slow=9.7,SNR=34 | | | | | | |
| STKA | **Stephens Creek** | **47.22** | **217** | P | P | 21 02 22.1 | -1.4 |
| | 1.2nm,0.7s,baz=58,slow=19,SNR=2.2 | | | | | | |
| STKA | | | | LR | LR | 21 22 24.1 | |
| | comp=Z,101nm,18.3s,baz=228,slow=36 | | | | | | |
| ASAR | **Alice Springs** | **47.46** | **231** | P | P | 21 02 26.4 | +0.9 |
| | 0.1nm,0.4s,baz=56,slow=9.1,SNR=3.2 | | | | | | |
| FITZ | **Fitzroy Crossi** | **51.88** | **242** | P | P | 21 03 00.8 | +1.5 |
| | 1.4nm,0.7s,baz=39,slow=8.6,SNR=1.6 | | | | | | |
| RES | **Resolute Bay** | **85.79** | **15** | LR | LR | 21 43 14.8 | |
| | comp=Z,39nm,21.4s,baz=78,slow=35 | | | | | | |

*IDC **18** 21:20:02.1±1.0, 23°.21'N×121°.00'E, h0km, mb3.4/9, mb1 3.5/9, mb1mx3.4/54, mbtmp3.5/9, MS3.6/1, Ms1 3.6/1, ms1mx2.5/48, Error ellipse: s-maj=37.8km s-min=18.3km az=68.0*

*TAP **18** 21:20:06.7, 22°.96'N×120°.35'E, h24km, ML4.2, B*

*ASIES **18** 21:20:07.5, 22°.96'N×120°.25'E, h29km, MW3.6*

*JMA **18** 21:20:07.0±0.3, 22°.94'N×120°.51'E, h5km, M3.9*

**ISC 18 21:20:07.7±0.7, 22°.96'N±0°.02×120°.30'E±0°.02, h30km±4km, n161, ₙ0ᵍ98/256, mb3.5/8, 54C-11D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SHHT | **Tainan City** | **0.07** | **34** | ⇑*i*P | Pb | 21 20 11.7 | -1.2 |
| | baz=359 | | | | | | |
| SHHT | | | | *i* S | Sb | 21 20 15.5 | -1.0 |
| | baz=359 | | | | | | |
| TAI1 | **Yung-k'ang** | **0.11** | **319** | ⇑*i*P | Pb | 21 20 12.0 | -1.0 |
| | baz=305 | | | | | | |
| TAI1 | | | | *i* S | Sb | 21 20 16.4 | -0.3 |
| | baz=305 | | | | | | |
| CHN3 | **Shinhua** | **0.13** | **26** | ⇑*i*P | Pb | 21 20 12.4 | -0.8 |
| | baz=359 | | | | | | |
| CHN3 | | | | *i* S | Sb | 21 20 17.0 | -0.1 |
| | baz=359 | | | | | | |
| TWM1 | **Shoushan** | **0.17** | **141** | ⇓*i*P | Pb | 21 20 13.1 | -0.6 |
| | baz=153 | | | | | | |
| TWM1 | | | | *e*S | Sb | 21 20 18.7 | +0.9 |
| | baz=153 | | | | | | |
| SSHA | **Shanhua** | **0.18** | **355** | ⇑*i*P | Pb | 21 20 13.0 | -0.7 |
| | baz=341 | | | | | | |
| SSHA | | | | S | Sb | 21 20 18.0 | +0.3 |
| | baz=341 | | | | | | |
| SCST | **Cishan** | **0.19** | **113** | ⇓*i*P | Pb | 21 20 12.9 | -0.9 |
| | baz=120 | | | | | | |
| SCST | | | | *e*S | Sb | 21 20 18.1 | +0.1 |
| | baz=120 | | | | | | |
| SNJT | **Kaohsiung City** | **0.21** | **172** | ⇓*i*P | Pb | 21 20 13.4 | -0.6 |
| | baz=190 | | | | | | |
| SNJT | | | | *e*S | Sb | 21 20 18.8 | +0.5 |
| | baz=190 | | | | | | |
| SCLT | **Jiali** | **0.24** | **335** | ⇑*i*P | Pb | 21 20 13.6 | -0.7 |
| | baz=327 | | | | | | |
| SCLT | | | | *e*S | Sb | 21 20 19.0 | +0.2 |
| | baz=327 | | | | | | |
| SGST | **Jiashian** | **0.28** | **65** | ⇓*i*P | Pb | 21 20 13.2 | -1.7 |
| | baz=72 | | | | | | |
| SGST | | | | *e*S | Sb | 21 20 19.1 | -0.8 |
| | baz=72 | | | | | | |
| SGLT | **Jiouru** | **0.29** | **143** | ⇑*i*P | Pn | 21 20 14.9 | -0.9 |
| | baz=151 | | | | | | |
| SGLT | | | | *e*S | Sb | 21 20 21.9 | +1.9 |
| | baz=151 | | | | | | |
| CHN1 | **Nanshi** | **0.30** | **43** | ⇓*i*P | Pb | 21 20 14.3 | -0.9 |
| | baz=36 | | | | | | |
| CHN1 | | | | *e*S | Sb | 21 20 19.6 | -0.8 |
| | baz=36 | | | | | | |
| SNST | **Tainan City** | **0.31** | **35** | *i* P | Pb | 21 20 14.5 | -0.8 |
| | baz=27 | | | | | | |
| SNST | | | | *e*S | Sb | 21 20 20.3 | -0.2 |
| | baz=27 | | | | | | |
| TSPT | **Pingtung City** | **0.33** | **148** | ⇑P | Pn | 21 20 15.4 | -1.1 |
| | baz=155 | | | | | | |
| TSPT | | | | *e*S | Sb | 21 20 22.5 | +1.5 |
| | baz=155 | | | | | | |
| TWK | **Hsinying** | **0.35** | **29** | ⇑*i*P | Pb | 21 20 15.2 | -0.8 |
| | baz=24 | | | | | | |
| TWK | | | | *e*S | Sb | 21 20 21.3 | -0.2 |
| | baz=24 | | | | | | |
| SSD | **Sandimen** | **0.37** | **125** | ⇑*i*P | Pn | 21 20 15.3 | -1.7 |
| | baz=117 | | | | | | |
| SSD | | | | *i* S | Sn | 21 20 21.4 | -1.8 |
| | baz=117 | | | | | | |
| KAU | **Kaohsiung** | **0.39** | **179** | ⇑*i*P | Pn | 21 20 16.5 | -0.8 |
| | baz=197 | | | | | | |
| KAU | | | | *e*S | Sn | 21 20 23.8 | +0.1 |
| | baz=197 | | | | | | |
| CHN8 | **Yiju** | **0.39** | **348** | ⇑*i*P | Pb | 21 20 15.9 | -0.6 |
| | baz=342 | | | | | | |
| CHN8 | | | | *e*S | Sb | 21 20 23.1 | +0.7 |
| | baz=342 | | | | | | |
| ICHU | **Yijhu** | **0.40** | **357** | ⇑*i*P | Pb | 21 20 15.8 | -0.7 |
| | baz=349 | | | | | | |
| ICHU | | | | *i* S | Sb | 21 20 22.6 | -0.1 |
| | baz=349 | | | | | | |
| TSMG | **Majia** | **0.40** | **129** | ⇑*i*P | Pn | 21 20 15.6 | -1.8 |
| | baz=122 | | | | | | |
| TSMG | | | | *i* S | Sn | 21 20 22.1 | -1.9 |
| | baz=122 | | | | | | |
| WTP | **Ta-pu** | **0.40** | **45** | ⇓*i*P | Pb | 21 20 15.8 | -0.8 |
| | baz=34 | | | | | | |
| WTP | | | | *i* S | Sb | 21 20 22.3 | -0.5 |
| | baz=34 | | | | | | |
| TPUB | **Ta-pu** | **0.45** | **42** | ⇓*i*P | Pb | 21 20 16.4 | -1.0 |
| | baz=37 | | | | | | |
| TPUB | | | | S | Sb | 21 20 23.2 | -0.8 |
| | baz=37 | | | | | | |
| TPUB | **Ta-pu** | **0.45** | **42** | P | Pb | 21 20 16.6 | -0.8 |
| MASBT | **Mashibuluo** | **0.46** | **139** | ⇑*i*P | Pn | 21 20 16.9 | -1.3 |
| | baz=131 | | | | | | |
| MASBT | | | | S | Sn | 21 20 24.2 | -1.2 |
| | baz=131 | | | | | | |
| STYT | **Tauyuan** | **0.46** | **64** | ⇑*i*P | Pb | 21 20 16.8 | -0.8 |
| | baz=63 | | | | | | |
| STYT | | | | *i* S | Sn | 21 20 23.9 | -1.7 |
| | baz=63 | | | | | | |
| CHN4 | **Tsaushan** | **0.47** | **34** | P | Pb | 21 20 16.9 | -0.8 |
| | baz=29 | | | | | | |
| CHN4 | | | | *e*S | Sb | 21 20 24.3 | -0.3 |
| | baz=29 | | | | | | |
| STYH | **Taoyuan** | **0.48** | **64** | ⇑*i*P | Pb | 21 20 17.1 | -0.7 |
| | baz=63 | | | | | | |
| STYH | | | | *e*S | Sn | 21 20 24.1 | -1.9 |
| | baz=63 | | | | | | |
| SSPT | **Xinbi** | **0.53** | **153** | ⇑*i*P | Pn | 21 20 19.1 | -0.1 |
| | baz=142 | | | | | | |
| SSPT | | | | *e*S | Sn | 21 20 28.7 | +1.6 |
| | baz=142 | | | | | | |
| CHY | **Chiayi** | **0.55** | **12** | ⇑P | Pb | 21 20 18.3 | -0.6 |
| | baz=7.0 | | | | | | |
| CHY | | | | *e*S | Sb | 21 20 26.4 | -0.1 |
| | baz=7.0 | | | | | | |
| WSL | **Shuilin Townsh** | **0.56** | **353** | ⇑*i*P | Pb | 21 20 18.3 | -0.8 |
| | baz=347 | | | | | | |
| WSL | | | | *e*S | Sb | 21 20 27.2 | +0.2 |
| | baz=347 | | | | | | |
| CHN2 | **Minshiung** | **0.59** | **15** | ⇑*e*P | Pb | 21 20 19.3 | -0.3 |
| | baz=11 | | | | | | |
| CHN2 | | | | *e*S | Sn | 21 20 29.1 | +0.5 |
| | baz=11 | | | | | | |
| WLCH | **Liuqiu** | **0.61** | **173** | ⇑P | Pn | 21 20 20.9 | +0.6 |
| | baz=194 | | | | | | |
| WLCH | | | | *e*S | Sn | 21 20 31.9 | +2.8 |
| | baz=194 | | | | | | |
| TWP | **Hsiaoliuchiu** | **0.61** | **175** | ⇑P | Pn | 21 20 20.9 | +0.5 |
| | baz=195 | | | | | | |
| TWP | | | | *e*S | Sn | 21 20 32.0 | +2.8 |
| | baz=195 | | | | | | |
| SCZT | **Fangliau** | **0.65** | **153** | ⇑*i*P | Pn | 21 20 20.6 | -0.3 |
| | baz=144 | | | | | | |
| SCZT | | | | *e*S | Sn | 21 20 30.6 | +0.4 |
| | baz=144 | | | | | | |
| WDGT | **Dungji** | **0.66** | **297** | *e*P | Pb | 21 20 20.1 | -0.7 |
| | baz=295 | | | | | | |
| WDGT | | | | *e*S | Sb | 21 20 29.6 | -0.2 |
| | baz=295 | | | | | | |
| WSF | **Szhu** | **0.68** | **354** | ⇑P | Pb | 21 20 20.2 | -0.9 |
| | baz=349 | | | | | | |
| WSF | | | | *e*S | Sb | 21 20 31.2 | +1.0 |
| | baz=349 | | | | | | |
| ELDTW | **Lidau** | **0.70** | **71** | ⇑*i*P | Pn | 21 20 20.6 | -1.0 |
| | baz=71 | | | | | | |
| ELDTW | | | | *e*S | Sn | 21 20 30.8 | -0.6 |
| | baz=71 | | | | | | |
| ALS | **Alishan** | **0.72** | **40** | ⇑P | Pb | 21 20 21.0 | -0.8 |
| | baz=46 | | | | | | |
| ALS | | | | *e*S | Sn | 21 20 31.9 | -0.3 |
| | baz=46 | | | | | | |
| CHN5 | **Tsauling** | **0.72** | **28** | ⇑*i*P | Pb | 21 20 20.9 | -1.0 |
| | baz=10.0 | | | | | | |
| CHN5 | | | | *e*S | Sb | 21 20 31.8 | +0.3 |
| | baz=10.0 | | | | | | |
| TWG | **Pinlang** | **0.72** | **101** | ⇑*i*P | Pn | 21 20 21.1 | -0.7 |
| | baz=103 | | | | | | |
| TWG | | | | *e*S | Sn | 21 20 31.6 | -0.3 |
| | baz=103 | | | | | | |
| WTK | **Tuku** | **0.73** | **6** | ⇑*i*P | Pb | 21 20 20.9 | -1.0 |
| | baz=350 | | | | | | |
| WTK | | | | *e*S | Sb | 21 20 31.9 | +0.3 |
| | baz=350 | | | | | | |
| TWGBT | **Beinan** | **0.73** | **101** | ⇑*i*P | Pn | 21 20 21.1 | -0.8 |
| | baz=103 | | | | | | |
| TWGBT | | | | *e*S | Sn | 21 20 31.4 | -0.6 |
| | baz=103 | | | | | | |
| WDLH | **Douliu** | **0.76** | **17** | *i* P | Pb | 21 20 21.5 | -0.9 |
| | baz=11 | | | | | | |
| WDLH | | | | *e*S | Sb | 21 20 32.9 | +0.5 |
| | baz=11 | | | | | | |
| WGK | **Gukeng** | **0.76** | **18** | *e*P | Pb | 21 20 21.7 | -0.7 |
| | baz=14 | | | | | | |
| WGK | | | | *e*S | Sn | 21 20 33.7 | +0.9 |
| | baz=14 | | | | | | |
| EAST | **Anshuo** | **0.76** | **139** | ⇑*i*P | Pn | 21 20 22.3 | -0.2 |
| | baz=130 | | | | | | |
| EAST | | | | *e*S | Sn | 21 20 33.9 | +1.0 |
| | baz=130 | | | | | | |
| LONT | **Longtian** | **0.76** | **94** | ⇑*e*P | Pn | 21 20 21.8 | -0.6 |
| | baz=95 | | | | | | |
| LONT | | | | *e*S | Sn | 21 20 32.4 | -0.5 |
| | baz=95 | | | | | | |
| YUS | **Yu-Shan** | **0.80** | **48** | ⇑P | Pb | 21 20 22.6 | -0.8 |
| | baz=47 | | | | | | |
| YUS | | | | *e*S | Sn | 21 20 34.2 | -0.2 |
| | baz=47 | | | | | | |
| TTN | **Taitung** | **0.81** | **105** | *e*P | Pn | 21 20 23.5 | +0.6 |
| | baz=106 | | | | | | |
| TTN | | | | *e*S | Sn | 21 20 36.6 | +2.7 |
| | baz=106 | | | | | | |
| TAW | **Tawu** | **0.81** | **137** | ⇑*e*P | Pn | 21 20 22.9 | -0.2 |
| | baz=129 | | | | | | |
| TAW | | | | *e*S | Sn | 21 20 34.8 | +0.7 |
| | baz=129 | | | | | | |
| TAWH | **Dawu Township** | **0.82** | **139** | ⇑*i*P | Pn | 21 20 22.9 | -0.3 |
| | baz=131 | | | | | | |
| TAWH | | | | *e*S | Sn | 21 20 35.0 | +0.7 |
| | baz=131 | | | | | | |
| VCHM | **Qimei** | **0.84** | **287** | ⇓P | Pb | 21 20 22.6 | -1.1 |
| | baz=286 | | | | | | |
| VCHM | | | | *e*S | Sb | 21 20 34.2 | -0.6 |
| | baz=286 | | | | | | |
| WMLT | **Mailiao** | **0.84** | **355** | *e*P | Pb | 21 20 22.5 | -1.4 |
| | baz=350 | | | | | | |
| WMLT | | | | *e*S | Sb | 21 20 35.3 | +0.5 |
| | baz=350 | | | | | | |
| ECS | **Chishang** | **0.85** | **81** | ⇑P | Pn | 21 20 23.6 | -0.1 |
| | baz=82 | | | | | | |
| ECS | | | | *e*S | Sn | 21 20 35.6 | +0.4 |
| | baz=82 | | | | | | |
| PHUB | **P'eng-hu** | **0.87** | **309** | ⇓*i*P | Pn | 21 20 22.9 | -0.9 |
| | baz=316 | | | | | | |
| PHUB | | | | *e*S | Sb | 21 20 34.7 | -0.9 |
| | baz=316 | | | | | | |
| SLIU | **Shizi** | **0.87** | **148** | ⇑*i*P | Pn | 21 20 23.6 | -0.3 |
| | baz=151 | | | | | | |
| SLIU | | | | S | Sn | 21 20 36.0 | +0.5 |
| | baz=151 | | | | | | |
| WTCT | **Ta-ch'eng** | **0.90** | **359** | P | Pb | 21 20 23.6 | -1.1 |
| | baz=355 | | | | | | |
| WTCT | | | | *e*S | Sb | 21 20 36.9 | +0.5 |
| | baz=355 | | | | | | |
| PNG | **Penghu** | **0.92** | **311** | ⇓P | Pn | 21 20 23.6 | -0.8 |
| | baz=318 | | | | | | |
| PNG | | | | *e*S | Sb | 21 20 36.0 | -0.9 |
| | baz=318 | | | | | | |
| EDH | **Donghe** | **0.92** | **89** | ⇑P | Pn | 21 20 24.5 | -0.1 |
| | baz=104 | | | | | | |
| EDH | | | | *e*S | Sn | 21 20 37.4 | +0.6 |
| | baz=104 | | | | | | |
| WRL | **Guolierlin Hig** | **0.94** | **4** | ⇑P | Pn | 21 20 24.0 | -0.8 |
| | baz=352 | | | | | | |
| WRL | | | | *e*S | Sb | 21 20 37.1 | -0.4 |
| | baz=352 | | | | | | |
| WJS | **Zhushan** | **0.94** | **24** | ⇑P | Pb | 21 20 24.3 | -1.2 |
| | baz=20 | | | | | | |
| WJS | | | | *e*S | Sb | 21 20 37.7 | 0.0 |
| | baz=20 | | | | | | |
| FULB | **Fuli** | **0.94** | **75** | ⇑*i*P | Pn | 21 20 25.2 | +0.4 |
| | baz=76 | | | | | | |
| FULB | | | | *e*S | Sn | 21 20 38.5 | +1.1 |
| | baz=76 | | | | | | |
| WNT | **Mingjian** | **0.98** | **21** | *e*P | Pn | 21 20 25.1 | -0.3 |
| | baz=3.0 | | | | | | |
| WNT | | | | *e*S | Sn | 21 20 39.1 | +0.9 |
| | baz=3.0 | | | | | | |
| CHKT | **Chengkung** | **0.99** | **82** | ⇑*e*P | Pn | 21 20 25.8 | +0.3 |
| | baz=83 | | | | | | |
| CHKT | | | | *e*S | Sn | 21 20 40.0 | +1.6 |
| | baz=83 | | | | | | |
| TWF1 | **Yuli** | **0.99** | **67** | ⇑P | Pn | 21 20 25.6 | 0.0 |
| | baz=67 | | | | | | |
| TWF1 | | | | *e*S | Sn | 21 20 38.9 | +0.3 |
| | baz=67 | | | | | | |
| WNT1 | **Nantou City** | **1.00** | **20** | *e*P | Pn | 21 20 25.5 | -0.2 |
| | baz=2.0 | | | | | | |
| WNT1 | | | | *e*S | Sb | 21 20 38.3 | -1.1 |
| | baz=2.0 | | | | | | |
| EYUL | **Yuli** | **1.01** | **67** | ⇑*i*P | Pn | 21 20 25.8 | 0.0 |
| | baz=67 | | | | | | |
| EYUL | | | | *e*S | Sn | 21 20 38.9 | -0.1 |
| | baz=67 | | | | | | |
| YULB | **Yu-li** | **1.01** | **65** | ⇑P | Pn | 21 20 25.7 | -0.1 |
| | baz=64 | | | | | | |
| YULB | | | | *e*S | Sn | 21 20 38.9 | -0.1 |
| | baz=64 | | | | | | |
| SSLB | **Suanglung** | **1.02** | **36** | ⇓P | Pn | 21 20 25.7 | -0.2 |
| | baz=21 | | | | | | |
| SSLB | | | | *e*S | Sn | 21 20 39.5 | +0.3 |
| | baz=21 | | | | | | |
| SSLB | **Suanglung** | **1.02** | **36** | P | Pb | 21 20 26.2 | -0.6 |
| WYL | **Yuanlin Townsh** | **1.03** | **14** | *e*P | Pn | 21 20 26.0 | -0.1 |
| | baz=9.0 | | | | | | |
| WYL | | | | *e*S | Sb | 21 20 40.4 | +0.3 |
| | baz=9.0 | | | | | | |
| HEN | **Hengchun** | **1.03** | **157** | ⇑P | Pn | 21 20 26.2 | +0.1 |
| | baz=143 | | | | | | |
| HEN | | | | *e*S | Sn | 21 20 39.3 | -0.2 |
| | baz=143 | | | | | | |
| SMST | **Manzhou Townsh** | **1.06** | **152** | *e*P | Pb | 21 20 26.2 | -1.2 |
| | baz=155 | | | | | | |
| TYC | **Yuchr** | **1.07** | **28** | *e*P | Pn | 21 20 26.5 | -0.1 |
| | baz=24 | | | | | | |
| TYC | | | | *e*S | Sb | 21 20 40.7 | -0.5 |
| | baz=24 | | | | | | |
| SMLT | **Sun Moon Lake** | **1.07** | **31** | *e*P | Pn | 21 20 26.4 | -0.3 |
| | baz=17 | | | | | | |
| SMLT | | | | *e*S | Sn | 21 20 41.6 | +1.0 |
| | baz=17 | | | | | | |
| EHY | **Hungye** | **1.08** | **60** | ⇑P | Pb | 21 20 27.0 | -0.9 |
| | baz=68 | | | | | | |
| EHY | | | | *e*S | Sn | 21 20 41.2 | +0.4 |
| | baz=68 | | | | | | |
| VWDT | **VWDT** | **1.10** | **44** | ⇑*e*P | Pb | 21 20 27.3 | -0.9 |
| | baz=43 | | | | | | |
| LDUT | **Ludao** | **1.11** | **105** | ⇑*e*P | Pb | 21 20 27.0 | -1.3 |
| | baz=107 | | | | | | |
| LDUT | | | | *e*S | Sn | 21 20 42.5 | +1.0 |
| | baz=107 | | | | | | |
| TWK1 | **Hengchun** | **1.11** | **155** | ⇑P | Pb | 21 20 27.2 | -1.1 |
| | baz=157 | | | | | | |
| TWK1 | | | | *e*S | Sn | 21 20 42.2 | +0.6 |
| | baz=157 | | | | | | |
| ECBN | **Changbin** | **1.11** | **71** | *e*P | Pb | 21 20 27.9 | -0.4 |
| | baz=73 | | | | | | |
| TWKBT | **Hengchun** | **1.12** | **155** | ⇑P | Pb | 21 20 27.2 | -1.2 |
| | baz=158 | | | | | | |
| WWF | **Wufeng** | **1.14** | **19** | *e*P | Pn | 21 20 27.6 | 0.0 |
| | baz=14 | | | | | | |
| WWF | | | | *e*S | Sb | 21 20 43.5 | +0.3 |
| | baz=14 | | | | | | |
| WCHH | **Zhanghua** | **1.14** | **12** | *e*P | Pn | 21 20 27.7 | +0.2 |
| | baz=6.0 | | | | | | |
| WCHH | | | | *e*S | Sn | 21 20 43.1 | +1.0 |
| | baz=6.0 | | | | | | |
| HGSD | **Ruisui** | **1.16** | **63** | ⇑*e*P | Pb | 21 20 28.7 | -0.4 |
| | baz=64 | | | | | | |
| HGSD | | | | *e*S | Sn | 21 20 44.5 | +1.9 |
| | baz=64 | | | | | | |
| TSEB | **Hengchuen, Pin** | **1.19** | **152** | ⇑P | Pb | 21 20 28.1 | -1.5 |
| | baz=156 | | | | | | |
| TSEB | | | | *e*S | Sn | 21 20 43.9 | +0.5 |
| | baz=156 | | | | | | |
| WPL | **Puli Township** | **1.21** | **30** | *e*P | Pn | 21 20 28.7 | +0.2 |
| | baz=25 | | | | | | |
| WPL | | | | *e*S | Sb | 21 20 45.5 | +0.3 |
| | baz=25 | | | | | | |
| DPDB | **Guoxing** | **1.21** | **28** | *e*P | Pn | 21 20 28.9 | +0.3 |
| | baz=40 | | | | | | |
| DPDB | | | | *e*S | Sb | 21 20 45.1 | -0.3 |
| | baz=40 | | | | | | |
| WCS | **Beigang Elemen** | **1.23** | **27** | *e*P | Pn | 21 20 29.1 | +0.3 |
| | baz=38 | | | | | | |
| WCS | | | | *e*S | Sn | 21 20 44.9 | +0.6 |
| | baz=38 | | | | | | |
| TCU | **Taichung** | **1.23** | **16** | *e*P | Pn | 21 20 29.2 | +0.3 |
| | baz=358 | | | | | | |
| TCU | | | | *e*S | Sb | 21 20 46.1 | +0.3 |
| | baz=358 | | | | | | |
| WUSB | **Renai** | **1.27** | **36** | *e*P | Pn | 21 20 29.6 | +0.1 |
| | baz=32 | | | | | | |
| WUSB | | | | *e*S | Sb | 21 20 46.2 | -0.9 |
| | baz=32 | | | | | | |
| ESL | **Shilin** | **1.34** | **50** | *e*P | Pn | 21 20 30.3 | -0.1 |
| | baz=50 | | | | | | |
| ESL | | | | *e*S | Sb | 21 20 47.7 | -1.3 |
| | baz=50 | | | | | | |
| CHGB | **Renai** | **1.36** | **36** | *e*P | Pn | 21 20 31.2 | +0.4 |
| | baz=25 | | | | | | |
| WDJ | **Dajia District** | **1.42** | **13** | *e*P | Pn | 21 20 32.3 | +0.9 |
| | baz=7.0 | | | | | | |
| WDJ | | | | *e*S | Sn | 21 20 50.7 | +1.7 |
| | baz=7.0 | | | | | | |
| WHP | **Taichung City** | **1.44** | **24** | *e*P | Pn | 21 20 32.1 | +0.3 |
| | baz=18 | | | | | | |
| WHP | | | | *e*S | Sb | 21 20 51.3 | -0.6 |
| | baz=18 | | | | | | |
| TWQ1 | **Liyutan** | **1.45** | **17** | *e*P | Pn | 21 20 32.5 | +0.7 |
| | baz=1.0 | | | | | | |
| TWQ1 | | | | *e*S | Sb | 21 20 52.3 | +0.2 |
| | baz=1.0 | | | | | | |
| WHF | **Hehuan Shan** | **1.47** | **37** | *e*P | Pn | 21 20 33.4 | +0.8 |
| | baz=34 | | | | | | |
| WHF | | | | *e*S | Sb | 21 20 53.8 | +0.5 |
| | baz=34 | | | | | | |
| LAY | **Lan-yu** | **1.47** | **128** | *e*P | Pn | 21 20 31.2 | -1.0 |
| | baz=131 | | | | | | |
| ETM | **Tongmen** | **1.48** | **47** | *e*P | Pn | 21 20 32.9 | +0.6 |
| | baz=47 | | | | | | |
| TEYL | **Yanliau Villag** | **1.49** | **53** | *e*P | Pn | 21 20 31.5 | -0.9 |
| | baz=54 | | | | | | |
| TDCB | **Techi** | **1.51** | **31** | *e*P | Pn | 21 20 33.2 | +0.4 |
| | baz=42 | | | | | | |
| TDCB | | | | *e*S | Sb | 21 20 53.4 | -0.5 |
| | baz=42 | | | | | | |
| NSY | **Sanyi** | **1.51** | **16** | *e*P | Pn | 21 20 34.0 | +1.3 |
| | baz=1.0 | | | | | | |
| NSY | | | | *e*S | Sb | 21 20 54.7 | +0.8 |
| | baz=1.0 | | | | | | |
| TWT | **Tachien** | **1.52** | **32** | *e*P | Pn | 21 20 33.5 | +0.6 |
| | baz=42 | | | | | | |
| TWT | | | | *e*S | Sb | 21 20 53.7 | -0.5 |
| | baz=42 | | | | | | |
| LYUB | **Lan-yu** | **1.52** | **129** | ⇑*e*P | Pn | 21 20 30.7 | -2.1 |
| | baz=131 | | | | | | |
| FUSS | **Fushou** | **1.54** | **34** | *e*P | Pn | 21 20 33.8 | +0.4 |
| | baz=30 | | | | | | |
| TWD | **Chiawan** | **1.63** | **47** | *e*P | Pn | 21 20 35.1 | +0.8 |
| | baz=45 | | | | | | |
| NMLH | **Miaoli** | **1.63** | **16** | *e*P | Pn | 21 20 35.6 | +1.2 |
| | baz=9.0 | | | | | | |
| ETLH | **Xiulin Townshi** | **1.65** | **41** | *e*P | Pn | 21 20 35.5 | +0.9 |
| | baz=41 | | | | | | |
| NACB | **Ninganchiao** | **1.69** | **44** | *e*P | Pn | 21 20 35.9 | +0.7 |
| | baz=29 | | | | | | |
| NACB | | | | *e*S | Sn | 21 20 56.6 | +0.7 |
| | baz=29 | | | | | | |
| NNSB | **Datong** | **1.77** | **34** | *e*P | Pn | 21 20 37.4 | +1.1 |
| | baz=32 | | | | | | |
| NNS | **Nan Shan** | **1.77** | **33** | *e*P | Pn | 21 20 37.5 | +1.1 |
| | baz=31 | | | | | | |
| NSTT | **Nanjuang** | **1.78** | **21** | *e*P | Pn | 21 20 36.8 | +0.4 |
| | baz=14 | | | | | | |
| LIOB | **Emei** | **1.80** | **21** | *e*P | Pn | 21 20 36.8 | +0.2 |
| | baz=14 | | | | | | |
| NFF | **Wufeng Townshi** | **1.82** | **24** | *e*P | Pn | 21 20 37.4 | +0.3 |
| | baz=3.0 | | | | | | |
| LATG | **Datong** | **1.93** | **35** | *e*P | Pn | 21 20 39.8 | +1.3 |
| | baz=32 | | | | | | |
| NSK | **Sanguang** | **1.96** | **29** | *e*P | Pn | 21 20 40.2 | +1.2 |
| | baz=5.0 | | | | | | |
| YHNB | **Yeheng** | **1.96** | **30** | *e*P | Pn | 21 20 40.0 | +1.0 |
| | baz=6.0 | | | | | | |
| YHNB | **Yeheng** | **1.96** | **30** | P | Pn | 21 20 40.5 | +1.5 |
| ENA | **Nanau** | **1.97** | **42** | *e*P | Pn | 21 20 40.0 | +1.0 |
| | baz=59 | | | | | | |
| NDT | **Datong Townshi** | **1.98** | **34** | *e*P | Pb | 21 20 41.5 | -1.5 |
| | baz=30 | | | | | | |
| EWUT | **Wuta** | **2.00** | **42** | *e*P | Pb | 21 20 41.5 | -1.9 |
| | baz=60 | | | | | | |
| ENTT | **Nioudou** | **2.03** | **34** | *e*P | Pb | 21 20 42.0 | -1.9 |
| | baz=31 | | | | | | |
| NDS | **Dongshan** | **2.11** | **38** | *e*P | Pb | 21 20 43.3 | -2.0 |
| | baz=37 | | | | | | |
| NWLT | **Wulai** | **2.12** | **31** | *e*P | Pn | 21 20 41.9 | +0.8 |
| | baz=23 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FUSB** | **Fushanzhiwuyua** baz=29 | **2.14** | **33** | *eP* | | **Pn** | **21 20 43.0** | **+1.5** |
| **TWE** | **Neicheng** baz=35 | **2.15** | **35** | *eP* | | **Pb** | **21 20 43.7** | **-2.3** |
| **TWC** | **Suao** baz=58 | **2.17** | **40** | *eP* | | **Pn** | **21 20 42.8** | **+1.1** |
| **KNM** | **Kinmen** baz=305 | **2.25** | **311** | *eP* | | **Pn** | **21 20 44.0** | **+1.2** |
| **KNMB** | **Chin-men Tao** baz=308 | **2.31** | **311** | *eP* | | **Pn** | **21 20 43.3** | **-0.3** |
| **PTMZ** | **Houxiangcun** baz=328 | **2.34** | **333** | *eP* | | **Pn** | **21 20 43.4** | **-0.6** |
| **TIPB** | **Shuangxi** baz=10.0 | **2.44** | **35** | *eP* | | **Pn** | **21 20 46.6** | **+1.1** |
| **NWF** | **Wu-fen Shan** baz=28 | **2.50** | **32** | *eP* | | **Pn** | **21 20 47.5** | **+1.1** |
| **QZH** | **Quanzhou** | **2.52** | **322** | *eP* | Pn | **Pn** | **21 20 46.8** | **+0.3** |
| QZH | | | | | Sn | **Sn** | **21 21 13.6** | **-2.6** |
| QZH | comp=N,340nm,0.6s | | | | smax | smax | | |
| QZH | comp=E,280nm,0.5s | | | | smax | smax | | |
| **ZPLA** | **Ao Xicun** baz=290 | **2.54** | **293** | *eP* | | **Pn** | **21 20 46.3** | **-0.5** |
| **TWB1** | **Santiao Chiao** baz=12 | **2.56** | **37** | *eP* | | **Pn** | **21 20 49.0** | **+1.9** |
| **SXI1** | **Grass Mountain** baz=11 | **2.56** | **34** | *eP* | | **Pn** | **21 20 48.4** | **+1.1** |
| **JYNG** | **Yonagunijimaku** | **2.84** | **58** | P | | **Pn** | **21 20 52.9** | **+2.0** |
| JYNG | | | | *eS* | | **Sn** | **21 21 25.7** | **+1.6** |
| **AXDP** | **Jialang** baz=310 | **2.88** | **313** | *eP* | | **Pn** | **21 20 51.3** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **2.90** | **58** | P | | **Pn** | **21 20 53.0** | **+1.3** |
| YOJ | | | | *eS* | | **Sn** | **21 21 26.8** | **+1.2** |
| **YOJ** | **Yonaguni jima** baz=65 | **2.90** | **58** | *eP* | | **Pn** | **21 20 53.0** | **+1.3** |
| **MATB** | **Ma-tsu** baz=346 | **3.19** | **354** | *eP* | | **Pn** | **21 20 55.1** | **-0.7** |
| **MHZQ** | **Yesham** baz=335 | **3.33** | **340** | *eP* | | **Pn** | **21 20 57.5** | **-0.2** |
| **HATJ** | **Hateruma jima** | **3.40** | **71** | S | | **Sn** | **21 21 37.8** | **0.0** |
| **IRIF** | **Iriomote-Funau** | **3.43** | **66** | P | | **Pn** | **21 21 00.0** | **+1.0** |
| IRIF | | | | *eS* | | **Sn** | **21 21 39.2** | **+0.6** |
| **LYJJ** | **Jianjiangzhen** baz=344 | **3.61** | **352** | *eP* | | **Pn** | **21 21 01.0** | **-0.5** |
| **JKRS** | **Kuro-shima** | **3.63** | **69** | P | | **Pn** | **21 21 03.2** | **+1.4** |
| JKRS | | | | S | | **Sn** | **21 21 44.7** | **+1.1** |
| **JIJ** | **Ishigaki jima** | **3.79** | **68** | P | | **Pn** | **21 21 04.3** | **+0.3** |
| JIJ | | | | *eS* | | **Sn** | **21 21 47.5** | **0.0** |
| **XPSS** | **Dashiqiu** baz=350 | **3.95** | **359** | *eP* | | **Pn** | **21 21 05.8** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **4.01** | **65** | *eS* | | **Sn** | **21 21 52.4** | **-0.7** |
| **JTJ** | **Tarama** | **4.36** | **67** | *eS* | | **Sn** | **21 22 03.2** | **+1.5** |
| **JIRB** | **Irabujima** | **4.83** | **66** | P | | **Pn** | **21 21 19.8** | **+1.5** |
| JIRB | | | | *eS* | | **Sn** | **21 22 13.5** | **+0.3** |
| **JMJ2** | **Miyako jima3** | **4.93** | **68** | P | | **Pn** | **21 21 20.5** | **+0.8** |
| JMJ2 | | | | *eS* | | **Sn** | **21 22 17.0** | **+1.3** |
| **WHN** | **Wuhan** | **9.24** | **326** | P | | Pn | 21 22 31.0 | +12 |
| **CMAR** | **Chiang Mai Arr** comp=E,0.5nm,0.7s,baz=56,slow=8.1,SNR=2.6 | **20.47** | **261** | P | | Pn | 21 24 47.6 | +2.2 |
| **USRK** | **Ussuriysk Ar.** comp=E,1.8nm,0.7s,baz=149,slow=5.9,SNR=2.3 | **23.27** | **22** | P | | P | 21 25 05.5 | -7.1 |
| **SONM** | **Songino Array** comp=E,0.2nm,0.7s,baz=165,slow=6.7,SNR=2.4 | **27.20** | **339** | P | | **P** | **21 25 47.3** | **-1.4** |
| **WMQ** | **Urumqi** | **33.94** | **316** | *eP* | | **P** | **21 26 51.3** | **+3.0** |
| **MKAR** | **Makanchi Array** comp=E,0.7nm,0.9s,baz=105,slow=9.4,SNR=6.9 | **38.67** | **317** | P | | **P** | **21 27 29.8** | **+1.2** |
| **ZALV** | **Zalesovo Beam** comp=E,0.3nm,0.4s,baz=116,slow=8.8,SNR=1.6 | **40.84** | **328** | P | | **P** | **21 27 47.2** | **+0.7** |
| **KURBB** | **Kurchatov Arra** comp=E,0.3nm,0.8s,baz=73,slow=4.1,SNR=4.0 | **42.53** | **321** | P | | **P** | **21 28 01.5** | **+1.1** |
| **WRA** | **Warramunga Arr** comp=E,0.7nm,0.6s,baz=346,slow=8.8,SNR=7.3 | **44.79** | **161** | P | | **P** | **21 28 17.6** | **-1.2** |
| **ASAR** | **Alice Springs** comp=E,0.2nm,0.3s,baz=338,slow=7.2,SNR=7.7 | **48.20** | **163** | P | | **P** | **21 28 45.5** | **0.0** |
| **CTA** | **Charters Tower** comp=E,54nm,18.0s,baz=102,slow=38 | **49.72** | **147** | LR | | LR | 21 51 52.2 | |
| **ARU** | **Arti** comp=E,0.5nm,0.4s,baz=48,slow=9.2,SNR=4.2 | **55.60** | **324** | P | | **P** | **21 29 40.3** | **0.0** |

*IDC **18** 21:33:25.9±2.8, 7°.71N×136°.62E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.6/41, mbtmp3.8/6, Error ellipse: s-maj=158.4km s-min=22.9km az=79.0*
*NEIC **18** 21:33:33.0±1.4, 7°.7N±0°.1×136°.8E±0°.2, h35km±2km, mb4.1/9, Error ellipse: s-maj=28.8km s-min=7.9km az=235.0*

**ISC 18 21:33:31.8±0.7, 7°.7N±0°.1×136°.8E±0°.2, h35km, n21, σ1°31/17, mb3.9/9, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUWI** | **Luwuk** | **16.46** | **239** | | **P** | **21 37 23.6** | **+1.0** |
| LUWI | comp=Z,28nm,0.7s | | | IAmb | IAmb | 21 37 31.2 | |
| **YULB** | **Yu-li** | **21.54** | **318** | P | **P** | **21 38 20.4** | **+2.2** |
| YULB | comp=Z,14nm,1.0s | | | IAmb | IAmb | 21 38 26.2 | |
| **WRAB** | **Tennant Creek** | **27.58** | **185** | P | **P** | **21 39 16.0** | **+0.2** |
| **WB2** | **Warramunga Arr** | **27.59** | **185** | P | **P** | **21 39 16.7** | **+0.8** |
| WB2 | comp=Z,3.3nm,1.1s | | | IAmb | IAmb | 21 39 36.4 | |
| **WRA** | **Warramunga Arr** comp=Z,0.6nm,0.8s,baz=3.3,slow=9.7,SNR=4.0 | **27.59** | **185** | P | **P** | **21 39 15.4** | **-0.6** |
| **WR0** | **Warramunga Arr** comp=Z,3.5nm,1.1s | **27.59** | **185** | P | **P** | **21 39 18.3** | **+2.4** |
| WR0 | | | | IAmb | IAmb | 21 39 23.4 | |
| **H11S3** | **WAKE ISLAND Hy** baz=253 | **30.98** | **67** | T | T | 22 12 48.6 | |
| **H11S1** | **WAKE ISLAND Hy** baz=253 | **31.00** | **67** | T | T | 22 12 49.2 | |
| **H11S2** | **WAKE ISLAND Hy** baz=253 | **31.00** | **67** | T | T | 22 12 52.5 | |
| **ASAR** | **Alice Springs** comp=Z,0.5nm,0.8s,baz=14,slow=10,SNR=3.0 | **31.32** | **185** | P | **P** | **21 39 47.4** | **-1.6** |
| **SONM** | **Songino Array** comp=Z,1.0nm,0.9s,baz=152,slow=9.6,SNR=6.3 | **47.58** | **333** | P | **P** | **21 42 03.7** | **-0.6** |
| **SONM** | **Songino Array** comp=Z,2.3nm,1.2s | **47.58** | **333** | IAmb | IAmb | 21 42 05.4 | |
| **MSVF** | **Nonsavu** | **47.97** | **122** | P | **P** | **21 42 07.3** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **48.35** | **17** | P | **P** | **21 42 10.7** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **48.35** | **17** | P | **P** | **21 42 10.9** | **+0.9** |
| **SNZO** | **South Karori** | **59.92** | **148** | P | **P** | **21 43 34.9** | **+0.5** |
| **MKAR** | **Makanchi Array** comp=Z,0.6nm,0.6s,baz=99,slow=8.9,SNR=8.2 | **60.50** | **320** | P | **P** | **21 43 36.4** | **-2.1** |
| **MKAR** | **Makanchi Array** | **60.50** | **320** | P | **P** | **21 43 37.7** | **-0.7** |
| **AKUT** | **Akutan** | **65.06** | **33** | P | **P** | **21 44 09.4** | **+0.8** |
| **BVAR** | **Borovoye Array** comp=Z,0.7nm,0.6s,baz=57,slow=16,SNR=4.2 | **69.75** | **324** | P | **P** | **21 44 37.9** | **-0.5** |
| **ARCES** | **ARCESS Array B** comp=Z,4.3nm,1.1s,baz=88,slow=6.7,SNR=4.9 | **90.09** | **341** | P | **P** | **21 46 26.7** | **-1.2** |

*UCR **18** 21:59:14.9±1.6, 12°.40N×87°.88W, h26km±8km, ML4.0, mb4.0(NEIC)*
*IDC **18** 21:59:15.3±1.0, 12°.67N×87°.47W, h81km±11km, mb3.4/3, mb1 3.6/6, mb1mx3.3/34, mbtmp3.6/6, MS4.0/1, Ms1 4.0/1, ms1mx2.6/41, Error ellipse: s-maj=39.8km s-min=9.4km az=41.0*
*INET **18** 21:59:15.6±0.3, 12°.43N×87°.74W, h24km±2km, MW3.4*
*SNET **18** 21:59:15.7±1.4, 12°.42N×87°.97W, h20km±6km, ML4.0*
*NEIC **18** 21:59:16.9±1.9, 12°.64N±0°.05×87°.62W±0°.05, h62km±5km, mb4.0/24, Md4.0(SNET), Error ellipse: s-maj=8.2km s-min=6.2km az=206.0*

**ISC 18 21:59:14.3±0.7, 12°.50N±0°.05×87°.74W±0°.04, h59km±6km, n91, σ1°77/121, mb4.0/13, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.70** | **73** | | **Pn** | **21 59 30.2** | **+1.6** |
| CRIN | | | | Sn | **Sn** | **21 59 40.6** | **+1.6** |
| **TELN** | **Telica** | **0.89** | **83** | *eP* | **Pn** | **21 59 31.8** | **+0.8** |
| **JUCU** | **Jucuaŗn** | **0.90** | **327** | *eP* | **Pn** | **21 59 32.0** | **+0.8** |
| JUCU | | | | *eS* | **Sn** | **21 59 44.5** | **+0.9** |
| **JUCU** | **Jucuaŗn** | **0.90** | **327** | *eP* | **Pn** | **21 59 32.0** | **+0.8** |
| JUCU | | | | *eS* | **Sn** | **21 59 44.5** | **+0.9** |
| **CNGN** | **Cerro Negro** | **1.01** | **90** | Pn | **Pn** | **21 59 32.9** | **+0.4** |
| CNGN | | | | Sn | **Sn** | **21 59 46.8** | **+0.7** |
| **ALJI** | **Alcalda de J** | **1.16** | **316** | *eP* | **Pn** | **21 59 34.8** | **+0.4** |
| ALJI | | | | *eS* | **Sn** | **21 59 50.6** | **+1.2** |
| ALJI | comp=Z,4μm,0.3s | | | IAML | | 21 59 53.1 | |
| **ALJI** | **Alcalda de J** | **1.16** | **316** | *eP* | **Pn** | **21 59 34.8** | **+0.4** |
| ALJI | | | | *eS* | **Sn** | **21 59 50.6** | **+1.2** |
| ALJI | comp=Z,4μm,0.3s | | | IAML | | 21 59 53.1 | |
| **MOMN** | **Momotombo** | **1.17** | **94** | *eP* | **Pn** | **21 59 35.4** | **+0.8** |
| **COEB** | **Comit de Eme** | **1.26** | **322** | *eP* | **Pn** | **21 59 37.2** | **+1.3** |
| COEB | | | | *eS* | **Sn** | **21 59 53.4** | **+1.4** |
| **COEB** | **Comit de Eme** | **1.26** | **322** | *eP* | **Pn** | **21 59 37.2** | **+1.3** |
| COEB | | | | *eS* | **Sn** | **21 59 53.4** | **+1.4** |
| **PQSS** | **Presa 15 de Se** | **1.38** | **325** | *eP* | **Pn** | **21 59 39.2** | **+1.8** |
| PQSS | | | | *eS* | **Sn** | **21 59 57.7** | **+3.0** |
| **PQSS** | **Presa 15 de Se** | **1.38** | **325** | *eP* | **Pn** | **21 59 39.2** | **+1.8** |
| PQSS | | | | *eS* | **Sn** | **21 59 57.7** | **+3.0** |
| **TECO** | **Alcaldia de Te** | **1.45** | **316** | *eP* | **Pn** | **21 59 39.2** | **+0.9** |
| TECO | | | | *eS* | **Sn** | **21 59 57.4** | **+0.9** |
| **TECO** | **Alcaldia de Te** | **1.45** | **316** | *eP* | **Pn** | **21 59 39.2** | **+0.9** |
| TECO | | | | *eS* | **Sn** | **21 59 57.4** | **+0.9** |
| **MGAN** | **Managua** | **1.50** | **103** | *eP* | **Pn** | **21 59 39.7** | **+0.8** |
| MGAN | | | | *eP* | **Pn** | **21 59 39.9** | **+1.0** |
| **SCLA** | **Alcaldia de Sa** | **1.54** | **321** | *eP* | **Pn** | **21 59 41.2** | **+1.6** |
| SCLA | | | | *eS* | **Sn** | **22 00 01.9** | **+3.3** |
| **SCLA** | **Alcaldia de Sa** | **1.54** | **321** | *eP* | **Pn** | **21 59 41.2** | **+1.6** |
| SCLA | | | | *eS* | **Sn** | **22 00 01.9** | **+3.3** |
| **COEG** | **Centro de Oper** | **1.58** | **315** | *eP* | **Pn** | **21 59 41.5** | **+1.3** |
| COEG | | | | *eS* | **Sn** | **22 00 00.3** | **+0.8** |
| COEG | comp=Z,3μm,0.3s | | | IAML | | 22 00 05.6 | |
| **COEG** | **Centro de Oper** | **1.58** | **315** | *eP* | **Pn** | **21 59 41.5** | **+1.3** |
| COEG | | | | *eS* | **Sn** | **22 00 00.3** | **+0.8** |
| COEG | comp=Z,3μm,0.3s | | | IAML | | 22 00 05.6 | |
| **TGUH** | **Tegucigalpa,Un** | **1.62** | **16** | Pn | **Pn** | **21 59 42.4** | **+1.7** |
| TGUH | | | | Sn | **Sn** | **22 00 02.2** | **+1.6** |
| **SJTE** | **Alcalda de S** | **1.66** | **312** | *eP* | **Pn** | **21 59 42.5** | **+1.2** |
| SJTE | | | | *eS* | **Sn** | **22 00 02.6** | **+1.0** |
| SJTE | | | | *eS* | **Sn** | **22 00 02.7** | **+1.0** |
| **SJTE** | **Alcalda de S** | **1.66** | **312** | *eP* | **Pn** | **21 59 42.5** | **+1.2** |
| SJTE | | | | *eS* | **Sn** | **22 00 02.6** | **+1.0** |
| SJTE | | | | *eS* | **Sn** | **22 00 02.7** | **+1.0** |
| **PAVA** | **Las Pavas** | **1.68** | **316** | *eP* | **Pn** | **21 59 43.2** | **+1.6** |
| PAVA | | | | *eS* | **Sn** | **22 00 05.1** | **+2.9** |
| **PAVA** | **Las Pavas** | **1.68** | **316** | *eP* | **Pn** | **21 59 43.2** | **+1.6** |
| PAVA | | | | *eS* | **Sn** | **22 00 05.1** | **+2.9** |
| **MATN** | **Matagalpa** | **1.82** | **76** | Pn | **Pn** | **21 59 44.4** | **+1.0** |
| MATN | | | | Sn | **Sn** | **22 00 06.6** | **+1.2** |
| **BOAB** | **BOACO BROADBAN** | **2.02** | **91** | | **Pn** | **21 59 46.7** | **+0.7** |
| **JAYA** | **Jayaque - finc** | **2.03** | **305** | *eP* | **Pn** | **21 59 46.6** | **+0.3** |
| JAYA | | | | *eS* | **Sn** | **22 00 11.5** | **+0.9** |
| JAYA | comp=Z,1μm,0.2s | | | IAML | | 22 00 15.2 | |
| **JAYA** | **Jayaque - finc** | **2.03** | **305** | *eP* | **Pn** | **21 59 46.6** | **+0.3** |
| JAYA | | | | *eS* | **Sn** | **22 00 11.5** | **+0.9** |
| JAYA | comp=Z,1μm,0.2s | | | IAML | | 22 00 15.2 | |
| **MTO3** | **Montecristo** | **2.47** | **320** | Pn | **Pn** | **21 59 54.1** | **+1.8** |
| **ACON** | **Acoyapa** | **2.56** | **102** | Pn | **Pn** | **21 59 53.2** | **-0.2** |
| **HZTE** | **Horizontes, Gu** | **2.75** | **130** | | **Pn** | **21 59 57.6** | **+1.6** |
| **LAPC** | **Finca la Perla** | **2.84** | **127** | *eP* | **Pn** | **21 59 59.9** | **+2.7** |
| **COLC** | **Colonia** | **3.08** | **126** | *eP* | **Pn** | **22 00 02.5** | **+3.0** |
| **ORTG** | **Ortega, Santa** | **3.08** | **133** | | **Pn** | **22 00 02.0** | **+1.5** |
| **ORTG** | **Ortega, Santa** | **3.08** | **133** | *eP* | **Pn** | **22 00 02.5** | **+1.9** |
| **GUAI** | **GUAI** | **3.11** | **135** | *eP* | **Pn** | **22 00 02.3** | **+1.4** |
| **SAJU** | **San Juanillo,** | **3.13** | **140** | *eP* | **Pn** | **22 00 02.2** | **+1.1** |
| **PLVR** | **Palo Verde** | **3.17** | **132** | *eP* | **Pn** | **22 00 03.9** | **+2.0** |
| **DUNO** | **Dulce Nombre,** | **3.26** | **137** | Pn | **Pn** | **22 00 04.1** | **+1.2** |
| **GRZA** | **Playa Garza** | **3.29** | **141** | *eP* | **Pn** | **22 00 04.5** | **+1.1** |
| **ESPN** | **Las Esperanzas** | **3.37** | **95** | Pn | **Pn** | **22 00 06.2** | **+1.8** |
| **INDI** | **Punta índio, G** | **3.41** | **140** | *eP* | **Pn** | **22 00 06.3** | **+1.3** |
| **JTS** | **Las Juntas de** comp=Z,3.7nm,0.3s,baz=347,slow=22,SNR=2.9 | **3.50** | **128** | P | **Pn** | **22 00 07.5** | **+1.2** |
| JTS | comp=Z,3.3nm,0.3s,baz=24,slow=23,SNR=1.3 | | | S | **Sn** | **22 00 46.0** | **-0.6** |
| **JTS** | **Las Juntas de** | **3.50** | **128** | Pn | Pn | 22 00 14.2 | +7.9 |
| JTS | | | | Sn | Sn | 22 00 58.8 | +12 |
| **APG** | **El Apazote** comp=Z,0.7nm,0.3s,baz=147,slow=9.5,SNR=5.0 | **3.64** | **314** | P | **Pn** | **22 00 09.8** | **+1.4** |
| APG | comp=Z,2.4nm,0.3s,baz=43,slow=9.0,SNR=5.2 | | | S | **Sn** | **22 00 53.7** | **+3.5** |
| **LAFE** | **Finca La Fe, P** | **3.85** | **134** | *eP* | **Pn** | **22 00 12.9** | **+1.8** |
| **JACO** | **JACO, Garabito** | **4.13** | **133** | Pn | **Pn** | **22 00 18.7** | **+3.8** |
| **LCR2** | **La Lucha 2** | **4.57** | **126** | *eP* | **Pn** | **22 00 24.0** | **+2.8** |
| **RIMA** | **Rio Macho** | **4.67** | **125** | | **Pn** | **22 00 24.6** | **+2.2** |
| **RIMA** | **Rio Macho** | **4.67** | **125** | *eP* | **Pn** | **22 00 25.2** | **+2.8** |
| **CDM** | **Cerro de Muert** | **4.87** | **126** | *eP* | **Pn** | **22 00 28.9** | **+3.4** |
| **MRVA** | **Moravia de Chi** | **4.98** | **122** | *eP* | **Pn** | **22 00 31.4** | **+4.7** |
| **SRBA** | **San Rafael, Bu** | **5.38** | **127** | Pn | **Pn** | **22 00 34.5** | **+2.3** |
| **SRBA** | **San Rafael, Bu** | **5.38** | **127** | *eP* | **Pn** | **22 00 34.9** | **+2.7** |
| **RIOS** | **Rincon, Osa** | **5.61** | **132** | Pn | **Pn** | **22 00 38.0** | **+2.8** |
| **PRVC** | **Isla de Provid** | **6.27** | **81** | Pn | **Pn** | **22 00 46.1** | **+1.9** |
| **CMIG** | **Matias Romero** comp=Z,0.6nm,0.3s,baz=124,slow=11,SNR=5.1 | **8.29** | **304** | P | **Pn** | **22 01 14.7** | **+2.9** |
| CMIG | comp=Z,0.6nm,0.3s,baz=81,slow=23,SNR=1.7 | | | S | **Sn** | **22 02 47.7** | **+3.7** |
| **MTDJ** | **Mount Denham** | **11.37** | **59** | Pn | **Pn** | **22 01 55.1** | **+1.0** |
| **GTBY** | **Guantanamo Bay** | **14.19** | **57** | P | **P** | **22 02 37.7** | **-0.4** |
| **URIC** | **Uribia, Colomb** | **15.42** | **91** | Pn | **Pn** | **22 02 48.2** | **0.0** |
| URIC | comp=Z,11nm,0.9s | | | IAmb | IAmb | 22 02 49.1 | |
| **KVTX** | **Kingsville** | **17.74** | **329** | P | **P** | **22 03 17.4** | **+0.1** |
| **GRTK** | **Grand Turk** | **18.22** | **58** | P | **P** | **22 03 21.2** | **-1.5** |
| **DR12** | **Loma Pena Alta** | **18.74** | **68** | P | **P** | **22 03 28.4** | **-0.2** |
| **250A** | **Grady** | **19.44** | **4** | P | **Pn** | **22 03 38.4** | **+0.8** |
| **MLPR** | **Magueyes Islan** | **20.69** | **72** | P | Pn | 22 03 51.3 | -1.2 |
| MLPR | comp=Z,11nm,0.8s | | | IAmb | IAmb | 22 04 10.7 | |
| **BIRV** | **Birongo** | **21.13** | **93** | P | **P** | **22 03 53.4** | **-1.1** |
| BIRV | comp=Z,19nm,1.1s | | | IAmb | IAmb | 22 04 01.6 | |
| **GOGA** | **Godfrey** | **21.18** | **10** | P | **P** | **22 03 56.5** | **+1.7** |
| GOGA | comp=Z,6.1nm,0.8s | | | IAmb | IAmb | 22 03 57.8 | |
| **Y49A** | **Blount Mountai** | **21.30** | **3** | P | **P** | **22 03 56.5** | **+0.4** |
| **PDPR** | **Patillas Dam,** | **21.65** | **73** | P | **P** | **22 04 00.5** | **+0.6** |
| PDPR | comp=Z,10nm,1.0s | | | IAmb | IAmb | 22 04 01.9 | |
| **MTP** | **Monte Pirata** | **22.10** | **73** | P | **P** | **22 04 04.3** | **-0.5** |
| **HODGE** | **Hodges** | **22.21** | **12** | P | **P** | **22 04 07.2** | **+1.4** |
| HODGE | comp=Z,4.6nm,0.9s | | | IAmb | IAmb | 22 04 07.9 | |
| **TXAR** | **Lajitas Array** comp=Z,1.1nm,0.6s,baz=146,slow=12,SNR=16 | **22.36** | **321** | P | **P** | **22 04 08.5** | **+0.8** |
| TXAR | comp=Z,0.7nm,0.7s,baz=121,slow=8.8,SNR=3.9 | | | pP | **sP** | **22 04 25.2** | **-3.0** |
| **TX31** | **Lajitas Ar. Si** | **22.36** | **321** | P | **P** | **22 04 08.8** | **+1.1** |
| TX31 | comp=Z,8.9nm,1.1s | | | IAmb | IAmb | 22 04 11.4 | |
| **TX32** | **Lajitas Array** | **22.36** | **321** | P | **P** | **22 04 08.7** | **+1.0** |
| **MIAR** | **Mount Ida** | **22.59** | **347** | P | **P** | **22 04 08.3** | **-1.6** |
| MIAR | comp=Z,5.2nm,1.1s | | | IAmb | IAmb | 22 04 10.2 | |
| **STVI** | **Saint Thomas** | **22.71** | **72** | P | **P** | **22 04 10.7** | **-0.6** |
| **W50A** | **Signal Mountai** | **22.71** | **5** | P | **P** | **22 04 10.9** | **-0.3** |
| **BG3** | **Lake Jocassee** | **22.82** | **10** | P | **P** | **22 04 12.9** | **+0.6** |
| BG3 | comp=Z,6.5nm,1.0s | | | IAmb | IAmb | 22 04 15.0 | |
| **CPCT** | **Cooper Cave** | **23.04** | **7** | P | **P** | **22 04 14.7** | **+0.2** |
| **TKL** | **Tuckaleechee C** | **23.34** | **8** | P | **P** | **22 04 18.1** | **+0.7** |
| TKL | comp=Z,4.2nm,0.9s | | | IAmb | IAmb | 22 04 22.2 | |
| **W57A** | **Gilead** | **23.62** | **16** | P | **P** | **22 04 19.8** | **-0.2** |
| **U49A** | **Red Boiling Sp** | **23.98** | **4** | P | **P** | **22 04 23.8** | **+0.5** |
| **TZTN** | **Tazewell** | **24.24** | **8** | P | **P** | **22 04 25.6** | **-0.1** |
| TZTN | comp=Z,7.0nm,1.1s | | | IAmb | IAmb | 22 04 31.0 | |
| **S39A** | **Bolivar** | **25.58** | **350** | P | **P** | **22 04 36.8** | **-1.0** |
| S39A | comp=Z,3.1nm,0.6s | | | IAmb | IAmb | 22 04 37.3 | |
| **LVC** | **Limon Verde** comp=Z,190nm,18.7s,baz=210,slow=33 | **39.47** | **152** | LR | LR | 22 21 16.1 | |
| **E04D** | **Cinebar** | **44.86** | **326** | P | **P** | **22 07 24.2** | **+1.5** |
| **SCHQ** | **Schefferville** comp=Z,2.6nm,0.5s,baz=222,slow=11,SNR=12 | **45.32** | **17** | P | **P** | **22 07 23.2** | **-3.0** |
| **SCHQ** | **Schefferville** | **45.32** | **17** | P | **P** | **22 07 24.1** | **-2.1** |
| **YKA** | **Yellowknife Ar** comp=Z,0.1nm,0.5s,baz=144,slow=7.0,SNR=3.5 | **53.49** | **345** | P | **P** | **22 08 25.1** | **-3.2** |
| YKA | comp=Z,0.8nm,1.0s,baz=140,slow=7.6,SNR=4.3 | | | pP | **pP** | **22 08 46.2** | **+2.1** |
| **WRA** | **Warramunga Arr** comp=Z,0.3nm,0.7s,baz=86,slow=2.9,SNR=1.7 | **139.01** | **254** | PKP | **PKPdf** | **22 18 34.8** | **-0.3** |
| WRA | comp=Z,0.4nm,0.6s,baz=90,slow=2.8,SNR=2.2 | | | pPKP | **sPKPdf** | **22 18 56.2** | **-2.7** |
| **ASAR** | **Alice Springs** comp=Z,0.2nm,0.3s,baz=96,slow=0.9,SNR=2.2 | **139.03** | **248** | PKP | **PKPdf** | **22 18 32.8** | **-2.3** |

*NEIC **18** 22:02:48.8±1.0, 59°.84N±0°.02×152°.94W±0°.07, h108km±7km, Error ellipse: s-maj=5.8km s-min=2.3km az=67.0*
*AEIC **18** 22:02:49.1±1.3, 59°.86N±0°.03×152°.92W±0°.07, h102km±5km, ML3.1, ML3.2/116(NEIC), Error ellipse: s-maj=5.6km s-min=4.3km az=60.0*
*IDC **18** 22:02:52.6±8.2, 60°.23N×152°.85W, h126km±68km, mb2.8/2, mb1 3.0/4, mb1mx2.9/37, mbtmp3.3/4, Error ellipse: s-maj=67.6km s-min=36.5km az=19.0*

**ISC 18 22:02:49.1±1.0, 59°.90N±0°.05×152°.86W±0°.05, h100km, n95, σ0°.96/92, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSO** | **Redoubt South** | **0.57** | **5** | | **Pn** | **22 03 06.5** | **+0.8** |
| RSO | | | | Sn | **Sn** | **22 03 19.4** | **+1.4** |
| **HOM** | **Homer** | **0.66** | **111** | Pn | **Pn** | **22 03 06.7** | **+0.5** |
| HOM | | | | | **Sn** | **22 03 20.8** | **+1.8** |
| HOM | comp=N,734nm,0.4s | | | IAML | | 22 03 21.9 | |
| **O19K** | **Port Alsworth** | **0.79** | **293** | | **Pn** | **22 03 07.9** | **+0.5** |
| O19K | | | | Sn | **Sn** | **22 03 21.8** | **+0.8** |
| O19K | comp=E,1μm,0.5s | | | IAML | | 22 03 22.5 | |
| O19K | comp=N,1μm,0.4s | | | IAML | | 22 03 22.5 | |
| **CNPM** | **China Poot** | **0.90** | **114** | | **Pn** | **22 03 09.0** | **+0.4** |
| CNPM | | | | Sn | **Sn** | **22 03 24.0** | **+0.9** |
| CNPM | comp=E,908nm,0.3s | | | IAML | | 22 03 24.1 | |
| CNPM | comp=N,768nm,0.4s | | | IAML | | 22 03 24.4 | |
| **BRLK** | **Bradley Lake** | **1.01** | **97** | | **Pn** | **22 03 10.1** | **+0.4** |
| BRLK | comp=E,1μm,0.2s | | | IAML | | 22 03 26.5 | |
| BRLK | comp=N,956nm,0.4s | | | IAML | | 22 03 26.5 | |
| **Q19K** | **Cape Douglas,** | **1.05** | **203** | | **Pn** | **22 03 09.7** | **-0.4** |
| **CAPN** | **Captain Cook N** | **1.22** | **43** | Pn | **Pn** | **22 03 14.7** | **+2.7** |
| **N19K** | **Bonanza Creek** | **1.22** | **319** | | **Pn** | **22 03 12.7** | **+0.6** |
| **P18K** | **Big Mountain,** | **1.30** | **248** | Pn | **Pn** | **22 03 12.5** | **-0.6** |
| **SPU** | **Mount Spurr** | **1.35** | **17** | | **Pn** | **22 03 14.4** | **+0.8** |
| **SEW** | **Seward** | **1.73** | **82** | | **Pn** | **22 03 18.4** | **+0.3** |
| **SVW2** | **Sparrevohn** | **1.81** | **313** | | **Pn** | **22 03 19.5** | **+0.3** |
| **FIS** | **Fire Island** | **1.81** | **45** | Pn | **Pn** | **22 03 20.1** | **+0.9** |
| FIS | comp=N,188nm,0.4s | | | IAML | | 22 03 49.9 | |
| FIS | comp=E,208nm,2.5s | | | IAML | | 22 04 08.1 | |
| **RC01** | **Rabbit Creek A** | **1.96** | **51** | | **Pn** | **22 03 21.9** | **+0.8** |
| RC01 | comp=E,207nm,0.4s | | | IAML | | 22 03 47.6 | |
| **KDAK** | **Kodiak Island** | **2.12** | **176** | | **Pn** | **22 03 22.1** | **-1.1** |
| KDAK | comp=E,104nm,2.6s | | | IAML | | 22 03 50.4 | |
| KDAK | comp=E,144nm,2.9s | | | IAML | | 22 03 55.2 | |
| **M19K** | **Big River Lodg** | **2.15** | **340** | | **Pn** | **22 03 23.8** | **+0.2** |
| **M22K** | **Willow** | **2.30** | **35** | Pn | **Pn** | **22 03 26.6** | **+1.1** |
| **PWL** | **Port Wells** | **2.45** | **65** | | **Pn** | **22 03 28.2** | **+0.7** |
| **L19K** | **White Mountain** | **2.49** | **338** | | **Pn** | **22 03 28.1** | **0.0** |
| **PMR** | **Palmer** | **2.50** | **46** | | **Pn** | **22 03 28.1** | **0.0** |
| **KNK** | **Knik Glacier** | **2.65** | **53** | Pn | **Pn** | **22 03 29.6** | **-0.6** |
| KNK | comp=E,138nm,0.7s | | | IAML | | 22 04 01.6 | |
| KNK | comp=N,136nm,0.5s | | | IAML | | 22 04 03.2 | |
| **OHAK** | **Old Harbor** | **2.69** | **185** | Pn | **Pn** | **22 03 29.6** | **-1.1** |
| OHAK | comp=N,99nm,3.1s | | | IAML | | 22 04 27.0 | |
| OHAK | comp=E,126nm,3.5s | | | IAML | | 22 04 52.1 | |
| **GHO** | **Glory Hole Cre** | **2.69** | **44** | | **Pn** | **22 03 30.9** | **+0.1** |
| GHO | comp=N,81nm,0.4s | | | IAML | | 22 04 05.2 | |
| GHO | comp=E,118nm,0.4s | | | IAML | | 22 04 05.4 | |
| **CUT** | **Chulitna** | **2.81** | **25** | | **Pn** | **22 03 31.9** | **-0.4** |
| CUT | comp=N,70nm,0.5s | | | IAML | | 22 04 14.2 | |
| CUT | comp=E,80nm,1.0s | | | IAML | | 22 04 35.4 | |
| **SML** | **Sawmill** | **2.93** | **47** | | **Pn** | **22 03 33.9** | **-0.1** |
| SML | comp=N,54nm,0.8s | | | IAML | | 22 04 09.4 | |
| SML | comp=E,64nm,1.2s | | | IAML | | 22 04 09.5 | |
| **GLI** | **Glacier Island** | **3.03** | **69** | Pn | **Pn** | **22 03 34.7** | **-0.5** |
| GLI | comp=N,85nm,0.5s | | | IAML | | 22 04 10.4 | |
| **PPLA** | **Purkeypile** | **3.03** | **6** | | **Pn** | **22 03 37.5** | **+2.2** |
| **FID** | **Port Fidalgo** | **3.29** | **72** | Pn | **Pn** | **22 03 38.0** | **-0.6** |
| **SCM** | **Sheep Creek Mo** | **3.33** | **52** | Pn | **Pn** | **22 03 39.5** | **+0.2** |
| SCM | comp=E,44nm,0.3s | | | IAML | | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,11nm,3.8s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.11** | **24** | IAML | | | 22 05 00.0 | |
| | comp=N,9.8nm,4.5s | | | | | | | |
| WRH | | | | IAML | | | 22 05 08.0 | |
| | comp=E,18nm,4.2s | | | | | | | |
| **MLY** | **Manley** | **5.25** | **10** | IAML | | | 22 06 54.1 | |
| | comp=E,8.9nm,3.8s | | | | | | | |
| MLY | | | | IAML | | | 22 07 40.6 | |
| | comp=N,11nm,3.6s | | | | | | | |
| **ISLE** | **Juniper Island** | **5.29** | **78** | Pn | **Pn** | | **22 04 05.7** | **-0.1** |
| **HDA** | **Harding Lake** | **5.31** | **29** | IAML | | | 22 05 06.8 | |
| | comp=N,13nm,0.8s | | | | | | | |
| HDA | | | | IAML | | | 22 05 17.3 | |
| | comp=E,12nm,2.7s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.32** | **24** | IAML | | | 22 04 54.9 | |
| | comp=N,8.6nm,3.3s | | | | | | | |
| CCB | | | | IAML | | | 22 05 58.0 | |
| | comp=E,12nm,3.7s | | | | | | | |
| **I21K** | **Tanana** | **5.32** | **4** | | **Pn** | | **22 04 07.5** | **+1.5** |
| I21K | | | | IAML | | | 22 05 20.4 | |
| | comp=N,17nm,3.9s | | | | | | | |
| I21K | | | | IAML | | | 22 06 34.2 | |
| | comp=E,17nm,4.0s | | | | | | | |
| **MENT** | **Mentasta** | **5.34** | **51** | Pn | **Pn** | | **22 04 07.5** | **+1.0** |
| MENT | | | | IAML | | | 22 06 36.3 | |
| | comp=N,19nm,0.1s | | | | | | | |
| **M26K** | **Nabesna, AK** | **5.40** | **58** | | **Pn** | | **22 04 08.6** | **+1.4** |
| **RIDG** | **Independent Ri** | **5.41** | **41** | | **Pn** | | **22 04 08.7** | **+1.3** |
| **MESA** | **MESA** | **5.48** | **82** | Pn | **Pn** | | **22 04 09.3** | **+1.0** |
| **COLA** | **College** | **5.51** | **23** | | **Pn** | | **22 04 09.0** | **+0.4** |
| **L26K** | **Log Cabin Wild** | **5.54** | **51** | Pn | **Pn** | | **22 04 10.2** | **+1.2** |
| **YAH** | **Yahtse** | **5.58** | **80** | | **Pn** | | **22 04 10.7** | **+0.9** |
| **DOT** | **Dot Lake** | **5.62** | **44** | Pn | **Pn** | | **22 04 10.9** | **+0.8** |
| **IL31** | | **5.63** | **27** | | **Pn** | | **22 04 10.3** | **+0.2** |
| **ILAR** | **Eielson Array** | **5.63** | **27** | P | **Pn** | | **22 04 10.3** | **+0.1** |
| | comp=N,1.1nm,0.3s,baz=219,slow=14,SNR=42 | | | | | | | |
| ILAR | | | | S | **Sn** | | **22 05 10.1** | **-3.3** |
| | comp=N,0.5nm,0.3s,baz=198,slow=17,SNR=5.1 | | | | | | | |
| **BARN** | **Barnard Glacie** | **5.66** | **73** | Pn | **Pn** | | **22 04 12.0** | **+1.1** |
| **H21K** | **Melozitna Rive** | **5.78** | **0** | | **Pn** | | **22 04 13.2** | **+0.8** |
| **POKR** | **Poker Plat Res** | **5.81** | **23** | Pn | **Pn** | | **22 04 12.9** | **+0.3** |
| **SCRK** | **Sand Creek** | **5.85** | **42** | Pn | **Pn** | | **22 04 13.3** | **-0.1** |
| **M27K** | **Edge Creek, AK** | **5.87** | **60** | Pn | **Pn** | | **22 04 15.2** | **+1.6** |
| **TABL** | **Table Mountain** | **5.88** | **80** | Pn | **Pn** | | **22 04 14.8** | **+1.0** |
| **IMAR** | **Indian Mountai** | **6.12** | **357** | Pn | **Pn** | | **22 04 17.9** | **+1.0** |
| **L27K** | **Beaver Creek,** | **6.16** | **54** | Pn | **Pn** | | **22 04 18.3** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **6.18** | **54** | Pn | **Pn** | | **22 04 19.0** | **+1.2** |
| **PCA** | **Pinnacle** | **6.33** | **83** | Pn | **Pn** | | **22 04 20.8** | **+1.0** |
| **H24K** | **Noodor Dome** | **6.38** | **19** | Pn | **Pn** | | **22 04 21.0** | **+0.5** |
| **PRP** | **Porcupine Dome** | **6.57** | **28** | Pn | **Pn** | | **22 04 22.6** | **-0.5** |
| **BCPM** | **Bancas Point** | **6.65** | **84** | Pn | **Pn** | | **22 04 22.4** | **-1.7** |
| **FYU** | **Fort Yukon** | **7.52** | **24** | Pn | **Pn** | | **22 04 36.1** | **+0.2** |
| **DAWY** | **Dawson** | **7.59** | **51** | Pn | **Pn** | | **22 04 37.1** | **+0.2** |
| **HYT** | **Haines Junctio** | **7.67** | **76** | Pn | **Pn** | | **22 04 38.7** | **+0.6** |
| **M30M** | **Minto, Yukon** | **8.20** | **64** | Pn | **Pn** | | **22 04 45.6** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **8.40** | **22** | Pn | **Pn** | | **22 04 48.0** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **8.89** | **8** | Pn | **Pn** | | **22 04 56.6** | **+2.1** |
| **WHY** | **Whitehorse** | **8.96** | **77** | Pn | **Pn** | | **22 04 55.7** | **0.0** |
| **YKA** | **Yellowknife Ar** | **18.43** | **65** | P | **P** | | **22 06 57.1** | **+0.8** |
| | comp=N,0.1nm,0.3s,baz=277,slow=9.9,SNR=10 | | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **306** | P | **P** | | **22 12 09.4** | **+0.3** |
| | comp=N,0.3nm,0.5s,baz=48,slow=4.3,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.56** | **321** | P | **P** | | **22 13 12.9** | **-2.3** |
| | comp=N,0.1nm,0.5s,baz=45,slow=2.7,SNR=1.5 | | | | | | | |

**IDC 18 22:06:17.7±2.5,1°28N×126°41E,h0km,mb3.3/3, mb1 3.5/3,mb1mx3.3/29,mbtmp3.4/3,Error ellipse: s-maj=266.1km s-min=25.5km az=65.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.48** | **160** | P | P | 22 11 18.4 | -0.5 |
| | 0.3nm,0.7s,baz=337,slow=11,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **25.85** | **164** | P | P | 22 11 51.5 | +0.3 |
| | 0.1nm,0.4s,baz=350,slow=16,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.38** | **326** | P | P | 22 16 21.9 | -0.1 |
| | 0.7nm,0.5s,baz=126,slow=7.7,SNR=16 | | | | | | |

*IASPEI **18** 22:21:09.9±0.8,38°.36N±0°.02×22°.03E±0°.02,h13km±4km, mb3.7/9,Error ellipse: s-maj=3.2km s-min=2.8km az=32.3, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*IDC **18** 22:21:09.0±1.1,38°.43N×22°.08E,h0km,mb3.6/10, mb1 3.7/13,mb1mx3.5/46,mbtmp3.6/13,ML3.0/3,Error ellipse: s-maj=22.1km s-min=19.0km az=174.0*

*THE **18** 22:21:10.2,38°.37N×22°.03E,h12km,ML3.5/7,Error ellipse: s-maj=0.7km s-min=0.5km az=130.0*

*ATH **18** 22:21:10.3,38°.35N×22°.03E,h12km±1km,ML3.4/13,Error ellipse: s-maj=1.2km s-min=0.8km az=35.0*

**ISC 18 22:21:10.1±0.7,38°.36N±0°.02×22°.01E±0°.02,h14km±4km, n112,σ1s83/135,mb3.7/9,7C-2D,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRIZ** | **Trizonia** | **0.05** | **81** | P | **Pg** | **22 21 12.2** | **-0.6** |
| TRIZ | | | | S | **Sg** | **22 21 13.5** | **-1.1** |
| | 17μm,0.3s | | | | | | |
| **TRIZ** | **Trizonia** | **0.05** | **81** | P | **Pg** | **22 21 12.2** | **-0.6** |
| TRIZ | | | | S | **Sg** | **22 21 13.6** | **-0.9** |
| **EFP** | **Efpalio** | **0.11** | **310** | P | **Pg** | **22 21 13.1** | **-0.3** |
| EFP | | | | S | **Sg** | **22 21 15.6** | **0.0** |
| | 57μm,0.3s | | | | | | |
| **EFP** | **Efpalio** | **0.11** | **310** | P | **Pg** | **22 21 13.2** | **-0.2** |
| EFP | | | | S | **Sg** | **22 21 15.6** | **0.0** |
| EFP | | | | AML | AML | 22 21 15.8 | |
| EFP | | | | AML | AML | 22 21 15.8 | |
| | comp=N,96408μm,0.3s | | | | | | |
| **LAKA** | **Lakka** | **0.12** | **193** | P | **Pg** | **22 21 13.3** | **-0.3** |
| LAKA | | | | S | **Sg** | **22 21 15.3** | **-0.6** |
| | comp=N,67μm,0.5s | | | | | | |
| **LAKA** | **Lakka** | **0.12** | **193** | P | **Pg** | **22 21 13.3** | **-0.3** |
| **ALIK** | **Aliki, Aigiali** | **0.12** | **141** | P | **Pg** | **22 21 13.5** | **-0.1** |
| ALIK | | | | S | **Sg** | **22 21 16.4** | **+0.5** |
| **UPR** | **University Cam** | **0.19** | **248** | P | **Pg** | **22 21 14.5** | **-0.1** |
| UPR | | | | S | **Sg** | **22 21 18.4** | **+0.8** |
| **ANX** | **Ano Chora** | **0.25** | **343** | P | **Pg** | **22 21 15.6** | **+0.1** |
| ANX | | | | S | **Sg** | **22 21 19.9** | **+0.7** |
| | comp=N,61μm,0.3s | | | | | | |
| **ANX** | **Ano Chora** | **0.25** | **343** | P | **Pg** | **22 21 15.7** | **+0.1** |
| ANX | | | | S | **Sg** | **22 21 20.0** | **+0.7** |
| ANX | | | | AML | AML | 22 21 20.1 | |
| ANX | | | | AML | AML | 22 21 20.3 | |
| | comp=E,99715μm,0.3s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **0.33** | **161** | P | **Pg** | **22 21 16.6** | **-0.4** |
| KLV | | | | S | **Sg** | **22 21 22.4** | **+0.8** |
| | comp=E,2μm,0.5s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **0.33** | **161** | P | **Pg** | **22 21 16.6** | **-0.4** |
| KLV | | | | S | **Sg** | **22 21 22.0** | **+0.4** |
| **DLFA** | **Delphi** | **0.40** | **72** | P | **Pg** | **22 21 17.7** | **-0.4** |
| DLFA | | | | S | **Sb** | **22 21 24.0** | **-1.0** |
| DLFA | | | | AML | AML | 22 21 27.0 | |
| | comp=N,11051μm,0.3s | | | | | | |
| DLFA | | | | AML | AML | 22 21 27.1 | |
| | comp=E,10364μm,0.5s | | | | | | |
| **DRO** | **Drossia** | **0.47** | **211** | P | **Pg** | **22 21 19.4** | **-0.1** |
| DRO | | | | S | **Sb** | **22 21 27.1** | **+0.1** |
| | comp=E,7μm,0.4s | | | | | | |
| **DRO** | **Drossia** | **0.47** | **211** | P | **Pg** | **22 21 19.5** | **0.0** |
| DRO | | | | AML | AML | 22 21 34.5 | |
| | comp=N,14150μm,0.3s | | | | | | |
| DRO | | | | AML | AML | 22 21 35.2 | |
| | comp=E,12016μm,0.4s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.52** | **235** | P | **Pg** | **22 21 20.5** | **+0.1** |
| RLS | | | | S | **Sg** | **22 21 28.6** | **+1.1** |
| | comp=E,2μm,0.3s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.52** | **235** | P | **Pg** | **22 21 20.6** | **+0.1** |
| RLS | | | | S | **Sb** | **22 21 28.8** | **+0.3** |
| RLS | | | | AML | AML | 22 21 30.0 | |
| | comp=N,5271μm,0.3s | | | | | | |
| RLS | | | | AML | AML | 22 21 35.1 | |
| | comp=E,2368μm,0.5s | | | | | | |
| **EVR** | **Evrytania** | **0.58** | **344** | P | **Pg** | **22 21 21.4** | **-0.2** |
| **EVR** | **Evrytania** | **0.58** | **344** | P | **Pg** | **22 21 21.7** | **+0.1** |
| EVR | | | | AML | AML | 22 21 33.4 | |
| | comp=N,14826μm,0.2s | | | | | | |
| EVR | | | | AML | AML | 22 21 33.5 | |
| | comp=E,12391μm,0.2s | | | | | | |
| **THAL** | **Thalero** | **0.60** | **122** | P | **Pg** | **22 21 21.8** | **-0.2** |
| **THAL** | **Thalero** | **0.60** | **122** | P | **Pg** | **22 21 21.8** | **-0.2** |
| **MAKR** | **Makrakomi, Fth** | **0.66** | **8** | P | **Pg** | **22 21 22.9** | **-0.2** |
| **MAKR** | **Makrakomi, Fth** | **0.66** | **8** | P | **Pg** | **22 21 23.0** | **-0.1** |
| MAKR | | | | AML | AML | 22 21 36.4 | |
| | comp=N,7905μm,0.6s | | | | | | |
| MAKR | | | | AML | AML | 22 21 36.7 | |
| | comp=E,8254μm,0.2s | | | | | | |
| **AGG** | **Agios Georgios** | **0.71** | **20** | P | **Pg** | **22 21 23.1** | **-0.9** |
| **AGG** | **Agios Georgios** | **0.71** | **20** | P | **Pg** | **22 21 23.2** | **-0.8** |
| AGG | | | | AML | AML | 22 21 36.0 | |
| | comp=E,5595μm,0.4s | | | | | | |
| AGG | | | | AML | AML | 22 21 39.2 | |
| | comp=N,7443μm,0.5s | | | | | | |
| **LKR** | **Lokris** | **0.83** | **69** | P | **Pg** | **22 21 25.3** | **-0.9** |
| **LKR** | **Lokris** | **0.83** | **69** | P | **Pg** | **22 21 25.4** | **-0.8** |
| LKR | | | | AML | AML | 22 21 42.9 | |
| | comp=N,4168μm,0.2s | | | | | | |
| LKR | | | | AML | AML | 22 21 43.0 | |
| | comp=E,5202μm,0.2s | | | | | | |
| **ATAL** | **Atalanti** | **0.86** | **67** | P | **Pg** | **22 21 25.5** | **-1.3** |
| **ATAL** | **Atalanti** | **0.86** | **67** | P | **Pg** | **22 21 25.6** | **-1.2** |
| ATAL | | | | AML | AML | 22 21 43.6 | |
| | comp=E,2701μm,0.5s | | | | | | |
| ATAL | | | | AML | AML | 22 21 43.7 | |
| | comp=N,4027μm,0.4s | | | | | | |
| **VIL2** | **Platees** | **1.00** | **98** | P | **Pn** | **22 21 29.9** | **+0.1** |
| **VILL** | **Villia** | **1.04** | **100** | P | **Pb** | **22 21 29.9** | **-0.1** |
| **NYDR** | **Nydri-Lefkada** | **1.09** | **289** | P | **Pb** | **22 21 30.4** | **-0.4** |
| **NYDR** | **Nydri-Lefkada** | **1.09** | **289** | P | **Pb** | **22 21 30.4** | **-0.4** |
| **EVGI** | **Lefkada island** | **1.10** | **284** | P | **Pb** | **22 21 30.7** | **-0.2** |
| **EVGI** | **Lefkada island** | **1.10** | **284** | P | **Pb** | **22 21 30.5** | **-0.4** |
| **VLS** | **Valsamata** | **1.13** | **261** | P | **Pb** | **22 21 30.9** | **-0.6** |
| **VLS** | **Valsamata** | **1.13** | **261** | P | **Pb** | **22 21 31.0** | **-0.6** |
| VLS | | | | AML | AML | 22 21 50.3 | |
| | comp=N,4592μm,0.2s | | | | | | |
| VLS | | | | AML | AML | 22 21 51.9 | |
| | comp=E,2196μm,0.2s | | | | | | |
| **FSK** | **Fiskardo** | **1.14** | **276** | P | **Pb** | **22 21 31.6** | **-0.1** |
| **FSK** | **Fiskardo** | **1.14** | **276** | P | **Pb** | **22 21 31.5** | **-0.1** |
| FSK | | | | AML | AML | 22 21 51.2 | |
| | comp=E,3152μm,0.2s | | | | | | |
| FSK | | | | AML | AML | 22 21 55.1 | |
| | comp=N,1639μm,0.5s | | | | | | |
| **LKD2** | **Lefkada island** | **1.15** | **292** | P | **Pb** | **22 21 31.9** | **+0.1** |
| **EPID** | **Epidvros** | **1.15** | **130** | P | **Pb** | **22 21 31.3** | **-0.4** |
| **PSDA** | **Pessada-Kefalo** | **1.15** | **258** | P | **Pb** | **22 21 31.5** | **-0.3** |
| **PSDA** | **Pessada-Kefalo** | **1.15** | **258** | P | **Pb** | **22 21 31.5** | **-0.3** |
| **TSLK** | **Tsoukalades, L** | **1.16** | **294** | P | **Pb** | **22 21 32.4** | **+0.4** |
| **DRAG** | **Dragano-Lefkad** | **1.17** | **287** | P | **Pn** | **22 21 32.1** | **-0.1** |
| **ITM** | **Ithomi** | **1.18** | **183** | P | **Pn** | **22 21 31.6** | **-0.6** |
| **THL** | **Klokotos Trika** | **1.21** | **0** | P | **Pn** | **22 21 32.4** | **-0.2** |
| THL | | | | AML | AML | 22 21 53.8 | |
| | comp=E,2789μm,0.5s | | | | | | |
| THL | | | | AML | AML | 22 21 55.2 | |
| | comp=N,1491μm,0.6s | | | | | | |
| **KEF4** | **Livadi, Kephal** | **1.25** | **266** | P | **Pn** | **22 21 33.4** | **+0.2** |
| **DMLN** | **Damoulianata-K** | **1.29** | **265** | P | **Pn** | **22 21 33.9** | **+0.1** |
| **KEF3** | **Kipouria, Keph** | **1.32** | **264** | P | **Pn** | **22 21 33.9** | **-0.2** |
| **KRND** | **KRANIDI** | **1.33** | **137** | P | **Pb** | **22 21 34.8** | **0.0** |
| **XOR** | **Xorichti** | **1.36** | **42** | P | **Pb** | **22 21 35.8** | **-0.6** |
| **VLY** | **Voula,Athens** | **1.49** | **109** | P | **Pb** | **22 21 37.3** | **-0.3** |
| **KYMI** | **Kymi, Euboea I** | **1.66** | **80** | P | **Pn** | **22 21 39.5** | **+0.7** |
| **KPRO** | **Kipourio** | **1.67** | **343** | P | **Pb** | **22 21 41.4** | **+0.7** |
| **VLI** | **Veliai** | **1.79** | **156** | P | **Pn** | **22 21 41.7** | **+1.0** |
| **OHR** | **Ohrid** | **2.91** | **342** | *i* Pg | **Pb** | **22 22 01.2** | **-0.5** |
| **VAY** | **Valandovo** | **2.99** | **8** | *i* Pg | **Pn** | **22 21 58.9** | **+1.8** |
| **IDI** | **Anoyia** | **3.84** | **142** | ⇓P | **Pn** | **22 22 12.6** | **+3.8** |
| **IDI** | **Anoyia** | **3.84** | **142** | Pn | **Pn** | **22 22 10.8** | **+2.0** |
| | comp=N,1.0nm,0.3s,baz=273,slow=9.3,SNR=1.4 | | | | | | | |
| IDI | | | | Sn | **Sn** | **22 22 52.6** | **-1.2** |
| | comp=N,1.9nm,0.3s,baz=282,slow=18,SNR=2.4 | | | | | | | |
| **TIP** | **Timpagrande** | **4.19** | **280** | ⇑P | **Pn** | **22 22 17.0** | **+3.4** |
| **VTS** | **Vitosha** | **4.36** | **12** | ⇑P | **Pn** | **22 22 18.3** | **+2.3** |
| VTS | | | | ⇑S | **Sn** | **22 23 08.6** | **+2.0** |
| **PDG** | **Podgorica** | **4.58** | **334** | ⇓P | **Pn** | **22 22 22.1** | **+3.2** |
| PDG | | | | ⇑S | **Sn** | **22 23 16.5** | **+4.6** |
| **PDG** | **Podgorica** | **4.58** | **334** | *e*Pn | **Pn** | **22 22 20.3** | **+1.4** |
| **HCY** | **Herceg Novi** | **4.89** | **328** | *e*Pn | **Pn** | **22 22 24.8** | **+1.6** |
| **TREB** | **Trebinje** | **5.17** | **329** | *e*Pn | **Pn** | **22 22 28.4** | **+1.3** |
| **BRY** | **Bratogost** | **5.25** | **331** | *e*Pn | **Pn** | **22 22 26.2** | **-2.1** |
| **UPM** | **Unac-Piva** | **5.38** | **335** | *e*Pn | **Pn** | **22 22 33.4** | **+3.2** |
| **STON** | **Ston** | **5.58** | **325** | *e*Pn | **Pn** | **22 22 33.3** | **+0.7** |
| **STON** | **Ston** | **5.58** | **325** | *e*Pn | **Pn** | **22 22 33.3** | **+0.7** |
| STON | | | | Sn | **Sn** | **22 23 29.3** | **-7.1** |
| **RUDO** | **Rudo** | **5.62** | **340** | *e*Pn | **Pn** | **22 22 35.3** | **+2.0** |
| **BBLS** | **Lazić** | **5.84** | **341** | *e*Pn | **Pn** | **22 22 39.2** | **+2.8** |
| **LSTV** | **Lastovo** | **5.88** | **320** | *e*Pn | **Pn** | **22 22 36.8** | **-0.1** |
| LSTV | | | | Sn | Sn | 22 23 35.3 | -8.7 |
| **DIVS** | **Divibare** | **5.93** | **346** | *e*Pn | **Pn** | **22 22 39.9** | **+2.3** |
| **MAKA** | **Makarska** | **6.21** | **324** | *e*Pn | **Pn** | **22 22 42.6** | **+1.3** |
| MAKA | | | | Sn | **Sn** | **22 23 45.1** | **-7.0** |
| **RICI** | **Ricice** | **6.32** | **326** | *e*Pn | **Pn** | **22 22 43.5** | **+0.6** |
| RICI | | | | Sn | **Sn** | **22 23 49.5** | **-5.4** |
| **HVAR** | **Hvar** | **6.40** | **321** | *e*Pn | **Pn** | **22 22 45.0** | **+1.0** |
| **FRGS** | **Fruska Gora** | **6.99** | **347** | *e*Pn | **Pn** | **22 22 52.7** | **+0.6** |
| **KIJV** | **Kijevo** | **7.05** | **325** | *e*Pn | **Pn** | **22 22 54.4** | **+1.5** |
| KIJV | | | | Sn | **Sn** | **22 24 07.0** | **-5.8** |
| **ZIRJ** | **Zirje** | **7.15** | **320** | *e*Pn | **Pn** | **22 22 55.0** | **+0.8** |
| ZIRJ | | | | Sn | **Sn** | **22 24 07.1** | **-8.2** |
| **ARR** | **Arges** | **7.27** | **15** | ⇑P | **Pn** | **22 22 57.3** | **+1.3** |
| **MORI** | **Morici** | **7.27** | **321** | *e*Pn | **Pn** | **22 22 57.8** | **+1.9** |
| MORI | | | | Sn | Sn | 22 24 09.4 | -8.8 |
| **BLY** | **Banja Luka** | **7.34** | **332** | *e*Pn | **Pn** | **22 22 57.1** | **+0.3** |
| **MRAK** | **Mrakovica** | **7.67** | **332** | *e*Pn | **Pn** | **22 23 01.8** | **+0.4** |
| **MLR** | **Muntele Rosu** | **7.71** | **21** | ⇑P | **Pn** | **22 23 02.0** | **0.0** |
| **MLR** | **Muntele Rosu** | **7.71** | **21** | Pn | **Pn** | **22 23 02.0** | **0.0** |
| | comp=N,0.1nm,0.3s,baz=258,slow=20,SNR=2.1 | | | | | | | |
| **UDBI** | **Udbina** | **7.75** | **325** | *e*Pn | **Pn** | **22 23 04.5** | **+2.0** |
| UDBI | | | | Sn | **Sn** | **22 24 24.2** | **-5.7** |
| **PLIT** | **Plitvice** | **8.08** | **326** | *e*Pn | **Pn** | **22 23 08.1** | **+1.1** |
| **NVLJ** | **Novalja** | **8.19** | **321** | *e*Pn | **Pn** | **22 23 08.8** | **+0.3** |
| **MOSL** | **Moslavina** | **8.24** | **333** | *e*Pn | **Pn** | **22 23 10.0** | **+0.8** |
| **PLOR** | **Plostina** | **8.24** | **23** | ⇑P | **Pn** | **22 23 09.1** | **-0.2** |
| **RABC** | **Rab** | **8.37** | **322** | *e*Pn | **Pn** | **22 23 10.6** | **-0.5** |
| **SMRN** | **Sveta Marina** | **8.89** | **321** | *e*Pn | **Pn** | **22 23 18.3** | **+0.2** |
| **CRES** | **Cresnjev** | **8.91** | **329** | *e*Pn | **Pn** | **22 23 17.4** | **-1.0** |
| **BRTR** | **Keskin Array B** | **9.15** | **78** | Pn | **Pn** | **22 23 24.8** | **+3.0** |
| | comp=N,0.1nm,0.3s,baz=328,slow=27,SNR=4.5 | | | | | | | |
| **CEY** | **Cerknica** | **9.28** | **325** | *e*Pn | **Pn** | **22 23 23.5** | **0.0** |
| **SOKA** | **Soboth** | **9.78** | **330** | *e*Pn | **Pn** | **22 23 31.5** | **+1.2** |
| | comp=N,0.4nm,0.3s | | | | | | | |
| **OBKA** | **Obir** | **9.83** | **328** | *e*Pn | **Pn** | **22 23 31.9** | **+0.8** |
| | comp=N,0.5nm,0.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **10.92** | **323** | *e*Pn | **Pn** | **22 23 47.1** | **+1.1** |
| | comp=N,1.7nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **11.71** | **323** | *e*Pn | **Pn** | **22 23 58.6** | **+1.8** |
| | comp=N,1.7nm,0.3s | | | | | | | |
| **MOTA** | **Moosalm** | **12.02** | **322** | *e*Pn | **Pn** | **22 24 02.2** | **+1.1** |
| | comp=N,1.2nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **20.21** | **282** | P | Pn | 22 25 46.9 | +0.3 |
| | comp=N,0.8nm,0.7s,baz=74,slow=11,SNR=8.0 | | | | | | | |
| **HFS** | **Hagfors** | **22.43** | **349** | P | **P** | **22 26 08.4** | **+0.2** |
| | comp=N,1.0nm,0.5s,baz=153,slow=13,SNR=2.1 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **23.69** | **347** | P | **P** | **22 26 22.4** | **+1.2** |
| | comp=Z,1.2nm,0.7s,baz=161,slow=11 | | | | | | | |
| **NOA** | **NORSAR Array B** | **23.69** | **347** | P | **P** | **22 26 21.4** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=150,slow=11,SNR=5.0 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.97** | **323** | P | **P** | **22 26 24.5** | **+0.7** |
| | comp=Z,2.2nm,0.8s,baz=125,slow=9.4,SNR=6.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.92** | **221** | P | **P** | **22 27 27.1** | **+0.6** |
| | comp=Z,0.7nm,0.6s,baz=39,slow=9.5,SNR=3.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.21** | **59** | P | **P** | **22 29 19.2** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=275,slow=7.6,SNR=27 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.70** | **48** | P | **P** | **22 29 21.5** | **-0.9** |
| | comp=Z,0.4nm,0.4s,baz=270,slow=7.2,SNR=2.4 | | | | | | | |
| **SCHQ** | **Schefferville** | **59.12** | **318** | P | **P** | **22 31 11.1** | **+1.2** |
| | comp=Z,1.2nm,0.6s,baz=57,slow=4.7,SNR=3.6 | | | | | | | |
| **SONM** | **Songino Array** | **59.43** | **51** | P | **P** | **22 31 12.7** | **+0.4** |
| | comp=Z,0.5nm,1.0s,baz=258,slow=4.3,SNR=2.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **73.62** | **341** | P | **P** | **22 32 44.1** | **+1.5** |
| | comp=Z,0.1nm,0.4s,baz=36,slow=5.1,SNR=2.8 | | | | | | | |

*IDC **18** 22:27:21.2±1.1,12°.98N×124°.65E,h0km,mb3.4/6, mb1 3.6/6,mb1mx3.4/44,mbtmp3.4/6,Error ellipse: s-maj=94.5km s-min=21.5km az=69.0*

*MAN **18** 22:27:22.8,12°.96N×124°.45E,h3km,mb4.6,ML3.5,MS3.4*

**ISC 18 22:27:22.7±1.0,12°.9N±0°.1×124°.5E±0°.1,h10km,n14, σ0s97/10,mb3.5/6,2D,Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMPH** | **Masbate** | | **1.02 237** | ⇓*i*P | **Pn** | **22 27 43.1** | **0.0** |
| MMPH | | | | *i* S | **Sn** | **22 27 57.8** | **+0.3** |
| **RCP** | **Roxas** | | **2.19 232** | ⇓*e*P | **Pn** | **22 28 00.1** | **+0.9** |
| RCP | | | | *e*S | **Sg** | **22 28 32.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **34.07** | **163** | P | **P** | **22 34 07.5** | **0.0** |
| | 0.4nm,0.7s,baz=343,slow=8.0,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **37.52** | **166** | P | **P** | **22 34 37.0** | **-0.1** |
| | 0.3nm,0.4s,baz=345,slow=6.9,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **37.94** | **340** | P | **P** | **22 34 39.8** | **-0.7** |
| | comp=Z,0.6s,baz=160,slow=8.0,SNR=3.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.92** | **77** | T | T | 23 18 53.0 | |
| | baz=278,slow=71,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.93** | **77** | T | T | 23 18 49.5 | |
| | baz=278,slow=71,SNR=9.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.94** | **77** | T | T | 23 18 55.9 | |
| | baz=278,slow=71,SNR=14 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.16** | **75** | T | T | 23 18 58.0 | |
| | baz=267,slow=75,SNR=117 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.16** | **75** | T | T | 23 19 01.5 | |
| | baz=267,slow=75,SNR=108 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.17** | **75** | T | T | 23 19 02.8 | |
| | baz=267,slow=75,SNR=129 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.88** | **322** | P | **P** | **22 36 08.2** | **-0.5** |
| | 0.4nm,0.7s,baz=119,slow=7.8,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.48** | **331** | P | **P** | **22 36 30.3** | **+2.0** |
| | 0.3nm,0.5s,baz=119,slow=5.6,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.04** | **23** | P | **P** | **22 40 31.3** | **-0.5** |
| | 0.1nm,0.5s,baz=282,slow=6.1,SNR=2.8 | | | | | | |

*IDC **18** 22:28:02.6±0.8,6°.45S×154°.63E,h0km,mb4.0/9, mb1 4.1/11,mb1mx4.0/37,mbtmp4.0/11,ML1.9/1,MS3.2/5, Ms1 3.3/5,ms1mx2.8/59,Error ellipse: s-maj=26.6km s-min=19.7km az=104.0*

**ISC 18 22:28:08.9±0.7,6°.6S±0°.1×154°.7E±0°.1,h48km,n30, σ1s00/30,mb4.7/22,MS3.3/3,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **5.94** | **119** | LR | LR | 22 31 57.0 | |
| | comp=Z,309nm,18.5s,baz=300,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **7.94** | **249** | Pn | **Pn** | **22 29 59.1** | **-2.7** |
| | 1.0nm,0.3s,baz=254,slow=22,SNR=1.4 | | | | | | |
| PMG | | | | Sn | **Sn** | **22 31 31.2** | **+0.9** |
| | 1.5nm,0.3s,baz=345,slow=22,SNR=1.6 | | | | | | |
| PMG | | | | LR | LR | 22 33 04.2 | |
| | comp=Z,136nm,18.6s,baz=337,slow=38 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.12** | **145** | P | **Pn** | **22 32 29.2** | **-0.2** |
| | 0.3nm,0.3s,baz=30,slow=11,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.77** | **234** | P | **P** | **22 33 18.4** | **+1.1** |
| | 3.2nm,0.7s,baz=58,slow=9.8,SNR=31 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 37 01.0** | **+0.9** |
| | 1.2nm,0.6s,baz=59,slow=2.3,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **26.19** | **227** | P | **P** | **22 33 39.4** | **+0.2** |
| | 0.5nm,0.6s,baz=62,slow=8.2,SNR=5.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 37 06.5** | **+1.0** |
| | 0.6nm,0.8s,baz=65,slow=2.4,SNR=2.3 | | | | | | |
| **STKA** | **Stephens Creek** | **27.95** | **204** | P | **P** | **22 33 55.9** | **+0.9** |
| | 0.8nm,0.5s,baz=20,slow=12,SNR=1.6 | | | | | | |
| STKA | | | | PcP | **PcP** | **22 37 09.2** | **-0.2** |
| | 0.6nm,0.4s,baz=231,slow=2.6,SNR=3.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.51** | **245** | LR | LR | 22 47 29.4 | |
| | comp=Z,68nm,18.1s,baz=151,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **34.77** | **271** | LR | LR | 22 50 28.1 | |
| | comp=Z,18nm,19.5s,baz=109,slow=39 

| | | | | | | |
|---|---|---|---|---|---|---|
| **PEA0B** | **Petropavlovsk-** | **74.66** | **345** | P | **P** | **22 42 54.0 +2.5** |
| PEA0B | | | | IAmb | IAmb | 22 42 58.2 |
| | comp=Z,22nm,1.1s | | | | | |
| **PETK** | **Petropavlovsk-** | **74.66** | **345** | P | **P** | **22 42 51.3 -0.2** |
| **JCC** | **Jacoby Creek,** | **77.48** | **39** | P | **P** | **22 43 06.2 -1.1** |
| **AKASG** | **Malin Array Be** | **141.59** | **332** | PKP | **PKiKP** | **22 50 39.9 +0.5** |
| | comp=Z,0.3nm,0.4s,baz=51,slow=3.2,SNR=5.0 | | | | | |

*TUL **18** 22:32:36.1±1.8,36°.78N±0°.02×98°.11W±0°.02, h6 km±1 km, ML2.9, mb_Lg2.6/25(NEIC), Error ellipse: s-maj=3.1km s-min=1.5km az=142.0*

**NEIC 18 22:32:37.4±2.8, 36°.83N±0°.02×97°.80W±0°.02, h4 km±1 km, Error ellipse: s-maj=2.9km s-min=2.3km az=98.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **1.04** | **85** | Pn | Pn | 22 32 59.7 | +0.9 |
| **FNO** | **Franklin** | **1.60** | **168** | Pn | Pn | 22 33 05.7 | -0.9 |
| **R32A** | **Long Quarter,** | **1.74** | **336** | | Pn | 22 33 07.9 | -0.7 |
| **W35A** | **Tecumseh** | **1.84** | **156** | Pn | Pn | 22 33 10.2 | +0.4 |
| **TUL1** | **Leonard** | **1.87** | **119** | | Pb | 22 33 11.9 | -0.1 |
| TUL1 | | | | IAmb_Lg | | 22 33 41.5 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.23** | **181** | Pn | Pn | 22 33 14.6 | -0.6 |
| **WMOK** | **Wichita Mounta** | **2.23** | **201** | Pn | Pn | 22 33 13.0 | -2.3 |
| WMOK | | | | IAmb_Lg | | 22 33 42.1 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **KSU1** | **Kansas State U** | **2.45** | **22** | IAmb_Lg | | 22 34 03.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.50** | **323** | Pn | Pn | 22 33 19.4 | +0.4 |
| **U38A** | **Gravette** | **2.78** | **97** | Pn | Pn | 22 33 25.0 | +2.2 |
| **X37A** | **Clayton** | **2.99** | **138** | Pn | Pn | 22 33 27.9 | +2.3 |
| X37A | | | | IAmb_Lg | | 22 34 21.4 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **3.64** | **115** | IAmb_Lg | | 22 34 40.3 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **S39A** | **Bolivar** | **3.68** | **75** | IAmb_Lg | | 22 34 42.2 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.70** | **239** | IAmb_Lg | | 22 34 24.2 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **MIAR** | **Mount Ida** | **4.13** | **122** | IAmb_Lg | | 22 35 02.5 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.37** | **49** | IAmb_Lg | | 22 35 01.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.27** | **323** | IAmb_Lg | | 22 35 28.7 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.30** | **275** | IAmb_Lg | | 22 35 21.7 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.36** | **75** | IAmb_Lg | | 22 35 43.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | |

**TAP 18 22:55:06.8, 22°.97N×120°.86E, h5 km±1 km, ML1.6, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLGT** | **Liugui** | **0.20** | **277** | P | Pg | 22 55 11.6 | +0.8 |
| | baz=269 | | | | | | |
| **STYH** | **Taoyuan** | **0.22** | **338** | *i* P | Pg | 22 55 11.7 | +0.6 |
| | baz=340 | | | | | | |
| STYH | | | | *e*S | Sg | 22 55 14.9 | +0.9 |
| | baz=340 | | | | | | |
| **STYT** | **Tauyuan** | **0.22** | **333** | P | Pg | 22 55 11.4 | +0.3 |
| | baz=336 | | | | | | |
| STYT | | | | *e*S | Sg | 22 55 14.6 | +0.5 |
| | baz=336 | | | | | | |
| **TWG** | **Pinlang** | **0.24** | **127** | P | Pg | 22 55 12.5 | +0.9 |
| | baz=126 | | | | | | |
| TWG | | | | *e*S | Sg | 22 55 16.2 | +1.3 |
| | baz=126 | | | | | | |
| **TWGBT** | **Beinan** | **0.25** | **127** | P | Pg | 22 55 12.6 | +0.8 |
| | baz=127 | | | | | | |
| **LONT** | **Longtian** | **0.26** | **104** | P | Pg | 22 55 12.5 | +0.7 |
| | baz=105 | | | | | | |
| LONT | | | | *e*S | Sg | 22 55 16.5 | +1.3 |
| | baz=105 | | | | | | |
| **ELDTW** | **Lidau** | **0.26** | **33** | *e*P | Pg | 22 55 12.1 | +0.1 |
| | baz=44 | | | | | | |
| **SSD** | **Sandimen** | **0.31** | **224** | P | Pg | 22 55 13.4 | +0.6 |
| | baz=221 | | | | | | |
| **TSMG** | **Majia** | **0.33** | **217** | P | Pg | 22 55 13.8 | +0.5 |
| | baz=216 | | | | | | |
| TSMG | | | | *e*S | Sg | 22 55 17.9 | +0.3 |
| | baz=216 | | | | | | |
| **WTP** | **Ta-pu** | **0.36** | **320** | *i* P | Pb | 22 55 15.0 | -0.7 |
| | baz=322 | | | | | | |
| WTP | | | | *e*S | Sb | 22 55 20.8 | -0.9 |
| | baz=322 | | | | | | |
| **CHN1** | **Nanshi** | **0.38** | **305** | *e*P | Pb | 22 55 15.7 | -0.3 |
| | baz=305 | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **327** | *e*P | Pb | 22 55 15.6 | -0.7 |
| | baz=328 | | | | | | |
| TPUB | | | | *e*S | Sb | 22 55 21.8 | -0.8 |
| | baz=328 | | | | | | |
| **EDH** | **Donghe** | **0.41** | **89** | *e*P | Pb | 22 55 16.2 | -0.3 |
| | baz=83 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.41** | **211** | *i* P | Pg | 22 55 15.4 | +0.5 |
| | baz=218 | | | | | | |
| **TWK** | **Hsinying** | **0.45** | **311** | *e*P | Pb | 22 55 17.5 | +0.1 |
| | baz=311 | | | | | | |
| **FULB** | **Fuli** | **0.46** | **60** | P | Pb | 22 55 16.7 | -0.8 |
| | baz=62 | | | | | | |
| FULB | | | | *e*S | Sb | 22 55 23.2 | -1.4 |
| | baz=62 | | | | | | |
| **ALS** | **Alishan** | **0.54** | **354** | P | Pg | 22 55 18.0 | +0.7 |
| | baz=8.0 | | | | | | |
| ALS | | | | *e*S | Sg | 22 55 25.7 | +1.2 |
| | baz=8.0 | | | | | | |
| **TWF1** | **Yuli** | **0.55** | **46** | P | Pg | 22 55 17.6 | +0.1 |
| | baz=57 | | | | | | |
| TWF1 | | | | *e*S | Sg | 22 55 24.9 | +0.2 |
| | baz=57 | | | | | | |
| **YULB** | **Yu-li** | **0.58** | **43** | *e*P | Pg | 22 55 17.8 | -0.3 |
| | baz=57 | | | | | | |

**TAP 18 22:55:10.6, 22°.97N×120°.82E, h8 km±1 km, ML1.9, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLGT** | **Liugui** | **0.16** | **278** | P | Pg | 22 55 14.5 | +0.6 |
| | baz=277 | | | | | | |
| SLGT | | | | *e*S | Sg | 22 55 17.3 | +1.2 |
| | baz=277 | | | | | | |
| **SLGT** | **Liugui** | **0.16** | **278** | *e*S | Sg | 22 55 14.5 | +0.6 |
| | baz=269 | | | | | | |
| **STYT** | **Tauyuan** | **0.20** | **344** | *e*S | Sg | 22 55 17.6 | +0.2 |
| | baz=351 | | | | | | |
| **STYH** | **Taoyuan** | **0.20** | **349** | *e*S | Sg | 22 55 18.0 | +0.6 |
| | baz=355 | | | | | | |
| **SSD** | **Sandimen** | **0.28** | **217** | *i* P | Pg | 22 55 16.4 | +0.2 |
| | baz=221 | | | | | | |
| SSD | | | | S | Sg | 22 55 20.6 | +0.6 |
| | baz=221 | | | | | | |
| **SSD** | **Sandimen** | **0.28** | **217** | *e*S | Pg | 22 55 16.8 | +0.6 |
| | baz=221 | | | | | | |
| **TSMG** | **Majia** | **0.31** | **211** | P | Pg | 22 55 16.9 | +0.2 |
| | baz=216 | | | | | | |
| TSMG | | | | *e*S | Sg | 22 55 21.1 | +0.3 |
| | baz=216 | | | | | | |
| **TWK** | **Hsinying** | **0.42** | **314** | *e*P | Pb | 22 55 20.5 | +0.2 |
| | baz=318 | | | | | | |
| TWK | | | | *e*S | Sb | 22 55 28.0 | +1.1 |
| | baz=318 | | | | | | |

**IDC 18 23:00:10.4±8.2, 4°.99S×152°.37E, h0 km, mb3.5/4, mb1 3.6/4, mb1mx3.1/35, mbtmp3.5/4, Error ellipse: s-maj=254.4km s-min=31.9km az=106.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.00** | **228** | P | P | 23 05 17.0 | -0.1 |
| | 0.7nm,0.9s,baz=54,slow=10,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **25.72** | **222** | P | P | 23 05 42.7 | 0.0 |
| | 0.7nm,0.9s,baz=52,slow=8.6,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **66.25** | **328** | P | P | 23 11 00.5 | -0.1 |
| | 0.5nm,0.9s,baz=144,slow=5.4,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.18** | **319** | P | P | 23 12 23.0 | +0.2 |
| | 0.6nm,0.9s,baz=93,slow=5.8,SNR=3.8 | | | | | | |

*IDC **18** 23:02:50.9±2.4, 28°.63S×68°.90W, h75 km±20 km, mb3.9/6, mb1 4.0/11, mb1mx3.8/28, mbtmp4.1/11, MS4.1/2, Ms1 4.1/2, ms1mx3.0/52, Error ellipse: s-maj=26.0km s-min=15.8km az=74.0*

*GUC **18** 23:02:53.6±0.8, 28°.61S×69°.09W, h119 km±17 km, ML4.1*

*NEIC **18** 23:02:53.5±2.6, 28°.66S×70°.05×68°.91W±0°.08, h98 km±7 km, mb4.3/21, Md3.9(SJA), Error ellipse: s-maj=9.7km s-min=6.9km az=95.0*

**ISC 18 23:02:53.1±0.7, 28°.63S±0°.04×68°.90W±0°.06, h100 km±7 km, n101, σ1°.42/111, mb4.3/14, 5C-1D, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GO03** | **Copiap** | **1.57** | **311** | Pn | **Pn** | **23 03 21.4** | **+1.1** |
| GO03 | | | | Sn | **Sn** | **23 03 42.1** | **+1.2** |
| **GO03** | **Copiap** | **1.57** | **311** | ⇓ *i*P | **Pn** | **23 03 21.4** | **+1.1** |
| GO03 | | | | *e*S | **Sn** | **23 03 41.9** | **+0.9** |
| GO03 | | | | IAML | | 23 03 42.9 | |
| | comp=N,3μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.63** | **256** | Pn | **Pn** | **23 03 22.8** | **+1.6** |
| LCO | | | | Sn | **Sn** | **23 03 44.6** | **+2.1** |
| **LCO** | **Las Campanas** | **1.63** | **256** | *e*P | **Pn** | **23 03 22.1** | **+0.9** |
| LCO | | | | *e*S | **Sn** | **23 03 43.9** | **+1.4** |
| **AC02** | **Maricunga** | **1.80** | **353** | Pn | **Pn** | **23 03 26.1** | **+2.4** |
| AC02 | | | | Sn | **Sn** | **23 03 49.8** | **+3.0** |
| **AC02** | **Maricunga** | **1.80** | **353** | ⇑ *i*P | **Pn** | **23 03 26.1** | **+2.4** |
| AC02 | | | | *e*S | **Sn** | **23 03 49.2** | **+2.4** |
| AC02 | | | | IAML | | 23 03 54.0 | |
| | comp=E,990nm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.96** | **282** | Pn | **Pn** | **23 03 25.7** | **+0.5** |
| AC04 | | | | Sn | **Sn** | **23 03 49.6** | **-0.1** |
| **AC04** | **Llanos de Chal** | **1.96** | **282** | ⇑ *i*P | **Pn** | **23 03 25.8** | **+0.6** |
| AC04 | | | | *e*S | **Sn** | **23 03 49.0** | **-0.7** |
| AC04 | | | | IAML | | 23 03 51.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **2.26** | **227** | | **Pn** | **23 03 30.4** | **+1.2** |
| **GO04** | **Tololo Observa** | **2.26** | **227** | ⇑ *i*P | **Pn** | **23 03 30.4** | **+1.1** |
| GO04 | | | | *e*S | **Sn** | **23 03 58.8** | **+1.8** |
| **CO05** | **La Serena** | **2.41** | **237** | | **Pn** | **23 03 31.4** | **+0.4** |
| **CO05** | **La Serena** | **2.41** | **237** | *e*P | **Pn** | **23 03 31.4** | **+0.4** |
| CO05 | | | | *e*S | **Sn** | **23 03 59.5** | **-0.6** |
| CO05 | | | | IAML | | 23 04 01.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **2.69** | **215** | | **Pn** | **23 03 36.4** | **+1.5** |
| **CO03** | **El Pedregal** | **2.69** | **215** | ⇑ *i*P | **Pn** | **23 03 36.2** | **+1.3** |
| CO03 | | | | *e*S | **Sn** | **23 04 08.2** | **+1.2** |
| CO03 | | | | IAML | | 23 04 15.0 | |
| | comp=E,587nm,0.1s | | | | | | |
| **ZON** | **Zonda** | **2.91** | **176** | Pn | **Pn** | **23 03 39.4** | **+1.7** |
| **CO06** | **Fray Jorge** | **3.13** | **229** | | **Pn** | **23 03 40.1** | **-0.5** |
| **CO06** | **Fray Jorge** | **3.13** | **229** | *i* P | **Pn** | **23 03 39.9** | **-0.7** |
| CO06 | | | | IAML | | 23 04 21.6 | |
| | comp=N,367nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **3.15** | **215** | | **Pn** | **23 03 41.4** | **+0.5** |
| **CO02** | **Combarbal** | **3.15** | **215** | ⇑ *i*P | **Pn** | **23 03 41.4** | **+0.5** |
| CO02 | | | | IAML | | 23 04 20.2 | |
| | comp=E,915nm,0.1s | | | | | | |
| **PB14** | **IPOC Station P** | **4.21** | **341** | Pn | **Pn** | **23 03 55.7** | **+0.3** |
| **PB14** | **IPOC Station P** | **4.21** | **341** | *e*P | **Pn** | **23 03 55.9** | **+0.4** |
| **VA03** | **San Esteban** | **4.36** | **199** | | **Pn** | **23 03 57.8** | **+0.6** |
| **VA03** | **San Esteban** | **4.36** | **199** | *e*P | **Pn** | **23 03 57.9** | **+0.6** |
| **VA06** | **Catapilco** | **4.43** | **207** | Pn | **Pn** | **23 03 57.2** | **-0.8** |
| **VA06** | **Catapilco** | **4.43** | **207** | *e*P | **Pn** | **23 03 56.9** | **-1.1** |
| **ROCH** | **El Roble** | **4.69** | **202** | *e*P | **Pn** | **23 04 00.6** | **-1.3** |
| ROCH | | | | *e*P | **Pn** | **23 03 59.1** | **-2.7** |
| **ROC1** | **El Roble** | **4.70** | **202** | | **Pn** | **23 03 59.0** | **-2.9** |
| **PEL** | **Peldehue** | **4.75** | **198** | | **Pn** | **23 04 02.4** | **-0.1** |
| **PEL** | **Peldehue** | **4.75** | **198** | *e*P | **Pn** | **23 04 02.2** | **-0.3** |
| **VA01** | **Torpederas** | **4.97** | **208** | Pn | **Pn** | **23 04 03.4** | **-2.0** |
| **MT02** | **Curacav** | **5.00** | **202** | | **Pn** | **23 04 04.5** | **-1.3** |
| **MT02** | **Curacav** | **5.00** | **202** | *e*P | **Pn** | **23 04 04.2** | **-1.6** |
| **MT05** | **Renca** | **5.00** | **198** | Pn | **Pn** | **23 04 05.7** | **-0.2** |
| **PB10** | **IPOC Station P** | **5.31** | **343** | Pn | **Pn** | **23 04 09.4** | **-0.7** |
| **LME1** | **Las Melosas** | **5.32** | **192** | | **Pn** | **23 04 10.0** | **-0.2** |
| **PB15** | **IPOC Station P** | **5.43** | **354** | | **Pn** | **23 04 11.3** | **-0.5** |
| **MT09** | **Talagante** | **5.43** | **199** | | **Pn** | **23 04 10.3** | **-1.5** |
| **VA05** | **Santo Domingo** | **5.52** | **204** | *e*P | **Pn** | **23 04 10.4** | **-2.5** |
| **BO04** | **La Punta** | **5.54** | **195** | | **Pn** | **23 04 12.2** | **-0.9** |
| **MT01** | **Popeta** | **5.59** | **201** | | **Pn** | **23 04 12.0** | **-1.8** |
| **LVC** | **Limon Verde** | **6.00** | **360** | P | **Pn** | **23 04 19.3** | **-0.5** |
| | comp=E,6.8nm,0.3s,baz=183,slow=10,SNR=60 | | | | | | |
| LVC | | | | S | **Sn** | **23 05 23.4** | **-3.8** |
| | comp=E,10nm,0.3s,baz=292,slow=22,SNR=7.6 | | | | | | |
| **LVC** | **Limon Verde** | **6.00** | **360** | Pn | **Pn** | **23 04 19.5** | **-0.2** |
| **BO01** | **Tunca** | **6.04** | **197** | Pn | **Pn** | **23 04 17.8** | **-2.1** |
| **BO02** | **Sierra Bellavi** | **6.35** | **194** | | **Pn** | **23 04 22.6** | **-1.5** |
| **PB04** | **IPOC Station P** | **6.37** | **350** | | **Pn** | **23 04 23.1** | **-1.6** |
| **PB09** | **IPOC Station P** | **6.81** | **357** | | **Pn** | **23 04 29.9** | **-0.8** |
| **PB07** | **IPOC Station P** | **6.93** | **352** | | **Pn** | **23 04 30.7** | **-1.6** |
| **ML02** | **Panimavida** | **7.42** | **196** | | **Pn** | **23 04 35.2** | **-3.5** |
| **PB01** | **IPOC Station P** | **7.58** | **356** | | **Pn** | **23 04 38.8** | **-2.1** |
| **PATCX** | **Punta Patache** | **7.86** | **351** | Pn | **Pn** | **23 04 42.4** | **-2.5** |
| **TA01** | **Diego Aracena** | **8.12** | **351** | Pn | **Pn** | **23 04 49.5** | **+1.3** |
| **PB08** | **IPOC Station P** | **8.46** | **358** | | **Pn** | **23 04 51.5** | **-1.7** |
| **PB11** | **IPOC Station P** | **8.86** | **355** | Pn | **Pn** | **23 04 59.1** | **+0.7** |
| **GO01** | **Chusmiza** | **8.93** | **358** | Pn | **Pn** | **23 04 58.6** | **-1.1** |
| **PB12** | **IPOC Station P** | **10.06** | **352** | Pn | **Pn** | **23 05 15.5** | **+0.8** |
| **PB16** | **IPOC Station P** | **10.27** | **357** | Pn | **Pn** | **23 05 16.9** | **-1.1** |
| **CPUP** | **Villa Florida** | **10.53** | **80** | P | **Pn** | **23 05 19.4** | **-1.6** |
| | comp=E,0.5nm,0.3s,baz=261,slow=10,SNR=7.4 | | | | | | |
| **CPUP** | **Villa Florida** | **10.53** | **80** | | **Pn** | **23 05 19.9** | **-1.1** |
| **LC01** | **Cunco** | **10.53** | **193** | Pn | **Pn** | **23 05 18.3** | **-2.7** |
| **ITQB** | **Itaqui** | **10.78** | **98** | | **Pn** | **23 05 23.9** | **-0.5** |
| **PLCA** | **Paso Flores** | **12.15** | **186** | P | **Pn** | **23 05 41.0** | **-1.7** |
| | comp=E,0.1nm,0.3s,baz=5.8,slow=18,SNR=2.0 | | | | | | |
| **LPAZ** | **La Paz** | **12.31** | **3** | P | **Pn** | **23 05 43.4** | **-2.1** |
| | comp=E,0.3nm,0.3s,baz=228,slow=4.3,SNR=5.0 | | | | | | |
| **PLTB** | **Pedras Altas** | **13.59** | **107** | Pn | **Pn** | **23 06 01.2** | **-0.5** |
| **AQDB** | **Aquidauana** | **14.49** | **59** | | **Pn** | **23 06 11.5** | **-1.9** |
| **SIV** | **San Ignacio** | **14.51** | **32** | P | **Pn** | **23 06 11.9** | **-1.8** |
| | comp=E,0.2nm,0.3s,baz=217,slow=11,SNR=6.8 | | | | | | |
| **LL07** | **Hotel Espejo d** | **14.64** | **193** | Pn | **Pn** | **23 06 14.8** | **-0.4** |
| **LL02** | **Futaleuf** | **14.72** | **189** | Pn | **Pn** | **23 06 15.3** | **-0.9** |
| **ITAB** | **Concordia** | **14.89** | **89** | P | **P** | **23 06 21.8** | **+0.2** |
| **GO07** | **Milladeo Hill,** | **14.95** | **194** | Pn | **Pn** | **23 06 19.7** | **+0.5** |
| **GO08** | **Villa O'Higgin** | **20.00** | **187** | P | Pn | 23 07 20.0 | -0.3 |
| GO08 | | | | IAmb | IAmb | 23 07 23.9 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **ROSC** | **El Rosal** | **33.69** | **350** | LR | LR | 23 24 30.3 | |
| | comp=Z,74nm,20.8s,baz=218,slow=39 | | | | | | |
| **BIRV** | **Birongo** | **38.96** | **4** | P | **P** | **23 10 08.8** | **-0.8** |
| **CELP** | **Cerrillos** | **46.49** | **3** | P | **P** | **23 11 10.1** | **-0.3** |
| CELP | | | | IAmb | IAmb | 23 11 19.0 | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| **AOPR** | **Arecibo Observ** | **46.75** | **3** | P | **P** | **23 11 11.8** | **-0.7** |
| **SNAA** | **Sanae** | **55.59** | **159** | P | **P** | **23 12 18.6** | **+0.5** |
| | comp=Z,1.8nm,0.5s,baz=273,slow=11,SNR=7.5 | | | | | | |
| **SNAA** | **Sanae** | **55.59** | **159** | P | **P** | **23 12 18.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **61.59** | **180** | P | **P** | **23 13 00.7** | **+0.9** |
| **833A** | **Chaparral WMA,** | **63.72** | **330** | P | **P** | **23 13 14.4** | **+0.2** |
| **TXAR** | **Lajitas Array** | **66.53** | **327** | P | **P** | **23 13 33.5** | **+0.9** |
| | comp=Z,0.8nm,0.7s,baz=154,slow=8.8,SNR=9.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.53** | **327** | P | **P** | **23 13 33.9** | **+1.3** |
| **TX31** | **Lajitas Ar. Si** | **66.54** | **327** | P | **P** | **23 13 33.6** | **+1.1** |
| TX31 | | | | IAmb | IAmb | 23 13 33.9 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **TX32** | **Lajitas Array** | **66.54** | **327** | P | **P** | **23 13 33.6** | **+1.1** |
| **LCAR** | **Lake Charles** | **67.69** | **341** | P | **P** | **23 13 40.1** | **+0.7** |
| LCAR | | | | IAmb | IAmb | 23 13 40.8 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **67.69** | **338** | P | **P** | **23 13 40.8** | **+1.3** |
| W39A | | | | IAmb | IAmb | 23 13 41.0 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **Q51A** | **Peebles** | **68.65** | **348** | P | **P** | **23 13 47.9** | **+2.4** |
| Q51A | | | | IAmb | IAmb | 23 13 56.6 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **FVM** | **French Village** | **69.27** | **342** | P | **P** | **23 13 49.8** | **+0.4** |
| FVM | | | | IAmb | IAmb | 23 13 58.6 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **69.84** | **340** | P | **P** | **23 13 53.6** | **+0.8** |
| S39A | | | | IAmb | IAmb | 23 13 54.1 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **70.90** | **71** | P | **P** | **23 14 00.5** | **+0.7** |
| | comp=Z,3.1nm,0.6s,baz=240,slow=5.8,SNR=5.0 | | | | | | |
| **DBIC** | **Dimbokro** | **70.90** | **71** | P | **P** | **23 14 00.4** | **+0.5** |
| **P40A** | **Paris** | **71.16** | **341** | P | **P** | **23 14 01.3** | **+0.5** |
| P40A | | | | IAmb | IAmb | 23 14 01.8 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.82** | **69** | P | **P** | **23 14 51.5** | **+0.6** |
| | comp=Z,2.8nm,0.7s,baz=276,slow=5.4,SNR=14 | | | | | | |
| **BOSA** | **Boshof** | **80.15** | **117** | P | **P** | **23 14 53.1** | **+0.3** |
| | comp=Z,4.3nm,0.9s,baz=250,slow=5.0,SNR=7.7 | | | | | | |
| **BOSA** | **Boshof** | **80.15** | **117** | IAmb | IAmb | 23 14 53.6 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **80.30** | **331** | P | **P** | **23 14 54.0** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=127,slow=7.6,SNR=4.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **80.30** | **331** | P | **P** | **23 14 53.9** | **+0.8** |
| **RAO** | **Raoul Island** | **91.07** | **236** | LR | LR | 23 48 56.7 | |
| | comp=Z,396nm,20.2s,baz=143,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **123.55** | **205** | PKP | **PKPdf** | **23 21 39.1** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=141,slow=3.3,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **126.75** | **208** | PKP | **PKPdf** | **23 21 45.3** | **-0.3** |
| | comp=Z,0.8nm,0.6s,baz=165,slow=1.6,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.26** | **30** | PKPbc | **PKPbc** | **23 22 27.8** | **+0.7** |
| | comp=Z,6.9nm,0.5s,baz=304,slow=3.8,SNR=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.11** | **43** | PKPbc | **PKiKP** | **23 22 35.0** | **0.0** |
| | comp=Z,4.5nm,0.7s,baz=306,slow=2.0,SNR=45 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **23 22 43.3** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=292,slow=3.6,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **160.48** | **10** | PKP | **PKPdf** | **23 22 38.1** | **-3.0** |
| | comp=Z,0.6nm,1.0s,baz=284,slow=0.6,SNR=3.7 | | | | | | |

*NEIC **18** 23:10:17.1±2.5, 8°.08S×103°.84E±0°.08, h194 km±6 km, mb4.1/20, Error ellipse: s-maj=12.9km s-min=10.7km az=195.0*

*IDC **18** 23:10:19.6±2.6, 7°.87S×113°.99E, h217 km±20 km, mb3.5/8, mb1 3.5/10, mb1mx3.2/29, mbtmp4.0/10, MS3.3/1, Ms1 3.3/1, ms1mx2.4/44, Error ellipse: s-maj=41.8km s-min=11.3km az=55.0*

*DJA **18** 23:10:19.8±0.3, 8°.5S±4°×11°.4E±°, h166 km±3 km, M4.0/22, mb4.0/7, mB4.7/3, MLv4.0/22, Mw(mB)4.0/3*

**ISC 18 23:10:16.7±0.6, 8°.09S±0°.06×113°.88E±0°.05, h196 km±5 km, n70, σ1°.66/77, mb4.0/16, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BLJI** | **Banyuglugur** | **0.45** | **320** | P | **Pn** | **23 10 43.8** | **+0.6** |
| **ABJI** | **Asem Bagus** | **0.46** | **50** | P | **Pn** | **23 10 44.2** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **0.46** | **145** | Pn | **Pn** | **23 10 44.0** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **0.46** | **145** | P | **Pn** | **23 10 44.0** | **+0.7** |
| JAGI | | | | S | **Sn** | **23 10 59.9** | **-3.9** |
| **GMJI** | **Gumukmas** | **0.47** | **247** | P | **Pn** | **23 10 44.2** | **+1.0** |
| GMJI | | | | S | **Sn** | **23 11 00.9** | **-2.8** |
| **IGBI** | **Denpasar** | **1.45** | **120** | P | **Pn** | **23 10 50.2** | **+0.6** |
| **GRJI** | **Gresik** | **1.82** | **310** | P | **Pn** | **23 10 53.8** | **+0.7** |
| GRJI | | | | S | **Sn** | **23 11 22.1** | **+0.8** |
| **PWJI** | **Pagerwojo** | **2.06** | **272** | P | **Pn** | **23 10 56.4** | **+0.9** |
| PWJI | | | | S | **Sn** | **23 11 26.7** | **+1.0** |
| **TBJI** | **Tambak Boyo** | **2.38** | **302** | P | **Pn** | **23 10 59.0** | **0.0** |
| TBJI | | | | S | **Sn** | **23 11 33.8** | **+1.8** |
| **BWJI** | **Bawean** | **2.53** | **331** | P | **Pn** | **23 11 03.9** | **+3.1** |
| **PCJI** | **Pacitan** | **2.68** | **268** | P | **Pn** | **23 11 03.3** | **+0.9** |
| PCJI | | | | S | **Sn** | **23 11 36.8** | **-1.2** |
| **UGM** | **Wanagama** | **3.33** | **273** | Pn | **Pn** | **23 11 12.0** | **+1.8** |
| **UGM** | **Wanagama** | **3.33** | **273** | P | **Pn** | **23 11 11.9** | **+1.7** |
| **UWJI** | **Ujung Watu** | **3.35** | **299** | P | **Pn** | **23 11 12.5** | **+2.1** |
| **YOGI** | **Yogyakarta** | **3.56** | **274** | P | **Pn** | **23 11 15.9** | **+2.9** |
| **SMRI** | **Semarang** | **3.56** | **287** | P | **Pn** | **23 11 15.0** | **+2.0** |
| **PLAI** | **Plampang** | **3.92** | **101** | P | **Pn** | **23 11 19.5** | **+1.9** |
| **KPJI** | **Karang Pucung** | **4.96** | **278** | P | **Pn** | **23 11 31.8** | **+1.2** |
| **KBKI** | **Kotabaru** | **5.27** | **26** | P | Pn | 23 11 41.2 | +6.6 |
| | 0.1nm37nm,0.7s | | | | | | |
| **CMJI** | **Cimerak** | **5.39** | **273** | P | **Pn** | **23 11 35.9** | **-0.2** |
| | 0.2nm920nm17nm,1.1s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **5.66** | **106** | P | **Pn** | **23 11 43.3** | **+3.7** |
| | 0.5nm28nm,1.5s | | | | | | |
| **KAPI** | **Kappang** | **6.58** | **63** | P | **Pn** | **23 11 52.6** | **+1.1** |
| | 0.4nm,0.3s,baz=251,slow=15,SNR=4.8 | | | | | | |
| **KAPI** | **Kappang** | **6.58** | **63** | Pn | **Pn** | **23 11 51.0** | **-0.5** |
| **CNJI** | **Cibinong** | **6.74** | **276** | P | **Pn** | **23 11 54.3** | **+0.7** |
| | 0.2nm2μm28nm,0.7s | | | | | | |
| **BKSI** | **Bulukumba** | **6.78** | **66** | P | **Pn** | **23 11 58.4** | **+4.3** |
| | 0.1nm14nm,1.8s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **6.84** | **74** | P | Pn | 23 12 00.4 | +5.5 |
| **BASI** | **Baing, Sumba** | **6.94** | **108** | P | **Pn** | **23 11 59.0** | **+2.8** |
| | 0.2nm21nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **8.29** | **94** | Pn | **Pn** | **23 12 12.2** | **-1.6** |
| **XMIS** | **Christmas Isla** | **8.46** | **253** | Pn | **Pn** | **23 12 13.6** | **-2.5** |
| XMIS | | | | Sn | Sn | 23 13 42.7 | -8.5 |
| **SOEI** | **Soe** | **10.39** | **100** | Pn | **Pn** | **23 12 39.4** | **-1.9** |
| **TOLI2** | **Tolitoli** | **11.44** | **37** | Pn | **Pn** | **23 12 55.5** | **+0.8** |
| **MYLDM** | **Lahad Datu** | **13.96** | **19** | Pn | **Pn** | **23 13 25.1** | **-1.4** |
| **KKM** | **Kota Kinabalu** | **14.23** | **9** | Pn | **Pn** | **23 13 28.8** | **-1.1** |
| **GIRL** | **Giralia** | **14.47** | **179** | | **Pn** | **23 13 34.1** |

comp=Z,0.9nm,0.4s,baz=135,slow=2.9,SNR=3.6

**NEIC 18 23:18:48.1±0.8, 36°78.8N±0.01°×97°60.3W±0.01°, 8 km, h2km±6km, mb_Lg2.6/7, Error ellipse: s-maj=1.6km s-min=0.7km az=156.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **0.88** | **81** | | Pg | 23 19 04.7 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.38** | **175** | Pn | Pn | 23 19 14.0 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.39** | **174** | | Pn | 23 19 13.8 | -0.7 |
| **FNO** | **Franklin** | **1.54** | **174** | Pn | Pn | 23 19 16.4 | -0.1 |
| **TUL1** | **Leonard** | **1.70** | **120** | | Pn | 23 19 19.3 | +0.5 |
| TUL1 | | | | IAmb_Lg | | 23 19 44.4 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **W35A** | **Tecumseh** | **1.74** | **160** | Pn | Pn | 23 19 19.6 | +0.3 |
| **R32A** | **Long Quarter,** | **1.85** | **332** | Pn | Pn | 23 19 21.2 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.19** | **185** | | Pg | 23 19 29.5 | -0.6 |
| **WMOK** | **Wichita Mounta** | **2.26** | **205** | Pn | Pn | 23 19 27.1 | +0.7 |
| **U38A** | **Gravette** | **2.61** | **97** | | Pn | 23 19 31.5 | +0.2 |
| **HHAR** | **Hobbs** | **2.99** | **99** | Pn | Pn | 23 19 36.5 | -0.1 |
| **WHAR** | **Wooly Hollow** | **4.56** | **108** | IAmb_Lg | | 23 21 10.1 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.22** | **74** | IAmb_Lg | | 23 21 37.9 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **HICK** | **Hickman** | **6.74** | **90** | IAmb_Lg | | 23 22 28.2 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **W45A** | **Hickory Valley** | **7.02** | **101** | IAmb_Lg | | 23 22 33.6 | |
| | comp=Z,11nm,0.7s | | | | | | |

*JMA **18** 23:27:04.8±0.4, 32°.39N×137°.97E, h412km±5km, M3.8*
*IDC **18** 23:27:06.8±0.9, 32°.16N×137°.74E, h388km±7km, mb3.1/10, mb1 3.3/13, mb1mx3.0/39, mbtmp3.8/13, Error ellipse: s-maj=15.9km s-min=15.3km az=172.0*
*NEIC **18** 23:27:06.7±1.6, 32°.12N±0°.08×137°.8E±0°.1, h387km±9km, mb4.1/45, Error ellipse: s-maj=13.1km s-min=12.0km az=92.0*

**ISC 18 23:27:06.1±0.6, 32°.18N±0°.07×137°.85E±0°.06, h380km, n90, σ1s26/95, mb4.1/44, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAOM** | **Aogashimamukai** | **1.65** | **80** | P | **Pn** | **23 27 59.5** | **+1.5** |
| **JHJ** | **Hachijo jima 2** | **1.88** | **60** | P | **Pn** | **23 28 01.4** | **+2.1** |
| | 37nm,0.3s,baz=356,slow=19,SNR=14 | | | | | | |
| JHJ | | | | S | **S** | **23 28 46.5** | **+4.1** |
| | 40nm,0.3s,baz=260,slow=22,SNR=4.7 | | | | | | |
| **JHJ2** | **Mitsune** | **1.91** | **60** | P | **Pn** | **23 28 00.6** | **+1.1** |
| **JHJ2** | **Mitsune** | **1.91** | **60** | Pn | **Pn** | **23 28 01.0** | **+1.5** |
| **JTNC** | **Tanabenakahech** | **2.49** | **312** | P | **Pn** | **23 28 04.7** | **+1.1** |
| JTNC | | | | eS | **S** | **23 28 51.9** | **+1.9** |
| **INU** | **Inuyama** | **3.23** | **348** | Pn | **Pn** | **23 28 10.6** | **+1.0** |
| **JAI** | **Aioi** | **3.27** | **300** | P | **Pn** | **23 28 11.6** | **+1.6** |
| **BSO1** | **Boso 1** | **3.60** | **46** | P | **Pn** | **23 28 12.4** | **+0.1** |
| **JMN** | **Monobe** | **3.67** | **296** | Pn | **Pn** | **23 28 14.8** | **+1.0** |
| **JWT** | **Wachi** | **3.70** | **327** | Pn | **Pn** | **23 28 12.1** | **-1.8** |
| **JRY** | **Ryogami san** | **3.92** | **13** | eS | **S** | **23 29 11.1** | **-1.7** |
| **JTO** | **Tosashimizu** | **4.31** | **280** | P | **Pn** | **23 28 21.2** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **4.36** | **4** | P | **Pn** | **23 28 21.8** | **+1.4** |
| | 0.5nm,0.3s,baz=184,slow=9.7,SNR=17 | | | | | | |
| MJAR | | | | S | **S** | **23 29 21.1** | **+0.5** |
| | 0.2nm,0.3s,baz=165,slow=16,SNR=2.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.36** | **4** | | **Pn** | **23 28 21.3** | **+0.9** |
| **MAJO** | **Matsushiro** | **4.36** | **4** | | **Pn** | **23 28 21.5** | **+1.1** |
| **MAT** | **Matsushiro** | **4.36** | **4** | P | **Pn** | **23 28 21.7** | **+1.3** |
| MAT | | | | S | **S** | **23 29 20.4** | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | **4.36** | **4** | | **Pn** | **23 28 21.7** | **+1.2** |
| **JYT** | **Yasato** | **4.48** | **25** | Pn | **Pn** | **23 28 21.5** | **-0.1** |
| **JHS** | **Saijyo** | **4.84** | **307** | Pn | **Pn** | **23 28 26.9** | **+1.4** |
| **JSD** | **Sado** | **5.85** | **3** | Pn | **Pn** | **23 28 37.1** | **+0.9** |
| **JMM** | **Marumori** | **6.17** | **22** | Pn | **Pn** | **23 28 39.9** | **+0.2** |
| JMM | | | | Sn | **S** | **23 29 52.7** | **-3.1** |
| **JCJ** | **Chichijima** | **6.32** | **142** | Pn | **Pn** | **23 28 39.5** | **-2.1** |
| **KSRS** | **Korea Array** | **9.70** | **306** | P | **P** | **23 29 22.2** | **+1.4** |
| | 0.2nm,0.3s,baz=115,slow=9.2,SNR=5.2 | | | | | | |
| **KLR** | **Kul'dur** | **17.64** | **347** | P | **P** | **23 30 47.6** | **+0.2** |
| | 0.1nm,0.3s,baz=156,slow=13,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **28.47** | **312** | P | **P** | **23 32 27.3** | **-0.5** |
| | 0.4nm,0.4s,baz=121,slow=8.8,SNR=5.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.52** | **258** | P | **P** | **23 33 44.5** | **-0.9** |
| | 2.0nm,0.3s,baz=46,slow=8.0,SNR=4.5 | | | | | | |
| **TAPN** | **Taplejung** | **43.47** | **277** | eP | **P** | **23 34 33.0** | **-0.9** |
| | 9.7nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **43.90** | **277** | eP | **P** | **23 34 36.2** | **-1.0** |
| | 19nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **44.38** | **306** | P | **P** | **23 34 39.9** | **-0.6** |
| **MKAR** | **Makanchi Array** | **44.38** | **306** | P | **P** | **23 34 40.0** | **-0.4** |
| | 1.4nm,0.6s,baz=87,slow=9.8,SNR=22 | | | | | | |
| **RAMN** | **Ramite** | **44.54** | **277** | eP | **P** | **23 34 41.3** | **-0.9** |
| | 4.4nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **44.60** | **306** | P | **P** | **23 34 41.8** | **-0.3** |
| **JIRN** | **Jiri** | **44.65** | **278** | eP | **P** | **23 34 42.5** | **-0.7** |
| | 45nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **44.83** | **279** | eP | **P** | **23 34 43.8** | **-0.8** |
| | 29nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **45.34** | **278** | eP | **P** | **23 34 47.0** | **-1.5** |
| | 14nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **45.34** | **278** | eP | **P** | **23 34 47.1** | **-1.4** |
| | 9.8nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **45.37** | **279** | eP | **P** | **23 34 47.6** | **-1.1** |
| | 22nm,0.8s | | | | | | |
| **DMN** | **Daman** | **45.58** | **279** | eP | **P** | **23 34 49.2** | **-1.1** |
| | 7.4nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **45.84** | **279** | eP | **P** | **23 34 51.1** | **-1.1** |
| | 12nm,0.5s | | | | | | |
| **COEN** | **Coen** | **46.16** | **173** | P | **P** | **23 34 53.2** | **-1.2** |
| **DANN** | **Dangsing** | **46.47** | **280** | eP | **P** | **23 34 56.4** | **-0.8** |
| | 19nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **46.79** | **279** | eP | **P** | **23 34 58.6** | **-0.9** |
| **PYUN** | **Piuthan** | **47.19** | **280** | eP | **P** | **23 35 01.9** | **-0.7** |
| | 20nm,0.5s | | | | | | |
| **RDOG** | **Red Dog Mine** | **49.15** | **25** | P | **P** | **23 35 15.4** | **-1.1** |
| RDOG | | | | IAmb | IAmb | 23 35 17.9 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **51.94** | **184** | P | **P** | **23 35 36.8** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 23 35 55.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Array** | **51.94** | **184** | P | **P** | **23 35 36.6** | **-1.1** |
| | comp=Z,0.4nm,0.8s,baz=1.2,slow=7.8,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.94** | **184** | P | **P** | **23 35 36.4** | **-1.3** |
| **WR0** | **Warramunga Arr** | **51.94** | **184** | P | **P** | **23 35 36.6** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 23 35 42.8 | |
| | comp=Z,17nm,1.8s | | | | | | |
| **K20K** | **Telida** | **51.99** | **32** | P | **P** | **23 35 39.3** | **+1.7** |
| K20K | | | | IAmb | IAmb | 23 36 09.7 | |
| | comp=Z,23nm,1.8s | | | | | | |
| **J20K** | **Nowinta River** | **52.01** | **31** | P | **P** | **23 35 39.6** | **+1.9** |
| J20K | | | | IAmb | IAmb | 23 35 57.0 | |
| | comp=Z,17nm,1.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **52.68** | **29** | P | **P** | **23 35 44.1** | **+1.5** |
| H21K | | | | IAmb | IAmb | 23 35 48.2 | |
| | comp=Z,13nm,1.7s | | | | | | |
| **KDAK** | **Kodiak Island** | **52.69** | **39** | P | **P** | **23 35 42.1** | **-0.6** |
| **PPLA** | **Purkeypile** | **52.83** | **33** | P | **P** | **23 35 45.7** | **+1.9** |
| **CAST** | **Castle Rocks** | **52.89** | **32** | P | **P** | **23 35 46.0** | **+1.8** |
| CAST | | | | IAmb | IAmb | 23 36 12.7 | |
| | comp=Z,16nm,1.7s | | | | | | |
| **CNPM** | **China Poot** | **53.32** | **37** | P | **P** | **23 35 48.0** | **+0.7** |
| **KTH** | **Kantishna Hill** | **53.41** | **32** | P | **P** | **23 35 49.4** | **+1.4** |
| KTH | | | | IAmb | IAmb | 23 36 24.2 | |
| | comp=Z,22nm,1.7s | | | | | | |
| **NIL** | **Nilore** | **53.43** | **290** | P | **P** | **23 35 48.5** | **-0.1** |
| **BRLK** | **Bradley Lake** | **53.49** | **37** | P | **P** | **23 35 48.5** | **0.0** |
| **MLY** | **Manley** | **53.51** | **30** | P | **P** | **23 35 49.5** | **+0.9** |
| **TRF** | **Thorofare Moun** | **53.69** | **32** | P | **P** | **23 35 51.3** | **+1.2** |
| TRF | | | | IAmb | IAmb | 23 36 28.6 | |
| | comp=Z,25nm,1.8s | | | | | | |
| **RND** | **Reindeer** | **54.34** | **32** | P | **P** | **23 35 54.9** | **+0.3** |
| RND | | | | IAmb | IAmb | 23 36 06.4 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **GHO** | **Glory Hole Cre** | **54.37** | **34** | P | **P** | **23 35 55.2** | **+0.4** |
| GHO | | | | IAmb | IAmb | 23 36 33.0 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **54.58** | **30** | P | **P** | **23 35 57.4** | **+1.2** |
| **SML** | **Sawmill** | **54.65** | **34** | P | **P** | **23 35 57.6** | **+0.8** |
| SML | | | | IAmb | IAmb | 23 36 28.6 | |
| | comp=Z,26nm,1.7s | | | | | | |
| **PWL** | **Port Wells** | **54.70** | **35** | P | **P** | **23 35 57.4** | **+0.3** |
| **H24K** | **Noodor Dome** | **54.72** | **29** | P | **P** | **23 35 59.4** | **+2.2** |
| H24K | | | | IAmb | IAmb | 23 36 10.2 | |
| | comp=Z,14nm,1.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **55.12** | **34** | P | **P** | **23 35 59.0** | **-1.1** |
| **ILAR** | **Eielson Array** | **55.16** | **30** | P | **P** | **23 35 60.0** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=280,slow=7.5,SNR=5.9 | | | | | | |
| **GLI** | **Glacier Island** | **55.30** | **35** | P | **P** | **23 36 00.5** | **-0.8** |
| **KLU** | **Klutina** | **55.81** | **34** | P | **P** | **23 36 06.2** | **+1.1** |
| KLU | | | | IAmb | IAmb | 23 36 35.3 | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **BMAR** | **Burnt Mountain** | **55.99** | **27** | P | **P** | **23 36 08.1** | **+2.0** |
| **SCRK** | **Sand Creek** | **56.47** | **31** | P | **P** | **23 36 09.8** | **+0.2** |
| SCRK | | | | IAmb | IAmb | 23 36 12.8 | |
| | comp=Z,16nm,1.8s | | | | | | |
| **BMRM** | **Bremner River** | **56.51** | **35** | P | **P** | **23 36 10.6** | **+0.8** |
| **BERG** | **Berg Lake** | **57.02** | **35** | P | **P** | **23 36 14.9** | **+1.5** |
| **VRDI** | **Verde Repeater** | **57.03** | **34** | P | **P** | **23 36 14.1** | **+0.5** |
| VRDI | | | | IAmb | IAmb | 23 36 32.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WAX** | **Waxell Ridge** | **57.43** | **35** | P | **P** | **23 36 17.0** | **+0.8** |
| WAX | | | | IAmb | IAmb | 23 36 20.1 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **M27K** | **Edge Creek, AK** | **57.61** | **33** | P | **P** | **23 36 18.7** | **+1.1** |
| M27K | | | | IAmb | IAmb | 23 36 28.8 | |
| | comp=Z,15nm,1.8s | | | | | | |
| **ISLE** | **Juniper Island** | **57.66** | **35** | P | **P** | **23 36 18.6** | **+0.7** |
| ISLE | | | | IAmb | IAmb | 23 36 49.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BARN** | **Barnard Glacie** | **57.91** | **34** | P | **P** | **23 36 19.1** | **-0.6** |
| **DAWY** | **Dawson** | **58.47** | **31** | P | **P** | **23 36 23.9** | **+0.6** |
| **ABKAR** | **Akbulak array** | **58.88** | **312** | P | **P** | **23 36 25.7** | **-0.6** |
| **EPYK** | **Eagle Plains** | **59.19** | **28** | P | **P** | **23 36 29.8** | **+1.6** |
| **INK** | **Inuvik** | **60.03** | **25** | P | **P** | **23 36 34.0** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=284,slow=4.0,SNR=4.9 | | | | | | |
| **WHY** | **Whitehorse** | **61.24** | **34** | P | **P** | **23 36 43.2** | **+1.2** |
| WHY | | | | IAmb | IAmb | 23 37 09.7 | |
| | comp=Z,12nm,1.6s | | | | | | |
| **A36M** | **Sachs Harbour** | **61.84** | **21** | P | **P** | **23 36 47.0** | **+1.4** |
| A36M | | | | IAmb | IAmb | 23 36 47.7 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **C36M** | **Paulatuk** | **63.05** | **23** | P | **P** | **23 36 54.3** | **+0.6** |
| C36M | | | | IAmb | IAmb | 23 36 54.8 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.47** | **28** | P | **P** | **23 37 34.3** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=300,slow=6.3,SNR=9.7 | | | | | | |
| **FINES** | **FINESS Array B** | **71.72** | **332** | P | **P** | **23 37 47.1** | **-0.3** |
| | comp=Z,2.7nm,0.9s,baz=114,slow=4.8,SNR=8.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.29** | **51** | P | **P** | **23 38 37.1** | **+1.0** |
| | comp=Z,0.3nm,0.6s,baz=286,slow=6.5,SNR=2.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.44** | **50** | P | **P** | **23 39 50.0** | **+1.1** |
| | comp=Z,0.2nm,0.7s,baz=322,slow=2.8,SNR=2.4 | | | | | | |

**WEL 19 00:27:42.6±0.8, 36°S±9'×17°8E±1', h207km±10km, M3.7/18, ML3.9/20, MLv3.7/18, Error ellipse: s-maj=0.0km s-min=0.0km az=123.6, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.48** | **182** | P | Pn | 00 28 16.9 | +0.2 |
| MXZ | | | | S | S | 00 28 43.1 | +0.1 |
| **WMGZ** | **Waiomatatini S** | **1.73** | **179** | P | Pn | 00 28 19.7 | +0.8 |
| WMGZ | | | | S | S | 00 28 48.3 | +1.2 |
| **HAZ** | **Te Kaha** | **1.74** | **196** | P | Pn | 00 28 18.7 | -0.3 |
| HAZ | | | | S | S | 00 28 47.5 | +0.4 |
| **PKGZ** | **Pakihiroa** | **1.82** | **188** | P | Pn | 00 28 20.2 | +0.3 |
| PKGZ | | | | S | S | 00 28 49.3 | +0.7 |
| **RUGZ** | **Raukumara Rang** | **1.96** | **197** | P | Pn | 00 28 20.7 | -0.6 |
| RUGZ | | | | S | S | 00 28 51.1 | -0.1 |
| **PUZ** | **Puketiti** | **1.98** | **183** | P | Pn | 00 28 21.6 | +0.2 |
| PUZ | | | | S | S | 00 28 50.8 | -0.7 |
| **TWGZ** | **Tauwhareparae** | **2.11** | **189** | P | Pn | 00 28 23.7 | +0.9 |
| TWGZ | | | | S | S | 00 28 56.4 | +2.5 |
| **OPRZ** | **Ohinepanea** | **2.29** | **219** | P | Pn | 00 28 24.8 | +0.2 |
| **MWZ** | **Matawai** | **2.35** | **197** | P | Pn | 00 28 25.3 | 0.0 |
| MWZ | | | | S | S | 00 28 59.1 | +0.9 |
| **TKGZ** | **Te Karaka** | **2.39** | **190** | P | Pn | 00 28 25.9 | +0.3 |
| TKGZ | | | | S | S | 00 29 00.7 | +1.8 |
| **URZ** | **Urewera** | **2.40** | **205** | P | Pn | 00 28 25.5 | -0.2 |
| URZ | | | | S | S | 00 28 59.3 | +0.3 |
| **CNGZ** | **Carnagh Statio** | **2.40** | **183** | P | Pn | 00 28 26.6 | +0.8 |
| **RAGZ** | **Rawiri** | **2.53** | **198** | P | Pn | 00 28 27.6 | +0.4 |
| **TARZ** | **Mount Tarawera** | **2.62** | **214** | P | Pn | 00 28 29.3 | +1.0 |
| **RIGZ** | **Rimuhau** | **2.66** | **191** | P | Pn | 00 28 28.7 | 0.0 |
| RIGZ | | | | S | S | 00 29 06.5 | +2.0 |
| **MUGZ** | **Murupara** | **2.71** | **208** | P | Pn | 00 28 29.1 | -0.1 |
| MUGZ | | | | S | S | 00 29 05.9 | +0.6 |
| **RTZ** | **Ruatahuna** | **2.76** | **203** | P | Pn | 00 28 27.2 | -2.7 |
| RTZ | | | | S | S | 00 29 06.7 | +0.2 |
| **SNGZ** | **Shannon Statio** | **2.82** | **197** | P | Pn | 00 28 30.6 | +0.1 |
| SNGZ | | | | S | S | 00 29 10.1 | +2.5 |
| **PRGZ** | **Paritu Road** | **2.86** | **188** | P | Pn | 00 28 30.8 | -0.2 |
| PRGZ | | | | S | S | 00 29 05.5 | -2.9 |
| **PRRZ** | **Plateau Road** | **2.89** | **213** | P | Pn | 00 28 31.2 | 0.0 |
| **KNZ** | **Kokohu** | **2.98** | **191** | P | Pn | 00 28 31.9 | -0.4 |
| KNZ | | | | S | S | 00 29 11.1 | +0.2 |
| **RAHZ** | **Arahi** | **3.01** | **200** | P | Pn | 00 28 32.5 | -0.1 |
| RAHZ | | | | S | S | 00 29 12.9 | +1.4 |
| **MTHZ** | **Maungataniwha** | **3.02** | **204** | P | Pn | 00 28 32.4 | -0.4 |
| MTHZ | | | | S | S | 00 29 11.9 | 0.0 |
| **MHGZ** | **Mahia Peninsul** | **3.08** | **187** | P | Pn | 00 28 33.7 | +0.1 |
| MHGZ | | | | S | S | 00 29 14.0 | +0.9 |
| **WHHZ** | **Waihua** | **3.12** | **197** | P | Pn | 00 28 37.0 | +3.0 |
| WHHZ | | | | S | S | 00 29 18.5 | +4.6 |
| **TLZ** | **Tolley Road** | **3.19** | **225** | P | Pn | 00 28 35.1 | +0.2 |
| **NMHZ** | **Naumai** | **3.26** | **202** | P | Pn | 00 28 35.7 | +0.1 |
| NMHZ | | | | S | S | 00 29 19.0 | +2.2 |
| **ARHZ** | **Aropaoanui** | **3.36** | **199** | P | Pn | 00 28 36.4 | -0.3 |
| ARHZ | | | | S | S | 00 29 20.0 | +1.2 |
| **BKZ** | **Black Stump Fm** | **3.42** | **205** | P | Pn | 00 28 36.6 | -0.9 |
| BKZ | | | | S | S | 00 29 20.8 | +0.5 |
| **RITZ** | **Rihia Road** | **3.52** | **214** | P | Pn | 00 28 38.5 | -0.1 |
| **MCHZ** | **McNeill Hill** | **3.61** | **201** | P | Pn | 00 28 39.5 | -0.3 |
| MCHZ | | | | S | S | 00 29 25.8 | +1.4 |
| **KWHZ** | **Kaweka Forest** | **3.68** | **204** | P | Pn | 00 28 39.6 | -1.1 |
| KWHZ | | | | S | S | 00 29 26.7 | +0.8 |
| **NTVZ** | **North Tongarir** | **3.70** | **215** | P | Pn | 00 28 40.7 | -0.3 |
| **TMVZ** | **Te Maari** | **3.70** | **214** | P | Pn | 00 28 40.5 | -0.5 |
| **KRVZ** | **Karewarewa** | **3.71** | **215** | P | Pn | 00 28 40.8 | -0.3 |
| **ETVZ** | **East Tongariro** | **3.71** | **214** | P | Pn | 00 28 40.5 | -0.6 |
| **HIZ** | **Hauiti** | **3.71** | **228** | P | Pn | 00 28 42.2 | +1.1 |
| **CKHZ** | **Cape Kidnapper** | **3.71** | **196** | P | Pn | 00 28 40.5 | -0.5 |
| CKHZ | | | | S | S | 00 29 27.3 | +0.7 |
| **WTVZ** | **West Tongariro** | **3.75** | **215** | P | Pn | 00 28 41.1 | -0.5 |
| **NNVZ** | **North Ngauruho** | **3.75** | **215** | P | Pn | 00 28 41.2 | -0.5 |
| **OTVZ** | **Oturere** | **3.75** | **214** | P | Pn | 00 28 41.0 | -0.7 |
| **SNVZ** | **South Ngauruho** | **3.79** | **214** | P | Pn | 00 28 41.5 | -0.6 |
| **TWVZ** | **Taurewa** | **3.79** | **217** | P | Pn | 00 28 41.5 | -0.5 |
| **NGZ** | **Ngauruhoe** | **3.79** | **215** | P | Pn | 00 28 41.8 | -0.4 |
| **BHHZ** | **Black Hill Sta** | **3.86** | **208** | P | Pn | 00 28 41.3 | -1.6 |
| **FWVZ** | **Far West T-bar** | **3.88** | **215** | P | Pn | 00 28 42.5 | -0.8 |
| **KAHZ** | **Kahuranaki** | **3.89** | **197** | P | Pn | 00 28 41.4 | -1.8 |
| **KRHZ** | **Kereru** | **3.89** | **204** | P | Pn | 00 28 41.7 | -1.5 |
| **MOVZ** | **Moawhango** | **3.92** | **211** | P | Pn | 00 28 41.9 | -1.7 |
| **WNVZ** | **Wahianoa** | **3.92** | **214** | P | Pn | 00 28 42.5 | -1.2 |
| **PXZ** | **Pawanui** | **4.12** | **197** | P | Pn | 00 28 44.7 | -1.3 |
| **WPHZ** | **Waipukurau** | **4.26** | **201** | P | Pn | 00 28 46.3 | -1.5 |
| **PRHZ** | **Porangahau** | **4.40** | **198** | P | Pn | 00 28 48.0 | -1.4 |
| **TSZ** | **Takapari Road** | **4.40** | **205** | P | Pn | 00 28 47.3 | -2.3 |
| **DVHZ** | **Dannevirke** | **4.55** | **202** | P | Pn | 00 28 49.2 | -2.2 |
| **ANWZ** | **Angora Road** | **4.62** | **198** | P | Pn | 00 28 50.8 | -1.4 |
| **POWZ** | **Post Office Ro** | **4.77** | **205** | P | Pn | 00 28 52.2 | -1.9 |
| **PRWZ** | **Pori Road** | **4.85** | **202** | P | Pn | 00 28 53.4 | -1.8 |
| **MRZ** | **Mangatainoka R** | **5.07** | **205** | P | Pn | 00 28 55.0 | -3.0 |
| **CPWZ** | **Castlepoint** | **5.11** | **199** | P | Pn | 00 28 57.1 | -1.3 |
| **OGWZ** | **Otaki Gorge** | **5.36** | **207** | P | Pn | 00 28 58.6 | -3.0 |
| **TMWZ** | **Te Maipa** | **5.38** | **201** | P | Pn | 00 28 59.5 | -2.4 |
| **KIW** | **Kapiti Island** | **5.49** | **209** | P | Pn | 00 29 00.2 | -3.1 |
| **MTW** | **Mount Morrison** | **5.54** | **203** | P | Pn | 00 29 00.5 | -3.5 |
| **CAW** | **Cannon Point** | **5.65** | **206** | P | Pn | 00 29 02.0 | -3.4 |
| **TRWZ** | **Traveller** | **5.71** | **201** | P | Pn | 00 29 03.3 | -2.8 |

*IDC **19** 00:35:47.4±1.6, 24°.24S×115°.87W, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.8/24, mbtmp3.8/4, MS3.5/4, Ms1 3.5/4, ms1mx3.1/57, Error ellipse: s-maj=64.9km s-min=34.4km az=24.0*
*NEIC **19** 00:35:48.7±2.4, 24°.3S±0°.1×115°.8W±0°.1, h10km±2km, mb4.9/41, Error ellipse: s-maj=27.6km s-min=17.9km az=215.0*

**ISC 19 00:35:48.7±1.0, 24°.3S±0°.2×115°.8W±0°.1, h12km, n60, σ1s20/48, mb4.8/26, MS3.5/3, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VA02** | **Isla de Pascua** | **6.39** | **118** | Pn | Pn | 00 37 17.5 | -5.1 |
| **RPN** | **Rapa Nui** | **6.45** | **117** | LR | LR | 00 39 15.2 | |
| | comp=Z,332nm,18.3s,baz=292,slow=32 | | | | | | |
| **H03N2** | **Juan Fernandez** | **33.38** | **114** | T | T | 01 18 00.8 | |
| | baz=280,slow=75,SNR=34 | | | | | | |
| **H03N3** | **Juan Fernandez** | **33.39** | **114** | T | T | 01 18 02.0 | |
| | baz=280,slow=75,SNR=40 | | | | | | |
| **H03N1** | **Juan Fernandez** | **33.40** | **114** | T | T | 01 18 01.9 | |
| | baz=280,slow=75,SNR=60 | | | | | | |
| **PAYG** | **Puerto Ayora** | **34.08** | **50** | P | **P** | **00 42 33.8** | **+0.5** |
| **BI05** | **Punta Hualpn** | **38.43** | **119** | P | **P** | **00 43 09.0** | **-1.2** |
| BI05 | | | | IAmb | IAmb | 00 43 12.6 | |
| | comp=Z,41nm,0.9s | | | | | | |
| **NNA** | **Nana** | **38.84** | **79** | LR | LR | 00 54 29.9 | |
| | comp=Z,88nm,20.1s,baz=213,slow=29 | | | | | | |
| **LL07** | **Hotel Espejo d** | **39.31** | **129** | P | **P** | **00 43 18.6** | **+1.0** |
| LL07 | | | | IAmb | IAmb | 00 43 20.6 | |
| | comp=Z,56nm,1.2s | | | | | | |
| **PB14** | **IPOC Station P** | **41.16** | **100** | P | **P** | **00 43 33.3** | **-0.2** |
| PB14 | | | | IAmb | IAmb | 00 43 38.4 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **AC02** | **Maricunga** | **41.98** | **104** | P | **P** | **00 43 40.3** | **0.0** |
| **PATCX** | **Punta Patache** | **42.14** | **95** | P | **P** | **00 43 41.4** | **+0.1** |
| PATCX | | | | IAmb | IAmb | 00 43 53.8 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **LPAZ** | **La Paz** | **45.22** | **89** | P | **P** | **00 44 09.0** | **+2.2** |
| | comp=Z,1.6nm,0.8s,baz=251,slow=5.6,SNR=5.2 | | | | | | |
| **PEZE** | **Perez Zeledon,** | **45.86** | **47** | P | **P** | **00 44 11.9** | **+0.7** |
| PEZE | | | | IAmb | IAmb | 00 44 18.1 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **CMIG** | **Matias Romero** | **45.92** | **28** | LR | LR | 00 58 51.6 | |
| | comp=Z,46nm,18.4s,baz=184,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **48.42** | **7** | LR | LR | 00 59 53.4 | |
| | comp=Z,45nm,21.0s,baz=194,slow=30 | | | | | | |
| **SDV** | **Santo Domingo** | **55.04** | **59** | P | **P** | **00 45 20.5** | **-0.2** |
| SDV | | | | IAmb | IAmb | 00 45 35.1 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **AQDB** | **Aquidauana** | **55.32** | **99** | P | **P** | **00 45 22.6** | **+0.1** |
| **JCT** | **Junction City** | **56.59** | **17** | P | **P** | **00 45 32.8** | **+1.4** |
| JCT | | | | IAmb | IAmb | 00 45 41.2 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **NPH** | **North Pit** | **58.05** | **315** | P | **P** | **00 45 41.7** | **-0.3** |
| **SBLHI** | **Steaming Bluff** | **58.05** | **315** | P | **P** | **00 45 41.1** | **-0.9** |
| **LCMT** | **Little Creek M** | **61.04** | **2** | P | **P** | **00 46 03.6** | **+1.2** |
| **KNB** | **Kanab** | **61.06** | **3** | P | **P** | **00 46 02.4** | **-0.1** |
| KNB | | | | IAmb | IAmb | 00 46 12.1 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **SDDR** | **Presa de Saban** | **61.08** | **49** | P | **P** | **00 46 00.1** | **-2.8** |
| SDDR | | | | IAmb | IAmb | 00 46 03.7 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **PKCU** | **Pink Cliffs** | **61.51** | **3** | P | **P** | **00 46 05.6** | **-0.2** |
| PKCU | | | | IAmb | IAmb | 00 46 14.5 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **X37A** | **Clayton** | **61.70** | **19** | P | **P** | **00 46 07.9** | **+1.2** |
| **T25A** | **Trinidad** | **62.05** | **10** | P | **P** | **00 46 10.1** | **+0.9** |
| T25A | | | | IAmb | IAmb | 00 46 17.5 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.45** | **358** | P | **P** | **00 46 16.2** | **+4.2** |
| | comp=Z,0.2nm,0.4s,baz=184,slow=8.0,SNR=2.2 | | | | | | |
| **PV16** | **Nyswonger Mesa** | **62.62** | **6** | P | **P** | **00 46 10.4** | **-2.7** |
| **SRU** | **San Rafael Swe** | **63.28** | **5** | P | **P** | **00 46 17.5** | **+0.1** |
| **BDFB** | **Brasilia** | **63.75** | **96** | P | **P** | **00 46 21.1** | **+0.1** |
| | comp=Z,2.8nm,1.0s,baz=209,slow=14,SNR=3.2 | | | | | | |
| **BDFB** | **Brasilia** | **63.75** | **96** | IAmb | IAmb | 00 46 26.6 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **152A** | **Waverly Hall** | **63.94** | **29** | P | **P** | **00 46 21.1** | **-0.6** |
| 152A | | | | IAmb | IAmb | 00 46 37.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **BEKR** | **Beckworth** | **63.99** | **356** | P | **P** | **00 46 22.0** | **-0.1** |
| **BMN** | **Battle Mountai** | **64.42** | **359** | P | **P** | **00 46 23.5** | **-1.3** |
| BMN | | | | IAmb | IAmb | 00 46 28.5 | |
| | comp=Z,7.9nm,1.5s | | | | | | |
| **ISCO**

0.5nm,0.4s,baz=121,slow=6.9,SNR=11
MKAR PcP **PcP 01 11 21.8 +1.3**
0.5nm,0.6s,baz=138,slow=2.9,SNR=4.2

**IDC 19 01:23:39.7±2.2, 14°46S×169°05E, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.4/41, mbtmp3.9/3, Error ellipse: s-maj=121.0km s-min=11.6km az=145.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **22.47** | **252** | P | | P | | 01 28 41.1 | +0.4 |
| | 3.5nm,0.7s,baz=74,slow=12,SNR=7.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **34.38** | **249** | P | | P | | 01 30 28.3 | -0.5 |
| | 0.8nm,0.7s,baz=72,slow=9.8,SNR=7.6 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.75** | **17** | P | | P | | 01 36 20.2 | -0.2 |
| | 0.6nm,0.6s,baz=230,slow=7.0,SNR=7.7 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.42** | **346** | PKP | | PKiKP | | 01 42 32.8 | +0.1 |
| | 2.9nm,0.9s,baz=58,slow=2.2,SNR=6.1 | | | | | | | | |

**IDC 19 01:25:55.0±1.4, 3°01S×139°61E, h0km, mb3.3/3, mb1 3.6/4, mb1mx2.9/37, mbtmp3.4/4, ML3.3/1, Error ellipse: s-maj=36.3km s-min=12.9km az=148.0, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.20** | **66** | Pg | | Pn | | 01 26 19.5 | +0.5 |
| | 6.1nm,0.3s,baz=203,slow=7.3,SNR=11 | | | | | | | | |
| JAY | | | | Lg | | Lg | | 01 26 32.8 | |
| | 19nm,0.3s,baz=36,slow=15,SNR=8.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.60** | **197** | P | | Pn | | 01 29 59.9 | -2.0 |
| | 0.1nm,0.3s,baz=19,slow=12,SNR=2.4 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.31** | **221** | P | | P | | 01 30 33.4 | +0.7 |
| | 1.4nm,0.9s,baz=34,slow=7.3,SNR=1.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **21.26** | **195** | P | | P | | 01 30 43.0 | -0.1 |
| | 0.9nm,0.8s,baz=22,slow=11,SNR=7.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.58** | **322** | P | | P | | 01 37 11.9 | -0.2 |
| | 0.3nm,0.5s,baz=103,slow=4.7,SNR=3.1 | | | | | | | | |

**RSNC 19 01:45:03.2±1.2, 6°83N×73°11W, h150km±4km, ML3.1, Mw3.7, 1C-4D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **197** | ⇓*i*P | | Pn | | 01 45 23.6 | -0.3 |
| BARC | | | | *e*S | | Sn | | 01 45 38.9 | -0.8 |
| BARC | | | | *i* | | | | 01 45 39.9 | |
| | comp=Z,231nm,0.2s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.65** | **39** | ⇑*e*P | | Pn | | 01 45 26.5 | +0.5 |
| PAMC | | | | *e*S | | Sn | | 01 45 43.6 | +0.3 |
| PAMC | | | | *i* | | | | 01 45 45.8 | |
| | comp=Z,144nm,0.5s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.66** | **295** | ⇓*e*P | | Pn | | 01 45 25.4 | 0.0 |
| BRRC | | | | *e*S | | Sn | | 01 45 42.6 | +0.2 |
| BRRC | | | | *i* | | | | 01 45 46.4 | |
| | comp=Z,133nm,0.3s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.93** | **178** | ⇓*e*P | | Pn | | 01 45 27.6 | -0.5 |
| RUSC | | | | *e*S | | Sn | | 01 45 46.4 | -0.5 |
| RUSC | | | | *i* | | | | 01 45 47.9 | |
| | comp=Z,82nm,0.4s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **258** | *e*P | | Pn | | 01 45 30.2 | -1.2 |
| PTBC | | | | *e*S | | Sn | | 01 45 51.3 | -1.7 |
| PTBC | | | | *i* | | | | 01 45 57.8 | |
| | comp=Z,87nm,0.4s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **106** | ⇓*i*P | | Pn | | 01 45 32.1 | +0.6 |
| TAMC | | | | *e*S | | Sn | | 01 45 52.0 | -1.0 |
| TAMC | | | | *i* | | | | 01 45 53.0 | |
| | comp=Z,79nm,0.4s | | | | | | | | |
| **OCAC** | **Ocana** | **1.42** | **352** | *e*P | | Pn | | 01 45 31.6 | -0.5 |
| OCAC | | | | *e*S | | Sn | | 01 45 53.6 | -0.7 |
| OCAC | | | | *i* | | | | 01 46 02.0 | |
| | comp=Z,220nm,0.2s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.51** | **219** | *e*P | | Pn | | 01 45 32.5 | -0.5 |
| SPBC | | | | *e*S | | Sn | | 01 45 54.9 | -0.9 |
| SPBC | | | | *i* | | | | 01 45 59.3 | |
| | comp=Z,172nm,0.3s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | *e*P | | Pn | | 01 45 36.1 | -0.6 |
| ZARC | | | | *e*S | | Sn | | 01 46 01.6 | -0.8 |
| ZARC | | | | *i* | | | | 01 46 06.8 | |
| | comp=Z,114nm,0.4s | | | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **234** | *e*P | | Pn | | 01 45 39.8 | -0.4 |
| NORC | | | | *e*S | | Sn | | 01 46 07.4 | -1.3 |
| NORC | | | | *i* | | | | 01 46 13.6 | |
| | comp=Z,64nm,0.2s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **196** | *e*P | | Pn | | 01 45 41.7 | -0.2 |
| CHIC | | | | *e*S | | Sn | | 01 46 11.2 | -0.6 |
| CHIC | | | | *i* | | | | 01 46 14.7 | |
| | comp=Z,76nm,0.6s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | *e*P | | Pn | | 01 45 43.5 | +1.0 |
| ROSC | | | | *e*S | | Sn | | 01 46 13.2 | +0.5 |
| ROSC | | | | *i* | | | | 01 46 18.3 | |
| | comp=Z,181nm,0.4s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.48** | **255** | *e*P | | Pn | | 01 45 44.9 | +0.4 |
| HELC | | | | *e*S | | Sn | | 01 46 16.1 | -0.2 |
| HELC | | | | *i* | | | | 01 46 21.7 | |
| | comp=Z,51nm,0.3s | | | | | | | | |
| **SOCV** | **Socops** | **2.66** | **57** | *e*P | | Pn | | 01 45 45.4 | -1.0 |
| SOCV | | | | *e*S | | Sn | | 01 46 15.8 | -3.9 |
| **GUY2C** | **Guyana, Caldas** | **2.75** | **235** | *e*P | | Pn | | 01 45 47.6 | -0.3 |
| GUY2C | | | | *e*S | | Sn | | 01 46 25.9 | +3.6 |
| GUY2C | | | | *i* | | | | 01 46 30.1 | |
| | comp=Z,54nm,0.6s | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.76** | **192** | *e*P | | Pn | | 01 45 47.5 | -0.2 |
| VILC | | | | *e*S | | Sn | | 01 46 21.9 | -0.2 |
| VILC | | | | *i* | | | | 01 46 24.4 | |
| | comp=Z,3μm,0.4s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **160** | *e*P | | Pn | | 01 45 46.8 | -1.2 |
| PTGC | | | | *e*S | | Sn | | 01 46 20.7 | -1.8 |
| PTGC | | | | *i* | | | | 01 46 22.0 | |
| | comp=Z,43nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | *e*P | | Pn | | 01 45 51.2 | 0.0 |
| CBOC | | | | *e*S | | Sn | | 01 46 27.6 | -0.8 |
| CBOC | | | | *i* | | | | 01 46 33.5 | |
| | comp=Z,14nm,0.3s | | | | | | | | |
| **DBBC** | **Dabeiba** | **3.08** | **274** | *e*P | | Pn | | 01 45 51.7 | 0.0 |
| DBBC | | | | *e*S | | Sn | | 01 46 27.6 | -1.6 |
| DBBC | | | | *i* | | | | 01 46 31.4 | |
| | comp=Z,129nm,0.3s | | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.19** | **308** | *e*P | | Pn | | 01 45 50.8 | -2.2 |
| MOTC | | | | *e*S | | Sn | | 01 46 29.3 | -2.2 |
| MOTC | | | | *i* | | | | 01 46 44.3 | |
| | comp=Z,23nm,0.6s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *e*P | | Pn | | 01 45 53.3 | 0.0 |
| SDV | | | | *e*S | | Sn | | 01 46 31.5 | -0.5 |
| SDV | | | | *i* | | | | 01 46 33.9 | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *e*P | | Pn | | 01 45 54.2 | +0.1 |
| ANIL | | | | *e*S | | Sn | | 01 46 34.4 | +0.9 |
| ANIL | | | | *i* | | | | 01 46 43.7 | |
| | comp=Z,176nm,0.3s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | *e*P | | Pn | | 01 45 58.0 | -0.3 |
| ORTC | | | | *e*S | | Sn | | 01 46 40.3 | -0.7 |
| ORTC | | | | *i* | | | | 01 46 45.0 | |
| | comp=Z,38nm,0.2s | | | | | | | | |
| **ELOV** | **Elorza** | **3.61** | **87** | *e*P | | Pn | | 01 45 58.0 | -0.4 |
| ELOV | | | | *e*S | | Sn | | 01 46 39.1 | -2.1 |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | *e*P | | Pn | | 01 45 57.8 | -1.5 |
| SJCC | | | | *e*S | | Sn | | 01 46 39.3 | -3.5 |
| SJCC | | | | *i* | | | | 01 46 53.4 | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.69** | **239** | *e*P | | Pn | | 01 45 59.1 | -0.4 |
| PLMC | | | | *e*S | | Sn | | 01 46 40.5 | -2.7 |
| PLMC | | | | *i* | | | | 01 46 47.2 | |
| | comp=Z,12nm,0.2s | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.28** | **229** | *e*P | | Pn | | 01 46 05.7 | -1.6 |
| **SMRC** | **Santa Marta, M** | **4.45** | **346** | *e*P | | Pn | | 01 46 08.3 | -1.0 |
| SMRC | | | | *e*S | | Sn | | 01 46 56.2 | -4.7 |
| SMRC | | | | *i* | | | | 01 47 08.5 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.71** | **189** | *e*P | | Pn | | 01 46 10.7 | -2.1 |
| MACC | | | | *e*S | | Sn | | 01 47 02.0 | -5.1 |
| MACC | | | | *i* | | | | 01 47 08.0 | |
| | comp=Z,15nm,0.8s | | | | | | | | |

*IDC 19 01:46:57.6±0.9, 45°85S×77°70W, h0km, mb4.2/9, mb1 4.3/11, mb1mx4.2/27, mbtmp4.1/11, ML3.4/2, MS3.9/25, Ms1 3.9/25, ms1mx3.7/51, Error ellipse: s-maj=32.2km s-min=19.7km az=101.0*
*NEIC 19 01:46:59.5±2.2, 45°68S±0°08×77°9W±0°2, h4km±4km, mb4.8/39, Error ellipse: s-maj=16.9km s-min=11.2km az=89.0*

**ISC 19 01:46:59.6±0.6, 45°74S±0°07×77°7W±0°1, h10km, n88, σ1s03/63, mb4.7/25, MS3.9/23, 1C, Off coast of southern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **COYC** | **Coyhaique** | **3.97** | **90** | Pn | | Pn | | **01 48 02.2** | **+1.8** |
| **LL07** | **Hotel Espejo d** | **4.22** | **48** | Pn | | Pn | | **01 48 04.0** | **+0.2** |
| **LL02** | **Futaleuf** | **4.92** | **61** | | | Pn | | **01 48 14.2** | **+0.6** |
| **LL05** | **Los Muermos** | **5.32** | **37** | | | Pn | | **01 48 19.1** | **0.0** |
| **LL03** | **Petrohue** | **6.01** | **42** | | | Pn | | **01 48 27.9** | **-0.7** |
| **LL04** | **Puerto Octay** | **6.19** | **41** | Pn | | Pn | | **01 48 29.7** | **-1.3** |
| **LR04** | **Corral** | **6.65** | **30** | Pn | | Pn | | **01 48 36.1** | **-1.2** |
| **MG05** | **Puerto Natales** | **6.88** | **152** | Pn | | Pn | | **01 48 40.8** | **+0.4** |
| **PLCA** | **Paso Flores** | **7.25** | **49** | Pn | | Pn | | **01 48 44.9** | **-0.7** |
| | 0.1nm,0.3s,baz=248,slow=16,SNR=4.3 | | | | | | | | |
| PLCA | | | | | | LR | LR | 01 51 28.8 | |
| | comp=Z,2μm,20.6s,baz=235,slow=37 | | | | | | | | |
| **PLCA** | **Paso Flores** | **7.25** | **49** | Pn | | Pn | | **01 48 46.6** | **+1.0** |
| **LR03** | **Panguipulli** | **7.28** | **35** | Pn | | Pn | | **01 48 44.7** | **-1.3** |
| **LC01** | **Cunco** | **8.09** | **34** | Pn | | Pn | | **01 48 56.4** | **-0.8** |
| **USHA** | **Ushuaia** | **10.87** | **150** | Pn | | Pn | | **01 49 33.1** | **-1.9** |
| | 0.5nm,0.3s,baz=310,slow=12,SNR=3.8 | | | | | | | | |
| USHA | | | | | | LR | LR | 01 53 48.9 | |
| | comp=Z,202nm,20.5s,baz=313,slow=38 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **11.91** | **355** | T | | T | | 02 02 04.8 | |
| | baz=174,SNR=53 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **11.92** | **355** | T | | T | | 02 02 07.4 | |
| | baz=174,SNR=43 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **11.93** | **355** | T | | T | | 02 02 02.0 | |
| | baz=174,SNR=53 | | | | | | | | |
| **ZON** | **Zonda** | **15.82** | **30** | Pn | | **Pn** | | **01 50 40.4** | **-2.0** |
| **AC02** | **Maricunga** | **20.07** | **23** | | | **P** | | **01 51 33.8** | **+0.2** |
| **PMSA** | **Palmer Station** | **20.52** | **163** | LR | | LR | | 01 57 21.3 | |
| | comp=Z,227nm,18.9s,baz=147,slow=31 | | | | | | | | |
| **ITQB** | **Itaqui** | **23.05** | **53** | P | | **P** | | **01 52 04.8** | **-0.1** |
| ITQB | | | | | | IAmb | IAmb | 01 52 17.8 | |
| | comp=Z,40nm,1.4s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **23.31** | **62** | P | | **P** | | **01 52 08.8** | **+1.1** |
| **LVC** | **Limon Verde** | **24.16** | **20** | P | | **P** | | **01 52 17.1** | **+0.7** |
| | comp=Z,2.7nm,0.8s,baz=178,slow=12,SNR=3.1 | | | | | | | | |
| LVC | | | | | | LR | LR | 01 59 49.8 | |
| | comp=Z,109nm,19.7s,baz=198,slow=32 | | | | | | | | |
| **LVC** | **Limon Verde** | **24.16** | **20** | P | | **P** | | **01 52 16.6** | **+0.3** |
| **CPUP** | **Villa Florida** | **25.32** | **47** | P | | **P** | | **01 52 27.7** | **+1.4** |
| | comp=Z,1.1nm,0.5s,baz=220,slow=8.0,SNR=4.3 | | | | | | | | |
| CPUP | | | | | | LR | LR | 02 02 25.2 | |
| | comp=Z,217nm,21.5s,baz=216,slow=37 | | | | | | | | |
| **CPUP** | **Villa Florida** | **25.32** | **47** | P | | **P** | | **01 52 27.9** | **+1.6** |
| CPUP | | | | | | IAmb | IAmb | 01 52 39.6 | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **SIV** | **San Ignacio** | **32.78** | **31** | P | | **P** | | **01 53 32.3** | **-0.6** |
| | comp=Z,2.0nm,0.9s,baz=212,slow=12,SNR=3.5 | | | | | | | | |
| SIV | | | | | | LR | LR | 02 07 18.6 | |
| | comp=Z,156nm,19.8s,baz=224,slow=37 | | | | | | | | |
| **NNA** | **Nana** | **33.64** | **2** | LR | | LR | | 02 03 13.8 | |
| | comp=Z,120nm,20.4s,baz=178,slow=29 | | | | | | | | |
| **ATAH** | **Atahualpa** | **38.46** | **359** | LR | | LR | | 02 06 36.2 | |
| | comp=Z,137nm,19.9s,baz=201,slow=31 | | | | | | | | |
| **BDFB** | **Brasilia** | **38.99** | **49** | P | | **P** | | **01 54 25.8** | **-0.5** |
| | comp=Z,1.3nm,0.4s,baz=186,slow=8.7,SNR=4.8 | | | | | | | | |
| BDFB | | | | | | LR | LR | 02 12 00.2 | |
| | comp=Z,504nm,19.1s,baz=176,slow=38 | | | | | | | | |
| **BDFB** | **Brasilia** | **38.99** | **49** | P | | **P** | | **01 54 27.0** | **+0.7** |
| **VNA3** | **Neumayer Olymp** | **40.53** | **152** | P | | **P** | | **01 54 39.7** | **+1.3** |
| **VNA2** | **Neumayer--Watz** | **41.28** | **152** | P | | **P** | | **01 54 45.7** | **+1.2** |
| | baz=267,slow=7.6 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **44.51** | **180** | P | | **P** | | **01 55 09.5** | **-1.5** |
| | comp=Z,8.7nm,1.1s,baz=162,slow=5.5,SNR=7.4 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **44.51** | **180** | P | | **P** | | **01 55 11.7** | **+0.7** |
| QSPA | | | | | | IAmb | IAmb | 01 55 13.5 | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **OTAV** | **Otavalo** | **45.78** | **359** | P | | **P** | | **01 55 22.6** | **+0.8** |
| OTAV | | | | | | IAmb | IAmb | 01 55 32.6 | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| **PTGA** | **Pitinga** | **47.47** | **24** | LR | | LR | | 02 16 48.9 | |
| | comp=Z,65nm,20.9s,baz=182,slow=38 | | | | | | | | |
| **ROSC** | **El Rosal** | **50.44** | **4** | LR | | LR | | 02 14 41.5 | |
| | comp=Z,140nm,21.4s,baz=192,slow=33 | | | | | | | | |
| **VNDA** | **Vanda** | **51.72** | **194** | LR | | LR | | 02 13 48.9 | |
| | comp=Z,115nm,20.9s,baz=52,slow=31 | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **53.05** | **4** | P | | **P** | | **01 56 16.9** | **+0.1** |
| ZARC | | | | | | IAmb | IAmb | 01 56 18.5 | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| **MDP** | **Montagnes des** | **55.34** | **31** | LR | | LR | | 02 21 00.8 | |
| | comp=Z,118nm,19.3s,baz=156,slow=37 | | | | | | | | |
| **SYO** | **Syowa Base** | **56.64** | **157** | ⇑*e*P | | **P** | | **01 56 41.4** | **-0.8** |
| **ESPN** | **Las Esperanzas** | **57.96** | **352** | P | | **P** | | **01 56 52.9** | **+0.8** |
| **APG** | **El Apazote** | **61.54** | **346** | LR | | LR | | 02 19 13.6 | |
| | comp=Z,42nm,18.1s,baz=145,slow=31 | | | | | | | | |
| **PPT** | **Papeete** | **65.01** | **270** | LR | | LR | | 02 19 34.5 | |
| | comp=Z,91nm,21.0s,baz=186,slow=30 | | | | | | | | |
| **RAR** | **Rarotonga** | **69.68** | **260** | LR | | LR | | 02 21 45.6 | |
| | comp=Z,224nm,19.3s,baz=154,slow=30 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **72.07** | **225** | LR | | LR | | 02 22 04.8 | |
| | comp=Z,258nm,19.0s,baz=118,slow=29 | | | | | | | | |
| **URZ** | **Urewera** | **72.78** | **233** | LR | | LR | | 02 21 45.9 | |
| | comp=Z,120nm,20.5s,baz=159,slow=29 | | | | | | | | |
| **SUR** | **Sutherland** | **73.00** | **119** | LR | | LR | | 02 27 54.2 | |
| | comp=Z,63nm,18.4s,baz=212,slow=34 | | | | | | | | |
| **HPIG** | | **76.65** | **335** | P | | **P** | | **01 58 51.6** | **+0.9** |
| HPIG | | | | | | IAmb | IAmb | 01 58 54.0 | |
| | comp=Z,7.3nm,1.3s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **78.34** | **337** | P | | **P** | | **01 59 01.1** | **+1.2** |
| TX31 | | | | | | IAmb | IAmb | 01 59 19.1 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **TX32** | **Lajitas Array** | **78.34** | **337** | P | | **P** | | **01 59 01.1** | **+1.2** |
| **TXAR** | **Lajitas Array** | **78.34** | **337** | P | | **P** | | **01 59 01.1** | **+1.2** |
| | comp=Z,2.1nm,1.1s,baz=149,slow=5.8,SNR=9.3 | | | | | | | | |
| TXAR | | | | | | LR | LR | 02 29 36.5 | |
| | comp=Z,50nm,18.8s,baz=108,slow=33 | | | | | | | | |
| **BOSA** | **Boshof** | **78.37** | **119** | P | | **P** | | **01 58 59.7** | **-0.7** |
| | comp=Z,4.4nm,1.0s,baz=217,slow=9.6,SNR=3.5 | | | | | | | | |
| BOSA | | | | | | LR | LR | 02 31 34.3 | |
| | comp=Z,66nm,18.3s,baz=182,slow=34 | | | | | | | | |
| **BOSA** | **Boshof** | **78.37** | **119** | | | IAmb | IAmb | 01 59 16.1 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **JCT** | **Junction City** | **78.46** | **341** | P | | **P** | | **01 59 02.1** | **+1.7** |
| JCT | | | | | | IAmb | IAmb | 01 59 03.6 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **WLAR** | **White Oak Lake** | **80.27** | **347** | P | | **P** | | **01 59 10.7** | **+0.6** |
| WLAR | | | | | | IAmb | IAmb | 01 59 11.8 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **SWET** | **Sewanee** | **80.92** | **353** | P | | **P** | | **01 59 13.7** | **0.0** |
| SWET | | | | | | IAmb | IAmb | 01 59 14.8 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **LBTB** | **Lobatse** | **81.17** | **117** | LR | | LR | | 02 29 30.6 | |
| | comp=Z,51nm,21.6s,baz=200,slow=32 | | | | | | | | |
| **V48A** | **Smith Brothers** | **81.51** | **353** | P | | **P** | | **01 59 17.4** | **+0.6** |
| **W39A** | **Magazine** | **81.85** | **347** | P | | **P** | | **01 59 19.7** | **+1.1** |
| W39A | | | | | | IAmb | IAmb | 01 59 21.2 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **319A** | **Douglas** | **81.91** | **333** | P | | **P** | | **01 59 20.1** | **+1.0** |
| 319A | | | | | | IAmb | IAmb | 01 59 22.6 | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **WVT** | **Waverly** | **82.00** | **352** | P | | **P** | | **01 59 19.7** | **+0.4** |
| WVT | | | | | | IAmb | IAmb | 01 59 20.9 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **LCAR** | **Lake Charles** | **82.33** | **349** | P | | **P** | | **01 59 21.4** | **+0.4** |
| LCAR | | | | | | IAmb | IAmb | 01 59 38.9 | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **U40A** | **Yellville** | **82.85** | **348** | P | | **P** | | **01 59 24.1** | **+0.3** |
| **DBIC** | **Dimbokro** | **82.97** | **73** | LR | | LR | | 02 30 11.9 | |
| | comp=Z,52nm,20.9s,baz=198,slow=31 | | | | | | | | |
| **TUC** | **Tucson** | **83.25** | **332** | P | | **P** | | **01 59 25.0** | **-1.1** |
| **R55A** | **Marlinton** | **83.67** | **358** | P | | **P** | | **01 59 26.8** | **-1.2** |
| **FVM** | **French Village** | **84.12** | **350** | P | | **P** | | **01 59 30.2** | **-0.1** |
| **S39A** | **Bolivar** | **84.22** | **348** | IAmb | | IAmb | | 01 59 31.7 | |
| | comp=Z,9.9nm,0.9s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **84.29** | **349** | P | | **P** | | **01 59 31.7** | **+0.5** |
| **ANMO** | **Albuquerque** | **84.40** | **337** | P | | **P** | | **01 59 33.6** | **+1.5** |
| ANMO | | | | | | IAmb | IAmb | 01 59 34.5 | |
| | comp=Z,5.8nm,1.2s | | | | | | | | |
| **P40A** | **Paris** | **85.85** | **349** | P | | **P** | | **01 59 40.0** | **+1.1** |
| **U15A** | **North Rim** | **87.52** | **333** | P | | **P** | | **01 59 49.9** | **+2.3** |
| **CCUT** | **Cedar City** | **88.89** | **332** | IAmb | | IAmb | | 01 59 58.6 | |
| | comp=Z,5.8nm,1.2s | | | | | | | | |
| **PRN** | **Pahroc Range** | **89.32** | **331** | IAmb | | IAmb | | 02 00 00.0 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **LSZ** | **Lusaka** | **89.92** | **112** | LR | | LR | | 02 38 58.3 | |
| | comp=Z,56nm,18.1s,baz=186,slow=35 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **90.93** | **237** | LR | | LR | | 02 33 22.8 | |
| | comp=Z,71nm,18.0s,baz=179,slow=31 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **92.08** | **73** | P | | **P** | | **02 00 08.9** | **-0.1** |
| | comp=Z,1.4nm,1.1s,baz=221,slow=3.8,SNR=3.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **92.08** | **73** | IAmb | | IAmb | | 02 00 11.0 | |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **92.56** | **337** | P | | **P** | | **02 00 09.4** | **-1.5** |
| | comp=Z,0.7nm,0.9s,baz=126,slow=2.0,SNR=3.6 | | | | | | | | |
| **BILL** | **Bilibino** | **140.97** | **328** | PKPdf | | **PKPdf** | | **02 06 28.2** | **-0.4** |
| **HRA** | **Herat** | **147.66** | **96** | PKPbc | | **PKPbc** | | **02 06 45.0** | **+0.7** |
| **MA2** | **Magadan** | **148.28** | **314** | PKPbc | | **PKPbc** | | **02 06 45.0** | **+0.1** |
| **UBPT** | **Khong Chiam** | **149.52** | **186** | PKPbc | | **PKPbc** | | **02 06 49.4** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **152.66** | **173** | PKPbc | | **PKPbc** | | **02 06 56.4** | **-0.2** |
| | comp=Z,0.9nm,0.3s,baz=218,slow=3.1,SNR=12 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **166.09** | **47** | PKP | | **PKPdf** | | **02 07 02.4** | **-1.5** |
| | comp=Z,0.3nm,0.4s,baz=264,slow=4.5,SNR=6.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **166.14** | **78** | PKP | | **PKPdf** | | **02 07 03.6** | **-0.6** |
| | comp=Z,0.1nm,0.6s,baz=258,slow=2.8,SNR=1.8 | | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | | **02 08 04.3** | **-0.8** |
| | comp=Z,1.0nm,1.0s,baz=282,slow=1.1,SNR=5.9 | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **170.01** | **264** | *e*PKP | | PKPdf | | 02 06 54.5 | -13 |

*IDC 19 01:50:18.8±1.7, 35°56N×140°15E, h60km±15km, mb3.8/22, mb1 4.0/28, mb1mx3.8/53, mbtmp4.1/28, MS3.4/8, Ms1 3.4/8, ms1mx3.0/79, Error ellipse: s-maj=15.9km s-min=11.3km az=93.0*
*NEIC 19 01:50:18.7±2.0, 35°62N±0°04×140°26E±0°07, h55km±6km, mb4.5/48, Error ellipse: s-maj=8.7km s-min=6.4km az=88.0*
*NIED 19 01:50:18.8, 35°66N×140°17E, h63km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr3.88; Mθθ-0.38; Mφφ-3.50; Mrθ-0.02; Mrφ-0.68; Mθφ2.33; Fault plane solution: Mo4.42000×10^15 NP1:φs6.00000°, δ61.00000°, λ84.00000°. NP2:φs197.00000°, δ30.00000°, λ100.00000°.*
*JMA 19 01:50:18.7±0.2, 35°66N×140°17E, h63km±2km, M3.9 Broadband fault plane solution: P waves. NP1: φs150.00000°, δ19.00000°, λ82.00000°. NP2: φs339.00000°, δ71.00000°, λ93.00000°. Principal axes: T Plg64.0000°, Azm254.0000°; N Plg3.0000°, Azm158.0000°; P Plg26.0000°, Azm67.0000°;*
*JMA Felt II J1.*

**ISC 19 01:50:18.5±0.5, 35°60N±0°04×140°18E±0°04, h56km±4km, n162, σ1s14/161, mb4.3/51, MS3.7/11, 5C-9D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JCN** | **Nagara** | **0.18** | **175** | ⇑P | | **Pn** | | **01 50 29.4** | **+2.0** |
| JCN | | | | *e*S | | Sn | | 01 50 37.0 | +3.3 |
| **JSMT** | **Sammumatsuo** | **0.22** | **77** | ⇑P | | **Pn** | | **01 50 29.1** | **+1.5** |
| JSMT | | | | S | | Sn | | **01 50 36.9** | **+2.7** |
| **TOK** | **Tokyo** | **0.36** | **285** | P | | **Pn** | | **01 50 30.5** | **+1.9** |
| **JIHU** | **Itakohorinouch** | **0.46** | **37** | P | | **Pn** | | **01 50 30.9** | **+1.2** |
| **JYT** | **Yasato** | **0.63** | **1** | | | **Pn** | | **01 50 31.5** | **-0.2** |
| **BSO3** | **Boso 3** | **0.83** | **161** | ⇑P | | **Pn** | | **01 50 35.0** | **+1.0** |
| **JOD2** | **Odawara 2** | **0.95** | **250** | ⇓P | | **Pn** | | **01 50 36.4** | **+0.6** |
| JOD2 | | | | S | | Sn | | **01 50 49.3** | **+0.7** |
| **JAG** | **Ashikaga** | **1.02** | **325** | ⇓P | | **Pn** | | **01 50 36.8** | **+0.2** |
| **JIM2** | **Oshima 3** | **1.07** | **215** | P | | **Pn** | | **01 50 37.6** | **+0.3** |
| JIM2 | | | | S | | Sn | | **01 50 51.9** | **+0.6** |
| **JRY** | **Ryogami san** | **1.12** | **292** | ⇓P | | **Pn** | | **01 50 39.0** | **+0.9** |
| **BSO1** | **Boso 1** | **1.14** | **145** | P | | **Pn** | | **01 50 37.9** | **+0.1** |
| **JFNN** | **Fujinakano** | **1.29** | **252** | ⇓P | | **Pn** | | **01 50 41.0** | **+0.8** |
| JFNN | | | | S | | Sn | | **01 50 57.6** | **+1.1** |
| **JYN** | **Shimob** | **1.34** | **266** | ⇓P | | **Pn** | | **01 50 41.6** | **+0.6** |
| JYN | | | | S | | Sn | | **01 50 58.8** | **+1.0** |
| **JIZS** | **Izushimoda** | **1.38** | **231** | ⇓P | | **Pn** | | **01 50 41.9** | **+0.4** |
| JIZS | | | | S | | Sn | | **01 50 59.0** | **+0.3** |
| **JKT** | **Katashina** | **1.39** | **327** | ⇓P | | **Pn** | | **01 50 41.7** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **1.86** | **301** | P | | **Pn** | | **01 50 48.6** | **+0.7** |
| | 20nm,0.3s,baz=136,slow=14,SNR=202 | | | | | | | | |
| MJAR | | | | | | S | Sn | **01 51 12.0** | **+1.7** |
| | 9.8nm,0.3s,baz=278,slow=25,SNR=3.6 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.86** | **301** | Pn | | **Pn** | | **01 50 47.3** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **1.86** | **301** | | | **Sn** | | **01 51 12.1** | **+1.7** |
| **MAJO** | **Matsushiro** | **1.86** | **301** | Pn | | **Pn** | | **01 50 48.9** | **+0.9** |
| **MAT** | **Matsushiro** | **1.86** | **301** | P | | **Pn** | | **01 50 48.9** | **+0.9** |
| MAT | | | | S | | **Sn** | | **01 51 11.8** | **+1.4** |
| **MJB9** | **Matsu-Tunnel** | **1.86** | **301** | | | **Pn** | | **01 50 49.0** | **+1.0** |
| **JGF** | **Kuroka** | **2.30** | **271** | Pn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H11S3** | **WAKE ISLAND Hy** | **28.97** | **119** | T | T | 02 27 24.7 | | |
| | SNR=12 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.97** | **119** | T | T | 02 26 15.6 | | |
| | baz=314,slow=74,SNR=20 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.99** | **119** | T | T | 02 26 17.2 | | |
| | baz=16,slow=74,SNR=13 | | | | | | | |
| **LZH** | **Lanzhou** | **29.36** | **282** | *e*P | P | 01 56 05.4 | -11 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **GYA** | **Guiyang** | **30.02** | **262** | ⇓P | **P** | **01 56 25.4** | **+3.3** | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| **GTA** | **Gaotai** | **32.06** | **289** | *e*P | **P** | **01 56 42.0** | **+1.9** | |
| GTA | | | | pP | pP | 01 56 49.1 | -5.1 | |
| GTA | | | | sP | sP | 01 56 52.6 | -8.3 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.3s | | | | | | | |
| **KMI** | **Kunming** | **33.77** | **262** | ⇑P | P | 01 57 00.3 | +5.0 | |
| KMI | | | | pP | pP | 01 57 07.9 | -1.5 | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **33.98** | **265** | P | **P** | **01 56 59.3** | **+2.4** | |
| **GOMU** | **GeErMu** | **36.50** | **285** | P | **P** | **01 57 19.1** | **+0.3** | |
| GOMU | | | | pP | pP | 01 57 25.1 | -8.0 | |
| GOMU | | | | sP | sP | 01 57 28.3 | -11 | |
| GOMU | | | | PcP | PcP | 01 59 32.3 | -9.3 | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,110nm,5.1s | | | | | | | |
| **TIXI** | **Tiksi** | **36.61** | **354** | P | **P** | **01 57 18.2** | **-0.6** | |
| | comp=Z,0.8nm,0.4s,baz=271,slow=22,SNR=3.7 | | | | | | | |
| **TIXI** | **Tiksi** | **36.61** | **354** | P | **P** | **01 57 18.6** | **-0.2** | |
| TIXI | | | | IAmb | IAmb | 01 57 41.3 | | |
| | comp=Z,6.1nm,1.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.18** | **256** | PcP | **PcP** | **01 59 53.9** | **+1.1** | |
| | comp=Z,1.0nm,0.4s,baz=3.7,slow=2.1,SNR=4.6 | | | | | | | |
| CMAR | | | | LR | LR | 02 15 28.8 | | |
| | comp=Z,29nm,18.5s,baz=70,slow=38 | | | | | | | |
| **WMQ** | **Urumqi** | **40.62** | **298** | *e*P | **P** | **01 57 55.1** | **+2.2** | |
| **ZAA0** | **Zalesovo Array** | **42.17** | **314** | P | **P** | **01 58 04.7** | **-0.6** | |
| **ZALV** | **Zalesovo Beam** | **42.17** | **314** | P | **P** | **01 58 05.3** | **0.0** | |
| | comp=Z,0.8nm,0.3s,baz=87,slow=6.4,SNR=7.0 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **01 59 58.4** | **-0.3** | |
| | comp=Z,1.4nm,0.5s,baz=119,slow=2.6,SNR=5.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.17** | **314** | P | **P** | **01 58 04.0** | **-1.3** | |
| **MK31** | **Makanchi Array** | **44.06** | **303** | P | **P** | **01 58 19.4** | **-1.3** | |
| **MKAR** | **Makanchi Array** | **44.06** | **303** | P | **P** | **01 58 20.7** | **0.0** | |
| | comp=Z,2.6nm,0.8s,baz=90,slow=9.6,SNR=17 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **02 00 05.1** | **-0.1** | |
| | comp=Z,0.6nm,0.7s,baz=64,slow=3.4,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.06** | **303** | P | **P** | **01 58 19.3** | **-1.5** | |
| **MAKZ** | **Makanchi** | **44.27** | **303** | P | **P** | **01 58 21.9** | **-0.5** | |
| MAKZ | | | | IAmb | IAmb | 01 58 23.5 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **46.05** | **309** | P | **P** | **01 58 35.7** | **-0.7** | |
| KURK | | | | IAmb | IAmb | 01 58 37.0 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **48.16** | **297** | IAmb | IAmb | 01 59 06.0 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **48.93** | **192** | P | **P** | **01 58 58.6** | **-0.5** | |
| **COEN** | **Coen** | **49.36** | **176** | P | **P** | **01 59 01.4** | **-1.0** | |
| COEN | | | | IAmb | IAmb | 01 59 24.1 | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **KSH** | **Kashi** | **50.09** | **295** | P | P | 01 59 12.8 | +4.8 | |
| **AAK** | **Ala-Archa** | **50.31** | **299** | LR | LR | 02 20 08.8 | | |
| | comp=Z,51nm,18.7s,baz=28,slow=36 | | | | | | | |
| **AAK** | **Ala-Archa** | **50.31** | **299** | P | **P** | **01 59 09.6** | **0.0** | |
| **RND** | **Reindeer** | **50.42** | **34** | P | **P** | **01 59 10.9** | **+0.9** | |
| **MDM** | **Murphy Dome** | **50.66** | **31** | P | **P** | **01 59 12.7** | **+0.9** | |
| MDM | | | | IAmb | IAmb | 01 59 13.8 | | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **H24K** | **Noodor Dome** | **50.79** | **30** | P | **P** | **01 59 12.4** | **-0.3** | |
| H24K | | | | IAmb | IAmb | 01 59 24.4 | | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **POKR** | **Poker Plat Res** | **50.99** | **31** | P | **P** | **01 59 14.4** | **+0.2** | |
| **IL31** | | **51.24** | **32** | P | **P** | **01 59 16.8** | **+0.8** | |
| IL31 | | | | IAmb | IAmb | 01 59 26.4 | | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **51.24** | **32** | P | **P** | **01 59 15.8** | **-0.2** | |
| | comp=Z,1.7nm,0.8s,baz=273,slow=6.6,SNR=20 | | | | | | | |
| **ILAR** | **Eielson Array** | **51.24** | **32** | P | **P** | **01 59 16.6** | **+0.5** | |
| **BMAR** | **Burnt Mountain** | **52.07** | **28** | P | **P** | **01 59 23.3** | **+1.0** | |
| **KNRA** | **Kununurra** | **52.13** | **194** | P | **P** | **01 59 22.7** | **-0.5** | |
| **BMRM** | **Bremner River** | **52.60** | **36** | P | **P** | **01 59 27.6** | **+1.2** | |
| **KKAR** | **Karatay Array** | **52.99** | **301** | P | **P** | **01 59 29.9** | **+0.5** | |
| **BCAR** | **Beaver Creek A** | **53.64** | **34** | P | **P** | **01 59 34.6** | **+0.7** | |
| **FITZ** | **Fitzroy Crossi** | **55.15** | **197** | P | **P** | **01 59 44.7** | **-0.5** | |
| | comp=Z,7.4nm,0.7s,baz=18,slow=6.6,SNR=19 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.15** | **197** | P | **P** | **01 59 44.9** | **-0.4** | |
| **WB0** | **Warramunga Arr** | **55.33** | **187** | P | **P** | **01 59 45.8** | **-0.7** | |
| **WRAB** | **Tennant Creek** | **55.50** | **187** | P | **P** | **01 59 45.6** | **-2.1** | |
| WRAB | | | | IAmb | IAmb | 01 59 59.8 | | |
| | comp=Z,7.8nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **55.51** | **186** | P | **P** | **01 59 46.6** | **-1.2** | |
| WR0 | | | | IAmb | IAmb | 02 00 10.6 | | |
| | comp=Z,8.7nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **55.51** | **187** | P | **P** | **01 59 46.5** | **-1.3** | |
| **WRA** | **Warramunga Arr** | **55.51** | **187** | P | **P** | **01 59 46.9** | **-0.9** | |
| | comp=Z,1.9nm,0.4s,baz=1.2,slow=7.7,SNR=44 | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.51** | **187** | P | **P** | **01 59 46.6** | **-1.2** | |
| **INK** | **Inuvik** | **56.12** | **27** | P | **P** | **01 59 52.3** | **+0.7** | |
| | comp=Z,1.0nm,0.7s,baz=301,slow=8.7,SNR=5.8 | | | | | | | |
| **INK** | **Inuvik** | **56.12** | **27** | P | **P** | **01 59 52.4** | **+0.8** | |
| INK | | | | IAmb | IAmb | 02 00 15.1 | | |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **56.78** | **319** | LR | LR | 02 28 06.9 | | |
| | comp=Z,74nm,18.1s,baz=322,slow=40 | | | | | | | |
| **ARU** | **Arti** | **56.78** | **319** | P | **P** | **01 59 56.3** | **-0.2** | |
| ARU | | | | IAmb | IAmb | 02 00 14.1 | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **KBL** | **Kabul** | **57.01** | **291** | P | **P** | **01 59 57.1** | **-1.7** | |
| **A36M** | **Sachs Harbour** | **57.96** | **21** | P | **P** | **02 00 04.8** | **+0.2** | |
| **ABKAR** | **Akbulak array** | **58.11** | **310** | P | **P** | **02 00 05.7** | **-0.3** | |
| **AKTO** | **Aktyubinsk** | **58.90** | **312** | LR | LR | 02 25 20.5 | | |
| | comp=Z,50nm,18.8s,baz=3.7,slow=36 | | | | | | | |
| **C36M** | **Paulatuk** | **59.15** | **24** | P | **P** | **02 00 12.8** | **-0.1** | |
| C36M | | | | IAmb | IAmb | 02 00 13.8 | | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **59.24** | **187** | P | **P** | **02 00 14.6** | **+0.6** | |
| AS31 | | | | IAmb | IAmb | 02 00 18.5 | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **59.24** | **187** | P | **P** | **02 00 13.6** | **-0.5** | |
| | comp=Z,1.3nm,0.7s,baz=20,slow=13,SNR=13 | | | | | | | |
| **ASAR** | **Alice Springs** | **59.24** | **187** | P | **P** | **02 00 14.6** | **+0.6** | |
| **PSA00** | **Pilbara Seismi** | **60.03** | **202** | P | **P** | **02 00 18.5** | **-1.0** | |
| **RES** | **Resolute Bay** | **64.24** | **14** | P | **P** | **02 00 46.8** | **-0.2** | |
| | comp=Z,0.9nm,0.6s,baz=333,slow=5.3,SNR=5.0 | | | | | | | |
| **RES** | **Resolute Bay** | **64.24** | **14** | P | **P** | **02 00 46.8** | **-0.2** | |
| **RES** | **Resolute Bay** | **64.24** | **14** | IAmb | IAmb | 02 01 05.0 | | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.99** | **339** | P | **P** | **02 00 52.1** | **0.0** | |
| | comp=Z,2.9nm,0.9s,baz=57,slow=6.0,SNR=5.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.55** | **29** | P | **P** | **02 00 55.8** | **+0.1** | |
| | comp=Z,0.9nm,0.7s,baz=302,slow=6.6,SNR=16 | | | | | | | |
| **FINES** | **FINESS Array B** | **69.62** | **332** | P | **P** | **02 01 21.2** | **-0.2** | |
| | comp=Z,4.0nm,0.9s,baz=57,slow=7.3,SNR=8.4 | | | | | | | |
| **WSAR** | **Wadi Sarin** | **70.28** | **285** | LR | LR | 02 35 33.7 | | |
| | comp=Z,37nm,18.7s,baz=158,slow=39 | | | | | | | |
| **KBZ** | **Khabaz** | **71.08** | **311** | P | **P** | **02 01 31.1** | **+0.4** | |
| | comp=Z,3.7nm,0.9s,baz=357,slow=2.5,SNR=6.4 | | | | | | | |
| **KBZ** | **Khabaz** | **71.08** | **311** | P | **P** | **02 01 31.1** | **+0.4** | |
| **SUMG** | **Summit** | **72.12** | **360** | P | **P** | **02 01 37.7** | **+0.8** | |
| **MNK** | **Minsk** | **73.12** | **326** | *i* P | **P** | **02 01 40.7** | **-2.0** | |
| | comp=E,2.0nm,1.0s | | | | | | | |
| MNK | | | | *i* P | **P** | **02 01 40.7** | **-2.0** | |
| | comp=N,18nm,1.4s | | | | | | | |
| MNK | | | | *i* P | **P** | **02 01 40.7** | **-2.0** | |
| | comp=Z,17nm,1.0s,baz=52 | | | | | | | |
| MNK | | | | *i* pP | **pP** | **02 01 54.3** | **-4.0** | |
| MNK | | | | *i* PP | **PP** | **02 04 21.9** | **-3.6** | |
| MNK | | | | *i* PPP | PPP | 02 06 07.3 | | |
| MNK | | | | *i* S | **S** | **02 11 05.6** | **-0.2** | |
| MNK | | | | *i* sS | **sS** | **02 11 30.1** | **-2.0** | |
| MNK | | | | *i* SS | **SS** | **02 15 47.0** | **+0.1** | |
| MNK | | | | *i* SSS | SSS | 02 19 10.3 | | |
| MNK | | | | *i* LQ | LQ | 02 28 42.5 | | |
| MNK | | | | *i* LR | LR | 02 34 23.9 | | |
| MNK | | | | *i* LRM | MLR | 02 39 14.7 | | |
| | comp=Z,85nm,7.3s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 02 39 33.4 | | |
| | comp=N,206nm,13.6s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 02 39 35.9 | | |
| | comp=E,34nm,21.2s | | | | | | | |
| **NACGM** | **Naroch** | **73.38** | **326** | *i* P | **P** | **02 01 44.4** | **+0.3** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JTMT** | **Jette** | **73.72** | **43** | P | **P** | **02 01 47.6** | **+1.1** | |
| JTMT | | | | IAmb | IAmb | 02 01 48.8 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.82** | **322** | P | **P** | **02 01 52.1** | **-0.6** | |
| | comp=Z,0.8nm,0.3s,baz=47,slow=6.2,SNR=14 | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.82** | **322** | IAmb | IAmb | 02 01 53.3 | | |
| | comp=Z,4.7nm,1.3s | | | | | | | |
| **AKBB** | **Malin Array Si** | **74.82** | **322** | P | **P** | **02 01 52.0** | **-0.7** | |
| AKBB | | | | IAmb | IAmb | 02 01 52.9 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **NC204** | **NORSAR Array S** | **75.09** | **337** | P | **P** | **02 01 54.1** | **0.0** | |
| **NB2** | **NORSAR Subarra** | **75.12** | **337** | P | **P** | **02 01 54.1** | **-0.2** | |
| | comp=Z,1.0nm,1.0s,baz=38,slow=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.12** | **337** | P | **P** | **02 01 54.3** | **0.0** | |
| | comp=Z,1.9nm,1.0s,baz=39,slow=5.9,SNR=4.0 | | | | | | | |
| **LRM** | **Limekiln Ridge** | **75.87** | **43** | P | **P** | **02 01 58.8** | **-0.3** | |
| **BMN** | **Battle Mountai** | **76.19** | **50** | P | **P** | **02 02 01.5** | **+0.6** | |
| **NVAR** | **Mina Array Bea** | **76.65** | **52** | P | **P** | **02 02 04.2** | **+0.6** | |
| | comp=Z,1.1nm,0.8s,baz=289,slow=5.2,SNR=7.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.65** | **52** | P | **P** | **02 02 04.1** | **+0.4** | |
| **BUR08** | **Bucovina Ar. S** | **78.81** | **321** | P | **P** | **02 02 15.5** | **+0.2** | |
| BUR08 | | | | IAmb | IAmb | 02 02 40.8 | | |
| | comp=Z,6.1nm,1.3s | | | | | | | |
| **BURAR** | **Bucovina Array** | **78.82** | **321** | P | **P** | **02 02 15.8** | **+0.5** | |
| **BRTR** | **Keskin Array B** | **79.05** | **311** | P | **P** | **02 02 16.8** | **-0.1** | |
| | comp=Z,1.5nm,1.0s,baz=67,slow=1.3,SNR=4.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.05** | **311** | P | **P** | **02 02 16.8** | **-0.1** | |
| **BW06** | **Boulder Array** | **79.38** | **45** | P | **P** | **02 02 19.3** | **+0.6** | |
| **PD31** | **Pinedale Array** | **79.38** | **45** | P | **P** | **02 02 19.0** | **+0.3** | |
| **PDAR** | **Pinedale Array** | **79.38** | **45** | P | **P** | **02 02 19.1** | **+0.3** | |
| | comp=Z,1.3nm,0.7s,baz=268,slow=2.4,SNR=14 | | | | | | | |
| **PDAR** | **Pinedale Array** | **79.38** | **45** | P | **P** | **02 02 19.1** | **+0.3** | |
| **P17A** | **Butcher Ranch,** | **80.75** | **48** | P | **P** | **02 02 26.4** | **+0.3** | |
| P17A | | | | IAmb | IAmb | 02 02 28.2 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **SRU** | **San Rafael Swe** | **81.11** | **48** | P | **P** | **02 02 28.5** | **+0.5** | |
| SRU | | | | IAmb | IAmb | 02 02 29.8 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **CLL** | **Collm** | **81.84** | **330** | *i* P | **P** | **02 02 31.2** | **-0.2** | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **SMOL** | **Smolenice** | **81.97** | **326** | *e*P | **P** | **02 02 33.5** | **+1.3** | |
| **MVCO** | **Mesa Verde** | **83.55** | **48** | P | **P** | **02 02 39.5** | **-1.3** | |
| MVCO | | | | IAmb | IAmb | 02 02 42.7 | | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **84.15** | **340** | P | **P** | **02 02 43.3** | **+0.1** | |
| | comp=Z,0.7nm,0.6s,baz=37,slow=5.7,SNR=4.1 | | | | | | | |
| **ANMO** | **Albuquerque** | **86.28** | **49** | P | **P** | **02 02 54.1** | **-0.4** | |
| ANMO | | | | IAmb | IAmb | 02 03 14.7 | | |
| | comp=Z,4.4nm,1.2s | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.79** | **52** | P | **P** | **02 03 21.3** | **+0.8** | |
| | comp=Z,0.6nm,0.8s,baz=279,slow=3.1,SNR=7.8 | | | | | | | |
| **KEST** | **Kesra** | **95.55** | **322** | LR | LR | 02 51 16.5 | | |
| | comp=Z,190nm,19.1s,baz=330,slow=38 | | | | | | | |
| **LPAZ** | **La Paz** | **148.27** | **60** | PKPbc | **PKPbc** | **02 09 60.0** | **+0.4** | |
| | comp=Z,1.1nm,0.7s,baz=239,slow=5.9,SNR=3.6 | | | | | | | |
| **LPAZ** | **La Paz** | **148.27** | **60** | | **PKPbc** | **02 09 60.0** | **+0.4** | |

*TUL* ***19*** *01:51:34.9±0.9, 36.45N±0.02×98.78W±0.02, h7km±2km, ML2.9, mb_Lg2.4/21(NEIC), Error ellipse: s-maj=2.2km s-min=1.5km az=151.0*

**NEIC 19 01:51:35.5±0.9, 36°44'N±0.02×98°77'W±0.02, h6km±2km, Error ellipse: s-maj=3.0km s-min=0.8km az=138.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.19** | **251** | Pg | Pg | 01 51 39.1 | -0.3 |
| U32A | | | | Sg | Sg | 01 51 42.4 | +0.5 |
| **OKCFA** | **Oklahoma City** | **1.48** | **133** | | Pn | 01 52 01.4 | -1.4 |
| **FNO** | **Franklin** | **1.63** | **136** | Pn | Pn | 01 52 03.9 | -0.8 |
| **WMOK** | **Wichita Mounta** | **1.70** | **180** | Pn | Pn | 01 52 05.2 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.88** | **75** | Pn | Pn | 01 52 08.3 | +0.1 |
| **R32A** | **Long Quarter,** | **1.98** | **1** | Pn | Pn | 01 52 10.3 | +0.7 |
| **X34A** | **Smith Ranch, M** | **1.99** | **157** | | Pn | 01 52 10.7 | +1.0 |
| X34A | | | | IAmb_Lg | | 01 52 41.7 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **W35A** | **Tecumseh** | **2.01** | **129** | Pn | Pn | 01 52 10.0 | 0.0 |
| **CBKS** | **Cedar Bluff** | **2.49** | **342** | IAmb_Lg | | 01 52 57.3 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.83** | **238** | IAmb_Lg | | 01 53 04.1 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.33** | **123** | Pn | Pn | 01 52 26.9 | -1.4 |
| X37A | | | | IAmb_Lg | | 01 53 26.3 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| **U38A** | **Gravette** | **3.54** | **89** | Pn | Pn | 01 52 29.6 | -1.4 |
| U38A | | | | IAmb_Lg | | 01 53 30.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.88** | **191** | IAmb_Lg | | 01 53 42.5 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **4.10** | **234** | Pn | Pn | 01 52 38.0 | -0.8 |
| **S39A** | **Bolivar** | **4.53** | **72** | IAmb_Lg | | 01 54 03.1 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **4.78** | **89** | IAmb_Lg | | 01 54 05.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.01** | **189** | IAmb_Lg | | 01 54 53.9 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.22** | **73** | IAmb_Lg | | 01 54 54.3 | |
| | comp=Z,6.9nm,0.9s | | | | | | |

*NIED* ***19*** *01:53:22.1, 31.73N×128.98E, h18km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-1.50; Mθθ 0.59; Mφφ 0.91; Mrθ 2.34; Mθφ 5.50; Mφr-1.40; Fault plane solution: M₀6.28000×10¹⁴ NP1: φs265.00000°, δ73.00000°, λ-25.00000°. NP2:φs3.00000°, δ66.00000°, λ-162.00000°.*
*JMA* ***19*** *01:53:22.0±0.2, 31.73N×128.98E, h18km±2km, M4.0*
*JMA Felt I J1.*

**ISC 19 01:53:20.8±3.6, 31°7'N±0'2×129°0'E±0'2, h10km, n4, σ0°47/6, 1C, Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSJ** | **Shimokoshiki** | **0.66** | **92** | ⇑P | **Pg** | **01 53 33.8** | **+0.3** |
| JSJ | | | | S | **Sg** | **01 53 42.4** | **+0.3** |
| **JFU** | **Fukue jima 2** | **0.96** | **350** | P | **Pg** | **01 53 39.5** | **+0.2** |
| JFU | | | | S | **Sb** | **01 53 52.7** | **+0.4** |
| **NGSJ** | **Nagasakinomoza** | **1.17** | **38** | P | **Pb** | **01 53 42.6** | **-0.6** |
| **JSU** | **Suzuyama** | **1.30** | **99** | P | **Pn** | **01 53 45.0** | **-0.1** |

**IDC 19 01:58:34.0±0.9, 26°84S×69°65W, h0km, mb3.7/1, mb1 3.6/2, mb1mx3.4/17, mbtmp3.6/2, ML2.7/1, MS3.4/1, Ms1 3.4/1, ms1mx2.7/54, Error ellipse: s-maj=62.2km s-min=5.7km az=96.0, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **4.26** | **9** | Pn | Pn | 01 59 40.9 | +0.5 |
| | 0.5nm,0.3s,baz=166,slow=7.6,SNR=12 | | | | | | |
| LVC | | | | Lg | Lg | 02 00 48.8 | |
| | 8.0nm,0.3s,baz=338,slow=20,SNR=8.8 | | | | | | |
| **SJG** | **San Juan** | **44.81** | **5** | LR | LR | 02 29 36.5 | |
| | comp=Z,41nm,18.5s,baz=226,slow=42 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.81** | **70** | P | P | 02 10 46.0 | +1.4 |
| | 0.6nm,0.9s,baz=225,slow=5.5,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.01** | **28** | PKPbc | PKPdf | 02 18 16.0 | -0.2 |
| | 0.9nm,0.7s,baz=289,slow=4.5,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **150.23** | **41** | PKPbc | PKPbc | 02 18 24.6 | -2.2 |
| | 0.5nm,0.7s,baz=289,slow=3.7,SNR=4.9 | | | | | | |

*IDC* ***19*** *01:59:28.1±1.0, 0.41S×120.31E, h0km, mb3.8/5, mb1 4.0/7, mb1mx3.7/31, mbtmp3.8/7, ML3.7/2, MS3.2/2, Ms1 3.2/2, ms1mx2.7/72, Error ellipse: s-maj=73.4km s-min=17.6km az=68.0*
*DJA* ***19*** *01:59:33.0±0.6, 1°S±2°×120°E±°, h13km±5km, M4.1/12, mb4.3/1, MLv4.0/12*

**ISC 19 01:59:31.7±0.8, 0.66S±0.04×119.72E±0.05, h10km, n20, σ1°58/22, mb4.0/5, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MPSI** | **Mapaga** | **1.00** | **10** | P | **Pg** | **01 59 51.8** | **+0.7** |
| MPSI | | | | S | **Sg** | **02 00 06.2** | **+2.0** |
| **APSI** | **Ampana** | **1.94** | **97** | P | **Pn** | **02 00 05.6** | **+0.8** |
| APSI | | | | S | **Sn** | **02 00 29.8** | **+0.6** |
| **TTSI** | **Tana Toraja** | **2.37** | **178** | P | **Pn** | **02 00 12.3** | **+1.6** |
| TTSI | | | | S | **Sn** | **02 00 41.0** | **+1.1** |
| **MRSI** | **Marisa** | **2.49** | **63** | P | **Pn** | **02 00 13.4** | **+1.1** |
| **SMKI** | **Samarinda** | **2.52** | **275** | P | **Pn** | **02 00 13.2** | **+0.4** |
| **LUWI** | **Luwuk** | **3.07** | **97** | P | **Pn** | **02 00 21.1** | **+0.8** |
| LUWI | | | | S | **Sn** | **02 00 58.2** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **3.28** | **179** | P | **Pn** | **02 00 23.6** | **+0.3** |
| **GTOI** | **Gorontalo** | **3.53** | **69** | P | **Pn** | **02 00 27.7** | **+1.1** |
| **BNSI** | **Bone** | **3.74** | **174** | P | **Pn** | **02 00 31.5** | **+2.0** |
| **KAPI** | **Kappang** | **4.33** | **180** | Pn | **Pn** | **02 00 37.2** | **-0.4** |
| | 5.8nm,0.3s,baz=2.1,slow=8.1,SNR=21 | | | | | | |
| **KBKI** | **Kotabaru** | **4.42** | **234** | P | **Pg** | **02 00 58.4** | **+2.0** |
| **BKSI** | **Bulukumba** | **4.65** | **175** | P | **Pn** | **02 00 42.4** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **5.50** | **172** | P | **Pn** | **02 00 55.0** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **18.28** | **162** | P | **Pn** | **02 03 44.7** | **-0.9** |
| | 0.1nm,0.3s,baz=348,slow=5.5,SNR=5.4 | | | | | | |
| FITZ | | | | LR | LR | 02 12 50.6 | |
| | comp=Z,46nm,18.6s,baz=238,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.92** | **144** | P | **P** | **02 04 42.2** | **-3.9** |
| | 4.1nm,1.0s,baz=322,slow=10,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **26.69** | **150** | P | **P** | **02 05 09.6** | **-1.7** |
| | 0.7nm,0.7s,baz=346,slow=14,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **49.67** | **348** | P | P | 02 08 19.3 | -4.6 |
| | 0.5nm,0.5s,baz=169,slow=8.8,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.50** | **330** | P | **P** | **02 09 20.6** | **-0.6** |
| | 1.1nm,0.7s,baz=128,slow=8.9,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.61** | **337** | P | **P** | **02 09 47.2** | **-2.1** |
| | 1.1nm,0.6s,baz=142,slow=7.1,SNR=4.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **85.59** | **303** | LR | LR | 02 59 56.6 | |
| | comp=Z,20nm,18.1s,baz=28,slow=42 | | | | | | |

*BJI* ***19*** *02:16:00.2±0.0, 26.40N×126.20E, h105km, mb4.2/27, mB4.5/13*
*NEIC* ***19*** *02:16:01.0±1.0, 26.47N±0.10×126.17E±0.08, h113km±5km, mb4.2/21, Error ellipse: s-maj=15.3km s-min=9.6km az=153.0*
*IDC* ***19*** *02:16:01.5±0.6, 26.50N×126.30E, h116km±5km, mb3.8/22, mb1 3.9/23, mb1mx3.8/43, mbtmp4.1/23, MS3.3/4, Ms1 3.4/4, ms1mx2.8/86, Error ellipse: s-maj=11.1km s-min=7.9km az=7.0*
*NIED* ***19*** *02:16:01.2, 26.38N×126.21E, h109km, MW4.3, Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁵Nm; Mrr-0.92; Mθθ 1.43; Mφφ -0.51; Mrθ -1.93; Mθφ 0.38; Mφr-1.57; Fault plane solution: M₀2.81000×10¹⁵ NP1:φs53.00000°, δ79.00000°, λ-107.00000°. NP2:φs291.00000°, δ20.00000°, λ-33.00000°.*
*JMA* ***19*** *02:16:01.2±0.2, 26.38N×126.21E, h109km±2km, M4.0*

**ISC 19 02:16:01.2±0.5, 26.39N±0.05×126.21E±0.04, h117km±4km, n90, σ1°22/113, mb4.1/33, 1C-1D, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKE** | **Kume jima 2** | **0.52** | **96** | P | **Pn** | **02 16 18.4** | **-0.5** |
| JKE | | | | S | **Sn** | **02 16 30.6** | **-1.6** |
| **JAGN** | **Aguni-jima** | **0.94** | **77** | P | **Pn** | **02 16 21.9** | **-0.5** |
| JAGN | | | | S | **Sn** | **02 16 36.9** | **-1.5** |
| **JJT3** | **Tamagusuku3** | **1.43** | **99** | P | **Pn** | **02 16 28.1** | **+0.5** |
| JJT3 | | | | S | **Sn** | **02 16 47.5** | **-0.2** |
| **JNTH** | **Nagotoyohara** | **1.63** | **85** | P | **Pn** | **02 16 29.8** | **-0.1** |
| JNTH | | | | S | **Sn** | **02 16 50.1** | **-1.7** |
| **JIH** | **Iheya** | **1.70** | **67** | P | **Pn** | **02 16 30.8** | **+0.1** |
| JIH | | | | S | **Sn** | **02 16 51.7** | **-1.6** |
| **JIKM** | **Ikemajima** | **1.70** | **211** | S | **Sn** | **02 16 52.5** | **-0.8** |
| **JOGS** | **Gusukube** | **1.78** | **204** | P | **Pn** | **02 16 31.7** | **-0.1** |
| JOGS | | | | S | **Sn** | **02 16 54.1** | **-0.9** |
| **JIRB** | **Irabujima** | **1.81** | **211** | P | **Pn** | **02 16 31.9** | **-0.3** |
| JIRB | | | | S | **Sn** | **02 16 53.9** | **-1.9** |
| **JMJ2** | **Miyako jima3** | **1.82** | **206** | P | **Pn** | **02 16 32.4** | **+0.1** |
| JMJ2 | | | | S | **Sn** | **02 16 54.9** | **-1.2** |
| **JOW** | **Kunigami** | **1.90** | **76** | P | **Pn** | **02 16 33.0** | **-0.2** |
| | 159nm,0.3s,baz=140,slow=27,SNR=297 | | | | | | |
| JOW | | | | S | **Sn** | **02 16 55.5** | **-2.2** |
| | 743nm,0.3s,baz=323,slow=29,SNR=65 | | | | | | |
| **JOW** | **Kunigami** | **1.90** | **76** | P | **Pn** | **02 16 32.9** | **-0.3** |
| JOW | | | | S | **Sn** | **02 16 55.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **40.09** | **312** | P | **P** | | **02 23 24.0** | **-1.1** |
| MKAR | | | | PcP | **PcP** | | **02 25 27.7** | **+0.2** |
| **MAKZ** | **Makanchi** | **40.30** | **312** | P | **P** | | **02 23 25.5** | **-1.4** |
| MAKZ | | | | IAmb | IAmb | | 02 23 28.2 | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.04** | **323** | P | **P** | | **02 23 31.6** | **-1.2** |
| ZAA0 | | | | IAmb | IAmb | | 02 23 33.2 | |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.04** | **323** | P | **P** | | **02 23 32.2** | **-0.6** |
| | comp=Z,3.0nm,0.5s,baz=111,slow=7.9,SNR=20 | | | | | | | |
| ZALV | | | | pP | **pP** | | **02 23 58.9** | **-0.4** |
| | comp=Z,1.4nm,0.5s,baz=108,slow=8.5,SNR=3.1 | | | | | | | |
| ZALV | | | | PcP | **PcP** | | **02 25 30.7** | **+0.3** |
| | comp=Z,0.7nm,0.4s,baz=114,slow=4.5,SNR=4.3 | | | | | | | |
| ZALV | | | | ScP | **ScP** | | **02 29 10.1** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=160,slow=4.6,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.04** | **323** | P | **P** | | **02 23 31.6** | **-1.2** |
| **KURK** | **Kurchatov** | **43.47** | **317** | P | **P** | | **02 23 51.6** | **-1.0** |
| KURK | | | | IAmb | IAmb | | 02 23 53.2 | |
| | comp=Z,5.1nm,1.2s | | | | | | | |
| **KSH** | **Kashi** | **43.62** | **300** | *eP* | **P** | | **02 23 55.5** | **+1.3** |
| **FITZ** | **Fitzroy Crossi** | **44.22** | **181** | P | **P** | | **02 23 58.7** | **-0.2** |
| **AAK** | **Ala-Archa** | **44.90** | **305** | P | **P** | | **02 24 02.7** | **-1.6** |
| **WRA** | **Warramunga Arr** | **46.72** | **169** | P | **P** | | **02 24 19.4** | **+0.8** |
| | comp=Z,2.8nm,0.7s,baz=352,slow=8.5,SNR=18 | | | | | | | |
| WRA | | | | LR | LR | | 02 43 50.5 | |
| | comp=Z,111nm,19.7s,baz=156,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.72** | **169** | P | **P** | | **02 24 18.5** | **-0.1** |
| **WB2** | **Warramunga Arr** | **46.73** | **169** | P | **P** | | **02 24 18.5** | **-0.1** |
| WB2 | | | | IAmb | IAmb | | 02 24 23.2 | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **46.77** | **169** | P | **P** | | **02 24 18.9** | **-0.1** |
| WR0 | | | | IAmb | IAmb | | 02 24 21.6 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.96** | **319** | PcP | **PcP** | | **02 25 58.3** | **+0.4** |
| | comp=Z,3.1nm,0.6s,baz=78,slow=7.5,SNR=14 | | | | | | | |
| **BRVK** | **Borovoye** | **49.03** | **319** | P | **P** | | **02 24 35.7** | **-0.3** |
| BRVK | | | | IAmb | IAmb | | 02 24 40.3 | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **KBL** | **Kabul** | **49.39** | **294** | P | **P** | | **02 24 39.6** | **+0.2** |
| **ASAR** | **Alice Springs** | **50.31** | **171** | P | **P** | | **02 24 47.3** | **+1.2** |
| | comp=Z,1.0nm,0.6s,baz=356,slow=13,SNR=16 | | | | | | | |
| ASAR | | | | pP | **pP** | | **02 25 14.2** | **+0.8** |
| | comp=Z,0.6nm,0.5s,baz=354,slow=7.3,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **50.31** | **171** | P | **P** | | **02 24 46.1** | **0.0** |
| **ABKAR** | **Akbulak array** | **55.22** | **313** | P | **P** | | **02 25 21.8** | **-0.1** |
| **ARU** | **Arti** | **56.15** | **322** | P | **P** | | **02 25 27.6** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=160,slow=4.5,SNR=5.1 | | | | | | | |
| **STKA** | **Stephens Creek** | **59.77** | **165** | P | **P** | | **02 25 55.2** | **+1.3** |
| | comp=Z,6.0nm,0.8s,baz=0.2,slow=5.0,SNR=8.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **65.16** | **28** | P | **P** | | **02 26 29.5** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=242,slow=4.5,SNR=9.6 | | | | | | | |
| **KBZ** | **Khabaz** | **67.66** | **309** | P | **P** | | **02 26 46.7** | **+1.1** |
| | comp=Z,2.2nm,0.7s,baz=166,slow=6.0,SNR=6.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.20** | **338** | LR | LR | | 03 06 18.5 | |
| | comp=Z,95nm,18.9s,baz=252,slow=44 | | | | | | | |
| **INK** | **Inuvik** | **69.46** | **23** | P | **P** | | **02 26 57.1** | **+0.7** |
| | comp=Z,1.4nm,0.6s,baz=285,slow=9.6,SNR=3.4 | | | | | | | |
| **INK** | **Inuvik** | **69.46** | **23** | IAmb | IAmb | | 02 27 10.6 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **69.78** | **304** | P | **P** | | **02 26 57.2** | **-1.9** |
| **A36M** | **Sachs Harbour** | **70.65** | **19** | P | **P** | | **02 27 04.1** | **+0.5** |
| **MARD** | **Mardin** | **71.11** | **303** | P | **P** | | **02 27 06.1** | **-1.1** |
| **FINES** | **FINESS Array B** | **71.83** | **330** | P | **P** | | **02 27 10.8** | **-0.1** |
| | comp=Z,1.3nm,0.4s,baz=55,slow=5.5,SNR=18 | | | | | | | |
| **C36M** | **Paulatuk** | **72.19** | **21** | P | **P** | | **02 27 12.8** | **-0.1** |
| C36M | | | | IAmb | IAmb | | 02 27 14.4 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.23** | **319** | P | **P** | | **02 27 25.0** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=58,slow=6.1,SNR=5.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.50** | **307** | P | **P** | | **02 27 32.8** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=142,slow=24,SNR=9.4 | | | | | | | |
| BRTR | | | | pP | **pP** | | **02 28 04.5** | **+2.6** |
| | comp=Z,1.9nm,1.0s,baz=71,slow=4.2,SNR=3.3 | | | | | | | |
| **RES** | **Resolute Bay** | **75.73** | **10** | P | **P** | | **02 27 34.3** | **+0.9** |
| | comp=Z,2.5nm,0.6s,baz=309,slow=5.7,SNR=12 | | | | | | | |
| **RES** | **Resolute Bay** | **75.73** | **10** | IAmb | IAmb | | 02 27 35.0 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **77.83** | **332** | P | **P** | | **02 27 44.6** | **-0.9** |
| | comp=Z,1.7nm,0.7s,baz=76,slow=6.3,SNR=6.7 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **78.37** | **333** | P | **P** | | **02 27 48.4** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=59,slow=5.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **78.37** | **333** | P | **P** | | **02 27 47.9** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=62,slow=7.7,SNR=6.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.14** | **24** | P | **P** | | **02 27 53.7** | **+1.1** |
| | comp=Z,2.1nm,0.7s,baz=302,slow=5.4,SNR=39 | | | | | | | |
| **GERES** | **GERESS Array B** | **83.97** | **322** | P | **P** | | **02 28 18.7** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=45,slow=5.8,SNR=6.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **83.97** | **322** | P | **P** | | **02 28 17.5** | **-1.0** |
| **EKA** | **Eskdalemuir Ar** | **87.84** | **334** | P | **P** | | **02 28 36.2** | **-1.0** |
| | comp=Z,1.2nm,0.9s,baz=351,slow=4.5,SNR=3.5 | | | | | | | |
| **FRB** | **Frobisher Bay** | **89.42** | **7** | P | **P** | | **02 28 44.0** | **-0.4** |
| | comp=Z,2.3nm,0.5s,baz=2.4,slow=4.9,SNR=9.3 | | | | | | | |
| **JLU** | **Jordanelle** | **94.52** | **40** | P | **P** | | **02 29 07.0** | **-1.9** |

*ATH **19** 02:33:09.1,33°.94N×26°.17E,h15km±4km,ML2.5/1,Error ellipse: s-maj=9.7km s-min=2.3km az=310.0*
*DDA **19** 02:33:18.0±0.0,34°.12N×26°.88E,h35km,ML2.7*
**ISC 19 02:33:08.3±2.4,33°.9N±0°.1×26°.40E±0°.05,h25km,n17, σ2s29/24,Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **1.27** | **353** | P | | **Pb** | **02 33 31.3** | **-0.3** |
| ZKR | | | | S | | **Sb** | **02 33 47.3** | **-0.1** |
| ZKR | | | | AML | | AML | 02 33 55.8 | |
| | comp=E,608μm,0.8s | | | | | | | |
| ZKR | | | | AML | | AML | 02 33 56.5 | |
| | comp=N,248μm,0.6s | | | | | | | |
| **NPS** | **Neapolis** | **1.55** | **335** | P | | **Pn** | **02 33 35.0** | **+0.6** |
| **SIVA** | **Sivas** | **1.75** | **312** | P | | **Pn** | **02 33 38.7** | **+1.5** |
| **IDI** | **Anoyia** | **1.90** | **319** | P | | **Pn** | **02 33 40.2** | **+1.0** |
| **VAM** | **Vamos** | **2.39** | **311** | P | | **Pn** | **02 33 47.1** | **+1.3** |
| **IMMV** | **Iera Moni Meta** | **2.56** | **309** | P | | **Pn** | **02 33 49.6** | **+1.4** |
| **AKAS** | **Kas** | **3.54** | **47** | P | | **Pn** | **02 34 04.4** | **+2.6** |
| **CAEL** | **Denizli, Camel** | **4.04** | **35** | P | | **Pn** | **02 34 11.4** | **+2.7** |
| **AKUM** | **Antalya-Kumluc** | **4.06** | **52** | P | | **Pn** | **02 34 10.9** | **+2.0** |
| AKUM | | | | S | | **Sn** | **02 34 51.0** | **-4.5** |
| **TAVA** | **DENIZLI_Tavas** | **4.14** | **29** | P | | **Pn** | **02 34 12.2** | **+2.1** |
| **GOLH** | **Golhisar** | **4.24** | **36** | P | | **Pn** | **02 34 14.1** | **+2.6** |
| **KORT** | **Korkueli** | **4.50** | **45** | P | | **Pn** | **02 34 17.9** | **+2.9** |
| KORT | | | | *i* AML | | AML | 02 34 47.0 | |
| | comp=N,14nm,2.2s | | | | | | | |
| KORT | | | | S | | **Sn** | **02 35 05.3** | **-1.3** |
| **KEPZ** | **Antalya-Kepez** | **5.22** | **53** | P | | **Pn** | **02 34 27.1** | **+2.3** |
| KEPZ | | | | S | | **Sn** | **02 35 21.0** | **-3.3** |
| **GAZI** | **Gazipasa** | **5.40** | **62** | P | | **Pn** | **02 34 29.0** | **+1.7** |
| GAZI | | | | S | | **Sn** | **02 35 26.0** | **-2.6** |
| GAZI | | | | *i* AML | | AML | 02 35 37.0 | |
| | comp=N,5.5nm,0.6s | | | | | | | |
| **SEDI** | **Konya, Seydise** | **5.64** | **49** | P | | **Pn** | **02 34 33.8** | **+3.1** |
| SEDI | | | | S | | **Sn** | **02 35 35.2** | **+0.4** |
| SEDI | | | | *i* AML | | AML | 02 35 46.0 | |
| | comp=N,5.7nm,0.6s | | | | | | | |
| SEDI | | | | *i* AML | | AML | 02 35 50.0 | |
| | comp=N,7.7nm,1.3s | | | | | | | |
| **KKBE** | **Karaman, Kazim** | **6.30** | **56** | P | | **Pn** | **02 34 41.7** | **+2.0** |
| KKBE | | | | S | | **Sn** | **02 35 49.0** | **-1.8** |
| KKBE | | | | *i* AML | | AML | 02 35 58.0 | |
| | comp=N,4.8nm,2.1s | | | | | | | |
| KKBE | | | | *i* AML | | AML | 02 36 00.0 | |
| | comp=N,3.3nm,0.8s | | | | | | | |
| **GULN** | **MERSIN_Gulnar** | **6.30** | **66** | P | | **Pn** | **02 34 39.2** | **-0.5** |

**OMAN 19 02:50:02.8±0.1,23°.88N×49°.31E,h12km±2km,mb5.0/6, ml3.9/2,Error ellipse: s-maj=4.2km s-min=1.6km az=262.0,Eastern Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TRNA** | **Turayna** | **1.93** | **64** | P | | Pn | 02 50 34.3 | -1.1 |
| TRNA | | | | S | | Sb | 02 51 02.9 | +0.9 |
| **SLWR** | **Sila** | **2.19** | **85** | P | | Pn | 02 50 40.4 | +1.4 |
| **SAKB** | **Bahrain** | **2.36** | **28** | P | | Pn | 02 50 39.6 | -1.8 |
| SAKB | | | | S | | Sn | 02 51 10.8 | +0.4 |
| **SHMA** | **Al-Shehemyia** | **2.47** | **37** | P | | Pb | 02 50 45.5 | -1.7 |
| SHMA | | | | S | | Sb | 02 51 16.2 | -1.4 |
| **KHOR** | **Al-Khor Airpor** | **2.65** | **49** | P | | Pn | 02 50 44.9 | -0.4 |
| KHOR | | | | S | | Sn | 02 51 18.1 | +0.8 |
| **MZR** | **Muzera** | **3.93** | **102** | P | | Pn | 02 51 05.7 | +2.8 |
| **UMZA** | **Um Al Zommool** | **5.50** | **101** | P | | Pn | 02 51 26.9 | +2.3 |
| UMZA | | | | S | | Sn | 02 52 28.9 | +1.1 |
| **ASUD** | **Al Ashush, Dub** | **5.54** | **81** | P | | Pn | 02 51 25.2 | +0.1 |
| **FAQ** | **Al Faqa, Dubai** | **5.79** | **80** | P | | Pn | 02 51 28.4 | -0.2 |
| FAQ | | | | S | | Sn | 02 52 36.2 | +1.2 |
| **NAZ** | **Nazwa, Dubai** | **5.89** | **78** | P | | Pn | 02 51 29.1 | -0.8 |
| NAZ | | | | S | | Sn | 02 52 38.1 | +0.7 |
| **HATD** | **Hatta, Dubai** | **6.29** | **80** | P | | Pn | 02 51 34.3 | -1.2 |
| HATD | | | | S | | Sn | 02 52 46.2 | -1.1 |
| **UOSS** | **Minazif** | **6.37** | **79** | P | | Pn | 02 51 35.0 | -1.5 |
| UOSS | | | | S | | Sn | 02 52 48.0 | -1.3 |
| **ARQ** | **Araqi** | **6.64** | **93** | P | | Pn | 02 51 40.6 | +0.4 |
| ARQ | | | | S | | Sn | 02 52 57.4 | +1.6 |
| **DOK** | **Doka** | **6.90** | **138** | P | | Pn | 02 51 43.6 | -0.2 |
| DOK | | | | S | | Sn | 02 53 03.5 | +1.2 |
| **WHFO** | **Wadi Hawf** | **7.25** | **144** | P | | Pn | 02 51 48.6 | 0.0 |
| | SNR=12 | | | | | | | |
| WHFO | | | | S | | Sn | 02 53 11.2 | +0.1 |
| **HOQ** | **Hoqain** | **7.34** | **91** | P | | Pn | 02 51 49.1 | -0.7 |
| **ABTO** | **Aybut** | **7.49** | **149** | P | | Pn | 02 51 50.1 | -1.9 |
| | SNR=14 | | | | | | | |
| ABTO | | | | S | | Sn | 02 53 19.3 | +2.4 |
| **DMTO** | **DMTO** | **8.09** | **138** | P | | Pn | 02 51 59.6 | -0.6 |
| **JMDO** | **Jabal Madar** | **8.23** | **99** | P | | Pn | 02 52 03.1 | +1.0 |
| JMDO | | | | S | | Sn | 02 53 34.3 | -0.8 |
| **MHTO** | **MHTO** | **8.51** | **108** | P | | Pn | 02 52 07.2 | +1.2 |
| MHTO | | | | S | | Sn | 02 53 42.0 | 0.0 |
| **WBK** | **Wadi Bani Khal** | **8.97** | **96** | P | | Pn | 02 52 12.0 | -0.3 |
| **JLN** | **Jalan Bani Buh** | **9.46** | **99** | P | | Pn | 02 52 19.5 | +0.6 |

**IDC 19 02:50:50.6±1.0,0°.78N×124°.81E,h0km,mb3.4/3, mb1 3.5/3,mb1mx3.3/26,mbtmp3.4/3,Error ellipse: s-maj=174.3km s-min=14.1km az=64.0,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.62** | **156** | P | | P | 02 55 53.3 | 0.0 |
| | 0.3nm,0.5s,baz=335,slow=12,SNR=4.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.92** | **327** | P | | P | 03 00 51.2 | -0.4 |
| | 0.4nm,0.6s,baz=118,slow=8.1,SNR=4.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.37** | **335** | P | | P | 03 01 15.5 | +0.6 |
| | 0.2nm,0.3s,baz=119,slow=7.2,SNR=2.1 | | | | | | | |

*TUL **19** 03:06:17.9±0.9,36°.45N±0°.03×98°.70W±0°.03,h7km±2km, ML2.7,mb_Lg2.6/33(NEIC),Error ellipse: s-maj=3.7km s-min=3.0km az=160.0*
**NEIC 19 03:06:18.6±0.6,36°.45N±0°.03×98°.70W±0°.03,h3km±6km, Error ellipse: s-maj=4.9km s-min=2.7km az=153.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.25** | **254** | Pg | | Pg | 03 06 23.3 | -0.2 |
| U32A | | | | Sg | | Sg | 03 06 27.4 | +0.7 |
| **OKCFA** | **Oklahoma City** | **1.45** | **135** | | | Pn | 03 06 44.4 | -1.3 |
| **WMOK** | **Wichita Mounta** | **1.71** | **182** | Pn | | Pn | 03 06 48.0 | -1.3 |
| **T35A** | **Sooner Cattle** | **1.82** | **74** | Pn | | Pn | 03 06 50.3 | -0.6 |
| **W35A** | **Tecumseh** | **1.97** | **130** | | | Pn | 03 06 52.5 | -0.3 |
| **X34A** | **Smith Ranch, M** | **1.98** | **159** | | | Pn | 03 06 53.4 | +0.4 |
| X34A | | | | IAmb_Lg | | | 03 07 22.2 | |
| | comp=Z,51nm,0.7s | | | | | | | |
| **TUL1** | **Leonard** | **2.42** | **102** | | | Pn | 03 06 58.4 | -0.6 |
| TUL1 | | | | IAmb_Lg | | | 03 07 35.4 | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.50** | **341** | Pn | | Pn | 03 07 00.1 | -0.1 |
| **KSU1** | **Kasas State U** | **3.12** | **31** | IAmb_Lg | | | 03 07 57.8 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **X37A** | **Clayton** | **3.29** | **123** | Pn | | Pn | 03 07 10.3 | -0.8 |
| X37A | | | | IAmb_Lg | | | 03 08 10.1 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **HHAR** | **Hobbs** | **3.85** | **91** | IAmb_Lg | | | 03 08 19.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.03** | **311** | IAmb_Lg | | | 03 08 34.3 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **W39A** | **Magazine** | **4.19** | **106** | Pn | | Pn | 03 07 22.9 | -0.5 |
| **T25A** | **Trinidad** | **4.63** | **280** | IAmb_Lg | | | 03 08 49.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **U40A** | **Yellville** | **4.72** | **89** | Pn | | Pn | 03 07 29.6 | -1.1 |
| U40A | | | | IAmb_Lg | | | 03 08 46.9 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **BGNE** | **Belgrade** | **4.97** | **5** | IAmb_Lg | | | 03 09 06.0 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **P38A** | **Dawn** | **5.17** | **51** | IAmb_Lg | | | 03 09 03.4 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.33** | **101** | IAmb_Lg | | | 03 09 19.3 | |
| | comp=Z,7.9nm,0.7s | | | | | | | |
| **R40A** | **Maddies Statio** | **5.45** | **68** | IAmb_Lg | | | 03 09 13.3 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.62** | **284** | IAmb_Lg | | | 03 10 00.9 | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.66** | **85** | IAmb_Lg | | | 03 09 57.4 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **N23A** | **Red Feather La** | **7.20** | **310** | IAmb_Lg | | | 03 10 18.1 | |
| | comp=Z,12nm,0.9s | | | | | | | |

*IDC **19** 03:12:12.2±0.7,2°.46N×128°.96E,h0km,mb4.0/12, mb1 4.1/13,mb1mx4.0/33,mbtmp4.0/13,ML3.8/1,MS3.4/4, Ms1 3.4/4,ms1mx2.8/73,Error ellipse: s-maj=44.6km s-min=13.6km az=78.0*
*DJA **19** 03:12:17.4±1.4,2°.N±5°×12°.9E±°,h31km±17km,M4.1/6, mb4.1/1,MLv4.1/6*
*NEIC **19** 03:12:17.2±0.6,2°.40N±0°.08×128°.95E±0°.09,h33km±3km, mb4.4/16,Error ellipse: s-maj=13.3km s-min=10.7km az=62.0*
**ISC 19 03:12:16.9±0.6,2°.4N±0°.1×128°.9E±0°.2,h35km,n49, σ0s62/34,mb4.2/17,MS3.3/3,1D,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.21** | **223** | | | Pn | 03 12 52.3 | +1.1 |
| **TNTI** | **Ternate** | **2.21** | **223** | P | | Pn | 03 12 52.2 | +1.1 |
| **SIJI** | **Sorong** | **4.02** | **144** | Pn | | **Pn** | **03 13 15.9** | **0.0** |
| | 5.9nm,0.3s,baz=327,slow=15,SNR=5.4 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **03 14 01.3** | **-0.5** |
| | 9.0nm,0.3s,baz=225,slow=22,SNR=10 | | | | | | | |
| **KCP** | **Kidapawan** | **5.95** | **321** | *e*P | | Pn | 03 13 47.4 | +4.9 |
| **FAKI** | **Fak Fak** | **6.25** | **147** | P | | **Pn** | **03 13 47.3** | **+0.6** |
| **JAY** | **Jayapura** | **12.78** | **112** | LR | | LR | 03 19 17.8 | |
| | comp=Z,106nm,18.4s,baz=301,slow=33 | | | | | | | |
| **SOEI** | **Soe** | **12.91** | **201** | Pn | | P | 03 15 19.1 | -9.3 |
| **FITZ** | **Fitzroy Crossi** | **20.61** | **189** | P | | Pn | 03 16 54.9 | -0.8 |
| | 1.3nm,0.8s,baz=1.4,slow=11,SNR=1.8 | | | | | | | |
| **PMG** | **Port Moresby** | **21.65** | **123** | LR | | LR | 03 26 21.9 | |
| | comp=Z,112nm,18.0s,baz=316,slow=39 | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.67** | **166** | P | | **P** | **03 17 15.1** | **-0.3** |
| **WRAB** | **Tennant Creek** | **22.82** | **167** | P | | **P** | **03 17 15.1** | **-1.9** |
| **WRA** | **Warramunga Arr** | **22.83** | **167** | P | | **P** | **03 17 17.1** | **0.0** |
| | 2.5nm,0.7s,baz=343,slow=10.0,SNR=18 | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.83** | **167** | P | | **P** | **03 17 17.1** | **0.0** |
| WB2 | | | | IAmb | | IAmb | 03 17 43.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.89** | **166** | P | | **P** | **03 17 17.4** | **-0.3** |
| WR0 | | | | IAmb | | IAmb | 03 17 36.4 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **26.35** | **170** | P | | **P** | **03 17 49.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **26.36** | **170** | P | | **P** | **03 17 50.5** | **+0.6** |
| | comp=Z,2.5nm,0.9s,baz=356,slow=6.6,SNR=14 | | | | | | | |
| **CTA** | **Charters Tower** | **28.10** | **143** | LR | | LR | 03 31 34.6 | |
| | comp=Z,165nm,18.2s,baz=263,slow=41 | | | | | | | |
| **KSRS** | **Korea Array** | **34.91** | **359** | P | | **P** | **03 19 05.5** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=171,slow=8.6,SNR=5.2 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.06** | **13** | P | | **P** | **03 19 06.3** | **-0.3** |
| | comp=Z,2.6nm,0.7s,baz=185,slow=9.4,SNR=4.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.06** | **13** | IAmb | | IAmb | 03 19 08.3 | |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.15** | **162** | P | | **P** | **03 19 16.8** | **+0.8** |
| | comp=Z,1.8nm,0.6s,baz=326,slow=8.4,SNR=3.6 | | | | | | | |
| **BJT** | **Baijiatuau** | **39.20** | **344** | P | | **P** | **03 19 41.4** | **-0.2** |
| BJT | | | | IAmb | | IAmb | 03 19 43.2 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.34** | **64** | T | | T | 04 02 59.2 | |
| | baz=251,slow=75,SNR=12 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.35** | **64** | T | | T | 04 03 01.9 | |
| | baz=251,slow=75,SNR=17 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.35** | **64** | T | | T | 04 03 01.9 | |
| | baz=251,slow=75,SNR=14 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.92** | **62** | T | | T | 04 03 43.8 | |
| | baz=250,slow=75,SNR=37 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.93** | **62** | T | | T | 04 03 48.2 | |
| | baz=250,slow=75,SNR=22 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.94** | **62** | T | | T | 04 03 48.2 | |
| | baz=250,slow=75,SNR=29 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.72** | **3** | P | | **P** | **03 20 02.4** | **-0.1** |
| | comp=Z,2.1nm,0.7s,baz=181,slow=6.5,SNR=6.5 | | | | | | | |
| **SHL** | **Shillong** | **42.40** | **306** | P | | **P** | **03 20 08.6** | **+0.1** |
| SHL | | | | IAmb | | IAmb | 03 20 09.8 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **49.07** | **341** | P | | **P** | **03 21 01.1** | **+0.3** |
| ULN | | | | IAmb | | IAmb | 03 21 02.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **49.27** | **340** | P | | **P** | **03 21 02.4** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=155,slow=9.2,SNR=5.9 | | | | | | | |
| **SONM** | **Songino Array** | **49.27** | **340** | P | | **P** | **03 21 02.8** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **55.89** | **21** | LR | | LR | 03 44 24.2 | |
| | comp=Z,17nm,21.1s,baz=92,slow=35 | | | | | | | |
| **MK31** | **Makanchi Array** | **59.88** | **325** | P | | **P** | **03 22 19.2** | **-0.1** |
| MK31 | | | | IAmb | | IAmb | 03 22 20.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.88** | **325** | P | | **P** | **03 22 20.1** | **+0.9** |
| | comp=Z,3.9nm,0.6s,baz=118,slow=8.2,SNR=40 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.88** | **325** | P | | **P** | **03 22 19.6** | **+0.4** |
| **MAKZ** | **Makanchi** | **60.07** | **325** | P | | **P** | **03 22 20.7** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **62.76** | **332** | P | | **P** | **03 22 38.2** | **-0.3** |
| | comp=Z,1.9nm,0.8s,baz=98,slow=6.3,SNR=8.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.76** | **332** | P | | **P** | **03 22 37.9** | **-0.6** |
| **KURK** | **Kurchatov** | **64.03** | **327** | P | | **P** | **03 22 47.2** | **+0.3** |
| **KKAR** | **Karatay Array** | **65.68** | **317** | P | | **P** | **03 22 58.3** | **+0.4** |
| **BRVK** | **Borovoye** | **69.69** | **327** | P | | **P** | **03 23 23.0** | **0.0** |
| **ABKAR** | **Akbulak array** | **74.55** | **321** | P | | **P** | **03 23 51.8** | **-0.3** |
| **IMAR** | **Indian Mountai** | **82.69** | **24** | P | | **P** | **03 24 37.6** | **+1.0** |
| **RAYN** | **Ar Rayn** | **82.99** | **293** | P | | **P** | **03 24 38.0** | **-1.1** |
| RAYN | | | | IAmb | | IAmb | 03 24 39.5 | |
| | comp=Z,3.9nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.38** | **25** | P | | **P** | **03 24 49.5** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=244,slow=5.7,SNR=2.1 | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **86.06** | **308** | P | | **P** | **03 24 54.5** | **0.0** |
| **YKA** | **Yellowknife Ar** | **99.81** | **25** | P | | **Pdif** | **03 25 58.4** | **+1.0** |
| | comp=Z,0.3nm,0.8s,baz=278,slow=4.7,SNR=2.0 | | | | | | | |

**IDC 19 03:15:51.4±1.9,4°.40S×146°.13E,h0km,mb3.6/3, mb1 3.9/4,mb1mx3.6/29,mbtmp3.6/4,ML3.6/1,Error ellipse: s-maj=129.3km s-min=27.3km az=124.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.08** | **168** | Sn | | Sn | 03 17 58.3 | -10 |
| | 9.9nm,0.3s,baz=190,slow=21,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.25** | **216** | P | | P | 03 20 17.2 | -0.4 |
| | 0.2nm,0.3s,baz=37,slow=10,SNR=8.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **22.50** | **210** | P | | P | 03 20 52.4 | -0.4 |
| | 0.2nm,0.3s,baz=41,slow=7.3,SNR=5.1 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.23** | **234** | P | | P | 03 21 10.5 | +0.3 |
| | 2.2nm,0.6s,baz=51,slow=8.8,SNR=12 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.36** | **23** | P | | P | 03 28 25.4 | +0.1 |
| | 0.4nm,0.6s,baz=262,slow=5.1,SNR=6.9 | | | | | | | |

**IDC 19 03:22:44.2±2.1,2°.15N×127°.85E,h0km,mb3.4/3, mb1 3.6/3,mb1mx3.4/44,mbtmp3.4/3,Error ellipse: s-maj=154.6km s-min=25.5km az=67.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.86** | **164** | P | | P | 03 27 50.5 | +1.2 |
| | 0.4nm,0.5s,baz=344,slow=11,SNR=6.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.33** | **167** | P | | P | 03 28 20.4 | -1.5 |
| | 0.2nm,0.3s,baz=347,slow=7.8,SNR=2.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.49** | **325** | P | | P | 03 32 49.3 | +0.2 |
| | 0.6nm,0.5s,baz=119,slow=8.4,SNR=9.2 | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IVRN** | **Varamin** | **4.08** | **51** | *e*Pn | **Pn** | **03 31 48.3** | **+1.8** |
| IVRN | | | | *e* | | 03 31 59.9 | |
| | comp=Z,968nm,0.7s | | | | | | |
| **ISFB** | **Sefidab** | **4.11** | **61** | *e*Pn | **Pn** | **03 31 48.0** | **+1.1** |
| ISFB | | | | *e* | | 03 33 06.0 | |
| | comp=Z,367nm,0.9s | | | | | | |
| **IKRK** | **Kirkuk** | **4.15** | **316** | *e*Pn | **Pn** | **03 31 49.0** | **+1.6** |
| IKRK | | | | *e*Sn | **Sn** | **03 32 37.0** | **+1.3** |
| **NASN** | **Na'in** | **4.17** | **84** | *e*Pn | **Pn** | 03 31 49.9 | +1.9 |
| **THKV** | **Tehran--Karaj** | **4.25** | **35** | *e*Pn | **Pn** | **03 31 51.2** | **+2.3** |
| **ZNJK** | **Zanjan** | **4.25** | **9** | *e*Pn | **Pn** | **03 31 51.6** | **+2.6** |
| **CHTH** | **Charan** | **4.37** | **37** | *e*Pn | **Pn** | **03 31 52.8** | **+2.2** |
| **JIR1** | **Jirandeh** | **4.52** | **20** | *e*Pn | **Pn** | **03 31 54.2** | **+1.5** |
| **QALM** | **Alamut, Qazvin** | **4.58** | **29** | *e*Pn | **Pn** | 03 31 55.8 | +2.4 |
| **DAMV** | **Damavand** | **4.64** | **46** | *e*Pn | **Pn** | **03 31 56.1** | **+1.7** |
| **IDMV** | **Damavand** | **4.64** | **47** | *e*Pn | **Pn** | **03 31 56.4** | **+2.0** |
| **ISAD** | **Sadrabad** | **4.96** | **95** | *e*Pn | **Pn** | **03 32 00.5** | **+1.8** |
| **LHJ2** | **Lahijan - Gila** | **5.03** | **20** | *e*Pn | **Pn** | **03 32 01.7** | **+2.3** |
| **ILAS** | **Lasjerd** | **5.13** | **54** | *e*Pn | **Pn** | **03 32 02.5** | **+1.4** |
| **IFIR** | **Firoozkooh** | **5.14** | **51** | *e*Pn | **Pn** | 03 32 02.9 | +1.6 |
| **IPRN** | **Peran** | **5.28** | **43** | *e*Pn | **Pn** | **03 32 05.5** | **+2.5** |
| **ICHK** | **Chekchek** | **5.53** | **90** | *e*Pn | **Pn** | 03 32 07.4 | +0.8 |
| **ISHM** | **Shahmirzad** | **5.59** | **52** | *e*Pn | **Pn** | **03 32 09.2** | **+1.7** |
| **YZKH** | **Yazd** | **5.68** | **89** | *e*Pn | **Pn** | 03 32 10.1 | +1.6 |
| **IANJ** | **Anjilo** | **5.84** | **57** | *e*Pn | **Pn** | **03 32 12.0** | **+1.1** |
| **GHIR** | **Ghir-Karzin** | **6.07** | **132** | *e*Pn | **Pn** | 03 32 16.3 | +2.5 |
| **GRMI** | **Germi** | **6.33** | **0** | *e*Pn | **Pn** | **03 32 20.1** | **+2.6** |
| **TPRV** | **Parvadeh(Tabas** | **7.44** | **83** | *e*Pn | **Pn** | 03 32 34.3 | +1.6 |
| **TNSJ** | **Nastanj** | **7.47** | **76** | *e*Pn | **Pn** | 03 32 33.9 | +0.8 |
| **SHRO** | **Shahrood** | **7.60** | **60** | *e*Pn | **Pn** | **03 32 37.2** | **+2.3** |
| **TKDS** | **Koohdasht(Taba** | **7.85** | **79** | *e*Pn | **Pn** | 03 32 38.9 | +0.6 |
| **NGRK** | **Negar Kerman** | **8.10** | **108** | *e*Pn | **Pn** | **03 32 43.1** | **+1.1** |
| **SBZV** | **Sabzevar** | **8.94** | **61** | *e*Pn | **Pn** | 03 32 54.6 | +1.2 |
| **ASF** | **Jabal al Asfar** | **9.30** | **271** | Pn | **Pn** | **03 32 55.5** | **-2.6** |
| | comp=Z,0.2nm,0.3s,baz=52,slow=17,SNR=2.5 | | | | | | |
| ASF | | | | Lg | Lg | 03 35 46.4 | |
| | comp=Z,0.1nm,0.3s,baz=266,slow=20,SNR=3.6 | | | | | | |
| **WSAR** | **Wadi Sarin** | **13.22** | **131** | LR | LR | 03 39 43.4 | |
| | comp=Z,61nm,18.2s,baz=260,slow=40 | | | | | | |
| **MLR** | **Muntele Rosu** | **21.36** | **314** | ⇑P | **P** | **03 35 34.2** | **+2.8** |
| **SORM** | **Soroca** | **21.51** | **322** | ⇓P | **P** | **03 35 31.2** | **-1.6** |
| **VOIR** | | **21.89** | **313** | ⇑P | **P** | **03 35 37.9** | **+0.9** |
| **ARR** | **Arges** | **22.11** | **312** | ⇑P | **P** | **03 35 38.6** | **-0.8** |
| **AKASG** | **Malin Array Be** | **22.84** | **328** | P | **P** | **03 35 43.8** | **-3.2** |
| | comp=Z,0.4nm,0.5s,baz=136,slow=9.2,SNR=5.2 | | | | | | |
| **BURAR** | **Bucovina Array** | **22.90** | **318** | ⇑P | **P** | 03 35 44.5 | -3.3 |
| **DRGR** | | **23.96** | **314** | ⇑P | **P** | **03 35 59.3** | **+1.0** |
| **SIRR** | **Siria** | **24.38** | **312** | ⇑P | **P** | 03 35 58.1 | -3.9 |
| **PSZ** | **Piszkesteto** | **26.18** | **314** | ⇑P | **P** | **03 36 20.1** | **+1.6** |
| **MKAR** | **Makanchi Array** | **29.85** | **51** | P | **P** | **03 36 51.5** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=252,slow=7.5,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **32.26** | **340** | P | **P** | **03 37 11.5** | **-0.7** |
| | comp=Z,1.5nm,0.8s,baz=150,slow=7.7,SNR=7.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.88** | **40** | P | **P** | **03 37 25.7** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=236,slow=7.7,SNR=10 | | | | | | |
| **NOA** | **NORSAR Array B** | **37.19** | **331** | P | **P** | **03 37 54.5** | **-0.4** |
| | comp=Z,0.6nm,0.8s,baz=122,slow=7.3,SNR=2.2 | | | | | | |
| **MDP** | **Montagnes des** | **96.12** | **280** | LR | LR | 04 32 42.9 | |
| | comp=Z,30nm,18.4s,baz=264,slow=39 | | | | | | |

***IDC 19 03:32:22.6±1.6, 2°.26N×128°.33E, h0km, mb3.6/4, mb1 3.8/5, mb1mx3.6/32, mbtmp3.7/5, ML3.5/1, MS2.7/1, Ms1 2.7/1, ms1mx2.2/52, Error ellipse: s-maj=73.1km s-min=21.9km az=66.0, Halmahera***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.27** | **137** | Pn | Pn | 03 33 27.1 | -1.9 |
| | 2.9nm,0.3s,baz=204,slow=24,SNR=7.1 | | | | | | |
| SIJI | | | | Sn | Sn | 03 34 11.7 | -7.9 |
| | 4.0nm,0.3s,baz=208,slow=23,SNR=7.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.40** | **187** | P | P | 03 37 00.3 | -1.0 |
| | 2.4nm,1.1s,baz=0.0,slow=14,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.84** | **165** | P | P | 03 37 28.2 | +0.7 |
| | 0.6nm,0.4s,baz=343,slow=10,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **26.33** | **168** | P | P | 03 38 00.7 | +0.2 |
| | 0.3nm,0.5s,baz=354,slow=10,SNR=4.6 | | | | | | |
| **KSRS** | **Korea Array** | **35.03** | **359** | LR | LR | 03 51 06.2 | |
| | comp=Z,12nm,21.7s,baz=340,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.67** | **325** | P | P | 03 42 29.0 | +0.2 |
| | 0.8nm,0.5s,baz=119,slow=8.3,SNR=12 | | | | | | |

*ATH **19** 03:40:29.3, 38°.51N×20°.57E, h14km±1km, ML2.5/5, Error ellipse: s-maj=2.0km s-min=0.6km az=285.0*
*THE **19** 03:40:29.5, 38°.51N×20°.53E, h12km, ML2.5/10, Error ellipse: s-maj=0.9km s-min=0.3km az=286.0*
***ISC 19 03:40:28.5±0.9, 38°.53N±0°.02×20°.49E±0°.03, h18km±4km, n39, σ1§22/65, Greece***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.09** | **138** | P | **Pg** | **03 40 31.9** | **-0.1** |
| FSK | | | | S | **Sg** | **03 40 33.2** | **-1.2** |
| | 9μm,0.2s | | | | | | |
| **FSK** | **Fiskardo** | **0.09** | **138** | P | **Pg** | **03 40 31.9** | **-0.1** |
| FSK | | | | S | **Sg** | **03 40 33.4** | **-1.0** |
| FSK | | | | AML | AML | 03 40 33.6 | |
| | comp=N,13696μm,0.2s | | | | | | |
| FSK | | | | AML | AML | 03 40 33.8 | |
| | comp=E,21970μm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.16** | **54** | P | **Pg** | **03 40 33.0** | **0.0** |
| EVGI | | | | S | **Sg** | **03 40 35.6** | **-0.3** |
| | comp=E,4μm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.16** | **54** | P | **Pg** | **03 40 33.0** | **0.0** |
| EVGI | | | | S | **Sg** | **03 40 35.6** | **-0.3** |
| **DRAG** | **Dragano-Lefkad** | **0.17** | **23** | P | **Pg** | **03 40 33.3** | **+0.2** |
| DRAG | | | | S | **Sg** | **03 40 36.5** | **+0.3** |
| | comp=E,6μm,0.2s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.17** | **23** | P | **Pg** | **03 40 33.3** | **+0.2** |
| DRAG | | | | S | **Sg** | **03 40 36.5** | **+0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.25** | **41** | P | **Pg** | **03 40 34.4** | **+0.2** |
| NYDR | | | | S | **Sg** | **03 40 38.2** | **+0.1** |
| **NYDR** | **Nydri-Lefkada** | **0.25** | **41** | P | **Pg** | **03 40 34.4** | **+0.2** |
| NYDR | | | | S | **Sg** | **03 40 37.8** | **-0.4** |
| **KEF4** | **Livadi, Kephal** | **0.27** | **190** | P | **Pg** | **03 40 35.0** | **+0.4** |
| KEF4 | | | | S | **Sg** | **03 40 39.6** | **+0.9** |
| **LKD2** | **Lefkada island** | **0.29** | **27** | P | **Pg** | **03 40 35.4** | **+0.3** |
| LKD2 | | | | S | **Sg** | **03 40 40.1** | **+0.7** |
| | comp=E,445nm,0.2s | | | | | | |
| **LKD2** | **Lefkada island** | **0.29** | **27** | P | **Pg** | **03 40 35.3** | **+0.3** |
| LKD2 | | | | S | **Sg** | **03 40 39.8** | **+0.4** |
| LKD2 | | | | AML | AML | 03 40 41.9 | |
| | comp=E,849μm,0.2s | | | | | | |
| LKD2 | | | | AML | AML | 03 40 41.9 | |
| | comp=N,916μm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.30** | **197** | P | **Pg** | **03 40 35.5** | **+0.4** |
| DMLN | | | | S | **Sg** | **03 40 40.5** | **+1.0** |
| | comp=N,2μm,0.4s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.30** | **197** | P | **Pg** | **03 40 35.5** | **+0.4** |
| DMLN | | | | S | **Sg** | **03 40 40.2** | **+0.7** |
| **LXRA** | **Lixouri, Kepha** | **0.33** | **187** | P | **Pg** | **03 40 36.0** | **+0.5** |
| LXRA | | | | S | **Sb** | **03 40 41.4** | **+0.7** |
| **TSLK** | **Tsoukalades, L** | **0.33** | **24** | P | **Pg** | **03 40 36.2** | **+0.7** |
| TSLK | | | | S | **Sg** | **03 40 41.2** | **+0.9** |
| | comp=N,478nm,0.5s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.33** | **24** | P | **Pg** | **03 40 36.1** | **+0.6** |
| TSLK | | | | S | **Sg** | **03 40 40.8** | **+0.6** |
| TSLK | | | | AML | AML | 03 40 47.5 | |
| | comp=E,901μm,0.3s | | | | | | |
| TSLK | | | | AML | AML | 03 40 47.9 | |
| | comp=N,1086μm,0.7s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.34** | **199** | P | **Pg** | **03 40 35.7** | **0.0** |
| KEF3 | | | | S | **Sg** | **03 40 40.7** | **+0.1** |
| | comp=N,3μm,0.3s | | | | | | |
| **VLS** | **Valsamata** | **0.36** | **167** | P | **Pg** | **03 40 36.1** | **+0.1** |
| VLS | | | | S | **Sg** | **03 40 41.5** | **+0.4** |
| | comp=N,2μm,0.2s | | | | | | |
| **VLS** | **Valsamata** | **0.36** | **167** | P | **Pg** | **03 40 35.9** | **-0.1** |
| VLS | | | | S | **Sb** | **03 40 41.6** | **-0.1** |
| VLS | | | | AML | AML | 03 40 41.8 | |
| | comp=N,4062μm,0.2s | | | | | | |
| VLS | | | | AML | AML | 03 40 42.0 | |
| | comp=E,4065μm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.42** | **169** | P | **Pg** | **03 40 37.2** | **+0.1** |
| PSDA | | | | S | **Sb** | **03 40 43.7** | **+0.3** |
| **PSDA** | **Pessada-Kefalo** | **0.42** | **169** | P | **Pg** | **03 40 37.2** | **+0.1** |
| PSDA | | | | S | **Sg** | **03 40 43.2** | **+0.4** |
| **RLS** | **Riolos of Patr** | **0.90** | **121** | P | **Pg** | **03 40 45.3** | **-0.8** |
| **IGT** | **Igoumenitsa** | **1.01** | **353** | P | **Pb** | **03 40 48.5** | **+0.9** |
| IGT | | | | S | **Sn** | **03 41 04.7** | **+3.0** |
| | comp=E,80nm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.01** | **353** | P | **Pb** | **03 40 48.6** | **+1.1** |
| **EVR** | **Evrytania** | **1.10** | **69** | P | **Pb** | **03 40 49.4** | **+0.3** |
| **EFP** | **Efpalio** | **1.12** | **95** | P | **Pb** | **03 40 48.9** | **-0.4** |
| **DRO** | **Drossia** | **1.12** | **120** | P | **Pb** | **03 40 49.5** | **+0.1** |
| DRO | | | | S | **Sn** | **03 41 05.7** | **+1.4** |
| | comp=E,282nm,0.3s | | | | | | |
| **DRO** | **Drossia** | **1.12** | **120** | P | **Pb** | **03 40 49.3** | **-0.1** |
| DRO | | | | AML | AML | 03 41 08.6 | |
| | comp=N,466μm,0.4s | | | | | | |
| DRO | | | | AML | AML | 03 41 09.4 | |
| | comp=E,648μm,0.2s | | | | | | |
| **ANX** | **Ano Chora** | **1.13** | **86** | P | **Pb** | **03 40 49.6** | **+0.1** |
| **ANX** | **Ano Chora** | **1.13** | **86** | P | **Pb** | **03 40 49.3** | **-0.2** |
| **LAKA** | **Lakka** | **1.21** | **103** | P | **Pb** | **03 40 50.5** | **-0.4** |
| **LAKA** | **Lakka** | **1.21** | **103** | P | **Pb** | **03 40 50.4** | **-0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.38** | **69** | P | **Pb** | **03 40 54.5** | **+0.8** |
| **KLV** | **Kalavryta, Ach** | **1.40** | **110** | P | **Pn** | **03 40 53.8** | **+0.7** |
| **KLV** | **Kalavryta, Ach** | **1.40** | **110** | P | **Pn** | **03 40 53.9** | **+0.7** |
| **AGG** | **Agios Georgios** | **1.52** | **70** | P | **Pb** | **03 40 56.8** | **+0.5** |
| **LSTV** | **Lastovo** | **5.04** | **328** | *e*Pn | **Pn** | 03 41 43.4 | +0.2 |
| LSTV | | | | Sn | **Sn** | **03 42 37.8** | **-3.2** |
| **RICI** | **Ricice** | **5.57** | **334** | *e*Pn | **Pn** | 03 41 51.0 | +0.4 |
| RICI | | | | Sn | **Sn** | **03 42 49.1** | **-5.0** |
| **KIJV** | **Kijevo** | **6.28** | **332** | *e*Pn | **Pn** | 03 42 01.2 | +1.0 |
| KIJV | | | | Sn | **Sn** | **03 43 06.3** | **-5.2** |

*NEIC **19** 04:12:05.9±1.9, 35°.47N±0°.04×120°.92W±0°.05, h13km±6km, Error ellipse: s-maj=6.3km s-min=5.8km az=65.0*
*ANF **19** 04:12:05.6±0.8, 35°.59N×120°.75W, h3km, ML3.2/15, Error ellipse: s-maj=7.5km s-min=3.4km az=90.0*
*NCEDC **19** 04:12:06.9±2.5, 35°.54N±0°.04×120°.79W±0°.04, h3km±7km, ML3.3/27, ML3.0/70(NEIC), Error ellipse: s-maj=7.5km s-min=3.0km az=218.0*
***ISC 19 04:12:06.1±1.0, 35°.49N±0°.03×120°.87W±0°.03, h13km±7km, n86, σ0§81/91, Central California***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAMR** | **Ramage Ranch** | **0.14** | **359** | | **Pg** | **04 12 09.8** | **+0.1** |
| RAMR | | | | | **Sg** | **04 12 12.2** | **0.0** |
| **TSCN** | **Private Proper** | **0.43** | **83** | | **Pg** | **04 12 14.8** | **+0.2** |
| **TCHL** | **Shandon** | **0.43** | **63** | | **Pg** | **04 12 14.6** | **-0.1** |
| TCHL | | | | | **Sg** | **04 12 19.8** | **-0.5** |
| **TRAM** | **Private Proper** | **0.52** | **69** | | **Pg** | **04 12 16.2** | **-0.1** |
| **PKD** | **Bear Valley Ra** | **0.53** | **30** | | **Pg** | **04 12 15.9** | **-0.6** |
| **PAGB** | **Antelope Grade** | **0.56** | **64** | Pg | **Pg** | **04 12 16.8** | **-0.2** |
| PAGB | | | | IAML | | 04 12 24.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| **THIS** | **South End of C** | **0.57** | **66** | | **Pg** | **04 12 17.0** | **-0.3** |
| **PAPM** | **Alder Peak** | **0.58** | **316** | | **Pb** | **04 12 18.4** | **+0.2** |
| **PMLM** | **Mount Lospe** | **0.63** | **160** | | **Pn** | **04 12 20.4** | **-0.4** |
| **PMPB** | **Monarch Peak** | **0.72** | **4** | Pg | **Pg** | **04 12 20.1** | **-0.1** |
| **PDRM** | **Domengine Ranc** | **0.94** | **25** | | **Pb** | **04 12 24.6** | **+0.3** |
| **BSMM** | **Soledad Missio** | **1.00** | **333** | | **Pg** | **04 12 25.5** | **+0.1** |
| **BBNM** | **San Benito** | **1.03** | **351** | | **Pb** | **04 12 25.9** | **+0.1** |
| **PKM** | **Mcpherson Peak** | **1.05** | **125** | P | **Pg** | **04 12 26.6** | **+0.2** |
| | baz=310,SNR=64 | | | | | | |
| PKM | | | | Sb | **Sn** | **04 12 41.4** | **-0.1** |
| | baz=310 | | | | | | |
| **HAST** | **Hastings Reser** | **1.05** | **328** | | **Pn** | **04 12 26.4** | **-0.3** |
| **BBGB** | **Big Mountain B** | **1.09** | **353** | | **Pg** | **04 12 27.5** | **+0.3** |
| **BJCM** | **Johnson Can.** | **1.14** | **338** | | **Pb** | **04 12 27.2** | **-0.4** |
| **SCZ** | **Santa Cruz** | **1.19** | **339** | | **Pn** | **04 12 27.9** | **-0.5** |
| **BLRM** | **Lewis Ranch** | **1.22** | **344** | | **Pn** | **04 12 28.5** | **-0.4** |
| **BCW** | **Bitter Crk WRg** | **1.31** | **114** | Pg | **Pn** | **04 12 30.1** | **-0.1** |
| **SAO** | **San Andreas Ge** | **1.35** | **340** | | **Pn** | **04 12 30.2** | **-0.6** |
| **SBC** | **Santa Barbara** | **1.41** | **138** | S | **Sg** | **04 12 53.1** | **+1.5** |
| | baz=322 | | | | | | |
| **HSFM** | **Saint Francis** | **1.41** | **339** | | **Pn** | **04 12 31.5** | **-0.1** |
| **VOG** | **Valley Oaks Go** | **1.46** | **55** | P | **Pn** | **04 12 31.1** | **-1.2** |
| | baz=236 | | | | | | |
| VOG | | | | S | **Sn** | **04 12 49.5** | **-1.8** |
| | baz=236 | | | | | | |
| **VES** | **Vestal, Richgr** | **1.49** | **76** | P | **Pn** | **04 12 31.5** | **-1.1** |
| | baz=258,SNR=25 | | | | | | |
| VES | | | | S | **Sn** | **04 12 51.0** | **-1.0** |
| | baz=258 | | | | | | |
| **HFEM** | **San Felipe** | **1.55** | **344** | | **Pn** | **04 12 33.5** | **0.0** |
| **HCOM** | **Corn Cob Canyo** | **1.55** | **334** | | **Pn** | **04 12 33.2** | **-0.3** |
| **PACP** | **Pacheco Peak** | **1.55** | **347** | | **Pn** | **04 12 33.8** | **+0.2** |
| **MOBB** | **Monterey Bay O** | **1.59** | **319** | | **Pb** | **04 12 34.2** | **-1.1** |
| **GHS** | **Gilroy Hot Spr** | **1.67** | **344** | | **Pn** | **04 12 35.2** | **+0.1** |
| **ARVC** | **Arvin** | **1.71** | **102** | P | **Pn** | **04 12 35.2** | **-0.4** |
| | baz=285,SNR=11 | | | | | | |
| **HELL** | **Mitchell Peak,** | **1.91** | **51** | | **Pn** | **04 12 37.7** | **-0.8** |
| **MHC** | **Mount Hamilton** | **1.95** | **342** | | **Pn** | **04 12 39.0** | **-0.1** |
| **ISA** | **Isabella, Lake** | **1.96** | **84** | Pn | **Pn** | **04 12 38.5** | **-0.7** |
| ISA | | | | IAML | | 04 13 05.4 | |
| | comp=E,123nm,0.5s | | | | | | |
| ISA | | | | IAML | | 04 13 05.6 | |
| | comp=N,184nm,0.4s | | | | | | |
| **ISA** | **Isabella, Lake** | **1.96** | **84** | P | **Pn** | **04 12 38.4** | **-0.7** |
| | baz=267,SNR=24 | | | | | | |
| ISA | | | | S | **Sn** | **04 13 03.3** | **-0.3** |
| | baz=267 | | | | | | |
| **COSM** | **Mount Oso** | **2.05** | **349** | | **Pn** | **04 12 41.1** | **+0.6** |
| **JRSC** | **Jasper Ridge** | **2.21** | **330** | | **Pn** | **04 12 41.8** | **-0.6** |
| **KCC** | **Kaiser Creek** | **2.21** | **34** | | **Pn** | **04 12 43.0** | **+0.4** |
| **CCAC** | **Calif City Air** | **2.35** | **97** | Pn | **Pn** | **04 12 44.9** | **+0.4** |
| CCAC | | | | IAML | | 04 13 24.9 | |
| | comp=E,95nm,0.8s | | | | | | |
| CCAC | | | | IAML | | 04 13 34.9 | |
| | comp=N,99nm,1.1s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **2.43** | **104** | P | **Pn** | **04 12 45.3** | **-0.3** |
| | baz=287,SNR=9.5 | | | | | | |
| **CWC** | **Cottonwood Cre** | **2.45** | **66** | Sb | **Sb** | **04 13 19.6** | **-0.8** |
| | baz=249 | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.50** | **153** | S | **Sn** | **04 13 17.5** | **+0.6** |
| | baz=336 | | | | | | |
| **MRDM** | **Red Cones** | **2.56** | **34** | | **Pn** | **04 12 49.1** | **+1.5** |
| **CMB** | **Columbia Colle** | **2.57** | **9** | | **Pn** | **04 12 48.1** | **+0.6** |
| **CMB** | **Columbia Colle** | **2.57** | **9** | Pn | **Pn** | **04 12 47.8** | **+0.3** |
| **CMB** | **Columbia Colle** | **2.57** | **9** | IAML | | 04 13 20.1 | |
| | comp=E,58nm,0.7s | | | | | | |
| CMB | | | | IAML | | 04 13 20.7 | |
| | comp=N,68nm,0.6s | | | | | | |
| **PASC** | **Pasadena Art C** | **2.57** | **120** | Pn | **Pn** | **04 12 47.7** | **+0.3** |
| **BKS** | **Berkeley--Byer** | **2.62** | **336** | | **Pn** | **04 12 47.6** | **-0.6** |
| **MTUM** | **Tungsten Hills** | **2.63** | **44** | | **Pn** | **04 12 49.9** | **+1.5** |
| **TIN** | **Tinemaha, Big** | **2.64** | **53** | Sb | **Sn** | **04 13 23.7** | **+3.2** |
| | baz=235 | | | | | | |
| **MDCM** | **Deadman Creek** | **2.66** | **33** | | **Pn** | **04 12 50.1** | **+1.1** |
| **MLAC** | **Mammoth, Mammo** | **2.69** | **37** | Pb | **Pn** | **04 12 51.4** | **+2.1** |
| | baz=218 | | | | | | |
| **MPMC** | **Manual Prospec** | **2.80** | **77** | P | **Pn** | **04 12 50.6** | **-0.3** |
| | baz=260 | | | | | | |
| **LCH** | **Last Change Ra** | **3.13** | **55** | | **Pn** | **04 12 56.0** | **+0.8** |
| LCH | | | | IAML | | 04 13 45.1 | |
| | comp=E,64nm,0.9s | | | | | | |
| LCH | | | | IAML | | 04 13 48.1 | |
| | comp=N,43nm,0.5s | | | | | | |
| **GRAC** | **Grapevine Rang** | **3.20** | **61** | Pn | **Pn** | **04 12 55.8** | **-0.5** |
| GRAC | | | | IAML | | 04 13 50.6 | |
| | comp=N,71nm,1.0s | | | | | | |
| **QSM** | **Queen of Sheba** | **3.29** | **81** | | **Pn** | **04 12 56.8** | **-0.6** |
| QSM | | | | IAML | | 04 13 52.4 | |
| | comp=E,28nm,0.8s | | | | | | |
| QSM | | | | IAML | | 04 13 53.5 | |
| | comp=N,39nm,0.7s | | | | | | |
| **GSC** | **Goldstone, Bar** | **3.32** | **92** | | **Pn** | **04 12 57.4** | **-0.5** |
| GSC | | | | IAML | | 04 13 54.8 | |
| | comp=E,44nm,0.6s | | | | | | |
| GSC | | | | IAML | | 04 13 55.9 | |
| | comp=N,25nm,0.8s | | | | | | |
| **GSC** | **Goldstone, Bar** | **3.32** | **92** | P | **Pn** | **04 12 57.3** | **-0.5** |
| | baz=275 | | | | | | |
| **LHV** | **Little Huntoon** | **3.34** | **34** | | **Pn** | **04 12 59.0** | **+1.0** |
| LHV | | | | IAML | | 04 14 03.4 | |
| | comp=N,53nm,0.9s | | | | | | |
| **ELS** | **Elsinore Mount** | **3.38** | **122** | | **Pn** | **04 12 58.3** | **-0.4** |
| **GWY** | **Greenwater Val** | **3.48** | **77** | | **Pn** | **04 12 59.7** | **-0.5** |
| **EMB** | **Emerald Bay** | **3.53** | **10** | Pn | **Pn** | **04 13 01.6** | **+0.7** |
| EMB | | | | IAML | | 04 14 07.1 | |
| | comp=N,54nm,1.0s | | | | | | |
| **MURC** | **Murrieta** | **3.57** | **121** | P | **Pn** | **04 13 01.4** | **+0.1** |
| | baz=304 | | | | | | |
| **NVAR** | **Mina Array Bea** | **3.58** | **34** | Pn | **Pn** | **04 13 02.3** | **+0.7** |
| **RYN** | **Ryan** | **3.65** | **30** | | **Pn** | **04 13 03.3** | **+0.8** |
| RYN | | | | IAML | | 04 14 05.2 | |
| | comp=E,24nm,2.2s | | | | | | |
| RYN | | | | IAML | | 04 14 10.0 | |
| | comp=N,24nm,4.7s | | | | | | |
| **NV11** | **Mina Array Sit** | **3.65** | **36** | Pn | **Pn** | **04 13 03.8** | **+1.3** |
| NV11 | | | | IAML | | 04 13 59.2 | |
| | comp=E,22nm,3.8s | | | | | | |
| **YERR** | **Yerington** | **3.72** | **20** | | **Pn** | **04 13 04.6** | **+1.1** |
| YERR | | | | IAML | | 04 14 02.5 | |
| | comp=N,34nm,0.6s | | | | | | |
| **PNTR** | **Pine Nut** | **3.73** | **15** | Pn | **Pn** | **04 13 03.7** | **+0.1** |
| **TPH** | **Tonopah** | **3.90** | **48** | | **Pn** | **04 13 04.8** | **-1.2** |
| **VCNR** | **Virginia City** | **3.92** | **14** | | **Pn** | **04 13 06.3** | **+0.1** |
| VCNR | | | | IAML | | 04 14 10.4 | |
| | comp=E,40nm,1.1s | | | | | | |
| VCNR | | | | IAML | | 04 14 12.4 | |
| | comp=N,31nm,0.7s | | | | | | |
| **TPNV** | **Topopah Spring** | **4.01** | **67** | | **Pn** | **04 13 07.7** | **+0.3** |
| **ORV** | **Oroville** | **4.09** | **353** | | **Pn** | **04 13 09.2** | **+0.9** |
| ORV | | | | IAML | | 04 14 04.1 | |
| | comp=N,14nm,4.7s | | | | | | |
| ORV | | | | IAML | | 04 14 17.3 | |
| | comp=E,18nm,4.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **4.09** | **116** | Pn | **Pn** | **04 13 09.5** | **+0.9** |
| **PFO** | **Pinyon Flats O** | **4.09** | **116** | P | **Pn** | **04 13 08.4** | **-0.1** |
| | baz=300 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **4.28** | **109** | P | **Pn** | **04 13 11.3** | **+0.2** |
| | baz=293 | | | | | | |
| **GMRC** | **Granite Mounta** | **4.33** | **98** | P | **Pn** | **04 13 10.4** | **-1.3** |
| | baz=282 | | | | | | |
| **PAHR** | **Pah Rah Range** | **4.37** | **15** | Pn | **Pn** | **04 13 13.1** | **+0.7** |
| PAHR | | | | IAML | | 04 14 34.0 | |
| | comp=E,22nm,3.3s | | | | | | |
| PAHR | | | | IAML | | 04 14 45.2 | |
| | comp=N,14nm,2.5s | | | | | | |
| **BEKR** | **Beckworth** | **4.39** | **5** | | **Pn** | **04 13 13.9** | **+1.3** |
| BEKR | | | | IAML | | 04 14 27.7 | |
| | comp=E,24nm,0.7s | | | | | | |
| BEKR | | | | IAML | | 04 15 13.4 | |
| | comp=N,12nm,4.8s | | | | | | |
| **BAR** | **Barrett** | **4.47** | **128** | Pn | **Pn** | **04 13 13.5** | **-0.1** |
| BAR | | | | IAML | | 04 13 57.3 | |
| | comp=E,9.4nm,5.0s | | | | | | |
| BAR | | | | IAML | | 04 14 08.6 | |
| | comp=N,11nm,3.9s | | | | | | |
| **MONP2** | **Monument Peak** | **4.50** | **124** | P | **Pn** | **04 13 14.2** | **0.0** |
| | baz=308 | | | | | | |
| **S11A** | **Rachel** | **4.65** | **61** | Pn | **Pn** | **04 13 15.4** | **-0.8** |
| **CBX** | **Cerro Bola** | **4.72** | **131** | Pn | **Pn** | **04 13 17.8** | **+0.6** |
| **SHPR** | **Sheep Range** | **4.74** | **76** | Pn | **Pn** | **04 13 18.3** | **+0.9** |
| SHPR | | | | IAML | | 04 14 46.9 | |
| | comp=E,8.3nm,4.9s | | | | | | |
| **PRN** | **Pahroc Range** | **5.06** | **66** | Pn | **Pn** | **04 13 21.9** | **0.0** |
| PRN | | | | IAML | | 04 14 55.9 | |
| | comp=N,14nm,1.0s | | | | | | |
| PRN | | | | IAML | | 04 14 57.2 | |
| | comp=E,14nm,1.4s | | | | | | |
| **R11A** | **Troy Canyon, C** | **5.10** | **54** | Pn | **Pn** | **04 13 23.5** | **+1.0** |
| R11A | | | | IAML | | 04 14 23.3 | |
| | comp=N,6.0nm,4.5s | | | | | | |
| **KCRM** | **Chalk Rock** | **5.45** | **336** | | **Pn** | **04 13 25.7** | **-1.4** |

*CNRM **19** 04:19:39.6, 35°.67N×3°.62W, h4km, ml2.7*
*INMG **19** 04:19:44.0±1.2, 35°.54N×3°.68W, h14km±5km, ML2.3, Error ellipse: s-maj=3.6km s-min=2.6km az=31.0*
*SFS **19** 04:19:44.0, 35°.39N×3°.67W, h23km, ML2.7, ALBORAN SUR*
***ISC 19 04:19:41.5±0.9, 35°.50N±0°.04×3°.69W±0°.04, h14km, n23, σ1§81/34, Strait of Gibraltar***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.35** | **217** | P | **Pg** | **04 19 49.2** | **+0.6** |
| **AKLM** | **AKL** | **1.00** | **188** | P | **Pb** | **04 20 01.2** | **+0.6** |
| **CHAS** | **Isla Isabel II** | **1.07** | **107** | P | **Pg** | **04 20 01.9** | **-0.2** |
| CHAS | | | | S | **Sg** | **04 20 15.5** | **-0.6** |
| **TAF** | **Taforalt** | **1.25** | **123** | P | **Pb** | **04 20 04.7** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.40** | **335** | P | **Pg** | **04 20 07.8** | **-0.5** |
| EMAL | | | | S | **Sg** | **04 20 23.9** | **-2.7** |
| EMAL | | | | *e*Cod | | 04 21 19.9 | |
| **CHEFC** | **Chefchaouen** | **1.41** | **254** | P | **Pn** | **04 20 07.0** | **+0.2** |
| **CEU** | **Ceuta** | **1.43** | **287** | P | **Pn** | **04 20 04.4** | **-2.6** |
| CEU | | | | S | **Sn** | **04 20 21.5** | **-4.1** |
| CEU | | | | *e*Cod | | 04 21 13.4 | |
| **JBK** | **JBK** | **1.48** | **141** | P | **Pn** | **04 20 08.0** | **+0.1** |
| **LCRM** | **LCR** | **2.05** | **208** | P | **

LFU La Fuente 0.24 256 ⇓ iP Pn 04 43 04.5 -0.5
LFRS El Faro 0.26 225 ⇑ iP Pn 04 43 04.2 -1.0
LFRS El Faro 0.26 225 ⇑ iP Pn 04 43 04.2 -1.0
TECO Alcaldia de Te 0.28 161 eP Pn 04 43 04.2 -0.9
TECO Alcaldia de Te 0.28 161 eP Pn 04 43 04.2 -0.9
OPAM Oficina de Pla 0.33 254 eP Pn 04 43 04.4 -0.8
OPAM IAML 04 43 05.3
comp=Z,25µm,0.3s
OPAM Oficina de Pla 0.33 254 eP Pn 04 43 04.4 -0.8
OPAM IAML 04 43 05.3
comp=Z,25µm,0.3s
UESS Universidad de 0.33 255 IAML 04 43 05.0
comp=Z,19µm,0.3s
UESS Universidad de 0.33 255 IAML 04 43 05.0
comp=Z,19µm,0.3s
UTEC Universidad Te 0.33 252 ⇑ eP Pn 04 43 04.2 -1.0
UTEC IAML 04 43 05.3
comp=Z,10µm,0.4s
UTEC Universidad Te 0.33 252 ⇑ eP Pn 04 43 04.2 -1.0
UTEC IAML 04 43 05.3
comp=Z,10µm,0.4s
PQSS Presa 15 de Se 0.35 120 ⇓ iP Pn 04 43 04.5 -0.6
PQSS Presa 15 de Se 0.35 120 ⇓ iP Pn 04 43 04.5 -0.6
LLGN La Laguna 0.36 349 IAML 04 43 05.3
comp=Z,6µm,0.2s
LLGN La Laguna 0.36 349 IAML 04 43 05.3
comp=Z,6µm,0.2s
UEES Universidad Ev 0.36 256 ⇑ eP Pn 04 43 04.3 -1.1
UEES Universidad Ev 0.36 256 ⇑ eP Pn 04 43 04.3 -1.1
SNET Serv Nac Est T 0.37 251 Pn 04 43 04.2 -1.1
SNET Serv Nac Est T 0.37 251 ⇑ eP Pn 04 43 04.2 -1.1
SNET Serv Nac Est T 0.37 251 i P Pn 04 43 04.2 -1.1
SNET Serv Nac Est T 0.37 251 ⇑ eP Pn 04 43 04.2 -1.1
BOQS Boqueron 0.40 260 ⇑ eP Pn 04 43 04.6 -1.0
BOQS Boqueron 0.40 260 ⇑ eP Pn 04 43 04.6 -1.0
ITCA Escuela Especi 0.41 252 ⇑ eP Pn 04 43 04.4 -1.1
ITCA Escuela Especi 0.41 252 ⇑ eP Pn 04 43 04.4 -1.1
MAGS Ministerio de 0.42 253 eP Pn 04 43 04.3 -1.2
PMON Piamonte 0.44 258 eP Pn 04 43 04.4 -1.2
PMON Piamonte 0.44 258 eP Pn 04 43 04.4 -1.2
COEB Comit de Eme 0.45 132 ⇑ eP Pn 04 43 05.1 -0.5
COEB IAML 04 43 06.1
comp=Z,11µm,0.4s
COEB Comit de Eme 0.45 132 ⇑ iP Pn 04 43 05.2 -0.5
COEB Comit de Eme 0.45 132 ⇑ eP Pn 04 43 05.1 -0.5
COEB IAML 04 43 06.1
comp=Z,11µm,0.4s
CEDA San Andres 0.51 270 ⇑ eP Pn 04 43 04.7 -1.0
CEDA San Andres 0.51 270 ⇑ iP Pn 04 43 04.7 -1.0
CEDA San Andres 0.51 270 ⇑ eP Pn 04 43 04.7 -1.0
LALI Alcalda de L 0.54 234 ⇑ eP Pn 04 43 04.5 -1.2
LALI Alcalda de L 0.54 234 ⇑ iP Pn 04 43 04.5 -1.2
LALI Alcalda de L 0.54 234 ⇑ eP Pn 04 43 04.5 -1.2
ALJI Alcalda de J 0.56 148 ⇑ eP Pn 04 43 05.3 -0.6
ALJI eS S 04 43 26.3 -1.3
ALJI Alcalda de J 0.56 148 ⇑ eP Pn 04 43 05.3 -0.6
ALJI eS S 04 43 26.3 -1.3
JAYA Jayaque - finc 0.58 255 IAML 04 43 06.0
comp=Z,15µm,0.5s
JAYA Jayaque - finc 0.58 255 IAML 04 43 06.0
comp=Z,15µm,0.5s
PACA Pacayal 0.63 122 eP Pn 04 43 06.4 0.0
PACA Pacayal 0.63 122 eP Pn 04 43 06.5 +0.1
PACA Pacayal 0.63 122 eP Pn 04 43 06.4 0.0
UNIC Universidad Ca 0.68 285 ⇑ eP Pn 04 43 05.2 -1.2
UNIC Universidad Ca 0.68 285 ⇑ eP Pn 04 43 05.2 -1.2
RANC El Ranchito 0.68 123 eP Pn 04 43 06.0 -0.6
RANC El Ranchito 0.68 123 eP Pn 04 43 06.0 -0.6
LCY Lacayo 0.68 124 ⇑ eP Pn 04 43 06.1 -0.4
LCY Lacayo 0.68 124 ⇑ eP Pn 04 43 06.1 -0.4
VSM San Miguel 0.69 123 ⇑ iP Pn 04 43 06.2 -0.6
VSM San Miguel 0.69 123 ⇑ iP Pn 04 43 06.2 -0.6
SNJE San Jose 0.71 275 ⇑ iP Pn 04 43 06.0 -0.8
SNJE San Jose 0.71 275 ⇑ iP Pn 04 43 06.0 -0.8
CEVE Cerro Verde 0.73 272 ⇑ eP Pn 04 43 06.2 -0.7
CEVE Cerro Verde 0.73 272 ⇑ eP Pn 04 43 06.2 -0.7
SBLS San Blas 0.73 273 ⇑ eP Pn 04 43 06.0 -0.9
SBLS San Blas 0.73 273 ⇑ eP Pn 04 43 06.0 -0.9
RTR El Retiro 0.75 277 ⇑ eP Pn 04 43 06.4 -0.6
RTR El Retiro 0.75 277 ⇑ eP Pn 04 43 06.4 -0.6
MTO3 Montecristo 0.76 321 Pn 04 43 06.7 -0.3
MTO3 Montecristo 0.76 321 IAML 04 43 07.3
comp=Z,5µm,0.4s
MTO3 Montecristo 0.76 321 i P Pn 04 43 06.7 -0.3
MTO3 Montecristo 0.76 321 IAML 04 43 07.3
comp=Z,5µm,0.4s
CNRM Centro Naciona 0.76 116 ⇑ eP Pn 04 43 06.1 -0.7
CNRM Centro Naciona 0.76 116 ⇑ eP Pn 04 43 06.1 -0.7
ESQI Esquipulas 0.88 329 Pn 04 43 07.8 +0.2
ESQI Esquipulas 0.88 329 ⇑ eP Pn 04 43 07.8 +0.2
NUBE Las Nubes 0.88 276 ⇑ eP Pn 04 43 06.8 -0.9
NUBE Las Nubes 0.88 276 ⇑ eP Pn 04 43 06.8 -0.9
LOAL Lomas de Alarc 0.90 282 ⇑ eP Pn 04 43 07.1 -0.6
LOAL Lomas de Alarc 0.90 282 ⇑ eP Pn 04 43 07.1 -0.6
SLOZ Alcaldia de Sa 0.91 284 ⇑ iP Pn 04 43 06.9 -0.8
SLOZ IAML 04 43 08.1
comp=Z,3µm,0.3s
MRL Marmol 1.49 328 eP Pn 04 43 13.5 +1.2
MRL eS S 04 43 39.4 +0.7
TGUH Tegucigalpa,Un 1.57 81 Pn 04 43 13.1 +0.2
TGUH Tegucigalpa,Un 1.57 81 eP Pn 04 43 12.5 -0.4
TGUH Tegucigalpa,Un 1.57 81 ⇓ iP Pn 04 43 13.2 +0.2
NBG Las Nubes 1.62 299 ⇑ iP Pn 04 43 14.8 +1.3
NBG eS S 04 43 45.3 +4.6
PCG Pacaya 1.78 289 eP Pn 04 43 15.8 +0.8
APG El Apazote 1.95 308 P Pn 04 43 17.0 +0.4
comp=Z,427nm,0.3s,baz=134,slow=6.0,SNR=5310
APG S S 04 43 46.3 +0.1
comp=Z,24nm,0.3s,baz=273,slow=21,SNR=10.0
FUG Fuego 3 2.01 289 eP Pn 04 43 17.7 +0.5
CRIN San Cristobal 2.09 122 Pn 04 43 18.6 +0.8
CRIN San Cristobal 2.09 122 eP Pn 04 43 18.4 +0.6
CNGN Cerro Negro 2.49 121 Pn 04 43 22.5 +0.4
MOMN Momotombo 2.67 121 eP Pn 04 43 24.0 -0.1
RTAL Retalhuleu 2.83 285 Pn Pn 04 43 25.8 -0.1
RTAL Retalhuleu 2.83 285 eP Pn 04 43 25.6 -0.3
RTAL eS S 04 44 01.7 -1.0
RTAL IAML 04 44 05.6
comp=Z,1µm,0.3s
HUEH Huehuetenango 2.96 301 Pn 04 43 28.3 +0.7
HUEH Huehuetenango 2.96 301 ⇑ eP Pn 04 43 28.3 +0.7
HUEH Huehuetenango 2.96 301 ⇑ iP Pn 04 43 28.4 +0.8
HUEH Huehuetenango 2.96 301 ⇑ eP Pn 04 43 28.3 +0.7
MATN Matagalpa 3.00 107 Pn 04 43 28.1 +0.1
MATN Matagalpa 3.00 107 i P Pn 04 43 27.9 -0.1
PETF Flores 3.24 343 Pn Pn 04 43 31.4 +0.7
BOAB BOACO BROADBAN 3.40 113 Pn 04 43 32.8 +0.1
CCIG Comitan 4.00 308 Pn Pn 04 43 41.2 +1.1
ACON Acoyapa 4.04 116 Pn 04 43 40.8 +0.2
ACON Acoyapa 4.04 116 eP Pn 04 43 40.7 +0.2
ACON Acoyapa 4.04 116 eP Pn 04 43 41.0 +0.5
HZTE Horizontes, Gu 4.44 133 Pn 04 43 47.0 +1.5
HZTE Horizontes, Gu 4.44 133 eP Pn 04 43 47.4 +1.9
HZTE Horizontes, Gu 4.44 133 eP Pn 04 43 47.4 +1.9
LAPC Finca la Perla 4.52 132 eP Pn 04 43 48.5 +2.0
BUAI Buenos Aires 4.52 130 eP Pn 04 43 47.7 +1.1
VMAR Armenia, Volca 4.72 129 eP Pn 04 43 50.2 +1.1
ESPN Las Esperanzas 4.74 109 Pn 04 43 50.2 +1.0
ESPN Las Esperanzas 4.74 109 eP Pn 04 43 50.0 +0.8
COLC Colonia 4.76 131 eP Pn 04 43 51.5 +2.0
ORTG Ortega, Santa 4.78 135 Pn 04 43 51.1 +1.3
ORTG Ortega, Santa 4.78 135 eP Pn 04 43 51.2 +1.3
ORTG Ortega, Santa 4.78 135 eP Pn 04 43 51.5 +1.6
CUI Cuipilapa 4.79 130 eP Pn 04 43 51.8 +1.8
GUAI GUAI 4.81 137 eP Pn 04 43 51.9 +1.7
SAJU San Juanillo, 4.84 140 eP Pn 04 43 51.6 +1.1
PLVR Palo Verde 4.87 135 eP Pn 04 43 52.6 +1.5
PTEN Parque Tenorio 4.89 129 eP Pn 04 43 52.2 +1.0
ACAL Aguas Claras 4.90 130 eP Pn 04 43 52.8 +1.4
NICO Nicoya 4.96 137 eP Pn 04 43 54.4 +2.4
DUNO Dulce Nombre, 4.97 138 Pn 04 43 53.5 +1.3
DUNO Dulce Nombre, 4.97 138 eP Pn 04 43 53.4 +1.2
GRZA Playa Garza 5.00 140 eP Pn 04 43 53.6 +1.0
INDI Punta indio, G 5.12 139 eP Pn 04 43 55.5 +1.4
JTS Las Juntas de 5.19 132 P Pn 04 43 55.0 0.0
comp=Z,75nm,0.3s,baz=29,slow=6.9,SNR=64
JTS S S 04 44 52.6 -2.8
comp=Z,49nm,0.3s,baz=30,slow=22,SNR=13
JTS Las Juntas de 5.19 132 Pn Pn 04 43 55.3 +0.3
JTS Las Juntas de 5.19 132 eP Pn 04 43 55.6 +0.6
JTS Las Juntas de 5.19 132 eP Pn 04 43 56.0 +1.0
JTS Las Juntas de 5.19 132 eP Pn 04 43 56.0 +1.0
CEDE Laguna Cedeo 5.25 129 eP Pn 04 43 58.0 +2.3
ARE1 Arenal 1 5.25 129 eP Pn 04 43 56.5 +0.8
CASO Castillo 5.26 129 eP Pn 04 43 58.1 +2.2
CAO2 Cobano, Puntar 5.51 138 eP Pn 04 44 00.6 +1.5
LAFE Finca La Fe, P 5.55 135 eP Pn 04 44 00.7 +1.1
LAFE Finca La Fe, P 5.55 135 i P Pn 04 44 00.8 +1.1
SRA1 San Ramn 5.67 130 eP Pn 04 44 03.2 +2.0
CRPO Crater poas 5.79 128 eP Pn 04 44 05.9 +2.9
JACO JACO, Garabito 5.83 134 Pn 04 44 04.3 +1.1
JACO JACO, Garabito 5.83 134 eP Pn 04 44 04.3 +1.1
RIFO Rio Frio, Sara 5.96 125 eP Pn 04 44 05.5 +0.7
HDC Heredia 6.00 129 eP Pn 04 44 07.1 +1.6
HDC3 Heredia 3 6.00 129 eP Pn 04 44 06.6 +1.0
OCM Ochomogo 6.18 128 eP Pn 04 44 08.9 +0.9
LCR2 La Lucha 2 6.25 130 eP Pn 04 44 10.3 +1.5
RIMA Rio Macho 6.34 129 Pn 04 44 10.7 +0.7
RIMA Rio Macho 6.34 129 eP Pn 04 44 11.5 +1.6
CDM Cerro de Muert 6.55 130 eP Pn 04 44 14.7 +1.8
MRVA Moravia de Chi 6.63 126 eP Pn 04 44 16.4 +2.8
CMIG Matias Romero 6.65 300 P Pn 04 44 13.8 0.0
comp=Z,3.2nm,0.3s,baz=138,slow=10,SNR=48
CMIG S S 04 45 21.5 -8.1
comp=Z,5.4nm,0.3s,baz=132,slow=10,SNR=4.5
CMIG LR LR 04 46 52.4
comp=Z,54nm,18.7s,baz=100,slow=38
EDDO Dominical 6.68 132 eP Pn 04 44 16.4 +2.3
PEZE Perez Zeledon, 6.73 130 eP Pn 04 44 16.6 +1.8
EDPN Palmar Norte 7.17 132 eP Pn 04 44 22.7 +2.2
EDBA Buenos Aires 7.17 129 eP Pn 04 44 22.4 +1.8
RIOS Rincon, Osa 7.31 133 eP Pn 04 44 23.5 +1.2
EDSV San Vito 7.62 130 eP Pn 04 44 28.6 +2.1
PIRO Carate, Puerto 7.64 134 eP Pn 04 44 29.1 +2.5
CDITO Canoas 7.86 131 Pn Pn 04 44 29.9 +0.5
MTDJ Mount Denham 11.75 67 eP P 04 45 26.8 +2.0
MOTC Monteria, Cord 13.88 110 Pn Pn 04 45 46.2 -0.2
MOTC Monteria, Cord 13.88 110 eP P 04 45 49.0 +0.7
SJCC San Jacinto, C 13.96 105 Pn Pn 04 45 47.2 -0.2
SJCC San Jacinto, C 13.96 105 eP Pn 04 45 48.0 +0.6
DBBC Dabeiba 14.16 117 eP P 04 45 50.9 -0.6
UREC San Jos de Ur 14.42 113 eP P 04 45 53.8 -0.5
PAYG Puerto Ayora 14.45 186 Pn Pn 04 45 53.5 +0.1
PAYG Puerto Ayora 14.45 186 eP P 04 45 56.7 +2.0
CBOC Ciudad Bolivar 14.92 121 eP Pn 04 45 59.6 +0.2
ZARC Zaragoza, Cauc 15.13 113 Pn Pn 04 46 00.4 -1.4
ZARC IAmb IAmb 04 46 04.7
comp=Z,29nm,0.7s
ZARC Zaragoza, Cauc 15.13 113 eP P 04 46 02.5 +0.3
YOTC Yotoco, Valle 15.75 127 eP P 04 46 09.2 +0.1
GUY2C Guyana, Caldas 15.81 121 ⇓ eP P 04 46 03.5 -6.7
DWPF Disney Wildern 15.83 25 P Pn 04 46 10.6 +0.5
DWPF Disney Wildern 15.83 25 P Pn 04 46 11.7 +1.6
baz=207
NORC Norcasia 16.04 119 eP P 04 46 12.2 -0.1
ANIL Santa Ana 16.19 124 eP Pn 04 46 16.0 +1.1
OCAC Ocana 16.24 108 eP Pn 04 46 15.1 -0.2
BRRC Barranca, Sant 16.32 113 eP Pn 04 46 16.0 -0.1
656A Willston 16.56 21 P Pn 04 46 16.7 -0.1
URIC Uribia, Colomb 16.60 95 eP P 04 46 17.9 -0.4
SPBC San Pablo de B 16.68 118 eP P 04 46 18.9 -0.4
SOTA Rioblanco 16.78 133 eP Pn 04 46 23.7 +1.7
PCON Cinco Dias 16.80 132 eP Pn 04 46 21.8 -0.6
553A Crawfordville 16.81 13 Pn 04 46 22.5 +0.7
ROSC El Rosal 16.89 120 P Pn 04 46 24.3 +1.0
comp=Z,1.9nm,0.3s,baz=81,slow=5.4,SNR=12
ROSC El Rosal 16.89 120 Pn 04 46 23.1 -0.1
ROSC IAmb IAmb 04 46 28.1
comp=Z,40nm,0.9s
ROSC El Rosal 16.89 120 eP Pn 04 46 24.7 +1.4
GCUF Volcan Galeras 16.92 137 ⇑ eP Pn 04 46 24.7 +0.9
OTAV Otavalo 16.98 142 P Pn 04 46 24.5 +0.1
OTAV Otavalo 16.98 142 eP Pn 04 46 25.7 +1.3
TULM Tulum-Chalpat 17.02 139 eP Pn 04 46 26.6 +1.8
BARC Barichara 17.02 113 eP P 04 46 23.7 +0.5
PAMC Pamplona, Colo 17.14 110 eP Pn 04 46 25.7 -0.7
BRAL Brewton 17.36 5 IAmb IAmb 04 46 30.9
comp=Z,33nm,0.8s
BRAL Brewton 17.36 5 P Pn 04 46 28.9 +0.6
baz=186
RUSC La Rusia 17.42 115 eP Pn 04 46 29.5 -0.1
833A Chaparral WMA, 17.45 328 P Pn 04 46 29.2 -0.1
baz=144,SNR=40
CHIC Chingaza 17.50 120 eP P 04 46 29.5 +0.9
346A Big Creek Wild 17.51 358 IAmb IAmb 04 46 32.5
comp=Z,41nm,0.7s
GARC Garzon, Huila 17.56 130 eP P 04 46 29.5 +0.4
SDDR Presa de Saban 17.64 71 P Pn 04 46 31.6 0.0
SDDR IAmb IAmb 04 46 51.0
comp=Z,54nm,1.2s
SDDR Presa de Saban 17.64 71 eP Pn 04 46 34.4 +2.7
344A Westbrook Farm 17.65 355 P Pn 04 46 32.2 +0.6
342A Flagon Creek P 17.77 350 IAmb IAmb 04 46 37.6
comp=Z,72nm,0.9s
VILC Villavicencio, 17.81 121 eP P 04 46 30.5 -1.2
FLOC Florencia 17.85 132 eP P 04 46 32.4 +0.4
TIGA Tifton 18.21 15 P Pn 04 46 38.2 0.0
baz=196,SNR=22
250A Grady 18.25 7 IAmb IAmb 04 46 40.0
comp=Z,40nm,0.9s
SC01 Santiago de lo 18.26 70 P Pn 04 46 38.4 -0.5
TAMC Tame, Arauca 18.33 112 eP P 04 46 37.3 -0.1
VBMS Vicksburg 18.39 356 P Pn 04 46 40.5 +0.2
baz=175,SNR=6.0
SOCV Socops 18.51 105 eP P 04 46 37.3 -2.0
SDV Santo Domingo 18.54 103 P P 04 46 39.9 +0.3
comp=Z,5.5nm,0.3s,baz=234,slow=1.7,SNR=24
SDV Santo Domingo 18.54 103 P P 04 46 40.0 +0.3
SDV Santo Domingo 18.54 103 ⇑ eP P 04 46 40.1 +0.4
NATX Nacogdoches 18.64 344 P Pn 04 46 42.2 -1.0
NATX IAmb IAmb 04 46 43.6
comp=Z,54nm,0.8s
NATX Nacogdoches 18.64 344 P Pn 04 46 42.4 -0.9
baz=162,SNR=5.2
435B Jarrell 18.70 336 IAmb IAmb 04 46 43.0
comp=Z,36nm,0.6s
435B Jarrell 18.70 336 P P 04 46 42.1 +0.9
baz=153
MACC Maracena, Meta 18.84 127 eP P 04 46 44.0 +1.2
PTGC Puerto Gaitan, 19.08 118 ⇓ eP Pn 04 46 51.7 +3.1
152A Waverly Hall 19.16 11 IAmb IAmb 04 46 51.1
comp=Z,34nm,0.8s
LRAL Lakeview Retre 19.22 5 P Pn 04 46 48.5 -1.6
LRAL IAmb IAmb 04 46 50.5
comp=Z,40nm,1.1s
LRAL Lakeview Retre 19.22 5 P Pn 04 46 48.6 -1.5
baz=185,SNR=20
DR12 Loma Pena Alta 19.35 73 P P 04 46 48.0 -0.3
JCT Junction City 19.41 331 P P 04 46 49.0 +0.1
JCT IAmb IAmb 04 46 54.2
comp=Z,30nm,0.7s
JCT Junction City 19.41 331 P P 04 46 49.5 +0.6
baz=146,SNR=17
Z41A Richland Creek 19.69 350 IAmb IAmb 04 46 58.0
comp=Z,43nm,0.7s
Z41A Richland Creek 19.69 350 P P 04 46 53.5 +1.8
baz=169,SNR=6.6
WHTX Lake Whitney, 19.73 338 P Pn 04 46 54.7 -1.6
baz=155
GOGA Godfrey 20.13 13 P P 04 46 57.8 +1.4
baz=195,SNR=28
Z38A Mt. Pleasant 20.15 345 IAmb IAmb 04 47 01.6
comp=Z,34nm,0.7s
WLAR White Oak Lake 20.16 350 P P 04 46 58.0 +1.3
WLAR IAmb IAmb 04 47 01.5
comp=Z,39nm,0.6s
HPIG 20.42 312 P P 04 47 01.4 +1.5
HPIG IAmb IAmb 04 47 03.6
comp=Z,14nm,0.4s
Y52A Lilburn 20.44 12 IAmb IAmb 04 47 02.0
comp=Z,46nm,0.8s
OXF Oxford 20.62 359 IAmb IAmb 04 47 20.4
comp=Z,45nm,0.7s
OXF Oxford 20.62 359 P P 04 47 02.7 +1.1
baz=178,SNR=5.4
X48A Hartselle 20.62 4 IAmb IAmb 04 47 04.4
comp=Z,35nm,0.8s
TX32 Lajitas Array 20.65 321 IAmb IAmb 04 47 04.7
comp=Z,34nm,0.7s
TXAR Lajitas Array 20.65 321 P P 04 47 03.8 +1.6
comp=Z,36nm,0.7s,baz=136,slow=9.6,SNR=425
TXAR ScP ScP 04 54 21.7 +0.7
comp=Z,0.2nm,0.6s,baz=146,slow=4.5,SNR=3.6
NHSC New Hope 20.79 21 P P 04 47 05.3 +2.0
NHSC New Hope 20.79 21 P P 04 47 05.9 +2.5
baz=204,SNR=12
FPAL Fort Paine 20.85 8 P P 04 47 04.3 +0.1
FPAL IAmb IAmb 04 47 06.7
comp=Z,33nm,0.9s
Z35A Perchaven, San 20.88 340 IAmb IAmb 04 47 09.3
comp=Z,29nm,0.9s
X40A Basin Creek Fa 20.90 351 IAmb IAmb 04 47 08.3
comp=Z,50nm,1.5s
X40A Basin Creek Fa 20.90 351 P P 04 47 06.6 +2.0
baz=169,SNR=7.1
MIAR Mount Ida 21.08 349 P P 04 47 07.0 +0.5
MIAR IAmb IAmb 04 47 08.6
comp=Z,42nm,0.8s
MIAR Mount Ida 21.08 349 P P 04 47 07.7 +1.2
baz=167,SNR=26
PLAL Pickwick Lake 21.10 2 IAmb IAmb 04 47 08.3
comp=Z,30nm,1.0s
ABTX Abilene, Hawle 21.16 334 IAmb IAmb 04 47 10.4
comp=Z,32nm,1.0s
ABTX Abilene, Hawle 21.16 334 P P 04 47 08.5 +1.2
baz=150,SNR=7.5
HODGE Hodges 21.20 15 IAmb IAmb 04 47 10.4
comp=Z,58nm,0.8s
SWET Sewanee 21.48 7 IAmb IAmb 04 47 11.7
comp=Z,30nm,0.5s
W41B Gary Mavity, V 21.49 352 IAmb IAmb 04 47 15.1
comp=Z,31nm,0.8s
W41B Gary Mavity, V 21.49 352 P P 04 47 11.8 +1.1
baz=171,SNR=19
X37A Clayton 21.51 345 P P 04 47 12.5 +1.5
X37A IAmb IAmb 04 47 14.4
comp=Z,45nm,0.7s
JSC Jenkinsville 21.52 17 IAmb IAmb 04 47 13.8
comp=Z,51nm,1.0s
W50A Signal Mountai 21.54 8 IAmb IAmb 04 47 12.6
comp=Z,18nm,0.6s
WHAR Woolly Hollow 21.61 352 IAmb IAmb 04 47 17.2
comp=Z,22nm,1.0s
W52A Murphy 21.64 11 IAmb IAmb 04 47 14.8
comp=Z,23nm,0.8s
Y58A Scranton 21.69 21 P P 04 47 13.7 +1.0
AOPR Arecibo Observ 21.72 75 IAmb IAmb 04 47 15.4
comp=Z,20nm,0.7s
W39A Magazine 21.75 349 IAmb IAmb 04 47 16.7
comp=Z,43nm,1.1s
W39A Magazine 21.75 349 P P 04 47 14.4 +1.1
baz=167,SNR=16
BG3 Lake Jocassee 21.77 13 IAmb IAmb 04 47 15.8
comp=Z,77nm,1.2s
OBIP Obispado Ponce 21.82 76 P P 04 47 13.2 -1.0
OBIP IAmb IAmb 04 47 15.5
comp=Z,30nm,0.7s
PAULI Pauline 21.88 16 IAmb IAmb 04 47 16.5
comp=Z,44nm,0.6s
CPCT Cooper Cave 21.91 10 IAmb IAmb 04 47 16.3
comp=Z,26nm,0.6s
V48A Smith Brothers 21.92 4 IAmb IAmb 04 47 17.0
comp=Z,29nm,0.7s
BIRD Birdtown, Kers 22.10 19 IAmb IAmb 04 47 19.4
comp=Z,46nm,0.9s
FCAR Ozark Folk Cen 22.18 353 P P 04 47 17.8 +0.3
TKL Tuckaleechee C 22.24 11 P P 04 47 17.7 -0.3
comp=Z,66nm,0.9s,baz=183,slow=12,SNR=58
TKL Tuckaleechee C 22.24 11 P P 04 47 18.4 +0.3
WVT Waverly 22.25 2 P P 04 47 17.3 -0.8
WVT IAmb IAmb 04 47 20.2
comp=Z,17nm,0.7s
WVT Waverly 22.25 2 P P 04 47 18.3 +0.2
baz=183
SJG San Juan 22.26 76 P P 04 47 17.3 -1.1
comp=Z,10nm,0.4s,baz=280,slow=7.9,SNR=14
SJG San Juan 22.26 76 P P 04 47 17.7 -0.7
SJG San Juan 22.26 76 eP P 04 47 13.9 -4.4
LCAR Lake Charles 22.26 355 IAmb IAmb 04 47 19.4
comp=Z,26nm,0.6s
V51A Loudon 22.28 10 IAmb IAmb 04 47 21.0
comp=Z,30nm,0.8s
KMSC Kings Mountain 22.31 16 P P 04 47 19.7 +1.0
baz=200,SNR=25
GCPR Guaynabo City 22.35 75 P P 04 47 19.1 -0.1
W35A Tecumseh 22.45 343 P 04 47 20.5 +0.5
W35A IAmb IAmb 04 47 21.5
comp=Z,37nm,0.7s
V52A Sevierville 22.45 11 IAmb IAmb 04 47 22.6
comp=Z,42nm,1.1s
WMOK Wichita Mounta 22.68 338 P P 04 47 22.6 +0.5
baz=154,SNR=20
W57A Gilead 22.72 19 IAmb IAmb 04 47 25.2
comp=Z,57nm,1.1s
U40A Yellville 22.74 352 P P 04 47 23.6 +1.0
baz=170,SNR=66
U49A Red Boiling Sp 22.78 6 IAmb IAmb 04 47 24.7
comp=Z,52nm,0.9s
MTP Monte Pirata 22.82 76 P P 04 47 23.3 -0.1
MTP IAmb IAmb 04 47 25.2
comp=Z,35nm,0.7s
HHAR Hobbs 22.84 349 IAmb IAmb 04 47 26.3
comp=Z,36nm,0.6s
OKCSW OKLAHOMA CITY 22.85 342 P 04 47 24.9 +1.4
TUL1 Leonard 22.87 345 IAmb IAmb 04 47 27.5
comp=Z,37nm,0.8s
TUL1 Leonard 22.87 345 P P 04 47 24.1 +0.3
baz=162,SNR=13
PBMO Poplar Bluff 22.92 357 IAmb IAmb 04 47 25.8
comp=Z,46nm,0.8s
V55A Taylorsville 23.01 16 IAmb IAmb 04 47 28.4
comp=Z,41nm,0.7s
U38A Gravette 23.07 349 IAmb IAmb 04 47 28.8
comp=Z,34nm,0.8s
CUPR Culebra, Puert 23.10 76 P P 04 47 26.9 +1.0
CUPR IAmb IAmb 04 47 28.9
comp=Z,20nm,0.6s
TZTN Tazewell 23.14 11 P P 04 47 26.9 +0.7
baz=193,SNR=5.9
ATAH Atahualpa 23.26 153 P P 04 47 29.6 +1.7
comp=Z,8.0nm,0.9s,baz=38,slow=6.3,SNR=4.2
MNTX Cornudas Mount 23.37 322 P P 04 47 29.5 +1.1
baz=136,SNR=25
STVI Saint Thomas 23.42 76 P P 04 47 29.0 +0.1
CNNC Cliffs of the 23.53 23 P P 04 47 30.6 +1.0
CNNC Cliffs of the 23.53 23 P P 04 47 30.8 +1.1
baz=207,SNR=5.5
U56A King 23.70 17 IAmb IAmb 04 47 35.8
comp=Z,33nm,0.7s
MSTX Muleshoe 23.71 330 P P 04 47 32.2 +0.7
baz=145,SNR=32
S44A Carbondale 23.79 359 IAmb IAmb 04 47 33.8
comp=Z,37nm,0.8s
AMTX Amarillo 23.96 333 IAmb IAmb 04 47 37.5
comp=Z,20nm,0.5s
AMTX Amarillo 23.96 333 P P 04 47 34.7 +0.9
baz=148
T35A Sooner Cattle 24.01 345 P 04 47 36.2 +2.1
T35A IAmb IAmb 04 47 36.9
comp=Z,32nm,0.9s
USIN University of 24.09 2 IAmb IAmb 04 47 38.0
comp=Z,34nm,0.6s
S51A Beattyville 24.20 10 IAmb IAmb 04 47 41.7
comp=Z,16nm,0.6s
CCM Cathedral Cave 24.24 355 P P 04 47 36.8 +0.6
CCM Cathedral Cave 24.24 355 P P 04 47 36.7 +0.5
baz=174
WCI Wyandotte Cave 24.43 5 P P 04 47 38.1 +0.2
WCI Wyandotte Cave 24.43 5 P P 04 47 38.2 +0.2
baz=186
BLA Blacksburg 24.50 16 IAmb IAmb 04 47 40.8
comp=Z,46nm,1.1s
BLA Blacksburg 24.50 16 P P 04 47 39.5 +0.9
baz=200,SNR=6.2
U59A Littleton 24.55 22 IAmb IAmb 04 47 40.9
comp=Z,22nm,0.9s
R40A Maddies Statio 24.57 354 IAmb IAmb 04 47 40.7
comp=Z,30nm,0.7s
R49A Shelbyville 24.61 7 IAmb IAmb 04 47 40.4
comp=Z,25nm,0.6s
T57A Hurt 24.65 19 IAmb IAmb 04 47 41.9
comp=Z,30nm,0.8s
S54A Dingess, Beckl 24.83 14 IAmb IAmb 04 47 43.2
comp=Z,63nm,1.4s
OLIL Olney 24.84 1 IAmb IAmb 04 47 43.0
comp=Z,34nm,0.9s
Q44A Meyer Farm, Va 25.00 360 P P 04 47 43.8 +0.8
R53A Hurricane 25.19 13 IAmb IAmb 04 47 45.9
comp=Z,18nm,0.9s
BLO Bloomington 25.35 4 IAmb IAmb 04 47 47.1
comp=Z,21nm,0.8s
121A Cookes Peak, D 25.41 320 P P 04 47 49.8 +2.7

baz=133,SNR=7.2
R55A **Marlinton** 25.59 16 IAmb IAmb 04 47 50.6
comp=Z,55nm,1.3s
Q51A **Peebles** 25.59 10 P P 04 47 49.0 +0.6
Q52A **Bidwell** 25.73 12 IAmb IAmb 04 47 51.2
comp=Z,23nm,0.8s
P48A **Milroy** 25.73 6 IAmb IAmb 04 47 50.1
comp=Z,24nm,0.7s
P46A **Rosedale** 25.75 3 IAmb IAmb 04 47 50.8
comp=Z,19nm,0.9s
BNM **Barren Site** 25.87 325 P P 04 47 52.7 +1.5
P49A **Miami Univ. Ec** 25.89 7 IAmb IAmb 04 47 51.1
comp=Z,14nm,0.6s
P49A **Miami Univ. Ec** 25.89 7 P P 04 47 50.6 -0.4
baz=189,SNR=5.5
R58B **Mineral** 25.97 20 IAmb IAmb 04 47 53.7
comp=Z,26nm,0.9s
Y22D **IRIS PASSCAL I** 25.98 324 P P 04 47 54.5 +2.4
baz=137
R32A **Long Quarter,** 26.02 342 IAmb IAmb 04 47 54.1
comp=Z,39nm,1.4s
P38A **Dawn** 26.04 352 IAmb IAmb 04 47 54.6
comp=Z,24nm,0.9s
P51A **Williamsport** 26.09 10 IAmb IAmb 04 47 54.0
comp=Z,24nm,0.6s
KSU1 **Kansas State U** 26.11 346 P P 04 47 53.5 +0.5
baz=163,SNR=5.5
O44A **Mansfield** 26.25 1 IAmb IAmb 04 47 55.3
comp=Z,28nm,0.7s
CBN **Corbin Frederi** 26.36 21 P P 04 47 56.7 +1.5
baz=206,SNR=6.2
ANMO **Albuquerque** 26.36 326 P P 04 47 57.2 +1.6
comp=Z,4.0nm,0.9s,baz=135,slow=12,SNR=9.5
ANMO **Albuquerque** 26.36 326 P P 04 47 57.5 +1.9
ANMO **Albuquerque** 26.36 326 P P 04 47 56.7 +1.1
baz=139
P52A **Corning** 26.41 12 IAmb IAmb 04 48 00.9
comp=Z,22nm,0.5s
P52A **Corning** 26.41 12 P P 04 47 55.9 +0.3
baz=195
P53A **Whipple** 26.42 13 IAmb IAmb 04 47 57.8
comp=Z,43nm,0.9s
SFIN **Lafayette** 26.52 3 IAmb IAmb 04 47 56.9
comp=Z,20nm,0.6s
SFIN **Lafayette** 26.52 3 P P 04 47 56.4 -0.2
baz=184
O48B **Farmland** 26.55 6 P P 04 47 56.4 -0.5
baz=188
Q56A **Snyder Ridge,** 26.55 17 IAmb IAmb 04 47 59.4
comp=Z,57nm,1.4s
O49A **Covington** 26.58 8 IAmb IAmb 04 47 58.0
comp=Z,22nm,0.7s
CBKS **Cedar Bluff** 26.70 341 P P 04 47 59.2 +0.8
baz=156
ACSO **Alum Creek Sta** 26.83 10 P P 04 48 00.2 +0.8
ACSO IAmb IAmb 04 48 00.8
comp=Z,32nm,0.8s
ACSO **Alum Creek Sta** 26.83 10 P P 04 47 59.8 +0.3
baz=193,SNR=9.1
N41A **Harden Midland** 26.86 357 IAmb IAmb 04 48 00.3
comp=Z,22nm,0.8s
O52A **Adamsville** 26.93 12 IAmb IAmb 04 48 01.4
comp=Z,28nm,0.7s
MCWV **Mont Chateau** 26.95 16 IAmb IAmb 04 48 02.3
comp=Z,32nm,1.1s
MCWV **Mont Chateau** 26.95 16 P P 04 48 01.5 +1.0
baz=200
T25A **Trinidad** 27.06 332 IAmb IAmb 04 48 05.1
comp=Z,17nm,0.8s
T25A **Trinidad** 27.06 332 P P 04 48 04.0 +2.2
baz=145,SNR=5.1
N47A **Urbana** 27.12 5 IAmb IAmb 04 48 02.1
comp=Z,32nm,0.9s
O53A **New Philadelph** 27.19 13 IAmb IAmb 04 48 04.6
comp=Z,27nm,0.8s
O53A **New Philadelph** 27.19 13 P P 04 48 03.2 +0.6
baz=196,SNR=6.1
TUC **Tucson** 27.21 316 P P 04 48 04.6 +1.6
TUC **Tucson** 27.21 316 P P 04 48 07.6 +4.6
baz=128
N49A **Columbus Grove** 27.32 8 IAmb IAmb 04 48 05.1
comp=Z,18nm,0.7s
N35A **Tabor** 27.60 349 IAmb IAmb 04 48 10.8
comp=Z,17nm,0.6s
N51A **Ashland** 27.60 11 IAmb IAmb 04 48 07.2
comp=Z,44nm,1.2s
SDMD **Soldier's Deli** 27.62 20 IAmb IAmb 04 48 08.4
comp=Z,24nm,0.6s
O56A **Blue Knob Stat** 27.87 17 IAmb IAmb 04 48 10.8
comp=Z,17nm,1.0s
O56A **Blue Knob Stat** 27.87 17 P P 04 48 09.7 +1.0
baz=202
KSCO **Kaye Shedlock'** 27.89 337 P P 04 48 09.9 +0.9
KSCO IAmb IAmb 04 48 11.5
comp=Z,32nm,0.7s
KSCO **Kaye Shedlock'** 27.89 337 P P 04 48 10.1 +1.0
baz=150
SDCO **Great Sand Dun** 28.06 331 P P 04 48 12.6 +1.9
baz=144,SNR=6.2
N54A **Moraine State** 28.15 14 P P 04 48 11.6 +0.5
baz=198,SNR=12
L40A **Anamosa** 28.23 356 IAmb IAmb 04 48 13.1
comp=Z,48nm,1.1s
SCIA **State Center** 28.25 353 P P 04 48 12.7 +0.6
baz=171
L48A **N Adams** 28.30 7 IAmb IAmb 04 48 13.9
comp=Z,20nm,0.6s
MVL **Millersville** 28.32 21 IAmb IAmb 04 48 14.9
comp=Z,30nm,1.3s
M52A **Chesterland** 28.40 12 IAmb IAmb 04 48 14.3
comp=Z,19nm,0.7s
PAGS **Pennsylvania G** 28.40 20 IAmb IAmb 04 48 15.7
comp=Z,35nm,1.0s
SSPA **Standing Stone** 28.41 18 P P 04 48 13.2 -0.2
SSPA IAmb IAmb 04 48 16.8
comp=Z,11nm,0.5s
SSPA **Standing Stone** 28.41 18 P P 04 48 14.0 +0.6
baz=203
M53A **WI Miller and** 28.44 13 IAmb IAmb 04 48 15.0
comp=Z,27nm,0.8s
M53A **WI Miller and** 28.44 13 P P 04 48 14.1 +0.3
baz=197,SNR=6.9
BGNE **Belgrade** 28.66 345 P P 04 48 16.5 +0.7
baz=161,SNR=5.2
S22A **4UR Ranch, Cre** 28.70 329 IAmb IAmb 04 48 19.6
comp=Z,17nm,0.7s
S22A **4UR Ranch, Cre** 28.70 329 P P 04 48 18.3 +1.9
baz=142,SNR=12
M54A **Oil Creek Stat** 28.74 14 IAmb IAmb 04 48 18.2
comp=Z,32nm,0.9s
M54A **Oil Creek Stat** 28.74 14 P P 04 48 16.9 +0.5
baz=199,SNR=6.2
AAM **Ann Arbor** 28.75 8 P P 04 48 17.2 +0.8
baz=190
Q24A **Divide** 28.89 333 P P 04 48 19.2 +1.1
baz=146
M55A **Ridgway** 28.93 16 IAmb IAmb 04 48 19.5
comp=Z,21nm,0.7s
JFWS **Jewell Farm** 29.03 358 P P 04 48 19.6 +0.7
baz=177
MVCO **Mesa Verde** 29.15 327 P P 04 48 22.2 +1.9
baz=138,SNR=7.5
LUPA **Lehigh Univers** 29.19 21 P P 04 48 20.8 +0.4
ERPA **Erie** 29.24 14 P P 04 48 20.9 +0.1
baz=198,SNR=6.4
M57A **Sunshine Farm,** 29.28 18 IAmb IAmb 04 48 23.0
comp=Z,22nm,0.8s
N59A **State Game Lan** 29.34 21 IAmb IAmb 04 48 23.7
comp=Z,30nm,0.8s
N59A **State Game Lan** 29.34 21 P P 04 48 22.8 +1.1
baz=207,SNR=8.0
WUAZ **Wupatki** 29.62 321 P P 04 48 26.4 +1.9
baz=131
ISCO **Idaho Springs** 29.79 333 P P 04 48 27.6 +1.6
baz=146,SNR=8.5
WVNY **West Valley, N** 29.85 15 IAmb IAmb 04 48 27.7
comp=Z,38nm,0.8s
L56A **Greenwood** 29.89 17 IAmb IAmb 04 48 28.5
comp=Z,24nm,1.1s
ODNJ **Ogdensburg** 29.89 22 IAmb IAmb 04 48 28.1
comp=Z,14nm,0.6s
SMCO **Snowmass** 29.90 331 P P 04 48 28.6 +1.5
SMCO IAmb IAmb 04 48 30.2
comp=Z,17nm,0.8s
I40A **Norwalk** 30.02 357 IAmb IAmb 04 48 29.0
comp=Z,18nm,0.7s
PV13 **Radium Mtn., P** 30.03 327 IAmb IAmb 04 48 31.3
comp=Z,26nm,1.3s

PAL **Palisades** 30.09 23 P P 04 48 28.3 +0.1
baz=210
PV07 **Paradox Valley** 30.15 328 IAmb IAmb 04 48 32.4
comp=Z,22nm,1.2s
PV11 **David Mesa, Pa** 30.16 328 IAmb IAmb 04 48 32.3
comp=Z,18nm,0.8s
BOAV **Boa Vista** 30.23 110 eP P 04 48 28.2 -1.6
MMNY **Mt. Morris Dam** 30.34 16 IAmb IAmb 04 48 31.7
comp=Z,16nm,0.7s
BINY **Binghamton** 30.42 19 P P 04 48 31.8 +0.6
baz=205,SNR=6.5
GLA **Glamis** 30.42 313 P P 04 48 32.5 +1.1
baz=123
ECSD **EROS Data Cent** 30.56 349 P P 04 48 32.2 -0.2
baz=165,SNR=6.4
PDMCI **Parker Dam,Lak** 30.65 316 P P 04 48 35.1 +1.8
baz=126
L59A **Walton** 30.72 20 P P 04 48 34.3 +0.4
L59A IAmb IAmb 04 48 35.2
comp=Z,24nm,0.6s
K57A **Scipio Center** 30.74 18 IAmb IAmb 04 48 35.1
comp=Z,31nm,0.9s
N23A **Red Feather La** 30.83 334 P P 04 48 36.9 +1.8
baz=146
GLMI **Grayling** 31.13 6 P P 04 48 36.6 -0.7
baz=188
BC3 **Big Chuckawall** 31.19 314 P P 04 48 40.0 +1.8
baz=123
O20A **White River Ci** 31.25 331 IAmb IAmb 04 48 42.7
comp=Z,41nm,0.8s
O20A **White River Ci** 31.25 331 P P 04 48 41.1 +2.3
baz=142,SNR=39
G40A **Rib Lake** 31.38 358 IAmb IAmb 04 48 41.0
comp=Z,31nm,1.1s
SPMN **Marine on St.** 31.49 355 P P 04 48 40.4 -0.1
baz=173,SNR=43
J57A **Williamstown** 31.51 18 IAmb IAmb 04 48 41.7
comp=Z,30nm,0.8s
J58A **Remsen** 31.69 19 IAmb IAmb 04 48 43.3
comp=Z,22nm,0.6s
SUSD **Miller** 31.72 346 P P 04 48 42.7 +0.1
baz=161
SADO **Sadowa** 31.95 13 P P 04 48 44.5 -0.1
comp=Z,39nm,0.7s,baz=248,slow=6.3,SNR=41
SADO **Sadowa** 31.95 13 IAmb IAmb 04 48 45.4
comp=Z,37nm,0.7s
DELO **Delora Mine** 32.08 15 IAmb IAmb 04 48 46.8
comp=Z,21nm,0.9s
F36A **Milaca** 32.19 354 IAmb IAmb 04 48 47.5
comp=Z,21nm,0.8s
ETMB **Extrema** 32.50 135 eP P 04 48 49.4 -0.3
F33A **5 Mile Ranch,** 32.54 350 IAmb IAmb 04 48 50.8
comp=Z,27nm,0.6s
MACA **Manacapuru-AM** 32.65 119 eP P 04 48 50.0 -1.1
E38A **The Farm, Brul** 32.77 357 IAmb IAmb 04 48 52.6
comp=Z,37nm,0.9s
RSSD **Black Hills** 32.88 340 P P 04 48 54.6 +1.6
RSSD **Black Hills** 32.88 340 P P 04 48 54.5 +1.6
baz=152
LONY **Lake Ozonia** 33.04 19 IAmb IAmb 04 48 54.7
comp=Z,17nm,0.7s
LONY **Lake Ozonia** 33.04 19 P P 04 48 54.2 +0.1
baz=206,SNR=5.6
TPNV **Topopah Spring** 33.59 318 P P 04 49 00.7 +1.6
baz=126
DUG **Dugway, Tooele** 33.64 326 P P 04 49 01.6 +2.2
baz=135
FURC **Furnace Creek,** 33.71 317 P P 04 49 02.4 +2.5
baz=125
LRMC **Laurel Mtn Rad** 33.72 315 P P 04 49 02.2 +2.0
baz=123
MPMC **Manual Prospec** 33.90 316 P P 04 49 03.2 +1.4
baz=124
BW06 **Boulder Array** 33.93 332 P P 04 49 03.0 +0.9
baz=142,SNR=8.0
PDAR **Pinedale Array** 33.93 332 P P 04 49 03.4 +1.3
comp=Z,3.4nm,0.6s,baz=128,slow=11,SNR=37
PDAR PcP PcP 04 51 35.1 -0.4
comp=Z,0.3nm,0.4s,baz=125,slow=5.3,SNR=4.1
PDAR **Pinedale Array** 33.93 332 P P 04 49 03.0 +1.0
R11A **Troy Canyon, C** 34.02 321 P P 04 49 03.7 +0.9
baz=129
EYMN **Ely** 34.11 357 IAmb IAmb 04 49 03.6
comp=Z,18nm,0.7s
EYMN **Ely** 34.11 357 P P 04 49 02.8 -0.4
baz=175
MNTQ **Montreal, Queb** 34.13 19 IAmb IAmb 04 49 04.6
comp=Z,21nm,0.8s
BGU **Big Grassy Mou** 34.27 327 P P 04 49 06.3 +1.4
AHID **Auburn Hatcher** 34.65 331 IAmb IAmb 04 49 11.3
comp=Z,27nm,0.6s
B35A **Bob, Littlefor** 34.69 354 IAmb IAmb 04 49 08.8
comp=Z,16nm,0.7s
AGMN **Agassiz Nation** 34.88 352 IAmb IAmb 04 49 10.8
comp=Z,38nm,0.9s
AGMN **Agassiz Nation** 34.88 352 P P 04 49 09.8 +0.1
baz=168,SNR=17
LOHW **Long Hollow** 35.07 332 P P 04 49 13.2 +1.4
LOHW IAmb IAmb 04 49 15.0
comp=Z,19nm,0.7s
MDND **Maddock** 35.10 347 P P 04 49 12.2 +0.5
baz=162,SNR=23
TPAW **Teton Pass** 35.13 332 IAmb IAmb 04 49 15.0
comp=Z,29nm,0.7s
FLWY **Flagg Ranch** 35.48 333 IAmb IAmb 04 49 18.1
comp=Z,61nm,1.4s
NVAR **Mina Array Bea** 35.77 319 P P 04 49 19.6 +1.8
comp=Z,2.9nm,0.7s,baz=128,slow=7.4,SNR=26
NVAR pP pP 04 50 01.1 +0.5
comp=Z,3.2nm,0.9s,baz=139,slow=8.4,SNR=5.5
NVAR PcP PcP 04 51 42.7 +1.6
comp=Z,0.5nm,0.6s,baz=116,slow=4.2,SNR=2.7
NVAR ScP ScP 04 55 08.1 +0.3
comp=Z,0.6nm,0.7s,baz=141,slow=5.8,SNR=4.8
NVAR **Mina Array Bea** 35.77 319 P P 04 49 18.7 +0.9
LHV **Little Huntoon** 35.80 318 P P 04 49 19.8 +2.0
LAO **LASA Array** 35.87 339 P P 04 49 19.5 +1.1
baz=150
LPAZ **La Paz** 36.25 145 P P 04 49 23.6 +1.1
comp=Z,3.4nm,0.5s,baz=315,slow=6.0,SNR=8.1
LPAZ **La Paz** 36.25 145 P P 04 49 22.4 -0.2
BMN **Battle Mountai** 36.31 322 P P 04 49 23.5 +1.2
ULM **Lac du Bonnet** 36.79 352 P P 04 49 25.5 -0.5
comp=Z,31nm,0.8s,baz=169,slow=8.8,SNR=28
ULM **Lac du Bonnet** 36.79 352 IAmb IAmb 04 49 26.4
comp=Z,33nm,0.9s
DGMT **Dagmar** 36.82 343 P P 04 49 27.7 +1.4
baz=155,SNR=23
HLID **Hailey** 36.87 329 P P 04 49 28.3 +1.3
baz=136
BOZ **Bozeman (W)** 37.08 333 P P 04 49 29.8 +1.1
BOZ IAmb IAmb 04 49 31.6
comp=Z,14nm,0.7s
BOZ **Bozeman (W)** 37.08 333 P P 04 49 30.5 +1.8
baz=142,SNR=18
DLMT **Dillon** 37.33 332 IAmb IAmb 04 49 34.0
comp=Z,22nm,0.8s
ITTB **Itaituba** 37.52 116 eP P 04 49 30.0 -2.6
EGMT **Eagleton** 38.27 337 IAmb IAmb 04 49 41.1
comp=Z,31nm,0.8s
EGMT **Eagleton** 38.27 337 P P 04 49 40.0 +1.5
baz=146,SNR=9.1
PB11 **IPOC Station P** 38.35 150 P P 04 49 41.0 +1.5
VILB **Vilhena** 38.91 132 eP P 04 49 43.8 -0.5
MSO **Missoula** 39.05 333 IAmb IAmb 04 49 47.4
comp=Z,24nm,1.1s
MSO **Missoula** 39.05 333 P P 04 49 46.3 +1.2
baz=139,SNR=15
NPGB **Novo Progresso** 39.19 120 eP P 04 49 44.0 -2.6
SIV **San Ignacio** 40.40 136 P P 04 49 56.3 -0.2
comp=Z,18nm,0.7s,baz=305,slow=7.8,SNR=84
SIV PcP PcP 04 51 56.0 +0.5
comp=Z,6.3nm,0.8s,baz=301,slow=3.7,SNR=6.7
PDRB **Porto dos Gac** 40.67 127 eP P 04 49 56.6 -2.0
WALA **Waterton Lakes** 40.75 335 P P 04 50 00.1 +1.0
CLDB **Colider** 40.96 125 eP P 04 49 59.1 -2.0
LVC **Limon Verde** 41.14 151 P P 04 50 03.9 +1.1
comp=Z,5.0nm,0.7s,baz=302,slow=12,SNR=3.7
LVC PcP PcP 04 51 59.6 +1.4
comp=Z,3.9nm,0.7s,baz=54,slow=5.5,SNR=1.9
LVC **Limon Verde** 41.14 151 eP P 04 50 05.6 +2.8
PTLB **Pontes e Lacer** 41.35 134 eP P 04 50 03.3 -0.9
NEW **Newport** 41.56 332 P P 04 50 06.1 +0.5
baz=136
E07A **Sunnyside** 41.72 328 P P 04 50 07.3 +0.4
C09A **Chrisman Ranch** 41.78 330 P P 04 50 08.2 +0.9
FFC **Flin Flon** 42.10 349 P P 04 50 10.1 +0.3

FFC IAmb IAmb 04 50 11.4
comp=Z,19nm,0.6s
DRLN **Deer Lake** 43.73 30 P P 04 50 23.2 +0.2
DRLN IAmb IAmb 04 50 24.8
comp=Z,30nm,0.8s
EDM **Edmonton** 43.85 339 IAmb IAmb 04 50 25.4
comp=Z,60nm,0.9s
B05A **Bryant** 43.99 328 P P 04 50 25.1 +0.1
baz=130
SALV **Santo Antonio** 44.13 131 eP P 04 50 25.2 -1.3
SCHQ **Schefferville** 44.41 18 P P 04 50 27.8 -0.5
comp=Z,35nm,0.8s,baz=220,slow=6.4,SNR=76
SCHQ PcP PcP 04 52 07.6 -0.6
comp=Z,2.7nm,0.3s,baz=229,slow=2.8,SNR=6.2
SCHQ **Schefferville** 44.41 18 P P 04 50 27.8 -0.5
SCHQ IAmb IAmb 04 50 28.7
comp=Z,30nm,0.8s
SNDB **Serra Nova Dou** 45.21 123 eP P 04 50 32.9 -2.2
PP1B **Ponte de Pedra** 45.82 132 eP P 04 50 38.9 -0.9
SMTB **Santa Maria do** 46.76 116 eP P 04 50 45.7 -1.5
ARAG **Araguaiana, MT** 46.93 127 eP P 04 50 46.9 -1.6
AQDB **Aquidauana** 47.16 136 P P 04 50 48.9 -1.3
AQDB **Aquidauana** 47.16 136 eP P 04 50 49.5 -0.7
PEXB **Peixe** 47.76 121 eP P 04 50 52.5 -2.5
BDFB **Brasilia** 49.88 124 P P 04 51 09.8 -1.4
comp=Z,1.8nm,0.5s,baz=286,slow=9.8,SNR=5.3
BDFB **Brasilia** 49.88 124 IAmb IAmb 04 51 13.3
comp=Z,3.0nm,0.7s
CPUP **Villa Florida** 50.33 142 P P 04 51 12.9 -1.2
comp=Z,4.8nm,0.7s,baz=331,slow=7.3,SNR=11
CPUP PcP PcP 04 52 30.9 +1.0
comp=Z,3.6nm,0.5s,baz=316,slow=3.4,SNR=8.7
CPUP **Villa Florida** 50.33 142 eP P 04 51 13.7 -0.5
ITRB **Iturama** 50.45 130 eP P 04 51 14.8 -0.5
PCMB **Pacaembu** 51.00 133 eP P 04 51 18.3 -1.0
IPMB **Ipameri, GO** 51.05 127 eP P 04 51 19.2 -0.6
YKA **Yellowknife Ar** 51.95 345 P P 04 51 26.0 +0.3
comp=Z,23nm,0.7s,baz=139,slow=8.0,SNR=428
YKA pP pP 04 52 11.7 +0.3
comp=Z,5.5nm,0.9s,baz=145,slow=7.7,SNR=3.5
PTGB **Pitanga** 52.50 137 eP P 04 51 29.1 -1.4
BB19B **Bebedouro** 52.64 130 eP P 04 51 30.4 -1.1
ITQB **Itaqui** 53.26 145 P P 04 51 35.9 +0.1
ITQB IAmb IAmb 04 51 36.9
comp=Z,40nm,0.8s
ITQB **Itaqui** 53.26 145 eP P 04 51 36.2 +0.5
FRTB **Fartura** 53.31 133 eP P 04 51 35.3 -1.1
DLBC **Dease Lake** 54.10 335 IAmb IAmb 04 51 44.3
comp=Z,14nm,0.8s
NBPN **Ponto Novo - B** 54.14 114 eP P 04 51 41.0 -1.5
ITAB **Concordia** 54.18 139 IAmb IAmb 04 51 43.0
comp=Z,25nm,0.7s
ITAB **Concordia** 54.18 139 eP P 04 51 42.1 -0.4
RCLB **Rio Claro- Sao** 54.20 131 eP P 04 51 41.9 -0.9
WTLY **Watson Lake, Y** 54.66 337 P P 04 51 46.4 +0.8
baz=130
LC01 **Cunco** 54.78 164 P P 04 51 47.3 +0.7
DIAM **Diamantina, MG** 54.81 124 eP P 04 51 45.9 -1.5
VAO **Valinhos** 54.97 131 eP P 04 51 47.5 -0.8
WRGLY **Wrigley** 55.00 342 P P 04 51 48.4 +0.6
baz=138
BSCB **Bom Sucesso** 55.43 128 eP P 04 51 50.7 -1.0
PET01 **Itanhaem-SP** 55.53 133 eP P 04 51 51.7 -0.6
CPSB **Cacapava Do Su** 55.64 143 eP P 04 51 52.8 -0.1
GDU01 **Guandu, BA** 55.96 117 eP P 04 51 53.7 -1.7
PARB **Paraibuna** 56.16 131 eP P 04 51 56.2 -0.6
P33M **Teslin, Yukon** 56.31 335 P P 04 51 58.2 +0.8
baz=126
PLTB **Pedras Altas** 56.54 144 IAmb IAmb 04 52 00.2
comp=Z,20nm,0.9s
PLTB **Pedras Altas** 56.54 144 eP P 04 51 59.5 +0.3
NBIT **Itapeh - BA** 56.64 118 eP P 04 51 59.1 -1.1
CMC01 **Camacan, BA** 56.77 119 eP P 04 51 59.9 -1.3
PLCA **Paso Flores** 56.86 163 P P 04 52 02.5 +1.1
comp=Z,3.9nm,0.9s,baz=328,slow=8.1,SNR=8.3
PLCA **Paso Flores** 56.86 163 eP P 04 52 02.5 +1.1
TER01 **Tubaro-SC** 57.01 138 eP P 04 52 02.4 -0.2
SJMB **Sao Joao De Ma** 57.03 123 eP P 04 52 02.3 -0.6
GUA01 **Guaratinga, BA** 57.11 120 eP P 04 52 02.4 -1.1
MMPY **Sheldon Lake,** 57.18 338 P P 04 52 04.5 +1.1
baz=129,SNR=7.7
WHY **Whitehorse** 57.41 335 P P 04 52 05.7 +0.6
baz=124
FARO **Faro, Yukon** 57.71 337 P P 04 52 07.7 +0.6
baz=126
RIB01 **Linhares ES** 57.98 123 eP P 04 52 08.9 -0.7
M31M **Drury Creek, Y** 58.09 337 P P 04 52 10.6 +0.9
baz=125
CAM01 **Campos-RJ** 58.30 127 eP P 04 52 11.4 -0.3
ALF01 **Guarapari-ES** 58.39 125 eP P 04 52 11.8 -0.5
HYT **Haines Junctio** 58.58 334 P P 04 52 14.0 +0.8
baz=121
SFJD **Kangerlussuaq** 58.81 17 P P 04 52 13.7 -0.8
comp=Z,18nm,0.9s,baz=230,slow=4.4,SNR=7.5
SFJD **Kangerlussuaq** 58.81 17 P P 04 52 14.2 -0.4
SFJD IAmb IAmb 04 52 14.8
comp=Z,15nm,0.8s
YUK6 **Outpost Mounta** 59.00 334 P P 04 52 17.0 +0.7
baz=120
M30M **Minto, Yukon** 59.23 336 P P 04 52 17.9 +0.3
baz=123
YUK4 **Talbot Arm** 59.32 335 P P 04 52 19.7 +1.2
baz=121
C36M **Paulatuk** 59.78 346 P P 04 52 20.6 -0.5
C36M **Paulatuk** 59.78 346 P P 04 52 20.8 -0.3
baz=140
YUK3 **Moose Creek** 60.29 335 P P 04 52 25.4 +0.4
baz=119
BVCY **Beaver Creek** 60.77 335 P P 04 52 28.6 +0.6
baz=119
DAWY **Dawson** 61.01 337 P P 04 52 29.4 -0.3
baz=121
M27K **Edge Creek, AK** 61.16 335 P P 04 52 31.3 +0.5
baz=118
EPYK **Eagle Plains** 61.33 340 P P 04 52 32.1 +0.4
baz=125
L27K **Beaver Creek,** 61.47 336 P P 04 52 33.1 +0.4
baz=118
INK **Inuvik** 61.51 343 P P 04 52 33.0 +0.2
comp=Z,11nm,0.7s,baz=119,slow=7.2,SNR=42
INK **Inuvik** 61.51 343 P P 04 52 33.0 +0.2
INK IAmb IAmb 04 52 34.3
comp=Z,13nm,0.8s
INK **Inuvik** 61.51 343 P P 04 52 33.2 +0.4
baz=129,SNR=14
BMRM **Bremner River** 61.72 333 P P 04 52 35.3 +0.9
baz=114
N25K **Chitina, Valde** 61.98 333 P P 04 52 37.1 +0.9
baz=115
EGAK **Eagle** 62.04 337 P P 04 52 36.6 +0.2
EGAK **Eagle** 62.04 337 P P 04 52 36.3 -0.2
baz=120
A36M **Sachs Harbour** 62.05 348 IAmb IAmb 04 52 37.0
comp=Z,16nm,1.1s
A36M **Sachs Harbour** 62.05 348 P P 04 52 36.0 -0.4
baz=139,SNR=10
KLU **Klutina** 62.51 333 P P 04 52 40.3 +0.6
baz=113
HARP **HAARP** 62.55 334 P P 04 52 40.7 +0.8
baz=114
SCRK **Sand Creek** 62.75 336 P P 04 52 41.8 +0.5
baz=116
M24K **Tolsona, Glenn** 62.87 334 P P 04 52 42.8 +0.8
baz=113
PAX **Paxson** 62.92 335 P P 04 52 42.6 +0.2
baz=114
RIDG **Independent Ri** 62.99 336 P P 04 52 43.3 +0.5
baz=115
SCM **Sheep Creek Mo** 63.26 333 P P 04 52 44.9 +0.2
baz=112
TULEG **Thule** 63.62 5 P P 04 52 47.1 +0.5
TULEG IAmb IAmb 04 52 47.9
comp=Z,14nm,1.2s
WAT6 **Susitna Watana** 63.72 334 P P 04 52 47.7 -0.1
baz=112
HDA **Harding Lake** 64.11 336 P P 04 52 50.0 -0.1
baz=114,SNR=5.6
IL31 64.23 336 P P 04 52 51.1 +0.4
IL31 IAmb IAmb 04 52 51.8
comp=Z,20nm,1.4s
ILAR **Eielson Array** 64.23 336 P P 04 52 50.6 -0.2
comp=Z,4.7nm,0.9s,baz=168,slow=4.7,SNR=57
ILAR pP pP 04 53 37.5 -1.1
comp=Z,5.3nm,1.1s,baz=122,slow=4.6,SNR=7.5
ILAR **Eielson Array** 64.23 336 P P 04 52 50.7 -0.2
ILAR pP pP 04 53 37.0 -1.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RND** | **Reindeer** | **64.50** | **334** | P | | **P** | **04 52 52.9** | **+0.2** |
| RND | | | | IAmb | | IAmb | 04 52 54.6 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| RND | | | | pP | | **pP** | **04 53 40.7** | **+0.3** |
| **POKR** | **Poker Plat Res** | **64.58** | **336** | P | | **P** | **04 52 53.1** | **0.0** |
| | baz=113 | | | | | | | |
| **COLA** | **College** | **64.65** | **336** | P | | **P** | **04 52 53.4** | **-0.1** |
| | baz=113 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **64.65** | **336** | P | | **P** | **04 52 53.4** | **-0.2** |
| | baz=113 | | | | | | | |
| **MCK** | **McKinley** | **64.65** | **335** | P | | **P** | **04 52 53.7** | **0.0** |
| | baz=111 | | | | | | | |
| **NEA2** | **Nenana** | **65.02** | **336** | P | | **P** | **04 52 56.2** | **+0.2** |
| | baz=112 | | | | | | | |
| **BWN** | **Browne** | **65.03** | **335** | IAmb | | IAmb | 04 52 56.9 | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **H24K** | **Noodor Dome** | **65.04** | **337** | P | | **P** | **04 52 56.4** | **+0.3** |
| | baz=113 | | | | | | | |
| **TRF** | **Thorofare Moun** | **65.12** | **334** | P | | **P** | **04 52 56.9** | **0.0** |
| | baz=110 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **65.34** | **336** | P | | **P** | **04 52 58.3** | **+0.3** |
| | baz=112,SNR=5.6 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **65.63** | **335** | P | | **P** | **04 52 59.9** | **-0.1** |
| | baz=110 | | | | | | | |
| **SUMG** | **Summit** | **65.63** | **15** | *i* P | | **P** | **04 52 59.0** | **-1.2** |
| **SUMG** | **Summit** | **65.63** | **15** | P | | **P** | **04 52 59.9** | **-0.3** |
| SUMG | | | | IAmb | | IAmb | 04 53 01.0 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| SUMG | | | | pP | | **pP** | **04 53 49.8** | **+1.7** |
| **H23K** | **Yukon River** | **65.67** | **337** | P | | **P** | **04 53 00.4** | **+0.3** |
| | baz=112 | | | | | | | |
| **PPLA** | **Purkeypile** | **65.76** | **333** | P | | **P** | **04 53 00.5** | **-0.4** |
| | baz=108 | | | | | | | |
| **MLY** | **Manley** | **65.85** | **336** | P | | **P** | **04 53 01.5** | **+0.1** |
| MLY | | | | IAmb | | IAmb | 04 53 02.3 | |
| | comp=Z,9.8nm,0.6s | | | | | | | |
| MLY | | | | pP | | **pP** | **04 53 48.9** | **-0.3** |
| **MLY** | **Manley** | **65.85** | **336** | P | | **P** | **04 53 01.4** | **+0.1** |
| | baz=110,SNR=9.9 | | | | | | | |
| **CAST** | **Castle Rocks** | **65.87** | **334** | P | | **P** | **04 53 01.0** | **-0.5** |
| | baz=108 | | | | | | | |
| **N19K** | **Bonanza Creek** | **66.21** | **331** | P | | **P** | **04 53 03.4** | **-0.4** |
| | baz=105 | | | | | | | |
| **P18K** | **Big Mountain,** | **66.23** | **329** | P | | **P** | **04 53 03.3** | **-0.5** |
| | baz=104 | | | | | | | |
| **EUNU** | **Eureka** | **66.28** | **0** | P | | **P** | **04 53 04.3** | **+0.4** |
| EUNU | | | | pP | | **pP** | **04 53 52.4** | **+0.6** |
| **L20K** | **Farewell, AK** | **66.38** | **333** | P | | **P** | **04 53 04.2** | **-0.5** |
| | baz=106 | | | | | | | |
| **I21K** | **Tanana** | **66.39** | **336** | P | | **P** | **04 53 04.5** | **-0.2** |
| | baz=109 | | | | | | | |
| **COLD** | **Coldfoot** | **66.43** | **338** | P | | **P** | **04 53 06.2** | **+1.2** |
| | baz=112,SNR=6.8 | | | | | | | |
| **M19K** | **Big River Lodg** | **66.45** | **332** | P | | **P** | **04 53 05.2** | **0.0** |
| | baz=105 | | | | | | | |
| **K20K** | **Telida** | **66.71** | **334** | P | | **P** | **04 53 06.4** | **-0.3** |
| | baz=106 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **66.75** | **340** | IAmb | | IAmb | 04 53 08.3 | |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **66.75** | **340** | P | | **P** | **04 53 07.5** | **+0.5** |
| | baz=113,SNR=9.0 | | | | | | | |
| **H21K** | **Melozitna Rive** | **66.87** | **336** | P | | **P** | **04 53 07.4** | **-0.4** |
| | baz=108 | | | | | | | |
| **J20K** | **Nowinta River** | **66.97** | **334** | P | | **P** | **04 53 08.3** | **-0.1** |
| | baz=106 | | | | | | | |
| **CHGN** | **Chignik** | **67.28** | **326** | P | | **P** | **04 53 10.3** | **-0.2** |
| | baz=99 | | | | | | | |
| **TTA** | **Tatalina** | **67.45** | **333** | P | | **P** | **04 53 11.2** | **-0.3** |
| | baz=104 | | | | | | | |
| **A21K** | **Barrow** | **69.94** | **341** | P | | **P** | **04 53 26.7** | **+0.1** |
| | baz=107 | | | | | | | |
| **UNV** | **Unalaska Valle** | **71.68** | **322** | P | | **P** | **04 53 37.8** | **+0.4** |
| | baz=92 | | | | | | | |
| **ANM** | **Nome** | **71.83** | **334** | P | | **P** | **04 53 38.6** | **+0.4** |
| | baz=96 | | | | | | | |
| **TNA** | **Tin City** | **73.00** | **335** | P | | **P** | **04 53 45.6** | **+0.6** |
| | baz=94 | | | | | | | |
| **NIKH** | **Nikolski High** | **73.08** | **322** | P | | **P** | **04 53 46.1** | **+0.4** |
| | baz=90 | | | | | | | |
| **GAMB** | **Gambell** | **74.56** | **333** | P | | **P** | **04 53 54.6** | **+0.5** |
| | baz=90 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.34** | **36** | P | | **P** | **04 54 02.1** | **-2.3** |
| | comp=Z,5.0nm,0.8s,baz=287,slow=6.0,SNR=9.3 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.45** | **52** | P | | **P** | **04 54 08.8** | **-2.2** |
| | comp=Z,2.1nm,0.7s,baz=289,slow=4.4,SNR=12 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **79.67** | **12** | P | | **P** | **04 54 21.3** | **-1.0** |
| | comp=Z,3.3nm,0.6s,baz=186,slow=9.7,SNR=9.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **82.65** | **85** | P | | **P** | **04 54 37.6** | **-1.6** |
| | comp=Z,1.7nm,0.5s,baz=302,slow=4.1,SNR=4.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **82.86** | **29** | P | | **P** | **04 54 38.5** | **-0.9** |
| | comp=Z,1.2nm,0.7s,baz=288,slow=5.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **82.86** | **29** | P | | **P** | **04 54 37.8** | **-1.6** |
| | comp=Z,1.9nm,0.8s,baz=288,slow=5.1,SNR=8.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.36** | **19** | P | | **P** | **04 54 51.2** | **-0.6** |
| | comp=Z,2.2nm,0.8s,baz=283,slow=5.0,SNR=13 | | | | | | | |
| **DAVA** | **Damuels** | **85.81** | **42** | *e*P | | **P** | **04 54 55.4** | **+0.7** |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| **RETA** | **Reutte** | **86.33** | **42** | *e*P | | **P** | **04 54 57.9** | **+0.7** |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **86.44** | **43** | *i* P | | **P** | **04 54 58.6** | **+0.8** |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **MOTA** | **Moosalm** | **86.60** | **42** | *e*P | | **P** | **04 54 59.0** | **+0.4** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **CLL** | **Collm** | **86.61** | **38** | *e*P | | **P** | **04 54 58.0** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **87.47** | **77** | P | | **P** | **04 55 00.3** | **-2.8** |
| | comp=Z,0.5nm,0.6s,baz=308,slow=4.3,SNR=6.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.47** | **77** | IAmb | | IAmb | 04 55 01.3 | |
| | comp=Z,241nm,0.6s | | | | | | | |
| **GERES** | **GERESS Array B** | **87.81** | **40** | P | | **P** | **04 55 04.2** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=241,slow=4.0,SNR=6.7 | | | | | | | |
| **KEST** | **Kesra** | **88.58** | **54** | P | | **P** | **04 55 06.8** | **-1.3** |
| | comp=Z,13nm,1.4s,baz=236,slow=6.0,SNR=5.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **89.37** | **26** | P | | **P** | **04 55 10.0** | **-1.1** |
| | comp=Z,1.6nm,0.8s,baz=304,slow=4.4,SNR=6.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **112.30** | **4** | PP | | **PP** | **05 01 36.0** | **-0.6** |
| | comp=Z,1.7nm,0.6s,baz=348,slow=7.1,SNR=10 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **114.91** | **9** | PKP | | **PKiKP** | **05 00 53.3** | **-1.1** |
| | comp=Z,0.4nm,0.4s,baz=359,slow=1.9,SNR=3.1 | | | | | | | |
| **SONM** | **Songino Array** | **117.14** | **348** | PP | | PP | 05 02 10.4 | -0.4 |
| | comp=Z,0.9nm,1.0s,baz=14,slow=6.7,SNR=4.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **119.16** | **7** | PKP | | **PKPdf** | **05 01 01.1** | **-1.7** |
| | comp=Z,0.2nm,0.5s,baz=263,slow=3.8,SNR=2.1 | | | | | | | |
| MKAR | | | | PP | | **PP** | **05 02 17.9** | **-6.7** |
| | comp=Z,0.7nm,0.9s,baz=1.9,slow=3.6,SNR=3.9 | | | | | | | |
| **WMQ** | **Urumqi** | **122.57** | **3** | PKP | | **PKiKP** | **05 01 10.9** | **+1.2** |
| WMQ | | | | PP | | **PP** | **05 02 54.1** | **+6.3** |
| WMQ | | | | AMB | | AMB | | |
| | comp=Z,390nm,5.5s | | | | | | | |
| **CTA** | **Charters Tower** | **127.09** | **255** | PKP | | **PKiKP** | **05 01 19.5** | **+0.3** |
| | comp=Z,2.7nm,0.5s,baz=131,slow=3.5,SNR=8.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **130.59** | **240** | PKP | | **PKiKP** | **05 01 26.4** | **+0.5** |
| | comp=Z,3.4nm,0.6s,baz=77,slow=2.2,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **138.29** | **255** | PKhKP | | PKPpre | 05 01 31.9 | |
| | comp=Z,0.3nm,0.4s,baz=91,slow=3.5,SNR=6.0 | | | | | | | |
| WRA | | | | PKP | | **PKPdf** | **05 01 40.4** | **+0.7** |
| | comp=Z,7.4nm,0.5s,baz=92,slow=2.9,SNR=4.8 | | | | | | | |
| WRA | | | | SKPbc | | **SKPbc** | **05 04 56.0** | **+1.2** |
| | comp=Z,1.2nm,0.8s,baz=89,slow=3.4,SNR=7.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **138.46** | **250** | PKhKP | | PKPpre | 05 01 31.1 | |
| | comp=Z,0.7nm,0.5s,baz=102,slow=3.4,SNR=12 | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | **05 01 39.1** | **-0.9** |
| | comp=Z,4.0nm,0.6s,baz=111,slow=3.5,SNR=26 | | | | | | | |
| ASAR | | | | SKPbc | | **SKPbc** | **05 04 56.5** | **+1.2** |
| | comp=Z,1.0nm,0.7s,baz=107,slow=3.7,SNR=5.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **138.46** | **250** | PKPdf | | **PKPdf** | **05 01 39.6** | **-0.3** |
| **PZH** | **PanZhiHua** | **138.62** | **346** | PKP | | **PKPdf** | **05 01 40.8** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **146.57** | **258** | PKPbc | | **PKPab** | **05 01 57.5** | **-0.3** |
| | comp=Z,9.5nm,0.5s,baz=43,slow=0.4,SNR=43 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **146.57** | **258** | PKPbc | | **PKPbc** | **05 01 55.7** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **147.03** | **346** | PKPbc | | **PKPbc** | **05 01 56.9** | **-0.6** |
| | comp=Z,1.6nm,0.4s,baz=334,slow=3.3,SNR=6.5 | | | | | | | |
| CMAR | | | | pPKPbc | | **pPKPdf** | **05 02 49.1** | **+0.8** |
| | comp=Z,1.4nm,0.5s,baz=340,slow=4.0,SNR=1.7 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.03** | **346** | PKPbc | | **PKPbc** | **05 01 56.5** | **-1.0** |
| **SOEI** | **Soe** | **147.32** | **273** | PKPbc | | **PKPbc** | **05 01 58.3** | **-0.3** |
| **MMRI** | **Maumere** | **149.07** | **276** | PKPbc | | **PKPbc** | **05 02 02.5** | **-0.5** |

*IDC **19** 05:00:03.9±1.0,2.°43N×128.°77E, h0km, mb3.9/10, mb1 4.0/11,mb1mx3.7/46, mbtmp4.0/11, ML4.1/1, Error ellipse: s-maj=79.8km s-min=14.1km az=69.0*
*NEIC **19** 05:00:10.5±1.2, 2.°2N±0.°1×128.°90E±0.°08, h54km±11km, mb4.4/11, Error ellipse: s-maj=15.5km s-min=11.3km az=196.0*
**ISC 19 05:00:10.0±0.7, 2.°26N±0.°09×128.°89E±0.°09, h50km, n35, σ1♀14/27, mb4.2/14, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.12** | **226** | | **Pn** | **05 00 43.3** | **+0.3** |
| **SIJI** | **Sorong** | **3.91** | **143** | Pn | **Pn** | **05 01 08.1** | **+0.5** |
| | 10nm,0.3s,baz=331,slow=16,SNR=13 | | | | | | |
| SIJI | | | | Sn | **Sn** | **05 01 51.4** | **-0.8** |
| | 6.1nm,0.3s,baz=238,slow=22,SNR=8.0 | | | | | | |
| **FAKI** | **Fak Fak** | **6.14** | **147** | Pn | **Pn** | **05 01 37.8** | **-0.4** |
| **TOLI2** | **Tolitoli** | **8.19** | **262** | Pn | **Pn** | **05 02 06.3** | **0.0** |
| **MYLDM** | **Lahad Datu** | **10.77** | **286** | Pn | **Pn** | **05 02 42.8** | **+1.2** |
| **GUMO** | **Guam** | **19.40** | **54** | P | **P** | **05 04 31.0** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **20.48** | **189** | P | Pn | 05 04 45.4 | -1.0 |
| | 1.3nm,0.7s,baz=356,slow=15,SNR=1.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.48** | **189** | P | **P** | **05 04 42.2** | **-1.6** |
| FITZ | | | | IAmb | IAmb | 05 04 48.0 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| **SMRI** | **Semarang** | **20.61** | **243** | P | **P** | **05 04 45.1** | **-0.2** |
| SMRI | | | | IAmb | IAmb | 05 04 57.9 | |
| | comp=Z,33nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.70** | **167** | P | **P** | **05 05 10.4** | **+2.7** |
| | comp=Z,1.8nm,0.4s,baz=344,slow=10,SNR=15 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.29** | **200** | P | **P** | **05 05 30.5** | **-1.4** |
| **AS31** | **Alice Springs** | **26.23** | **170** | P | **P** | **05 05 38.7** | **-1.8** |
| **ASAR** | **Alice Springs** | **26.23** | **170** | P | **P** | **05 05 41.6** | **+1.2** |
| | comp=Z,0.6nm,0.5s,baz=352,slow=7.8,SNR=7.3 | | | | | | |
| **XMIS** | **Christmas Isla** | **26.37** | **241** | P | **P** | **05 05 40.1** | **-1.7** |
| XMIS | | | | IAmb | IAmb | 05 05 44.6 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **36.03** | **161** | P | **P** | **05 07 08.6** | **+2.0** |
| | comp=Z,1.2nm,0.5s,baz=1.4,slow=12,SNR=2.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.39** | **64** | T | T | 05 50 55.9 | |
| | baz=251,slow=75,SNR=24 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.40** | **64** | T | T | 05 50 52.8 | |
| | baz=251,slow=75,SNR=32 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.40** | **64** | T | T | 05 50 51.6 | |
| | baz=251,slow=75,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.98** | **62** | T | T | 05 51 35.4 | |
| | baz=250,slow=75,SNR=110 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.99** | **62** | T | T | 05 51 37.8 | |
| | baz=250,slow=75,SNR=65 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.99** | **62** | T | T | 05 51 37.3 | |
| | baz=250,slow=75,SNR=85 | | | | | | |
| **SONM** | **Songino Array** | **49.39** | **340** | P | **P** | **05 08 54.7** | **-0.1** |
| | comp=Z,1.0nm,0.8s,baz=160,slow=8.4,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **49.39** | **340** | IAmb | IAmb | 05 08 55.6 | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **59.99** | **325** | P | **P** | **05 10 11.1** | **-0.4** |
| MK31 | | | | IAmb | IAmb | 05 10 12.2 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.99** | **325** | P | **P** | **05 10 11.5** | **0.0** |
| | comp=Z,2.5nm,0.6s,baz=120,slow=8.2,SNR=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.99** | **325** | P | **P** | **05 10 10.9** | **-0.6** |
| **MAKZ** | **Makanchi** | **60.18** | **325** | P | **P** | **05 10 12.6** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 05 10 13.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **NIL** | **Nilore** | **60.53** | **308** | P | **P** | **05 10 16.7** | **+1.3** |
| **ZALV** | **Zalesovo Beam** | **62.88** | **332** | P | **P** | **05 10 29.9** | **-0.9** |
| | comp=Z,1.0nm,0.7s,baz=130,slow=6.4,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.14** | **327** | P | **P** | **05 10 38.7** | **-0.5** |
| | comp=Z,3.5nm,0.7s,baz=127,slow=6.1,SNR=12 | | | | | | |
| **KURK** | **Kurchatov** | **64.14** | **327** | P | **P** | **05 10 38.7** | **-0.4** |
| **KURK** | **Kurchatov** | **64.14** | **327** | IAmb | IAmb | 05 10 39.6 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.72** | **327** | P | **P** | **05 11 14.5** | **-0.2** |
| | comp=Z,1.8nm,0.5s,baz=78,slow=14,SNR=8.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **76.15** | **322** | P | **P** | **05 11 52.4** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=110,slow=7.2,SNR=5.2 | | | | | | |
| **ARU** | **Arti** | **77.33** | **328** | P | **P** | **05 11 58.5** | **-0.8** |
| | comp=Z,0.7nm,0.3s,baz=104,slow=17,SNR=3.5 | | | | | | |

*NNC **19** 05:09:52.5±12.0, 38.°45N×70.°64E, h0km, mb3.7, mpv3.2, Error ellipse: s-maj=99.5km s-min=69.6km az=4.0*
**ISC 19 05:09:42.8±3.7, 38.°4N±0.°2×71.°1E±0.°1, h10km, n8, σ2♀50/11, 5C-1D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **4.19** | **27** | P | **Pn** | **05 10 47.9** | **+0.8** |
| | SNR=44 | | | | | | |
| **UCH** | **Uchtor** | **4.60** | **33** | P | **Pn** | **05 10 52.9** | **+0.1** |
| | SNR=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.69** | **25** | P | **Pn** | **05 10 55.0** | **+1.3** |
| | SNR=15 | | | | | | |
| **KK09** | **Karatay Array** | **4.72** | **354** | ⇑P | **Pb** | **05 11 05.1** | **-0.5** |
| | 0.8nm,0.3s,baz=182,slow=13 | | | | | | |
| KK09 | | | | ⇑S | **Sb** | **05 12 01.4** | **-1.1** |
| | 5.3nm,0.5s,baz=186,slow=21 | | | | | | |
| **AAK** | **Ala-Archa** | **4.93** | **30** | P | **Pn** | **05 10 57.3** | **+0.2** |
| | SNR=6.7 | | | | | | |
| **AAK** | **Ala-Archa** | **4.93** | **30** | ⇓P | **Pb** | **05 11 11.8** | **+2.6** |
| | 1.2nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sb** | **05 12 12.7** | **+4.0** |
| | 6.6nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.63** | **36** | P | **Pn** | **05 11 05.8** | **-1.0** |
| | SNR=6.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.63** | **36** | ⇑P | **Pb** | **05 11 19.7** | **-1.6** |
| | 2.9nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sb** | **05 12 24.4** | **-4.5** |
| | 0.3nm,0.3s | | | | | | |

*NOU **19** 05:16:15.6, 31.°57S×177.°50W, h57km, mb5.0/33, Kermadec Islands Region*
*NEIC **19** 05:16:19.4±1.6, 31.°33S±0.°08×178.°3W±0.°1, h58km±3km, mb4.8/30, Error ellipse: s-maj=18.7km s-min=10.7km az=102.0*
*IDC **19** 05:16:22.2±2.2, 31.°05S×178.°25W, h88km±19km, mb4.3/5, mb1 4.6/7, mb1mx4.2/26, mbtmp4.8/7, MS3.8/28, Ms1 3.8/28, ms1mx3.6/62, Error ellipse: s-maj=23.9km s-min=17.8km az=133.0*
*GCMT **19** 05:16:22.4±0.3, 31.°22S±0.°02×178.°07W±0.°02, h80km±3km, MW5.1/91, Moment Tensor Solution. s38,c41; s91,c123; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr 1.52±.22; Mθθ -3.78±.17; Mϕϕ 2.26±.20; Mrθ -1.52±.12; Mθϕ 1.46±.17; Mϕr 2.98±.11; Best double couple: Mo 4.91700×10^16^ NP1:ϕ±64.00000°, δ±44.00000°, λ±18.00000°. NP2: ϕ±321.00000°, δ±78.00000°, λ±133.00000°. Principal axes: T 4.8940, Plg41.0000°, Azm271.0000°; N 0.0460, Plg41.0000°, Azm130.0000°; P -4.9400, Plg21.0000°, Azm20.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function.*
**ISC 19 05:16:16.7±0.5, 31.°38S±0.°04×177.°88W±0.°08, h50km, n219, σ1♀96/202, mb4.9/24, MS3.8/25, 1C, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **2.11** | **359** | P | **Pn** | **05 16 51.1** | **+1.6** |
| GLKZ | | | | S | **Sn** | **05 17 14.0** | **-0.6** |
| **RAO** | **Raoul Island** | **2.12** | **359** | P | **Pn** | **05 16 51.5** | **+1.8** |
| | 2μm,0.3s,baz=123,slow=5.7,SNR=29 | | | | | | |
| RAO | | | | S | **Sn** | **05 17 14.7** | **-0.2** |
| | 3μm,0.3s,baz=69,slow=21,SNR=15 | | | | | | |
| RAO | | | | LR | LR | 05 17 15.2 | |
| | comp=Z,994nm,18.3s,baz=122,slow=29 | | | | | | |
| **RAO** | **Raoul Island** | **2.12** | **359** | P | **Pn** | **05 16 51.8** | **+2.1** |
| **RIZ** | **Raoul Island** | **2.13** | **359** | P | **Pn** | **05 16 51.5** | **+1.6** |
| RIZ | | | | S | **Sn** | **05 17 15.8** | **+0.8** |
| **MXZ** | **Matakaoa Point** | **6.92** | **206** | P | **Pn** | **05 17 56.0** | **+0.4** |
| MXZ | | | | S | **Sn** | **05 19 13.1** | **+0.2** |
| **WMGZ** | **Waiomatatini S** | **7.11** | **204** | P | **Pn** | **05 17 59.0** | **+0.8** |
| WMGZ | | | | S | **Sn** | **05 19 17.1** | **-0.5** |
| **HAZ** | **Te Kaha** | **7.30** | **208** | P | **Pn** | **05 18 01.2** | **+0.6** |
| HAZ | | | | S | **Sn** | **05 19 20.5** | **-1.6** |
| **PKGZ** | **Pakihiroa** | **7.30** | **206** | P | **Pn** | **05 18 00.8** | **+0.1** |
| PKGZ | | | | S | **Sn** | **05 19 17.4** | **-4.8** |
| **PUZ** | **Puketiti** | **7.39** | **204** | P | **Pn** | **05 18 01.7** | **-0.3** |
| PUZ | | | | S | **Sn** | **05 19 21.2** | **-3.3** |
| **RUGZ** | **Raukumara Rang** | **7.52** | **208** | P | **Pn** | **05 18 03.9** | **+0.1** |
| RUGZ | | | | S | **Sn** | **05 19 24.4** | **-3.3** |
| **TWGZ** | **Tauwhareparae** | **7.59** | **206** | P | **Pn** | **05 18 04.6** | **-0.1** |
| TWGZ | | | | S | **Sn** | **05 19 27.1** | **-2.2** |
| **CNGZ** | **Carnagh Statio** | **7.78** | **203** | P | **Pn** | **05 18 07.7** | **+0.4** |
| **TKGZ** | **Te Karaka** | **7.87** | **205** | P | **Pn** | **05 18 08.0** | **-0.5** |
| **MWZ** | **Matawai** | **7.90** | **207** | P | **Pn** | **05 18 08.2** | **-0.7** |
| **OPRZ** | **Ohinepanea** | **7.91** | **214** | P | **Pn** | **05 18 10.6** | **+1.5** |
| **MARZ** | **Manawahe** | **7.97** | **213** | P | **Pn** | **05 18 11.8** | **+1.9** |
| **URZ** | **Urewera** | **8.00** | **210** | P | **Pn** | **05 18 09.8** | **-0.5** |
| | 5.8nm,0.3s,baz=270,slow=5.2,SNR=32 | | | | | | |
| URZ | | | | S | **Sn** | **05 19 40.1** | **+0.7** |
| | 56nm,0.3s,baz=229,slow=19,SNR=17 | | | | | | |
| **URZ** | **Urewera** | **8.00** | **210** | P | **Pn** | **05 18 09.8** | **-0.5** |
| **URZ** | **Urewera** | **8.00** | **210** | P | **Pn** | **05 18 10.1** | **-0.2** |
| **EDRZ** | **Edgecumbe** | **8.04** | **212** | P | **Pn** | **05 18 12.7** | **+1.9** |
| **RAGZ** | **Rawiri** | **8.08** | **207** | P | **Pn** | **05 18 11.2** | **-0.3** |
| **RIGZ** | **Rimuhau** | **8.13** | **205** | P | **Pn** | **05 18 12.3** | **+0.1** |
| **KARZ** | **Kaharoa** | **8.20** | **215** | P | **Pn** | **05 18 15.5** | **+2.4** |
| **PRGZ** | **Paritu Road** | **8.29** | **204** | P | **Pn** | **05 18 13.2** | **-1.0** |
| **RRRZ** | **Republican Roa** | **8.33** | **212** | P | **Pn** | **05 18 18.6** | **+3.7** |
| **MUGZ** | **Murupara** | **8.33** | **210** | P | **Pn** | **05 18 14.6** | **-0.2** |
| **RTZ** | **Ruatahuna** | **8.36** | **209** | P | **Pn** | **05 18 14.6** | **-0.7** |
| **SNGZ** | **Shannon Statio** | **8.36** | **207** | P | **Pn** | **05 18 14.8** | **-0.4** |
| **KNZ** | **Kokohu** | **8.45** | **204** | P | **Pn** | **05 18 14.4** | **-2.0** |
| **MHGZ** | **Mahia Peninsul** | **8.48** | **203** | P | **Pn** | **05 18 15.9** | **-1.0** |
| **PRRZ** | **Plateau Road** | **8.52** | **212** | P | **Pn** | **05 18 18.1** | **+0.7** |
| **RAHZ** | **Arahi** | **8.57** | **207** | P | **Pn** | **05 18 17.3** | **-0.9** |
| **ALRZ** | **Allen Road** | **8.59** | **212** | P | **Pn** | **05 18 18.9** | **+0.5** |
| **MTHZ** | **Maungataniwha** | **8.62** | **209** | P | **Pn** | **05 18 18.3** | **-0.5** |
| **WHHZ** | **Waihua** | **8.65** | **206** | P | **Pn** | **05 18 22.1** | **+2.8** |
| **NMHZ** | **Naumai** | **8.84** | **208** | P | **Pn** | **05 18 20.9** | **-1.0** |
| **ARHZ** | **Aropaoanui** | **8.91** | **207** | P | **Pn** | **05 18 21.4** | **-1.3** |
| **WATZ** | **Wairara** | **8.99** | **214** | P | **Pn** | **05 18 25.0** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **9.03** | **209** | Pn | **Pn** | **05 18 23.0** | **-1.4** |
| **BKZ** | **Black Stump Fm** | **9.03** | **209** | P | **Pn** | **05 18 23.2** | **-1.2** |
| **RATZ** | **Rangitukua** | **9.10** | **213** | P | **Pn** | **05 18 28.4** | **+3.0** |
| **RITZ** | **Rihia Road** | **9.15** | **212** | P | **Pn** | **05 18 26.9** | **+0.9** |
| **CKHZ** | **Cape Kidnapper** | **9.22** | **205** | P | **Pn** | **05 18 24.7** | **-2.4** |
| **NTVZ** | **North Tongarir** | **9.33** | **213** | P | **Pn** | **05 18 28.5** | **-0.1** |
| **TMVZ** | **Te Maari** | **9.33** | **212** | P | **Pn** | **05 18 28.1** | **-0.5** |
| **ETVZ** | **East Tongariro** | **9.34** | **212** | P | **Pn** | **05 18 28.2** | **-0.6** |
| **WTVZ** | **West Tongariro** | **9.38** | **213** | P | **Pn** | **05 18 30.8** | **+1.5** |
| **NNVZ** | **North Ngauruho** | **9.38** | **213** | P | **Pn** | **05 18 30.4** | **+1.1** |
| **OTVZ** | **Oturere** | **9.38** | **212** | P | **Pn** | **05 18 32.4** | **+3.0** |
| **SNVZ** | **South Ngauruho** | **9.41** | **212** | P | **Pn** | **05 18 29.8** | **-0.1** |
| **TWVZ** | **Taurewa** | **9.42** | **214** | P | **Pn** | **05 18 31.2** | **+1.4** |
| **NGZ** | **Ngauruhoe** | **9.42** | **213** | P | **Pn** | **05 18 30.1** | **+0.1** |
| **TUVZ** | **Tukino** | **9.47** | **212** | P | **Pn** | **05 18 30.9** | **+0.3** |
| **BHHZ** | **Black Hill Sta** | **9.48** | **210** | P | **Pn** | **05 18 28.7** | **-1.8** |
| **KRHZ** | **Kereru** | **9.48** | **208** | P | **Pn** | **05 18 27.6** | **-3.0** |
| **TRVZ** | **Turoa** | **9.55** | **212** | P | **Pn** | **05 18 34.8** | **+3.1** |
| **WNVZ** | **Wahianoa** | **9.55** | **212** | P | **Pn** | **05 18 31.5** | **-0.1** |
| **PXZ** | **Pawanui** | **9.63** | **205** | P | **Pn** | **05 18 29.6** | **-3.0** |
| **VRZ** | **Vera Road** | **9.79** | **216** | P | **Pn** | **05 18 36.3** | **+1.5** |
| **WPHZ** | **Waipukurau** | **9.81** | **206** | P | **Pn** | **05 18 32.9** | **-2.2** |
| **PRHZ** | **Porangahau** | **9.92** | **205** | P | **Pn** | **05 18 34.1** | **-2.4** |
| **TSZ** | **Takapari Road** | **10.00** | **208** | P | **Pn** | **05 18 33.9** | **-3.8** |
| **ANWZ** | **Angora Road** | **10.15** | **205** | P | **Pn** | **05 18 36.7** | **-3.0** |
| **WAZ** | **Wanganui** | **10.17** | **213** | P | **Pn** | **05 18 39.7** | **-0.3** |
| **KHEZ** | **Kahui Hut** | **10.30** | **218** | P | **Pn** | **05 18 45.3** | **+3.5** |
| **PRWZ** | **Pori Road** | **10.42** | **207** | P | **Pn** | **05 18 40.5** | **-2.9** |
| **BFZ** | **Birch Farm** | **10.43** | **205** | P | **Pn** | **05 18 40.2** | **-3.3** |
| **MRZ** | **Mangatainoka R** | **10.66** | **208** | P | **Pn** | **05 18 42.4** | **-4.3** |
| **SNZO** | **South Karori** | **11.57** | **209** | P | **Pn** | **05 18 57.9** | **-1.2** |
| **TUWZ** | **Tuamarina** | **11.99** | **211** | | **Pn** | **05 19 01.5** | **-3.3** |
| **QRZ** | **Quartz Range** | **12.20** | **217** | P | **Pn** | **05 19 05.9** | **-1.

comp=Z,4.8nm,0.4s,baz=100,slow=12,SNR=20
STKA LR LR 05 36 05.1
comp=Z,162nm,19.2s,baz=71,slow=35
**STKA Stephens Creek 34.37 258** P **P** **05 22 59.3 +0.3**
baz=35,SNR=14
**STKA Stephens Creek 34.37 258** P **P** **05 22 59.3 +0.3**
**STKA Stephens Creek 34.37 258** P **P** **05 23 01.0 +2.0**
**HTT Hallett 36.34 255** P **P** **05 23 15.6 -0.3**
baz=37,SNR=10
**HTT Hallett 36.34 255** P **P** **05 23 15.6 -0.3**
**MTSU Mount Surprise 36.59 282** P **P** **05 23 18.5 +0.3**
baz=37,SNR=14
**LCRK Leigh Creek 37.49 260** P **P** **05 23 25.9 +0.2**
**BBOO Buckleboo 38.81 255** P **P** **05 23 35.7 -1.1**
baz=39,SNR=11
**BBOO Buckleboo 38.81 255** P **P** **05 23 35.5 -1.3**
BBOO IAmb IAmb 05 23 40.2
comp=Z,10nm,0.8s
**BBOO Buckleboo 38.81 255** P **P** **05 23 36.0 -0.8**
**PMG Port Moresby 39.12 296** LR LR 05 36 19.6
comp=Z,136nm,20.1s,baz=148,slow=31
**QIS Mount Isa 39.50 275** P **P** **05 23 41.9 -0.7**
baz=40,SNR=5.3
**QIS Mount Isa 39.50 275** P **P** **05 23 43.5 +0.8**
**COEN Coen 39.65 287** P **P** **05 23 43.2 -0.7**
COEN IAmb IAmb 05 23 46.2
comp=Z,19nm,1.2s
**COEN Coen 39.65 287** P **P** **05 23 44.5 +0.6**
**OOD Oodnadatta 40.31 263** P **P** **05 23 49.8 +0.5**
**MULG Mulgathing 41.02 259** P **P** **05 23 54.5 -0.7**
**TAOE Nuku Hiva Isla 41.61 66** *e*LR LR 05 35 35.9
comp=Z,490nm,28.3s
**PTCN Pitcairn Islan 42.31 94** P **P** **05 24 02.6 -3.2**
comp=Z,3µm,1.1s
**AS31 Alice Springs 43.17 268** P **P** **05 24 11.9 -0.9**
AS31 IAmb IAmb 05 24 13.3
comp=Z,7.7nm,0.5s
**ASAR Alice Springs 43.17 268** P **P** **05 24 11.8 -1.0**
comp=Z,17nm,0.5s,baz=105,slow=7.5,SNR=182
ASAR LR LR 05 41 09.5
comp=Z,154nm,18.3s,baz=108,slow=35
**ASAR Alice Springs 43.17 268** P **P** **05 24 11.5 -1.2**
**WB2 Warramunga Arr 44.23 273** P **P** **05 24 19.6 -1.7**
WB2 IAmb IAmb 05 24 21.9
comp=Z,16nm,0.7s
**WRAB Tennant Creek 44.24 273** P **P** **05 24 20.2 -1.2**
**WRA Warramunga Arr 44.24 273** P **P** **05 24 20.1 -1.4**
comp=Z,7.0nm,0.4s,baz=113,slow=7.6,SNR=44
WRA LR LR 05 42 03.5
comp=Z,182nm,18.1s,baz=107,slow=35
**WRA Warramunga Arr 44.24 273** P **P** **05 24 19.4 -2.1**
**WB0 Warramunga Arr 44.27 273** P **P** **05 24 19.9 -1.8**
WB0 IAmb IAmb 05 24 42.5
comp=Z,17nm,0.7s
**FORT Forrest 45.90 256** P **P** **05 24 32.8 -1.6**
FORT IAmb IAmb 05 24 56.6
comp=Z,20nm,0.9s
**FORT Forrest 45.90 256** P **P** **05 24 33.3 -1.1**
**VNDA Vanda 47.13 186** LR LR 05 43 42.9
comp=Z,106nm,18.0s,baz=354,slow=35
**WRKA Warakurna 47.46 264** P **P** **05 24 44.9 -1.9**
baz=48,SNR=16
**WRKA Warakurna 47.46 264** P **P** **05 24 45.2 -1.6**
**JAY Jayapura 48.44 298** LR LR 05 42 38.2
comp=Z,110nm,21.9s,baz=328,slow=33
**KDU Kakadu 49.19 281** P **P** **05 24 58.9 -1.3**
baz=49,SNR=6.9
**MTN Manton Dam 50.24 280** P **P** **05 25 07.3 -0.8**
baz=50,SNR=4.0
**MTN Manton Dam 50.24 280** P **P** **05 25 05.9 -2.2**
MTN IAmb IAmb 05 25 23.6
comp=Z,17nm,1.2s
**KNRA Kununurra 50.89 275** P **P** **05 25 12.5 -0.4**
baz=51,SNR=7.0
**KNRA Kununurra 50.89 275** P **P** **05 25 10.7 -2.3**
KNRA IAmb IAmb 05 25 26.1
comp=Z,16nm,1.2s
**FITZ Fitzroy Crossi 52.47 271** LR LR 05 46 32.5
comp=Z,117nm,19.3s,baz=118,slow=35
**FITZ Fitzroy Crossi 52.47 271** P **P** **05 25 22.5 -2.3**
baz=53,SNR=12
**FITZ Fitzroy Crossi 52.47 271** P **P** **05 25 22.7 -2.0**
**FITZ Fitzroy Crossi 52.47 271** P **P** **05 25 23.8 -0.9**
**CASY Casey 54.33 208** P **P** **05 25 38.1 +0.4**
**MEEK Meekatharra 55.07 258** P **P** **05 25 42.2 -1.6**
baz=55,SNR=3.8
**PSA00 Pilbara Seismi 55.96 264** P **P** **05 25 48.0 -2.2**
PSA00 IAmb IAmb 05 26 06.4
comp=Z,15nm,1.3s
**SIJI Sorong 56.79 292** LR LR 05 50 29.5
comp=Z,84nm,18.6s,baz=94,slow=36
**GUMO Guam 57.25 316** LR LR 05 48 01.4
comp=Z,39nm,20.8s,baz=112,slow=33
**BATI Baumata 57.88 278** LR LR 05 50 31.8
comp=Z,214nm,18.8s,baz=87,slow=36
**QSPA South Pole Qui 58.73 180** P **P** **05 26 13.3 +4.1**
comp=Z,3.3nm,0.5s,baz=243,slow=0.2,SNR=29
**QSPA South Pole Qui 58.73 180** P **P** **05 26 13.3 +4.1**
**KAPI Kappang 63.88 281** LR LR 05 55 49.4
comp=Z,24nm,18.7s,baz=148,slow=37
**BELA Belgrano 2 68.80 172** P **P** **05 27 17.7 +2.5**
**PCJI Pacitan 69.52 273** P **P** **05 27 19.2 -1.4**
comp=Z,51nm,0.8s
**LEM Lembang 73.25 272** LR LR 06 00 00.8
comp=Z,51nm,20.1s,baz=155,slow=36
**SYO Syowa Base 76.19 193** *i*P **P** **05 28 03.0 +3.9**
**SNAA Sanae 77.18 178** P **P** **05 28 07.2 +2.4**
**SNAA Sanae 77.18 178** **P** **05 28 06.9 +2.1**
SNAA IAmb IAmb 05 28 17.3
comp=Z,18nm,1.3s
**VNA3 Neumayer Olymp 77.32 176** P **P** **05 28 07.3 +1.8**
**MDSI Maura Dua 77.38 272** P **P** **05 28 03.2 -3.6**
**VNA2 Neumayer--Watz 77.76 177** P **P** **05 28 10.0 +2.0**
baz=282,slow=8.5
**LPIG La Paz 84.97 58** LR LR 05 58 07.7
comp=Z,46nm,21.4s,baz=226,slow=30
**PSI Prapat 85.64 276** LR LR 06 07 11.6
comp=Z,49nm,20.1s,baz=80,slow=36
**ISA Isabella, Lake 86.92 45** P **P** **05 28 59.1 +2.8**
**NJ2 Nanjing 86.96 311** *e*P **P** **05 28 57.8 +1.4**
NJ2 pmax pmax
comp=Z,12nm,0.5s
**QSM Queen of Sheba 88.09 45** P **P** **05 29 03.9 +2.0**
QSM IAmb IAmb 05 29 06.0
comp=Z,9.6nm,1.4s
**YBH Yreka Blue Hor 88.74 38** LR LR 05 59 44.1
comp=Z,36nm,21.1s,baz=208,slow=29
**NVAR Mina Array Bea 88.89 43** P **P** **05 29 07.9 +2.1**
comp=Z,0.7nm,0.7s,baz=207,slow=7.6,SNR=4.2
NVAR LR LR 06 00 05.0
comp=Z,69nm,21.6s,baz=188,slow=30
**W13A Hualapai Mount 89.38 47** P **P** **05 29 11.2 +3.0**
W13A IAmb IAmb 05 29 29.0
comp=Z,7.4nm,1.1s
**DBO Dodson Butte 89.45 37** P **P** **05 29 10.4 +2.2**
**ELK Elko 92.19 42** LR LR 06 01 32.6
comp=Z,65nm,21.7s,baz=178,slow=29
**CMAR Chiang Mai Arr 93.82 289** LR LR 06 15 09.6
comp=Z,9.8nm,18.8s,baz=115,slow=38
**PZH PanZhiHua 95.85 297** P **P** **05 29 40.3 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,140nm,4.5s
**NEW Newport 96.11 36** LR LR 06 04 45.9
comp=Z,54nm,20.9s,baz=212,slow=30
**PDAR Pinedale Array 96.77 44** LR LR 06 08 22.8
comp=Z,27nm,18.3s,baz=188,slow=32
**HHC Hu-ho-hao-te 96.98 314** *e*P **P** **05 29 45.1 +2.2**
HHC pmax pmax
comp=Z,9.0nm,1.0s
HHC pmax pmax
comp=Z,110nm,8.0s
**MKAR Makanchi Array 118.48 310** PKP **PKPdf** **05 34 57.4 -1.2**
comp=Z,0.4nm,0.4s,baz=212,slow=1.6,SNR=13
**ARCES ARCESS Array B 139.57 348** PKhKP PKPpre 05 35 30.9
comp=Z,1.7nm,0.8s,baz=270,slow=1.2,SNR=5.0
ARCES PKP **PKiKP** **05 35 39.2 -0.9**
comp=Z,2.7nm,0.8s,baz=350,slow=4.9,SNR=5.1
**KBZ Khabaz 145.73 303** PKPbc **PKPdf** **05 35 49.2 -0.2**
comp=Z,4.1nm,1.0s,baz=116,slow=23,SNR=4.5
**FINES FINESS Array B 146.10 340** PKPbc **PKPdf** **05 35 49.5 0.0**
comp=Z,6.6nm,0.4s,baz=50,slow=4.4,SNR=90
**NB2 NORSAR Subarra149.73 351** PKP **PKPbc** **05 36 00.3 0.0**
comp=Z,1.1nm,0.6s,baz=18,slow=2.7
**NOA NORSAR Array B 149.73 351** PKPbc **PKPbc** **05 36 00.1 -0.2**
comp=Z,1.3nm,0.6s,baz=15,slow=4.2,SNR=6.1
**NACGM Naroch 150.68 331** *i* PKP **PKPbc** **05 36 00.3 -2.4**
**AKASG Malin Array Be 152.13 322** PKPbc **PKPbc** **05 36 05.3 -0.9**
comp=Z,1.0nm,0.4s,baz=50,slow=2.8,SNR=17
**BRTR Keskin Array B 153.14 297** PKPbc **PKPbc** **05 36 08.0 -1.0**
comp=Z,0.8nm,0.4s,baz=134,slow=5.3,SNR=6.1
**TORD Torodi Ar. Bea 161.85 179** PKPab **PKPab** **05 36 59.6 +1.1**
comp=Z,2.6nm,0.6s,baz=180,slow=3.3,SNR=18

*BGR **19** 05:28:40.6±0.0, 16°.90S×177°.66W, h33km*
*IDC **19** 05:29:27.9±1.2, 15°.95S×177°.39W, h424km±12km,*
*mb3.9/13, mb1 4.1/16, mb1mx4.0/32, mbtmp4.7/16, Error ellipse: s-maj=19.3km s-min=11.5km az=141.0*
*NEIC **19** 05:29:27.5±1.4, 15°.6S±0°.1×177°.5W±0°.1, h413km±7km,*
*mb4.6/48, Error ellipse: s-maj=18.1km s-min=14.6km az=128.0*

**ISC 19 05:29:26.5±0.4, 15°.68S±0°.08×177°.45W±0°.08, h400km, n268, σ1§04/239, mb4.5/41, 2C-15D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **MSVF** | **Nonsavu** | **4.77** | **244** | P | **Pn** | **05 30 48.9** | **+2.6** |
| | 33nm,0.3s,baz=63,slow=9.2,SNR=144 | | | | | | |
| MSVF | | | | S | **S** | **05 31 56.3** | **+5.2** |
| | baz=112,slow=16,SNR=7.6 | | | | | | |
| **MSVF** | **Nonsavu** | **4.77** | **244** | P | **Pn** | **05 30 49.9** | **+3.6** |
| **AFI** | **Afiamalu** | **5.76** | **73** | P | **Pn** | **05 30 57.5** | **+0.7** |
| | 15nm,0.3s,baz=308,slow=2.8,SNR=7.3 | | | | | | |
| **AFI** | **Afiamalu** | **5.76** | **73** | P | **Pn** | **05 30 57.3** | **+0.6** |
| **FUNA** | **Funafuti** | **7.83** | **335** | P | **P** | **05 31 21.0** | **+0.9** |
| **NIUE** | **Niue** | **7.94** | **116** | P | **Pn** | **05 31 22.2** | **+1.4** |
| **DZM** | **Mont Dzumac** | **16.51** | **245** | P | **P** | **05 32 55.4** | **0.0** |
| | 0.4nm,0.3s,baz=60,slow=22,SNR=2.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.51** | **245** | IAmb | IAmb | 05 33 09.2 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **OUZ** | **Omahuta** | **21.05** | **201** | P | **P** | **05 33 40.8** | **+0.4** |
| **URZ** | **Urrara** | **23.00** | **191** | P | **P** | **05 33 54.1** | **-4.0** |
| | comp=Z,20nm,0.6s,baz=48,slow=3.0,SNR=7.3 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.61** | **197** | P | **P** | **05 34 54.0** | **-2.7** |
| | comp=Z,8.9nm,0.4s,baz=8.1,slow=7.1,SNR=3.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.61** | **197** | P | **P** | **05 34 54.6** | **-2.2** |
| RPZ | | | | IAmb | IAmb | 05 34 56.0 | |
| | comp=Z,44nm,1.2s | | | | | | |
| **FOZ** | **Fox Glacier** | **29.81** | **199** | P | **P** | **05 34 55.5** | **-3.0** |
| **MLZ** | **Mavora Lakes** | **31.99** | **199** | P | **P** | **05 35 15.5** | **-1.9** |
| MLZ | | | | IAmb | IAmb | 05 35 19.6 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **39.30** | **229** | P | **P** | **05 36 18.0** | **-0.9** |
| **STKA** | **Stephens Creek** | **40.53** | **239** | P | **P** | **05 36 27.4** | **-1.5** |
| | comp=Z,4.5nm,0.6s,baz=84,slow=7.3,SNR=8.1 | | | | | | |
| **STKA** | **Stephens Creek** | **40.53** | **239** | P | **P** | **05 36 28.1** | **-0.8** |
| **WR0** | **Warramunga Arr** | **45.79** | **257** | P | **P** | **05 37 09.1** | **-1.5** |
| **WB0** | **Warramunga Arr** | **45.94** | **258** | P | **P** | **05 37 10.0** | **-1.8** |
| **WRA** | **Warramunga Arr** | **45.98** | **257** | P | **P** | **05 37 11.0** | **-1.1** |
| | comp=Z,1.0nm,0.3s,baz=91,slow=6.6,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.98** | **257** | P | **P** | **05 37 10.4** | **-1.7** |
| **AS31** | **Alice Springs** | **46.31** | **252** | P | **P** | **05 37 13.6** | **-1.0** |
| **ASAR** | **Alice Springs** | **46.31** | **252** | P | **P** | **05 37 13.9** | **-0.8** |
| | comp=Z,17nm,0.5s,baz=86,slow=7.9,SNR=223 | | | | | | |
| ASAR | | | | S | **S** | **05 43 26.9** | **-4.4** |
| | comp=Z,1.6nm,1.0s,baz=84,slow=15,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **46.31** | **252** | P | **P** | **05 37 13.8** | **-0.9** |
| **FORT** | **Forrest** | **51.81** | **243** | P | **P** | **05 37 53.2** | **-2.4** |
| FORT | | | | IAmb | IAmb | 05 38 06.8 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **62.69** | **184** | P | **P** | **05 39 10.8** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **66.70** | **322** | P | **P** | **05 39 35.3** | **-0.9** |
| | comp=Z,3.1nm,0.6s,baz=157,slow=5.7,SNR=4.8 | | | | | | |
| **JHS** | **Saijyo** | **68.84** | **318** | P | **P** | **05 39 49.7** | **+0.3** |
| JHS | | | | IAmb | IAmb | 05 40 16.9 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **UNV** | **Unalaska Valle** | **69.88** | **7** | P | **P** | **05 39 54.0** | **-1.1** |
| **PEA0B** | **Petropavlovsk-** | **71.78** | **345** | P | **P** | **05 40 05.9** | **-0.6** |
| **PETK** | **Petropavlovsk-** | **71.78** | **345** | P | **P** | **05 40 05.7** | **-0.8** |
| | comp=Z,8.9nm,0.9s,baz=122,slow=9.2,SNR=8.2 | | | | | | |
| **CHGN** | **Chignik** | **73.47** | **11** | P | **P** | **05 40 15.1** | **-1.1** |
| **PMPB** | **Monarch Peak** | **74.32** | **45** | P | **P** | **05 40 22.7** | **+1.0** |
| **QSPA** | **South Pole Qui** | **74.36** | **180** | P | **P** | **05 40 21.2** | **-0.4** |
| **KMRM** | **Mail Ridge** | **74.72** | **40** | P | **P** | **05 40 25.3** | **+1.3** |
| **ARVC** | **Arvin** | **75.09** | **46** | P | **P** | **05 40 26.6** | **+0.5** |
| | baz=238 | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **75.27** | **40** | P | **P** | **05 40 27.7** | **+0.6** |
| O02D | | | | IAmb | IAmb | 05 40 29.7 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **75.27** | **40** | P | **P** | **05 40 28.5** | **+1.4** |
| | baz=234 | | | | | | |
| **VES** | **Vestal, Richgr** | **75.29** | **46** | P | **P** | **05 40 26.9** | **-0.2** |
| | baz=238 | | | | | | |
| **MURC** | **Murrieta** | **75.47** | **48** | P | **P** | **05 40 28.3** | **+0.1** |
| | baz=240 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **75.55** | **47** | P | **P** | **05 40 29.3** | **+0.5** |
| | baz=238 | | | | | | |
| **ISA** | **Isabella, Lake** | **75.62** | **46** | P | **P** | **05 40 29.7** | **+0.6** |
| | baz=238 | | | | | | |
| **MONP2** | **Monument Peak** | **75.68** | **49** | P | **P** | **05 40 30.2** | **+0.5** |
| | baz=240 | | | | | | |
| **N02D** | **Trinity Center** | **75.78** | **40** | P | **P** | **05 40 31.0** | **+1.1** |
| | baz=234 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **75.79** | **50** | P | **P** | **05 40 30.5** | **+0.4** |
| | baz=241 | | | | | | |
| **M02C** | **Callahan** | **75.94** | **39** | P | **P** | **05 40 31.7** | **+1.0** |
| | baz=234 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **76.08** | **47** | P | **P** | **05 40 32.4** | **+0.7** |
| | baz=239 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **76.16** | **50** | P | **P** | **05 40 32.5** | **+0.4** |
| | baz=241 | | | | | | |
| **K02D** | **Willamette Mer** | **76.22** | **38** | P | **P** | **05 40 33.4** | **+1.0** |
| | baz=233 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **76.22** | **39** | P | **P** | **05 40 33.0** | **+0.7** |
| YBH | | | | IAmb | IAmb | 05 40 34.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **CWC** | **Cottonwood Cre** | **76.30** | **46** | P | **P** | **05 40 33.2** | **+0.2** |
| | baz=238 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **76.41** | **44** | P | **P** | **05 40 34.1** | **+0.4** |
| | baz=238 | | | | | | |
| **MPMC** | **Manual Prospec** | **76.51** | **46** | P | **P** | **05 40 34.7** | **+0.5** |
| | baz=239 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **76.53** | **49** | P | **P** | **05 40 34.3** | **0.0** |
| | baz=240 | | | | | | |
| **GSC** | **Goldstone, Bar** | **76.60** | **47** | P | **P** | **05 40 34.9** | **+0.2** |
| | baz=240 | | | | | | |
| **PNTR** | **Pine Nut** | **76.69** | **43** | P | **P** | **05 40 35.3** | **+0.1** |
| PNTR | | | | IAmb | IAmb | 05 40 36.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **HEC** | **Hector,Ludlow** | **76.70** | **48** | P | **P** | **05 40 35.8** | **+0.7** |
| | baz=240 | | | | | | |
| **L04D** | **Klamath Falls** | **76.75** | **39** | P | **P** | **05 40 36.1** | **+0.8** |
| | baz=234 | | | | | | |
| **BC3** | **Big Chuckawall** | **76.76** | **49** | P | **P** | **05 40 35.9** | **+0.4** |
| | baz=241 | | | | | | |
| **YERR** | **Yerington** | **76.87** | **43** | P | **P** | **05 40 36.1** | **0.0** |
| YERR | | | | IAmb | IAmb | 05 40 37.5 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **P18K** | **Big Mountain,** | **76.97** | **11** | P | **P** | **05 40 33.5** | **-2.4** |
| **LCH** | **Last Change Ra** | **77.01** | **45** | P | **P** | **05 40 36.3** | **-0.5** |
| **I03D** | **Drain, OR** | **77.01** | **37** | P | **P** | **05 40 36.7** | **+0.1** |
| | baz=233 | | | | | | |
| **GRAC** | **Grapevine Rang** | **77.07** | **45** | P | **P** | **05 40 37.9** | **+0.7** |
| | baz=239,SNR=6.3 | | | | | | |
| **FURC** | **Furnace Creek,** | **77.15** | **46** | P | **P** | **05 40 37.9** | **+0.4** |
| | baz=239 | | | | | | |
| **GMRC** | **Granite Mounta** | **77.16** | **48** | P | **P** | **05 40 38.1** | **+0.4** |
| | baz=240 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.19** | **44** | P | **P** | **05 40 38.5** | **+0.5** |
| | comp=Z,7.2nm,0.8s,baz=227,slow=8.7,SNR=48 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.19** | **44** | P | **P** | **05 40 37.8** | **-0.2** |
| **IRM** | **Iron Mountain** | **77.22** | **49** | P | **P** | **05 40 38.7** | **+0.7** |
| | baz=241 | | | | | | |
| **NJ2** | **Nanjing** | **77.25** | **309** | *e*P | **P** | **05 40 38.0** | **-0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **NV11** | **Mina Array Sit** | **77.29** | **44** | P | **P** | **05 40 37.2** | **-1.2** |
| NV11 | | | | IAmb | IAmb | 05 40 39.9 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **TUQ** | **Turquoise Moun** | **77.29** | **47** | P | **P** | **05 40 38.9** | **+0.4** |
| | baz=240 | | | | | | |
| **O18K** | **Koktuh Hills** | **77.40** | **11** | P | **P** | **05 40 38.1** | **-0.2** |
| | baz=202 | | | | | | |
| **113A** | **Mohawk Valley,** | **77.58** | **51** | P | **P** | **05 40 39.6** | **-0.3** |
| 113A | | | | IAmb | IAmb | 05 40 41.6 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **TPNV** | **Topopah Spring** | **77.82** | **46** | P | **P** | **05 40 41.8** | **+0.4** |
| | baz=240,SNR=8.8 | | | | | | |
| **O19K** | **Port Alsworth** | **77.89** | **12** | P | **P** | **05 40 40.0** | **-0.9** |
| | baz=203 | | | | | | |
| **214A** | **Organ Pipe Nat** | **77.92** | **52** | P | **P** | **05 40 42.5** | **+0.6** |
| | baz=243 | | | | | | |
| **J05D** | **Fort Rock, OR** | **78.02** | **38** | P | **P** | **05 40 42.9** | **+0.6** |
| | baz=235 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **78.02** | **49** | P | **P** | **05 40 43.2** | **+0.9** |
| | baz=242 | | | | | | |
| **BRLK** | **Bradley Lake** | **78.21** | **13** | P | **P** | **05 40 41.8** | **-0.9** |
| BRLK | | | | IAmb | IAmb | 05 40 43.3 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **BRSE** | **Bradley Lake S** | **78.22** | **13** | P | **P** | **05 40 43.0** | **+0.2** |
| | baz=206 | | | | | | |
| **N19K** | **Bonanza Creek** | **78.43** | **11** | P | **P** | **05 40 43.2** | **-0.8** |
| | baz=203 | | | | | | |
| **I05D** | **Terrebonne, OR** | **78.56** | **37** | P | **P** | **05 40 45.5** | **+0.4** |
| | baz=235 | | | | | | |
| **CN2** | **Changchun** | **78.84** | **322** | *e*P | **P** | **05 40 47.0** | **+0.5** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **Q23K** | **Middleton Isla** | **79.00** | **16** | P | **P** | **05 40 48.3** | **+1.4** |
| | baz=210 | | | | | | |
| **G05D** | **Wamic, OR** | **79.10** | **37** | P | **P** | **05 40 49.0** | **+1.2** |
| | baz=235 | | | | | | |
| **E04D** | **Cinebar** | **79.16** | **35** | P | **P** | **05 40 48.8** | **+0.7** |
| | baz=233 | | | | | | |
| **M19K** | **Big River Lodg** | **79.45** | **11** | P | **P** | **05 40 48.8** | **-0.6** |
| **TUC** | **Tucson** | **79.62** | **52** | P | **P** | **05 40 52.2** | **+1.2** |
| | baz=244 | | | | | | |
| **L19K** | **White Mountain** | **79.63** | **11** | P | **P** | **05 40 51.8** | **+1.5** |
| | baz=202 | | | | | | |
| **L20K** | **Farewell, AK** | **80.08** | **11** | P | **P** | **05 40 52.2** | **-0.6** |
| | baz=203 | | | | | | |
| **TTA** | **Tatalina** | **80.13** | **10** | P | **P** | **05 40 52.5** | **-0.5** |
| TTA | | | | IAmb | IAmb | 05 40 54.9 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **TTA** | **Tatalina** | **80.13** | **10** | P | **P** | **05 40 53.5** | **+0.4** |
| | baz=201 | | | | | | |
| **M22K** | **Willow** | **80.16** | **13** | P | **P** | **05 40 52.8** | **-0.3** |
| | baz=207 | | | | | | |
| **KNK** | **Knik Glacier** | **80.23** | **14** | P | **P** | **05 40 53.5** | **0.0** |
| | baz=208 | | | | | | |
| **PMR** | **Palmer** | **80.23** | **13** | P | **P** | **05 40 53.8** | **+0.3** |
| | baz=208 | | | | | | |
| **B05A** | **Bryant** | **80.44** | **34** | P | **P** | **05 40 55.0** | **+0.1** |
| | baz=234 | | | | | | |
| **ANM** | **Nome** | **80.53** | **5** | P | **P** | **05 40 55.4** | **+0.4** |
| | baz=192 | | | | | | |
| **SML** | **Sawmill** | **80.60** | **14** | P | **P** | **05 40 55.6** | **+0.1** |
| | baz=208 | | | | | | |
| **CUT** | **Chulitna** | **80.72** | **12** | P | **P** | **05 40 55.6** | **-0.4** |
| | baz=206 | | | | | | |
| **BMRM** | **Bremner River** | **80.78** | **16** | P | **P** | **05 40 56.2** | **-0.2** |
| | baz=212 | | | | | | |
| **PPLA** | **Purkeypile** | **80.78** | **11** | P | **P** | **05 40 56.4** | **-0.2** |
| | baz=205 | | | | | | |
| **WAX** | **Waxell Ridge** | **80.81** | **17** | P | **P** | **05 40 56.0** | **-0.6** |
| WAX | | | | IAmb | IAmb | 05 40 57.5 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **MESA** | **MESA** | **80.83** | **17** | P | **P** | **05 40 56.6** | **-0.3** |
| | baz=215 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **80.86** | **14** | P | **P** | **05 40 56.3** | **-0.6** |
| | baz=209 | | | | | | |
| **K20K** | **Telida** | **80.86** | **10** | P | **P** | **05 40 56.6** | **-0.2** |
| K20K | | | | IAmb | IAmb | 05 40 57.7 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **K20K** | **Telida** | **80.86** | **10** | P | **P** | **05 40 56.4** | **-0.3** |
| | baz=203 | | | | | | |
| **YAH** | **Yahtse** | **81.04** | **17** | P | **P** | **05 40 57.6** | **-0.4** |
| YAH | | | | IAmb | IAmb | 05 40 59.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **CAST** | **Castle Rocks** | **81.28** | **11** | P | **P** | **05 40 57.3** | **-1.6** |
| | baz=205 | | | | | | |
| **TNA** | **Tin City** | **81.32** | **4** | P | **P** | **05 40 59.5** | **+0.4** |
| | baz=189,SNR=8.2 | | | | | | |
| **N25K** | **Chitina, Valde** | **81.32** | **15** | P | **P** | **05 40 58.5** | **-0.8** |
| N25K | | | | IAmb | IAmb | 05 40 59.9 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **81.32** | **15** | P | **P** | **05 40 58.8** | **-0.5** |
| | baz=212,SNR=5.3 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **81.36** | **14** | P | **P** | **05 40 59.4** | **-0.1** |
| | baz=210 | | | | | | |
| **WAT6** | **Susitna Watana** | **81.42** | **13** | P | **P** | **05 40 59.2** | **-0.7** |
| | baz=209 | | | | | | |
| **J20K** | **Nowinta River** | **81.60** | **10** | P | **P** | **05 41 00.1** | **-0.5** |
| **J20K** | **Nowinta River** | **81.60** | **10** | P | **P** | **05 41 00.4** | **-0.2** |
| | baz=203 | | | | | | |
| **BARN** | **Barnard Glacie** | **81.64** | **17** | P | **P** | **05 41 00.5** | **-0.6** |
| BARN | | | | IAmb | IAmb | 05 41 01.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **TRF** | **Thorofare Moun** | **81.65** | **12** | P | **P** | **05 41 00.1** | **-1.0** |
| | baz=206 | | | | | | |
| **DUG** | **Dugway, Tooele** | **81.75** | **44** | P | **P** | **05 41 02.2** | **0.0** |
| | baz=242 | | | | | | |
| **DHY** | **Denali Highway** | **81.93** | **13** | P | **P** | **05 41 01.8** | **-0.7** |
| | baz=209 | | | | | | |
| **121A** | **Cookes Peak, D** | **82.01** | **53** | P | **P** | **05 41 04.4** | **+0.7** |
| | baz=246 | | | | | | |
| **MCK** | **McKinley** | **82.18** | **12** | P | **P** | **05 41 02.9** | **-0.8** |
| | baz=208,SNR=5.6 | | | | | | |
| **SKAG** | **Skagway** | **82.30** | **20** | P | **P** | **05 41 03.6** | **-0.7** |
| | baz=221 | | | | | | |
| **HLID** | **Hailey** | **82.35** | **41** | P | **P** | **05 41 05.5** | **+0.3** |
| | baz=240,SNR=17 | | | | | | |
| **M26K** | **Nabesna, AK** | **82.40** | **15** | P | **P** | **05 41 04.6** | **-0.3** |
| | baz=213 | | | | | | |
| **YUK6** | **Outpost Mounta** | **82.50** | **18** | P | **P** | **05 41 05.5** | **-0.1** |
| | baz=218 | | | | | | |
| **YUK3** | **Moose Creek** | **82.56** | **17** | P | **P** | **05 41 05.6** | **-0.3** |
| | baz=216 | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.66** | **16** | P | **P** | **05 41 05.7** | **-0.5** |
| M27K | | | | IAmb | IAmb | 05 41 07.5 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.66** | **16** | P | **P** | **05 41 06.5** | **+0.3** |
| | baz=214 | | | | | | |
| **HYT** | **Haines Junctio** | **82.66** | **18** | P | **P** | **05 41 06.1** | **-0.2** |
| | baz=219 | | | | | | |
| **YUK4** | **Talbot Arm** | **82.73** | **18** | P | **P** | **05 41 07.1** | **+0.4** |
| | baz=218 | | | | | | |
| **L26K** | **Log Cabin Wild** | **82.84** | **15** | P | **P** | **05 41 07.0** | **0.0** |
| | baz=213 | | | | | | |
| **I21K** | **Tanana** | **82.90** | **11** | P | **P** | **05 41 06.8** | **-0.4** |
| | baz=205 | | | | | | |
| **NEA2** | **Nenana** | **82.92** | **12** | P | **P** | **05 41 06.2** | **-1.1** |
| | baz=208 | | | | | | |
| **BVCY** | **Beaver Creek** | **82.97** | **16** | P | **P** | **05 41 07.3** | **-0.4** |
| | baz=215,SNR=6.1 | | | | | | |
| **MLY** | **Manley** | **82.99** | **11** | P | **P** | **05 41 06.7** | **-1.0** |
| | baz=206 | | | | | | |
| **RIDG** | **Independent Ri** | **83.08** | **14** | P | **P** | **05 41 07.6** | **-0.6** |
| | baz=212 | | | | | | |
| **NEW** | **Newport** | **83.18** | **36** | P | **P** | **05 41 08.1** | **-1.0** |
| | baz=238 | | | | | | |
| **HDA** | **Harding Lake** | **83.19** | **13** | P | **P** | **05 41 07.8** | **-0.9** |
| | baz=210,SNR=11 | | | | | | |
| **H21K** | **Melozitna Rive** | **83.20** | **10** | P | **P** | **05 41 08.6** | **-0.1** |
| H21K | | | | IAmb | IAmb | 05 41 10.7 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **83.20** | **10** | P | **P** | **05 41 08.4** | **-0.3** |
| | baz=204 | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.22** | **12** | P | **P** | **05 41 07.4** | **-1.4** |
| **L27K** | **Beaver Creek,** | **83.25** | **15** | P | **P** | **05 41 08.7** | **-0.4** |
| | baz=214 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **83.36** | **12** | P | **P** | **05 41 09.2** | **-0.3** |
| | baz=207 | | | | | | |
| **WHY** | **Whitehorse** | **83.36** | **20** | P | **P** | **05 41 09.5** | **-0.3** |
| **WHY** | **Whit

baz=207
**ANMO Albuquerque** 84.00 51 P P 05 41 14.1 +0.4
baz=246
**J26L Joseph Creek** 84.03 14 P P 05 41 12.8 -0.2
baz=213,SNR=16
**TX31 Lajitas Ar. Si** 84.03 57 P P 05 41 14.1 +0.2
**TXAR Lajitas Array** 84.03 57 P P 05 41 15.1 +1.3
comp=Z,4.6nm,0.8s,baz=220,slow=6.9,SNR=57
**TXAR Lajitas Array** 84.03 57 P P 05 41 13.9 +0.1
**M30M Minto, Yukon** 84.24 18 P P 05 41 13.4 -0.7
M30M IAmb IAmb 05 41 14.7
comp=Z,9.5nm,0.7s
**M30M Minto, Yukon** 84.24 18 P P 05 41 13.8 -0.3
baz=219,SNR=13
**MSO Missoula** 84.28 38 P P 05 41 14.4 -0.3
baz=240
**M31M Drury Creek, Y** 84.68 19 P P 05 41 15.7 -0.6
baz=221
**XLT XiLinHaoTe** 84.70 318 *eP* P 05 41 17.3 +0.5
XLT pP pwP 05 42 53.6 +3.2
XLT pmax pmax
comp=Z,5.0nm,0.8s
XLT pmax pmax
comp=Z,130nm,5.7s
**DAWY Dawson** 84.70 16 P P 05 41 16.5 +0.1
baz=217
**EGAK Eagle** 84.84 15 P P 05 41 16.6 -0.3
EGAK IAmb IAmb 05 41 17.6
comp=Z,7.7nm,0.8s
**EGAK Eagle** 84.84 15 P P 05 41 16.5 -0.3
baz=215,SNR=7.2
**O20A White River Ci** 84.85 46 P P 05 41 17.1 -0.8
baz=245
**S22A 4UR Ranch, Cre** 84.86 49 P P 05 41 18.5 +0.5
baz=246
**FARO Faro, Yukon** 85.03 19 P P 05 41 17.5 -0.5
baz=222
**COLD Coldfoot** 85.07 10 P P 05 41 18.4 +0.4
baz=206
**BOZ Bozeman (W)** 85.08 40 P P 05 41 18.8 0.0
baz=242
**BW06 Boulder Array** 85.11 43 P P 05 41 18.6 -0.5
baz=244
**PDAR Pinedale Array** 85.11 43 P P 05 41 19.1 0.0
comp=Z,1.0nm,0.5s,baz=214,slow=4.1,SNR=10
**MAYO Mayo, Yukon** 85.30 17 P P 05 41 19.8 +0.6
baz=220
**J29M Klondike Camp** 85.33 16 P P 05 41 19.7 +0.3
baz=218
**XAN Xi'an** 85.65 307 P P 05 41 22.4 +0.7
XAN pP pwP 05 42 54.5 -0.9
XAN pmax pmax
comp=Z,7.0nm,0.8s
**MMPY Sheldon Lake,** 85.98 20 P P 05 41 22.7 +0.1
baz=224
**MAW Mawson** 86.25 199 P P 05 41 25.2 +1.3
**BMAR Burnt Mountain** 86.30 12 P P 05 41 23.7 -0.3
**HHC Hu-ho-hao-te** 86.38 314 *eP* P 05 41 24.9 -0.2
HHC pmax pmax
comp=Z,9.0nm,1.0s
HHC pmax pmax
comp=Z,150nm,8.5s
**TOLK Toolik Lake Re** 86.44 10 P P 05 41 24.4 -0.3
baz=207
**833A Chaparral WMA,** 87.19 60 P P 05 41 30.2 +1.1
baz=251
**EPYK Eagle Plains** 87.22 15 P P 05 41 28.0 -0.4
baz=219
**PZH PanZhiHua** 88.93 298 P P 05 41 36.9 -0.6
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,30nm,3.5s
**LAO LASA Array** 88.94 41 P P 05 41 37.6 +0.7
baz=246
**WRGLY Wrigley** 89.03 21 P P 05 41 37.2 +0.3
baz=231
**RSSD Black Hills** 89.33 44 P P 05 41 38.7 -0.4
baz=247
**INK Inuvik** 89.51 15 P P 05 41 38.6 -0.4
baz=222
**DGMT Dagmar** 90.90 40 P P 05 41 46.3 +0.3
baz=247
**YKA Yellowknife Ar** 91.94 24 P P 05 41 49.8 -0.6
comp=Z,1.9nm,0.6s,baz=237,slow=4.7,SNR=33
**SONM Songino Array** 92.47 319 P P 05 41 53.5 +0.1
comp=Z,1.3nm,0.8s,baz=124,slow=7.3,SNR=1.5
**C36M Paulatuk** 92.71 17 P P 05 41 53.0 -0.7
baz=231
**A36M Sachs Harbour** 94.11 14 P P 05 41 59.8 -0.3
baz=230
**P52A Corning** 103.86 52 P Pdif 05 42 43.6 -1.0
baz=261
**MKAR Makanchi Array** 108.24 315 PKiKP PKiKP 05 47 06.5 -1.5
comp=Z,0.6nm,0.7s,baz=182,slow=0.5,SNR=5.4
**ARCES ARCESS Array B** 124.29 350 PKP PKPdf 05 47 36.9 -1.0
comp=Z,1.5nm,0.4s,baz=346,slow=1.5,SNR=22
**FINES FINESS Array B** 131.29 345 PKP PKPdf 05 47 51.3 -0.2
comp=Z,2.4nm,0.8s,baz=90,slow=1.9,SNR=5.7
**AKASG Malin Array Be** 138.99 334 PKP PKPdf 05 48 06.8 +0.6
comp=Z,0.3nm,0.4s,baz=34,slow=3.2,SNR=4.7
**EKA Eskdalemuir Ar** 140.18 5 PKhKP PKPpre 05 48 03.2
comp=Z,0.8nm,0.7s,baz=346,slow=2.5,SNR=4.5
**FLTG Flechtingen** 142.79 351 *e*PKPbc PKPdf 05 48 10.7 -2.2
baz=16,slow=3.0
**IBBN Ibbenburen** 143.22 355 *e*PKPbc PKPab 05 48 11.8 +0.8
baz=16,slow=3.0
**NIE Niedzica** 143.37 341 *e*PKPdf PKPbc 05 48 12.9 +0.9
**CLZ Clausthal** 143.39 352 *e*PKPbc PKPab 05 48 11.4 -0.3
baz=16,slow=3.0
**CLL Collm** 143.48 349 *i* PKPdf PKPab 05 48 11.9 -0.1
CLL *i* x x 05 48 12.8
comp=Z,5.0nm,0.6s
**OSTC Ostas** 143.50 345 *e*PKP PKPab 05 48 12.2 +0.1
**UPC Upice** 143.60 345 *e*PKP PKPab 05 48 12.2 -0.3
**DPC Dobruska-Polom** 143.67 345 *e*PKP PKPab 05 48 12.8 0.0
**TRPA Tarpa** 143.69 337 ⇓P PKPab 05 48 12.8 -0.1
**FBE Freiberg** 143.79 348 *e*PKPbc PKPab 05 48 13.1 0.0
baz=16,slow=3.0
**KRLC Kraliky** 143.80 344 *e*PKP PKPab 05 48 12.8 -0.5
**BRTR Keskin Array B** 143.82 318 PKP PKPab 05 48 13.6 -0.2
comp=Z,12nm,0.8s,baz=88,slow=2.5,SNR=40
**ARCR ARCALIA** 143.83 335 ⇑P PKPab 05 48 13.6 +0.2
**MORC Moravsky Berou** 143.87 343 *e*PKP PKPab 05 48 13.2 -0.4
**PVCC Panska Ves** 143.91 347 *e*PKP PKPab 05 48 13.3 -0.3
**KASTN Kahler Asten** 144.25 354 *e*PKPbc PKPbc 05 48 14.3 -0.5
baz=16,slow=3.0
**MOX Moxa** 144.36 350 *e*PKPbc PKPbc 05 48 14.7 -0.4
baz=16,slow=3.0
**MLR Muntele Rosu** 144.37 331 ⇓P PKPbc 05 48 16.2 +0.7
**MLR Muntele Rosu** 144.37 331 PKP PKPbc 05 48 15.9 +0.4
comp=Z,9.3nm,0.6s,baz=312,slow=3.3,SNR=11
**PRU Pruhonice** 144.42 347 *e*PKP PKPbc 05 48 14.6 -0.7
**WERD Werda** 144.44 349 *e*PKPbc PKPbc 05 48 15.2 -0.2
baz=16,slow=3.0
**TANN Tannenbergstha** 144.44 349 *e*PKPbc PKPbc 05 48 15.0 -0.5
baz=16,slow=3.0
**UBBA Unterbreizbach** 144.44 352 *e*PKPbc PKPbc 05 48 14.7 -0.5
baz=16,slow=3.0
**VRAC Vranov** 144.56 344 PKP PKPbc 05 48 16.0 +0.2
comp=Z,8.0nm,1.0s,baz=53,slow=3.3,SNR=7.6
**VRAC Vranov** 144.56 344 *e*PKP PKPbc 05 48 15.5 -0.3
**WERN Wernitzgruen** 144.58 349 *e*PKPbc PKPbc 05 48 15.9 0.0
baz=16,slow=3.0
**NKC Novy Kostel** 144.62 349 *e*PKP PKPbc 05 48 15.3 -0.7
**JAVC Velka Javorina** 144.67 343 *e*PKP PKPbc 05 48 16.6 +0.4
**DRGR** 144.73 336 ⇓P PKPbc 05 48 16.3 -0.2
**VOIR** 144.82 332 ⇓P PKPbc 05 48 17.3 +0.4
**KRUC Moravsky** 144.83 344 *e*PKP PKPbc 05 48 16.2 -0.5
**MANZ Manzenberg** 144.91 349 *e*PKPbc PKPdf 05 48 16.9 +0.1
baz=16,slow=3.0
**MEM Membach** 145.05 356 *d*PKP PKPdf 05 48 16.8 -0.1
**ARR Arges** 145.06 332 ⇑P PKPab 05 48 18.7 +0.6
**BSTI Sart Tilman** 145.10 357 *d*PKP PKPdf 05 48 17.2 +0.3
**ROTZ Rotzenmuhle** 145.11 349 *e*PKPbc PKPdf 05 48 17.3 +0.3
baz=16,slow=3.0
**TNS Taunus Mts** 145.22 353 *e*PKPbc PKPdf 05 48 17.9 +0.5
baz=16,slow=3.0
**SNF Seneffe** 145.23 358 *d*P PKPdf 05 48 17.0 -0.2
SNF *d*PKP PKiKP 05 48 23.3 +2.0
**KHC Kasperske Hory** 145.44 347 *e*PKP PKPdf 05 48 18.4 +0.7
**CKRC Cesky Krumlov** 145.57 346 *e*PKP PKPdf 05 48 17.9 0.0
**SIRR Siria** 145.57 336 ⇓P PKPdf 05 48 19.0 +1.0
**DOU Dourbes** 145.63 358 *d*P PKPdf 05 48 18.3 +0.4
**MMAI Mount Meron Ar** 145.64 306 PKPbc PKPbc 05 48 20.0 +0.3
comp=Z,5.6nm,0.6s,baz=61,slow=6.8,SNR=12
**GEC2 GERESS Array S** 145.69 347 *e*PKPbc PKPdf 05 48 18.4 +0.2
baz=16,slow=3.0
**GERES GERESS Array B** 145.69 347 PKPbc PKPdf 05 48 18.9 +0.6
comp=Z,3.2nm,0.6s,baz=17,slow=3.8,SNR=28
**WLF Walferdange** 145.98 356 *e*PKPbc PKPbc 05 48 20.5 +0.5
baz=16,slow=3.0
**WLF Walferdange** 145.98 356 *d*PKP PKPdf 05 48 20.1 +1.6
**CONA Conrad Observa** 146.02 344 *eP* PKPdf 05 48 20.4 +1.6
comp=Z,7.7nm,0.7s,SNR=7.0
**BZS Buzias** 146.13 336 ⇓P PKPdf 05 48 20.4 +1.5
**HERR Herculane** 146.40 334 ⇓P PKPdf 05 48 21.0 +1.6
**MOA Molln** 146.49 346 *eP* PKPdf 05 48 21.3 +1.8
comp=Z,5.7nm,0.7s
**LEF Lefka** 146.65 311 ⇓P PKPbc 05 48 22.0 -0.4
**BFO Black Forest** 147.09 353 *e*PKPbc PKPbc 05 48 23.1 -0.2
baz=16,slow=3.0
**EIL Elat** 147.15 301 PKPbc PKPdf 05 48 22.0 +0.9
comp=Z,2.9nm,0.8s,baz=331,slow=1.9,SNR=4.4
**SOKA Soboth** 147.39 344 *eP* PKPdf 05 48 23.2 +2.1
comp=Z,4.7nm,0.8s
**KBA Koelnbreinsper** 147.43 346 *i P* PKPbc 05 48 23.8 -0.6
comp=Z,7.4nm,0.6s
**UBR Ueberruh** 147.48 350 *e*PKPbc PKPbc 05 48 24.1 -0.2
baz=16,slow=3.0
**WATA Walderalm** 147.56 349 *eP* PKPbc 05 48 24.1 -0.6
comp=Z,7.3nm,0.9s
**RETA Reutte** 147.56 350 *eP* PKPbc 05 48 24.0 -0.6
comp=Z,2.5nm,0.5s
**WTTA Wattenberg** 147.62 348 *eP* PKPbc 05 48 24.4 -0.5
comp=Z,5.6nm,0.5s,SNR=7.0
**MOTA Moosalm** 147.64 349 *eP* PKPbc 05 48 24.1 -0.8
comp=Z,4.0nm,0.7s
**MYKA Terra Mystica** 147.78 346 *eP* PKPdf 05 48 23.9 +2.1
comp=Z,3.5nm,0.5s,SNR=4.4
**VTS Vitosha** 147.82 331 ⇓P PKPbc 05 48 25.5 -0.1
**DAVA Damuels** 147.90 351 *eP* PKPbc 05 48 25.4 -0.2
comp=Z,5.5nm,0.6s
**ABTA Abfaltersbach** 147.93 347 *i P* PKPdf 05 48 24.4 +2.4
comp=Z,9.0nm,0.7s,SNR=9.0
**FETA Feichten** 148.02 349 *eP* PKPbc 05 48 25.3 -0.6
comp=Z,6.1nm,0.8s

*IDC* ***19*** *05:33:03.8±0.5, 30.66S×71.61W, h0km, mb5.0/14, mb1 5.0/20, mb1mx4.9/26, mbtmp4.9/20, ML4.5/6, MS4.2/34, Ms1 4.2/34, ms1mx4.1/54, Error ellipse: s-maj=19.4km s-min=14.0km az=78.0*

*SJA* ***19*** *05:33:04.7±2.1, 30.60S×71.90W, h10km, ML5.1, MW4.7*

*MOS* ***19*** *05:33:07.9±0.9, 30.63S×71.62W, h34km, mb5.3/14, Error ellipse: s-maj=19.4km s-min=7.8km az=94.4*

*GUC* ***19*** *05:33:08.3±0.7, 30.59S×71.70W, h36km±2km, ML5.4, MW5.5*

*NEIC* ***19*** *05:33:08.3±1.4, 30.59S±0.03×71.59W±0.07, h24km±4km, mb5.2/80, Mww4.9, Mwr5.5(GUC), Error ellipse: s-maj=8.9km s-min=4.4km az=101.0*

*BJI* ***19*** *05:33:09.0±0.0, 30.60S×71.60W, h33km, mB5.2/6, Ms5.1/2, Ms7 4.8/3*

*VAO* ***19*** *05:33:09.4±0.4, 30.56S×71.50W, h30km, mb5.1*

*NEIC* ***19*** *05:33:11, 30.57S×71.80W, h40km, Moment Tensor Solution. Duration: 49 Moment tensor: Scale 1016Nm; Mrr2.78; Mθθ0.54; Mϕϕ -3.32; Mrθ0.20; Mθϕ0.01; Mϕr-0.62; Fault plane solution: M03.15000×1016 NP1:ϕ5.00000°, δ39.00000°, λ97.00000°. NP2:ϕ175.00000°, δ51.00000°, λ84.00000°. Principal axes: T 2.8566, Plg83.0000°, Azm50.0000°; N 0.5261, Plg5.0000°, Azm179.0000°; P -3.3827, Plg6.0000°, Azm269.0000°;*

*GCMT* ***19*** *05:33:14.4±0.4, 30.62S±0.02×71.81W±0.03, h36km±1km, MW5.0/65, Moment Tensor Solution. s31,c33; s65,c86; Duration: 0 Moment tensor: Scale 1016Nm; Mrr4.21±.27; Mθθ-0.17±.15; Mϕϕ-4.04±.16; Mrθ0.02±.13; Mθϕ0.12±.08; Mϕr-2.18±.17; Best double couple: M04.66700×1016 NP1:ϕ358.00000°, δ31.00000°, λ89.00000°. NP2: ϕ179.00000°, δ59.00000°, λ91.00000°. Principal axes: T 4.7510, Plg76.0000°, Azm91.0000°; N -0.1710, Plg1.0000°, Azm359.0000°; P -4.5840, Plg14.0000°, Azm268.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 19 05:33:08.6±0.6, 30.62S±0.02×71.64W±0.04, h31km±3km, n484,σ1°11/484, mb5.1/49, MS4.3/31, 47C-38D, Fault plane solution: NP1:ϕ340.72559°, δ5.78187°, λ52.21859°. NP2:ϕ198.64858°, δ85.43320°, λ93.54979°. Principal axes:** T Plg49.4475°, Azm112.5098°; N Plg3.5385°, Azm18.3656°; P Plg40.3315°, Azm285.3561°;

**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **CO06** | **Fray Jorge** | **0.05** | **177** | Pg | | **Pb** | **05 33 13.6** | **-0.1** |
| CO06 | | | | Sg | | **Sb** | **05 33 17.6** | **+0.2** |
| **CO06** | **Fray Jorge** | **0.05** | **177** | *i* P | | **Pb** | **05 33 13.9** | **+0.1** |
| CO06 | | | | *i* S | | **Sb** | **05 33 17.5** | **+0.2** |
| CO06 | | | | IAML | | | 05 33 18.7 | |
| | comp=N,836μm,0.5s | | | | | | | |
| **CO05** | **La Serena** | **0.78** | **26** | | | **Pn** | **05 33 23.1** | **-0.4** |
| CO05 | | | | Sg | | **Sb** | **05 33 31.6** | **-2.4** |
| **CO05** | **La Serena** | **0.78** | **26** | ⇓*i* P | | **Pn** | **05 33 22.9** | **-0.5** |
| CO05 | | | | *i* S | | **Sb** | **05 33 33.0** | **-0.9** |
| **CO02** | **Combarbal** | **0.80** | **137** | | | **Pb** | **05 33 24.1** | **0.0** |
| CO02 | | | | | | **Sn** | **05 33 35.3** | **+0.5** |
| **CO02** | **Combarbal** | **0.80** | **137** | ⇓*i* P | | **Pb** | **05 33 24.2** | **+0.2** |
| CO02 | | | | *i* S | | **Sn** | **05 33 35.9** | **+1.1** |
| CO02 | | | | IAML | | | 05 33 40.4 | |
| | comp=E,275μm,0.4s | | | | | | | |
| **CO02** | **Combarbal** | **0.80** | **137** | *i* P | | **Pb** | **05 33 24.0** | **0.0** |
| CO02 | | | | *i* S | | **Sn** | **05 33 35.6** | **+0.8** |
| CO02 | | | | IAML | | | 05 33 39.9 | |
| | comp=Z,74μm,0.6s | | | | | | | |
| **CO03** | **El Pedregal** | **0.84** | **105** | | | **Pb** | **05 33 24.9** | **+0.2** |
| **CO03** | **El Pedregal** | **0.84** | **105** | *i* P | | **Pb** | **05 33 25.0** | **+0.2** |
| CO03 | | | | *i* S | | **Sn** | **05 33 37.4** | **+1.5** |
| CO03 | | | | IAML | | | 05 33 39.7 | |
| | comp=Z,31μm,1.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.85** | **58** | | | **Pn** | **05 33 24.8** | **0.0** |
| **GO04** | **Tololo Observa** | **0.85** | **58** | ⇓*i* P | | **Pn** | **05 33 24.7** | **0.0** |
| GO04 | | | | *e*S | | **Sn** | **05 33 36.9** | **+0.6** |
| GO04 | | | | IAML | | | 05 33 40.7 | |
| | comp=N,174μm,0.6s | | | | | | | |
| **LCO** | **Las Campanas** | **1.80** | **27** | P | | **Pn** | **05 33 37.6** | **-0.2** |
| **LCO** | **Las Campanas** | **1.80** | **27** | | | **Pn** | **05 33 37.6** | **-0.2** |
| **LCO** | **Las Campanas** | **1.80** | **27** | *i* P | | **Pn** | **05 33 38.6** | **+0.9** |
| LCO | | | | *i* S | | **Sb** | **05 34 02.5** | **-0.8** |
| LCO | | | | IAML | | | 05 34 09.1 | |
| | comp=Z,66μm,0.6s | | | | | | | |
| **AROD** | **Rodeo** | **1.93** | **77** | *i* P | | **Pb** | **05 33 43.4** | **+0.2** |
| **VA06** | **Catapilco** | **1.96** | **172** | Pn | | **Pn** | **05 33 40.5** | **+0.9** |
| **VA06** | **Catapilco** | **1.96** | **172** | ⇑*i* P | | **Pn** | **05 33 40.4** | **+0.7** |
| VA06 | | | | *i* S | | **Sb** | **05 34 07.3** | **-0.2** |
| VA06 | | | | IAML | | | 05 34 16.7 | |
| | comp=E,48μm,0.3s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.22** | **90** | *i* P | | **Pb** | **05 33 48.0** | **-0.2** |
| ACCO | | | | IAML | | | 05 34 29.2 | |
| | comp=Z,2μm,1.5s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.22** | **79** | *i* P | | **Pb** | **05 33 47.5** | **-0.6** |
| ACDV | | | | IAML | | | 05 34 27.4 | |
| | comp=Z,5μm,1.2s | | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **157** | | | **Pn** | **05 33 46.8** | **+2.0** |
| **VA03** | **San Esteban** | **2.33** | **157** | ⇑*i* P | | **Pn** | **05 33 46.9** | **+2.0** |
| VA03 | | | | *i* S | | **Sb** | **05 34 16.2** | **-2.1** |
| VA03 | | | | IAML | | | 05 34 24.4 | |
| | comp=N,31μm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **157** | *i* P | | **Pn** | **05 33 47.0** | **+2.1** |
| VA03 | | | | *i* S | | **Sb** | **05 34 18.9** | **+0.6** |
| VA03 | | | | IAML | | | 05 34 27.0 | |
| | comp=Z,14μm,0.4s | | | | | | | |
| **VA01** | **Torpederas** | **2.39** | **180** | *eP* | | **Pn** | **05 33 47.6** | **+1.9** |
| VA01 | | | | *e*S | | **Sn** | **05 34 13.6** | **-0.4** |
| **VA01** | **Torpederas** | **2.39** | **180** | *i* P | | **Pn** | **05 33 45.7** | **0.0** |
| VA01 | | | | *i* S | | **Sb** | **05 34 19.7** | **-0.3** |
| VA01 | | | | IAML | | | 05 34 26.4 | |
| | comp=Z,5μm,0.7s | | | | | | | |
| **ROCH** | **El Roble** | **2.40** | **167** | ⇑*i* P | | **Pn** | **05 33 47.2** | **+1.2** |
| ROCH | | | | *e*P | | **Pb** | **05 33 47.9** | **-3.3** |
| ROCH | | | | *e*S | | **Sb** | **05 34 18.0** | **-2.6** |
| ROCH | | | | *i* S | | **Sn** | **05 34 18.3** | **+3.8** |
| ROCH | | | | IAML | | | 05 34 26.7 | |
| | comp=N,27μm,0.3s | | | | | | | |
| ROCH | | | | IAML | | | 05 34 28.0 | |
| | comp=N,40μm,0.1s | | | | | | | |

**ROC1 El Roble** 2.41 167 Pn 05 33 46.0 -0.1
**AC04 Llanos de Chal** 2.46 12 Pn Pn 05 33 46.2 -0.3
**AC04 Llanos de Chal** 2.46 12 *i* P Pn 05 33 46.6 +0.1
AC04 *i* S Sb 05 34 21.7 -0.2
AC04 IAML 05 34 29.4
comp=Z,7μm,0.8s
**AUSP Uspallata** 2.50 130 *i* P Pb 05 33 51.1 -1.9
**PEL Peldehue** 2.64 162 P Pn 05 33 49.7 +0.6
**PEL Peldehue** 2.64 162 Pn 05 33 49.7 +0.6
**PEL Peldehue** 2.64 162 ⇑*i* P Pn 05 33 51.0 +1.9
PEL *i* S Sb 05 34 23.8 -3.5
PEL IAML 05 34 37.1
comp=E,16μm,0.7s
**PEL Peldehue** 2.64 162 *i* P Pn 05 33 51.0 +1.9
**MT02 Curacav** 2.66 171 Pn 05 33 50.0 +0.6
**MT02 Curacav** 2.66 171 ⇑*i* P Pn 05 33 49.9 +0.5
MT02 *e*S Sn 05 34 23.7 +3.0
MT02 IAML 05 34 34.2
comp=E,8μm,0.4s
**MT02 Curacav** 2.66 171 *i* P Pn 05 33 50.7 +1.3
MT02 *i* S Sb 05 34 29.2 +1.4
MT02 IAML 05 34 34.9
comp=Z,9μm,0.5s
**ZON Zonda** 2.70 111 P Pb 05 33 54.5 -1.7
**ZON Zonda** 2.70 111 *i* P Pb 05 33 54.0 -2.2
ZON IAML 05 34 42.4
comp=Z,6μm,0.9s
**RTLL Cerro Villicun** 2.81 105 *i* P Pb 05 33 55.7 -2.3
**MT05 Renca** 2.87 165 Pn Pn 05 33 53.1 +0.9
**MT05 Renca** 2.87 165 ⇑*i* P Pn 05 33 53.7 +1.5
MT05 *e*S Sn 05 34 28.9 +3.2
**VA05 Santo Domingo** 3.03 180 Pn 05 33 54.1 -0.3
**MT09 Talagante** 3.19 170 Pn 05 33 58.2 +1.4
**MT09 Talagante** 3.19 170 ⇑*i* P Pn 05 33 58.0 +1.2
MT09 *e*S Sn 05 34 36.8 +2.9
MT09 IAML 05 34 55.2
comp=E,10μm,0.7s
**MT01 Popeta** 3.25 174 Pn 05 33 59.2 +1.8
**MT01 Popeta** 3.25 174 ⇑*i* P Pn 05 33 57.8 +0.3
MT01 *e*S Sn 05 34 38.0 +3.0
MT01 IAML 05 34 54.5
comp=E,6μm,0.5s
**GO03 Copiap** 3.26 22 Pn Pn 05 33 57.7 +0.1
**LMEL Las Melosas** 3.44 160 Pn Pn 05 34 01.9 +1.7
**BO04 La Punta** 3.47 166 Pn 05 34 02.0 +1.5
**BO01 Tunca** 3.79 173 Pn Pn 05 34 05.5 +0.6
**BO02 Sierra Bellavi** 4.22 170 Pn Pn 05 34 11.5 +0.6
**ACHE Chepes** 4.31 98 *i* P Pn 05 34 15.5 +3.4
**AC02 Maricunga** 4.37 31 Pn Pn 05 34 13.9 +0.6
**H03N1 Juan Fernandez** 6.79 244 T T 05 41 40.4
baz=73,slow=72
**H03N2 Juan Fernandez** 6.80 244 T T 05 41 41.1
baz=73,slow=72,SNR=7876
**H03N3 Juan Fernandez** 6.80 244 T T 05 41 39.7
baz=73,slow=72,SNR=7153
**H03S3 Juan Fernandez** 6.94 241 T T 05 41 45.3
SNR=42
**H03S1 Juan Fernandez** 6.94 241 T T 05 41 44.8
SNR=45
**H03S2 Juan Fernandez** 6.96 241 T T 05 41 45.9
SNR=46
**LC01 Cunco** 8.26 181 Pn Pn 05 35 05.4 -0.8
**LVC Limon Verde** 8.35 18 Pn Pn 05 35 05.2 -2.6
comp=E,1.3nm,0.3s,baz=197,slow=9.9,SNR=11
LVC Sn Sn 05 36 45.6 +4.4
comp=E,5.6nm,0.3s,baz=138,slow=11,SNR=4.1
LVC LR LR 05 38 11.7
comp=E,2μm,20.1s,baz=212,slow=37
**LVC Limon Verde** 8.35 18 *eP* Pn 05 35 05.8 -2.0
**LR03 Panguipulli** 9.01 183 Pn 05 35 15.6 -0.9
**PB02 IPOC Station P** 9.40 10 Pn 05 35 20.9 -1.1
**PLCA Paso Flores** 10.13 175 Pn Pn 05 35 31.6 -0.3
comp=E,1.5nm,0.3s,baz=340,slow=11,SNR=70
PLCA LR LR 05 39 22.6
comp=E,1μm,19.7s,baz=352,slow=38
**PLCA Paso Flores** 10.13 175 P Pn 05 35 32.4 +0.5
**PLCA Paso Flores** 10.13 175 Pn Pn 05 35 32.4 +0.5
**PLCA Paso Flores** 10.13 175 *eP* Pn 05 35 32.7 +0.8
**LL04 Puerto Octay** 10.28 183 Pn Pn 05 35 32.6 -1.3
**LL03 Petrohue** 10.51 183 Pn Pn 05 35 36.2 -0.9
**PB08 IPOC Station P** 10.68 13 Pn Pn 05 35 38.6 -1.2
**PB12 IPOC Station P** 12.02 6 Pn Pn 05 35 56.2 -1.6
**PB16 IPOC Station P** 12.39 9 Pn Pn 05 36 03.5 +0.1
**GO07 Milladeo Hill,** 12.57 187 Pn Pn 05 36 03.8 -1.5
**ITQB Itaqui** 13.03 90 Pn Pn 05 36 10.3 -1.3
**ITQB Itaqui** 13.03 90 *eP* Pn 05 36 10.6 -1.0
**CPUP Villa Florida** 13.29 75 Pn Pn 05 36 13.2 -2.0
comp=E,0.6nm,0.3s,baz=254,slow=12,SNR=23
CPUP LR LR 05 41 44.7
comp=E,1μm,20.8s,baz=254,slow=39
**CPUP Villa Florida** 13.29 75 P Pn 05 36 13.3 -1.8
**CPUP Villa Florida** 13.29 75 Pn Pn 05 36 13.3 -1.8
**CPUP Villa Florida** 13.29 75 *eP* Pn 05 36 13.3 -1.8
**LPAZ La Paz** 14.62 13 Pn Pn 05 36 34.4 +0.4
comp=E,1.7nm,0.3s,baz=182,slow=8.6,SNR=45
**LPAZ La Paz** 14.62 13 Pn 05 36 33.7 -0.3
**COYC Coyhaique** 14.93 181 Pn 05 36 38.5 +1.2
**PLTB Pedras Altas** 15.48 99 Pn 05 36 41.9 -2.8
**CPSB Cacapava Do Su** 15.69 94 *eP* Pn 05 36 47.1 -0.3
**ITAB Concordia** 17.41 84 Pn Pn 05 37 08.6 -0.5
ITAB IAmb IAmb 05 37 14.8
comp=Z,143nm,1.0s
**ITAB Concordia** 17.41 84 *eP* Pn 05 37 08.8 -0.3
**SIV San Ignacio** 17.48 36 P Pn 05 37 09.4 -0.8
comp=E,1.5nm,0.3s,baz=218,slow=11,SNR=104
SIV LR LR 05 45 12.2
comp=Z,1μm,21.3s,baz=215,slow=42
**AQDB Aquidauana** 17.56 59 *eP* Pn 05 37 09.5 -1.5
**GO08 Villa O'Higgin** 17.83 182 P P 05 37 15.0 +0.2
**PTGB Pitanga** 18.30 76 *eP* Pn 05 37 20.7 +0.4
**PTLB Pontes e Lacer** 18.96 40 *eP* P 05 37 27.2 -0.1
**NNA Nana** 19.16 344 P Pn 05 37 30.4 -0.3
comp=Z,0.6nm,0.3s,baz=170,slow=14,SNR=4.6
NNA LR LR 05 43 11.6
comp=Z,465nm,21.7s,baz=170,slow=32
**NNA Nana** 19.16 344 P P 05 37 30.1 +0.5
**TER01 Tubaro-SC** 19.68 90 *eP* P 05 37 35.8 +0.6
**PP1B Ponte de Pedra** 20.02 53 *eP* P 05 37 39.1 +0.2
**PCMB Pacaembu** 20.36 69 *eP* P 05 37 42.7 +0.1
**VILB Vilhena** 20.52 33 *eP* P 05 37 43.9 -0.5
**TIJ01 Guaruva-PR** 20.66 81 *eP* P 05 37 43.6 -2.5
**SALV Santo Antonio** 20.68 48 *eP* P 05 37 45.5 -0.7
**FRTB Fartura** 20.95 75 *eP* P 05 37 48.9 -0.1
**MG05 Puerto Natales** 21.05 182 P P 05 37 51.4 +1.6
MG05 IAmb IAmb 05 38 03.3
comp=Z,127nm,1.2s
**ETMB Extrema** 21.31 15 *eP* P 05 37 53.2 +0.3
**ITRB Iturama** 22.08 65 *eP* P 05 38 00.1 -1.1
**PET01 Itanhaem-SP** 22.50 80 *eP* P 05 38 05.6 0.0
**CZSB Cruzeiro do Su** 22.80 357 *eP* P 05 38 09.6 +0.7
**BB19B Bebedouro** 22.84 71 *eP* P 05 38 07.7 -1.6
**RCLB Rio Claro- Sao** 23.03 75 *eP* P 05 38 11.1 -0.2
**MG03 Isla Dawson** 23.23 178 P P 05 38 13.9 +1.0
MG03 IAmb IAmb 05 38 25.5
comp=Z,44nm,0.8s
**VAO Valinhos** 23.26 77 *eP* P 05 38 12.5 -1.2
**EFI East Falkland** 23.31 158 *i* P P 05 38 13.3 -0.4
**PDRB Porto dos Gac** 23.43 39 *eP* P 05 38 15.6 +0.3
**ARAG Araguaiana, MT** 23.45 55 *eP* P 05 38 13.2 -2.3
**ATAH Atahualpa** 24.21 343 LR LR 05 45 47.0
comp=Z,415nm,22.0s,baz=171,slow=32
**PARB Paraibuna** 24.26 79 *eP* P 05 38 23.0 -0.2
**USHA Ushuaia** 24.30 175 P P 05 38 24.1 +1.0
comp=Z,40nm,0.8s,baz=351,slow=6.6,SNR=28
USHA LR LR 05 48 35.6
comp=Z,753nm,20.3s,baz=0.5,slow=38
**MG01 Puerto William** 24.47 174 P P 05 38 25.7 +1.1
MG01 IAmb IAmb 05 38 45.0
comp=Z,125nm,1.2s
**CLDB Colider** 24.55 40 *eP* P 05 38 25.5 -0.2
**IPMB Ipameri, GO** 24.72 65 *eP* P 05 38 26.6 -0.8
**MAN01 Angra dos Reis** 25.85 79 *eP* P 05 38 37.3 -0.2
**BSCB Bom Sucesso** 25.96 75 *eP* P 05 38 38.2 -0.4
**BDFB Brasilia** 26.27 61 P P 05 38 40.9 -0.5
comp=Z,45nm,0.8s,baz=232,slow=8.9,SNR=87
BDFB LR LR 05 50 09.3
comp=Z,2μm,18.3s,baz=233,slow=39
**BDFB Brasilia** 26.27 61 P P 05 38 40.8 -0.6
BDFB IAmb IAmb 05 38 42.0
comp=Z,43nm,0.8s
**TBTG Tabatinga, AM** 26.35 4 *eP* P 05 38 41.4 -0.6
**TBTG Tabatinga, AM** 26.35 4 *eP* P 05 38 42.3 +0.4
**SNDB Serra Nova Dou** 26.44 50 *eP* P 05 38 42.4 -0.5

DUB01 **Friburgo-RJ** 27.51 79 *e*P P 05 38 52.6 +0.1
NPGB **Novo Progresso** 27.99 36 *e*P P 05 38 55.6 -1.2
DIAM **Diamantina, MG** 28.17 71 *e*P P 05 38 58.8 +0.2
CAM01 **Campos-RJ** 28.22 79 *e*P P 05 38 58.7 -0.1
PEXB **Peixe** 28.39 55 *e*P P 05 39 00.2 -0.1
MACA **Manacapuru-AM** 29.21 23 *e*P P 05 39 07.3 -0.3
JANB **Januaria** 29.46 64 *e*P P 05 39 09.2 -0.7
ALF01 **Guarapari-ES** 29.52 78 *e*P P 05 39 10.4 +0.1
SJMB **Sao Joao De Ma** 30.01 74 *e*P P 05 39 14.5 -0.3
ITTB **Itaituba** 30.12 33 *e*P P 05 39 14.4 -1.2
RIB01 **Linhares ES** 30.38 76 *e*P P 05 39 17.8 -0.2
SDBA **SAO DESIDERIO** 30.64 60 *e*P P 05 39 20.1 -0.3
PTLC **Puerto Leguiza** 30.77 354 *e*P P 05 39 20.4 -1.0
SMTB **Santa Maria do** 31.18 51 *e*P P 05 39 25.3 +0.2
NAN01 **Guarapari, ES** 31.31 73 *e*P P 05 39 25.4 -0.8
OTAV **Otavalo** 31.37 347 P P 05 39 28.6 +1.4
OTAV pmax pmax
comp=Z,8.0nm,0.9s
OTAV **Otavalo** 31.37 347 P P 05 39 28.6 +1.4
OTAV **Otavalo** 31.37 347 *e*P P 05 39 33.7 +6.5
OTAV **Otavalo** 31.37 347 *e*P P 05 39 28.9 +1.8
PTGA **Pitinga** 31.73 23 LR LR 05 54 31.4
comp=Z,647nm,19.5s,baz=192,slow=41
PRPB **Parauapebas** 31.81 45 *e*P P 05 39 30.1 -0.5
GUA01 **Guaratinga, BA** 32.21 72 *e*P P 05 39 33.8 -0.4
FLOC **Florencia** 32.25 352 *e*P P 05 39 34.7 +0.2
GARC **Garzon, Huila** 32.83 353 *e*P P 05 39 40.4 +0.6
SOTA **Rioblanco** 32.92 351 *e*P P 05 39 42.3 +1.4
PCON **Cinco Dias** 33.08 351 *e*P P 05 39 46.1 +3.8
RPN **Rapa Nui** 33.09 266 LR LR 05 49 24.5
comp=Z,515nm,20.2s,baz=131,slow=30
CMC01 **Camacan, BA** 33.09 70 *e*P P 05 39 41.5 -0.4
POPC **Popayan, Colom** 33.33 351 *e*P P 05 39 44.2 +0.1
NBIT **Itapeh - BA** 33.40 69 *e*P P 05 39 44.9 +0.3
GDU01 **Guandu, BA** 33.96 67 *e*P P 05 39 48.9 -0.5
BOAV **Boa Vista** 34.50 20 *e*P P 05 39 54.2 +0.1
ORTC **Ortega, Tolima** 34.51 354 *e*P P 05 39 55.6 +1.4
VILC **Villavicencio,** 34.59 356 *e*P P 05 39 56.5 +1.5
PTGC **Puerto Gaitan,** 34.63 359 *e*P P 05 39 54.6 -0.5
YOTC **Yotoco, Valle** 34.70 352 *e*P P 05 39 56.5 +0.6
CHIC **Chingaza** 35.11 356 *e*P P 05 40 01.3 +1.5
NBPN **Ponto Novo - B** 35.19 63 *e*P P 05 39 59.7 -0.4
ROSC **El Rosal** 35.35 355 P P 05 40 03.8 +2.0
comp=Z,19nm,0.8s,baz=41,slow=18,SNR=8.7
ROSC **El Rosal** 35.35 355 P P 05 40 02.3 +0.4
ROSC pmax pmax
comp=Z,25nm,1.0s
ROSC **El Rosal** 35.35 355 P P 05 40 02.3 +0.4
ROSC IAmb IAmb 05 40 07.4
comp=Z,25nm,0.9s
ROSC **El Rosal** 35.35 355‖ *e*P P 05 40 13.7 +12
MCPB **Macapa, AP** 35.38 35 *e*P P 05 40 01.4 -0.3
GUY2C **Guyana, Caldas** 35.82 354 *e*P P 05 40 07.0 +1.1
TMAB **Tom-Au,PA,Br** 35.86 43 *e*P P 05 40 06.0 +0.2
NORC **Norcasia** 36.11 355 *e*P P 05 40 08.9 +0.9
SPBC **San Pablo de B** 36.14 355 *e*P P 05 40 08.0 -0.3
RUSC **La Rusia** 36.33 358 *e*P P 05 40 11.8 +1.4
CBOC **Ciudad Bolivar** 36.52 353 *e*P P 05 40 13.7 +2.1
HELC **Santa Helena** 36.79 354 *e*P P 05 40 14.6 +0.5
TAMC **Tame, Arauca** 36.85 360 *e*P P 05 40 12.7 -1.5
NBLA **Lagarto - SE** 36.97 65 *e*P P 05 40 14.3 -1.0
BARC **Barichara** 37.03 357 *e*P P 05 40 15.6 -0.5
PTBC **PUERTO BERRIO,** 37.05 355 *e*P P 05 40 13.7 -2.2
BRRC **Barranca, Sant** 37.57 357 *e*P P 05 40 17.5 -2.8
ROSB **Rosrio** 37.91 49 *e*P P 05 40 22.7 -0.5
ZARC **Zaragoza, Cauc** 38.02 355 P P 05 40 23.7 -0.4
ZARC IAmb IAmb 05 40 26.4
comp=Z,27nm,0.8s
ZARC **Zaragoza, Cauc** 38.02 355 *e*P P 05 40 23.2 -1.0
UREC **San Jos de Ur** 38.34 354 *e*P P 05 40 27.0 +0.2
NBMA **Muriti-CE** 38.50 60 *e*P P 05 40 28.2 0.0
NBPS **Pedro II - PI** 38.62 52 *e*P P 05 40 28.7 -0.4
OCAC **Ocana** 38.67 357 P P 05 40 28.8 -0.9
SOCV **Socops** 38.69 1 *e*P P 05 40 29.8 +0.1
NBAN **Anadia - AL** 38.95 65 *e*P P 05 40 31.3 -0.7
NBPB **Pedra_Branca-C** 39.12 57 *e*P P 05 40 32.7 -0.7
SDV **Santo Domingo** 39.29 2 LR LR 05 58 13.2
comp=Z,305nm,18.0s,baz=182,slow=38
SDV **Santo Domingo** 39.29 2 P P 05 40 34.1 -0.9
SDV **Santo Domingo** 39.29 2‖ *e*P P 05 40 46.0 +11
SDV **Santo Domingo** 39.29 2 *e*P P 05 40 34.6 -0.4
NBLV **Livramento - P** 39.89 62 *e*P P 05 40 39.9 0.0
MDP **Montagnes des** 39.90 30 LR LR 05 58 18.6
comp=Z,233nm,18.8s,baz=202,slow=38
NBMO **Morrinhos-CE** 40.35 54 *e*P P 05 40 43.0 -0.6
SJCC **San Jacinto, C** 40.43 355 P P 05 40 43.8 -0.5
NBCL **Cascavel-CE** 40.95 57 *e*P P 05 40 48.7 +0.1
BIRV **Birongo** 41.19 8 P P 05 40 49.8 -0.7
BIRV IAmb IAmb 05 40 51.7
comp=Z,43nm,0.9s
RCBR **Riachuelo** 41.65 61 *e*P P 05 40 55.8 +1.4
NBPV **Pedro Velho** 41.73 62 *e*P P 05 40 55.2 +0.2
MLPR **Magueyes Islan** 48.51 6 P P 05 41 47.1 -1.6
CRPR **Cabo Rojo, PR** 48.54 6 P P 05 41 47.9 -1.1
OBIP **Obispado Ponce** 48.63 6 P P 05 41 47.5 -2.1
CELP **Cerrillos** 48.66 6 P P 05 41 48.8 -1.1
SJG **San Juan** 48.74 7 P P 05 41 49.5 -0.9
SJG pmax pmax
comp=Z,73nm,0.9s
SJG **San Juan** 48.74 7 P P 05 41 49.5 -0.9
SJG **San Juan** 48.74 7 *e*P P 05 41 47.8 -2.6
MTP **Monte Pirata** 48.79 8 P P 05 41 49.5 -1.4
MTP IAmb IAmb 05 41 50.5
comp=Z,30nm,1.1s
SDD **Santo Domingo** 48.83 2 P P 05 41 51.0 -0.1
APG **El Apazote** 48.85 336 LR LR 05 58 06.9
comp=Z,129nm,20.4s,baz=196,slow=31
AOPR **Arecibo Observ** 48.91 6 P P 05 41 50.6 -1.3
GCPR **Guaynabo City** 48.94 7 P P 05 41 50.6 -1.4
CUPR **Culebra, Puert** 49.03 8 P P 05 41 51.1 -1.5
CUPR IAmb IAmb 05 41 52.4
comp=Z,16nm,0.8s
SC01 **Santiago de lo** 49.77 1 P P 05 41 58.3 0.0
BELA **Belgrano 2** 50.14 170 P P 05 42 00.9 +0.3
BELA IAmb IAmb 05 42 02.6
comp=Z,26nm,1.1s
VNA3 **Neumayer Olymp** 52.36 159 P P 05 42 17.4 +0.1
CMIG **Matias Romero** 52.45 332 LR LR 05 59 46.8
comp=Z,130nm,21.1s,baz=188,slow=30
VNA2 **Neumayer--Watz** 53.00 158 P P 05 42 22.4 +0.4
baz=304,slow=8.2
SNAA **Sanae** 54.59 159 P P 05 42 34.0 +0.3
SNAA **Sanae** 54.59 159 LR LR 06 03 54.1
comp=Z,296nm,21.4s,baz=292,slow=34
SNAA **Sanae** 54.59 159 *i* P P 05 42 33.7 0.0
SNAA pmax pmax
comp=Z,21nm,0.9s
SNAA **Sanae** 54.59 159 P P 05 42 33.8 +0.1
SNAA IAmb IAmb 05 42 34.7
comp=Z,21nm,0.7s
QSPA **South Pole Qui** 59.60 180 LR LR 06 09 39.9
comp=Z,92nm,18.4s,baz=176,slow=37
QSPA **South Pole Qui** 59.60 180 P P 05 43 09.8 +0.5
NHSC **New Hope** 63.90 352 P P 05 43 38.6 +0.3
baz=172
833A **Chaparral WMA,** 64.32 333 P P 05 43 42.1 +0.9
833A IAmb IAmb 05 43 43.5
comp=Z,26nm,1.0s
833A **Chaparral WMA,** 64.32 333 P P 05 43 41.8 +0.6
baz=154
GOGA **Godfrey** 64.66 349 P P 05 43 43.9 +0.6
baz=169
LRAL **Lakeview Retre** 64.96 346 P P 05 43 45.6 +0.4
baz=165
143A **Socs Landing,** 65.70 342 P P 05 43 50.7 +0.6
435B **Jarrell** 65.86 336 P P 05 43 51.4 +0.2
435B IAmb IAmb 05 44 02.7
comp=Z,15nm,1.1s
X51A **Calhoun** 66.03 348 P P 05 43 52.2 +0.1
KMSC **Kings Mountain** 66.05 351 P P 05 43 52.8 +0.5
baz=171
X48A **Hartselle** 66.34 346 P P 05 43 54.0 -0.2
X48A IAmb IAmb 05 44 04.1
comp=Z,22nm,0.9s
JCT **Junction City** 66.41 334 P P 05 43 55.2 +0.5
JCT pmax pmax
comp=Z,16nm,0.9s
JCT **Junction City** 66.41 334 P P 05 43 55.2 +0.5
JCT IAmb IAmb 05 43 56.5
comp=Z,16nm,0.8s
JCT **Junction City** 66.41 334 P P 05 43 54.4 -0.4
baz=154
Z41A **Richland Creek** 66.61 341 P P 05 43 56.6 +0.7
baz=160
WHTX **Lake Whitney,** 66.91 336 P P 05 43 57.9 0.0
baz=156
OXF **Oxford** 66.92 344 P P 05 43 57.4 -0.4
baz=163
TXAR **Lajitas Array** 66.98 330 P P 05 43 59.2 +0.8
comp=Z,3.2nm,0.8s,baz=152,slow=8.0,SNR=32
TXAR **Lajitas Array** 66.98 330 P P 05 43 58.7 +0.3
TX31 **Lajitas Ar. Si** 66.98 330 P P 05 43 58.9 +0.4
TX31 IAmb IAmb 05 44 00.3
comp=Z,11nm,0.8s
TX32 **Lajitas Array** 66.98 330 P P 05 43 58.6 +0.1
V51A **Loudon** 67.15 349 P P 05 43 59.2 0.0
V51A IAmb IAmb 05 44 08.5
comp=Z,12nm,0.9s
T59A **Double "B" Far** 67.47 355 P P 05 44 01.6 +0.4
T59A IAmb IAmb 05 44 19.2
comp=Z,31nm,1.4s
V48A **Smith Brothers** 67.54 347 P P 05 44 01.8 0.0
V48A IAmb IAmb 05 44 11.3
comp=Z,30nm,1.1s
CLTN **Cedars of Leba** 67.78 347 P P 05 44 03.4 +0.1
CLTN IAmb IAmb 05 44 12.8
comp=Z,14nm,1.0s
BLA **Blacksburg** 67.98 352 P P 05 44 04.2 -0.4
baz=172
MIAR **Mount Ida** 68.04 341 P P 05 44 04.9 0.0
baz=160
Z35A **Perchaven, San** 68.06 337 P P 05 44 05.9 +0.8
WVT **Waverly** 68.12 346 P P 05 44 05.1 -0.3
baz=165
W41B **Gary Mavity, V** 68.26 342 P P 05 44 06.2 -0.1
baz=161
ABTX **Abilene, Hawle** 68.27 335 P P 05 44 06.5 +0.1
baz=154
W39A **Magazine** 68.71 341 P P 05 44 09.8 +0.6
W39A **Magazine** 68.71 341 P P 05 44 09.5 +0.4
baz=160,SNR=14
LCAR **Lake Charles** 68.83 343 P P 05 44 09.6 -0.2
LCAR IAmb IAmb 05 44 11.6
comp=Z,11nm,0.7s
T45A **Paducah** 69.15 345 P P 05 44 11.6 -0.2
U40A **Yellville** 69.54 342 P P 05 44 14.2 -0.1
baz=161,SNR=8.4
MNTX **Cornudas Mount** 69.76 330 P P 05 44 13.9 -1.9
baz=149,SNR=9.8
WMOK **Wichita Mounta** 69.86 336 P P 05 44 15.5 -0.8
baz=155
TUL1 **Leonard** 69.97 339 P P 05 44 16.8 -0.1
baz=158,SNR=8.6
P52A **Corning** 70.58 351 P P 05 44 19.8 -0.8
baz=170
MSTX **Muleshoe** 70.65 333 P P 05 44 20.4 -0.9
baz=152,SNR=8.9
TVO **Taravao** 70.73 260 *e*T T 07 01 32.0
comp=Z,3.5nm,0.3s
CCM **Cathedral Cave** 70.74 344 P P 05 44 21.2 -0.4
baz=162
P49A **Miami Univ. Ec** 70.85 349 P P 05 44 21.4 -0.8
baz=168
PPT2 **Papeete2** 71.09 260 *e*LR LR 06 06 12.0
comp=Z,246nm,24.2s,baz=104
T35A **Sooner Cattle** 71.12 339 P P 05 44 24.4 +0.5
T35A IAmb IAmb 05 44 25.9
comp=Z,18nm,1.0s
SSPA **Standing Stone** 71.14 355 P P 05 44 23.9 0.0
baz=174
R40A **Maddies Statio** 71.21 343 P P 05 44 24.5 +0.1
ACSO **Alum Creek Sta** 71.28 351 P P 05 44 24.7 -0.1
baz=170
121A **Cookes Peak, D** 71.53 328 P P 05 44 28.1 +1.4
121A **Cookes Peak, D** 71.53 328 P P 05 44 27.2 +0.4
baz=148
O48B **Farmland** 71.63 349 P P 05 44 26.9 0.0
baz=168
M55A **Ridgway** 72.03 354 P P 05 44 29.3 0.0
N49A **Columbus Grove** 72.13 350 P P 05 44 29.8 -0.1
N49A IAmb IAmb 05 44 39.3
comp=Z,36nm,1.1s
M54A **Oil Creek Stat** 72.15 354 P P 05 44 29.7 -0.3
baz=173
M53A **WI Miller and** 72.19 353 P P 05 44 30.0 -0.2
baz=172
P40A **Paris** 72.33 344 P P 05 44 31.1 0.0
P40A IAmb IAmb 05 44 32.8
comp=Z,31nm,0.8s
BNM **Barren Site** 72.39 330 P P 05 44 33.0 +1.0
P38A **Dawn** 72.79 342 P P 05 44 34.0 +0.1
P38A IAmb IAmb 05 44 35.2
comp=Z,21nm,0.9s
ANMO **Albuquerque** 73.00 331 *ce*P P 05 44 36.1 +0.6
ANMO pmax pmax
comp=Z,7.0nm,1.3s
ANMO **Albuquerque** 73.00 331 P P 05 44 35.0 -0.4
baz=149
LIC **Lamto** 73.40 72 *e*P P 05 44 37.6 -0.5
comp=Z,64nm,0.8s
214A **Organ Pipe Nat** 73.46 324 P P 05 44 37.9 -0.2
baz=144
TIC **Toumodi** 73.65 72 *e*P P 05 44 39.3 -0.3
KIC **Kosan Boka** 73.72 72 *e*P P 05 44 39.6 -0.4
comp=Z,43nm,0.7s
DBIC **Dimbokro** 73.79 72 P P 05 44 40.5 +0.1
comp=Z,41nm,0.8s,baz=237,slow=5.8,SNR=46
DBIC LR LR 06 14 44.9
comp=Z,350nm,19.5s,baz=228,slow=34
DBIC **Dimbokro** 73.79 72 P P 05 44 39.9 -0.5
CBKS **Cedar Bluff** 73.88 337 P P 05 44 40.4 0.0
baz=155
LONY **Lake Ozonia** 74.93 358 P P 05 44 47.0 +0.7
baz=177
SDCO **Great Sand Dun** 75.02 333 P P 05 44 47.8 +0.4
baz=150
S22A **4UR Ranch, Cre** 75.55 332 P P 05 44 50.5 0.0
baz=149,SNR=6.2
WUAZ **Wupatki** 75.66 327 P P 05 44 51.6 +0.7
baz=145,SNR=5.6
BGNE **Belgrade** 75.74 340 P P 05 44 52.2 +1.1
baz=157
MVCO **Mesa Verde** 75.79 330 P P 05 44 52.3 +0.5
baz=148,SNR=8.7
Q24A **Divide** 75.94 334 P P 05 44 52.8 +0.2
baz=151,SNR=9.0
PDMCI **Parker Dam,Lak** 76.01 325 P P 05 44 54.2 +1.5
baz=143
MONP2 **Monument Peak** 76.06 322 P P 05 44 54.2 +0.9
baz=141
BC3 **Big Chuckawall** 76.16 324 P P 05 44 54.3 +0.6
baz=142,SNR=6.1
SUR **Sutherland** 76.17 119 LR LR 06 15 15.4
comp=Z,171nm,18.4s,baz=226,slow=33
MAW **Mawson** 76.31 164 P P 05 44 54.8 +0.8
comp=Z,34nm,0.7s,baz=235,slow=9.0,SNR=6.2
MAW LR LR 06 18 23.2
comp=Z,229nm,18.1s,baz=239,slow=36
MAW **Mawson** 76.31 164 IAmb IAmb 05 44 59.2
comp=Z,31nm,1.3s
IRM **Iron Mountain** 76.40 324 P P 05 44 55.8 +0.8
baz=142
TPFO **Pinon Flats** 76.64 323 P P 05 44 57.6 +1.1
baz=141
PFO **Pinyon Flats O** 76.64 323 LR LR 06 12 34.3
comp=Z,119nm,20.6s,baz=144,slow=31
PFO **Pinyon Flats O** 76.64 323 P P 05 44 57.5 +1.0
baz=141
BELC **Belle Mtn. Jos** 76.71 323 P P 05 44 57.8 +0.9
baz=142
PV13 **Radium Mtn., P** 76.73 331 P P 05 44 58.0 +0.9
SMCO **Snowmass** 76.84 333 P P 05 44 59.1 +1.3
SMCO IAmb IAmb 05 45 00.4
comp=Z,20nm,0.8s
ISCO **Idaho Springs** 76.84 334 P P 05 44 58.4 +0.6
baz=150,SNR=8.0
MURC **Murrieta** 77.02 322 P P 05 44 59.3 +0.8
baz=141
GMRC **Granite Mounta** 77.15 324 P P 05 44 60.0 +0.6
baz=132,SNR=6.2
ECSD **EROS Data Cent** 77.45 342 P P 05 45 00.8 +0.1
baz=158
HEC **Hector,Ludlow** 77.53 324 P P 05 45 02.2 +0.8
baz=142,SNR=6.9
TUQ **Turquoise Moun** 77.80 324 P P 05 45 03.9 +0.9
baz=142,SNR=7.6
SPMN **Marine on St.** 77.91 345 P P 05 45 04.0 +0.9
baz=161
N23A **Red Feather La** 77.92 334 P P 05 45 03.9 +0.2
baz=150
RAR **Rarotonga** 77.97 252 LR LR 06 10 18.8
comp=Z,181nm,18.4s,baz=348,slow=29
GSC **Goldstone, Bar** 78.14 324 P P 05 45 05.6 +0.7
baz=141,SNR=5.3
SZCU **Shurtz Canyon** 78.15 328 P P 05 45 06.0 +1.0
O20A **White River Ci** 78.16 332 P P 05 45 05.8 +0.8
baz=148,SNR=9.6
SRU **San Rafael Swe** 78.25 330 P P 05 45 05.8 +0.3
SRU pmax pmax
comp=Z,13nm,0.9s
SRU **San Rafael Swe** 78.25 330 P P 05 45 05.8 +0.3
Q16A **Castle Valley** 78.37 330 P P 05 45 07.3 +1.1
EDW2 **Edwards Air Fo** 78.43 323 P P 05 45 07.0 +0.6
baz=140
LRMC **Laurel Mtn Rad** 78.73 323 P P 05 45 08.9 +0.8
baz=141
MPMC **Manual Prospec** 79.08 324 P P 05 45 10.9 +0.8
baz=141
FURC **Furnace Creek,** 79.08 324 P P 05 45 10.9 +1.2
baz=142
TPNV **Topopah Spring** 79.15 325 P P 05 45 11.4 +1.0
baz=142,SNR=13
ISA **Isabella, Lake** 79.28 323 P P 05 45 12.2 +1.2
baz=140,SNR=10
PKM **Mcpherson Peak** 79.40 321 P P 05 45 12.9 +1.0
baz=139
K22A **Casper** 79.66 335 P P 05 45 14.6 +1.5
baz=150
CWC **Cottonwood Cre** 79.67 324 P P 05 45 14.4 +1.1
baz=141
VES **Vestal, Richgr** 79.73 323 P P 05 45 14.0 +0.6
baz=140,SNR=7.4
GRAC **Grapevine Rang** 79.74 324 P P 05 45 14.4 +0.9
baz=141
TSUM **Tsumeb** 79.82 106 LR LR 06 16 39.7
comp=Z,185nm,19.4s,baz=312,slow=33
TSUM **Tsumeb** 79.82 106 P P 05 45 15.2 +0.6
TSUM IAmb IAmb 05 45 29.8
comp=Z,26nm,0.9s
R11A **Troy Canyon, C** 79.93 326 P P 05 45 15.7 +1.0
baz=143
RSSD **Black Hills** 80.06 337 P P 05 45 16.6 +1.4
baz=152
DUG **Dugway, Tooele** 80.14 329 P P 05 45 16.4 +0.7
DUG pmax pmax
comp=Z,9.0nm,0.9s
DUG **Dugway, Tooele** 80.14 329 P P 05 45 16.4 +0.7
DUG **Dugway, Tooele** 80.14 329 P P 05 45 16.4 +0.7
baz=145,SNR=9.2
EYMN **Ely** 80.22 347 P P 05 45 16.4 +0.6
baz=163
TIN **Tinemaha, Big** 80.22 324 P P 05 45 16.8 +0.6
baz=141
D32A **Dogwood Acres,** 80.71 343 P P 05 45 18.4 0.0
D32A IAmb IAmb 05 45 19.4
comp=Z,28nm,0.8s
BW06 **Boulder Array** 80.92 333 P P 05 45 20.0 +0.1
baz=148
PDAR **Pinedale Array** 80.92 333 P P 05 45 20.1 +0.2
comp=Z,1.8nm,0.7s,baz=136,slow=5.6,SNR=14
NVAR **Mina Array Bea** 81.32 325 P P 05 45 22.8 +0.6
comp=Z,4.7nm,0.8s,baz=158,slow=6.3,SNR=30
NVAR LR LR 06 17 25.7
comp=Z,75nm,18.7s,baz=181,slow=33
NVAR **Mina Array Bea** 81.32 325 P P 05 45 23.0 +0.9
BOSA **Boshof** 81.34 118 P P 05 45 22.6 0.0
comp=Z,16nm,0.8s,baz=241,slow=4.0,SNR=32
BOSA LR LR 06 17 30.8
comp=Z,183nm,19.4s,baz=206,slow=33
BOSA **Boshof** 81.34 118 P P 05 45 22.5 -0.1
BOSA IAmb IAmb 05 45 24.1
comp=Z,17nm,0.8s
AGMN **Agassiz Nation** 81.51 344 P P 05 45 22.8 +0.2
baz=159
ELK **Elko** 81.68 328 LR LR 06 17 07.3
comp=Z,125nm,19.5s,baz=153,slow=32
MDND **Maddock** 82.06 341 P P 05 45 25.8 +0.3
baz=156
TORD **Torodi Ar. Bea** 82.75 70 P P 05 45 29.6 -0.3
comp=Z,13nm,0.8s,baz=255,slow=4.2,SNR=48
TORD **Torodi Ar. Bea** 82.75 70 P P 05 45 29.6 -0.3
LAO **LASA Array** 83.05 337 P P 05 45 30.7 -0.1
LAO IAmb IAmb 05 45 32.2
comp=Z,13nm,1.0s
LAO **LASA Array** 83.05 337 P P 05 45 31.1 +0.3
baz=150
ULM **Lac du Bonnet** 83.34 345 P P 05 45 31.6 -0.6
comp=Z,17nm,0.8s,baz=173,slow=3.3,SNR=20
CASY **Casey** 83.39 181 P P 05 45 33.5 +1.1
LBTB **Lobatse** 83.42 115 LR LR 06 20 23.4
comp=Z,295nm,18.1s,baz=219,slow=34
HLID **Hailey** 83.58 330 P P 05 45 34.3 +0.6
HLID **Hailey** 83.58 330 P P 05 45 34.4 +0.6
baz=144
ORV **Oroville** 83.79 324 P P 05 45 35.8 +1.1
ORV pmax pmax
comp=Z,13nm,1.0s
ORV **Oroville** 83.79 324 P P 05 45 35.8 +1.1
ORV IAmb IAmb 05 45 37.5
comp=Z,13nm,0.9s
MCMT **McKenzie Canyo** 83.95 332 P P 05 45 36.8 +1.0
DGMT **Dagmar** 83.96 339 P P 05 45 36.3 +0.9
baz=152
LRM **Limekiln Ridge** 84.61 333 P P 05 45 39.7 +0.6
SCHQ **Schefferville** 85.20 3 P P 05 45 41.4 -0.1
comp=Z,13nm,1.0s,baz=142,slow=5.5,SNR=8.2
SCHQ LR LR 06 25 02.2
comp=Z,72nm,20.0s,baz=218,slow=37
J08A **Circle Bar Ran** 85.22 328 P P 05 45 42.8 +0.8
J08A IAmb IAmb 05 45 44.4
comp=Z,19nm,0.9s
M04C **Macdoel** 85.63 325 P P 05 45 44.6 +0.5
baz=138
M02C **Callahan** 85.85 324 P P 05 45 45.7 +0.6
baz=138
RPZ **Rata Peaks** 86.43 220 LR LR 06 16 29.5
comp=Z,113nm,18.6s,baz=138,slow=30
J05D **Fort Rock, OR** 86.46 326 P P 05 45 49.2 +1.0
baz=139
K02D **Willamette Mer** 87.22 324 P P 05 45 53.3 +1.4
baz=137
I05D **Terrebonne, OR** 87.30 327 P P 05 45 53.0 +0.9
baz=139
MATP **Matopo** 88.08 113 LR LR 06 22 58.5
comp=Z,146nm,18.4s,baz=226,slow=34
H04D **Lebanon** 88.11 326 P P 05 45 56.7 +0.8
baz=138
NEW **Newport** 88.47 332 LR LR 06 22 55.9
comp=Z,115nm,18.4s,baz=152,slow=34
MDT **Midelt** 89.43 51 LR LR 06 24 19.5
comp=Z,106nm,20.1s,baz=236,slow=34
LSZ **Lusaka** 90.53 108 LR LR 06 21 55.4
comp=Z,177nm,21.9s,baz=178,slow=32
LSZ **Lusaka** 90.53 108 P P 05 46 08.5 +0.2
LSZ pmax pmax
comp=Z,12nm,1.2s
LSZ **Lusaka** 90.53 108 P P 05 46 08.5 +0.2
LSZ IAmb IAmb 05 46 20.3
comp=Z,12nm,1.1s
ESDC **Sonseca Array** 93.99 46 P P 05 46 23.4 -0.1
comp=Z,1.9nm,1.0s,baz=264,slow=7.2,SNR=5.6
ESDC LR LR 06 29 24.1
comp=Z,193nm,18.1s,baz=242,slow=36
SFJD **Kangerlussuaq** 98.61 8 LR LR 06 33 25.5
comp=Z,65nm,18.5s,baz=240,slow=37
YKA **Yellowknife Ar** 98.98 341 P P 05 46 44.9 -0.5
comp=Z,1.2nm,0.7s,baz=140,slow=4.4,SNR=21
YKA PKiKP PKiKP 05 51 17.4 +1.5
comp=Z,0.1nm,0.5s,baz=132,slow=1.5,SNR=2.2
DZM **Mont Dzumac** 103.50 234 *e*LR LR 06 21 12.3
comp=Z,220nm,23.9s
DAWY **Dawson** 108.16 335 P PKiKP 05 51 33.2 +0.5
baz=123
M27K **Edge Creek, AK** 108.20 332 P PKiKP 05 51 33.4 +0.4
baz=121
GERES **GERESS Array B** 109.53 44 PKiKP PKiKP 05 51 36.5 +0.6
comp=Z,0.8nm,0.8s,baz=192,slow=1.2,SNR=6.3
ILAR **Eielson Array** 111.34 334 PKiKP PKiKP 05 51 38.1 -0.5
comp=Z,0.8nm,0.9s,baz=38,slow=1.7,SNR=5.2
TOLK **Toolik Lake Re** 113.93 337 P PKiKP 05 51 44.1 +0.5
baz=113
H21K **Melozitna Rive** 113.98 333 P PKiKP 05 51 44.4 +0.7
baz=111
NACGM **Naroch** 119.12 41 *i* PKP PKiKP 05 52 00.8 +6.9
AKASG **Malin Array Be** 119.64 46 PKP PKPdf 05 51 53.6 -1.3
comp=Z,3.6nm,0.9s,baz=266,slow=2.5,SNR=16
BRTR **Keskin Array B** 119.86 59 PKP PKPdf 05 51 54.4 -1.6

comp=Z,1.2nm,0.8s,baz=184,slow=3.7,SNR=4.7
**ASAR Alice Springs 120.72 207** PKP **PKPdf 05 51 56.9 -1.3**
comp=Z,1.7nm,0.7s,baz=149,slow=2.3,SNR=16
ASAR PKKPbc **PKKPbc 06 02 02.8 +0.5**
comp=Z,0.8nm,0.8s,baz=344,slow=2.9,SNR=8.5
**WRA Warramunga Arr 123.86 210** PKP **PKPdf 05 52 02.4 -1.8**
comp=Z,6.3nm,0.8s,baz=158,slow=1.6,SNR=32
WRA PKKPbc **PKKPbc 06 01 50.6 +0.6**
comp=Z,0.7nm,0.8s,baz=351,slow=4.1,SNR=4.8
**WRAB Tennant Creek 123.86 210** *i* PKIKP **PKPdf 05 52 01.1 -3.1**
**OBN Obninsk 124.72 42** *e*PKIKP **PKPdf 05 52 03.3 -1.2**
OBN *e* 05 52 12.7
OBN *e* 05 53 51.8
OBN pmax pmax
comp=Z,10.0nm,1.0s
**LPSR Galich'ya Gora 125.90 45** *e*PKIKP **PKPdf 05 52 06.1 -0.8**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
**H11S2 WAKE ISLAND Hyl 126.09 271** T T 08 10 56.2
baz=116,slow=75,SNR=278
**H11S1 WAKE ISLAND Hyl 126.11 271** T T 08 10 53.8
baz=116,slow=75,SNR=220
**H11S3 WAKE ISLAND Hyl 126.11 271** T T 08 10 59.7
baz=116,slow=75,SNR=166
**H11N3 WAKE ISLAND Hyl 126.42 273** T T 08 11 13.4
baz=116,slow=75,SNR=53
**H11N1 WAKE ISLAND Hyl 126.44 273** T T 08 11 14.9
baz=116,slow=75,SNR=19
**H11N2 WAKE ISLAND Hyl 126.44 273** T T 08 11 25.8
baz=116,slow=75,SNR=103
**KLMR Klimovskoe 126.46 35** *e*PKIKP **PKPdf 05 52 07.0 -0.7**
KLMR pmax pmax
comp=Z,19nm,1.0s
**KLMR Klimovskoe 126.46 35** *e*PKPdf **PKPdf 05 52 07.0 -0.7**
KLMR AMP 05 52 09.1
comp=Z,19nm,1.0s
**SHA1 Shidzhatmaz 127.32 56** *i* PKIKP **PKPdf 05 52 08.3 -2.0**
**KIV Kislovodsk 127.37 56** *e*PKIKP **PKPdf 05 52 08.7 -1.5**
KIV pmax pmax
comp=Z,8.0nm,1.0s
**KBZ Khabaz 127.49 56** PKP **PKiKP 05 52 10.7 -0.1**
comp=Z,3.0nm,0.9s,baz=199,slow=3.9,SNR=4.2
**VRH Novokhoyorsk 127.52 47** *e*PKIKP **PKPdf 05 52 08.9 -1.1**
VRH pmax pmax
comp=Z,8.0nm,0.9s
**PRGR Permogore 129.34 33** *e*PKIKP **PKPdf 05 52 12.5 -0.7**
**BILL Bilibino 129.93 335** *e*PKIKP **PKiKP 05 52 14.7 -0.3**
BILL *e* 05 52 23.9
BILL *e* 05 54 26.5
BILL *e*PPP PPP 05 57 16.2
BILL pmax pmax
comp=Z,8.0nm,1.0s
**KIRV Kirov 131.66 37***c* *i* PKIKP **PKiKP 05 52 19.7 +1.1**
**ARU Arti 136.93 38** *i* PKIKP **PKPdf 05 52 28.4 +0.7**
ARU 05 55 09.1
**SEY Seymchan 137.25 332** *i* PKIKP **PKPdf 05 52 27.9 -0.1**
**TIXI Tiksi 137.43 351** *i* PKIKP **PKPdf 05 52 27.2 -0.9**
**AB31 Akbulak array 139.27 49** *i* PKHKP PKPpre 05 52 22.4
**NRIK Noril'sk 139.45 11** *i* PKIKP **PKPdf 05 52 31.2 -0.7**
**MA2 Magadan 139.49 328** *i* PKIKP **PKPdf 05 52 32.3 0.0**
**BRVK Borovoye 144.46 40** *i* PKIKP PKPbc 05 52 39.9 0.0
**YAK Yakutsk 145.65 342** *e*PKP2 **PKPdf 05 52 42.9 -0.2**
YAK *e* 05 56 04.4
YAK *e* 05 59 52.7
YAK pmax pmax
comp=Z,120nm,1.0s
YAK pmax pmax
comp=N,12nm,1.3s
YAK pmax pmax
comp=E,12nm,1.2s
YAK pmax pmax
comp=Z,201nm,5.9s
YAK pmax pmax
comp=N,152nm,6.6s
YAK pmax pmax
comp=E,143nm,5.9s
**BRZS Berezniki 147.04 44** *e*PKP2 **PKPbc 05 52 48.6 +0.6**
**BRZS Berezniki 147.04 44** *e*PKPab **PKPbc 05 52 48.7 +0.6**
baz=44
**BRLS Borolday 147.05 57** *e*PKP2 **PKPbc 05 52 48.3 0.0**
**BRLS Borolday 147.05 57** *e*PKPab **PKPbc 05 52 48.3 0.0**
baz=58
**OTUK Ortayu 147.46 47** PKIKP **PKPdf 05 52 47.3 +0.6**
**DZA Taraz 148.15 57** *e*PKP2 **PKPbc 05 52 50.7 -0.6**
**DZA Taraz 148.15 57** *e*PKPbc **PKPbc 05 52 50.7 -0.6**
baz=57
**YSS Yuzh-Sakhalins 148.93 311** *i* PKIKP **PKPdf 05 52 48.2 -0.8**
**BTLS Baital 149.57 52** *e*PKP2 **PKPbc 05 52 54.9 +0.2**
**BTLS Baital 149.57 52** *e*PKPbc **PKPbc 05 52 54.9 +0.2**
baz=52
BTLS *e*PKPab **PKPab 05 52 59.5 -0.4**
baz=52
**EKS2 Erkin-Say 149.97 57** P **PKiKP 05 52 56.9 0.0**
SNR=8.8
**AML Almayashu 150.01 58** P **PKiKP 05 52 57.3 0.0**
SNR=8.8
**KURBB Kurchatov Arra 150.12 39** PKIKP **PKPbc 05 52 55.0 -0.9**
**USP Ospenovka 150.35 55** P **PKiKP 05 52 57.2 -0.3**
SNR=17
**SGDS Sogindy 150.39 55** *e*PKPbc **PKPbc 05 52 56.7 -0.2**
baz=55
**AAK Ala-Archa 150.49 57** P **PKiKP 05 52 58.1 +0.1**
SNR=22
**CHMS Chumysh 150.59 56** P **PKiKP 05 52 58.2 +0.2**
SNR=9.7
**UCH Uchtor 150.59 57** P **PKiKP 05 52 59.1 +0.5**
SNR=11
**KBK Karagaybulak 150.81 56** P **PKiKP 05 52 58.8 +0.1**
SNR=10
**ZALV Zalesovo Beam 151.16 29** PKPbc **PKPbc 05 52 58.3 +0.1**
comp=E,94nm,0.8s,baz=284,slow=2.2,SNR=12
ZALV PKPab **pPKPbc 05 53 07.7 -0.7**
comp=E,90nm,0.8s,baz=292,slow=3.4,SNR=21
**SEM Semipalatinsk 151.17 39** *e*PKIKP **PKPbc 05 52 58.1 -0.6**
**SEM Semipalatinsk 151.17 39** *e*PKPbc **PKPbc 05 52 58.1 -0.6**
baz=39
SEM *e*PKPab **PKPab 05 53 06.6 +0.1**
baz=39
**TKM2 Tokmak 2 151.21 56** P **PKPbc 05 52 59.3 +0.3**
SNR=12
**KUU Kurty 151.47 53** *e*PKIKP **PKPbc 05 52 58.8 -0.5**
**KUU Kurty 151.47 53** *e*PKPbc **PKPbc 05 52 58.8 -0.5**
baz=54
KUU *e*PKPab **sPKPdf 05 53 06.9 0.0**
baz=54
**ULHL Ulahol 151.84 57** P **PKiKP 05 53 01.1 +0.2**
SNR=13
**CHKK Chushkaly 151.93 53** *e*PKPbc **PKPbc 05 52 59.5 -0.9**
baz=53
**TNSS Tian-Shan 152.14 55** *e*PKPbc **PKiKP 05 53 01.8 0.0**
baz=55
**KSH Kashi 152.16 63** PKPbc **PKiKP 05 53 01.5 0.0**
KSH pPKP PKPab 05 53 11.0 0.0
KSH sPKP 05 53 14.8
KSH PP **PP 05 56 41.3 -2.1**
**MDOK Medeo 152.17 55** *e*PKIKP **PKPbc 05 53 00.7 -0.4**
**MDOK Medeo 152.17 55** *e*PKPbc **PKPbc 05 53 00.8 -0.4**
baz=55
MDOK *e*PKPab **PKPab 05 53 10.6 -0.4**
baz=55
**SATY Saty 153.15 54** *e*PKIKP **PKPbc 05 53 02.5 -0.8**
**SATY Saty 153.15 54** *e*PKPbc **PKPbc 05 53 02.5 -0.8**
baz=54
**ZEA Zeya 153.16 335** *e*PKIKP **PKPbc 05 53 02.1 -0.6**
ZEA pmax pmax
comp=Z,10.0nm,1.2s
**KPKS Kokpek 153.22 53** *e*PKIKP **PKPbc 05 53 02.9 -0.5**
**KPKS Kokpek 153.22 53** *e*PKPbc **PKPbc 05 53 02.9 -0.5**
baz=53
**MK31 Makanchi Array 154.19 44** *i* PKIKP **PKPdf 05 52 56.1 -1.0**
**MKAR Makanchi Array 154.19 44** PKP **PKPdf 05 52 57.2 +0.1**
comp=Z,1.6nm,0.9s,baz=49,slow=2.2,SNR=12
MKAR PKPbc **PKPbc 05 53 04.8 -0.5**
comp=Z,6.7nm,0.8s,baz=312,slow=2.0,SNR=33
MKAR PKPab **PKPab 05 53 19.1 -0.1**
comp=Z,6.0nm,0.8s,baz=288,slow=2.7,SNR=9.8
**MJAR Matsushiro Arr 154.50 291** PKPbc **PKPbc 05 53 05.9 -0.4**
comp=Z,1.2nm,0.4s,baz=48,slow=1.9,SNR=4.4
MJAR PKPab **PKPab 05 53 21.0 +0.2**
comp=Z,8.0nm,0.9s,baz=106,slow=1.4,SNR=7.8
**ZSN Zaisan 155.34 40** *e*PKP2 **PKPab 05 53 24.4 +0.4**
**ZSN Zaisan 155.34 40** *e*PKPab **PKPab 05 53 24.4 +0.4**
baz=41
**WMQ Urumqi 158.99 45** PKP **PKPdf 05 53 03.8 +0.4**
WMQ pPKP pPKPdf 05 53 13.3 -0.4
WMQ PKPab **PKPab 05 53 41.3 +1.4**
WMQ PP **PP 05 57 22.4 +1.5**
WMQ AMB AMB
comp=Z,130nm,4.9s
**ZAK Zakamensk 159.90 9** *e*PKP2 **PKPab 05 53 44.0 +0.4**
ZAK pmax pmax
comp=Z,13nm,1.2s
**KSRS Korea Array 162.43 298** PKP **PKPdf 05 53 06.8 -0.4**
comp=Z,1.1nm,0.6s,baz=121,slow=0.4,SNR=4.7
**SONM Songino Array 162.75 4** PKP **PKPdf 05 53 07.2 -0.2**
comp=Z,1.6nm,1.0s,baz=163,slow=1.5,SNR=5.2
SONM PKPab **PKPab 05 53 57.1 +0.9**
comp=Z,5.7nm,0.9s,baz=314,slow=3.8,SNR=15
**CMAR Chiang Mai Arr 165.17 143** PKP **PKPdf 05 53 09.3 -1.1**
comp=Z,1.0nm,0.4s,baz=231,slow=1.9,SNR=5.8
CMAR PKPab **PKPab 05 54 07.3 -0.1**
comp=Z,5.6nm,0.9s,baz=231,slow=5.8,SNR=19
**GOMU GeErMu 167.39 60** PKP **PKPdf 05 53 13.1 +1.0**
GOMU pPKP pPKPdf 05 53 21.5 -0.8
GOMU sPKP 05 53 25.6
GOMU AMB AMB
comp=Z,61nm,4.2s
**GTA Gaotai 168.78 36** *e*PKP **PKPdf 05 53 13.3 +0.7**
GTA pPKP pPKPdf 05 53 22.8 -0.1
GTA PKPab **PKPab 05 54 24.1 +1.0**
**HHC Hu-ho-hao-te 169.47 347** *e*PKP **PKPdf 05 53 12.4 -0.6**
**BTO Baotou 169.95 353** *e*P PKPdf 05 52 59.6 -14
**NJ2 Nanjing 170.91 282** *e*PKP **PKPdf 05 53 13.8 -0.1**
**PZH PanZhiHua 172.88 124** PKP **PKPdf 05 53 15.0 -0.2**
**LZH Lanzhou 173.37 34** *e*PKP **PKPdf 05 53 08.8 -6.3**
**GYA Guiyang 175.59 160** ⇓PKP **PKPdf 05 53 16.0 -0.1**
**XAN Xi'an 176.56 352** PKP **PKPdf 05 53 16.3 +0.3**
XAN pPKP sPKPdf 05 53 30.3 +0.6

*IDC **19** 06:06:33.9±0.7, 52.°09N×169.°78W, h0km, mb4.1/27, mb1 4.3/29, mb1mx4.2/58, mbtmp4.1/29, ML3.8/2, MS3.8/17, Ms1 3.8/17, ms1mx3.3/101 Error ellipse: s-maj=21.3km s-min=12.0km az=2.0*
*AEIC **19** 06:06:36±2.4, 51.°91N±0.°07×169.°67W±0.°09, h22km±5km, ML3.8/25, mb4.4/43(NEIC), Error ellipse: s-maj=10.6km s-min=7.6km az=151.0*
*NEIC **19** 06:06:37.9±2.0, 51.°97N±0.°08×169.°71W±0.°09, h27km±6km, Error ellipse: s-maj=12.4km s-min=7.7km az=160.0*
**ISC 19 06:06:37.9±0.5, 51.°95N±0.°07×169.°70W±0.°05, h30km, n221, σt1§16/200, mb4.2/39, MS3.8/15, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **1.15** | **27** | | **Pn** | **06 06 57.2** | **-0.6** |
| **NIKH** | **Nikolski High** | **1.15** | **27** | | **Sb** | **06 07 13.7** | **+0.1** |
| **NIKH** | **Nikolski High** | **1.15** | **27** | P | **Pn** | **06 06 57.3** | **-0.6** |
| | baz=205,SNR=14 | | | | | | |
| **OKSP** | **Okmok Steeple** | **1.56** | **33** | | **Pn** | **06 07 03.5** | **-0.1** |
| **OKFG** | **Magazine Ridge** | **1.82** | **36** | | **Pn** | **06 07 07.6** | **+0.5** |
| OKFG | | | | | **Sn** | **06 07 29.5** | **+0.2** |
| **MREP** | **Makushin Rep't** | **2.58** | **43** | | **Pn** | **06 07 18.2** | **+0.5** |
| **MSW** | **Makushin Switc** | **2.65** | **41** | | **Pn** | **06 07 19.1** | **+0.6** |
| **UNV** | **Unalaska Valle** | **2.71** | **44** | | **Pn** | **06 07 19.6** | **+0.2** |
| **UNV** | **Unalaska Valle** | **2.71** | **44** | | **Sn** | **06 07 52.5** | **+1.4** |
| **UNV** | **Unalaska Valle** | **2.71** | **44** | P | **Pn** | **06 07 19.5** | **+0.2** |
| | baz=226,SNR=9.4 | | | | | | |
| **MTBL** | **Makushin Table** | **2.73** | **41** | | **Pn** | **06 07 21.1** | **+1.4** |
| **ATKA** | **Atka Island** | **2.78** | **277** | | **Pn** | **06 07 21.1** | **+0.8** |
| **KOKL** | **Mount Kliuchef** | **2.80** | **279** | | **Pn** | **06 07 22.1** | **+1.5** |
| **AKBBA** | **Akutan Broad B** | **3.13** | **45** | | **Pn** | **06 07 26.2** | **+1.1** |
| **AKUT** | **Akutan** | **3.23** | **46** | Pn | **Pn** | **06 07 26.2** | **-0.2** |
| **AKSA** | **Akutan Strait** | **3.26** | **46** | | **Pn** | **06 07 26.9** | **0.0** |
| **GSMY** | **Great Sitkin M** | **3.93** | **274** | | **Pn** | **06 07 36.1** | **0.0** |
| **GSTR** | **Great Sitkin T** | **3.93** | **275** | Pn | **Pn** | **06 07 36.8** | **+0.7** |
| **WECS** | **Westdahl Cape** | **3.93** | **47** | | **Pn** | **06 07 37.3** | **+1.2** |
| **GSTD** | **Great Sitkin T** | **3.98** | **274** | | **Pn** | **06 07 37.4** | **+0.5** |
| **ADK** | **Adak** | **4.32** | **272** | Pn | **Pn** | **06 07 41.7** | **+0.2** |
| **SSLS** | **Shishaldin Sou** | **4.40** | **49** | | **Pn** | **06 07 43.8** | **+1.2** |
| **KIWB** | **Kanaga Island** | **4.61** | **272** | | **Pn** | **06 07 46.1** | **+0.6** |
| **FALS** | **False Pass** | **4.75** | **50** | Pn | **Pn** | **06 07 48.0** | **+0.6** |
| **TAPA** | **Tanaga Point A** | **5.03** | **272** | | **Pn** | **06 07 51.7** | **+0.5** |
| **SDPT** | **Sand Point** | **6.46** | **55** | Pn | **Pn** | **06 08 11.8** | **+1.0** |
| **SDPT** | **Sand Point** | **6.46** | **55** | P | **Pn** | **06 08 11.2** | **+0.4** |
| | baz=242 | | | | | | |
| **CNBA** | **Chernabura Isl** | **6.70** | **61** | Pn | **Pn** | **06 08 14.2** | **+0.2** |
| **CHNA** | **Chernabura Isl** | **6.70** | **61** | P | **Pn** | **06 08 14.8** | **+0.6** |
| | baz=248 | | | | | | |
| **CHGN** | **Chignik** | **7.93** | **52** | Pn | **Pn** | **06 08 31.3** | **+0.4** |
| **CHGN** | **Chignik** | **7.93** | **52** | P | **Pn** | **06 08 31.5** | **+0.5** |
| | baz=241 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **9.95** | **281** | LR | LR | 06 12 24.8 | |
| | comp=Z,342nm,21.5s,baz=112,slow=36 | | | | | | |
| **P18K** | **Big Mountain,** | **11.04** | **42** | P | **Pn** | **06 09 14.3** | **+0.6** |
| | baz=234 | | | | | | |
| **O18K** | **Koktuh Hills** | **11.33** | **40** | P | **Pn** | **06 09 18.3** | **+0.7** |
| | baz=232 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.45** | **53** | Pn | **Pn** | **06 09 17.3** | **-1.8** |
| | 2.2nm,0.3s,baz=264,slow=8.9,SNR=28 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.45** | **53** | Pn | **Pn** | **06 09 17.7** | **-1.4** |
| **Q19K** | **Cape Douglas,** | **11.47** | **46** | Pn | **Pn** | **06 09 19.4** | **0.0** |
| **O19K** | **Port Ailsworth** | **11.89** | **40** | P | **Pn** | **06 09 26.0** | **+0.8** |
| | baz=233 | | | | | | |
| **GAMB** | **Gambell** | **11.91** | **356** | P | **Pn** | **06 09 27.8** | **+2.4** |
| | baz=174 | | | | | | |
| **RSO** | **Redoubt South** | **12.68** | **41** | | **Pn** | **06 09 37.5** | **+1.3** |
| **ANM** | **Nome** | **12.85** | **8** | P | **Pn** | **06 09 40.6** | **+2.3** |
| | baz=192 | | | | | | |
| **M19K** | **Big River Lodg** | **12.97** | **34** | P | **Pn** | **06 09 40.8** | **+0.8** |
| | baz=226 | | | | | | |
| **L19K** | **White Mountain** | **13.01** | **32** | P | **Pn** | **06 09 41.9** | **+1.4** |
| | baz=225 | | | | | | |
| **BRSE** | **Bradley Lake S** | **13.17** | **46** | P | **Pn** | **06 09 42.9** | **+0.3** |
| | baz=242 | | | | | | |
| **TTA** | **Tatalina** | **13.21** | **28** | Pn | **Pn** | **06 09 43.1** | **-0.1** |
| **L20K** | **Farewell, AK** | **13.55** | **33** | P | **Pn** | **06 09 49.5** | **+1.8** |
| | baz=226 | | | | | | |
| **TNA** | **Tin City** | **13.68** | **3** | | **Pn** | **06 09 49.7** | **+0.1** |
| **TNA** | **Tin City** | **13.68** | **3** | P | **Pn** | **06 09 51.1** | **+1.6** |
| | baz=185 | | | | | | |
| **SEW** | **Seward** | **13.91** | **46** | | **Pn** | **06 09 51.9** | **-0.8** |
| **SEW** | **Seward** | **13.91** | **46** | P | **Pn** | **06 09 51.6** | **-1.0** |
| | baz=243 | | | | | | |
| **O22K** | **Cooper Landing** | **13.97** | **45** | | **Pn** | **06 09 51.5** | **-1.9** |
| **O22K** | **Cooper Landing** | **13.97** | **45** | P | **Pn** | **06 09 52.2** | **-1.3** |
| | baz=241 | | | | | | |
| **K20K** | **Telida** | **14.11** | **30** | Pn | **Pn** | **06 09 55.4** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **14.27** | **42** | Pn | **Pn** | **06 09 56.5** | **-1.1** |
| **RC01** | **Rabbit Creek A** | **14.27** | **42** | P | **Pn** | **06 09 55.9** | **-1.7** |
| | baz=239 | | | | | | |
| **J20K** | **Nowinta River** | **14.70** | **28** | P | **Pn** | **06 10 04.3** | **+0.8** |
| | baz=221 | | | | | | |
| **PWL** | **Port Wells** | **14.75** | **44** | Pn | **Pn** | **06 10 02.0** | **-2.2** |
| **PWL** | **Port Wells** | **14.75** | **44** | P | **Pn** | **06 10 02.1** | **-2.0** |
| | baz=242 | | | | | | |
| **CAST** | **Castle Rocks** | **14.79** | **32** | Pn | **Pn** | **06 10 05.9** | **+1.2** |
| **KNK** | **Knik Glacier** | **14.96** | **42** | Pn | **Pn** | **06 10 04.8** | **-2.2** |
| **KNK** | **Knik Glacier** | **14.96** | **42** | P | **Pn** | **06 10 05.5** | **-1.5** |
| | baz=240 | | | | | | |
| **CHUM** | **Lake Minchumin** | **15.04** | **31** | P | **Pn** | **06 10 07.3** | **-0.7** |
| | baz=225,SNR=5.6 | | | | | | |
| **KTH** | **Kantishna Hill** | **15.27** | **33** | | **Pn** | **06 10 11.9** | **+0.8** |
| KTH | | | | IAmb | IAmb | 06 10 28.2 | |
| | comp=Z,47nm,1.7s | | | | | | |
| **GLI** | **Glacier Island** | **15.30** | **45** | P | **Pn** | **06 10 10.3** | **-1.2** |
| | baz=244 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **15.61** | **32** | Pn | **Pn** | **06 10 16.1** | **+0.5** |
| BPAW | | | | IAmb | IAmb | 06 10 20.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **15.61** | **32** | P | **Pn** | **06 10 14.4** | **-1.1** |
| | baz=227,SNR=8.9 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **15.64** | **42** | P | **Pn** | **06 10 14.0** | **-2.0** |
| | baz=241 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **15.77** | **48** | P | **Pn** | **06 10 15.0** | **-2.5** |
| | baz=247 | | | | | | |
| **WAT6** | **Susitna Watana** | **15.86** | **39** | P | **Pn** | **06 10 17.8** | **-1.0** |
| | baz=238 | | | | | | |
| **MCK** | **McKinley** | **16.07** | **35** | P | **Pn** | **06 10 21.6** | **+0.2** |
| | baz=232 | | | | | | |
| **I21K** | **Tanana** | **16.07** | **28** | P | **Pn** | **06 10 22.8** | **+1.4** |
| | baz=223 | | | | | | |
| **KLU** | **Klutina** | **16.08** | **44** | P | **Pn** | **06 10 19.2** | **-2.4** |
| | baz=244,SNR=9.8 | | | | | | |
| **H21K** | **Melozitna Rive** | **16.20** | **26** | P | **Pn** | **06 10 24.5** | **+1.4** |
| | baz=220 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **16.25** | **42** | | **Pn** | **06 10 22.2** | **-1.6** |
| **M24K** | **Tolsona, Glenn** | **16.25** | **42** | P | **Pn** | **06 10 22.0** | **-1.7** |
| | baz=242 | | | | | | |
| **DHY** | **Denali Highway** | **16.26** | **38** | | **Pn** | **06 10 23.4** | **-0.6** |
| **DHY** | **Denali Highway** | **16.26** | **38** | P | **Pn** | **06 10 23.1** | **-0.9** |
| | baz=237 | | | | | | |
| **MLY** | **Manley** | **16.33** | **29** | P | **Pn** | **06 10 24.0** | **-0.8** |
| | baz=226,SNR=13 | | | | | | |
| **HMT** | **Hamilton** | **16.38** | **49** | Pn | **Pn** | **06 10 23.8** | **-1.6** |
| **BMRM** | **Bremner River** | **16.45** | **47** | Pn | **Pn** | **06 10 23.7** | **-2.5** |
| BMRM | | | | IAmb | IAmb | 06 10 33.3 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **BMRM** | **Bremner River** | **16.45** | **47** | P | **Pn** | **06 10 24.2** | **-2.0** |
| | baz=248 | | | | | | |
| **BERG** | **Berg Lake** | **16.66** | **49** | Pn | **Pn** | **06 10 27.8** | **-1.1** |
| BERG | | | | IAmb | IAmb | 06 10 37.1 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **N25K** | **Chitina, Valde** | **16.70** | **45** | P | **Pn** | **06 10 27.6** | **-1.8** |
| | baz=246 | | | | | | |
| **HARP** | **HAARP** | **16.81** | **42** | P | **Pn** | **06 10 29.8** | **-1.0** |
| | baz=243 | | | | | | |
| **WRH** | **Wood River Hil** | **16.82** | **33** | | **Pn** | **06 10 29.9** | **-1.0** |
| WRH | | | | IAmb | IAmb | 06 11 21.9 | |
| | comp=Z,30nm,1.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **16.84** | **30** | P | **Pn** | **06 10 30.7** | **-0.4** |
| | baz=228 | | | | | | |
| **PAX** | **Paxson** | **16.95** | **40** | P | **Pn** | **06 10 32.8** | **+0.2** |
| | baz=240 | | | | | | |
| **HDA** | **Harding Lake** | **17.18** | **35** | P | **Pn** | **06 10 32.5** | **-2.8** |
| | baz=234 | | | | | | |
| **H23K** | **Yukon River** | **17.25** | **29** | P | **Pn** | **06 10 35.8** | **-0.4** |
| | baz=226 | | | | | | |
| **ISLE** | **Juniper Island** | **17.37** | **49** | P | **Pn** | **06 10 37.2** | **-0.7** |
| ISLE | | | | IAmb | IAmb | 06 10 49.7 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **17.41** | **34** | P | **Pn** | **06 10 35.9** | **-2.4** |
| | comp=Z,0.2nm,0.3s,baz=224,slow=11,SNR=22 | | | | | | |
| ILAR | | | | LR | LR | 06 17 47.8 | |
| | comp=Z,228nm,20.4s,baz=236,slow=39 | | | | | | |
| **MESA** | **MESA** | **17.43** | **51** | P | **Pn** | **06 10 39.4** | **+0.6** |
| **MESA** | **MESA** | **17.43** | **51** | P | **Pn** | **06 10 38.2** | **-0.5** |
| | baz=254 | | | | | | |
| **YAH** | **Yahtse** | **17.58** | **50** | P | **Pn** | **06 10 40.7** | **+0.1** |
| YAH | | | | IAmb | IAmb | 06 11 27.2 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **RIDG** | **Independent Ri** | **17.58** | **38** | P | **Pn** | **06 10 39.4** | **-1.1** |
| | baz=239 | | | | | | |
| **M26K** | **Nabesna, AK** | **17.72** | **43** | | **Pn** | **06 10 41.1** | **-1.0** |
| **M26K** | **Nabesna, AK** | **17.72** | **43** | P | **Pn** | **06 10 41.1** | **-1.0** |
| | baz=246 | | | | | | |
| **H24K** | **Noodor Dome** | **17.76** | **30** | P | **Pn** | **06 10 42.9** | **+0.3** |
| H24K | | | | IAmb | IAmb | 06 11 10.7 | |
| | comp=Z,46nm,1.9s | | | | | | |
| **H24K** | **Noodor Dome** | **17.76** | **30** | P | **Pn** | **06 10 42.5** | **-0.1** |
| | baz=229 | | | | | | |
| **BARN** | **Barnard Glacie** | **17.83** | **48** | P | **Pn** | **06 10 43.2** | **-0.4** |
| BARN | | | | IAmb | IAmb | 06 11 24.2 | |
| | comp=Z,37nm,1.5s | | | | | | |
| **L26K** | **Log Cabin Wild** | **17.84** | **41** | P | **Pn** | **06 10 42.5** | **-1.1** |
| | baz=244 | | | | | | |
| **SCRK** | **Sand Creek** | **18.03** | **38** | P | **Pn** | **06 10 44.6** | **-1.4** |
| | baz=240 | | | | | | |
| **COLD** | **Coldfoot** | **18.08** | **25** | P | **Pn** | **06 10 45.2** | **-1.3** |
| | baz=222,SNR=8.5 | | | | | | |
| **M27K** | **Edge Creek, AK** | **18.18** | **44** | P | **Pn** | **06 10 47.4** | **-0.5** |
| **M27K** | **Edge Creek, AK** | **18.18** | **44** | P | **Pn** | **06 10 46.6** | **-1.2** |
| | baz=248 | | | | | | |
| **J26L** | **Joseph Creek** | **18.46** | **37** | P | **P** | **06 10 49.3** | **-1.6** |
| | baz=239 | | | | | | |
| **L27K** | **Beaver Creek,** | **18.48** | **42** | P | **P** | **06 10 50.1** | **-1.0** |
| **L27K** | **Beaver Creek,** | **18.48** | **42** | P | **P** | **06 10 50.6** | **-0.5** |
| | baz=246 | | | | | | |
| **PNL** | **Peninsula** | **18.56** | **54** | P | **P** | **06 10 51.4** | **-0.7** |
| | baz=259 | | | | | | |
| **YUK3** | **Moose Creek** | **18.60** | **47** | P | **P** | **06 10 51.8** | **-0.9** |
| | baz=251,SNR=6.4 | | | | | | |
| **BVCY** | **Beaver Creek** | **18.64** | **45** | P | **P** | **06 10 52.0** | **-0.8** |
| | baz=249,SNR=5.8 | | | | | | |
| **YUK4** | **Talbot Arm** | **19.31** | **49** | P | **P** | **06 11 00.5** | **+0.2** |
| | baz=255,SNR=18 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **19.31** | **22** | | **P** | **06 10 59.6** | **-0.6** |
| **TOLK** | **Toolik Lake Re** | **19.31** | **22** | P | **P** | **06 11 00.1** | **0.0** |
| | baz=220 | | | | | | |
| **YUK6** | **Outpost Mounta** | **19.34** | **50** | P | **P** | **06 11 01.2** | **+0.4** |
| | baz=256 | | | | | | |
| **EGAK** | **Eagle** | **19.50** | **38** | P | **P** | **06 11 01.6** | **-0.6** |
| **EGAK** | **Eagle** | **19.50** | **38** | P | **P** | **06 11 02.1** | **-0.1** |
| | baz=242 | | | | | | |
| **HYT** | **Haines Junctio** | **19.72** | **51** | P | **P** | **06 11 04.8** | **-0.1** |
| | baz=258,SNR=21 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.78** | **286** | P | **P** | **06 11 04.9** | **-0.4** |
| | comp=Z,2.2nm,0.3s,baz=86,slow=14,SNR=35 | | | | | | |
| **BMAR** | **Burnt Mountain** | **19.80** | **29** | P | **P** | **06 11 05.0** | **-0.5** |
| **BILL** | **Bilibino** | **19.88** | **333** | | **P** | **06 11 07.2** | **+0.8** |
| **DAWY** | **Dawson** | **19.88** | **41** | P | **P** | **06 11 05.1** | **-1.4** |
| **DAWY** | **Dawson** | **19.88** | **41** | P | **P** | **06 11 05.9** | **-0.6** |
| | baz=247 | | | | | | |
| **A21K** | **Barrow** | **20.31** | **12** | P | **P** | **06 11 10.2** | **-0.8** |
| | baz=204 | | | | | | |
| **M30M** | **Minto, Yukon** | **20.48** | **46** | P | **P** | **06 11 14.1** | **+1.1** |
| | baz=254 | | | | | | |
| **J29M** | **Klondike Camp** | **20.51** | **40** | P | **P** | **06 11 14.1** | **+0.8** |
| | baz=247 | | | | | | |
| **SKAG** | **Skagway** | **20.58** | **55** | | **P** | **06 11 14.8** | **+0.9** |
| SKAG | | | | IAmb | IAmb | 06 11 25.1 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **SKAG** | **Skagway** | **20.58** | **55** | P | **P** | **06 11 14.9** | **+0.9** |
| | baz=264 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **20.84** | **38** | P | **P** | **06 11 16.1** | **-0.6** |
| | baz=245 | | | | | | |
| **WHY** | **Whitehorse** | **20.96** | **52** | P | Pn | 06 11 20.1 | -0.8 |
| WHY | | | | IAmb | IAmb | 06 11 23.9 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **WHY** | **Whitehorse** | **20.96** | **52** | P | **P** | **06 11 18.5** | **+0.3** |
| | baz=261,SNR=8.1 | | | | | | |
| **M31M** | **Drury Creek, Y** | **21.48** | **48** | P | **P** | **06 11 24.6** | **+0.9** |
| M31M | | | | IAmb | IAmb | 06 11 32.3 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **M31M** | **Drury Creek, Y** | **21.48** | **48** | P | **P** | **06 11 24.3** | **+0.6** |
| | baz=258,SNR=7.8 | | | | | | |
| **EPYK** | **Eagle Plains** | **21.86** | **36** | P | **P** | **06 11 26.4** | **-1.4** |
| | baz=245,SNR=5.3 | | | | | | |
| **P33M** | **Teslin, Yukon** | **21.92** | **53** | P | **P** | **06 11 29.4** | **+0.9** |
| P33M | | | | IAmb | IAmb | 06 11 36.3 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **P33M** | **Teslin, Yukon** | **21.92** | **53** | P | **P** | **06 11 28.7** | **+0.3** |
| | baz=264,SNR=24 | | | | | | |
| **FARO** | **Faro, Yukon** | **21.96** | **48** | P | **P** | **06 11 29.7** | **+0.8** |
| | baz=259 | | | | | | |
| **SEY** | **Seymchan** | **22.81** | **314** | P | **P** | **06 11 36.8** | **-1.0** |
| | comp=Z,4.5nm,0.8s,baz=95,slow=10,SNR=19 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **22.99** | **47** | P | **P** | **06 11 39.9** | **+0.2** |
| | baz=260,SNR=12 | | | | | | |
| **MA2** | **Magadan** | **23.21** | **305** | P | **P** | **06 11 41.6** | **-0.3** |
| | comp=Z,3.5nm,0.3s,baz=89,slow=9.6,SNR=8.6 | | | | | | |
| **MA2** | **Magadan** | **23.21** | **305** | P | **P** | **06 11 42.7** | **+0.7** |
| MA2 | | | | IAmb | IAmb | 06 11 44.8 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **23.81** | **33** | P | **P** | **06 11 46.0** | **-1.7** |
| | comp=Z,3.7nm,0.5s,baz=242,slow=8.7,SNR=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| H11N2 | **WAKE ISLAND Hy** | **37.00** | **218** | T | | T | | 06 53 24.5 | |
| | baz=24,slow=76,SNR=3.4 | | | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **37.00** | **218** | T | | T | | 06 53 29.7 | |
| | baz=24,slow=76,SNR=3.7 | | | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **37.02** | **218** | T | | T | | 06 53 34.8 | |
| | baz=24,slow=76,SNR=3.4 | | | | | | | | |
| EGMT | **Eagleton** | **37.79** | **71** | P | | P | | **06 13 51.1** | **-0.1** |
| | baz=299 | | | | | | | | |
| NVAR | **Mina Array Bea** | **37.87** | **90** | P | | P | | **06 13 54.5** | **+2.4** |
| | comp=Z,0.2nm,0.3s,baz=275,slow=11,SNR=2.4 | | | | | | | | |
| EUNU | **Eureka** | **38.18** | **16** | P | | P | | **06 13 54.6** | **+0.5** |
| H11S1 | **WAKE ISLAND Hy** | **38.19** | **218** | T | | T | | 06 55 09.6 | |
| | baz=23,slow=76,SNR=15 | | | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **38.20** | **218** | T | | T | | 06 55 21.7 | |
| | baz=23,slow=76,SNR=10 | | | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **38.20** | **218** | T | | T | | 06 55 11.7 | |
| | baz=23,slow=76,SNR=9.0 | | | | | | | | |
| ELK | **Elko** | **38.37** | **85** | LR | | LR | | 06 26 32.0 | |
| | comp=Z,86nm,22.0s,baz=230,slow=31 | | | | | | | | |
| USRK | **Ussuriysk Ar.** | **38.78** | **282** | LR | | LR | | 06 30 12.9 | |
| | comp=Z,104nm,20.5s,baz=54,slow=37 | | | | | | | | |
| BW06 | **Boulder Array** | **40.69** | **78** | P | | P | | **06 14 16.3** | **+0.7** |
| | baz=305 | | | | | | | | |
| PDAR | **Pinedale Array** | **40.69** | **78** | P | | P | | **06 14 16.8** | **+1.2** |
| | comp=Z,1.3nm,0.7s,baz=299,slow=2.8,SNR=11 | | | | | | | | |
| PDAR | **Pinedale Array** | **40.69** | **78** | P | | P | | **06 14 16.5** | **+0.9** |
| O20A | **White River Ci** | **43.03** | **81** | P | | P | | **06 14 34.1** | **-0.7** |
| | baz=307 | | | | | | | | |
| MDND | **Maddock** | **43.74** | **66** | P | | P | | **06 14 40.9** | **+0.7** |
| | baz=303 | | | | | | | | |
| ULM | **Lac du Bonnet** | **44.53** | **62** | P | | P | | **06 14 46.5** | **0.0** |
| | comp=Z,4.8nm,0.8s,baz=278,slow=4.8,SNR=5.2 | | | | | | | | |
| KSRS | **Korea Array** | **45.25** | **277** | P | | P | | **06 14 53.2** | **+1.0** |
| | comp=Z,1.6nm,0.8s,baz=53,slow=7.3,SNR=5.6 | | | | | | | | |
| AGMN | **Agassiz Nation** | **45.60** | **64** | P | | P | | **06 14 54.4** | **-0.5** |
| | baz=304 | | | | | | | | |
| TUC | **Tucson** | **46.50** | **91** | P | | P | | **06 15 02.8** | **+0.5** |
| | baz=313 | | | | | | | | |
| NRIK | **Noril'sk** | **46.70** | **332** | P | | P | | **06 15 03.4** | **+0.1** |
| | comp=Z,2.3nm,0.6s,baz=81,slow=7.8,SNR=3.5 | | | | | | | | |
| NRIK | **Noril'sk** | **46.70** | **332** | IAmb | | IAmb | | 06 16 14.1 | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| ECSD | **EROS Data Cent** | **47.81** | **69** | P | | P | | **06 15 11.0** | **-1.4** |
| | baz=307 | | | | | | | | |
| MNTX | **Cornudas Mount** | **50.26** | **88** | P | | P | | **06 15 32.1** | **+0.8** |
| | baz=314 | | | | | | | | |
| SUMG | **Summit** | **51.24** | **17** | *i* P | | P | | **06 15 38.0** | **-0.5** |
| SONM | **Songino Array** | **51.34** | **301** | P | | P | | **06 15 40.3** | **+1.0** |
| | comp=Z,1.1nm,0.7s,baz=56,slow=7.6,SNR=8.7 | | | | | | | | |
| SONM | | | | LR | | LR | | 06 40 55.2 | |
| | comp=Z,106nm,18.0s,baz=351,slow=40 | | | | | | | | |
| SONM | **Songino Array** | **51.34** | **301** | IAmb | | IAmb | | 06 15 40.7 | |
| | comp=Z,2.8nm,1.1s | | | | | | | | |
| HHC | **Hu-ho-hao-te** | **52.88** | **291** | *e*P | | P | | **06 15 51.8** | **+1.0** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,150nm,8.1s | | | | | | | | |
| TX31 | **Lajitas Ar. Si** | **52.96** | **88** | P | | P | | **06 15 52.4** | **+0.8** |
| TX32 | **Lajitas Array** | **52.96** | **88** | P | | P | | **06 15 52.7** | **+1.2** |
| TX32 | | | | IAmb | | IAmb | | 06 16 10.2 | |
| | comp=Z,14nm,1.8s | | | | | | | | |
| TXAR | **Lajitas Array** | **52.96** | **88** | P | | P | | **06 15 52.6** | **+1.1** |
| | comp=Z,1.2nm,0.8s,baz=294,slow=5.0,SNR=9.8 | | | | | | | | |
| TXAR | **Lajitas Array** | **52.96** | **88** | P | | P | | **06 15 52.1** | **+0.6** |
| SCHQ | **Schefferville** | **55.88** | **43** | P | | P | | **06 16 12.7** | **+0.4** |
| | comp=Z,3.6nm,0.8s,baz=305,slow=5.7,SNR=5.4 | | | | | | | | |
| SCHQ | | | | LR | | LR | | 06 42 53.2 | |
| | comp=Z,99nm,20.2s,baz=82,slow=39 | | | | | | | | |
| ZALV | **Zalesovo Beam** | **57.59** | **318** | LR | | LR | | 06 42 04.6 | |
| | comp=Z,59nm,18.4s,baz=16,slow=37 | | | | | | | | |
| ARCES | **ARCESS Array B** | **58.32** | **354** | P | | P | | **06 16 29.2** | **-0.1** |
| | comp=Z,4.8nm,1.0s,baz=357,slow=9.9,SNR=2.0 | | | | | | | | |
| ARCES | | | | LR | | LR | | 06 44 06.3 | |
| | comp=Z,128nm,18.2s,baz=248,slow=39 | | | | | | | | |
| GTA | **Gaotai** | **60.49** | **297** | *e*P | | P | | 06 16 56.4 | +12 |
| GTA | | | | pP | | pwP | | 06 17 00.5 | +2.8 |
| GTA | | | | sP | | sP | | 06 17 03.1 | +7.0 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.4s | | | | | | | | |
| KURK | **Kurchatov** | **62.55** | **318** | P | | P | | **06 16 58.1** | **-0.3** |
| KURK | | | | IAmb | | IAmb | | 06 18 04.7 | |
| | comp=Z,3.6nm,0.8s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **62.66** | **318** | P | | P | | **06 16 59.4** | **+0.2** |
| | comp=Z,31nm,0.5s,baz=43,slow=6.7,SNR=7.9 | | | | | | | | |
| WMQ | **Urumqi** | **63.63** | **308** | *e*P | | P | | **06 17 06.6** | **+0.8** |
| WMQ | | | | pP | | pP | | 06 17 14.8 | +0.8 |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| MKAR | **Makanchi Array** | **63.94** | **313** | P | | P | | **06 17 06.7** | **-1.2** |
| | comp=Z,1.2nm,1.0s,baz=55,slow=6.7,SNR=6.5 | | | | | | | | |
| ARU | **Arti** | **64.90** | **333** | P | | P | | **06 17 13.1** | **-0.7** |
| | comp=Z,1.1nm,0.3s,baz=344,slow=9.5,SNR=4.2 | | | | | | | | |
| ARU | **Arti** | **64.90** | **333** | IAmb | | IAmb | | 06 17 13.5 | |
| | comp=Z,17nm,1.6s | | | | | | | | |
| KLMR | **Klimovskoe** | **65.14** | **345** | *e*P | | P | | **06 17 12.0** | **-3.3** |
| KLMR | | | | AMP | | | | 06 17 14.5 | |
| | comp=Z,10.0nm,1.3s | | | | | | | | |
| KIRV | **Kirov** | **65.32** | **339** | LR | | LR | | 06 49 44.8 | |
| | comp=Z,98nm,19.5s,baz=296,slow=40 | | | | | | | | |
| GOMU | **GeErMu** | **65.54** | **298** | P | | P | | **06 17 19.3** | **+0.5** |
| GOMU | | | | pP | | pP | | 06 17 23.0 | -4.0 |
| GOMU | | | | PcP | | **PcP** | | **06 17 44.6** | **-5.8** |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,110nm,4.6s | | | | | | | | |
| FINES | **FINESS Array B** | **66.25** | **352** | P | | P | | **06 17 21.5** | **-1.0** |
| | comp=Z,3.4nm,0.8s,baz=69,slow=6.9,SNR=6.7 | | | | | | | | |
| NB2 | **NORSAR Subarra** | **67.36** | **360** | P | | P | | **06 17 29.4** | **-0.2** |
| | comp=Z,3.6nm,0.9s,baz=1.4,slow=6.9 | | | | | | | | |
| NOA | **NORSAR Array B** | **67.36** | **360** | P | | P | | **06 17 28.8** | **-0.8** |
| | comp=Z,1.8nm,1.0s,baz=1.5,slow=6.4,SNR=4.4 | | | | | | | | |
| PZH | **PanZhiHua** | **68.74** | **286** | P | | P | | **06 17 39.8** | **+0.9** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,150nm,4.8s | | | | | | | | |
| AKTO | **Aktyubinsk** | **70.27** | **330** | P | | P | | **06 17 47.2** | **-0.6** |
| | comp=Z,3.7nm,0.7s,baz=43,slow=1.6,SNR=8.9 | | | | | | | | |
| AKTO | | | | LR | | LR | | 06 52 35.1 | |
| | comp=Z,100nm,18.8s,baz=314,slow=39 | | | | | | | | |
| AAK | **Ala-Archa** | **70.65** | **315** | P | | P | | **06 17 49.8** | **-0.7** |
| | comp=Z,1.9nm,0.7s,baz=196,slow=4.7,SNR=6.8 | | | | | | | | |
| AAK | **Ala-Archa** | **70.65** | **315** | P | | P | | **06 17 50.1** | **-0.4** |
| AAK | | | | IAmb | | IAmb | | 06 17 52.6 | |
| | comp=Z,2.7nm,0.9s | | | | | | | | |
| ABKAR | **Akbulak array** | **70.68** | **328** | P | | P | | **06 17 49.5** | **-0.9** |
| KKAR | **Karatay Array** | **71.96** | **318** | P | | P | | **06 17 57.8** | **-0.5** |
| KSH | **Kashi** | **72.51** | **312** | P | | P | | **06 18 05.6** | **+3.9** |
| KSH | | | | pP | | sP | | 06 18 12.4 | -0.7 |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| RAR | **Rarotonga** | **73.36** | **170** | LR | | LR | | 06 45 04.1 | |
| | comp=Z,58nm,21.3s,baz=329,slow=31 | | | | | | | | |
| AKASG | **Malin Array Be** | **76.47** | **348** | P | | P | | **06 18 23.7** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=16,slow=5.9,SNR=4.4 | | | | | | | | |
| AKASG | **Malin Array Be** | **76.47** | **348** | IAmb | | IAmb | | 06 19 41.6 | |
| | comp=Z,4.6nm,1.6s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **76.51** | **283** | P | | P | | **06 18 26.4** | **+1.3** |
| | comp=Z,1.0nm,0.3s,baz=27,slow=6.3,SNR=5.2 | | | | | | | | |
| GERES | **GERESS Array B** | **79.54** | **358** | P | | P | | **06 18 41.8** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=23,slow=8.7,SNR=4.4 | | | | | | | | |
| KBZ | **Khabaz** | **80.62** | **337** | P | | P | | **06 18 48.6** | **+1.4** |
| | comp=Z,2.5nm,0.9s,baz=50,slow=2.0,SNR=4.7 | | | | | | | | |
| BATI | **Baumata** | **84.07** | **245** | LR | | LR | | 06 55 13.3 | |
| | comp=Z,51nm,18.3s,baz=303,slow=35 | | | | | | | | |
| WRA | **Warramunga Arr** | **86.58** | **231** | P | | P | | **06 19 17.6** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=39,slow=6.3,SNR=6.8 | | | | | | | | |
| ASAR | **Alice Springs** | **89.97** | **230** | P | | P | | **06 19 34.3** | **+0.2** |
| | comp=Z,2.4nm,0.7s,baz=26,slow=4.6,SNR=23 | | | | | | | | |

**IDC 19 06:12:12.9±63.0, 17°.00S×176°.29W, h579km±66km, mb3.1/3, mb1 3.4/4, mb1mx2.9/34, mbtmp4.2/4, Error ellipse: s-maj=1045.0km s-min=135.3km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | **5.46** | **261** | P | P | 06 13 48.4 | 0.0 |
| | 4.5nm,0.3s,baz=121,slow=23,SNR=22 | | | | | | |
| STKA | **Stephens Creek** | **40.84** | **241** | P | P | 06 19 05.7 | +0.3 |
| | 0.9nm,0.5s,baz=90,slow=5.1,SNR=3.4 | | | | | | |
| WRA | **Warramunga Arr** | **46.79** | **258** | P | P | 06 19 51.4 | -0.2 |
| | 0.6nm,0.4s,baz=97,slow=6.8,SNR=13 | | | | | | |
| ASAR | **Alice Springs** | **46.99** | **253** | P | P | 06 19 52.8 | -0.3 |
| | 4.8nm,0.5s,baz=88,slow=8.0,SNR=72 | | | | | | |

**IDC 19 06:40:04.3±1.6, 2°.16N×128°.13E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.6/33, mbtmp3.8/4, Error ellipse: s-maj=132.1km s-min=21.1km az=70.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **22.80** | **165** | P | P | 06 45 09.5 | +0.7 |
| | 1.2nm,0.4s,baz=344,slow=10,SNR=18 | | | | | | |
| ASAR | **Alice Springs** | **26.28** | **168** | P | P | 06 45 40.6 | -1.1 |
| | 0.4nm,0.5s,baz=354,slow=8.5,SNR=5.9 | | | | | | |
| SONM | **Songino Array** | **49.23** | **341** | P | P | 06 48 54.1 | -0.6 |
| | 0.5nm,0.6s,baz=156,slow=7.3,SNR=3.5 | | | | | | |
| MKAR | **Makanchi Array** | **59.63** | **325** | P | P | 06 50 10.8 | +0.5 |
| | 1.3nm,0.6s,baz=113,slow=8.0,SNR=22 | | | | | | |

**WEL 19 07:22:53.7±0.3, 44°S±2°×17°3E±°, h11km±2km, M3.8/29, ML4.0/32, MLv3.8/29, Error ellipse: s-maj=0.0km s-min=0.0km az=123.6, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | **McQueen's Vall** | **0.21** | **217** | P | Pg | 07 22 58.8 | +0.6 |
| MQZ | | | | S | Sg | 07 23 02.0 | +0.7 |
| OKCZ | **Okains Bay** | **0.25** | **138** | P | Pb | 07 23 00.8 | +0.5 |
| AKCZ | **Akaroa Harbour** | **0.34** | **170** | P | Pb | 07 23 02.1 | +0.3 |
| AKCZ | | | | S | Sb | 07 23 07.6 | +0.4 |
| AMCZ | **Amberley** | **0.38** | **340** | P | Pb | 07 23 02.1 | -0.4 |
| AMCZ | | | | S | Sb | 07 23 08.0 | -0.4 |
| RACZ | **Rakaia** | **0.54** | **249** | P | Pb | 07 23 04.8 | -0.3 |
| GVZ | **Greta Valley S** | **0.59** | **15** | P | Pb | 07 23 06.5 | +0.5 |
| GVZ | | | | S | Sb | 07 23 15.7 | +1.3 |
| OXZ | **Oxford** | **0.61** | **290** | P | Pg | 07 23 05.6 | -0.1 |
| OXZ | | | | S | Sg | 07 23 14.1 | +0.3 |
| WACZ | **Wakanui South** | **0.83** | **240** | P | Pb | 07 23 10.4 | +0.4 |
| WACZ | | | | S | Sb | 07 23 21.9 | +0.7 |
| LTZ | **Lake Taylor** | **0.86** | **331** | P | Pb | 07 23 10.7 | 0.0 |
| LTZ | | | | S | Sb | 07 23 22.5 | +0.3 |
| MHCZ | **Mount Hutt** | **0.92** | **270** | P | Pb | 07 23 11.6 | -0.1 |
| MHCZ | | | | S | Sb | 07 23 24.2 | +0.3 |
| KHZ | **Kahutara** | **1.23** | **25** | P | Pn | 07 23 16.1 | -0.7 |
| ARCZ | **Arundel** | **1.27** | **251** | P | Pn | 07 23 16.7 | -0.7 |
| ARCZ | | | | S | Sb | 07 23 32.6 | -1.4 |
| INZ | **Inchbonnie** | **1.30** | **308** | P | Pn | 07 23 17.9 | +0.2 |
| RPZ | **Rata Peaks** | **1.30** | **262** | P | Pn | 07 23 17.3 | -0.5 |
| TMZ | **Timaru** | **1.57** | **237** | P | Pn | 07 23 21.2 | -0.3 |
| WVZ | **Waitaha Valley** | **1.60** | **286** | P | Pb | 07 23 23.7 | +0.5 |
| THZ | **Tophouse** | **1.77** | **2** | P | Pn | 07 23 24.0 | -0.4 |
| GCSZ | **Gaunt Creek Bo** | **1.84** | **276** | P | Pb | 07 23 26.5 | -0.9 |
| DSZ | **Denniston Nort** | **1.94** | **337** | P | Pn | 07 23 26.9 | +0.2 |
| BSWZ | **Blackbirch Sta** | **1.98** | **23** | P | Pn | 07 23 27.1 | 0.0 |
| LBZ | **Lake Benmore** | **2.09** | **245** | P | Pn | 07 23 28.5 | -0.2 |
| MRNZ | **Matariki Terra** | **2.14** | **359** | P | Pn | 07 23 29.7 | +0.4 |
| ODZ | **Otahua Downs** | **2.18** | **225** | P | Pn | 07 23 29.5 | -0.4 |
| FOZ | **Fox Glacier** | **2.19** | **269** | P | Pn | 07 23 31.2 | +1.1 |
| TUWZ | **Tuamarina** | **2.26** | **22** | P | Pn | 07 23 30.8 | -0.2 |
| NNZ | **Nelson** | **2.35** | **10** | P | Pn | 07 23 32.4 | +0.2 |
| TCW | **Tory Channel** | **2.56** | **25** | P | Pn | 07 23 34.4 | -0.7 |
| BHW | **Baring Head** | **2.61** | **36** | P | Pn | 07 23 35.2 | -0.6 |
| PLWZ | **Palliser** | **2.66** | **43** | P | Pn | 07 23 35.6 | -0.9 |
| QRZ | **Quartz Range** | **2.72** | **355** | P | Pn | 07 23 37.2 | -0.1 |
| HHSZ | **Highcliff Hill** | **2.84** | **213** | P | Pn | 07 23 38.8 | -0.1 |
| DUWZ | **D'Urville Isla** | **2.85** | **17** | P | Pn | 07 23 39.6 | +0.5 |
| CAW | **Cannon Point** | **2.94** | **35** | P | Pn | 07 23 39.9 | -0.4 |
| JCZ | **Jackson Bay** | **2.98** | **258** | P | Pn | 07 23 41.7 | +0.8 |
| TRWZ | **Traveller** | **3.01** | **46** | P | Pn | 07 23 40.3 | -1.0 |
| WKZ | **Wanaka** | **3.03** | **244** | P | Pn | 07 23 41.5 | -0.1 |
| EAZ | **Earnscleugh** | **3.04** | **235** | P | Pn | 07 23 41.5 | -0.3 |
| KIW | **Kapiti Island** | **3.09** | **31** | P | Pn | 07 23 42.1 | -0.3 |
| OGWZ | **Otaki Gorge** | **3.23** | **33** | P | Pn | 07 23 43.4 | -0.8 |
| HOWZ | **Holdsworth Sta** | **3.31** | **38** | P | Pn | 07 23 44.6 | -0.8 |
| TUZ | **Tuapeka** | **3.32** | **222** | P | Pn | 07 23 45.5 | -0.1 |
| TMWZ | **Te Maipa** | **3.32** | **44** | P | Pn | 07 23 45.3 | -0.4 |
| MRZ | **Mangatainoka R** | **3.53** | **36** | P | Pn | 07 23 47.1 | -1.3 |
| MLZ | **Mavora Lakes** | **3.84** | **240** | P | Pn | 07 23 52.1 | -0.6 |
| SYZ | **Scrubby Hill** | **3.98** | **220** | P | Pn | 07 23 55.0 | +0.4 |
| WAZ | **Wanganui** | **4.11** | **24** | P | Pn | 07 23 58.6 | +2.1 |
| TSZ | **Takapari Road** | **4.19** | **35** | P | Pn | 07 23 57.3 | -0.3 |
| PREZ | **Palmer Road** | **4.31** | **14** | P | Pn | 07 24 01.0 | +1.8 |
| KHEZ | **Kahui Hut** | **4.33** | **12** | P | Pn | 07 24 01.3 | +1.7 |
| NBEZ | **Newall Road No** | **4.34** | **11** | P | Pn | 07 24 00.7 | +1.2 |
| NEZ | **North Egmont** | **4.37** | **13** | P | Pn | 07 24 02.1 | +2.0 |
| PKE | **Pukeiti** | **4.42** | **12** | P | Pn | 07 24 02.3 | +1.5 |
| DREZ | **Durham Road** | **4.46** | **14** | P | Pn | 07 24 02.8 | +1.5 |
| VRZ | **Vera Road** | **4.64** | **19** | P | Pn | 07 24 05.4 | +1.7 |
| MOVZ | **Moawhango** | **4.67** | **29** | P | Pn | 07 24 04.2 | 0.0 |
| WNVZ | **Wahianoa** | **4.69** | **27** | P | Pn | 07 24 05.0 | +0.4 |
| TRVZ | **Turoa** | **4.70** | **27** | P | Pn | 07 24 06.0 | +1.2 |
| KRHZ | **Kereru** | **4.71** | **35** | P | Pn | 07 24 03.3 | -1.4 |
| BHHZ | **Black Hill Sta** | **4.72** | **32** | P | Pn | 07 24 04.7 | -0.1 |
| APZ | **The Paps** | **4.75** | **224** | P | Pn | 07 24 05.3 | 0.0 |
| TUVZ | **Tukino** | **4.76** | **27** | P | Pn | 07 24 06.7 | +1.2 |
| KAUZ | **Kahuranaki** | **4.81** | **40** | P | Pn | 07 24 05.1 | -1.0 |
| NGZ | **Ngauruhoe** | **4.83** | **26** | P | Pn | 07 24 06.5 | +0.1 |
| SNVZ | **South Ngauruho** | **4.83** | **27** | P | Pn | 07 24 07.2 | +0.7 |
| OTVZ | **Oturere** | **4.86** | **27** | P | Pn | 07 24 07.9 | +0.9 |
| NNVZ | **North Ngauruho** | **4.87** | **26** | P | Pn | 07 24 07.7 | +0.6 |
| WTVZ | **West Tongariro** | **4.88** | **26** | P | Pn | 07 24 07.6 | +0.5 |
| ETVZ | **East Tongariro** | **4.90** | **27** | P | Pn | 07 24 07.9 | +0.4 |
| TMVZ | **Te Maari** | **4.92** | **27** | P | Pn | 07 24 08.2 | +0.6 |
| HIZ | **Hauiti** | **5.25** | **18** | P | Pn | 07 24 12.2 | +0.1 |
| RAHZ | **Arahi** | **5.62** | **36** | P | Pn | 07 24 17.6 | +0.3 |
| TOZ | **Tahuroa Road** | **6.14** | **20** | P | Pn | 07 24 24.1 | -0.3 |
| AWAZ | **Awhitu Peninsu** | **6.61** | **13** | P | Pn | 07 24 31.2 | +0.4 |
| RUGZ | **Raukumara Rang** | **6.67** | **35** | P | Pn | 07 24 31.8 | 0.0 |
| HAZ | **Te Kaha** | **6.89** | **35** | P | Pn | 07 24 33.1 | -1.5 |
| WIAZ | **Waiheke Island** | **6.96** | **15** | P | Pn | 07 24 35.7 | +0.1 |

**IDC 19 07:47:56.6±1.2, 55°.51N×86°.60E, h0km, mb1 2.6/2, mb1mx2.6/38, mbtmp2.6/2, ML2.4/2, Error ellipse: s-maj=28.4km s-min=9.5km az=124.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | **ZALESOVO INFRA** | **1.87** | **214** | *i* | | 08 01 29.5 | |
| | baz=32,slow=343,SNR=2.0 | | | | | | |
| ZALV | **Zalesovo Beam** | **1.87** | **214** | Pn | Pn | 07 48 29.8 | -0.1 |
| | 1.6nm,0.3s,baz=29,slow=15,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 07 48 56.0 | |
| | 2.2nm,0.3s,baz=31,slow=25,SNR=6.1 | | | | | | |
| KURBB | **Kurchatov Arra** | **6.89** | **228** | Pn | Pn | 07 49 39.8 | +0.9 |
| | 0.0nm,0.3s,baz=45,slow=13,SNR=2.8 | | | | | | |
| MKAR | **Makanchi Array** | **9.13** | **199** | Pn | Pn | 07 50 10.0 | +0.4 |
| | 0.1nm,0.3s,baz=15,slow=6.0,SNR=2.0 | | | | | | |

*SNET **19** 07:51:55.9±0.9, 13°.34N×87°.99W, h9km±3km, ML2.3*
*INET **19** 07:51:55.7±1.1, 13°.22N×88°.05W, h18km±9km, ML3.2*
**ISC 19 07:51:54.9±1.7, 13°.32N±0°.10×87°.96W±0°.05, h14km±14km, n18, σ0°37/25, 1D, Honduras**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNRM | **Centro Naciona** | **0.26** | **307** | *i* P | Pb | **07 52 01.1** | **-0.2** |
| CNRM | | | | *e*S | Sb | **07 52 05.1** | **-0.5** |
| VSM | **San Miguel** | **0.32** | **290** | *e*P | Pb | **07 52 02.6** | **0.0** |
| VSM | | | | *e*S | Sb | **07 52 07.8** | **0.0** |
| RANC | **El Ranchito** | **0.34** | **290** | *e*P | Pb | **07 52 02.9** | **+0.1** |
| RANC | | | | *e*S | Sb | **07 52 08.5** | **+0.4** |
| RANC | | | | IAML | | 07 52 12.5 | |
| | comp=Z,436nm,0.2s | | | | | | |
| LCY | **Lacayo** | **0.34** | **288** | *e*P | Pb | **07 52 02.7** | **-0.1** |
| LCY | | | | IAML | | 07 52 10.4 | |
| | comp=Z,528nm,0.1s | | | | | | |
| PACA | **Pacayal** | **0.38** | **293** | *e*P | Pb | **07 52 03.8** | **+0.3** |
| PACA | **Pacayal** | **0.38** | **293** | *e*P | Pb | **07 52 03.9** | **+0.3** |
| PACA | | | | *e*S | Sb | **07 52 10.3** | **+0.9** |
| PACA | | | | IAML | | 07 52 10.3 | |
| | comp=Z,240nm,0.1s | | | | | | |
| COEB | **Comit de Eme** | **0.58** | **288** | *e*P | Pb | **07 52 06.9** | **0.0** |
| COEB | **Comit de Eme** | **0.58** | **288** | *e*P | Pb | **07 52 06.9** | **0.0** |
| COEB | | | | *e*S | Sb | **07 52 15.3** | **+0.2** |
| COEB | | | | IAML | | 07 52 16.4 | |
| | comp=Z,207nm,0.2s | | | | | | |
| ALJI | **Alcalda de J** | **0.59** | **271** | *e*P | Pb | **07 52 07.1** | **+0.1** |
| ALJI | | | | *e*S | Sb | **07 52 15.8** | **+0.5** |
| ALJI | | | | IAML | | 07 52 19.8 | |
| | comp=Z,252nm,0.2s | | | | | | |
| PQSS | **Presa 15 de Se** | **0.66** | **298** | *e*P | Pb | **07 52 08.4** | **+0.3** |
| TECO | **Alcaldia de Te** | **0.83** | **285** | *e*S | Sb | **07 52 22.4** | **+0.4** |
| SCLA | **Alcaldia de Sa** | **0.84** | **297** | *e*P | Pb | **07 52 11.5** | **+0.2** |
| UESV | **Universidad de** | **0.86** | **291** | *e*P | Pb | **07 52 12.1** | **+0.4** |
| COEG | **Centro de Oper** | **0.94** | **289** | *e*P | Pb | **07 52 13.1** | **0.0** |
| COEG | | | | *e*S | Sn | **07 52 26.6** | **-0.5** |
| COEG | | | | IAML | | 07 52 30.8 | |
| | comp=Z,158nm,0.3s | | | | | | |
| TGUH | **Tegucigalpa,Un** | **0.99** | **42** | *e*P | Pg | **07 52 13.8** | **-0.3** |
| PAVA | **Las Pavas** | **1.03** | **293** | IAML | | 07 52 32.7 | |
| | comp=Z,89nm,0.2s | | | | | | |
| SJTE | **Alcalda de S** | **1.06** | **286** | *e*P | Pg | **07 52 14.8** | **-0.5** |
| SJTE | | | | *e*S | Sn | **07 52 29.8** | **-0.1** |
| SJTE | | | | IAML | | 07 52 31.6 | |
| | comp=Z,44nm,0.2s | | | | | | |
| CRIN | **San Cristobal** | **1.08** | **125** | *e*P | Pn | **07 52 15.8** | **+0.1** |
| CRIN | | | | IAML | | 07 52 33.2 | |
| | comp=N,576nm,0.3s | | | | | | |

**NNC 19 07:59:43.8±5.7, 54°.41N×86°.13E, h0km, mb3.5, mpv2.7, 3C-3D, Error ellipse: s-maj=75.8km s-min=30.6km az=158.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZAA0 | **Zalesovo Array** | **0.90** | **239** | ⇓P | Pg | 07 59 59.8 | -1.1 |
| | 0.2nm,0.3s | | | | | | |
| ZAA0 | | | | ⇓S | Sb | 08 00 14.3 | -0.4 |
| | 1.8nm,0.3s | | | | | | |
| KURK | **Kurchatov** | **5.89** | **234** | Pn | Pn | 08 01 11.9 | -0.3 |
| | 1.2nm,0.6s | | | | | | |
| KURK | | | | Sn | Sn | 08 02 16.8 | -3.4 |
| | 0.2nm,0.2s | | | | | | |
| KURK | | | | Lg | Lg | 08 02 52.0 | |
| | 3.9nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | **5.99** | **234** | ⇓Pn | Pn | 08 01 17.3 | +3.7 |
| | 1.8nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 08 02 26.0 | +3.2 |
| | 2.2nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 02 56.0 | |
| | 5.6nm,0.6s | | | | | | |
| MK31 | **Makanchi Array** | **8.01** | **199** | Pn | Pn | 08 01 44.0 | +2.7 |
| | 0.5nm,0.5s,baz=30,slow=13,SNR=21 | | | | | | |
| MK31 | | | | Sn | Sn | 08 03 11.3 | -1.2 |
| | 0.2nm,0.5s,baz=35,slow=26,SNR=5.2 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 03 55.1 | |
| | 2.5nm,0.9s,baz=25,slow=31,SNR=5.0 | | | | | | |

*NEIC **19** 08:04:40.4±0.5, 36°.51N±0°.02×98°.68W±0°.03, h3km±4km, Error ellipse: s-maj=4.2km s-min=1.9km az=142.0*
**TUL 19 08:04:39.7±0.6, 36°.53N±0°.02×98°.69W±0°.02, h5km±3km, ML3.5, mb_Lg3.2/77(NEIC), Error ellipse: s-maj=3.2km s-min=2.2km az=134.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| U32A | **Winter Ranch,** | **0.30** | **240** | | Pg | 08 04 45.7 | +0.2 |
| U32A | | | | Sg | Sg | 08 04 50.2 | +0.9 |
| OKCFA | **Oklahoma City** | **1.50** | **138** | | Pn | 08 05 07.0 | -0.3 |
| OKCSW | **OKLAHOMA CITY** | **1.51** | **138** | | Pn | 08 05 07.2 | -0.3 |
| FNO | **Franklin** | **1.64** | **140** | | Pn | 08 05 09.4 | +0.1 |
| T35A | **Sooner Cattle** | **1.79** | **77** | Pn | Pn | 08 05 11.6 | +0.4 |
| T35A | | | | lAmb_Lg | | 08 05 39.6 | |
| | comp=Z,93nm,0.8s | | | | | | |
| WMOK | **Wichita Mounta** | **1.79** | **183** | | Pn | 08 05 10.9 | -0.3 |
| R32A | **Long Quarter,** | **1.89** | **359** | | Pn | 08 05 13.4 | +0.8 |
| R32A | | | | lAmb_Lg | | 08 05 42.3 | |
| | comp=Z,126nm,0.8s | | | | | | |
| W35A | **Tecumseh** | **2.01** | **133** | Pn | Pn | 08 05 14.9 | +0.6 |
| X34A | **Smith Ranch, M** | **2.04** | **160** | Pn | Pn | 08 05 15.7 | +0.9 |
| TUL1 | **Leonard** | **2.42** | **104** | | Pn | 08 05 20.4 | +0.4 |
| TUL1 | | | | lAmb_Lg | | 08 05 56.8 | |
| | comp=Z,89nm,0.7s | | | | | | |
| CBKS | **Cedar Bluff** | **2.43** | **340** | | Pn | 08 05 22.0 | +1.9 |
| X37A | **Clayton** | **3.32** | **125** | Pn | Pn | 08 05 32.7 | +0.3 |
| U38A | **Gravette** | **3.47** | **90** | lAmb_Lg | | 08 06 35.6 | |
| | comp=Z,60nm,1.0s | | | | | | |
| HHAR | **Hobbs** | **3.84** | **92** | lAmb_Lg | | 08 06 44.1 | |
| | comp=Z,55nm,0.7s | | | | | | |
| W39A | **Magazine** | **4.20** | **107** | lAmb_Lg | | 08 07 04.0 | |
| | comp=Z,91nm,1.0s | | | | | | |
| MSTX | **Muleshoe** | **4.21** | **234** | lAmb_Lg | | 08 07 02.6 | |
| | comp=Z,62nm,0.8s | | | | | | |
| N33A | **J

*MOS **19** 08:13:23.6±1.3,39°.33N×143°.75E,h23km,mb4.7/26,Error ellipse: s-maj=8.3km s-min=4.9km az=94.1*
*NEIC **19** 08:13:26.7±2.0,39°.24N±0°.07×143°.6E±0°.1,h27km±5km, mb4.5/32,Error ellipse: s-maj=13.2km s-min=8.3km az=123.0*

**ISC 19 08:13:26.4±0.5,39°.24N±0°.05×143°.81E±0°.05,h35km,n187, σ1§93/205,mb4.5/60,MS4.0/27,11C-13D,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MIYJ** | **Miyakonagasawa** | **1.58** | **283** | P | **Pn** | **08 13 49.9** | **-1.9** |
| MIYJ | | | | *eS* | **Sn** | **08 14 09.6** | **-1.4** |
| **JTH** | **Tanohata** | **1.66** | **295** | P | **Pn** | **08 13 51.1** | **-1.8** |
| JTH | | | | S | **Sn** | **08 14 11.5** | **-1.5** |
| **OFUJ** | **Ofunato** | **1.67** | **265** | P | **Pn** | **08 13 51.3** | **-1.8** |
| **JOM** | **Ohasama** | **1.96** | **278** | P | **Pn** | **08 13 55.8** | **-1.4** |
| **JMK** | **Ichinoseki** | **2.04** | **263** | P | **Pn** | **08 13 56.7** | **-1.4** |
| **JANG** | **Nango** | **2.10** | **303** | P | **Pn** | **08 13 56.6** | **-2.4** |
| **JYK** | **Kaneyama** | **2.70** | **264** | P | **Pn** | **08 14 06.4** | **-1.0** |
| **JMM** | **Marumori** | **2.73** | **241** | | **Pn** | **08 14 05.4** | **-2.4** |
| **ERM** | **Erimo** | **2.81** | **350** | ⇑*eP* | **Pn** | **08 14 07.7** | **-1.1** |
| **ERM** | **Erimo** | **2.81** | **350** | Pn | **Pn** | **08 14 07.9** | **-1.0** |
| **JOT** | **Ohata** | **3.00** | **316** | P | **Pn** | **08 14 10.2** | **-1.2** |
| **JFT** | **Otama** | **3.23** | **239** | P | **Pn** | **08 14 13.3** | **-1.3** |
| **JCH** | **Churui** | **3.38** | **354** | P | **Pn** | **08 14 14.9** | **-1.8** |
| JCH | | | | *eS* | **Sn** | **08 14 53.0** | **-2.6** |
| **JAK** | **Akkeshi** | **3.81** | **10** | P | **Pn** | **08 14 20.4** | **-2.1** |
| **JEW** | **Eniwo** | **4.01** | **334** | Pn | **Pn** | **08 14 24.7** | **-0.6** |
| **JFR** | **Furan** | **4.02** | **347** | P | **Pn** | **08 14 25.0** | **-0.5** |
| **NMR** | **Nemuro--Hokkai** | **4.37** | **19** | *eP* | **Pn** | **08 14 27.1** | **-3.1** |
| NMR | | | | *eS* | **Sn** | **08 15 14.6** | **-5.3** |
| **GLVR** | **Golovnino** | **4.67** | **15** | P | **Pn** | **08 14 31.8** | **-2.6** |
| GLVR | | | | *eS* | **Sn** | **08 15 24.8** | **-2.5** |
| GLVR | | | | smax | smax | | |
| | comp=N,312nm,0.4s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,255nm,0.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **4.95** | **350** | Pn | **Pn** | **08 14 38.1** | **-0.1** |
| **ASAJ** | **Asahikawa** | **4.95** | **350** | Pn | **Pn** | **08 14 37.1** | **-1.2** |
| | comp=E,4.6nm,0.3s,baz=188,slow=4.9,SNR=15 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **08 15 38.9** | **+4.6** |
| | comp=E,3.0nm,0.3s,baz=276,slow=32,SNR=4.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.95** | **350** | P | **Pn** | **08 14 38.1** | **-0.2** |
| **RUSJ** | **Misakicho** | **4.98** | **12** | *eP* | **Pn** | **08 14 36.3** | **-2.2** |
| RUSJ | | | | *eS* | **Sn** | **08 15 32.0** | **-2.8** |
| **YUK** | **Yuzh-Kuril'sk** | **5.03** | **17** | P | **Pn** | **08 14 38.2** | **-1.1** |
| YUK | | | | *i* S | **Sn** | **08 15 30.5** | **-5.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,46nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,32nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,15nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,189nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,688nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **5.15** | **25** | *eP* | **Pn** | **08 14 37.8** | **-3.1** |
| SHO | | | | *eS* | **Sn** | **08 15 33.6** | **-5.5** |
| SHO | | | | pmax | pmax | | |
| | comp=N,13nm,0.5s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,26nm,0.5s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,12nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,147nm,0.6s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,275nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **5.18** | **240** | Pn | **Pn** | **08 14 40.1** | **-1.4** |
| | comp=E,1.3nm,0.3s,baz=57,slow=11,SNR=112 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **5.18** | **240** | P | **Pn** | **08 14 41.6** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **5.18** | **240** | Pn | **Pn** | **08 14 41.6** | **+0.1** |
| **MAJO** | **Matsushiro** | **5.18** | **240** | *c iP* | **Pn** | **08 14 41.7** | **+0.2** |
| **MAJO** | **Matsushiro** | **5.18** | **240** | Pn | **Pn** | **08 14 41.7** | **+0.2** |
| **MAT** | **Matsushiro** | **5.18** | **240** | P | **Pn** | **08 14 41.4** | **-0.1** |
| MAT | | | | S | **Sn** | **08 15 37.8** | **-2.3** |
| **MJB9** | **Matsu-Tunnel** | **5.19** | **240** | | **Pn** | **08 14 41.6** | **+0.1** |
| **JGF** | **Kuroka** | **6.29** | **237** | Pn | **Pn** | **08 14 55.7** | **-1.0** |
| **INU** | **Inuyama** | **6.66** | **236** | Pn | **Pn** | **08 15 01.0** | **-0.8** |
| **KUR** | **Kuril'sk** | **6.70** | **25** | *eP* | **Pn** | **08 15 01.6** | **-0.6** |
| KUR | | | | *eS* | **Sn** | **08 16 12.3** | **-5.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,32nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,182nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,69nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.92** | **209** | Pn | **Pn** | **08 15 03.1** | **-2.2** |
| | comp=E,12nm,0.3s,baz=349,slow=20,SNR=9.5 | | | | | | |
| JHJ | | | | Sn | **Sn** | **08 16 15.8** | **-7.0** |
| | comp=E,34nm,0.3s,baz=239,slow=23,SNR=8.6 | | | | | | |
| JHJ | | | | LR | LR | 08 17 59.5 | |
| | comp=E,130nm,20.0s,baz=62,slow=41 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.75** | **355** | *eP* | **Pn** | **08 15 16.0** | **-0.6** |
| YSS | | | | *eS* | **Sn** | **08 16 40.0** | **-3.0** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,800nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,700nm,15.0s | | | | | | |
| **TEY** | **Ternei** | **7.88** | **320** | ⇓*eP* | **Pn** | **08 15 19.6** | **+1.2** |
| TEY | | | | pmax | pmax | | |
| | comp=N,20nm,0.9s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=E,30nm,0.9s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **10.13** | **303** | P | **Pn** | **08 15 50.0** | **+0.8** |
| **USA0B** | **Ussuriysk Arra** | **10.13** | **303** | | **Pn** | **08 15 50.0** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **10.13** | **303** | Pn | **Pn** | **08 15 48.0** | **-1.2** |
| | baz=104,slow=13,SNR=12 | | | | | | |
| USRK | | | | LR | LR | 08 19 26.2 | |
| | comp=Z,256nm,18.5s,baz=113,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.13** | **303** | P | **Pn** | **08 15 50.2** | **+1.0** |
| **USRK** | **Ussuriysk Ar.** | **10.13** | **303** | Pn | **Pn** | **08 15 50.2** | **+1.0** |
| **MDJ** | **Mudanjiang** | **11.87** | **301** | Pn | **Pn** | **08 16 11.2** | **-1.8** |
| **MDJ** | **Mudanjiang** | **11.87** | **301** | P | **Pn** | **08 16 13.0** | **0.0** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,170nm,5.8s | | | | | | |
| **JNU** | **Nakatsue** | **12.10** | **244** | Pn | **Pn** | **08 16 15.0** | **-1.3** |
| | comp=Z,0.5nm,0.3s,baz=57,slow=5.5,SNR=2.4 | | | | | | |
| **KSRS** | **Korea Array** | **12.60** | **267** | Pn | **Pn** | **08 16 22.4** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=80,slow=13,SNR=6.6 | | | | | | |
| KSRS | | | | LR | LR | 08 20 25.0 | |
| | comp=Z,151nm,21.9s,baz=85,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **12.60** | **267** | P | **Pn** | **08 16 22.5** | **-0.6** |
| **KLR** | **Kul'dur** | **13.19** | **323** | Pn | **Pn** | **08 16 29.6** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=126,slow=12,SNR=7.7 | | | | | | |
| KLR | | | | LR | LR | 08 21 58.6 | |
| | comp=Z,246nm,19.0s,baz=116,slow=39 | | | | | | |
| **KLR** | **Kul'dur** | **13.19** | **323** | *de*P | **Pn** | **08 16 29.6** | **-1.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BNX** | **BinXian** | **13.72** | **304** | ⇑P | **Pn** | **08 16 36.8** | **-1.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,350nm,4.5s | | | | | | |
| **OKH** | **Okha** | **14.32** | **358** | *de*P | Pn | 08 16 41.0 | -5.5 |
| **CN2** | **Changchun** | **14.48** | **294** | *eP* | **Pn** | **08 16 49.8** | **+1.1** |
| CN2 | | | | *eS* | **Sn** | **08 19 30.4** | **+2.4** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,200nm,7.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,200nm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=E,300nm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,13.0s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **16.83** | **30** | ⇑*eP* | **Pn** | **08 17 20.2** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **16.83** | **30** | Pn | **Pn** | **08 17 18.8** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=253,slow=2.5,SNR=4.2 | | | | | | |
| PETK | | | | LR | LR | 08 23 08.3 | |
| | comp=Z,86nm,21.6s,baz=109,slow=35 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.83** | **30** | P | **Pn** | **08 17 18.8** | **-0.4** |
| **JOW** | **Kunigami** | **17.93** | **231** | Pn | **Pn** | **08 17 31.0** | **-2.0** |
| JOW | | | | IAmb | IAmb | 08 17 53.4 | |
| | comp=Z,62nm,1.2s | | | | | | |
| **ZEA** | **Zeya** | **18.37** | **328** | *eP* | **P** | **08 17 34.9** | **-3.1** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=E,200nm,11.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,200nm,13.0s | | | | | | |
| **HIA** | **Hailar** | **19.86** | **308** | P | **P** | **08 17 52.2** | **-2.1** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **HIA** | **Hailar** | **19.86** | **308** | P | **P** | **08 17 52.2** | **-2.1** |
| **MA2** | **Magadan** | **20.83** | **10** | P | **P** | **08 18 05.8** | **+1.2** |
| | comp=Z,6.3nm,0.7s,baz=191,slow=8.7,SNR=17 | | | | | | |
| MA2 | | | | LR | LR | 08 27 11.5 | |
| | comp=Z,99nm,19.4s,baz=196,slow=40 | | | | | | |
| **MA2** | **Magadan** | **20.83** | **10** | ⇓*eP* | **P** | **08 18 04.8** | **+0.1** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **20.83** | **10** | P | **P** | **08 18 05.1** | **+0.5** |
| MA2 | | | | IAmb | IAmb | 08 18 06.4 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **21.21** | **292** | *eP* | **P** | **08 18 06.9** | **-2.2** |
| XLT | | | | pP | pP | 08 18 16.3 | -1.2 |
| XLT | | | | sP | sP | 08 18 21.5 | 0.0 |
| XLT | | | | PP | **PnPn** | **08 18 30.3** | **+1.3** |
| XLT | | | | S | **S** | **08 21 55.3** | **-7.7** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,69nm,5.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=N,23nm,13.3s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,310nm,15.3s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,320nm,13.5s | | | | | | |
| **BJI** | **Beijing** | **21.27** | **281** | P | **P** | **08 18 07.1** | **-2.4** |
| BJI | | | | S | **S** | **08 22 00.8** | **-3.1** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=N,170nm,9.7s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=E,140nm,10.5s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,270nm,14.2s | | | | | | |
| **BJT** | **Baijiatuau** | **21.27** | **281** | P | **P** | **08 18 06.2** | **-3.4** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **BJT** | **Baijiatuau** | **21.27** | **281** | P | **P** | **08 18 06.2** | **-3.4** |
| **TIA** | **Tai'an** | **21.30** | **270** | *eP* | **P** | **08 18 06.9** | **-3.0** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=N,210nm,15.7s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,270nm,16.7s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,460nm,12.8s | | | | | | |
| **NJ2** | **Nanjing** | **21.47** | **258** | *eP* | **P** | **08 18 11.8** | **0.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **22.87** | **275** | ⇑P | **P** | **08 18 23.6** | **-3.1** |
| HNS | | | | *eS* | **S** | **08 22 31.5** | **-2.3** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,600nm,18.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,350nm,12.2s | | | | | | |
| **SEY** | **Seymchan** | **24.28** | **10** | P | **P** | **08 18 41.5** | **+1.5** |
| | comp=Z,3.3nm,0.9s,baz=186,slow=6.5,SNR=9.6 | | | | | | |
| **SEY** | **Seymchan** | **24.28** | **10** | ⇓*eP* | **P** | **08 18 41.1** | **+1.0** |
| **YAK** | **Yakutsk** | **24.40** | **344** | LR | LR | 08 30 15.9 | |
| | comp=Z,97nm,18.3s,baz=86,slow=42 | | | | | | |
| **YAK** | **Yakutsk** | **24.40** | **344** | ⇑*eP* | **P** | **08 18 41.4** | **+0.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **24.66** | **284** | *eP* | **P** | **08 18 44.5** | **+0.6** |
| HHC | | | | PP | **PnPn** | **08 19 20.3** | **+4.1** |
| HHC | | | | S | **S** | **08 23 04.1** | **+0.9** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,8.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,160nm,16.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,300nm,14.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,400nm,15.7s | | | | | | |
| **LYN** | **LuoYang** | **25.43** | **269** | *eP* | **P** | **08 18 49.8** | **-0.9** |
| LYN | | | | S | **S** | **08 23 16.5** | **+1.3** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,400nm,11.2s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,310nm,13.3s | | | | | | |
| **WHN** | **Wuhan** | **25.59** | **259** | ⇓P | **P** | **08 18 52.6** | **+0.4** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,70nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.78** | **300** | *i*P | **P** | **08 19 13.0** | **+1.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.78** | **300** | P | **P** | **08 19 12.4** | **+0.4** |
| **H11N2** | **WAKE ISLAND Hy** | **27.83** | **128** | T | T | 08 48 30.8 | |
| | baz=319,slow=74,SNR=14 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.84** | **128** | T | T | 08 48 27.8 | |
| | baz=319,slow=74,SNR=12 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.84** | **128** | T | T | 08 48 31.9 | |
| | baz=319,slow=74,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **28.22** | **300** | P | **P** | **08 19 15.7** | **-0.2** |
| | comp=Z,1.9nm,0.7s,baz=99,slow=9.2,SNR=10.0 | | | | | | |
| **SONM** | **Songino Array** | **28.22** | **300** | P | **P** | **08 19 16.0** | **+0.1** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **28.22** | **300** | P | **P** | **08 19 16.0** | **+0.1** |
| **XAN** | **Xi'an** | **28.36** | **270** | P | **P** | **08 19 18.5** | **+1.3** |
| XAN | | | | pP | pwP | 08 19 28.4 | -1.9 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,200nm,14.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,290nm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,420nm,12.7s | | | | | | |
| **ZAK** | **Zakamensk** | **30.47** | **305** | *eP* | **P** | **08 19 34.5** | **-1.3** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **31.38** | **16** | *eP* | **P** | **08 19 43.8** | **+0.3** |
| BILL | | | | *e*PPP | PPP | 08 20 57.6 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,27nm,3.5s | | | | | | |
| **LZH** | **Lanzhou** | **31.62** | **277** | *eP* | P | 08 19 51.3 | +5.2 |
| LZH | | | | pP | pwP | 08 19 57.1 | -2.0 |
| LZH | | | | sP | sP | 08 20 00.1 | +0.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,450nm,15.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,480nm,15.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,610nm,15.3s | | | | | | |
| **GYA** | **Guiyang** | **33.48** | **259** | ⇓P | **P** | **08 20 02.4** | **0.0** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| **CD2** | **Chengdu** | **33.59** | **268** | P | **P** | **08 20 03.0** | **-0.4** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,30nm,14.5s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=E,280nm,13.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,250nm,14.7s | | | | | | |
| **GTA** | **Gaotai** | **33.78** | **285** | ⇑P | **P** | **08 20 05.8** | **+0.8** |
| GTA | | | | pP | pwP | 08 20 15.0 | -3.5 |
| GTA | | | | sP | sP | 08 20 19.5 | +1.7 |
| GTA | | | | PcS | **PcS** | **08 26 26.3** | **-3.4** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,110nm,4.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,150nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,270nm,15.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,160nm,15.3s | | | | | | |
| **PZH** | **PanZhiHua** | **37.23** | **263** | P | **P** | **08 20 34.9** | **+0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,4.4s | | | | | | |
| **GOMU** | **GeErMu** | **38.50** | **281** | P | **P** | **08 20 46.4** | **+0.8** |
| GOMU | | | | pP | pP | 08 20 51.5 | -3.3 |
| GOMU | | | | sP | pwP | 08 20 56.5 | -2.7 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,150nm,4.7s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **40.68** | **304** | *ce*P | **P** | **08 21 04.7** | **+1.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **WMQ** | **Urumqi** | **41.57** | **295** | *eP* | **P** | **08 21 12.3** | **+1.6** |
| WMQ | | | | pP | pP | 08 21 20.4 | +0.5 |
| WMQ | | | | sP | sP | 08 21 25.6 | +1.9 |
| WMQ | | | | S | **S** | **08 27 21.4** | **-2.9** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.87** | **311** | P | **P** | **08 21 11.7** | **-1.1** |
| | comp=Z,4.0nm,0.7s,bac=86,slow=11,SNR=13 | | | | | | |
| ZALV | | | | LR | LR | 08 39 00.6 | |
| | comp=Z,94nm,18.4s,baz=45,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.87** | **311** | P | **P** | **08 21 11.7** | **-1.1** |
| **NRIK** | **Noril'sk** | **42.09** | **334** | ⇓*eP* | **P** | **08 21 14.7** | **+0.3** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.0s | | | | | | |
| **SVW2** | **Sparrevohn** | **42.62** | **39** | P | **P** | **08 21 21.4** | **+2.4** |
| SVW2 | | | | IAmb | IAmb | 08 21 33.8 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **L19K** | **White Mountain** | **43.02** | **37** | P | **P** | **08 21 24.9** | **+2.7** |
| L19K | | | | IAmb | IAmb | 08 21 27.5 | |
| | comp=Z,8.9nm,1.5s | | | | | | |
| **CHTO** | **Chiang Mai** | **43.67** | **255** | P | **P** | **08 21 27.6** | **-0.3** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **43.67** | **255** | P | **P** | **08 21 27.6** | **-0.3** |
| CHTO | | | | IAmb | IAmb | 08 21 29.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **IMAR** | **Indian Mountai** | **43.79** | **32** | P | **P** | **08 21 29.9** | **+1.6** |
| **CMAR** | **Chiang Mai Arr** | **43.89** | **255** | P | **P** | **08 21 29.6** | **0.0** |
| | comp=Z,1.6nm,0.7s,baz=43,slow=6.8,SNR=7.4 | | | | | | |
| CMAR | | | | LR | LR | 08 40 33.7 | |
| | comp=Z,26nm,20.5s,baz=305,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.89** | **255** | *i* P | **P** | **08 21 30.7** | **+1.1** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **44.58** | **301** | P | **P** | **08 21 34.8** | **-0.1** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **44.58** | **301** | P | **P** | **08 21 34.8** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 08 21 36.3 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.58** | **301** | P | **P** | **08 21 35.5** | **+0.6** |
| | comp=Z,4.2nm,0.9s,baz=82,slow=9.2,SNR=35 | | | | | | |
| MKAR | | | | LR | LR | 08 43 10.3 | |
| | comp=Z,56nm,19.3s,baz=43,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.58** | **301** | P | **P** | **08 21 35.5** | **+0.6** |
| **MKAR** | **Makanchi Array** | **44.58** | **301** | P | **P** | **08 21 35.0** | **0.0** |
| **MLY** | **Manley** | **44.98** | **33** | P | **P** | **08 21 40.2** | **+2.4** |
| **RC01** | **Rabbit Creek A** | **45.46** | **39** | P | **P** | **08 21 43.4** | **+1.7** |
| RC01 | | | | IAmb | IAmb | 08 21 50.4 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **PMR** | **Palmer** | **45.73** | **38** | P | **P** | **08 21 45.2** | **+1.5** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| **PMR** | **Palmer** | **45.73** | **38** | P | **P** | **08 21 45.2** | **+1.5** |
| PMR | | | | IAmb | IAmb | 08 22 03.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **45.82** | **38** | P | **P** | **08 21 45.8** | **+1.2** |
| **KNK** | **Knik Glacier** | **46.06** | **38** | P | **P** | **08 21 48.3** | **+1.8** |
| **KURK** | **Kurchatov** | **46.09** | **307** | *c iP* | **P** | **08 21 46.7** | **0.0** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **46.09** | **307** | P | **P** | **08 21 46.7** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **46.17** | **307** | LR | LR | 08 40 52.6 | |
| | comp=Z,60nm,19.3s,baz=20,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **46.62** | **33** | P | **P** | **08 21 52.1** | **+1.4** |
| | comp=Z,2.0nm,0.7s,baz=259,slow=5.9,SNR=24 | | | | | | |
| **ILAR** | **Eielson Array** | **46.62** | **33** | P | **P** | **08 21 52.2** | **+1.4** |
| **N25K** | **Chitina, Valde** | **47.88** | **38** | P | **P** | **08 22 03.2** | **+2.5** |
| **L26K** | **Log Cabin Wild** | **48.30** | **36** | P | **P** | **08 22 06.5** | **+2.6** |
| **VRDI** | **Verde Repeater** | **48.48** | **38** | P | **P** | **08 22 06.7** | **+1.2** |
| **L27K** | **Beaver Creek,** | **48.99** | **36** | P | **P** | **08 22 12.2** | **+3.0** |
| L27K | | | | IAmb | IAmb | 08 22 24.3 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **BCAR** | **Beaver Creek A** | **49.01** | **36** | P | **P** | **08 22 12.0** | **+2.7** |
| **BRVK** | **Borovoye** | **50.56** | **311** | ⇓*iP* | **P** | **08 22 22.0** | **+0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **51.12** | **298** | LR | LR | 08 44 53.8 | |
| | comp=Z,53nm,18.9s,baz=72,slow=37 | | | | | | |
| **KSH** | **Kashi** | **51.25** | **293** | P | P | 08 22 32.0 | +5.2 |
| KSH | | | | pP | pwP | 08 22 39.0 | -1.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **M30M** | **Minto, Yukon** | **51.35** | **36** | P | **P** | **08 22 29.6** | **+2.6** |
| **INK** | **Inuvik** | **51.56** | **28** | P | **P** | **08 22 30.5** | **+2.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **51.56** | **28** | P | **P** | **08 22 30.5** | **+2.1** |
| INK | | | | IAmb | IAmb | 08 22 32.0 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **M31M** | **Drury Creek, Y** | **52.52** | **36** | P | **P** | **08 22 38.6** | **+2.8** |
| M31M | | | | IAmb | IAmb | 08 22 40.2 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **NIL** | **Nilore** | **55.73** | **288** | P | **P** | **08 22 59.8** | **+0.2** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **NIL** | **Nilore** | **55.73** | **288** | P | **P** | **08 22 59.8** | **+0.2** |
| **ARU** | **Arti** | **55.97** | **318** | LR | LR | 08 52 01.2 | |
| | comp=Z,116nm,19.3s,baz=23,slow=42 | | | | | | |
| **ARU** | **Arti** | **55.97** | **318** | *c iP* | **P** | **08 23 01.6** | **+0.7** |
| ARU | | | | | | 08 23 55.7 | |
| ARU | | | | S | **S** | **08 30 49.8** | **+3.5** |
| ARU | | | | SS | **SS** | **08 34 33.3** | **+1.4** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **ARU** | **Arti** | **55.97** | **318** | P | **P** | **08 23 01.3** | **+0.4** |
| **ABKAR** | **Akbulak array** | **57.97** | **310** | P | **P** | **08 23 15.5** | **+0.3** |
| **KBL** | **Kabul** | **58.40** | **291** | P | **P** | **08 23 18.4** | **-0.3** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **KBL** | **Kabul** | **58.40** | **291** | P | **P** | **08 23 18.4** | **-0.3** |
| KBL | | | | IAmb | IAmb | 08 23 20.1 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **58.72** | **349** | LR | LR | 08 52 08.2 | |
| | comp=Z,52nm,20.8s,baz=174,slow=40 | | | | | | |
| **WB0** | **Warramunga Arr** | **59.36** | **190** | P | **P** | **08 23 25.0** | **0.0** |
| WB0 | | | | IAmb | IAmb | 08 23 45.6 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **59.52** | **200** | P | **P** | **08 23 27.4** | **+1.3** |
| FITZ | | | | IAmb | IAmb | 08 23 38.2 | |
| | comp=Z,4.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PALK** | **Pallekele** | **64.68** | **258** | LR | LR | 08 56 50.5 | | |
| | comp=Z,29nm,18.3s,baz=237,slow=40 | | | | | | | |
| **OBN** | **Obninsk** | **67.45** | **324** | *e*P | **P** | **08 24 17.4** | **-0.8** | |
| OBN | | | | *e* | | 08 24 44.8 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **67.73** | **333** | P | **P** | **08 24 20.2** | **+0.3** | |
| | comp=Z,3.8nm,0.9s,baz=54,slow=10,SNR=6.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **67.73** | **333** | *i* P | **P** | **08 24 20.2** | **+0.3** | |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KIV** | **Kislovodsk** | **70.88** | **311** | *e*P | **P** | **08 24 41.8** | **+2.0** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,83nm,17.0s | | | | | | | |
| **KBZ** | **Khabaz** | **70.89** | **311** | P | **P** | **08 24 40.7** | **+1.0** | |
| | comp=Z,5.1nm,0.8s,baz=43,slow=5.4,SNR=11 | | | | | | | |
| **KBZ** | **Khabaz** | **70.89** | **311**⇓ | *e*P | **P** | **08 24 41.6** | **+1.9** | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **MNK** | **Minsk** | **71.71** | **326** | *i* P | **P** | **08 24 43.4** | **-1.0** | |
| MNK | | | | *i* | | 08 27 22.5 | | |
| MNK | | | | *i* PPP | PPP | 08 29 06.4 | | |
| MNK | | | | *i* S | **S** | **08 34 01.4** | **-0.3** | |
| MNK | | | | *i* SS | **SS** | **08 38 34.9** | **-1.8** | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,3.0nm,1.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,130nm,24.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,1μm,22.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,137nm,12.0s | | | | | | | |
| **MNK** | **Minsk** | **71.71** | **326** | *i* P | **P** | **08 24 43.5** | **-1.0** | |
| | comp=E,3.0nm,1.0s | | | | | | | |
| MNK | | | | *i* P | **P** | **08 24 43.5** | **-1.0** | |
| | comp=N,36nm,0.8s | | | | | | | |
| MNK | | | | *i* P | **P** | **08 24 43.5** | **-1.0** | |
| | comp=Z,6.0nm,0.8s,baz=47 | | | | | | | |
| MNK | | | | *i* PP | **PP** | **08 27 22.6** | **-0.8** | |
| MNK | | | | *i* PPP | PPP | 08 29 06.4 | | |
| MNK | | | | *i* S | **S** | **08 34 01.4** | **-0.3** | |
| MNK | | | | *i* SS | **SS** | **08 38 35.0** | **-1.8** | |
| MNK | | | | *i* SSS | SSS | 08 41 59.8 | | |
| MNK | | | | *i* LQ | LQ | 08 51 22.1 | | |
| MNK | | | | *i* LR | LR | 08 56 33.7 | | |
| MNK | | | | *i* LRM | MLR | 09 00 02.0 | | |
| | comp=E,130nm,24.2s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 09 00 04.6 | | |
| | comp=N,1μm,22.2s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 09 00 07.1 | | |
| | comp=Z,137nm,11.8s | | | | | | | |
| **GNI** | **Garni** | **71.89** | **307**⇑ | *e*P | **P** | **08 24 48.7** | **+2.6** | |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **NACGM** | **Naroch** | **71.91** | **327** | *i* P | **P** | **08 24 43.9** | **-1.8** | |
| **NVAR** | **Mina Array Bea** | **72.16** | **55** | P | **P** | **08 24 51.1** | **+3.3** | |
| | comp=Z,0.6nm,0.7s,baz=292,slow=4.5,SNR=4.5 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **72.87** | **338** | P | **P** | **08 24 51.9** | **+0.5** | |
| | comp=Z,1.1nm,1.2s,baz=38,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **72.87** | **338** | P | **P** | **08 24 51.9** | **+0.5** | |
| | comp=Z,1.8nm,0.8s,baz=38,slow=6.0,SNR=6.3 | | | | | | | |
| NOA | | | | LR | LR | 09 01 00.1 | | |
| | comp=Z,68nm,18.6s,baz=350,slow=39 | | | | | | | |
| **NOA** | **NORSAR Array B** | **72.87** | **338** | P | **P** | **08 24 51.9** | **+0.5** | |
| **SFJD** | **Kangerlussuaq** | **73.51** | **6** | LR | LR | 08 58 50.7 | | |
| | comp=Z,73nm,18.0s,baz=72,slow=37 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.69** | **323** | P | **P** | **08 24 56.9** | **+0.6** | |
| | comp=Z,2.3nm,0.6s,baz=45,slow=5.9,SNR=12 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.69** | **323** | P | **P** | **08 24 56.9** | **+0.6** | |
| **PDAR** | **Pinedale Array** | **74.78** | **47** | P | **P** | **08 25 04.6** | **+1.5** | |
| | comp=Z,0.6nm,0.6s,baz=255,slow=1.2,SNR=6.7 | | | | | | | |
| **LANS** | **Liptovska Anna** | **79.19** | **326** | *e*P | **P** | **08 25 30.2** | **+2.6** | |
| **LANS** | **Liptovska Anna** | **79.19** | **326** | *e*P | **P** | **08 25 30.2** | **+2.6** | |
| **KRLC** | **Kraliky** | **79.60** | **328** | *e*P | **P** | **08 25 31.4** | **+1.6** | |
| **KRLC** | **Kraliky** | **79.60** | **328** | *e*P | **P** | **08 25 31.4** | **+1.6** | |
| **VYHS** | **Vyhne** | **79.96** | **326** | *e*P | **P** | **08 25 33.9** | **+2.2** | |
| **VYHS** | **Vyhne** | **79.96** | **326** | *e*P | **P** | **08 25 33.9** | **+2.2** | |
| **CLL** | **Collm** | **80.10** | **331** | *e*P | **P** | **08 25 34.0** | **+1.6** | |
| CLL | | | | *e*pP | **pP** | **08 25 43.0** | **+0.8** | |
| **VRAC** | **Vranov** | **80.27** | **328** | LR | LR | 09 04 40.7 | | |
| | comp=Z,127nm,18.8s,baz=356,slow=38 | | | | | | | |
| **KHC** | **Kasperske Hory** | **81.62** | **330**⇓ | *e*P | **P** | **08 25 42.2** | **+1.5** | |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **KHC** | **Kasperske Hory** | **81.62** | **330** | *e*P | **P** | **08 25 42.0** | **+1.3** | |
| **PPT** | **Papeete** | **83.97** | **118** | LR | LR | 08 57 46.3 | | |
| | comp=Z,91nm,19.7s,baz=286,slow=32 | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.29** | **54** | P | **P** | **08 26 11.1** | **+1.3** | |
| | comp=Z,0.2nm,0.6s,baz=317,slow=6.2,SNR=2.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.29** | **54** | P | **P** | **08 26 11.1** | **+1.3** | |
| **TORD** | **Torodi Ar. Bea** | **117.04** | **318** | PKP | **PKPdf** | **08 32 07.4** | **-0.6** | |
| | comp=Z,0.9nm,1.1s,baz=333,slow=1.6,SNR=2.6 | | | | | | | |

**IDC 19 08:14:22.0±451.0, 0°67N×12°10W, h0km, Error ellipse: s-maj=170.7km s-min=151.3km az=47.0, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I50GB** | **ASCENSION ISLA** | **8.85** | **195** | *i* | | 09 10 20.0 | |
| | baz=15,slow=319,SNR=4.8 | | | | | | |
| **I17CI** | **DIMBOKRO INFRA** | **9.36** | **50** | *i* | | 09 08 40.0 | |
| | baz=230,slow=316,SNR=2.1 | | | | | | |
| **I48TN** | **KESRA INFRASON** | **40.23** | **27** | *i* | | 12 23 20.0 | |
| | baz=219,slow=311,SNR=0.9 | | | | | | |

*NEIC **19** 08:14:52.4±0.6, 59.99N±0.06×139.25W±0.07, h14km±9km, Error ellipse: s-maj=8.8km s-min=4.5km az=161.0*
*PGC **19** 08:14:53.1±0.0, 59.97N×139.28W, h10km, ML2.7/5, 76km Nne of Yakutat, Ak Southeastern Alaska*

**ISC 19 08:14:52.2±1.0, 59.95N±0.03×139.27W±0.03, h17km±8km, n30, σ0.978/43, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BCPM** | **Bancas Point** | **0.19** | **272** | Pg | **Pg** | **08 14 57.6** | **+0.8** |
| BCPM | | | | IAML | | 08 15 02.6 | |
| | comp=E,244nm,0.3s | | | | | | |
| **PNL** | **Peninsula** | **0.29** | **193** | | **Pb** | **08 14 58.7** | **-0.2** |
| PNL | | | | | **Sb** | **08 15 03.9** | **+0.4** |
| **PNL** | **Peninsula** | **0.29** | **193** | P | **Pb** | **08 14 58.7** | **-0.2** |
| PNL | | | | S | **Sb** | **08 15 03.9** | **+0.4** |
| **PCA** | **Pinnacle** | **0.52** | **287** | Pg | **Pb** | **08 15 02.6** | **-0.4** |
| **YUK7** | **Dusty Glacier** | **0.81** | **43** | S | **Sg** | **08 15 18.0** | **-0.8** |
| **TABL** | **Table Mountain** | **1.06** | **299** | | **Pg** | **08 15 11.5** | **-1.2** |
| **TABL** | **Table Mountain** | **1.06** | **299** | P | **Pg** | **08 15 11.5** | **-1.2** |
| TABL | | | | S | **Sb** | **08 15 25.9** | **0.0** |
| **YUK6** | **Outpost Mounta** | **1.10** | **24** | P | **Pg** | **08 15 12.6** | **-0.9** |
| YUK6 | | | | S | **Sg** | **08 15 27.0** | **-0.8** |
| **HYT** | **Haines Junctio** | **1.24** | **44** | Pn | **Pn** | **08 15 15.0** | **0.0** |
| **HYT** | **Haines Junctio** | **1.24** | **44** | P | **Pn** | **08 15 14.7** | **-0.3** |
| HYT | | | | S | **Sb** | **08 15 31.1** | **0.0** |
| **YAH** | **Yahtse** | **1.31** | **290** | Pn | **Pn** | **08 15 15.9** | **0.0** |
| YAH | | | | IAML | | 08 16 04.1 | |
| | comp=E,61nm,1.2s | | | | | | |
| YAH | | | | IAML | | 08 16 04.3 | |
| | comp=N,46nm,0.8s | | | | | | |
| **YUK8** | **Steele Glacier** | **1.36** | **350** | P | **Pn** | **08 15 17.1** | **+0.3** |
| YUK8 | | | | S | **Sb** | **08 15 35.2** | **+0.5** |
| **MESA** | **MESA** | **1.37** | **281** | Pn | **Pb** | **08 15 17.0** | **-0.4** |
| **MESA** | **MESA** | **1.37** | **281** | P | **Pb** | **08 15 17.2** | **-0.4** |
| MESA | | | | S | **Sg** | **08 15 36.0** | **-0.4** |
| **YUK5** | **Granite Creek** | **1.38** | **30** | P | **Pn** | **08 15 17.4** | **+0.5** |
| YUK5 | | | | S | **Sn** | **08 15 36.1** | **+1.3** |
| **YUK4** | **Talbot Arm** | **1.44** | **12** | Pn | **Pg** | **08 15 19.8** | **-0.1** |
| YUK4 | | | | Sn | **Sg** | **08 15 39.9** | **+1.3** |
| **BARN** | **Barnard Glacie** | **1.63** | **314** | Pn | **Pn** | **08 15 20.5** | **+0.1** |
| BARN | | | | IAML | | 08 15 45.9 | |
| | comp=E,15nm,0.8s | | | | | | |
| **ISLE** | **Juniper Island** | **1.67** | **295** | Pn | **Pn** | **08 15 21.0** | **+0.2** |
| ISLE | | | | IAML | | 08 16 15.8 | |
| | comp=E,32nm,1.4s | | | | | | |
| ISLE | | | | IAML | | 08 16 19.3 | |
| | comp=N,36nm,1.2s | | | | | | |
| **KIAG** | **Kiagna River** | **1.82** | **304** | Pn | **Pn** | **08 15 23.2** | **+0.2** |
| KIAG | | | | Sn | **Sb** | **08 15 47.0** | **-0.7** |
| **WAX** | **Waxell Ridge** | **1.86** | **287** | Pn | **Pn** | **08 15 24.1** | **+0.7** |
| **BALM** | **Baldy** | **1.88** | **307** | Pn | **Pn** | **08 15 24.0** | **+0.4** |
| BALM | | | | Sn | **Sb** | **08 15 48.5** | **-0.8** |
| **YUK3** | **Moose Creek** | **1.93** | **343** | Pn | **Pn** | **08 15 25.2** | **+0.8** |
| YUK3 | | | | Sg | **Sb** | **08 15 52.2** | **+1.3** |
| **YUK2** | **White River** | **2.00** | **338** | Pg | **Pb** | **08 15 28.2** | **0.0** |
| YUK2 | | | | Sg | **Sb** | **08 15 54.5** | **+1.6** |
| **BERG** | **Berg Lake** | **2.26** | **283** | Pn | **Pn** | **08 15 29.4** | **+0.5** |
| **WHY** | **Whitehorse** | **2.30** | **70** | Pn | **Pn** | **08 15 29.5** | **+0.1** |
| WHY | | | | IAML | | 08 16 28.9 | |
| | comp=N,7.2nm,4.3s | | | | | | |
| WHY | | | | IAML | | 08 16 34.9 | |
| | comp=E,6.6nm,3.8s | | | | | | |
| **WHY** | **Whitehorse** | **2.30** | **70** | Sn | **Sn** | **08 15 57.3** | **-0.1** |
| **VRDI** | **Verde Repeater** | **2.43** | **304** | Pn | **Pn** | **08 15 32.2** | **+0.8** |
| VRDI | | | | IAML | | 08 15 51.5 | |
| | comp=E,13nm,4.1s | | | | | | |
| VRDI | | | | IAML | | 08 16 58.5 | |
| | comp=N,15nm,4.0s | | | | | | |
| **BVCY** | **Beaver Creek** | **2.59** | **343** | Sg | **Sg** | **08 16 14.4** | **-1.1** |
| **GLB** | **Gilahina Butte** | **2.69** | **306** | Pn | **Pn** | **08 15 36.7** | **+1.9** |
| GLB | | | | IAML | | 08 17 04.4 | |
| | comp=E,16nm,3.9s | | | | | | |
| GLB | | | | IAML | | 08 17 06.6 | |
| | comp=N,13nm,0.8s | | | | | | |
| **DAWY** | **Dawson** | **4.13** | **359** | Pn | **Pn** | **08 15 54.9** | **+0.3** |

*UCR **19** 09:00:32.4±2.2, 6.35N×82.55W, h32km±947km, MW4.6*
*UPA **19** 09:00:32.6±1.9, 6.57N×82.41W, h10km±19km, MW4.8*
*IDC **19** 09:00:36.6±7.7, 7.93N×81.44W, h0km, mb3.6/5, mb1 4.1/7, mb1mx3.8/43, mbtmp3.9/7, ML4.5/2, MS3.5/23, Ms1 3.5/23, ms1mx3.3/60, Error ellipse: s-maj=215.7km s-min=44.1km az=17.0*

**ISC 19 09:00:32.7±0.9, 6.53N±0.07×82.42W±0.06, h10km, n73, σ1.989/68, mb3.8/5, MS3.5/18, 3C-1D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTPM** | **Petroterminale** | **1.73** | **345** | *e*P | **Pn** | **09 01 01.4** | **-1.4** |
| PTPM | | | | *e*S | **Sn** | **09 01 22.0** | **-2.9** |
| **REMES** | **Remedios, Chir** | **1.79** | **19** | *e*P | **Pn** | **09 01 01.8** | **-1.9** |
| **MARI3** | **Mariato, Verag** | **1.81** | **52** | *e*P | **Pn** | **09 01 01.8** | **-2.1** |
| **DVD** | **David** | **1.90** | **359** | *e*P | **Pn** | **09 01 03.4** | **-1.7** |
| DVD | | | | *e*S | **Sn** | **09 01 26.5** | **-2.7** |
| **LESP3** | **La Esperanza,** | **1.90** | **349** | *e*P | **Pn** | **09 01 01.6** | **-3.6** |
| **CDITO** | **Canoas** | **2.08** | **348**⇑ | *e*P | **Pn** | **09 01 05.7** | **-2.0** |
| CDITO | | | | *e*S | **Sn** | **09 01 29.7** | **-4.0** |
| **BCO2** | **Palmira** | **2.18** | **357** | *e*P | **Pn** | **09 01 08.4** | **-0.8** |
| BCO2 | | | | *e*S | **Sn** | **09 01 35.8** | **-0.6** |
| **LNBQ3** | **Los Naranjos,** | **2.25** | **360** | *e*P | **Pn** | **09 01 08.8** | **-1.4** |
| **BRU2** | **Volcan** | **2.27** | **353** | *e*P | **Pn** | **09 01 09.3** | **-1.1** |
| BRU2 | | | | *e*S | **Sn** | **09 01 38.0** | **-0.6** |
| **MLIR3** | **Monte Lirio, C** | **2.29** | **350** | *e*P | **Pn** | **09 01 09.8** | **-0.8** |
| MLIR3 | | | | *e*S | **Sn** | **09 01 37.4** | **-1.6** |
| **EDSV** | **San Vito** | **2.34** | **347**⇑ | *e*P | **Pn** | **09 01 10.2** | **-1.2** |
| EDSV | | | | *e*S | **Sn** | **09 01 39.8** | **-0.6** |
| **CHGR2** | **Aguacate** | **2.41** | **7** | *e*S | **Sn** | **09 01 41.2** | **-0.7** |
| **AZU** | **Azuero** | **2.48** | **59**⇓ | *i*P | **Pn** | **09 01 11.1** | **-2.0** |
| AZU | | | | *e*S | **Sn** | **09 01 40.1** | **-3.3** |
| **PCRI3** | **Pocri, Los San** | **2.55** | **64** | *e*P | **Pn** | **09 01 11.9** | **-2.2** |
| **EDPN** | **Palmar Norte** | **2.63** | **337** | *e*P | **Pn** | **09 01 13.9** | **-1.3** |
| **EDBA** | **Buenos Aires** | **2.75** | **342** | *e*P | **Pn** | **09 01 15.8** | **-1.1** |
| **PNME** | **Penonome** | **2.85** | **47** | *e*P | **Pn** | **09 01 17.5** | **-0.8** |
| **CNI2** | **El Empalme, Bo** | **2.88** | **359** | *e*P | **Pn** | **09 01 19.4** | **+0.8** |
| CNI2 | | | | *e*S | **Sn** | **09 01 51.1** | **-2.3** |
| **EDDO** | **Dominical** | **3.06** | **332** | *e*P | **Pn** | **09 01 19.7** | **-1.5** |
| **VTON** | **El Valle, Cocl** | **3.09** | **48** | *e*S | **Sn** | **09 01 59.3** | **+0.7** |
| **BCIP** | **Isla Barro Col** | **3.67** | **44** | *e*P | **Pn** | **09 01 29.2** | **-0.3** |
| BCIP | | | | *e*S | **Sn** | **09 02 10.8** | **-2.0** |
| **BATAN** | **Batan** | **3.67** | **345** | *e*P | **Pn** | **09 01 30.1** | **+0.5** |
| **UPA** | **Univ. de Panam** | **3.76** | **49** | *e*P | **Pn** | **09 01 29.8** | **-0.9** |
| UPA | | | | *e*S | **Sn** | **09 02 13.2** | **-1.9** |
| **HDC** | **Heredia** | **3.84** | **334**⇑ | *e*P | **Pn** | **09 01 31.8** | **-0.2** |
| HDC | | | | *e*S | **Sn** | **09 02 15.4** | **-1.8** |
| **JTS** | **Las Juntas de** | **4.50** | **326** | Pn | **Pn** | **09 01 40.4** | **-0.6** |
| | 38nm,0.3s,baz=190,slow=6.8,SNR=103 | | | | | | |
| JTS | | | | Sn | **Sn** | **09 02 31.0** | **-2.5** |
| | 8.2nm,0.3s,baz=27,slow=22,SNR=7.3 | | | | | | |
| JTS | | | | LR | LR | 09 03 35.8 | |
| | comp=Z,693nm,18.7s,baz=178,slow=43 | | | | | | |
| **JTS** | **Las Juntas de** | **4.50** | **326** | *e*P | **Pn** | **09 01 40.7** | **-0.3** |
| **JTS** | **Las Juntas de** | **4.50** | **326** | *e*P | **Pn** | **09 01 41.0** | **0.0** |
| JTS | | | | *e*S | **Sn** | **09 02 29.4** | **-4.1** |
| **PTAC** | **Punta Ardita,** | **4.62** | **82** | *e*P | **Pn** | **09 01 39.7** | **-2.9** |
| **SOLC** | **Bahia Solano** | **4.99** | **93** | *e*P | **Pn** | **09 01 44.6** | **-3.1** |
| **ACON** | **Acoyapa** | **6.05** | **334** | *e*P | **Pn** | **09 02 02.5** | **+0.2** |
| **PLMC** | **San Jos del P** | **6.32** | **104** | *e*P | **Pn** | **09 02 03.1** | **-2.9** |
| **CBOC** | **Ciudad Bolivar** | **6.41** | **96** | *e*P | **Pn** | **09 02 03.1** | **-4.2** |
| **YOTC** | **Yotoco, Valle** | **6.56** | **112** | *e*P | **Pn** | **09 02 08.9** | **-0.4** |
| **HELC** | **Santa Helena** | **6.86** | **92** | *e*P | **Pn** | **09 02 14.8** | **+1.1** |
| **POPC** | **Popayan, Colom** | **6.96** | **124** | *e*P | **Pn** | **09 02 13.8** | **-1.2** |
| **GUY2C** | **Guyana, Caldas** | **7.14** | **100** | *e*P | **Pn** | **09 02 19.7** | **+2.0** |
| **SOTA** | **Rioblanco** | **7.25** | **127** | *e*P | **Pn** | **09 02 19.7** | **+0.4** |
| **ANIL** | **Santa Ana** | **7.27** | **106** | *e*P | **Pn** | **09 02 17.7** | **-1.6** |
| **GCUF** | **Volcan Galeras** | **7.30** | **136** | *e*P | **Pn** | **09 02 18.7** | **-1.3** |
| **PCON** | **Cinco Dias** | **7.31** | **124** | *e*P | **Pn** | **09 02 20.6** | **+0.5** |
| **ZARC** | **Zaragoza, Cauc** | **7.57** | **82** | *e*P | **Pn** | **09 02 21.6** | **-1.6** |
| **NORC** | **Norcasia** | **7.57** | **97** | *e*P | **Pn** | **09 02 23.6** | **+0.3** |
| **ORTC** | **Ortega, Tolima** | **7.60** | **110** | *e*P | **Pn** | **09 02 23.6** | **-0.1** |
| **PTBC** | **PUERTO BERRIO,** | **7.92** | **89** | *e*P | **Pn** | **09 02 30.4** | **+2.5** |
| **ROSC** | **El Rosal** | **8.23** | **101** | LR | LR | 09 05 51.2 | |
| | comp=Z,139nm,19.7s,baz=340,slow=41 | | | | | | |
| **FLOC** | **Florencia** | **8.35** | **126** | *e*P | **Pn** | **09 02 33.3** | **-0.6** |
| **CHIC** | **Chingaza** | **8.85** | **102** | *e*P | **Pn** | **09 02 43.0** | **+1.9** |
| **BARC** | **Barichara** | **9.18** | **89** | *e*P | **Pn** | **09 02 46.0** | **+0.5** |
| **MACC** | **Macarena, Meta** | **9.59** | **117** | *e*P | **Pn** | **09 02 49.9** | **-1.1** |
| **APG** | **El Apazote** | **11.55** | **318** | Pn | **Pn** | **09 03 21.1** | **+3.1** |
| | 2.1nm,0.3s,baz=118,slow=9.5,SNR=28 | | | | | | |
| APG | | | | LR | LR | 09 07 23.4 | |
| | comp=Z,201nm,22.0s,baz=140,slow=36 | | | | | | |
| **CMIG** | **Matias Romero** | **16.08** | **312** | LR | LR | 09 10 01.6 | |
| | comp=Z,134nm,20.1s,baz=122,slow=35 | | | | | | |
| **SJG** | **San Juan** | **19.61** | **53** | LR | LR | 09 12 10.4 | |
| | comp=Z,85nm,20.2s,baz=244,slow=39 | | | | | | |
| **LPAZ** | **La Paz** | **26.72** | **148** | LR | LR | 09 17 35.9 | |
| | comp=Z,201nm,20.7s,baz=311,slow=37 | | | | | | |
| **TKL** | **Tuckaleechee C** | **29.02** | **358** | LR | LR | 09 18 09.2 | |
| | comp=Z,64nm,18.3s,baz=186,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **30.27** | **321** | LR | LR | 09 21 21.5 | |
| | comp=Z,66nm,18.9s,baz=112,slow=42 | | | | | | |
| **SIV** | **San Ignacio** | **30.78** | **137** | LR | LR | 09 19 02.1 | |
| | comp=Z,121nm,19.6s,baz=275,slow=36 | | | | | | |
| **LVC** | **Limon Verde** | **31.83** | **156** | LR | LR | 09 20 40.7 | |
| | comp=Z,78nm,21.1s,baz=27,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **35.92** | **325** | P | **P** | **09 07 34.7** | **+1.2** |
| | 2.3nm,1.0s,baz=141,slow=9.8,SNR=3.7 | | | | | | |
| ANMO | | | | LR | LR | 09 24 18.0 | |
| | comp=Z,36nm,18.8s,baz=120,slow=40 | | | | | | |
| **BDFB** | **Brasilia** | **40.58** | **123** | LR | LR | 09 26 43.0 | |
| | comp=Z,80nm,20.1s,baz=274,slow=39 | | | | | | |
| **PFO** | **Pinyon Flats O** | **41.47** | **315** | LR | LR | 09 25 54.1 | |
| | comp=Z,44nm,18.5s,baz=139,slow=37 | | | | | | |
| **PDAR** | **Pinedale Array** | **43.32** | **331** | P | **P** | **09 08 35.8** | **+0.6** |
| | 0.7nm,1.0s,baz=119,slow=6.4,SNR=4.8 | | | | | | |
| PDAR | | | | LR | LR | 09 28 31.9 | |
| | comp=Z,37nm,18.1s,baz=112,slow=39 | | | | | | |
| **ELK** | **Elko** | **44.94** | **324** | LR | LR | 09 32 23.7 | |
| | comp=Z,31nm,19.9s,baz=128,slow=43 | | | | | | |
| **NVAR** | **Mina Array Bea** | **45.40** | **320** | P | **P** | **09 08 53.9** | **+2.0** |
| | 0.4nm,0.5s,baz=126,slow=7.0,SNR=4.7 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **50.05** | **321** | LR | LR | 09 32 05.8 | |
| | comp=Z,43nm,18.1s,baz=148,slow=38 | | | | | | |
| **NEW** | **Newport** | **50.96** | **331** | LR | LR | 09 33 50.6 | |
| | comp=Z,47nm,18.3s,baz=120,slow=40 | | | | | | |
| **FRB** | **Frobisher Bay** | **57.99** | **7** | LR | LR | 09 36 07.8 | |
| | comp=Z,66nm,18.4s,baz=194,slow=38 | | | | | | |
| **BBB** | **Bella Bella** | **58.92** | **329** | LR | LR | 09 37 42.6 | |
| | comp=Z,28nm,18.5s,baz=280,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **60.63** | **344** | P | **P** | **09 10 41.2** | **-2.3** |
| | 1.1nm,1.1s,baz=134,slow=7.1,SNR=7.5 | | | | | | |
| **DLBC** | **Dease Lake** | **63.36** | **334** | LR | LR | 09 41 37.3 | |
| | comp=Z,38nm,18.1s,baz=102,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **73.41** | **336** | P | **P** | **09 12 04.9** | **+0.1** |
| | 0.9nm,1.0s,baz=132,slow=4.0,SNR=4.2 | | | | | | |
| **MDT** | **Midelt** | **76.26** | **58** | LR | LR | 09 41 03.0 | |
| | comp=Z,36nm,19.1s,baz=343,slow=32 | | | | | | |
| **ESDC** | **Sonseca Array** | **76.99** | **51** | LR | LR | 09 46 26.9 | |
| | comp=Z,81nm,18.3s,baz=275,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.11** | **29** | LR | LR | 09 48 50.3 | |
| | comp=Z,14nm,18.6s,baz=350,slow=34 | | | | | | |

**IDC 19 09:17:24.1±2.1, 41.27S×16.60W, h0km, mb3.9/3, mb1 4.1/3, mb1mx3.7/23, mbtmp3.9/3, MS3.4/5, Ms1 3.3/5, ms1mx3.1/51, Error ellipse: s-maj=77.6km s-min=25.8km az=153.0, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SUR** | **Sutherland** | **31.04** | **86** | LR | LR | 09 33 38.1 | |
| | comp=Z,71nm,18.7s,baz=210,slow=31 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **32.23** | **4** | T | T | 09 57 37.9 | |
| | baz=38,slow=74,SNR=5.5 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **32.23** | **4** | T | T | 09 57 37.6 | |
| | baz=182,slow=74,SNR=10 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **33.34** | **4** | T | T | 09 58 59.2 | |
| **H10N3** | **ASCENSION HYDR** | **33.34** | **4** | T | T | 09 58 59.7 | |
| | baz=258,slow=74,SNR=21 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **33.36** | **4** | T | T | 09 59 01.5 | |
| | baz=196,slow=74,SNR=5.3 | | | | | | |
| **BOSA** | **Boshof** | **36.22** | **83** | LR | LR | 09 36 09.2 | |
| | comp=Z,24nm,20.1s,baz=189,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **36.47** | **63** | LR | LR | 09 36 14.4 | |
| | comp=Z,70nm,19.2s,baz=153,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **36.63** | **281** | P | P | 09 24 32.1 | -0.1 |
| | 1.1nm,0.7s,baz=152,slow=11,SNR=3.2 | | | | | | |
| **LBTB** | **Lobatse** | **38.46** | **78** | LR | LR | 09 38 08.7 | |
| | comp=Z,81nm,19.5s,baz=207,slow=32 | | | | | | |
| **MATP** | **Matopo** | **43.36** | **75** | LR | LR | 09 40 22.8 | |
| | comp=Z,50nm,21.8s,baz=254,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **56.73** | **21** | P | P | 09 27 09.3 | -0.4 |
| | 1.0nm,1.0s,baz=200,slow=7.2,SNR=3.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **81.38** | **10** | P | P | 09 29 42.7 | +0.3 |
| | 1.4nm,1.0s,baz=188,slow=3.6,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **129.11** | **324** | PKP | PKPdf | 09 36 32.6 | -0.3 |
| | 0.6nm,1.0s,baz=111,slow=1.9,SNR=5.2 | | | | | | |

**KRSC 19 09:21:17.0±1.0, 48.80N×156.11E, h16km±14km, ML4.0, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.88** | **0** | *e*P | Pn | 09 21 49.0 | +0.6 |
| SKR | | | | *e*S | Sn | 09 22 12.6 | +0.8 |
| **PAU** | **Pauzhetka** | **2.71** | **9** | *e*P | Pb | 09 22 02.4 | -2.5 |
| PAU | | | | *e*S | Sb | 09 22 35.6 | -2.2 |
| **KDTR** | **Khodutka, Kamc** | **3.26** | **22** | *e*P | Pb | 09 22 10.9 | -3.5 |
| KDTR | | | | *e*S | Sb | 09 22 49.9 | -3.9 |
| **MTVR** | **Mutnovka** | **3.91** | **19** | *e*P | Pn | 09 22 20.6 | +4.1 |
| MTVR | | | | *e*S | Sb | 09 23 07.5 | -5.2 |
| **RUS** | **Russkaya** | **3.94** | **22** | *e*P | Pn | 09 22 20.0 | +3.3 |
| RUS | | | | *e*S | Sn | 09 23 06.8 | +4.2 |
| **PET** | **Petropavlovsk** | **4.52** | **20** | *e*S | Sn | 09 23 22.2 | +5.4 |
| **DALK** | **Dalny** | **4.55** | **21** | *e*S | Sn | 09 23 22.5 | +4.9 |
| **UGLR** | **Uglovaya** | **4.73** | **20** | *e*P | Pn | 09 22 31.2 | +3.5 |
| **AVH** | **Avacha** | **4.77** | **19** | *e*P | Pn | 09 22 32.2 | +4.1 |
| **KOK** | **Koryaka** | **4.77** | **19** | *e*P | Pn | 09 22 33.3 | +5.1 |
| **SMAR** | **Somma** | **4.78** | **20** | *e*P | Pn | 09 22 33.0 | +4.6 |
| **SDLR** | **Sedlovina** | **4.81** | **20** | *e*P | Pn | 09 22 32.6 | +3.8 |
| **SPN** | **Mys Shipunski** | **4.96** | **28** | *e*P | Pn | 09 23 34.9 | +4.2 |
| SPN | | | | *e*S | Sn | 09 23 33.4 | +5.8 |
| **TUMR** | **Tumrok** | **6.95** | **19** | *e*P | Pn | 09 23 03.0 | +4.9 |

**KRSZO 19 09:26:07.8, 46.18N×18.29E, h0km, Explosion. locality : Koml II. GT info : GT2 explosion, Hungary**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOVH** | **Kovagotottos** | **0.16** | **237** | Pg | Pg | 09 26 11.7 | +0.9 |
| KOVH | | | | Lg | Lg | 09 26 14.6 | |
| **KOVH** | **Kovagotottos** | **0.16** | **237** | PG | Pg | 09 26 11.7 | +0.9 |
| KOVH | | | | SG | Sg | 09 26 14.6 | +1.7 |
| **MORH** | **Mrgy, Hungar** | **0.25** | **81** | Pg | Pg | 09 26 13.5 | +1.0 |
| MORH | | | | Lg | Lg | 09 26 17.4 | |
| **MORH** | **Mrgy, Hungar** | **0.25** | **81** | PG | Pg | 09 26 13.5 | +1.0 |
| MORH | | | | SG | Sg | 09 26 17.4 | +1.7 |

*IDC **19** 09:26:

baz=70,slow=71,SNR=88
**H03N3 Juan Fernandez 5.52 244** Pn **Pn** 09 27 28.1 -2.7
baz=107,slow=18,SNR=81
H03N3 T T 09 33 09.0
baz=70,slow=71,SNR=108
**H03N2 Juan Fernandez 5.52 244** Pn **Pn** 09 27 28.5 -2.3
baz=107,slow=18,SNR=38
H03N2 T T 09 33 07.0
baz=70,slow=71,SNR=104
**BI05 Punta Hualpn 5.57 182** Pn **Pn** 09 27 30.3 -1.3
**H03S3 Juan Fernandez 5.66 241** Pn **Pn** 09 27 30.3 -2.4
SNR=8.4
**H03S1 Juan Fernandez 5.66 240** Pn **Pn** 09 27 29.8 -3.0
SNR=6.4
**H03S2 Juan Fernandez 5.68 240** Pn **Pn** 09 27 30.2 -2.7
SNR=10.0
**LC01 Cunco 7.76 174** Pn **Pn** 09 28 01.4 -0.5
**LR03 Panguipulli 8.46 177** **Pn** 09 28 11.3 -0.1
**LR04 Corral 8.70 182** Pn **Pn** 09 28 14.4 -0.3
**LVC Limon Verde 9.27 24** LR LR 09 32 09.1
comp=E,55nm,19.5s,baz=210,slow=39
**PLCA Paso Flores 9.75 169** Pn **Pn** 09 28 30.1 +0.9
comp=E,8.8nm,0.3s,baz=331,slow=11,SNR=374
**PLCA Paso Flores 9.75 169** Pn **Pn** 09 28 30.2 +1.0
**LPAZ La Paz 15.46 18** Pn **Pn** 09 29 46.1 -1.6
comp=E,0.2nm,0.3s,baz=189,slow=7.6,SNR=10
**LPAZ La Paz 15.46 18** Pn **Pn** 09 29 46.8 -0.8
**LPAZ La Paz 15.46 18** *eP* **Pn** 09 29 48.0 +0.3
**SIV San Ignacio 18.62 38** P **P** 09 30 25.6 -1.1
comp=E,0.3nm,0.3s,baz=223,slow=12,SNR=20
**AQDB Aquidauana 18.83 60** *eP* **Pn** 09 30 29.2 -0.3
**NNA Nana 19.42 349** LR LR 09 36 21.5
comp=E,65nm,18.7s,baz=203,slow=32
**PTGB Pitanga 19.56 76** *eP* **Pn** 09 30 38.0 -0.3
**PTLB Pontes e Lacer 20.13 42** *eP* Pn 09 30 44.9 -0.1
**TER01 Tubaro-SC 20.86 89** *eP* Pn 09 30 52.6 -0.9
**VILB Vilhena 21.62 36** *eP* **P** 09 31 00.8 +1.4
**PCMB Pacaembu 21.64 69** *eP* **P** 09 31 00.3 +0.8
**SALV Santo Antonio 21.92 50** *eP* **P** 09 31 02.6 +0.1
**ETMB Extrema 22.16 18** *eP* **P** 09 31 08.2 +3.0
**FRTB Fartura 22.21 75** *eP* **P** 09 31 06.8 +1.1
**CZSB Cruzeiro do Su 23.32 1** *eP* **P** 09 31 18.3 +1.0
**ITRB Iturama 23.36 66** *eP* **P** 09 31 18.1 +0.3
**USHA Ushuaia 23.88 173** P **P** 09 31 22.9 +0.4
comp=E,3.3nm,0.6s,baz=305,slow=21,SNR=1.9
**PDRB Porto dos Gac 24.60 41** *eP* **P** 09 31 30.1 +0.6
**ARAG Araguaiana, MT 24.72 56** *eP* **P** 09 31 31.9 +1.3
**SNDB Serra Nova Dou 27.68 51** *eP* **P** 09 32 00.2 +2.8
**VNA3 Neumayer Olymp 52.28 159** P **P** 09 35 19.2 -1.0
**VNA2 Neumayer--Watz 52.93 158** P **P** 09 35 25.8 +0.7
**SNAA Sanae 54.51 159** P **P** 09 35 37.3 +0.7
**SNAA Sanae 54.51 159** P **P** 09 35 37.8 +1.1
SNAA IAmb IAmb 09 35 38.6
comp=Z,6.2nm,0.7s
**QSPA South Pole Qui 59.06 180** P **P** 09 36 10.6 +1.4
comp=Z,5.4nm,0.6s,baz=237,slow=0.6,SNR=37
**QSPA South Pole Qui 59.06 180** P **P** 09 36 11.0 +1.8
QSPA IAmb IAmb 09 36 12.8
comp=Z,7.0nm,0.9s
**JCT Junction City 66.39 335** P **P** 09 36 58.9 +0.7
**TXAR Lajitas Array 66.88 331** P **P** 09 37 02.1 +0.6
comp=Z,1.0nm,0.7s,baz=152,slow=8.0,SNR=13
**TX31 Lajitas Ar. Si 66.88 331** P **P** 09 37 02.4 +0.9
**TX32 Lajitas Array 66.88 331** P **P** 09 37 01.7 +0.2
TX32 IAmb IAmb 09 37 04.9
comp=Z,2.3nm,0.8s
**SWET Sewanee 67.15 349** P **P** 09 37 03.1 +0.1
**ABTX Abilene, Hawle 68.28 336** P **P** 09 37 10.3 +0.2
**LCAR Lake Charles 69.02 344** P **P** 09 37 15.0 +0.3
LCAR IAmb IAmb 09 37 22.9
comp=Z,4.0nm,0.8s
**FCAR Ozark Folk Cen 69.08 343** P **P** 09 37 15.7 +0.6
**PBMO Poplar Bluff 69.54 345** P **P** 09 37 19.1 +1.2
**MNTX Cornudas Mount 69.66 331** P **P** 09 37 19.1 +0.4
MNTX IAmb IAmb 09 37 21.4
comp=Z,2.7nm,0.8s
**MSTX Muleshoe 70.62 334** P **P** 09 37 24.9 +0.1
**X16A Lo Mia Camp, P 74.62 328** P **P** 09 37 47.1 -1.6
X16A IAmb IAmb 09 37 52.8
comp=Z,6.1nm,1.3s
**Q24A Divide 75.92 335** P **P** 09 37 55.9 -0.4
Q24A IAmb IAmb 09 38 05.9
comp=Z,6.0nm,0.8s
**SMCO Snowmass 76.80 333** P **P** 09 38 00.8 -0.4
SMCO IAmb IAmb 09 38 05.6
comp=Z,5.8nm,1.0s
**KNB Kanab 77.40 328** P **P** 09 38 05.1 +0.6
KNB IAmb IAmb 09 38 09.6
comp=Z,5.8nm,1.2s
**ECSD EROS Data Cent 77.61 343** P **P** 09 38 05.7 +0.4
ECSD IAmb IAmb 09 38 08.1
comp=Z,5.8nm,0.8s
**CCUT Cedar City 78.08 328** P **P** 09 38 08.7 +0.3
**NVAR Mina Array Bea 81.10 326** P **P** 09 38 26.3 +1.5
comp=Z,0.7nm,0.7s,baz=155,slow=3.4,SNR=4.8
**TORD Torodi Ar. Bea 84.02 71** P **P** 09 38 40.6 +0.4
comp=Z,0.9nm,0.8s,baz=263,slow=4.5,SNR=4.2
**TORD Torodi Ar. Bea 84.02 71** IAmb IAmb 09 38 49.8
comp=Z,2.5nm,1.4s
**WRA Warramunga Arr 122.81 211** PKP **PKiKP** 09 45 05.6 -0.7
comp=Z,0.6nm,0.8s,baz=173,slow=1.6,SNR=6.8
**BVAR Borovoye Array 145.69 40** PKPbc **PKPab** 09 45 48.3 +0.2
comp=Z,0.5nm,0.4s,baz=343,slow=4.5,SNR=2.9
**ZALV Zalesovo Beam 152.20 29** PKPbc **PKiKP** 09 46 04.5 -0.3
comp=Z,4.0nm,0.6s,baz=300,slow=3.2,SNR=14
**ZALV Zalesovo Beam 152.20 29** PKPdf **PKPdf** 09 45 56.4 -1.4
ZALV **pPKPbc** 09 46 05.0 +0.8
ZALV PKPab **PKPab** 09 46 12.8 -1.5
**MKAR Makanchi Array 155.39 44** PKPbc PKPbc 09 46 11.3
comp=Z,0.5nm,0.7s,baz=344,slow=2.5,SNR=3.6

*IDC **19** 09:29:56.6±1.2,56.°54S×123.°34W, h0km, mb3.8/4, mb1 4.1/4, mb1mx3.7/34, mbtmp3.8/4, MS4.2/43, Ms1 4.2/43, ms1mx4.2/52, Error ellipse: s-maj=99.9km s-min=31.0km az=153.0*

*GCMT **19** 09:30:00.0±0.1,55.°95S±0.°01×123.°45W±0.°01, h19km±1km, MW5.2/126, Moment Tensor Solution. s79,c111; s126,c204; Duration: 1ᵗ0 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$=0.08±.02; $M_{\theta\theta}$=0.44±.02; $M_{\phi\phi}$=-0.36±.01; $M_{r\theta}$=-0.28±.04; $M_{\theta\phi}$=0.75±.01; $M_{\phi r}$=-0.21±.03; Best double couple: $M_0$=0.91100×$10^{17}$ NP1:$\phi_s$=286.00000°,δ76.00000°, λ11.00000°. NP2:$\phi_s$=193.00000°,δ80.00000°,λ165.00000°. Principal axes: T 1.0050, Plg18.0000°, Azm149.0000°; N -0.1880, Plg72.0000°, Azm339.0000°; P -0.8160, Plg3.0000°, Azm240.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 19 09:29:57.9±1.2,56.°35S±0.°5×123.°6W±0.°3, h10km, n63, σ1ᵗ93/7, mb3.9/4, MS4.3/45, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **USHA** | **Ushuaia** | **30.50** | **111** | LR | LR | 09 45 07.1 | |
| | comp=Z,669nm,21.4s,baz=239,slow=30 | | | | | | |
| **RPN** | **Rapa Nui** | **30.91** | **25** | LR | LR | 09 43 53.3 | |
| | comp=Z,184nm,20.2s,baz=209,slow=27 | | | | | | |
| **VNDA** | **Vanda** | **32.57** | **203** | LR | LR | 09 45 44.8 | |
| | comp=Z,436nm,21.3s,baz=90,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.86** | **180** | LR | LR | 09 48 39.0 | |
| | comp=Z,427nm,19.5s,baz=88,slow=33 | | | | | | |
| **H03S2** | **Juan Fernandez** | **37.78** | **73** | T | T | 10 17 00.4 | |
| | baz=218,SNR=15 | | | | | | |
| **H03S1** | **Juan Fernandez** | **37.79** | **73** | T | T | 10 16 59.3 | |
| | baz=218,SNR=16 | | | | | | |
| **H03S3** | **Juan Fernandez** | **37.80** | **73** | T | T | 10 16 57.7 | |
| | baz=218,SNR=18 | | | | | | |
| **H03N3** | **Juan Fernandez** | **38.08** | **72** | T | T | 10 17 25.0 | |
| | baz=221,slow=72,SNR=133 | | | | | | |
| **H03N2** | **Juan Fernandez** | **38.09** | **72** | T | T | 10 17 20.1 | |
| | baz=221,slow=72,SNR=237 | | | | | | |
| **H03N1** | **Juan Fernandez** | **38.10** | **72** | T | T | 10 17 14.2 | |
| | baz=221,slow=72,SNR=121 | | | | | | |
| **RPZ** | **Rata Peaks** | **42.27** | **259** | LR | LR | 09 51 42.4 | |
| | comp=Z,556nm,18.4s,baz=116,slow=31 | | | | | | |
| **URZ** | **Urewera** | **42.63** | **269** | LR | LR | 09 51 15.1 | |
| | comp=Z,382nm,20.3s,baz=130,slow=30 | | | | | | |
| **PPT2** | **Papeete2** | **43.37** | **322** | *eS* | S | 09 44 18.5 | -10 |
| | 341nm,25.2s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 09 47 46.7 | |
| | 1μm,23.4s | | | | | | |
| PPT2 | | | | *e*LR | LR | 09 49 43.0 | |
| | comp=Z,2μm,26.0s,baz=168 | | | | | | |
| **PPT** | **Papeete** | **43.39** | **322** | LR | LR | 09 50 49.8 | |
| | comp=Z,465nm,21.4s,baz=162,slow=29 | | | | | | |
| **RAR** | **Rarotonga** | **44.10** | **308** | LR | LR | 09 50 50.3 | |
| | comp=Z,241nm,20.2s,baz=150,slow=28 | | | | | | |
| **VAH** | **Vaihoa** | **44.94** | **326** | *eT* | T | 10 25 26.4 | |
| | 30nm,0.2s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **45.24** | **326** | *eT* | T | 10 25 50.6 | |
| | 8.9nm,0.3s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **49.11** | **338** | *eS* | S | 09 45 38.0 | -13 |
| TAOE | 270nm,25.3s | | | | | | |
| | comp=Z,1μm,28.4s | | | *e*LR | LR | 09 52 13.0 | |
| **LVC** | **Limon Verde** | **52.02** | **73** | LR | LR | 09 55 49.5 | |
| | comp=Z,137nm,18.2s,baz=222,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **55.39** | **86** | LR | LR | 09 58 45.7 | |
| | comp=Z,212nm,20.6s,baz=228,slow=31 | | | | | | |
| **MAW** | **Mawson** | **56.30** | **183** | LR | LR | 10 02 16.1 | |
| | comp=Z,749nm,20.0s,baz=167,slow=35 | | | | | | |
| **NNA** | **Nana** | **56.96** | **58** | LR | LR | 09 57 31.5 | |
| | comp=Z,169nm,21.0s,baz=206,slow=29 | | | | | | |
| **LPAZ** | **La Paz** | **57.65** | **69** | LR | LR | 09 59 19.3 | |
| | comp=Z,84nm,20.2s,baz=208,slow=31 | | | | | | |
| **ATAH** | **Atahualpa** | **60.50** | **54** | LR | LR | 09 59 42.0 | |
| | comp=Z,328nm,18.5s,baz=218,slow=30 | | | | | | |
| **DZM** | **Mont Dzumac** | **60.86** | **274** | LR | LR | 10 01 15.5 | |
| | comp=Z,314nm,19.8s,baz=140,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **60.86** | **274** | *eS* | S | 09 48 38.2 | +10 |
| DZM | 134nm,22.7s | | | | | | |
| | comp=Z,543nm,26.1s | | | *e*LR | LR | 09 58 28.4 | |
| **SIV** | **San Ignacio** | **61.64** | **76** | P | **P** | **09 40 15.4** | **-0.4** |
| | 1.0nm,0.8s,baz=236,slow=7.3,SNR=2.9 | | | | | | |
| SIV | | | | | LR | 10 01 56.5 | |
| | comp=Z,196nm,21.6s,baz=254,slow=31 | | | | | | |
| **STKA** | **Stephens Creek** | **66.65** | **247** | LR | LR | 10 05 26.2 | |
| | comp=Z,206nm,18.6s,baz=177,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **69.11** | **87** | LR | LR | 10 08 30.5 | |
| | comp=Z,278nm,20.1s,baz=181,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **73.64** | **258** | LR | LR | 10 08 56.2 | |
| | comp=Z,160nm,20.7s,baz=110,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **75.03** | **68** | LR | LR | 10 08 40.4 | |
| | comp=Z,138nm,19.5s,baz=219,slow=31 | | | | | | |
| **APG** | **El Apazote** | **76.26** | **33** | LR | LR | 10 09 30.4 | |
| | comp=Z,57nm,18.3s,baz=202,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **77.20** | **247** | P | **P** | **09 41 51.8** | **-0.6** |
| | 0.8nm,0.8s,baz=148,slow=5.8,SNR=4.7 | | | | | | |
| ASAR | | | | | LR | 10 12 31.1 | |
| | comp=Z,215nm,18.2s,baz=142,slow=33 | | | | | | |
| **SDV** | **Santo Domingo** | **78.20** | **54** | LR | LR | 10 13 01.3 | |
| | comp=Z,52nm,19.4s,baz=195,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.12** | **249** | P | **P** | **09 42 07.5** | **-0.6** |
| | 1.2nm,0.9s,baz=147,slow=4.8,SNR=7.1 | | | | | | |
| WRA | | | | | LR | 10 12 51.8 | |
| | comp=Z,274nm,20.7s,baz=154,slow=32 | | | | | | |
| **LPIG** | **La Paz** | **80.89** | **12** | LR | LR | 10 09 01.9 | |
| | comp=Z,141nm,20.9s,baz=196,slow=29 | | | | | | |
| **PMG** | **Port Moresby** | **81.86** | **265** | LR | LR | 10 14 14.0 | |
| | comp=Z,221nm,18.4s,baz=162,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **83.79** | **71** | LR | LR | 10 14 18.5 | |
| | comp=Z,106nm,19.1s,baz=202,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **86.09** | **243** | LR | LR | 10 15 34.6 | |
| | comp=Z,176nm,21.4s,baz=137,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **86.59** | **150** | LR | LR | 10 14 55.1 | |
| | comp=Z,175nm,20.8s,baz=173,slow=31 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.98** | **17** | P | **P** | **09 42 42.6** | **-0.3** |
| | 0.5nm,0.9s,baz=194,slow=7.3,SNR=3.8 | | | | | | |
| TXAR | | | | | LR | 10 13 14.2 | |
| | comp=Z,70nm,21.1s,baz=178,slow=30 | | | | | | |
| **SJG** | **San Juan** | **88.34** | **53** | LR | LR | 10 19 06.5 | |
| | comp=Z,68nm,18.2s,baz=195,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.78** | **6** | LR | LR | 10 14 15.7 | |
| | comp=Z,162nm,18.4s,baz=190,slow=30 | | | | | | |
| **JAY** | **Jayapura** | **91.12** | **264** | LR | LR | 10 21 13.4 | |
| | comp=Z,91nm,18.7s,baz=5.5,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **91.34** | **153** | LR | LR | 10 21 49.3 | |
| | comp=Z,185nm,18.4s,baz=188,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **92.06** | **14** | LR | LR | 10 17 05.2 | |
| | comp=Z,73nm,18.8s,baz=197,slow=31 | | | | | | |
| **BATI** | **Baumata** | **93.80** | **245** | LR | LR | 10 20 29.1 | |
| | comp=Z,289nm,21.5s,baz=160,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.49** | **4** | LR | LR | 10 16 53.8 | |
| | comp=Z,196nm,19.2s,baz=171,slow=30 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **94.52** | **297** | T | T | 11 27 56.7 | |
| | baz=148,slow=76,SNR=12 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **94.53** | **297** | T | T | 11 28 00.4 | |
| | baz=148,slow=76,SNR=13 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **94.53** | **297** | T | T | 11 28 01.8 | |
| | baz=148,slow=76,SNR=11 | | | | | | |
| **LBTB** | **Lobatse** | **94.86** | **152** | LR | LR | 10 20 32.7 | |
| | comp=Z,150nm,19.4s,baz=194,slow=32 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **95.45** | **298** | T | T | 11 29 04.6 | |
| | baz=148,slow=76,SNR=6.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **95.46** | **298** | T | T | 11 29 10.1 | |
| | baz=148,slow=76,SNR=7.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **95.47** | **298** | T | T | 11 29 08.8 | |
| | baz=148,slow=76,SNR=7.4 | | | | | | |
| **ELK** | **Elko** | **96.95** | **6** | LR | LR | 10 19 11.6 | |
| | comp=Z,118nm,18.3s,baz=196,slow=30 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **97.69** | **1** | LR | LR | 10 17 37.9 | |
| | comp=Z,186nm,20.3s,baz=185,slow=29 | | | | | | |
| **TSUM** | **Tsumeb** | **97.96** | **143** | LR | LR | 10 23 59.2 | |
| | comp=Z,90nm,18.1s,baz=151,slow=33 | | | | | | |
| **PDAR** | **Pinedale Array** | **99.42** | **10** | LR | LR | 10 19 33.1 | |
| | comp=Z,155nm,21.8s,baz=200,slow=30 | | | | | | |
| **MATP** | **Matopo** | **99.99** | **153** | LR | LR | 10 24 24.2 | |
| | comp=Z,106nm,20.5s,baz=200,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **122.08** | **348** | PKP | **PKiKP** | **09 48 53.6** | **+2.4** |
| | 0.4nm,0.8s,baz=194,slow=2.5,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **148.78** | **276** | PKPbc | **PKPab** | **09 49 46.6** | **-2.0** |
| | 0.7nm,0.9s,baz=148,slow=3.4,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **161.42** | **250** | PKPab | **PKPab** | **09 50 44.3** | **+2.0** |
| | 0.9nm,0.9s,baz=157,slow=3.7,SNR=4.8 | | | | | | |

**IDC 19 09:34:30.7±1.8,1.°95N×127.°44E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.2/49, mbtmp3.4/4, Error ellipse: s-maj=187.2km s-min=12.4km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.79** | **163** | P | P | 09 39 35.9 | +0.8 |
| | 0.3nm,0.5s,baz=342,slow=10.0,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **26.23** | **166** | P | P | 09 40 06.1 | -1.6 |
| | 0.3nm,0.8s,baz=354,slow=9.0,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.41** | **326** | P | P | 09 44 35.5 | +0.3 |
| | 0.5nm,0.5s,baz=111,slow=8.0,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.61** | **328** | P | P | 09 45 02.9 | -0.5 |
| | 0.5nm,0.6s,baz=126,slow=6.2,SNR=3.2 | | | | | | |

**IDC 19 09:35:02.6±1.4,2.°05N×127.°91E, h0km, mb3.7/4, mb1 3.8/4, mb1mx3.3/48, mbtmp3.7/4, Error ellipse: s-maj=135.2km s-min=8.0km az=67.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.75** | **164** | P | P | 09 40 07.0 | +0.4 |
| | 0.7nm,0.4s,baz=344,slow=11,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **26.22** | **167** | P | P | 09 40 38.6 | -0.7 |
| | 0.3nm,0.5s,baz=353,slow=8.4,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.60** | **325** | P | P | 09 45 08.4 | +0.1 |
| | 0.9nm,0.5s,baz=116,slow=7.8,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.78** | **327** | P | P | 09 45 36.0 | -0.4 |
| | 1.0nm,0.6s,baz=129,slow=6.0,SNR=5.5 | | | | | | |

*IDC **19** 09:37:35.4±0.5,6.°73N×73.°07W, h166km±15km, mb3.0/2, mb1 3.4/3, mb1mx3.0/30, mbtmp3.5/3, Error ellipse: s-maj=34.9km s-min=10.2km az=140.0*

*RSNC **19** 09:37:35.1±1.2,6.°84N×73.°13W, h154km±4km, ML3.3, Mw3.5*

**ISC 19 09:37:34.4±0.9,6.°87N±0.°03×73.°11W±0.°03, h157km±6km, n37, σ1ᵗ45/69, 2C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.28** | **194** | ↓*iP* | **Pn** | **09 37 55.9** | **-0.3** |
| BARC | | | | *eS* | **Sn** | **09 38 11.3** | **-1.4** |
| BARC | | | | *i* | | 09 38 12.1 | |
| | comp=Z,454nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.62** | **41** | *eP* | **Pn** | **09 37 58.8** | **+0.9** |
| PAMC | | | | *eS* | **Sn** | **09 38 16.1** | **+0.4** |
| PAMC | | | | *i* | | 09 38 19.1 | |
| | comp=Z,197nm,0.4s | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.64** | **292** | ↑*iP* | **Pn** | **09 37 57.7** | **+0.3** |
| BRRC | | | | *eS* | **Sn** | **09 38 14.9** | **+0.1** |
| BRRC | | | | *i* | | 09 38 18.0 | |
| | comp=Z,331nm,0.3s | | | | | | |
| **RUSC** | **La Rusia** | **0.97** | **178** | ↓*eP* | **Pn** | **09 37 59.8** | **-0.4** |
| RUSC | | | | *eS* | **Sn** | **09 38 18.8** | **-1.3** |
| RUSC | | | | *i* | | 09 38 21.4 | |
| | comp=Z,126nm,0.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **256** | *eP* | **Pn** | **09 38 02.3** | **-1.0** |
| PTBC | | | | *eS* | **Sn** | **09 38 23.6** | **-1.8** |
| PTBC | | | | *i* | | 09 38 28.8 | |
| | comp=Z,232nm,0.4s | | | | | | |
| **OCAC** | **Ocana** | **1.38** | **352** | *eP* | **Pn** | **09 38 04.0** | **+0.5** |
| OCAC | | | | *eS* | **Sn** | **09 38 26.0** | **+0.1** |
| OCAC | | | | *i* | | 09 38 35.1 | |
| | comp=Z,336nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.38** | **108** | ↓*iP* | **Pn** | **09 38 04.4** | **+0.9** |
| TAMC | | | | *eS* | **Sn** | **09 38 26.0** | **+0.4** |
| TAMC | | | | *i* | | 09 38 26.7 | |
| | comp=Z,143nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.54** | **218** | *eP* | **Pn** | **09 38 04.7** | **-0.4** |
| SPBC | | | | *eS* | **Sn** | **09 38 26.9** | **-1.7** |
| SPBC | | | | *i* | | 09 38 31.7 | |
| | comp=Z,314nm,0.4s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.84** | **290** | *eP* | **Pn** | **09 38 08.3** | **+0.1** |
| ZARC | | | | *eS* | **Sn** | **09 38 33.9** | **-0.2** |
| ZARC | | | | *i* | | 09 38 40.1 | |
| | comp=Z,216nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.17** | **233** | *eP* | **Pn** | **09 38 11.9** | **-0.2** |
| NORC | | | | *eS* | **Sn** | **09 38 39.8** | **-1.3** |
| NORC | | | | *i* | | 09 38 45.2 | |
| | comp=Z,142nm,0.6s | | | | | | |
| **CHIC** | **Chingaza** | **2.31** | **195** | *eP* | **Pn** | **09 38 13.9** | **-0.1** |
| CHIC | | | | *eS* | **Sn** | **09 38 43.5** | **-1.1** |
| CHIC | | | | *i* | | 09 38 48.5 | |
| | comp=Z,121nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.34** | **211** | P | **Pn** | **09 38 14.8** | **+0.3** |
| | comp=Z,23nm,0.3s,baz=101,slow=17,SNR=90 | | | | | | |
| ROSC | | | | S | **Sn** | **09 38 45.6** | **+0.3** |
| | comp=Z,120nm,0.3s,baz=100,slow=16,SNR=22 | | | | | | |
| **ROSC** | **El Rosal** | **2.34** | **211** | *eP* | **Pn** | **09 38 15.7** | **+1.2** |
| ROSC | | | | *eS* | **Sn** | **09 38 46.2** | **+0.8** |
| ROSC | | | | *i* | | 09 38 50.6 | |
| | comp=Z,312nm,0.4s | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **254** | *eP* | **Pn** | **09 38 16.6** | **+0.4** |
| HELC | | | | *eS* | **Sn** | **09 38 50.8** | **+2.4** |
| HELC | | | | *i* | | 09 38 54.5 | |
| | comp=Z,110nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.55** | **290** | *eP* | **Pn** | **09 38 15.6** | **-1.0** |
| UREC | | | | *eS* | **Sn** | **09 38 46.5** | **-2.7** |
| UREC | | | | *i* | | 09 38 58.1 | |
| | comp=Z,156nm,0.2s | | | | | | |
| **SOCV** | **Socops** | **2.64** | **58** | ↑*eP* | **Pn** | **09 38 17.7** | **0.0** |
| SOCV | | | | *eS* | **Sn** | **09 38 50.2** | **-1.0** |
| **GUY2C** | **Guyana, Caldas** | **2.77** | **234** | *eP* | **Pn** | **09 38 20.0** | **+0.3** |
| GUY2C | | | | *eS* | **Sn** | **09 38 58.2** | **+3.5** |
| GUY2C | | | | *i* | | 09 39 02.3 | |
| | comp=Z,105nm,0.6s | | | | | | |
| **VILC** | **Villavicencio,** | **2.80** | **192** | *eP* | **Pn** | **09 38 19.6** | **-0.2** |
| VILC | | | | *eS* | **Sn** | **09 38 53.9** | **-0.9** |
| VILC | | | | *i* | | 09 38 56.7 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.83** | **160** | *eP* | **Pn** | **09 38 18.9** | **-1.1** |
| PTGC | | | | *eS* | **Sn** | **09 38 52.6** | **-2.6** |
| PTGC | | | | *i* | | 09 38 55.4 | |
| | comp=Z,71nm,0.2s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.85** | **357** | *eP* | **Pn** | **09 38 20.5** | **+0.2** |
| LL6C | | | | *eS* | **Sn** | **09 38 56.0** | **+0.2** |
| LL6C | | | | *i* | | 09 38 58.9 | |
| | comp=Z,30nm,0.3s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **251** | *eP* | **Pn** | **09 38 23.3** | **+0.4** |
| CBOC | | | | *eS* | **Sn** | **09 39 00.1** | **-0.3** |
| CBOC | | | | *i* | | 09 39 05.7 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.16** | **307** | *eP* | **Pn** | **09 38 23.1** | **-1.0** |
| MOTC | | | | *eS* | **Sn** | **09 39 01.6** | **-1.0** |
| MOTC | | | | *i* | | 09 39 03.6 | |
| | comp=Z,57nm,0.3s | | | | | | |
| **SDV** | **Santo Domingo** | **3.17** | **51** | *eP* | **Pn** | **09 38 25.5** | **+1.0** |
| SDV | | | | *eS* | **Sn** | **09 39 01.9** | **-1.4** |
| SDV | | | | *i* | | 09 39 06.0 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **ANIL** | **Santa Ana** | **3.28** | **224** | *eP* | **Pn** | **09 38 27.0** | **+1.1** |
| ANIL | | | | *eS* | **Sn** | **09 39 07.1** | **+1.3** |
| ANIL | | | | *i* | | 09 39 10.6 | |
| | comp=Z,248nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.63** | **216** | *eP* | **Pn** | **09 38 30.0** | **-0.2** |
| ORTC | | | | *eS* | **Sn** | **09 39 13.5** | **+0.1** |
| ORTC | | | | *i* | | 09 39 19.9 | |
| | comp=Z,53nm,0.5s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.64** | **326** | *eP* | **Pn** | **09 38 29.5** | **-0.8** |
| SJCC | | | | *eS* | **Sn** | **09 39 11.1** | **-2.6** |
| SJCC | | | | *i* | | 09 39 15.1 | |
| | comp=Z,26nm,0.2s | | | | | | |
| **PLMC** | **San Jos del P** | **3.71** | **238** | *eP* | **Pn** | **09 38 31.2** | **+0.1** |
| PLMC | | | | *eS* | **Sn** | **09 39 12.9** | **-2.4** |
| **YOTC** | **Yotoco, Valle** | **4.31** | **228** | *eP* | **Pn** | **09 38 38.2** | **-0.9** |
| YOTC | | | | *i* | | 09 39 37.4 | |
| | comp=Z,5.8nm,0.4s | | | | | | |
| **GUVC** | **San Jose del G** | **4.32** | **174** | *eP* | **Pn** | **09 38 38.5** | **-0.6** |
| GUVC | | | | *eS* | **Sn** | **09 39 28.7** | **-0.9** |
| GUVC | | | | *i* | | 09 39 32.5 | |
| | comp=Z,44nm,0.2s | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.41** | **346** | *eP* | **Pn** | **09 38 40.5** | **+0.3** |
| SMRC | | | | *eS* | **Sn** | **09 39 28.6** | **-2.9** |
| SMRC | | | | *i* | | 09 39 33.9 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.75** | **189** | *eP* | **Pn** | **09 38 43.0** | **-1.7** |
| MACC | | | | *i* | | 09 38 54.3 | |
| | comp=Z,26nm,0.2s | | | | | | |
| MACC | | | | *eS* | **Sn** | **09 39 34.5** | **-5.1** |
| **MARP** | **Paez Belalcaza** | **4.90** | **215** | *eP* | **Pn** | **09 38 48.2** | **+1.3** |
| MARP | | | | *eS* | **Sn** | **09 39 41.3** | **-2.3** |
| **URIC** | **Uribia, Colomb** | **4.93** | **13** | *eP* | **Pn** | **09 38 46.4** | **-0.7** |
| URIC | | | | *eS* | **Sn** | **09 39 40.8** | **-3.0** |
| URIC | | | | *i* | | 09 39 48.9 | |
| | comp=Z,6.8nm,0.5s | | | | | | |
| **PCON** | **Cinco Dias** | **5.57** | **216** | *eP* | **Pn** | **09 38 56.7** | **+0.6** |
| **TXAR** | **Lajitas Array** | **36.44** | **312** | P | **P** | **09 44 25.7** | **+1.5** |
| | comp=Z,0.4nm,0.8s,baz=125,slow=7.9,SNR=3.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.22** | **340** | P | **P** | **09 47 46.5** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=132,slow=6.6,SNR=11 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| OBF0 | | | SG | **Sb** | **10 07 33.5** | **+1.4** |
| **TOF** | **Tornio** | **2.81 298** | PG | **Pb** | **10 07 01.6** | **+0.5** |
| TOF | | | MSG | | 10 07 35.6 | |
| | comp=Z,2.4nm,0.2s | | | | | |
| TOF | | | SB | **Sb** | **10 07 36.8** | **+0.8** |
| **SUF** | **Sumiainen** | **2.86 223** | PB | **Pn** | **10 06 58.1** | **+1.1** |
| | baz=40 | | | | | |
| SUF | | | MSG | | 10 07 31.7 | |
| | comp=Z,2.7nm,0.2s | | | | | |
| SUF | | | SG | **Sn** | **10 07 34.7** | **+2.7** |
| **VRF** | **Varrio** | **2.91 354** | PB | **Pn** | **10 06 59.1** | **+1.4** |
| VRF | | | MSG | | 10 07 38.7 | |
| | comp=Z,1.1nm,0.2s | | | | | |
| VRF | | | SG | **Sg** | **10 07 42.9** | **-0.8** |
| **SGF** | **Sodankyl** | **3.03 330** | PN | **Pn** | **10 07 00.8** | **+1.5** |
| SGF | | | SB | **Sb** | **10 07 43.5** | **+1.1** |
| **KALU** | **Kalix** | **3.11 292** | PB | **Pn** | **10 07 02.2** | **+1.8** |
| | baz=111 | | | | | |
| KALU | | | SG | **Sg** | **10 07 48.8** | **-1.2** |
| **KAF** | **Kangasniemi** | **3.31 215** | PG | **Pn** | **10 07 06.7** | **+3.5** |
| | baz=34 | | | | | |
| **KLF** | **Kolari** | **3.54 315** | PN | **Pn** | **10 07 08.2** | **+1.9** |
| | baz=125 | | | | | |
| KLF | | | SG | **Sg** | **10 08 02.4** | **-1.3** |
| **KEF** | **Keuruu** | **3.67 225** | PB | **Pn** | **10 07 08.9** | **+0.9** |
| **PAJU** | **Pajala** | **3.69 309** | PN | **Pn** | **10 07 09.8** | **+1.5** |
| PAJU | | | SG | **Sg** | **10 08 06.4** | **-2.0** |
| **ERTU** | **Ertsjaerv** | **3.79 300** | PN | **Pn** | **10 07 12.7** | **+3.0** |
| ERTU | | | SG | **Sg** | **10 08 09.7** | **-2.0** |
| **VAF** | **Ylistaro** | **3.87 245** | PG | **Pb** | **10 07 19.7** | **+0.6** |
| VAF | | | SG | **Sg** | **10 08 11.2** | **-3.0** |
| **FIA0** | **FINESS Array S** | **3.95 212** | PB | **Pn** | **10 07 12.6** | **+0.7** |
| | baz=34 | | | | | |
| FIA0 | | | SG | **Sb** | **10 08 10.2** | **+1.3** |
| **FINES** | **FINESS Array B** | **3.95 212** | Pn | **Pn** | **10 07 10.4** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=35,slow=12,SNR=1.4 | | | | | |
| FINES | | | Pg | **Pb** | **10 07 18.8** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=37,slow=14,SNR=6.3 | | | | | |
| FINES | | | Lg | Lg | 10 08 09.3 | |
| | comp=Z,0.7nm,0.3s,baz=29,slow=29,SNR=11 | | | | | |
| **HEF** | **Hetta** | **4.45 326** | SG | **Sg** | **10 08 29.4** | **-3.6** |
| **ARCES** | **ARCESS Array B** | **5.06 340** | Pn | **Pn** | **10 07 27.3** | **+0.1** |
| | baz=157,slow=13,SNR=19 | | | | | |
| ARCES | | | Sn | **Sn** | **10 08 26.6** | **+0.4** |
| | baz=154,slow=23,SNR=7.3 | | | | | |
| ARCES | | | Lg | Lg | 10 08 46.7 | |
| | baz=159,slow=28,SNR=13 | | | | | |
| **I43RU** | **DUBNA INFRASON** | **8.82 155** | *i* | | 11 01 30.0 | |
| | baz=349,slow=333,SNR=0.9 | | | | | |
| **HFS** | **Hagfors** | **9.05 246** | Pn | **Pn** | **10 08 20.2** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=42,slow=12,SNR=1.7 | | | | | |
| **NOA** | **NORSAR Array B** | **9.52 255** | Pn | **Pn** | **10 08 26.5** | **-1.9** |
| | comp=Z,0.0nm,0.3s,baz=54,slow=12,SNR=1.7 | | | | | |

*DDA **19** 10:08:16.5±0.0, 42.61N×45.34E, h6km±6km, ML2.5*
*TIF **19** 10:08:21.0, 42.32N×45.57E, h9km±2km*
*MOS **19** 10:08:22.2±0.0, 42.43N×45.72E, h18km, MPVA3.5*
*DRS **19** 10:08:22.9±0.0, 42.50N×45.66E, h13km*
*NORS **19** 10:08:24.2±0.0, 42.41N×45.72E, h19km, MPVA3.5*
**ISC 19 10:08:21.5**±1.1, **42.37N**±0.02×**45.64E**±0.02, **h10**km±9km, **n25**, σ1=**66**/50, **Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTLR** | **Botlikh** | **0.52** | **56** | *e*Pg | **Pb** | **10 08 32.3** | **-0.6** |
| BTLR | | | | *e*Sg | **Sb** | **10 08 39.5** | **-1.1** |
| **DVE** | **Vedeno** | **0.69** | **32** | *i* Pg | **Pb** | **10 08 35.6** | **-0.1** |
| DVE | | | | *e*Sg | **Sn** | **10 08 45.6** | **-2.7** |
| **LGD** | **Lagodekhi** | **0.70** | **140** | P | **Pg** | **10 08 35.1** | **0.0** |
| LGD | | | | S | **Sg** | **10 08 44.5** | **+0.3** |
| **PNSH** | **Pansheti** | **0.80** | **290** | P | **Pg** | **10 08 36.4** | **-0.6** |
| PNSH | | | | S | **Sg** | **10 08 47.0** | **-0.4** |
| **XNZR** | **Khunzakh** | **0.81** | **77** | *e*Pg | **Pb** | **10 08 38.0** | **+0.2** |
| XNZR | | | | *e*Sg | **Sb** | **10 08 48.9** | **0.0** |
| **GROC** | **Groznyy** | **0.84** | **8** | *i* Pg | **Pn** | **10 08 39.6** | **+0.1** |
| GROC | | | | *e*Sg | **Sn** | **10 08 52.9** | **+0.9** |
| **KMGR** | **Komgaron** | **0.89** | **321** | *e*Pg | **Pn** | **10 08 42.1** | **+1.9** |
| KMGR | | | | *e*Sg | **Sn** | **10 08 55.4** | **+2.1** |
| **UNCR** | **Uncukul** | **0.92** | **68** | *e*Pg | **Pn** | **10 08 40.5** | **-0.1** |
| UNCR | | | | *e*Sg | **Sn** | **10 08 52.8** | **-1.3** |
| **BTNK** | **Botanikuri** | **0.93** | **223** | P | **Pb** | **10 08 37.0** | **-2.7** |
| BTNK | | | | S | **Sb** | **10 08 49.2** | **-2.9** |
| **BTNK** | **Botanikuri** | **0.93** | **223** | P | **Pb** | **10 08 36.8** | **-2.9** |
| BTNK | | | | S | **Sb** | **10 08 50.8** | **-1.4** |
| BTNK | | | | *i* AML | AML | 10 08 54.0 | |
| | comp=E,145nm,0.1s | | | | | | |
| **GNBR** | **Gunib** | **0.98** | **88** | *e*Pg | **Pn** | **10 08 42.4** | **+0.9** |
| GNBR | | | | *e*Sg | **Sn** | **10 08 56.3** | **+0.7** |
| **DDFL** | **Dedoflistskaro** | **0.99** | **158** | P | **Pn** | **10 08 43.1** | **+1.5** |
| DDFL | | | | S | **Sn** | **10 09 01.2** | **+5.5** |
| **DDFL** | **Dedoflistskaro** | **0.99** | **158** | P | **Pn** | **10 08 42.6** | **+1.0** |
| DDFL | | | | S | **Sn** | **10 09 00.4** | **+4.7** |
| DDFL | | | | *i* AML | AML | 10 09 03.0 | |
| | comp=N,66nm,0.4s | | | | | | |
| **DLMR** | **Dylym** | **1.01** | **46** | *e*Pg | **Pg** | **10 08 40.7** | **-0.3** |
| DLMR | | | | *e*Sg | **Sn** | **10 08 54.2** | **-2.0** |
| **ARKR** | **Arakani** | **1.03** | **77** | *e*Pg | **Pg** | **10 08 41.5** | **+0.1** |
| ARKR | | | | *e*Sg | **Sn** | **10 08 55.7** | **-1.1** |
| **KRNR** | **Karanay** | **1.04** | **64** | *e*Pg | **Pn** | **10 08 42.0** | **-0.4** |
| KRNR | | | | *e*Sg | **Sn** | **10 08 56.4** | **-0.7** |
| **LACR** | **Lac** | **1.09** | **295** | *e*Pg | **Pn** | **10 08 42.1** | **-0.5** |
| LACR | | | | *e*Sg | **Sb** | **10 08 55.2** | **-1.6** |
| **DBC** | **Dubki** | **1.09** | **53** | *e*Pg | **Pn** | **10 08 43.1** | **+0.1** |
| DBC | | | | *e*Sg | **Sn** | **10 08 58.4** | **+0.1** |
| **BUJR** | **Buynaksk** | **1.18** | **67** | *e*Pg | **Pg** | **10 08 44.3** | **+0.1** |
| BUJR | | | | *e*Sg | **Sn** | **10 09 00.6** | **+0.3** |
| **KZRT** | **Kazreti** | **1.35** | **224** | P | **Pn** | **10 08 46.0** | **-0.5** |
| KZRT | | | | S | **Sn** | **10 09 03.6** | **-0.9** |
| **TRLG** | **Trialeti** | **1.41** | **235** | P | **Pn** | **10 08 47.3** | **-0.2** |
| TRLG | | | | S | **Sn** | **10 09 06.4** | **+0.1** |
| **DMNI** | **Dmanisi** | **1.50** | **227** | P | **Pn** | **10 08 48.3** | **-0.3** |
| DMNI | | | | S | **Sn** | **10 09 08.1** | **-0.3** |
| **DIGR** | **Digorskoe uzhe** | **1.60** | **290** | *e*Pg | **Pb** | **10 08 51.8** | **+0.3** |
| DIGR | | | | *e*Sg | **Sg** | **10 09 14.2** | **+1.0** |
| **LSNR** | **Lesken** | **1.61** | **305** | *e*Pg | **Pg** | **10 08 53.2** | **+0.8** |
| LSNR | | | | *e*Sg | **Sg** | **10 09 15.8** | **+2.4** |
| **ABS** | **Abastumani** | **2.19** | **255** | P | **Pn** | **10 09 00.6** | **+2.4** |
| ABS | | | | S | **Sb** | **10 09 29.0** | **+0.4** |

*DDA **19** 10:10:10.7±0.0, 40.53N×27.34E, h7km±2km, ML1.4*
**ISK 19 10:10:10.9**, **40.54N**×**27.23E**, **h14**km±2km, **ML1.7**/6, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RKY** | **Sarkoy-Tekirda** | **0.15** | **344** | PG | Pg | 10 10 15.2 | +0.4 |
| RKY | | | | SG | Sb | 10 10 18.2 | -0.5 |
| **SART** | **Tekirdag** | **0.15** | **345** | P | Pb | 10 10 15.3 | -0.4 |
| SART | | | | *i* AML | AML | 10 10 18.0 | |
| | comp=N,62nm,0.2s | | | | | | |
| SART | | | | S | Sb | 10 10 18.3 | -0.5 |
| **KRBG** | **Karabiga-Canak** | **0.15** | **161** | PG | Pg | 10 10 15.1 | +0.3 |
| KRBG | | | | SG | Sb | 10 10 18.1 | -0.5 |
| **MAR6** | **Marsite Statio** | **0.17** | **9** | PG | Pb | 10 10 15.7 | -0.1 |
| MAR6 | | | | SG | Sb | 10 10 18.5 | -0.5 |
| **MAR3** | **Marsite Statio** | **0.21** | **13** | PG | Pg | 10 10 15.6 | 0.0 |
| MAR3 | | | | SG | Sg | 10 10 18.8 | 0.0 |
| **ERIK** | **Erikli-Kesan** | **0.56** | **284** | PG | Pb | 10 10 22.5 | 0.0 |
| ERIK | | | | SG | Sb | 10 10 30.8 | +0.4 |
| **GELI** | **Tayfur-Gelibol** | **0.60** | **256** | PG | Pb | 10 10 22.9 | -0.2 |
| GELI | | | | SG | Sb | 10 10 31.8 | +0.5 |
| **BAYC** | **CANAKKALE_Bayr** | **0.95** | **214** | P | Pb | 10 10 28.9 | -0.3 |
| BAYC | | | | S | Sn | 10 10 43.2 | -0.1 |
| BAYC | | | | *i* AML | AML | 10 10 47.0 | |
| | comp=N,17nm,1.8s | | | | | | |

**IDC 19 10:10:42.9**±2.0, **2.22N**×**128.16E**, **h0**km, **mb3.5**/3, **mb1 3.7**/3, **mb1mx3.4**/36, **mbtmp3.5**/3, **Error ellipse: s-maj=189.9km s-min=9.4km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.84** | **165** | P | P | 10 15 48.7 | +0.8 |
| | 0.6nm,0.4s,baz=344,slow=10.0,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **26.33** | **168** | P | P | 10 16 19.5 | -1.2 |
| | 0.2nm,0.4s,baz=355,slow=8.2,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.60** | **325** | P | P | 10 20 48.7 | 0.0 |
| | 0.8nm,0.5s,baz=120,slow=8.3,SNR=11 | | | | | | |

**IDC 19 10:14:27.3**±0.7, **54.80N**×**83.75E**, **h0**km, **mb1 2.5**/2, **mb1mx2.5**/53, **mbtmp2.5**/2, **ML2.2**/2, **Error ellipse: s-maj=11.8km s-min=3.9km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.06** | **144** | *i* | | 10 20 00.0 | |
| | baz=318,slow=333,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.06** | **144** | Pg | Pg | 10 14 47.7 | +0.1 |
| | 2.9nm,0.3s,baz=326,slow=17,SNR=24 | | | | | | |
| ZALV | | | | Lg | Lg | 10 15 02.3 | |
| | 8.0nm,0.3s,baz=324,slow=28,SNR=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.25** | **219** | Pn | Pn | 10 15 47.2 | +0.2 |
| | 0.1nm,0.3s,baz=40,slow=13,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.07** | **187** | Pn | Pn | 10 16 27.0 | +1.2 |
| | 0.1nm,0.3s,baz=7.7,slow=11,SNR=2.4 | | | | | | |

**IDC 19 10:18:01.4**±0.8, **15.01N**×**147.49E**, **h0**km, **mb3.4**/3, **mb1 3.7**/4, **mb1mx3.3**/41, **mbtmp3.5**/4, **ML3.4**/1, **Error ellipse: s-maj=28.7km s-min=7.5km az=146.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.90** | **241** | Pn | Pn | 10 18 50.2 | +1.3 |
| | 5.9nm,0.3s,baz=22,slow=19,SNR=1.3 | | | | | | |
| GUMO | | | | Sn | Sn | 10 19 25.3 | +0.7 |
| | 25nm,0.3s,baz=162,slow=23,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.06** | **201** | P | P | 10 25 13.5 | 0.0 |
| | 0.4nm,0.8s,baz=24,slow=9.2,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **40.67** | **199** | P | P | 10 25 43.3 | -0.4 |
| | 0.2nm,0.6s,baz=29,slow=7.8,SNR=2.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.43** | **28** | P | P | 10 30 14.7 | -0.1 |
| | 0.4nm,0.7s,baz=284,slow=5.5,SNR=7.0 | | | | | | |

*NNC **19** 10:23:52.7±5.9, 40.98N×70.15E, h0km, mb3.0, mpv2.6, Error ellipse: s-maj=43.8km s-min=21.6km az=26.0*
*KRNET **19** 10:23:53.9±0.1, 40.90N×70.35E, h12km, mb2.3*
**ISC 19 10:23:55.1**±1.6, **40.89N**±0.05×**70.5E**±0.1, **h10**km, **n8**, σ1=**53**/13, **12C-4D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRKS** | **Terek-Say** | **0.80** | **37** | ⇑*i* | **Pg** | **10 24 09.7** | **-0.8** |
| | baz=47 | | | | | | |
| TRKS | | | | ⇑*i* | **Sg** | **10 24 21.7** | **+0.7** |
| | baz=47 | | | | | | |
| **BTK** | **Batken** | **0.87** | **164** | ⇑*i* | **Pg** | **10 24 11.5** | **-0.3** |
| | baz=57 | | | | | | |
| BTK | | | | ⇑*i* | **Sb** | **10 24 23.8** | **-0.1** |
| | baz=57 | | | | | | |
| **ARK** | **Arkit** | **1.43** | **50** | ⇑*i* | **Pb** | **10 24 22.4** | **+0.6** |
| | baz=53 | | | | | | |
| ARK | | | | ⇑*i* | **Sg** | **10 24 43.1** | **+2.1** |
| | baz=53 | | | | | | |
| **MNAS** | **Manas** | **2.19** | **43** | ⇑*i* | **Pb** | **10 24 34.4** | **-0.5** |
| | baz=45 | | | | | | |
| MNAS | | | | ⇑*i* | **Sb** | **10 25 03.9** | **+1.8** |
| | baz=45 | | | | | | |
| **KK08** | **Karatay Array** | **2.21** | **360** | ⇑Pg | **Pn** | **10 24 32.3** | **+0.4** |
| | 1.6nm,0.6s,baz=147,slow=18 | | | | | | |
| KK08 | | | | ⇓Lg | Lg | 10 25 00.6 | |
| | 5.7nm,0.6s,baz=189,slow=26 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.02** | **53** | ⇑*i* | **Pb** | **10 24 46.3** | **-2.7** |
| | baz=54 | | | | | | |
| EKS2 | | | | ⇑*i* | **Sb** | **10 25 24.2** | **-1.8** |
| | baz=54 | | | | | | |
| **AAK** | **Ala-Archa** | **3.46** | **58** | ⇑Pg | **Pb** | **10 24 57.8** | **+1.3** |
| | 1.3nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 10 25 46.8 | |
| | 1.7nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.31** | **60** | ⇓Pg | **Pg** | **10 25 16.6** | **-1.0** |
| | 0.9nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 10 26 15.2 | |
| | 2.1nm,0.6s | | | | | | |

**IDC 19 10:27:43.2**±695.0, **53.65N**×**34.46E**, **h0**km, **Error ellipse: s-maj=288.6km s-min=75.1km az=30.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **3.46** | **26** | *i* | | 10 48 50.0 | |
| | baz=208,slow=321,SNR=0.5 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.85** | **93** | *i* | | 11 58 30.0 | |
| | baz=290,slow=335,SNR=0.9 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.24** | **69** | *i* | | 13 27 10.0 | |
| | baz=295,slow=325,SNR=1.5 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **44.13** | **67** | *i* | | 14 59 10.0 | |
| | baz=307,slow=338,SNR=0.6 | | | | | | |

*IDC **19** 10:28:27.6±0.9, 8.52S×157.69E, h0km, mb3.9/7, mb1 4.2/9, mb1mx3.9/33, mbtmp3.9/9, ML4.0/2, MS3.5/2, Ms1 3.5/2, ms1mx2.7/59, Error ellipse: s-maj=26.8km s-min=20.2km az=157.0*
*NEIC **19** 10:28:30.0±0.9, 8.55S±0.1×157.63E±0.09, h10km±1km, mb4.2/10, Error ellipse: s-maj=22.4km s-min=14.4km az=194.0*
**ISC 19 10:28:29.9**±0.8, **8.65S**±0.1×**157.72E**±0.08, **h16**km, **n20**, σ0=**77**/19, **mb4.1**/13, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **2.37** | **112** | Pn | **Pn** | **10 29 06.9** | **-1.3** |
| | 50nm,0.3s,baz=236,slow=4.5,SNR=1.9 | | | | | | |
| HNR | | | | Sn | **Sb** | **10 29 41.5** | **+0.2** |
| | 170nm,0.3s,baz=215,slow=22,SNR=8.8 | | | | | | |
| **HNR** | **Honiara** | **2.37** | **112** | | **Pn** | **10 29 08.1** | **-0.1** |
| **CTA** | **Charters Tower** | **15.95** | **223** | Pn | **Pn** | **10 32 13.7** | **-0.1** |
| | 0.3nm,0.3s,baz=38,slow=9.1,SNR=6.5 | | | | | | |
| **ARMA** | **Armidale** | **22.48** | **194** | P | **P** | **10 33 29.8** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 10 33 30.7 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **25.12** | **241** | P | **P** | **10 33 54.5** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 10 34 17.0 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **25.17** | **241** | P | **P** | **10 33 54.6** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 10 34 15.8 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **25.27** | **241** | P | **P** | **10 33 55.7** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 10 34 10.9 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **25.28** | **241** | P | **P** | **10 33 54.8** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 10 34 22.8 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **25.29** | **241** | P | **P** | **10 33 55.9** | **0.0** |
| | comp=Z,1.6nm,0.7s,baz=66,slow=9.3,SNR=18 | | | | | | |
| WRA | | | | LR | LR | 10 42 38.1 | |
| | comp=Z,84nm,20.7s,baz=123,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **27.30** | **234** | P | **P** | **10 34 13.8** | **-0.3** |
| | comp=Z,0.3nm,0.8s,baz=67,slow=9.5,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **27.62** | **211** | P | **P** | **10 34 17.6** | **+0.8** |
| | comp=Z,3.8nm,0.7s,baz=30,slow=13,SNR=7.9 | | | | | | |
| **STKA** | **Stephens Creek** | **27.62** | **211** | IAmb | IAmb | 10 34 20.8 | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **62.63** | **11** | LR | LR | 11 01 40.8 | |
| | comp=Z,46nm,22.0s,baz=330,slow=32 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **63.88** | **295** | P | **P** | **10 39 00.7** | **-1.8** |
| **CMAR** | **Chiang Mai Arr** | **63.88** | **295** | P | **P** | **10 39 01.9** | **-0.6** |
| | comp=Z,0.5nm,0.3s,baz=136,slow=5.7,SNR=4.6 | | | | | | |
| **CAST** | **Castle Rocks** | **81.21** | **20** | P | **P** | **10 40 45.4** | **+0.6** |
| CAST | | | | IAmb | IAmb | 10 40 46.2 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **MCK** | **McKinley** | **82.51** | **21** | P | **P** | **10 40 52.1** | **+0.4** |
| **ILAR** | **Eielson Array** | **83.85** | **21** | P | **P** | **10 40 58.7** | **+0.2** |
| | comp=Z,0.9nm,0.6s,baz=262,slow=5.3,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **86.35** | **318** | P | **P** | **10 41 12.4** | **+0.9** |
| | comp=Z,0.3nm,0.6s,baz=95,slow=6.8,SNR=5.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.58** | **51** | P | **P** | **10 41 32.2** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=252,slow=5.7,SNR=4.3 | | | | | | |

**ISC 19 10:36:57.9**±1.4, **48.72N**±0.04×**17.31E**±0.07, **h4**km±16km, **n6**, σ1=**03**/9, **Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMOL** | **Smolenice** | **0.22** | **160** | *e*PG | **Pg** | **10 37 02.3** | **+0.1** |
| SMOL | | | | *e*SG | **Sg** | **10 37 04.6** | **-0.5** |
| **JAVC** | **Velka Javorina** | **0.27** | **60** | *e*PG | **Pb** | **10 37 06.3** | **+0.8** |
| JAVC | | | | *e*SG | **Sb** | **10 37 11.8** | **+1.3** |
| **MODS** | **Modra-Piesok** | **0.35** | **184** | *e*PG | **Pn** | **10 37 08.6** | **-1.3** |
| **ZST** | **Bratislava** | **0.55** | **195** | *e*PG | **Pg** | **10 37 09.3** | **+0.9** |
| **VYHS** | **Vyhne** | **1.04** | **102** | *e*PG | **Pg** | **10 37 17.5** | **-0.3** |
| **MORC** | **Moravsky Berou** | **1.06** | **8** | *e*PG | **Pg** | **10 37 18.1** | **-0.3** |
| MORC | | | | *e*SG | **Sg** | **10 37 31.9** | **-0.3** |

**IDC 19 10:42:20.3**±4.8, **21.35S**×**179.82W**, **h624**km±36km, **mb3.0**/4, **mb1 3.1**/5, **mb1mx2.9**/43, **mbtmp4.1**/5, **Error ellipse: s-maj=116.0km s-min=42.3km az=144.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.12** | **331** | P | P | 10 43 48.5 | -0.1 |
| | 8.8nm,0.3s,baz=138,slow=14,SNR=34 | | | | | | |
| **CTA** | **Charters Tower** | **31.72** | **266** | P | P | 10 47 56.0 | +0.5 |
| | 1.7nm,0.4s,baz=90,slow=11,SNR=6.3 | | | | | | |
| **STKA** | **Stephens Creek** | **35.89** | **245** | P | P | 10 48 29.2 | -0.9 |
| | 1.5nm,0.5s,baz=108,slow=9.6,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **42.67** | **258** | P | P | 10 49 24.6 | +0.2 |
| | 2.6nm,0.8s,baz=96,slow=8.1,SNR=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.80** | **263** | P | P | 10 49 25.4 | -0.1 |
| | 0.6nm,0.4s,baz=95,slow=7.8,SNR=19 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.90** | **329** | PKP | PKPdf | 11 00 43.5 | -0.5 |
| | 0.2nm,0.4s,baz=45,slow=4.4,SNR=4.2 | | | | | | |

**NNC 19 10:51:14.9**±5.5, **37.55N**×**69.77E**, **h0**km, **mb3.9**, **mpv3.5**, **7C-1D**, **Error ellipse: s-maj=54.5km s-min=38.3km az=165.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK08** | **Karatay Array** | **5.57** | **5** | ⇓Pn | Pn | 10 52 38.6 | -0.5 |
| | 0.9nm,0.5s,baz=191,slow=14 | | | | | | |
| KK08 | | | | ⇑Pg | Pg | 10 52 58.4 | -3.2 |
| | 2.6nm,0.5s,baz=179,slow=12 | | | | | | |
| KK08 | | | | ⇑Lg | Lg | 10 54 11.4 | |
| | 6.3nm,0.6s,baz=163,slow=30 | | | | | | |
| **AAK** | **Ala-Archa** | **6.24** | **34** | ⇑Pn | Pn | 10 52 49.2 | +0.9 |
| | 5.1nm,0.6s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 10 54 31.3 | |
| | 10nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.97** | **38** | ⇑Pn | Pn | 10 52 57.6 | -0.8 |
| | 2.1nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 10 54 56.2 | |
| | 6.9nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **13.69** | **332** | P | Pn | 10 54 26.7 | -3.4 |
| | 0.5nm,0.3s,baz=110,slow=8.4,SNR=42 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.38** | **331** | ⇑P | P | 10 54 56.4 | -1.6 |
| | 3.5nm,0.6s | | | | | | |

*DJA **19** 10:52:51.2±0.6, 2.7N±5°×12.9E±°, h36km±5km, M4.5/14, mB5.2/5, mb4.8/14, MLv4.4/8, Mw(mB)4.5/5*
*IDC **19** 10:52:52.4±3.1, 2.35N×128.88E, h52km±31km, mb4.1/18, mb1 4.2/20, mb1mx4.0/46, mbtmp4.4/20, ML4.3/2, MS3.3/6, Ms1 3.3/6, ms1mx2.9/68, Error ellipse: s-maj=25.1km s-min=14.0km az=74.0*
*NEIC **19** 10:52:53.3±1.5, 2.19N±0.08×128.86E±0.05, h62km±7km, mb4.5/38, Error ellipse: s-maj=11.4km s-min=7.8km az=182.0*
**ISC 19 10:52:52.1**±0.4, **2.26N**±0.05×**128.96E**±0.07, **h50**km, **n106**, σ1=**06**/97, **mb4.5**/45, **MS3.7**/6, **3C, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.18** | **227** | Pn | **Pn** | **10 53 25.4** | **-0.5** |
| **TNTI** | **Ternate** | **2.18** | **227** | P | **Pn** | **10 53 25.9** | **0.0** |
| **SIJI** | **Sorong** | **3.87** | **143** | P | **Pn** | **10 53 49.9** | **+0.7** |
| | 17nm,0.3s,baz=327,slow=13,SNR=41 | | | | | | |
| SIJI | | | | S | **Sn** | **10 54 34.5** | **+1.1** |
| | 14nm,0.3s,baz=225,slow=22,SNR=13 | | | | | | |
| SIJI | | | | LR | LR | 10 55 40.2 | |
| | comp=Z,488nm,18.3s,baz=72,slow=42 | | | | | | |
| **KMSI** | **Cibinong** | **5.25** | **251** | P | **Pn** | **10 54 09.3** | **+1.2** |
| | 0.8nm192nm,0.7s | | | | | | |
| **KCP** | **Kidapawan** | **6.09** | **321** | ⇑*e*P | **Pn** | **10 54 19.2** | **-0.5** |
| KCP | | | | *i* S | Sn | 10 55 44.2 | +16 |
| **FAKI** | **Fak Fak** | **6.11** | **147** | Pn | **Pn** | **10 54 20.2** | **+0.4** |
| FAKI | | | | Sn | **Sn** | **10 55 28.2** | **-0.3** |
| **FAKI** | **Fak Fak** | **6.11** | **147** | P | **Pn** | **10 54 22.4** | **+2.5** |
| | 0.1nm17nm,0.9s | | | | | | |
| **GTOI** | **Gorontalo** | **6.16** | **255** | P | **Pn** | **10 54 21.8** | **+1.2** |
| | 0.1nm264nm18nm,0.4s | | | | | | |
| **MRSI** | **Marisa** | **7.24** | **256** | P | **Pn** | **10 54 37.0** | **+1.6** |
| | 0.3nm960nm68nm,0.6s | | | | | | |
| **APSI** | **Ampana** | **7.96** | **247** | P | **Pn** | **10 54 46.5** | **+1.2** |
| | 44nm,0.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **8.26** | **262** | Pn | **Pn** | **10 54 48.4** | **-0.9** |
| **TTSI** | **Tana Toraja** | **10.55** | **240** | P | **Pn** | **10 55 20.1** | **-0.6** |
| | 2μm77nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **10.83** | **286** | | **Pn** | **10 55 24.6** | **0.0** |
| **BNSI** | **Bone** | **11.05** | **233** | P | **Pn** | **10 55 28.0** | **+0.4** |
| | 17nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.07** | **236** | P | **Pn** | **10 55 28.1** | **+0.2** |
| | 29nm,0.5s | | | | | | |
| **BKSI** | **Bulukumba** | **11.61** | **230** | P | **Pn** | **10 55 37.2** | **+2.0** |
| | 415nm35nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **11.70** | **232** | P | **Pn** | **10 55 36.1** | **-0.4** |
| | 2.3nm,0.3s,baz=98,slow=8.1,SNR=5.8 | | | | | | |
| KAPI | | | | LR | LR | 11 00 39.8 | |
| | comp=Z,38nm,19.4s,baz=88,slow=40 | | | | | | |
| **JAY** | **Jayapura** | **12.66** | **112** | LR | LR | 11 00 04.8 | |
| | comp=Z,154nm,20.8s,baz=275,slow=34 | | | | | | |
| **SOEI** | **Soe** | **12.82** | **201** | Pn | **Pn** | **10 55 51.2** | **-0.7** |
| **KKM** | **Kota Kinabalu** | **13.25** | **287** | Pn | **Pn** | **10 55 56.6** | **-1.2** |
| **MTN**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **35.03** | **359** | P | | **P** | | **10 59 40.0** | **-0.1** |
| | comp=Z,3.9nm,0.7s,baz=176,slow=10,SNR=14 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.16** | **13** | P | | **P** | | **10 59 40.3** | **-1.0** |
| | comp=Z,4.2nm,0.7s,baz=185,slow=9.4,SNR=10 | | | | | | | | |
| **MAJO** | **Matsushiro** | **35.16** | **13** | P | | **P** | | **10 59 40.5** | **-0.7** |
| MAJO | | | | IAmb | | IAmb | | 10 59 56.3 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **MAT** | **Matsushiro** | **35.16** | **13** | P | | **P** | | **10 59 39.8** | **-1.4** |
| **MJB9** | **Matsu-Tunnel** | **35.17** | **13** | P | | **P** | | **10 59 40.4** | **-0.9** |
| MJB9 | | | | IAmb | | IAmb | | 10 59 56.3 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **TIA** | **Tai'an** | **35.51** | **343** | ⇑P | | P | | 10 59 31.5 | -13 |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **35.52** | **170** | P | | **P** | | **10 59 42.8** | **-1.6** |
| **PZH** | **PanZhiHua** | **35.54** | **315** | P | | **P** | | **10 59 46.6** | **+1.8** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,80nm,4.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.01** | **162** | P | | **P** | | **10 59 49.4** | **+0.8** |
| | comp=Z,3.1nm,0.6s,baz=333,slow=11,SNR=9.8 | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.01** | **162** | P | | **P** | | **10 59 46.4** | **-2.1** |
| **CD2** | **Chengdu** | **37.14** | **323** | P | | **P** | | **10 59 57.8** | **-0.5** |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **BJT** | **Baijiatuan** | **39.34** | **344** | P | | **P** | | **11 00 15.5** | **-1.0** |
| BJT | | | | IAmb | | IAmb | | 11 00 16.6 | |
| | comp=Z,7.1nm,0.6s | | | | | | | | |
| **BJI** | **Beijing** | **39.35** | **344** | P | | **P** | | **11 00 16.1** | **-0.5** |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.33** | **64** | T | | T | | 11 43 39.2 | |
| | baz=251,slow=75,SNR=12 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.34** | **64** | T | | T | | 11 43 38.3 | |
| | baz=251,slow=75,SNR=8.9 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.34** | **64** | T | | T | | 11 43 42.6 | |
| | baz=251,slow=75,SNR=13 | | | | | | | | |
| **LZH** | **Lanzhou** | **40.90** | **328** | *e*P | | **P** | | **11 00 30.3** | **+0.5** |
| LZH | | | | pP | | pP | | 11 00 44.5 | +1.6 |
| LZH | | | | sP | | sP | | 11 00 48.3 | -0.4 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,98nm,6.0s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=N,290nm,15.7s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=E,270nm,15.3s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,240nm,16.5s | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.92** | **62** | T | | T | | 11 44 22.6 | |
| | baz=250,slow=75,SNR=21 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.93** | **62** | T | | T | | 11 44 22.3 | |
| | baz=250,slow=75,SNR=11 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.93** | **62** | T | | T | | 11 44 22.8 | |
| | baz=250,slow=75,SNR=15 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.51** | **340** | *e*P | | **P** | | **11 00 36.6** | **+2.0** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,150nm,8.5s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.85** | **3** | P | | **P** | | **11 00 37.5** | **+0.4** |
| | comp=Z,4.0nm,0.7s,baz=176,slow=8.6,SNR=6.7 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.85** | **3** | P | | **P** | | **11 00 37.3** | **+0.2** |
| **TOO** | **Toolangi** | **42.50** | **160** | P | | **P** | | **11 00 42.2** | **-0.4** |
| **SHL** | **Shillong** | **42.53** | **306** | P | | **P** | | **11 00 42.5** | **-0.8** |
| **GTA** | **Gaotai** | **45.50** | **328** | ⇑P | | **P** | | **11 01 06.8** | **0.0** |
| GTA | | | | pP | | pP | | 11 01 20.0 | -0.1 |
| GTA | | | | sP | | sP | | 11 01 26.3 | +0.4 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,72nm,6.0s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=N,140nm,16.7s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=E,96nm,15.3s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,180nm,17.5s | | | | | | | | |
| **GOMU** | **GeErMu** | **46.21** | **321** | P | | **P** | | **11 01 13.0** | **+0.2** |
| GOMU | | | | pP | | pP | | 11 01 15.3 | -11 |
| GOMU | | | | sP | | sP | | 11 01 17.8 | -14 |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **49.41** | **340** | P | | **P** | | **11 01 36.6** | **-0.5** |
| | comp=Z,2.1nm,0.6s,baz=158,slow=6.8,SNR=6.7 | | | | | | | | |
| **SONM** | **Songino Array** | **49.41** | **340** | IAmb | | IAmb | | 11 01 37.5 | |
| | comp=Z,3.4nm,1.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **55.20** | **324** | *e*P | | **P** | | **11 02 21.9** | **+1.9** |
| **PETK** | **Petropavlovsk-** | **55.98** | **20** | P | | **P** | | **11 02 26.2** | **+0.9** |
| **MK31** | **Makanchi Array** | **60.03** | **325** | P | | **P** | | **11 02 53.4** | **-0.4** |
| **MKAR** | **Makanchi Array** | **60.03** | **325** | P | | **P** | | **11 02 53.4** | **-0.5** |
| | comp=Z,8.0nm,0.6s,baz=118,slow=8.3,SNR=104 | | | | | | | | |
| **MAKZ** | **Makanchi** | **60.22** | **325** | P | | **P** | | **11 02 54.4** | **-0.7** |
| **KSH** | **Kashi** | **60.65** | **315** | P | | **P** | | **11 02 59.3** | **+0.9** |
| KSH | | | | pP | | sP | | 11 03 18.8 | +1.4 |
| KSH | | | | PcP | | **PcP** | | **11 03 43.8** | **+1.5** |
| **ZAA0** | **Zalesovo Array** | **62.90** | **332** | P | | **P** | | **11 03 12.1** | **-0.9** |
| ZAA0 | | | | IAmb | | IAmb | | 11 03 12.5 | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.90** | **332** | P | | **P** | | **11 03 11.6** | **-1.5** |
| | comp=Z,2.3nm,0.5s,baz=114,slow=7.3,SNR=14 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.90** | **332** | P | | **P** | | **11 03 11.8** | **-1.2** |
| **KURK** | **Kurchatov** | **64.17** | **327** | P | | **P** | | **11 03 20.7** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **64.17** | **327** | P | | **P** | | **11 03 20.7** | **-0.8** |
| | comp=Z,12nm,0.6s,baz=126,slow=6.0,SNR=11 | | | | | | | | |
| **KKAR** | **Karatay Array** | **65.82** | **317** | P | | **P** | | **11 03 31.1** | **-1.3** |
| **TIXI** | **Tiksi** | **69.29** | **360** | P | | **P** | | **11 03 53.3** | **-0.4** |
| TIXI | | | | IAmb | | IAmb | | 11 04 02.9 | |
| | comp=Z,4.1nm,1.1s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.76** | **327** | P | | **P** | | **11 03 56.4** | **-0.6** |
| | comp=Z,3.9nm,0.5s,baz=81,slow=14,SNR=22 | | | | | | | | |
| **BRVK** | **Borovoye** | **69.83** | **327** | P | | **P** | | **11 03 56.6** | **-0.8** |
| BRVK | | | | IAmb | | IAmb | | 11 03 57.4 | |
| | comp=Z,9.9nm,0.9s | | | | | | | | |
| **NRIK** | **Noril'sk** | **72.38** | **346** | P | | **P** | | **11 04 12.2** | **-0.4** |
| | comp=Z,2.3nm,0.6s,baz=132,slow=5.8,SNR=3.8 | | | | | | | | |
| **NRIK** | **Noril'sk** | **72.38** | **346** | IAmb | | IAmb | | 11 04 13.8 | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **74.69** | **321** | P | | **P** | | **11 04 25.4** | **-1.0** |
| **AKTO** | **Aktyubinsk** | **76.19** | **322** | P | | **P** | | **11 04 34.2** | **-0.9** |
| | comp=Z,3.8nm,0.7s,baz=86,slow=5.4,SNR=16 | | | | | | | | |
| **ARU** | **Arti** | **77.36** | **328** | P | | **P** | | **11 04 40.3** | **-1.2** |
| | comp=Z,2.0nm,0.5s,baz=117,slow=3.1,SNR=10 | | | | | | | | |
| **ARU** | **Arti** | **77.36** | **328** | P | | **P** | | **11 04 40.5** | **-1.0** |
| **TTA** | **Tatalina** | **81.20** | **27** | P | | **P** | | **11 05 03.1** | **+0.6** |
| **KDAK** | **Kodiak Island** | **81.94** | **32** | LR | | LR | | 11 35 15.6 | |
| | comp=Z,331nm,21.6s,baz=251,slow=31 | | | | | | | | |
| **IMAR** | **Indian Mountai** | **82.78** | **24** | P | | **P** | | **11 05 12.7** | **+2.1** |
| **RAYN** | **Ar Rayn** | **83.10** | **293** | P | | **P** | | **11 05 12.0** | **-1.2** |
| RAYN | | | | IAmb | | IAmb | | 11 05 13.0 | |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| **VOI** | **Vohitsoka** | **83.58** | **248** | P | | **P** | | **11 05 14.5** | **-1.3** |
| **COLD** | **Coldfoot** | **84.37** | **23** | P | | **P** | | **11 05 20.3** | **+1.6** |
| COLD | | | | IAmb | | IAmb | | 11 05 28.2 | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **RND** | **Reindeer** | **84.48** | **27** | P | | **P** | | **11 05 20.4** | **+0.9** |
| RND | | | | IAmb | | IAmb | | 11 05 20.7 | |
| | comp=Z,3.8nm,0.6s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **84.79** | **21** | P | | **P** | | **11 05 22.2** | **+1.3** |
| TOLK | | | | IAmb | | IAmb | | 11 05 23.3 | |
| | comp=Z,9.3nm,1.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.47** | **25** | P | | **P** | | **11 05 23.9** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=249,slow=5.5,SNR=8.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **92.58** | **340** | P | | **P** | | **11 05 56.8** | **-1.1** |
| | comp=Z,3.5nm,0.9s,baz=45,slow=2.4,SNR=6.1 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.89** | **25** | P | | **Pdif** | | **11 06 30.9** | **-0.3** |
| | comp=Z,0.4nm,0.7s,baz=288,slow=4.5,SNR=6.0 | | | | | | | | |

*NNC **19** 10:54:44.4±1.2,51˚.75N×75˚.50E,h0km,mb3.2,mpv2.8, Error ellipse: s-maj=17.4km s-min=6.9km az=19.0, Suspected Mining explosion.*

*IDC **19** 10:54:45.5±0.4,51˚.56N×75˚.31E,h0km,mb1 3.1/4, mb1mx2.9/57,mbtmp3.1/4,ML2.5/4, Error ellipse: s-maj=5.8km s-min=2.2km az=31.0*

**ISC 19 10:54:46.8±1.1,51˚.73N±0˚.07×75˚.54E±0˚.06,h0km,n11, σ1§27/12,3C-6D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KURBB** | **Kurchatov Arra** | **2.19** | **119** | Pn | | **Pb** | **10 55 25.3** | **-1.9** |
| | 1.0nm,0.3s,baz=298,slow=19,SNR=6.7 | | | | | | | |
| KURBB | | | | Lg | | Lg | 10 55 54.9 | |
| | 0.9nm,0.3s,baz=310,slow=34,SNR=5.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.19** | **119** | ⇓Pg | | **Pn** | **10 55 25.0** | **+0.7** |
| | 2.6nm,0.4s | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | 10 55 55.8 | |
| | 30nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **2.19** | **117** | ⇓Pg | | **Pn** | **10 55 24.0** | **-0.4** |
| | 2.8nm,0.5s | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 10 55 53.7 | |
| | 9.6nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **3.41** | **294** | Pn | | **Pn** | **10 55 40.7** | **-0.5** |
| | 0.5nm,0.3s,baz=122,slow=19,SNR=2.2 | | | | | | | |
| BVAR | | | | Lg | | Lg | 10 56 31.6 | |
| | 2.8nm,0.3s,baz=88,slow=38,SNR=9.4 | | | | | | | |
| **BRVK** | **Borovoye** | **3.48** | **294** | ⇑Pg | | **Pb** | **10 55 48.4** | **-0.9** |
| | 1.8nm,0.5s | | | | | | | |
| BRVK | | | | ⇓Lg | | Lg | 10 56 31.8 | |
| | 13nm,0.6s | | | | | | | |
| **OTUK** | **Ortayu** | **4.06** | **212** | ⇓Pg | | **Pb** | **10 55 58.3** | **-0.8** |
| | 3.0nm,1.0s | | | | | | | |
| OTUK | | | | ⇓Lg | | Lg | 10 56 52.5 | |
| | 5.2nm,0.6s | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.04** | **65** | *i* | | | 11 30 30.0 | |
| | baz=249,slow=311,SNR=0.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.04** | **65** | Pn | | **Pn** | **10 56 18.6** | **+1.3** |
| | 0.7nm,0.3s,baz=258,slow=14,SNR=11 | | | | | | | |
| ZALV | | | | Sn | | **Sn** | **10 57 27.8** | **+0.6** |
| | 0.2nm,0.3s,baz=251,slow=27,SNR=3.5 | | | | | | | |
| ZALV | | | | Lg | | Lg | 10 58 04.7 | |
| | 0.2nm,0.3s,baz=251,slow=27,SNR=2.6 | | | | | | | |
| **MK31** | **Makanchi Array** | **6.63** | **136** | Pn | | **Pn** | **10 56 25.6** | **+0.2** |
| | 0.5nm,0.6s,baz=310,slow=12,SNR=6.4 | | | | | | | |
| MK31 | | | | Sn | | **Sn** | **10 57 44.0** | **+2.3** |
| | 0.5nm,0.5s,baz=313,slow=24,SNR=5.0 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 10 58 13.9 | |
| | 2.1nm,0.5s,baz=321,slow=26,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **6.63** | **136** | Pn | | **Pn** | **10 56 25.2** | **-0.2** |
| | 0.1nm,0.3s,baz=312,slow=13,SNR=5.6 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **10 57 42.7** | **+1.1** |
| | 0.3nm,0.3s,baz=314,slow=25,SNR=6.1 | | | | | | | |
| MKAR | | | | Lg | | Lg | 10 58 14.4 | |
| | 0.6nm,0.3s,baz=323,slow=26,SNR=8.4 | | | | | | | |
| **AAK** | **Ala-Archa** | **9.13** | **185** | Lg | | Lg | 10 59 35.2 | |
| | 0.1nm,0.3s,baz=234,slow=22,SNR=2.7 | | | | | | | |

**IDC 19 10:55:09.1±3.0,42˚.16N×129˚.56E,h0km,mb1 2.5/2, mb1mx2.5/66,mbtmp2.5/2,ML1.8/2,Error ellipse: s-maj=43.1km s-min=20.6km az=120.0,North Korea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I45RU** | **USSURIYSK INFR** | **2.70** | **40** | *i* | | | 11 10 20.0 | |
| | baz=221,slow=327,SNR=4.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **2.70** | **40** | Pn | | Pn | 10 55 53.5 | -0.2 |
| | baz=225,slow=14,SNR=6.1 | | | | | | | |
| USRK | | | | Pg | | Pb | 10 55 58.5 | +0.3 |
| | baz=234,slow=14,SNR=14 | | | | | | | |
| USRK | | | | Lg | | Lg | 10 56 35.1 | |
| | baz=222,slow=26,SNR=8.2 | | | | | | | |
| **KSRS** | **Korea Array** | **4.87** | **196** | Pn | | Pn | 10 56 23.7 | +0.2 |
| | 0.2nm,0.3s,baz=15,slow=14,SNR=2.6 | | | | | | | |

*NEIC **19** 10:56:06.7±1.8,27˚.2N±0˚.1×126˚.57E±0˚.05,h140km±9km, mb4.3/17, Error ellipse: s-maj=17.2km s-min=5.7km az=173.0*

*IDC **19** 10:56:07.5±0.3,27˚.37N×126˚.81E,h151km±4km,mb3.5/8, mb1 3.6/8,mb1mx3.3/65,mbtmp4.0/8, Error ellipse: s-maj=12.0km s-min=6.5km az=36.0*

*JMA **19** 10:56:07.4±0.3,27˚.19N×126˚.61E,h139km, M4.0*

**ISC 19 10:56:06.5±0.8,27˚.15N±0˚.08×126˚.57E±0˚.06,h145km±9km, n56,σ1§18/70,mb4.2/16,1C,Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JAGN** | **Aguni-jima** | **0.82** | **133** | P | | **Pn** | **10 56 30.1** | **+0.8** |
| JAGN | | | | S | | **Sn** | **10 56 46.8** | **+0.1** |
| **JKE** | **Kume jima 2** | **0.84** | **167** | P | | **Pn** | **10 56 30.1** | **+0.6** |
| **JIH** | **Iheya** | **1.25** | **95** | P | | **Pn** | **10 56 33.8** | **+0.7** |
| JIH | | | | S | | **Sn** | **10 56 53.0** | **-0.4** |
| **JNTH** | **Nagotoyohara** | **1.45** | **116** | P | | **Pn** | **10 56 35.8** | **+0.7** |
| JNTH | | | | S | | **Sn** | **10 56 55.7** | **-1.2** |
| **JJT3** | **Tamagusuku3** | **1.48** | **132** | P | | **Pn** | **10 56 36.8** | **+1.3** |
| JJT3 | | | | S | | **Sn** | **10 56 58.0** | **+0.4** |
| **JOW** | **Kunigami** | **1.56** | **101** | P | | **Pn** | **10 56 36.8** | **+0.6** |
| | 190nm,0.3s,baz=300,slow=20,SNR=340 | | | | | | | |
| JOW | | | | S | | **Sn** | **10 56 57.6** | **-1.4** |
| | 459nm,0.3s,baz=110,slow=25,SNR=21 | | | | | | | |
| **JOW** | **Kunigami** | **1.56** | **101** | P | | **Pn** | **10 56 36.7** | **+0.4** |
| JOW | | | | S | | **Sn** | **10 56 57.6** | **-1.4** |
| **JYRO** | **Yoronjima** | **1.68** | **94** | P | | **Pn** | **10 56 38.0** | **+0.4** |
| JYRO | | | | S | | **Sn** | **10 56 59.7** | **-1.8** |
| **JOKE** | **Okinoerabujima** | **1.80** | **83** | P | | **Pn** | **10 56 39.0** | **+0.1** |
| JOKE | | | | S | | **Sn** | **10 57 01.8** | **-2.0** |
| **JTK** | **Tokunoshima** | **2.21** | **73** | P | | **Pn** | **10 56 43.8** | **0.0** |
| JTK | | | | S | | **Sn** | **10 57 10.6** | **-1.9** |
| **JIKM** | **Ikemajima** | **2.52** | **208** | *e*S | | **Sn** | **10 57 19.3** | **+0.1** |
| **JAMN** | **Amaminishikomi** | **2.56** | **64** | P | | **Pn** | **10 56 47.7** | **-0.3** |
| JAMN | | | | S | | **Sn** | **10 57 18.7** | **-1.3** |
| **JIRB** | **Irabujima** | **2.63** | **209** | P | | **Pn** | **10 56 49.1** | **+0.1** |
| JIRB | | | | S | | **Sn** | **10 57 20.0** | **-1.8** |
| **JMJ2** | **Miyako jima3** | **2.65** | **205** | P | | **Pn** | **10 56 49.5** | **+0.3** |
| JMJ2 | | | | *e*S | | **Sn** | **10 57 21.4** | **-0.7** |
| **JAM** | **Amami Oshima** | **2.97** | **64** | P | | **Pn** | **10 56 52.8** | **-0.4** |
| JAM | | | | S | | **Sn** | **10 57 28.1** | **-1.3** |
| **JTJ** | **Tarama** | **3.01** | **214** | P | | **Pn** | **10 56 54.3** | **+0.5** |
| JTJ | | | | *e*S | | **Sn** | **10 57 28.5** | **-1.8** |
| **JTAJ** | **Takarajima** | **3.06** | **49** | P | | **Pn** | **10 56 54.9** | **+0.5** |
| **JZK** | **Kikaishima** | **3.23** | **68** | *e*S | | **Sn** | **10 57 34.9** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **3.26** | **219** | P | | **Pn** | **10 56 56.8** | **-0.2** |
| JISG | | | | S | | **Sn** | **10 57 34.8** | **-1.3** |
| **JIJ** | **Ishigaki jima** | **3.53** | **219** | S | | **Sn** | **10 57 39.4** | **-3.0** |
| **YOJ** | **Yonaguni jima** | **4.18** | **231** | Pn | | **Pn** | **10 57 07.9** | **-1.0** |
| **YHNB** | **Yeheng** | **5.29** | **243** | Pn | | **Pn** | **10 57 26.4** | **+2.7** |
| **NACB** | **Ninganchiao** | **5.38** | **238** | Pn | | **Pn** | **10 57 24.9** | **+0.1** |
| **YULB** | **Yu-li** | **6.06** | **233** | Pn | | **Pn** | **10 57 31.5** | **-2.5** |
| **SSLB** | **Suanglung** | **6.08** | **238** | Pn | | **Pn** | **10 57 33.9** | **-0.3** |
| **TPUB** | **Ta-pu** | **6.60** | **236** | Pn | | **Pn** | **10 57 41.6** | **+0.3** |
| **JMN** | **Monobe** | **9.10** | **42** | Pn | | **Pn** | **10 58 11.8** | **-2.8** |
| **LYN** | **LuoYang** | **14.17** | **305** | ⇑P | | **P** | **10 59 26.5** | **+2.8** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **25.98** | **328** | P | | **P** | **11 01 25.8** | **+0.1** |
| | comp=Z,5.7nm,0.6s,baz=144,slow=10,SNR=31 | | | | | | | |
| **MK31** | **Makanchi Array** | **39.81** | **311** | P | | **P** | **11 03 25.3** | **-0.1** |
| **MKAR** | **Makanchi Array** | **39.81** | **311** | P | | **P** | **11 03 24.3** | **-1.1** |
| | comp=Z,1.9nm,0.5s,baz=98,slow=9.7,SNR=7.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.81** | **311** | P | | **P** | **11 03 24.2** | **-1.2** |
| **MAKZ** | **Makanchi** | **40.02** | **311** | P | | **P** | **11 03 27.0** | **-0.2** |
| MAKZ | | | | IAmb | | IAmb | 11 03 27.5 | |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.62** | **323** | P | | **P** | **11 03 31.7** | **-0.1** |
| ZAA0 | | | | IAmb | | IAmb | 11 03 31.9 | |
| | comp=Z,4.3nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.62** | **323** | P | | **P** | **11 03 30.6** | **-1.2** |
| | comp=Z,4.5nm,0.4s,baz=112,slow=9.1,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.62** | **323** | P | | **P** | **11 03 31.9** | **+0.1** |
| **KURK** | **Kurchatov** | **43.13** | **316** | P | | **P** | **11 03 51.9** | **-0.4** |
| **WRA** | **Warramunga Arr** | **47.42** | **170** | P | | **P** | **11 04 26.4** | **0.0** |
| | comp=Z,0.5nm,0.9s,baz=350,slow=8.4,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **47.42** | **170** | IAmb | | IAmb | 11 04 28.4 | |
| | comp=Z,0.3nm,1.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **51.02** | **171** | P | | **P** | **11 04 55.2** | **+1.6** |
| | comp=Z,0.3nm,1.0s,baz=358,slow=15,SNR=4.8 | | | | | | | |
| **J20K** | **Nowinta River** | **61.27** | **29** | P | | **P** | **11 06 06.9** | **+1.0** |
| J20K | | | | IAmb | | IAmb | 11 06 14.9 | |
| | comp=Z,6.0nm,1.5s | | | | | | | |
| **K20K** | **Telida** | **61.36** | **30** | P | | **P** | **11 06 05.7** | **-0.9** |
| K20K | | | | IAmb | | IAmb | 11 06 19.0 | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| **RND** | **Reindeer** | **63.69** | **30** | P | | **P** | **11 06 21.2** | **-0.9** |
| **MDM** | **Murphy Dome** | **63.74** | **28** | P | | **P** | **11 06 23.1** | **+0.7** |
| MDM | | | | IAmb | | IAmb | 11 06 23.4 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **64.33** | **28** | P | | **P** | **11 06 26.1** | **-0.1** |
| | comp=Z,0.2nm,0.5s,baz=291,slow=9.6,SNR=4.3 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **64.81** | **25** | P | | **P** | **11 06 31.1** | **+1.8** |
| **KLU** | **Klutina** | **65.36** | **32** | P | | **P** | **11 06 33.0** | **-0.1** |
| **GLB** | **Gilahina Butte** | **66.37** | **32** | P | | **P** | **11 06 39.8** | **+0.4** |
| **M26K** | **Nabesna, AK** | **66.51** | **31** | P | | **P** | **11 06 41.0** | **+0.6** |
| M26K | | | | IAmb | | IAmb | 11 06 57.8 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| **VRDI** | **Verde Repeater** | **66.58** | **32** | P | | **P** | **11 06 41.1** | **+0.1** |
| **L27K** | **Beaver Creek,** | **66.88** | **30** | P | | **P** | **11 06 44.0** | **+1.4** |
| L27K | | | | IAmb | | IAmb | 11 07 10.4 | |
| | comp=Z,6.1nm,1.5s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **66.89** | **30** | P | | **P** | **11 06 44.0** | **+1.3** |
| **M27K** | **Edge Creek, AK** | **67.03** | **30** | P | | **P** | **11 06 44.3** | **+0.6** |
| M27K | | | | IAmb | | IAmb | 11 06 50.7 | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **WHY** | **Whitehorse** | **70.74** | **31** | P | | **P** | **11 07 06.9** | **+0.2** |
| **FINES** | **FINESS Array B** | **71.33** | **330** | P | | **P** | **11 07 08.7** | **-1.3** |
| | comp=Z,2.5nm,0.9s,baz=68,slow=5.1,SNR=5.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.31** | **25** | P | | **P** | **11 07 50.0** | **-0.1** |
| | comp=Z,1.2nm,0.7s,baz=299,slow=5.6,SNR=12 | | | | | | | |

*IDC **19** 11:06:40.1±4.9,11˚.45S×166˚.24E,h48km±44km,mb4.0/10, mb1 4.2/11,mb1mx3.9/34,mbtmp4.3/11,ML4.1/1,MS3.5/9, Ms1 3.5/9,ms1mx3.1/60,Error ellipse: s-maj=30.5km s-min=28.1km az=127.0*

*NEIC **19** 11:06:40.8±1.8,11˚.4S±0˚.1×166˚.3E±0˚.2,h53km±6km, mb4.4/16,Error ellipse: s-maj=23.2km s-min=14.5km az=84.0*

**ISC 19 11:06:41.1±0.8,11˚.4S±0˚.1×166˚.3E±0˚.1,h59km,n39, σ0§91/32,mb4.3/18,MS3.3/6,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **4.12** | **167** | | | **Pn** | **11 07 41.8** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **9.30** | **192** | Pn | | **Pn** | **11 08 53.8** | **+1.3** |
| **DZM** | **Mont Dzumac** | **10.61** | **179** | P | | **Pn** | **11 09 09.8** | **-0.8** |
| | 1.4nm,0.3s,baz=145,slow=9.1,SNR=9.6 | | | | | | | |
| DZM | | | | LR | | LR | 11 13 01.4 | |
| | comp=Z,169nm,18.7s,baz=29,slow=36 | | | | | | | |
| **ONTNC** | **Ouen Toro** | **10.85** | **179** | Pn | | **Pn** | **11 09 13.6** | **-0.1** |
| **OUENC** | **Ouen Island, N** | **10.97** | **177** | Pn | | **Pn** | **11 09 14.6** | **-0.8** |
| **MSVF** | **Nonsavu** | **13.02** | **120** | LR | | LR | 11 13 47.5 | |
| | comp=Z,244nm,21.1s,baz=197,slow=33 | | | | | | | |
| **PMG** | **Port Moresby** | **18.91** | **274** | LR | | LR | 11 18 51.4 | |
| | comp=Z,118nm,18.1s,baz=166,slow=39 | | | | | | | |
| **CTA** | **Charters Tower** | **21.10** | **243** | P | | **P** | **11 11 19.9** | **-1.0** |
| | 2.9nm,0.5s,baz=66,slow=13,SNR=6.8 | | | | | | | |
| CTA | | | | LR | | LR | 11 18 04.3 | |
| | comp=Z,112nm,18.3s,baz=80,slow=32 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **29.11** | **164** | P | | **P** | **11 12 36.6** | **+0.2** |
| **STKA** | **Stephens Creek** | **30.55** | **224** | P | | **P** | **11 12 49.2** | **0.0** |
| | 2.7nm,0.8s,baz=7.3,slow=14,SNR=3.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **30.55** | **224** | IAmb | | IAmb | 11 12 49.7 | |
| | comp=Z,2.8nm,1.4s | | | | | | | |
| **WR0** | **Warramunga Arr** | **31.67** | **250** | P | | **P** | **11 12 58.1** | **-1.1** |
| WR0 | | | | IAmb | | IAmb | 11 13 20.9 | |
| | comp=Z,2.6nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **31.77** | **251** | P | | **P** | **11 12 59.3** | **-0.8** |
| WB0 | | | | IAmb | | IAmb | 11 13 00.1 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **31.84** | **251** | P | | **P** | **11 13 00.4** | **-0.4** |
| WB2 | | | | IAmb | | IAmb | 11 13 01.7 | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.85** | **251** | P | | **P** | **11 12 59.2** | **-1.6** |
| | comp=Z,2.7nm,0.8s,baz=81,slow=9.2,SNR=15 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **11 15 51.0** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=86,slow=3.9,SNR=8.7 | | | | | | | |
| WRA | | | | LR | | LR | 11 24 39.3 | |
| | comp=Z,75nm,18.6s,baz=38,slow=34 | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.85** | **251** | IAmb | | IAmb | 11 13 08.7 | |
| | comp=Z,0.2nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **32.05** | **212** | P | | **P** | **11 13 03.8** | **+1.5** |
| TOO | | | | IAmb | | IAmb | 11 13 19.8 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **GUMO** | **Guam** | **32.67** | **319** | LR | | LR | 11 26 04.0 | |
| | comp=Z,31nm,21.2s,baz=72,slow=36 | | | | | | | |
| **AS31** | **Alice Springs** | **33.10** | **244** | P | | **P** | **11 13 10.2** | **-1.5** |
| **ASAR** | **Alice Springs** | **33.10** | **244** | P | | **P** | **11 13 10.3** | **-1.5** |
| | comp=Z,4.0nm,0.7s,baz=70,slow=9.7,SNR=46 | | | | |

**Ms1 3.8/11,ms1mx3.4/53,Error ellipse: s-maj=88.9km s-min=48.5km az=76.0,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMSA** | **Palmer Station** | **29.05** | **131** | LR | LR | 11 30 56.1 | |
| | comp=Z,130nm,18.4s,baz=319,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.63** | **180** | P | P | 11 21 46.7 | -0.1 |
| | 1.8nm,1.0s,baz=108,slow=5.3,SNR=3.1 | | | | | | |
| **PLCA** | **Paso Flores** | **37.17** | **88** | LR | LR | 11 33 47.7 | |
| | comp=Z,93nm,20.5s,baz=214,slow=30 | | | | | | |
| **H03S2** | **Juan Fernandez** | **37.64** | **72** | T | T | 12 02 13.4 | |
| | baz=219,SNR=12 | | | | | | |
| **H03S1** | **Juan Fernandez** | **37.65** | **72** | T | T | 12 02 09.2 | |
| | baz=219,SNR=11 | | | | | | |
| **H03S3** | **Juan Fernandez** | **37.66** | **72** | T | T | 12 02 04.6 | |
| | baz=219,SNR=11 | | | | | | |
| **H03N3** | **Juan Fernandez** | **37.94** | **72** | T | T | 12 02 22.7 | |
| | baz=221,slow=72,SNR=56 | | | | | | |
| **H03N2** | **Juan Fernandez** | **37.95** | **71** | T | T | 12 02 20.5 | |
| | baz=221,slow=72,SNR=96 | | | | | | |
| **H03N1** | **Juan Fernandez** | **37.96** | **72** | T | T | 12 02 26.3 | |
| | baz=221,slow=72,SNR=43 | | | | | | |
| **RPZ** | **Rata Peaks** | **42.44** | **259** | LR | LR | 11 36 51.7 | |
| | comp=Z,172nm,19.1s,baz=120,slow=31 | | | | | | |
| **URZ** | **Urewera** | **42.85** | **269** | LR | LR | 11 36 00.6 | |
| | comp=Z,78nm,21.6s,baz=122,slow=29 | | | | | | |
| **SNAA** | **Sanae** | **45.46** | **157** | LR | LR | 11 40 38.9 | |
| | comp=Z,145nm,20.8s,baz=306,slow=34 | | | | | | |
| **MAW** | **Mawson** | **56.08** | **183** | LR | LR | 11 45 39.3 | |
| | comp=Z,127nm,18.4s,baz=238,slow=33 | | | | | | |
| **NNA** | **Nana** | **56.90** | **58** | LR | LR | 11 42 25.6 | |
| | comp=Z,51nm,21.3s,baz=208,slow=29 | | | | | | |
| **ASAR** | **Alice Springs** | **77.38** | **246** | P | P | 11 27 01.2 | -0.3 |
| | 0.6nm,0.9s,baz=154,slow=5.1,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.25** | **249** | P | P | 11 27 17.4 | 0.0 |
| | 0.9nm,0.8s,baz=146,slow=4.9,SNR=7.2 | | | | | | |
| **BOSA** | **Boshof** | **91.04** | **153** | LR | LR | 12 09 32.5 | |
| | comp=Z,59nm,18.0s,baz=188,slow=36 | | | | | | |
| **LBTB** | **Lobatse** | **94.56** | **152** | LR | LR | 12 05 31.2 | |
| | comp=Z,35nm,19.4s,baz=200,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **94.82** | **296** | T | T | 13 13 15.9 | |
| | baz=148,slow=75,SNR=6.5 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **94.83** | **296** | T | T | 13 13 16.1 | |
| | baz=148,slow=75,SNR=6.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **94.83** | **296** | T | T | 13 13 11.7 | |
| | baz=148,slow=75,SNR=4.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **95.76** | **297** | T | T | 13 14 25.8 | |
| | baz=148,slow=76,SNR=4.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **95.76** | **297** | T | T | 13 14 24.2 | |
| | baz=148,slow=76,SNR=5.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **95.77** | **297** | T | T | 13 14 25.3 | |
| | baz=148,slow=76,SNR=6.1 | | | | | | |
| **TSUM** | **Tsumeb** | **97.64** | **143** | LR | LR | 12 08 10.2 | |
| | comp=Z,66nm,18.1s,baz=162,slow=33 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **97.91** | **0** | LR | LR | 12 02 28.5 | |
| | comp=Z,44nm,19.2s,baz=34,slow=29 | | | | | | |
| **TIXI** | **Tiksi** | **147.56** | **326** | PKPbc | PKPdf | 11 34 47.4 | +0.9 |
| | 0.8nm,0.3s,baz=305,slow=6.7,SNR=1.5 | | | | | | |
| **SONM** | **Songino Array** | **149.03** | **275** | PKPbc | PKiKP | 11 34 55.1 | -0.2 |
| | 0.2nm,0.6s,baz=120,slow=5.2,SNR=1.6 | | | | | | |

*IDC **19** 11:25:40.7±1.2,52.˚51N×169.˚67W,h0km,mb3.3/3, mb1 3.7/4,mb1mx3.3/49,mbtmp3.4/4,ML2.8/1,Error ellipse: s-maj=57.6km s-min=13.6km az=3.0*
*NEIC **19** 11:25:46.5±2.4,52.˚4N±0.˚1×169.˚6W±0.˚1,h38km±17km, Error ellipse: s-maj=18.0km s-min=6.8km az=153.0*
*AEIC **19** 11:25:46±3.1,52.˚51N±0.˚03×169.˚5W±0.˚1,h26km±7km, ML3.2/17,Error ellipse: s-maj=9.3km s-min=4.8km az=95.0*

**ISC 19 11:25:46.6±1.3,52.˚5N±0.˚2×169.˚7W±0.˚1,h40km,n18, σ1s15/19,mb3.4/3,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.65** | **48** | | **Sn** | **11 26 07.7** | **-0.8** |
| **NIKH** | **Nikolski High** | **0.65** | **48** | Pn | **Pn** | **11 25 58.8** | **-0.5** |
| **OKSP** | **Okmok Steeple** | **1.09** | **48** | | **Pn** | **11 26 05.5** | **+0.1** |
| **OKSO** | **Okmok South** | **1.22** | **47** | | **Pn** | **11 26 07.1** | **-0.1** |
| **OKTU** | **Okmok Mt. Tuli** | **1.29** | **48** | | **Pn** | **11 26 08.4** | **+0.2** |
| **MREP** | **Makushin Rep't** | **2.16** | **53** | | **Pn** | **11 26 21.6** | **+1.5** |
| **MSW** | **Makushin Switc** | **2.21** | **50** | | **Pn** | **11 26 21.6** | **+0.8** |
| MSW | | | | | **Sn** | **11 26 48.7** | **+1.9** |
| **UNV** | **Unalaska Valle** | **2.30** | **54** | Pn | **Pn** | **11 26 22.8** | **+0.9** |
| **AKRB** | **Akutan Reef Bi** | **2.67** | **52** | | **Pn** | **11 26 28.6** | **+1.5** |
| **AHB** | **Akutan Harbor** | **2.79** | **54** | | **Pn** | **11 26 30.2** | **+1.5** |
| **AKUT** | **Akutan** | **2.82** | **54** | Pn | **Pn** | **11 26 28.4** | **-0.7** |
| **WECS** | **Westdahl Cape** | **3.53** | **54** | | **Pn** | **11 26 41.1** | **+2.3** |
| **ADK** | **Adak** | **4.38** | **264** | Pn | **Pn** | **11 26 51.0** | **+0.5** |
| **CNBA** | **Chernabura Isl** | **6.40** | **65** | Pn | **Pn** | **11 27 17.2** | **-1.0** |
| **PETK** | **Petropavlovsk-** | **19.65** | **285** | P | **P** | **11 30 10.8** | **-0.9** |
| | 0.2nm,0.3s,baz=79,slow=7.8,SNR=4.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.26** | **49** | P | **P** | **11 31 52.9** | **-0.4** |
| | 0.1nm,0.4s,baz=275,slow=6.8,SNR=2.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.54** | **79** | P | **P** | **11 33 22.1** | **+0.1** |
| | 0.4nm,0.6s,baz=305,slow=4.1,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.92** | **89** | P | **P** | **11 34 58.1** | **-0.6** |
| | 0.4nm,0.7s,baz=295,slow=5.5,SNR=4.3 | | | | | | |

*IDC **19** 11:26:29.1±19.0,52.˚11N×169.˚94W,h0km,mb3.3/3, mb1 3.7/4,mb1mx3.3/50,mbtmp3.2/4,ML2.9/1,MS3.3/2, Ms1 3.4/2,ms1mx3.0/14,Error ellipse: s-maj=358.8km s-min=54.2km az=84.0*
*NEIC **19** 11:26:30.6±2.7,52.˚7N±0.˚1×170.˚3W±0.˚1,h16km±4km, mb3.8/14,Error ellipse: s-maj=19.8km s-min=7.8km az=165.0*

**ISC 19 11:26:29.4±1.1,52.˚5N±0.˚1×170.˚25W±0.˚09,h10km,n41, σ1s75/39,mb3.3/3,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.96** | **61** | | **Pn** | **11 26 49.4** | **+0.5** |
| **UNV** | **Unalaska Valle** | **2.62** | **58** | Pn | **Pn** | **11 27 12.0** | **+0.3** |
| **AKUT** | **Akutan** | **3.14** | **57** | Pn | **Pn** | **11 27 16.8** | **-1.9** |
| **ADK** | **Adak** | **4.01** | **263** | Pn | **Pn** | **11 27 30.8** | **0.0** |
| **KIWB** | **Kanaga Island** | **4.30** | **264** | Pn | **Pn** | **11 27 34.8** | **+0.1** |
| **SPIA** | **Saint Paul Isl** | **4.67** | **360** | Pn | **Pn** | **11 27 37.8** | **-2.1** |
| **SDPT** | **Sand Point** | **6.43** | **60** | Pn | **Pn** | **11 28 01.8** | **-2.2** |
| **CNBA** | **Chernabura Isl** | **6.74** | **66** | Pn | **Pn** | **11 28 07.5** | **-0.8** |
| **CHGN** | **Chignik** | **7.88** | **57** | Pn | **Pn** | **11 28 27.3** | **+3.5** |
| **OHAK** | **Old Harbor** | **10.84** | **58** | Pn | **Pn** | **11 29 01.7** | **-2.7** |
| **GAMB** | **Gambell** | **11.32** | **357** | Pn | **Pn** | **11 29 12.6** | **+1.7** |
| **Q19K** | **Cape Douglas,** | **11.33** | **49** | Pn | **Pn** | **11 29 09.1** | **-2.1** |
| **KDAK** | **Kodiak Island** | **11.38** | **55** | Pn | **Pn** | **11 29 10.8** | **-1.0** |
| | 0.2nm,0.3s,baz=201,slow=6.0,SNR=1.7 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.38** | **55** | | **Pn** | **11 29 08.6** | **-3.3** |
| **M19K** | **Big River Lodg** | **12.70** | **36** | Pn | **Pn** | **11 29 28.5** | **-1.3** |
| **KTH** | **Kantishna Hill** | **14.99** | **35** | Pn | **Pn** | **11 30 01.8** | **+0.8** |
| **BPAW** | **Bear Paw Mtn.** | **15.31** | **33** | Pn | **Pn** | **11 30 02.5** | **-2.9** |
| BPAW | | | | IAmb | IAmb | 11 30 22.0 | |
| | comp=Z,9.6nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **15.65** | **37** | Pn | **Pn** | **11 30 07.4** | **-2.4** |
| RND | | | | IAmb | IAmb | 11 30 10.1 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **IMAR** | **Indian Mountai** | **15.84** | **25** | Pn | **Pn** | **11 30 10.8** | **-1.3** |
| **KLU** | **Klutina** | **15.92** | **46** | Pn | **Pn** | **11 30 11.1** | **-2.2** |
| KLU | | | | IAmb | IAmb | 11 30 24.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **RAGM** | **Ragged Mountai** | **16.10** | **51** | Pn | **Pn** | **11 30 13.4** | **-2.1** |
| **HMT** | **Hamilton** | **16.28** | **51** | Pn | **Pn** | **11 30 16.8** | **-1.1** |
| **N25K** | **Chitina, Valde** | **16.55** | **47** | Pn | **Pn** | **11 30 20.3** | **-1.0** |
| N25K | | | | IAmb | IAmb | 11 30 39.0 | |
| | comp=Z,6.4nm,1.3s | | | | | | |
| **IL31** | | **17.14** | **35** | | **P** | **11 30 31.2** | **+0.9** |
| **ILAR** | **Eielson Array** | **17.14** | **35** | Pn | **P** | **11 30 31.2** | **+0.9** |
| | comp=Z,0.0nm,0.3s,baz=228,slow=11,SNR=1.6 | | | | | | |
| **ILAR** | **Eielson Array** | **17.14** | **35** | P | **Pn** | **11 30 28.0** | **-0.7** |
| **POKR** | **Poker Plat Res** | **17.15** | **34** | Pn | **Pn** | **11 30 24.8** | **-4.1** |
| POKR | | | | IAmb | IAmb | 11 30 30.7 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **ISLE** | **Juniper Island** | **17.27** | **51** | | **Pn** | **11 30 30.0** | **-0.5** |
| **MENT** | **Mentasta** | **17.45** | **43** | | **P** | **11 30 33.4** | **-0.5** |
| MENT | | | | IAmb | IAmb | 11 30 46.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **M26K** | **Nabesna, AK** | **17.55** | **45** | | **Pn** | **11 30 33.7** | **-0.1** |
| **M27K** | **Edge Creek, AK** | **18.02** | **46** | Pn | **Pn** | **11 30 37.5** | **-2.2** |
| **YKA** | **Yellowknife Ar** | **30.55** | **49** | P | **P** | **11 32 44.8** | **+2.2** |
| | comp=Z,0.1nm,0.5s,baz=274,slow=7.6,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.55** | **49** | P | **P** | **11 32 42.4** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **38.34** | **281** | LR | LR | 11 51 32.0 | |
| | comp=Z,26nm,18.0s,baz=54,slow=39 | | | | | | |
| **PD31** | **Pinedale Array** | **40.90** | **79** | P | **P** | **11 34 12.0** | **+0.3** |
| PD31 | | | | IAmb | IAmb | 11 34 25.6 | |
| | comp=Z,2.9nm,1.3s | | | | | | |
| **PDAR** | **Pinedale Array** | **40.90** | **79** | P | **P** | **11 34 12.1** | **+0.3** |
| | comp=Z,0.5nm,0.6s,baz=314,slow=3.4,SNR=5.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.90** | **79** | P | **P** | **11 34 12.1** | **+0.3** |
| **TX32** | **Lajitas Array** | **53.28** | **88** | P | **P** | **11 35 48.6** | **+0.3** |
| **TXAR** | **Lajitas Array** | **53.28** | **88** | P | **P** | **11 35 48.4** | **0.0** |
| | comp=Z,0.2nm,0.6s,baz=299,slow=4.4,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.28** | **88** | P | **P** | **11 35 48.4** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **76.06** | **282** | LR | LR | 12 16 24.1 | |
| | comp=Z,20nm,18.1s,baz=195,slow=39 | | | | | | |

*IDC **19** 11:26:54.8±3.2,52.˚55N×169.˚90W,h37km±26km,mb3.9/19, mb1 4.2/21,mb1mx4.0/50,mbtmp4.1/21,ML3.8/2,MS3.6/8, Ms1 3.6/8,ms1mx3.1/74,Error ellipse: s-maj=22.1km s-min=11.2km az=173.0*
*AEIC **19** 11:26:54±2.8,52.˚37N±0.˚07×169.˚62W±0.˚06,h26km±4km, ML4.3,mb4.4/147(NEIC),Error ellipse: s-maj=10.7km s-min=4.5km az=158.0*
*NEIC **19** 11:26:56.9±1.6,52.˚64N±0.˚10×169.˚82W±0.˚09,h49km±6km, Error ellipse: s-maj=15.0km s-min=6.5km az=156.0*

**ISC 19 11:26:55.3±0.5,52.˚44N±0.˚09×169.˚71W±0.˚05,h40km, n400,σ1s11/387,mb4.4/63,MS3.7/7,1C,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.74** | **44** | | **Pn** | **11 27 08.4** | **-0.8** |
| **NIKH** | **Nikolski High** | **0.74** | **44** | P | **Pn** | **11 27 08.1** | **-1.2** |
| | baz=217,SNR=9.6 | | | | | | |
| **OKTU** | **Okmok Mt. Tuli** | **1.38** | **46** | | **Pn** | **11 27 17.8** | **-0.3** |
| **OKFG** | **Magazine Ridge** | **1.46** | **48** | | **Pn** | **11 27 19.4** | **+0.4** |
| OKFG | | | | | **Sn** | **11 27 38.0** | **+1.1** |
| **MREP** | **Makushin Rep't** | **2.25** | **51** | | **Pn** | **11 27 31.2** | **+1.2** |
| **MSW** | **Makushin Switc** | **2.30** | **49** | | **Pn** | **11 27 31.7** | **+1.1** |
| MSW | | | | | **Sn** | **11 27 58.8** | **+1.2** |
| **MNAT** | **Makushin Natee** | **2.32** | **50** | | **Pn** | **11 27 31.9** | **+0.9** |
| **MTBL** | **Makushin Table** | **2.38** | **49** | | **Pn** | **11 27 33.0** | **+1.2** |
| **UNV** | **Unalaska Valle** | **2.39** | **53** | Pn | **Pn** | **11 27 32.3** | **+0.5** |
| **UNV** | **Unalaska Valle** | **2.39** | **53** | | **Sn** | **11 28 02.3** | **+2.6** |
| **UNV** | **Unalaska Valle** | **2.39** | **53** | P | **Pn** | **11 27 32.5** | **+0.7** |
| | baz=233,SNR=17 | | | | | | |
| **KOFP** | **Korovin Flat P** | **2.70** | **268** | | **Pn** | **11 27 37.5** | **+1.3** |
| **AKRB** | **Akutan Reef Bi** | **2.76** | **51** | | **Pn** | **11 27 38.3** | **+1.3** |
| **ATKA** | **Atka Island** | **2.77** | **267** | | **Pn** | **11 27 37.5** | **+0.5** |
| **AKMO** | **Akutan Morgan** | **2.77** | **52** | | **Pn** | **11 27 38.1** | **+1.0** |
| AKMO | | | | | **Sn** | **11 28 11.8** | **+2.7** |
| **AKBBA** | **Akutan Broad B** | **2.81** | **52** | | **Pn** | **11 27 39.3** | **+1.7** |
| **AKGG** | **Akutan Green G** | **2.84** | **50** | | **Pn** | **11 27 39.9** | **+1.8** |
| **AKUT** | **Akutan** | **2.91** | **53** | Pn | **Pn** | **11 27 39.3** | **+0.4** |
| AKUT | | | | | **Sn** | **11 28 20.5** | **+7.9** |
| **WECS** | **Westdahl Cape** | **3.61** | **53** | | **Pn** | **11 27 50.3** | **+1.7** |
| **GSTR** | **Great Sitkin T** | **3.92** | **267** | | **Pn** | **11 27 53.7** | **+0.8** |
| **GSMY** | **Great Sitkin M** | **3.92** | **267** | | **Pn** | **11 27 54.5** | **+1.5** |
| **GSTD** | **Great Sitkin T** | **3.98** | **267** | | **Pn** | **11 27 54.9** | **+1.1** |
| **SSLN** | **Shishaldin Nor** | **4.15** | **53** | | **Pn** | **11 27 57.8** | **+1.7** |
| **ISLZ** | **Isanotski Laza** | **4.24** | **55** | | **Pn** | **11 27 58.9** | **+1.6** |
| **ADK** | **Adak** | **4.33** | **265** | Pn | **Pn** | **11 27 58.1** | **-0.5** |
| **FALS** | **False Pass** | **4.46** | **55** | | **Pn** | **11 28 01.1** | **+1.0** |
| **FALS** | **False Pass** | **4.46** | **55** | P | **Pn** | **11 28 00.7** | **+0.5** |
| | baz=238 | | | | | | |
| **KIWB** | **Kanaga Island** | **4.62** | **266** | | **Pn** | **11 28 02.5** | **0.0** |
| **KIMD** | **Kanaga Island** | **4.69** | **265** | | **Pn** | **11 28 05.0** | **+1.5** |
| **SPIA** | **Saint Paul Isl** | **4.75** | **356** | Pn | **Pn** | **11 28 03.6** | **-0.7** |
| **SPIA** | **Saint Paul Isl** | **4.75** | **356** | P | **Pn** | **11 28 05.2** | **+0.9** |
| | baz=176 | | | | | | |
| **TAPA** | **Tanaga Point A** | **5.03** | **266** | | **Pn** | **11 28 09.5** | **+1.3** |
| **TAFP** | **Tanaga Falls P** | **5.12** | **267** | | **Pn** | **11 28 10.9** | **+1.5** |
| **TASE** | **Tanaga Southea** | **5.17** | **267** | | **Pn** | **11 28 11.9** | **+1.9** |
| **SDPT** | **Sand Point** | **6.18** | **58** | Pn | **Pn** | **11 28 25.3** | **+1.4** |
| **SDPT** | **Sand Point** | **6.18** | **58** | P | **Pn** | **11 28 24.0** | **+0.1** |
| | baz=245 | | | | | | |
| **CNBA** | **Chernabura Isl** | **6.47** | **64** | Pn | **Pn** | **11 28 29.2** | **+1.4** |
| **CHNA** | **Chernabura Isl** | **6.47** | **64** | P | **Pn** | **11 28 28.4** | **+0.4** |
| | baz=252 | | | | | | |
| **CHGN** | **Chignik** | **7.64** | **55** | Pn | **Pn** | **11 28 44.9** | **+1.0** |
| **CHGN** | **Chignik** | **7.64** | **55** | P | **Pn** | **11 28 44.8** | **+0.9** |
| | baz=244 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **9.86** | **278** | LR | LR | 11 32 28.3 | |
| | comp=Z,288nm,20.7s,baz=132,slow=34 | | | | | | |
| **OHAK** | **Old Harbor** | **10.60** | **57** | Pn | **Pn** | **11 29 23.1** | **-1.3** |
| **OHAK** | **Old Harbor** | **10.60** | **57** | P | **Pn** | **11 29 24.5** | **+0.1** |
| | baz=250 | | | | | | |
| **P18K** | **Big Mountain,** | **10.68** | **44** | Pn | **Pn** | **11 29 24.6** | **-0.9** |
| **P18K** | **Big Mountain,** | **10.68** | **44** | P | **Pn** | **11 29 26.1** | **+0.5** |
| | baz=235,SNR=8.7 | | | | | | |
| **O18K** | **Koktuh Hills** | **10.96** | **42** | | **Pn** | **11 29 30.6** | **+1.3** |
| **Q19K** | **Cape Douglas,** | **11.13** | **48** | Pn | **Pn** | **11 29 31.2** | **-0.6** |
| **Q19K** | **Cape Douglas,** | **11.13** | **48** | P | **Pn** | **11 29 31.7** | **0.0** |
| | baz=241 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.16** | **55** | Pn | **Pn** | **11 29 30.5** | **-1.4** |
| | 1.3nm,0.3s,baz=241,slow=6.6,SNR=13 | | | | | | |
| **KDAK** | **Kodiak Island** | **11.16** | **55** | Pn | **Pn** | **11 29 30.4** | **-1.6** |
| **GAMB** | **Gambell** | **11.41** | **356** | P | **Pn** | **11 29 38.7** | **+3.2** |
| | baz=174 | | | | | | |
| **O19K** | **Port Alsworth** | **11.52** | **42** | P | **Pn** | **11 29 38.8** | **+1.9** |
| | baz=234 | | | | | | |
| **N19K** | **Bonanza Creek** | **11.83** | **39** | P | **Pn** | **11 29 44.6** | **+3.4** |
| | baz=231 | | | | | | |
| **RSO** | **Redoubt South** | **12.31** | **43** | | **Pn** | **11 29 49.0** | **+1.0** |
| **ANM** | **Nome** | **12.36** | **9** | Pn | **Pn** | **11 29 50.6** | **+2.1** |
| **CNPM** | **China Poot** | **12.51** | **48** | Pn | **Pn** | **11 29 50.9** | **+0.4** |
| **M19K** | **Big River Lodg** | **12.57** | **35** | P | **Pn** | **11 29 53.7** | **+2.4** |
| | baz=228 | | | | | | |
| **L19K** | **White Mountain** | **12.60** | **33** | P | **Pn** | **11 29 54.2** | **+2.5** |
| | baz=226,SNR=14 | | | | | | |
| **BRLK** | **Bradley Lake** | **12.78** | **48** | Pn | **Pn** | **11 29 52.2** | **-1.9** |
| **TTA** | **Tatalina** | **12.78** | **29** | Pn | **Pn** | **11 29 54.5** | **+0.4** |
| **TTA** | **Tatalina** | **12.78** | **29** | P | **Pn** | **11 29 56.8** | **+2.6** |
| | baz=220,SNR=8.0 | | | | | | |
| **BRSE** | **Bradley Lake S** | **12.83** | **48** | P | **Pn** | **11 29 55.4** | **+0.5** |
| | baz=243 | | | | | | |
| **SPU** | **Mount Spurr** | **13.00** | **41** | Pn | **Pn** | **11 29 55.1** | **-2.2** |
| **L20K** | **Farewell, AK** | **13.14** | **34** | P | **Pn** | **11 30 01.8** | **+2.8** |
| | baz=227 | | | | | | |
| **TNA** | **Tin City** | **13.19** | **3** | Pn | **Pn** | **11 30 00.6** | **+0.9** |
| **TNA** | **Tin City** | **13.19** | **3** | P | **Pn** | **11 30 01.9** | **+2.2** |
| | baz=184,SNR=6.3 | | | | | | |
| **SEW** | **Seward** | **13.57** | **48** | Pn | **Pn** | **11 30 04.3** | **-0.6** |
| **SEW** | **Seward** | **13.57** | **48** | P | **Pn** | **11 30 04.8** | **-0.2** |
| | baz=244 | | | | | | |
| **O22K** | **Cooper Landing** | **13.62** | **46** | | **Pn** | **11 30 05.8** | **+0.3** |
| **O22K** | **Cooper Landing** | **13.62** | **46** | P | **Pn** | **11 30 05.4** | **-0.2** |
| | baz=242,SNR=5.6 | | | | | | |
| **K20K** | **Telida** | **13.69** | **31** | P | **Pn** | **11 30 08.4** | **+1.8** |
| | baz=224 | | | | | | |
| **RC01** | **Rabbit Creek A** | **13.91** | **44** | Pn | **Pn** | **11 30 09.5** | **0.0** |
| **RC01** | **Rabbit Creek A** | **13.91** | **44** | P | **Pn** | **11 30 09.7** | **+0.2** |
| | baz=240 | | | | | | |
| **GCSA** | **Galena City Sc** | **13.99** | **23** | P | **Pn** | **11 30 13.5** | **+2.9** |
| | baz=214 | | | | | | |
| **PPLA** | **Purkeypile** | **14.00** | **35** | P | **Pn** | **11 30 12.2** | **+1.3** |
| | baz=229 | | | | | | |
| **J20K** | **Nowinta River** | **14.27** | **28** | Pn | **Pn** | **11 30 15.4** | **+1.1** |
| **J20K** | **Nowinta River** | **14.27** | **28** | P | **Pn** | **11 30 15.2** | **+0.9** |
| | baz=221 | | | | | | |
| **CAST** | **Castle Rocks** | **14.38** | **33** | Pn | **Pn** | **11 30 15.6** | **-0.3** |
| **CAST** | **Castle Rocks** | **14.38** | **33** | P | **Pn** | **11 30 17.5** | **+1.6** |
| | baz=228 | | | | | | |
| **PWL** | **Port Wells** | **14.40** | **46** | Pn | **Pn** | **11 30 15.5** | **-0.7** |
| **PWL** | **Port Wells** | **14.40** | **46** | P | **Pn** | **11 30 15.6** | **-0.7** |
| | baz=243 | | | | | | |
| **PMR** | **Palmer** | **14.41** | **42** | Pn | **Pn** | **11 30 17.3** | **+1.0** |
| **PMR** | **Palmer** | **14.41** | **42** | P | **Pn** | **11 30 16.9** | **+0.6** |
| | baz=239 | | | | | | |
| **GHO** | **Glory Hole Cre** | **14.59** | **42** | Pn | **Pn** | **11 30 19.0** | **+0.2** |
| **KNK** | **Knik Glacier** | **14.60** | **44** | Pn | **Pn** | **11 30 18.0** | **-1.0** |
| **KNK** | **Knik Glacier** | **14.60** | **44** | P | **Pn** | **11 30 19.4** | **+0.5** |
| | baz=241 | | | | | | |
| **SML** | **Sawmill** | **14.85** | **42** | | **Pn** | **11 30 21.4** | **-0.9** |
| **SML** | **Sawmill** | **14.85** | **42** | P | **Pn** | **11 30 23.2** | **+1.0** |
| | baz=240 | | | | | | |
| **KTH** | **Kantishna Hill** | **14.86** | **34** | Pn | **Pn** | **11 30 23.0** | **+0.6** |
| **TRF** | **Thorofare Moun** | **15.02** | **35** | Pn | **P** | **11 30 27.2** | **-2.2** |
| TRF | | | | IAmb | IAmb | 11 30 43.5 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **FID** | **Port Fidalgo** | **15.19** | **48** | Pn | **Pn** | **11 30 24.3** | **-2.3** |
| FID | | | | IAmb | IAmb | 11 30 51.6 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **15.20** | **33** | P | **Pn** | **11 30 26.6** | **-0.2** |
| | baz=228 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **15.28** | **43** | | **Pn** | **11 30 27.6** | **-0.3** |
| SCM | | | | IAmb | IAmb | 11 30 34.6 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **15.28** | **43** | P | **Pn** | **11 30 27.2** | **-0.7** |
| | baz=242 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **15.44** | **49** | Pn | **Pn** | **11 30 28.7** | **-1.2** |
| EYAK | | | | IAmb | IAmb | 11 30 36.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WAT6** | **Susitna Watana** | **15.48** | **40** | P | **Pn** | **11 30 28.9** | **-1.7** |
| | baz=239 | | | | | | |
| **RND** | **Reindeer** | **15.51** | **37** | Pn | **Pn** | **11 30 31.7** | **+0.8** |
| RND | | | | IAmb | IAmb | 11 30 42.2 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **I21K** | **Tanana** | **15.64** | **28** | Pn | **Pn** | **11 30 33.0** | **+0.5** |
| I21K | | | | IAmb | IAmb | 11 30 49.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **I21K** | **Tanana** | **15.64** | **28** | P | **Pn** | **11 30 33.1** | **+0.6** |
| | baz=223 | | | | | | |
| **DIV** | **Divide** | **15.65** | **47** | Pn | **Pn** | **11 30 30.7** | **-2.0** |
| DIV | | | | IAmb | IAmb | 11 30 36.7 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **15.67** | **36** | | **Pn** | **11 30 32.7** | **-0.2** |
| **MCK** | **McKinley** | **15.67** | **36** | P | **Pn** | **11 30 33.2** | **+0.2** |
| | baz=233 | | | | | | |
| **KLU** | **Klutina** | **15.73** | **46** | | **Pn** | **11 30 33.2** | **-0.5** |
| KLU | | | | IAmb | IAmb | 11 30 33.6 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **KLU** | **Klutina** | **15.73** | **46** | P | **Pn** | **11 30 32.2** | **-1.6** |
| | baz=245,SNR=7.3 | | | | | | |
| **BWN** | **Browne** | **15.75** | **34** | | **Pn** | **11 30 34.7** | **+0.7** |
| BWN | | | | IAmb | IAmb | 11 30 41.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **15.76** | **26** | | **P** | **11 30 37.9** | **+0.4** |
| **H21K** | **Melozitna Rive** | **15.76** | **26** | P | **Pn** | **11 30 31.9** | **-2.2** |
| | baz=221 | | | | | | |
| **IMAR** | **Indian Mountai** | **15.77** | **24** | | **P** | **11 30 36.5** | **-1.0** |
| **DHY** | **Denali Highway** | **15.88** | **39** | Pn | **Pn** | **11 30 35.1** | **-0.7** |
| **DHY** | **Denali Highway** | **15.88** | **39** | P | **Pn** | **11 30 36.2** | **+0.5** |
| | baz=238 | | | | | | |
| **RAGM** | **Ragged Mountai** | **15.89** | **50** | Pn | **Pn** | **11 30 35.6** | **-0.2** |
| RAGM | | | | IAmb | IAmb | 11 30 51.9 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **15.89** | **43** | | **Pn** | **11 30 35.2** | **-0.5** |
| M24K | | | | IAmb | IAmb | 11 31 00.3 | |
| | comp=Z,33nm,1.0s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **15.89** | **43** | P | **Pn** | **11 30 34.9** | **-0.9** |
| | baz=243 | | | | | | |
| **MLY** | **Manley** | **15.91** | **30** | P | **P** | **11 30 39.1** | **-0.1** |
| **MLY** | **Manley** | **15.91** | **30** | P | **Pn** | **11 30 35.8** | **-0.1** |
| | baz=226 | | | | | | |
| **RDOG** | **Red Dog Mine** | **16.00** | **9** | P | **P** | **11 30 38.8** | **-1.4** |
| | baz=195 | | | | | | |
| **HMT** | **Hamilton** | **16.07** | **51** | Pn | **Pn** | **11 30 36.9** | **-1.1** |
| HMT | | | | IAmb | IAmb | 11 31 00.9 | |
| | comp=Z,54nm,1.4s | | | | | | |
| **BMRM** | **Bremner River** | **16.12** | **48** | Pn | **Pn** | **11 30 38.1** | **-0.6** |
| BMRM | | | | IAmb | IAmb | 11 31 05.9 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BMRM** | **Bremner River** | **16.12** | **48** | P | **Pn** | **11 30 37.6** | **-1.0** |
| | baz=249 | | | | | | |
| **BERG** | **Berg Lake** | **16.35** | **51** | | **Pn** | **11 30 40.9** | **-0.7** |
| BERG | | | | IAmb | IAmb | 11 30 57.1 | |
| | comp=Z,55nm,1.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **16.36** | **46** | | **Pn** | **11 30 40.5** | **-1.3** |
| **N25K** | **Chitina, Valde** | **16.36** | **46** | P | **Pn** | **11 30 40.7** | **-1.1** |
| | baz=247 | | | | | | |
| **WRH** | **Wood River Hil** | **16.41** | **34** | Pn | **Pn** | **11 30 41.2** | **-1.1** |
| **I23K** | **Minto, Yukon-K** | **16.42** | **31** | | **Pn** | **11 30 42.2** | **-0.2** |
| I23K | | | | I

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HYT** | **Haines Junctio** | **19.42** | **52** | P | **Pn** | **11 31 19.6** | **+0.3** |
| HYT | | | | IAmb | IAmb | 11 31 22.1 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **HYT** | **Haines Junctio** | **19.42** | **52** | P | **Pn** | **11 31 18.8** | **-0.5** |
| | baz=259,SNR=14 | | | | | | |
| **DAWY** | **Dawson** | **19.51** | **42** | P | **P** | **11 31 18.6** | **-0.3** |
| **DAWY** | **Dawson** | **19.51** | **42** | P | **P** | **11 31 18.7** | **-0.1** |
| | baz=247 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **19.64** | **285** | P | **P** | **11 31 20.4** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **19.64** | **285** | P | **P** | **11 31 18.9** | **-1.3** |
| | comp=Z,2.4nm,0.3s,baz=92,slow=12,SNR=46 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.64** | **285** | P | **P** | **11 31 20.3** | **0.0** |
| **A21K** | **Barrow** | **19.83** | **12** | P | **Pn** | **11 31 23.5** | **-0.5** |
| | baz=204 | | | | | | |
| **J29M** | **Klondike Camp** | **20.13** | **41** | P | **P** | **11 31 25.9** | **+0.3** |
| | baz=248 | | | | | | |
| **M30M** | **Minto, Yukon** | **20.14** | **47** | P | Pn | 11 31 26.9 | -0.9 |
| **SKAG** | **Skagway** | **20.30** | **56** | P | Pn | 11 31 29.3 | -0.3 |
| **SKAG** | **Skagway** | **20.30** | **56** | P | **P** | **11 31 27.4** | **0.0** |
| | baz=265,SNR=11 | | | | | | |
| **WHY** | **Whitehorse** | **20.66** | **53** | P | Pn | 11 31 32.9 | -1.0 |
| WHY | | | | IAmb | IAmb | 11 31 41.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **WHY** | **Whitehorse** | **20.66** | **53** | P | **P** | **11 31 31.7** | **+0.3** |
| | baz=262 | | | | | | |
| **JIS** | **Juneau Island** | **20.73** | **60** | P | **P** | **11 31 32.9** | **+1.0** |
| JIS | | | | IAmb | IAmb | 11 31 37.8 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **M31M** | **Drury Creek, Y** | **21.15** | **49** | P | **P** | **11 31 36.6** | **0.0** |
| M31M | | | | IAmb | IAmb | 11 31 46.6 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **M31M** | **Drury Creek, Y** | **21.15** | **49** | P | **P** | **11 31 36.4** | **-0.1** |
| | baz=258 | | | | | | |
| **P33M** | **Teslin, Yukon** | **21.63** | **54** | P | **P** | **11 31 42.2** | **+0.5** |
| P33M | | | | IAmb | IAmb | 11 31 52.7 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **P33M** | **Teslin, Yukon** | **21.63** | **54** | P | **P** | **11 31 42.0** | **+0.2** |
| | baz=265 | | | | | | |
| **FARO** | **Faro, Yukon** | **21.64** | **49** | P | **P** | **11 31 41.5** | **-0.2** |
| | baz=260 | | | | | | |
| **H02S1** | **DAWSON INLET T** | **22.35** | **73** | T | T | 11 55 01.9 | |
| | SNR=9.7 | | | | | | |
| **SEY** | **Seymchan** | **22.47** | **313** | P | **P** | **11 31 49.0** | **-1.6** |
| | comp=Z,1.4nm,0.7s,baz=95,slow=11,SNR=7.1 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **22.66** | **48** | P | **P** | **11 31 53.0** | **+0.3** |
| | baz=261 | | | | | | |
| **DLBC** | **Dease Lake** | **23.02** | **59** | P | **P** | **11 31 57.0** | **+0.5** |
| | comp=Z,9.5nm,1.0s,baz=260,slow=8.6,SNR=11 | | | | | | |
| **DLBC** | **Dease Lake** | **23.02** | **59** | P | **P** | **11 31 59.0** | **+2.4** |
| DLBC | | | | IAmb | IAmb | 11 32 01.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **23.40** | **34** | P | **P** | **11 32 00.0** | **0.0** |
| | comp=Z,2.3nm,0.4s,baz=254,slow=10,SNR=16 | | | | | | |
| **INK** | **Inuvik** | **23.40** | **34** | P | **P** | **11 32 01.2** | **+1.2** |
| INK | | | | IAmb | IAmb | 11 32 21.8 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **INK** | **Inuvik** | **23.40** | **34** | P | **P** | **11 32 00.0** | **0.0** |
| | baz=245 | | | | | | |
| **C36M** | **Paulatuk** | **26.98** | **34** | P | **P** | **11 32 31.9** | **-0.8** |
| **C36M** | **Paulatuk** | **26.98** | **34** | P | **P** | **11 32 32.1** | **-0.6** |
| | baz=254 | | | | | | |
| **A36M** | **Sachs Harbour** | **27.45** | **28** | P | **P** | **11 32 35.6** | **-1.3** |
| **D04E** | **Lakebay** | **30.31** | **81** | P | **P** | **11 33 02.8** | **+0.3** |
| | baz=298 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.35** | **49** | P | **P** | **11 33 01.9** | **-0.8** |
| | comp=Z,1.3nm,0.6s,baz=272,slow=7.8,SNR=34 | | | | | | |
| YKA | | | | PcP | **PcP** | **11 36 01.4** | **-0.3** |
| | comp=Z,0.5nm,0.9s,baz=288,slow=2.4,SNR=4.0 | | | | | | |
| YKA | | | | ScP | **ScP** | **11 39 41.7** | **+1.1** |
| | comp=Z,0.2nm,0.6s,baz=270,slow=4.3,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.35** | **49** | P | **P** | **11 33 02.3** | **-0.4** |
| **B08A** | **Colville Reser** | **31.84** | **77** | P | **P** | **11 33 17.6** | **+1.6** |
| B08A | | | | IAmb | IAmb | 11 33 17.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **HAWA** | **Hanford** | **32.64** | **80** | P | **P** | **11 33 24.4** | **+1.4** |
| HAWA | | | | IAmb | IAmb | 11 33 24.9 | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **NEW** | **Newport** | **33.19** | **76** | P | **P** | **11 33 28.4** | **+0.5** |
| NEW | | | | IAmb | IAmb | 11 33 29.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **NEW** | **Newport** | **33.19** | **76** | P | **P** | **11 33 28.5** | **+0.6** |
| | baz=297 | | | | | | |
| **EDM** | **Edmonton** | **33.30** | **66** | P | **P** | **11 33 29.7** | **+0.8** |
| **J08A** | **Circle Bar Ran** | **34.86** | **84** | P | **P** | **11 33 44.4** | **+1.9** |
| J08A | | | | IAmb | IAmb | 11 33 56.7 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **JTMT** | **Jette** | **35.12** | **75** | P | **P** | **11 33 45.6** | **+0.9** |
| JTMT | | | | IAmb | IAmb | 11 33 46.1 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **MSO** | **Missoula** | **35.77** | **76** | P | **P** | **11 33 51.5** | **+1.2** |
| **MSO** | **Missoula** | **35.77** | **76** | P | **P** | **11 33 50.6** | **+0.3** |
| | baz=300 | | | | | | |
| **MFID** | **Camas Ranch** | **36.44** | **82** | P | **P** | **11 33 57.4** | **+1.3** |
| MFID | | | | IAmb | IAmb | 11 33 57.9 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **HLID** | **Hailey** | **37.21** | **81** | P | **P** | **11 34 04.0** | **+1.2** |
| HLID | | | | IAmb | IAmb | 11 34 04.1 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **HLID** | **Hailey** | **37.21** | **81** | P | **P** | **11 34 03.1** | **+0.4** |
| | baz=304 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.38** | **218** | T | T | 12 13 51.7 | |
| | baz=24,slow=76,SNR=70 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.39** | **218** | T | T | 12 13 53.8 | |
| | baz=24,slow=76,SNR=58 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.40** | **218** | T | T | 12 13 55.2 | |
| | baz=24,slow=76,SNR=46 | | | | | | |
| **BCYI** | **Bear Canyon** | **37.41** | **79** | P | **P** | **11 34 05.5** | **+1.1** |
| **MCMT** | **McKenzie Canyo** | **37.47** | **78** | P | **P** | **11 34 06.0** | **+1.1** |
| **BOZ** | **Bozeman (W)** | **37.78** | **77** | P | **P** | **11 34 08.2** | **+0.7** |
| BOZ | | | | IAmb | IAmb | 11 34 08.5 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **BOZ** | **Bozeman (W)** | **37.78** | **77** | P | **P** | **11 34 07.4** | **-0.1** |
| | baz=302,SNR=6.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **37.87** | **91** | P | **P** | **11 34 09.6** | **+1.2** |
| | comp=Z,1.6nm,0.8s,baz=295,slow=7.7,SNR=9.8 | | | | | | |
| **ELK** | **Elko** | **38.33** | **85** | P | **P** | **11 34 13.7** | **+1.4** |
| **H11S1** | **WAKE ISLAND Hy** | **38.57** | **218** | T | T | 12 15 25.1 | |
| | baz=23,slow=76,SNR=779 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.59** | **218** | T | T | 12 15 25.9 | |
| | baz=23,slow=76,SNR=361 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.59** | **218** | T | T | 12 15 21.1 | |
| | baz=23,slow=76,SNR=365 | | | | | | |
| **YHH** | **Holmes Hill** | **38.68** | **77** | P | **P** | **11 34 16.7** | **+1.4** |
| YHH | | | | IAmb | IAmb | 11 34 16.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **FFC** | **Flin Flon** | **38.86** | **59** | P | **P** | **11 34 16.9** | **+0.7** |
| FFC | | | | IAmb | IAmb | 11 34 17.2 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **H17A** | **Grant Village** | **39.06** | **78** | P | **P** | **11 34 19.5** | **+1.1** |
| | baz=303 | | | | | | |
| **HVU** | **Hansel Valley** | **39.22** | **82** | P | **P** | **11 34 21.0** | **+1.4** |
| HVU | | | | IAmb | IAmb | 11 34 21.5 | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **RLMT** | **Red Lodge** | **39.44** | **76** | P | **P** | **11 34 22.3** | **+0.8** |
| RLMT | | | | IAmb | IAmb | 11 34 23.9 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **39.44** | **76** | P | **P** | **11 34 21.2** | **-0.2** |
| | baz=303,SNR=7.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.49** | **267** | P | **P** | **11 34 20.3** | **-1.4** |
| | comp=Z,4.0nm,0.7s,baz=46,slow=7.6,SNR=8.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.49** | **267** | P | **P** | **11 34 21.0** | **-0.8** |
| MJAR | | | | IAmb | IAmb | 11 34 22.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **39.49** | **267** | P | **P** | **11 34 21.7** | **-0.1** |
| MJB9 | | | | IAmb | IAmb | 11 34 22.2 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **MAJO** | **Matsushiro** | **39.49** | **267** | P | **P** | **11 34 21.5** | **-0.2** |
| **ISA** | **Isabella, Lake** | **39.55** | **94** | P | **P** | **11 34 22.7** | **+0.5** |
| | baz=311 | | | | | | |
| **R11A** | **Troy Canyon, C** | **39.59** | **89** | P | **P** | **11 34 23.7** | **+1.0** |
| **R11A** | **Troy Canyon, C** | **39.59** | **89** | P | **P** | **11 34 22.9** | **+0.2** |
| | baz=309 | | | | | | |
| **FURC** | **Furnace Creek,** | **40.01** | **92** | P | **P** | **11 34 27.2** | **+1.2** |
| | baz=311 | | | | | | |
| **TPNV** | **Topopah Spring** | **40.07** | **91** | P | **P** | **11 34 28.2** | **+1.5** |
| **TPNV** | **Topopah Spring** | **40.07** | **91** | P | **P** | **11 34 27.7** | **+1.0** |
| | baz=310 | | | | | | |
| **DUG** | **Dugway, Tooele** | **40.14** | **84** | P | **P** | **11 34 28.3** | **+1.1** |
| DUG | | | | IAmb | IAmb | 11 34 29.3 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **DUG** | **Dugway, Tooele** | **40.14** | **84** | P | **P** | **11 34 27.8** | **+0.6** |
| | baz=307,SNR=5.7 | | | | | | |
| **CTU** | **Camp Tracy** | **40.49** | **83** | P | **P** | **11 34 30.4** | **+0.2** |
| CTU | | | | IAmb | IAmb | 11 34 31.6 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **PRN** | **Pahroc Range** | **40.51** | **89** | P | **P** | **11 34 32.2** | **+1.9** |
| PRN | | | | IAmb | IAmb | 11 34 32.4 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **BW06** | **Boulder Array** | **40.59** | **79** | P | **P** | **11 34 31.6** | **+0.6** |
| BW06 | | | | IAmb | IAmb | 11 34 32.5 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **BW06** | **Boulder Array** | **40.59** | **79** | P | **P** | **11 34 30.5** | **-0.5** |
| | baz=305,SNR=9.5 | | | | | | |
| **PD31** | **Pinedale Array** | **40.59** | **79** | P | **P** | **11 34 31.6** | **+0.5** |
| PD31 | | | | IAmb | IAmb | 11 34 32.5 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **40.59** | **79** | P | **P** | **11 34 31.6** | **+0.5** |
| | comp=Z,6.5nm,0.6s,baz=301,slow=4.3,SNR=61 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.59** | **79** | P | **P** | **11 34 31.3** | **+0.3** |
| **JLU** | **Jordanelle** | **40.73** | **83** | P | **P** | **11 34 33.0** | **+0.8** |
| JLU | | | | IAmb | IAmb | 11 34 33.4 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **GSC** | **Goldstone, Bar** | **40.81** | **93** | P | **P** | **11 34 34.0** | **+1.3** |
| GSC | | | | IAmb | IAmb | 11 34 34.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **GSC** | **Goldstone, Bar** | **40.81** | **93** | P | **P** | **11 34 33.4** | **+0.6** |
| | baz=312 | | | | | | |
| **TUQ** | **Turquoise Moun** | **41.26** | **92** | P | **P** | **11 34 36.9** | **+0.5** |
| | baz=312 | | | | | | |
| **HEC** | **Hector,Ludlow** | **41.41** | **93** | P | **P** | **11 34 37.7** | **+0.1** |
| | baz=312 | | | | | | |
| **CCUT** | **Cedar City** | **41.45** | **88** | P | **P** | **11 34 38.1** | **-0.1** |
| **MSU** | **Marysvale** | **41.57** | **86** | P | **P** | **11 34 39.1** | **0.0** |
| **TMUT** | **Trail Mountain** | **41.67** | **84** | P | **P** | **11 34 41.4** | **+1.4** |
| TMUT | | | | IAmb | IAmb | 11 34 42.1 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **GMRC** | **Granite Mounta** | **41.85** | **93** | P | **P** | **11 34 41.8** | **+0.5** |
| | baz=312 | | | | | | |
| **LCMT** | **Little Creek M** | **41.87** | **89** | P | **P** | **11 34 42.7** | **+1.2** |
| **RDMU** | **Red Mountain** | **41.89** | **82** | P | **P** | **11 34 42.5** | **+0.8** |
| RDMU | | | | IAmb | IAmb | 11 34 43.4 | |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **Q16A** | **Castle Valley** | **41.93** | **85** | P | **P** | **11 34 43.6** | **+1.6** |
| Q16A | | | | IAmb | IAmb | 11 34 44.3 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **P18A** | **Preston Nutter** | **42.05** | **83** | P | **P** | **11 34 44.2** | **+1.0** |
| P18A | | | | IAmb | IAmb | 11 34 45.2 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **TPFO** | **Pinon Flats** | **42.16** | **95** | P | **P** | **11 34 44.6** | **+0.8** |
| | baz=313 | | | | | | |
| **SRU** | **San Rafael Swe** | **42.20** | **84** | P | **P** | **11 34 45.1** | **+0.9** |
| SRU | | | | IAmb | IAmb | 11 34 46.9 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **K22A** | **Casper** | **42.48** | **77** | P | **P** | **11 34 46.5** | **+0.1** |
| | baz=306 | | | | | | |
| **IRM** | **Iron Mountain** | **42.59** | **93** | P | **P** | **11 34 47.9** | **+0.7** |
| | baz=312 | | | | | | |
| **W13A** | **Hualapai Mount** | **42.73** | **91** | P | **P** | **11 34 49.3** | **+0.7** |
| **U15A** | **North Rim** | **42.83** | **88** | P | **P** | **11 34 50.7** | **+1.2** |
| U15A | | | | IAmb | IAmb | 11 34 51.6 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **O20A** | **White River Ci** | **42.95** | **81** | P | **P** | **11 34 50.5** | **+0.2** |
| **O20A** | **White River Ci** | **42.95** | **81** | P | **P** | **11 34 50.1** | **-0.2** |
| | baz=308,SNR=11 | | | | | | |
| **RSSD** | **Black Hills** | **43.09** | **74** | P | **P** | **11 34 50.8** | **-0.7** |
| | baz=305 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **43.10** | **92** | P | **P** | **11 34 51.7** | **+0.4** |
| | baz=312 | | | | | | |
| **PV11** | **David Mesa, Pa** | **43.72** | **84** | P | **P** | **11 34 57.2** | **+0.7** |
| PV11 | | | | IAmb | IAmb | 11 34 57.6 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **PV07** | **Paradox Valley** | **43.77** | **83** | P | **P** | **11 34 56.9** | **0.0** |
| PV07 | | | | IAmb | IAmb | 11 34 57.9 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **43.88** | **79** | P | **P** | **11 34 58.1** | **+0.3** |
| | baz=308 | | | | | | |
| **PV15** | **Paradox Valley** | **43.93** | **83** | P | **P** | **11 34 58.5** | **+0.3** |
| PV15 | | | | IAmb | IAmb | 11 34 59.9 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **WUAZ** | **Wupatki** | **43.99** | **89** | P | **P** | **11 34 59.5** | **+0.8** |
| WUAZ | | | | IAmb | IAmb | 11 35 00.6 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **WUAZ** | **Wupatki** | **43.99** | **89** | P | **P** | **11 34 59.4** | **+0.8** |
| | baz=311 | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.30** | **62** | P | **P** | **11 35 00.6** | **-0.2** |
| | comp=Z,5.0nm,0.6s,baz=280,slow=7.4,SNR=6.8 | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.30** | **62** | P | **P** | **11 35 00.8** | **0.0** |
| ULM | | | | IAmb | IAmb | 11 35 02.1 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **SMCO** | **Snowmass** | **44.32** | **81** | P | **P** | **11 35 01.6** | **+0.1** |
| SMCO | | | | IAmb | IAmb | 11 35 02.4 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **MVCO** | **Mesa Verde** | **44.64** | **85** | P | **P** | **11 35 04.0** | **0.0** |
| | baz=310 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **44.68** | **90** | P | **P** | **11 35 05.2** | **+1.0** |
| X16A | | | | IAmb | IAmb | 11 35 06.5 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ISCO** | **Idaho Springs** | **44.75** | **80** | P | **P** | **11 35 04.6** | **-0.3** |
| | baz=308 | | | | | | |
| **KSRS** | **Korea Array** | **45.19** | **276** | P | **P** | **11 35 06.7** | **-1.3** |
| | comp=Z,2.1nm,0.6s,baz=54,slow=7.1,SNR=8.6 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **45.31** | **83** | P | **P** | **11 35 10.2** | **+0.9** |
| S22A | | | | IAmb | IAmb | 11 35 11.7 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **45.31** | **83** | P | **P** | **11 35 09.7** | **+0.4** |
| | baz=310 | | | | | | |
| **AGMN** | **Agassiz Nation** | **45.38** | **64** | P | **P** | **11 35 09.2** | **-0.2** |
| AGMN | | | | IAmb | IAmb | 11 35 09.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **AGMN** | **Agassiz Nation** | **45.38** | **64** | P | **P** | **11 35 08.5** | **-0.9** |
| | baz=304,SNR=5.2 | | | | | | |
| **214A** | **Organ Pipe Nat** | **45.52** | **94** | P | **P** | **11 35 11.2** | **+0.5** |
| | baz=314 | | | | | | |
| **Q24A** | **Divide** | **45.55** | **80** | P | **P** | **11 35 11.4** | **+0.2** |
| | baz=309 | | | | | | |
| **SDCO** | **Great Sand Dun** | **46.12** | **82** | P | **P** | **11 35 16.4** | **+0.6** |
| SDCO | | | | IAmb | IAmb | 11 35 17.4 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **SDCO** | **Great Sand Dun** | **46.12** | **82** | P | **P** | **11 35 15.4** | **-0.3** |
| | baz=310,SNR=5.7 | | | | | | |
| **TUC** | **Tucson** | **46.51** | **92** | P | **P** | **11 35 19.4** | **+0.7** |
| TUC | | | | IAmb | IAmb | 11 35 20.4 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **TUC** | **Tucson** | **46.51** | **92** | P | **P** | **11 35 19.4** | **+0.7** |
| | baz=314 | | | | | | |
| **B35A** | **Bob, Littlefor** | **46.52** | **63** | P | **P** | **11 35 18.2** | **-0.2** |
| **KSCO** | **Kaye Shedlock'** | **47.04** | **79** | P | **P** | **11 35 23.2** | **+0.5** |
| | baz=310 | | | | | | |
| **T25A** | **Trinidad** | **47.17** | **82** | P | **P** | **11 35 24.4** | **+0.5** |
| | baz=311 | | | | | | |
| **ANMO** | **Albuquerque** | **47.37** | **86** | P | **P** | **11 35 25.9** | **+0.4** |
| | baz=312 | | | | | | |
| **ECSD** | **EROS Data Cent** | **47.64** | **70** | P | **P** | **11 35 26.5** | **-0.7** |
| | baz=308 | | | | | | |
| **BNM** | **Barren Site** | **47.80** | **87** | P | **P** | **11 35 28.9** | **+0.1** |
| **EYMN** | **Ely** | **47.98** | **62** | P | **P** | **11 35 29.3** | **-0.4** |
| | baz=306 | | | | | | |
| **121A** | **Cookes Peak, D** | **48.20** | **89** | P | **P** | **11 35 31.7** | **-0.1** |
| | baz=314 | | | | | | |
| **E38A** | **The Farm, Brul** | **48.74** | **64** | P | **P** | **11 35 34.8** | **-0.9** |
| **MNTX** | **Cornudas Mount** | **50.24** | **88** | | **P** | **11 35 48.1** | **+0.8** |
| MNTX | | | | IAmb | IAmb | 11 35 48.9 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **50.24** | **88** | P | **P** | **11 35 47.4** | **+0.2** |
| | baz=314,SNR=5.8 | | | | | | |
| **MSTX** | **Muleshoe** | **50.27** | **84** | P | **P** | **11 35 48.1** | **+0.5** |
| | baz=313 | | | | | | |
| **AMTX** | **Amarillo** | **50.32** | **82** | | **P** | **11 35 48.3** | **+0.4** |
| **KSU1** | **Kansas State U** | **50.57** | **75** | | **P** | **11 35 48.8** | **-0.9** |
| **SONM** | **Songino Array** | **51.08** | **301** | P | **P** | **11 35 52.8** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=57,slow=5.5,SNR=3.8 | | | | | | |
| SONM | | | | PcP | **PcP** | **11 37 09.1** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=77,slow=2.5,SNR=4.5 | | | | | | |
| **N38A** | **Joes South For** | **51.44** | **71** | P | **P** | **11 35 56.2** | **0.0** |
| **I42A** | **Draeger Farm,** | **51.89** | **65** | P | **P** | **11 35 59.5** | **0.0** |
| **L42A** | **Oliver, Polo** | **52.69** | **67** | P | **P** | **11 36 06.0** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **52.70** | **291** | *eP* | **P** | **11 36 06.3** | **+0.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,8.0s | | | | | | |
| **E46A** | **Sault Ste Mari** | **52.81** | **60** | P | **P** | **11 36 06.1** | **-0.1** |
| **TX31** | **Lajitas Ar. Si** | **52.95** | **89** | P | **P** | **11 36 08.5** | **+0.8** |
| **TX32** | **Lajitas Array** | **52.95** | **89** | P | **P** | **11 36 08.4** | **+0.8** |
| TX32 | | | | IAmb | IAmb | 11 36 08.8 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **52.95** | **89** | P | **P** | **11 36 07.9** | **+0.3** |
| | comp=Z,4.0nm,0.7s,baz=297,slow=5.2,SNR=46 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.95** | **89** | P | **P** | **11 36 08.3** | **+0.7** |
| **HNS** | **HongShan** | **53.16** | **285** | ⇑P | **P** | **11 36 09.0** | **+0.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **53.65** | **72** | P | **P** | **11 36 11.4** | **-1.1** |
| **J47A** | **Sunmer** | **54.58** | **63** | P | **P** | **11 36 19.4** | **+0.3** |
| **VLDQ** | **Val d'Or** | **55.19** | **55** | P | **P** | **11 36 22.3** | **-1.3** |
| VLDQ | | | | IAmb | IAmb | 11 36 23.6 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **55.52** | **43** | P | **P** | **11 36 25.0** | **-0.9** |
| | comp=Z,6.6nm,0.9s,baz=318,slow=7.4,SNR=6.4 | | | | | | |
| **SCHQ** | **Schefferville** | **55.52** | **43** | P | **P** | **11 36 26.0** | **+0.1** |
| **PBMO** | **Poplar Bluff** | **55.75** | **73** | P | **P** | **11 36 28.7** | **+1.0** |
| **833A** | **Chaparral WMA,** | **56.29** | **86** | P | **P** | **11 36 31.0** | **-0.7** |
| | baz=316 | | | | | | |
| **O48B** | **Farmland** | **56.39** | **66** | P | **P** | **11 36 31.0** | **-1.3** |
| | baz=313 | | | | | | |
| **SADO** | **Sadowa** | **56.58** | **59** | P | **P** | **11 36 33.4** | **-0.2** |
| **WCI** | **Wyandotte Cave** | **57.14** | **69** | P | **P** | **11 36 37.1** | **-0.6** |
| | baz=314 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.23** | **317** | PcP | **PcP** | **11 37 31.9** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=63,slow=3.6,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.83** | **354** | P | **P** | **11 36 40.4** | **-1.6** |
| | comp=Z,2.4nm,0.8s,baz=32,slow=7.6,SNR=6.9 | | | | | | |
| ARCES | | | | PcP | **PcP** | **11 37 32.8** | **-1.4** |
| | comp=Z,2.3nm,0.7s,baz=28,slow=5.5,SNR=5.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.83** | **354** | P | **P** | **11 36 41.2** | **-0.8** |
| **OXF** | **Oxford** | **57.91** | **74** | P | **P** | **11 36 42.0** | **-1.1** |
| | baz=315 | | | | | | |
| **M53A** | **WI Miller and** | **58.05** | **62** | P | **P** | **11 36 43.4** | **-0.6** |
| | baz=314 | | | | | | |
| **M54A** | **Oil Creek Stat** | **58.55** | **62** | P | **P** | **11 36 47.2** | **-0.3** |
| | baz=314 | | | | | | |
| **N54A** | **Moraine State** | **58.76** | **62** | P | **P** | **11 36 48.3** | **-0.6** |
| | baz=314 | | | | | | |
| **VBMS** | **Vicksburg** | **58.88** | **77** | P | **P** | **11 36 49.9** | **0.0** |
| | baz=315 | | | | | | |
| **LONY** | **Lake Ozonia** | **59.04** | **56** | P | **P** | **11 36 50.2** | **-0.6** |
| **LONY** | **Lake Ozonia** | **59.04** | **56** | P | **P** | **11 36 50.1** | **-0.7** |
| | baz=315 | | | | | | |
| **M55A** | **Ridgway** | **59.06** | **61** | P | **P** | **11 36 50.7** | **-0.3** |
| **LMQ** | **La Malbaie** | **59.06** | **51** | P | **P** | **11 36 49.9** | **-1.1** |
| **J57A** | **Williamstown** | **59.16** | **58** | P | **P** | **11 36 51.9** | **+0.3** |
| **L56A** | **Greenwood** | **59.24** | **60** | P | **P** | **11 36 52.5** | **+0.2** |
| **J58A** | **Remsen** | **59.56** | **58** | P | **P** | **11 36 54.8** | **+0.3** |
| **NCB** | **Newcomb** | **59.68** | **56** | P | **P** | **11 36 55.0** | **-0.3** |
| **W50A** | **Signal Mountai** | **59.82** | **71** | P | **P** | **11 36 56.7** | **+0.3** |
| **J59A** | **Piesco** | **59.89** | **57** | P | **P** | **11 36 56.7** | **-0.1** |
| **BINY** | **Binghamton** | **60.02** | **59** | P | **P** | **11 36 57.2** | **-0.4** |
| | baz=315 | | | | | | |
| **SSPA** | **Standing Stone** | **60.12** | **61** | P | **P** | **11 36 58.2** | **-0.1** |
| **SSPA** | **Standing Stone** | **60.12** | **61** | P | **P** | **11 36 57.6** | **-0.7** |
| | baz=315 | | | | | | |
| **LRAL** | **Lakeview Retre** | **60.38** | **73** | P | **P** | **11 36 58.8** | **-1.4** |
| | baz=316 | | | | | | |
| **TKL** | **Tuckaleechee C** | **60.38** | **69** | LR | LR | 12 01 35.7 | |
| | comp=Z,59nm,20.3s,baz=348,slow=34 | | | | | | |
| **L59A** | **Walton** | **60.52** | **58** | P | **P** | **11 37 01.4** | **+0.4** |
| **BORG** | **Borgarnes** | **60.61** | **15** | LR | LR | 12 05 26.6 | |
| | comp=Z,61nm,18.2s,baz=21,slow=38 | | | | | | |
| **N59A** | **State Game Lan** | **61.05** | **60** | P | **P** | **11 37 03.6** | **-1.1** |
| | baz=316 | | | | | | |
| **BLA** | **Blacksburg** | **61.17** | **66** | P | **P** | **11 37 04.4** | **-1.2** |
| | baz=316 | | | | | | |
| **BATG** | **Bathurst New B** | **61.26** | **49** | P | **P** | **11 37 06.2** | **+0.2** |
| **KMSC** | **Kings Mountain** | **62.14** | **68** | P | **P** | **11 37 11.4** | **-0.6** |
| | baz=316 | | | | | | |
| **GOGA** | **Godfrey** | **62.16** | **71** | P | **P** | **11 37 11.4** | **-0.9** |
| | baz=316 | | | | | | |
| **LMN** | **Caledonia Moun** | **62.90** | **49** | P | **P** | **11 37 16.9** | **-0.2** |
| **WMQ** | **Urumqi** | **63.32** | **308** | *eP* | **P** | **11 37 23.6** | **+3.7** |
| **MKAR** | **Makanchi Array** | **63.60** | **313** | P | **P** | **11 37 19.6** | **-2.0** |
| | comp=Z,0.4nm,0.7s,baz=52,slow=7.9,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.60** | **313** | P | **P** | **11 37 20.5** | **-1.2** |
| **FINES** | **FINESS Array B** | **65.77** | **352** | P | **P** | **11 37 33.9** | **-1.6** |
| | comp=Z,1.6nm,0.7s,baz=18,slow=6.8,SNR=7.3 | | | | | | |
| **FINES** | **FINESS Array B** | **65.77** | **352** | P | **P** | **11 37 34.5** | **-1.0** |
| **NC303** | **NORSAR Array S** | **66.68** | **359** | P | **P** | **11 37 40.9** | **-0.5** |
| **NC405** | **NORSAR Array S** | **66.79** | **359** | P | **P** | **11 37 41.1** | **-0.9** |
| **NB2** | **NORSAR Subarra** | **66.86** | **360** | P | **P** | **11 37 41.9** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=360,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **66.86** | **360** | P | **P** | **11 37 40.9** | **-1.7** |
| | comp=Z,0.7nm,0.6s,baz=1.5,slow=6.3,SNR=4.9 | | | | | | |
| **PZH** | **PanZhiHua** | **68.60** | **286** | P | **P** | **11 37 55.3** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **ABKAR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,27nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | IAmb_Lg | | 11 35 55.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.57** | **258** | Pn | Pn | 11 34 55.4 | +0.4 |
| **CBKS** | **Cedar Bluff** | **3.62** | **330** | IAmb_Lg | | 11 36 00.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.69** | **180** | Pn | Pn | 11 34 57.0 | +0.5 |
| **U40A** | **Yellville** | **3.76** | **78** | Pn | Pn | 11 34 57.9 | +0.4 |
| **X40A** | **Basin Creek Fa** | **3.95** | **106** | Pn | Pn | 11 34 58.5 | -1.5 |
| **WLAR** | **White Oak Lake** | **4.08** | **118** | IAmb_Lg | | 11 36 16.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.26** | **95** | IAmb_Lg | | 11 36 15.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.52** | **121** | IAmb_Lg | | 11 36 31.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.88** | **56** | IAmb_Lg | | 11 36 32.6 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **5.00** | **37** | IAmb_Lg | | 11 36 44.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.11** | **84** | IAmb_Lg | | 11 36 41.8 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.28** | **73** | IAmb_Lg | | 11 36 55.9 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.49** | **63** | IAmb_Lg | | 11 36 51.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.80** | **290** | IAmb_Lg | | 11 37 38.2 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **Q24A** | **Divide** | **6.97** | **300** | IAmb_Lg | | 11 37 56.5 | |
| | comp=Z,6.7nm,0.8s | | | | | | |

**ISC 19 11:35:14.8±1.4, 49°06'N±0'.04×18°26'E±0'.05, h9km±11km, n7, σ2.9±13/12, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAVC** | **Velka Javorina** | **0.44** | **243** | *e*PG | **Pg** | **11 35 22.2** | **-1.1** |
| JAVC | | | | *e*SG | **Sg** | **11 35 27.6** | **-1.5** |
| **KOLL** | **Kolacno** | **0.49** | **169** | *e*PG | **Pg** | **11 35 25.2** | **+0.9** |
| KOLL | | | | *e*SG | **Sb** | **11 35 32.8** | **0.0** |
| **VYHS** | **Vyhne** | **0.68** | **146** | *e*PG | **Pg** | **11 35 28.2** | **+0.3** |
| VYHS | | | | *e*SG | **Sb** | **11 35 40.6** | **+2.3** |
| **MORC** | **Moravsky Berou** | **0.86** | **327** | *e*PG | **Pg** | **11 35 33.2** | **+1.8** |
| MORC | | | | *e*SG | **Sb** | **11 35 45.5** | **+1.9** |
| **MODS** | **Modra-Piesok** | **0.94** | **224** | *e*SG | **Sn** | **11 35 49.5** | **+1.6** |
| **VRAC** | **Vranov** | **1.12** | **284** | *e*PG | **Pb** | **11 35 36.2** | **-0.2** |
| VRAC | | | | *e*SG | **Sn** | **11 35 51.1** | **-1.2** |
| **OJC** | **Ojcow** | **1.53** | **40** | *e*Pg | Pg | 11 35 52.8 | +8.6 |
| OJC | | | | *e*Sg | **Sn** | **11 35 58.5** | **-3.9** |

*IDC **19** 12:03:51.4±0.9, 2°.36N×128°.70E, h0km, mb3.8/8, mb1 3.9/9, mb1mx3.8/32, mbtmp3.8/9, ML3.5/1, Error ellipse: s-maj=63.7km s-min=15.1km az=72.0*
*DJA **19** 12:03:53.2±0.6, 2°.N±5°×12°.9E±°, h10km, M4.0/7, MLv4.0/7*
**ISC 19 12:03:56.3±0.8, 2°.39N±0°.08×128°.93E±0°.09, h35km, n16, σ0.970/12, mb4.0/7, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.24** | **224** | P | **Pn** | **12 04 30.6** | **-0.3** |
| TNTI | | | | S | **Sn** | **12 04 58.0** | **+0.6** |
| **SIJI** | **Sorong** | **3.99** | **144** | Pn | **Pn** | **12 04 55.4** | **+0.3** |
| | 2.8nm,0.3s,baz=216,slow=22,SNR=18 | | | | | | |
| SIJI | | | | Sn | **Sn** | **12 05 40.0** | **-0.7** |
| | 3.2nm,0.3s,baz=223,slow=22,SNR=7.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.61** | **189** | P | **P** | **12 08 31.9** | **-0.7** |
| | 3.5nm,1.2s,baz=24,slow=8.9,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.82** | **167** | P | **P** | **12 08 55.6** | **-0.7** |
| | 1.0nm,0.6s,baz=344,slow=10,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **26.35** | **170** | P | **P** | **12 09 29.9** | **+0.6** |
| | 0.6nm,0.5s,baz=352,slow=7.9,SNR=26 | | | | | | |
| **KSRS** | **Korea Array** | **34.91** | **359** | P | **P** | **12 10 45.3** | **+0.7** |
| | 1.7nm,0.9s,baz=182,slow=9.3,SNR=5.2 | | | | | | |
| **STKA** | **Stephens Creek** | **36.14** | **162** | P | **P** | **12 10 55.8** | **+0.6** |
| | 1.1nm,0.5s,baz=322,slow=12,SNR=4.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 40.30** | | **64** | T | T | 12 54 44.5 | |
| | baz=251,slow=75,SNR=30 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 40.31** | | **64** | T | T | 12 54 42.9 | |
| | baz=251,slow=75,SNR=33 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 40.31** | | **64** | T | T | 12 54 43.6 | |
| | baz=251,slow=75,SNR=27 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 40.88** | | **62** | T | T | 12 55 26.7 | |
| | baz=250,slow=75,SNR=50 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 40.90** | | **62** | T | T | 12 55 27.9 | |
| | baz=250,slow=75,SNR=25 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 40.90** | | **62** | T | T | 12 55 27.5 | |
| | baz=250,slow=75,SNR=34 | | | | | | |
| **SONM** | **Songino Array** | **49.28** | **340** | P | **P** | **12 12 41.4** | **-0.4** |
| | 0.7nm,0.6s,baz=149,slow=8.4,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.91** | **325** | P | **P** | **12 13 59.0** | **+0.1** |
| | 2.1nm,0.5s,baz=118,slow=8.5,SNR=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.78** | **332** | P | **P** | **12 14 17.1** | **-1.0** |
| | 0.6nm,0.5s,baz=143,slow=6.4,SNR=3.9 | | | | | | |

*DDA **19** 12:13:05.9±0.0, 39°.10N×27°.92E, h7km±2km, ML2.2*
*ISK **19** 12:13:05.3, 39°.10N×27°.91E, h3km, ML2.7/9*
**ISC 19 12:13:06.1±0.9, 39°.11N±0°.03×27°.91E±0°.02, h11km±9km, n16, σ0.949/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.24** | **199** | P | **Pg** | **12 13 11.2** | **0.0** |
| AKHS | | | | *i* AML | AML | 12 13 15.0 | |
| | comp=E,439nm,0.5s | | | | | | |
| AKHS | | | | S | **Sg** | **12 13 15.4** | **+0.7** |
| **AKS** | **Akhisar** | **0.24** | **199** | PG | **Pg** | **12 13 10.5** | **-0.7** |
| AKS | | | | SG | **Sg** | **12 13 14.9** | **+0.3** |
| **STEP** | **BALIKESIR_Sava** | **0.31** | **330** | P | **Pg** | **12 13 12.2** | **-0.1** |
| STEP | | | | S | **Sg** | **12 13 17.2** | **+0.6** |
| **DEMI** | **Demirci** | **0.63** | **96** | P | **Pb** | **12 13 18.4** | **-0.8** |
| DEMI | | | | S | **Sg** | **12 13 26.9** | **+0.3** |
| DEMI | | | | *i* AML | AML | 12 13 28.0 | |
| | comp=E,248nm,0.2s | | | | | | |
| **DURS** | **Dursunbey** | **0.66** | **41** | P | **Pg** | **12 13 18.7** | **-0.2** |
| DURS | | | | S | **Sg** | **12 13 27.4** | **-0.2** |
| **ZEDA** | **zmir-Bergama** | **0.67** | **258** | P | **Pb** | **12 13 19.3** | **-0.5** |
| ZEDA | | | | S | **Sb** | **12 13 28.6** | **-0.4** |
| **BALY** | **Balya** | **0.67** | **340** | P | **Pb** | **12 13 19.4** | **-0.5** |
| BALY | | | | S | **Sb** | **12 13 29.0** | **-0.1** |
| **DST** | **Dursunbey** | **0.74** | **48** | PG | **Pg** | **12 13 20.2** | **-0.2** |
| **DKL** | **Dikili** | **0.79** | **267** | PG | **Pg** | **12 13 20.9** | **-0.4** |
| **SMAA** | **Simav-Kutahya** | **0.83** | **90** | PG | **Pg** | **12 13 22.0** | **-0.2** |
| SMAA | | | | SG | **Sb** | **12 13 34.7** | **+0.9** |
| **SIMA** | **Simav-Kutahya** | **0.83** | **92** | PG | **Pb** | **12 13 22.2** | **-0.4** |
| SIMA | | | | SG | **Sb** | **12 13 33.8** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.83** | **135** | PG | **Pb** | **12 13 22.4** | **-0.2** |
| **USAK** | **Uak-Merkez** | **0.95** | **114** | P | **Pg** | **12 13 24.0** | **-0.5** |
| USAK | | | | *i* AML | AML | 12 13 36.0 | |
| | comp=E,62nm,0.8s | | | | | | |
| USAK | | | | S | **Sg** | **12 13 36.3** | **-0.5** |
| **GEDZ** | **Gediz** | **1.17** | **93** | PN | **Pb** | **12 13 28.4** | **+0.1** |
| **URLA** | **Izmir** | **1.27** | **234** | PN | **Pn** | **12 13 30.6** | **+0.8** |
| **EZN** | **Ezine** | **1.42** | **301** | PN | **Pg** | **12 13 33.2** | **-0.2** |

*CNRM **19** 12:36:17.9, 35°.53N×3°.72W, h18km, ml2.8*
*SFS **19** 12:36:19.0, 35°.40N×3°.70W, h35km, ML3.1, ALBORAN SUR*
*IGIL **19** 12:36:19.5, 35°.43N×3°.92W, h9km*
*INMG **19** 12:36:21.0±1.3, 35°.50N×3°.80W, h25km±8km, ML2.5, Error ellipse: s-maj=4.8km s-min=4.5km az=98.0*
**ISC 19 12:36:17.2±1.3, 35°.54N±0°.04×3°.73W±0°.04, h17km±10km, n20, σ1.958/37, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.37** | **208** | P | **Pb** | **12 36 25.1** | **-0.3** |
| PALE | | | | S | **Sg** | **12 36 30.1** | **+0.1** |
| **CHAS** | **Isla Isabel II** | **1.12** | **108** | P | **Pg** | **12 36 38.8** | **-0.1** |
| CHAS | | | | S | **Sb** | **12 36 51.8** | **-0.7** |
| **TAF** | **Taforalt** | **1.30** | **124** | P | **Pb** | **12 36 41.2** | **-0.1** |
| TAF | | | | S | **Sg** | **12 36 58.0** | **-1.3** |
| **EMAL** | **Malaga-Limoner** | **1.34** | **335** | P | **Pn** | **12 36 41.5** | **+0.3** |
| EMAL | | | | S | **Sn** | **12 36 57.3** | **-1.4** |
| EMAL | | | | *e*Cod | | 12 37 54.7 | |
| **CEU** | **Ceuta** | **1.38** | **285** | P | **Pn** | **12 36 38.6** | **-3.2** |
| CEU | | | | S | **Sn** | **12 36 56.2** | **-3.6** |
| CEU | | | | *e*Cod | | 12 37 50.1 | |
| **CHEFC** | **Chefchaouen** | **1.39** | **252** | P | **Pn** | **12 36 42.5** | **+0.6** |
| CHEFC | | | | S | **Sb** | **12 37 01.0** | **+0.8** |
| **JBK** | **JBK** | **1.54** | **141** | P | **Pb** | **12 36 45.2** | **-0.2** |
| JBK | | | | S | **Sb** | **12 37 03.4** | **-1.3** |
| **IFR** | **Ifrane** | **2.33** | **210** | P | **Pb** | **12 36 59.1** | **+0.2** |
| IFR | | | | S | **Sn** | **12 37 22.5** | **-0.8** |
| **MD31** | **MD31** | **2.80** | **198** | P | **Pn** | **12 37 03.0** | **+1.6** |
| MD31 | | | | S | **Sn** | **12 37 35.9** | **+1.1** |
| **MDT** | **Midelt** | **2.82** | **195** | P | **Pn** | **12 37 03.0** | **+1.4** |
| MDT | | | | S | **Sn** | **12 37 34.6** | **-0.7** |
| **ZHG** | **ZHG** | **3.19** | **230** | P | **Pn** | **12 37 08.7** | **+2.0** |
| ZHG | | | | S | **Sb** | **12 37 50.4** | **-1.7** |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | *e*Pn | **Pn** | **12 37 15.8** | **+2.0** |
| PVAQ | | | | *e*Sn | **Sn** | **12 37 56.7** | **-0.5** |
| PVAQ | | | | A | A | 12 38 04.0 | |
| | 11nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **301** | P | **Pn** | **12 37 14.4** | **+0.6** |
| PVAQ | | | | S | **Sn** | **12 37 57.4** | **+0.2** |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **298** | *e*Pn | **Pn** | **12 37 16.8** | **+1.8** |
| PBDV | | | | *e*Sn | **Sn** | **12 37 58.8** | **-0.4** |
| PBDV | | | | A | A | 12 38 08.8 | |
| | 7.8nm,0.7s | | | | | | |
| **PCVE** | **Castro Verde** | **4.05** | **302** | *e*Pn | **Pn** | **12 37 20.6** | **+2.2** |
| PCVE | | | | *e*Sn | **Sn** | **12 38 06.6** | **+1.1** |
| PCVE | | | | A | A | 12 38 06.9 | |
| | 5.5nm,1.0s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*P | **Pn** | **12 37 22.0** | **+0.4** |
| **MESJ** | **Messejana** | **4.28** | **304** | *e*Pn | **Pn** | **12 37 24.3** | **+2.7** |
| MESJ | | | | *e*Sn | **Sn** | **12 38 10.4** | **-0.7** |
| MESJ | | | | A | A | 12 38 11.9 | |
| | 6.9nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **305** | *e*Pn | **Pn** | **12 37 28.1** | **+1.7** |
| PNCL | | | | *e*Sn | **Sn** | **12 38 18.9** | **-0.8** |
| PNCL | | | | A | A | 12 38 30.2 | |
| | 4.2nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **4.85** | **324** | *e*Pn | **Pn** | **12 37 31.8** | **+2.3** |
| **MVO** | **Moncorvo** | **6.18** | **336** | *e*Pn | **Pn** | **12 37 50.7** | **+2.8** |

**IDC 19 12:52:17.9±4.3, 23°.00S×178°.71W, h0km, mb4.0/3, mb1 4.2/3, mb1mx3.8/31, mbtmp4.0/3, Error ellipse: s-maj=174.1km s-min=58.3km az=148.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **36.16** | **247** | P | P | 12 59 21.1 | -1.0 |
| | 0.5nm,0.3s,baz=97,slow=11,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **43.35** | **259** | P | P | 13 00 22.0 | -0.2 |
| | 0.8nm,0.6s,baz=97,slow=7.8,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.65** | **265** | P | P | 13 00 25.1 | +0.5 |
| | 1.4nm,0.3s,baz=100,slow=8.3,SNR=70 | | | | | | |
| **HFS** | **Hagfors** | **141.88** | **350** | PKP | PKPdf | 13 11 48.9 | -2.3 |
| | 0.8nm,0.3s,baz=29,slow=3.3,SNR=6.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.96** | **309** | PKPbc | PKPbc | 13 12 05.3 | -0.2 |
| | 0.9nm,0.9s,baz=103,slow=2.9,SNR=2.6 | | | | | | |

*IDC **19** 13:01:50.9±1.3, 5°.34S×152°.88E, h0km, mb4.2/14, mb1 4.3/14, mb1mx4.1/41, mbtmp4.2/14, MS3.5/7, Ms1 3.5/7, ms1mx3.2/56, Error ellipse: s-maj=44.8km s-min=18.4km az=124.0*
*NEIC **19** 13:01:58.3±1.4, 5°.24S±0°.09×152°.8E±0°.1, h41km±4km, mb4.4/17, Error ellipse: s-maj=20.3km s-min=11.8km az=112.0*
**ISC 19 13:01:57.3±0.9, 5°.3S±0°.1×152°.8E±0°.2, h37km, n48, σ0.974/45, mb4.3/23, MS3.4/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.25** | **331** | Pn | **Pn** | **13 02 18.9** | **+0.7** |
| **PMG** | **Port Moresby** | **6.92** | **233** | Pn | **Pn** | **13 03 37.2** | **+1.1** |
| | 1.8nm,0.3s,baz=24,slow=8.4,SNR=10.0 | | | | | | |
| PMG | | | | Sn | **Sn** | **13 04 52.5** | **-1.1** |
| | 4.8nm,0.3s,baz=137,slow=20,SNR=9.0 | | | | | | |
| PMG | | | | LR | LR | 13 06 13.9 | |
| | comp=Z,214nm,21.8s,baz=31,slow=38 | | | | | | |
| **PMG** | **Port Moresby** | **6.92** | **233** | | **Pn** | **13 03 36.7** | **+0.6** |
| **CTA** | **Charters Tower** | **16.02** | **203** | LR | LR | 13 11 09.9 | |
| | comp=Z,169nm,19.6s,baz=51,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.29** | **143** | LR | LR | 13 13 56.8 | |
| | comp=Z,159nm,20.6s,baz=49,slow=34 | | | | | | |
| **MTN** | **Manton Dam** | **22.64** | **249** | P | **P** | **13 06 56.6** | **+1.2** |
| MTN | | | | IAmb | IAmb | 13 07 20.1 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.97** | **230** | P | **P** | **13 06 58.9** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 13 07 15.7 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.97** | **229** | P | **P** | **13 06 58.1** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 13 07 00.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.10** | **229** | P | **P** | **13 07 00.4** | **+0.4** |
| WRAB | | | | IAmb | IAmb | 13 07 28.8 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.10** | **229** | P | **P** | **13 07 00.6** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 13 07 17.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.11** | **229** | P | **P** | **13 06 59.0** | **-1.2** |
| | comp=Z,2.3nm,0.8s,baz=53,slow=9.9,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 13 16 21.0 | |
| | comp=Z,71nm,19.2s,baz=22,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.11** | **229** | P | **P** | **13 06 59.8** | **-0.4** |
| **KNRA** | **Kununurra** | **25.74** | **245** | P | **P** | **13 07 25.2** | **+0.7** |
| KNRA | | | | IAmb | IAmb | 13 07 48.6 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **25.78** | **223** | P | **P** | **13 07 26.1** | **+1.2** |
| **ASAR** | **Alice Springs** | **25.78** | **223** | P | **P** | **13 07 23.8** | **-1.1** |
| | comp=Z,2.0nm,0.8s,baz=60,slow=8.9,SNR=21 | | | | | | |
| ASAR | | | | LR | LR | 13 17 11.6 | |
| | comp=Z,79nm,19.3s,baz=63,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **25.78** | **223** | P | **P** | **13 07 26.0** | **+1.1** |
| **STKA** | **Stephens Creek** | **28.45** | **200** | LR | LR | 13 18 18.8 | |
| | comp=Z,87nm,18.7s,baz=24,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.41** | **242** | P | **P** | **13 07 57.1** | **-0.4** |
| | comp=Z,1.3nm,0.4s,baz=59,slow=8.8,SNR=8.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.41** | **242** | P | **P** | **13 07 56.8** | **-0.7** |
| **RPZ** | **Rata Peaks** | **41.52** | **160** | LR | LR | 13 27 03.8 | |
| | comp=Z,157nm,18.1s,baz=292,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.06** | **295** | P | **P** | **13 11 47.1** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=101,slow=5.3,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.06** | **295** | P | **P** | **13 11 46.4** | **-0.9** |
| **PEA0B** | **Petropavlovsk-** | **58.32** | **3** | P | **P** | **13 11 48.8** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **58.32** | **3** | P | **P** | **13 11 47.9** | **-0.5** |
| | comp=Z,1.2nm,0.4s,baz=171,slow=8.9,SNR=7.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.32** | **3** | P | **P** | **13 11 47.5** | **-0.9** |
| **SONM** | **Songino Array** | **66.72** | **328** | P | **P** | **13 12 44.8** | **0.0** |
| | comp=Z,0.9nm,0.6s,baz=145,slow=5.8,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **66.72** | **328** | P | **P** | **13 12 44.5** | **-0.3** |
| **GAMB** | **Gambell** | **73.85** | **16** | P | **P** | **13 13 28.4** | **+0.6** |
| **TTA** | **Tatalina** | **78.23** | **21** | P | **P** | **13 13 53.9** | **+1.0** |
| TTA | | | | IAmb | IAmb | 13 14 16.9 | |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.68** | **319** | P | **P** | **13 14 07.1** | **+0.5** |
| | comp=Z,1.8nm,0.9s,baz=110,slow=5.9,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.68** | **319** | P | **P** | **13 14 06.4** | **-0.2** |
| **IMAR** | **Indian Mountai** | **80.85** | **19** | P | **P** | **13 14 07.8** | **+0.8** |
| **MCK** | **McKinley** | **81.32** | **23** | P | **P** | **13 14 09.2** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **81.54** | **326** | P | **P** | **13 14 10.5** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=120,slow=8.5,SNR=4.8 | | | | | | |
| **IL31** | | **82.61** | **22** | P | **P** | **13 14 16.2** | **0.0** |
| IL31 | | | | IAmb | IAmb | 13 14 16.5 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **82.61** | **22** | P | **P** | **13 14 15.4** | **-0.9** |
| | comp=Z,2.5nm,0.7s,baz=244,slow=5.2,SNR=30 | | | | | | |
| **ILAR** | **Eielson Array** | **82.61** | **22** | P | **P** | **13 14 16.2** | **-0.1** |
| **KURK** | **Kurchatov** | **84.14** | **322** | P | **P** | **13 14 24.4** | **0.0** |
| KURK | | | | IAmb | IAmb | 13 14 25.6 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.17** | **322** | P | **P** | **13 14 24.2** | **-0.4** |
| | comp=Z,1.4nm,1.0s,baz=111,slow=4.4,SNR=7.6 | | | | | | |
| **BMAR** | **Burnt Mountain** | **84.71** | **20** | | **P** | **13 14 28.3** | **+1.2** |
| **AAK** | **Ala-Archa** | **84.98** | **314** | P | **P** | **13 14 30.0** | **+0.8** |
| | comp=Z,3.8nm,0.8s,baz=124,slow=4.3,SNR=13 | | | | | | |
| **NRIK** | **Noril'sk** | **86.42** | **341** | P | **P** | **13 14 35.2** | **-0.3** |
| | comp=Z,2.5nm,0.5s,baz=124,slow=7.2,SNR=5.0 | | | | | | |
| **KKAR** | **Karatay Array** | **87.95** | **313** | P | **P** | **13 14 43.5** | **0.0** |
| **INK** | **Inuvik** | **88.91** | **21** | P | **P** | **13 14 47.9** | **+0.5** |
| **BVAR** | **Borovoye Array** | **89.62** | **323** | P | **P** | **13 14 49.7** | **-1.4** |
| | comp=Z,1.7nm,0.8s,baz=68,slow=16,SNR=8.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.86** | **28** | P | **P** | **13 15 19.8** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=270,slow=4.7,SNR=13 | | | | | | |
| **GERES** | **GERESS Array B** | **124.46** | **328** | PKP | **PKiKP** | **13 20 52.8** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=17,slow=1.4,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.44** | **287** | PKPbc | **PKPbc** | **13 21 45.1** | **-0.9** |
| | comp=Z,1.4nm,0.9s,baz=9.3,slow=2.2,SNR=5.4 | | | | | | |

*IDC **19** 13:13:48.5±0.4, 37°.22N×142°.24E, h0km, mb4.7/39, mb1 4.8/46, mb1mx4.7/67, mbtmp4.7/46, ML4.4/6, MS4.6/69, Ms1 4.6/69, ms1mx4.6/86, Error ellipse: s-maj=12.0km s-min=9.8km az=115.0*
*BJI **19** 13:13:49.6±0.0, 37°.20N×142°.01E, h13km, mb5.0/81, mB5.1/59, Ms5.2/94, Ms7 5.1/88*
*MOS **19** 13:13:50.2±1.0, 37°.41N×142°.23E, h16km, mb5.1/72, MS4.9/13, Error ellipse: s-maj=5.8km s-min=3.9km az=101.6*
*JMA **19** 13:13:50.8±0.2, 37°.23N×142°.17E, h26km, M5.3*
*JMA Felt II J1.*
*NIED **19** 13:13:50.9, 37°.23N×142°.17E, h26km, MW5.2, Moment Tensor Solution. s3 Moment tensor: Scale 10^16 Nm; Mrr=3.22; Mθθ=0.64; Mϕϕ=2.58; Mrθ=-1.11; Mθϕ=0.30; Mϕr=5.90; Fault plane solution: M0=6.68000×10^16 NP1: ϕs=170.00000°, δ=77.00000°, λ=-91.00000°. NP2: ϕs=352.00000°, δ=13.00000°, λ=-87.00000°.*
*NEIC **19** 13:13:52.4±1.9, 37°.25N±0°.05×142°.24E±0°.07, h19km±3km, mb5.1/142, Mww5.1 Error ellipse: s-maj=8.3km s-min=7.3km az=71.0*
*BGR **19** 13:13:53.0±0.0, 37°.11N×142°.98E, h33km, mb4.7, Ms4.7*
*GCMT **19** 13:13:54.4±0.2, 37°.23N±0°.01×142°.06E±0°.01, h24km, MW5.1/101, Moment Tensor Solution. s58,c83; s101,c163; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=3.40±.14; Mθθ=0.50±.11; Mϕϕ=3.90±.09; Mrθ=1.84±.16; Mθϕ=0.30±.07; Mϕr=5.08±.13; Best double couple: M0=6.54200×10^16 NP1:ϕs=24.00000°, δ=21.00000°, λ=52.00000°. NP2:ϕs=164.00000°, δ=74.00000°, λ=103.00000°. Principal axes: T 6.5530, Plg=28.0000°, Azm=265.0000°; N -0.0200, Plg=12.0000°, Azm=168.0000°; P -6.5300, Plg=59.0000°, Azm=56.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **19** 13:13:55, 37°.32N×142°.22E, h18km, Moment Tensor Solution. Duration: 6s0 Moment tensor: Scale 10^16 Nm; Mrr=3.11; Mθθ=0.80; Mϕϕ=3.90; Mrθ=-3.36; Mθϕ=0.06; Mϕr=4.04; Fault plane solution: M0=6.36000×10^16 NP1:ϕs=25.00000°, δ=25.00000°, λ=-36.00000°. NP2:ϕs=149.00000°, δ=75.00000°, λ=-110.00000°. Principal axes: T 6.0492, Plg=27.0000°, Azm=256.0000°; N 0.5782, Plg=20.0000°, Azm=155.0000°; P -6.6274, Plg=55.0000°, Azm=34.0000°;*
**ISC 19 13:13:51.6±0.5, 37°.26N±0°.03×142°.26E±0°.03, h18km±2km, h18km:pP-P, n801, σ1.949/826, mb5.1/226, MS4.8/98, 35C-48D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **1.11** | **276** | ⇑P | **Pb** | **13 14 09.6** | **-2.6** |
| JFK | | | | S | **Sb** | **13 14 23.0** | **-3.3** |
| **ONAJ** | **Iwakimizuishiy** | **1.17** | **263** | P | **Pn** | **13 14 10.5** | **-2.7** |
| **JMST** | **Minamisoumatoc** | **1.18** | **294** | ⇑P | **Pn** | **13 14 10.9** | **-2.3** |
| JMST | | | | *e*S | **Sb** | **13 14 25.1** | **-3.4** |
| **JIKH** | **Ishinomakikobu** | **1.22** | **329** | P | **Pn** | **13 14 12.0** | **-1.8** |
| JIKH | | | | *e*S | **Sb** | **13 14 27.1** | **-2.5** |
| **JMM** | **Marumori** | **1.31** | **298** | ⇑P | **Pn** | **13 14 13.0** | **-2.0** |
| JMM | | | | *e*S | **Sn** | **13 14 28.7** | **-3.3** |
| **JMM** | **Marumori** | **1.31** | **298** | | **Pn** | **13 14 13.0** | **-2.0** |
| JMM | | | | Sn | **Sn** | **13 14 32.2** | **+0.2** |
| **JIO** | **Ouri** | **1.39** | **329** | ⇑P | **Pn** | **13 14 14.6** | **-1.5** |
| **JFT** | **Otama** | **1.55** | **280** | P | **Pn** | **13 14 17.1** | **-1.2** |
| **JOU** | **Okura** | **1.68** | **312** | ⇑P | **Pn** | **13 14 19.2** | **-0.8** |
| **OFUJ** | **Ofunato** | **1.88** | **346** | P | **Pn** | **13 14 22.4** | **-0.4** |
| **JMK** | **Ichinoseki** | **1.88** | **335** | P | **Pn** | **13 14 23.2** | **+0.4** |
| **JYT** | **Yasato** | **1.95** | **239** | | **Pn** | **13 14 21.3** | **-2.4** |
| **JYS** | **Shirataka** | **1.98** | **300** | P | **Pn** | **13 14 24.3** | **0.0** |
| JYS | | | | *e*S | **Sn** | **13 14 48.7** | **0.0** |
| **JFY** | **Yanaizu** | **2.04** | **275** | P | **Pn** | **13 14 24.0** | **-1.0** |
| JFY | | | | *e*S | **Sn** | **13 14 48.9** | **-1.1** |
| **JYK** | **Kaneyama** | **2.23** | **318** | P | **Pn** | **13 14 27.2** | **-0.5** |
| **I30JP** | **ISUMI INFRASON** | **2.50** | **219** | Pn | **Pb** | **13 14 35.2** | **-0.7** |
| | baz=44,slow=18,SNR=0.5 | | | | | | |
| **BSO3** | **Boso 3** | **2.83** | **211** | ⇓P | **Pn** | **13 14 34.9** | **-0.7** |
| **JSD** | **Sado** | **3.27** | **285** | | **Pn** | **13 14 41.4** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **3.32** | **259** | Pn | **Pn** | **13 14 42.0** | **-0.6** |
| | 16nm,0.3s,baz=82,slow=15,SNR=180 | | | | | | |
| MJAR | | | | LR | LR | 13 16 16.5 | |
| | comp=Z,36μm,18.6s,baz=111,slow=45 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.32** | **259** | P | **Pn** | **13 14 42.4** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **3.32** | **259** | | **Pn** | **13 14 42.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **3.32** | **259** | *c* | *i*P | **Pn** | **

comp=Z,6μm,19.4s,baz=76,slow=39
**JNU Nakatsue 10.18 249 Pn Pn 13 16 17.1 +0.3**
**USA0B Ussuriysk Arra 10.42 315 P Pn 13 16 21.6 +1.5**
**USA0B Ussuriysk Arra 10.42 315 Pn 13 16 21.6 +1.5**
**USRK Ussuriysk Ar. 10.42 315 Pn Pn 13 16 21.8 +1.7**
baz=124,slow=14,SNR=12
USRK LR LR 13 20 09.7
comp=Z,4μm,20.3s,baz=122,slow=36
**USRK Ussuriysk Ar. 10.42 315 P Pn 13 16 22.2 +2.1**
**USRK Ussuriysk Ar. 10.42 315 Pn Pn 13 16 22.2 +2.1**
**JSU Suzuyama 11.31 243 Pn Pn 13 16 32.4 +0.2**
**KSRS Korea Array 11.41 275 Pn Pn 13 16 36.4 +2.8**
comp=Z,0.5nm,0.3s,baz=91,slow=12,SNR=57
KSRS LR LR 13 20 59.0
comp=Z,7μm,18.0s,baz=90,slow=38
**KSAR Wonju Array Be 11.44 275 P Pn 13 16 35.8 +1.7**
**KSAR Wonju Array Be 11.44 275 Pn 13 16 35.8 +1.7**
**KS19 Wonju Array Si 11.45 276 Pn 13 16 36.4 +2.1**
**TJN Taejon 11.97 270 ⇓eP Pn 13 16 44.1 +2.8**
**TJN Taejon 11.97 270 Pn 13 16 43.5 +2.3**
**MDJ Mudanjiang 12.06 311 Pn Pn 13 16 46.8 +4.3**
**MDJ Mudanjiang 12.06 311 P Pn 13 16 45.4 +2.9**
MDJ S **Sn 13 19 59.8 +3.3**
MDJ sS 13 19 08.0
MDJ SS **SnSn 13 19 12.3 +3.8**
MDJ pmax pmax
comp=Z,350nm,8.0s
MDJ LR LR
comp=Z,2μm,14.1s
MDJ LR LR
comp=Z,3μm,17.6s
MDJ LR LR
comp=Z,4μm,16.9s
**INCN Inchon 12.43 276 P Pn 13 16 50.1 +2.4**
**INCN Inchon 12.43 276 Pn Pn 13 16 50.1 +2.4**
**TYV Tymovskoe 13.61 1 eP P 13 17 10.0 -2.4**
TYV pmax pmax
comp=Z,500nm,3.7s
TYV pmax pmax
comp=Z,20nm,1.2s
TYV MLR MLR
comp=N,4μm,15.0s
TYV MLR MLR
comp=Z,3μm,15.0s
**BNX BinXian 13.97 312 ⇓P Pn 13 17 09.8 +1.3**
BNX pP **P 13 17 13.5 -3.0**
BNX sP 13 17 16.6
BNX PP **PnPn 13 17 21.5 +5.1**
BNX S **Sn 13 19 45.6 +2.5**
BNX sS S 13 19 51.9 -13
BNX pmax pmax
comp=Z,10.0nm,0.8s
BNX pmax pmax
comp=Z,350nm,6.0s
BNX LR LR
comp=Z,3μm,13.5s
BNX LR LR
comp=Z,4μm,12.6s
BNX LR LR
comp=Z,8μm,16.0s
**KLR Kul'dur 14.19 331 Pn Pn 13 17 10.4 -1.1**
comp=Z,0.3nm,0.3s,baz=134,slow=9.1,SNR=9.6
KLR LR LR 13 22 41.3
comp=Z,4μm,18.1s,baz=146,slow=38
**KLR Kul'dur 14.19 331 ⇑eP Pn 13 17 09.9 -1.6**
**CN2 Changchun 14.35 302 eP Pn 13 17 14.5 +0.8**
CN2 S **Sn 13 19 55.3 +3.1**
CN2 pmax pmax
comp=Z,20nm,2.3s
CN2 pmax pmax
comp=Z,300nm,10.3s
CN2 LR LR
comp=Z,3μm,16.0s
CN2 LR LR
comp=Z,3μm,16.0s
CN2 LR LR
comp=Z,3μm,18.0s
**SNY Shenyang 15.11 293 ⇑P Pn 13 17 22.3 -1.7**
SNY S **Sn 13 20 11.3 +0.4**
SNY pmax pmax
comp=Z,12nm,0.8s
SNY pmax pmax
comp=Z,440nm,10.5s
SNY LR LR
comp=Z,5μm,12.4s
SNY LR LR
comp=Z,7μm,14.7s
SNY LR LR
comp=Z,11μm,16.3s
**JOW Kunigami 15.75 233 Pn Pn 13 17 30.3 -2.1**
comp=Z,2.0nm,0.3s,baz=75,slow=12,SNR=3.7
**JOW Kunigami 15.75 233 Pn 13 17 30.3 -2.1**
JOW IAmb IAmb 13 17 37.5
comp=Z,94nm,1.0s
**OKH Okha 16.30 1 deP Pn 13 17 37.2 -2.1**
OKH pmax pmax
comp=Z,200nm,8.8s
**DL2 Dalian 16.33 282 ⇓iP Pn 13 17 39.4 -0.4**
DL2 S **Sn 13 20 38.5 -1.9**
DL2 pmax pmax
comp=Z,69nm,1.6s
DL2 pmax pmax
comp=Z,230nm,4.6s
DL2 LR LR
comp=Z,2μm,12.1s
DL2 LR LR
comp=Z,4μm,13.6s
DL2 LR LR
comp=Z,5μm,12.8s
**SKR Severo-Kuril's 16.68 32 eP Pn 13 17 44.3 +0.1**
SKR eS **Sn 13 20 47.9 -1.0**
SKR pmax pmax
comp=Z,300nm,5.9s
SKR MLR MLR
comp=Z,800nm,16.0s
SKR MLR MLR
comp=Z,1μm,14.0s
**SSE Sheshan 18.47 257 P P 13 18 06.0 -0.4**
SSE pmax pmax
comp=Z,23nm,0.8s
SSE pmax pmax
comp=Z,280nm,3.2s
SSE LR LR
comp=Z,1μm,13.9s
SSE LR LR
comp=Z,2μm,13.3s
**PETK Petropavlovsk- 19.16 29 P P 13 18 13.5 -0.3**
comp=Z,0.3nm,0.3s,baz=212,slow=8.4,SNR=7.5
PETK LR LR 13 25 33.4
comp=Z,2μm,21.6s,baz=221,slow=37
**PET Petropavlovsk 19.48 31 ceP Pn 13 18 21.8 +3.3**
PET eS **Sn 13 21 54.8 -1.7**
PET pmax pmax
comp=Z,1μm,4.8s
PET pmax pmax
comp=Z,1μm,6.8s
PET pmax pmax
comp=Z,38nm,1.0s
PET MLR MLR
comp=Z,3μm,16.0s
PET MLR MLR
comp=Z,3μm,18.0s
**ZEA Zeya 19.48 333 eP P 13 18 16.1 -1.2**
ZEA eS **Sn 13 21 46.7 -10**
ZEA pmax pmax
comp=N,30nm,0.7s
ZEA pmax pmax
comp=E,20nm,0.7s
ZEA pmax pmax
comp=Z,40nm,0.8s
ZEA pmax pmax
comp=Z,100nm,6.4s
ZEA smax smax
comp=E,500nm,9.8s
ZEA MLR MLR
comp=N,2μm,14.0s
ZEA MLR MLR
comp=E,1μm,14.0s
**NJ2 Nanjing 19.92 262 ⇑iP P 13 18 22.0 -0.3**
NJ2 pP **pP 13 18 27.5 +0.4**
NJ2 sP **sP 13 18 29.8 +0.4**
NJ2 PP **PnPn 13 18 39.0 +0.9**
NJ2 pmax pmax
comp=E,59nm,1.2s
NJ2 pmax pmax
comp=E,770nm,3.9s
NJ2 LR LR
comp=E,2μm,18.2s
NJ2 LR LR
comp=E,5μm,15.8s
NJ2 LR LR
comp=E,5μm,16.3s
**TIA Tai'an 20.16 275 ⇓P P 13 18 22.8 -2.1**
TIA S S 13 21 59.8 -11
TIA pmax pmax
comp=E,55nm,1.1s
TIA pmax pmax
comp=E,310nm,6.1s
TIA LR LR
comp=E,3μm,14.5s
TIA LR LR
comp=E,5μm,13.3s
TIA LR LR
comp=E,6μm,14.1s
**BJI Beijing 20.54 286 P P 13 18 26.9 -2.0**
BJI S **S 13 22 15.5 -2.3**
BJI pmax pmax
comp=E,11nm,1.0s
BJI pmax pmax
comp=E,330nm,4.1s
BJI LR LR
comp=E,2μm,13.4s
BJI LR LR
comp=E,940nm,13.3s
**BJT Baijiatuau 20.54 286 P P 13 18 27.9 -1.1**
BJT pmax pmax
comp=Z,26nm,0.8s
**BJT Baijiatuau 20.54 286 P P 13 18 27.9 -1.1**
**XLT XiLinHaoTe 20.91 297 eP P 13 18 30.0 -3.0**
XLT pP Pn 13 18 35.0 -0.6
XLT sP pP 13 18 37.8 -0.1
XLT S S 13 22 15.9 -9.5
XLT sS Sn 13 22 29.4 -1.9
XLT SS **SnSn 13 22 53.4 +7.4**
XLT pmax pmax
comp=E,52nm,1.1s
XLT LR LR
comp=Z,3μm,17.7s
XLT LR LR
comp=Z,4μm,18.2s
**HNS HongShan 21.88 279 ⇓P P 13 18 39.8 -3.6**
HNS S **S 13 22 38.3 -6.1**
HNS pmax pmax
comp=Z,130nm,1.2s
HNS pmax pmax
comp=Z,470nm,3.9s
HNS LR LR
comp=Z,630nm,12.7s
HNS LR LR
comp=Z,5μm,14.6s
HNS LR LR
comp=Z,5μm,13.0s
**NACB Ninganchiao 21.98 239 P P 13 18 43.4 -1.2**
**SSLB Suanglung 22.67 240 P P 13 18 49.7 -2.4**
SSLB IAmb IAmb 13 18 57.1
comp=E,50nm,1.0s
**YULB Yu-li 22.70 238 P P 13 18 50.8 -1.5**
YULB IAmb IAmb 13 19 05.5
comp=Z,49nm,1.1s
**MA2 Magadan 23.00 11 P P 13 18 54.7 -0.4**
comp=Z,37nm,0.8s,baz=199,slow=8.2,SNR=34
MA2 LR LR 13 28 54.4
comp=Z,1μm,20.0s,baz=193,slow=39
**MA2 Magadan 23.00 11 diP P 13 18 54.5 -0.6**
MA2 pmax pmax
comp=Z,56nm,0.9s
**MA2 Magadan 23.00 11 P P 13 18 54.3 -0.8**
MA2 IAmb IAmb 13 18 58.4
comp=Z,47nm,0.8s
**TPUB Ta-pu 23.21 239 P P 13 18 54.7 -3.0**
**TWG Pinlang 23.24 238 P P 13 18 56.6 -1.2**
TWG IAmb IAmb 13 19 03.6
comp=Z,78nm,0.9s
**QZH Quanzhou 23.62 245 ⇑iP P 13 18 57.8 -3.8**
QZH S **S 13 23 08.6 -6.7**
QZH pmax pmax
comp=Z,64nm,0.8s
QZH LR LR
comp=Z,2μm,11.2s
QZH LR LR
comp=Z,2μm,14.5s
QZH LR LR
comp=Z,2μm,13.6s
**TIY Taiyuan 23.63 280 P P 13 19 06.6 +4.9**
TIY S **S 13 23 17.0 +1.6**
TIY SS SnSn 13 24 08.8 +16
TIY pmax pmax
comp=Z,150nm,4.5s
TIY LR LR
comp=N,2μm,14.8s
TIY LR LR
comp=E,3μm,12.8s
TIY LR LR
comp=Z,4μm,11.7s
**HHC Hu-ho-hao-te 24.04 288 eP P 13 19 06.3 +0.6**
HHC PP **PnPn 13 19 40.6 +6.1**
HHC S **S 13 23 24.3 +2.3**
HHC pmax pmax
comp=Z,25nm,1.1s
HHC LR LR
comp=Z,2μm,13.3s
HHC LR LR
comp=Z,2μm,15.0s
HHC LR LR
comp=Z,4μm,14.3s
**WHN Wuhan 24.06 262 ⇑P P 13 19 04.3 -1.4**
WHN S **S 13 23 18.1 -4.1**
WHN pmax pmax
comp=Z,86nm,0.8s
WHN LR LR
comp=Z,3μm,12.5s
WHN LR LR
comp=Z,7μm,11.9s
WHN LR LR
comp=Z,11μm,18.8s
**LYN LuoYang 24.23 273 eP P 13 19 05.0 -2.4**
LYN PP **PnPn 13 19 34.4 -2.7**
LYN S **S 13 23 19.0 -6.0**
LYN pmax pmax
comp=Z,30nm,1.2s
LYN pmax pmax
comp=Z,180nm,7.7s
LYN LR LR
comp=Z,3μm,13.3s
LYN LR LR
comp=Z,3μm,14.9s
**CIT Chita 24.99 315 eP P 13 19 14.6 +0.5**
CIT e 13 19 24.2
CIT e 13 19 45.8
CIT e 13 20 06.8
CIT e 13 23 38.8
CIT pmax pmax
comp=Z,199nm,1.5s
**BTO Baotou 25.22 288 eP P 13 19 17.0 +0.6**
BTO S **S 13 23 44.9 +3.9**
BTO LR LR
comp=Z,11μm,14.1s
BTO LR LR
comp=Z,6μm,14.5s
**YAK Yakutsk 26.00 346 P P 13 19 22.3 -0.8**
comp=Z,48nm,0.7s,baz=139,slow=0.7,SNR=34
YAK LR LR 13 29 51.0
comp=Z,1μm,18.7s,baz=154,slow=37
**YAK Yakutsk 26.00 346 diP P 13 19 22.2 -0.9**
YAK e*PP **pP 13 19 26.0 -2.4**
YAK e 13 19 58.5
YAK e 13 22 51.5
YAK eS **S 13 23 52.9 +0.2**
YAK eSS **SnSn 13 24 56.1 +5.8**
YAK pmax pmax
comp=Z,81nm,0.8s
YAK pmax pmax
comp=E,6.0nm,1.0s
YAK pmax pmax
comp=N,10.0nm,1.1s
YAK pmax pmax
comp=Z,126nm,1.9s
YAK pmax pmax
comp=N,75nm,1.8s
YAK pmax pmax
comp=E,62nm,1.8s
YAK smax smax
comp=E,186nm,2.5s
YAK smax smax
comp=N,961nm,7.1s
YAK MLR MLR
comp=Z,2μm,14.0s
YAK MLR MLR
comp=N,716nm,13.0s
YAK MLR MLR
comp=E,1μm,17.0s
**YAK Yakutsk 26.00 346 P P 13 19 22.3 -0.8**
**CNSH ChangSha 26.20 258 ⇓P P 13 19 13.1 -12**
CNSH S S 13 23 36.1 -20
CNSH pmax pmax
comp=Z,120nm,1.1s
CNSH LR LR
comp=N,2μm,17.0s
CNSH LR LR
comp=E,1μm,15.1s
CNSH LR LR
comp=Z,2μm,15.4s
**SEY Seymchan 26.45 10 P P 13 19 28.2 +1.1**
comp=Z,15nm,0.6s,baz=190,slow=7.2,SNR=49
SEY LR LR 13 31 24.7
comp=Z,1μm,19.0s,baz=192,slow=40
**SEY Seymchan 26.45 10 ⇓eP P 13 19 27.3 +0.2**
**SHEM Shemya Is, Ala 27.04 45 LR LR 13 28 15.7**
comp=Z,1μm,20.8s,baz=264,slow=32
**XAN Xi'an 27.20 273 P P 13 19 31.0 -3.3**
XAN pP pP 13 19 36.6 -2.9
XAN PP **PnPn 13 20 16.3 -1.4**
XAN S **S 13 24 09.1 -3.2**
XAN pmax pmax
comp=Z,35nm,1.4s
XAN pmax pmax
comp=Z,390nm,5.2s
XAN LR LR
comp=Z,3μm,15.5s
XAN LR LR
comp=Z,1μm,14.3s
XAN LR LR
comp=Z,4μm,15.2s
**H11N2 WAKE ISLAND Hy 27.69 122 T T 13 48 33.8**
baz=315,slow=75,SNR=416
**H11N1 WAKE ISLAND Hy 27.70 122 T T 13 48 57.8**
baz=315,slow=75,SNR=319
**H11N3 WAKE ISLAND Hy 27.71 122 T T 13 48 40.1**
baz=315,slow=75,SNR=464
**ULN Ulaanbaatar 27.79 304 ⇓eP P 13 19 39.3 -0.2**
ULN pmax pmax
comp=Z,44nm,1.7s
**ULN Ulaanbaatar 27.79 304 P P 13 19 38.8 -0.8**
**SONM Songino Array 28.22 303 P P 13 19 43.4 +0.1**
comp=Z,13nm,0.8s,baz=100,slow=8.6,SNR=52
SONM LR LR 13 31 12.1
comp=Z,972nm,20.2s,baz=93,slow=37
**SONM Songino Array 28.22 303 P P 13 19 43.3 -0.1**
**H11S1 WAKE ISLAND Hy 28.42 124 T T 13 49 45.3**
baz=318,slow=74,SNR=501
**H11S3 WAKE ISLAND Hy 28.42 124 T T 13 49 33.5**
baz=318,slow=74,SNR=431
**H11S2 WAKE ISLAND Hy 28.44 124 T T 13 50 16.4**
baz=318
**GULI GuiLin 29.61 255 ⇓P P 13 19 57.8 +2.0**
GULI S **S 13 24 50.3 0.0**
GULI pmax pmax
comp=Z,140nm,1.2s
GULI LR LR
comp=Z,2μm,19.5s
GULI LR LR
comp=Z,1μm,19.0s
GULI LR LR
comp=Z,3μm,19.5s
**TGY Tagaytay City 29.88 225 P P 13 19 58.3 +0.1**
comp=Z,105nm,0.3s,baz=177,slow=3.6,SNR=5.0
**ZAK Zakamensk 30.66 308 eP P 13 20 04.4 -0.5**
ZAK pmax pmax
comp=Z,30nm,1.5s
**LZH Lanzhou 30.69 280 ⇑P P 13 20 05.8 +0.3**
LZH pP sP 13 20 13.4 +0.8
LZH sP pP 13 20 17.9 +7.1
LZH S **S 13 25 10.6 +3.2**
LZH sS sS 13 25 20.5 +4.9
LZH pmax pmax
comp=Z,31nm,1.5s
LZH pmax pmax
comp=Z,180nm,4.3s
LZH LR LR
comp=Z,2μm,13.0s
LZH LR LR
comp=Z,3μm,11.9s
LZH LR LR
comp=Z,4μm,15.2s
**GYA Guiyang 31.92 261 ⇑P P 13 20 15.9 -0.4**
GYA pP pwP 13 20 24.6 +3.1
GYA PP **PnPn 13 21 24.6 +3.4**
GYA S **S 13 25 23.3 -3.4**
GYA pmax pmax
comp=Z,65nm,1.2s
GYA pmax pmax
comp=Z,140nm,3.5s
GYA LR LR
comp=Z,2μm,17.9s
GYA LR LR
comp=Z,2μm,24.4s
GYA LR LR
comp=Z,3μm,22.8s
**MOY Mondy 32.31 310 eP P 13 20 19.0 -0.5**
MOY pmax pmax
comp=Z,33nm,2.6s
**CD2 Chengdu 32.35 270 P P 13 20 18.8 -1.1**
CD2 S **S 13 25 30.4 -2.7**
CD2 pmax pmax
comp=Z,40nm,0.9s
CD2 pmax pmax
comp=Z,180nm,4.9s
CD2 LR LR
comp=Z,4μm,14.1s
CD2 LR LR
comp=Z,5μm,14.7s
**GTA Gaotai 33.14 287 eP P 13 20 25.9 -1.0**
GTA pP pP 13 20 30.4 -1.8
GTA sP sP 13 20 33.6 -0.5
GTA PcP **PcP 13 23 10.9 +1.2**
GTA S **S 13 25 44.8 -0.7**
GTA sS sS 13 25 54.9 +1.8
GTA ScS **ScS 13 30 51.3 -2.2**
GTA pmax pmax
comp=Z,8.0nm,1.7s
GTA pmax pmax
comp=Z,210nm,5.1s
GTA LR LR
comp=Z,2μm,18.9s
GTA LR LR
comp=Z,1μm,18.5s
GTA LR LR
comp=Z,2μm,19.6s
**BILL Bilibino 33.62 16 eP P 13 20 29.3 -1.3**
BILL e 13 21 38.7
BILL e 13 23 08.6
BILL pmax pmax
comp=Z,41nm,2.5s
BILL MLR MLR
comp=Z,794nm,22.0s
**BILL Bilibino 33.62 16 P P 13 20 29.5 -1.1**
BILL IAmb IAmb 13 20 31.1
comp=Z,20nm,1.2s
**QIZ Qiongzhong 33.63 246 P P 13 20 30.5 -0.7**
QIZ S **S 13 25 53.8 +0.6**
QIZ LR LR
comp=Z,1μm,18.6s
QIZ LR LR
comp=Z,1μm,15.7s
QIZ LR LR
comp=Z,2μm,14.9s
**DAV Davao City (W) 33.66 211 LR LR 13 32 22.8**
comp=Z,1μm,21.5s,baz=58,slow=33
**TIXI Tiksi 35.15 353 P P 13 20 43.0 -0.8**
comp=Z,2.8nm,0.7s,baz=89,slow=23,SNR=15
TIXI LR LR 13 36 59.1
comp=Z,2μm,18.8s,baz=180,slow=40
**TIXI Tiksi 35.15 353 ⇓iP P 13 20 42.7 -1.0**
TIXI pmax pmax
comp=Z,14nm,1.7s
**TIXI Tiksi 35.15 353 P P 13 20 42.4 -1.3**
**KMI Kunming 35.66 262 ⇑P P 13 20 49.3 +0.4**
KMI pP sP 13 20 54.8 -1.6

KMI sP pwP 13 20 58.1 +3.9
KMI PP **PP** **13 22 10.8 +0.8**
KMI S **S** **13 26 20.6 -4.2**
KMI sS sS 13 26 34.3 +1.2
KMI pmax pmax
comp=Z,42nm,1.1s
KMI LR LR
comp=Z,2µm,18.8s
KMI LR LR
comp=Z,2µm,18.4s
KMI LR LR
comp=Z,3µm,21.9s
**PZH PanZhiHua 35.79 264** P **P** **13 20 48.4 -1.6**
PZH pP **pP** **13 20 54.8 -0.4**
PZH PP **PnPn** **13 22 10.0 0.0**
PZH S **S** **13 26 22.8 -3.8**
PZH sS **sS** **13 26 39.8 +4.8**
PZH pmax pmax
comp=Z,30nm,1.0s
PZH pmax pmax
comp=Z,210nm,3.6s
PZH LR LR
comp=Z,2µm,15.3s
PZH LR LR
comp=Z,2µm,15.0s
PZH LR LR
comp=Z,3µm,16.7s
**GOMU GeErMu 37.73 283** P **P** **13 21 06.3 -0.3**
GOMU pP pP 13 21 09.3 -2.7
GOMU sP sP 13 21 12.8 -1.1
GOMU S **S** **13 26 56.4 0.0**
GOMU ScS **ScS** **13 31 20.8 +1.7**
GOMU pmax pmax
comp=Z,5.0nm,0.9s
GOMU pmax pmax
comp=Z,160nm,4.5s
GOMU LR LR
comp=Z,620nm,15.1s
GOMU LR LR
comp=Z,470nm,15.9s
GOMU LR LR
comp=Z,560nm,15.5s
**MYLDM Lahad Datu 38.61 220** P **P** **13 21 14.1 +0.3**
**UBPT Khong Chiam 39.23 246** P **P** **13 21 19.8 +0.8**
UBPT IAmb IAmb 13 21 30.4
comp=Z,63nm,1.1s
**SIJI Sorong 39.28 198** P **P** **13 21 19.0 -0.4**
comp=Z,11nm,0.9s,baz=269,slow=4.6,SNR=4.3
SIJI LR LR 13 35 17.3
comp=Z,1µm,19.6s,baz=4.0,slow=33
**DLV T Lat 39.37 239** P **P** **13 21 21.2 +0.8**
**KMSI Cibinong 40.22 209** P **P** **13 21 29.6 +2.4**
comp=Z,130nm,0.8s
**TNA Tin City 40.33 29** P **P** **13 21 28.5 +1.0**
baz=250
**GTOI Gorontalo 40.55 210** P **P** **13 21 30.3 +0.4**
comp=Z,416nmcomp=Z,39nm,1.5s
**DGZ Jazzator, Alta 40.81 306***d iP* **P** **13 21 32.8 +0.9**
DGZ pmax pmax
comp=Z,42nm,0.7s
**FAKI Fak Fak 41.04 195** P **P** **13 21 33.9 -0.1**
FAKI IAmb IAmb 13 21 45.2
comp=Z,48nm,1.1s
**ANM Nome 41.05 31** P **P** **13 21 33.3 -0.3**
ANM pmax pmax
comp=Z,18nm,1.4s
**ANM Nome 41.05 31** P **P** **13 21 33.3 -0.3**
**ANM Nome 41.05 31** P **P** **13 21 35.1 +1.5**
baz=254
**MRSI Marisa 41.13 212** P **P** **13 21 36.7 +2.0**
comp=Z,1µmcomp=Z,76nm,1.1s
**WMQ Urumqi 41.34 297** *eP* **P** **13 21 40.0 +3.7**
WMQ pP sP 13 21 43.9 +0.3
WMQ sP pP 13 21 48.4 +6.7
WMQ PP **PnPn** **13 23 18.6 +2.3**
WMQ S **S** **13 27 50.9 +1.0**
WMQ pmax pmax
comp=Z,56nm,1.3s
WMQ pmax pmax
comp=Z,320nm,4.7s
WMQ LR LR
comp=Z,3µm,19.7s
WMQ LR LR
comp=Z,1µm,17.7s
WMQ LR LR
comp=Z,1µm,17.7s
**CHTO Chiang Mai 42.00 256** P **P** **13 21 41.4 -0.5**
CHTO pmax pmax
comp=Z,15nm,1.1s
**CHTO Chiang Mai 42.00 256** P **P** **13 21 41.4 -0.5**
**MPSI Mapaga 42.15 215** P **P** **13 21 43.4 +0.4**
comp=Z,1µmcomp=Z,20nm,1.6s
**CM31 Chiang Mai Arr 42.20 256** P **P** **13 21 42.8 -0.8**
**CMAR Chiang Mai Arr 42.20 256** P **P** **13 21 43.9 +0.3**
comp=Z,4.7nm,0.9s,baz=48,slow=5.9,SNR=18
CMAR LR LR 13 41 03.3
comp=Z,2µm,18.4s,baz=55,slow=39
**CMAR Chiang Mai Arr 42.20 256** P **P** **13 21 42.9 -0.6**
**ZAA0 Zalesovo Array 42.26 312** P **P** **13 21 44.0 +0.4**
ZAA0 IAmb IAmb 13 21 50.5
comp=Z,38nm,1.1s
**ZALV Zalesovo Beam 42.26 312** P **P** **13 21 43.4 -0.1**
comp=Z,12nm,0.8s,baz=91,slow=6.6,SNR=25
ZALV LR LR 13 40 00.5
comp=Z,964nm,19.9s,baz=87,slow=37
**ZALV Zalesovo Beam 42.26 312** *i P* **P** **13 21 43.7 +0.1**
ZALV pmax pmax
comp=Z,12nm,0.8s
**ZALV Zalesovo Beam 42.26 312** P **P** **13 21 43.6 0.0**
**APSI Ampana 42.51 211** P **P** **13 21 46.7 +0.8**
comp=Z,648nmcomp=Z,56nm,0.9s
**CHNA Chernabura Isl 42.67 46** P **P** **13 21 47.3 +0.4**
baz=270
**ZSN Zaisan 42.73 303** *eP* **P** **13 21 47.1 -0.4**
**ZSN Zaisan 42.73 303** *eP* **P** **13 21 47.1 -0.4**
baz=303
**AAI Ambon 42.79 201** P **P** **13 21 48.5 +0.3**
AAI pmax pmax
comp=Z,80nm,1.3s
**LSA Lhasa 42.86 275** P **P** **13 21 50.9 +1.6**
LSA S S 13 28 04.8 -8.6
LSA pmax pmax
comp=Z,37nm,1.6s
LSA pmax pmax
comp=Z,76nm,2.1s
LSA LR LR
comp=Z,590nm,16.4s
LSA LR LR
comp=Z,610nm,12.1s
LSA LR LR
comp=Z,810nm,12.1s
**RDOG Red Dog Mine 43.00 27** P **P** **13 21 51.0 +1.5**
**RDOG Red Dog Mine 43.00 27** P **P** **13 21 50.1 +0.6**
baz=253
**NRIK Noril'sk 43.35 335** P **P** **13 21 52.6 +0.4**
comp=Z,3.0nm,0.5s,baz=114,slow=9.0,SNR=5.5
NRIK LR LR 13 41 05.7
comp=Z,2µm,18.5s,baz=109,slow=38
**NRIK Noril'sk 43.35 335***d iP* **P** **13 21 51.3 -0.9**
NRIK pmax pmax
comp=Z,21nm,1.9s
**NRIK Noril'sk 43.35 335** P **P** **13 21 51.8 -0.4**
**SHL Shillong 44.08 270** P **P** **13 21 58.8 -0.1**
SHL pmax pmax
comp=Z,28nm,0.9s
**SHL Shillong 44.08 270** P **P** **13 21 58.8 -0.1**
SHL IAmb IAmb 13 22 18.1
comp=Z,28nm,0.9s
**MK31 Makanchi Array 44.57 302**‖ *eP* **P** **13 22 01.9 -0.5**
**MK31 Makanchi Array 44.57 302** P **P** **13 22 01.9 -0.5**
**MKAR Makanchi Array 44.57 302** P **P** **13 22 01.9 -0.5**
comp=Z,7.9nm,0.7s,baz=85,slow=9.7,SNR=42
MKAR LR LR 13 41 10.2
comp=Z,742nm,19.4s,baz=78,slow=37
**MKAR Makanchi Array 44.57 302** P **P** **13 22 02.4 0.0**
**MKAR Makanchi Array 44.57 302** P **P** **13 22 02.4 0.0**
**MAKZ Makanchi 44.78 302** P **P** **13 22 03.8 -0.3**
MAKZ pmax pmax
comp=Z,13nm,1.0s
**MAKZ Makanchi 44.78 302** P **P** **13 22 03.8 -0.3**
**TTA Tatalina 44.85 35** P **P** **13 22 05.1 +0.6**
baz=265
**SVW2 Sparrevohn 44.94 37** P **P** **13 22 06.3 +1.2**
SVW2 IAmb IAmb 13 22 08.7
comp=Z,19nm,0.9s
**P18K Big Mountain, 45.06 40** P **P** **13 22 05.5 -0.6**
P18K IAmb IAmb 13 22 09.7
comp=Z,25nm,1.1s
**P18K Big Mountain, 45.06 40** P **P** **13 22 07.2 +1.1**
baz=269
**L19K White Mountain 45.34 36** P **P** **13 22 09.0 +0.7**
L19K IAmb IAmb 13 22 10.2
comp=Z,23nm,1.3s
**L19K White Mountain 45.34 36** P **P** **13 22 09.5 +1.2**
baz=267
**SEM Semipalatinsk 45.34 307** *eP* **P** **13 22 09.2 +0.6**
**SEM Semipalatinsk 45.34 307** *eP* **P** **13 22 09.3 +0.6**
baz=307
**N19K Bonanza Creek 45.46 38** P **P** **13 22 12.0 +2.7**
**N19K Bonanza Creek 45.46 38** P **P** **13 22 10.2 +0.9**
baz=269
**O19K Port Alsworth 45.53 39** P **P** **13 22 10.3 +0.6**
O19K IAmb IAmb 13 22 13.7
comp=Z,36nm,1.4s
**O19K Port Alsworth 45.53 39** P **P** **13 22 10.8 +1.1**
baz=269
**M19K Big River Lodg 45.54 36** P **P** **13 22 11.1 +1.2**
baz=268
**MTKI Muara Teweh, K 45.68 220** P **P** **13 22 14.7 +3.3**
comp=Z,36nm,1.5s
**J20K Nowinta River 45.79 33** P **P** **13 22 13.2 +1.4**
baz=266
**L20K Farewell, AK 45.80 36** P **P** **13 22 12.8 +0.9**
baz=268
**Q19K Cape Douglas, 45.88 41** P **P** **13 22 13.2 +0.6**
baz=271
**A21K Barrow 45.99 23** P **P** **13 22 14.5 +1.3**
baz=256
**SPSI Sidrap Palu 46.05 212** P **P** **13 22 14.6 +0.3**
comp=Z,654nmcomp=Z,29nm,0.9s
**IMAR Indian Mountai 46.12 31** P **P** **13 22 15.0 +0.6**
**KSM Kuching 46.20 227** P **P** **13 22 14.9 -0.7**
**BNSI Bone 46.30 211** P **P** **13 22 16.5 +0.2**
comp=Z,49nm,1.1s
**RSO Redoubt South 46.31 38** P **P** **13 22 16.4 +0.3**
**BBSI Bau Bau 46.32 208** P P 13 22 30.0 +14
**KURK Kurchatov 46.32 308***c iP* **P** **13 22 16.0 -0.1**
KURK pmax pmax
comp=Z,35nm,0.6s
**KURK Kurchatov 46.32 308** P **P** **13 22 15.6 -0.5**
**KURBB Kurchatov Arra 46.40 308** P **P** **13 22 16.1 -0.6**
comp=Z,32nm,0.7s,baz=82,slow=8.2,SNR=87
KURBB LR LR 13 42 40.4
comp=Z,1µm,18.4s,baz=58,slow=37
**H21K Melozitna Rive 46.47 31** P **P** **13 22 17.9 +0.7**
baz=265
**KDAK Kodiak Island 46.48 42** P **P** **13 22 17.6 +0.4**
comp=Z,18nm,0.8s,baz=60,slow=11,SNR=5.7
**KDAK Kodiak Island 46.48 42** P **P** **13 22 17.8 +0.5**
KDAK pmax pmax
comp=Z,96nm,1.5s
**KDAK Kodiak Island 46.48 42** P **P** **13 22 17.8 +0.5**
**SPCR Spurr Chakacha 46.57 37** P **P** **13 22 19.4 +1.3**
baz=270,SNR=6.1
**CHUM Lake Minchumin 46.58 34** P **P** **13 22 19.6 +1.7**
baz=268,SNR=9.2
**TAPN Taplejung 46.60 274** *eP* **P** **13 22 19.8 +0.8**
comp=Z,54nm,0.8s
**PPLA Purkeypile 46.60 35** P **P** **13 22 20.2 +1.9**
PPLA IAmb IAmb 13 22 20.7
comp=Z,31nm,1.2s
**PPLA Purkeypile 46.60 35** P **P** **13 22 19.2 +0.8**
baz=269
**PMG Port Moresby 46.64 173** LR LR 13 39 55.3
comp=Z,162nm,21.4s,baz=343,slow=34
**PMG Port Moresby 46.64 173**‖ *eP* **P** **13 22 18.2 -0.7**
PMG pmax pmax
comp=Z,13nm,1.0s
**SPU Mount Spurr 46.65 37** P **P** **13 22 19.2 +0.6**
**CAST Castle Rocks 46.66 34** P **P** **13 22 20.2 +1.5**
CAST IAmb IAmb 13 22 22.5
comp=Z,13nm,0.8s
**CAST Castle Rocks 46.66 34** P **P** **13 22 20.2 +1.5**
baz=268,SNR=9.8
**I21K Tanana 46.78 32** P **P** **13 22 21.0 +1.4**
baz=267
**KAPI Kappang 47.00 211** LR LR 13 44 44.8
comp=Z,202nm,18.1s,baz=56,slow=40
**KAPI Kappang 47.00 211** P **P** **13 22 22.6 +0.8**
KAPI pmax pmax
comp=Z,111nm,1.3s
**KAPI Kappang 47.00 211** P **P** **13 22 22.6 +0.8**
**ODAN Odare 47.07 274** *eP* **P** **13 22 22.8 +0.2**
comp=Z,109nm,1.1s
**BKSI Bulukumba 47.13 211** P **P** **13 22 21.7 -1.0**
comp=Z,32nm,1.1s
**BPAW Bear Paw Mtn. 47.17 33** P **P** **13 22 23.4 +0.7**
baz=269
**KTH Kantishna Hill 47.19 34** P **P** **13 22 24.0 +1.2**
KTH IAmb IAmb 13 22 26.5
comp=Z,21nm,0.9s
**PDGK Podgornoye 47.26 298** *i P* **P** **13 22 23.1 -0.7**
PDGK pmax pmax
comp=Z,35nm,1.3s
**MLY Manley 47.30 32** P **P** **13 22 24.5 +0.8**
MLY IAmb IAmb 13 22 27.0
comp=Z,15nm,0.8s
**MLY Manley 47.30 32** P **P** **13 22 24.7 +1.0**
baz=268,SNR=15
**BRSE Bradley Lake S 47.34 39** P **P** **13 22 25.5 +1.5**
baz=273
**TRF Thorofare Moun 47.47 34** P **P** **13 22 26.7 +1.5**
TRF IAmb IAmb 13 22 28.3
comp=Z,19nm,1.0s
**TRF Thorofare Moun 47.47 34** P **P** **13 22 25.0 -0.1**
baz=270,SNR=8.2
**CUT Chulitna 47.48 36** P **P** **13 22 25.3 +0.2**
baz=271
**M22K Willow 47.57 37** P **P** **13 22 25.9 +0.2**
**M22K Willow 47.57 37** P **P** **13 22 25.9 +0.2**
baz=272
**COLD Coldfoot 47.63 29** P **P** **13 22 25.9 -0.2**
baz=266
**RAMN Ramite 47.66 274** *eP* **P** **13 22 27.0 -0.2**
comp=Z,7.6nm,0.5s
**JIRN Jiri 47.67 275** *eP* **P** **13 22 28.2 +0.8**
comp=Z,252nm,1.3s
**RC01 Rabbit Creek A 47.77 37** P **P** **13 22 27.0 -0.3**
RC01 IAmb IAmb 13 22 29.9
comp=Z,19nm,0.9s
**RC01 Rabbit Creek A 47.77 37** P **P** **13 22 27.3 0.0**
baz=272,SNR=6.0
**KPKS Kokpek 47.80 298** *eP* **P** **13 22 28.3 +0.4**
**KPKS Kokpek 47.80 298** *eP* **P** **13 22 28.3 +0.4**
baz=298
**GUN Gumba 47.80 276** *eP* **P** **13 22 29.1 +0.7**
comp=Z,94nm,0.8s
**O22K Cooper Landing 47.81 38** P **P** **13 22 27.4 -0.2**
baz=273
**H23K Yukon River 47.83 31** P **P** **13 22 29.3 +1.6**
baz=268,SNR=13
**BWN Browne 47.84 33** P **P** **13 22 29.1 +1.3**
**I23K Minto, Yukon-K 47.89 32** P **P** **13 22 28.5 +0.4**
I23K IAmb IAmb 13 22 30.1
comp=Z,26nm,1.4s
**I23K Minto, Yukon-K 47.89 32** P **P** **13 22 29.4 +1.2**
baz=269,SNR=5.4
**SRIT Nakonsritamara 47.95 244** P **P** **13 22 30.4 +1.2**
**TOLK Toolik Lake Re 47.96 27** P **P** **13 22 29.9 +1.1**
TOLK IAmb IAmb 13 22 32.5
comp=Z,12nm,0.8s
**TOLK Toolik Lake Re 47.96 27** P **P** **13 22 29.8 +1.0**
baz=266,SNR=9.3
**NEA2 Nenana 48.01 33** P **P** **13 22 30.8 +1.6**
NEA2 IAmb IAmb 13 22 32.7
comp=Z,27nm,1.1s
**NEA2 Nenana 48.01 33** P **P** **13 22 29.5 +0.4**
baz=270
**PMR Palmer 48.04 37** P **P** **13 22 29.3 -0.1**
PMR pmax pmax
comp=Z,22nm,1.0s
**PMR Palmer 48.04 37** P **P** **13 22 29.3 -0.1**
PMR IAmb IAmb 13 22 31.9
comp=Z,22nm,1.0s
**PMR Palmer 48.04 37** P **P** **13 22 29.2 -0.1**
baz=272,SNR=7.0
**ZHN Zhinishke 48.05 298** *eP* **P** **13 22 30.5 +0.6**
**ZHN Zhinishke 48.05 298** *eP* **P** **13 22 30.6 +0.6**
baz=298
**MCK McKinley 48.07 34** P **P** **13 22 29.0 -0.7**
MCK pmax pmax
comp=Z,18nm,0.8s
**MCK McKinley 48.07 34** P **P** **13 22 29.0 -0.7**
MCK IAmb IAmb 13 22 32.0
comp=Z,18nm,0.8s
**MCK McKinley 48.07 34** P **P** **13 22 29.9 +0.2**
baz=271,SNR=11
**SATY Saty 48.10 298** *eP* **P** **13 22 30.9 +0.6**
**SATY Saty 48.10 298** *eP* **P** **13 22 31.0 +0.6**
baz=298
**RND Reindeer 48.12 34** P **P** **13 22 30.3 +0.3**
RND pmax pmax
comp=Z,16nm,0.9s
**RND Reindeer 48.12 34** P **P** **13 22 30.3 +0.3**
RND IAmb IAmb 13 22 32.5
comp=Z,16nm,0.9s
**GHO Glory Hole Cre 48.13 37** P **P** **13 22 30.7 +0.5**
**PKI Pulchoki 48.33 276** *eP* **P** **13 22 32.5 0.0**
comp=Z,54nm,0.8s
**KKN Kakani 48.33 276** *eP* **P** **13 22 32.7 +0.3**
comp=Z,44nm,0.7s
**PKIN Phulchoki 48.33 276** *eP* **P** **13 22 32.5 0.0**
comp=Z,30nm,0.7s
**MDM Murphy Dome 48.37 32** P **P** **13 22 33.0 +1.1**
**KNK Knik Glacier 48.38 37** P **P** **13 22 32.2 +0.2**
baz=273
**SML Sawmill 48.41 36** P **P** **13 22 32.9 +0.5**
baz=273,SNR=6.7
**WRH Wood River Hil 48.43 33** P **P** **13 22 32.7 +0.3**
WRH IAmb IAmb 13 22 34.8
comp=Z,12nm,0.9s
**PWL Port Wells 48.47 38** P **P** **13 22 33.3 +0.6**
PWL IAmb IAmb 13 22 35.2
comp=Z,19nm,0.8s
**PWL Port Wells 48.47 38** P **P** **13 22 32.8 0.0**
baz=274,SNR=5.5
**H24K Noodor Dome 48.51 31** P **P** **13 22 34.3 +1.2**
baz=270,SNR=9.1
**TCOL CIGO, UAF Yank 48.53 32** P **P** **13 22 33.7 +0.6**
TCOL IAmb IAmb 13 22 35.9
comp=Z,22nm,0.9s
**TCOL CIGO, UAF Yank 48.53 32** P **P** **13 22 33.4 +0.3**
baz=271
**COLA College 48.53 32**‖ *eP* **P** **13 22 33.8 +0.7**
COLA pmax pmax
comp=Z,24nm,1.0s
**COLA College 48.53 32** P **P** **13 22 34.6 +1.5**
COLA IAmb IAmb 13 22 35.9
comp=Z,24nm,1.0s
**COLA College 48.53 32** P **P** **13 22 32.9 -0.1**
baz=271
**DMN Daman 48.55 276** *eP* **P** **13 22 34.2 +0.1**
comp=Z,111nm,1.4s
**CCB Clear Creek Bu 48.55 33** P **P** **13 22 33.7 +0.5**
**WAT6 Susitna Watana 48.65 35** P **P** **13 22 34.5 +0.2**
baz=273,SNR=5.1
**POKR Poker Plat Res 48.70 32** P **P** **13 22 35.3 +0.8**
**POKR Poker Plat Res 48.70 32** P **P** **13 22 35.8 +1.4**
baz=271,SNR=22
**GKN Gorkha 48.75 277** *eP* **P** **13 22 35.3 -0.2**
comp=Z,69nm,0.7s
**DHY Denali Highway 48.79 35** P **P** **13 22 35.6 +0.2**
**DHY Denali Highway 48.79 35** P **P** **13 22 35.3 0.0**
baz=273
**CHKK Chushkaly 48.88 299** *eP* **P** **13 22 35.0 -1.1**
baz=299
**SCM Sheep Creek Mo 48.89 36** P **P** **13 22 36.1 0.0**
baz=274
**TARG Taragay, Kyrgy 48.91 296** P **P** **13 22 36.9 0.0**
TARG IAmb IAmb 13 22 51.3
comp=Z,16nm,0.8s
**HDA Harding Lake 48.93 33** P **P** **13 22 36.0 -0.2**
baz=272,SNR=15
**IL31 48.95 32** P **P** **13 22 36.5 +0.2**
**ILAR Eielson Array 48.95 32** P **P** **13 22 36.4 +0.1**
comp=Z,20nm,0.8s,baz=266,slow=6.2,SNR=116
**ILAR Eielson Array 48.95 32** P **P** **13 22 36.1 -0.2**
**MDOK Medeo 49.03 298** P **P** **13 22 36.7 -0.8**
**MDOK Medeo 49.03 298** *eP* **P** **13 22 36.7 -0.8**
baz=298
**GLI Glacier Island 49.07 38** P **P** **13 22 37.2 -0.1**
baz=275
**DANN Dangsing 49.29 278** *eP* **P** **13 22 39.8 0.0**
comp=Z,128nm,0.6s
**HNR Honiara 49.32 157** LR LR 13 40 12.3
comp=Z,334nm,21.9s,baz=326,slow=32
**M24K Tolsona, Glenn 49.41 36** P **P** **13 22 40.5 +0.5**
baz=275
**PRP Porcupine Dome 49.49 31** P **P** **13 22 41.1 +0.5**
baz=272
**FYU Fort Yukon 49.58 30** P **P** **13 22 42.4 +1.3**
**KLU Klutina 49.58 37** P **P** **13 22 42.0 +0.7**
KLU IAmb IAmb 13 22 43.5
comp=Z,14nm,0.7s
**KLU Klutina 49.58 37** P **P** **13 22 42.1 +0.8**
baz=275,SNR=6.3
**Q23K Middleton Isla 49.59 40** P **P** **13 22 42.0 +0.8**
baz=277
**PAX Paxson 49.67 35** P **P** **13 22 42.5 +0.5**
PAX pmax pmax
comp=Z,8.0nm,1.0s
**PAX Paxson 49.67 35** P **P** **13 22 42.5 +0.5**
**PAX Paxson 49.67 35** P **P** **13 22 42.5 +0.5**
baz=274
**KOLN Koldanda 49.67 277** *eP* **P** **13 22 41.7 -0.9**
comp=Z,242nm,1.4s
**DIV Divide 49.69 37** P **P** **13 22 42.6 +0.5**
DIV IAmb IAmb 13 22 43.8
comp=Z,34nm,1.1s
**EYAK Cordova Ski Ar 49.76 38** P **P** **13 22 43.2 +0.6**
EYAK IAmb IAmb 13 22 46.1
comp=Z,30nm,1.0s
**EYAK Cordova Ski Ar 49.76 38** P **P** **13 22 43.2 +0.6**
baz=276
**BMAR Burnt Mountain 49.81 29** P **P** **13 22 44.6 +1.7**
**IPM Ipoh 49.83 239** P **P** **13 22 42.8 -1.0**
IPM IAmb IAmb 13 22 53.8
comp=Z,29nm,0.9s
**HARP HAARP 49.86 36** P **P** **13 22 44.4 +1.0**
baz=275
**RIDG Independent Ri 49.89 34** P **P** **13 22 44.0 +0.3**
**RIDG Independent Ri 49.89 34** P **P** **13 22 43.2 -0.4**
baz=274
**PYUN Piuthan 50.01 278** *eP* **P** **13 22 44.4 -0.8**
comp=Z,340nm,1.2s
**TKM2 Tokmak 2 50.12 298** *i P* **P** **13 22 45.4 -0.4**
TKM2 pmax pmax
comp=Z,19nm,0.8s
**N25K Chitina, Valde 50.20 37** P **P** **13 22 47.1 +1.1**
**N25K Chitina, Valde 50.20 37** P **P** **13 22 46.6 +0.6**
baz=276
**SCRK Sand Creek 50.25 33** P **P** **13 22 47.2 +0.8**
SCRK IAmb IAmb 13 22 49.2
comp=Z,19nm,0.9s
**SCRK Sand Creek 50.25 33** P **P** **13 22 46.5 +0.1**
baz=275,SNR=15
**BMRM Bremner River 50.27 37** P **P** **13 22 46.4 -0.2**
BMRM IAmb IAmb 13 23 11.4
comp=Z,40nm,1.2s
**BMRM Bremner River 50.27 37** P **P** **13 22 47.4 +0.8**
baz=277
**BATI Baumata 50.34 204** LR LR 13 42 11.2
comp=Z,675nm,21.9s,baz=20,slow=34
**J26L Joseph Creek 50.39 33** P **P** **13 22 47.7 +0.2**
baz=275
**MENT Mentasta 50.47 35** P **P** **13 22 49.2 +1.2**
MENT IAmb IAmb 13 22 51.2
comp=Z,22nm,1.2s
**KAIM Kayak Island 50.50 39** P **P** **13 22 49.0 +0.8**
baz=278
**BTLS Baital 50.57 302** *eP* **P** **13 22 47.8 -1.2**
**BTLS Baital 50.57 302** *eP* **P** **13 22 47.8 -1.2**
baz=302
**GLB Gilahina Butte 50.60 37** P **P** **13 22 49.6 +0.6**
GLB IAmb IAmb 13 22 50.9
comp=Z,26nm,1.3s
**L26K Log Cabin Wild 50.63 35** P **P** **13 22 50.5 +1.2**
L26K IAmb IAmb 13 22 52.4
comp=Z,16nm,0.8s
**L26K Log Cabin Wild 50.63 35** P **P** **13 22 50.4 +1.2**
baz=276,SNR=13
**SGDS Sogindy 50.63 299** *eP* **P** **13 22 49.8 +0.2**
baz=300
**BERG Berg Lake 50.79 38** P **P** **13 22 51.4 +0.9**
**OTUK Ortayu 50.84 306** P **P** **13 22 50.3 -0.7**
**M26K Nabesna, AK 50.86 35** P **P** **13 22 51.8 +0.8**
baz=277
**BVAR Borovoye Array 50.92 312** P **P** **13 22 51.2 -0.3**

comp=Z,3.8nm,0.5s,baz=64,slow=18,SNR=15
**MTN Manton Dam 50.92 194 P P 13 22 51.5 -0.3**
**KSH Kashi 50.93 294 P P** 13 22 58.4 +6.5
KSH sP sP 13 23 07.1 +7.8
KSH S S **13 30 15.9 +8.1**
KSH ScS ScS **13 32 44.4 +2.5**
KSH LR LR
comp=Z,2µm,15.6s
KSH LR LR
comp=Z,2µm,15.8s
KSH LR LR
comp=Z,3µm,15.8s
**COEN Coen 50.95 179 P P 13 22 51.9 -0.1**
COEN IAmb IAmb 13 22 52.8
comp=Z,35nm,1.2s
**AAK Ala-Archa 50.98 298 P P 13 22 51.9 -0.3**
comp=Z,2.1nm,0.4s,baz=117,slow=6.3,SNR=10.0
AAK LR LR 13 45 53.2
comp=Z,3µm,18.9s,baz=76,slow=38
**AAK Ala-Archa 50.98 298|| *e*P P 13 22 52.0 -0.3**
AAK pmax pmax
comp=Z,7.0nm,0.7s
**AAK Ala-Archa 50.98 298 P P 13 22 53.6 +1.3**
**BRVK Borovoye 50.98 312** *c i*P **P 13 22 52.3 +0.4**
BRVK pmax pmax
comp=Z,17nm,1.4s
**BRVK Borovoye 50.98 312 P P 13 22 51.9 0.0**
**BGLC Bering Glacier 51.03 38 P P 13 22 53.8 +1.6**
baz=279
**WAX Waxell Ridge 51.20 38 P P 13 22 54.6 +1.0**
WAX IAmb IAmb 13 23 08.6
comp=Z,24nm,1.0s
**PLAI Plampang 51.26 212 P P 13 22 55.4 +1.0**
comp=Z,30nm,1.4s
**L27K Beaver Creek, 51.31 34 P P 13 22 55.8 +1.5**
baz=278
**BCAR Beaver Creek A 51.33 34 P P 13 22 55.8 +1.3**
**M27K Edge Creek, AK 51.38 35 P P 13 22 55.9 +0.9**
baz=278
**EGAK Eagle 51.39 32 P P 13 22 54.7 -0.1**
**EGAK Eagle 51.39 32 P P 13 22 55.3 +0.5**
baz=277,SNR=7.0
**ISLE Juniper Island 51.42 38 P P 13 22 56.4 +1.1**
ISLE IAmb IAmb 13 22 56.7
comp=Z,32nm,1.3s
**BARN Barnard Glacie 51.68 37 P P 13 22 58.2 +0.9**
BARN IAmb IAmb 13 23 18.2
comp=Z,29nm,1.5s
**MESA MESA 51.68 38 P P 13 22 58.4 +1.1**
baz=280
**BVCY Beaver Creek 51.84 35 P P 13 22 59.4 +1.1**
baz=279,SNR=13
**ABJI Asem Bagus 51.92 216 P P** 13 23 12.7 +13
**YUK3 Moose Creek 52.13 36 P P 13 23 01.5 +0.8**
baz=280,SNR=7.1
**DAWY Dawson 52.25 33 P P 13 23 02.4 +1.1**
**DAWY Dawson 52.25 33 P P 13 23 02.1 +0.8**
baz=279
**PSI Prapat 52.49 240 LR LR** 13 48 13.0
comp=Z,166nm,18.4s,baz=51,slow=39
**I29M Ogilvie Camp, 52.51 31 P P 13 23 04.2 +1.0**
I29M IAmb IAmb 13 23 06.8
comp=Z,32nm,1.1s
**I29M Ogilvie Camp, 52.51 31 P P 13 23 04.4 +1.1**
baz=279,SNR=9.1
**J29M Klondike Camp 52.69 32 P P 13 23 06.3 +1.7**
baz=280
**PNL Peninsula 53.04 38 P P 13 23 08.2 +1.0**
baz=282
**YUK4 Talbot Arm 53.06 36 P P 13 23 08.7 +1.1**
baz=282
**YUK6 Outpost Mounta 53.28 37 P P 13 23 10.2 +1.0**
baz=282
**PWJI Pagerwojo 53.30 219 P P 13 23 11.1 +1.5**
comp=Z,62nm,0.7s
**MNSI Mandailing Nat 53.50 237 P P** 13 23 21.5 +10
**KKAR Karatay Array 53.59 300 P P 13 23 12.2 +0.7**
**KKAR Karatay Array 53.59 300 P P 13 23 12.2 +0.7**
**HYT Haines Junctio 53.72 37 P P 13 23 14.2 +1.9**
**HYT Haines Junctio 53.72 37 P P 13 23 14.1 +1.9**
baz=283,SNR=13
**UGM Wanagama 53.86 220 P P 13 23 14.4 +0.7**
comp=Z,199nm,1.4s
**MAYO Mayo, Yukon 53.86 33 P P 13 23 14.7 +1.6**
baz=282,SNR=8.6
**INK Inuvik 53.88 27 P P 13 23 14.1 +0.9**
comp=Z,14nm,0.6s,baz=296,slow=6.6,SNR=71
INK LR LR 13 49 14.6
comp=Z,498nm,19.7s,baz=255,slow=39
**INK Inuvik 53.88 27 P P 13 23 14.0 +0.9**
INK IAmb IAmb 13 23 15.8
comp=Z,16nm,0.8s
**INK Inuvik 53.88 27 P P 13 23 14.1 +0.9**
baz=281,SNR=19
**YOGI Yogyakarta 53.90 220 P P** 13 23 22.5 +8.6
**CHLP Challavanipeta 53.90 266** *eP* **P 13 23 14.5 +0.5**
**BRLS Borolday 54.09 300** *eP* **P 13 23 16.3 +1.2**
**BRLS Borolday 54.09 300** *eP* **P 13 23 16.3 +1.2**
baz=300
**KNRA Kununurra 54.16 196 P P 13 23 15.6 -0.2**
**KPJI Karang Pucung 54.21 222 P P 13 23 17.3 +1.1**
comp=Z,54nm,1.0s
**LHSI Lahat 54.47 230 P P 13 23 21.9 +3.7**
**GSI Gunungsitoli 54.49 240 P P 13 23 18.7 +0.3**
**LEM Lembang 54.50 224 LR LR** 13 46 51.9
comp=Z,403nm,19.9s,baz=10.0,slow=36
**LEM Lembang 54.50 224 P P 13 23 19.8 +1.2**
LEM pmax pmax
comp=Z,111nm,1.0s
**MDSI Maura Dua 54.60 229 P P 13 23 18.1 -1.0**
comp=Z,501nmcomp=Z,42nm,1.3s
**M31M Drury Creek, Y 54.85 35 P P 13 23 22.1 +1.7**
M31M IAmb IAmb 13 23 23.5
comp=Z,12nm,0.9s
**M31M Drury Creek, Y 54.85 35 P P 13 23 21.4 +1.0**
baz=284,SNR=8.5
**KSI Kapahiang 54.91 231 P P** 13 23 32.4 +11
**WHY Whitehorse 55.01 37 P P 13 23 22.9 +1.2**
WHY IAmb IAmb 13 23 23.9
comp=Z,14nm,1.1s
**WHY Whitehorse 55.01 37 P P 13 23 22.9 +1.2**
baz=285,SNR=6.0
**LWLI Liwa 55.09 229 P P** 13 23 29.8 +7.0
**SKAG Skagway 55.10 38 P P 13 23 22.6 +0.4**
baz=285
**FARO Faro, Yukon 55.31 35 P P 13 23 24.7 +0.9**
baz=285,SNR=12
**SVE Sverdlovsk 55.42 319** *e*P **P 13 23 25.2 +0.6**
SVE pmax pmax
comp=Z,33nm,1.0s
SVE MLR MLR
comp=Z,2µm,16.0s
**SIT Sitka 55.78 41 P P 13 23 27.8 +0.7**
baz=287
**A36M Sachs Harbour 55.80 22 P P 13 23 28.2 +1.2**
**A36M Sachs Harbour 55.80 22 P P 13 23 28.3 +1.3**
baz=286,SNR=35
**P33M Teslin, Yukon 56.12 37 P P 13 23 31.1 +1.5**
P33M IAmb IAmb 13 23 33.7
comp=Z,20nm,1.0s
**P33M Teslin, Yukon 56.12 37 P P 13 23 30.7 +1.1**
baz=287,SNR=13
**MMPY Sheldon Lake, 56.14 34 P P 13 23 31.2 +1.5**
baz=286,SNR=5.2
**PVM Polavaram 56.52 267** *eP* **P 13 23 34.6 +1.6**
**ARU Arti 56.64 319 P P 13 23 33.0 -0.2**
comp=Z,2.7nm,0.4s,baz=0.3,slow=1.3,SNR=12
ARU LR LR 13 52 21.5
comp=Z,1µm,18.0s,baz=69,slow=41
**ARU Arti 56.64 319** *d i*P **P 13 23 32.9 -0.4**
ARU 13 24 29.3
ARU 13 25 35.1
ARU S S **13 31 26.3 +2.0**
ARU SS SS **13 35 07.1 -4.3**
ARU pmax pmax
comp=Z,39nm,1.8s
ARU MLR MLR
comp=Z,1µm,16.0s
**ARU Arti 56.64 319 P P 13 23 33.5 +0.2**
ARU IAmb IAmb 13 23 40.5
comp=Z,21nm,0.8s
**C36M Paulatuk 56.94 25 P P 13 23 35.6 +0.4**
C36M IAmb IAmb 13 23 37.6
comp=Z,25nm,0.8s
**C36M Paulatuk 56.94 25 P P 13 23 35.9 +0.7**
baz=288,SNR=32

**WB0 Warramunga Arr 57.20 189 P P 13 23 36.0 -1.6**
**FITZ Fitzroy Crossi 57.24 199 P P 13 23 36.7 -1.2**
FITZ IAmb IAmb 13 23 48.7
comp=Z,36nm,1.2s
**WRAB Tennant Creek 57.37 189** *d i*P **P 13 23 37.1 -1.7**
WRAB pmax pmax
comp=Z,33nm,1.3s
**WRAB Tennant Creek 57.37 189 P P 13 23 37.7 -1.0**
**WR0 Warramunga Arr 57.37 189 P P 13 23 37.4 -1.4**
**WB2 Warramunga Arr 57.38 189 P P 13 23 37.5 -1.4**
**WRA Warramunga Arr 57.38 189 P P 13 23 37.4 -1.5**
comp=Z,13nm,0.7s,baz=4.7,slow=7.0,SNR=75
WRA LR LR 13 48 31.1
comp=Z,450nm,19.1s,baz=46,slow=36
**WRA Warramunga Arr 57.38 189 P P 13 23 37.6 -1.2**
WRA pmax pmax
comp=Z,3.0nm,1.1s
**WRA Warramunga Arr 57.38 189 P P 13 23 37.6 -1.2**
**SANVU Saraoutou 57.45 151 P P 13 23 38.7 -0.6**
**RPR Rampur 57.51 270** *eP* **P 13 23 41.0 +1.1**
**WRAK Wrangell Islan 57.54 41 P P 13 23 40.6 +1.0**
baz=290
**MYLAV Mylavaram 57.59 267** *eP* **P 13 23 41.6 +1.0**
**KBL Kabul 57.96 291 P P 13 23 43.0 -0.2**
KBL pmax pmax
comp=Z,17nm,0.9s
**KBL Kabul 57.96 291 P P 13 23 43.0 -0.2**
KBL IAmb IAmb 13 23 58.3
comp=Z,17nm,0.9s
**DLBC Dease Lake 58.03 38 P P 13 23 43.2 0.0**
DLBC IAmb IAmb 13 23 45.8
comp=Z,28nm,1.2s
**WTLY Watson Lake, Y 58.05 36 P P 13 23 44.1 +0.8**
baz=290
**SRSP Sriramsagar 58.23 270** *eP* **P 13 23 45.4 +0.3**
**AB31 Akbulak array 58.31 310** *i P* **P 13 23 44.4 -0.8**
**ABKAR Akbulak array 58.31 310 P P 13 23 44.5 -0.7**
**ADKI Addanki 58.62 266** *eP* **P 13 23 47.2 -0.5**
**CUPL Choutuppal 58.66 268** *eP* **P 13 23 47.5 -0.5**
**NJS Nagarjunasagar 58.76 268** *eP* **P 13 23 49.3 +0.6**
**HYBB Hyderabad (bro 58.88 269** *eP* **P 13 23 49.7 +0.1**
**AKTO Aktyubinsk 59.02 312 P P 13 23 49.7 -0.4**
comp=Z,3.8nm,0.6s,baz=73,slow=15,SNR=15
AKTO LR LR 13 51 02.0
comp=Z,586nm,18.1s,baz=66,slow=38
**AKTO Aktyubinsk 59.02 312 P P 13 23 49.9 -0.2**
**WRGLY Wrigley 59.30 32 P P 13 23 52.8 +1.0**
baz=292,SNR=8.9
**SRLM Srisailam 59.34 267** *eP* **P 13 23 52.4 -0.4**
**RCLA Racherla 59.65 267** *eP* **P 13 23 54.2 -0.7**
**EUNU Eureka 59.87 9 P P 13 23 56.0 +0.4**
EUNU IAmb IAmb 13 23 57.4
comp=Z,16nm,0.8s
**SKHT Srikalahasti 60.02 265** *eP* **P 13 23 56.6 -0.8**
**KLRI Killari 60.09 271** *eP* **P 13 23 58.4 +0.4**
**SPITS Spitsbergen Ar 60.43 349 LR LR** 13 51 51.0
comp=Z,754nm,19.5s,baz=261,slow=38
**KIRV Kirov 60.48 323 P P 13 24 00.2 +0.3**
comp=Z,17nm,0.7s,baz=72,slow=8.1,SNR=6.8
**KIRV Kirov 60.48 323** *de*P **P 13 23 59.6 -0.3**
**NOR Nord 60.87 357 P P 13 24 02.7 +0.4**
NOR pmax pmax
comp=Z,17nm,2.7s
**PRGR Permogore 60.94 327** *eP* P 13 24 10.0 +6.9
PRGR pmax pmax
comp=Z,18nm,1.0s
**AS31 Alice Springs 61.10 189 P P 13 24 03.8 -0.8**
**ASAR Alice Springs 61.11 189 P P 13 24 03.5 -1.1**
comp=Z,9.6nm,0.9s,baz=16,slow=7.0,SNR=55
ASAR LR LR 13 49 14.5
comp=Z,309nm,21.8s,baz=9.5,slow=35
**ASAR Alice Springs 61.11 189 P P 13 24 03.4 -1.2**
**RES Resolute Bay 62.22 15 LR LR** 13 53 36.3
comp=Z,222nm,19.4s,baz=314,slow=38
**RES Resolute Bay 62.22 15 P P 13 24 11.5 0.0**
RES pmax pmax
comp=Z,17nm,1.0s
**RES Resolute Bay 62.22 15 P P 13 24 11.5 0.0**
RES IAmb IAmb 13 24 12.2
comp=Z,17nm,0.9s
**APA Apatity 62.76 336** *|| i*P **P 13 24 15.0 -0.2**
APA pmax pmax
comp=Z,10.0nm,0.7s
**PALK Pallekele 63.07 258 LR LR** 13 54 44.3
comp=Z,847nm,18.8s,baz=151,slow=39
**DZM Mont Dzumac 63.26 155 LR LR** 13 49 43.3
comp=Z,314nm,20.7s,baz=20,slow=34
**DZM Mont Dzumac 63.26 155** *e*LR LR 13 43 12.6
comp=Z,430nm,21.2s
**YKA Yelowknife Ar 63.28 30 P P 13 24 18.8 +0.1**
comp=Z,5.3nm,0.8s,baz=302,slow=6.8,SNR=85
**YKA Yellowknife Ar 63.28 30 P P 13 24 18.7 0.0**
**KLMR Klimovskoe 63.93 328** *eP* **P 13 24 23.2 +0.2**
KLMR *e* 13 26 43.4
KLMR pmax pmax
comp=Z,17nm,1.0s
**KLMR Klimovskoe 63.93 328** *eP* **P 13 24 23.2 +0.2**
KLMR AMP 13 24 24.3
comp=Z,17nm,1.0s
KLMR *e*PP **PP 13 26 43.5 +0.3**
KLMR LQ LQ 13 46 31.4
KLMR LQ LQ 13 46 31.4
KLMR LR LR 13 53 08.5
**ARCES ARCESS Array B 64.02 340 P P 13 24 23.9 +0.3**
comp=Z,6.3nm,0.8s,baz=47,slow=5.7,SNR=6.9
ARCES LR LR 13 56 25.9
comp=Z,582nm,18.9s,baz=39,slow=40
**ARCES ARCESS Array B 64.02 340 P P 13 24 24.7 +1.1**
ARCES pmax pmax
comp=Z,27nm,1.5s
**ARCES ARCESS Array B 64.02 340 P P 13 24 24.7 +1.1**
ARCES IAmb IAmb 13 24 30.5
comp=Z,27nm,1.4s
**MSVF Nonsavu 64.26 142 LR LR** 13 47 46.3
comp=Z,378nm,19.3s,baz=356,slow=32
**D03D Eldon 66.46 47 P P 13 24 40.9 +1.2**
baz=300
**OUL Oulu 66.67 336 P P 13 24 40.2 -0.5**
OUL pmax pmax
comp=Z,31nm,0.8s
**AFI Afiamalu 66.76 131 LR LR** 13 48 38.5
comp=Z,238nm,21.5s,baz=358,slow=31
**MOS Moscow 67.47 324** *eP* **P 13 24 44.2 -1.8**
MOS MLR MLR
comp=Z,700nm,19.0s
**VRH Novokhopyorsk 67.86 318** *eP* **P 13 24 45.8 -2.7**
VRH pmax pmax
comp=Z,10.0nm,0.4s
VRH MLR MLR
comp=Z,880nm,13.0s
**ARMA Armidale 67.89 171 P P 13 24 48.8 -0.1**
**OBN Obninsk 68.32 323** *eP* **P 13 24 51.5 +0.2**
OBN *i* 13 25 18.4
OBN *e* 13 27 25.6
OBN *e*PPP PPP 13 29 02.4
OBN pmax pmax
comp=Z,11nm,1.0s
OBN MLR MLR
comp=Z,497nm,16.0s
**HOOD Mount Hood Mea 68.44 49 P P 13 24 53.4 +0.9**
**LPSR Galich'ya Gora 68.56 320** *eP* **P 13 24 51.1 -1.8**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
LPSR MLR MLR
comp=Z,1µm,14.0s
**EDM Edmonton 68.75 39 P P 13 24 53.9 -0.3**
EDM pmax pmax
comp=Z,23nm,1.2s
**EDM Edmonton 68.75 39 P P 13 24 53.9 -0.3**
EDM IAmb IAmb 13 24 54.9
comp=Z,22nm,1.2s
**I04A Tendick Farm, 68.78 51 P P 13 24 55.2 +0.7**
baz=302
**STKA Stephens Creek 68.78 181 P P 13 24 54.0 -0.4**
comp=Z,6.4nm,0.8s,baz=351,slow=8.6,SNR=8.1
STKA LR LR 13 53 48.8
comp=Z,157nm,21.8s,baz=9.2,slow=35
**STKA Stephens Creek 68.78 181 P P 13 24 54.0 -0.4**
**STKA Stephens Creek 68.78 181 P P 13 24 53.7 -0.6**
**MAK Makhachkala 68.85 308** *eP* **P 13 24 52.1 -2.7**
MAK *e* 13 27 27.3
MAK *e*S **S 13 33 54.8 -3.1**
MAK *e*SS **SS 13 38 23.3 +0.9**
MAK pmax pmax
comp=Z,176nm,1.3s

**FIA1 FINESS Array S 68.93 332 P P 13 24 55.6 +0.6**
**FINES FINESS Array B 68.93 332 P P 13 24 55.0 0.0**
comp=Z,19nm,0.7s,baz=53,slow=7.4,SNR=36
FINES LR LR 14 00 16.4
comp=Z,1µm,18.1s,baz=44,slow=40
**FINES FINESS Array B 68.93 332 P P 13 24 54.6 -0.4**
**VORR Voronezh 68.93 319** *eP* **P 13 24 55.6 +0.4**
VORR pmax pmax
comp=Z,80nm,0.5s
**FORT Forrest 68.97 193 P P 13 24 54.5 -1.0**
**VSR Storozhevoye 69.20 319** *eP* **P 13 24 56.0 -0.9**
VSR pmax pmax
comp=Z,20nm,0.7s
VSR MLR MLR
comp=Z,2µm,18.0s
**VORD Divnogorie 69.28 319** *eP* **P 13 24 55.1 -2.3**
VORD pmax pmax
comp=Z,9.0nm,0.5s
**NEW Newport 69.50 45 P P 13 24 59.3 +0.5**
NEW pmax pmax
comp=Z,8.0nm,1.1s
**NEW Newport 69.50 45 P P 13 24 59.3 +0.5**
**NEW Newport 69.50 45 P P 13 24 59.4 +0.5**
baz=303
**L04D Klamath Falls 69.67 52 P P 13 25 01.2 +1.0**
baz=302
**M02C Callahan 69.76 53 P P 13 25 01.6 +0.9**
baz=302
**J05D Fort Rock, OR 69.77 51 P P 13 25 01.6 +0.8**
baz=302
**JMIC Jan Mayen 70.04 350 LR LR** 13 58 28.7
comp=Z,146nm,18.1s,baz=59,slow=38
**O02D Mt. Diablo Mer 70.45 54 P P 13 25 05.9 +0.9**
baz=303
**VSU Vasula 70.60 330|| *e*P P 13 25 05.1 -0.3**
VSU pmax pmax
comp=Z,133nm,2.0s
**ZEI Tsey 71.18 310** *eP* **P** 13 25 04.6 -4.8
ZEI pmax pmax
comp=Z,9.0nm,1.4s
**KBZ Khabaz 71.27 311 P P 13 25 09.9 +0.2**
comp=Z,2.9nm,0.4s,baz=82,slow=2.8,SNR=7.9
KBZ LR LR 14 01 16.9
comp=Z,878nm,18.4s,baz=40,slow=40
**KBZ Khabaz 71.27 311|| *e*P P 13 25 09.6 -0.1**
KBZ pmax pmax
comp=Z,19nm,1.2s
**KIV Kislovodsk 71.27 311** *eP* **P 13 25 10.7 +0.8**
KIV pmax pmax
comp=Z,19nm,1.0s
**KIV Kislovodsk 71.27 311 P P 13 25 10.6 +0.8**
KIV IAmb IAmb 13 25 23.2
comp=Z,26nm,1.1s
**BMO Blue Mountains 71.28 48 P P 13 25 10.6 +0.7**
BMO pmax pmax
comp=Z,13nm,1.2s
**BMO Blue Mountains 71.28 48 P P 13 25 10.6 +0.7**
BMO IAmb IAmb 13 25 11.3
comp=Z,13nm,1.1s
**JTMT Jette 71.37 44 P P 13 25 11.1 +0.7**
JTMT IAmb IAmb 13 25 11.8
comp=Z,17nm,1.2s
**WSAR Wadi Sarin 71.46 285 LR LR** 14 00 15.8
comp=Z,275nm,20.7s,baz=94,slow=39
**MTSE Matsula 71.58 331** *eP* **P 13 25 11.7 +0.4**
**WVOR Wild Horse Val 71.83 50 P P 13 25 14.7 +1.4**
WVOR pmax pmax
comp=Z,14nm,1.9s
**MSO Missoula 72.09 44 P P 13 25 15.2 +0.4**
baz=306
**GNI Garni 72.11 307 LR LR** 14 00 35.8
comp=Z,590nm,18.3s,baz=70,slow=39
**GNI Garni 72.11 307|| *e*P P 13 25 17.1 +2.0**
GNI pmax pmax
comp=Z,16nm,0.9s
**IDID Didziasalis 72.65 327** *eP* **P 13 25 18.6 +0.8**
**IIGN Ignalina 72.85 328** *eP* **P 13 25 19.4 +0.4**
**NACGM Naroch 72.91 327** *i P* **P 13 25 19.8 +0.5**
**UPP Uppsala 73.05 334** *eP* **P 13 25 20.1 +0.1**
**SOC Sochi 73.25 312** *eP* **P 13 25 20.7 -0.8**
SOC *e* 13 28 06.2
SOC *e*PPP PPP 13 29 47.1
SOC *e*S **S 13 34 49.5 +0.6**
SOC *e*SS **SS 13 39 31.4 +1.6**
SOC *e*SSS SSS 13 42 46.9
SOC MLR MLR
comp=Z,549nm,20.0s
**LRM Limekiln Ridge 73.52 45 P P 13 25 23.9 +0.5**
**PABE Paberze 73.70 329** *eP* **P 13 25 24.3 +0.4**
**DLMT Dillon 73.71 45 P P 13 25 25.7 +1.3**
DLMT IAmb IAmb 13 25 26.3
comp=Z,15nm,1.0s
**HLID Hailey 73.73 47 P P 13 25 25.5 +0.9**
baz=306,SNR=9.9
**RYN Ryan 74.06 54 P P 13 25 27.1 +0.5**
RYN IAmb IAmb 13 25 28.2
comp=Z,20nm,1.3s
**BOZ Bozeman (W) 74.11 45 P P 13 25 27.3 +0.5**
baz=307,SNR=18
**HFS Hagfors 74.16 336 P P 13 25 26.6 0.0**
comp=Z,7.5nm,0.6s,baz=33,slow=3.5,SNR=22
HFS LR LR 14 00 47.3
comp=Z,1µm,18.5s,baz=40,slow=38
**NC204 NORSAR Array S 74.19 338 P P 13 25 27.3 +0.5**
**NB2 NORSAR Subarra 74.24 338 P P 13 25 26.8 -0.3**
comp=Z,89nm,2.0s,baz=38,slow=5.9
**NB2 NORSAR Subarra 74.24 338 P P 13 25 26.8 -0.3**
baz=38,slow=5.9
**NOA NORSAR Array B 74.24 338 P P 13 25 27.1 0.0**
comp=Z,4.0nm,0.7s,baz=39,slow=5.9,SNR=23
NOA LR LR 14 00 58.3
comp=Z,728nm,19.6s,baz=10.0,slow=38
**NVAR Mina Array Bea 74.31 54 P P 13 25 28.9 +0.7**
comp=Z,4.6nm,0.8s,baz=288,slow=5.8,SNR=37
**NVAR Mina Array Bea 74.31 54 P P 13 25 28.6 +0.4**
**VIKU Vikbolandet 74.37 334** *eP* **P 13 25 27.9 +0.1**
**AKASG Malin Array Be 74.53 323 P P 13 25 28.5 -0.4**
comp=Z,9.4nm,0.5s,baz=46,slow=6.0,SNR=72
AKASG LR LR 14 01 46.5
comp=Z,501nm,18.2s,baz=54,slow=39
**AKASG Malin Array Be 74.53 323 P P 13 25 28.1 -0.8**
**AKBB Malin Array Si 74.53 323** *|| i*P **P 13 25 28.3 -0.6**
AKBB pmax pmax
comp=Z,33nm,1.8s
**AKBB Malin Array Si 74.53 323 P P 13 25 28.5 -0.4**
AKBB IAmb IAmb 13 25 29.3
comp=Z,13nm,0.5s
**TPH Tonopah 75.21 53 P P 13 25 33.8 +0.4**
TPH pmax pmax
comp=Z,88nm,1.2s
**TPH Tonopah 75.21 53 P P 13 25 33.8 +0.4**
**VES Vestal, Richgr 75.30 56 P P 13 25 33.5 -0.1**
baz=306,SNR=5.9
**PKM Mcpherson Peak 75.36 57 P P 13 25 35.0 +0.7**
baz=305
**H17A Grant Village 75.44 45 P P 13 25 37.1 +2.5**
baz=308,SNR=7.7
**SFJD Kangerlussuaq 75.60 5 LR LR** 13 59 34.8
comp=Z,494nm,21.9s,baz=347,slow=36
**CWC Cottonwood Cre 75.61 55 P P 13 25 36.1 +0.5**
baz=306
**RLMT Red Lodge 75.72 44 P P 13 25 36.6 +0.5**
baz=309
**GRAC Grapevine Rang 75.75 54 P P 13 25 37.3 +1.0**
baz=306,SNR=6.2
**ISA Isabella, Lake 75.80 56 P P 13 25 36.7 0.0**
baz=306
**ARVC Arvin 75.88 57 P P 13 25 37.6 +0.6**
baz=306
**R11A Troy Canyon, C 76.09 52 P P 13 25 39.0 +0.6**
R11A IAmb IAmb 13 25 39.9
comp=Z,15nm,1.1s
**R11A Troy Canyon, C 76.09 52 P P 13 25 39.1 +0.6**
baz=307,SNR=13
**MPMC Manual Prospec 76.22 55 P P 13 25 39.7 +0.6**
baz=306,SNR=7.5
**LAO LASA Array 76.36 41 P P 13 25 39.8 +0.2**
baz=310
**FURC Furnace Creek, 76.39 55 P P 13 25 40.5 +0.6**
baz=306,SNR=7.3
**FRB Frobisher Bay 76.40 14 P P 13 25 39.6 +0.2**
FRB pmax pmax
comp=Z,30nm,1.0s
**LRMC Laurel Mtn Rad 76.44 56 P P 13 25 40.5 +0.2**
baz=306
**TPNV Topopah Spring 76.50 54 P P 13 25 41.2 +0.5**

baz=307,SNR=10
**EDW2 Edwards Air Fo 76.58 56** P **P** **13 25 41.8 +0.7**
baz=306,SNR=6.6
**DUG Dugway, Tooele 76.70 50** P **P** **13 25 42.9 +1.1**
DUG pmax pmax
comp=Z,19nm,1.5s
**DUG Dugway, Tooele 76.70 50** P **P** **13 25 42.8 +1.0**
baz=308,SNR=9.5
**DEL Delary 76.91 333** *e*P **P** **13 25 42.6 +0.2**
**BW06 Boulder Array 77.03 46** P **P** **13 25 44.1 +0.4**
**BW06 Boulder Array 77.03 46** P **P** **13 25 43.9 +0.2**
baz=309,SNR=5.6
**PD31 Pinedale Array 77.03 46** P **P** **13 25 44.1 +0.5**
**PDAR Pinedale Array 77.03 46** P **P** **13 25 43.8 +0.1**
comp=Z,4.1nm,0.7s,baz=274,slow=2.0,SNR=26
**GSC Goldstone, Bar 77.12 55** P **P** **13 25 44.5 +0.3**
baz=307
**CIS Catalina Islan 77.17 58** P **P** **13 25 45.1 +0.8**
baz=306
**SHPR Sheep Range 77.47 54** P **P** **13 25 46.8 +0.7**
SHPR IAmb IAmb 13 25 47.8
comp=Z,16nm,1.2s
**BORG Borgarnes 77.51 353** LR LR 14 00 55.8
comp=Z,173nm,19.1s,baz=7.1,slow=36
**BSD Bornholm Skovb 77.56 332** P **P** **13 25 46.3 +0.2**
BSD pmax pmax
comp=Z,22nm,0.8s
**BSD Bornholm Skovb 77.56 332** *e*P **P** **13 25 46.5 +0.5**
**LVV L'vov 77.59 324** *e*P **P** **13 25 46.2 -0.2**
LVV *e*S **S** **13 35 33.3 -3.6**
LVV pmax pmax
comp=Z,80nm,2.0s
LVV MLR MLR
comp=E,800nm,15.0s
LVV MLR MLR
comp=Z,2µm,15.0s
LVV MLR MLR
comp=N,1µm,16.0s
**TUQ Turquoise Moun 77.61 55** P **P** **13 25 47.7 +0.7**
baz=307,SNR=7.1
**BEL Belsk 77.62 327** *e*P **P** **13 25 47.2 +0.7**
**HEC Hector,Ludlow 77.71 56** P **P** **13 25 48.0 +0.6**
baz=307,SNR=7.7
**MURC Murrieta 77.87 57** P **P** **13 25 48.0 -0.3**
baz=307
**GMRC Granite Mounta 78.18 55** P **P** **13 25 50.4 +0.3**
baz=307,SNR=6.4
**KWP Kalwaria Pacla 78.34 325** *e*P **P** **13 25 51.5 +0.9**
**109C Camp Elliot, M 78.36 58** P **P** **13 25 51.2 +0.3**
baz=307
**PFO Pinyon Flats O 78.36 57** LR LR 13 53 37.5
comp=N,810nm,21.9s,baz=284,slow=30
**PFO Pinyon Flats O 78.36 57** P **P** **13 25 51.5 +0.4**
PFO pmax pmax
comp=Z,21nm,1.4s
**PFO Pinyon Flats O 78.36 57** P **P** **13 25 51.5 +0.4**
PFO IAmb IAmb 13 25 52.0
comp=Z,21nm,1.4s
**PFO Pinyon Flats O 78.36 57** P **P** **13 25 51.4 +0.3**
baz=307,SNR=5.3
**TPFO Pinon Flats 78.36 57** P **P** **13 25 51.1 0.0**
baz=307
**LCMT Little Creek M 78.38 52** P **P** **13 25 51.7 +0.5**
LCMT IAmb IAmb 13 25 53.0
comp=Z,16nm,1.1s
**BELC Belle Mtn. Jos 78.43 56** P **P** **13 25 51.3 -0.2**
baz=307
**BURAR Bucovina Array 78.55 322** ⇑P **P** **13 25 52.2 +0.3**
**BURAR Bucovina Array 78.55 322** ⇑P **P** **13 25 52.2 +0.3**
**BURAR Bucovina Array 78.55 322** P **P** **13 25 51.9 0.0**
**TESR Tescani 78.59 321** ⇑P **P** **13 25 52.3 +0.3**
**MONP2 Monument Peak 78.81 57** P **P** **13 25 54.2 +0.4**
baz=307
**K22A Casper 78.82 45** P **P** **13 25 53.5 -0.1**
baz=311
**IRM Iron Mountain 78.90 56** P **P** **13 25 54.6 +0.6**
baz=308,SNR=8.8
**MDND Maddock 78.93 37** P **P** **13 25 53.9 +0.1**
baz=314
**ULM Lac du Bonnet 78.94 34** P **P** **13 25 53.5 -0.4**
comp=Z,4.3nm,0.7s,baz=319,slow=5.5,SNR=5.4
ULM LR LR 14 01 38.8
comp=Z,187nm,20.6s,baz=328,slow=36
**VRI Vrincioaia 78.99 320** ⇓P **P** **13 25 55.7 +1.5**
**VRI Vrincioaia 78.99 320** ⇓P **P** **13 25 55.7 +1.5**
**BC3 Big Chuckawall 79.00 56** P **P** **13 25 55.1 +0.4**
baz=308,SNR=8.8
**IKP In-Ko-Pah, Jac 79.17 57** P **P** **13 25 55.8 +0.3**
baz=307
**SWSC Sam W. Stewart 79.20 57** P **P** **13 25 55.5 -0.1**
baz=308
**BRTR Keskin Array B 79.20 312** P **P** **13 25 55.8 +0.1**
comp=Z,1.5nm,0.9s,baz=128,slow=8.0,SNR=4.3
BRTR LR LR 14 05 38.1
comp=Z,446nm,18.3s,baz=48,slow=39
**RSSD Black Hills 79.21 42** P **P** **13 25 55.8 +0.1**
RSSD pmax pmax
comp=Z,12nm,1.3s
**RSSD Black Hills 79.21 42** P **P** **13 25 55.5 -0.3**
baz=312
**OJC Ojcow 79.23 327** *e*P **P** **13 25 55.7 +0.3**
**OJC Ojcow 79.23 327** P **P** **13 25 55.9 +0.5**
OJC pmax pmax
comp=Z,22nm,1.6s
**UZH Uzhgorod 79.24 324** *e*P **P** **13 25 54.0 -1.5**
UZH *e* 13 26 02.0
UZH *i* 13 26 06.2
**OZUR 79.31 321** ⇑P **P** **13 25 57.1 +1.1**
**O20A White River Ci 79.47 47** P **P** **13 25 57.1 -0.1**
baz=310
**PDMCI Parker Dam,Lak 79.47 55** P **P** **13 25 57.6 +0.7**
baz=308,SNR=6.8
**TRPA Tarpa 79.48 324** ⇑P **P** **13 25 57.5 +0.7**
**BLYC Blythe 79.55 56** P **P** **13 25 58.3 +0.8**
BLYC IAmb IAmb 13 25 58.9
comp=Z,26nm,1.4s
**NIE Niedzica 79.59 326** *e*P **P** **13 25 58.9 +1.4**
**DOPR Dopca 79.60 321** ⇓P **P** **13 25 59.2 +1.6**
**MLR Muntele Rosu 79.65 320** LR LR 14 04 36.4
comp=Z,850nm,18.0s,baz=44,slow=38
**RAR Rarotonga 79.75 126** LR LR 13 54 22.0
comp=Z,467nm,19.8s,baz=254,slow=30
**GLA Glamis 79.78 56** P **P** **13 25 59.6 +0.7**
baz=308,SNR=5.1
**PV10 Paradox Valley 80.12 49** P **P** **13 26 02.4 +1.5**
**VOIR 80.14 321** ⇓P **P** **13 26 01.6 +1.0**
**VOIR 80.14 321** ⇓P **P** **13 26 01.6 +1.0**
**LANS Liptovska Anna 80.16 326** *e*P **P** **13 26 02.8 +2.3**
LANS pmax pmax
comp=Z,6.0nm,0.8s
**LANS Liptovska Anna 80.16 326** *e*P **P** **13 26 02.8 +2.3**
**BSEG Bad Segeberg 80.16 333** *e*P **P** **13 26 01.0 +0.7**
comp=Z,5.8nm,0.8s,baz=37,slow=5.1
**KSP Ksiaz 80.26 329** *e*P **P** **13 26 01.3 +0.3**
**KSP Ksiaz 80.26 329** P **P** **13 26 01.6 +0.6**
KSP pmax pmax
comp=Z,12nm,1.6s
**N23A Red Feather La 80.30 46** P **P** **13 26 02.4 +0.6**
baz=311
**DRGR 80.35 323** ⇑P **P** **13 26 02.1 +0.4**
**DRGR 80.35 323** ⇑P **P** **13 26 02.1 +0.4**
**AGMN Agassiz Nation 80.37 35** P **P** **13 26 01.1 -0.6**
baz=317
**ARR Arges 80.40 321** ⇓P **P** **13 26 03.1 +1.2**
**Y14A Wickenburg 80.43 55** P **P** **13 26 03.6 +1.2**
Y14A IAmb IAmb 13 26 03.6
comp=Z,18nm,1.2s
**WUAZ Wupatki 80.49 53** P **P** **13 26 03.4 +0.7**
baz=309,SNR=9.3
**MORC Moravsky Berou 80.54 327** ⇑P **P** **13 26 03.3 +0.7**
**MORC Moravsky Berou 80.54 327** ⇑P **P** **13 26 03.3 +0.7**
**MORC Moravsky Berou 80.54 327** *e*P **P** **13 26 02.5 -0.1**
**CHVC Chvalec 80.56 329** *e*P **P** **13 26 03.0 +0.4**
**DPC Dobruska-Polom 80.62 328** *e*P **P** **13 26 03.8 +0.8**
DPC *e* 13 26 11.3
**DPC Dobruska-Polom 80.62 328** *e*P **P** **13 26 03.8 +0.8**
DPC *ep*P **sP** **13 26 11.3 +0.7**
**UPC Upice 80.63 329** P **P** **13 26 03.7 +0.7**
UPC pmax pmax
comp=Z,10.0nm,1.6s
**KRLC Kraliky 80.64 328** *e*P **P** **13 26 03.5 +0.4**
KRLC *e* 13 26 10.8
**KRLC Kraliky 80.64 328** *e*P **P** **13 26 03.5 +0.4**
KRLC *ep*P **sP** **13 26 10.8 +0.1**
**PSZ Piszkesteto 80.86 325** ⇑P **P** **13 26 05.4 +1.0**
**PSZ Piszkesteto 80.86 325** ⇑P **P** **13 26 05.4 +1.0**
**VYHS Vyhne 80.92 326** *e*P P 13 26 09.7 +5.1
VYHS pmax pmax
comp=Z,12nm,1.2s
**VYHS Vyhne 80.92 326** *e*P P 13 26 09.7 +5.1
**FLTG Flechtingen 81.11 332** *e*P **P** **13 26 05.6 +0.1**
comp=Z,9.9nm,0.7s,baz=37,slow=5.1
**JAVC Velka Javorina 81.17 327** *e*P **P** **13 26 07.1 +1.1**
**MVCO Mesa Verde 81.20 50** P **P** **13 26 07.1 +0.5**
baz=310,SNR=9.0
**BRG Berggiesshubel 81.20 330** *e*P **P** **13 26 06.4 +0.4**
BRG Amp 13 26 08.4
comp=Z,16nm,1.3s
BRG *ex* x 13 26 14.0
BRG Amp 13 26 16.4
comp=Z,5.7nm,0.9s
BRG Amp 14 05 48.0
comp=Z,1.3nm,12.4s
BRG Amp 14 05 49.0
comp=E,0.7nm,16.8s
BRG Amp 14 05 52.0
comp=N,0.7nm,16.8s
**BRG Berggiesshubel 81.20 330** *e*P **P** **13 26 06.4 +0.4**
BRG *e* 13 26 14.0
BRG pmax pmax
comp=Z,16nm,1.3s
BRG MLR MLR
comp=Z,1µm,12.4s
BRG MLR MLR
comp=E,720nm,16.8s
BRG MLR MLR
comp=N,730nm,16.8s
**BRG Berggiesshubel 81.20 330** *e*P **P** **13 26 06.5 +0.4**
comp=N,3.6nm,0.8s,baz=37,slow=5.1
**ISCO Idaho Springs 81.21 46** P **P** **13 26 07.6 +0.9**
**ISCO Idaho Springs 81.21 46** P **P** **13 26 07.0 +0.3**
baz=312
**PVCC Panska Ves 81.21 329** P **P** **13 26 06.9 +0.8**
PVCC pmax pmax
comp=Z,24nm,0.8s
**CLL Collm 81.23 331** *i* P **P** **13 26 05.8 -0.4**
comp=Z,11nm,0.8s
CLL *i* pP **PcP** **13 26 12.8 +0.4**
CLL *es*P **sP** **13 26 15.0 +1.3**
CLL *ex* x 13 29 18.0
CLL *e*S **S** **13 36 13.0 -2.4**
CLL LmH 13 59 00.0
comp=N,500nm,18.4s
CLL LmH 13 59 00.0
comp=E,800nm,19.1s
CLL LmV 14 03 00.0
comp=N,600nm,20.5s
CLL LmV 14 03 00.0
comp=E,700nm,18.7s
CLL LmV 14 03 00.0
comp=Z,600nm,21.1s
**CLL Collm 81.23 331** *e*P **P** **13 26 06.5 +0.3**
comp=Z,5.8nm,0.7s,baz=37,slow=5.1
**VRAC Vranov 81.30 327** ⇓P **P** **13 26 07.6 +1.0**
**VRAC Vranov 81.30 327** P **P** **13 26 07.1 +0.5**
comp=Z,4.1nm,0.6s,baz=43,slow=4.2,SNR=6.7
**VRAC Vranov 81.30 327** *e*P **P** **13 26 06.9 +0.3**
**GZR Gura Zlata 81.31 322** ⇑P **P** **13 26 07.0 +0.2**
**GZR Gura Zlata 81.31 322** ⇑P **P** **13 26 07.0 +0.2**
**FBE Freiberg 81.40 330** *e*P **P** **13 26 07.9 +0.8**
comp=Z,6.2nm,0.7s,baz=37,slow=5.1
**SMOL Smolenice 81.53 327** *e*P **P** **13 26 08.9 +1.0**
SMOL pmax pmax
comp=Z,9.0nm,1.3s
**SMOL Smolenice 81.53 327** *e*P **P** **13 26 08.9 +1.0**
**KRUC Moravsky 81.57 327** P **P** **13 26 08.4 +0.4**
KRUC pmax pmax
comp=Z,16nm,0.8s
**KRUC Moravsky 81.57 327** *e*P **P** **13 26 07.9 -0.1**
**PRU Pruhonice 81.64 329** *e*P **P** **13 26 09.0 +0.6**
**PRU Pruhonice 81.64 329** *e*P **P** **13 26 09.0 +0.6**
**MODS Modra-Piesok 81.70 326** *e*P **P** **13 26 12.7 +3.9**
**MODS Modra-Piesok 81.70 326** *e*P **P** **13 26 12.7 +3.9**
**BZS Buzias 81.72 322** ⇑P **P** **13 26 09.1 +0.2**
**BZS Buzias 81.72 322** ⇑P **P** **13 26 09.1 +0.2**
**URZ Urewera 81.74 153** LR LR 13 58 06.6
comp=Z,310nm,19.9s,baz=350,slow=32
**W18A Petrified Fore 81.78 52** P **P** **13 26 10.3 +0.6**
baz=310
**214A Organ Pipe Nat 81.79 56** P **P** **13 26 10.1 +0.5**
baz=309,SNR=6.3
**CLZ Clausthal 81.82 332** *e*P **P** **13 26 09.9 +0.6**
comp=Z,5.8nm,0.8s,baz=37,slow=5.1
**HERR Herculane 81.85 321** ⇓P **P** **13 26 10.2 +0.6**
**S22A 4UR Ranch, Cre 81.85 48** P **P** **13 26 11.2 +1.0**
baz=311,SNR=9.5
**GTTG Gottingen 82.21 332** *e*P **P** **13 26 11.9 +0.6**
comp=Z,5.7nm,0.9s,baz=37,slow=5.1
**WERN Wernitzgruen 82.28 330** *e*P **P** **13 26 12.3 +0.5**
comp=Z,4.3nm,0.8s,baz=37,slow=5.1
**MOX Moxa 82.30 331** P **P** **13 26 12.4 +0.5**
MOX pmax pmax
comp=Z,8.0nm,2.5s
**MOX Moxa 82.30 331** *e*P **P** **13 26 12.2 +0.4**
comp=Z,3.2nm,0.7s,baz=37,slow=5.1
MOX *e*L L 14 05 01.9
comp=Z,356nm,21.7s
**MMAI Mount Meron Ar 82.38 306** P **P** **13 26 13.1 +0.4**
comp=Z,1.0nm,0.5s,baz=35,slow=11,SNR=1.5
MMAI LR 14 07 04.6
comp=Z,451nm,18.7s,baz=210,slow=39
**EYMN Ely 82.58 33** P **P** **13 26 13.2 -0.2**
baz=320
**MANZ Manzenberg 82.63 330** *e*P **P** **13 26 14.2 +0.6**
comp=Z,0.9nm,0.7s,baz=37,slow=5.1
**CKRC Cesky Krumlov 82.64 328** *e*P **P** **13 26 13.9 +0.2**
**SDCO Great Sand Dun 82.64 48** P **P** **13 26 15.0 +0.7**
**SDCO Great Sand Dun 82.64 48** P **P** **13 26 14.6 +0.4**
baz=312,SNR=6.8
**CONA Conrad Observa 82.66 327** *e*P **P** **13 26 14.1 +0.2**
comp=Z,20nm,1.7s
**MORH Mrgy, Hungar 82.70 324** ⇓P **P** **13 26 15.0 +1.0**
**KHC Kasperske Hory 82.70 329** *i* P **P** **13 26 14.2 +0.2**
KHC pmax pmax
comp=Z,57nm,2.0s
**KHC Kasperske Hory 82.70 329** *e*P **P** **13 26 14.3 +0.2**
KHC *ex* x 13 26 21.3
**ROTZ Rotzenmuhle 82.76 330** *e*P **P** **13 26 15.0 +0.7**
comp=Z,0.9nm,0.7s,baz=37,slow=5.1
**GEC2 GERESS Array S 82.87 329** P **P** **13 26 14.6 -0.4**
**GEC2 GERESS Array S 82.87 329** *e*P **P** **13 26 15.1 0.0**
comp=Z,3.5nm,0.7s,baz=37,slow=5.1
**GERES GERESS Array B 82.87 329** P **P** **13 26 15.0 0.0**
comp=Z,3.5nm,0.7s,baz=33,slow=5.4,SNR=26
**GERES GERESS Array B 82.87 329** P **P** **13 26 14.6 -0.4**
**TUC Tucson 82.90 55** P **P** **13 26 16.1 +0.7**
TUC pmax pmax
comp=Z,8.0nm,1.9s
**TUC Tucson 82.90 55** P **P** **13 26 15.7 +0.3**
baz=310
**WET Wettzell 82.98 329** P **P** **13 26 15.7 +0.2**
WET pmax pmax
comp=Z,9.0nm,1.7s
**KASTN Kahler Asten 83.06 333** *e*P **P** **13 26 16.0 +0.2**
comp=Z,2.9nm,0.8s,baz=37,slow=5.1
**EKA Eskdalemuir Ar 83.14 341** P **P** **13 26 18.2 +2.1**
**GRF Grafenberg Arr 83.21 330** *e*L L 14 07 48.4
comp=Z,404nm,20.1s
**ECSD EROS Data Cent 83.32 39** P **P** **13 26 17.0 -0.3**
baz=317
**ARSA Arzberg 83.33 327** *e*P **P** **13 26 17.5 +0.3**
comp=Z,6.6nm,1.4s
**MOA Molln 83.41 328** *e*P **P** **13 26 18.1 +0.4**
comp=Z,14nm,1.4s
**PMOR Pomariorio Ree 83.65 114** *e*T T 14 58 18.9
comp=Z,11nm,0.2s
**T25A Trinidad 83.69 48** P **P** **13 26 20.0 +0.4**
baz=313,SNR=5.8
**ANMO Albuquerque 83.93 50** LR LR 13 57 30.0
comp=Z,197nm,21.8s,baz=328,slow=31
**ANMO Albuquerque 83.93 50** *di* P **P** **13 26 21.4 +0.6**
ANMO pmax pmax
comp=Z,22nm,1.4s
**ANMO Albuquerque 83.93 50** P **P** **13 26 21.4 +0.6**
ANMO IAmb IAmb 13 26 23.2
comp=Z,24nm,1.4s
**ANMO Albuquerque 83.93 50** P **P** **13 26 21.5 +0.7**
baz=312
**GROS Grobnik 83.94 326** *i* P **P** **13 26 20.1 -0.4**
**PERS Pernice 83.98 326** *e*P **P** **13 26 20.3 -0.3**
**SOKA Soboth 83.98 327** *e*P **P** **13 26 20.9 +0.2**
comp=Z,26nm,1.5s
**SPMN Marine on St. 84.06 36** P **P** **13 26 20.5 -0.5**
baz=319
**PPT Papeete 84.13 117** LR LR 13 58 25.8
comp=Z,427nm,19.7s,baz=330,slow=32
**PPT2 Papeete2 84.15 117** *e*S **S** **13 36 50.9 +4.8**
comp=Z,82nm,23.2s
**PPT2 Papeete2 84.15 117** *e*LR LR 13 52 46.0
comp=Z,601nm,23.2s,baz=304
**BGNE Belgrade 84.21 41** P **P** **13 26 21.6 -0.3**
baz=316
**BNM Barren Site 84.35 51** P **P** **13 26 23.5 +0.5**
**KBA Koelnbreinsper 84.40 328** *e*P **P** **13 26 22.8 -0.2**
comp=Z,8.8nm,1.0s
**KBA Koelnbreinsper 84.40 328** P **P** **13 26 24.0 +1.0**
KBA pmax pmax
comp=Z,10.0nm,1.9s
**MYKA Terra Mystica 84.62 327** *e*P **P** **13 26 23.7 -0.3**
comp=Z,6.5nm,0.8s
**121A Cookes Peak, D 84.69 53** P **P** **13 26 24.9 +0.2**
baz=311,SNR=7.3
**RPZ Rata Peaks 84.73 159** LR LR 14 01 53.8
comp=Z,207nm,19.2s,baz=320,slow=34
**BCLA Clavier 84.82 334** *d*P **P** **13 26 24.8 0.0**
**EIL Elat 84.82 303** P **P** **13 26 25.8 +0.6**
comp=Z,2.3nm,0.7s,baz=146,slow=3.1,SNR=3.6
EIL LR LR 14 09 36.8
comp=Z,448nm,18.2s,baz=49,slow=40
**BGES Gesves 84.92 334** *d*P **P** **13 26 24.6 -0.6**
**SCHQ Schefferville 84.94 16** P **P** **13 26 25.6 +0.3**
comp=Z,3.3nm,0.6s,baz=332,slow=4.5,SNR=12
SCHQ LR LR 14 05 51.2
comp=Z,358nm,21.4s,baz=314,slow=37
**SCHQ Schefferville 84.94 16** P **P** **13 26 26.0 +0.7**
**WATA Walderalm 84.94 329** *e*P **P** **13 26 25.6 0.0**
comp=Z,6.6nm,1.0s
**WTTA Wattenberg 84.97 329** *i* P **P** **13 26 25.6 -0.2**
comp=Z,7.3nm,1.0s
**ABTA Abfaltersbach 85.02 328** *e*P **P** **13 26 26.7 +0.7**
comp=Z,12nm,1.7s
**RCHB Rochefort 85.06 334** *d*P **P** **13 26 25.9 -0.1**
**BMRD Maredsous 85.10 334** *d*P **P** **13 26 26.0 -0.2**
**MOTA Moosalm 85.13 329** *e*P **P** **13 26 26.6 0.0**
comp=Z,14nm,1.3s
**RETA Reutte 85.15 329** *i* P **P** **13 26 27.0 +0.3**
comp=Z,24nm,1.6s
**DOU Dourbes 85.33 334** *d*P **P** **13 26 27.1 -0.3**
**BFO Black Forest 85.44 331** P **P** **13 26 27.7 -0.3**
BFO pmax pmax
comp=Z,11nm,0.9s
**BFO Black Forest 85.44 331** P **P** **13 26 27.7 -0.3**
BFO IAmb IAmb 13 26 37.3
comp=Z,11nm,0.9s
**BFO Black Forest 85.44 331** *e*P **P** **13 26 28.1 +0.1**
comp=Z,7.8nm,0.8s,baz=37,slow=5.1
**FETA Feichten 85.54 329** *e*P **P** **13 26 28.7 0.0**
comp=Z,12nm,1.2s
**TAOE Nuku Hiva Isla 85.57 105** *e*S **S** **13 37 02.0 +1.5**
comp=Z,106nm,26.1s
**TAOE Nuku Hiva Isla 85.57 105** *e*LR LR 13 53 29.6
comp=Z,928nm,23.1s
**DAVA Damuels 85.67 330** *e*P **P** **13 26 29.5 +0.1**
comp=Z,9.6nm,0.7s
**MNTX Cornudas Mount 86.76 52** P **P** **13 26 35.6 +0.8**
**MNTX Cornudas Mount 86.76 52** P **P** **13 26 35.2 +0.4**
baz=312,SNR=5.4
**AMTX Amarillo 86.85 48** P **P** **13 26 35.6 +0.3**
baz=314
**LPIG La Paz 88.49 61** LR LR 14 01 46.6
comp=Z,208nm,19.1s,baz=324,slow=32
**WMOK Wichita Mounta 88.64 46** P **P** **13 26 43.7 -0.1**
WMOK pmax pmax
comp=Z,5.0nm,1.6s
**WMOK Wichita Mounta 88.64 46** P **P** **13 26 43.9 +0.1**
baz=316
**TX31 Lajitas Ar. Si 89.45 53** P **P** **13 26 47.7 -0.1**
**TXAR Lajitas Array 89.45 53** P **P** **13 26 47.7 0.0**
comp=Z,2.5nm,0.8s,baz=296,slow=3.0,SNR=20
TXAR LR LR 14 00 22.6
comp=Z,354nm,21.9s,baz=313,slow=31
**SADO Sadowa 90.19 28** LR LR 14 12 15.4
comp=Z,149nm,19.1s,baz=336,slow=39
**CCM Cathedral Cave 90.26 39** P **P** **13 26 51.0 -0.2**
baz=320
**SFIN Lafayette 90.46 35** P **P** **13 26 51.7 -0.5**
baz=323
**ATD Arta Tunnel 90.47 285** LR LR 14 11 50.6
comp=Z,220nm,19.3s,baz=60,slow=38
**U40A Yellville 90.72 41** P **P** **13 26 53.1 -0.4**
baz=319
**WHTX Lake Whitney, 91.38 47** P **P** **13 26 56.5 -0.1**
baz=317
**O48B Farmland 91.44 34** P **P** **13 26 56.4 -0.3**
baz=324
**MIAR Mount Ida 91.70 43** P **P** **13 26 57.9 -0.1**
baz=319
**X40A Basin Creek Fa 92.14 43** P **P** **13 27 00.1 0.0**
baz=319
**TZTN Tazewell 95.19 35** P **P** **13 27 14.2 +0.2**
baz=325
**KEST Kesra 95.25 323** LR LR 14 16 40.7
comp=Z,216nm,18.1s,baz=330,slow=40
**TKL Tuckaleechee C 95.81 36** LR LR 14 13 34.6
comp=Z,127nm,20.1s,baz=332,slow=37
**LRAL Lakeview Retre 96.34 40** P **P** **13 27 18.8 -0.5**
baz=323
**ESDC Sonseca Array 97.38 334** LR LR 14 16 34.4
comp=Z,551nm,18.6s,baz=8.5,slow=39
**TORD Torodi Ar. Bea 117.65 316** PP PP 13 33 49.4 +0.6
comp=Z,0.9nm,0.9s,baz=22,slow=8.0,SNR=2.5
**SDV Santo Domingo 124.72 41** *e*P **PKPdf** **13 32 51.1 +0.2**
**SYO Syowa Base 128.71 207** ⇓*e*Pdiff **Pdif** **13 29 46.1 +3.8**
**PB12 IPOC Station P 145.98 66** PKPdf **PKPdf** **13 33 30.1 +0.2**
**LPAZ La Paz 146.00 60** PKPbc **PKPdf** **13 33 30.9 +0.3**
comp=Z,17nm,0.9s,baz=353,slow=5.3,SNR=32
**LPAZ La Paz 146.00 60** PKP2 **PKPdf** **13 33 30.7 +0.1**
**LPAZ La Paz 146.00 60** **PKPdf** **13 33 30.7 +0.1**
**LPAZ La Paz 146.00 60** *e*P **PKPdf** **13 33 31.0 +0.3**
**PB16 IPOC Station P 146.39 65** **PKPdf** **13 33 31.6 +0.4**
**NBPS Pedro II - PI 147.12 7** *e*P **PKPbc** **13 33 33.8 -0.3**
**PRPB Parauapebas 147.16 23** *e*P **PKPbc** **13 33 33.5 -0.6**
**PB11 IPOC Station P 147.19 67** **PKPdf** **13 33 31.7 -0.3**
**PMSA Palmer Station 148.34 159** *e*P **PKPdf** **13 33 33.8 +1.6**
**NBPB Pedra_Branca-C 148.39 3** *e*P **PKPdf** **13 33 33.9 -0.1**
**VILB Vilhena 148.55 46** *e*P **PKPdf** **13 33 35.6 +1.4**
**PDRB Porto dos Gac 149.29 39** *e*P **PKPdf** **13 33 36.4 +1.0**
**LVC Limon Verde 149.46 70** *e*P **PKPdf** **13 33 37.9 +2.0**
**NBLV Livramento - P 150.23 358** *e*P **PKPdf** **13 33 38.5 +1.5**
**PTLB Pontes e Lacer 151.16 47** *e*P **PKPdf** **13 33 39.7 +1.5**
**LC01 Cunco 153.17 104** **PKPbc** **13 33 46.7 -1.3**
LC01 PKPab **PKPab** **13 34 01.1 +1.2**
**PLCA Paso Flores 154.35 108** PKPab **PKPab** **13 34 05.2 +0.3**
comp=Z,5.8nm,1.1s,baz=259,slow=5.1,SNR=6.6
**PLCA Paso Flores 154.35 108** PKPdf **PKPdf** **13 33 41.8 -0.6**
PLCA **PKPab** **13 34 06.0 +1.1**
**PLCA Paso Flores 154.35 108** *e*P **PKPdf** **13 33 44.9 +2.6**
**CPUP Villa Florida 160.14 62** PKPab **PKPab** **13 34 30.1 0.0**
comp=Z,0.9nm,0.3s,baz=268,slow=5.0,SNR=4.1
**CPUP Villa Florida 160.14 62** PKP2 **PKPab** **13 34 29.2 -0.9**
CPUP 14 33 48.7
**CPUP Villa Florida 160.14 62** PKPdf **PKPdf** **13 33 48.7 -1.2**
CPUP **PKPab** **13 34 29.2 -0.9**

*TUL* ***19*** *13:18:32.9±1.1, 36°.53N±0°.02×98°.68W±0°.03, h5km±5km, ML3.1,mb_Lg2.7/34(NEIC), Error ellipse: s-maj=3.7km s-min=2.1km az=102.0*

**NEIC 19 13:18:33.2±1.1, 36°.53N±0°.01×98°.67W±0°.02, h5km±1km, Error ellipse: s-maj=3.5km s-min=2.7km az=271.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.30** | **241** | Pg | Pg | 13 18 38.9 | -0.2 |
| U32A | | | | Sg | Sg | 13 18 43.5 | +0.4 |
| **OKCFA** | **Oklahoma City** | **1.49** | **138** | Pn | Pn | 13 18 60.0 | -0.7 |
| **FNO** | **Franklin** | **1.64** | **140** | Pn | Pn | 13 19 02.6 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.78** | **77** | | Pn | 13 19 05.1 | +0.5 |
| **WMOK** | **Wichita Mounta** | **1.79** | **183** | | Pn | 13 19 04.3 | -0.5 |
| **R32A** | **Long Quarter,** | **1.89** | **359** | | Pn | 13 19 07.1 | +0.9 |
| **W35A** | **Tecumseh** | **2.00** | **133** | Pn | Pn | 13 19 08.2 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.04** | **160** | Pn | Pn | 13 19 09.3 | +1.1 |
| **TUL1** | **Leonard** | **2.41** | **104** | | Pn | 13 19 13.7 | +0.4 |
| TUL1 | | | | IAmb_Lg | | 13 19 49.9 | |

comp=Z,27nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CBKS** | **Cedar Bluff** | **2.43** | **340** | | Pn | | 13 19 13.2 | -0.4 |
| **AMTX** | **Amarillo** | **2.95** | **237** | IAmb_Lg | | | 13 20 13.4 | |
| | comp=Z,28nm,0.7s | | | | | | | |
| **X37A** | **Clayton** | **3.31** | **125** | | Pn | | 13 19 25.6 | -0.1 |
| **U38A** | **Gravette** | **3.46** | **90** | | Pn | | 13 19 29.0 | +1.3 |
| **HHAR** | **Hobbs** | **3.83** | **92** | | Pn | | 13 19 33.4 | +0.7 |
| **W39A** | **Magazine** | **4.19** | **107** | Pn | Pn | | 13 19 38.8 | +1.0 |
| W39A | | | | IAmb_Lg | | | 13 20 47.9 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **MSTX** | **Muleshoe** | **4.22** | **234** | IAmb_Lg | | | 13 20 54.4 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **4.43** | **73** | | Pn | | 13 19 41.0 | -0.1 |
| S39A | | | | IAmb_Lg | | | 13 20 52.4 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.60** | **114** | | Pn | | 13 19 44.2 | +0.8 |
| **T25A** | **Trinidad** | **4.64** | **279** | Pn | Pn | | 13 19 43.3 | -0.9 |
| T25A | | | | IAmb_Lg | | | 13 21 06.8 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **U40A** | **Yellville** | **4.69** | **90** | Pn | Pn | | 13 19 44.5 | -0.2 |
| U40A | | | | IAmb_Lg | | | 13 21 12.4 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **P38A** | **Dawn** | **5.10** | **51** | IAmb_Lg | | | 13 21 23.7 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **MGMO** | **Mountain Grove** | **5.17** | **81** | | Pn | | 13 19 51.4 | +0.1 |
| MGMO | | | | IAmb_Lg | | | 13 21 18.6 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.18** | **111** | Pn | Pn | | 13 19 53.2 | +1.9 |
| **WHAR** | **Wooly Hollow** | **5.33** | **102** | | Pn | | 13 19 53.6 | +0.3 |
| WHAR | | | | IAmb_Lg | | | 13 21 30.3 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.33** | **95** | Pn | Pn | | 13 19 51.4 | -2.1 |
| **W41B** | **Gary Mavity, V** | **5.39** | **103** | Pn | Pn | | 13 19 55.4 | +1.1 |
| **R40A** | **Maddies Statio** | **5.39** | **69** | Pn | Pn | | 13 19 53.2 | -1.1 |
| R40A | | | | IAmb_Lg | | | 13 21 26.9 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.59** | **285** | Pn | Pn | | 13 19 57.8 | +0.5 |
| **Q24A** | **Divide** | **5.68** | **297** | Pn | Pn | | 13 19 58.0 | -0.6 |
| Q24A | | | | IAmb_Lg | | | 13 21 38.3 | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **6.03** | **58** | Pn | Pn | | 13 20 04.5 | +1.5 |
| **K31A** | **O'Neill** | **6.09** | **359** | IAmb_Lg | | | 13 21 57.2 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **LCAR** | **Lake Charles** | **6.09** | **92** | Pn | Pn | | 13 20 02.8 | -1.0 |
| **JCT** | **Junction City** | **6.11** | **189** | IAmb_Lg | | | 13 22 02.2 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **6.12** | **73** | Pn | Pn | | 13 20 04.2 | 0.0 |
| CCM | | | | IAmb_Lg | | | 13 21 53.8 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.37** | **303** | Pn | Pn | | 13 20 07.5 | -0.5 |
| ISCO | | | | IAmb_Lg | | | 13 21 57.8 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **6.53** | **258** | Pn | Pn | | 13 20 10.9 | +0.9 |
| **FVM** | **French Village** | **6.74** | **75** | IAmb_Lg | | | 13 22 08.9 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.12** | **314** | IAmb_Lg | | | 13 22 18.7 | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **N23A** | **Red Feather La** | **7.16** | **310** | Pn | Pn | | 13 20 18.8 | -0.1 |

**IDC 19 13:19:35.8±999.0, 50.06N×55.62E, h0km, Error ellipse: s-maj=1229.0km s-min=33.4km az=76.0, Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **1.59** | **76** | *i* | | 13 28 30.0 | |
| | baz=258,slow=342,SNR=3.6 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.33** | **67** | *i* | | 15 16 20.0 | |
| | baz=273,slow=321,SNR=1.1 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **32.93** | **74** | *i* | | 16 42 40.0 | |
| | baz=297,slow=334,SNR=0.7 | | | | | | |

*GII **19** 13:37:50.5±0.0, 36.58N×36.19E, h8km, MD2.9/2*
*ISK **19** 13:37:56.1, 35.81N×36.93E, h5km, ML3.1/14*
*GRAL **19** 13:37:57.9±0.5, 35.96N×36.83E, h0km±999km, MD3.2*
*DDA **19** 13:37:58.8±0.0, 35.87N×36.94E, h36km±1km, ML3.1*
**ISC 19 13:37:57.6±1.4, 35.88N±0.03×36.92E±0.05, h5km±12km, n37, σ1°33/54, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YAYL** | **Yayladag** | **0.68** | **283** | PG | **Pg** | **13 38 10.2** | **-0.5** |
| **TAHT** | **Tahtakopru-Hat** | **0.78** | **310** | PG | **Pb** | **13 38 12.5** | **-1.1** |
| TAHT | | | | SG | **Sb** | **13 38 24.4** | **0.0** |
| **KAMA** | **Osmaniye** | **1.32** | **351** | P | **Pg** | **13 38 24.1** | **+1.1** |
| KAMA | | | | S | **Sn** | **13 38 41.9** | **+1.1** |
| KAMA | | | | *i* AML | AML | 13 38 45.0 | |
| | comp=E,191nm,0.4s | | | | | | |
| **YURE** | **YUREGIR** | **1.41** | **313** | P | **Pg** | **13 38 24.7** | **+0.1** |
| YURE | | | | S | **Sg** | **13 38 45.2** | **+2.4** |
| **KRTD** | **Karatas-Adana** | **1.41** | **301** | PN | **Pb** | **13 38 23.7** | **-0.7** |
| **CEYT** | **Ceyhan** | **1.47** | **320** | PN | **Pb** | **13 38 24.8** | **-0.7** |
| CEYT | | | | SN | **Sg** | **13 38 45.8** | **+0.8** |
| **KHMN** | **Narli-Kahraman** | **1.52** | **7** | PN | **Pg** | **13 38 25.6** | **-1.2** |
| **GZT** | **Gaziantep** | **1.56** | **19** | P | **Pg** | **13 38 26.9** | **-0.6** |
| GZT | | | | S | **Sg** | **13 38 50.1** | **+2.2** |
| GZT | | | | *i* AML | AML | 13 38 52.0 | |
| | comp=N,293nm,0.2s | | | | | | |
| **KAHM** | **Kahramanmaras,** | **1.63** | **2** | P | **Pg** | **13 38 28.2** | **-0.8** |
| KAHM | | | | S | **Sg** | **13 38 52.1** | **+1.9** |
| **HWQ** | **Hawqa** | **1.79** | **207** | *e*P | **Pn** | **13 38 29.0** | **-0.3** |
| HWQ | | | | *e*S | **Sn** | **13 38 52.4** | **0.0** |
| **KOZT** | **Kozan** | **1.82** | **331** | PN | **Pb** | **13 38 29.8** | **-1.7** |
| **AKO** | **Adana** | **1.97** | **324** | P | **Pb** | **13 38 32.4** | **-1.7** |
| AKO | | | | S | **Sb** | **13 38 58.1** | **-0.9** |
| **KARA** | **Karaisali** | **2.04** | **313** | PN | **Pn** | **13 38 32.8** | **+0.2** |
| **MERS** | **Mersin** | **2.17** | **298** | PN | **Pn** | **13 38 34.5** | **0.0** |
| **SAIM** | **ADANA** | **2.20** | **342** | P | **Pb** | **13 38 36.1** | **-1.8** |
| SAIM | | | | S | **Sb** | **13 39 04.2** | **-1.3** |
| SAIM | | | | *i* AML | AML | 13 39 06.0 | |
| | comp=E,98nm,0.4s | | | | | | |
| **GULE** | **Gulek** | **2.22** | **310** | P | **Pn** | **13 38 35.9** | **+0.6** |
| GULE | | | | S | **Sb** | **13 39 04.2** | **-2.1** |
| GULE | | | | *i* AML | AML | 13 39 12.0 | |
| | comp=E,151nm,0.5s | | | | | | |
| **BHL** | **Bhannes** | **2.23** | **208** | *e*P | **Pn** | **13 38 35.4** | **+0.1** |
| BHL | | | | *e*S | **Sn** | **13 39 03.3** | **0.0** |
| **EREN** | **Erenkoy** | **2.27** | **262** | PN | **Pn** | **13 38 35.2** | **-0.5** |
| **KIZK** | **Mersin** | **2.33** | **286** | PN | **Pn** | **13 38 36.5** | **-0.1** |
| **CMRD** | **Camardi-Nigde** | **2.36** | **319** | PN | **Pn** | **13 38 37.6** | **+0.5** |
| **DQRL** | **Deir Qamar** | **2.44** | **208** | *e*P | **Pn** | **13 38 38.4** | **+0.2** |
| DQRL | | | | *e*S | **Sn** | **13 39 08.1** | **-0.4** |
| **SLFK** | **Silifke-Mersin** | **2.46** | **283** | PN | **Pn** | **13 38 38.3** | **-0.1** |
| **SILI** | **Silifke-Mersin** | **2.48** | **282** | PN | **Pn** | **13 38 38.2** | **-0.4** |
| **RCY** | **Rachaya** | **2.54** | **201** | *e*P | **Pn** | **13 38 40.0** | **+0.4** |
| **SARI** | **SarD1z-Kayseri** | **2.55** | **351** | PN | **Pn** | **13 38 40.3** | **+0.4** |
| **IKL** | **Isikli** | **2.65** | **279** | PN | **Pn** | **13 38 40.9** | **-0.1** |
| **KEBE** | **Keben-Mersin** | **2.66** | **283** | PN | **Pn** | **13 38 41.2** | **0.0** |
| **AKKU** | **Akkuyu-Mersin** | **2.75** | **277** | PN | **Pn** | **13 38 41.3** | **-1.0** |
| **NATI** | **Neve Ativ** | **2.79** | **201** | Pn | **Pn** | **13 38 43.5** | **+0.6** |
| NATI | | | | Sn | **Sb** | **13 39 23.1** | **+0.7** |
| **GEM** | **Giv'at Ha'Em** | **2.86** | **202** | Pn | **Pn** | **13 38 44.2** | **+0.3** |
| GEM | | | | Sn | **Sb** | **13 39 23.8** | **-0.6** |
| **TEVE** | **Tevekalti-Mers** | **2.87** | **282** | PN | **Pn** | **13 38 44.2** | **+0.1** |
| **MMA0** | **Mount Meron ar** | **3.12** | **204** | Pn | **Pn** | **13 38 46.3** | **-1.3** |
| **MMA0B** | **Mount Meron ar** | **3.12** | **204** | Pn | **Pn** | **13 38 46.5** | **-1.1** |
| MMA0B | | | | Sn | **Sn** | **13 39 29.6** | **+4.3** |
| **HNTI** | **Hanita** | **3.14** | **208** | Pn | **Pn** | **13 38 46.6** | **-1.2** |
| HNTI | | | | Sn | **Sn** | **13 39 29.6** | **+3.9** |
| **OFRI** | **`Ofer** | **3.62** | **207** | Pn | **Pn** | **13 38 52.9** | **-1.6** |
| **MMLI** | **Mount Malkishu** | **3.65** | **200** | Pn | **Pn** | **13 38 54.9** | **+0.1** |
| **HMDT** | **Nahal Hemdat** | **3.80** | **198** | Pn | **Pn** | **13 38 57.3** | **+0.5** |
| HMDT | | | | Sn | **Sb** | **13 39 49.1** | **-2.4** |

**NNC 19 13:47:48.2±7.5, 37.24N×70.83E, h0km, mb3.6, mpv3.3, 2C-4D, Error ellipse: s-maj=60.0km s-min=47.6km az=162.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK09** | **Karatay Array** | **5.88** | **358** | ⇓P | Pn | 13 49 17.8 | +1.2 |
| | 1.5nm,0.5s,baz=180,slow=13 | | | | | | |
| KK09 | | | | ⇓S | Sn | 13 50 26.9 | +2.2 |
| | 0.5nm,0.4s,baz=184,slow=23 | | | | | | |
| **AAK** | **Ala-Archa** | **6.08** | **26** | ⇑P | Pn | 13 49 20.5 | +1.0 |
| | 0.5nm,0.3s | | | | | | |
| AAK | | | | ⇑S | Sn | 13 50 31.6 | +1.7 |
| | 1.7nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.75** | **31** | ⇓P | Pn | 13 49 27.9 | -0.8 |
| | 1.9nm,0.6s | | | | | | |
| TKM2 | | | | ⇓S | Sn | 13 50 44.8 | -1.6 |
| | 1.1nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **14.37** | **330** | P | Pn | 13 51 10.4 | -2.4 |
| | 0.3nm,0.5s,baz=158,slow=5.9,SNR=5.5 | | | | | | |

*IDC **19** 14:08:23.3±6.8, 37.85N×71.63E, h201km±51km, mb3.1/1, mb1 2.8/5, mb1mx2.6/37, mbtmp3.5/5, Error ellipse: s-maj=110.5km s-min=39.0km az=141.0*
*NNC **19** 14:08:24.0±4.7, 37.73N×71.92E, h152km±114km, mb2.4, mpv3.2, Error ellipse: s-maj=49.2km s-min=26.0km az=5.0*
**ISC 19 14:08:17.4±1.9, 37.4N±0.1×71.9E±0.1, h150km, n9, σ1°73/13, 2C-5D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.63** | **20** | P | **Pn** | **14 09 41.4** | **+2.2** |
| | 0.8nm,0.3s,baz=202,slow=10,SNR=15 | | | | | | |
| AAK | | | | S | **Sn** | **14 10 43.1** | **-0.1** |
| | 1.4nm,0.3s,baz=325,slow=23,SNR=26 | | | | | | |
| **AAK** | **Ala-Archa** | **5.63** | **20** | ⇓P | **Pn** | **14 09 41.6** | **+2.3** |
| | 2.7nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **14 10 42.1** | **-1.1** |
| | 12nm,0.7s | | | | | | |
| **KK08** | **Karatay Array** | **5.84** | **350** | ⇓P | **Pn** | **14 09 44.4** | **+2.6** |
| | 1.3nm,0.3s,baz=167,slow=13 | | | | | | |
| KK08 | | | | ⇓S | **Sn** | **14 10 46.7** | **-1.3** |
| | 4.6nm,0.5s,baz=172,slow=23 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.23** | **26** | ⇓P | **Pn** | **14 09 48.7** | **+1.4** |
| | 1.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **14 10 56.2** | **-1.4** |
| | 2.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.17** | **36** | P | **Pn** | **14 11 06.6** | **+0.8** |
| | 0.0nm,0.3s,baz=212,slow=10,SNR=1.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.08** | **18** | P | **Pn** | **14 11 28.2** | **-1.8** |
| | 0.1nm,0.3s,baz=203,slow=11,SNR=4.0 | | | | | | |
| **AB31** | **Akbulak array** | **14.71** | **328** | ⇑P | **P** | **14 11 40.7** | **+0.5** |
| | 0.3nm,0.5s,baz=160,slow=6.7,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.83** | **24** | P | **P** | **14 12 24.3** | **-1.1** |
| | 0.6nm,0.3s,baz=220,slow=10,SNR=15 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.46** | **269** | P | **P** | **14 18 50.1** | **-0.9** |
| | 0.3nm,0.4s,baz=47,slow=5.8,SNR=4.6 | | | | | | |

*IDC **19** 14:28:07.1±3.4, 38.34N×142.21E, h65km±25km, mb3.7/3, mb1 3.7/7, mb1mx3.3/42, mbtmp4.0/7, ML3.3/4, MS3.4/1, Ms1 3.4/1, ms1mx2.4/88, Error ellipse: s-maj=61.0km s-min=25.8km az=104.0*
*JMA **19** 14:28:08.6, 38.38N×141.90E, h64km±1km, M3.7 Broadband fault plane solution: P waves. NP1: φs79.00000°, δ77.00000°, λ168.00000°. NP2: φs171.00000°, δ78.00000°, λ14.00000°. Principal axes: T Plg18.0000°, Azm35.0000°; N Plg72.0000°, Azm212.0000°; P Plg1.0000°, Azm305.0000°;*
*JMA Felt I J1.*
**ISC 19 14:28:06.8±1.7, 38.31N±0.05×142.1E±0.1, h58km±10km, n29, σ1°04/34, mb3.7/3, 5C-8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **0.49** | **270** | ⇑P | **Pn** | **14 28 19.5** | **+1.0** |
| JIKH | | | | S | **Sn** | **14 28 27.2** | **+0.2** |
| **JIO** | **Ouri** | **0.60** | **284** | ⇑P | **Pn** | **14 28 20.4** | **+0.7** |
| JIO | | | | S | **Sn** | **14 28 28.6** | **-0.5** |
| **JKMT** | **Kesennumamotoy** | **0.70** | **316** | ⇓P | **Pn** | **14 28 21.4** | **+0.5** |
| JKMT | | | | S | **Sn** | **14 28 30.5** | **-0.7** |
| **OFUJ** | **Ofunato** | **0.84** | **337** | ⇓P | **Pn** | **14 28 23.3** | **+0.6** |
| OFUJ | | | | S | **Sn** | **14 28 33.9** | **-0.4** |
| **JMK** | **Ichinoseki** | **0.94** | **313** | ⇓P | **Pn** | **14 28 24.3** | **+0.4** |
| JMK | | | | S | **Sn** | **14 28 35.8** | **-0.8** |
| **JMM** | **Marumori** | **1.12** | **247** | ⇑P | **Pn** | **14 28 26.7** | **+0.4** |
| JMM | | | | S | **Sn** | **14 28 40.1** | **-0.7** |
| **JOU** | **Okura** | **1.13** | **273** | ⇓P | **Pn** | **14 28 26.6** | **+0.2** |
| JOU | | | | *e*S | **Sn** | **14 28 39.9** | **-1.1** |
| **JOM** | **Ohasama** | **1.32** | **332** | ⇓P | **Pn** | **14 28 29.4** | **+0.4** |
| JOM | | | | S | **Sn** | **14 28 44.9** | **-0.7** |
| **JFK** | **Kawauchi** | **1.35** | **226** | ⇑P | **Pn** | **14 28 30.5** | **+1.1** |
| **JYK** | **Kaneyama** | **1.49** | **295** | ⇓P | **Pn** | **14 28 31.3** | **0.0** |
| JYK | | | | S | **Sn** | **14 28 48.3** | **-1.4** |
| **JRG** | **Rokugo** | **1.57** | **314** | ⇓P | **Pn** | **14 28 32.6** | **+0.2** |
| **JFT** | **Otama** | **1.60** | **241** | ⇑P | **Pn** | **14 28 33.9** | **+1.1** |
| **JYS** | **Shirataka** | **1.60** | **267** | P | **Pn** | **14 28 33.3** | **+0.5** |
| JYS | | | | S | **Sn** | **14 28 51.8** | **-0.6** |
| **JYA** | **Atsumi** | **1.89** | **279** | ⇓P | **Pn** | **14 28 36.8** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **3.56** | **241** | P | **Pn** | **14 29 01.7** | **+2.2** |
| | 1.1nm,0.3s,baz=33,slow=13,SNR=47 | | | | | | |
| **MAT** | **Matsushiro** | **3.56** | **242** | P | **Pn** | **14 29 01.8** | **+2.2** |
| MAT | | | | *e*S | **Sn** | **14 29 41.3** | **+0.9** |
| **JHJ** | **Hachijo jima 2** | **5.51** | **201** | P | **Pn** | **14 29 26.7** | **+0.5** |
| | 22nm,0.3s,baz=142,slow=22,SNR=20 | | | | | | |
| JHJ | | | | S | **Sn** | **14 30 25.1** | **-3.1** |
| | 21nm,0.3s,baz=264,slow=23,SNR=14 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.81** | **4** | P | **Pn** | **14 29 30.3** | **-0.1** |
| | 1.1nm,0.3s,baz=192,slow=16,SNR=12 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.62** | **311** | P | **Pn** | **14 30 23.0** | **+0.6** |
| | baz=122,slow=14,SNR=5.3 | | | | | | |
| **JOW** | **Kunigami** | **16.31** | **229** | LR | LR | 14 37 30.2 | |
| | comp=Z,138nm,19.2s,baz=189,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **27.55** | **302** | P | **P** | **14 33 48.1** | **0.0** |
| | 0.7nm,0.5s,baz=109,slow=9.3,SNR=7.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.37** | **124** | T | T | 15 04 16.7 | |
| | baz=316,slow=75,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.38** | **124** | T | T | 15 04 17.3 | |
| | baz=316,slow=75,SNR=28 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.39** | **124** | T | T | 15 04 18.2 | |
| | baz=316,slow=75,SNR=26 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.13** | **126** | T | T | 15 05 19.0 | |
| | baz=318,slow=76,SNR=4.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.13** | **126** | T | T | 15 05 16.6 | |
| | baz=318,slow=76,SNR=7.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.15** | **126** | T | T | 15 05 13.6 | |
| | baz=318,slow=76,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.47** | **311** | P | **P** | **14 35 47.4** | **-0.3** |
| | 2.2nm,0.6s,baz=80,slow=7.7,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.91** | **301** | P | **P** | **14 36 07.9** | **+0.2** |
| | 1.0nm,0.7s,baz=85,slow=9.9,SNR=14 | | | | | | |

**IDC 19 15:06:13.8±8.1, 7.27S×128.79E, h110km±86km, mb2.9/1, mb1 2.8/4, mb1mx2.7/35, mbtmp3.2/4, ML3.0/3, Error ellipse: s-maj=72.4km s-min=30.4km az=30.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.84** | **240** | P | Pn | 15 07 39.1 | +1.0 |
| | 1.9nm,0.3s,baz=90,slow=13,SNR=7.4 | | | | | | |
| BATI | | | | S | Sn | 15 08 42.9 | -1.0 |
| | 1.9nm,0.3s,baz=69,slow=20,SNR=1.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.19** | **196** | P | Pn | 15 08 47.2 | -3.4 |
| | 0.1nm,0.3s,baz=11,slow=11,SNR=1.5 | | | | | | |
| FITZ | | | | S | Sn | 15 10 42.6 | -11 |
| | 0.2nm,0.3s,baz=150,slow=23,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.70** | **157** | P | Pn | 15 09 23.4 | -0.2 |
| | 0.0nm,0.3s,baz=348,slow=12,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **17.03** | **164** | P | P | 15 10 06.0 | +0.6 |
| | 0.0nm,0.3s,baz=343,slow=10,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.80** | **327** | P | P | 15 16 59.9 | 0.0 |
| | 0.1nm,0.6s,baz=119,slow=10,SNR=2.2 | | | | | | |

*IDC **19** 15:09:21.9±1.9, 1.34N×125.90E, h0km, mb3.6/3, mb1 3.9/3, mb1mx3.4/47, mbtmp3.6/3, Error ellipse: s-maj=176.4km s-min=23.8km az=65.0*
*DJA **19** 15:09:27.3±1.9, 2.7N±4.4×12.7E±.°, h30km±19km, M3.5/6, MLv3.5/6*
**ISC 19 15:09:27.6±1.5, 1.6N±0.2×126.6E±0.1, h50km, n5, σ0°50/6, mb3.5/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.12** | **138** | P | **Pn** | **15 09 46.9** | **-0.1** |
| TNTI | | | | S | **Sn** | **15 10 01.5** | **+0.1** |
| **KMSI** | **Cibinong** | **2.83** | **249** | P | **Pn** | **15 10 10.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **22.72** | **161** | P | **P** | **15 14 25.0** | **-0.5** |
| | 2.3nm,0.6s,baz=337,slow=11,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **26.11** | **165** | P | **P** | **15 14 57.7** | **+0.7** |
| | 0.5nm,0.4s,baz=346,slow=8.2,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.23** | **326** | P | **P** | **15 19 23.8** | **0.0** |
| | 0.2nm,0.5s,baz=120,slow=7.7,SNR=9.3 | | | | | | |

*IDC **19** 15:11:31.4±1.6, 12.75N×87.66W, h86km±25km, mb3.3/5, mb1 3.6/8, mb1mx3.4/43, mbtmp3.6/8, Error ellipse: s-maj=58.8km s-min=14.0km az=39.0*
*INET **19** 15:11:31.5±0.8, 12.60N×87.86W, h26km±8km, MW4.0*
*UCR **19** 15:11:31.3±1.4, 12.54N×87.99W, h31km±5km, ML4.0*
*SNET **19** 15:11:31.9±1.0, 12.53N×88.17W, h17km±4km, ML4.0*
*SSS **19** 15:11:31.9, 12.53N×88.17W, h17km, ML4.0*
**ISC 19 15:11:30.5±0.9, 12.65N±0.07×87.86W±0.05, h73km±8km, n78, σ1°12/107, mb3.5/5, 2D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JUCU** | **Jucuarɲn** | **0.70** | **328** | *e*P | **Pn** | **15 11 45.7** | **-0.1** |
| JUCU | | | | IAML | | 15 11 46.6 | |
| | comp=Z,6μm,0.2s | | | | | | |
| JUCU | | | | *e*S | **Sn** | **15 11 56.2** | **-0.8** |
| **JUCU** | **Jucuarɲn** | **0.70** | **328** | *e*P | **Pn** | **15 11 45.7** | **-0.1** |
| **JUCU** | **Jucuarɲn** | **0.70** | **328** | *e*P | **Pn** | **15 11 45.7** | **-0.1** |
| JUCU | | | | IAML | | 15 11 46.6 | |
| | comp=Z,6μm,0.2s | | | | | | |
| JUCU | | | | *e*S | **Sn** | **15 11 56.2** | **-0.8** |
| **CRIN** | **San Cristobal** | **0.79** | **87** | *e*P | **Pn** | **15 11 47.1** | **+0.3** |
| **VSM** | **San Miguel** | **0.87** | **332** | *e*P | **Pn** | **15 11 48.5** | **+0.6** |
| **VSM** | **San Miguel** | **0.87** | **332** | *e*P | **Pn** | **15 11 48.5** | **+0.6** |
| **LCY** | **Lacayo** | **0.87** | **331** | ⇓*e*P | **Pn** | **15 11 48.4** | **+0.7** |
| **LCY** | **Lacayo** | **0.87** | **331** | ⇓*e*P | **Pn** | **15 11 48.4** | **+0.7** |
| **PACA** | **Pacayal** | **0.93** | **331** | *e*P | **Pn** | **15 11 49.3** | **+0.8** |
| PACA | | | | *e*S | **Sn** | **15 12 02.2** | **+0.5** |
| **PACA** | **Pacayal** | **0.93** | **331** | *e*P | **Pn** | **15 11 49.3** | **+0.8** |
| **PACA** | **Pacayal** | **0.93** | **331** | *e*P | **Pn** | **15 11 49.3** | **+0.8** |
| PACA | | | | *e*S | **Sn** | **15 12 02.2** | **+0.5** |
| **TEL3** | **Telica 3** | **1.00** | **95** | *e*P | **Pn** | **15 11 48.9** | **-0.2** |
| **TELN** | **Telica** | **1.01** | **93** | *e*P | **Pn** | **15 11 50.3** | **+0.9** |
| **COEB** | **Comit de Eme** | **1.06** | **322** | *e*P | **Pn** | **15 11 50.7** | **+0.6** |
| COEB | | | | *e*S | **Sn** | **15 12 05.0** | **+0.4** |
| **COEB** | **Comit de Eme** | **1.06** | **322** | *e*P | **Pn** | **15 11 50.7** | **+0.6** |
| COEB | | | | *e*S | **Sn** | **15 12 05.0** | **+0.4** |
| **CNGN** | **Cerro Negro** | **1.15** | **98** | *e*P | **Pn** | **15 11 50.9** | **-0.2** |
| CNGN | | | | *e*S | **Sn** | **15 12 06.5** | **+0.1** |
| **PQSS** | **Presa 15 de Se** | **1.18** | **325** | *e*P | **Pn** | **15 11 52.4** | **+1.0** |
| PQSS | | | | *e*S | **Sn** | **15 12 09.0** | **+1.9** |
| **PQSS** | **Presa 15 de Se** | **1.18** | **325** | *e*P | **Pn** | **15 11 52.4** | **+1.0** |
| PQSS | | | | *e*S | **Sn** | **15 12 09.0** | **+1.9** |
| **TECO** | **Alcaldia de Te** | **1.25** | **315** | *e*P | **Pn** | **15 11 52.7** | **+0.3** |
| **TECO** | **Alcaldia de Te** | **1.25** | **315** | *e*P | **Pn** | **15 11 52.7** | **+0.3** |
| **MOMN** | **Momotombo** | **1.31** | **101** | *e*P | **Pn** | **15 11 53.0** | **-0.2** |
| **COPN** | **Copaltepe** | **1.33** | **111** | *e*P | **Pn** | **15 11 52.4** | **-0.9** |
| **SCLA** | **Alcaldia de Sa** | **1.34** | **321** | *e*P | **Pn** | **15 11 54.3** | **+0.7** |
| SCLA | | | | *e*S | **Sn** | **15 12 13.8** | **+2.9** |
| **SCLA** | **Alcaldia de Sa** | **1.34** | **321** | *e*P | **Pn** | **15 11 54.3** | **+0.7** |
| SCLA | | | | *e*S | **Sn** | **15 12 13.8** | **+2.9** |
| **COEG** | **Centro de Oper** | **1.38** | **314** | *e*P | **Pn** | **15 11 54.7** | **+0.6** |
| COEG | | | | *e*S | **Sn** | **15 12 12.5** | **+0.7** |
| **COEG** | **Centro de Oper** | **1.38** | **314** | *e*P | **Pn** | **15 11 54.7** | **+0.6** |
| COEG | | | | *e*S | **Sn** | **15 12 12.5** | **+0.7** |
| **SJTE** | **Alcalda de S** | **1.47** | **311** | *e*P | **Pn** | **15 11 55.8** | **+0.5** |
| SJTE | | | | *e*S | **Sn** | **15 12 14.2** | **+0.2** |
| **SJTE** | **Alcalda de S** | **1.47** | **311** | *e*P | **Pn** | **15 11 55.8** | **+0.5** |
| SJTE | | | | *e*S | **Sn** | **15 12 14.2** | **+0.2** |
| **BRAN** | **Las Pilas** | **1.48** | **87** | *e*P | **Pn** | **15 11 56.6** | **+1.3** |
| **PAVA** | **Las Pavas** | **1.48** | **315** | *e*P | **Pn** | **15 11 56.1** | **+0.6** |
| PAVA | | | | *e*S | **Sn** | **15 12 15.9** | **+1.5** |
| **PAVA** | **Las Pavas** | **1.48** | **315** | *e*P | **Pn** | **15 11 56.3** | **+0.7** |
| **PAVA** | **Las Pavas** | **1.48** | **315** | *e*P | **Pn** | **15 11 56.1** | **+0.6** |
| PAVA | | | | *e*S | **Sn** | **15 12 15.9** | **+1.5** |
| **TGUH** | **Tegucigalpa,Un** | **1.51** | **22** | *e*P | **Pn** | **15 11 56.9** | **+1.1** |
| **LFRS** | **El Faro** | **1.52** | **310** | *e*P | **Pn** | **15 11 56.6** | **+0.7** |
| **LFRS** | **El Faro** | **1.52** | **310** | *e*P | **Pn** | **15 11 56.6** | **+0.7** |
| **LBRS** | **Las Brisas** | **1.58** | **313** | *e*P | **Pn** | **15 11 57.5** | **+0.8** |
| **LBRS** | **Las Brisas** | **1.58** | **313** | *e*P | **Pn** | **15 11 57.5** | **+0.8** |
| **LFU** | **La Fuente** | **1.63** | **312** | *e*P | **Pn** | **15 11 58.4** | **+0.9** |
| **LFU** | **La Fuente** | **1.63** | **312** | *e*P | **Pn** | **15 11 58.4** | **+0.9** |
| **LALI** | **Alcalda de L** | **1.65** | **300** | *e*P | **Pn** | **15 11 57.9** | **+0.3** |
| LALI | | | | *e*S | **Sn** | **15 12 16.9** | **-1.1** |
| **LALI** | **Alcalda de L** | **1.65** | **300** | *e*P | **Pn** | **15 11 57.9** | **+0.3** |
| LALI | | | | *e*S | **Sn** | **15 12 16.9** | **-1.1** |
| **HUEN** | | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=26 | | | | | | | |
| **VLO** | **Vlora** | **0.41** | **322** | P | **Pb** | **15 12 10.4** | **+0.5** |
| | baz=318 | | | | | | | |
| VLO | | | | S | **Sb** | **15 12 17.0** | **+0.9** |
| | baz=318 | | | | | | | |
| VLO | | | | AMP | | | | |
| | comp=E,9.7nm,0.6s,baz=318 | | | | | | | |
| **KASA** | **Kassiopi** | **0.41** | **168** | P | **Pg** | **15 12 07.8** | **-0.9** |
| KASA | | | | S | **Sg** | **15 12 14.0** | **-0.1** |
| KASA | | | | AML | AML | 15 12 16.7 | | |
| | comp=N,3742µm,0.3s | | | | | | | |
| KASA | | | | AML | AML | 15 12 17.0 | | |
| | comp=E,4561µm,0.3s | | | | | | | |
| **KEK** | **Kerkira** | **0.43** | **183** | P | **Pg** | **15 12 08.5** | **-0.7** |
| KEK | | | | S | **Sg** | **15 12 14.7** | **-0.2** |
| | comp=E,1µm,0.2s | | | | | | | |
| **KEK** | **Kerkira** | **0.43** | **183** | P | **Pg** | **15 12 08.4** | **-0.8** |
| KEK | | | | S | **Sg** | **15 12 15.1** | **+0.2** |
| KEK | | | | AML | AML | 15 12 15.8 | | |
| | comp=E,2656µm,0.2s | | | | | | | |
| KEK | | | | AML | AML | 15 12 18.8 | | |
| | comp=N,2567µm,0.3s | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.73** | **147** | P | **Pg** | **15 12 13.5** | **-1.2** |
| IGT | | | | S | **Sb** | **15 12 24.6** | **-0.7** |
| | comp=N,262nm,0.3s | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.73** | **147** | P | **Pg** | **15 12 13.6** | **-1.2** |
| IGT | | | | S | **Sb** | **15 12 24.2** | **-1.0** |
| **IGT** | **Igoumenitsa** | **0.73** | **147** | P | **Pg** | **15 12 13.6** | **-1.2** |
| | baz=151 | | | | | | | |
| IGT | | | | S | **Sb** | **15 12 24.1** | **-1.1** |
| | baz=151 | | | | | | | |
| **KBN** | **Korca** | **0.88** | **57** | P | **Pg** | **15 12 16.1** | **-1.5** |
| KBN | | | | S | **Sb** | **15 12 29.4** | **-0.3** |
| | comp=N,285nm,0.5s | | | | | | | |
| **KBN** | **Korca** | **0.88** | **57** | P | **Pg** | **15 12 16.3** | **-1.2** |
| | baz=53 | | | | | | | |
| KBN | | | | S | **Sb** | **15 12 29.7** | **0.0** |
| | baz=53 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=N,1.3nm,0.5s,baz=53 | | | | | | | |
| **JAN** | **Janina** | **0.93** | **121** | P | **Pg** | **15 12 17.4** | **-1.1** |
| JAN | | | | S | **Sb** | **15 12 31.1** | **0.0** |
| | comp=N,538nm,0.4s | | | | | | | |
| **JAN** | **Janina** | **0.93** | **121** | P | **Pg** | **15 12 17.4** | **-1.1** |
| JAN | | | | AML | AML | 15 12 34.9 | | |
| | comp=N,1201µm,0.3s | | | | | | | |
| JAN | | | | AML | AML | 15 12 34.9 | | |
| | comp=E,1207µm,0.4s | | | | | | | |
| **NEST** | **Nestorio** | **0.97** | **74** | P | **Pg** | **15 12 18.3** | **-1.1** |
| **NEST** | **Nestorio** | **0.97** | **74** | P | **Pg** | **15 12 17.9** | **-1.5** |
| **PENT** | **Pentalofos** | **1.01** | **87** | P | **Pg** | **15 12 18.5** | **-1.6** |
| **PENT** | **Pentalofos** | **1.01** | **87** | P | **Pb** | **15 12 19.6** | **-0.6** |
| **KPRO** | **Kipourio** | **1.20** | **99** | P | **Pg** | **15 12 22.3** | **-1.3** |
| **KPRO** | **Kipourio** | **1.20** | **99** | P | **Pb** | **15 12 22.5** | **-0.9** |
| **OHR** | **Ohrid** | **1.22** | **37** | *e*Pg | **Pn** | **15 12 23.8** | **+0.1** |
| OHR | | | | *e*Sg | **Sn** | **15 12 42.9** | **+2.8** |
| **OHR** | **Ohrid** | **1.22** | **37** | *i* Pn | **Pn** | **15 12 23.8** | **+0.1** |
| **FNA** | **Florina** | **1.34** | **61** | P | **Pb** | **15 12 25.3** | **-0.6** |
| FNA | | | | S | **Sn** | **15 12 45.0** | **+1.7** |
| | comp=E,630nm,0.6s | | | | | | | |
| **FNA** | **Florina** | **1.34** | **61** | P | **Pb** | **15 12 25.3** | **-0.6** |
| FNA | | | | S | **Sn** | **15 12 45.4** | **+2.2** |
| FNA | | | | AML | AML | 15 12 50.7 | | |
| | comp=N,1162µm,0.5s | | | | | | | |
| FNA | | | | AML | AML | 15 12 52.8 | | |
| | comp=E,1118µm,0.6s | | | | | | | |
| **FNA** | **Florina** | **1.34** | **61** | P | **Pn** | **15 12 25.4** | **0.0** |
| | baz=59 | | | | | | | |
| FNA | | | | S | **Sn** | **15 12 44.9** | **+1.7** |
| | baz=59 | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **1.47** | **154** | P | **Pb** | **15 12 27.6** | **-0.4** |
| TSLK | | | | S | **Sn** | **15 12 49.2** | **+3.0** |
| **KZN** | **Kozani** | **1.50** | **83** | P | **Pb** | **15 12 28.3** | **-0.2** |
| KZN | | | | AML | AML | 15 12 56.0 | | |
| | comp=N,407µm,0.5s | | | | | | | |
| KZN | | | | AML | AML | 15 12 57.5 | | |
| | comp=E,522µm,0.4s | | | | | | | |
| **LKD2** | **Lefkada island** | **1.50** | **154** | P | **Pb** | **15 12 28.2** | **-0.3** |
| LKD2 | | | | S | **Sn** | **15 12 50.5** | **+3.4** |
| LKD2 | | | | AML | AML | 15 12 53.0 | | |
| | comp=E,923µm,0.7s | | | | | | | |
| LKD2 | | | | AML | AML | 15 12 53.2 | | |
| | comp=N,925µm,0.4s | | | | | | | |
| **LKD2** | **Lefkada island** | **1.50** | **154** | P | **Pg** | **15 12 28.4** | **-1.0** |
| | baz=156 | | | | | | | |
| LKD2 | | | | S | **Sn** | **15 12 49.1** | **+2.1** |
| | baz=156 | | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **1.58** | **154** | P | **Pn** | **15 12 29.1** | **+0.5** |
| NYDR | | | | S | **Sg** | **15 12 52.1** | **+0.5** |
| **EVGI** | **Lefkada island** | **1.65** | **157** | P | **Pn** | **15 12 30.3** | **+0.7** |
| **FSK** | **Fiskardo** | **1.78** | **161** | P | **Pn** | **15 12 31.9** | **+0.6** |
| FSK | | | | S | **Sg** | **15 12 57.0** | **-0.9** |
| **THL** | **Klokotos Trika** | **1.78** | **108** | P | **Pg** | **15 12 33.2** | **-1.6** |
| THL | | | | S | **Sg** | **15 12 57.0** | **-1.0** |
| **EVR** | **Evrytania** | **1.96** | **128** | P | **Pb** | **15 12 36.4** | **-0.1** |
| **LIT** | **Litokhoron** | **2.04** | **90** | P | **Pb** | **15 12 37.0** | **-0.8** |
| **MAKR** | **Makrakomi, Fth** | **2.11** | **122** | P | **Pb** | **15 12 38.6** | **-0.3** |
| **SKO** | **Skopje** | **2.19** | **33** | *i* Pn | **Pg** | **15 12 41.3** | **-1.4** |
| **NOCI** | **Noci** | **2.20** | **288** | P | **Pn** | **15 12 39.0** | **+1.9** |
| | baz=288 | | | | | | | |
| NOCI | | | | S | **Sg** | **15 13 12.7** | **+1.3** |
| | baz=288 | | | | | | | |
| NOCI | | | | AMP | | | | |
| | comp=N,1.9nm,0.6s,baz=288 | | | | | | | |
| **AGG** | **Agios Georgios** | **2.24** | **119** | P | **Pb** | **15 12 39.7** | **-1.4** |
| **ANX** | **Ano Chora** | **2.25** | **133** | P | **Pb** | **15 12 39.9** | **-1.4** |
| **PDG** | **Podgorica** | **2.32** | **350** | *e*Pn | **Pn** | **15 12 40.5** | **+1.7** |
| PDG | | | | *e*Sn | **Sb** | **15 13 12.8** | **+1.6** |
| **EFP** | **Efpalio** | **2.36** | **136** | P | **Pb** | **15 12 41.2** | **-1.9** |
| **STIP** | **Stip** | **2.37** | **48** | *i* Pn | **Pg** | **15 12 43.9** | **-2.0** |
| **VAY** | **Valandovo** | **2.39** | **60** | *i* Pn | **Pb** | **15 12 42.1** | **-1.6** |
| **RLS** | **Riolos of Patr** | **2.45** | **148** | P | **Pn** | **15 12 41.3** | **+1.4** |
| **LAKA** | **Lakka** | **2.54** | **138** | P | **Pn** | **15 12 43.3** | **+1.6** |
| **DRO** | **Drossia** | **2.64** | **146** | P | **Pn** | **15 12 43.9** | **+0.8** |
| **NEO** | **Neokhori** | **2.75** | **107** | P | **Pn** | **15 12 46.6** | **+1.8** |
| **KLV** | **Kalavryta, Ach** | **2.77** | **139** | P | **Pn** | **15 12 46.7** | **+1.7** |
| **TREB** | **Trebinje** | **2.80** | **337** | *e*Pn | **Pn** | **15 12 48.4** | **+3.1** |
| **ATAL** | **Atalanti** | **2.87** | **119** | P | **Pn** | **15 12 47.8** | **+1.5** |
| **PRVS** | **Prvonek** | **2.91** | **35** | *e*Pn | **Pn** | **15 12 48.7** | **+1.9** |
| PRVS | | | | *e*Sn | **Sn** | **15 13 24.2** | **+2.4** |
| **BARS** | **Barje** | **3.06** | **29** | *e*Pn | **Pn** | **15 12 51.0** | **+2.1** |
| **BOSS** | **Bosilegrad** | **3.08** | **40** | *e*Pn | **Pn** | **15 12 51.2** | **+1.9** |
| **SJES** | **Sjenica** | **3.11** | **2** | *e*Pn | **Pn** | **15 12 52.4** | **+2.6** |
| SJES | | | | *e*Sn | **Sn** | **15 13 30.7** | **+3.7** |
| **STON** | **Ston** | **3.16** | **330** | *e*Pn | **Pn** | **15 12 50.6** | **+0.4** |
| STON | | | | Sn | **Sn** | **15 13 26.8** | **-1.1** |
| **SELS** | **Selova** | **3.22** | **17** | *e*Pn | **Pn** | **15 12 53.3** | **+2.1** |
| **LSTV** | **Lastovo** | **3.42** | **321** | *e*Pn | **Pn** | **15 12 54.4** | **+0.4** |
| LSTV | | | | Sn | **Sn** | **15 13 31.9** | **-2.6** |
| **IVAS** | **Ivanjica** | **3.44** | **4** | *e*Pn | **Pn** | **15 12 55.7** | **+1.5** |
| **SGRT** | **San Giovanni R** | **3.48** | **299** | P | **Pn** | **15 12 56.5** | **+1.7** |
| | baz=299 | | | | | | | |
| **ZAPS** | **Zavoj** | **3.77** | **33** | *e*Pn | **Pn** | **15 13 00.9** | **+2.2** |
| ZAPS | | | | *e*Sn | **Sn** | **15 13 44.5** | **+1.5** |
| **GRUS** | **Gruza** | **3.80** | **10** | *e*Pn | **Pn** | **15 13 01.9** | **+2.8** |
| **RICI** | **Ricice** | **3.90** | **330** | *e*Pn | **Pn** | **15 13 01.6** | **+1.0** |
| **HVAR** | **Hvar** | **3.94** | **321** | *e*Pn | **Pn** | **15 13 00.5** | **-0.5** |
| **DIVS** | **Divibare** | **3.95** | **2** | *e*Pn | **Pn** | **15 13 04.2** | **+2.9** |
| DIVS | | | | *e*Sn | **Sn** | **15 13 49.3** | **+1.7** |
| **ZAGS** | **Zajecar** | **4.08** | **25** | *e*Pn | **Pn** | **15 13 03.1** | **+0.2** |
| **TRUS** | **Trudelj** | **4.10** | **6** | *e*Pn | **Pn** | **15 13 05.9** | **+2.7** |
| **KIJV** | **Kijevo** | **4.62** | **328** | *e*Pn | **Pn** | **15 13 12.3** | **+1.9** |
| **ZIRJ** | **Zirje** | **4.69** | **320** | *e*Pn | **Pn** | **15 13 12.1** | **+0.8** |
| ZIRJ | | | | Sn | **Sn** | **15 14 02.1** | **-3.6** |
| **MORI** | **Morici** | **4.82** | **322** | *e*Pn | **Pn** | **15 13 14.6** | **+1.5** |
| MORI | | | | Sn | **Sn** | **15 14 06.9** | **-2.0** |
| **DUGI** | **Dugi Otok** | **5.23** | **319** | *e*Pn | **Pn** | **15 13 20.2** | **+1.5** |
| DUGI | | | | Sn | **Sn** | **15 14 16.2** | **-2.8** |
| **UDBI** | **Udbina** | **5.31** | **327** | *e*Pn | **Pn** | **15 13 22.5** | **+2.5** |
| UDBI | | | | Sn | **Sn** | **15 14 20.0** | **-1.1** |
| **NVLJ** | **Novalja** | **5.74** | **322** | *e*Pn | **Pn** | **15 13 26.9** | **+1.2** |
| NVLJ | | | | Sn | **Sn** | **15 14 29.7** | **-1.8** |
| **A250A** | **Rusevo Krmpots** | **6.12** | **325** | *e*Pn | **Pn** | **15 13 32.1** | **+1.0** |
| **BRJN** | **Brijuni** | **6.54** | **319** | *e*Pn | **Pn** | **15 13 38.4** | **+1.7** |
| BRJN | | | | Sn | **Sn** | **15 14 47.3** | **-3.9** |

*BUL **19** 15:13:59.5±0.9,26°.00S×29°.52E, h20km±8km, MD3.7*
**EAF 19 15:13:59.4±2.0,25°.98S×29°.54E, h22km±20km, MD3.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.40** | **98** | *e*P | Pn | 15 14 37.6 | +0.3 |
| CNG | | | | *e*S | Sn | 15 15 06.1 | 0.0 |
| **CNG** | **Changalane** | **2.40** | **98** | *e*P | Pn | 15 14 37.6 | +0.3 |
| CNG | | | | *e*S | Sn | 15 15 06.1 | 0.0 |
| **MOPA** | **Mopani** | **2.98** | **35** | *e*P | Pn | 15 14 43.7 | -1.7 |
| MOPA | | | | *e*S | Sn | 15 15 17.0 | -3.4 |
| **MOPA** | **Mopani** | **2.98** | **35** | *e*P | Pn | 15 14 43.7 | -1.7 |
| MOPA | | | | *e*S | Sn | 15 15 17.0 | -3.4 |
| **MSNA** | **Messina** | **3.65** | **7** | *e*P | Pn | 15 14 55.1 | +0.4 |
| MSNA | | | | *e*S | Sn | 15 15 35.6 | -1.5 |
| **MSNA** | **Messina** | **3.65** | **7** | *e*P | Pn | 15 14 55.1 | +0.4 |
| MSNA | | | | *e*S | Sn | 15 15 35.6 | -1.5 |
| **LBTB** | **Lobatse** | **3.69** | **284** | *e*P | Pn | 15 14 55.9 | +0.6 |
| LBTB | | | | *e*S | Sn | 15 15 36.2 | -2.1 |
| **LBTB** | **Lobatse** | **3.69** | **284** | *e*P | Pn | 15 14 55.9 | +0.6 |
| LBTB | | | | *e*S | Sn | 15 15 36.2 | -2.1 |
| **BOSA** | **Boshof** | **4.63** | **235** | *e*P | Pn | 15 15 07.2 | -1.0 |
| BOSA | | | | *e*S | Sn | 15 15 57.1 | -4.2 |
| **BOSA** | **Boshof** | **4.63** | **235** | *e*P | Pn | 15 15 07.2 | -1.0 |
| BOSA | | | | *e*S | Sn | 15 15 57.1 | -4.2 |
| **MATP** | **Matopo** | **5.61** | **350** | *e*P | Pn | 15 15 21.8 | 0.0 |
| MATP | | | | *e*S | Sn | 15 16 20.9 | -4.8 |
| **MATP** | **Matopo** | **5.61** | **350** | *e*P | Pn | 15 15 21.8 | 0.0 |
| MATP | | | | *e*S | Sn | 15 16 20.9 | -4.8 |
| **BLWY** | **Bulawayo** | **5.88** | **351** | *e*P | Pn | 15 15 25.2 | -0.2 |
| BLWY | | | | *e*S | Sn | 15 16 27.5 | -4.7 |
| **BLWY** | **Bulawayo** | **5.88** | **351** | *e*P | Pn | 15 15 25.2 | -0.2 |
| BLWY | | | | *e*S | Sn | 15 16 27.5 | -4.7 |

**IDC 19 15:18:38.0±999.0,52°.81N×27°.99E, h0km, Error ellipse: s-maj=1777.0km s-min=311.6km az=78.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **18.75** | **85** | *i* | | 17 12 40.0 | |
| | baz=289,slow=348,SNR=0.9 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **33.15** | **65** | *i* | | 18 43 30.0 | |
| | baz=294,slow=324,SNR=1.3 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **48.01** | **63** | *i* | | 20 10 40.0 | |
| | baz=305,slow=335,SNR=1.3 | | | | | | |

*BEO **19** 15:18:41.2±0.9,43°.91N×16°.49E, h10km±4km, ML2.5/5*
*RHSSO **19** 15:18:43.9±0.4,43°.89N×16°.79E, h4km±2km, ML2.6/13*
*VIE **19** 15:18:44.3±1.1,43°.79N×17°.19E, h8km, mb2.6/5, ml2.4/4, ms3.7/1, Error ellipse: s-maj=12.8km s-min=8.8km az=45.0 66 km ENE of Split*
**ISC 19 15:18:43.6±1.1,43°.88N±0°.02×16°.84E±0°.02, h3km±10km, n54,σ1s09/89, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.34** | **291** | *e*Pg | **Pg** | **15 18 50.5** | **+0.5** |
| **RICI** | **Ricice** | **0.44** | **151** | *e*Pg | **Pg** | **15 18 51.5** | **-0.5** |
| RICI | | | | Sg | **Sg** | **15 18 58.3** | **+0.5** |
| **MGRS** | **Mrkonjic Grad** | **0.56** | **18** | *e*Pg | **Pg** | **15 18 54.6** | **+0.3** |
| MGRS | | | | *e*Sg | **Sg** | **15 19 01.8** | **+0.2** |
| **MAKA** | **Makarska** | **0.61** | **167** | *e*Pg | **Pg** | **15 18 54.5** | **-0.7** |
| MAKA | | | | Sg | **Sg** | **15 19 04.3** | **+1.2** |
| **HVAR** | **Hvar** | **0.76** | **202** | *e*Pg | **Pg** | **15 18 58.0** | **-0.1** |
| HVAR | | | | Sg | **Sb** | **15 19 09.3** | **-0.9** |
| **MORI** | **Morici** | **0.82** | **269** | *e*Pg | **Pb** | **15 18 59.6** | **-0.8** |
| MORI | | | | Sg | **Sn** | **15 19 13.2** | **-1.4** |
| **ZIRJ** | **Zirje** | **0.90** | **256** | *e*Pg | **Pg** | **15 19 00.8** | **+0.1** |
| ZIRJ | | | | Sg | **Sn** | **15 19 14.2** | **-2.4** |
| **BLY** | **Banja Luka** | **0.90** | **16** | *e*Pg | **Pg** | **15 19 00.5** | **-0.3** |
| BLY | | | | *e*Sg | **Sg** | **15 19 12.7** | **+0.2** |
| **BLY** | **Banja Luka** | **0.90** | **16** | *e*Pg | **Pg** | **15 19 00.5** | **-0.3** |
| BLY | | | | *e*Sg | **Sg** | **15 19 12.4** | **-0.1** |
| **UDBI** | **Udbina** | **1.01** | **310** | *e*Pg | **Pb** | **15 19 03.5** | **-0.1** |
| **LSTV** | **Lastovo** | **1.11** | **178** | *e*Pg | **Pg** | **15 19 03.8** | **-1.1** |
| LSTV | | | | Sg | **Sn** | **15 19 21.1** | **-0.9** |
| **MRAK** | **Mrakovica** | **1.13** | **2** | *e*Pg | **Pg** | **15 19 04.7** | **-0.5** |
| MRAK | | | | *e*Sg | **Sg** | **15 19 19.9** | **0.0** |
| **STON** | **Ston** | **1.19** | **148** | *e*Pg | **Pb** | **15 19 05.3** | **-1.5** |
| STON | | | | *e*Sg | **Sn** | **15 19 24.5** | **+0.7** |
| **STON** | **Ston** | **1.19** | **148** | *e*Pg | **Pb** | **15 19 04.8** | **-2.0** |
| STON | | | | *e*Sg | **Sg** | **15 19 22.9** | **+1.1** |
| **STON** | **Ston** | **1.19** | **148** | *e*Pg | **Pb** | **15 19 04.6** | **-2.2** |
| STON | | | | Sg | **Sb** | **15 19 22.6** | **0.0** |
| **DOB** | **Doboj** | **1.24** | **46** | *e*Sg | **Sb** | **15 19 24.1** | **0.0** |
| **DUGI** | **Dugi Otok** | **1.29** | **275** | *e*Pg | **Pg** | **15 19 08.3** | **0.0** |
| DUGI | | | | Sg | **Sn** | **15 19 28.8** | **+2.5** |
| **PLIT** | **Plitvice** | **1.32** | **319** | *e*Pg | **Pg** | **15 19 09.5** | **+0.6** |
| **NVLJ** | **Novalja** | **1.57** | **296** | *e*Pn | **Pg** | **15 19 13.7** | **+0.1** |
| NVLJ | | | | Sg | **Sg** | **15 19 36.8** | **+2.8** |
| **BRY** | **Bratogost** | **1.58** | **128** | *e*Pn | **Pn** | **15 19 12.9** | **+0.2** |
| BRY | | | | *e*Sn | **Sb** | **15 19 34.4** | **+0.4** |
| **TREB** | **Trebinje** | **1.60** | **136** | *e*Pn | **Pn** | **15 19 12.6** | **-0.3** |
| **TREB** | **Trebinje** | **1.60** | **136** | *e*Pn | **Pb** | **15 19 13.7** | **-0.2** |
| TREB | | | | *e*Sn | **Sb** | **15 19 34.7** | **+0.1** |
| **UPM** | **Unac-Piva** | **1.65** | **114** | *e*Pn | **Pn** | **15 19 14.2** | **+0.6** |
| UPM | | | | *e*Sn | **Sb** | **15 19 36.5** | **+0.5** |
| **A252A** | **Venje** | **1.71** | **25** | *e*Pg | **Pn** | **15 19 13.3** | **-1.0** |
| **RABC** | **Rab** | **1.71** | **301** | *e*Pn | **Pg** | **15 19 15.9** | **-0.4** |
| RABC | | | | Sn | **Sg** | **15 19 40.6** | **+2.0** |
| **MOSL** | **Moslavina** | **1.73** | **358** | *e*Pn | **Pn** | **15 19 14.2** | **-0.4** |
| **A250A** | **Rusevo Krmpots** | **1.83** | **312** | *e*Pn | **Pg** | **15 19 18.1** | **-0.5** |
| **RUDO** | **Rudo** | **1.85** | **97** | *e*Pn | **Pn** | **15 19 15.8** | **-0.5** |
| RUDO | | | | *e*Sn | **Sn** | **15 19 40.8** | **+0.5** |
| **BBLS** | **Lazići** | **1.86** | **90** | *e*Pn | **Pn** | **15 19 16.1** | **-0.3** |
| BBLS | | | | *e*Sn | **Sb** | **15 19 43.5** | **+1.7** |
| **BBLS** | **Lazići** | **1.86** | **90** | *e*Pn | **Pn** | **15 19 16.7** | **+0.3** |
| BBLS | | | | *e*Sn | **Sb** | **15 19 41.8** | **0.0** |
| **HCY** | **Herceg Novi** | **1.88** | **139** | *e*Pn | **Pb** | **15 19 41.4** | **-0.7** |
| HCY | | | | *e*Sn | **Sn** | **15 19 41.4** | **+0.6** |
| **PTJ** | **Puntijarka** | **2.12** | **343** | *e*Pn | **Pn** | **15 19 19.3** | **-0.7** |
| **CRES** | **Cresnjev** | **2.18** | **334** | *e*Pn | **Pn** | **15 19 20.8** | **+0.1** |
| CRES | | | | *e*Sn | **Sn** | **15 19 47.4** | **-0.8** |
| **RIY** | **Rijeka** | **2.21** | **311** | *e*Pn | **Pn** | **15 19 20.7** | **-0.5** |
| RIY | | | | *e*Sn | **Sn** | **15 19 48.8** | **-0.4** |
| **SMRN** | **Sveta Marina** | **2.24** | **302** | *e*Pn | **Pn** | **15 19 22.2** | **+0.7** |
| **KALN** | **Kalnik** | **2.26** | **353** | *e*Pn | **Pn** | **15 19 21.2** | **-0.7** |
| **DIVS** | **Divibare** | **2.29** | **84** | *e*Pn | **Pn** | **15 19 23.1** | **+0.8** |
| DIVS | | | | *e*Sn | **Sn** | **15 19 52.6** | **+1.6** |
| **DIVS** | **Divibare** | **2.29** | **84** | *e*Pn | **Pn** | **15 19 23.6** | **+1.3** |
| DIVS | | | | *e*Sn | **Sn** | **15 19 52.2** | **+1.2** |
| **PDG** | **Podgorica** | **2.29** | **129** | *e*Pn | **Pn** | **15 19 22.9** | **+0.7** |
| PDG | | | | *e*Sn | **Sn** | **15 19 51.6** | **+0.7** |
| **SJES** | **Sjenica** | **2.36** | **104** | *e*Pn | **Pn** | **15 19 24.1** | **+0.7** |
| **DRME** | **Dracevica, Mon** | **2.42** | **134** | *e*Pn | **Pn** | **15 19 24.5** | **+0.5** |
| DRME | | | | *e*Sn | **Sn** | **15 19 55.4** | **+1.3** |
| **IVAS** | **Ivanjica** | **2.42** | **96** | *e*Pn | **Pn** | **15 19 23.6** | **-0.5** |
| IVAS | | | | *e*Sn | **Sb** | **15 19 57.8** | **-0.3** |
| **BRJN** | **Brijuni** | **2.44** | **296** | *e*Pn | **Pb** | **15 19 25.8** | **-2.3** |
| **FRGS** | **Fruska Gora** | **2.48** | **58** | *e*Pn | **Pn** | **15 19 23.5** | **-1.4** |
| **FRGS** | **Fruska Gora** | **2.48** | **58** | *e*Pn | **Pn** | **15 19 24.7** | **-0.2** |
| FRGS | | | | *e*Sn | **Sn** | **15 19 57.3** | **+1.6** |
| **CEY** | **Cerknica** | **2.53** | **318** | *e*Pn | **Pn** | **15 19 25.9** | **+0.3** |
| CEY | | | | *e*Sn | **Sn** | **15 19 56.2** | **-0.7** |
| **SKDS** | **Skadanscina** | **2.61** | **311** | *e*Pn | **Pn** | **15 19 27.0** | **+0.3** |
| SKDS | | | | *e*Sn | **Sn** | **15 19 58.5** | **-0.5** |
| **MORH** | **Mrgy, Hungar** | **2.66** | **28** | *e*Pn | **Pn** | **15 19 27.7** | **+0.4** |
| MORH | | | | *e*Sn | **Sn** | **15 20 00.3** | **+0.2** |
| **GRUS** | **Gruza** | **2.80** | **89** | *e*Pn | **Pn** | **15 19 29.9** | **+0.6** |
| **OBKA** | **Obir** | **3.08** | **329** | *e*Pn | **Pb** | **15 19 36.8** | **-2.3** |
| | 0.7nm,0.2s | | | | | | |
| OBKA | | | | *i* Sn | **Sb** | **15 20 16.3** | **-0.9** |
| | 4.5nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **3.49** | **345** | *i* Pn | **Pn** | **15 19 40.1** | **+1.3** |
| | 0.9nm,0.2s | | | | | | |
| **CONA** | **Conrad Observa** | **4.10** | **351** | *i* Pn | **Pn** | **15 19 48.2** | **+0.9** |
| | 0.3nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **4.98** | **315** | *i* Pn | **Pn** | **15 20 02.4** | **+3.0** |
| | 1.0nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **5.31** | **313** | *e*Pn | **Pn** | **15 20 06.3** | **+2.4** |
| | 0.8nm,0.2s | | | | | | |

*DDA **19** 15:19:01.7±0.0,37°.38N×26°.91E, h21km±1km, ML3.3*
*ISK **19** 15:19:02.8,37°.45N×26°.94E, h10km, ML3.4/21*
*THE **19** 15:19:03.5,37°.47N×26°.98E, h0km, ML3.4/5, Error ellipse: s-maj=1.2km s-min=0.3km az=69.0*
*ATH **19** 15:19:03.0,37°.49N×26°.87E, h28km±1km, ML3.3/8, Error ellipse: s-maj=3.8km s-min=1.2km az=74.0*
**ISC 19 15:19:03.2±0.9,37°.43N±0°.02×26°.92E±0°.03, h12km±8km, n62,σ0s58/82, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DDIM** | **Aydin, Didim** | **0.26** | **83** | P | **Pg** | **15 19 08.4** | **-0.2** |
| DDIM | | | | S | **Sg** | **15 19 12.8** | **+0.7** |
| DDIM | | | | *i* AML | AML | 15 19 13.0 | |
| | comp=E,1µm,0.4s | | | | | | |
| DDIM | | | | *i* AML | AML | 15 19 13.0 | |
| | comp=N,8µm,0.3s | | | | | | |
| **SMG** | **Samos** | **0.29** | **347** | P | **Pg** | **15 19 09.2** | **0.0** |
| SMG | | | | S | **Sg** | **15 19 13.6** | **+0.5** |
| | 30µm,0.3s | | | | | | |
| **SMG** | **Samos** | **0.29** | **347** | P | **Pg** | **15 19 09.2** | **0.0** |
| SMG | | | | S | **Sg** | **15 19 13.4** | **+0.2** |
| SMG | | | | AML | AML | 15 19 13.9 | |
| | comp=N,58899µm,0.3s | | | | | | |
| SMG | | | | AML | AML | 15 19 14.3 | |
| | comp=E,62010µm,0.3s | | | | | | |
| **GCAM** | **G?zelcaml?** | **0.37** | **42** | PG | **Pg** | **15 19 10.4** | **-0.2** |
| GCAM | | | | SG | **Sg** | **15 19 15.7** | **+0.1** |
| **YKAV** | **Yalikavak-Bodr** | **0.42** | **136** | PG | **Pg** | **15 19 11.6** | **+0.2** |
| YKAV | | | | SG | **Sb** | **15 19 17.8** | **-1.0** |
| **BODT** | **Bodrum** | **0.48** | **139** | P | **Pb** | **15 19 13.1** | **-0.5** |
| BODT | | | | S | **Sb** | **15 19 21.1** | **+0.5** |
| **BODT** | **Bodrum** | **0.48** | **139** | PG | **Pg** | **15 19 12.8** | **+0.2** |
| BODT | | | | SG | **Sb** | **15 19 20.4** | **-0.2** |
| **DGB** | **zmir** | **0.63** | **357** | P | **Pg** | **15 19 14.7** | **-0.7** |
| DGB | | | | S | **Sb** | **15 19 25.4** | **+0.5** |
| DGB | | | | *i* AML | AML | 15 19 27.0 | |
| | comp=E,1µm,0.3s | | | | | | |
| **KOSK** | **Kos Island** | **0.68** | **176** | P | **Pb** | **15 19 17.4** | **+0.5** |
| KOSK | | | | S | **Sn** | **15 19 29.0** | **-0.1** |
| | comp=E,4µm,0.5s | | | | | | |
| **KOSK** | **Kos Island** | **0.68** | **176** | PG | **Pb** | **15 19 16.6** | **-0.3** |
| **MLSB** | **Milas** | **0.69** | **101** | PG | **Pg** | **15 19 16.2** | **-0.5** |
| MLSB | | | | SG | **Sb** | **15 19 26.5** | **-0.4** |
| **NISR** | **Nisiros** | **0.83** | **168** | P | **Pn** | **15 19 20.6** | **-0.1** |
| NISR | | | | S | **Sn** | **15 19 33.2** | **+0.3** |
| | comp=E,1µm,0.4s | | | | | | |
| **NISR** | **Nisiros** | **0.83** | **168** | P | **Pn** | **15 19 21.3** | **+0.6** |
| **NIS1** | **Nisyros Isl.** | **0.85** | **166** | P | **Pn** | **15 19 20.6** | **-0.4** |
| NIS1 | | | | S | **Sn** | **15 19 34.5** | **+1.1** |
| | comp=E,2µm,0.5s | | | | | | |
| **NIS1** | **Nisyros Isl.** | **0.85** | **166** | P | **Pn** | **15 19 20.7** | **-0.3** |
| NIS1 | | | | S | **Sn** | **15 19 34.8** | **+1.4** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.88** | **338** | P | **Pg** | **15 19 19.7** | **-0.5** |
| ZEYE | | | | S | **Sg** | **15 19 32.1** | **+0.5** |
| ZEYE | | | | *i* AML | AML | 15 19 33.0 | |
| | comp=E,2µm,0.7s | | | | | | |
| ZEYE | | | | *i* AML | AML | 15 19 35.0 | |
| | comp=E,3µm,0.4s | | | | | | |
| **URLA** | **Izmir** | **0.97** | **345** | PG | **Pg** | **15 19 21.3** | **-0.6** |
| URLA | | | | SG | **Sb** | **15 19 35.2** | **+0.4** |
| **YER** | **Yerkesik** | **1.12** | **105** | P | **Pb** | **15 19 24.3** | **-0.4** |
| **YER** | **Yerkesik** | **1.12** | **105** | PN | **Pn** | **15 19 24.7** | **-0.2** |
| **MULA** | **Mugla, Merkez-** | **1.13** | **98** | P | **Pb** | **15 19 24.0** | **-0.7** |
| MULA | | | | S | **Sb** | **15 19 39.4** | **-0.1** |
| MULA | | | | *i* AML | AML | 15 19 45.0 | |
| | comp=E,395nm,0.5s | | | | | | |
| **CHOS** | **Chios island** | **1.18** | **325** | P | **Pb** | **15 19 25.4** | **-0.2** |
| CHOS | | | | S | **Sn** | **15 19 43.1** | **+1.4** |
| | comp=E,2µm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **1.18** | **325** | P | **Pb** | **15 19 24.8** | **-0.8** |
| CHOS | | | | AML | AML | 15 19 44.9 | |
| | comp=E,4189µm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 15 19 50.6 | |
| | comp=N,1722µm,0.5s | | | | | | |
| **TURN** | **Turunc** | **1.24** | **121** | PN | **Pb** | **15 19 26.4** | **-0.2** |
| **MRSB** | **Marmaris-Mugla** | **1.24** | **124** | PN | **Pg** | **15 19 26.7** | **-0.4** |
| **FOCM** | **Foa** | **1.29** | **353** | PN | **Pn** | **15 19 27.4** | **+0.3** |
| **TNSA** | **Tinos** | **1.40** | **275** | P | **Pn** | **15 19 28.1** | **-0.5** |
| TNSA | | | | AML | AML | 15 19 51.0 | |
| | comp=E,1762µm,0.4s | | | | | | |
| TNSA | | | | AML | AML | 15 19 54.4 | |
| | comp=N,788µm,0.5s | | | | | | |
| **GOMA** | **Golmarmara-Man** | **1.50** | **31**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JHO | | | | S | **Sb** | **15 28 39.9** | **-1.1** |
| **JOU** | **Okura** | **1.30** | **322** | ǁP | **Pn** | **15 28 28.4** | **+0.6** |
| JOU | | | | S | **Sb** | **15 28 45.1** | **-0.2** |
| **JYS** | **Shirataka** | **1.55** | **305** | P | **Pn** | **15 28 32.2** | **+1.0** |
| JYS | | | | S | **Sb** | **15 28 51.3** | **-1.2** |
| **JFY** | **Yanaizu** | **1.57** | **273** | P | **Pn** | **15 28 32.1** | **+0.6** |
| JFY | | | | S | **Sn** | **15 28 51.0** | **-0.1** |
| **JMK** | **Ichinoseki** | **1.65** | **347** | ǁP | **Pn** | **15 28 33.4** | **+0.9** |
| JMK | | | | *e*S | **Sn** | **15 28 52.9** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **2.89** | **255** | P | **Pn** | **15 28 51.2** | **+1.6** |
| | 0.5nm,0.3s,baz=80,slow=16,SNR=17 | | | | | | |
| MJAR | | | | LR | LR | 15 30 23.8 | |
| | comp=Z,58nm,19.9s,baz=110,slow=45 | | | | | | |
| **MAT** | **Matsushiro** | **2.90** | **255** | P | **Pn** | **15 28 52.7** | **+3.0** |
| MAT | | | | *e*S | **Sn** | **15 29 25.2** | **+1.5** |
| **JHJ** | **Hachijo jima 2** | **4.49** | **201** | P | **Pn** | **15 29 12.9** | **+1.3** |
| | 6.4nm,0.3s,baz=318,slow=21,SNR=9.8 | | | | | | |
| JHJ | | | | S | **Sn** | **15 30 02.0** | **-1.0** |
| | 8.0nm,0.3s,baz=75,slow=22,SNR=8.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **6.80** | **6** | P | **Pn** | **15 29 45.6** | **+2.2** |
| | 0.2nm,0.3s,baz=348,slow=26,SNR=2.1 | | | | | | |
| **KSRS** | **Korea Array** | **10.95** | **275** | P | Pn | 15 30 45.5 | +5.4 |
| | 0.0nm,0.3s,baz=83,slow=13,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **27.79** | **303** | P | **P** | **15 33 52.1** | **-0.1** |
| | 0.3nm,0.3s,baz=102,slow=8.2,SNR=4.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.13** | **122** | T | T | 16 03 51.7 | |
| | baz=314,slow=75,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.13** | **122** | T | T | 16 04 11.4 | |
| | baz=314,slow=75,SNR=24 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.14** | **122** | T | T | 16 04 10.4 | |
| | baz=314,slow=75,SNR=15 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.85** | **124** | T | T | 16 04 23.9 | |
| | baz=315,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.85** | **124** | T | T | 16 04 36.1 | |
| | baz=315,slow=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.87** | **124** | T | T | 16 04 29.4 | |
| | baz=315,SNR=7.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.14** | **302** | P | **P** | **15 36 10.8** | **-0.7** |
| | 0.7nm,0.7s,baz=87,slow=9.9,SNR=8.9 | | | | | | |

**TAP 19 15:31:20.5,23°.89N×121°.73E,h53km,ML2.2,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEYL** | **Yanliau Villag** | **0.12** | **259** | P | Pn | 15 31 29.4 | +0.7 |
| | baz=271 | | | | | | |
| TEYL | | | | *e*S | Sn | 15 31 35.6 | +0.9 |
| | baz=271 | | | | | | |
| **HWA** | **Hwalien** | **0.14** | **307** | *i* P | Pn | 15 31 28.6 | -0.2 |
| | baz=308 | | | | | | |
| **TWD** | **Chiawan** | **0.22** | **327** | *i* P | Pn | 15 31 29.4 | +0.1 |
| | baz=332 | | | | | | |
| TWD | | | | *i* S | Sn | 15 31 36.2 | +0.6 |
| | baz=332 | | | | | | |
| **ETM** | **Tongmen** | **0.23** | **289** | P | Pn | 15 31 29.4 | +0.1 |
| | baz=279 | | | | | | |
| ETM | | | | S | Sn | 15 31 35.8 | +0.1 |
| | baz=279 | | | | | | |
| **TEGC** | **Jichi Village** | **0.25** | **224** | *e*P | Pn | 15 31 30.2 | +0.7 |
| | baz=222 | | | | | | |
| **ESL** | **Shilin** | **0.28** | **254** | *i* P | Pn | 15 31 29.7 | -0.1 |
| | baz=263 | | | | | | |
| ESL | | | | *i* S | Sn | 15 31 36.0 | -0.4 |
| | baz=263 | | | | | | |
| **ETL** | **Fush Village** | **0.28** | **340** | P | Pn | 15 31 29.9 | 0.0 |
| | baz=343 | | | | | | |
| ETL | | | | S | Sn | 15 31 36.9 | +0.4 |
| | baz=343 | | | | | | |
| **NACB** | **Ninganchiao** | **0.31** | **336** | P | Pn | 15 31 29.9 | 0.0 |
| | baz=327 | | | | | | |
| NACB | | | | S | Sn | 15 31 37.2 | +0.4 |
| | baz=327 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.39** | **324** | P | Pn | 15 31 30.7 | -0.1 |
| | baz=318 | | | | | | |
| ETLH | | | | *e*S | Sn | 15 31 38.3 | 0.0 |
| | baz=318 | | | | | | |
| **HGSD** | **Ruisui** | **0.49** | **215** | P | Pn | 15 31 32.8 | +1.0 |
| | baz=225 | | | | | | |
| HGSD | | | | S | Sn | 15 31 40.7 | +0.8 |
| | baz=225 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.49** | **301** | *i* P | Pn | 15 31 32.3 | 0.0 |
| | baz=295 | | | | | | |
| WHF | | | | *i* S | Sn | 15 31 40.6 | -0.2 |
| | baz=295 | | | | | | |
| **ENA** | **Nanau** | **0.53** | **1** | *i* P | Pn | 15 31 32.2 | -0.1 |
| | baz=8.0 | | | | | | |
| ENA | | | | *i* S | Sn | 15 31 41.6 | +0.7 |
| | baz=8.0 | | | | | | |
| **CHGB** | **Renai** | **0.54** | **288** | P | Pn | 15 31 33.1 | +0.5 |
| | baz=288 | | | | | | |
| CHGB | | | | S | Sn | 15 31 41.8 | +0.5 |
| | baz=288 | | | | | | |
| **EHY** | **Hungye** | **0.54** | **224** | *i* P | Pn | 15 31 31.8 | -0.6 |
| | baz=223 | | | | | | |
| EHY | | | | S | Sn | 15 31 40.5 | -0.4 |
| | baz=223 | | | | | | |
| **EWUT** | **Wuta** | **0.55** | **5** | P | Pn | 15 31 33.0 | +0.5 |
| | baz=5.0 | | | | | | |
| EWUT | | | | S | Sn | 15 31 42.0 | +0.8 |
| | baz=5.0 | | | | | | |
| **VWDT** | **VWDT** | **0.56** | **256** | P | Pn | 15 31 33.1 | +0.5 |
| | baz=252 | | | | | | |
| VWDT | | | | S | Sn | 15 31 42.1 | +0.8 |
| | baz=252 | | | | | | |
| **FUSS** | **Fushou** | **0.57** | **309** | *i* P | Pn | 15 31 33.4 | +0.4 |
| | baz=312 | | | | | | |
| FUSS | | | | *i* S | Sn | 15 31 42.4 | +0.4 |
| | baz=312 | | | | | | |
| **WUSB** | **Renai** | **0.57** | **280** | P | Pn | 15 31 33.4 | +0.5 |
| | baz=280 | | | | | | |
| WUSB | | | | S | Sn | 15 31 42.1 | +0.3 |
| | baz=280 | | | | | | |
| **NNSB** | **Datong** | **0.62** | **329** | P | Pn | 15 31 34.1 | +0.6 |
| | baz=330 | | | | | | |
| NNSB | | | | S | Sn | 15 31 42.6 | -0.3 |
| | baz=330 | | | | | | |
| **TWT** | **Tachien** | **0.62** | **306** | *i* P | Pn | 15 31 34.4 | +0.8 |
| | baz=298 | | | | | | |
| TWT | | | | *i* S | Sn | 15 31 43.9 | +0.8 |
| | baz=298 | | | | | | |
| **TDCB** | **Techi** | **0.63** | **305** | P | Pn | 15 31 34.2 | +0.5 |
| | baz=298 | | | | | | |
| TDCB | | | | S | Sn | 15 31 44.0 | +0.7 |
| | baz=298 | | | | | | |
| **NNS** | **Nan Shan** | **0.64** | **329** | *i* P | Pn | 15 31 33.8 | +0.1 |
| | baz=330 | | | | | | |
| NNS | | | | S | Sn | 15 31 43.7 | +0.4 |
| | baz=330 | | | | | | |
| **YULB** | **Yu-li** | **0.64** | **219** | P | Pn | 15 31 33.1 | -0.5 |
| | baz=223 | | | | | | |
| YULB | | | | S | Sn | 15 31 42.9 | -0.2 |
| | baz=223 | | | | | | |
| **EYUL** | **Yuli** | **0.66** | **215** | P | Pn | 15 31 35.3 | +1.4 |
| | baz=222 | | | | | | |
| **LATG** | **Datong** | **0.67** | **344** | P | Pn | 15 31 34.0 | -0.1 |
| | baz=337 | | | | | | |
| LATG | | | | S | Sn | 15 31 43.4 | -0.5 |
| | baz=337 | | | | | | |
| **SSLB** | **Suanglung** | **0.72** | **262** | P | Pn | 15 31 34.9 | +0.3 |
| | baz=260 | | | | | | |
| SSLB | | | | S | Sn | 15 31 46.3 | +1.4 |
| | baz=260 | | | | | | |
| **TWC** | **Suao** | **0.72** | **9** | P | Pn | 15 31 36.0 | +1.4 |
| | baz=19 | | | | | | |
| TWC | | | | S | Sn | 15 31 46.2 | +1.2 |
| | baz=19 | | | | | | |
| **NDT** | **Datong Townshi** | **0.73** | **344** | *e*P | Pn | 15 31 36.0 | +1.1 |
| | baz=346 | | | | | | |
| NDT | | | | S | Sn | 15 31 45.6 | +0.4 |
| | baz=346 | | | | | | |
| **NDS** | **Dongshan** | **0.74** | **359** | P | Pn | 15 31 34.8 | -0.1 |
| | baz=350 | | | | | | |
| NDS | | | | S | Sn | 15 31 46.0 | +0.6 |
| | baz=350 | | | | | | |
| **ENTT** | **Nioudou** | **0.76** | **349** | *i* P | Pn | 15 31 35.3 | +0.1 |
| | baz=351 | | | | | | |
| ENTT | | | | *i* S | Sn | 15 31 46.0 | +0.1 |
| | baz=351 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.76** | **269** | *i* P | Pn | 15 31 36.1 | +0.9 |
| | baz=268 | | | | | | |
| SMLT | | | | *i* S | Sn | 15 31 48.6 | +2.6 |
| | baz=268 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.77** | **283** | P | Pn | 15 31 36.0 | +0.8 |
| | baz=282 | | | | | | |
| WCS | | | | S | Sn | 15 31 48.4 | +2.5 |
| | baz=282 | | | | | | |
| **FULB** | **Fuli** | **0.80** | **210** | *e*P | Pn | 15 31 36.7 | +1.0 |
| | baz=218 | | | | | | |
| FULB | | | | *i* S | Sn | 15 31 47.9 | +1.1 |
| | baz=218 | | | | | | |
| **TYC** | **Yuchr** | **0.80** | **271** | *i* P | Pn | 15 31 36.7 | +1.1 |
| | baz=272 | | | | | | |
| TYC | | | | *i* S | Sn | 15 31 48.3 | +1.7 |
| | baz=272 | | | | | | |
| **WHP** | **Taichung City** | **0.81** | **298** | *i* P | Pn | 15 31 37.1 | +1.2 |
| | baz=300 | | | | | | |
| WHP | | | | S | Sn | 15 31 48.4 | +1.2 |
| | baz=300 | | | | | | |
| **TWE** | **Neicheng** | **0.83** | **356** | P | Pn | 15 31 36.2 | +0.1 |
| | baz=350 | | | | | | |
| TWE | | | | S | Sn | 15 31 47.2 | -0.1 |
| | baz=350 | | | | | | |
| **YHNB** | **Yeheng** | **0.84** | **337** | P | Pn | 15 31 36.8 | +0.5 |
| | baz=339 | | | | | | |
| YHNB | | | | S | Sn | 15 31 47.7 | -0.1 |
| | baz=339 | | | | | | |
| **NSK** | **Sanguang** | **0.85** | **337** | *i* P | Pn | 15 31 36.9 | +0.5 |
| | baz=338 | | | | | | |
| NSK | | | | *i* S | Sn | 15 31 47.3 | -0.8 |
| | baz=338 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.87** | **352** | P | Pn | 15 31 37.6 | +0.9 |
| | baz=347 | | | | | | |
| FUSB | | | | S | Sn | 15 31 48.9 | +0.3 |
| | baz=347 | | | | | | |
| **NWLT** | **Wulai** | **0.91** | **347** | P | Pn | 15 31 37.9 | +0.8 |
| | baz=342 | | | | | | |
| NWLT | | | | *i* S | Sn | 15 31 49.0 | -0.2 |
| | baz=342 | | | | | | |
| **WJS** | **Zhushan** | **0.92** | **266** | *i* P | Pn | 15 31 38.6 | +1.4 |
| | baz=264 | | | | | | |
| WJS | | | | *i* S | Sn | 15 31 52.2 | +2.6 |
| | baz=264 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.92** | **323** | P | Pn | 15 31 38.9 | +1.5 |
| | baz=327 | | | | | | |
| NFF | | | | *i* S | Sn | 15 31 50.9 | +1.1 |
| | baz=327 | | | | | | |
| **ALS** | **Alishan** | **0.93** | **246** | *i* P | Pn | 15 31 38.5 | +0.9 |
| | baz=239 | | | | | | |
| ALS | | | | *i* S | Sn | 15 31 51.8 | +1.6 |
| | baz=239 | | | | | | |
| **ELDTW** | **Lidau** | **0.96** | **223** | *i* P | Pn | 15 31 37.5 | -0.3 |
| | baz=217 | | | | | | |
| ELDTW | | | | *i* S | Sn | 15 31 50.4 | -0.2 |
| | baz=217 | | | | | | |
| **WNT** | **Mingjian** | **0.96** | **269** | P | Pn | 15 31 38.6 | +0.9 |
| | baz=268 | | | | | | |
| WNT | | | | *i* S | Sn | 15 31 52.8 | +2.4 |
| | baz=268 | | | | | | |
| **TWQ1** | **Liyutan** | **0.98** | **298** | P | Pn | 15 31 39.0 | +0.9 |
| | baz=297 | | | | | | |
| TWQ1 | | | | *i* S | Sn | 15 31 52.7 | +1.6 |
| | baz=297 | | | | | | |
| **NSTT** | **Nanjuang** | **0.99** | **318** | P | Pn | 15 31 39.7 | +1.6 |
| | baz=307 | | | | | | |
| NSTT | | | | *i* S | Sn | 15 31 52.9 | +1.6 |
| | baz=307 | | | | | | |
| **LIOB** | **Emei** | **0.99** | **319** | *i* P | Pn | 15 31 39.1 | +0.9 |
| | baz=308 | | | | | | |
| LIOB | | | | *i* S | Sn | 15 31 53.4 | +2.1 |
| | baz=308 | | | | | | |
| **EDH** | **Donghe** | **0.99** | **203** | P | Pn | 15 31 38.5 | +0.3 |
| | baz=211 | | | | | | |
| EDH | | | | *i* S | Sn | 15 31 51.2 | -0.1 |
| | baz=211 | | | | | | |
| **TCU** | **Taichung** | **1.00** | **285** | *i* P | Pn | 15 31 39.7 | +1.5 |
| | baz=284 | | | | | | |
| TCU | | | | *i* S | Sn | 15 31 54.5 | +3.2 |
| | baz=284 | | | | | | |
| **CHN5** | **Tsauling** | **1.01** | **253** | *i* P | Pn | 15 31 39.2 | +0.8 |
| | baz=251 | | | | | | |
| CHN5 | | | | *i* S | Sn | 15 31 54.8 | +3.0 |
| | baz=251 | | | | | | |
| **TIPB** | **Shuangxi** | **1.08** | **5** | P | Pn | 15 31 40.6 | +1.2 |
| | baz=358 | | | | | | |
| TIPB | | | | S | Sn | 15 31 54.9 | +1.5 |
| | baz=358 | | | | | | |
| **WCHH** | **Zhanghua** | **1.09** | **280** | *e*S | Sn | 15 31 56.5 | +3.0 |
| | baz=291 | | | | | | |
| **WDLH** | **Douliu** | **1.11** | **260** | *i* P | Pn | 15 31 41.0 | +1.2 |
| | baz=258 | | | | | | |
| WDLH | | | | *i* S | Sn | 15 31 57.7 | +3.7 |
| | baz=258 | | | | | | |
| **STYH** | **Taoyuan** | **1.13** | **231** | P | Pn | 15 31 41.0 | +1.0 |
| | baz=237 | | | | | | |
| STYH | | | | S | Sn | 15 31 56.8 | +2.2 |
| | baz=237 | | | | | | |
| **TPUB** | **Ta-pu** | **1.17** | **240** | P | Pn | 15 31 41.9 | +1.3 |
| | baz=238 | | | | | | |
| TPUB | | | | S | Sn | 15 31 58.5 | +3.0 |
| | baz=238 | | | | | | |
| **WTP** | **Ta-pu** | **1.21** | **238** | *i* P | Pn | 15 31 43.0 | +1.8 |
| | baz=235 | | | | | | |
| WTP | | | | *i* S | Sn | 15 31 59.8 | +3.3 |
| | baz=235 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.24** | **271** | S | Sn | 15 31 59.6 | +2.5 |
| | baz=279 | | | | | | |
| **WTK** | **Tuku** | **1.25** | **261** | P | Pn | 15 31 42.6 | +1.1 |
| | baz=259 | | | | | | |
| WTK | | | | *i* S | Sn | 15 31 59.9 | +2.6 |
| | baz=259 | | | | | | |
| **TWK** | **Hsinying** | **1.30** | **242** | *i* P | Pn | 15 31 44.5 | +2.1 |
| | baz=239 | | | | | | |
| TWK | | | | S | Sn | 15 32 01.2 | +2.6 |
| | baz=239 | | | | | | |
| **CHN1** | **Nanshi** | **1.31** | **238** | *i* P | Pn | 15 31 44.1 | +1.6 |
| | baz=235 | | | | | | |
| CHN1 | | | | S | Sn | 15 32 02.1 | +3.2 |
| | baz=235 | | | | | | |
| **SLGT** | **Liugui** | **1.34** | **228** | *i* P | Pn | 15 31 44.6 | +1.7 |
| | baz=233 | | | | | | |
| SLGT | | | | *i* S | Sn | 15 32 02.5 | +2.9 |
| | baz=233 | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.42** | **255** | P | Pn | 15 31 44.9 | +0.9 |
| | baz=253 | | | | | | |
| WSL | | | | S | Sn | 15 32 04.2 | +2.5 |
| | baz=253 | | | | | | |

**JMA 19 15:31:28.7±0.2,24°.98N×123°.57E,h19km,M1.4,**
**Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.66** | **167** | *e*S | Sb | 15 31 50.3 | +0.1 |
| **YOJ** | **Yonaguni jima** | **0.72** | **225** | P | Pb | 15 31 42.4 | -0.3 |
| YOJ | | | | S | Sb | 15 31 51.4 | -0.8 |
| **JISG** | **Ishigakijimahi** | **0.78** | **120** | P | Pb | 15 31 43.1 | -0.5 |
| JISG | | | | S | Sb | 15 31 53.0 | -0.8 |
| **JIJ** | **Ishigaki jima** | **0.81** | **140** | *e*S | Sb | 15 31 53.7 | -0.9 |
| **JKRS** | **Kuro-shima** | **0.84** | **152** | P | Pb | 15 31 44.5 | -0.2 |
| JKRS | | | | S | Sb | 15 31 55.7 | +0.1 |

*PGC **19** 15:38:21.9±0.0,65°.46N×134°.03W,h1km,ML3.4/13, 221km south of Fort McPherson, Nt Northern Yukon Territory, Canada*
*NEIC **19** 15:38:21.8±1.7,65°.43N±0°.05×133°.9W±0°.1,h7km±6km, Error ellipse: s-maj=7.6km s-min=7.4km az=154.0*
*IDC **19** 15:38:22.7±2.8,65°.51N×134°.08W,h11km±19km,mb3.8/11, mb1 4.0/15,mb1mx3.8/47,mbtmp3.9/15,ML4.1/4,MS3.0/3, Ms1 3.1/3,ms1mx2.6/93,Error ellipse: s-maj=11.1km s-min=9.1km az=45.0*
*AEIC **19** 15:38:23±1.8,65°.44N±0°.05×134°.0W±0°.1,h29km±7km, Error ellipse: s-maj=7.8km s-min=7.2km az=184.0*
*ANF **19** 15:38:24.4±1.1,65°.45N×134°.09W,h25km±11km,ML4.4/12, Error ellipse: s-maj=3.5km s-min=2.3km az=42.0*

**ISC 19 15:38:24.5±1.5,65°.49N±0°.03×133°.93W±0°.03,**
**h29km±12km,n190,σ1$48/238,mb4.1/13,Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I29M** | **Ogilvie Camp,** | **1.84** | **268** | Pn | **Pn** | **15 38 52.4** | **-1.7** |
| I29M | | | | Sn | **Sn** | **15 39 16.9** | **+0.5** |
| **I29M** | **Ogilvie Camp,** | **1.84** | **268** | P | **Pn** | **15 38 53.0** | **-1.0** |
| | baz=85,SNR=80 | | | | | | |
| I29M | | | | Sb | **Sb** | **15 39 18.5** | **-1.4** |
| | baz=85 | | | | | | |
| **MAYO** | **Mayo, Yukon** | **2.09** | **205** | Pn | **Pn** | **15 38 56.0** | **-1.4** |
| MAYO | | | | Sn | **Sn** | **15 39 23.5** | **+1.0** |
| **MAYO** | **Mayo, Yukon** | **2.09** | **205** | P | **Pn** | **15 38 56.7** | **-0.8** |
| | baz=22,SNR=120 | | | | | | |
| MAYO | | | | Sb | **Sb** | **15 39 25.8** | **-1.2** |
| | baz=22 | | | | | | |
| **J29M** | **Klondike Camp** | **2.10** | **242** | P | **Pn** | **15 38 57.4** | **-0.3** |
| | baz=59,SNR=769 | | | | | | |
| J29M | | | | Sb | **Sb** | **15 39 26.5** | **-1.0** |
| | baz=59 | | | | | | |
| **DAWY** | **Dawson** | **2.75** | **241** | Pn | **Pn** | **15 39 05.8** | **-0.7** |
| **DAWY** | **Dawson** | **2.75** | **241** | Pn | **Pn** | **15 39 06.0** | **-0.6** |
| DAWY | | | | Sn | **Sn** | **15 39 37.9** | **-0.8** |
| DAWY | | | | Sg | **Sb** | **15 39 45.6** | **-0.4** |
| **DAWY** | **Dawson** | **2.75** | **241** | P | **Pn** | **15 39 05.9** | **-0.7** |
| | baz=56,SNR=88 | | | | | | |
| DAWY | | | | S | **Sn** | **15 39 38.0** | **-0.8** |
| | baz=56 | | | | | | |
| **INK** | **Inuvik** | **2.83** | **3** | Pn | **Pn** | **15 39 08.2** | **+0.6** |
| | 4.8nm,0.3s,baz=176,slow=18,SNR=125 | | | | | | |
| INK | | | | Lg | Lg | 15 39 51.1 | |
| | 79nm,0.3s,baz=240,slow=26,SNR=9.6 | | | | | | |
| INK | | | | LR | LR | 15 40 20.1 | |
| | comp=Z,208nm,18.5s,baz=139,slow=42 | | | | | | |
| **INK** | **Inuvik** | **2.83** | **3** | Pn | **Pn** | **15 39 08.4** | **+0.8** |
| **INK** | **Inuvik** | **2.83** | **3** | Pn | **Pn** | **15 39 08.2** | **+0.6** |
| INK | | | | Sg | **Sb** | **15 39 50.8** | **+2.5** |
| **INK** | **Inuvik** | **2.83** | **3** | P | **Pn** | **15 39 08.3** | **+0.6** |
| | baz=184,SNR=38 | | | | | | |
| INK | | | | Sb | **Sb** | **15 39 51.2** | **+2.9** |
| | baz=184 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **3.12** | **157** | Pn | **Pn** | **15 39 11.3** | **-0.4** |
| MMPY | | | | Sn | **Sn** | **15 39 48.1** | **+0.2** |
| MMPY | | | | Sg | **Sb** | **15 39 58.0** | **+1.3** |
| **MMPY** | **Sheldon Lake,** | **3.12** | **157** | P | **Pn** | **15 39 11.4** | **-0.2** |
| | baz=338,SNR=68 | | | | | | |
| MMPY | | | | S | **Sn** | **15 39 48.2** | **+0.3** |
| | baz=338 | | | | | | |
| **EGAK** | **Eagle** | **3.14** | **260** | | **Pn** | **15 39 10.6** | **-1.3** |
| **EGAK** | **Eagle** | **3.14** | **260** | P | **Pn** | **15 39 10.4** | **-1.5** |
| | baz=74,SNR=33 | | | | | | |
| EGAK | | | | S | **Sn** | **15 39 46.7** | **-1.6** |
| | baz=74 | | | | | | |
| **M30M** | **Minto, Yukon** | **3.19** | **205** | | **Pn** | **15 39 11.7** | **-0.9** |
| **FARO** | **Faro, Yukon** | **3.29** | **175** | Pn | **Pn** | **15 39 13.2** | **-0.8** |
| FARO | | | | Sn | **Sn** | **15 39 50.6** | **-1.5** |
| **FARO** | **Faro, Yukon** | **3.29** | **175** | P | **Pn** | **15 39 13.1** | **-0.9** |
| | baz=355,SNR=54 | | | | | | |
| FARO | | | | S | **Sn** | **15 39 51.1** | **-1.0** |
| | baz=355 | | | | | | |
| **M31M** | **Drury Creek, Y** | **3.31** | **184** | | **Pn** | **15 39 13.2** | **-1.2** |
| **M31M** | **Drury Creek, Y** | **3.31** | **184** | P | **Pn** | **15 39 13.3** | **-1.0** |
| | baz=2.6,SNR=54 | | | | | | |
| M31M | | | | Sb | **Sb** | **15 40 02.0** | **-0.2** |
| | baz=2.6 | | | | | | |
| **BC03** | | **4.20** | **238** | | **Pn** | **15 39 25.8** | **-0.7** |
| **BCAR** | **Beaver Creek A** | **4.20** | **238** | Pn | **Pn** | **15 39 25.9** | **-0.7** |
| **L27K** | **Beaver Creek,** | **4.22** | **238** | | **Pn** | **15 39 26.1** | **-0.7** |
| **L27K** | **Beaver Creek,** | **4.22** | **238** | P | **Pn** | **15 39 26.1** | **-0.7** |
| | baz=51,SNR=18 | | | | | | |
| L27K | | | | Sb | **Sb** | **15 40 28.4** | **0.0** |
| | baz=51 | | | | | | |
| **BVCY** | **Beaver Creek** | **4.35** | **228** | | **Pn** | **15 39 27.9** | **-0.7** |
| BVCY | | | | | **Sn** | **15 40 17.3** | **-0.9** |
| **BVCY** | **Beaver Creek** | **4.35** | **228** | Pn | **Pn** | **15 39 27.8** | **-0.7** |
| BVCY | | | | Sn | **Sn** | **15 40 17.0** | **-1.2** |
| **BVCY** | **Beaver Creek** | **4.35** | **228** | Pn | **Pn** | **15 39 27.8** | **-0.7** |
| BVCY | | | | Sn | **Sn** | **15 40 17.4** | **-0.8** |
| **BVCY** | **Beaver Creek** | **4.35** | **228** | P | **Pn** | **15 39 27.8** | **-0.7** |
| | baz=42,SNR=50 | | | | | | |
| BVCY | | | | S | **Sn** | **15 40 17.7** | **-0.5** |
| | baz=42 | | | | | | |
| **SCRK** | **Sand Creek** | **4.57** | **255** | Pn | **Pn** | **15 39 30.6** | **-1.1** |
| **SCRK** | **Sand Creek** | **4.57** | **255** | P | **Pn** | **15 39 30.3** | **-1.4** |
| | baz=66 | | | | | | |
| SCRK | | | | Sb | **Sb** | **15 40 38.9** | **+0.4** |
| | baz=66 | | | | | | |
| **YUK4** | **Talbot Arm** | **4.67** | **209** | Pn | **Pn** | **15 39 30.8** | **-2.4** |
| **YUK4** | **Talbot Arm** | **4.67** | **209** | Pn | **Pn** | **15 39 30.9** | **-2.3** |
| YUK4 | | | | Sn | **Sn** | **15 40 21.9** | **-4.5** |
| **YUK4** | **Talbot Arm** | **4.67** | **209** | P | **Pn** | **15 39 30.9** | **-2.3** |
| | baz=25,SNR=26 | | | | | | |
| YUK4 | | | | S | **Sn** | **15 40 22.9** | **-3.6** |
| | baz=25 | | | | | | |
| **BMAR** | **Burnt Mountain** | **4.69** | **299** | Pn | **Pn** | **15 39 32.1** | **-1.2** |
| **BM03** | **Burnt Mountain** | **4.70** | **299** | | **Pn** | **15 39 32.9** | **-0.5** |
| **M27K** | **Edge Creek, AK** | **4.71** | **232** | | **Pn** | **15 39 33.1** | **-0.6** |
| **YUK3** | **Moose Creek** | **4.73** | **221** | | **Pn** | **15 39 33.6** | **-0.4** |
| **YUK3** | **Moose Creek** | **4.73** | **221** | Pn | **Pn** | **15 39 32.9** | **-1.1** |
| **YUK3** | **Moose Creek** | **4.73** | **221** | Pn | **Pn** | **15 39 33.6** | **-0.4** |
| YUK3 | | | | Sn | **Sn** | **15 40 24.6** | **-3.3** |
| **YUK3** | **Moose Creek** | **4.73** | **221** | P | **Pn** | **15 39 33.6** | **-0.4** |
| | baz=35,SNR=47 | | | | | | |
| YUK3 | | | | S | **Sn** | **15 40 26.2** | **-1.7** |
| | baz=35 | | | | | | |
| **FYU** | **Fort Yukon** | **4.74** | **288** | | **Pn** | **15 39 32.4** | **-1.4** |
| **DOT** | **Dot Lake** | **4.75** | **252** | | **Pn** | **15 39 32.6** | **-1.4** |
| **DOT** | **Dot Lake** | **4.75** | **252** | Pn | **Pn** | **15 39 32.5** | **-1.5** |
| **L26K** | **Log Cabin Wild** | **4.80** | **243** | | **Pn** | **15 39 33.7** | **-1.0** |
| **L26K** | **Log Cabin Wild** | **4.80** | **243** | P | **Pn** | **15 39 33.5** | **-1.2** |
| | baz=55,SNR=39 | | | | | | |
| L26K | | | | Sb | **Sb** | **15 40 47.0** | **+2.1** |
| | baz=55 | | | | | | |
| **YUK2** | **White River** | **4.83** | **223** | | **Pn** | **15 39 34.7** | **-0.5** |
| **YUK2** | **White River** | **4.83** | **223** | Pn | **Pn** | **15 39 34.7** | **-0.5** |
| **YUK2** | **White River** | **4.83** | **223** | Pn | **Pn** | **15 39 35.0** | **-0.3** |
| YUK2 | | | | Sn | **Sn** | **15 40 28.2** | **-2.0** |
| **HYT** | **Haines Junctio** | **4.96** | **201** | Pn | **Pn** | **15 39 36.4** | **-0.6** |
| **HYT** | **Haines Junctio** | **4.96** | **201** | Pn | **Pn** | **15 39 36.1** | **-1.0** |
| **HYT** | **Haines Junctio** | **4.96** | **201** | P | **Pn** | **15 39 36.0** | **-1.0** |
| | baz=17,SNR=15 | | | | | | |
| **YUK8** | **Steele Glacier** | **4.97** | **215** | Pn | **Pn** | **15 39 36.8** | **-0.6** |
| YUK8 | | | | Sn | **Sn** | **15 40 30.7** | **-3.3** |
| **YUK6** | **Outpost Mounta** | **4.99** | **206** | | **Pn** | **15 39 36.9** | **-0.6** |
| **YUK6** | **Outpost Mounta** | **4.99** | **206** | Pn | **Pn** | **15 39 36.4** | **-1.1** |
| **YUK6** | **Outpost Mounta** | **4.99** | **206** | Pn | **Pn** | **15 39 36.5** | **-1.0** |
| **YUK6** | **Outpost Mounta** | **4.99** | **206** | P | **Pn** | **15 39 36.8** | **-0.7** |
| | baz=22,SNR=5.4 | | | | | | |
| YUK6 | | | | Sb | **Sb** | **15 40 52.3** | **+1.7** |
| | baz=22 | | | | | | |
| **RIDG** | **Independent Ri** | **5.02** | **254** | | **Pn** | **15 39 36.9** | **-0.9** |
| **RIDG** | **Independent Ri** | **5.02** | **254** | Sb | **Sb** | **15 40 53.5** | **+2.3** |
| | baz=65 | | | | | | |
| **M26K** | **Nabesna, AK** | **5.06** | **236** | | **Pn** | **15 39 37.5** | **-0.8** |
| **M26K** | **Nabesna, AK** | **5.06** | **236** | P | **Pn** | **15 39 37.4** | **-0.9** |
| | baz=48 | | | | | | |
| M26K | | | | S | **Sn** | **15 40 33.6** | **-2.2** |
| | baz=48 | | | | | | |
| **WRGLY** | **Wrigley** | **5.08** | **112** | P | **Pn** | **15 39 39.0** | **+0.5** |
| | baz=301 | | | | | | |
| WRGLY | | | | S | **Sn** | **15 40 37.2** | **+1.0** |
| | baz=301 | | | | | | |
| **P33M** | **Teslin, Yukon** | **5.33** | **174** | Pn | **Pn** | **15 39 41.3** | **-0.8** |
| **P33M** | **Teslin, Yukon** | **5.33** | **174** | P | **Pn** | **15 39 41.0** | **-1.0** |
| | baz=354,SNR=15 | | | | | | |
| **YUK7** | **Dusty Glacier** | **5.34** | **203** | | **Pn** | **15 39 41.7** | **-0.6** |
| **YUK7** | **Dusty Glacier** | **5.34** | **203** | Pn | **Pn** | **15 39 41.5** | **-0.8** |
| **YUK7** | **Dusty Glacier** | **5.34** | **203** | Pn | **Pn** | **15 39 41.5** | **-0.8** |
| YUK7 | | | | Sg | **Sb** | **15 41 04.5** | **+3.8** |
| **C36M** | **Paulatuk** | **5.42** | **40** | Pn | **Pn** | **15 39 43.1** | **0.0** |
| **C36M** | **Paulatuk** | **5.42** | **40** | Pn | **Pn** | **15 39 42.9** | **-0.2** |
| C36M | | | | Sn | **Sn** | **15 40 41.2** | **-3.2** |
| **C36M** | **Paulatuk** | **5.42** | **40** | P | **Pn** | **15 39 43.1** | **0.0** |
| | baz=229,SNR=57 | | | | | | |
| C36M | | | | S | **Sn** | **15 40 43.9** | **-0.4** |
| | baz=229 | | | | | | |
| **IL31** | | **5.52** | **268** | | **Pn** | **15 39 42.7** | **-1.8** |
| **ILAR** | **Eielson Array** | **5.52** | **268** | Pn | **Pn** | **15 39 42.3** | **-2.3** |
| | 0.6nm,0.3s,baz=79,slow=12,SNR=24 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 40 44.2** | **-2.7** |
| | 2.9nm,0.3s,baz=90,slow=15,SNR=6.6 | | | | | | |
| ILAR | | | | Lg |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BALM** | **Baldy** | **5.87** | **224** | Pn | **Pn** | **15 39 49.9** | **+0.5** |
| BALM | | | | Sn | **Sn** | **15 40 55.1** | **-0.6** |
| **CCB** | **Clear Creek Bu** | **5.93** | **268** | | **Pn** | **15 39 48.3** | **-1.9** |
| **KIAG** | **Kiagna River** | **5.96** | **224** | Pn | **Pn** | **15 39 50.6** | **-0.2** |
| **KIAG** | **Kiagna River** | **5.96** | **224** | Pn | **Pn** | **15 39 51.4** | **+0.6** |
| KIAG | | | | Sn | **Sn** | **15 40 59.0** | **+0.8** |
| **GLB** | **Gilahina Butte** | **6.01** | **232** | Pn | **Pn** | **15 39 51.5** | **+0.1** |
| **MDM** | **Murphy Dome** | **6.04** | **271** | | **Pn** | **15 39 49.7** | **-2.0** |
| **TABL** | **Table Mountain** | **6.04** | **216** | | **Pn** | **15 39 53.0** | **+1.0** |
| **TABL** | **Table Mountain** | **6.04** | **216** | Pn | **Pn** | **15 39 52.2** | **+0.2** |
| TABL | | | | Sn | **Sn** | **15 40 59.6** | **-0.6** |
| **VRDI** | **Verde Repeater** | **6.05** | **229** | Pn | **Pn** | **15 39 52.3** | **+0.2** |
| **SKAG** | **Skagway** | **6.09** | **187** | Pn | **Pn** | **15 39 52.0** | **-0.4** |
| **SKAG** | **Skagway** | **6.09** | **187** | P | **Pn** | **15 39 52.0** | **-0.4** |
| | baz=5.2 | | | | | | |
| **WRH** | **Wood River Hil** | **6.10** | **267** | | **Pn** | **15 39 51.6** | **-0.9** |
| **PCA** | **Pinnacle** | **6.14** | **211** | | **Pn** | **15 39 53.1** | **-0.1** |
| **PCA** | **Pinnacle** | **6.14** | **211** | Pn | **Pn** | **15 39 54.7** | **+1.5** |
| PCA | | | | Sn | **Sn** | **15 41 04.9** | **+2.4** |
| **N25K** | **Chitina, Valde** | **6.16** | **236** | | **Pn** | **15 39 52.7** | **-0.7** |
| **ISLE** | **Juniper Island** | **6.22** | **222** | | **Pn** | **15 39 55.5** | **+1.1** |
| **SAMH** | **Samovar Hills** | **6.23** | **213** | Pn | **Pn** | **15 39 56.3** | **+1.8** |
| SAMH | | | | Sn | **Sn** | **15 41 07.7** | **+3.1** |
| **YAH** | **Yahtse** | **6.26** | **218** | | **Pn** | **15 39 56.9** | **+1.9** |
| **DHY** | **Denali Highway** | **6.33** | **254** | | **Pn** | **15 39 55.2** | **-0.7** |
| **DHY** | **Denali Highway** | **6.33** | **254** | P | **Pn** | **15 39 54.9** | **-1.0** |
| | baz=62 | | | | | | |
| **PNL** | **Peninsula** | **6.37** | **206** | | **Pn** | **15 39 56.2** | **0.0** |
| **PNL** | **Peninsula** | **6.37** | **206** | Pn | **Pn** | **15 39 56.8** | **+0.5** |
| **PNL** | **Peninsula** | **6.37** | **206** | P | **Pn** | **15 39 55.6** | **-0.7** |
| | baz=21 | | | | | | |
| **H23K** | **Yukon River** | **6.46** | **280** | | **Pn** | **15 39 55.1** | **-2.5** |
| **H23K** | **Yukon River** | **6.46** | **280** | P | **Pn** | **15 39 56.2** | **-1.4** |
| | baz=86 | | | | | | |
| **MESA** | **MESA** | **6.47** | **218** | Pn | **Pn** | **15 39 58.4** | **+0.5** |
| **MESA** | **MESA** | **6.47** | **218** | Pn | **Pn** | **15 39 58.4** | **+0.5** |
| MESA | | | | Sn | **Sn** | **15 41 11.6** | **+0.9** |
| **NEA2** | **Nenana** | **6.47** | **269** | P | **Pn** | **15 39 56.0** | **-1.7** |
| | baz=76 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **6.47** | **274** | | **Pn** | **15 39 55.4** | **-2.2** |
| **I23K** | **Minto, Yukon-K** | **6.47** | **274** | P | **Pn** | **15 39 56.1** | **-1.5** |
| | baz=80 | | | | | | |
| **BMRM** | **Bremner River** | **6.62** | **232** | Pn | **Pn** | **15 40 00.2** | **+0.4** |
| **BMRM** | **Bremner River** | **6.62** | **232** | P | **Pn** | **15 39 58.5** | **-1.3** |
| | baz=42 | | | | | | |
| **MCK** | **McKinley** | **6.69** | **262** | Pn | **Pn** | **15 39 59.6** | **-1.1** |
| **MCK** | **McKinley** | **6.69** | **262** | P | **Pn** | **15 39 59.2** | **-1.4** |
| | baz=68 | | | | | | |
| **WAT6** | **Susitna Watana** | **6.73** | **251** | | **Pn** | **15 39 60.0** | **-1.4** |
| **WAT6** | **Susitna Watana** | **6.73** | **251** | P | **Pn** | **15 40 00.3** | **-1.1** |
| | baz=58 | | | | | | |
| **BWN** | **Browne** | **6.76** | **266** | | **Pn** | **15 39 58.6** | **-2.9** |
| **COLD** | **Coldfoot** | **6.77** | **292** | Pn | **Pn** | **15 40 01.3** | **-0.4** |
| **COLD** | **Coldfoot** | **6.77** | **292** | Pn | **Pn** | **15 40 00.9** | **-0.8** |
| COLD | | | | Sn | **Sn** | **15 41 14.5** | **-3.2** |
| **COLD** | **Coldfoot** | **6.77** | **292** | P | **Pn** | **15 40 00.8** | **-0.8** |
| | baz=98 | | | | | | |
| **RND** | **Reindeer** | **6.79** | **259** | Pn | **Pn** | **15 40 01.2** | **-0.8** |
| **TOLK** | **Toolik Lake Re** | **6.87** | **304** | Pn | **Pn** | **15 40 04.0** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **6.87** | **304** | P | **Pn** | **15 40 03.7** | **+0.5** |
| | baz=110,SNR=9.8 | | | | | | |
| **BESE** | **Bessie Mountai** | **6.95** | **184** | Pn | **Pn** | **15 40 03.5** | **-0.9** |
| **BESE** | **Bessie Mountai** | **6.95** | **184** | Pn | **Pn** | **15 40 04.0** | **-0.4** |
| BESE | | | | Sn | **Sn** | **15 41 19.8** | **-2.6** |
| **SCM** | **Sheep Creek Mo** | **7.00** | **245** | Pn | **Pn** | **15 40 05.4** | **+0.5** |
| **A36M** | **Sachs Harbour** | **7.24** | **22** | Pn | **Pn** | **15 40 08.0** | **0.0** |
| **A36M** | **Sachs Harbour** | **7.24** | **22** | Pn | **Pn** | **15 40 07.3** | **-0.7** |
| A36M | | | | Sn | **Sn** | **15 41 26.1** | **-2.9** |
| **A36M** | **Sachs Harbour** | **7.24** | **22** | P | **Pn** | **15 40 09.1** | **+1.0** |
| | baz=210,SNR=51 | | | | | | |
| **JIS** | **Juneau Island** | **7.25** | **182** | | **Pn** | **15 40 08.1** | **-0.1** |
| **EYAK** | **Cordova Ski Ar** | **7.31** | **233** | | **Pn** | **15 40 08.4** | **-0.7** |
| **DLBC** | **Dease Lake** | **7.32** | **164** | Pn | **Pn** | **15 40 08.5** | **-0.8** |
| | 4.0nm,0.3s,baz=16,slow=9.7,SNR=33 | | | | | | |
| **DLBC** | **Dease Lake** | **7.32** | **164** | | **Pn** | **15 40 09.1** | **-0.3** |
| **DLBC** | **Dease Lake** | **7.32** | **164** | Pn | **Pn** | **15 40 08.9** | **-0.3** |
| DLBC | | | | Sn | **Sn** | **15 41 28.0** | **-3.3** |
| **TRF** | **Thorofare Moun** | **7.36** | **261** | Pn | **Pn** | **15 40 08.9** | **-1.1** |
| **TRF** | **Thorofare Moun** | **7.36** | **261** | P | **Pn** | **15 40 08.6** | **-1.4** |
| | baz=67 | | | | | | |
| **SML** | **Sawmill** | **7.39** | **247** | | **Pn** | **15 40 10.1** | **-0.2** |
| **BPAW** | **Bear Paw Mtn.** | **7.41** | **267** | P | **Pn** | **15 40 10.7** | **+0.1** |
| | baz=72 | | | | | | |
| **I21K** | **Tanana** | **7.56** | **276** | Pn | **Pn** | **15 40 11.8** | **-0.7** |
| **KTH** | **Kantishna Hill** | **7.58** | **263** | Pn | **Pn** | **15 40 11.6** | **-1.3** |
| **KNK** | **Knik Glacier** | **7.68** | **245** | Pn | **Pn** | **15 40 14.8** | **+0.5** |
| **KNK** | **Knik Glacier** | **7.68** | **245** | P | **Pn** | **15 40 14.2** | **0.0** |
| | baz=52 | | | | | | |
| **NBC2** | **NorthernBC 2** | **7.78** | **132** | Pn | **Pn** | **15 40 14.8** | **-0.8** |
| **NBC2** | **NorthernBC 2** | **7.78** | **132** | Pn | **Pn** | **15 40 15.6** | **0.0** |
| **H21K** | **Melozitna River** | **7.82** | **280** | | **Pn** | **15 40 16.1** | **-0.1** |
| **KUKN** | **Kugluktuk,NWT** | **7.83** | **64** | Pn | **Pn** | **15 40 15.1** | **-1.1** |
| KUKN | | | | Sn | **Sn** | **15 41 39.3** | **-4.4** |
| **IM03** | | **8.17** | **282** | | **Pn** | **15 40 19.0** | **-1.9** |
| **IMAR** | **Indian Mountai** | **8.17** | **282** | Pn | **Pn** | **15 40 19.8** | **-1.2** |
| **FNBB** | **Fort Nelson** | **8.35** | **137** | Pn | **Pn** | **15 40 23.0** | **-0.4** |
| **NBC3** | **NorthernBC 3** | **8.47** | **128** | | **Pn** | **15 40 24.0** | **-1.0** |
| **NBC3** | **NorthernBC 3** | **8.47** | **128** | Pn | **Pn** | **15 40 24.2** | **-0.9** |
| **J20K** | **Nowinta River** | **8.71** | **271** | Pn | **Pn** | **15 40 26.4** | **-1.9** |
| **J20K** | **Nowinta River** | **8.71** | **271** | P | **Pn** | **15 40 26.1** | **-2.1** |
| | baz=72 | | | | | | |
| **YKA** | **Yellowknife Ar** | **8.99** | **101** | Pn | **Pn** | **15 40 30.4** | **-1.7** |
| | 4.8nm,0.3s,baz=297,slow=13,SNR=136 | | | | | | |
| YKA | | | | Sn | **Sn** | **15 42 04.5** | **-7.8** |
| | 3.0nm,0.3s,baz=295,slow=24,SNR=9.1 | | | | | | |
| **NBC6** | **NorthernBC 6** | **9.10** | **134** | Pn | **Pn** | **15 40 32.3** | **-1.3** |
| **WRAK** | **Wrangell Islan** | **9.14** | **174** | Pn | **Pn** | **15 40 32.8** | **-1.4** |
| **WRAK** | **Wrangell Islan** | **9.14** | **174** | P | **Pn** | **15 40 33.9** | **-0.2** |
| | baz=356 | | | | | | |
| **L20K** | **Farewell, AK** | **9.26** | **260** | | **Pn** | **15 40 35.0** | **-0.9** |
| **L20K** | **Farewell, AK** | **9.26** | **260** | P | **Pn** | **15 40 35.4** | **-0.5** |
| | baz=62 | | | | | | |
| **M19K** | **Big River Lodg** | **9.75** | **258** | Pn | **Pn** | **15 40 42.1** | **-0.4** |
| **L19K** | **White Mountain** | **9.80** | **260** | Pn | **Pn** | **15 40 42.7** | **-0.6** |
| **L19K** | **White Mountain** | **9.80** | **260** | P | **Pn** | **15 40 43.0** | **-0.3** |
| | baz=61 | | | | | | |
| **TTA** | **Tatalina** | **9.94** | **265** | Pn | **Pn** | **15 40 43.1** | **-2.2** |
| **A21K** | **Barrow** | **10.14** | **315** | Pn | **Pn** | **15 40 48.8** | **+1.0** |
| **A21K** | **Barrow** | **10.14** | **315** | P | **Pn** | **15 40 48.6** | **+0.8** |
| | baz=114 | | | | | | |
| **SVW2** | **Sparrevohn** | **10.66** | **256** | Pn | **Pn** | **15 40 54.9** | **-0.2** |
| **BBB** | **Bella Bella** | **13.67** | **165** | LR | LR | 15 47 21.1 | |
| | comp=Z,46nm,18.5s,baz=166,slow=39 | | | | | | |
| **RES** | **Resolute Bay** | **15.79** | **38** | Pn | **Pn** | **15 42 02.0** | **-2.2** |
| | 1.4nm,0.3s,baz=236,slow=10,SNR=9.7 | | | | | | |
| RES | | | | Sn | Sn | 15 44 46.7 | -11 |
| | 0.7nm,0.3s,baz=124,slow=14,SNR=5.0 | | | | | | |
| **RES** | **Resolute Bay** | **15.79** | **38** | Pn | **Pn** | **15 42 01.4** | **-2.8** |
| RES | | | | IAmb | IAmb | 15 42 16.3 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **FFC** | **Flin Flon** | **18.98** | **109** | P | **P** | **15 42 41.8** | **-1.5** |
| FFC | | | | IAmb | IAmb | 15 42 44.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **EUNU** | **Eureka** | **19.27** | **23** | | **Pn** | **15 42 47.6** | **+0.2** |
| EUNU | | | | IAmb | IAmb | 15 43 11.7 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **FRB** | **Frobisher Bay** | **26.96** | **63** | P | **P** | **15 44 03.9** | **+1.0** |
| | comp=Z,0.9nm,0.3s,baz=305,slow=11,SNR=4.8 | | | | | | |
| **SEY** | **Seymchan** | **30.48** | **300** | P | **P** | **15 44 35.7** | **+1.4** |
| | comp=Z,1.3nm,1.0s,baz=266,slow=21,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **40.75** | **138** | P | **P** | **15 46 04.6** | **+1.9** |
| | comp=Z,0.5nm,0.9s,baz=358,slow=8.8,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **40.75** | **138** | P | **P** | **15 46 02.4** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **44.48** | **10** | P | **P** | **15 46 32.5** | **+0.1** |
| | comp=Z,2.8nm,0.9s,baz=10,slow=7.4,SNR=5.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **51.14** | **21** | P | **P** | **15 47 24.9** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=358,slow=6.1,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **52.50** | **12** | P | **P** | **15 47 34.5** | **+0.3** |
| | comp=Z,1.4nm,0.6s,baz=0.5,slow=7.7,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.26** | **334** | P | **P** | **15 48 09.3** | **+0.6** |
| | comp=Z,1.0nm,0.5s,baz=18,slow=7.1,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **57.83** | **316** | P | **P** | **15 48 14.7** | **+1.7** |
| | comp=Z,0.4nm,0.4s,baz=33,slow=6.0,SNR=4.1 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **62.55** | **309** | *e*P | **P** | **15 48 45.6** | **+0.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,55nm,7.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **63.41** | **12** | P | **P** | **15 48 51.3** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=354,slow=6.4,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.59** | **333** | P | **P** | **15 48 58.9** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=34,slow=6.4,SNR=4.4 | | | | | | |
| **WMQ** | **Urumqi** | **66.33** | **328** | *e*P | **P** | **15 49 13.1** | **+3.1** |
| **PZH** | **PanZhiHua** | **78.90** | **311** | P | **P** | **15 50 26.0** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.31** | **311** | P | **P** | **15 51 09.5** | **+1.2** |
| | comp=Z,0.7nm,0.4s,baz=1.0,slow=5.4,SNR=7.7 | | | | | | |
| CMAR | | | | LR | LR | 16 34 54.8 | |
| | comp=Z,14nm,18.1s,baz=120,slow=39 | | | | | | |

*IDC* ***19*** *15:40:13.8±1.8,3˚.58S×128˚.88E,h118km±22km, mb3.5/4, mb1 3.8/8,mb1mx3.4/45,mbtmp4.0/8,MS2.4/1,Ms1 2.4/1, ms1mx2.1/43,Error ellipse: s-maj=20.7km s-min=15.5km az=96.0*

*DJA* ***19*** *15:40:14.1±0.5,4˚S±6˚×12˚9E±˚,h80km±5km,M4.2/8, mb4.2/3,mB4.8/1,MLv4.3/8,Mw(mB)4.0/1*

**ISC 19 15:40:12.4±0.7,3˚.61S±0˚.06×128˚.71E±0˚.06,h100km,n31, σ1°39/35,mb4.0/5,Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **0.34** | **40** | P | | **Pn** | | **15 40 27.9** | **+0.7** |
| MSAI | | | | S | | **Sn** | | **15 40 39.1** | **+0.8** |
| **AAI** | **Ambon** | **0.52** | **262** | P | | **Pn** | | **15 40 28.8** | **+0.5** |
| AAI | | | | S | | **Sn** | | **15 40 40.4** | **+0.1** |
| **BNDI** | **Bandanaira** | **1.50** | **127** | P | | **Pn** | | **15 40 41.5** | **+2.9** |
| **SANI** | **Sanana** | **3.13** | **300** | P | | Pn | | 15 40 58.3 | -1.6 |
| **SANI** | **Sanana** | **3.13** | **300** | P | | **Pn** | | **15 40 58.5** | **-1.4** |
| **FAKI** | **Fak Fak** | **3.60** | **79** | P | | **Pn** | | **15 41 07.8** | **+1.6** |
| **FAKI** | **Fak Fak** | **3.60** | **79** | P | | **Pn** | | **15 41 08.3** | **+2.1** |
| **SIJI** | **Sorong** | **3.74** | **43** | P | | **Pn** | | **15 41 09.1** | **+1.0** |
| | 41nm,0.3s,baz=254,slow=19,SNR=770 | | | | | | | | |
| SIJI | | | | S | | **Sn** | | **15 41 50.4** | **-0.8** |
| | 111nm,0.3s,baz=214,slow=23,SNR=26 | | | | | | | | |
| SIJI | | | | LR | | LR | | 15 43 22.3 | |
| | comp=Z,61nm,20.5s,baz=148,slow=52 | | | | | | | | |
| **TNTI** | **Ternate** | **4.56** | **343** | P | | **Pn** | | **15 41 19.5** | **+0.3** |
| **TNTI** | **Ternate** | **4.56** | **343** | P | | **Pn** | | **15 41 20.2** | **+1.0** |
| **BKSI** | **Bulukumba** | **8.73** | **258** | P | | **Pn** | | **15 42 17.1** | **+1.2** |
| | 534nm27nm,1.4s | | | | | | | | |
| **DRS** | **Darwin Rock St** | **9.03** | **166** | P | | **Pn** | | **15 42 21.5** | **+1.6** |
| **KAPI** | **Kappang** | **9.04** | **261** | P | | **Pn** | | **15 42 22.2** | **+2.1** |
| | 1.2nm,0.3s,baz=74,slow=18,SNR=6.0 | | | | | | | | |
| **MTN** | **Manton Dam** | **9.48** | **165** | P | | **Pn** | | **15 42 27.8** | **+1.7** |
| **KDU** | **Kakadu** | **9.75** | **158** | P | | **Pn** | | **15 42 29.7** | **-0.1** |
| **KNRA** | **Kununurra** | **11.99** | **180** | P | | **Pn** | | **15 42 59.4** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **14.71** | **192** | P | | **Pn** | | **15 43 37.4** | **+1.9** |
| | 0.1nm,0.3s,baz=36,slow=12,SNR=6.1 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **17.13** | **162** | P | | **Pn** | | **15 44 05.4** | **-0.3** |
| **WRA** | **Warramunga Arr** | **17.13** | **162** | P | | **Pn** | | **15 44 04.4** | **-1.3** |
| | 0.8nm,0.3s,baz=344,slow=11,SNR=52 | | | | | | | | |
| **COEN** | **Coen** | **17.59** | **127** | P | | **P** | | **15 44 10.7** | **-0.3** |
| **QIS** | **Mount Isa** | **19.91** | **149** | P | | **P** | | **15 44 36.4** | **+0.2** |
| **ASAR** | **Alice Springs** | **20.56** | **166** | P | | **P** | | **15 44 43.0** | **-0.2** |
| | 9.6nm,0.5s,baz=347,slow=11,SNR=182 | | | | | | | | |
| ASAR | | | | S | | **S** | | **15 48 23.6** | **-4.2** |
| | 1.4nm,1.0s,baz=352,slow=24,SNR=3.9 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **15 48 50.1** | **-0.6** |
| | 0.4nm,0.5s,baz=343,slow=1.0,SNR=4.8 | | | | | | | | |
| **WRKA** | **Warakurna** | **21.30** | **181** | P | | **P** | | **15 44 51.1** | **-0.1** |
| **OOD** | **Oonadatta** | **24.95** | **165** | P | | **P** | | **15 45 25.8** | **-0.8** |
| | 6.2nm,0.8s | | | | | | | | |
| **MULG** | **Mulgathing** | **27.00** | **170** | P | | **P** | | **15 45 44.7** | **-0.4** |
| **LCRK** | **Leigh Creek** | **28.16** | **162** | P | | **P** | | **15 45 55.7** | **+0.3** |
| | 22nm,1.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **29.85** | **168** | P | | **P** | | **15 46 09.2** | **-1.2** |
| **STKA** | **Stephens Creek** | **30.61** | **158** | P | | **P** | | **15 46 16.5** | **-0.6** |
| | 2.7nm,0.9s,baz=339,slow=8.6,SNR=5.0 | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **35.14** | **162** | P | | **P** | | **15 46 55.1** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **36.62** | **308** | P | | **P** | | **15 47 10.3** | **+0.9** |
| | 0.4nm,0.6s,baz=119,slow=7.3,SNR=4.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.71** | **327** | P | | **P** | | **15 50 39.8** | **-0.2** |
| | 0.3nm,0.7s,baz=145,slow=5.3,SNR=2.4 | | | | | | | | |

*IDC* ***19*** *15:43:34.4±1.0,53˚.91S×133˚.79W,h0km,mb3.9/4, mb1 4.2/4,mb1mx3.7/38,mbtmp3.9/4,MS3.8/2,Ms1 3.8/2, ms1mx3.1/52,Error ellipse: s-maj=42.5km s-min=31.6km az=123.0*

**ISC 19 15:43:36.3±1.1,53˚.9S±0˚.2×133˚.8W±0˚.3,h12km,n18, σ0°57/7,mb3.9/4,Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **32.57** | **201** | LR | | LR | LR | 15 59 26.4 | |
| | comp=Z,186nm,20.7s,baz=100,slow=29 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **36.24** | **180** | P | | **P** | | **15 50 39.1** | **+0.2** |
| | 2.2nm,1.0s,baz=84,slow=4.3,SNR=8.5 | | | | | | | | |
| QSPA | | | | LR | | LR | | 16 02 02.0 | |
| | comp=Z,122nm,20.3s,baz=100,slow=30 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **43.36** | **85** | T | | T | | 16 37 27.5 | |
| | baz=226,slow=72,SNR=19 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **43.36** | **85** | T | | T | | 16 37 26.4 | |
| | baz=226,slow=72,SNR=25 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **43.37** | **85** | T | | T | | 16 37 29.8 | |
| | baz=226,slow=72,SNR=19 | | | | | | | | |
| **ASAR** | **Alice Springs** | **72.55** | **254** | P | | **P** | | **15 55 03.1** | **0.0** |
| | 0.8nm,0.7s,baz=123,slow=6.8,SNR=5.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **75.22** | **257** | P | | **P** | | **15 55 18.8** | **0.0** |
| | 0.7nm,0.6s,baz=141,slow=5.4,SNR=9.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.92** | **26** | P | | **P** | | **15 56 21.4** | **+0.6** |
| | 1.0nm,0.9s,baz=181,slow=6.3,SNR=7.1 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **88.25** | **305** | T | | T | | 17 34 28.4 | |
| | baz=148,slow=76,SNR=8.0 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **88.27** | **305** | T | | T | | 17 34 29.3 | |
| | baz=148,slow=76,SNR=6.5 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **88.27** | **305** | T | | T | | 17 34 31.6 | |
| | baz=148,slow=76,SNR=7.8 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **89.21** | **306** | T | | T | | 17 35 40.1 | |
| | baz=148,slow=76,SNR=4.3 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **89.21** | **306** | T | | T | | 17 35 42.3 | |
| | baz=148,slow=76,SNR=4.3 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **89.22** | **306** | T | | T | | 17 35 41.6 | |
| | baz=148,slow=76,SNR=5.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **118.80** | **354** | PKP | | **PKiKP** | | **16 02 22.6** | **-0.4** |
| | 1.0nm,0.7s,baz=205,slow=2.3,SNR=15 | | | | | | | | |
| **SONM** | **Songino Array** | **142.57** | **286** | PKhKP | | PKPpre | | 16 03 04.5 | |
| | 0.3nm,0.6s,baz=109,slow=1.5,SNR=4.3 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **151.86** | **67** | PKPbc | | **PKPbc** | | **16 03 28.9** | **-0.9** |
| | 0.3nm,0.4s,baz=242,slow=1.8,SNR=3.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **156.12** | **267** | PKPab | | **PKPab** | | **16 03 57.5** | **+0.1** |
| | 0.6nm,0.8s,baz=107,slow=4.2,SNR=5.3 | | | | | | | | |

*IDC* ***19*** *15:46:14.3±8.5,13˚.68S×166˚.71E,h61km±83km,mb3.6/7, mb1 3.8/8,mb1mx3.4/44,mbtmp3.8/8,ML4.0/1,MS3.4/2, Ms1 3.4/2,ms1mx2.7/51,Error ellipse: s-maj=56.8km s-min=28.1km az=162.0*

**ISC 19 15:46:14.1±0.8,13˚.64S±0˚.09×166˚.6E±0˚.2,h50km,n9, σ2°01/11,mb3.8/7,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **8.38** | **181** | P | | **Pn** | | **15 48 13.5** | **+0.4** |
| | 1.8nm,0.3s,baz=350,slow=23,SNR=11 | | | | | | | | |
| DZM | | | | S | | **Sn** | | **15 49 46.3** | **-0.1** |
| | 0.6nm,0.3s,baz=88,slow=19,SNR=1.7 | | | | | | | | |
| DZM | | | | LR | | LR | | 15 50 44.0 | |
| | comp=Z,77nm,19.4s,baz=234,slow=32 | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.23** | **227** | P | | **P** | | **15 52 12.2** | **+0.9** |
| | 1.0nm,0.5s,baz=35,slow=11,SNR=3.2 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **30.21** | **174** | LR | | LR | | 16 03 34.0 | |
| | comp=Z,189nm,20.3s,baz=108,slow=34 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.48** | **254** | P | | **P** | | **15 52 30.4** | **-1.0** |
| | 0.5nm,0.6s,baz=84,slow=8.8,SNR=8.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.47** | **247** | P | | **P** | | **15 52 38.7** | **-1.4** |
| | 0.7nm,0.6s,baz=74,slow=9.6,SNR=20 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.92** | **294** | P | | **P** | | **15 57 45.6** | **+1.0** |
| | 1.0nm,0.8s,baz=127,slow=4.1,SNR=7.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.70** | **18** | P | | **P** | | **15 58 46.0** | **-1.3** |
| | 0.3nm,0.6s,baz=239,slow=5.0,SNR=6.1 | | | | | | | | |
| ILAR | | | | pP | | **sP** | | **15 59 10.2** | **+4.2** |
| | 0.7nm,0.9s,baz=252,slow=5.6,SNR=3.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **95.98** | **317** | P | | **P** | | **15 59 35.2** | **-0.7** |
| | 0.3nm,0.7s,baz=103,slow=5.4,SNR=3.8 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **96.33** | **61** | P | | **P** | | **15 59 35.7** | **-2.3** |
| | 0.4nm,0.9s,baz=290,slow=2.6,SNR=1.9 | | | | | | | | |
| TXAR | | | | pP | | **sP** | | **15 59 59.0** | **+1.4** |
| | 0.5nm,0.8s,baz=340,slow=7.0,SNR=3.8 | | | | | | | | |

*IDC* ***19*** *15:47:33.5±1.4,29˚.56S×179˚.12W,h288km±16km,mb3.2/3, mb1 3.4/4,mb1mx2.9/35,mbtmp3.9/4,Error ellipse: s-maj=35.1km s-min=21.6km az=49.0*

**ISC 19 15:47:33.6±1.2,29˚.6S±0˚.2×179˚.0W±0˚.2,h300km,n6, σ1°09/6,mb3.3/3,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.97** | **73** | P | | **Pn** | | **15 48 13.0** | **-0.8** |
| | 354nm,0.3s,baz=260,slow=19,SNR=5.0 | | | | | | | | |
| **URZ** | **Urewera** | **9.28** | **199** | P | | **Pn** | | **15 49 42.5** | **-0.3** |
| | 0.5nm,0.3s,baz=309,slow=17,SNR=1.6 | | | | | | | | |
| URZ | | | | S | | S | | 15 51 16.4 | -12 |
| | 1.0nm,0.3s,baz=67,slow=23,SNR=11 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.31** | **266** | P | | **P** | | **15 54 58.1** | **-0.8** |
| | 1.6nm,1.1s,baz=104,slow=7.2,SNR=10 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.22** | **272** | P | | **P** | | **15 55 06.4** | **+0.2** |
| | 0.9nm,0.5s,baz=111,slow=7.7,SNR=15 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.56** | **180** | P | | **P** | | **15 57 13.3** | **+0.6** |
| | 2.4nm,0.9s,baz=62,slow=1.7,SNR=12 | | | | | | | | |
| **FINES** | **FINESS Array B** | **144.06** | **340** | PKP | | **PKPdf** | | **16 06 34.2** | **+1.3** |
| | 1.1nm,0.5s,baz=45,slow=4.1,SNR=13 | | | | | | | | |

*IDC* ***19*** *15:48:24.3±3.4,26˚.12S×28˚.88E,h0km,mb1 3.3/5, mb1mx2.2/35,mbtmp3.3/5,ML2.7/4,Error ellipse: s-maj=43.0km s-min=18.0km az=116.0*

*EAF* ***19*** *15:48:30.9±1.7,25˚.94S×29˚.16E,h10km,MD3.3*

*BUL* ***19*** *15:48:31.0±0.9,25˚.95S×29˚.14E,h10km,MD3.3*

**ISC 19 15:48:23.5±0.8,26˚.15S±0˚.04×28˚.97E±0˚.04,h10km,n21, σ2°57/38,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.90** | **94** | *e*P | | **Pb** | | **15 49 15.4** | **+0.1** |
| CNG | | | | *e*S | | **Sn** | | **15 49 47.3** | **+2.7** |
| **CNG** | **Changalane** | **2.90** | **94** | *e*P | | **Pb** | | **15 49 15.4** | **+0.1** |
| CNG | | | | *e*S | | **Sn** | | **15 49 47.3** | **+2.7** |
| **LBTB** | **Lobatse** | **3.25** | **290** | Pn | | **Pn** | | **15 49 17.0** | **+2.4** |
| | 0.5nm,0.3s,baz=107,slow=14,SNR=17 | | | | | | | | |
| LBTB | | | | Pg | | **Pb** | | **15 49 22.4** | **+1.1** |
| | 3.9nm,0.3s,baz=106,slow=18,SNR=55 | | | | | | | | |
| **LBTB** | **Lobatse** | **3.25** | **290** | *e*P | | **Pb** | | **15 49 22.7** | **+1.4** |
| LBTB | | | | *e*S | | **Sb** | | **15 50 00.6** | **-0.3** |
| **LBTB** | **Lobatse** | **3.25** | **290** | *e*P | | **Pb** | | **15 49 22.7** | **+1.4** |
| LBTB | | | | *e*S | | **Sb** | | **15 50 00.6** | **-0.3** |
| **MOPA** | **Mopani** | **3.43** | **41** | *e*P | | **Pn** | | **15 49 18.7** | **+1.7** |
| MOPA | | | | *e*S | | **Sn** | | **15 49 54.5** | **-3.1** |
| **MOPA** | **Mopani** | **3.43** | **41** | *e*P | | **Pn** | | **15 49 18.7** | **+1.7** |
| MOPA | | | | *e*S | | **Sn** | | **15 49 54.5** | **-3.1** |
| **MSNA** | **Messina** | **3.91** | **15** | *e*P | | **Pn** | | **15 49 26.9** | **+3.3** |
| MSNA | | | | *e*S | | **Sn** | | **15 50 09.6** | **0.0** |
| **MSNA** | **Messina** | **3.91** | **15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 7.72 228 | Pn | Pn | 16 04 06.8 | +3.8 | |
| | 4.3nm,0.3s,baz=22,slow=7.1,SNR=16 | | | | | | |
| PMG | | | Sn | Sn | 16 05 30.9 | +1.3 | |
| | 4.0nm,0.3s,baz=95,slow=20,SNR=6.2 | | | | | | |
| PMG | Port Moresby | 7.72 228 | P | Pn | 16 04 07.0 | +4.0 | |
| PMG | Port Moresby | 7.72 228 | P | Pn | 16 04 06.9 | +4.0 | |
| PATS | Pohnpei | 12.21 26 | P | Pn | 16 05 06.0 | +1.5 | |
| | baz=12 | | | | | | |
| PATS | Pohnpei | 12.21 26 | Pn | Pn | 16 05 05.0 | +0.5 | |
| PATS | Pohnpei | 12.21 26 | P | Pn | 16 05 06.7 | +2.2 | |
| JAY | Jayapura | 12.34 277 | LR | LR | 16 09 16.1 | | |
| | comp=Z,765nm,20.4s,baz=86,slow=34 | | | | | | |
| GENI | Genyem | 12.86 277 | P | P | 16 05 27.9 | +4.0 | |
| COEN | Coen | 13.66 224 | Pn | Pn | 16 05 24.9 | +0.5 | |
| COEN | Coen | 13.66 224 | P | Pn | 16 05 27.9 | +3.6 | |
| MTSU | Mount Surprise | 16.21 211 | P | P | 16 06 00.8 | -0.4 | |
| CTA | Charters Tower | 17.08 202 | Pn | P | 16 06 11.3 | +0.6 | |
| | 0.3nm,0.3s,baz=20,slow=11,SNR=6.8 | | | | | | |
| CTA | | | LR | LR | 16 12 00.1 | | |
| | comp=Z,432nm,21.6s,baz=26,slow=34 | | | | | | |
| GUMO | Guam | 19.42 336 | LR | LR | 16 14 01.5 | | |
| | comp=Z,61nm,19.1s,baz=134,slow=36 | | | | | | |
| FAKI | Fak Fak | 20.70 273 | P | P | 16 06 50.6 | 0.0 | |
| FAKI | | | IAmb | IAmb | 16 06 56.1 | | |
| | comp=Z,180nm,1.5s | | | | | | |
| FAKI | Fak Fak | 20.70 273 | P | P | 16 06 49.5 | -1.1 | |
| | comp=Z,2μmcomp=Z,94nm,1.6s | | | | | | |
| FAKI | Fak Fak | 20.70 273 | P | P | 16 06 49.4 | -1.1 | |
| QIS | Mount Isa | 20.80 218 | P | P | 16 06 51.9 | +0.3 | |
| | baz=21,SNR=34 | | | | | | |
| QIS | Mount Isa | 20.80 218 | P | Pn | 16 06 52.6 | -1.5 | |
| EIDS | Eidsvold | 21.11 185 | P | P | 16 06 57.2 | +2.2 | |
| | baz=21,SNR=4.8 | | | | | | |
| EIDS | Eidsvold | 21.11 185 | P | P | 16 06 55.6 | +0.7 | |
| SIJI | Sorong | 21.91 278 | P | P | 16 07 04.7 | +1.1 | |
| | comp=Z,29nm,0.9s,baz=57,slow=7.9,SNR=12 | | | | | | |
| SIJI | | | LR | LR | 16 14 24.3 | | |
| | comp=Z,516nm,21.6s,baz=96,slow=33 | | | | | | |
| KDU | Kakadu | 21.92 246 | P | P | 16 07 02.4 | -1.2 | |
| | baz=22,SNR=25 | | | | | | |
| KDU | Kakadu | 21.92 246 | P | P | 16 07 03.2 | -0.4 | |
| DZM | Mont Dzumac | 22.05 145 | P | P | 16 07 06.5 | +1.3 | |
| | comp=Z,6.5nm,0.5s,baz=27,slow=18,SNR=3.1 | | | | | | |
| DZM | | | LR | LR | 16 14 08.0 | | |
| | comp=Z,189nm,21.7s,baz=27,slow=32 | | | | | | |
| DZM | Mont Dzumac | 22.05 145 | P | P | 16 07 04.2 | -0.9 | |
| DZM | | | IAmb | IAmb | 16 07 26.9 | | |
| | comp=Z,46nm,1.1s | | | | | | |
| RMQ | Roma | 22.51 190 | P | P | 16 07 10.9 | +1.0 | |
| | baz=23,SNR=6.9 | | | | | | |
| RMQ | Roma | 22.51 190 | P | P | 16 07 11.7 | +1.8 | |
| MTN | Manton Dam | 23.20 247 | P | P | 16 07 15.9 | -1.3 | |
| | baz=23,SNR=4.7 | | | | | | |
| MTN | Manton Dam | 23.20 247 | P | P | 16 07 15.6 | -1.6 | |
| MTN | | | IAmb | IAmb | 16 07 40.1 | | |
| | comp=Z,19nm,0.9s | | | | | | |
| MTN | Manton Dam | 23.20 247 | P | P | 16 07 16.6 | -0.6 | |
| DRS | Darwin Rock St | 23.28 248 | P | P | 16 07 17.0 | -1.0 | |
| QLP | Quilpie | 23.76 200 | P | P | 16 07 23.7 | +1.2 | |
| | baz=24,SNR=3.9 | | | | | | |
| WB0 | Warramunga Arr | 23.80 228 | P | P | 16 07 22.0 | -1.0 | |
| WR0 | Warramunga Arr | 23.81 227 | P | P | 16 07 22.1 | -1.0 | |
| WR0 | | | IAmb | IAmb | 16 07 23.8 | | |
| | comp=Z,76nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 23.93 228 | P | P | 16 07 23.3 | -1.0 | |
| WRAB | Tennant Creek | 23.93 228 | P | P | 16 07 23.8 | -0.5 | |
| WB2 | Warramunga Arr | 23.94 228 | P | P | 16 07 23.4 | -0.9 | |
| WRA | Warramunga Arr | 23.95 228 | P | P | 16 07 23.3 | -1.1 | |
| | comp=Z,42nm,0.5s,baz=53,slow=9.7,SNR=218 | | | | | | |
| WRA | | | pPcP | | 16 11 18.7 | | |
| | comp=Z,1.4nm,0.7s,baz=56,slow=2.7,SNR=4.8 | | | | | | |
| WRA | | | S | S | 16 11 35.8 | -3.9 | |
| | comp=Z,2.1nm,0.9s,baz=46,slow=16,SNR=5.1 | | | | | | |
| WRA | | | ScP | ScP | 16 14 42.0 | -1.6 | |
| | comp=Z,2.2nm,1.0s,baz=45,slow=2.9,SNR=6.5 | | | | | | |
| WRA | | | LR | LR | 16 16 58.9 | | |
| | comp=Z,359nm,20.6s,baz=40,slow=37 | | | | | | |
| WRA | Warramunga Arr | 23.95 228 | P | P | 16 07 22.8 | -1.6 | |
| ARMA | Armidale | 26.10 183 | P | P | 16 07 39.8 | -4.2 | |
| ARMA | | | IAmb | IAmb | 16 08 09.2 | | |
| | comp=Z,15nm,1.1s | | | | | | |
| INKA | Innaminka | 26.13 205 | P | P | 16 07 46.0 | +1.8 | |
| H11S3 | WAKE ISLAND Hy | 26.31 31 | T | T | 16 35 15.2 | | |
| | baz=207,slow=74,SNR=75 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 26.32 31 | T | T | 16 35 22.3 | | |
| | baz=207,slow=74,SNR=61 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 26.33 31 | T | T | 16 35 23.0 | | |
| | baz=207,slow=74,SNR=65 | | | | | | |
| KNRA | Kununurra | 26.37 243 | P | P | 16 07 46.2 | -0.3 | |
| | baz=26,SNR=48 | | | | | | |
| KNRA | Kununurra | 26.37 243 | P | P | 16 07 46.5 | 0.0 | |
| KNRA | | | IAmb | IAmb | 16 07 48.2 | | |
| | comp=Z,63nm,1.0s | | | | | | |
| KNRA | Kununurra | 26.37 243 | P | P | 16 07 46.3 | -0.2 | |
| AS31 | Alice Springs | 26.68 222 | P | P | 16 07 48.0 | -1.3 | |
| ASAR | Alice Springs | 26.68 222 | P | P | 16 07 48.2 | -1.0 | |
| | comp=Z,111nm,0.9s,baz=53,slow=9.1,SNR=194 | | | | | | |
| ASAR | | | PcP | PcP | 16 11 13.2 | +0.5 | |
| | comp=Z,1.5nm,0.7s,baz=57,slow=4.6,SNR=4.1 | | | | | | |
| ASAR | | | pPcP | | 16 11 25.0 | | |
| | comp=Z,2.1nm,0.8s,baz=46,slow=2.5,SNR=5.3 | | | | | | |
| ASAR | | | ScP | ScP | 16 14 50.4 | -1.0 | |
| | comp=Z,1.7nm,0.9s,baz=58,slow=3.4,SNR=7.4 | | | | | | |
| ASAR | | | LR | LR | 16 18 21.0 | | |
| | comp=Z,290nm,21.0s,baz=41,slow=36 | | | | | | |
| ASAR | Alice Springs | 26.68 222 | P | P | 16 07 48.0 | -1.3 | |
| SANI | Sanana | 27.00 274 | P | P | 16 07 53.8 | +1.5 | |
| | comp=Z,32nm,1.2s | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.45 30 | T | T | 16 36 43.0 | | |
| | baz=217 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.46 30 | T | T | 16 36 44.1 | | |
| | baz=217 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.46 29 | T | T | 16 36 47.0 | | |
| | baz=217 | | | | | | |
| MSVF | Nonsavu | 28.01 121 | LR | LR | 16 19 20.3 | | |
| | comp=Z,268nm,20.3s,baz=172,slow=37 | | | | | | |
| CMSA | Cobar Meteorol | 28.03 193 | P | P | 16 08 01.3 | +0.2 | |
| | baz=28,SNR=9.8 | | | | | | |
| CMSA | Cobar Meteorol | 28.03 193 | P | P | 16 08 01.9 | +0.7 | |
| OOD | Oodnadatta | 28.65 213 | P | P | 16 08 06.4 | -0.3 | |
| KMSI | Cibinong | 29.33 279 | P | P | 16 08 20.0 | +7.0 | |
| STKA | Stephens Creek | 29.51 200 | P | P | 16 08 13.9 | -0.6 | |
| | comp=Z,2.3nm,0.7s,baz=31,slow=14,SNR=6.0 | | | | | | |
| STKA | | | LR | LR | 16 19 51.7 | | |
| | comp=Z,241nm,21.8s,baz=22,slow=36 | | | | | | |
| STKA | Stephens Creek | 29.51 200 | P | P | 16 08 13.3 | -1.1 | |
| DAV | Davao City (W) | 29.53 292 | LR | LR | 16 19 15.3 | | |
| | comp=Z,106nm,20.3s,baz=322,slow=35 | | | | | | |
| LCRK | Leigh Creek | 29.57 206 | P | P | 16 08 15.1 | +0.2 | |
| | comp=Z,26nm,0.9s | | | | | | |
| BATI | Baumata | 29.64 257 | LR | LR | 16 22 26.5 | | |
| | comp=Z,352nm,20.5s,baz=112,slow=41 | | | | | | |
| FITZ | Fitzroy Crossi | 30.07 241 | P | P | 16 08 17.4 | -2.1 | |
| | comp=Z,19nm,1.0s,baz=45,slow=5.2,SNR=41 | | | | | | |
| FITZ | | | LR | LR | 16 20 49.7 | | |
| | comp=Z,138nm,19.3s,baz=49,slow=37 | | | | | | |
| FITZ | Fitzroy Crossi | 30.07 241 | P | P | 16 08 17.4 | -2.1 | |
| | baz=30,SNR=16 | | | | | | |
| FITZ | Fitzroy Crossi | 30.07 241 | P | P | 16 08 17.4 | -2.1 | |
| FITZ | | | IAmb | IAmb | 16 08 18.6 | | |
| | comp=Z,21nm,1.1s | | | | | | |
| FITZ | Fitzroy Crossi | 30.07 241 | P | P | 16 08 17.7 | -1.8 | |
| GTOI | Gorontalo | 30.30 278 | P | P | 16 08 19.9 | -1.7 | |
| | comp=Z,19nm,0.6s | | | | | | |
| CAN | Canberra | 31.17 186 | P | P | 16 08 29.0 | -0.1 | |
| CAN | | | IAmb | IAmb | 16 08 44.5 | | |
| | comp=Z,60nm,1.3s | | | | | | |
| WRKA | Warakurna | 31.47 226 | P | P | 16 08 30.3 | -1.5 | |
| | baz=32,SNR=22 | | | | | | |
| WRKA | Warakurna | 31.47 226 | P | P | 16 08 30.6 | -1.2 | |
| MULG | Mulgathing | 31.48 212 | P | P | 16 08 31.2 | -0.6 | |
| HTT | Hallett | 31.88 203 | P | P | 16 08 37.6 | +2.3 | |
| | baz=32,SNR=3.3 | | | | | | |
| HTT | Hallett | 31.88 203 | P | P | 16 08 36.1 | +0.7 | |
| | comp=Z,12nm,1.5s | | | | | | |
| BBOO | Buckleboo | 32.54 207 | P | P | 16 08 41.4 | +0.3 | |
| | baz=33,SNR=7.6 | | | | | | |
| BBOO | Buckleboo | 32.54 207 | P | P | 16 08 39.8 | -1.3 | |
| BBOO | | | IAmb | IAmb | 16 08 40.8 | | |
| | comp=Z,23nm,1.2s | | | | | | |
| BBOO | Buckleboo | 32.54 207 | P | P | 16 08 41.3 | +0.2 | |
| KAPI | Kappang | 33.10 267 | LR | LR | 16 23 26.7 | | |
| | comp=Z,49nm,21.3s,baz=104,slow=38 | | | | | | |
| KAPI | Kappang | 33.10 267 | P | P | 16 08 44.8 | -1.4 | |
| ARPS | Mount Arapiles | 33.97 196 | P | P | 16 08 55.9 | +2.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| PLAI | Plampang | 35.23 261 | P | P | 16 09 03.0 | -1.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| FORT | Forrest | 35.34 219 | P | P | 16 09 03.9 | -1.6 | |
| | baz=35,SNR=20 | | | | | | |
| FORT | Forrest | 35.34 219 | P | P | 16 09 04.3 | -1.1 | |
| FORT | Forrest | 35.34 219 | P | P | 16 09 04.6 | -0.8 | |
| PSA00 | Pilbara Seismi | 36.46 239 | P | P | 16 09 12.6 | -2.6 | |
| PSA00 | | | IAmb | IAmb | 16 09 14.3 | | |
| | comp=Z,14nm,1.1s | | | | | | |
| TAU | Tasmania Unive | 38.86 187 | P | P | 16 09 37.0 | +1.9 | |
| | comp=Z,30nm,1.6s | | | | | | |
| MEEK | Meekatharra | 39.68 232 | P | P | 16 09 40.9 | -1.4 | |
| | baz=40,SNR=35 | | | | | | |
| MEEK | Meekatharra | 39.68 232 | P | P | 16 09 41.2 | -1.1 | |
| URZ | Urewera | 40.42 150 | LR | LR | 16 25 27.0 | | |
| | comp=Z,115nm,18.7s,baz=326,slow=34 | | | | | | |
| QRZ | Quartz Range | 40.48 157 | P | P | 16 09 51.1 | +2.4 | |
| BKZ | Black Stump Fm | 40.83 152 | P | P | 16 09 53.0 | +1.3 | |
| | comp=Z,66nm,2.2s | | | | | | |
| TUWZ | Tuamarina | 41.56 156 | P | P | 16 09 57.8 | +0.2 | |
| GIRL | Giralia | 41.68 240 | P | P | 16 09 58.2 | -0.7 | |
| GIRL | Giralia | 41.68 240 | P | P | 16 09 58.0 | -0.9 | |
| | comp=Z,128nm,1.6s | | | | | | |
| PLWZ | Palliser | 42.22 155 | P | P | 16 10 01.9 | -1.1 | |
| KHZ | Kahutara | 42.23 157 | P | P | 16 10 03.9 | +0.8 | |
| RPZ | Rata Peaks | 42.47 161 | P | P | 16 10 06.1 | +1.1 | |
| | comp=Z,22nm,0.8s,baz=308,slow=3.1,SNR=9.8 | | | | | | |
| RPZ | | | LR | LR | 16 25 13.6 | | |
| | comp=Z,301nm,19.0s,baz=326,slow=32 | | | | | | |
| RPZ | Rata Peaks | 42.47 161 | P | P | 16 10 07.9 | +2.9 | |
| KLBR | Kellerberrin | 42.81 226 | P | P | 16 10 06.9 | -1.1 | |
| | baz=43,SNR=5.6 | | | | | | |
| KLBR | Kellerberrin | 42.81 226 | P | P | 16 10 07.5 | -0.5 | |
| | comp=Z,36nm,1.0s | | | | | | |
| MJAR | Matsushiro Arr | 42.82 342 | LR | LR | 16 25 35.9 | | |
| | comp=Z,57nm,21.4s,baz=158,slow=33 | | | | | | |
| MORW | Morawa | 42.83 231 | P | P | 16 10 06.5 | -1.7 | |
| | baz=43,SNR=6.4 | | | | | | |
| MORW | Morawa | 42.83 231 | P | P | 16 10 06.6 | -1.6 | |
| MORW | | | IAmb | IAmb | 16 10 07.6 | | |
| | comp=Z,33nm,1.1s | | | | | | |
| MORW | Morawa | 42.83 231 | P | P | 16 10 06.9 | -1.3 | |
| BLDU | Ballidu | 43.08 228 | P | P | 16 10 08.5 | -1.6 | |
| | baz=43,SNR=10 | | | | | | |
| BLDU | Ballidu | 43.08 228 | P | P | 16 10 08.8 | -1.4 | |
| ODZ | Otahua Downs | 43.53 162 | P | P | 16 10 14.6 | +1.1 | |
| LEM | Lembang | 45.18 265 | LR | LR | 16 32 48.2 | | |
| | comp=Z,39nm,19.1s,baz=100,slow=41 | | | | | | |
| TNG | Tangerang | 46.14 266 | P | P | 16 10 34.3 | -0.6 | |
| | comp=Z,923nm,0.5s | | | | | | |
| TNG | | | P | P | 16 10 35.4 | +0.5 | |
| | comp=Z,1μm,0.5s | | | | | | |
| KSRS | Korea Array | 47.55 333 | P | P | 16 10 45.5 | +0.1 | |
| | comp=Z,2.2nm,1.0s,baz=141,slow=9.2,SNR=7.4 | | | | | | |
| KSRS | | | pP | sP | 16 10 57.1 | +0.1 | |
| | comp=Z,2.3nm,1.0s,baz=153,slow=9.1,SNR=5.3 | | | | | | |
| NJ2 | Nanjing | 48.49 321 | eP | P | 16 10 52.3 | -0.5 | |
| NJ2 | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| ASAJ | Asahikawa | 49.00 350 | LR | LR | 16 29 15.5 | | |
| | comp=Z,62nm,20.8s,baz=128,slow=33 | | | | | | |
| CN2 | Changchun | 53.83 336 | eP | P | 16 11 33.5 | +0.8 | |
| CN2 | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PSI | Prapat | 54.43 276 | LR | LR | 16 38 58.2 | | |
| | comp=Z,47nm,18.7s,baz=113,slow=41 | | | | | | |
| HNS | HongShan | 54.57 323 | ⇓P | P | 16 11 39.4 | +1.2 | |
| HNS | | | pmax | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | |
| BNX | BinXian | 54.68 338 | ⇑P | P | 16 11 39.4 | +0.5 | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | |
| BNX | | | pmax | pmax | | | |
| | comp=Z,270nm,4.4s | | | | | | |
| PETK | Petropavlovsk- | 57.25 3 | P | P | 16 11 58.7 | +1.5 | |
| | comp=Z,10.0nm,1.1s,baz=164,slow=5.9,SNR=4.5 | | | | | | |
| PETK | | | pP | sP | 16 12 09.2 | +0.6 | |
| | comp=Z,8.2nm,1.0s,baz=148,slow=9.9,SNR=3.4 | | | | | | |
| PETK | | | LR | LR | 16 33 03.0 | | |
| | comp=Z,40nm,21.5s,baz=181,slow=32 | | | | | | |
| CMAR | Chiang Mai Arr | 57.77 295 | P | P | 16 12 02.0 | +0.6 | |
| | comp=Z,0.8nm,0.8s,baz=115,slow=5.5,SNR=8.5 | | | | | | |
| PZH | PanZhiHua | 58.16 305 | P | P | 16 12 03.3 | -1.0 | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,120nm,4.9s | | | | | | |
| XLT | XiLinHaoTe | 58.24 329 | eP | P | 16 12 04.9 | +0.5 | |
| XLT | | | pP | sP | 16 12 16.0 | -0.1 | |
| XLT | | | sP | pP | 16 12 22.8 | +10 | |
| XLT | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| XLT | | | pmax | pmax | | | |
| | comp=Z,120nm,4.7s | | | | | | |
| CD2 | Chengdu | 58.47 310 | P | P | 16 12 07.1 | +0.8 | |
| CD2 | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| HHC | Hu-ho-hao-te | 58.66 324 | eP | P | 16 12 09.1 | +1.6 | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,190nm,8.7s | | | | | | |
| SHEM | Shemya Is, Ala | 59.48 15 | LR | LR | 16 32 34.1 | | |
| | comp=Z,156nm,20.7s,baz=202,slow=31 | | | | | | |
| LZH | Lanzhou | 60.92 316 | eP | P | 16 12 24.4 | +1.3 | |
| LZH | | | pP | sP | 16 12 35.9 | +1.1 | |
| LZH | | | sP | pP | 16 12 42.6 | +11 | |
| LZH | | | pmax | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | |
| LZH | | | LR | LR | | | |
| | comp=N,140nm,15.3s | | | | | | |
| LZH | | | LR | LR | | | |
| | comp=E,140nm,15.4s | | | | | | |
| LZH | | | LR | LR | | | |
| | comp=Z,260nm,16.0s | | | | | | |
| MA2 | Magadan | 63.61 359 | LR | LR | 16 40 30.4 | | |
| | comp=Z,32nm,19.2s,baz=142,slow=36 | | | | | | |
| GTA | Gaotai | 65.33 317 | ⇓P | P | 16 12 53.3 | +1.0 | |
| GTA | | | pP | sP | 16 13 04.9 | +0.9 | |
| GTA | | | sP | pP | 16 13 09.3 | +8.4 | |
| GTA | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.5s | | | | | | |
| GTA | | | pmax | pmax | | | |
| | comp=Z,120nm,5.6s | | | | | | |
| GTA | | | LR | LR | | | |
| | comp=N,110nm,15.3s | | | | | | |
| GTA | | | LR | LR | | | |
| | comp=E,110nm,17.4s | | | | | | |
| GTA | | | LR | LR | | | |
| | comp=Z,80nm,16.0s | | | | | | |
| SONM | Songino Array | 65.91 328 | P | P | 16 12 57.0 | +1.1 | |
| | comp=Z,0.6nm,0.6s,baz=149,slow=5.1,SNR=6.8 | | | | | | |
| SONM | Songino Array | 65.91 328 | P | P | 16 12 53.6 | -2.3 | |
| WMQ | Urumqi | 75.41 317 | eP | P | 16 13 50.4 | -3.4 | |
| WMQ | | | pP | PcP | 16 14 05.8 | -1.1 | |
| WMQ | | | pmax | pmax | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| KDAK | Kodiak Island | 75.59 27 | LR | LR | 16 39 38.9 | | |
| | comp=Z,132nm,21.9s,baz=234,slow=30 | | | | | | |
| MKAR | Makanchi Array | 79.98 319 | P | P | 16 14 19.3 | +0.1 | |
| | comp=Z,0.4nm,0.5s,baz=93,slow=6.6,SNR=9.3 | | | | | | |
| MKAR | | | pP | sP | 16 14 31.0 | -0.2 | |
| | comp=Z,0.9nm,0.9s,baz=130,slow=1.9,SNR=4.8 | | | | | | |
| ILAR | Eielson Array | 81.56 22 | P | P | 16 14 26.4 | -0.8 | |
| | comp=Z,1.3nm,0.7s,baz=253,slow=5.8,SNR=7.5 | | | | | | |
| ILAR | | | pP | sP | 16 14 37.6 | -1.3 | |
| | comp=Z,2.0nm,0.9s,baz=257,slow=5.2,SNR=6.7 | | | | | | |
| ILAR | | | LR | LR | 16 45 52.7 | | |
| | comp=Z,55nm,20.1s,baz=246,slow=32 | | | | | | |
| AAK | Ala-Archa | 84.37 313 | LR | LR | 16 55 11.5 | | |
| | comp=Z,28nm,18.3s,baz=92,slow=38 | | | | | | |
| BBB | Bella Bella | 86.54 37 | LR | LR | 16 50 44.7 | | |
| | comp=Z,29nm,18.1s,baz=274,slow=34 | | | | | | |
| DLBC | Dease Lake | 86.81 31 | LR | LR | 16 47 04.3 | | |
| | comp=Z,138nm,20.9s,baz=276,slow=31 | | | | | | |
| INK | Inuvik | 87.86 21 | LR | LR | 16 48 17.1 | | |
| | comp=Z,52nm,20.1s,baz=218,slow=31 | | | | | | |
| YBH | Yreka Blue Hor | 88.55 48 | LR | LR | 16 46 21.2 | | |
| | comp=Z,60nm,21.1s,baz=254,slow=30 | | | | | | |
| NVAR | Mina Array Bea | 91.61 52 | LR | LR | 16 49 36.9 | | |
| | comp=Z,107nm,20.5s,baz=280,slow=31 | | | | | | |
| PFO | Pinyon Flats O | 92.80 57 | LR | LR | 16 49 17.8 | | |
| | comp=Z,131nm,21.1s,baz=242,slow=30 | | | | | | |
| NEW | Newport | 93.06 42 | LR | LR | 16 52 18.7 | | |
| | comp=Z,79nm,19.1s,baz=270,slow=32 | | | | | | |
| ELK | Elko | 94.09 50 | LR | LR | 16 51 08.6 | | |
| | comp=Z,71nm,20.3s,baz=256,slow=31 | | | | | | |
| SYO | Syowa Base | 94.27 199 | ⇑iPcP | PcP | 16 15 29.4 | +0.3 | |
| YKA | Yellowknife Ar | 94.84 28 | P | P | 16 15 31.4 | 0.0 | |
| | comp=Z,0.5nm,0.7s,baz=273,slow=4.6,SNR=8.5 | | | | | | |
| YKA | | | pP | sP | 16 15 42.5 | -1.0 | |
| | comp=Z,0.5nm,0.7s,baz=272,slow=4.7,SNR=5.2 | | | | | | |
| LPIG | La Paz | 97.85 66 | LR | LR | 16 55 30.9 | | |
| | comp=Z,68nm,18.0s,baz=272,slow=33 | | | | | | |
| PDAR | Pinedale Array | 98.34 48 | LR | LR | 16 54 07.0 | | |
| | comp=Z,74nm,19.9s,baz=272,slow=32 | | | | | | |
| AKASG | Malin Array Be | 114.11 325 | PKP | PKPdf | 16 20 47.8 | -1.3 | |
| | comp=Z,0.7nm,0.5s,baz=52,slow=2.3,SNR=5.6 | | | | | | |
| AKASG | | | pPKP | PKiKP | 16 20 60.0 | +11 | |
| | comp=Z,0.6nm,0.5s,baz=67,slow=2.3,SNR=2.7 | | | | | | |
| PLCA | Paso Flores | 120.16 143 | PKP | PKPdf | 16 21 00.7 | -0.6 | |
| | comp=Z,1.6nm,0.7s,baz=225,slow=3.2,SNR=6.3 | | | | | | |
| KRLC | Kraliky | 121.29 329 | ePKPDF | PKiKP | 16 21 03.1 | -0.1 | |
| CLL | Collm | 122.41 331 | ePKPdf | PKPdf | 16 21 05.0 | -0.1 | |
| CLL | | | epPKPdf | sPKPdf | 16 21 16.0 | -1.1 | |
| CONA | Conrad Observa | 123.04 327 | eP | PKPdf | 16 21 05.4 | -1.1 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| CONA | | | eP | sPKPdf | 16 21 18.5 | -0.1 | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| CKRC | Cesky Krumlov | 123.33 328 | ePKPDF | PKiKP | 16 21 07.4 | +0.2 | |
| CKRC | | | ex | x | 16 21 18.9 | | |
| KHC | Kasperske Hory | 123.52 329 | ePKPDF | PKiKP | 16 21 07.8 | +0.2 | |
| KHC | | | epPKP | sPKPdf | 16 21 18.7 | -0.7 | |
| GERES | GERESS Array B | 123.63 329 | PKP | PKPdf | 16 21 07.0 | -0.7 | |
| | comp=Z,1.1nm,0.5s,baz=73,slow=0.6,SNR=8.2 | | | | | | |
| GERES | | | pPKP | sPKPdf | 16 21 19.1 | -0.6 | |
| | comp=Z,1.5nm,0.6s,baz=75,slow=1.5,SNR=7.5 | | | | | | |
| SOKA | Soboth | 124.23 326 | i P | PKPdf | 16 21 08.0 | -0.9 | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| SOKA | | | eP | sPKPdf | 16 21 19.4 | -1.4 | |
| | comp=Z,4.5nm,1.3s | | | | | | |
| KBA | Koelnbreinsper | 124.92 327 | eP | PKiKP | 16 21 21.6 | +11 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| WTTA | Wattenberg | 125.71 328 | i P | PKPdf | 16 21 10.1 | -1.7 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| MOTA | Moosalm | 125.93 329 | eP | PKPdf | 16 21 11.8 | -0.4 | |
| | comp=Z,8.6nm,1.3s | | | | | | |
| MOTA | | | i P | sPKPdf | 16 21 23.9 | -0.3 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| FETA | Feichten | 126.34 329 | eP | PKPdf | 16 21 13.0 | 0.0 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| FETA | | | eP | sPKPdf | 16 21 25.2 | +0.2 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| DAVA | Damuels | 126.60 329 | eP | PKPdf | 16 21 13.2 | -0.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| DAVA | | | eP | sPKPdf | 16 21 25.5 | 0.0 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| LPAZ | La Paz | 134.56 118 | PKP | PKPdf | 16 21 29.8 | -0.2 | |
| | comp=Z,2.1nm,0.8s,baz=216,slow=3.9,SNR=6.6 | | | | | | |
| CPUP | Villa Florida | 137.80 138 | PKP | PKPdf | 16 21 35.3 | +0.3 | |
| | comp=Z,2.0nm,0.6s,baz=176,slow=2.3,SNR=4.2 | | | | | | |
| CPUP | | | SKPbc | SKPbc | 16 25 04.7 | -2.6 | |
| | comp=Z,1.3nm,0.3s,baz=6.9,slow=2.0,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 150.26 289 | PKPbc | PKPbc | 16 22 00.8 | -1.2 | |
| | comp=Z,12nm,1.0s,baz=49,slow=2.2,SNR=34 | | | | | | |
| TORD | | | pPKPbc | sPKPbc | 16 22 13.4 | -0.6 | |
| | comp=Z,8.2nm,0.8s,baz=51,slow=2.5,SNR=11 | | | | | | |
| BDFB | Brasilia | 151.37 134 | PKPbc | PKPbc | 16 22 04.7 | 0.0 | |
| | comp=Z,16nm,0.7s,baz=274,slow=1.5,SNR=17 | | | | | | |
| BDFB | | | pPKPbc | sPKPbc | 16 22 16.9 | +0.1 | |
| | comp=Z,9.0nm,0.9s,baz=115,slow=4.3,SNR=4.6 | | | | | | |

*BUL **19** 16:03:23.9±1.0, 25°.97S×29°.52E, h16km±9km, MD3.8*
**EAF 19 16:03:23.9±1.7, 25°.95S×29°.55E, h18km±16km, MD3.7, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CNG | Changalane | 2.40 | 99 | i P | | Pn | 16 04 02.5 | +0.3 |
| CNG | | | | i S | | Sn | 16 04 30.7 | -0.4 |
| CNG | Changalane | 2.40 | 99 | i P | | Pn | 16 04 02.5 | +0.3 |
| CNG | | | | i S | | Sn | 16 04 30.7 | -0.4 |
| MOPA | Mopani | 2.95 | 35 | i P | | Pn | 16 04 09.7 | -0.2 |
| MOPA | | | | i S | | Sn | 16 04 41.1 | -3.7 |
| MOPA | Mopani | 2.95 | 35 | i P | | Pn | 16 04 09.7 | -0.2 |
| MOPA | | | | i S | | Sn | 16 04 41.1 | -3.7 |
| MSNA | Messina | 3.62 | 7 | i P | | Pn | 16 04 19.3 | +0.2 |
| MSNA | | | | i S | | Sn | 16 04 59.2 | -2.1 |
| MSNA | Messina | 3.62 | 7 | i P | | Pn | 16 04 19.3 | +0.2 |
| MSNA | | | | i S | | Sn | 16 04 59.2 | -2.1 |
| LBTB | Lobatse | 3.69 | 284 | i P | | Pn | 16 04 19.6 | -0.6 |
| LBTB | | | | i S | | Sn | 16 05 00.9 | -2.4 |
| LBTB | Lobatse | 3.69 | 284 | i P | | Pn | 16 04 19.6 | -0.6 |
| LBTB | | | | i S | | Sn | 16 05 00.9 | -2.4 |
| BOSA | Boshof | 4.65 | 234 | i P | | Pn | 16 04 32.8 | -0.6 |
| BOSA | | | | i S | | Sn | 16 05 23.1 | -3.8 |
| BOSA | Boshof | 4.65 | 234 | i P | | Pn | 16 04 32.8 | -0.6 |
| BOSA | | | | i S | | Sn | 16 05 23.1 | -3.8 |
| MATP | Matopo | 5.58 | 350 | eP | | Pn | 16 04 45.6 | -0.6 |
| MATP | | | | i S | | Sn | 16 05 46.8 | -3.2 |
| MATP | Matopo | 5.58 | 350 | eP | | Pn | 16 04 45.6 | -0.6 |
| MATP | | | | i S | | Sn | 16 05 46.8 | -3.2 |
| BLWY | Bulawayo | 5.85 | 351 | eP | | Pn | 16 04 49.2 | -0.6 |
| BLWY | | | | i S | | Sn | 16 05 51.8 | -4.8 |
| BLWY | Bulawayo | 5.85 | 351 | eP | | Pn | 16 04 49.2 | -0.6 |
| BLWY | | | | i S | | Sn | 16 05 51.8 | -4.8 |

**JMA 19 16:15:47.0±0.3, 37°.13N×142°.31E, h11km±3km, M3.6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JFK | Kawauchi | 1.17 | 282 | P | | Pb | 16 16 08.8 | -0.5 |
| ONAJ | Iwakimizuishiy | 1.21 | 269 | eS | | Sb | 16 16 25.3 | -0.3 |
| JMST | Minamisoumatoc | 1.28 | 298 | P | | Pn | 16 16 10.2 | -0.6 |
| JIKH | Ishinomakibobu | 1.36 | 331 | P | | Pn | 16 16 11.5 | -0.4 |
| JHO | Hitachi | 1.49 | 250 | P | | Pn | 16 16 13.5 | -0.2 |
| JIO | Ouri | 1.53 | 330 | P | | Pn | 16 16 14.2 | 0.0 |
| JFT | Otama | 1.62 | 284 | P | | Pn | 16 16 16.2 | +0.7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MSNA | **Messina** | **3.88** | **9** | *i* P | | **Pg** | | **16 29 04.6 +1.0** | | |
| MSNA | | | | *i* S | | **Sb** | | **16 29 44.8 -0.1** | | |
| **MSNA** | **Messina** | **3.88** | **9** | *i* P | | **Pg** | | **16 29 04.6 +1.0** | | |
| MSNA | | | | *i* S | | **Sb** | | **16 29 44.8 -0.1** | | |
| **BOSA** | **Boshof** | **4.36** | **235** | Pn | | **Pn** | | **16 28 54.8 -1.0** | | |
| | 0.1nm,0.3s,baz=57,slow=16,SNR=1.2 | | | | | | | | | |
| BOSA | | | | Pg | | **Pb** | | **16 29 06.4 +0.3** | | |
| | 0.5nm,0.3s,baz=51,slow=18,SNR=9.3 | | | | | | | | | |
| BOSA | | | | Lg | | Lg | | 16 30 00.7 | | |
| | 2.0nm,0.3s,baz=332,slow=20,SNR=9.3 | | | | | | | | | |
| **BOSA** | **Boshof** | **4.36** | **235** | *i* P | | **Pg** | | **16 29 12.8 0.0** | | |
| BOSA | | | | *i* S | | **Sb** | | **16 30 00.7 +1.9** | | |
| **BOSA** | **Boshof** | **4.36** | **235** | *i* P | | **Pg** | | **16 29 12.8 0.0** | | |
| BOSA | | | | *i* S | | **Sb** | | **16 30 00.7 +1.9** | | |
| **I47ZA** | **BOSHOF INFRASO** | **4.38** | **236** | *i* | | | | 16 54 05.0 | | |
| | baz=50,slow=308,SNR=1.0 | | | | | | | | | |
| **MATP** | **Matopo** | **5.79** | **352** | Pn | | **Pn** | | **16 29 14.8 -0.6** | | |
| | 0.1nm,0.3s,baz=167,slow=18,SNR=10 | | | | | | | | | |
| MATP | | | | Lg | | Lg | | 16 30 39.9 | | |
| | 0.8nm,0.3s,baz=265,slow=23,SNR=9.1 | | | | | | | | | |
| **MATP** | **Matopo** | **5.79** | **352** | *i* P | | **Pb** | | **16 29 28.9 -1.6** | | |
| MATP | | | | *e*S | | **Sn** | | **16 30 27.6 +5.6** | | |
| **MATP** | **Matopo** | **5.79** | **352** | *i* P | | **Pb** | | **16 29 28.9 -1.6** | | |
| MATP | | | | *e*S | | **Sn** | | **16 30 27.6 +5.6** | | |
| **BLWY** | **Bulawayo** | **6.06** | **353** | *i* P | | **Pb** | | **16 29 32.7 -2.4** | | |
| BLWY | | | | *i* S | | **Sn** | | **16 30 34.9 +6.3** | | |
| **BLWY** | **Bulawayo** | **6.06** | **353** | *i* P | | **Pb** | | **16 29 32.7 -2.4** | | |
| BLWY | | | | *i* S | | **Sn** | | **16 30 34.9 +6.3** | | |
| **LSZ** | **Lusaka** | **10.91** | **354** | Pn | | **Pn** | | **16 30 25.1 -0.6** | | |
| | 0.6nm,0.3s,baz=198,slow=13,SNR=3.6 | | | | | | | | | |
| **I35NA** | **TSUMEB INFRASO** | **12.89** | **300** | *i* | | | | 17 45 00.0 | | |
| | baz=126,slow=319,SNR=5.7 | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.46** | **322** | P | | **P** | | **16 36 23.3 -1.1** | | |
| | 0.4nm,0.8s,baz=142,slow=7.3,SNR=2.4 | | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **56.73** | **33** | LR | | LR | | 17 02 41.0 | | |
| | comp=Z,42nm,18.6s,baz=180,slow=37 | | | | | | | | | |

*IDC* ***19*** *16:56:57.5±1.1,50.28N×132.37E,h0km,mb3.5/5, mb1 3.7/7,mb1mx3.4/55,mbtmp3.5/7,ML2.6/2,MS3.2/6, Ms1 3.2/6,ms1mx2.8/75,Error ellipse: s-maj=29.8km s-min=11.4km az=103.0*

*MOS* ***19*** *16:56:57.0±1.2,50.28N×132.31E,h9km,mb4.0/4,Error ellipse: s-maj=19.0km s-min=8.5km az=93.1*

*SKHL* ***19*** *16:56:58.2±0.2,50.30N×132.30E,h11km±4km,mb4.9/6, ms3.4/3*

**ISC 19 16:56:58.7**±0.5,**50°28N**±0'.03×**132°25E**±0'.03,**h10**km,**n41,** σ2ˢ**26**/53,**mb3.7**/8,**MS3.3**/4,**3C-2D**,**Southeastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLR** | **Kul'dur** | **1.10** | **197** | Pg | **Pb** | **16 57 18.9** | **-0.9** |
| | 92nm,0.3s,baz=16,slow=14,SNR=599 | | | | | | |
| KLR | | | | Lg | Lg | 16 57 34.1 | |
| | 772nm,0.3s,baz=176,slow=20,SNR=24 | | | | | | |
| KLR | | | | LR | LR | 16 57 40.3 | |
| | comp=Z,21nm,20.7s,baz=39,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **1.10** | **197** | *c* *i* P | **Pb** | **16 57 18.8** | **-0.9** |
| KLR | | | | *i* S | **Sg** | **16 57 34.6** | **+0.6** |
| **KHBR** | **Khabarovsk** | **2.58** | **133** | *e*Pn | **Pn** | **16 57 40.4** | **0.0** |
| KHBR | | | | *e*Pg | **Pb** | **16 57 45.3** | **+0.4** |
| KHBR | | | | AMB | AMB | 16 57 46.3 | |
| | 264nm,0.2s | | | | | | |
| KHBR | | | | *e*Sg | **Sb** | **16 58 17.2** | **+0.6** |
| KHBR | | | | A | A | 16 58 17.7 | |
| | 2μm,0.5s | | | | | | |
| KHBR | | | | A | A | 16 58 17.7 | |
| | 2μm,0.5s | | | | | | |
| KHBR | | | | AMS | AMS | 16 58 55.1 | |
| | 430nm,4.4s | | | | | | |
| KHBR | | | | AMS | AMS | 16 58 55.1 | |
| | 260nm,4.4s | | | | | | |
| **GRNR** | **Gornyy** | **2.71** | **78** | *e*Pn | **Pn** | **16 57 42.1** | **-0.2** |
| GRNR | | | | *e*Pg | **Pb** | **16 57 47.6** | **+0.4** |
| GRNR | | | | AMB | AMB | 16 57 47.8 | |
| | 204nm,0.2s | | | | | | |
| GRNR | | | | *e*Sg | **Sg** | **16 58 21.9** | **-3.8** |
| GRNR | | | | A | A | 16 58 24.6 | |
| | 670nm,0.6s | | | | | | |
| GRNR | | | | A | A | 16 58 24.6 | |
| | 692nm,0.6s | | | | | | |
| GRNR | | | | AMS | AMS | 16 59 00.0 | |
| | 290nm,5.0s | | | | | | |
| GRNR | | | | AMS | AMS | 16 59 00.0 | |
| | 240nm,5.0s | | | | | | |
| **EKMR** | **Ekimchan** | **2.83** | **9** | *e*Pn | **Pn** | **16 57 44.6** | **+0.7** |
| EKMR | | | | *e*Pg | **Pb** | **16 57 49.0** | **-0.3** |
| EKMR | | | | *e*Sn | **Sn** | **16 58 17.1** | **-1.0** |
| EKMR | | | | *e*Sg | **Sb** | **16 58 24.5** | **+0.6** |
| **ZEA** | **Zeya** | **4.64** | **320** | *e*P | **Pn** | **16 58 09.8** | **+1.1** |
| ZEA | | | | *e*S | **Sn** | **16 59 02.2** | **-0.4** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,50nm,0.7s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,90nm,0.6s | | | | | | |
| ZEA | | | | smax | smax | | |
| | comp=N,170nm,0.5s | | | | | | |
| ZEA | | | | smax | smax | | |
| | comp=E,840nm,0.6s | | | | | | |
| ZEA | | | | smax | smax | | |
| | comp=Z,380nm,0.6s | | | | | | |
| **ZEA** | **Zeya** | **4.64** | **320** | *e*Pn | **Pn** | **16 58 09.8** | **+1.1** |
| ZEA | | | | *e*rx | rx | 16 58 12.8 | |
| ZEA | | | | *e*Pg | **Pb** | **16 58 21.5** | **+1.5** |
| ZEA | | | | *e*Sg | **Sg** | **16 59 22.3** | **-5.2** |
| ZEA | | | | A | A | 16 59 25.5 | |
| | comp=Z,320nm,0.7s | | | | | | |
| ZEA | | | | AMS | AMS | 17 01 05.0 | |
| | comp=Z,100nm,5.0s | | | | | | |
| ZEA | | | | AMS | AMS | 17 01 05.0 | |
| | comp=Z,100nm,5.0s | | | | | | |
| ZEA | | | | AMS | AMS | 17 01 05.0 | |
| | comp=Z,120nm,5.0s | | | | | | |
| **KROS** | **Kirovskiy** | **5.27** | **324** | *e*Pn | **Pn** | **16 58 18.6** | **+1.2** |
| KROS | | | | AMB | AMB | 16 58 19.2 | |
| | comp=Z,97nm,0.9s | | | | | | |
| KROS | | | | *e*Pg | **Pb** | **16 58 34.4** | **+3.6** |
| KROS | | | | *e*Sg | **Sg** | **16 59 43.2** | **-4.4** |
| KROS | | | | A | A | 16 59 50.9 | |
| | comp=Z,252nm,0.5s | | | | | | |
| **NKL** | **Nikolayevsk** | **5.98** | **58** | *e*Pg | **Pb** | **16 58 46.0** | **+3.2** |
| NKL | | | | AMB | AMB | 16 58 48.9 | |
| | comp=Z,40nm,0.4s | | | | | | |
| NKL | | | | *e*Sg | **Sg** | **17 00 04.1** | **-6.3** |
| NKL | | | | A | A | 17 00 11.1 | |
| | comp=Z,173nm,0.9s | | | | | | |
| **TEY** | **Ternei** | **6.01** | **149** | *e*Pn | **Pn** | **16 58 26.7** | **-0.9** |
| TEY | | | | *e*Sg | **Sg** | **17 00 06.0** | **-5.6** |
| TEY | | | | A | A | 17 00 16.0 | |
| | comp=Z,70nm,0.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **6.08** | **182** | ⇑*e*P | **Pn** | **16 58 28.4** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **6.08** | **182** | Pn | **Pn** | **16 58 28.4** | **-0.2** |
| | baz=7.0,slow=15,SNR=13 | | | | | | |
| USRK | | | | Lg | Lg | 17 00 09.6 | |
| | baz=353,slow=30,SNR=7.9 | | | | | | |
| **GRTR** | **Gornotajezhnoj** | **6.58** | **181** | *e*Pn | **Pn** | **16 58 35.9** | **+0.5** |
| GRTR | | | | *e*Sg | **Sg** | **17 00 24.5** | **-5.1** |
| GRTR | | | | A | A | 17 00 28.1 | |
| | comp=Z,79nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.72** | **112** | *e*P | **Pn** | **16 58 52.1** | **+1.1** |
| YSS | | | | *e*S | **Sn** | **17 00 22.0** | **+3.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,300nm,16.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.72** | **112** | *e*Pn | **Pn** | **16 58 52.1** | **+1.1** |
| **MSHR** | **Mys Shultsa** | **7.74** | **186** | ⇑*e*P | **Pn** | **16 58 52.4** | **+1.1** |
| **TUP** | **Tupik** | **8.59** | **304** | *e*Pn | **Pn** | **16 59 03.6** | **+0.6** |
| TUP | | | | *e*Pg | Pg | 16 59 34.0 | -9.0 |
| TUP | | | | AMB | AMB | 16 59 43.7 | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| TUP | | | | *e*Sg | **Sg** | **17 01 29.0** | **-5.1** |
| **ASAJ** | **Asahikawa** | **9.36** | **127** | LR | LR | 17 02 45.4 | |
| | comp=Z,59nm,20.6s,baz=141,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **11.87** | **354** | LR | LR | 17 04 16.4 | |
| | comp=Z,88nm,19.0s,baz=256,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **11.87** | **354** | ⇓*e*P | **Pn** | **16 59 47.8** | **+0.1** |
| **YAK** | **Yakutsk** | **11.87** | **354** | *e*P | **Pn** | **16 59 47.8** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **14.39** | **160** | LR | LR | 17 05 58.5 | |
| | comp=Z,31nm,18.1s,baz=24,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **17.09** | **272** | P | **P** | **17 01 00.3** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=93,slow=12,SNR=3.0 | | | | | | |
| **ZAK** | **Zakamensk** | **18.45** | **282** | *e*P | **Pn** | **17 01 14.8** | **+0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | |
| **ZAK** | **Zakamensk** | **18.45** | **282** | *e*P | **Pn** | **17 01 14.8** | **+0.5** |
| **TIXI** | **Tiksi** | **21.50** | **357** | LR | LR | 17 10 39.7 | |
| | comp=Z,64nm,18.9s,baz=211,slow=38 | | | | | | |
| **TIXI** | **Tiksi** | **21.50** | **357** | ⇓*e*P | **P** | **17 01 49.4** | **+2.2** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **21.50** | **357** | *e*P | **P** | **17 01 49.4** | **+2.2** |
| **BILL** | **Bilibino** | **24.39** | **31** | *e*P | **P** | **17 02 16.1** | **-0.6** |
| BILL | | | | *e* | | 17 02 49.5 | |
| BILL | | | | *e*PPP | PPP | 17 02 58.6 | |
| BILL | | | | *e* | | 17 05 55.9 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,52nm,15.0s | | | | | | |
| **BILL** | **Bilibino** | **24.39** | **31** | *e*P | **P** | **17 02 16.1** | **-0.6** |
| **MKAR** | **Makanchi Array** | **32.76** | **284** | P | **P** | **17 03 32.7** | **+1.2** |
| | comp=Z,0.3nm,0.8s,baz=58,slow=3.6,SNR=1.6 | | | | | | |
| **ILAR** | **Eielson Array** | **42.55** | **39** | P | **P** | **17 04 53.8** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=298,slow=7.2,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **42.55** | **39** | *e*P | **P** | **17 04 54.9** | **+0.9** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **OBN** | **Obninsk** | **53.75** | **315** | *e*P | **P** | **17 06 21.3** | **+0.7** |
| OBN | | | | *e* | | 17 07 26.2 | |
| OBN | | | | *e* | | 17 08 19.7 | |
| OBN | | | | *e*PPP | PPP | 17 09 27.6 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **OBN** | **Obninsk** | **53.75** | **315** | *e*P | **P** | **17 06 21.3** | **+0.7** |
| **FINES** | **FINESS Array B** | **54.07** | **325** | P | **P** | **17 06 22.8** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=27,slow=4.7,SNR=7.6 | | | | | | |
| **FINES** | **FINESS Array B** | **54.07** | **325** | *e*P | **P** | **17 06 21.5** | **-1.3** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **56.12** | **195** | LR | LR | 17 32 10.4 | |
| | comp=Z,32nm,18.4s,baz=178,slow=38 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.26** | **312** | LR | LR | 17 36 50.8 | |
| | comp=Z,107nm,18.5s,baz=264,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **69.93** | **178** | P | **P** | **17 08 11.6** | **+1.7** |
| | comp=Z,0.5nm,1.0s,baz=355,slow=6.9,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **73.63** | **178** | P | **P** | **17 08 32.2** | **+0.1** |
| | comp=Z,0.2nm,0.7s,baz=354,slow=5.9,SNR=1.5 | | | | | | |

*IDC* ***19*** *17:05:38.8±1.0,31.61N×50.00E,h0km,mb3.9/17, mb1 4.0/22,mb1mx3.8/54,mbtmp4.0/22,ML3.8/5,Error ellipse: s-maj=23.4km s-min=14.4km az=1.0*

*MOS* ***19*** *17:05:39.8±2.1,31.60N×49.90E,h10km,mb4.4/4,Error ellipse: s-maj=9.0km s-min=5.8km az=112.2*

*NEIC* ***19*** *17:05:39.8±2.1,31.59N±0.04×49.93E±0.05,h10km±1km, mb4.6/45,mb_Lg3.9(TEH),Error ellipse: s-maj=8.8km s-min=4.7km az=123.0*

*TEH* ***19*** *17:05:40.5,31.68N×50.09E,h9km,ML3.9*

*DSN* ***19*** *17:05:42.4±1.5,31.42N×50.17E,h10km,ML3.9/9,Error ellipse: s-maj=15.8km s-min=15.6km az=17.0*

*OMAN* ***19*** *17:05:49.0±0.3,31.25N×50.56E,h10km,mb5.7/20, ms2.7/1,Error ellipse: s-maj=5.6km s-min=4.2km az=295.0*

**ISC 19 17:05:39.9**±0.4,**31°59N**±0'.04×**50°07E**±0'.03,**h10**km,**n243,** σ2ˢ**19**/267,**mb4.4**/50,**5C-7D**,**Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AMIS** | **Naft Sefid** | **0.67** | **276** | *e*Pg | **Pg** | **17 05 54.3** | **+1.5** |
| AMIS | | | | *e*Sg | **Sb** | **17 06 05.0** | **+2.0** |
| AMIS | | | | *e* | | 17 06 06.8 | |
| | comp=Z,81μm,0.2s | | | | | | |
| **ABEH** | **Behbahan** | **1.00** | **171** | *e*Pg | **Pn** | **17 06 02.1** | **+2.1** |
| **SHK1** | **Shahrekord** | **1.01** | **43** | *e*Pg | **Pg** | **17 05 59.6** | **+0.2** |
| SHK1 | | | | *e*Sg | **Sg** | **17 06 14.0** | **+1.5** |
| **IBRJ** | **Brojen** | **1.06** | **72** | Pg | **Pg** | **17 06 01.1** | **+0.7** |
| IBRJ | | | | Sg | **Sn** | **17 06 17.8** | **+1.7** |
| **IBRJ** | **Brojen** | **1.06** | **72** | *e*Pg | **Pg** | **17 06 01.1** | **+0.7** |
| IBRJ | | | | *e*Sg | **Sn** | **17 06 17.8** | **+1.7** |
| **AHWZ** | **Ahwaz** | **1.24** | **258** | *e*Pg | **Pg** | **17 06 06.0** | **+2.2** |
| **IPIR** | **Pirpir** | **1.29** | **33** | | **Pn** | **17 06 05.0** | **+0.7** |
| **IPIR** | **Pirpir** | **1.29** | **33** | *e* | | 17 06 26.6 | |
| | comp=Z,27μm,0.5s | | | | | | |
| IPIR | | | | *e*Pg | **Pn** | **17 06 05.0** | **+0.7** |
| **KLNJ** | **Kolanjah** | **1.43** | **114** | *e* | | 17 06 43.6 | |
| | comp=Z,25μm,0.7s | | | | | | |
| KLNJ | | | | *e*Pn | **Pn** | **17 06 07.8** | **+1.6** |
| **IGAR** | **Gharneh** | **1.86** | **64** | Pn | **Pb** | **17 06 15.4** | **+1.3** |
| **IGAR** | **Gharneh** | **1.86** | **64** | *e*Pn | **Pb** | **17 06 15.5** | **+1.3** |
| **IRAM** | **Ramesheh** | **1.98** | **83** | *e*Pn | **Pb** | **17 06 17.3** | **+1.1** |
| IRAM | | | | *e* | | 17 06 54.0 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **KHMZ** | **Khomeyn** | **2.14** | **358** | *e*Pn | **Pb** | **17 06 19.4** | **+0.5** |
| **IKLH** | **Kolahrood** | **2.15** | **36** | *e*Pn | **Pb** | **17 06 19.3** | **+0.3** |
| IKLH | | | | *e* | | 17 06 59.6 | |
| | comp=Z,11μm,0.5s | | | | | | |
| **IZEF** | **Zefreh** | **2.32** | **55** | Pn | **Pb** | **17 06 21.8** | **-0.1** |
| **IZEF** | **Zefreh** | **2.32** | **55** | *e*Pn | **Pb** | **17 06 21.9** | **0.0** |
| IZEF | | | | *e* | | 17 07 03.6 | |
| | comp=Z,4μm,0.6s | | | | | | |
| **BMDN** | **Meydan** | **2.32** | **334** | *e*Pn | **Pn** | **17 06 20.9** | **+2.5** |
| BMDN | | | | *e* | | 17 07 00.3 | |
| | comp=Z,9μm,0.8s | | | | | | |
| **KAZ1** | **Kazerun** | **2.38** | **145** | *e*Pn | **Pn** | **17 06 22.3** | **+3.2** |
| **NASN** | **Na'in** | **2.62** | **62** | *e*Pn | **Pn** | **17 06 26.0** | **+3.5** |
| **IKFM** | **Kafar-mosalman** | **2.69** | **316** | *e*Pn | **Pn** | **17 06 25.6** | **+2.4** |
| **IDOB** | **Doab** | **2.71** | **324** | *e*Pn | **Pn** | **17 06 26.1** | **+2.4** |
| IDOB | | | | *e* | | 17 07 18.5 | |
| | comp=Z,6μm,0.6s | | | | | | |
| **SHI** | **Shiraz** | **2.87** | **132** | *e*Pn | **Pn** | **17 06 30.2** | **+4.4** |
| SHI | | | | *e* | | 17 07 22.7 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **HSAM** | **Samen** | **2.89** | **335** | *e*Pn | **Pn** | **17 06 28.9** | **+2.7** |
| **AHBU** | **AHRAM** | **2.92** | **158** | *e*Pn | **Pn** | **17 06 30.3** | **+3.9** |
| **KRSH** | **Karshahi** | **2.94** | **36** | *e*Pn | **Pn** | **17 06 30.4** | **+3.5** |
| KRSH | | | | *e* | | 17 07 27.8 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **ASAO** | **Ashtian** | **2.95** | **359** | *e*Pn | **Pn** | **17 06 30.6** | **+3.6** |
| **GHVR** | **GHOM** | **3.06** | **19** | *e*Pn | **Pn** | **17 06 32.4** | **+4.0** |
| **ISAD** | **Sadrabad** | **3.10** | **83** | *e*Pn | **Pn** | **17 06 33.2** | **+4.1** |
| **ISFB** | **Sefidab** | **3.30** | **33** | *e*Pn | **Pn** | **17 06 34.6** | **+2.9** |
| ISFB | | | | *e* | | 17 07 29.7 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **HAGD** | **Aghdareh** | **3.31** | **347** | *e*Pn | **Pn** | **17 06 34.8** | **+2.8** |
| HAGD | | | | *e* | | 17 07 34.4 | |
| | comp=Z,4μm,0.7s | | | | | | |
| **IQOM** | **Qom** | **3.35** | **14** | *e*Pn | **Pn** | **17 06 34.9** | **+2.4** |
| IQOM | | | | *e* | | 17 06 44.4 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **ANAR** | **Anarak** | **3.48** | **62** | *e*Pn | **Pn** | **17 06 38.5** | **+4.2** |
| **IVRN** | **Varamin** | **3.67** | **22** | *e*Pn | **Pn** | **17 06 39.9** | **+3.2** |
| IVRN | | | | *e* | | 17 07 05.6 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **3.69** | **317** | *e*Pn | **Pn** | **17 06 39.4** | **+2.2** |
| KCHF | | | | *e* | | 17 07 50.0 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **KER** | **Kermanshah** | **3.72** | **319** | *e*Pn | **Pn** | **17 06 39.6** | **+2.1** |
| **ICHK** | **Chekchek** | **3.75** | **79** | Pn | **Pn** | **17 06 41.5** | **+3.5** |
| **ICHK** | **Chekchek** | **3.75** | **79** | *e*Pn | **Pn** | **17 06 41.5** | **+3.5** |
| **IRAZ** | **Razeghan** | **3.80** | **358** | *e*Pn | **Pn** | **17 06 41.1** | **+2.4** |
| IRAZ | | | | *e* | | 17 07 50.2 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **IMEH** | **Mehriz** | **3.89** | **92** | *e*Pn | **Pn** | **17 06 43.3** | **+4.4** |
| **YZKH** | **Yazd** | **3.93** | **77** | *e*Pn | **Pn** | **17 06 44.3** | **+4.0** |
| **IHSB** | **Hasanabad** | **3.97** | **14** | *e*Pn | **Pn** | **17 06 43.7** | **+2.8** |
| **IGHG** | **Ghaleghazi** | **4.01** | **314** | *e*Pn | **Pn** | **17 06 43.8** | **+2.2** |
| **QIR1** | **Qir** | **4.04** | **140** | *e*Pn | **Pn** | **17 06 45.7** | **+3.9** |
| **IMHD** | **Mahdasht** | **4.11** | **7** | *e*Pn | **Pn** | **17 06 45.6** | **+2.7** |
| IMHD | | | | *e* | | 17 07 56.0 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **4.13** | **355** | *e*Pn | **Pn** | **17 06 44.7** | **+1.5** |
| **GHIR** | **Ghir-Karzin** | **4.16** | **142** | Pn | **Pn** | **17 06 45.9** | **+2.4** |
| **GHIR** | **Ghir-Karzin** | **4.16** | **142** | *e*Pn | **Pn** | **17 06 46.0** | **+2.4** |
| **SNGE** | **Sanandaj** | **4.17** | **328** | *e*Pn | **Pn** | **17 06 45.5** | **+1.8** |
| **IDMV** | **Damavand** | **4.30** | **22** | *e*Pn | **Pn** | **17 06 48.1** | **+2.5** |
| **DAMV** | **Damavand** | **4.33** | **21** | *e*Pn | **Pn** | **17 06 49.3** | **+3.3** |
| **THKV** | **Tehran--Karaj** | **4.37** | **9** | *e*Pn | **Pn** | **17 06 47.1** | **+0.7** |
| **IDHR** | **Dehrash** | **4.37** | **316** | *e*Pn | **Pn** | **17 06 48.4** | **+1.8** |
| IDHR | | | | *e* | | 17 08 05.4 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **CHTH** | **Charan** | **4.39** | **11** | *e*Pn | **Pn** | **17 06 49.8** | **+2.9** |
| **ILAS** | **Lasjerd** | **4.49** | **32** | *e*Pn | **Pn** | **17 06 50.9** | **+2.8** |
| **IFIR** | **Firoozkooh** | **4.62** | **28** | *e*Pn | **Pn** | **17 06 53.2** | **+3.2** |
| **IBAF** | **Bafgh** | **4.69** | **89** | *e*Pn | **Pn** | **17 06 54.8** | **+3.9** |
| **QALM** | **Alamut, Qazvin** | **4.85** | **6** | *e*Pn | **Pn** | **17 06 55.7** | **+2.5** |
| **ISHM** | **Shahmirzad** | **4.99** | **32** | *e*Pn | **Pn** | **17 06 57.8** | **+2.7** |
| ISHM | | | | *e* | | 17 07 20.5 | |
| | comp=Z,924nm,0.4s | | | | | | |
| **IPRN** | **Peran** | **5.01** | **22** | *e*Pn | **Pn** | **17 06 58.8** | **+3.6** |
| **IANJ** | **Anjilo** | **5.03** | **39** | Pn | **Pn** | **17 06 58.1** | **+2.5** |
| **IANJ** | **Anjilo** | **5.03** | **39** | *e*Pn | **Pn** | **17 06 58.1** | **+2.5** |
| **JIR1** | **Jirandeh** | **5.11** | **358** | *e*Pn | **Pn** | **17 06 58.9** | **+2.3** |
| **ZNJK** | **Zanjan** | **5.19** | **348** | *e*Pn | **Pn** | **17 07 01.4** | **+3.5** |
| **SAKB** | **Bahrain** | **5.61** | **176** | P | **Pn** | **17 07 07.4** | **+4.0** |
| SAKB | | | | S | **Sn** | **17 08 09.8** | **+2.0** |
| **KHGB** | **Koh Gabri** | **5.64** | **101** | Pn | **Pn** | **17 07 07.4** | **+3.5** |
| **KHGB** | **Koh Gabri** | **5.64** | **101** | *e*Pn | **Pn** | **17 07 07.4** | **+3.5** |
| **SHMA** | **Al-Shehemyia** | **5.77** | **172** | P | **Pn** | **17 07 08.6** | **+3.1** |
| SHMA | | | | S | **Sn** | **17 08 12.8** | **+1.0** |
| **TPRV** | **Parvadeh(Tabas** | **5.78** | **74** | *e*Pn | **Pn** | **17 07 09.8** | **+4.0** |
| **IGLO** | **Ghaloghah** | **5.81** | **32** | *e*Pn | **Pn** | **17 07 10.1** | **+3.8** |
| **KRBR** | **Kerman** | **5.98** | **104** | *e*Pn | **Pn** | **17 07 12.8** | **+4.1** |
| **TNSJ** | **Nastanj** | **6.00** | **65** | *e*Pn | **Pn** | **17 07 11.8** | **+3.0** |
| **KHOR** | **Al-Khor Airpor** | **6.08** | **168** | P | **Pn** | **17 07 13.6** | **+3.7** |
| **TKDS** | **Koohdasht(Taba** | **6.29** | **69** | *e*Pn | **Pn** | **17 07 16.2** | **+3.4** |
| **TABS** | **Tabas** | **6.29** | **69** | *e*Pn | **Pn** | **17 07 16.4** | **+3.6** |
| **SHRO** | **Shahrood** | **6.61** | **47** | *e*Pn | **Pn** | **17 07 20.7** | **+3.5** |
| **TRNA** | **Turayna** | **6.91** | **171** | P | **Pn** | **17 07 23.8** | **+2.7** |
| TRNA | | | | S | **Sn** | **17 08 41.5** | **+1.7** |
| **GRMI** | **Germi** | **7.42** | **347** | *e*Pn | **Pn** | **17 07 31.8** | **+3.5** |
| **SLWR** | **Sila** | **7.63** | **169** | P | **Pn** | **17 07 33.9** | **+2.7** |
| SLWR | | | | S | **Sn** | **17 08 58.0** | **+0.3** |
| **SHME** | **Shamm** | **7.67** | **135** | P | **Pn** | **17 07 33.9** | **+2.2** |
| **SHME** | **Shamm** | **7.67** | **135** | P | **Pn** | **17 07 33.2** | **+1.5** |
| **BSRN** | **Basiran** | **7.72** | **85** | *e*Pn | **Pn** | **17 07 35.9** | **+3.4** |
| **AFRZ** | **Afriz** | **7.78** | **74** | *e*Pn | **Pn** | **17 07 36.4** | **+3.2** |
| **MRT** | **Maraveh tapeh** | **7.83** | **38** | *e*Pn | **Pn** | **17 07 37.3** | **+3.5** |
| **BANOM** | **Banah** | **7.86** | **134** | P | **Pn** | **17 07 36.2** | **+1.9** |
| | SNR=16 | | | | | | |
| BANOM | | | | S | **Sn** | **17 09 01.6** | **-1.8** |
| **BANOM** | **Banah** | **7.86** | **134** | *i* P | **Pn** | **17 07 34.9** | **+0.6** |
| | SNR=16 | | | | | | |
| BANOM | | | | S | **Sn** | **17 08 59.8** | **-3.6** |
| **SBZV** | **Sabzevar** | **7.88** | **51** | *e*Pn | **Pn** | **17 07 38.2** | **+3.5** |
| **GHWR** | **Ruwais** | **8.00** | **161** | P | **Pn** | **17 07 38.7** | **+2.5** |
| GHWR | | | | S | **Sn** | **17 09 05.5** | **-1.2** |
| **MASF** | **Masafi** | **8.19** | **138** | P | **Pn** | **17 07 40.1** | **+1.3** |
| MASF | | | | S | **Sn** | **17 09 09.0** | **-2.6** |
| | SNR=23 | | | | | | |
| **MSFE** | **Esma-Masafi** | **8.20** | **138** | P | **Pn** | **17 07 39.5** | **+0.5** |
| **NAZ** | **Nazwa, Dubai** | **8.22** | **142** | P | **Pn** | **17 07 42.8** | **+3.6** |
| NAZ | | | | S | **Sn** | **17 09 11.4** | **-0.8** |
| **ASUD** | **Al Ashush, Dub** | **8.35** | **145** | P | **Pn** | **17 07 44.4** | **+3.4** |
| | SNR=19 | | | | | | |
| ASUD | | | | S | **Sn** | **17 09 14.9** | **-0.5** |
| **ASUD** | **Al Ashush, Dub** | **8.35** | **145** | *i* P | **Pn** | **17 07 42.9** | **+1.9** |
| | SNR=19 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **8.38** | **143** | P | **Pn** | **17 07 45.2** | **+3.8** |
| FAQ | | | | P | **Pn** | **17 07 45.2** | **+3.8** |
| FAQ | | | | S | **Sn** | **17 09 14.3** | **-1.9** |
| | SNR=7.8 | | | | | | |
| FAQ | | | | S | **Sn** | **17 09 14.3** | **-1.9** |
| | SNR=7.8 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **8.38** | **143** | P | **Pn** | **17 07 42.7** | **+1.3** |
| **MZWR** | **Madinat Zayed** | **8.50** | **156** | P | **Pn** | **17 07 45.7** | **+2.6** |
| MZWR | | | | S | **Sn** | **17 09 17.6** | **-1.4** |
| **ISFR** | **Sfrayin** | **8.53** | **48** | *e*Pn | **Pn** | **17 07 47.3** | **+3.7** |
| **UOSS** | **Minazif** | **8.55** | **139** | | **Pn** | **17 07 44.4** | **+0.6** |
| **UOSS** | **Minazif** | **8.55** | **139** | P | **Pn** | **17 07 45.3** | **+1.5** |
| UOSS | | | | S | **Sn** | **17 09 17.0** | **-3.3** |
| **UOSS** | **Minazif** | **8.55** | **139** | P | **Pn** | **17 07 44.1** | **+0.4** |
| **HATD** | **Hatta, Dubai** | **8.60** | **140** | P | **Pn** | **17 07 46.0** | **+1.5** |
| HATD | | | | S | **Sn** | **17 09 19.1** | **-2.5** |
| | SNR=10 | | | | | | |
| **HATD** | **Hatta, Dubai** | **8.60** | **140** | P | **Pn** | **17 07 45.9** | **+1.4** |
| **SIRT** | **Sirnak** | **8.62** | **315** | Pn | **Pn** | **17 07 43.1** | **-1.6** |
| **ASHO** | **Ashiyiah** | **8.68** | **141** | P | **Pn** | **17 07 47.0** | **+1.4** |
| | SNR=18

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MLR | Muntele Rosu | 23.31 | 313 | ⇑P | | P | | 17 10 52.7 | +4.7 |
| MLR | Muntele Rosu | 23.31 | 313 | ⇑P | | P | | 17 10 52.7 | +4.7 |
| SORM | Soroca | 23.34 | 321 | ⇓P | | P | | 17 10 47.3 | -0.9 |
| SORM | Soroca | 23.34 | 321 | ⇓P | | P | | 17 10 47.3 | -0.9 |
| AGG | Agios Georgios | 23.76 | 296 | P | | P | | 17 10 50.1 | -2.3 |
| AGG | comp=Z,36nm,1.5s | | | pmax | | pmax | | | |
| AGG | Agios Georgios | 23.76 | 296 | P | | P | | 17 10 50.1 | -2.3 |
| AGG | comp=Z,36nm,1.5s | | | IAmb | | IAmb | | 17 11 18.1 | |
| ITM | Ithomi | 23.84 | 291 | P | | P | | 17 10 51.0 | -2.2 |
| LIT | Litokhoron | 23.84 | 299 | P | | P | | 17 10 53.2 | 0.0 |
| LIT | comp=Z,34nm,1.7s | | | pmax | | pmax | | | |
| LIT | Litokhoron | 23.84 | 299 | P | | P | | 17 10 53.2 | 0.0 |
| LIT | comp=Z,34nm,1.7s | | | IAmb | | IAmb | | 17 10 54.9 | |
| VOIR | | 23.84 | 313 | ⇓P | | P | | 17 10 54.6 | +1.3 |
| VOIR | | 23.84 | 313 | ⇓P | | P | | 17 10 54.6 | +1.3 |
| VTS | Vitosha | 23.97 | 305 | P | | P | | 17 10 53.5 | -1.1 |
| VTS | comp=Z,9.0nm,1.4s | | | pmax | | pmax | | | |
| VTS | Vitosha | 23.97 | 305 | P | | P | | 17 10 53.5 | -1.1 |
| AKASG | Malin Array Be | 24.57 | 327 | P | | P | | 17 10 59.4 | -0.4 |
| | comp=Z,4.1nm,0.9s,baz=131,slow=8.5,SNR=14 | | | | | | | | |
| AKASG | Malin Array Be | 24.57 | 327 | P | | P | | 17 10 57.8 | -1.9 |
| AKBB | Malin Array Si | 24.57 | 327 | P | | P | | 17 10 57.1 | -2.7 |
| AKBB | comp=Z,8.0nm,1.0s | | | pmax | | pmax | | | |
| AKBB | Malin Array Si | 24.57 | 327 | P | | P | | 17 10 57.1 | -2.7 |
| AKBB | comp=Z,8.0nm,1.0s | | | IAmb | | IAmb | | 17 11 00.5 | |
| BURAR | Bucovina Array | 24.80 | 317 | ⇑P | | P | | 17 11 01.6 | -0.5 |
| BURAR | Bucovina Array | 24.80 | 317 | ⇑P | | P | | 17 11 01.6 | -0.5 |
| BURAR | Bucovina Array | 24.80 | 317 | P | | P | | 17 11 00.7 | -1.4 |
| FNA | Florina | 24.82 | 300 | P | | P | | 17 11 00.8 | -1.4 |
| FNA | comp=Z,26nm,1.5s | | | pmax | | pmax | | | |
| FNA | Florina | 24.82 | 300 | P | | P | | 17 11 00.8 | -1.4 |
| FNA | comp=Z,26nm,1.5s | | | IAmb | | IAmb | | 17 11 03.7 | |
| BUR08 | Bucovina Ar. S | 24.82 | 317 | P | | P | | 17 11 01.4 | -0.8 |
| BUR08 | comp=Z,6.5nm,1.1s | | | IAmb | | IAmb | | 17 11 11.3 | |
| KBN | Korca | 25.22 | 299 | P | | P | | 17 11 05.1 | -0.8 |
| KBN | comp=Z,19nm,0.8s | | | pmax | | pmax | | | |
| KBN | Korca | 25.22 | 299 | P | | P | | 17 11 05.1 | -0.8 |
| KBN | comp=Z,19nm,0.8s | | | IAmb | | IAmb | | 17 11 09.4 | |
| GZR | Gura Zlata | 25.27 | 311 | ⇓P | | P | | 17 11 07.9 | +1.6 |
| ARU | Arti | 25.53 | 11 | P | | P | | 17 11 07.9 | -0.5 |
| ARU | comp=Z,6.2nm,1.1s | | | IAmb | | IAmb | | 17 11 13.6 | |
| BRVK | Borovoye | 25.97 | 28 | P | | P | | 17 11 12.2 | -0.3 |
| BRVK | comp=Z,5.0nm,1.4s | | | pmax | | pmax | | | |
| BRVK | Borovoye | 25.97 | 28 | P | | P | | 17 11 12.2 | -0.3 |
| BVAR | Borovoye Array | 25.99 | 29 | P | | P | | 17 11 13.5 | +0.8 |
| | comp=Z,1.7nm,0.9s,baz=58,slow=3.7,SNR=8.0 | | | | | | | | |
| KURBB | Kurchatov Arra | 28.39 | 40 | P | | P | | 17 11 35.5 | +1.3 |
| | comp=Z,0.4nm,0.8s,baz=238,slow=9.7,SNR=4.1 | | | | | | | | |
| KURK | Kurchatov | 28.49 | 40 | P | | P | | 17 11 35.5 | +0.4 |
| KURK | Kurchatov | 28.49 | 40 | P | | P | | 17 11 35.2 | +0.1 |
| MK31 | Makanchi Array | 28.98 | 49 | P | | P | | 17 11 38.8 | -0.8 |
| MK31 | comp=Z,1.0nm,0.6s | | | pmax | | pmax | | | |
| MK31 | Makanchi Array | 28.98 | 49 | P | | P | | 17 11 38.8 | -0.8 |
| MKAR | Makanchi Array | 28.98 | 49 | P | | P | | 17 11 41.1 | +1.5 |
| | comp=Z,0.8nm,0.5s,baz=248,slow=8.6,SNR=15 | | | | | | | | |
| MKAR | Makanchi Array | 28.98 | 49 | P | | P | | 17 11 39.1 | -0.5 |
| KBA | Koelnbreinsper | 32.00 | 310 | eP | | P | | 17 12 07.4 | +1.0 |
| | comp=Z,8.6nm,1.0s | | | | | | | | |
| WTTA | Wattenberg | 33.17 | 309 | *i* P | | P | | 17 12 17.1 | +0.3 |
| | comp=Z,9.8nm,0.9s | | | | | | | | |
| ZAA0 | Zalesovo Array | 33.39 | 38 | P | | P | | 17 12 17.3 | -1.0 |
| ZAA0 | comp=Z,4.9nm,1.4s | | | IAmb | | IAmb | | 17 12 32.0 | |
| ZALV | Zalesovo Beam | 33.39 | 38 | P | | P | | 17 12 19.0 | +0.7 |
| | comp=Z,0.7nm,0.4s,baz=250,slow=7.4,SNR=3.9 | | | | | | | | |
| ZALV | Zalesovo Beam | 33.39 | 38 | P | | P | | 17 12 17.9 | -0.4 |
| MOTA | Moosalm | 33.55 | 309 | *i* P | | P | | 17 12 19.8 | -0.1 |
| | comp=Z,6.6nm,0.7s | | | | | | | | |
| FINES | FINESS Array B | 33.71 | 339 | P | | P | | 17 12 21.0 | 0.0 |
| | comp=Z,1.0nm,0.4s,baz=150,slow=8.9,SNR=24 | | | | | | | | |
| FINES | FINESS Array B | 33.71 | 339 | P | | P | | 17 12 21.0 | 0.0 |
| FINES | FINESS Array B | 33.71 | 339 | P | | P | | 17 12 21.0 | 0.0 |
| FIA1 | FINESS Array S | 33.72 | 339 | P | | P | | 17 12 20.9 | -0.1 |
| FIA1 | comp=Z,23nm,1.6s | | | IAmb | | IAmb | | 17 12 22.3 | |
| FETA | Feichten | 33.72 | 309 | eP | | P | | 17 12 21.8 | +0.4 |
| | comp=Z,5.5nm,0.8s | | | | | | | | |
| VSL | Villasalto | 33.81 | 295 | P | | P | | 17 12 21.8 | -0.4 |
| DAVA | Damuels | 34.34 | 309 | *i* P | | P | | 17 12 26.8 | -0.1 |
| | comp=Z,7.6nm,0.6s | | | | | | | | |
| TUE | Stuetta | 34.53 | 307 | P | | P | | 17 12 26.5 | -2.1 |
| TUE | comp=Z,4.0nm,0.9s | | | IAmb | | IAmb | | 17 12 57.4 | |
| SENIN | Lac Senin/Sane | 35.91 | 307 | P | | P | | 17 12 39.6 | -0.9 |
| SENIN | comp=Z,11nm,1.3s | | | IAmb | | IAmb | | 17 13 06.9 | |
| BNI | Bardonecchia | 36.17 | 304 | P | | P | | 17 12 40.1 | -2.5 |
| BNI | comp=Z,27nm,1.7s | | | pmax | | pmax | | | |
| BNI | Bardonecchia | 36.17 | 304 | P | | P | | 17 12 40.1 | -2.5 |
| BNI | comp=Z,27nm,1.7s | | | IAmb | | IAmb | | 17 12 42.6 | |
| HFS | Hagfors | 37.32 | 331 | P | | P | | 17 12 51.5 | -0.5 |
| | comp=Z,2.3nm,0.7s,baz=142,slow=12,SNR=12 | | | | | | | | |
| LVZ | Lovozero | 37.45 | 350 | P | | P | | 17 12 54.2 | +1.1 |
| LVZ | comp=Z,124nm,1.7s | | | pmax | | pmax | | | |
| LVZ | Lovozero | 37.45 | 350 | P | | P | | 17 12 54.2 | +1.1 |
| NC405 | NORSAR Array S | 38.68 | 331 | P | | P | | 17 13 02.2 | -1.3 |
| NB201 | NORSAR Array S | 38.82 | 331 | P | | P | | 17 13 03.7 | -1.0 |
| NB201 | comp=Z,54nm,1.5s | | | IAmb | | IAmb | | 17 13 05.2 | |
| NB2 | NORSAR Subarra | 38.84 | 331 | P | | P | | 17 13 04.4 | -0.5 |
| | comp=Z,4.0nm,0.5s,baz=121,slow=8.6 | | | | | | | | |
| NOA | NORSAR Array B | 38.84 | 331 | P | | P | | 17 13 04.4 | -0.5 |
| | comp=Z,0.8nm,0.8s,baz=135,slow=7.6,SNR=2.0 | | | | | | | | |
| NC303 | NORSAR Array S | 38.88 | 331 | P | | P | | 17 13 04.9 | -0.3 |
| NC303 | comp=Z,59nm,1.8s | | | IAmb | | IAmb | | 17 13 45.0 | |
| NBO00 | NORSAR Array S | 39.02 | 331 | P | | P | | 17 13 05.6 | -0.8 |
| NC204 | NORSAR Array S | 39.16 | 331 | P | | P | | 17 13 06.2 | -1.3 |
| KEV | Kevo | 40.36 | 348 | P | | P | | 17 13 17.7 | +0.3 |
| KEV | comp=Z,86nm,1.8s | | | pmax | | pmax | | | |
| KEV | Kevo | 40.36 | 348 | P | | P | | 17 13 17.7 | +0.3 |
| ARCES | ARCESS Array B | 40.45 | 347 | P | | P | | 17 13 18.7 | +0.5 |
| | comp=Z,2.1nm,0.8s,baz=156,slow=9.3,SNR=9.1 | | | | | | | | |
| ARCES | ARCESS Array B | 40.45 | 347 | P | | P | | 17 13 16.9 | -1.3 |
| ARCES | comp=Z,25nm,1.4s | | | IAmb | | IAmb | | 17 13 43.6 | |
| ESDC | Sonseca Array | 44.08 | 296 | P | | P | | 17 13 48.8 | +0.6 |
| | comp=Z,1.0nm,0.8s,baz=76,slow=6.8,SNR=5.1 | | | | | | | | |
| PAB | San Pablo | 44.39 | 296 | P | | P | | 17 13 49.3 | -1.5 |
| PAB | comp=Z,22nm,1.8s | | | pmax | | pmax | | | |
| PAB | San Pablo | 44.39 | 296 | P | | P | | 17 13 49.3 | -1.5 |
| PAB | comp=Z,22nm,1.8s | | | IAmb | | IAmb | | 17 14 03.0 | |
| SONM | Songino Array | 45.25 | 52 | P | | P | | 17 13 58.0 | +0.4 |
| SONM | comp=Z,2.0nm,1.2s | | | pmax | | pmax | | | |
| SONM | Songino Array | 45.25 | 52 | P | | P | | 17 13 58.0 | +0.4 |
| CMAR | Chiang Mai Arr | 45.83 | 95 | P | | P | | 17 14 03.5 | +1.2 |
| | comp=Z,0.3nm,0.4s,baz=285,slow=9.0,SNR=4.5 | | | | | | | | |
| TORD | Torodi Ar. Bea | 47.93 | 259 | P | | P | | 17 14 19.2 | +0.4 |
| | comp=Z,1.2nm,0.7s,baz=49,slow=8.0,SNR=6.7 | | | | | | | | |
| SPB2 | Spitsbergen Ar | 48.96 | 351 | P | | P | | 17 14 26.4 | +0.5 |
| SPITS | Spitsbergen Ar | 48.97 | 351 | P | | P | | 17 14 26.6 | +0.6 |
| | comp=Z,4.6nm,0.8s,baz=140,slow=12,SNR=11 | | | | | | | | |
| KBS | Kingsbay | 50.11 | 351 | P | | P | | 17 14 36.3 | +1.6 |
| KBS | comp=Z,39nm,1.6s | | | pmax | | pmax | | | |
| KBS | Kingsbay | 50.11 | 351 | P | | P | | 17 14 36.3 | +1.6 |
| KSRS | Korea Array | 62.71 | 61 | P | | P | | 17 16 05.3 | +0.3 |
| | comp=Z,2.4nm,0.9s,baz=282,slow=6.9,SNR=9.0 | | | | | | | | |
| A36M | Sachs Harbour | 76.65 | 359 | P | | P | | 17 17 30.1 | -0.3 |
| A36M | comp=Z,16nm,1.8s | | | IAmb | | IAmb | | 17 18 08.8 | |
| SCHQ | Schefferville | 78.36 | 328 | P | | P | | 17 17 39.3 | -1.0 |
| SCHQ | | | | IAmb | | IAmb | | 17 18 13.0 | |
| | comp=Z,4.3nm,1.1s | | | | | | | | |
| BMAR | Burnt Mountain | 80.67 | 6 | P | | P | | 17 17 51.9 | -0.8 |
| IMAR | Indian Mountai | 81.02 | 10 | P | | P | | 17 17 53.5 | -1.0 |
| J20K | Nowinta River | 82.66 | 10 | P | | P | | 17 18 03.4 | +0.2 |
| J20K | comp=Z,12nm,1.6s | | | IAmb | | IAmb | | 17 18 37.5 | |
| ILAR | Eielson Array | 83.04 | 7 | P | | P | | 17 18 05.1 | 0.0 |
| | comp=Z,0.4nm,0.8s,baz=294,slow=3.2,SNR=5.3 | | | | | | | | |
| ILAR | Eielson Array | 83.04 | 7 | P | | P | | 17 18 04.6 | -0.6 |
| YKA | Yellowknife Ar | 85.44 | 353 | P | | P | | 17 18 17.1 | -0.3 |
| | comp=Z,0.4nm,0.6s,baz=18,slow=5.5,SNR=6.8 | | | | | | | | |

*NEIC* ***19*** *17:07:02.7±1.1,59.9°S±0.1°×28.6°W±0.2,h201km±7km, mb4.8/45, Error ellipse: s-maj=19.3km s-min=15.1km az=214.0*

*IDC* ***19*** *17:07:04.0±3.9,59.89°S×28.67°W,h213km±36km,mb4.1/8, mb1 4.2/9,mb1mx4.0/20,mbtmp4.6/9,MS3.8/1,Ms1 3.8/1, ms1mx2.8/42,Error ellipse: s-maj=19.5km s-min=13.4km az=47.0*

**ISC 19 17:07:02.3**±0.4,**59.91S**±0.08×**28.63W**±0.09,**h200**km,**n90,** σ0**85/88,mb4.7/25,1C-1D,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| VNA1 | Neumayer--Stat | 13.64 | 151 | P | | P | Pn | 17 10 06.9 | -0.4 |
| VNA3 | Neumayer Olymp | 13.72 | 154 | P | | P | Pn | 17 10 04.0 | -4.4 |
| ESPZ | Base Esperanza | 13.86 | 243 | Pn | | P | Pn | 17 10 10.3 | +0.2 |
| VNA2 | Neumayer--Watz | 14.04 | 151 | P | | P | Pn | 17 10 11.0 | -1.2 |
| | baz=20,slow=15 | | | | | | | | |
| SNAA | Sanae | 15.65 | 149 | P | | P | P | 17 10 32.3 | +0.3 |
| SNAA | Sanae | 15.65 | 149 | P | | P | P | 17 10 32.3 | +0.3 |
| | 0.3nm,0.3s,baz=272,slow=11,SNR=7.8 | | | | | | | | |
| SNAA | Sanae | 15.65 | 149 | | | | P | 17 10 32.0 | 0.0 |
| PMSA | Palmer Station | 16.98 | 238 | LR | | LR | LR | 17 15 53.5 | |
| | comp=Z,334nm,19.2s,baz=328,slow=31 | | | | | | | | |
| BELA | Belgrano 2 | 18.16 | 184 | P | | P | P | 17 10 59.2 | -0.1 |
| EFI | East Falkland | 18.35 | 284 | P | | P | P | 17 11 01.5 | 0.0 |
| SYO | Syowa Base | 29.18 | 137 | *eP* | | P | P | 17 12 43.4 | -1.0 |
| SYO | Syowa Base | 29.18 | 137 | *eP*nPn | | PnPn | PnPn | 17 13 45.8 | -1.9 |
| QSPA | South Pole Qui | 30.33 | 180 | P | | P | P | 17 12 56.3 | +1.5 |
| | 8.2nm,1.1s,baz=191,slow=6.7,SNR=7.5 | | | | | | | | |
| QSPA | | | | PcP | | PcP | PcP | 17 15 50.4 | +1.1 |
| | 3.1nm,0.7s,baz=209,slow=1.9,SNR=7.4 | | | | | | | | |
| QSPA | South Pole Qui | 30.33 | 180 | P | | P | P | 17 12 55.9 | +1.1 |
| QSPA | comp=Z,24nm,1.4s | | | IAmb | | IAmb | IAmb | 17 12 57.4 | |
| PLCA | Paso Flores | 32.18 | 288 | P | | P | P | 17 13 10.4 | -0.7 |
| | comp=Z,3.3nm,0.9s,baz=142,slow=10,SNR=6.7 | | | | | | | | |
| PLCA | Paso Flores | 32.18 | 288 | P | | P | P | 17 13 10.3 | -0.8 |
| PLTB | Pedras Altas | 32.69 | 318 | P | | P | P | 17 13 15.5 | -0.1 |
| PLTB | comp=Z,17nm,0.8s | | | IAmb | | IAmb | IAmb | 17 13 17.3 | |
| PLTB | Pedras Altas | 32.69 | 318 | *eP* | | P | P | 17 13 16.6 | +1.0 |
| LC01 | Cunco | 34.25 | 288 | P | | P | P | 17 13 27.5 | -1.4 |
| LC01 | comp=Z,29nm,1.6s | | | IAmb | | IAmb | IAmb | 17 13 30.0 | |
| ITQB | Itaqui | 35.64 | 315 | P | | P | P | 17 13 40.9 | +0.1 |
| ITQB | comp=Z,40nm,1.0s | | | IAmb | | IAmb | IAmb | 17 13 42.2 | |
| ITQB | Itaqui | 35.64 | 315 | *eP* | | P | P | 17 13 41.8 | +0.9 |
| ITAB | Concordia | 36.42 | 323 | P | | P | P | 17 13 48.6 | +1.2 |
| ITAB | comp=Z,42nm,1.4s | | | IAmb | | IAmb | IAmb | 17 13 49.6 | |
| ITAB | Concordia | 36.42 | 323 | *eP* | | P | P | 17 13 48.7 | +1.2 |
| BO02 | Sierra Bellavi | 37.05 | 294 | P | | P | P | 17 13 52.1 | -0.7 |
| GO05 | Huala | 37.40 | 292 | P | | P | P | 17 13 54.7 | -1.1 |
| GO05 | comp=Z,44nm,1.5s | | | IAmb | | IAmb | IAmb | 17 14 32.7 | |
| BO01 | Tunca | 37.52 | 294 | P | | P | P | 17 13 56.5 | -0.2 |
| BO01 | comp=Z,22nm,1.2s | | | IAmb | | IAmb | IAmb | 17 13 59.8 | |
| MAW | Mawson | 37.56 | 141 | P | | P | P | 17 13 58.1 | +1.5 |
| MAW | comp=Z,40nm,1.8s | | | IAmb | | IAmb | IAmb | 17 14 08.4 | |
| BO04 | La Punta | 37.63 | 294 | P | | P | P | 17 13 57.3 | -0.4 |
| BO04 | comp=Z,30nm,1.1s | | | IAmb | | IAmb | IAmb | 17 13 59.5 | |
| MT09 | Talagante | 37.99 | 294 | P | | P | P | 17 14 00.8 | 0.0 |
| MT01 | Popeta | 38.03 | 294 | P | | P | P | 17 14 00.9 | -0.1 |
| PEL | Peldehue | 38.38 | 295 | P | | P | P | 17 14 04.0 | +0.1 |
| PARB | Paraibuna | 38.44 | 334 | *eP* | | P | P | 17 14 06.3 | +1.7 |
| MT02 | Curacav | 38.49 | 295 | P | | P | P | 17 14 04.9 | +0.1 |
| VA03 | San Esteban | 38.63 | 296 | P | | P | P | 17 14 06.7 | +0.6 |
| ROC1 | El Roble | 38.67 | 295 | P | | P | P | 17 14 06.4 | -0.2 |
| ROC1 | comp=Z,19nm,0.9s | | | IAmb | | IAmb | IAmb | 17 14 09.4 | |
| PTGB | Pitanga | 38.77 | 325 | *eP* | | P | P | 17 14 07.4 | +0.1 |
| ZON | Zonda | 38.83 | 299 | P | | P | P | 17 14 07.4 | -0.3 |
| ZON | comp=Z,30nm,1.2s | | | IAmb | | IAmb | IAmb | 17 14 09.0 | |
| CPUP | Villa Florida | 38.94 | 317 | P | | P | P | 17 14 09.0 | +0.4 |
| | comp=Z,14nm,0.8s,baz=160,slow=7.6,SNR=32 | | | | | | | | |
| CPUP | Villa Florida | 38.94 | 317 | P | | P | P | 17 14 08.8 | +0.2 |
| CPUP | comp=Z,20nm,0.9s | | | IAmb | | IAmb | IAmb | 17 14 09.9 | |
| VAO | Valinhos | 39.07 | 333 | *eP* | | P | P | 17 14 11.7 | +1.9 |
| VA06 | Catapilco | 39.14 | 295 | P | | P | P | 17 14 10.5 | +0.3 |
| VA06 | comp=Z,33nm,1.0s | | | IAmb | | IAmb | IAmb | 17 14 12.4 | |
| FRTB | Fartura | 39.38 | 329 | *eP* | | P | P | 17 14 14.2 | +1.9 |
| CO02 | Combarbal | 40.15 | 296 | P | | P | P | 17 14 18.1 | -0.7 |
| CO03 | El Pedregal | 40.32 | 297 | P | | P | P | 17 14 20.9 | +0.8 |
| CO03 | comp=Z,21nm,0.9s | | | IAmb | | IAmb | IAmb | 17 14 21.8 | |
| CO06 | Fray Jorge | 40.89 | 296 | P | | P | P | 17 14 24.9 | +0.3 |
| GO04 | Tololo Observa | 40.94 | 297 | P | | P | P | 17 14 24.5 | -0.8 |
| SUR | Sutherland | 42.47 | 72 | P | | P | P | 17 14 37.0 | -0.6 |
| SUR | comp=Z,76nm,1.6s | | | IAmb | | IAmb | IAmb | 17 14 54.1 | |
| GO03 | Copiap | 42.91 | 300 | P | | P | P | 17 14 40.9 | -0.2 |
| GO03 | comp=Z,23nm,0.9s | | | IAmb | | IAmb | IAmb | 17 14 42.1 | |
| ITRB | Iturama | 43.07 | 329 | *eP* | | P | P | 17 14 43.7 | +1.4 |
| AC02 | Maricunga | 43.09 | 302 | P | | P | P | 17 14 42.5 | -0.5 |
| AC02 | comp=Z,37nm,1.0s | | | IAmb | | IAmb | IAmb | 17 14 45.4 | |
| AQDB | Aquidauana | 43.85 | 322 | P | | P | P | 17 14 48.0 | -0.5 |
| IPMB | Ipameri, GO | 44.20 | 333 | *eP* | | P | P | 17 14 52.9 | +1.5 |
| PP1B | Ponte de Pedra | 46.32 | 324 | *eP* | | P | P | 17 15 09.0 | +1.0 |
| BDFB | Brasilia | 46.41 | 334 | P | | P | P | 17 15 08.5 | -0.3 |
| LVC | Limon Verde | 46.73 | 305 | P | | P | P | 17 15 11.2 | -0.4 |
| LVC | Limon Verde | 46.73 | 305 | *eP* | | P | P | 17 15 11.3 | -0.2 |
| ARAG | Araguaiana, MT | 47.27 | 329 | *eP* | | P | P | 17 15 16.7 | +1.4 |
| BOSA | Boshof | 47.73 | 74 | P | | P | P | 17 15 19.2 | +0.3 |
| | comp=Z,4.7nm,0.7s,baz=207,slow=7.8,SNR=10 | | | | | | | | |
| SALV | Santo Antonio | 48.16 | 324 | *eP* | | P | P | 17 15 23.0 | +0.8 |
| TA02 | Huaiquique | 49.32 | 305 | P | | P | P | 17 15 30.3 | -0.6 |
| TA02 | comp=Z,28nm,0.9s | | | IAmb | | IAmb | IAmb | 17 15 34.9 | |
| GO01 | Chusmiza | 49.48 | 306 | P | | P | P | 17 15 32.2 | -0.5 |
| PTLB | Pontes e Lacer | 49.66 | 320 | *eP* | | P | P | 17 15 33.8 | +0.3 |
| SNDB | Serra Nova Dou | 50.72 | 331 | *eP* | | P | P | 17 15 42.5 | +1.0 |
| LPAZ | La Paz | 52.10 | 309 | P | | P | P | 17 15 53.4 | +0.9 |
| | comp=Z,6.3nm,0.4s,baz=104,slow=5.5,SNR=32 | | | | | | | | |
| LPAZ | La Paz | 52.10 | 309 | P | | P | P | 17 15 52.9 | +0.4 |
| LPAZ | comp=Z,19nm,1.1s | | | IAmb | | IAmb | IAmb | 17 15 54.4 | |
| LPAZ | La Paz | 52.10 | 309 | *eP* | | P | P | 17 15 53.5 | +1.0 |
| VILB | Vilhena | 52.34 | 320 | *eP* | | P | P | 17 15 53.6 | +0.1 |
| PDRB | Porto dos Gac | 52.53 | 324 | *eP* | | P | P | 17 15 55.1 | +0.2 |
| SMTB | Santa Maria do | 52.90 | 336 | *eP* | | P | P | 17 15 58.8 | +1.2 |
| CLDB | Colider | 52.97 | 326 | *eP* | | P | P | 17 15 58.0 | -0.1 |
| NPGB | Novo Progresso | 56.49 | 328 | *eP* | | P | P | 17 16 23.7 | +0.3 |
| ETMB | Extrema | 57.32 | 314 | *eP* | | P | P | 17 16 29.0 | -0.2 |
| ITTB | Itaituba | 59.16 | 328 | *eP* | | P | P | 17 16 41.9 | 0.0 |
| SDV | Santo Domingo | 76.26 | 317 | P | | P | P | 17 18 28.7 | -0.2 |
| BIRV | Birongo | 76.32 | 322 | P | | P | P | 17 18 29.2 | +0.3 |
| BIRV | comp=Z,36nm,1.2s | | | IAmb | | IAmb | IAmb | 17 18 30.7 | |
| ZARC | Zaragoza, Cauc | 76.48 | 313 | P | | P | P | 17 18 27.9 | -1.9 |
| TORD | Torodi Ar. Bea | 76.79 | 30 | P | | P | P | 17 18 32.4 | +0.9 |
| | comp=Z,6.9nm,0.6s,baz=196,slow=6.2,SNR=49 | | | | | | | | |
| STKA | Stephens Creek | 88.20 | 172 | P | | P | P | 17 19 30.8 | +0.4 |
| | comp=Z,3.5nm,0.8s,baz=147,slow=6.2,SNR=5.0 | | | | | | | | |
| ASAR | Alice Springs | 95.51 | 164 | P | | P | P | 17 20 04.3 | 0.0 |
| | comp=Z,1.5nm,0.7s,baz=182,slow=4.3,SNR=20 | | | | | | | | |
| CMAR | Chiang Mai Arr | 124.30 | 114 | PKP | | PKiKP | PKiKP | 17 25 37.6 | +0.3 |
| | comp=Z,0.9nm,0.8s,baz=243,slow=3.8,SNR=7.8 | | | | | | | | |
| FINES | FINESS Array B | 128.14 | 30 | PKP | | PKPdf | PKPdf | 17 25 42.5 | -0.3 |
| | comp=Z,1.6nm,0.7s,baz=153,slow=0.9,SNR=4.5 | | | | | | | | |
| AAK | Ala-Archa | 131.87 | 75 | PKP | | PKPdf | PKPdf | 17 25 50.9 | +0.1 |
| | comp=Z,1.0nm,0.7s,baz=206,slow=5.0,SNR=6.0 | | | | | | | | |
| PZH | PanZhiHua | 132.53 | 112 | PKP | | PKiKP | PKiKP | 17 25 53.9 | +0.3 |
| ARCES | ARCESS Array B | 134.81 | 24 | PKP | | PKPdf | PKPdf | 17 25 55.3 | 0.0 |
| | comp=Z,2.7nm,0.9s,baz=224,slow=3.2,SNR=5.8 | | | | | | | | |
| YKA | Yellowknife Ar | 138.47 | 316 | PKP | | PKPdf | PKPdf | 17 26 01.7 | -0.5 |
| | comp=Z,1.6nm,0.8s,baz=130,slow=2.2,SNR=12 | | | | | | | | |
| MKAR | Makanchi Array | 138.70 | 76 | PKP | | PKPdf | PKPdf | 17 26 00.6 | -2.6 |
| | comp=Z,0.3nm,0.7s,baz=258,slow=3.4,SNR=2.5 | | | | | | | | |
| ZALV | Zalesovo Beam | 144.61 | 69 | PKP | | PKPab | PKPab | 17 26 11.9 | -0.8 |
| | comp=Z,2.6nm,0.7s,baz=261,slow=3.8,SNR=12 | | | | | | | | |
| ZALV | Zalesovo Beam | 144.61 | 69 | | | PKPab | PKPab | 17 26 11.5 | -1.3 |
| SONM | Songino Array | 151.46 | 95 | PKPbc | | PKPbc | PKPbc | 17 26 31.4 | 0.0 |
| | comp=Z,1.9nm,0.7s,baz=217,slow=3.0,SNR=13 | | | | | | | | |
| ILAR | Eielson Array | 151.96 | 307 | PKPbc | | PKPbc | PKPbc | 17 26 31.2 | -0.6 |
| | comp=Z,1.7nm,0.3s,baz=153,slow=2.0,SNR=41 | | | | | | | | |

*IDC* ***19*** *17:08:50.8±0.9,32.16°N×45.91E,h0km,mb3.8/16, mb1 3.9/16,mb1mx3.7/54,mbtmp3.8/16,MS2.8/2, Ms1 2.8/2,ms1mx2.4/83,Error ellipse: s-maj=22.5km s-min=19.0km az=163.0*

*NEIC* ***19*** *17:08:52.9±2.0,32.08N±0.08×45.84E±0.1°,h14km±5km, mb4.1/14,mb_Lg3.8(TEH),Error ellipse: s-maj=13.5km s-min=10.5km az=47.0*

*ISN* ***19*** *17:08:53.9±0.4,32.18N×46.01E,h7km±122km,ML3.8*

*TEH* ***19*** *17:08:53.6,32.23N×46.08E,h10km,ML3.8*

**ISC 19 17:08:52.4**±0.5,**32.21N**±0.04×**45.93E**±0.05,**h10**km,**n80,** σ1**45/81,mb3.9/19,Iraq**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| RAFI | Al-Rafai | 0.52 | 162 | *e*Pg | | Pg | Pg | 17 09 03.0 | +0.6 |
| | baz=350 | | | | | | | | |
| RAFI | | | | *e*Sg | | Sg | Sg | 17 09 10.0 | +0.8 |
| RAFI | | | | AML | | AML | AML | 17 09 19.0 | |
| | comp=E,12μm,0.5s | | | | | | | | |
| IBDR | Badra | 0.89 | 0 | *e*Pg | | Pn | Pn | 17 09 12.0 | +0.9 |
| IBDR | | | | *e*Sg | | Sn | Sn | 17 09 25.0 | +0.9 |
| IBDR | | | | AML | | AML | AML | 17 09 41.8 | |
| | comp=E,2μm,0.6s | | | | | | | | |
| IBDR | | | | AML | | AML | AML | 17 09 43.2 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| IKFM | Kafar-mosalman | 2.08 | 51 | *e*Pn | | Pb | Pb | 17 09 29.7 | -0.5 |
| IKFM | | | | *e*Sg | | Sg | Sg | 17 09 59.6 | +0.3 |
| IKFM | | | | *e* | | | | 17 10 12.2 | |
| | comp=Z,12μm,0.5s | | | | | | | | |
| IGHG | Ghaleghazi | 2.18 | 14 | Pn | | Pb | Pb | 17 09 31.5 | -0.6 |
| IGHG | Ghaleghazi | 2.18 | 14 | *e*Pn | | Pb | Pb | 17 09 31.5 | -0.6 |
| IGHG | | | | *e* | | | | 17 10 19.2 | |
| | comp=Z,11μm,0.8s | | | | | | | | |
| KCHF | Cheshme Sefid, | 2.26 | 24 | *e*Pn | | Pb | Pb | 17 09 32.9 | -0.5 |
| KCHF | | | | *e* | | | | 17 10 31.2 | |
| | comp=Z,5μm,0.7s | | | | | | | | |
| KER | Kermanshah | 2.39 | 25 | *e*Pn | | Pb | Pb | 17 09 34.1 | -1.5 |
| IDOB | Doab | 2.46 | 50 | Pn | | Pb | Pb | 17 09 34.5 | -2.3 |
| IDOB | Doab | 2.46 | 50 | *e*Pn | | Pb | Pb | 17 09 34.6 | -2.3 |
| IDHR | Dehrash | 2.51 | 9 | *e*Pn | | Pn | Pn | 17 09 36.0 | +2.5 |
| IDHR | | | | *e* | | | | 17 10 42.5 | |
| | comp=Z,3μm,0.8s | | | | | | | | |
| BMDN | Meydan | 2.84 | 58 | *e*Pn | | Pn | Pn | 17 09 39.5 | +1.5 |
| BMDN | | | | *e* | | | | 17 10 43.3 | |
| | comp=Z,3μm,0.8s | | | | | | | | |
| AMIS | Naft Sefid | 2.91 | 100 | *e*Pn | | Pn | Pn | 17 09 40.2 | +1.4 |
| AMIS | | | | *e* | | | | 17 10 47.1 | |
| | comp=Z,6μm,0.6s | | | | | | | | |
| HSAM | Samen | 3.00 | 48 | *e*Pn | | Pn | Pn | 17 09 42.5 | +2.2 |
| SNGE | Sanandaj | 3.11 | 22 | *e*Pn | | Pn | Pn | 17 09 44.2 | +2.5 |
| KHMZ | Khomeyn | 3.72 | 65 | *e*Pn | | Pn | Pn | 17 09 52.3 | +2.2 |
| HAGD | Aghdareh | 3.74 | 45 | *e*Pn | | Pn | Pn | 17 09 52.5 | +2.1 |
| HAGD | | | | *e* | | | | 17 09 55.1 | |
| | comp=Z,3μm,0.2s | | | | | | | | |
| ASAO | Ashtian | 4.14 | 55 | *e*Pn | | Pn | Pn | 17 09 58.4 | +2.4 |
| SHK1 | Shahrekord | 4.20 | 87 | *e*Pn | | Pn | Pn | 17 09 58.7 | +1.9 |
| SHK1 | | | | *e* | | | | 17 11 27.5 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| IPIR | Pirpir | 4.22 | 82 | *e*Pn | | Pn | Pn | 17 09 59.7 | +2.5 |
| IPIR | | | | *e* | | | | 17 11 30.9 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| IBRJ | Brojen | 4.54 | 92 | Pn | | Pn | Pn | 17 10 02.5 | +1.1 |
| IBRJ | Brojen | 4.54 | 92 | *e*Pn | | Pn | Pn | 17 10 02.6 | +1.1 |
| IRAZ | Razeghan | 4.61 | 45 | *e*Pn | | Pn | Pn | 17 10 05.5 | +3.1 |
| IRAZ | | | | *e* | | | | 17 11 18.8 | |
| | comp=Z,772nm,0.9s | | | | | | | | |
| QABG | Abgarm-Qazvin | 4.62 | 40 | *e*Pn | | Pn | Pn | 17 10 04.2 | +1.6 |
| IKLH | Kolahrood | 4.89 | 75 | *e* | | | | 17 10 09

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **35.12** | **40** | P | **P** | **17 15 45.1** | **-0.8** |
| ZAA0 | | | | IAmb | IAmb | 17 15 46.5 | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.12** | **40** | P | **P** | **17 15 45.8** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=248,slow=7.8,SNR=7.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.12** | **40** | P | **P** | **17 15 45.2** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **39.10** | **349** | P | **P** | **17 16 19.9** | **+0.4** |
| | comp=Z,3.4nm,1.0s,baz=168,slow=9.2,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.64** | **255** | P | **P** | **17 17 04.8** | **-0.6** |
| | comp=Z,1.8nm,0.9s,baz=49,slow=8.8,SNR=6.0 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **47.84** | **352** | P | **P** | **17 17 30.8** | **+0.9** |
| | comp=Z,11nm,1.0s,baz=123,slow=10,SNR=7.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.38** | **93** | P | **P** | **17 17 42.0** | **-0.6** |
| | comp=Z,0.4nm,0.7s,baz=292,slow=8.5,SNR=5.0 | | | | | | |
| **BOSA** | **Boshof** | **63.60** | **200** | P | **P** | **17 19 24.0** | **+0.4** |
| | comp=Z,2.1nm,0.8s,baz=5.7,slow=6.9,SNR=3.7 | | | | | | |
| **BOSA** | **Boshof** | **63.60** | **200** | P | **P** | **17 19 23.4** | **-0.3** |
| BOSA | | | | IAmb | IAmb | 17 19 24.6 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **65.47** | **60** | P | **P** | **17 19 34.9** | **-0.9** |
| | comp=Z,0.9nm,0.7s,baz=300,slow=6.5,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **82.81** | **5** | P | **P** | **17 21 16.3** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=327,slow=5.0,SNR=5.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.33** | **351** | P | **P** | **17 21 24.2** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=24,slow=6.1,SNR=7.7 | | | | | | |

*DJA* ***19*** *17:11:21.6±0.3,9°S±3°×12°0E±°, h77km±5km, M3.9/14, mb4.3/2, mB5.2/1, MLv3.7/14, Mw(mB)4.6/1*

**ISC 19 17:11:20.1±1.0, 9°01S±0°06×119°59E±0°05, h100km, n23, σ1°32/27, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **0.66** | **197** | P | **Pn** | **17 11 38.0** | **+0.7** |
| WBSI | | | | S | **Sn** | **17 11 51.0** | **+0.9** |
| **BASI** | **Baing, Sumba** | **1.55** | **141** | P | **Pn** | **17 11 48.4** | **+1.4** |
| BASI | | | | S | **Sn** | **17 12 09.1** | **+1.7** |
| **PLAI** | **Plampang** | **1.80** | **276** | P | **Pn** | **17 11 51.6** | **+1.5** |
| PLAI | | | | S | **Sn** | **17 12 13.3** | **+0.3** |
| **PLAI** | **Plampang** | **1.80** | **276** | P | **Pn** | **17 11 51.8** | **+1.7** |
| **MMRI** | **Maumere** | **2.65** | **82** | P | **Pn** | **17 12 02.5** | **+1.3** |
| **MMRI** | **Maumere** | **2.65** | **82** | P | **Pn** | **17 12 02.5** | **+1.3** |
| **BSSI** | **Bau Bau, Buton** | **2.98** | **18** | P | **Pn** | **17 12 05.6** | **-0.1** |
| **BKSI** | **Bulukumba** | **3.70** | **8** | P | **Pn** | **17 12 15.8** | **+0.5** |
| **KAPI** | **Kappang** | **3.97** | **2** | P | **Pn** | **17 12 19.9** | **+0.9** |
| **BATI** | **Baumata** | **4.19** | **107** | P | **Pn** | **17 12 23.2** | **+1.2** |
| **IGBI** | **Denpasar** | **4.39** | **272** | P | **Pn** | **17 12 25.6** | **+1.0** |
| IGBI | | | | S | **Sn** | **17 13 16.9** | **+2.2** |
| **BBSI** | **Bau Bau** | **4.58** | **40** | P | **Pn** | **17 12 28.9** | **+1.7** |
| **BNSI** | **Bone** | **4.61** | **6** | P | **Pn** | **17 12 28.0** | **+0.5** |
| **SOEI** | **Soe** | **4.68** | **100** | P | **Pn** | **17 12 29.7** | **+1.1** |
| **SOEI** | **Soe** | **4.68** | **100** | P | **Pn** | **17 12 29.8** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **5.01** | **2** | P | **Pn** | **17 12 35.4** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** 0.3nm2µm40nm,0.4s | **5.40** | **275** | P | **Pn** | **17 12 37.5** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **5.40** | **275** | P | **Pn** | **17 12 37.7** | **-0.6** |
| **GMJI** | **Gumukmas** | **6.12** | **276** | P | **Pn** | **17 12 47.0** | **-1.0** |
| **KNRA** | **Kununurra** | **11.14** | **127** | P | **Pn** | **17 13 55.0** | **-1.4** |
| **MTN** | **Manton Dam** | **11.96** | **110** | P | **Pn** | **17 14 05.8** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **12.49** | **179** | P | **Pn** | **17 14 14.0** | **-0.4** |
| **KDU** | **Kakadu** 7.9nm,1.1s | **13.17** | **107** | P | **Pn** | **17 14 22.6** | **-0.8** |

*TUL* ***19*** *17:18:38.7±1.1,36°48N±0°03×98°76W±0°05, h6km±6km, ML2.9, mb_Lg2.7/29(NEIC), Error ellipse: s-maj=5.2km s-min=4.0km az=90.0*

**NEIC 19 17:18:39.3±1.3, 36°46N±0°04×98°69W±0°05, h8km±7km, Error ellipse: s-maj=6.4km s-min=5.4km az=144.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.27** | **253** | Pg | Pg | 17 18 43.4 | -1.2 |
| **FNO** | **Franklin** | **1.59** | **138** | Pn | Pn | 17 19 08.0 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.72** | **183** | Pn | Pn | 17 19 09.4 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.81** | **75** | | Pn | 17 19 11.1 | +0.3 |
| T35A | | | | IAmb_Lg | | 17 19 39.8 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **1.96** | **359** | | Pn | 17 19 13.3 | +0.3 |
| **W35A** | **Tecumseh** | **1.96** | **131** | | Pn | 17 19 13.3 | +0.4 |
| **X34A** | **Smith Ranch, M** | **1.98** | **159** | | Pb | 17 19 14.6 | -1.0 |
| X34A | | | | IAmb_Lg | | 17 19 46.4 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.40** | **102** | Pn | Pn | 17 19 19.6 | +0.6 |
| TUL1 | | | | IAmb_Lg | | 17 19 59.7 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.50** | **341** | | Pn | 17 19 20.6 | +0.3 |
| **AMTX** | **Amarillo** | **2.90** | **238** | Pn | Pn | 17 19 26.1 | +0.2 |
| AMTX | | | | IAmb_Lg | | 17 20 10.3 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.11** | **31** | Pn | Pn | 17 19 28.9 | +0.1 |
| **X37A** | **Clayton** | **3.28** | **124** | | Pn | 17 19 31.5 | +0.4 |
| **Z35A** | **Perchaven, San** | **3.33** | **159** | Pn | Pn | 17 19 32.3 | +0.5 |
| **U38A** | **Gravette** | **3.47** | **89** | Pn | Pn | 17 19 33.0 | -0.6 |
| U38A | | | | IAmb_Lg | | 17 20 31.7 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.83** | **91** | | Pn | 17 19 38.6 | -0.1 |
| HHAR | | | | IAmb_Lg | | 17 20 41.9 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **192** | Pn | Pn | 17 19 39.3 | -0.4 |
| **MSTX** | **Muleshoe** | **4.16** | **235** | Pn | Pn | 17 19 43.5 | +0.2 |
| MSTX | | | | IAmb_Lg | | 17 20 56.5 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **4.18** | **106** | Pn | Pn | 17 19 43.9 | +0.5 |
| **S39A** | **Bolivar** | **4.46** | **72** | | Pn | 17 19 47.5 | +0.2 |
| **MIAR** | **Mount Ida** | **4.58** | **113** | Pn | Pn | 17 19 48.1 | -0.8 |
| **T25A** | **Trinidad** | **4.64** | **280** | Pn | Pn | 17 19 49.2 | -0.8 |
| **U40A** | **Yellville** | **4.71** | **89** | Pn | Pn | 17 19 50.7 | +0.1 |
| U40A | | | | IAmb_Lg | | 17 21 07.6 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **5.15** | **51** | IAmb_Lg | | 17 21 26.8 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.16** | **111** | Pn | Pn | 17 19 55.5 | -1.4 |
| X40A | | | | IAmb_Lg | | 17 21 29.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.19** | **331** | Pn | Pn | 17 19 57.2 | -0.2 |
| **MGMO** | **Mountain Grove** | **5.20** | **80** | Pn | Pn | 17 19 57.2 | -0.2 |
| **FCAR** | **Ozark Folk Cen** | **5.34** | **94** | Pn | Pn | 17 19 59.0 | -0.3 |
| **W41B** | **Gary Mavity, V** | **5.39** | **102** | Pn | Pn | 17 19 60.0 | 0.0 |
| **R40A** | **Maddies Statio** | **5.43** | **68** | Pn | Pn | 17 19 59.6 | -1.0 |
| **SDCO** | **Great Sand Dun** | **5.60** | **285** | Pn | Pn | 17 20 03.1 | -0.1 |
| **Q24A** | **Divide** | **5.70** | **298** | IAmb_Lg | | 17 21 52.4 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **189** | IAmb_Lg | | 17 21 59.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **P40A** | **Paris** | **6.07** | **58** | Pn | Pn | 17 20 08.8 | -0.7 |
| **LCAR** | **Lake Charles** | **6.10** | **91** | Pn | Pn | 17 20 09.5 | -0.3 |
| **CCM** | **Cathedral Cave** | **6.15** | **73** | Pn | Pn | 17 20 09.6 | -0.9 |
| CCM | | | | IAmb_Lg | | 17 21 55.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.40** | **304** | Pn | Pn | 17 20 14.0 | -0.2 |
| **PBMO** | **Poplar Bluff** | **6.65** | **85** | Pn | Pn | 17 20 16.8 | -0.5 |
| **N23A** | **Red Feather La** | **7.20** | **310** | IAmb_Lg | | 17 22 34.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.30** | **231** | IAmb_Lg | | 17 22 42.2 | |
| | comp=Z,6.3nm,0.9s | | | | | | |

*MAN* ***19*** *17:20:30.0, 12°55N×125°85E, h62km, mb5.4, ML4.4, MS4.6*
*NEIC* ***19*** *17:20:32.8±2.7, 12°4N±0°1×125°43E±0°07, h35km±2km, mb4.5/17, Error ellipse: s-maj=19.0km s-min=8.2km az=151.0*
*IDC* ***19*** *17:20:38.0±0.9, 12°28N×125°46E, h79km±6km, mb3.6/10, mb1 3.7/10, mb1mx3.4/48, mbtmp3.9/10, MS3.5/4, Ms1 3.5/4, ms1mx2.8/78, Error ellipse: s-maj=38.6km s-min=12.6km az=68.0*

**ISC 19 17:20:32.5±0.5, 12°53N±0°04×125°82E±0°06, h32km, n62, σ2°45/72, mb4.2/18, MS3.6/3, 12C-8D, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OCLP** | **Ormoc** | **1.89** | **219** | *e*P | **Pn** | **17 21 00.9** | **-1.7** |
| OCLP | | | | *i* S | **Sn** | **17 21 24.8** | **-0.7** |
| **PVCP** | **Virac** | **1.94** | **303** | *e*P | **Pn** | **17 21 01.0** | **-2.3** |
| PVCP | | | | *i* S | **Sb** | **17 21 36.3** | **+5.2** |
| **MMPH** | **Masbate** | **2.15** | **266** | *e*P | **Pn** | **17 21 05.1** | **-1.2** |
| MMPH | | | | *i* S | **Sn** | **17 21 30.6** | **-1.3** |
| **MSLP** | **Maasin** | **2.56** | **202** | *e*P | **Pn** | **17 21 11.0** | **-1.0** |
| MSLP | | | | *i* S | **Sb** | **17 21 52.3** | **+3.3** |
| **GLSP** | **General Luna,** | **2.75** | **174** | *e*P | **Pn** | **17 21 12.1** | **-2.3** |
| **SCPH** | **Surigao** | **2.75** | **187** | *e*P | **Pn** | **17 21 12.8** | **-1.7** |
| **LLP** | **Lapu-Lapu** | **2.86** | **220** | *i*P | **Pn** | **17 21 15.0** | **-0.9** |
| LLP | | | | *i* S | **Sn** | **17 21 51.6** | **+2.3** |
| **RCP** | **Roxas** | **3.16** | **253** | *e*P | **Pn** | **17 21 18.3** | **-1.8** |
| RCP | | | | *e*S | **Sn** | **17 21 59.1** | **+2.3** |
| **TBP** | **Tagbilaran** | **3.42** | **214** | *e*P | **Pn** | **17 21 20.8** | **-2.9** |
| **JCNP** | **Jose Panganiba** | **3.51** | **300** | *e*P | **Pn** | **17 21 24.7** | **-0.2** |
| **GQP** | **Guinayangan** | **3.56** | **293** | *e*P | **Pn** | **17 21 27.1** | **+1.5** |
| GQP | | | | *e*S | **Sn** | **17 22 06.1** | **-0.5** |
| **BOAC** | **Boac** | **3.99** | **284** | *e*P | **Pn** | **17 21 32.4** | **+0.9** |
| **CNOP** | **Candoni, Negro** | **4.12** | **230** | *e*P | **Pn** | **17 21 32.4** | **-0.9** |
| **JAP** | **San Jose, Anti** | **4.19** | **245** | *e*P | **Pn** | **17 21 33.9** | **-0.4** |
| **LQP** | **Lukban** | **4.46** | **291** | *e*P | **Pn** | **17 21 36.4** | **-1.7** |
| **BALP** | **Baler** | **5.21** | **308** | *e*P | **Pn** | **17 21 51.9** | **+3.6** |
| **DAV** | **Davao City (W)** comp=Z,239nm,18.4s,baz=12,slow=41 | **5.43** | **183** | LR | LR | 17 24 11.8 | |
| **PCPH** | **Palayan** | **5.49** | **304** | *e*P | **Pn** | **17 21 51.3** | **-0.8** |
| PCPH | | | | *e*S | **Sb** | **17 23 09.3** | **-3.8** |
| **CTBH** | **Cotabato--PC H** | **5.50** | **197** | *i*P | Pb | 17 22 01.5 | -6.5 |
| **CAUP** | **Cauayan** | **5.85** | **319** | *e*P | **Pn** | **17 21 57.2** | **+0.1** |
| CAUP | | | | *e*S | **Sb** | **17 23 18.3** | **-5.1** |
| **SMPP** | **San Manuel, Pa** | **6.15** | **306** | *e*P | **Pn** | **17 22 01.2** | **0.0** |
| SMPP | | | | *e*S | **Sn** | **17 23 04.9** | **-5.5** |
| **SAMP** | **Sagada Mountai** | **6.56** | **314** | *e*P | **Pn** | **17 22 06.3** | **-0.6** |
| SAMP | | | | *i* S | **Sn** | **17 23 19.2** | **-1.5** |
| **UBPT** | **Khong Chiam** | **19.94** | **280** | P | **P** | **17 24 57.5** | **-4.6** |
| UBPT | | | | IAmb | IAmb | 17 25 54.4 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **SOEI** | **Soe** | **22.20** | **184** | P | **P** | **17 25 23.1** | **-3.3** |
| SOEI | | | | IAmb | IAmb | 17 26 05.8 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **BATI** | **Baumata** | **22.69** | **186** | P | **P** | **17 25 30.3** | **-1.4** |
| | comp=Z,9.1nm,0.5s,baz=111,slow=1.2,SNR=6.7 | | | | | | |
| **LYN** | **LuoYang** | **25.05** | **333** | *e*PKP | **P** | **17 25 56.3** | **+2.3** |
| **XAN** | **Xi'an** | **26.37** | **327** | P | **P** | **17 26 06.0** | **0.0** |
| XAN | | | | pP | sP | 17 26 18.3 | +2.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.55** | **286** | P | **P** | **17 26 05.8** | **-1.9** |
| | comp=Z,1.4nm,0.6s,baz=97,slow=7.6,SNR=15 | | | | | | |
| CMAR | | | | pP | **pwP** | **17 26 25.8** | **+4.4** |
| | comp=Z,2.2nm,0.9s,baz=90,slow=7.2,SNR=3.1 | | | | | | |
| **KNRA** | **Kununurra** | **28.18** | **174** | P | **P** | **17 26 20.5** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **30.44** | **180** | P | **P** | **17 26 40.4** | **-2.0** |
| | comp=Z,2.0nm,0.8s,baz=26,slow=16,SNR=5.6 | | | | | | |
| FITZ | | | | pP | **pwP** | **17 27 00.2** | **+3.5** |
| | comp=Z,3.1nm,0.9s,baz=15,slow=4.3,SNR=3.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.44** | **180** | P | **P** | **17 26 40.0** | **-2.3** |
| FITZ | | | | IAmb | IAmb | 17 27 09.9 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | **30.69** | **324** | *e*P | **P** | **17 26 46.5** | **+1.8** |
| LZH | | | | pP | sP | 17 26 55.1 | +0.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.19** | **165** | P | **P** | **17 27 03.5** | **-3.1** |
| WB0 | | | | IAmb | IAmb | 17 27 29.0 | |
| | comp=Z,9.3nm,1.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.34** | **165** | P | **P** | **17 27 06.2** | **-1.7** |
| | comp=Z,0.3nm,0.8s,baz=352,slow=9.2,SNR=2.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 29 49.5** | **0.0** |
| | comp=Z,2.9nm,1.3s,baz=338,slow=3.1,SNR=6.5 | | | | | | |
| WRA | | | | pPcP | | 17 30 09.4 | |
| | comp=Z,0.4nm,0.5s,baz=343,slow=2.4,SNR=6.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **33.35** | **165** | P | **P** | **17 27 06.5** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 17 27 36.7 | |
| | comp=Z,13nm,1.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **33.41** | **165** | P | **P** | **17 27 07.4** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 17 28 17.4 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **AS31** | **Alice Springs** | **36.83** | **168** | P | **P** | **17 27 35.5** | **-2.5** |
| **ASAR** | **Alice Springs** | **36.84** | **168** | P | **P** | **17 27 36.2** | **-1.8** |
| | comp=Z,0.4nm,0.5s,baz=348,slow=6.5,SNR=14 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 29 59.1** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=342,slow=3.0,SNR=4.8 | | | | | | |
| ASAR | | | | pPcP | | 17 30 19.1 | |
| | comp=Z,0.4nm,0.5s,baz=344,slow=3.5,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **36.84** | **168** | P | **P** | **17 27 34.8** | **-3.2** |
| **KLR** | **Kul'dur** | **36.91** | **6** | LR | LR | 17 44 23.8 | |
| | comp=Z,37nm,18.5s,baz=127,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **36.76** | **339** | P | **P** | **17 27 55.1** | **+1.0** |
| | comp=Z,1.2nm,1.0s,baz=155,slow=10,SNR=3.7 | | | | | | |
| SONM | | | | pP | **pwP** | **17 28 14.8** | **+4.1** |
| | comp=Z,1.4nm,0.9s,baz=153,slow=9.7,SNR=3.8 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** baz=266,slow=74,SNR=26 | **40.02** | **74** | T | T | 18 11 37.2 | |
| **H11N2** | **WAKE ISLAND Hy** baz=266,slow=74,SNR=30 | **40.02** | **74** | T | T | 18 11 48.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=266,slow=74,SNR=24 | **40.03** | **74** | T | T | 18 11 47.2 | |
| **BBOO** | **Buckleboo** | | **46.14** | **168** | P | **P** | **17 28 53.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **46.67** | **161** | P | **P** | **17 28 59.5** | **+1.2** |
| | comp=Z,2.3nm,0.8s,baz=325,slow=16,SNR=3.1 | | | | | | |
| **STKA** | **Stephens Creek** | **46.67** | **161** | P | **P** | **17 28 58.7** | **+0.4** |
| **PEA0B** | **Petropavlovsk-** | **47.78** | **25** | P | **P** | **17 29 08.4** | **+1.6** |
| **MK31** | **Makanchi Array** | **49.98** | **322** | P | **P** | **17 29 20.0** | **-3.8** |
| MK31 | | | | IAmb | IAmb | 17 29 45.3 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.98** | **322** | P | **P** | **17 29 24.7** | **+1.0** |
| | comp=Z,1.3nm,0.7s,baz=113,slow=10.0,SNR=9.1 | | | | | | |
| MKAR | | | | pP | **pwP** | **17 29 44.5** | **+5.5** |
| | comp=Z,1.4nm,0.7s,baz=120,slow=8.2,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.98** | **322** | P | **P** | **17 29 19.4** | **-4.3** |
| **LIFNC** | **LIFOU** | **52.47** | **129** | P | **P** | **17 29 42.3** | **-0.4** |
| **KURK** | **Kurchatov** | **53.97** | **325** | P | **P** | **17 29 51.8** | **-1.6** |
| KURK | | | | IAmb | IAmb | 17 30 14.8 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **56.37** | **314** | P | **P** | **17 30 11.1** | **+0.3** |
| **BRVK** | **Borovoye** | **59.64** | **325** | P | **P** | **17 30 33.2** | **-0.4** |
| **ABKAR** | **Akbulak array** | **64.89** | **319** | P | **P** | **17 31 05.5** | **-3.2** |
| **AFI** | **Afiamalu** | **67.18** | **111** | LR | LR | 17 55 47.0 | |
| | comp=Z,136nm,21.6s,baz=350,slow=31 | | | | | | |
| **FINES** | **FINESS Array B** | **83.70** | **332** | P | **P** | **17 32 58.2** | **+0.1** |
| | comp=Z,1.7nm,0.9s,baz=39,slow=5.3,SNR=1.9 | | | | | | |
| FINES | | | | pP | **pwP** | **17 33 18.9** | **+3.4** |
| | comp=Z,3.2nm,1.1s,baz=66,slow=4.6,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **83.70** | **332** | P | **P** | **17 32 57.6** | **-0.5** |
| **AKASG** | **Malin Array Be** | **84.55** | **321** | P | **P** | **17 33 01.6** | **-1.0** |
| | comp=Z,0.5nm,0.5s,baz=63,slow=5.0,SNR=4.5 | | | | | | |
| AKASG | | | | pP | **pwP** | **17 33 22.0** | **+1.9** |
| | comp=Z,0.7nm,0.7s,baz=58,slow=4.7,SNR=2.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **84.55** | **321** | IAmb | IAmb | 17 33 23.2 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **90.55** | **334** | LR | LR | 18 18 01.0 | |
| | comp=Z,21nm,18.0s,baz=10.0,slow=38 | | | | | | |

*DDA* ***19*** *17:32:19.7±0.0, 35°53N×29°45E, h10km±1km, ML2.2*
*ISK* ***19*** *17:32:20.7, 35°68N×29°47E, h20km, ML2.6/15*
*NIC* ***19*** *17:32:23.0±0.0, 35°78N×29°50E, h32km±21km, M3.4/4*

**ISC 19 17:32:21.2±1.4, 35°71N±0°04×29°48E±0°03, h14km±10km, n34, σ0°80/48, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.45** | **11** | P | **Pb** | **17 32 31.5** | **+0.5** |
| KSL | | | | S | **Sb** | **17 32 38.8** | **+1.3** |
| **AKAS** | **Kas** | **0.54** | **11** | PG | **Pb** | **17 32 32.9** | **+0.4** |
| AKAS | | | | SG | **Sb** | **17 32 40.5** | **+0.4** |
| **AKAS** | **Kas** | **0.54** | **11** | P | **Pb** | **17 32 32.3** | **-0.2** |
| AKAS | | | | S | **Sn** | **17 32 42.6** | **-0.9** |
| **AKUM** | **Antalya-Kumluc** | **0.93** | **48** | P | **Pn** | **17 32 39.4** | **-0.5** |
| AKUM | | | | S | **Sn** | **17 32 52.5** | **-0.6** |
| AKUM | | | | *i* AML | AML | 17 32 57.0 | |
| | comp=E,75nm,0.3s | | | | | | |
| AKUM | | | | *i* AML | AML | 17 32 58.0 | |
| | comp=N,56nm,0.2s | | | | | | |
| **FETY** | **Fethiye** | **0.98** | **341** | PG | **Pg** | **17 32 40.3** | **+0.1** |
| **FETY** | **Fethiye** | **0.98** | **341** | P | **Pg** | **17 32 40.0** | **-0.2** |
| FETY | | | | S | **Sg** | **17 32 51.7** | **-1.3** |
| FETY | | | | *i* AML | AML | 17 32 54.0 | |
| | comp=E,77nm,0.3s | | | | | | |
| FETY | | | | *i* AML | AML | 17 32 55.0 | |
| | comp=N,92nm,0.3s | | | | | | |
| **ELL** | **Elmali** | **1.10** | **18** | PN | **Pg** | **17 32 41.8** | **-0.6** |
| ELL | | | | SN | **Sn** | **17 32 57.3** | **-0.1** |
| **ELL** | **Elmali** | **1.10** | **18** | P | **Pg** | **17 32 41.7** | **-0.6** |
| **ARG** | **Arkhangelos** | **1.21** | **295** | PN | **Pn** | **17 32 43.0** | **-0.7** |
| ARG | | | | SN | **Sb** | **17 32 59.2** | **-0.2** |
| **ARG** | **Arkhangelos** | **1.21** | **295** | S | **Sb** | **17 32 59.3** | **-0.2** |
| **CAME** | **Cameli-Denizli** | **1.24** | **353** | PN | **Pn** | **17 32 43.9** | **-0.4** |
| **DALY** | **Dalyan (Mula)** | **1.29** | **329** | PN | **Pn** | **17 32 44.9** | **0.0** |
| **TURN** | **Turunc** | **1.46** | **317** | PN | **Pn** | **17 32 46.9** | **-0.3** |
| **TURN** | **Turunc** | **1.46** | **317** | P | **Pb** | **17 32 49.1** | **+0.9** |
| TURN | | | | *i* AML | AML | 17 33 08.0 | |
| | comp=N,13nm,0.3s | | | | | | |
| TURN | | | | *i* AML | AML | 17 33 09.0 | |
| | comp=E,21nm,0.9s | | | | | | |
| **KORT** | **Korkueli** | **1.47** | **28** | PN | **Pn** | **17 32 46.9** | **-0.6** |
| **KORT** | **Korkueli** | **1.47** | **28** | P | Pn | 17 32 42.2 | -5.3 |
| KORT | | | | S | **Sg** | **17 33 10.3** | **+1.6** |
| **ANTB** | **Antalya** | **1.52** | **38** | PN | **Pn** | **17 32 48.0** | **0.0** |
| **GOLH** | **Golhisar** | **1.53** | **2** | P | **Pn** | **17 32 48.8** | **+0.6** |
| GOLH | | | | S | **Sg** | **17 33 09.9** | **-0.6** |
| GOLH | | | | *i* AML | AML | 17 33 18.0 | |
| | comp=N,58nm,0.6s | | | | | | |
| GOLH | | | | *i* AML | AML | 17 33 20.0 | |
| | comp=E,51nm,0.6s | | | | | | |
| **YER** | **Yerkesik** | **1.72** | **326** | PN | **Pn** | **17 32 50.9** | **+0.1** |
| **TAVA** | **DENIZLI_Tavas** | **1.81** | **346** | P | **Pb** | **17 32 55.1** | **+0.8** |
| TAVA | | | | S | **Sn** | **17 33 14.9** | **-0.1** |
| TAVA | | | | *i* AML | AML | 17 33 21.0 | |
| | comp=N,22nm,0.6s | | | | | | |
| TAVA | | | | *i* AML | AML | 17 33 32.0 | |
| | comp=E,21nm,0.6s | | | | | | |
| **KARP** | **Karpathos** | **1.90** | **266** | PN | **Pn** | **17 32 53.1** | **-0.1** |
| **KARP** | **Karpathos** | **1.90** | **266** | P | **Pn** | **17 32 53.7** | **+0.5** |
| KARP | | | | S | **Sn** | **17 33 16.7** | **-0.2** |
| KARP | | | | AMI | | 17 33 19.6 | |
| | 0.3nm,0.8s | | | | | | |
| KARP | | | | AMI | | 17 33 19.6 | |
| | 0.3nm,0.8s | | | | | | |
| **KEPZ** | **Antalya-Kepez** | **2.09** | **55** | P | **Pn** | **17 32 56.3** | **+0.4** |
| KEPZ | | | | S | **Sn** | **17 33 19.1** | **-2.7** |
| KEPZ | | | | *i* AML | AML | 17 33 22.0 | |
| | comp=N,11nm,0.8s | | | | | | |
| KEPZ | | | | *i* AML | AML | 17 33 43.0 | |
| | comp=E,9.7nm,1.1s | | | | | | |
| **GAZI** | **Gazipasa** | **2.36** | **76** | PN | **Pn** | **17 32 58.8** | **-0.8** |
| **AKMS** | **Akamas** | **2.43** | **106** | P | **Pn** | **17 33 00.7** | **+0.1** |
| AKMS | | | | S | **Sn** | **17 33 28.4** | **-1.8** |
| AKMS | | | | AMI | | 17 33 30.5 | |
| | 0.5nm,0.7s | | | | | | |
| AKMS | | | | AMI | | 17 33 30.5 | |
| | 0.5nm,0.7s | | | | | | |
| AKMS | | | | AMI | | 17 33 30.6 | |
| | 0.4nm,1.0s | | | | | | |
| AKMS | | | | AMI | | 17 33 30.6 | |
| | 0.4nm,1.0s | | | | | | |
| **SEDI** | **Konya, Seydise** | **2.53** | **46** | P | **Pn** | **17 33 03.4** | **+1.4** |
| SEDI | | | | S | **Sn** | **17 33 33.9** | **+1.2** |
| SEDI | | | | *i* AML | AML | 17 33 37.0 | |
| | comp=E,12nm,0.5s | | | | | | |
| SEDI | | | | *i* AML | AML | 17 33 40.0 | |
| | comp=N,13nm,0.4s | | | | | | |
| **SEYD** | **Seydisehir-KON** | **2.55** | **48** | PN | **Pn** | **17 33 02.3** | **+0.1** |
| **NATA** | **Nata** | **2.69** | **109** | P | **Pn** | **17 33 04.8** | **+0.6** |
| **ZKR** | **Zakros** | **2.73** | **258** | PN | **Pn** | **17 33 04.5** | **-0.1** |
| **HDMB** | **Hadim** | **2.73** | **62** | PN | **Pn** | **17 33 05.0** | **+0.1** |
| **SZAC** | **Souni** | **2.94** | **108** | P | **Pn** | **17 33 08.0** | **+0.4** |
| SZAC | | | | S | **Sn** | **17 33 42.6** | **-0.2** |
| SZAC | | | | AMI | | 17 33 43.4 | |
| | 0.4nm,0.6s | | | | | | |
| SZAC | | | | AMI | | 17 33 43.4 | |
| | 0.4nm,0.6s | | | | | | |
| SZAC | | | | AMI | | 17 33 44.3 | |
| | 0.3nm,0.7s | | | | | | |
| SZAC | | | | AMI | | 17 33 44.3 | |
| | 0.3nm,0.7s | | | | | | |
| **ASGA** | **Asgata** | **3.22** | **105** | P | **Pn** | **17 33 11.7** | **+0.3** |
| ASGA | | | | AMI | | 17 33 49.6 | |
| | 0.1nm,0.3s | | | | | | |
| **CSS** | **Mathiatis** | **3.23** | **102** | P | Pn | **17 33 11.9** | **+0.3** |
| **IDI** | **Anoyia** | **3.77** | **265** | PN | **Pn** | **17 33 19.3** | **+0.3** |

*IDC* ***19*** *17:36:43.2±2.1, 31°64N×49°94E, h0km, mb3.7/3, mb1 3.8/5, mb1mx3.4/45, mbtmp3.8/5, ML3.6/2, Error ellipse: s-maj=47.9km s-min=28.6km az=25.0*
*TEH* ***19*** *17:36:44.7, 31°67N×50°08E, h8km, ML3.7*
*DSN* ***19*** *17:36:48.2±1.1, 31°38N×50°49E, h10km, ML3.7/3, Error ellipse: s-maj=30.3km s-min=8.7km az=44.0*

**ISC 19 17:36:45.1±0.7, 31°66N±0°03×50°09E±0°03, h10km, n78

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BANOM | **Banah** | **7.89** | **135** | *e*Pn | **Pn** | **17 38 42.5** | **+2.5** |
| BANOM | **Banah** | **7.89** | **135** | P | **Pn** | **17 38 37.7** | **-2.3** |
| BANOM | | | | S | **Sn** | **17 40 03.6** | **-5.9** |
| GHWR | **Ruwais** | **8.05** | **161** | *e*Pn | **Pn** | **17 38 43.2** | **+1.1** |
| MSFE | **Esma-Masafi** | **8.24** | **138** | *e*Pn | **Pn** | **17 38 45.9** | **+1.1** |
| MSFE | **Esma-Masafi** | **8.24** | **138** | P | **Pn** | **17 38 41.2** | **-3.6** |
| FAQ | **Al Faqa, Dubai** | **8.43** | **143** | *e*Pn | **Pn** | **17 38 49.2** | **+1.9** |
| UOSS | **Minazif** | **8.59** | **140** | *e*Pn | **Pn** | **17 38 51.0** | **+1.5** |
| UOSS | **Minazif** | **8.59** | **140** | P | **Pn** | **17 38 46.6** | **-2.9** |
| HATD | **Hatta, Dubai** | **8.64** | **140** | *e*Pn | **Pn** | **17 38 51.0** | **+0.7** |
| ASHO | **Ashiyiah** | **8.72** | **141** | *e*Pn | **Pn** | **17 38 52.7** | **+1.4** |
| ASHO | **Ashiyiah** | **8.72** | **141** | P | **Pn** | **17 38 49.3** | **-2.0** |
| ASHO | | | | S | **Sn** | **17 40 23.6** | **-6.2** |
| SHRT | **Shahrakht** | **8.83** | **74** | *e*Pn | **Pn** | **17 38 55.5** | **+2.7** |
| MZR | **Muzera** | **9.13** | **160** | *e*Pn | **Pn** | **17 38 57.5** | **+0.5** |
| UMZA | **Um Al Zommool** | **9.99** | **152** | *e*Pn | **Pn** | **17 39 11.0** | **+2.3** |
| BIDO | **Bidbid** | **10.79** | **137** | *e*Pn | **Pn** | **17 39 22.6** | **+2.9** |
| ASF | **Jabal al Asfar** | **11.22** | **276** | Pn | **Pn** | **17 39 23.7** | **-2.0** |
| | comp=Z,0.4nm,0.3s,baz=79,slow=16,SNR=2.3 | | | | | | |
| WSAR | **Wadi Sarin** | **11.30** | **136** | Pn | **Pn** | **17 39 27.0** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=328,slow=7.7,SNR=6.0 | | | | | | |
| BRTR | **Keskin Array B** | **15.59** | **306** | Pn | **P** | **17 40 29.8** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=117,slow=12,SNR=6.6 | | | | | | |
| AKASG | **Malin Array Be** | **24.52** | **327** | P | **P** | **17 42 03.4** | **-1.2** |
| | comp=Z,0.7nm,0.6s,baz=130,slow=8.6,SNR=5.6 | | | | | | |
| MKAR | **Makanchi Array** | **28.92** | **49** | P | **P** | **17 42 45.0** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=251,slow=8.5,SNR=6.2 | | | | | | |
| FINES | **FINESS Array B** | **33.66** | **339** | P | **P** | **17 43 25.3** | **-0.4** |
| | comp=Z,2.4nm,1.0s,baz=147,slow=11,SNR=4.7 | | | | | | |

**OMAN 19 18:08:00.7±0.4, 24°44N×62°41E, h10km, mb4.8/4, ml3.0/4, Error ellipse: s-maj=5.9km s-min=5.0km az=281.0, Off coast of Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JLN** | **Jalan Bani Buh** | **3.58** | **231** | P | Pn | 18 08 54.8 | -1.5 |
| | SNR=18 | | | | | | |
| JLN | | | | S | Sn | 18 09 39.5 | +0.8 |
| **WBK** | **Wadi Bani Khal** | **3.65** | **241** | P | Pn | 18 08 56.0 | -1.2 |
| | SNR=56 | | | | | | |
| WBK | | | | S | Sn | 18 09 40.3 | 0.0 |
| **BIDO** | **Bidbid** | **4.02** | **258** | P | Pn | 18 09 01.9 | -0.5 |
| BIDO | | | | S | Sn | 18 09 48.5 | -1.1 |
| **SMDO** | **Samad** | **4.22** | **252** | P | Pn | 18 09 04.4 | -0.9 |
| | SNR=8.4 | | | | | | |
| SMDO | | | | S | Sn | 18 09 53.8 | -0.9 |
| **JMDO** | **Jabal Madar** | **4.46** | **243** | P | Pn | 18 09 08.2 | -0.3 |
| JMDO | | | | S | Sn | 18 10 02.6 | +2.1 |
| **HOQ** | **Hoqain** | **4.74** | **261** | P | Pn | 18 09 10.7 | -1.6 |
| HOQ | | | | S | Sn | 18 10 06.5 | -0.9 |
| **BSY** | **Bisya** | **5.07** | **252** | P | Pn | 18 09 16.9 | +0.1 |
| BSY | | | | S | Sn | 18 10 17.4 | +1.9 |
| **MHTO** | **MHTO** | **5.35** | **231** | P | Pn | 18 09 21.5 | +0.8 |
| MHTO | | | | S | Sn | 18 10 23.7 | +1.3 |
| **ARQ** | **Araqi** | **5.50** | **260** | P | Pn | 18 09 23.8 | +1.0 |
| | SNR=15 | | | | | | |
| ARQ | | | | S | Sn | 18 10 28.7 | +2.6 |
| BANOM | **Banah** | **5.73** | **286** | P | Pn | 18 09 25.9 | +0.1 |
| MASF | **Masafi** | **5.75** | **281** | P | Pn | 18 09 26.7 | +0.6 |
| ASHO | **Ashiyiah** | **5.79** | **274** | P | Pn | 18 09 27.3 | +0.6 |
| ASHO | | | | S | Sn | 18 10 34.0 | +0.8 |
| SHME | **Shamm** | **5.89** | **287** | P | Pn | 18 09 27.4 | -0.7 |
| ALNE | **Al Ain** | **6.09** | **268** | P | Pn | 18 09 30.6 | -0.2 |
| FAQ | **Al Faqa, Dubai** | **6.21** | **274** | P | Pn | 18 09 32.3 | -0.2 |
| FAQ | | | | S | Sn | 18 10 44.0 | +0.4 |

**IDC 19 18:08:31.8±10.0, 18°92S×179°17E, h408km±51km, mb3.3/3, mb1 3.5/3, mb1mx3.0/23, mbtmp4.1/3, Error ellipse: s-maj=235.3km s-min=93.1km az=89.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.59** | **318** | P | P | 18 09 26.3 | -0.1 |
| | 3.5nm,0.3s,baz=139,slow=20,SNR=9.6 | | | | | | |
| **STKA** | **Stephens Creek** | **36.13** | **242** | P | P | 18 14 57.5 | 0.0 |
| | 1.6nm,0.4s,baz=91,slow=11,SNR=9.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.20** | **261** | P | P | 18 15 46.9 | -0.3 |
| | 0.7nm,0.5s,baz=97,slow=7.3,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **42.31** | **255** | P | P | 18 15 47.9 | -0.2 |
| | 2.4nm,0.4s,baz=89,slow=8.8,SNR=142 | | | | | | |

**IDC 19 18:22:18.6±8.7, 27°81N×143°12E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.2/63, mbtmp3.3/5, MS3.3/2, Ms1 3.3/2, ms1mx2.5/39, Error ellipse: s-maj=336.3km s-min=25.0km az=71.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **34.78** | **315** | P | P | 18 29 12.0 | +1.0 |
| | 0.1nm,0.4s,baz=110,slow=9.0,SNR=1.7 | | | | | | |
| SONM | | | | LR | LR | 18 43 46.1 | |
| | comp=Z,43nm,18.2s,baz=106,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.22** | **191** | P | P | 18 31 01.3 | +0.1 |
| | 0.5nm,0.5s,baz=13,slow=8.7,SNR=7.8 | | | | | | |
| WRA | | | | LR | LR | 18 50 30.0 | |
| | comp=Z,36nm,18.6s,baz=18,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.66** | **309** | P | P | 18 31 18.7 | -1.1 |
| | 0.1nm,0.7s,baz=85,slow=9.7,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **51.94** | **191** | P | P | 18 31 29.2 | -0.2 |
| | 0.4nm,1.0s,baz=8.3,slow=7.7,SNR=1.6 | | | | | | |
| KURBB | **Kurchatov Arra** | **53.14** | **314** | P | P | 18 31 37.8 | -0.3 |
| | 0.5nm,0.5s,baz=91,slow=8.1,SNR=6.2 | | | | | | |

*ISU **19** 18:22:16, 41°50N×72°00E, h5km*
*KRNET **19** 18:22:17.1±0.1, 41°34N×71°73E, h13km, mb2.8*
*SOME **19** 18:22:21.7, 41°37N×71°87E, h25km*
*NNC **19** 18:22:23.0±3.0, 41°46N×71°86E, h0km, mb3.3, mpv3.4, Error ellipse: s-maj=27.6km s-min=9.3km az=3.0*

**ISC 19 18:22:20.2±0.8, 41°37N±0°03×71°73E±0°03, h10km, n35, σ1s83/57, 17C-9D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **0.46** | **22** | ⇑*i*P | **Pg** | **18 22 26.5** | **-2.8** |
| | baz=21 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **18 22 33.8** | **-1.6** |
| | baz=21 | | | | | | |
| **TRKS** | **Terek-Say** | **0.47** | **290** | ⇓*i*P | Pg | 18 22 25.7 | -3.7 |
| | baz=87 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sg** | **18 22 31.9** | **-3.8** |
| | baz=87 | | | | | | |
| **ANR** | **Andizhan** | **0.78** | **142** | *e*P | **Pg** | **18 22 34.0** | **-1.1** |
| ANR | | | | *e*S | **Sn** | **18 22 54.0** | **+5.1** |
| **FRG** | **Fergana** | **0.99** | **178** | *e*P | Pg | 18 22 39.0 | -0.3 |
| FRG | | | | *e*S | **Sg** | **18 22 55.0** | **+2.8** |
| **OHH** | **Osh** | **1.16** | **136** | ⇑*i*P | Pb | 18 22 38.7 | -3.7 |
| | baz=35 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **18 22 54.4** | **-3.1** |
| | baz=35 | | | | | | |
| **CHMG** | **Chimgan** | **1.31** | **279** | *i* P | Pn | 18 22 41.0 | -3.6 |
| CHMG | | | | *i* S | **Sb** | **18 23 00.0** | **-1.7** |
| **CHRV** | **Charvak** | **1.36** | **282** | *e*P | **Pn** | **18 22 45.0** | **-0.3** |
| **BTK** | **Batken** | **1.48** | **208** | ⇓*i*P | Pn | 18 22 44.3 | -2.7 |
| | baz=9.0 | | | | | | |
| BTK | | | | ⇓*e*S | **Sn** | **18 23 04.3** | **-2.1** |
| | baz=9.0 | | | | | | |
| **DZA** | **Taraz** | **1.55** | **349** | *e*P | **Pb** | **18 22 50.3** | **+1.3** |
| | 46nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **18 23 10.9** | **+0.8** |
| | 129nm,0.2s | | | | | | |
| **DZA** | **Taraz** | **1.55** | **349** | P | **Pb** | **18 22 50.2** | **+1.2** |
| | 48nm,0.1s | | | | | | |
| DZA | | | | S | **Sg** | **18 23 10.7** | **+0.7** |
| | 129nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **1.77** | **38** | *e*P | **Pb** | **18 22 52.8** | **0.0** |
| | 13nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **18 23 14.9** | **-2.2** |
| | 45nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.77** | **38** | P | **Pb** | **18 22 52.8** | **0.0** |
| | 13nm,0.1s | | | | | | |
| MRKS | | | | S | **Sg** | **18 23 14.9** | **-2.2** |
| | 45nm,0.3s | | | | | | |
| **DRK** | **Karamyk** | **1.89** | **178** | ⇑*i*P | Pn | 18 22 51.6 | -1.1 |
| | baz=78 | | | | | | |
| DRK | | | | ⇑*i*S | **Sn** | **18 23 16.5** | **-0.2** |
| | baz=78 | | | | | | |
| **KK08** | **Karatay Array** | **1.97** | **332** | ⇓Pn | **Pn** | **18 22 54.2** | **+0.6** |
| | 8.1nm,0.5s,baz=150,slow=15 | | | | | | |
| KK08 | | | | ⇑Sn | **Sb** | **18 23 21.7** | **+1.0** |
| | 10nm,0.5s,baz=148,slow=27 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.00** | **49** | ⇓*i*P | **Pn** | **18 22 54.3** | **+0.2** |
| | baz=48 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sb** | **18 23 21.4** | **-0.3** |
| | baz=48 | | | | | | |
| **ARLS** | **Aral** | **2.00** | **75** | ⇑*i*P | **Pn** | **18 22 54.0** | **-0.2** |
| | baz=74 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sb** | **18 23 21.3** | **-0.6** |
| | baz=74 | | | | | | |
| **BRLS** | **Borolday** | **2.18** | **320** | *e*P | **Pn** | **18 22 58.8** | **+2.3** |
| | 26nm,0.3s | | | | | | |
| BRLS | | | | *e*S | **Sn** | **18 23 25.2** | **+1.6** |
| | 31nm,0.3s | | | | | | |
| **BRLS** | **Borolday** | **2.18** | **320** | Pg | **Pn** | **18 22 58.7** | **+2.3** |
| | 26nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 18 23 25.8 | |
| | 31nm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **2.25** | **67** | ⇑*i*P | **Pn** | **18 22 57.9** | **0.0** |
| | baz=66 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **18 23 27.2** | **-2.1** |
| | baz=66 | | | | | | |
| **AAK** | **Ala-Archa** | **2.42** | **57** | ⇑Pn | **Pn** | **18 23 01.3** | **+1.4** |
| | 4.5nm,0.5s | | | | | | |
| AAK | | | | ⇑Sn | **Sb** | **18 23 33.2** | **-0.6** |
| | 6.0nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.42** | **57** | ⇑*e*P | **Pn** | **18 23 00.0** | **+0.1** |
| | baz=57 | | | | | | |
| AAK | | | | ⇑*e*S | **Sb** | **18 23 31.4** | **-2.4** |
| | baz=57 | | | | | | |
| **KBK** | **Karagaybulak** | **2.72** | **61** | ⇓*i*P | **Pn** | **18 23 04.1** | **0.0** |
| | baz=60 | | | | | | |
| KBK | | | | ⇓*i*S | **Sn** | **18 23 38.5** | **+1.3** |
| | baz=60 | | | | | | |
| **SGDS** | **Sogindy** | **2.99** | **45** | *e*P | **Pb** | **18 23 13.7** | **+0.1** |
| | 1.9nm,0.2s | | | | | | |
| SGDS | | | | *e*S | **Sb** | **18 23 50.7** | **+0.5** |
| | 7.6nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.27** | **60** | ⇑Pn | **Pb** | **18 23 16.6** | **-1.7** |
| | 1.3nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sb** | **18 23 57.9** | **-0.3** |
| | 4.0nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.53** | **57** | *e*P | **Pb** | **18 23 23.5** | **+0.6** |
| | 1.4nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sb** | **18 24 07.0** | **+1.2** |
| | 4.5nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.53** | **57** | Pg | **Pb** | **18 23 23.7** | **+0.8** |
| | 1.4nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 18 24 07.0 | |
| | 4.5nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.73** | **50** | *e*P | **Pb** | **18 23 27.0** | **+0.8** |
| | 1.4nm,0.3s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **18 24 13.2** | **+1.8** |
| | 3.6nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.73** | **50** | Pg | **Pb** | **18 23 27.0** | **+0.8** |
| | 1.4nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 18 24 13.2 | |
| | 3.6nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.91** | **62** | *e*P | **Pb** | **18 23 30.5** | **+1.3** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **18 24 19.6** | **+3.0** |
| | 5.8nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.91** | **62** | Pg | **Pb** | **18 23 30.5** | **+1.3** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | Lg | Lg | 18 24 19.6 | |
| | 5.8nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **4.04** | **24** | *e*P | **Pb** | **18 23 34.7** | **+3.2** |
| | 2.5nm,0.5s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **18 24 26.8** | **-3.1** |
| | 2.5nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **4.23** | **52** | *e*P | **Pb** | **18 23 35.0** | **+0.2** |
| | 1.3nm,0.0s | | | | | | |
| KUU | | | | *e*S | **Sb** | **18 24 26.7** | **+0.8** |
| | 2.5nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **4.23** | **52** | Pg | **Pb** | **18 23 34.9** | **+0.2** |
| | 1.3nm,0.0s | | | | | | |
| KUU | | | | Lg | Lg | 18 24 26.7 | |
| | 2.5nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **4.34** | **56** | *e*P | **Pb** | **18 23 38.1** | **+1.5** |
| | 1.3nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **18 24 32.4** | **+3.3** |
| | 5.7nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.34** | **56** | Pg | **Pb** | **18 23 38.1** | **+1.5** |
| | 1.3nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 18 24 32.4 | |
| | 5.7nm,0.6s | | | | | | |

*IDC **19** 18:31:07.3±3.2,0.1°2S×97.1°58E, h0km, mb3.8/5, mb1 3.8/6, mb1mx3.5/54, mbtmp3.7/6, ML3.4/1, Error ellipse: s-maj=127.6km s-min=20.2km az=59.0*
*DJA **19** 18:31:09.2±0.8, 0.1°N±4.1°×9.8°E±1.1°, h10km, M3.8/7, MLv3.8/7*
*NEIC **19** 18:31:12.2±1.7, 0.0°N±0.1°×97.1°E±0.1°, h31km±7km, mb4.2/12, Error ellipse: s-maj=22.1km s-min=7.5km az=52.0*

**ISC 19 18:31:10.2±1.1, 0.03S±0.08×97.50E±0.10, h25km, n33, σ1s26/33, mb4.1/11, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **1.33** | **3** | | **Pn** | **18 31 33.7** | **+0.6** |
| GSI | | | | | **Sn** | **18 31 47.3** | **-2.7** |
| **GSI** | **Gunungsitoli** | **1.33** | **3** | P | **Pn** | **18 31 33.9** | **+0.8** |
| GSI | | | | S | **Sn** | **18 31 48.4** | **-1.6** |
| **MNSI** | **Mandailing Nat** | **2.24** | **69** | P | **Pn** | **18 31 46.4** | **+0.8** |
| MNSI | | | | S | **Sn** | **18 32 13.6** | **+1.1** |
| **PPI** | **Padang Panjang** | **2.93** | **98** | P | **Pn** | **18 31 55.3** | **+0.1** |
| PPI | | | | S | **Sn** | **18 32 29.8** | **+0.2** |
| **BKNI** | **Bangkinang** | **3.56** | **84** | Pn | **Pn** | **18 32 02.7** | **-1.2** |
| **KRJI** | **Kerinci** | **4.46** | **117** | P | **Pn** | **18 32 16.9** | **+0.5** |
| **LHMI** | **Lhok Sumawe** | **5.25** | **354** | Pn | **Pn** | **18 32 27.1** | **0.0** |
| **IPM** | **Ipoh** | **5.70** | **38** | Pn | **Pn** | **18 32 34.2** | **+0.9** |
| **KULM** | **Kulim** | **6.15** | **31** | Pn | **Pn** | **18 32 38.1** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **18.43** | **4** | P | **Pn** | **18 35 25.4** | **+1.3** |
| | 0.1nm,0.3s,baz=201,slow=10.0,SNR=3.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.43** | **4** | P | **P** | **18 35 24.4** | **+0.5** |
| **H08S2** | **Diego Garcia H** | **26.05** | **253** | T | T | 19 03 41.1 | |
| | baz=74,slow=75,SNR=90 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.06** | **253** | T | T | 19 03 39.8 | |
| | baz=74,slow=75,SNR=94 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.07** | **253** | T | T | 19 03 40.8 | |
| | baz=74,slow=75,SNR=133 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.98** | **125** | P | **P** | **18 37 41.4** | **-2.0** |
| **SAUI** | **Saumlaki** | **34.60** | **104** | P | **P** | **18 37 55.2** | **-2.3** |
| **FAKI** | **Fak Fak** | **34.85** | **95** | P | **P** | **18 37 59.5** | **-0.3** |
| **WB0** | **Warramunga Arr** | **41.12** | **121** | P | **P** | **18 38 51.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 18 38 53.7 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.14** | **121** | P | **P** | **18 38 52.5** | **-0.3** |
| | comp=Z,1.8nm,0.7s,baz=302,slow=8.9,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.14** | **121** | P | **P** | **18 38 52.2** | **-0.5** |
| **WRAB** | **Tennant Creek** | **41.15** | **121** | P | **P** | **18 38 52.0** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 18 39 34.1 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.15** | **121** | P | **P** | **18 38 52.1** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 18 39 19.5 | |
| | comp=Z,12nm,1.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.32** | **121** | P | **P** | **18 38 53.3** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 18 38 54.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **42.43** | **126** | P | **P** | **18 39 03.2** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=303,slow=8.0,SNR=18 | | | | | | |
| **SONM** | **Songino Array** | **48.30** | **8** | P | **P** | **18 39 51.0** | **+1.5** |
| | comp=Z,0.2nm,0.4s,baz=189,slow=8.4,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **48.30** | **8** | IAmb | IAmb | 18 40 14.1 | |
| | comp=Z,3.8nm,1.5s | | | | | | |
| **MK31** | **Makanchi Array** | **48.50** | **346** | P | **P** | **18 39 51.8** | **+0.8** |
| **MKAR** | **Makanchi Array** | **48.50** | **346** | P | **P** | **18 39 52.7** | **+1.8** |
| | comp=Z,1.3nm,0.7s,baz=161,slow=9.1,SNR=9.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.50** | **346** | P | **P** | **18 39 52.0** | **+1.1** |
| **MAKZ** | **Makanchi** | **48.59** | **346** | P | **P** | **18 39 49.3** | **-2.3** |
| MAKZ | | | | IAmb | IAmb | 18 39 59.1 | |
| | comp=Z,2.3nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.40** | **42** | P | **P** | **18 40 20.6** | **0.0** |
| MJAR | | | | IAmb | IAmb | 18 40 50.5 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.81** | **351** | P | **P** | **18 40 39.5** | **+1.6** |
| | comp=Z,0.7nm,0.5s,baz=190,slow=7.3,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.81** | **351** | P | **P** | **18 40 39.0** | **+1.0** |

*VAO **19** 18:48:48.0±1.0, 20°20S×71°09W, h10km, mb4.3*
*IDC **19** 18:49:15.4±1.0, 21°55S×68°40W, h103km±11km, mb3.7/3, mb1 3.8/6, mb1mx3.5/46, mbtmp4.0/6, Error ellipse: s-maj=33.1km s-min=16.5km az=113.0*
*GUC **19** 18:49:16.0±0.6, 21°51S×68°64W, h101km±3km, ML3.8*

**ISC 19 18:49:14.9±0.7, 21°49S±0°03×68°63W±0°06, h107km±7km, n36, σ0s94/52, mb4.0/4, 13C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.64** | **242** | ⇑*i*P | **Pn** | **18 49 33.2** | **+0.4** |
| PB09 | | | | *i* S | **Sn** | **18 49 45.9** | **-0.1** |
| PB09 | | | | IAML | | 18 49 47.1 | |
| | comp=N,6μm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **0.91** | **299** | ⇑*i*P | **Pn** | **18 49 35.0** | **-0.1** |
| PB01 | | | | *i* S | **Sn** | **18 49 50.0** | **-0.2** |
| PB01 | | | | IAML | | 18 49 51.4 | |
| | comp=E,3μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.14** | **193** | P | **Pn** | **18 49 38.1** | **+0.4** |
| | comp=E,489nm,0.3s,baz=17,slow=10,SNR=2313 | | | | | | |
| LVC | | | | S | **Sn** | **18 49 55.3** | **+0.2** |
| | comp=E,264nm,0.3s,baz=289,slow=24,SNR=53 | | | | | | |
| **LVC** | **Limon Verde** | **1.14** | **193** | ⇑*i*P | **Pn** | **18 49 38.2** | **+0.4** |
| LVC | | | | *i* S | **Sn** | **18 49 55.5** | **+0.4** |
| **LVC** | **Limon Verde** | **1.14** | **193** | *e*P | **Pn** | **18 49 38.3** | **+0.5** |
| **PB03** | **IPOC Station P** | **1.18** | **242** | ⇑*i*P | **Pn** | **18 49 38.0** | **0.0** |
| PB03 | | | | *i* S | **Sn** | **18 49 55.5** | **0.0** |
| PB03 | | | | IAML | | 18 49 57.0 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **1.19** | **278** | ⇑*i*P | **Pn** | **18 49 38.0** | **-0.1** |
| PB02 | | | | *i* S | **Sn** | **18 49 54.9** | **-0.6** |
| PB02 | | | | IAML | | 18 49 59.0 | |
| | comp=E,5μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.19** | **258** | ⇑*i*P | **Pn** | **18 49 38.0** | **-0.1** |
| PB07 | | | | *i* S | **Sn** | **18 49 55.4** | **-0.3** |
| PB07 | | | | IAML | | 18 49 58.0 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PB08** | **IPOC Station P** | **1.43** | **340** | ⇓*i*P | **Pn** | **18 49 42.3** | **+1.2** |
| PB08 | | | | *i* S | **Sn** | **18 50 01.7** | **+0.8** |
| PB08 | | | | IAML | | 18 50 05.4 | |
| | comp=E,531nm,0.6s | | | | | | |
| **PB06** | **IPOC Station P** | **1.49** | **216** | ⇑*i*P | **Pn** | **18 49 41.8** | **+0.2** |
| PB06 | | | | *i* S | **Sn** | **18 50 02.1** | **+0.3** |
| PB06 | | | | IAML | | 18 50 02.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.57** | **295** | ⇑*i*P | **Pn** | **18 49 42.7** | **+0.3** |
| PATCX | | | | *i* S | **Sn** | **18 50 03.2** | **-0.2** |
| PATCX | | | | IAML | | 18 50 05.3 | |
| | comp=N,3μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **1.64** | **239** | ⇑*i*P | **Pn** | **18 49 43.0** | **-0.5** |
| PB04 | | | | *i* S | **Sn** | **18 50 04.9** | **-0.2** |
| PB04 | | | | IAML | | 18 50 08.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **1.68** | **316** | ⇑*i*P | **Pn** | **18 49 44.1** | **+0.2** |
| HMBC | | | | *i* S | **Sn** | **18 50 05.9** | **0.0** |
| HMBC | | | | IAML | | 18 50 12.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **1.71** | **302** | ⇑*i*P | **Pn** | **18 49 44.1** | **-0.1** |
| TA01 | | | | *i* S | **Sn** | **18 50 06.0** | **-0.4** |
| TA01 | | | | IAML | | 18 50 10.8 | |
| | comp=N,1μm,0.4s | | | | | | |
| **TA02** | **Huaiquique** | **1.85** | **311** | *e*P | **Pn** | **18 49 46.4** | **+0.4** |
| TA02 | | | | IAML | | 18 50 14.1 | |
| | comp=N,2μm,0.1s | | | | | | |
| **PB15** | **IPOC Station P** | **1.88** | **204** | ⇑*i*P | **Pn** | **18 49 46.7** | **+0.3** |
| PB15 | | | | *i* S | **Sn** | **18 50 11.2** | **+0.7** |
| **GO01** | **Chusmiza** | **1.89** | **344** | *e*P | **Pn** | **18 49 47.9** | **+1.0** |
| GO01 | | | | *i* S | **Sn** | **18 50 12.9** | **+1.8** |
| GO01 | | | | IAML | | 18 50 18.6 | |
| | comp=E,553nm,0.1s | | | | | | |
| **PB11** | **IPOC Station P** | **1.97** | **331** | ⇑*i*P | **Pn** | **18 49 48.1** | **+0.5** |
| PB11 | | | | *i* S | **Sn** | **18 50 12.4** | **-0.1** |
| PB11 | | | | IAML | | 18 50 19.1 | |
| | comp=E,878nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **2.69** | **221** | *e*P | **Pn** | **18 49 56.6** | **-0.1** |
| PB10 | | | | *i* S | **Sn** | **18 50 28.6** | **-0.2** |
| PB10 | | | | IAML | | 18 50 39.1 | |
| | comp=E,307nm,0.5s | | | | | | |
| **PB12** | **IPOC Station P** | **3.27** | **331** | *e*P | **Pn** | **18 50 03.4** | **-1.2** |
| PB12 | | | | IAML | | 18 51 10.5 | |
| | comp=N,273nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **5.20** | **5** | P | **Pn** | **18 50 33.9** | **+2.9** |
| | comp=N,2.3nm,0.3s,baz=215,slow=4.9,SNR=24 | | | | | | |
| **SIV** | **San Ignacio** | **9.01** | **54** | P | **Pn** | **18 51 19.7** | **-2.5** |
| | comp=N,2.1nm,0.3s,baz=242,slow=12,SNR=106 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.83** | **58** | *e*P | **Pn** | **18 51 44.9** | **-1.9** |
| **VILB** | **Vilhena** | **11.70** | **45** | *e*P | Pn | 18 51 48.8 | -10 |
| **AQDB** | **Aquidauana** | **12.12** | **88** | *e*P | **P** | **18 52 11.7** | **-0.5** |
| **ARAG** | **Araguaiana, MT** | **16.95** | **73** | *e*P | **P** | **18 53 07.8** | **+1.9** |
| **SNDB** | **Serra Nova Dou** | **19.09** | **63** | *e*P | **P** | **18 53 28.6** | **-0.9** |
| **PLCA** | **Paso Flores** | **19.25** | **184** | P | **Pn** | **18 53 32.7** | **-0.3** |
| | comp=N,0.1nm,0.3s,baz=3.4,slow=17,SNR=2.4 | | | | | | |
| **PTGA** | **Pitinga** | **22.30** | **23** | P | **P** | **18 54 01.9** | **-1.8** |
| | comp=N,4.4nm,0.3s,baz=192,slow=3.6,SNR=11 | | | | | | |
| **JANB** | **Januaria** | **23.95** | **79** | *e*P | **P** | **18 54 20.2** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **75.64** | **322** | P | **P** | **19 00 50.4** | **+1.7** |
| | comp=N,0.6nm,0.8s,baz=167,slow=8.2,SNR=2.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.11** | **70** | P | **P** | **19 00 56.8** | **-0.3** |
| | comp=N,0.9nm,0.5s,baz=257,slow=4.8,SNR=10.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.26** | **340** | P | **P** | **19 02 08.4** | **+0.6** |
| | comp=N,0.8nm,0.6s,baz=136,slow=4.6,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **130.04** | **207** | PKP | **PKiKP** | **19 08 13.7** | **-0.1** |
| | comp=N,0.9nm,1.0s,baz=130,slow=2.0,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.09** | **210** | PKP | **PKiKP** | **19 08 19.7** | **-0.3** |
|

*az=124.0*

**ISC 19 18:58:09.7±0.9, 4°07'S±0'09×152°9E±0'1, h50km, n28, σ1°59/27, mb4.3/8, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **0.71** | **260** | | **Pn** | **18 58 23.8** | **+0.2** |
| RABL | | | | | **Sn** | **18 58 33.8** | **+0.1** |
| **MANU** | **Manus Island** | **5.85** | **290** | | **Pn** | **18 59 37.0** | **+3.2** |
| **PMG** | **Port Moresby** | **7.76** | **227** | P | **Pn** | **19 00 04.4** | **+4.2** |
| | 0.9nm,0.3s,baz=38,slow=7.5,SNR=2.1 | | | | | | |
| PMG | | | | S | **Sn** | **19 01 27.4** | **+0.6** |
| | 1.0nm,0.3s,baz=57,slow=15,SNR=3.6 | | | | | | |
| **PMG** | **Port Moresby** | **7.76** | **227** | | **Pn** | **19 00 03.8** | **+3.7** |
| **PATS** | **Pohnpei** | **12.12** | **27** | Pn | **Pn** | **19 01 00.0** | **+0.2** |
| **COEN** | **Coen** | **13.71** | **224** | P | **P** | **19 01 26.4** | **-2.5** |
| **CTA** | **Charters Tower** | **17.18** | **201** | LR | LR | 19 07 33.0 | |
| | comp=Z,70nm,20.3s,baz=79,slow=33 | | | | | | |
| **ONTNC** | **Ouen Toro** | **22.41** | **145** | P | **P** | **19 03 04.7** | **+0.5** |
| **MTN** | **Manton Dam** | **23.18** | **247** | | **P** | **19 03 12.1** | **-0.2** |
| MTN | | | | IAmb | IAmb | 19 03 21.2 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **19 03 18.3** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 19 03 19.6 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.84** | **227** | P | **P** | **19 03 18.4** | **-0.2** |
| **WRAB** | **Tennant Creek** | **23.97** | **227** | P | **P** | **19 03 19.4** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 19 03 20.7 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.97** | **227** | P | **P** | **19 03 19.4** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 19 03 20.8 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.98** | **227** | P | **P** | **19 03 19.7** | **-0.1** |
| | comp=Z,4.9nm,0.5s,baz=53,slow=9.7,SNR=77 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.98** | **227** | P | **P** | **19 03 18.5** | **-1.3** |
| **KNRA** | **Kununurra** | **26.36** | **242** | P | **P** | **19 03 41.1** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 19 04 04.3 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **26.73** | **221** | P | **P** | **19 03 44.3** | **-0.5** |
| **ASAR** | **Alice Springs** | **26.73** | **221** | P | **P** | **19 03 44.3** | **-0.5** |
| | comp=Z,1.0nm,0.4s,baz=54,slow=9.1,SNR=46 | | | | | | |
| **ASAR** | **Alice Springs** | **26.73** | **221** | P | **P** | **19 03 44.1** | **-0.7** |
| **BATI** | **Baumata** | **29.59** | **257** | LR | LR | 19 18 31.9 | |
| | comp=Z,60nm,20.6s,baz=158,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.07** | **240** | P | **P** | **19 04 13.6** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=62,slow=6.5,SNR=15 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.07** | **240** | P | **P** | **19 04 12.7** | **-1.8** |
| FITZ | | | | IAmb | IAmb | 19 04 36.5 | |
| | comp=Z,13nm,1.6s | | | | | | |
| **BBOO** | **Buckleboo** | **32.63** | **207** | P | **P** | **19 04 37.0** | **+0.1** |
| **FORT** | **Forrest** | **35.40** | **219** | P | **P** | **19 04 59.9** | **-1.1** |
| **MORW** | **Morawa** | **42.85** | **230** | P | **P** | **19 06 01.7** | **-1.6** |
| **ELK** | **Elko** | **94.06** | **50** | LR | LR | 19 51 51.9 | |
| | comp=Z,14nm,18.0s,baz=345,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **123.47** | **329** | PKP | **PKiKP** | **19 17 02.9** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=81,slow=3.3,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.13** | **289** | PKPbc | **PKPbc** | **19 17 56.9** | **+0.8** |
| | comp=Z,1.1nm,0.7s,baz=66,slow=1.5,SNR=6.3 | | | | | | |

*IDC **19** 19:06:50.9±3.4, 34°39'N×136°82'E, h304km±84km, mb2.9/2, mb1 3.1/3, mb1mx2.7/43, mbtmp3.4/3, Error ellipse: s-maj=160.8km s-min=27.0km az=58.0*

*JMA **19** 19:06:51.2±0.3, 34°71'N×136°95'E, h339km±3km, M2.7*

**ISC 19 19:06:52.0±1.2, 34°7'N±0'1×137°0E±0'1, h331km±9km, n16, σ0°60/19, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAA** | **Atsumi** | **0.11** | **101** | P | **Pn** | **19 07 34.0** | **+0.5** |
| JAA | | | | S | **S** | **19 08 06.8** | **+0.1** |
| **JIE** | **Ise** | **0.36** | **225** | P | **Pn** | **19 07 34.2** | **+0.3** |
| JIE | | | | S | **S** | **19 08 06.9** | **-0.4** |
| **JYTA** | **Yamagatataniai** | **0.97** | **346** | P | **Pn** | **19 07 35.7** | **+0.3** |
| **JWY** | **Kouya** | **1.25** | **250** | P | **Pn** | **19 07 37.1** | **+0.1** |
| **JTNC** | **Tanabenakahech** | **1.43** | **235** | P | **Pn** | **19 07 37.8** | **-0.1** |
| **JWT** | **Wachi** | **1.47** | **296** | P | **Pn** | **19 07 37.9** | **-0.1** |
| **JYN** | **Shimob** | **1.51** | **56** | P | **Pn** | **19 07 38.7** | **+0.4** |
| **JKG** | **Kaga** | **1.71** | **341** | P | **Pn** | **19 07 39.0** | **-0.4** |
| **JOD2** | **Odawara 2** | **1.81** | **70** | P | **Pn** | **19 07 40.5** | **+0.4** |
| **JRY** | **Ryogami san** | **2.06** | **48** | P | **Pn** | **19 07 42.5** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **2.12** | **27** | P | **Pn** | **19 07 42.3** | **-0.1** |
| | 0.3nm,0.3s,baz=212,slow=8.3,SNR=24 | | | | | | |
| MJAR | | | | S | **S** | **19 08 22.1** | **-0.7** |
| | 0.1nm,0.3s,baz=208,slow=12,SNR=4.1 | | | | | | |
| **MAT** | **Matsushiro** | **2.12** | **27** | P | **Pn** | **19 07 42.6** | **+0.2** |
| **JAI** | **Aioi** | **2.29** | **249** | P | **Pn** | **19 07 43.4** | **-0.4** |
| **JAG** | **Ashikaga** | **2.66** | **48** | P | **Pn** | **19 07 45.8** | **-1.0** |
| **SONM** | **Songino Array** | **26.33** | **309** | P | **P** | **19 12 00.0** | **+1.4** |
| | 0.4nm,0.5s,baz=100,slow=9.2,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **54.35** | **183** | P | **P** | **19 15 44.9** | **-0.6** |
| | 0.2nm,0.3s,baz=0.9,slow=7.6,SNR=8.3 | | | | | | |

*IDC **19** 19:12:46.4±2.7, 37°.08'N×142°.50'E, h0km, mb3.4/3, mb1 3.6/6, mb1mx3.3/44, mbtmp3.5/6, ML3.2/3, MS2.6/2, Ms1 2.6/2, ms1mx2.2/49, Error ellipse: s-maj=53.8km s-min=28.8km az=65.0*

*JMA **19** 19:12:49.3±0.3, 37°.18'N×142°.17'E, h31km, M3.6*

*NIED **19** 19:12:49.3, 37°.18'N×142°.17'E, h31km, MW3.5, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.48; $M_{\theta\theta}$0.45; $M_{\phi\phi}$1.03; $M_{r\theta}$0.10; $M_{\theta\phi}$-0.26; $M_{\phi r}$1.62; Fault plane solution: $M_0$2.07000×$10^{14}$ NP1: $\phi_s$177.00000°, δ71.00000°, λ-82.00000°. NP2: $\phi_s$335.00000°, δ21.00000°, λ-111.00000°.*

**ISC 19 19:12:47.1±2.4, 37°.18N±0'.05×142°.20E±0'.08, h0km±13km, n25, σ1°68/27, mb3.4/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **1.07** | **281** | P | **Pg** | **19 13 08.1** | **+0.5** |
| JFK | | | | *e*S | **Sg** | **19 13 21.1** | **-0.4** |
| **JMST** | **Minamisoumatoc** | **1.18** | **298** | P | **Pb** | **19 13 09.7** | **-0.6** |
| JMST | | | | *e*S | **Sg** | **19 13 23.9** | **-1.0** |
| **JIKH** | **Ishinomakikobu** | **1.27** | **333** | P | **Pn** | **19 13 10.8** | **-1.3** |
| **JMM** | **Marumori** | **1.31** | **302** | P | **Pn** | **19 13 11.8** | **-0.8** |
| JMM | | | | *e*S | **Sb** | **19 13 27.6** | **-2.4** |
| **JIO** | **Ouri** | **1.44** | **333** | P | **Pn** | **19 13 13.5** | **-0.9** |
| **JFT** | **Otama** | **1.52** | **284** | P | **Pn** | **19 13 15.6** | **0.0** |
| JFT | | | | *e*S | **Sn** | **19 13 34.2** | **-1.9** |
| **JOU** | **Okura** | **1.70** | **315** | P | **Pn** | **19 13 18.4** | **+0.4** |
| JOU | | | | *e*S | **Sn** | **19 13 39.2** | **-1.3** |
| **JMK** | **Ichinoseki** | **1.93** | **337** | P | **Pn** | **19 13 21.9** | **+0.7** |
| **JYS** | **Shirataka** | **1.99** | **302** | *e*S | **Sb** | **19 13 47.9** | **-1.5** |
| **JFY** | **Yanaizu** | **2.00** | **277** | P | **Pb** | **19 13 23.4** | **-0.9** |
| JFY | | | | *e*S | **Sn** | **19 13 47.4** | **-0.5** |
| **JYK** | **Kaneyama** | **2.27** | **321** | P | **Pn** | **19 13 26.5** | **+0.7** |
| **JAG** | **Ashikaga** | **2.33** | **252** | P | **Pn** | **19 13 26.4** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **3.26** | **260** | Pn | **Pn** | **19 13 41.3** | **+1.8** |
| | 1.0nm,0.3s,baz=84,slow=15,SNR=23 | | | | | | |
| MJAR | | | | LR | LR | 19 15 14.8 | |
| | comp=Z,108nm,18.6s,baz=32,slow=42 | | | | | | |
| **MAT** | **Matsushiro** | **3.26** | **260** | P | **Pn** | **19 13 41.1** | **+1.6** |
| MAT | | | | *e*S | **Sn** | **19 14 21.5** | **+2.5** |
| **JHJ** | **Hachijo jima 2** | **4.50** | **207** | Pn | **Pn** | **19 13 56.7** | **+0.1** |
| | 9.4nm,0.3s,baz=338,slow=20,SNR=31 | | | | | | |
| JHJ | | | | Sn | **Sn** | **19 14 45.7** | **-4.0** |
| | 11nm,0.3s,baz=70,slow=24,SNR=2.5 | | | | | | |
| **KSRS** | **Korea Array** | **11.37** | **276** | Pn | **Pn** | **19 15 34.1** | **+3.4** |
| | 0.1nm,0.3s,baz=83,slow=14,SNR=2.2 | | | | | | |
| KSRS | | | | LR | LR | 19 19 38.7 | |
| | comp=Z,20nm,20.3s,baz=115,slow=35 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.69** | **122** | T | T | 19 47 34.3 | |
| | baz=315,slow=75,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.70** | **122** | T | T | 19 47 31.1 | |
| | baz=315,slow=75,SNR=8.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.71** | **122** | T | T | 19 47 38.6 | |
| | baz=315,slow=75,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **28.23** | **304** | P | **P** | **19 18 43.3** | **+1.6** |
| | 0.4nm,0.7s,baz=106,slow=9.1,SNR=2.8 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.42** | **124** | T | T | 19 48 26.4 | |
| | baz=316,slow=76,SNR=8.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.42** | **124** | T | T | 19 48 24.0 | |
| | baz=316,slow=76,SNR=6.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.43** | **124** | T | T | 19 48 25.1 | |
| | baz=316,slow=76,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.57** | **302** | P | **P** | **19 21 01.9** | **+1.2** |
| | 0.3nm,0.7s,baz=90,slow=10,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.29** | **189** | P | **P** | **19 22 35.4** | **-1.2** |
| | 0.5nm,1.0s,baz=6.0,slow=7.1,SNR=5.8 | | | | | | |

**IDC 19 19:47:54.4±1.5, 2°91S×129°55E, h0km, mb3.4/2, mb1 3.7/4, mb1mx3.4/29, mbtmp3.5/4, ML3.6/2, Error ellipse: s-maj=45.7km s-min=25.0km az=84.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.65** | **40** | Pn | Pn | 19 48 38.3 | -0.1 |
| | 21nm,0.3s,baz=265,slow=22,SNR=224 | | | | | | |
| SIJI | | | | Sn | Sn | 19 49 07.6 | -3.7 |
| | 11nm,0.3s,baz=49,slow=19,SNR=10.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.57** | **165** | P | Pn | 19 51 58.9 | -1.9 |
| | 0.1nm,0.3s,baz=347,slow=12,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **21.07** | **169** | P | P | 19 52 41.3 | +1.0 |
| | 1.2nm,0.5s,baz=348,slow=10,SNR=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.59** | **326** | P | P | 19 58 33.6 | 0.0 |
| | 0.2nm,0.4s,baz=111,slow=8.3,SNR=7.3 | | | | | | |

**IDC 19 20:13:04.1±52.0, 15°79S×175°64W, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.6/26, mbtmp3.7/3, Error ellipse: s-maj=981.8km s-min=181.2km az=78.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **41.98** | **240** | P | P | 20 20 57.1 | -0.1 |
| | 1.0nm,0.6s,baz=95,slow=12,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.66** | **257** | P | P | 20 21 42.6 | -0.1 |
| | 0.3nm,0.9s,baz=91,slow=8.1,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **47.94** | **252** | P | P | 20 21 44.6 | -0.2 |
| | 1.8nm,0.6s,baz=88,slow=8.3,SNR=39 | | | | | | |

**JMA 19 21:11:10.9±0.2, 37°.75N×144°.53E, h47km, M4.2, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **2.48** | **284** | P | Pn | 21 11 50.1 | +1.3 |
| **JIO** | **Ouri** | **2.61** | **287** | P | Pn | 21 11 51.9 | +1.4 |
| JIO | | | | *e*S | Sn | 21 12 22.5 | +1.6 |
| **OFUJ** | **Ofunato** | **2.61** | **301** | P | Pn | 21 11 51.9 | +1.3 |
| OFUJ | | | | *e*S | Sn | 21 12 22.5 | +1.5 |
| **JKMT** | **Kesennumamotoy** | **2.63** | **295** | P | Pn | 21 11 52.1 | +1.3 |
| **JMK** | **Ichinoseki** | **2.87** | **296** | P | Pn | 21 11 55.8 | +1.7 |
| JMK | | | | *e*S | Sn | 21 12 28.9 | +1.6 |
| **JOM** | **Ohasama** | **3.06** | **305** | P | Pn | 21 11 58.7 | +1.9 |
| **JFT** | **Otama** | **3.34** | **267** | P | Pn | 21 12 02.7 | +2.1 |
| JFT | | | | S | Sn | 21 12 41.1 | +2.1 |
| **JYK** | **Kaneyama** | **3.48** | **291** | P | Pn | 21 12 04.8 | +2.3 |
| JYK | | | | *e*S | Sn | 21 12 45.1 | +2.6 |
| **BSO1** | **Boso 1** | **4.22** | **224** | P | Pn | 21 12 11.7 | -0.5 |
| **JRY** | **Ryogami san** | **4.83** | **251** | P | Pn | 21 12 21.9 | +0.8 |
| JRY | | | | *e*S | Sn | 21 13 14.8 | -1.0 |
| **JCH** | **Churui** | **4.94** | **350** | P | Pn | 21 12 21.4 | -1.1 |
| JCH | | | | *e*S | Sn | 21 13 14.6 | -3.7 |
| **MAT** | **Matsushiro** | **5.19** | **258** | P | Pn | 21 12 28.4 | +2.4 |
| MAT | | | | S | Sn | 21 13 27.7 | +3.0 |
| **NEM2** | **Nemuro 2** | **5.69** | **9** | P | Pn | 21 12 29.3 | -3.4 |
| NEM2 | | | | *e*S | Sn | 21 13 28.5 | -8.1 |
| **JHJ2** | **Mitsune** | **6.02** | **221** | P | Pn | 21 12 35.9 | -1.4 |
| **JTKR** | **Abashiri--Toko** | **6.23** | **356** | P | Pn | 21 12 39.1 | -1.1 |
| JTKR | | | | S | Sn | 21 13 45.1 | -5.0 |
| **JHR** | **Hokuryu** | **6.35** | **341** | P | Pn | 21 12 43.7 | +1.8 |

*TUL **19** 21:16:48.2±0.8, 36°.48N±0°.03×98°.74W±0°.04, h7km±5km, ML3.4, mb_Lg3.2/67(NEIC), Error ellipse: s-maj=5.0km s-min=3.5km az=119.0*

**NEIC 19 21:16:49.2±0.7, 36°.46N±0°.03×98°.69W±0°.04, h7km±3km, Error ellipse: s-maj=5.2km s-min=3.5km az=111.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.27** | **253** | Pg | Pg | 21 16 53.1 | -1.4 |
| U32A | | | | Sg | Sg | 21 16 56.9 | -1.1 |
| **OKCFA** | **Oklahoma City** | **1.45** | **136** | | Pn | 21 17 14.9 | -0.8 |
| **FNO** | **Franklin** | **1.59** | **139** | Pn | Pn | 21 17 17.3 | -0.4 |
| **WMOK** | **Wichita Mounta** | **1.72** | **183** | | Pn | 21 17 18.4 | -1.1 |
| **T35A** | **Sooner Cattle** | **1.81** | **75** | | Pn | 21 17 20.7 | 0.0 |
| **R32A** | **Long Quarter,** | **1.96** | **359** | Pn | Pn | 21 17 22.8 | -0.1 |
| **W35A** | **Tecumseh** | **1.97** | **131** | Pn | Pn | 21 17 22.4 | -0.5 |
| **X34A** | **Smith Ranch, M** | **1.98** | **159** | Pn | Pn | 21 17 23.7 | +0.6 |
| **TUL1** | **Leonard** | **2.40** | **102** | | Pn | 21 17 28.7 | -0.2 |
| TUL1 | | | | IAmb_Lg | | 21 18 06.5 | |
| | comp=Z,88nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.49** | **341** | Pn | Pn | 21 17 29.7 | -0.5 |
| CBKS | | | | IAmb_Lg | | 21 18 08.9 | |
| | comp=Z,74nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **2.90** | **238** | | Pn | 21 17 34.6 | -1.3 |
| **KSU1** | **Kansas State U** | **3.11** | **31** | Pn | Pn | 21 17 37.9 | -0.7 |
| **Z35A** | **Perchaven, San** | **3.34** | **159** | | Pn | 21 17 41.4 | -0.3 |
| **U38A** | **Gravette** | **3.47** | **89** | | Pn | 21 17 43.4 | -0.1 |
| U38A | | | | IAmb_Lg | | 21 18 38.5 | |
| | comp=Z,45nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.83** | **91** | | Pn | 21 17 48.3 | -0.3 |
| **ABTX** | **Abilene, Hawle** | **3.91** | **192** | | Pn | 21 17 48.3 | -1.3 |
| **KSCO** | **Kaye Shedlock'** | **4.03** | **310** | | Pn | 21 17 50.6 | -0.8 |
| **MSTX** | **Muleshoe** | **4.17** | **235** | IAmb_Lg | | 21 19 07.5 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.38** | **12** | Pn | Pn | 21 17 54.5 | -1.6 |
| N33A | | | | IAmb_Lg | | 21 19 15.6 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.41** | **135** | IAmb_Lg | | 21 19 14.1 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.46** | **72** | IAmb_Lg | | 21 19 21.4 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.57** | **167** | Pg | Pb | 21 18 11.5 | +1.8 |
| **T25A** | **Trinidad** | **4.64** | **280** | IAmb_Lg | | 21 19 13.3 | |
| | comp=Z,56nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.71** | **90** | IAmb_Lg | | 21 19 16.7 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **4.96** | **5** | Pn | Pn | 21 18 03.0 | -1.0 |
| BGNE | | | | Pg | Pg | 21 18 20.5 | -3.7 |
| BGNE | | | | IAmb_Lg | | 21 19 38.5 | |
| | comp=Z,53nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **5.04** | **151** | IAmb_Lg | | 21 19 42.0 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.17** | **111** | IAmb_Lg | | 21 19 39.7 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.19** | **331** | Pn | Pn | 21 18 05.0 | -2.3 |
| OGNE | | | | Pg | Pg | 21 18 24.7 | -3.9 |
| **MGMO** | **Mountain Grove** | **5.20** | **80** | IAmb_Lg | | 21 19 35.1 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.32** | **101** | IAmb_Lg | | 21 19 42.0 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.34** | **94** | IAmb_Lg | | 21 19 40.8 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.34** | **120** | IAmb_Lg | | 21 19 50.7 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.39** | **102** | IAmb_Lg | | 21 19 42.1 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.60** | **285** | Pn | Pn | 21 18 13.1 | +0.1 |
| SDCO | | | | Pg | Pb | 21 18 31.2 | +3.9 |
| SDCO | | | | IAmb_Lg | | 21 19 52.6 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.70** | **298** | IAmb_Lg | | 21 19 55.4 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.74** | **170** | IAmb_Lg | | 21 20 04.2 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **NATX** | **Nacogdoches** | **5.75** | **143** | IAmb_Lg | | 21 20 05.3 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **5.80** | **122** | IAmb_Lg | | 21 20 03.5 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **189** | IAmb_Lg | | 21 20 14.3 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.14** | **73** | IAmb_Lg | | 21 20 01.8 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **K31A** | **O'Neill** | **6.16** | **360** | IAmb_Lg | | 21 20 06.9 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.65** | **85** | IAmb_Lg | | 21 20 22.8 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **FVM** | **French Village** | **6.76** | **75** | IAmb_Lg | | 21 20 24.9 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **6.90** | **36** | IAmb_Lg | | 21 20 36.4 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.16** | **315** | IAmb_Lg | | 21 20 34.2 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.31** | **231** | IAmb_Lg | | 21 20 48.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.64** | **78** | IAmb_Lg | | 21 20 52.0 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **SUSD** | **Miller** | **7.98** | **359** | IAmb_Lg | | 21 21 15.1 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.56** | **27** | IAmb_Lg | | 21 21 29.8 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **RSSD** | **Black Hills** | **8.67** | **334** | IAmb_Lg | | 21 21 28.1 | |
| | comp=Z,16nm,0.9s | | | | | | |

**ASRS 19 21:20:26.4±0.2, 51°N±2°×97°8E±°, h5km, MLh4.0/7, 1C-1D, Error ellipse: s-maj=4.1km s-min=2.4km az=5.1, confirmed, Tuva-Buryatia-Mongolia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNGR** | **Kungurtug, Tuv** | **0.56** | **219** | ↑Pg | Pg | 21 20 37.5 | +0.4 |
| KNGR | | | | Sg | Sg | 21 20 43.0 | -1.3 |
| **MOY** | **Mondy** | **1.94** | **70** | ↓Pg | Pg | 21 21 06.1 | +2.5 |
| MOY | | | | Sg | Sg | 21 21 32.7 | +4.0 |
| **ERNS** | **Erzin** | **2.01** | **249** | Pg | Pg | 21 21 06.1 | +1.2 |
| ERNS | | | | Sg | Sg | 21 21 32.8 | +1.8 |
| **KZLR** | **Kyzyl** | **2.36** | **288** | Pg | Pg | 21 21 12.3 | +0.7 |
| KZLR | | | | Sg | Sg | 21 21 44.9 | +2.6 |
| **ZAK** | **Zakamensk** | **3.38** | **99** | Pn | Pn | 21 21 22.4 | +2.5 |
| ZAK | | | | Pg | Pg | 21 21 28.9 | -2.1 |
| ZAK | | | | Sg | Sg | 21 22 13.6 | -1.2 |
| **IRK** | **Irkutsk** | **4.05** | **70** | Sg | Sg | 21 22 36.6 | +0.3 |
| **DJOS** | **Djoyskaya Sosn** | **4.49** | **296** | Pg | Pg | 21 21 52.2 | -0.2 |
| DJOS | | | | Sg | Sg | 21 22 52.5 | +2.0 |
| **CERR** | **Cheremushki** | **4.50** | **296** | Pn | Pn | 21 21 37.2 | +2.0 |
| CERR | | | | Pg | Pg | 21 21 54.0 | +1.4 |
| CERR | | | | Sg | Sg | 21 22 53.7 | +2.8 |
| **MINR** | **Mina** | **4.52** | **330** | Pn | Pb | 21 21 42.1 | -4.1 |
| MINR | | | | Pg | Pg | 21 21 55.0 | +2.0 |
| MINR | | | | Sg | Sg | 21 22 57.2 | +5.6 |
| **DJO** | **Djoy, Khakassi** | **4.59** | **295** | Pn | Pn | 21 21 39.8 | +3.4 |
| DJO | | | | Pg | Pg | 21 21 54.4 | +0.1 |
| DJO | | | | Sg | Sg | 21 22 53.2 | -0.5 |

**NEIC 19 21:26:24.7±0.6, 36°.48N±0°.01×98°.74W±0°.02, h7km±1km, ML2.2/40, Error ellipse: s-maj=2.1km s-min=1.8km az=173.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.24** | **246** | Pg | Pg | 21 26 28.9 | -0.5 |
| U32A | | | | Sg | Sg | 21 26 32.6 | 0.0 |
| U32A | | | | IAML | | 21 26 32.8 | |
| | comp=N,664nm,0.4s | | | | | | |
| **FNO** | **Franklin** | **1.63** | **138** | Pn | Pn | 21 26 52.5 | -1.4 |
| **WMOK** | **Wichita Mounta** | **1.74** | **181** | Pn | Pn | 21 26 54.5 | -0.9 |

*IDC **19** 21:50:49.2±1.0, 45°.85S×77°.40W, h0km, mb4.1/7, mb1 4.3/9, mb1mx4.1/35, mbtmp4.2/9, ML3.9/2, MS4.1/28, Ms1 4.1/28, ms1mx4.0/48, Error ellipse: s-maj=36.3km s-min=19.3km az=100.0*

*NEIC **19** 21:50:49.4±1.7, 45°.73S±0°.06×77°.7W±0°.2, h10km±1km, mb4.6/56, Mwr4.7/11, Error ellipse: s-maj=21.0km s-min=10.9km az=268.0*

*NEIC **19** 21:50:49.5, 45°.72S×77°.65W, h23km, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.79; $M_{\theta\theta}$0.15; $M_{\phi\phi}$-0.95; $M_{r\theta}$-0.66; $M_{\theta\phi}$-0.73; $M_{\phi r}$0.48; Fault plane solution: $M_0$1.40000×$10^{16}$ NP1:$\phi_s$238.94000°, δ53.36000°, λ142.77000°. NP2:$\phi_s$353.34000°, δ60.96000°, λ43.05000°. Principal axes: T 1.4742, Plg50.0000°, Azm210.0000°; N -0.1526, Plg40.0000°, Azm21.0000°; P -1.3216, Plg5.0000°, Azm115.0000°;*

*GCMT **19** 21:50:50.4±0.3, 45°.80S±0°.02×77°.89W±0°.03, h25km±1km, MW5.0/93, Moment Tensor Solution. s24,c27; s93,c118; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.68±.20; $M_{\theta\theta}$2.08±.17; $M_{\phi\phi}$-1.40±.17; $M_{r\theta}$-0.80±.29; $M_{\theta\phi}$-3.51±.12; $M_{\phi r}$-1.48±.34; Best double couple: $M_w$4.30400×$10^{16}$ NP1:$\phi_s$80.00000°, δ72.00000°, λ-163.00000°. NP2: $\phi_s$344.00000°, δ74.00000°, λ-19.00000°. Principal axes: T 4.2600, Plg1.0000°, Azm32.0000°; N 0.0880, Plg65.0000°, Azm125.0000°; P -4.3480, Plg25.0000°, Azm302.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*GUC **19** 21:51:17.6±0.3, 39°.92S×74°.42W, h5km, ML3.7*

**ISC 19 21:50:49.3±0.6, 45°.72S±0°.06×77°.8W±0°.1, h10km, n135, σ1°22/104, mb4.5/24, MS4.1/27, 1C-1D, Off coast of southern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GO07** | **Milladeo Hill,** | **3.92** | **50** | Pn | **Pn** | **21 51 47.9** | **-1.6** |
| **GO07** | **Milladeo Hill,** | **3.92** | **50** | ↑*e*P | **Pn** | **21 51 48.0** | **-1.6** |
| GO07 | | | | IAML | | 21 52 54.0 | |
| | comp=E,180nm,0.7s | | | | | | |
| **COYC** | **Coyhaique** | **3.98** | **90** | Pn | **Pn** | **21 51 49.3** | **-1.1** |
| **LL07** | **Hotel Espejo d** | **4.21** | **48** | Pn | **Pn** | **21 51 51.4** | **-2.2** |
| **GO08** | **Villa O'Higgin** | **4.49** | **130** | | **Pn** | **21 51 56.6** | **-0.8** |
| **LL06** | **Loncomilla** | **4.60** | **42** | *e*P | **Pn** | **21 51 58.1** | **-0.7** |
| **LL02** | **Itahaleuf** | **4.93** | **61** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PB14** | **IPOC Station P** | **21.87** | **18** | P | | **P** | **21 55 41.5** | **-1.0** |
| PB14 | | | | IAmb | | IAmb | 21 55 57.9 | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **ITQB** | **Itaqui** | **23.05** | **53** | P | | **P** | **21 55 55.7** | **+1.0** |
| ITQB | | | | IAmb | | IAmb | 21 56 01.8 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **PLTB** | **Pedras Altas** | **23.32** | **62** | P | | **P** | **21 55 56.6** | **-0.9** |
| PLTB | | | | IAmb | | IAmb | 21 56 05.5 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **PB15** | **IPOC Station P** | **23.45** | **19** | P | | **P** | **21 55 59.6** | **+0.7** |
| PB15 | | | | IAmb | | IAmb | 21 56 05.4 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **PB04** | **IPOC Station P** | **24.14** | **17** | P | | **P** | **21 56 05.2** | **-0.5** |
| **LVC** | **Limon Verde** | **24.15** | **20** | P | | **P** | **21 56 07.3** | **+1.3** |
| | comp=Z,3.2nm,0.7s,baz=194,slow=9.9,SNR=6.8 | | | | | | | |
| LVC | | | | LR | | LR | 22 05 59.1 | |
| | comp=Z,305nm,18.5s,baz=190,slow=38 | | | | | | | |
| **LVC** | **Limon Verde** | **24.15** | **20** | P | | **P** | **21 56 05.2** | **-0.7** |
| LVC | | | | IAmb | | IAmb | 21 56 22.1 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **PB02** | **IPOC Station P** | **25.18** | **17** | P | | **P** | **21 56 14.9** | **0.0** |
| PB02 | | | | IAmb | | IAmb | 21 56 26.3 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **CPUP** | **Villa Florida** | **25.31** | **47** | P | | **P** | **21 56 16.4** | **+0.4** |
| | comp=Z,7.6nm,0.9s,baz=229,slow=9.0,SNR=11 | | | | | | | |
| CPUP | | | | LR | | LR | 22 06 48.7 | |
| | comp=Z,1μm,18.5s,baz=216,slow=38 | | | | | | | |
| **CPUP** | **Villa Florida** | **25.31** | **47** | P | | **P** | **21 56 15.9** | **-0.1** |
| CPUP | | | | IAmb | | IAmb | 21 56 28.0 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **PB01** | **IPOC Station P** | **25.53** | **18** | P | | **P** | **21 56 18.1** | **-0.1** |
| PB01 | | | | IAmb | | IAmb | 21 56 29.7 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **TA02** | **Huaiquique** | **26.15** | **16** | P | | **P** | **21 56 24.1** | **+0.5** |
| **PB08** | **IPOC Station P** | **26.48** | **18** | P | | **P** | **21 56 27.1** | **0.0** |
| PB08 | | | | IAmb | | IAmb | 21 56 42.6 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **PB11** | **IPOC Station P** | **26.74** | **17** | P | | **P** | **21 56 28.4** | **-0.8** |
| PB11 | | | | IAmb | | IAmb | 21 56 42.2 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **GO01** | **Chusmiza** | **26.93** | **18** | P | | **P** | **21 56 31.2** | **-0.1** |
| **ITAB** | **Concordia** | **27.47** | **57** | P | | **P** | **21 56 36.3** | **+0.8** |
| **PB16** | **IPOC Station P** | **28.15** | **17** | P | | **P** | **21 56 43.4** | **+1.1** |
| **LPAZ** | **La Paz** | **30.43** | **18** | P | | **P** | **21 57 04.9** | **+2.3** |
| | comp=Z,0.5nm,0.5s,baz=217,slow=12,SNR=1.5 | | | | | | | |
| **LPAZ** | **La Paz** | **30.43** | **18** | P | | **P** | **21 57 02.9** | **+0.3** |
| **AQDB** | **Aquidauana** | **31.03** | **43** | P | | **P** | **21 57 07.1** | **0.0** |
| AQDB | | | | IAmb | | IAmb | 21 57 27.0 | |
| | comp=Z,7.1nm,1.0s | | | | | | | |
| **RPN** | **Rapa Nui** | **31.18** | **296** | LR | | LR | 22 06 22.6 | |
| | comp=Z,423nm,19.9s,baz=154,slow=30 | | | | | | | |
| **SIV** | **San Ignacio** | **32.77** | **31** | LR | | LR | 22 11 28.7 | |
| | comp=Z,413nm,20.4s,baz=226,slow=38 | | | | | | | |
| **NNA** | **Nana** | **33.63** | **2** | LR | | LR | 22 07 36.4 | |
| | comp=Z,272nm,19.3s,baz=184,slow=30 | | | | | | | |
| **BELA** | **Belgrano 2** | **36.34** | **166** | P | | **P** | **21 57 53.0** | **+0.1** |
| **ATAH** | **Atahualpa** | **38.44** | **359** | P | | **P** | **21 58 14.1** | **+2.4** |
| | comp=Z,3.0nm,0.7s,baz=163,slow=9.5,SNR=4.6 | | | | | | | |
| ATAH | | | | LR | | LR | 22 10 25.2 | |
| | comp=Z,342nm,20.4s,baz=200,slow=30 | | | | | | | |
| **BDFB** | **Brasilia** | **38.99** | **49** | P | | **P** | **21 58 16.5** | **+0.6** |
| | comp=Z,2.5nm,0.7s,baz=218,slow=8.2,SNR=6.1 | | | | | | | |
| BDFB | | | | LR | | LR | 22 15 49.3 | |
| | comp=Z,953nm,18.2s,baz=222,slow=39 | | | | | | | |
| **BDFB** | **Brasilia** | **38.99** | **49** | P | | **P** | **21 58 15.2** | **-0.8** |
| **VNA3** | **Neumayer Olymp** | **40.55** | **153** | P | | **P** | **21 58 29.2** | **+0.8** |
| **VNA2** | **Neumayer--Watz** | **41.30** | **152** | P | | **P** | **21 58 35.2** | **+0.8** |
| | baz=272,slow=8.8 | | | | | | | |
| **SNAA** | **Sanae** | **42.73** | **153** | LR | | LR | 22 14 16.2 | |
| | comp=Z,174nm,18.9s,baz=280,slow=33 | | | | | | | |
| **SNAA** | **Sanae** | **42.73** | **153** | P | | **P** | **21 58 45.8** | **-0.4** |
| **QSPA** | **South Pole Qui** | **44.53** | **180** | P | | **P** | **21 59 01.5** | **+0.7** |
| | comp=Z,4.7nm,0.9s,baz=134,slow=6.5,SNR=6.9 | | | | | | | |
| QSPA | | | | LR | | LR | 22 15 53.8 | |
| | comp=Z,178nm,18.0s,baz=143,slow=34 | | | | | | | |
| **QSPA** | **South Pole Qui** | **44.53** | **180** | P | | **P** | **21 59 01.7** | **+0.8** |
| QSPA | | | | IAmb | | IAmb | 21 59 09.8 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **OTAV** | **Otavalo** | **45.77** | **359** | P | | **P** | **21 59 10.9** | **-0.6** |
| **PAYG** | **Puerto Ayora** | **46.20** | **343** | P | | **P** | **21 59 11.9** | **-2.5** |
| **PTGA** | **Pitinga** | **47.46** | **24** | LR | | LR | 22 22 01.6 | |
| | comp=Z,221nm,18.1s,baz=189,slow=39 | | | | | | | |
| **ROSC** | **El Rosal** | **50.43** | **4** | LR | | LR | 22 18 41.4 | |
| | comp=Z,415nm,20.6s,baz=224,slow=33 | | | | | | | |
| **ROSC** | **El Rosal** | **50.43** | **4** | P | | **P** | **21 59 47.6** | **+0.2** |
| **VNDA** | **Vanda** | **51.73** | **194** | LR | | LR | 22 18 47.9 | |
| | comp=Z,188nm,18.9s,baz=136,slow=32 | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **53.03** | **4** | P | | **P** | **22 00 05.3** | **-1.2** |
| ZARC | | | | IAmb | | IAmb | 22 00 07.2 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **MOTC** | **Monteria, Cord** | **54.28** | **3** | P | | **P** | **22 00 16.6** | **+1.1** |
| **SDV** | **Santo Domingo** | **54.73** | **9** | LR | | LR | 22 21 54.9 | |
| | comp=Z,225nm,20.7s,baz=200,slow=34 | | | | | | | |
| **MDP** | **Montagnes des** | **55.33** | **31** | LR | | LR | 22 24 50.1 | |
| | comp=Z,267nm,19.6s,baz=170,slow=37 | | | | | | | |
| **SYO** | **Syowa Base** | **56.66** | **157** | *ℓeX* | | P | 22 00 41.0 | +8.9 |
| **APG** | **El Apazote** | **61.52** | **346** | LR | | LR | 22 22 03.3 | |
| | comp=Z,118nm,19.6s,baz=80,slow=30 | | | | | | | |
| **MAW** | **Mawson** | **63.16** | **164** | LR | | LR | 22 27 23.0 | |
| | comp=Z,299nm,21.0s,baz=228,slow=35 | | | | | | | |
| **BANI** | **BANI** | **64.16** | **8** | P | | **P** | **22 01 24.0** | **0.0** |
| **CMIG** | **Matias Romero** | **64.41** | **342** | LR | | LR | 22 22 46.5 | |
| | comp=Z,73nm,21.7s,baz=186,slow=30 | | | | | | | |
| **RPZ** | **Rata Peaks** | **72.08** | **225** | LR | | LR | 22 25 56.2 | |
| | comp=Z,298nm,20.6s,baz=110,slow=29 | | | | | | | |
| **URZ** | **Urewera** | **72.78** | **233** | LR | | LR | 22 25 47.2 | |
| | comp=Z,122nm,21.3s,baz=154,slow=29 | | | | | | | |
| **SUR** | **Sutherland** | **73.02** | **119** | LR | | LR | 22 29 51.0 | |
| | comp=Z,72nm,20.7s,baz=176,slow=32 | | | | | | | |
| **435B** | **Jarrell** | **78.24** | **343** | P | | **P** | **22 02 47.2** | **-1.7** |
| **TX31** | **Lajitas Ar. Si** | **78.32** | **337** | P | | **P** | **22 02 50.9** | **+1.4** |
| TX31 | | | | IAmb | | IAmb | 22 03 03.9 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **TX32** | **Lajitas Array** | **78.32** | **337** | P | | **P** | **22 02 51.0** | **+1.5** |
| **TXAR** | **Lajitas Array** | **78.32** | **337** | P | | **P** | **22 02 52.6** | **+3.1** |
| | comp=Z,1.0nm,0.9s,baz=164,slow=5.1,SNR=7.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **78.32** | **337** | P | | **P** | **22 02 50.9** | **+1.4** |
| **BOSA** | **Boshof** | **78.39** | **119** | LR | | LR | 22 35 01.6 | |
| | comp=Z,39nm,18.1s,baz=196,slow=34 | | | | | | | |
| **BOSA** | **Boshof** | **78.39** | **119** | P | | **P** | **22 02 50.1** | **-0.2** |
| BOSA | | | | IAmb | | IAmb | 22 02 53.8 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **GOGA** | **Godfrey** | **78.93** | **355** | P | | **P** | **22 02 54.4** | **+1.7** |
| GOGA | | | | IAmb | | IAmb | 22 03 05.9 | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **TSUM** | **Tsumeb** | **80.11** | **107** | LR | | LR | 22 32 24.9 | |
| | comp=Z,44nm,20.2s,baz=204,slow=31 | | | | | | | |
| **SWET** | **Sewanee** | **80.90** | **353** | P | | **P** | **22 03 03.6** | **+0.3** |
| **MIAR** | **Mount Ida** | **81.16** | **347** | P | | **P** | **22 03 03.8** | **-0.9** |
| **LBTB** | **Lobatse** | **81.18** | **117** | LR | | LR | 22 33 40.0 | |
| | comp=Z,81nm,21.9s,baz=208,slow=32 | | | | | | | |
| **V48A** | **Smith Brothers** | **81.50** | **353** | P | | **P** | **22 03 06.7** | **+0.3** |
| **319A** | **Douglas** | **81.89** | **333** | P | | **P** | **22 03 10.4** | **+1.6** |
| 319A | | | | IAmb | | IAmb | 22 03 25.7 | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **U54A** | **Nelsons Funny** | **81.94** | **357** | P | | **P** | **22 03 10.0** | **+1.1** |
| **WVT** | **Waverly** | **81.98** | **352** | P | | **P** | **22 03 09.2** | **+0.3** |
| WVT | | | | IAmb | | IAmb | 22 03 12.1 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **82.26** | **348** | P | | **P** | **22 03 11.5** | **+1.1** |
| FCAR | | | | IAmb | | IAmb | 22 03 22.1 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **82.31** | **343** | P | | **P** | **22 03 12.2** | **+1.4** |
| WMOK | | | | IAmb | | IAmb | 22 03 23.8 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **P40A** | **Paris** | **85.83** | **349** | P | | **P** | **22 03 28.9** | **+0.4** |
| **LSZ** | **Lusaka** | **89.94** | **112** | LR | | LR | 22 39 39.1 | |
| | comp=Z,52nm,20.8s,baz=194,slow=33 | | | | | | | |
| **DZM** | **Mont Dzumac** | **90.93** | **237** | LR | | LR | 22 38 15.3 | |
| | comp=Z,51nm,18.2s,baz=108,slow=31 | | | | | | | |
| **STKA** | **Stephens Creek** | **94.93** | **213** | LR | | LR | 22 39 41.8 | |
| | comp=Z,141nm,18.1s,baz=198,slow=31 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **20.77** | **265** | T | | T | 00 22 02.9 | |
| | baz=139,slow=75,SNR=26 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **20.78** | **265** | T | | T | 00 22 16.1 | |
| | baz=139,slow=75,SNR=12 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **20.78** | **265** | T | | T | 00 22 01.9 | |
| | baz=139,slow=75,SNR=10 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **21.46** | **266** | T | | T | 00 22 47.6 | |
| | baz=260,slow=74,SNR=4.2 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **21.47** | **266** | T | | T | 00 22 48.3 | |
| | baz=134,slow=74,SNR=3.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **152.68** | **173** | PKPbc | | **PKiKP** | **22 10 46.8** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=208,slow=3.9,SNR=7.7 | | | | | | | |
| **PZH** | **PanZhiHua** | **160.82** | **179** | PKP | | **PKPdf** | **22 10 48.9** | **-0.8** |

*IDC* ***19*** *22:07:27.3±8.0,51.˝51N×178.˝64E, h0km, mb3.3/4, mb1 3.9/5, mb1mx3.5/59, mbtmp3.6/5, ML3.9/1, Error ellipse: s-maj=160.8km s-min=68.1km az=92.0*
*NEIC* ***19*** *22:07:38.8±2.6,51.˝8N±0.˝2×178.˝76E±0.˝07, h75km±11km, mb3.8/50, Error ellipse: s-maj=27.9km s-min=6.5km az=182.0*

**ISC 19 22:07:36.4**±1.4,**51.˝9N**±0.˝2×**178.˝6E**±0.˝1,**h50**km,**n63,** σ1§**38**/62,**mb3.7**/15,**Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KIWB** | **Kanaga Island** | **2.66** | **88** | Pn | **Pn** | **22 08 18.1** | **+1.4** |
| **UNV** | **Unalaska Valle** | **9.25** | **72** | Pn | **Pn** | **22 09 47.9** | **+0.9** |
| **AKUT** | **Akutan** | **9.72** | **70** | Pn | **Pn** | **22 09 54.0** | **+0.7** |
| **SDPT** | **Sand Point** | **12.92** | **66** | Pn | **Pn** | **22 10 38.9** | **+1.9** |
| **O18K** | **Koktuh Hills** | **16.66** | **51** | | **Pn** | **22 11 27.3** | **+1.1** |
| O18K | | | | IAmb | IAmb | 22 11 30.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SVW2** | **Sparrevohn** | **16.90** | **47** | Pn | **Pn** | **22 11 28.5** | **-0.6** |
| **OHAK** | **Old Harbor** | **17.12** | **61** | | **Pn** | **22 11 31.8** | **0.0** |
| **Q19K** | **Cape Douglas,** | **17.20** | **55** | P | **Pn** | **22 11 32.5** | **-0.5** |
| **N19K** | **Bonanza Creek** | **17.30** | **48** | | **Pn** | **22 11 36.3** | **+2.1** |
| N19K | | | | IAmb | IAmb | 22 11 41.7 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **TTA** | **Tatalina** | **17.48** | **41** | | **Pn** | **22 11 35.8** | **-0.5** |
| **KDAK** | **Kodiak Island** | **17.56** | **59** | P | **Pn** | **22 11 35.9** | **-1.3** |
| | comp=Z,0.4nm,0.3s,baz=271,slow=3.4,SNR=7.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **17.56** | **59** | P | **Pn** | **22 11 35.4** | **-1.8** |
| **L19K** | **White Mountain** | **17.64** | **44** | P | **Pn** | **22 11 40.1** | **+1.9** |
| **K20K** | **Telida** | **18.46** | **41** | P | **P** | **22 11 49.2** | **+1.5** |
| **CNPM** | **China Poot** | **18.54** | **54** | | **P** | **22 11 49.0** | **+0.5** |
| CNPM | | | | IAmb | IAmb | 22 11 56.3 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BRLK** | **Bradley Lake** | **18.76** | **53** | P | **P** | **22 11 50.6** | **-0.4** |
| BRLK | | | | IAmb | IAmb | 22 11 53.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **J20K** | **Nowinta River** | **18.80** | **39** | P | **P** | **22 11 52.8** | **+1.4** |
| **PPLA** | **Purkeypile** | **19.06** | **43** | P | **P** | **22 11 55.6** | **+1.2** |
| PPLA | | | | IAmb | IAmb | 22 12 02.9 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **CAST** | **Castle Rocks** | **19.30** | **42** | P | **P** | **22 11 58.3** | **+1.4** |
| **SEW** | **Seward** | **19.53** | **53** | P | **P** | **22 12 00.2** | **+0.9** |
| **RC01** | **Rabbit Creek A** | **19.61** | **50** | P | **P** | **22 12 01.1** | **+0.9** |
| RC01 | | | | IAmb | IAmb | 22 12 07.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KTH** | **Kantishna Hill** | **19.84** | **42** | P | **P** | **22 12 04.3** | **+1.5** |
| KTH | | | | IAmb | IAmb | 22 12 07.3 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **19.86** | **34** | P | **P** | **22 12 03.6** | **+0.7** |
| **H21K** | **Melozitna Rive** | **20.03** | **35** | P | **P** | **22 12 05.9** | **+1.2** |
| H21K | | | | IAmb | IAmb | 22 12 06.8 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **TRF** | **Thorofare Moun** | **20.06** | **43** | P | **P** | **22 12 07.0** | **+1.7** |
| TRF | | | | IAmb | IAmb | 22 12 08.8 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **GHO** | **Glory Hole Cre** | **20.15** | **48** | P | **P** | **22 12 08.1** | **+1.9** |
| GHO | | | | IAmb | IAmb | 22 12 19.5 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **PWL** | **Port Wells** | **20.22** | **51** | P | **P** | **22 12 06.5** | **-0.4** |
| PWL | | | | IAmb | IAmb | 22 12 10.1 | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **KNK** | **Knik Glacier** | **20.28** | **49** | P | **P** | **22 12 05.7** | **-1.9** |
| KNK | | | | IAmb | IAmb | 22 12 14.6 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| **SML** | **Sawmill** | **20.43** | **48** | P | **P** | **22 12 10.6** | **+1.4** |
| SML | | | | IAmb | IAmb | 22 12 15.0 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **RND** | **Reindeer** | **20.66** | **43** | P | **P** | **22 12 13.2** | **+1.5** |
| **MCK** | **McKinley** | **20.73** | **42** | P | **P** | **22 12 13.8** | **+1.4** |
| MCK | | | | IAmb | IAmb | 22 12 19.4 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **20.90** | **48** | P | **P** | **22 12 13.8** | **-0.5** |
| SCM | | | | IAmb | IAmb | 22 12 15.9 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **FID** | **Port Fidalgo** | **21.10** | **51** | P | **P** | **22 12 14.8** | **-1.5** |
| **DHY** | **Denali Highway** | **21.19** | **45** | P | **P** | **22 12 17.2** | **-0.3** |
| **WRH** | **Wood River Hil** | **21.33** | **41** | P | **P** | **22 12 19.4** | **+0.6** |
| **MDM** | **Murphy Dome** | **21.45** | **40** | P | **P** | **22 12 20.6** | **+0.5** |
| **KLU** | **Klutina** | **21.49** | **50** | P | **P** | **22 12 20.9** | **+0.3** |
| KLU | | | | IAmb | IAmb | 22 12 27.0 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.49** | **48** | P | **P** | **22 12 20.2** | **-0.4** |
| **CCB** | **Clear Creek Bu** | **21.51** | **41** | P | **P** | **22 12 21.1** | **+0.4** |
| CCB | | | | IAmb | IAmb | 22 12 35.3 | |
| | comp=Z,4.2nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **21.72** | **33** | P | **P** | **22 12 22.5** | **-0.4** |
| **ILAR** | **Eielson Array** | **21.92** | **41** | P | **P** | **22 12 23.8** | **-1.3** |
| | comp=Z,0.5nm,0.7s,baz=246,slow=9.7,SNR=6.9 | | | | | | |
| **H24K** | **Noodor Dome** | **21.93** | **38** | P | **P** | **22 12 26.4** | **+1.2** |
| H24K | | | | IAmb | IAmb | 22 12 27.5 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **BMRM** | **Bremner River** | **22.04** | **51** | P | **P** | **22 12 27.6** | **+1.1** |
| **HMT** | **Hamilton** | **22.13** | **53** | P | **P** | **22 12 25.4** | **-2.0** |
| **N25K** | **Chitina, Valde** | **22.14** | **50** | P | **P** | **22 12 27.2** | **-0.3** |
| N25K | | | | IAmb | IAmb | 22 12 33.6 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **22.48** | **50** | P | **P** | **22 12 31.9** | **+0.6** |
| GLB | | | | IAmb | IAmb | 22 12 31.9 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **22.65** | **30** | P | **P** | **22 12 33.0** | **+0.1** |
| TOLK | | | | IAmb | IAmb | 22 12 34.7 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **23.20** | **37** | P | **P** | **22 12 35.9** | **-2.5** |
| FYU | | | | IAmb | IAmb | 22 12 54.6 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **BARN** | **Barnard Glacie** | **23.47** | **51** | P | **P** | **22 12 40.7** | **-0.7** |
| BARN | | | | IAmb | IAmb | 22 12 51.7 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **M27K** | **Edge Creek, AK** | **23.52** | **48** | P | **P** | **22 12 43.0** | **+1.3** |
| M27K | | | | IAmb | IAmb | 22 12 52.2 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **23.65** | **46** | P | **P** | **22 12 43.5** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **23.67** | **46** | P | **P** | **22 12 43.7** | **+0.6** |
| **DAWY** | **Dawson** | **24.90** | **44** | P | **P** | **22 12 54.6** | **+0.4** |
| **HYT** | **Haines Junctio** | **25.49** | **52** | P | **P** | **22 13 01.7** | **+2.0** |
| HYT | | | | IAmb | IAmb | 22 13 04.1 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **P33M** | **Teslin, Yukon** | **27.82** | **53** | P | **P** | **22 13 16.4** | **-4.2** |
| P33M | | | | IAmb | IAmb | 22 13 24.0 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **JTM** | **Tenabayashi** | **27.86** | **262** | P | **P** | **22 13 22.5** | **+1.5** |
| **INK** | **Inuvik** | **28.02** | **36** | P | **P** | **22 13 21.4** | **-0.8** |
| **A36M** | **Sachs Harbour** | **31.47** | **30** | P | **P** | **22 13 52.8** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **36.09** | **46** | P | **P** | **22 14 32.1** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=283,slow=7.7,SNR=6.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **47.72** | **71** | P | **P** | **22 16 05.8** | **-2.4** |
| | comp=Z,0.2nm,0.5s,baz=306,slow=6.2,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.19** | **80** | P | **P** | **22 17 37.3** | **-1.9** |
| | comp=Z,0.3nm,0.6s,baz=292,slow=3.4,SNR=4.7 | | | | | | |
| **SLBS** | **Sierra La Lagu** | **60.41** | **89** | P | **P** | **22 17 42.5** | **+1.8** |
| **SCHQ** | **Schefferville** | **60.63** | **37** | P | P | 22 17 39.4 | -2.3 |

*IDC* ***19*** *22:12:58.2±1.5,40.˝97N×71.˝75E, h0km, mb4.0/7, mb1 4.0/13, mb1mx3.7/48, mbtmp3.9/13, ML3.3/6, MS3.8/3, Ms1 3.8/3, ms1mx2.7/89, Error ellipse: s-maj=23.0km s-min=10.6km az=166.0*
*MOS* ***19*** *22:13:00.6±1.4,41.˝15N×71.˝53E, h21km, mb4.3/5, Error ellipse: s-maj=10.0km s-min=5.3km az=70.7*
*KRNET* ***19*** *22:13:01.4±0.1,41.˝01N×71.˝76E, h24km, mb4.1*
*ISU* ***19*** *22:13:01,40.˝99N×71.˝68E, h5km*
*NNC* ***19*** *22:13:01.9±0.9,41.˝14N×71.˝76E, h0km, mb4.6, mpv4.3, Error ellipse: s-maj=8.6km s-min=4.0km az=5.0*
*SOME* ***19*** *22:13:01.8,41.˝13N×71.˝87E, h15km*
*NEIC* ***19*** *22:13:04.7±2.0,41.˝03N±0.˝06×71.˝67E±0.˝07, h39km±8km, mb4.2/8, Error ellipse: s-maj=8.3km s-min=7.3km az=155.0*

**ISC 19 22:13:00.6**±1.0,**41.˝09N**±0.˝02×**71.˝85E**±0.˝02,**h13**km±7km, **n176,** σ1§**84**/232,**mb4.1**/12,**MS4.0**/3,**44C-20D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANR** | **Andizhan** | **0.51** | **131** | *i* P | **Pb** | **22 13 13.0** | **+1.4** |
| ANR | | | | *i* S | **Sn** | **22 13 22.0** | **-0.4** |
| **TRKS** | **Terek-Say** | **0.69** | **310** | ⇑*i*P | **Pg** | **22 13 13.7** | **-0.4** |
| | baz=16 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **22 13 22.5** | **-0.7** |
| | baz=16 | | | | | | |
| **ARK** | **Arkit** | **0.71** | **7** | *e*P | **Pb** | **22 13 16.0** | **+1.0** |
| ARK | | | | *e*S | **Sn** | **22 13 27.0** | **-0.4** |
| **ARK** | **Arkit** | **0.71** | **7** | ⇓*i*P | **Pn** | **22 13 16.6** | **+0.1** |
| | baz=11 | | | | | | |
| ARK | | | | ⇓*i*S | **Sn** | **22 13 27.8** | **+0.4** |
| | baz=11 | | | | | | |
| **FRG** | **Fergana** | **0.72** | **184** | *i* P | **Pg** | **22 13 14.0** | **-0.6** |
| FRG | | | | *e*S | **Sg** | **22 13 24.0** | **-0.1** |
| **OHH** | **Osh** | **0.91** | **128** | ⇓*i*P | **Pb** | **22 13 18.6** | **+0.2** |
| | baz=21 | | | | | | |
| OHH | | | | ⇓*i*S | **Sb** | **22 13 30.7** | **+0.3** |
| | baz=21 | | | | | | |
| **BTK** | **Batken** | **1.30** | **218** | *i* P | **Pn** | **22 13 24.0** | **-0.6** |
| BTK | | | | *i* S | **Sn** | **22 13 39.0** | **-2.8** |
| **BTK** | **Batken** | **1.30** | **218** | ⇓*i*P | **Pn** | **22 13 23.5** | **-1.1** |
| | baz=17 | | | | | | |
| BTK | | | | ⇓*i*S | **Sn** | **22 13 39.3** | **-2.5** |
| | baz=17 | | | | | | |
| **CHMG** | **Chimgan** | **1.46** | **289** | *i* P | **Pn** | **22 13 28.0** | **+1.2** |
| CHMG | | | | *e*S | **Sb** | **22 13 47.0** | **+0.8** |
| **CHRV** | **Charvak** | **1.53** | **292** | *e*P | **Pn** | **22 13 29.0** | **+1.3** |
| CHRV | | | | *e*S | **Sb** | **22 13 49.0** | **+0.8** |
| **DRK** | **Karamyk** | **1.61** | **181** | ⇑*i*P | **Pn** | **22 13 29.4** | **+0.3** |
| | baz=79 | | | | | | |
| DRK | | | | ⇑*i*S | **Sn** | **22 13 49.7** | **-0.2** |
| | baz=79 | | | | | | |
| **AML** | **Almayashu** | **1.73** | **53** | P | **Pg** | **22 13 34.5** | **+0.6** |
| | SNR=209 | | | | | | |
| **TGS** | **TashGRES** | **1.79** | **281** | *e*P | **Pg** | **22 13 36.0** | **+1.1** |
| TGS | | | | *e*S | **Sg** | **22 14 01.0** | **+2.9** |
| **DZA** | **Taraz** | **1.84** | **348** | *e*P | **Pg** | **22 13 36.9** | **+0.9** |
| | 473nm,0.4s | | | | | | |
| DZA | | | | *e*S | **Sg** | **22 14 01.4** | **+1.7** |
| | 3μm,0.3s | | | | | | |
| **TAS** | **Tashkent** | **1.94** | **278** | PN | **Pn** | **22 13 33.9** | **+0.6** |
| TAS | | | | | | 22 14 00.4 | |
| **TAS** | **Tashkent** | **1.94** | **278** | Pn | **Pn** | **22 13 33.9** | **+0.6** |
| TAS | | | | Sn | **Sb** | **22 14 00.4** | **+0.4** |
| **TAS** | **Tashkent** | **1.94** | **278** | *e*P | **Pb** | **22 13 36.0** | **+0.1** |
| TAS | | | | *e*S | **Sb** | **22 14 02.0** | **+2.0** |
| **TAS** | **Tashkent** | **1.94** | **278** | ⇓*i*P | **Pn** | **22 13 34.6** | **+1.3** |
| | baz=81 | | | | | | |
| TAS | | | | ⇓*i*S | **Sn** | **22 13 58.9** | **+1.3** |
| | baz=81 | | | | | | |
| **MRKS** | **Merke** | **1.94** | **31** | *e*P | **Pg** | **22 13 40.1** | **+2.1** |
| | 197nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **22 14 07.2** | **+4.0** |
| | 2μm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.94** | **31** | Pg | **Pg** | **22 13 38.2** | **+0.3** |
| | 197nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 22 14 07.2 | |
| | 2μm,0.3s | | | | | | |
| **ARLS** | **Aral** | **2.01** | **67** | ⇑*i*P | **Pb** | **22 13 37.9** | **+0.7** |
| | baz=66 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sg** | **22 14 04.6** | **-0.7** |
| | baz=66 | | | | | | |
| **CHM** | **Chimkent** | **2.08** | **307** | *e*P | **Pg** | **22 13 40.6** | **+0.1** |
| | 102nm,0.2s | | | | | | |
| CHM | | | | *e*S | **Sg** | **22 14 08.4** | **+0.9** |
| | 2μm,0.4s | | | | | | |
| **YNGY** | **Yangiyul** | **2.12** | **271** | *e*P | **Pb** | **22 13 40.0** | **+1.0** |
| YNGY | | | | *e*S | **Sb** | **22 14 08.0** | **+2.8** |
| **EKS2** | **Erkin-Say** | **2.13** | **42** | P | **Pb** | **22 13 39.9** | **+0.8** |
| | SNR=30 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.13** | **42** | *e*PN | **Pb** | **22 13 39.6** | **+0.4** |
| **EKS2** | **Erkin-Say** | **2.13** | **42** | ⇑*i*P | **Pb** | **22 13 39.6** | **+0.4** |
| | baz=42 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sg** | **22 14 07.4** | **-1.7** |
| | baz=42 | | | | | | |
| **KK02** | **Karatay Array** | **2.24** | **334** | ⇑Pn | **Pb** | **22 13 40.3** | **-0.7** |
| | 26nm,0.3s | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 22 14 09.4 | |
| | 301nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **2.24** | **334** | PN | **Pb** | **22 13 40.3** | **-0.7** |
| KKAR | | | | | | 22 14 09.5 | |
| **KKAR** | **Karatay Array** | **2.24** | **334** | | **Pb** | **22 13 40.2** | **-0.7** |
| KKAR | | | | Sn | **Sb** | **22 14 09.5** | **+0.8** |
| **UCH** | **Uchtor** | **2.30** | **60** | P | **Pb** | **22 13 42.1** | **-0.1** |
| | SNR=44 | | | | | | |
| **UCH** | **Uchtor** | **2.30** | **60** | 

KSH sP Pb 22 14 05.8 +2.8
KSH S **Sn** **22 14 38.0 +1.1**
KSH pmax pmax
comp=Z,4.0nm,0.4s
KSH smax smax
comp=N,170nm,0.6s
KSH smax smax
comp=E,120nm,0.7s
**DGS Degeres 3.62 52** *e*P **Pg** **22 14 09.6 -0.4**
comp=E,34nm,0.4s
DGS *e*S **Sg** **22 14 58.6 +1.7**
comp=E,164nm,0.6s
**DGS Degeres 3.62 52** Pg **Pg** **22 14 09.1 -0.9**
comp=E,42nm,0.3s
DGS Lg Lg 22 14 58.6
comp=E,164nm,0.6s
**KST Kastek 3.63 56** *e*P **Pg** **22 14 09.6 -0.6**
comp=E,81nm,0.5s
KST *e*S **Sg** **22 14 58.0 +0.7**
comp=E,235nm,0.4s
**KST Kastek 3.63 56** Pg **Pb** **22 14 07.9 +3.2**
comp=E,81nm,0.5s
KST Lg Lg 22 14 57.1
comp=E,235nm,0.4s
**KRBS Karabastau 3.85 46** *e*P **Pg** **22 14 13.0 -1.3**
comp=E,36nm,0.4s
KRBS *e*S **Sg** **22 15 04.2 +0.1**
comp=E,119nm,0.3s
**KRBS Karabastau 3.85 46** Pg **Pb** **22 14 10.3 +1.9**
comp=E,36nm,0.4s
KRBS Lg Lg 22 15 01.8
comp=E,119nm,0.3s
**MTBS Maitube 3.97 58** *e*P **Pg** **22 14 15.2 -1.5**
comp=E,24nm,0.2s
MTBS *e*S **Sg** **22 15 07.3 -0.7**
comp=E,93nm,0.4s
**MTBS Maitube 3.97 58** Pg **Pg** **22 14 14.1 -2.6**
comp=E,24nm,0.2s
MTBS Lg Lg 22 15 07.2
comp=E,93nm,0.4s
**KDJ Kajisay 4.13 74**⇑*i*P **Pn** **22 14 07.5 +3.9**
baz=73
KDJ ⇑*i*S **Sn** **22 14 55.9 +4.1**
baz=73
**BTLS Baital 4.26 21** *e*PN **Pb** **22 14 17.4 +2.0**
**BTLS Baital 4.26 21** *e*P **Pg** **22 14 20.9 -1.4**
comp=E,102nm,0.4s
BTLS *e*S **Sg** **22 15 17.6 +0.1**
comp=E,145nm,0.7s
**BTLS Baital 4.26 21** *e*Pg **Pb** **22 14 17.4 +2.0**
baz=25
**BTLS Baital 4.26 21** Pg **Pg** **22 14 19.2 -3.1**
comp=E,102nm,0.4s
BTLS Lg Lg 22 15 17.2
comp=E,16nm,0.4s
**AAA Alma-Ata 4.32 59** *e*P **Pg** **22 14 22.1 -1.2**
comp=E,51nm,0.5s
AAA *e*S **Sg** **22 15 19.6 +0.2**
comp=E,127nm,0.8s
**AAA Alma-Ata 4.32 59** Pg **Pg** **22 14 21.4 -1.9**
comp=E,53nm,0.4s
AAA Lg Lg 22 15 19.5
comp=E,127nm,0.8s
**KUU Kurty 4.34 48** *e*PN **Pn** **22 14 09.0 +2.7**
KUU *e* 22 14 22.1
**KUU Kurty 4.34 48** *e*P **Pg** **22 14 22.5 -1.3**
comp=E,50nm,0.5s
KUU *e*S **Sg** **22 15 19.9 -0.1**
comp=E,90nm,0.3s
**KUU Kurty 4.34 48** *e*Pn **Pn** **22 14 09.0 +2.7**
baz=52
KUU *e*Pg **Pg** **22 14 22.1 -1.7**
baz=52
**KUU Kurty 4.34 48** Pg **Pg** **22 14 21.5 -2.3**
comp=E,50nm,0.5s
KUU Lg Lg 22 15 19.8
comp=E,90nm,0.3s
**KNDC Almaty 4.36 59** PN **Pb** **22 14 17.6 +0.5**
**KNDC Almaty 4.36 59** ⇑Pn **Pn** **22 14 10.2 +3.6**
comp=E,30nm,0.5s
KNDC ⇑Pg **Pg** **22 14 25.6 +1.6**
comp=E,89nm,0.5s
KNDC ⇑Lg Lg 22 15 20.9
comp=E,556nm,1.2s
**MDOK Medeo 4.38 60** *e*PN **Pn** **22 14 09.9 +2.8**
**MDOK Medeo 4.38 60** *e*P **Pg** **22 14 23.2 -1.5**
comp=E,37nm,0.3s
MDOK *e*S **Sg** **22 15 21.4 0.0**
comp=E,83nm,0.5s
**MDOK Medeo 4.38 60** *e*Pn **Pn** **22 14 09.9 +2.8**
baz=63
**MDOK Medeo 4.38 60** ⇑Pn **Pn** **22 14 10.3 +3.2**
comp=E,9.4nm,0.5s
MDOK ⇑Pg **Pg** **22 14 22.4 -2.2**
comp=E,39nm,0.7s
MDOK ⇑Lg Lg 22 15 21.0
comp=E,111nm,0.8s
**MDOK Medeo 4.38 60** Pg **Pg** **22 14 23.2 -1.5**
comp=E,37nm,0.3s
MDOK Lg Lg 22 15 21.4
comp=E,83nm,0.5s
**KTBS Karatobe 4.43 52** *e*P **Pg** **22 14 23.4 -2.2**
comp=E,24nm,0.4s
KTBS *e*S **Sg** **22 15 21.7 -1.3**
comp=E,111nm,0.4s
**KTBS Karatobe 4.43 52** Pg **Pg** **22 14 23.4 -2.2**
comp=E,24nm,0.4s
KTBS Lg Lg 22 15 21.7
comp=E,111nm,0.4s
**KOTS Kotyrbulak 4.46 60** *e*P **Pg** **22 14 25.0 -1.1**
comp=E,48nm,0.4s
KOTS *e*S **Sg** **22 15 25.2 +1.4**
comp=E,160nm,0.7s
**KOTS Kotyrbulak 4.46 60** Pg **Pg** **22 14 24.2 -1.9**
comp=E,48nm,0.4s
KOTS Lg Lg 22 15 25.2
comp=E,160nm,0.7s
**TARG Taragay, Kyrgy 4.52 80** **Pn** **22 14 12.2 +3.0**
**ANVS Anan'yevo 4.66 67**⇓*i*P **Pn** **22 14 14.5 +3.7**
baz=66
ANVS ⇓*i*S **Sn** **22 15 08.2 +3.3**
baz=66
**CHKK Chushkaly 4.70 52** *e*P **Pg** **22 14 28.2 -2.4**
comp=E,12nm,0.5s
CHKK *e*S **Sg** **22 15 30.9 -0.5**
comp=E,68nm,0.3s
**CHKK Chushkaly 4.70 52** *e*Pn **Pn** **22 14 14.1 +2.9**
baz=55
CHKK *e*Pg **Pg** **22 14 28.7 -1.9**
baz=55
**CHKK Chushkaly 4.70 52** Pg **Pg** **22 14 28.2 -2.4**
comp=E,12nm,0.5s
CHKK Lg Lg 22 15 30.9
comp=E,68nm,0.3s
**NUT Nurota 4.71 265** *e*P **Pn** **22 14 11.0 -0.4**
NUT *e*S **Sg** **22 15 29.0 -2.9**
**PKMR Pachkamar 4.91 241** *e*P **Pn** **22 14 14.0 -0.2**
PKMR *e*S **Sn** **22 15 11.0 0.0**
**SATY Saty 5.26 66** *e*PN **Pg** **22 14 39.1 -2.2**
**SATY Saty 5.26 66** *e*P **Pg** **22 14 39.3 -2.1**
comp=E,19nm,0.5s
SATY *e*S **Sg** **22 15 49.2 -0.3**
comp=E,69nm,0.8s
**SATY Saty 5.26 66** *e*Pg **Pg** **22 14 39.2 -2.2**
baz=68
**SATY Saty 5.26 66** Pg **Pg** **22 14 39.3 -2.1**
comp=E,19nm,0.5s
SATY Lg Lg 22 15 49.2
comp=E,69nm,0.8s
**KURS Kuram 5.26 61** *e*P **Pg** **22 14 39.3 -2.2**
comp=E,22nm,0.6s
KURS *e*S **Sg** **22 15 48.8 -0.8**
comp=E,28nm,0.8s
**KURS Kuram 5.26 61** Pg **Pg** **22 14 38.5 -2.9**
comp=E,22nm,0.6s
KURS Lg Lg 22 15 48.8
comp=E,28nm,0.8s
**ZHN Zhinishke 5.32 65** *e*PN **Pg** **22 14 40.7 -1.7**
**ZHN Zhinishke 5.32 65** *e*P **Pg** **22 14 39.6 -2.8**
comp=E,20nm,0.2s
ZHN *e*S **Sg** **22 15 49.3 -2.1**
comp=E,29nm,0.6s
**ZHN Zhinishke 5.32 65** *e*Pg **Pg** **22 14 40.8 -1.7**
baz=67
**ZHN Zhinishke 5.32 65** Pg **Pg** **22 14 39.6 -2.8**
comp=E,20nm,0.2s
ZHN Lg Lg 22 15 49.3
comp=E,29nm,0.6s

**ARXS Arharly 5.40 53** *e*PN **Pg** **22 14 41.1 -2.9**
**ARXS Arharly 5.40 53** *e*P **Pg** **22 14 42.1 -1.9**
comp=E,30nm,0.5s
ARXS *e*S **Sg** **22 15 53.7 -0.3**
comp=E,72nm,0.6s
**ARXS Arharly 5.40 53** Pg **Pb** **22 14 39.6 +4.8**
comp=E,30nm,0.5s
ARXS Lg Lg 22 15 51.4
comp=E,72nm,0.6s
**KPKS Kokpek 5.60 63** *e*PN **Pg** **22 14 44.9 -2.9**
**KPKS Kokpek 5.60 63** *e*P **Pg** **22 14 45.1 -2.7**
comp=E,21nm,1.1s
KPKS *e*S **Sg** **22 15 59.4 -0.9**
comp=E,69nm,0.6s
**KPKS Kokpek 5.60 63** *e*Pg **Pg** **22 14 45.0 -2.9**
baz=65
**UZB Uzynbulak 5.72 67** *e*PN **Pn** **22 14 27.5 +2.2**
UZB *e* 22 14 48.6
UZB pmax pmax
comp=Z,1.0nm,0.6s
**UZB Uzynbulak 5.72 67** *e*Pn **Pn** **22 14 27.6 +2.2**
comp=Z,1.0nm,0.6s,baz=69
UZB *e*Pg **Pg** **22 14 48.6 -1.5**
baz=69
**PDGK Podgornoye 6.10 66** PN Pg 22 14 52.7 -4.7
**PDGK Podgornoye 6.10 66** ⇑Pg Pg 22 14 52.7 -4.7
comp=Z,7.1nm,0.6s
PDGK ⇑Lg Lg 22 16 11.2
comp=Z,59nm,0.8s
**KBL Kabul 6.91 200** PN **Pn** **22 14 42.6 +0.8**
**KBL Kabul 6.91 200** **Pn** **22 14 42.6 +0.8**
**OTUK Ortayu 7.16 3** *i* PN **Pn** **22 14 46.7 +1.7**
OTUK pmax pmax
comp=Z,3.0nm,0.6s
**OTUK Ortayu 7.16 3** ⇓Pn **Pn** **22 14 46.7 +1.7**
comp=Z,3.0nm,0.7s
OTUK ⇓Pg Pb 22 15 11.4 +6.6
comp=Z,6.1nm,0.5s
OTUK ⇑Lg Lg 22 16 48.5
comp=Z,80nm,0.7s
**NIL Nilore 7.51 171** P **Pn** **22 14 51.3 +1.4**
**NIL Nilore 7.51 171** **Pn** **22 14 51.3 +1.4**
**BRZS Berezniki 8.91 3** *e*P **Pn** **22 15 07.5 -1.5**
BRZS pmax pmax
comp=Z,1.0nm,1.0s
**BRZS Berezniki 8.91 3** *e*Pn **Pn** **22 15 07.5 -1.5**
comp=Z,1.3nm,1.0s,baz=4.8
BRZS *e*Pg Pg 22 15 40.2 -11
baz=4.8
**MAKZ Makanchi 9.27 49** P **Pn** **22 15 16.7 +2.7**
**MAKZ Makanchi 9.27 49** **Pn** **22 15 16.7 +2.7**
**MAKZ Makanchi 9.27 49** ⇑Pn **Pn** **22 15 11.7 -2.3**
comp=Z,3.5nm,0.9s
MAKZ ⇓Lg Lg 22 17 56.5
comp=Z,8.5nm,0.6s
**MK31 Makanchi Array 9.44 49***d i*P **Pn** **22 15 19.2 +2.9**
**MK31 Makanchi Array 9.44 49** **Pn** **22 15 19.2 +2.9**
**MK31 Makanchi Array 9.44 49** Pn **Pn** **22 15 18.9 +2.6**
comp=Z,2.6nm,0.6s,baz=237,slow=13,SNR=20
MK31 ⇓Lg Lg 22 17 58.5
comp=Z,6.8nm,0.5s
**MKAR Makanchi Array 9.44 49** Pn **Pn** **22 15 19.1 +2.8**
comp=Z,0.3nm,0.3s,baz=236,slow=15,SNR=24
MKAR Lg Lg 22 18 00.6
comp=Z,0.7nm,0.3s,baz=239,slow=28,SNR=6.1
**MKAR Makanchi Array 9.44 49** *i* P **Pn** **22 15 19.2 +2.9**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**HRA Herat 10.13 232** Pn **Pn** **22 15 22.8 -3.2**
**KURBB Kurchatov Arra 10.60 24** Pn **Pn** **22 15 32.0 -0.1**
comp=Z,0.1nm,0.3s,baz=213,slow=12,SNR=2.8
KURBB Lg Lg 22 18 36.6
comp=Z,0.6nm,0.3s,baz=211,slow=31,SNR=11
**KURK Kurchatov 10.71 24**⇑*e*P **Pn** **22 15 34.6 +0.9**
**KURK Kurchatov 10.71 24** **Pn** **22 15 34.4 +0.7**
**KURK Kurchatov 10.71 24** ⇑Lg Lg 22 18 39.2
comp=Z,36nm,0.7s
**AB31 Akbulak array 11.70 318** *i* P **Pn** **22 15 45.6 -1.6**
AB31 pmax pmax
comp=Z,2.0nm,0.4s
**AB31 Akbulak array 11.70 318** Pn **Pn** **22 15 45.6 -1.6**
comp=Z,1.8nm,0.4s,baz=131,slow=11,SNR=64
**ABKAR Akbulak array 11.70 318** Pn **Pn** **22 15 46.2 -1.0**
**BVAR Borovoye Array 11.98 356** Pn **Pn** **22 15 50.9 -0.1**
comp=Z,0.5nm,0.3s,baz=149,slow=34,SNR=3.7
BVAR Sn **Sn** **22 18 01.4 -3.0**
comp=Z,1.6nm,0.3s,baz=266,slow=9.0,SNR=8.4
**BRVK Borovoye 12.02 355***de*P **Pn** **22 15 51.4 -0.1**
**BRVK Borovoye 12.02 355** Pn **Pn** **22 15 50.6 -0.9**
**AKTO Aktyubinsk 13.41 319** Pn **Pn** **22 16 08.4 -2.2**
comp=Z,0.4nm,0.3s,baz=189,slow=6.5,SNR=4.2
**AKTO Aktyubinsk 13.41 319** *i* P **Pn** **22 16 07.5 -3.1**
AKTO pmax pmax
comp=Z,2.0nm,0.5s
**AKTO Aktyubinsk 13.41 319** ⇑Pn **Pn** **22 16 07.6 -3.1**
comp=Z,1.5nm,0.5s
**DGZ Jazzator, Alta 13.90 47**⇑*e*P **P** **22 16 22.7 -3.0**
**ZAA0 Zalesovo Array 15.53 30** Pn **Pn** **22 16 40.3 +1.1**
**ZALV Zalesovo Beam 15.53 30** Pn **Pn** **22 16 39.3 +0.2**
comp=Z,0.1nm,0.3s,baz=222,slow=13,SNR=4.5
**ZALV Zalesovo Beam 15.53 30** *i* P **Pn** **22 16 41.5 +2.4**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**ZALV Zalesovo Beam 15.53 30** **Pn** **22 16 40.9 +1.8**
**ARU Arti 17.62 335** P **P** **22 17 08.3 +1.7**
comp=Z,0.0nm,0.3s,baz=140,slow=6.4,SNR=9.5
**ARU Arti 17.62 335***d i*P **P** **22 17 08.5 +1.9**
ARU pmax pmax
comp=Z,5.0nm,0.7s
**ARU Arti 17.62 335** **Pn** **22 17 05.3 -0.4**
**ONI Oni 21.17 283** P **P** **22 17 45.7 +0.1**
ONI pmax pmax
comp=Z,8.0nm,1.1s
**ONI Oni 21.17 283** P **P** **22 17 45.7 +0.1**
ONI IAmb IAmb 22 17 56.2
comp=Z,7.7nm,1.1s
**KIV Kislovodsk 21.63 287** P **P** **22 17 48.1 -2.6**
KIV IAmb IAmb 22 18 00.0
comp=Z,15nm,1.5s
**OBN Obninsk 27.07 313** *e*P **P** **22 18 42.4 -0.2**
OBN *e* 22 19 23.9
OBN *e* 22 22 04.4
OBN pmax pmax
comp=Z,1.0nm,0.9s
**AKASG Malin Array Be 30.80 303** LR LR 22 33 54.6
comp=Z,61nm,18.2s,baz=163,slow=41
**FIA1 FINESS Array S 34.15 322** P **P** **22 19 44.8 -0.3**
**FINES FINESS Array B 34.15 322** P **P** **22 19 45.2 +0.1**
comp=Z,1.5nm,0.4s,baz=111,slow=9.3,SNR=20
**ARCES ARCESS Array B 37.21 335** P **P** **22 20 11.6 +0.4**
comp=Z,1.4nm,0.5s,baz=106,slow=8.9,SNR=12
**ARCES ARCESS Array B 37.21 335** P **P** **22 20 11.6 +0.4**
ARCES pmax pmax
comp=Z,26nm,1.5s
**GEC2 GERESS Array S 40.97 301** P **P** **22 20 42.9 -0.1**
GEC2 IAmb IAmb 22 20 45.6
comp=Z,2.2nm,1.0s
**GERES GERESS Array B 40.97 301** P **P** **22 20 43.5 +0.4**
comp=Z,1.2nm,0.6s,baz=52,slow=8.6,SNR=10
**NC303 NORSAR Array S 41.13 320** P **P** **22 20 44.3 +0.2**
NC303 IAmb IAmb 22 20 58.8
comp=Z,16nm,1.2s
**TIXI Tiksi 41.29 24** P **P** **22 20 45.4 +0.1**
comp=Z,3.3nm,0.6s,baz=270,slow=24,SNR=16
**BILL Bilibino 54.21 28** *e*P **P** **22 22 27.2 +1.7**
BILL *e* 22 24 30.5
BILL pmax pmax
comp=Z,3.0nm,1.4s
**ESDC Sonseca Array 55.99 295** LR LR 22 50 51.9
comp=Z,138nm,21.1s,baz=226,slow=41
**INK Inuvik 69.27 10** P **P** **22 24 07.2 +0.3**
comp=Z,0.9nm,0.5s,baz=350,slow=4.2,SNR=5.3
**BATI Baumata 69.84 124** LR LR 22 58 11.3
comp=Z,91nm,18.9s,baz=185,slow=39
**ILAR Eielson Array 70.19 17** P **P** **22 24 12.5 -0.2**
comp=Z,0.5nm,0.8s,baz=331,slow=5.4,SNR=3.1
**YKA Yellowknife Ar 76.63 3** P **P** **22 24 50.1 -0.5**
comp=Z,0.3nm,0.4s,baz=349,slow=5.7,SNR=3.7

**WEL 19 22:20:09.8**±0.4,**40°S**±3°×**17°E**±°,**h34**km±4km,**M3.2**/19,
**ML3.6**/19,**MLv3.2**/19,**Error ellipse: s-maj=0.0km**
**s-min=0.0km az=114.9,North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**PXZ Pawanui 0.17 111** P Pb 22 20 17.4 +1.1
PXZ S Sb 22 20 23.4 +2.8
**WPHZ Waipukurau 0.19 240** P Pb 22 20 18.2 +1.8
WPHZ S Sb 22 20 25.0 +4.1
**KAHZ Kahuranaki 0.25 45** P Pb 22 20 18.0 +1.0
KAHZ S Sb 22 20 25.0 +3.1
**PRHZ Porangahau 0.30 182** P Pb 22 20 18.8 +1.1
PRHZ S Sb 22 20 25.8 +2.8
**PNHZ Pukenui 0.35 279** P Pn 22 20 19.7 +1.0
PNHZ S Sb 22 20 27.2 +3.0
**KRHZ Kereru 0.39 326** P Pn 22 20 19.8 +0.6
KRHZ S Sn 22 20 27.3 +2.1
**CKHZ Cape Kidnapper 0.45 47** P Pb 22 20 19.8 0.0
**DVHZ Dannevirke 0.50 228** P Pn 22 20 21.1 +0.6
DVHZ S Sn 22 20 30.0 +2.0
**ANWZ Angora Road 0.51 195** P Pn 22 20 21.2 +0.6
**MCHZ McNeill Hill 0.53 4** P Pn 22 20 21.6 +0.7
**TSZ Takapari Road 0.54 260** P Pb 22 20 21.8 +0.7
TSZ S Sn 22 20 30.8 +1.9
**KWHZ Kaweka Forest 0.57 342** P Pb 22 20 22.0 +0.3
KWHZ S Sn 22 20 31.3 +1.5
**BHHZ Black Hill Sta 0.66 316** P Pb 22 20 23.6 +0.5
BHHZ S Sb 22 20 33.3 +1.2
**ARHZ Aropaoanui 0.75 21** P Pn 22 20 24.3 +0.3
ARHZ S Sb 22 20 35.9 +1.3
**BFZ Birch Farm 0.78 203** P Pn 22 20 24.3 -0.1
BFZ S Sb 22 20 35.8 +0.5
**PRWZ Pori Road 0.78 221** P Pb 22 20 25.0 -0.1
**POWZ Post Office Ro 0.80 238** P Pb 22 20 25.2 -0.1
**BKZ Black Stump Fm 0.81 351** P Pn 22 20 25.1 +0.2
**NMHZ Naumai 0.88 8** P Pn 22 20 26.2 +0.3
**MOWZ Moawhango 0.89 309** P Pn 22 20 27.6 +0.2
**TIWZ Tintock 1.00 216** P Pn 22 20 27.5 0.0
**WHHZ Waihua 1.00 27** P Pb 22 20 30.1 +1.5
**CPWZ Castlepoint 1.00 200** P Pn 22 20 27.4 -0.1
**WNVZ Wahianoa 1.04 308** P Pb 22 20 29.7 +0.3
**TUVZ Tukino 1.04 312** P Pb 22 20 29.9 +0.5
**WHVZ Whangaehu Hut 1.07 310** P Pb 22 20 30.3 +0.3
**MRZ Mangatainoka R 1.07 230** P Pn 22 20 28.4 -0.1
**MTVZ Mangateitei 1.08 302** P Pb 22 20 30.3 +0.2
**TRVZ Turoa 1.08 308** P Pb 22 20 30.5 +0.3
**DRZ Dome Shelter 1.09 309** P Pb 22 20 31.4 +1.1
**RAHZ Arahi 1.10 18** P Pn 22 20 28.6 -0.3
**ETVZ East Tongariro 1.11 319** P Pb 22 20 30.5 -0.1
**SNVZ South Ngauruho 1.11 315** P Pb 22 20 30.8 +0.2
**FWVZ Far West T-bar 1.11 310** P Pb 22 20 30.7 0.0
**OTVZ Oturere 1.11 316** P Pb 22 20 30.4 -0.2
**TMVZ Te Maari 1.12 319** P Pb 22 20 30.5 -0.3
**MTHZ Maungataniwha 1.12 8** P Pn 22 20 28.9 -0.3
**NGZ Ngauruhoe 1.14 314** P Pb 22 20 31.1 0.0
**MRHZ Matea Rd 1.15 351** P Pn 22 20 30.0 +0.5
**NTVZ North Tongariro 1.15 319** P Pb 22 20 30.8 -0.5
**NNVZ North Ngauruho 1.16 316** P Pb 22 20 31.5 +0.1
**RITZ Rihia Road 1.17 328** P Pb 22 20 31.0 -0.4
**KRVZ Karewarewa 1.17 318** P Pb 22 20 31.6 0.0
**WTVZ West Tongariro 1.18 316** P Pb 22 20 32.1 +0.3
**PKVZ Pokaka 1.22 304** P Pb 22 20 31.8 -0.5
**KNZ Kokohu 1.23 40** P Pn 22 20 29.4 -1.3
**KATZ Kakaramea 1.24 323** P Pb 22 20 32.8 0.0
**MHGZ Mahia Peninsul 1.27 50** P Pn 22 20 30.0 -1.2
**HOWZ Holdsworth Sta 1.27 223** P Pn 22 20 30.5 -0.6
**TMWZ Te Maipa 1.28 207** P Pn 22 20 30.3 -0.9
**RATZ Rangitukua 1.29 328** P Pb 22 20 33.2 -0.4
**TWVZ Taurewa 1.30 313** P Pb 22 20 33.0 -0.8
**SNGZ Shannon Statio 1.30 24** P Pn 22 20 31.0 -0.6
**WAZ Wanganui 1.30 279** P Pb 22 20 33.7 0.0
**RTZ Ruatahuna 1.38 11** P Pn 22 20 33.3 -0.4
**WHTZ Whakaora 1.41 337** P Pb 22 20 35.5 +0.1
**OGWZ Otaki Gorge 1.41 233** P Pn 22 20 32.8 -0.4
**PRGZ Paritu Road 1.42 43** P Pn 22 20 31.9 -1.3
**ALRZ Allen Road 1.43 350** P Pn 22 20 33.4 +0.1
**MTW Mount Morrison 1.48 216** P Pn 22 20 32.6 -1.4
**PRRZ Plateau Road 1.48 352** P Pn 22 20 34.2 +0.1
**MUGZ Murupara 1.49 4** P Pn 22 20 33.9 -0.4
**WPRZ Whakapapatarin 1.50 345** P Pn 22 20 34.6 +0.3
**RIGZ Rimuhau 1.53 35** P Pn 22 20 33.7 -1.0
**RAGZ Rawiri 1.59 22** P Pn 22 20 34.7 -0.9
**KIW Kapiti Island 1.60 236** P Pn 22 20 35.5 -0.2
**HRRZ Handcock Road 1.60 350** P Pn 22 20 35.8 +0.1
**TRWZ Traveller 1.60 207** P Pn 22 20 34.3 -1.5
**RRRZ Republican Roa 1.63 356** P Pn 22 20 35.5 -0.6
**CAW Cannon Point 1.66 226** P Pn 22 20 35.7 -0.8
**VRZ Vera Road 1.69 299** P Pb 22 20 43.6 +3.4
**PAWZ Paruwai Farm 1.69 213** P Pn 22 20 35.7 -1.3
**TARZ Mount Tarawera 1.73 356** P Pn 22 20 36.7 0.0
**URZ Urewera 1.74 12** P Pn 22 20 36.7 -1.0
**MWZ Matawai 1.77 23** P Pn 22 20 36.8 -1.2
**TKGZ Te Karaka 1.79 32** P Pn 22 20 36.9 -1.4
**MSWZ Moikau Station 1.80 216** P Pn 22 20 36.5 -1.9
**TLZ Tolley Road 1.85 332** P Pn 22 20 39.4 +0.2
**EDRZ Edgecumbe 1.86 2** P Pn 22 20 38.9 -0.4
**CNGZ Carnagh Statio 1.91 40** P Pn 22 20 38.5 -1.5
**PLWZ Palliser 1.92 213** P Pn 22 20 38.0 -2.1
**BHW Baring Head 1.98 223** P Pn 22 20 39.1 -1.7
**HIZ Hauiti 2.02 316** P Pn 22 20 42.4 +1.0
**TWGZ Tauwhareparae 2.07 30** P Pn 22 20 40.9 -1.3
**NEZ North Egmont 2.09 289** P Pb 22 20 45.9 -1.3
**OPRZ Ohinepanea 2.12 358** P Pn 22 20 42.1 -0.8
**RUGZ Raukumara Rang 2.15 22** P Pn 22 20 42.2 -1.2
**TCW Tory Channel 2.19 235** P Pn 22 20 42.7 -1.1
**PKE Pukeiti 2.20 290** P Pb 22 20 46.9 -2.1
**DUVZ D'Urville Isla 2.25 247** P Pn 22 20 43.8 -0.7
**PUZ Pukeiti 2.27 34** P Pn 22 20 42.8 -2.2
**PKGZ Pakihiroa 2.36 29** P Pn 22 20 44.7 -1.4
**HAZ Te Kaha 2.38 22** P Pn 22 20 44.5 -1.8
**TUWZ Tuamarina 2.52 234** P Pn 22 20 47.1 -1.3
**WMGZ Waiomatatini S 2.55 33** P Pn 22 20 46.7 -2.0
**MXZ Matakaoa Point 2.73 29** P Pn 22 20 50.1 -1.1
**BSWZ Blackbirch Sta 2.73 229** P Pn 22 20 49.6 -1.6
**NNZ Nelson 2.79 242** P Pn 22 20 51.1 -0.9
**QRZ Quartz Range 3.26 253** P Pn 22 20 57.7 -0.8
**MRNZ Matariki Terra 3.29 243** P Pn 22 20 58.0 -0.9
**THZ Tophouse 3.36 237** P Pn 22 20 58.2 -1.7
**KHZ Kahutara 3.39 223** P Pn 22 20 57.8 -2.5
**GVZ Greta Valley S 4.04 221** P Pn 22 21 07.7 -1.6
**LTZ Lake Taylor 4.33 228** P Pn 22 21 12.3 -1.0
**AMCZ Amberley 4.39 222** P Pn 22 21 12.3 -1.7
**OKCZ Okains Bay 4.61 214** P Pn 22 21 14.3 -2.8
**MQZ McQueen's Vall 4.78 217** P Pn 22 21 16.3 -3.1
**AKCZ Akaroa Harbour 4.80 214** P Pn 22 21 16.7 -2.9
**WACZ Wakanui South 5.35 221** P Pn 22 21 24.0 -3.2
**ARCZ Arundel 5.70 224** P Pn 22 21 30.4 -1.6
**TMZ Timaru 6.08 222** P Pn 22 21 34.9 -2.5
**ODZ Otahua Downs 6.74 219** P Pn 22 21 43.7 -2.6

*MAN* **19** *22:29:46.7,5°.88N×124°.12E,h43km,mb4.7,ML3.6,MS3.5*
*IDC* **19** *22:29:50.2×4.8,5°.76N×124°.17E,h59km±46km,mb3.3/5,*
*mb1 3.5/5,mb1mx3.3/45,mbtmp3.6/5,MS2.7/2,Ms1 2.7/2,*
*ms1mx2.4/33,Error ellipse: s-maj=42.1km s-min=18.6km*
*az=83.0*

**ISC 19 22:29:47.8**±1.1,**5°.87N**±0°.09×**124°.03E**±0°.09,**h35km,n11,**
**σ1s60/13,mb3.4/5,1C-2D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**GSPH General Santos 0.94 76**⇓*e*P **Pn** **22 30 03.8 -0.8**
GSPH *i* S **Sn** **22 30 17.7 +0.8**
**CTBH Cotabato--PC H 1.36 9**⇑*i*P **Pn** **22 30 09.3 -1.0**
CTBH *i* S **Sn** **22 30 27.0 -0.1**
**KCP Kidapawan 1.55 43**⇓*e*P **Pn** **22 30 10.9 -2.0**
KCP *i* S **Sn** **22 30 29.9 -1.9**
**DAV Davao City (W) 1.95 52** P **Pn** **22 30 19.3 +0.9**
104nm,0.3s,baz=358,slow=1.2,SNR=17
DAV S **Sn** **22 30 44.0 +2.4**
142nm,0.3s,baz=273,slow=23,SNR=7.6
**KAPI Kappang 11.62 202** LR LR 22 37 19.4
comp=Z,24nm,20.1s,baz=106,slow=39
**WRA Warramunga Arr 27.58 159** P **P** **22 35 30.8 -1.1**
1.1nm,0.8s,baz=332,slow=11,SNR=8.1
**PMG Port Moresby 27.59 123** LR LR 22 46 45.6
comp=Z,21nm,21.5s,baz=156,slow=37
**ASAR Alice Springs 30.89 162** P **P** **22 36 00.6 -0.6**
0.4nm,0.7s,baz=334,slow=6.2,SNR=4.8
**SONM Songino Array 44.45 343** P **P** **22 37 57.0 +1.4**
0.6nm,0.9s,baz=160,slow=9.7,SNR=4.8
**MKAR Makanchi Array 54.28 326** P **P** **22 39 12.3 +1.7**
0.2nm,0.6s,baz=116,slow=7.1,SNR=4.4
**ILAR Eielson Array 84.34 26** P **P** **22 42 14.6 -1.5**
0.8nm,0.7s,baz=246,slow=5.0,SNR=6.4

*SEA **19** 22:37:08.5±0.8, 47.62N±0.03×123.35W±0.03, h42km±3km, ML2.1/25, Error ellipse: s-maj=3.9km s-min=2.8km az=168.0*

**NEIC 19 22:37:08.0**±0.5, **47.60N**±0.03×**123.34W**±0.02, **h45**km±6km, **Error ellipse: s-maj=4.8km s-min=1.2km az=164.0, Washington**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **D03D** | **Eldon** | **0.18** | **110** | | | | **Pn** | 22 37 15.4 | -0.3 |
| D03D | | | | | | | Sn | 22 37 21.2 | +0.2 |
| **HDW** | **Hoodsport** | **0.20** | **75** | | | | **Pn** | 22 37 15.8 | -0.2 |
| HDW | | | | | | | Sn | 22 37 21.5 | 0.0 |
| **SMW** | **South Mountain** | **0.28** | **180** | | | | **Pn** | 22 37 16.8 | +0.3 |
| **C04A** | **Brinnon** | **0.28** | **64** | | | | **Pn** | 22 37 16.2 | -0.2 |
| C04A | | | | | | | Sn | 22 37 22.4 | 0.0 |
| **OLQ** | **Olympics--Lake** | **0.33** | **256** | | | | **Pn** | 22 37 16.9 | 0.0 |
| OLQ | | | | | | | Sn | 22 37 23.2 | +0.1 |
| **GNW** | **Green Mountain** | **0.35** | **95** | | | | **Pn** | 22 37 16.9 | -0.3 |
| GNW | | | | | | | Sn | 22 37 23.4 | -0.2 |
| **B013** | **Quilcene** | **0.36** | **53** | | | | **Pn** | 22 37 17.2 | -0.1 |
| B013 | | | | | | | Sn | 22 37 23.9 | +0.1 |
| **GMW** | **Gold Mountain** | **0.38** | **97** | | | | **Pn** | 22 37 17.3 | -0.3 |
| **KIMR** | **Kitsap County** | **0.40** | **103** | | | | **Sn** | 22 37 25.1 | +0.5 |
| **NLWA** | **Neilton Lookou** | **0.41** | **240** | | | | **Pn** | 22 37 17.9 | -0.1 |
| NLWA | | | | | | | Sn | 22 37 25.3 | +0.4 |
| **B04A** | **Port Angeles** | **0.47** | **347** | | | | **Pn** | 22 37 18.5 | -0.1 |
| B04A | | | | | | | Sn | 22 37 26.0 | -0.2 |
| **SQM** | **Sequim** | **0.52** | **23** | | | | **Pn** | 22 37 19.7 | +0.5 |
| **D04E** | **Lakebay** | **0.57** | **137** | | | | **Pn** | 22 37 20.5 | +0.7 |
| D04E | | | | | | | Sn | 22 37 30.6 | +2.3 |
| **OBC** | **Olympics--Boni** | **0.66** | **312** | | | | **Pn** | 22 37 21.1 | 0.0 |
| **P403** | **Sandy Floe Qua** | **0.71** | **311** | | | | **Pn** | 22 37 21.5 | -0.2 |
| P403 | | | | | | | Sn | 22 37 31.6 | 0.0 |
| **SP2** | **Seward Park 2** | **0.74** | **93** | | | | **Pn** | 22 37 23.0 | +0.9 |

*GCG **19** 22:55:21.3±0.5, 13.86N×92.75W, h0km±999km, MD4.3*
*MEX **19** 22:55:23.9±1.7, 13.82N×92.72W, h12km±264km, MD4.2*
*IDC **19** 22:55:26.8±5.9, 13.99N×92.70W, h33km±43km, mb4.0/8, mb1 4.3/11, mb1mx4.0/44, mbtmp4.2/11, ML4.0/3, MS3.5/18, Ms1 3.5/18, ms1mx3.2/70, Error ellipse: s-maj=40.1km s-min=15.9km az=38.0*
*UCR **19** 22:55:28.3±1.6, 14.10N×92.45W, h94km±21km, ML4.1, mb4.4(NEIC)*
*SNET **19** 22:55:28.1±1.6, 14.09N×92.46W, h94km±22km, ML4.4*
*NEIC **19** 22:55:31.8±2.0, 14.32N±0.07×92.55W±0.05, h57km±9km, mb4.4/56, Md4.1/18(MEX), Error ellipse: s-maj=11.1km s-min=6.8km az=203.0*

**ISC 19 22:55:27.5**±1.5, **14.01N**±0.07×**92.65W**±0.06, **h43**km±14km, **n159**, σ1§50/164, **mb4.4**/31, **MS3.6**/15, **Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **THIG** | | **0.97** | **22** | | | | **Pn** | **22 55 42.5** | **-2.2** |
| THIG | | | | | | | **Sn** | **22 55 56.7** | **-0.6** |
| **THIG** | | **0.97** | **22** | *i* | P | | **Pn** | **22 55 42.5** | **-2.2** |
| THIG | | | | *i* | S | | **Sn** | **22 55 56.7** | **-0.6** |
| **RTAL** | **Retalhuleu** | **1.06** | **61** | | Pn | | **Pn** | **22 55 45.0** | **-1.0** |
| RTAL | | | | | Sn | | **Sn** | **22 55 58.6** | **-0.9** |
| **RTAL** | **Retalhuleu** | **1.06** | **61** | *i* | P | | **Pn** | **22 55 44.9** | **-1.0** |
| RTAL | | | | | eS | | **Sn** | **22 56 01.5** | **+2.0** |
| **PATR** | **El Naranjo** | **1.17** | **20** | *i* | P | | **Pn** | **22 55 44.9** | **-2.8** |
| PATR | | | | | eS | | **Sn** | **22 55 59.0** | **-3.6** |
| **CHUJ** | **Union Juarez** | **1.20** | **26** | *i* | P | | **Pn** | **22 55 46.6** | **-1.5** |
| CHUJ | | | | *i* | S | | **Sn** | **22 56 03.3** | **0.0** |
| **PAVE** | **Pavencul** | **1.27** | **21** | *i* | P | | **Pn** | **22 55 46.4** | **-2.6** |
| PAVE | | | | | eS | | **Sn** | **22 56 04.0** | **-0.9** |
| **HUEH** | **Huehuetenango** | **1.71** | **40** | | Pn | | **Pn** | **22 55 55.2** | **+0.1** |
| **HUEH** | **Huehuetenango** | **1.71** | **40** | *i* | P | | **Pn** | **22 55 55.1** | **+0.1** |
| HUEH | | | | *eP* | | | **Pn** | **22 55 55.2** | **+0.1** |
| HUEH | | | | *eS* | | | **Sn** | **22 56 16.5** | **+0.6** |
| **HUEH** | **Huehuetenango** | **1.71** | **40** | *i* | P | | **Pn** | **22 55 55.1** | **+0.1** |
| HUEH | | | | *eP* | | | **Pn** | **22 55 55.2** | **+0.1** |
| HUEH | | | | *eS* | | | **Sn** | **22 56 16.5** | **+0.6** |
| **PCIG** | | **1.78** | **342** | | | | **Pn** | **22 55 53.4** | **-2.4** |
| PCIG | | | | | | | **Sn** | **22 56 15.6** | **-1.6** |
| **PCIG** | | **1.78** | **342** | *i* | P | | **Pn** | **22 55 53.4** | **-2.4** |
| PCIG | | | | | eS | | **Sn** | **22 56 15.6** | **-1.6** |
| **FUG** | **Fuego 3** | **1.81** | **76** | *eP* | | | **Pn** | **22 55 55.7** | **-0.7** |
| **PCG** | **Pacaya** | **2.02** | **79** | *eP* | | | **Pn** | **22 55 59.3** | **0.0** |
| **NBG** | **Las Nubes** | **2.30** | **75** | *eP* | | | **Pn** | **22 56 04.6** | **+1.3** |
| NBG | | | | | eS | | **Sn** | **22 56 36.0** | **+5.5** |
| **CCIG** | **Comitan** | **2.31** | **12** | | Pn | | **Pn** | **22 56 04.0** | **+0.7** |
| **CCIG** | **Comitan** | **2.31** | **12** | *i* | P | | **Pn** | **22 56 03.6** | **+0.2** |
| CCIG | | | | *i* | S | | **Sn** | **22 56 32.6** | **+1.9** |
| **APG** | **El Apazote** | **2.33** | **65** | | Pn | | **Pn** | **22 56 03.8** | **+0.1** |
| | 54nm,0.3s,baz=237,slow=7.3,SNR=355 | | | | | | | | |
| APG | | | | | Sn | | **Sn** | **22 56 33.6** | **+2.3** |
| | 85nm,0.3s,baz=167,slow=17,SNR=9.5 | | | | | | | | |
| APG | | | | | LR | | LR | 22 57 13.3 | |
| | comp=Z,714nm,19.2s,baz=266,slow=44 | | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **2.78** | **89** | *eP* | | | **Pn** | **22 56 08.5** | **-1.1** |
| SLOZ | | | | *eS* | | | **Sn** | **22 56 40.9** | **-1.0** |
| **NUBE** | **Las Nubes** | **2.79** | **92** | *eP* | | | **Pn** | **22 56 09.1** | **-0.7** |
| NUBE | | | | *eS* | | | **Sn** | **22 56 40.0** | **-2.3** |
| **NUBE** | **Las Nubes** | **2.79** | **92** | *eP* | | | **Pn** | **22 56 09.1** | **-0.7** |
| NUBE | | | | *eS* | | | **Sn** | **22 56 40.0** | **-2.3** |
| **TGIG** | | **2.79** | **351** | | | | **Pn** | **22 56 08.8** | **-1.0** |
| TGIG | | | | | | | **Sn** | **22 56 43.8** | **+1.4** |
| **TGIG** | | **2.79** | **351** | *i* | P | | **Pn** | **22 56 08.8** | **-1.0** |
| TGIG | | | | *i* | S | | **Sn** | **22 56 43.8** | **+1.4** |
| **RTR** | **El Retiro** | **2.92** | **92** | *eP* | | | **Pn** | **22 56 10.6** | **-1.0** |
| **RTR** | **El Retiro** | **2.92** | **92** | *eP* | | | **Pn** | **22 56 10.6** | **-1.0** |
| **CEVE** | **Cerro Verde** | **2.94** | **93** | *eP* | | | **Pn** | **22 56 11.3** | **-0.7** |
| CEVE | | | | *eS* | | | **Sn** | **22 56 45.9** | **-0.4** |
| CEVE | | | | | IAML | | | 22 56 51.7 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **CEVE** | **Cerro Verde** | **2.94** | **93** | *eP* | | | **Pn** | **22 56 11.3** | **-0.7** |
| CEVE | | | | *eS* | | | **Sn** | **22 56 45.9** | **-0.4** |
| CEVE | | | | | IAML | | | 22 56 51.7 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **SBLS** | **San Blas** | **2.94** | **93** | *eP* | | | **Pn** | **22 56 11.3** | **-0.7** |
| **SBLS** | **San Blas** | **2.94** | **93** | *eP* | | | **Pn** | **22 56 11.3** | **-0.7** |
| **SNJE** | **San Jose** | **2.96** | **92** | *eP* | | | **Pn** | **22 56 12.5** | **+0.4** |
| **SNJE** | **San Jose** | **2.96** | **92** | *eP* | | | **Pn** | **22 56 12.5** | **+0.4** |
| **MRL** | **Marmol** | **3.06** | **69** | *eP* | | | **Pn** | **22 56 13.9** | **+0.3** |
| **JAYA** | **Jayaque - finc** | **3.13** | **96** | *eP* | | | **Pn** | **22 56 13.5** | **-1.0** |
| JAYA | | | | *eS* | | | **Sn** | **22 56 49.6** | **-1.1** |
| JAYA | | | | | IAML | | | 22 56 55.2 | |
| | comp=Z,820nm,0.3s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **3.13** | **96** | *eP* | | | **Pn** | **22 56 13.5** | **-1.0** |
| JAYA | | | | *eS* | | | **Sn** | **22 56 49.6** | **-1.1** |
| JAYA | | | | | IAML | | | 22 56 55.2 | |
| | comp=Z,820nm,0.3s | | | | | | | | |
| **CEDA** | **San Andres** | **3.17** | **93** | | IAML | | | 22 57 01.9 | |
| | comp=Z,1μm,0.7s | | | | | | | | |
| **CEDA** | **San Andres** | **3.17** | **93** | | IAML | | | 22 57 01.9 | |
| | comp=Z,1μm,0.7s | | | | | | | | |
| **MTO3** | **Montecristo** | **3.21** | **83** | | Pn | | **Pn** | **22 56 15.7** | **0.0** |
| **MTO3** | **Montecristo** | **3.21** | **83** | *eP* | | | **Pn** | **22 56 15.6** | **-0.1** |
| **MTO3** | **Montecristo** | **3.21** | **83** | *eP* | | | **Pn** | **22 56 15.6** | **-0.1** |
| **PMON** | **Piamonte** | **3.25** | **95** | *eP* | | | **Pn** | **22 56 15.1** | **-1.0** |
| PMON | | | | *eS* | | | **Sn** | **22 56 52.2** | **-1.5** |
| **PMON** | **Piamonte** | **3.25** | **95** | *eP* | | | **Pn** | **22 56 15.1** | **-1.0** |
| PMON | | | | *eS* | | | **Sn** | **22 56 52.2** | **-1.5** |
| **ESQI** | **Esquipulas** | **3.25** | **80** | | Pn | | **Pn** | **22 56 18.9** | **+2.7** |
| **ESQI** | **Esquipulas** | **3.25** | **80** | *eP* | | | **Pn** | **22 56 17.6** | **+1.5** |
| **LALI** | **Alcalda de L** | **3.27** | **99** | *eS* | | | **Sn** | **22 56 52.8** | **-1.2** |
| **LALI** | **Alcalda de L** | **3.27** | **99** | *eS* | | | **Sn** | **22 56 52.8** | **-1.2** |
| **BOQS** | **Boqueron** | **3.28** | **94** | *eP* | | | **Pn** | **22 56 16.6** | **-0.1** |
| **BOQS** | **Boqueron** | **3.28** | **94** | *eP* | | | **Pn** | **22 56 16.6** | **-0.1** |
| **SNET** | **Serv Nac Est T** | **3.33** | **95** | | Pn | | **Pn** | **22 56 21.0** | **+3.7** |
| **LFRS** | **El Faro** | **3.50** | **96** | *eP* | | | **Pn** | **22 56 18.4** | **-1.2** |
| **LFRS** | **El Faro** | **3.50** | **96** | *eP* | | | **Pn** | **22 56 18.4** | **-1.2** |
| **SJTE** | **Alcalda de S** | **3.56** | **96** | *eS* | | | **Sn** | **22 57 00.0** | **-1.2** |
| **SJTE** | **Alcalda de S** | **3.56** | **96** | *eS* | | | **Sn** | **22 57 00.0** | **-1.2** |
| **UXUV** | **UXUV** | **3.59** | **337** | *i* | P | | **Pn** | **22 56 20.0** | **-0.7** |
| UXUV | | | | *eS* | | | **Sn** | **22 57 03.9** | **+1.9** |
| **PAVA** | **Las Pavas** | **3.62** | **94** | *eP* | | | **Pn** | **22 56 20.9** | **-0.2** |
| **PAVA** | **Las Pavas** | **3.62** | **94** | *eP* | | | **Pn** | **22 56 20.9** | **-0.2** |
| **CMIG** | **Matias Romero** | **3.75** | **325** | | Pn | | **Pn** | **22 56 20.6** | **-2.3** |
| | comp=Z,5.4nm,0.3s,baz=147,slow=11,SNR=38 | | | | | | | | |
| **CMIG** | **Matias Romero** | **3.75** | **325** | | | | **Pn** | **22 56 21.1** | **-1.7** |
| CMIG | | | | | | | **Sn** | **22 57 06.8** | **+1.0** |
| **CMIG** | **Matias Romero** | **3.75** | **325** | *i* | P | | **Pn** | **22 56 21.1** | **-1.7** |
| CMIG | | | | *eS* | | | **Sn** | **22 57 06.8** | **+1.0** |
| **SCLA** | **Alcaldia de Sa** | **3.82** | **94** | *eP* | | | **Pn** | **22 56 23.4** | **-0.5** |
| **SCLA** | **Alcaldia de Sa** | **3.82** | **94** | *eP* | | | **Pn** | **22 56 23.4** | **-0.5** |
| **PETF** | **Flores** | **3.94** | **42** | Pn | | | **Pn** | **22 56 26.1** | **+0.6** |
| **TGUH** | **Tegucigalpa,Un** | **5.22** | **89** | Pn | | | **Pn** | **22 56 45.8** | **+2.6** |
| **CRIN** | **San Cristobal** | **5.60** | **103** | Pn | | | **Pn** | **22 56 51.8** | **+3.4** |
| **CNGN** | **Cerro Negro** | **5.98** | **104** | Pn | | | **Pn** | **22 56 57.1** | **+3.4** |
| **MATN** | **Matagalpa** | **6.63** | **99** | Pn | | | **Pn** | **22 57 03.1** | **+0.6** |
| **BOAB** | **BOACO BROADBAN** | **6.97** | **102** | Pn | | | **Pn** | **22 57 10.8** | **+3.6** |
| **ACON** | **Acoyapa** | **7.56** | **105** | Pn | | | **Pn** | **22 57 18.0** | **+2.8** |
| **HZTE** | **Horizontes, Gu** | **7.63** | **115** | Pn | | | **Pn** | **22 57 18.2** | **+2.0** |
| **ORTG** | **Ortega, Santa** | **7.91** | **116** | | | | **Pn** | **22 57 22.6** | **+2.5** |
| **ESPN** | **Las Esperanzas** | **8.33** | **102** | Pn | | | **Pn** | **22 57 29.4** | **+3.6** |
| **JTS** | **Las Juntas de** | **8.38** | **115** | LR | | | LR | 23 00 13.7 | |
| | comp=Z,173nm,18.4s,baz=150,slow=34 | | | | | | | | |
| **JTS** | **Las Juntas de** | **8.38** | **115** | Pn | | | Pn | 22 57 33.0 | +6.5 |
| **JACO** | **JACO, Garabito** | **8.93** | **118** | Pn | | | Pn | 22 57 38.9 | +4.8 |
| **CVTR** | **Volcan Turrial** | **9.55** | **114** | Pn | | | Pn | 22 57 47.0 | +4.0 |
| **RIMA** | **Rio Macho** | **9.57** | **115** | | | | **Pn** | **22 57 46.2** | **+3.2** |
| **PEZE** | **Perez Zeledon,** | **9.91** | **117** | Pn | | | Pn | 22 57 51.9 | +4.3 |
| **SRBA** | **San Rafael, Bu** | **10.26** | **117** | Pn | | | Pn | 22 57 57.2 | +4.9 |
| **RIOS** | **Rincon, Osa** | **10.39** | **120** | Pn | | | Pn | 22 58 00.1 | +6.1 |
| **SOR** | **Soroa** | **12.64** | **45** | Pn | | | **Pn** | **22 58 23.6** | **-1.2** |
| **TX31** | **Lajitas Ar. Si** | **18.35** | **328** | P | | | **Pn** | **22 59 41.0** | **+2.0** |
| **TX32** | **Lajitas Array** | **18.35** | **328** | P | | | **Pn** | **22 59 41.1** | **+2.1** |
| **TXAR** | **Lajitas Array** | **18.35** | **328** | P | | | **Pn** | **22 59 40.0** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=14,SNR=30 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **18.35** | **328** | P | | | **Pn** | **22 59 41.6** | **+2.7** |
| **LPIG** | **La Paz** | **19.46** | **304** | LR | | | LR | 23 07 36.7 | |
| | comp=Z,85nm,18.6s,baz=202,slow=38 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **19.60** | **342** | P | | | **Pn** | **22 59 54.4** | **+0.5** |
| **MIAR** | **Mount Ida** | **20.47** | **358** | P | | | **P** | **23 00 01.3** | **-0.3** |
| **X34A** | **Smith Ranch, M** | **21.03** | **348** | P | | | **P** | **23 00 07.6** | **-0.2** |
| X34A | | | | | | IAmb | IAmb | 23 00 17.0 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **W39A** | **Magazine** | **21.12** | **357** | P | | | **P** | **23 00 09.3** | **+0.6** |
| **MNTX** | **Cornudas Mount** | **21.13** | **329** | P | | | **P** | **23 00 09.4** | **+0.6** |
| **WMOK** | **Wichita Mounta** | **21.37** | **346** | P | | | **P** | **23 00 11.2** | **-0.2** |
| **W35A** | **Tecumseh** | **21.40** | **350** | P | | | **P** | **23 00 10.6** | **-1.1** |
| W35A | | | | | | IAmb | IAmb | 23 00 13.5 | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **FPAL** | **Fort Plaine** | **21.41** | **16** | P | | | **P** | **23 00 10.4** | **-1.5** |
| **FNO** | **Franklin** | **21.59** | **349** | P | | | **P** | **23 00 13.4** | **-0.3** |
| **X51A** | **Calhoun** | **21.65** | **18** | P | | | **P** | **23 00 14.4** | **+0.1** |
| X51A | | | | | | IAmb | IAmb | 23 00 28.0 | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **MSTX** | **Muleshoe** | **21.89** | **337** | P | | | **P** | **23 00 17.7** | **+0.6** |
| **SWET** | **Sewanee** | **21.97** | **15** | P | | | **P** | **23 00 16.2** | **-1.6** |
| SWET | | | | | | IAmb | IAmb | 23 00 32.0 | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| **W50A** | **Signal Mountai** | **22.11** | **16** | P | | | **P** | **23 00 17.9** | **-1.5** |
| W50A | | | | | | IAmb | IAmb | 23 00 29.6 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **SDV** | **Santo Domingo** | **22.16** | **101** | P | | | **P** | **23 00 22.2** | **+2.0** |
| | comp=Z,3.1nm,0.4s,baz=298,slow=7.2,SNR=4.3 | | | | | | | | |
| **AMTX** | **Amarillo** | **22.33** | **340** | | | IAmb | IAmb | 23 00 23.8 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **CLTN** | **Cedars of Leba** | **22.71** | **13** | P | | | **P** | **23 00 22.5** | **-3.2** |
| CLTN | | | | | | IAmb | IAmb | 23 00 23.1 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.99** | **19** | LR | | | LR | 23 10 26.9 | |
| | comp=Z,125nm,19.9s,baz=192,slow=39 | | | | | | | | |
| **T47A** | **Sharon Grove** | **23.42** | **11** | P | | | **P** | **23 00 31.3** | **-1.5** |
| T47A | | | | | | IAmb | IAmb | 23 00 33.2 | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **BNM** | **Barren Site** | **23.72** | **330** | P | | | **P** | **23 00 38.0** | **+2.0** |
| **Y60A** | **Bolivia** | **23.82** | **31** | P | | | **P** | **23 00 36.5** | **-0.1** |
| **ANMO** | **Albuquerque** | **24.29** | **332** | P | | | **P** | **23 00 41.1** | **-0.1** |
| | comp=Z,3.5nm,0.8s,baz=147,slow=11,SNR=9.8 | | | | | | | | |
| **ANMO** | **Albuquerque** | **24.29** | **332** | P | | | **P** | **23 00 42.1** | **+0.9** |
| **T25A** | **Trinidad** | **25.32** | **338** | P | | | **P** | **23 00 51.4** | **+0.8** |
| T25A | | | | | | IAmb | IAmb | 23 00 55.5 | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **ATAH** | **Atahualpa** | **25.32** | **145** | LR | | | LR | 23 08 55.9 | |
| | comp=Z,47nm,18.2s,baz=247,slow=32 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **26.80** | **334** | P | | | **P** | **23 01 04.7** | **+0.7** |
| **MVCO** | **Mesa Verde** | **27.09** | **331** | P | | | **P** | **23 01 07.7** | **+1.1** |
| MVCO | | | | | | IAmb | IAmb | 23 01 11.1 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **PV13** | **Radium Mtn., P** | **28.01** | **332** | P | | | **P** | **23 01 15.6** | **+0.8** |
| PV13 | | | | | | IAmb | IAmb | 23 01 19.4 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **PV11** | **David Mesa, Pa** | **28.15** | **332** | P | | | **P** | **23 01 17.4** | **+1.4** |
| PV11 | | | | | | IAmb | IAmb | 23 01 20.5 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **PV07** | **Paradox Valley** | **28.16** | **333** | P | | | **P** | **23 01 17.0** | **+0.9** |
| PV07 | | | | | | IAmb | IAmb | 23 01 21.3 | |
| | comp=Z,7.3nm,1.0s | | | | | | | | |
| **PV10** | **Paradox Valley** | **28.29** | **332** | P | | | **P** | **23 01 16.4** | **-0.9** |
| **PV23** | **Carpenter Ridg** | **28.34** | **332** | P | | | **P** | **23 01 18.9** | **+1.1** |
| **PFO** | **Pinyon Flats O** | **29.12** | **316** | LR | | | LR | 23 14 23.9 | |
| | comp=Z,86nm,19.0s,baz=173,slow=39 | | | | | | | | |
| **N23A** | **Red Feather La** | **29.20** | **339** | P | | | **P** | **23 01 27.0** | **+1.6** |
| **NNA** | **Nana** | **30.21** | **148** | LR | | | LR | 23 11 24.0 | |
| | comp=Z,56nm,20.5s,baz=250,slow=32 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.16** | **336** | P | | | **P** | **23 01 51.7** | **+0.3** |
| | comp=Z,0.8nm,0.7s,baz=142,slow=7.5,SNR=6.7 | | | | | | | | |
| PDAR | | | | | | LR | LR | 23 16 20.7 | |
| | comp=Z,41nm,18.1s,baz=146,slow=39 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.16** | **336** | P | | | **P** | **23 01 52.2** | **+0.8** |
| **HVU** | **Hansel Valley** | **32.72** | **332** | P | | | **P** | **23 01 57.1** | **+0.8** |
| HVU | | | | | | IAmb | IAmb | 23 02 00.8 | |
| | comp=Z,4.4nm,1.0s | | | | | | | | |
| **SADO** | **Sadowa** | **32.74** | **18** | LR | | | LR | 23 16 18.5 | |
| | comp=Z,129nm,18.7s,baz=162,slow=38 | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **32.78** | **334** | P | | | **P** | **23 01 56.9** | **0.0** |
| AHID | | | | | | IAmb | IAmb | 23 01 60.0 | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **ELK** | **Elko** | **33.15** | **328** | LR | | | LR | 23 18 03.3 | |
| | comp=Z,120nm,18.4s,baz=148,slow=41 | | | | | | | | |
| **REDW** | **Red Top Meadow** | **33.17** | **335** | P | | | **P** | **23 02 00.9** | **+0.5** |
| **SNOW** | **Snow King Moun** | **33.22** | **336** | P | | | **P** | **23 02 01.4** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **33.27** | **322** | P | | | **P** | **23 02 03.2** | **+1.9** |
| | comp=Z,2.3nm,0.7s,baz=132,slow=9.8,SNR=12 | | | | | | | | |
| NVAR | | | | | | LR | LR | 23 17 17.2 | |
| | comp=Z,151nm,20.3s,baz=38,slow=40 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.27** | **322** | P | | | **P** | **23 02 03.0** | **+1.7** |
| **LOHW** | **Long Hollow** | **33.28** | **336** | P | | | **P** | **23 02 01.4** | **+0.1** |
| LOHW | | | | | | IAmb | IAmb | 23 02 03.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **TPAW** | **Teton Pass** | **33.32** | **335** | P | | | **P** | **23 02 02.4** | **+0.8** |
| **MOOW** | **Moose Ponds** | **33.45** | **336** | P | | | **P** | **23 02 03.0** | **+0.3** |
| **HLID** | **Hailey** | **34.87** | **332** | | | IAmb | IAmb | 23 02 19.4 | |
| | comp=Z,3.7nm,0.9s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **35.20** | **335** | P | | | **P** | **23 02 18.7** | **+0.9** |
| **LRM** | **Limekiln Ridge** | **35.85** | **336** | P | | | **P** | **23 02 22.1** | **-1.4** |
| **PLID** | **Pearl Lake** | **36.77** | **332** | | | IAmb | IAmb | 23 02 35.0 | |
| | comp=Z,7.3nm,1.1s | | | | | | | | |
| **MSO** | **Missoula** | **37.27** | **336** | P | | | **P** | **23 02 35.5** | **+0.1** |
| MSO | | | | | | IAmb | IAmb | 23 02 36.8 | |
| | comp=Z,6.9nm,1.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **37.98** | **322** | LR | | | LR | 23 20 33.8 | |
| | comp=Z,91nm,18.7s,baz=156,slow=40 | | | | | | | | |
| **JTMT** | **Jette** | **38.15** | **336** | P | | | **P** | **23 02 42.5** | **-0.4** |
| JTMT | | | | | | IAmb | IAmb | 23 02 56.2 | |
| | comp=Z,8.3nm,1.4s | | | | | | | | |
| **MDP** | **Montagnes des** | **40.37** | **99** | LR | | | LR | 23 20 35.4 | |
| | comp=Z,67nm,18.4s,baz=149,slow=37 | | | | | | | | |
| **SIV** | **San Ignacio** | **43.16** | **133** | P | | | **P** | **23 03 24.0** | **-0.4** |
| | comp=Z,2.4nm,0.8s,baz=299,slow=7.8,SNR=8.3 | | | | | | | | |
| **SCHQ** | **Schefferville** | **45.44** | **21** | LR | | | LR | 23 23 41.9 | |
| | comp=Z,124nm,18.4s,baz=178,slow=37 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.88** | **347** | P | | | **P** | **23 04 23.3** | **-0.7** |
| | comp=Z,9.7nm,0.7s,baz=151,slow=7.5,SNR=121 | | | | | | | | |
| YKA | | | | | | PcP | **PcP** | **23 05 39.8** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=158,slow=3.6,SNR=5.1 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **59.70** | **18** | LR | | | LR | 23 31 53.0 | |
| | comp=Z,62nm,18.9s,baz=180,slow=37 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **59.78** | **337** | P | | | **P** | **23 05 29.1** | **+1.0** |
| **L27K** | **Beaver Creek,** | **59.80** | **336** | P | | | **P** | **23 05 29.3** | **+1.1** |
| L27K | | | | | | IAmb | IAmb | 23 05 31.4 | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **60.26** | **344** | P | | | **P** | **23 05 31.3** | **+0.1** |
| | comp=Z,3.0nm,0.7s,baz=122,slow=6.1,SNR=21 | | | | | | | | |
| INK | | | | | | LR | LR | 23 37 59.9 | |
| | comp=Z,44nm,19.7s,baz=76,slow=42 | | | | | | | | |
| **INK** | **Inuvik** | **60.26** | **344** | | | IAmb | IAmb | 23 05 33.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **61.12** | **349** | P | | | **P** | **23 05 36.7** | **-0.3** |
| **IL31** | | **62.59** | **337** | P | | | **P** | **23 05 47.0** | **0.0** |
| **ILAR** | **Eielson Array** | **62.59** | **337** | P | | | **P** | **23 05 47.0** | **-0.1** |
| | comp=Z,3.8nm,1.1s,baz=132,slow=4.7,SNR=12 | | | | | | | | |
| **ILAR** | **Eielson Array** | **62.59** | **337** | P | | | **P** | **23 05 47.3** | **+0.2** |
| **BMAR** | **Burnt Mountain** | **63.07** | **340** | P | | | **P** | **23 05 50.5** | **+0.2** |
| **JMIC** | **Jan Mayen** | **74.95** | **20** | LR | | | LR | 23 40 49.3 | |
| | comp=Z,50nm,18.2s,baz=236,slow=36 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **80.20** | **52** | P | | | **P** | **23 07 31.7** | **-2.2** |
| | comp=Z,1.0nm,0.8s,baz=298,slow=2.8,SNR=5.2 | | | | | | | | |
| **BILL** | **Bilibino** | **81.22** | **338** | P | | | **P** | **23 07 39.4** | **+0.8** |
| BILL | | | | | | IAmb | IAmb | 23 07 40.2 | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **84.44** | **28** | LR | | | LR | 23 44 45.3 | |
| | comp=Z,12nm,18.3s,baz=5.0,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **134.79** | **256** | PKP | | | **PKiKP** | **23 14 43.0** | **-1.0** |
| | comp=Z,0.3nm,0.7s,baz=88,slow=2.9,SNR=5.6 | | | | | | | | |
| **PZH** | **PanZhiHua** | **137.37** | **341** | PKP | | | **PKiKP** | **23 14 48.0** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **145.78** | **340** | PKPbc | | | **PKPab** | **23 15 02.8** | **-0.5** |
| | comp=Z,3.2nm,0.6s,baz=340,slow=3.8,SNR=17 | | | | | | | | |

*IDC **19** 22:58:31.7±3.9, 21.61N×143.13E, h300km±40km, mb3.2/9, mb1 3.4/11, mb1mx3.0/64, mbtmp4.0/11, Error ellipse: s-maj=69.3km s-min=11.8km az=85.0*

**ISC 19 22:58:32.5**±2.0, **21.6N**±0.1×**143.1E**±0.6, **h311**km, **n11**, σ0§51/11, **mb3.5/8**, **Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHJ** | **Hachijo jima 2** | **11.83** | **346** | P | | | **Pn** | **23 01 12.0** | **-0.8** |
| | 9.5nm,0.3s,baz=100,slow=21,SNR=5.3 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.47** | **345** | P | | | **P** | **23 01 54.1** | **-0.1** |
| | 0.2nm,0.3s,baz=172,slow=10,SNR=6.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **20.55** | **323** | P | | | **P** | **23 02 48.4** | **+0.2** |
| | 0.9nm,0.4s,baz=148,slow=9.4,SNR=2.3 | | | | | | | | |
| **KLR** | **Kul'dur** | **29.00** | **345** | P | | | **P** | **23 04 04.3** | **+0.2** |
| | 2.0nm,0.5s,baz=175,slow=7.3,SNR=15 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.20** | **192** | P | | | **P** | **23 05 55.8** | **-0.1** |
| | 0.8nm,0.6s,baz=16,slow=9.8,SNR=23 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.04** | **205** | P | | | **P** | **23 06 02.2** | **-0.3** |
| | 2.0nm,0.5s,baz=8.8,slow=7.3,SNR=9.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.91** | **192** | P | | | **P** | **23 06 24.8** | **-0.2** |
| | 0.3nm,0.6s,baz=16,slow=13,SNR=9.2 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.55** | **317** | P | | | **P** | **23 07 50.2** | **0.0** |
| | 0.2nm,0.3s,baz=94,slow=7.6,SNR=5.6 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.70** | **320** | P | | | **P** | **23 08 25.4** | **+0.6**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HHC** | **Hu-ho-hao-te** | **38.05** | **340** | *e*P | | **P** | **23 07 59.4** | **+1.1** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,180nm,8.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.46** | **161** | P | | **P** | **23 08 12.2** | **+2.2** |
| | comp=Z,2.7nm,0.4s,baz=344,slow=7.8,SNR=8.0 | | | | | | | |
| STKA | | | | LR | | LR | 23 26 12.4 | |
| | comp=Z,39nm,18.7s,baz=208,slow=39 | | | | | | | |
| **STKA** | **Stephens Creek** | **39.46** | **161** | P | | **P** | **23 08 12.6** | **+2.6** |
| **GTA** | **Gaotai** | **42.04** | **328** | *e*P | | **P** | **23 08 31.5** | **0.0** |
| GTA | | | | pP | | pP | 23 08 43.6 | 0.0 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **42.50** | **148** | P | | **P** | **23 08 35.0** | **-0.3** |
| ARMA | | | | IAmb | | IAmb | 23 08 49.2 | |
| | comp=Z,7.2nm,1.3s | | | | | | | |
| **ODAN** | **Odare** | **43.69** | **304** | *e*P | | **P** | **23 08 44.2** | **-0.9** |
| | comp=Z,16nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **44.38** | **303** | *e*P | | **P** | **23 08 49.7** | **-0.9** |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **JIRN** | **Jiri** | **44.98** | **304** | *e*P | | **P** | **23 08 55.3** | **-0.3** |
| | comp=Z,15nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **45.33** | **304** | *e*P | | **P** | **23 08 57.8** | **-0.5** |
| | comp=Z,12nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **45.95** | **340** | P | | **P** | **23 09 03.4** | **+0.7** |
| | comp=Z,0.8nm,0.6s,baz=157,slow=9.9,SNR=7.2 | | | | | | | |
| **LIFNC** | **LIFOU** | **46.96** | **125** | P | | **P** | **23 09 09.9** | **-0.8** |
| **KOLN** | **Koldanda** | **47.16** | **303** | *e*P | | **P** | **23 09 12.1** | **-0.5** |
| | comp=Z,17nm,0.6s | | | | | | | |
| **DANN** | **Dangsing** | **47.23** | **304** | *e*P | | **P** | **23 09 12.7** | **-0.5** |
| | comp=Z,18nm,0.6s | | | | | | | |
| **PYUN** | **Piuthan** | **47.78** | **303** | *e*P | | **P** | **23 09 17.7** | **+0.3** |
| | comp=Z,26nm,0.9s | | | | | | | |
| **WMQ** | **Urumqi** | **51.77** | **324** | *e*P | | **P** | **23 09 46.8** | **-0.5** |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **56.59** | **324** | P | | **P** | **23 10 22.3** | **0.0** |
| MK31 | | | | IAmb | | IAmb | 23 10 22.9 | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.59** | **324** | P | | **P** | **23 10 22.1** | **-0.2** |
| | comp=Z,4.6nm,0.6s,baz=123,slow=8.3,SNR=77 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.59** | **324** | P | | **P** | **23 10 22.3** | **0.0** |
| **MAKZ** | **Makanchi** | **56.78** | **324** | P | | **P** | **23 10 23.4** | **-0.2** |
| MAKZ | | | | IAmb | | IAmb | 23 10 24.2 | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **NIL** | **Nilore** | **57.47** | **307** | P | | **P** | **23 10 28.2** | **-0.5** |
| NIL | | | | IAmb | | IAmb | 23 10 29.1 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **59.43** | **332** | P | | **P** | **23 10 40.1** | **-1.8** |
| ZAA0 | | | | IAmb | | IAmb | 23 10 45.9 | |
| | comp=Z,3.4nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.43** | **332** | P | | **P** | **23 10 40.6** | **-1.3** |
| | comp=Z,1.1nm,0.5s,baz=136,slow=7.1,SNR=6.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.43** | **332** | P | | **P** | **23 10 41.1** | **-0.8** |
| **AAK** | **Ala-Archa** | **59.60** | **317** | P | | **P** | **23 10 43.6** | **+0.1** |
| AAK | | | | IAmb | | IAmb | 23 10 45.1 | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **60.72** | **327** | P | | **P** | **23 10 50.5** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **60.72** | **327** | P | | **P** | **23 10 50.4** | **-0.4** |
| | comp=Z,6.5nm,0.6s,baz=125,slow=6.1,SNR=73 | | | | | | | |
| **KBL** | **Kabul** | **61.07** | **307** | P | | **P** | **23 10 53.5** | **-0.3** |
| KBL | | | | IAmb | | IAmb | 23 10 54.1 | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **CHGR** | **Chuyangaron** | **62.08** | **311** | P | | **P** | **23 10 59.3** | **-1.1** |
| **WKZ** | **Wanaka** | **62.35** | **148** | P | | **P** | **23 11 04.7** | **+2.8** |
| **KKAR** | **Karatay Array** | **62.50** | **316** | P | | **P** | **23 11 02.9** | **-0.1** |
| **WHZ** | **Wether Hill Ro** | **62.51** | **149** | P | | **P** | **23 11 02.4** | **-0.6** |
| **PLWZ** | **Palliser** | **63.92** | **142** | P | | **P** | **23 11 13.3** | **+0.9** |
| **BVAR** | **Borovoye Array** | **66.31** | **326** | P | | **P** | **23 11 27.4** | **-0.3** |
| | comp=Z,5.7nm,0.6s,baz=77,slow=15,SNR=39 | | | | | | | |
| **BRVK** | **Borovoye** | **66.38** | **326** | P | | **P** | **23 11 28.1** | **-0.1** |
| **ABKAR** | **Akbulak array** | **71.31** | **320** | P | | **P** | **23 11 58.4** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **72.79** | **321** | LR | | LR | 23 47 16.3 | |
| | comp=Z,46nm,19.5s,baz=39,slow=38 | | | | | | | |
| **ARU** | **Arti** | **73.90** | **327** | P | | **P** | **23 12 13.5** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=11,slow=2.6,SNR=5.0 | | | | | | | |
| **ARU** | **Arti** | **73.90** | **327** | IAmb | | IAmb | 23 12 14.3 | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **TTA** | **Tatalina** | **79.11** | **27** | P | | **P** | **23 12 44.2** | **+0.6** |
| **L19K** | **White Mountain** | **79.52** | **28** | P | | **P** | **23 12 46.4** | **+0.6** |
| L19K | | | | IAmb | | IAmb | 23 12 50.4 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **M19K** | **Big River Lodg** | **79.70** | **28** | P | | **P** | **23 12 46.0** | **-0.7** |
| M19K | | | | IAmb | | IAmb | 23 12 52.4 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **RAYN** | **Ar Rayn** | **80.47** | **293** | P | | **P** | **23 12 50.8** | **-0.9** |
| RAYN | | | | IAmb | | IAmb | 23 12 52.0 | |
| | comp=Z,3.7nm,0.8s | | | | | | | |
| **IMAR** | **Indian Mountai** | **80.55** | **24** | P | | **P** | **23 12 52.6** | **+1.5** |
| **COLD** | **Coldfoot** | **82.10** | **23** | P | | **P** | **23 13 00.5** | **+1.1** |
| **H24K** | **Noodor Dome** | **82.93** | **24** | P | | **P** | **23 13 05.1** | **+1.3** |
| **ILAR** | **Eielson Array** | **83.31** | **25** | P | | **P** | **23 13 05.0** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=242,slow=5.3,SNR=5.7 | | | | | | | |
| **VOI** | **Vohitsoka** | **83.34** | **247** | P | | **P** | **23 13 06.4** | **-0.5** |
| **M24K** | **Tolsona, Glenn** | **83.58** | **28** | P | | **P** | **23 13 02.8** | **-4.5** |
| **KLU** | **Klutina** | **83.69** | **29** | P | | **P** | **23 13 06.3** | **+0.4** |
| KLU | | | | IAmb | | IAmb | 23 13 22.1 | |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **84.28** | **23** | P | | **P** | **23 13 12.4** | **+1.7** |
| **BRTR** | **Keskin Array B** | **89.49** | **310** | P | | **P** | **23 13 35.1** | **-1.6** |
| | comp=Z,0.9nm,0.8s,baz=153,slow=4.0,SNR=4.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **90.69** | **332** | P | | **P** | **23 13 39.9** | **-1.8** |
| | comp=Z,1.9nm,1.0s,baz=52,slow=7.2,SNR=1.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **90.69** | **332** | P | | **P** | **23 13 40.8** | **-0.9** |

*GUC **19** 23:28:01.7±0.8, 18°.57S×70°.98W, h28km±6km, ML3.4*
*IDC **19** 23:28:20.3±16.0, 16°.63S×70°.62W, h133km±61km, mb3.3/2, mb1 3.4/3, mb1mx3.2/31, mbtmp3.6/3, MS2.9/1, Ms1 2.9/1, ms1mx2.4/17, Error ellipse: s-maj=380.4km s-min=62.0km az=24.0*

**ISC 19 23:27:57.1±2.7, 18°.56S±0°.08×71°.2W±0°.1, h8km±15km, n22, σ1°46/20, 2C-1D, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB12** | **IPOC Station P** | **0.78** | **94** | *i*P | **Pg** | **23 28 12.9** | **+0.8** |
| PB12 | | | | *i* S | **Sg** | **23 28 21.4** | **-0.8** |
| PB12 | | | | IAML | | 23 28 25.1 | |
| | comp=N,3μm,0.2s | | | | | | |
| **AP01** | **Chacalluta** | **0.79** | **76** | *e*P | **Pg** | **23 28 13.2** | **+0.9** |
| AP01 | | | | *i* S | **Sg** | **23 28 22.0** | **-0.5** |
| **PB11** | **IPOC Station P** | **1.84** | **130** | *i*P | **Pn** | **23 28 30.4** | **+1.1** |
| PB11 | | | | *i* S | **Sn** | **23 28 52.2** | **-0.8** |
| **TA02** | **Huaiquique** | **1.95** | **151** | IAML | | 23 29 01.6 | |
| | comp=E,541nm,0.1s | | | | | | |
| **HMBC** | **Humberstone** | **2.08** | **145** | *i*P | **Pn** | **23 28 33.5** | **+1.0** |
| HMBC | | | | *i* S | **Sb** | **23 29 01.6** | **+0.3** |
| HMBC | | | | IAML | | 23 29 15.2 | |
| | comp=E,532nm,0.4s | | | | | | |
| **GO01** | **Chusmiza** | **2.15** | **121** | *e*P | **Pn** | **23 28 35.6** | **+1.8** |
| GO01 | | | | IAML | | 23 29 05.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **2.19** | **156** | *e*P | **Pn** | **23 28 34.7** | **+0.8** |
| TA01 | | | | IAML | | 23 29 14.3 | |
| | comp=N,310nm,0.5s | | | | | | |
| **PATCX** | **Punta Patache** | **2.43** | **158** | *e*P | **Pn** | **23 28 38.0** | **+0.7** |
| **PB08** | **IPOC Station P** | **2.45** | **130** | *e*P | **Pn** | **23 28 39.0** | **+1.2** |
| PB08 | | | | *i* S | **Sn** | **23 29 07.8** | **-0.4** |
| PB08 | | | | IAML | | 23 29 14.0 | |
| | comp=N,470nm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **2.98** | **157** | *e*P | **Pn** | **23 28 45.8** | **+0.9** |
| PB02 | | | | *i* S | **Sn** | **23 29 17.9** | **-3.1** |
| **LPAZ** | **La Paz** | **3.66** | **52** | P | **Pb** | **23 29 00.2** | **-2.3** |
| | comp=N,2.7nm,0.3s,baz=257,slow=12,SNR=36 | | | | | | |
| **PB09** | **IPOC Station P** | **3.68** | **151** | *e*P | **Pn** | **23 28 56.3** | **+1.7** |
| **PB03** | **IPOC Station P** | **3.71** | **160** | *e*P | **Pn** | **23 28 55.3** | **+0.4** |
| **SIV** | **San Ignacio** | **9.96** | **77** | LR | LR | 23 34 44.3 | |
| | comp=N,80nm,21.9s,baz=131,slow=42 | | | | | | |
| **H03N1** | **Juan Fernandez** | **16.37** | **204** | T | T | 23 49 11.1 | |
| | baz=29,slow=73,SNR=42 | | | | | | |
| **H03N2** | **Juan Fernandez** | **16.38** | **204** | T | T | 23 49 11.1 | |
| | baz=29,slow=73,SNR=34 | | | | | | |
| **H03N3** | **Juan Fernandez** | **16.39** | **204** | T | T | 23 49 02.7 | |
| | baz=29,slow=73,SNR=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.40** | **72** | P | **P** | **23 40 00.9** | **+1.9** |
| | comp=N,1.6nm,1.2s,baz=257,slow=5.5,SNR=2.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.74** | **341** | P | **P** | **23 40 45.6** | **-0.6** |
| | comp=N,0.1nm,0.5s,baz=129,slow=5.6,SNR=4.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.37** | **280** | T | T | 02 04 51.1 | |
| | baz=100,slow=75,SNR=5.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.37** | **280** | T | T | 02 04 46.3 | |
| | baz=100,slow=75,SNR=5.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.38** | **280** | T | T | 02 04 53.1 | |
| | baz=100,slow=75,SNR=6.5 | | | | | | |

*IDC **19** 23:34:45.1±2.7, 14°.23N×125°.87E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.3/36, mbtmp3.4/3, Error ellipse: s-maj=97.0km s-min=29.5km az=56.0*
*MAN **19** 23:34:51.8, 13°.90N×124°.65E, h24km, mb4.7, ML3.6, MS3.5*

**ISC 19 23:34:50.0±1.6, 13°.8N±0°.1×124°.8E±0°.1, h10km, n6, σ3°12/7, mb3.4/3, 1C-2D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GQP** | **Guinayangan** | **2.32** | **272** | *e*P | **Pb** | **23 35 30.1** | **-1.9** |
| GQP | | | | *e*S | **Sn** | **23 35 54.8** | **-2.1** |
| **RCP** | **Roxas** | **3.05** | **222** | *e*P | **Pb** | **23 35 44.6** | **+0.2** |
| **LQP** | **Lukban** | **3.21** | **275** | *e*P | **Pn** | **23 35 42.6** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **25.28** | **284** | P | **P** | **23 40 21.5** | **+4.7** |
| | 0.5nm,0.3s,baz=93,slow=6.6,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.32** | **167** | P | **P** | **23 42 09.0** | **-2.1** |
| | 0.2nm,0.5s,baz=355,slow=8.6,SNR=6.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.36** | **322** | P | **P** | **23 43 31.2** | **-0.8** |
| | 0.2nm,0.6s,baz=113,slow=7.8,SNR=4.0 | | | | | | |

*IDC **19** 23:49:41.7±1.2, 28°.24N×128°.57E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.6/50, mbtmp3.6/6, MS3.3/22, Ms1 3.4/22, ms1mx3.1/83, Error ellipse: s-maj=44.9km s-min=17.6km az=76.0*
*NIED **19** 23:49:44.1, 28°.12N×128°.07E, h16km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr=0.44; Mθθ1.20; Mϕϕ-0.77; Mrθ-0.70; Mθϕ1.40; Mϕr-0.20; Fault plane solution: M0 1.83000×10^15 NP1: ϕs288.00000°, δ86.00000°, λ18.00000°. NP2: ϕs196.00000°, δ72.00000°, λ175.00000°.*
*JMA **19** 23:49:44.1±0.2, 28°.12N×128°.06E, h16km±2km, M3.7*

**ISC 19 23:49:43.5±1.5, 28°.11N±0°.04×128°.16E±0°.06, h9km±10km, n37, σ0°94/22, mb3.6/6, MS3.3/18, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTK** | **Tokunoshima** | **0.77** | **115** | P | **Pn** | **23 49 59.9** | **-0.6** |
| JTK | | | | S | **Sn** | **23 50 11.5** | **-0.6** |
| **JOKE** | **Okinoerabujima** | **0.83** | **154** | P | **Pb** | **23 50 00.5** | **+0.5** |
| **JAMN** | **Amaminishikomi** | **0.90** | **81** | P | **Pn** | **23 50 02.4** | **+0.1** |
| **JIH** | **Iheya** | **1.08** | **189** | P | **Pb** | **23 50 04.0** | **-0.4** |
| JIH | | | | S | **Sg** | **23 50 18.3** | **-0.1** |
| **JYRO** | **Yoronjima** | **1.11** | **167** | P | **Pg** | **23 50 04.8** | **0.0** |
| JYRO | | | | S | **Sg** | **23 50 19.3** | **+0.1** |
| **JOW** | **Kunigami** | **1.27** | **176** | Pn | **Pn** | **23 50 07.5** | **0.0** |
| | 97nm,0.3s,baz=72,slow=17,SNR=133 | | | | | | |
| JOW | | | | Sn | **Sb** | **23 50 24.0** | **-0.1** |
| | 103nm,0.3s,baz=186,slow=23,SNR=24 | | | | | | |
| JOW | | | | LR | LR | 23 50 56.6 | |
| | comp=Z,754nm,18.4s,baz=103,slow=53 | | | | | | |
| **JOW** | **Kunigami** | **1.27** | **176** | P | **Pn** | **23 50 07.5** | **0.0** |
| JOW | | | | S | **Sb** | **23 50 23.9** | **-0.2** |
| **JAM** | **Amami Oshima** | **1.31** | **76** | P | **Pn** | **23 50 09.3** | **+1.4** |
| **JTAJ** | **Takarajima** | **1.39** | **41** | P | **Pg** | **23 50 09.6** | **-0.5** |
| **JNTH** | **Nagotoyohara** | **1.59** | **185** | P | **Pn** | **23 50 12.3** | **+0.5** |
| **JAGN** | **Aguni-jima** | **1.72** | **209** | P | **Pn** | **23 50 13.1** | **-0.5** |
| **JNU** | **Nakatsue** | **5.52** | **24** | LR | LR | 23 52 54.5 | |
| | comp=Z,719nm,20.9s,baz=135,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **9.32** | **359** | LR | LR | 23 55 40.0 | |
| | comp=Z,1.82nm,19.2s,baz=200,slow=39 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **11.18** | **61** | LR | LR | 23 56 29.2 | |
| | comp=Z,87nm,19.7s,baz=254,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.95** | **43** | LR | LR | 23 57 30.9 | |
| | comp=Z,74nm,19.0s,baz=198,slow=40 | | | | | | |
| **DAV** | **Davao City (W)** | **21.07** | **187** | LR | LR | 00 00 18.5 | |
| | comp=Z,33nm,18.2s,baz=344,slow=44 | | | | | | |
| **GUMO** | **Guam** | **21.23** | **129** | LR | LR | 00 01 21.5 | |
| | comp=Z,84nm,20.9s,baz=112,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **21.27** | **6** | LR | LR | 00 02 31.0 | |
| | comp=Z,61nm,18.4s,baz=174,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **325** | P | **P** | **23 55 17.9** | **+1.4** |
| | 1.4nm,0.7s,baz=141,slow=11,SNR=10 | | | | | | |
| SONM | | | | LR | LR | 00 06 27.6 | |
| | comp=Z,75nm,18.4s,baz=48,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.44** | **257** | LR | LR | 00 07 17.1 | |
| | comp=Z,47nm,18.7s,baz=70,slow=37 | | | | | | |
| **SIJI** | **Sorong** | **29.96** | **174** | LR | LR | 00 04 53.8 | |
| | comp=Z,47nm,21.8s,baz=297,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **33.15** | **33** | LR | LR | 00 11 29.3 | |
| | comp=Z,36nm,18.7s,baz=139,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **33.91** | **195** | LR | LR | 00 10 05.2 | |
| | comp=Z,22nm,21.4s,baz=60,slow=36 | | | | | | |
| **PSI** | **Prapat** | **37.56** | **233** | LR | LR | 00 13 11.2 | |
| | comp=Z,45nm,18.6s,baz=70,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.26** | **310** | P | **P** | **23 57 21.4** | **+0.8** |
| | 0.6nm,0.7s,baz=98,slow=10,SNR=9.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.73** | **322** | LR | LR | 00 16 33.6 | |
| | comp=Z,44nm,19.5s,baz=48,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **41.58** | **151** | LR | LR | 00 11 44.8 | |
| | comp=Z,39nm,19.9s,baz=178,slow=32 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.47** | **315** | P | **P** | **23 57 47.1** | **+0.3** |
| | 0.5nm,0.6s,baz=103,slow=9.0,SNR=4.4 | | | | | | |
| KURBB | | | | LR | LR | 00 17 22.2 | |
| | comp=Z,62nm,19.6s,baz=45,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.14** | **172** | P | **P** | **23 58 25.1** | **+1.1** |
| | 1.1nm,0.8s,baz=354,slow=8.4,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **51.77** | **173** | P | **P** | **23 58 52.5** | **+0.9** |
| | 0.3nm,0.5s,baz=356,slow=9.0,SNR=2.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.48** | **314** | LR | LR | 00 24 50.3 | |
| | comp=Z,66nm,19.2s,baz=46,slow=37 | | | | | | |
| **KBZ** | **Khabaz** | **67.93** | **309** | LR | LR | 00 36 16.0 | |
| | comp=Z,23nm,20.7s,baz=12,slow=41 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.07** | **319** | LR | LR | 00 37 43.5 | |
| | comp=Z,52nm,19.3s,baz=52,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.84** | **308** | LR | LR | 00 38 03.1 | |
| | comp=Z,36nm,18.7s,baz=298,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.86** | **25** | P | **P** | **00 01 32.8** | **-2.7** |
| | 0.3nm,0.5s,baz=299,slow=5.5,SNR=4.2 | | | | | | |
| **HFS** | **Hagfors** | **77.14** | **332** | LR | LR | 00 41 29.7 | |
| | comp=Z,75nm,20.2s,baz=20,slow=40 | | | | | | |
| **NOA** | **NORSAR Array B** | **77.61** | **334** | LR | LR | 00 38 56.8 | |
| | comp=Z,28nm,18.5s,baz=20,slow=38 | | | | | | |

*IDC **19** 23:50:39.9±1.3, 45°.83N×106°.80W, h0km, mb1 3.3/3, mb1mx3.2/42, mbtmp3.0/3, ML2.8/3, Error ellipse: s-maj=40.9km s-min=9.6km az=131.0*
*NEIC **19** 23:50:43.2±2.0, 45°.93N±0°.04×106°.55W±0°.05, h0km±2km, ML3.1/46, Error ellipse: s-maj=6.9km s-min=6.1km az=23.0*

**ISC 19 23:50:37.9±0.9, 45°.60N±0°.04×106°.47W±0°.05, h0km, n34, σ1°33/32, Montana**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAO** | **LASA Array** | **1.10** | **9** | | **Pg** | **23 50 58.2** | **-0.7** |
| **RLMT** | **Red Lodge** | **2.03** | **257** | | **Pb** | **23 51 16.0** | **+0.3** |
| RLMT | | | | Sn | **Sb** | **23 51 41.5** | **-0.1** |
| RLMT | | | | IAML | | 23 51 45.1 | |
| | 130nm,0.4s | | | | | | |
| RLMT | | | | IAML | | 23 51 45.4 | |
| | 193nm,0.4s | | | | | | |
| **GCMT** | **Greycliff** | **2.25** | **276** | Pn | **Pg** | **23 51 20.8** | **-0.1** |
| **RSSD** | **Black Hills** | **2.28** | **130** | Pg | | 23 51 25.8 | +4.3 |
| RSSD | | | | IAML | | 23 52 03.7 | |
| | 62nm,0.5s | | | | | | |
| RSSD | | | | IAML | | 23 52 03.8 | |
| | 67nm,0.6s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.74** | **253** | | **Pb** | **23 51 28.7** | **+0.8** |
| **K22A** | **Casper** | **2.95** | **181** | Pn | **Pg** | **23 51 34.1** | **-0.3** |
| K22A | | | | IAML | | 23 52 25.6 | |
| | comp=N,47nm,0.6s | | | | | | |
| K22A | | | | IAML | | 23 52 31.5 | |
| | comp=E,43nm,0.5s | | | | | | |
| **LKWY** | **Lake** | **2.97** | **251** | | **Pb** | **23 51 32.3** | **+0.5** |
| LKWY | | | | IAML | | 23 52 14.6 | |
| | comp=E,55nm,0.5s | | | | | | |
| **YNR** | **Norris Junctio** | **3.10** | **255** | | **Pb** | **23 51 34.1** | **+0.1** |
| YNR | | | | IAML | | 23 52 13.8 | |
| | comp=E,62nm,0.5s | | | | | | |
| YNR | | | | IAML | | 23 52 15.6 | |
| | comp=N,50nm,0.5s | | | | | | |
| **H17A** | **Grant Village** | **3.15** | **249** | | **Pb** | **23 51 35.5** | **+0.6** |
| **YHH** | **Holmes Hill** | **3.20** | **257** | | **Pb** | **23 51 35.5** | **-0.2** |
| **DGMT** | **Dagmar** | **3.27** | **28** | | **Pb** | **23 51 36.5** | **-0.2** |
| **EGMT** | **Eagleton** | **3.31** | **318** | | **Pn** | **23 51 33.4** | **+2.4** |
| **YMR** | **Madison River** | **3.31** | **255** | | **Pb** | **23 51 37.9** | **+0.3** |
| YMR | | | | IAML | | 23 52 42.4 | |
| | comp=E,62nm,0.9s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.37** | **245** | | **Pb** | **23 51 38.8** | **+0.3** |
| FLWY | | | | IAML | | 23 52 30.3 | |
| | comp=E,31nm,0.5s | | | | | | |
| FLWY | | | | IAML | | 23 52 48.7 | |
| | comp=E,41nm,4.8s | | | | | | |
| **LOHW** | **Long Hollow** | **3.56** | **237** | | **Pb** | **23 51 40.6** | **-1.1** |
| LOHW | | | | IAML | | 23 53 30.8 | |
| | comp=E,23nm,4.9s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.57** | **240** | | **Pb** | **23 51 41.8** | **-0.1** |
| **QLMT** | **Earthquake Lak** | **3.59** | **259** | Pn | **Pb** | **23 51 40.9** | **-1.4** |
| **BW06** | **Boulder Array** | **3.60** | **219** | IAML | | 23 52 39.9 | |
| | comp=E,30nm,0.5s | | | | | | |
| BW06 | | | | IAML | | 23 52 42.9 | |
| | comp=E,20nm,0.6s | | | | | | |
| **PD31** | **Pinedale Array** | **3.60** | **219** | | **Pb** | **23 51 41.2** | **-1.2** |
| **PDAR** | **Pinedale Array** | **3.60** | **219** | Pn | **Pb** | **23 51 41.3** | **-1.2** |
| | comp=E,0.9nm,0.3s,baz=44,slow=15,SNR=22 | | | | | | |
| PDAR | | | | Pg | **Pg** | **23 51 47.3** | **+0.5** |
| | comp=E,4.0nm,0.3s,baz=44,slow=18,SNR=27 | | | | | | |
| PDAR | | | | Lg | Lg | 23 52 33.4 | |
| | comp=E,3.1nm,0.3s,baz=38,slow=36,SNR=7.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.60** | **219** | | **Pb** | **23 51 42.3** | **-0.2** |
| **BOZ** | **Bozeman (W)** | **3.62** | **272** | | **Pb** | **23 51 40.2** | **-2.5** |
| BOZ | | | | IAML | | 23 52 32.7 | |
| | comp=E,45nm,3.1s | | | | | | |
| **SNOW** | **Snow King Moun** | **3.73** | **237** | Pn | **Pb** | **23 51 44.1** | **-0.8** |
| SNOW | | | | IAML | | 23 53 11.9 | |
| | comp=E,32nm,4.5s | | | | | | |
| SNOW | | | | IAML | | 23 53 56.0 | |
| | comp=E,22nm,3.7s | | | | | | |
| **TPAW** | **Teton Pass** | **3.83** | **238** | | **Pb** | **23 51 46.0** | **-0.5** |
| TPAW | | | | IAML | | 23 52 51.0 | |
| | comp=E,24nm,4.1s | | | | | | |
| TPAW | | | | IAML | | 23 53 20.1 | |
| | comp=E,19nm,4.7s | | | | | | |
| **REDW** | **Red Top Meadow** | **3.85** | **236** | Pn | **Pb** | **23 51 46.0** | **-0.8** |
| REDW | | | | IAML | | 23 54 03.1 | |
| | comp=E,23nm,4.1s | | | | | | |
| REDW | | | | IAML | | 23 54 04.8 | |
| | comp=E,22nm,5.0s | | | | | | |
| **HRY** | **Holter Researc** | **3.88** | **289** | | **Pn** | **23 51 41.0** | **+2.1** |
| **RWWY** | **Rawlins** | **3.95** | **188** | | **Pb** | **23 51 48.6** | **+0.1** |
| **LRM** | **Limekiln Ridge** | **4.19** | **275** | | **Pn** | **23 51 43.9** | **+0.6** |
| **AHID** | **Auburn Hatcher** | **4.37** | **231** | Pn | **Pb** | **23 51 51.9** | **-3.7** |
| AHID | | | | IAML | | 23 53 10.8 | |
| | comp=E,11nm,3.9s | | | | | | |
| AHID | | | | IAML | | 23 53 28.1 | |
| | comp=E,14nm,5.0s | | | | | | |
| **N23A** | **Red Feather La** | **4.72** | **175** | Pn | **Pb** | **23 52 01.0** | **-0.7** |
| **BCYI** | **Bear Canyon** | **5.09** | **258** | Pn | Pn | 23 52 01.3 | +5.8 |
| **I10CA** | **LAC DU BONNET** | **8.39** | **53** | *i* | | 00 38 30.0 | |
| | baz=236,slow=316,SNR=4.0 | | | | | | |
| **ULM** | **Lac du Bonnet** | **8.50** | **53** | Pn | **Pn** | **23 52 43.1** | **+1.0** |
| | comp=E,0.2nm,0.3s,baz=243,slow=16,SNR=1.3 | | | | | | |
| ULM | | | | Lg | Lg | 23 55 04.2 | |
| | comp=E,0.3nm,0.3s,baz=133,slow=20,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **17.56** | **347** | P | **Pn** | **23 54 40.8** | **-2.9** |
| | comp=E,0.0nm,0.3s,baz=163,slow=12,SNR=2.7 | | | | | | |

*IDC **19** 23:56:41.4±4.6, 6°.14S×148°.52E, h45km±51km, mb3.8/4, mb1 4.1/6, mb1mx3.6/42, mbtmp4.1/6, ML3.6/2, MS3.2/4, Ms1 3.2/4, ms1mx2.7/58, Error ellipse: s-maj=67.5km s-min=27.0km az=129.0*
*NEIC **19** 23:56:43.0±1.9, 6°.16S±0°.05×148°.6E±0°.1, h61km±8km, mb4.1/22, Error ellipse: s-maj=18.6km s-min=1.9km az=114.0*

**ISC 19 23:56:43.0±0.6, 6°.20S±0°.08×148°.6E±0°.1, h65km, n47, σ1°16/45, mb4.1/13, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.48** | **204** | P | **Pn** | **23 57 34.3** | **-0.5** |
| | 57nm,0.3s,baz=15,slow=8.1,SNR=46 | | | | | | |
| PMG | | | | S | **Sn** | **23 58 14.3** | **-0.6** |
| | 28nm,0.3s,baz=2.7,slow=22,SNR=19 | | | | | | |
| PMG | | | | LR | LR | 23 59 10.9 | |
| | comp=Z,203nm,18.8s,baz=146,slow=42 | | | | | | |
| **PMG** | **Port Moresby** | **3.48** | **204** | | **Pn** | **23 57 34.8** | **0.0** |
| PMG | | | | Sn | **Sn** | **23 58 15.8** | **+0.9** |
| **PMG** | **Port Moresby** | **3.48** | **204** | P | **Pn** | **23 57 34.9** | **0.0** |
| **PMG** | **Port Moresby** | **3.48** | **204** | P | **Pn** | **23 57 35.0** | **+0.1** |
| **RABL** | **Rabaul** | **4.09** | **61** | Pn | **Pn** | **23 57 42.1** | **-1.1** |
| **COEN** | **Coen** | **9.37** | **214** | Pn | **Pn** | **23 58 53.8** | **-1.5** |
| **COEN** | **Coen** | **9.37** | **214** | P | **Pn** | **23 58 53.1** | **-2.3** |
| **MTSU** | **Mount Surprise** | **12.57** | **199** | P | **Pn** | **23 59 38.3** | **-0.9** |
| **MTN** | **Manton Dam** | **18.42** | **248** | P | **P

*IDC **20** 00:00:29.4±1.1,59˚70N×153˚42W,h103km±13km,mb3.6/5, mb1 3.8/8,mb1mx3.5/50,mbtmp4.0/8,MS3.2/2,Ms1 3.2/2, ms1mx2.4/89,Error ellipse: s-maj=20.1km s-min=10.4km az=95.0*

*NEIC **20** 00:00:31.0±1.2,59˚66N±0˚03×153˚28W±0˚09, h128km±4km,Error ellipse: s-maj=6.8km s-min=4.6km az=94.0*

*AEIC **20** 00:00:32±1.7,59˚66N±0˚05×153˚26W±0˚09,h121km±4km, ML4.0,mb4.3/6(NEIC),ML4.2/112(NEIC),Error ellipse: s-maj=7.2km s-min=6.0km az=138.0*

**ISC 20 00:00:31.5±0.6,59˚66N±0˚04×153˚23W±0˚04, h127km±5km,n291,σ0s88/299,mb4.2/8,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.01** | **187** | | **Pn** | **00 00 48.3** | **-0.4** |
| OPT | | | | | **Sn** | **00 01 01.1** | **-0.7** |
| **OPT** | **Oil Point** | **0.01** | **187** | P | **Pn** | **00 00 48.3** | **-0.4** |
| | baz=291 | | | | | | |
| OPT | | | | S | **Sn** | **00 01 01.1** | **-0.7** |
| | baz=291 | | | | | | |
| **AU22** | **Augustine Moun** | **0.30** | **193** | | **Sn** | **00 01 02.1** | **-0.5** |
| **AUL** | **Augustine Lava** | **0.30** | **200** | | **Pn** | **00 00 49.0** | **-0.2** |
| AUL | | | | | **Sn** | **00 01 02.1** | **-0.6** |
| **AUH** | **Augustine H** | **0.32** | **200** | | **Pn** | **00 00 49.1** | **-0.3** |
| **AGU** | **Augustine-Summ** | **0.32** | **199** | | **Pn** | **00 00 49.3** | **-0.2** |
| **AUQ** | **Augustine Qik'** | **0.32** | **197** | | **Pn** | **00 00 49.1** | **-0.3** |
| AUQ | | | | | **Sn** | **00 01 02.2** | **-0.7** |
| **O20K** | **Slope Mountain** | **0.52** | **36** | | **Pn** | **00 00 50.2** | **-0.2** |
| O20K | | | | | **Sn** | **00 01 04.2** | **-0.5** |
| **O20K** | **Slope Mountain** | **0.52** | **36** | P | **Pn** | **00 00 50.2** | **-0.2** |
| | baz=217 | | | | | | |
| O20K | | | | S | **Sn** | **00 01 04.2** | **-0.5** |
| | baz=217 | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **315** | Pn | **Pn** | **00 00 51.4** | **-0.5** |
| O19K | | | | | **Sn** | **00 01 06.3** | **-1.2** |
| O19K | | | | IAML | | 00 01 07.4 | |
| | comp=N,12µm,0.5s | | | | | | |
| O19K | | | | IAML | | 00 01 08.4 | |
| | comp=E,8µm,0.5s | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **315** | P | **Pn** | **00 00 51.5** | **-0.5** |
| | baz=135 | | | | | | |
| O19K | | | | S | **Sn** | **00 01 06.8** | **-0.7** |
| | baz=135 | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.77** | **196** | Pn | **Pn** | **00 00 51.6** | **-0.5** |
| Q19K | | | | | **Sn** | **00 01 06.6** | **-1.1** |
| Q19K | | | | IAML | | 00 01 14.7 | |
| | comp=E,6µm,1.1s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.77** | **196** | P | **Pn** | **00 00 51.6** | **-0.5** |
| | baz=15 | | | | | | |
| Q19K | | | | S | **Sn** | **00 01 06.9** | **-0.8** |
| | baz=15 | | | | | | |
| **RED** | **Redoubt Volcan** | **0.79** | **17** | | **Pn** | **00 00 52.0** | **-0.4** |
| RED | | | | | **Sn** | **00 01 07.2** | **-1.0** |
| **HOM** | **Homer** | **0.81** | **90** | Pn | **Pn** | **00 00 52.0** | **-0.3** |
| HOM | | | | IAML | | 00 01 09.5 | |
| | comp=N,12µm,0.5s | | | | | | |
| HOM | | | | IAML | | 00 01 11.6 | |
| | comp=E,8µm,0.4s | | | | | | |
| **HOM** | **Homer** | **0.81** | **90** | P | **Pn** | **00 00 52.3** | **0.0** |
| | baz=271 | | | | | | |
| **RSO** | **Redoubt South** | **0.84** | **16** | | **Pn** | **00 00 52.6** | **-0.3** |
| **RDWB** | **Redoubt West** | **0.85** | **13** | | **Pn** | **00 00 52.5** | **-0.4** |
| RDWB | | | | | **Sn** | **00 01 08.0** | **-1.2** |
| **NCT** | **North Crescent** | **0.91** | **9** | | **Pn** | **00 00 53.0** | **-0.4** |
| NCT | | | | | **Sn** | **00 01 09.2** | **-0.8** |
| **RDJH** | **Redoubt Jeurge** | **0.95** | **13** | | **Pn** | **00 00 53.5** | **-0.3** |
| RDJH | | | | | **Sn** | **00 01 10.0** | **-0.8** |
| **DFR** | **Drift River** | **0.97** | **16** | | **Pn** | **00 00 53.6** | **-0.3** |
| **RDT** | **Redoubt** | **1.00** | **24** | | **Pn** | **00 00 53.9** | **-0.3** |
| **O18K** | **Koktuh Hills** | **1.02** | **282** | | **Pn** | **00 00 53.5** | **-0.8** |
| **O18K** | **Koktuh Hills** | **1.02** | **282** | P | **Pn** | **00 00 53.5** | **-0.8** |
| | baz=100 | | | | | | |
| **CNPM** | **China Poot** | **1.02** | **97** | Pn | **Pn** | **00 00 54.1** | **-0.2** |
| CNPM | | | | IAML | | 00 01 11.6 | |
| | comp=N,5µm,0.6s | | | | | | |
| CNPM | | | | IAML | | 00 01 14.9 | |
| | comp=E,4µm,0.4s | | | | | | |
| **CNPM** | **China Poot** | **1.02** | **97** | | **Sn** | **00 01 10.7** | **-1.0** |
| **P18K** | **Big Mountain,** | **1.05** | **256** | | **Pn** | **00 00 53.7** | **-0.9** |
| P18K | | | | | **Sn** | **00 01 10.3** | **-1.9** |
| **P18K** | **Big Mountain,** | **1.05** | **256** | P | **Pn** | **00 00 53.7** | **-0.9** |
| | baz=74 | | | | | | |
| P18K | | | | S | **Sn** | **00 01 10.3** | **-1.9** |
| | baz=74 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.19** | **84** | | **Pn** | **00 00 55.5** | **-0.5** |
| BRLK | | | | IAML | | 00 01 15.3 | |
| | comp=E,3µm,0.3s | | | | | | |
| BRLK | | | | IAML | | 00 01 15.4 | |
| | comp=N,5µm,0.4s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.26** | **85** | | **Pn** | **00 00 56.2** | **-0.5** |
| **BRSE** | **Bradley Lake S** | **1.26** | **85** | P | **Pn** | **00 00 56.2** | **-0.5** |
| | baz=267 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.31** | **332** | | **Pn** | **00 00 57.0** | **-0.4** |
| **N19K** | **Bonanza Creek** | **1.31** | **332** | | **Sn** | **00 01 15.9** | **-1.1** |
| **N19K** | **Bonanza Creek** | **1.31** | **332** | IAML | | 00 01 16.4 | |
| | comp=E,1µm,0.7s | | | | | | |
| N19K | | | | IAML | | 00 01 17.1 | |
| | comp=N,523nm,0.6s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.31** | **332** | P | **Pn** | **00 00 57.0** | **-0.4** |
| | baz=152 | | | | | | |
| N19K | | | | S | **Sn** | **00 01 15.9** | **-1.1** |
| | baz=152 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.52** | **42** | Pn | **Pn** | **00 01 01.1** | **+1.6** |
| **CAPN** | **Captain Cook N** | **1.52** | **42** | P | **Pn** | **00 01 01.2** | **+1.7** |
| | baz=224 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.62** | **18** | | **Pn** | **00 01 00.7** | **-0.1** |
| **SPCR** | **Spurr Chakacha** | **1.62** | **18** | P | **Pn** | **00 01 00.7** | **-0.1** |
| | baz=199 | | | | | | |
| **SPU** | **Mount Spurr** | **1.63** | **20** | | **Pn** | **00 01 00.8** | **-0.1** |
| **SPBG** | **Spurr Blockage** | **1.66** | **15** | | **Pn** | **00 01 01.5** | **+0.2** |
| SPBG | | | | | **Sn** | **00 01 24.5** | **+0.5** |
| **SLKM** | **Skilak Lake** | **1.73** | **59** | | **Pn** | **00 01 01.5** | **-0.5** |
| **SPCG** | **Spurr Capps Gl** | **1.74** | **20** | | **Pn** | **00 01 02.2** | **0.0** |
| **KABU** | **Katmai Buttres** | **1.76** | **218** | | **Pn** | **00 01 02.1** | **-0.4** |
| **KELA** | **Mount Kelaz** | **1.79** | **228** | | **Pn** | **00 01 02.4** | **-0.4** |
| **SVW2** | **Sparrevohn** | **1.85** | **322** | | **Pn** | **00 01 02.7** | **-0.8** |
| **ANCK** | **Angle Creek** | **1.88** | **220** | | **Pn** | **00 01 03.5** | **-0.3** |
| **KDAK** | **Kodiak Island** | **1.92** | **170** | P | **Pn** | **00 01 02.6** | **-1.6** |
| | comp=N,31nm,0.3s,baz=37,slow=7.2,SNR=225 | | | | | | |
| KDAK | | | | S | **Sn** | **00 01 26.6** | **-2.7** |
| | comp=N,128nm,0.3s,baz=132,slow=23,SNR=50 | | | | | | |
| KDAK | | | | LR | LR | 00 01 58.0 | |
| | comp=N,110nm,18.6s,baz=235,slow=45 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.92** | **170** | | **Sn** | **00 01 26.8** | **-2.4** |
| KDAK | | | | IAML | | 00 01 28.7 | |
| | comp=N,1µm,0.4s | | | | | | |
| KDAK | | | | IAML | | 00 01 28.8 | |
| | comp=N,2µm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **1.92** | **170** | P | **Pn** | **00 01 02.7** | **-1.6** |
| | baz=350 | | | | | | |
| **O22K** | **Cooper Landing** | **1.94** | **63** | | **Pn** | **00 01 04.6** | **+0.1** |
| O22K | | | | | **Sn** | **00 01 28.0** | **-1.7** |
| **O22K** | **Cooper Landing** | **1.94** | **63** | P | **Pn** | **00 01 04.6** | **+0.1** |
| | baz=246 | | | | | | |
| O22K | | | | S | **Sn** | **00 01 28.2** | **-1.6** |
| | baz=246 | | | | | | |
| **SEW** | **Seward** | **1.96** | **75** | | **Pn** | **00 01 04.0** | **-0.6** |
| **SEW** | **Seward** | **1.96** | **75** | P | **Pn** | **00 01 04.1** | **-0.6** |
| | baz=258 | | | | | | |
| **STLK** | **Strandline Lak** | **1.97** | **20** | | **Pn** | **00 01 04.9** | **0.0** |
| **FIS** | **Fire Island** | **2.11** | **44** | | **Pn** | **00 01 06.8** | **+0.3** |
| FIS | | | | IAML | | 00 01 42.0 | |
| | comp=E,2µm,0.4s | | | | | | |
| FIS | | | | IAML | | 00 01 42.1 | |
| | comp=N,3µm,0.6s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.25** | **49** | | **Pn** | **00 01 08.1** | **-0.2** |
| RC01 | | | | | **Sn** | **00 01 34.9** | **-1.6** |
| RC01 | | | | IAML | | 00 01 36.6 | |
| | comp=E,3µm,0.4s | | | | | | |
| RC01 | | | | IAML | | 00 01 37.6 | |
| | comp=N,2µm,0.5s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.25** | **49** | P | **Pn** | **00 01 08.1** | **-0.2** |
| | baz=232 | | | | | | |
| RC01 | | | | S | **Sn** | **00 01 35.0** | **-1.6** |
| | baz=232 | | | | | | |
| **M19K** | **Big River Lodg** | **2.32** | **346** | | **Pn** | **00 01 08.8** | **-0.4** |
| **M19K** | **Big River Lodg** | **2.32** | **346** | P | **Pn** | **00 01 08.8** | **-0.4** |
| | baz=166 | | | | | | |
| **OHAK** | **Old Harbor** | **2.45** | **181** | | **Pn** | **00 01 09.1** | **-1.8** |
| **OHAK** | **Old Harbor** | **2.45** | **181** | IAML | | 00 01 44.0 | |
| | comp=E,472nm,1.0s | | | | | | |
| **OHAK** | **Old Harbor** | **2.45** | **181** | P | **Pn** | **00 01 09.1** | **-1.8** |
| | baz=0.3 | | | | | | |
| **PLK3** | **Peulik 3** | **2.54** | **220** | | **Pn** | **00 01 11.8** | **-0.2** |
| **PLK1** | **Peulik 1** | **2.57** | **225** | | **Pn** | **00 01 12.4** | **+0.1** |
| **M22K** | **Willow** | **2.59** | **35** | | **Pn** | **00 01 12.7** | **+0.1** |
| **M22K** | **Willow** | **2.59** | **35** | P | **Pn** | **00 01 12.7** | **+0.1** |
| | baz=218 | | | | | | |
| **L19K** | **White Mountain** | **2.65** | **343** | | **Pn** | **00 01 12.8** | **-0.6** |
| **L19K** | **White Mountain** | **2.65** | **343** | P | **Pn** | **00 01 12.8** | **-0.6** |
| | baz=162 | | | | | | |
| **PWL** | **Port Wells** | **2.72** | **62** | | **Pn** | **00 01 13.6** | **-0.7** |
| **PWL** | **Port Wells** | **2.72** | **62** | | **Sn** | **00 01 44.9** | **-2.3** |
| **PMR** | **Palmer** | **2.80** | **44** | | **Pn** | **00 01 14.2** | **-1.1** |
| **PMR** | **Palmer** | **2.80** | **44** | IAML | | 00 01 49.4 | |
| | comp=E,693nm,0.5s | | | | | | |
| PMR | | | | IAML | | 00 01 55.6 | |
| | comp=N,502nm,0.8s | | | | | | |
| **PMR** | **Palmer** | **2.80** | **44** | P | **Pn** | **00 01 14.2** | **-1.1** |
| | baz=228 | | | | | | |
| **L20K** | **Farewell, AK** | **2.84** | **354** | | **Pn** | **00 01 15.8** | **-0.1** |
| **L20K** | **Farewell, AK** | **2.84** | **354** | P | **Pn** | **00 01 15.8** | **-0.1** |
| | baz=174 | | | | | | |
| **KNK** | **Knik Glacier** | **2.94** | **51** | Pn | **Pn** | **00 01 16.3** | **-0.8** |
| **KNK** | **Knik Glacier** | **2.94** | **51** | P | **Pn** | **00 01 16.2** | **-0.9** |
| | baz=236 | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.99** | **43** | | **Pn** | **00 01 16.8** | **-1.1** |
| **GHO** | **Glory Hole Cre** | **2.99** | **43** | IAML | | 00 01 54.8 | |
| | comp=N,886nm,0.6s | | | | | | |
| GHO | | | | IAML | | 00 01 56.5 | |
| | comp=E,1µm,0.5s | | | | | | |
| **CUT** | **Chulitna** | **3.10** | **26** | | **Pn** | **00 01 18.9** | **-0.3** |
| **CUT** | **Chulitna** | **3.10** | **26** | IAML | | 00 01 56.6 | |
| | comp=N,796nm,0.4s | | | | | | |
| CUT | | | | IAML | | 00 01 58.0 | |
| | comp=E,839nm,0.2s | | | | | | |
| **CUT** | **Chulitna** | **3.10** | **26** | P | **Pn** | **00 01 18.9** | **-0.3** |
| | baz=209 | | | | | | |
| **SML** | **Sawmill** | **3.23** | **46** | Pn | **Pn** | **00 01 20.0** | **-1.0** |
| SML | | | | IAML | | 00 01 58.7 | |
| | comp=N,788nm,1.0s | | | | | | |
| SML | | | | IAML | | 00 01 59.3 | |
| | comp=E,637nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **3.23** | **46** | P | **Pn** | **00 01 19.9** | **-1.0** |
| | baz=230 | | | | | | |
| **PPLA** | **Purkeypile** | **3.28** | **8** | Pn | **Pn** | **00 01 21.8** | **0.0** |
| **PPLA** | **Purkeypile** | **3.28** | **8** | P | **Pn** | **00 01 22.2** | **+0.5** |
| | baz=190 | | | | | | |
| **GLI** | **Glacier Island** | **3.29** | **66** | | **Pn** | **00 01 21.1** | **-0.6** |
| **GLI** | **Glacier Island** | **3.29** | **66** | IAML | | 00 01 59.8 | |
| | comp=N,929nm,0.7s | | | | | | |
| GLI | | | | IAML | | 00 02 00.1 | |
| | comp=E,1µm,0.5s | | | | | | |
| **GLI** | **Glacier Island** | **3.29** | **66** | P | **Pn** | **00 01 21.1** | **-0.6** |
| | baz=251 | | | | | | |
| **Q23K** | **Middleton Isla** | **3.51** | **91** | Pn | **Pn** | **00 01 23.6** | **-1.0** |
| Q23K | | | | IAML | | 00 02 06.1 | |
| | comp=N,387nm,0.8s | | | | | | |
| Q23K | | | | IAML | | 00 02 07.3 | |
| | comp=E,544nm,0.9s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.51** | **91** | P | **Pn** | **00 01 24.2** | **-0.3** |
| | baz=277 | | | | | | |
| **MID** | **Middleton Isla** | **3.52** | **91** | Pn | **Pn** | **00 01 23.3** | **-1.3** |
| MID | | | | IAML | | 00 02 06.1 | |
| | comp=N,414nm,0.8s | | | | | | |
| MID | | | | IAML | | 00 02 07.3 | |
| | comp=E,540nm,0.9s | | | | | | |
| **TT01** | **Tatalina** | **3.52** | **339** | | **Pn** | **00 01 24.2** | **-0.5** |
| **FID** | **Port Fidalgo** | **3.54** | **69** | | **Pn** | **00 01 23.6** | **-1.4** |
| **TTA** | **Tatalina** | **3.54** | **339** | | **Pn** | **00 01 24.3** | **-0.7** |
| **TTA** | **Tatalina** | **3.54** | **339** | P | **Pn** | **00 01 24.3** | **-0.7** |
| | baz=157 | | | | | | |
| **JPK** | **Jack Peak** | **3.58** | **64** | | **Pn** | **00 01 25.6** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **3.62** | **51** | | **Pn** | **00 01 25.5** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **3.62** | **51** | IAML | | 00 02 08.2 | |
| | comp=E,788nm,0.8s | | | | | | |
| SCM | | | | IAML | | 00 02 09.6 | |
| | comp=N,678nm,0.7s | | | | | | |
| **VMT** | **TAPS TI Valdez** | **3.69** | **64** | | **Pn** | **00 01 27.2** | **+0.3** |
| **K20K** | **Telida** | **3.73** | **354** | | **Pn** | **00 01 27.3** | **-0.2** |
| **K20K** | **Telida** | **3.73** | **354** | P | **Pn** | **00 01 27.3** | **-0.2** |
| | baz=174 | | | | | | |
| **CAST** | **Castle Rocks** | **3.81** | **8** | | **Pn** | **00 01 28.1** | **-0.4** |
| **CAST** | **Castle Rocks** | **3.81** | **8** | P | **Pn** | **00 01 28.1** | **-0.4** |
| | baz=189 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.85** | **73** | | **Pn** | **00 01 28.5** | **-0.5** |
| **EYAK** | **Cordova Ski Ar** | **3.85** | **73** | P | **Pn** | **00 01 28.5** | **-0.5** |
| | baz=260 | | | | | | |
| **WAT1** | **Susitna Watana** | **3.90** | **33** | | **Pn** | **00 01 29.1** | **-0.7** |
| **WAT1** | **Susitna Watana** | **3.90** | **33** | P | **Pn** | **00 01 29.1** | **-0.7** |
| | baz=218 | | | | | | |
| **WAT6** | **Susitna Watana** | **3.96** | **40** | | **Pn** | **00 01 29.7** | **-0.9** |
| **WAT6** | **Susitna Watana** | **3.96** | **40** | P | **Pn** | **00 01 29.7** | **-0.9** |
| | baz=225 | | | | | | |
| **DIV** | **Divide** | **3.98** | **65** | | **Pn** | **00 01 30.5** | **-0.4** |
| **KLU** | **Klutina** | **4.04** | **60** | | **Pn** | **00 01 31.1** | **-0.6** |
| **KLU** | **Klutina** | **4.04** | **60** | P | **Pn** | **00 01 31.1** | **-0.6** |
| | baz=246 | | | | | | |
| **TRF** | **Thorofare Moun** | **4.05** | **19** | | **Pn** | **00 01 31.1** | **-0.8** |
| **TRF** | **Thorofare Moun** | **4.05** | **19** | IAML | | 00 02 22.2 | |
| | comp=E,148nm,0.9s | | | | | | |
| TRF | | | | IAML | | 00 02 41.5 | |
| | comp=N,203nm,0.8s | | | | | | |
| **TRF** | **Thorofare Moun** | **4.05** | **19** | P | **Pn** | **00 01 31.1** | **-0.8** |
| | baz=202 | | | | | | |
| **KTH** | **Kantishna Hill** | **4.06** | **15** | | **Pn** | **00 01 31.0** | **-0.9** |
| **KTH** | **Kantishna Hill** | **4.06** | **15** | IAML | | 00 02 18.8 | |
| | comp=N,128nm,0.8s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.23** | **52** | | **Pn** | **00 01 34.1** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **4.23** | **52** | IAML | | 00 02 26.0 | |
| | comp=E,544nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.23** | **52** | P | **Pn** | **00 01 34.1** | **0.0** |
| | baz=238 | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.26** | **5** | | **Pn** | **00 01 34.3** | **-0.2** |
| **CHUM** | **Lake Minchumin** | **4.26** | **5** | P | **Pn** | **00 01 34.3** | **-0.2** |
| | baz=186 | | | | | | |
| **RND** | **Reindeer** | **4.30** | **27** | | **Pn** | **00 01 33.9** | **-1.2** |
| **RND** | **Reindeer** | **4.30** | **27** | IAML | | 00 02 25.6 | |
| | comp=E,227nm,0.3s | | | | | | |
| RND | | | | IAML | | 00 02 26.2 | |
| | comp=N,216nm,0.4s | | | | | | |
| **GOAT** | **Goat Mountain** | **4.35** | **74** | | **Pn** | **00 01 35.3** | **-0.5** |
| **RAGM** | **Ragged Mountai** | **4.35** | **77** | | **Pn** | **00 01 35.4** | **-0.4** |
| **RAGM** | **Ragged Mountai** | **4.35** | **77** | IAML | | 00 02 28.2 | |
| | comp=E,505nm,0.4s | | | | | | |
| **CHGN** | **Chignik** | **4.36** | **222** | | **Pn** | **00 01 35.1** | **-0.7** |
| **CHGN** | **Chignik** | **4.36** | **222** | IAML | | 00 02 23.8 | |
| | comp=N,105nm,0.5s | | | | | | |
| CHGN | | | | IAML | | 00 02 24.0 | |
| | comp=E,100nm,0.1s | | | | | | |
| **CHGN** | **Chignik** | **4.36** | **222** | P | **Pn** | **00 01 35.1** | **-0.7** |
| | baz=37 | | | | | | |
| **DHY** | **Denali Highway** | **4.43** | **37** | | **Pn** | **00 01 36.1** | **-0.8** |
| **DHY** | **Denali Highway** | **4.43** | **37** | IAML | | 00 02 27.6 | |
| | comp=E,441nm,0.4s | | | | | | |
| DHY | | | | IAML | | 00 02 28.3 | |
| | comp=N,459nm,0.5s | | | | | | |
| **DHY** | **Denali Highway** | **4.43** | **37** | P | **Pn** | **00 01 36.1** | **-0.8** |
| | baz=222 | | | | | | |
| **KAIM** | **Kayak Island** | **4.46** | **83** | Pn | **Pn** | **00 01 37.6** | **+0.4** |
| KAIM | | | | IAML | | 00 02 29.8 | |
| | comp=E,349nm,1.0s | | | | | | |
| KAIM | | | | IAML | | 00 02 32.5 | |
| | comp=N,288nm,0.4s | | | | | | |
| **KAIM** | **Kayak Island** | **4.46** | **83** | P | **Pn** | **00 01 37.5** | **+0.4** |
| | baz=270 | | | | | | |
| **BMRM** | **Bremner River** | **4.48** | **69** | | **Pn** | **00 01 37.3** | **-0.2** |
| **BMRM** | **Bremner River** | **4.48** | **69** | P | **Pn** | **00 01 37.3** | **-0.2** |
| | baz=257 | | | | | | |
| **PS11** | **TAS Pump St11** | **4.50** | **54** | | **Pn** | **00 01 37.6** | **-0.1** |
| **J20K** | **Nowinta River** | **4.55** | **355** | | **Pn** | **00 01 38.0** | **-0.3** |
| **J20K** | **Nowinta River** | **4.55** | **355** | P | **Pn** | **00 01 38.0** | **-0.3** |
| | baz=174 | | | | | | |
| **HMT** | **Hamilton** | **4.55** | **78** | | **Pn** | **00 01 38.4** | **0.0** |
| **MCK** | **McKinley** | **4.57** | **25** | | **Pn** | **00 01 38.0** | **-0.6** |
| **MCK** | **McKinley** | **4.57** | **25** | IAML | | 00 02 32.9 | |
| | comp=N,181nm,0.3s | | | | | | |
| MCK | | | | IAML | | 00 02 33.4 | |
| | comp=E,171nm,0.4s | | | | | | |
| **MCK** | **McKinley** | **4.57** | **25** | P | **Pn** | **00 01 38.0** | **-0.6** |
| | baz=209 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.58** | **12** | | **Pn** | **00 01 37.7** | **-1.0** |
| **BPAW** | **Bear Paw Mtn.** | **4.58** | **12** | P | **Pn** | **00 01 37.7** | **-1.0** |
| | baz=195 | | | | | | |
| **N25K** | **Chitina, Valde** | **4.67** | **62** | | **Pn** | **00 01 39.7** | **-0.5** |
| N25K | | | | IAML | | 00 02 32.8 | |
| | comp=E,426nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.67** | **62** | P | **Pn** | **00 01 39.6** | **-0.5** |
| | baz=249 | | | | | | |
| **NICHA** | **Nichawak Mount** | **4.69** | **79** | | **Pn** | **00 01 40.2** | **-0.1** |
| **VNSG** | **Veniaminof 6** | **4.73** | **224** | | **Pn** | **00 01 40.6** | **-0.3** |
| **SUCK** | **Suckling Hills** | **4.78** | **81** | Pn | **Pn** | **00 01 41.6** | **+0.1** |
| SUCK | | | | IAML | | 00 02 37.8 | |
| | comp=N,166nm,0.7s | | | | | | |
| SUCK | | | | IAML | | 00 03 15.4 | |
| | comp=E,104nm,1.8s | | | | | | |
| **HARP** | **HAARP** | **4.79** | **52** | | **Pn** | **00 01 41.3** | **-0.3** |
| **HARP** | **HAARP** | **4.79** | **52** | P | **Pn** | **00 01 41.3** | **-0.3** |
| | baz=239 | | | | | | |
| **BERG** | **Berg Lake** | **4.83** | **77** | | **Pn** | **00 01 41.5** | **-0.7** |
| **BWN** | **Browne** | **4.86** | **20** | | **Pn** | **00 01 42.2** | **-0.3** |
| BWN | | | | IAML | | 00 03 01.2 | |
| | comp=N,141nm,1.0s | | | | | | |
| BWN | | | | IAML | | 00 03 30.6 | |
| | comp=E,174nm,0.9s | | | | | | |
| **GLB** | **Gilahina Butte** | **4.98** | **65** | | **Pn** | **00 01 43.9** | **-0.3** |
| **GLB** | **Gilahina Butte** | **4.98** | **65** | IAML | | 00 02 41.1 | |
| | comp=E,331nm,0.7s | | | | | | |
| **PAX** | **Paxson** | **5.00** | **45** | | **Pn** | **00 01 44.0** | **-0.5** |
| **PAX** | **Paxson** | **5.00** | **45** | P | **Pn** | **00 01 43.9** | **-0.5** |
| | baz=232 | | | | | | |
| **GRIN** | **Grindle Hills** | **5.02** | **79** | | **Pn** | **00 01 44.8** | **+0.1** |
| **BGLC** | **Bering Glacier** | **5.03** | **80** | | **Pn** | **00 01 44.4** | **-0.3** |
| **BGLC** | **Bering Glacier** | **5.03** | **80** | P | **Pn** | **00 01 44.4** | **-0.3** |
| | baz=269 | | | | | | |
| **KHIT** | **Khitrov Hills** | **5.06** | **77** | | **Pn** | **00 01 45.1** | **-0.2** |
| **VRDI** | **Verde Repeater** | **5.09** | **68** | | **Pn** | **00 01 45.6** | **-0.2** |
| **PS10** | **TAPS Pump St10** | **5.19** | **40** | | **Pn** | **00 01 47.2** | **+0.2** |
| **SNH** | **Sunshine Point** | **5.25** | **80** | | **Pn** | **00 01 48.1** | **+0.2** |
| SNH | | | | IAML | | 00 02 47.2 | |
| | comp=E,131nm,0.4s | | | | | | |
| SNH | | | | IAML | | 00 02 49.8 | |
| | comp=N,203nm,0.5s | | | | | | |
| **WAX** | **Waxell Ridge** | **5.26** | **77** | | **Pn** | **00 01 47.5** | **-0.4** |
| **NEA2** | **Nenana** | **5.32** | **20** | | **Pn** | **00 01 47.4** | **-1.3** |
| **NEA2** | **Nenana** | **5.32** | **20** | P | **Pn** | **00 01 47.4** | **-1.3** |
| | baz=204 | | | | | | |
| **GCSA** | **Galena City Sc** | **5.38** | **343** | | **Pn** | **00 01 48.9** | **-0.5** |
| **GCSA** | **Galena City Sc** | **5.38** | **343** | P | **Pn** | **00 01 48.9** | **-0.5** |
| | baz=160 | | | | | | |
| **WRH** | **Wood River Hil** | **5.39** | **24** | | **Pn** | **00 01 48.5** | **-1.1** |
| **MLY** | **Manley** | **5.51** | **11** | | **Pn** | **00 01 50.0** | **-1.3** |
| **MLY** | **Manley** | **5.51** | **11** | P | **Pn** | **00 01 50.1** | **-1.2** |
| | baz=198 | | | | | | |
| **ISLE** | **Juniper Island** | **5.53** | **76** | | **Pn** | **00 01 51.5** | **-0.1** |
| **KIAG** | **Kiagna River** | **5.55** | **72** | | **Pn** | **00 01 51.9** | **-0.1** |
| **I21K** | **Tanana** | **5.57** | **5** | | **Pn** | **00 01 51.5** | **-0.5** |
| **I21K** | **Tanana** | **5.57** | **5** | P | **Pn** | **00 01 51.6** | **-0.4** |
| | baz=187 | | | | | | |
| **BALM** | **Baldy** | **5.58** | **71** | | **Pn** | **00 01 52.2** | **0.0** |
| **HDA** | **Harding Lake** | **5.60** | **29** | | **Pn** | **00 01 51.3** | **-1.2** |
| **HDA** | **Harding Lake** | **5.60** | **29** | P | **Pn** | **00 01 51.6** | **-0.9** |
| | baz=215 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.61** | **25** | | **Pn** | **00 01 51.0** | **-1.5** |
| **MENT** | **Mentasta** | **5.64** | **50** | | **Pn** | **00 01 52.7** | **-0.3** |
| **BAGL** | **Bagley Icefiel** | **5.64** | **77** | | **Pn** | **00 01 53.2** | **+0.2** |
| **M26K** | **Nabesna, AK** | **5.68** | **57** | | **Pn** | **00 01 53.9** | **+0.3** |
| **M26K** | **Nabesna, AK** | **5.68** | **57** | P | **Pn** | **00 01 53.9** | **+0.3** |
| | baz=246 | | | | | | |
| **MESA** | **MESA** | **5.70** | **80** | | **Pn** | **00 01 54.2** | **+0.2** |
| **MESA** | **MESA** | **5.70** | **80** | P | **Pn** | **00 01 54.1** | **+0.2** |
| | baz=270 | | | | | | |
| **RIDG** | **Independent Ri** | **5.71** | **41** | | **Pn** | **00 01 53.6** | **-0.3** |
| **RIDG** | **Independent Ri** | **5.71** | **41** | P | **Pn** | **00 01 53.6** | **-0.3** |
| | baz=228 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.79** | **16** | | **Pn** | **00 01 54.0** | **-1.0** |
| **I23K** | **Minto, Yukon-K** | **5.79** | **16** | P | **Pn** | **00 01 54.0** | **-1.0** |
| | baz=200 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.80** | **23** | | **Pn** | **00 01 53.9** | **-1.1** |
| **TCOL** | **CIGO, UAF Yank** | **5.80** | **23** | P | **Pn** | **00 01 54.1** | **-0.9** |
| | baz=208 | | | | | | |
| **COLA** | **College** | **5.80** | **23** | | **Pn** | **00 01 54.1** | **-0.9** |
| **MDM** | **Murphy Dome** | **5.80** | **22** | | **Pn** | **00 01 53.8** | **-1.4** |
| **YAH** | **Yahtse** | **5.80** | **78** | Pn | **Pn** | **00 01 55.9** | **+0.5** |
| **SDPT** | **Sand Point** | **5.83** | **225** | Pn | **Pn** | **00 01 55.5** | **0.0** |
| **L26K** | **Log Cabin Wild** | **5.83** | **50** | | **Pn** | **00 01 55.7** | **+0.2** |
| **L26K** | **Log Cabin Wild** | **5.83** | **50** | P | **Pn** | **00 01 55.7** | **+0.2** |
| | baz=239 | | | | | | |
| **BARN** | **Barnard Glacie** | **5.91** | **71** | | **Pn** | **00 01 56.8** | **-0.1** |
| **IL31** | | **5.92** | **27** | | **Pn** | **00 01 55.5** | **-1.2** |
| **ILAR** | **Eielson Array** | **5.92** | **27** | P | **Pn** | **00 01 55.1** | **-1.6** |
| | comp=N,14nm,0.3s,baz=216,slow=14,SNR=770 | | | | | | |
| ILAR | | | | S | **Sn** | **00 03 00.3** | **-3.0** |
| | comp=N,14nm,0.3s,baz=212,slow=27,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **5.92** | **27** | Pn | **Pn** | **00 01 55.5** | **-1.2** |
| **CNBA** | **Chernabura Isl** | **5.96** | **218** | Pn | **Pn** | **00 01 56.3** | **-1.0** |
| **H21K** | **Melozitna Rive** | **6.02** | **2** | | **Pn** | **00 01 57.3** | **-0.7** |
| **H21K** | **Melozitna Rive** | **6.02** | **2** | P | **Pn** | **00 01 57.3** | **-0.7** |
| | baz=182 | | | | | | |
| **POKR** | **Poker Plat Res** | **6.10** | **24** | | **Pn** | **00 01 58.1** | **-1.1** |
| **POKR** | **Poker Plat Res** | **6.10** | **24** | P | **Pn** | **00 01 58.0** | **-1.1** |
| | baz=209 | | | | | | |
| **TABL** | **Table Mountain** | **6.11** | **77** | | **Pn** | **00 01 59.6** | **+0.2** |
| **SCRK** | **Sand Creek** | **6.15** | **41** | | **Pn** | **00 01 58.9** | **-1.1** |
| **SCRK** | **Sand Creek** | **6.15** | **41** | P | **Pn** | **00 01 58.7** | **-1.3

comp=N,4.5nm,0.3s,baz=296,slow=11,SNR=36

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DLBC** | **Dease Lake** | **11.99** | **86** | | **Pn** | | **00 03 19.2** | **+1.0** |
| **INK** | **Inuvik** | **12.18** | **36** | P | **Pn** | | **00 03 19.6** | **-0.9** |
| | comp=N,0.5nm,0.3s,baz=225,slow=14,SNR=18 | | | | | | | |
| **INK** | **Inuvik** | **12.18** | **36** | Pn | **Pn** | | **00 03 19.7** | **-0.7** |
| **DIB** | **Dawson Inlet,** | **13.14** | **110** | Pn | **Pn** | | **00 03 34.0** | **+0.9** |
| **MOBC** | **Moresby Island** | **13.42** | **110** | Pn | **Pn** | | **00 03 37.3** | **+0.5** |
| **GRNB** | **Grenville Isla** | **13.99** | **104** | Pn | **Pn** | | **00 03 43.5** | **-0.4** |
| **ADK** | **Adak** | **15.26** | **250** | Pn | **Pn** | | **00 03 57.9** | **-2.0** |
| ADK | | | | IAmb | IAmb | | 00 04 15.9 | |
| | comp=Z,45nm,1.1s | | | | | | | |
| **C36M** | **Paulatuk** | **15.68** | **40** | Pn | **Pn** | | **00 04 02.7** | **-2.3** |
| C36M | | | | IAmb | IAmb | | 00 04 03.8 | |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| **A36M** | **Sachs Harbour** | **16.61** | **31** | | **Pn** | | **00 04 15.7** | **-0.7** |
| A36M | | | | IAmb | IAmb | | 00 04 18.6 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.70** | **65** | P | **Pn** | | **00 04 40.9** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=279,slow=9,9,SNR=13 | | | | | | | |
| YKA | | | | PcP | **PcP** | | **00 09 02.4** | **+0.8** |
| | comp=Z,0.0nm,0.3s,baz=181,slow=18,SNR=4.2 | | | | | | | |
| YKA | | | | ScP | **ScP** | | **00 12 26.2** | **+1.1** |
| | comp=Z,0.0nm,0.3s,baz=292,slow=1.9,SNR=3.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.70** | **65** | P | **P** | | **00 04 40.1** | **+0.5** |
| **WDC** | **Whiskeytown Da** | **27.03** | **121** | P | **P** | | **00 06 02.6** | **+1.1** |
| **O02D** | **Mt. Diablo Mer** | **27.25** | **122** | P | **P** | | **00 06 05.2** | **+1.6** |
| O02D | | | | IAmb | IAmb | | 00 06 09.3 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **27.31** | **114** | P | **P** | | **00 06 05.5** | **+1.4** |
| **ANMO** | **Albuquerque** | **39.02** | **108** | LR | LR | | 00 24 38.1 | |
| | comp=Z,21nm,20.8s,baz=96,slow=37 | | | | | | | |
| **NRIK** | **Noril'sk** | **44.15** | **334** | P | **P** | | **00 08 27.0** | **+0.3** |
| | comp=Z,3.0nm,0.4s,baz=48,slow=7.0,SNR=3.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **44.97** | **110** | P | **P** | | **00 08 36.2** | **+2.3** |
| | comp=Z,0.3nm,0.8s,baz=321,slow=5.5,SNR=3.6 | | | | | | | |
| **CN2** | **Changchun** | **49.48** | **290** | *e*P | **P** | | **00 09 07.3** | **-1.2** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **54.89** | **306** | P | **P** | | **00 09 49.2** | **+0.6** |
| | comp=Z,3.1nm,0.7s,baz=44,slow=6.8,SNR=32 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.58** | **324** | P | **P** | | **00 10 06.9** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=23,slow=7.4,SNR=6.8 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.23** | **297** | *e*P | **P** | | **00 10 13.8** | **+1.5** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,190nm,4.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **59.22** | **0** | LR | LR | | 00 36 02.8 | |
| | comp=Z,33nm,20.9s,baz=24,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.62** | **321** | P | **P** | | **00 10 54.1** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=32,slow=6.1,SNR=9.7 | | | | | | | |
| **BOSA** | **Boshof** | **148.94** | **3** | PKPbc | **PKPbc** | | **00 20 03.5** | **-0.5** |
| | comp=Z,1.6nm,0.6s,baz=37,slow=0.9,SNR=5.4 | | | | | | | |

*MAN **20** 00:07:40.1, 7˚.46N×125˚.12E, h113km, mb4.2, ML3.1, MS2.8*
*IDC **20** 00:07:41.2±13.0, 5˚.75N×126˚.32E, h89km±122km, mb3.6/6, mb1 3.7/6, mb1mx3.4/35, mbtmp3.9/6, MS3.6/3, Ms1 3.6/3, ms1mx2.6/58, Error ellipse: s-maj=129.3km s-min=24.9km az=66.0*
*NEIC **20** 00:07:41.7±1.4, 5˚.93N±0˚.07×126˚.5E±0˚.1, h94km±4km, mb4.1/19, Error ellipse: s-maj=17.9km s-min=9.7km az=70.0*

**ISC 20 00:07:42.0**±0.6, **5˚.82N**±0˚.06×**126˚.35E**±0˚.08, **h100**km, **n38,** σ1°**63**/34, **mb4.0**/14, **1C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GSPH** | **General Santos** | **1.41** | **281** | ⇓*i*P | | **Pn** | **00 08 05.8** | **-1.5** |
| GSPH | | | | *e*S | | **Sn** | **00 08 24.9** | **-1.6** |
| **DAV** | **Davao City (W)** | **1.46** | **329** | Pn | | **Pn** | **00 08 07.1** | **-0.7** |
| **BIPH** | **Bislig** | **2.35** | **0** | ⇑P | | Pn | 00 08 23.3 | +4.2 |
| BIPH | | | | *i* S | | **Sn** | **00 08 52.9** | **+5.4** |
| **TNTI** | **Ternate** | **5.12** | **168** | Pn | | **Pn** | **00 08 57.1** | **+0.8** |
| **TOLI2** | **Tolitoli** | **7.26** | **230** | Pn | | **Pn** | **00 09 24.6** | **-0.9** |
| **KKM** | **Kota Kinabalu** | **10.08** | **272** | Pn | | **Pn** | **00 10 05.9** | **+2.0** |
| **SBUM** | **Sibu** | **14.48** | **257** | | | **P** | **00 11 09.2** | **+3.2** |
| **NACB** | **Ninganchiao** | **18.81** | **346** | P | | **P** | **00 11 50.1** | **-3.7** |
| NACB | | | | IAmb | | IAmb | 00 11 52.1 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **JMZ** | **Minamidaito 2** | **20.43** | **13** | P | | **P** | **00 12 10.3** | **-1.0** |
| JMZ | | | | IAmb | | IAmb | 00 12 12.2 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **21.49** | **174** | P | | **P** | **00 12 23.1** | **+0.4** |
| KNRA | | | | IAmb | | IAmb | 00 12 23.4 | |
| | comp=Z,6.1nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.78** | **182** | P | | **P** | **00 12 45.3** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=22,slow=10,SNR=8.9 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.78** | **182** | P | | **P** | **00 12 45.7** | **+0.2** |
| FITZ | | | | IAmb | | IAmb | 00 12 55.9 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **25.79** | **140** | P | | **P** | **00 13 03.4** | **-0.5** |
| COEN | | | | IAmb | | IAmb | 00 13 12.3 | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **26.63** | **163** | P | | **P** | **00 13 13.1** | **+1.7** |
| WB0 | | | | IAmb | | IAmb | 00 13 23.3 | |
| | comp=Z,2.1nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.78** | **163** | P | | **P** | **00 13 12.1** | **-0.7** |
| | comp=Z,0.4nm,0.7s,baz=342,slow=10,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.78** | **163** | IAmb | | IAmb | 00 13 13.2 | |
| | comp=Z,0.1nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **26.79** | **163** | P | | **P** | **00 13 12.6** | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 00 13 21.9 | |
| | comp=Z,2.1nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **26.86** | **163** | P | | **P** | **00 13 13.2** | **-0.2** |
| **JNU** | **Nakatsue** | **27.49** | **8** | LR | | LR | 00 25 11.4 | |
| | comp=Z,85nm,18.6s,baz=264,slow=38 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.96** | **193** | P | | **P** | **00 13 22.3** | **-0.9** |
| PSA00 | | | | IAmb | | IAmb | 00 13 22.4 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **29.90** | **23** | LR | | LR | 00 30 00.3 | |
| | comp=Z,36nm,18.0s,baz=75,slow=45 | | | | | | | |
| **ASAR** | **Alice Springs** | **30.22** | **166** | P | | **P** | **00 13 43.1** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=342,slow=6.8,SNR=14 | | | | | | | |
| **FORT** | **Forrest** | **36.43** | **178** | P | | **P** | **00 14 37.2** | **+0.1** |
| **BBOO** | **Buckleboo** | **39.51** | **167** | P | | **P** | **00 15 03.5** | **+0.5** |
| BBOO | | | | IAmb | | IAmb | 00 15 04.6 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **40.21** | **160** | P | | **P** | **00 15 09.0** | **+0.2** |
| | comp=Z,1.7nm,0.6s,baz=326,slow=11,SNR=3.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **40.21** | **160** | IAmb | | IAmb | 00 15 09.9 | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **43.42** | **148** | P | | **P** | **00 15 35.7** | **+0.6** |
| ARMA | | | | IAmb | | IAmb | 00 15 43.7 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **55.63** | **325** | P | | **P** | **00 17 08.3** | **+0.7** |
| **MKAR** | **Makanchi Array** | **55.63** | **325** | P | | **P** | **00 17 08.3** | **+0.7** |
| | comp=Z,1.5nm,0.4s,baz=120,slow=7.7,SNR=23 | | | | | | | |
| **KHZ** | **Kahutara** | **64.34** | **143** | P | | **P** | **00 18 06.2** | **-1.0** |
| KHZ | | | | IAmb | | IAmb | 00 18 19.3 | |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **64.59** | **145** | P | | **P** | **00 18 08.6** | **-0.2** |
| **MSWZ** | **Moikau Station** | **64.82** | **141** | P | | **P** | **00 18 10.0** | **-0.3** |
| **ABKAR** | **Akbulak array** | **70.30** | **320** | P | | **P** | **00 18 45.0** | **+0.3** |
| **OHAK** | **Old Harbor** | **79.92** | **33** | P | | **P** | **00 19 36.5** | **-3.2** |
| **OPO** | **Ambohidratompo** | **81.63** | **250** | LR | | LR | 00 52 50.0 | |
| | comp=Z,120nm,19.4s,baz=40,slow=33 | | | | | | | |
| **FINES** | **FINESS Array B** | **89.82** | **332** | P | | **P** | **00 20 30.0** | **+0.8** |
| | comp=Z,4.0nm,1.1s,baz=70,slow=6.3,SNR=5.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **89.82** | **332** | P | | **P** | **00 20 29.9** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **121.89** | **289** | PKP | | **PKiKP** | **00 26 25.8** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=72,slow=2.2,SNR=4.4 | | | | | | | |

**TAP 20 00:16:10.4, 23˚.16N×120˚.79E, h6km, ML2.1, 3C-3D, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.02** | **317** | ⇑*e*P | | Pg | 00 16 12.1 | +0.5 |
| | baz=339 | | | | | | | |
| STYH | | | | *e*S | | Sg | 00 16 12.8 | +0.4 |
| | baz=339 | | | | | | | |
| **STYT** | **Tauyuan** | **0.03** | **284** | P | | Pg | 00 16 12.0 | +0.3 |
| | baz=284 | | | | | | | |
| STYT | | | | S | | Sg | 00 16 12.8 | +0.1 |
| | baz=284 | | | | | | | |
| **WTP** | **Ta-pu** | **0.19** | **299** | ⇓*i*P | | Pg | 00 16 15.2 | +1.0 |
| | baz=299 | | | | | | | |
| WTP | | | | *i* S | | Sg | 00 16 18.3 | +1.6 |
| | baz=299 | | | | | | | |
| **SGST** | **Jiashian** | **0.20** | **249** | *i* P | | Pg | 00 16 14.7 | +0.2 |
| | baz=248 | | | | | | | |
| SGST | | | | S | | Sg | 00 16 18.1 | +0.9 |
| | baz=248 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.21** | **314** | ⇓P | | Pg | 00 16 15.7 | +1.1 |
| | baz=314 | | | | | | | |
| TPUB | | | | S | | Sg | 00 16 19.1 | +1.7 |
| | baz=314 | | | | | | | |
| **SLGT** | **Liugui** | **0.21** | **220** | ⇑*e*P | | Pg | 00 16 15.7 | +1.1 |
| | baz=219 | | | | | | | |
| SLGT | | | | *e*S | | Sg | 00 16 18.9 | +1.6 |
| | baz=219 | | | | | | | |
| **ELDTW** | **Lidau** | **0.21** | **81** | P | | Pg | 00 16 16.1 | +1.5 |
| | baz=81 | | | | | | | |
| ELDTW | | | | S | | Sg | 00 16 19.4 | +1.9 |
| | baz=81 | | | | | | | |
| **CHN1** | **Nanshi** | **0.24** | **277** | P | | Pg | 00 16 16.7 | +1.5 |
| | baz=277 | | | | | | | |
| CHN1 | | | | S | | Sg | 00 16 20.7 | +2.2 |
| | baz=277 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.27** | **317** | ⇓*e*P | | Pb | 00 16 17.1 | -0.6 |
| | baz=317 | | | | | | | |
| CHN4 | | | | *e*S | | Sb | 00 16 21.6 | -0.9 |
| | baz=317 | | | | | | | |
| **SNST** | **Tainan City** | **0.28** | **283** | *e*P | | Pb | 00 16 17.6 | -0.2 |
| | baz=283 | | | | | | | |
| **TWK** | **Hsinying** | **0.30** | **292** | P | | Pb | 00 16 17.9 | -0.4 |
| | baz=292 | | | | | | | |
| TWK | | | | *e*S | | Sb | 00 16 23.1 | -0.4 |
| | baz=292 | | | | | | | |
| **ALS** | **Alishan** | **0.35** | **2** | ⇑*i*P | | Pb | 00 16 18.6 | -0.8 |
| | baz=3.0 | | | | | | | |
| ALS | | | | *i* S | | Sb | 00 16 23.9 | -1.4 |
| | baz=3.0 | | | | | | | |
| **LONT** | **Longtian** | **0.40** | **128** | *e*P | | Pb | 00 16 19.7 | -0.2 |
| | baz=128 | | | | | | | |
| LONT | | | | *e*S | | Sb | 00 16 25.7 | -0.6 |
| | baz=128 | | | | | | | |
| **CHN3** | **Shinhua** | **0.40** | **259** | *e*S | | Sb | 00 16 25.1 | -1.2 |
| | baz=258 | | | | | | | |
| **TWG** | **Pinlang** | **0.42** | **142** | P | | Pb | 00 16 20.2 | 0.0 |
| | baz=141 | | | | | | | |
| **TWGBT** | **Beinan** | **0.43** | **142** | P | | Pb | 00 16 20.2 | -0.2 |
| | baz=141 | | | | | | | |
| TWGBT | | | | S | | Sb | 00 16 26.7 | -0.4 |
| | baz=141 | | | | | | | |
| **SSD** | **Sandimen** | **0.43** | **200** | P | | Pb | 00 16 19.8 | -0.6 |
| | baz=198 | | | | | | | |
| **CHN5** | **Tsauling** | **0.45** | **347** | P | | Pb | 00 16 20.6 | -0.3 |
| | baz=346 | | | | | | | |
| CHN5 | | | | S | | Sb | 00 16 27.3 | -0.6 |
| | baz=346 | | | | | | | |
| **FULB** | **Fuli** | **0.47** | **85** | *e*S | | Sb | 00 16 28.6 | +0.4 |
| | baz=84 | | | | | | | |
| **TSMG** | **Majia** | **0.47** | **197** | *e*P | | Pb | 00 16 20.4 | -0.7 |
| | baz=196 | | | | | | | |
| TSMG | | | | *e*S | | Sb | 00 16 28.4 | +0.2 |
| | baz=196 | | | | | | | |
| **CHY** | **Chiayi** | **0.48** | **315** | *e*S | | Sb | 00 16 29.2 | +0.6 |
| | baz=315 | | | | | | | |
| **TWF1** | **Yuli** | **0.51** | **67** | P | | Pb | 00 16 21.8 | 0.0 |
| | baz=67 | | | | | | | |
| **EYUL** | **Yuli** | **0.52** | **68** | *e*P | | Pb | 00 16 21.8 | -0.3 |
| | baz=68 | | | | | | | |
| EYUL | | | | *e*S | | Sb | 00 16 29.4 | -0.5 |
| | baz=68 | | | | | | | |
| **YULB** | **Yu-li** | **0.52** | **63** | P | | Pb | 00 16 21.6 | -0.4 |
| | baz=63 | | | | | | | |
| YULB | | | | *e*S | | Sb | 00 16 29.4 | -0.5 |
| | baz=63 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.56** | **195** | P | | Pb | 00 16 22.1 | -0.5 |
| | baz=195 | | | | | | | |
| **WDLH** | **Douliu** | **0.58** | **336** | *e*P | | Pb | 00 16 22.8 | -0.2 |
| | baz=336 | | | | | | | |
| **EHY** | **Hugye** | **0.60** | **54** | *e*P | | Pb | 00 16 23.4 | 0.0 |
| | baz=54 | | | | | | | |
| **SSLB** | **Suanglung** | **0.65** | **13** | P | | Pb | 00 16 23.7 | -0.5 |
| | baz=13 | | | | | | | |
| SSLB | | | | S | | Sb | 00 16 32.9 | -0.6 |
| | baz=13 | | | | | | | |
| **HGSD** | **Ruisui** | **0.67** | **60** | P | | Pn | 00 16 25.9 | -0.6 |
| | baz=60 | | | | | | | |
| **VWDT** | **VWDT** | **0.68** | **28** | P | | Pb | 00 16 24.4 | -0.3 |
| | baz=28 | | | | | | | |
| **SSPT** | **Xinbi** | **0.70** | **197** | *e*P | | Pb | 00 16 25.4 | +0.4 |
| | baz=197 | | | | | | | |
| **TYC** | **Yuchr** | **0.75** | **5** | P | | Pb | 00 16 26.6 | +0.7 |
| | baz=5.0 | | | | | | | |
| **EAST** | **Anshuo** | **0.77** | **176** | P | | Pb | 00 16 26.4 | +0.1 |
| | baz=175 | | | | | | | |
| **SCZT** | **Fangliau** | **0.80** | **191** | *e*P | | Pg | 00 16 25.8 | +0.1 |
| | baz=190 | | | | | | | |
| **CHGB** | **Renai** | **0.97** | **21** | *e*P | | Pn | 00 16 31.2 | +0.5 |
| | baz=21 | | | | | | | |
| CHGB | | | | *e*S | | Sn | 00 16 44.2 | -0.7 |
| | baz=21 | | | | | | | |

**TAP 20 00:16:21.0, 23˚.07N×120˚.87E, h3km±1km, ML2.1, 1D, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.14** | **319** | P | | Pg | 00 16 24.0 | +0.3 |
| | baz=322 | | | | | | | |
| STYH | | | | S | | Sg | 00 16 26.1 | +0.6 |
| | baz=322 | | | | | | | |
| **STYT** | **Tauyuan** | **0.14** | **312** | ⇓*i*P | | Pg | 00 16 23.9 | +0.1 |
| | baz=313 | | | | | | | |
| STYT | | | | *i* S | | Sg | 00 16 26.1 | +0.3 |
| | baz=313 | | | | | | | |
| **ELDTW** | **Lidau** | **0.18** | **47** | *e*P | | Pg | 00 16 24.9 | +0.4 |
| | baz=49 | | | | | | | |
| ELDTW | | | | S | | Sg | 00 16 27.5 | +0.6 |
| | baz=49 | | | | | | | |
| **SLGT** | **Liugui** | **0.22** | **251** | *e*P | | Pg | 00 16 25.3 | 0.0 |
| | baz=250 | | | | | | | |
| SLGT | | | | *e*S | | Sg | 00 16 28.2 | 0.0 |
| | baz=250 | | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **273** | *e*P | | Pg | 00 16 26.3 | +0.2 |
| | baz=273 | | | | | | | |
| SGST | | | | *e*S | | Sg | 00 16 30.2 | +0.5 |
| | baz=273 | | | | | | | |
| **LONT** | **Longtian** | **0.28** | **124** | *e*P | | Pg | 00 16 27.0 | +0.5 |
| | baz=124 | | | | | | | |
| LONT | | | | *e*S | | Sg | 00 16 31.3 | +1.1 |
| | baz=124 | | | | | | | |
| **WTP** | **Ta-pu** | **0.30** | **307** | P | | Pg | 00 16 27.4 | +0.7 |
| | baz=307 | | | | | | | |
| WTP | | | | S | | Sg | 00 16 32.5 | +1.8 |
| | baz=307 | | | | | | | |
| **TWG** | **Pinlang** | **0.31** | **143** | *e*P | | Pg | 00 16 27.5 | +0.6 |
| | baz=142 | | | | | | | |
| TWG | | | | *e*S | | Sg | 00 16 32.1 | +1.2 |
| | baz=142 | | | | | | | |
| **TWG** | **Pinlang** | **0.31** | **143** | *e*S | | Pb | 00 16 27.3 | -1.8 |
| | baz=141 | | | | | | | |
| **TWGBT** | **Beinan** | **0.31** | **143** | *e*P | | Pg | 00 16 28.0 | +1.0 |
| | baz=142 | | | | | | | |
| TWGBT | | | | *e*S | | Sb | 00 16 33.2 | -1.5 |
| | baz=142 | | | | | | | |
| **ECS** | **Chishang** | **0.32** | **85** | *e*P | | Pg | 00 16 28.1 | +0.9 |
| | baz=84 | | | | | | | |
| ECS | | | | *e*S | | Sg | 00 16 33.1 | +1.8 |
| | baz=84 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.32** | **316** | *e*P | | Pb | 00 16 28.6 | -0.8 |
| | baz=316 | | | | | | | |
| TPUB | | | | S | | Sb | 00 16 33.3 | -1.8 |
| | baz=316 | | | | | | | |
| **CHN1** | **Nanshi** | **0.34** | **290** | *e*P | | Pg | 00 16 28.5 | +1.0 |
| | baz=290 | | | | | | | |
| CHN1 | | | | *e*S | | Sb | 00 16 33.8 | -1.7 |
| | baz=290 | | | | | | | |
| **CHN4** | **Tsaushan** | **0.38** | **318** | *e*P | | Pg | 00 16 29.3 | +0.9 |
| | baz=317 | | | | | | | |
| **SSD** | **Sandimen** | **0.39** | **215** | *e*P | | Pg | 00 16 29.3 | +0.8 |
| | baz=213 | | | | | | | |
| SSD | | | | *e*S | | Sg | 00 16 34.8 | +1.2 |
| | baz=213 | | | | | | | |
| **TTN** | **Taitung** | **0.40** | **141** | *e*P | | Pb | 00 16 30.4 | -0.3 |
| | baz=140 | | | | | | | |
| TTN | | | | *e*S | | Sb | 00 16 36.1 | -1.1 |
| | baz=140 | | | | | | | |
| **EDH** | **Donghe** | **0.41** | **103** | *e*S | | Pb | 00 16 29.8 | -1.0 |
| | baz=111 | | | | | | | |
| **EDH** | **Donghe** | **0.41** | **103** | *e*P | | Pb | 00 16 29.9 | -0.9 |
| | baz=103 | | | | | | | |
| EDH | | | | *e*S | | Sb | 00 16 36.6 | -0.8 |
| | baz=103 | | | | | | | |
| **TWK** | **Hsinying** | **0.41** | **299** | *e*P | | Pb | 00 16 30.6 | -0.3 |
| | baz=299 | | | | | | | |
| TWK | | | | *e*S | | Sb | 00 16 37.0 | -0.5 |
| | baz=299 | | | | | | | |
| **FULB** | **Fuli** | **0.41** | **71** | *e*P | | Pg | 00 16 29.6 | +0.8 |
| | baz=71 | | | | | | | |
| FULB | | | | *e*S | | Sb | 00 16 36.3 | -1.2 |
| | baz=71 | | | | | | | |
| **ALS** | **Alishan** | **0.45** | **352** | P | | Pg | 00 16 30.3 | +0.6 |
| | baz=352 | | | | | | | |
| ALS | | | | *e*S | | Sb | 00 16 37.7 | -1.2 |
| | baz=352 | | | | | | | |
| **CHKT** | **Chengkung** | **0.45** | **86** | *e*P | | Pb | 00 16 31.3 | -0.4 |
| | baz=86 | | | | | | | |
| CHKT | | | | *e*S | | Sb | 00 16 39.0 | +0.2 |
| | baz=86 | | | | | | | |
| **HGSD** | **Ruisui** | **0.66** | **50** | *e*P | | Pb | 00 16 35.0 | -0.1 |
| | baz=50 | | | | | | | |
| HGSD | | | | *e*S | | Sb | 00 16 43.7 | -1.0 |
| | baz=50 | | | | | | | |
| **HGSD** | **Ruisui** | **0.66** | **50** | *e*S | | Pb | 00 16 35.1 | 0.0 |
| | baz=60 | | | | | | | |
| **EAST** | **Anshuo** | **0.68** | **182** | *e*P | | Pb | 00 16 35.8 | +0.2 |
| | baz=181 | | | | | | | |
| EAST | | | | *e*S | | Sb | 00 16 46.7 | +1.3 |
| | baz=181 | | | | | | | |
| **WDLH** | **Douliu** | **0.69** | **334** | *e*S | | Sb | 00 16 46.8 | +1.2 |
| | baz=333 | | | | | | | |
| **VWDT** | **VWDT** | **0.73** | **20** | *e*P | | Pg | 00 16 35.0 | 0.0 |
| | baz=19 | | | | | | | |
| VWDT | | | | *e*S | | Sb | 00 16 47.3 | +0.7 |
| | baz=19 | | | | | | | |
| **VWDT** | **VWDT** | **0.73** | **20** | *e*S | | Pb | 00 16 35.0 | -1.3 |
| | baz=28 | | | | | | | |
| **TYC** | **Yuchr** | **0.83** | **359** | P | | Pb | 00 16 38.0 | -0.1 |
| | baz=359 | | | | | | | |
| TYC | | | | *e*S | | Sn | 00 16 51.3 | -1.1 |
| | baz=359 | | | | | | | |
| **TYC** | **Yuchr** | **0.83** | **359** | S | | Pb | 00 16 38.0 | -0.1 |
| | baz=5.0 | | | | | | | |

*ARE **20** 00:40:03±3.5, 15˚.73S±0˚.07×71˚.78W±0˚.09, h7km±5km, Error ellipse: s-maj=0.0km s-min=0.0km az=158.0*
*NEIC **20** 00:40:09.9±2.3, 15˚.89S±0˚.07×71˚.68W±0˚.04, h31km±7km, mb4.4/8, ML4.2(ARE), Error ellipse: s-maj=10.4km s-min=4.6km az=192.0*
*IDC **20** 00:40:11.4±3.5, 15˚.87S×71˚.04W, h51km±34km, mb3.6/3, mb1 4.0/5, mb1mx3.6/31, mbtmp4.0/5, ML3.8/2, MS3.4/9, Ms1 3.4/9, ms1mx3.0/52, Error ellipse: s-maj=47.0km s-min=24.3km az=60.0*

**ISC 20 00:40:09.8**±0.6, **15˚.94S**±0˚.09×**71˚.8W**±0˚.1, **h35**km, **n51,** σ1°**51**/38, **mb3.9**/4, **MS3.3**/6, **Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AP01** | **Chacalluta** | **2.80** | **150** | Pn | | **Pn** | **00 40 54.0** | **+1.9** |
| **PB12** | **IPOC Station P** | **3.02** | **152** | | | **Pn** | **00 40 57.0** | **+1.9** |
| **PB16** | **IPOC Station P** | **3.25** | **138** | | | **Pn** | **00 41 02.0** | **+3.2** |
| **LPAZ** | **La Paz** | **3.56** | **96** | | | Pn | 00 41 08.1 | +5.0 |
| **PB11** | **IPOC Station P** | **4.32** | **152** | | | **Pn** | **00 41 14.9** | **+1.7** |
| **GO01** | **Chusmiza** | **4.47** | **146** | Pn | | **Pn** | **00 41 17.7** | **+2.1** |
| **TA02** | **Huaiquique** | **4.60** | **160** | | | **Pn** | **00 41 17.2** | **+0.4** |
| **TA01** | **Diego Aracena** | **4.86** | **162** | | | **Pn** | **00 41 20.4** | **0.0** |
| **PB08** | **IPOC Station P** | **4.89** | **149** | Pn | | **Pn** | **00 41 22.7** | **+1.5** |
| **PATCX** | **Punta Patache** | **5.11** | **162** | | | **Pn** | **00 41 24.3** | **+0.4** |
| **PB01** | **IPOC Station P** | **5.54** | **157** | Pn | | **Pn** | **00 41 30.1** | **+0.3** |
| **PB02** | **IPOC Station P** | **5.65** | **162** | | | **Pn** | **00 41 31.7** | **+0.3** |
| **PB07** | **IPOC Station P** | **6.04** | **163** | | | **Pn** | **00 41 37.6** | **+0.7** |
| **NNA** | **Nana** | **6.26** | **308** | P | | Pn | 00 41 48.2 | +8.3 |
| | 1.2nm,0.3s,baz=135,slow=4.3,SNR=7.2 | | | | | | | |
| **NNA** | **Nana** | **6.26** | **308** | Pn | | **Pn** | **00 41 41.3** | **+1.4** |
| **PB09** | **IPOC Station P** | **6.32** | **158** | | | **Pn** | **00 41 42.1** | **+1.5** |
| **PB03** | **IPOC Station P** | **6.38** | **163** | | | **Pn** | **00 41 41.7** | **+0.2** |
| **PB04** | **IPOC Station P** | **6.55** | **166** | | | **Pn** | **00 41 43.6** | **-0.3** |
| **PB06** | **IPOC Station P** | **7.06** | **163** | Pn | | **Pn** | **00 41 49.7** | **-1.1** |
| **LVC** | **Limon Verde** | **7.18** | **158** | P | | **Pn** | **00 41 53.4** | **+0.7** |
| | 4.4nm,0.3s,baz=347,slow=9.0,SNR=19 | | | | | | | |
| LVC | | | | LR | | LR | 00 44 51.3 | |
| | comp=Z,264nm,18.6s,baz=331,slow=40 | | | | | | | |
| **LVC** | **Limon Verde** | **7.18** | **158** | | | **Pn** | **00 41 53.0** | **+0.3** |
| **PB15** | **IPOC Station P** | **7.56** | **163** | | | **Pn** | **00 41 57.1** | **-0.7** |
| **PB10** | **IPOC Station P** | **7.63** | **171** | Pn | | **Pn** | **00 41 57.5** | **-1.0** |
| **PB14** | **IPOC Station P** | **8.74** | **172** | | | **Pn** | **00 42 12.6** | **-1.5** |
| **SIV** | **San Ignacio** | **10.33** | **92** | P | | **Pn** | **00 42 33.1** | **-2.6** |
| | 0.5nm,0.3s,baz=273,slow=12,SNR=8.8 | | | | | | | |
| **ATAH** | **Atahualpa** | **10.86** | **323** | LR | | LR | 00 47 13.2 | |
| | comp=Z,382nm,18.3s,baz=166,slow=37 | | | | | | | |
| **AC02** | **Maricunga** | **11.13** | **167** | Pn | | **Pn** | **00 42 46.3** | **-0.7** |
| **CO03** | **El Pedregal** | **14.87** | **176** | | | **P** | **00 43 44.0** | **+1.1** |
| **VA03** | **San Esteban** | **16.79** | **176** | P | | **P** | **00 44 05.2** | **+0.9** |
| VA03 | | | | IAmb | | IAmb | 00 44 07.3 | |
| | comp=Z,28nm,1.1s | | | | | | | |
| **H03N1** | **Juan Fernandez** | **18.57** | **199** | T | | T | 01 02 43.7 | |
| | baz=22,slow=73,SNR=119 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **18.57** | **199** | T | | T | 01 02 47.8 | |
| | baz=22,slow=73,SNR=74 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **18.59** | **199** | T | | T | 01 02 45.9 | |
| | baz=22,slow=73,SNR=107 | | | | | | | |
| **PTGA** | **Pitinga** | **19.11** | **39** | LR | | LR | 00 52 55.0 | |
| | comp=Z,52nm,18.4s,baz=146,slow=41 | | | | | | | |
| **ROSC** | **El Rosal** | **20.79** | **353** | LR | | LR | 00 53 06.6 | |
| | comp=Z,149nm,21.8s,baz=204,slow=37 | | | | | | | |
| **PLCA** | **Paso Flores** | **24.73** | **178** | P | | **P** | **00 45 27.5** | **-0.5** |
| | comp=Z,2.9nm,0.9s,baz=2.5,slow=8.3,SNR=4.5 | | | | | | | |
| **PLCA** | **Paso Flores** | **24.73** | **178** | P | | **P** | **00 45 28.3** | **+0.4** |
| PLCA | | | | IAmb | | IAmb | 00 45 39.0 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **APG** | **El Apazote** | **35.84** | **328** | LR | | LR | 01 00 17.1 | |
| | comp=Z,52nm,19.2s,baz=26,slow=33 | | | | | | | |
| **CMIG** | **Matias Romero** | **39.93** | **324** | LR | | LR | 01 02 07.3 | |
| | comp=Z,45nm,21.7s,baz=188,slow=33 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **52.55** | **348** | LR | | LR | 01 14 32.4 | |
| | comp=Z,29nm,18.3s,

**WEL 20 00:44:19.6±0.7, 34°S±13′×18°0E±1°9, h300km±17km, M3.7/18, mB4.3/9, ML4.2/25, MLv4.0/18, Mw(mB)3.4/9, Error ellipse: s-maj=0.0km s-min=0.0km az=121.6, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.85** | **195** | P | Pn | 00 45 24.3 | +0.3 |
| MXZ | | | | S | S | 00 46 13.1 | -2.5 |
| **WMGZ** | **Waiomatatini S** | **4.08** | **193** | P | Pn | 00 45 28.1 | +1.6 |
| WMGZ | | | | S | S | 00 46 22.4 | +2.2 |
| **HAZ** | **Te Kaha** | **4.16** | **200** | P | Pn | 00 45 27.2 | -0.3 |
| HAZ | | | | S | S | 00 46 20.6 | -1.2 |
| **PKGZ** | **Pakihiroa** | **4.21** | **196** | P | Pn | 00 45 27.6 | -0.5 |
| PKGZ | | | | S | S | 00 46 23.3 | +0.3 |
| **PUZ** | **Puketiti** | **4.35** | **194** | P | Pn | 00 45 29.3 | -0.3 |
| PUZ | | | | S | S | 00 46 25.7 | 0.0 |
| **RUGZ** | **Raukumara Rang** | **4.39** | **200** | P | Pn | 00 45 29.8 | -0.4 |
| RUGZ | | | | S | S | 00 46 24.5 | -2.2 |
| **TWGZ** | **Tauwhareparae** | **4.51** | **196** | P | Pn | 00 45 32.4 | +1.0 |
| TWGZ | | | | S | S | 00 46 30.1 | +1.0 |
| **OPRZ** | **Ohinepanea** | **4.68** | **211** | P | Pn | 00 45 33.4 | +0.1 |
| **CNGZ** | **Carnagh Statio** | **4.76** | **193** | P | Pn | 00 45 34.5 | +0.3 |
| **MWZ** | **Matawai** | **4.78** | **200** | P | Pn | 00 45 34.7 | +0.3 |
| MWZ | | | | S | S | 00 46 34.5 | 0.0 |
| **TKGZ** | **Te Karaka** | **4.79** | **196** | P | Pn | 00 45 33.5 | -1.1 |
| TKGZ | | | | S | S | 00 46 35.6 | +0.8 |
| **URZ** | **Urewera** | **4.83** | **204** | P | Pn | 00 45 34.7 | -0.4 |
| URZ | | | | S | S | 00 46 36.6 | +0.9 |
| **RIGZ** | **Rimuhau** | **5.07** | **196** | P | Pn | 00 45 38.1 | +0.3 |
| RIGZ | | | | S | S | 00 46 40.1 | -0.6 |
| **MUGZ** | **Murupara** | **5.15** | **205** | P | Pn | 00 45 39.5 | +0.8 |
| **RTZ** | **Ruatahuna** | **5.20** | **203** | P | Pn | 00 45 38.6 | -0.8 |
| **PRGZ** | **Paritu Road** | **5.25** | **195** | P | Pn | 00 45 41.1 | +1.2 |
| PRGZ | | | | S | S | 00 46 46.4 | +1.9 |
| **KNZ** | **Kokohu** | **5.39** | **196** | P | Pn | 00 45 40.5 | -1.0 |
| KNZ | | | | S | S | 00 46 46.5 | -0.9 |
| **RAHZ** | **Arahi** | **5.44** | **201** | P | Pn | 00 45 41.3 | -0.8 |
| RAHZ | | | | S | S | 00 46 50.3 | +1.6 |
| **MTHZ** | **Maungataniwha** | **5.46** | **203** | P | Pn | 00 45 42.0 | -0.4 |
| MTHZ | | | | S | S | 00 46 48.2 | -0.9 |
| **MHGZ** | **Mahia Peninsul** | **5.46** | **194** | P | Pn | 00 45 42.8 | +0.4 |
| MHGZ | | | | S | S | 00 46 48.4 | -0.7 |
| **NMHZ** | **Naumai** | **5.69** | **202** | P | Pn | 00 45 44.9 | -0.3 |
| NMHZ | | | | S | S | 00 46 57.0 | +2.8 |
| **ARHZ** | **Aropaoanui** | **5.79** | **200** | P | Pn | 00 45 46.3 | 0.0 |
| ARHZ | | | | S | S | 00 46 58.8 | +2.7 |
| **BKZ** | **Black Stump Fm** | **5.86** | **204** | P | Pn | 00 45 46.6 | -0.6 |
| BKZ | | | | S | S | 00 46 58.7 | +1.0 |
| **HIZ** | **Hauiti** | **6.02** | **218** | P | Pn | 00 45 51.7 | +2.7 |
| **MCHZ** | **McNeill Hill** | **6.05** | **202** | P | Pn | 00 45 49.6 | +0.3 |
| MCHZ | | | | S | S | 00 47 02.5 | +0.9 |
| **NTVZ** | **North Tongarir** | **6.11** | **210** | P | Pn | 00 45 50.5 | +0.3 |
| **TMVZ** | **Te Maari** | **6.11** | **209** | P | Pn | 00 45 50.4 | +0.1 |
| **KWHZ** | **Kaweka Forest** | **6.12** | **203** | P | Pn | 00 45 49.0 | -1.2 |
| KWHZ | | | | S | S | 00 47 04.1 | +0.8 |
| **ETVZ** | **East Tongariro** | **6.13** | **209** | P | Pn | 00 45 50.5 | +0.1 |
| **SNVZ** | **South Ngauruho** | **6.20** | **210** | P | Pn | 00 45 51.4 | +0.1 |
| **FWVZ** | **Far West T-bar** | **6.29** | **210** | P | Pn | 00 45 52.3 | -0.2 |
| **BHHZ** | **Black Hill Sta** | **6.30** | **206** | P | Pn | 00 45 51.5 | -0.9 |
| BHHZ | | | | S | S | 00 47 06.8 | -0.5 |
| **KAHZ** | **Kahuranaki** | **6.32** | **199** | P | Pn | 00 45 51.0 | -1.6 |
| **KRHZ** | **Kereru** | **6.33** | **203** | P | Pn | 00 45 50.9 | -1.8 |
| KRHZ | | | | S | S | 00 47 06.0 | -1.9 |
| **WNVZ** | **Wahianoa** | **6.33** | **209** | P | Pn | 00 45 52.5 | -0.5 |
| **PNHZ** | **Pukenui** | **6.63** | **203** | P | Pn | 00 45 55.1 | -1.3 |
| PNHZ | | | | S | S | 00 47 11.9 | -2.7 |
| **DVHZ** | **Dannevirke** | **6.99** | **202** | P | Pn | 00 45 59.3 | -1.4 |

*DJA **20** 00:46:59.8±1.2, 5°S±7′×15°4E±1°1, h145km±6km, M4.7/18, mB5.0/4, mb4.6/18, MLv4.9/1, Mw(mB)4.3/4*
*IDC **20** 00:47:01.0±2.5, 5.2°S×153.3°E, h144km±21km, mb3.9/15, mb1 4.1/15, mb1mx3.8/49, mbtmp4.4/15, MS2.9/4, Ms1 2.9/4, ms1mx2.6/59, Error ellipse: s-maj=22.3km s-min=13.6km az=82.0*
*NEIC **20** 00:47:01.6±1.3, 5.2°S±0.1°×154.0°E±0.1°, h147km±8km, mb4.6/26, Error ellipse: s-maj=20.0km s-min=12.7km az=222.0*

**ISC 20 00:47:01.5±0.6, 5.14°S±0.07°×153.99°E±0.09, h150km, n98, σ1§05/97, mb4.6/54, 2C, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.05** | **297** | | **Pn** | **00 47 36.6** | **-0.7** |
| RABL | | | | Sn | **Sn** | **00 48 04.9** | **+0.1** |
| **RABL** | **Rabaul** | **2.05** | **297** | P | **Pn** | **00 47 36.8** | **-0.5** |
| **PMG** | **Port Moresby** | **7.99** | **238** | P | **Pn** | **00 48 57.2** | **+2.3** |
| | 6.2nm,0.3s,baz=44,slow=7.9,SNR=30 | | | | | | |
| PMG | | | | LR | LR | 00 51 39.2 | |
| | comp=Z,72nm,18.6s,baz=154,slow=35 | | | | | | |
| **PMG** | **Port Moresby** | **7.99** | **238** | Pn | **Pn** | **00 48 57.3** | **+2.4** |
| **PMG** | **Port Moresby** | **7.99** | **238** | P | **Pn** | **00 48 57.4** | **+2.4** |
| | 161nm,0.8s | | | | | | |
| **JAY** | **Jayapura** | **13.51** | **281** | P | **Pn** | **00 50 07.0** | **-0.4** |
| | 565nm57nm,1.0s | | | | | | |
| **COEN** | **Coen** | **13.80** | **230** | | **P** | **00 50 15.5** | **+1.0** |
| **GENI** | **Genyem** | **14.02** | **280** | P | **Pn** | **00 50 13.3** | **-0.6** |
| **SMPI** | **Sarmi** | **15.57** | **281** | P | **Pn** | **00 50 32.2** | **-0.9** |
| **MTSU** | **Mount Surprise** | **16.01** | **215** | P | **P** | **00 50 40.6** | **+1.6** |
| | 6.4nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **16.66** | **206** | P | **Pn** | **00 50 47.4** | **+1.0** |
| | 0.3nm,0.3s,baz=41,slow=12,SNR=5.8 | | | | | | |
| CTA | | | | LR | LR | 00 57 15.9 | |
| | comp=Z,35nm,18.3s,baz=22,slow=37 | | | | | | |
| **RK1H** | **Rockhampton Ha** | **18.45** | **190** | P | **P** | **00 51 06.2** | **+0.4** |
| **DZM** | **Mont Dzumac** | **20.70** | **146** | P | **P** | **00 51 30.0** | **-0.2** |
| | 6.2nm,0.6s,baz=265,slow=7.5,SNR=6.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.70** | **146** | P | **P** | **00 51 29.9** | **-0.3** |
| DZM | | | | IAmb | IAmb | 00 51 33.8 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **20.74** | **221** | P | **P** | **00 51 30.3** | **-0.3** |
| | comp=Z,18nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **21.80** | **275** | P | **P** | **00 51 40.6** | **-1.3** |
| FAKI | | | | IAmb | IAmb | 00 51 48.8 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **RMQ** | **Roma** | **21.81** | **193** | P | **P** | **00 51 41.9** | **0.0** |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **22.53** | **249** | P | **P** | **00 51 47.8** | **-1.3** |
| | comp=Z,55nm,0.9s | | | | | | |
| **SAUI** | **Saumlaki** | **22.72** | **262** | P | **P** | **00 51 49.5** | **-1.4** |
| | comp=Z,281nm,1.1s | | | | | | |
| **SAUI** | **Saumlaki** | **22.72** | **262** | P | **P** | **00 51 50.2** | **-0.7** |
| **SIJI** | **Sorong** | **23.08** | **280** | P | **P** | **00 51 54.0** | **-0.3** |
| | comp=Z,30nm,0.8s,baz=62,slow=8.6,SNR=9.8 | | | | | | |
| **QLP** | **Quilpie** | **23.27** | **203** | P | **P** | **00 51 55.7** | **-0.1** |
| | comp=Z,26nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **23.82** | **250** | P | **P** | **00 52 00.5** | **-0.5** |
| MTN | | | | IAmb | IAmb | 00 52 01.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **23.82** | **250** | P | **P** | **00 52 00.8** | **-0.2** |
| | comp=Z,26nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **23.93** | **251** | P | **P** | **00 52 01.4** | **-0.6** |
| **WR0** | **Warramunga Arr** | **23.98** | **230** | P | **P** | **00 52 01.9** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 00 52 03.4 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.99** | **231** | P | **P** | **00 52 01.9** | **-0.6** |
| **WRAB** | **Tennant Creek** | **24.12** | **231** | P | **P** | **00 52 02.9** | **-0.7** |
| **WRAB** | **Tennant Creek** | **24.12** | **231** | P | **P** | **00 52 03.1** | **-0.5** |
| | comp=Z,39nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.12** | **231** | P | **P** | **00 52 03.0** | **-0.7** |
| **WRA** | **Warramunga Arr** | **24.13** | **231** | P | **P** | **00 52 03.0** | **-0.7** |
| | comp=Z,21nm,0.5s,baz=55,slow=10.0,SNR=109 | | | | | | |
| WRA | | | | ScP | **ScP** | **00 59 06.0** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=58,slow=3.0,SNR=6.6 | | | | | | |
| WRA | | | | LR | LR | 01 01 24.0 | |
| | comp=Z,51nm,18.2s,baz=106,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.13** | **231** | P | **P** | **00 52 02.1** | **-1.7** |
| **H11S3** | **WAKE ISLAND Hy** | **26.61** | **28** | T | T | 01 21 08.2 | |
| | baz=208,slow=76,SNR=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.62** | **28** | T | T | 01 21 21.9 | |
| | baz=208,slow=76,SNR=9.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.63** | **28** | T | T | 01 21 23.1 | |
| | baz=208,slow=76,SNR=12 | | | | | | |
| **AS31** | **Alice Springs** | **26.72** | **224** | P | **P** | **00 52 26.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **26.72** | **224** | P | **P** | **00 52 26.1** | **-1.1** |
| | comp=Z,2.3nm,0.5s,baz=56,slow=8.7,SNR=26 | | | | | | |
| ASAR | | | | ScP | **ScP** | **00 59 13.5** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=51,slow=3.1,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **26.72** | **224** | P | **P** | **00 52 25.6** | **-1.6** |
| **KNRA** | **Kununurra** | **26.90** | **245** | P | **P** | **00 52 28.1** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 00 52 29.7 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **26.90** | **245** | P | **P** | **00 52 28.1** | **-0.7** |
| | comp=Z,12nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **29.02** | **202** | P | **P** | **00 52 45.9** | **-1.6** |
| | comp=Z,2.0nm,0.5s,baz=37,slow=14,SNR=5.9 | | | | | | |
| **STKA** | **Stephens Creek** | **29.02** | **202** | P | **P** | **00 52 46.0** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **30.55** | **243** | P | **P** | **00 52 59.6** | **-1.5** |
| | comp=Z,18nm,0.6s,baz=69,slow=7.9,SNR=100 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.55** | **243** | P | **P** | **00 52 59.8** | **-1.4** |
| **BBOO** | **Buckleboo** | **32.22** | **209** | P | **P** | **00 53 13.4** | **-2.2** |
| BBOO | | | | IAmb | IAmb | 00 53 15.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **33.35** | **267** | P | **P** | **00 53 24.6** | **-1.1** |
| | comp=Z,20nm,1.5s | | | | | | |
| **BNSI** | **Bone** | **33.77** | **270** | P | **P** | **00 53 28.8** | **-0.6** |
| | comp=Z,22nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **34.10** | **269** | LR | LR | 01 10 50.0 | |
| | comp=Z,14nm,19.1s,baz=134,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **34.10** | **269** | P | **P** | **00 53 31.5** | **-0.7** |
| KAPI | | | | IAmb | IAmb | 00 53 32.7 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **MPSI** | **Mapaga** | **34.48** | **278** | P | **P** | **00 53 33.9** | **-1.6** |
| **FORT** | **Forrest** | **35.29** | **221** | P | **P** | **00 53 40.9** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **36.89** | **241** | P | **P** | **00 53 54.4** | **-1.5** |
| PSA00 | | | | IAmb | IAmb | 00 53 55.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BKZ** | **Black Stump Fm** | **39.52** | **152** | P | **P** | **00 54 17.3** | **-0.5** |
| BKZ | | | | IAmb | IAmb | 00 54 31.6 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **41.26** | **161** | P | **P** | **00 54 31.9** | **0.0** |
| | comp=Z,8.5nm,0.8s,baz=276,slow=3.9,SNR=4.0 | | | | | | |
| **RPZ** | **Rata Peaks** | **41.26** | **161** | P | **P** | **00 54 31.5** | **-0.5** |
| RPZ | | | | IAmb | IAmb | 00 54 33.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **LBZ** | **Lake Benmore** | **41.59** | **162** | P | **P** | **00 54 34.5** | **-0.2** |
| LBZ | | | | IAmb | IAmb | 00 54 45.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **43.07** | **232** | P | **P** | **00 54 45.3** | **-1.5** |
| **SSLB** | **Suanglung** | **43.18** | **313** | P | **P** | **00 54 47.5** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 00 55 00.7 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **44.13** | **277** | P | **P** | **00 54 55.9** | **+0.4** |
| KSM | | | | IAmb | IAmb | 00 54 56.5 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **48.84** | **332** | P | **P** | **00 55 32.2** | **+0.3** |
| | comp=Z,0.9nm,0.4s,baz=146,slow=7.8,SNR=5.0 | | | | | | |
| **NJ2** | **Nanjing** | **49.86** | **320** | *e*P | **P** | **00 55 41.1** | **+1.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **KULM** | **Kulim** | **54.27** | **280** | P | **P** | **00 56 11.8** | **-0.8** |
| KULM | | | | IAmb | IAmb | 00 56 12.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **ENH** | **Enshi** | **55.26** | **312** | P | **P** | **00 56 19.6** | **+0.1** |
| **KLR** | **Kul'dur** | **57.51** | **343** | P | **P** | **00 56 35.6** | **+0.6** |
| | comp=Z,0.9nm,0.6s,baz=160,slow=6.9,SNR=4.4 | | | | | | |
| **XAN** | **Xi'an** | **57.69** | **316** | P | **P** | **00 56 37.0** | **+0.4** |
| XAN | | | | pP | pP | 00 57 10.1 | -0.3 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **58.16** | **304** | ⇑P | **P** | **00 56 42.1** | **+1.8** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.10** | **295** | P | **P** | **00 56 47.8** | **+1.1** |
| | comp=Z,2.9nm,0.4s,baz=112,slow=5.2,SNR=18 | | | | | | |
| **PZH** | **PanZhiHua** | **59.54** | **305** | P | **P** | **00 56 50.3** | **+0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.5s | | | | | | |
| **XLT** | **XiLinHaoTe** | **59.57** | **329** | *e*P | **P** | **00 56 50.0** | **+0.5** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,54nm,6.6s | | | | | | |
| **CD2** | **Chengdu** | **59.86** | **310** | P | **P** | **00 56 52.8** | **+1.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **60.02** | **324** | *e*P | **P** | **00 56 55.3** | **+2.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,5.2s | | | | | | |
| **LZH** | **Lanzhou** | **62.30** | **315** | *e*P | **P** | **00 57 09.5** | **+1.3** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.4s | | | | | | |
| **GTA** | **Gaotai** | **66.71** | **317** | ⇑P | **P** | **00 57 38.5** | **+1.7** |
| GTA | | | | pP | pP | 00 58 14.3 | +2.9 |
| GTA | | | | sP | sP | 00 58 30.5 | +3.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **67.25** | **327** | P | **P** | **00 57 40.8** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=151,slow=5.8,SNR=13 | | | | | | |
| **TAPN** | **Taplejung** | **71.60** | **301** | *e*P | **P** | **00 58 08.0** | **+0.7** |
| | comp=Z,24nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **71.74** | **300** | *e*P | **P** | **00 58 08.9** | **+0.8** |
| | comp=Z,47nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **72.44** | **300** | *e*P | **P** | **00 58 13.0** | **+0.7** |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **72.98** | **301** | *e*P | **P** | **00 58 14.8** | **-0.8** |
| | comp=Z,14nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **73.31** | **301** | *e*P | **P** | **00 58 18.1** | **+0.5** |
| | comp=Z,15nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **73.63** | **301** | *e*P | **P** | **00 58 19.6** | **+0.2** |
| **PKIN** | **Phulchoki** | **73.64** | **301** | *e*P | **P** | **00 58 19.5** | **+0.1** |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **73.80** | **301** | *e*P | **P** | **00 58 20.1** | **-0.1** |
| | comp=Z,12nm,0.5s | | | | | | |
| **DMN** | **Daman** | **73.90** | **300** | *e*P | **P** | **00 58 21.5** | **+0.6** |
| **GKN** | **Gorkha** | **74.40** | **301** | *e*P | **P** | **00 58 23.8** | **+0.2** |
| | comp=Z,6.7nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **75.23** | **300** | *e*P | **P** | **00 58 28.6** | **+0.1** |
| | comp=Z,28nm,0.8s | | | | | | |
| **DANN** | **Dangsing** | **75.23** | **301** | *e*P | **P** | **00 58 28.4** | **-0.2** |
| | comp=Z,14nm,0.7s | | | | | | |
| **PYUN** | **Piuthan** | **75.83** | **301** | *e*P | **P** | **00 58 31.7** | **-0.2** |
| | comp=Z,25nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **76.80** | **317** | *e*P | **P** | **00 58 38.4** | **+1.5** |
| **MK31** | **Makanchi Array** | **81.36** | **319** | P | **P** | **00 59 01.4** | **-0.1** |
| **MKAR** | **Makanchi Array** | **81.36** | **319** | P | **P** | **00 59 02.0** | **+0.4** |
| | comp=Z,1.6nm,0.8s,baz=105,slow=5.2,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **81.36** | **319** | P | **P** | **00 59 01.7** | **+0.2** |
| **MAKZ** | **Makanchi** | **81.57** | **319** | P | **P** | **00 59 03.3** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **82.10** | **326** | P | **P** | **00 59 04.6** | **-0.6** |
| | comp=Z,0.9nm,0.5s,baz=108,slow=4.6,SNR=5.3 | | | | | | |
| **KSH** | **Kashi** | **84.06** | **310** | P | **P** | **00 59 18.5** | **+2.7** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.80** | **322** | P | **P** | **00 59 18.6** | **-0.5** |
| | comp=Z,0.2nm,0.2s,baz=96,slow=4.6,SNR=5.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **84.82** | **180** | P | **P** | **00 59 18.8** | **-0.3** |
| **AAK** | **Ala-Archa** | **85.76** | **313** | P | **P** | **00 59 24.9** | **+0.7** |
| | comp=Z,0.9nm,0.5s,baz=129,slow=6.5,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.54** | **288** | PKPbc | **PKPbc** | **01 06 38.0** | **-1.0** |
| | comp=Z,1.6nm,0.7s,baz=32,slow=2.3,SNR=9.2 | | | | | | |

*IDC **20** 00:50:12.1±1.6, 31.01°N×141.49°E, h0km, mb3.3/3, mb1 3.6/4, mb1mx3.2/50, mbtmp3.4/4, ML3.0/1, Error ellipse: s-maj=41.1km s-min=25.8km az=73.0*
*JMA **20** 00:50:14.8±0.4, 31.83°N×142.35°E, h49km, M3.8*

**ISC 20 00:50:12.7±1.6, 31.67°N±0.10°×142.6°E±0.1°, h35km, n13, σ1§36/15, mb3.4/3, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **2.74** | **302** | P | **Pn** | **00 50 54.1** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **2.77** | **302** | Pn | **Pn** | **00 50 54.8** | **+0.3** |
| | 6.5nm,0.3s,baz=250,slow=16,SNR=1.6 | | | | | | |
| JHJ | | | | Sn | **Sn** | **00 51 26.5** | **-0.3** |
| | 14nm,0.3s,baz=146,slow=22,SNR=7.6 | | | | | | |
| **BSO1** | **Boso 1** | **3.27** | **336** | P | **Pn** | **00 51 02.0** | **+1.1** |
| **BSO3** | **Boso 3** | **3.57** | **332** | P | **Pn** | **00 51 06.6** | **+1.2** |
| BSO3 | | | | *e*S | **Sn** | **00 51 44.8** | **-1.4** |
| **BSO4** | **Boso 4** | **3.81** | **331** | *e*S | **Sn** | **00 51 50.4** | **-1.8** |
| **JOD2** | **Odawara 2** | **4.62** | **322** | P | **Pn** | **00 51 20.5** | **+0.4** |
| **JHU** | **Hanno** | **4.99** | **328** | P | **Pn** | **00 51 25.9** | **+0.7** |
| **JHO** | **Hitachi** | **5.20** | **342** | P | **Pn** | **00 51 28.1** | **0.0** |
| JHO | | | | *e*S | **Sn** | **00 52 24.8** | **-2.0** |
| **JRY** | **Ryogami san** | **5.31** | **326** | P | **Pn** | **00 51 31.0** | **+1.5** |
| **JAG** | **Ashikaga** | **5.41** | **332** | P | **Pn** | **00 51 31.8** | **+1.0** |
| **MKAR** | **Makanchi Array** | **47.93** | **307** | P | **P** | **00 58 49.6** | **+1.9** |
| | 0.2nm,0.6s,baz=89,slow=9.5,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.92** | **190** | P | **P** | **00 59 16.6** | **-1.4** |
| | 0.2nm,0.4s,baz=5.4,slow=7.6,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **53.58** | **30** | P | P | 00 59 41.8 | +12 |
| | 0.8nm,1.0s,baz=249,slow=6.9,SNR=2.8 | | | | | | |

*IDC **20** 00:57:53.0±0.8, 31.63°N×69.99°E, h0km, mb4.2/20, mb1 4.3/22, mb1mx4.1/44, mbtmp4.2/22, ML4.6/2, MS3.1/7, Ms1 3.2/7, ms1mx2.8/84, Error ellipse: s-maj=17.7km s-min=15.6km az=14.0*
*NDI **20** 00:57:53.1±2.9, 31.72°N×69.78°E, h10km, ML4.1, mb4.3(NEIC)*
*BJI **20** 00:57:58.5±0.0, 31.84°N×70.13°E, h31km, mb4.1/23, mB4.7/13, ML4.6/1, Ms3.9/1*
*MOS **20** 00:57:59.4±1.1, 31.86°N×70.06°E, h52km, mb4.6/24, Error ellipse: s-maj=9.7km s-min=5.4km az=88.8*
*NNC **20** 00:58:00.8±3.9, 32.26°N×69.76°E, h0km, mb4.8, Error ellipse: s-maj=45.3km s-min=30.9km az=109.0*
*NEIC **20** 00:58:00.9±1.4, 31.80°N±0.09°×70.07°E±0.09, h51km±3km, mb4.3/39, Error ellipse: s-maj=13.7km s-min=9.4km az=207.0*

**ISC 20 00:57:59.6±0.4, 31.66°N±0.05°×70.10°E±0.04, h50km, n182, σ1§59/196, mb4.4/54, MS3.5/8, 19C-10D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THW** | **Thamme Wali** | **1.79** | **51** | P | **Pn** | **00 58 28.3** | **+0.2** |
| **SARP** | **Sargodha** | **2.20** | **83** | P | **Pn** | **00 58 34.2** | **+0.5** |
| **CEP** | **Cherat** | **2.64** | **35** | P | **Pn** | **00 58 40.3** | **+0.5** |
| **KBL** | **Kabul** | **3.00** | **343** | P | **Pn** | **00 58 45.4** | **+0.5** |
| **KBL** | **Kabul** | **3.00** | **343** | Pn | **Pn** | **00 58 45.4** | **+0.5** |
| **NIL** | **Nilore** | **3.31** | **52** | P | **Pn** | **00 58 49.8** | **+0.8** |
| **NIL** | **Nilore** | **3.31** | **52** | Pn | **Pn** | **00 58 49.8** | **+0.8** |
| **JMU** | **Jammu** | **4.20** | **74** | *e*P | **Pn** | **00 59 00.0** | **-1.1** |
| JMU | | | | *e*P | **Pn** | **00 59 01.6** | **+0.5** |
| JMU | | | | *e*S | **Sn** | **00 59 49.0** | **+0.1** |
| JMU | | | | *e*S | **Sn** | **00 59 51.3** | **+2.4** |
| **THN** | **Thein Dam** | **4.83** | **79** | *e*P | **Pn** | **00 59 10.6** | **+0.9** |
| THN | | | | *e*S | **Sn** | **01 00 06.5** | **+2.2** |
| THN | | | | *e*S | **Sn** | **01 00 07.0** | **+2.7** |
| **BHK** | **Bhakra** | **5.40** | **91** | *e*P | **Pn** | **00 59 17.3** | **-0.2** |
| BHK | | | | *e*S | **Sn** | **01 00 19.5** | **+1.1** |
| **SMLA** | **Simla** | **6.06** | **93** | *e*P | **Pn** | **00 59 27.3** | **+0.7** |
| SMLA | | | | *e*S | **Sn** | **01 00 35.3** | **+0.6** |
| SMLA | | | | IAML | | 01 00 38.2 | |
| | comp=E,371nm,0.3s | | | | | | |
| SMLA | | | | IAML | | 01 00 38.8 | |
| | comp=N,457nm,0.3s | | | | | | |
| **AJM** | **Ajmer** | **6.52** | **141** | *e*P | **Pn** | **00 59 32.8** | **-0.1** |
| AJM | | | | *e*S | **Sn** | **01 00 44.2** | **-1.7** |
| **KUDL** | **Kundal** | **6.56** | **121** | *e*P | **Pn** | **00 59 31.7** | **-1.7** |
| **NDI** | **New Delhi** | **6.84** | **114** | *e*P | **Pn** | **00 59 36.2** | **-1.1** |
| NDI | | | | *e*P | **Pn** | **00 59 39.0** | **+1.7** |
| NDI | | | | *e*S | **Sn** | **01 00 54.0** | **+0.2** |
| **AYAN** | **Aya Nagar** | **6.86** | **116** | *e*P | **Pn** | **00 59 36.5** | **-1.1** |
| AYAN | | | | *e*S | **Sn** | **01 00 50.7** | **-3.7** |
| **SONA** | **Sohna** | **6.95** | **118** | *e*P | **Pn** | **00 59 37.7** | **-1.1** |
| SONA | | | | *e*S | **Sn** | **01 00 53.5** | **-2.9** |
| **CHGR** | **Chuyangaron** | **7.02** | **354** | Pn | **Pn** | **00 59 39.0** | **-0.8** |
| **HRA** | **Herat** | **7.14** | **294** | Pn | **Pn** | **00 59 41.9** | **+0.3** |
| **GAR** | **Garm** | **7.32** | **1** | Pn | **Pn** | **00 59 43.4** | **-0.7** |
| **PTH** | **Pithoragarh** | **8.97** | **101** | *e*P | **Pn** | **01 00 05.0** | **-1.6** |
| PTH | | | | *e*S | **Sn** | **01 01 43.3** | **-3.0** |
| **LGTI** | **Lohaghat** | **9.02** | **102** | *e*P | **Pn** | **01 00 04.7** | **-2.5** |
| LGTI | | | | *e*S | **Sn** | **01 01 41.5** | **-5.8** |
| **KSH** | **Kashi** | **9.18** | **30** | P | **Pn** | **01 00 05.0** | **-4.4** |
| KSH | | | | sP | | 01 00 19.1 | |
| KSH | | | | S | Sn | 01 01 38.3 | -13 |
| KSH | | | | smax | smax | | |
| | comp=N,170nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,110nm,0.4s | | | | | | |
| **JHNI** | **Jhansi** | **9.65** | **128** | *e*P | **Pn** | **01 00 14.8** | **-1.0** |
| JHNI | | | | *e*S | Sn | 01 01 57.2 | -5.6 |
| **BHPL** | **Bhopal** | **10.61** | **140** | *e*P | **Pn** | **01 00 27.4** | **-1.6** |
| BHPL | | | | *e*S | Sn | 01 02 20.9 | -5.5 |
| BHPL | | | | IAML | | 01 02 23.2 | |
| | comp=N,37nm,0.2s | | | | | | |
| BHPL | | | | IAML | | 01 02 23.2 | |
| | comp=E,36nm,0.2s | | | | | | |
| **AML** | **Almayashu** SNR=46 | **10.84** | **14** | P | **Pn** | **01 00 30.9** | **-1.4** |
| **UCH** | **Uchtor** SNR=50 | **11.12** | **17** | P | **Pn** | **01 00 34.7** | **-1.5** |
| **EKS2** | **Erkin-Say** SNR=12 | **11.36** | **14** | P | **Pn** | **01 00 38.0** | **-1.2** |
| **KK02** | **Kar

**MKAR Makanchi Array 17.78 28** P **Pn 01 02 01.5 -1.9**
comp=Z,0.9nm,0.3s,baz=217,slow=9.4,SNR=46
**MKAR Makanchi Array 17.78 28***ceP* **Pn 01 02 03.0 -0.5**
MKAR pmax pmax
comp=Z,4.0nm,0.6s
**MKAR Makanchi Array 17.78 28 Pn 01 02 02.9 -0.5**
**WMQ Urumqi 18.42 44** *eP* **Pn 01 02 12.9 +1.7**
**AB31 Akbulak array 19.17 339** *eP* **P 01 02 18.2 -0.6**
**ABKAR Akbulak array 19.17 339** P **P 01 02 18.3 -0.4**
**KURBB Kurchatov Arra 19.95 16** P **P 01 02 26.2 -1.1**
comp=Z,3.3nm,0.6s,baz=207,slow=10,SNR=14
KURBB LR LR 01 10 57.4
comp=Z,67nm,19.1s,baz=211,slow=39
**KURK Kurchatov 20.06 16**⇑*eP* **P 01 02 26.9 -1.6**
KURK pmax pmax
comp=Z,25nm,4.0s
**KURK Kurchatov 20.06 16** P **P 01 02 27.3 -1.2**
**AKTO Aktyubinsk 20.80 338** P **P 01 02 35.9 -0.6**
comp=Z,9.9nm,0.8s,baz=159,slow=13,SNR=14
**AKTO Aktyubinsk 20.80 338** P **P 01 02 36.0 -0.6**
**GOMU GeErMu 20.98 71** P Pn 01 02 43.3 +1.2
GOMU pmax pmax
comp=Z,30nm,5.5s
**BVAR Borovoye Array 21.35 0** P **P 01 02 41.6 -0.8**
comp=Z,13nm,0.7s,baz=106,slow=11,SNR=57
**BRVK Borovoye 21.38 0***c iP* **P 01 02 42.1 -0.6**
BRVK pmax pmax
comp=Z,24nm,0.8s
**BRVK Borovoye 21.38 0** P **P 01 02 41.8 -0.9**
**GNI Garni 22.16 300***ceP* **P 01 02 52.1 +0.7**
GNI pmax pmax
comp=Z,30nm,1.6s
**DGZ Jazzator, Alta 22.21 31***d iP* **P 01 02 52.5 +0.7**
DGZ pmax pmax
comp=Z,8.0nm,0.6s
**KBZ Khabaz 24.55 307** P **P 01 03 14.7 +0.2**
comp=Z,2.4nm,0.8s,baz=127,slow=10,SNR=7.0
**KBZ Khabaz 24.55 307**⇓*eP* **P 01 03 13.9 -0.6**
KBZ pmax pmax
comp=Z,9.0nm,1.8s
**ZAA0 Zalesovo Array 24.65 21** P **P 01 03 14.9 -0.5**
ZAA0 IAmb IAmb 01 03 16.2
comp=Z,5.8nm,0.6s
**ZALV Zalesovo Beam 24.65 21** P **P 01 03 14.8 -0.5**
comp=Z,7.0nm,0.4s,baz=228,slow=10.0,SNR=40
**ZALV Zalesovo Beam 24.65 21** *i* P **P 01 03 15.1 -0.2**
ZALV pmax pmax
comp=Z,8.0nm,0.4s
**ZALV Zalesovo Beam 24.65 21** P **P 01 03 15.0 -0.3**
**MARD Mardin 24.76 291** P **P 01 03 16.2 -0.5**
MARD IAmb IAmb 01 03 17.5
comp=Z,7.7nm,0.6s
**KIV Kislovodsk 24.77 307** P **P 01 03 16.9 +0.3**
KIV IAmb IAmb 01 03 22.4
comp=Z,7.4nm,1.1s
**GTA Gaotai 25.30 64** ⇑P **P 01 03 25.8 +4.2**
GTA pP pP 01 03 29.9 -4.5
GTA sP sP 01 03 32.9 -7.5
GTA pmax pmax
comp=Z,2.0nm,1.1s
**ARU Arti 26.04 345** P **P 01 03 28.7 +0.9**
comp=Z,1.4nm,0.7s,baz=130,slow=5.6,SNR=8.8
**ARU Arti 26.04 345***c iP* **P 01 03 29.9 +2.0**
ARU 01 04 09.8
ARU SS 01 09 03.9
ARU pmax pmax
comp=Z,16nm,1.8s
**ARU Arti 26.04 345** P **P 01 03 28.6 +0.7**
ARU IAmb IAmb 01 03 31.6
comp=Z,5.0nm,0.8s
**PZH PanZhiHua 28.07 92** P **P 01 03 48.8 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,5.0s
**LZH Lanzhou 28.27 72** *eP* **P 01 03 51.1 +2.7**
LZH pP pP 01 03 54.8 -6.5
LZH pmax pmax
comp=Z,15nm,1.4s
**CMAR Chiang Mai Arr 29.15 110** LR LR 01 18 09.9
comp=Z,16nm,19.9s,baz=130,slow=42
**MMAI Mount Meron Ar 29.27 282** LR LR 01 17 43.3
comp=Z,41nm,19.9s,baz=202,slow=41
**KIRV Kirov 30.36 339***deP* **P 01 04 06.8 +0.4**
**BR131 Keskin Array S 30.52 296** P **P 01 04 08.3 0.0**
BR131 pmax pmax
comp=Z,3.0nm,1.0s
**BR131 Keskin Array S 30.52 296** P **P 01 04 08.3 0.0**
**BRTR Keskin Array B 30.52 296** P **P 01 04 07.7 -0.6**
comp=Z,1.0nm,0.5s,baz=125,slow=9.8,SNR=12
BRTR PcP **PcP 01 07 06.9 +0.7**
comp=Z,0.9nm,1.0s,baz=132,slow=1.8,SNR=4.1
**BRTR Keskin Array B 30.52 296***ceP* **P 01 04 07.9 -0.3**
BRTR pmax pmax
comp=Z,1.0nm,0.5s
**BRTR Keskin Array B 30.52 296** P **P 01 04 07.9 -0.3**
**SONM Songino Array 31.89 49** P **P 01 04 22.6 +2.5**
comp=Z,1.0nm,0.9s,baz=258,slow=7.5,SNR=6.2
SONM LR LR 01 19 14.3
comp=Z,63nm,19.9s,baz=320,slow=40
**ELL Elmali 33.45 290** P **P 01 04 34.3 +0.4**
ELL pmax pmax
comp=Z,28nm,1.0s
**ELL Elmali 33.45 290** P **P 01 04 34.3 +0.4**
**HHC Hu-ho-hao-te 34.40 63** *eP* **P 01 04 43.3 +1.2**
HHC pmax pmax
comp=Z,6.0nm,0.9s
HHC pmax pmax
comp=Z,76nm,6.9s
**AKASG Malin Array Be 35.59 314** P **P 01 04 51.5 -0.6**
comp=Z,1.1nm,0.4s,baz=98,slow=7.5,SNR=18
AKASG LR LR 01 22 38.0
comp=Z,61nm,18.4s,baz=136,slow=42
**AKASG Malin Array Be 35.59 314***ceP* **P 01 04 51.7 -0.4**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 35.59 314**⇑*eP* **P 01 04 50.9 -1.2**
AKBB pmax pmax
comp=Z,11nm,1.5s
**MLR Muntele Rosu 36.72 305** P **P 01 05 02.9 +1.0**
MLR pmax pmax
comp=Z,4.0nm,1.0s
**MLR Muntele Rosu 36.72 305** P **P 01 05 02.9 +1.0**
MLR IAmb IAmb 01 05 07.5
comp=Z,4.3nm,1.0s
**BURAR Bucovina Array 37.49 308** P **P 01 05 08.4 -0.1**
BURAR pmax pmax
comp=Z,1.0nm,0.7s
**BURAR Bucovina Array 37.49 308** P **P 01 05 08.4 -0.1**
**BUR08 Bucovina Ar. S 37.51 308** P **P 01 05 08.1 -0.5**
BUR08 IAmb IAmb 01 05 17.0
comp=Z,3.7nm,1.1s
**MNK Minsk 37.57 320** *i* P **P 01 05 08.7 -0.2**
MNK *i* 01 06 34.6
MNK *i* PPP PPP 01 06 53.0
MNK *i* 01 07 26.7
MNK *i* S **S 01 10 55.1 +0.6**
MNK *i* SSS SSS 01 13 54.9
MNK *i* 01 15 19.6
MNK pmax pmax
comp=Z,5.0nm,0.9s
MNK pmax pmax
comp=E,3.0nm,1.2s
MNK pmax pmax
comp=N,17nm,1.0s
MNK MLR MLR
comp=E,105nm,20.0s
MNK MLR MLR
comp=Z,56nm,16.0s
MNK MLR MLR
comp=N,364nm,18.0s
**MNK Minsk 37.57 320** *i* P **P 01 05 08.8 -0.1**
comp=E,3.0nm,1.2s
MNK *i* P **P 01 05 08.8 -0.1**
comp=N,17nm,1.0s
MNK *i* P **P 01 05 08.8 -0.1**
comp=Z,5.0nm,0.8s,baz=292
MNK *i* PP **PP 01 06 34.6 -0.6**
MNK *i* PPP PPP 01 06 53.0
MNK *i* S **S 01 10 55.1 +0.6**
MNK *i* SS **SnSn 01 13 35.5 -0.8**
MNK *i* SSS SSS 01 13 54.9
MNK *i* LQ LQ 01 16 31.2
MNK *i* LR LR 01 20 24.3
MNK *i* LRM MLR 01 22 30.2
comp=E,105nm,19.5s
MNK *i* LRM MLR 01 22 32.4
comp=Z,56nm,15.9s
MNK *i* LRM MLR 01 22 37.4
comp=N,364nm,18.1s
**NRIK Noril'sk 39.01 10** P **P 01 05 21.7 +0.9**
comp=N,3.9nm,0.7s,baz=191,slow=5.8,SNR=11
**NRIK Noril'sk 39.01 10***c iP* **P 01 05 21.5 +0.7**
NRIK pmax pmax
comp=Z,5.0nm,0.7s
**NRIK Noril'sk 39.01 10** P **P 01 05 21.3 +0.5**
NRIK IAmb IAmb 01 05 22.2
comp=Z,4.4nm,0.7s
**FIA1 FINESS Array S 41.17 330** P **P 01 05 37.3 -1.5**
**FINES FINESS Array B 41.17 330** P **P 01 05 39.0 +0.2**
comp=Z,1.1nm,0.4s,baz=121,slow=8.1,SNR=15
**FINES FINESS Array B 41.17 330** P **P 01 05 38.5 -0.3**
**KEV Kevo 45.05 340** P **P 01 06 10.4 +0.4**
KEV pmax pmax
comp=Z,11nm,1.1s
**KEV Kevo 45.05 340** P **P 01 06 10.4 +0.4**
**GERES GERESS Array B 45.26 309** P **P 01 06 11.6 -0.5**
comp=Z,0.2nm,0.3s,baz=107,slow=9.1,SNR=3.6
**ARCES ARCESS Array B 45.37 340** P **P 01 06 13.1 +0.5**
comp=Z,5.6nm,0.7s,baz=120,slow=7.2,SNR=31
**ARCES ARCESS Array B 45.37 340** P **P 01 06 13.3 +0.7**
ARCES pmax pmax
comp=Z,8.0nm,1.1s
**ARCES ARCESS Array B 45.37 340** P **P 01 06 13.3 +0.7**
ARCES IAmb IAmb 01 06 24.0
comp=Z,8.4nm,1.1s
**NC405 NORSAR Array S 47.65 326** P **P 01 06 30.0 -0.6**
**NC602 NORSAR Array S 47.66 325** P **P 01 06 29.8 -0.8**
**NC303 NORSAR Array S 47.83 326** P **P 01 06 31.8 -0.1**
NC303 IAmb IAmb 01 06 35.5
comp=Z,6.3nm,1.1s
**NB201 NORSAR Array S 47.84 326** P **P 01 06 32.3 +0.3**
**NB2 NORSAR Subarra 47.87 326** P **P 01 06 31.2 -1.1**
comp=Z,0.7nm,0.4s,baz=103,slow=7.9
**NOA NORSAR Array B 47.87 326** P **P 01 06 31.5 -0.9**
comp=Z,1.4nm,0.6s,baz=103,slow=7.7,SNR=6.5
NOA LR LR 01 30 02.6
comp=Z,48nm,18.9s,baz=210,slow=40
**NBO00 NORSAR Array S 48.08 326** P **P 01 06 32.9 -1.0**
**NC204 NORSAR Array S 48.13 326** P **P 01 06 34.0 -0.3**
**TUE Stuetta 48.28 306** P **P 01 06 34.5 -1.4**
TUE IAmb IAmb 01 06 43.0
comp=Z,2.7nm,0.7s
**YAK Yakutsk 48.38 33***deP* **P 01 06 35.8 -0.3**
YAK pmax pmax
comp=Z,6.0nm,0.4s
**KLR Kul'dur 48.70 50**⇑*eP* **P 01 06 40.1 +1.2**
KLR pmax pmax
comp=Z,4.0nm,1.3s
**MSHR Mys Shultsa 48.93 59**⇑*eP* **P 01 06 42.2 +1.5**
MSHR pmax pmax
comp=Z,8.0nm,0.9s
**SENIN Lac Senin/Sane 49.70 306** P **P 01 06 46.0 -0.8**
SENIN IAmb IAmb 01 06 55.3
comp=Z,6.6nm,1.1s
**KEST Kesra 50.01 292** P **P 01 06 49.7 +0.6**
comp=Z,3.9nm,0.4s,baz=78,slow=2.6,SNR=39
**KEST Kesra 50.01 292** P **P 01 06 49.7 +0.6**
**TIXI Tiksi 50.54 21**⇓*eP* **P 01 06 53.0 +0.6**
TIXI pmax pmax
comp=Z,4.0nm,0.8s
**SPB2 Spitsbergen Ar 52.03 348** P **P 01 07 04.9 +1.4**
**SPITS Spitsbergen Ar 52.04 348** P **P 01 07 04.5 +0.9**
SPITS pmax pmax
comp=Z,32nm,1.1s
**SEY Seymchan 58.88 32**⇓*eP* **P 01 07 54.3 +1.4**
**ESDC Sonseca Array 59.15 300** P **P 01 07 54.1 -1.1**
comp=Z,0.6nm,0.5s,baz=71,slow=6.9,SNR=11
**ESDC Sonseca Array 59.15 300** P **P 01 07 54.4 -0.9**
**PAB San Pablo 59.47 300** P **P 01 07 56.9 -0.6**
**PAB San Pablo 59.47 300** P **P 01 07 56.9 -0.6**
**BILL Bilibino 63.29 25**⇑*eP* **P 01 08 24.0 +1.3**
BILL *e* 01 10 45.1
BILL pmax pmax
comp=Z,2.0nm,0.7s
BILL MLR MLR
comp=Z,185nm,20.0s
**SKR Severo-Kuril's 63.85 45***ceP* **P 01 08 26.1 -0.6**
**TORD Torodi Ar. Bea 64.93 270** P **P 01 08 33.5 -0.8**
comp=Z,5.6nm,0.7s,baz=54,slow=4.8,SNR=21
**SUMG Summit 65.40 342** P **P 01 08 36.8 -0.1**
**SUMG Summit 65.40 342** P **P 01 08 36.8 -0.1**
**KIC Kosan Boka 73.79 267** *eP* **P 01 09 28.9 -0.2**
comp=Z,8.0nm,0.6s
**TIC Toumodi 73.89 268** *eP* **P 01 09 29.4 -0.3**
**LIC Lamto 74.11 268** *eP* **P 01 09 30.7 -0.3**
comp=Z,18nm,0.5s
**TOLK Toolik Lake Re 75.78 14** P **P 01 09 40.8 +1.0**
TOLK IAmb IAmb 01 09 48.6
comp=Z,2.1nm,0.7s
**A36M Sachs Harbour 76.08 5** P **P 01 09 42.6 +1.3**
A36M IAmb IAmb 01 09 43.9
comp=Z,5.1nm,0.9s
**H21K Melozitna Rive 77.50 17** P **P 01 09 46.0 -3.5**
H21K IAmb IAmb 01 10 02.0
comp=Z,2.7nm,1.1s
**BMAR Burnt Mountain 77.81 13** P **P 01 09 52.5 +1.2**
**INK Inuvik 78.79 9** P **P 01 09 57.6 +1.1**
**INK Inuvik 78.79 9** P **P 01 09 57.6 +1.1**
**K20K Telida 79.02 19** P **P 01 09 58.4 +0.4**
**MDM Murphy Dome 79.16 16** P **P 01 09 59.0 +0.3**
MDM IAmb IAmb 01 10 17.1
comp=Z,2.5nm,1.0s
**CAST Castle Rocks 79.50 18** P **P 01 10 01.7 +1.1**
CAST IAmb IAmb 01 10 03.4
comp=Z,3.3nm,0.6s
**WB0 Warramunga Arr 80.05 121** P **P 01 10 04.8 +0.7**
WB0 IAmb IAmb 01 10 07.3
comp=Z,4.0nm,1.0s
**WRA Warramunga Arr 80.12 121** P **P 01 10 05.5 +1.0**
comp=Z,1.8nm,0.6s,baz=318,slow=5.3,SNR=23
**WRA Warramunga Arr 80.12 121** P **P 01 10 05.9 +1.4**
**WRAB Tennant Creek 80.12 121**⇑*eP* **P 01 10 05.7 +1.2**
WRAB pmax pmax
comp=Z,6.0nm,1.2s
**WRAB Tennant Creek 80.12 121** P **P 01 10 05.6 +1.0**
WRAB IAmb IAmb 01 10 07.4
comp=Z,6.3nm,1.1s
**WB2 Warramunga Arr 80.13 121** P **P 01 10 05.5 +1.0**
WB2 IAmb IAmb 01 10 22.7
comp=Z,4.3nm,1.1s
**WR0 Warramunga Arr 80.28 121** P **P 01 10 06.3 +1.0**
WR0 IAmb IAmb 01 10 07.0
comp=Z,3.2nm,0.9s
**AS31 Alice Springs 82.15 124** P **P 01 10 16.3 +1.0**
**ASAR Alice Springs 82.15 124** P **P 01 10 16.1 +0.9**
comp=Z,17nm,0.6s,baz=310,slow=5.2,SNR=25
**ASAR Alice Springs 82.15 124** P **P 01 10 16.7 +1.4**
**ASAR Alice Springs 82.15 124** P **P 01 10 16.7 +1.4**
**YKA Yellowknife Ar 86.10 2** P **P 01 10 35.5 +0.7**
comp=Z,1.8nm,0.5s,baz=348,slow=5.1,SNR=41

*BJI **20** 01:26:30.0±0.0,3.°00S×129.°50E,h10km,mb4.8/55, mB5.0/33,Ms4.7/15,Ms7 4.4/13*
*IDC **20** 01:26:30.7±0.4,3.°04S×129.°40E,h0km,mb4.8/22, mb1 5.0/27,mb1mx4.9/37,mbtmp4.8/27,ML4.7/4,MS4.0/33, Ms1 4.0/33,ms1mx3.8/72,Error ellipse: s-maj=17.2km s-min=11.4km az=74.0*
*MOS **20** 01:26:31.5±1.0,3.°02S×129.°40E,h19km,mb5.1/41,Error ellipse: s-maj=9.5km s-min=5.2km az=119.5*
*NEIC **20** 01:26:32.8±1.7,3.°04S±0.°05×129.°42E±0.°05,h10km±1km, mb5.0/71,Error ellipse: s-maj=9.7km s-min=7.5km az=238.0*
*DJA **20** 01:26:36.7±0.2,3.°S±2.°×12.°9E±.°,h42km±3km,M4.9/64, mB5.4/36,mb5.2/64,MLv5.1/13,Mw(mB)4.8/36, MwMwp4.5/1,Mwp4.9/1*
**ISC 20 01:26:33.3±0.8,3.°03S±0.°04×129.°42E±0.°04,h18km±3km, n401,σ1°§40/403,mb5.0/115,MS4.0/33,12C-17D,Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.58** | **237** | P | **Pn** | **01 26 47.6** | **+0.9** |
| **AAI** | **Ambon** | **1.39** | **242** | P | **Pg** | **01 27 01.1** | **+1.0** |
| **AAI** | **Ambon** | **1.39** | **242** | P | **Pg** | **01 27 00.7** | **+0.6** |
| **BNDI** | **Bandanaira** | **1.56** | **162** | P | **Pg** | **01 27 04.5** | **+1.1** |
| **FAKI** | **Fak Fak** | **2.83** | **88** | Pn | **Pn** | **01 27 18.1** | **+0.5** |
| **FAKI** | **Fak Fak** | **2.83** | **88** | P | **Pn** | **01 27 18.3** | **+0.7** |

**FAKI Fak Fak 2.83 88** P **Pn 01 27 18.7 +1.1**
**SIJI Sorong 2.83 41** Pn **Pn 01 27 17.4 -0.2**
256nm,0.3s,baz=205,slow=6.7,SNR=332
SIJI Sn **Sn 01 27 50.8 -0.6**
363nm,0.3s,baz=61,slow=22,SNR=25
SIJI LR LR 01 28 57.9
comp=Z,6μm,19.0s,baz=268,slow=52
**SANI Sanana 3.56 286** P **Pn 01 27 27.8 0.0**
**TNTI Ternate 4.30 331** Pn **Pn 01 27 37.6 -0.3**
**TNTI Ternate 4.30 331** P **Pn 01 27 38.2 +0.3**
**TNTI Ternate 4.30 331** P **Pn 01 27 38.6 +0.7**
**SAUI Saumlaki 5.26 159** P **Pn 01 27 50.1 -1.1**
**SAUI Saumlaki 5.26 159** P **Pb 01 28 05.9 +1.0**
**KMSI Cibinong 6.51 303** P **Pn 01 28 08.5 +0.2**
3.1nm366nm,0.5s
**LUWI Luwuk 6.93 286** Pn **Pn 01 28 14.2 +0.1**
**LUWI Luwuk 6.93 286** P **Pn 01 28 15.5 +1.4**
1.7nm4μm255nm,0.6s
**LUWI Luwuk 6.93 286** P **Pn 01 28 15.3 +1.2**
**BBSI Bau Bau 7.25 250** P Pn 01 28 23.6 +5.1
0.1nm249nm26nm,0.8s
**GTOI Gorontalo 7.37 300** P **Pn 01 28 23.3 +3.2**
0.5nm1μm129nm,0.5s
**APSI Ampana 8.05 285** P **Pn 01 28 30.8 +1.4**
1.8nm4μm307nm,0.5s
**MRSI Marisa 8.25 295** P **Pn 01 28 32.2 0.0**
0.8nm3μm257nm,0.9s
**SOEI Soe 8.42 217** Pn **Pn 01 28 34.3 -0.3**
**SOEI Soe 8.42 217** P Pn 01 28 44.1 +10
**MMRI Maumere 9.06 232** Pn **Pn 01 28 47.3 +4.0**
**MMRI Maumere 9.06 232** P Pn 01 28 48.6 +5.3
3μm164nm,1.1s
**BATI Baumata 9.14 218** LR LR 01 32 26.0
comp=Z,4μm,21.7s,baz=31,slow=39
**BATI Baumata 9.14 218** P Pn 01 28 51.0 +6.6
1μm1μm130nm,0.8s
**BNSI Bone 9.39 261** P **Pn 01 28 51.9 +4.0**
982nm85nm,1.0s
**BSSI Bau Bau, Buton 9.42 251** P Pn 01 28 53.1 +4.8
1μm133nm,0.9s
**DRS Darwin Rock St 9.45 171** P **Pn 01 28 52.5 +3.8**
**BKSI Bulukumba 9.55 256** P **Pn 01 28 54.5 +4.5**
1μm96nm,0.7s
**TOLI2 Tolitoli 9.57 295** Pn **Pn 01 28 50.5 +0.2**
**TOLI2 Tolitoli 9.57 295** P **Pn 01 28 51.1 +0.8**
87nm,0.8s
**TTSI Tana Toraja 9.59 270** P Pn 01 28 59.0 +8.4
**SPSI Sidrap Palu 9.68 264** P **Pn 01 28 55.3 +3.5**
1μm78nm,0.6s
**KAPI Kappang 9.84 258** Pn **Pn 01 28 58.2 +4.2**
3.7nm,0.3s,baz=100,slow=10,SNR=54
KAPI LR LR 01 33 25.7
comp=Z,2μm,22.0s,baz=96,slow=42
**KAPI Kappang 9.84 258** P **Pn 01 28 55.8 +1.7**
**KAPI Kappang 9.84 258** Pn **Pn 01 28 55.8 +1.7**
**KAPI Kappang 9.84 258** P **Pn 01 28 58.0 +3.9**
**MTN Manton Dam 9.90 170** P **Pn 01 28 56.0 +1.2**
baz=10.0,SNR=22
**MTN Manton Dam 9.90 170** Pn **Pn 01 28 55.2 +0.4**
**MTN Manton Dam 9.90 170** P **Pn 01 28 56.8 +2.0**
**KDU Kakadu 10.06 163** P **Pn 01 28 56.9 -0.1**
baz=10,SNR=111
**KDU Kakadu 10.06 163** P **Pn 01 28 57.4 +0.4**
**MPSI Mapaga 10.09 289** P **Pn 01 28 59.8 +2.4**
878nm89nm,0.8s
**GENI Genyem 10.74 88** P **Pn 01 29 08.2 +1.8**
227nm,1.0s
**GENI Genyem 10.74 88** P **Pn 01 29 06.4 0.0**
**JAY Jayapura 11.28 88** Pn **Pn 01 29 13.9 +0.1**
4.3nm,0.3s,baz=232,slow=14,SNR=9.3
JAY LR LR 01 35 17.8
comp=Z,1μm,20.5s,baz=271,slow=47
**JAY Jayapura 11.28 88** P **Pn 01 29 15.1 +1.3**
2.4nm,0.7s
**BASI Baing, Sumba 11.32 230** P Pn 01 29 25.8 +12
**WBSI Waikabubak, Su 11.93 236** P Pn 01 29 28.7 +6.0
1μm125nm,1.1s
**KNRA Kununurra 12.58 183** P **Pn 01 29 31.6 0.0**
baz=13,SNR=27
**KNRA Kununurra 12.58 183** Pn **Pn 01 29 32.1 +0.6**
**KNRA Kununurra 12.58 183** P **Pn 01 29 32.7 +1.1**
**PLAI Plampang 12.93 243** P Pn 01 29 41.1 +4.7
1μm109nm,0.8s
**PLAI Plampang 12.93 243** P **Pn 01 29 40.8 +4.4**
**MYLDM Lahad Datu 13.62 307** **Pn 01 29 45.1 -0.6**
**MTKI Muara Teweh, K 14.66 278** P **P 01 30 09.5 +3.3**
**IGBI Denpasar 15.31 247** P **P 01 30 13.6 +0.2**
75nm,1.0s
**FITZ Fitzroy Crossi 15.43 194** Pn **Pn 01 30 09.5 -0.7**
1.1nm,0.3s,baz=34,slow=9.7,SNR=58
FITZ LR LR 01 36 55.6
comp=Z,630nm,19.8s,baz=20,slow=40
**FITZ Fitzroy Crossi 15.43 194** P **Pn 01 30 09.3 -0.9**
baz=16,SNR=24
**FITZ Fitzroy Crossi 15.43 194** **Pn 01 30 09.9 -0.3**
**FITZ Fitzroy Crossi 15.43 194** P **Pn 01 30 10.9 +0.7**
**ABJI Asem Bagus 15.84 252** P **P 01 30 19.2 -0.1**
3μm263nm,0.9s
**JAGI Jajag, Banyuwa 16.12 250** Pn **Pn 01 30 20.4 +1.2**
JAGI IAmb IAmb 01 30 22.8
comp=Z,118nm,0.9s
**JAGI Jajag, Banyuwa 16.12 250** P **Pn 01 30 21.0 +1.8**
comp=Z,1μmcomp=Z,148nm,0.9s
**JAGI Jajag, Banyuwa 16.12 250** P **P 01 30 21.5 -0.9**
comp=Z,147nm,1.1s
**BLJI Banyuglugur 16.43 253** P **P 01 30 27.3 +1.4**
comp=Z,1μmcomp=Z,139nm,1.0s
**GMJI Gumukmas 16.73 251** P **P 01 30 29.5 +0.4**
comp=Z,995nmcomp=Z,100nm,0.9s
**GRJI Gresik 17.31 256** P **P 01 30 38.3 +2.7**
comp=Z,2μmcomp=Z,237nm,0.9s
**WB0 Warramunga Arr 17.33 164** Pn **Pn 01 30 33.2 -1.3**
WB0 IAmb IAmb 01 30 37.3
comp=Z,89nm,0.9s
**COEN Coen 17.39 129** Pn **Pn 01 30 33.6 -1.7**
**COEN Coen 17.39 129** P **Pn 01 30 34.5 -0.7**
**WRAB Tennant Creek 17.48 164***ceP* **Pn 01 30 34.2 -2.1**
**WRA Warramunga Arr 17.48 164** P **Pn 01 30 34.2 -2.1**
comp=Z,2.7nm,0.3s,baz=344,slow=12,SNR=46
**WRA Warramunga Arr 17.48 164** *i* P **Pn 01 30 34.2 -2.1**
WRA pmax pmax
comp=Z,59nm,0.9s
**WB2 Warramunga Arr 17.48 164** Pn **Pn 01 30 34.1 -2.3**
WB2 IAmb IAmb 01 30 39.2
comp=Z,71nm,0.9s
**WR0 Warramunga Arr 17.55 164** Pn **Pn 01 30 36.0 -1.2**
**PBKI Pangkalan Bun 17.73 271** P **P 01 30 43.0 +2.7**
comp=Z,4μmcomp=Z,216nm,1.3s
**SBUM Sibu 18.04 287** Pn **Pn 01 30 40.6 -2.7**
**STKI Sintang 18.20 279** P **P 01 30 48.4 +3.0**
comp=Z,16μmcomp=Z,26nm,0.4s
**PMG Port Moresby 18.73 111** P **Pn 01 30 52.9 +1.2**
comp=Z,1.3nm,0.3s,baz=312,slow=6.1,SNR=13
PMG LR LR 01 40 15.0
comp=Z,401nm,19.8s,baz=317,slow=44
**PMG Port Moresby 18.73 111**⇓*eP* **Pn 01 30 52.3 +0.6**
PMG pmax pmax
comp=Z,51nm,1.0s
**PMG Port Moresby 18.73 111** P **P 01 30 50.6 -0.6**
**PMG Port Moresby 18.73 111** P **P 01 30 50.5 -0.7**
**PMG Port Moresby 18.73 111** P **P 01 30 50.6 -0.6**
**PCJI Pacitan 18.86 253** P **P 01 30 52.0 -0.7**
comp=Z,2μmcomp=Z,164nm,1.5s
**SMRI Semarang 19.32 257** P **P 01 30 57.2 -0.5**
**SMRI Semarang 19.32 257** P **Pn 01 31 00.2 +1.3**
comp=Z,231nm,0.8s
**SMRI Semarang 19.32 257** P **Pn 01 31 00.7 +1.8**
**UGM Wanagama 19.42 255** P **P 01 30 58.7 -0.2**
**UGM Wanagama 19.42 255** P **Pn 01 31 00.4 +0.3**
comp=Z,204nm,1.2s
**UGM Wanagama 19.42 255** P **P 01 30 59.7 +0.8**
**YOGI Yogyakarta 19.62 255** P **Pn 01 31 05.2 +2.7**
comp=Z,2μmcomp=Z,218nm,1.2s
**KSM Kuching 19.62 283** P **P 01 31 00.8 -0.3**
KSM IAmb IAmb 01 31 04.3
comp=Z,83nm,1.0s
**KSM Kuching 19.62 283** P **P 01 31 02.0 +0.9**
**QIS Mount Isa 20.05 151** P **P 01 31 06.2 +0.5**
baz=20,SNR=59
**QIS Mount Isa 20.05 151** P **P 01 31 06.3 +0.5**
**PSA00 Pilbara Seismi 20.65 206** P **P 01 31 10.7 -1.4**
PSA00 IAmb IAmb 01 31 16.3
comp=Z,37nm,0.7s
**PSA00 Pilbara Seismi 20.65 206** P **P 01 31 11.6 -0.6**
**KPJI Karang Pucung 20.84 257** P **P 01 31 14.4 0.0**

comp=Z,92nm,1.7s
**MTSU Mount Surprise 20.94 137** P **P** **01 31 16.2 +0.8**
baz=21,SNR=40
**MTSU Mount Surprise 20.94 137** P **P** **01 31 16.2 +0.8**
**AS31 Alice Springs 20.97 168** P **P** **01 31 15.4 -0.2**
AS31 IAmb IAmb 01 31 20.7
comp=Z,73nm,0.7s
**ASAR Alice Springs 20.97 168** P **P** **01 31 15.7 +0.1**
comp=Z,154nm,0.6s,baz=346,slow=10,SNR=512
ASAR S **S** **01 35 05.3 -3.4**
comp=Z,16nm,1.0s,baz=348,slow=20,SNR=8.7
ASAR PcP **PcP** **01 35 23.3 +0.2**
comp=Z,4.8nm,0.5s,baz=359,slow=1.6,SNR=6.8
ASAR LR LR 01 40 04.4
comp=Z,608nm,18.1s,baz=354,slow=39
**ASAR Alice Springs 20.97 168** P **P** **01 31 15.5 -0.1**
**CMJI Cimerak 21.40 256** P **P** **01 31 20.0 -0.3**
comp=Z,809nmcomp=Z,50nm,0.8s
**WRKA Warakurna 21.91 183** P **P** **01 31 25.2 -0.5**
baz=22,SNR=129
**WRKA Warakurna 21.91 183** P **P** **01 31 25.2 -0.5**
**LEM Lembang 22.04 259** P **P** **01 31 26.8 -0.6**
comp=Z,62nm,0.7s,baz=85,slow=10,SNR=9.7
LEM LR LR 01 42 16.4
comp=Z,1μm,18.5s,baz=53,slow=43
**CNJI Cibinong 22.60 258** P **P** **01 31 30.4 -2.8**
comp=Z,2μmcomp=Z,247nm,1.0s
**RABL Rabaul 22.73 94** P **P** **01 31 33.7 -0.9**
**PPBI Pangkal Pinang 23.28 272** P **P** **01 31 43.0 +2.7**
**CTA Charters Tower 23.61 137** P **P** **01 31 43.5 +0.1**
comp=Z,31nm,0.9s,baz=325,slow=11,SNR=40
CTA LR LR 01 42 40.2
comp=Z,508nm,19.1s,baz=319,slow=41
**CGJI Cibinong 23.91 261** P **P** **01 31 43.3 -3.1**
comp=Z,2μmcomp=Z,55nm,1.2s
**GIRL Giralia 24.43 216** P **P** **01 31 52.5 +1.3**
baz=25,SNR=4.3
**KLSI 24.69 265** P **P** **01 31 54.4 +0.8**
comp=Z,15nm,0.9s
**XMIS Christmas Isla 24.72 251** P **P** **01 31 50.9 -3.0**
XMIS IAmb IAmb 01 31 52.7
comp=Z,32nm,0.8s
**KASI Kota Agung 24.98 263** P **P** **01 31 53.4 -2.8**
comp=Z,58nm,0.9s
**MDSI Maura Dua 25.23 266** P **P** **01 31 58.8 +0.3**
comp=Z,27nm,1.0s
**DLV T Lat 25.58 306** P **P** **01 32 01.2 -0.6**
DLV IAmb IAmb 01 32 04.2
comp=Z,42nm,1.0s
**MEEK Meekatharra 25.66 203** P **P** **01 31 59.8 -2.4**
baz=26,SNR=5.0
**JMBI JAMBI 25.79 273** P **P** **01 32 09.7 +6.1**
**LHSI Lahat 25.86 267** P **P** **01 32 06.2 +2.0**
comp=Z,2μmcomp=Z,93nm,0.8s
**MYKOM Kota Tinggi 26.01 280** P **P** **01 32 05.2 -0.4**
**MASI Maura Aman, Be 27.14 269** P **P** **01 32 17.6 +1.7**
comp=Z,2μmcomp=Z,193nm,1.2s
**FORT Forrest 27.63 183** P **P** **01 32 18.9 -1.0**
baz=28,SNR=7.9
**FORT Forrest 27.63 183** P **P** **01 32 18.6 -1.4**
**BKNI Bangkinang 28.57 276** P **P** **01 32 28.8 +0.3**
**BKNI Bangkinang 28.57 276** P **P** **01 32 30.9 +2.4**
comp=Z,3μmcomp=Z,101nm,0.5s
**MORW Morawa 28.85 205** P **P** **01 32 29.6 -1.3**
baz=29,SNR=4.7
**MORW Morawa 28.85 205** P **P** **01 32 29.9 -1.0**
**IPM Ipoh 29.34 285** P **P** **01 32 35.5 +0.1**
**KULM Kulim 29.91 286** P **P** **01 32 40.5 +0.1**
KULM IAmb IAmb 01 32 43.5
comp=Z,25nm,0.9s
**MNSI Mandailing Nat 30.07 277** P **P** **01 32 42.7 +0.8**
comp=Z,83nm,0.6s
**BBOO Buckleboo 30.27 169** P **P** **01 32 42.7 -0.8**
baz=30,SNR=17
**BBOO Buckleboo 30.27 169** P **P** **01 32 42.5 -0.9**
BBOO IAmb IAmb 01 32 43.5
comp=Z,17nm,0.7s
**KLBR Kellerberrin 30.46 200** P **P** **01 32 43.3 -1.9**
baz=31,SNR=6.6
**STKA Stephens Creek 30.90 160** P **P** **01 32 48.3 -0.7**
comp=Z,7.6nm,0.7s,baz=329,slow=8.7,SNR=13
**STKA Stephens Creek 30.90 160** P **P** **01 32 48.1 -0.9**
baz=31,SNR=7.0
**STKA Stephens Creek 30.90 160** P **P** **01 32 48.5 -0.5**
STKA pmax pmax
comp=Z,6.0nm,1.2s
**STKA Stephens Creek 30.90 160** P **P** **01 32 48.5 -0.5**
**HNR Honiara 30.99 103** LR LR 01 47 12.9
comp=Z,243nm,20.0s,baz=292,slow=40
**HTT Hallett 31.52 165** P **P** **01 32 51.0 -3.6**
baz=32,SNR=4.1
**GSI Gunungsitoli 32.12 277** P **P** **01 32 59.2 -0.9**
**GSI Gunungsitoli 32.12 277** P **P** **01 33 00.0 0.0**
comp=Z,75nm,0.9s
**CMSA Cobar Meteorol 32.23 153** P **P** **01 33 01.0 +0.2**
baz=32,SNR=6.9
**ARPS Mount Arapiles 35.47 163** P **P** **01 33 29.5 +0.7**
baz=36,SNR=13
**NJ2 Nanjing 36.30 345** *eP* **P** **01 33 39.3 +3.3**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**GYA Guiyang 36.66 324** ⇓P **P** **01 33 41.4 +2.2**
GYA pmax pmax
comp=Z,13nm,0.7s
**CM31 Chiang Mai Arr 36.83 307** P **P** **01 33 41.3 +0.6**
CM31 IAmb IAmb 01 33 43.3
comp=Z,38nm,1.1s
**CMAR Chiang Mai Arr 36.83 307** P **P** **01 33 41.9 +1.2**
comp=Z,12nm,0.9s,baz=138,slow=7.4,SNR=61
CMAR PcP **PcP** **01 36 04.3 +1.6**
comp=Z,3.1nm,0.4s,baz=164,slow=2.4,SNR=12
CMAR LR LR 01 50 12.0
comp=Z,116nm,20.8s,baz=135,slow=39
**CMAR Chiang Mai Arr 36.83 307** *i* P **P** **01 33 42.2 +1.4**
CMAR pmax pmax
comp=Z,12nm,0.9s
**CMAR Chiang Mai Arr 36.83 307** P **P** **01 33 41.0 +0.2**
CMAR PcP **PcP** **01 36 03.3 +0.6**
**CAN Canberra 36.90 153** P **P** **01 33 42.1 +0.9**
CAN pmax pmax
comp=Z,18nm,1.0s
**CAN Canberra 36.90 153** P **P** **01 33 42.1 +0.9**
**CHTO Chiang Mai 37.02 307** P **P** **01 33 42.2 -0.2**
CHTO 01 36 04.1
CHTO pmax pmax
comp=Z,50nm,1.1s
**CHTO Chiang Mai 37.02 307** P **P** **01 33 42.2 -0.2**
CHTO IAmb IAmb 01 33 44.7
comp=Z,50nm,1.1s
CHTO PcP **PcP** **01 36 04.1 +0.9**
**TOO Toolangi 37.41 159** P **P** **01 33 45.9 +0.5**
baz=38,SNR=5.7
**TOO Toolangi 37.41 159** P **P** **01 33 46.5 +1.1**
TOO pmax pmax
comp=Z,18nm,1.1s
**TOO Toolangi 37.41 159** P **P** **01 33 46.5 +1.1**
**KMI Kunming 38.12 319** ⇓P **P** **01 33 53.9 +2.0**
KMI pP sP 01 33 59.6 -0.3
KMI pmax pmax
comp=Z,35nm,1.0s
**ENH Enshi 38.20 332** P **P** **01 33 52.9 +0.6**
**PZH PanZhiHua 39.72 319** P **P** **01 34 05.4 +0.3**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,140nm,4.5s
**MAJO Matsushiro 40.21 11** *d iP* **P** **01 34 06.4 -2.5**
MAJO pmax pmax
comp=Z,78nm,1.0s
**KSRS Korea Array 40.30 358** P **P** **01 34 09.8 +0.2**
comp=Z,1.8nm,0.7s,baz=170,slow=9.9,SNR=5.9
KSRS PcP **PcP** **01 36 13.7 +0.6**
comp=Z,2.1nm,0.8s,baz=200,slow=2.8,SNR=5.5
KSRS LR LR 01 50 21.8
comp=Z,156nm,20.3s,baz=180,slow=36
**XAN Xi'an 41.63 334** P **P** **01 34 20.3 -0.4**
XAN pP pP 01 34 24.4 -2.0
XAN pmax pmax
comp=Z,12nm,1.3s
**CD2 Chengdu 41.69 326** P **P** **01 34 21.1 -0.1**
CD2 pmax pmax
comp=Z,10.0nm,1.0s
**HNS HongShan 42.49 343** ⇑P **P** **01 34 28.6 +1.1**
**BJI Beijing 44.55 345** P **P** **01 34 44.3 +0.2**
BJI pP **pP** **01 34 48.0 -1.9**
BJI pmax pmax
comp=Z,5.0nm,0.8s
**NFK Norfolk Island 44.80 129** P **P** **01 34 45.1 -1.3**
baz=45,SNR=4.8
**LZH Lanzhou 45.67 331** *eP* **P** **01 34 54.1 +0.8**
LZH pP sP 01 34 58.3 -3.1
LZH sP pP 01 35 01.3 +2.2
LZH PcP **PcP** **01 36 33.4 +2.1**
LZH pmax pmax
comp=Z,22nm,1.2s
LZH LR LR
comp=Z,340nm,15.2s
LZH LR LR
comp=Z,190nm,15.0s
LZH LR LR
comp=Z,370nm,16.9s
**SHL Shillong 46.16 310** P **P** **01 34 56.6 -0.8**
SHL pmax pmax
comp=Z,25nm,0.9s
**SHL Shillong 46.16 310** P **P** **01 34 56.6 -0.8**
SHL IAmb IAmb 01 34 59.2
comp=Z,25nm,0.9s
**HHC Hu-ho-hao-te 46.62 341** *eP* **P** **01 35 04.1 +3.4**
HHC pmax pmax
comp=Z,11nm,1.0s
HHC pmax pmax
comp=Z,99nm,7.2s
**USA0B Ussuriysk Arra 47.07 3** ⇓*eP* **P** **01 35 05.4 +1.4**
**USRK Ussuriysk Ar. 47.07 3** P **P** **01 35 04.1 +0.1**
comp=Z,5.9nm,0.7s,baz=162,slow=5.7,SNR=7.3
USRK LR LR 01 53 52.4
comp=Z,152nm,21.1s,baz=137,slow=35
**XLT XiLinHaoTe 48.23 347** *eP* **P** **01 35 13.1 0.0**
XLT pP sP 01 35 17.8 -3.5
XLT S **S** **01 42 11.1 -0.8**
XLT pmax pmax
comp=Z,6.0nm,1.1s
XLT pmax pmax
comp=Z,180nm,4.6s
XLT LR LR
comp=Z,730nm,11.5s
XLT LR LR
comp=Z,340nm,15.6s
**ASAJ Asahikawa 48.40 13** LR LR 01 54 47.4
comp=Z,145nm,21.0s,baz=344,slow=35
**BNX BinXian 48.59 358** ⇓P **P** **01 35 15.1 -0.6**
BNX pmax pmax
comp=Z,16nm,1.0s
**LSA Lhasa 48.99 314** P **P** **01 35 20.5 +0.8**
LSA pmax pmax
comp=Z,26nm,1.1s
**PALK Pallekele 49.68 282** LR LR 01 59 07.8
comp=Z,134nm,18.5s,baz=215,slow=39
**GTA Gaotai 50.25 330** ⇑P **P** **01 35 28.8 +0.1**
GTA pP sP 01 35 34.0 -2.9
GTA sP pP 01 35 37.6 +3.0
GTA PcP **PcP** **01 36 49.5 +1.8**
GTA ScP **ScP** **01 40 44.0 +1.1**
GTA pmax pmax
comp=Z,18nm,1.1s
GTA pmax pmax
comp=Z,94nm,5.3s
GTA LR LR
comp=Z,97nm,18.2s
GTA LR LR
comp=Z,90nm,20.0s
GTA LR LR
comp=Z,170nm,18.9s
**TAPN Taplejung 50.28 310** *eP* **P** **01 35 29.4 +0.1**
comp=Z,21nm,0.4s
**ODAN Odare 50.28 309** *eP* **P** **01 35 29.1 -0.2**
comp=Z,46nm,1.0s
**GOMU GeErMu 50.66 324** P **P** **01 35 32.6 +0.4**
GOMU pP sP 01 35 37.3 -3.0
GOMU sP pP 01 35 41.9 +3.9
GOMU PcP **PcP** **01 36 45.3 -4.2**
GOMU pmax pmax
comp=Z,60nm,4.2s
**RAMN Ramite 50.94 309** *eP* **P** **01 35 34.6 +0.3**
comp=Z,9.1nm,0.6s
**GUN Gumba 51.96 309** *eP* **P** **01 35 42.1 0.0**
comp=Z,46nm,0.7s
**KLR Kul'dur 52.09 2** LR LR 01 58 52.3
comp=Z,54nm,19.3s,baz=182,slow=37
**KLR Kul'dur 52.09 2** *ceP* **P** **01 35 42.2 0.0**
KLR pmax pmax
comp=Z,7.0nm,1.3s
**PKI Pulchoki 52.17 309** *eP* **P** **01 35 43.1 -0.5**
comp=Z,26nm,1.0s
**PKIN Phulchoki 52.18 309** *eP* **P** **01 35 42.5 -1.1**
comp=Z,16nm,0.7s
**KKN Kakani 52.37 309** *eP* **P** **01 35 44.8 -0.2**
comp=Z,15nm,0.5s
**DMN Daman 52.42 309** *eP* **P** **01 35 45.3 -0.1**
comp=Z,35nm,0.9s
**GKN Gorkha 52.97 309** *eP* **P** **01 35 49.2 -0.1**
comp=Z,31nm,0.7s
**KOLN Koldanda 53.68 308** *eP* **P** **01 35 54.6 0.0**
comp=Z,82nm,0.8s
**DANN Dangsing 53.82 309** *eP* **P** **01 35 55.3 -0.4**
comp=Z,68nm,0.8s
**PYUN Piuthan 54.31 308** *eP* **P** **01 35 59.1 -0.1**
comp=Z,77nm,0.9s
**ULN Ulaanbaatar 54.34 342** *c iP* **P** **01 35 59.2 +0.2**
ULN pmax pmax
comp=Z,13nm,1.0s
**ULN Ulaanbaatar 54.34 342** P **P** **01 35 59.4 +0.5**
ULN IAmb IAmb 01 36 02.5
comp=Z,9.7nm,0.8s
**SONM Songino Array 54.52 341** P **P** **01 36 00.6 +0.4**
comp=Z,4.4nm,0.7s,baz=153,slow=7.6,SNR=25
SONM LR LR 02 03 57.4
comp=Z,48nm,19.3s,baz=147,slow=41
**SONM Songino Array 54.52 341** P **P** **01 36 00.2 0.0**
**RPZ Rata Peaks 54.73 144** LR LR 02 00 58.9
comp=Z,289nm,19.1s,baz=280,slow=38
**URZ Urewera 55.84 135** LR LR 02 02 54.4
comp=Z,170nm,18.8s,baz=310,slow=39
**ZEA Zeya 56.59 358** *eP* **P** **01 36 15.5 +0.6**
**ZAK Zakamensk 57.75 341** *eP* **P** **01 36 22.5 -0.8**
ZAK pmax pmax
comp=Z,7.0nm,1.2s
**MOY Mondy 59.61 340** *eP* **P** **01 36 37.0 +0.8**
MOY pmax pmax
comp=Z,29nm,2.0s
**WMQ Urumqi 59.79 326** *eP* **P** **01 36 37.8 +0.3**
WMQ pP sP 01 36 44.9 -0.9
WMQ PP **PP** **01 38 52.3 +2.6**
WMQ pmax pmax
comp=Z,25nm,1.3s
**KNGR Kungurtug, Tuv 60.02 337** ⇓*eP* **P** **01 36 40.0 +0.9**
**PEA0B Petropavlovsk- 60.77 19** *ceP* **P** **01 36 44.9 +0.9**
**PEA0B Petropavlovsk- 60.77 19** P **P** **01 36 45.4 +1.3**
**PETK Petropavlovsk- 60.77 19** P **P** **01 36 44.7 +0.7**
comp=Z,21nm,0.7s,baz=175,slow=4.7,SNR=24
PETK LR LR 01 59 13.0
comp=Z,99nm,21.6s,baz=205,slow=32
**PETK Petropavlovsk- 60.77 19** P **P** **01 36 44.5 +0.5**
**PET Petropavlovsk 61.02 20** ⇓*eP* **P** **01 36 47.8 +2.2**
PET pmax pmax
comp=Z,44nm,1.3s
**PET Petropavlovsk 61.02 20** P **P** **01 36 46.4 +0.8**
**ZSN Zaisan 63.62 328** *eP* **P** **01 37 02.3 -0.9**
ZSN *i* S **S** **01 45 36.2 -0.2**
**ZSN Zaisan 63.62 328** *eP* **P** **01 37 02.3 -0.9**
baz=328
ZSN *i* S **S** **01 45 36.2 -0.2**
baz=328
**DGZ Jazzator, Alta 63.77 331** *d iP* **P** **01 37 04.7 +0.3**
DGZ pmax pmax
comp=Z,16nm,1.1s
**NIL Nilore 64.23 310** P **P** **01 37 07.0 -0.6**
NIL pmax pmax
comp=Z,8.0nm,0.8s
**NIL Nilore 64.23 310** P **P** **01 37 07.0 -0.6**
NIL IAmb IAmb 01 37 07.5
comp=Z,7.7nm,0.8s
**PDGK Podgornoye 64.33 322** *i* P **P** **01 37 07.6 -0.6**
PDGK pmax pmax
comp=Z,13nm,1.1s
**UZB Uzunbulak 64.53 321** *eP* **P** **01 37 08.9 -0.6**
**UZB Uzunbulak 64.53 321** *eP* **P** **01 37 08.9 -0.6**
baz=321
**TARG Taragay, Kyrgy 64.58 319** IAmb IAmb 01 37 21.4
comp=Z,9.8nm,1.3s
**MK31 Makanchi Array 64.62 326** *i* P **P** **01 37 09.5 -0.4**
**MK31 Makanchi Array 64.62 326** IAmb IAmb 01 37 10.9
comp=Z,9.0nm,1.0s
**MKAR Makanchi Array 64.62 326** P **P** **01 37 09.6 -0.3**
comp=Z,7.2nm,0.7s,baz=124,slow=8.1,SNR=72
MKAR PKP2bc 02 06 01.9
comp=Z,0.6nm,0.9s,baz=290,slow=3.6,SNR=4.3
**MKAR Makanchi Array 64.62 326** *ceP* **P** **01 37 10.0 +0.1**
MKAR pmax pmax
comp=Z,7.0nm,0.7s
**MA2 Magadan 64.65 12** P **P** **01 37 10.8 +1.1**
comp=Z,5.7nm,0.6s,baz=178,slow=9.9,SNR=7.1
**MA2 Magadan 64.65 12** P **P** **01 37 10.8 +1.1**
MA2 IAmb IAmb 01 37 13.8
comp=Z,6.2nm,0.7s
**KSH Kashi 64.74 317** P **P** **01 37 12.0 +1.1**
KSH pP sP 01 37 17.0 -2.2
KSH sP pP 01 37 18.9 +2.0
KSH pmax pmax
comp=Z,7.0nm,0.9s
**MAKZ Makanchi 64.80 326** P **P** **01 37 11.1 +0.1**
MAKZ pmax pmax
comp=Z,11nm,1.0s
**MAKZ Makanchi 64.80 326** P **P** **01 37 11.1 +0.1**
MAKZ IAmb IAmb 01 37 12.0
comp=Z,11nm,1.0s
**SATY Saty 64.87 321** *eP* **P** **01 37 11.0 -0.6**
SATY pmax pmax
comp=Z,9.0nm,1.0s
**SATY Saty 64.87 321** *eP* **P** **01 37 11.1 -0.6**
comp=Z,8.6nm,1.0s,baz=321
**YAK Yakutsk 64.88 0** LR LR 02 04 16.1
comp=Z,51nm,20.3s,baz=52,slow=35
**YAK Yakutsk 64.88 0** *d iP* **P** **01 37 11.8 +0.6**
YAK pmax pmax
comp=Z,54nm,0.7s
**YAK Yakutsk 64.88 0** P **P** **01 37 11.6 +0.4**
**KPKS Kokpek 64.90 322** *eP* **P** **01 37 10.9 -0.9**
KPKS pmax pmax
comp=Z,12nm,1.1s
**KPKS Kokpek 64.90 322** *eP* **P** **01 37 10.9 -0.9**
comp=Z,12nm,1.1s,baz=322
**ZHN Zhinishke 64.90 321** *eP* **P** **01 37 11.1 -0.8**
**ZHN Zhinishke 64.90 321** *eP* **P** **01 37 11.2 -0.8**
baz=321
**MDOK Medeo 65.78 321** *eP* **P** **01 37 16.8 -0.8**
**MDOK Medeo 65.78 321** *eP* **P** **01 37 16.9 -0.8**
baz=321
**TNSS Tian-Shan 65.78 320** *eP* **P** **01 37 17.1 -0.8**
baz=320
**TDK Taldyqorghan 65.88 323** *eP* **P** **01 37 17.4 -0.6**
TDK pmax pmax
comp=Z,7.0nm,0.7s
**TDK Taldyqorghan 65.88 323** *eP* **P** **01 37 17.5 -0.6**
comp=Z,6.6nm,0.7s,baz=323
**KUU Kurty 66.58 321** *eP* **P** **01 37 21.6 -1.0**
KUU pmax pmax
comp=Z,17nm,0.9s
**KUU Kurty 66.58 321** *eP* **P** **01 37 21.6 -1.0**
comp=Z,17nm,0.9s,baz=321
**TKM2 Tokmak 2 66.59 320** P **P** **01 37 23.0 +0.1**
SNR=6.8
**TKM2 Tokmak 2 66.59 320** *i* P **P** **01 37 22.5 -0.4**
TKM2 pmax pmax
comp=Z,7.0nm,0.9s
**UCH Uchtor 66.97 319** P **P** **01 37 26.1 +0.5**
SNR=8.0
**UCH Uchtor 66.97 319** P **P** **01 37 26.5 +0.9**
**AAK Ala-Archa 67.17 319** LR LR 02 09 50.2
comp=Z,58nm,21.8s,baz=108,slow=39
**AAK Ala-Archa 67.17 319** ⇓*eP* **P** **01 37 26.5 -0.1**
AAK pmax pmax
comp=Z,9.0nm,1.5s
**AAK Ala-Archa 67.17 319** P **P** **01 37 26.1 -0.5**
**USP Ospenovka 67.46 320** P **P** **01 37 28.7 +0.5**
SNR=11
**USP Ospenovka 67.46 320** P **P** **01 37 28.5 +0.3**
USP pmax pmax
comp=Z,16nm,1.3s
**SGDS Sogindy 67.46 320** *eP* **P** **01 37 27.1 -1.1**
baz=320
**AML Almayashu 67.47 318** P **P** **01 37 29.1 +0.4**
SNR=10
**AML Almayashu 67.47 318** P **P** **01 37 29.4 +0.7**
AML pmax pmax
comp=Z,15nm,1.2s
**EKS2 Erkin-Say 67.65 319** P **P** **01 37 30.4 +0.8**
SNR=8.1
**EKS2 Erkin-Say 67.65 319** P **P** **01 37 30.3 +0.7**
EKS2 pmax pmax
comp=Z,10.0nm,1.2s
**ZAA0 Zalesovo Array 67.80 333** P **P** **01 37 29.3 -0.8**
ZAA0 IAmb IAmb 01 37 30.3
comp=Z,15nm,1.0s
**ZALV Zalesovo Beam 67.80 333** P **P** **01 37 29.2 -0.8**
comp=Z,10nm,0.9s,baz=120,slow=5.3,SNR=35
ZALV PKPPKP **P'P'df** **02 05 52.7 +1.8**
comp=Z,1.2nm,0.9s,baz=270,slow=3.0,SNR=4.5
ZALV LR LR 02 09 02.1
comp=Z,81nm,18.9s,baz=139,slow=38
**KBL Kabul 67.80 309** P **P** **01 37 30.3 -0.5**
KBL pmax pmax
comp=Z,9.0nm,1.0s
**KBL Kabul 67.80 309** P **P** **01 37 30.3 -0.5**
KBL IAmb IAmb 01 37 31.1
comp=Z,8.7nm,0.9s
**SEM Semipalatinsk 67.83 328** *eP* **P** **01 37 28.9 -1.7**
**SEM Semipalatinsk 67.83 328** *eP* **P** **01 37 29.0 -1.7**
baz=328
**SEY Seymchan 68.04 11** P **P** **01 37 32.7 +1.3**
comp=Z,8.0nm,0.6s,baz=202,slow=5.1,SNR=22
**KURK Kurchatov 68.86 328** ⇑*iP* **P** **01 37 36.7 0.0**
KURK pmax pmax
comp=Z,42nm,1.3s
**KURK Kurchatov 68.86 328** P **P** **01 37 36.7 0.0**
**KKAR Karatay Array 70.00 318** P **P** **01 37 43.4 -0.7**
**KKAR Karatay Array 70.00 318** P **P** **01 37 43.4 -0.7**
**OTUK Ortayu 71.11 324** P **P** **01 37 50.3 -0.4**
**BRZS Berezniki 71.73 325** *eP* **P** **01 37 53.4 -1.0**
BRZS pmax pmax
comp=Z,6.0nm,0.8s
**BRZS Berezniki 71.73 325** *eP* **P** **01 37 53.5 -1.0**
comp=Z,6.0nm,0.8s,baz=325
**WSAR Wadi Sarin 73.64 295** LR LR 02 15 57.9
comp=Z,59nm,18.0s,baz=134,slow=40
**BRVK Borovoye 74.50 327** *c iP* **P** **01 38 10.2 -0.5**
BRVK pmax pmax
comp=Z,16nm,0.9s
**BRVK Borovoye 74.50 327** P **P** **01 38 10.5 -0.1**
BRVK IAmb IAmb 01 38 11.6
comp=Z,15nm,0.9s
**TIXI Tiksi 74.55 360** P **P** **01 38 10.3 -0.3**
comp=Z,4.4nm,0.5s,baz=192,slow=3.4,SNR=17
TIXI LR LR 02 09 59.7
comp=Z,58nm,21.9s,baz=181,slow=35
**TIXI Tiksi 74.55 360** ⇓*iP* **P** **01 38 09.9 -0.7**
TIXI pmax pmax
comp=Z,5.0nm,0.6s
**TIXI Tiksi 74.55 360** P **P** **01 38 10.1 -0.4**
**BILL Bilibino 75.41 13** ⇓*eP* **P** **01 38 16.6 +1.0**
BILL *e* 01 38 27.4
BILL *e* 01 41 08.8
BILL pmax pmax
comp=Z,21nm,3.6s
**UOSS Minazif 76.13 296** P **P** **01 38 20.1 -0.6**
UOSS IAmb IAmb 01 38 21.2
comp=Z,16nm,1.1s
**VNDA Vanda 76.43 173** P **P** **01 38 21.0 -0.4**
comp=Z,3.1nm,0.8s,baz=331,slow=4.4,SNR=5.1
**VNDA Vanda 76.43 173** P **P** **01 38 21.0 -0.4**
**NRIK Noril'sk 77.59 346** P **P** **01 38 28.4 +0.4**
comp=Z,9.7nm,0.8s,baz=129,slow=6.7,SNR=19
**NRIK Noril'sk 77.59 346** *c iP* **P** **01 38 28.0 +0.1**
NRIK pmax pmax
comp=Z,11nm,0.8s
**NRIK Noril'sk 77.59 346** P **P** **01 38 28.1 +0.1**
NRIK IAmb IAmb 01 38 29.4
comp=Z,9.4nm,0.8s
**MAW Mawson 78.42 201** LR LR 02 10 54.4
comp=Z,110nm,19.2s,baz=58,slow=34
**MAW Mawson 78.42 201** P **P** **01 38 32.6 0.0**
MAW pmax pmax
comp=Z,15nm,1.4s
**MAW Mawson 78.42 201** P **P** **01 38 32.6 0.0**
MAW IAmb IAmb 01 38 33.4
comp=Z,15nm,1.4s
**AB31 Akbulak array 79.06 321** P **P** **01 38 36.1 -0.4**
**ABKAR Akbulak array 79.06 321** P **P** **01 38 36.1 -0.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GAMB** | **Gambell** | **79.50** | **23** | P | | **P** | **01 38 39.7** | **+1.1** |
| | baz=240 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.60** | **322** | LR | | LR | 02 18 10.4 | | |
| | comp=Z,56nm,18.5s,baz=100,slow=38 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.60** | **322** | P | | **P** | **01 38 44.0** | **-0.9** |
| **SVE** | **Sverdlovsk** | **81.09** | **329** | *eP* | | **P** | **01 38 47.1** | **-0.2** |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **SDPT** | **Sand Point** | **81.31** | **33** | P | | **P** | **01 38 48.5** | **-0.1** |
| **ABPO** | **Ambohimpanom** | **81.64** | **251** | P | | **P** | **01 38 51.1** | **-0.2** |
| ABPO | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **81.64** | **251** | P | | **P** | **01 38 51.1** | **-0.2** |
| **TNA** | **Tin City** | **81.77** | **22** | P | | **P** | **01 38 51.1** | **+0.4** |
| TNA | | | | IAmb | | IAmb | 01 39 09.7 | | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **TNA** | **Tin City** | **81.77** | **22** | P | | **P** | **01 38 51.6** | **+0.8** |
| | baz=244 | | | | | | | | |
| **VOI** | **Vohitsoka** | **82.04** | **248** | P | | **P** | **01 38 53.0** | **-0.3** |
| VOI | | | | IAmb | | IAmb | 01 38 59.8 | | |
| | comp=Z,27nm,1.2s | | | | | | | | |
| **ARU** | **Arti** | **82.05** | **328** | *d* iP | | **P** | **01 38 51.7** | **-0.7** |
| ARU | | | | S | | **S** | **01 49 06.7** | **+0.7** |
| ARU | | | | SS | | **SS** | **01 54 22.8** | **-2.5** |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | **82.05** | **328** | P | | **P** | **01 38 52.3** | **-0.1** |
| ARU | | | | IAmb | | IAmb | 01 38 54.6 | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **ANM** | **Nome** | **82.33** | **23** | P | | **P** | **01 38 54.7** | **+1.0** |
| | baz=246 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **85.62** | **294** | P | | **P** | **01 39 12.0** | **+0.5** |
| RAYN | | | | pmax | | pmax | | | |
| | comp=Z,58nm,1.0s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **85.62** | **294** | P | | **P** | **01 39 12.0** | **+0.5** |
| **TTA** | **Tatalina** | **85.71** | **26** | IAmb | | IAmb | 01 39 13.1 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **TTA** | **Tatalina** | **85.71** | **26** | P | | **P** | **01 39 12.1** | **+1.0** |
| | baz=255 | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **85.86** | **30** | P | | **P** | **01 39 13.1** | **+1.3** |
| | baz=257 | | | | | | | | |
| **N19K** | **Bonanza Creek** | **85.88** | **28** | P | | **P** | **01 39 12.9** | **+0.9** |
| | baz=256 | | | | | | | | |
| **L19K** | **White Mountain** | **86.03** | **27** | P | | **P** | **01 39 13.7** | **+1.0** |
| | baz=256 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **86.16** | **32** | LR | | LR | 02 11 22.4 | | |
| | comp=Z,72nm,21.5s,baz=239,slow=31 | | | | | | | | |
| **M19K** | **Big River Lodg** | **86.18** | **27** | IAmb | | IAmb | 01 39 15.7 | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **M19K** | **Big River Lodg** | **86.18** | **27** | P | | **P** | **01 39 13.8** | **+0.4** |
| | baz=256 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **86.92** | **180** | P | | **P** | **01 39 16.6** | **-0.5** |
| QSPA | | | | IAmb | | IAmb | 01 39 28.6 | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **SYO** | **Syowa Base** | **87.13** | **201** ‖ | *i* PcP | | **PcP** | **01 39 21.0** | **+1.0** |
| **KIRV** | **Kirov** | **87.36** | **329** | *d* iP | | **P** | **01 39 19.7** | **+0.6** |
| **GROC** | **Groznyy** | **87.41** | **313** | *eP* | | **P** | **01 39 19.3** | **-0.4** |
| GROC | | | | *e* | | | 01 42 47.4 | | |
| GROC | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **87.55** | **26** | P | | **P** | **01 39 21.2** | **+1.3** |
| | baz=258 | | | | | | | | |
| **CAST** | **Castle Rocks** | **87.55** | **26** | P | | **P** | **01 39 21.1** | **+1.1** |
| | baz=258 | | | | | | | | |
| **O22K** | **Cooper Landing** | **88.11** | **29** | P | | **P** | **01 39 23.3** | **+0.6** |
| | baz=261 | | | | | | | | |
| **M22K** | **Willow** | **88.13** | **28** | P | | **P** | **01 39 23.4** | **+0.7** |
| | baz=260 | | | | | | | | |
| **SEW** | **Seward** | **88.18** | **30** | P | | **P** | **01 39 24.0** | **+1.0** |
| | baz=261 | | | | | | | | |
| **TRF** | **Thorofare Moun** | **88.35** | **26** | P | | **P** | **01 39 24.1** | **+0.1** |
| | baz=260 | | | | | | | | |
| **MLY** | **Manley** | **88.44** | **25** | P | | **P** | **01 39 25.1** | **+0.8** |
| | baz=260 | | | | | | | | |
| **PMR** | **Palmer** | **88.57** | **28** | P | | **P** | **01 39 25.6** | **+0.8** |
| | baz=261 | | | | | | | | |
| **ZEI** | **Tsey** | **88.75** | **313** | *eP* | | **P** | **01 39 26.6** | **+0.2** |
| ZEI | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **PWL** | **Port Wells** | **88.84** | **29** | P | | **P** | **01 39 27.4** | **+1.2** |
| | baz=262 | | | | | | | | |
| **KNK** | **Knik Glacier** | **88.86** | **28** | P | | **P** | **01 39 27.1** | **+0.8** |
| | baz=262 | | | | | | | | |
| **SML** | **Sawmill** | **88.98** | **28** | P | | **P** | **01 39 27.7** | **+0.9** |
| | baz=262 | | | | | | | | |
| **MCK** | **McKinley** | **89.00** | **26** | P | | **P** | **01 39 26.5** | **-0.4** |
| | baz=261 | | | | | | | | |
| **GEVA** | **Gevas** | **89.00** | **308** | P | | **P** | **01 39 27.9** | **+0.2** |
| **NCK** | **Nalchik** | **89.03** | **313** ‖ | *eP* | | **P** | **01 39 28.6** | **+1.1** |
| NCK | | | | pmax | | pmax | | | |
| | comp=Z,51nm,2.6s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **89.04** | **25** | P | | **P** | **01 39 27.1** | **+0.2** |
| | baz=261 | | | | | | | | |
| **COLD** | **Coldfoot** | **89.05** | **23** | P | | **P** | **01 39 27.9** | **+0.9** |
| | baz=260 | | | | | | | | |
| **H23K** | **Yukon River** | **89.07** | **24** | P | | **P** | **01 39 27.9** | **+0.8** |
| | baz=261 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **89.36** | **27** | P | | **P** | **01 39 29.4** | **+0.6** |
| | baz=262 | | | | | | | | |
| **SIRT** | **Sirnak** | **89.43** | **307** | P | | **P** | **01 39 30.1** | **+0.5** |
| **GLI** | **Glacier Island** | **89.45** | **29** | P | | **P** | **01 39 29.8** | **+0.8** |
| | baz=263 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **89.52** | **21** | P | | **P** | **01 39 30.1** | **+0.8** |
| | baz=260 | | | | | | | | |
| **KBZ** | **Khabaz** | **89.56** | **314** | P | | **P** | **01 39 30.6** | **+0.8** |
| | comp=Z,4.5nm,0.9s,baz=184,slow=5.7,SNR=4.7 | | | | | | | | |
| **KBZ** | **Khabaz** | **89.56** | **314** ‖ | *eP* | | **P** | **01 39 30.1** | **+0.2** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **DHY** | **Denali Highway** | **89.60** | **27** | IAmb | | IAmb | 01 39 34.2 | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **DHY** | **Denali Highway** | **89.60** | **27** | P | | **P** | **01 39 31.5** | **+1.6** |
| | baz=263 | | | | | | | | |
| **H24K** | **Noodor Dome** | **89.75** | **24** | P | | **P** | **01 39 30.7** | **+0.3** |
| | baz=262 | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **89.82** | **308** | P | | **P** | **01 39 31.7** | **+0.2** |
| GURO | | | | IAmb | | IAmb | 01 39 33.8 | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **90.03** | **25** | P | | **P** | **01 39 30.7** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=238,slow=4.9,SNR=1.8 | | | | | | | | |
| ILAR | | | | LR | | LR | 02 16 33.6 | | |
| | comp=Z,70nm,19.8s,baz=284,slow=33 | | | | | | | | |
| **PAX** | **Paxson** | **90.45** | **27** | P | | **P** | **01 39 34.3** | **+0.6** |
| | baz=264 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **90.73** | **28** | P | | **P** | **01 39 36.2** | **+1.1** |
| | baz=265 | | | | | | | | |
| **MARD** | **Mardin** | **90.73** | **307** | P | | **P** | **01 39 35.4** | **-0.3** |
| MARD | | | | IAmb | | IAmb | 01 39 36.8 | | |
| | comp=Z,8.7nm,0.7s | | | | | | | | |
| **J26L** | **Joseph Creek** | **91.42** | **26** | P | | **P** | **01 39 38.5** | **+0.2** |
| | baz=266 | | | | | | | | |
| **SOC** | **Sochi** | **91.85** | **313** | *eP* | | **P** | **01 39 36.6** | **-4.0** |
| SOC | | | | *e* | | | 01 43 14.7 | | |
| SOC | | | | *eS* | | **SKSac** | **01 50 07.4** | **-5.4** |
| SOC | | | | *eSS* | | **SS** | **01 56 46.4** | **-2.9** |
| SOC | | | | *eSSS* | | SSS | 02 00 26.0 | | |
| SOC | | | | MLR | | MLR | | | |
| | comp=Z,65nm,13.0s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **92.11** | **269** | P | | **P** | **01 39 43.9** | **+1.2** |
| | comp=Z,6.7nm,1.0s,baz=43,slow=5.1,SNR=12 | | | | | | | | |
| KMBO | | | | LR | | LR | 02 17 26.8 | | |
| | comp=Z,170nm,21.3s,baz=96,slow=33 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **92.11** | **269** | P | | **P** | **01 39 42.3** | **-0.5** |
| KMBO | | | | IAmb | | IAmb | 01 39 44.8 | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **92.58** | **331** | *eP* | | **P** | **01 39 40.9** | **-2.6** |
| KLMR | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **92.58** | **331** | *eP* | | **P** | **01 39 40.9** | **-2.6** |
| KLMR | | | | AMP | | | 01 39 42.7 | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **M30M** | **Minto, Yukon** | **94.42** | **28** | IAmb | | IAmb | 01 40 00.2 | | |
| | comp=Z,7.9nm,1.1s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **95.01** | **303** | LR | | LR | 02 28 42.0 | | |
| | comp=Z,48nm,20.2s,baz=256,slow=39 | | | | | | | | |
| **INK** | **Inuvik** | **95.41** | **22** | P | | **P** | **01 39 55.3** | **-1.1** |
| | comp=Z,3.8nm,1.0s,baz=298,slow=11,SNR=4.0 | | | | | | | | |
| **INK** | **Inuvik** | **95.41** | **22** | P | | **P** | **01 39 56.5** | **+0.1** |
| | baz=275 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.37** | **309** | P | | **P** | **01 40 01.2** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=141,slow=8.0,SNR=4.7 | | | | | | | | |
| BRTR | | | | LR | | LR | 02 30 38.7 | | |
| | comp=Z,27nm,20.3s,baz=118,slow=40 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.37** | **309** | *ce* P | | **P** | **01 40 01.7** | **0.0** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **96.48** | **30** | P | | **P** | **01 40 02.5** | **+0.9** |
| | baz=275 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **97.59** | **18** | P | | **P** | **01 40 06.1** | **-0.1** |
| | baz=284 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **97.68** | **340** | P | | **P** | **01 40 05.5** | **-1.2** |
| | comp=Z,6.1nm,1.0s,baz=20,slow=3.9,SNR=6.4 | | | | | | | | |
| **C36M** | **Paulatuk** | **98.61** | **20** | P | | **P** | **01 40 10.5** | **-0.3** |
| | baz=284 | | | | | | | | |
| **MBAR** | **Mbarara** | **98.64** | **269** | LR | | LR | 02 19 56.5 | | |
| | comp=Z,92nm,21.7s,baz=72,slow=32 | | | | | | | | |
| **MNK** | **Minsk** | **99.16** | **325** | *i* P | | **Pdif** | **01 40 13.4** | **-0.2** |
| MNK | | | | *i* | | | 01 44 15.9 | | |
| MNK | | | | *i* PPP | | PPP | 01 46 22.2 | | |
| MNK | | | | *i* S | | **S** | **01 51 41.6** | **-2.5** |
| MNK | | | | *i* SS | | **SS** | **01 58 34.0** | **+1.7** |
| MNK | | | | *i* SSS | | SSS | 02 02 18.3 | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,1.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=N,183nm,22.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=E,11nm,14.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=Z,144nm,19.0s | | | | | | | | |
| **MNK** | **Minsk** | **99.16** | **325** | *i* P | | **Pdif** | **01 40 13.4** | **-0.2** |
| | comp=E,3.0nm,1.0s | | | | | | | | |
| MNK | | | | *i* P | | **Pdif** | **01 40 13.4** | **-0.2** |
| | comp=N,33nm,1.1s | | | | | | | | |
| MNK | | | | *i* P | | **Pdif** | **01 40 13.4** | **-0.2** |
| | comp=Z,5.0nm,0.8s,baz=83 | | | | | | | | |
| MNK | | | | *i* PP | | **PP** | **01 44 16.0** | **-0.1** |
| MNK | | | | *i* PPP | | PPP | 01 46 22.2 | | |
| MNK | | | | *i* SKS | | | 01 50 38.4 | | |
| MNK | | | | *i* S | | **ScS** | **01 51 41.7** | **-2.4** |
| MNK | | | | *i* PS | | PS | 01 52 39.8 | -33 | |
| MNK | | | | *i* SS | | **SS** | **01 58 34.1** | **+1.7** |
| MNK | | | | *i* SSS | | SSS | 02 02 18.3 | | |
| MNK | | | | *i* LR | | LR | 02 23 24.2 | | |
| MNK | | | | *i* LRM | | MLR | 02 25 53.1 | | |
| | comp=E,11nm,14.1s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 02 25 53.1 | | |
| | comp=N,183nm,21.7s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 02 26 02.0 | | |
| | comp=Z,144nm,18.6s | | | | | | | | |
| **BBB** | **Bella Bella** | **100.03** | **38** | P | | **Pdif** | **01 40 17.4** | **-0.1** |
| | comp=Z,51nm,1.1s,baz=251,slow=7.2,SNR=3.2 | | | | | | | | |
| **BOSA** | **Boshof** | **100.94** | **240** | P | | **Pdif** | **01 40 22.6** | **+0.2** |
| | comp=Z,4.0nm,1.0s,baz=122,slow=9.5,SNR=3.1 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **104.45** | **26** | Pdiff | | **Pdif** | **01 40 38.7** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=290,slow=4.8,SNR=4.5 | | | | | | | | |
| YKA | | | | PKiKP | | **PKiKP** | **01 44 52.9** | **-0.2** |
| | comp=Z,0.6nm,0.8s,baz=293,slow=1.6,SNR=8.6 | | | | | | | | |
| YKA | | | | PKKPbc | | **PKKPbc** | **01 56 22.7** | **-2.9** |
| | comp=Z,0.8nm,0.7s,baz=110,slow=2.7,SNR=9.9 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **114.49** | **44** | PKP | | PKPdf | 01 45 12.9 | 0.0 | |
| | comp=Z,0.7nm,0.9s,baz=233,slow=1.9,SNR=4.6 | | | | | | | | |
| PDAR | | | | PKKPbc | | **PKKPbc** | **01 55 51.8** | **-1.3** | |
| | comp=Z,0.6nm,0.6s,baz=123,slow=3.9,SNR=5.4 | | | | | | | | |
| PDAR | | | | PKKPab | | **PKKPab** | **01 55 57.5** | **-0.8** | |
| | comp=Z,0.6nm,0.7s,baz=104,slow=6.3,SNR=5.5 | | | | | | | | |
| **RSSD** | **Black Hills** | **117.69** | **41** | PKiKP | | **PKPdf** | **01 45 19.2** | **+0.2** | |
| **RSSD** | **Black Hills** | **117.69** | **41** | PKPdf | | **PKPdf** | **01 45 19.2** | **+0.2** | |
| **TXAR** | **Lajitas Array** | **123.32** | **57** | PKP | | **PKPdf** | **01 45 30.9** | **+0.8** | |
| | comp=Z,1.1nm,0.8s,baz=259,slow=1.3,SNR=12 | | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPab** | **01 55 19.6** | **-0.2** | |
| | comp=Z,0.3nm,0.7s,baz=123,slow=6.1,SNR=3.7 | | | | | | | | |
| **P38A** | **Dawn** | **126.72** | **41** | PKPdf | | **PKPdf** | **01 45 36.7** | **+0.5** | |
| **TORD** | **Torodi Ar. Bea** | **127.38** | **284** | PKP | | **PKPdf** | **01 45 38.2** | **+0.1** | |
| | comp=Z,3.9nm,0.9s,baz=38,slow=2.2,SNR=15 | | | | | | | | |
| **S39A** | **Bolivar** | **127.86** | **43** | | | **PKPdf** | **01 45 39.0** | **+0.5** | |
| **PLCA** | **Paso Flores** | **132.77** | **159** | PKP | | **PKiKP** | **01 45 49.4** | **+0.5** | |
| | comp=Z,3.4nm,0.7s,baz=258,slow=1.9,SNR=8.9 | | | | | | | | |
| **GO03** | **Copiap** | **144.14** | **149** | PKPdf | | **PKPab** | **01 46 07.2** | **+0.6** | |
| **JTS** | **Las Juntas de** | **145.13** | **76** | PKiKP | | **PKPbc** | **01 46 10.0** | **-0.5** | |
| **JTS** | **Las Juntas de** | **145.13** | **76** | PKPbc | | **PKPbc** | **01 46 10.0** | **-0.5** | |
| **PLTB** | **Pedras Altas** | **145.28** | **175** | PKPbc | | **PKPbc** | **01 46 09.7** | **-0.7** | |
| **AC02** | **Maricunga** | **145.32** | **150** | PKPbc | | **PKPbc** | **01 46 10.4** | **-0.9** | |
| **PEZE** | **Perez Zeledon,** | **146.52** | **78** | PKPbc | | **PKPdf** | **01 46 13.4** | **0.0** | |
| **ITQB** | **Itaqui** | **146.97** | **170** | PKPbc | | **PKPdf** | **01 46 14.4** | **+0.8** | |
| **PB03** | **IPOC Station P** | **148.81** | **144** | PKPbc | | **PKPdf** | **01 46 18.5** | **+1.4** | |
| **LVC** | **Limon Verde** | **148.86** | **146** | PKP2 | | **PKPbc** | **01 46 20.4** | **-0.9** | |
| **LVC** | **Limon Verde** | **148.86** | **146** | PKPbc | | **PKPbc** | **01 46 20.4** | **-0.9** | |
| **ITAB** | **Concordia** | **149.87** | **177** | PKPbc | | **PKPbc** | **01 46 22.3** | **-0.9** | |
| **NNA** | **Nana** | **149.93** | **120** | PKHKP | | PKPpre | 01 46 21.9 | | |
| **NNA** | **Nana** | **149.93** | **120** | PKPbc | | **PKPdf** | **01 46 21.9** | **+2.9** | |
| **CPUP** | **Villa Florida** | **150.09** | **168** | PKP | | **PKPdf** | **01 46 19.8** | **+0.9** | |
| | comp=Z,20nm,0.8s,baz=2.5,slow=1.3,SNR=5.1 | | | | | | | | |
| CPUP | | | | PKPbc | | **sPKPdf** | **01 46 24.3** | **-3.3** | |
| | comp=Z,20nm,0.8s,baz=165,slow=1.8,SNR=39 | | | | | | | | |
| **LPAZ** | **La Paz** | **154.13** | **138** | PKPbc | | **PKiKP** | **01 46 35.5** | **+1.4** | |
| | comp=Z,1.5nm,0.6s,baz=322,slow=3.9,SNR=4.3 | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **155.43** | **79** | | | **PKPdf** | **01 46 33.4** | **+6.4** | |

**NEIC 20 01:26:36.4**±0.9,**36°26N**±0.01×**97°68W**±0.02,**h4**km±7km,
**mb_Lg2.7**/54,**Error ellipse: s-maj=2.4km s-min=1.5km az=131.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.86** | **167** | | Pg | 01 26 53.1 | +0.2 |
| OKCFA | | | | IAmb_Lg | | 01 27 05.0 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.87** | **167** | | Pg | 01 26 52.7 | -0.4 |
| **FNO** | **Franklin** | **1.02** | **167** | | Pg | 01 26 55.1 | -0.9 |
| FNO | | | | IAmb_Lg | | 01 27 09.2 | |
| | comp=Z,66nm,1.2s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.07** | **277** | Pg | Pg | 01 26 56.7 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.15** | **55** | Pg | Pg | 01 26 57.9 | -0.5 |
| **W35A** | **Tecumseh** | **1.28** | **149** | | Pg | 01 27 00.2 | -0.8 |
| **TUL1** | **Leonard** | **1.57** | **102** | | Pn | 01 27 04.1 | -0.9 |
| TUL1 | | | | IAmb_Lg | | 01 27 29.5 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.66** | **184** | | Pn | 01 27 06.2 | 0.0 |
| X34A | | | | IAmb_Lg | | 01 27 32.2 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.76** | **211** | | Pn | 01 27 07.6 | -0.1 |
| WMOK | | | | IAmb_Lg | | 01 27 33.4 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **R32A** | **Long Quarter,** | **2.31** | **340** | Pn | Pn | 01 27 15.5 | +0.3 |
| **X37A** | **Clayton** | **2.52** | **131** | Pn | Pn | 01 27 18.9 | +0.9 |
| X37A | | | | IAmb_Lg | | 01 28 01.0 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **2.67** | **85** | | Pn | 01 27 21.1 | +1.0 |
| U38A | | | | IAmb_Lg | | 01 28 05.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.96** | **16** | Pn | Pn | 01 27 23.8 | -0.4 |
| **HHAR** | **Hobbs** | **3.02** | **88** | Pn | Pn | 01 27 24.4 | -0.6 |
| **CBKS** | **Cedar Bluff** | **3.03** | **328** | Pn | Pn | 01 27 25.6 | +0.5 |
| CBKS | | | | IAmb_Lg | | 01 28 15.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **W39A** | **Magazine** | **3.34** | **107** | Pn | Pn | 01 27 31.4 | +2.0 |
| **AMTX** | **Amarillo** | **3.54** | **248** | Pn | Pn | 01 27 31.7 | -0.5 |
| AMTX | | | | IAmb_Lg | | 01 28 29.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.73** | **143** | Pn | Pn | 01 27 34.5 | -0.2 |
| Z38A | | | | IAmb_Lg | | 01 28 43.2 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.76** | **116** | Pn | Pn | 01 27 36.1 | +0.9 |
| MIAR | | | | IAmb_Lg | | 01 28 43.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.77** | **66** | Pn | Pn | 01 27 35.0 | -0.4 |
| S39A | | | | IAmb_Lg | | 01 28 38.7 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **U40A** | **Yellville** | **3.90** | **87** | Pn | Pn | 01 27 37.2 | +0.2 |
| U40A | | | | IAmb_Lg | | 01 28 43.8 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.97** | **205** | Pn | Pn | 01 27 37.7 | -0.4 |
| **X40A** | **Basin Creek Fa** | **4.34** | **113** | Pn | Pn | 01 27 42.4 | -0.7 |
| X40A | | | | IAmb_Lg | | 01 28 55.7 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.44** | **77** | Pn | Pn | 01 27 44.7 | +0.2 |
| MGMO | | | | IAmb_Lg | | 01 29 04.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.49** | **101** | IAmb_Lg | | 01 29 08.8 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.52** | **93** | IAmb_Lg | | 01 29 06.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.54** | **123** | Pn | Pn | 01 27 46.0 | +0.1 |
| WLAR | | | | IAmb_Lg | | 01 29 09.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.55** | **102** | Pn | Pn | 01 27 45.9 | -0.1 |
| **P38A** | **Dawn** | **4.70** | **43** | IAmb_Lg | | 01 29 16.5 | |
| **R40A** | **Maddies Statio** | **4.77** | **63** | Pn | Pn | 01 27 48.7 | -0.3 |
| **KSCO** | **Kaye Shedlock'** | **4.79** | **306** | IAmb_Lg | | 01 29 09.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **4.87** | **19** | Pn | Pn | 01 27 49.9 | -0.4 |
| **LCAR** | **Lake Charles** | **5.29** | **90** | IAmb_Lg | | 01 29 31.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.45** | **69** | Pn | Pn | 01 27 57.4 | -0.9 |
| CCM | | | | IAmb_Lg | | 01 29 36.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.52** | **52** | Pn | Pn | 01 27 59.5 | +0.2 |
| **OGNE** | **Ogallala** | **5.79** | **325** | Pn | Pn | 01 28 01.7 | -1.4 |
| OGNE | | | | IAmb_Lg | | 01 29 48.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.79** | **10** | Pn | Pn | 01 28 03.1 | +0.1 |
| **PBMO** | **Poplar Bluff** | **5.86** | **83** | Pn | Pn | 01 28 04.0 | -0.1 |
| **JCT** | **Junction City** | **6.03** | **198** | Pn | Pn | 01 28 05.7 | -0.7 |
| **FVM** | **French Village** | **6.05** | **71** | IAmb_Lg | | 01 29 48.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **K31A** | **O'Neill** | **6.41** | **353** | Pn | Pn | 01 28 11.6 | +0.1 |
| **PHWY** | **Pilot Hill** | **7.89** | **312** | IAmb_Lg | | 01 30 58.5 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **OLIL** | **Olney** | **8.01** | **69** | IAmb_Lg | | 01 31 02.4 | |
| | comp=Z,12nm,0.9s | | | | | | |

*IDC **20** 01:52:14.7*±3.0,37°.35N×142°.53E,h0km,mb3.4/3,
mb1 3.5/4,mb1mx3.3/32,mbtmp3.4/4,ML2.7/1,MS3.6/1,
Ms1 3.6/1,ms1mx2.5/60,Error ellipse: s-maj=70.5km
s-min=36.0km az=61.0*

*JMA **20** 01:52:14.5*±0.2,37°.15N×142°.36E,h12km±2km,M3.7*

**ISC 20 01:52:17.2**±1.5,**37°24N**±0°.07×**142°23E**±0°.09,**h10**km,**n15,**
σ1§**22**/19,**mb3.4/3,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JFK** | **Kawauchi** | **1.09** | **277** | P | **Pb** | **01 52 36.7** | **-1.5** |
| JFK | | | | *eS* | **Sb** | **01 52 52.9** | **+0.4** |
| **ONAJ** | **Iwakimizuishiy** | **1.16** | **264** | P | **Pn** | **01 52 37.6** | **-1.9** |
| **JMST** | **Minamisoumatoc** | **1.18** | **295** | P | **Pn** | **01 52 38.0** | **-1.7** |
| JMST | | | | *eS* | **Sb** | **01 52 55.5** | **+0.6** |
| **JMM** | **Marumori** | **1.31** | **299** | *eS* | **Sn** | **01 52 59.2** | **+0.2** |
| **JIO** | **Ouri** | **1.40** | **330** | P | **Pn** | **01 52 42.1** | **-0.7** |
| **JFT** | **Otama** | **1.54** | **281** | P | **Pn** | **01 52 43.6** | **-1.1** |
| JFT | | | | *eS* | **Sn** | **01 53 04.8** | **+0.1** |
| **JOU** | **Okura** | **1.68** | **313** | P | **Pn** | **01 52 46.6** | **0.0** |
| JOU | | | | *eS* | **Sn** | **01 53 09.3** | **+1.1** |
| **JYK** | **Kaneyama** | **2.24** | **319** | P | **Pn** | **01 52 54.8** | **+0.5** |
| **JAG** | **Ashikaga** | **2.37** | **251** | P | **Pn** | **01 52 54.8** | **-1.4** |
| **MJAR** | **Matsushiro Ar** | **3.30** | **259** | Pn | **Pn** | **01 53 10.8** | **+1.9** |
| | 0.6nm,0.3s,baz=87,slow=15,SNR=12 | | | | | | |
| **MAT** | **Matsushiro** | **3.30** | **259** | P | **Pn** | **01 53 10.6** | **+1.7** |
| MAT | | | | *eS* | **Sn** | **01 53 50.1** | **+1.8** |
| **SONM** | **Songino Array** | **28.22** | **303** | P | **P** | **01 58 10.4** | **+0.2** |
| | 0.5nm,0.8s,baz=98,slow=8.0,SNR=3.9 | | | | | | |
| **DAV** | **Davao City (W)** | **33.64** | **211** | LR | LR | 02 10 45.6 | |
| | comp=Z,95nm,21.4s,baz=356,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.57** | **302** | P | **P** | **02 00 29.5** | **+0.3** |
| | 0.3nm,0.7s,baz=86,slow=11,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.36** | **189** | P | **P** | **02 02 05.7** | **+0.2** |
| | 0.4nm,0.8s,baz=8.5,slow=7.3,SNR=2.6 | | | | | | |

*ARE **20** 02:05:48*±2.0, 15°.74S±0°.06×71°.78W±0°.08,h12km±3km,
Error ellipse: s-maj=10.7km s-min=8.0km az=68.0*

*NEIC **20** 02:05:50.0*±2.0,15°.72S±0°.03×71°.82W±0°.06,h10km±1km,
mb5.0/158,ML5.5(ARE),Error ellipse: s-maj=10.9km
s-min=2.9km az=295.0*

*VAO **20** 02:05:51.3*±0.5,15°.69S×71°.66W,h10km,mb4.6*

*BJI **20** 02:05:51.0*±0.0,15°.70S×71°.90W,h10km,mB5.4/3,
Ms5.3/5,Ms7 4.9/6*

*IDC **20** 02:05:54.5*±2.0,15°.63S×71°.46W,h46km±20km,mb4.2/9,
mb1 4.5/13,mb1mx4.3/27,mbtmp4.5/13,ML4.2/4,MS4.3/49,
Ms1 4.3/49,ms1mx4.2/57,Error ellipse: s-maj=21.4km
s-min=14.5km az=64.0*

*GCMT **20** 02:05:54.0*±0.2, 15°.80S±0°.01×71°.70W±0°.02,h20km,
MW5.1/104,Moment Tensor Solution. s38,c49;
s104,c144; Duration: 0 Moment tensor: Scale 10¹⁶Nm;
Mrr=2.13±.20; Mθθ4.98±.14; Mϕϕ-2.85±.16; Mrθ-1.63±.24;
Mθϕ-1.18±.12; Mϕr2.53±.36; Best double couple:
M₀5.37300×10¹⁶ NP1:ϕs240.00000°,δ49.00000°,
λ-158.00000°. NP2:

FLOC **Florencia** 17.64 347 *e*P P 02 09 53.8 -2.1
MT03 **Universidad Ad** 17.71 176 P 02 09 56.6 -0.2
GCUF **Volcan Galeras** 17.73 341 *e*P P 02 10 00.7 +2.2
MT09 **Talagante** 17.97 178 IAmb IAmb 02 10 06.3
comp=Z,81nm,1.0s
MT01 **Popeta** 18.05 179 IAmb IAmb 02 10 06.0
comp=Z,89nm,0.9s
LMEL **Las Melosas** 18.08 176 IAmb IAmb 02 10 09.6
comp=Z,76nm,0.9s
GARC **Garzon, Huila** 18.19 348 *e*P Pn 02 10 02.6 -0.4
NPGB **Novo Progresso** 18.27 64 *e*P Pn 02 10 03.0 -0.8
SOTA **Rioblanco** 18.39 345 *e*P P 02 10 11.4 +5.6
BBAC **Balboa, Cauca** 18.46 343 *e*P Pn 02 10 09.4 +3.2
PCON **Cinco Dias** 18.53 345 *e*P Pn 02 10 10.4 +3.0
BETC **Betania** 18.66 349 *e*P Pn 02 10 10.4 +1.9
H03N1 **Juan Fernandez** 18.76 199 T T 02 28 16.9
baz=24,slow=73,SNR=288
H03N2 **Juan Fernandez** 18.76 199 T T 02 28 13.2
baz=24,slow=73,SNR=201
H03N3 **Juan Fernandez** 18.78 199 T T 02 28 20.9
baz=24,slow=73,SNR=219
POPC **Popayan, Colom** 18.80 345 *e*P Pn 02 10 10.4 0.0
PTGA **Pitinga** 18.94 39 P P 02 10 10.1 -1.2
comp=Z,0.5nm,0.3s,baz=220,slow=14,SNR=9.4
PTGA LR LR 02 18 03.0
comp=Z,2µm,19.2s,baz=222,slow=39
BO02 **Sierra Bellavi** 18.99 177 IAmb IAmb 02 10 25.4
comp=Z,68nm,1.1s
ARAG **Araguaiana, MT** 19.24 93 *e*P P 02 10 13.6 -0.9
ITTB **Itaituba** 19.42 56 *e*P P 02 10 15.8 -0.8
ITQB **Itaqui** 19.66 137 P P 02 10 17.1 -2.0
ITQB IAmb IAmb 02 10 29.1
comp=Z,114nm,1.1s
ITQB **Itaqui** 19.66 137 *e*P P 02 10 20.1 +1.0
ML02 **Panimavida** 19.94 179 IAmb IAmb 02 10 29.2
comp=Z,87nm,0.9s
SNDB **Serra Nova Dou** 20.25 82 *e*P P 02 10 24.8 -0.9
PCMB **Pacaembu** 20.30 110 *e*P P 02 10 26.0 -0.1
PTGB **Pitanga** 20.53 119 *e*P Pn 02 10 30.5 -0.4
ROSC **El Rosal** 20.61 353 LR LR 02 19 00.9
comp=Z,2µm,18.1s,baz=206,slow=38
ROSC **El Rosal** 20.61 353 P P 02 10 26.9 -3.0
ITRB **Iturama** 20.79 104 *e*P P 02 10 31.8 +0.3
PLMC **San Jos del P** 20.99 347 *e*P Pn 02 10 35.8 -0.5
GUY2C **Guyana, Caldas** 21.13 350 *e*P P 02 10 38.7 +3.1
BOAV **Boa Vista** 21.19 33 *e*P P 02 10 36.4 +0.6
RUSC **La Rusia** 21.54 357 *e*P P 02 10 39.7 -0.3
ITAB **Concordia** 21.54 125 P P 02 10 37.9 -1.6
CBOC **Ciudad Bolivar** 21.87 349 *e*P P 02 10 43.6 +0.3
TAMC **Tame, Arauca** 22.04 0 *e*P P 02 10 45.6 +0.7
HELC **Santa Helena** 22.11 350 *e*P P 02 10 45.6 -0.4
MALB **Monte Alegre** 22.12 53 *e*P P 02 10 46.5 +0.7
BARC **Barichara** 22.24 356 *e*P P 02 10 45.6 -1.7
FRTB **Fartura** 22.25 113 *e*P P 02 10 46.8 -0.4
ELOV **Elorza** 22.71 6 *e*P P 02 10 51.4 -0.7
BDFB **Brasilia** 22.89 93 P P 02 10 51.8 -2.4
comp=Z,4.1nm,0.9s,baz=265,slow=11,SNR=5.4
BDFB LR LR 02 19 57.1
comp=Z,593nm,20.6s,baz=303,slow=37
BDFB **Brasilia** 22.89 93 P P 02 10 52.7 -1.5
PLTB **Pedras Altas** 23.00 137 P P 02 10 54.4 -0.7
PLTB **Pedras Altas** 23.00 137 *e*P P 02 10 56.9 +1.9
LC01 **Cunco** 23.07 180 P P 02 10 55.1 -0.5
LC01 IAmb IAmb 02 11 01.1
comp=Z,72nm,1.1s
PEXB **Peixe** 23.08 84 *e*P P 02 10 54.8 -1.2
ZARC **Zaragoza, Cauc** 23.29 352 P P 02 10 56.5 -1.5
ZARC **Zaragoza, Cauc** 23.29 352 *e*P P 02 10 57.3 -0.7
PRPB **Paraupebas** 23.56 69 *e*P P 02 11 00.6 -0.2
LR03 **Panguipulli** 23.80 181 P P 02 11 02.7 -0.2
LR03 IAmb IAmb 02 11 09.8
comp=Z,44nm,1.1s
RCLB **Rio Claro- Sao** 23.85 110 *e*P P 02 11 04.6 +0.9
SOCV **Socops** 23.89 2 *e*P P 02 11 03.2 -0.9
LR04 **Corral** 24.09 183 IAmb IAmb 02 11 21.4
comp=Z,56nm,1.1s
VAO **Valinhos** 24.49 111 *e*P P 02 11 10.9 +1.3
SDV **Santo Domingo** 24.50 3 P P 02 11 09.2 -0.7
comp=Z,28nm,0.9s,baz=216,slow=5.0,SNR=21
SDV LR LR 02 21 28.5
comp=Z,1µm,20.2s,baz=222,slow=38
SDV **Santo Domingo** 24.50 3 P P 02 11 08.7 -1.1
SDV **Santo Domingo** 24.50 3 *e*P P 02 11 09.0 -0.8
SDV **Santo Domingo** 24.50 3 *e*P P 02 11 09.7 -0.1
SMTB **Santa Maria do** 24.60 77 *e*P P 02 11 11.6 +0.9
MOTC **Monteria, Cord** 24.67 351 P P 02 11 10.3 -0.8
MOTC IAmb IAmb 02 11 16.4
comp=Z,32nm,1.4s
MCPB **Macapa, AP** 24.76 54 *e*P P 02 11 11.8 -0.3
PLCA **Paso Flores** 24.92 178 P P 02 11 14.8 +1.4
comp=Z,52nm,1.1s,baz=358,slow=11,SNR=52
PLCA **Paso Flores** 24.92 178 *e*P P 02 11 15.0 +1.7
LL04 **Puerto Octay** 25.08 181 P P 02 11 13.8 -0.8
SJCC **San Jacinto, C** 25.70 352 P P 02 11 20.8 +0.2
SJCC IAmb IAmb 02 11 30.6
comp=Z,46nm,1.1s
SJCC **San Jacinto, C** 25.70 352 *e*P P 02 11 19.8 -0.7
JANB **Januaria** 26.50 92 *e*P P 02 11 28.9 +1.1
TMAB **Tom-Au,PA,Br** 26.86 63 *e*P P 02 11 31.8 +0.7
DIAM **Diamantina, MG** 27.00 99 *e*P P 02 11 33.5 +1.0
MDP **Montagnes des** 28.08 44 LR LR 02 23 43.5
comp=Z,2µm,18.4s,baz=220,slow=38
JTS **Las Juntas de** 28.96 332 LR LR 02 23 28.3
comp=Z,468nm,18.5s,baz=114,slow=36
COYC **Coyhaique** 29.74 180 IAmb IAmb 02 12 22.7
comp=Z,35nm,1.1s
NBPB **Pedra_Branca-C** 33.19 76 *e*P P 02 12 27.1 -0.1
ICMP **Isla Caja de M** 33.82 9 P P 02 12 31.7 -0.8
SJG **San Juan** 34.10 10 LR LR 02 28 41.5
comp=Z,582nm,18.1s,baz=193,slow=40
APG **El Apazote** 35.69 328 LR LR 02 27 24.8
comp=Z,290nm,20.0s,baz=150,slow=36
RPN **Rapa Nui** 36.60 246 LR LR 02 24 08.8
comp=Z,530nm,18.2s,baz=92,slow=30
CMIG **Matias Romero** 39.79 324 LR LR 02 28 47.1
comp=Z,257nm,20.1s,baz=152,slow=34
ZAIG **Zacatecas** 48.71 321 P P 02 14 34.2 -1.0
ZAIG IAmb IAmb 02 14 44.1
comp=Z,21nm,1.5s
NHSC **New Hope** 49.23 351 P P 02 14 37.9 -0.7
152A **Waverly Hall** 49.70 346 IAmb IAmb 02 14 51.7
comp=Z,16nm,1.1s
Y57A **Sumter** 50.16 351 P P 02 14 45.0 -0.7
Y57A IAmb IAmb 02 14 56.3
comp=Z,24nm,1.1s
LRAL **Lakeview Retre** 50.63 343 IAmb IAmb 02 14 52.5
comp=Z,14nm,1.1s
BIRD **Birdtown, Kers** 50.78 351 IAmb IAmb 02 14 56.2
comp=Z,19nm,1.2s
342A **Flagon Creek P** 50.83 337 P P 02 14 50.3 -0.5
CNNC **Cliffs of the** 51.03 354 P P 02 14 52.4 +0.2
W57A **Gilead** 51.21 351 IAmb IAmb 02 14 55.8
comp=Z,20nm,1.1s
833A **Chaparral WMA,** 51.31 328 IAmb IAmb 02 15 01.4
comp=Z,18nm,1.0s
833A **Chaparral WMA,** 51.31 328 P P 02 14 54.8 +0.3
baz=145
X48A **Hartselle** 51.98 344 IAmb IAmb 02 15 02.5
comp=Z,19nm,1.1s
V55A **Taylorsville** 52.09 350 P P 02 14 59.5 -0.7
V55A IAmb IAmb 02 15 06.8
comp=Z,13nm,1.0s
Z41A **Richland Creek** 52.70 338 P P 02 15 04.9 +0.2
baz=154
OXF **Oxford** 52.71 342 P P 02 15 04.1 -0.7
OXF IAmb IAmb 02 15 13.8
comp=Z,23nm,1.1s
PLAL **Pickwick Lake** 52.77 343 P P 02 15 04.0 -1.2
PLAL IAmb IAmb 02 15 10.8
comp=Z,25nm,1.4s
V48A **Smith Brothers** 53.15 345 IAmb IAmb 02 15 35.9
comp=Z,26nm,1.4s
BLA **Blacksburg** 53.30 351 P P 02 15 09.5 +0.3
BLA IAmb IAmb 02 15 33.7
comp=Z,32nm,1.5s
WHTX **Lake Whitney,** 53.46 333 IAmb IAmb 02 15 14.8
comp=Z,12nm,0.9s
WHTX **Lake Whitney,** 53.46 333 P P 02 15 11.0 +0.6
baz=149
HPIG 53.68 322 P P 02 15 11.5 -0.9
WVT **Waverly** 53.78 344 P P 02 15 11.2 -1.5
WVT IAmb IAmb 02 15 15.0
comp=Z,12nm,1.1s
X40A **Basin Creek Fa** 53.82 338 P P 02 15 14.8 +1.9
baz=155
MIAR **Mount Ida** 54.13 338 P P 02 15 14.0 -1.3
MIAR IAmb IAmb 02 15 24.7
comp=Z,14nm,0.9s
W41B **Gary Mavity, V** 54.23 339 P P 02 15 17.7 +1.7
baz=156
R55A **Marlinton** 54.31 352 P P 02 15 16.6 +0.1
TXAR **Lajitas Array** 54.37 325 P P 02 15 16.7 -0.5
comp=Z,2.6nm,0.9s,baz=146,slow=8.9,SNR=15
TXAR LR LR 02 36 37.7
comp=Z,184nm,21.6s,baz=142,slow=34
TX31 **Lajitas Ar. Si** 54.37 325 IAmb IAmb 02 15 20.0
comp=Z,18nm,1.1s
LCAR **Lake Charles** 54.69 341 IAmb IAmb 02 15 24.6
comp=Z,10nm,1.1s
W39A **Magazine** 54.79 338 IAmb IAmb 02 15 29.5
comp=Z,12nm,0.9s
W39A **Magazine** 54.79 338 P P 02 15 20.0 0.0
baz=154
PARMO **Parma** 54.81 342 P P 02 15 19.3 -0.9
ABTX **Abilene, Hawle** 54.98 331 IAmb IAmb 02 15 28.1
comp=Z,21nm,1.0s
ABTX **Abilene, Hawle** 54.98 331 P P 02 15 21.1 -0.4
baz=147
PBMO **Poplar Bluff** 55.12 342 IAmb IAmb 02 15 28.4
comp=Z,30nm,1.4s
U40A **Yellville** 55.51 339 IAmb IAmb 02 15 31.6
comp=Z,20nm,1.4s
U40A **Yellville** 55.51 339 P P 02 15 27.0 +1.8
baz=155
P53A **Whipple** 55.67 351 IAmb IAmb 02 15 32.0
comp=Z,18nm,1.0s
HHAR **Hobbs** 55.82 338 IAmb IAmb 02 15 30.9
comp=Z,11nm,1.0s
X34A **Smith Ranch, M** 55.86 334 IAmb IAmb 02 15 28.6
comp=Z,17nm,1.0s
P52A **Corning** 55.93 350 P P 02 15 29.7 +1.5
baz=168
MGMO **Mountain Grove** 56.04 340 P P 02 15 28.7 -0.4
MGMO IAmb IAmb 02 15 38.1
comp=Z,25nm,1.4s
U38A **Gravette** 56.12 338 IAmb IAmb 02 15 32.2
comp=Z,15nm,1.4s
TUL1 **Leonard** 56.17 337 IAmb IAmb 02 15 36.3
comp=Z,17nm,1.1s
FVM **French Village** 56.24 342 IAmb IAmb 02 15 36.2
comp=Z,25nm,1.1s
FNO **Franklin** 56.24 335 IAmb IAmb 02 15 36.4
comp=Z,18nm,0.9s
O53A **New Philadelph** 56.39 351 P P 02 15 32.8 +1.3
baz=169
N54A **Moraine State** 56.93 353 P P 02 15 37.6 +2.3
baz=171
O48B **Farmland** 57.09 348 P P 02 15 37.6 +1.2
baz=165
MNTX **Cornudas Mount** 57.13 326 P P 02 15 35.9 -1.0
T35A **Sooner Cattle** 57.33 337 IAmb IAmb 02 15 45.3
comp=Z,27nm,1.3s
M54A **Oil Creek Stat** 57.43 353 P P 02 15 40.9 +2.0
baz=171
M53A **WI Miller and** 57.48 352 P P 02 15 40.8 +1.6
baz=170
MSTX **Muleshoe** 57.58 330 IAmb IAmb 02 15 44.5
comp=Z,13nm,1.0s
MSTX **Muleshoe** 57.58 330 P P 02 15 40.1 -0.1
baz=146
SRIG **Santa Rosalia** 58.07 317 P P 02 15 44.0 +0.4
121A **Cookes Peak, D** 59.08 325 P P 02 15 51.0 +0.2
121A IAmb IAmb 02 15 56.1
comp=Z,11nm,1.0s
121A **Cookes Peak, D** 59.08 325 P P 02 15 51.5 +0.7
baz=139
ANMO **Albuquerque** 60.21 327 LR LR 02 42 40.6
comp=Z,116nm,19.6s,baz=133,slow=37
ANMO **Albuquerque** 60.21 327 P P 02 15 57.2 -1.4
CBKS **Cedar Bluff** 60.25 335 P P 02 15 57.9 -0.6
CBKS IAmb IAmb 02 16 05.6
comp=Z,17nm,0.9s
SADO **Sadowa** 60.59 354 LR LR 02 44 10.2
comp=Z,194nm,19.6s,baz=170,slow=38
T25A **Trinidad** 60.92 330 IAmb IAmb 02 16 08.1
comp=Z,9.8nm,0.9s
T25A **Trinidad** 60.92 330 P P 02 16 03.8 +0.4
baz=144
KSCO **Kaye Shedlock'** 61.63 333 P P 02 16 08.6 +0.5
baz=146
BGNE **Belgrade** 61.88 338 P P 02 16 08.8 -0.7
SDCO **Great Sand Dun** 61.92 330 IAmb IAmb 02 16 17.2
comp=Z,10nm,0.9s
S22A **4UR Ranch, Cre** 62.57 329 IAmb IAmb 02 16 32.9
comp=Z,9.2nm,1.2s
S22A **4UR Ranch, Cre** 62.57 329 P P 02 16 15.4 +0.8
baz=142
Q24A **Divide** 62.73 331 IAmb IAmb 02 16 20.3
comp=Z,11nm,1.1s
Q24A **Divide** 62.73 331 P P 02 16 15.2 -0.5
baz=144
MVCO **Mesa Verde** 63.00 328 P P 02 16 17.4 0.0
MVCO IAmb IAmb 02 16 22.2
comp=Z,16nm,1.4s
WUAZ **Wupatki** 63.29 324 P P 02 16 18.6 -0.6
WUAZ IAmb IAmb 02 16 23.0
comp=Z,10nm,0.9s
SPMN **Marine on St.** 63.61 344 P P 02 16 22.9 +2.0
baz=157
SMCO **Snowmass** 63.76 330 IAmb IAmb 02 16 40.7
comp=Z,13nm,1.2s
PV15 **Paradox Valley** 63.86 328 P P 02 16 23.6 +0.5
F36A **Milaca** 64.39 343 IAmb IAmb 02 16 29.3
comp=Z,9.3nm,0.9s
U15A **North Rim** 64.46 325 IAmb IAmb 02 16 31.0
comp=Z,12nm,1.3s
BELA **Belgrano 2** 64.80 172 P P 02 16 29.2 +0.8
BELA IAmb IAmb 02 16 32.6
comp=Z,15nm,1.5s
PFO **Pinyon Flats O** 64.98 320 LR LR 02 42 21.8
comp=Z,146nm,19.0s,baz=136,slow=34
O20A **White River Ci** 65.12 330 IAmb IAmb 02 16 36.5
comp=Z,18nm,1.2s
O20A **White River Ci** 65.12 330 P P 02 16 31.6 +0.3
baz=141
KNB **Kanab** 65.18 325 IAmb IAmb 02 16 37.5
comp=Z,11nm,1.0s
F33A **5 Mile Ranch,** 65.18 341 IAmb IAmb 02 16 34.1
comp=Z,16nm,1.1s
HEC **Hector,Ludlow** 65.71 321 P P 02 16 36.7 +1.7
baz=132
P18A **Preston Nutter** 65.73 328 IAmb IAmb 02 16 40.9
comp=Z,13nm,1.2s
SZCU **Shurtz Canyon** 65.74 325 P P 02 16 35.0 -0.3
SZCU IAmb IAmb 02 16 43.7
comp=Z,7.9nm,1.1s
CCUT **Cedar City** 65.86 325 IAmb IAmb 02 16 42.1
comp=Z,8.0nm,1.0s
P17A **Butcher Ranch,** 65.86 328 IAmb IAmb 02 16 40.8
comp=Z,12nm,1.2s
RDMU **Red Mountain** 66.10 329 P P 02 16 37.7 +0.1
RDMU IAmb IAmb 02 16 42.2
comp=Z,7.6nm,1.0s
VNA3 **Neumayer Olymp** 66.37 162 P P 02 16 40.3 +1.6
RSSD **Black Hills** 66.45 335 P P 02 16 40.5 +0.7
VNA2 **Neumayer--Watz** 66.95 161 P P 02 16 45.0 +2.6
baz=44,slow=8.2
TPNV **Topopah Spring** 67.09 322 P P 02 16 43.7 -0.3
FURC **Furnace Creek,** 67.13 322 P P 02 16 46.1 +2.1
baz=132
AGMN **Agassiz Nation** 67.27 343 IAmb IAmb 02 16 48.0
comp=Z,10.0nm,0.9s
DUG **Dugway, Tooele** 67.47 327 IAmb IAmb 02 16 51.6
comp=Z,7.5nm,1.1s
SBC **Santa Barbara** 67.57 318 P P 02 16 48.5 +1.7
baz=130
ISA **Isabella, Lake** 67.58 320 P P 02 16 49.6 +2.6
baz=131
R11A **Troy Canyon, C** 67.67 324 P P 02 16 49.3 +1.7
baz=134
PD31 **Pinedale Array** 67.78 331 P P 02 16 48.0 -0.2
PDAR **Pinedale Array** 67.78 331 P P 02 16 47.2 -1.1
comp=Z,1.8nm,1.0s,baz=124,slow=3.9,SNR=8.4
PDAR LR LR 02 48 34.1
comp=Z,127nm,21.6s,baz=136,slow=38
CWC **Cottonwood Cre** 67.84 321 P P 02 16 50.3 +1.6
baz=131
MDND **Maddock** 68.01 340 P P 02 16 51.8 +2.4
baz=151
VES **Vestal, Richgr** 68.07 320 P P 02 16 51.9 +2.0
baz=130
SNAA **Sanae** 68.58 162 P P 02 16 55.2 +2.5
SNAA **Sanae** 68.58 162 LR LR 02 45 17.9
comp=Z,202nm,20.5s,baz=342,slow=34
SNAA **Sanae** 68.58 162 P P 02 16 52.8 +0.1
SNAA IAmb IAmb 02 16 57.6
comp=Z,11nm,0.9s
ULM **Lac du Bonnet** 69.05 344 P P 02 16 54.0 -1.7
comp=Z,8.9nm,1.0s,baz=132,slow=5.7,SNR=4.1
ULM LR LR 02 48 47.0
comp=Z,176nm,21.4s,baz=150,slow=37
ULM **Lac du Bonnet** 69.05 344 IAmb IAmb 02 16 58.9
comp=Z,15nm,1.1s
ELK **Elko** 69.15 326 LR LR 02 45 44.7
comp=Z,215nm,21.8s,baz=130,slow=34
NVAR **Mina Array Bea** 69.29 322 P P 02 16 58.7 +0.9
comp=Z,2.2nm,0.9s,baz=139,slow=6.2,SNR=9.6
SCHQ **Schefferville** 70.42 3 LR LR 02 49 53.2
comp=Z,174nm,19.3s,baz=200,slow=38
MFID **Camas Ranch** 71.35 328 IAmb IAmb 02 17 14.0
comp=Z,12nm,1.2s
ORV **Oroville** 71.92 322 IAmb IAmb 02 17 19.3
comp=Z,17nm,1.2s
EGMT **Eagleton** 71.95 334 IAmb IAmb 02 17 16.5
comp=Z,11nm,1.1s
YBH **Yreka Blue Hor** 74.00 323 LR LR 02 48 43.4
comp=Z,79nm,20.7s,baz=134,slow=35
QSPA **South Pole Qui** 74.41 180 P P 02 17 27.6 -0.5
QSPA IAmb IAmb 02 17 31.9
comp=Z,12nm,1.1s
FFC **Flin Flon** 74.74 342 P P 02 17 29.9 +0.1
NEW **Newport** 75.42 331 LR LR 02 53 38.9
comp=Z,93nm,18.8s,baz=132,slow=38
TORD **Torodi Ar. Bea** 78.13 73 P P 02 17 46.1 -3.8
comp=Z,3.8nm,0.8s,baz=276,slow=5.7,SNR=23
TORD **Torodi Ar. Bea** 78.13 73 P P 02 17 48.5 -1.5
FRB **Frobisher Bay** 79.28 1 LR LR 02 52 28.4
comp=Z,178nm,22.0s,baz=191,slow=35
MDT **Midelt** 80.27 52 LR LR 02 50 08.0
comp=Z,165nm,21.8s,baz=258,slow=33
VNDA **Vanda** 82.01 190 LR LR 02 50 29.1
comp=Z,244nm,18.0s,baz=140,slow=32
RAR **Rarotonga** 82.61 250 LR LR 02 48 01.1
comp=Z,88nm,21.4s,baz=197,slow=30
SYO **Syowa Base** 82.82 160 *i* sP P 02 18 17.4 +3.3
BBB **Bella Bella** 83.32 329 LR LR 02 58 23.5
comp=Z,53nm,20.3s,baz=166,slow=38
ESDC **Sonseca Array** 83.75 46 LR LR 02 49 33.1
comp=Z,200nm,21.9s,baz=240,slow=31
SFJD **Kangerlussuaq** 83.98 8 LR LR 02 54 58.2
comp=Z,117nm,21.9s,baz=189,slow=35
DY2G **Dye2** 84.16 10 *i* P P 02 18 19.0 -2.2
DY2G IAmb IAmb 02 18 27.3
comp=Z,35nm,1.2s
TSUM **Tsumeb** 84.37 108 LR LR 02 52 46.1
comp=Z,174nm,20.3s,baz=250,slow=33
YKA **Yellowknife Ar** 84.89 342 P P 02 18 23.7 -0.9
comp=Z,3.2nm,0.9s,baz=136,slow=5.3,SNR=24
YKA LR LR 02 59 24.2
comp=Z,113nm,19.6s,baz=137,slow=38
YKA **Yellowknife Ar** 84.89 342 P P 02 18 24.1 -0.5
ICESG **Greenland Ices** 87.65 11 *i* P P 02 18 37.8 -0.7
ICESG IAmb IAmb 02 18 41.3
comp=Z,9.0nm,0.6s
DLBC **Dease Lake** 87.86 333 LR LR 03 01 32.2
comp=Z,90nm,21.1s,baz=104,slow=38
BOSA **Boshof** 88.59 119 LR LR 02 55 12.2
comp=Z,159nm,18.2s,baz=230,slow=34
LBTB **Lobatse** 89.94 116 LR LR 02 56 17.6
comp=Z,207nm,19.4s,baz=247,slow=34
MAW **Mawson** 90.59 164 LR LR 02 58 57.1
comp=Z,122nm,20.5s,baz=234,slow=35
SUMG **Summit** 90.85 10 *i* P P 02 18 51.1 -2.5
SUMG IAmb IAmb 02 18 57.6
comp=Z,17nm,0.9s
SUMG **Summit** 90.85 10 P P 02 18 53.1 -0.5
EKA **Eskdalemuir Ar** 91.19 32 LR LR 02 55 45.4
comp=Z,137nm,20.7s,baz=186,slow=33
RES **Resolute Bay** 91.41 354 LR LR 03 01 09.3
comp=Z,237nm,21.3s,baz=120,slow=36
KEST **Kesra** 92.07 54 LR LR 03 03 11.7
comp=Z,86nm,18.1s,baz=270,slow=38
TULEG **Thule** 92.11 1 *e*P P 02 19 05.7 +6.8
TULEG IAmb IAmb 02 19 08.2
comp=Z,7.3nm,0.9s
TULEG **Thule** 92.11 1 P P 02 18 59.2 +0.4
NEEM **North Greenlan** 93.79 4 *i* P P 02 19 06.6 -0.4
NEEM IAmb IAmb 02 19 12.1
comp=Z,9.4nm,0.9s
MATP **Matopo** 93.89 112 LR LR 02 59 39.7
comp=Z,96nm,18.7s,baz=246,slow=34
A36M **Sachs Harbour** 94.47 345 P P 02 19 09.5 -0.3
A36M IAmb IAmb 02 19 13.9
comp=Z,7.0nm,0.9s
INK **Inuvik** 94.63 341 LR LR 03 05 20.2
comp=Z,258nm,20.5s,baz=112,slow=38
LSZ **Lusaka** 95.19 107 LR LR 02 59 04.4
comp=Z,183nm,21.6s,baz=249,slow=34
URZ **Urewera** 96.12 229 PKPbc LR 02 54 21.5
comp=Z,87nm,18.1s,baz=115,slow=30
VAE **Valguarnera** 96.47 53 LR LR 03 02 04.8
comp=Z,109nm,19.5s,baz=244,slow=35
JMIC **Jan Mayen** 96.48 17 LR LR 03 00 21.8
comp=Z,79nm,19.8s,baz=260,slow=34
RPZ **Rata Peaks** 97.64 221 LR LR 02 56 16.6
comp=Z,106nm,18.3s,baz=138,slow=31
KDAK **Kodiak Island** 98.35 328 LR LR 03 04 37.4
comp=Z,53nm,20.1s,baz=105,slow=36
ASAR **Alice Springs** 133.47 213 PKP **PKPdf** 02 25 07.0 -0.4
comp=Z,0.8nm,0.8s,baz=135,slow=1.9,SNR=6.7
WRA **Warramunga Arr** 136.21 217 PKP **PKPdf** 02 25 12.7 +0.1
comp=Z,3.3nm,1.1s,baz=148,slow=1.9,SNR=14
ZALV **Zalesovo Beam** 137.73 20 PKPdf **PKPdf** 02 25 14.3 -0.1
MK31 **Makanchi Array** 142.28 29 **PKPdf** 02 25 20.6 -2.3
MKAR **Makanchi Array** 142.28 29 PKhKP PKPpre 02 25 17.1
comp=Z,0.7nm,0.7s,baz=336,slow=2.7,SNR=9.5
KSH **Kashi** 143.22 44 PKP **PKiKP** 02 25 28.3 +0.1
NIL **Nilore** 143.81 54 PKPdf **PKPdf** 02 25 25.2 -0.7
USRK **Ussuriysk Ar.** 145.20 329 PKPbc **PKPbc** 02 25 26.6 -1.0
comp=Z,2.1nm,0.6s,baz=265,slow=32,SNR=4.0
USRK **Ussuriysk Ar.** 145.20 329 PKPbc **PKPbc** 02 25 26.4 -1.2
HIA **Hailar** 145.27 347 PKPbc **PKPbc** 02 25 26.5 -1.2
MJAR **Matsushiro Arr** 146.25 314 PKPbc **PKPdf** 02 25 30.6 +0.5
comp=Z,6.2nm,0.6s,baz=37,slow=0.9,SNR=15
MJAR **Matsushiro Arr** 146.25 314 PKPbc **PKPdf** 02 25 29.0 -1.1
MAJO **Matsushiro** 146.25 314 PKPbc **PKPdf** 02 25 29.8 -0.3
MAT **Matsushiro** 146.25 314 PKP **PKPdf** 02 25 30.3 +0.2
MJB9 **Matsu-Tunnel** 146.25 314 PKPbc **PKPdf** 02 25 29.9 -0.2
WMQ **Urumqi** 147.02 28 *e*PKPbc **PKPbc** 02 25 32.9 -0.4
WMQ LR LR
comp=Z,160nm,19.9s
ULN **Ulaanbaatar** 147.96 1 PKPbc **PKPbc** 02 25 35.4 -0.4
SONM **Songino Array** 147.97 2 PKPbc **PKPbc** 02 25 35.6 -0.2
comp=Z,8.1nm,1.0s,baz=316,slow=1.5,SNR=25
SONM **Songino Array** 147.97 2 PKPbc **PKPdf** 02 25 34.1 +1.3
XLT **XiLinHaoTe** 151.15 348 *e*PKPbc **PKPdf** 02 25 37.8 -0.1
XLT PP **PP** 02 25 29.5 +4.7
XLT SKS **SKSdf** 02 32 43.3 -2.5
XLT AMB AMB
comp=Z,220nm,6.0s
XLT LR LR
comp=Z,290nm,18.0s
XLT LR LR
comp=Z,170nm,21.9s
KSRS **Korea Array** 152.21 325 PKPbc **PKPbc** 02 25 46.3 0.0
comp=Z,8.4nm,1.1s,baz=32,slow=1.0,SNR=7.7
HHC **Hu-ho-hao-te** 154.82 354 *e*PKPbc **PKPdf** 02 25 37.8 -5.6
GTA **Gaotai** 155.30 16 *e*PKP **PKPdf** 02 25 47.5 +3.4
GTA PKPab **PKPab** 02 26 09.9 +0.8
GTA LR LR
comp=Z,120nm,20.0s
GTA LR LR
comp=Z,74nm,17.8s
GTA LR LR
comp=Z,180nm,20.7s
NJ2 **Nanjing** 161.09 331 *e*PKP **PKPdf** 02 25 50.3 -0.9
PZH **PanZhiHua** 167.72 28 PKP **PKPdf** 02 25 55.3 -2.1

*ANF **20** 02:13:12.4±0.9,31°.85N×116°.25W,h5km,ML3.1/18,Error ellipse: s-maj=7.2km s-min=4.9km az=33.0*
*NEIC **20** 02:13:14.0±1.5,31°.86N±0°.04×116°.19W±0°.07,h5km±7km, Error ellipse: s-maj=10.4km s-min=3.4km az=58.0*
*PAS **20** 02:13:14.7±1.0,31°.89N±0°.05×116°.22W±0°.04,h4km±2km, Error ellipse: s-maj=9.4km s-min=3.0km az=209.0*
*ECX **20** 02:13:14.5±0.6,31°.85N×116°.19W,h9km±21km,MD3.0,*

*ML3.3*
*MEX **20** 02:13:15.2±0.3,31.81N×116.31W,h10km±6km,MD3.8*
**ISC 20 02:13:13.7**±1.0,**31.86N**±0.02×**116.18W**±0.02,**h9**km±9km,
**n76,σ1s02**/106,**5C-8D,Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CCX** | **Cicese** | **0.42** | **271** | | **Pg** | **02 13 22.1** | **+0.3** |
| CCX | | | | IAML | | 02 13 28.3 | |
| | comp=E,2μm,0.4s | | | | | | |
| **CCX** | **Cicese** | **0.42** | **271** | ⇑*i*P | **Pg** | **02 13 22.1** | **+0.3** |
| CCX | | | | *e*S | **Sg** | **02 13 27.8** | **+0.4** |
| CCX | | | | *e* | | 02 13 28.2 | |
| CCX | | | | IAML | | 02 13 28.2 | |
| | comp=N,2μm,0.2s | | | | | | |
| **SVX** | **San Vicente** | **0.53** | **187** | ⇓*e*P | **Pg** | **02 13 23.7** | **-0.3** |
| SVX | | | | *i* S | **Sg** | **02 13 30.9** | **-0.2** |
| SVX | | | | ⇑*e* | | 02 13 31.0 | |
| SVX | | | | IAML | | 02 13 31.0 | |
| | comp=E,2μm,0.1s | | | | | | |
| SVX | | | | IAML | | 02 13 31.3 | |
| | comp=N,2μm,0.1s | | | | | | |
| SVX | | | | ⇓*e* | | 02 13 31.3 | |
| **CBX** | **Cerro Bola** | **0.61** | **318** | | **Pg** | **02 13 25.5** | **-0.2** |
| CBX | | | | | **Sg** | **02 13 33.7** | **0.0** |
| **CBX** | **Cerro Bola** | **0.61** | **318** | IAML | | 02 13 34.7 | |
| | comp=E,1μm,0.2s | | | | | | |
| CBX | | | | IAML | | 02 13 34.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **0.61** | **318** | *e*P | **Pg** | **02 13 25.5** | **-0.2** |
| CBX | | | | *e*S | **Sg** | **02 13 33.7** | **0.0** |
| **CBX** | **Cerro Bola** | **0.61** | **318** | ⇑*e*P | **Pg** | **02 13 25.5** | **-0.2** |
| CBX | | | | *e*S | **Sg** | **02 13 33.8** | **0.0** |
| CBX | | | | IAML | | 02 13 35.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| CBX | | | | ⇑*e* | | 02 13 35.0 | |
| **TJIG** | **Tijuana** | **0.71** | **324** | | **Pg** | **02 13 27.2** | **-0.3** |
| TJIG | | | | | **Sg** | **02 13 36.3** | **-0.4** |
| **TJIG** | **Tijuana** | **0.71** | **324** | *e*P | **Pg** | **02 13 27.2** | **-0.3** |
| TJIG | | | | *e*S | **Sg** | **02 13 36.3** | **-0.4** |
| **TJIG** | **Tijuana** | **0.71** | **324** | *e*P | **Pg** | **02 13 27.2** | **-0.3** |
| TJIG | | | | *e*S | **Sg** | **02 13 36.4** | **-0.4** |
| **RMX** | **La Rumorosa** | **0.75** | **6** | | **Pg** | **02 13 27.6** | **-0.6** |
| RMX | | | | IAML | | 02 13 37.3 | |
| | comp=N,799nm,0.4s | | | | | | |
| RMX | | | | IAML | | 02 13 37.6 | |
| | comp=E,732nm,0.3s | | | | | | |
| **RMX** | **La Rumorosa** | **0.75** | **6** | ⇓*i*P | **Pg** | **02 13 27.6** | **-0.6** |
| RMX | | | | *e*S | **Sg** | **02 13 36.8** | **-1.2** |
| **IKP** | **In-Ko-Pah, Jac** | **0.79** | **4** | ⇓*i*P | **Pg** | **02 13 29.1** | **+0.1** |
| IKP | | | | *e*S | **Sg** | **02 13 39.3** | **-0.1** |
| **IKP** | **In-Ko-Pah, Jac** | **0.79** | **4** | P | **Pg** | **02 13 29.1** | **+0.1** |
| | baz=187,SNR=147 | | | | | | |
| IKP | | | | S | **Sg** | **02 13 39.2** | **-0.1** |
| | baz=187 | | | | | | |
| **TKX** | **Tecate** | **0.80** | **333** | | **Pg** | **02 13 28.8** | **-0.3** |
| **TKX** | **Tecate** | **0.80** | **333** | *e*P | **Pg** | **02 13 28.6** | **-0.5** |
| TKX | | | | *e*S | **Sg** | **02 13 38.8** | **-0.8** |
| **YUH** | **Yuha Desert** | **0.81** | **15** | | **Pg** | **02 13 29.3** | **-0.1** |
| YUH | | | | IAML | | 02 13 40.7 | |
| | comp=N,743nm,0.1s | | | | | | |
| YUH | | | | IAML | | 02 13 40.7 | |
| | comp=E,457nm,0.1s | | | | | | |
| **YUH2** | **Yuha Desert** | **0.81** | **15** | ⇓*i*P | **Pg** | **02 13 29.5** | **0.0** |
| YUH2 | | | | *e*S | **Sg** | **02 13 39.8** | **-0.3** |
| **BAR** | **Barrett** | **0.92** | **333** | | **Pg** | **02 13 30.5** | **-1.0** |
| **BAR** | **Barrett** | **0.92** | **333** | ⇓*e*P | **Pg** | **02 13 30.4** | **-1.0** |
| BAR | | | | IAML | | 02 13 43.6 | |
| | comp=E,1μm,0.2s | | | | | | |
| BAR | | | | ⇑*e* | | 02 13 44.2 | |
| BAR | | | | IAML | | 02 13 44.2 | |
| | comp=N,998nm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.93** | **53** | | **Pb** | **02 13 32.7** | **+0.7** |
| **CPBX** | **Cerro Prieto** | **0.93** | **53** | *e*P | **Pg** | **02 13 30.8** | **-0.8** |
| **WESC** | **Westside Schoo** | **0.97** | **23** | *e*P | **Pg** | **02 13 32.0** | **-0.5** |
| WESC | | | | *e*S | **Sg** | **02 13 45.2** | **+0.1** |
| **OLP** | **Otay Lakes Par** | **0.98** | **320** | *e*P | **Pg** | **02 13 31.6** | **-1.0** |
| **TJX** | **Tijuana** | **0.99** | **311** | | **Pg** | **02 13 32.7** | **-0.1** |
| TJX | | | | IAML | | 02 13 47.9 | |
| | comp=E,738nm,0.4s | | | | | | |
| **MBIG** | **Mexicali** | **0.99** | **56** | | **Pb** | **02 13 34.2** | **+1.1** |
| MBIG | | | | | **Sn** | **02 13 48.9** | **+0.8** |
| **MBIG** | **Mexicali** | **0.99** | **56** | *e*P | **Pg** | **02 13 33.2** | **+0.4** |
| MBIG | | | | *e*P | **Pb** | **02 13 34.2** | **+1.1** |
| MBIG | | | | *e*S | **Sn** | **02 13 48.9** | **+0.8** |
| **SPIG** | **San Pedro Mart** | **1.01** | **143** | | **Pg** | **02 13 32.4** | **-0.8** |
| **SPIG** | **San Pedro Mart** | **1.01** | **143** | *e*P | **Pg** | **02 13 32.4** | **-0.8** |
| **SPIG** | **San Pedro Mart** | **1.01** | **143** | ⇓*e*P | **Pg** | **02 13 32.4** | **-0.8** |
| SPIG | | | | *e*S | **Sg** | **02 13 46.2** | **-0.2** |
| **MONP2** | **Monument Peak** | **1.05** | **349** | ⇓*e*P | **Pg** | **02 13 33.2** | **-0.7** |
| **MONP2** | **Monument Peak** | **1.05** | **349** | P | **Pg** | **02 13 33.2** | **-0.7** |
| | baz=170,SNR=25 | | | | | | |
| MONP2 | | | | S | **Sg** | **02 13 46.9** | **-0.8** |
| | baz=170 | | | | | | |
| **SDRC** | **San Diego Road** | **1.09** | **324** | *e*P | **Pg** | **02 13 33.3** | **-1.4** |
| **SWSC** | **Sam W. Stewart** | **1.13** | **16** | P | **Pg** | **02 13 35.2** | **-0.3** |
| | baz=199,SNR=170 | | | | | | |
| SWSC | | | | S | **Sg** | **02 13 50.3** | **+0.2** |
| | baz=199 | | | | | | |
| **EML** | **El Monte Cty P** | **1.18** | **331** | *e*P | **Pg** | **02 13 34.6** | **-1.7** |
| **109C** | **Camp Elliot, M** | **1.29** | **323** | | **Pn** | **02 13 37.3** | **-0.7** |
| **109C** | **Camp Elliot, M** | **1.29** | **323** | P | **Pn** | **02 13 36.8** | **-1.2** |
| | baz=143,SNR=11 | | | | | | |
| 109C | | | | S | **Sg** | **02 13 53.0** | **-2.4** |
| | baz=143 | | | | | | |
| **MATG** | **Mataguay Scout** | **1.40** | **344** | *e*P | **Pn** | **02 13 38.8** | **-0.7** |
| **SFX** | **San Felipe** | **1.40** | **126** | | **Pn** | **02 13 40.4** | **+0.9** |
| SFX | | | | IAML | | 02 13 59.4 | |
| | comp=N,230nm,0.6s | | | | | | |
| SFX | | | | IAML | | 02 14 04.5 | |
| | comp=E,240nm,0.8s | | | | | | |
| **SFX** | **San Felipe** | **1.40** | **126** | *e*P | **Pn** | **02 13 38.4** | **-1.0** |
| SFX | | | | *e*S | **Sb** | **02 13 57.6** | **-0.3** |
| **YMD** | **Yuma Desert** | **1.55** | **63** | *e*P | **Pn** | **02 13 40.7** | **-0.8** |
| **GLA** | **Glamis** | **1.65** | **43** | | **Pn** | **02 13 42.2** | **-0.7** |
| GLA | | | | IAML | | 02 14 04.3 | |
| | comp=E,179nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **1.65** | **43** | P | **Pn** | **02 13 42.4** | **-0.5** |
| | baz=226,SNR=28 | | | | | | |
| GLA | | | | S | **Sn** | **02 14 02.2** | **-2.1** |
| | baz=226 | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.76** | **352** | Pn | **Pn** | **02 13 45.3** | **+0.7** |
| PFO | | | | IAML | | 02 14 09.9 | |
| | comp=E,130nm,0.3s | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.76** | **352** | Pn | **Pn** | **02 13 44.4** | **-0.2** |
| | baz=173,SNR=14 | | | | | | |
| PFO | | | | Pb | **Pb** | **02 13 46.2** | **-0.2** |
| | baz=173 | | | | | | |
| PFO | | | | Sb | **Sn** | **02 14 08.8** | **+1.5** |
| | baz=173 | | | | | | |
| **BC3** | **Big Chuckawall** | **1.89** | **19** | P | **Pn** | **02 13 46.3** | **0.0** |
| | baz=200,SNR=26 | | | | | | |
| **MURC** | **Murrieta** | **1.94** | **334** | Pb | **Pn** | **02 13 47.7** | **+0.8** |
| | baz=154,SNR=22 | | | | | | |
| MURC | | | | Sb | **Sn** | **02 14 12.3** | **+0.8** |
| | baz=154 | | | | | | |
| **ELS** | **Elsinore Mount** | **2.07** | **330** | | **Pn** | **02 13 50.0** | **+1.2** |
| ELS | | | | IAML | | 02 14 19.9 | |
| | comp=E,172nm,0.5s | | | | | | |
| ELS | | | | IAML | | 02 14 20.0 | |
| | comp=N,105nm,0.6s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.14** | **4** | Pn | **Pn** | **02 13 49.8** | **0.0** |
| | baz=185,SNR=27 | | | | | | |
| BELC | | | | Pb | **Pb** | **02 13 53.4** | **+0.6** |
| | baz=185 | | | | | | |
| BELC | | | | Sb | **Sb** | **02 14 21.2** | **+1.7** |
| | baz=185 | | | | | | |
| **113A** | **Mohawk Valley,** | **2.23** | **65** | Pn | **Pn** | **02 13 51.5** | **+0.5** |
| **BLYC** | **Blythe** | **2.34** | **36** | Pn | **Pn** | **02 13 52.1** | **-0.3** |
| **CIS** | **Catalina Islan** | **2.44** | **310** | S | **Sn** | **02 14 21.5** | **-2.2** |
| | baz=129 | | | | | | |
| **IRM** | **Iron Mountain** | **2.45** | **20** | P | **Pn** | **02 13 54.4** | **+0.4** |
| | baz=202,SNR=7.0 | | | | | | |
| **BBRC** | **Big Bear Solar** | **2.48** | **346** | Sb | **Sb** | **02 14 29.3** | **0.0** |
| | baz=166 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.86** | **87** | Pn | **Pn** | **02 13 58.8** | **-0.8** |
| **214A** | **Organ Pipe Nat** | **2.86** | **87** | P | **Pn** | **02 13 58.8** | **-0.8** |
| | baz=270 | | | | | | |
| 214A | | | | S | **Sn** | **02 14 32.7** | **-1.6** |
| | baz=270 | | | | | | |
| **GMRC** | **Granite Mounta** | **2.95** | **8** | P | **Pn** | **02 14 01.6** | **+0.7** |
| | baz=189 | | | | | | |
| **HEC** | **Hector,Ludlow** | **2.97** | **357** | Pn | **Pn** | **02 14 02.1** | **+1.0** |
| | baz=178 | | | | | | |
| HEC | | | | Pb | **Pb** | **02 14 08.7** | **+1.8** |
| | baz=178,SNR=6.2 | | | | | | |
| HEC | | | | Sb | **Sg** | **02 14 47.3** | **-1.7** |
| | baz=178 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **3.38** | **334** | Sb | **Sb** | **02 14 55.4** | **+0.4** |
| | baz=153 | | | | | | |
| **Y14A** | **Wickenburg** | **3.38** | **51** | Pn | **Pn** | **02 14 07.9** | **+1.1** |
| **GSC** | **Goldstone, Bar** | **3.47** | **351** | Pn | **Pn** | **02 14 08.8** | **+0.7** |
| GSC | | | | IAML | | 02 15 04.8 | |
| | comp=N,24nm,0.7s | | | | | | |
| GSC | | | | IAML | | 02 15 10.1 | |
| | comp=E,42nm,0.9s | | | | | | |
| **TUQ** | **Turquoise Moun** | **3.57** | **3** | Sb | **Sg** | **02 15 06.2** | **-2.4** |
| | baz=184 | | | | | | |
| **W13A** | **Hualapai Mount** | **3.76** | **30** | Pn | **Pn** | **02 14 13.3** | **+1.2** |
| **QSM** | **Queen of Sheba** | **4.14** | **352** | Pn | **Pn** | **02 14 18.2** | **+1.1** |
| **MPMC** | **Manual Prospec** | **4.33** | **346** | Sb | **Sg** | **02 15 28.4** | **-4.4** |
| | baz=166 | | | | | | |
| **GWY** | **Greenwater Val** | **4.34** | **355** | Pn | **Pn** | **02 14 21.0** | **+1.0** |
| **TUC** | **Tucson** | **4.60** | **83** | Pn | **Pn** | **02 14 25.2** | **+1.7** |
| **SHPR** | **Sheep Range** | **4.71** | **10** | Pn | **Pn** | **02 14 26.3** | **+1.1** |
| **X16A** | **Lo Mia Camp, P** | **4.72** | **56** | | **Pn** | **02 14 26.1** | **+0.8** |
| **TPNV** | **Topopah Spring** | **5.08** | **359** | | **Pn** | **02 14 31.5** | **+1.3** |
| TPNV | | | | IAML | | 02 17 02.1 | |
| | comp=E,7.8nm,4.8s | | | | | | |
| **WUAZ** | **Wupatki** | **5.42** | **46** | Pn | **Pn** | **02 14 36.1** | **+1.2** |
| **LCH** | **Last Change Ra** | **5.50** | **348** | Pn | **Pn** | **02 14 36.6** | **+0.7** |
| **U15A** | **North Rim** | **5.58** | **34** | Pn | **Pn** | **02 14 38.5** | **+1.2** |
| **PRN** | **Pahroc Range** | **5.61** | **9** | Pn | **Pn** | **02 14 38.1** | **+0.6** |
| **LCMT** | **Little Creek M** | **5.68** | **24** | | **Pn** | **02 14 39.8** | **+1.3** |
| **CCUT** | **Cedar City** | **6.13** | **21** | Pn | **Pn** | **02 14 45.4** | **+0.6** |

*IDC **20** 02:21:44.0±1.8,23.42N×121.10E,h0km,mb3.7/4,*
*mb1 3.8/4,mb1mx3.5/32,mbtmp3.7/4,MS4.1/2,Ms1 4.1/2,*
*ms1mx2.7/81,Error ellipse: s-maj=152.0km s-min=23.0km*
*az=64.0*
*TAP **20** 02:21:45.8,24.14N×122.43E,h31km,ML3.7,D*
*JMA **20** 02:21:45.3±0.2,24.05N×122.43E,h23km±4km,M3.3*
**ISC 20 02:21:45.4**±1.0,**24.07N**±0.02×**122.43E**±0.02,**h26**km±10km,
**n103,σ1s02**/174,**mb3.5**/4,**Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.60** | **51** | P | **Pb** | **02 21 57.1** | **-0.3** |
| JYNG | | | | S | **Sb** | **02 22 05.0** | **-0.5** |
| **YOJ** | **Yonaguni jima** | **0.66** | **54** | P | **Pb** | **02 21 58.2** | **-0.1** |
| YOJ | | | | *e*S | **Sb** | **02 22 06.8** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.66** | **54** | *i* P | **Pb** | **02 21 58.2** | **-0.1** |
| | baz=57 | | | | | | |
| YOJ | | | | *i* S | **Sb** | **02 22 06.6** | **-0.4** |
| | baz=57 | | | | | | |
| **EWUT** | **Wuta** | **0.70** | **302** | P | **Pb** | **02 21 59.1** | **0.0** |
| | baz=297 | | | | | | |
| EWUT | | | | S | **Sn** | **02 22 08.6** | **-1.1** |
| | baz=297 | | | | | | |
| **ENA** | **Nanau** | **0.72** | **300** | P | **Pn** | **02 21 59.6** | **-0.4** |
| | baz=295 | | | | | | |
| ENA | | | | S | **Sb** | **02 22 08.8** | **-0.1** |
| | baz=295 | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **277** | *e*P | **Pn** | **02 21 59.7** | **-0.6** |
| | baz=257 | | | | | | |
| ETL | | | | *e*S | **Sn** | **02 22 10.8** | **+0.1** |
| | baz=257 | | | | | | |
| **TWC** | **Suao** | **0.75** | **315** | P | **Pn** | **02 21 59.3** | **-1.1** |
| | baz=302 | | | | | | |
| TWC | | | | S | **Sb** | **02 22 08.7** | **-1.0** |
| | baz=302 | | | | | | |
| **TWD** | **Chiawan** | **0.76** | **271** | *e*P | **Pn** | **02 21 59.6** | **-0.9** |
| | baz=266 | | | | | | |
| TWD | | | | *e*S | **Sb** | **02 22 10.4** | **+0.3** |
| | baz=266 | | | | | | |
| **NACB** | **Ninganchiao** | **0.77** | **278** | P | **Pn** | **02 21 59.8** | **-0.8** |
| | baz=259 | | | | | | |
| NACB | | | | *e*S | **Sb** | **02 22 10.5** | **+0.2** |
| | baz=259 | | | | | | |
| **NDS** | **Dongshan** | **0.86** | **311** | *e*P | **Pb** | **02 22 01.8** | **+0.1** |
| | baz=308 | | | | | | |
| NDS | | | | *e*S | **Sb** | **02 22 12.7** | **-0.1** |
| | baz=308 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.88** | **279** | P | **Pn** | **02 22 01.6** | **-0.6** |
| | baz=276 | | | | | | |
| ETLH | | | | S | **Sn** | **02 22 13.2** | **-0.9** |
| | baz=276 | | | | | | |
| **ILA** | **Ilan** | **0.93** | **318** | *e*P | **Pb** | **02 22 03.2** | **+0.3** |
| | baz=309 | | | | | | |
| ILA | | | | *e*S | **Sb** | **02 22 15.2** | **+0.4** |
| | baz=309 | | | | | | |
| **LATG** | **Datong** | **0.94** | **299** | *e*P | **Pb** | **02 22 03.1** | **-0.1** |
| | baz=296 | | | | | | |
| LATG | | | | *e*S | **Sb** | **02 22 16.4** | **+1.0** |
| | baz=296 | | | | | | |
| **ESL** | **Shilin** | **0.95** | **255** | *e*P | **Pn** | **02 22 02.5** | **-0.5** |
| | baz=251 | | | | | | |
| ESL | | | | *e*S | **Sn** | **02 22 13.9** | **-1.8** |
| | baz=251 | | | | | | |
| **TWE** | **Neicheng** | **0.95** | **313** | P | **Pb** | **02 22 03.2** | **0.0** |
| | baz=311 | | | | | | |
| TWE | | | | *e*S | **Sb** | **02 22 15.0** | **-0.4** |
| | baz=311 | | | | | | |
| **NTC** | **Toucheng** | **0.95** | **325** | *e*P | **Pb** | **02 22 03.3** | **0.0** |
| | baz=323 | | | | | | |
| NTC | | | | *e*S | **Sb** | **02 22 15.2** | **-0.3** |
| | baz=323 | | | | | | |
| **ENTT** | **Nioudou** | **0.97** | **306** | P | **Pb** | **02 22 03.7** | **+0.1** |
| | baz=303 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **02 22 17.1** | **+1.1** |
| | baz=303 | | | | | | |
| **NDT** | **Datong Townshi** | **0.99** | **302** | *e*P | **Pb** | **02 22 04.2** | **+0.3** |
| | baz=300 | | | | | | |
| NDT | | | | *e*S | **Sb** | **02 22 16.9** | **+0.4** |
| | baz=300 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.02** | **337** | P | **Pb** | **02 22 04.2** | **-0.2** |
| | baz=351 | | | | | | |
| TWB1 | | | | *e*S | **Sb** | **02 22 17.4** | **+0.1** |
| | baz=351 | | | | | | |
| **NNSB** | **Datong** | **1.02** | **291** | *e*P | **Pb** | **02 22 05.6** | **+1.1** |
| | baz=288 | | | | | | |
| NNSB | | | | S | **Sb** | **02 22 17.8** | **+0.3** |
| | baz=288 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.03** | **312** | P | **Pb** | **02 22 04.6** | **0.0** |
| | baz=301 | | | | | | |
| FUSB | | | | S | **Sb** | **02 22 17.9** | **+0.2** |
| | baz=301 | | | | | | |
| **NNS** | **Nan Shan** | **1.03** | **291** | *e*P | **Pb** | **02 22 04.5** | **-0.2** |
| | baz=288 | | | | | | |
| NNS | | | | *e*S | **Sb** | **02 22 18.7** | **+0.8** |
| | baz=288 | | | | | | |
| **TIPB** | **Shuangxi** | **1.05** | **329** | *e*P | **Pb** | **02 22 04.5** | **-0.4** |
| | baz=318 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **02 22 18.4** | **0.0** |
| | baz=318 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.07** | **274** | *e*P | **Pn** | **02 22 04.5** | **-0.6** |
| | baz=271 | | | | | | |
| **HGSD** | **Ruisui** | **1.09** | **238** | *e*P | **Pn** | **02 22 03.9** | **-1.0** |
| | baz=235 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **02 22 17.3** | **-1.9** |
| | baz=235 | | | | | | |
| **FUSS** | **Fushou** | **1.10** | **279** | *e*P | **Pn** | **02 22 05.3** | **0.0** |
| | baz=277 | | | | | | |
| FUSS | | | | *e*S | **Sb** | **02 22 20.6** | **+0.7** |
| | baz=277 | | | | | | |
| **NWLT** | **Wulai** | **1.10** | **310** | *e*P | **Pb** | **02 22 05.8** | **0.0** |
| | baz=308 | | | | | | |
| NWLT | | | | *e*S | **Sb** | **02 22 20.1** | **+0.3** |
| | baz=308 | | | | | | |
| **YHNB** | **Yeheng** | **1.13** | **302** | *e*P | **Pb** | **02 22 06.0** | **-0.4** |
| | baz=288 | | | | | | |
| YHNB | | | | *e*S | **Sb** | **02 22 21.2** | **+0.5** |
| | baz=288 | | | | | | |
| **CHGB** | **Renai** | **1.15** | **270** | *e*P | **Pn** | **02 22 05.8** | **-0.2** |
| | baz=256 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **02 22 21.1** | **+0.1** |
| | baz=256 | | | | | | |
| **NSK** | **Sanguang** | **1.15** | **302** | *i* P | **Pb** | **02 22 06.1** | **-0.5** |
| | baz=289 | | | | | | |
| NSK | | | | *e*S | **Sb** | **02 22 21.5** | **+0.3** |
| | baz=289 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.16** | **329** | *e*P | **Pb** | **02 22 06.0** | **-0.8** |
| | baz=328 | | | | | | |
| NWF | | | | *e*S | **Sb** | **02 22 22.2** | **+0.8** |
| | baz=328 | | | | | | |
| **EHY** | **Hungye** | **1.16** | **241** | *e*P | **Pn** | **02 22 05.3** | **-0.7** |
| | baz=253 | | | | | | |
| EHY | | | | *e*S | **Sn** | **02 22 19.9** | **-1.0** |
| | baz=253 | | | | | | |
| **TWT** | **Tachien** | **1.16** | **279** | *e*P | **Pb** | **02 22 07.0** | **+0.1** |
| | baz=265 | | | | | | |
| **TDCB** | **Techi** | **1.18** | **279** | *e*P | **Pn** | **02 22 06.6** | **+0.3** |
| | baz=266 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **02 22 21.5** | **0.0** |
| | baz=266 | | | | | | |
| **TWA** | **Mucha** | **1.19** | **320** | *e*P | **Pb** | **02 22 07.7** | **+0.4** |
| | baz=334 | | | | | | |
| TWA | | | | *e*S | **Sb** | **02 22 22.4** | **+0.1** |
| | baz=334 | | | | | | |
| **WUSB** | **Renai** | **1.20** | **266** | *e*P | **Pn** | **02 22 06.5** | **-0.1** |
| | baz=264 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **02 22 22.3** | **+0.1** |
| | baz=264 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.21** | **317** | *e*P | **Pb** | **02 22 08.1** | **+0.4** |
| | baz=330 | | | | | | |
| NHDH | | | | *e*S | **Sb** | **02 22 24.0** | **+1.1** |
| | baz=330 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.22** | **77** | P | **Pn** | **02 22 07.0** | **+0.3** |
| IRIF | | | | S | **Sb** | **02 22 23.8** | **+0.8** |
| **VWDT** | **VWDT** | **1.22** | **255** | *e*P | **Pn** | **02 22 06.9** | **+0.1** |
| | baz=243 | | | | | | |
| **YULB** | **Yu-li** | **1.24** | **237** | *e*P | **Pn** | **02 22 06.5** | **-0.5** |
| | baz=250 | | | | | | |
| YULB | | | | *e*S | **Sn** | **02 22 22.0** | **-1.0** |
| | baz=250 | | | | | | |
| **EYUL** | **Yuli** | **1.25** | **235** | *e*P | **Pn** | **02 22 05.9** | **-1.2** |
| | baz=233 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **02 22 22.4** | **-0.7** |
| | baz=233 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.26** | **90** | P | **Pn** | **02 22 07.7** | **+0.4** |
| HATJ | | | | *e*S | **Sb** | **02 22 24.1** | **-0.1** |
| **TWF1** | **Yuli** | **1.26** | **236** | *e*P | **Pn** | **02 22 07.3** | **-0.1** |
| | baz=233 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.32** | **295** | *e*P | **Pb** | **02 22 09.7** | **+0.1** |
| | baz=293 | | | | | | |
| NFF | | | | *e*S | **Sb** | **02 22 27.0** | **+0.9** |
| | baz=293 | | | | | | |
| **FULB** | **Fuli** | **1.36** | **230** | *e*P | **Pn** | **02 22 08.1** | **-0.6** |
| | baz=228 | | | | | | |
| **WHP** | **Taichung City** | **1.37** | **279** | *e*P | **Pn** | **02 22 09.7** | **+0.8** |
| | baz=266 | | | | | | |
| WHP | | | | *e*S | **Sb** | **02 22 27.1** | **-0.5** |
| | baz=266 | | | | | | |
| **SSLB** | **Suanglung** | **1.38** | **258** | *e*P | **Pn** | **02 22 09.1** | **+0.1** |
| | baz=256 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **02 22 27.1** | **+0.7** |
| | baz=256 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.39** | **270** | *e*P | **Pn** | **02 22 09.5** | **+0.4** |
| | baz=267 | | | | | | |
| **LIOB** | **Emei** | **1.41** | **294** | *e*P | **Pb** | **02 22 10.8** | **-0.3** |
| | baz=293 | | | | | | |
| LIOB | | | | *e*S | **Sb** | **02 22 29.2** | **+0.5** |
| | baz=293 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.41** | **263** | *e*P | **Pn** | **02 22 09.9** | **+0.4** |
| | baz=260 | | | | | | |
| **NSTT** | **Nanjuang** | **1.42** | **293** | *e*P | **Pb** | **02 22 10.8** | **-0.4** |
| | baz=292 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **02 22 29.0** | **+0.1** |
| | baz=292 | | | | | | |
| **TWY** | **Chenhua** | **1.42** | **328** | *e*P | **Pb** | **02 22 11.2** | **0.0** |
| | baz=327 | | | | | | |
| TWY | | | | *e*S | **Sb** | **02 22 30.1** | **+1.2** |
| | baz=327 | | | | | | |
| **TYC** | **Yuchr** | **1.45** | **264** | *e*P | **Pn** | **02 22 10.4** | **+0.5** |
| | baz=261 | | | | | | |
| TYC | | | | *e*S | **Sb** | **02 22 29.5** | **-0.2** |
| | baz=261 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.45** | **83** | P | **Pb** | **02 22 11.1** | **-0.7** |
| JKRS | | | | S | **Sb** | **02 22 30.6** | **+0.8** |
| **YUS** | **Yu-Shan** | **1.47** | **247** | *e*P | **Pn** | **02 22 11.3** | **+0.6** |
| | baz=245 | | | | | | |
| YUS | | | | *e*S | **Sn** | **02 22 27.9** | **-1.5** |
| | baz=245 | | | | | | |
| **EDH** | **Donghe** | **1.50** | **224** | *e*P | **Pn** | **02 22 09.7** | **-1.0** |
| | baz=212 | | | | | | |
| EDH | | | | *e*S | **Sn** | **02 22 27.4** | **-2.1** |
| | baz=212 | | | | | | |
| **TWQ1** | **Liyutan** | **1.54** | **281** | *e*P | **Pb** | **02 22 12.9** | **-0.3** |
| | baz=279 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **02 22 33.2** | **+0.9** |
| | baz=279 | | | | | | |
| **NSY** | **Sanyi** | **1.56** | **283** | *e*P | **Pb** | **02 22 13.3** | **-0.3** |
| | baz=282 | | | | | | |
| NSY | | | | *e*S | **Sb** | **02 22 33.9** | **+0.9** |
| | baz=282 | | | | | | |
| **NMLH** | **Miaoli** | **1.57** | **288** | *e*P | **Pb** | **02 22 13.0** | **-0.7** |
| | baz=286 | | | | | | |
| NMLH | | | | *e*S | **Sb** | **02 22 33.8** | **+0.7** |
| | baz=286 | | | | | | |
| **WJS** | **Zhushan** | **1.58** | **261** | *e*P | **Pb** | **02 22 13.4** | **-0.5** |
| | baz=259 | | | | | | |
| WJS | | | | *e*S | **Sb** | **02 22 36.6** | **+3.2** |
| | baz=259 | | | | | | |
| **ALS** | **Alishan** | **1.59** | **250** | *e*P | **Pn** | **02 22 12.9** | **+0.7** |
| | baz=248 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.59** | **79** | P | **Pn** | **02 22 11.8** | **-0.1** |
| JIJ | | | | S | **Sn** | **02 22 32.2** | **+0.6** |
| **WNT** | **Mingjian** | **1.61** | **263** | *e*P | **Pb** | **02 22 13.9** | **-0.5** |
| | baz=261 | | | | | | |
| WNT | | | | *e*S | **Sb** | **02 22 34.5** | **+0.2** |
| | baz=261 | | | | | | |
| **LDUT** | **Ludao** | **1.65** | **213** | *e*P | **Pn** | **02 22 11.4** | **-1.2** |
| | baz=210 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **02 22 30.2** | **-2.8** |
| | baz=210 | | | | | | |
| **WDJ** | **Dajia District** | **1.66** | **280** | *e*P | **Pb** | **02 22 14.4** | **-0.9** |
| | baz=278 | | | | | | |
| WDJ | | | | *e*S | **Sb** | **02 22 36.6** | **+0.9** |
| | baz=278 | | | | | | |
| **LONT** | **Longtian** | **1.66** | **226** | *e*P | **Pn** | **02 22 13.2** | **+0.3** |
| | baz=237 | | | | | | |
| LONT | | | | *e*S | **Sn** | **02 22 32.6** | **-0.8** |
| | baz=237 | | | | | | |
| **CHN5** | **Tsauling** | **1.67** | **254** | *e*P | **Pb** | **02 22 15.0** | **-0.5** |
| | baz=243 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **02 22 37.2** | **+1.0** |
| | baz=243 | | | | | | |
| **TWGBT** | **Beinan** | **1.76** | **225** | *e*P | **Pn** | **02 22 13.7** | **-0.5** |
| | baz=234 | | | | | | |
| **STYH** | **Taoyuan** | **1.76** | **240** | *e*P | **Pn** | **02 22 15.1** | **+0.8** |
| | baz=228 | | | | | | |
| STYH | | | | *e*S | **Sn** | **02 22 35.9** | **0.0** |
| | baz=228 | | | | | | |
| **TWG** | **Pinlang** | **1.76** | **225** | *e*P | **Pn** | **02 22 13.8** | **-0.4** |
| | baz=234 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.79** | **73** | P | **Pn** | **02 22 14.6** | **0.0** |
| JISG | | | | *e*S | **Sn** | **02 22 36.7** | **+0.2** |
| **TPUB** | **Ta-pu** | **1.82** | **245** | *e*P | **Pn** | **02 22 16.6** | **+1.5** |
| | baz=244 | | | | | | |
| TPUB | | | | *e*S | **Sb** | **02 22 40.3** | **-0.2** |
| | baz=244 | | | | | | |
| **CHN4** | **Tsaushan** | **1.83** | **247** | *e*P | **Pb** | **02 22 18.5** | **+0.3** |
| | baz=246 | | | | | | |
| CHN4 | | | | *e*S | **Sb** | **02 22 40.8** | **+0.1** |
| | baz=246 | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **244** | *e*P | **Pn** | **02 22 17.4** | **+1.8** |
| | baz=242 | | | | | | |
| WTP | | | | *e*S | **Sb** | **02 22 42.3** | **+0.7** |
| | baz=242 | | | | | | |
| **TWK** | **Hsinying** | **1.95** | **246** | *e*P | **Pn** | **02 22 18.8** | **+1.8** |
| | baz=244 | | | | | | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MASBT** | **Mashibuluo** | **2.20** | **229** | *e*P | | **Pn** | **02 22 21.3** | **+1.1** |
| | baz=223 | | | | | | | |
| MASBT | | | | *e*S | | **Sn** | **02 22 49.8** | **+3.2** |
| | baz=223 | | | | | | | |
| **LYUB** | **Lan-yu** | **2.20** | **201** | *e*P | | **Pn** | **02 22 19.2** | **-1.1** |
| | baz=199 | | | | | | | |
| **EAST** | **Anshuo** | **2.22** | **221** | *e*P | | **Pn** | **02 22 22.2** | **+1.6** |
| | baz=219 | | | | | | | |
| **TAWH** | **Dawu Township** | **2.23** | **220** | *e*P | | **Pn** | **02 22 20.1** | **-0.6** |
| | baz=228 | | | | | | | |
| **SCZT** | **Fangliau** | **2.37** | **225** | *e*P | | **Pn** | **02 22 25.6** | **+3.0** |
| | baz=218 | | | | | | | |
| SCZT | | | | *e*S | | **Sn** | **02 22 54.5** | **+3.5** |
| | baz=218 | | | | | | | |
| **TWKBT** | **Hengchun** | **2.59** | **215** | *e*P | | **Pn** | **02 22 25.9** | **+0.2** |
| | baz=213 | | | | | | | |
| TWKBT | | | | *e*S | | **Sn** | **02 22 57.9** | **+1.6** |
| | baz=213 | | | | | | | |
| **MATB** | **Ma-tsu** | **3.06** | **313** | *e*P | | **Pn** | **02 22 31.8** | **-0.3** |
| | baz=298 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.16** | **288** | *e*P | | **Pn** | **02 22 33.3** | **-0.2** |
| | baz=286 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.45** | **316** | *e*P | | **Pn** | **02 22 37.1** | **-0.4** |
| | baz=322 | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.49** | **325** | *e*P | | **Pn** | **02 22 38.2** | **+0.1** |
| | baz=321 | | | | | | | |
| **KNM** | **Kinmen** | **3.66** | **276** | *e*P | | **Pn** | **02 22 42.0** | **+1.6** |
| | baz=275 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.69** | **304** | *e*P | | **Pn** | **02 22 39.7** | **-1.0** |
| | baz=301 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.71** | **277** | *e*P | | **Pn** | **02 22 40.8** | **-0.2** |
| | baz=275 | | | | | | | |
| **AXDP** | **Jialang** | **4.15** | **282** | *e*P | | **Pn** | **02 22 47.0** | **0.0** |
| | baz=270 | | | | | | | |
| **KSRS** | **Korea Array** | **14.15** | **18** | LR | | LR | 02 30 35.1 | |
| | comp=Z,20nm,21.0s,baz=270,slow=35 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.21** | **316** | P | | **P** | **02 29 10.3** | **-1.1** |
| | 0.4nm,0.6s,baz=104,slow=10,SNR=9.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.26** | **164** | P | | **P** | **02 30 00.7** | **-0.2** |
| | 0.1nm,0.4s,baz=347,slow=8.9,SNR=6.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.74** | **166** | P | | **P** | **02 30 28.6** | **+0.5** |
| | 0.4nm,0.6s,baz=342,slow=7.0,SNR=7.5 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **69.83** | **348** | LR | | LR | 03 07 21.8 | |
| | comp=Z,101nm,19.6s,baz=26,slow=39 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **70.07** | **338** | P | | P | 02 32 58.8 | +4.1 |
| | 2.4nm,0.9s,baz=71,slow=6.8,SNR=1.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.71** | **319** | LR | | LR | 03 08 29.5 | |
| | comp=Z,132nm,18.9s,baz=269,slow=38 | | | | | | | |

*IDC* ***20*** *02:31:31.4±5.8, 19.°70S×178.°51W, h502km±40km, mb3.1/4, mb1 3.5/5, mb1mx3.1/25, mbtmp4.0/5, Error ellipse: s-maj=165.0km s-min=21.7km az=151.0*

**ISC 20 02:31:30.8**±1.9**, 19.°8S**±0.°5×**178.°5W**±0.°2**, h500**km**, n6,** σ0**33**/6**, mb3.5**/4**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.88** | **301** | P | **P** | **02 32 48.5** | **0.0** |
| | 7.8nm,0.3s,baz=77,slow=19,SNR=56 | | | | | | |
| **ASAR** | **Alice Springs** | **44.26** | **256** | P | **P** | **02 38 55.8** | **+0.1** |
| | 2.5nm,0.5s,baz=96,slow=7.6,SNR=60 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.27** | **261** | P | **P** | **02 38 55.8** | **+0.1** |
| | 0.9nm,0.3s,baz=96,slow=7.6,SNR=45 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.80** | **44** | P | **P** | **02 42 52.6** | **+0.3** |
| | 0.2nm,0.6s,baz=215,slow=7.7,SNR=3.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **88.74** | **43** | P | **P** | **02 43 30.9** | **-0.1** |
| | 0.3nm,0.7s,baz=191,slow=4.1,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.03** | **313** | PKPbc | **PKPbc** | **02 50 14.3** | **-0.4** |
| | 0.8nm,0.7s,baz=116,slow=6.6,SNR=4.2 | | | | | | |

*IGIL* ***20*** *02:51:16.9, 36.°61N×9.°76W, h13km, ML1.4*
*INMG* ***20*** *02:51:17.4±1.1, 36.°65N×9.°78W, h16km±4km, ML1.7, Error ellipse: s-maj=5.6km s-min=5.1km az=39.0*
*CNRM* ***20*** *02:51:18.7, 36.°13N×9.°06W, h0km, ml3.8*

**ISC 20 02:51:10.6**±1.4**, 36.°47N**±0.°03×**9.°92W**±0.°09**, h10**km**, n23,** σ2**23**/39**, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.09** | **53** | *e*P | **Pn** | **02 51 33.5** | **+1.4** |
| PFVI | | | | *e*S | **Sn** | **02 51 45.8** | **-1.5** |
| **MORF** | **Marmelete** | **1.31** | **50** | *e*P | **Pg** | **02 51 36.6** | **+0.7** |
| MORF | | | | *e*S | **Sg** | **02 51 51.0** | **-2.0** |
| MORF | | | | IAML | | 02 51 53.9 | |
| | comp=E,8.6nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.31** | **50** | *e*P | **Pg** | **02 51 36.9** | **+1.0** |
| MORF | | | | *e*S | **Sn** | **02 51 52.1** | **-0.6** |
| MORF | | | | A | A | 02 51 52.4 | |
| | comp=E,6.2nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.44** | **41** | *e*S | **Sn** | **02 51 54.1** | **-1.5** |
| **PBDV** | **Barranco-do-Ve** | **1.77** | **64** | *e*Pn | **Pb** | **02 51 43.1** | **-0.1** |
| PBDV | | | | *e*Sn | **Sn** | **02 52 02.4** | **-1.5** |
| **PCVE** | **Castro Verde** | **1.90** | **52** | *e*Sn | **Sn** | **02 52 05.8** | **-1.2** |
| PCVE | | | | A | A | 02 52 08.6 | |
| | comp=E,2.3nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.92** | **44** | *e*P | **Pb** | **02 51 45.0** | **-0.8** |
| MESJ | | | | *e*S | **Sn** | **02 52 05.5** | **-2.2** |
| MESJ | | | | IAML | | 02 52 09.1 | |
| | comp=N,2.3nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **1.92** | **44** | *e*Pn | **Pb** | **02 51 45.0** | **-0.8** |
| MESJ | | | | *e*Sn | **Sn** | **02 52 06.3** | **-1.4** |
| MESJ | | | | A | A | 02 52 10.2 | |
| | comp=N,3.3nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.98** | **34** | *e*Sn | **Sn** | **02 52 07.0** | **-2.0** |
| PNCL | | | | A | A | 02 52 09.9 | |
| | comp=N,3.0nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.99** | **61** | *e*Pn | **Pb** | **02 51 46.8** | **-0.2** |
| PVAQ | | | | *e*Sn | **Sn** | **02 52 08.2** | **-1.2** |
| PVAQ | | | | A | A | 02 52 12.7 | |
| | comp=N,3.4nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.99** | **61** | P | **Pg** | **02 51 52.2** | **+3.3** |
| PVAQ | | | | S | **Sn** | **02 52 07.7** | **-1.7** |
| **PMAFR** | **Mafra** | **2.53** | **11** | *e*Pn | **Pn** | **02 51 53.2** | **+1.4** |
| PMAFR | | | | *e*Sn | **Sn** | **02 52 20.5** | **-2.2** |
| PMAFR | | | | A | A | 02 52 21.9 | |
| | comp=N,9.7nm,0.8s | | | | | | |
| **EVO** | **Evora** | **2.55** | **36** | *e*Pn | **Pn** | **02 51 53.3** | **+1.2** |
| EVO | | | | *e*Sn | **Sn** | **02 52 20.8** | **-2.5** |
| EVO | | | | A | A | 02 52 22.4 | |
| | comp=N,3.9nm,0.3s | | | | | | |
| **PMTG** | **Montargil** | **2.92** | **27** | *e*Pn | **Pn** | **02 51 59.0** | **+1.9** |
| PMTG | | | | *e*Sn | **Sn** | **02 52 29.0** | **-3.3** |
| PMTG | | | | A | A | 02 52 32.3 | |
| | comp=N,2.1nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **3.02** | **37** | *e*Sn | **Sn** | **02 52 32.0** | **-2.8** |
| **PSBE** | **So Bento** | **3.17** | **16** | *e*Pn | **Pn** | **02 52 01.7** | **+1.2** |
| PSBE | | | | *e*Sn | **Sn** | **02 52 36.9** | **-1.5** |
| **PMRV** | **Marv??o** | **3.56** | **33** | *e*Pn | **Pn** | **02 52 07.8** | **+1.8** |
| PMRV | | | | *e*Sn | **Sn** | **02 52 44.5** | **-3.7** |
| PMRV | | | | A | A | 02 52 47.3 | |
| | comp=N,1.7nm,0.5s | | | | | | |
| **OUK** | **Oukaimeden** | **5.52** | **161** | P | **Pn** | **02 52 35.1** | **+1.9** |
| OUK | | | | S | **Sn** | **02 53 33.2** | **-3.7** |
| **MD31** | **MD31** | **5.56** | **129** | P | **Pn** | **02 52 35.5** | **+1.9** |
| MD31 | | | | S | Sn | 02 53 29.0 | -8.7 |
| **MDT** | **Midelt** | **5.70** | **128** | P | **Pn** | **02 52 37.6** | **+2.2** |
| MDT | | | | S | **Sn** | **02 53 35.4** | **-5.5** |
| **TTIG** | **Tnine Tigouga,** | **6.04** | **168** | P | **Pn** | **02 52 41.5** | **+1.4** |
| **OUZM** | **OUZ** | **6.14** | **154** | P | **Pn** | **02 52 44.0** | **+2.5** |
| OUZM | | | | S | **Sn** | **02 53 49.1** | **-2.7** |
| **TZRR** | **Tazzarine** | **6.73** | **146** | P | **Pn** | **02 52 52.4** | **+2.8** |
| TZRR | | | | S | Sn | 02 54 00.6 | -5.8 |

*SKHL* ***20*** *02:51:08.9±0.3, 46.°30N×140.°50E, h7km±1km, mb5.0/9*
*JMA* ***20*** *02:51:09.5±0.4, 46.°28N×140.°55E, h0km, M4.4*
*NIED* ***20*** *02:51:09.6, 46.°28N×140.°55E, h0km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.00; Mθθ0.85; Mϕϕ-0.85; Mrθ-0.32; Mrϕ1.00; Mθϕ-1.43; Fault plane solution: M₀1.96000×10¹⁵ NP1:ϕs19.00000°, δ89.00000°, λ-132.00000°. NP2:ϕs288.00000°, δ42.00000°, λ-1.00000°.*
*MOS* ***20*** *02:51:10.0±3.7, 46.°80N×140.°50E, h10km, mb4.2/10, MS3.7/4 Error ellipse: s-maj=8.5km s-min=5.2km az=119.8*
*IDC* ***20*** *02:51:11.1±0.7, 46.°23N×140.°70E, h0km, mb3.8/12, mb1 4.0/14, mb1mx3.9/36, mbtmp3.8/14, ML3.2/2, MS3.3/10, Ms1 3.4/10, ms1mx3.0/94, Error ellipse: s-maj=17.9km s-min=14.0km az=179.0*
*NEIC* ***20*** *02:51:12.9±1.8, 46.°22N±0.°07×140.°81E±0.°07, h10km±1km, mb4.2/13, Error ellipse: s-maj=11.9km s-min=7.1km az=160.0*
*BJI* ***20*** *02:51:12.5±0.0, 46.°00N×141.°00E, h30km, mb4.2/10, mB4.4/1, ML4.3/1, Ms4.6/3, Ms7 4.3/3*

**ISC 20 02:51:12.**3±1.1**, 46.°26N**±0.°03×**140.°65E**±0.°03**, h4**km±7km**, n85,** σ2**20**/95**, mb4.0**/28**, MS3.8**/11**, 13C-1D, Primorye**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JRBN** | **Rebuntou** | **0.89** | **161** | P | **Pg** | **02 51 27.4** | **-1.9** |
| JRBN | | | | *e*S | **Sg** | **02 51 39.8** | **-0.9** |
| **JRR** | **Rishiri** | **1.22** | **157** | P | **Pg** | **02 51 34.1** | **-1.4** |
| JRR | | | | *e*S | **Sg** | **02 51 51.7** | **+0.4** |
| **KHLM** | **Kholmsk** | **1.25** | **50** | *i* Pg | **Pg** | **02 51 34.7** | **-1.5** |
| KHLM | | | | *e*Sg | **Sn** | **02 51 53.0** | **-0.7** |
| **JWK2** | **Keihoku** | **1.29** | **137** | P | **Pg** | **02 51 35.3** | **-1.6** |
| JWK2 | | | | *e*S | **Sb** | **02 51 54.1** | **+0.2** |
| **YSS** | **Yuzh-Sakhalins** | **1.61** | **64** | *e*PN | **Pn** | **02 51 39.9** | **-1.5** |
| YSS | | | | *e* | | 02 51 58.8 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,320nm,1.2s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **1.61** | **64** | | **Pn** | **02 51 40.1** | **-1.3** |
| **YSS** | **Yuzh-Sakhalins** | **1.61** | **64** | *e*P | **Pn** | **02 51 39.8** | **-1.6** |
| YSS | | | | P | **Pg** | **02 51 42.0** | **-1.1** |
| | comp=E,66nm,0.4s | | | | | | |
| YSS | | | | *e*S | **Sn** | **02 52 00.9** | **-1.7** |
| YSS | | | | S | **Sg** | **02 52 03.5** | **-0.4** |
| | comp=E,350nm,0.5s | | | | | | |
| YSS | | | | S | **Sg** | **02 52 03.5** | **-0.4** |
| | comp=E,310nm,0.5s | | | | | | |
| **JSE** | **Soyaes** | **1.88** | **133** | P | **Pn** | **02 51 43.2** | **-2.0** |
| **ASAJ** | **Asahikawa** | **2.55** | **147** | Pn | **Pn** | **02 51 52.9** | **-1.5** |
| | comp=E,2.9nm,0.3s,baz=333,slow=11,SNR=18 | | | | | | |
| ASAJ | | | | LR | LR | 02 53 07.2 | |
| | comp=E,732nm,19.4s,baz=142,slow=46 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.55** | **147** | P | **Pn** | **02 51 54.1** | **-0.3** |
| **ASAJ** | **Asahikawa** | **2.55** | **147** | PN | **Pn** | **02 51 53.1** | **-1.3** |
| **JKA** | **Kamikawa-asahi** | **2.55** | **147** | | **Pn** | **02 51 53.1** | **-1.3** |
| **UGL** | **Uglegorsk** | **2.98** | **18** | *e*PN | **Pn** | **02 52 01.6** | **+1.4** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,190nm,0.8s | | | | | | |
| **UGL** | **Uglegorsk** | **2.98** | **18** | *e*P | **Pn** | **02 52 02.0** | **+1.8** |
| UGL | | | | P | **Pb** | **02 52 03.3** | **-2.5** |
| | comp=Z,200nm,0.8s | | | | | | |
| UGL | | | | *e*Sg | **Sg** | **02 52 49.3** | **+1.5** |
| UGL | | | | A | A | 02 52 53.0 | |
| | comp=Z,340nm,0.8s | | | | | | |
| UGL | | | | A | A | 02 52 53.0 | |
| | comp=Z,500nm,0.8s | | | | | | |
| **TEY** | **Ternei** | **3.09** | **248** | *e*PN | **Pn** | **02 52 02.3** | **+0.5** |
| TEY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **JEW** | **Eniwo** | **3.47** | **170** | Pn | **Pn** | **02 52 06.1** | **-0.9** |
| **TYV** | **Tymovskoe** | **4.79** | **15** | *e*PN | **Pn** | **02 52 26.0** | **+0.8** |
| TYV | | | | *e*S | **Sn** | **02 53 14.0** | **-7.1** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,52nm,0.6s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,200nm,3.5s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,36nm,1.0s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,41nm,1.0s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=Z,800nm,14.0s | | | | | | |
| **TYV** | **Tymovskoe** | **4.79** | **15** | *e*P | **Pn** | **02 52 24.4** | **-0.8** |
| TYV | | | | AMB | AMB | 02 52 28.6 | |
| | comp=Z,50nm,0.7s | | | | | | |
| TYV | | | | *e*S | **Sn** | **02 53 18.2** | **-2.9** |
| TYV | | | | A | A | 02 53 23.0 | |
| | comp=Z,30nm,0.7s | | | | | | |
| TYV | | | | A | A | 02 53 23.0 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **GRNR** | **Gornyy** | **5.31** | **330** | *i*PN | **Pn** | **02 52 32.6** | **+0.2** |
| GRNR | | | | *e*S | **Sn** | **02 53 26.2** | **-7.8** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| GRNR | | | | smax | smax | | |
| | comp=E,300nm,0.6s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=N,330nm,14.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=Z,520nm,15.0s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **6.46** | **254** | Pn | **Pn** | **02 52 50.1** | **+2.0** |
| USA0B | | | | Pg | **Pg** | **02 53 15.8** | **0.0** |
| USA0B | | | | Sg | **Sg** | **02 54 36.3** | **-3.2** |
| **USRK** | **Ussuriysk Ar.** | **6.46** | **254** | Pg | Pb | 02 53 10.6 | +5.5 |
| | baz=52,slow=18,SNR=4.2 | | | | | | |
| USRK | | | | Lg | Lg | 02 54 35.1 | |
| | baz=65,slow=24,SNR=2.5 | | | | | | |
| USRK | | | | LR | LR | 02 55 28.1 | |
| | comp=Z,416nm,18.0s,baz=81,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **6.46** | **254** | Pn | **Pn** | **02 52 49.3** | **+1.2** |
| USRK | | | | Sg | **Sg** | **02 54 35.7** | **-3.7** |
| **KLR** | **Kul'dur** | **6.70** | **300** | Pn | **Pn** | **02 52 51.9** | **+0.6** |
| | comp=Z,0.7nm,0.3s,baz=111,slow=19,SNR=13 | | | | | | |
| KLR | | | | Lg | Lg | 02 54 45.3 | |
| | comp=Z,0.7nm,0.3s,baz=48,slow=18,SNR=4.7 | | | | | | |
| **KLR** | **Kul'dur** | **6.70** | **300** | *e*PN | **Pn** | **02 52 51.3** | **0.0** |
| **MDJ** | **Mudanjiang** | **7.95** | **262** | Pn | **Pn** | **02 53 10.0** | **+1.4** |
| **ZEA** | **Zeya** | **11.40** | **316** | *e*PN | Pn | 02 54 06.5 | +11 |
| ZEA | | | | MLR | MLR | | |
| | comp=E,100nm,4.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=N,400nm,9.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,300nm,7.0s | | | | | | |
| **KSRS** | **Korea Array** | **12.93** | **232** | LR | LR | 02 58 20.1 | |
| | comp=Z,101nm,20.6s,baz=40,slow=33 | | | | | | |
| **PETK** | **Petropavlovsk-** | **12.97** | **52** | LR | LR | 02 59 38.2 | |
| | comp=Z,68nm,19.9s,baz=220,slow=39 | | | | | | |
| **TJN** | **Taejon** | **14.02** | **230** | *ce*P | **P** | **02 54 43.5** | **+3.8** |
| **MA2** | **Magadan** | **14.64** | **21** | P | **Pn** | **02 54 38.9** | **-1.1** |
| **MA2** | **Magadan** | **14.64** | **21** | Pn | **Pn** | **02 54 38.9** | **-1.1** |
| **YAK** | **Yakutsk** | **17.01** | **342** | LR | LR | 03 01 50.5 | |
| | comp=Z,91nm,20.0s,baz=303,slow=38 | | | | | | |
| **SEY** | **Seymchan** | **17.98** | **18** | *e*P | **P** | **02 55 27.7** | **+4.3** |
| **ULN** | **Ulaanbaatar** | **22.84** | **286** | *i*P | **P** | **02 56 19.1** | **+2.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **22.84** | **286** | P | **P** | **02 56 15.9** | **-0.6** |
| **SONM** | **Songino Array** | **23.29** | **286** | P | **P** | **02 56 20.5** | **-0.5** |
| | comp=Z,1.6nm,0.8s,baz=79,slow=8.2,SNR=10 | | | | | | |
| SONM | | | | LR | LR | 03 07 16.7 | |
| | comp=Z,72nm,18.1s,baz=53,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **23.29** | **286** | P | **P** | **02 56 20.5** | **-0.5** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.6s | | | | | | |
| **SONM** | **Songino Array** | **23.29** | **286** | IAmb | IAmb | 02 56 24.9 | |
| | comp=Z,7.6nm,1.6s | | | | | | |
| **ZAK** | **Zakamensk** | **25.01** | **293** | *e*P | **P** | **02 56 37.2** | **+0.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **25.50** | **22** | *i*P | **P** | **02 56 44.5** | **+3.2** |
| BILL | | | | *e* | | 02 57 27.0 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,18nm,4.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,326nm,19.0s | | | | | | |
| **TIXI** | **Tiksi** | **26.07** | **352** | *i*P | **P** | **02 56 49.4** | **+3.0** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| TIXI | | | | MLR | MLR | | |
| | comp=Z,110nm,13.0s | | | | | | |
| **TIXI** | **Tiksi** | **26.07** | **352** | P | **P** | **02 56 47.5** | **+1.1** |
| TIXI | | | | IAmb | IAmb | 02 56 51.8 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **GOMU** | **GeErMu** | **35.47** | **270** | P | **P** | **02 58 11.3** | **+1.2** |
| GOMU | | | | ScS | ScS | 03 08 20.3 | -11 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,37nm,5.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,160nm,13.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,90nm,13.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,59nm,13.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **35.78** | **303** | P | **P** | **02 58 12.4** | **+0.3** |
| ZAA0 | | | | IAmb | IAmb | 02 58 38.0 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.78** | **303** | P | **P** | **02 58 12.1** | **-0.1** |
| | comp=Z,1.7nm,0.9s,baz=96,slow=11,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.78** | **303** | *i* P | **P** | **02 58 15.6** | **+3.4** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **IMAR** | **Indian Mountai** | **39.25** | **36** | P | **P** | **02 58 41.3** | **-0.1** |
| **MK31** | **Makanchi Array** | **39.35** | **293** | *ce*P | **P** | **02 58 45.0** | **+2.5** |
| **MK31** | **Makanchi Array** | **39.35** | **293** | P | **P** | **02 58 42.9** | **+0.4** |
| MK31 | | | | IAmb | IAmb | 02 58 45.1 | |
| | comp=Z,7.3nm,1.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.35** | **293** | P | **P** | **02 58 42.0** | **-0.5** |
| | comp=Z,1.0nm,0.7s,baz=78,slow=9.2,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.35** | **293** | *ce*P | **P** | **02 58 44.7** | **+2.2** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **39.54** | **293** | P | **P** | **02 58 44.8** | **+0.7** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.7s | | | | | | |
| **MAKZ** | **Makanchi** | **39.54** | **293** | P | **P** | **02 58 44.8** | **+0.7** |
| MAKZ | | | | IAmb | IAmb | 03 00 12.3 | |
| | comp=Z,8.6nm,1.7s | | | | | | |
| **KURK** | **Kurchatov** | **40.29** | **300** | *i*P | **P** | **02 58 52.4** | **+2.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.9s | | | | | | |
| **IL31** | | **42.24** | **37** | P | **P** | **02 59 04.9** | **-1.2** |
| IL31 | | | | IAmb | IAmb | 02 59 11.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **42.24** | **37** | P | **P** | **02 59 05.4** | **-0.8** |
| | comp=Z,2.3nm,0.7s,baz=288,slow=7.5,SNR=13 | | | | | | |
| **SCRK** | **Sand Creek** | **43.64** | **38** | IAmb | IAmb | 02 59 19.8 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.09** | **245** | LR | LR | 03 18 25.1 | |
| | comp=Z,24nm,18.1s,baz=290,slow=37 | | | | | | |
| **BRVK** | **Borovoye** | **44.37** | **306** | *i*eP | **P** | **02 59 25.7** | **+2.3** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| **BCAR** | **Beaver Creek A** | **44.83** | **39** | P | **P** | **02 59 27.3** | **+0.3** |
| **INK** | **Inuvik** | **46.58** | **31** | P | **P** | **02 59 40.4** | **-0.3** |
| | comp=Z,1.2nm,0.8s,baz=306,slow=5.6,SNR=2.8 | | | | | | |
| **KKAR** | **Karatay Array** | **48.47** | **293** | P | **P** | **02 59 56.7** | **+0.8** |
| **KKAR** | **Karatay Array** | **48.47** | **293** | P | **P** | **02 59 56.6** | **+0.8** |
| **ARU** | **Arti** | **49.32** | **313** | *c* P | **P** | **03 00 04.6** | **+2.5** |
| ARU | | | | | | 03 01 56.7 | |
| ARU | | | | S | **S** | **03 07 04.8** | **-4.0** |
| ARU | | | | SS | **SS** | **03 10 32.9** | **-6.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **51.87** | **305** | P | **P** | **03 00 21.8** | **+0.4** |
| **RES** | **Resolute Bay** | **53.84** | **16** | P | **P** | **03 00 38.1** | **+2.4** |
| | comp=Z,4.3nm,0.8s,baz=297,slow=7.4,SNR=17 | | | | | | |
| **RES** | **Resolute Bay** | **53.84** | **16** | P | **P** | **03 00 38.1** | **+2.4** |
| RES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **RES** | **Resolute Bay** | **53.84** | **16** | P | **P** | **03 00 38.1** | **+2.4** |
| **YKA** | **Yellowknife Ar** | **56.23** | **33** | P | **P** | **03 00 52.2** | **-0.9** |
| | comp=Z,0.9nm,0.7s,baz=305,slow=6.6,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **60.47** | **330** | P | **P** | **03 01 22.9** | **+0.3** |
| | comp=Z,3.4nm,1.0s,baz=35,slow=7.0,SNR=4.6 | | | | | | |
| FINES | | | | LR | LR | 03 32 34.7 | |
| | comp=Z,69nm,19.3s,baz=312,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **60.47** | **330** | *i* P | **P** | **03 01 25.5** | **+2.8** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **LEM** | **Lembang** | **60.49** | **218** | LR | LR | 03 27 44.2 | |
| | comp=Z,571nm,18.8s,baz=106,slow=36 | | | | | | |
| **MNK** | **Minsk** | **64.64** | **323** | *i* P | **P** | **03 01 48.8** | **-1.8** |
| MNK | | | | *i* | | 03 02 27.9 | |
| MNK | | | | *i* | | 03 04 09.3 | |
| MNK | | | | *i* PPP | PPP | 03 05 39.5 | |
| MNK | | | | *i* S | S | 03 10 19.3 | -11 |
| MNK | | | | *i* | | 03 11 40.2 | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,17nm,1.1s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,2.0nm,0.9s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,41nm,20.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,321nm,22.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,78nm,16.0s | | | | | | |
| **MNK** | **Minsk** | **64.64** | **323** | *i* P | **P** | **03 01 48.9** | **-1.8** |
| | comp=E,2.0nm,0.9s | | | | | | |
| MNK | | | | *i* P | **P** | **03 01 48.9** | **-1.8** |
| | comp=N,17nm,1.1s | | | | | | |
| MNK | | | | *i* P | **P** | **03 01 48.9** | **-1.8** |
| | comp=Z,6.0nm,0.9s,baz=45 | | | | | | |
| MNK | | | | *i* PcP | **PcP** | **03 02 28.0** | **+3.5** |
| MNK | | | | *i* PP | **PP** | **03 04 09.3** | **-2.8** |
| MNK | | | | *i* PPP | PPP | 03 05 39.5 | |
| MNK | | | | *i* S | S | 03 10 19.3 | -11 |
| MNK | | | | *i* SS | **SS** | **03 14 40.5** | **+0.1** |
| MNK | | | | *i* SSS | SSS | 03 17 33.7 | |
| MNK | | | | *i* LQ | LQ | 03 26 31.0 | |
| MNK | | | | *i* LR | LR | 03 29 37.5 | |
| MNK | | | | *i* LRM | MLR | 03 32 22.9 | |
| | comp=E,41nm,20.4s | | | | | | |
| MNK | | | | *i* LRM | MLR | 03 32 45.0 | |
| | comp=N,321nm,22.0s | | | | | | |
| MNK | | | | *i* LRM | MLR | 03 32 50.9 | |
| | comp=Z,78nm,16.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **65.50** | **336** | LR | LR | 03 33 38.2 | |
| | comp=Z,23nm,18.8s,baz=240,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.14** | **186** | P | **P** | **03 01 59.4** | **-1.3** |
| | comp=Z,1.0nm,1.1s,baz=3.4,slow=7.6,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.14** | **186** | IAmb | IAmb | 03 01 59.8 | |
| | comp=Z,0.7nm,1.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **66.76** | **320** | *ce*P | P | 03 02 09.5 | +5.1 |
| **FRB** | **Frobisher Bay** | **67.93** | **14** | P | **P** | **03 02 13.7** | **+2.1** |
| **AS31** | **Alice Springs** | **69.86** | **187** | P | **P** | **03 02 24.6** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 03 02 47.2 | |
| | comp=Z,2.5nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **69.86** | **187** | P | **P** | **03 02 24.1** | **0.0** |
| | comp=Z,0.9nm,0.8s,baz=5.1,slow=5.4,SNR=7.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **70.04** | **55** | P | **P** | **03 02 25.8** | **+0.4** |
| | comp=Z,0.6nm,0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KBS | Kingsbay | 6.77 | 14 | *eP* | | Pn | 02 56 45.3 | +0.8 |
| KIF | Kilpisjarvi | 6.79 | 113 | Pn | | Pn | 02 56 47.2 | +2.3 |
| KIF | | | | Sn | | Sn | 02 57 59.6 | -2.5 |
| KIF | Kilpisjarvi | 6.79 | 113 | *eP* | | Pn | 02 56 47.0 | +2.2 |
| KIF | | | | *eP* | | Pn | 02 56 47.4 | +2.5 |
| KIF | | | | MPN | | | 02 56 50.9 | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| KIF | | | | *eS* | | Sn | 02 57 58.8 | -3.3 |
| KIF | Kilpisjarvi | 6.79 | 113 | *eP* | | Pn | 02 56 47.0 | +2.2 |
| KIF | | | | MPN | | | 02 56 50.9 | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| KIF | | | | *eS* | | Sn | 02 57 58.8 | -3.3 |
| DBG | Daneborg | 6.90 | 296 | Pn | | Pn | 02 56 44.5 | -1.9 |
| DBG | | | | Sn | | Sn | 02 57 55.0 | -10 |
| DBG | Daneborg | 6.90 | 296 | *i* P | | Pn | 02 56 43.2 | -3.2 |
| DBG | | | | *i* P | | Pn | 02 56 43.2 | -3.2 |
| DBG | | | | IAML | | | 02 56 51.4 | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| DBG | Daneborg | 6.90 | 296 | *eP* | | Pn | 02 56 43.9 | -2.5 |
| DBG | | | | Pn | | Pn | 02 56 44.5 | -1.9 |
| DBG | | | | Sn | | Sn | 02 57 55.0 | -10 |
| DBG | | | | *eS* | | Sn | 02 57 55.4 | -9.5 |
| KONS | Konsvik | 6.98 | 145 | *eP* | | Pn | 02 56 50.4 | +3.0 |
| STOK | Stokkvaagen | 7.12 | 146 | *eP* | | Pn | 02 56 52.1 | +2.9 |
| KTK1 | Kautokeino | 7.48 | 108 | *eP* | | Pn | 02 56 55.7 | +1.4 |
| MOR8 | Moi Rana | 7.51 | 143 | *eP* | | Pn | 02 56 58.9 | +4.2 |
| MOR8 | | | | *eS* | | Sn | 02 58 16.3 | -3.6 |
| LANU | Lannavaara | 7.76 | 116 | *eP* | | Pn | 02 57 00.8 | +2.7 |
| LANU | | | | *eS* | | Sn | 02 58 22.2 | -3.7 |
| LANU | Lannavaara | 7.76 | 116 | *eP* | | Pn | 02 57 00.8 | +2.7 |
| LANU | | | | *eS* | | Sn | 02 58 22.2 | -3.7 |
| ARA0 | ARCESS Array S | 7.84 | 102 | Pn | | Pn | 02 57 01.2 | +2.0 |
| | baz=312,slow=14 | | | | | | | |
| ARA0 | | | | Sn | | Sn | 02 58 25.2 | -2.6 |
| ARA0 | ARCESS Array S | 7.84 | 102 | *eP* | | Pn | 02 57 00.6 | +1.4 |
| ARA0 | | | | Pn | | Pn | 02 57 01.2 | +2.0 |
| | baz=312,slow=14 | | | | | | | |
| ARA0 | | | | Sn | | Sn | 02 58 26.1 | -1.7 |
| ARA0 | ARCESS Array S | 7.84 | 102 | *eP* | | Pn | 02 57 00.8 | +1.6 |
| ARA0 | | | | *eS* | | Sn | 02 58 22.4 | -5.4 |
| HEF | Hetta | 7.98 | 111 | *eP* | | Pn | 02 57 03.9 | +2.8 |
| HEF | | | | MPN | | | 02 57 05.7 | |
| | comp=Z,0.8nm,0.2s | | | | | | | |
| HEF | | | | *eS* | | Sn | 02 58 28.1 | -3.2 |
| HEF | Hetta | 7.98 | 111 | *eP* | | Pn | 02 57 03.6 | +2.4 |
| HEF | | | | MPN | | | 02 57 05.7 | |
| | comp=Z,0.8nm,0.2s | | | | | | | |
| HEF | | | | *eS* | | Sn | 02 58 28.1 | -3.2 |
| KEV | Kevo | 8.17 | 98 | *eP* | | Pn | 02 57 04.4 | +0.7 |
| KEV | Kevo | 8.17 | 98 | *eP* | | Pn | 02 57 04.9 | +1.2 |
| SCO | Scoresbysund | 8.21 | 268 | *i* P | | Pn | 02 57 03.6 | -0.8 |
| SCO | | | | IAML | | | 02 57 07.7 | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| NSS | Namsos | 8.65 | 154 | *eP* | | Pn | 02 57 12.8 | +2.5 |
| KLF | Kolari | 8.87 | 116 | *eP* | | Pn | 02 57 15.7 | +2.4 |
| KLF | | | | *eS* | | Sn | 02 58 50.2 | -2.9 |
| KLF | Kolari | 8.87 | 116 | *eP* | | Pn | 02 57 15.7 | +2.4 |
| KLF | | | | *eS* | | Sn | 02 58 50.2 | -2.9 |
| APA0 | Apatity Array | 11.20 | 101 | Pn | | Pn | 02 57 47.3 | +2.1 |
| | baz=326,slow=8.6 | | | | | | | |
| APA0 | Apatity Array | 11.20 | 101 | Pn | | Pn | 02 57 47.3 | +2.1 |
| | baz=326,slow=8.6 | | | | | | | |
| MSF | Maaselka | 11.23 | 113 | *eP* | | Pn | 02 57 45.9 | +0.3 |
| MSF | Maaselka | 11.23 | 113 | *eP* | | Pn | 02 57 45.9 | +0.3 |
| HFS | Hagfors | 13.11 | 156 | Pn | | Pn | 02 58 13.8 | +2.4 |
| | baz=350,slow=14 | | | | | | | |
| HFS | Hagfors | 13.11 | 156 | Pn | | Pn | 02 58 13.8 | +2.4 |
| | baz=350,slow=14 | | | | | | | |
| FIA0 | FINESS Array S | 14.13 | 130 | Pn | | Pn | 02 58 27.5 | +2.2 |
| | baz=338,slow=7.9 | | | | | | | |
| FIA0 | FINESS Array S | 14.13 | 130 | Pn | | Pn | 02 58 27.5 | +2.2 |
| | baz=338,slow=7.9 | | | | | | | |

*IDC **20** 03:10:50.0±1.3, 12°.97N×143°.43E, h215km±17km, mb3.4/8, mb1 3.6/8, mb1mx3.3/40, mbtmp3.9/8, Error ellipse: s-maj=38.9km s-min=13.2km az=93.0*

**ISC 20 03:10:48.9±0.8, 13°.0N±0°.1×143°.2E±0°.1, h200km, n9, σ0.9 90/11, mb3.5/8, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GUMO | Guam | 1.75 | 69 | P | Pn | 03 11 25.8 | +0.9 |
| | 11nm,0.3s,baz=40,slow=23,SNR=1.7 | | | | | | |
| GUMO | | | | S | Sn | 03 11 52.9 | -0.1 |
| | 72nm,0.3s,baz=359,slow=23,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 33.83 | 195 | P | P | 03 17 12.6 | +0.1 |
| | 1.8nm,0.7s,baz=15,slow=9.6,SNR=22 | | | | | | |
| ASAR | Alice Springs | 37.51 | 194 | P | P | 03 17 43.8 | 0.0 |
| | 0.6nm,0.5s,baz=19,slow=12,SNR=22 | | | | | | |
| ASAR | | | | PcP | PcP | 03 19 58.2 | +0.5 |
| | 0.2nm,0.6s,baz=22,slow=8.0,SNR=4.4 | | | | | | |
| STKA | Stephens Creek | 44.60 | 182 | P | P | 03 18 41.1 | -0.3 |
| | 1.0nm,0.6s,baz=355,slow=11,SNR=3.5 | | | | | | |
| SONM | Songino Array | 46.32 | 326 | P | P | 03 18 55.7 | +0.8 |
| | 0.5nm,0.6s,baz=148,slow=8.6,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 60.82 | 317 | P | P | 03 20 40.9 | +0.9 |
| | 0.5nm,0.6s,baz=86,slow=8.9,SNR=7.0 | | | | | | |
| ILAR | Eielson Array | 69.84 | 25 | P | P | 03 21 36.7 | -0.8 |
| | 0.3nm,0.6s,baz=253,slow=6.1,SNR=4.7 | | | | | | |
| ARCES | ARCESS Array B | 87.18 | 342 | P | P | 03 23 10.8 | -1.3 |
| | 8.2nm,1.1s,baz=79,slow=6.4,SNR=5.8 | | | | | | |
| FINES | FINESS Array B | 91.04 | 335 | P | P | 03 23 29.0 | -1.3 |
| | 0.5nm,0.3s,baz=73,slow=5.4,SNR=14 | | | | | | |

*IDC **20** 03:23:22.2±1.6, 6°.66S×102°.25E, h0km, mb4.4/12, mb1 4.5/13, mb1mx4.1/42, mbtmp4.5/13, ML5.0/1, MS3.6/12, Ms1 3.6/12, ms1mx3.2/78, Error ellipse: s-maj=50.7km s-min=14.1km az=52.0*

*NEIC **20** 03:23:24.0±1.5, 6°.77S±0°.08×102°.24E±0°.08, h14km±4km, mb4.7/33, Error ellipse: s-maj=12.4km s-min=10.5km az=225.0*

*DJA **20** 03:23:28.6±0.7, 6°.S±2°.×10°.3E±°, h21km±6km, M4.7/26, mb4.8/26, mB5.2/8, MLv4.8/21, Mw(mB)4.6/8*

**ISC 20 03:23:23.5±0.5, 6°.68S±0°.06×102°.31E±0°.05, h10km, n145, σ1.5 56/135, mb4.7/43, MS3.7/18, 3C-1D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LWLI | Liwa | 2.40 | 47 | P | Pn | 03 24 03.0 | +0.1 |
| KASI | Kota Agung | 2.46 | 62 | P | Pn | 03 24 03.4 | -0.3 |
| KASI | | | | S | Sn | 03 24 30.2 | -3.6 |
| MDSI | Maura Dua | 2.86 | 41 | P | Pn | 03 24 09.4 | +0.1 |
| MDSI | | | | S | Sn | 03 24 41.3 | -2.5 |
| KSI | Kapahiang | 3.02 | 5 | P | Pn | 03 24 11.1 | -0.4 |
| KSI | | | | S | Sn | 03 24 42.3 | -5.5 |
| LHSI | Lahat | 3.08 | 23 | P | Pn | 03 24 12.0 | -0.2 |
| LHSI | | | | S | Sn | 03 24 42.7 | -6.5 |
| KLI | Kotabumi | 3.11 | 55 | P | Pn | 03 24 14.9 | +2.3 |
| KLI | | | | S | Sn | 03 24 46.5 | -3.4 |
| KLSI | | 3.11 | 51 | P | Pn | 03 24 12.7 | 0.0 |
| BLSI | Bandar Lampung | 3.19 | 66 | P | Pn | 03 24 13.7 | -0.1 |
| BLSI | | | | S | Sn | 03 24 48.9 | -3.1 |
| CGJI | Cibinong | 3.36 | 89 | P | Pn | 03 24 16.3 | +0.2 |
| CGJI | | | | S | Sn | 03 24 51.7 | -4.4 |
| MASI | Maura Aman, Be | 3.52 | 359 | P | Pn | 03 24 17.9 | -0.4 |
| SKJI | Sukabumi | 4.23 | 95 | P | Pn | 03 24 29.0 | +1.0 |
| DBJI | Dramaga | 4.41 | 89 | P | Pn | 03 24 31.4 | +0.8 |
| DBJI | | | | S | Sn | 03 25 19.0 | -3.0 |
| CBJI | Citeko | 4.52 | 87 | P | Pn | 03 24 32.3 | +0.3 |
| KRJI | Kerinci | 4.64 | 349 | P | Pn | 03 24 32.7 | -1.0 |
| KRJI | | | | S | Sn | 03 25 25.0 | -2.7 |
| CNJI | Cibinong | 4.82 | 98 | P | Pn | 03 24 35.5 | -0.7 |
| XMIS | Christmas Isla | 5.02 | 139 | Pn | Pn | 03 24 34.0 | -5.0 |
| XMIS | Christmas Isla | 5.02 | 139 | P | Pn | 03 24 37.7 | -1.2 |
| XMI | Christmas Isla | 5.02 | 139 | P | Pn | 03 24 36.5 | -2.4 |
| LEM | Lembang | 5.27 | 92 | Pn | Pn | 03 24 44.7 | +2.2 |
| | 52nm,0.3s,baz=248,slow=5.4,SNR=32 | | | | | | |
| LEM | Lembang | 5.27 | 92 | P | Pn | 03 24 43.9 | +1.4 |
| | 0.6nm2μm159nm,0.8s | | | | | | |
| CMJI | Cimerak | 6.19 | 101 | P | Pn | 03 24 54.1 | -0.9 |
| | 0.9nm3μm225nm,0.5s | | | | | | |
| PPI | Padang Panjang | 6.47 | 343 | P | Pn | 03 24 57.1 | -1.8 |
| | 20nm,1.2s | | | | | | |
| DSRI | Dabo | 6.56 | 20 | P | Pn | 03 24 58.8 | -1.3 |
| | 0.2nm34nm,1.0s | | | | | | |
| KPJI | Karang Pucung | 6.60 | 96 | P | Pn | 03 25 03.3 | +2.6 |
| | 0.5nm1μm130nm,0.6s | | | | | | |
| BKNI | Bangkinang | 7.07 | 350 | Pn | Pn | 03 25 07.3 | +0.1 |
| COCO | West Island | 7.69 | 224 | | Pn | 03 25 14.4 | -1.3 |
| YOGI | Yogyakarta | 8.00 | 99 | P | Pn | 03 25 19.7 | -0.2 |
| | 0.4nm87nm,0.7s | | | | | | |
| SMRI | Semarang | 8.08 | 93 | | Pn | 03 25 21.5 | +0.5 |
| SMRI | Semarang | 8.08 | 93 | P | Pn | 03 25 20.8 | -0.2 |
| | 0.6nm189nm,1.1s | | | | | | |
| SMRI | Semarang | 8.08 | 93 | P | Pn | 03 25 22.4 | +1.4 |
| UGM | Wanagama | 8.24 | 99 | | Pn | 03 25 22.7 | -0.5 |
| UGM | Wanagama | 8.24 | 99 | P | Pn | 03 25 23.8 | +0.6 |
| | 0.7nm2μm242nm,0.8s | | | | | | |
| UGM | Wanagama | 8.24 | 99 | P | Pn | 03 25 24.0 | +0.8 |
| PCJI | Pacitan | 8.92 | 100 | P | Pn | 03 25 32.9 | +0.4 |
| | 0.3nm1μm60nm,1.2s | | | | | | |
| GRJI | Gresik | 10.10 | 92 | P | Pn | 03 25 51.0 | +2.3 |
| | 2μm191nm,0.9s | | | | | | |
| STKI | Sintang | 11.34 | 54 | P | Pn | 03 26 11.6 | +5.9 |
| JAGI | Jajag, Banyuwa | 11.87 | 99 | Pn | Pn | 03 26 12.6 | -0.5 |
| JAGI | Jajag, Banyuwa | 11.87 | 99 | P | Pn | 03 26 15.1 | +2.1 |
| | 41nm,1.0s | | | | | | |
| JAGI | Jajag, Banyuwa | 11.87 | 99 | P | Pn | 03 26 12.5 | -0.5 |
| ABJI | Asem Bagus | 11.88 | 96 | P | Pn | 03 26 14.2 | +1.1 |
| SBUM | Sibu | 13.42 | 48 | Pn | Pn | 03 26 34.3 | +0.2 |
| MTKI | Muara Teweh, K | 13.79 | 66 | P | P | 03 26 51.1 | +3.4 |
| PLAI | Plampang | 15.47 | 99 | P | P | 03 27 06.2 | -0.3 |
| | 69nm,0.9s | | | | | | |
| PLAI | Plampang | 15.47 | 99 | P | Pn | 03 27 02.8 | +0.8 |
| KAPI | Kappang | 17.43 | 85 | LR | LR | 03 35 33.5 | |
| | comp=Z,174nm,18.3s,baz=277,slow=42 | | | | | | |
| BKSI | Bulukumba | 17.76 | 87 | P | Pn | 03 27 31.2 | +0.1 |
| | 16nm,1.0s | | | | | | |
| MPSI | Mapaga | 18.88 | 69 | P | P | 03 27 45.6 | +1.4 |
| | 31nm,1.4s | | | | | | |
| MMRI | Maumere | 19.84 | 97 | P | P | 03 27 54.1 | -0.7 |
| MMRI | Maumere | 19.84 | 97 | P | P | 03 27 55.8 | +1.0 |
| | 103nm,0.9s | | | | | | |
| MMRI | Maumere | 19.84 | 97 | P | P | 03 27 55.3 | +0.5 |
| TOLI2 | Tolitoli | 19.99 | 68 | P | P | 03 27 56.0 | -0.4 |
| TOLI2 | | | | IAmb | IAmb | 03 27 57.5 | |
| | comp=Z,32nm,1.1s | | | | | | |
| TOLI2 | Tolitoli | 19.99 | 68 | P | P | 03 27 55.6 | -0.8 |
| MYLDM | Lahad Datu | 20.00 | 54 | | P | 03 27 57.2 | +0.7 |
| MRSI | Marisa | 20.84 | 71 | P | Pn | 03 28 09.7 | +1.6 |
| | comp=Z,21nm,0.9s | | | | | | |
| BATI | Baumata | 21.41 | 101 | P | P | 03 28 12.7 | +0.9 |
| | comp=Z,118nm,0.9s,baz=211,slow=2.1,SNR=10 | | | | | | |
| BATI | Baumata | 21.41 | 101 | P | P | 03 28 14.0 | +2.2 |
| | comp=Z,764nmcomp=Z,84nm,1.0s | | | | | | |
| SOEI | Soe | 21.94 | 99 | P | P | 03 28 17.5 | -0.1 |
| SOEI | Soe | 21.94 | 99 | P | P | 03 28 18.0 | +0.4 |
| | comp=Z,200nm,0.9s | | | | | | |
| SOEI | Soe | 21.94 | 99 | P | P | 03 28 18.7 | +1.1 |
| UBPT | Khong Chiam | 22.04 | 8 | P | P | 03 28 17.8 | -0.7 |
| UBPT | | | | IAmb | IAmb | 03 28 19.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| CM31 | Chiang Mai Arr | 25.20 | 352 | P | P | 03 28 49.4 | -0.1 |
| CM31 | | | | IAmb | IAmb | 03 28 58.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 25.20 | 352 | P | P | 03 28 49.5 | 0.0 |
| | comp=Z,10.0nm,0.9s,baz=188,slow=8.5,SNR=47 | | | | | | |
| CMAR | Chiang Mai Arr | 25.20 | 352 | P | P | 03 28 49.3 | -0.2 |
| FITZ | Fitzroy Crossi | 25.42 | 119 | P | P | 03 28 52.1 | +0.5 |
| | comp=Z,5.3nm,0.6s,baz=276,slow=6.3,SNR=28 | | | | | | |
| FITZ | Fitzroy Crossi | 25.42 | 119 | P | P | 03 28 51.5 | 0.0 |
| CHTO | Chiang Mai | 25.55 | 353 | P | P | 03 28 52.0 | -0.6 |
| CHTO | | | | IAmb | IAmb | 03 29 01.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 25.55 | 353 | P | P | 03 28 48.8 | -3.9 |
| TNTI | Ternate | 26.08 | 74 | P | P | 03 28 57.5 | -0.1 |
| KNRA | Kununurra | 27.42 | 111 | P | P | 03 29 09.4 | -0.2 |
| KNRA | | | | IAmb | IAmb | 03 29 14.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| H08S2 | Diego Garcia H | 29.60 | 266 | T | T | 04 01 02.4 | |
| | baz=89,slow=75,SNR=35 | | | | | | |
| H08S3 | Diego Garcia H | 29.61 | 266 | T | T | 04 00 59.6 | |
| | baz=89,slow=75,SNR=96 | | | | | | |
| H08S1 | Diego Garcia H | 29.62 | 266 | T | T | 04 01 10.3 | |
| | baz=89,slow=75,SNR=10.0 | | | | | | |
| KMI | Kunming | 31.61 | 1 | ⇑P | P | 03 29 48.6 | +1.6 |
| KMI | | | | pP | pwP | 03 29 56.8 | +2.1 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,760nm,13.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,450nm,11.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,800nm,13.1s | | | | | | |
| PZH | PanZhiHua | 32.99 | 359 | P | P | 03 30 00.4 | +1.4 |
| PZH | | | | S | S | 03 35 21.8 | +4.3 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,190nm,4.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=N,400nm,14.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,450nm,15.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,410nm,12.4s | | | | | | |
| GYA | Guiyang | 33.21 | 7 | ⇑P | P | 03 30 02.1 | +1.2 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| SHL | Shillong | 33.62 | 343 | P | P | 03 30 03.5 | -1.0 |
| WB0 | Warramunga Arr | 33.75 | 116 | P | P | 03 30 05.6 | 0.0 |
| WB0 | | | | IAmb | IAmb | 03 30 17.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 33.76 | 116 | P | P | 03 30 06.0 | +0.3 |
| | comp=Z,4.3nm,0.8s,baz=285,slow=12,SNR=24 | | | | | | |
| WRA | Warramunga Arr | 33.76 | 116 | P | P | 03 30 05.0 | -0.7 |
| WRAB | Tennant Creek | 33.76 | 116 | P | P | 03 30 04.9 | -0.9 |
| WRAB | | | | IAmb | IAmb | 03 30 17.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| WB2 | Warramunga Arr | 33.77 | 116 | P | P | 03 30 05.4 | -0.4 |
| WB2 | | | | IAmb | IAmb | 03 30 17.5 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| WR0 | Warramunga Arr | 33.94 | 116 | IAmb | IAmb | 03 30 09.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| ASAR | Alice Springs | 34.73 | 123 | P | P | 03 30 14.2 | +0.2 |
| | comp=Z,0.8nm,0.5s,baz=298,slow=8.1,SNR=16 | | | | | | |
| CD2 | Chengdu | 37.40 | 2 | P | P | 03 30 37.0 | +0.2 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| COEN | Coen | 40.80 | 104 | P | P | 03 31 04.3 | -1.2 |
| XAN | Xi'an | 40.98 | 8 | P | P | 03 31 06.3 | -0.4 |
| XAN | | | | pP | pwP | 03 31 13.6 | -0.9 |
| XAN | | | | S | S | 03 37 16.4 | -2.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,360nm,11.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,400nm,13.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,600nm,12.6s | | | | | | |
| NJ2 | Nanjing | 41.62 | 21 | *eP* | P | 03 31 14.3 | +2.3 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| LZH | Lanzhou | 42.56 | 2 | *eP* | P | 03 31 20.5 | +0.7 |
| LZH | | | | pP | pwP | 03 31 26.8 | -0.7 |
| LZH | | | | sP | sP | 03 31 29.3 | +7.1 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,810nm,15.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,610nm,16.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,890nm,16.8s | | | | | | |
| GOMU | GeErMu | 43.23 | 351 | P | P | 03 31 25.6 | +0.2 |
| GOMU | | | | pP | pP | 03 31 28.0 | +0.8 |
| GOMU | | | | sP | sP | 03 31 28.8 | +1.0 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,52nm,4.9s | | | | | | |
| STKA | Stephens Creek | 44.37 | 130 | P | P | 03 31 36.1 | +1.7 |
| | comp=Z,2.3nm,0.8s,baz=326,slow=9.9,SNR=4.5 | | | | | | |
| STKA | Stephens Creek | 44.37 | 130 | P | P | 03 31 34.0 | -0.3 |
| PMG | Port Moresby | 44.47 | 97 | P | P | 03 31 35.8 | +0.4 |
| | comp=Z,4.6nm,0.4s,baz=235,slow=5.4,SNR=3.7 | | | | | | |
| PMG | Port Moresby | 44.47 | 97 | P | P | 03 31 35.8 | +0.4 |
| PMG | | | | IAmb | IAmb | 03 31 48.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| GTA | Gaotai | 45.91 | 357 | *eP* | P | 03 31 47.4 | +0.8 |
| GTA | | | | pP | sP | 03 31 52.5 | +3.5 |
| GTA | | | | sP | pwP | 03 31 56.8 | +2.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,45nm,4.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,180nm,15.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,220nm,16.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,310nm,15.3s | | | | | | |
| HHC | Hu-ho-hao-te | 48.05 | 9 | *eP* | P | 03 32 04.5 | +1.2 |
| HHC | | | | sP | pwP | 03 32 14.5 | +3.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,5.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,350nm,14.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,250nm,15.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,260nm,15.9s | | | | | | |
| BJI | Beijing | 48.22 | 14 | P | P | 03 32 04.8 | +0.4 |
| BJI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| NIL | Nilore | 48.66 | 327 | P | P | 03 32 08.0 | 0.0 |
| NIL | | | | IAmb | IAmb | 03 32 17.2 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| KSAR | Wonju Array Be | 49.97 | 27 | P | P | 03 32 18.0 | +0.1 |
| KSRS | Korea Array | 50.00 | 27 | P | P | 03 32 18.1 | +0.1 |
| | comp=Z,2.5nm,0.9s,baz=232,slow=7.8,SNR=8.1 | | | | | | |
| XLT | XiLinHaoTe | 51.86 | 13 | *eP* | P | 03 32 33.1 | +1.0 |
| XLT | | | | pP | pwP | 03 32 40.8 | +0.9 |
| XLT | | | | S | S | 03 40 01.3 | +6.5 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,170nm,4.7s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=N,23nm,18.5s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=E,240nm,14.0s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,280nm,15.6s | | | | | | |
| WMQ | Urumqi | 51.98 | 347 | *eP* | P | 03 32 32.3 | -0.7 |
| WMQ | | | | pP | pwP | 03 32 41.8 | +1.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| WSAR | Wadi Sarin | 52.02 | 306 | LR | LR | 03 54 42.9 | |
| | comp=Z,55nm,18.0s,baz=64,slow=36 | | | | | | |
| KSH | Kashi | 52.02 | 334 | P | P | 03 32 40.0 | +6.5 |
| KSH | | | | sP | pwP | 03 32 51.4 | +10 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| SONM | Songino Array | 54.40 | 3 | P | P | 03 32 51.5 | +0.7 |
| | comp=Z,5.4nm,0.6s,baz=184,slow=9.0,SNR=29 | | | | | | |
| SONM | Songino Array | 54.40 | 3 | P | P | 03 32 50.9 | +0.1 |
| SONM | | | | IAmb | IAmb | 03 32 54.8 | |

*TUL **20** 03:10:24.4±0.8, 36°.48N±0°.02×98°.75W±0°.04, h7km±2km, ML2.9, mb_Lg2.9/58(NEIC), Error ellipse: s-maj=4.7km s-min=2.9km az=89.0*

**NEIC 20 03:10:24.9±0.5, 36°.46N±0°.02×98°.75W±0°.04, h1km±5km, Error ellipse: s-maj=5.2km s-min=2.2km az=111.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| U32A | Winter Ranch, | 0.22 | 250 | Pg | Pg | 03 10 29.0 | -0.2 |
| FNO | Franklin | 1.62 | 137 | Pn | Pn | 03 10 54.2 | -0.4 |
| T35A | Sooner Cattle | 1.85 | 75 | Pn | Pn | 03 10 57.5 | -0.3 |
| T35A | | | | IAmb_Lg | | 03 11 23.5 | |
| | comp=Z,52nm,0.9s | | | | | | |
| R32A | Long Quarter, | 1.96 | 1 | | Pn | 03 10 59.4 | +0.1 |
| X34A | Smith Ranch, M | 1.99 | 158 | Pn | Pn | 03 11 00.5 | +0.8 |
| X34A | | | | IAmb_Lg | | 03 11 33.3 | |
| | comp=Z,76nm,0.7s | | | | | | |
| W35A | Tecumseh | 2.00 | 130 | Pn | Pn | 03 11 00.1 | +0.3 |
| TUL1 | Leonard | 2.45 | 102 | Pn | Pn | 03 11 05.4 | -0.6 |
| TUL1 | | | | IAmb_Lg | | 03 11 45.8 | |
| | comp=Z,48nm,1.0s | | | | | | |
| CBKS | Cedar Bluff | 2.48 | 342 | | Pn | 03 11 07.5 | +1.0 |
| AMTX | Amarillo | 2.86 | 238 | Pn | Pn | 03 11 13.8 | +2.1 |
| AMTX | | | | IAmb_Lg | | 03 11 58.8 | |
| | comp=Z,39nm,0.8s | | | | | | |
| KSU1 | Kansas State U | 3.14 | 32 | Pn | Pn | 03 11 15.6 | +0.2 |
| X37A | Clayton | 3.32 | 123 | IAmb_Lg | | 03 12 17.1 | |
| | comp=Z,43nm,0.9s | | | | | | |
| U38A | Gravette | 3.52 | 89 | IAmb_Lg | | 03 12 20.1 | |
| | comp=Z,22nm,0.7s | | | | | | |
| HHAR | Hobbs | 3.88 | 91 | IAmb_Lg | | 03 12 27.5 | |
| | comp=Z,21nm,0.7s | | | | | | |
| KSCO | Kaye Shedlock' | 4.00 | 311 | IAmb_Lg | | 03 12 36.9 | |
| | comp=Z,41nm,0.7s | | | | | | |
| MSTX | Muleshoe | 4.12 | 234 | IAmb_Lg | | 03 12 41.0 | |
| | comp=Z,18nm,0.8s | | | | | | |
| W39A | Magazine | 4.22 | 106 | IAmb_Lg | | 03 12 41.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| Z38A | Mt. Pleasant | 4.44 | 135 | IAmb_Lg | | 03 12 48.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| S39A | Bolivar | 4.51 | 73 | IAmb_Lg | | 03 12 47.6 | |
| | comp=Z,24nm,0.9s | | | | | | |
| U40A | Yellville | 4.75 | 89 | Pn | Pn | 03 11 37.4 | -0.3 |
| U40A | | | | IAmb_Lg | | 03 12 53.1 | |
| | comp=Z,30nm,1.1s | | | | | | |
| P38A | Dawn | 5.19 | 51 | IAmb_Lg | | 03 13 11.9 | |
| | comp=Z,18nm,0.9s | | | | | | |
| X40A | Basin Creek Fa | 5.21 | 110 | IAmb_Lg | | 03 13 15.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| WLAR | White Oak Lake | 5.38 | 119 | IAmb_Lg | | 03 13 27.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| FCAR | Ozark Folk Cen | 5.39 | 94 | IAmb_Lg | | 03 13 15.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| W41B | Gary Mavity, V | 5.43 | 102 | IAmb_Lg | | 03 13 19.3 | |
| | comp=Z,21nm,0.9s | | | | | | |
| SDCO | Great Sand Dun | 5.55 | 285 | IAmb_Lg | | 03 13 22.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| Q24A | Divide | 5.66 | 298 | IAmb_Lg | | 03 13 28.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| 435B | Jarrell | 5.74 | 170 | IAmb_Lg | | 03 13 33.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| Z41A | Richland Creek | 5.83 | 121 | IAmb_Lg | | 03 13 35.0 | |

comp=Z,5.9nm,0.7s
**ULN Ulaanbaatar 54.47 4** P **P** 03 32 51.2 **-0.2**
**MJAR Matsushiro Arr 54.58 35** P **P** 03 32 50.3 **-1.9**
comp=Z,1.6nm,0.6s,baz=238,slow=7.0,SNR=2.9
**MJAR Matsushiro Arr 54.58 35** IAmb IAmb 03 32 58.6
comp=Z,2.4nm,0.9s
**MK31 Makanchi Array 56.13 344** P **P** 03 33 02.6 **-0.6**
**MKAR Makanchi Array 56.13 344** P **P** 03 33 03.1 **-0.1**
comp=Z,2.6nm,0.7s,baz=146,slow=8.3,SNR=20
MKAR LR LR 03 59 03.3
comp=Z,57nm,20.3s,baz=99,slow=38
**MKAR Makanchi Array 56.13 344** P **P** 03 33 02.4 **-0.8**
**MAKZ Makanchi 56.23 343** P **P** 03 33 04.0 **0.0**
**BNX BinXian 56.80 21** ⇓P **P** 03 33 07.8 **-0.2**
BNX pmax pmax
comp=Z,26nm,1.2s
BNX pmax pmax
comp=Z,170nm,4.6s
**USA0B Ussuriysk Arra 57.29 25** P **P** 03 33 11.5 **+0.1**
USA0B IAmb IAmb 03 33 12.0
comp=Z,6.4nm,0.8s
**USRK Ussuriysk Ar. 57.29 25** P **P** 03 33 11.0 **-0.4**
comp=Z,2.1nm,0.6s,baz=198,slow=4.2,SNR=3.3
**USRK Ussuriysk Ar. 57.29 25** P **P** 03 33 11.5 **+0.1**
**KKAR Karatay Array 57.34 333** P **P** 03 33 10.3 **-1.6**
**KURK Kurchatov 60.72 343** P **P** 03 33 34.4 **-0.7**
KURK IAmb IAmb 03 33 49.4
comp=Z,8.0nm,1.1s
**ZALV Zalesovo Beam 62.17 348** P **P** 03 33 44.6 **-0.3**
comp=Z,3.2nm,0.4s,baz=165,slow=6.9,SNR=19
ZALV LR LR 04 01 35.8
comp=Z,51nm,18.3s,baz=140,slow=37
**BRVK Borovoye 65.41 339** P **P** 03 34 06.5 **+0.2**
BRVK IAmb IAmb 03 34 15.1
comp=Z,3.9nm,1.1s
**ABKAR Akbulak array 66.83 331** P **P** 03 34 14.6 **-0.8**
**AKTO Aktyubinsk 68.54 331** LR LR 04 05 58.5
comp=Z,40nm,20.6s,baz=116,slow=37
**MBAR Mbarara 71.63 272** LR LR 04 00 34.8
comp=Z,45nm,21.5s,baz=94,slow=31
**YAK Yakutsk 71.70 13** LR LR 04 07 36.2
comp=Z,30nm,18.8s,baz=289,slow=37
**LSZ Lusaka 72.99 256** LR LR 04 02 59.9
comp=Z,42nm,19.7s,baz=161,slow=33
**SYO Syowa Base 74.23 199** ⇑*i*pP pP 03 35 05.8 +3.9
**LBTB Lobatse 75.19 246** LR LR 04 02 08.0
comp=Z,46nm,21.6s,baz=158,slow=31
**MA2 Magadan 76.36 23** P **P** 03 35 12.7 **-0.1**
**NRIK Noril'sk 76.53 355** P **P** 03 35 13.5 **0.0**
NRIK IAmb IAmb 03 35 27.6
comp=Z,3.6nm,0.8s
**BR131 Keskin Array S 78.17 313** P **P** 03 35 24.3 **+0.8**
**BRTR Keskin Array B 78.17 313** LR LR 04 13 12.3
comp=Z,34nm,18.2s,baz=196,slow=38
**BRTR Keskin Array B 78.17 313** P **P** 03 35 23.0 **-0.5**
**TIXI Tiksi 80.11 8** LR LR 04 16 29.1
comp=Z,85nm,18.1s,baz=186,slow=40
**TIXI Tiksi 80.11 8** P **P** 03 35 32.2 **-1.0**
TIXI IAmb IAmb 03 35 41.5
comp=Z,10nm,1.3s
**NOA NORSAR Array B 96.33 331** LR LR 04 23 14.2
comp=Z,16nm,18.2s,baz=230,slow=37
**H09N1 TRISTAN DA CUN 105.17 229** T T 05 36 13.4
SNR=45
**TXAR Lajitas Array 146.72 44** PKPbc **PKPbc** 03 43 07.4 **+0.9**
comp=Z,1.9nm,0.8s,baz=284,slow=1.1,SNR=11
**TXAR Lajitas Array 146.72 44** PKPbc **PKPdf** 03 43 03.5 **-1.5**
**U40A Yellville 147.36 23** PKPbc **PKPdf** 03 43 06.2 **+0.5**
**FCAR Ozark Folk Cen 148.05 22** PKPbc **PKPdf** 03 43 07.3 **+0.5**
**LCAR Lake Charles 148.25 21** PKPbc **PKPdf** 03 43 07.3 **+0.2**
**JCT Junction City 148.51 38** PKPbc **PKPdf** 03 43 09.6 **+1.9**
**MIAR Mount Ida 148.63 26** PKPbc **PKPdf** 03 43 09.8 **+2.0**
**WVT Waverly 149.25 16** PKPbc **PKPdf** 03 43 10.8 **+2.1**
**237A Washetta, Mont 149.66 32** PKPbc **PKPdf** 03 43 11.7 **+2.2**

**WEL 20 03:30:50.8**±0.3,**44°S**±2°×**17°3E**±°,**h10**km±2km,**M3.4**/20,
**ML3.7**/27,**MLv3.4**/20,**Error ellipse: s-maj=0.0km**
**s-min=0.0km az=126.6,South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MQZ** | **McQueen's Vall** | **0.18** | **150** | P | Pg | 03 30 55.4 | +0.8 |
| MQZ | | | | S | Sg | 03 30 58.3 | +1.2 |
| **RACZ** | **Rakaia** | **0.33** | **238** | P | Pg | 03 30 58.1 | +0.7 |
| RACZ | | | | S | Sg | 03 31 03.1 | +1.2 |
| **AMCZ** | **Amberley** | **0.39** | **13** | P | Pb | 03 30 59.7 | -0.1 |
| AMCZ | | | | S | Sb | 03 31 05.8 | 0.0 |
| **OKCZ** | **Okains Bay** | **0.42** | **114** | P | Pb | 03 31 00.3 | -0.1 |
| **AKCZ** | **Akaroa Harbour** | **0.42** | **139** | P | Pb | 03 30 60.0 | -0.4 |
| **OXZ** | **Oxford** | **0.42** | **302** | P | Pg | 03 30 59.2 | +0.1 |
| OXZ | | | | S | Sg | 03 31 05.5 | +0.7 |
| **WACZ** | **Wakanui South** | **0.63** | **232** | P | Pb | 03 31 03.9 | -0.1 |
| **GVZ** | **Greta Valley S** | **0.69** | **32** | P | Pb | 03 31 05.3 | +0.3 |
| GVZ | | | | S | Sn | 03 31 16.2 | -1.4 |
| **MHCZ** | **Mount Hutt** | **0.70** | **271** | P | Pg | 03 31 04.7 | +0.3 |
| MHCZ | | | | S | Sb | 03 31 14.6 | -0.4 |
| **LTZ** | **Lake Taylor** | **0.80** | **346** | P | Pb | 03 31 06.8 | 0.0 |
| LTZ | | | | S | Sb | 03 31 17.7 | +0.1 |
| **ARCZ** | **Arundel** | **1.06** | **248** | P | Pg | 03 31 10.7 | -0.4 |
| ARCZ | | | | S | Sb | 03 31 25.3 | +0.1 |
| **RPZ** | **Rata Peaks** | **1.08** | **261** | P | Pg | 03 31 11.2 | -0.4 |
| RPZ | | | | S | Sb | 03 31 26.6 | +0.6 |
| **INZ** | **Inchbonnie** | **1.15** | **316** | P | Pb | 03 31 12.2 | -0.6 |
| INZ | | | | S | Sg | 03 31 27.9 | +0.1 |
| **KHZ** | **Kahutara** | **1.36** | **33** | P | Pn | 03 31 14.7 | -1.1 |
| **TMZ** | **Timaru** | **1.38** | **232** | P | Pn | 03 31 15.5 | -0.7 |
| TMZ | | | | S | Sg | 03 31 35.0 | -0.1 |
| **WVZ** | **Waitaha Valley** | **1.39** | **289** | P | Pb | 03 31 17.2 | +0.2 |
| **GCSZ** | **Gaunt Creek Bo** | **1.62** | **278** | P | Pn | 03 31 19.6 | +0.1 |
| **THZ** | **Tophouse** | **1.81** | **9** | P | Pn | 03 31 21.5 | -0.6 |
| **DSZ** | **Denniston Nort** | **1.89** | **343** | P | Pn | 03 31 22.7 | -0.5 |
| **LBZ** | **Lake Benmore** | **1.89** | **243** | P | Pn | 03 31 23.7 | +0.5 |
| **FOZ** | **Fox Glacier** | **1.97** | **270** | P | Pn | 03 31 25.1 | +0.8 |
| **ODZ** | **Otahua Downs** | **2.01** | **222** | P | Pn | 03 31 24.1 | -0.8 |
| **BSWZ** | **Blackbirch Sta** | **2.09** | **29** | P | Pn | 03 31 25.5 | -0.5 |
| **MRNZ** | **Matariki Terra** | **2.16** | **5** | P | Pn | 03 31 26.9 | 0.0 |
| **NNZ** | **Nelson** | **2.42** | **15** | P | Pn | 03 31 30.1 | -0.3 |
| **TCW** | **Tory Channel** | **2.67** | **30** | P | Pn | 03 31 33.2 | -0.8 |
| **HHSZ** | **Highcliff Hill** | **2.71** | **210** | P | Pn | 03 31 35.4 | +0.9 |
| **QRZ** | **Quartz Range** | **2.73** | **360** | P | Pn | 03 31 33.8 | -0.9 |
| **JCZ** | **Jackson Bay** | **2.76** | **258** | P | Pn | 03 31 35.8 | +0.5 |
| **PLWZ** | **Palliser** | **2.83** | **46** | P | Pn | 03 31 34.4 | -1.7 |
| **WKZ** | **Wanaka** | **2.83** | **242** | P | Pn | 03 31 36.1 | 0.0 |
| **EAZ** | **Earnscleugh** | **2.85** | **233** | P | Pn | 03 31 35.5 | -1.0 |
| **TUZ** | **Tuapeka** | **3.17** | **220** | P | Pn | 03 31 41.0 | +0.2 |
| **MLZ** | **Mavora Lakes** | **3.64** | **239** | P | Pn | 03 31 46.9 | -0.4 |
| **SYZ** | **Scrubby Hill** | **3.83** | **218** | P | Pn | 03 31 50.5 | +0.6 |
| **SNGZ** | **Shannon Statio** | **5.99** | **39** | P | Pn | 03 32 18.3 | -1.2 |

*IDC **20** 03:34:44.7±5.3,5.°50S×152.°10E,h64km±46km,mb3.6/8,*
*mb1 3.9/9,mb1mx3.5/42,mbtmp3.9/9,ML1.8/1,MS3.2/2,*
*Ms1 3.2/2,ms1mx2.6/50,Error ellipse: s-maj=52.4km*
*s-min=26.3km az=129.0*
**ISC 20 03:34:43.0**±1.2,**5.°4S**±0.°2×**152.°1E**±0.°3,**h45**km,**n12,**
σ1§**08**/11,**mb3.8**/8,**New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.34** | **231** | P | **Pn** | **03 36 15.0** | **+1.1** |
| | 1.4nm,0.3s,baz=36,slow=7.5,SNR=8.3 | | | | | | |
| PMG | | | | S | **Sn** | **03 37 25.7** | **+0.7** |
| | 4.2nm,0.3s,baz=269,slow=19,SNR=8.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.62** | **141** | LR | LR | 03 45 47.9 | |
| | comp=Z,61nm,19.5s,baz=178,slow=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.55** | **229** | P | **P** | **03 39 37.9** | **-1.6** |
| | 1.0nm,0.5s,baz=53,slow=9.8,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **25.27** | **222** | P | **P** | **03 40 04.3** | **-0.9** |
| | 2.8nm,0.9s,baz=53,slow=9.7,SNR=22 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.79** | **242** | P | **P** | **03 40 36.1** | **-0.8** |
| | 2.3nm,0.6s,baz=50,slow=7.5,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.69** | **344** | LR | LR | 04 00 33.7 | |
| | comp=Z,34nm,18.6s,baz=239,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **66.46** | **328** | P | **P** | **03 45 28.7** | **+0.7** |
| | 0.3nm,0.4s,baz=140,slow=5.2,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.32** | **319** | P | **P** | **03 46 49.3** | **-0.2** |
| | 0.5nm,0.8s,baz=85,slow=7.3,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **82.95** | **22** | P | **P** | **03 47 02.2** | **-0.7** |
| | 2.4nm,0.7s,baz=247,slow=5.4,SNR=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.97** | **52** | P | **P** | **03 47 53.6** | **+1.5** |
| | 0.3nm,0.7s,baz=243,slow=4.0,SNR=2.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.25** | **28** | P | **P** | **03 48 05.8** | **-0.5** |
| | 0.2nm,0.7s,baz=274,slow=5.2,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.84** | **287** | PKPbc | **PKPbc** | **03 54 29.0** | **-0.3** |
| | 0.8nm,0.6s,baz=38,slow=2.2,SNR=7.4 | | | | | | |

*TUL **20** 03:36:29.2±1.1,36.°28N±0.°01×97.°51W±0.°02,h6km±7km,*
*ML2.6,mb_Lg2.6/41(NEIC),Error ellipse: s-maj=2.8km*
*s-min=0.8km az=53.0*
**NEIC 20 03:36:28.8**±1.0,**36.°27N**±0.°02×**97.°52W**±0.°02,**h3**km±8km,
**Error ellipse: s-maj=2.8km s-min=2.1km az=54.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.86** | **176** | | Pg | 03 36 45.2 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **0.87** | **175** | Pg | Pg | 03 36 45.2 | -0.3 |
| **FNO** | **Franklin** | **1.02** | **174** | Pg | Pg | 03 36 47.9 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.03** | **51** | Pg | Pg | 03 36 47.6 | -1.0 |
| **U32A** | **Winter Ranch,** | **1.20** | **275** | | Pg | 03 36 51.2 | -0.6 |
| **W35A** | **Tecumseh** | **1.24** | **155** | Pg | Pg | 03 36 51.4 | -1.1 |
| **TUL1** | **Leonard** | **1.45** | **104** | | Pn | 03 36 55.2 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.69** | **189** | | Pn | 03 36 59.7 | +0.6 |
| **WMOK** | **Wichita Mounta** | **1.84** | **214** | | Pn | 03 37 02.1 | +0.8 |
| **R32A** | **Long Quarter,** | **2.34** | **337** | | Pn | 03 37 08.8 | +0.6 |
| **X37A** | **Clayton** | **2.43** | **133** | | Pn | 03 37 09.9 | +0.5 |
| **U38A** | **Gravette** | **2.54** | **85** | Pn | Pn | 03 37 11.3 | +0.4 |
| U38A | | | | IAmb_Lg | | 03 37 52.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **2.90** | **89** | | Pn | 03 37 17.0 | +1.2 |
| **KSU1** | **Kansas State U** | **2.91** | **14** | Pn | Pn | 03 37 15.8 | -0.1 |
| KSU1 | | | | IAmb_Lg | | 03 38 03.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.09** | **326** | Pn | Pn | 03 37 17.5 | -0.9 |
| CBKS | | | | IAmb_Lg | | 03 38 07.1 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **3.23** | **108** | Pn | Pn | 03 37 19.4 | -0.8 |
| W39A | | | | IAmb_Lg | | 03 38 15.9 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.65** | **66** | Pn | Pn | 03 37 25.8 | -0.3 |
| S39A | | | | IAmb_Lg | | 03 38 30.9 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.66** | **117** | Pn | Pn | 03 37 26.2 | 0.0 |
| MIAR | | | | IAmb_Lg | | 03 38 28.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.66** | **144** | Pn | Pn | 03 37 25.8 | -0.4 |
| Z38A | | | | IAmb_Lg | | 03 38 32.3 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.66** | **249** | Pn | Pn | 03 37 26.6 | +0.2 |
| **U40A** | **Yellville** | **3.77** | **87** | Pn | Pn | 03 37 26.2 | -1.6 |
| U40A | | | | IAmb_Lg | | 03 38 32.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.04** | **206** | Pn | Pn | 03 37 32.3 | +0.7 |
| ABTX | | | | IAmb_Lg | | 03 38 39.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.22** | **114** | Pn | Pn | 03 37 33.5 | -0.5 |
| X40A | | | | IAmb_Lg | | 03 38 44.9 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.31** | **77** | IAmb_Lg | | 03 38 44.3 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.37** | **101** | Pn | Pn | 03 37 36.8 | +0.8 |
| **FCAR** | **Ozark Folk Cen** | **4.39** | **93** | Pn | Pn | 03 37 35.8 | -0.5 |
| FCAR | | | | IAmb_Lg | | 03 38 57.3 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.43** | **103** | Pn | Pn | 03 37 37.9 | +1.1 |
| W41B | | | | IAmb_Lg | | 03 38 54.2 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.45** | **124** | IAmb_Lg | | 03 38 55.9 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **4.60** | **42** | IAmb_Lg | | 03 39 01.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.65** | **63** | Pn | Pn | 03 37 39.6 | -0.3 |
| R40A | | | | IAmb_Lg | | 03 38 56.4 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.89** | **306** | IAmb_Lg | | 03 39 17.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.91** | **126** | IAmb_Lg | | 03 39 14.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.16** | **90** | Pn | Pn | 03 37 46.5 | -0.3 |
| **P40A** | **Paris** | **5.41** | **51** | IAmb_Lg | | 03 39 21.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **5.60** | **281** | IAmb_Lg | | 03 39 37.1 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **FVM** | **French Village** | **5.92** | **71** | IAmb_Lg | | 03 39 45.2 | |
| | comp=Z,9.2nm,1.1s | | | | | | |

*DSN **20** 03:38:10.1±1.2,27.°62N×55.°71E,h10km,ML3.4/8,Error*
*ellipse: s-maj=22.8km s-min=6.5km az=59.0*
*TEH **20** 03:38:10.4,27.°51N×55.°75E,h6km,ML3.6*
*OMAN **20** 03:38:11.6±0.8,27.°52N×55.°71E,h10km,mb5.3/3,*
*ml3.5/13,Error ellipse: s-maj=10.4km s-min=5.2km*
*az=53.0*
**ISC 20 03:38:11.4**±1.5,**27.°47N**±0.°04×**55.°77E**±0.°04,**h6**km±11km,
**n73,**σ1§**14**/81,**Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GENO** | **Geno** | **0.37** | **101** | *e*Pg | **Pg** | **03 38 18.1** | **-0.6** |
| GENO | | | | eSg | **Sb** | **03 38 24.8** | **-1.8** |
| **LAR1** | **LAR** | **1.25** | **279** | *e*Pg | **Pn** | **03 38 34.6** | **-0.9** |
| LAR1 | | | | *e* | | 03 39 07.3 | |
| | comp=Z,14μm,0.4s | | | | | | |
| **SHME** | **Shamm** | **1.45** | **167** | *e*Pn | **Pb** | **03 38 38.7** | **-0.2** |
| **SHME** | **Shamm** | **1.45** | **167** | P | **Pb** | **03 38 38.6** | **-0.3** |
| | SNR=12 | | | | | | |
| SHME | | | | S | **Sg** | **03 38 59.9** | **+1.7** |
| **SHME** | **Shamm** | **1.45** | **167** | *e*P | **Pb** | **03 38 38.4** | **-0.5** |
| | SNR=9.8 | | | | | | |
| SHME | | | | S | **Sg** | **03 39 00.3** | **+2.1** |
| **BANOM** | **Banah** | **1.61** | **163** | *e*Pn | **Pb** | **03 38 41.0** | **-0.6** |
| **BANOM** | **Banah** | **1.61** | **163** | P | **Pb** | **03 38 40.7** | **-1.0** |
| | SNR=53 | | | | | | |
| BANOM | | | | S | **Sg** | **03 39 03.1** | **-0.2** |
| **BANOM** | **Banah** | **1.61** | **163** | *e*P | **Pb** | **03 38 40.7** | **-1.0** |
| | SNR=53 | | | | | | |
| BANOM | | | | S | **Sg** | **03 39 04.6** | **+1.3** |
| **KHNJ** | **Kahnooj** | **1.79** | **74** | *e*Pn | **Pn** | **03 38 42.5** | **-0.3** |
| **MASF** | **Masafi** | **2.12** | **170** | P | **Pb** | **03 38 48.6** | **-1.7** |
| MASF | | | | S | **Sb** | **03 39 15.6** | **-1.3** |
| **MSFE** | **Esma-Masafi** | **2.13** | **170** | *e*Pn | **Pb** | **03 38 48.8** | **-1.7** |
| **MSFE** | **Esma-Masafi** | **2.13** | **170** | *e*P | **Pn** | **03 38 48.6** | **+1.0** |
| | SNR=7.5 | | | | | | |
| **LMD1** | **Lamerd** | **2.32** | **267** | *e*Pn | **Pn** | **03 38 52.1** | **+2.0** |
| **NGRK** | **Negar Kerman** | **2.33** | **21** | *e*Pn | **Pn** | **03 38 50.8** | **+0.2** |
| NGRK | | | | *e* | | 03 39 28.2 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.47** | **182** | *e*Pn | **Pn** | **03 38 54.0** | **+1.7** |
| **UOSS** | **Minazif** | **2.54** | **171** | *e*Pn | **Pn** | **03 38 53.9** | **+0.6** |
| **UOSS** | **Minazif** | **2.54** | **171** | P | **Pn** | **03 38 54.2** | **+0.9** |
| **UOSS** | **Minazif** | **2.54** | **171** | *e*P | **Pn** | **03 38 54.1** | **+0.9** |
| | SNR=7.6 | | | | | | |
| **GHIR** | **Ghir-Karzin** | **2.59** | **289** | *e*Pn | **Pn** | **03 38 55.9** | **+1.9** |
| **QIR1** | **Qir** | **2.61** | **293** | *e*Pn | **Pn** | **03 38 54.5** | **+0.3** |
| QIR1 | | | | *e* | | 03 39 51.9 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **KRBR** | **Kerman** | **2.65** | **19** | *e*Pn | **Pn** | **03 38 56.0** | **+1.0** |
| **HATD** | **Hatta, Dubai** | **2.65** | **173** | *e*Pn | **Pn** | **03 38 55.9** | **+1.1** |
| **HATD** | **Hatta, Dubai** | **2.65** | **173** | P | **Pn** | **03 38 55.5** | **+0.8** |
| **HATD** | **Hatta, Dubai** | **2.65** | **173** | P | **Pn** | **03 38 55.0** | **+0.3** |
| **TVBK** | **TV Kerman** | **2.66** | **19** | *e*Pn | **Pn** | **03 38 56.3** | **+1.2** |
| TVBK | | | | *e* | | 03 39 01.0 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.72** | **183** | *e*Pn | **Pn** | **03 38 57.2** | **+1.5** |
| **FAQ** | **Al Faqa, Dubai** | **2.72** | **183** | P | **Pn** | **03 38 57.1** | **+1.5** |
| | SNR=6.3 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.72** | **183** | P | **Pn** | **03 38 56.3** | **+0.7** |
| **ASHO** | **Ashiyiah** | **2.79** | **175** | *e*Pn | **Pn** | **03 38 57.2** | **+0.6** |
| **ASHO** | **Ashiyiah** | **2.79** | **175** | P | **Pn** | **03 38 58.0** | **+1.3** |
| | SNR=24 | | | | | | |
| ASHO | | | | S | **Sn** | **03 39 31.8** | **+1.2** |
| **ASHO** | **Ashiyiah** | **2.79** | **175** | *e*P | **Pn** | **03 38 57.1** | **+0.5** |
| | SNR=24 | | | | | | |
| **CHMN** | **Cheshme madani** | **2.85** | **33** | *e*Pn | **Pn** | **03 38 58.6** | **+0.9** |
| CHMN | | | | *e* | | 03 39 38.8 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.86** | **188** | *e*Pn | **Pn** | **03 38 59.5** | **+1.9** |
| **ASUD** | **Al Ashush, Dub** | **2.86** | **188** | P | **Pn** | **03 38 59.7** | **+2.1** |
| | SNR=7.3 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.86** | **188** | *i* P | **Pn** | **03 38 58.7** | **+1.1** |
| | SNR=7.3 | | | | | | |
| **KBAM** | **BAM** | **2.89** | **54** | *e*Pn | **Pn** | **03 38 59.2** | **+1.1** |
| KBAM | | | | *e* | | 03 39 43.4 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **KHGB** | **Koh Gabri** | **2.96** | **12** | *e*Pn | **Pn** | **03 39 00.7** | **+1.5** |
| KHGB | | | | *e* | | 03 39 39.8 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **ALNE** | **Al Ain** | **3.40** | **180** | *e*Pn | **Pn** | **03 39 06.5** | **+1.5** |
| **ALNE** | **Al Ain** | **3.40** | **180** | S | **Sn** | **03 39 45.9** | **+0.2** |
| **IMEH** | **Mehriz** | **4.03** | **346** | *e*Pn | **Pn** | **03 39 15.0** | **+1.0** |
| **IBAF** | **Bafgh** | **4.11** | **358** | *e*Pn | **Pn** | **03 39 15.4** | **+0.5** |
| **HOQ** | **Hoqain** | **4.12** | **160** | P | **Pn** | **03 39 14.2** | **-0.7** |
| **ARQ** | **Araqi** | **4.17** | **170** | P | **Pn** | **03 39 15.7** | **0.0** |
| ARQ | | | | S | **Sn** | **03 40 05.2** | **+0.5** |
| **SHMA** | **Al-Shehemyia** | **4.59** | **251** | S | **Sn** | **03 40 14.9** | **0.0** |
| **UMZA** | **Um Al Zommool** | **4.77** | **187** | *e*Pn | **Pn** | **03 39 24.3** | **+0.5** |
| **UMZA** | **Um Al Zommool** | **4.77** | **187** | P | **Pn** | **03 39 24.0** | **+0.1** |
| **ISAD** | **Sadrabad** | **4.78** | **338** | *e*Pn | **Pn** | **03 39 25.6** | **+1.3** |
| **ZHDN** | **Zahedan** | **4.84** | **65** | *e*Pn | **Pn** | **03 39 26.1** | **+1.1** |
| **SMDO** | **Samad** | **4.85** | **154** | P | **Pn** | **03 39 27.1** | **+1.9** |
| **BSY** | **Bisya** | **4.88** | **164** | P | **Pn** | **03 39 27.1** | **+1.7** |
| **ZHSF** | **Zahedan** | **4.90** | **63** | *e*Pn | **Pn** | **03 39 27.3** | **+1.6** |
| **ICHK** | **Chekchek** | **4.90** | **346** | *e*Pn | **Pn** | **03 39 26.1** | **+0.2** |
| **TRNA** | **Turayna** | **4.92** | **237** | P | **Pn** | **03 39 25.2** | **-0.6** |
| **YZKH** | **Yazd** | **5.01** | **349** | *e*Pn | **Pn** | **03 39 28.1** | **+0.9** |
| **IRAM** | **Ramesheh** | **5.23** | **327** | *e*Pn | **Pn** | **03 39 30.8** | **+0.4** |
| **BSRN** | **Basiran** | **5.35** | **32** | *e*Pn | **Pn** | **03 39 33.5** | **+1.6** |
| **NHDN** | **Nehbandan** | **5.41** | **43** | *e*Pn | **Pn** | **03 39 34.7** | **+2.0** |
| **TPRV** | **Parvadeh(Tabas** | **5.60** | **8** | *e*Pn | **Pn** | **03 39 36.2** | **+0.9** |
| **WBK** | **Wadi Bani Khal** | **5.64** | **148** | P | **Pn** | **03 39 35.4** | **-0.5** |
| | SNR=6.4 | | | | | | |
| **SRVN** | **Saravan** | **5.89** | **89** | *e*Pn | **Pn** | **03 39 40.7** | **+1.2** |
| **NASN** | **Na'in** | **5.90** | **335** | *e*Pn | **Pn** | **03 39 39.6** | **0.0** |
| **IZEF** | **Zefreh** | **6.17** | **332** | *e*Pn | **Pn** | **03 39 42.8** | **-0.5** |
| **JLN** | **Jalan Bani Buh** | **6.25** | **147** | P | **Pn** | **03 39 42.9** | **-1.3** |
| **TNSJ** | **Nastanj** | **6.51** | **6** | *e*Pn | **Pn** | **03 39 48.4** | **+0.5** |
| **AFRZ** | **Afriz** | **6.56** | **24** | *e*Pn | **Pn** | **03 39 50.1** | **+1.5** |
| **IPIR** | **Pirpir** | **6.70** | **322** | *e*Pn | **Pn** | **03 39 50.7** | **+0.1** |
| **MHTO** | **MHTO** | **6.76** | **162** | P | **Pn** | **03 39 52.0** | **+0.8** |
| | SNR=9.9 | | | | | | |
| **IKLH** | **Kolahrood** | **6.86** | **329** | *e*Pn | **Pn** | **03 39 54.7** | **+1.9** |
| **KRSH** | **Karshahi** | **7.19** | **335** | *e*Pn | **Pn** | **03 39 57.8** | **+0.5** |
| **ISFB** | **Sefidab** | **7.50** | **337** | *e*Pn | **Pn** | **03 40 01.7** | **+0.3** |
| **DOK** | **Doka** | **8.94** | **190** | P | **Pn** | **03 40 20.3** | **-0.9** |
| **SHAO** | **Shalim** | **9.40** | **181** | P | **Pn** | **03 40 28.0** | **+0.4** |
| | SNR=14 | | | | | | |
| **SHAO** | **Shalim** | **9.40** | **181** | *i* P | **Pn** | **03 40 27.0** | **-0.5** |
| | SNR=14 | | | | | | |

**IDC 20 03:59:52.4**±2.4,**2.°57N**×**129.°18E**,**h0**km,**mb3.2**/3,
**mb1 3.4**/3,**mb1mx3.2**/48,**mbtmp3.3**/3,**Error ellipse:**
**s-maj=163.6km s-min=26.1km az=69.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.94** | **167** | P | P | 04 04 58.8 | +0.4 |
| | 0.2nm,0.4s,baz=347,slow=11,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **26.48** | **170** | P | P | 04 05 31.0 | -0.6 |
| | 0.1nm,0.6s,baz=357,slow=8.4,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.91** | **325** | P | P | 04 10 00.4 | +0.1 |
| | 0.4nm,0.5s,baz=118,slow=9.0,SNR=8.4 | | | | | | |

*NOU **20** 04:06:55.2,37.°80S×176.°62E,h230km,MLv3.9/7,North*
*Island, New Zealand*
*WEL **20** 04:07:03.6±0.7,38.°3S±4.°×17.°6E±.°,h157km±6km,M2.7/43,*
*ML2.0/8,MLv2.7/43,Error ellipse: s-maj=0.0km*
*s-min=0.0km az=158.4*
**ISC 20 04:06:58.7**±1.9,**38.°00S**±0.°06×**176.°33E**±0.°06,
**h197**km±10km,**n114,**σ1§**57**/120,**North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARZ** | **Kaharoa** | **0.07** | **255** | P | **Pn** | **04 07 24.9** | **+0.4** |
| **OMRZ** | **Omania** | **0.11** | **163** | P | **Pn** | **04 07 25.5** | **+1.0** |
| **OPRZ** | **Ohinepanea** | **0.24** | **49** | P | **Pn** | **04 07 25.2** | **+0.5** |
| **TARZ** | **Mount Tarawera** | **0.27** | **150** | P | **Pn** | **04 07 25.9** | **+1.1** |
| **TGRZ** | **Tauranga** | **0.28** | **348** | P | **Pn** | **04 07 25.4** | **+0.6** |
| **KMRZ** | **Kaimai** | **0.34** | **297** | P | **Pn** | **04 07 25.9** | **+0.9** |
| **RRRZ** | **Republican Roa** | **0.37** | **157** | P | **Pn** | **04 07 26.0** | **+0.9** |
| **GRRZ** | **Galatos Road** | **0.39** | **207** | P | **Pn** | **04 07 26.2** | **+1.1** |
| **HRRZ** | **Handcock Road** | **0.39** | **185** | P | **Pn** | **04 07 26.3** | **+1.2** |
| **PRRZ** | **Plateau Road** | **0.50** | **174** | P | **Pn** | **04 07 26.6** | **+1.2** |
| **MURZ** | **Murupara** | **0.59** | **144** | P | **Pn** | **04 07 26.8** | **+1.0** |
| **URZ** | **Urewera** | **0.67** | **113** | P | **Pn** | **04 07 26.8** | **+0.7** |
| URZ | | | | S | **Sn** | **04 07 44.7** | **-2.6** |
| **URZ** | **Urewera** | **0.67** | **113** | P | **Pn** | **04 07 26.8** | **+0

| | | | | | | |
|---|---|---|---|---|---|---|
| **BFZ** | **Birch Farm** | **2.68** | **181** | P | **Pn** | **04 07 45.9 +1.6** |
| **MRZ** | **Mangatainoka R** | **2.72** | **192** | P | **Pn** | **04 07 46.0 +1.2** |
| **CPWZ** | **Castlepoint** | **2.91** | **182** | P | **Pn** | **04 07 48.9 +2.0** |
| **OGWZ** | **Otaki Gorge** | **2.95** | **197** | P | **Pn** | **04 07 48.6 +1.1** |
| **HOWZ** | **Holdsworth Sta** | **2.96** | **192** | P | **Pn** | **04 07 48.4 +0.8** |
| **KIW** | **Kapiti Island** | **3.06** | **201** | P | **Pn** | **04 07 49.7 +0.8** |
| **TMWZ** | **Te Maipa** | **3.12** | **186** | P | **Pn** | **04 07 50.5 +1.0** |
| **MTW** | **Mount Morrison** | **3.22** | **191** | P | **Pn** | **04 07 51.3 +0.6** |
| **CAW** | **Cannon Point** | **3.25** | **197** | P | **Pn** | **04 07 52.0 +0.9** |
| **DUWZ** | **D'Urville Isla** | **3.36** | **213** | P | **Pn** | **04 07 53.1 +0.6** |
| **TRWZ** | **Traveller** | **3.43** | **188** | P | **Pn** | **04 07 54.0 +0.7** |
| **PAWZ** | **Paruwai Farm** | **3.45** | **191** | P | **Pn** | **04 07 54.0 +0.5** |
| **WEL** | **Wellington** | **3.49** | **200** | P | **Pn** | **04 07 54.8 +0.8** |
| **MSWZ** | **Moikau Station** | **3.51** | **193** | P | **Pn** | **04 07 54.8 +0.5** |
| **SNZO** | **South Karori** | **3.54** | **200** | P | **Pn** | **04 07 55.1 +0.6** |
| **TCW** | **Tory Channel** | **3.58** | **206** | P | **Pn** | **04 07 55.6 +0.6** |
| **BHW** | **Baring Head** | **3.58** | **198** | P | **Pn** | **04 07 55.5 +0.4** |
| **PLWZ** | **Palliser** | **3.66** | **193** | P | **Pn** | **04 07 56.4 +0.3** |
| **TUWZ** | **Tuamarina** | **3.89** | **208** | P | **Pn** | **04 07 59.5 +0.6** |
| **NNZ** | **Nelson** | **3.94** | **214** | P | **Pn** | **04 07 59.8 +0.3** |
| **QRZ** | **Quartz Range** | **4.08** | **225** | P | **Pn** | **04 08 03.3 +2.0** |
| **BSWZ** | **Blackbirch Sta** | **4.16** | **206** | P | **Pn** | **04 08 03.3 +1.0** |
| **MRNZ** | **Matariki Terra** | **4.37** | **218** | P | **Pn** | **04 08 05.1 +0.2** |
| **THZ** | **Tophouse** | **4.59** | **214** | P | **Pn** | **04 08 09.3 +1.6** |
| **KHZ** | **Kahutara** | **4.90** | **205** | P | **Pn** | **04 08 12.1 +0.4** |
| **KHZ** | **Kahutara** | **4.90** | **205** | P | **Pn** | **04 08 12.2 +0.6** |
| **GVZ** | **Greta Valley S** | **5.56** | **206** | P | **Pn** | **04 08 20.3 +0.1** |
| **OKCZ** | **Okains Bay** | **6.23** | **202** | P | **Pn** | **04 08 28.8 0.0** |
| **MQZ** | **McQueen's Vall** | **6.34** | **205** | P | **Pn** | **04 08 29.1 -1.1** |
| **TMZ** | **Timaru** | **7.53** | **211** | P | **Pn** | **04 08 45.3 -0.4** |

*IDC* ***20*** *04:08:24.1±1.0,38°.33N×91°.94E,h0km,mb3.7/5, mb1 3.9/7,mb1mx3.5/58,mbtmp3.7/7,ML3.6/2,MS3.4/1, Ms1 3.4/1,ms1mx2.4/90,Error ellipse: s-maj=44.1km s-min=23.1km az=56.0*

**ISC 20 04:08:29.1±1.1,38°.5N±0°.2×91°.7E±0°.3,h35km,n8,σ1$67/7, mb3.6/5,Qinghai**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **10.79** | **323** | Pn | | **Pn** | **04 10 59.3** | **-1.7** |
| | 0.6nm,0.3s,baz=132,slow=14,SNR=25 | | | | | | | |
| KURBB | **Kurchatov Arra** | **15.30** | **327** | Pn | | **Pn** | **04 12 01.8** | **-0.5** |
| | 0.1nm,0.3s,baz=134,slow=12,SNR=16 | | | | | | | |
| **NRIK** | **Noril'sk** | **31.00** | **357** | LR | | LR | 04 27 44.1 | |
| | comp=Z,76nm,21.5s,baz=160,slow=37 | | | | | | | |
| **ILAR** | **Eielson Array** | **67.40** | **23** | P | | **P** | **04 19 20.7** | **+0.2** |
| | 1.1nm,0.9s,baz=289,slow=5.5,SNR=4.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.57** | **137** | P | | **P** | **04 19 39.2** | **-1.6** |
| | 0.2nm,0.7s,baz=334,slow=5.9,SNR=1.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **73.42** | **140** | P | | **P** | **04 19 57.0** | **-0.8** |
| | 0.4nm,0.6s,baz=329,slow=5.7,SNR=7.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.17** | **12** | P | | **P** | **04 20 20.2** | **+1.4** |
| | 0.4nm,0.8s,baz=341,slow=5.9,SNR=5.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.91** | **280** | P | | **P** | **04 20 47.1** | **+1.7** |
| | 0.7nm,0.5s,baz=44,slow=4.6,SNR=10.0 | | | | | | | |

*MOS* ***20*** *04:11:50.9±0.9,46°.73N×146°.75E,h332km,mb4.2/21, Error ellipse: s-maj=8.4km s-min=5.9km az=88.7*

*SKHL* ***20*** *04:11:51.5±0.4,46°.60N×146°.70E,h341km±5km,mb5.3/8, msha5.3/9*

*IDC* ***20*** *04:11:52.3±1.0,46°.87N×146°.59E,h324km±10km, mb3.7/27,mb1 3.9/33,mb1mx3.7/63,mbtmp4.5/33,Error ellipse: s-maj=9.7km s-min=8.3km az=146.0*

*NEIC* ***20*** *04:11:52.2±1.6,46°.83N±0°.09×146°.6E±0°.1,h328km±7km, mb4.4/166,Error ellipse: s-maj=14.9km s-min=11.9km az=112.0*

*JMA* ***20*** *04:11:53.5±0.4,46°.15N×146°.85E,h351km,M4.3*

*NIED* ***20*** *04:11:53.6,46°.15N×146°.85E,h351km,MW4.3,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr3.34; Mθθ-0.78; Mφφ-2.56; Mrθ 0.45; Mθφ-2.25; Mφr-0.03; Fault plane solution: M₀3.75000×10¹⁵ NP1:φ₁42.00000°, δ47.00000°,λ,101.00000°. NP2:φ₂206.00000°,δ44.00000°, λ78.00000°.*

**ISC 20 04:11:51.5±0.5,46°.63N±0°.04×146°.70E±0°.04,h327km±4km, n493,σ1$52/476,mb4.3/133,25C-15D,Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.62** | **149** | *i* P | | **Pn** | **04 12 39.5** | **+1.4** |
| KUR | | | | *e* S | | **S** | **04 13 24.1** | **+8.8** |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,301nm,0.6s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,114nm,0.4s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,282nm,0.6s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.62** | **149** | *e* P | | **Pn** | **04 12 39.0** | **+0.9** |
| KUR | | | | AMB | AMB | | 04 12 40.2 | |
| | comp=E,300nm,0.5s | | | | | | | |
| KUR | | | | *e* S | | **S** | **04 13 24.1** | **+8.8** |
| KUR | | | | A | A | | 04 13 35.0 | |
| | comp=E,110nm,0.6s | | | | | | | |
| KUR | | | | A | A | | 04 13 35.0 | |
| | comp=E,280nm,0.6s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.66** | **193** | *e* PN | | **Pn** | **04 12 46.7** | **+0.6** |
| YUK | | | | S | | **S** | **04 13 29.7** | **-0.1** |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,344nm,0.4s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=N,169nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,185nm,0.2s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,498nm,0.4s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,377nm,0.1s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.66** | **193** | *e* P | | **Pn** | **04 12 46.6** | **+0.5** |
| YUK | | | | AMB | AMB | | 04 12 51.4 | |
| | comp=N,340nm,0.4s | | | | | | | |
| YUK | | | | *e* S | | **S** | **04 13 30.6** | **+0.8** |
| YUK | | | | A | A | | 04 13 32.0 | |
| | comp=N,2μm,1.6s | | | | | | | |
| YUK | | | | A | A | | 04 13 32.0 | |
| | comp=N,1μm,1.6s | | | | | | | |
| YUK | | | | A | A | | 04 13 35.7 | |
| | comp=N,380nm,0.4s | | | | | | | |
| YUK | | | | A | A | | 04 13 35.7 | |
| | comp=N,500nm,0.4s | | | | | | | |
| **RUSJ** | **Misakicho** | **2.72** | **203** | *i* PN | | **Pn** | **04 12 48.2** | **+1.6** |
| RUSJ | | | | *e* S | | **S** | **04 13 32.3** | **+1.5** |
| **YSS** | **Yuzh-Sakhalins** | **2.73** | **278** | *e* PN | | **Pn** | **04 12 48.7** | **+2.2** |
| YSS | | | | *e* S | | **S** | **04 13 31.6** | **+0.9** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,60nm,0.6s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=N,160nm,1.0s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=E,170nm,1.1s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=E,700nm,4.2s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **2.73** | **278** | | | **Pn** | **04 12 47.8** | **+1.2** |
| **YSS** | **Yuzh-Sakhalins** | **2.73** | **278** | *i* P | | **Pn** | **04 12 48.3** | **+1.8** |
| YSS | | | | AMB | AMB | | 04 12 50.2 | |
| | comp=E,60nm,0.6s | | | | | | | |
| YSS | | | | *i* S | | **S** | **04 13 32.5** | **+1.8** |
| YSS | | | | A | A | | 04 13 34.2 | |
| | comp=E,190nm,0.6s | | | | | | | |
| YSS | | | | A | A | | 04 13 34.2 | |
| | comp=E,80nm,0.6s | | | | | | | |
| YSS | | | | A | A | | 04 13 34.3 | |
| | comp=E,700nm,4.0s | | | | | | | |
| **SHO** | **Shikotan** | **2.76** | **178** | *i* PN | | **Pn** | **04 12 45.8** | **-1.2** |
| SHO | | | | *e* S | | **S** | **04 13 27.9** | **-3.5** |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,534nm,0.3s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=N,388nm,0.2s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=E,242nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,1μm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,2μm,0.2s | | | | | | | |
| **SHO** | **Shikotan** | **2.76** | **178** | *i* P | | **Pn** | **04 12 46.1** | **-0.9** |
| SHO | | | | AMB | AMB | | 04 12 46.6 | |
| | comp=E,530nm,0.4s | | | | | | | |
| SHO | | | | *i* S | | **S** | **04 13 28.5** | **-2.9** |
| SHO | | | | A | A | | 04 13 30.3 | |
| | comp=E,1μm,0.6s | | | | | | | |
| SHO | | | | A | A | | 04 13 30.3 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **JRA** | **Rausu** | **2.91** | **203** | P | | **Pn** | **04 12 49.3** | **+1.0** |
| **GLVR** | **Golovnino** | **3.01** | **196** | *e* S | | **S** | **04 13 35.6** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **3.31** | **218** | P | | **Pn** | **04 12 53.7** | **+1.6** |
| JTKR | | | | *e* S | | **S** | **04 13 40.6** | **-0.1** |
| **JSE** | **Soyaes** | **3.33** | **241** | P | | **Pn** | **04 12 54.3** | **+2.1** |
| JSE | | | | *e* S | | **S** | **04 13 43.0** | **+2.0** |
| **NMR** | **Nemuro--Hokkai** | **3.33** | **192** | *i* PN | | **Pn** | **04 12 51.2** | **-1.1** |
| NMR | | | | *e* S | | **S** | **04 13 38.0** | **-3.2** |
| **NMR** | **Nemuro--Hokkai** | **3.33** | **192** | *i* P | | **Pn** | **04 12 51.3** | **-1.1** |
| NMR | | | | *e* S | | **S** | **04 13 38.5** | **-2.7** |
| **NEM2** | **Nemuro 2** | **3.33** | **192** | P | | **Pn** | **04 12 51.2** | **-1.2** |
| NEM2 | | | | *e* S | | **S** | **04 13 37.5** | **-3.7** |
| **JWK2** | **Keihoku** | **3.59** | **250** | P | | **Pn** | **04 12 57.9** | **+3.0** |
| **JKA** | **Kamikawa-asahi** | **3.83** | **230** | | | **S** | **04 13 52.2** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **3.83** | **230** | Pn | | **Pn** | **04 12 59.2** | **+1.9** |
| **JKA** | **Kamikawa-asahi** | **3.83** | **230** | *e* P | | **Pn** | **04 12 59.2** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.83** | **230** | P | | **Pn** | **04 12 59.8** | **+2.4** |
| ASAJ | comp=E,36nm,0.3s,baz=63,slow=9.8,SNR=214 | | | | | | | |
| | baz=179,slow=32,SNR=1.8 | | | S | | **S** | **04 13 52.2** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.83** | **230** | PN | | **Pn** | **04 12 59.2** | **+1.8** |
| ASAJ | | | | | | | 04 13 52.2 | |
| **JAK** | **Akkeshi** | **3.90** | **202** | P | | **Pn** | **04 12 57.5** | **-0.6** |
| JAK | | | | *e* S | | **S** | **04 13 48.2** | **-3.5** |
| **JKK2** | **Kamakawa 2** | **3.92** | **227** | P | | **Pn** | **04 13 00.1** | **+1.8** |
| **JAR** | **Ashorobuto** | **3.92** | **213** | P | | **Pn** | **04 12 59.4** | **+1.0** |
| **UGL** | **Uglegorsk** | **3.97** | **310** | *e* PN | | **Pn** | **04 12 59.0** | **+0.4** |
| UGL | | | | *e* | | | 04 13 53.5 | |
| **UGL** | **Uglegorsk** | **3.97** | **310** | *i* P | | **Pn** | **04 12 59.6** | **+1.0** |
| UGL | | | | AMB | AMB | | 04 13 01.2 | |
| | comp=E,70nm,0.5s | | | | | | | |
| UGL | | | | *e* S | | **S** | **04 13 53.7** | **+1.1** |
| UGL | | | | A | A | | 04 13 58.0 | |
| | comp=E,90nm,0.5s | | | | | | | |
| UGL | | | | A | A | | 04 13 58.0 | |
| | comp=E,190nm,0.5s | | | | | | | |
| **JFR** | **Furan** | **4.53** | **222** | P | | **Pn** | **04 13 06.2** | **+1.3** |
| **JHR** | **Hokuryu** | **4.55** | **232** | P | | **Pn** | **04 13 07.0** | **+2.0** |
| **JCH** | **Churui** | **4.67** | **212** | P | | **Pn** | **04 13 05.8** | **-0.6** |
| JCH | | | | *e* S | | **S** | **04 14 02.4** | **-4.3** |
| **TYV** | **Tymovskoe** | **5.01** | **329** | *e* PN | | **Pn** | **04 13 10.4** | **+0.4** |
| TYV | | | | *e* S | | **S** | **04 14 12.6** | **-0.8** |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,77nm,0.9s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=N,16nm,1.3s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=E,21nm,1.3s | | | | | | | |
| **TYV** | **Tymovskoe** | **5.01** | **329** | *i* P | | **Pn** | **04 13 10.8** | **+0.8** |
| TYV | | | | AMB | AMB | | 04 13 11.3 | |
| | comp=E,80nm,0.9s | | | | | | | |
| TYV | | | | *e* S | | **S** | **04 14 14.0** | **+0.6** |
| TYV | | | | A | A | | 04 14 14.5 | |
| | comp=E,30nm,0.8s | | | | | | | |
| TYV | | | | A | A | | 04 14 14.5 | |
| | comp=E,20nm,0.8s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.18** | **214** | P | | **Pn** | **04 13 11.3** | **-0.9** |
| JNBK | | | | *e* S | | **S** | **04 14 12.5** | **-4.7** |
| **ERM** | **Erimo** | **5.26** | **210** | *de* PN | | **Pn** | **04 13 13.0** | **-0.1** |
| **ERM** | **Erimo** | **5.26** | **210** | | | **Pn** | **04 13 13.4** | **+0.3** |
| **JEW** | **Eniwo** | **5.32** | **227** | P | | **Pn** | **04 13 15.7** | **+2.0** |
| JEW | | | | *e* S | | **S** | **04 14 19.5** | **-0.6** |
| **JEW** | **Eniwo** | **5.32** | **227** | | | **Pn** | **04 13 15.5** | **+1.8** |
| **JKB** | **Kayabe** | **6.24** | **223** | P | | **Pn** | **04 13 23.6** | **-0.8** |
| JKB | | | | *e* S | | **S** | **04 14 33.7** | **-5.9** |
| **JOT** | **Ohata** | **6.64** | **220** | P | | **Pn** | **04 13 27.5** | **-1.6** |
| JOT | | | | *e* S | | **S** | **04 14 40.9** | **-7.2** |
| **JTM** | **Tenmabayashi** | **7.12** | **217** | Pn | | **Pn** | **04 13 33.3** | **-1.5** |
| **TEY** | **Ternei** | **7.23** | **261** | *e* PN | | **Pn** | **04 13 37.6** | **+1.6** |
| TEY | | | | pmax | pmax | | | |
| | comp=N,20nm,0.5s | | | | | | | |
| TEY | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **TEY** | **Ternei** | **7.23** | **261** | *i* P | | **Pn** | **04 13 37.0** | **+1.0** |
| TEY | | | | AMB | AMB | | 04 13 38.6 | |
| | comp=Z,60nm,0.8s | | | | | | | |
| **JANG** | **Nango** | **7.30** | **213** | P | | **Pn** | **04 13 35.1** | **-1.8** |
| JANG | | | | *e* S | | **S** | **04 14 54.3** | **-8.2** |
| **OKH** | **Okha** | **7.34** | **342** | *e* P | | **Pn** | **04 13 37.9** | **+0.7** |
| OKH | | | | AMB | AMB | | 04 13 39.8 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.44** | **54** | *i* P | | **Pn** | **04 13 40.2** | **+1.8** |
| SKR | | | | AMB | AMB | | 04 13 40.6 | |
| | comp=Z,150nm,0.6s | | | | | | | |
| SKR | | | | *e* S | | **S** | **04 15 05.2** | **-0.1** |
| SKR | | | | A | A | | 04 15 16.3 | |
| | comp=Z,60nm,0.5s | | | | | | | |
| SKR | | | | A | A | | 04 15 16.3 | |
| | comp=Z,120nm,0.5s | | | | | | | |
| **NKL** | **Nikolayevsk** | **7.59** | **331** | *e* P | | **Pn** | **04 13 41.3** | **+1.1** |
| NKL | | | | AMB | AMB | | 04 13 45.7 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **GRNR** | **Gornyy** | **7.96** | **305** | *i* P | | **Pn** | **04 13 45.4** | **+0.7** |
| GRNR | | | | AMB | AMB | | 04 13 46.6 | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **KHBR** | **Khabarovsk** | **8.09** | **287** | *i* P | | **Pn** | **04 13 48.0** | **+1.7** |
| KHBR | | | | AMB | AMB | | 04 13 49.3 | |
| | comp=Z,50nm,0.6s | | | | | | | |
| **JOM** | **Ohasama** | **8.17** | **211** | P | | **Pn** | **04 13 46.3** | **-1.1** |
| JOM | | | | *e* S | | **S** | **04 15 15.3** | **-6.4** |
| **PAU** | **Pauzhetka** | **8.22** | **50** | *i* P | | **Pn** | **04 13 48.2** | **+0.4** |
| PAU | | | | AMB | AMB | | 04 13 49.3 | |
| | comp=Z,90nm,0.6s | | | | | | | |
| PAU | | | | *e* S | | **S** | **04 15 20.6** | **-1.8** |
| **JMK** | **Ichinoseki** | **8.66** | **210** | P | | **Pn** | **04 13 52.7** | **-0.6** |
| **JYK** | **Kaneyama** | **9.00** | **213** | P | | **Pn** | **04 13 57.1** | **-0.3** |
| **JMM** | **Marumori** | **9.78** | **209** | Pn | | **Pn** | **04 14 07.4** | **+0.5** |
| **PET** | **Petropavlovsk** | **10.03** | **46** | *e* P | | **Pn** | **04 14 10.3** | **+0.7** |
| PET | | | | AMB | AMB | | 04 14 11.2 | |
| | comp=Z,110nm,0.4s | | | | | | | |
| PET | | | | *e* S | | **S** | **04 16 00.5** | **-2.1** |
| PET | | | | A | A | | 04 16 03.8 | |
| | comp=Z,110nm,0.3s | | | | | | | |
| PET | | | | A | A | | 04 16 03.8 | |
| | comp=Z,120nm,0.3s | | | | | | | |
| **KLR** | **Kul'dur** | **10.37** | **290** | P | | **P** | **04 14 15.2** | **-0.6** |
| | comp=Z,2.0nm,0.3s,baz=85,slow=11,SNR=42 | | | | | | | |
| **KLR** | **Kul'dur** | **10.37** | **290** | *d* PN | | **P** | **04 14 15.3** | **-0.6** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **10.62** | **262** | *d* PN | | **P** | **04 14 18.2** | **-0.6** |
| **USA0B** | **Ussuriysk Arra** | **10.62** | **262** | P | | **Pn** | **04 14 17.3** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **10.62** | **262** | P | | **P** | **04 14 18.2** | **-0.6** |
| | baz=69,slow=12,SNR=73 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.62** | **262** | | | **Pn** | **04 14 17.8** | **+0.9** |
| **GRTR** | **Gornotajezhnoj** | **10.68** | **259** | *i* P | | **Pn** | **04 14 18.2** | **+0.6** |
| GRTR | | | | AMB | AMB | | 04 14 20.0 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **VLA** | **Vladivostok** | **11.08** | **257** | *c i* PN | | **P** | **04 14 23.3** | **-0.5** |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,47nm,0.6s | | | | | | | |
| **VLA** | **Vladivostok** | **11.08** | **257** | *i* P | | **P** | **04 14 23.3** | **-0.5** |
| VLA | | | | AMB | AMB | | 04 14 24.8 | |
| | comp=Z,50nm,0.6s | | | | | | | |
| **MSHR** | **Mys Shultsa** | **11.79** | **256** | *c i* PN | | **P** | **04 14 31.8** | **+0.1** |
| MSHR | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.7s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.90** | **215** | | | **P** | **04 14 34.8** | **+1.7** |
| **MAJO** | **Matsushiro** | **11.90** | **215** | *i* PN | | **P** | **04 14 35.9** | **+2.8** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **11.90** | **215** | | | **P** | **04 14 35.4** | **+2.2** |
| **MAT** | **Matsushiro** | **11.90** | **215** | P | | **P** | **04 14 34.9** | **+1.8** |
| MAT | | | | *e* S | | **S** | **04 16 40.0** | **-5.2** |
| **MJAR** | **Matsushiro Arr** | **11.90** | **215** | P | | **P** | **04 14 34.6** | **+1.5** |
| | comp=Z,0.5nm,0.3s,baz=17,slow=12,SNR=13 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.90** | **215** | | | **P** | **04 14 35.4** | **+2.3** |
| **MDJ** | **Mudanjiang** | **12.15** | **267** | | | **Pn** | **04 14 35.0** | **-0.2** |
| **MDJ** | **Mudanjiang** | **12.15** | **267** | P | | **P** | **04 14 35.8** | **+0.2** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,220nm,3.5s | | | | | | | |
| **MA2** | **Magadan** | **13.20** | **9** | P | | **Pn** | **04 14 48.0** | **+0.5** |
| | comp=Z,4.2nm,0.3s,baz=191,slow=9.2,SNR=56 | | | | | | | |
| **MA2** | **Magadan** | **13.20** | **9** | PN | | **P** | **04 14 47.0** | **0.0** |
| **MA2** | **Magadan** | **13.20** | **9** | P | | **P** | **04 14 47.0** | **0.0** |
| **MA2** | **Magadan** | **13.20** | **9** | *e* P | | **P** | **04 14 47.0** | **0.0** |
| **BNX** | **BinXian** | **13.40** | **273** | P | | **P** | **04 14 48.5** | **-1.0** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.8s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,270nm,3.8s | | | | | | | |
| **INU** | **Inuyama** | **13.42** | **216** | P | | **Pn** | **04 14 52.2** | **+1.8** |
| **ZEA** | **Zeya** | **14.32** | **307** | *e* P | | **Pn** | **04 15 02.1** | **+1.3** |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,20nm,0.8s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **ZEA** | **Zeya** | **14.32** | **307** | *e* P | | **Pn** | **04 15 01.9** | **+1.1** |
| ZEA | | | | AMB | AMB | | 04 15 03.1 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **CN2** | **Changchun** | **15.23** | **267** | *e* P | | **P** | **04 15 07.1** | **-2.5** |
| **KSRS** | **Korea Array** | **16.65** | **243** | P | | **Pn** | **04 15 27.2** | **-1.0** |
| | comp=Z,1.3nm,0.3s,baz=50,slow=10,SNR=16 | | | | | | | |
| **SEY** | **Seymchan** | **16.65** | **9** | P | | **P** | **04 15 25.5** | **+0.7** |
| | comp=Z,2.9nm,0.3s,baz=187,slow=8.8,SNR=79 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **16.69** | **243** | P | | **P** | **04 15 26.0** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **16.69** | **243** | P | | **P** | **04 15 26.0** | **+0.5** |
| **JNU** | **Nakatsue** | **18.10** | **227** | P | | **P** | **04 15 43.0** | **+2.2** |
| | comp=Z,1.0nm,0.3s,baz=343,slow=8.8,SNR=4.2 | | | | | | | |
| **YAK** | **Yakutsk** | **18.25** | **334** | P | | **P** | **04 15 40.4** | **-1.5** |
| | comp=Z,1.3nm,0.3s,baz=291,slow=1.6,SNR=24 | | | | | | | |
| **YAK** | **Yakutsk** | **18.25** | **334** | *e* P | | **P** | **04 15 40.4** | **-1.5** |
| YAK | | | | *e* S | | **S** | **04 18 46.8** | **-6.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,117nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,13nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,9.0nm,0.9s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,70nm,2.0s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,64nm,2.0s | | | | | | | |
| **YAK** | **Yakutsk** | **18.25** | **334** | | | **P** | **04 15 40.6** | **-1.3** |
| **YAK** | **Yakutsk** | **18.25** | **334** | *e* P | | **P** | **04 15 40.4** | **-1.5** |
| YAK | | | | AMB | AMB | | 04 15 42.8 | |
| | comp=N,120nm,0.9s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **21.66** | **274** | *e* P | | **P** | **04 16 15.6** | **-0.7** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,120nm,4.6s | | | | | | | |
| **BJT** | **Baijiatuao** | **23.07** | **264** | P | | **P** | **04 16 30.5** | **+1.5** |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **BJT** | **Baijiatuao** | **23.07** | **264** | P | | **P** | **04 16 30.5** | **+1.5** |
| BJT | | | | IAmb | IAmb | | 04 16 32.5 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **BILL** | **Bilibino** | **23.70** | **18** | *e* P | | **P** | **04 16 32.7** | **-1.7** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.7s | | | | | | | |
| **BILL** | **Bilibino** | **23.70** | **18** | P | | **P** | **04 16 33.0** | **-1.4** |
| **HHC** | **Hu-ho-hao-te** | **25.88** | **270** | *e* P | | **P** | **04 16 56.0** | **+1.6** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,140nm,5.4s | | | | | | | |
| **TIXI** | **Tiksi** | **26.48** | **347** | P | | **P** | **04 16 57.2** | **-2.0** |
| | comp=Z,1.7nm,0.4s,baz=89,slow=23,SNR=7.9 | | | | | | | |
| TIXI | | | | PcP | | **PcP** | **04 20 14.4** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=92,slow=24,SNR=1.7 | | | | | | | |
| **TIXI** | **Tiksi** | **26.48** | **347** | *i* P | | **P** | **04 16 57.2** | **-2.0** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| **TIXI** | **Tiksi** | **26.48** | **347** | P | | **P** | **04 16 56.8** | **-2.4** |
| **ULN** | **Ulaanbaatar** | **26.74** | **287** | *i* P | | **P** | **04 17 05.0** | **+3.0** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.74** | **287** | P | | **P** | **04 17 02.5** | **+0.5** |
| **SONM** | **Songino Array** | **27.18** | **287** | P | | **P** | **04 17 07.2** | **+1.3** |
| | comp=Z,3.8nm,0.8s,baz=82,slow=9.8,SNR=11 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **04 20 17.1** | **+0.6** |
| | comp=Z,1.0nm,0.7s,baz=91,slow=2.2,SNR=4.6 | | | | | | | |
| **SONM** | **Songino Array** | **27.18** | **287** | P | | **P** | **04 17 06.2** | **+0.3** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **27.18** | **287** | P | | **P** | **04 17 06.2** | **+0.3** |
| **TNA** | **Tin City** | **30.65** | **36** | P | | **P** | **04 17 34.2** | **-1.8** |
| **XAN** | **Xi'an** | **31.12** | **260** | P | | **P** | **04 17 41.5** | **+0.9** |
| XAN | | | | pP | pP | | 04 18 44.1 | +1.5 |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **ANM** | **Nome** | **31.46** | **38** | P | | **P** | **04 17 42.7** | **-0.4** |
| | baz=259 | | | | | | | |
| **GTA** | **Gaotai** | **34.60** | **275** | P | | **P** | **04 18 11.4** | **+0.9** |
| GTA | | | | pP | PP | | 04 19 28.5 | -8.4 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **TTA** | **Tatalina** | **35.44** | **42** | P | | **P** | **04 18 17.6** | **+0.3** |
| | baz=270 | | | | | | | |
| **L19K** | **White Mountain** | **35.99** | **43** | P | | **P** | **04 18 22.3** | **+0.4** |
| | baz=272 | | | | | | | |
| **P18K** | **Big Mountain,** | **36.00** | **48** | P | | **P** | **04 18 22.5** | **+0.6** |
| | baz=276 | | | | | | | |
| **M19K** | **Big River Lodg** | **36.22** | **43** | P | | **P** | **04 18 25.1** | **+1.3** |
| | baz=273 | | | | | | | |
| **N19K** | **Bonanza Creek** | **36.25** | **45** | P | | **P** | **04 18 25.3** | **+1.2** |
| | baz=275 | | | | | | | |
| **J20K** | **Nowinta River** | **36.28** | **39** | IAmb | IAmb | | 04 18 25.9 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **J20K** | **Nowinta River** | **36.28** | **39** | P | | **P** | **04 18 24.9** | **+0.7** |
| | baz=270 | | | | | | | |
| **K20K** | **Telida** | **36.32** | **41** | P | | **P** | **04 18 25.3** | **+0.7** |
| | baz=272 | | | | | | | |
| **L20K** | **Farewell, AK** | **36.44** | **42** | P | | **P** | **04 18 26.4** | **+0.8** |
| | baz=273 | | | | | | | |
| **IMAR** | **Indian Mountai** | **

MCK McKinley 38.60 40 P P 04 18 42.8 -0.7
MCK McKinley 38.60 40 P P 04 18 43.7 +0.2
baz=275
RND Reindeer 38.66 41 P P 04 18 44.1 0.0
RND pmax pmax
comp=Z,7.0nm,0.6s
RND Reindeer 38.66 41 P P 04 18 44.1 0.0
RND IAmb IAmb 04 18 45.7
comp=Z,7.3nm,0.6s
PMR Palmer 38.74 43 P P 04 18 45.8 +1.1
baz=278
MDM Murphy Dome 38.80 38 P P 04 18 45.0 -0.2
SEW Seward 38.81 46 P P 04 18 45.4 +0.2
baz=280
GHO Glory Hole Cre 38.82 43 P P 04 18 45.2 -0.2
GHO IAmb IAmb 04 18 47.4
comp=Z,21nm,1.0s
WAT1 Susitna Watana 38.86 41 P P 04 18 45.6 -0.1
baz=277
H24K Noodor Dome 38.89 37 P P 04 18 46.2 +0.3
baz=274
TCOL CIGO, UAF Yank 38.97 38 IAmb IAmb 04 18 47.6
comp=Z,16nm,0.7s
TCOL CIGO, UAF Yank 38.97 38 P P 04 18 47.0 +0.5
baz=275
COLA College 38.97 38 *ceP P 04 18 46.8 +0.3
COLA pmax pmax
comp=Z,13nm,0.7s
COLA College 38.97 38 P P 04 18 46.3 -0.2
COLA IAmb IAmb 04 18 47.6
comp=Z,17nm,0.7s
ZALV Zalesovo Beam 39.06 304 P P 04 18 46.5 -0.9
comp=Z,0.8nm,0.4s,baz=58,slow=7.4,SNR=2.7
ZALV PcP PcP 04 20 50.2 +0.4
comp=Z,1.3nm,0.3s,baz=86,slow=2.9,SNR=9.0
KNK Knik Glacier 39.09 44 P P 04 18 48.0 +0.4
baz=279
SML Sawmil 39.09 43 IAmb IAmb 04 18 49.0
comp=Z,21nm,0.7s
SML Sawmill 39.09 43 P P 04 18 48.5 +0.9
baz=278
POKR Poker Plat Res 39.13 38 P P 04 18 48.8 +0.9
baz=275
PWL Port Wells 39.23 45 P P 04 18 48.8 +0.1
baz=280
WAT6 Susitna Watana 39.26 42 P P 04 18 48.9 -0.3
baz=278
DHY Denali Highway 39.36 41 IAmb IAmb 04 18 50.6
comp=Z,11nm,0.7s
DHY Denali Highway 39.36 41 P P 04 18 50.1 +0.1
baz=278,SNR=10
ILAR Eielson Array 39.39 38 P P 04 18 49.5 -0.5
comp=Z,6.5nm,0.7s,baz=257,slow=5.8,SNR=99
ILAR PcP PcP 04 20 49.8 -0.9
comp=Z,0.6nm,0.5s,baz=276,slow=3.3,SNR=6.3
ILAR Eielson Array 39.39 38 P P 04 18 49.3 -0.7
ILAR Eielson Array 39.39 38 P P 04 18 49.3 -0.7
HDA Harding Lake 39.40 39 P P 04 18 49.6 -0.5
baz=276
SCM Sheep Creek Mo 39.56 43 P P 04 18 52.1 +0.6
baz=279
GOMU GeErMu 39.63 274 P P 04 18 54.4 +1.6
GOMU pmax pmax
comp=Z,8.0nm,0.6s
PRP Porcupine Dome 39.89 37 P P 04 18 54.4 +0.2
PRP IAmb IAmb 04 18 55.3
comp=Z,10nm,0.7s
M24K Tolsona, Glenn 40.05 42 P P 04 18 56.6 +1.0
baz=280
BMAR Burnt Mountain 40.10 34 P P 04 18 55.7 0.0
KLU Klutina 40.28 43 P P 04 18 56.4 -1.0
KLU IAmb IAmb 04 18 58.9
comp=Z,16nm,0.9s
KLU Klutina 40.28 43 P P 04 18 58.1 +0.7
baz=281
RIDG Independent Ri 40.40 40 P P 04 18 57.6 -0.7
baz=279
HARP HAARP 40.48 42 P P 04 18 59.9 +1.0
baz=280
PZH PanZhiHua 40.65 256 P P 04 19 02.3 +1.4
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
SCRK Sand Creek 40.74 39 P P 04 19 00.6 -0.6
SCRK Sand Creek 40.74 39 P P 04 19 00.5 -0.6
baz=279
WMQ Urumqi 40.81 288 eP P 04 19 03.1 +1.2
J26L Joseph Creek 40.84 38 P P 04 19 01.5 -0.4
baz=279
N25K Chitina, Valde 40.88 43 P P 04 19 03.1 +0.9
baz=282
BMRM Bremner River 41.00 44 P P 04 19 03.5 +0.3
baz=282
M26K Nabesna, AK 41.46 41 IAmb IAmb 04 19 09.2
comp=Z,13nm,0.8s
M26K Nabesna, AK 41.46 41 P P 04 19 08.2 +1.3
baz=282
EGAK Eagle 41.82 38 P P 04 19 09.4 -0.2
baz=281
L27K Beaver Creek, 41.86 40 P P 04 19 11.1 +1.1
baz=282
M27K Edge Creek, AK 41.98 41 IAmb IAmb 04 19 13.2
comp=Z,18nm,0.9s
M27K Edge Creek, AK 41.98 41 P P 04 19 12.5 +1.3
baz=283
ISLE Juniper Island 42.17 44 P P 04 19 13.3 +0.6
BARN Barnard Glacie 42.38 43 IAmb IAmb 04 19 16.4
comp=Z,15nm,0.6s
BVCY Beaver Creek 42.43 41 P P 04 19 15.8 +1.1
baz=283,SNR=5.7
MESA MESA 42.46 45 P P 04 19 16.6 +1.5
baz=285
YAH Yahtse 42.51 44 IAmb IAmb 04 19 17.7
comp=Z,16nm,0.6s
DAWY Dawson 42.71 39 P P 04 19 16.6 -0.3
baz=283
YUK3 Moose Creek 42.77 42 P P 04 19 18.0 +0.4
baz=284
MK31 Makanchi Array 43.03 295 ⇓iP P 04 19 19.1 -0.5
MK31 Makanchi Array 43.03 295 P P 04 19 18.5 -1.1
MKAR Makanchi Array 43.03 295 P P 04 19 19.5 -0.1
comp=Z,1.1nm,0.6s,baz=69,slow=7.0,SNR=11
MKAR PcP PcP 04 21 03.4 +0.3
comp=Z,0.8nm,0.3s,baz=71,slow=5.9,SNR=16
MKAR ScP ScP 04 24 22.4 +0.2
comp=Z,0.3nm,0.4s,baz=57,slow=4.5,SNR=4.1
MKAR Makanchi Array 43.03 295 P P 04 19 18.0 -1.6
KURK Kurchatov 43.70 301 P P 04 19 25.7 +0.8
KURK *SP sP 04 21 05.9 -1.7
KURK pmax pmax
comp=Z,2.0nm,0.9s
KURK Kurchatov 43.70 301 sP 04 21 05.9 -1.7
KURK Kurchatov 43.70 301 P P 04 19 25.6 +0.8
KURK Kurchatov 43.70 301 IAmb IAmb 04 19 30.2
comp=Z,2.1nm,0.9s
YUK4 Talbot Arm 43.72 42 P P 04 19 26.1 +1.1
baz=286
KURBB Kurchatov Arra 43.79 301 P P 04 19 25.7 +0.1
comp=Z,0.6nm,0.3s,baz=69,slow=8.4,SNR=2.1
KURBB PcP PcP 04 21 05.9 +0.4
comp=Z,1.5nm,0.4s,baz=72,slow=3.6,SNR=12
YUK6 Outpost Mounta 43.96 43 P P 04 19 28.1 +1.1
baz=287
INK Inuvik 44.10 32 P P 04 19 27.2 -0.4
comp=Z,2.5nm,0.4s,baz=286,slow=8.2,SNR=44
INK PcP PcP 04 21 06.8 +0.5
comp=Z,1.1nm,0.4s,baz=320,slow=4.8,SNR=4.6
INK Inuvik 44.10 32 P P 04 19 27.0 -0.7
INK Inuvik 44.10 32 P P 04 19 27.3 -0.4
baz=283
M30M Minto, Yukon 44.22 40 P P 04 19 30.1 +1.3
baz=286
HYT Haines Junctio 44.40 43 P P 04 19 32.3 +2.0
baz=288,SNR=15
A36M Sachs Harbour 45.90 26 P P 04 19 39.8 -1.9
baz=287
P33M Teslin, Yukon 46.79 43 P P 04 19 48.5 -0.3
P33M IAmb IAmb 04 19 50.8
comp=Z,11nm,0.7s
P33M Teslin, Yukon 46.79 43 P P 04 19 50.5 +1.6
baz=292,SNR=5.4
C36M Paulatuk 47.10 29 P P 04 19 49.8 -1.1
C36M Paulatuk 47.10 29 P P 04 19 50.1 -0.8
baz=290
BVAR Borovoye Array 47.47 307 P P 04 19 53.7 -0.4
comp=Z,1.4nm,0.5s,baz=54,slow=18,SNR=8.0
BVAR PcP PcP 04 21 18.8 +0.3
comp=Z,0.8nm,0.2s,baz=129,slow=2.5,SNR=6.1
BRVK Borovoye 47.51 307 ⇓iP P 04 19 54.0 -0.4
BRVK pmax pmax
comp=Z,3.0nm,0.7s
BRVK Borovoye 47.51 307 P P 04 19 52.6 -1.8
BRVK Borovoye 47.51 307 iP P 04 19 54.0 -0.4
CMAR Chiang Mai Arr 48.10 251 PcP PcP 04 21 23.1 +1.9
comp=Z,2.2nm,0.3s,baz=20,slow=2.9,SNR=4.1
DLBC Deuce Lake 48.80 44 IAmb IAmb 04 20 07.2
comp=Z,23nm,1.3s
EUNU Eureka 50.09 10 IAmb IAmb 04 20 31.4
comp=Z,9.8nm,0.6s
SPA0 Spitsbergen Ar 51.90 348 eP P 04 20 25.8 -1.0
ARU Arti 52.05 315 P P 04 20 27.3 -0.9
comp=Z,2.7nm,0.4s,baz=89,slow=3.4,SNR=10
ARU Arti 52.05 315 diP P 04 20 27.2 -0.9
ARU pmax pmax
comp=Z,8.0nm,1.7s
ARU Arti 52.05 315 P P 04 20 26.9 -1.2
ARU IAmb IAmb 04 20 27.8
comp=Z,8.6nm,0.6s
YKA Yellowknife Ar 53.60 35 P P 04 20 38.8 -0.6
comp=Z,1.1nm,0.4s,baz=300,slow=7.0,SNR=28
YKA PcP PcP 04 21 41.6 +0.6
comp=Z,1.2nm,0.5s,baz=306,slow=3.8,SNR=17
YKA Yellowknife Ar 53.60 35 ceP P 04 20 39.0 -0.3
YKA pmax pmax
comp=Z,1.0nm,0.4s
ABKAR Akbulak array 55.04 307 P P 04 20 49.2 -0.6
AKTO Aktyubinsk 55.44 309 P P 04 20 52.2 -0.5
comp=Z,2.2nm,0.5s,baz=59,slow=6.5,SNR=6.9
NIL Nilore 55.70 285 P P 04 20 53.6 -1.2
NIL pmax pmax
comp=Z,4.0nm,0.7s
NIL Nilore 55.70 285 P P 04 20 53.5 -1.2
HAMF Hammerfest 56.09 340 eP P 04 20 55.7 -1.1
ARA0 ARCESS Array S 56.44 339 eP P 04 20 58.5 -0.9
ARCES ARCESS Array B 56.44 339 P P 04 20 58.1 -1.2
comp=Z,2.3nm,0.8s,baz=49,slow=7.5,SNR=24
ARCES PcP PcP 04 21 52.1 +0.1
comp=Z,0.9nm,0.4s,baz=59,slow=5.7,SNR=6.3
ARCES ARCESS Array B 56.44 339 P P 04 20 58.2 -1.2
ARCES pmax pmax
comp=Z,13nm,1.3s
ARCES ARCESS Array B 56.44 339 IAmb IAmb 04 21 16.9
comp=Z,13nm,1.3s
KTK1 Kautokeino 57.38 339 eP P 04 21 04.6 -1.3
JETT Jettan, Norway 57.65 340 eP P 04 21 07.7 -0.2
D03D Eldon 57.92 53 P P 04 21 12.0 +2.1
baz=306
TRO Tromso 57.93 341 eP P 04 21 08.6 -1.1
B05A Bryant 58.04 52 P P 04 21 12.3 +1.6
baz=306
EDM Edmonton 59.51 43 IAmb IAmb 04 21 22.3
comp=Z,15nm,0.7s
HOOD Mount Hood Mea 60.03 54 P P 04 21 23.5 -1.1
C09A Chrisman Ranch 60.37 51 P P 04 21 26.4 -0.2
C09A IAmb IAmb 04 21 28.3
comp=Z,7.1nm,0.6s
I04A Tendick Farm, 60.53 56 P P 04 21 29.8 +2.0
baz=308
FAUS Fauske 60.53 341 eP P 04 21 26.3 -1.0
NEW Newport 60.69 50 IAmb IAmb 04 21 30.8
comp=Z,8.1nm,0.9s
NEW Newport 60.69 50 P P 04 21 30.2 +1.3
baz=308,SNR=5.1
I05D Terrebonne, OR 60.81 55 P P 04 21 31.7 +2.0
baz=308
SUMG Summit 61.04 2 P P 04 21 29.8 -1.4
SUMG pmax pmax
comp=Z,10.0nm,0.5s
SUMG Summit 61.04 2 iP P 04 21 29.0 -2.2
SUMG Summit 61.04 2 P P 04 21 29.8 -1.4
SUMG IAmb IAmb 04 21 31.1
comp=Z,10nm,0.5s
J04D Umpqua Nationa 61.05 57 P P 04 21 33.6 +2.1
baz=308
J05D Fort Rock, OR 61.52 56 P P 04 21 36.7 +2.1
baz=309
L04D Klamath Falls 61.56 58 P P 04 21 37.0 +2.1
baz=309
MOR8 Moi Rana 61.72 340 eP P 04 21 32.9 -2.4
KONS Konsvik 61.75 341 eP P 04 21 35.4 -0.1
WALA Waterton Lakes 61.85 47 IAmb IAmb 04 21 38.5
comp=Z,6.5nm,0.8s
N02D Trinity Center 62.10 59 P P 04 21 40.7 +2.3
baz=309
M04C Macdoel 62.11 58 P P 04 21 40.3 +1.8
baz=309
FINES FINESS Array B 62.17 332 P P 04 21 37.1 -1.3
comp=Z,15nm,0.5s,baz=41,slow=7.5,SNR=146
FINES FINESS Array B 62.17 332 P P 04 21 37.3 -1.1
FINES FINESS Array B 62.17 332 P P 04 21 37.3 -1.1
MSO Missoula 63.27 49 IAmb IAmb 04 21 48.0
comp=Z,9.2nm,1.1s
MSO Missoula 63.27 49 P P 04 21 47.3 +1.4
baz=311,SNR=5.1
PLID Pearl Lake 63.30 52 IAmb IAmb 04 21 48.0
comp=Z,5.1nm,0.7s
NSS Namsos 63.66 340 eP P 04 21 47.1 -0.9
VSU Vasula 64.18 330 ⇑iP P 04 21 50.4 -1.1
VSU pmax pmax
comp=Z,74nm,2.2s
VSU Vasula 64.18 330 eP P 04 21 50.6 -0.9
BEKR Beckworth 64.19 59 IAmb IAmb 04 21 54.6
comp=Z,6.9nm,1.0s
EGMT Eagleton 64.62 46 P P 04 21 55.3 +0.7
EGMT IAmb IAmb 04 21 56.0
comp=Z,8.6nm,0.7s
EGMT Eagleton 64.62 46 P P 04 21 55.7 +1.1
baz=312,SNR=5.5
PAHR Pah Rah Range 64.87 58 IAmb IAmb 04 21 58.7
comp=Z,5.2nm,0.8s
DLMT Dillon 64.94 50 IAmb IAmb 04 21 59.2
comp=Z,6.5nm,0.8s
MTSE Matsula 64.98 331 eP P 04 21 55.7 -0.9
HLID Hailey 65.16 52 P P 04 21 58.9 +0.6
HLID Hailey 65.16 52 P P 04 21 59.4 +1.1
baz=312
BOZ Bozeman (W) 65.29 49 P P 04 21 58.9 -0.1
BOZ pmax pmax
comp=Z,10.0nm,0.5s
BOZ Bozeman (W) 65.29 49 P P 04 21 58.9 -0.1
BOZ Bozeman (W) 65.29 49 P P 04 22 00.5 +1.5
baz=312,SNR=17
CMB Columbia Colle 65.36 60 P P 04 22 00.4 +0.9
CMB pmax pmax
comp=Z,9.0nm,1.1s
CMB Columbia Colle 65.36 60 P P 04 22 00.4 +0.9
CMB IAmb IAmb 04 22 02.3
comp=Z,9.0nm,1.1s
UPP Uppsala 66.02 335 eP P 04 22 01.8 -1.4
RYN Ryan 66.08 59 IAmb IAmb 04 22 06.6
comp=Z,5.5nm,0.8s
GCMT Greycliff 66.17 48 P P 04 22 06.0 +1.4
YHH Holmes Hill 66.24 49 IAmb IAmb 04 22 07.5
comp=Z,6.7nm,1.1s
LHV Little Huntoon 66.34 59 IAmb IAmb 04 22 08.7
comp=Z,9.7nm,0.8s
NVAR Mina Array Bea 66.34 59 P P 04 22 07.5 +1.6
comp=Z,5.0nm,0.7s,baz=292,slow=6.2,SNR=52
NVAR Mina Array Bea 66.34 59 P P 04 22 06.8 +0.9
NV11 Mina Array Sit 66.42 59 IAmb IAmb 04 22 08.8
comp=Z,3.6nm,0.7s
DOMB Dombas 66.48 340 eP P 04 22 05.2 -1.0
IDID Didziasalis 66.56 327 eP P 04 22 06.2 -0.5
H17A Grant Village 66.65 50 P P 04 22 10.9 +3.1
baz=313,SNR=5.0
IIGN Ignalina 66.72 328 eP P 04 22 07.5 -0.2
NB201 NORSAR Array S 66.78 338 eP P 04 22 06.3 -1.7
FLWY Flagg Ranch 66.80 50 IAmb IAmb 04 22 15.3
comp=Z,4.1nm,0.8s
NB2 NORSAR Subarra 66.81 338 P P 04 22 07.0 -1.2
comp=Z,3.3nm,0.5s,baz=30,slow=6.5
NB2 NORSAR Subarra 66.81 338 P P 04 22 07.0 -1.2
baz=30,slow=6.5
NOA NORSAR Array B 66.81 338 P P 04 22 07.1 -1.1
comp=Z,4.6nm,0.5s,baz=31,slow=6.7,SNR=43
NACGM Naroch 66.86 327 iP P 04 22 07.9 -0.7
NC602 NORSAR Array S 66.98 338 eP P 04 22 08.2 -1.0
DGMT Dagmar 67.00 43 P P 04 22 10.5 +0.9
baz=315
MOOW Moose Ponds 67.00 50 IAmb IAmb 04 22 12.4
comp=Z,4.0nm,0.7s
TPAW Teton Pass 67.07 51 IAmb IAmb 04 22 12.5
comp=Z,7.1nm,0.9s
WRAB Tennant Creek 67.18 193 ⇑iP P 04 22 12.4 +1.5
WRA Warramunga Arr 67.19 193 P P 04 22 12.5 +1.5
comp=Z,2.0nm,0.5s,baz=8.5,slow=6.6,SNR=44
WRA PcP PcP 04 22 38.1 +1.8
comp=Z,0.6nm,0.7s,baz=7.9,slow=4.8,SNR=4.7
REDW Red Top Meadow 67.21 51 IAmb IAmb 04 22 14.0
comp=Z,5.7nm,0.8s
LAO LASA Array 67.28 46 IAmb IAmb 04 22 13.5
comp=Z,4.1nm,0.8s
LAO LASA Array 67.28 46 P P 04 22 12.2 +0.7
baz=315
VIKU Vikbolandet 67.41 334 eP P 04 22 10.7 -1.2
PABE Paberze 67.42 329 eP P 04 22 11.3 -0.7
NCK Nalchik 67.46 310 ⇑eP P 04 22 13.7 +1.1
NCK pmax pmax
comp=Z,6.0nm,0.3s
KIV Kislovodsk 67.62 311 eP P 04 22 14.7 +1.0
KIV pmax pmax
comp=Z,28nm,1.0s
KIV Kislovodsk 67.62 311 P P 04 22 13.8 +0.2
KIV Kislovodsk 67.62 311 eP P 04 22 14.7 +1.0
KBZ Khabaz 67.67 310 P P 04 22 14.7 +0.9
comp=Z,10nm,0.8s,baz=75,slow=4.0,SNR=22
KBZ Khabaz 67.67 310 ciP P 04 22 14.2 +0.4
KBZ pmax pmax
comp=Z,7.0nm,0.6s
KBZ Khabaz 67.67 310 eP P 04 22 14.2 +0.4
CWC Cottonwood Cre 67.80 60 P P 04 22 16.2 +1.3
baz=312
GRAC Grapevine Rang 67.85 59 P P 04 22 16.9 +1.8
baz=313,SNR=9.0
R11A Troy Canyon, C 67.98 57 P P 04 22 17.5 +1.4
baz=313,SNR=5.6
ISA Isabella, Lake 68.08 61 P P 04 22 16.9 +0.3
baz=313
DUG Dugway, Tooele 68.30 54 IAmb IAmb 04 22 20.5
comp=Z,6.8nm,0.7s
DUG Dugway, Tooele 68.30 54 P P 04 22 19.7 +1.7
baz=314,SNR=5.9
BW06 Boulder Array 68.31 50 P P 04 22 19.1 +1.0
baz=314,SNR=15
PD31 Pinedale Array 68.31 50 P P 04 22 18.6 +0.5
PDAR Pinedale Array 68.31 50 P P 04 22 19.0 +0.9
comp=Z,8.8nm,0.5s,baz=31,slow=0.8,SNR=143
SUE Sulen 68.34 341 eP P 04 22 18.9 +1.3
MPMC Manual Prospec 68.40 60 P P 04 22 20.1 +1.4
baz=313,SNR=6.7
FURC Furnace Creek, 68.50 59 P P 04 22 20.9 +1.9
baz=313,SNR=5.1
TPNV Topopah Spring 68.54 59 P P 04 22 20.2 +0.7
TPNV pmax pmax
comp=Z,3.0nm,0.8s
TPNV Topopah Spring 68.54 59 P P 04 22 20.2 +0.7
TPNV Topopah Spring 68.54 59 P P 04 22 21.0 +1.5
baz=313,SNR=5.4
LRMC Laurel Mtn Rad 68.68 61 P P 04 22 20.3 -0.1
baz=313
GWY Greenwater Val 68.81 60 IAmb IAmb 04 22 23.2
comp=Z,6.6nm,0.7s
QSM Queen of Sheba 68.84 60 IAmb IAmb 04 22 23.4
comp=Z,7.3nm,0.8s
NLU North Lily Min 68.88 54 IAmb IAmb 04 22 23.9
comp=Z,5.7nm,0.9s
EDW2 Edwards Air Fo 68.89 61 P P 04 22 23.0 +1.4
baz=313
PRN Pahroc Range 68.93 58 IAmb IAmb 04 22 28.5
comp=Z,6.6nm,1.2s
AKASG Malin Array Be 69.08 323 P P 04 22 21.4 -1.0
comp=Z,3.5nm,0.4s,baz=36,slow=6.2,SNR=30
AKASG Malin Array Be 69.08 323 P P 04 22 21.6 -0.7
AKBB Malin Array Si 69.08 323 ⇓iP P 04 22 21.6 -0.8
AKBB pmax pmax
comp=Z,10.0nm,0.8s
AKBB Malin Array Si 69.08 323 IAmb IAmb 04 22 22.1
comp=Z,8.7nm,0.8s
GSC Goldstone, Bar 69.33 60 IAmb IAmb 04 22 26.2
comp=Z,6.8nm,1.1s
GSC Goldstone, Bar 69.33 60 P P 04 22 25.5 +1.3
baz=313
ULM Lac du Bonnet 69.41 37 P P 04 22 24.1 -0.2
comp=Z,6.7nm,0.5s,baz=319,slow=7.3,SNR=8.1
ULM Lac du Bonnet 69.41 37 IAmb IAmb 04 22 24.6
comp=Z,7.7nm,0.7s
SHPR Sheep Range 69.48 58 IAmb IAmb 04 22 27.5
comp=Z,3.9nm,0.8s
MDND Maddock 69.58 41 P P 04 22 25.7 +0.2
TUQ Turquoise Moun 69.76 60 P P 04 22 28.4 +1.4
baz=314,SNR=5.9
TMUT Trail Mountain 69.82 54 IAmb IAmb 04 22 29.6
comp=Z,6.2nm,0.7s
HEC Hector,Ludlow 69.93 60 P P 04 22 29.3 +1.4
baz=314
K22A Casper 69.98 49 P P 04 22 29.0 +0.8
baz=316
P18A Preston Nutter 70.12 53 IAmb IAmb 04 22 31.6
comp=Z,5.1nm,0.6s
MTPU Mount Pierson 70.14 55 IAmb IAmb 04 22 32.3
comp=Z,4.5nm,0.6s
RSSD Black Hills 70.19 46 P P 04 22 29.5 0.0
RSSD pmax pmax
comp=Z,7.0nm,0.6s
RSSD Black Hills 70.19 46 P P 04 22 29.5 0.0
RSSD IAmb IAmb 04 22 30.9
comp=Z,6.5nm,0.6s
RSSD Black Hills 70.19 46 P P 04 22 30.2 +0.7
baz=317
LCMT Little Creek M 70.25 57 IAmb IAmb 04 22 32.0
comp=Z,4.2nm,0.8s
GMRC Granite Mounta 70.36 60 P P 04 22 32.2 +1.6
baz=314
O20A White River Ci 70.86 52 IAmb IAmb 04 22 56.7
comp=Z,6.7nm,1.1s
O20A White River Ci 70.86 52 P P 04 22 34.6 +1.0
baz=316
AGMN Agassiz Nation 70.89 39 P P 04 22 33.1 -0.3
baz=320
ASAR Alice Springs 70.91 192 P P 04 22 36.0 +2.3
comp=Z,1.3nm,0.5s,baz=9.3,slow=5.6,SNR=26
ASAR Alice Springs 70.91 192 P P 04 22 36.4 +2.7
IRM Iron Mountain 71.10 60 P P 04 22 36.4 +1.5
baz=314,SNR=5.2
U15A North Rim 71.20 57 IAmb IAmb 04 22 38.5
comp=Z,7.7nm,0.8s
SORM Soroca 71.41 322 ⇑P P 04 22 36.0 -0.4
SORM Soroca 71.41 322 ⇑P P 04 22 36.0 -0.4
PDMCI Parker Dam,Lak 71.60 59 P P 04 22 39.3 +1.5
baz=315,SNR=5.7
PV23 Carpenter Ridg 71.63 53 IAmb IAmb 04 22 40.3
comp=Z,8.6nm,0.8s
GURO Guroymak-BITLI 71.76 307 P P 04 22 38.5 -0.4
PV11 David Mesa, Pa 71.81 53 IAmb IAmb 04 22 42.0
comp=Z,13nm,1.0s
SMCO Snowmass 72.22 52 P P 04 22 42.5 +0.6
SMCO IAmb IAmb 04 22 43.9
comp=Z,5.4nm,1.0s
WUAZ Wupatki 72.37 57 P P 04 22 44.6 +2.0
baz=315
ISCO Idaho Springs 72.50 50 P P 04 22 44.7 +1.3
baz=317
Y14A Wickenburg 72.53 59 IAmb IAmb 04 22 45.6
comp=Z,4.1nm,0.7s
MVCO Mesa Verde 72.80 54 IAmb IAmb 04 22 47.1
comp=Z,6.8nm,0.8s
MVCO Mesa Verde 72.80 54 P P 04 22 46.4 +1.3
baz=316
EYMN Ely 73.01 37 P P 04 22 46.0 +0.1
baz=322
X16A Lo Mia Camp, P 73.11 58 IAmb IAmb 04 22 49.6
comp=Z,6.1nm,0.9s
BUR08 Bucovina Ar. S 73.12 323 IAmb IAmb 04 22 48.6
comp=Z,8.1nm,1.4s
BUR01 Bucovina Ar. S 73.14 323 ⇑P P 04 22 46.8 +0.1
BURAR Bucovina Array 73.14 323 P P 04 22 46.1 -0.6
BURAR pmax pmax
comp=Z,4.0nm,0.8s
BURAR Bucovina Array 73.14 323 P P 04 22 46.1 -0.6
S22A 4UR Ranch, Cre 73.33 53 P P 04 22 50.1 +1.8
baz=317
Q24A Divide 73.36 51 P P 04 22 49.5 +1.1
baz=317
TESR Tescani 73.40 321 ⇑P P 04 22 48.0 -0.2
OGNE Ogallala 73.52 47 P P 04 22 49.9 +0.8
baz=318
TRPA Tarpa 73.81 325 ⇓P P 04 22 51.2 +0.7
VRI Vrincioaia 73.87 321 ⇑P P 04 22 52.5 +1.6
VRI Vrincioaia 73.87 321 ⇑P P 04 22 52.5 +1.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **X18A** | **Snowflake** | **73.89** | **57** | IAmb | IAmb | 04 22 53.9 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **214A** | **Organ Pipe Nat** | **74.04** | **60** | P | **P** | **04 22 53.4** | **+1.2** |
| | baz=316 | | | | | | |
| **ECSD** | **EROS Data Cent** | **74.05** | **42** | IAmb | IAmb | 04 22 52.5 | |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **ECSD** | **EROS Data Cent** | **74.05** | **42** | P | **P** | **04 22 52.3** | **+0.3** |
| | baz=320 | | | | | | |
| **SDCO** | **Great Sand Dun** | **74.06** | **52** | P | **P** | **04 22 53.5** | **+1.0** |
| | baz=317 | | | | | | |
| **HARR** | **Harsova** | **74.26** | **319** | ⇓P | **P** | **04 22 53.1** | **0.0** |
| **HARR** | **Harsova** | **74.26** | **319** | ⇓P | **P** | **04 22 53.1** | **0.0** |
| **DPC** | **Dobruska-Polom** | **74.31** | **330** | *e*P | **P** | **04 22 53.4** | **0.0** |
| **DPC** | **Dobruska-Polom** | **74.31** | **330** | *e*P | **P** | **04 22 53.4** | **0.0** |
| **MORC** | **Moravsky Berou** | **74.36** | **329** | ⇑P | **P** | **04 22 53.7** | **0.0** |
| **MORC** | **Moravsky Berou** | **74.36** | **329** | ⇑P | **P** | **04 22 53.7** | **0.0** |
| **MORC** | **Moravsky Berou** | **74.36** | **329** | P | **P** | **04 22 52.3** | **-1.3** |
| MORC | | | | IAmb | IAmb | 04 22 54.7 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **SPMN** | **Marine on St.** | **74.61** | **39** | P | **P** | **04 22 54.9** | **-0.2** |
| | baz=322 | | | | | | |
| **CLL** | **Collm** | **74.62** | **332** | *i* P | **P** | **04 22 54.4** | **-0.6** |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **VOIR** | | **74.93** | **322** | ⇑P | **P** | **04 22 57.9** | **+0.9** |
| **VOIR** | | **74.93** | **322** | ⇑P | **P** | **04 22 57.9** | **+0.9** |
| **TUC** | **Tucson** | **74.99** | **59** | P | **P** | **04 22 59.4** | **+1.8** |
| | baz=316 | | | | | | |
| **SCHQ** | **Schefferville** | **75.01** | **19** | P | **P** | **04 22 56.5** | **-0.7** |
| | comp=Z,1.0nm,0.4s,baz=31,slow=6.6,SNR=8.2 | | | | | | |
| **T25A** | **Trinidad** | **75.09** | **51** | IAmb | IAmb | 04 23 00.0 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **75.09** | **51** | P | **P** | **04 22 59.1** | **+0.8** |
| | baz=318 | | | | | | |
| **BGNE** | **Belgrade** | **75.10** | **45** | P | **P** | **04 22 58.3** | **+0.3** |
| | baz=320 | | | | | | |
| **ARR** | **Arges** | **75.17** | **322** | ⇑P | **P** | **04 22 59.4** | **+1.0** |
| **BR131** | **Keskin Array S** | **75.34** | **313** | ⇑*e*P | **P** | **04 22 58.8** | **-0.7** |
| **BRTR** | **Keskin Array B** | **75.34** | **313** | P | **P** | **04 22 59.7** | **+0.2** |
| | comp=Z,1.4nm,0.7s,baz=97,slow=1.3,SNR=9.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.34** | **313** | *i* P | **P** | **04 23 00.1** | **+0.6** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **75.58** | **54** | P | **P** | **04 23 02.8** | **+1.8** |
| | baz=317 | | | | | | |
| **BNM** | **Barren Site** | **76.06** | **55** | P | **P** | **04 23 04.1** | **+0.3** |
| **KHC** | **Kasperske Hory** | **76.29** | **330** | *e*P | **P** | **04 23 04.6** | **0.0** |
| **KHC** | **Kasperske Hory** | **76.29** | **330** | *e*P | **P** | **04 23 04.6** | **0.0** |
| **KHC** | **Kasperske Hory** | **76.29** | **330** | IAmb | IAmb | 04 23 06.0 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **76.31** | **330** | *e*P | **P** | **04 23 04.6** | **0.0** |
| **GERES** | **GERESS Array B** | **76.50** | **330** | P | **P** | **04 23 05.3** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=27,slow=5.7,SNR=8.1 | | | | | | |
| **CONA** | **Conrad Observa** | **76.52** | **328** | *i* P | **P** | **04 23 06.3** | **+0.4** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **319A** | **Douglas** | **76.55** | **59** | IAmb | IAmb | 04 23 08.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **121A** | **Cookes Peak, D** | **76.58** | **57** | IAmb | IAmb | 04 23 09.4 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **121A** | **Cookes Peak, D** | **76.58** | **57** | P | **P** | **04 23 08.7** | **+2.1** |
| | baz=317 | | | | | | |
| **VTS** | **Vitosha** | **77.97** | **321** | P | **P** | **04 23 13.2** | **-0.9** |
| VTS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **VTS** | **Vitosha** | **77.97** | **321** | P | **P** | **04 23 13.2** | **-0.9** |
| VTS | | | | IAmb | IAmb | 04 23 15.4 | |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **VLDQ** | **Val d'Or** | **78.09** | **28** | P | **P** | **04 23 12.6** | **-1.8** |
| **KBA** | **Koelnbreinsper** | **78.13** | **329** | *i* P | **P** | **04 23 15.6** | **+0.7** |
| | comp=Z,2.3nm,0.4s | | | | | | |
| **OBKA** | **Obir** | **78.19** | **328** | *i* P | **P** | **04 23 15.3** | **+0.1** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **78.24** | **51** | P | **P** | **04 23 15.9** | **+0.3** |
| | baz=320 | | | | | | |
| **MSTX** | **Muleshoe** | **78.34** | **53** | P | **P** | **04 23 16.9** | **+0.7** |
| | baz=319 | | | | | | |
| **WATA** | **Walderalm** | **78.52** | **331** | *i* P | **P** | **04 23 17.0** | **0.0** |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **78.56** | **331** | *i* P | **P** | **04 23 17.4** | **+0.1** |
| | comp=Z,2.9nm,0.3s | | | | | | |
| **MNTX** | **Cornudas Mount** | **78.57** | **56** | P | **P** | **04 23 17.3** | **-0.1** |
| MNTX | | | | IAmb | IAmb | 04 23 19.5 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **MNTX** | **Cornudas Mount** | **78.57** | **56** | P | **P** | **04 23 18.9** | **+1.5** |
| | baz=318 | | | | | | |
| **RETA** | **Reutte** | **78.66** | **331** | *i* P | **P** | **04 23 18.1** | **+0.4** |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **78.67** | **331** | *i* P | **P** | **04 23 17.8** | **-0.1** |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **DAVA** | **Damuels** | **79.13** | **332** | *i* P | **P** | **04 23 19.7** | **-0.6** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **79.89** | **50** | P | **P** | **04 23 25.1** | **+0.7** |
| | baz=321 | | | | | | |
| **S39A** | **Bolivar** | **80.33** | **44** | IAmb | IAmb | 04 23 27.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **TUL1** | **Leonard** | **80.52** | **47** | P | **P** | **04 23 28.5** | **+0.8** |
| | baz=322 | | | | | | |
| **U38A** | **Gravette** | **80.81** | **46** | P | **P** | **04 23 28.5** | **-0.7** |
| U38A | | | | IAmb | IAmb | 04 23 30.2 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **81.02** | **43** | P | **P** | **04 23 30.6** | **+0.3** |
| | baz=324 | | | | | | |
| **HHAR** | **Hobbs** | **81.15** | **45** | IAmb | IAmb | 04 23 32.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **TX32** | **Lajitas Array** | **81.32** | **56** | IAmb | IAmb | 04 23 34.3 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.32** | **56** | P | **P** | **04 23 33.4** | **+1.3** |
| | comp=Z,5.6nm,0.8s,baz=296,slow=3.7,SNR=58 | | | | | | |
| **TXAR** | **Lajitas Array** | **81.32** | **56** | P | **P** | **04 23 31.9** | **-0.2** |
| **U40A** | **Yellville** | **81.62** | **45** | P | **P** | **04 23 33.8** | **+0.3** |
| | baz=323 | | | | | | |
| **W39A** | **Magazine** | **82.09** | **46** | P | **P** | **04 23 36.4** | **+0.5** |
| | baz=323 | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **82.35** | **45** | IAmb | IAmb | 04 23 38.0 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **82.62** | **53** | P | **P** | **04 23 39.7** | **+0.9** |
| | baz=321 | | | | | | |
| **P49A** | **Miami Univ. Ec** | **82.70** | **38** | P | **P** | **04 23 38.9** | **0.0** |
| | baz=327 | | | | | | |
| **MIAR** | **Mount Ida** | **82.71** | **46** | IAmb | IAmb | 04 23 40.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **82.71** | **46** | P | **P** | **04 23 39.8** | **+0.7** |
| | baz=323 | | | | | | |
| **WHTX** | **Lake Whitney,** | **82.72** | **50** | P | **P** | **04 23 40.3** | **+1.1** |
| | baz=322 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **82.83** | **36** | P | **P** | **04 23 39.8** | **+0.2** |
| | baz=328 | | | | | | |
| **W41B** | **Gary Mavity, V** | **82.86** | **45** | P | **P** | **04 23 40.1** | **+0.3** |
| | baz=324 | | | | | | |
| **M54A** | **Oil Creek Stat** | **83.04** | **33** | P | **P** | **04 23 40.9** | **+0.2** |
| | baz=330 | | | | | | |
| **WCI** | **Wyandotte Cave** | **83.12** | **39** | P | **P** | **04 23 41.5** | **+0.4** |
| | baz=327 | | | | | | |
| **X40A** | **Basin Creek Fa** | **83.12** | **46** | P | **P** | **04 23 42.1** | **+0.9** |
| | baz=324 | | | | | | |
| **N54A** | **Moraine State** | **83.39** | **34** | P | **P** | **04 23 42.5** | **0.0** |
| | baz=330 | | | | | | |
| **O53A** | **New Philadelph** | **83.53** | **35** | P | **P** | **04 23 43.4** | **+0.2** |
| | baz=329 | | | | | | |
| **BINY** | **Binghamton** | **83.77** | **30** | P | **P** | **04 23 44.3** | **-0.1** |
| | baz=332 | | | | | | |
| **CCAR** | **Cane Creek** | **84.10** | **45** | P | **P** | **04 23 47.2** | **+1.1** |
| **M57A** | **Sunshine Farm,** | **84.12** | **32** | P | **P** | **04 23 46.0** | **-0.1** |
| **WVT** | **Waverly** | **84.17** | **42** | P | **P** | **04 23 47.0** | **+0.6** |
| | baz=326 | | | | | | |
| **SSPA** | **Standing Stone** | **84.46** | **32** | P | **P** | **04 23 47.9** | **+0.1** |
| | baz=331 | | | | | | |
| **O56A** | **Blue Knob Stat** | **84.53** | **33** | P | **P** | **04 23 48.3** | **+0.1** |
| | baz=331 | | | | | | |
| **OXF** | **Oxford** | **84.76** | **43** | P | **P** | **04 23 50.1** | **+0.7** |
| | baz=325 | | | | | | |
| **TZTN** | **Tazewell** | **85.72** | **38** | P | **P** | **04 23 54.7** | **+0.5** |
| | baz=328 | | | | | | |
| **Z51A** | **Franklin** | **87.72** | **41** | P | **P** | **04 24 03.2** | **-0.5** |
| **ESDC** | **Sonseca Array** | **90.17** | **338** | P | **P** | **04 24 13.8** | **-1.3** |
| | comp=Z,0.3nm,0.5s,baz=26,slow=4.3,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **112.72** | **323** | PKiKP | **PKiKP** | **04 29 49.1** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=28,slow=1.2,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **112.72** | **323** | | **PKiKP** | **04 29 47.5** | **-2.2** |
| **BDFB** | **Brasilia** | **146.76** | **27** | PKPbc | **PKPbc** | **04 30 56.3** | **+0.7** |
| | comp=Z,3.4nm,0.4s,baz=43,slow=4.6,SNR=11 | | | | | | |
| **SNAA** | **Sanae** | **151.08** | **199** | PKPdf | **PKiKP** | **04 31 05.6** | **+0.5** |
| **CPUP** | **Villa Florida** | **152.20** | **52** | PKPbc | **PKiKP** | **04 31 08.8** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=237,slow=0.3,SNR=4.1 | | | | | | |
| **PLCA** | **Paso Flores** | **152.61** | **91** | PKPbc | **PKiKP** | **04 31 10.6** | **+1.3** |
| | comp=Z,4.1nm,0.6s,baz=308,slow=3.3,SNR=20 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **152.64** | **198** | PKPdf | **PKiKP** | **04 31 09.2** | **+1.0** |
| | baz=98,slow=1.3 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **152.86** | **197** | PKPdf | **PKiKP** | **04 31 09.4** | **+0.6** |
| **VNA1** | **Neumayer--Stat** | **153.03** | **198** | PKPdf | **PKiKP** | **04 31 10.1** | **+1.1** |

**PRU 20 04:20:01.8±0.0, 51.46N×16.21E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.62** | **175** | *e*Pg | Pg | 04 20 13.4 | -0.3 |
| KSP | | | | *e*Sg | Sg | 04 20 21.7 | +0.1 |
| **CHVC** | **Chvalec** | **0.88** | **186** | *e*PG | Pg | 04 20 18.5 | -0.1 |
| CHVC | | | | *e*SG | Sg | 04 20 30.2 | +0.2 |
| **OSTC** | **Ostas** | **0.91** | **180** | *e*PG | Pg | 04 20 18.9 | -0.2 |
| OSTC | | | | *e*SG | Sg | 04 20 31.5 | +0.7 |
| **UPC** | **Upice** | **0.96** | **188** | *e*PG | Pg | 04 20 20.3 | +0.1 |
| UPC | | | | *e*SG | Sg | 04 20 32.8 | +0.1 |
| | comp=Z,5.5nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.11** | **176** | *e*PG | Pg | 04 20 22.6 | -0.5 |
| DPC | | | | *e*SG | Sg | 04 20 37.3 | -0.2 |
| **PVCC** | **Panska Ves** | **1.40** | **229** | *e*PG | Pn | 04 20 27.0 | -1.5 |
| PVCC | | | | *e*SG | Sg | 04 20 46.7 | +0.1 |
| | comp=Z,6.4nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.43** | **165** | *e*PG | Pn | 04 20 28.1 | -1.0 |
| KRLC | | | | *e*SG | Sg | 04 20 47.2 | -0.6 |
| **BRG** | **Berggiesshubel** | **1.54** | **249** | Sg | Sn | 04 20 50.9 | -0.4 |
| BRG | | | | Amp | | 04 20 52.0 | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.88** | **217** | *e*SG | Sg | 04 21 33.6 | -0.6 |
| **CKRC** | **Cesky Krumlov** | **2.91** | **206** | *e*SG | Sb | 04 21 32.9 | +2.2 |

*JMA **20** 04:27:00.3±0.3, 33.79N×137.23E, h371km±3km, M3.7*
*IDC **20** 04:27:02.7±1.9, 33.66N×137.10E, h328km±31km, mb2.7/2, mb1 3.0/5, mb1mx2.7/41, mbtmp3.6/5, Error ellipse: s-maj=54.2km s-min=25.3km az=55.0*
**ISC 20 04:27:02.9±1.0, 33.9N±0.1×137.20E±0.07, h350km, n20, σ0s98/22, 1C, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIE** | **Ise** | **0.66** | **322** | P | **Pn** | **04 27 48.0** | **+0.6** |
| **JKN2** | **Miekihoku** | **0.85** | **296** | P | **Pn** | **04 27 48.1** | **+0.1** |
| **JTNC** | **Tanabenakahech** | **1.33** | **268** | P | **Pn** | **04 27 50.1** | **0.0** |
| **JWY** | **Kouya** | **1.38** | **285** | P | **Pn** | **04 27 50.4** | **0.0** |
| **JNY** | **Yasuok** | **1.58** | **20** | P | **Pn** | **04 27 52.1** | **+0.6** |
| **JWT** | **Wachi** | **2.05** | **314** | ⇑P | **Pn** | **04 27 54.4** | **0.0** |
| **JHU** | **Hanno** | **2.61** | **40** | *e*S | **S** | **04 28 44.0** | **+0.2** |
| **MAT** | **Matsushiro** | **2.79** | **17** | *e*S | **S** | **04 28 46.4** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **2.79** | **17** | P | **Pn** | **04 28 00.8** | **+0.5** |
| | 0.4nm,0.3s,baz=196,slow=8.6,SNR=9.6 | | | | | | |
| **BSO3** | **Boso 3** | **2.89** | **70** | P | **Pn** | **04 28 00.8** | **-0.1** |
| BSO3 | | | | *e*S | **S** | **04 28 47.9** | **+0.3** |
| **JAG** | **Ashikaga** | **3.15** | **35** | P | **Pn** | **04 28 02.9** | **-0.6** |
| **BSO1** | **Boso 1** | **3.22** | **75** | P | **Pn** | **04 28 03.3** | **-0.3** |
| BSO1 | | | | *e*S | **S** | **04 28 52.8** | **+0.2** |
| **JYT** | **Yasato** | **3.40** | **45** | P | **Pn** | **04 28 05.2** | **-0.6** |
| **JHS** | **Saijyo** | **3.56** | **290** | P | **Pn** | **04 28 07.4** | **-0.1** |
| **JHO** | **Hitachi** | **3.88** | **44** | P | **Pn** | **04 28 09.9** | **-0.7** |
| **JFK** | **Kawauchi** | **4.59** | **40** | P | **Pn** | **04 28 17.3** | **-0.7** |
| **KSRS** | **Korea Array** | **8.36** | **298** | P | **P** | **04 29 01.2** | **-2.7** |
| | 0.4nm,0.3s,baz=110,slow=12,SNR=10 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.08** | **340** | P | **P** | **04 29 34.0** | **-0.1** |
| | baz=156,slow=10,SNR=7.0 | | | | | | |
| **SONM** | **Songino Array** | **26.95** | **310** | P | **P** | **04 32 16.3** | **+2.8** |
| | 0.3nm,0.5s,baz=101,slow=7.5,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.58** | **183** | P | **P** | **04 35 49.2** | **+0.1** |
| | 0.2nm,0.4s,baz=0.5,slow=7.6,SNR=6.2 | | | | | | |

*IDC **20** 04:43:02.0±21.0, 11.74N×88.64W, h0km, mb3.6/3, mb1 3.9/3, mb1mx3.6/33, mbtmp3.6/3, Error ellipse: s-maj=427.5km s-min=65.2km az=7.0*
*SNET **20** 04:43:12.4±1.2, 12.46N×89.13W, h15km±3km, ML3.4*
**ISC 20 04:43:11.1±2.3, 12.4N±0.1×89.12W±0.06, h22km±10km, n31, σ0s87/44, mb3.5/3, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LALI** | **Alcalda de L** | **1.13** | **350** | *e*P | **Pn** | **04 43 31.7** | **0.0** |
| LALI | | | | *e*S | **Sb** | **04 43 45.7** | **-0.7** |
| **TECO** | **Alcaldia de Te** | **1.21** | **16** | *e*P | **Pn** | **04 43 32.3** | **-0.5** |
| TECO | | | | *e*S | **Sn** | **04 43 48.3** | **-0.2** |
| **SJTE** | **Alcalda de S** | **1.24** | **5** | *e*P | **Pn** | **04 43 32.9** | **-0.4** |
| SJTE | | | | *e*S | **Sn** | **04 43 48.4** | **-1.0** |
| **LFRS** | **El Faro** | **1.25** | **2** | *e*P | **Pn** | **04 43 33.3** | **-0.1** |
| **COEB** | **Comit de Eme** | **1.26** | **27** | *i* P | **Pn** | **04 43 33.6** | **+0.1** |
| **COEG** | **Centro de Oper** | **1.27** | **10** | *e*P | **Pn** | **04 43 33.5** | **-0.1** |
| COEG | | | | IAML | | 04 43 58.8 | |
| | comp=Z,578nm,0.3s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.32** | **355** | *e*P | **Pn** | **04 43 34.7** | **+0.4** |
| SNET | | | | IAML | | 04 43 48.0 | |
| | comp=Z,448nm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.32** | **346** | *e*P | **Pn** | **04 43 34.2** | **-0.2** |
| JAYA | | | | *e*S | **Sn** | **04 43 50.9** | **-0.5** |
| JAYA | | | | IAML | | 04 43 53.6 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **RANC** | **El Ranchito** | **1.33** | **37** | *e*P | **Pn** | **04 43 35.1** | **+0.6** |
| **OPAM** | **Oficina de Pla** | **1.34** | **357** | *e*P | **Pn** | **04 43 35.0** | **+0.4** |
| **PAVA** | **Las Pavas** | **1.35** | **7** | *e*P | **Pn** | **04 43 34.7** | **-0.1** |
| PAVA | | | | *e*S | **Sb** | **04 43 53.5** | **+0.8** |
| PAVA | | | | IAML | | 04 43 55.5 | |
| | comp=Z,534nm,0.3s | | | | | | |
| **PMON** | **Piamonte** | **1.35** | **352** | *e*P | **Pn** | **04 43 34.7** | **-0.1** |
| **PQSS** | **Presa 15 de Se** | **1.36** | **23** | *e*P | **Pn** | **04 43 35.1** | **+0.3** |
| **BOQS** | **Boqueron** | **1.37** | **353** | *e*P | **Pn** | **04 43 35.6** | **+0.4** |
| **SCLA** | **Alcaldia de Sa** | **1.38** | **16** | *e*P | **Pn** | **04 43 35.2** | **+0.1** |
| SCLA | | | | *e*S | **Sn** | **04 43 53.4** | **+0.6** |
| **CEDA** | **San Andres** | **1.45** | **349** | *e*P | **Pn** | **04 43 36.5** | **+0.4** |
| CEDA | | | | *e*S | **Sn** | **04 43 54.7** | **+0.2** |
| CEDA | | | | IAML | | 04 44 03.2 | |
| | comp=Z,670nm,0.2s | | | | | | |
| **LCND** | **La Caada** | **1.52** | **52** | *e*S | **Sb** | **04 43 57.6** | **+0.1** |
| **CEVE** | **Cerro Verde** | **1.53** | **341** | *e*P | **Pn** | **04 43 37.9** | **+0.5** |
| CEVE | | | | *e*S | **Sb** | **04 43 58.6** | **+0.5** |
| CEVE | | | | IAML | | 04 44 01.9 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **SBLS** | **San Blas** | **1.54** | **341** | *e*P | **Pn** | **04 43 38.0** | **+0.5** |
| **SNJE** | **San Jose** | **1.57** | **342** | *e*P | **Pb** | **04 43 39.2** | **-0.4** |
| **RTR** | **El Retiro** | **1.61** | **341** | *e*P | **Pn** | **04 43 39.1** | **+0.7** |
| **TACO** | **Tacachico** | **1.61** | **352** | *e*P | **Pn** | **04 43 38.6** | **+0.3** |
| TACO | | | | *e*S | **Sn** | **04 43 59.4** | **+0.9** |
| TACO | | | | IAML | | 04 44 03.4 | |
| | comp=Z,288nm,0.4s | | | | | | |
| **NUBE** | **Las Nubes** | **1.66** | **337** | *e*P | **Pn** | **04 43 39.3** | **+0.3** |
| NUBE | | | | *e*S | **Sn** | **04 43 59.0** | **-0.8** |
| NUBE | | | | IAML | | 04 44 03.0 | |
| | comp=Z,410nm,0.4s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.77** | **339** | *e*P | **Pn** | **04 43 41.6** | **+1.0** |
| SLOZ | | | | *e*S | **Sn** | **04 44 03.4** | **+1.0** |
| **LLGN** | **La Laguna** | **1.79** | **5** | *e*S | **Sn** | **04 44 04.3** | **+1.3** |
| **MTO3** | **Montecristo** | **2.03** | **353** | *e*P | **Pn** | **04 43 45.3** | **+1.0** |
| MTO3 | | | | *e*S | **Sb** | **04 44 11.6** | **-1.0** |
| **ESQI** | **Esquipulas** | **2.19** | **354** | *e*P | **Pn** | **04 43 47.9** | **+1.5** |
| ESQI | | | | *e*S | **Sn** | **04 44 14.5** | **+1.7** |
| **TGUH** | **Tegucigalpa,Un** | **2.46** | **47** | *e*P | **Pn** | **04 43 51.4** | **+1.4** |
| **TXAR** | **Lajitas Array** | **21.64** | **323** | P | **P** | **04 48 02.6** | **+2.4** |
| | comp=Z,1.3nm,0.6s,baz=145,slow=11,SNR=15 | | | | | | |
| **SCHQ** | **Schefferville** | **45.84** | **18** | P | **P** | **04 51 29.5** | **-1.9** |
| | comp=Z,2.2nm,1.0s,baz=214,slow=11,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.27** | **346** | P | **P** | **04 52 27.3** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=138,slow=7.8,SNR=5.2 | | | | | | |

**IDC 20 04:50:33.0±4.5, 3.71S×149.15E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.3/33, mbtmp3.4/3, Error ellipse: s-maj=153.1km s-min=53.6km az=112.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.66** | **221** | P | P | 04 55 23.8 | -1.5 |
| | 0.2nm,0.4s,baz=45,slow=9.4,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **24.71** | **215** | P | P | 04 55 56.6 | +0.4 |
| | 0.5nm,0.5s,baz=44,slow=7.7,SNR=9.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.10** | **236** | P | P | 04 56 18.8 | +1.0 |
| | 1.3nm,0.9s,baz=61,slow=12,SNR=6.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.51** | **288** | PKPbc | PKPdf | 05 10 16.1 | +0.1 |
| | 0.3nm,0.9s,baz=90,slow=6.6,SNR=1.0 | | | | | | |

*IDC **20** 04:53:15.7±1.1, 36.24N×21.69E, h0km, mb3.8/10, mb1 3.8/13, mb1mx3.7/41, mbtmp3.8/13, ML3.6/3, MS3.2/3, Ms1 3.2/3, ms1mx2.5/93, Error ellipse: s-maj=23.5km s-min=19.4km az=39.0*
*ATH **20** 04:53:19.6, 36.16N×21.61E, h29km±3km, ML3.3/6, Error ellipse: s-maj=5.7km s-min=2.0km az=45.0*
*THE **20** 04:53:21.5, 36.14N×21.63E, h19km±4km, ML3.4/3, Error ellipse: s-maj=4.6km s-min=1.3km az=327.0*
*ISK **20** 04:53:35.4, 36.31N×23.58E, h7km, ML3.0/4*
**ISC 20 04:53:15.4±1.6, 36.07N±0.05×21.31E±0.05, h14km±9km, n92, σ1s78/97, mb3.9/10, 6C-1D, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PYL** | **PYLOS** | **0.90** | **23** | P | **Pn** | **04 53 34.7** | **+1.1** |
| PYL | | | | S | **Sn** | **04 53 47.4** | **+1.0** |
| | 3μm,0.7s | | | | | | |
| **PYL** | **PYLOS** | **0.90** | **23** | P | **Pn** | **04 53 34.3** | **+0.7** |
| PYL | | | | S | **Sg** | **04 53 44.9** | **+0.3** |
| PYL | | | | AML | AML | 04 53 49.1 | |
| | comp=E,5980μm,0.5s | | | | | | |
| PYL | | | | AML | AML | 04 53 50.5 | |
| | comp=N,4257μm,0.8s | | | | | | |
| **ITM** | **Ithomi** | **1.22** | **24** | P | **Pn** | **04 53 40.0** | **+1.9** |
| **ITM** | **Ithomi** | **1.22** | **24** | P | **Pn** | **04 53 40.0** | **+1.9** |
| ITM | | | | S | **Sg** | **04 53 53.6** | **-1.2** |
| ITM | | | | AML | AML | 04 54 04.0 | |
| | comp=N,2700μm,0.8s | | | | | | |
| ITM | | | | AML | AML | 04 54 09.1 | |
| | comp=E,3531μm,0.5s | | | | | | |
| **KTHR** | **Kythira** | **1.39** | **81** | P | **Pb** | **04 53 41.7** | **+0.6** |
| **KTHA** | **Kythira Island** | **1.43** | **82** | P | **Pg** | **04 53 42.4** | **-0.6** |
| **KTHA** | **Kythira Island** | **1.43** | **82** | P | **Pb** | **04 53 42.2** | **+0.3** |
| KTHA | | | | AML | AML | 04 54 07.7 | |
| | comp=N,2103μm,0.5s | | | | | | |
| KTHA | | | | AML | AML | 04 54 10.5 | |
| | comp=E,5173μm,0.8s | | | | | | |
| **VLI** | **Velíai** | **1.47** | **63** | P | **Pb** | **04 53 42.6** | **+0.1** |
| VLI | | | | S | **Sn** | **04 53 58.2** | **-2.3** |
| | comp=E,2μm,0.7s | | | | | | |
| **VLI** | **Velíai** | **1.47** | **63** | P | **Pn** | **04 53 42.5** | **+1.0** |
| VLI | | | | AML | AML | 04 54 10.1 | |
| | comp=E,2954μm,0.8s | | | | | | |
| VLI | | | | AML | AML | 04 54 10.2 | |
| | comp=N,2079μm,1.1s | | | | | | |
| **MNVA** | **Monemvasia** | **1.53** | **66** | P | **Pg** | **04 53 44.2** | **-0.6** |
| **ANKY** | **Antikythira Is** | **1.63** | **96** | P | **Pb** | **04 53 45.5** | **+0.2** |
| **ANKY** | **Antikythira Is** | **1.63** | **96** | P | **Pb** | **04 53 45.5** | **+0.2** |
| ANKY | | | | AML | AML | 04 54 17.9 | |
| | comp=N,1691μm,0.9s | | | | | | |
| ANKY | | | | AML | AML | 04 54 19.9 | |
| | comp=E,2124μm,0.6s | | | | | | |
| **LTHK** | **Lithakia** | **1.68** | **347** | P | **Pg** | **04 53 47.8** | **0.0** |
| **DRO** | **Drossia** | **1.91** | **10** | P | **Pg** | **04 53 51.4** | **-0.7** |
| **DRO** | **Drossia** | **1.91** | **10** | P | **Pg** | **04 53 51.3** | **-0.7** |
| **KRND** | **KRANIDI** | **1.98** | **48** | P | **Pn** | **04 53 49.3** | **+0.8** |
| KRND | | | | AML | AML | 04 54 31.7 | |
| | comp=N,981μm,0.6s | | | | | | |
| KRND | | | | AML | AML | 04 54 34.1 | |
| | comp=E,1025μm,1.0s | | | | | | |
| **RLS** | **Riolos of Patr** | **1.99** | **4** | P | **Pg** | **04 53 52.7** | **-0.9** |
| **RLS** | **Riolos of Patr** | **1.99** | **4** | P | **Pg** | **04 53 52.7** | **-0.9** |
| **KLV** | **Kalavryta, Ach** | **2.09** | **19** | P | **Pb** | **04 53 53.5** | **+0.4** |
| **KLV** | **Kalavryta, Ach** | **2.09** | **19** | P | **Pb** | **04 53 53.4** | **+0.4** |
| **KNDR** | **Palaiochora Ch** | **2.11** | **112** | PG | **Pg** | **04 53 56.4** | **+0.5** |
| KNDR | | | | SG | **Sn** | **04 54 11.5** | **-4.7** |
| **PSDA** | **Pessada-Kefalo** | **2.12** | **344** | P | **Pg** | **04 53 55.1** | **-1.0** |
| **VLS** | **Valsamata** | **2.18** | **345** | P | **Pg** | **04 53 55.8** | **-1.5** |
| **VLS** | **Valsamata** | **2.18** | **345** | P | **Pg** | **04 53 55.7** | **-1.5** |
| **LAKA** | **Lakka** | **2.24** | **14** | P | **Pb** | **04 53 56.1** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **2.26** | **105** | P | **Pn** | **04 53 53.6** | **+1.2** |
| IMMV | | | | S | **Sn** | **04 54 19.6** | **-0.4** |
| | comp=E,570nm,0.8s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.26** | **105** | P | **Pn** | **04 53 53.5** | **+1.2** |
| **IMMV** | **Iera Moni Meta** | **2.26** | **105** | PG | **Pn** | **04 53 53.3** | **+1.0** |
| IMMV | | | | SG | Sn | 04 54 06.5 | -13 |
| **KEF3** | **Kipouria, Keph** | **2.27** | **341** | P | **Pg** | **04 53 57.1** | **-1.8** |
| **EFP** | **Efpalio** | **2.41** | **11** | P | **Pb** | **04 53 58.9** | **+0.5** |
| **VAM** | **Vamos** | **2.44** | **105** | P | **Pn** | **04 53 56.0** | **+1.1** |
| **FSK** | **Fiskardo** | **2.46** | **346** | P | **Pg** | **04 54 00.5** | **-2.1** |
| **ANX** | **Ano Chora

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **75.59** | **341** | P | | **P** | | **05 05 02.0** | **+2.7** |
| | comp=E,0.3nm,0.6s,baz=39,slow=5.1,SNR=6.0 | | | | | | | | |
| **KSRS** | **Korea Array** | **80.18** | **51** | P | | **P** | | **05 05 26.0** | **+0.7** |
| | comp=E,1.3nm,0.6s,baz=291,slow=4.9,SNR=4.5 | | | | | | | | |

**IDC 20 04:58:35.4±2.4, 11°29S×120°59E, h0km, mb3.2/1, mb1 3.4/4, mb1mx3.2/35, mbtmp3.2/4, ML3.1/3, Error ellipse: s-maj=184.9km s-min=28.5km az=52.0, South of Sumba**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **FITZ** | **Fitzroy Crossi** | **8.35** | **145** | Pn | | Pn | 05 | 00 | 37.8 | 0.0 |
| | 0.2nm,0.3s,baz=326,slow=12,SNR=14 | | | | | | | | | |
| FITZ | | | | Sn | | Sn | 05 | 02 | 05.4 | -7.4 |
| | 0.7nm,0.3s,baz=194,slow=21,SNR=12 | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.78** | **125** | Pn | | Pn | 05 | 02 | 17.4 | -1.9 |
| | 0.1nm,0.3s,baz=296,slow=12,SNR=1.8 | | | | | | | | | |
| WRA | | | | Sn | | Sn | 05 | 05 | 05.4 | -10 |
| | 0.1nm,0.3s,baz=309,slow=24,SNR=5.1 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.67** | **136** | P | | P | 05 | 02 | 44.4 | +0.2 |
| | 0.1nm,0.3s,baz=311,slow=12,SNR=8.7 | | | | | | | | | |
| ASAR | | | | S | | Sn | 05 | 05 | 50.2 | -11 |
| | 0.1nm,0.3s,baz=306,slow=22,SNR=4.1 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.20** | **332** | P | | P | 05 | 09 | 31.4 | 0.0 |
| | 0.1nm,0.4s,baz=152,slow=6.2,SNR=2.1 | | | | | | | | | |

**RSNC 20 05:00:43.1±1.0, 5°22N×76°28W, h96km±3km, ML3.1, Mw3.7, 11C-5D, Fault plane solution: NP1: ϕs128.00000°, δ78.00000°, λ158.00000°., Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **PLMC** | **San Jos del P** | **0.32** | **181** | *e*P | | Pn | 05 | 00 | 56.5 | -0.9 |
| PLMC | | | | *e*S | | Sn | 05 | 01 | 07.9 | -0.2 |
| **CBOC** | **Ciudad Bolivar** | **0.69** | **22** | *e*P | | Pn | 05 | 00 | 59.7 | -0.6 |
| CBOC | | | | *e*S | | Sn | 05 | 01 | 12.9 | -0.1 |
| CBOC | | | | *i* | | | 05 | 01 | 17.0 | |
| | comp=Z,438nm,0.2s | | | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **0.91** | **90** | ↑*i*P | | Pn | 05 | 01 | 02.1 | -0.7 |
| GUY2C | | | | *e*S | | Sn | 05 | 01 | 17.1 | -0.3 |
| GUY2C | | | | *i* | | | 05 | 01 | 19.5 | |
| | comp=Z,548nm,0.5s | | | | | | | | | |
| **PIZC** | **Pizarro, Choco** | **1.11** | **257** | *e*P | | Pn | 05 | 01 | 04.1 | -0.4 |
| PIZC | | | | *e*S | | Sn | 05 | 01 | 21.1 | +0.5 |
| PIZC | | | | *i* | | | 05 | 01 | 24.3 | |
| | comp=Z,237nm,0.6s | | | | | | | | | |
| **ANIL** | **Santa Ana** | **1.14** | **130** | *e*P | | Pn | 05 | 01 | 04.2 | -0.8 |
| ANIL | | | | *e*S | | Sn | 05 | 01 | 21.6 | 0.0 |
| **HELC** | **Santa Helena** | **1.22** | **38** | ↓*e*P | | Pn | 05 | 01 | 05.0 | -1.1 |
| HELC | | | | *e*S | | Sn | 05 | 01 | 22.1 | -1.2 |
| HELC | | | | *i* | | | 05 | 01 | 25.4 | |
| | comp=Z,239nm,0.3s | | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **1.23** | **183** | ↓*i*P | | Pn | 05 | 01 | 04.4 | -1.7 |
| YOTC | | | | *e*S | | Sn | 05 | 01 | 21.1 | -2.3 |
| YOTC | | | | *i* | | | 05 | 01 | 24.6 | |
| | comp=Z,263nm,0.4s | | | | | | | | | |
| **NORC** | **Norcasia** | **1.44** | **76** | ↑*e*P | | Pn | 05 | 01 | 08.2 | -0.3 |
| NORC | | | | *e*S | | Sn | 05 | 01 | 27.6 | -0.2 |
| NORC | | | | *i* | | | 05 | 01 | 32.0 | |
| | comp=Z,149nm,0.3s | | | | | | | | | |
| **SOLC** | **Bahia Solano** | **1.50** | **312** | ↑*e*P | | Pn | 05 | 01 | 08.1 | -1.2 |
| SOLC | | | | *e*S | | Sn | 05 | 01 | 29.5 | +0.5 |
| **ORTC** | **Ortega, Tolima** | **1.66** | **142** | *e*P | | Pn | 05 | 01 | 10.8 | -0.4 |
| ORTC | | | | *e*S | | Sn | 05 | 01 | 33.0 | +0.4 |
| ORTC | | | | *i* | | | 05 | 01 | 36.5 | |
| | comp=Z,272nm,0.6s | | | | | | | | | |
| **ROSC** | **El Rosal** | **1.99** | **101** | ↑*i*P | | Pn | 05 | 01 | 17.0 | +1.3 |
| **PTBC** | **PUERTO BERRIO,** | **2.23** | **54** | ↑*e*P | | Pn | 05 | 01 | 18.4 | -0.2 |
| PTBC | | | | *e*S | | Sn | 05 | 01 | 45.1 | -0.7 |
| PTBC | | | | *i* | | | 05 | 01 | 51.1 | |
| | comp=Z,100nm,0.6s | | | | | | | | | |
| **SPBC** | **San Pablo de B** | **2.24** | **79** | ↑*i*P | | Pn | 05 | 01 | 18.7 | 0.0 |
| SPBC | | | | *e*S | | Sn | 05 | 01 | 46.0 | 0.0 |
| SPBC | | | | *i* | | | 05 | 01 | 56.1 | |
| | comp=Z,48nm,0.4s | | | | | | | | | |
| **MARP** | **Paez Belalcaza** | **2.39** | **172** | *e*P | | Pn | 05 | 01 | 20.7 | -0.2 |
| MARP | | | | *e*S | | Sn | 05 | 01 | 48.7 | -1.0 |
| MARP | | | | *i* | | | 05 | 01 | 51.8 | |
| | comp=Z,28nm,0.3s | | | | | | | | | |
| **PTAC** | **Punta Ardita,** | **2.44** | **322** | *e*P | | Pn | 05 | 01 | 19.7 | -1.7 |
| PTAC | | | | *e*S | | Sn | 05 | 01 | 47.6 | -3.1 |
| **CHIC** | **Chingaza** | **2.60** | **103** | ↑*i*P | | Pn | 05 | 01 | 25.4 | +1.5 |
| CHIC | | | | *e*S | | Sn | 05 | 01 | 57.3 | +2.2 |
| CHIC | | | | *i* | | | 05 | 02 | 00.5 | |
| | comp=Z,30nm,0.4s | | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.62** | **16** | *e*P | | Pn | 05 | 01 | 23.2 | -0.5 |
| **BETC** | **Betania** | **2.66** | **162** | *e*P | | Pn | 05 | 01 | 23.8 | -0.6 |
| BETC | | | | *e*S | | Sn | 05 | 01 | 54.9 | -1.0 |
| BETC | | | | *i* | | | 05 | 01 | 57.4 | |
| | comp=Z,46nm,0.2s | | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **2.66** | **32** | *e*P | | Pn | 05 | 01 | 24.2 | 0.0 |
| ZARC | | | | *e*S | | Sn | 05 | 01 | 55.1 | -0.8 |
| ZARC | | | | *i* | | | 05 | 01 | 58.4 | |
| | comp=Z,158nm,0.5s | | | | | | | | | |
| **POPC** | **Popayan, Colom** | **2.69** | **189** | *i* P | | Pn | 05 | 01 | 24.1 | -0.8 |
| POPC | | | | *e*S | | Sn | 05 | 01 | 56.5 | -0.5 |
| POPC | | | | *i* | | | 05 | 02 | 03.9 | |
| | comp=Z,38nm,0.7s | | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.80** | **113** | *e*P | | Pn | 05 | 01 | 28.3 | +2.0 |
| VILC | | | | *e*S | | Sn | 05 | 02 | 04.1 | +4.6 |
| **PCON** | **Cinco Dias** | **2.88** | **182** | ↑*i*P | | Pn | 05 | 01 | 28.2 | +0.5 |
| PCON | | | | *e*S | | Sn | 05 | 02 | 03.0 | +1.1 |
| PCON | | | | *i* | | | 05 | 02 | 16.9 | |
| | comp=Z,42nm,0.4s | | | | | | | | | |
| **SOTA** | **Rioblanco** | **3.08** | **186** | *e*P | | Pn | 05 | 01 | 30.9 | +0.5 |
| SOTA | | | | *e*S | | Sn | 05 | 02 | 06.2 | -0.5 |
| SOTA | | | | *i* | | | 05 | 02 | 19.8 | |
| | comp=Z,35nm,0.6s | | | | | | | | | |
| **GARC** | **Garzon, Huila** | **3.12** | **165** | ↓*e*P | | Pn | 05 | 01 | 29.9 | -0.7 |
| GARC | | | | *e*S | | Sn | 05 | 02 | 03.2 | -3.9 |
| GARC | | | | *i* | | | 05 | 02 | 07.6 | |
| | comp=Z,73nm,0.3s | | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **3.16** | **54** | ↑*e*P | | Pn | 05 | 01 | 30.9 | -0.1 |
| BRRC | | | | *e*S | | Sn | 05 | 02 | 07.4 | -0.5 |
| BRRC | | | | *i* | | | 05 | 02 | 12.8 | |
| | comp=Z,36nm,0.3s | | | | | | | | | |
| **RUSC** | **La Rusia** | **3.25** | **78** | *e*P | | Pn | 05 | 01 | 32.8 | +0.3 |
| RUSC | | | | *e*S | | Sn | 05 | 02 | 12.9 | +2.3 |
| RUSC | | | | *i* | | | 05 | 02 | 34.4 | |
| | comp=Z,16nm,0.5s | | | | | | | | | |
| **BBAC** | **Balboa, Cauca** | **3.32** | **197** | *e*P | | Pn | 05 | 01 | 32.9 | -0.4 |
| BBAC | | | | *e*S | | Sn | 05 | 02 | 10.6 | -1.6 |
| BBAC | | | | *i* | | | 05 | 02 | 22.7 | |
| | comp=Z,33nm,0.3s | | | | | | | | | |
| **BARC** | **Barichara** | **3.37** | **66** | ↑*e*P | | Pn | 05 | 01 | 34.0 | +0.1 |
| BARC | | | | *e*S | | Sn | 05 | 02 | 13.2 | 0.0 |
| BARC | | | | *i* | | | 05 | 02 | 15.6 | |
| | comp=Z,42nm,0.7s | | | | | | | | | |
| **FLOC** | **Florencia** | **3.67** | **170** | ↓*e*P | | Pn | 05 | 01 | 37.1 | -0.7 |
| **MACC** | **Macarena, Meta** | **3.90** | **142** | ↓*e*P | | Pn | 05 | 01 | 40.2 | -0.8 |
| MACC | | | | *e*S | | Sn | 05 | 02 | 24.5 | -1.3 |
| MACC | | | | *i* | | | 05 | 02 | 31.2 | |
| | comp=Z,52nm,0.4s | | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **4.13** | **59** | *e*P | | Pn | 05 | 01 | 44.8 | +0.3 |
| PAMC | | | | *e*S | | Sn | 05 | 02 | 31.8 | -0.2 |
| PAMC | | | | *i* | | | 05 | 02 | 37.6 | |
| | comp=Z,28nm,0.3s | | | | | | | | | |
| **OCAC** | **Ocana** | **4.20** | **44** | *e*P | | Pn | 05 | 01 | 45.4 | +0.3 |
| OCAC | | | | *e*S | | Sn | 05 | 02 | 32.0 | -1.1 |
| OCAC | | | | *i* | | | 05 | 02 | 39.5 | |
| | comp=Z,68nm,0.4s | | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **4.62** | **75** | *e*P | | Pn | 05 | 01 | 50.9 | +0.2 |
| TAMC | | | | *e*S | | Sn | 05 | 02 | 42.6 | -0.7 |
| **OTAV** | **Otavalo** | **5.41** | **204** | *e*P | | Pn | 05 | 01 | 59.6 | -2.1 |
| OTAV | | | | *e*S | | Sn | 05 | 02 | 57.1 | -5.8 |
| **PAC1** | **Pacto, Paraso** | **5.53** | **207** | *e*P | | Pn | 05 | 01 | 59.7 | -3.4 |
| PAC1 | | | | *e*S | | Sn | 05 | 02 | 59.3 | -6.2 |
| **SOCV** | **Socops** | **6.18** | **60** | *e*P | | Pn | 05 | 02 | 11.0 | -0.9 |
| SOCV | | | | *e*S | | Sn | 05 | 03 | 16.6 | -4.6 |
| **SDV** | **Santo Domingo** | **6.68** | **57** | *e*P | | Pn | 05 | 02 | 17.6 | -1.3 |
| SDV | | | | *e*S | | Sn | 05 | 03 | 28.7 | -4.9 |
| SDV | | | | *i* | | | 05 | 03 | 33.3 | |
| | comp=Z,8.9nm,0.4s | | | | | | | | | |

*IDC 20 05:19:37.4±2.0, 30°.84S×71°.46W, h0km, mb4.1/2, mb1 3.9/7, mb1mx3.7/26, mbtmp3.8/7, ML3.4/5, MS4.3/1, Ms1 4.3/1, ms1mx2.8/53, Error ellipse: s-maj=51.1km s-min=27.1km az=104.0*
*SJA 20 05:19:38.0±0.8, 30°.72S×71°.90W, h15km±3km, ML4.0, MW3.9*
*NEIC 20 05:19:43.4±2.0, 30°.73S±0°.05×71°.6W±0°.1, h36km±9km, mb4.3/3, ML4.0(GUC), Error ellipse: s-maj=15.6km s-min=6.8km az=105.0*
*GUC 20 05:19:43.9±0.7, 30°.74S×71°.43W, h49km±1km, ML4.0*
**ISC 20 05:19:43.7±0.8, 30.75S±0.03×71.61W±0.04, h45km±7km, n91, σ1s83/118, mb4.0/3, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **CO06** | **Fray Jorge** | **0.08** | **345** | | | **Pn** | **05** | **19** | **51.9** | **+1.0** |
| **CO06** | **Fray Jorge** | **0.08** | **345** | *e*P | | **Pn** | **05** | **19** | **51.9** | **+1.0** |
| CO06 | | | | *i* S | | **Sn** | **05** | **19** | **57.2** | **+1.2** |
| CO06 | | | | IAML | | | 05 | 19 | 58.8 | |
| | comp=E,17μm,0.2s | | | | | | | | | |
| **CO02** | **Combarbal** | **0.69** | **131** | | | **Pn** | **05** | **19** | **56.3** | **-1.0** |
| **CO02** | **Combarbal** | **0.69** | **131** | *e*P | | **Pn** | **05** | **19** | **56.2** | **-1.0** |
| CO02 | | | | *i* S | | **Sn** | **05** | **20** | **05.2** | **-1.8** |
| CO02 | | | | IAML | | | 05 | 20 | 05.6 | |
| | comp=E,47μm,0.2s | | | | | | | | | |
| **CO02** | **Combarbal** | **0.69** | **131** | *e*P | | **Pn** | **05** | **19** | **55.7** | **-1.6** |
| CO02 | | | | *e*P | | **Pn** | **05** | **19** | **56.0** | **-1.3** |
| CO02 | | | | IAML | | | 05 | 20 | 11.9 | |
| | comp=Z,3μm,0.4s | | | | | | | | | |
| **CO03** | **El Pedregal** | **0.80** | **96** | | | **Pn** | **05** | **19** | **56.7** | **-2.0** |
| **CO03** | **El Pedregal** | **0.80** | **96** | *e*P | | **Pn** | **05** | **19** | **57.2** | **-1.5** |
| CO03 | | | | *i* S | | **Sn** | **05** | **20** | **06.9** | **-2.7** |
| CO03 | | | | IAML | | | 05 | 20 | 07.2 | |
| | comp=E,7μm,0.1s | | | | | | | | | |
| **CO03** | **El Pedregal** | **0.80** | **96** | *e*P | | **Pn** | **05** | **19** | **57.0** | **-1.7** |
| CO03 | | | | IAML | | | 05 | 20 | 14.6 | |
| | comp=Z,2μm,0.3s | | | | | | | | | |
| **CO05** | **La Serena** | **0.89** | **21** | | | **Pn** | **05** | **20** | **00.1** | **+0.2** |
| **CO05** | **La Serena** | **0.89** | **21** | *e*P | | **Pn** | **05** | **19** | **59.9** | **0.0** |
| CO05 | | | | *i* S | | **Sn** | **05** | **20** | **11.1** | **-0.5** |
| CO05 | | | | IAML | | | 05 | 20 | 18.5 | |
| | comp=E,4μm,0.3s | | | | | | | | | |
| **GO04** | **Tololo Observa** | **0.91** | **51** | | | **Pn** | **05** | **19** | **59.2** | **-1.0** |
| **GO04** | **Tololo Observa** | **0.91** | **51** | *e*P | | **Pn** | **05** | **19** | **59.3** | **-1.0** |
| GO04 | | | | *i* S | | **Sn** | **05** | **20** | **10.8** | **-1.6** |
| GO04 | | | | IAML | | | 05 | 20 | 12.2 | |
| | comp=E,7μm,0.1s | | | | | | | | | |
| **GO04** | **Tololo Observa** | **0.91** | **51** | *e*P | | Pn | 05 | 19 | 54.5 | -5.8 |
| GO04 | | | | *e*P | | **Pn** | **05** | **19** | **59.0** | **-1.3** |
| GO04 | | | | *e*S | | **Sn** | **05** | **20** | **11.2** | **-1.2** |
| **VA06** | **Catapilco** | **1.82** | **172** | Pn | | **Pn** | **05** | **20** | **12.9** | **+0.4** |
| **VA06** | **Catapilco** | **1.82** | **172** | *e*P | | **Pn** | **05** | **20** | **13.0** | **+0.4** |
| VA06 | | | | *i* S | | **Sn** | **05** | **20** | **36.3** | **+1.9** |
| VA06 | | | | IAML | | | 05 | 20 | 41.9 | |
| | comp=N,2μm,0.5s | | | | | | | | | |
| **LCO** | **Las Campanas** | **1.91** | **25** | Pn | | **Pn** | **05** | **20** | **13.9** | **0.0** |
| **LCO** | **Las Campanas** | **1.91** | **25** | *e*P | | **Pn** | **05** | **20** | **14.3** | **+0.3** |
| LCO | | | | *i* S | | **Sn** | **05** | **20** | **37.4** | **+0.5** |
| **LCO** | **Las Campanas** | **1.91** | **25** | *e*P | | **Pn** | **05** | **20** | **14.0** | **0.0** |
| **AROD** | **Rodeo** | **1.94** | **73** | *e*P | | **Pn** | **05** | **20** | **16.0** | **+1.6** |
| AROD | | | | *e*S | | **Sn** | **05** | **20** | **34.0** | **-3.7** |
| **VA03** | **San Esteban** | **2.20** | **156** | | | **Pn** | **05** | **20** | **18.6** | **+0.9** |
| **VA03** | **San Esteban** | **2.20** | **156** | *e*P | | **Pn** | **05** | **20** | **18.7** | **+0.9** |
| VA03 | | | | *i* S | | **Sn** | **05** | **20** | **45.2** | **+1.3** |
| VA03 | | | | IAML | | | 05 | 20 | 49.5 | |
| | comp=E,2μm,0.2s | | | | | | | | | |
| **VA03** | **San Esteban** | **2.20** | **156** | *e*P | | **Pn** | **05** | **20** | **18.7** | **+0.9** |
| VA03 | | | | *e*S | | **Sn** | **05** | **20** | **48.2** | **+4.4** |
| VA03 | | | | IAML | | | 05 | 20 | 51.8 | |
| | comp=Z,759nm,0.2s | | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.20** | **86** | *e*P | | **Pn** | **05** | **20** | **19.9** | **+1.9** |
| ACCO | | | | *e*S | | Sn | 05 | 20 | 32.5 | -12 |
| **ROCH** | **El Roble** | **2.27** | **167** | *e*P | | **Pn** | **05** | **20** | **19.6** | **+0.7** |
| ROCH | | | | *e*P | | **Pn** | **05** | **20** | **18.2** | **-0.7** |
| ROCH | | | | *i* S | | **Sn** | **05** | **20** | **47.6** | **+1.8** |
| ROCH | | | | *i* S | | **Sn** | **05** | **20** | **47.8** | **+2.0** |
| ROCH | | | | IAML | | | 05 | 20 | 54.5 | |
| | comp=N,2μm,0.4s | | | | | | | | | |
| ROCH | | | | IAML | | | 05 | 20 | 59.5 | |
| | comp=N,1μm,0.4s | | | | | | | | | |
| **ROC1** | **El Roble** | **2.27** | **167** | *e*P | | **Pn** | **05** | **20** | **18.1** | **-0.9** |
| ROC1 | | | | *e*S | | **Sn** | **05** | **20** | **47.2** | **+1.3** |
| **AUSP** | **Uspallata** | **2.40** | **128** | *e*P | | **Pn** | **05** | **20** | **22.0** | **+1.2** |
| AUSP | | | | *e*P | | **Pn** | **05** | **20** | **22.5** | **+1.7** |
| AUSP | | | | *e*S | | **Sn** | **05** | **20** | **52.0** | **+2.9** |
| **PEL** | **Peldehue** | **2.51** | **162** | | | **Pn** | **05** | **20** | **22.3** | **+0.2** |
| **PEL** | **Peldehue** | **2.51** | **162** | *e*P | | **Pn** | **05** | **20** | **23.1** | **+1.0** |
| PEL | | | | *i* S | | **Sn** | **05** | **20** | **52.7** | **+1.2** |
| PEL | | | | IAML | | | 05 | 21 | 07.6 | |
| | comp=N,685nm,0.6s | | | | | | | | | |
| **PEL** | **Peldehue** | **2.51** | **162** | *e*P | | **Pn** | **05** | **20** | **23.0** | **+1.0** |
| PEL | | | | *e*S | | **Sn** | **05** | **20** | **53.0** | **+1.5** |
| **MT02** | **Curacav** | **2.53** | **171** | | | **Pn** | **05** | **20** | **23.3** | **+1.0** |
| **MT02** | **Curacav** | **2.53** | **171** | *e*P | | **Pn** | **05** | **20** | **22.6** | **+0.2** |
| MT02 | | | | *i* S | | **Sn** | **05** | **20** | **53.4** | **+1.5** |
| MT02 | | | | IAML | | | 05 | 21 | 07.5 | |
| | comp=E,543nm,0.8s | | | | | | | | | |
| **MT02** | **Curacav** | **2.53** | **171** | *e*P | | **Pn** | **05** | **20** | **22.0** | **-0.3** |
| MT02 | | | | *e*P | | **Pn** | **05** | **20** | **22.5** | **+0.2** |
| MT02 | | | | *e*S | | **Sn** | **05** | **20** | **53.0** | **+1.1** |
| MT02 | | | | IAML | | | 05 | 21 | 06.7 | |
| | comp=Z,420nm,0.5s | | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.58** | **11** | Pn | | **Pn** | **05** | **20** | **23.8** | **+0.8** |
| **AC04** | **Llanos de Chal** | **2.58** | **11** | *e*P | | **Pn** | **05** | **20** | **23.9** | **+0.9** |
| AC04 | | | | *e*S | | **Sn** | **05** | **20** | **52.0** | **-1.2** |
| AC04 | | | | *e*S | | **Sn** | **05** | **20** | **54.5** | **+1.3** |
| AC04 | | | | IAML | | | 05 | 21 | 07.5 | |
| | comp=Z,380nm,0.7s | | | | | | | | | |
| **ZON** | **Zonda** | **2.63** | **108** | *e*P | | **Pn** | **05** | **20** | **25.5** | **+1.7** |
| ZON | | | | *e*S | | Sn | 05 | 21 | 01.5 | +6.9 |
| ZON | | | | IAML | | | 05 | 21 | 07.3 | |
| | comp=Z,416nm,0.3s | | | | | | | | | |
| **MT05** | **Renca** | **2.73** | **165** | Pn | | **Pn** | **05** | **20** | **25.0** | **-0.1** |
| **MT05** | **Renca** | **2.73** | **165** | *i* S | | **Sn** | **05** | **20** | **58.3** | **+1.3** |
| MT05 | | | | IAML | | | 05 | 21 | 06.1 | |
| | comp=E,1μm,0.4s | | | | | | | | | |
| **MT05** | **Renca** | **2.73** | **165** | *e*P | | **Pn** | **05** | **20** | **26.6** | **+1.5** |
| MT05 | | | | *e*S | | **Sn** | **05** | **21** | **00.5** | **+3.5** |
| MT05 | | | | IAML | | | 05 | 21 | 11.0 | |
| | comp=Z,575nm,0.7s | | | | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.75** | **103** | *e*P | | **Pn** | **05** | **20** | **26.7** | **+1.3** |
| RTLL | | | | *e*S | | **Sn** | **05** | **21** | **00.5** | **+3.1** |
| RTLL | | | | *e*S | | Sn | 05 | 21 | 04.8 | +7.3 |
| **RTCV** | **Cerro Valdivia** | **2.85** | **114** | *e*P | | **Pn** | **05** | **20** | **29.0** | **+2.3** |
| RTCV | | | | *e*S | | Sn | 05 | 21 | 07.4 | +7.5 |
| RTCV | | | | *e*S | | Sn | 05 | 21 | 08.5 | +8.6 |
| **MT03** | **Universidad Ad** | **2.89** | **161** | *e*P | | **Pn** | **05** | **20** | **28.3** | **+1.0** |
| MT03 | | | | *i* S | | **Sn** | **05** | **21** | **02.1** | **+1.3** |
| MT03 | | | | IAML | | | 05 | 21 | 15.6 | |
| | comp=E,2μm,0.8s | | | | | | | | | |
| **MT03** | **Universidad Ad** | **2.89** | **161** | *e*P | | **Pn** | **05** | **20** | **28.0** | **+0.7** |
| MT03 | | | | *e*S | | **Sn** | **05** | **21** | **08.5** | **+7.7** |
| MT03 | | | | IAML | | | 05 | 21 | 12.8 | |
| | comp=Z,454nm,0.5s | | | | | | | | | |
| **VA05** | **Santo Domingo** | **2.90** | **180** | | | **Pn** | **05** | **20** | **27.1** | **-0.2** |
| **ASAL** | **Salagasta** | **2.99** | **128** | *e*P | | **Pn** | **05** | **20** | **31.0** | **+2.3** |
| ASAL | | | | *e*S | | Sn | 05 | 21 | 10.6 | +7.2 |
| **MT09** | **Talagante** | **3.06** | **170** | | | **Pn** | **05** | **20** | **30.4** | **+0.7** |
| **ARCO** | **CERRO ARCO** | **3.09** | **133** | *e*P | | **Pn** | **05** | **20** | **33.0** | **+2.9** |
| ARCO | | | | *e*S | | Sn | 05 | 21 | 19.1 | +13 |
| ARCO | | | | IAML | | | 05 | 21 | 21.8 | |
| | comp=Z,629nm,0.4s | | | | | | | | | |
| **MT01** | **Popeta** | **3.12** | **174** | | | **Pn** | **05** | **20** | **30.8** | **+0.4** |
| **LMEL** | **Las Melosas** | **3.31** | **159** | *e*P | | **Pn** | **05** | **20** | **35.0** | **+1.9** |
| LMEL | | | | *i* S | | **Sn** | **05** | **21** | **12.6** | **+1.3** |
| **AAGR** | **Agrelo** | **3.32** | **135** | *e*P | | **Pn** | **05** | **20** | **35.9** | **+2.7** |
| AAGR | | | | *e*S | | Sn | 05 | 21 | 24.9 | +13 |
| **BO04** | **La Punta** | **3.33** | **166** | | | **Pn** | **05** | **20** | **33.4** | **0.0** |
| **BO04** | **La Punta** | **3.33** | **166** | *e*P | | **Pn** | **05** | **20** | **34.3** | **+0.9** |
| BO04 | | | | *i* S | | **Sn** | **05** | **21** | **12.9** | **+1.1** |
| **GO03** | **Copiap** | **3.37** | **21** | *e*P | | **Pn** | **05** | **20** | **35.0** | **+1.1** |
| GO03 | | | | *e*S | | **Sn** | **05** | **21** | **16.0** | **+3.3** |
| **VCA** | **Vinchina** | **3.58** | **57** | *e*P | | **Pn** | **05** | **20** | **40.0** | **+3.1** |
| VCA | | | | *e*S | | **Sn** | **05** | **21** | **22.0** | **+4.0** |
| VCA | | | | *e*S | | **Sn** | **05** | **21** | **23.5** | **+5.5** |
| VCA | | | | *e*S | | Sn | 05 | 21 | 28.0 | +10 |
| VCA | | | | IAML | | | 05 | 21 | 33.6 | |
| | comp=Z,894nm,0.5s | | | | | | | | | |
| **BO01** | **Tunca** | **3.66** | **173** | Pn | | **Pn** | **05** | **20** | **38.1** | **+0.3** |
| **BO02** | **Sierra Bellavi** | **4.09** | **170** | | | **Pn** | **05** | **20** | **44.5** | **+0.7** |
| **BO02** | **Sierra Bellavi** | **4.09** | **170** | *e*P | | **Pn** | **05** | **20** | **44.5** | **+0.7** |
| BO02 | | | | *e*S | | **Sn** | **05** | **21** | **33.5** | **+3.1** |
| BO02 | | | | IAML | | | 05 | 21 | 49.3 | |
| | comp=Z,200nm,0.8s | | | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.25** | **73** | *e*P | | **Pn** | **05** | **20** | **47.3** | **+1.2** |
| ACLC | | | | *e*S | | Sn | 05 | 21 | 43.5 | +9.0 |
| **GO05** | **Huala** | **4.25** | **184** | | | **Pn** | **05** | **20** | **45.1** | **-0.9** |
| **GO05** | **Huala** | **4.25** | **184** | *e*P | | **Pn** | **05** | **20** | **45.0** | **-0.9** |
| GO05 | | | | *e*P | | **Pn** | **05** | **20** | **45.2** | **-0.7** |
| GO05 | | | | *e*S | | Sn | 05 | 21 | 48.5 | +14 |
| **APLL** | **PUNTA DE LOS L** | **4.40** | **87** | *e*P | | **Pn** | **05** | **20** | **48.5** | **+0.6** |
| APLL | | | | *e*P | | **Pn** | **05** | **20** | **48.6** | **+0.6** |
| APLL | | | | *e*S | | **Sn** | **05** | **21** | **40.0** | **+2.0** |
| **AC02** | **Maricunga** | **4.47** | **30** | *e*P | | **Pn** | **05** | **20** | **50.8** | **+1.4** |
| AC02 | | | | *e*S | | **Sn** | **05** | **21** | **45.0** | **+4.6** |
| AC02 | | | | *e*S | | Sn | 05 | 21 | 52.0 | +12 |
| AC02 | | | | IAML | | | 05 | 22 | 04.1 | |
| | comp=Z,138nm,0.5s | | | | | | | | | |
| **RFA** | **San Rafael** | **4.80** | **147** | *e*P | | **Pn** | **05** | **20** | **54.9** | **+1.3** |
| RFA | | | | IAML | | | 05 | 22 | 22.2 | |
| | comp=Z,50nm,0.4s | | | | | | | | | |
| **MRA** | **San Martin** | **5.29** | **110** | *e*S | | **Sn** | **05** | **22** | **00.5** | **+0.3** |
| **H03N1** | **Juan Fernandez** | **6.75** | **245** | T | | T | 05 | 28 | 19.0 | |
| | baz=72,slow=72,SNR=1747 | | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.76** | **245** | T | | T | 05 | 28 | 11.1 | |
| | baz=72,slow=72,SNR=1259 | | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.76** | **245** | T | | T | 05 | 28 | 13.1 | |
| | baz=72,slow=72,SNR=1180 | | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.90** | **242** | T | | T | 05 | 28 | 41.4 | |
| | baz=85 | | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **6.90** | **242** | T | | T | 05 | 28 | 44.9 | |
| | baz=85 | | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **6.91** | **242** | T | | T | 05 | 28 | 43.9 | |
| | baz=85 | | | | | | | | | |
| **LC01** | **Cunco** | **8.13** | **181** | Pn | | **Pn** | **05** | **21** | **38.4** | **-0.7** |
| **LVC** | **Limon Verde** | **8.46** | **17** | Pn | | **Pn** | **05** | **21** | **43.4** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=183,slow=18,SNR=0.9 | | | | | | | | | |
| LVC | | | | Sn | | **Sn** | **05** | **23** | **19.1** | **+0.7** |
| | comp=Z,1.1nm,0.3s,baz=72,slow=18,SNR=2.1 | | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.99** | **175** | Pn | | **Pn** | **05** | **22** | **03.1** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=332,slow=12,SNR=1.8 | | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.99** | **175** | Pn | | **Pn** | **05** | **22** | **04.3** | **-0.4** |
| **LL04** | **Puerto Octay** | **10.15** | **183** | Pn | | **Pn** | **05** | **22** | **06.2** | **-0.6** |
| **ITQB** | **Itaqui** | **13.01** | **89** | Pn | | **Pn** | **05** | **22** | **43.6** | **-2.2** |
| **CPUP** | **Villa Florida** | **13.30** | **74** | Pn | | **Pn** | **05** | **22** | **47.8** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=251,slow=18,SNR=1.9 | | | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **05** | **25** | **15.0** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=218,slow=17,SNR=2.2 | | | | | | | | | |
| **LPAZ** | **La Paz** | **14.75** | **13** | Pn | | **Pn** | **05** | **23** | **10.8** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=189,slow=8.1,SNR=4.6 | | | | | | | | | |
| **SIV** | **San Ignacio** | **17.57** | **36** | P | | **P** | **05** | **23** | **45.1** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=221,slow=10,SNR=9.4 | | | | | | | | | |
| **BDFB** | **Brasilia** | **26.31** | **60** | P | | **P** | **05** | **25** | **13.9** | **-1.5** |
| | comp=Z,4.0nm,0.8s,baz=243,slow=9.4,SNR=5.1 | | | | | | | | | |
| **BDFB** | **Brasilia** | **26.31** | **60** | IAmb | | IAmb | 05 | 25 | 16.0 | |
| | comp=Z,4.5nm,1.0s | | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **41.24** | **10** | LR | | LR | 05 | 47 | 28.3 | |
| | comp=Z,366nm,18.2s,slow=40 | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.47** | **180** | P | | **P** | **05** | **29** | **42.4** | **+0.6** |
| QSPA | | | | IAmb | | IAmb | 05 | 29 | 43.6 | |
| | comp=Z,9.4nm,1.4s | | | | | | | | | |
| **TORD** | **Torodi Ar.

comp=Z,43nm,0.5s
**MOTC** **Monteria, Cord** **3.17 308** *e*P **Pn** **05 42 50.0 -1.0**
MOTC *e*S **Sn** **05 43 28.7 -1.1**
MOTC *i* 05 43 43.7
comp=Z,95nm,0.5s
**SDV** **Santo Domingo** **3.20 50** *e*P **Pn** **05 42 52.5 +1.0**
SDV *e*S **Sn** **05 43 29.9 -0.7**
SDV *i* 05 43 32.0
comp=Z,35nm,0.3s
**ANIL** **Santa Ana** **3.25 224** *e*P **Pn** **05 42 54.1 +1.8**
ANIL *e*S **Sn** **05 43 33.8 +1.7**
**ORTC** **Ortega, Tolima** **3.59 216** *e*P **Pn** **05 42 57.2 +0.8**
ORTC *e*S **Sn** **05 43 39.9 +0.4**
ORTC *i* 05 43 46.8
comp=Z,86nm,0.3s
**ELOV** **Elorza** **3.62 87** *e*P **Pn** **05 42 57.3 +0.6**
ELOV *e*S **Sn** **05 43 39.0 -0.8**
**SJCC** **San Jacinto, C** **3.66 326** *e*P **Pn** **05 42 56.6 -0.7**
SJCC *e*S **Sn** **05 43 38.2 -2.8**
SJCC *i* 05 43 53.0
comp=Z,46nm,0.3s
**PLMC** **San Jos del P** **3.68 239** *e*P **Pn** **05 42 58.5 +0.9**
PLMC *e*S **Sn** **05 43 40.4 -1.1**
PLMC *i* 05 43 48.2
comp=Z,39nm,0.2s
**CRJC** **Cerrejon, Guaj** **4.17 3** *e*P **Pn** **05 43 03.4 -0.5**
CRJC *e*S **Sn** **05 43 50.3 -2.5**
CRJC *i* 05 43 54.6
comp=Z,61nm,0.2s
**YOTC** **Yotoco, Valle** **4.28 229** *e*P **Pn** **05 43 05.5 +0.1**
YOTC *e*S **Sn** **05 43 57.0 +1.5**
**GUVC** **San Jose del G** **4.29 173** *e*P **Pn** **05 43 05.5 +0.2**
GUVC *e*S **Sn** **05 43 55.8 +0.2**
GUVC *i* 05 44 00.5
comp=Z,106nm,0.2s
**SMRC** **Santa Marta, M** **4.44 346** *e*P **Pn** **05 43 07.9 +0.6**
SMRC *e*S **Sn** **05 43 56.2 -2.8**
SMRC *i* 05 44 00.4
comp=Z,29nm,0.4s
**MACC** **Macarena, Meta** **4.71 189** *e*P **Pn** **05 43 09.9 -1.1**
MACC *e*S **Sn** **05 44 01.9 -3.7**
MACC *i* 05 44 07.1
comp=Z,66nm,0.9s
**GARC** **Garzon, Huila** **5.19 207** *e*P **Pn** **05 43 17.0 -0.4**
GARC *e*S **Sn** **05 44 13.8 -3.3**
GARC *i* 05 44 16.8
comp=Z,37nm,0.3s
**POPC** **Popayan, Colom** **5.54 220** *e*P **Pn** **05 43 22.5 +0.4**
POPC *e*S **Sn** **05 44 24.6 -0.9**
**FLOC** **Florencia** **5.80 206** *e*P **Pn** **05 43 25.7 +0.5**
FLOC *e*S **Sn** **05 44 31.6 +0.4**
FLOC *i* 05 44 36.0
comp=Z,11nm,0.5s
**BBAC** **Balboa, Cauca** **6.31 221** *e*P **Pn** **05 43 34.1 +1.9**
BBAC *e*S **Sn** **05 44 42.7 -0.9**
BBAC *i* 05 44 50.3
comp=Z,5.2nm,0.3s
**YKA** **Yellowknife Ar** **63.25 340** P **P** **05 52 13.3 +1.1**
comp=Z,0.2nm,0.5s,baz=134,slow=6.9,SNR=4.7
**ASAR** **Alice Springs** **149.12 234** PKPbc **PKiKP** **06 01 31.3 -1.2**
comp=Z,0.4nm,0.7s,baz=108,slow=3.4,SNR=6.4
**WRA** **Warramunga Arr** **150.34 241** PKPbc **PKiKP** **06 01 34.8 -0.3**
comp=Z,0.4nm,0.6s,baz=107,slow=2.6,SNR=7.7

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**IDC 20 05:48:24.6±1.9, 1.68N×126.59E, h0km, mb3.5/3, mb1 3.7/4, mb1mx3.3/40, mbtmp3.5/4, ML3.2/1, Error ellipse: s-maj=121.7km s-min=23.2km az=68.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **19.68** | **183** | P | | | Pn | 05 52 56.1 | -0.6 |
| | 0.1nm,0.3s,baz=17,slow=11,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.80** | **161** | P | | | P | 05 53 27.4 | -1.7 |
| | 1.6nm,0.7s,baz=338,slow=11,SNR=10 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.18** | **165** | P | | | P | 05 54 02.1 | +1.1 |
| | 0.6nm,0.5s,baz=344,slow=11,SNR=10 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.16** | **326** | P | | | P | 05 58 27.2 | -0.1 |
| | 0.3nm,0.4s,baz=121,slow=8.4,SNR=8.8 | | | | | | | | |

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**IDC 20 05:53:07.4±2.1, 5.19S×152.28E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.3/34, mbtmp3.5/4, Error ellipse: s-maj=129.1km s-min=27.7km az=130.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.80** | **228** | P | | | P | 05 58 11.3 | -0.7 |
| | 0.3nm,0.6s,baz=52,slow=9.6,SNR=4.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.52** | **222** | P | | | P | 05 58 37.4 | -0.5 |
| | 0.4nm,0.6s,baz=55,slow=8.9,SNR=4.3 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.02** | **242** | P | | | P | 05 59 10.6 | +1.2 |
| | 0.8nm,0.6s,baz=40,slow=11,SNR=1.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.71** | **22** | P | | | P | 06 05 32.8 | 0.0 |
| | 0.6nm,0.8s,baz=246,slow=5.7,SNR=7.6 | | | | | | | | |

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*IDC **20** 06:13:19.0±0.5, 34.57N×116.54W, h0km, mb4.1/16, mb1 4.2/23, mb1mx4.1/55, mbtmp4.1/23, ML4.3/5, MS3.5/23, Ms1 3.5/23, ms1mx3.3/81, Error ellipse: s-maj=12.6km s-min=5.6km az=82.0*

*ANF **20** 06:13:19.3±0.2, 34.59N×116.63W, h10km±2km, ML4.9/43, Error ellipse: s-maj=1.6km s-min=1.4km az=47.0*

*NEIC **20** 06:13:19.7±1.7, 34.60N±0.03×116.66W±0.04, h5km±5km, Error ellipse: s-maj=5.2km s-min=4.4km az=145.0*

*PAS **20** 06:13:20.3±1.8, 34.61N±0.04×116.63W±0.05, h7km±4km, Mwr4.3/6, mb4.5/17(NEIC), ML4.5/96(NEIC), Error ellipse: s-maj=6.0km s-min=4.8km az=135.0*

*NEIC **20** 06:13:20.3, 34.61N×116.63W, h14km, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr2.22; Mθθ-3.02; Mφφ0.80; Mrθ0.84; Mrφ2.09; Mθφ1.07; Fault plane solution: M0 3.64000×10^15^ NP1:ϕ327.00000°, δ54.00000°, λ141.00000°. NP2:ϕ82.00000°, δ60.00000°, λ43.00000°. Principal axes: T 3.3213, Plg51.0000°, Azm297.0000°; N 0.6398, Plg39.0000°, Azm110.0000°; P -3.9611, Plg3.0000°, Azm203.0000°;*

**ISC 20 06:13:19.7±1.0, 34.60N±0.02×116.61W±0.02, h7km±7km, n185, σ1§25/215, mb4.3/20, MS3.5/17, Southern California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HEC** | **Hector,Ludlow** | **0.32** | **45** | P | | | **Pg** | **06 13 26.8** | **+0.7** |
| | baz=228,SNR=1000 | | | | | | | | |
| HEC | | | | S | | | **Sg** | **06 13 31.6** | **+1.2** |
| | baz=228 | | | | | | | | |
| **RRX** | **Edison Barstow** | **0.42** | **311** | P | | | **Pg** | **06 13 28.2** | **+0.3** |
| | baz=131,SNR=1000 | | | | | | | | |
| RRX | | | | S | | | **Sg** | **06 13 34.1** | **+0.7** |
| | baz=131 | | | | | | | | |
| **BBRC** | **Big Bear Solar** | **0.42** | **217** | P | | | **Pg** | **06 13 28.3** | **+0.3** |
| | baz=35,SNR=1000 | | | | | | | | |
| BBRC | | | | S | | | **Sg** | **06 13 34.5** | **+0.9** |
| | baz=35 | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **0.71** | **347** | | | | **Pg** | **06 13 33.3** | **-0.2** |
| GSC | | | | IAML | | | | 06 13 46.8 | |
| | comp=N,27μm,0.4s | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **0.71** | **347** | P | | | **Pg** | **06 13 33.5** | **0.0** |
| | baz=168,SNR=1000 | | | | | | | | |
| GSC | | | | S | | | **Sg** | **06 13 43.2** | **+0.3** |
| | baz=168 | | | | | | | | |
| **CFSC** | **Central Fire S** | **0.74** | **228** | | | | **Pg** | **06 13 34.1** | **+0.1** |
| CFSC | | | | | | | **Sb** | **06 13 44.4** | **-1.1** |
| **BELC** | **Belle Mtn. Jos** | **0.79** | **140** | P | | | **Pg** | **06 13 35.1** | **+0.2** |
| | baz=320,SNR=1000 | | | | | | | | |
| BELC | | | | S | | | **Sb** | **06 13 46.1** | **-0.7** |
| | baz=320 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **0.81** | **77** | P | | | **Pg** | **06 13 35.4** | **+0.2** |
| | baz=258,SNR=1000 | | | | | | | | |
| GMRC | | | | S | | | **Sg** | **06 13 46.4** | **+0.7** |
| | baz=258 | | | | | | | | |
| **RSBC** | **Riverside Bore** | **0.86** | **223** | | | | **Pg** | **06 13 36.0** | **-0.3** |
| RSBC | | | | | | | **Sg** | **06 13 47.2** | **-0.3** |
| **GVDA** | **Garner Valley** | **0.93** | **183** | | | | **Pg** | **06 13 37.5** | **-0.2** |
| **PFO** | **Pinyon Flats O** | **1.00** | **173** | Pg | | | **Pg** | **06 13 38.6** | **-0.3** |
| | comp=N,597nm,0.3s,baz=339,slow=16,SNR=3834 | | | | | | | | |
| PFO | | | | | Lg | | Lg | 06 13 51.5 | |
| | comp=N,2μm,0.3s,baz=69,slow=23,SNR=17 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.00** | **173** | | | | **Pg** | **06 13 38.4** | **-0.5** |
| PFO | | | | IAML | | | | 06 13 54.9 | |
| | comp=N,11μm,1.0s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.00** | **173** | P | | | **Pg** | **06 13 38.7** | **-0.3** |
| | baz=352,SNR=1000 | | | | | | | | |
| PFO | | | | S | | | **Sg** | **06 13 51.6** | **-0.3** |
| | baz=352 | | | | | | | | |
| **I57US** | **PINON FLAT INF** | **1.00** | **172** | Pg | | | **Pg** | **06 13 38.2** | **-0.8** |
| | baz=349,slow=26,SNR=1.0 | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **1.00** | **34** | P | | | **Pg** | **06 13 38.8** | **-0.3** |
| | baz=215,SNR=1000 | | | | | | | | |
| TUQ | | | | S | | | **Sb** | **06 13 53.5** | **+0.4** |
| | baz=215 | | | | | | | | |
| **MURC** | **Murrieta** | **1.11** | **206** | P | | | **Pg** | **06 13 40.3** | **-0.7** |
| | baz=25,SNR=1000 | | | | | | | | |
| **ELS** | **Elsinore Mount** | **1.17** | **216** | | | | **Pg** | **06 13 41.0** | **-1.2** |
| **EDW2** | **Edwards Air Fo** | **1.17** | **284** | Pn | | | **Pg** | **06 13 40.8** | **-1.4** |
| | baz=103 | | | | | | | | |
| EDW2 | | | | Pg | | | **Pb** | **06 13 41.5** | **-0.9** |
| | baz=103,SNR=1000 | | | | | | | | |
| EDW2 | | | | S | | | **Sg** | **06 13 56.3** | **-1.1** |
| | baz=103 | | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.24** | **315** | P | | | **Pg** | **06 13 42.4** | **-1.1** |
| | baz=135,SNR=1000 | | | | | | | | |
| LRMC | | | | S | | | **Sg** | **06 13 58.9** | **-0.7** |
| | baz=135 | | | | | | | | |
| **CCAC** | **Calif City Air** | **1.28** | **296** | | | | **Pn** | **06 13 42.6** | **-1.5** |
| **IRM** | **Iron Mountain** | **1.29** | **110** | Pn | | | **Pn** | **06 13 42.5** | **-1.8** |
| | baz=291,SNR=1000 | | | | | | | | |
| IRM | | | | Pg | | | **Pb** | **06 13 44.1** | **-0.3** |
| | baz=291 | | | | | | | | |
| IRM | | | | Sg | | | **Sn** | **06 14 02.2** | **+0.3** |
| | baz=291 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **1.35** | **134** | Pn | | | **Pn** | **06 13 43.7** | **-1.4** |
| | baz=315,SNR=1000 | | | | | | | | |
| BC3 | | | | Pg | | | **Pg** | **06 13 46.0** | **+0.4** |
| | baz=315 | | | | | | | | |
| BC3 | | | | Sg | | | **Sn** | **06 14 04.3** | **+0.9** |
| | baz=315 | | | | | | | | |
| **PASC** | **Pasadena Art C** | **1.37** | **252** | | | | **Pn** | **06 13 44.5** | **-0.9** |
| **PASC** | **Pasadena Art C** | **1.37** | **252** | IAML | | | | 06 14 04.6 | |
| | comp=N,12μm,0.9s | | | | | | | | |
| PASC | | | | IAML | | | | 06 14 06.2 | |
| | comp=E,10μm,0.5s | | | | | | | | |
| **QSM** | **Queen of Sheba** | **1.37** | **351** | | | | **Pn** | **06 13 45.4** | **0.0** |
| **DECC** | **Green Verdugo** | **1.47** | **257** | Pn | | | **Pn** | **06 13 45.8** | **-0.9** |
| | baz=75,SNR=1000 | | | | | | | | |
| DECC | | | | Pg | | | **Pg** | **06 13 48.0** | **+0.2** |
| | baz=75 | | | | | | | | |
| DECC | | | | Sg | | | **Sg** | **06 14 07.5** | **+0.7** |
| | baz=75 | | | | | | | | |
| **GWY** | **Greenwater Val** | **1.58** | **358** | | | | **Pb** | **06 13 49.1** | **-0.3** |
| **MPMC** | **Manual Prospec** | **1.62** | **334** | P | | | **Pn** | **06 13 47.8** | **-1.1** |
| | baz=154,SNR=1000 | | | | | | | | |
| MPMC | | | | Sb | | | **Sg** | **06 14 11.3** | **-0.5** |
| | baz=154 | | | | | | | | |
| **NEE2** | **Needles Airpor** | **1.65** | **84** | P | | | **Pn** | **06 13 48.2** | **-1.1** |
| | baz=265,SNR=95 | | | | | | | | |
| NEE2 | | | | Sg | | | **Sg** | **06 14 13.1** | **+0.2** |
| | baz=265 | | | | | | | | |
| **FMP** | **Fort Macarthur** | **1.65** | **238** | Pn | | | **Pb** | **06 13 49.8** | **-0.8** |
| | baz=56,SNR=149 | | | | | | | | |
| FMP | | | | Pg | | | **Pg** | **06 13 53.0** | **+1.6** |
| | baz=56 | | | | | | | | |
| **MONP2** | **Monument Peak** | **1.71** | **175** | Pn | | | **Pn** | **06 13 49.4** | **-0.8** |
| | baz=354,SNR=590 | | | | | | | | |
| MONP2 | | | | Pg | | | **Pb** | **06 13 51.7** | **0.0** |
| | baz=354 | | | | | | | | |
| MONP2 | | | | Sb | | | **Sb** | **06 14 13.1** | **-0.4** |
| | baz=354 | | | | | | | | |
| **OSI** | **Osito Audit: C** | **1.74** | **271** | Pn | | | **Pn** | **06 13 49.0** | **-1.5** |
| | baz=90,SNR=421 | | | | | | | | |
| OSI | | | | Pg | | | **Pb** | **06 13 52.4** | **+0.3** |
| | baz=90 | | | | | | | | |
| OSI | | | | Sb | | | **Sb** | **06 14 14.3** | **+0.1** |
| | baz=90 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.76** | **194** | | | | **Pn** | **06 13 50.9** | **+0.2** |
| 109C | | | | IAML | | | | 06 14 16.4 | |
| | comp=E,7μm,0.7s | | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.76** | **194** | Pn | | | **Pn** | **06 13 50.1** | **-0.6** |
| | baz=13,SNR=1000 | | | | | | | | |
| 109C | | | | Pb | | | **Pb** | **06 13 51.3** | **-1.1** |
| | baz=13 | | | | | | | | |
| 109C | | | | Sb | | | **Sb** | **06 14 14.0** | **-0.7** |
| | baz=13 | | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **1.79** | **158** | P | | | **Pn** | **06 13 49.3** | **-1.7** |
| | baz=338,SNR=112 | | | | | | | | |
| SWSC | | | | Sb | | | **Sg** | **06 14 16.7** | **-0.5** |
| | baz=338 | | | | | | | | |
| **ISA** | **Isabella, Lake** | **1.86** | **305** | | | | **Pn** | **06 13 50.7** | **-1.5** |
| ISA | | | | IAML | | | | 06 14 20.4 | |
| | comp=E,5μm,0.5s | | | | | | | | |
| ISA | | | | IAML | | | | 06 14 20.8 | |
| | comp=N,4μm,0.8s | | | | | | | | |
| **ISA** | **Isabella, Lake** | **1.86** | **305** | Pn | | | **Pn** | **06 13 50.6** | **-1.5** |
| | baz=124,SNR=944 | | | | | | | | |
| ISA | | | | Pg | | | **Pb** | **06 13 54.5** | **+0.5** |
| | baz=124 | | | | | | | | |
| ISA | | | | Sb | | | **Sg** | **06 14 18.6** | **-0.8** |
| | baz=124 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **1.87** | **354** | Pg | | | **Pb** | **06 13 54.7** | **+0.5** |
| | baz=174,SNR=1000 | | | | | | | | |
| **ARVC** | **Arvin** | **1.90** | **287** | Pn | | | **Pn** | **06 13 50.8** | **-1.8** |
| | baz=105,SNR=683 | | | | | | | | |
| ARVC | | | | Pg | | | **Pb** | **06 13 54.9** | **+0.2** |
| | baz=105 | | | | | | | | |
| ARVC | | | | Sb | | | **Sg** | **06 14 19.5** | **-1.2** |
| | baz=105 | | | | | | | | |
| **CIS** | **Catalina Islan** | **1.92** | **232** | Pn | | | **Pn** | **06 13 51.9** | **-1.0** |
| | baz=50,SNR=113 | | | | | | | | |
| CIS | | | | Pb | | | **Pb** | **06 13 54.5** | **-0.6** |
| | baz=50 | | | | | | | | |
| CIS | | | | Sb | | | **Sb** | **06 14 19.1** | **-0.1** |
| | baz=50 | | | | | | | | |
| **BAR** | **Barrett** | **1.92** | **181** | | | | **Pn** | **06 13 52.4** | **-0.5** |
| BAR | | | | IAML | | | | 06 14 24.1 | |
| | comp=E,4μm,0.6s | | | | | | | | |
| **BLYC** | **Blythe** | **1.93** | **116** | | | | **Pn** | **06 13 53.2** | **+0.2** |
| BLYC | | | | IAML | | | | 06 14 24.7 | |
| | comp=E,5μm,0.4s | | | | | | | | |
| BLYC | | | | IAML | | | | 06 14 26.8 | |
| | comp=N,3μm,0.8s | | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **1.99** | **168** | Pn | | | **Pn** | **06 13 52.8** | **-1.1** |
| | baz=348,SNR=281 | | | | | | | | |
| IKP | | | | Pg | | | **Pb** | **06 13 56.8** | **+0.4** |
| | baz=348 | | | | | | | | |
| IKP | | | | Sb | | | **Sb** | **06 14 22.4** | **+0.9** |
| | baz=348 | | | | | | | | |
| **RMX** | **La Rumorosa** | **2.04** | **167** | | | | **Pn** | **06 13 55.6** | **+0.8** |
| RMX | | | | IAML | | | | 06 14 28.9 | |
| | comp=E,4μm,0.7s | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **2.06** | **98** | Pn | | | **Pn** | **06 13 53.6** | **-1.2** |
| | baz=279,SNR=140 | | | | | | | | |
| PDMCI | | | | Pb | | | **Pb** | **06 13 56.0** | **-1.6** |
| | baz=279 | | | | | | | | |
| PDMCI | | | | Sb | | | **Sb** | **06 14 24.7** | **+1.2** |
| | baz=279 | | | | | | | | |
| **TJX** | **Tijuana** | **2.12** | **190** | | | | **Pn** | **06 13 56.5** | **+0.8** |
| **GLA** | **Glamis** | **2.15** | **136** | | | | **Pn** | **06 13 56.6** | **+0.5** |
| GLA | | | | IAML | | | | 06 14 38.3 | |
| | comp=N,6μm,1.2s | | | | | | | | |
| **GLA** | **Glamis** | **2.15** | **136** | Pn | | | **Pn** | **06 13 54.2** | **-1.8** |
| | baz=317,SNR=120 | | | | | | | | |
| GLA | | | | Pb | | | **Pb** | **06 13 56.8** | **-2.2** |
| | baz=317 | | | | | | | | |
| GLA | | | | Pg | | | **Pg** | **06 14 00.1** | **-0.8** |
| | baz=317 | | | | | | | | |
| GLA | | | | Sg | | | **Sg** | **06 14 29.0** | **+0.3** |
| | baz=317 | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **2.19** | **327** | Pn | | | **Pn** | **06 13 56.2** | **-0.6** |
| | baz=147 | | | | | | | | |
| CWC | | | | Pg | | | **Pb** | **06 14 00.5** | **+0.7** |
| | baz=147 | | | | | | | | |
| **SHPR** | **Sheep Range** | **2.24** | **32** | | | | **Pn** | **06 13 57.0** | **-0.4** |
| **SCI2** | **San Clemente I** | **2.28** | **225** | Pb | | | **Pb** | **06 14 00.4** | **-1.0** |
| | baz=44,SNR=100 | | | | | | | | |
| **CBX** | **Cerro Bola** | **2.29** | **181** | | | | **Pn** | **06 13 58.0** | **-0.1** |
| **CBX** | **Cerro Bola** | **2.29** | **181** | IAML | | | | 06 14 34.4 | |
| CBX | comp=E,4μm,0.8s | | | IAML | | | | 06 14 40.6 | |
| | comp=N,2μm,0.7s | | | | | | | | |
| **W13A** | **Hualapai Mount** | **2.30** | **77** | Pn | | | **Pn** | **06 13 57.9** | **-0.4** |
| **BCW** | **Bitter Crk WRg** | **2.33** | **279** | | | | **Pn** | **06 13 56.9** | **-1.7** |
| **TPNV** | **Topopah Spring** | **2.36** | **7** | Pn | | | **Pn** | **06 13 58.9** | **-0.2** |
| | baz=188,SNR=535 | | | | | | | | |
| TPNV | | | | Pg | | | **Pg** | **06 14 04.1** | **-0.8** |
| | baz=188 | | | | | | | | |
| TPNV | | | | Sb | | | **Sg** | **06 14 34.2** | **-1.4** |
| | baz=188 | | | | | | | | |
| **VES** | **Vestal, Richgr** | **2.37** | **302** | Pn | | | **Pn** | **06 13 58.0** | **-1.1** |
| | baz=121,SNR=192 | | | | | | | | |
| VES | | | | Pg | | | **Pg** | **06 14 04.1** | **-1.0** |
| | baz=121 | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.46** | **346** | | | | **Pn** | **06 14 00.4** | **-0.1** |
| **GRAC** | **Grapevine Rang** | **2.46** | **346** | P | | | **Pn** | **06 14 00.6** | **+0.1** |
| | baz=166,SNR=296 | | | | | | | | |
| GRAC | | | | Sb | | | **Sg** | **06 14 38.3** | **-0.6** |
| | baz=166 | | | | | | | | |
| **SBC** | **Santa Barbara** | **2.56** | **267** | P | | | **Pn** | **06 14 01.1** | **-0.7** |
| | baz=85,SNR=20 | | | | | | | | |
| **PKM** | **Mcpherson Peak** | **2.65** | **277** | Pn | | | **Pn** | **06 14 02.0** | **-1.1** |
| | baz=95,SNR=32 | | | | | | | | |
| PKM | | | | Pg | | | **Pg** | **06 14 10.4** | **-0.2** |
| | baz=95 | | | | | | | | |
| **CCX** | **Cicese** | **2.73** | **181** | | | | **Pn** | **06 14 04.2** | **+0.2** |
| CCX | | | | IAML | | | | 06 14 53.7 | |
| | comp=N,2μm,1.1s | | | | | | | | |
| CCX | | | | IAML | | | | 06 14 53.7 | |
| | comp=E,2μm,0.9s | | | | | | | | |
| **LCH** | **Last Change Ra** | **2.75** | **343** | | | | **Pn** | **06 14 04.2** | **-0.3** |
| LCH | | | | IAML | | | | 06 14 54.6 | |
| | comp=E,2μm,0.6s | | | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.77** | **242** | | | | **Pn** | **06 14 03.6** | **-1.0** |
| SNCC | | | | IAML | | | | 06 14 48.7 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| SNCC | | | | IAML | | | | 06 14 49.9 | |
| | comp=N,2μm,1.0s | | | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.77** | **242** | P | | | **Pn** | **06 14 03.5** | **-1.1** |
| | baz=60,SNR=18 | | | | | | | | |
| SNCC | | | | Sb | | | **Sb** | **06 14 44.6** | **+0.8** |
| | baz=60 | | | | | | | | |
| **TIN** | **Tinemaha, Big** | **2.78** | **332** | P | | | **Pn** | **06 14 04.7** | **0.0** |
| | baz=152,SNR=35 | | | | | | | | |
| **VOG** | **Valley Oaks Go** | **2.84** | **308** | P | | | **Pn** | **06 14 05.2** | **-0.3** |
| | baz=126,SNR=14 | | | | | | | | |
| VOG | | | | Sb | | | **Sg** | **06 14 49.1** | **-1.8** |
| | baz=126 | | | | | | | | |
| **Y14A** | **Wickenburg** | **3.06** | **102** | Pn | | | **Pn** | **06 14 08.2** | **-0.4** |
| **PRN** | **Pahroc Range** | **3.07** | **24** | | | | **Pn** | **06 14 08.8** | **0.0** |
| PRN | | | | IAML | | | | 06 15 06.0 | |
| | comp=N,2μm,0.7s | | | | | | | | |
| **PAGB** | **Antelope Grade** | **3.19** | **292** | Pn | | | **Pn** | **06 14 08.9** | **-1.4** |
| PAGB | | | | IAML | | | | 06 15 21.8 | |
| | comp=E,1μm,1.1s | | | | | | | | |
| PAGB | | | | IAML | | | | 06 15 24.2 | |
| | comp=N,1μm,0.8s | | | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **3.52** | **330** | P | | | **Pn** | **06 14 15.7** | **+0.6** |
| | baz=149,SNR=18 | | | | | | | | |
| **LCMT** | **Little Creek M** | **3.64** | **48** | | | | **Pn** | **06 14 16.5** | **-0.2** |
| **PMPB** | **Monarch Peak** | **3.78** | **296** | Pn | | | **Pn** | **06 14 17.1** | **-1.4** |
| PMPB | | | | IAML | | | | 06 15 27.7 | |
| | comp=E,1μm,0.7s | | | | | | | | |
| PMPB | | | | IAML | | | | 06 15 34.6 | |
| | comp=N,1μm,1.2s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **3.83** | **12** | Pn | | | **Pn** | **06 14 19.7** | **+0.4** |
| | baz=193,SNR=18 | | | | | | | | |
| R11A | | | | Pg | | | **Pg** | **06 14 31.3** | **-1.8** |
| | baz=193 | | | | | | | | |
| **KNB** | **Kanab** | **3.91** | **51** | Pn | | | **Pn** | **06 14 20.5** | **0.0** |
| KNB | | | | IAML | | | | 06 15 28.4 | |
| | comp=E,785nm,1.3s | | | | | | | | |
| KNB | | | | IAML | | | | 06 15 31.6 | |
| | comp=N,851nm,1.1s | | | | | | | | |
| **CCUT** | **Cedar City** | **3.95** | **41** | Pn | | | **Pn** | **06 14 21.2** | **+0.2** |
| **LHV** | **Little Huntoon** | **3.95** | **338** | | | | **Pn** | **06 14 21.3** | **+0.6** |
| LHV | | | | IAML | | | | 06 15 39.0 | |
| | comp=E,856nm,1.4s | | | | | | | | |
| LHV | | | | IAML | | | | 06 15 40.8 | |
| | comp=N,718nm,0.9s | | | | | | | | |
| **U15A** | **North Rim** | **3.97** | **61** | Pn | | | **Pn** | **06 14 21.4** | **+0.1** |
| **NV11** | **Mina Array Sit** | **4.02** | **342** | | | | **Pn** | **06 14 21.8** | **-0.1** |
| NV11 | | | | IAML | | | | 06 15 47.1 | |
| | comp=E,549nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **4.05** | **341** | Pn | | | **Pn** | **06 14 22.8** | **+0.4** |
| | comp=E,9.9nm,0.3s,baz=166,slow=15,SNR=205 | | | | | | | | |
| NVAR | | | | | Lg | | Lg | 06 15 28.4 | |
| | comp=E,50nm,0.3s,baz=270,slow=21,SNR=6.4 | | | | | | | | |
| **BBGB** | **Big Mountain B** | **4.11** | **300** | | | | **Pn** | **06 14 21.8** | **-1.3** |
| **SZCU** | **Shurtz Canyon** | **4.13** | **43** | | | | **Pn** | **06 14 23.3** | **-0.2** |
| **214A** | **Organ Pipe Nat** | **4.14** | **129** | Pn | | | **Pn** | **06 14 23.3** | **-0.1** |
| 214A | | | | IAML | | | | 06 15 41.2 | |
| | comp=N,495nm,1.2s | | | | | | | | |
| 214A | | | | IAML | | | | 06 15 41.8 | |
| | comp=E,548nm,1.0s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **4.14** | **129** | P | | | **Pn** | **06 14 22.7** | **-0.7** |
| | baz=311,SNR=19 | | | | | | | | |
| **Q09A** | **Carvers** | **4.25** | **354** | | | | **Pn** | **06 14 26.1** | **+1.0** |
| **X16A** | **Lo Mia Camp, P** | **4.28** | **91** | | | | **Pn** | **06 14 25.2** | **-0.3** |
| **RYN** | **Ryan** | **4.30** | **340** | | | | **Pn** | **06 14 25.8** | **0.0** |
| RYN | | | | IAML | | | | 06 15 51.1 | |
| | comp=E,424nm,1.1s | | | | | | | | |
| **WUAZ** | **Wupatki** | **4.39** | **77** | P | | | **Pn** | **06 14 27.4** | **+0.4** |
| | baz=260,SNR=64 | | | | | | | | |
| **SAO** | **San Andreas Ge** | **4.49** | **300** | Pn | | | **Pn** | **06 14 27.4** | **-0.8** |
| **PKCU** | **Pink Cliffs** | **4.49** | **50** | | | | **Pn** | **06 14 29.6** | **+1.0** |
| **PSUT** | **Pine Spring** | **4.51** | **29** | | | | **Pn** | **06 14 28.8** | **+0.1** |
| PSUT | | | | IAML | | | | 06 15 51.9 | |
| | comp=E,530nm,1.7s | | | | | | | | |
| PSUT | | | | IAML | | | | 06 15 56.4 | |
| | comp=N,525nm,1.4s | | | | | | | | |
| **CMB** | **Columbia Colle** | **4.58** | **319** | Pn | | | **Pn** | **06 14 29.6** | **0.0** |
| CMB | | | | IAML | | | | 06 15 51.4 | |
| | comp=E,350nm,0.7s | | | | | | | | |
| CMB | | | | IAML | | | | 06 15 54.5 | |
| | comp=N,418nm,0.8s | | | | | | | | |
| **KVN** | **Kaiserville** | **4.60** | **345** | | | | **Pn** | **06 14 30.4** | **+0.5** |
| **YERR** | **Yerington** | **4.86** | **335** | | | | **Pn** | **06 14 34.1** | **+0.6** |
| **MTPU** | **Mount Pierson** | **4.96** | **45** | Pn | | | **Pn** | **06 14 35.7** | **+0.7** |
| **PNTR** | **Pine Nut** | **5.08** | **333** | Pn | | | **Pn** | **06 14 36.4** | **-0.1** |
| PNTR | | | | IAML | | | | 06 16 27.3 | |
| | comp=N,522nm,0.9s | | | | | | | | |
| PNTR | | | | IAML | | | | 06 16 27.9 | |
| | comp=E,464nm,1.1s | | | | | | | | |
| **VCNR** | **Virginia City** | **5.28** | **333** | | | | **Pn** | **06 14 40.3** | **+1.1** |
| VCNR | | | | IAML | | | | 06 16 22.9 | |
| | comp=N,271nm,1.2s | | | | | | | | |
| VCNR | | | | IAML | | | | 06 16 27.3 | |
| | comp=E,382nm,1.0s | | | | | | | | |
| **MSU** | **Marysvale** | **5.29** | **41** | | | | **Pn** | **06 14 40.8** | **+1.4** |
| **TUC** | **Tucson** | **5.38** | **114** | P | | | **Pn** | **06 14 38.9** | **-1.7** |
| | baz=297 | | | | | | | | |
| TUC | | | | Sb | | | **Sb** | **06 16 05.2** | **+6.2** |
| | baz=297 | | | | | | | | |
| **W18A** | **Petrified Fore** | **5.68** | **83** | Pg | | | **Pg** | **06 15 05.3** | **-3.2** |
| | baz=267 | | | | | | | | |
| **Q16A** | **Castle Valley** | **6.13** | **44** | Pn | | | **Pn** | **06 14 52.4** | **+1.4** |
| **ELK** | **Elko** | **6.23** | **10** | Pn | | | **Pn** | **06 14 53.5** | **+1.1** |
| | comp=E,2.4nm,0.3s,baz=198,slow=13,SNR=32 | | | | | | | | |
| ELK | | | | | Lg | | Lg | 06 16 34.6 | |
| | comp=E,12nm,0.3s,baz=298,slow=17,SNR=4.8 | | | | | | | | |
| ELK | | | | | LR | | LR | 06 16 52.4 | |
| | comp=E,121nm,20.2s,baz=153,slow=34 | | | | | | | | |
| **ELK** | **Elko** | **6.23** | **10** | Pn | | | **Pn** | **06 14 53.3** | **+1.0** |
| **DUG** | **Dugway, Tooele** | **6.35** | **27** | Pn | | | **Pn** | **06 14 54.6** | **+0.8** |
| | baz=210 | | | | | | | | |
| DUG | | | | Pg | | | **Pg** | **06 15 20.2** | **-1

comp=E,0.1nm,0.3s,baz=128,slow=9.3,SNR=3.1
YBH Lg Lg 06 17 49.9
comp=E,0.2nm,0.3s,baz=111,slow=5.8,SNR=3.8
**SMCO Snowmass 8.97 57 Pn Pn 06 15 31.5 +1.4**
**HLID Hailey 9.11 10** P Pn 06 15 38.3 +6.5
baz=192
**BW06 Boulder Array 9.84 32** P Pn 06 15 48.8 +7.0
baz=216,SNR=6.3
**PDAR Pinedale Array 9.84 32** Pn **Pn 06 15 44.9 +3.0**
comp=E,0.7nm,0.3s,baz=217,slow=12,SNR=22
PDAR Lg Lg 06 18 29.4
comp=E,0.1nm,0.3s,baz=215,slow=28,SNR=3.5
**MNTX Cornudas Mount 9.85 104** P **Pn 06 15 44.7 +2.9**
baz=290,SNR=11
**LPIG La Paz 11.82 151** LR LR 06 20 52.4
comp=E,245nm,18.7s,baz=341,slow=39
**TX31 Lajitas Ar. Si 12.18 112 Pn Pn 06 16 15.3 +1.4**
**TX32 Lajitas Array 12.18 112** Pn **Pn 06 16 14.3 +0.5**
**TXAR Lajitas Array 12.18 112** Pn **Pn 06 16 15.1 +1.3**
comp=E,0.6nm,0.3s,baz=291,slow=13,SNR=24
TXAR Lg Lg 06 19 47.9
comp=E,0.2nm,0.3s,baz=284,slow=27,SNR=9.0
TXAR LR LR 06 20 42.6
comp=E,104nm,20.3s,baz=282,slow=37
**NEW Newport 13.65 359** Pn **Pn 06 16 38.2 +4.4**
comp=E,0.2nm,0.3s,baz=177,slow=13,SNR=8.3
NEW LR LR 06 21 21.5
comp=E,118nm,21.8s,baz=170,slow=35
**NEW Newport 13.65 359** Pn **Pn 06 16 33.0 -0.8**
**WALA Waterton Lakes 14.58 7 Pn Pn 06 16 45.1 -1.5**
**E28A Huff 16.97 40** P **Pn 06 17 17.9 +0.3**
E28A IAmb IAmb 06 17 26.4
comp=Z,60nm,1.4s
**TUL1 Leonard 17.06 80** P **Pn 06 17 18.7 0.0**
**ECSD EROS Data Cent 17.95 54** P **Pn 06 17 29.0 -0.9**
**EDM Edmonton 18.76 6** P **P 06 17 39.1 -0.1**
**MIAR Mount Ida 18.97 84 P P 06 17 41.4 -0.3**
**BBB Bella Bella 19.42 338** LR LR 06 25 53.6
comp=Z,319nm,18.2s,baz=278,slow=39
**AGMN Agassiz Nation 20.63 42** P **P 06 17 59.8 +0.1**
AGMN IAmb IAmb 06 18 06.1
comp=Z,21nm,0.9s
**ULM Lac du Bonnet 21.77 38** P **P 06 18 11.7 -0.2**
comp=Z,16nm,0.9s,baz=236,slow=9.9,SNR=10
ULM LR LR 06 26 54.8
comp=Z,74nm,21.3s,baz=250,slow=38
**ULM Lac du Bonnet 21.77 38** P **P 06 18 12.1 +0.2**
ULM IAmb IAmb 06 18 17.6
comp=Z,20nm,0.9s
**DLBC Dease Lake 25.47 344** P **P 06 18 49.3 +1.0**
comp=Z,5.4nm,0.9s,baz=173,slow=17,SNR=5.6
DLBC LR LR 06 28 46.4
comp=Z,243nm,18.0s,baz=148,slow=36
**DLBC Dease Lake 25.47 344** IAmb IAmb 06 18 53.7
comp=Z,16nm,1.2s
**CMIG Matias Romero 26.11 126** LR LR 06 30 29.1
comp=Z,198nm,19.4s,baz=282,slow=40
**TKL Tuckaleechee C 26.81 78** LR LR 06 30 50.0
comp=Z,74nm,18.0s,baz=276,slow=39
**YKA Yellowknife Ar 27.94 2** P **P 06 19 10.8 +0.3**
comp=Z,0.4nm,0.6s,baz=182,slow=9.2,SNR=11
YKA PcP **PcP 06 22 25.6 +0.1**
comp=Z,0.3nm,0.7s,baz=187,slow=2.5,SNR=3.8
YKA LR LR 06 31 09.0
comp=Z,103nm,20.2s,baz=291,slow=38
**SADO Sadowa 30.33 59** LR LR 06 32 19.1
comp=Z,96nm,18.2s,baz=350,slow=38
**APG El Apazote 30.57 123** LR LR 06 33 33.3
comp=Z,96nm,18.1s,baz=48,slow=40
**INK Inuvik 35.09 349** P **P 06 20 14.3 +1.1**
comp=Z,2.1nm,1.0s,baz=128,slow=11,SNR=5.1
INK LR LR 06 35 23.0
comp=Z,151nm,19.1s,baz=115,slow=38
**INK Inuvik 35.09 349** IAmb IAmb 06 20 20.5
comp=Z,9.1nm,1.4s
**IL31 35.31 338** P **P 06 20 14.3 -0.8**
IL31 IAmb IAmb 06 20 21.9
comp=Z,7.4nm,1.1s
**ILAR Eielson Array 35.31 338** P **P 06 20 16.9 +1.8**
comp=Z,2.4nm,0.8s,baz=153,slow=7.9,SNR=35
ILAR LR LR 06 34 50.9
comp=Z,36nm,19.5s,baz=150,slow=36
**K20K Telida 36.89 333** P **P 06 20 28.7 0.0**
**J20K Nowinta River 37.37 334** P **P 06 20 33.0 +0.2**
J20K IAmb IAmb 06 20 52.2
comp=Z,12nm,1.2s
**A36M Sachs Harbour 37.72 356** P **P 06 20 35.3 -0.3**
A36M IAmb IAmb 06 20 43.3
comp=Z,9.0nm,0.8s
**FRB Frobisher Bay 41.28 30** LR LR 06 38 34.7
comp=Z,73nm,19.8s,baz=138,slow=37
**RES Resolute Bay 41.53 9** LR LR 06 37 50.2
comp=Z,91nm,20.2s,baz=211,slow=35
**SJG San Juan 47.62 97** LR LR 06 42 31.7
comp=Z,28nm,21.9s,baz=104,slow=37
**ROSC El Rosal 49.05 117** LR LR 06 47 24.1
comp=Z,58nm,20.3s,baz=8.5,slow=42
**SFJD Kangerlussuaq 49.33 28** LR LR 06 41 05.0
comp=Z,66nm,21.6s,baz=196,slow=34
**BILL Bilibino 53.63 333** P **P 06 22 41.3 -0.1**
**NNA Nana 59.76 134** LR LR 06 49 28.1
comp=Z,28nm,18.1s,baz=213,slow=36
**SEY Seymchan 60.26 328** P **P 06 23 29.2 +0.8**
comp=Z,3.3nm,0.6s,baz=92,slow=6.8,SNR=10
**TIXI Tiksi 64.67 341** LR LR 06 54 48.5
comp=Z,33nm,19.6s,baz=346,slow=38
**LPAZ La Paz 68.44 129** P **P 06 24 22.8 -0.5**
comp=Z,1.6nm,0.9s,baz=323,slow=5.1,SNR=4.7
**ARCES ARCESS Array B 72.53 13** LR LR 06 59 25.6
comp=Z,61nm,18.2s,baz=249,slow=38
**NRIK Noril'sk 74.85 351** P **P 06 25 00.4 -0.1**
comp=Z,1.6nm,0.4s,baz=27,slow=9.0,SNR=3.7
**NRIK Noril'sk 74.85 351** IAmb IAmb 06 25 01.6
comp=Z,7.9nm,1.1s
**FINES FINESS Array B 79.60 17** P **P 06 25 27.6 +0.2**
comp=Z,1.4nm,0.7s,baz=298,slow=5.8,SNR=1.8
**ESDC Soseca Array 83.44 46** P **P 06 25 48.9 +0.7**
comp=Z,0.8nm,1.0s,baz=317,slow=5.3,SNR=2.0
**SONM Songino Array 89.35 333** P **P 06 26 17.8 +0.7**
comp=Z,1.5nm,1.1s,baz=30,slow=4.9,SNR=6.4
**SONM Songino Array 89.35 333** IAmb IAmb 06 26 19.3
comp=Z,3.2nm,1.2s
**AKASG Malin Array Be 89.87 21** P **P 06 26 18.4 -0.9**
comp=Z,0.2nm,0.3s,baz=322,slow=4.2,SNR=4.2
**ZALV Zalesovo Beam 89.88 348** P **P 06 26 19.1 -0.2**
comp=Z,1.0nm,0.6s,baz=41,slow=2.7,SNR=4.9
**BVAR Borovoye Array 92.52 356** P **P 06 26 32.2 +0.6**
comp=Z,1.2nm,0.8s,baz=50,slow=14,SNR=5.4
**HHC Hu-ho-hao-te 92.81 326** *eP* **P 06 26 31.6 -1.7**
HHC pmax pmax
comp=Z,10.0nm,0.9s
HHC pmax pmax
comp=Z,130nm,6.3s
**KURBB Kurchatov Arra 94.09 350** P **P 06 26 39.0 +0.2**
comp=Z,1.3nm,0.8s,baz=11,slow=4.7,SNR=10
**MKAR Makanchi Array 97.21 347** P **P 06 26 53.1 0.0**
comp=Z,0.3nm,0.8s,baz=20,slow=5.4,SNR=3.2
**WMQ Urumqi 98.86 342** *eP* Pdif 06 27 02.3 +1.6
**WRA Warramunga Arr 116.42 263** PKP **PKPdf 06 32 04.2 -0.5**
comp=Z,0.6nm,0.6s,baz=67,slow=1.6,SNR=5.3
**ASAR Alice Springs 118.55 260** PKP **PKPdf 06 32 08.1 -0.7**
comp=Z,0.8nm,0.7s,baz=73,slow=2.1,SNR=15

**IDC 20 06:37:40.1±5.7, 7°15S×129°14E, h250km±61km, mb3.0/1, mb1 3.0/4, mb1mx2.6/42, mbtmp3.5/4, MS3.2/1, Ms1 3.2/1, ms1mx2.4/15, Error ellipse: s-maj=60.9km s-min=26.6km az=67.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **11.41** | **197** | P | | Pn | 06 40 17.1 +0.7 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=1.5 | | | | | | |
| FITZ | | | | S | | S | 06 42 22.4 -1.5 |
| | 0.3nm,0.3s,baz=264,slow=20,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.68** | **159** | P | | Pn | 06 40 42.7 -1.8 |
| | 0.3nm,0.3s,baz=340,slow=12,SNR=6.1 | | | | | | |
| WRA | | | | S | | S | 06 43 05.5 -11 |
| | 0.3nm,0.3s,baz=349,slow=21,SNR=2.7 | | | | | | |
| **DAV** | **Davao City (W)** | **14.56** | **346** | LR | | LR | 06 47 37.0 |
| | comp=Z,85nm,19.8s,baz=340,slow=41 | | | | | | |
| **ASAR** | **Alice Springs** | **17.05** | **165** | P | | P | 06 41 23.4 +0.8 |
| | 0.2nm,0.3s,baz=345,slow=9.5,SNR=7.2 | | | | | | |
| ASAR | | | | S | | S | 06 44 27.8 +0.4 |
| | 0.1nm,0.3s,baz=350,slow=26,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.88** | **327** | P | | P | 06 48 11.7 -0.1 |
| | 0.3nm,0.4s,baz=136,slow=6.0,SNR=5.8 | | | | | | |



*IDC **20** 07:03:30.0±2.3, 18°.88S×70°.07W, h62km±23km, mb3.5/6, mb1 3.8/9, mb1mx3.6/23, mbtmp3.8/9, ML3.5/3, Error ellipse: s-maj=24.9km s-min=15.6km az=85.0*
*NEIC **20** 07:03:31.3±1.1, 18°.95S±0°.05×70°.24W±0°.07, h68km±6km, mb4.3/9, ML4.2(GUC), Error ellipse: s-maj=9.2km s-min=6.7km az=83.0*
*GUC **20** 07:03:32.0±0.7, 18°.96S×70°.18W, h72km±4km, ML4.2*
**ISC 20 07:03:30.7±0.7, 18°.95S±0°.03×70°.24W±0°.06, h73km±6km, n61, σ1°21/61, mb4.0/6, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB12** | **IPOC Station P** | **0.34** | **346** | | **Pn** | **07 03 43.3** | **+0.6** |
| **PB12** | **IPOC Station P** | **0.34** | **346** | *eP* | **Pn** | **07 03 43.5** | **+0.8** |
| PB12 | | | | *i* S | **Sn** | **07 03 52.6** | **+1.1** |
| **AP01** | **Chacalluta** | **0.58** | **351** | Pn | **Pn** | **07 03 45.1** | **+0.4** |
| **AP01** | **Chacalluta** | **0.58** | **351** | *eP* | **Pn** | **07 03 45.5** | **+0.8** |
| AP01 | | | | *i* S | **Sn** | **07 03 56.3** | **+1.4** |
| AP01 | | | | IAML | | 07 03 58.9 | |
| | comp=N,9μm,0.3s | | | | | | |
| **PB16** | **IPOC Station P** | **0.93** | **49** | | **Pn** | **07 03 48.7** | **-0.4** |
| **PB16** | **IPOC Station P** | **0.93** | **49** | *eP* | **Pn** | **07 03 49.1** | **0.0** |
| PB16 | | | | *i* S | **Sn** | **07 04 02.1** | **-0.6** |
| PB16 | | | | IAML | | 07 04 02.9 | |
| | comp=N,5μm,0.3s | | | | | | |
| **PB11** | **IPOC Station P** | **0.98** | **146** | | **Pn** | **07 03 49.3** | **-0.1** |
| **GO01** | **Chusmiza** | **1.22** | **126** | | **Pn** | **07 03 53.0** | **+0.3** |
| **GO01** | **Chusmiza** | **1.22** | **126** | *eP* | **Pn** | **07 03 53.2** | **+0.4** |
| GO01 | | | | *i* S | **Sn** | **07 04 09.6** | **+0.5** |
| GO01 | | | | IAML | | 07 04 11.5 | |
| | comp=N,18μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.32** | **175** | | **Pn** | **07 03 53.7** | **+0.2** |
| **TA02** | **Huaiquique** | **1.32** | **175** | *eP* | **Pn** | **07 03 53.9** | **+0.4** |
| TA02 | | | | *i* S | **Sn** | **07 04 10.5** | **-0.1** |
| TA02 | | | | IAML | | 07 04 12.4 | |
| | comp=N,10μm,0.1s | | | | | | |
| **HMBC** | **Humberstone** | **1.37** | **166** | *eP* | **Pn** | **07 03 54.3** | **+0.1** |
| HMBC | | | | *i* S | **Sn** | **07 04 11.9** | **0.0** |
| HMBC | | | | IAML | | 07 04 13.6 | |
| | comp=N,5μm,0.4s | | | | | | |
| **PB08** | **IPOC Station P** | **1.57** | **139** | | **Pn** | **07 03 57.2** | **+0.1** |
| **PB08** | **IPOC Station P** | **1.57** | **139** | *eP* | **Pn** | **07 03 57.9** | **+0.7** |
| PB08 | | | | *i* S | **Sn** | **07 04 17.7** | **+0.7** |
| PB08 | | | | IAML | | 07 04 18.7 | |
| | comp=N,8μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.61** | **178** | | **Pn** | **07 03 57.7** | **+0.4** |
| **TA01** | **Diego Aracena** | **1.61** | **178** | *eP* | **Pn** | **07 03 57.6** | **+0.3** |
| TA01 | | | | *i* S | **Sn** | **07 04 17.6** | **+0.2** |
| TA01 | | | | IAML | | 07 04 18.6 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.86** | **177** | | **Pn** | **07 04 00.7** | **-0.1** |
| **PATCX** | **Punta Patache** | **1.86** | **177** | *i* S | **Sn** | **07 04 23.6** | **+0.1** |
| **PB01** | **IPOC Station P** | **2.20** | **161** | | **Pn** | **07 04 05.4** | **+0.1** |
| **PB01** | **IPOC Station P** | **2.20** | **161** | *eP* | **Pn** | **07 04 05.5** | **+0.1** |
| PB01 | | | | *i* S | **Sn** | **07 04 31.0** | **-0.7** |
| PB01 | | | | IAML | | 07 04 33.6 | |
| | comp=N,2μm,0.1s | | | | | | |
| **PB02** | **IPOC Station P** | **2.38** | **172** | | **Pn** | **07 04 08.6** | **+0.8** |
| **PB02** | **IPOC Station P** | **2.38** | **172** | *eP* | **Pn** | **07 04 08.3** | **+0.6** |
| PB02 | | | | *i* S | **Sn** | **07 04 35.8** | **-0.3** |
| PB02 | | | | IAML | | 07 04 37.6 | |
| | comp=N,2μm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **2.79** | **173** | | **Pn** | **07 04 13.6** | **+0.3** |
| **PB07** | **IPOC Station P** | **2.79** | **173** | *eP* | **Pn** | **07 04 13.7** | **+0.4** |
| PB07 | | | | IAML | | 07 04 49.0 | |
| | comp=E,781nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **2.99** | **162** | | **Pn** | **07 04 16.8** | **+0.8** |
| **PB09** | **IPOC Station P** | **2.99** | **162** | *eP* | **Pn** | **07 04 17.1** | **+1.1** |
| PB09 | | | | IAML | | 07 04 57.0 | |
| | comp=E,528nm,0.5s | | | | | | |
| **PB03** | **IPOC Station P** | **3.12** | **172** | | **Pn** | **07 04 18.1** | **+0.3** |
| **PB03** | **IPOC Station P** | **3.12** | **172** | *eP* | **Pn** | **07 04 18.1** | **+0.3** |
| **LPAZ** | **La Paz** | **3.33** | **38** | P | **Pn** | **07 04 23.5** | **+2.5** |
| | comp=E,3.1nm,0.3s,baz=223,slow=3.5,SNR=93 | | | | | | |
| **LPAZ** | **La Paz** | **3.33** | **38** | | **Pn** | **07 04 22.8** | **+1.8** |
| **PB04** | **IPOC Station P** | **3.37** | **179** | | **Pn** | **07 04 21.5** | **+0.3** |
| **LVC** | **Limon Verde** | **3.85** | **161** | P | **Pn** | **07 04 29.0** | **+1.1** |
| | comp=E,2.4nm,0.3s,baz=355,slow=8.3,SNR=50 | | | | | | |
| LVC | | | | S | **Sn** | **07 05 11.2** | **-1.0** |
| | comp=E,32nm,0.3s,baz=233,slow=23,SNR=30 | | | | | | |
| **LVC** | **Limon Verde** | **3.85** | **161** | | **Pn** | **07 04 28.5** | **+0.5** |
| **PB10** | **IPOC Station P** | **4.55** | **184** | Pn | **Pn** | **07 04 36.7** | **-0.5** |
| **SIV** | **San Ignacio** | **9.23** | **73** | P | **Pn** | **07 05 38.2** | **-3.1** |
| | comp=E,0.7nm,0.3s,baz=264,slow=10,SNR=8.2 | | | | | | |
| **NNA** | **Nana** | **9.40** | **316** | P | **Pn** | **07 05 44.1** | **+0.6** |
| | comp=E,0.7nm,0.3s,baz=157,slow=13,SNR=1.5 | | | | | | |
| NNA | | | | S | **Sn** | **07 07 22.1** | **-5.5** |
| | comp=E,0.8nm,0.3s,baz=84,slow=7.5,SNR=1.5 | | | | | | |
| **MT02** | **Curacav** | **14.28** | **183** | Pn | **Pn** | **07 06 48.6** | **-0.6** |
| **MT01** | **Popeta** | **14.88** | **183** | Pn | **Pn** | **07 06 57.5** | **+0.4** |
| **H03N1** | **Juan Fernandez** | **16.38** | **207** | T | T | 07 24 19.7 | |
| | baz=31,slow=73,SNR=130 | | | | | | |
| **H03N2** | **Juan Fernandez** | **16.39** | **207** | T | T | 07 24 19.8 | |
| | baz=31,slow=73,SNR=54 | | | | | | |
| **H03N3** | **Juan Fernandez** | **16.40** | **207** | T | T | 07 24 19.6 | |
| | baz=31,slow=73,SNR=70 | | | | | | |
| **LC01** | **Cunco** | **19.93** | **184** | P | **P** | **07 07 57.1** | **+0.4** |
| **PTGA** | **Pitinga** | **20.72** | **30** | P | **P** | **07 08 02.6** | **-2.8** |
| | comp=E,2.4nm,0.3s,baz=334,slow=22,SNR=11 | | | | | | |
| **BDFB** | **Brasilia** | **21.48** | **85** | P | **P** | **07 08 13.4** | **-0.2** |
| | comp=E,1.2nm,0.5s,baz=259,slow=5.2,SNR=5.3 | | | | | | |
| **BDFB** | **Brasilia** | **21.48** | **85** | lAmb | lAmb | 07 08 34.4 | |
| | comp=Z,27nm,2.0s | | | | | | |
| **PLCA** | **Paso Flores** | **21.71** | **181** | P | **P** | **07 08 17.4** | **+1.6** |
| | comp=Z,3.2nm,0.9s,baz=0.0,slow=12,SNR=7.9 | | | | | | |
| **PLCA** | **Paso Flores** | **21.71** | **181** | lAmb | lAmb | 07 08 46.7 | |
| | comp=Z,33nm,2.0s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **26.66** | **350** | P | **P** | **07 09 00.9** | **-2.0** |
| ZARC | | | | lAmb | lAmb | 07 09 02.2 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **65.09** | **161** | P | **P** | **07 14 04.8** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.23** | **180** | P | **P** | **07 14 42.7** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **72.72** | **322** | P | **P** | **07 14 53.0** | **+1.7** |
| | comp=Z,0.4nm,0.8s,baz=159,slow=5.8,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.71** | **71** | P | **P** | **07 15 19.9** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=260,slow=5.4,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.71** | **71** | lAmb | lAmb | 07 15 54.3 | |
| | comp=Z,5.9nm,1.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.38** | **341** | P | **P** | **07 16 13.9** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=134,slow=4.8,SNR=24 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **26.27** | **279** | T | T | 09 41 32.2 | |
| | baz=101,slow=75,SNR=64 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **26.28** | **279** | T | T | 09 41 32.8 | |
| | baz=101,slow=75,SNR=44 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **26.29** | **281** | T | T | 09 41 39.7 | |
| | baz=100,slow=74,SNR=24 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **26.29** | **279** | T | T | 09 41 33.5 | |
| | baz=101,slow=75,SNR=46 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **26.30** | **281** | T | T | 09 41 42.6 | |
| | baz=100,slow=74,SNR=27 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **26.31** | **281** | T | T | 09 41 42.5 | |
| | baz=100,slow=74,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **151.06** | **5** | PKPbc | **PKPbc** | **07 23 15.5** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=17,slow=2.0,SNR=8.1 | | | | | | |

*IDC **20** 07:15:33.2±2.7, 54°.58N×86°.32E, h0km, mb1 3.2/2, mb1mx3.0/50, mbtmp3.2/2, ML2.8/2, Error ellipse: s-maj=21.0km s-min=13.4km az=46.0*
**NNC 20 07:15:29.3±1.6, 54°.67N×86°.49E, h0km, mb3.0, mpv2.8, 6C-3D, Error ellipse: s-maj=24.2km s-min=8.4km az=149.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.22** | **234** | *i* | | 07 21 48.1 | |
| | baz=54,slow=343,SNR=4.1 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.22** | **234** | ⇑P | Pg | 07 15 52.0 | -0.6 |
| | 0.3nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | Sb | 07 16 09.0 | -0.4 |
| | 0.5nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.22** | **234** | Pg | Pg | 07 15 52.5 | -0.1 |
| | 2.4nm,0.3s,baz=51,slow=16,SNR=25 | | | | | | |
| ZALV | | | | Lg | Lg | 07 16 09.1 | |
| | 8.7nm,0.3s,baz=56,slow=28,SNR=25 | | | | | | |
| **KURK** | **Kurchatov** | **6.21** | **234** | ⇓Pn | Pn | 07 17 02.6 | +0.5 |
| | 3.1nm,1.2s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 07 18 14.8 | +1.0 |
| | 1.1nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 07 18 46.6 | |
| | 1.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.31** | **233** | Pn | Pn | 07 17 06.5 | +2.9 |
| | 0.1nm,0.3s,baz=50,slow=14,SNR=16 | | | | | | |
| KURBB | | | | Sn | Sn | 07 18 16.3 | 0.0 |
| | 0.0nm,0.3s,baz=4.5,slow=25,SNR=1.9 | | | | | | |
| KURBB | | | | Lg | Lg | 07 18 50.5 | |
| | 0.0nm,0.3s,baz=319,slow=20,SNR=1.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.31** | **233** | ⇓Pn | Pn | 07 17 04.1 | +0.5 |
| | 1.0nm,0.2s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 18 49.9 | |
| | 3.9nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.32** | **200** | Pn | Pn | 07 17 32.0 | +0.8 |
| | 0.1nm,0.2s,baz=23,slow=14,SNR=33 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 19 07.6 | +1.8 |
| | 0.6nm,0.6s,baz=18,slow=26,SNR=5.6 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 19 54.9 | |
| | 1.1nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.32** | **200** | Pn | Pn | 07 17 34.1 | +2.9 |
| | 0.2nm,0.3s,baz=23,slow=13,SNR=21 | | | | | | |
| MKAR | | | | Sn | Sn | 07 19 05.8 | 0.0 |
| | 0.2nm,0.3s,baz=27,slow=30,SNR=5.6 | | | | | | |
| MKAR | | | | Lg | Lg | 07 19 57.5 | |
| | 0.1nm,0.3s,baz=20,slow=28,SNR=3.8 | | | | | | |

*DJA **20** 07:18:35.8±0.3, 6°.5S×102°.1E, h104km±8km, M4.5/10, mb4.5/8, mB5.0/6, MLv4.6/10, Mw(mB)4.4/6*
*NEIC **20** 07:18:36.4±2.2, 5°.66S±0°.05×130°.95E±0°.09, h84km±9km, mb4.0/9, Error ellipse: s-maj=13.7km s-min=7.8km az=93.0*
*IDC **20** 07:18:37.0±2.5, 5°.64S×130°.77E, h80km±25km, mb3.7/7, mb1 4.0/10, mb1mx3.6/43, mbtmp4.3/10, MS2.9/2, Ms1 2.9/2, ms1mx2.3/66, Error ellipse: s-maj=24.5km s-min=15.8km az=71.0*
**ISC 20 07:18:36.0±0.5, 5°.69S±0°.04×131°.00E±0°.06, h100km, n63, σ2°59/69, mb4.0/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.59** | **317** | P | **Pn** | **07 19 03.2** | **-0.1** |
| **SAUI** | **Saumlaki** | **2.30** | **172** | | **Pn** | **07 19 15.0** | **+2.5** |
| SAUI | | | | Sn | **Sn** | **07 19 40.3** | **-0.2** |
| **SAUI** | **Saumlaki** | **2.30** | **172** | P | **Pn** | **07 19 15.2** | **+2.7** |
| SAUI | | | | S | **Sn** | **07 19 40.6** | **+0.1** |
| **FAKI** | **Fak Fak** | **3.02** | **24** | | **Pn** | **07 19 23.1** | **+1.0** |
| FAKI | | | | Sn | **Sn** | **07 19 55.6** | **-1.9** |
| **FAKI** | **Fak Fak** | **3.02** | **24** | P | **Pn** | **07 19 23.2** | **+1.1** |
| FAKI | | | | S | **Sn** | **07 19 56.2** | **-1.3** |
| **FAKI** | **Fak Fak** | **3.02** | **24** | P | **Pn** | **07 19 23.2** | **+1.1** |
| **MSAI** | **Masohi** | **3.11** | **318** | P | **Pn** | **07 19 23.4** | **+0.2** |
| MSAI | | | | S | **Sn** | **07 19 56.8** | **-2.8** |
| **AAI** | **Ambon** | **3.43** | **305** | P | **Pn** | **07 19 27.0** | **-0.5** |
| **SIJI** | **Sorong** | **4.79** | **3** | P | **Pn** | **07 19 45.8** | **-0.2** |
| | 44nm,0.3s,baz=48,slow=18,SNR=57 | | | | | | |
| SIJI | | | | S | **Sn** | **07 20 35.9** | **-4.5** |
| | 39nm,0.3s,baz=63,slow=24,SNR=15 | | | | | | |
| **SANI** | **Sanana** | **6.17** | **306** | P | **Pn** | **07 20 04.8** | **+0.2** |
| | 0.2nm806nm43nm,0.5s | | | | | | |
| **SANI** | **Sanana** | **6.17** | **306** | P | **Pn** | **07 20 05.9** | **+1.3** |
| **DRS** | **Darwin Rock St** | **6.70** | **181** | P | **Pn** | **07 20 12.3** | **+0.4** |
| **KDU** | **Kakadu** | **7.11** | **168** | P | **Pn** | **07 20 17.5** | **+0.1** |
| **MTN** | **Manton Dam** | **7.11** | **179** | Pn | **Pn** | **07 20 17.5** | **+0.1** |
| **MTN** | **Manton Dam** | **7.11** | **179** | P | **Pn** | **07 20 17.8** | **+0.3** |
| **SOEI** | **Soe** | **7.80** | **238** | Pn | **Pn** | **07 20 28.1** | **+1.2** |
| **SOEI** | **Soe** | **7.80** | **238** | P | **Pn** | **07 20 29.1** | **+2.2** |
| | 0.3nm82nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **7.80** | **238** | P | **Pn** | **07 20 28.2** | **+1.3** |
| **BATI** | **Baumata** | **8.54** | **238** | P | **Pn** | **07 20 36.4** | **-0.5** |
| | 14nm,0.3s,baz=117,slow=6.9,SNR=8.0 | | | | | | |
| BATI | | | | S | **Sn** | **07 22 09.5** | **-2.1** |
| | 4.8nm,0.3s,baz=200,slow=2.2,SNR=2.0 | | | | | | |
| BATI | | | | LR | LR | 07 23 36.1 | |
| | comp=Z,60nm,20.5s,baz=65,slow=36 | | | | | | |
| **BATI** | **Baumata** | **8.54** | **238** | P | **Pn** | **07 20 38.2** | **+1.3** |
| | 650nm40nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **10.17** | **192** | Pn | **Pn** | **07 20 57.4** | **-1.6** |
| **SPSI** | **Sidrap Palu** | **11.32** | **278** | P | Pn | 07 21 18.3 | +3.7 |
| | 14nm,1.1s | | | | | | |
| **TTSI** | **Tana Toraja** | **11.45** | **283** | P | Pn | 07 21 32.9 | +16 |
| **TOLI2** | **Tolitoli** | **12.23** | **303** | P | **Pn** | **07 21 28.8** | **+1.9** |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **203** | P | **Pn** | **07 21 38.6** | **-3.6** |
| | 2.8nm,0.3s,baz=28,slow=9.4,SNR=58 | | | | | | |
| FITZ | | | | S | Sn | 07 23 55.5 | -14 |
| | 2.6nm,0.3s,baz=76,slow=13,SNR=6.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **203** | Pn | **Pn** | **07 21 39.0** | **-3.2** |
| **PLAI** | **Plampang** | **13.48** | **256** | P | **P** | **07 21 47.1** | **-1.8** |
| **WB0** | **Warramunga Arr** | **14.38** | **167** | | **Pn** | **07 21 53.0** | **-2.0** |
| **COEN** | **Coen** | **14.54** | **125** | Pn | **P** | **07 21 58.6** | **-2.1** |
| **COEN** | **Coen** | **14.54** | **125** | P | **P** | **07 21 58.9** | **-1.8** |
| **WRA** | **Warramunga Arr** | **14.54** | **167** | P | **Pn** | **07 21 53.1** | **-3.9** |
| | 3.0nm,0.3s,baz=346,slow=14,SNR=23 | | | | | | |
| WRA | | | | S | **Sn** | **07 24 28.7** | **-8.6** |
| | 4.4nm,0.3s,baz=332,slow=22,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 07 27 31.4 | |
| | comp=Z,51nm,18.9s,baz=175,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.54** | **167** | Pn | **Pn** | **07 21 55.4** | **-1.5** |
| **WR0** | **Warramunga Arr** | **14.60** | **167** | | **Pn** | **07 21 55.5** | **-2.2** |
| **PMG** | **Port Moresby** | **16.44** | **104** | Pn | **Pn** | **07 22 20.9** | **0.0** |
| PMG | | | | lAmb | lAmb | 07 22 34.9 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **QIS** | **Mount Isa** | **16.98** | **151** | P | **P** | **07 22 29.3** | **+1.5** |
| **AS31** | **Alice Springs** | **18.09** | **171** | | **Pn** | **07 22 41.4** | **+0.4** |
| AS31 | | | | lAmb | lAmb | 07 22 47.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **18.09** | **171** | P | **Pn** | **07 22 41.8** | **+0.8** |
| | comp=Z,1.6nm,0.3s,baz=347,slow=8.5,SNR=84 | | | | | | |
| ASAR | | | | S | **S** | **07 25 52.7** | **-10** |
| | comp=Z,0.6nm,0.3s,baz=348,slow=27,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **18.09** | **171** | | **Pn** | **07 22 41.2** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **19.13** | **213** | P | **Pn** | **07 22 52.6** | **-0.7** |
| **WRKA** | **Warakurna** | **19.41** | **187** | P | **Pn** | **07 22 57.1** | **+0.5** |
| **CTA** | **Charters Tower** | **20.61** | **135** | P | Pn | 07 23 14.0 | +3.4 |
| | comp=Z,1.0nm,0.3s,baz=316,slow

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PMG | | | | S | | Sn | 07 27 15.0 | -0.2 |
| | 28nm,0.3s,baz=198,slow=22,SNR=8.5 | | | | | | | |
| **PMG** | **Port Moresby** | **3.65** | **198** | | | **Pn** | **07 26 33.4** | **+0.5** |
| **PMG** | **Port Moresby** | **3.65** | **198** | P | | **Pn** | **07 26 33.7** | **+0.7** |
| **PMG** | **Port Moresby** | **3.65** | **198** | P | | **Pn** | **07 26 34.0** | **+1.1** |
| **RABL** | **Rabaul** | **4.21** | **66** | | | **Pn** | **07 26 40.5** | **0.0** |
| **RABL** | **Rabaul** | **4.21** | **66** | P | | **Pn** | **07 26 40.7** | **+0.2** |
| **COEN** | **Coen** | **9.46** | **212** | Pn | | **Pn** | **07 27 52.3** | **+0.6** |
| **KDU** | **Kakadu** | **17.00** | **246** | P | | **P** | **07 29 30.9** | **+0.6** |
| **MTN** | **Manton Dam** | **18.27** | **247** | P | | **P** | **07 29 43.9** | **-0.5** |
| MTN | | | | IAmb | IAmb | | 07 29 54.3 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **DRS** | **Darwin Rock St** | **18.35** | **248** | P | | **Pn** | **07 29 47.3** | **+0.9** |
| **WB0** | **Warramunga Arr** | **19.30** | **223** | P | | **P** | **07 29 54.9** | **-0.7** |
| **WRAB** | **Tennant Creek** | **19.45** | **223** | P | | **Pn** | **07 29 58.7** | **-0.7** |
| **WB2** | **Warramunga Arr** | **19.45** | **223** | P | | **P** | **07 29 56.4** | **-0.9** |
| WB2 | | | | IAmb | IAmb | | 07 29 59.3 | |
| | comp=Z,13nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.46** | **223** | P | | **Pn** | **07 29 58.7** | **-0.8** |
| | comp=Z,1.6nm,0.3s,baz=47,slow=11,SNR=20 | | | | | | | |
| WRA | | | | S | | **S** | **07 33 29.8** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=40,slow=19,SNR=2.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.46** | **223** | IAmb | IAmb | | 07 30 00.7 | |
| | comp=Z,0.7nm,1.5s | | | | | | | |
| **EIDS** | **Eidsvold** | **19.54** | **172** | P | | **P** | **07 29 58.6** | **+0.5** |
| **KNRA** | **Kununurra** | **21.48** | **242** | P | | **P** | **07 30 18.7** | **-0.4** |
| KNRA | | | | IAmb | IAmb | | 07 30 21.3 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **21.48** | **242** | P | | **P** | **07 30 19.9** | **+0.8** |
| **AS31** | **Alice Springs** | **22.44** | **217** | P | | **P** | **07 30 29.4** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.44** | **217** | P | | **P** | **07 30 30.2** | **+0.9** |
| | comp=Z,3.2nm,0.6s,baz=56,slow=9.3,SNR=20 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **07 34 20.0** | **-0.4** |
| | comp=Z,0.7nm,0.7s,baz=104,slow=3.2,SNR=4.0 | | | | | | | |
| ASAR | | | | S | | **S** | **07 34 32.5** | **+3.7** |
| | comp=Z,5.0nm,0.9s,baz=28,slow=23,SNR=25 | | | | | | | |
| **DZM** | **Mont Dzumac** | **23.79** | **134** | P | | **P** | **07 30 42.1** | **-0.1** |
| | comp=Z,6.7nm,1.0s,baz=311,slow=19,SNR=1.5 | | | | | | | |
| **DZM** | **Mont Dzumac** | **23.79** | **134** | IAmb | IAmb | | 07 31 06.4 | |
| | comp=Z,38nm,1.4s | | | | | | | |
| **SOEI** | **Soe** | **24.10** | **259** | P | | **P** | **07 30 43.0** | **-2.1** |
| SOEI | | | | IAmb | IAmb | | 07 30 55.2 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **OUENC** | **Ouen Island, N** | **24.30** | **134** | P | | **P** | **07 30 48.0** | **+1.4** |
| **ARMA** | **Armidale** | **24.59** | **173** | P | | **P** | **07 30 48.2** | **-1.1** |
| ARMA | | | | IAmb | IAmb | | 07 30 51.6 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.21** | **239** | P | | **P** | **07 30 56.2** | **+1.1** |
| | comp=Z,10nm,0.5s,baz=54,slow=8.9,SNR=15 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.21** | **239** | IAmb | IAmb | | 07 31 00.9 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **MSVF** | **Nonsavu** | **31.35** | **115** | P | | **P** | **07 31 50.2** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **59.33** | **7** | P | | **P** | **07 35 30.6** | **+0.9** |
| | comp=Z,3.4nm,0.6s,baz=154,slow=6.7,SNR=8.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **78.25** | **320** | | | **P** | **07 37 27.9** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=99,slow=6.8,SNR=3.4 | | | | | | | |
| **KTH** | **Kantishna Hill** | **82.76** | **23** | P | | **P** | **07 37 50.5** | **-0.6** |
| KTH | | | | IAmb | IAmb | | 07 37 50.9 | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.06** | **180** | P | | **P** | **07 37 56.8** | **-1.1** |
| QSPA | | | | IAmb | IAmb | | 07 37 57.4 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| **H23K** | **Yukon River** | **84.37** | **21** | P | | **P** | **07 37 59.6** | **+0.4** |
| **IL31** | | **84.89** | **23** | P | | **P** | **07 38 00.8** | **-0.9** |
| IL31 | | | | IAmb | IAmb | | 07 38 15.8 | |
| | comp=Z,7.6nm,1.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.89** | **23** | P | | **P** | **07 38 00.1** | **-1.7** |
| | comp=Z,1.9nm,0.6s,baz=252,slow=4.9,SNR=24 | | | | | | | |
| **VRDI** | **Verde Repeater** | **84.90** | **27** | P | | **P** | **07 38 02.2** | **0.0** |
| **DOT** | **Dot Lake** | **85.56** | **24** | P | | **P** | **07 38 04.9** | **-0.4** |
| **BARN** | **Barnard Glacie** | **85.65** | **27** | P | | **P** | **07 38 06.2** | **+0.2** |
| **M27K** | **Edge Creek, AK** | **86.01** | **26** | P | | **P** | **07 38 08.0** | **+0.3** |
| M27K | | | | IAmb | IAmb | | 07 38 09.6 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **86.30** | **25** | P | | **P** | **07 38 09.9** | **+1.0** |
| **HYT** | **Haines Junctio** | **87.50** | **28** | P | | **P** | **07 38 16.1** | **+1.2** |
| **EPYK** | **Eagle Plains** | **89.41** | **23** | P | | **P** | **07 38 23.6** | **0.0** |
| EPYK | | | | IAmb | IAmb | | 07 38 36.0 | |
| | comp=Z,7.6nm,1.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **121.49** | **146** | PKP | | **PKPdf** | **07 44 20.1** | **-0.6** |
| | comp=Z,1.4nm,1.0s,baz=254,slow=3.8,SNR=6.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.31** | **285** | PKPbc | | **PKPdf** | **07 45 07.7** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=61,slow=4.3,SNR=1.9 | | | | | | | |
| **PTGA** | **Pitinga** | **151.03** | **102** | PKPbc | | **PKPbc** | **07 45 19.6** | **-1.3** |
| | comp=Z,2.9nm,0.5s,baz=333,slow=22,SNR=8.1 | | | | | | | |
| **BDFB** | **Brasilia** | **153.18** | **143** | PKPbc | | **PKPbc** | **07 45 24.8** | **-0.9** |
| | comp=Z,2.2nm,0.5s,baz=33,slow=3.6,SNR=6.0 | | | | | | | |

**NEIC 20 07:53:53.2±2.0, 31°23N±0°04×103°33W±0°06, h3km±3km, mb_Lg3.3/76, Error ellipse: s-maj=7.0km s-min=6.0km az=84.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNTX** | **Cornudas Mount** | **1.82** | **286** | Pn | Pb | 07 54 26.6 | -0.5 |
| MNTX | | | | Sn | Sn | 07 54 48.8 | -0.2 |
| **TX31** | **Lajitas Ar. Si** | **1.91** | **189** | Pn | Pn | 07 54 26.8 | +0.1 |
| TX31 | | | | Sn | Sn | 07 54 50.8 | -0.5 |
| **TX32** | **Lajitas Array** | **1.91** | **189** | Pn | Pn | 07 54 26.9 | +0.2 |
| TX32 | | | | Sn | Sn | 07 54 51.6 | +0.3 |
| **TXAR** | **Lajitas Array** | **1.91** | **189** | | Pn | 07 54 26.6 | -0.1 |
| **MSTX** | **Muleshoe** | **2.78** | **10** | Pn | Pn | 07 54 40.8 | +2.2 |
| MSTX | | | | IAmb_Lg | | 07 55 22.2 | |
| | comp=Z,119nm,1.0s | | | | | | |
| **JCT** | **Junction City** | **3.12** | **103** | Pn | Pn | 07 54 44.0 | +0.6 |
| **ABTX** | **Abilene, Hawle** | **3.43** | **65** | Pn | Pn | 07 54 48.5 | +0.9 |
| **AMTX** | **Amarillo** | **3.90** | **20** | | Pn | 07 54 56.2 | +2.1 |
| AMTX | | | | IAmb_Lg | | 07 56 04.4 | |
| | comp=Z,71nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **4.01** | **290** | Pn | Pn | 07 54 54.1 | -1.5 |
| 121A | | | | IAmb_Lg | | 07 56 07.1 | |
| | comp=Z,72nm,1.1s | | | | | | |
| **BNM** | **Barren Site** | **4.03** | **317** | | Pn | 07 54 56.6 | +0.5 |
| **Y22D** | **IRIS PASSCAL I** | **4.15** | **314** | | Pn | 07 54 56.9 | -0.7 |
| Y22D | | | | IAmb_Lg | | 07 56 12.0 | |
| | comp=Z,92nm,0.8s | | | | | | |
| **LENM** | **Lemitar** | **4.25** | **315** | Pn | Pn | 07 54 57.0 | -1.9 |
| **833A** | **Chaparral WMA,** | **4.48** | **129** | Pn | Pn | 07 55 01.8 | -0.2 |
| **ANMO** | **Albuquerque** | **4.54** | **326** | Pn | Pn | 07 55 03.0 | 0.0 |
| **HPIG** | | **4.74** | **206** | | Pn | 07 55 05.7 | 0.0 |
| **435B** | **Jarrell** | **4.95** | **94** | | Pn | 07 55 08.3 | -0.1 |
| **WHTX** | **Lake Whitney,** | **5.07** | **80** | | Pn | 07 55 09.5 | -0.5 |
| **319A** | **Douglas** | **5.10** | **273** | Pn | Pn | 07 55 11.4 | +0.8 |
| **WMOK** | **Wichita Mounta** | **5.18** | **46** | | Pn | 07 55 12.3 | +0.6 |
| WMOK | | | | IAmb_Lg | | 07 56 40.5 | |
| | comp=Z,65nm,0.7s | | | | | | |
| **735A** | **Kenedy** | **5.34** | **115** | Pn | Pn | 07 55 12.5 | -1.2 |
| **Z35A** | **Perchaven, San** | **5.56** | **66** | Pn | Pn | 07 55 16.4 | -0.3 |
| **X34A** | **Smith Ranch, M** | **5.72** | **52** | Pn | Pn | 07 55 19.7 | +0.7 |
| **T25A** | **Trinidad** | **5.97** | **352** | IAmb_Lg | | 07 57 16.8 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **U32A** | **Winter Ranch,** | **6.28** | **34** | Pn | Pn | 07 55 27.1 | +0.4 |
| U32A | | | | IAmb_Lg | | 07 57 15.8 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **FNO** | **Franklin** | **6.39** | **49** | | Pn | 07 55 28.3 | 0.0 |
| **237A** | **Washetta, Mont** | **6.46** | **81** | Pn | Pn | 07 55 27.3 | -1.9 |
| **X18A** | **Snowflake** | **6.47** | **302** | | Pn | 07 55 29.4 | -0.1 |
| **W35A** | **Tecumseh** | **6.68** | **52** | | Pn | 07 55 31.9 | -0.2 |
| W35A | | | | IAmb_Lg | | 07 57 44.2 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **7.35** | **72** | Pn | Pn | 07 55 40.3 | -1.2 |
| **NATX** | **Nacogdoches** | **7.42** | **84** | Pn | Pn | 07 55 41.0 | -1.4 |
| NATX | | | | IAmb_Lg | | 07 58 01.3 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **7.48** | **61** | Pn | Pn | 07 55 43.1 | -0.1 |
| **TUL1** | **Leonard** | **7.83** | **51** | Pn | Pn | 07 55 47.2 | -0.8 |
| **T35A** | **Sooner Cattle** | **8.01** | **43** | Pn | Pn | 07 55 50.3 | -0.2 |
| **R32A** | **Long Quarter,** | **8.12** | **27** | Pn | Pn | 07 55 51.5 | -0.5 |
| R32A | | | | IAmb_Lg | | 07 58 20.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **8.12** | **20** | IAmb_Lg | | 07 58 25.0 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **PV23** | **Carpenter Ridg** | **8.59** | **329** | IAmb_Lg | | 07 58 49.7 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **8.84** | **65** | | Pn | 07 56 02.0 | +0.1 |
| MIAR | | | | IAmb_Lg | | 07 58 44.2 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **8.92** | **61** | IAmb_Lg | | 07 58 59.7 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **113A** | **Mohawk Valley,** | **9.00** | **283** | Pn | Pn | 07 56 04.5 | +0.4 |
| **U38A** | **Gravette** | **9.07** | **53** | Pn | Pn | 07 56 03.7 | -1.4 |
| U38A | | | | IAmb_Lg | | 07 58 47.7 | |
| | comp=Z,23nm,0.7s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Z41A** | **Richland Creek** | **9.14** | **74** | | Pn | Pn | 07 56 04.2 | -1.8 |
| **HHAR** | **Hobbs** | **9.30** | **55** | | Pn | Pn | 07 56 06.8 | -1.4 |
| HHAR | | | | IAmb_Lg | | | 07 58 58.1 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **KSU1** | **Kansas State U** | **9.59** | **33** | IAmb_Lg | | | 07 59 23.2 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **O20A** | **White River Ci** | **9.74** | **337** | Pn | Pn | | 07 56 14.2 | -0.2 |
| **OGNE** | **Ogallala** | **9.76** | **6** | IAmb_Lg | | | 07 59 13.7 | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **10.47** | **49** | | Pn | | 07 56 22.4 | -1.9 |
| **MGMO** | **Mountain Grove** | **10.90** | **54** | | Pn | | 07 56 29.0 | -1.1 |
| **LCAR** | **Lake Charles** | **11.23** | **61** | Pn | Pn | | 07 56 33.0 | -1.6 |
| **R40A** | **Maddies Statio** | **11.50** | **49** | Pn | Pn | | 07 56 36.1 | -2.2 |
| **CCM** | **Cathedral Cave** | **12.05** | **52** | Pn | Pn | | 07 56 43.5 | -2.3 |
| **P40A** | **Paris** | **12.38** | **45** | Pn | Pn | | 07 56 48.1 | -2.2 |
| **WVT** | **Waverly** | **13.80** | **65** | Pn | Pn | | 07 57 06.5 | -3.2 |
| **HDIL** | **Hopedale** | **14.68** | **47** | Pn | Pn | | 07 57 17.6 | -4.1 |
| **SSPA** | **Standing Stone** | **22.57** | **58** | P | P | | 07 58 53.9 | -0.8 |

**WEL 20 08:07:53.9, 42°S±5°×17°3E±°, h62km±14km, M2.8/13, mB5.8/1, ML3.1/26, MLv2.8/13, Mw(mB)5.3/1, Error ellipse: s-maj=0.0km s-min=0.0km az=79.4, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THZ** | **Tophouse** | **0.31** | **15** | P | Pn | 08 08 05.0 | +0.6 |
| **KHZ** | **Kahutara** | **0.65** | **123** | P | Pn | 08 08 08.5 | +0.9 |
| **MRNZ** | **Matariki Terra** | **0.67** | **358** | P | Pn | 08 08 08.6 | +0.7 |
| **DSZ** | **Denniston Nort** | **0.81** | **293** | P | Pn | 08 08 09.7 | +0.2 |
| **LTZ** | **Lake Taylor** | **0.81** | **208** | P | Pn | 08 08 10.4 | +0.7 |
| **BSWZ** | **Blackbirch Sta** | **0.88** | **67** | P | Pn | 08 08 11.8 | +1.4 |
| **GVZ** | **Greta Valley S** | **0.92** | **169** | P | Pn | 08 08 11.8 | +0.8 |
| **NNZ** | **Nelson** | **0.95** | **28** | P | Pn | 08 08 12.3 | +1.0 |
| **TUWZ** | **Tuamarina** | **1.07** | **54** | P | Pn | 08 08 14.1 | +1.2 |
| **AMCZ** | **Amberley** | **1.12** | **185** | P | Pn | 08 08 14.0 | +0.5 |
| **INZ** | **Inchbonnie** | **1.20** | **236** | P | Pn | 08 08 15.0 | +0.5 |
| **QRZ** | **Quartz Range** | **1.25** | **351** | P | Pn | 08 08 15.5 | +0.1 |
| **OXZ** | **Oxford** | **1.38** | **204** | P | Pn | 08 08 16.9 | -0.1 |
| **TCW** | **Tory Channel** | **1.40** | **53** | P | Pn | 08 08 18.1 | +0.9 |
| **DUWZ** | **D'Urville Isla** | **1.52** | **34** | P | Pn | 08 08 20.6 | +1.7 |
| **MQZ** | **McQueen's Vall** | **1.64** | **184** | P | Pn | 08 08 19.8 | -0.7 |
| **OKCZ** | **Okains Bay** | **1.67** | **173** | P | Pn | 08 08 20.9 | 0.0 |
| **RACZ** | **Rakaia** | **1.73** | **196** | P | Pn | 08 08 21.1 | -0.6 |
| **AKCZ** | **Akaroa Harbour** | **1.81** | **177** | P | Pn | 08 08 22.3 | -0.5 |
| **WVZ** | **Waitaha Valley** | **1.82** | **236** | P | Pn | 08 08 23.6 | +0.7 |
| **CAW** | **Cannon Point** | **1.95** | **61** | P | Pn | 08 08 24.6 | -0.1 |
| **KIW** | **Kapiti Island** | **1.99** | **54** | P | Pn | 08 08 25.8 | +0.5 |
| **WACZ** | **Wakanui South** | **2.00** | **200** | P | Pn | 08 08 24.9 | -0.4 |
| **RPZ** | **Rata Peaks** | **2.09** | **217** | P | Pn | 08 08 27.5 | +0.9 |
| **OGWZ** | **Otaki Gorge** | **2.18** | **56** | P | Pn | 08 08 27.8 | 0.0 |
| **MTW** | **Mount Morrison** | **2.22** | **67** | P | Pn | 08 08 27.5 | -0.8 |
| **MRZ** | **Mangatainoka R** | **2.52** | **57** | P | Pn | 08 08 32.0 | -0.5 |
| **FOZ** | **Fox Glacier** | **2.64** | **235** | P | Pn | 08 08 34.2 | +0.2 |
| **TMZ** | **Timaru** | **2.66** | **209** | P | Pn | 08 08 33.7 | -0.7 |
| **PREZ** | **Palmer Road** | **2.91** | **21** | P | Pn | 08 08 38.7 | +0.9 |
| **KHEZ** | **Kahui Hut** | **2.92** | **19** | P | Pn | 08 08 40.2 | +2.2 |
| **PKE** | **Pukeiti** | **3.01** | **18** | P | Pn | 08 08 41.5 | +2.4 |
| **TSZ** | **Takapari Road** | **3.12** | **51** | P | Pn | 08 08 46.9 | +6.3 |
| **VRZ** | **Vera Road** | **3.30** | **28** | P | Pn | 08 08 45.5 | +2.5 |
| **PNHZ** | **Pukenui** | **3.35** | **51** | P | Pn | 08 08 45.4 | +1.6 |
| **ODZ** | **Otahua Downs** | **3.36** | **207** | P | Pn | 08 08 43.6 | -0.4 |
| **PXZ** | **Pawanui** | **3.69** | **58** | P | Pn | 08 08 47.4 | -0.9 |
| **WHRZ** | **Whale Island** | **5.29** | **39** | P | Pn | 08 09 10.6 | +0.3 |

*NNC 20 08:27:58.3±0.4, 44.67N×79.24E, h0km, mb4.2, mpv4.2, Error ellipse: s-maj=3.2km s-min=2.7km az=96.0*
*SOME 20 08:27:59.3, 44.62N×79.20E, h15km, MS2.4*
**ISC 20 08:27:59.0±0.9, 44°64N±0°02×79°23E±0°02, h11km±8km, n88, σ1°14/138, 20C-17D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNOS** | **Konyrlen** | **0.28** | **188** | ⇓*e*P | **Pg** | **08 28 05.2** | **+0.3** |
| | 382nm,0.0s | | | | | | |
| KNOS | | | | *e*S | **Sg** | **08 28 09.4** | **+0.7** |
| | 2μm,0.0s | | | | | | |
| **DJR** | **Jarkent** | **0.50** | **127** | ⇓*e*P | **Pg** | **08 28 08.5** | **-0.4** |
| | 2μm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | **08 28 15.1** | **-0.4** |
| | 1μm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **0.50** | **127** | P | **Pg** | **08 28 08.5** | **-0.4** |
| | 2μm,0.1s | | | | | | |
| DJR | | | | S | **Sg** | **08 28 15.1** | **-0.4** |
| | 1μm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **0.65** | **8** | ⇑*e*P | **Pg** | **08 28 11.1** | **-0.7** |
| | 144nm,0.1s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **08 28 19.5** | **-0.8** |
| | 4μm,0.1s | | | | | | |
| **KAPS** | **Kapalarasan** | **0.65** | **8** | P | **Pg** | **08 28 11.0** | **-0.7** |
| | 144nm,0.1s | | | | | | |
| KAPS | | | | S | **Sg** | **08 28 19.5** | **-0.8** |
| | 4μm,0.1s | | | | | | |
| **TDK** | **Taldyqorghan** | **0.69** | **302** | *e*P | **Pg** | **08 28 11.9** | **-0.5** |
| | 739nm,0.3s | | | | | | |
| TDK | | | | *e*S | **Sg** | **08 28 21.5** | **0.0** |
| | 487nm,0.3s | | | | | | |
| **TDK** | **Taldyqorghan** | **0.69** | **302** | *i*P | **Pg** | **08 28 10.8** | **-1.6** |
| | baz=301 | | | | | | |
| **TDK** | **Taldyqorghan** | **0.69** | **302** | P | **Pg** | **08 28 12.0** | **-0.5** |
| | 739nm,0.3s | | | | | | |
| TDK | | | | S | **Sg** | **08 28 21.5** | **0.0** |
| | 487nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **0.77** | **225** | *e*P | **Pb** | **08 28 14.0** | **-0.4** |
| | 1μm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sb** | **08 28 24.5** | **-0.3** |
| | 1μm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **0.77** | **225** | P | **Pb** | **08 28 14.0** | **-0.4** |
| | 1μm,0.1s | | | | | | |
| BLB | | | | S | **Sb** | **08 28 24.5** | **-0.3** |
| | 1μm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **1.09** | **248** | *e*P | **Pg** | **08 28 19.5** | **-0.5** |
| | 169nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **08 28 34.0** | **-0.3** |
| | 570nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **1.09** | **248** | P | **Pg** | **08 28 19.5** | **-0.5** |
| | 169nm,0.2s | | | | | | |
| ARXS | | | | S | **Sg** | **08 28 34.0** | **-0.3** |
| | 570nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **1.24** | **199** | ⇑*e*P | **Pb** | **08 28 22.2** | **-0.3** |
| | 247nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **08 28 38.8** | **+0.4** |
| | 2μm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **1.24** | **199** | ⇑*i*P | **Pb** | **08 28 22.1** | **-0.3** |
| | baz=193 | | | | | | |
| **PDGK** | **Podgornoye** | **1.32** | **172** | P | **Pn** | **08 28 23.4** | **-0.1** |
| | 144nm,0.2s | | | | | | |
| PDGK | | | | S | **Sb** | **08 28 41.0** | **+0.1** |
| | 350nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **1.32** | **172** | ⇓P | **Pn** | **08 28 23.4** | **-0.1** |
| | 71nm,0.2s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **08 28 41.0** | **+0.1** |
| | 245nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.38** | **214** | *e*P | **Pg** | **08 28 25.4** | **-0.1** |
| | 152nm,0.3s | | | | | | |
| KURS | | | | *e*S | **Sg** | **08 28 43.8** | **+0.3** |
| | 181nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **1.38** | **214** | P | **Pg** | **08 28 25.4** | **-0.1** |
| | 152nm,0.3s | | | | | | |
| KURS | | | | S | **Sg** | **08 28 43.8** | **+0.3** |
| | 181nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.44** | **145** | *e*P | **Pn** | **08 28 25.3** | **+0.2** |
| | 120nm,0.0s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **08 28 43.9** | **-0.2** |
| | 414nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.44** | **145** | P | **Pn** | **08 28 25.3** | **+0.2** |
| | 120nm,0.2s | | | | | | |
| KTMS | | | | S | **Sn** | **08 28 43.9** | **-0.2** |
| | 414nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.50** | **186** | *e*P | **Pb** | **08 28 26.9** | **-0.1** |
| | 192nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **08 28 46.5** | **+0.5** |
| | 1μm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **1.50** | **186** | ⇑*i*P | **Pn** | **08 28 26.6** | **+0.6** |
| | baz=182 | | | | | | |
| **UZB** | **Uzynbulak** | **1.50** | **186** | P | **Pb** | **08 28 26.8** | **-0.1** |
| | 192nm,0.3s | | | | | | |
| UZB | | | | S | **Sb** | **08 28 46.5** | **+0.5** |
| | 1μm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **1.58** | **202** | *e*P | **Pb** | **08 28 28.3** | **0.0** |
| | 446nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **08 28 49.0** | **+0.7** |
| | 428nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.58** | **202** | ⇑P | **Pb** | **08 28 49.0** | **+0.7** |
| | baz=197 | | | | | | |
| **ZHN** | **Zhinishke** | **1.58** | **202** | P | **Pb** | **08 28 28.3** | **0.0** |
| | 446nm,0.2s | | | | | | |
| ZHN | | | | S | **Sb** | **08 28 49.0** | **+0.7** |
| | 428nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.69** | **201** | *e*P | **Pb** | **08 28 30.5** | **+0.3** |
| | 242nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **08 28 52.6** | **-0.7** |
| | 2μm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.69** | **201** | *e*Pg | **Pb** | **08 28 29.9** | **-0.3** |
| | baz=197 | | | | | | |
| SATY | | | | *e*Sn | **Sb** | **08 28 51.9** | **+0.4** |
| | baz=197 | | | | | | |
| **SATY** | **Saty** | **1.69** | **201** | P | **Pb** | **08 28 30.5** | **+0.3** |
| | 242nm,0.1s | | | | | | |
| SATY | | | | S | **Sg** | **08 28 52.6** | **-0.7** |
| | 2μm,0.1s | | | | | | |
| **CHKK** | **Chushkaly** | **1.79** | **245** | *e*P | **Pb** | **08 28 31.9** | **0.0** |
| | 64nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **08 28 55.0** | **+0.7** |
| | 610nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.79** | **245** | *e*Pg | **Pn** | **08 28 30.8** | **+0.9** |
| | baz=241 | | | | | | |
| **CHKK** | **Chushkaly** | **1.79** | **245** | P | **Pb** | **08 28 31.9** | **0.0** |
| | 64nm,0.2s | | | | | | |
| CHKK | | | | S | **Sb** | **08 28 55.0** | **+0.7** |
| | 610nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **2.06** | **244** | *e*P | **Pb** | **08 28 36.6** | **+0.2** |
| | 48nm,0.1s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **08 29 03.0** | **+1.1** |
| | 556nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **2.06** | **244** | Pg | **Pb** | **08 28 36.6** | **+0.2** |
| | 49nm,0.2s | | | | | | |
| KTBS | | | | Lg | Lg | 08 29 03.0 | |
| | 556nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.08** | **228** | *e*P | **Pb** | **08 28 36.7** | **-0.1** |
| | 113nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **08 29 03.3** | **+0.7** |
| | 432nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.08** | **228** | Pg | **Pb** | **08 28 36.7** | **-0.1** |
| | 113nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 08 29 03.3 | |
| | 432nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **228** | *e*P | **Pb** | **08 28 37.6** | **-0.6** |
| | 113nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **08 29 05.6** | **+0.6** |
| | 284nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **228** | *e*Pg | **Pb** | **08 28 37.6** | **-0.6** |
| | baz=224 | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **228** | ⇓Pn | **Pb** | **08 28 37.6** | **-0.6** |
| | 116nm,0.6s | | | | | | |
| MDOK | | | | ⇓Sn | **Sb** | **08 29 06.2** | **+1.2** |
| | 108nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **228** | Pg | **Pb** | **08 28 37.6** | **-0.6** |
| | 113nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 08 29 05.6 | |
| | 284nm,0.6s | | | | | | |
| **KNDC** | **Almaty** | **2.17** | **230** | ⇑Pn | **Pb** | **08 28 37.0** | **-1.3** |
| | 160nm,0.2s | | | | | | |
| KNDC | | | | ⇑Sn | **Sg** | **08 29 07.6** | **-1.1** |
| | 522nm,0.6s | | | | | | |
| **AAA** | **Alma-Ata** | **2.20** | **230** | *e*P | **Pb** | **08 28 38.9** | **0.0** |
| | 383nm,0.2s | | | | | | |
| AAA | | | | *e*S | **Sg** | **08 29 08.1** | **-1.6** |
| | 391nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **2.20** | **230** | *e*Pg | **Pb** | **08 28 38.8** | **0.0** |
| | baz=227 | | | | | | |
| **AAA** | **Alma-Ata** | **2.20** | **230** | Pg | **Pb** | **08 28 38.9** | **0.0** |
| | 383nm,0.2s | | | | | | |
| AAA | | | | Lg | Lg | 08 29 08.1 | |
| | 391nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **2.21** | **251** | *e*P | **Pb** | **08 28 38.5** | **-0.4** |
| | 56nm,0.2s | | | | | | |
| KUU | | | | *e*S | **Sb** | **08 29 06.7** | **+0.4** |
| | 460nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **2.21** | **251** | *e*Pg | **Pb** | **08 28 37.5** | **-1.4** |
| | baz=248 | | | | | | |
| **KUU** | **Kurty** | **2.21** | **251** | Pg | **Pb** | **08 28 38.5** | **-0.4** |
| | 56nm,0.2s | | | | | | |
| KUU | | | | Lg | Lg | 08 29 06.6 | |
| | 460nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.30** | **227** | *e*P | **Pb** | **08 28 40.0** | **-0.7** |
| | 57nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **08 29 10.9** | **+1.5** |
| | 100nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.30** | **227** | *e*Pg | **Pb** | **08 28 40.1** | **-0.7** |
| | baz=223 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.30** | **227** | Pg | **Pb** | **08 28 40.0** | **-0.7** |
| | 57nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 08 29 10.9 | |
| | 100nm,0.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 16nm,0.4s | | | | | | | |
| BTLS | | | | Lg | Lg | 08 29 56.1 | | |
| | 4.7nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.98** | **241** | P | **Pn** | **08 29 01.8** | **+1.7** | |
| | SNR=8.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.98** | **241** | ⇑Pn | **Pn** | **08 29 01.6** | **+1.5** | |
| | 3.1nm,0.4s | | | | | | | |
| AAK | | | | ⇑Pg | **Pb** | **08 29 10.1** | **+0.9** | |
| | 10nm,0.5s | | | | | | | |
| AAK | | | | Lg | Lg | 08 30 06.8 | | |
| | 47nm,0.6s | | | | | | | |
| **UCH** | **Uchtor** | **4.20** | **237** | P | **Pn** | **08 29 05.8** | **+2.5** | |
| | SNR=5.6 | | | | | | | |
| **EKS2** | **Erkin-Say** | **4.42** | **245** | P | **Pn** | **08 29 08.1** | **+1.9** | |
| | SNR=9.7 | | | | | | | |
| **MRKS** | **Merke** | **4.75** | **249** | *e*P | **Pb** | **08 29 25.5** | **+3.2** | |
| | 6.8nm,0.4s | | | | | | | |
| MRKS | | | | *e*S | **Sg** | **08 30 26.9** | **-4.6** | |
| | 30nm,0.5s | | | | | | | |
| **MRKS** | **Merke** | **4.75** | **249** | Pg | **Pb** | **08 29 25.5** | **+3.2** | |
| | 6.8nm,0.4s | | | | | | | |
| MRKS | | | | Lg | Lg | 08 30 26.9 | | |
| | 30nm,0.5s | | | | | | | |
| **AML** | **Almayashu** | **4.75** | **240** | P | **Pn** | **08 29 13.6** | **+2.7** | |
| | SNR=8.2 | | | | | | | |
| **ZSN** | **Zaisan** | **4.83** | **52** | Pg | **Pb** | **08 29 22.7** | **-0.9** | |
| | 2.4nm,0.3s | | | | | | | |
| ZSN | | | | Lg | Lg | 08 30 22.6 | | |
| | 21nm,0.6s | | | | | | | |
| **OTUK** | **Ortayu** | **5.97** | **310** | ⇓Pn | **Pn** | **08 29 27.3** | **-0.1** | |
| | 3.2nm,0.8s | | | | | | | |
| OTUK | | | | ⇓Sn | **Sn** | **08 30 35.4** | **-0.3** | |
| | 3.4nm,0.6s | | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 08 31 05.5 | | |
| | 28nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.01** | **356** | ⇑Pn | **Pn** | **08 29 28.9** | **+1.2** | |
| | 4.0nm,1.2s | | | | | | | |
| KURBB | | | | ⇓Pg | **Pb** | **08 29 44.4** | **+0.8** | |
| | 2.4nm,0.4s | | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **08 30 35.7** | **-0.7** | |
| | 4.6nm,0.3s | | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 31 04.5 | | |
| | 66nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **6.09** | **356** | ⇑Pn | **Pn** | **08 29 29.0** | **+0.1** | |
| | 0.5nm,0.3s | | | | | | | |
| KURK | | | | ⇓Pg | **Pb** | **08 29 46.9** | **+1.8** | |
| | 5.1nm,1.1s | | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **08 30 37.2** | **-1.4** | |
| | 5.6nm,0.6s | | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 31 06.9 | | |
| | 24nm,0.6s | | | | | | | |
| **KK09** | **Karatay Array** | **6.49** | **260** | ⇓Pn | **Pn** | **08 29 35.5** | **+1.1** | |
| | 3.1nm,0.6s | | | | | | | |
| KK09 | | | | ⇓Pg | Pg | 08 29 57.6 | -5.6 | |
| | 8.8nm,0.4s | | | | | | | |
| KK09 | | | | ⇓Lg | Lg | 08 31 25.1 | | |
| | 15nm,0.6s | | | | | | | |
| **BRZS** | **Berezniki** | **6.96** | **323** | *e*Pg | **Pb** | **08 30 02.6** | **+2.8** | |
| | baz=323 | | | | | | | |
| **BRLS** | **Boroldaу** | **6.98** | **260** | *e*Pg | Pg | 08 30 07.0 | -5.6 | |
| | baz=258 | | | | | | | |
| **BRVK** | **Borovoye** | **10.28** | **328** | ⇑Sn | **Sn** | **08 32 21.3** | **-0.1** | |
| | 2.7nm,1.0s | | | | | | | |
| BRVK | | | | ⇓Lg | Lg | 08 33 21.1 | | |
| | 19nm,1.1s | | | | | | | |
| **AB31** | **Akbulak array** | **13.95** | **296** | Pn | **Pn** | **08 31 16.1** | **-0.4** | |
| | 1.4nm,0.6s,baz=99,slow=15,SNR=31 | | | | | | | |
| AB31 | | | | ⇓Lg | Lg | 08 32 18.3 | | |
| | 1.1nm,0.5s,baz=171,slow=10,SNR=21 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.43** | **300** | ⇓Lg | Lg | 08 32 41.0 | | |
| | 4.0nm,1.2s | | | | | | | |

**IDC 20 08:38:03.4±1.4, 1°22N×129°60E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.5/43, mbtmp3.7/5, ML3.0/1, Error ellipse: s-maj=87.9km s-min=19.0km az=62.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.67** | **141** | Pn | Pn | 08 38 46.0 | -1.6 |
| | 2.5nm,0.3s,baz=179,slow=17,SNR=2.7 | | | | | | |
| SIJI | | | | Sn | Sn | 08 39 21.6 | +0.8 |
| | 1.5nm,0.3s,baz=230,slow=22,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.54** | **168** | P | P | 08 42 53.7 | -0.8 |
| | 0.6nm,0.5s,baz=344,slow=11,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **25.09** | **171** | P | P | 08 43 31.0 | +1.0 |
| | 4.2nm,0.7s,baz=343,slow=11,SNR=52 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 40.23** | **62** | | T | T | 09 29 16.7 | |
| | baz=249,slow=75,SNR=52 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 40.24** | **62** | | T | T | 09 29 19.4 | |
| | baz=249,slow=75,SNR=16 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 40.24** | **62** | | T | T | 09 29 19.3 | |
| | baz=249,slow=75,SNR=25 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 40.85** | **61** | | T | T | 09 30 02.4 | |
| | baz=247,slow=75,SNR=58 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 40.86** | **61** | | T | T | 09 30 02.0 | |
| | baz=247,slow=75,SNR=31 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 40.87** | **61** | | T | T | 09 30 04.3 | |
| | baz=247,slow=75,SNR=73 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.23** | **325** | P | P | 08 48 20.4 | 0.0 |
| | 0.3nm,0.4s,baz=121,slow=8.4,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.38** | **327** | P | | 08 48 47.5 | -0.2 |
| | 0.4nm,0.5s,baz=128,slow=6.2,SNR=4.7 | | | | | | |

*IDC **20** 08:45:44.0±2.2, 54°.20N×86°.00E, h0km, mb1 3.1/2, mb1mx3.0/38, mbtmp3.1/2, ML2.8/2, Error ellipse: s-maj=17.5km s-min=10.3km az=57.0*

**NNC 20 08:45:39.0±1.5, 54°.46N×86°.22E, h0km, mb3.5, mpv2.8, 6C-3D, Error ellipse: s-maj=22.1km s-min=7.6km az=155.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.97** | **239** | *i* | | 08 50 33.5 | |
| | baz=68,slow=343,SNR=6.2 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.97** | **239** | ⇓P | Pg | 08 45 57.3 | -0.3 |
| | 0.2nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | Sb | 08 46 11.2 | -0.9 |
| | 3.1nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.97** | **239** | Pg | Pg | 08 45 57.2 | -0.4 |
| | 1.6nm,0.3s,baz=73,slow=16,SNR=17 | | | | | | |
| ZALV | | | | Lg | Lg | 08 46 08.8 | |
| | 6.7nm,0.3s,baz=71,slow=30,SNR=7.1 | | | | | | |
| **KURK** | **Kurchatov** | **5.96** | **234** | ⇑Pn | Pn | 08 47 09.6 | +1.2 |
| | 3.8nm,1.1s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 48 46.7 | |
| | 2.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.07** | **234** | Pn | Pn | 08 47 12.5 | +2.7 |
| | 0.2nm,0.3s,baz=52,slow=13,SNR=16 | | | | | | |
| KURBB | | | | Lg | Lg | 08 48 50.2 | |
| | 0.0nm,0.3s,baz=55,slow=34,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.07** | **234** | ⇑Pn | Pn | 08 47 11.1 | +1.2 |
| | 2.4nm,0.9s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 08 48 22.3 | +2.5 |
| | 1.9nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 08 48 53.0 | |
| | 4.1nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.07** | **200** | Pn | Pn | 08 47 37.7 | +0.2 |
| | 0.3nm,0.4s,baz=26,slow=13,SNR=39 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 08 49 10.0 | +0.6 |
| | 1.1nm,0.9s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 08 49 55.1 | |
| | 3.2nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.07** | **200** | Pn | Pn | 08 47 39.2 | +1.8 |
| | 0.2nm,0.3s,baz=21,slow=12,SNR=20 | | | | | | |
| MKAR | | | | Sn | Sn | 08 49 06.9 | -2.4 |
| | 0.1nm,0.3s,baz=21,slow=23,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 08 49 50.9 | |
| | 0.0nm,0.3s,baz=9.6,slow=19,SNR=2.9 | | | | | | |

*IDC **20** 09:12:36.3±2.3, 34°.98N×139°.47E, h0km, mb3.2/2, mb1 3.4/2, mb1mx3.0/61, mbtmp3.2/2, Error ellipse: s-maj=77.4km s-min=22.5km az=70.0*
*JMA **20** 09:12:39.6±0.2, 35°.66N×140°.16E, h62km±2km, M2.6*

**ISC 20 09:12:39.8±1.2, 35°.58N±0°.05×140°.19E±0°.06, h65km±10km, n13, σ0°.49/18, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCN** | **Nagara** | **0.17** | **176** | P | **Pn** | **09 12 50.2** | **+0.5** |
| **JSMT** | **Sammumatsuo** | **0.22** | **75** | P | **Pn** | **09 12 49.8** | **-0.1** |
| **JIHU** | **Itakohorinouch** | **0.47** | **36** | P | **Pn** | **09 12 51.5** | **-0.4** |
| **BSO3** | **Boso 3** | **0.82** | **161** | P | **Pn** | **09 12 55.7** | **+0.1** |
| **JOD2** | **Odawara 2** | **0.95** | **251** | P | **Pn** | **09 12 57.3** | **-0.2** |
| JOD2 | | | | S | **Sn** | **09 13 10.1** | **-0.5** |
| **JAG** | **Ashikaga** | **1.03** | **325** | P | **Pn** | **09 12 57.6** | **-0.8** |
| **JIM2** | **Oshima 3** | **1.06** | **216** | P | **Pn** | **09 12 58.5** | **-0.4** |
| JIM2 | | | | S | **Sn** | **09 13 12.7** | **-0.4** |
| **BSO1** | **Boso 1** | **1.13** | **145** | P | **Pn** | **09 12 59.1** | **-0.1** |
| **JFNN** | **Fujinakano** | **1.29** | **253** | P | **Pn** | **09 13 01.9** | **+0.1** |
| JFNN | | | | *e*S | **Sn** | **09 13 18.1** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **1.87** | **301** | Pn | **Pn** | **09 13 09.6** | **0.0** |
| | 1.1nm,0.3s,baz=144,slow=14,SNR=42 | | | | | | |
| MJAR | | | | Sn | **Sn** | **09 13 33.0** | **+0.9** |
| | 0.5nm,0.3s,baz=188,slow=33,SNR=5.2 | | | | | | |
| **MAT** | **Matsushiro** | **1.87** | **301** | P | **Pn** | **09 13 09.8** | **+0.2** |
| MAT | | | | *e*S | **Sn** | **09 13 32.6** | **+0.4** |
| **WRA** | **Warramunga Arr** | **55.50** | **187** | P | **P** | **09 22 07.8** | **-0.4** |
| | 0.1nm,0.4s,baz=1.2,slow=7.5,SNR=1.0 | | | | | | |
| **ASAR** | **Alice Springs** | **59.23** | **187** | P | **P** | **09 22 35.0** | **+0.6** |
| | 0.3nm,0.9s,baz=8.2,slow=14,SNR=1.3 | | | | | | |

*IDC **20** 09:15:05.4±1.8, 7°.58S×154°.86E, h0km, mb3.6/5, mb1 3.8/6, mb1mx3.5/36, mbtmp3.7/6, ML1.8/1, Error ellipse: s-maj=60.7km s-min=23.6km az=133.0*

**ISC 20 09:15:09.9±1.6, 7°.7S±0°.3×154°.9E±0°.2, h31km, n7, σ0°.85/8, mb3.9/5, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **7.81** | **257** | Pn | **Pn** | **09 17 00.1** | **-1.4** |
| | 0.7nm,0.3s,baz=318,slow=16,SNR=1.6 | | | | | | |
| PMG | | | | Sn | **Sn** | **09 18 29.9** | **+1.0** |
| | 0.6nm,0.3s,baz=249,slow=23,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.34** | **236** | P | **P** | **09 20 16.2** | **+0.4** |
| | 1.0nm,0.9s,baz=60,slow=10.0,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.64** | **229** | P | **P** | **09 20 37.4** | **+0.4** |
| | 0.4nm,0.7s,baz=56,slow=8.8,SNR=5.9 | | | | | | |
| **SONM** | **Songino Array** | **69.81** | **327** | P | **P** | **09 26 18.0** | **+0.4** |
| | 0.6nm,0.6s,baz=140,slow=6.4,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.81** | **319** | P | **P** | **09 27 36.5** | **+0.1** |
| | 0.7nm,0.7s,baz=104,slow=4.5,SNR=7.9 | | | | | | |
| **ILAR** | **Eielson Array** | **84.03** | **21** | P | **P** | **09 27 36.8** | **-0.3** |
| | 0.6nm,0.6s,baz=245,slow=4.7,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.06** | **284** | PKPbc | **PKiKP** | **09 35 06.1** | **+0.4** |
| | 0.6nm,0.8s,baz=83,slow=4.1,SNR=3.6 | | | | | | |

**IDC 20 09:15:26.0±2.2, 45°.76S×35°.00E, h0km, mb3.6/2, mb1 3.9/4, mb1mx3.5/39, mbtmp3.9/4, ML3.8/2, MS3.3/4, Ms1 3.3/4, ms1mx2.9/49, Error ellipse: s-maj=159.1km s-min=30.1km az=43.0, Prince Edward Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SUR** | **Sutherland** | **17.28** | **316** | P | Pn | 09 19 28.2 | -0.5 |
| | 0.4nm,0.3s,baz=134,slow=11,SNR=6.3 | | | | | | |
| SUR | | | | LR | LR | 09 25 12.4 | |
| | comp=Z,43nm,19.7s,baz=163,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **18.76** | **332** | P | P | 09 19 46.5 | -0.2 |
| | 0.1nm,0.3s,baz=169,slow=14,SNR=2.0 | | | | | | |
| BOSA | | | | LR | LR | 09 25 16.4 | |
| | comp=Z,64nm,20.0s,baz=188,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **22.04** | **337** | LR | LR | 09 26 36.9 | |
| | comp=Z,84nm,18.9s,baz=173,slow=30 | | | | | | |
| **VNDA** | **Vanda** | **52.73** | **167** | LR | LR | 09 45 38.7 | |
| | comp=Z,110nm,18.8s,baz=204,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.88** | **324** | P | P | 09 26 13.8 | +0.3 |
| | 0.7nm,0.6s,baz=156,slow=6.1,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **79.30** | **113** | P | P | 09 27 33.6 | 0.0 |
| | 0.2nm,0.7s,baz=220,slow=5.7,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.81** | **258** | PKP | PKPdf | 09 35 02.1 | -0.9 |
| | 0.2nm,0.7s,baz=132,slow=5.1,SNR=2.3 | | | | | | |

*MCSM **20** 09:15:28.9±0.4, 52°.N±3°.×1°.6E±°., h2km, ML3.2/2, MLv3.5/12*
*DNK **20** 09:15:28.5±1.9, 51°.40N×16°.48E, h40km±19km, ML2.1*
*IDC **20** 09:15:29.4±0.6, 51°.60N×16°.02E, h0km, mb3.3/5, mb1 3.6/11, mb1mx3.4/46, mbtmp3.3/11, ML2.8/6, Error ellipse: s-maj=11.6km s-min=7.3km az=113.0*
*BGR **20** 09:15:29.7±0.6, 51°.59N×16°.14E, h1km, ML3.3/10, Error ellipse: s-maj=6.7km s-min=3.3km az=23.0*
*IPEC **20** 09:15:29.1±0.3, 51°.59N×16°.21E, h1km, ML3.1/3, Error ellipse: s-maj=3.0km s-min=1.4km az=58.0*
*PRU **20** 09:15:29.9±0.0, 51°.57N×16°.11E, h0km*
*LDG **20** 09:15:29.0±0.3, 51°.54N×15°.96E, h1km, Ml3.6/4, Error ellipse: s-maj=8.9km s-min=4.0km az=13.0, Suspected Mining induced.*
*VIE **20** 09:15:31.8±0.8, 51°.42N×16°.19E, h0km, mb3.0/14, ml3.1/11, Error ellipse: s-maj=6.7km s-min=4.1km az=39.0 67 km WNW of Wroclaw Suspected Mining induced.*

**ISC 20 09:15:27.8±0.5, 51°.65N±0°.02×16°.13E±0°.02, h0km, n105, σ1°.82/167, mb3.3/5, 4C-6D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.81** | **173** | *i* Pg | **Pg** | **09 15 43.9** | **+0.7** |
| KSP | | | | *e*Sg | **Sg** | **09 15 53.8** | **+0.1** |
| **KSP** | **Ksiaz** | **0.81** | **173** | *e*Pg | **Pg** | **09 15 44.0** | **+0.7** |
| **KSP** | **Ksiaz** | **0.81** | **173** | Pg | **Pg** | **09 15 43.7** | **+0.4** |
| **CHVC** | **Chvalec** | **1.06** | **183** | *e*PG | **Pg** | **09 15 48.7** | **+0.7** |
| CHVC | | | | *e*SG | **Sg** | **09 16 01.7** | **-0.1** |
| **OSTC** | **Ostas** | **1.09** | **177** | *e*PG | **Pg** | **09 15 49.4** | **+0.7** |
| OSTC | | | | *e*SG | **Sg** | **09 16 02.8** | **0.0** |
| | comp=Z,364nm,1.1s | | | | | | |
| **UPC** | **Upice** | **1.14** | **184** | *e*PG | **Pg** | **09 15 50.0** | **+0.3** |
| UPC | | | | *e*SG | **Sg** | **09 16 03.9** | **-0.5** |
| | comp=Z,255nm,0.7s | | | | | | |
| **UPC** | **Upice** | **1.14** | **184** | Pg | **Pg** | **09 15 49.9** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **1.30** | **175** | *e*PG | **Pg** | **09 15 52.6** | **-0.1** |
| DPC | | | | *e*SG | **Sg** | **09 16 08.4** | **-1.2** |
| | comp=Z,230nm,0.9s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.30** | **175** | *e*Pg | **Pg** | **09 15 52.7** | **0.0** |
| DPC | | | | *e*Sg | **Sg** | **09 16 09.3** | **-0.2** |
| **DPC** | **Dobruska-Polom** | **1.30** | **175** | Pg | **Pg** | **09 15 52.7** | **0.0** |
| **PVCC** | **Panska Ves** | **1.49** | **222** | *e*PG | **Pn** | **09 15 56.0** | **+0.2** |
| PVCC | | | | *e*SG | **Sb** | **09 16 16.5** | **+0.8** |
| | comp=Z,510nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.58** | **241** | Pn | **Pn** | **09 15 57.0** | **+0.1** |
| BRG | | | | Pg | **Pb** | **09 15 58.6** | **+0.8** |
| BRG | | | | Sg | **Sb** | **09 16 19.2** | **+1.0** |
| BRG | | | | Amp | | 09 16 20.0 | |
| | comp=Z,179nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.58** | **241** | *e*Pn | **Pn** | **09 15 57.2** | **+0.2** |
| BRG | | | | *e*Pg | **Pb** | **09 15 58.6** | **+0.8** |
| BRG | | | | *e*Sg | **Sg** | **09 16 19.6** | **+1.2** |
| **KRLC** | **Kraliky** | **1.63** | **165** | *e*PG | **Pn** | **09 15 57.9** | **+0.3** |
| KRLC | | | | *e*SG | **Sn** | **09 16 18.8** | **-0.5** |
| | comp=Z,116nm,0.6s | | | | | | |
| **KRLC** | **Kraliky** | **1.63** | **165** | Pn | **Pn** | **09 15 58.0** | **+0.3** |
| **RUE** | **Ruedersdorf** | **1.67** | **301** | *e*P | **Pn** | **09 15 59.5** | **+1.2** |
| RUE | | | | *e*S | **Sg** | **09 16 24.9** | **+3.4** |
| RUE | | | | IAML | | 09 16 33.4 | |
| | comp=Z,65nm,0.3s | | | | | | |
| **FBE** | **Freiberg** | **1.89** | **248** | *e*Sg | **Sb** | **09 16 28.3** | **+1.1** |
| **PRU** | **Pruhonice** | **1.94** | **212** | *e*PN | **Pn** | **09 16 02.1** | **+0.1** |
| PRU | | | | *e*PG | **Pb** | **09 16 04.3** | **+0.3** |
| PRU | | | | *e*SG | **Sn** | **09 16 28.2** | **+1.2** |
| | comp=Z,119nm,0.6s | | | | | | |
| **CLL** | **Collm** | **1.98** | **261** | *e*Pn | **Pn** | **09 16 03.0** | **+0.5** |
| | comp=Z,23nm,0.5s | | | | | | |
| CLL | | | | *i* Pg | **Pg** | **09 16 06.2** | **+0.4** |
| CLL | | | | *i* x | x | 09 16 09.8 | |
| CLL | | | | *e*Sg | **Sg** | **09 16 32.0** | **+0.6** |
| | comp=Z,70nm,0.7s | | | | | | |
| **CLL** | **Collm** | **1.98** | **261** | *e*Pn | **Pn** | **09 16 03.1** | **+0.5** |
| CLL | | | | *e*Pg | **Pb** | **09 16 05.9** | **+1.2** |
| CLL | | | | *e*Sg | **Sg** | **09 16 32.5** | **+1.1** |
| **RAC** | **Raciborz** | **2.04** | **139** | *e*PG | **Pb** | **09 16 06.1** | **+0.4** |
| RAC | | | | *e*SG | **Sg** | **09 16 32.8** | **-0.4** |
| **MORC** | **Moravsky Berou** | **2.08** | **154** | ⇓Pn | **Pn** | **09 16 04.2** | **+0.3** |
| **MORC** | **Moravsky Berou** | **2.08** | **154** | ⇓Sn | **Sb** | **09 16 33.6** | **+0.9** |
| MORC | | | | ⇑Sb | **Sg** | **09 16 37.5** | **+3.1** |
| **MORC** | **Moravsky Berou** | **2.08** | **154** | *e*Pn | **Pn** | **09 16 03.9** | **0.0** |
| | baz=336 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **09 16 32.0** | **-0.6** |
| | comp=Z,105nm,0.8s,baz=336 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.08** | **154** | *e*Pn | **Pn** | **09 16 04.0** | **+0.1** |
| **MORC** | **Moravsky Berou** | **2.08** | **154** | Pn | **Pn** | **09 16 03.8** | **-0.1** |
| **OKC** | **Ostrava-Krasne** | **2.22** | **144** | *e*PG | **Pg** | **09 16 10.2** | **0.0** |
| **VRAC** | **Vranov** | **2.36** | **173** | ⇑Pn | **Pn** | **09 16 08.5** | **+0.8** |
| **VRAC** | **Vranov** | **2.36** | **173** | ⇑Sn | **Sn** | **09 16 39.4** | **+2.0** |
| **VRAC** | **Vranov** | **2.36** | **173** | Pn | **Pn** | **09 16 08.7** | **+1.0** |
| | comp=Z,2.6nm,0.3s,baz=345,slow=16,SNR=25 | | | | | | |
| VRAC | | | | Lg | Lg | 09 16 38.8 | |
| | comp=Z,7.7nm,0.3s,baz=280,slow=14,SNR=9.8 | | | | | | |
| **VRAC** | **Vranov** | **2.36** | **173** | *e*Pn | **Pn** | **09 16 08.2** | **+0.5** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **09 16 41.2** | **+0.4** |
| | comp=Z,95nm,0.8s,baz=354 | | | | | | |
| **TREC** | **Trest** | **2.39** | **190** | *e*SG | **Sb** | **09 16 43.2** | **+1.6** |
| **KRUC** | **Moravsky** | **2.59** | **176** | *e*Pn | **Pn** | **09 16 11.3** | **+0.4** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **09 16 48.3** | **+0.8** |
| | comp=Z,97nm,1.1s,baz=357 | | | | | | |
| **KRUC** | **Moravsky** | **2.59** | **176** | *e*PN | **Pn** | **09 16 11.4** | **+0.5** |
| KRUC | | | | *e*SG | **Sb** | **09 16 48.4** | **+0.9** |
| **TANN** | **Tannenbergstha** | **2.62** | **243** | *e*Pn | **Pn** | **09 16 12.2** | **+0.8** |
| TANN | | | | *e*Pg | **Pg** | **09 16 18.5** | **+0.5** |
| TANN | | | | *e*Sg | **Sg** | **09 16 52.3** | **+0.4** |
| **NKC** | **Novy Kostel** | **2.72** | **240** | *e*PN | **Pn** | **09 16 13.9** | **+1.1** |
| NKC | | | | *e*PG | **Pg** | **09 16 20.6** | **+0.7** |
| NKC | | | | *e*SG | **Sg** | **09 16 55.8** | **+0.6** |
| | comp=Z,204nm,1.0s | | | | | | |
| **NKC** | **Novy Kostel** | **2.72** | **240** | Pn | **Pn** | **09 16 13.9** | **+1.1** |
| **OJC** | **Ojcow** | **2.73** | **120** | *e*Pn | **Pn** | **09 16 12.1** | **-0.7** |
| OJC | | | | *e*Pg | **Pg** | **09 16 21.5** | **+1.5** |
| OJC | | | | *e*Sg | **Sg** | **09 16 56.2** | **+0.9** |
| **OJC** | **Ojcow** | **2.73** | **120** | Pn | **Pn** | **09 16 13.2** | **+0.4** |
| **JAVC** | **Velka Javorina** | **2.96** | **160** | *e*PN | **Pn** | **09 16 16.3** | **+0.3** |
| **KHC** | **Kasperske Hory** | **3.00** | **214** | *e*PN | **Pn** | **09 16 16.9** | **+0.3** |
| KHC | | | | *e*PG | **Pb** | **09 16 22.9** | **+0.8** |
| KHC | | | | *e*SN | **Sn** | **09 16 53.5** | **+0.3** |
| KHC | | | | *e*SG | **Sg** | **09 17 03.2** | **-0.9** |
| | comp=Z,49nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.00** | **214** | Pn | **Pn** | **09 16 16.9** | **+0.3** |
| **MOX** | **Moxa** | **3.01** | **252** | *e*Pn | **Pn** | **09 16 17.4** | **+0.7** |
| MOX | | | | *e*Pg | **Pg** | **09 16 26.0** | **+0.5** |
| MOX | | | | *e*Sg | **Sg** | **09 17 06.4** | **+1.9** |
| **CKRC** | **Cesky Krumlov** | **3.06** | **203** | *e*PN | **Pn** | **09 16 18.3** | **+0.9** |
| CKRC | | | | *e*PG | **Pb** | **09 16 24.4** | **+1.3** |
| CKRC | | | | *e*SG | **Sb** | **09 17 02.6** | **+1.6** |
| | comp=Z,80nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **3.21** | **210** | Pn | **Pn** | **09 16 20.6** | **+1.1** |
| | comp=Z,2.4nm,0.3s,baz=26,slow=13,SNR=26 | | | | | | |
| GERES | | | | Pg | **Pb** | **09 16 26.2** | **+0.6** |
| | comp=Z,6.7nm,0.3s,baz=38,slow=14,SNR=33 | | | | | | |
| GERES | | | | Lg | Lg | 09 17 05.7 | |
| | comp=Z,4.8nm,0.3s,baz=28,slow=23,SNR=3.9 | | | | | | |
| **SMOL** | **Smolenice** | **3.25** | **165** | *e*PG | **Pg** | **09 16 29.6** | **-0.3** |
| SMOL | | | | *e*SG | **Sg** | **09 17 11.8** | **-0.1** |
| **WET** | **Wettzell** | **3.25** | **221** | *e*Pn | **Pn** | **09 16 20.9** | **+0.8** |
| **MODS** | **Modra-Piesok** | **3.36** | **167** | *e*PG | **Pg** | **09 16 35.0** | **+2.9** |
| MODS | | | | *e*SG | **Sg** | **09 17 16.4** | **+0.8** |
| **KOLL** | **Kolacno** | **3.40** | **154** | *e*PN | **Pn** | **09 16 22.5** | **+0.5** |
| KOLL | | | | *e*SG | **Sg** | **09 17 16.6** | **-0.4** |
| **NIE** | **Niedzica** | **3.47** | **128** | *e*P | **Pg** | **09 16 34.8** | **+0.6** |
| NIE | | | | *e*S | **Sg** | **09 17 18.6** | **-0.6** |
| **NIE** | **Niedzica** | **3.47** | **128** | Pn | **Pn** | **09 16 24.1** | **+1.0** |
| **ZST** | **Bratislava** | **3.51** | **169** | *e*SG | **Sg** | **09 17 20.1** | **-0.4** |
| **BSD** | **Bornholm Skovb** | **3.55** | **349** | *i* P | **Pn** | **09 16 26.0** | **+1.9** |
| BSD | | | | *i* S | **Sn** | **09 17 06.9** | **+0.2** |
| BSD | | | | IAML | | 09 17 15.1 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **CLZ** | **Clausthal** | **3.58** | **275** | *e*Pn | **Pn** | **09 16 26.5** | **+1.9** |
| CLZ | | | | *e*Pg | **Pg** | **09 16 37.0** | **+0.6** |
| **VYHS** | **Vyhne** | **3.60** | **150** | *e*PN | **Pn** | **09 16 25.0** | **+0.2** |
| VYHS | | | | *e*PG | **Pg** | **09 16 36.1** | **-0.7** |
| VYHS | | | | *e*SG | **Sg** | **09 17 21.9** | **-1.6** |
| **VYHS** | **Vyhne** | **3.60** | **150** | Pn | **Pn** | **09 16 25.1** | **+0.2** |
| **CONA** | **Conrad Observa** | **3.73** | **183** | *e*Pn | **Pn** | **09 16 27.4** | **+0.8** |
| | comp=Z,3.2nm,0.3s,SNR=10 | | | | | | |
| CONA | | | | Sg | **Sg** | **09 17 26.7** | **-0.6** |
| | comp=Z,42nm,0.7s | | | | | | |
| **MOA** | **Molln** | **3.99** | **198** | *e*Pn | **Pn** | **09 16 30.9** | **+0.8** |
| | comp=Z,16nm,0.4s,SNR=7.5 | | | | | | |
| MOA | | | | Sg | **Sg** | **09 17 34.4** | **-1.3** |
| | comp=Z,49nm,0.6s | | | | | | |
| **LUNU** | **Lund** | **4.30** | **339** | *i* P | **Pn** | **09 16 35.3** | **+0.9** |
| LUNU | | | | *i* S | **Sn** | **09 17 25.3** | **+0.1** |
| **CRVS** | **Cervenica-Dubn** | **4.39** | **127** | *e*PG | **Pg** | **09 16 53.4** | **+1.6** |
| CRVS | | | | *e*SG | **Sg** | **09 17 49.9** | **+1.3** |
| **ARSA** | **Arzberg** | **4.42** | **185** | *i* Pn | **Pn** | **09 16 38.2** | **+2.1** |
| | comp=Z,4.4nm,0.3s | | | | | | |
| ARSA | | | | Sg | **Sg** | **09 17 49.5** | **-0.1** |
| | comp=Z,68nm,0.9s | | | | | | |
| **PSZ** | **Piszkesteto** | **4.46** | **145** | ⇑Pn | **Pn** | **09 16 37.6** | **+1.0** |
| **PSZ** | **Piszkesteto** | **4.46** | **145** | Pn | **Pn** | **09 16 37.5** | **+0.9** |
| **BLEU** | **Blekinge** | **4.67** | **358** | *i* P | **Pn** | **09 16 40.2** | **+0.8** |
| BLEU | | | | *i* S | **Sn** | **09 17 32.5** | **-1.8** |
| **KBA** | **Koelnbreinsper** | **4.92** | **203** | *i* Pn | **Pn** | **09 16 44.2** | **+1.1** |
| | comp=Z,7.7n

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **40.12** | **59** | P | | **P** | **09 23 07.6** | **+2.8** |
| | comp=Z,0.2nm,0.3s,baz=312,slow=9.5,SNR=1.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.74** | **336** | P | | **P** | **09 25 35.1** | **+1.4** |
| | comp=Z,0.3nm,0.7s,baz=31,slow=6.8,SNR=6.4 | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.84** | **322** | P | | **P** | **09 27 11.0** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=59,slow=5.4,SNR=2.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.86** | **325** | P | | **P** | **09 27 49.4** | **+0.4** |
| | comp=Z,0.1nm,0.4s,baz=21,slow=7.9,SNR=1.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.64** | **310** | P | | **P** | **09 27 58.8** | **+0.6** |
| | comp=Z,0.1nm,0.6s,baz=56,slow=6.7,SNR=1.5 | | | | | | | |

*IDC* ***20*** *09:29:39.7±1.8,27.85N×127.50E,h0km,mb3.3/4, mb1 3.5/4,mb1mx3.2/60,mbtmp3.3/4,MS2.7/1,Ms1 2.7/1, ms1mx2.3/37,Error ellipse: s-maj=108.5km s-min=17.0km az=56.0*

*JMA* ***20*** *09:29:40.8±0.1,28.12N×128.06E,h16km±2km,M3.5*

*NIED* ***20*** *09:29:40.8,28.12N×128.06E,h16km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.61; $M_{\theta\theta}$2.30; $M_{\phi\phi}$-2.91; $M_{r\theta}$1.75; $M_{\theta\phi}$3.82; $M_{r\phi}$0.88; Fault plane solution: $M_0$5.04000×$10^{14}$ NP1: $\phi_s$110.00000°,$\delta$74.00000°,$\lambda$17.00000°. NP2:$\phi_s$15.00000°, $\delta$74.00000°,$\lambda$163.00000°.*

**ISC 20 09:29:39.1±2.0,28.14N±0.05×128.04E±0.07,h6km±13km, n14,σ0.982/22,mb3.3/4,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JTK** | **Tokunoshima** | **0.88** | **113** | P | | **Pb** | **Pb** | **09 29 56.7** | **0.0** |
| JTK | | | | *eS* | | **Sg** | **Sg** | **09 30 07.9** | **+0.5** |
| **JOKE** | **Okinoerabujima** | **0.91** | **149** | P | | **Pb** | **Pb** | **09 29 57.4** | **+0.2** |
| JOKE | | | | *eS* | | **Sg** | **Sg** | **09 30 09.3** | **+1.0** |
| **JAMN** | **Amaminishikomi** | **1.01** | **84** | P | | **Pn** | **Pn** | **09 29 59.2** | **-0.5** |
| JAMN | | | | *eS* | | **Sb** | **Sb** | **09 30 15.4** | **+0.2** |
| **JIH** | **Iheya** | **1.10** | **183** | P | | **Pn** | **Pn** | **09 30 00.7** | **-0.3** |
| JIH | | | | *eS* | | **Sg** | **Sg** | **09 30 15.0** | **+0.4** |
| **JYRO** | **Yoronjima** | **1.17** | **162** | P | | **Pb** | **Pb** | **09 30 01.7** | **0.0** |
| JYRO | | | | *eS* | | **Sg** | **Sg** | **09 30 16.3** | **-0.4** |
| **JOW** | **Kunigami** | **1.32** | **171** | Pn | | **Pb** | **Pb** | **09 30 04.2** | **0.0** |
| | 53nm,0.3s,baz=127,slow=26,SNR=37 | | | | | | | | |
| JOW | | | | LR | | LR | LR | 09 30 19.3 | |
| | comp=Z,159nm,20.6s,baz=54,slow=32 | | | | | | | | |
| JOW | | | | Sn | | **Sb** | **Sb** | **09 30 21.0** | **-0.4** |
| | 78nm,0.3s,baz=189,slow=24,SNR=18 | | | | | | | | |
| **JOW** | **Kunigami** | **1.32** | **171** | P | | **Pb** | **Pb** | **09 30 04.1** | **-0.1** |
| JOW | | | | *eS* | | **Sb** | **Sb** | **09 30 21.1** | **-0.3** |
| **JAM** | **Amami Oshima** | **1.41** | **79** | P | | **Pg** | **Pg** | **09 30 05.8** | **-0.3** |
| JAM | | | | *eS* | | **Sg** | **Sg** | **09 30 24.2** | **-0.1** |
| **JNTH** | **Nagotoyohara** | **1.61** | **181** | P | | **Pb** | **Pb** | **09 30 09.1** | **-0.2** |
| JNTH | | | | | | **Sn** | **Sn** | **09 30 29.2** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **12.00** | **43** | LR | | LR | LR | 09 37 01.3 | |
| | comp=Z,41nm,22.0s,baz=209,slow=35 | | | | | | | | |
| **SONM** | **Songino Array** | **25.88** | **325** | P | | **P** | **P** | **09 35 13.5** | **+1.9** |
| | 0.6nm,0.7s,baz=140,slow=9.4,SNR=4.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.16** | **310** | P | | **P** | **P** | **09 37 15.0** | **-0.9** |
| | 0.2nm,0.6s,baz=120,slow=8.7,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.19** | **172** | P | | **P** | **P** | **09 38 22.2** | **+1.8** |
| | 0.4nm,0.9s,baz=354,slow=8.5,SNR=2.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **51.81** | **173** | P | | **P** | **P** | **09 38 46.4** | **-1.5** |
| | 0.1nm,0.4s,baz=357,slow=8.4,SNR=1.7 | | | | | | | | |

**RSNC 20 09:34:17.8±1.1,6.82N×73.12W,h148km±4km,ML3.2, Mw3.7,3C-5D,Fault plane solution: NP1:$\phi$s38.00000°, $\delta$18.00000°,$\lambda$17.00000°.,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **195** | ⇓*iP* | | | Pn | 09 34 38.1 | -0.1 |
| BARC | | | | *eS* | | | Sn | 09 34 53.0 | -0.8 |
| BARC | | | | *i* | | | | 09 34 54.5 | |
| | comp=Z,451nm,0.2s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.65** | **296** | ⇑*iP* | | | Pn | 09 34 39.9 | +0.1 |
| BRRC | | | | *eS* | | | Sn | 09 34 56.7 | +0.2 |
| BRRC | | | | *i* | | | | 09 34 59.5 | |
| | comp=Z,157nm,0.3s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.66** | **39** | ⇑*iP* | | | Pn | 09 34 40.9 | +0.4 |
| PAMC | | | | *eS* | | | Sn | 09 34 57.9 | +0.2 |
| PAMC | | | | *i* | | | | 09 35 00.4 | |
| | comp=Z,340nm,0.6s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.93** | **178** | ⇓*eP* | | | Pn | 09 34 42.1 | -0.3 |
| RUSC | | | | *eS* | | | Sn | 09 35 00.1 | -1.0 |
| RUSC | | | | *i* | | | | 09 35 02.0 | |
| | comp=Z,202nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.36** | **258** | *eP* | | | Pn | 09 34 44.7 | -1.1 |
| PTBC | | | | *eS* | | | Sn | 09 35 05.9 | -1.2 |
| PTBC | | | | *i* | | | | 09 35 08.8 | |
| | comp=Z,194nm,0.4s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.38** | **106** | ⇑*iP* | | | Pn | 09 34 46.4 | +0.4 |
| TAMC | | | | *eS* | | | Sn | 09 35 06.8 | -0.7 |
| TAMC | | | | *i* | | | | 09 35 07.2 | |
| | comp=Z,138nm,0.3s | | | | | | | | |
| **OCAC** | **Ocana** | **1.42** | **352** | *eP* | | | Pn | 09 34 46.2 | -0.4 |
| OCAC | | | | *eS* | | | Sn | 09 35 07.4 | -1.2 |
| OCAC | | | | *i* | | | | 09 35 13.7 | |
| | comp=Z,493nm,0.3s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.50** | **219** | *eP* | | | Pn | 09 34 47.0 | -0.4 |
| SPBC | | | | *eS* | | | Sn | 09 35 09.4 | -0.5 |
| SPBC | | | | *i* | | | | 09 35 11.9 | |
| | comp=Z,324nm,0.2s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | *eP* | | | Pn | 09 34 50.7 | -0.4 |
| ZARC | | | | *eS* | | | Sn | 09 35 16.4 | -0.2 |
| ZARC | | | | *i* | | | | 09 35 22.7 | |
| | comp=Z,184nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.14** | **234** | *eP* | | | Pn | 09 34 54.1 | -0.5 |
| NORC | | | | *eS* | | | Sn | 09 35 21.8 | -1.0 |
| NORC | | | | *i* | | | | 09 35 27.7 | |
| | comp=Z,158nm,0.5s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.26** | **196** | ⇓*eP* | | | Pn | 09 34 56.0 | -0.4 |
| CHIC | | | | *eS* | | | Sn | 09 35 25.5 | -0.6 |
| CHIC | | | | *i* | | | | 09 35 36.1 | |
| | comp=Z,59nm,0.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.30** | **211** | ⇓*eP* | | | Pn | 09 34 57.9 | +1.0 |
| ROSC | | | | *eS* | | | Sn | 09 35 28.2 | +1.4 |
| ROSC | | | | *i* | | | | 09 35 34.3 | |
| | comp=Z,132nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.48** | **255** | *eP* | | | Pn | 09 34 59.0 | +0.1 |
| HELC | | | | *eS* | | | Sn | 09 35 30.7 | +0.2 |
| HELC | | | | *i* | | | | 09 35 38.1 | |
| | comp=Z,110nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.56** | **291** | *eP* | | | Pn | 09 34 58.1 | -1.5 |
| UREC | | | | *eS* | | | Sn | 09 35 28.8 | -3.1 |
| UREC | | | | *i* | | | | 09 35 38.8 | |
| | comp=Z,82nm,0.2s | | | | | | | | |
| **SOCV** | **Socops** | **2.67** | **57** | *eP* | | | Pn | 09 34 59.7 | -1.3 |
| SOCV | | | | *eS* | | | Sn | 09 35 31.8 | -2.6 |
| **GUY2C** | **Guyana, Caldas** | **2.74** | **235** | *eP* | | | Pn | 09 35 02.9 | +0.6 |
| GUY2C | | | | *eS* | | | Sn | 09 35 36.1 | -0.4 |
| GUY2C | | | | *i* | | | | 09 35 44.7 | |
| | comp=Z,101nm,0.3s | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.75** | **192** | *eP* | | | Pn | 09 35 01.9 | -0.3 |
| VILC | | | | *eS* | | | Sn | 09 35 34.5 | -1.9 |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **159** | ⇓*eP* | | | Pn | 09 35 01.2 | -1.2 |
| PTGC | | | | *eS* | | | Sn | 09 35 34.4 | -2.6 |
| PTGC | | | | *i* | | | | 09 35 34.6 | |
| | comp=Z,56nm,0.4s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.90** | **357** | *eP* | | | Pn | 09 35 02.7 | -1.1 |
| LL6C | | | | *eS* | | | Sn | 09 35 37.2 | -2.2 |
| LL6C | | | | *i* | | | | 09 35 41.4 | |
| | comp=Z,31nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **252** | *eP* | | | Pn | 09 35 06.0 | +0.3 |
| CBOC | | | | *eS* | | | Sn | 09 35 42.3 | -0.3 |
| CBOC | | | | *i* | | | | 09 35 51.8 | |
| | comp=Z,39nm,0.5s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.20** | **50** | *eP* | | | Pn | 09 35 07.5 | -0.4 |
| SDV | | | | *eS* | | | Sn | 09 35 44.5 | -2.1 |
| **ANIL** | **Santa Ana** | **3.25** | **225** | *eP* | | | Pn | 09 35 09.1 | +0.5 |
| ANIL | | | | *eS* | | | Sn | 09 35 47.4 | -0.4 |
| ANIL | | | | *i* | | | | 09 35 53.9 | |
| | comp=Z,116nm,0.3s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | *eP* | | | Pn | 09 35 12.4 | -0.3 |
| ORTC | | | | *eS* | | | Sn | 09 35 55.5 | +0.2 |
| ORTC | | | | *i* | | | | 09 36 02.3 | |
| | comp=Z,54nm,0.5s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | *eP* | | | Pn | 09 35 12.3 | -1.4 |
| SJCC | | | | *eS* | | | Sn | 09 35 53.0 | -4.3 |
| SJCC | | | | *i* | | | | 09 35 57.0 | |
| | comp=Z,47nm,0.4s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.68** | **239** | *eP* | | | Pn | 09 35 14.0 | 0.0 |
| PLMC | | | | *eS* | | | Sn | 09 35 57.0 | -0.4 |
| PLMC | | | | *i* | | | | 09 36 02.9 | |
| | comp=Z,39nm,0.5s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | *eP* | | | Pn | 09 35 18.3 | -2.1 |
| CRJC | | | | *eS* | | | Sn | 09 36 05.1 | -4.1 |
| CRJC | | | | *i* | | | | 09 36 11.6 | |
| | comp=Z,28nm,0.3s | | | | | | | | |
| **GUVC** | **San Jose del G** | **4.28** | **173** | *eP* | | | Pn | 09 35 21.0 | -0.7 |
| GUVC | | | | *eS* | | | Sn | 09 36 08.8 | -2.7 |
| GUVC | | | | *i* | | | | 09 36 15.9 | |
| | comp=Z,35nm,0.4s | | | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.45** | **346** | *eP* | | | Pn | 09 35 23.4 | -0.5 |
| SMRC | | | | *eS* | | | Sn | 09 36 11.9 | -3.6 |
| SMRC | | | | *i* | | | | 09 36 17.5 | |
| | comp=Z,14nm,0.2s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.70** | **189** | *eP* | | | Pn | 09 35 25.3 | -2.0 |
| **POPC** | **Popayan, Colom** | **5.54** | **220** | *eP* | | | Pn | 09 35 38.3 | -0.3 |
| POPC | | | | *eS* | | | Sn | 09 36 38.1 | -3.6 |
| **BBAC** | **Balboa, Cauca** | **6.30** | **221** | *eP* | | | Pn | 09 35 48.7 | -0.1 |
| BBAC | | | | *eS* | | | Sn | 09 36 58.3 | -1.6 |
| BBAC | | | | *i* | | | | 09 37 05.8 | |
| | comp=Z,4.5nm,0.5s | | | | | | | | |

*IDC* ***20*** *09:34:31.6±1.3,3.04S×127.92E,h0km,mb3.4/3, mb1 3.7/6,mb1mx3.5/52,mbtmp3.6/6,ML3.4/3,Error ellipse: s-maj=42.4km s-min=23.5km az=76.0*

*DJA* ***20*** *09:34:35.1±0.7,3.5S×127.98E±°,h24km±8km,M3.9/8, mb4.2/3,MLv3.7/8*

**ISC 20 09:34:36.6±0.9,3.05S±0.06×127.98E±0.05,h38km,n11, σ1.906/15,mb3.5/3,Seram**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **0.67** | **161** | P | | | **Pn** | **09 34 49.5** | **-0.2** |
| AAI | | | | *S* | | | **Sn** | **09 34 58.2** | **-0.8** |
| **MSAI** | **Masohi** | **1.00** | **107** | P | | | **Pn** | **09 34 54.6** | **+0.5** |
| **SANI** | **Sanana** | **2.22** | **297** | P | | | **Pn** | **09 35 10.1** | **-0.8** |
| SANI | | | | *S* | | | **Sn** | **09 35 36.0** | **-1.1** |
| **SIJI** | **Sorong** | **3.94** | **57** | Pn | | | **Pn** | **09 35 34.6** | **+0.1** |
| | 5.9nm,0.3s,baz=300,slow=22,SNR=18 | | | | | | | | |
| SIJI | | | | | Sn | | **Sn** | **09 36 18.9** | **-0.7** |
| | 6.7nm,0.3s,baz=210,slow=20,SNR=13 | | | | | | | | |
| **FAKI** | **Fak Fak** | **4.27** | **88** | P | | | **Pn** | **09 35 37.7** | **-1.4** |
| FAKI | | | | *S* | | | **Sn** | **09 36 28.2** | **+0.5** |
| **APSI** | **Ampana** | **6.67** | **288** | P | | | **Pn** | **09 36 14.7** | **+2.6** |
| | 0.2nm38nm,0.4s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.13** | **189** | Pn | | | **Pn** | **09 38 07.9** | **+0.2** |
| | 0.1nm,0.3s,baz=7.1,slow=8.1,SNR=1.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.90** | **160** | P | | | **Pn** | **09 38 41.9** | **-0.9** |
| | 0.1nm,0.3s,baz=345,slow=12,SNR=13 | | | | | | | | |
| **ASAR** | **Alice Springs** | **21.28** | **165** | P | | | **P** | **09 39 20.2** | **+0.2** |
| | 1.4nm,0.6s,baz=347,slow=12,SNR=20 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.84** | **327** | P | | | **P** | **09 45 05.7** | **+0.5** |
| | 0.2nm,0.5s,baz=122,slow=8.5,SNR=2.2 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **68.11** | **329** | P | | | **P** | **09 45 32.9** | **+0.3** |
| | 0.4nm,0.7s,baz=124,slow=4.6,SNR=2.9 | | | | | | | | |

*IDC* ***20*** *09:35:39.3±6.8,35.42N×70.44E,h0km,mb3.8/5, mb1 3.8/8,mb1mx3.5/57,mbtmp3.7/8,ML3.4/3,MS3.6/1, Ms1 3.6/1,ms1mx2.4/87,Error ellipse: s-maj=115.7km s-min=30.4km az=158.0*

*SOME* ***20*** *09:35:56.8,37.75N×70.72E,h0km*

*NNC* ***20*** *09:36:00.7±3.8,36.93N×69.98E,h0km,mb4.0,mpv3.7, Error ellipse: s-maj=30.3km s-min=20.1km az=174.0*

**ISC 20 09:35:59.6±1.7,36.6N±0.1×70.08E±0.10,h100km,n17, σ1.870/26,mb3.9/4,6C-5D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZA** | **Taraz** | **6.40** | **8** | ⇑*iP* | | | **Pn** | **09 37 33.7** | **+2.5** |
| | 31nm,0.0s | | | | | | | | |
| DZA | | | | *eS* | | | **Sn** | **09 38 43.7** | **+0.9** |
| | 39nm,0.0s | | | | | | | | |
| **BRLS** | **Borolday** | **6.46** | **358** | *eP* | | | **Pn** | **09 37 32.2** | **0.0** |
| | 3.6nm,0.3s | | | | | | | | |
| BRLS | | | | *eS* | | | **Sn** | **09 38 41.1** | **-3.3** |
| | 30nm,0.6s | | | | | | | | |
| **KK09** | **Karatay Array** | **6.56** | **3** | ⇑P | | | **Pn** | **09 37 36.1** | **+2.6** |
| | 4.7nm,0.5s,baz=187,slow=13 | | | | | | | | |
| KK09 | | | | ⇑S | | | **Sn** | **09 38 47.0** | **+0.2** |
| | 4.4nm,0.4s,baz=185,slow=23 | | | | | | | | |
| **MRKS** | **Merke** | **6.64** | **20** | *eP* | | | **Pn** | **09 37 37.2** | **+2.6** |
| | 4.7nm,0.7s | | | | | | | | |
| MRKS | | | | *eS* | | | **Sn** | **09 38 49.6** | **+0.8** |
| | 16nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **28** | Pn | | | **Pn** | **09 37 37.6** | **-1.5** |
| | 0.8nm,0.3s,baz=210,slow=8.6,SNR=14 | | | | | | | | |
| AAK | | | | | Sn | | **Sn** | **09 38 55.7** | **-1.0** |
| | 0.7nm,0.3s,baz=326,slow=21,SNR=10 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **28** | ⇓P | | | **Pn** | **09 37 39.4** | **+0.3** |
| | 4.2nm,0.9s | | | | | | | | |
| AAK | | | | ⇑S | | | **Sn** | **09 38 57.3** | **+0.5** |
| | 12nm,1.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.64** | **32** | ⇓P | | | **Pn** | **09 37 48.7** | **+0.3** |
| | 3.0nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇓S | | | **Sn** | **09 39 15.5** | **+2.1** |
| | 3.1nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.69** | **38** | Pn | | | **Pn** | **09 39 06.3** | **-3.0** |
| | 0.0nm,0.3s,baz=221,slow=13,SNR=1.7 | | | | | | | | |
| **AB31** | **Akbulak array** | **14.68** | **333** | ⇑P | | | **P** | **09 39 25.1** | **-0.5** |
| | 0.9nm,0.3s,baz=151,slow=11,SNR=61 | | | | | | | | |
| AB31 | | | | ⇓S | | | **Sn** | **09 42 03.7** | **-0.2** |
| | 1.2nm,0.5s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.37** | **332** | Pn | | | **Pn** | **09 39 43.8** | **+0.5** |
| | 0.3nm,0.3s,baz=144,slow=15,SNR=4.1 | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **09 42 41.2** | **-3.3** |
| | 0.1nm,0.3s,baz=35,slow=7.9,SNR=1.9 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.37** | **332** | ⇑P | | | **P** | **09 39 46.2** | **+1.9** |
| | 2.5nm,0.8s | | | | | | | | |
| AKTO | | | | ⇓S | | | **Sn** | **09 42 44.5** | **-0.1** |
| | 4.6nm,1.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.18** | **26** | P | | | **P** | **09 40 24.8** | **-1.2** |
| | 1.8nm,0.3s,baz=215,slow=10.0,SNR=11 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **32.33** | **309** | P | | | **P** | **09 42 18.7** | **-0.3** |
| | 0.3nm,0.4s,baz=84,slow=7.0,SNR=3.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.02** | **326** | P | | | **P** | **09 42 59.9** | **+0.7** |
| | 2.1nm,0.9s,baz=136,slow=6.9,SNR=5.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.81** | **338** | P | | | **P** | **09 43 31.1** | **+0.3** |
| | 3.4nm,1.0s,baz=108,slow=7.7,SNR=1.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **43.89** | **323** | P | | | **P** | **09 43 55.5** | **-0.4** |
| | 0.7nm,0.7s,baz=83,slow=8.0,SNR=2.0 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **48.33** | **227** | LR | | | LR | 10 05 56.4 | |
| | comp=Z,60nm,18.5s,baz=86,slow=38 | | | | | | | | |

**RSNC 20 09:36:16.2±1.2,6.83N×73.13W,h150km±4km,ML3.3, Mw3.8,2C-6D,Fault plane solution: NP1:$\phi$s11.00000°, $\delta$16.00000°,$\lambda$-42.00000°.,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **192** | ⇓*iP* | | | Pn | 09 36 36.8 | -0.2 |
| BARC | | | | *eS* | | | Sn | 09 36 52.0 | -0.8 |
| BARC | | | | *i* | | | | 09 36 53.3 | |
| | comp=Z,423nm,0.4s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.64** | **295** | ⇓*iP* | | | Pn | 09 36 38.6 | +0.3 |
| BRRC | | | | *eS* | | | Sn | 09 36 55.3 | +0.1 |
| BRRC | | | | *i* | | | | 09 36 58.1 | |
| | comp=Z,152nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.35** | **258** | *eP* | | | Pn | 09 36 43.2 | -1.0 |
| PTBC | | | | *eS* | | | Sn | 09 37 04.5 | -1.1 |
| PTBC | | | | *i* | | | | 09 37 06.6 | |
| | comp=Z,267nm,0.4s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.39** | **106** | ⇑*iP* | | | Pn | 09 36 45.0 | +0.3 |
| TAMC | | | | *eS* | | | Sn | 09 37 05.7 | -0.7 |
| TAMC | | | | *i* | | | | 09 37 05.8 | |
| | comp=Z,218nm,0.4s | | | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **352** | *eP* | | | Pn | 09 36 44.6 | -0.4 |
| OCAC | | | | *eS* | | | Sn | 09 37 06.5 | -0.7 |
| OCAC | | | | *i* | | | | 09 37 12.4 | |
| | comp=Z,590nm,0.3s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.50** | **219** | ⇓*eP* | | | Pn | 09 36 45.6 | -0.3 |
| SPBC | | | | *eS* | | | Sn | 09 37 08.4 | -0.2 |
| SPBC | | | | *i* | | | | 09 37 15.1 | |
| | comp=Z,328nm,0.3s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **291** | *eP* | | | Pn | 09 36 49.2 | -0.3 |
| ZARC | | | | *eS* | | | Sn | 09 37 13.8 | -1.2 |
| ZARC | | | | *i* | | | | 09 37 21.4 | |
| | comp=Z,215nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.14** | **234** | *eP* | | | Pn | 09 36 52.8 | -0.2 |
| NORC | | | | *eS* | | | Sn | 09 37 21.0 | -0.4 |
| NORC | | | | *i* | | | | 09 37 26.1 | |
| | comp=Z,239nm,0.5s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **195** | *eP* | | | Pn | 09 36 54.6 | -0.4 |
| CHIC | | | | *eS* | | | Sn | 09 37 24.2 | -0.5 |
| CHIC | | | | *i* | | | | 09 37 31.5 | |
| | comp=Z,117nm,0.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | ⇓*iP* | | | Pn | 09 36 56.5 | +1.1 |
| ROSC | | | | *eS* | | | Sn | 09 37 27.4 | +1.9 |
| ROSC | | | | *i* | | | | 09 37 33.0 | |
| | comp=Z,246nm,0.4s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.46** | **255** | *eP* | | | Pn | 09 36 57.7 | +0.4 |
| HELC | | | | *eS* | | | Sn | 09 37 29.7 | +0.8 |
| HELC | | | | *i* | | | | 09 37 36.8 | |
| | comp=Z,150nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.55** | **291** | *eP* | | | Pn | 09 36 56.5 | -1.5 |
| UREC | | | | *eS* | | | Sn | 09 37 27.8 | -2.4 |
| UREC | | | | *i* | | | | 09 37 39.7 | |
| | comp=Z,89nm,0.3s | | | | | | | | |
| **SOCV** | **Socops** | **2.68** | **57** | *eP* | | | Pn | 09 36 58.4 | -1.2 |
| SOCV | | | | *eS* | | | Sn | 09 37 29.2 | -3.9 |
| **GUY2C** | **Guyana, Caldas** | **2.74** | **234** | *eP* | | | Pn | 09 37 01.1 | +0.4 |
| GUY2C | | | | *eS* | | | Sn | 09 37 35.0 | 0.0 |
| GUY2C | | | | *i* | | | | 09 37 43.3 | |
| | comp=Z,210nm,0.3s | | | | | | | | |
| **VILC** | **Villavicencio,** | **2.76** | **192** | *eP* | | | Pn | 09 37 00.0 | -0.7 |
| VILC | | | | *eS* | | | Sn | 09 37 34.2 | -0.9 |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **159** | ⇓*iP* | | | Pn | 09 36 59.9 | -1.2 |
| PTGC | | | | *eS* | | | Sn | 09 37 32.8 | -3.0 |
| PTGC | | | | *i* | | | | 09 37 33.3 | |
| | comp=Z,92nm,0.4s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.89** | **357** | *eP* | | | Pn | 09 37 01.1 | -1.1 |
| LL6C | | | | *eS* | | | Sn | 09 37 34.5 | -3.3 |
| LL6C | | | | *i* | | | | 09 37 40.0 | |
| | comp=Z,35nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.02** | **252** | *eP* | | | Pn | 09 37 04.5 | +0.5 |
| CBOC | | | | *eS* | | | Sn | 09 37 40.2 | -0.7 |
| CBOC | | | | *i* | | | | 09 37 50.5 | |
| | comp=Z,60nm,0.4s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.21** | **50** | *eP* | | | Pn | 09 37 06.1 | -0.4 |
| SDV | | | | *eS* | | | Sn | 09 37 42.9 | -2.4 |
| **ANIL** | **Santa Ana** | **3.24** | **224** | *eP* | | | Pn | 09 37 07.6 | +0.6 |
| ANIL | | | | *eS* | | | Sn | 09 37 46.4 | +0.1 |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | *eP* | | | Pn | 09 37 11.1 | -0.1 |
| ORTC | | | | *eS* | | | Sn | 09 37 53.4 | -0.4 |
| ORTC | | | | *i* | | | | 09 38 01.2 | |
| | comp=Z,91nm,0.4s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.66** | **327** | *eP* | | | Pn | 09 37 10.7 | -1.4 |
| SJCC | | | | *eS* | | | Sn | 09 37 51.7 | -3.8 |
| SJCC | | | | *i* | | | | 09 37 55.5 | |
| | comp=Z,44nm,0.3s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.67** | **239** | *eP* | | | Pn | 09 37 12.6 | +0.3 |
| PLMC | | | | *eS* | | | Sn | 09 37 54.8 | -1.1 |
| **CRJC** | **Cerrejon, Guaj** | **4.17** | **3** | *eP* | | | Pn | 09 37 16.9 | -1.9 |
| CRJC | | | | *eS* | | | Sn | 09 38 03.8 | -3.6 |
| CRJC | | | | *i* | | | | 09 38 09.9 | |
| | comp=Z,28nm,0.3s | | | | | | | | |
| **GUVC** | **San Jose del G** | **4.29** | **173** | *eP* | | | Pn | 09 37 19.1 | -1.2 |
| GUVC | | | | *eS* | | | Sn | 09 38 07.3 | -2.9 |
| GUVC | | | | *i* | | | | 09 38 14.3 | |
| | comp=Z,68nm,0.3s | | | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.44** | **346** | *eP* | | | Pn | 09 37 21.5 | -0.8 |
| SMRC | | | | *eS* | | | Sn | 09 38 08.8 | -4.9 |
| SMRC | | | | *i* | | | | 09 38 13.6 | |
| | comp=Z,16nm,0.3s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **4.71** | **189** | *eP* | | | Pn | 09 37 23.5 | -2.4 |
| MACC | | | | *eS* | | | Sn | 09 38 15.1 | -5.1 |
| **POPC** | **Popayan, Colom** | **5.54** | **220** | *eP* | | | Pn | 09 37 36.2 | -0.8 |
| POPC | | | | *eS* | | | Sn | 09 38 38.9 | -1.2 |
| POPC | | | | *i* | | | | 09 38 43.8 | |
| | comp=Z,5.7nm,0.4s | | | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.30** | **221** | *eP* | | | Pn | 09 37 47.4 | +0.3 |
| BBAC | | | | *eS* | | | Sn | 09 38 56.7 | -1.6 |
| BBAC | | | | *i* | | | | 09 39 04.6 | |
| | comp=Z,9.0nm,0.4s | | | | | | | | |

*SKHL* ***20*** *09:44:21.4±0.3,46.30N×140.70E,h7km±2km,mb4.0/2*

*JMA* ***20*** *09:44:21.4±0.6,46.24N×140.56E,h1km,M2.8*

**ISC 20 09:44:20.7±3.4,46.25N±0.07×140.4E±0.2,h10km,n6, σ0.998/10,Primorye**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JRBN** | **Rebuntou** | **0.94** | **151** | P | | | **Pg** | **09 44 38.4** | **-0.3** |
| JRBN | | | | *eS* | | | **Sg** | **09 44 50.7** | **-0.2** |
| **JRR** | **Rishiri** | **1.27** | **150** | P | | | **Pn** | **09 44 45.3** | **+0.8** |
| **KHLM** | **Kholmsk** | **1.38** | **54** | *eP* | g | | **Pn** | **09 44 45.7** | **-0.3** |
| KHLM | | | | *eS* | g | | **Sn** | **09 45 02.8** | **-1.5** |
| **JWK2** | **Keihoku** | **1.39** | **132** | P | | | **Pn** | **09 44 46.3** | **+0.2** |
| JWK2 | | | | *eS* | | | **Sn** | **09 45 04.0** | **-0.4** |
| **YSS** | **Yuzh-Sakhalins** | **1.75** | **65** | *eP* | g | | **Pn** | **09 44 52.3** | **+1.1** |
|

| | | | | | | |
|---|---|---|---|---|---|---|
| RTZ | Ruatahuna | 7.16 202 | P | Pn | 09 49 31.1 | +1.8 |
| PRGZ | Paritu Road | 7.20 196 | P | Pn | 09 49 31.9 | +2.2 |
| SNGZ | Shannon Statio | 7.20 200 | P | Pn | 09 49 30.3 | +0.5 |
| GRRZ | Galatos Road | 7.24 208 | P | Pn | 09 49 35.2 | +5.0 |
| PRRZ | Plateau Road | 7.26 206 | P | Pn | 09 49 32.7 | +2.3 |
| ALRZ | Allen Road | 7.33 206 | P | Pn | 09 49 33.6 | +2.3 |
| KNZ | Kokohu | 7.34 197 | P | Pn | 09 49 31.1 | -0.3 |
| RAHZ | Arahi | 7.40 201 | P | Pn | 09 49 34.2 | +2.1 |
| MHGZ | Mahia Peninsul | 7.41 195 | P | Pn | 09 49 38.4 | +6.2 |
| MTHZ | Maungataniwha | 7.42 202 | P | Pn | 09 49 33.9 | +1.6 |
| TLZ | Tolley Road | 7.46 211 | P | Pn | 09 49 37.5 | +4.7 |
| KUTZ | Kaahu Road | 7.47 209 | P | Pn | 09 49 37.8 | +4.8 |
| WHHZ | Waihua | 7.51 199 | P | Pn | 09 49 39.9 | +6.6 |
| MRHZ | Matea Rd | 7.55 205 | P | Pn | 09 49 34.6 | +0.8 |
| NMHZ | Naumai | 7.66 202 | P | Pn | 09 49 35.4 | +0.3 |
| WATZ | Wairara | 7.70 209 | P | Pn | 09 49 37.7 | +2.1 |
| HATZ | Hinemaiaia | 7.72 206 | P | Pn | 09 49 38.8 | +3.0 |
| ARHZ | Aropaoanui | 7.75 200 | P | Pn | 09 49 35.9 | -0.3 |
| BKZ | Black Stump Fm | 7.82 203 | Pn | Pn | 09 49 36.6 | -0.5 |
| BKZ | Black Stump Fm | 7.82 203 | P | Pn | 09 49 36.2 | -0.8 |
| BKZ | Black Stump Fm | 7.82 203 | P | Pn | 09 49 36.2 | -0.8 |
| HIZ | Hauiti | 7.92 214 | P | P | 09 49 40.5 | +2.3 |
| MCHZ | McNeill Hill | 8.01 201 | P | Pn | 09 49 38.8 | -0.4 |
| NTVZ | North Tongarir | 8.06 207 | P | P | 09 49 42.1 | -0.8 |
| TMVZ | Te Maari | 8.06 207 | P | P | 09 49 41.9 | -1.1 |
| ETVZ | East Tongariro | 8.07 207 | P | Pn | 09 49 40.4 | +0.3 |
| KWHZ | Kaweka Forest | 8.08 203 | P | P | 09 49 42.3 | -0.8 |
| CKHZ | Cape Kidnapper | 8.10 199 | P | P | 09 49 42.8 | -0.4 |
| WTVZ | West Tongariro | 8.10 208 | P | P | 09 49 42.5 | -1.0 |
| NNVZ | North Ngauruho | 8.11 208 | P | P | 09 49 42.8 | -0.8 |
| OTVZ | Oturere | 8.12 207 | P | P | 09 49 43.0 | -0.7 |
| SNVZ | South Ngauruho | 8.12 207 | P | P | 09 49 43.3 | -0.7 |
| NGZ | Ngauruhoe | 8.15 207 | P | P | 09 49 43.2 | -0.9 |
| FWVZ | Far West T-bar | 8.24 207 | P | Pn | 09 49 42.1 | -0.1 |
| WHVZ | Whangaehu Hut | 8.25 207 | P | P | 09 49 44.2 | -1.0 |
| BHHZ | Black Hill Sta | 8.26 204 | P | Pn | 09 49 40.8 | -1.5 |
| KAHZ | Kahuranaki | 8.28 199 | P | Pn | 09 49 41.9 | -0.6 |
| TRVZ | Turoa | 8.28 207 | P | Pn | 09 49 42.4 | -0.3 |
| WNVZ | Wahianoa | 8.28 207 | P | Pn | 09 49 42.2 | -0.5 |
| KRHZ | Kereru | 8.29 202 | P | Pn | 09 49 41.4 | -1.3 |
| MOVZ | Moawhango | 8.29 206 | P | Pn | 09 49 41.9 | -0.8 |
| PKVZ | Pokaka | 8.35 208 | P | Pn | 09 49 43.4 | 0.0 |
| VRZ | Vera Road | 8.46 211 | P | P | 09 49 47.8 | +0.5 |
| PXZ | Pawanui | 8.50 199 | P | Pn | 09 49 44.0 | -1.0 |
| PNHZ | Pukenui | 8.59 202 | P | Pn | 09 49 44.8 | -1.4 |
| WPHZ | Waipukurau | 8.65 201 | P | Pn | 09 49 47.9 | +1.0 |
| PRHZ | Porangahau | 8.78 199 | P | Pn | 09 49 48.7 | +0.2 |
| TSZ | Takapari Road | 8.80 203 | P | Pn | 09 49 46.9 | -1.7 |
| NEZ | North Egmont | 8.88 214 | P | P | 09 49 54.4 | +2.3 |
| WAZ | Wanganui | 8.89 208 | P | Pn | 09 49 50.6 | +0.8 |
| KHEZ | Kahui Hut | 8.94 214 | P | P | 09 49 54.5 | +1.8 |
| DVHZ | Dannevirke | 8.95 201 | P | Pn | 09 49 49.6 | -0.8 |
| ANWZ | Angora Road | 9.01 200 | P | P | 09 49 53.4 | 0.0 |
| PRWZ | Pori Road | 9.25 202 | P | P | 09 49 55.6 | -0.5 |
| BFZ | Birch Farm | 9.28 200 | | Pn | 09 49 53.9 | -0.5 |
| BFZ | Birch Farm | 9.28 200 | P | Pn | 09 49 54.6 | +0.2 |
| TMWZ | Te Maipa | 9.78 201 | P | Pn | 09 49 59.1 | -1.1 |
| MTW | Mount Morrison | 9.94 202 | P | Pn | 09 50 02.0 | -0.2 |
| TRWZ | Traveller | 10.10 201 | P | Pn | 09 50 04.2 | 0.0 |
| MSWZ | Moikau Station | 10.26 202 | P | Pn | 09 50 05.8 | -0.2 |
| SNZO | South Karori | 10.35 205 | P | Pn | 09 50 07.3 | +0.3 |
| BHW | Baring Head | 10.38 204 | P | Pn | 09 50 07.4 | 0.0 |
| PLWZ | Palliser | 10.39 202 | P | Pn | 09 50 07.7 | +0.1 |
| CMWZ | Cape Campbell | 10.91 205 | P | P | 09 50 14.7 | +0.2 |
| KHZ | Kahutara | 11.74 206 | P | P | 09 50 20.9 | -2.7 |
| RPZ | Rata Peaks | 13.81 210 | P | P | 09 50 45.1 | -1.5 |
| | 1.0nm,0.3s,baz=82,slow=19,SNR=2.0 | | | | | |
| RPZ | | | S | S | 09 53 09.7 | -7.3 |
| | 1.0nm,0.3s,baz=309,slow=21,SNR=8.4 | | | | | |
| RPZ | Rata Peaks | 13.81 210 | P | Pn | 09 50 47.0 | -1.1 |
| ODZ | Otahua Downs | 15.08 208 | P | Pn | 09 51 04.0 | +1.3 |
| LHI | Lord Howe Isla | 18.18 266 | P | P | 09 51 14.3 | -20 |
| | 77nm,1.3s | | | | | |
| CNB | Canberra Magne | 26.01 254 | P | P | 09 52 50.4 | +2.9 |
| CAN | Canberra | 26.31 254 | P | P | 09 52 52.6 | +2.5 |
| CAN | Canberra | 26.31 254 | P | P | 09 52 53.1 | +3.0 |
| TOO | Toolangi | 29.11 249 | P | P | 09 53 17.2 | +2.4 |
| TOO | | | IAmb | IAmb | 09 53 32.0 | |
| | comp=Z,20nm,1.5s | | | | | |
| TOO | Toolangi | 29.11 249 | P | P | 09 53 17.6 | +2.8 |
| CMSA | Cobar Meteorol | 29.46 262 | P | P | 09 53 20.2 | +2.3 |
| QLP | Quilpie | 31.93 270 | P | P | 09 53 40.3 | +0.8 |
| ARPS | Mount Arapiles | 32.05 251 | P | P | 09 53 42.4 | +2.0 |
| CTA | Charters Tower | 32.78 283 | P | P | 09 53 47.8 | +0.8 |
| | comp=Z,4.1nm,0.4s,baz=107,slow=10,SNR=14 | | | | | |
| CTA | Charters Tower | 32.78 283 | P | P | 09 53 48.3 | +1.4 |
| STKA | Stephens Creek | 32.83 260 | P | P | 09 53 48.9 | +1.7 |
| | comp=Z,7.8nm,0.5s,baz=104,slow=11,SNR=31 | | | | | |
| STKA | Stephens Creek | 32.83 260 | P | P | 09 53 49.0 | +1.8 |
| STKA | Stephens Creek | 32.83 260 | P | P | 09 53 49.2 | +2.0 |
| INKA | Innaminka | 34.54 267 | P | P | 09 54 03.7 | +1.9 |
| MTSU | Mount Surprise | 35.33 284 | P | P | 09 54 09.8 | +1.1 |
| LCRK | Leigh Creek | 35.96 261 | P | P | 09 54 15.1 | +1.2 |
| BBOO | Buckleboo | 37.26 257 | P | P | 09 54 25.5 | +0.8 |
| BBOO | Buckleboo | 37.26 257 | P | P | 09 54 25.3 | +0.6 |
| COEN | Coen | 38.47 289 | P | P | 09 54 35.9 | +1.0 |
| COEN | | | IAmb | IAmb | 09 54 57.3 | |
| | comp=Z,11nm,1.4s | | | | | |
| OOD | Oodnadatta | 38.80 264 | P | P | 09 54 38.8 | +1.3 |
| MULG | Mulgathing | 39.49 260 | P | P | 09 54 43.6 | +0.5 |
| AS31 | Alice Springs | 41.71 269 | P | P | 09 55 01.4 | +0.2 |
| ASAR | Alice Springs | 41.71 269 | P | P | 09 55 01.2 | 0.0 |
| | comp=Z,2.7nm,0.3s,baz=106,slow=7.2,SNR=73 | | | | | |
| ASAR | | | pP | pwP | 09 56 15.3 | +1.1 |
| | comp=Z,0.7nm,0.8s,baz=111,slow=8.3,SNR=5.0 | | | | | |
| ASAR | | | S | S | 10 00 48.1 | -3.5 |
| | comp=Z,0.3nm,0.6s,baz=108,slow=15,SNR=3.5 | | | | | |
| ASAR | Alice Springs | 41.71 269 | P | P | 09 55 01.0 | -0.2 |
| WR0 | Warramunga Arr | 42.67 275 | P | P | 09 55 08.7 | -0.2 |
| WB2 | Warramunga Arr | 42.84 275 | P | P | 09 55 10.1 | -0.1 |
| WB2 | | | IAmb | IAmb | 09 55 10.3 | |
| | comp=Z,6.4nm,0.9s | | | | | |
| WRAB | Tennant Creek | 42.84 275 | P | P | 09 55 10.1 | -0.1 |
| WRA | Warramunga Arr | 42.85 275 | P | P | 09 55 09.9 | -0.4 |
| | comp=Z,3.7nm,0.5s,baz=112,slow=7.9,SNR=32 | | | | | |
| WRA | | | ScP | ScP | 10 00 10.8 | -0.4 |
| | comp=Z,0.4nm,0.7s,baz=113,slow=3.8,SNR=6.1 | | | | | |
| WB0 | Warramunga Arr | 42.88 275 | P | P | 09 55 10.4 | -0.1 |
| WB0 | | | IAmb | IAmb | 09 55 10.8 | |
| | comp=Z,5.0nm,0.8s | | | | | |
| KNRA | Kununurra | 49.52 277 | P | P | 09 56 02.0 | +0.3 |
| KNRA | | | IAmb | IAmb | 09 56 18.5 | |
| | comp=Z,20nm,1.4s | | | | | |
| FITZ | Fitzroy Crossi | 51.04 272 | P | P | 09 56 13.1 | +0.1 |
| | comp=Z,1.5nm,0.5s,baz=152,slow=5.6,SNR=3.1 | | | | | |
| FITZ | Fitzroy Crossi | 51.04 272 | P | P | 09 56 13.3 | +0.3 |
| FITZ | | | IAmb | IAmb | 09 56 24.0 | |
| | comp=Z,4.0nm,1.1s | | | | | |
| QSPA | South Pole Qui | 58.10 180 | P | P | 09 57 08.7 | +6.0 |
| | comp=Z,14nm,0.7s,baz=16,slow=1.8,SNR=72 | | | | | |
| QSPA | South Pole Qui | 58.10 180 | P | P | 09 57 08.9 | +6.2 |
| BELA | Belgrano 2 | 68.37 172 | P | P | 09 58 14.2 | +5.1 |
| BELA | | | IAmb | IAmb | 09 58 14.4 | |
| | comp=Z,2.2nm,0.7s | | | | | |
| SNAA | Sanae | 76.58 179 | P | P | 09 59 01.9 | +4.6 |
| SNAA | | | IAmb | IAmb | 09 59 02.7 | |
| | comp=Z,10nm,1.2s | | | | | |
| PLCA | Paso Flores | 82.38 134 | P | P | 09 59 35.4 | +6.5 |
| | comp=Z,1.0nm,0.6s,baz=243,slow=5.6,SNR=5.8 | | | | | |
| PLCA | Paso Flores | 82.38 134 | P | P | 09 59 35.6 | +6.7 |
| PETK | Petropavlovsk- | 87.05 347 | P | P | 09 59 53.8 | +2.5 |
| | comp=Z,4.5nm,1.0s,baz=176,slow=4.3,SNR=2.2 | | | | | |
| NVAR | Mina Array Bea | 90.34 44 | P | P | 10 00 12.0 | +4.7 |
| | comp=Z,0.7nm,0.8s,baz=226,slow=9.8,SNR=6.0 | | | | | |
| MKAR | Makanchi Array | 117.77 310 | PKP | PKiKP | 10 05 51.1 | +1.2 |
| | comp=Z,0.2nm,0.6s,baz=107,slow=1.5,SNR=2.2 | | | | | |
| ARCES | ARCESS Array B | 139.86 347 | PKP | PKiKP | 10 06 33.8 | +0.3 |
| | comp=Z,2.4nm,0.8s,baz=90,slow=1.2,SNR=4.2 | | | | | |
| FINES | FINESS Array B | 146.17 338 | PKPbc | PKiKP | 10 06 45.5 | -1.2 |
| | comp=Z,8.7nm,0.8s,baz=58,slow=4.4,SNR=17 | | | | | |
| FINES | FINESS Array B | 146.17 338 | | PKiKP | 10 06 45.6 | -1.0 |
| NB2 | NORSAR Subarra | 150.12 349 | PKP | PKPab | 10 06 55.9 | -5.6 |
| | comp=Z,0.7nm,0.5s,baz=13,slow=2.6 | | | | | |
| NOA | NORSAR Array B | 150.12 349 | PKPbc | PKPab | 10 06 55.1 | -6.4 |
| | comp=Z,0.7nm,0.7s,baz=24,slow=4.4,SNR=4.3 | | | | | |
| AKASG | Malin Array Be | 151.71 320 | PKPbc | PKiKP | 10 06 59.7 | +1.3 |
| | comp=Z,0.5nm,0.3s,baz=45,slow=3.1,SNR=5.9 | | | | | |
| TORD | Torodi Ar. Bea | 161.18 184 | PKPab | PKPab | 10 07 53.5 | +3.5 |
| | comp=Z,1.4nm,0.9s,baz=173,slow=2.5,SNR=4.9 | | | | | |

*IDC **20** 10:11:55.6±23.0, 20°.47S×175°.71W, h432km±228km,*

*mb3.4/3,mb1 3.6/4,mb1mx3.1/40,mbtmp4.3/4, Error ellipse: s-maj=160.5km s-min=44.6km az=37.0*

**ISC 20 10:11:56.6**±3.0, **20°.7S**±0°.3×**176°.1W**±0°.4, **h400**km, **n13**, σ1§**22**/12, **mb3.6**/3, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| URZ | Urewera | 18.45 | 197 | P | | P | 10 15 46.5 | +0.9 |
| | 0.6nm,0.3s,baz=266,slow=19,SNR=1.2 | | | | | | | |
| LHI | Lord Howe Isla | 24.68 | 239 | P | | P | 10 16 41.9 | -1.4 |
| | baz=26,SNR=6.0 | | | | | | | |
| CTA | Charters Tower | 35.20 | 264 | P | | P | 10 18 15.7 | +0.5 |
| | 6.4nm,0.4s,baz=94,slow=9.9,SNR=19 | | | | | | | |
| CTA | Charters Tower | 35.20 | 264 | P | | P | 10 18 15.3 | +0.2 |
| | baz=36 | | | | | | | |
| QLP | Quilpie | 36.66 | 253 | P | | P | 10 18 24.2 | -3.1 |
| | baz=38,SNR=3.4 | | | | | | | |
| MTSU | Mount Surprise | 37.32 | 267 | P | | P | 10 18 33.1 | +0.2 |
| | baz=39,SNR=7.0 | | | | | | | |
| ASAR | Alice Springs | 46.16 | 257 | P | | P | 10 19 42.5 | -1.0 |
| | 1.2nm,0.8s,baz=91,slow=7.3,SNR=16 | | | | | | | |
| ASAR | | | | pP | | pP | 10 20 48.5 | -13 |
| | 0.2nm,0.4s,baz=90,slow=8.7,SNR=5.1 | | | | | | | |
| ASPA | Alice Springs | 46.17 | 257 | P | | P | 10 19 42.5 | -1.0 |
| | baz=47 | | | | | | | |
| WC3 | Warramunga Arr | 46.26 | 262 | P | | P | 10 19 44.3 | 0.0 |
| | baz=48 | | | | | | | |
| WRA | Warramunga Arr | 46.29 | 262 | P | | P | 10 19 44.6 | 0.0 |
| | 0.7nm,0.2s,baz=94,slow=8.4,SNR=67 | | | | | | | |
| WRKA | Warakurna | 51.08 | 254 | P | | P | 10 20 19.8 | -0.7 |
| | baz=52,SNR=7.7 | | | | | | | |
| KNRA | Kununurra | 52.38 | 266 | P | | P | 10 20 32.6 | +2.7 |
| | baz=54,SNR=6.0 | | | | | | | |
| BRTR | Keskin Array B | 148.25 | 313 | PKPbc | | PKPdf | 10 30 52.1 | -0.6 |
| | 0.5nm,0.5s,baz=115,slow=5.7,SNR=2.1 | | | | | | | |

*SSNC **20** 10:18:51.1±1.4, 18°.13N×71°.77W, h25km±126km, MD3.8, ML3.6,MW3.7*

*OSPL **20** 10:18:54.1±2.2, 18°.55N×71°.92W, h2km±7km, ML3.5, Fault plane solution: NP1:φs315.90000°, δ79.70000°, λ-149.00000°.*

**ISC 20 10:18:52.6**±0.8, **18°.47N**±0°.04×**71°.87W**±0°.02, **h10**km, **n19**, σ1§**83**/32, **9C-1D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| LONE2 | Loma La Sidra | 0.39 | 77 | ASPG | | | 10 19 02.2 | |
| | comp=Z,23μm,0.3s | | | | | | | |
| LONE2 | | | | ⇑*iP* | | Pb | 10 19 02.6 | +0.9 |
| LONE2 | | | | ATPG | | | 10 19 03.3 | |
| | comp=Z,90μm,0.3s | | | | | | | |
| LONE2 | | | | ASSG | | | 10 19 09.6 | |
| | comp=Z,39μm,0.3s | | | | | | | |
| LONE2 | | | | *eS* | | Sb | 10 19 10.0 | +2.3 |
| LONE2 | | | | ATSG | | | 10 19 11.3 | |
| | comp=Z,120μm,0.3s | | | | | | | |
| LONE2 | | | | IAML | | | 10 19 13.4 | |
| | comp=Z,5μm,0.3s | | | | | | | |
| PAPH | Port-au-Prince | 0.41 | 278 | ⇑*iP* | | Pg | 10 19 01.8 | +1.0 |
| PAPH | | | | *eS* | | Sg | 10 19 08.1 | +1.9 |
| PAPH | | | | IAML | | | 10 19 08.9 | |
| | comp=Z,5μm,0.1s | | | | | | | |
| LOPE2 | Hotel El Peder | 0.45 | 165 | ASPG | | | 10 19 04.2 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| LOPE2 | | | | ⇓*iP* | | Pn | 10 19 04.7 | -0.5 |
| LOPE2 | | | | ATPG | | | 10 19 05.6 | |
| | comp=Z,22μm,0.4s | | | | | | | |
| LOPE2 | | | | ASSG | | | 10 19 12.9 | |
| | comp=Z,58μm,0.3s | | | | | | | |
| LOPE2 | | | | *eS* | | Sb | 10 19 13.3 | +3.9 |
| LOPE2 | | | | ATSG | | | 10 19 15.3 | |
| | comp=Z,210μm,0.3s | | | | | | | |
| LOPE2 | | | | IAML | | | 10 19 21.1 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| JAKH | Jacmel | 0.66 | 250 | ASPG | | | 10 19 05.8 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| JAKH | | | | ⇑*iP* | | Pb | 10 19 06.2 | 0.0 |
| JAKH | | | | ATPG | | | 10 19 06.8 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| JAKH | | | | ASSG | | | 10 19 15.5 | |
| | comp=Z,18μm,0.3s | | | | | | | |
| JAKH | | | | *eS* | | Sb | 10 19 15.9 | +0.4 |
| JAKH | | | | ATSG | | | 10 19 16.6 | |
| | comp=Z,60μm,0.3s | | | | | | | |
| JAKH | | | | IAML | | | 10 19 21.6 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| LGNH | Logne | 0.70 | 274 | ASPG | | | 10 19 05.9 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| LGNH | | | | ⇑*iP* | | Pg | 10 19 06.3 | +0.1 |
| LGNH | | | | ATPG | | | 10 19 07.0 | |
| | comp=Z,9μm,0.3s | | | | | | | |
| LGNH | | | | ASSG | | | 10 19 15.9 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| LGNH | | | | *eS* | | Sg | 10 19 16.3 | +0.9 |
| LGNH | | | | ATSG | | | 10 19 16.9 | |
| | comp=Z,10μm,0.3s | | | | | | | |
| LGNH | | | | IAML | | | 10 19 23.4 | |
| | comp=Z,453nm,0.3s | | | | | | | |
| SDDR | Presa de Saban | 0.75 | 47 | *eP* | | Pg | 10 19 07.8 | +0.6 |
| SDDR | | | | *eS* | | Sg | 10 19 18.2 | +1.2 |
| SDDR | Presa de Saban | 0.75 | 47 | ASPG | | | 10 19 07.4 | |
| | comp=Z,233nm,0.3s | | | | | | | |
| SDDR | | | | ⇑*iP* | | Pg | 10 19 07.8 | +0.6 |
| SDDR | | | | ATPG | | | 10 19 09.4 | |
| | comp=Z,722nm,0.3s | | | | | | | |
| SDDR | | | | ASSG | | | 10 19 17.9 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| SDDR | | | | *eS* | | Sg | 10 19 18.3 | +1.2 |
| SDDR | | | | ATSG | | | 10 19 19.2 | |
| | comp=Z,13μm,0.3s | | | | | | | |
| SDDR | | | | IAML | | | 10 19 22.8 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| LOBA2 | Hotel Casa Bon | 0.83 | 117 | ⇑*iP* | | Pn | 10 19 10.2 | -0.2 |
| LOBA2 | | | | *eS* | | Sn | 10 19 23.1 | +0.4 |
| LOBA2 | | | | IAML | | | 10 19 34.2 | |
| | comp=Z,926nm,0.7s | | | | | | | |
| BANI | BANI | 1.44 | 93 | ⇑*iP* | | Pn | 10 19 14.7 | -4.1 |
| BANI | | | | *eS* | | Sn | 10 19 34.6 | -3.3 |
| BANI | | | | IAML | | | 10 19 44.2 | |
| | comp=Z,618nm,4.5s | | | | | | | |
| SC01 | Santiago de Io | 1.44 | 48 | ⇑*iP* | | Pn | 10 19 20.1 | +1.2 |
| SC01 | | | | *eS* | | Sn | 10 19 37.0 | -0.8 |
| SC01 | | | | IAML | | | 10 19 47.0 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| SDD | Santo Domingo | 1.86 | 90 | ⇑*iP* | | Pb | 10 19 26.4 | -0.2 |
| SDD | | | | *eS* | | Sg | 10 19 53.0 | +0.6 |
| SDD | | | | IAML | | | 10 20 13.5 | |
| | comp=Z,86nm,0.7s | | | | | | | |
| MASC | Masc | 2.80 | 308 | *eP* | | Pn | 10 19 36.7 | -0.8 |
| MASC | | | | *eS* | | Sn | 10 20 11.0 | -0.4 |
| MASC | | | | IAML | | | 10 20 13.1 | |
| | comp=E,60nm,0.5s | | | | | | | |
| MASC | | | | IAML | | | 10 20 16.1 | |
| | comp=N,53nm,0.8s | | | | | | | |
| PCDR | Punta Cana, DR | 3.31 | 89 | *iP* | | Pb | 10 19 48.6 | -2.9 |
| PCDR | | | | IAML | | | 10 21 09.6 | |
| | comp=Z,185nm,2.7s | | | | | | | |
| GTBY | Guantanamo Bay | 3.39 | 296 | *eP* | | Pn | 10 19 44.4 | -1.3 |
| MOAC | Moa | 3.64 | 307 | *eP* | | Pn | 10 19 48.6 | -0.5 |
| MOAC | | | | *eS* | | Sn | 10 20 30.6 | -1.6 |
| MOAC | | | | IAML | | | 10 20 37.6 | |
| | comp=N,39nm,0.6s | | | | | | | |
| MOAC | | | | IAML | | | 10 20 37.9 | |
| | comp=E,26nm,0.6s | | | | | | | |
| RCC | Rio Carpintero | 3.92 | 293 | *eP* | | Pn | 10 19 50.8 | -2.2 |
| RCC | | | | *eS* | | Sn | 10 20 36.4 | -2.7 |
| RCC | | | | IAML | | | 10 20 44.5 | |
| | comp=E,19nm,0.4s | | | | | | | |
| RCC | | | | IAML | | | 10 20 50.3 | |
| | comp=N,18nm,0.6s | | | | | | | |
| HLGC | Holguin | 4.63 | 302 | *eP* | | Pn | 10 20 04.6 | +1.9 |
| LMGC | Las Mercedes | 5.11 | 289 | *eP* | | Pn | 10 20 06.7 | -2.5 |
| LMGC | | | | IAML | | | 10 21 11.6 | |
| | comp=E,12nm,0.5s | | | | | | | |
| LMGC | | | | IAML | | | 10 21 12.3 | |
| | comp=N,14nm,0.5s | | | | | | | |
| CCCC | Cccc | 6.18 | 297 | *eP* | | Pn | 10 20 18.6 | -5.4 |
| CCCC | | | | IAML | | | 10 21 32.6 | |
| | comp=E,1.9nm,0.4s | | | | | | | |
| CCCC | | | | IAML | | | 10 21 33.7 | |
| | comp=N,2.5nm,0.5s | | | | | | | |

*NIED **20** 10:21:35.6, 46°.30N×140°.50E, h5km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.05; Mθθ1.19; Mϕϕ-1.24; Mrθ-0.65; Mrϕ2.25; Mθϕ-3.25; Fault plane solution: Mw4.18000×10¹⁵ NP1: φs193.00000°, δ90.00000°, λ128.00000°. NP2: φs284.00000°, δ38.00000°, λ1.00000°.*

*JMA **20** 10:21:35.5±0.4, 46°.30N×140°.50E, h5km, M4.6*

*SKHL **20** 10:21:36.1±0.3, 46°.10N×140°.70E, h10km±5km, mb5.0/13*

*IDC **20** 10:21:37.5±0.6, 46°.29N×140°.69E, h0km, mb4.0/15, mb1 4.2/19, mb1mx4.0/49, mbtmp3.9/19, ML3.3/4, MS3.7/32, Ms1 3.7/32, ms1mx3.4/93, Error ellipse: s-maj=13.2km s-min=11.8km az=43.0*

*MOS **20** 10:21:38.9±1.2, 46°.24N×140°.73E, h11km, mb4.6/14, MS3.7/10, Error ellipse: s-maj=8.1km s-min=5.8km az=95.2*

*NEIC **20** 10:21:42.0±1.4, 46°.41N±0°.06×140°.82E±0°.09, h15km±3km, mb4.5/30, Error ellipse: s-maj=9.7km s-min=7.4km az=128.0*

*BJI **20** 10:21:41.5±0.0, 46°.46N×140°.35E, h5km, mb4.2/26, mB4.8/14, ML4.3/2, Ms4.6/20, Ms7 4.4/20*

**ISC 20 10:21:39.8**±1.0, **46°.23N**±0°.03×**140°.72E**±0°.03, **h10**km±6km, **n170**, σ2§**32**/161, **mb4.4**/52, **MS3.8**/34, **12C-5D, Primorye**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| JRBN | Rebuntou | 0.84 | 163 | P | | Pg | 10 21 53.6 | -2.4 |
| JRBN | | | | *eS* | | Sg | 10 22 05.8 | -1.2 |
| JRR | Rishiri | 1.17 | 159 | P | | Pb | 10 22 00.1 | -2.0 |
| JRR | | | | *eS* | | Sn | 10 22 18.3 | +0.1 |
| JWK2 | Keihoku | 1.23 | 138 | P | | Pn | 10 22 01.4 | -1.7 |
| JWK2 | | | | *eS* | | Sn | 10 22 19.4 | -0.4 |
| KHLM | Kholmsk | 1.23 | 48 | *i* P | | Pn | 10 22 00.6 | -2.5 |
| KHLM | | | | *eS* | | Sg | 10 22 18.2 | -1.3 |
| YSS | Yuzh-Sakhalins | 1.58 | 62 | *e*PN | | Pn | 10 22 05.6 | -2.3 |
| YSS | | | | *eS* | | Sg | 10 22 28.5 | -2.0 |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,100nm,0.4s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,750nm,15.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=N,620nm,9.3s | | | | | | | |
| YSS | Yuzh-Sakhalins | 1.58 | 62 | Pn | | Pn | 10 22 06.2 | -1.6 |
| YSS | Yuzh-Sakhalins | 1.58 | 62 | *e*P | | Pn | 10 22 05.8 | -2.1 |
| YSS | | | | P | | Pg | 10 22 10.7 | +0.6 |
| | comp=N,230nm,0.4s | | | | | | | |
| YSS | | | | *eS* | | Sn | 10 22 26.4 | -1.9 |
| YSS | | | | S | | Sg | 10 22 30.3 | -0.2 |
| | comp=N,2μm,0.6s | | | | | | | |
| YSS | | | | S | | Sg | 10 22 30.3 | -0.2 |
| | comp=N,1μm,0.6s | | | | | | | |
| JSE | Soyaes | 1.83 | 134 | P | | Pn | 10 22 09.3 | -1.9 |
| JSS | Shosan | 2.00 | 156 | P | | Pn | 10 22 12.6 | -1.0 |
| ASAJ | Asahikawa | 2.50 | 147 | Pn | | Pn | 10 22 19.2 | -1.3 |
| | comp=N,3.9nm,0.3s,baz=342,slow=11,SNR=46 | | | | | | | |
| ASAJ | | | | Lg | | Lg | 10 22 59.3 | |
| | comp=N,7.1nm,0.3s,baz=15,slow=31,SNR=5.7 | | | | | | | |
| ASAJ | | | | LR | | LR | 10 23 33.1 | |
| | comp=N,2μm,19.3s,baz=35,slow=45 | | | | | | | |
| ASAJ | Asahikawa | 2.50 | 147 | P | | Pn | 10 22 19.0 | -1.5 |
| JKA | Kamikawa-asahi | 2.50 | 147 | | | Pn | 10 22 19.3 | -1.3 |
| UGL | Uglegorsk | 2.99 | 17 | *e*PN | | Pn | 10 22 25.9 | -1.3 |
| UGL | | | | pmax | | pmax | | |
| | comp=Z,300nm,0.8s | | | | | | | |
| UGL | | | | MLR | | MLR | | |
| | comp=E,4μm,3.0s | | | | | | | |
| UGL | | | | MLR | | MLR | | |
| | comp=N,3μm,5.0s | | | | | | | |
| UGL | | | | MLR | | MLR | | |
| | comp=Z,2μm,7.0s | | | | | | | |
| UGL | Uglegorsk | 2.99 | 17 | *e*P | | Pn | 10 22 26.5 | -0.7 |
| UGL | | | | AMB | | AMB | 10 22 30.0 | |
| | comp=Z,300nm,0.8s | | | | | | | |
| UGL | | | | *eS* | | Sn | 10 23 02.7 | -0.4 |
| UGL | | | | A | | A | 10 23 04.7 | |
| | comp=Z,400nm,0.7s | | | | | | | |
| UGL | | | | A | | A | 10 23 04.7 | |
| | comp=Z,600nm,0.7s | | | | | | | |
| TEY | Ternei | 3.12 | 249 | *e*PN | | Pn | 10 22 26.7 | -2.4 |
| TEY | | | | *e* | | | 10 23 14.6 | |
| TEY | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| TEY | | | | pmax | | pmax | | |
| | comp=N,20nm,0.8s | | | | | | | |
| TEY | | | | pmax | | pmax | | |
| | comp=E,20nm,0.8s | | | | | | | |
| TEY | Ternei | 3.12 | 249 | *e*P | | Pn | 10 22 26.7 | -2.4 |
| JEW | Eniwo | 3.43 | 171 | | | Pb | 10 22 37.0 | -3.7 |
| YUK | Yuzh-Kuril'sk | 4.25 | 119 | *i* PN | | Pn | 10 22 46.7 | +2.1 |
| AKK | Akkeshi | 4.36 | 136 | *e*Pg | | Pb | 10 22 58.6 | +2.2 |
| ERM | Erimo | 4.57 | 157 | *i* PN | | Pn | 10 22 51.8 | +2.9 |
| ERM | Erimo | 4.57 | 157 | Pn | | Pn | 10 22 52.2 | +3.3 |
| NMR | Nemuro--Hokkai | 4.57 | 127 | *e*P | | Pn | 10 22 46.8 | -2.2 |
| TYV | Tymovskoe | 4.81 | 15 | *e*PN | | Pn | 10 22 54.4 | +2.2 |
| TYV | | | | *e*S | | Sn | 10 23 53.4 | +5.4 |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,94nm,0.7s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,200nm,4.4s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=N,67nm,1.0s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,31nm,1.0s | | | | | | | |
| TYV | | | | MLR | | MLR | | |
| | comp=Z,1μm,14.0s | | | | | | | |
| TYV | Tymovskoe | 4.81 | 15 | *e*P | | Pn | 10 22 51.6 | -0.6 |
| TYV | | | | AMB | | AMB | 10 22 55.2 | |
| | comp=Z,90nm,0.7s | | | | | | | |
| TYV | | | | *eS* | | Sn | 10 23 48.5 | +0.5 |
| TYV | | | | A | | A | 10 23 54.2 | |
| | comp=Z,67nm,0.8s | | | | | | | |
| TYV | | | | A | | A | 10 23 54.2 | |
| | comp=Z,50nm,0.8s | | | | | | | |
| GRNR | Gornyy | 5.36 | 329 | ⇓*i* PN | | Pn | 10 22 59.5 | -0.4 |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=E,760nm,12.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=N,670nm,13.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=Z,1μm,13.0s | | | | | | | |
| GRNR | Gornyy | 5.36 | 329 | *e*P | | Pn | 10 22 59.5 

comp=E,360nm,1.3s
**MJB9 Matsu-Tunnel 9.86 192** Pn **Pn** **10 24 04.9 +3.3**
**MAJO Matsushiro 9.86 192** *i* PN **Pn** **10 24 04.7 +3.1**
**MJAR Matsushiro Arr 9.86 192** Pn **Pn** **10 24 02.6 +1.0**
comp=E,0.0nm,0.3s,baz=8.9,slow=14,SNR=9.3
MJAR LR LR 10 27 29.3
comp=E,144nm,19.4s,baz=36,slow=36
**ZEA Zeya 11.46 316** *e*PN Pn 10 24 27.5 +4.1
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax
comp=Z,10.0nm,1.0s
ZEA MLR MLR
comp=E,900nm,12.0s
ZEA MLR MLR
comp=N,700nm,8.0s
ZEA MLR MLR
comp=Z,700nm,14.0s
**KSRS Korea Array 12.95 232** LR LR 10 28 47.4
comp=Z,249nm,21.2s,baz=40,slow=33
**PETK Petropavlovsk- 12.96 52** LR LR 10 30 03.6
comp=Z,172nm,19.0s,baz=223,slow=39
**PET Petropavlovsk 13.45 53** *e*PN P 10 24 54.5 -5.4
PET MLR MLR
comp=Z,800nm,14.0s
**HIA Hailar 14.43 290** *i* P **Pn** **10 25 05.3 +1.3**
HIA pmax pmax
comp=Z,3.0nm,0.9s
**MA2 Magadan 14.65 21** Pn **Pn** **10 25 08.7 +1.7**
comp=Z,0.1nm,0.3s,baz=120,slow=22,SNR=3.0
**MA2 Magadan 14.65 21** *ce*P **Pn** **10 25 08.8 +1.9**
MA2 pmax pmax
comp=Z,10.0nm,0.9s
**YAK Yakutsk 17.06 342** LR LR 10 32 16.9
comp=Z,214nm,19.4s,baz=165,slow=38
**YAK Yakutsk 17.06 342** *e*P **Pn** **10 25 35.3 -2.8**
YAK *e*S **Sn** **10 28 40.5 -7.1**
YAK pmax pmax
comp=Z,5.0nm,0.9s
YAK pmax pmax
comp=N,4.0nm,0.9s
YAK smax smax
comp=E,158nm,4.7s
YAK smax smax
comp=N,59nm,3.3s
YAK MLR MLR
comp=Z,322nm,15.0s
YAK MLR MLR
comp=N,155nm,14.0s
YAK MLR MLR
comp=E,63nm,13.0s
**XLT XiLinHaoTe 17.54 271** *e*P **P** **10 25 48.6 +3.0**
XLT pmax pmax
comp=E,13nm,1.1s
XLT pmax pmax
comp=E,110nm,4.5s
XLT LR LR
comp=E,900nm,10.6s
XLT LR LR
comp=E,830nm,11.0s
**SEY Seymchan 18.00 17** P **P** **10 25 51.5 +1.3**
comp=E,0.1nm,0.3s,baz=214,slow=9.7,SNR=22
**SEY Seymchan 18.00 17** *i* P **P** **10 25 50.3 0.0**
**SEY Seymchan 18.00 17** *e*P **P** **10 25 50.3 0.0**
**BJI Beijing 18.91 260** P **Pn** **10 26 02.5 +1.4**
BJI S **S** **10 29 35.8 +0.5**
BJI pmax pmax
comp=E,3.0nm,0.8s
BJI LR LR
comp=E,640nm,12.9s
BJI LR LR
comp=E,290nm,11.4s
BJI LR LR
comp=E,810nm,11.2s
**HNS HongShan 21.23 255** *e*P **P** **10 26 23.4 -2.3**
HNS S **S** **10 30 13.6 -8.0**
HNS LR LR
comp=E,680nm,17.7s
HNS LR LR
comp=E,620nm,14.3s
**HHC Hu-ho-hao-te 21.74 266** *e*P **P** **10 26 35.5 +4.1**
HHC pmax pmax
comp=Z,11nm,1.0s
HHC pmax pmax
comp=Z,120nm,4.6s
HHC LR LR
comp=Z,760nm,9.9s
HHC LR LR
comp=Z,600nm,9.6s
HHC LR LR
comp=Z,1μm,10.9s
**NJ2 Nanjing 22.00 238** *e*P **P** **10 26 39.1 +5.1**
NJ2 pmax pmax
comp=Z,10.0nm,0.6s
**SHEM Shemya Is, Ala 22.49 61** LR LR 10 34 25.1
comp=Z,83nm,21.8s,baz=274,slow=34
**ULN Ulaanbaatar 22.90 286** *ce*P **P** **10 26 43.1 -0.6**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 22.90 286** P **P** **10 26 44.5 +0.8**
**ULN Ulaanbaatar 22.90 286** *e*P **P** **10 26 43.1 -0.6**
**SONM Songino Array 23.34 286** P **P** **10 26 46.8 -1.5**
comp=Z,1.8nm,0.8s,baz=88,slow=8.1,SNR=14
**SONM Songino Array 23.34 286** P **P** **10 26 49.2 +1.0**
**ZAK Zakamensk 25.07 293** *e*P **P** **10 27 04.0 -0.3**
ZAK *e* 10 27 53.7
ZAK pmax pmax
comp=Z,10.0nm,1.2s
ZAK pmax pmax
comp=Z,7.0nm,1.3s
**BILL Bilibino 25.51 22** *e*P **P** **10 27 08.3 +0.3**
BILL *e* 10 27 48.2
BILL *e*S **S** **10 31 36.7 +1.6**
BILL *e*SS SnSn 10 32 42.2 +15
BILL pmax pmax
comp=Z,4.0nm,1.3s
BILL MLR MLR
comp=Z,114nm,16.0s
**BILL Bilibino 25.51 22** P **P** **10 27 08.6 +0.6**
BILL IAmb IAmb 10 27 29.4
comp=Z,9.6nm,1.1s
**BILL Bilibino 25.51 22** *e*P **P** **10 27 08.3 +0.3**
**TIXI Tiksi 26.11 351** P **P** **10 27 13.2 -0.2**
comp=Z,3.3nm,0.7s,baz=91,slow=23,SNR=13
TIXI LR LR 10 37 30.6
comp=Z,60nm,20.5s,baz=180,slow=37
**TIXI Tiksi 26.11 351** *ce*P **P** **10 27 13.5 +0.1**
TIXI pmax pmax
comp=Z,11nm,1.7s
**TIXI Tiksi 26.11 351** P **P** **10 27 13.4 +0.1**
**TIXI Tiksi 26.11 351** *e*P **P** **10 27 13.5 +0.1**
**KRAR Krasnoyarsk 31.00 306** *i* P **P** **10 27 59.3 +2.2**
**NRIK Noril'sk 34.85 330** LR LR 10 43 36.5
comp=Z,253nm,20.5s,baz=106,slow=38
**NRIK Noril'sk 34.85 330** *ce*P **P** **10 28 32.7 +2.1**
NRIK pmax pmax
comp=Z,11nm,1.6s
**DGZ Jazzator, Alta 35.23 296** *i* P **P** **10 28 36.2 +1.9**
DGZ pmax pmax
comp=Z,8.0nm,2.5s
**GOMU GeErMu 35.52 270** P P 10 28 43.3 +6.1
GOMU pP sP 10 28 44.3 +3.3
GOMU sP pP 10 28 46.4 +6.5
GOMU pmax pmax
comp=Z,2.0nm,0.5s
GOMU pmax pmax
comp=Z,79nm,5.0s
GOMU LR LR
comp=Z,200nm,13.2s
GOMU LR LR
comp=Z,170nm,12.9s
GOMU LR LR
comp=Z,150nm,12.2s
**ZALV Zalesovo Beam 35.84 303** P **P** **10 28 36.6 -2.7**
comp=Z,0.3nm,0.3s,baz=88,slow=8.8,SNR=1.6
ZALV PcP **PcP** **10 31 05.0 -1.5**
comp=Z,0.7nm,0.4s,baz=90,slow=2.9,SNR=2.7
ZALV LR LR 10 44 18.9
comp=Z,104nm,18.7s,baz=346,slow=38
**ZALV Zalesovo Beam 35.84 303** P **P** **10 28 39.2 -0.1**
**PZH PanZhiHua 36.58 251** P P 10 28 51.4 +5.4
PZH S **S** **10 34 32.5 +3.8**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.7s
PZH LR LR
comp=Z,470nm,15.0s
PZH LR LR
comp=Z,400nm,14.0s
PZH LR LR
comp=Z,630nm,14.0s
**WMQ Urumqi 36.98 286** *e*P **P** **10 28 52.9 +3.7**
**J20K Nowinta River 39.20 39** P **P** **10 29 07.4 -0.2**
J20K IAmb IAmb 10 29 11.2
comp=Z,12nm,0.8s
**IMAR Indian Mountai 39.24 36** P **P** **10 29 07.5 -0.5**
**MK31 Makanchi Array 39.40 293** *i* P **P** **10 29 10.2 +0.6**
**MK31 Makanchi Array 39.40 293** P **P** **10 29 11.2 +1.6**
**MKAR Makanchi Array 39.40 293** P **P** **10 29 08.2 -1.3**
comp=Z,0.9nm,0.8s,baz=80,slow=9.2,SNR=7.6
MKAR PcP **PcP** **10 31 15.6 -2.0**
comp=Z,0.6nm,0.9s,baz=56,slow=2.6,SNR=2.1
**MKAR Makanchi Array 39.40 293** *ce*P **P** **10 29 11.8 +2.2**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**MKAR Makanchi Array 39.40 293** P **P** **10 29 10.7 +1.1**
**H21K Melozitna Rive 39.65 37** P **P** **10 29 11.1 -0.4**
**CAST Castle Rocks 40.19 40** P **P** **10 29 16.3 +0.4**
CAST IAmb IAmb 10 29 19.1
comp=Z,9.6nm,0.9s
**PPLA Purkeypile 40.21 41** P **P** **10 29 16.3 0.0**
**RSO Redoubt South 40.34 45** P **P** **10 29 15.4 -2.0**
**KURK Kurchatov 40.35 300** *ce*P **P** **10 29 18.6 +1.3**
KURK pmax pmax
comp=Z,7.0nm,1.7s
**KURBB Kurchatov Arra 40.43 300** P **P** **10 29 17.8 -0.2**
comp=Z,0.4nm,0.3s,baz=72,slow=9.1,SNR=2.0
**COLD Coldfoot 40.58 34** P **P** **10 29 19.2 +0.2**
COLD IAmb IAmb 10 29 32.0
comp=Z,5.9nm,0.9s
**KTH Kantishna Hill 40.69 40** P **P** **10 29 20.2 +0.1**
**TOLK Toolik Lake Re 40.72 32** P **P** **10 29 19.8 -0.4**
TOLK IAmb IAmb 10 29 22.9
comp=Z,13nm,1.2s
**H23K Yukon River 40.98 36** P **P** **10 29 22.7 +0.2**
H23K IAmb IAmb 10 29 26.2
comp=Z,9.1nm,1.0s
**KDAK Kodiak Island 40.98 49** LR LR 10 47 20.5
comp=Z,76nm,19.2s,baz=267,slow=38
**TRF Thorofare Moun 40.98 40** P **P** **10 29 22.9 +0.2**
TRF IAmb IAmb 10 29 29.4
comp=Z,7.0nm,1.0s
**I23K Minto, Yukon-K 41.14 37** P **P** **10 29 23.8 +0.1**
I23K IAmb IAmb 10 29 30.6
comp=Z,9.0nm,1.1s
**MDM Murphy Dome 41.64 37** P **P** **10 29 27.8 -0.1**
MDM IAmb IAmb 10 29 30.7
comp=Z,10nm,1.1s
**H24K Noodor Dome 41.66 36** P **P** **10 29 27.7 -0.3**
H24K IAmb IAmb 10 29 31.4
comp=Z,8.5nm,1.1s
**WRH Wood River Hil 41.78 38** P **P** **10 29 29.1 +0.1**
WRH IAmb IAmb 10 29 32.2
comp=Z,15nm,1.1s
**CCB Clear Creek Bu 41.87 38** P **P** **10 29 29.8 +0.1**
**IL31 42.24 37** P **P** **10 29 32.7 +0.1**
IL31 IAmb IAmb 10 29 54.0
comp=Z,20nm,1.5s
**ILAR Eielson Array 42.24 37** P **P** **10 29 31.8 -0.9**
comp=Z,3.7nm,0.7s,baz=283,slow=8.8,SNR=24
ILAR PcP **PcP** **10 31 24.6 -1.8**
comp=Z,0.4nm,0.8s,baz=252,slow=5.6,SNR=0.9
ILAR LR LR 10 48 31.2
comp=Z,87nm,18.1s,baz=341,slow=38
**PRP Porcupine Dome 42.67 36** P **P** **10 29 36.1 -0.3**
PRP IAmb IAmb 10 29 39.5
comp=Z,10nm,0.8s
**BMAR Burnt Mountain 42.72 33** P **P** **10 29 36.8 +0.2**
**SCRK Sand Creek 43.64 38** P **P** **10 29 43.1 -1.0**
SCRK IAmb IAmb 10 29 50.1
comp=Z,7.2nm,0.9s
**CMAR Chiang Mai Arr 44.12 245** P **P** **10 29 47.5 -0.9**
comp=Z,0.7nm,0.3s,baz=29,slow=6.4,SNR=2.0
CMAR LR LR 10 47 47.8
comp=Z,19nm,18.3s,baz=0.0,slow=36
**CMAR Chiang Mai Arr 44.12 245** *ce*P P 10 29 52.5 +4.1
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**BRVK Borovoye 44.42 306** *ce*P **P** **10 29 52.2 +1.7**
BRVK pmax pmax
comp=Z,6.0nm,1.3s
**EGAK Eagle 44.63 37** P **P** **10 29 51.2 -0.8**
**L27K Beaver Creek, 44.80 39** P **P** **10 29 53.8 +0.3**
**EPYK Eagle Plains 45.98 34** P **P** **10 30 02.4 -0.3**
EPYK IAmb IAmb 10 30 05.9
comp=Z,7.0nm,0.8s
**AAK Ala-Archa 46.19 291** LR LR 10 49 01.7
comp=Z,87nm,18.8s,baz=59,slow=36
**AAK Ala-Archa 46.19 291** *ce*P **P** **10 30 06.9 +2.1**
AAK pmax pmax
comp=Z,9.0nm,2.5s
**SVE Sverdlovsk 48.16 313** *e*P **P** **10 30 21.4 +1.6**
SVE pmax pmax
comp=Z,15nm,1.2s
**ARU Arti 49.37 314** LR LR 10 51 49.3
comp=Z,67nm,19.4s,baz=52,slow=37
**ARU Arti 49.37 314** *d i*P **P** **10 30 29.8 +0.7**
ARU 10 32 22.4
ARU S **S** **10 37 39.5 +3.9**
ARU pmax pmax
comp=Z,10.0nm,1.0s
ARU MLR MLR
comp=Z,157nm,15.0s
**EUNU Eureka 51.19 9** P **P** **10 30 43.1 +0.5**
**DLBC Dease Lake 51.91 42** LR LR 10 53 27.3
comp=Z,52nm,19.6s,baz=298,slow=37
**ABKAR Akbulak array 51.92 305** P **P** **10 30 49.4 +0.9**
**KIRV Kirov 52.78 319** LR LR 10 54 30.2
comp=Z,117nm,18.8s,baz=58,slow=37
**RES Resolute Bay 53.86 16** P **P** **10 31 02.3 -0.1**
RES pmax pmax
comp=Z,8.0nm,0.9s
**RES Resolute Bay 53.86 16** P **P** **10 31 02.3 -0.1**
**ARCES ARCESS Array B 55.26 337** LR LR 10 58 43.5
comp=Z,69nm,18.1s,baz=50,slow=40
**BBB Bella Bella 56.05 48** LR LR 10 54 15.2
comp=Z,34nm,18.8s,baz=274,slow=35
**YKA Yellowknife Ar 56.23 33** P **P** **10 31 18.6 -1.1**
comp=Z,1.5nm,0.7s,baz=306,slow=6.7,SNR=16
**NEEM North Greenlan 56.38 3** *i* P **P** **10 31 20.7 -0.2**
NEEM IAmb IAmb 10 31 23.6
comp=Z,16nm,1.2s
**FINES FINESS Array B 60.51 330** P **P** **10 31 48.1 -1.5**
comp=Z,2.4nm,0.8s,baz=41,slow=9.3,SNR=2.6
FINES LR LR 11 00 35.6
comp=Z,200nm,18.0s,baz=36,slow=39
**FINES FINESS Array B 60.51 330** P **P** **10 31 48.8 -0.8**
**OBN Obninsk 60.55 320** LR LR 11 00 35.9
comp=Z,46nm,18.9s,baz=168,slow=39
**OBN Obninsk 60.55 320** *i* P **P** **10 31 50.3 +0.4**
OBN *e* 10 32 36.0
OBN *e* 10 34 05.6
OBN *e*S S 10 40 22.0 +17
OBN pmax pmax
comp=Z,5.0nm,1.0s
OBN MLR MLR
comp=Z,179nm,15.0s
**SUMG Summit 61.49 360** *i* P **P** **10 31 59.0 +2.4**
SUMG IAmb IAmb 10 31 60.0
comp=Z,6.8nm,0.9s
**KNRA Kununurra 62.56 193** P **P** **10 32 07.6 +3.8**
**NEW Newport 64.03 47** LR LR 11 00 02.7
comp=Z,36nm,18.2s,baz=302,slow=36
**PALK Pallekele 64.23 253** LR LR 11 01 23.8
comp=Z,49nm,20.9s,baz=157,slow=37
**KIV Kislovodsk 64.67 308** *eP* **P** **10 32 18.6 +0.8**
KIV pmax pmax
comp=Z,8.0nm,1.0s
KIV MLR MLR
comp=Z,60nm,17.0s
**MNK Minsk 64.69 324** *i* P P 10 32 10.0 -7.6
MNK *i* S **S** **10 40 49.2 -8.2**
MNK *i* SS **SS** **10 45 02.6 -4.7**
MNK pmax pmax
comp=Z,7.0nm,0.7s
MNK pmax pmax
comp=N,19nm,0.9s
MNK pmax pmax
comp=E,3.0nm,0.8s
MNK MLR MLR
comp=N,536nm,19.0s
MNK MLR MLR
comp=E,121nm,20.0s
MNK MLR MLR
comp=Z,88nm,19.0s
**MNK Minsk 64.69 324** *i* P P 10 32 10.1 -7.5
comp=E,3.0nm,0.8s
MNK *i* P P 10 32 10.1 -7.5
comp=N,19nm,0.9s
MNK *i* P P 10 32 10.1 -7.5
comp=Z,7.0nm,0.7s,baz=45
MNK *i* PP **PP** **10 34 32.2 -7.1**
MNK *i* PPP PPP 10 36 01.2
MNK *i* S **S** **10 40 49.2 -8.2**
MNK *i* SS **SS** **10 45 02.6 -4.7**
MNK *i* SSS SSS 10 48 08.9
MNK *i* LQ LQ 10 54 38.9
MNK *i* LR LR 11 00 41.0
MNK *i* LRM MLR 11 02 42.9
comp=E,121nm,19.8s
MNK *i* LRM MLR 11 02 42.9
comp=N,536nm,18.5s
MNK *i* LRM MLR 11 03 02.7
comp=Z,88nm,18.6s
**SHA1 Shidzhatmaz 64.83 308** *c i*P **P** **10 32 21.0 +2.0**
**HFS Hagfors 65.55 334** LR LR 11 06 34.6
comp=Z,95nm,18.3s,baz=28,slow=41
**NOA NORSAR Array B 65.55 336** LR LR 11 05 19.7
comp=Z,66nm,19.6s,baz=245,slow=40
**AKASG Malin Array Be 66.81 320** P **P** **10 32 30.7 -0.6**
comp=Z,0.2nm,0.3s,baz=38,slow=6.1,SNR=1.5
**AKBB Malin Array Si 66.81 320** *ce*P **P** **10 32 34.1 +2.8**
**DY2G Dye2 67.50 3** *i* P **P** **10 32 36.5 +0.8**
DY2G IAmb IAmb 10 32 38.6
comp=Z,15nm,1.0s
**MCMT McKenzie Canyo 68.53 47** P **P** **10 32 44.0 +1.3**
**PAHR Pah Rah Range 68.53 55** P **P** **10 32 42.1 -0.5**
PAHR IAmb IAmb 10 32 46.9
comp=Z,3.9nm,1.0s
**UOSS Minazif 68.77 284** P **P** **10 32 45.5 +1.5**
**ASAR Alice Springs 69.84 187** P **P** **10 32 50.1 -0.4**
comp=Z,1.1nm,0.8s,baz=3.9,slow=5.3,SNR=10
**ASAR Alice Springs 69.84 187** P **P** **10 32 51.0 +0.5**
**ASAR Alice Springs 69.84 187** P **P** **10 32 51.0 +0.5**
**NVAR Mina Array Bea 70.02 55** P **P** **10 32 51.5 -0.4**
comp=Z,1.1nm,0.8s,baz=282,slow=6.1,SNR=8.2
**ELK Elko 70.12 52** LR LR 11 02 15.6
comp=Z,25nm,19.8s,baz=18,slow=35
**PDAR Pinedale Array 71.67 47** P **P** **10 33 00.2 -1.8**
comp=Z,0.9nm,0.8s,baz=342,slow=1.4,SNR=7.3
PDAR LR LR 11 03 36.1
comp=Z,21nm,20.4s,baz=32,slow=35
**PDAR Pinedale Array 71.67 47** P **P** **10 33 00.8 -1.1**
**MLR Muntele Rosu 72.12 318** LR LR 11 07 16.5
comp=Z,110nm,20.3s,baz=24,slow=38
**BRTR Keskin Array B 72.48 309** LR LR 11 12 32.4
comp=Z,26nm,18.8s,baz=320,slow=42
**VRAC Vranov 73.18 326** LR LR 11 10 12.0
comp=Z,128nm,18.1s,baz=0.0,slow=40
**STKA Stephens Creek 77.75 179** P **P** **10 33 36.5 -0.2**
comp=Z,1.1nm,0.5s,baz=4.1,slow=12,SNR=3.2
**ANMO Albuquerque 79.09 50** LR LR 11 08 25.4
comp=Z,26nm,18.9s,baz=36,slow=36
**TXAR Lajitas Array 84.91 52** P **P** **10 34 14.4 -0.7**
comp=Z,0.5nm,0.6s,baz=297,slow=1.8,SNR=5.9
**TXAR Lajitas Array 84.91 52** P **P** **10 34 14.6 -0.6**
**ESDC Sonseca Array 88.82 333** LR LR 11 21 02.6
comp=Z,81nm,18.6s,baz=344,slow=40

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*IDC* ***20*** *10:28:52.7±2.2, 7.°93S×127.°43E, h117km±29km, mb2.9/1, mb1 3.4/6, mb1mx3.0/34, mbtmp3.7/6, Error ellipse: s-maj=26.0km s-min=21.1km az=136.0*
**ISC 20 10:28:51.8±0.9, 7.°99S±0.°07×127.°37E±0.°07, h100km, n13, σ3§21/15, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **3.53** | **240** | P | | Pn | 10 29 50.3 | +5.5 |
| **BATI** | **Baumata** | **4.27** | **239** | P | | **Pn** | **10 29 58.5** | **+3.8** |
| | 22nm,0.3s,baz=103,slow=0.8,SNR=14 | | | | | | | |
| BATI | | | | S | | **Sn** | **10 30 47.0** | **+3.5** |
| | 8.7nm,0.3s,baz=327,slow=15,SNR=2.2 | | | | | | | |
| **DRS** | **Darwin Rock St** | **5.62** | **142** | P | | **Pn** | **10 30 17.7** | **+4.7** |
| **MTN** | **Manton Dam** | **6.08** | **143** | P | | **Pn** | **10 30 22.9** | **+3.6** |
| **KDU** | **Kakadu** | **6.86** | **133** | P | | **Pn** | **10 30 33.1** | **+3.3** |
| **FAKI** | **Fak Fak** | **7.00** | **44** | P | | **Pn** | **10 30 30.2** | **-1.5** |
| **KNRA** | **Kununurra** | **7.76** | **170** | P | | **Pn** | **10 30 44.8** | **+2.7** |
| **SIJI** | **Sorong** | **8.07** | **29** | P | | **Pn** | **10 30 45.9** | **-0.4** |
| | 2.4nm,0.3s,baz=244,slow=20,SNR=4.6 | | | | | | | |
| **PLAI** | **Plampang** | **9.53** | **264** | P | | **Pn** | **10 31 05.5** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **10.19** | **189** | P | | **Pn** | **10 31 15.0** | **-0.1** |
| | 0.3nm,0.3s,baz=8.5,slow=12,SNR=9.7 | | | | | | | |
| FITZ | | | | S | | **Sn** | **10 33 03.5** | **-4.0** |
| | 0.4nm,0.3s,baz=111,slow=21,SNR=2.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.67** | **151** | P | | **Pn** | **10 32 01.8** | **+0.3** |
| | 0.3nm,0.3s,baz=332,slow=13,SNR=12 | | | | | | | |
| WRA | | | | S | | **Sn** | **10 34 27.5** | **-4.5** |
| | 0.8nm,0.3s,baz=331,slow=23,SNR=13 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.80** | **159** | P | | **P** | **10 32 43.2** | **+1.6** |
| | 0.1nm,0.3s,baz=337,slow=12,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.65** | **328** | P | | **P** | **10 39 36.9** | **-1.3** |
| | 0.2nm,0.8s,baz=130,slow=4.5,SNR=1.6 | | | | | | | |

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*BJI* ***20*** *11:08:31.0±0.0, 7.°94S×128.°73E, h155km, mb5.1/79, mB5.1/42*
*DJA* ***20*** *11:08:36.7±0.1, 8.°S±1.°×12.°8E±.°, h127km±2km, M4.9/62, mB5.4/41, mb5.2/62, MLv5.6/15, Mw(mB)4.9/41, MwMwp4.8/22, Mwp5.2/22*
*IDC* ***20*** *11:08:37.0±0.7, 7.°47S×128.°17E, h147km±6km, mb4.6/31, mb1 4.6/37, mb1mx4.5/48, mbtmp5.0/37, MS4.0/40, Ms1 4.0/40, ms1mx3.8/69, Error ellipse: s-maj=11.0km s-min=7.8km az=61.0*
*NEIC* ***20*** *11:08:37.1±2.2, 7.°44S±0.°07×128.°17E±0.°07, h137km±5km, mb5.1/70, Error ellipse: s-maj=10.4km s-min=9.5km az=177.0*
*GCMT* ***20*** *11:08:37.1±0.1, 7.°56S±0.°01×128.°20E±0.°01, h143km, MW5.3/134, Moment Tensor Solution. s112,c147; s134,c229; Duration: 1§1 Moment tensor: Scale 10^17 Nm; Mrr0.92±.01; Mθθ-0.72±.02; Mϕϕ-0.19±.02; Mrθ0.48±.01; Mrϕ0.36±.02; Mθϕ-0.00±.01; Best double couple: M0 1.03400×10^17 NP1:φs308.00000°, δ33.00000°, λ109.00000°. NP2:φs105.00000°, δ59.00000°, λ78.00000°. Principal axes: T 1.0610, Plg73.0000°, Azm344.0000°; N -0.0540, Plg10.0000°, Azm112.0000°; P -1.0080, Plg13.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MOS* ***20*** *11:08:38.7±0.9, 7.°39S×128.°12E, h176km, mb5.0/50 Error ellipse: s-maj=9.2km s-min=5.1km az=113.7*
**ISC 20 11:08:37.3±0.4, 7.°50S±0.°03×128.°19E±0.°03, h152km±3km, h153km:pP-P, n473, σ1§59/491, mb5.0/129, 28C-5D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **3.12** | **99** | Pn | | **Pn** | **11 09 25.9** | **-0.4** |
| **SAUI** | **Saumlaki** | **3.12** | **99** | P | | **Pn** | **11 09 26.2** | **-0.1** |
| SAUI | | | | S | | **Sn** | **11 10 00.3** | **-3.8** |
| **SAUI** | **Saumlaki** | **3.12** | **99** | P | | **Pn** | **11 09 26.2** | **-0.1** |
| **BNDI** | **Bandanaira** | **3.41** | **30** | P | | **Pn** | **11 09 30.5** | **+0.5** |
| **AAI** | **Ambon** | **3.78** | **0** | P | | **Pn** | **11 09 36.4** | **+1.5** |
| **AAI** | **Ambon** | **3.78** | **0** | P | | **Pn** | **11 09 36.1** | **+1.2** |
| **MSAI** | **Masohi** | **4.19** | **10** | P | | **Pn** | **11 09 41.6** | **+1.5** |
| **SOEI** | **Soe** | **4.48** | **240** | Pn | | **Pn** | **11 09 43.6** | **-0.4** |
| **SOEI** | **Soe** | **4.48** | **240** | P | | **Pn** | **11 09 43.7** | **-0.4** |
| SOEI | | | | S | | **Sn** | **11 10 32.8** | **-3.3** |
| **SOEI** | **Soe** | **4.48** | **240** | P | | **Pn** | **11 09 44.6** | **+0.5** |
| **BATI** | **Baumata** | **5.22** | **239** | P | | **Pn** | **11 09 53.5** | **-0.3** |
| | 412nm,0.3s,baz=133,slow=2.7,SNR=234 | | | | | | | |
| BATI | | | | S | | **Sn** | **11 10 50.1** | **-3.4** |
| | 424nm,0.3s,baz=102,slow=22,SNR=13 | | | | | | | |
| BATI | | | | LR | | LR | 11 11 30.0 | |
| | comp=Z,5μm,21.8s,baz=318,slow=33 | | | | | | | |
| **BATI** | **Baumata** | **5.22** | **239** | P | | **Pn** | **11 09 53.1** | **-0.7** |
| | 7.2nm3μm16μm1μm,0.6s | | | | | | | |
| BATI | | | | S | | **Sn** | **11 10 52.0** | **-1.5** |
| | 7.2nm3μm16μm1μm,0.6s | | | | | | | |
| **DRS** | **Darwin Rock St** | **5.58** | **152** | P | | **Pn** | **11 09 57.2** | **-1.3** |
| **SANI** | **Sanana** | **5.84** | **338** | P | | **Pn** | **11 10 04.5** | **+2.5** |

1.2nm3µm5µm385nm,1.0s
SANI S **Sn** **11 11 13.5 +5.3**
1.2nm3µm5µm385nm,1.0s
**SANI Sanana 5.84 338** P **Pn** **11 10 04.5 +2.5**
**BBSI Bau Bau 5.93 289** P **Pn** **11 10 06.7 +3.5**
0.1nm361nm33nm,0.8s
**MMRI Maumere 6.00 259** Pn **Pn** **11 10 04.0 -0.2**
**MMRI Maumere 6.00 259** P **Pn** **11 10 03.9 -0.2**
1.7nm4µm4µm212nm,0.6s
MMRI S **Sn** **11 11 10.8 -1.3**
1.7nm4µm4µm212nm,0.6s
**MMRI Maumere 6.00 259** P **Pn** **11 10 04.8 +0.7**
**MTN Manton Dam 6.05 152** P **Pn** **11 10 01.8 -3.0**
baz=6.0,SNR=1000
**MTN Manton Dam 6.05 152** Pn **Pn** **11 10 04.3 -0.4**
**MTN Manton Dam 6.05 152** P **Pn** **11 10 03.3 -1.4**
**FAKI Fak Fak 6.08 42** Pn **Pn** **11 10 03.7 -1.5**
**FAKI Fak Fak 6.08 42** P **Pn** **11 10 03.7 -1.5**
4.0nm17µm7µm424nm,0.6s
FAKI S **Sn** **11 11 11.5 -2.5**
4.0nm17µm7µm424nm,0.6s
**FAKI Fak Fak 6.08 42** P **Pn** **11 10 04.1 -1.1**
**KDU Kakadu 6.66 141** P **Pn** **11 10 10.5 -2.4**
baz=6.6,SNR=1000
**KDU Kakadu 6.66 141** P **Pn** **11 10 11.0 -1.9**
**SIJI Sorong 7.26 25** P **Pn** **11 10 20.5 -0.4**
55nm,0.3s,baz=210,slow=9.0,SNR=98
SIJI S **Sn** **11 11 37.4 -4.9**
8.1nm,0.3s,baz=283,slow=23,SNR=1.7
**BSSI Bau Bau, Buton 7.76 280** P **Pn** **11 10 29.8 +2.2**
0.3nm1µm95nm,0.9s
**BASI Baing, Sumba 8.00 250** P **Pn** **11 10 29.0 -1.7**
2.4nm2µm6µm238nm,0.5s
BASI S **Sn** **11 11 57.2 -2.7**
2.4nm2µm6µm238nm,0.5s
**KNRA Kununurra 8.15 176** P **Pn** **11 10 29.9 -2.8**
baz=8.1,SNR=1000
**KNRA Kununurra 8.15 176** Pn **Pn** **11 10 30.2 -2.5**
**KNRA Kununurra 8.15 176** P **Pn** **11 10 30.2 -2.5**
**TNTI Ternate 8.25 354** Pn **Pn** **11 10 34.9 +0.7**
**TNTI Ternate 8.25 354** P **Pn** **11 10 36.5 +2.4**
2µm2µm137nm,0.9s
**TNTI Ternate 8.25 354** P **Pn** **11 10 36.6 +2.4**
136nm,0.9s
**BKSI Bulukumba 8.30 285** P **Pn** **11 10 36.5 +1.7**
2µm1µm81nm,0.7s
**LUWI Luwuk 8.38 320** P Pn 11 10 49.6 +14
**LUWI Luwuk 8.38 320** P **Pn** **11 10 37.5 +1.6**
**BNSI Bone 8.61 290** P **Pn** **11 10 39.8 +0.9**
1µm97nm,0.8s
**KAPI Kappang 8.74 286** P **Pn** **11 10 40.8 +0.1**
1.6nm,0.3s,baz=117,slow=9.0,SNR=16
KAPI S **Sn** **11 12 22.5 +4.5**
baz=308,slow=5.0,SNR=1.2
**KAPI Kappang 8.74 286** P **Pn** **11 10 41.3 +0.6**
**KAPI Kappang 8.74 286** Pn **Pn** **11 10 41.3 +0.6**
**KAPI Kappang 8.74 286** P **Pn** **11 10 41.8 +1.1**
**WBSI Waikabubak, Su 8.96 256** P **Pn** **11 10 42.3 -1.3**
4µm290nm,0.6s
**KMSI Cibinong 9.05 332** P Pn 11 10 50.6 +5.8
187nm,0.8s
**SPSI Sidrap Palu 9.09 292** P **Pn** **11 10 47.3 +2.1**
1µm53nm,0.7s
**APSI Ampana 9.24 315** P Pn 11 10 52.7 +5.4
1µm1µm93nm,1.2s
**TTSI Tana Toraja 9.44 298** P **Pn** **11 10 49.4 -0.5**
2µm80nm,1.2s
**MRSI Marisa 10.08 322** P **Pn** **11 11 02.8 +4.4**
2µm1µm81nm,1.0s
**PLAI Plampang 10.40 262** P **Pn** **11 11 01.0 -1.6**
2µm2µm104nm,0.5s
**PLAI Plampang 10.40 262** P **Pn** **11 11 01.4 -1.2**
**FITZ Fitzroy Crossi 10.83 193** P Pn 11 11 03.4 -4.9
56nm,0.3s,baz=26,slow=10,SNR=732
FITZ S Sn 11 12 55.6 -12
70nm,0.3s,baz=294,slow=19,SNR=9.2
FITZ LR LR 11 16 28.2
comp=Z,2µm,18.2s,baz=6.0,slow=43
**FITZ Fitzroy Crossi 10.83 193** P Pn 11 11 03.4 -4.9
baz=11,SNR=1000
**FITZ Fitzroy Crossi 10.83 193 Pn** **11 11 03.9 -4.3**
**TOLI2 Tolitoli 11.30 319** Pn **Pn** **11 11 18.0 +3.5**
**TOLI2 Tolitoli 11.30 319** P **Pn** **11 11 17.0 +2.5**
**MPSI Mapaga 11.36 313** P **P** **11 11 22.9 -0.1**
**SGSI Sangihe 11.42 346** P P 11 11 29.6 +5.9
**SMPI Sarmi 11.82 63** P **Pn** **11 11 20.3 -1.0**
2µm59nm,0.8s
**GENI Genyem 12.88 68** P **Pn** **11 11 36.9 +1.9**
123nm,1.0s
**GENI Genyem 12.88 68** P **Pn** **11 11 36.3 +1.3**
**JAY Jayapura 13.41 69** P **Pn** **11 11 41.9 +0.1**
3.0nm,0.3s,baz=203,slow=13,SNR=8.1
JAY S Sn 11 13 59.5 -11
0.8nm,0.3s,baz=314,slow=23,SNR=1.2
JAY LR LR 11 18 13.9
comp=Z,948nm,21.0s,baz=244,slow=43
**JAY Jayapura 13.41 69** P **P** **11 11 47.6 +1.7**
**WRAB Tennant Creek 13.73 155***ce***P** **Pn** **11 11 41.5 -4.3**
WRAB pmax pmax
comp=Z,351nm,1.0s
**WRA Warramunga Arr 13.73 155** P Pn 11 11 41.3 -4.6
comp=Z,5.3nm,0.3s,baz=330,slow=13,SNR=190
WRA S Sn 11 14 02.2 -16
comp=Z,89nm,0.3s,baz=332,slow=22,SNR=14
WRA LR LR 11 17 46.6
comp=Z,619nm,20.9s,baz=336,slow=40
**WC3 Warramunga Arr 13.76 155** P Pn 11 11 41.6 -4.6
baz=14
**BLJI Banyuglugur 14.47 268** P **P** **11 12 00.4 +2.8**
comp=Z,58nm,0.5s
**DAV Davao City (W) 14.70 350** P **P** **11 12 01.7 +1.5**
comp=Z,56nm,0.3s,baz=138,slow=4.3,SNR=8.3
**DAV Davao City (W) 14.70 350** P **P** **11 12 03.3 +3.1**
**MTKI Muara Teweh, K 14.77 296** P **P** **11 12 04.1 +3.2**
comp=Z,54nm,0.7s
**COEN Coen 16.05 115** P **P** **11 12 16.4 +1.2**
COEN IAmb IAmb 11 12 26.5
comp=Z,59nm,0.8s
**COEN Coen 16.05 115** P **Pn** **11 12 14.0 -0.8**
**PSA00 Pilbara Seismi 16.15 209** P **Pn** **11 12 13.5 -2.4**
**PCJI Pacitan 16.87 266** P **P** **11 12 22.7 -1.5**
comp=Z,80nm,0.8s
**AS31 Alice Springs 16.99 162** P **P** **11 12 24.9 -0.5**
AS31 IAmb IAmb 11 12 27.4
comp=Z,105nm,0.7s
**ASPA Alice Springs 16.99 162** P **P** **11 12 24.2 -1.2**
baz=17
**ASAR Alice Springs 16.99 162** P **P** **11 12 24.4 -1.1**
comp=Z,16nm,0.3s,baz=343,slow=12,SNR=294
ASAR S S 11 15 19.4 -15
comp=Z,9.3nm,0.3s,baz=338,slow=18,SNR=4.2
**ASAR Alice Springs 16.99 162** P **P** **11 12 24.7 -0.7**
**ASAR Alice Springs 16.99 162** P **P** **11 12 24.7 -0.7**
**QIS Mount Isa 17.05 141** P **P** **11 12 25.0 -1.1**
baz=17,SNR=124
**QIS Mount Isa 17.05 141** P **P** **11 12 25.7 -0.4**
**PBKI Pangkalan Bun 17.13 285** P **Pn** **11 12 31.0 +3.2**
comp=Z,293nm,1.1s
**WRKA Warakurna 17.44 180** P **P** **11 12 29.3 -1.1**
baz=18,SNR=297
**WRKA Warakurna 17.44 180** P **P** **11 12 29.9 -0.5**
**UGM Wanagama 17.52 267** P **P** **11 12 30.3 -1.0**
**KKM Kota Kinabalu 17.99 318** P **Pn** **11 12 38.4 +0.2**
KKM IAmb IAmb 11 12 47.8
comp=Z,236nm,1.4s
**KKM Kota Kinabalu 17.99 318** P **Pn** **11 12 39.8 +1.7**
**SBUM Sibu 18.75 301** P **Pn** **11 12 47.4 +0.4**
SBUM IAmb IAmb 11 12 48.9
comp=Z,69nm,1.1s
**PMG Port Moresby 18.86 97** P **P** **11 12 45.0 -1.0**
comp=Z,1.6nm,0.3s,baz=264,slow=19,SNR=4.8
PMG S **S** **11 16 05.9 -6.5**
comp=Z,0.6nm,0.3s,baz=6.4,slow=23,SNR=1.5
PMG LR LR 11 19 30.1
comp=Z,628nm,21.8s,baz=276,slow=35
**PMG Port Moresby 18.86 97***ce***P** **Pn** **11 12 47.8 -0.4**
PMG pmax pmax
comp=Z,104nm,1.0s
**PMG Port Moresby 18.86 97** P **P** **11 12 46.7 +0.8**
PMG IAmb IAmb 11 12 52.8
comp=Z,77nm,0.8s
**PMG Port Moresby 18.86 97** P **Pn** **11 12 49.5 +1.3**
**PMG Port Moresby 18.86 97** P **Pn** **11 12 49.7 +1.5**
**MTSU Mount Surprise 18.93 125** P **P** **11 12 47.5 +0.8**
baz=19,SNR=46
**MTSU Mount Surprise 18.93 125** P **P** **11 12 48.1 +1.4**

**KPJI Karang Pucung 19.10 269** P **Pn** **11 12 51.3 +0.2**
comp=Z,1µmcomp=Z,45nm,0.6s
**CMJI Cimerak 19.57 268** P Pn 11 13 04.7 +8.1
**MANU Manus Island 19.85 75** P **Pn** **11 12 58.6 -1.3**
**KSM Kuching 19.94 296** P **P** **11 12 59.2 +1.6**
**KSM Kuching 19.94 296** P **Pn** **11 13 00.9 -0.1**
**GIRL Giralia 20.18 220** P **P** **11 13 01.6 +1.4**
baz=20,SNR=14
**GIRL Giralia 20.18 220** P **P** **11 13 01.6 +1.4**
**GIRL Giralia 20.18 220** P **P** **11 13 02.2 +2.1**
**LEM Lembang 20.43 271** P **P** **11 13 02.2 -0.8**
comp=Z,26nm,0.5s,baz=190,slow=22,SNR=2.4
LEM LR LR 11 22 19.3
comp=Z,416nm,19.3s,baz=62,slow=40
**CNJI Cibinong 20.89 269** P **P** **11 13 08.4 +0.6**
comp=Z,2µmcomp=Z,87µmcomp=Z,1µm,0.6s
**MEEK Meekatharra 21.10 204** P **P** **11 13 09.7 -0.3**
baz=21,SNR=24
**MEEK Meekatharra 21.10 204** P **P** **11 13 11.2 +1.2**
**CBJI Citeko 21.21 272** P **P** **11 13 13.7 +2.4**
**DBJI Dramaga 21.30 271** P P 11 13 29.7 +17
**OOD Oodnadatta 21.40 162** P **P** **11 13 13.5 +0.4**
**CTA Charters Tower 21.52 127** P **P** **11 13 14.7 +0.2**
comp=Z,8.6nm,0.6s,baz=300,slow=11,SNR=27
CTA S **S** **11 17 04.8 +1.1**
comp=Z,6.0nm,0.5s,baz=295,slow=14,SNR=1.1
CTA LR LR 11 22 27.3
comp=Z,958nm,18.9s,baz=304,slow=38
**CTA Charters Tower 21.52 127** P **P** **11 13 15.9 +1.4**
**CGJI Cibinong 22.35 271** P **P** **11 13 20.7 -2.3**
**TGY Tagaytay City 22.63 341** P **P** **11 13 26.0 +0.3**
comp=Z,176nm,0.3s,baz=164,slow=8.3,SNR=9.3
**FORT Forrest 23.16 180** P **P** **11 13 31.2 +0.8**
baz=23,SNR=18
**FORT Forrest 23.16 180** P **P** **11 13 31.1 +0.7**
**FORT Forrest 23.16 180** P **P** **11 13 31.1 +0.7**
**MULG Mulgathing 23.33 167** P **P** **11 13 32.7 +0.8**
**INKA Innaminka 23.38 151** P **P** **11 13 34.0 +1.6**
**MDSI Maura Dua 24.07 276** P **P** **11 13 44.0 +5.2**
comp=Z,6.5nm,0.5s
**MORW Morawa 24.32 207** P **P** **11 13 41.9 +0.9**
baz=24,SNR=54
**MORW Morawa 24.32 207** P **P** **11 13 41.6 +0.6**
**MORW Morawa 24.32 207** P **P** **11 13 42.3 +1.3**
**QLP Quilpie 24.35 143** P **P** **11 13 42.2 +1.0**
baz=24,SNR=57
**QLP Quilpie 24.35 143** P **P** **11 13 42.6 +1.3**
**LCRK Leigh Creek 24.69 159** P **P** **11 13 45.3 +1.0**
**BLDU Ballidu 25.39 204** P **P** **11 13 51.2 +0.6**
baz=26,SNR=74
**BLDU Ballidu 25.39 204** P **P** **11 13 53.3 +2.6**
**KLBR Kellerberrin 25.88 201** P **P** **11 13 55.5 +0.5**
baz=26,SNR=32
**KLBR Kellerberrin 25.88 201** P **P** **11 13 56.0 +1.0**
**MYKOM Kota Tinggi 25.98 290** P **P** **11 13 57.6 +1.5**
MYKOM IAmb IAmb 11 14 00.4
comp=Z,42nm,0.8s
**BBOO Buckleboo 26.23 165** P **P** **11 13 58.9 +0.7**
baz=26,SNR=24
**BBOO Buckleboo 26.23 165** P **P** **11 13 59.0 +0.8**
BBOO IAmb IAmb 11 14 22.3
comp=Z,51nm,0.7s
**BBOO Buckleboo 26.23 165** P **P** **11 13 59.0 +0.8**
**RK1H Rockhampton Ha 26.61 129** P **P** **11 14 02.7 +1.0**
**MUN Mundaring 26.80 203** P **P** **11 14 03.8 +0.5**
baz=27,SNR=15
**MUN Mundaring 26.80 203** P **P** **11 14 03.9 +0.6**
**WHYH Whyalla 26.86 162** P **P** **11 14 04.7 +0.9**
**NAPP Napperby 27.18 161** P **P** **11 14 07.6 +1.0**
**RMQ Roma 27.19 136** P **P** **11 14 10.0 +3.1**
baz=27,SNR=4.3
**RMQ Roma 27.19 136** P **P** **11 14 10.1 +3.2**
**STKA Stephens Creek 27.29 155** P **P** **11 14 07.8 +0.2**
comp=Z,21nm,0.6s,baz=329,slow=9.1,SNR=21
**STKA Stephens Creek 27.29 155** P **P** **11 14 08.7 +1.0**
baz=27,SNR=25
**STKA Stephens Creek 27.29 155** P **P** **11 14 08.7 +1.0**
STKA pmax pmax
comp=Z,6.0nm,0.7s
**STKA Stephens Creek 27.29 155** P **P** **11 14 08.7 +1.0**
**STKA Stephens Creek 27.29 155** P **P** **11 14 09.4 +1.7**
**HTT Hallett 27.65 160** P **P** **11 14 12.0 +1.0**
baz=28,SNR=11
**HTT Hallett 27.65 160** P **P** **11 14 12.3 +1.3**
**RKGY Rocky Gully 28.89 199** P **P** **11 14 23.9 +2.0**
baz=29,SNR=7.3
**CMSA Cobar Meteorol 28.96 148** P **P** **11 14 24.0 +1.4**
baz=29,SNR=61
**CMSA Cobar Meteorol 28.96 148** P **P** **11 14 24.0 +1.4**
**IPM Ipoh 29.60 293** P **P** **11 14 29.1 +0.7**
IPM IAmb IAmb 11 14 31.6
comp=Z,27nm,0.6s
**IPM Ipoh 29.60 293** P **P** **11 14 29.2 +0.7**
**MNSI Mandailing Nat 29.70 285** P **P** **11 14 28.3 -1.0**
comp=Z,2µmcomp=Z,63nm,0.6s
**KULM Kulim 30.27 294** P **P** **11 14 34.2 -0.2**
KULM IAmb IAmb 11 14 36.4
comp=Z,22nm,0.7s
**PSI Prapat 30.94 288** P **P** **11 14 39.8 -0.6**
comp=Z,68nm,0.8s,baz=139,slow=5.6,SNR=56
PSI S **S** **11 19 28.0 -5.9**
comp=Z,2.9nm,0.9s,baz=345,slow=20,SNR=1.2
PSI LR LR 11 28 30.8
comp=Z,438nm,18.5s,baz=122,slow=39
**HNR Honiara 31.46 96** LR LR 11 27 13.6
comp=Z,193nm,20.6s,baz=280,slow=36
**ARMA Armidale 31.66 139** P **P** **11 14 49.3 +2.9**
baz=32,SNR=6.5
**ARMA Armidale 31.66 139** P **P** **11 14 47.6 +1.1**
**ARPS Mount Arapiles 31.68 159** P **P** **11 14 48.2 +1.8**
baz=32,SNR=28
**ARPS Mount Arapiles 31.68 159** P **P** **11 14 48.4 +2.0**
**GSI Gunungsitoli 31.77 285** P **P** **11 14 52.0 +4.5**
comp=Z,25nm,0.7s
**GSI Gunungsitoli 31.77 285** P **P** **11 14 52.0 +4.5**
comp=Z,24nm,0.8s
**QIZ Qiongzhong 31.97 326** P **P** **11 14 50.6 +1.5**
QIZ S **S** **11 19 51.6 +2.1**
QIZ LR LR
comp=Z,480nm,10.7s
QIZ LR LR
comp=Z,450nm,15.7s
QIZ LR LR
comp=Z,400nm,14.3s
**KCSI Kotacane, Aceh 32.27 289** P **P** **11 14 55.0 +3.1**
comp=Z,17nm,0.6s
**YHNB Yeheng 32.65 348** P **P** **11 14 55.1 -0.1**
**BRAT Ballarat 33.16 157** P **P** **11 15 00.7 +1.5**
**QZH Quanzhou 33.57 344***i***P** **P** **11 15 02.0 -1.0**
QZH pmax pmax
comp=Z,49nm,0.7s
**CAN Canberra 33.64 148** P **P** **11 15 06.1 +2.6**
CAN pmax pmax
comp=Z,20nm,0.6s
**CAN Canberra 33.64 148** P **P** **11 15 06.1 +2.6**
CAN IAmb IAmb 11 15 09.3
comp=Z,20nm,0.6s
**CAN Canberra 33.64 148** P **P** **11 15 06.2 +2.6**
**TOO Toolangi 33.81 155** P **P** **11 15 08.3 +3.3**
baz=34,SNR=7.7
**TOO Toolangi 33.81 155** P **P** **11 15 07.2 +2.2**
TOO pmax pmax
comp=Z,20nm,1.2s
**TOO Toolangi 33.81 155** P **P** **11 15 07.2 +2.2**
**TOO Toolangi 33.81 155** P **P** **11 15 07.1 +2.1**
**CNB Canberra Magne 33.82 148** P **P** **11 15 07.2 +2.0**
baz=34,SNR=7.2
**JOW Kunigami 34.12 0** P **P** **11 15 08.2 +0.5**
comp=Z,29nm,0.5s,baz=180,slow=15,SNR=2.6
JOW LR LR 11 27 31.1
comp=Z,163nm,21.6s,baz=299,slow=33
**MILA Mila 35.06 150** P **P** **11 15 18.6 +2.7**
baz=35,SNR=3.2
**GULI GuiLin 36.92 333** P **P** **11 15 34.8 +3.1**
**CMAR Chiang Mai Arr 38.70 312** P **P** **11 15 47.1 +0.4**
comp=Z,7.2nm,0.7s,baz=144,slow=7.0,SNR=30
CMAR pP **pP** **11 16 17.9 -0.7**
comp=Z,3.4nm,0.8s,baz=144,slow=6.9,SNR=1.7
CMAR PcP **PcP** **11 17 53.6 -2.0**
comp=Z,2.0nm,0.4s,baz=152,slow=3.6,SNR=4.3
**CMAR Chiang Mai Arr 38.70 312** *i* **P** **P** **11 15 47.2 +0.4**
CMAR pmax pmax
comp=Z,9.0nm,0.7s
**CHTO Chiang Mai 38.93 313** P **P** **11 15 49.0 +0.4**
CHTO pmax pmax
comp=Z,14nm,0.9s
**CHTO Chiang Mai 38.93 313** P **P** **11 15 49.0 +0.4**
**DZM Mont Dzumac 39.58 116** P **P** **11 15 54.7 +0.5**
comp=Z,10.0nm,0.7s,baz=246,slow=19,SNR=2.8
DZM LR LR 11 34 33.3
comp=Z,189nm,18.1s,baz=206,slow=39
**DZM Mont Dzumac 39.58 116** *e***S** **S** **11 21 51.3 +5.4**
comp=Z,322nm,28.1s
DZM *e*LR LR 11 27 05.6
comp=Z,424nm,27.6s
**ONTNC Ouen Toro 39.65 116** P **P** **11 15 56.4 +1.8**
ONTNC IAmb IAmb 11 15 58.1
comp=Z,62nm,1.2s
**GYA Guiyang 39.70 329** ⇓P **P** **11 15 55.9 +0.9**
GYA sP sP 11 16 46.0 +2.5
GYA PcP **PcP** **11 17 58.3 -0.5**
GYA S **S** **11 21 50.3 +2.9**
GYA pmax pmax
comp=Z,39nm,0.8s
GYA pmax pmax
comp=Z,280nm,7.3s
GYA LR LR
comp=Z,160nm,4.0s
GYA LR LR
comp=Z,260nm,4.1s
GYA LR LR
comp=Z,170nm,4.5s
**WHN Wuhan 40.09 341** ⇑*i*P **P** **11 15 58.8 +0.8**
WHN sP **sP** **11 16 45.8 -0.6**
WHN pmax pmax
comp=Z,180nm,1.0s
**NJ2 Nanjing 40.32 348** ⇑P **P** **11 16 00.5 +0.6**
NJ2 pmax pmax
comp=Z,47nm,0.8s
**JNU Nakatsue 40.47 3** P **P** **11 16 00.8 -0.4**
comp=Z,19nm,0.7s,baz=128,slow=3.8,SNR=5.0
**KMI Kunming 40.81 323** ⇑P **P** **11 16 05.9 +1.6**
KMI pmax pmax
comp=Z,52nm,1.1s
KMI LR LR
comp=Z,310nm,19.1s
**JMN Monobe 41.35 7** P **P** **11 16 09.6 +1.3**
**ENH Enshi 41.63 335** P **P** **11 16 11.0 +0.3**
ENH IAmb IAmb 11 16 11.6
comp=Z,33nm,0.6s
**PZH PanZhiHua 42.44 324** P **P** **11 16 17.6 +0.2**
PZH pP **pwP** **11 16 57.6 +2.1**
PZH S **S** **11 22 24.9 -3.1**
PZH ScS **ScS** **11 26 03.3 -0.1**
PZH pmax pmax
comp=Z,40nm,0.8s
PZH pmax pmax
comp=Z,200nm,6.3s
**JHS Saijyo 42.52 6** P **P** **11 16 17.8 0.0**
JHS IAmb IAmb 11 16 19.2
comp=Z,78nm,1.4s
**TJN Taejon 43.65 359***ce***P** **P** **11 16 27.5 +0.7**
**TJN Taejon 43.65 359** P **P** **11 16 28.0 +1.2**
**LYN LuoYang 44.39 341***i***P** **P** **11 16 32.5 -0.2**
LYN pmax pmax
comp=Z,30nm,0.7s
**TIA Tai'an 44.70 347** ⇑P **P** **11 16 34.5 -0.7**
TIA pmax pmax
comp=Z,30nm,0.9s
**KSAR Wonju Array Be 44.70 360** P **P** **11 16 36.2 +1.0**
**KSAR Wonju Array Be 44.70 360** P **P** **11 16 36.2 +1.0**
**KSRS Korea Array 44.72 360** P **P** **11 16 36.0 +0.7**
comp=Z,19nm,0.6s,baz=177,slow=9.3,SNR=105
KSRS PcP **PcP** **11 18 14.6 -0.4**
comp=Z,3.1nm,0.8s,baz=192,slow=3.1,SNR=1.7
KSRS LR LR 11 34 32.3
comp=Z,77nm,20.4s,baz=175,slow=35
**KS19 Wonju Array Si 44.76 360** P **P** **11 16 36.3 +0.6**
KS19 IAmb IAmb 11 16 37.9
comp=Z,36nm,0.8s
**CD2 Chengdu 44.79 330** P **P** **11 16 35.8 -0.3**
CD2 S **S** **11 23 03.4 +1.4**
CD2 pmax pmax
comp=Z,50nm,0.7s
CD2 LR LR
comp=Z,400nm,18.7s
CD2 LR LR
comp=Z,260nm,12.6s
**MAJO Matsushiro 44.80 11** *i* P **P** **11 16 34.9 -1.1**
MAJO pmax pmax
comp=Z,29nm,0.7s
**MAJO Matsushiro 44.80 11** P **P** **11 16 35.4 -0.6**
MAJO IAmb IAmb 11 16 35.8
comp=Z,29nm,0.7s
**MAT Matsushiro 44.80 11** P **P** **11 16 35.1 -0.9**
MAT S **S** **11 23 00.4 -1.5**
**MJAR Matsushiro Arr 44.80 11** P **P** **11 16 34.6 -1.4**
comp=Z,21nm,0.7s,baz=190,slow=8.8,SNR=30
**MJAR Matsushiro Arr 44.80 11** P **P** **11 16 35.0 -1.0**
MJAR pmax pmax
comp=Z,12nm,0.9s
**MJAR Matsushiro Arr 44.80 11** P **P** **11 16 35.0 -1.0**
**MJB9 Matsu-Tunnel 44.81 11** P **P** **11 16 35.3 -0.7**
MJB9 IAmb IAmb 11 16 35.7
comp=Z,28nm,0.7s
**JYT Yasato 44.93 14** P **P** **11 16 36.2 -0.8**
**XAN Xi'an 45.17 337** P **P** **11 16 38.1 -0.9**
XAN S **S** **11 23 11.3 +4.0**
XAN pmax pmax
comp=Z,93nm,0.8s
XAN LR LR
comp=Z,390nm,20.6s
XAN LR LR
comp=Z,160nm,16.5s
XAN LR LR
comp=Z,430nm,17.9s
**JSD Sado 46.26 11** P **P** **11 16 47.7 +0.3**
JSD IAmb IAmb 11 16 48.6
comp=Z,16nm,0.6s
**HNS HongShan 46.41 345** ⇑P **P** **11 16 48.3 -0.3**
HNS pmax pmax
comp=Z,100nm,0.9s
**JMM Marumori 46.63 14** P **P** **11 16 50.6 +0.3**
JMM IAmb IAmb 11 16 53.4
comp=Z,47nm,0.7s
**TIY Taiyuan 47.32 343** P **P** **11 16 55.8 0.0**
TIY pmax pmax
comp=Z,40nm,0.6s
**BJT Baijiatuan 48.56 348** P **P** **11 17 05.3 +0.1**
BJT pmax pmax
comp=Z,87nm,1.3s
**BJT Baijiatuan 48.56 348** P **P** **11 17 05.3 +0.1**
**BJI Beijing 48.59 348** P **P** **11 17 05.1 -0.2**
BJI pP **pP** **11 17 36.3 -2.0**
BJI sP **sP** **11 17 54.8 +0.2**
BJI PcP **PcP** **11 18 29.5 +0.8**
BJI pmax pmax
comp=Z,51nm,1.1s
**LZH Lanzhou 49.02 334** ⇑P **P** **11 17 09.8 +0.8**
LZH pP pP 11 17 41.1 -1.1
LZH sP sP 11 17 57.8 -0.9
LZH pmax pmax
comp=Z,82nm,1.3s
LZH pmax pmax
comp=Z,170nm,4.5s
LZH LR LR
comp=Z,540nm,13.0s
LZH LR LR
comp=Z,520nm,15.2s
LZH LR LR
comp=Z,560nm,16.3s
**JTM Tenmabayashi 49.48 13** P **P** **11 17 11.7 -0.5**
**PALK Pallekele 49.58 286** P **P** **11 17 13.2 -0.3**
comp=Z,3.2nm,0.5s,baz=234,slow=5.9,SNR=1.7
PALK LR LR 11 39 27.2
comp=Z,108nm,20.8s,baz=212,slow=37
**MSHR Mys Shultsa 49.91 3***ce***P** **P** **11 17 15.9 +0.6**
MSHR pmax pmax
comp=Z,35nm,1.7s
**HHC Hu-ho-hao-te 50.48 344** *eP* **P** **11 17 20.4 +0.5**
HHC pmax pmax
comp=Z,31nm,1.1s
HHC pmax pmax
comp=Z,97nm,6.1s
**VLA Vladivostok 50.49 4** *i* P **P** **11 17 20.0 +0.3**
VLA pmax pmax
comp=Z,24nm,0.7s
**CHLP Challavanipeta 50.62 301** *eP* **P** **11 17 20.9 -0.3**
CHLP IVmB_BB 11 17 22.0
comp=Z,231nm,1.1s

**CN2 Changchun 51.12 357** *e*P **P** **11 17 22.0 -2.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**ERM Erimo 51.14 14** P **P** **11 17 25.4 +0.8**
ERM pmax pmax
comp=Z,57nm,1.4s
**ERM Erimo 51.14 14** P **P** **11 17 25.4 +0.8**
ERM IAmb IAmb 11 17 50.8
comp=Z,57nm,1.4s
**USA0B Ussuriysk Arra 51.57 3** P **P** **11 17 28.5 +0.7**
USA0B pmax pmax
comp=Z,15nm,0.9s
**USA0B Ussuriysk Arra 51.57 3** P **P** **11 17 28.5 +0.7**
**USRK Ussuriysk Ar. 51.57 3** P **P** **11 17 27.9 +0.2**
comp=Z,15nm,0.6s,baz=186,slow=7.4,SNR=32
**USRK Ussuriysk Ar. 51.57 3** P **P** **11 17 28.0 +0.2**
**MDJ Mudanjiang 51.89 1** P **P** **11 17 30.6 +0.5**
MDJ pmax pmax
comp=Z,34nm,1.7s
MDJ pmax pmax
comp=Z,330nm,3.5s
**RPZ Rata Peaks 51.96 141** P **P** **11 17 32.4 +1.7**
comp=Z,36nm,0.8s,baz=22,slow=10,SNR=7.6
RPZ LR LR 11 40 17.2
comp=Z,618nm,19.3s,baz=300,slow=36
**PVM Polavaram 52.18 299** *e*P **P** **11 17 32.7 0.0**
**ODAN Odare 52.25 312** *e*P **P** **11 17 33.5 +0.1**
comp=Z,70nm,0.5s
**TAPN Taplejung 52.29 313** *e*P **P** **11 17 33.8 -0.1**
comp=Z,150nm,0.8s
**XLT XiLinHaoTe 52.32 349**⇑ *i*P **P** **11 17 33.6 +0.1**
XLT pP pwP 11 18 10.6 -2.7
XLT pmax pmax
comp=Z,92nm,1.3s
XLT pmax pmax
comp=Z,130nm,4.5s
**SKHT Srikalahasti 52.55 294** *e*P **P** **11 17 35.1 -0.4**
SKHT IVmB_BB 11 17 35.5
comp=Z,495nm,0.5s
**TUWZ Tuamarina 52.72 137** P **P** **11 17 37.2 +0.8**
**MYLAV Mylavaram 52.84 297** *e*P **P** **11 17 37.2 -0.4**
MYLAV IVmB_BB 11 17 37.9
comp=Z,235nm,0.7s
**RAMN Ramite 52.88 312** *e*P **P** **11 17 38.3 +0.2**
comp=Z,26nm,0.5s
**BNX BinXian 53.00 359** ⇓P **P** **11 17 37.8 -0.5**
BNX pmax pmax
comp=Z,30nm,1.1s
BNX pmax pmax
comp=Z,320nm,5.9s
**ASAJ Asahikawa 53.00 13** LR LR 11 40 38.0
comp=Z,86nm,20.0s,baz=185,slow=36
**ADKI Addanki 53.08 296** *e*P **P** **11 17 39.5 0.0**
ADKI IVmBBB 11 17 39.9
comp=Z,233nm,0.3s
**GTA Gaotai 53.56 333**⇑ P **P** **11 17 43.3 +0.6**
GTA pP pP 11 18 17.1 +0.7
GTA sP sP 11 18 33.8 +0.8
GTA pmax pmax
comp=Z,35nm,1.1s
GTA pmax pmax
comp=Z,270nm,4.7s
GTA LR LR
comp=Z,260nm,19.6s
GTA LR LR
comp=Z,310nm,18.9s
GTA LR LR
comp=Z,180nm,18.5s
**JIRN Jiri 53.58 312** *e*P **P** **11 17 43.3 0.0**
comp=Z,107nm,0.8s
**GOMU GeErMu 53.59 326** P **P** **11 17 43.9 +0.6**
GOMU pmax pmax
comp=Z,5.0nm,1.1s
GOMU pmax pmax
comp=Z,130nm,5.4s
**URZ Urewera 53.64 133** LR LR 11 42 26.5
comp=Z,318nm,18.1s,baz=310,slow=38
**RCLA Racherla 53.84 295** *e*P **P** **11 17 44.0 -1.1**
RCLA IVmB_BB 11 17 44.2
comp=Z,215nm,0.9s
**NJS Nagarjunasagar 53.94 297** *e*P **P** **11 17 44.4 -1.3**
NJS IVmB_BB 11 17 45.1
comp=Z,187nm,0.6s
**GUN Gumba 53.95 313** *e*P **P** **11 17 45.8 -0.2**
comp=Z,265nm,1.0s
**PKI Pulchoki 54.10 312** *e*P **P** **11 17 46.5 -0.6**
comp=Z,131nm,1.0s
**PKIN Phulchoki 54.11 312** *e*P **P** **11 17 46.7 -0.4**
comp=Z,105nm,0.9s
**SRLM Srisailam 54.14 296** *e*P **P** **11 17 46.1 -1.1**
SRLM IVmB_BB 11 17 46.4
comp=Z,156nm,1.3s
**KKN Kakani 54.32 312** *e*P **P** **11 17 48.2 -0.3**
comp=Z,173nm,1.1s
**DMN Daman 54.35 312** *e*P **P** **11 17 48.5 -0.3**
comp=Z,202nm,1.1s
**CUPL Choutuppal 54.56 297** *e*P **P** **11 17 48.9 -1.3**
CUPL IVmB_BB 11 17 49.6
comp=Z,221nm,0.7s
**RPR Rampur 54.85 299** *e*P **P** **11 17 52.7 +0.4**
**GKN Gorkha 54.91 312** *e*P **P** **11 17 52.6 -0.1**
comp=Z,94nm,0.4s
**HYBB Hyderabad (bro 54.94 297** *e*P **P** **11 17 51.8 -1.1**
HYBB IVmB_BB 11 17 52.2
comp=Z,238nm,0.8s
**URV Uravakonda 55.19 294** *e*P **P** **11 17 53.6 -1.2**
URV IVmBBB 11 17 54.3
comp=Z,98nm,0.9s
**KOLN Koldanda 55.55 311** *e*P **P** **11 17 57.2 -0.2**
comp=Z,256nm,1.0s
**SRSP Sriramsagar 55.71 299** *e*P **P** **11 17 57.3 -1.1**
SRSP IVmBBB 11 17 57.7
comp=Z,74nm,0.5s
**YSS Yuzh-Sakhalins 55.73 12** *e*P **P** **11 17 58.3 +0.3**
YSS *e* 11 25 33.0
YSS pmax pmax
comp=Z,30nm,0.6s
**YSS Yuzh-Sakhalins 55.73 12** P **P** **11 17 58.7 +0.7**
**DANN Dangsing 55.75 312** *e*P **P** **11 17 58.3 -0.6**
comp=Z,122nm,0.9s
**PYUN Piuthan 56.19 311** *e*P **P** **11 18 01.8 -0.1**
comp=Z,289nm,1.1s
**KLR Kul'dur 56.57 3** *ce*P **P** **11 18 04.2 +0.3**
KLR pmax pmax
comp=Z,32nm,1.5s
**KLRI Killari 56.91 297** *e*P **P** **11 18 06.6 -0.3**
KLRI IVmB_BB 11 18 08.9
comp=Z,158nm,2.7s
**HIA Hailar 57.01 353** P **P** **11 18 07.9 +0.9**
HIA pmax pmax
comp=Z,12nm,0.7s
**HIA Hailar 57.01 353** P **P** **11 18 07.9 +0.9**
HIA IAmb IAmb 11 18 09.5
comp=Z,12nm,0.7s
**ULN Ulaanbaatar 58.20 343** *ce*P **P** **11 18 16.2 +0.6**
ULN pmax pmax
comp=Z,81nm,1.3s
**ULN Ulaanbaatar 58.20 343** P **P** **11 18 16.4 +0.8**
**SONM Songino Array 58.36 343** P **P** **11 18 17.7 +1.0**
comp=Z,23nm,0.6s,baz=171,slow=7.4,SNR=153
SONM PKP2bc 11 48 04.7
comp=Z,0.4nm,0.6s,baz=298,slow=3.2,SNR=4.2
**SONM Songino Array 58.36 343** P **P** **11 18 17.5 +0.8**
**GRNR Gornyy 58.46 6** *e*P **P** **11 18 17.8 +0.6**
**AFI Afiamalu 59.21 102** P **P** **11 18 23.4 +0.3**
comp=Z,52nm,1.0s,baz=249,slow=20,SNR=1.8
AFI LR LR 11 42 21.0
comp=Z,54nm,20.1s,baz=314,slow=34
**ZEA Zeya 61.01 359** *e*P **P** **11 18 35.2 +0.7**
ZEA pmax pmax
comp=N,10.0nm,1.1s
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**ZAK Zakamensk 61.56 342** *e*P **P** **11 18 38.4 0.0**
ZAK pmax pmax
comp=Z,20nm,1.3s
**WMQ Urumqi 62.85 328** *e*P **P** **11 18 48.1 +1.0**
WMQ pP pP 11 19 21.6 -0.2
WMQ sP sP 11 19 39.5 +1.6
WMQ pmax pmax
comp=Z,36nm,0.7s
WMQ pmax pmax
comp=Z,270nm,4.5s
**MOY Mondy 63.39 341** *e*P **P** **11 18 51.5 +0.9**
MOY pmax pmax
comp=Z,67nm,1.3s
**KNGR Kungurtug, Tuv 63.67 339** *i*P **P** **11 18 52.9 +0.5**
**PEA0B Petropavlovsk- 65.36 19** P **P** **11 19 03.5 +0.3**
PEA0B pmax pmax
comp=Z,64nm,1.4s
**PEA0B Petropavlovsk- 65.36 19** P **P** **11 19 03.5 +0.3**
**PETK Petropavlovsk- 65.36 19** P **P** **11 19 03.7 +0.5**
comp=Z,8.0nm,0.6s,baz=191,slow=6.9,SNR=11
PETK LR LR 11 43 42.4
comp=Z,55nm,20.8s,baz=195,slow=32
**PET Petropavlovsk 65.61 20** *e*P **P** **11 19 03.7 -1.0**
PET *e* 11 19 31.8
PET *e*S **S** **11 27 37.3 -0.6**
PET pmax pmax
comp=Z,12nm,0.6s
**PET Petropavlovsk 65.61 20** P **P** **11 19 05.5 +0.8**
PET IAmb IAmb 11 19 15.1
comp=Z,34nm,1.3s
**NIL Nilore 66.19 312** P **P** **11 19 09.0 0.0**
NIL pmax pmax
comp=Z,23nm,0.7s
**NIL Nilore 66.19 312** P **P** **11 19 09.0 0.0**
NIL IAmb IAmb 11 19 10.2
comp=Z,23nm,0.7s
**ZSN Zaisan 66.77 330** *e*P **P** **11 19 11.2 -1.1**
**ZSN Zaisan 66.77 330** *e*P **P** **11 19 11.3 -1.1**
baz=330
**DGZ Jazzator, Alta 67.10 333** *c i*P **P** **11 19 15.0 +0.4**
DGZ pmax pmax
comp=Z,37nm,1.0s
**KSH Kashi 67.19 318** P **P** **11 19 16.5 +1.2**
KSH pP pP 11 19 49.4 -0.8
KSH pmax pmax
comp=Z,10.0nm,0.9s
**TARG Taragay, Kyrgy 67.22 321** P **P** **11 19 16.8 +1.1**
**UZB Uzynbulak 67.28 323** *e*P **P** **11 19 15.0 -0.8**
UZB *e*S **S** **11 27 59.8 +0.9**
**UZB Uzynbulak 67.28 323** *e*P **P** **11 19 15.0 -0.8**
baz=323
UZB *e*S **S** **11 27 59.8 +0.9**
baz=323
**SATY Saty 67.60 323** *e*P **P** **11 19 17.2 -0.6**
SATY pmax pmax
comp=Z,14nm,1.1s
**SATY Saty 67.60 323** *e*P **P** **11 19 17.2 -0.6**
comp=Z,14nm,1.1s,baz=323
**KPKS Kokpek 67.67 323** *e*P **P** **11 19 16.7 -1.5**
KPKS pmax pmax
comp=Z,18nm,1.3s
**KPKS Kokpek 67.67 323** *e*P **P** **11 19 16.8 -1.5**
comp=Z,18nm,1.3s,baz=323
**MK31 Makanchi Array 67.67 328** *i*P **P** **11 19 17.9 -0.1**
MK31 pmax pmax
comp=Z,18nm,0.7s
**MK31 Makanchi Array 67.67 328** P **P** **11 19 18.4 +0.3**
MK31 IAmb IAmb 11 19 19.6
comp=Z,29nm,1.2s
**MKAR Makanchi Array 67.67 328** P **P** **11 19 18.2 +0.2**
comp=Z,14nm,0.5s,baz=124,slow=7.8,SNR=168
MKAR pP **pP** **11 19 54.6 +1.1**
comp=Z,8.2nm,0.8s,baz=123,slow=8.8,SNR=2.9
**MAKZ Makanchi 67.85 328** P **P** **11 19 19.4 +0.3**
MAKZ pmax pmax
comp=Z,54nm,1.5s
**MAKZ Makanchi 67.85 328** P **P** **11 19 19.4 +0.3**
MAKZ IAmb IAmb 11 19 20.5
comp=Z,54nm,1.5s
**TNSS Tian-Shan 68.47 322** *e*P **P** **11 19 22.0 -1.6**
baz=322
**MDOK Medeo 68.48 322** *e*P **P** **11 19 22.5 -0.8**
**MDOK Medeo 68.48 322** *e*P **P** **11 19 22.6 -0.8**
baz=322
**AAA Alma-Ata 68.59 322** *e*P **P** **11 19 22.7 -1.2**
**AAA Alma-Ata 68.59 322** *e*P **P** **11 19 22.8 -1.2**
baz=322
**ARXS Arharly 68.61 324** *e*P **P** **11 19 24.0 0.0**
**TDK Taldyqorghan 68.72 324** *e*P **P** **11 19 24.3 -0.3**
TDK pmax pmax
comp=Z,20nm,1.2s
**TDK Taldyqorghan 68.72 324** *e*P **P** **11 19 24.3 -0.3**
comp=Z,20nm,1.2s,baz=324
**TKM2 Tokmak 2 69.24 321** P **P** **11 19 29.0 +0.9**
SNR=9.2
**TKM2 Tokmak 2 69.24 321** *i*P **P** **11 19 27.8 -0.3**
TKM2 pmax pmax
comp=Z,15nm,1.0s
**MA2 Magadan 69.24 12** P **P** **11 19 27.3 -0.2**
comp=Z,11nm,0.7s,baz=185,slow=5.0,SNR=13
MA2 pP **pP** **11 20 02.9 -0.4**
comp=Z,9.5nm,1.1s,baz=233,slow=6.6,SNR=2.4
MA2 LR LR 11 48 03.5
comp=Z,57nm,20.9s,baz=202,slow=34
**MA2 Magadan 69.24 12** *ce*P **P** **11 19 27.9 +0.4**
MA2 pmax pmax
comp=Z,11nm,0.7s
**MA2 Magadan 69.24 12** P **P** **11 19 27.1 -0.4**
**KUU Kurty 69.31 323** *e*P **P** **11 19 27.3 -1.0**
KUU pmax pmax
comp=Z,25nm,0.7s
**KUU Kurty 69.31 323** *e*P **P** **11 19 27.3 -1.0**
comp=Z,25nm,0.7s,baz=323
**YAK Yakutsk 69.33 1** P **P** **11 19 27.7 -0.2**
comp=Z,22nm,0.4s,baz=181,slow=1.6,SNR=9.3
**YAK Yakutsk 69.33 1** *e*P **P** **11 19 27.2 -0.7**
YAK *e* 11 19 49.5
YAK *e**PP **pwP** **11 20 05.1 -3.3**
YAK *e* 11 22 01.8
YAK *e*PPP PPP 11 23 40.7
YAK *e*S **S** **11 28 20.1 -1.9**
YAK *e*SS **SS** **11 32 52.1 -0.2**
YAK pmax pmax
comp=Z,67nm,0.9s
YAK pmax pmax
comp=N,8.0nm,0.9s
YAK pmax pmax
comp=E,3.0nm,0.9s
YAK pmax pmax
comp=Z,269nm,6.4s
YAK pmax pmax
comp=N,147nm,4.8s
YAK pmax pmax
comp=E,156nm,5.4s
YAK smax smax
comp=N,150nm,5.1s
YAK smax smax
comp=E,78nm,5.1s
**YAK Yakutsk 69.33 1** P **P** **11 19 27.6 -0.3**
**UCH Uchtor 69.55 320** P **P** **11 19 31.1 +0.8**
SNR=8.1
**KRAR Krasnoyarsk 69.69 340** *i*P **P** **11 19 31.1 +0.8**
**KBL Kabul 69.72 311** P **P** **11 19 31.1 -0.1**
KBL pmax pmax
comp=Z,9.0nm,0.7s
**KBL Kabul 69.72 311** P **P** **11 19 31.1 -0.1**
**AAK Ala-Archa 69.77 321** P **P** **11 19 31.5 +0.2**
comp=Z,2.9nm,0.3s,baz=135,slow=5.6,SNR=15
**AAK Ala-Archa 69.77 321** P **P** **11 19 32.0 +0.7**
SNR=9.0
**AAK Ala-Archa 69.77 321** *c i*P **P** **11 19 31.3 0.0**
AAK pmax pmax
comp=Z,17nm,1.2s
**AAK Ala-Archa 69.77 321** P **P** **11 19 31.9 +0.5**
**AML Almayashu 70.02 320** P **P** **11 19 33.6 +0.5**
SNR=17
**USP Ospenovka 70.10 321** P **P** **11 19 33.6 +0.4**
SNR=17
**SGDS Sogindy 70.12 321** *e*P **P** **11 19 32.7 -0.6**
SGDS pmax pmax
comp=Z,39nm,4.0s
**SGDS Sogindy 70.12 321** *e*P **P** **11 19 32.3 -1.0**
baz=322
**EKS2 Erkin-Say 70.24 320** P **P** **11 19 35.4 +1.3**
SNR=14
**RAR Rarotonga 70.61 110** LR LR 11 49 47.0
comp=Z,34nm,18.9s,baz=226,slow=35
**GAR Garm 70.75 316** P **P** **11 19 36.7 -0.6**
GAR IAmb IAmb 11 19 39.3
comp=Z,22nm,1.0s
**SEM Semipalatinsk 71.01 330** *e*P **P** **11 19 37.5 -1.2**
SEM pmax pmax
comp=Z,12nm,0.9s
**SEM Semipalatinsk 71.01 330** *e*P **P** **11 19 37.5 -1.2**
comp=Z,12nm,0.9s,baz=330
**ZAA0 Zalesovo Array 71.25 335** P **P** **11 19 39.2 -0.6**
ZAA0 IAmb IAmb 11 19 39.9
comp=Z,32nm,1.1s
**ZALV Zalesovo Beam 71.25 335** P **P** **11 19 39.1 -0.6**
comp=Z,23nm,0.8s,baz=132,slow=5.0,SNR=90
**ZALV Zalesovo Beam 71.25 335** *i*P **P** **11 19 39.0 -0.8**
ZALV pmax pmax
comp=Z,23nm,0.8s
**ZALV Zalesovo Beam 71.25 335** P **P** **11 19 38.6 -1.2**
**BTLS Baital 71.32 323** *e*P **P** **11 19 39.6 -0.8**
**BTLS Baital 71.32 323** *e*P **P** **11 19 39.6 -0.8**
baz=323
**CHGR Chuyangaron 71.41 315** P **P** **11 19 41.0 -0.2**
CHGR pmax pmax
comp=Z,42nm,1.2s
**CHGR Chuyangaron 71.41 315** P **P** **11 19 41.0 -0.2**
CHGR IAmb IAmb 11 19 41.5
comp=Z,42nm,1.2s
**SHEM Shemya Is, Ala 71.53 27** LR LR 11 44 21.9
comp=Z,116nm,21.8s,baz=233,slow=30
**DZA Taraz 71.91 320** *e*P **P** **11 19 43.0 -1.1**
**DZA Taraz 71.91 320** *e*P **P** **11 19 43.1 -1.1**
baz=320
**KURBB Kurchatov Arra 72.01 329** P **P** **11 19 44.4 0.0**
comp=Z,28nm,0.7s,baz=131,slow=5.0,SNR=223
KURBB pP **pP** **11 20 19.7 0.0**
comp=Z,5.6nm,0.7s,baz=130,slow=5.0,SNR=2.3
**KURBB Kurchatov Arra 72.01 329** P **P** **11 19 43.0 -1.4**
**KURK Kurchatov 72.02 329** *ce*P **P** **11 19 44.8 +0.4**
KURK pmax pmax
comp=Z,95nm,1.3s
**KURK Kurchatov 72.02 329** P **P** **11 19 44.5 +0.1**
**VNDA Vanda 72.18 173** P **P** **11 19 45.7 +0.7**
comp=Z,1.6nm,0.5s,baz=324,slow=7.3,SNR=5.9
VNDA LR LR 11 52 37.3
comp=Z,209nm,18.1s,baz=330,slow=37
**VNDA Vanda 72.18 173** P **P** **11 19 46.7 +1.6**
VNDA pmax pmax
comp=Z,12nm,1.4s
**VNDA Vanda 72.18 173** P **P** **11 19 46.6 +1.6**
**KK31 Karatay Array 72.54 320** P **P** **11 19 47.0 -0.8**
**KKAR Karatay Array 72.54 320** P **P** **11 19 47.7 -0.1**
**KKAR Karatay Array 72.54 320** P **P** **11 19 47.7 -0.1**
**SEY Seymchan 72.63 11** LR LR 11 52 17.8
comp=Z,51nm,19.8s,baz=220,slow=36
**SEY Seymchan 72.63 11** *c i*P **P** **11 19 48.2 +0.4**
**BRLS Borolday 72.94 319** *e*P **P** **11 19 49.3 -0.8**
**BRLS Borolday 72.94 319** *e*P **P** **11 19 49.4 -0.8**
baz=319
**MAW Mawson 73.84 201** P **P** **11 19 54.9 0.0**
comp=Z,5.8nm,0.6s,baz=46,slow=17,SNR=1.2
MAW LR LR 11 50 37.6
comp=Z,282nm,18.9s,baz=58,slow=34
**WSAR Wadi Sarin 74.48 297** LR LR 11 55 44.5
comp=Z,59nm,20.2s,baz=128,slow=38
**BRZS Berezniki 74.72 327** *e*P **P** **11 19 59.8 -0.6**
BRZS pmax pmax
comp=Z,24nm,1.3s
**BRZS Berezniki 74.72 327** *e*P **P** **11 19 59.8 -0.6**
comp=Z,24nm,1.3s,baz=326
**HRA Herat 74.85 309** P **P** **11 20 02.6 +0.9**
**SOCY Socotra 76.31 284** P **P** **11 20 10.0 -0.2**
SOCY IAmb IAmb 11 20 29.3
comp=Z,38nm,1.3s
**BVAR Borovoye Array 77.53 328** P **P** **11 20 16.4 +0.2**
comp=Z,10nm,0.7s,baz=72,slow=14,SNR=51
**BRVK Borovoye 77.61 328** *ce*P **P** **11 20 16.5 -0.1**
BRVK pmax pmax
comp=Z,33nm,1.3s
**BRVK Borovoye 77.61 328** P **P** **11 20 16.7 +0.1**
BRVK IAmb IAmb 11 20 17.7
comp=Z,27nm,1.1s
**TIXI Tiksi 78.98 0** LR LR 11 58 19.8
comp=Z,42nm,18.0s,baz=181,slow=38
**TIXI Tiksi 78.98 0** *c i*P **P** **11 20 23.1 -0.6**
TIXI pmax pmax
comp=Z,20nm,0.6s
**VOI Vohitsoka 79.29 249** P **P** **11 20 27.6 +0.9**
**BILL Bilibino 80.01 14**⇑ *e*P **P** **11 20 30.9 +1.5**
BILL *e* 11 23 36.2
BILL pmax pmax
comp=Z,8.0nm,1.7s
**PPT2 Papeete2 80.40 107** *e*LR LR 11 46 04.9
comp=Z,196nm,31.0s
**PPT Papeete 80.40 107** LR LR 11 52 39.1
comp=Z,46nm,20.1s,baz=280,slow=33
**NRIK Noril'sk 81.61 346** P **P** **11 20 38.0 +0.2**
comp=Z,12nm,0.4s,baz=137,slow=5.6,SNR=31
NRIK LR LR 12 01 41.9
comp=Z,101nm,18.2s,baz=130,slow=39
**NRIK Noril'sk 81.61 346** *ce*P **P** **11 20 38.0 +0.2**
NRIK pmax pmax
comp=Z,20nm,0.9s
**NRIK Noril'sk 81.61 346** P **P** **11 20 38.1 +0.2**
NRIK IAmb IAmb 11 20 40.4
comp=Z,17nm,0.8s
**AB31 Akbulak array 81.79 322** *i*P **P** **11 20 38.6 -0.6**
**ABKAR Akbulak array 81.79 322** P **P** **11 20 38.7 -0.5**
**QSPA South Pole Qui 82.48 180** P **P** **11 20 42.9 +0.2**
comp=Z,3.7nm,0.7s,baz=309,slow=1.0,SNR=23
QSPA LR LR 11 57 16.6
comp=Z,178nm,19.9s,baz=357,slow=35
**QSPA South Pole Qui 82.48 180** P **P** **11 20 43.0 +0.3**
**SYO Syowa Base 82.55 201**⇓ *i*P **P** **11 20 44.4 +1.6**
**SYO Syowa Base 82.55 201**⇑ *e*PcP **PcP** **11 20 50.8 +3.3**
**AKTO Aktyubinsk 83.37 323** *i*P **P** **11 20 46.2 -1.2**
AKTO pmax pmax
comp=Z,23nm,1.1s
**GAMB Gambell 84.06 23** P **P** **11 20 51.3 +0.7**
GAMB IAmb IAmb 11 20 51.4
comp=Z,15nm,0.8s
**SVE Sverdlovsk 84.27 329**⇓ *e*P **P** **11 20 51.6 -0.2**
SVE pmax pmax
comp=Z,35nm,0.8s
**ARU Arti 85.18 328** LR LR 11 59 57.6
comp=Z,60nm,21.2s,baz=123,slow=36
**ARU Arti 85.18 328** *c i*P **P** **11 20 55.5 -0.9**
ARU 11 24 13.2
ARU S **S** **11 31 07.2 -6.2**
ARU SS **SS** **11 36 43.8 -7.3**
ARU pmax pmax
comp=Z,29nm,0.9s
**ARU Arti 85.18 328** P **P** **11 20 56.0 -0.4**
ARU IAmb IAmb 11 20 57.0
comp=Z,28nm,0.9s
**ATD Arta Tunnel 86.95 282** LR LR 11 58 26.8
comp=Z,46nm,19.6s,baz=47,slow=34
**KIRV Kirov 90.53 329** LR LR 12 05 46.6
comp=Z,67nm,18.0s,baz=75,slow=38
**KMBO Kilima Mbogo 90.79 269** LR LR 11 58 11.9
comp=Z,48nm,22.0s,baz=89,slow=33
**ZEI Tsey 90.87 313** *e*P **P** **11 21 22.3 -1.7**
ZEI pmax pmax
comp=Z,9.0nm,1.3s
**KBZ Khabaz 91.74 314** P **P** **11 21 27.5 -0.3**
comp=Z,2.4nm,0.7s,baz=49,slow=5.8,SNR=3.7
**KBZ Khabaz 91.74 314** *i*P **P** **11 21 27.0 -0.7**
KBZ pmax pmax
comp=Z,5.0nm,0.9s
**KIV Kislovodsk 91.92 314** *e*P **P** **11 21 30.6 +1.8**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**COLD Coldfoot 93.61 23** P **P** **11 21 35.6 -0.3**
COLD IAmb IAmb 11 21 36.0
comp=Z,4.3nm,0.6s
**H24K Noodor Dome 94.30 24** P **P** **11 21 38.9 -0.3**
H24K IAmb IAmb 11 21 39.8
comp=Z,20nm,1.4s
**ILAR Eielson Array 94.56 25** P **P** **11 21 38.4 -1.9**
comp=Z,1.3nm,0.6s,baz=246,slow=4.3,SNR=14
ILAR LR LR 11 57 56.3
comp=Z,59nm,21.0s,baz=294,slow=31
**SNAA Sanae 94.76 194** P **P** **11 21 42.3 +1.0**
SNAA pmax pmax
comp=Z,7.0nm,1.0s
**SNAA Sanae 94.76 194** P **P** **11 21 42.3 +1.0**
SNAA IAmb IAmb 11 21 49.6
comp=Z,7.1nm,1.0s
**KLMR Klimovskoe 95.84 331** *e*P **P** **11 21 42.1 -4.1**
KLMR pmax pmax
comp=Z,6.0nm,0.6s
**KLMR Klimovskoe 95.84 331** *e*P **P** **11 21 42.1 -4.1**
KLMR AMP 11 21 44.7
comp=Z,6.0nm,0.6s
**MMAI Mount Meron Ar 96.36 302** LR LR 12 12 39.2
comp=Z,24nm,18.6s,baz=255,slow=40
**BCAR Beaver Creek A 96.64 27** P **P** **11 21 50.1 +0.3**
**OBN Obninsk 97.02 325**⇓ *e*P Pdif 11 21 52.1 +0.4
OBN *e* 11 25 50.3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OBN | | | | *e*PPP | PPP | 11 27 51.0 | | | |
| OBN | | | | *e*S | **S** | **11 32 53.5** | **-7.6** | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | |
| **MBAR** | **Mbarara** | **97.31 268** | | LR | LR | 12 04 03.2 | | | |
| | comp=Z,59nm,20.0s,baz=164,slow=34 | | | | | | | | |
| **LSZ** | **Lusaka** | **97.60 254** | | LR | LR | 12 02 30.0 | | | |
| | comp=Z,51nm,20.4s,baz=114,slow=33 | | | | | | | | |
| **BOSA** | **Boshof** | **97.67 240** | | P | Pdif | 11 21 56.0 | +0.5 | | |
| | comp=Z,3.2nm,0.7s,baz=88,slow=5.2,SNR=4.4 | | | | | | | | |
| BOSA | | | | LR | LR | 12 02 24.7 | | | |
| | comp=Z,63nm,18.7s,baz=168,slow=33 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **98.23 309** | | P | **P** | **11 21 56.1** | **-1.7** | | |
| | comp=Z,0.7nm,0.8s,baz=156,slow=2.1,SNR=3.1 | | | | | | | | |
| BRTR | | | | LR | LR | 12 15 28.2 | | | |
| | comp=Z,49nm,18.6s,baz=70,slow=41 | | | | | | | | |
| **INK** | **Inuvik** | **99.99 22** | | LR | LR | 12 04 31.9 | | | |
| | comp=Z,35nm,19.7s,baz=25,slow=34 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **101.42 340** | | P | **Pdif** | **11 22 09.5** | **-1.5** | | |
| | comp=Z,2.7nm,0.7s,baz=84,slow=5.1,SNR=18 | | | | | | | | |
| ARCES | | | | PKiKP | **PKiKP** | **11 26 34.3** | **0.0** | | |
| | comp=Z,0.7nm,0.5s,baz=126,slow=1.6,SNR=6.9 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **101.44 320** | | P | **Pdif** | **11 22 09.5** | **-2.0** | | |
| | comp=Z,3.8nm,0.4s,baz=5.2,slow=5.8,SNR=1.7 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **101.70 349** | | P | **Pdif** | **11 22 11.4** | **-0.8** | | |
| | comp=Z,7.0nm,0.7s,baz=91,slow=7.0,SNR=20 | | | | | | | | |
| **FINES** | **FINESS Array B** | **102.34 331** | | P | **Pdif** | **11 22 13.2** | **-2.1** | | |
| | comp=Z,2.0nm,0.8s,baz=35,slow=4.7,SNR=4.7 | | | | | | | | |
| FINES | | | | PKiKP | **PKiKP** | **11 26 36.4** | **+0.2** | | |
| | comp=Z,1.1nm,0.5s,baz=5.7,slow=3.8,SNR=6.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **108.98 26** | | Pdiff | **Pdif** | **11 22 42.3** | **-2.4** | | |
| | comp=Z,0.1nm,0.5s,baz=291,slow=4.0,SNR=4.7 | | | | | | | | |
| YKA | | | | PKiKP | **PKiKP** | **11 26 47.9** | **-0.5** | | |
| | comp=Z,2.0nm,0.6s,baz=296,slow=1.6,SNR=34 | | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **11 37 56.2** | **-2.7** | | |
| | comp=Z,0.9nm,0.6s,baz=112,slow=3.3,SNR=14 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **108.98 26** | | PKiKP | **PKiKP** | **11 26 48.3** | **-0.1** | | |
| **NOA** | **NORSAR Array B** | **109.40 333** | | Pdiff | **Pdif** | **11 22 44.4** | **-2.3** | | |
| | comp=Z,1.0nm,0.9s,baz=68,slow=1.9,SNR=3.5 | | | | | | | | |
| NOA | | | | PKiKP | **PKiKP** | **11 26 47.8** | **-1.5** | | |
| | comp=Z,1.0nm,0.9s,baz=36,slow=6.1,SNR=1.7 | | | | | | | | |
| **GERES** | **GERESS Array B** | **111.64 320** | | PKiKP | **PKiKP** | **11 26 53.7** | **-0.3** | | |
| | comp=Z,1.6nm,0.6s,baz=41,slow=2.5,SNR=4.8 | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **112.30 318** | *i* P | | **PKiKP** | **11 26 55.3** | **-0.2** | | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **112.93 318** | *i* P | | **PKiKP** | **11 26 56.0** | **-0.5** | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **113.00 51** | | PKiKP | **PKiKP** | **11 26 57.7** | **+0.6** | | |
| | comp=Z,1.0nm,0.7s,baz=252,slow=2.9,SNR=8.6 | | | | | | | | |
| **WTTA** | **Wattenberg** | **113.38 318** | *i* P | | **PKiKP** | **11 26 57.6** | **+0.1** | | |
| | comp=Z,5.9nm,0.3s | | | | | | | | |
| **WATA** | **Walderalm** | **113.40 319** | *i* P | | **PKiKP** | **11 26 58.4** | **+0.9** | | |
| | comp=Z,1.8nm,0.3s | | | | | | | | |
| **MOTA** | **Moosalm** | **113.71 319** | *i* P | | **PKiKP** | **11 26 57.9** | **-0.2** | | |
| | comp=Z,1.2nm,0.3s | | | | | | | | |
| **RETA** | **Reutte** | **113.89 319** | *i* P | | **PKiKP** | **11 26 58.2** | **-0.2** | | |
| | comp=Z,1.0nm,0.1s | | | | | | | | |
| **FETA** | **Feichten** | **114.04 318** | *i* P | | PKPdf | 11 26 58.4 | -0.4 | | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| **DAVA** | **Damuels** | **114.53 319** | *i* P | | PKPdf | 11 26 59.8 | +0.1 | | |
| | comp=Z,1.8nm,0.3s | | | | | | | | |
| **LOHW** | **Long Hollow** | **117.53 44** | | | **PKiKP** | **11 27 06.7** | **+1.0** | | |
| **KEST** | **Kesra** | **117.68 306** | | PKP | **PKPdf** | **11 27 05.9** | **-0.1** | | |
| | comp=Z,2.3nm,0.7s,baz=191,slow=5.2,SNR=3.5 | | | | | | | | |
| **BW06** | **Boulder Array** | **118.51 45** | | | **PKPdf** | **11 27 07.7** | **+0.1** | | |
| **PD31** | **Pinedale Array** | **118.51 45** | | | **PKiKP** | **11 27 08.0** | **+0.3** | | |
| **PDAR** | **Pinedale Array** | **118.51 45** | | PKP | **PKiKP** | **11 27 08.0** | **+0.3** | | |
| | comp=Z,2.8nm,0.6s,baz=250,slow=1.0,SNR=34 | | | | | | | | |
| PDAR | | | | PKKPbc | **PKKPbc** | **11 37 25.5** | **-0.8** | | |
| | comp=Z,0.9nm,0.8s,baz=114,slow=6.2,SNR=8.1 | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **118.56 49** | | | **PKiKP** | **11 27 08.8** | **+1.0** | | |
| **PV11** | **David Mesa, Pa** | **120.28 50** | | | **PKiKP** | **11 27 12.4** | **+1.2** | | |
| **ANMO** | **Albuquerque** | **123.04 53** | | PKiKP | **PKiKP** | **11 27 17.0** | **+0.3** | | |
| **ANMO** | **Albuquerque** | **123.04 53** | | PKPdf | **PKiKP** | **11 27 17.0** | **+0.3** | | |
| **ULM** | **Lac du Bonnet** | **123.83 33** | | PKP | **PKPdf** | **11 27 16.4** | **-0.9** | | |
| | comp=Z,4.7nm,0.7s,baz=262,slow=2.1,SNR=6.2 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **126.59 315** | | PKP | **PKPdf** | **11 27 22.0** | **-1.0** | | |
| | comp=Z,1.3nm,0.9s,baz=49,slow=4.5,SNR=4.8 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **126.72 59** | | | **PKiKP** | **11 27 24.3** | **+0.2** | | |
| **TX32** | **Lajitas Array** | **126.72 59** | | PKPdf | **PKiKP** | **11 27 24.5** | **+0.4** | | |
| **TXAR** | **Lajitas Array** | **126.72 59** | | PKP | **PKPdf** | **11 27 24.1** | **+0.6** | | |
| | comp=Z,2.2nm,0.6s,baz=259,slow=1.5,SNR=28 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **126.72 59** | | PKiKP | **PKiKP** | **11 27 24.5** | **+0.4** | | |
| **TXAR** | **Lajitas Array** | **126.72 59** | | | **PKiKP** | **11 27 24.5** | **+0.4** | | |
| **TORD** | **Torodi Ar. Bea** | **127.14 281** | | PKP | **PKPdf** | **11 27 24.4** | **-0.1** | | |
| | comp=Z,5.0nm,0.7s,baz=59,slow=1.9,SNR=29 | | | | | | | | |
| **PLCA** | **Paso Flores** | **129.00 162** | | PKP | **PKPdf** | **11 27 28.4** | **+0.8** | | |
| | comp=Z,4.8nm,0.9s,baz=292,slow=4.0,SNR=9.0 | | | | | | | | |
| **PLCA** | **Paso Flores** | **129.00 162** | | PKiKP | **PKiKP** | **11 27 29.5** | **+1.2** | | |
| **PLCA** | **Paso Flores** | **129.00 162** | | | **PKiKP** | **11 27 29.4** | **+1.2** | | |
| **SCHQ** | **Schefferville** | **131.28 12** | | PKP | **PKPdf** | **11 27 31.3** | **0.0** | | |
| | comp=Z,2.6nm,0.5s,baz=44,slow=1.5,SNR=9.4 | | | | | | | | |
| **KIC** | **Kosan Boka** | **133.28 272** | | *e*PKiKP | **PKPdf** | **11 27 36.5** | **+0.2** | | |
| | comp=Z,7.6nm,0.7s | | | | | | | | |
| **LIC** | **Lamto** | **133.55 271** | | *e*PKiKP | **PKPdf** | **11 27 37.0** | **+0.2** | | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| **TIC** | **Toumodi** | **133.58 272** | | *e*PKiKP | **PKPdf** | **11 27 36.5** | **-0.4** | | |
| **CPUP** | **Villa Florida** | **145.95 171** | | PKPbc | **PKPdf** | **11 27 59.5** | **+0.6** | | |
| | comp=Z,1.5nm,0.9s,baz=167,slow=2.4,SNR=18 | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.95 171** | | | **PKPbc** | **11 28 00.1** | **+0.3** | | |
| **JTS** | **Las Juntas de** | **147.15 83** | | PKPbc | **PKPbc** | **11 28 02.9** | **-0.8** | | |
| | comp=Z,27nm,0.9s,baz=6.6,slow=3.0,SNR=12 | | | | | | | | |
| **NNA** | **Nana** | **148.47 128** | *c* | *i* PKP2 | **PKiKP** | **11 28 08.7** | **0.0** | | |
| NNA | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **LPAZ** | **La Paz** | **151.37 146** | | PKP | **PKPdf** | **11 28 09.8** | **+1.1** | | |
| | comp=Z,4.3nm,1.1s,baz=151,slow=2.3,SNR=8.1 | | | | | | | | |
| LPAZ | | | | PKPbc | **PKPbc** | **11 28 15.4** | **+0.5** | | |
| | comp=Z,13nm,0.4s,baz=220,slow=0.6,SNR=54 | | | | | | | | |
| **LPAZ** | **La Paz** | **151.37 146** | | PKPbc | **PKiKP** | **11 28 16.4** | **+1.1** | | |
| **AQDB** | **Aquidauana** | **151.94 172** | | | **PKPbc** | **11 28 15.7** | **+0.5** | | |
| **BDFB** | **Brasilia** | **156.71 189** | | PKP | **PKPdf** | **11 28 15.3** | **-0.3** | | |
| | comp=Z,1.0nm,0.3s,baz=202,slow=5.4,SNR=3.1 | | | | | | | | |
| **ROSC** | **El Rosal** | **157.47 95** | | PKPab | **PKPab** | **11 28 50.6** | **+1.3** | | |
| | comp=Z,7.1nm,0.4s,baz=199,slow=8.5,SNR=4.7 | | | | | | | | |
| **SDV** | **Santo Domingo** | **161.31 84** | | PKP | **PKPdf** | **11 28 20.4** | **-0.8** | | |
| | comp=Z,9.0nm,0.8s,baz=254,slow=3.4,SNR=8.2 | | | | | | | | |
| SDV | | | | PKPab | **PKPab** | **11 29 07.2** | **+1.3** | | |
| | comp=Z,3.1nm,0.6s,baz=334,slow=12,SNR=2.1 | | | | | | | | |
| **SJG** | **San Juan** | **162.50 52** | | PKP | **PKPdf** | **11 28 21.2** | **-0.7** | | |
| | comp=Z,20nm,0.2s,baz=267,slow=10,SNR=6.8 | | | | | | | | |
| SJG | | | | PKPab | **PKPab** | **11 29 10.0** | **-0.5** | | |
| | comp=Z,8.7nm,0.3s,baz=35,slow=16,SNR=4.1 | | | | | | | | |

*NOU **20** 11:11:36.8,21°.265×178°.45W,h544km,mb4.7/14, Fiji Islands Region*
*IDC **20** 11:11:41.4±1.4,21°.25S×179°.10W,h602km±16km, mb3.7/17,mb1 3.9/19,mb1mx3.8/36,mbtmp4.6/19,Error ellipse: s-maj=14.5km s-min=13.5km az=96.0*
*NEIC **20** 11:11:42.4±1.5,21°.3S±0°.1×179°.0W±0°.1,h612km±8km, mb4.7/11,Error ellipse: s-maj=20.8km s-min=17.6km az=136.0*

**ISC 20 11:11:41.2**±0.4,**21°.34S**±0°.06×**178°.92W**±0°.08,**h602**km, **n130,σ1s94**/144,**mb4.5**/22,**5C-6D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **MSVF** | **Nonsavu** | **4.59** | **321** | P | **P** | **11 13 13.0** | **+1.8** | |
| | 110nm,0.3s,baz=151,slow=7.2,SNR=36 | | | | | | | |
| **MSVF** | **Nonsavu** | **4.59** | **321** | P | **P** | **11 13 13.8** | **+2.6** | |
| **RAO** | **Raoul Island** | **7.93** | **174** | P | **P** | **11 13 40.8** | **+1.0** | |
| | 133nm,0.3s,baz=12,slow=19,SNR=1.8 | | | | | | | |
| **GLKZ** | **Green Lake** | **7.94** | **174** | P | **P** | **11 13 40.6** | **+0.8** | |
| GLKZ | | | | S | **S** | **11 15 20.3** | **+3.1** | |
| **AFI** | **Afiamalu** | **10.05** | **44** | P | **P** | **11 13 59.4** | **-1.3** | |
| | 12nm,0.3s,baz=27,slow=7.0,SNR=12 | | | | | | | |
| AFI | | | | S | **S** | **11 15 50.1** | **-5.0** | |
| | 1.9nm,0.3s,baz=0.3,slow=19,SNR=2.1 | | | | | | | |
| **AFI** | **Afiamalu** | **10.05** | **44** | P | **P** | **11 14 00.5** | **-0.2** | |
| **PINNC** | **Pines Island,** | **12.71** | **262** | P | **P** | **11 14 27.5** | **+0.5** | |
| **DZM** | **Mont Dzumac** | **13.62** | **264** | P | **P** | **11 14 34.9** | **-1.6** | |
| | 1.6nm,0.3s,baz=78,slow=19,SNR=14 | | | | | | | |
| **DZM** | **Mont Dzumac** | **13.62** | **264** | P | **P** | **11 14 36.4** | **0.0** | |
| **SANVU** | **Saraoutou** | **14.41** | **292** | P | **P** | **11 14 43.2** | **-0.8** | |
| **SANVU** | **Saraoutou** | **14.41** | **292** | P | **P** | **11 14 43.5** | **-0.5** | |
| **OUZ** | **Omahuta** | **15.31** | **204** | P | **P** | **11 14 55.1** | **+3.2** | |
| **GRZ** | **Great Barrier** | **15.64** | **197** | P | **P** | **11 14 57.7** | **+2.8** | |
| **WCZ** | **Waipu Caves** | **15.69** | **201** | P | **P** | **11 14 59.0** | **+3.6** | |
| **KOUNC** | **Koumac, New Ca** | **15.71** | **270** | P | **P** | **11 14 57.3** | **+1.5** | |
| | 44nm,1.0s | | | | | | | |
| **KUZ** | **Kuaotunu** | **16.04** | **196** | P | **P** | **11 15 00.9** | **+2.3** | |
| **ABAZ** | **Army Bay** | **16.15** | **198** | P | **P** | **11 15 00.2** | **+0.6** | |
| **WIAZ** | **Waiheke Island** | **16.24** | **197** | P | **P** | **11 15 03.1** | **+2.7** | |
| **MBAZ** | **Motutapu North** | **16.29** | **198** | P | **P** | **11 15 04.0** | **+3.2** | |
| **MXZ** | **Matakaoa Point** | **16.34** | **188** | P | **P** | **11 15 02.7** | **+1.3** | |
| **RVAZ** | **Riverhead Bore** | **16.38** | **199** | P | **P** | **11 15 04.9** | **+3.1** | |
| **ETAZ** | **East Tamaki Re** | **16.45** | **198** | P | **P** | **11 15 05.1** | **+2.7** | |
| **WTAZ** | **Waiatarua** | **16.53** | **199** | P | **P** | **11 15 06.3** | **+3.2** | |
| **WMGZ** | **Waiomatatini S** | **16.58** | **187** | P | **P** | **11 15 03.9** | **+0.4** | |
| WMGZ | | | | S | **S** | **11 17 44.5** | **-3.9** | |
| **HAZ** | **Te Kaha** | **16.61** | **189** | P | **P** | **11 15 03.9** | **+0.1** | |
| **AWAZ** | **Awhitu Peninsu** | **16.63** | **198** | P | **P** | **11 15 07.0** | **+2.9** | |
| **PKGZ** | **Pakihiroa** | **16.69** | **188** | P | **P** | **11 15 03.8** | **-0.8** | |
| **RUGZ** | **Raukumara Rang** | **16.82** | **189** | P | **P** | **11 15 06.0** | **+0.1** | |
| **PUZ** | **Puketiti** | **16.85** | **188** | P | **P** | **11 15 07.3** | **+1.2** | |
| PUZ | | | | S | **S** | **11 17 49.1** | **-3.7** | |
| **TGRZ** | **Tauranga** | **16.85** | **193** | P | **P** | **11 15 08.6** | **+2.5** | |
| **TWGZ** | **Tauwhareparae** | **16.99** | **188** | P | **P** | **11 15 08.6** | **+1.2** | |
| TWGZ | | | | S | **S** | **11 17 47.4** | **-7.6** | |
| **TOZ** | **Tahuroa Road** | **17.03** | **195** | P | **P** | **11 15 10.3** | **+2.7** | |
| **KARZ** | **Kaharoa** | **17.14** | **193** | P | **P** | **11 15 07.0** | **-1.7** | |
| **URZ** | **Urewera** | **17.20** | **191** | P | **P** | **11 15 06.5** | **-2.8** | |
| | 4.2nm,0.3s,baz=0.0,slow=7.1,SNR=19 | | | | | | | |
| URZ | | | | S | **S** | **11 17 50.4** | **-8.0** | |
| | 1.4nm,0.3s,baz=231,slow=23,SNR=6.3 | | | | | | | |
| **URZ** | **Urewera** | **17.20** | **191** | P | **P** | **11 15 06.7** | **-2.5** | |
| **URZ** | **Urewera** | **17.20** | **191** | P | **P** | **11 15 08.6** | **-0.6** | |
| **MWZ** | **Matawai** | **17.21** | **189** | P | **P** | **11 15 08.9** | **-0.4** | |
| MWZ | | | | S | **S** | **11 17 53.7** | **-4.9** | |
| **CNGZ** | **Carnagh Statio** | **17.26** | **188** | P | **P** | **11 15 11.1** | **+1.4** | |
| **HSRZ** | **Hossack Road** | **17.42** | **193** | P | **P** | **11 15 13.9** | **+2.7** | |
| **RIGZ** | **Rimuhau** | **17.54** | **189** | P | **P** | **11 15 12.6** | **+0.2** | |
| **RTZ** | **Rustahuna** | **17.57** | **191** | P | **P** | **11 15 12.8** | **+0.1** | |
| **TLZ** | **Tolley Road** | **17.59** | **195** | P | **P** | **11 15 11.2** | **-1.6** | |
| **SNGZ** | **Shannon Statio** | **17.68** | **190** | P | **P** | **11 15 13.3** | **-0.3** | |
| **PRGZ** | **Paritu Road** | **17.74** | **188** | P | **P** | **11 15 16.6** | **+2.4** | |
| **MTHZ** | **Maungataniwha** | **17.83** | **191** | P | **P** | **11 15 14.9** | **-0.1** | |
| **KNZ** | **Kokohu** | **17.86** | **189** | P | **P** | **11 15 15.6** | **+0.3** | |
| KNZ | | | | S | **S** | **11 18 08.0** | **-1.0** | |
| **HIZ** | **Hauiti** | **17.93** | **196** | P | **P** | **11 15 19.0** | **+3.1** | |
| **MHGZ** | **Mahia Peninsul** | **17.96** | **188** | P | **P** | **11 15 18.4** | **+2.3** | |
| **NMHZ** | **Naumai** | **18.07** | **191** | P | **P** | **11 15 17.8** | **+0.5** | |
| NMHZ | | | | S | **S** | **11 18 11.9** | **-0.7** | |
| **BKZ** | **Black Stump Fm** | **18.20** | **191** | P | **P** | **11 15 17.5** | **-0.9** | |
| BKZ | | | | S | **S** | **11 18 06.5** | **-8.1** | |
| **BKZ** | **Black Stump Fm** | **18.20** | **191** | P | **P** | **11 15 18.0** | **-0.4** | |
| **NTVZ** | **North Tongarir** | **18.30** | **193** | P | **P** | **11 15 20.7** | **+1.4** | |
| **TMVZ** | **Te Maari** | **18.31** | **193** | P | **P** | **11 15 20.7** | **+1.2** | |
| **ETVZ** | **East Tongariro** | **18.32** | **193** | P | **P** | **11 15 20.0** | **+0.4** | |
| **OTVZ** | **Oturere** | **18.36** | **193** | P | **P** | **11 15 21.2** | **+1.2** | |
| **NGZ** | **Ngauruhoe** | **18.39** | **194** | P | **P** | **11 15 20.2** | **0.0** | |
| **SNVZ** | **South Ngauruho** | **18.39** | **193** | P | **P** | **11 15 21.0** | **+0.7** | |
| **MCHZ** | **McNeill Hill** | **18.43** | **191** | P | **P** | **11 15 20.1** | **-0.3** | |
| **TUVZ** | **Tukino** | **18.46** | **193** | P | **P** | **11 15 20.5** | **-0.4** | |
| **TRVZ** | **Turoa** | **18.52** | **194** | P | **P** | **11 15 21.4** | **-0.1** | |
| **WNVZ** | **Wahianoa** | **18.53** | **193** | P | **P** | **11 15 21.2** | **-0.4** | |
| **BHHZ** | **Black Hill Sta** | **18.59** | **192** | P | **P** | **11 15 21.0** | **-0.9** | |
| **KRHZ** | **Kereru** | **18.68** | **191** | P | **P** | **11 15 22.1** | **-0.6** | |
| **KAHZ** | **Kahuranaki** | **18.74** | **190** | P | **P** | **11 15 24.8** | **+1.5** | |
| **SNZO** | **South Karori** | **20.62** | **194** | P | **P** | **11 15 39.8** | **-0.4** | |
| | 94nm,1.4s | | | | | | | |
| **QRZ** | **Quartz Range** | **20.73** | **199** | P | **P** | **11 15 42.2** | **+1.0** | |
| **QRZ** | **Quartz Range** | **20.73** | **199** | P | **P** | **11 15 42.4** | **+1.2** | |
| **KHZ** | **Kahutara** | **21.95** | **195** | P | **P** | **11 15 51.6** | **-0.4** | |
| **RPZ** | **Rata Peaks** | **23.82** | **198** | P | **P** | **11 16 08.7** | **0.0** | |
| | 8.0nm,0.6s,baz=358,slow=2.1,SNR=9.1 | | | | | | | |
| **RPZ** | **Rata Peaks** | **23.82** | **198** | P | **P** | **11 16 09.5** | **+0.8** | |
| **ODZ** | **Otahua Downs** | **25.16** | **198** | P | **P** | **11 16 22.1** | **+1.7** | |
| **CTA** | **Charters Tower** | **32.56** | **266** | P | **P** | **11 17 24.3** | **-0.4** | |
| | 9.5nm,0.7s,baz=101,slow=15,SNR=1.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.65** | **245** | P | **P** | **11 17 58.2** | **-0.3** | |
| **BBOO** | **Buckleboo** | **41.40** | **244** | P | **P** | **11 18 35.9** | **-0.8** | |
| BBOO | | | | IAmb | IAmb | 11 19 03.8 | | |
| | comp=Z,49nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.49** | **258** | P | **P** | **11 18 52.4** | **-0.8** | |
| | comp=Z,7.0nm,0.5s,baz=89,slow=6.0,SNR=1.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.63** | **263** | P | **P** | **11 18 53.0** | **-1.3** | |
| | comp=Z,7.4nm,0.5s,baz=95,slow=8.1,SNR=1.5 | | | | | | | |
| **SIJI** | **Sorong** | **52.63** | **286** | P | **P** | **11 19 59.7** | **-1.2** | |
| | comp=Z,31nm,0.7s,baz=84,slow=5.0,SNR=11 | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.73** | **180** | P | **P** | **11 21 47.1** | **+1.4** | |
| | comp=Z,13nm,0.8s,baz=56,slow=5.4,SNR=12 | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.73** | **180** | P | **P** | **11 21 47.3** | **+1.5** | |
| QSPA | | | | IAmb | IAmb | 11 21 48.3 | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.38** | **324** | P | **P** | **11 21 54.5** | **-1.3** | |
| | comp=Z,4.9nm,0.6s,baz=159,slow=6.4,SNR=7.7 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.38** | **324** | P | **P** | **11 21 55.3** | **-0.6** | |
| **JHS** | **Saijyo** | **72.19** | **320** | P | **P** | **11 22 06.9** | **+0.5** | |
| JHS | | | | IAmb | IAmb | 11 22 07.2 | | |
| | comp=Z,34nm,1.5s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **76.87** | **346** | P | **P** | **11 22 32.0** | **-0.1** | |
| PEA0B | | | | IAmb | IAmb | 11 22 58.5 | | |
| | comp=Z,85nm,1.5s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.87** | **346** | P | **P** | **11 22 31.8** | **-0.4** | |
| | comp=Z,5.7nm,0.6s,baz=153,slow=10.0,SNR=5.5 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.87** | **346** | P | **P** | **11 22 32.2** | **+0.1** | |
| **KSRS** | **Korea Array** | **76.95** | **319** | P | **P** | **11 22 33.1** | **+0.2** | |
| | comp=Z,0.5nm,0.6s,baz=80,slow=4.7,SNR=1.5 | | | | | | | |
| **BELA** | **Belgrano 2** | **78.84** | **173** | P | **P** | **11 22 43.2** | **+0.8** | |
| BELA | | | | IAmb | IAmb | 11 22 43.9 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **79.18** | **326** | P | **P** | **11 22 45.5** | **+0.8** | |
| | comp=Z,4.0nm,0.8s,baz=171,slow=6.7,SNR=4.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.23** | **44** | P | **P** | **11 23 02.0** | **+1.1** | |
| | comp=Z,0.5nm,0.5s,baz=230,slow=7.7,SNR=6.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.23** | **44** | P | **P** | **11 23 01.1** | **+0.2** | |
| **MA2** | **Maqadan** | **84.37** | **345** | P | **P** | **11 23 09.5** | **-1.1** | |
| | comp=Z,2.4nm,0.6s,baz=143,slow=11,SNR=2.9 | | | | | | | |
| **DSPA** | **Despedida** | **84.41** | **146** | P | **P** | **11 23 11.7** | **+0.5** | |
| **SNAA** | **Sanae** | **87.19** | **179** | P | **P** | **11 23 24.1** | **-0.1** | |
| SNAA | | | | IAmb | IAmb | 11 23 32.6 | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **TXAR** | **Lajitas Array** | **88.23** | **58** | P | **P** | **11 23 31.9** | **+2.0** | |
| | comp=Z,1.9nm,0.8s,baz=215,slow=5.6,SNR=21 | | | | | | | |
| **TXAR** | **Lajitas Array** | **88.23** | **58** | P | **P** | **11 23 31.1** | **+1.3** | |
| **IMAR** | **Indian Mountai** | **89.13** | **10** | P | **P** | **11 23 32.3** | **-0.7** | |
| **PLCA** | **Paso Flores** | **89.32** | **134** | P | **P** | **11 23 36.3** | **+1.5** | |
| | comp=Z,7.8nm,1.0s,baz=234,slow=5.2,SNR=16 | | | | | | | |
| **PLCA** | **Paso Flores** | **89.32** | **134** | P | **P** | **11 23 37.1** | **+2.3** | |
| PLCA | | | | IAmb | IAmb | 11 23 38.2 | | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.33** | **13** | P | **P** | **11 23 33.1** | **-0.8** | |
| | comp=Z,1.4nm,0.5s,baz=215,slow=5.1,SNR=18 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.58** | **290** | P | **P** | **11 23 37.0** | **+0.8** | |
| | comp=Z,1.1nm,0.4s,baz=135,slow=3.2,SNR=6.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **90.16** | **44** | P | **P** | **11 23 39.6** | **+1.0** | |
| | comp=Z,0.4nm,0.6s,baz=190,slow=2.6,SNR=4.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.64** | **25** | P | Pdif | 11 24 11.3 | -0.5 | |
| | comp=Z,0.1nm,0.4s,baz=234,slow=5.3,SNR=1.9 | | | | | | | |
| **BVAR** | **Borovoye Array** | **119.16** | **320** | PKP | **PKPdf** | **11 29 21.0** | **-1.5** | |
| | comp=Z,1.0nm,0.3s,baz=68,slow=9.5,SNR=9.1 | | | | | | | |
| **SUR** | **Sutherland** | **123.34** | **200** | PKP | **PKPdf** | **11 29 31.1** | **-0.4** | |
| | comp=Z,5.7nm,0.9s,baz=104,slow=8.3,SNR=1.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.59** | **349** | PKP | **PKPdf** | **11 29 41.4** | **-0.6** | |
| | comp=Z,1.3nm,0.6s,baz=63,slow=1.1,SNR=10 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.59** | **349** | | **PKPdf** | **11 29 42.9** | **+0.9** | |
| **AKASG** | **Malin Array Be** | **143.32** | **330** | PKP | PKPab | 11 30 04.8 | -1.4 | |
| | comp=Z,5.3nm,0.5s,baz=42,slow=4.3,SNR=56 | | | | | | | |
| AKASG | | | | SKPbc | **SKPbc** | **11 32 48.5** | **-1.7** | |
| | comp=Z,0.1nm,0.3s,baz=47,slow=2.2,SNR=6.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.32** | **330** | | PKPab | 11 30 05.9 | -0.2 | |
| **AKBB** | **Malin Array Si** | **143.32** | **330** | | PKPab | 11 30 05.3 | -0.9 | |
| **BRTR** | **Keskin Array B** | **146.75** | **311** | PKPbc | **PKPdf** | **11 30 16.1** | **+1.9** | |
| | comp=Z,1.8nm,0.6s,baz=128,slow=4.8,SNR=6.3 | | | | | | | |
| **BURAR** | **Bucovina Array** | **147.35** | **329** | ⇓P | **PKPbc** | **11 30 18.5** | **+0.2** | |
| **CFR** | **Carcaliu** | **147.45** | **323** | ⇓P | **PKPdf** | **11 30 17.0** | **+2.1** | |
| **DOPR** | **Dopca** | **148.41** | **327** | ⇓P | **PKPbc** | **11 30 21.2** | **+0.2** | |
| **DPC** | **Dobruska-Polom** | **148.65** | **341** | *e*PKP | **PKPbc** | **11 30 21.1** | **-0.3** | |
| **CLL** | **Collm** | **148.67** | **346** | *i* PKPbc | **PKPbc** | **11 30 21.2** | **-0.1** | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **ARR** | **Arges** | **149.21** | **327** | ⇓P | **PKPbc** | **11 30 23.5** | **+0.6** | |
| **PRU** | **Pruhonice** | **149.49** | **343** | *e*PKP | **PKPbc** | **11 30 23.0** | **-0.3** | |
| **GZR** | **Gura Zlata** | **150.12** | **328** | ⇓P | **PKPbc** | **11 30 24.4** | **-0.6** | |
| **BZS** | **Buzias** | **150.51** | **330** | ⇓P | **PKPbc** | **11 30 25.5** | **-0.4** | |
| **KHC** | **Kasperske Hory** | **150.53** | **343** | ⇑*e*PKP | **PKPbc** | **11 30 25.5** | **-0.4** | |
| KHC | | | | *e*PKPAB | **PKPab** | **11 30 35.8** | **+0.5** | |
| **CKRC** | **Cesky Krumlov** | **150.61** | **342** | ⇑*e*PKP | **PKPbc** | **11 30 25.9** | **-0.1** | |
| **GERES** | **GERESS Array B** | **150.76** | **343** | PKPbc | **PKPbc** | **11 30 25.5** | **-1.0** | |
| | comp=Z,1.7nm,0.6s,baz=50,slow=9.0,SNR=5.3 | | | | | | | |
| **CONA** | **Conrad Observa** | **150.92** | **339** | *i* P | **PKPbc** | **11 30 26.4** | **-0.4** | |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| CONA | | | | *i* P | **PKPab** | **11 30 37.5** | **+0.4** | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **151.34** | **334** | ⇑P | **PKPbc** | **11 30 26.8** | **-0.9** | |
| **MOA** | **Molln** | **151.50** | **341** | *i* P | **PKPbc** | **11 30 27.1** | **-1.0** | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| MOA | | | | *i* P | **PKPab** | **11 30 40.3** | **+0.9** | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **152.46** | **342** | *i* P | **PKPbc** | **11 30 29.3** | **-1.1** | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| KBA | | | | *i* P | **PKPab** | **11 30 44.4** | **+0.7** | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.76** | **344** | *i* P | **PKPbc** | **11 30 30.2** | **-0.9** | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| WTTA | | | | *i* P | **PKPab** | **11 30 45.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,1.4nm,0.6s | | | | | | | |
| NATA | | | | AMI | | 11 26 09.9 | | |
| | comp=N,1.4nm,0.6s | | | | | | | |
| NATA | | | | AMI | | 11 26 10.4 | | |
| | comp=N,0.9nm,0.3s | | | | | | | |
| NATA | | | | AMI | | 11 26 10.4 | | |
| | comp=N,0.9nm,0.3s | | | | | | | |
| **GCAM** | **G?zelcaml?** | **2.70** | **318** | PN | **Pn** | **11 25 35.8** | **+0.8** | |
| **GCAM** | **G?zelcaml?** | **2.70** | **318** | P | **Pn** | **11 25 35.3** | **+0.3** | |
| GCAM | | | | S | **Sn** | **11 26 04.3** | **-3.2** | |
| **HDMB** | **Hadim** | **2.71** | **62** | PN | **Pn** | **11 25 36.2** | **+0.9** | |
| **ZKR** | **Zakros** | **2.75** | **259** | P | **Pn** | **11 25 37.6** | **+1.9** | |
| ZKR | | | | S | **Sn** | **11 26 07.9** | **-0.9** | |
| | comp=N,205nm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **2.75** | **259** | P | **Pn** | **11 25 37.6** | **+1.9** | |
| **ZKR** | **Zakros** | **2.75** | **259** | PN | **Pn** | **11 25 36.8** | **+1.1** | |
| **LEF** | **Lefka** | **2.82** | **101** | PN | **Pn** | **11 25 37.5** | **+0.8** | |
| **KULA** | **Kula-Manisa** | **2.88** | **347** | PN | **Pn** | **11 25 38.3** | **+0.7** | |
| **ERMK** | **Ermenek** | **2.91** | **70** | P | **Pb** | **11 25 41.2** | **-2.6** | |
| ERMK | | | | *i* AML | AML | 11 26 22.0 | | |
| | comp=N,103nm,0.4s | | | | | | | |
| ERMK | | | | *i* AML | AML | 11 26 23.0 | | |
| | comp=N,145nm,1.0s | | | | | | | |
| **YVAC** | **Isparta, Yalva** | **2.91** | **28** | P | **Pn** | **11 25 40.8** | **+2.8** | |
| YVAC | | | | S | **Sn** | **11 26 13.4** | **+0.7** | |
| **SZAC** | **Souni** | **2.92** | **108** | P | **Pn** | **11 25 40.0** | **+1.9** | |
| SZAC | | | | AMI | | 11 26 12.8 | | |
| | comp=N,0.7nm,0.4s | | | | | | | |
| SZAC | | | | AMI | | 11 26 13.8 | | |
| | comp=N,1.1nm,0.5s | | | | | | | |
| **DOGA** | **KONYA_Doganhis** | **2.95** | **35** | P | **Pb** | **11 25 41.9** | **-2.6** | |
| DOGA | | | | S | **Sn** | **11 26 14.8** | **+0.8** | |
| DOGA | | | | *i* AML | AML | 11 26 19.0 | | |
| | comp=N,121nm,0.8s | | | | | | | |
| DOGA | | | | *i* AML | AML | 11 26 20.0 | | |
| | comp=N,114nm,0.6s | | | | | | | |
| DOGA | | | | *i* AML | AML | 11 26 21.0 | | |
| | comp=N,105nm,0.5s | | | | | | | |
| **TEKE** | **Tekeli-Mersin** | **2.96** | **81** | PN | **Pn** | **11 25 39.9** | **+1.4** | |
| **SHUT** | **Suhut-Afyon** | **2.96** | **16** | PN | **Pn** | **11 25 39.5** | **+0.8** | |
| **USAK** | **Uak-Merkez** | **3.03** | **353** | P | **Pn** | **11 25 39.7** | **+0.1** | |
| USAK | | | | S | **Sn** | **11 26 12.2** | **-3.4** | |
| **BERE** | **Bereket-Mersin** | **3.08** | **77** | PN | **Pn** | **11 25 41.5** | **+1.2** | |
| **KMER** | **Konya-Meram** | **3.08** | **47** | P | **Pn** | **11 25 42.8** | **+2.5** | |
| **DGB** | **zmir** | **3.15** | **319** | P | **Pn** | **11 25 41.5** | **+0.4** | |
| **KKBE** | **Karaman, Kazim** | **3.15** | **60** | P | **Pn** | **11 25 44.4** | **+3.1** | |
| KKBE | | | | S | **Sn** | **11 26 18.3** | **-0.4** | |
| **ASGA** | **Asgata** | **3.19** | **106** | P | **Pn** | **11 25 43.5** | **+1.7** | |
| **KONT** | **Konya--Tatoy** | **3.20** | **45** | PN | **Pn** | **11 25 43.3** | **+1.5** | |
| **KONT** | **Konya--Tatoy** | **3.20** | **45** | P | **Pn** | **11 25 44.3** | **+2.5** | |
| **CSS** | **Mathiatis** | **3.21** | **102** | PN | **Pn** | **11 25 43.6** | **+1.5** | |
| **CSS** | **Mathiatis** | **3.21** | **102** | P | **Pn** | **11 25 43.6** | **+1.5** | |
| **NPS** | **Neapolis** | **3.21** | **263** | P | **Pn** | **11 25 43.3** | **+1.2** | |
| NPS | | | | S | **Sn** | **11 26 18.5** | **-1.6** | |
| | comp=N,360nm,0.5s | | | | | | | |
| **NPS** | **Neapolis** | **3.21** | **263** | P | **Pn** | **11 25 43.8** | **+1.8** | |
| **TEVE** | **Tevekalti-Mers** | **3.27** | **76** | PN | **Pn** | **11 25 44.4** | **+1.5** | |
| **AKKU** | **Akkuyu-Mersin** | **3.31** | **81** | PN | **Pn** | **11 25 45.0** | **+1.6** | |
| **LADK** | **Ladik-KONYA** | **3.38** | **42** | PN | **Pn** | **11 25 45.8** | **+1.4** | |
| **THR3** | **Thira Island,** | **3.40** | **283** | P | **Pn** | **11 25 45.2** | **+0.6** | |
| **SNT5** | **Nea Kammeni, S** | **3.41** | **283** | P | **Pn** | **11 25 45.4** | **+0.7** | |
| **IKL** | **Isikli** | **3.43** | **80** | PN | **Pn** | **11 25 46.6** | **+1.6** | |
| **OSC2** | **CSNet OBS 4** | **3.48** | **138** | P | **Pn** | **11 25 49.1** | **+3.4** | |
| **KDHN** | **Kadinhani** | **3.50** | **36** | P | **Pn** | **11 25 48.3** | **+2.3** | |
| KDHN | | | | S | **Sn** | **11 26 26.6** | **-0.6** | |
| **URLA** | **Izmir** | **3.53** | **319** | PN | **Pn** | **11 25 47.7** | **+1.3** | |
| **KIZT** | **Kizilcal** | **3.69** | **30** | PN | **Pn** | **11 25 50.3** | **+1.6** | |
| **TVSB** | **Tavsanli** | **3.73** | **359** | PN | **Pn** | **11 25 50.5** | **+1.2** | |
| **IDI** | **Anoyia** | **3.79** | **265** | P | **Pn** | **11 25 51.2** | **+1.1** | |
| **IDI** | **Anoyia** | **3.79** | **265** | PN | **Pn** | **11 25 51.3** | **+1.2** | |
| **CIFT** | **Cifteler, Eski** | **3.85** | **18** | PN | **Pn** | **11 25 52.2** | **+1.3** | |
| **AUSIV** | **SIVRIHISAR** | **4.06** | **23** | PN | **Pn** | **11 25 55.2** | **+1.4** | |
| **MERS** | **Mersin** | **4.21** | **73** | PN | **Pn** | **11 25 57.7** | **+1.9** | |
| **BORA** | **Eskisehir** | **4.23** | **10** | PN | **Pn** | **11 25 57.6** | **+1.5** | |
| **SRCK** | **Saricakaya, Es** | **4.42** | **11** | PN | **Pn** | **11 26 00.2** | **+1.6** | |
| **CMRD** | **Camardi-Nigde** | **4.82** | **65** | PN | **Pn** | **11 26 06.3** | **+2.1** | |
| **SLUM** | **Salum** baz=223 | **5.53** | **222** | P | **Pn** | **11 26 16.4** | **+2.5** | |
| **MMA0B** | **Mount Meron ar** | **5.56** | **117** | Pn | **Pn** | **11 26 16.2** | **+1.8** | |
| MMA0B | | | | Sn | **Sn** | **11 27 17.6** | **-0.6** | |
| **GEM** | **Giv'at Ha'Em** | **5.66** | **114** | Pn | **Pn** | **11 26 17.5** | **+1.8** | |
| GEM | | | | Sn | **Sn** | **11 27 18.7** | **-1.8** | |
| **NATI** | **Neve Ativ** | **5.69** | **114** | Pn | **Pn** | **11 26 18.1** | **+2.0** | |
| NATI | | | | Sn | **Sn** | **11 27 20.5** | **-0.7** | |
| **HMDT** | **Nahal Hemdat** | **6.07** | **123** | Pn | **Pn** | **11 26 22.7** | **+1.4** | |
| **HNAT** | **Natroun** baz=170 | **6.13** | **171** | P | **Pn** | **11 26 24.3** | **+2.1** | |
| **KZIT** | **Kziot** | **6.30** | **138** | Pn | **Pn** | **11 26 25.6** | **+1.1** | |
| KZIT | | | | Sn | **Sn** | **11 27 34.1** | **-2.1** | |
| **GLL** | **Jalalah** baz=162 | **6.39** | **163** | P | **Pn** | **11 26 27.9** | **+2.1** | |
| **DSI** | **Dead Sea** | **6.40** | **128** | Pn | **Pn** | **11 26 27.7** | **+1.8** | |
| **RYAN** | **Fayoum** baz=174 | **6.64** | **174** | S | **Sn** | **11 27 41.1** | **-3.5** | |
| **ZFRI** | **Zfri** | **7.00** | **136** | Pn | **Pn** | **11 26 34.9** | **+0.8** | |
| ZFRI | | | | Sn | **Sn** | **11 27 51.6** | **-1.9** | |
| **PRNI** | **Paran** | **7.06** | **138** | Pn | **Pn** | **11 26 35.8** | **+0.9** | |
| PRNI | | | | Sn | **Sn** | **11 27 51.6** | **-3.3** | |
| **KRMI** | **Paran Flat** | **7.09** | **140** | Pn | **Pn** | **11 26 36.3** | **+0.9** | |
| KRMI | | | | Sn | **Sn** | **11 27 52.3** | **-3.5** | |
| **MBRI** | **Mt Berech** | **7.45** | **141** | Pn | **Pn** | **11 26 41.8** | **+1.5** | |
| MBRI | | | | Sn | **Sn** | **11 28 01.5** | **-3.1** | |
| **EIL** | **Elat** | **7.57** | **141** | Pn | **Pn** | **11 26 43.7** | **+1.8** | |
| EIL | | | | Sn | **Sn** | **11 28 04.0** | **-3.5** | |
| **GRB** | **Gharib** baz=158 | **7.92** | **159** | P | **Pn** | **11 26 48.6** | **+1.8** | |

*IDC **20** 11:31:37.4±0.5,8˚.63N×83˚.52W, h0km, mb4.4/26, mb1 4.5/32,mb1mx4.5/45,mbtmp4.4/32,ML3.7/6,MS3.7/12, Ms1 3.7/12,ms1mx3.3/67,Error ellipse: s-maj=19.9km s-min=9.9km az=50.0*

*NEIC **20** 11:31:40.1±2.6,8˚.56N±0˚.04×83˚.68W±0˚.04, h5km±4km, mb4.8/92,Mwr4.5/40,Error ellipse: s-maj=7.2km s-min=2.1km az=45.0*

*UPA **20** 11:31:40.9±1.4,8˚.48N×83˚.63W, h14km±4km,MW5.2*

*UCR **20** 11:31:40.3±2.2,8˚.54N×83˚.66W, h4km±3km,MW5.2, mb4.5(NEIC)*

*NEIC **20** 11:31:40.1,8˚.56N×83˚.68W, h15km,Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr6.79; Mθθ-2.28; Mφφ-4.51; Mrθ-1.01; Mθφ3.97; Mφr1.95; Fault plane solution: M0 7.51000×10^15^ NP1:φs139.36000°, δ36.69000°, λ84.62000°. NP2:φs326.07000°, δ53.50000°, λ94.00000°. Principal axes: T 7.1347, Plg81.0000°, Azm254.0000°; N 0.7057, Plg3.0000°, Azm144.0000°; P -7.8403, Plg8.0000°, Azm53.0000°;*

*INET **20** 11:31:42.5±0.7,8˚.44N×83˚.68W, h15km,ML5.0*

**ISC 20 11:31:40.1**±0.8,**8˚.52N**±0˚.03×**83˚.68W**±0˚.03,**h17**km±4km, **n407,σ1i38**/440,**mb4.7**/76,**MS3.8**/8,**3C-27D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **RIOS** | **Rincon, Osa** | **0.24** | **44** | Pg | | **Pg** | **11 31 45.6** | **0.0** |
| **RIOS** | **Rincon, Osa** | **0.24** | **44** | *i*P | | **Pg** | **11 31 45.6** | **0.0** |
| RIOS | | | | eS | | **Sg** | **11 31 50.2** | **+0.9** |
| **PIRO** | **Carate, Puerto** | **0.36** | **109** | eP | | **Pg** | **11 31 47.8** | **+0.2** |
| PIRO | | | | eS | | **Sb** | **11 31 53.9** | **+0.3** |
| **PIRO** | **Carate, Puerto** | **0.36** | **109** | eP | | **Pg** | **11 31 47.8** | **+0.2** |
| PIRO | | | | eS | | **Sg** | **11 31 52.8** | **0.0** |
| **PTJ1** | **Puerto Jimnez** | **0.38** | **88** | *i*P | | **Pg** | **11 31 48.0** | **+0.1** |
| PTJ1 | | | | eS | | **Sb** | **11 31 55.0** | **+1.0** |
| **PNPB** | **Parque Naciona** | **0.48** | **71** | eP | | **Pg** | **11 31 49.2** | **-0.5** |
| PNPB | | | | eS | | **Sb** | **11 31 57.7** | **+0.8** |
| **EDPN** | **Palmar Norte** | **0.49** | **27** | *i*P | | **Pb** | **11 31 50.2** | **-0.1** |
| **CCOL** | **Caracol de Cor** | **0.71** | **99** | *i*P | | **Pg** | **11 31 53.4** | **-0.7** |
| CCOL | | | | eS | | **Sb** | **11 32 04.6** | **+1.0** |
| **EDDO** | **Dominical** | **0.74** | **346** | eP | | **Pb** | **11 31 54.5** | **-0.2** |
| EDDO | | | | eS | | **Sb** | **11 32 05.5** | **+0.9** |
| **EDBA** | **Buenos Aires** | **0.75** | **32** | *i*P | | **Pg** | **11 31 54.4** | **-0.4** |
| **EDSV** | **San Vito** | **0.76** | **67** | eP | | **Pg** | **11 31 54.8** | **-0.3** |
| EDSV | | | | eS | | **Sb** | **11 32 06.8** | **+1.6** |
| **POTG** | **Potrero Grande** | **0.77** | **47** | *i*P | | **Pg** | **11 31 54.8** | **-0.3** |
| POTG | | | | eS | | **Sb** | **11 32 05.4** | **+0.1** |
| **SRBA** | **San Rafael, Bu** | **0.77** | **24** | Pg | | **Pg** | **11 31 54.9** | **-0.4** |
| **SRBA** | **San Rafael, Bu** | **0.77** | **24** | eP | | **Pg** | **11 31 54.8** | **-0.4** |
| SRBA | | | | eS | | **Sb** | **11 32 06.9** | **+1.4** |
| **CDITO** | **Canoas** | **0.80** | **86** | | | **Pg** | **11 31 54.6** | **-1.1** |
| **CDITO** | **Canoas** | **0.80** | **86** | *i*P | | **Pg** | **11 31 54.7** | **-1.1** |
| CDITO | | | | eS | | **Sg** | **11 32 06.6** | **+0.1** |
| **CDITO** | **Canoas** | **0.80** | **86** | *i*P | | **Pg** | **11 31 54.7** | **-1.1** |
| CDITO | | | | eS | | **Sg** | **11 32 05.8** | **-0.6** |
| **PEZE** | **Perez Zeledon,** | **0.85** | **0** | | | **Pg** | **11 31 56.2** | **-0.5** |
| **PEZE** | **Perez Zeledon,** | **0.85** | **0** | eP | | **Pg** | **11 31 56.3** | **-0.5** |
| **PTPM** | **Petroterminale** | **0.86** | **112** | eP | | **Pg** | **11 31 55.7** | **-1.1** |
| PTPM | | | | eS | | **Sg** | **11 32 07.5** | **-0.6** |
| **MLIR3** | **Monte Lirio, C** | **0.89** | **73** | *i*P | | **Pg** | **11 31 56.9** | **-0.5** |
| MLIR3 | | | | eS | | **Sg** | **11 32 08.9** | **-0.3** |
| **LESP3** | **La Esperanza,** | **0.89** | **98** | eP | | **Pg** | **11 31 55.9** | **-1.6** |
| LESP3 | | | | eS | | **Sg** | **11 32 08.5** | **-0.8** |
| **BRU2** | **Volcan** | **1.02** | **75** | | | **Pg** | **11 31 58.6** | **-1.3** |
| **BRU2** | **Volcan** | **1.02** | **75** | *i*P | | **Pg** | **11 31 58.5** | **-1.3** |
| BRU2 | | | | eS | | **Sb** | **11 32 13.4** | **+0.8** |
| **BRU2** | **Volcan** | **1.02** | **75** | eP | | **Pg** | **11 31 58.6** | **-1.3** |
| **BRU2** | **Volcan** | **1.02** | **75** | *i*P | | **Pg** | **11 31 58.5** | **-1.3** |
| BRU2 | | | | eS | | **Sg** | **11 32 11.8** | **-1.4** |
| **CDM** | **Cerro de Muert** | **1.03** | **356** | *i*P | | **Pg** | **11 31 59.1** | **-1.0** |
| CDM | | | | eS | | **Sb** | **11 32 14.2** | **+1.1** |
| **BCO2** | **Palmira** | **1.16** | **80** | *i*P | | **Pg** | **11 32 00.8** | **-1.7** |
| BCO2 | | | | eS | | **Sg** | **11 32 16.8** | **-0.9** |
| **DVD** | **David** | **1.22** | **94** | eP | | **Pg** | **11 32 01.3** | **-2.4** |
| DVD | | | | eS | | **Sg** | **11 32 17.8** | **-1.9** |
| **RIMA** | **Rio Macho** | **1.25** | **352** | | | **Pg** | **11 32 02.7** | **-1.5** |
| **RIMA** | **Rio Macho** | **1.25** | **352** | eP | | **Pg** | **11 32 02.7** | **-1.5** |
| **LCR2** | **La Lucha 2** | **1.25** | **345** | eP | | **Pg** | **11 32 02.7** | **-1.6** |
| **LNBQ3** | **Los Naranjos,** | **1.26** | **78** | *i*P | | **Pg** | **11 32 01.9** | **-2.5** |
| LNBQ3 | | | | eS | | **Sg** | **11 32 18.5** | **-2.4** |
| **LOMA3** | **Las Lomas, Chi** | **1.28** | **94** | eP | | **Pn** | **11 32 02.4** | **-0.9** |
| LOMA3 | | | | eS | | **Sg** | **11 32 18.3** | **-3.3** |
| **MRVA** | **Moravia de Chi** | **1.31** | **10** | *i*P | | **Pg** | **11 32 03.8** | **-1.7** |
| MRVA | | | | eS | | **Sn** | **11 32 22.1** | **+1.0** |
| **CHIR3** | **Chiriqui UPA,** | **1.35** | **95** | eP | | **Pn** | **11 32 03.1** | **-1.0** |
| **OCM** | **Ochomogo** | **1.39** | **349** | eP | | **Pn** | **11 32 04.9** | **0.0** |
| OCM | | | | eS | | **Sn** | **11 32 24.3** | **+1.2** |
| **SJS** | **Escuela Geolog** | **1.45** | **345** | eP | | **Pn** | **11 32 05.6** | **-0.2** |
| **JACO** | **JACO, Garabito** | **1.48** | **320** | | | **Pn** | **11 32 05.8** | **-0.3** |
| **JACO** | **JACO, Garabito** | **1.48** | **320** | eP | | **Pn** | **11 32 05.1** | **-1.0** |
| **CVTR** | **Volcan Turrial** | **1.49** | **357** | | | **Pn** | **11 32 07.1** | **+0.7** |
| **CVTR** | **Volcan Turrial** | **1.49** | **357** | *i*P | | **Pn** | **11 32 07.2** | **+0.7** |
| **CNI2** | **El Empalme, Bo** | **1.50** | **53** | eP | | **Pn** | **11 32 05.6** | **-0.6** |
| CNI2 | | | | eS | | **Sn** | **11 32 26.2** | **+0.8** |
| **RGM0** | **Gandoca** | **1.50** | **45** | | | **Pn** | **11 32 07.4** | **+1.1** |
| **RGM0** | **Gandoca** | **1.50** | **45** | *i*P | | **Pn** | **11 32 07.4** | **+1.1** |
| **RGM0** | **Gandoca** | **1.50** | **45** | eP | | **Pn** | **11 32 07.6** | **+1.3** |
| RGM0 | | | | eS | | **Sn** | **11 32 25.6** | **+0.1** |
| **HDC** | **Heredia** | **1.53** | **344** | | | **Pn** | **11 32 07.3** | **+0.5** |
| **HDC** | **Heredia** | **1.53** | **344** | eP | | **Pn** | **11 32 07.0** | **+0.2** |
| **HDC** | **Heredia** | **1.53** | **344** | eP | | **Pn** | **11 32 07.2** | **+0.4** |
| HDC | | | | eS | | **Sb** | **11 32 28.1** | **+0.8** |
| **HDC3** | **Heredia 3** | **1.53** | **344** | eP | | **Pn** | **11 32 07.1** | **+0.3** |
| **CHGR2** | **Aguacate** | **1.58** | **75** | eP | | **Pn** | **11 32 06.7** | **-0.7** |
| CHGR2 | | | | eS | | **Sn** | **11 32 26.6** | **-0.8** |
| **BATAN** | **Batan** | **1.59** | **11** | Pn | | **Pn** | **11 32 08.6** | **+1.0** |
| **BATAN** | **Batan** | **1.59** | **11** | *i*P | | **Pn** | **11 32 08.6** | **+1.0** |
| BATAN | | | | eS | | **Sg** | **11 32 30.5** | **-1.1** |
| **BATAN** | **Batan** | **1.59** | **11** | *i*P | | **Pn** | **11 32 08.7** | **+1.1** |
| BATAN | | | | eS | | **Sb** | **11 32 29.4** | **+0.4** |
| **SRA1** | **San Ramn** | **1.74** | **333** | eP | | **Pn** | **11 32 10.9** | **+1.2** |
| **CRPO** | **Crater poas** | **1.74** | **342** | eP | | **Pn** | **11 32 10.9** | **+1.0** |
| **LAFE** | **Finca La Fe, P** | **1.76** | **317** | eP | | **Pn** | **11 32 10.1** | **+0.2** |
| **RIFO** | **Rio Frio, Sara** | **1.80** | **352** | eP | | **Pn** | **11 32 11.1** | **+0.7** |
| **CAO2** | **Cobano, Puntar** | **1.82** | **310** | | | **Pn** | **11 32 10.8** | **0.0** |
| **JTS** | **Las Juntas de** | **2.15** | **325** | Pn | | **Pn** | **11 32 17.0** | **+1.7** |
| | 124nm,0.3s,baz=212,slow=5.0,SNR=107 | | | | | | | |
| JTS | | | | Sn | | **Sn** | **11 32 41.9** | **+0.2** |
| | 173nm,0.3s,baz=215,slow=19,SNR=8.4 | | | | | | | |
| **JTS** | **Las Juntas de** | **2.15** | **325** | Pn | | **Pn** | **11 32 16.3** | **+1.0** |
| **JTS** | **Las Juntas de** | **2.15** | **325** | eP | | **Pn** | **11 32 15.5** | **+0.2** |
| **JTS** | **Las Juntas de** | **2.15** | **325** | eP | | **Pb** | **11 32 18.0** | **-0.8** |
| **JTS** | **Las Juntas de** | **2.15** | **325** | eP | | **Pn** | **11 32 17.5** | **+2.1** |
| JTS | | | | eS | | **Sn** | **11 32 43.8** | **+2.0** |
| **JTS** | **Las Juntas de** | **2.15** | **325** | eP | | **Pn** | **11 32 17.5** | **+2.1** |
| **CASO** | **Castillo** | **2.16** | **331** | *i*P | | **Pb** | **11 32 18.4** | **-0.5** |
| **CEDE** | **Laguna Cedeo** | **2.19** | **333** | eP | | **Pb** | **11 32 19.0** | **-0.5** |
| **INDI** | **Punta indio, G** | **2.24** | **307** | eP | | **Pn** | **11 32 15.9** | **-0.5** |
| **COVE** | **Coope Vega, Sa** | **2.29** | **342** | | | **Pn** | **11 32 18.2** | **+1.0** |
| **COVE** | **Coope Vega, Sa** | **2.29** | **342** | eP | | **Pn** | **11 32 18.2** | **+1.0** |
| **DUNO** | **Dulce Nombre,** | **2.36** | **311** | | | **Pn** | **11 32 18.3** | **+0.1** |
| **DUNO** | **Dulce Nombre,** | **2.36** | **311** | eP | | **Pn** | **11 32 19.5** | **+1.4** |
| **NICO** | **Nicoya** | **2.36** | **313** | eP | | **Pn** | **11 32 19.9** | **+1.7** |
| **PLVR** | **Palo Verde** | **2.45** | **318** | eP | | **Pn** | **11 32 20.6** | **+1.1** |
| **ACAL** | **Aguas Claras** | **2.48** | **328** | *i*P | | **Pn** | **11 32 20.1** | **+0.8** |
| **GUAI** | **GUAI** | **2.50** | **314** | eP | | **Pn** | **11 32 20.9** | **+0.8** |
| **SAJU** | **San Juanillo,** | **2.52** | **308** | eP | | **Pn** | **11 32 20.1** | **-0.3** |
| **PTEN** | **Parque Tenorio** | **2.53** | **330** | *i*P | | **Pb** | **11 32 23.9** | **-1.2** |
| **ORTG** | **Ortega, Santa** | **2.53** | **316** | | | **Pn** | **11 32 21.0** | **+0.5** |
| **ORTG** | **Ortega, Santa** | **2.53** | **316** | eP | | **Pn** | **11 32 21.6** | **+1.0** |
| **CUI** | **Cuipilapa** | **2.57** | **326** | *i*P | | **Pn** | **11 32 23.9** | **+2.7** |
| **COLC** | **Colonia** | **2.60** | **325** | *i*P | | **Pn** | **11 32 24.2** | **+2.7** |
| **HORNC** | **Hornillas** | **2.63** | **326** | eP | | **Pn** | **11 32 24.5** | **+2.6** |
| **GUAB** | **Guayabo de Bag** | **2.65** | **325** | eP | | **Pn** | **11 32 25.3** | **+3.1** |
| **LIM1** | **Limonal** | **2.66** | **325** | eP | | **Pn** | **11 32 24.7** | **+2.4** |
| **VMAR** | **Armenia, Volca** | **2.68** | **328** | eP | | **Pn** | **11 32 25.1** | **+2.5** |
| **GPS2** | **Hotel Rincn d** | **2.76** | **324** | *i*P | | **Pn** | **11 32 26.3** | **+2.7** |
| **GPS3** | **Bodega del ICE** | **2.77** | **323** | eP | | **Pn** | **11 32 25.6** | **+1.8** |
| **VRLE** | **La Escondida,** | **2.79** | **324** | eP | | **Pn** | **11 32 26.0** | **+1.8** |
| **LAPC** | **Finca la Perla** | **2.82** | **322** | *i*P | | **Pn** | **11 32 26.6** | **+2.1** |
| **GBS3** | **Finca Las Img** | **2.84** | **322** | eP | | **Pn** | **11 32 26.7** | **+1.9** |
| **BUAI** | **Buenos Aires** | **2.85** | **325** | eP | | **Pn** | **11 32 26.8** | **+1.9** |
| **HZTE** | **Horizontes, Gu** | **2.88** | **319** | Pn | | **Pn** | **11 32 27.4** | **+2.1** |
| **HZTE** | **Horizontes, Gu** | **2.88** | **319** | eP | | **Pn** | **11 32 27.1** | **+1.9** |
| **HZTE** | **Horizontes, Gu** | **2.88** | **319** | eP | | **Pn** | **11 32 27.1** | **+1.9** |
| **CACAO** | **El Cacao, Vera** | **3.03** | **113** | eP | | **Pn** | **11 32 26.8** | **-0.5** |
| CACAO | | | | eS | | **Sb** | **11 33 10.2** | **-0.2** |
| **PNME** | **Penonome** | **3.32** | **90** | eP | | **Pn** | **11 32 32.4** | **+1.1** |
| **AZU** | **Azuero** | **3.45** | **102** | eP | | **Pn** | **11 32 33.4** | **+0.2** |
| **AZU** | **Azuero** | **3.45** | **102** | eP | | **Pn** | **11 32 33.6** | **+0.4** |
| AZU | | | | eS | | **Sn** | **11 33 17.5** | **+3.7** |
| **ESPN** | **Las Esperanzas** | **3.70** | **351** | | | **Pn** | **11 32 37.6** | **+1.1** |
| **ESPN** | **Las Esperanzas** | **3.70** | **351** | eP | | **Pn** | **11 32 37.8** | **+1.2** |
| **ESPN** | **Las Esperanzas** | **3.70** | **351** | eP | | **Pn** | **11 32 38.3** | **+1.8** |
| ESPN | | | | IAML | | | **11 33 37.2** | |
| | comp=E,2μm,0.6s | | | | | | | |
| **ACON** | **Acoyapa** | **3.72** | **337** | | | **Pn** | **11 32 37.8** | **+0.9** |
| **ACON** | **Acoyapa** | **3.72** | **337** | eP | | **Pn** | **11 32 39.1** | **+2.2** |
| **ACON** | **Acoyapa** | **3.72** | **337** | eP | | **Pn** | **11 32 39.1** | **+2.2** |
| **ZANG** | **Zanguenga, Cho** | **3.80** | **83** | eP | | **Pn** | **11 32 39.1** | **+1.1** |
| **BCIP** | **Isla Barro Col** | **3.85** | **80** | Pn | | **Pn** | **11 32 39.6** | **+0.9** |
| **BCIP** | **Isla Barro Col** | **3.85** | **80** | eP | | **Pn** | **11 32 39.4** | **+0.7** |
| **BCIP** | **Isla Barro Col** | **3.85** | **80** | eP | | **Pn** | **11 32 39.9** | **+1.2** |
| **BOAB** | **BOACO BROADBAN** | **3.36** | **334** | Pn | | **Pn** | **11 32 47.2** | **+1.5** |
| **HUEN** | | **4.51** | **327** | eP | | **Pn** | **11 32 50.1** | **+2.4** |
| **MATN** | **Matagalpa** | **4.90** | **333** | | | **Pn** | **11 32 55.3** | **+2.1** |
| **CNGN** | **Cerro Negro** | **4.94** | **323** | | | **Pn** | **11 32 55.4** | **+1.8** |
| **CRIN** | **San Cristobal** | **5.31** | **322** | | | **Pn** | **11 33 00.7** | **+1.9** |
| **CRIN** | **San Cristobal** | **5.31** | **322** | eP | | **Pn** | **11 33 00.9** | **+2.2** |
| **PRVC** | **Isla de Provid** | **5.33** | **25** | Pn | | **Pn** | **11 33 00.7** | **+1.6** |
| **PRVC** | **Isla de Provid** | **5.33** | **25** | eP | | **Pn** | **11 32 56.1** | **-2.9** |
| **PRVC** | **Isla de Provid** | **5.33** | **25** | eP | | **Pn** | **11 32 59.5** | **+0.5** |
| **PTAC** | **Punta Ardita,** | **5.98** | **103** | eP | | **Pn** | **11 33 06.8** | **-1.1** |
| **TGUH** | **Tegucigalpa,Un** | **6.53** | **328** | Pn | | **Pn** | **11 33 18.8** | **+3.1** |
| **TGUH** | **Tegucigalpa,Un** | **6.53** | **328** | eP | | **Pn** | **11 33 18.7** | **+3.1** |
| **SNET** | **Serv Nac Est T** | **7.48** | **314** | | | **Pn** | **11 33 30.4** | **+1.8** |
| **MTO3** | **Montecristo** | **8.06** | **317** | | | **Pn** | **11 33 39.2** | **+2.5** |
| **UREC** | **San Jos de Ur** | **8.11** | **95** | eP | | **Pn** | **11 33 38.2** | **+1.0** |
| **ESQI** | **Esquipulas** | **8.17** | **318** | | | **Pn** | **11 33 40.6** | **+2.6** |
| **PLMC** | **San Jos del P** | **8.18** | **116** | eP | | **Pn** | **11 33 42.0** | **+3.7** |
| **SJCC** | **San Jacinto, C** | **8.51** | **80** | | | **Pn** | **11 33 43.7** | **+1.0** |
| **SJCC** | **San Jacinto, C** | **8.51** | **80** | eP | | **Pn** | **11 33 43.8** | **+1.0** |
| **YOTC** | **Yotoco, Valle** | **8.58** | **121** | eP | | **Pn** | **11 33 44.2** | **+0.5** |
| **ZARC** | **Zaragoza, Cauc** | **8.80** | **96** | Pn | | **Pn** | **11 33 48.5** | **+1.8** |
| **ZARC** | **Zaragoza, Cauc** | **8.80** | **96** | eP | | **Pn** | **11 33 48.1** | **+1.4** |
| **GUY2C** | **Guyana, Caldas** | **8.89** | **111** | eP | | **Pn** | **11 33 49.0** | **+0.7** |
| **BBAC** | **Balboa, Cauca** | **9.10** | **135** | eP | | **Pn** | **11 33 52.2** | **+1.2** |
| **ANIL** | **Santa Ana** | **9.15** | **115** | eP | | **Pn** | **11 33 53.6** | **+1.8** |
| **NORC** | **Norcasia** | **9.23** | **108** | eP | | **Pn** | **11 33 53.4** | **+0.7** |
| **APG** | **El Apazote** | **9.25** | **315** | Pn | | **Pn** | **11 33 55.4** | **+2.4** |
| | comp=E,2.4nm,0.3s,baz=114,slow=8.0,SNR=18 | | | | | | | |
| APG | | | | LR | | LR | **11 37 19.2** | |
| | comp=E,124nm,20.7s,baz=107,slow=37 | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **9.36** | **102** | eP | | **Pn** | **11 33 55.4** | **+1.0** |
| **SOTA** | **Rioblanco** | **9.48** | **132** | eP | | **Pn** | **11 33 59.8** | **+3.3** |
| **PCON** | **Cinco Dias** | **9.51** | **130** | eP | | **Pn** | **11 34 00.9** | **+3.9** |
| **ORTC** | **Ortega, Tolima** | **9.56** | **118** | eP | | **Pn** | **11 34 00.3** | **+3.2** |
| **GCUF** | **Volcan Galeras** | **9.61** | **139** | eP | | **Pn** | **11 33 59.8** | **+1.5** |
| **SMRC** | **Santa Marta, M** | **9.68** | **74** | eP | | **Pn** | **11 33 59.4** | **+0.6** |
| **TULN** | **Tulcn-Chalpat** | **9.73** | **143** | eP | | **Pn** | **11 34 01.5** | **+1.6** |
| **OTAV** | **Otavalo** | **9.74** | **147** | | | **Pn** | **11 34 02.6** | **+2.5** |
| **ROSC** | **El Rosal** | **9.99** | **111** | Pn | | **Pn** | **11 34 02.3** | **-1.1** |
| | comp=E,2.4nm,0.3s,baz=28,slow=20,SNR=1.8 | | | | | | | |
| **ROSC** | **El Rosal** | **9.99** | **111** | | | **Pn** | **11 34 03.4** | **-0.1** |
| **BETC** | **Betania** | **10.05** | **125** | eP | | **Pn** | **11 34 02.7** | **-1.2** |
| **OCAC** | **Ocana** | **10.26** | **91** | | | **Pn** | **11 34 07.8** | **+1.0** |
| **OCAC** | **Ocana** | **10.26** | **91** | eP | | **Pn** | **11 34 07.0** | **+0.2** |
| **GARC** | **Garzon, Huila** | **10.30** | **127** | eP | | **Pn** | **11 34 08.5** | **+1.0** |
| **CHIC** | **Chingaza** | **10.62** | **111** | eP | | **Pn** | **11 34 13.5** | **+1.5** |
| **RUSC** | **La Rusia** | **10.84** | **103** | eP | | **Pn** | **11 34 18.0** | **+2.9** |
| **VILC** | **Villavicencio,** | **10.85** | **113** | eP | | Pn | **11 34 20.1** | **+5.2** |
| **CRJC** | **Cerrejon, Guaj** | **10.93** | **76** | eP | | **Pn** | **11 34 15.6** | **-0.5** |
| **PAMC** | **Pamplona, Colo** | **10.94** | **95** | eP | | **Pn** | **11 34 18.9** | **+2.4** |
| **URIC** | **Uribia, Colomb** | **11.94** | **74** | eP | | **Pn** | **11 34 28.8** | **-0.9** |
| **SOCV** | **Socops** | **12.69** | **90** | eP | | Pn | **11 34 31.4** | **-8.7** |
| **SDV** | **Santo Domingo** | **12.91** | **87** | Pn | | **Pn** | **11 34 39.8** | **-3.3** |
| | comp=E,1.5nm,0.3s,baz=294,slow=20,SNR=5.7 | | | | | | | |
| SDV | | | | Sn | | **Sn** | **11 37 09.2** | **+2.6** |
| | comp=E,0.7nm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OLIL | Olney | 30.34 | 353 | P | P | 11 37 50.3 | -0.7 |
| BLO | Bloomington | 30.62 | 356 | P | P | 11 37 52.7 | -0.7 |
| BLO | | | | IAmb | IAmb | 11 37 54.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| MNTX | Cornudas Mount | 30.64 | 322 | P | P | 11 37 53.1 | -0.7 |
| MNTX | Cornudas Mount | 30.64 | 322 | P | P | 11 37 54.4 | +0.6 |
| | baz=134 | | | | | | |
| ITTB | Itaituba | 30.67 | 114 | *eP* | P | 11 37 55.1 | +0.9 |
| P49A | Miami Univ. Ec | 30.89 | 358 | P | P | 11 37 55.4 | -0.4 |
| | baz=178 | | | | | | |
| MDP | Montagnes des | 31.00 | 94 | P | P | 11 37 57.3 | +0.2 |
| | comp=Z,9.9nm,0.6s,baz=267,slow=6.7,SNR=6.0 | | | | | | |
| MALB | Monte Alegre | 31.09 | 108 | *eP* | P | 11 37 58.8 | +0.9 |
| P43A | Skaggs, Pawnee | 31.42 | 351 | P | P | 11 38 00.2 | -0.3 |
| GO01 | Chusmiza | 31.44 | 153 | P | P | 11 38 02.2 | +0.8 |
| GO01 | | | | IAmb | IAmb | 11 38 04.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| ACSO | Alum Creek Sta | 31.58 | 1 | P | P | 11 38 02.1 | +0.2 |
| ACSO | Alum Creek Sta | 31.58 | 1 | P | P | 11 38 02.3 | +0.5 |
| | baz=181 | | | | | | |
| VILB | Vilhena | 31.61 | 132 | *eP* | P | 11 38 02.9 | +0.4 |
| O48B | Farmland | 31.63 | 358 | P | P | 11 38 02.1 | -0.2 |
| | baz=177,SNR=6.6 | | | | | | |
| P40A | Paris | 31.77 | 348 | P | P | 11 38 02.9 | -0.7 |
| P40A | | | | IAmb | IAmb | 11 38 03.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| O44A | Mansfield | 31.78 | 353 | P | P | 11 38 03.6 | 0.0 |
| SFIN | Lafayette | 31.87 | 355 | P | P | 11 38 03.6 | -0.8 |
| | baz=174 | | | | | | |
| NPGB | Novo Progresso | 32.20 | 118 | *eP* | P | 11 38 06.7 | -0.9 |
| P38A | Dawn | 32.20 | 346 | P | P | 11 38 07.4 | 0.0 |
| P38A | | | | IAmb | IAmb | 11 38 17.6 | |
| | comp=Z,10nm,1.1s | | | | | | |
| HDIL | Hopedale | 32.29 | 352 | P | P | 11 38 07.2 | -0.9 |
| HDIL | Hopedale | 32.29 | 352 | P | P | 11 38 07.5 | -0.5 |
| | baz=170 | | | | | | |
| N41A | Harden Midland | 32.68 | 350 | P | P | 11 38 11.2 | -0.3 |
| MCPB | Macapa, AP | 32.73 | 104 | *eP* | P | 11 38 13.1 | +0.7 |
| 319A | Douglas | 32.94 | 317 | P | P | 11 38 16.7 | +2.6 |
| N38A | Joes South For | 33.24 | 347 | P | P | 11 38 15.8 | -0.6 |
| PB09 | IPOC Station P | 33.30 | 155 | P | P | 11 38 18.1 | +0.8 |
| PB09 | | | | IAmb | IAmb | 11 38 19.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| PDRB | Porto dos Gac | 33.45 | 126 | *eP* | P | 11 38 17.8 | -0.8 |
| ANMO | Albuquerque | 33.57 | 325 | P | P | 11 38 20.6 | +0.9 |
| ANMO | Albuquerque | 33.57 | 325 | P | P | 11 38 20.8 | +1.1 |
| | baz=136 | | | | | | |
| L42A | Oliver, Polo | 33.76 | 352 | P | P | 11 38 19.3 | -1.6 |
| CLDB | Colider | 33.78 | 124 | *eP* | P | 11 38 20.6 | -0.9 |
| PTLB | Pontes e Lacer | 34.04 | 134 | *eP* | P | 11 38 23.2 | -0.5 |
| LVC | Limon Verde | 34.16 | 155 | LR | LR | 11 51 50.7 | |
| | comp=Z,67nm,20.5s,baz=216,slow=36 | | | | | | |
| TUC | Tucson | 34.52 | 317 | P | P | 11 38 29.6 | +1.8 |
| TUC | Tucson | 34.52 | 317 | P | P | 11 38 30.2 | +2.4 |
| | baz=127 | | | | | | |
| JFWS | Jewell Farm | 34.74 | 352 | P | P | 11 38 28.3 | -1.2 |
| | baz=169,SNR=5.1 | | | | | | |
| X18A | Snowflake | 35.38 | 321 | P | P | 11 38 36.9 | +1.6 |
| W18A | Petrified Fore | 35.63 | 322 | P | P | 11 38 39.3 | +1.8 |
| W18A | | | | IAmb | IAmb | 11 38 47.1 | |
| | comp=Z,25nm,1.2s | | | | | | |
| W18A | Petrified Fore | 35.63 | 322 | P | P | 11 38 40.0 | +2.5 |
| | baz=132,SNR=6.0 | | | | | | |
| 214A | Organ Pipe Nat | 35.71 | 315 | P | P | 11 38 40.2 | +2.2 |
| 214A | | | | IAmb | IAmb | 11 38 46.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| 214A | Organ Pipe Nat | 35.71 | 315 | P | P | 11 38 41.0 | +3.0 |
| | baz=124,SNR=8.4 | | | | | | |
| X16A | Lo Mia Camp, P | 36.25 | 319 | P | P | 11 38 44.9 | +2.1 |
| X16A | | | | IAmb | IAmb | 11 38 51.4 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| SADO | Sadowa | 36.32 | 5 | LR | LR | 11 54 35.3 | |
| | comp=Z,184nm,18.1s,baz=172,slow=38 | | | | | | |
| 113A | Mohawk Valley, | 36.83 | 315 | P | P | 11 38 49.4 | +1.8 |
| 113A | | | | IAmb | IAmb | 11 38 56.3 | |
| | comp=Z,19nm,1.2s | | | | | | |
| SALV | Santo Antonio | 36.84 | 131 | *eP* | P | 11 38 47.4 | -0.4 |
| ECSD | EROS Data Cent | 36.85 | 344 | P | P | 11 38 46.6 | -0.9 |
| ECSD | EROS Data Cent | 36.85 | 344 | P | P | 11 38 46.9 | -0.7 |
| | baz=158 | | | | | | |
| WUAZ | Wupatki | 36.90 | 321 | P | P | 11 38 49.6 | +1.3 |
| WUAZ | Wupatki | 36.90 | 321 | P | P | 11 38 50.5 | +2.2 |
| | baz=130,SNR=7.4 | | | | | | |
| TMAB | Tom-Au,PA,Br | 37.10 | 105 | *eP* | P | 11 38 51.0 | +1.0 |
| SPMN | Marine on St. | 37.41 | 349 | P | P | 11 38 50.5 | -1.8 |
| | baz=165,SNR=7.8 | | | | | | |
| GLA | Glamis | 37.73 | 315 | P | P | 11 38 58.2 | +3.0 |
| | baz=123 | | | | | | |
| AC02 | Maricunga | 37.88 | 159 | P | P | 11 38 58.2 | +1.1 |
| AC02 | | | | IAmb | IAmb | 11 38 59.9 | |
| | comp=Z,14nm,0.8s | | | | | | |
| PDMCI | Parker Dam,Lak | 37.96 | 317 | P | P | 11 39 00.1 | +3.0 |
| | baz=126,SNR=7.8 | | | | | | |
| U15A | North Rim | 38.06 | 321 | P | P | 11 39 00.6 | +2.3 |
| SNDB | Serra Nova Dou | 38.10 | 122 | *eP* | P | 11 38 58.0 | -0.5 |
| BC3 | Big Chuckawall | 38.50 | 315 | P | P | 11 39 04.3 | +2.5 |
| | baz=123 | | | | | | |
| IRM | Iron Mountain | 38.56 | 316 | P | P | 11 39 04.2 | +2.0 |
| | baz=124 | | | | | | |
| KNB | Kanab | 38.76 | 322 | P | P | 11 39 06.3 | +2.2 |
| BELC | Belle Mtn. Jos | 39.07 | 315 | P | P | 11 39 08.1 | +1.6 |
| | baz=123 | | | | | | |
| PFO | Pinyon Flats O | 39.18 | 314 | P | P | 11 39 11.1 | +3.5 |
| | baz=122 | | | | | | |
| GMRC | Granite Mounta | 39.27 | 316 | P | P | 11 39 10.7 | +2.4 |
| | baz=124 | | | | | | |
| MURC | Murrieta | 39.70 | 314 | P | P | 11 39 13.9 | +2.1 |
| | baz=121 | | | | | | |
| HEC | Hector,Ludlow | 39.75 | 316 | P | P | 11 39 15.0 | +2.8 |
| | baz=124 | | | | | | |
| TUQ | Turquoise Moun | 39.81 | 317 | P | P | 11 39 15.3 | +2.5 |
| | baz=125,SNR=8.8 | | | | | | |
| AQDB | Aquidauana | 39.85 | 137 | *eP* | P | 11 39 12.6 | -0.5 |
| SMTB | Santa Maria do | 39.89 | 115 | *eP* | P | 11 39 13.4 | -0.2 |
| GSC | Goldstone, Bar | 40.33 | 316 | P | P | 11 39 19.8 | +2.7 |
| | baz=124,SNR=6.4 | | | | | | |
| PEXB | Peixe | 40.71 | 120 | *eP* | P | 11 39 19.7 | -0.6 |
| GWY | Greenwater Val | 40.73 | 318 | P | P | 11 39 22.9 | +2.5 |
| QSM | Queen of Sheba | 40.74 | 317 | P | P | 11 39 22.4 | +2.0 |
| QSM | | | | IAmb | IAmb | 11 39 29.0 | |
| | comp=Z,16nm,1.0s | | | | | | |
| TPNV | Topopah Spring | 40.89 | 319 | P | P | 11 39 25.4 | +3.6 |
| | baz=126,SNR=10 | | | | | | |
| AGMN | Agassiz Nation | 40.95 | 348 | P | P | 11 39 20.7 | -1.2 |
| | baz=162,SNR=6.5 | | | | | | |
| PDAR | Pinedale Array | 40.98 | 331 | P | P | 11 39 21.5 | -1.0 |
| | comp=Z,0.6nm,0.8s,baz=139,slow=9.2,SNR=4.6 | | | | | | |
| PDAR | | | | PcP | PcP | 11 41 22.5 | 0.0 |
| | comp=Z,1.7nm,1.0s,baz=147,slow=4.5,SNR=5.2 | | | | | | |
| PDAR | Pinedale Array | 40.98 | 331 | P | P | 11 39 22.6 | +0.1 |
| FURC | Furnace Creek, | 41.02 | 318 | P | P | 11 39 25.5 | +2.9 |
| | baz=124,SNR=11 | | | | | | |
| LRMC | Laurel Mtn Rad | 41.03 | 316 | P | P | 11 39 25.6 | +2.7 |
| | baz=123,SNR=10 | | | | | | |
| ROSB | Rosrio | 41.04 | 104 | *eP* | P | 11 39 24.0 | +0.9 |
| MPMC | Manual Prospec | 41.21 | 317 | P | P | 11 39 26.5 | +2.1 |
| | baz=123,SNR=11 | | | | | | |
| R11A | Troy Canyon, C | 41.30 | 321 | P | P | 11 39 27.1 | +1.9 |
| | baz=128,SNR=6.6 | | | | | | |
| ARVC | Arvin | 41.64 | 315 | P | P | 11 39 30.5 | +2.7 |
| | baz=121 | | | | | | |
| ISA | Isabella, Lake | 41.67 | 316 | P | P | 11 39 30.8 | +2.7 |
| | baz=122 | | | | | | |
| CWC | Cottonwood Cre | 41.82 | 317 | P | P | 11 39 31.4 | +2.0 |
| | baz=123 | | | | | | |
| LCH | Last Change Ra | 41.97 | 318 | P | P | 11 39 32.9 | +2.3 |
| H03N2 | Juan Fernandez | 41.98 | 174 | T | T | 12 24 07.8 | |
| | baz=354,slow=76,SNR=46 | | | | | | |
| H03N1 | Juan Fernandez | 41.98 | 174 | T | T | 12 24 08.7 | |
| | baz=354,slow=76,SNR=75 | | | | | | |
| H03N3 | Juan Fernandez | 41.99 | 174 | T | T | 12 24 07.5 | |
| | baz=354,slow=76,SNR=72 | | | | | | |
| VES | Vestal, Richgr | 42.19 | 316 | P | P | 11 39 34.7 | +2.5 |
| | baz=122 | | | | | | |
| ELK | Elko | 42.60 | 324 | P | P | 11 39 36.0 | +0.2 |
| | comp=Z,2.3nm,0.8s,baz=118,slow=3.9,SNR=9.6 | | | | | | |
| BDFB | Brasilia | 42.72 | 124 | P | P | 11 39 35.7 | -1.2 |
| | comp=Z,2.4nm,0.6s,baz=290,slow=10,SNR=3.1 | | | | | | |
| BDFB | | | | PcP | PcP | 11 41 28.5 | -0.1 |
| | comp=Z,1.7nm,0.4s,baz=11,slow=12,SNR=1.8 | | | | | | |
| ULM | Lac du Bonnet | 42.81 | 348 | P | P | 11 39 34.8 | -2.2 |
| | comp=Z,15nm,0.9s,baz=172,slow=8.1,SNR=9.5 | | | | | | |
| ULM | | | | PcP | PcP | 11 41 27.7 | -0.4 |
| | comp=Z,3.3nm,0.6s,baz=138,slow=6.0,SNR=2.5 | | | | | | |
| ULM | Lac du Bonnet | 42.81 | 348 | P | P | 11 39 35.8 | -1.3 |
| ULM | | | | IAmb | IAmb | 11 39 46.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| NV11 | Mina Array Sit | 42.98 | 319 | P | P | 11 39 41.0 | +2.1 |
| NV11 | | | | IAmb | IAmb | 11 39 47.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| NVAR | Mina Array Bea | 43.08 | 319 | P | P | 11 39 41.4 | +1.7 |
| | comp=Z,8.3nm,0.9s,baz=127,slow=7.3,SNR=44 | | | | | | |
| NVAR | | | | PcP | PcP | 11 41 30.3 | +0.7 |
| | comp=Z,1.6nm,0.7s,baz=139,slow=4.1,SNR=5.6 | | | | | | |
| NVAR | Mina Array Bea | 43.08 | 319 | P | P | 11 39 41.0 | +1.4 |
| CPUP | Villa Florida | 43.08 | 144 | P | P | 11 39 38.1 | -1.4 |
| | comp=Z,1.6nm,0.5s,baz=337,slow=9.8,SNR=5.9 | | | | | | |
| CPUP | Villa Florida | 43.08 | 144 | P | P | 11 39 39.6 | +0.1 |
| RPN | Rapa Nui | 43.29 | 214 | LR | LR | 11 53 26.5 | |
| | comp=Z,148nm,19.7s,baz=140,slow=30 | | | | | | |
| BMN | Battle Mountai | 43.58 | 322 | P | P | 11 39 45.3 | +1.7 |
| BMN | | | | IAmb | IAmb | 11 39 51.6 | |
| | comp=Z,15nm,1.0s | | | | | | |
| IPMB | Ipameri, GO | 43.83 | 127 | *eP* | P | 11 39 45.8 | 0.0 |
| HLID | Hailey | 44.01 | 328 | P | P | 11 39 48.9 | +1.9 |
| | baz=133 | | | | | | |
| PTGB | Pitanga | 45.19 | 138 | *eP* | P | 11 39 55.7 | -0.9 |
| BB19B | Bebedouro | 45.36 | 131 | *eP* | P | 11 39 56.6 | -1.4 |
| JANB | Januaria | 45.52 | 121 | *eP* | P | 11 39 58.1 | -1.2 |
| ITQB | Itaqui | 46.05 | 147 | P | P | 11 40 03.2 | +0.1 |
| ITQB | Itaqui | 46.05 | 147 | *eP* | P | 11 40 03.3 | +0.1 |
| ITAB | Concordia | 46.89 | 140 | *eP* | P | 11 40 09.3 | -0.5 |
| YBH | Yreka Blue Hor | 47.72 | 320 | P | P | 11 40 15.9 | -0.4 |
| | comp=Z,5.3nm,1.1s,baz=62,slow=7.3,SNR=3.8 | | | | | | |
| SCHQ | Schefferville | 48.10 | 13 | P | P | 11 40 17.6 | -1.3 |
| | comp=Z,2.2nm,0.6s,baz=209,slow=6.4,SNR=7.6 | | | | | | |
| SCHQ | | | | LR | LR | 12 00 33.5 | |
| | comp=Z,69nm,21.2s,baz=152,slow=36 | | | | | | |
| FFC | Flin Flon | 48.34 | 346 | P | P | 11 40 20.8 | +0.1 |
| FFC | | | | IAmb | IAmb | 11 40 32.9 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| PLTB | Pedras Altas | 49.31 | 146 | P | P | 11 40 28.5 | 0.0 |
| PLTB | Pedras Altas | 49.31 | 146 | *eP* | P | 11 40 28.3 | -0.2 |
| NBIT | Itapeh - BA | 49.67 | 118 | *eP* | P | 11 40 31.3 | -0.2 |
| CMC01 | Camacan, BA | 49.78 | 118 | *eP* | P | 11 40 31.9 | -0.4 |
| PLCA | Paso Flores | 50.49 | 167 | P | P | 11 40 37.4 | 0.0 |
| | comp=Z,9.4nm,0.6s,baz=338,slow=8.2,SNR=43 | | | | | | |
| PLCA | Paso Flores | 50.49 | 167 | *eP* | P | 11 40 37.8 | +0.5 |
| ALF01 | Guarapari-ES | 51.21 | 125 | *eP* | P | 11 40 42.9 | -0.1 |
| YKA | Yellowknife Ar | 58.37 | 344 | P | P | 11 41 33.3 | -1.0 |
| | comp=Z,4.2nm,0.8s,baz=140,slow=6.9,SNR=58 | | | | | | |
| YKA | | | | PcP | PcP | 11 42 25.4 | +0.4 |
| | comp=Z,1.4nm,0.7s,baz=140,slow=4.2,SNR=7.6 | | | | | | |
| YKA | | | | LR | LR | 12 07 41.0 | |
| | comp=Z,65nm,19.3s,baz=328,slow=37 | | | | | | |
| YKA | Yellowknife Ar | 58.37 | 344 | P | P | 11 41 35.8 | +1.5 |
| RES | Resolute Bay | 66.43 | 357 | LR | LR | 12 12 19.9 | |
| | comp=Z,95nm,18.2s,baz=86,slow=37 | | | | | | |
| RES | Resolute Bay | 66.43 | 357 | P | P | 11 42 28.0 | -0.1 |
| RES | | | | IAmb | IAmb | 11 42 39.3 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| DAWY | Dawson | 67.83 | 337 | P | P | 11 42 37.8 | +0.6 |
| DAWY | | | | IAmb | IAmb | 11 42 47.1 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| DAWY | Dawson | 67.83 | 337 | P | P | 11 42 38.0 | +0.8 |
| | baz=118 | | | | | | |
| EPYK | Eagle Plains | 68.01 | 340 | P | P | 11 42 38.2 | -0.1 |
| | baz=122 | | | | | | |
| INK | Inuvik | 68.05 | 342 | P | P | 11 42 38.5 | +0.1 |
| INK | Inuvik | 68.05 | 342 | P | P | 11 42 38.8 | +0.4 |
| | baz=125 | | | | | | |
| I29M | Ogilvie Camp, | 68.05 | 338 | P | P | 11 42 39.1 | +0.5 |
| | baz=120 | | | | | | |
| A36M | Sachs Harbour | 68.27 | 347 | P | P | 11 42 39.7 | 0.0 |
| A36M | Sachs Harbour | 68.27 | 347 | P | P | 11 42 38.9 | -0.9 |
| | baz=135 | | | | | | |
| L27K | Beaver Creek, | 68.35 | 335 | P | P | 11 42 40.8 | +0.2 |
| L27K | | | | IAmb | IAmb | 11 42 47.7 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| L27K | Beaver Creek, | 68.35 | 335 | P | P | 11 42 41.6 | +1.1 |
| | baz=115 | | | | | | |
| EGAK | Eagle | 68.84 | 337 | P | P | 11 42 43.9 | +0.4 |
| | baz=117 | | | | | | |
| SUMG | Summit | 69.50 | 13 | *i* P | P | 11 42 47.0 | -0.9 |
| SUMG | Summit | 69.50 | 13 | P | P | 11 42 47.3 | -0.5 |
| J26L | Joseph Creek | 69.66 | 336 | P | P | 11 42 50.2 | +1.6 |
| | baz=114 | | | | | | |
| ILAR | Eielson Array | 71.08 | 336 | P | P | 11 42 57.4 | +0.1 |
| | comp=Z,2.1nm,0.8s,baz=115,slow=4.7,SNR=20 | | | | | | |
| ILAR | Eielson Array | 71.08 | 336 | P | P | 11 42 58.0 | +0.7 |
| H24K | Nondor Dome | 71.85 | 337 | P | P | 11 43 02.6 | +0.6 |
| | baz=110 | | | | | | |
| I23K | Minto, Yukon-K | 72.20 | 336 | P | P | 11 43 04.8 | +0.9 |
| | baz=109 | | | | | | |
| COLD | Coldfoot | 73.20 | 338 | P | P | 11 43 11.4 | +1.6 |
| | baz=109 | | | | | | |
| L20K | Farewell, AK | 73.38 | 333 | P | P | 11 43 11.0 | 0.0 |
| | baz=104 | | | | | | |
| ESDC | Sonseca Array | 76.71 | 51 | P | P | 11 43 30.5 | -0.3 |
| | comp=Z,3.8nm,1.0s,baz=276,slow=6.3,SNR=14 | | | | | | |
| ESDC | Sonseca Array | 76.71 | 51 | P | P | 11 43 31.3 | +0.5 |
| ESDC | | | | IAmb | IAmb | 11 43 32.0 | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| EKA | Eskdalemuir Ar | 77.65 | 35 | P | P | 11 43 34.0 | -1.6 |
| | comp=Z,3.0nm,0.7s,baz=250,slow=5.0,SNR=4.3 | | | | | | |
| TIC | Toumodi | 77.88 | 85 | *eP* | P | 11 43 37.5 | -0.2 |
| LIC | Lamto | 77.92 | 85 | *eP* | P | 11 43 38.0 | 0.0 |
| | comp=Z,54nm,0.7s | | | | | | |
| KOWA | Kowa | 77.97 | 77 | P | P | 11 43 38.7 | +0.5 |
| KOWA | | | | IAmb | IAmb | 11 43 45.0 | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| KIC | Kosan Boka | 78.19 | 85 | *eP* | P | 11 43 39.5 | 0.0 |
| | comp=Z,19nm,0.6s | | | | | | |
| TORD | Torodi Ar. Bea | 83.63 | 78 | P | P | 11 44 07.1 | -1.4 |
| | comp=Z,1.7nm,0.8s,baz=284,slow=5.6,SNR=7.6 | | | | | | |
| NB2 | NORSAR Subarra | 84.98 | 29 | P | P | 11 44 14.0 | -0.5 |
| | comp=Z,1.6nm,0.8s,baz=277,slow=5.1 | | | | | | |
| NOA | NORSAR Array B | 84.98 | 29 | P | P | 11 44 13.4 | -1.1 |
| | comp=Z,2.2nm,0.9s,baz=283,slow=4.8,SNR=4.1 | | | | | | |
| DAVA | Daruels | 86.22 | 43 | *i* P | P | 11 44 21.6 | +0.5 |
| | comp=Z,14nm,1.0s | | | | | | |
| HFS | Hagfors | 86.34 | 30 | P | P | 11 44 20.1 | -1.1 |
| | comp=Z,2.8nm,0.6s,baz=248,slow=1.6,SNR=12 | | | | | | |
| RETA | Reutte | 86.78 | 43 | *i* P | P | 11 44 24.1 | +0.4 |
| | comp=Z,8.1nm,1.0s | | | | | | |
| FETA | Feichten | 86.83 | 43 | *eP* | P | 11 44 24.5 | +0.4 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| CLL | Collm | 87.57 | 39 | *eP* | P | 11 44 27.0 | -0.4 |
| CLL | | | | *i* x | x | 11 44 33.0 | |
| ABTA | Abfaltersbach | 88.08 | 43 | *eP* | P | 11 44 30.4 | +0.4 |
| | comp=Z,11nm,1.1s | | | | | | |
| GERES | GERESS Array B | 88.48 | 41 | P | P | 11 44 31.6 | -0.3 |
| | comp=Z,1.5nm,0.8s,baz=256,slow=5.4,SNR=5.2 | | | | | | |
| ARCES | ARCESS Array B | 88.65 | 19 | P | P | 11 44 31.1 | -1.1 |
| | comp=Z,5.6nm,1.1s,baz=342,slow=7.6,SNR=4.4 | | | | | | |
| ARCES | ARCESS Array B | 88.65 | 19 | P | P | 11 44 31.1 | -1.1 |
| BILL | Bilibino | 89.49 | 339 | P | P | 11 44 36.2 | +0.1 |
| SOKA | Soboth | 89.80 | 43 | *i* P | P | 11 44 37.7 | -0.4 |
| | comp=Z,11nm,1.5s | | | | | | |
| CONA | Conrad Observa | 90.08 | 42 | *i* P | P | 11 44 39.0 | -0.4 |
| | comp=Z,3.7nm,0.9s | | | | | | |
| FINES | FINESS Array B | 91.81 | 27 | P | P | 11 44 46.1 | -1.0 |
| | comp=Z,2.3nm,0.9s,baz=204,slow=9.0,SNR=1.8 | | | | | | |
| FINES | FINESS Array B | 91.81 | 27 | P | P | 11 44 47.0 | 0.0 |
| TIXI | Tiksi | 97.15 | 350 | P | P | 11 45 10.2 | -1.1 |
| | comp=Z,2.8nm,0.7s,baz=304,slow=6.2,SNR=15 | | | | | | |
| TIXI | Tiksi | 97.15 | 350 | P | P | 11 45 10.5 | -0.8 |
| H11S1 | WAKE ISLAND Hyl | 105.58 | 292 | T | T | 13 43 52.8 | |
| | baz=76,slow=75,SNR=6.7 | | | | | | |
| H11S2 | WAKE ISLAND Hyl | 105.58 | 292 | T | T | 13 43 55.5 | |
| | baz=76,slow=75,SNR=7.6 | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 105.60 | 292 | T | T | 13 43 55.9 | |
| | baz=76,slow=75,SNR=8.2 | | | | | | |
| ZALV | Zalesovo Beam | 117.01 | 8 | PKP | PKPdf | 11 50 23.0 | -1.1 |
| | comp=Z,0.4nm,0.3s,baz=302,slow=8.3,SNR=1.8 | | | | | | |
| SONM | Songino Array | 123.18 | 352 | PKP | PKPdf | 11 50 35.2 | -1.2 |
| | comp=Z,1.8nm,0.6s,baz=335,slow=1.6,SNR=13 | | | | | | |
| MKAR | Makanchi Array | 123.53 | 12 | PKP | PKPdf | 11 50 35.6 | -1.4 |
| | comp=Z,0.2nm,0.6s,baz=32,slow=3.4,SNR=2.5 | | | | | | |
| KSRS | Korea Array | 125.53 | 329 | PKP | PKPdf | 11 50 41.2 | +0.3 |
| | comp=Z,4.5nm,0.8s,baz=1.5,slow=1.3,SNR=12 | | | | | | |
| GTA | Gaotai | 132.20 | 356 | ⇑PKP | PKPdf | 11 50 54.8 | +0.9 |
| GTA | | | | pPKP | sPKPdf | 11 51 00.9 | -0.6 |
| ASAR | Alice Springs | 141.02 | 243 | PKhKP | PKPpre | 11 51 03.6 | |
| | comp=Z,1.6nm,0.7s,baz=115,slow=3.9,SNR=13 | | | | | | |
| ASAR | | | | PKP | PKPdf | 11 51 10.2 | -0.3 |
| | comp=Z,2.5nm,0.7s,baz=104,slow=1.8,SNR=19 | | | | | | |
| WRA | Warramunga Arr | 141.53 | 249 | PKhKP | PKPpre | 11 51 05.0 | |
| | comp=Z,1.1nm,0.9s,baz=104,slow=3.2,SNR=9.6 | | | | | | |
| WRA | | | | PKP | PKPdf | 11 51 11.2 | -0.2 |
| | comp=Z,2.8nm,0.8s,baz=96,slow=2.1,SNR=18 | | | | | | |
| WRA | Warramunga Arr | 141.53 | 249 | | PKPdf | 11 51 10.9 | -0.6 |
| PZH | PanZhiHua | 144.78 | 352 | PKP | PKPab | 11 51 15.6 | -0.4 |
| CMAR | Chiang Mai Arr | 153.06 | 354 | PKP | PKPdf | 11 51 31.2 | +0.7 |
| | comp=Z,1.8nm,0.8s,baz=307,slow=2.4,SNR=12 | | | | | | |
| CMAR | | | | PKPbc | sPKPdf | 11 51 36.9 | -1.3 |
| | comp=Z,4.7nm,0.8s,baz=343,slow=3.0,SNR=17 | | | | | | |
| CMAR | Chiang Mai Arr | 153.06 | 354 | | PKPdf | 11 51 29.8 | -0.8 |
| CMAR | | | | PKPbc | PKPbc | 11 51 37.7 | -0.2 |
| CMAR | | | | PKPab | PKPab | 11 51 49.5 | +0.4 |

*IDC* ***20*** *11:48:54.9±1.5,29°.74S×71°.56W,h0km,mb4.0/2, mb1 3.9/6,mb1mx3.7/29,mbtmp3.8/6,ML3.3/3,Error ellipse: s-maj=44.7km s-min=27.5km az=92.0*

**ISC 20 11:49:02.2±1.6,29°.6S±0°.1×71°.4W±0°.2,h50km,n12, σ1°26/8,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LVC | Limon Verde | 7.31 | 18 | Pn | Pn | 11 50 45.1 | -1.6 |
| | 0.2nm,0.3s,baz=238,slow=15,SNR=1.9 | | | | | | |
| LVC | | | | Sn | Sn | 11 52 10.0 | +1.5 |
| | 0.3nm,0.3s,baz=204,slow=7.4,SNR=1.6 | | | | | | |
| H03N1 | Juan Fernandez | 7.48 | 237 | T | T | 11 58 20.2 | |
| | baz=67,slow=71,SNR=101 | | | | | | |
| H03N2 | Juan Fernandez | 7.50 | 237 | T | T | 11 58 01.2 | |
| | baz=67,slow=71,SNR=102 | | | | | | |
| H03N3 | Juan Fernandez | 7.50 | 237 | T | T | 11 58 06.9 | |
| | baz=67,slow=71,SNR=96 | | | | | | |
| PLCA | Paso Flores | 11.12 | 177 | Pn | Pn | 11 51 32.4 | -6.2 |
| | 0.1nm,0.3s,baz=358,slow=12,SNR=3.8 | | | | | | |
| CPUP | Villa Florida | 12.84 | 79 | Pn | Pn | 11 52 01.2 | -0.8 |
| | 1.1nm,0.3s,baz=167,slow=1.0,SNR=4.5 | | | | | | |
| LPAZ | La Paz | 13.58 | 13 | Pn | Pn | 11 52 08.1 | -4.7 |
| | 0.1nm,0.3s,baz=275,slow=9.2,SNR=4.7 | | | | | | |
| SIV | San Ignacio | 16.53 | 37 | Pn | Pn | 11 52 51.5 | +0.7 |
| | 0.1nm,0.3s,baz=208,slow=15,SNR=6.4 | | | | | | |
| ATAH | Atahualpa | 23.31 | 342 | P | P | 11 54 06.0 | -0.4 |
| | 4.2nm,0.6s,baz=303,slow=20,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 82.19 | 70 | P | P | 12 01 19.7 | +1.4 |
| | 1.0nm,0.8s,baz=256,slow=4.3,SNR=3.9 | | | | | | |
| ZALV | Zalesovo Beam | 150.16 | 29 | PKPbc | PKiKP | 12 08 47.9 | 0.0 |
| | 2.5nm,0.6s,baz=296,slow=3.3,SNR=14 | | | | | | |
| MKAR | Makanchi Array | 153.30 | 43 | PKPbc | PKPbc | 12 08 54.6 | +0.1 |
| | 0.3nm,0.8s,baz=302,slow=0.6,SNR=2.5 | | | | | | |

*IDC* ***20*** *11:54:58.9±0.8,27°.94N×127°.91E,h0km,mb3.6/9, mb1 3.8/12,mb1mx3.7/51,mbtmp3.7/12,ML3.5/2,MS3.4/17, Ms1 3.4/17,ms1mx3.1/82,Error ellipse: s-maj=31.0km s-min=12.6km az=75.0*

*NIED* ***20*** *11:55:00.1,28°.13N×128°.07E,h14km,MW4.2,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr=0.22; Mθθ0.88; Mϕϕ-0.65; Mrθ-1.03; Mθϕ1.94; Mϕr0.08; Fault plane solution: M₀2.33000×10¹⁵ NP1: ϕs100.00000°,δ89.00000°,λ-27.00000°. NP2: ϕs191.00000°,δ63.00000°,λ-179.00000°.*

*JMA* ***20*** *11:55:00.1±0.1,28°.13N×128°.07E,h15km±2km,M4.2 JMA Felt I J1.*

**ISC 20 11:55:02.4±1.5,28°.05N±0°.04×128°.17E±0°.05,h24km±12km, n42,σ0°92/39,mb3.5/9,MS3.3/15,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JTK | Tokunoshima | 0.74 | 111 | P | Pb | 11 55 16.1 | -0.6 |
| JTK | | | | eS | Sn | 11 55 27.5 | -0.5 |
| JOKE | Okinoerabujima | 0.78 | 152 | P | Pb | 11 55 16.7 | -0.6 |
| JOKE | | | | eS | Sn | 11 55 28.3 | -0.5 |
| JAMN | Amaminishikomi | 0.91 | 78 | P | Pn | 11 55 18.5 | -1.2 |
| JAMN | | | | eS | Sn | 11 55 32.0 | -0.1 |
| JIH | Iheya | 1.03 | 190 | P | Pn | 11 55 20.1 | -1.3 |
| JIH | | | | eS | Sn | 11 55 34.5 | -0.6 |
| JYRO | Yoronjima | 1.06 | 166 | P | Pn | 11 55 21.1 | -0.6 |
| JYRO | | | | eS | Sb | 11 55 36.5 | +1.1 |
| JOW | Kunigami | 1.22 | 175 | Pn | Pn | 11 55 23.3 | -0.7 |
| | 224nm,0.3s,baz=66,slow=16,SNR=96 | | | | | | |
| JOW | | | | Sn | Sn | 11 55 39.8 | 0.0 |
| | 83nm,0.3s,baz=89,slow=26,SNR=20 | | | | | | |
| JOW | Kunigami | 1.22 | 175 | P | Pn | 11 55 23.7 | -0.3 |
| JOW | | | | eS | Sb | 11 55 40.5 | +0.3 |
| JAM | Amami Oshima | 1.32 | 74 | P | Pn | 11 55 24.9 | -0.4 |
| JAM | | | | eS | Sb | 11 55 42.7 | +0.3 |
| JTAJ | Takarajima | 1.43 | 40 | P | Pn | 11 55 25.8 | -1.0 |
| JTAJ | | | | eS | Sn | 11 55 43.9 | -0.9 |
| JNTH | Nagotoyohara | 1.54 | 185 | P | Pn | 11 55 28.1 | -0.2 |
| JNTH | | | | eS | Sn | 11 55 48.4 | +0.9 |
| JZK | Kikaishima | 1.61 | 80 | P | Pb | 11 55 32.1 | +0.5 |
| JAGN | Aguni-jima | 1.68 | 210 | P | Pn | 11 55 29.9 | -0.4 |
| JJT3 | Tamagusuku3 | 1.93 | 190 | P | Pn | 11 55 35.0 | +1.2 |
| JKE | Kume jima 2 | 2.12 | 216 | P | Pn | 11 55 35.3 | -1.0 |
| JYAK | Yakushimahirau | 2.99 | 43 | P | Pn | 11 55 48.6 | +0.3 |
| JKDJ | Kitadaitoujima | 3.49 | 126 | P | Pn | 11 55 55.8 | +0.5 |
| JKDJ | | | | eS | Sn | 11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MORC** | **Moravsky Berou** | **1.03 246** | ⇑Pn | | **Pb** | **12 09 48.5** | **0.0** |
| **MORC** | **Moravsky Berou** | **1.03 246** | ⇓Sn | | **Sb** | **12 10 03.8** | **+1.1** |
| **MORC** | **Moravsky Berou** | **1.03 246** | *e*PG | | **Pg** | **12 09 48.3** | **+0.7** |
| MORC | | | *e*SG | | **Sg** | **12 10 01.4** | **+0.5** |
| **NIE** | **Niedzica** | **1.15 132** | *e*Pg | | **Pb** | **12 09 51.0** | **+0.3** |
| NIE | | | *e*Sg | | **Sn** | **12 10 07.8** | **+0.1** |
| **KRLC** | **Kraliky** | **1.43 266** | *e*PG | | **Pn** | **12 09 54.9** | **-0.2** |
| KRLC | | | *e*SG | | **Sg** | **12 10 13.6** | **-0.2** |
| | comp=Z,29nm,0.5s | | | | | | |
| **JAVC** | **Velka Javorina** | **1.59 213** | *e*PN | | **Pb** | **12 09 58.2** | **0.0** |
| **STHS** | **Stebnicka Huta** | **1.65 117** | *e*PN | | **Pn** | **12 09 59.2** | **+1.0** |
| **VYHS** | **Vyhne** | **1.71 184** | *e*PN | | **Pn** | **12 09 59.1** | **+0.2** |
| VYHS | | | *e*SN | | **Sg** | **12 10 23.2** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **1.72 276** | *e*PG | | **Pn** | **12 09 59.7** | **+0.6** |
| DPC | | | *e*SG | | **Sg** | **12 10 23.5** | **+0.3** |
| | comp=Z,33nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **1.79 241** | ⇓Pn | | **Pb** | **12 10 01.6** | **-0.1** |
| **VRAC** | **Vranov** | **1.79 241** | ⇑Sn | | **Sn** | **12 10 23.6** | **0.0** |
| **VRAC** | **Vranov** | **1.79 241** | Pg | | **Pb** | **12 10 01.8** | **+0.2** |
| | 6.8nm,0.3s,baz=56,slow=13,SNR=36 | | | | | | |
| VRAC | | | Lg | | Lg | 12 10 26.5 | |
| | 6.2nm,0.3s,baz=151,slow=21,SNR=16 | | | | | | |
| **VRAC** | **Vranov** | **1.79 241** | *e*PN | | **Pn** | **12 10 01.1** | **+1.0** |
| VRAC | | | *e*SG | | **Sg** | **12 10 25.6** | **+0.1** |
| **KSP** | **Ksiaz** | **1.84 292** | *e*Pg | | **Pg** | **12 10 03.6** | **+0.5** |
| KSP | | | *e*Sg | | **Sg** | **12 10 28.6** | **+1.6** |
| **CHVC** | **Chvalec** | **1.92 283** | *e*PG | | **Pn** | **12 10 02.4** | **+0.5** |
| **UPC** | **Upice** | **1.94 280** | *e*PG | | **Pb** | **12 10 04.1** | **+0.1** |
| UPC | | | *e*SG | | **Sg** | **12 10 31.7** | **+1.7** |
| | comp=Z,12nm,0.4s | | | | | | |
| **KECS** | **Kecovo** | **1.97 150** | *e*PN | | **Pg** | **12 10 05.5** | **-0.2** |
| **KRUC** | **Moravsky** | **2.04 237** | *e*PN | | **Pn** | **12 10 04.4** | **+1.0** |
| KRUC | | | *e*SG | | **Sg** | **12 10 33.2** | **-0.1** |
| **CRVS** | **Cervenica-Dubn** | **2.06 128** | *e*PN | | **Pb** | **12 10 06.2** | **0.0** |
| **MODS** | **Modra-Piesok** | **2.15 212** | *e* | | Pg | 12 10 14.6 | +5.6 |
| **PSZ** | **Piszkesteto** | **2.36 165** | ⇑Pn | | **Pg** | **12 10 13.1** | **0.0** |
| **PRU** | **Pruhonice** | **2.88 268** | *e*SG | | **Sg** | **12 10 58.5** | **-1.7** |
| **BRG** | **Berggiesshubel** | **3.29 284** | Pg | | **Pg** | **12 10 30.0** | **-1.0** |
| BRG | | | Sg | | **Sg** | **12 11 14.7** | **+1.1** |
| BRG | | | Amp | | | 12 11 22.8 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.35 247** | *e*PG | | **Pg** | **12 10 30.9** | **-1.2** |
| CKRC | | | *e*SG | | **Sg** | **12 11 12.9** | **-2.6** |
| | comp=Z,11nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.68 255** | *e*PN | | **Pn** | **12 10 26.6** | **+0.6** |
| KHC | | | *e*PG | | **Pb** | **12 10 33.3** | **-0.4** |
| KHC | | | *e*SG | | **Sg** | **12 11 25.8** | **-0.2** |
| | comp=Z,11nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **3.71 251** | Pn | | **Pn** | **12 10 27.9** | **+1.5** |
| | comp=Z,0.4nm,0.3s,baz=166,slow=28,SNR=4.0 | | | | | | |
| GERES | | | Pg | | **Pb** | **12 10 36.9** | **+2.6** |
| | comp=Z,0.7nm,0.3s,baz=61,slow=18,SNR=3.4 | | | | | | |
| GERES | | | Lg | | Lg | 12 11 27.7 | |
| | comp=Z,2.1nm,0.3s,baz=61,slow=31,SNR=10.0 | | | | | | |
| **BURAR** | **Bucovina Array** | **4.85 120** | ⇓Pn | | **Pn** | **12 10 42.8** | **+0.6** |
| **AKASG** | **Malin Array Be** | **6.55 82** | Pn | | Pn | 12 10 58.9 | -6.5 |
| | comp=Z,0.3nm,0.3s,baz=276,slow=14,SNR=1.3 | | | | | | |
| AKASG | | | Lg | | Lg | 12 12 49.5 | |
| | comp=Z,0.6nm,0.3s,baz=262,slow=25,SNR=2.8 | | | | | | |
| **HFS** | **Hagfors** | **10.40 345** | Pn | | **Pn** | **12 11 58.3** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=154,slow=14,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **11.94 17** | Pn | | **Pn** | **12 12 16.2** | **-2.9** |
| | comp=Z,0.3nm,0.3s,baz=198,slow=12,SNR=12 | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.65 7** | Pn | | **P** | **12 13 57.1** | **-0.7** |
| | comp=Z,3.5nm,0.9s,baz=184,slow=11,SNR=2.2 | | | | | | |

*IDC **20** 12:14:16.9±1.9, 7.°02S×129.°86E, h111km±16km, mb3.6/2, mb1 3.5/6, mb1mx3.3/35, mbtmp3.9/6, Error ellipse: s-maj=27.8km s-min=14.4km az=115.0*

**ISC 20 12:14:16.5±0.8, 7.°08S±0.°06×129.°84E±0.°08, h104km, n15, σ3°07/18, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.70** | **122** | P | | P | Pn | 12 14 51.5 | +6.0 |
| **FAKI** | **Fak Fak** | **4.78** | **30** | P | | **P** | **Pn** | **12 15 27.8** | **+1.5** |
| **DRS** | **Darwin Rock St** | **5.42** | **169** | P | | **P** | **Pn** | **12 15 39.0** | **+4.1** |
| **MTN** | **Manton Dam** | **5.87** | **168** | P | | **P** | **Pn** | **12 15 44.7** | **+3.7** |
| **SOEI** | **Soe** | **6.12** | **244** | P | | **P** | **Pn** | **12 15 47.8** | **+3.2** |
| **KDU** | **Kakadu** | **6.14** | **155** | P | | **P** | **Pn** | **12 15 47.5** | **+2.7** |
| **SIJI** | **Sorong** | **6.33** | **13** | P | | **P** | **Pn** | **12 15 48.8** | **+1.4** |
| | 3.2nm,0.3s,baz=207,slow=22,SNR=14 | | | | | | | | |
| SIJI | | | | S | | | **Sn** | **12 16 55.0** | **-3.3** |
| | 3.0nm,0.3s,baz=257,slow=23,SNR=6.8 | | | | | | | | |
| **BATI** | **Baumata** | **6.85** | **243** | P | | **P** | **Pn** | **12 15 57.5** | **+3.0** |
| | 21nm,0.3s,baz=106,slow=4.8,SNR=12 | | | | | | | | |
| BATI | | | | S | | | **Sn** | **12 17 10.8** | **-0.2** |
| | 8.5nm,0.3s,baz=278,slow=19,SNR=8.2 | | | | | | | | |
| **KNRA** | **Kununurra** | **8.61** | **187** | P | | **P** | **Pn** | **12 16 19.5** | **+1.2** |
| **PLAI** | **Plampang** | **12.07** | **261** | P | | **P** | **Pn** | **12 17 05.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **13.51** | **162** | P | | **P** | **Pn** | **12 17 22.7** | **-1.3** |
| | 0.3nm,0.3s,baz=344,slow=12,SNR=20 | | | | | | | | |
| WRA | | | | S | | | Sn | 12 19 42.9 | -10 |
| | 0.6nm,0.3s,baz=329,slow=22,SNR=8.7 | | | | | | | | |
| **COEN** | **Coen** | **14.78** | **119** | P | | **P** | **Pn** | **12 17 41.9** | **+1.5** |
| **ASAR** | **Alice Springs** | **16.95** | **167** | P | | **P** | **P** | **12 18 08.7** | **+1.1** |
| | 0.1nm,0.3s,baz=344,slow=10,SNR=14 | | | | | | | | |
| ASAR | | | | S | | | **Sn** | **12 21 08.8** | **-7.0** |
| | 0.3nm,0.3s,baz=359,slow=27,SNR=7.1 | | | | | | | | |
| ASAR | | | | ScP | | | **ScP** | **12 26 10.1** | **-3.5** |
| | 0.1nm,0.3s,baz=3.4,slow=1.5,SNR=5.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.21** | **327** | P | | | **P** | **12 25 06.2** | **+0.3** |
| | 0.9nm,0.4s,baz=117,slow=7.4,SNR=31 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.59** | **334** | P | | | **P** | **12 25 25.2** | **-1.1** |
| | 0.5nm,0.6s,baz=144,slow=4.9,SNR=2.3 | | | | | | | | |

*IDC **20** 12:31:00.4±0.8, 55.°79S×123.°47W, h0km, mb4.2/6, mb1 4.4/6, mb1mx4.1/36, mbtmp4.2/6, MS4.3/24, Ms1 4.3/24, ms1mx4.1/51, Error ellipse: s-maj=40.4km s-min=23.2km az=153.0*

*NEIC **20** 12:31:03.2±0.9, 56.2S±0.2×123.0W±0.3, h14km±4km, mb4.7/13, Error ellipse: s-maj=25.0km s-min=21.4km az=164.0*

*GCMT **20** 12:31:06.2±0.2, 55.96S±0.01×123.38W±0.02, h22km±1km, MW5.2/115, Moment Tensor Solution. s55,c84; s115,c176; Duration: 1§0 Moment tensor: Scale 10[16] Nm; Mrr=0.32±.21; Mθθ3.78±.21; Mϕϕ-3.46±.17; Mrθ-1.91±.34; Mθϕ6.28±.14; Mϕr-1.93±.31; Best double couple: M=7.69200×10[16] NP1:ϕs286.00000°, δ73.00000°, λ8.00000°. NP2:ϕs194.00000°, δ83.00000°, λ163.00000°. Principal axes: T 8.2160, Plg17.0000°, Azm249.0000°; N -1.0440, Plg72.0000°, Azm351.0000°; P -7.1690, Plg6.0000°, Azm241.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 12:31:03.0±0.6, 56.0S±0.1×123.1W±0.1, h12km, n65, σ1§67/31, mb4.5/11, MS4.3/26, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMSA** | **Palmer Station** | **29.41** | **132** | LR | | LR | LR | 12 45 34.3 | |
| | comp=Z,813nm,21.9s,baz=303,slow=29 | | | | | | | | |
| **RPN** | **Rapa Nui** | **30.46** | **25** | LR | | LR | LR | 12 46 27.6 | |
| | comp=Z,378nm,19.2s,baz=186,slow=30 | | | | | | | | |
| **VNDA** | **Vanda** | **33.01** | **203** | LR | | LR | LR | 12 48 27.8 | |
| | comp=Z,272nm,18.5s,baz=88,slow=32 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.23** | **180** | P | | | **P** | **12 37 50.0** | **+1.7** |
| | 2.9nm,0.9s,baz=125,slow=5.9,SNR=5.4 | | | | | | | | |
| QSPA | | | | LR | | LR | LR | 12 49 55.0 | |
| | comp=Z,379nm,19.7s,baz=88,slow=33 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.23** | **180** | P | | | **P** | **12 37 46.5** | **-1.8** |
| QSPA | | | | IAmb | | | IAmb | 12 37 51.4 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **PLCA** | **Paso Flores** | **37.11** | **88** | LR | | LR | LR | 12 50 19.3 | |
| | comp=Z,288nm,19.6s,baz=226,slow=31 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **37.42** | **73** | T | | T | T | 13 18 09.6 | |
| | SNR=36 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **37.43** | **73** | T | | T | T | 13 18 13.9 | |
| | SNR=40 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **37.44** | **73** | T | | T | T | 13 18 12.6 | |
| | SNR=46 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **37.72** | **72** | T | | T | T | 13 18 22.6 | |
| | baz=221,slow=72,SNR=40 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **37.72** | **72** | T | | T | T | 13 18 28.6 | |
| | baz=221,slow=72,SNR=622 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **37.73** | **72** | T | | T | T | 13 18 35.4 | |
| | baz=221,slow=72,SNR=33 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **42.60** | **258** | LR | | LR | LR | 12 52 21.7 | |
| | comp=Z,529nm,21.4s,baz=128,slow=30 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BKZ** | **Black Stump Fm** | **42.62** | **267** | | | **P** | | **12 39 00.1** | **+1.2** |
| **URZ** | **Urewera** | **42.90** | **268** | LR | | LR | | 12 52 24.7 | |
| | comp=Z,493nm,21.2s,baz=134,slow=30 | | | | | | | | |
| **PPT2** | **Papeete2** | **43.24** | **322** | *e*S | | **S** | | **12 45 28.4** | **-2.4** |
| | comp=Z,232nm,25.8s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | | 12 50 54.3 | |
| | comp=Z,1μm,25.8s,baz=152 | | | | | | | | |
| **PPT** | **Papeete** | **43.26** | **322** | LR | | LR | | 12 52 36.1 | |
| | comp=Z,406nm,18.2s,baz=169,slow=30 | | | | | | | | |
| **RAR** | **Rarotonga** | **44.09** | **307** | LR | | LR | | 12 51 58.4 | |
| | comp=Z,255nm,21.6s,baz=150,slow=29 | | | | | | | | |
| **VAH** | **Vaihoa** | **44.78** | **325** | *e*T | | T | | 13 26 25.2 | |
| | comp=Z,58nm,0.3s | | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **45.09** | **325** | *e*T | | T | | 13 26 48.3 | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| **SNAA** | **Sanae** | **46.00** | **158** | LR | | LR | | 13 00 09.8 | |
| | comp=Z,546nm,18.1s,baz=241,slow=38 | | | | | | | | |
| **SNAA** | **Sanae** | **46.00** | **158** | P | | | **P** | **12 39 24.4** | **-1.2** |
| SNAA | | | | IAmb | | | IAmb | 12 39 27.4 | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| **RAO** | **Raoul Island** | **46.76** | **281** | LR | | LR | | 12 55 14.8 | |
| | comp=Z,171nm,21.0s,baz=90,slow=31 | | | | | | | | |
| **OUZ** | **Omahuta** | **47.04** | **269** | P | | **P** | | **12 39 35.2** | **+1.2** |
| **TAOE** | **Nuku Hiva Isla** | **48.87** | **337** | *e*S | | **S** | | **12 46 51.1** | **-0.6** |
| | comp=Z,335nm,26.7s | | | | | | | | |
| TAOE | | | | *e*LR | | LR | | 12 53 34.5 | |
| | comp=Z,926nm,27.3s | | | | | | | | |
| **CPUP** | **Villa Florida** | **55.10** | **86** | P | | **P** | | **12 40 33.6** | **-1.1** |
| | comp=Z,0.9nm,0.3s,baz=165,slow=2.5,SNR=2.8 | | | | | | | | |
| **AFI** | **Afiamalu** | **56.08** | **298** | LR | | LR | | 12 59 37.7 | |
| | comp=Z,101nm,19.0s,baz=146,slow=31 | | | | | | | | |
| **MAW** | **Mawson** | **56.68** | **183** | LR | | LR | | 13 03 12.3 | |
| | comp=Z,488nm,20.9s,baz=172,slow=34 | | | | | | | | |
| **LPAZ** | **La Paz** | **57.27** | **69** | P | | **P** | | **12 40 51.0** | **0.0** |
| | comp=Z,3.9nm,1.1s,baz=138,slow=1.8,SNR=4.7 | | | | | | | | |
| **LPAZ** | **La Paz** | **57.27** | **69** | P | | **P** | | **12 40 50.7** | **-0.3** |
| LPAZ | | | | IAmb | | | IAmb | 12 41 00.4 | |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **61.10** | **273** | LR | | LR | | 13 02 34.3 | |
| | comp=Z,362nm,19.7s,baz=180,slow=31 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **61.10** | **273** | *e*LR | | LR | | 12 59 10.4 | |
| | comp=Z,638nm,25.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **67.04** | **247** | LR | | LR | | 13 04 50.6 | |
| | comp=Z,196nm,20.9s,baz=134,slow=30 | | | | | | | | |
| **CTA** | **Charters Tower** | **73.97** | **258** | LR | | LR | | 13 09 55.0 | |
| | comp=Z,155nm,20.8s,baz=96,slow=32 | | | | | | | | |
| **HNR** | **Honiara** | **74.95** | **275** | LR | | LR | | 13 09 01.9 | |
| | comp=Z,132nm,20.5s,baz=166,slow=30 | | | | | | | | |
| **ASAR** | **Alice Springs** | **77.65** | **246** | P | | **P** | | **12 42 57.5** | **-1.7** |
| | comp=Z,2.3nm,0.9s,baz=149,slow=5.0,SNR=14 | | | | | | | | |
| ASAR | | | | LR | | LR | | 13 12 36.4 | |
| | comp=Z,205nm,19.4s,baz=151,slow=32 | | | | | | | | |
| **ASAR** | **Alice Springs** | **77.65** | **246** | P | | **P** | | **12 42 58.4** | **-0.9** |
| **AS31** | **Alice Springs** | **77.65** | **246** | P | | **P** | | **12 43 00.2** | **+1.0** |
| **WR0** | **Warramunga Arr** | **80.38** | **249** | P | | **P** | | **12 43 13.3** | **-0.9** |
| WR0 | | | | IAmb | | IAmb | | 12 43 13.8 | |
| | comp=Z,8.3nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **80.49** | **249** | P | | **P** | | **12 43 13.8** | **-1.0** |
| WB2 | | | | IAmb | | IAmb | | 12 43 36.7 | |
| | comp=Z,9.9nm,1.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.50** | **249** | P | | **P** | | **12 43 12.9** | **-1.9** |
| | comp=Z,4.5nm,1.0s,baz=144,slow=4.9,SNR=25 | | | | | | | | |
| WRA | | | | LR | | LR | | 13 13 50.5 | |
| | comp=Z,179nm,21.1s,baz=164,slow=32 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.50** | **249** | P | | **P** | | **12 43 14.2** | **-0.6** |
| **WRAB** | **Tennant Creek** | **80.50** | **249** | IAmb | | IAmb | | 12 43 14.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| WRAB | | | | P | | **P** | | **12 43 14.1** | **-0.8** |
| **WB0** | **Warramunga Arr** | **80.62** | **249** | P | | **P** | | **12 43 14.8** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | | 12 43 15.0 | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **PMG** | **Port Moresby** | **82.15** | **265** | LR | | LR | | 13 15 51.0 | |
| | comp=Z,197nm,18.9s,baz=162,slow=33 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **86.50** | **243** | LR | | LR | | 13 16 43.4 | |
| | comp=Z,117nm,21.9s,baz=140,slow=32 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.55** | **17** | P | | **P** | | **12 43 45.4** | **-0.1** |
| | comp=Z,0.6nm,0.9s,baz=351,slow=15,SNR=3.1 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.55** | **17** | P | | **P** | | **12 43 46.2** | **+0.7** |
| **214A** | **Organ Pipe Nat** | **88.00** | **9** | P | | **P** | | **12 43 53.3** | **+0.9** |
| **TUC** | **Tucson** | **88.53** | **10** | P | | **P** | | **12 43 55.7** | **+0.6** |
| **JAY** | **Jayapura** | **91.42** | **263** | LR | | LR | | 13 22 41.2 | |
| | comp=Z,96nm,18.4s,baz=190,slow=34 | | | | | | | | |
| **BATI** | **Baumata** | **94.19** | **245** | LR | | LR | | 13 23 07.3 | |
| | comp=Z,242nm,19.6s,baz=159,slow=33 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **94.59** | **296** | T | | T | | 14 29 02.9 | |
| | baz=148,slow=75,SNR=25 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **94.60** | **296** | T | | T | | 14 29 03.7 | |
| | baz=148,slow=75,SNR=20 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **94.60** | **296** | T | | T | | 14 29 04.1 | |
| | baz=148,slow=75,SNR=17 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **95.52** | **297** | T | | T | | 14 30 15.0 | |
| | baz=134,slow=75,SNR=9.7 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **95.52** | **297** | T | | T | | 14 30 07.6 | |
| | baz=134,slow=75,SNR=9.4 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **95.54** | **297** | T | | T | | 14 30 16.4 | |
| | baz=134,slow=75,SNR=8.8 | | | | | | | | |
| **SIJI** | **Sorong** | **98.01** | **256** | LR | | LR | | 13 24 29.0 | |
| | comp=Z,117nm,21.5s,baz=230,slow=33 | | | | | | | | |
| **ILAR** | **Eielson Array** | **121.77** | **348** | PKP | | | **PKPdf** | **12 49 54.0** | **-1.1** |
| | comp=Z,0.5nm,0.8s,baz=197,slow=3.2,SNR=4.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **121.77** | **348** | | | | **PKPdf** | **12 49 57.1** | **+1.9** |
| **EKA** | **Eskdalemuir Ar** | **147.02** | **65** | PKPbc | | | **PKPdf** | **12 50 45.0** | **+2.9** |
| | comp=Z,1.5nm,0.6s,baz=256,slow=3.2,SNR=4.1 | | | | | | | | |
| **SONM** | **Songino Array** | **149.01** | **276** | PKPbc | | | **PKPdf** | **12 50 49.7** | **+3.8** |
| | comp=Z,0.5nm,0.4s,baz=312,slow=49,SNR=3.8 | | | | | | | | |
| **SONM** | **Songino Array** | **149.01** | **276** | | | | **PKPdf** | **12 50 44.1** | **-1.7** |
| SONM | | | | PKPbc | | | **pPKPdf** | **12 50 50.8** | **+2.0** |
| SONM | | | | PKPab | | | **pPKPbc** | **12 50 54.9** | **+1.9** |
| **MKAR** | **Makanchi Array** | **161.80** | **250** | PKPab | | | **PKPab** | **12 51 45.8** | **-2.8** |
| | comp=Z,0.6nm,0.9s,baz=150,slow=9.2,SNR=2.8 | | | | | | | | |

*IDC **20** 12:33:40.9±0.8, 4.°58N×32.°57W, h0km, mb4.1/11, mb1 4.3/11, mb1mx4.0/54, mbtmp4.1/11, MS4.0/3, Ms1 4.0/3, ms1mx3.2/83, Error ellipse: s-maj=30.5km s-min=17.8km az=145.0*

*GCMT **20** 12:33:40.7±0.4, 4.42N±0.05×32.46W±0.03, h19km±1km, MW4.9/81, Moment Tensor Solution. s16,c17; s81,c93; Duration: 0 Moment tensor: Scale 10[16]Nm; Mrr-2.65±.26; Mθθ0.06±.15; Mϕϕ2.58±.17; Mrθ-0.88±.47; Mθϕ-0.56±.10; Mϕr-1.19±.32; Best double couple: M=3.04600×10[16] NP1:ϕs151.00000°, δ38.00000°, λ-121.00000°. NP2: ϕs7.00000°, δ58.00000°, λ-69.00000°. Principal axes: T 2.8880, Plg11.0000°, Azm82.0000°; N 0.3090, Plg18.0000°, Azm176.0000°; P -3.2040, Plg69.0000°, Azm323.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **20** 12:33:42.7±0.9, 4.45N±0.07×32.51W±0.09, h10km±1km, mb4.8/21 Error ellipse: s-maj=18.3km s-min=8.6km az=56.0*

**ISC 20 12:33:42.4±0.5, 4.53N±0.10×32.6W±0.1, h11km, n44, σ0§84/36, mb4.7/20, MS3.9/3, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **10.81** | **198** | Pn | | Pn | **Pn** | **12 36 17.3** | **-0.1** |
| **MDP** | **Montagnes des** | **20.02** | **272** | LR | | LR | LR | 12 45 31.2 | |
| | comp=Z,253nm,19.2s,baz=85,slow=36 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.80** | **124** | T | | T | T | 13 01 15.2 | |
| | baz=303,slow=75,SNR=9.0 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.81** | **124** | T | | T | T | 13 01 15.5 | |
| | baz=303,slow=75,SNR=8.2 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.82** | **124** | T | | T | T | 13 01 16.8 | |
| | baz=303,slow=75,SNR=8.5 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.30** | **127** | T | | T | T | 13 01 50.5 | |
| | baz=302,slow=74,SNR=11 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.32** | **127** | T | | T | T | 13 01 52.4 | |
| | baz=278,slow=74,SNR=9.5 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.21** | **217** | LR | | LR | LR | 12 48 06.3 | |
| | comp=Z,394nm,19.6s,baz=7.8,slow=34 | | | | | | | | |
| **PTGA** | **Pitinga** | **27.88** | **260** | LR | | LR | LR | 12 49 41.3 | |
| | comp=Z,482nm,18.3s,baz=82,slow=34 | | | | | | | | |
| **BIRV** | **Birongo** | **33.92** | **282** | P | | **P** | **P** | **12 40 25.1** | **-0.9** |
| **SIV** | **San Ignacio** | **34.81** | **234** | P | | **P** | **P** | **12 40 33.9** | **+0.3** |
| | 2.1nm,0.7s,baz=83,slow=9.3,SNR=7.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.87** | **74** | P | | **P** | **P** | **12 40 33.5** | **-0.7** |
| | 2.3nm,1.1s,baz=263,slow=9.3,SNR=7.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.87** | **74** | P | | **P** | **P** | **12 40 33.2** | **-0.9** |
| **CPUP** | **Villa Florida** | **38.94** | **217** | P | | **P** | **P** | **12 41 09.5** | **+0.8** |
| | 1.0nm,0.5s,baz=353,slow=9.0,SNR=2.9 | | | | | | | | |
| **LPAZ** | **La Paz** | **40.81** | **239** | P | | | **P** | **12 41 26.2** | **+1.2** |
| | 1.9nm,0.8s,baz=255,slow=7.8,SNR=1.8 | | | | | | | | |
| **AC02** | **Maricunga** | **47.14** | **227** | P | | **P** | **P** | **12 42 15.6** | **-0.1** |
| AC02 | | | | IAmb | | IAmb | IAmb | 12 42 43.4 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.36** | **310** | P | | **P** | **P** | **12 43 24.9** | **+1.0** |
| TKL | | | | IAmb | | IAmb | IAmb | 12 43 25.8 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **GERES** | **GERESS Array B** | **59.06** | **34** | P | | **P** | **P** | **12 43 42.6** | **-0.2** |
| **BOSA** | **Boshof** | **64.56** | **125** | P | | **P** | **P** | **12 44 19.9** | **-0.3** |
| | comp=Z,5.6nm,0.9s,baz=311,slow=5.1,SNR=3.9 | | | | | | | | |
| **BOSA** | **Boshof** | **64.56** | **125** | P | | **P** | **P** | **12 44 19.4** | **-0.8** |
| **MLR** | **Muntele Rosu** | **65.03** | **41** | P | | **P** | **P** | **12 44 24.7** | **+1.7** |
| | comp=Z,7.3nm,1.0s,baz=304,slow=2.5,SNR=8.5 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.03** | **41** | P | | **P** | **P** | **12 44 24.6** | **+1.6** |
| **BURAR** | **Bucovina Array** | **65.33** | **39** | P | | **P** | **P** | **12 44 26.7** | **+1.9** |
| **ILULI** | **Ilulissat** | **65.76** | **353** | P | | **P** | **P** | **12 44 27.9** | **+0.9** |
| **Z35A** | **Perchaven, San** | **66.45** | **304** | P | | **P** | **P** | **12 44 30.6** | **-1.6** |
| Z35A | | | | IAmb | | IAmb | IAmb | 12 44 32.8 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.89** | **37** | P | | **P** | **P** | **12 44 47.0** | **-0.2** |
| | comp=Z,1.9nm,0.8s,baz=252,slow=5.4,SNR=7.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.89** | **37** | P | | **P** | **P** | **12 44 47.1** | **-0.1** |
| AKASG | | | | IAmb | | IAmb | IAmb | 12 44 51.1 | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| **BR131** | **Keskin Array S** | **68.89** | **49** | P | | **P** | **P** | **12 44 48.0** | **+0.3** |
| BR131 | | | | IAmb | | IAmb | IAmb | 12 44 50.0 | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.89** | **49** | P | | **P** | **P** | **12 44 48.2** | **+0.5** |
| | comp=Z,1.9nm,0.8s,baz=232,slow=6.1,SNR=7.5 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.89** | **49** | P | | **P** | **P** | **12 44 47.8** | **+0.1** |
| **OGNE** | **Ogallala** | **71.58** | **312** | P | | **P** | **P** | **12 45 04.3** | **+0.1** |
| **ISCO** | **Idaho Springs** | **74.11** | **310** | P | | **P** | **P** | **12 45 18.8** | **-0.6** |
| **DGMT** | **Dagmar** | **74.48** | **319** | P | | **P** | **P** | **12 45 21.4** | **+0.4** |
| DGMT | | | | IAmb | | IAmb | IAmb | 12 45 22.8 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **LAO** | **LASA Array** | **75.53** | **317** | P | | **P** | **P** | **12 45 27.7** | **+0.5** |
| LAO | | | | IAmb | | IAmb | IAmb | 12 45 28.9 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.40** | **313** | P | | **P** | **P** | **12 45 37.0** | **-1.1** |
| | comp=Z,0.5nm,0.7s,baz=94,slow=4.8,SNR=4.6 | | | | | | | | |
| PDAR | | | | PP | | PP | PP | 12 48 14.8 | -18 |
| | comp=Z,0.2nm,0.6s,baz=108,slow=3.4,SNR=3.8 | | | | | | | | |
| **SNAA** | **Sanae** | **78.49** | **171** | P | | **P** | **P** | **12 45 43.3** | **0.0** |
| SNAA | | | | IAmb | | IAmb | IAmb | 12 45 43.6 | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.79** | **311** | P | | **P** | **P** | **12 45 45.3** | **-0.5** |
| **MSU** | **Marysvale** | **79.08** | **308** | P | | **P** | **P** | **12 45 47.7** | **+0.2** |
| **EDM** | **Edmonton** | **80.88** | **323** | P | | **P** | **P** | **12 45 57.1** | **+0.4** |
| EDM | | | | IAmb | | IAmb | IAmb | 12 45 57.9 | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| **JTMT** | **Jette** | **81.10** | **317** | P | | **P** | **P** | **12 45 58.2** | **+0.1** |
| JTMT | | | | IAmb | | IAmb | IAmb | 12 45 59.9 | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.33** | **332** | P | | **P** | **P** | **12 46 04.4** | **+0.3** |
| | comp=Z,1.1nm,1.0s,baz=97,slow=5.4,SNR=6.4 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.33** | **332** | P | | **P** | **P** | **12 46 04.1** | **+0.1** |
| **QSPA** | **South Pole Qui** | **94.57** | **180** | P | | **P** | **P** | **12 47 02.8** | **-0.2** |
| QSPA | | | | IAmb | | IAmb | IAmb | 12 47 16.8 | |
| |

comp=Z,634nm,19.6s,baz=17,slow=38
**BATI Baumata 8.55 211** P Pn 12 46 31.8 +7.3
**KAPI Kappang 8.63 255** P **Pn 12 46 28.1 +2.6**
2.5nm,0.3s,baz=129,slow=6.7,SNR=12
KAPI LR LR 12 50 11.4
comp=Z,508nm,18.0s,baz=90,slow=40
**MPSI Mapaga 8.82 291** P **Pn 12 46 29.9 +1.9**
0.2nm1µm43nm,0.5s
**DRS Darwin Rock St 9.91 164** P **Pn 12 46 46.2 +3.2**
53nm,0.7s
**DAV Davao City (W) 10.18 346** LR LR 12 50 56.4
comp=Z,185nm,20.2s,baz=328,slow=38
**MTN Manton Dam 10.37 164** Pn **Pn 12 46 51.4 +2.1**
**MTN Manton Dam 10.37 164** P **Pn 12 46 51.0 +1.7**
**SMPI Sarmi 10.60 86** P **Pn 12 46 53.5 +1.0**
11µm14nm,0.8s
**KDU Kakadu 10.68 157** P **Pn 12 46 54.5 +0.9**
**PLAI Plampang 11.89 240** P **Pn 12 47 13.4 +3.3**
32nm,0.8s
**PLAI Plampang 11.89 240** P **Pn 12 47 12.2 +2.1**
**GENI Genyem 12.03 89** P **Pn 12 47 14.9 +2.9**
124nm,1.2s
**KNRA Kununurra 12.77 177** Pn **Pn 12 47 24.5 +2.4**
**KNRA Kununurra 12.77 177** P **Pn 12 47 23.6 +1.5**
**JAGI Jajag, Banyuwa 14.99 248** **Pn 12 47 54.2 +1.9**
JAGI IAmb IAmb 12 48 02.4
comp=Z,47nm,1.2s
**JAGI Jajag, Banyuwa 14.99 248** P **P 12 47 59.6 +2.3**
**FITZ Fitzroy Crossi 15.35 189** P **Pn 12 47 57.8 +0.7**
comp=Z,2.0nm,0.3s,baz=23,slow=9.4,SNR=42
FITZ LR LR 12 54 31.3
comp=Z,205nm,18.1s,baz=26,slow=40
**FITZ Fitzroy Crossi 15.35 189** Pn **Pn 12 47 57.2 +0.1**
**FITZ Fitzroy Crossi 15.35 189** P **Pn 12 47 58.5 +1.4**
**GMJI Gumukmas 15.58 249** P **P 12 48 06.5 +2.7**
**PCJI Pacitan 17.69 252** P **P 12 48 28.4 +1.2**
comp=Z,81nm,0.7s
**WRA Warramunga Arr 18.04 161** P **Pn 12 48 29.1 -1.9**
comp=Z,5.6nm,0.3s,baz=341,slow=12,SNR=116
WRA S **Sn 12 51 51.1 -0.2**
comp=Z,0.3nm,0.3s,baz=342,slow=22,SNR=3.0
WRA LR LR 12 56 12.8
comp=Z,242nm,18.1s,baz=342,slow=39
**UGM Wanagama 18.23 253** P **Pn 12 48 34.3 +0.9**
**YOGI Yogyakarta 18.43 254** P Pn 12 48 43.8 +8.1
**COEN Coen 18.51 127** P **P 12 48 36.2 -0.1**
**COEN Coen 18.51 127** P **Pn 12 48 37.0 +0.3**
**KPJI Karang Pucung 19.63 256** P **P 12 48 49.2 +0.6**
comp=Z,2µmcomp=Z,156nm,0.5s
**PMG Port Moresby 20.00 110** P **P 12 48 51.4 -1.2**
comp=Z,0.4nm,0.3s,baz=98,slow=5.8,SNR=5.3
PMG LR LR 12 58 07.3
comp=Z,232nm,18.3s,baz=335,slow=41
**CMJI Cimerak 20.20 255** P **P 12 48 53.2 -1.6**
comp=Z,563nmcomp=Z,84nm,0.9s
**PSA00 Pilbara Seismi 20.28 203** P **P 12 48 53.7 -1.9**
PSA00 IAmb IAmb 12 48 55.9
comp=Z,21nm,0.7s
**LEM Lembang 20.82 258** P **P 12 49 02.5 +0.9**
comp=Z,45nm,0.9s,baz=143,slow=21,SNR=7.0
LEM LR LR 12 58 29.5
comp=Z,402nm,19.2s,baz=88,slow=40
**QIS Mount Isa 20.86 148** P **P 12 49 00.6 -1.3**
**AS31 Alice Springs 21.44 165** P **P 12 49 06.8 -1.3**
AS31 IAmb IAmb 12 49 09.8
comp=Z,18nm,0.8s
**ASAR Alice Springs 21.44 165** P **P 12 49 06.7 -1.4**
comp=Z,52nm,0.8s,baz=346,slow=11,SNR=170
ASAR S **S 12 53 00.9 -3.1**
comp=Z,9.7nm,0.9s,baz=344,slow=20,SNR=17
**ASAR Alice Springs 21.44 165** P **P 12 49 07.3 -0.8**
**MTSU Mount Surprise 21.97 135** P **P 12 49 15.9 +2.1**
**WRKA Warakurna 22.06 180** P **P 12 49 15.0 +0.2**
**GUMO Guam 23.29 45** LR LR 12 58 59.4
comp=Z,43nm,18.6s,baz=167,slow=38
**KLSI 23.42 265** P **P 12 49 29.1 +0.1**
comp=Z,16nm,0.9s
**XMIS Christmas Isla 23.57 250** P **P 12 49 28.6 -1.9**
**GIRL Giralia 23.85 213** P **P 12 49 30.8 -2.2**
**GIRL Giralia 23.85 213** P **P 12 49 31.5 -1.5**
**MDSI Maura Dua 23.96 265** P **P 12 49 34.7 +0.6**
comp=Z,20nm,1.0s
**LHSI Lahat 24.59 267** P **P 12 49 41.3 +1.4**
comp=Z,58nm,1.0s
**CTA Charters Tower 24.63 135** P **P 12 49 40.6 +0.4**
comp=Z,4.0nm,0.9s,baz=322,slow=10,SNR=3.7
**MEEK Meekatharra 25.36 200** P **P 12 49 44.9 -1.8**
**OOD Oodnadatta 25.84 164** P **P 12 49 49.4 -1.6**
**INKA Innaminka 27.53 155** P **P 12 50 06.3 0.0**
**FORT Forrest 27.78 180** P **P 12 50 08.0 -0.5**
FORT IAmb IAmb 12 50 11.7
comp=Z,21nm,0.8s
**FORT Forrest 27.78 180** P **P 12 50 08.3 -0.2**
comp=Z,28nm,0.9s
**PPI Padang Panjang 27.82 274** P **P 12 50 15.9 +6.8**
**MULG Mulgathing 27.86 169** P **P 12 50 08.9 -0.3**
**MORW Morawa 28.50 203** P **P 12 50 15.4 +0.5**
MORW IAmb IAmb 12 50 19.0
comp=Z,19nm,1.4s
**MORW Morawa 28.50 203** P **P 12 50 14.6 -0.4**
**MNSI Mandailing Nat 28.77 277** P **P 12 50 18.5 +0.9**
comp=Z,2µmcomp=Z,26nm,0.8s
**LCRK Leigh Creek 29.07 162** P **P 12 50 19.4 -0.5**
**BLDU Ballidu 29.66 200** P **P 12 50 23.0 -2.2**
**PSI Prapat 29.73 281** P **P 12 50 25.1 -1.1**
comp=Z,5.7nm,0.8s,baz=89,slow=4.4,SNR=7.2
**BBOO Buckleboo 30.72 167** P **P 12 50 32.1 -2.5**
**BBOO Buckleboo 30.72 167** P **P 12 50 32.7 -1.9**
**GSI Gunungsitoli 30.82 277** P **P 12 50 36.2 +0.4**
GSI IAmb IAmb 12 50 36.2
comp=Z,13nm,0.8s
**GSI Gunungsitoli 30.82 277** P **P 12 50 35.9 +0.1**
comp=Z,16nm,0.8s
**MUN Mundaring 31.08 200** P **P 12 50 38.0 +0.3**
comp=Z,14nm,1.6s
**STKA Stephens Creek 31.54 158** P **P 12 50 40.5 -1.3**
comp=Z,6.0nm,0.7s,baz=326,slow=9.5,SNR=9.5
**STKA Stephens Creek 31.54 158** P **P 12 50 41.0 -0.8**
**STKA Stephens Creek 31.54 158** P **P 12 50 41.7 -0.1**
**HTT Hallett 32.06 163** P **P 12 50 45.9 -0.5**
**CMSA Cobar Meteorol 32.99 152** P **P 12 50 55.1 +0.5**
**TWOA Tennyson Woods 33.46 164** P **P 12 50 58.6 0.0**
comp=Z,16nm,1.1s
**ARMA Armidale 35.30 143** P **P 12 51 15.5 +0.7**
ARMA IAmb IAmb 12 51 26.8
comp=Z,13nm,1.1s
**CM31 Chiang Mai Arr 35.70 307** P **P 12 51 17.8 -0.3**
CM31 IAmb IAmb 12 51 38.5
comp=Z,4.1nm,0.9s
**CMAR Chiang Mai Arr 35.70 307** P **P 12 51 17.3 -0.8**
comp=Z,1.0nm,0.6s,baz=136,slow=7.1,SNR=9.9
CMAR PcP **PcP 12 53 44.8 -1.3**
comp=Z,0.3nm,0.3s,baz=43,slow=7.0,SNR=1.6
**GYA Guiyang 35.77 326** ⇓P **P 12 51 19.8 +1.0**
GYA pmax pmax
comp=Z,7.0nm,0.8s
**NJ2 Nanjing 35.81 346** *eP* **P 12 51 20.6 +1.7**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**ARPS Mount Arapiles 36.05 161** P **P 12 51 20.2 -0.7**
comp=Z,30nm,0.9s
**BRAT Ballarat 37.46 159** P **P 12 51 34.3 +1.4**
comp=Z,7.5nm,0.7s
**CAN Canberra 37.67 152** P **P 12 51 34.3 -0.5**
**CAN Canberra 37.67 152** P **P 12 51 34.6 -0.2**
**TOO Toolangi 38.06 157** P **P 12 51 38.3 +0.2**
TOO IAmb IAmb 12 51 59.2
comp=Z,8.1nm,1.1s
**TOO Toolangi 38.06 157** P **P 12 51 37.6 -0.4**
**PZH PanZhiHua 38.75 320** P **P 12 51 45.3 +1.2**
PZH pmax pmax
comp=Z,10.0nm,1.4s
PZH pmax pmax
comp=Z,130nm,5.7s
**KSRS Korea Array 40.10 360** P **P 12 51 53.5 -1.4**
comp=Z,2.7nm,1.1s,baz=179,slow=10,SNR=4.0
**MJAR Matsushiro Arr 40.30 13** LR LR 13 08 45.1
comp=Z,66nm,19.6s,baz=172,slow=36
**HHC Hu-ho-hao-te 46.05 343** *eP* **P 12 52 47.0 +3.8**
HHC pmax pmax
comp=Z,7.0nm,1.1s
HHC pmax pmax
comp=Z,140nm,5.5s
**GTA Gaotai 49.46 331** *eP* P 12 53 19.8 +10
GTA pP sP 12 53 24.8 +1.0
GTA sP pwP 12 53 28.5 +5.5
GTA pmax pmax
comp=Z,3.0nm,1.0s
**SONM Songino Array 53.94 342** P **P 12 53 41.2 -1.9**
comp=Z,0.8nm,0.6s,baz=137,slow=8.0,SNR=5.4
**SONM Songino Array 53.94 342** P **P 12 53 42.2 -0.8**
**WHZ Wether Hill Ro 55.17 147** P **P 12 53 50.7 -1.2**
**RPZ Rata Peaks 55.65 143** LR LR 13 17 52.0
comp=Z,103nm,19.9s,baz=290,slow=36
**TUWZ Tuamarina 56.22 140** P **P 12 53 58.8 -0.7**
**WMQ Urumqi 58.92 327** *eP* **P 12 54 20.5 +2.0**
**KSH Kashi 63.72 317** P **P 12 54 53.6 +2.4**
KSH pmax pmax
comp=Z,3.0nm,1.0s
**MK31 Makanchi Array 63.75 327** P **P 12 54 49.9 -1.2**
**MKAR Makanchi Array 63.75 327** P **P 12 54 47.8 -3.4**
comp=Z,2.9nm,0.8s,baz=121,slow=7.7,SNR=25
**MKAR Makanchi Array 63.75 327** P **P 12 54 50.5 -0.6**
**MAKZ Makanchi 63.94 327** P **P 12 54 51.5 -0.8**
MAKZ IAmb IAmb 12 54 57.4
comp=Z,3.5nm,1.1s
**AAK Ala-Archa 66.19 319** P **P 12 55 06.4 -0.9**
comp=Z,0.8nm,0.4s,baz=188,slow=6.5,SNR=5.5
**ZALV Zalesovo Beam 67.06 334** P **P 12 55 11.1 -1.2**
comp=Z,0.9nm,0.8s,baz=117,slow=5.3,SNR=4.1
**ZALV Zalesovo Beam 67.06 334** P **P 12 55 12.0 -0.3**
**GAR Garm 67.44 314** P **P 12 55 14.1 -1.2**
GAR IAmb IAmb 12 55 20.1
comp=Z,8.5nm,1.0s
**KURBB Kurchatov Arra 68.02 328** P **P 12 55 15.2 -3.3**
comp=Z,3.3nm,0.6s,baz=27,slow=26,SNR=8.2
**KURK Kurchatov 68.03 329** P **P 12 55 18.2 -0.3**
KURK IAmb IAmb 12 55 20.2
comp=Z,8.9nm,1.0s
**KKAR Karatay Array 69.01 319** P **P 12 55 24.8 -0.1**
**BVAR Borovoye Array 73.58 328** P **P 12 55 49.4 -2.8**
comp=Z,3.2nm,0.9s,baz=84,slow=14,SNR=11
**BRVK Borovoye 73.65 328** P **P 12 55 52.9 +0.2**
BRVK IAmb IAmb 12 55 53.9
comp=Z,5.0nm,0.9s
**TIXI Tiksi 74.36 0** P **P 12 55 56.5 +0.1**
**VNDA Vanda 76.77 173** P **P 12 56 10.4 +0.3**
VNDA IAmb IAmb 12 56 13.7
comp=Z,11nm,1.2s
**ABKAR Akbulak array 78.12 322** P **P 12 56 17.6 -0.7**
**AKTO Aktyubinsk 79.67 322** P **P 12 56 24.2 -2.5**
comp=Z,2.3nm,0.9s,baz=131,slow=3.7,SNR=6.4
**VOI Vohitsoka 80.91 248** P **P 12 56 32.9 -1.3**
**QSPA South Pole Qui 87.10 180** P **P 12 57 03.5 -1.3**
QSPA IAmb IAmb 12 57 21.6
comp=Z,7.4nm,1.4s
**KBZ Khabaz 88.50 314** P **P** 12 57 25.0 +13
comp=Z,2.1nm,0.2s,baz=167,slow=2.6,SNR=7.1
**ASF Jabal al Asfar 92.54 302** P **P** 12 57 44.4 +13
comp=Z,15nm,0.4s,baz=194,slow=4.0,SNR=15
**CPUP Villa Florida 150.52 170** PKPbc **PKPbc 13 04 10.6 -1.0**
comp=Z,4.9nm,0.9s,baz=228,slow=1.2,SNR=8.7

*ISK **20** 12:45:05.0, 40°.25N×43°.52E, h5km, ML2.6/11*
*DDA **20** 12:45:06.2±0.0, 40°.23N×43°.54E, h7km±2km, ML2.8*
**ISC 20 12:45:06.0**±1.1, **40°23N**±0°.03×**43°.53E**±0°.03, **h8km**±10km, **n23**, σ=**971/36**, **Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DIGO** | **Kars** | **0.22** | **326** | P | **Pg** | **12 45 10.8** | **+0.2** |
| DIGO | | | | S | **Sg** | **12 45 14.1** | **+0.5** |
| DIGO | | | | *i* AML | AML | 12 45 15.0 | |
| | comp=Z,2µm,0.1s | | | | | | |
| DIGO | | | | *i* AML | AML | 12 45 15.0 | |
| | comp=E,7µm,0.5s | | | | | | |
| DIGO | | | | *i* AML | AML | 12 45 16.0 | |
| | comp=N,8µm,0.4s | | | | | | |
| **EAK** | **Akyaka** | **0.46** | **7** | P | **Pb** | **12 45 16.6** | **+0.1** |
| EAK | | | | S | **Sb** | **12 45 24.2** | **+0.7** |
| EAK | | | | *i* AML | AML | 12 45 25.0 | |
| | comp=Z,448nm,0.4s | | | | | | |
| EAK | | | | *i* AML | AML | 12 45 25.0 | |
| | comp=N,1µm,0.3s | | | | | | |
| EAK | | | | *i* AML | AML | 12 45 27.0 | |
| | comp=E,609nm,0.4s | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **0.50** | **211** | P | **Pb** | **12 45 16.5** | **-0.5** |
| KOTA | | | | S | **Sb** | **12 45 24.9** | **+0.4** |
| **KARS** | **Kars** | **0.53** | **319** | PG | **Pg** | **12 45 15.8** | **-0.4** |
| KARS | | | | SG | **Sg** | **12 45 23.6** | **+0.4** |
| **IGDI** | **IGDIR** | **0.55** | **131** | P | **Pg** | **12 45 16.5** | **-0.2** |
| IGDI | | | | S | **Sb** | **12 45 25.0** | **-1.1** |
| IGDI | | | | *i* AML | AML | 12 45 26.0 | |
| | comp=E,500nm,0.4s | | | | | | |
| **TASB** | **TASBURUN-IGDIR** | **0.59** | **114** | PG | **Pb** | **12 45 17.9** | **-0.8** |
| TASB | | | | SG | **Sb** | **12 45 27.6** | **+0.3** |
| **DYDN** | **Diyadin** | **0.70** | **170** | P | **Pb** | **12 45 20.0** | **-0.5** |
| DYDN | | | | S | **Sn** | **12 45 32.9** | **-0.5** |
| **EATA** | **Eleskirt** | **0.88** | **246** | P | **Pb** | **12 45 23.5** | **-0.2** |
| EATA | | | | S | **Sn** | **12 45 39.0** | **+0.8** |
| **GNI** | **Garni** | **0.93** | **95** | PG | **Pb** | **12 45 24.3** | **-0.1** |
| GNI | | | | SG | **Sn** | **12 45 38.4** | **-0.7** |
| **AKH** | **Akhalkalaki** | **1.18** | **358** | PN | **Pb** | **12 45 28.4** | **-0.3** |
| **VMUR** | **Van-Muradiye** | **1.24** | **179** | P | **Pn** | **12 45 30.5** | **+0.7** |
| VMUR | | | | S | **Sn** | **12 45 47.9** | **+1.1** |
| **KOPU** | **Koprukoy-ERZUR** | **1.31** | **260** | PN | **Pn** | **12 45 29.9** | **-0.9** |
| **MLAZ** | **Malazgirt-MUS** | **1.33** | **215** | PN | **Pg** | **12 45 31.6** | **+0.2** |
| **DAGI** | **Agillar** | **1.50** | **305** | P | **Pb** | **12 45 33.6** | **-0.4** |
| DAGI | | | | S | **Sg** | **12 45 53.6** | **-0.4** |
| **DDEM** | **Demirkent** | **1.51** | **297** | P | **Pn** | **12 45 33.1** | **-0.3** |
| **DBAD** | **Bademkaya** | **1.61** | **300** | P | **Pn** | **12 45 34.8** | **0.0** |
| DBAD | | | | S | **Sg** | **12 45 57.8** | **+0.2** |
| **VANB** | **Van** | **1.64** | **184** | PN | **Pg** | **12 45 37.5** | **+0.1** |
| **DBOC** | **Borcka** | **1.80** | **309** | P | **Pb** | **12 45 38.6** | **-0.7** |
| DBOC | | | | S | **Sb** | **12 46 02.1** | **+0.1** |
| **VRTB** | **Varto-Mus** | **1.93** | **237** | PN | **Pb** | **12 45 40.2** | **-1.2** |
| **AKDM** | **Akdamar-Van** | **1.95** | **193** | PN | **Pb** | **12 45 40.9** | **-0.9** |
| **BATM** | **Batumi** | **1.96** | **315** | PN | **Pb** | **12 45 40.4** | **-1.5** |
| **GURO** | **Guroymak-BITLI** | **2.04** | **215** | PN | **Pn** | **12 45 41.9** | **+1.1** |
| **BNGB** | **Bingl** | **2.53** | **242** | PN | **Pn** | **12 45 48.6** | **+1.1** |

*IDC **20** 12:48:04.2±0.5, 4°.59N×32°.66W, h0km, mb4.3/22, mb1 4.5/22, mb1mx4.3/61, mbtmp4.3/22, MS4.3/52, Ms1 4.3/52, ms1mx4.3/70, Error ellipse: s-maj=17.1km s-min=13.0km az=150.0*
*NEIC **20** 12:48:06.9±2.0, 4°.57N±0°.10×32°.7W±0°.1, h10km±1km, mb4.8/88, Error ellipse: s-maj=18.4km s-min=16.1km az=291.0*
*GCMT **20** 12:48:07.9±0.2, 4°.74N±0°.02×32°.67W±0°.01, h14km, MW5.1/119, Moment Tensor Solution. s40,c48; s119,c178; Duration: 0 Moment tensor: Scale 10¹⁶Nm; $M_{rr}$-5.23±.30; $M_{\theta\theta}$0.12±.16; $M_{\phi\phi}$5.11±.20; $M_{r\theta}$1.08±.51; $M_{\theta\phi}$-0.36±.10; $M_{r\phi}$2.86±.42; Best double couple: $M_o$6.01100×10¹⁶ NP1:$\phi_s$345.00000°, $\delta$32.00000°, $\lambda$-109.00000°. NP2:$\phi_s$188.00000°, $\delta$60.00000°, $\lambda$-78.00000°. Principal axes: T 5.8490, Plg14.0000°, Azm269.0000°; N 0.3260, Plg10.0000°, Azm2.0000°; P -6.1730, Plg72.0000°, Azm126.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 20 12:48:06.2**±0.3, **4°.68N**±0°.06×**32°.65W**±0°.07, **h11km**, **n223**, σ=**1928/178**, **mb4.8/74**, **MS4.3/51**, **10C-3D**, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBMO** | **Morrinhos-CE** | **10.84** | **223** | *eP* | **Pn** | **12 50 38.9** | **-2.6** |
| **RCBR** | **Riachuelo** | **10.93** | **197** | Pn | **Pn** | **12 50 40.7** | **-2.0** |
| **NBPS** | **Pedro II - PI** | **12.59** | **224** | *eP* | **Pn** | **12 51 04.8** | **-0.7** |
| **NBLV** | **Livramento - P** | **12.69** | **200** | *eP* | **Pn** | **12 51 11.2** | **+4.3** |
| **NBMA** | **Murití-CE** | **13.43** | **207** | *eP* | **Pn** | **12 51 19.6** | **+2.7** |
| **ROSB** | **Rosrio** | **13.71** | **237** | *eP* | **Pn** | **12 51 17.4** | **-3.4** |
| **NBAN** | **Anadia - AL** | **14.70** | **194** | *eP* | **P** | **12 51 40.3** | **-0.3** |
| **NBLA** | **Lagarto - SE** | **16.39** | **198** | *eP* | **P** | **12 52 01.7** | **+2.5** |
| **NBPN** | **Ponto Novo - B** | **17.16** | **206** | *eP* | **P** | **12 52 08.8** | **+1.1** |
| **GDU01** | **Guandu, BA** | **19.53** | **201** | *eP* | **Pn** | **12 52 39.8** | **+4.6** |
| **MDP** | **Montagnes des** | **19.93** | **272** | LR | LR | 12 58 42.2 | |
| | comp=Z,842nm,20.9s,baz=67,slow=32 | | | | | | |
| **MCPB** | **Macapa, AP** | **20.02** | **256** | *eP* | **P** | **12 52 39.3** | **0.0** |
| **SMTB** | **Santa Maria do** | **20.07** | **228** | *eP* | **P** | **12 52 39.2** | **-0.6** |
| **PRPB** | **Parauapebas** | **20.25** | **238** | *eP* | **P** | **12 52 41.3** | **-0.4** |
| **NBIT** | **Itapeh - BA** | **20.61** | **199** | *eP* | Pn | 12 52 51.9 | +4.0 |
| **SDBA** | **SAO DESIDERIO** | **20.89** | **216** | *eP* | Pn | 12 52 51.2 | -0.1 |
| **H10N3** | **ASCENSION HYDR** | **21.96** | **124** | T | T | 13 15 44.4 | |
| | baz=303,slow=75,SNR=38 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.97** | **124** | T | T | 13 15 46.8 | |
| | baz=303,slow=75,SNR=38 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.98** | **124** | T | T | 13 15 45.2 | |
| | baz=303,slow=75,SNR=42 | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.28** | **198** | *eP* | **P** | **12 53 09.8** | **+6.2** |
| **H10S3** | **ASCENSION HYDR** | **22.47** | **127** | T | T | 13 16 29.3 | |
| | baz=277,slow=74,SNR=22 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.49** | **127** | T | T | 13 16 26.4 | |
| | baz=303,slow=74,SNR=15 | | | | | | |
| **MALB** | **Monte Alegre** | **22.55** | **254** | *eP* | **P** | **12 53 06.1** | **-0.5** |
| **RIB01** | **Linhares ES** | **25.03** | **198** | *eP* | **P** | **12 53 36.5** | **+6.0** |
| **BDFB** | **Brasilia** | **25.28** | **217** | P | **P** | **12 53 33.7** | **+0.7** |
| | 7.1nm,0.8s,baz=34,slow=9.2,SNR=2.8 | | | | | | |
| **PTGA** | **Pitinga** | **27.82** | **260** | P | **P** | **12 53 54.5** | **-1.3** |
| | 3.5nm,0.8s,baz=112,slow=9.5,SNR=5.2 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.40** | **291** | T | T | 13 24 58.7 | |
| | SNR=18 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.18** | **295** | T | T | 13 26 02.0 | |
| | SNR=8.0 | | | | | | |
| **VILB** | **Vilhena** | **32.49** | **237** | *eP* | **P** | **12 54 39.5** | **+2.2** |
| **BIRV** | **Birongo** | **33.80** | **282** | P | **P** | **12 54 49.0** | **+0.3** |
| **SIV** | **San Ignacio** | **34.83** | **233** | P | **P** | **12 54 56.3** | **-1.2** |
| | 4.9nm,0.9s,baz=91,slow=13,SNR=2.9 | | | | | | |
| SIV | | | | LR | LR | 13 08 23.8 | |
| | comp=Z,2µm,20.8s,baz=88,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.92** | **74** | P | **P** | **12 54 57.8** | **-0.6** |
| | 4.6nm,0.9s,baz=264,slow=9.3,SNR=13 | | | | | | |
| **SJG** | **San Juan** | **35.36** | **295** | LR | LR | 13 06 21.7 | |
| | comp=Z,635nm,21.2s,baz=93,slow=31 | | | | | | |
| **ETMB** | **Extrema** | **36.41** | **247** | *eP* | **P** | **12 55 11.4** | **+0.2** |
| **MDT** | **Midelt** | **38.33** | **40** | LR | LR | 13 10 12.5 | |
| | comp=Z,911nm,19.3s,baz=242,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | LR | LR | 13 11 18.0 | |
| | comp=Z,755nm,19.6s,baz=48,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | P | **P** | **12 55 33.1** | **+0.2** |
| **LPAZ** | **La Paz** | **40.81** | **239** | P | **P** | **12 55 48.5** | **-0.4** |
| | 2.0nm,0.8s,baz=32,slow=5.7,SNR=3.9 | | | | | | |
| LPAZ | | | | LR | LR | 13 11 49.5 | |
| | comp=Z,766nm,19.6s,baz=53,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **40.81** | **239** | P | **P** | **12 55 48.8** | **-0.1** |
| **LPAZ** | **La Paz** | **40.81** | **239** | *eP* | **P** | **12 55 49.6** | **+0.8** |
| **ITQB** | **Itaqui** | **41.17** | **212** | P | **P** | **12 55 49.4** | **-1.5** |
| ITQB | | | | IAmb | IAmb | 12 56 03.6 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **ROSC** | **El Rosal** | **41.52** | **272** | LR | LR | 13 14 07.5 | |
| | comp=Z,1µm,18.6s,baz=76,slow=38 | | | | | | |
| **ROSC** | **El Rosal** | **41.52** | **272** | P | **P** | **12 55 54.9** | **+0.4** |
| ROSC | | | | IAmb | IAmb | 12 56 02.0 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **41.82** | **253** | *eP* | **P** | **12 55 58.8** | **+2.4** |
| **ZARC** | **Zaragoza, Cauc** | **42.05** | **276** | P | **P** | **12 55 57.9** | **-0.5** |
| **PB16** | **IPOC Station P** | **42.93** | **237** | P | **P** | **12 56 05.6** | **-0.5** |
| **ESDC** | **Sonseca Array** | **43.42** | **33** | P | **P** | **12 56 10.1** | **+0.9** |
| | comp=Z,2.0nm,0.9s,baz=228,slow=8.5,SNR=9.6 | | | | | | |
| ESDC | | | | LR | LR | 13 11 16.5 | |
| | comp=Z,234nm,19.8s,baz=157,slow=32 | | | | | | |
| **LVC** | **Limon Verde** | **44.63** | **231** | LR | LR | 13 15 27.0 | |
| | comp=Z,428nm,20.8s,baz=58,slow=37 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.66** | **157** | T | T | 13 45 33.3 | |
| | SNR=98 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.68** | **157** | T | T | 13 45 18.3 | |
| | SNR=8.8 | | | | | | |
| **NNA** | **Nana** | **46.96** | **249** | LR | LR | 13 16 11.2 | |
| | comp=Z,660nm,18.9s,baz=80,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.14** | **256** | P | **P** | **12 56 39.5** | **0.0** |
| | comp=Z,2.9nm,0.7s,baz=21,slow=10,SNR=3.0 | | | | | | |
| ATAH | | | | LR | LR | 13 17 02.0 | |
| | comp=Z,1µm,18.0s,baz=77,slow=37 | | | | | | |
| **AC02** | **Maricunga** | **47.18** | **226** | P | **P** | **12 56 39.9** | **+0.2** |
| AC02 | | | | IAmb | IAmb | 12 56 47.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KEST** | **Kesra** | **49.47** | **46** | LR | LR | 13 17 57.8 | |
| | comp=Z,958nm,19.4s,baz=187,slow=36 | | | | | | |
| **BATG** | **Bathurst New B** | **51.26** | **331** | P | **P** | **12 57 11.9** | **+1.9** |
| **JTS** | **Las Juntas de** | **52.11** | **279** | LR | LR | 13 21 33.1 | |
| | comp=Z,133nm,19.2s,baz=182,slow=38 | | | | | | |
| **BO04** | **La Punta** | **52.56** | **220** | P | **P** | **12 57 19.1** | **-0.9** |
| BO04 | | | | IAmb | IAmb | 12 57 24.9 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **BNI** | **Bardonecchia** | **52.87** | **34** | P | **P** | **12 57 23.3** | **+1.0** |
| BNI | | | | IAmb | IAmb | 12 57 32.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **VAE** | **Valguarnera** | **53.90** | **46** | LR | LR | 13 19 53.6 | |
| | comp=Z,543nm,21.4s,baz=260,slow=35 | | | | | | |
| **TSUM** | **Tsumeb** | **54.83** | **117** | P | **P** | **12 57 36.7** | **-0.3** |
| | comp=Z,5.5nm,0.9s,baz=287,slow=7.1,SNR=3.2 | | | | | | |
| TSUM | | | | LR | LR | 13 15 26.9 | |
| | comp=Z,708nm,21.9s,baz=326,slow=30 | | | | | | |
| **TSUM** | **Tsumeb** | **54.83** | **117** | P | **P** | **12 57 35.9** | **-1.1** |
| TSUM | | | | IAmb | IAmb | 12 57 38.0 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.79** | **20** | LR | LR | 13 17 50.4 | |
| | comp=Z,286nm,19.1s,baz=186,slow=32 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.19** | **310** | LR | LR | 13 16 30.3 | |
| | comp=Z,416nm,21.9s,baz=120,slow=30 | | | | | | |
| **CTI** | **Castel Tesino** | **56.29** | **36** | P | **P** | **12 57 47.3** | **+0.2** |
| CTI | | | | IAmb | IAmb | 12 57 48.7 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **FETA** | **Feichten** | **56.31** | **34** | *i* P | **P** | **12 57 47.6** | **+0.3** |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **RETA** | **Reutte** | **56.59** | **34** | *eP* | **P** | **12 57 49.6** | **+0.4** |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **MOTA** | **Moosalm** | **56.70** | **34** | *i* P | **P** | **12 57 50.4** | **+0.3** |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **SADO** | **Sadowa** | **56.93** | **322** | LR | LR | 13 19 32.0 | |
| | comp=Z,132nm,18.3s,baz=158,slow=33 | | | | | | |
| **WTTA** | **Wattenberg** | **56.96** | **35** | *eP* | **P** | **12 57 52.0** | **+0.1** |
| | comp=Z,10nm,1.5s | | | | | | |
| **WATA** | **Walderalm** | **56.96** | **34** | *i* P | **P** | **12 57 52.1** | **+0.2** |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **PLCA** | **Paso Flores** | **56.98** | **214** | LR | LR | 13 22 02.7 | |
| | comp=Z,721nm,20.1s,baz=52,slow=36 | | | | | | |
| **SCHQ** | **Schefferville** | **57.10** | **337** | P | **P** | **12 57 53.3** | **+0.7** |
| | comp=Z,4.8nm,0.9s,baz=125,slow=8.8,SNR=6.6 | | | | | | |
| **SCHQ** | **Schefferville** | **57.10** | **337** | P | **P** | **12 57 52.7** | **+0.1** |
| SCHQ | | | | IAmb | IAmb | 12 58 00.7 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **ABTA** | **Abfaltersbach** | **57.17** | **35** | *eP* | **P** | **12 57 54.4** | **+1.1** |
| | comp=Z,11nm,1.3s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **57.37** | **316** | P | **P** | **12 57 55.5** | **+0.7** |
| ACSO | | | | IAmb | IAmb | 12 57 56.6 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **SWET** | **Sewanee** | **57.70** | **309** | P | **P** | **12 57 56.8** | **-0.4** |
| SWET | | | | IAmb | IAmb | 12 58 05.4 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **APG** | **El Apazote** | **57.73** | **285** | LR | LR | 13 23 37.7 | |
| | comp=Z,177nm,19.7s,baz=89,slow=37 | | | | | | |
| **KBA** | **Koelnbreinsper** | **57.83** | **36** | *eP* | **P** | **12 57 59.7** | **+1.6** |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **U49A** | **Red Boiling Sp** | **58.01** | **311** | P | **P** | **12 58 00.1** | **+0.8** |
| U49A | | | | IAmb | IAmb | 12 58 01.4 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **OBKA** | **Obir** | **58.24** | **37** | *eP* | **P** | **12 58 02.2** | **+1.3** |
| | comp=Z,10nm,1.1s | | | | | | |
| **SOKA** | **Soboth** | **58.62** | **37** | *i* P | **P** | **12 58 04.5** | **+1.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SIRR** | **Siria** | **62.50** | **39** | ⇑P | | **P** | | **12 58 31.4** | **+1.5** |
| **CCM** | **Cathedral Cave** | **62.63** | **311** | P | | **P** | | **12 58 30.5** | **-0.4** |
| CCM | | | | IAmb | IAmb | | | 12 58 31.5 | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| **SUR** | **Sutherland** | **62.68** | **130** | LR | LR | | | 13 20 09.1 | |
| | comp=Z,304nm,20.2s,baz=264,slow=31 | | | | | | | | |
| **GZR** | **Gura Zlata** | **62.87** | **41** | ⇓P | | **P** | | **12 58 33.7** | **+1.3** |
| **DRGR** | | **63.38** | **39** | ⇑P | | **P** | | **12 58 37.0** | **+1.2** |
| **LSZ** | **Lusaka** | **63.41** | **110** | LR | LR | | | 13 21 48.7 | |
| | comp=Z,209nm,19.8s,baz=254,slow=32 | | | | | | | | |
| **R40A** | **Maddies Statio** | **63.47** | **311** | P | | **P** | | **12 58 35.7** | **-0.8** |
| R40A | | | | IAmb | IAmb | | | 12 58 37.2 | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| **MBAR** | **Mbarara** | **63.54** | **93** | LR | LR | | | 13 23 28.8 | |
| | comp=Z,530nm,18.9s,baz=248,slow=33 | | | | | | | | |
| **P40A** | **Paris** | **63.66** | **312** | P | | **P** | | **12 58 37.4** | **-0.3** |
| **TRPA** | **Tarpa** | **63.81** | **38** | ⇑P | | **P** | | **12 58 39.6** | **+1.1** |
| **VOIR** | | **64.37** | **41** | ⇑P | | **P** | | **12 58 43.7** | **+1.3** |
| **FRB** | **Frobisher Bay** | **64.43** | **343** | LR | LR | | | 13 21 47.1 | |
| | comp=Z,82nm,21.2s,baz=148,slow=31 | | | | | | | | |
| **ICESG** | **Greenland Ices** | **64.48** | **357** | *i* P | | **P** | | **12 58 41.9** | **-1.1** |
| ICESG | | | | IAmb | IAmb | | | 12 58 50.5 | |
| | comp=Z,4.2nm,1.0s | | | | | | | | |
| **BOSA** | **Boshof** | **64.72** | **125** | P | | **P** | | **12 58 43.8** | **-1.3** |
| | comp=Z,7.0nm,0.9s,baz=293,slow=7.7,SNR=4.9 | | | | | | | | |
| **BOSA** | **Boshof** | **64.72** | **125** | P | | **P** | | **12 58 44.0** | **-1.0** |
| **N38A** | **Joes South For** | **64.89** | **313** | P | | **P** | | **12 58 45.4** | **-0.4** |
| **MLR** | **Muntele Rosu** | **64.98** | **41** | ⇑P | | **P** | | **12 58 48.0** | **+1.6** |
| **MLR** | **Muntele Rosu** | **64.98** | **41** | P | | **P** | | **12 58 47.7** | **+1.3** |
| | comp=Z,20nm,0.9s,baz=210,slow=1.9,SNR=24 | | | | | | | | |
| MLR | | | | LR | LR | | | 13 25 21.8 | |
| | comp=Z,421nm,21.1s,baz=276,slow=34 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.98** | **41** | P | | **P** | | **12 58 47.5** | **+1.1** |
| **NB2** | **NORSAR Subarra** | **65.13** | **22** | P | | **P** | | **12 58 47.5** | **+0.5** |
| | comp=Z,24nm,1.7s,baz=227,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.13** | **22** | P | | **P** | | **12 58 47.0** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=319,slow=9.3,SNR=5.9 | | | | | | | | |
| NOA | | | | LR | LR | | | 13 24 58.9 | |
| | comp=Z,191nm,18.8s,baz=230,slow=34 | | | | | | | | |
| **ISR** | **Istrita** | **65.25** | **42** | ⇑P | | **P** | | **12 58 49.6** | **+1.5** |
| **ELL** | **Elmali** | **65.34** | **52** | P | | **P** | | **12 58 50.8** | **+1.8** |
| **BISRR** | **Bisoca** | **65.51** | **42** | ⇑P | | **P** | | **12 58 50.9** | **+1.2** |
| **HFS** | **Hagfors** | **65.51** | **23** | LR | LR | | | 13 26 15.1 | |
| | comp=Z,111nm,18.0s,baz=240,slow=35 | | | | | | | | |
| **TESR** | **Tescani** | **65.79** | **41** | ⇓P | | **P** | | **12 58 52.5** | **+1.0** |
| **SPMN** | **Marine on St.** | **65.93** | **318** | P | | **P** | | **12 58 51.7** | **-0.7** |
| **HARR** | **Harsova** | **66.05** | **43** | ⇑P | | **P** | | **12 58 53.9** | **+0.8** |
| **BORA** | **Eskisehir** | **66.50** | **48** | P | | **P** | | **12 58 56.6** | **+0.3** |
| BORA | | | | IAmb | IAmb | | | 12 58 58.0 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **SORM** | **Soroca** | **67.43** | **39** | ⇑P | | **P** | | **12 59 01.7** | **-0.2** |
| **L34A** | **Svendsen Farm,** | **67.48** | **314** | P | | **P** | | **12 59 01.4** | **-1.1** |
| **B35A** | **Bob, Littlefor** | **67.55** | **321** | P | | **P** | | **12 59 03.2** | **+0.5** |
| B35A | | | | IAmb | IAmb | | | 12 59 09.3 | |
| | comp=Z,7.8nm,1.0s | | | | | | | | |
| **SUMG** | **Summit** | **67.92** | **358** | *i* P | | **P** | | **12 59 04.4** | **-0.6** |
| SUMG | | | | IAmb | IAmb | | | 12 59 13.4 | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **68.10** | **315** | P | | **P** | | **12 59 05.6** | **-0.7** |
| ECSD | | | | IAmb | IAmb | | | 12 59 13.0 | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **EIL** | **Elat** | **68.26** | **60** | LR | LR | | | 13 29 59.0 | |
| | comp=Z,776nm,18.1s,baz=272,slow=37 | | | | | | | | |
| **BGNE** | **Belgrade** | **68.64** | **313** | P | | **P** | | **12 59 09.2** | **-0.5** |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | | **P** | | **12 59 10.6** | **0.0** |
| | comp=Z,3.4nm,0.7s,baz=251,slow=6.6,SNR=12 | | | | | | | | |
| AKASG | | | | LR | LR | | | 13 29 16.1 | |
| | comp=Z,114nm,18.7s,baz=252,slow=36 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | | **P** | | **12 59 10.7** | **+0.1** |
| AKASG | | | | IAmb | IAmb | | | 12 59 15.6 | |
| | comp=Z,10nm,1.5s | | | | | | | | |
| **BR131** | **Keskin Array S** | **68.86** | **49** | P | | **P** | | **12 59 12.1** | **+0.8** |
| **BRTR** | **Keskin Array B** | **68.86** | **49** | P | | **P** | | **12 59 12.3** | **+1.1** |
| | comp=Z,6.9nm,0.9s,baz=240,slow=7.0,SNR=22 | | | | | | | | |
| BRTR | | | | LR | LR | | | 13 31 18.9 | |
| | comp=Z,210nm,18.5s,baz=258,slow=38 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.86** | **49** | P | | **P** | | **12 59 11.4** | **+0.2** |
| **AGMN** | **Agassiz Nation** | **68.88** | **320** | P | | **P** | | **12 59 11.1** | **0.0** |
| AGMN | | | | IAmb | IAmb | | | 12 59 17.7 | |
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **69.09** | **57** | LR | LR | | | 13 31 40.3 | |
| | comp=Z,160nm,19.4s,baz=47,slow=38 | | | | | | | | |
| **K31A** | **O'Neill** | **69.35** | **314** | P | | **P** | | **12 59 13.7** | **-0.5** |
| **ULM** | **Lac du Bonnet** | **69.49** | **322** | P | | **P** | | **12 59 14.1** | **-0.7** |
| | comp=Z,2.3nm,0.6s,baz=91,slow=7.2,SNR=3.5 | | | | | | | | |
| ULM | | | | LR | LR | | | 13 27 56.4 | |
| | comp=Z,114nm,18.2s,baz=94,slow=34 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.49** | **322** | P | | **P** | | **12 59 14.4** | **-0.4** |
| **KMBO** | **Kilima Mbogo** | **70.07** | **93** | P | | **P** | | **12 59 19.0** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=212,slow=7.9,SNR=3.6 | | | | | | | | |
| **BNN** | **Bunyan** | **70.37** | **50** | P | | **P** | | **12 59 21.0** | **+0.4** |
| **TXAR** | **Lajitas Array** | **71.18** | **299** | P | | **P** | | **12 59 25.9** | **+0.2** |
| | comp=Z,0.6nm,0.9s,baz=135,slow=5.3,SNR=4.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.18** | **299** | P | | **P** | | **12 59 25.3** | **-0.4** |
| **FINES** | **FINESS Array B** | **71.36** | **26** | P | | **P** | | **12 59 26.5** | **+0.5** |
| | comp=Z,3.8nm,0.8s,baz=190,slow=7.7,SNR=5.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **71.36** | **26** | P | | **P** | | **12 59 26.2** | **+0.3** |
| **FIA1** | **FINESS Array S** | **71.36** | **26** | P | | **P** | | **12 59 26.5** | **+0.5** |
| FIA1 | | | | IAmb | IAmb | | | 12 59 34.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **E28A** | **Huff** | **71.60** | **318** | P | | **P** | | **12 59 27.4** | **-0.4** |
| **ISCO** | **Idaho Springs** | **73.94** | **310** | P | | **P** | | **12 59 43.0** | **+0.8** |
| **MARD** | **Mardin** | **74.00** | **53** | P | | **P** | | **12 59 43.3** | **+0.9** |
| MARD | | | | IAmb | IAmb | | | 12 59 44.6 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **ANMO** | **Albuquerque** | **74.07** | **305** | LR | LR | | | 13 28 28.5 | |
| | comp=Z,600nm,20.8s,baz=98,slow=33 | | | | | | | | |
| **ANMO** | **Albuquerque** | **74.07** | **305** | P | | **P** | | **12 59 42.9** | **-0.1** |
| **DGMT** | **Dagmar** | **74.31** | **319** | P | | **P** | | **12 59 44.4** | **+0.6** |
| **FFC** | **Flin Flon** | **74.33** | **326** | P | | **P** | | **12 59 44.4** | **+0.6** |
| FFC | | | | IAmb | IAmb | | | 12 59 45.0 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **N23A** | **Red Feather La** | **74.33** | **311** | P | | **P** | | **12 59 44.7** | **+0.2** |
| N23A | | | | IAmb | IAmb | | | 12 59 53.0 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **OBN** | **Obninsk** | **74.37** | **34** | LR | LR | | | 13 30 11.2 | |
| | comp=Z,31nm,21.3s,baz=194,slow=34 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.88** | **18** | LR | LR | | | 13 29 11.0 | |
| | comp=Z,81nm,19.6s,baz=252,slow=33 | | | | | | | | |
| **LAO** | **LASA Array** | **75.36** | **317** | P | | **P** | | **12 59 50.7** | **+0.8** |
| LAO | | | | IAmb | IAmb | | | 12 59 58.4 | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| **PV13** | **Radium Mtn., P** | **76.25** | **308** | P | | **P** | | **12 59 55.5** | **0.0** |
| **LPIG** | **La Paz** | **76.85** | **294** | LR | LR | | | 13 35 00.7 | |
| | comp=Z,40nm,18.1s,baz=85,slow=37 | | | | | | | | |
| **PD31** | **Pinedale Array** | **77.23** | **313** | P | | **P** | | **13 00 00.6** | **-0.4** |
| **PDAR** | **Pinedale Array** | **77.23** | **313** | P | | **P** | | **13 00 01.1** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=111,slow=5.2,SNR=12 | | | | | | | | |
| PDAR | | | | LR | LR | | | 13 29 40.8 | |
| | comp=Z,189nm,21.8s,baz=129,slow=32 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.23** | **313** | P | | **P** | | **13 00 00.8** | **-0.1** |
| **RLMT** | **Red Lodge** | **77.26** | **315** | P | | **P** | | **13 00 01.8** | **+0.8** |
| RLMT | | | | IAmb | IAmb | | | 13 00 02.6 | |
| | comp=Z,6.7nm,0.8s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **77.28** | **173** | P | | **P** | | **12 59 59.3** | **-1.0** |
| **RAYN** | **Ar Rayn** | **77.29** | **67** | P | | **P** | | **13 00 02.5** | **+1.1** |
| **VNA2** | **Neumayer--Watz** | **77.30** | **172** | P | | **P** | | **12 59 59.9** | **-0.4** |
| | baz=355,slow=6.9 | | | | | | | | |
| **GNI** | **Garni** | **77.36** | **50** | LR | LR | | | 13 37 13.0 | |
| | comp=Z,135nm,18.8s,baz=261,slow=38 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **77.64** | **9** | LR | LR | | | 13 29 30.6 | |
| | comp=Z,91nm,19.6s,baz=38,slow=32 | | | | | | | | |
| **LOHW** | **Long Hollow** | **78.07** | **313** | P | | **P** | | **13 00 06.0** | **+0.4** |
| **WUAZ** | **Wupatki** | **78.12** | **305** | P | | **P** | | **13 00 07.3** | **+1.4** |
| **FLWY** | **Flagg Ranch** | **78.18** | **314** | P | | **P** | | **13 00 06.2** | **+0.1** |
| FLWY | | | | IAmb | IAmb | | | 13 00 08.2 | |
| | comp=Z,8.7nm,0.9s | | | | | | | | |
| **MOOW** | **Moose Ponds** | **78.18** | **314** | P | | **P** | | **13 00 06.5** | **+0.3** |
| **REDW** | **Red Top Meadow** | **78.23** | **313** | P | | **P** | | **13 00 06.6** | **+0.1** |
| REDW | | | | IAmb | IAmb | | | 13 00 15.5 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **YHH** | **Holmes Hill** | **78.35** | **315** | P | | **P** | | **13 00 07.7** | **+0.5** |
| YHH | | | | IAmb | IAmb | | | 13 00 15.6 | |
| | comp=Z,8.4nm,1.2s | | | | | | | | |
| **RES** | **Resolute Bay** | **78.38** | **346** | P | | **P** | | **13 00 06.7** | **+0.4** |
| RES | | | | IAmb | IAmb | | | 13 00 08.1 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **YMR** | **Madison River** | **78.42** | **314** | P | | **P** | | **13 00 08.9** | **+1.4** |
| YMR | | | | IAmb | IAmb | | | 13 00 09.9 | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **78.65** | **171** | P | | **P** | | **13 00 07.3** | **-0.7** |
| **SNAA** | **Sanae** | **78.65** | **171** | P | | **P** | | **13 00 08.0** | **+0.1** |
| SNAA | | | | IAmb | IAmb | | | 13 00 27.1 | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **MTPU** | **Mount Pierson** | **78.89** | **308** | P | | **P** | | **13 00 10.5** | **+0.1** |
| MTPU | | | | IAmb | IAmb | | | 13 00 12.9 | |
| | comp=Z,8.7nm,1.1s | | | | | | | | |
| **EUNU** | **Eureka** | **79.50** | **352** | P | | **P** | | **13 00 13.6** | **+1.1** |
| **LRM** | **Limekiln Ridge** | **79.55** | **316** | P | | **P** | | **13 00 14.3** | **+0.6** |
| **SZCU** | **Shurtz Canyon** | **79.59** | **307** | P | | **P** | | **13 00 15.1** | **+1.1** |
| SZCU | | | | IAmb | IAmb | | | 13 00 27.5 | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **DLMT** | **Dillon** | **79.62** | **315** | P | | **P** | | **13 00 14.8** | **+0.9** |
| DLMT | | | | IAmb | IAmb | | | 13 00 21.1 | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **CCUT** | **Cedar City** | **79.81** | **307** | P | | **P** | | **13 00 15.7** | **+0.4** |
| **RPN** | **Rapa Nui** | **80.34** | **242** | LR | LR | | | 13 31 48.2 | |
| | comp=Z,136nm,21.2s,baz=91,slow=33 | | | | | | | | |
| **EDM** | **Edmonton** | **80.70** | **323** | P | | **P** | | **13 00 20.1** | **+0.6** |
| **HLID** | **Hailey** | **80.83** | **313** | P | | **P** | | **13 00 19.5** | **-1.0** |
| **PRN** | **Pahroc Range** | **81.14** | **307** | P | | **P** | | **13 00 23.6** | **+1.2** |
| **KIRV** | **Kirov** | **81.89** | **32** | LR | LR | | | 13 36 32.4 | |
| | comp=Z,129nm,18.1s,baz=291,slow=36 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.15** | **332** | P | | **P** | | **13 00 26.6** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=98,slow=5.3,SNR=18 | | | | | | | | |
| YKA | | | | LR | LR | | | 13 33 28.2 | |
| | comp=Z,115nm,20.9s,baz=346,slow=33 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.15** | **332** | P | | **P** | | **13 00 24.5** | **-2.4** |
| **PFO** | **Pinyon Flats O** | **82.28** | **303** | LR | LR | | | 13 35 18.2 | |
| | comp=Z,227nm,19.0s,baz=90,slow=34 | | | | | | | | |
| **GWY** | **Greenwater Val** | **82.44** | **306** | P | | **P** | | **13 00 30.1** | **+0.9** |
| GWY | | | | IAmb | IAmb | | | 13 00 49.0 | |
| | comp=Z,9.8nm,1.5s | | | | | | | | |
| **QSM** | **Queen of Sheba** | **82.60** | **306** | P | | **P** | | **13 00 30.4** | **+0.5** |
| QSM | | | | IAmb | IAmb | | | 13 00 50.4 | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| **NEW** | **Newport** | **82.85** | **318** | LR | LR | | | 13 32 32.0 | |
| | comp=Z,268nm,21.8s,baz=94,slow=32 | | | | | | | | |
| **TPH** | **Tonopah** | **82.87** | **308** | P | | **P** | | **13 00 31.8** | **+0.4** |
| **BMO** | **Blue Mountains** | **82.94** | **314** | P | | **P** | | **13 00 31.9** | **+0.4** |
| BMO | | | | IAmb | IAmb | | | 13 00 34.2 | |
| | comp=Z,9.8nm,1.4s | | | | | | | | |
| **LCH** | **Last Change Ra** | **83.21** | **307** | P | | **P** | | **13 00 33.9** | **+0.7** |
| **LHV** | **Little Huntoon** | **83.88** | **308** | P | | **P** | | **13 00 36.6** | **+0.3** |
| LHV | | | | IAmb | IAmb | | | 13 00 44.5 | |
| | comp=Z,6.9nm,1.0s | | | | | | | | |
| **ISA** | **Isabella, Lake** | **83.91** | **305** | P | | **P** | | **13 00 37.4** | **+0.7** |
| ISA | | | | IAmb | IAmb | | | 13 00 47.0 | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **BEKR** | **Beckworth** | **85.28** | **309** | P | | **P** | | **13 00 44.8** | **+1.2** |
| BEKR | | | | IAmb | IAmb | | | 13 00 46.7 | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **86.39** | **342** | P | | **P** | | **13 00 48.3** | **+0.1** |
| A36M | | | | IAmb | IAmb | | | 13 00 49.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **86.85** | **40** | LR | LR | | | 13 38 11.1 | |
| | comp=Z,75nm,21.6s,baz=293,slow=35 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.35** | **67** | LR | LR | | | 13 41 31.6 | |
| | comp=Z,530nm,20.8s,baz=300,slow=36 | | | | | | | | |
| **CRZF** | **Crozet Islands** | **89.57** | **136** | P | | **P** | | **13 01 05.1** | **+1.1** |
| **BBB** | **Bella Bella** | **89.69** | **322** | LR | LR | | | 13 38 44.3 | |
| | comp=Z,97nm,19.2s,baz=84,slow=34 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **94.72** | **180** | LR | LR | | | 13 39 34.4 | |
| | comp=Z,106nm,19.1s,baz=134,slow=33 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **94.72** | **180** | P | | **P** | | **13 01 26.8** | **-0.8** |
| **ILAR** | **Eielson Array** | **95.86** | **337** | P | | **P** | | **13 01 32.0** | **-0.6** |
| | comp=Z,1.2nm,0.9s,baz=51,slow=4.0,SNR=9.3 | | | | | | | | |
| **PZH** | **PanZhiHua** | **126.08** | **52** | PKP | | **PKPdf** | | **13 07 08.9** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **127.05** | **63** | PKP | | **PKiKP** | | **13 07 12.1** | **+0.1** |
| | comp=Z,1.5nm,0.9s,baz=282,slow=3.5,SNR=8.5 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.05** | **63** | | | **PKPdf** | | **13 07 11.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **152.41** | **169** | PKPbc | | **PKPbc** | | **13 08 01.9** | **-1.2** |
| | comp=Z,4.1nm,1.0s,baz=172,slow=7.6,SNR=4.8 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **154.93** | **124** | PKP | | **PKPdf** | | **13 08 00.1** | **-0.1** |
| | comp=Z,2.3nm,0.8s,baz=9.4,slow=2.7,SNR=2.7 | | | | | | | | |
| FITZ | | | | PKPbc | | **PKPbc** | | **13 08 08.7** | **-0.2** |
| | comp=Z,4.1nm,0.9s,baz=241,slow=3.6,SNR=6.2 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **154.93** | **124** | | | **PKPdf** | | **13 07 59.5** | **-0.7** |
| FITZ | | | | | | **PKiKP** | | **13 08 09.2** | **+0.2** |
| FITZ | | | | PKPab | | **PKPab** | | **13 08 23.3** | **-0.9** |
| **RTV** | **Rentapao** | **155.61** | **236** | P | | **PKPdf** | | **13 07 59.2** | **-1.9** |
| **DVP** | **Devils Point** | **155.84** | **236** | P | | **PKPdf** | | **13 07 59.0** | **-2.4** |
| **ASAR** | **Alice Springs** | **157.09** | **147** | PKP | | **PKPdf** | | **13 08 01.9** | **-1.1** |
| | comp=Z,0.9nm,0.9s,baz=271,slow=1.6,SNR=4.8 | | | | | | | | |
| ASAR | | | | PKPab | | **PKPab** | | **13 08 32.1** | **-1.2** |
| | comp=Z,1.0nm,0.8s,baz=209,slow=5.7,SNR=5.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **157.09** | **147** | | | **PKPdf** | | **13 08 00.9** | **-2.2** |
| ASAR | | | | PKPab | | **PKPab** | | **13 08 32.0** | **-1.3** |
| **WRA** | **Warramunga Arr** | **160.23** | **141** | PKPab | | **PKPab** | | **13 08 45.8** | **-1.2** |
| | comp=Z,2.6nm,1.2s,baz=210,slow=3.6,SNR=5.5 | | | | | | | | |

*SJA* ***20*** *12:48:50.1±0.6,21.°55S×68.°44W,h161km±3km,ML4.5, MW4.1*
*IDC* ***20*** *12:48:51.2±0.7,21.°49S×68.°07W,h124km±9km,mb3.7/6, mb1 3.9/11,mb1mx3.7/35,mbtmp4.1/11,MS3.5/1, Ms1 3.5/1,ms1mx2.9/51,Error ellipse: s-maj=18.7km s-min=12.6km az=133.0*
*VAO* ***20*** *12:48:51.4±0.4,21.°65S×68.°49W,h161km±4km,mb4.4*
*GUC* ***20*** *12:48:52.5±0.8,21.°51S×68.°37W,h140km±5km,ML4.4*
*NEIC* ***20*** *12:48:52.0±2.5,21.°53S±0.°04×68.°40W±0.°08,h133km±6km, Error ellipse: s-maj=11.2km s-min=5.8km az=106.0*

**ISC 20 12:48:51.7±0.5,21.°52S±0.°03×68.°40W±0.°05,h142km±5km, n119,σ1$31/166,mb4.3/12,14C,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PB09** | **IPOC Station P** | **0.83** | **251** | ⇑*i*P | | **Pn** | **12 49 15.2** | **+0.6** |
| PB09 | | | | *i* S | | **Sn** | **12 49 32.3** | **+0.4** |
| PB09 | | | | IAML | | | 12 49 34.5 | |
| | comp=N,4μm,0.5s | | | | | | | |
| **PB09** | **IPOC Station P** | **0.83** | **251** | *e*P | | **Pn** | **12 49 15.0** | **+0.4** |
| PB09 | | | | *e*S | | **Sn** | **12 49 33.6** | **+1.6** |
| PB09 | | | | IAML | | | 12 49 34.2 | |
| | comp=Z,4μm,0.4s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.12** | **295** | | | **Pn** | **12 49 17.1** | **+0.1** |
| **PB01** | **IPOC Station P** | **1.12** | **295** | ⇑*i*P | | **Pn** | **12 49 17.1** | **+0.1** |
| PB01 | | | | *i* S | | **Sn** | **12 49 36.1** | **-0.1** |
| PB01 | | | | IAML | | | 12 49 37.8 | |
| | comp=N,10μm,0.4s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.12** | **295** | *e*P | | **Pn** | **12 49 17.0** | **0.0** |
| PB01 | | | | *e*S | | **Sn** | **12 49 37.2** | **+1.0** |
| PB01 | | | | IAML | | | 12 49 37.8 | |
| | comp=Z,4μm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **1.19** | **204** | P | | **Pn** | **12 49 18.1** | **+0.2** |
| | comp=Z,75nm,0.3s,baz=38,slow=7.3,SNR=514 | | | | | | | |
| LVC | | | | S | | **Sn** | **12 49 37.7** | **-0.1** |
| | comp=Z,195nm,0.3s,baz=69,slow=6.7,SNR=17 | | | | | | | |
| **LVC** | **Limon Verde** | **1.19** | **204** | *e*P | | **Pn** | **12 49 18.1** | **+0.2** |
| LVC | | | | *i* S | | **Sn** | **12 49 38.2** | **+0.4** |
| **LVC** | **Limon Verde** | **1.19** | **204** | *e*P | | **Pn** | **12 49 18.0** | **+0.1** |
| **LVC** | **Limon Verde** | **1.19** | **204** | *e*P | | **Pn** | **12 49 18.0** | **+0.1** |
| LVC | | | | *e*S | | **Sn** | **12 49 38.5** | **+0.6** |
| **PB03** | **IPOC Station P** | **1.36** | **247** | ⇑*i*P | | **Pn** | **12 49 19.9** | **+0.4** |
| PB03 | | | | *i* S | | **Sn** | **12 49 40.1** | **-0.5** |
| PB03 | | | | IAML | | | 12 49 41.2 | |
| | comp=E,9μm,0.3s | | | | | | | |
| **PB03** | **IPOC Station P** | **1.36** | **247** | *e*P | | **Pn** | **12 49 19.0** | **-0.4** |
| PB03 | | | | *e*S | | **Sn** | **12 49 40.9** | **+0.3** |
| PB03 | | | | IAML | | | 12 49 41.1 | |
| | comp=Z,6μm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.40** | **261** | ⇑*i*P | | **Pn** | **12 49 20.3** | **+0.5** |
| PB07 | | | | *i* S | | **Sn** | **12 49 40.9** | **-0.3** |
| PB07 | | | | IAML | | | 12 49 42.2 | |
| | comp=N,12μm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.40** | **261** | *e*P | | **Pn** | **12 49 20.0** | **+0.2** |
| PB07 | | | | *e*S | | **Sn** | **12 49 41.7** | **+0.5** |
| PB07 | | | | *e*S | | **Sn** | **12 49 41.8** | **+0.5** |
| PB07 | | | | IAML | | | 12 49 45.0 | |
| | comp=Z,4μm,0.2s | | | | | | | |
| **PB02** | **IPOC Station P** | **1.41** | **278** | ⇑*i*P | | **Pn** | **12 49 20.2** | **+0.4** |
| PB02 | | | | *i* S | | **Sn** | **12 49 41.0** | **-0.3** |
| **PB02** | **IPOC Station P** | **1.41** | **278** | *e*P | | **Pn** | **12 49 20.0** | **+0.1** |
| PB02 | | | | *e*P | | **Pn** | **12 49 20.2** | **+0.4** |
| PB02 | | | | *e*S | | **Sn** | **12 49 36.0** | **-5.3** |
| PB02 | | | | *e*S | | **Sn** | **12 49 41.8** | **+0.5** |
| PB02 | | | | IAML | | | 12 49 41.9 | |
| | comp=Z,16μm,0.3s | | | | | | | |
| **PB08** | **IPOC Station P** | **1.54** | **333** | ⇑*i*P | | **Pn** | **12 49 22.3** | **+0.7** |
| PB08 | | | | *i* S | | **Sn** | **12 49 44.7** | **+0.4** |
| PB08 | | | | IAML | | | 12 49 46.2 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **PB08** | **IPOC Station P** | **1.54** | **333** | *e*P | | **Pn** | **12 49 22.0** | **+0.4** |
| PB08 | | | | *e*S | | **Sn** | **12 49 45.6** | **+1.2** |
| **PB06** | **IPOC Station P** | **1.61** | **222** | *e*P | | **Pn** | **12 49 22.5** | **+0.5** |
| PB06 | | | | *i* S | | **Sn** | **12 49 45.5** | **+0.3** |
| PB06 | | | | IAML | | | 12 49 47.2 | |
| | comp=E,3μm,0.2s | | | | | | | |
| **PB06** | **IPOC Station P** | **1.61** | **222** | *e*P | | **Pn** | **12 49 22.0** | **0.0** |
| PB06 | | | | *e*S | | **Sn** | **12 49 45.5** | **+0.3** |
| PB06 | | | | IAML | | | 12 49 47.8 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.78** | **293** | | | **Pn** | **12 49 24.2** | **+0.3** |
| **PATCX** | **Punta Patache** | **1.78** | **293** | ⇑*i*P | | **Pn** | **12 49 24.1** | **+0.3** |
| PATCX | | | | *i* S | | **Sn** | **12 49 48.3** | **-0.2** |
| PATCX | | | | IAML | | | 12 49 51.0 | |
| | comp=N,6μm,0.5s | | | | | | | |
| **PATCX** | **Punta Patache** | **1.78** | **293** | *e*P | | **Pn** | **12 49 24.0** | **+0.1** |
| PATCX | | | | *e*P | | **Pn** | **12 49 24.2** | **+0.3** |
| PATCX | | | | *e*P | | **Pn** | **12 49 24.3** | **+0.4** |
| PATCX | | | | *e*P | | **Pn** | **12 49 24.4** | **+0.4** |
| PATCX | | | | IAML | | | 12 49 51.0 | |
| | comp=Z,4μm,0.6s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.82** | **243** | ⇑*i*P | | **Pn** | **12 49 24.8** | **+0.3** |
| PB04 | | | | *i* S | | **Sn** | **12 49 49.1** | **-0.3** |
| PB04 | | | | IAML | | | 12 49 52.5 | |
| | comp=N,4μm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.82** | **243** | *e*P | | **Pn** | **12 49 24.0** | **-0.4** |
| PB04 | | | | *e*P | | **Pn** | **12 49 24.7** | **+0.3** |
| PB04 | | | | *e*S | | **Sn** | **12 49 49.2** | **-0.3** |
| PB04 | | | | IAML | | | 12 49 50.0 | |
| | comp=Z,3μm,0.2s | | | | | | | |
| **HMBC** | **Humberstone** | **1.86** | **311** | ⇑*i*P | | **Pn** | **12 49 24.6** | **-0.3** |
| HMBC | | | | *i* S | | **Sn** | **12 49 49.9** | **-0.4** |
| HMBC | | | | IAML | | | 12 49 51.5 | |
| | comp=N,5μm,0.3s | | | | | | | |
| **TA01** | **Diego Aracena** | **1.92** | **299** | | | **Pn** | **12 49 25.3** | **-0.1** |
| **TA01** | **Diego Aracena** | **1.92** | **299** | ⇑*i*P | | **Pn** | **12 49 25.1** | **-0.3** |
| TA01 | | | | *i* S | | **Sn** | **12 49 50.1** | **-1.1** |
| **TA01** | **Diego Aracena** | **1.92** | **299** | *e*P | | **Pn** | **12 49 24.2** | **-1.2** |
| TA01 | | | | *e*P | | **Pn** | **12 49 25.3** | **-0.1** |
| TA01 | | | | *e*S | | **Sn** | **12 49 51.5** | **+0.4** |
| TA01 | | | | IAML | | | 12 49 52.5 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **PB15** | **IPOC Station P** | **1.95** | **210** | *e*P | | **Pn** | **12 49 26.6** | **+0.6** |
| PB15 | | | | *i* S | | **Sn** | **12 49 53.2** | **+0.8** |
| **PB15** | **IPOC Station P** | **1.95** | **210** | *e*P | | **Pn** | **12 49 27.0** | **+1.0** |
| PB15 | | | | *e*S | | **Sn** | **12 49 52.7** | **+0.3** |
| PB15 | | | | IAML | | | 12 49 56.3 | |
| | comp=Z,6μm,0.1s | | | | | | | |
| **GO01** | **Chusmiza** | **1.99** | **338** | | | **Pn** | **12 49 27.1** | **+0.3** |
| **GO01** | **Chusmiza** | **1.99** | **338** | ⇑*i*P | | **Pn** | **12 49 27.0** | **+0.3** |
| GO01 | | | | IAML | | | 12 49 57.8 | |
| | comp=N,3μm,0.2s | | | | | | | |
| **GO01** | **Chusmiza** | **1.99** | **338** | *e*P | | **Pn** | **12 49 27.0** | **+0.3** |
| GO01 | | | | *e*S | | **Sn** | **12 49 55.1** | **+1.6** |
| **TA02** | **Huaiquique** | **2.04** | **307** | *e*P | | **Pn** | **12 49 26.4** | **-0.4** |
| TA02 | | | | *i* S | | **Sn** | **12 49 53.0** | **-0.9**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SRU** | **San Rafael Swe** | **72.05** | **327** | P | **P** | **13 00 01.1** | **+0.6** |
| SRU | | | | IAmb | IAmb | 13 00 12.2 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **P17A** | **Butcher Ranch,** | **72.44** | **327** | P | **P** | **13 00 04.3** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **75.80** | **322** | P | **P** | **13 00 25.1** | **+2.7** |
| | comp=Z,0.3nm,0.5s,baz=166,slow=6.4,SNR=4.8 | | | | | | |
| **SCHQ** | **Schefferville** | **76.05** | **1** | P | **P** | **13 00 23.1** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **76.91** | **70** | P | **P** | **13 00 28.8** | **0.0** |
| | comp=Z,3.4nm,0.5s,baz=259,slow=5.3,SNR=19 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.91** | **70** | P | **P** | **13 00 29.0** | **+0.2** |
| TORD | | | | IAmb | IAmb | 13 00 38.9 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **PAHR** | **Pah Rah Range** | **77.28** | **322** | P | **P** | **13 00 32.7** | **+2.2** |
| PAHR | | | | IAmb | IAmb | 13 00 34.5 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **MOD** | **Modoc Plateau** | **79.27** | **323** | P | **P** | **13 00 43.7** | **+2.3** |
| MOD | | | | IAmb | IAmb | 13 01 03.6 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **WDC** | **Whiskeytown Da** | **79.68** | **321** | P | **P** | **13 00 43.7** | **+0.2** |
| WDC | | | | IAmb | IAmb | 13 00 44.2 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **K05A** | **Summer Lake** | **80.14** | **324** | P | **P** | **13 00 47.1** | **+1.0** |
| **BOSA** | **Boshof** | **83.02** | **118** | P | **P** | **13 01 01.9** | **+0.2** |
| | comp=Z,3.7nm,1.0s,baz=214,slow=16,SNR=1.8 | | | | | | |
| **BOSA** | **Boshof** | **83.02** | **118** | P | **P** | **13 01 02.2** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **91.36** | **340** | P | **P** | **13 01 42.4** | **+1.6** |
| | comp=Z,2.3nm,0.6s,baz=134,slow=4.5,SNR=36 | | | | | | |
| YKA | | | | pP | **pP** | **13 02 18.2** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=131,slow=4.4,SNR=4.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.36** | **340** | P | **P** | **13 01 41.8** | **+0.9** |
| **MKAR** | **Makanchi Array** | **145.37** | **36** | PKPbc | **PKPab** | **13 08 14.6** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=339,slow=3.3,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.37** | **36** | | **PKPab** | **13 08 14.1** | **+0.9** |

**IDC 20 12:51:21.4±7.4, 6.15°S×145.59°E, h92km±76km, mb3.2/3, mb1 3.4/5, mb1mx3.1/41, mbtmp3.5/5, ML3.7/1, Error ellipse: s-maj=61.5km s-min=28.1km az=150.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.59** | **154** | P | Pn | 12 52 13.5 | -1.5 |
| | 2.3nm,0.3s,baz=18,slow=10,SNR=12 | | | | | | |
| PMG | | | | S | Sn | 12 52 57.8 | +1.4 |
| | 1.1nm,0.3s,baz=258,slow=22,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.54** | **218** | P | Pn | 12 55 21.4 | +1.3 |
| | 0.3nm,0.3s,baz=47,slow=12,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **20.73** | **212** | P | P | 12 55 54.4 | -0.4 |
| | 0.5nm,0.6s,baz=46,slow=8.5,SNR=4.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.80** | **237** | P | P | 12 56 16.0 | -0.7 |
| | 1.5nm,0.5s,baz=49,slow=9.0,SNR=9.4 | | | | | | |
| **ILAR** | **Eielson Array** | **86.17** | **23** | P | P | 13 03 52.5 | +0.3 |
| | 0.6nm,1.0s,baz=228,slow=6.7,SNR=4.2 | | | | | | |

*IDC **20** 12:53:38.8±0.7, 4.74°N×32.52°W, h0km, mb4.1/15, mb1 4.4/15, mb1mx4.1/56, mbtmp4.1/15, Error ellipse: s-maj=25.8km s-min=18.0km az=147.0*
*NEIC **20** 12:53:41.5±1.4, 4.7°N±0.1°×32.7°W±0.1°, h10km±1km, mb4.9/41, Error ellipse: s-maj=19.7km s-min=18.3km az=185.0*
**ISC 20 12:53:40.4±0.5, 4.66°N±0.09°×32.58°W±0.09, h11km, n76, σ0.94/71, mb4.7/31, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **21.90** | **124** | T | T | 13 21 03.0 | |
| | baz=303,slow=75,SNR=13 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.90** | **124** | T | T | 13 21 07.1 | |
| | baz=303,slow=75,SNR=17 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.92** | **124** | T | T | 13 21 04.0 | |
| | baz=303,slow=75,SNR=20 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.40** | **127** | T | T | 13 21 38.5 | |
| | baz=303,slow=74,SNR=35 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.42** | **127** | T | T | 13 21 39.9 | |
| | baz=277,slow=74,SNR=19 | | | | | | |
| **BDFB** | **Brasilia** | **25.30** | **217** | P | **P** | **12 59 07.3** | **-0.1** |
| **DBIC** | **Dimbokro** | **27.66** | **85** | P | **P** | **12 59 28.2** | **-0.4** |
| | 5.1nm,1.0s,baz=281,slow=9.3,SNR=4.1 | | | | | | |
| **DBIC** | **Dimbokro** | **27.66** | **85** | P | **P** | **12 59 29.0** | **+0.3** |
| DBIC | | | | IAmb | IAmb | 12 59 30.2 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.47** | **291** | T | T | 13 30 34.1 | |
| | SNR=12 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.25** | **295** | T | T | 13 31 30.7 | |
| | SNR=7.6 | | | | | | |
| **BIRV** | **Birongo** | **33.87** | **282** | P | **P** | **13 00 22.6** | **-0.9** |
| BIRV | | | | IAmb | IAmb | 13 00 25.5 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **SIV** | **San Ignacio** | **34.87** | **233** | P | **P** | **13 00 32.8** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=100,slow=10,SNR=3.8 | | | | | | |
| **AGPR** | **Aguadilla, PR** | **36.41** | **295** | P | **P** | **13 00 44.8** | **-0.5** |
| **CPUP** | **Villa Florida** | **39.03** | **217** | P | **P** | **13 01 07.9** | **+0.5** |
| | comp=Z,1.1nm,0.6s,baz=284,slow=7.0,SNR=3.0 | | | | | | |
| **LPAZ** | **La Paz** | **40.86** | **239** | P | **P** | **13 01 21.4** | **-2.0** |
| **ROSC** | **El Rosal** | **41.59** | **272** | P | **P** | **13 01 28.6** | **-0.7** |
| **ESDC** | **Sonseca Array** | **43.40** | **33** | P | **P** | **13 01 42.8** | **-0.4** |
| | comp=Z,1.5nm,0.9s,baz=237,slow=8.3,SNR=5.0 | | | | | | |
| **GGN** | **Saint George** | **50.19** | **329** | P | **P** | **13 02 37.8** | **+1.6** |
| **BOAB** | **BOACO BROADBA** | **52.98** | **282** | P | **P** | **13 02 57.6** | **0.0** |
| **SENIN** | **Lac Senin/Sane** | **53.99** | **33** | P | **P** | **13 03 05.8** | **+1.0** |
| **SCHQ** | **Schefferville** | **57.15** | **337** | P | **P** | **13 03 25.6** | **-1.5** |
| | comp=Z,5.6nm,1.1s,baz=120,slow=7.7,SNR=4.4 | | | | | | |
| **SCHQ** | **Schefferville** | **57.15** | **337** | P | **P** | **13 03 26.5** | **-0.6** |
| SCHQ | | | | IAmb | IAmb | 13 03 29.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **NRS** | **Narsarsuaq** | **57.20** | **353** | P | **P** | **13 03 28.1** | **+0.9** |
| **Q51A** | **Peebles** | **57.20** | **314** | P | **P** | **13 03 28.1** | **+0.4** |
| Q51A | | | | IAmb | IAmb | 13 03 30.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **GEC2** | **GERESS Array S** | **58.96** | **34** | P | **P** | **13 03 40.5** | **+0.5** |
| GEC2 | | | | IAmb | IAmb | 13 03 47.2 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **GERES** | **GERESS Array B** | **58.96** | **34** | P | **P** | **13 03 39.7** | **-0.4** |
| | comp=Z,3.5nm,1.0s,baz=226,slow=7.0,SNR=5.9 | | | | | | |
| **GERES** | **GERESS Array B** | **58.96** | **34** | P | **P** | **13 03 40.5** | **+0.5** |
| **KHC** | **Kasperske Hory** | **59.05** | **34** | *eP* | **P** | **13 03 40.0** | **-0.6** |
| **PLAL** | **Pickwick Lake** | **59.36** | **308** | P | **P** | **13 03 44.3** | **+1.4** |
| PLAL | | | | IAmb | IAmb | 13 03 55.5 | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **BORG** | **Borgarnes** | **60.52** | **6** | P | **P** | **13 03 46.7** | **-3.5** |
| **OLIL** | **Olney** | **60.55** | **312** | P | **P** | **13 03 52.2** | **+1.2** |
| **PSZ** | **Piszkesteto** | **62.09** | **37** | P | **P** | **13 04 02.2** | **+0.8** |
| PSZ | | | | IAmb | IAmb | 13 04 03.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CCM** | **Cathedral Cave** | **62.70** | **311** | P | **P** | **13 04 05.2** | **-0.4** |
| CCM | | | | IAmb | IAmb | 13 04 06.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **OJC** | **Ojcow** | **63.09** | **35** | P | **P** | **13 04 08.8** | **+0.9** |
| OJC | | | | IAmb | IAmb | 13 04 09.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **63.47** | **352** | P | **P** | **13 04 10.8** | **+0.6** |
| SFJD | | | | IAmb | IAmb | 13 04 30.8 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **64.65** | **125** | P | **P** | **13 04 18.7** | **-0.1** |
| **NOA** | **NORSAR Array B** | **65.13** | **22** | P | **P** | **13 04 20.5** | **-0.7** |
| | comp=Z,4.4nm,1.0s,baz=229,slow=6.4,SNR=6.9 | | | | | | |
| **ELL** | **Elmali** | **65.30** | **52** | P | **P** | **13 04 24.5** | **+1.6** |
| **AKASG** | **Malin Array Be** | **68.80** | **37** | P | **P** | **13 04 44.4** | **-0.2** |
| | comp=Z,1.4nm,0.7s,baz=250,slow=6.7,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.80** | **37** | P | **P** | **13 04 46.3** | **+1.6** |
| AKASG | | | | IAmb | IAmb | 13 04 51.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BR131** | **Keskin Array S** | **68.82** | **49** | P | **P** | **13 04 45.5** | **+0.3** |
| **BRTR** | **Keskin Array B** | **68.82** | **49** | P | **P** | **13 04 44.3** | **-0.9** |
| | comp=Z,5.8nm,1.1s,baz=234,slow=4.3,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.82** | **49** | P | **P** | **13 04 45.5** | **+0.3** |
| **BNN** | **Bunyan** | **70.33** | **50** | P | **P** | **13 04 56.0** | **+1.4** |
| **TXAR** | **Lajitas Array** | **71.25** | **299** | P | **P** | **13 05 02.0** | **+1.7** |
| | comp=Z,0.8nm,1.1s,baz=94,slow=6.5,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.25** | **299** | P | **P** | **13 05 01.2** | **+0.9** |
| **FINES** | **FINESS Array B** | **71.35** | **26** | P | **P** | **13 04 59.1** | **-1.0** |
| | comp=Z,4.7nm,0.9s,baz=232,slow=9.4,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **71.35** | **26** | P | **P** | **13 05 00.1** | **0.0** |
| **Q24A** | **Divide** | **73.54** | **309** | P | **P** | **13 05 14.2** | **+0.1** |
| Q24A | | | | IAmb | IAmb | 13 05 16.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **SDCO** | **Great Sand Dun** | **73.67** | **308** | P | **P** | **13 05 15.6** | **+0.8** |
| **MARD** | **Mardin** | **73.97** | **53** | P | **P** | **13 05 17.5** | **+1.1** |
| MARD | | | | IAmb | IAmb | 13 05 18.5 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **ISCO** | **Idaho Springs** | **74.01** | **310** | P | **P** | **13 05 17.4** | **+0.6** |
| **DGMT** | **Dagmar** | **74.37** | **319** | P | **P** | **13 05 18.8** | **+0.4** |
| DGMT | | | | IAmb | IAmb | 13 05 21.0 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **FFC** | **Flin Flon** | **74.39** | **326** | P | **P** | **13 05 18.2** | **-0.1** |
| FFC | | | | IAmb | IAmb | 13 05 19.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **LAO** | **LASA Array** | **75.42** | **317** | P | **P** | **13 05 25.1** | **+0.5** |
| LAO | | | | IAmb | IAmb | 13 05 26.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.29** | **313** | P | **P** | **13 05 35.5** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=103,slow=6.7,SNR=5.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.29** | **313** | P | **P** | **13 05 36.4** | **+0.9** |
| **P18A** | **Preston Nutter** | **77.54** | **309** | P | **P** | **13 05 37.2** | **+0.1** |
| **LOHW** | **Long Hollow** | **78.13** | **313** | P | **P** | **13 05 39.4** | **-0.8** |
| LOHW | | | | IAmb | IAmb | 13 05 43.0 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **MOOW** | **Moose Ponds** | **78.25** | **314** | P | **P** | **13 05 40.4** | **-0.3** |
| **SNAA** | **Sanae** | **78.62** | **171** | P | **P** | **13 05 41.6** | **-0.4** |
| SNAA | | | | IAmb | IAmb | 13 05 57.6 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **MSU** | **Marysvale** | **78.98** | **308** | P | **P** | **13 05 46.2** | **+1.3** |
| **HRY** | **Holter Researc** | **79.25** | **317** | P | **P** | **13 05 46.4** | **+0.3** |
| **214A** | **Organ Pipe Nat** | **79.27** | **302** | P | **P** | **13 05 47.0** | **+0.6** |
| **EDM** | **Edmonton** | **80.76** | **323** | P | **P** | **13 05 54.1** | **+0.1** |
| EDM | | | | IAmb | IAmb | 13 05 55.7 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PRN** | **Pahroc Range** | **81.21** | **307** | P | **P** | **13 05 57.9** | **+1.0** |
| **YKA** | **Yellowknife Ar** | **82.20** | **332** | P | **P** | **13 06 01.0** | **-0.4** |
| | comp=Z,1.8nm,1.0s,baz=94,slow=5.3,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.20** | **332** | P | **P** | **13 06 01.9** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **83.78** | **308** | P | **P** | **13 06 10.6** | **+0.2** |
| | comp=Z,0.9nm,0.9s,baz=106,slow=6.1,SNR=5.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **94.70** | **180** | P | **P** | **13 07 02.8** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 13 07 04.6 | |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **95.91** | **337** | P | **P** | **13 07 07.5** | **+0.4** |
| | comp=Z,1.4nm,1.0s,baz=48,slow=4.4,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.00** | **63** | PKP | **PKPdf** | **13 12 45.6** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=294,slow=3.9,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **157.04** | **147** | PKP | **PKPdf** | **13 13 37.4** | **+0.2** |
| | comp=Z,0.3nm,0.7s,baz=157,slow=3.5,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **157.04** | **147** | | **PKPdf** | **13 13 36.4** | **-0.8** |
| ASAR | | | | PKPab | **PKPab** | **13 14 06.8** | **-0.5** |
| **WRA** | **Warramunga Arr** | **160.17** | **141** | PKPab | **PKPab** | **13 14 20.5** | **-0.5** |
| | comp=Z,1.4nm,1.0s,baz=215,slow=2.2,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **160.17** | **141** | PKPdf | **PKPdf** | **13 13 39.4** | **-1.6** |
| WRA | | | | | **PKPab** | **13 14 19.7** | **-1.2** |

**MAN 20 12:54:27.5, 9.27°N×123.06°E, h18km, mb4.3, ML3.1, MS2.9, 5D, Negros**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNOP** | **Candoni, Negro** | **0.69** | **324** | *eP* | Pg | 12 54 41.6 | +0.4 |
| **TBP** | **Tagbilaran** | **0.90** | **62** | *eP* | Pb | 12 54 43.2 | -1.5 |
| TBP | | | | *i* S | Sb | 12 54 54.9 | -1.5 |
| **LLP** | **Lapu-Lapu** | **1.38** | **41** | *iP* | Pn | 12 54 48.2 | -3.7 |
| LLP | | | | *eS* | Sn | 12 55 09.0 | -0.7 |
| **PAGZ** | **Pagadian** | **1.45** | **167** | *iP* | Pb | 12 54 53.8 | -0.1 |
| **MSLP** | **Maasin** | **1.98** | **64** | *iP* | Pn | 12 55 00.9 | +0.8 |

*MOS **20** 12:56:35.9±0.9, 38.11°N×74.18°E, h174km, mb4.4/24, Error ellipse: s-maj=6.2km s-min=3.9km az=88.1*
*BJI **20** 12:56:36.5±0.0, 38.25°N×74.17°E, h179km, mb4.3/29, mB4.7/16*
*IDC **20** 12:56:36.4±1.8, 38.04°N×74.20°E, h170km±16km, mb4.0/29, mb1 4.0/35, mb1mx3.8/69, mbtmp4.5/35, Error ellipse: s-maj=12.2km s-min=8.4km az=166.0*
*SOME **20** 12:56:38.5, 39.08°N×73.00°E, h5km*
*NEIC **20** 12:56:38.2±1.9, 38.09°N±0.07°×74.14°E±0.09, h183km±6km, mb4.5/57, Error ellipse: s-maj=10.5km s-min=8.9km az=126.0*
*NNC **20** 12:56:44.5±3.4, 38.99°N×74.27E, h0km, mb4.8, mpv4.4, Error ellipse: s-maj=25.4km s-min=19.7km az=162.0*
**ISC 20 12:56:36.9±0.4, 38.03°N±0.03×74.17°E±0.04, h174km±4km, h174km:pP-P, n342, σ1.58/347, mb4.4/81, 23C-42D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **2.05** | **43** | P | Pn | 12 57 10.4 | -3.8 |
| KSH | | | | S | Sn | 12 57 33.6 | -10 |
| KSH | | | | smax | smax | | |
| | comp=N,7μm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,5μm,0.6s | | | | | | |
| **GAR** | **Garm** | **3.17** | **289** | | **Pn** | **12 57 26.5** | **-1.0** |
| **CHGR** | **Chuyangaron** | **3.98** | **281** | PN | **Pn** | **12 57 36.5** | **-1.2** |
| **CHGR** | **Chuyangaron** | **3.98** | **281** | | **Pn** | **12 57 36.5** | **-1.2** |
| **AML** | **Almayashu** | **4.11** | **355** | P | **Pn** | **12 57 39.1** | **-0.4** |
| | SNR=310 | | | | | | |
| **UCH** | **Uchtor** | **4.20** | **4** | P | **Pn** | **12 57 40.6** | **-0.2** |
| | SNR=206 | | | | | | |
| **NIL** | **Nilore** | **4.44** | **190** | PN | **Pn** | **12 57 44.8** | **+1.3** |
| **NIL** | **Nilore** | **4.44** | **190** | Pn | **Pn** | **12 57 44.8** | **+1.3** |
| **ULHL** | **Ulahol** | **4.50** | **20** | P | **Pn** | **12 57 44.1** | **-0.2** |
| | SNR=138 | | | | | | |
| **CEP** | **Cherat** | **4.58** | **204** | P | **Pn** | **12 57 45.9** | **+0.4** |
| CEP | | | | S | **Sn** | **12 58 38.0** | **-1.1** |
| **AAK** | **Ala-Archa** | **4.61** | **3** | P | **Pn** | **12 57 45.8** | **+0.1** |
| | 18nm,0.3s,baz=162,slow=7.2,SNR=225 | | | | | | |
| AAK | | | | S | **Sn** | **12 58 37.4** | **-2.3** |
| | 19nm,0.3s,baz=298,slow=16,SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **4.61** | **3** | P | **Pn** | **12 57 45.8** | **+0.1** |
| | SNR=60 | | | | | | |
| **AAK** | **Ala-Archa** | **4.61** | **3** | *d* PN | **Pn** | **12 57 45.7** | **+0.1** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,46nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **4.61** | **3** | ⇓Pn | **Pn** | **12 57 42.9** | **-2.8** |
| | comp=Z,46nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 12 58 30.8 | -8.9 |
| | comp=Z,111nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **4.63** | **356** | P | **Pn** | **12 57 45.9** | **-0.1** |
| | SNR=159 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **4.63** | **36** | | **Pn** | **12 57 45.9** | **-0.4** |
| **KBK** | **Karagaybulak** | **4.66** | **7** | P | **Pn** | **12 57 46.7** | **+0.3** |
| | SNR=174 | | | | | | |
| **MRKS** | **Merke** | **4.76** | **352** | *eP* | **Pn** | **12 57 48.4** | **+0.8** |
| | comp=Z,222nm,0.1s | | | | | | |
| MRKS | | | | *eS* | **Sn** | **12 58 38.2** | **-4.9** |
| | comp=Z,609nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **4.76** | **352** | Pg | **Pn** | **12 57 48.4** | **+0.8** |
| | comp=Z,222nm,0.6s | | | | | | |
| MRKS | | | | Lg | Lg | 12 58 38.8 | |
| | comp=Z,506nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **4.98** | **5** | P | **Pn** | **12 57 50.6** | **+0.1** |
| | SNR=90 | | | | | | |
| **TAS** | **Tashkent** | **4.99** | **313** | PN | **Pn** | **12 57 50.2** | **-0.4** |
| **TAS** | **Tashkent** | **4.99** | **313** | | **Pn** | **12 57 50.2** | **-0.4** |
| **TKM2** | **Tokmak 2** | **5.00** | **12** | P | **Pn** | **12 57 50.9** | **0.0** |
| | SNR=66 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.00** | **12** | *i* PN | **Pn** | **12 57 50.4** | **-0.5** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,130nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.00** | **12** | ⇓Pn | **Pn** | **12 57 49.1** | **-1.7** |
| | comp=Z,130nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 12 58 52.7 | |
| | comp=Z,286nm,0.6s | | | | | | |
| **KST** | **Kastek** | **5.19** | **15** | *eP* | Pn | 12 58 00.6 | +7.3 |
| | comp=Z,61nm,0.5s | | | | | | |
| KST | | | | *eS* | **Sn** | **12 58 59.2** | **+6.0** |
| | comp=Z,165nm,0.2s | | | | | | |
| **USP** | **Ospenovka** | **5.23** | **3** | P | **Pn** | **12 57 53.4** | **-0.3** |
| | SNR=136 | | | | | | |
| **DZA** | **Taraz** | **5.31** | **337** | *eP* | **Pn** | **12 57 54.1** | **-0.6** |
| **DZA** | **Taraz** | **5.31** | **337** | *eP* | **Pn** | **12 57 54.1** | **-0.6** |
| | baz=336 | | | | | | |
| **JMU** | **Jammu** | **5.34** | **173** | *eP* | **Pn** | **12 57 54.0** | **-1.2** |
| JMU | | | | *eS* | **Sn** | **12 58 52.0** | **-4.6** |
| **DGS** | **Degeres** | **5.34** | **13** | *eP* | Pn | 12 58 03.8 | +8.6 |
| | comp=Z,50nm,0.2s | | | | | | |
| DGS | | | | *eS* | **Sn** | **12 59 04.8** | **+8.0** |
| | comp=Z,90nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **5.34** | **13** | Pg | Pn | 12 58 03.8 | +8.6 |
| | comp=Z,62nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 12 59 04.8 | |
| | comp=Z,157nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **5.41** | **231** | PN | **Pn** | **12 57 57.0** | **+0.7** |
| **KBL** | **Kabul** | **5.41** | **231** | Pn | **Pn** | **12 57 57.0** | **+0.7** |
| **SGDS** | **Sogindy** | **5.42** | **4** | *eP* | Pn | 12 58 02.7 | +6.4 |
| | comp=Z,17nm,0.3s | | | | | | |
| SGDS | | | | *eS* | **Sn** | **12 59 03.1** | **+4.5** |
| | comp=Z,38nm,0.4s | | | | | | |
| **SGDS** | **Sogindy** | **5.42** | **4** | ⇓*iP* | **Pn** | **12 57 55.7** | **-0.5** |
| | baz=3.7 | | | | | | |
| **SGDS** | **Sogindy** | **5.42** | **4** | Pg | Pn | 12 58 04.5 | +8.2 |
| | comp=Z,53nm,0.8s | | | | | | |
| SGDS | | | | Lg | Lg | 12 59 06.5 | |
| | comp=Z,38nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.43** | **22** | *eP* | Pn | 12 58 10.2 | +14 |
| | comp=Z,23nm,0.5s | | | | | | |
| TNSS | | | | *eS* | Sn | 12 59 15.8 | +17 |
| | comp=Z,80nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.43** | **22** | *iP* | **Pn** | **12 57 56.0** | **-0.6** |
| | baz=23 | | | | | | |
| **TNSS** | **Tian-Shan** | **5.43** | **22** | Pg | Pn | 12 58 10.2 | +14 |
| | comp=Z,23nm,0.5s | | | | | | |
| TNSS | | | | Lg | Lg | 12 59 15.8 | |
| | comp=Z,58nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **5.57** | **22** | *i* PN | **Pn** | **12 57 57.8** | **-0.5** |
| **MDOK** | **Medeo** | **5.57** | **22** | *eP* | Pn | 12 58 13.1 | +15 |
| | comp=Z,17nm,0.2s | | | | | | |
| MDOK | | | | *eS* | Sn | 12 59 20.8 | +18 |
| | comp=Z,129nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **5.57** | **22** | *iP* | **Pn** | **12 57 57.8** | **-0.5** |
| | baz=23 | | | | | | |
| **MDOK** | **Medeo** | **5.57** | **22** | ⇓Pn | **Pn** | **12 57 57.6** | **-0.7** |
| | comp=Z,36nm,0.7s | | | | | | |
| MDOK | | | | ⇑Sn | Sn | 12 58 48.5 | -14 |
| | comp=Z,52nm,0.6s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 12 59 12.8 | |
| | comp=Z,123nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **5.57** | **22** | Pg | Pn | 12 58 13.0 | +15 |
| | comp=Z,20nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 12 59 20.8 | |
| | comp=Z,129nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **5.58** | **21** | *e*PN | **Pn** | **12 57 57.9** | **-0.3** |
| **AAA** | **Alma-Ata** | **5.58** | **21** | *eP* | **Pn** | **12 57 57.9** | **-0.3** |
| | baz=22 | | | | | | |
| **THW** | **Thamme Wali** | **5.59** | **201** | P | **Pn** | **12 57 58.5** | **0.0** |
| **KNDC** | **Almaty** | **5.60** | **21** | PN | **Pn** | **12 57 58.8** | **+0.3** |
| **KNDC** | **Almaty** | **5.60** | **21** | ⇑Pn | **Pn** | **12 57 58.8** | **+0.3** |
| | comp=Z,143nm,0.8s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 12 59 13.9 | |
| | comp=Z,664nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.66** | **22** | *eP* | Pn | 12 58 15.0 | +16 |
| | comp=Z,19nm,0.0s | | | | | | |
| KOTS | | | | *eS* | Sn | 12 59 23.8 | +20 |
| | comp=Z,231nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.66** | **22** | Pg | Pn | 12 58 15.0 | +16 |
| | comp=Z,36nm,1.4s | | | | | | |
| KOTS | | | | Lg | Lg | 12 59 23.8 | |
| | comp=Z,259nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **5.77** | **11** | *eP* | Pn | 12 58 11.2 | +10 |
| | comp=Z,11nm,0.0s | | | | | | |
| KRBS | | | | *eS* | Sn | 12 59 18.0 | +11 |
| | comp=Z,91nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **5.77** | **11** | Pg | Pn | 12 58 11.2 | +10 |
| | comp=Z,27nm,0.6s | | | | | | |
| KRBS | | | | Lg | Lg | 12 59 18.0 | |
| | comp=Z,66nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **5.78** | **332** | PN | **Pn** | **12 57 59.8** | **-1.0** |
| **KKAR** | **Karatay Array** | **5.78** | **332** | PN | **Pn** | **12 57 59.7** | **-1.1** |
| **KKAR** | **Karatay Array** | **5.78** | **332** | Pn | **Pn** | **12 57 59.7** | **-1.1** |
| **KK08** | **Karatay Array** | **5.79** | **332** | ⇓Pn | **Pn** | **12 57 59.8** | **-1.1** |
| | comp=Z,40nm,0.5s,baz=132,slow=12 | | | | | | |
| KK08 | | | | ⇑Sn | **Sn** | **12 59 01.0** | **-6.1** |
| | comp=Z,445nm,0.5s,baz=140,slow=23 | | | | | | |
| **SATY** | **Saty** | **5.97** | **31** | *d* PN | **Pn** | **12 58 02.4** | **-1.0** |
| **SATY** | **Saty** | **5.97** | **31** | ⇓*iP* | **Pn** | **12 58 02.4** | **-1.0** |
| | baz=32 | | | | | | |
| **BRLS** | **Borolday** | **5.98** | **328** | *e*PN | **Pn** | **12 58 00.2** | **-3.3** |
| **BRLS** | **Borolday** | **5.98** | **328** | *eP* | **Pn** | **12 58 00.3** | **-3.2** |
| | comp=Z,39nm,0.0s | | | | | | |
| BRLS | | | | *eS* | Sn | 12 58 59.0 | -13 |
| | comp=Z,174nm,0.8s | | | | | | |
| **BRLS** | **Borolday** | **5.98** | **328** | *eP* | **Pn** | **12 58 00.3** | **-3.2** |
| | baz=325 | | | | | | |
| **BRLS** | **Borolday** | **5.98** | **328** | Pg | **Pn** | **12 58 00.2** | **-3.2** |
| | comp=Z,39nm,0.2s | | | | | | |
| BRLS | | | | Lg | Lg | 12 58 58.9 | |
| | comp=Z,174nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **5.99** | **18** | *eP* | Pn | 12 58 18.0 | +14 |
| | comp=Z,21nm,0.2s | | | | | | |
| KTBS | | | | *eS* | Sn | 12 59 29.9 | +18 |
| | comp=Z,261nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **5.99** | **18** | Pg | Pn | 12 58 18.0 | +14 |
| | comp=Z,21nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 12 59 29.8 | |
| | comp=Z,262nm,0.9s | | | | | | |
| **KUU** | **Kurty** | **6.08** | **15** | *d* PN | **Pn** | **12 58 03.6** | **-1.2** |
| **KUU** | **Kurty** | **6.08** | **15** | *eP* | Pn | 12 58 19.0 | +14 |
| | comp=Z,18nm,0.4s | | | | | | |
| KUU | | | | *eS* | Sn | 12 59 30.6 | +17 |
| | comp=Z,83nm,0.2s | | | | | | |

comp=Z,145nm,0.3s
**DANN Dangsing 12.55 137** *e*P **Pn 12 59 27.9 -2.0**
comp=Z,114nm,0.4s
**KOLN Koldanda 12.94 140** *e*P **Pn 12 59 33.4 -1.3**
comp=Z,91nm,0.4s
**KURBB Kurchatov Arra 12.96 12** P **Pn 12 59 31.6 -3.0**
comp=Z,0.3nm,0.3s,baz=201,slow=11,SNR=48
KURBB S **S 13 02 04.0 -1.1**
baz=203,slow=19,SNR=4.1
**KURK Kurchatov 13.07 13***ce*P **Pn 12 59 32.9 -3.0**
KURK pmax pmax
comp=Z,12nm,0.7s
**KURK Kurchatov 13.07 13** Pn **Pn 12 59 33.9 -2.0**
**SEM Semipalatinsk 13.11 17** *e*P **Pn 12 59 33.8 -2.8**
**SEM Semipalatinsk 13.11 17** *e*P **Pn 12 59 33.9 -2.8**
baz=18
**GKN Gorkha 13.30 136** *e*P **Pn 12 59 37.4 -1.9**
comp=Z,69nm,0.3s
**KKN Kakani 13.83 134** *e*P **Pn 12 59 44.2 -1.7**
comp=Z,58nm,0.4s
**DMN Daman 13.87 135** *e*P **Pn 12 59 44.9 -1.6**
comp=Z,61nm,0.3s
**PKIN Phulchoki 14.06 135** *e*P **Pn 12 59 46.8 -2.0**
comp=Z,43nm,0.3s
**PKI Pulchoki 14.07 135** *e*P **Pn 12 59 47.0 -2.0**
comp=Z,97nm,0.7s
**GUN Gumba 14.08 132** *e*P **Pn 12 59 46.9 -2.3**
comp=Z,70nm,0.4s
**JIRN Jiri 14.45 132** *e*P **Pn 12 59 52.0 -1.8**
comp=Z,146nm,0.4s
**DGZ Jazzator, Alta 15.06 35** *i*P **Pn 13 00 00.4 -0.5**
DGZ pmax pmax
comp=Z,126nm,0.9s
**AB31 Akbulak array 15.20 322** *e*P **Pn 13 00 00.4 -2.0**
**AB31 Akbulak array 15.20 322** Pg **Pn 13 00 00.4 -2.0**
comp=Z,2.2nm,0.4s,baz=127,slow=13,SNR=106
AB31 ⇓Lg Lg 13 02 39.7
comp=Z,6.7nm,0.6s,baz=133,slow=25,SNR=6.5
**ABKAR Akbulak array 15.20 322** Pn **Pn 13 00 00.5 -2.0**
**BVAR Borovoye Array 15.22 351** P **Pn 13 00 01.4 -1.3**
comp=Z,5.6nm,0.3s,baz=315,slow=22,SNR=64
BVAR S **Sn 13 02 48.1 -4.3**
comp=Z,0.2nm,0.3s,baz=130,slow=16,SNR=2.0
**RAMN Ramite 15.22 133** *e*P **Pn 13 00 01.4 -1.8**
comp=Z,19nm,0.4s
**BRVK Borovoye 15.27 351***ce*P **Pn 13 00 01.4 -1.9**
BRVK pmax pmax
comp=Z,43nm,0.7s
**BRVK Borovoye 15.27 351** Pn **Pn 13 00 01.5 -1.7**
**BRVK Borovoye 15.27 351** ⇑Pg **Pn 13 00 01.4 -1.9**
comp=Z,40nm,0.7s
BRVK ⇓Lg Lg 13 04 04.3
comp=Z,25nm,1.4s
**TAPN Taplejung 15.59 129** *e*P **Pn 13 00 05.9 -1.8**
comp=Z,59nm,0.4s
**JBP Jabalpur 15.64 160** *e*P **Pn 13 00 08.3 +0.3**
**ODAN Odare 15.75 131** *e*P **Pn 13 00 08.5 -1.2**
comp=Z,58nm,0.4s
**LSA Lhasa 16.36 116** P **Pn 13 00 21.9 +4.7**
LSA pmax pmax
comp=Z,8.0nm,1.3s
**GOMU GeErMu 16.57 90** P **P 13 00 19.8 +0.6**
GOMU pP Pn 13 00 22.8 +3.1
GOMU pmax pmax
comp=Z,89nm,5.0s
**AKTO Aktyubinsk 16.91 322** P **P 13 00 22.3 0.0**
comp=Z,1.3nm,0.3s,baz=120,slow=9,SNR=19
AKTO S **S 13 03 22.7 -6.8**
comp=Z,0.4nm,0.3s,baz=301,slow=23,SNR=2.2
**AKTO Aktyubinsk 16.91 322** ⇑Pn **P 13 00 22.4 0.0**
comp=Z,3.4nm,0.5s
AKTO ⇓Lg Lg 13 03 24.2
comp=Z,10nm,0.8s
**ZAA0 Zalesovo Array 17.52 21** P **P 13 00 28.6 -0.4**
**ZALV Zalesovo Beam 17.52 21** P **P 13 00 28.5 -0.4**
comp=Z,14nm,0.3s,baz=213,slow=11,SNR=396
**ZALV Zalesovo Beam 17.52 21 P 13 00 28.4 -0.6**
**DHUB DHUBRI 17.96 127** *e*P **P 13 00 36.1 +2.1**
**GUWA GUWAHATI 18.93 123** *e*P **P 13 00 45.2 +0.6**
GUWA IAmb IAmb 13 00 46.0
comp=Z,27nm,0.6s
**SRSP Sriramsagar 19.38 168** *e*P **P 13 00 50.4 +0.9**
**RPR Rampur 19.62 165** *e*P **P 13 00 52.7 +0.6**
**WSAR Wadi Sarin 19.86 226** P **P 13 00 55.5 +0.9**
comp=Z,0.6nm,0.3s,baz=61,slow=5.9,SNR=8.1
**KLRI Killari 20.00 173** *e*P **P 13 00 57.8 +1.5**
KLRI *e* 13 01 00.0
**GTA Gaotai 20.04 78** P **P 13 00 57.8 +1.2**
GTA sP sP 13 01 53.3 +4.4
GTA pmax pmax
comp=Z,7.0nm,1.0s
GTA pmax pmax
comp=Z,60nm,4.2s
**MOKO MOKOCHONG 20.76 118** *e*P **P 13 01 05.5 +1.1**
MOKO IAmb IAmb 13 01 07.2
comp=Z,9.4nm,0.5s
**KNGR Kungurtug, Tuv 20.80 45** *i*P **P 13 01 04.8 +0.3**
**SVE Sverdlovsk 20.84 339** *e*P **P 13 01 04.5 -0.2**
SVE *e*S **S 13 04 48.5 +1.3**
SVE pmax pmax
comp=Z,10.0nm,0.8s
**KOHI KOHIMA 20.87 120** *e*P **P 13 01 07.7 +2.2**
KOHI IAmb IAmb 13 01 13.3
comp=Z,20nm,0.7s
**HYBB Hyderabad (bro 20.90 168** *e*P **P 13 01 06.6 +0.9**
**HYB Hyderabad 20.90 168** *e*P **P 13 01 06.0 +0.3**
HYB *e*S **S 13 04 49.0 0.0**
**CUPL Choutuppal 21.08 167** *e*P **P 13 01 08.3 +0.6**
**ARU Arti 21.14 336** P **P 13 01 09.0 +1.0**
comp=Z,1.8nm,0.5s,baz=115,slow=11,SNR=8.3
**ARU Arti 21.14 336***d i*P **P 13 01 07.9 -0.1**
ARU *PP **pP 13 01 39.9 +0.8**
ARU S **S 13 04 54.8 +2.1**
ARU pmax pmax
comp=Z,14nm,1.3s
**ARU Arti 21.14 336** P **P 13 01 07.7 -0.3**
ARU IAmb IAmb 13 01 10.9
comp=Z,18nm,1.3s
**CHLP Challavanipeta 21.29 153** *e*P **P 13 01 11.1 +1.2**
**IMP Imphal 21.35 122** *e*P **P 13 01 11.9 +1.3**
IMP IAmb IAmb 13 01 14.4
comp=Z,12nm,0.5s
**PVM Polavaram 21.72 160** *e*P **P 13 01 16.0 +1.6**
**NJS Nagarjunasagar 21.87 167** *e*P **P 13 01 17.1 +1.2**
**MYLAV Mylavaram 21.95 163** *e*P **P 13 01 18.1 +1.4**
**SRLM Srisailam 22.24 168** *e*P **P 13 01 20.2 +0.5**
**ADKI Addanki 22.69 165** *e*P **P 13 01 24.9 +1.2**
**RCLA Racherla 22.88 168** *e*P **P 13 01 26.1 +0.6**
**GNI Garni 22.89 285** P **P 13 01 27.1 +1.5**
comp=Z,18nm,0.9s,baz=179,slow=23,SNR=5.7
**GNI Garni 22.89 285** *i*P **P 13 01 24.7 -0.9**
GNI pmax pmax
comp=Z,28nm,0.9s
**URV Uravakonda 23.16 172** *e*P **P 13 01 28.8 +0.8**
**MOY Mondy 23.23 45** *e*P **P 13 01 29.9 +1.4**
MOY pmax pmax
comp=Z,12nm,1.6s
**ZEI Tsey 23.46 291** *e*P **P 13 01 33.8 +3.0**
ZEI pmax pmax
comp=Z,12nm,1.0s
**ONI Oni 23.79 291** P **P 13 01 36.2 +2.6**
ONI pmax pmax
comp=Z,85nm,1.4s
**ONI Oni 23.79 291** P **P 13 01 36.2 +2.6**
**ZAK Zakamensk 24.08 50** *e*P **P 13 01 36.2 0.0**
ZAK pmax pmax
comp=Z,21nm,1.1s
**KBZ Khabaz 24.23 294** P **P 13 01 37.8 +0.3**
comp=Z,4.3nm,0.7s,baz=86,slow=4.2,SNR=5.7
**KBZ Khabaz 24.23 294** *i*P **P 13 01 37.7 +0.3**
KBZ pmax pmax
comp=Z,9.0nm,1.1s
**NEY Neytrino 24.34 292** *i*P **P 13 01 40.4 +1.7**
NEY pmax pmax
comp=Z,4.0nm,0.9s
**KIV Kislovodsk 24.39 294** *e*P **P 13 01 38.4 -0.7**
KIV pmax pmax
comp=Z,10.0nm,1.1s
**SKHT Srikalahasti 24.69 167** *e*P **P 13 01 43.3 +1.4**
**SONM Songino Array 25.39 57** P **P 13 01 49.0 +0.9**
comp=Z,5.6nm,0.7s,baz=256,slow=10.0,SNR=43
**SONM Songino Array 25.39 57** P **P 13 01 48.6 +0.6**
SONM IAmb IAmb 13 01 49.9
comp=Z,7.5nm,0.9s
**ULN Ulaanbaatar 25.83 57***ce*P **P 13 01 52.7 +0.6**
ULN pmax pmax
comp=Z,8.0nm,1.7s
**PZH PanZhiHua 25.90 108** P P 13 02 03.4 +10
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
**XAN Xi'an 28.29 87** P **P 13 02 14.5 +0.4**
XAN pP pP 13 02 50.1 -0.9
XAN pmax pmax
comp=Z,7.0nm,0.7s
**HHC Hu-ho-hao-te 28.88 73** *e*P **P 13 02 21.8 +2.5**
HHC pmax pmax
comp=Z,14nm,0.9s
HHC pmax pmax
comp=Z,140nm,4.7s
**CMAR Chiang Mai Arr 29.12 125** P **P 13 02 21.9 +0.5**
comp=Z,0.4nm,0.3s,baz=305,slow=6.5,SNR=1.5
**CMAR Chiang Mai Arr 29.12 125** P **P 13 02 22.0 +0.5**
**OBN Obninsk 30.50 316***ce*P **P 13 02 33.1 -0.1**
OBN *e*PP **pP 13 03 11.4 +0.6**
OBN *e* 13 03 43.3
OBN pmax pmax
comp=Z,6.0nm,0.9s
**BR131 Keskin Array S 31.41 286** *i*P **P 13 02 41.6 0.0**
**BR131 Keskin Array S 31.41 286** P **P 13 02 42.8 +1.2**
BR131 IAmb IAmb 13 02 43.7
comp=Z,19nm,1.1s
**BRTR Keskin Array B 31.41 286** P **P 13 02 42.8 +1.2**
comp=Z,5.1nm,0.5s,baz=100,slow=7.9,SNR=31
**BRTR Keskin Array B 31.41 286** P **P 13 02 42.6 +1.0**
**NRIK Noril'sk 32.19 9** P **P 13 02 48.1 +0.2**
comp=Z,9.6nm,0.7s,baz=203,slow=5.0,SNR=11
**NRIK Noril'sk 32.19 9** *e*P **P 13 02 48.1 +0.2**
NRIK pmax pmax
comp=Z,18nm,1.1s
**BORA Eskisehir 33.79 287** P **P 13 03 03.6 +1.3**
**AKASG Malin Array Be 34.01 307** P **P 13 03 03.8 -0.1**
comp=Z,2.6nm,0.4s,baz=79,slow=8.0,SNR=18
**AKASG Malin Array Be 34.01 307** P **P 13 03 03.6 -0.3**
**AKBB Malin Array Si 34.01 307***ce*P **P 13 03 04.6 +0.7**
**AKBB Malin Array Si 34.01 307** P **P 13 03 04.0 +0.1**
AKBB IAmb IAmb 13 03 04.7
comp=Z,18nm,1.4s
**SORM Soroca 34.49 302** ⇓P **P 13 03 08.1 +0.1**
**SORM Soroca 34.49 302** ⇓P **P 13 03 08.1 +0.1**
**ELL Elmali 34.94 282** P **P 13 03 14.0 +1.8**
ELL pmax pmax
comp=Z,33nm,0.8s
**ELL Elmali 34.94 282** P **P 13 03 13.9 +1.8**
**MNK Minsk 35.24 313** *i*P **P 13 03 17.6 +3.2**
MNK *i *PP **pP 13 03 55.4 +2.8**
MNK *i* 13 04 41.3
MNK *i* 13 05 47.7
MNK *i*S **S 13 08 37.2 +2.4**
MNK *i *SS **sS 13 09 45.2 +3.6**
MNK pmax pmax
comp=N,16nm,0.8s
MNK pmax pmax
comp=E,2.0nm,0.7s
MNK pmax pmax
comp=Z,18nm,0.7s
MNK MLR MLR
comp=N,693nm,22.0s
MNK MLR MLR
comp=E,99nm,22.0s
MNK MLR MLR
comp=Z,34nm,12.0s
**MNK Minsk 35.24 313** *i*P **P 13 03 17.6 +3.2**
comp=E,2.0nm,0.7s
MNK *i*P **P 13 03 17.6 +3.2**
comp=N,16nm,0.8s
MNK *i*P **P 13 03 17.6 +3.2**
comp=Z,18nm,0.7s,baz=276
MNK *i* pP **pP 13 03 55.4 +2.9**
MNK *i* PP **PnPn 13 04 41.3 +2.5**
MNK *i* S **S 13 08 37.2 +2.4**
MNK *i* sS **sS 13 09 45.2 +3.6**
MNK *i* SS **SnSn 13 11 17.3 +3.2**
MNK *i* LRM MLR 13 19 01.9
comp=N,693nm,22.4s
MNK *i* LRM MLR 13 19 02.8
comp=E,99nm,22.4s
MNK *i* LRM MLR 13 19 10.5
comp=Z,34nm,12.2s
**VRI Vrincioaia 35.70 298** ⇓P **P 13 03 20.4 +2.0**
**VRI Vrincioaia 35.70 298** ⇓P **P 13 03 20.4 +2.0**
**TESR Tescani 35.70 299** ⇓P **P 13 03 19.5 +1.1**
**PLOR Plostina 35.75 298** ⇓P **P 13 03 20.3 +1.4**
**PLOR Plostina 35.75 298** ⇓P **P 13 03 20.3 +1.4**
**COVR Voineasa-Covas 36.06 298** ⇓P **P 13 03 23.4 +1.8**
**MLR Muntele Rosu 36.27 298** ⇑P **P 13 03 25.9 +2.4**
**MLR Muntele Rosu 36.27 298** ⇑P **P 13 03 25.9 +2.4**
**MLR Muntele Rosu 36.27 298** P **P 13 03 25.7 +2.2**
MLR IAmb IAmb 13 03 26.6
comp=Z,18nm,0.9s
**BURAR Bucovina Array 36.61 301** ⇑P **P 13 03 26.5 +0.2**
**BURAR Bucovina Array 36.61 301** ⇑P **P 13 03 26.5 +0.2**
**BURAR Bucovina Array 36.61 301** P **P 13 03 26.3 0.0**
**DOPR Dopca 36.62 298** ⇓P **P 13 03 28.1 +1.8**
**BUR08 Bucovina Ar. S 36.62 301** P **P 13 03 27.3 +0.9**
**NJ2 Nanjing 36.80 86** *e*P **P 13 03 27.0 -0.9**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**VOIR 36.91 298** ⇓P **P 13 03 30.0 +1.2**
**VOIR 36.91 298** ⇓P **P 13 03 30.0 +1.2**
**FIA1 FINESS Array S 37.67 324** P **P 13 03 35.7 +0.8**
FIA1 IAmb IAmb 13 03 40.9
comp=Z,22nm,1.5s
**FINES FINESS Array B 37.67 324** P **P 13 03 35.2 +0.3**
comp=Z,5.2nm,0.4s,baz=115,slow=10.0,SNR=56
**FINES FINESS Array B 37.67 324** P **P 13 03 35.5 +0.6**
**TRPA Tarpa 38.38 302** ⇑P **P 13 03 41.7 +0.8**
**TRPA Tarpa 38.38 302** P **P 13 03 41.8 +0.8**
**DRGR 38.38 300** ⇓P **P 13 03 42.8 +1.6**
**DRGR 38.38 300** ⇓P **P 13 03 42.8 +1.6**
**GZR Gura Zlata 38.50 298** ⇓P **P 13 03 43.2 +1.1**
**ZEA Zeya 39.17 49** *i*P **P 13 03 48.4 +0.9**
**IDI Anoyia 39.26 282** P **P 13 03 48.5 0.0**
comp=Z,8.7nm,0.7s,baz=253,slow=3.1,SNR=6.9
**IDI Anoyia 39.26 282** P **P 13 03 48.4 -0.1**
**BZS Buzias 39.28 298** ⇑P **P 13 03 50.1 +1.6**
**BZS Buzias 39.28 298** ⇑P **P 13 03 50.1 +1.6**
**LIT Litokhoron 39.71 290** P **P 13 03 52.9 +0.7**
LIT pmax pmax
comp=Z,19nm,1.1s
**LIT Litokhoron 39.71 290** P **P 13 03 52.9 +0.7**
LIT IAmb IAmb 13 04 20.6
comp=Z,19nm,1.1s
**NIE Niedzica 39.76 304** *e*P **P 13 03 54.7 +2.3**
**OJC Ojcow 40.03 306** *e*P **P 13 03 55.4 +0.8**
**AGG Agios Georgios 40.11 288** P **P 13 03 55.6 +0.1**
AGG pmax pmax
comp=Z,18nm,1.1s
**AGG Agios Georgios 40.11 288** P **P 13 03 55.5 +0.1**
AGG IAmb IAmb 13 03 57.0
comp=Z,18nm,1.1s
**PSZ Piszkesteto 40.17 302** P **P 13 03 58.4 +2.5**
**FNA Florina 40.37 291** P **P 13 03 58.1 +0.4**
FNA pmax pmax
comp=Z,8.0nm,0.7s
**FNA Florina 40.37 291** P **P 13 03 58.1 +0.4**
FNA IAmb IAmb 13 03 58.6
comp=Z,7.6nm,0.7s
**DIVS Divibare 40.67 296** P **P 13 04 01.1 +1.1**
DIVS IAmb IAmb 13 04 02.0
comp=Z,9.3nm,0.8s
**ARCES ARCESS Array B 40.73 336** P **P 13 04 00.5 +0.4**
comp=Z,2.4nm,0.4s,baz=109,slow=8.0,SNR=32
**ARCES ARCESS Array B 40.73 336** P **P 13 04 00.3 +0.2**
ARCES IAmb IAmb 13 04 28.8
comp=Z,16nm,1.4s
**ITM Ithomi 40.94 285** P **P 13 04 02.2 -0.1**
ITM IAmb IAmb 13 04 28.2
comp=Z,13nm,1.0s
**MORH Mrgy, Hungar 41.24 300** ⇓P **P 13 04 05.8 +1.2**
**MORH Mrgy, Hungar 41.24 300** P **P 13 04 04.4 -0.3**
**YAK Yakutsk 41.25 36** P **P 13 04 03.9 -0.5**
comp=Z,5.4nm,0.4s,baz=182,slow=0.4,SNR=4.7
**YAK Yakutsk 41.25 36** *e*P **P 13 04 02.4 -2.0**
YAK pmax pmax
comp=Z,11nm,0.9s
YAK pmax pmax
comp=N,1.0nm,0.8s
YAK pmax pmax
comp=E,1.0nm,0.7s
**GKP Gorka Klasztor 41.46 311** *e*P **P 13 04 05.8 -0.5**
**MODS Modra-Piesok 41.85 303** *e*P **P** 13 04 02.2 -7.4
**MODS Modra-Piesok 41.85 303** *e*P **P** 13 04 02.2 -7.4
**KLR Kul'dur 42.20 55** P **P 13 04 12.5 +0.2**
comp=E,4.9nm,0.5s,baz=284,slow=7.3,SNR=34
**KLR Kul'dur 42.20 55***ce*P **P 13 04 12.5 +0.2**
KLR pmax pmax
comp=Z,4.0nm,0.6s
**DPC Dobruska-Polom 42.24 306** *e*P **P 13 04 13.8 +1.1**
**DPC Dobruska-Polom 42.24 306** *e*P **P 13 04 13.8 +1.1**
**UPC Upice 42.42 306** *e*P **P 13 04 15.1 +1.0**
**UPC Upice 42.42 306** *e*P **P 13 04 15.1 +1.0**
**CONA Conrad Observa 42.85 303** *e*P **P 13 04 18.7 +1.0**
comp=Z,5.3nm,0.6s,SNR=7.3
**USRK Ussuriysk Ar. 43.22 63** P **P 13 04 20.0 -0.6**
comp=Z,1.5nm,0.6s,baz=253,slow=8.9,SNR=4.1
**USRK Ussuriysk Ar. 43.22 63** P **P 13 04 20.4 -0.2**
**TIXI Tiksi 43.41 22***ce*P **P 13 04 21.4 -0.3**
TIXI pmax pmax
comp=Z,7.0nm,0.6s
**TIXI Tiksi 43.41 22** P **P 13 04 21.7 0.0**
TIXI IAmb IAmb 13 04 22.3
comp=Z,12nm,0.5s
**PRU Pruhonice 43.42 306** *e*P **P 13 04 23.2 +1.1**
**PRU Pruhonice 43.42 306** *e*P **P 13 04 23.2 +1.1**
**SOKA Soboth 43.62 301** *e*P **P 13 04 24.9 +1.0**
comp=Z,8.0nm,0.9s,SNR=8.1
**MOA Molln 43.92 303** *i*P **P 13 04 26.8 +0.6**
comp=Z,5.3nm,0.8s
**GERES GERESS Array B 44.13 304** P **P 13 04 29.0 +1.1**
comp=Z,0.7nm,0.4s,baz=0.0,slow=0.7,SNR=6.7
**KHC Kasperske Hory 44.16 305** *e*P **P 13 04 29.0 +0.9**
**KHC Kasperske Hory 44.16 305** *e*P **P 13 04 29.0 +0.9**
**KHC Kasperske Hory 44.16 305** P **P 13 04 29.5 +1.4**
KHC IAmb IAmb 13 04 30.0
comp=Z,6.0nm,0.7s
**CLL Collm 44.22 308** *i*P **P 13 04 28.8 +0.3**
comp=Z,5.0nm,0.6s
CLL *e*(sP) **sP 13 05 26.0 -2.1**
CLL LmV 13 20 00.0
comp=Z,300nm,19.3s
**NC405 NORSAR Array S 44.46 322** P **P 13 04 29.8 -0.5**
NC405 IAmb IAmb 13 04 56.8
comp=Z,20nm,1.1s
**NORES NORESS Array B 44.54 322** P **P 13 04 31.1 +0.2**
**KBA Koelnbreinsper 44.68 302** *e*P **P 13 04 32.8 +0.4**
comp=Z,2.2nm,0.6s
**NB2 NORSAR Subarra 44.70 322** P **P 13 04 31.7 -0.5**
comp=Z,3.5nm,0.5s,baz=92,slow=7.9
**NOA NORSAR Array B 44.70 322** P **P 13 04 31.8 -0.5**
comp=Z,4.8nm,0.6s,baz=102,slow=7.5,SNR=12
**ABTA Abfaltersbach 45.31 302** *e*P **P 13 04 37.5 +0.2**
comp=Z,2.3nm,0.5s
**KONO Kongsberg 45.51 320** P **P 13 04 38.1 -0.4**
KONO pmax pmax
comp=Z,74nm,1.5s
**KONO Kongsberg 45.51 320** P **P 13 04 38.1 -0.4**
**WTTA Wattenberg 45.78 303** *i*P **P 13 04 41.2 +0.1**
comp=Z,6.5nm,1.0s
**WATA Walderalm 45.81 303** *i*P **P 13 04 41.6 +0.3**
comp=Z,8.6nm,1.2s
**NRCA Norcia 45.83 296** P **P 13 04 41.9 +0.4**
NRCA IAmb IAmb 13 04 43.1
comp=Z,14nm,1.0s
**MOTA Moosalm 46.12 303** *e*P **P 13 04 44.1 +0.3**
comp=Z,5.8nm,0.9s
**MURB Monte Urbino 46.13 297** P **P 13 04 45.1 +1.3**
**FETA Feichten 46.44 302** *e*P **P 13 04 45.9 -0.3**
comp=Z,2.4nm,0.6s
**SPITS Spitsbergen Ar 46.59 346** P **P 13 04 47.1 +0.3**
SPITS pmax pmax
comp=Z,51nm,1.3s
**DAVA Damuels 46.95 303** *e*P **P 13 04 50.3 +0.2**
comp=Z,13nm,0.5s,SNR=7.1
**TUE Stuetta 47.49 302** P **P 13 04 54.5 +0.1**
**MSSA Maissana 47.94 299** P **P 13 04 57.7 -0.1**
MSSA IAmb IAmb 13 05 11.4
comp=Z,28nm,1.1s
**BTNL Ternell 48.62 308** *d*P **P 13 05 03.3 +0.5**
**WLF Walferdange 48.82 307** κP **P 13 05 05.3 +1.1**
**SENIN Lac Senin/Sane 48.89 302** P **P 13 05 05.9 +0.7**
**BMRD Maredsous 49.53 308** *d*P **P 13 05 11.0 +1.3**
**BNI Bardonecchia 49.68 301** P **P 13 05 11.1 +0.1**
BNI pmax pmax
comp=Z,26nm,1.4s
**BNI Bardonecchia 49.68 301** P **P 13 05 11.1 +0.1**
BNI IAmb IAmb 13 05 12.0
comp=Z,26nm,1.4s
**MJAR Matsushiro Arr 50.05 71** P **P 13 05 13.8 0.0**
comp=Z,2.7nm,0.7s,baz=284,slow=9.9,SNR=4.8
**MJA0 Matsu Arr-Jizo 50.08 71** *e*P **P 13 05 15.4 +1.3**
MJA0 pmax pmax
comp=Z,1.0nm,0.8s
**JTM Tenmabayashi 50.62 65** P **P 13 05 17.1 -0.9**
**KEST Kesra 50.94 289** P **P 13 05 20.6 0.0**
comp=Z,5.5nm,0.6s,baz=30,slow=3.1,SNR=7.3
**KEST Kesra 50.94 289** P **P 13 05 21.9 +1.3**
KEST IAmb IAmb 13 05 22.3
comp=Z,6.2nm,0.7s
**JMM Marumori 51.47 68** P **P 13 05 24.2 -0.2**
**SEY Seymchan 51.73 35** *i*P **P 13 05 26.4 +0.5**
**MBAR Mbarara 55.45 237** P **P 13 05 53.4 -0.4**
comp=Z,1.4nm,0.3s,baz=45,slow=22,SNR=4.4
**BILL Bilibino 56.11 27**⇓*e*P **P 13 05 58.1 +0.5**
BILL *e*PP **pP 13 06 37.7 -0.9**
BILL *e* 13 08 07.1
BILL *e*S S 13 13 48.9 +16
BILL pmax pmax
comp=Z,2.0nm,0.7s
**ESBB Sonseca Array 58.97 298** P **P 13 06 17.9 -0.1**
ESBB IAmb IAmb 13 06 25.4
comp=Z,20nm,1.4s
**ESDC Sonseca Array 58.97 298** P **P 13 06 18.2 +0.2**
comp=Z,1.9nm,0.6s,baz=60,slow=7.2,SNR=20
**ESDC Sonseca Array 58.97 298** P **P 13 06 17.6 -0.4**
**EUNU Eureka 61.66 356** P **P 13 06 36.9 +1.3**
**MDT Midelt 62.59 291** P **P 13 06 42.8 +0.2**
comp=Z,1.6nm,0.5s,baz=107,slow=8.7,SNR=4.4
**VOI Vohitsoka 64.94 208** P **P 13 06 58.1 +0.1**
**RES Resolute Bay 67.33 357** P **P 13 07 12.6 +0.2**
RES pmax pmax
comp=Z,2.0nm,0.4s
**RES Resolute Bay 67.33 357** P **P 13 07 12.6 +0.2**
RES IAmb IAmb 13 07 13.4
comp=Z,2.1nm,0.3s
**TORD Torodi Ar. Bea 68.26 270** P **P 13 07 17.9 -1.2**
comp=Z,10nm,0.5s,baz=46,slow=5.4,SNR=105
**TORD Torodi Ar. Bea 68.26 270** P **P 13 07 18.4 -0.7**
TORD IAmb IAmb 13 07 20.6
comp=Z,11nm,0.7s
**LSZ Lusaka 68.35 228** P **P 13 07 19.1 -0.6**
comp=Z,4.7nm,0.7s,baz=37,slow=5.3,SNR=4.8
**TOLK Toolik Lake Re 68.78 16** P **P 13 07 21.5 -0.1**
TOLK IAmb IAmb 13 07 22.3
comp=Z,6.8nm,0.5s
**A36M Sachs Harbour 69.43 6** P **P 13 07 25.6 +0.2**
**COLD Coldfoot 69.79 17** P **P 13 07 28.0 +0.2**
**IMAR Indian Mountai 69.93 19** P **P 13 07 28.0 -0.7**
**BMAR Burnt Mountain 70.84 15** P **P 13 07 34.5 +0.4**
**H23K Yukon River 71.09 18** P **P 13 07 36.2 +0.4**
**INK Inuvik 71.96 10** P **P 13 07 40.5 -0.3**
comp=Z,1.9nm,0.5s,baz=321,slow=5.9,SNR=14
**INK Inuvik 71.96 10** P **P 13 07 40.7 -0.1**
INK pmax pmax
comp=Z,7.0nm,1.3s
**INK Inuvik 71.96 10** P **P 13 07 40.7 -0.1**
INK IAmb IAmb 13 07 48.1
comp=Z,7.2nm,1.2s
**KOWA Kowa 71.98 275** P **P 13 07 41.8 0.0**
KOWA IAmb IAmb 13 07 42.6
comp=Z,8.8nm,0.8s
**C36M Paulatuk 72.09 7** P **P 13 07 41.4 -0.1**
**ILAR Eielson Array 72.59 17** P **P 13 07 43.8 -0.8**
comp=Z,1.2nm,0.9s,baz=325,slow=5.7,SNR=9.4
**KTH Kantishna Hill 72.60 19** P **P 13 07 44.5 -0.3**
KTH IAmb IAmb 13 07 48.8
comp=Z,12nm,1.5s
**PPLA Purkeypile 72.80 20** P **P 13 07 46.0 0.0**
PPLA IAmb IAmb 13 08 07.7
comp=Z,17nm,1.4s
**DAWY Dawson 74.83 15** P **P 13 07 57.0 -0.8**
**M24K Tolsona, Glenn 75.02 18** P **P 13 07 58.6 -0.3**
**BCAR Beaver Creek A 75.22 16** P **P 13 08 00.1 +0.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **77.28** | **269** | P | | **P** | **13 08 12.2** | **-0.1** |
| | comp=Z,7.8nm,0.7s,baz=57,slow=6.4,SNR=11 | | | | | | | |
| **DBIC** | **Dimbokro** | **77.28** | **269** | P | | **P** | **13 08 12.0** | **-0.3** |
| DBIC | | | | IAmb | | IAmb | 13 08 12.9 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **KIC** | **Kosan Boka** | **77.38** | **268** | *e*P | | **P** | **13 08 12.7** | **-0.2** |
| | comp=Z,15nm,0.5s | | | | | | | |
| **TIC** | **Toumodi** | **77.42** | **269** | *e*P | | **P** | **13 08 12.9** | **-0.2** |
| **LIC** | **Lamto** | **77.69** | **268** | *e*P | | **P** | **13 08 14.2** | **-0.4** |
| | comp=Z,30nm,1.0s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.57** | **4** | P | | **P** | **13 08 23.8** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=349,slow=5.4,SNR=16 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.57** | **4** | P | | **P** | **13 08 23.2** | **-0.8** |
| **BOSA** | **Boshof** | **80.56** | **222** | P | | **P** | **13 08 29.8** | **-0.2** |
| | comp=Z,1.4nm,0.5s,baz=10,slow=3.4,SNR=5.5 | | | | | | | |
| **BOSA** | **Boshof** | **80.56** | **222** | P | | **P** | **13 08 29.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **80.71** | **124** | P | | **P** | **13 08 30.4** | **-0.4** |
| | comp=Z,1.9nm,0.7s,baz=327,slow=4.9,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.71** | **124** | P | | **P** | **13 08 30.0** | **-0.7** |
| **WB2** | **Warramunga Arr** | **80.72** | **124** | P | | **P** | **13 08 30.5** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 13 08 58.6 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **PLCA** | **Paso Flores** | **152.71** | **253** | PKPab | | **PKPab** | **13 16 24.4** | **+0.1** |
| | comp=Z,1.8nm,0.9s,baz=167,slow=5.6,SNR=3.1 | | | | | | | |
| **PLCA** | **Paso Flores** | **152.71** | **253** | PKIKP | | **PKPdf** | **13 16 04.5** | **-1.0** |
| PLCA | | | | | | | 13 16 22.5 | |
| **PLCA** | **Paso Flores** | **152.71** | **253** | | | **PKPdf** | **13 16 04.5** | **-1.0** |
| PLCA | | | | PKPab | | **PKPab** | **13 16 22.5** | **-1.8** |

*IDC **20** 12:59:51.4±1.0, 3.°54S×139.°92E, h0km, mb3.5/6, mb1 3.8/8, mb1mx3.5/42, mbtmp3.6/8, ML3.6/1, MS3.8/2, Ms1 3.8/2, ms1mx2.7/59, Error ellipse: s-maj=25.6km s-min=16.9km az=116.0*

**ISC 20 12:59:57.5±0.8, 3.°64S±0.°08×140.°1E±0.°1, h56km, n12, σ1§82/12, mb3.6/5, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **1.29** | **30** | Pn | **Pn** | **13 00 17.1** | **-2.2** |
| | 19nm,0.3s,baz=199,slow=11,SNR=47 | | | | | | |
| JAY | | | | Sn | **Sn** | **13 00 34.3** | **-1.4** |
| | 16nm,0.3s,baz=170,slow=19,SNR=8.5 | | | | | | |
| JAY | | | | LR | LR | 13 00 54.7 | |
| | comp=Z,71nm,19.0s,baz=215,slow=49 | | | | | | |
| **PMG** | **Port Moresby** | **9.09** | **129** | Pn | **Pn** | **13 02 05.9** | **-0.1** |
| | 0.5nm,0.3s,baz=318,slow=12,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.14** | **199** | P | **P** | **13 03 55.0** | **+0.8** |
| | 0.2nm,0.3s,baz=13,slow=11,SNR=11 | | | | | | |
| WRA | | | | S | **Sn** | **13 06 59.9** | **-3.3** |
| | 0.1nm,0.3s,baz=40,slow=18,SNR=2.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.14** | **223** | P | **P** | **13 04 26.2** | **-1.0** |
| | 1.4nm,0.8s,baz=14,slow=22,SNR=2.5 | | | | | | |
| **HNR** | **Honiara** | **20.57** | **107** | P | **P** | **13 04 34.2** | **+2.3** |
| | 141nm,1.0s,baz=337,slow=11,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **20.78** | **196** | P | **P** | **13 04 34.5** | **+0.4** |
| | 3.0nm,0.6s,baz=28,slow=9.2,SNR=34 | | | | | | |
| **NJ2** | **Nanjing** | **40.82** | **332** | *e*P | P | 13 07 25.9 | -7.8 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **59.13** | **334** | P | **P** | **13 09 53.7** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=140,slow=6.3,SNR=0.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **71.34** | **322** | P | **P** | **13 11 13.3** | **+1.8** |
| | comp=Z,0.2nm,0.8s,baz=107,slow=8.0,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **73.41** | **330** | P | **P** | **13 11 23.2** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=119,slow=1.8,SNR=2.0 | | | | | | |
| ZALV | | | | LR | LR | 13 44 59.7 | |
| | comp=Z,36nm,21.2s,baz=309,slow=37 | | | | | | |
| **KDAK** | **Kodiak Island** | **81.22** | **30** | LR | LR | 13 43 29.8 | |
| | comp=Z,109nm,21.6s,baz=98,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **86.12** | **24** | P | **P** | **13 12 33.0** | **+0.8** |
| | comp=Z,0.5nm,0.8s,baz=232,slow=5.6,SNR=2.5 | | | | | | |

*IDC **20** 13:00:52.8±0.9, 4.°77N×32.°52W, h0km, mb4.0/13, mb1 4.3/13, mb1mx3.9/55, mbtmp4.0/13, Error ellipse: s-maj=36.4km s-min=18.1km az=152.0*

**ISC 20 13:00:54.5±0.8, 4.°7N±0.°2×32.°5W±0.°2, h11km, n22, σ0§76/14, mb3.9/13, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.89** | **125** | T | T | 13 28 28.8 | |
| | baz=303,slow=75,SNR=15 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.89** | **125** | T | T | 13 28 29.9 | |
| | baz=303,slow=75,SNR=13 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.91** | **125** | T | T | 13 28 30.6 | |
| | baz=303,slow=75,SNR=14 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.40** | **127** | T | T | 13 29 04.6 | |
| | baz=301,slow=74,SNR=18 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.41** | **127** | T | T | 13 29 07.3 | |
| | baz=279,slow=74,SNR=16 | | | | | | |
| **PTGA** | **Pitinga** | **27.95** | **260** | P | **P** | **13 06 45.5** | **+0.2** |
| | 1.8nm,0.3s,baz=133,slow=12,SNR=3.6 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.50** | **291** | T | T | 13 37 57.3 | |
| | SNR=5.7 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.28** | **295** | T | T | 13 38 52.7 | |
| **TORD** | **Torodi Ar. Bea** | **34.78** | **74** | P | **P** | **13 07 45.8** | **+0.4** |
| | 2.0nm,0.9s,baz=264,slow=6.9,SNR=5.1 | | | | | | |
| **CPUP** | **Villa Florida** | **39.13** | **217** | P | **P** | **13 08 22.0** | **-0.2** |
| | 1.1nm,0.3s,baz=79,slow=8.2,SNR=3.0 | | | | | | |
| **LPAZ** | **La Paz** | **40.94** | **239** | P | **P** | **13 08 37.8** | **-0.4** |
| | 1.2nm,0.7s,baz=56,slow=7.1,SNR=4.5 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.67** | **157** | T | T | 13 58 07.0 | |
| | SNR=5.8 | | | | | | |
| **GERES** | **GERESS Array B** | **58.87** | **34** | P | **P** | **13 10 53.9** | **+0.4** |
| | 0.7nm,0.6s,baz=286,slow=9.5,SNR=1.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.73** | **49** | P | **P** | **13 11 57.5** | **-1.3** |
| | 0.2nm,0.4s,baz=251,slow=4.4,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **71.26** | **26** | P | **P** | **13 12 13.5** | **-0.1** |
| | 6.9nm,1.1s,baz=210,slow=13,SNR=2.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.27** | **299** | P | **P** | **13 12 15.2** | **+0.7** |
| | 0.5nm,1.0s,baz=92,slow=5.6,SNR=3.4 | | | | | | |
| **KBZ** | **Khabaz** | **76.22** | **46** | P | **P** | **13 12 42.8** | **-0.3** |
| | 2.1nm,0.2s,baz=207,slow=9.0,SNR=10 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.29** | **313** | P | **P** | **13 12 49.4** | **-0.2** |
| | 0.5nm,0.9s,baz=101,slow=6.2,SNR=3.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.17** | **332** | P | **P** | **13 13 14.9** | **-0.3** |
| | 1.0nm,0.9s,baz=94,slow=5.4,SNR=8.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.79** | **308** | P | **P** | **13 13 25.2** | **+0.7** |
| | 0.2nm,0.5s,baz=90,slow=8.1,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **95.87** | **337** | P | **P** | **13 14 20.3** | **-0.7** |
| | 0.6nm,0.9s,baz=64,slow=3.8,SNR=4.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.92** | **63** | PKP | **PKiKP** | **13 20 01.6** | **+1.5** |
| | 0.2nm,0.3s,baz=350,slow=2.7,SNR=1.0 | | | | | | |

**ROM 20 13:01:42.8±0.1, 43.°091N±0.°003×13.°007E±0.°006, h14km, ML1.3/2, 1C, Error ellipse: s-maj=0.5km s-min=0.0km az=283.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FDMO** | **Fiordimonte** | **0.08** | **133** | P | Pg | 13 01 46.1 | +0.3 |
| FDMO | | | | S | Sg | 13 01 48.3 | +0.5 |
| **SNTG** | **Esanatoglia** | **0.17** | **344** | ⇑P | Pg | 13 01 47.3 | +0.3 |
| SNTG | | | | S | Sg | 13 01 50.4 | +0.6 |
| SNTG | | | | AML | AML | | |
| | comp=E,131μm,0.1s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,127μm,0.1s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,130μm,0.1s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,126μm,0.1s | | | | | | |
| **EL6** | **Elcito** | **0.25** | **16** | P | Pg | 13 01 48.5 | +0.3 |
| EL6 | | | | S | Sb | 13 01 53.1 | -0.3 |
| **ASSB** | **Assisi San Ben** | **0.26** | **259** | P | Pg | 13 01 48.6 | +0.2 |
| ASSB | | | | S | Sg | 13 01 52.9 | +0.7 |
| ASSB | | | | AML | AML | | |
| | comp=E,89μm,1.3s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,101μm,1.3s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,102μm,1.3s | | | | | | |
| **NRCA** | **Norcia** | **0.27** | **163** | P | Pg | 13 01 48.8 | +0.2 |
| NRCA | | | | S | Sb | 13 01 53.3 | -0.6 |
| **TRE1** | **Treia** | **0.31** | **45** | P | Pg | 13 01 49.3 | 0.0 |
| **MOMA** | **Monte Martano** | **0.43** | **228** | P | Pg | 13 01 51.6 | +0.1 |
| MOMA | | | | S | Sb | 13 01 58.4 | -0.2 |
| **PE3** | **Peglio** | **0.71** | **329** | S | Sn | 13 02 10.0 | +0.8 |

*IDC **20** 13:03:35.3±1.5, 4.°99N×32.°58W, h0km, mb3.7/11, mb1 4.0/11, mb1mx3.8/54, mbtmp3.7/11, MS3.9/5, Ms1 3.9/5, ms1mx3.3/86, Error ellipse: s-maj=54.2km s-min=22.5km az=163.0*

**ISC 20 13:03:37.0±1.2, 5.°0N±0.°3×32.°6W±0.°2, h11km, n23, σ0§67/11, mb3.7/11, MS3.8/5, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **22.06** | **125** | T | T | 13 31 02.7 | |
| | baz=303,slow=75,SNR=15 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.06** | **125** | T | T | 13 31 03.0 | |
| | baz=303,slow=75,SNR=12 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.08** | **125** | T | T | 13 31 04.2 | |
| | baz=303,slow=75,SNR=13 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.57** | **128** | T | T | 13 31 43.8 | |
| | baz=303,slow=74,SNR=19 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.59** | **128** | T | T | 13 31 45.2 | |
| | baz=277,slow=74,SNR=13 | | | | | | |
| **DBIC** | **Dimbokro** | **27.63** | **85** | LR | LR | 13 17 50.8 | |
| | comp=Z,180nm,21.8s,baz=250,slow=31 | | | | | | |
| **PTGA** | **Pitinga** | **27.93** | **259** | LR | LR | 13 19 48.6 | |
| | comp=Z,240nm,18.1s,baz=101,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.78** | **74** | P | **P** | **13 10 28.5** | **+0.6** |
| | 4.6nm,1.0s,baz=259,slow=8.4,SNR=3.8 | | | | | | |
| **SIV** | **San Ignacio** | **35.04** | **233** | LR | LR | 13 23 55.8 | |
| | comp=Z,300nm,20.1s,baz=88,slow=35 | | | | | | |
| **SJG** | **San Juan** | **35.32** | **295** | LR | LR | 13 22 06.5 | |
| | comp=Z,146nm,20.2s,baz=103,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **41.01** | **238** | P | **P** | **13 11 20.9** | **-0.3** |
| | 0.6nm,0.5s,baz=26,slow=5.6,SNR=1.7 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.88** | **157** | T | T | 14 00 44.1 | |
| **H09W1** | **TRISTAN DA CUN** | **45.89** | **157** | T | T | 14 00 43.2 | |
| **SCHQ** | **Schefferville** | **56.89** | **337** | LR | LR | 13 35 00.7 | |
| | comp=Z,117nm,19.6s,baz=126,slow=33 | | | | | | |
| **GERES** | **GERESS Array B** | **58.72** | **34** | P | **P** | **13 13 34.0** | **-1.0** |
| | 0.3nm,0.4s,baz=321,slow=4.5,SNR=1.6 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.73** | **42** | P | **P** | **13 14 15.8** | **+0.1** |
| | 3.0nm,0.6s,baz=309,slow=13,SNR=4.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.56** | **37** | P | **P** | **13 14 40.0** | **+0.2** |
| | 0.5nm,0.5s,baz=258,slow=4.8,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.63** | **49** | P | **P** | **13 14 39.8** | **-0.9** |
| | 1.5nm,0.8s,baz=248,slow=6.1,SNR=2.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.11** | **299** | P | **P** | **13 14 57.2** | **+1.1** |
| | 0.1nm,0.6s,baz=111,slow=5.1,SNR=2.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.10** | **313** | P | **P** | **13 15 30.9** | **-0.1** |
| | 0.4nm,0.8s,baz=72,slow=4.8,SNR=3.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.95** | **332** | P | **P** | **13 15 56.5** | **-0.2** |
| | 0.1nm,0.3s,baz=95,slow=6.9,SNR=3.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.61** | **308** | P | **P** | **13 16 06.0** | **-0.2** |
| | 0.2nm,0.5s,baz=88,slow=2.7,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **95.65** | **337** | P | **P** | **13 17 02.3** | **-0.3** |
| | 0.3nm,0.8s,baz=76,slow=3.8,SNR=2.9 | | | | | | |

**PRU 20 13:04:54.5±0.0, 50.°21N×18.°97E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRLC** | **Kraliky** | **1.41** | **265** | *e*SG | Sg | 13 05 39.8 | -0.1 |
| **DPC** | **Dobruska-Polom** | **1.70** | **276** | *e*PG | Pn | 13 05 25.5 | 0.0 |
| DPC | | | | *e*SG | Sn | 13 05 48.3 | +0.3 |
| **DPC** | **Dobruska-Polom** | **1.70** | **276** | *e* | Sn | 13 05 48.3 | +0.3 |

**IDC 20 13:12:23.1±5.6, 5.°93S×147.°84E, h0km, mb4.0/3, mb1 4.1/5, mb1mx3.5/35, mbtmp3.9/5, ML3.8/1, MS3.1/1, Ms1 3.1/1, ms1mx2.5/58, Error ellipse: s-maj=85.8km s-min=46.0km az=62.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.52** | **191** | Pn | Pn | 13 13 19.9 | +0.7 |
| | 2.3nm,0.3s,baz=7.4,slow=7.2,SNR=7.0 | | | | | | |
| PMG | | | | Sn | Sn | 13 14 00.8 | -0.8 |
| | 2.5nm,0.3s,baz=15,slow=20,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.14** | **222** | P | P | 13 16 47.3 | -0.8 |
| | 0.3nm,0.3s,baz=47,slow=11,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **22.16** | **216** | P | P | 13 17 20.4 | -0.4 |
| | 2.4nm,0.5s,baz=50,slow=9.2,SNR=125 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.81** | **239** | P | P | 13 17 47.4 | +0.1 |
| | 3.8nm,0.5s,baz=53,slow=8.0,SNR=28 | | | | | | |
| **STKA** | **Stephens Creek** | **26.47** | **192** | P | P | 13 18 02.8 | +0.7 |
| | 1.9nm,0.8s,baz=339,slow=17,SNR=2.4 | | | | | | |
| **KSRS** | **Korea Array** | **46.99** | **338** | LR | LR | 13 39 33.6 | |
| | comp=Z,22nm,21.0s,baz=310,slow=35 | | | | | | |

**IDC 20 13:16:38.9±6.0, 6.°14S×149.°55E, h0km, mb3.0/3, mb1 3.2/3, mb1mx3.1/33, mbtmp3.1/3, Error ellipse: s-maj=178.0km s-min=38.4km az=105.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.16** | **226** | P | P | 13 21 13.9 | -1.1 |
| | 0.2nm,0.8s,baz=52,slow=10.0,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **219** | P | P | 13 21 46.4 | +0.7 |
| | 0.3nm,0.5s,baz=51,slow=9.2,SNR=9.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **79.23** | **320** | P | P | 13 28 46.1 | 0.0 |
| | 0.6nm,1.0s,baz=97,slow=4.8,SNR=2.4 | | | | | | |

*IDC **20** 13:21:56.3±0.6, 4.°56N×32.°70W, h0km, mb4.0/21, mb1 4.1/21, mb1mx4.0/49, mbtmp4.0/21, MS4.0/34, Ms1 4.0/34, ms1mx3.7/84, Error ellipse: s-maj=21.1km s-min=13.7km az=146.0*

*NEIC **20** 13:21:57.5±1.9, 4.°5N±0.°1×32.°6W±0.°1, h10km±1km, mb4.8/14, Error ellipse: s-maj=26.7km s-min=19.5km az=135.0*

*GCMT **20** 13:22:06.0±0.2, 4.°69N±0.°03×32.°60W±0.°01, h15km±1km, MW5.0/109, Moment Tensor Solution. s26,c28; s109,c156; Duration: 0 Moment tensor: Scale 10^16^Nm; $M_{rr}$-3.20±.21; $M_{\theta\theta}$-0.14±.12; $M_{\phi\phi}$3.34±.15; $M_{r\theta}$-0.32±.38; $M_{\theta\phi}$0.08±.08; $M_{r\phi}$0.79±.24; Best double couple: $M_o$3.38100×10^16^ NP1:$\phi_s$7.00000°, $\delta$39.00000°, $\lambda$-81.00000°. NP2:$\phi_s$175.00000°, $\delta$52.00000°, $\lambda$-97.00000°. Principal axes: T 3.4350, Plg7.0000°, Azm271.0000°; N -0.1040, Plg6.0000°, Azm180.0000°; P -3.3280, Plg81.0000°, Azm49.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 20 13:21:57.7±0.4, 4.°37N±0.°08×32.°55W±0.°09, h11km, n92, σ2§26/46, mb4.3/30, MS4.0/34, 1D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCBR** | **Riachuelo** | **10.67** | **198** | Pn | **Pn** | **13 24 30.6** | **0.0** |
| RCBR | | | | Sn | **Sn** | **13 26 23.0** | **-7.2** |
| **NBMO** | **Morrinhos-CE** | **10.69** | **225** | *e*P | Pn | 13 24 36.7 | +5.9 |
| **NBLA** | **Lagarto - SE** | **16.13** | **199** | *e*P | P | 13 25 57.3 | +10 |
| **NBPN** | **Ponto Novo - B** | **16.93** | **207** | *e*P | P | 13 26 07.1 | +10 |
| **GDU01** | **Guandu, BA** | **19.28** | **201** | *e*P | Pn | 13 26 38.0 | +14 |
| **SMTB** | **Santa Maria do** | **19.94** | **229** | *e*P | **Pn** | **13 26 37.4** | **+5.8** |
| **MDP** | **Montagnes des** | **20.04** | **273** | LR | LR | 13 32 38.5 | |
| | comp=Z,277nm,21.4s,baz=110,slow=32 | | | | | | |
| **MCPB** | **Macapa, AP** | **20.05** | **257** | *e*P | Pn | 13 26 34.9 | +2.1 |
| **PRPB** | **Parauapebas** | **20.17** | **239** | *e*P | Pn | 13 26 38.5 | +4.2 |
| **NBIT** | **Itapeh - BA** | **20.35** | **199** | *e*P | Pn | 13 26 49.2 | +13 |
| **CMC01** | **Camacan, BA** | **20.78** | **199** | *e*P | Pn | 13 26 55.5 | +14 |
| **H10N3** | **ASCENSION HYDR** | **21.71** | **124** | T | T | 13 49 33.2 | |
| | baz=304,slow=75,SNR=6.6 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.72** | **124** | T | T | 13 49 33.8 | |
| | baz=304,slow=75,SNR=36 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.73** | **124** | T | T | 13 49 35.0 | |
| | baz=304,slow=75,SNR=35 | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.02** | **199** | *e*P | P | 13 27 08.6 | +16 |
| **H10S3** | **ASCENSION HYDR** | **22.21** | **127** | T | T | 13 50 22.5 | |
| | baz=276,slow=74,SNR=34 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.23** | **127** | T | T | 13 49 59.2 | |
| | baz=304,slow=74,SNR=26 | | | | | | |
| **JANB** | **Januaria** | **22.55** | **211** | *e*P | P | 13 27 11.2 | +13 |
| **MALB** | **Monte Alegre** | **22.56** | **255** | *e*P | **P** | **13 27 02.5** | **+4.3** |
| **PEXB** | **Peixe** | **22.65** | **224** | *e*P | P | 13 27 07.8 | +8.7 |
| **SNDB** | **Serra Nova Dou** | **24.72** | **229** | *e*P | P | 13 27 27.9 | +8.6 |
| **ITTB** | **Itaituba** | **24.73** | **250** | *e*P | **P** | **13 27 26.3** | **+6.8** |
| **DIAM** | **Diamantina, MG** | **25.05** | **206** | *e*P | P | 13 27 37.6 | +15 |
| **BDFB** | **Brasilia** | **25.09** | **217** | P | **P** | **13 27 22.0** | **-0.7** |
| | 1.3nm,0.4s,baz=138,slow=13,SNR=1.7 | | | | | | |
| BDFB | | | | LR | LR | 13 36 18.1 | |
| | comp=Z,159nm,19.3s,baz=345,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **27.66** | **84** | P | **P** | **13 27 43.8** | **-2.1** |
| | 3.8nm,0.8s,baz=260,slow=8.1,SNR=2.4 | | | | | | |
| DBIC | | | | LR | LR | 13 36 12.9 | |
| | comp=Z,420nm,21.3s,baz=284,slow=31 | | | | | | |
| **DBIC** | **Dimbokro** | **27.66** | **84** | IAmb | IAmb | 13 28 00.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PTGA** | **Pitinga** | **27.86** | **260** | P | **P** | **13 27 47.0** | **-0.7** |
| | comp=Z,0.7nm,0.3s,baz=102,slow=9.3,SNR=1.3 | | | | | | |
| PTGA | | | | LR | LR | 13 37 44.3 | |
| | comp=Z,426nm,20.9s,baz=52,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.60** | **292** | T | T | 13 58 58.5 | |
| | SNR=19 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.40** | **295** | T | T | 13 59 49.3 | |
| | SNR=9.2 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **32.33** | **282** | LR | LR | 13 41 26.3 | |
| | comp=Z,154nm,19.2s,slow=36 | | | | | | |
| **SIV** | **San Ignacio** | **34.72** | **234** | P | **P** | **13 28 49.2** | **+1.1** |
| | comp=Z,3.7nm,0.8s,baz=77,slow=11,SNR=4.7 | | | | | | |
| SIV | | | | LR | LR | 13 42 31.4 | |
| | comp=Z,366nm,21.0s,baz=95,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **73** | P | **P** | **13 28 49.5** | **-0.2** |
| | comp=Z,2.8nm,0.9s,baz=264,slow=8.4,SNR=10.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **73** | P | **P** | **13 28 50.4** | **+0.6** |
| **SJG** | **San Juan** | **35.58** | **295** | LR | LR | 13 39 56.6 | |
| | comp=Z,324nm,21.6s,baz=84,slow=30 | | | | | | |
| **MDT** | **Midelt** | **38.50** | **39** | LR | LR | 13 44 08.0 | |
| | comp=Z,201nm,18.6s,baz=232,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **38.82** | **217** | P | **P** | **13 29 23.8** | **+0.9** |
| | comp=Z,0.9nm,0.5s,baz=2.6,slow=12,SNR=1.4 | | | | | | |
| CPUP | | | | LR | LR | 13 44 28.7 | |
| | comp=Z,178nm,21.8s,baz=49,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **40.73** | **239** | P | **P** | **13 29 39.6** | **-0.1** |
| | comp=Z,3.1nm,0.9s,baz=45,slow=10,SNR=3.6 | | | | | | |
| LPAZ | | | | LR | LR | 13 45 35.5 | |
| | comp=Z,200nm,20.3s,baz=50,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **40.73** | **239** | *e*P | P | 13 29 47.2 | +7.5 |
| **ROSC** | **El Rosal** | **41.63** | **272** | LR | LR | 13 48 14.4 | |
| | comp=Z,205nm,19.1s,baz=69,slow=38 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **41.83** | **253** | *e*P | P | 13 29 54.1 | +6.1 |
| **PB16** | **IPOC Station P** | **42.85** | **237** | P | **P** | **13 29 54.5** | **-2.5** |
| **ESDC** | **Sonseca Array** | **43.62** | **32** | P | **P** | **13 30 02.2** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=226,slow=10,SNR=4.0 | | | | | | |
| **LVC** | **Limon Verde** | **44.51** | **231** | LR | LR | 13 48 48.9 | |
| | comp=Z,140nm,21.2s,baz=52,slow=36 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.36** | **157** | T | T | 14 19 14.9 | |
| | SNR=6.8 | | | | | | |
| **NNA** | **Nana** | **46.94** | **249** | LR | LR | 13 50 07.5 | |
| | comp=Z,179nm,19.2s,baz=90,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.16** | **256** | LR | LR | 13 50 40.4 | |
| | comp=Z,250nm,18.6s,baz=68,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.62** | **46** | P | **P** | **13 30 50.4** | **+0.9** |
| | comp=Z,2.4nm,0.6s,baz=195,slow=14,SNR=1.3 | | | | | | |
| KEST | | | | LR | LR | 13 51 52.7 | |
| | comp=Z,291nm,18.9s,baz=203,slow=36 | | | | | | |
| **JTS** | **Las Juntas de** | **52.26** | **280** | LR | LR | 13 53 56.3 | |
| | comp=Z,70nm,19.9s,baz=176,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **54.60** | **117** | P | **P** | **13 31 29.3** | **+2.5** |
| | comp=Z,0.9nm,0.3s,baz=246,slow=15,SNR=2.0 | | | | | | |
| TSUM | | | | LR | LR | 13 49 34.6 | |
| | comp=Z,164nm,21.5s,baz=329,slow=30 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.46** | **310** | LR | LR | 13 50 37.2 | |
| | comp=Z,167nm,22.0s,baz=118,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **56.78** | **214** | LR | LR | 13 55 46.0 | |
| | comp=Z,136nm,18.9s,baz=69,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **57.23** | **322** | LR | LR | 13 50 26.8 | |
| | comp=Z,98nm,20.6s,baz=165,slow=30 | | | | | | |
| **SCHQ** | **Schefferville** | **57.42** | **337** | P | **P** | **13 31 45.7** | **-0.7** |
| | comp=Z,2.7nm,0.8s,baz=146,slow=4.8,SNR=4.3 | | | | | | |
| SCHQ | | | | LR | LR | 13 52 22.3 | |
| | comp=Z,93nm,20.4s,baz=85,slow=32 | | | | | | |
| **APG** | **El Apazote** | **57.91** | **285** | LR | LR | 13 57 24.4 | |
| | comp=Z,54nm,19.9s,baz=84,slow=37 | | | | | | |
| **VRAC** | **Vranov** | **61.04** | **34** | LR | LR | 13 56 14.6 | |
| | comp=Z,103nm,19.2s,baz=260,slow=34 | | | | | | |
| **IDI** | **Anoyia** | **61.15** | **52** | LR | LR | 13 59 04.0 | |
| | comp=Z,74nm,20.5s,baz=267,slow=36 | | | | | | |
| **CMIG** | **Matias Romero** | **62.30** | **287** | LR | LR | 14 00 24.0 | |
| | comp=Z,32nm,19.1s,baz=85,slow=37 | | | | | | |
| **MBAR** | **Mbarara** | **63.42** | **93** | LR | LR | 13 58 33.7 | |
| | comp=Z,139nm,18.7s,baz=285,slow=35 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **63.76** | **352** | LR | LR | 13 56 00.5 | |
| | comp=Z,77nm,18.4s,baz=152,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **64.47** | **124** | P | **P** | **13 32 37.2** | **+2.4** |
| | comp=Z,4.1nm,1.0s,baz=256,slow=4.2,SNR=2.4 | | | | | | |
| **FRB** | **Frobisher Bay** | **64.75** | **343** | LR | LR | 13 57 43.2 | |
| | comp=Z,102nm,19.1s,baz=58,slow=33 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.14** | **41** | P | **P** | **13 32 39.1** | **+0.1** |
| | comp=Z,6.4nm,0.7s,baz=156,slow=8.9,SNR=9.8 | | | | | | |
| MLR | | | | LR | LR | 13 59 28.4 | |
| | comp=Z,178nm,20.2s,baz=276,slow=35 | | | | | | |
| **MLR** | **Muntele Rosu** |

GLKZ S S 13 26 46.0 -1.2
**RAO Raoul Island 0.99 82** P Pn 13 26 10.6 0.0
1µm,0.3s,baz=252,slow=20,SNR=23
RAO S S 13 26 46.5 -0.7
467nm,0.3s,baz=288,slow=20,SNR=21
**RAO Raoul Island 0.99 82** Pn Pn 13 26 10.4 -0.2
**MXZ Matakaoa Point 8.44 195** Pn Pn 13 27 22.8 -1.3
**MXZ Matakaoa Point 8.44 195** P Pn 13 27 25.7 +1.6
MXZ S S 13 28 56.6 -4.9
**OUZ Omahuta 8.52 225** Pn Pn 13 27 26.6 +1.6
**KUZ Kuaotunu 8.54 210** P Pn 13 27 28.0 +2.6
**WMGZ Waiomatatini S 8.66 194** P Pn 13 27 28.0 +1.3
WMGZ S S 13 29 01.3 -5.0
**HAZ Te Kaha 8.75 197** P Pn 13 27 28.3 +0.5
HAZ S S 13 29 05.3 -2.9
**PKGZ Pakihiroa 8.80 195** P Pn 13 27 28.3 -0.2
PKGZ S S 13 29 04.8 -4.7
**PUZ Puketiti 8.94 194** P Pn 13 27 29.2 -0.9
PUZ S S 13 29 07.7 -4.7
**RUGZ Raukumara Rang 8.97 197** P Pn 13 27 30.2 -0.4
RUGZ S S 13 29 08.9 -4.5
**TWGZ Tauwhareparae 9.10 195** P Pn 13 27 32.0 0.0
TWGZ S S 13 29 11.8 -4.2
**TGRZ Tauranga 9.19 204** P Pn 13 27 36.6 +3.6
**OPRZ Ohinepanea 9.19 202** P Pn 13 27 34.6 +1.6
**CNGZ Carnagh Statio 9.35 193** P Pn 13 27 33.4 -1.5
**EDRZ Edgecumbe 9.37 201** P Pn 13 27 38.3 +3.0
**URZ Urewera 9.40 199** P Pn 13 27 34.4 -1.2
45nm,0.3s,baz=338,slow=5.4,SNR=108
URZ S S 13 29 20.8 -1.7
52nm,0.3s,baz=79,slow=23,SNR=19
**URZ Urewera 9.40 199** Pn Pn 13 27 34.3 -1.3
**URZ Urewera 9.40 199** P Pn 13 27 34.0 -1.6
URZ S S 13 29 19.3 -3.2
**KARZ Kaharoa 9.45 203** P Pn 13 27 39.6 +3.3
**OMRZ Omania 9.49 203** P P 13 27 40.4 +1.8
**UTU Utuhina 9.61 203** P P 13 27 42.6 +2.7
**HLRZ Highlands Stat 9.62 202** P Pn 13 27 41.2 +2.9
**RIGZ Rimuhau 9.65 195** P Pn 13 27 37.3 -1.3
**SNGZ Shannon Statio 9.83 197** P Pn 13 27 39.6 -1.1
SNGZ S S 13 29 28.3 -3.7
**ALRZ Allen Road 9.91 202** P Pn 13 27 42.8 +1.2
ALRZ S S 13 29 33.3 -0.5
**WPRZ Whakapapataria 9.93 202** P Pn 13 27 44.6 +2.7
**TLZ Tolley Road 9.98 205** P P 13 27 46.5 +2.4
**MTHZ Maungataniwha 10.03 199** P Pn 13 27 43.1 0.0
MTHZ S S 13 29 33.5 -3.0
**MHGZ Mahia Peninsul 10.05 194** P Pn 13 27 44.2 +0.9
**NMHZ Naumai 10.27 198** P Pn 13 27 46.1 +0.1
**HIZ Hauiti 10.41 208** P P 13 27 51.3 +2.6
**BKZ Black Stump Fm 10.42 200** Pn Pn 13 27 45.6 -2.1
**RITZ Rihia Road 10.45 203** P Pn 13 27 49.9 +1.8
**NTVZ North Tongarir 10.62 203** P Pn 13 27 50.1 -0.1
**MCHZ McNeill Hill 10.62 198** P Pn 13 27 50.3 +0.2
**KRVZ Karewarewa 10.62 203** P Pn 13 27 49.8 -0.5
**ETVZ East Tongariro 10.64 203** P Pn 13 27 50.0 -0.5
**WTVZ West Tongariro 10.66 203** P Pn 13 27 50.4 -0.3
**NNVZ North Ngauruho 10.67 203** P Pn 13 27 50.6 -0.3
**OTVZ Oturere 10.68 203** P Pn 13 27 50.7 -0.3
**KWKZ Kaweka Forest 10.68 198** P Pn 13 27 51.3 +0.5
**SNVZ South Ngauruho 10.71 203** P Pn 13 27 50.9 +0.4
**NGZ Ngauruhoe 10.71 203** P Pn 13 27 51.4 0.0
**CKHZ Cape Kidnapper 10.72 196** P Pn 13 27 52.5 +1.2
**TUVZ Tukino 10.78 203** P Pn 13 27 51.4 -0.8
**FWVZ Far West T-bar 10.80 203** P Pn 13 27 51.9 -0.6
**WHVZ Whangaehu Hut 10.81 203** P Pn 13 27 51.7 -0.9
**DRZ Dome Shelter 10.81 203** P Pn 13 27 53.3 +0.6
**TRVZ Turoa 10.84 203** P Pn 13 27 51.9 -1.1
**BHHZ Black Hill Sta 10.85 201** P Pn 13 27 50.0 -2.9
**WNVZ Wahianoa 10.85 203** P Pn 13 27 49.9 -3.1
**MOVZ Moawhango 10.87 202** P Pn 13 27 51.7 -1.4
**KRHZ Kereru 10.90 199** P Pn 13 27 50.9 -2.5
**PKVZ Pokaka 10.90 204** P Pn 13 27 52.8 -0.7
**KAHZ Kahuranaki 10.90 197** P Pn 13 27 51.1 -2.4
**MTVZ Mangateitei 10.94 203** P Pn 13 27 53.2 -0.8
**VRZ Vera Road 10.97 206** P Pn 13 27 54.5 +0.2
**MHEZ Mangahewa 11.10 208** P P 13 28 00.1 +3.6
**PXZ Pawanui 11.13 197** P Pn 13 27 53.3 -3.0
**PNHZ Pukenui 11.20 199** P Pn 13 27 54.2 -2.8
**DREZ Durham Road 11.25 208** P P 13 28 01.5 +3.5
**WPHZ Waipukurau 11.27 198** P Pn 13 27 57.2 -0.6
**PKE Pukeiti 11.34 209** P P 13 28 01.8 +2.7
**NEZ North Egmont 11.36 208** P P 13 28 02.5 +3.1
**PREZ Palmer Road 11.40 208** P P 13 28 02.5 +2.7
**LREZ Lake Rotokare 11.40 207** P Pn 13 28 01.4 +2.0
**PRHZ Porangahau 11.41 197** P Pn 13 27 58.9 -0.6
**KHEZ Kahui Hut 11.41 208** P P 13 28 02.9 +2.9
**WAZ Wanganui 11.44 204** P Pn 13 27 59.4 -0.5
**NBEZ Newall Road No 11.45 209** P P 13 28 04.5 +4.2
**DVHZ Dannevirke 11.56 199** P Pn 13 27 59.9 -1.5
**ANWZ Angora Road 11.63 197** P P 13 28 01.7 -0.6
**OHWZ Ohakea 11.73 202** P P 13 28 02.5 -0.9
**POWZ Post Office Ro 11.76 200** P P 13 28 02.9 -0.9
**PRWZ Pori Road 11.86 199** P P 13 28 02.9 -1.9
**BFZ Birch Farm 11.90 198** P P 13 28 01.8 -3.3
**BFZ Birch Farm 11.90 198** P P 13 28 02.3 -3.0
**MRZ Mangatainoka R 12.07 200** P P 13 28 04.0 -3.2
**OGWZ Otaki Gorge 12.33 201** P P 13 28 06.2 -3.9
**MSWZ Moikau Station 12.86 200** P P 13 28 15.2 -0.7
**SNZO South Karori 12.93 202** P P 13 28 14.4 -2.2
**BHW Baring Head 12.97 201** P P 13 28 15.6 -1.4
**PLWZ Palliser 13.00 199** P P 13 28 16.2 -1.3
**TUWZ Tuamarina 13.29 204** P P 13 28 16.6 -4.0
**NNZ Nelson 13.31 206** P P 13 28 18.2 -2.6
**QRZ Quartz Range 13.32 209** P P 13 28 19.7 -1.2
**BSWZ Blackbirch Sta 13.57 203** P P 13 28 22.0 -1.7
**THZ Tophouse 13.96 206** P P 13 28 26.4 -1.7
**KHZ Kahutara 14.30 203** P P 13 28 29.2 -2.5
**DZM Mont Dzumac 14.97 296** P Pn 13 28 43.9 +2.2
3.3nm,0.3s,baz=72,slow=19,SNR=27
**LTZ Lake Taylor 15.08 205** P P 13 28 38.0 -2.3
LTZ IAmb IAmb 13 28 45.7
comp=Z,17nm,0.5s
**OXZ Oxford 15.63 205** P P 13 28 43.8 -2.5
**MQZ McQueen's Vall 15.75 203** P P 13 28 47.2 -0.3
MQZ IAmb IAmb 13 28 48.9
comp=Z,41nm,1.1s
**RPZ Rata Peaks 16.34 206** P P 13 28 51.2 -2.6
comp=Z,2.8nm,0.3s,baz=9.8,slow=14,SNR=14
RPZ S S 13 31 44.5 -2.7
comp=Z,6.2nm,0.3s,baz=94,slow=20,SNR=16
**RPZ Rata Peaks 16.34 206** P P 13 28 51.3 -2.6
RPZ IAmb IAmb 13 28 57.5
comp=Z,21nm,0.7s
**LBZ Lake Benmore 17.24 207** P P 13 29 04.0 +0.4
**ARMA Armidale 25.42 260** P P 13 30 22.7 +0.6
ARMA IAmb IAmb 13 30 25.9
comp=Z,30nm,0.7s
**EIDS Eidsvold 26.80 271** P P 13 30 34.9 +0.5
EIDS IAmb IAmb 13 30 36.3
comp=Z,13nm,0.8s
**CAN Canberra 27.57 249** P P 13 30 43.3 +2.3
CAN IAmb IAmb 13 30 44.6
comp=Z,29nm,0.7s
**PPTF Pamatai, Papee 29.39 73** P P 13 30 57.1 -0.1
**TOO Toolangi 30.55 245** P P 13 31 08.2 +1.0
**STKA Stephens Creek 33.84 256** P P 13 31 35.8 +0.1
comp=Z,25nm,0.6s,baz=98,slow=10,SNR=57
**STKA Stephens Creek 33.84 256** P P 13 31 36.5 +0.9
**COEN Coen 38.14 286** P P 13 32 10.9 -1.0
COEN IAmb IAmb 13 32 13.4
comp=Z,15nm,0.9s
**BBOO Buckleboo 38.38 253** P P 13 32 13.4 -0.4
BBOO IAmb IAmb 13 32 14.3
comp=Z,12nm,0.5s
**AS31 Alice Springs 42.27 266** P P 13 32 45.0 -0.6
**ASAR Alice Springs 42.27 266** P P 13 32 43.9 -1.6
comp=Z,22nm,0.5s,baz=101,slow=6.5,SNR=460
ASAR PcP PP 13 34 31.9 -0.1
comp=Z,2.4nm,0.5s,baz=114,slow=4.0,SNR=6.3
ASAR ScP ScP 13 37 50.0 +1.4
comp=Z,1.0nm,0.7s,baz=117,slow=3.8,SNR=4.6
ASAR S S 13 38 38.4 -1.1
comp=Z,0.4nm,0.7s,baz=112,slow=15,SNR=4.2
**ASAR Alice Springs 42.27 266** P P 13 32 45.0 -0.6
**WR0 Warramunga Arr 42.98 272** P P 13 32 50.5 -0.7
WR0 IAmb IAmb 13 32 51.7
comp=Z,29nm,0.9s
**WB2 Warramunga Arr 43.16 272** P P 13 32 52.0 -0.5
WB2 IAmb IAmb 13 32 53.0
comp=Z,43nm,0.8s
**WRAB Tennant Creek 43.16 272** P P 13 32 51.6 -0.9
WRAB IAmb IAmb 13 32 53.0
comp=Z,36nm,0.8s
**WRA Warramunga Arr 43.17 272** P P 13 32 51.6 -1.0
comp=Z,26nm,0.7s,baz=110,slow=7.6,SNR=138
WRA PcP PcP 13 34 34.7 -0.4
comp=Z,2.3nm,0.7s,baz=109,slow=3.5,SNR=5.3
WRA ScP ScP 13 37 53.7 +1.4
comp=Z,0.6nm,0.5s,baz=103,slow=3.8,SNR=4.6
WRA S S 13 38 48.7 -3.8
comp=Z,0.9nm,0.8s,baz=106,slow=15,SNR=5.4
**WRA Warramunga Arr 43.17 272** P P 13 32 51.2 -1.5
**WB0 Warramunga Arr 43.19 272** P P 13 32 51.8 -1.0
WB0 IAmb IAmb 13 32 53.2
comp=Z,44nm,0.9s
**FORT Forrest 45.44 254** P P 13 33 09.5 -0.8
**MTN Manton Dam 48.94 279** P P 13 33 35.7 -1.6
MTN IAmb IAmb 13 33 36.9
comp=Z,17nm,0.7s
**SBA Scott Base 48.97 184** P P 13 33 40.6 +4.1
**VNDA Vanda 49.00 185** P P 13 33 38.8 +2.0
comp=Z,4.2nm,0.7s,baz=357,slow=6.5,SNR=8.5
**VNDA Vanda 49.00 185** P P 13 33 37.5 +0.7
**KNRA Kununurra 49.74 274** P P 13 33 42.9 -0.3
KNRA IAmb IAmb 13 33 43.9
comp=Z,37nm,0.9s
**FITZ Fitzroy Crossi 51.47 270** P P 13 33 55.5 -0.5
FITZ IAmb IAmb 13 33 56.5
comp=Z,29nm,0.8s
**FAKI Fak Fak 53.15 290** P P 13 34 06.2 -2.1
**PSA00 Pilbara Seismi 55.19 263** P P 13 34 21.1 -1.8
**CASY Casey 55.60 208** P P 13 34 25.4 +0.4
**MORW Morawa 55.96 253** P P 13 34 27.0 -1.1
MORW IAmb IAmb 13 34 27.8
comp=Z,15nm,0.8s
**SOEI Soe 56.33 278** P P 13 34 32.4 +1.4
comp=Z,30nm,0.8s
**SANI Sanana 58.81 287** P P 13 34 47.4 -0.6
comp=Z,28nm,0.6s
**GIRL Giralia 59.64 260** P P 13 34 54.2 +0.6
**QSPA South Pole Qui 60.71 180** P P 13 35 03.0 +2.9
QSPA IAmb IAmb 13 35 04.1
comp=Z,14nm,0.7s
**BKSI Bulukumba 62.07 280** P P 13 35 10.1 +0.2
comp=Z,15nm,0.8s
**PLAI Plampang 62.39 275** P P 13 35 11.7 -0.3
comp=Z,66nm,0.9s
**BNSI Bone 62.55 281** P P 13 35 13.4 +0.4
comp=Z,20nm,1.9s
**IGBI Denpasar 64.68 274** P P 13 35 28.8 +2.0
**PCJI Pacitan 68.43 273** P P 13 35 51.0 +0.7
comp=Z,82nm,0.9s
**KPJI Karang Pucung 70.80 272** P P 13 36 05.7 +1.0
comp=Z,24nm,0.5s
**KKM Kota Kinabalu 71.39 288** P P 13 36 06.7 -1.6
**CNJI Cibinong 72.38 271** P P 13 36 13.6 -0.4
comp=Z,687nmcomp=Z,56nm,1.0s
**MDSI Maura Dua 76.30 273** P P 13 36 35.0 -1.5
comp=Z,348nmcomp=Z,31nm,0.6s
**MJAR Matsushiro Arr 76.91 326** P P 13 36 38.1 -1.3
comp=Z,5.7nm,1.0s,baz=173,slow=5.5,SNR=7.0
**SNAA Sanae 79.17 179** P P 13 36 52.6 +1.4
**VNA3 Neumayer Olymp 79.36 177** P P 13 36 53.7 +1.5
**VNA2 Neumayer--Watz 79.78 177** P P 13 36 56.1 +1.6
baz=174,slow=4.6
**VNA1 Neumayer--Stat 80.02 177** P P 13 36 56.3 +0.6
**KSRS Korea Array 83.01 320** P P 13 37 11.1 -0.5
comp=Z,1.4nm,0.7s,baz=138,slow=5.1,SNR=4.9
**PLCA Paso Flores 83.84 134** P P 13 37 18.1 +2.0
comp=Z,2.2nm,0.9s,baz=187,slow=6.5,SNR=4.2
**PLCA Paso Flores 83.84 134** P P 13 37 16.6 +0.4
**LC01 Cunco 84.00 131** P P 13 37 18.1 +1.2
LC01 IAmb IAmb 13 37 20.0
comp=Z,7.0nm,0.8s
**GSI Gunungsitoli 84.87 274** P P 13 37 22.3 +0.7
**NJ2 Nanjing 84.91 311** *eP* P 13 37 22.1 +0.8
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**NVAR Mina Array Bea 88.12 43** P P 13 37 37.1 +0.3
comp=Z,2.3nm,0.8s,baz=224,slow=9.3,SNR=15
**CMAR Chiang Mai Arr 92.22 290** P P 13 37 56.2 +0.2
comp=Z,1.1nm,0.6s,baz=135,slow=4.1,SNR=6.7
**TXAR Lajitas Array 92.61 58** P P 13 37 58.4 +0.6
comp=Z,0.2nm,0.7s,baz=210,slow=7.2,SNR=3.5
**PZH PanZhiHua 94.05 298** P P 13 38 04.5 +0.1
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,100nm,3.9s
**HHC Hu-ho-hao-te 94.89 315** *eP* P 13 38 07.8 -0.1
HHC pmax pmax
comp=Z,13nm,1.1s
HHC pmax pmax
comp=Z,120nm,6.5s
**PDAR Pinedale Array 96.03 44** P P 13 38 12.8 -0.5
comp=Z,0.2nm,0.6s,baz=175,slow=2.3,SNR=2.4
**MKAR Makanchi Array 116.44 311** PKP **PKPdf** 13 43 26.1 -1.1
comp=Z,0.3nm,0.6s,baz=69,slow=0.7,SNR=5.5
**MKAR Makanchi Array 116.44 311** **PKPdf** 13 43 26.4 -0.8
**BOSA Boshof 117.81 204** PKP **PKPdf** 13 43 30.3 -0.4
comp=Z,1.9nm,0.7s,baz=180,slow=8.1,SNR=1.6
**KURBB Kurchatov Arra 119.75 314** PKP **PKPdf** 13 43 32.1 -1.3
comp=Z,0.9nm,0.5s,baz=105,slow=1.8,SNR=8.2
**BVAR Borovoye Array 125.06 316** PKP **PKPdf** 13 43 43.1 -0.5
comp=Z,0.8nm,0.6s,baz=77,slow=12,SNR=3.1
**ARU Arti 131.75 321** PKP **PKPdf** 13 43 55.6 -0.6
comp=Z,0.5nm,0.4s,baz=94,slow=18,SNR=3.1
**ARCES ARCESS Array B 137.42 348** PKP **PKPdf** 13 44 07.1 +0.7
comp=Z,1.7nm,0.7s,baz=76,slow=5.1,SNR=1.2
**KBZ Khabaz 143.81 305** PKP PKPbc 13 44 17.1 -0.3
comp=Z,2.7nm,0.6s,baz=146,slow=3.1,SNR=4.8
**FINES FINESS Array B 143.90 340** PKP PKPab 13 44 15.3 -1.2
comp=Z,4.6nm,0.5s,baz=65,slow=4.0,SNR=53
**FINES FINESS Array B 143.90 340** PKPbc 13 44 16.2 -0.8
**NB2 NORSAR Subarra 147.63 351** PKP **PKPbc** 13 44 27.3 -0.6
comp=Z,0.8nm,0.7s,baz=16,slow=2.7
**NOA NORSAR Array B 147.63 351** PKPbc **PKPbc** 13 44 26.6 -1.2
comp=Z,1.0nm,0.7s,baz=341,slow=3.8,SNR=3.9
**HFS Hagfors 148.09 348** PKPbc **PKPbc** 13 44 27.9 -1.1
comp=Z,2.5nm,0.6s,baz=29,slow=3.3,SNR=2.3
**NACGM Naroch 148.47 331** *i* PKP **PKiKP** 13 44 30.9 -0.6
**AKASG Malin Array Be 149.96 323** PKPbc **PKPbc** 13 44 33.5 -0.4
comp=Z,3.4nm,0.5s,baz=48,slow=2.9,SNR=18
AKASG PKPab **PKPab** 13 44 40.1 -0.9
comp=Z,1.4nm,0.5s,baz=47,slow=3.8,SNR=11
**MMAI Mount Meron Ar 150.40 286** PKPbc **PKiKP** 13 44 37.0 +0.7
comp=Z,20nm,0.8s,baz=64,slow=7.6,SNR=13
**EIL Elat 150.49 279** PKPbc **PKPbc** 13 44 35.6 -0.3
comp=Z,9.3nm,1.1s,baz=173,slow=8.1,SNR=4.7
EIL PKPab **PKPab** 13 44 44.4 +0.5
comp=Z,2.5nm,0.6s,baz=192,slow=5.6,SNR=3.7
**BRTR Keskin Array B 151.33 300** PKP **PKPdf** 13 44 28.9 -2.4
comp=Z,0.3nm,0.3s,baz=3.4,slow=7.4,SNR=2.0
BRTR PKPbc **PKPbc** 13 44 37.2 -0.4
comp=Z,1.3nm,0.6s,baz=106,slow=4.0,SNR=6.2
BRTR PKPab **PKPab** 13 44 46.6 -0.7
comp=Z,2.1nm,0.8s,baz=98,slow=4.7,SNR=6.5
**EKA Eskdalemuir Ar 153.91 5** PKP **PKPdf** 13 44 33.4 -0.9
comp=Z,1.1nm,0.8s,baz=55,slow=3.7,SNR=1.4
**CLL Collm 156.33 341** *e*PKPab **PKPab** 13 45 08.0 0.0
**TORD Torodi Ar. Bea 163.81 183** PKPab **PKPab** 13 45 42.4 +1.0
comp=Z,3.7nm,0.6s,baz=180,slow=3.0,SNR=21
**MDT Midelt 174.13 53** PKP **PKPdf** 13 44 55.7 +2.5
comp=Z,4.0nm,0.9s,baz=258,slow=5.2,SNR=3.5

*IDC **20** 13:42:13.1±0.5,4.°55N×32.°65W,h0km,mb4.3/20, mb1 4.5/20,mb1mx4.3/41,mbtmp4.3/20,Error ellipse: s-maj=18.9km s-min=13.0km az=151.0*
*NEIC **20** 13:42:15.0±1.8,4.°6N±0.°1×32.°60W±0.°04,h10km±1km, mb4.9/39,Error ellipse: s-maj=24.0km s-min=2.9km az=164.0*
**ISC 20 13:42:14.5**±0.5,**4.°54N**±0.°10×**32.°60W**±0.°08,**h11**km,**n82,**
σ1s**16**/70,**mb4.7**/34,**Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | ISC |
| | | | | | | h m s | |
| **NBMO** | **Morrinhos-CE** | **10.78** | **224** | *eP* | | **13 44 49.0** | **+0.2** |
| **MBO** | **M'Bour** | **18.26** | **57** | Pn | | **13 46 25.7** | **-2.4** |
| MBO | | | | IAmb | IAmb | 13 47 12.3 | |
| | comp=Z,150nm,1.2s | | | | | | |
| **SMTB** | **Santa Maria do** | **20.02** | **228** | *eP* | | **13 46 48.5** | **+0.9** |
| **MCPB** | **Macapa, AP** | **20.04** | **256** | *eP* | | **13 46 43.6** | **-4.2** |
| **PRPB** | **Parauapebas** | **20.22** | **238** | *eP* | | **13 46 49.6** | **-0.2** |
| **NBIT** | **Itapeh - BA** | **20.50** | **199** | *eP* | | Pn 13 47 05.3 | +10 |
| **H10N3** | **ASCENSION HYDR** | **21.85** | **124** | T | | T 14 09 41.8 | |
| | baz=304,slow=75,SNR=42 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.86** | **124** | T | | T 14 09 44.7 | |
| | baz=304,slow=75,SNR=45 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.87** | **124** | T | | T 14 09 43.2 | |
| | baz=304,slow=75,SNR=43 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.35** | **127** | T | | T 14 10 24.3 | |
| | baz=276,slow=74,SNR=52 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.37** | **127** | T | | T 14 10 18.1 | |
| | baz=304,slow=74,SNR=36 | | | | | | |
| **PEXB** | **Peixe** | **22.74** | **223** | *eP* | | **P 13 47 20.1** | **+3.1** |
| **ITTB** | **Itaituba** | **24.75** | **249** | *eP* | | **P 13 47 36.4** | **0.0** |
| **DIAM** | **Diamantina, MG** | **25.18** | **205** | *eP* | | P 13 47 51.8 | +11 |
| **BDFB** | **Brasilia** | **25.20** | **217** | P | | **P 13 47 40.0** | **-0.5** |
| | comp=Z,1.7nm,0.4s,baz=67,slow=7.9,SNR=3.5 | | | | | | |
| **BDFB** | **Brasilia** | **25.20** | **217** | P | | **P 13 47 40.2** | **-0.3** |
| **NPGB** | **Novo Progresso** | **25.46** | **243** | *eP* | | **P 13 47 42.7** | **-0.1** |
| **DBIC** | **Dimbokro** | **27.69** | **84** | P | | **P 13 48 03.1** | **+0.1** |
| | comp=Z,8.8nm,1.1s,baz=269,slow=11,SNR=4.6 | | | | | | |
| **DBIC** | **Dimbokro** | **27.69** | **84** | P | | **P 13 48 00.4** | **-2.6** |
| DBIC | | | | IAmb | IAmb | 13 48 04.0 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **PTGA** | **Pitinga** | **27.84** | **260** | P | | **P 13 48 04.1** | **-0.2** |
| | comp=Z,1.4nm,0.3s,baz=36,slow=9.6,SNR=4.4 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.49** | **291** | T | | T 14 19 15.4 | |
| | SNR=12 | | | | | | |
| **KOWA** | **Kowa** | **29.84** | **69** | P | | **P 13 48 22.6** | **+0.4** |
| KOWA | | | | IAmb | IAmb | 13 48 23.6 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **BB19B** | **Bebedouro** | **29.86** | **211** | *eP* | | P 13 48 32.1 | +10 |
| **H05N1** | **Guadeloupe/Mar** | **30.28** | **295** | T | | T 14 20 09.9 | |
| | SNR=4.8 | | | | | | |
| **SIV** | **San Ignacio** | **34.78** | **233** | P | | **P 13 49 06.1** | **+0.6** |
| | comp=Z,6.0nm,0.8s,baz=80,slow=8.2,SNR=22 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **74** | P | | **P 13 49 05.8** | **-0.8** |
| | comp=Z,8.0nm,0.8s,baz=266,slow=9.1,SNR=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **74** | P | | **P 13 49 06.4** | **-0.2** |
| **ETMB** | **Extrema** | **36.40** | **247** | *eP* | | **P 13 49 20.2** | **+0.9** |
| **CPUP** | **Villa Florida** | **38.93** | **217** | P | | **P 13 49 41.0** | **+0.4** |
| | comp=Z,3.6nm,1.0s,baz=19,slow=9.2,SNR=5.0 | | | | | | |
| **CPUP** | **Villa Florida** | **38.93** | **217** | P | | **P 13 49 40.1** | **-0.5** |
| **LPAZ** | **La Paz** | **40.78** | **239** | P | | **P 13 49 57.5** | **+0.6** |
| | comp=Z,2.2nm,0.9s,baz=6.2,slow=6.0,SNR=7.9 | | | | | | |
| **LPAZ** | **La Paz** | **40.78** | **239** | P | | **P 13 49 57.8** | **+1.0** |
| **LPAZ** | **La Paz** | **40.78** | **239** | *eP* | | **P 13 49 58.2** | **+1.3** |
| **CZSB** | **Cruzeiro do Su** | **41.83** | **253** | *eP* | | **P 13 50 04.7** | **-0.2** |
| **ESDC** | **Sonseca Array** | **43.51** | **33** | P | | **P 13 50 20.2** | **+2.0** |
| | comp=Z,1.9nm,1.0s,baz=224,slow=8.9,SNR=6.4 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.53** | **157** | T | | T 14 39 25.5 | |
| **BG3** | **Lake Jocassee** | **55.43** | **310** | P | | **P 13 51 50.9** | **+1.5** |
| BG3 | | | | IAmb | IAmb | 13 51 52.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **O52A** | **Adamsville** | **56.65** | **316** | P | | **P 13 51 57.4** | **-0.6** |
| O52A | | | | IAmb | IAmb | 13 52 00.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **57.25** | **337** | P | | **P 13 52 02.4** | **+0.4** |
| | comp=Z,5.0nm,0.8s,baz=155,slow=6.0,SNR=7.2 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **57.50** | **316** | P | | **P 13 52 02.8** | **-1.2** |
| ACSO | | | | IAmb | IAmb | 13 52 05.7 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **U49A** | **Red Boiling Sp** | **58.13** | **311** | P | | **P 13 52 07.9** | **-0.6** |
| U49A | | | | IAmb | IAmb | 13 52 10.0 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **GERES** | **GERESS Array B** | **59.07** | **34** | P | | **P 13 52 16.8** | **+1.9** |
| | comp=Z,1.1nm,0.8s,baz=257,slow=7.9,SNR=1.9 | | | | | | |
| **SFIN** | **Lafayette** | **60.46** | **314** | P | | **P 13 52 25.2** | **+0.7** |
| **Q44A** | **Meyer Farm, Va** | **61.35** | **312** | P | | **P 13 52 30.7** | **+0.2** |
| **O44A** | **Mansfield** | **61.36** | **314** | P | | **P 13 52 29.7** | **-0.9** |
| **MGMO** | **Mountain Grove** | **63.28** | **309** | P | | **P 13 52 42.7** | **-0.9** |
| MGMO | | | | IAmb | IAmb | 13 52 44.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **P40A** | **Paris** | **63.78** | **312** | P | | **P 13 52 46.6** | **-0.3** |
| **BOSA** | **Boshof** | **64.61** | **125** | P | | **P 13 52 53.4** | **+0.8** |
| | comp=Z,8.6nm,0.8s,baz=242,slow=10,SNR=12 | | | | | | |
| **BOSA** | **Boshof** | **64.61** | **125** | P | | **P 13 52 52.9** | **+0.3** |
| **MLR** | **Muntele Rosu** | **65.05** | **41** | P | | **P 13 52 56.0** | **+0.8** |
| | comp=Z,5.8nm,0.9s,baz=0.0,slow=0.0,SNR=6.2 | | | | | | |
| **ELL** | **Elmali** | **65.39** | **52** | P | | **P 13 52 58.9** | **+1.3** |
| **SPMN** | **Marine on St.** | **66.06** | **318** | P | | **P 13 53 00.6** | **-0.9** |
| **L34A** | **Svendsen Farm,** | **67.61** | **314** | P | | **P 13 53 10.6** | **-0.9** |
| **ECSD** | **EROS Data Cent** | **68.23** | **315** | P | | **P 13 53 14.6** | **-0.9** |
| ECSD | | | | IAmb | IAmb | 13 53 15.8 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **68.90** | **37** | P | | **P 13 53 19.6** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=250,slow=6.7,SNR=9.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.90** | **37** | P | | **P 13 53 19.3** | **-0.1** |
| AKASG | | | | IAmb | IAmb | 13 53 28.1 | |
| | comp=Z,9.6nm,1.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **68.91** | **49** | P | | **P 13 53 21.4** | **+1.4** |
| | comp=Z,1.9nm,0.8s,baz=222,slow=6.3,SNR=7.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.91** | **49** | P | | **P 13 53 21.0** | **+1.1** |
| **AGMN** | **Agassiz Nation** | **69.02** | **320** | P | | **P 13 53 18.1** | **-2.1** |
| AGMN | | | | IAmb | IAmb | 13 53 20.4 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.62** | **322** | P | | **P 13 53 22.5** | **-1.4** |
| | comp=Z,4.0nm,0.7s,baz=103,slow=6.5,SNR=4.8 | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.62** | **322** | IAmb | IAmb | 13 53 23.9 | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **71.29** | **299** | P | | **P 13 53 34.2** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=112,slow=6.0,SNR=4.6 | | | | | | |
| **ISCO** | **Idaho Springs** | **74.06** | **310** | P | | **P 13 53 50.3** | **-1.0** |
| ISCO | | | | IAmb | IAmb | 13 53 53.7 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **ANMO** | **Albuquerque** | **74.18** | **305** | P | | **P 13 53 51.6** | **-0.3** |
| **DGMT** | **Dagmar** | **74.44** | **319** | P | | **P 13 53 53.1** | **+0.2** |
| **FFC** | **Flin Flon** | **74.47** | **326** | P | | **P 13 53 53.0** | **+0.1** |
| FFC | | | | IAmb | IAmb | 13 53 54.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **LAO** | **LASA Array** | **75.49** | **317** | P | | **P 13 53 59.5** | **+0.5** |
| LAO | | | | IAmb | IAmb | 13 54 01.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **BW06** | **Boulder Array** | **77.35** | **313** | P | | **P 13 54 09.9** | **0.0** |
| **PDAR** | **Pinedale Array** | **77.35** | **313** | P | | **P 13 54 10.1** | **+0.1** |
| | comp=Z,1.4nm,0.7s,baz=110,slow=5.9,SNR=17 | | | | | | |
| **WUAZ** | **Wupatki** | **78.24** | **305** | P | | **P 13 54 15.7** | **+0.7** |
| **RES** | **Resolute Bay** | **78.52** | **346** | P | | **P 13 54 14.8** | **-0.6** |
| RES | | | | IAmb | IAmb | 13 54 23.8 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **MSU** | **Marysvale** | **79.03** | **308** | P | | **P 13 54 20.6** | **+1.3** |
| **DUG** | **Dugway, Tooele** | **79.61** | **310** | P | | **P 13 54 21.7** | **-0.6** |
| **EDM** | **Edmonton** | **80.84** | **323** | P | | **P 13 54 28.9** | **+0.4** |
| EDM | | | | IAmb | IAmb | 13 54 30.1 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.30** | **332** | P | | **P 13 54 35.4** | **-0.6** |
| | comp=Z,1.8nm,0.7s,baz=98,slow=5.2,SNR=25 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.30** | **332** | P | | **P 13 54 34.9** | **-1.1** |
| **GSC** | **Goldstone, Bar** | **82.67** | **305** | P | | **P 13 54 37.8** | **-0.8** |
| GSC | | | | IAmb | IAmb | 13 54 40.5 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.83** | **308** | P | | **P 13 54 45.5** | **+0.7** |
| | comp=Z,1.4nm,0.9s,baz=98,slow=6.2,SNR=8.5 | | | | | | |
| **ILAR** | **Eielson Array** | **96.00** | **337** | P | | **P 13 55 41.8** | **+0.1** |
| | comp=Z,1.4nm,0.8s,baz=53,slow=4.5,SNR=14 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.07** | **63** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NBMO | Morrinhos-CE | 10.79 | 224 | eP | Pn | 13 53 22.4 | -1.5 |
| TMAB | Tom-Au,PA,Br | 16.96 | 246 | eP | P | 13 54 48.2 | -0.4 |
| NBPN | Ponto Novo - B | 17.07 | 206 | eP | Pn | 13 54 48.0 | -0.1 |
| MBO | M'Bour | 18.24 | 57 | Pn | Pn | 13 54 59.3 | -3.3 |
| GDU01 | Guandu, BA | 19.43 | 201 | eP | P | 13 55 15.9 | 0.0 |
| SMTB | Santa Maria do | 20.03 | 228 | eP | P | 13 55 22.7 | +0.2 |
| MCPB | Macapa, AP | 20.06 | 256 | eP | P | 13 55 23.0 | +0.2 |
| PRPB | Parauapebas | 20.24 | 238 | eP | P | 13 55 24.9 | +0.2 |
| SDBA | SAO DESIDERIO | 20.83 | 216 | eP | P | 13 55 31.5 | +0.3 |
| CMC01 | Camacan, BA | 20.94 | 199 | eP | P | 13 55 32.6 | +0.3 |
| H10N3 | ASCENSION HYDR | 21.84 | 124 | T | T | 14 18 19.1 | |
| | baz=303,slow=75,SNR=48 | | | | | | |
| H10N2 | ASCENSION HYDR | 21.84 | 124 | T | T | 14 18 19.0 | |
| | baz=303,slow=75,SNR=50 | | | | | | |
| H10N1 | ASCENSION HYDR | 21.86 | 124 | T | T | 14 18 36.2 | |
| | baz=303,slow=75,SNR=48 | | | | | | |
| GUA01 | Guaratinga, BA | 22.18 | 199 | eP | P | 13 55 45.4 | -0.2 |
| H10S3 | ASCENSION HYDR | 22.34 | 127 | T | T | 14 18 50.6 | |
| | baz=303,slow=74,SNR=64 | | | | | | |
| H10S2 | ASCENSION HYDR | 22.36 | 127 | T | T | 14 18 51.9 | |
| | baz=277,slow=74,SNR=60 | | | | | | |
| MALB | Monte Alegre | 22.58 | 254 | eP | P | 13 55 52.4 | +2.4 |
| JANB | Januaria | 22.68 | 211 | eP | P | 13 55 51.8 | +0.6 |
| PEXB | Peixe | 22.76 | 223 | eP | P | 13 55 52.9 | +1.0 |
| SJMB | Sao Joao De Ma | 24.61 | 200 | eP | P | 13 56 09.7 | -0.1 |
| ITTB | Itaituba | 24.77 | 249 | eP | P | 13 56 12.2 | +0.8 |
| SNDB | Serra Nova Dou | 24.82 | 228 | eP | P | 13 56 12.8 | +1.0 |
| RIB01 | Linhares ES | 24.93 | 198 | eP | P | 13 56 12.5 | -0.2 |
| DIAM | Diamantina, MG | 25.20 | 205 | eP | P | 13 56 15.6 | +0.3 |
| BDFB | Brasilia | 25.22 | 217 | P | P | 13 56 14.9 | -0.6 |
| BDFB | | | | IAmb | IAmb | 13 56 59.0 | |
| | comp=Z,33nm,1.7s | | | | | | |
| NPGB | Novo Progresso | 25.48 | 243 | eP | P | 13 56 16.8 | -1.1 |
| ALF01 | Guarapari-ES | 26.26 | 197 | eP | P | 13 56 25.3 | +0.6 |
| IPMB | Ipameri, GO | 27.19 | 214 | eP | P | 13 56 33.5 | +0.3 |
| DBIC | Dimbokro | 27.67 | 84 | P | P | 13 56 37.0 | -0.5 |
| | comp=Z,9.0nm,1.0s,baz=240,slow=8.6,SNR=3.9 | | | | | | |
| DBIC | Dimbokro | 27.67 | 84 | P | P | 13 56 36.0 | -1.5 |
| CLDB | Colider | 27.73 | 236 | eP | P | 13 56 38.6 | +0.5 |
| PTGA | Pitinga | 27.86 | 260 | P | P | 13 56 37.9 | -1.3 |
| | comp=Z,3.8nm,0.4s,baz=87,slow=1.6,SNR=6.8 | | | | | | |
| BBGH | Gun Hill | 27.96 | 290 | P | P | 13 56 38.2 | -1.9 |
| BOAV | Boa Vista | 27.97 | 267 | eP | P | 13 56 41.0 | +0.8 |
| PDRB | Porto dos Gac | 28.89 | 236 | eP | P | 13 56 50.5 | +2.0 |
| H05S1 | Guadeloupe/Mar | 29.51 | 291 | T | T | 14 27 45.5 | |
| | SNR=18 | | | | | | |
| KOWA | Kowa | 29.82 | 69 | P | P | 13 56 56.6 | 0.0 |
| KOWA | | | | IAmb | IAmb | 13 56 58.3 | |
| | comp=Z,27nm,1.6s | | | | | | |
| H05N1 | Guadeloupe/Mar | 30.29 | 295 | T | T | 14 28 40.3 | |
| | SNR=5.5 | | | | | | |
| PCMB | Pacaembu | 31.79 | 214 | eP | P | 13 57 15.0 | +1.0 |
| PTLB | Pontes e Lacer | 32.96 | 232 | eP | P | 13 57 25.0 | +0.7 |
| SIV | San Ignacio | 34.80 | 233 | P | P | 13 57 40.6 | +0.2 |
| | comp=Z,4.0nm,0.7s,baz=80,slow=9.7,SNR=10 | | | | | | |
| SIV | | | | LR | LR | 14 11 15.2 | |
| | comp=Z,1µm,20.1s,baz=104,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 34.89 | 74 | P | P | 13 57 40.5 | -0.7 |
| | comp=Z,9.4nm,1.2s,baz=268,slow=6.8,SNR=14 | | | | | | |
| TORD | Torodi Ar. Bea | 34.89 | 74 | P | P | 13 57 40.3 | -0.9 |
| ETMB | Extrema | 36.42 | 247 | eP | P | 13 57 54.6 | +0.3 |
| ITAB | Concordia | 36.81 | 210 | eP | P | 13 57 58.1 | +0.6 |
| SDV | Santo Domingo | 38.02 | 279 | P | P | 13 58 08.2 | +0.1 |
| | comp=Z,1.6nm,0.3s,baz=96,slow=7.7,SNR=3.6 | | | | | | |
| SDV | Santo Domingo | 38.02 | 279 | eP | P | 13 58 10.0 | +1.9 |
| TBTG | Tabatinga, AM | 38.29 | 257 | eP | P | 13 58 12.1 | +1.9 |
| CPUP | Villa Florida | 38.95 | 217 | P | P | 13 58 15.3 | -0.2 |
| | comp=Z,4.3nm,0.9s,baz=43,slow=10,SNR=4.9 | | | | | | |
| CPUP | Villa Florida | 38.95 | 217 | P | P | 13 58 15.7 | +0.2 |
| CPUP | Villa Florida | 38.95 | 217 | eP | P | 13 58 16.0 | +0.5 |
| LPAZ | La Paz | 40.80 | 239 | P | P | 13 58 31.9 | +0.1 |
| | comp=Z,2.9nm,0.8s,baz=64,slow=9.6,SNR=8.1 | | | | | | |
| LPAZ | | | | LR | LR | 14 14 49.6 | |
| | comp=Z,445nm,18.7s,baz=54,slow=35 | | | | | | |
| LPAZ | La Paz | 40.80 | 239 | P | P | 13 58 31.8 | -0.1 |
| LPAZ | La Paz | 40.80 | 239 | eP | P | 13 58 32.2 | +0.4 |
| ITQB | Itaqui | 41.10 | 213 | eP | P | 13 58 34.0 | +0.7 |
| PLTB | Pedras Altas | 41.29 | 208 | eP | P | 13 58 35.9 | +0.9 |
| CZSB | Cruzeiro do Su | 41.85 | 253 | eP | P | 13 58 39.8 | 0.0 |
| ZARC | Zaragoza, Cauc | 42.13 | 276 | P | P | 13 58 40.5 | -1.6 |
| ESDC | Sonseca Array | 43.49 | 32 | P | P | 13 58 54.0 | +1.2 |
| | comp=Z,1.0nm,0.9s,baz=248,slow=7.8,SNR=4.0 | | | | | | |
| H09N1 | TRISTAN DA CUN | 45.52 | 157 | T | T | 14 47 49.5 | |
| | SNR=5.9 | | | | | | |
| H09W1 | TRISTAN DA CUN | 45.53 | 157 | T | T | 14 47 54.7 | |
| | SNR=22 | | | | | | |
| OTAV | Otavalo | 46.02 | 266 | eP | P | 13 59 15.3 | +1.5 |
| KEST | Kesra | 49.52 | 46 | P | P | 13 59 42.3 | +2.0 |
| | comp=Z,4.0nm,0.7s,baz=226,slow=6.0,SNR=2.4 | | | | | | |
| JTS | Las Juntas de | 52.19 | 279 | LR | LR | 14 24 04.1 | |
| | comp=Z,58nm,18.4s,baz=176,slow=38 | | | | | | |
| EKA | Eskdalemuir Ar | 55.89 | 20 | P | P | 14 00 28.4 | +1.5 |
| | comp=Z,1.5nm,0.8s,baz=145,slow=4.6,SNR=1.7 | | | | | | |
| EKA | | | | LR | LR | 14 22 01.5 | |
| | comp=Z,288nm,18.1s,baz=208,slow=34 | | | | | | |
| SCHQ | Schefferville | 57.25 | 337 | P | P | 14 00 37.4 | +0.7 |
| | comp=Z,3.2nm,0.9s,baz=156,slow=5.7,SNR=3.7 | | | | | | |
| GERES | GERESS Array B | 59.05 | 34 | P | P | 14 00 50.3 | +0.8 |
| | comp=Z,1.4nm,1.0s,baz=263,slow=7.8,SNR=2.7 | | | | | | |
| GERES | | | | LR | LR | 14 23 38.3 | |
| | comp=Z,137nm,19.8s,baz=273,slow=33 | | | | | | |
| LSZ | Lusaka | 63.31 | 109 | LR | LR | 14 24 44.5 | |
| | comp=Z,132nm,19.4s,baz=308,slow=32 | | | | | | |
| FRB | Frobisher Bay | 64.57 | 343 | P | P | 14 01 25.3 | -0.9 |
| | comp=Z,1.2nm,0.7s,baz=97,slow=14,SNR=2.3 | | | | | | |
| BOSA | Boshof | 64.59 | 125 | P | P | 14 01 27.2 | 0.0 |
| | comp=Z,2.8nm,0.6s,baz=283,slow=5.7,SNR=6.8 | | | | | | |
| NOA | NORSAR Array B | 65.22 | 22 | P | P | 14 01 31.0 | +0.3 |
| | comp=Z,1.2nm,0.8s,baz=207,slow=7.6,SNR=2.8 | | | | | | |
| AKASG | Malin Array Be | 68.88 | 37 | P | P | 14 01 54.4 | +0.4 |
| | comp=Z,0.4nm,0.4s,baz=248,slow=6.9,SNR=7.8 | | | | | | |
| AKASG | Malin Array Be | 68.88 | 37 | P | P | 14 01 52.9 | -1.1 |
| AKASG | | | | IAmb | IAmb | 14 02 17.8 | |
| | comp=Z,7.8nm,1.6s | | | | | | |
| BRTR | Keskin Array B | 68.89 | 49 | P | P | 14 01 55.8 | +1.3 |
| | comp=Z,3.5nm,0.9s,baz=226,slow=4.6,SNR=13 | | | | | | |
| AGMN | Agassiz Nation | 69.02 | 320 | P | P | 14 01 53.6 | -1.4 |
| AGMN | | | | IAmb | IAmb | 14 02 00.9 | |
| | comp=Z,10nm,1.2s | | | | | | |
| TXAR | Lajitas Array | 71.30 | 299 | P | P | 14 02 07.8 | -1.7 |
| | comp=Z,0.2nm,0.5s,baz=113,slow=5.8,SNR=5.4 | | | | | | |
| MDND | Maddock | 71.31 | 319 | P | P | 14 02 08.0 | -1.1 |
| FINES | FINESS Array B | 71.44 | 26 | P | P | 14 02 10.5 | +1.0 |
| | comp=Z,1.6nm,0.9s,baz=264,slow=11,SNR=3.7 | | | | | | |
| Q24A | Divide | 73.61 | 309 | P | P | 14 02 21.6 | -1.8 |
| Q24A | | | | IAmb | IAmb | 14 04 02.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| SDCO | Great Sand Dun | 73.73 | 308 | P | P | 14 02 24.2 | +0.1 |
| SDCO | | | | IAmb | IAmb | 14 02 25.1 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| ISCO | Idaho Springs | 74.07 | 310 | P | P | 14 02 25.6 | -0.4 |
| ISCO | | | | IAmb | IAmb | 14 02 34.1 | |
| | comp=Z,8.8nm,1.2s | | | | | | |
| DGMT | Dagmar | 74.45 | 319 | P | P | 14 02 27.4 | -0.3 |
| N23A | Red Feather La | 74.47 | 311 | P | P | 14 02 27.5 | -0.8 |
| LAO | LASA Array | 75.50 | 317 | P | P | 14 02 34.0 | +0.1 |
| PDAR | Pinedale Array | 77.36 | 313 | P | P | 14 02 44.0 | -0.8 |
| | comp=Z,1.2nm,0.9s,baz=98,slow=6.1,SNR=5.9 | | | | | | |
| LOHW | Long Hollow | 78.20 | 313 | P | P | 14 02 49.3 | -0.1 |
| LOHW | | | | IAmb | IAmb | 14 04 27.7 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| YHH | Holmes Hill | 78.48 | 315 | P | P | 14 02 51.1 | +0.1 |
| YHH | | | | IAmb | IAmb | 14 03 19.7 | |
| | comp=Z,16nm,1.8s | | | | | | |
| RES | Resolute Bay | 78.52 | 346 | P | P | 14 02 50.3 | +0.2 |
| | comp=Z,1.0nm,0.5s,baz=40,slow=5.8,SNR=4.2 | | | | | | |
| YMR | Madison River | 78.55 | 315 | P | P | 14 02 50.7 | -0.6 |
| YMR | | | | IAmb | IAmb | 14 02 59.3 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| MTPU | Mount Pierson | 79.02 | 308 | P | P | 14 02 54.8 | +0.6 |
| MTPU | | | | IAmb | IAmb | 14 03 28.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| NLU | North Lily Min | 79.04 | 310 | P | P | 14 02 53.4 | -0.7 |
| NLU | | | | IAmb | IAmb | 14 04 32.8 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| DUG | Dugway, Tooele | 79.62 | 310 | P | P | 14 02 57.1 | -0.1 |
| DUG | | | | IAmb | IAmb | 14 02 59.0 | |
| | comp=Z,19nm,1.6s | | | | | | |
| CCUT | Cedar City | 79.93 | 307 | P | P | 14 02 58.7 | -0.4 |
| EDM | Edmonton | 80.84 | 323 | P | P | 14 03 02.5 | -0.8 |
| YKA | Yellowknife Ar | 82.30 | 332 | P | P | 14 03 09.9 | -0.8 |
| | comp=Z,0.4nm,0.5s,baz=106,slow=5.5,SNR=11 | | | | | | |
| QSM | Queen of Sheba | 82.73 | 306 | P | P | 14 03 14.2 | +0.6 |
| QSM | | | | IAmb | IAmb | 14 03 15.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| NEW | Newport | 82.99 | 318 | P | P | 14 03 14.5 | -0.2 |
| | comp=Z,1.3nm,0.8s,baz=157,slow=16,SNR=3.1 | | | | | | |
| NVAR | Mina Array Bea | 83.85 | 308 | P | P | 14 03 18.4 | -1.2 |
| | comp=Z,0.3nm,0.6s,baz=116,slow=3.4,SNR=4.1 | | | | | | |
| A36M | Sachs Harbour | 86.53 | 342 | P | P | 14 03 31.7 | -0.3 |
| A36M | | | | IAmb | IAmb | 14 03 39.7 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| ILAR | Eielson Array | 96.01 | 337 | P | P | 14 04 15.4 | -1.0 |
| | comp=Z,0.7nm,0.8s,baz=66,slow=3.8,SNR=6.1 | | | | | | |
| CMAR | Chiang Mai Arr | 127.05 | 63 | PKP | PKiKP | 14 09 55.6 | +0.5 |
| | comp=Z,0.4nm,0.5s,baz=278,slow=3.5,SNR=4.1 | | | | | | |

*IDC **20** 13:52:24.4±0.7, 4.°58N×32.°61W, h0km, mb4.2/19, mb1 4.4/19, mb1mx4.2/52, mbtmp4.2/19, Error ellipse: s-maj=23.5km s-min=14.7km az=149.0*
*NEIC **20** 13:52:26.4±1.2, 4.°51N±0.°04×32.°5W±0.°1, h10km±1km, mb4.8/18, Error ellipse: s-maj=21.9km s-min=6.8km az=90.0*

**ISC 20 13:52:25.8±0.6, 4.°5N±0.°1×32.°58W±0.°09, h11km, n45, σ0s83/36, mb4.4/26, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| H10N3 | ASCENSION HYDR | 21.81 | 124 | T | | T | T | 14 19 51.5 | |
| | baz=303,slow=75,SNR=8.8 | | | | | | | | |
| H10N2 | ASCENSION HYDR | 21.81 | 124 | T | | T | T | 14 19 48.7 | |
| | baz=303,slow=75,SNR=7.0 | | | | | | | | |
| H10N1 | ASCENSION HYDR | 21.83 | 124 | T | | T | T | 14 19 52.6 | |
| | baz=303,slow=75,SNR=8.5 | | | | | | | | |
| H10S3 | ASCENSION HYDR | 22.31 | 127 | T | | T | T | 14 20 23.1 | |
| | baz=304,slow=74,SNR=14 | | | | | | | | |
| H10S2 | ASCENSION HYDR | 22.33 | 127 | T | | T | T | 14 20 24.4 | |
| | baz=276,slow=74,SNR=13 | | | | | | | | |
| DBIC | Dimbokro | 27.67 | 84 | P | | P | P | 13 58 11.9 | -2.2 |
| DBIC | | | | IAmb | | IAmb | IAmb | 13 58 18.4 | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| PTGA | Pitinga | 27.85 | 260 | P | | P | P | 13 58 13.2 | -2.5 |
| | comp=Z,2.7nm,0.4s,baz=335,slow=23,SNR=2.4 | | | | | | | | |
| H05S1 | Guadeloupe/Mar | 29.53 | 291 | T | | T | T | 14 29 23.0 | |
| | SNR=8.7 | | | | | | | | |
| H05N1 | Guadeloupe/Mar | 30.32 | 295 | T | | T | T | 14 30 20.9 | |
| SIV | San Ignacio | 34.78 | 234 | P | | P | P | 13 59 17.4 | +0.7 |
| | comp=Z,8.7nm,0.9s,baz=83,slow=10.0,SNR=9.5 | | | | | | | | |
| TORD | Torodi Ar. Bea | 34.90 | 73 | P | | P | P | 13 59 17.7 | -0.1 |
| | comp=Z,8.6nm,0.9s,baz=264,slow=8.8,SNR=13 | | | | | | | | |
| TORD | Torodi Ar. Bea | 34.90 | 73 | P | | P | P | 13 59 17.5 | -0.3 |
| TORD | | | | IAmb | | IAmb | IAmb | 13 59 18.8 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| CPUP | Villa Florida | 38.91 | 217 | P | | P | P | 13 59 52.2 | +0.5 |
| | comp=Z,7.5nm,1.1s,baz=33,slow=6.6,SNR=5.0 | | | | | | | | |
| CPUP | Villa Florida | 38.91 | 217 | P | | P | P | 13 59 52.3 | +0.5 |
| LPAZ | La Paz | 40.78 | 239 | P | | P | P | 14 00 08.6 | +0.4 |
| | comp=Z,3.1nm,0.9s,baz=46,slow=8.4,SNR=5.7 | | | | | | | | |
| LPAZ | La Paz | 40.78 | 239 | P | | P | P | 14 00 08.1 | 0.0 |
| LPAZ | | | | IAmb | | IAmb | IAmb | 14 00 09.6 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| ITQB | Itaqui | 41.06 | 213 | P | | P | P | 14 00 09.7 | +0.1 |
| ITQB | | | | IAmb | | IAmb | IAmb | 14 00 12.3 | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| ROSC | El Rosal | 41.60 | 272 | P | | P | P | 14 00 15.1 | +0.4 |
| | comp=Z,7.3nm,0.4s,baz=81,slow=5.7,SNR=4.1 | | | | | | | | |
| ESDC | Sonseca Array | 43.53 | 32 | P | | P | P | 14 00 29.6 | 0.0 |
| | comp=Z,0.7nm,0.9s,baz=234,slow=7.7,SNR=2.2 | | | | | | | | |
| H09N1 | TRISTAN DA CUN | 45.47 | 157 | T | | T | T | 14 49 35.3 | |
| H09W1 | TRISTAN DA CUN | 45.49 | 157 | T | | T | T | 14 49 29.2 | |
| KEST | Kesra | 49.55 | 46 | P | | P | P | 14 01 17.9 | +0.9 |
| | comp=Z,4.3nm,0.9s,baz=35,slow=9.5,SNR=2.3 | | | | | | | | |
| DELO | Deloro Mine | 56.05 | 322 | P | | P | P | 14 02 05.4 | +0.6 |
| SCHQ | Schefferville | 57.29 | 337 | P | | P | P | 14 02 12.9 | -0.6 |
| | comp=Z,1.9nm,0.6s,baz=153,slow=6.7,SNR=4.0 | | | | | | | | |
| GERES | GERESS Array B | 59.09 | 34 | P | | P | P | 14 02 27.1 | +0.8 |
| | comp=Z,0.8nm,0.8s,baz=251,slow=12,SNR=2.1 | | | | | | | | |
| CCM | Cathedral Cave | 62.80 | 311 | P | | P | P | 14 02 50.8 | -0.8 |
| BOSA | Boshof | 64.57 | 124 | P | | P | P | 14 03 04.1 | +0.5 |
| | comp=Z,6.4nm,0.9s,baz=273,slow=7.0,SNR=4.4 | | | | | | | | |
| MLR | Muntele Rosu | 65.07 | 41 | P | | P | P | 14 03 08.2 | +1.6 |
| MLR | | | | IAmb | | IAmb | IAmb | 14 03 09.0 | |
| | comp=Z,9.2nm,0.9s | | | | | | | | |
| AKASG | Malin Array Be | 68.92 | 37 | P | | P | P | 14 03 31.4 | +0.6 |
| | comp=Z,1.6nm,0.7s,baz=248,slow=7.3,SNR=5.0 | | | | | | | | |
| AKASG | Malin Array Be | 68.92 | 37 | P | | P | P | 14 03 29.6 | -1.2 |
| BRTR | Keskin Array B | 68.92 | 49 | P | | P | P | 14 03 31.6 | +0.4 |
| | comp=Z,3.3nm,0.9s,baz=229,slow=5.7,SNR=7.9 | | | | | | | | |
| TXAR | Lajitas Array | 71.33 | 299 | P | | P | P | 14 03 46.4 | +0.3 |
| | comp=Z,0.4nm,0.8s,baz=92,slow=6.2,SNR=2.5 | | | | | | | | |
| FINES | FINESS Array B | 71.48 | 26 | P | | P | P | 14 03 46.0 | -0.3 |
| | comp=Z,1.1nm,0.7s,baz=234,slow=8.4,SNR=1.2 | | | | | | | | |
| SDCO | Great Sand Dun | 73.76 | 308 | P | | P | P | 14 04 01.5 | +0.8 |
| ISCO | Idaho Springs | 74.11 | 310 | P | | P | P | 14 04 03.7 | +0.9 |
| ISCO | | | | IAmb | | IAmb | IAmb | 14 04 05.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | | | |
| ANMO | Albuquerque | 74.22 | 305 | P | | P | P | 14 04 03.4 | 0.0 |
| DGMT | Dagmar | 74.49 | 319 | P | | P | P | 14 04 05.3 | +0.8 |
| N23A | Red Feather La | 74.50 | 311 | P | | P | P | 14 04 05.0 | 0.0 |
| N23A | | | | IAmb | | IAmb | IAmb | 14 04 07.8 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| FFC | Flin Flon | 74.51 | 326 | P | | P | P | 14 04 05.0 | +0.6 |
| FFC | | | | IAmb | | IAmb | IAmb | 14 04 05.6 | |
| | comp=Z,17nm,1.3s | | | | | | | | |
| PDAR | Pinedale Array | 77.40 | 313 | P | | P | P | 14 04 21.0 | -0.5 |
| | comp=Z,1.1nm,0.9s,baz=98,slow=8.1,SNR=5.3 | | | | | | | | |
| RES | Resolute Bay | 78.57 | 346 | P | | P | P | 14 04 26.9 | -0.1 |
| | comp=Z,2.1nm,0.6s,baz=108,slow=5.5,SNR=6.1 | | | | | | | | |
| EDM | Edmonton | 80.88 | 323 | P | | P | P | 14 04 40.2 | +0.1 |
| YKA | Yellowknife Ar | 82.34 | 332 | P | | P | P | 14 04 47.4 | -0.1 |
| | comp=Z,1.6nm,1.0s,baz=95,slow=5.4,SNR=6.6 | | | | | | | | |
| NVAR | Mina Array Bea | 83.88 | 308 | P | | P | P | 14 04 56.3 | 0.0 |
| | comp=Z,1.8nm,1.1s,baz=94,slow=6.2,SNR=5.6 | | | | | | | | |
| ILAR | Eielson Array | 96.05 | 337 | P | | P | P | 14 05 53.0 | -0.1 |
| | comp=Z,0.8nm,1.0s,baz=48,slow=3.8,SNR=4.3 | | | | | | | | |

*IDC **20** 13:55:49.8±0.7, 4.°47N×32.°61W, h0km, mb4.1/19, mb1 4.3/19, mb1mx4.1/54, mbtmp4.1/19, Error ellipse: s-maj=27.3km s-min=14.0km az=142.0*

**ISC 20 13:55:51.4±0.7, 4.°4N±0.°2×32.°6W±0.°1, h11km, n28, σ0s78/20, mb4.2/19, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| H10N3 | ASCENSION HYDR | 21.78 | 124 | T | | T | T | 14 23 20.3 | |
| | baz=303,slow=75,SNR=43 | | | | | | | | |
| H10N2 | ASCENSION HYDR | 21.79 | 124 | T | | T | T | 14 23 16.6 | |
| | baz=303,slow=75,SNR=34 | | | | | | | | |
| H10N1 | ASCENSION HYDR | 21.80 | 124 | T | | T | T | 14 23 16.9 | |
| | baz=303,slow=75,SNR=40 | | | | | | | | |
| H10S3 | ASCENSION HYDR | 22.28 | 127 | T | | T | T | 14 23 49.3 | |
| | baz=304,slow=74,SNR=43 | | | | | | | | |
| H10S2 | ASCENSION HYDR | 22.30 | 127 | T | | T | T | 14 23 48.6 | |
| | baz=276,slow=74,SNR=34 | | | | | | | | |
| BDFB | Brasilia | 25.11 | 217 | P | | P | P | 14 01 15.7 | -1.0 |
| | 1.5nm,0.4s,baz=24,slow=11,SNR=1.9 | | | | | | | | |
| PTGA | Pitinga | 27.82 | 260 | P | | P | P | 14 01 39.2 | -1.9 |
| | 1.8nm,0.3s,baz=114,slow=14,SNR=4.7 | | | | | | | | |
| H05S1 | Guadeloupe/Mar | 29.54 | 292 | T | | T | T | 14 32 50.8 | |
| | SNR=8.1 | | | | | | | | |
| H05N1 | Guadeloupe/Mar | 30.33 | 295 | T | | T | T | 14 33 48.9 | |
| SIV | San Ignacio | 34.72 | 234 | P | | P | P | 14 02 43.0 | +1.2 |
| | 5.3nm,0.8s,baz=81,slow=9.0,SNR=14 | | | | | | | | |
| TORD | Torodi Ar. Bea | 34.94 | 73 | P | | P | P | 14 02 43.3 | -0.5 |
| | 5.7nm,1.0s,baz=262,slow=9.1,SNR=11 | | | | | | | | |
| CPUP | Villa Florida | 38.85 | 217 | P | | P | P | 14 03 17.0 | +0.2 |
| | 4.4nm,1.0s,baz=39,slow=4.8,SNR=3.9 | | | | | | | | |
| LPAZ | La Paz | 40.73 | 239 | P | | P | P | 14 03 34.2 | +0.8 |
| | 2.8nm,0.9s,baz=76,slow=8.6,SNR=5.0 | | | | | | | | |
| ROSC | El Rosal | 41.58 | 272 | P | | P | P | 14 03 41.1 | +0.9 |
| | 5.6nm,0.4s,baz=148,slow=14,SNR=4.2 | | | | | | | | |
| ESDC | Sonseca Array | 43.60 | 32 | P | | P | P | 14 03 56.4 | +0.6 |
| | 0.5nm,0.9s,baz=218,slow=8.1,SNR=1.7 | | | | | | | | |
| H09W1 | TRISTAN DA CUN | 45.43 | 157 | T | | T | T | 14 52 55.7 | |
| | SNR=5.8 | | | | | | | | |
| SCHQ | Schefferville | 57.35 | 337 | P | | P | P | 14 05 39.3 | -0.2 |
| | 2.9nm,0.9s,baz=95,slow=9.3,SNR=3.6 | | | | | | | | |
| GERES | GERESS Array B | 59.16 | 34 | P | | P | P | 14 05 52.2 | -0.2 |
| | 0.4nm,0.4s,baz=209,slow=5.6,SNR=2.8 | | | | | | | | |
| NOA | NORSAR Array B | 65.34 | 22 | P | | P | P | 14 06 34.2 | +0.6 |
| | 1.9nm,1.0s,baz=260,slow=5.5,SNR=2.5 | | | | | | | | |
| BRTR | Keskin Array B | 68.98 | 49 | P | | P | P | 14 06 57.3 | 0.0 |
| | 2.0nm,0.9s,baz=231,slow=4.0,SNR=6.8 | | | | | | | | |
| AKASG | Malin Array Be | 68.98 | 37 | P | | P | P | 14 06 56.9 | 0.0 |
| | 0.2nm,0.3s,baz=252,slow=5.7,SNR=1.1 | | | | | | | | |
| TXAR | Lajitas Array | 71.35 | 299 | P | | P | P | 14 07 11.8 | -0.2 |
| | 0.5nm,0.8s,baz=115,slow=5.9,SNR=4.0 | | | | | | | | |
| PDAR | Pinedale Array | 77.43 | 313 | P | | P | P | 14 07 46.9 | -0.4 |
| | 0.6nm,0.8s,baz=88,slow=7.6,SNR=4.8 | | | | | | | | |
| RES | Resolute Bay | 78.63 | 346 | P | | P | P | 14 07 52.7 | -0.2 |
| | 3.0nm,1.1s,baz=69,slow=5.6,SNR=4.2 | | | | | | | | |
| YKA | Yellowknife Ar | 82.39 | 332 | P | | P | P | 14 08 12.5 | -0.9 |
| | 2.3nm,1.1s,baz=97,slow=5.2,SNR=9.6 | | | | | | | | |
| NVAR | Mina Array Bea | 83.91 | 308 | P | | P | P | 14 08 22.9 | +0.8 |
| | 1.0nm,1.0s,baz=89,slow=6.4,SNR=4.8 | | | | | | | | |
| ILAR | Eielson Array | 96.11 | 337 | P | | P | P | 14 09 19.4 | +0.3 |
| | 0.8nm,1.0s,baz=52,slow=4.7,SNR=5.1 | | | | | | | | |
| CMAR | Chiang Mai Arr | 127.12 | 63 | PKP | | PKiKP | | 14 14 57.4 | 0.0 |
| | 0.3nm,0.3s,baz=282,slow=4.5,SNR=4.1 | | | | | | | | |

*IDC **20** 13:57:41.9±1.1, 4.°83N×32.°59W, h0km, mb3.8/11, mb1 4.0/11, mb1mx3.8/52, mbtmp3.8/11, Error ellipse: s-maj=42.5km s-min=20.1km az=150.0*

**ISC 20 13:57:43.6±1.1, 4.°8N±0.°2×32.°6W±0.°2, h11km, n12, σ0s98/12, mb3.9/12, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 34.82 | 74 | P | | P | P | 14 04 34.8 | -0.1 |
| | 2.4nm,0.8s,baz=265,slow=8.1,SNR=7.3 | | | | | | | | |
| SIV | San Ignacio | 34.97 | 233 | P | | P | P | 14 04 36.3 | +0.1 |
| | 0.7nm,0.3s,baz=77,slow=10,SNR=3.7 | | | | | | | | |
| LPAZ | La Paz | 40.94 | 238 | P | | P | P | 14 05 26.2 | -1.1 |
| | 5.0nm,1.3s,baz=90,slow=5.1,SNR=2.3 | | | | | | | | |
| ESDC | Sonseca Array | 43.26 | 33 | P | | P | P | 14 05 44.5 | -0.8 |
| | 0.3nm,0.6s,baz=238,slow=7.4,SNR=1.8 | | | | | | | | |
| NOA | NORSAR Array B | 64.97 | 22 | P | | P | P | 14 08 22.6 | -0.8 |
| | 1.4nm,0.9s,baz=211,slow=4.8,SNR=2.8 | | | | | | | | |
| AKASG | Malin Array Be | 68.66 | 37 | P | | P | P | 14 08 48.2 | +1.2 |
| | 0.2nm,0.3s,baz=248,slow=8.8,SNR=2.1 | | | | | | | | |
| BRTR | Keskin Array B | 68.71 | 49 | P | | P | P | 14 08 48.7 | +0.9 |
| | 2.1nm,0.9s,baz=243,slow=5.4,SNR=5.5 | | | | | | | | |
| PDAR | Pinedale Array | 77.17 | 313 | P | | P | P | 14 09 38.9 | +0.9 |
| | 0.1nm,0.4s,baz=67,slow=7.2,SNR=3.6 | | | | | | | | |
| SPITS | Spitsbergen Ar | 77.48 | 9 | P | | P | P | 14 09 37.2 | -1.6 |
| | 14nm,1.1s,baz=216,slow=12,SNR=1.6 | | | | | | | | |
| YKA | Yellowknife Ar | 82.05 | 332 | P | | P | P | 14 10 04.2 | +0.4 |
| | 0.7nm,0.9s,baz=94,slow=4.9,SNR=5.6 | | | | | | | | |
| NVAR | Mina Array Bea | 83.67 | 308 | P | | P | P | 14 10 13.8 | +0.7 |
| | 0.5nm,1.0s,baz=90,slow=3.0,SNR=2.4 | | | | | | | | |
| ILAR | Eielson Array | 95.75 | 337 | P | | P | P | 14 11 09.9 | +0.3 |
| | 0.2nm,0.5s,baz=62,slow=5.0,SNR=2.1 | | | | | | | | |

*IDC **20** 13:58:14.4±0.7, 4.°76N×32.°64W, h0km, mb4.3/21, mb1 4.4/21, mb1mx4.2/53, mbtmp4.2/21, MS4.3/1, Ms1 4.3/1, ms1mx3.3/62, Error ellipse: s-maj=22.4km s-min=16.0km az=167.0*
*NEIC **20** 13:58:17.7±2.1, 4.°9N±0.°2×32.°6W±0.°1, h10km±1km, mb4.9/39, Error ellipse: s-maj=26.2km s-min=18.2km az=160.0*
*GCMT **20** 13:58:17.7±0.3, 4.°96N±0.°03×32.°53W±0.°02, h17km±1km, MW5.1/107, Moment Tensor Solution. s21,c22; s107,c144; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=2.92±.26; $M_{\theta\theta}$-0.84±.16; $M_{\phi\phi}$3.76±.19; $M_{r\theta}$4.00±.72; $M_{\theta\phi}$-0.18±.10; $M_{\phi r}$-0.85±.42; Best double couple: $M_o$5.04300×$10^{16}$ NP1=202.00000°, δ42.00000°, λ-34.00000°. NP2=319.00000°, δ68.00000°, λ-127.00000°. Principal axes: T 4.0400, Plg15.0000°, Azm75.0000°; N 2.0070, Plg34.0000°, Azm335.0000°; P -6.0450, Plg52.0000°, Azm185.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 13:58:16.1±0.6, 4.°7N±0.°1×32.°64W±0.°09, h11km, n111, σ

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRG | | | | Amp | | | 14 08 29.7 | |
| | comp=Z,6.6nm,1.2s | | | | | | | |
| **MORC** | **Moravsky Berou** | **61.59** | **34** | P | | **P** | **14 08 35.1** | **+1.5** |
| **PSZ** | **Piszkesteto** | **62.09** | **37** | P | | **P** | **14 08 36.6** | **-0.5** |
| **BZS** | **Buzias** | **62.18** | **40** | P | | **P** | **14 08 40.2** | **+2.6** |
| **SIRR** | **Siria** | **62.47** | **39** | P | | **P** | **14 08 42.0** | **+2.3** |
| **CCM** | **Cathedral Cave** | **62.63** | **311** | P | | **P** | **14 08 40.4** | **-0.4** |
| CCM | | | | IAmb | | IAmb | 14 08 48.8 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **GZR** | **Gura Zlata** | **62.84** | **41** | ⇓P | | **P** | **14 08 43.5** | **+1.3** |
| **N41A** | **Harden Midland** | **63.13** | **314** | P | | **P** | **14 08 42.6** | **-1.5** |
| **MGMO** | **Mountain Grove** | **63.16** | **309** | P | | **P** | **14 08 43.5** | **-0.9** |
| MGMO | | | | IAmb | | IAmb | 14 08 45.9 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **DRGR** | | **63.35** | **39** | ⇑P | | **P** | **14 08 47.4** | **+1.9** |
| **R40A** | **Maddies Statio** | **63.47** | **311** | P | | **P** | **14 08 45.9** | **-0.5** |
| R40A | | | | IAmb | | IAmb | 14 08 47.6 | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **TRPA** | **Tarpa** | **63.78** | **38** | ⇑P | | **P** | **14 08 50.1** | **+1.9** |
| **ARR** | **Arges** | **64.05** | **41** | P | | **P** | **14 08 52.9** | **+2.7** |
| **VOIR** | | **64.35** | **41** | ⇑P | | **P** | **14 08 54.0** | **+1.9** |
| **RAZG** | **Razgrad** | **64.69** | **44** | P | | **P** | **14 08 56.2** | **+1.8** |
| **BOSA** | **Boshof** | **64.72** | **125** | P | | **P** | **14 08 54.0** | **-0.9** |
| | comp=Z,3.7nm,0.9s,baz=290,slow=7.6,SNR=4.4 | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.95** | **41** | P | | **P** | **14 08 58.1** | **+2.0** |
| **MLR** | **Muntele Rosu** | **64.95** | **41** | P | | **P** | **14 08 57.2** | **+1.0** |
| **NB2** | **NORSAR Subarra** | **65.11** | **22** | P | | **P** | **14 08 58.1** | **+1.4** |
| | comp=Z,1.2nm,0.9s,baz=226,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.11** | **22** | P | | **P** | **14 08 56.8** | **+0.1** |
| | comp=Z,4.1nm,1.0s,baz=227,slow=6.4,SNR=3.9 | | | | | | | |
| **ISR** | **Istrita** | **65.23** | **42** | ⇓P | | **P** | **14 08 59.9** | **+2.1** |
| **BURAR** | **Bucovina Array** | **65.24** | **39** | P | | **P** | **14 09 00.3** | **+2.4** |
| **BURAR** | **Bucovina Array** | **65.24** | **39** | P | | **P** | **14 08 59.6** | **+1.7** |
| **ELL** | **Elmali** | **65.32** | **52** | P | | **P** | **14 09 00.6** | **+1.9** |
| **VRI** | **Vrincioaia** | **65.60** | **41** | ⇑P | | **P** | **14 09 02.2** | **+2.0** |
| **SPMN** | **Marine on St.** | **65.92** | **318** | P | | **P** | **14 09 01.8** | **-0.5** |
| SPMN | | | | IAmb | | IAmb | 14 09 10.1 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **HARR** | **Harsova** | **66.02** | **43** | P | | **P** | **14 09 04.6** | **+1.7** |
| **CFR** | **Carcaliu** | **66.31** | **42** | ⇓P | | **P** | **14 09 05.8** | **+1.0** |
| **SORM** | **Soroca** | **67.40** | **39** | ⇓P | | **P** | **14 09 12.2** | **+0.6** |
| **JCT** | **Junction City** | **67.98** | **301** | P | | **P** | **14 09 15.3** | **-0.5** |
| JCT | | | | IAmb | | IAmb | 14 09 17.4 | |
| | comp=Z,20nm,1.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.79** | **37** | P | | **P** | **14 09 20.7** | **+0.3** |
| | comp=Z,4.8nm,0.9s,baz=252,slow=6.5,SNR=16 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.79** | **37** | P | | **P** | **14 09 18.8** | **-1.5** |
| **BRTR** | **Keskin Array B** | **68.83** | **49** | P | | **P** | **14 09 22.8** | **+1.7** |
| | comp=Z,5.3nm,1.0s,baz=235,slow=4.4,SNR=13 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.83** | **49** | P | | **P** | **14 09 21.1** | **+0.1** |
| **AGMN** | **Agassiz Nation** | **68.88** | **320** | P | | **P** | **14 09 20.0** | **-1.0** |
| AGMN | | | | IAmb | | IAmb | 14 09 21.9 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.48** | **322** | P | | **P** | **14 09 24.2** | **-0.4** |
| | comp=Z,1.7nm,0.5s,baz=48,slow=6.1,SNR=2.5 | | | | | | | |
| **BNN** | **Bunyan** | **70.35** | **50** | P | | **P** | **14 09 31.0** | **+0.6** |
| **MDND** | **Maddock** | **71.17** | **319** | P | | **P** | **14 09 34.5** | **-0.5** |
| **TXAR** | **Lajitas Array** | **71.18** | **299** | P | | **P** | **14 09 34.6** | **-1.0** |
| | comp=Z,0.3nm,0.6s,baz=96,slow=6.4,SNR=4.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **71.33** | **26** | P | | **P** | **14 09 33.6** | **-2.0** |
| | comp=Z,7.1nm,1.1s,baz=197,slow=6.0,SNR=5.2 | | | | | | | |
| **ISCO** | **Idaho Springs** | **73.94** | **310** | P | | **P** | **14 09 53.1** | **+1.0** |
| ISCO | | | | IAmb | | IAmb | 14 10 01.9 | |
| | comp=Z,9.6nm,1.0s | | | | | | | |
| **MARD** | **Mardin** | **73.98** | **53** | P | | **P** | **14 09 53.6** | **+1.5** |
| MARD | | | | IAmb | | IAmb | 14 09 55.0 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **ANMO** | **Albuquerque** | **74.07** | **305** | P | | **P** | **14 09 53.3** | **+0.5** |
| **BNM** | **Barren Site** | **74.13** | **304** | P | | **P** | **14 09 53.7** | **+0.4** |
| **DGMT** | **Dagmar** | **74.30** | **319** | P | | **P** | **14 09 54.5** | **+0.8** |
| **FFC** | **Flin Flon** | **74.32** | **326** | P | | **P** | **14 09 53.6** | **0.0** |
| FFC | | | | IAmb | | IAmb | 14 09 55.4 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **KBZ** | **Khabaz** | **76.31** | **46** | P | | **P** | **14 10 06.4** | **+1.1** |
| | comp=Z,1.9nm,0.7s,baz=190,slow=5.3,SNR=2.7 | | | | | | | |
| **BW06** | **Boulder Array** | **77.22** | **313** | P | | **P** | **14 10 11.0** | **+0.2** |
| **PD31** | **Pinedale Array** | **77.22** | **313** | P | | **P** | **14 10 11.0** | **+0.2** |
| **PDAR** | **Pinedale Array** | **77.22** | **313** | P | | **P** | **14 10 09.9** | **-0.9** |
| | comp=Z,1.7nm,0.9s,baz=107,slow=5.8,SNR=7.8 | | | | | | | |
| **RAYN** | **Ar Rayn** | **77.27** | **67** | P | | **P** | **14 10 12.0** | **+0.8** |
| **LOHW** | **Long Hollow** | **78.06** | **313** | P | | **P** | **14 10 15.7** | **+0.2** |
| LOHW | | | | IAmb | | IAmb | 14 10 17.7 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **WUAZ** | **Wupatki** | **78.12** | **305** | P | | **P** | **14 10 15.1** | **-0.8** |
| WUAZ | | | | IAmb | | IAmb | 14 10 19.1 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **RES** | **Resolute Bay** | **78.36** | **346** | P | | **P** | **14 10 16.6** | **+0.4** |
| | comp=Z,6.2nm,1.1s,baz=99,slow=7.3,SNR=6.9 | | | | | | | |
| **YMR** | **Madison River** | **78.41** | **314** | P | | **P** | **14 10 17.0** | **-0.3** |
| YMR | | | | IAmb | | IAmb | 14 10 20.4 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **MSU** | **Marysvale** | **78.91** | **308** | P | | **P** | **14 10 21.4** | **+1.2** |
| **ELK** | **Elko** | **81.35** | **310** | P | | **P** | **14 10 33.8** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **82.14** | **332** | P | | **P** | **14 10 36.4** | **-0.4** |
| | comp=Z,2.2nm,1.0s,baz=96,slow=5.3,SNR=9.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.14** | **332** | P | | **P** | **14 10 36.1** | **-0.7** |
| **NVAR** | **Mina Array Bea** | **83.71** | **308** | P | | **P** | **14 10 46.1** | **+0.3** |
| | comp=Z,1.2nm,0.9s,baz=96,slow=7.2,SNR=7.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.71** | **308** | P | | **P** | **14 10 45.0** | **-0.8** |
| **ILAR** | **Eielson Array** | **95.85** | **337** | P | | **P** | **14 11 42.1** | **-0.4** |
| | comp=Z,1.6nm,0.9s,baz=50,slow=4.2,SNR=8.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.03** | **63** | PKP | | **PKPdf** | **14 17 21.8** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=294,slow=3.6,SNR=9.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **154.93** | **124** | PKP | | **PKPdf** | **14 18 09.2** | **-0.9** |
| | comp=Z,2.8nm,1.1s,baz=233,slow=3.7,SNR=2.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **157.11** | **147** | PKP | | **PKPdf** | **14 18 12.7** | **-0.3** |
| | comp=Z,2.3nm,1.1s,baz=226,slow=1.1,SNR=4.7 | | | | | | | |

*IDC **20** 14:07:27.2±0.8, 4°.52N×32°.58W, h0km, mb4.0/13, mb1 4.1/13, mb1mx3.9/49, mbtmp4.0/13, MS4.0/12, Ms1 4.0/12, ms1mx3.6/84, Error ellipse: s-maj=27.1km s-min=17.6km az=151.0*

*NEIC **20** 14:07:29.1±2.5, 4°.54N±0°.06×32°.5W±0°.1, h10km±1km, mb4.5/10, Error ellipse: s-maj=18.5km s-min=9.8km az=252.0*

**ISC 20 14:07:28.9**±0.7, **4°.6N**±0°.1×**32°.5W**±0°.1, **h11**km, **n36, σ1§42/22, mb4.1**/17, **MS4.0**/12, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SACV** | **Santiago Islan** | **13.52** | **40** | Pn | | **Pn** | **14 10 38.0** | **-2.9** |
| **MBO** | **M'Bour** | **18.15** | **57** | Pn | | **Pn** | **14 11 37.3** | **-3.8** |
| **MDP** | **Montagnes des** | **20.05** | **272** | LR | | LR | 14 18 15.8 | |
| | comp=Z,281nm,21.0s,baz=90,slow=32 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.83** | **124** | T | | T | 14 35 00.2 | |
| | baz=304,slow=75,SNR=29 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.83** | **124** | T | | T | 14 35 00.6 | |
| | baz=304,slow=75,SNR=30 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.85** | **124** | T | | T | 14 35 01.8 | |
| | baz=304,slow=75,SNR=29 | | | | | | | |
| **BDFB** | **Brasilia** | **25.31** | **217** | P | | **P** | **14 12 54.9** | **-1.0** |
| | 2.0nm,0.7s,baz=355,slow=14,SNR=1.8 | | | | | | | |
| BDFB | | | | LR | | LR | 14 21 52.7 | |
| | comp=Z,348nm,18.6s,baz=7.3,slow=34 | | | | | | | |
| **DBIC** | **Dimbokro** | **27.60** | **84** | LR | | LR | 14 22 16.2 | |
| | comp=Z,347nm,18.1s,baz=282,slow=32 | | | | | | | |
| **DBIC** | **Dimbokro** | **27.60** | **84** | P | | **P** | **14 13 18.4** | **+1.8** |
| DBIC | | | | IAmb | | IAmb | 14 13 23.0 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **PTGA** | **Pitinga** | **27.93** | **260** | P | | **P** | **14 13 18.1** | **-1.5** |
| | comp=Z,2.4nm,0.3s,baz=338,slow=22,SNR=2.3 | | | | | | | |
| PTGA | | | | LR | | LR | 14 23 09.9 | |
| | comp=Z,436nm,20.0s,baz=62,slow=34 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.81** | **74** | P | | **P** | **14 14 20.8** | **+0.6** |
| | comp=Z,1.1nm,0.6s,baz=265,slow=9.5,SNR=4.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.81** | **74** | IAmb | | IAmb | 14 14 23.0 | |
| | comp=Z,4.9nm,1.5s | | | | | | | |
| **SIV** | **San Ignacio** | **34.89** | **233** | P | | **P** | **14 14 21.1** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=103,slow=9.4,SNR=7.1 | | | | | | | |
| SIV | | | | LR | | LR | 14 27 46.3 | |
| | comp=Z,571nm,21.1s,baz=100,slow=35 | | | | | | | |
| **SJG** | **San Juan** | **35.50** | **295** | LR | | LR | 14 25 22.8 | |
| | comp=Z,230nm,21.3s,baz=93,slow=30 | | | | | | | |
| **MDT** | **Midelt** | **38.29** | **40** | LR | | LR | 14 29 14.9 | |
| | comp=Z,273nm,19.9s,baz=288,slow=34 | | | | | | | |
| **ESDC** | **Sonseca Array** | **43.40** | **32** | P | | **P** | **14 15 33.6** | **+1.8** |
| | comp=Z,0.6nm,0.7s,baz=220,slow=8.1,SNR=2.4 | | | | | | | |
| **TSUM** | **Tsumeb** | **54.69** | **117** | LR | | LR | 14 35 09.6 | |
| | comp=Z,211nm,20.1s,baz=329,slow=30 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.80** | **20** | LR | | LR | 14 39 42.7 | |
| | comp=Z,180nm,18.1s,baz=352,slow=35 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.32** | **310** | LR | | LR | 14 36 55.6 | |
| | comp=Z,113nm,19.9s,baz=109,slow=31 | | | | | | | |
| **SCHQ** | **Schefferville** | **57.21** | **337** | LR | | LR | 14 40 37.6 | |
| | comp=Z,40nm,18.1s,baz=93,slow=35 | | | | | | | |
| **SUR** | **Sutherland** | **62.55** | **130** | LR | | LR | 14 39 28.2 | |
| | comp=Z,120nm,18.9s,baz=318,slow=31 | | | | | | | |
| **BOSA** | **Boshof** | **64.58** | **125** | P | | **P** | **14 18 06.1** | **-0.7** |
| | comp=Z,1.3nm,0.6s,baz=273,slow=5.6,SNR=4.6 | | | | | | | |
| **BOSA** | **Boshof** | **64.58** | **125** | IAmb | | IAmb | 14 18 19.3 | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **68.23** | **315** | P | | **P** | **14 18 29.2** | **-0.6** |
| ECSD | | | | IAmb | | IAmb | 14 18 30.4 | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.79** | **37** | P | | **P** | **14 18 34.3** | **+1.2** |
| | comp=Z,1.4nm,0.7s,baz=250,slow=6.4,SNR=9.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.80** | **49** | P | | **P** | **14 18 34.4** | **+0.8** |
| | comp=Z,1.2nm,0.7s,baz=222,slow=4.5,SNR=6.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.32** | **299** | P | | **P** | **14 18 49.5** | **+0.2** |
| | comp=Z,0.2nm,0.6s,baz=140,slow=6.5,SNR=3.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.32** | **299** | P | | **P** | **14 18 49.9** | **+0.7** |
| **ISCO** | **Idaho Springs** | **74.08** | **310** | P | | **P** | **14 19 06.4** | **+0.7** |
| ISCO | | | | IAmb | | IAmb | 14 19 18.8 | |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **FFC** | **Flin Flon** | **74.45** | **326** | P | | **P** | **14 19 07.3** | **+0.1** |
| FFC | | | | IAmb | | IAmb | 14 19 15.7 | |
| | comp=Z,6.4nm,1.5s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.90** | **18** | P | | **P** | **14 19 09.6** | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=264,slow=6.3,SNR=1.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.36** | **313** | P | | **P** | **14 19 24.2** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=107,slow=4.4,SNR=7.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.36** | **313** | P | | **P** | **14 19 24.0** | **-0.3** |
| **EDM** | **Edmonton** | **80.83** | **323** | P | | **P** | **14 19 41.7** | **-1.2** |
| **YKA** | **Yellowknife Ar** | **82.27** | **332** | P | | **P** | **14 19 50.5** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=98,slow=5.3,SNR=13 | | | | | | | |
| **ILAR** | **Eielson Array** | **95.97** | **337** | P | | **P** | **14 20 56.1** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=54,slow=4.0,SNR=5.3 | | | | | | | |

**IDC 20 14:11:47.8**±1.7, **1°.12N**×**129°.41E**, **h0**km, **mb3.4**/3, **mb1 3.6**/4, **mb1mx3.2**/37, **mbtmp3.4**/4, **ML3.2**/1, **Error ellipse: s-maj=77.6km s-min=22.6km az=58.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.71** | **137** | Pn | | Pn | 14 12 32.5 | -0.1 |
| | 3.8nm,0.3s,baz=197,slow=19,SNR=6.6 | | | | | | | |
| SIJI | | | | Sn | | Sn | 14 13 05.5 | -0.7 |
| | 4.8nm,0.3s,baz=187,slow=23,SNR=5.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.48** | **167** | P | | P | 14 16 37.4 | -0.8 |
| | 0.8nm,0.9s,baz=345,slow=11,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.02** | **170** | P | | P | 14 17 14.4 | +0.7 |
| | 1.3nm,0.6s,baz=346,slow=11,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.21** | **325** | P | | P | 14 22 04.4 | -0.2 |
| | 0.2nm,0.6s,baz=117,slow=8.3,SNR=4.9 | | | | | | | |

**IDC 20 14:13:20.3**±9.5, **4°.00N**×**32°.61W**, **h0**km, **mb3.5**/3, **mb1 3.7**/3, **mb1mx3.4**/54, **mbtmp3.5**/3, **Error ellipse: s-maj=295.6km s-min=48.9km az=11.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.56** | **123** | T | | T | 14 40 50.0 | |
| | baz=304,slow=75,SNR=7.4 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.57** | **123** | T | | T | 14 40 47.9 | |
| | baz=304,slow=75,SNR=6.7 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.58** | **123** | T | | T | 14 40 51.6 | |
| | baz=304,slow=75,SNR=7.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.07** | **73** | P | | P | 14 20 15.4 | -0.1 |
| | 1.3nm,0.8s,baz=259,slow=9.0,SNR=5.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.33** | **37** | P | | P | 14 24 29.7 | 0.0 |
| | 0.2nm,0.3s,baz=255,slow=5.6,SNR=2.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.77** | **332** | P | | P | 14 25 46.1 | 0.0 |
| | 0.2nm,0.8s,baz=102,slow=5.4,SNR=2.9 | | | | | | | |

**IDC 20 14:16:08.6**±6.4, **4°.18N**×**32°.61W**, **h0**km, **mb3.6**/5, **mb1 3.8**/5, **mb1mx3.6**/52, **mbtmp3.6**/5, **Error ellipse: s-maj=218.6km s-min=35.7km az=5.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.66** | **123** | T | | T | 14 43 38.3 | |
| | baz=305 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.66** | **123** | T | | T | 14 43 37.5 | |
| | baz=305 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.68** | **123** | T | | T | 14 43 42.4 | |
| | baz=305 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.02** | **73** | P | | P | 14 23 03.1 | -0.2 |
| | 1.4nm,0.9s,baz=265,slow=9.1,SNR=4.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **69.15** | **49** | P | | P | 14 27 17.8 | +0.5 |
| | 1.1nm,0.8s,baz=242,slow=2.8,SNR=3.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.19** | **37** | P | | P | 14 27 16.6 | -0.5 |
| | 0.2nm,0.4s,baz=250,slow=6.4,SNR=2.0 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.59** | **313** | P | | P | 14 28 06.9 | -0.2 |
| | 0.3nm,0.7s,baz=94,slow=6.6,SNR=2.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.61** | **332** | P | | P | 14 28 33.9 | +0.4 |
| | 0.2nm,0.6s,baz=99,slow=5.3,SNR=3.3 | | | | | | | |

*IDC **20** 14:18:30.4±0.9, 4°.78N×32°.64W, h0km, mb3.9/10, mb1 4.2/10, mb1mx3.9/51, mbtmp3.9/10, MS3.8/10, Ms1 3.8/10, ms1mx3.3/84, Error ellipse: s-maj=33.4km s-min=19.6km az=156.0*

*NEIC **20** 14:18:31.4±2.7, 4°.8N±0°.1×32°.8W±0°.1, h10km±1km, mb4.6/17, Error ellipse: s-maj=26.8km s-min=18.4km az=152.0*

**ISC 20 14:18:31.3**±0.6, **4°.7N**±0°.1×**32°.7W**±0°.1, **h11**km, **n40, σ1§42/30, mb4.2**/16, **MS3.7**/9, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SACV** | **Santiago Islan** | **13.57** | **41** | Pn | | **Pn** | **14 21 44.4** | **+0.5** |
| **MDP** | **Montagnes des** | **19.83** | **272** | LR | | LR | 14 29 26.3 | |
| | comp=Z,126nm,18.7s,baz=118,slow=33 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **22.08** | **124** | T | | T | 14 46 01.4 | |
| | baz=303,slow=75,SNR=15 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.08** | **124** | T | | T | 14 46 18.7 | |
| | baz=303,slow=75,SNR=15 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.10** | **124** | T | | T | 14 46 18.6 | |
| | baz=303,slow=75,SNR=16 | | | | | | | |
| **BDFB** | **Brasilia** | **25.28** | **216** | LR | | LR | 14 32 44.2 | |
| | comp=Z,246nm,19.6s,baz=318,slow=34 | | | | | | | |
| **BDFB** | **Brasilia** | **25.28** | **216** | P | | **P** | **14 23 58.2** | **+0.2** |
| **PTGA** | **Pitinga** | **27.73** | **259** | LR | | LR | 14 35 32.6 | |
| | comp=Z,190nm,18.2s,baz=58,slow=37 | | | | | | | |
| **DBIC** | **Dimbokro** | **27.81** | **85** | P | | **P** | **14 24 19.1** | **-1.7** |
| | 4.1nm,0.9s,baz=286,slow=5.0,SNR=2.6 | | | | | | | |
| DBIC | | | | LR | | LR | 14 32 31.6 | |
| | comp=Z,179nm,21.8s,baz=300,slow=30 | | | | | | | |
| **DBIC** | **Dimbokro** | **27.81** | **85** | P | | **P** | **14 24 19.2** | **-1.7** |
| DBIC | | | | IAmb | | IAmb | 14 24 24.7 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **TOSP** | **Speyside** | **28.26** | **285** | P | | **P** | **14 24 23.4** | **-1.5** |
| **SIV** | **San Ignacio** | **34.79** | **233** | LR | | LR | 14 38 56.8 | |
| | comp=Z,282nm,19.4s,baz=99,slow=35 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.99** | **74** | P | | **P** | **14 25 23.3** | **-0.8** |
| | comp=Z,3.6nm,0.7s,baz=266,slow=8.7,SNR=17 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.99** | **74** | P | | **P** | **14 25 23.2** | **-0.8** |
| TORD | | | | IAmb | | IAmb | 14 25 25.8 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **SJG** | **San Juan** | **35.25** | **295** | LR | | LR | 14 36 44.2 | |
| | comp=Z,98nm,19.2s,baz=112,slow=31 | | | | | | | |
| **MDT** | **Midelt** | **38.34** | **40** | LR | | LR | 14 40 40.2 | |
| | comp=Z,120nm,18.2s,baz=282,slow=35 | | | | | | | |
| **DR12** | **Loma Pena Alta** | **38.38** | **294** | P | | **P** | **14 25 52.3** | **-0.8** |
| **CPUP** | **Villa Florida** | **39.01** | **216** | P | | **P** | **14 26 01.1** | **+3.1** |
| | comp=Z,3.2nm,0.9s,baz=54,slow=5.3,SNR=4.2 | | | | | | | |
| CPUP | | | | LR | | LR | 14 41 29.9 | |
| | comp=Z,143nm,21.3s,baz=43,slow=35 | | | | | | | |
| **LPAZ** | **La Paz** | **40.77** | **238** | P | | **P** | **14 26 14.3** | **+0.7** |
| | comp=Z,1.8nm,0.8s,baz=358,slow=4.3,SNR=3.9 | | | | | | | |
| LPAZ | | | | LR | | LR | 14 42 21.5 | |
| | comp=Z,127nm,18.6s,baz=46,slow=35 | | | | | | | |
| **LPAZ** | **La Paz** | **40.77** | **238** | P | | **P** | **14 26 12.9** | **-0.7** |
| **ITQB** | **Itaqui** | **41.18** | **212** | P | | **P** | **14 26 15.4** | **-0.7** |
| ITQB | | | | IAmb | | IAmb | 14 26 23.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **ESDC** | **Sonseca Array** | **43.41** | **33** | P | | **P** | **14 26 35.3** | **+1.1** |
| | comp=Z,0.9nm,0.9s,baz=224,slow=9.0,SNR=3.0 | | | | | | | |
| **TSUM** | **Tsumeb** | **54.94** | **117** | LR | | LR | 14 46 24.3 | |
| | comp=Z,68nm,20.5s,baz=329,slow=30 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | | **P** | **14 29 37.5** | **+1.7** |
| | comp=Z,1.3nm,0.9s,baz=251,slow=7.3,SNR=5.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | | **P** | **14 29 37.6** | **+1.9** |
| **BR131** | **Keskin Array S** | **68.89** | **49** | P | | **P** | **14 29 35.7** | **-0.9** |
| BR131 | | | | IAmb | | IAmb | 14 29 45.9 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **MDND** | **Maddock** | **71.06** | **319** | P | | **P** | **14 29 50.5** | **+0.9** |
| **TXAR** | **Lajitas Array** | **71.07** | **299** | P | | **P** | **14 29 51.2** | **+1.0** |
| | comp=Z,0.6nm,1.0s,baz=112,slow=7.2,SNR=3.1 | | | | | | | |
| **E28A** | **Huff** | **71.48** | **318** | P | | **P** | **14 29 50.0** | **-2.2** |
| **RSSD** | **Black Hills** | **73.31** | **315** | P | | **P** | **14 30 02.1** | **-1.3** |
| RSSD | | | | IAmb | | IAmb | 14 30 07.7 | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **Q24A** | **Divide** | **73.36** | **309** | P | | **P** | **14 30 02.1** | **-1.8** |
| Q24A | | | | IAmb | | IAmb | 14 30 06.9 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **ANMO** | **Albuquerque** | **73.95** | **305** | P | | **P** | **14 30 06.3** | **-1.0** |
| **FFC** | **Flin Flon** | **74.22** | **326** | P | | **P** | **14 30 08.5** | **+0.2** |
| FFC | | | | IAmb | | IAmb | 14 30 10.8 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.12** | **313** | P | | **P** | **14 30 25.8** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=79,slow=5.7,SNR=3.5 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.12** | **313** | P | | **P** | **14 30 22.9** | **-2.5** |
| **EDM** | **Edmonton** | **80.59** | **323** | P | | **P** | **14 30 45.5** | **+1.5** |
| **YKA** | **Yellowknife Ar** | **82.05** | **332** | P | | **P** | **14 30 52.2** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=98,slow=5.5,SNR=7.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.05** | **332** | P | | **P** | **14 30 50.1** | **-1.4** |
| **QSM** | **Queen of Sheba** | **82.48** | **306** | P | | **P** | **14 30 54.4** | **0.0** |
| QSM | | | | IAmb | | IAmb | 14 30 59.3 | |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **95.77** | **337** | P | | **P** | **14 31 58.3** | **+1.0** |
| | comp=Z,0.3nm,0.6s,baz=104,slow=3.8,SNR=2.6 | | | | | | | |

*IDC **20** 14:22:56.6±6.7, 4°.41N×32°.69W, h0km, mb3.9/6, mb1 4.1/6, mb1mx3.7/51, mbtmp3.8/6, Error ellipse: s-maj=208.4km s-min=39.8km az=7.0*

**ISC 20 14:22:58.2**±6.4, **4°.N**±1°×**32°.7W**±0°.3, **h11**km, **n9**, **σ0§98/6, mb3.9**/6, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.82** | **124** | T | | T | 14 50 29.2 | |
| | baz=302 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.82** | **124** | T | | T | 14 50 29.5 | |
| | baz=302 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.84** | **124** | T | | T | 14 50 31.6 | |
| | baz=302 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.01** | **73** | P | | **P** | **14 29 50.8** | **-0.4** |
| | 1.2nm,0.8s,baz=261,slow=8.1,SNR=4.7 | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.20** | **41** | P | | **P** | **14 33 40.3** | **+0.4** |
| | 2.7nm,0.7s,baz=150,slow=16,SNR=4.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.05** | **37** | P | | **P** | **14 34 03.2** | **-0.9** |
| | 0.5nm,0.5s,baz=247,slow=6.9,SNR=2.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **69.05** | **49** | P | | **P** | **14 34 05.8** | **+1.3** |
| | 1.5nm,0.9s,baz=242,slow=3.1,SNR=5.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.39** | **332** | P | | **P** | **14 35 20.3** | **+0.1** |
| | 0.2nm,0.6s,baz=98,slow=5.3,SNR=4.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **96.11** | **337** | P | | **P** | **14 36 25.7** | **-0.2** |
| | 0.2nm,0.7s,baz=38,slow=4.6,SNR=1.9 | | | | | | | |

*IDC **20** 14:30:34.9±2.3, 7°.18S×102°.57E, h0km, mb3.7/6, mb1 3.9/7, mb1mx3.5/46, mbtmp3.7/7, ML4.1/1, MS3.4/1, Ms1 3.4/1, ms1mx2.6/76, Error ell

MXZ IAmb IAmb 14 42 03.8
comp=Z,61nm,0.8s
**MXZ Matakaoa Point 15.12 183 P P 14 41 48.0 -2.0**
**HAZ Te Kaha 15.35 185 P P 14 41 50.0 -2.1**
HAZ S S 14 44 22.5 -6.0
**WMGZ Waiomatatini S 15.37 183 P P 14 41 50.4 -2.0**
WMGZ S S 14 44 21.2 -7.7
**PKGZ Pakihiroa 15.46 184 P P 14 41 50.8 -2.4**
PKGZ S S 14 44 27.4 -3.1
**TOZ Tahuroa Road 15.62 191 P P 14 41 56.4 +1.7**
**PUZ Puketiti 15.63 183 P P 14 41 51.9 -2.9**
PUZ S S 14 44 28.4 -4.8
**URZ Urewera 15.91 186 P P 14 41 54.9 -2.4**
comp=Z,7.4nm,0.3s,baz=352,slow=3.2,SNR=52
URZ S S 14 44 35.1 -2.6
comp=Z,1.9nm,0.3s,baz=266,slow=23,SNR=12
**URZ Urewera 15.91 186 P P 14 41 55.0 -2.3**
URZ IAmb IAmb 14 41 57.3
comp=Z,97nm,0.7s
**URZ Urewera 15.91 186 P P 14 41 53.9 -3.4**
**MWZ Matawai 15.94 185 P P 14 41 54.8 -3.0**
**TKGZ Te Karaka 16.02 184 P P 14 41 55.1 -3.3**
**CNGZ Carnagh Statio 16.05 183 P P 14 41 57.0 -1.6**
**HIZ Hauiti 16.50 192 P P 14 42 05.3 +2.5**
HIZ IAmb IAmb 14 42 06.1
comp=Z,158nm,1.1s
**BKZ Black Stump Fm 16.87 188 P P 14 42 04.0 -2.3**
BKZ IAmb IAmb 14 42 05.7
comp=Z,37nm,0.9s
**BKZ Black Stump Fm 16.87 188 P P 14 42 05.2 -1.0**
**TRVZ Turoa 17.14 190 P P 14 42 08.8 -0.1**
**BFZ Birch Farm 18.40 187 P P 14 42 18.6 -1.5**
**BFZ Birch Farm 18.40 187 P P 14 42 18.5 -1.5**
**QRZ Quartz Range 19.23 196 P P 14 42 28.5 +0.8**
**QRZ Quartz Range 19.23 196 P P 14 42 28.7 +1.0**
**SNZO South Karori 19.24 191 P P 14 42 27.3 -0.3**
**MSWZ Moikau Station 19.25 189 P P 14 42 26.9 -0.9**
**BHW Baring Head 19.31 190 P P 14 42 27.1 -1.2**
**PLWZ Palliser 19.40 199 P P 14 42 28.9 -0.4**
**NNZ Nelson 19.41 194 P P 14 42 28.5 -0.7**
**TUWZ Tuamarina 19.49 192 P P 14 42 28.8 -1.2**
**BSWZ Blackbirch Sta 19.78 192 P P 14 42 30.3 -2.3**
**THZ Tophouse 20.03 194 P 14 42 34.4 -0.6**
**KHZ Kahutara 20.52 192 P 14 42 38.2 -1.0**
**LTZ Lake Taylor 21.15 195 P 14 42 43.7 -1.2**
**OXZ Oxford 21.72 194 P P 14 42 49.0 -1.0**
**MQZ McQueen's Vall 21.94 193 P 14 42 50.4 -1.5**
MQZ IAmb IAmb 14 42 55.6
comp=Z,87nm,1.1s
**RPZ Rata Peaks 22.32 196 P P 14 42 55.3 -0.1**
comp=Z,40nm,0.6s,baz=316,slow=1.0,SNR=30
**RPZ Rata Peaks 22.32 196 P 14 42 54.4 -1.0**
**RPZ Rata Peaks 22.32 196 P P 14 42 55.5 +0.1**
**FOZ Fox Glacier 22.49 198 P 14 42 56.0 -0.8**
**ODZ Otahua Downs 23.67 195 P P 14 43 06.2 -1.1**
**WKZ Wanaka 23.91 198 P 14 43 08.8 -0.7**
**MLZ Mavora Lakes 24.66 199 P 14 43 16.9 +0.7**
**DCZ Deep Cove 25.05 201 P P 14 43 19.4 -0.1**
DCZ IAmb IAmb 14 43 21.6
comp=Z,47nm,0.8s
**WHZ Wether Hill Ro 25.19 199 P 14 43 21.3 +0.5**
**EIDS Eidsvold 25.98 258 P P 14 43 28.6 +0.6**
baz=26,SNR=6.1
**EIDS Eidsvold 25.98 258 P P 14 43 28.3 +0.3**
EIDS IAmb IAmb 14 43 29.1
comp=Z,37nm,0.9s
**ARMA Armidale 26.01 246 P P 14 43 29.9 +1.6**
baz=26,SNR=46
**ARMA Armidale 26.01 246 P P 14 43 29.9 +1.6**
ARMA IAmb IAmb 14 43 30.8
comp=Z,42nm,0.8s
**ARMA Armidale 26.01 246 P P 14 43 30.0 +1.6**
**MGCD Mangrove Creek 27.10 240 P P 14 43 39.6 +1.9**
baz=27,SNR=28
**MGCD Mangrove Creek 27.10 240 P P 14 43 39.6 +1.9**
**RIV Riverview 27.24 239 P P 14 43 41.6 +2.7**
baz=27,SNR=4.3
**SYDH Sydney Hard Ro 27.55 240 P P 14 43 43.3 +1.7**
**RMQ Roma 28.09 255 P P 14 43 47.9 +1.4**
baz=28,SNR=17
**RMQ Roma 28.09 255 P P 14 43 48.0 +1.5**
**CNB Canberra Magne 29.10 237 P P 14 43 56.7 +1.5**
baz=29,SNR=93
**CNB Canberra Magne 29.10 237 P P 14 43 56.9 +1.7**
**CAN Canberra 29.39 237 P 14 43 58.6 +1.0**
CAN IAmb IAmb 14 43 59.8
comp=Z,75nm,0.9s
**CAN Canberra 29.39 237 P P 14 43 59.0 +1.4**
**MILA Mila 29.84 234 P P 14 44 02.6 +1.1**
baz=30,SNR=7.0
**CTA Charters Tower 30.88 268 P P 14 44 11.1 +0.5**
comp=Z,42nm,0.5s,baz=93,slow=10,SNR=155
**CTA Charters Tower 30.88 268 P P 14 44 11.1 +0.5**
**CMSA Cobar Meteorol 31.23 246 P P 14 44 14.1 +0.7**
baz=31,SNR=145
**CMSA Cobar Meteorol 31.23 246 P P 14 44 13.8 +0.5**
**QLP Quilpie 32.14 255 P P 14 44 21.5 +0.3**
baz=32,SNR=25
**QLP Quilpie 32.14 255 P P 14 44 21.8 +0.6**
**TOO Toolangi 32.77 235 P P 14 44 27.3 +1.0**
baz=33,SNR=144
**TOO Toolangi 32.77 235 P 14 44 27.4 +1.0**
**TOO Toolangi 32.77 235 P P 14 44 27.4 +1.0**
**CORO Coronation Par 32.99 227 P P 14 44 29.7 +1.6**
**MTSU Mount Surprise 33.07 271 P P 14 44 29.5 +0.3**
baz=33,SNR=35
**MTSU Mount Surprise 33.07 271 P P 14 44 29.7 +0.5**
**MLBS Spotswood, Mel 33.29 235 P P 14 44 32.0 +1.3**
comp=Z,127nm,0.7s
**MOO Moorlands 33.40 226 P P 14 44 32.6 +1.1**
baz=34,SNR=3.7
**PMG Port Moresby 33.44 288 P P 14 44 32.3 0.0**
comp=Z,16nm,0.8s,baz=131,slow=6.1,SNR=10
**PMG Port Moresby 33.44 288 P P 14 44 31.0 -1.3**
**PMG Port Moresby 33.44 288 P P 14 44 32.6 +0.3**
**TAU Tasmania Unive 33.52 225 P P 14 44 33.5 +1.0**
TAU IAmb IAmb 14 44 41.2
comp=Z,77nm,1.4s
**GEXS Deakin Univers 33.86 234 P P 14 44 36.8 +1.3**
**BRAT Ballarat 33.95 236 P P 14 44 37.8 +1.6**
**STKA Stephens Creek 34.73 246 P P 14 44 43.7 +0.8**
comp=Z,52nm,0.4s,baz=93,slow=10,SNR=252
STKA S S 14 49 30.7 -1.5
comp=Z,1.8nm,0.8s,baz=205,slow=20,SNR=1.9
STKA ScP ScP 14 49 51.7 +2.4
comp=Z,7.1nm,1.0s,baz=345,slow=6.8,SNR=5.0
**STKA Stephens Creek 34.73 246 P P 14 44 43.7 +0.8**
baz=35,SNR=206
**STKA Stephens Creek 34.73 246 P P 14 44 43.5 +0.7**
STKA IAmb IAmb 14 44 44.2
comp=Z,15nm,0.5s
**STKA Stephens Creek 34.73 246 P P 14 44 43.8 +1.0**
**INKA Innaminka 35.25 253 P P 14 44 48.6 +1.4**
**COEN Coen 35.29 278 P P 14 44 47.5 -0.2**
**ARPS Mount Arapiles 35.36 238 P P 14 44 48.4 +0.4**
baz=36,SNR=33
**ARPS Mount Arapiles 35.36 238 P P 14 44 48.6 +0.6**
**PATS Pohnpei 35.62 322 P P 14 44 47.9 -2.5**
**QIS Mount Isa 36.94 265 P P 14 45 00.7 -0.5**
baz=37,SNR=17
**QIS Mount Isa 36.94 265 P P 14 45 01.0 -0.2**
**HTT Hallett 37.15 244 P P 14 45 03.0 +0.2**
baz=37,SNR=80
**HTT Hallett 37.15 244 P P 14 45 03.2 +0.4**
**LCRK Leigh Creek 37.51 249 P P 14 45 06.2 +0.5**
**TWOA Tennyson Woods 37.64 241 P P 14 45 07.0 +0.4**
**NAPP Napperby 37.76 244 P P 14 45 08.5 +0.8**
**PTPS Port Pirie 37.89 244 P P 14 45 09.6 +0.9**
**WHYH Whyalla 38.23 245 P P 14 45 11.8 +0.4**
**BBOO Buckleboo 39.48 245 P P 14 45 21.4 -0.2**
baz=40,SNR=230
**BBOO Buckleboo 39.48 245 P P 14 45 21.5 0.0**
**BBOO Buckleboo 39.48 245 P P 14 45 21.6 0.0**
**OOD Oodnadatta 39.73 253 P P 14 45 24.6 +1.0**
**MULG Mulgathing 41.10 249 P P 14 45 34.7 +0.2**
**AS31 Alice Springs 41.69 259 P P 14 45 39.0 -0.2**
**ASAR Alice Springs 41.69 259 P P 14 45 39.0 -0.2**
comp=Z,62nm,0.8s,baz=96,slow=8.1,SNR=496
ASAR ScP ScP 14 50 18.6 +2.3
comp=Z,3.7nm,0.6s,baz=105,slow=4.2,SNR=9.0
ASAR S S 14 51 11.9 -2.7
comp=Z,3.8nm,0.7s,baz=96,slow=16,SNR=21
**ASAR Alice Springs 41.69 259 P P 14 45 38.8 -0.4**
**ASPA Alice Springs 41.69 259 P P 14 45 39.0 -0.2**

baz=42
**WR0 Warramunga Arr 41.72 265 P P 14 45 38.5 -1.0**
**WC3 Warramunga Arr 41.88 265 P P 14 45 39.9 -0.9**
baz=42
**WB0 Warramunga Arr 41.90 265 P P 14 45 39.9 -1.0**
**WB2 Warramunga Arr 41.90 265 P P 14 45 40.2 -0.8**
WB2 IAmb IAmb 14 45 41.1
comp=Z,23nm,0.8s
**WRAB Tennant Creek 41.90 265 P P 14 45 40.0 -0.9**
WRAB IAmb IAmb 14 45 41.0
comp=Z,37nm,1.1s
**WRAB Tennant Creek 41.90 265 P P 14 45 40.3 -0.6**
**WRA Warramunga Arr 41.91 265 P P 14 45 40.1 -0.9**
comp=Z,14nm,0.6s,baz=96,slow=8.3,SNR=403
WRA ScP ScP 14 50 19.6 +2.4
comp=Z,3.6nm,0.8s,baz=93,slow=3.9,SNR=9.6
WRA S S 14 51 13.7 -4.2
comp=Z,1.3nm,0.7s,baz=98,slow=14,SNR=4.6
**WRA Warramunga Arr 41.91 265 P P 14 45 39.0 -2.0**
**JAY Jayapura 42.38 292 P P 14 45 44.3 -0.4**
comp=Z,6.9nm,0.3s,baz=172,slow=4.9,SNR=9.8
**KDU Kakadu 45.55 274 P P 14 46 08.4 -0.8**
baz=46,SNR=22
**FORT Forrest 46.27 248 P P 14 46 13.9 -0.4**
baz=46,SNR=88
**FORT Forrest 46.27 248 P P 14 46 13.9 -0.4**
**FORT Forrest 46.27 248 P P 14 46 14.0 -0.4**
**WRKA Warakurna 46.57 256 P P 14 46 16.5 -0.3**
baz=47,SNR=51
**WRKA Warakurna 46.57 256 P P 14 46 16.6 -0.2**
**MTN Manton Dam 46.74 273 P P 14 46 17.1 -1.0**
baz=47,SNR=5.5
**MTN Manton Dam 46.74 273 P P 14 46 17.5 -0.6**
**KNRA Kununurra 48.09 269 P P 14 46 27.6 -0.5**
baz=48,SNR=46
**KNRA Kununurra 48.09 269 P P 14 46 27.7 -0.5**
KNRA IAmb IAmb 14 46 28.6
comp=Z,34nm,0.6s
**KNRA Kununurra 48.09 269 P P 14 46 27.9 -0.3**
**MLOA Mauna Loa Obse 48.37 32 P P 14 46 30.3 -0.3**
**HMH Humu'ula Sheep 48.47 32 P P 14 46 31.9 +0.7**
**HPAH Hawaii Prepara 48.73 32 P P 14 46 32.5 -0.4**
**GUMO Guam 49.21 313 P P 14 46 36.3 0.0**
comp=Z,74nm,0.4s,baz=273,slow=3.6,SNR=5.4
**GUMO Guam 49.21 313 P P 14 46 35.9 -0.4**
**FITZ Fitzroy Crossi 50.34 265 P P 14 46 44.4 -0.3**
comp=Z,16nm,0.5s,baz=96,slow=4.8,SNR=114
FITZ S S 14 53 12.9 -2.0
comp=Z,1.8nm,0.9s,baz=263,slow=22,SNR=1.2
**FITZ Fitzroy Crossi 50.34 265 P P 14 46 44.4 -0.3**
baz=50,SNR=60
**FITZ Fitzroy Crossi 50.34 265 P P 14 46 44.4 -0.3**
**FITZ Fitzroy Crossi 50.34 265 P P 14 46 44.8 +0.1**
**SIJI Soroq 51.39 288 P P 14 46 52.0 -0.4**
comp=Z,7.4nm,0.4s,baz=36,slow=12,SNR=7.8
**SOEI Soe 54.12 274 P P 14 47 12.3 +0.5**
**SOEI Soe 54.12 274 P P 14 47 13.6 +1.8**
comp=Z,34nm,0.8s
**BATI Baumata 54.52 273 P P 14 47 14.2 -0.4**
comp=Z,15nm,0.5s,baz=138,slow=2.3,SNR=6.5
**PSA00 Pilbara Seismi 54.84 259 P P 14 47 15.9 -0.7**
PSA00 IAmb IAmb 14 47 17.1
comp=Z,63nm,1.3s
**MEEK Meekatharra 54.96 252 P P 14 47 16.7 -0.8**
**KLBR Kellerberrin 55.01 246 P P 14 47 17.3 -0.4**
baz=55,SNR=20
**KLBR Kellerberrin 55.01 246 P P 14 47 17.4 -0.3**
**RKGY Rocky Gully 55.35 243 P P 14 47 20.3 +0.3**
baz=55,SNR=5.3
**VNDA Vanda 55.80 185 P P 14 47 24.4 +2.0**
comp=Z,3.3nm,0.4s,baz=13,slow=7.6,SNR=16
**VNDA Vanda 55.80 185 P P 14 47 23.8 +1.4**
**BLDU Ballidu 56.02 247 P P 14 47 24.1 -0.5**
baz=56,SNR=84
**BLDU Ballidu 56.02 247 P P 14 47 24.2 -0.5**
**MUN Mundaring 56.27 246 P P 14 47 26.2 -0.1**
baz=56,SNR=10
**MUN Mundaring 56.27 246 P P 14 47 26.6 +0.2**
**MORW Morawa 56.81 249 P P 14 47 29.7 -0.4**
baz=57,SNR=18
**MORW Morawa 56.81 249 P P 14 47 29.7 -0.4**
**MORW Morawa 56.81 249 P P 14 47 29.9 -0.3**
**GIRL Giralia 59.66 256 P P 14 47 50.0 +0.6**
baz=60,SNR=20
**GIRL Giralia 59.66 256 P P 14 47 50.1 +0.6**
GIRL IAmb IAmb 14 48 41.0
comp=Z,287nm,1.8s
**PLAI Plampang 60.44 272 P P 14 47 54.9 +0.3**
comp=Z,33nm,0.9s
**PLAI Plampang 60.44 272 P P 14 47 54.2 -0.4**
**JCJ Chichijima 60.94 322 P P 14 47 57.1 -0.5**
**JAGI Jajag, Banyuwa 63.91 271 P P 14 48 15.8 -1.3**
**PCJI Pacitan 66.76 271 P P 14 48 35.5 +0.6**
comp=Z,64nm,0.8s
**JHJ Hachijo jima 2 66.88 324 P P 14 48 35.0 -0.2**
comp=Z,150nm,0.5s,baz=106,slow=15,SNR=4.5
**UGM Wanagama 67.47 271 P P 14 48 38.5 -0.8**
UGM IAmb IAmb 14 48 39.6
comp=Z,94nm,1.4s
**QSPA South Pole Qui 67.66 180 P P 14 48 41.0 +1.4**
QSPA IAmb IAmb 14 48 42.0
comp=Z,60nm,0.9s
**JMM Marumori 70.06 328 P P 14 48 54.6 +0.4**
JMM IAmb IAmb 14 50 28.8
comp=Z,173nm,1.8s
**INU Inuyama 70.06 324 P P 14 48 54.2 -0.1**
INU IAmb IAmb 14 48 58.5
comp=Z,148nm,1.9s
**JGF Kuroka 70.07 325 P P 14 48 54.3 -0.1**
JGF IAmb IAmb 14 50 36.3
comp=Z,80nm,1.8s
**MJAR Matsushiro Arr 70.33 326 P P 14 48 55.6 -0.3**
comp=Z,18nm,0.8s,baz=159,slow=5.7,SNR=33
**MJAR Matsushiro Arr 70.33 326 P P 14 48 55.8 -0.1**
**MAJO Matsushiro 70.33 326 P P 14 48 55.7 -0.2**
**MAJO Matsushiro 70.33 326 P P 14 48 56.2 +0.3**
**MAT Matsushiro 70.33 326 P P 14 48 55.5 -0.4**
**MJB9 Matsu-Tunnel 70.34 326 P P 14 48 55.7 -0.3**
**LEM Lembang 70.54 271 P P 14 48 58.1 +0.2**
comp=Z,16nm,0.5s,baz=310,slow=22,SNR=5.2
**JSD Sado 71.45 327 P P 14 49 01.8 -0.5**
**JHS Saijyo 71.99 321 P P 14 49 06.0 +0.4**
JHS IAmb IAmb 14 49 07.4
comp=Z,79nm,1.2s
**JNU Nakatsue 72.01 319 P P 14 49 05.6 -0.2**
comp=Z,9.6nm,0.7s,baz=174,slow=14,SNR=2.9
**CGJI Cibinong 72.40 270 P P 14 49 07.9 -0.6**
comp=Z,15nm,0.5s
**NACB Ninganchiao 72.74 306 P P 14 49 09.1 -1.0**
NACB IAmb IAmb 14 49 10.8
comp=Z,70nm,1.2s
**YHNB Yeheng 73.18 306 P P 14 49 11.7 -1.1**
**JEW Eniwo 73.72 332 P P 14 49 15.5 +0.2**
**ADK Adak 74.06 3 P P 14 49 16.7 -0.2**
ADK IAmb IAmb 14 49 17.6
comp=Z,67nm,0.7s
**ASAJ Asahikawa 74.27 333 P P 14 49 20.4 +2.1**
comp=Z,30nm,0.8s,baz=214,slow=8.7,SNR=32
**SHEM Shemya Is, Ala 74.96 357 P P 14 49 21.6 -0.4**
comp=Z,60nm,0.9s,baz=144,slow=20,SNR=2.0
**NIKH Nikolski High 75.77 7 P P 14 49 25.5 -1.0**
**NIKH Nikolski High 75.77 7 P P 14 49 26.4 0.0**
baz=191
**YSS Yuzh-Sakhalins 76.53 335 P P 14 49 32.2 +1.4**
YSS IAmb IAmb 14 49 33.3
comp=Z,36nm,0.9s
**YSS Yuzh-Sakhalins 76.53 335 P P 14 49 32.7 +1.9**
**KSRS Korea Array 76.72 320 P P 14 49 33.2 +1.2**
comp=Z,7.6nm,0.8s,baz=136,slow=5.5,SNR=21
**KSAR Wonju Array Be 76.73 320 P P 14 49 32.7 +0.5**
**KS19 Wonju Array Si 76.78 320 P P 14 49 31.8 -0.6**
KS19 IAmb IAmb 14 50 41.4
comp=Z,103nm,1.8s
**UNV Unalaska Valle 76.92 9 P P 14 49 31.8 -1.0**
**UNV Unalaska Valle 76.92 9 P P 14 49 32.1 -0.7**
baz=194
**PET Petropavlovsk 77.24 347 P P 14 49 34.4 -0.1**
PET IAmb IAmb 14 49 34.9
comp=Z,22nm,0.5s
**PEA0B Petropavlovsk- 77.52 347 P P 14 49 36.4 +0.4**
PEA0B IAmb IAmb 14 49 37.3
comp=Z,28nm,0.7s
**PETK Petropavlovsk- 77.52 347 P P 14 49 35.7 -0.4**
comp=Z,20nm,0.6s,baz=124,slow=7.0,SNR=44
**BELA Belgrano 2 77.98 173 P P 14 49 38.4 +0.1**

**MAW Mawson 78.92 200 P P 14 49 43.9 +0.5**
comp=Z,11nm,0.8s,baz=351,slow=15,SNR=2.1
**MAW Mawson 78.92 200 P P 14 49 43.5 +0.1**
**USRK Ussuriysk Ar. 79.19 327 P P 14 49 46.1 +1.0**
comp=Z,14nm,0.8s,baz=160,slow=4.9,SNR=18
**USRK Ussuriysk Ar. 79.19 327 P P 14 49 45.7 +0.5**
**NJ2 Nanjing 79.22 311 ⇑P P 14 49 46.8 +1.2**
NJ2 pmax pmax
comp=Z,18nm,0.5s
**SDPT Sand Point 79.35 12 P P 14 49 44.7 -1.0**
**SDPT Sand Point 79.35 12 P P 14 49 45.7 0.0**
baz=199
**CHGN Chignik 80.64 12 P P 14 49 51.1 -1.3**
CHGN IAmb IAmb 14 49 54.2
comp=Z,68nm,1.2s
**CHGN Chignik 80.64 12 P P 14 49 52.5 +0.1**
baz=201
**MDJ Mudanjiang 80.69 326 P P 14 49 51.9 -1.0**
**MDJ Mudanjiang 80.69 326 P P 14 49 54.1 +1.1**
MDJ pmax pmax
comp=Z,25nm,0.9s
MDJ pmax pmax
comp=Z,110nm,3.6s
**MDJ Mudanjiang 80.69 326 P P 14 49 54.5 +1.5**
**KMPM Mount Pierce 81.69 40 P P 14 49 58.0 -0.3**
KMPM IAmb IAmb 14 50 01.6
comp=Z,92nm,1.1s
**ARVC Arvin 81.91 47 P P 14 50 01.1 +1.7**
baz=235
**VES Vestal, Richgr 82.14 46 P P 14 50 02.0 +1.4**
baz=235
**MURC Murrieta 82.18 49 P P 14 50 02.1 +1.2**
baz=237
**CN2 Changchun 82.33 324 eP P 14 50 00.8 -0.6**
CN2 pmax pmax
comp=Z,30nm,1.0s
**EDW2 Edwards Air Fo 82.33 47 P P 14 50 03.1 +1.4**
baz=236,SNR=9.3
**MONP2 Monument Peak 82.34 50 P P 14 50 03.3 +1.4**
baz=237,SNR=6.0
**O02D Mt. Diablo Mer 82.34 41 P P 14 50 04.0 +2.4**
baz=232,SNR=9.3
**IKP In-Ko-Pah, Jac 82.43 50 P P 14 50 04.0 +1.8**
baz=237
**ISA Isabella, Lake 82.45 47 P P 14 50 03.7 +1.4**
**ISA Isabella, Lake 82.45 47 P P 14 50 03.8 +1.6**
baz=236,SNR=18
**CMB Columbia Colle 82.55 44 P P 14 50 04.2 +1.5**
**YUH Yuha Desert 82.56 50 P P 14 50 02.6 -0.1**
**BNX BinXian 82.59 326 ⇑P P 14 50 02.9 +0.3**
BNX pmax pmax
comp=Z,42nm,0.8s
BNX pmax pmax
comp=Z,220nm,6.1s
**OHAK Old Harbor 82.60 15 P P 14 50 01.9 -0.5**
**OHAK Old Harbor 82.60 15 P P 14 50 02.7 +0.4**
baz=205
**SLBS Sierra La Lagu 82.61 61 P P 14 50 03.0 -0.4**
SLBS IAmb IAmb 14 50 06.5
comp=Z,66nm,1.4s
**PFO Pinyon Flats O 82.70 49 P P 14 50 04.9 +1.3**
baz=237
**SWSC Sam W. Stewart 82.81 50 P P 14 50 05.5 +1.5**
baz=238
**N02D Trinity Center 82.88 40 P P 14 50 06.7 +2.4**
baz=232,SNR=6.9
**LRMC Laurel Mtn Rad 82.88 47 P P 14 50 05.9 +1.4**
baz=236,SNR=9.7
**KLR Kul'dur 82.94 331 P P 14 50 05.8 +1.5**
comp=Z,4.6nm,0.8s,baz=102,slow=2.7,SNR=19
**M02C Callahan 83.04 40 P P 14 50 07.5 +2.4**
baz=232,SNR=5.5
**CWC Cottonwood Cre 83.15 46 P P 14 50 07.1 +1.3**
baz=236
**BELC Belle Mtn. Jos 83.23 49 P P 14 50 07.9 +1.6**
baz=237,SNR=12
**MPMC Manual Prospec 83.33 47 P P 14 50 08.0 +1.1**
baz=236,SNR=9.6
**YBH Yreka Blue Hor 83.34 40 P P 14 50 08.4 +1.9**
comp=Z,11nm,0.8s,baz=108,slow=0.5,SNR=16
**YBH Yreka Blue Hor 83.34 40 P P 14 50 07.8 +1.2**
**K02D Willamette Mer 83.38 38 P P 14 50 08.8 +2.1**
baz=231
**GSC Goldstone, Bar 83.38 48 P P 14 50 08.6 +1.6**
baz=237,SNR=9.4
**TIN Tinemaha, Big 83.39 46 P P 14 50 09.2 +2.2**
baz=236
**BC3 Big Chuckawall 83.43 50 P P 14 50 08.9 +1.6**
baz=238,SNR=6.1
**HEC Hector, Ludlow 83.44 48 P P 14 50 08.7 +1.4**
baz=237,SNR=16
**MPK Martis Peak 83.52 43 P P 14 50 07.3 -0.4**
MPK IAmb IAmb 14 50 10.4
comp=Z,40nm,1.2s
**GLA Glamis 83.56 50 P P 14 50 09.9 +2.1**
baz=238
**PNTR Pine Nut 83.67 43 P P 14 50 07.8 -0.7**
PNTR IAmb IAmb 14 50 11.0
comp=Z,30nm,0.9s
**HUMO Hull Mountain 83.73 39 P P 14 50 09.6 +1.1**
**L04D Klamath Falls 83.87 40 P P 14 50 10.4 +1.1**
baz=232,SNR=5.3
**M04C Macdoel 83.89 40 P P 14 50 11.2 +1.8**
baz=233
**GMRC Granite Mounta 83.89 49 P P 14 50 10.6 +1.1**
baz=238,SNR=6.7
**IRM Iron Mountain 83.91 49 P P 14 50 11.1 +1.6**
baz=238,SNR=16
**FURC Furnace Creek, 83.98 47 P P 14 50 11.1 +1.4**
baz=237
**TUQ Turquoise Moun 84.06 48 P P 14 50 11.4 +1.1**
baz=237,SNR=9.6
**NVAR Mina Array Bea 84.12 44 P P 14 50 11.9 +1.2**
comp=Z,5.7nm,0.8s,baz=227,slow=8.2,SNR=35
**NVAR Mina Array Bea 84.12 44 P P 14 50 10.9 +0.2**
**SYO Syowa Base 84.31 194 ⇓iP P 14 50 10.6 -0.2**
**SYO Syowa Base 84.31 194 ⇓epP pP 14 52 16.1 +0.7**
**214A Organ Pipe Nat 84.45 52 P P 14 50 14.1 +1.9**
baz=239
**J04D Umpqua Nationa 84.61 39 P P 14 50 14.5 +1.6**
baz=232
**TPNV Topopah Spring 84.66 47 P P 14 50 13.4 +0.1**
**TPNV Topopah Spring 84.66 47 P P 14 50 14.5 +1.2**
baz=237,SNR=10
**PDMCI Parker Dam,Lak 84.70 50 P P 14 50 14.9 +1.6**
baz=238,SNR=15
**MOD Modoc Plateau 84.88 41 P P 14 50 14.4 +0.2**
**MA2 Magadan 84.99 346 P P 14 50 13.8 -0.3**
comp=Z,16nm,0.9s,baz=140,slow=5.0,SNR=52
**MA2 Magadan 84.99 346 P P 14 50 13.7 -0.4**
MA2 IAmb IAmb 14 50 15.1
comp=Z,23nm,0.9s
**MA2 Magadan 84.99 346 P P 14 50 13.8 -0.3**
comp=Z,36nm,1.1s
**K05A Summer Lake 85.01 40 P P 14 50 15.8 +0.9**
K05A IAmb IAmb 14 50 17.8
comp=Z,42nm,1.2s
**HNS HongShan 85.04 314 ⇓P P 14 50 16.0 +1.2**
HNS pmax pmax
comp=Z,15nm,0.9s
**H04D Lebanon 85.04 37 P P 14 50 15.9 +1.1**
baz=232
**LYN LuoYang 85.06 310 eP P 14 50 16.6 +1.5**
LYN pmax pmax
comp=Z,10.0nm,0.9s
**O19K Port Alsworth 85.08 13 P P 14 50 14.3 -0.2**
O19K IAmb IAmb 14 50 15.2
comp=Z,70nm,1.1s
**O19K Port Alsworth 85.08 13 P P 14 50 14.3 -0.2**
baz=204,SNR=8.0
**J05D Fort Rock, OR 85.15 39 P P 14 50 17.3 +1.9**
baz=233,SNR=6.2
**BRLK Bradley Lake 85.44 15 P P 14 50 14.6 -1.8**
**GYA Guiyang 85.46 301 ⇑P P 14 50 18.3 +1.0**
GYA pmax pmax
comp=Z,6.0nm,0.7s
**BJI Beijing 85.54 317 P P 14 50 17.6 +0.4**
BJI pmax pmax
comp=Z,10.0nm,0.8s
**N19K Bonanza Creek 85.61 13 P P 14 50 16.6 -0.6**
baz=204
**R11A Troy Canyon, C 85.86 46 P P 14 50 19.7 +0.7**
baz=237
**TUC Tucson 86.11 53 P P 14 50 22.5 +2.2**
baz=240
**SNAA Sanae 86.15 179 P P 14 50 19.1 -0.6**

**SNAA Sanae** 86.15 179 P **P** 14 50 19.1 -0.6
**GAMB Gambell** 86.19 4 P **P** 14 50 19.0 -0.7
**GAMB Gambell** 86.19 4 P **P** 14 50 20.7 +1.0
baz=188
**WVOR Wild Horse Val** 86.19 41 P **P** 14 50 20.1 -0.4
WVOR IAmb IAmb 14 50 23.0
comp=Z,25nm,1.2s
**VNA3 Neumayer Olymp** 86.38 177 P **P** 14 50 20.3 -0.5
**M19K Big River Lodg** 86.63 12 P **P** 14 50 21.9 0.0
M19K IAmb IAmb 14 50 22.7
comp=Z,89nm,1.9s
**M19K Big River Lodg** 86.63 12 P **P** 14 50 22.1 +0.2
baz=204
**I07A Izee** 86.63 39 P **P** 14 50 23.1 +0.7
I07A IAmb IAmb 14 50 25.1
comp=Z,33nm,1.1s
**L19K White Mountain** 86.79 12 P **P** 14 50 23.3 +0.7
L19K IAmb IAmb 14 50 24.2
comp=Z,38nm,0.9s
**L19K White Mountain** 86.79 12 P **P** 14 50 23.2 +0.6
baz=204,SNR=10
**VNA2 Neumayer--Watz** 86.79 178 P **P** 14 50 22.5 -0.2
baz=177,slow=4.4
**RC01 Rabbit Creek A** 86.89 14 P **P** 14 50 22.3 -0.7
RC01 IAmb IAmb 14 50 24.2
comp=Z,53nm,1.2s
**RC01 Rabbit Creek A** 86.89 14 P **P** 14 50 23.2 +0.1
baz=208
**PWL Port Wells** 87.02 15 P **P** 14 50 23.5 -0.2
PWL IAmb IAmb 14 50 24.6
comp=Z,38nm,0.9s
**PWL Port Wells** 87.02 15 P **P** 14 50 23.8 +0.1
baz=210,SNR=5.1
**VNA1 Neumayer--Stat** 87.03 177 P **P** 14 50 22.9 -0.9
**L20K Farewell, AK** 87.25 12 P **P** 14 50 24.0 -0.8
baz=205
**TTA Tatalina** 87.27 11 P **P** 14 50 24.9 0.0
**TTA Tatalina** 87.27 11 P **P** 14 50 25.4 +0.4
baz=203,SNR=6.2
**WUAZ Wupatki** 87.27 50 P **P** 14 50 27.7 +2.0
baz=240
**GLI Glacier Island** 87.34 16 P **P** 14 50 25.1 -0.1
**GLI Glacier Island** 87.34 16 P **P** 14 50 25.3 0.0
baz=211,SNR=6.7
**XAN Xi'an** 87.34 308 P **P** 14 50 27.1 +1.2
XAN pP pP 14 52 26.9 -5.4
XAN pmax pmax
comp=Z,13nm,0.8s
**ELK Elko** 87.37 44 P **P** 14 50 26.9 +0.8
**M22K Willow** 87.38 14 P **P** 14 50 25.4 +0.1
baz=208
**EYAK Cordova Ski Ar** 87.40 16 P **P** 14 50 25.2 -0.2
EYAK IAmb IAmb 14 50 26.6
comp=Z,32nm,0.9s
**EYAK Cordova Ski Ar** 87.40 16 P **P** 14 50 25.9 +0.5
baz=212
**PMR Palmer** 87.47 14 P **P** 14 50 25.6 -0.1
PMR IAmb IAmb 14 50 26.3
comp=Z,16nm,0.7s
**PMR Palmer** 87.47 14 P **P** 14 50 25.8 +0.1
baz=209,SNR=5.1
**KNK Knik Glacier** 87.47 15 P **P** 14 50 25.8 0.0
KNK IAmb IAmb 14 50 27.0
comp=Z,29nm,0.8s
**KNK Knik Glacier** 87.47 15 P **P** 14 50 26.2 +0.3
baz=210,SNR=6.5
**ANM Nome** 87.51 7 P **P** 14 50 26.3 +0.4
baz=194
**HMT Hamilton** 87.62 17 P **P** 14 50 26.9 +0.3
**GHO Glory Hole Cre** 87.67 14 P **P** 14 50 27.0 +0.2
**B05A Bryant** 87.69 35 P **P** 14 50 28.6 +1.5
baz=232,SNR=5.0
**SEY Seymchan** 87.70 348 P **P** 14 50 27.3 +0.5
comp=Z,15nm,0.6s,baz=145,slow=5.4,SNR=81
**XLT XiLinHaoTe** 87.76 320 *e*P **P** 14 50 27.9 +0.2
XLT pmax pmax
comp=Z,6.0nm,0.7s
XLT pmax pmax
comp=Z,100nm,4.6s
**CUT Chulitna** 87.93 14 P **P** 14 50 27.6 -0.3
**CUT Chulitna** 87.93 14 P **P** 14 50 27.6 -0.3
baz=208,SNR=7.0
**K20K Telida** 88.02 12 P **P** 14 50 27.9 -0.4
K20K IAmb IAmb 14 50 29.0
comp=Z,14nm,0.8s
**K20K Telida** 88.02 12 P **P** 14 50 28.6 +0.2
baz=204,SNR=7.8
**BMRM Bremner River** 88.06 17 P **P** 14 50 28.5 -0.1
BMRM IAmb IAmb 14 50 29.9
comp=Z,27nm,0.8s
**BMRM Bremner River** 88.06 17 P **P** 14 50 28.4 -0.3
baz=213
**SCM Sheep Creek Mo** 88.10 15 P **P** 14 50 29.2 +0.4
**SCM Sheep Creek Mo** 88.10 15 P **P** 14 50 29.2 +0.4
baz=211,SNR=7.7
**KLU Klutina** 88.16 16 P **P** 14 50 29.7 +0.6
baz=212
**TNA Tin City** 88.24 5 P **P** 14 50 29.6 +0.3
baz=192
**YAH Yahtse** 88.35 18 P **P** 14 50 29.6 -0.6
YAH IAmb IAmb 14 50 32.1
comp=Z,39nm,0.9s
**CMAR Chiang Mai Arr** 88.43 291 P **P** 14 50 32.4 +1.1
comp=Z,2.9nm,1.0s,baz=128,slow=3.3,SNR=17
**121A Cookes Peak, D** 88.44 54 P **P** 14 50 33.4 +2.1
baz=242
**CAST Castle Rocks** 88.46 12 P **P** 14 50 29.2 -1.2
CAST IAmb IAmb 14 50 30.1
comp=Z,25nm,0.8s
**CAST Castle Rocks** 88.46 12 P **P** 14 50 29.2 -1.2
baz=206,SNR=16
**CHTO Chiang Mai** 88.58 291 P **P** 14 50 33.6 +1.6
comp=Z,5.2nm,1.2s
**VRDI Verde Repeater** 88.58 17 P **P** 14 50 31.0 -0.3
VRDI IAmb IAmb 14 50 33.3
comp=Z,34nm,1.3s
**N25K Chitina, Valde** 88.60 16 P **P** 14 50 31.4 +0.2
N25K IAmb IAmb 14 50 32.6
comp=Z,18nm,0.7s
**N25K Chitina, Valde** 88.60 16 P **P** 14 50 31.6 +0.4
baz=213,SNR=5.4
**M24K Tolsona, Glenn** 88.62 15 P **P** 14 50 32.1 +0.8
baz=212
**WAT6 Susitna Watana** 88.65 15 P **P** 14 50 31.4 -0.1
baz=210,SNR=6.1
**DUG Dugway, Tooele** 88.66 45 P **P** 14 50 32.9 +0.9
baz=239,SNR=5.7
**GLB Gilahina Butte** 88.67 17 P **P** 14 50 31.5 0.0
GLB IAmb IAmb 14 50 32.7
comp=Z,19nm,0.8s
**WAT1 Susitna Watana** 88.68 14 P **P** 14 50 31.3 -0.2
baz=210
**J20K Nowinta River** 88.75 11 P **P** 14 50 31.9 +0.2
**J20K Nowinta River** 88.75 11 P **P** 14 50 32.0 +0.2
baz=204
**KTH Kantishna Hill** 88.81 13 P **P** 14 50 31.4 -0.7
KTH IAmb IAmb 14 50 32.0
comp=Z,19nm,0.9s
**CHUM Lake Minchumin** 88.83 12 P **P** 14 50 31.3 -0.8
baz=206,SNR=5.6
**TRF Thorofare Moun** 88.85 13 P **P** 14 50 31.9 -0.6
TRF IAmb IAmb 14 50 32.7
comp=Z,29nm,0.8s
**TRF Thorofare Moun** 88.85 13 P **P** 14 50 31.8 -0.6
baz=208,SNR=11
**HHC Hu-ho-hao-te** 88.94 315 *e*P **P** 14 50 32.8 -0.5
HHC pmax pmax
comp=Z,10.0nm,0.9s
HHC pmax pmax
comp=Z,120nm,4.9s
**RND Reindeer** 89.12 14 P **P** 14 50 33.6 0.0
RND IAmb IAmb 14 50 34.4
comp=Z,32nm,0.9s
**B08A Colville Reser** 89.22 36 P **P** 14 50 34.4 +0.1
B08A IAmb IAmb 14 50 35.9
comp=Z,22nm,1.1s
**MCK McKinley** 89.39 14 P **P** 14 50 34.8 +0.1
MCK IAmb IAmb 14 50 36.8
comp=Z,12nm,0.8s
**MCK McKinley** 89.39 14 P **P** 14 50 34.5 -0.2
baz=209,SNR=6.4
**HLID Hailey** 89.40 42 P **P** 14 50 36.8 +1.3
baz=238,SNR=8.3
**PZH PanZhiHua** 89.43 299 P **P** 14 50 36.6 +0.7
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,140nm,4.9s
**PAX Paxson** 89.53 15 P **P** 14 50 34.9 -0.6
baz=212
**SRU San Rafael Swe** 89.64 47 P **P** 14 50 37.4 +0.7
SRU IAmb IAmb 14 50 38.9
comp=Z,32nm,0.9s
**M26K Nabesna, AK** 89.68 17 P **P** 14 50 36.7 +0.6
M26K IAmb IAmb 14 50 37.6
comp=Z,23nm,1.4s
**M26K Nabesna, AK** 89.68 17 P **P** 14 50 36.7 +0.6
baz=214
**PLCA Paso Flores** 89.74 134 P **P** 14 50 38.7 +1.5
comp=Z,1.9nm,0.8s,baz=287,slow=4.0,SNR=4.7
**PLCA Paso Flores** 89.74 134 P **P** 14 50 36.9 -0.3
PLCA IAmb IAmb 14 53 00.1
comp=Z,40nm,2.0s
**CD2 Chengdu** 89.75 304 P **P** 14 50 38.9 +1.7
CD2 pmax pmax
comp=Z,10.0nm,0.9s
**YUK3 Moose Creek** 89.86 18 P **P** 14 50 38.1 +0.9
baz=217,SNR=7.3
**MNTX Cornudas Mount** 89.88 56 P **P** 14 50 39.2 +1.4
baz=244
**M27K Edge Creek, AK** 89.94 17 P **P** 14 50 37.6 +0.1
M27K IAmb IAmb 14 50 38.7
comp=Z,11nm,0.9s
**M27K Edge Creek, AK** 89.94 17 P **P** 14 50 38.4 +0.9
baz=215
**I21K Tanana** 90.06 12 P **P** 14 50 37.8 0.0
baz=206
**L26K Log Cabin Wild** 90.11 16 P **P** 14 50 38.2 +0.2
baz=214
**MLY Manley** 90.17 12 P **P** 14 50 37.7 -0.6
baz=208
**TXAR Lajitas Array** 90.17 58 P **P** 14 50 41.0 +1.7
comp=Z,7.6nm,0.8s,baz=216,slow=5.5,SNR=64
**BVCY Beaver Creek** 90.27 17 P **P** 14 50 39.7 +0.9
baz=216,SNR=6.7
**H21K Melozitna Rive** 90.34 11 P **P** 14 50 39.2 +0.1
**H21K Melozitna Rive** 90.34 11 P **P** 14 50 39.1 +0.1
baz=206,SNR=5.7
**CCB Clear Creek Bu** 90.43 14 P **P** 14 50 38.7 -0.8
CCB IAmb IAmb 14 50 39.8
comp=Z,30nm,1.4s
**IMAR Indian Mountai** 90.47 11 P **P** 14 50 39.8 +0.2
**L27K Beaver Creek,** 90.53 17 P **P** 14 50 40.5 +0.5
baz=216
**ANMO Albuquerque** 90.54 52 P **P** 14 50 42.1 +1.1
baz=243
**TCOL CIGO, UAF Yank** 90.62 13 P **P** 14 50 40.0 -0.3
baz=210,SNR=5.7
**BILL Bilibino** 90.70 355 P **P** 14 50 40.6 0.0
BILL IAmb IAmb 14 50 42.0
comp=Z,12nm,0.9s
**SCRK Sand Creek** 90.74 15 P **P** 14 50 41.5 +0.4
baz=214
**IL31** 90.74 14 P **P** 14 50 40.7 -0.1
IL31 IAmb IAmb 14 50 41.5
comp=Z,23nm,1.4s
**ILAR Eielson Array** 90.74 14 P **P** 14 50 40.1 -0.8
comp=Z,2.0nm,0.6s,baz=214,slow=5.6,SNR=36
**ILAR Eielson Array** 90.74 14 P **P** 14 50 40.7 -0.2
**H23K Yukon River** 91.11 12 P **P** 14 50 42.4 -0.2
baz=209
**RDOG Red Dog Mine** 91.15 7 P **P** 14 50 43.5 +0.7
baz=196
**J26L Joseph Creek** 91.28 15 P **P** 14 50 44.3 +0.8
baz=214
**S22A 4UR Ranch, Cre** 91.55 50 P **P** 14 50 47.0 +1.3
baz=243
**M30M Minto, Yukon** 91.56 19 P **P** 14 50 45.5 +0.7
baz=220,SNR=6.5
**O20A White River Ci** 91.68 47 P **P** 14 50 47.1 +1.0
baz=242
**PRP Porcupine Dome** 91.68 14 P **P** 14 50 45.0 -0.4
PRP IAmb IAmb 14 53 00.1
comp=Z,32nm,2.0s
**PRP Porcupine Dome** 91.68 14 P **P** 14 50 45.9 +0.5
baz=212
**LZH Lanzhou** 91.98 308 *e*P **P** 14 50 48.1 +0.6
LZH pmax pmax
comp=Z,15nm,1.2s
**DAWY Dawson** 91.99 17 P **P** 14 50 46.8 +0.1
**DAWY Dawson** 91.99 17 P **P** 14 50 47.1 +0.3
baz=218,SNR=6.0
**BW06 Boulder Array** 92.06 44 P **P** 14 50 48.0 +0.2
baz=241
**PDAR Pinedale Array** 92.06 44 P **P** 14 50 48.4 +0.6
comp=Z,3.4nm,0.8s,baz=209,slow=2.8,SNR=24
**EGAK Eagle** 92.10 16 P **P** 14 50 47.1 0.0
baz=216
**BOZ Bozeman (W)** 92.15 41 P **P** 14 50 48.9 +0.8
baz=240
**H17A Grant Village** 92.20 42 P **P** 14 50 50.9 +2.4
baz=240
**COLD Coldfoot** 92.22 11 P **P** 14 50 48.3 +0.6
baz=208
**SDCO Great Sand Dun** 92.48 50 P **P** 14 50 50.7 +0.7
baz=244
**YAK Yakutsk** 92.97 339 P **P** 14 50 51.3 +0.1
comp=Z,4.6nm,0.6s,baz=340,slow=1.3,SNR=5.2
**T25A Trinidad** 93.00 51 P **P** 14 50 53.0 +0.8
baz=244
**MMPY Sheldon Lake,** 93.31 21 P **P** 14 50 53.7 +0.8
baz=225
**BMAR Burnt Mountain** 93.50 13 P **P** 14 50 54.2 +0.6
**TOLK Toolik Lake Re** 93.58 11 P **P** 14 50 54.2 +0.3
TOLK IAmb IAmb 14 52 36.7
comp=Z,30nm,1.9s
**EPYK Eagle Plains** 94.50 16 P **P** 14 50 58.2 +0.1
baz=220
**ULN Ulaanbaatar** 95.20 320 P **P** 14 51 01.1 -0.9
ULN IAmb IAmb 14 55 00.4
comp=Z,12nm,1.9s
**SONM Songino Array** 95.58 320 P **P** 14 51 03.2 -0.4
comp=Z,0.9nm,0.8s,baz=136,slow=4.3,SNR=4.9
SONM PP **PP** 14 55 08.6 +3.1
comp=Z,0.5nm,0.5s,baz=123,slow=5.3,SNR=5.2
**GTA Gaotai** 96.28 310 *e*P **P** 14 51 08.4 +1.5
GTA PP **PP** 14 55 11.1 +0.1
GTA pmax pmax
comp=Z,2.0nm,1.2s
**INK Inuvik** 96.77 16 P **P** 14 51 07.5 -0.7
comp=Z,1.7nm,0.7s,baz=191,slow=3.5,SNR=5.4
**INK Inuvik** 96.77 16 P **P** 14 51 06.3 -2.0
INK IAmb IAmb 14 52 54.9
comp=Z,28nm,2.0s
**YKA Yellowknife Ar** 99.29 25 P **Pdif** 14 51 19.7 +0.1
comp=Z,0.7nm,0.6s,baz=243,slow=4.5,SNR=10
YKA PP **PP** 14 55 28.9 -4.0
comp=Z,0.4nm,0.8s,baz=241,slow=7.2,SNR=4.3
**TIXI Tiksi** 99.97 346 P **Pdif** 14 51 21.3 -1.0
comp=Z,0.4nm,0.4s,baz=273,slow=23,SNR=3.7
**A36M Sachs Harbour** 101.36 15 P **Pdif** 14 51 29.0 +0.5
baz=231
**ZALV Zelenovo Beam** 110.42 321 PKiKP **PKiKP** 14 56 05.0 -1.2
comp=Z,0.7nm,0.4s,baz=71,slow=1.7,SNR=5.5
**MKAR Makanchi Array** 110.70 313 PKiKP **PKiKP** 14 56 06.1 -0.9
comp=Z,0.7nm,0.4s,baz=212,slow=0.5,SNR=17
**KURBB Kurchatov Arra** 113.75 317 PKiKP **PKiKP** 14 56 11.4 -1.2
comp=Z,1.8nm,0.6s,baz=92,slow=1.6,SNR=10
**KKAR Karatay Array** 118.47 308 PKPdf **PKPdf** 14 56 21.6 -0.4
**BRVK Borovoye** 118.98 319 PKPdf **PKPdf** 14 56 22.1 -0.6
**SPA0 Spitsbergen Ar** 123.60 356 *e*PKPdf **PKPdf** 14 56 30.9 0.0
**ARU Arti** 125.33 324 PKPdf **PKPdf** 14 56 34.8 +0.1
**GBN Guysborough** 125.92 49 PKPdf **PKPdf** 14 56 36.5 +0.3
**KIRV Kirov** 129.34 329 PKP **PKiKP** 14 56 42.9 -0.2
comp=Z,8.8nm,0.4s,baz=63,slow=3.3,SNR=4.9
KIRV SKPbc SKPab 14 59 09.3 0.0
comp=Z,6.5nm,0.6s,baz=47,slow=9.0,SNR=3.8
**ARA0 ARCESS Array S** 130.31 348 *e*PKPdf **PKPdf** 14 56 43.7 -0.2
**ARCES ARCESS Array B** 130.31 348 PKP **PKPdf** 14 56 43.4 -0.5
comp=Z,6.5nm,0.6s,baz=42,slow=1.2,SNR=27
ARCES SKPbc **SKPab** 14 59 13.5 +0.3
comp=Z,37nm,1.0s,baz=38,slow=6.1,SNR=18
**KTK1 Kautokeino** 131.18 349 *e*PKPdf **PKPdf** 14 56 45.8 +0.3
**TRO Tromso** 131.33 351 *e*PKPdf **PKPdf** 14 56 46.1 +0.4
**STEI Steigen** 133.42 352 *e*PKPdf **PKPdf** 14 56 50.2 +0.5
**TSUM Tsumeb** 134.95 205 SKPbc **SKPbc** 14 59 31.3 +1.1
comp=Z,4.7nm,0.8s,baz=127,slow=8.6,SNR=4.8
**KONS Konsvik** 135.05 352 *e*PKPdf **PKPdf** 14 56 51.7 -1.1
**KMBO Kilima Mbogo** 136.25 243 SKPbc **SKiKP** 14 59 37.1 -2.5
comp=Z,7.3nm,0.9s,baz=72,slow=2.2,SNR=10
**FINES FINESS Array B** 136.85 342 PKhKP PKPpre 14 56 43.2
comp=Z,0.9nm,0.4s,baz=72,slow=3.7,SNR=7.7
FINES PKP **PKPdf** 14 56 56.9 +0.6
comp=Z,3.2nm,0.5s,baz=64,slow=3.2,SNR=14
FINES SKPbc **SKPbc** 14 59 34.5 +0.3
comp=Z,12nm,0.7s,baz=46,slow=4.0,SNR=21
**NB2 NORSAR Subarra** 140.53 351 PKP **PKPdf** 14 56 56.0 -7.1
comp=Z,9.1nm,1.1s,baz=16,slow=3.2
**NB2 NORSAR Subarra** 140.53 351 PKPab **PKPdf** 14 56 56.0 -7.1
baz=16,slow=3.2
**NOA NORSAR Array B** 140.53 351 PKhKP PKPpre 14 56 56.3
comp=Z,0.3nm,0.3s,baz=54,slow=6.5,SNR=12
NOA PKP **PKiKP** 14 57 04.8 -1.1
comp=Z,9.3nm,1.3s,baz=14,slow=4.1,SNR=4.8
NOA SKPbc **SKPbc** 14 59 44.6 +0.2
comp=Z,4.0nm,0.8s,baz=15,slow=4.2,SNR=9.6
**NC602 NORSAR Array S** 140.77 351 *e*PKPdf **PKPdf** 14 56 58.2 -5.3
**SUE Sulen** 141.20 356 *e*PKPdf **PKPdf** 14 57 03.7 -0.5
**MNK Minsk** 141.45 333 *i* PKP **PKPdf** 14 57 06.2 +1.4
comp=E,1.0nm,0.6s
MNK *i* PKP **PKPdf** 14 57 06.2 +1.4
comp=N,16nm,1.1s
MNK *i* PKP **PKPdf** 14 57 06.2 +1.4
comp=Z,5.0nm,0.6s,baz=224
MNK *i* pPKP **pPKPdf** 14 59 25.0 +4.4
MNK *i* PP **sPKPdf** 15 00 17.3 +0.6
MNK *i* SKS **SKSdf** 15 03 19.7 +0.5
MNK *i* SKKS **SKKSdf** 15 12 41.8 -1.5
MNK *i* SS **SS** 15 18 07.7 +8.4
MNK *i* SSS SSS 15 23 36.6
MNK *i* LRM MLR 16 00 34.5
comp=E,90nm,19.7s
MNK *i* LRM MLR 16 00 34.5
comp=N,205nm,18.4s
MNK *i* LRM MLR 16 00 49.4
comp=Z,117nm,14.4s
**BER Bergen** 141.83 355 *e*Pdif **Pdif** 14 54 28.0 -0.8
**KONO Kongsberg** 142.09 352 *e*PKPdf **PKPdf** 14 57 02.1 -3.7
**ODD1 Odda** 142.18 354 *e*PKPdf **PKPdf** 14 57 03.0 -3.1
**PABE Paberze** 142.22 337 *e*P **PKPdf** 14 57 03.1 -3.1
**STRU Stroemstad** 142.45 350 *i* P **PKPdf** 14 57 03.1 -3.3
**BLS5 Blasjo** 142.68 354 *e*PKPdf **PKPdf** 14 57 04.6 -2.4
**AKASG Malin Array Be** 143.39 328 PKP PKPab 14 57 06.3 -0.7
comp=Z,25nm,0.5s,baz=44,slow=4.4,SNR=152
AKASG SKPbc **SKPbc** 14 59 51.9 +0.1
comp=Z,2.1nm,0.6s,baz=41,slow=2.9,SNR=9.6
**AKASG Malin Array Be** 143.39 328 PKPdf PKPab 14 57 06.2 -0.8
**AKBB Malin Array Si** 143.39 328 PKPdf PKPab 14 57 06.5 -0.4
**BORU Boraas** 143.49 348 *i* P PKPab 14 57 06.5 -0.6
**HOMB Homborsund** 143.57 352 *i* P PKPbc 14 57 07.7 +0.3
**HOMB Homborsund** 143.57 352 *e*PKPdf PKPbc 14 57 07.8 +0.4
**SUW Suwalki** 143.66 336 *e*PKP PKPbc 14 57 07.5 -0.3
**SUW Suwalki** 143.66 336 *e*P PKPbc 14 57 07.6 -0.2
**SNART Snartemo** 143.67 353 *i* P PKPbc 14 57 07.6 -0.1
**SNART Snartemo** 143.67 353 *e*PKPdf PKPab 14 57 08.2 +0.5
**ONAU Onsala** 143.87 348 *i* P PKPbc 14 57 07.6 -0.8
**BLEU Blekinge** 144.03 344 *i* P PKPbc 14 57 08.3 -0.6
**FABU Falkenberg** 144.09 348 *i* P PKPbc 14 57 08.3 -0.8
**DEL Delary** 144.34 346 *i* P PKPbc 14 57 09.0 -0.9
**DEL Delary** 144.34 346 *e*P PKPbc 14 57 08.6 -1.3
**BSD Bornholm Skovb** 145.33 344 *e*P **PKPdf** 14 57 11.8 +0.2
**SORM Soroca** 145.44 325 ⇓P **PKPbc** 14 57 12.8 -0.6
**BR131 Keskin Array S** 146.18 309 **PKPbc** 14 57 15.9 -0.1
**BRTR Keskin Array B** 146.18 309 PKPbc **PKPbc** 14 57 15.7 -0.4
comp=Z,3.9nm,0.6s,baz=130,slow=4.3,SNR=18
**BRTR Keskin Array B** 146.18 309 **PKPbc** 14 57 15.5 -0.5
**BEL Belsk** 146.27 336 *e*PKPbc **PKPbc** 14 57 16.2 +0.6
**GKP Gorka Klasztor** 146.30 341 *e*PKPbc **PKPbc** 14 57 16.0 +0.3
**VASR Vaslui** 146.65 323 ⇑P **PKPbc** 14 57 17.4 +0.6
**TLCR** 146.90 320 ⇑P **PKPbc** 14 57 17.6 +0.1
**VLDR Vladesti** 146.95 322 ⇑P **PKPbc** 14 57 18.4 +0.8
**CFR Carcaliu** 147.30 321 ⇑P **PKPbc** 14 57 19.0 +0.4
**TPGR Topolog** 147.31 320 ⇑P **PKPbc** 14 57 19.2 +0.5
**TESR Tescani** 147.35 324 ⇓P **PKPbc** 14 57 18.8 +0.1
**BUR08 Bucovina Ar. S** 147.39 327 **PKPbc** 14 57 19.7 +0.8
**BURAR Bucovina Array** 147.40 327 ⇑P **PKPbc** 14 57 19.8 +0.9
**BURAR Bucovina Array** 147.40 327 **PKiKP** 14 57 20.3 -0.2
**BSEG Bad Segeberg** 147.44 348 *e*PKPbc **PKPbc** 14 57 18.9 +0.3
baz=21,slow=2.4
**PANC Panciu** 147.46 323 ⇓P **PKiKP** 14 57 19.9 -0.6
**HARR Harsova** 147.70 320 ⇑P **PKPbc** 14 57 19.7 +0.1
**VRI Vrincioaia** 147.70 323 ⇑P **PKPbc** 14 57 19.5 -0.2
**TLBR Topalu** 147.71 320 ⇓P **PKPbc** 14 57 20.3 +0.6
**PLOR Plostina** 147.75 323 ⇑P **PKPbc** 14 57 19.1 -0.7
**OJC Ojcow** 147.94 335 *e*PKPbc **PKPbc** 14 57 20.4 +0.3
**OJC Ojcow** 147.94 335 **PKPbc** 14 57 20.4 +0.3
**RUE Ruedersdorf** 148.00 343 *e*PKPbc **PKPbc** 14 57 20.6 +0.5
baz=21,slow=2.4
**COVR Voineasa-Covas** 148.00 323 ⇑P **PKPbc** 14 57 20.0 -0.4
**OZUR** 148.08 324 ⇑P **PKPbc** 14 57 20.4 -0.2
**ISR Istrita** 148.25 322 ⇑P **PKPbc** 14 57 21.2 +0.1
**CRVS Cervenica-Dubn** 148.26 332 *e*PKP **PKPbc** 14 57 21.5 +0.5
CRVS *e* 14 57 26.8
**TRPA Tarpa** 148.34 330 ⇓P **PKPbc** 14 57 21.1 -0.1
**NIE Niedzica** 148.37 334 *e*PKPbc **PKiKP** 14 57 22.9 +0.5
**MLR Muntele Rosu** 148.37 323 ⇑P **PKPbc** 14 57 21.1 -0.3
**DOPR Dopca** 148.37 324 ⇑P **PKPbc** 14 57 21.8 +0.4
**KSP Ksiaz** 148.69 339 *e*PKPbc **PKiKP** 14 57 22.7 -0.3
**FLTG Flechtingen** 148.76 346 *e*PKPbc **PKPbc** 14 57 22.2 +0.2
baz=21,slow=2.4
**RETH Rethem/Aller,** 148.76 348 *e*PKPbc **PKPbc** 14 57 22.2 +0.2
baz=21,slow=2.4
**CJR Cluj-Napoca** 148.82 327 ⇑P **PKiKP** 14 57 23.2 -0.3
**VOIR** 148.89 324 ⇓P **PKPbc** 14 57 22.7 0.0
**OSTC Ostas** 148.96 339 ⇑ *e*PKP **PKiKP** 14 57 23.4 -0.1
**CHVC Chvalec** 148.98 339 ⇑ *e*PKP **PKiKP** 14 57 23.3 -0.3
**UPC Upice** 149.07 339 ⇑ *e*PKP **PKiKP** 14 57 23.5 -0.2
**DPC Dobruska-Polom** 149.10 339 ⇑ *e*PKP **PKiKP** 14 57 23.7 -0.2
**MORC Moravsky Berou** 149.15 337 ⇓P **PKPbc** 14 57 23.2 0.0
**MORC Moravsky Berou** 149.15 337 *e*PKP **PKPbc** 14 57 23.5 +0.4
MORC *e* 14 57 30.7
**ARR Arges** 149.16 324 ⇑P **PKPbc** 14 57 23.7 +0.3
**KRLC Kraliky** 149.17 338 ⇑ *e*PKP **PKiKP** 14 57 23.7 -0.3
KRLC *e*PKPAB **PKPab** 14 57 30.5 +0.4
**DRGR** 149.21 328 ⇑P **PKPbc** 14 57 23.4 0.0
**CLL Collm** 149.26 343 ⇓ *i* PKPbc **PKPbc** 14 57 23.7 +0.5
comp=Z,54nm,1.1s
CLL *i* PKPab **PKPab** 14 57 30.4 0.0
comp=Z,17nm,0.7s
**CLL Collm** 149.26 343 **PKPbc** 14 57 23.8 +0.5
**CLL Collm** 149.26 343 *e*PKPbc **PKPbc** 14 57 23.6 +0.3
baz=21,slow=2.4
**BRG Berggiesshubel** 149.39 342 *i* PKP **PKiKP** 14 57 24.1 -0.3
BRG Amp 14 57 25.0
comp=Z,38nm,1.1s
BRG *ex* x 14 57 30.6
BRG Amp 14 57 32.0
comp=Z,23nm,1.5s
BRG *ex* x 14 59 42.8
BRG Amp 14 59 51.4
comp=Z,14nm,1.6s
**BRG Berggiesshubel** 149.39 342 *e*PKPbc **PKiKP** 14 57 24.2 -0.1
baz=21,slow=2.4
**CLZ Clausthal** 149.41 346 *e*PKPbc **PKiKP** 14 57 24.2 -0.2
baz=21,slow=2.4
**IBBN Ibbenburen** 149.46 350 *e*PKPbc **PKPbc** 14 57 23.9 +0.3
baz=21,slow=2.4
**FBE Freiberg** 149.51 342 *e*PKPbc **PKiKP** 14 57 24.6 0.0
baz=21,slow=2.4
**NEUB Neuenburg** 149.67 344 *e*PKPbc **PKPbc** 14 57 24.5 +0.3
baz=21,slow=2.4
**VYHS Vyhne** 149.69 334 *e*PKP **PKPbc** 14 57 24.7 +0.3
VYHS *e* 14 57 33.0
**PSZ Piszkesteto** 149.69 332 ⇓P **PKPbc** 14 57 24.0 -0.5
**GTTG Gottingen** 149.77 347 *e*PKPbc **PKiKP** 14 57 24.9 -0.2
baz=21,slow=2.4
**JAVC Velka Javorina** 149.86 336 *e*PKP **PKiKP** 14 57 26.3 +0.8
JAVC *e* 14 57 34.7
**VRAC Vranov** 149.88 337 ⇓P **PKiKP** 14 57 25.3 -0.2
**VRAC Vranov** 149.88 337 *e*PKP **PKPbc** 14 57 25.2 +0.3
VRAC *e* 14 57 33.9
**PRU Pruhonice** 149.99 340 ⇑ *e*PKP **PKPbc** 14 57 25.3 +0.3
**SIRR Siria** 150.10 328 ⇓P **PKiKP** 14 57 25.9 -0.2
**GZR Gura Zlata** 150.14 326 ⇓P **PKPbc** 14 57 25.1 -0.6
**KRUC Moravsky** 150.16 337 *e*PKP **PKPbc** 14 57 25.7 +0.2
KRUC *e* 14 57 34.9
**TANN Tannenbergstha** 150.22 343 *e*PKPbc **PKPbc** 14 57 25.9 +0.3
baz=21,slow=2.4
**PLN Plauen** 150.24 343 *e*PKPbc **PKPbc** 14 57 25.9 +0.3
baz=21,slow=2.4
**WERN Wernitzgruen** 150.36 343 *e*PKPbc **PKPbc** 14 57 26.0 +0.1
baz=21,slow=2.4
**NKC Novy Kostel** 150.39 343 ⇑ *e*PKP **PKPbc** 14 57 26.3 +0.3
**SRE Strehaia** 150.39 324 ⇑P **PKPbc** 14 57 25.2 -1.0
**MODS Modra-Piesok** 150.40 335 *e*PKP **PKiKP** 14 57 29.9 +3.3
MODS *e* 14 57 39.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KASTN | Kahler Asten | 150.41 | 348 | *e*PKPbc | PKiKP | 14 57 26.5 | 0.0 | |
| | baz=21,slow=2.4 | | | | | | | |
| HERR | Herculane | 150.67 | 325 | ⇑P | PKPbc | 14 57 26.4 | -0.4 | |
| MANZ | Manzenberg | 150.70 | 343 | *e*PKPbc | PKiKP | 14 57 27.2 | 0.0 | |
| | baz=21,slow=2.4 | | | | | | | |
| ROTZ | Rotzenmuhle | 150.88 | 343 | *e*PKPbc | PKPbc | 14 57 27.2 | +0.1 | |
| | baz=21,slow=2.4 | | | | | | | |
| KHC | Kasperske Hory | 151.04 | 340 | ⇑ePKP | PKiKP | 14 57 27.8 | -0.1 | |
| KHC | | | | ePKPAB | PKPab | 14 57 38.6 | +0.6 | |
| KHC | Kasperske Hory | 151.04 | 340 | | PKiKP | 14 57 27.9 | -0.1 | |
| CKRC | Cesky Krumlov | 151.08 | 339 | ⇑ePKP | PKiKP | 14 57 27.9 | -0.1 | |
| GEC2 | GERESS Array S | 151.26 | 340 | ePKPbc | PKiKP | 14 57 28.2 | 0.0 | |
| | baz=21,slow=2.4 | | | | | | | |
| GERES | GERESS Array B | 151.26 | 340 | PKPbc | PKPbc | 14 57 28.1 | 0.0 | |
| | comp=Z,6.7nm,0.7s,baz=29,slow=3.0,SNR=32 | | | | | | | |
| GERES | GERESS Array B | 151.26 | 340 | | PKPbc | 14 57 28.3 | +0.1 | |
| CONA | Conrad Observa | 151.31 | 337 | *i* P | PKiKP | 14 57 28.6 | +0.1 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| CONA | | | | *i* P | PKPab | 14 57 40.3 | +1.2 | |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| TNS | Taunus Mts | 151.34 | 348 | ePKPbc | PKPbc | 14 57 28.4 | +0.2 | |
| | baz=21,slow=2.4 | | | | | | | |
| MEM | Membach | 151.38 | 351 | *d*PKPbc | PKPbc | 14 57 27.9 | -0.3 | |
| BTNL | Ternell | 151.38 | 351 | *d*PKiKP | PKiKP | 14 57 28.6 | 0.0 | |
| BTNL | | | | *d*PKPab | PKPab | 14 57 39.2 | -0.1 | |
| BSTI | Sart Tilman | 151.46 | 352 | *d*PKiKP | PKPbc | 14 57 28.1 | -0.3 | |
| BHOU | Houvegnez | 151.63 | 351 | *d*PKiKP | PKiKP | 14 57 29.1 | +0.1 | |
| BHOU | | | | *d*PKPab | PKPab | 14 57 40.4 | 0.0 | |
| BCLA | Clavier | 151.66 | 352 | *d*PKPab | PKPbc | 14 57 40.1 | -0.3 | |
| BGES | Gesves | 151.72 | 352 | *d*PKiKP | PKPbc | 14 57 28.8 | -0.2 | |
| BGES | | | | *d*PKPab | PKPab | 14 57 40.5 | -0.2 | |
| BMRD | Maredsous | 151.84 | 353 | *d*PKiKP | PKPbc | 14 57 29.2 | 0.0 | |
| BMRD | | | | *d*PKPab | PKPab | 14 57 40.7 | -0.5 | |
| RCHB | Rochefort | 151.93 | 352 | *d*PKiKP | PKPbc | 14 57 29.2 | -0.2 | |
| RCHB | | | | *d*PKPab | PKPab | 14 57 40.3 | -1.2 | |
| MOA | Molln | 151.94 | 338 | *i* P | PKPbc | 14 57 29.3 | -0.3 | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| ARSA | Arzberg | 152.00 | 336 | *i* P | PKPab | 14 57 40.8 | -1.2 | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| DOU | Dourbes | 152.06 | 353 | *d*PKiKP | PKiKP | 14 57 30.2 | +0.3 | |
| DOU | | | | *d*PKPab | PKPab | 14 57 42.0 | -0.1 | |
| WLF | Walferdange | 152.28 | 350 | *d*PKiKP | PKiKP | 14 57 30.9 | +0.5 | |
| WLF | | | | *d*PKPab | PKPab | 14 57 44.1 | +1.0 | |
| SOKA | Soboth | 152.66 | 336 | *i* P | PKPbc | 14 57 30.8 | -0.4 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| SOKA | | | | *i* P | PKPab | 14 57 45.2 | +0.3 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| KBA | Koelnbreinsper | 152.92 | 339 | *e*P | PKPbc | 14 57 31.8 | -0.1 | |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| OBKA | Obir | 152.98 | 336 | *i* P | PKPab | 14 57 46.4 | 0.0 | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| GCIS | Gornji Cirnik | 153.10 | 334 | *i* PKPbc | PKPbc | 14 57 32.0 | -0.1 | |
| CRES | Cresnjev | 153.20 | 334 | *e*PKPbc | PKPbc | 14 57 32.1 | -0.2 | |
| MYKA | Terra Mystica | 153.21 | 338 | *i* P | PKPbc | 14 57 31.8 | -0.6 | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| MYKA | | | | *e*P | PKPab | 14 57 46.9 | -0.3 | |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| WATA | Walderalm | 153.25 | 341 | *i* P | PKPbc | 14 57 32.2 | -0.4 | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| WATA | | | | *i* P | PKPab | 14 57 48.1 | +0.5 | |
| | comp=Z,16nm,1.9s | | | | | | | |
| WTTA | Wattenberg | 153.30 | 341 | *e*P | PKPbc | 14 57 32.8 | +0.1 | |
| | comp=Z,7.1nm,0.5s,SNR=8.1 | | | | | | | |
| WTTA | | | | *i* P | PKPab | 14 57 48.5 | +0.7 | |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| RETA | Reutte | 153.35 | 343 | *i* P | PKPbc | 14 57 32.6 | -0.1 | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| RETA | | | | *i* P | PKPab | 14 57 48.4 | +0.6 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| MOTA | Moosalm | 153.38 | 342 | *i* P | PKiKP | 14 57 33.0 | +0.1 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| MOTA | | | | *i* P | PKPab | 14 57 48.5 | +0.4 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| ABTA | Abfaltersbach | 153.49 | 339 | *i* P | PKPbc | 14 57 32.6 | -0.5 | |
| | comp=Z,5.6nm,0.6s,SNR=5.2 | | | | | | | |
| ABTA | | | | *e*P | PKPab | 14 57 48.9 | +0.5 | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| DAVA | Damuels | 153.77 | 344 | *i* P | PKPab | 14 57 50.3 | +0.6 | |
| | comp=Z,9.9nm,0.6s | | | | | | | |
| FETA | Feichten | 153.78 | 342 | *e*P | PKiKP | 14 57 34.0 | +0.2 | |
| | comp=Z,9.5nm,1.2s | | | | | | | |
| FETA | | | | *e*P | PKPab | 14 57 50.8 | +0.9 | |
| | comp=Z,16nm,1.5s | | | | | | | |
| ESDC | Sonseca Array | 162.57 | 9 | PKPab | PKPab | 14 58 28.1 | +0.1 | |
| | comp=Z,3.5nm,0.9s,baz=340,slow=4.4,SNR=11 | | | | | | | |
| TORD | Torodi Ar. Bea | 170.51 | 194 | PKP | PKPdf | 14 57 41.7 | -0.7 | |
| | comp=Z,1.4nm,0.9s,baz=317,slow=2.2,SNR=5.1 | | | | | | | |
| TORD | | | | PKPab | PKPab | 14 59 03.9 | +0.2 | |
| | comp=Z,5.3nm,0.9s,baz=164,slow=3.9,SNR=16 | | | | | | | |

**IDC 20 14:49:54.0±7.6, 19.76S×178.35W, h641km±87km, mb2.6/5, mb1 2.9/5, mb1mx2.7/36, mbtmp3.6/5, Error ellipse: s-maj=105.0km s-min=32.2km az=147.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ASAR | Alice Springs | 44.38 | 256 | P | P | 14 57 10.8 | +0.5 |
| | 0.5nm,0.6s,baz=89,slow=8.6,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 14 58 39.0 | -0.6 |
| | 0.2nm,0.5s,baz=96,slow=4.4,SNR=2.3 | | | | | | |
| WRA | Warramunga Arr | 44.38 | 261 | P | P | 14 57 09.4 | -1.0 |
| | 0.1nm,0.5s,baz=94,slow=7.1,SNR=1.7 | | | | | | |
| WRA | | | | PcP | PcP | 14 58 38.9 | -0.7 |
| | 0.2nm,0.7s,baz=91,slow=4.0,SNR=1.6 | | | | | | |
| NVAR | Mina Array Bea | 80.72 | 44 | P | P | 15 01 03.2 | +0.5 |
| | 0.4nm,0.6s,baz=224,slow=9.8,SNR=4.4 | | | | | | |
| ILAR | Eielson Array | 87.67 | 13 | P | P | 15 01 34.4 | -1.2 |
| | 0.3nm,0.8s,baz=228,slow=5.3,SNR=2.0 | | | | | | |
| SONM | Songino Array | 94.99 | 319 | P | P | 15 02 11.6 | +1.8 |
| | 0.2nm,0.3s,baz=108,slow=4.7,SNR=2.2 | | | | | | |

*BGR **20** 14:54:13.6±0.0, 3.33N×32.51W, h33km, mb4.9*
*IDC **20** 14:54:16.8±0.4, 4.61N×32.62W, h0km, mb4.4/28, mb1 4.5/29, mb1mx4.4/41, mbtmp4.4/29, ML4.0/1, MS4.1/12, Ms1 4.1/12, ms1mx3.6/80, Error ellipse: s-maj=14.9km s-min=11.4km az=150.0*
*NEIC **20** 14:54:19.4±2.0, 4.8N±0.1×32.6W±0.1, h10km±1km, mb4.9/45, Error ellipse: s-maj=21.1km s-min=16.4km az=159.0*
*GCMT **20** 14:54:21.4±0.3, 4.87N±0.04×32.62W±0.02, h21km±1km, MW4.9/76, Moment Tensor Solution. s22,c22; s76,c100; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-2.83±.22; $M_{\theta\theta}$-0.07±.14; $M_{\phi\phi}$2.90±.14; $M_{r\theta}$1.17±.32; $M_{\theta\phi}$0.20±.09; $M_{\phi r}$0.57±.20; Best double couple: $M_0$3.14300×$10^{16}$ NP1:$\phi_s$346.00000°, δ42.00000°, λ-119.00000°. NP2: $\phi_s$203.00000°, δ55.00000°, λ-67.00000°. Principal axes: T 2.9910, Plg7.0000°, Azm276.0000°; N 0.3030, Plg19.0000°, Azm9.0000°; P -3.2940, Plg70.0000°, Azm167.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 14:54:18.9±0.3, 4.78N±0.07×32.62W±0.06, h11km, n177, σ1.9/19/167, mb4.7/61, MS4.2/13, 14C-6D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NBMO | Morrinhos-CE | 10.93 | 223 | *e*P | Pn | 14 56 52.3 | -3.1 |
| SACV | Santiago Islan | 13.46 | 41 | Pn | Pn | 14 57 28.0 | -2.1 |
| NBLA | Lagarto - SE | 16.49 | 198 | *e*P | Pn | 14 58 12.2 | +1.9 |
| NBPN | Ponto Novo - B | 17.26 | 206 | *e*P | Pn | 14 58 21.3 | +1.3 |
| MDP | Montagnes des | 19.95 | 272 | P | P | 14 58 50.4 | -0.8 |
| | 0.4nm,0.3s,baz=236,slow=1.1,SNR=2.8 | | | | | | |
| MCPB | Macapa, AP | 20.07 | 256 | *e*P | P | 14 58 52.5 | 0.0 |
| SMTB | Santa Maria do | 20.16 | 228 | *e*P | P | 14 58 52.4 | -1.0 |
| PRPB | Parauapebas | 20.32 | 238 | *e*P | P | 14 58 54.5 | -0.7 |
| NBIT | Itapeh - BA | 20.71 | 199 | *e*P | Pn | 14 59 02.3 | +0.5 |
| CMC01 | Camacan, BA | 21.14 | 199 | *e*P | P | 14 59 06.6 | +2.5 |
| H10N3 | ASCENSION HYDR | 22.00 | 125 | T | T | 15 21 50.9 | |
| | baz=304,slow=75,SNR=70 | | | | | | |
| H10N2 | ASCENSION HYDR | 22.00 | 125 | T | T | 15 21 51.1 | |
| | baz=304,slow=75,SNR=40 | | | | | | |
| H10N1 | ASCENSION HYDR | 22.02 | 125 | T | T | 15 21 52.7 | |
| | baz=304,slow=75,SNR=72 | | | | | | |
| GUA01 | Guaratinga, BA | 22.38 | 198 | *e*P | P | 14 59 19.8 | +2.4 |
| MALB | Monte Alegre | 22.61 | 254 | *e*P | P | 14 59 20.0 | +0.1 |
| JANB | Januaria | 22.86 | 210 | *e*P | P | 14 59 21.9 | -0.6 |
| PEXB | Peixe | 22.90 | 223 | *e*P | P | 14 59 23.1 | +0.2 |
| ITTB | Itaituba | 24.81 | 249 | *e*P | P | 14 59 40.9 | -0.5 |
| SJMB | Sao Joao De Ma | 24.81 | 200 | *e*P | P | 14 59 43.9 | +2.7 |
| SNDB | Serra Nova Dou | 24.93 | 228 | *e*P | P | 14 59 44.1 | +1.7 |
| BDFB | Brasilia | 25.37 | 217 | P | P | 14 59 44.9 | -1.6 |
| | 1.6nm,0.5s,baz=11,slow=18,SNR=1.9 | | | | | | |
| DIAM | Diamantina, MG | 25.39 | 205 | *e*P | P | 14 59 46.6 | +0.1 |
| NPGB | Novo Progresso | 25.55 | 243 | *e*P | P | 14 59 47.1 | -0.9 |
| IPMB | Ipameri, GO | 27.35 | 214 | *e*P | P | 15 00 06.6 | +2.3 |
| DBIC | Dimbokro | 27.69 | 85 | P | P | 15 00 06.0 | -1.3 |
| | 3.9nm,0.8s,baz=277,slow=12,SNR=3.3 | | | | | | |
| DBIC | Dimbokro | 27.69 | 85 | P | P | 15 00 06.0 | -1.3 |
| DBIC | Dimbokro | 27.69 | 85 | IAmb | IAmb | 15 00 06.6 | |
| | comp=Z,16nm,1.3s | | | | | | |
| CLDB | Colider | 27.82 | 236 | *e*P | P | 15 00 10.4 | +1.9 |
| PTGA | Pitinga | 27.86 | 259 | P | P | 15 00 07.8 | -1.1 |
| | comp=Z,1.2nm,0.4s,baz=342,slow=22,SNR=1.4 | | | | | | |
| TOSP | Speyside | 28.37 | 285 | P | P | 15 00 13.6 | +0.2 |
| H05S1 | Guadeloupe/Mar | 29.39 | 291 | T | T | 15 31 18.6 | |
| | SNR=26 | | | | | | |
| H05N1 | Guadeloupe/Mar | 30.16 | 295 | T | T | 15 32 05.6 | |
| TORD | Torodi Ar. Bea | 34.87 | 74 | P | P | 15 01 10.1 | -0.5 |
| | comp=Z,6.7nm,0.8s,baz=266,slow=8.9,SNR=21 | | | | | | |
| TORD | Torodi Ar. Bea | 34.87 | 74 | P | P | 15 01 09.3 | -1.3 |
| SIV | San Ignacio | 34.91 | 233 | P | P | 15 01 11.1 | +0.2 |
| | comp=Z,2.2nm,0.8s,baz=93,slow=8.0,SNR=7.2 | | | | | | |
| SJG | San Juan | 35.35 | 295 | LR | LR | 15 14 20.0 | |
| | comp=Z,293nm,19.9s,baz=111,slow=34 | | | | | | |
| ETMB | Extrema | 36.47 | 247 | *e*P | P | 15 01 24.8 | +0.4 |
| SDV | Santo Domingo | 37.95 | 278 | P | P | 15 01 37.8 | +0.6 |
| | comp=Z,1.6nm,0.3s,baz=330,slow=2.6,SNR=3.7 | | | | | | |
| SDV | | | | LR | LR | 15 17 30.9 | |
| | comp=Z,139nm,19.7s,baz=96,slow=37 | | | | | | |
| SDV | Santo Domingo | 37.95 | 278 | *e*P | P | 15 01 38.4 | +1.3 |
| MDT | Midelt | 38.23 | 40 | P | P | 15 01 40.1 | +0.9 |
| | comp=Z,4.9nm,0.9s,baz=232,slow=3.9,SNR=3.8 | | | | | | |
| CPUP | Villa Florida | 39.10 | 216 | P | P | 15 01 46.2 | -0.2 |
| | comp=Z,3.3nm,1.0s,baz=24,slow=7.9,SNR=3.2 | | | | | | |
| CPUP | Villa Florida | 39.10 | 216 | P | P | 15 01 48.3 | +1.9 |
| CPUP | Villa Florida | 39.10 | 216 | *e*P | P | 15 01 47.1 | +0.7 |
| LPAZ | La Paz | 40.88 | 238 | P | P | 15 02 01.7 | -0.4 |
| | comp=Z,1.5nm,0.8s,baz=63,slow=5.6,SNR=2.4 | | | | | | |
| LPAZ | La Paz | 40.88 | 238 | P | P | 15 02 03.7 | +1.6 |
| LPAZ | La Paz | 40.88 | 238 | *e*P | P | 15 02 02.4 | +0.2 |
| PLTB | Piedras Altas | 41.47 | 207 | *e*P | P | 15 02 06.6 | +0.6 |
| ROSC | El Rosal | 41.55 | 272 | LR | LR | 15 20 39.6 | |
| | comp=Z,328nm,19.2s,baz=76,slow=38 | | | | | | |
| CZSB | Cruzeiro do Su | 41.88 | 253 | *e*P | P | 15 02 10.7 | +1.1 |
| ESDC | Sonseca Array | 43.32 | 33 | P | P | 15 02 22.4 | +1.4 |
| | comp=Z,3.6nm,0.8s,baz=232,slow=8.5,SNR=17 | | | | | | |
| H09W1 | TRISTAN DA CUN | 45.76 | 157 | T | T | 15 51 30.3 | |
| | SNR=6.6 | | | | | | |
| KEST | Kesra | 49.39 | 46 | P | P | 15 03 10.6 | +1.7 |
| | comp=Z,6.7nm,1.0s,baz=237,slow=5.5,SNR=4.0 | | | | | | |
| KEST | Kesra | 49.39 | 46 | P | P | 15 03 09.9 | +1.1 |
| KEST | | | | IAmb | IAmb | 15 03 17.6 | |
| | comp=Z,24nm,1.2s | | | | | | |
| D62A | Allapoint, All | 52.53 | 329 | P | P | 15 03 33.0 | +0.8 |
| D62A | | | | IAmb | IAmb | 15 03 41.7 | |
| | comp=Z,28nm,1.4s | | | | | | |
| BNI | Bardonecchia | 52.77 | 34 | P | P | 15 03 34.0 | -0.2 |
| BNI | | | | IAmb | IAmb | 15 03 37.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| TSUM | Tsumeb | 54.85 | 117 | P | P | 15 03 49.3 | -0.5 |
| | comp=Z,4.3nm,0.8s,baz=100,slow=19,SNR=7.8 | | | | | | |
| TSUM | | | | LR | LR | 15 21 48.8 | |
| | comp=Z,239nm,20.9s,baz=330,slow=30 | | | | | | |
| TSUM | Tsumeb | 54.85 | 117 | P | P | 15 03 49.0 | -0.9 |
| ECH | Echery | 54.99 | 31 | P | P | 15 03 50.7 | +0.4 |
| ECH | | | | IAmb | IAmb | 15 03 53.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| DAVA | Damuels | 55.89 | 34 | *e*P | P | 15 03 57.6 | +0.7 |
| | comp=Z,9.2nm,1.1s | | | | | | |
| TKL | Tuckaleechee C | 56.15 | 310 | LR | LR | 15 24 30.1 | |
| | comp=Z,152nm,20.7s,baz=108,slow=32 | | | | | | |
| FETA | Feichten | 56.21 | 34 | *e*P | P | 15 03 59.5 | +0.2 |
| | comp=Z,10.0nm,1.1s | | | | | | |
| MOTA | Moosalm | 56.61 | 34 | *e*P | P | 15 04 01.9 | -0.1 |
| | comp=Z,8.3nm,1.2s | | | | | | |
| WTTA | Wattenberg | 56.86 | 35 | *e*P | P | 15 04 04.1 | +0.3 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| STAL | STALIGIAL | 56.93 | 36 | P | P | 15 04 04.8 | +0.5 |
| STAL | | | | IAmb | IAmb | 15 04 06.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| SCHQ | Schefferville | 57.02 | 337 | P | P | 15 04 05.5 | +0.8 |
| | comp=Z,7.6nm,0.7s,baz=140,slow=5.8,SNR=16 | | | | | | |
| SCHQ | Schefferville | 57.02 | 337 | P | P | 15 04 05.4 | +0.8 |
| SCHQ | | | | IAmb | IAmb | 15 04 13.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| ABTA | Abfaltersbach | 57.08 | 35 | *i* P | P | 15 04 06.2 | +0.9 |
| | comp=Z,18nm,1.3s | | | | | | |
| MYKA | Terra Mystica | 57.67 | 36 | *i* P | P | 15 04 10.8 | +1.3 |
| | comp=Z,10nm,1.2s | | | | | | |
| GRF | Grafenberg Arr | 58.02 | 32 | *e*P | P | 15 04 12.2 | +0.5 |
| | comp=Z,14nm,1.2s,baz=228,slow=6.7 | | | | | | |
| OBKA | Obir | 58.15 | 37 | *e*P | P | 15 04 13.8 | +0.9 |
| | comp=Z,9.4nm,1.0s | | | | | | |
| SOKA | Soboth | 58.52 | 37 | *e*P | P | 15 04 16.5 | +1.0 |
| | comp=Z,11nm,1.0s | | | | | | |
| MOA | Molln | 58.67 | 35 | *e*P | P | 15 04 17.8 | +1.4 |
| | comp=Z,8.4nm,1.5s | | | | | | |
| GEC2 | GERESS Array S | 58.89 | 34 | P | P | 15 04 17.9 | 0.0 |
| GEC2 | | | | IAmb | IAmb | 15 04 19.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| GERES | GERESS Array B | 58.89 | 34 | P | P | 15 04 18.5 | +0.5 |
| | comp=Z,5.5nm,1.0s,baz=244,slow=5.8,SNR=17 | | | | | | |
| GERES | GERESS Array B | 58.89 | 34 | P | P | 15 04 17.4 | -0.6 |
| KHC | Kasperske Hory | 58.97 | 34 | *e*P | P | 15 04 18.7 | +0.2 |
| ARSA | Arzberg | 59.10 | 36 | *e*P | P | 15 04 19.8 | +0.4 |
| | comp=Z,7.2nm,1.2s | | | | | | |
| T47A | Sharon Grove | 59.13 | 311 | P | P | 15 04 19.3 | -0.5 |
| T47A | | | | IAmb | IAmb | 15 04 28.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| CKRC | Cesky Krumlov | 59.21 | 34 | *e*P | P | 15 04 20.5 | +0.3 |
| CONA | Conrad Observa | 59.64 | 36 | *e*P | P | 15 04 23.9 | +0.7 |
| | comp=Z,5.3nm,1.1s | | | | | | |
| PRU | Pruhonice | 59.97 | 33 | *e*P | P | 15 04 25.8 | +0.5 |
| BRG | Berggiesshubel | 60.12 | 32 | *e*P | P | 15 04 27.5 | +1.1 |
| BRG | | | | Amp | | 15 04 29.0 | |
| | comp=Z,13nm,1.4s | | | | | | |
| MODS | Modra-Piesok | 60.68 | 36 | *e*P | P | 15 04 34.8 | +4.5 |
| DPC | Dobruska-Polom | 61.13 | 33 | *e*P | P | 15 04 34.1 | +0.8 |
| KRLC | Kraliky | 61.24 | 34 | *e*P | P | 15 04 35.1 | +1.0 |
| PSZ | Piszkesteto | 62.02 | 37 | ⇑P | P | 15 04 40.6 | +1.2 |
| PSZ | Piszkesteto | 62.02 | 37 | P | P | 15 04 40.4 | +1.0 |
| BZS | Buzias | 62.12 | 40 | ⇓P | P | 15 04 41.5 | +1.5 |
| SIRR | Siria | 62.41 | 39 | P | P | 15 04 43.0 | +1.0 |
| SUR | Sutherland | 62.72 | 130 | LR | LR | 15 25 38.9 | |
| | comp=Z,140nm,21.4s,baz=324,slow=30 | | | | | | |
| GZR | Gura Zlata | 62.78 | 41 | ⇓P | P | 15 04 45.7 | +1.2 |
| OJC | Ojcow | 63.01 | 35 | P | P | 15 04 45.9 | 0.0 |
| DRGR | | 63.28 | 39 | ⇑P | P | 15 04 48.7 | +0.8 |
| CRVS | Cervenica-Dubn | 63.39 | 37 | *e*P | P | 15 04 50.0 | +1.5 |
| LSZ | Lusaka | 63.42 | 110 | LR | LR | 15 28 11.1 | |
| | comp=Z,105nm,20.2s,baz=306,slow=32 | | | | | | |
| MBAR | Mbarara | 63.52 | 93 | LR | LR | 15 29 39.9 | |
| | comp=Z,256nm,19.6s,baz=275,slow=33 | | | | | | |
| P40A | Paris | 63.61 | 312 | P | P | 15 04 49.0 | -1.0 |
| TRPA | Tarpa | 63.72 | 38 | ⇑P | P | 15 04 51.0 | +0.4 |
| LBTB | Lobatse | 63.80 | 121 | LR | LR | 15 28 39.4 | |
| | comp=Z,168nm,18.8s,baz=284,slow=32 | | | | | | |
| ARR | Arges | 63.98 | 41 | ⇑P | P | 15 04 54.1 | +1.6 |
| VOIR | | 64.28 | 41 | ⇑P | P | 15 04 55.7 | +1.2 |
| ICESG | Greenland Ices | 64.39 | 357 | *i* P | P | 15 04 53.4 | -1.6 |
| ICESG | | | | IAmb | IAmb | 15 05 02.4 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| ARCR | ARCALIA | 64.44 | 39 | ⇓P | P | 15 04 57.1 | +1.7 |
| DOPR | Dopca | 64.69 | 41 | ⇓P | P | 15 04 57.8 | +0.7 |
| BOSA | Boshof | 64.75 | 125 | P | P | 15 04 56.4 | -1.5 |
| | comp=Z,7.9nm,0.9s,baz=290,slow=5.5,SNR=5.0 | | | | | | |
| BOSA | Boshof | 64.75 | 125 | P | P | 15 04 56.4 | -1.5 |
| MLR | Muntele Rosu | 64.89 | 42 | ⇑P | P | 15 04 59.8 | +1.3 |
| MLR | Muntele Rosu | 64.89 | 42 | P | P | 15 04 58.9 | +0.4 |
| NB2 | NORSAR Subarra | 65.03 | 22 | P | P | 15 04 59.4 | +0.4 |
| | comp=Z,2.2nm,0.9s,baz=231,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 65.03 | 22 | P | P | 15 04 59.7 | +0.7 |
| | comp=Z,6.0nm,1.0s,baz=230,slow=6.3,SNR=8.0 | | | | | | |
| ISR | Istrita | 65.16 | 42 | ⇑P | P | 15 05 01.4 | +1.2 |
| BUR08 | Bucovina Ar. S | 65.18 | 39 | P | P | 15 05 01.2 | +0.9 |
| BUR08 | | | | IAmb | IAmb | 15 06 32.1 | |
| | comp=Z,19nm,1.7s | | | | | | |
| BURAR | Bucovina Array | 65.18 | 39 | ⇑P | P | 15 05 02.2 | +1.9 |
| BURAR | Bucovina Array | 65.18 | 39 | P | P | 15 05 01.6 | +1.3 |
| COVR | Voineasa-Covas | 65.18 | 41 | ⇓P | P | 15 05 01.4 | +1.1 |
| BISRR | Bisoca | 65.42 | 42 | ⇓P | P | 15 05 03.5 | +1.7 |
| PLOR | Plostina | 65.48 | 41 | ⇑P | P | 15 05 04.3 | +2.1 |
| VRI | Vrincioaia | 65.53 | 41 | ⇑P | P | 15 05 03.0 | +0.4 |
| ICOR | Ion Corvin | 65.69 | 43 | P | P | 15 05 04.1 | +0.6 |
| TESR | Tescani | 65.70 | 41 | ⇑P | P | 15 05 04.2 | +0.6 |
| HARR | Harsova | 65.96 | 43 | ⇑P | P | 15 05 05.9 | +0.6 |
| CFR | Carcaliu | 66.25 | 42 | ⇑P | P | 15 05 07.2 | +0.2 |
| BORA | Eskisehir | 66.42 | 48 | P | P | 15 05 08.9 | +0.4 |
| BORA | | | | IAmb | IAmb | 15 05 10.0 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| SUW | Suwalki | 66.59 | 32 | P | P | 15 05 08.4 | -0.7 |
| TLCR | | 66.71 | 43 | P | P | 15 05 10.4 | +0.4 |
| MILM | Milestii Mici | 67.24 | 41 | P | P | 15 05 13.6 | +0.2 |
| SORM | Soroca | 67.34 | 39 | ⇑P | P | 15 05 13.4 | -0.5 |
| L34A | Svendsen Farm, | 67.43 | 314 | P | P | 15 05 13.1 | -1.7 |
| SUMG | Summit | 67.82 | 358 | *i* P | P | 15 05 16.2 | -0.9 |
| SUMG | | | | IAmb | IAmb | 15 05 25.1 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| ECSD | EROS Data Cent | 68.05 | 315 | P | P | 15 05 17.0 | -1.7 |
| ECSD | | | | IAmb | IAmb | 15 05 26.0 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 68.72 | 37 | P | P | 15 05 23.1 | +0.5 |
| | comp=Z,5.4nm,0.8s,baz=250,slow=6.7,SNR=22 | | | | | | |
| AKASG | Malin Array Be | 68.72 | 37 | P | P | 15 05 21.9 | -0.8 |
| AKASG | | | | IAmb | IAmb | 15 05 23.6 | |
| | comp=Z,12nm,1.3s | | | | | | |
| BR131 | Keskin Array S | 68.77 | 49 | P | P | 15 05 23.8 | +0.4 |
| BRTR | Keskin Array B | 68.77 | 49 | P | P | 15 05 24.4 | +1.0 |
| | comp=Z,9.8nm,1.0s,baz=232,slow=5.7,SNR=29 | | | | | | |
| BRTR | Keskin Array B | 68.77 | 49 | P | P | 15 05 22.9 | -0.6 |
| AGMN | Agassiz Nation | 68.83 | 320 | P | P | 15 05 22.1 | -1.2 |
| AGMN | | | | IAmb | IAmb | 15 05 30.8 | |
| | comp=Z,8.4nm,1.0s | | | | | | |
| MNK | Minsk | 69.31 | 33 | *i* P | P | 15 05 25.9 | -0.4 |
| | comp=E,6.0nm,1.1s | | | | | | |
| MNK | | | | *i* P | P | 15 05 25.9 | -0.4 |
| | comp=N,18nm,0.8s | | | | | | |
| MNK | | | | *i* P | P | 15 05 25.9 | -0.4 |
| | comp=Z,18nm,1.1s,baz=248 | | | | | | |
| MNK | | | | *i* PP | PP | 15 07 59.2 | -0.1 |
| MNK | | | | *i* PPP | PPP | 15 09 40.0 | |
| MNK | | | | *i* S | S | 15 14 34.0 | +1.4 |
| MNK | | | | *i* SS | SS | 15 19 02.6 | +3.2 |
| MNK | | | | *i* SSS | SSS | 15 22 20.0 | |
| MNK | | | | *i* LR | LR | 15 36 22.4 | |
| MNK | | | | *i* LRM | MLR | 15 38 19.6 | |
| | comp=N,464nm,19.3s | | | | | | |
| MNK | | | | *i* LRM | MLR | 15 38 20.2 | |
| | comp=Z,154nm,20.6s | | | | | | |
| MNK | | | | *i* LRM | MLR | 15 38 30.1 | |
| | comp=E,23nm,11.0s | | | | | | |
| KMBO | Kilima Mbogo | 70.05 | 93 | P | P | 15 05 33.2 | +1.3 |
| | comp=E,0.6nm,0.3s,baz=42,slow=12,SNR=1.8 | | | | | | |
| KMBO | | | | LR | LR | 15 33 42.0 | |
| | comp=E,189nm,19.7s,baz=286,slow=34 | | | | | | |
| BNN | Bunyan | 70.29 | 50 | P | P | 15 05 32.1 | -0.7 |
| TXAR | Lajitas Array | 71.16 | 299 | P | P | 15 05 38.0 | -0.2 |
| | comp=E,0.6nm,0.8s,baz=113,slow=6.9,SNR=5.0 | | | | | | |
| FINES | FINESS Array B | 71.26 | 26 | P | P | 15 05 38.0 | 0.0 |
| | comp=E,5.7nm,0.9s,baz=220,slow=3.6,SNR=5.3 | | | | | | |
| FINES | FINESS Array B | 71.26 | 26 | P | P | 15 05 38.4 | +0.4 |
| Q24A | Divide | 73.44 | 309 | P | P | 15 05 51.4 | -0.5 |
| Q24A | | | | IAmb | IAmb | 15 06 01.2 | |
| | comp=Z,10nm,0.9s | | | | | | |
| SDCO | Great Sand Dun | 73.56 | 308 | P | P | 15 05 53.3 | +0.6 |
| SDCO | | | | IAmb | IAmb | 15 08 22.6 | |
| | comp=Z,19nm,1.9s | | | | | | |
| ISCO | Idaho Springs | 73.90 | 310 | P | P | 15 05 55.1 | +0.4 |
| ANMO | Albuquerque | 74.03 | 305 | LR | LR | 15 34 30.1 | |
| | comp=Z,277nm,21.8s,baz=88,slow=33 | | | | | | |
| DGMT | Dagmar | 74.25 | 319 | P | P | 15 05 56.0 | -0.1 |
| FFC | Flin Flon | 74.27 | 326 | P | P | 15 05 56.0 | 0.0 |
| ARCES | ARCESS Array B | 74.78 | 18 | P | P | 15 05 59.7 | +0.9 |
| | comp=Z,5.3nm,1.0s,baz=286,slow=0.9,SNR=6.1 | | | | | | |
| ATD | Arta Tunnel | 74.84 | 79 | LR | LR | 15 36 24.4 | |
| | comp=Z,87nm,21.5s,baz=35,slow=34 | | | | | | |
| GURO | Guroymak-BITLI | 75.04 | 52 | P | P | 15 06 01.5 | +0.5 |
| GURO | | | | IAmb | IAmb | 15 06 03.6 | |
| | comp=Z,17nm,1.5s | | | | | | |
| LAO | LASA Array | 75.31 | 317 | P | P | 15 06 02.6 | +0.2 |
| LAO | | | | IAmb | IAmb | 15 06 04.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| O20A | White River Ci | 75.94 | 310 | P | P | 15 06 05.4 | -0.9 |
| O20A | | | | IAmb | IAmb | 15 06 08.1 | |
| | comp=Z,15nm,1.1s | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **34.83** | **285** | P | **P** | **15 02 39.3** | **+0.5** |
| | 6.0nm,0.7s,baz=181,slow=6.1,SNR=3.9 | | | | | | |
| **STKA** | **Stephens Creek** | **36.55** | **245** | P | **P** | **15 02 53.5** | **+0.7** |
| | 1.7nm,0.4s,baz=86,slow=10,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **43.46** | **258** | P | **P** | **15 03 48.1** | **-0.5** |
| | 4.9nm,0.8s,baz=99,slow=7.9,SNR=39 | | | | | | |
| ASAR | | | | PcP | **pwP** | **15 05 24.9** | **-0.2** |
| | 0.4nm,0.6s,baz=99,slow=4.1,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.64** | **263** | P | **P** | **15 03 48.6** | **-1.4** |
| | 2.4nm,0.5s,baz=96,slow=7.6,SNR=5.3 | | | | | | |
| **SIJI** | **Sorong** | **52.76** | **286** | P | **P** | **15 04 58.0** | **-0.3** |
| | 12nm,0.7s,baz=83,slow=7.0,SNR=3.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.74** | **290** | P | **P** | **15 08 36.3** | **+1.2** |
| | 0.9nm,0.8s,baz=116,slow=2.9,SNR=7.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.63** | **330** | PKP | PKPab | 15 15 05.1 | -0.8 |
| | 0.7nm,0.3s,baz=43,slow=4.3,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.00** | **310** | PKPbc | **PKPbc** | **15 15 15.5** | **-1.1** |
| | 0.6nm,0.7s,baz=165,slow=6.0,SNR=3.0 | | | | | | |

*IDC **20** 14:56:39.3±0.8,4˚.56N×32˚.52W, h0km, mb4.0/11, mb1 4.2/11, mb1mx4.0/39, mbtmp4.0/11, Error ellipse: s-maj=27.2km s-min=21.7km az=162.0*

*NEIC **20** 14:56:41.1±1.5,4˚.6N±0˚.1×32˚.4W±0˚.1, h10km±1km, mb4.7/14, Error ellipse: s-maj=25.9km s-min=19.6km az=147.0*

**ISC 20 14:56:40.9±0.6,4˚.5N±0˚.1×32˚.4W±0˚.1, h11km, n37, σ1.9s05/31, mb4.3/20, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SACV** | **Santiago Islan** | **13.50** | **39** | Pn | **Pn** | **14 59 53.6** | **+0.9** |
| **MBO** | **M'Bour** | **18.09** | **56** | | **Pn** | **15 00 50.2** | **-2.2** |
| **H10N3** | **ASCENSION HYDR** | **21.68** | **124** | T | T | 15 24 12.0 | |
| | baz=304,slow=75,SNR=18 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.68** | **124** | T | T | 15 24 12.3 | |
| | baz=304,slow=75,SNR=15 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.70** | **124** | T | T | 15 24 13.5 | |
| | baz=304,slow=75,SNR=16 | | | | | | |
| **DBIC** | **Dimbokro** | **27.49** | **84** | P | **P** | **15 02 27.1** | **-0.5** |
| DBIC | | | | IAmb | IAmb | 15 02 38.3 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.72** | **73** | P | **P** | **15 03 32.0** | **+0.7** |
| | comp=Z,2.8nm,1.1s,baz=259,slow=11,SNR=4.7 | | | | | | |
| **SIV** | **San Ignacio** | **34.94** | **234** | P | **P** | **15 03 33.2** | **-0.1** |
| | comp=Z,0.8nm,0.2s,baz=82,slow=8.6,SNR=3.5 | | | | | | |
| **SDV** | **Santo Domingo** | **38.20** | **279** | P | **P** | **15 04 04.4** | **+3.1** |
| | comp=Z,1.8nm,0.4s,baz=295,slow=18,SNR=1.3 | | | | | | |
| **LPAZ** | **La Paz** | **40.95** | **239** | P | P | 15 04 29.6 | +4.9 |
| | comp=Z,1.9nm,0.8s,baz=86,slow=8.0,SNR=4.7 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.45** | **157** | T | T | 15 53 50.0 | |
| **SCHQ** | **Schefferville** | **57.33** | **337** | P | **P** | **15 06 28.1** | **-0.8** |
| | comp=Z,3.0nm,0.9s,baz=91,slow=12,SNR=3.4 | | | | | | |
| **SCHQ** | **Schefferville** | **57.33** | **337** | IAmb | IAmb | 15 06 40.9 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **GERES** | **GERESS Array B** | **58.96** | **34** | P | **P** | **15 06 40.9** | **+0.3** |
| | comp=Z,2.5nm,1.1s,baz=251,slow=6.1,SNR=5.5 | | | | | | |
| **GERES** | **GERESS Array B** | **58.96** | **34** | P | **P** | **15 06 40.6** | **+0.1** |
| **NOA** | **NORSAR Array B** | **65.17** | **22** | P | **P** | **15 07 22.8** | **+0.8** |
| | comp=Z,2.3nm,1.0s,baz=160,slow=6.6,SNR=2.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.76** | **49** | P | **P** | **15 07 47.0** | **+1.7** |
| | comp=Z,4.0nm,1.1s,baz=235,slow=4.4,SNR=9.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.76** | **49** | P | **P** | **15 07 46.6** | **+1.3** |
| **AKASG** | **Malin Array Be** | **78.78** | **37** | P | **P** | **15 07 45.0** | **0.0** |
| | comp=Z,0.2nm,0.2s,baz=249,slow=7.0,SNR=8.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.47** | **299** | P | **P** | **15 08 01.6** | **-0.5** |
| | comp=Z,0.4nm,1.0s,baz=114,slow=2.3,SNR=2.2 | | | | | | |
| **ISCO** | **Idaho Springs** | **74.23** | **310** | P | **P** | **15 08 18.2** | **-0.4** |
| ISCO | | | | IAmb | IAmb | 15 08 20.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **FFC** | **Flin Flon** | **74.59** | **326** | P | **P** | **15 08 18.6** | **-1.4** |
| FFC | | | | IAmb | IAmb | 15 08 20.5 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **N23A** | **Red Feather La** | **74.62** | **311** | P | **P** | **15 08 20.6** | **-0.2** |
| **LAO** | **LASA Array** | **75.63** | **317** | P | **P** | **15 08 25.6** | **-0.7** |
| **PDAR** | **Pinedale Array** | **77.51** | **313** | P | **P** | **15 08 38.0** | **+0.8** |
| | comp=Z,1.0nm,1.0s,baz=77,slow=6.5,SNR=4.2 | | | | | | |
| **RES** | **Resolute Bay** | **78.58** | **346** | P | **P** | **15 08 41.4** | **-0.8** |
| RES | | | | IAmb | IAmb | 15 09 05.1 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **MTPU** | **Mount Pierson** | **79.18** | **308** | | **P** | **15 08 46.8** | **+0.1** |
| **BGU** | **Big Grassy Mou** | **79.97** | **311** | P | **P** | **15 08 50.0** | **-0.7** |
| BGU | | | | IAmb | IAmb | 15 08 51.0 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **CCUT** | **Cedar City** | **80.09** | **307** | P | **P** | **15 08 50.7** | **-0.8** |
| **PRN** | **Pahroc Range** | **81.43** | **307** | P | **P** | **15 08 58.0** | **-0.6** |
| PRN | | | | IAmb | IAmb | 15 08 59.9 | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **BELA** | **Belgrano 2** | **82.31** | **180** | | **P** | **15 09 02.1** | **0.0** |
| BELA | | | | IAmb | IAmb | 15 09 03.6 | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.40** | **332** | P | **P** | **15 09 01.4** | **-1.5** |
| | comp=Z,3.5nm,1.2s,baz=96,slow=5.4,SNR=7.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.00** | **308** | P | **P** | **15 09 11.3** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=99,slow=4.7,SNR=2.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.89** | **63** | PKP | **PKiKP** | **15 15 46.8** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=318,slow=1.2,SNR=4.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **154.64** | **124** | PKPbc | **PKPbc** | **15 16 42.4** | **-0.6** |
| | comp=Z,2.4nm,0.9s,baz=3.7,slow=9.0,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **156.84** | **146** | PKPab | **PKPab** | **15 17 06.4** | **-0.5** |
| | comp=Z,0.9nm,1.0s,baz=236,slow=1.7,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **159.96** | **141** | PKPab | **PKPab** | **15 17 20.9** | **+0.4** |
| | comp=Z,1.6nm,1.1s,baz=204,slow=2.9,SNR=5.7 | | | | | | |

*IDC **20** 14:59:56.8±0.4,4˚.54N×32˚.65W, h0km, mb4.6/33, mb1 4.7/34, mb1mx4.7/40, mbtmp4.6/34, ML4.3/1, MS4.0/23, Ms1 4.0/23, ms1mx3.7/82, Error ellipse: s-maj=13.6km s-min=9.6km az=155.0*

*NEIC **20** 14:59:58.6±1.6,4˚.5N±0˚.1×32˚.62W±0˚.10, h10km±1km, mb5.2/100, Error ellipse: s-maj=19.0km s-min=15.2km az=145.0*

*GCMT **20** 15:00:01.7±0.4,4˚.84N±0˚.04×32˚.46W±0˚.03, h23km±1km, MW4.9/93, Moment Tensor Solution. s14,c14; s93,c107; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=2.83±.28; Mθθ-0.08±.17; Mφφ2.92±.19; Mrθ1.09±.26; Mθφ0.28±.10; Mφr-0.98±.23; Best double couple: Mw3.23000×10^16^ NP1:φ203.00000°, δ40.00000°, λ-59.00000°. NP2: φ346.00000°, δ57.00000°, λ-113.00000°. Principal axes: T 3.0850, Plg9.0000°, Azm92.0000°; N 0.2950, Plg19.0000°, Azm359.0000°; P -3.3740, Plg69.0000°, Azm206.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 14:59:58.6±0.3,4˚.55N±0˚.06×32˚.64W±0˚.06, h11km, n388, σ0.98/372, mb5.1/89, MS4.0/23, 18C-12D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBCL** | **Cascavel-CE** | **10.38** | **213** | eP | **Pn** | **15 02 29.0** | **+1.4** |
| **NBMO** | **Morrinhos-CE** | **10.75** | **224** | eP | **Pn** | **15 02 30.4** | **-2.3** |
| **NBLV** | **Livramento - P** | **12.58** | **200** | eP | **Pn** | **15 02 59.6** | **+1.9** |
| **NBMA** | **Muriti-CE** | **13.32** | **207** | eP | **Pn** | **15 03 09.7** | **+1.9** |
| **SACV** | **Santiago Islan** | **13.65** | **40** | Pn | **Pn** | **15 03 10.3** | **-2.0** |
| **ROSB** | **Rosrio** | **13.65** | **237** | eP | **Pn** | **15 03 12.8** | **+0.4** |
| **NBLA** | **Lagarto - SE** | **16.27** | **198** | eP | **P** | **15 03 49.2** | **-1.1** |
| **TMAB** | **Tom-Au,PA,Br** | **16.90** | **246** | eP | **Pn** | **15 03 56.0** | **+0.6** |
| **NBPN** | **Ponto Novo - B** | **17.05** | **206** | eP | **P** | **15 03 59.0** | **0.0** |
| **GDU01** | **Guandu, BA** | **19.41** | **201** | eP | **Pn** | **15 04 27.1** | **+1.0** |
| **MDP** | **Montagnes des** | **19.94** | **272** | P | **P** | **15 04 28.6** | **-2.2** |
| | 0.9nm,0.3s,baz=82,slow=8.9,SNR=6.2 | | | | | | |
| **SMTB** | **Santa Maria do** | **19.99** | **228** | eP | **P** | **15 04 31.8** | **+0.4** |
| **MCPB** | **Macapa, AP** | **20.00** | **256** | eP | **P** | **15 04 31.6** | **+0.1** |
| **PRPB** | **Parauapebas** | **20.19** | **238** | eP | **P** | **15 04 33.3** | **-0.2** |
| **NBIT** | **Itapeh - BA** | **20.49** | **199** | eP | **P** | **15 04 37.6** | **+0.8** |
| **SDBA** | **SAO DESIDERIO** | **20.80** | **216** | eP | **P** | **15 04 40.1** | **-0.1** |
| **CMC01** | **Camacan, BA** | **20.92** | **199** | eP | **P** | **15 04 42.6** | **+1.1** |
| **H10N3** | **ASCENSION HYDR** | **21.89** | **124** | T | T | 15 27 21.4 | |
| | baz=304,slow=75,SNR=59 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.89** | **124** | T | T | 15 27 21.7 | |
| | baz=304,slow=75,SNR=48 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.91** | **124** | T | T | 15 27 22.9 | |
| | baz=304,slow=75,SNR=61 | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.16** | **198** | eP | **P** | **15 04 55.5** | **+0.7** |
| **MALB** | **Monte Alegre** | **22.52** | **254** | eP | **P** | **15 04 58.5** | **-0.2** |
| **JANB** | **Januaria** | **22.66** | **210** | eP | **P** | **15 04 57.6** | **-2.5** |
| **PEXB** | **Peixe** | **22.72** | **223** | eP | **P** | **15 05 00.9** | **+0.2** |
| **NAN01** | **Guarapari, ES** | **23.45** | **198** | eP | **P** | **15 05 07.7** | **-0.4** |
| **SJMB** | **Sao Joao De Ma** | **24.59** | **200** | eP | **P** | **15 05 19.0** | **0.0** |
| **ITTB** | **Itaituba** | **24.71** | **249** | eP | **P** | **15 05 20.3** | **+0.2** |
| **SNDB** | **Serra Nova Dou** | **24.77** | **228** | eP | **P** | **15 05 20.8** | **+0.2** |
| **RIB01** | **Linhares ES** | **24.91** | **198** | eP | **P** | **15 05 22.5** | **+0.6** |
| **DIAM** | **Diamantina, MG** | **25.17** | **205** | eP | **P** | **15 05 25.6** | **+1.2** |
| **BDFB** | **Brasilia** | **25.18** | **217** | P | **P** | **15 05 23.2** | **-1.2** |
| | 3.7nm,0.7s,baz=34,slow=17,SNR=4.1 | | | | | | |
| BDFB | | | | LR | LR | 15 14 20.7 | |
| | comp=Z,412nm,19.5s,baz=14,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **25.18** | **217** | P | **P** | **15 05 21.7** | **-2.8** |
| **NPGB** | **Novo Progresso** | **25.43** | **243** | eP | **P** | **15 05 26.1** | **-0.6** |
| **ALF01** | **Guarapari-ES** | **26.24** | **197** | eP | **P** | **15 05 34.7** | **+0.9** |
| **IPMB** | **Ipameri, GO** | **27.15** | **214** | eP | **P** | **15 05 42.4** | **+0.1** |
| **LIC** | **Lamto** | **27.54** | **85** | eP | **P** | **15 05 47.4** | **+1.6** |
| | 146nm,1.5s | | | | | | |
| **TIC** | **Toumodi** | **27.57** | **84** | eP | **P** | **15 05 47.7** | **+1.7** |
| **CAM01** | **Campos-RJ** | **27.66** | **198** | eP | **P** | **15 05 47.8** | **+1.2** |
| **ARAG** | **Araguaiana, MT** | **27.66** | **223** | eP | **P** | **15 05 46.7** | **-0.1** |
| **DBIC** | **Dimbokro** | **27.73** | **84** | P | **P** | **15 05 46.2** | **-1.3** |
| | 14nm,0.9s,baz=274,slow=11,SNR=11 | | | | | | |
| DBIC | | | | LR | LR | 15 14 49.4 | |
| | comp=Z,369nm,18.1s,baz=279,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **27.73** | **84** | P | **P** | **15 05 44.4** | **-3.0** |
| **PTGA** | **Pitinga** | **27.80** | **260** | P | **P** | **15 05 47.8** | **-0.2** |
| | 14nm,0.9s,baz=93,slow=11,SNR=15 | | | | | | |
| PTGA | | | | LR | LR | 15 15 26.9 | |
| | comp=Z,493nm,20.8s,baz=73,slow=34 | | | | | | |
| **KIC** | **Kosan Boka** | **27.83** | **85** | eP | **P** | **15 05 50.2** | **+1.8** |
| | 30nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **27.91** | **267** | eP | **P** | **15 05 49.5** | **+0.4** |
| **PDRB** | **Porto dos Gac** | **28.84** | **236** | eP | **P** | **15 05 57.9** | **+0.5** |
| **H05S1** | **Guadeloupe/Mar** | **29.45** | **291** | T | T | 15 36 58.3 | |
| | SNR=85 | | | | | | |
| **ITRB** | **Iturama** | **29.74** | **215** | eP | **P** | **15 06 05.4** | **+0.1** |
| **KOWA** | **Kowa** | **29.87** | **69** | P | **P** | **15 06 05.1** | **-1.4** |
| KOWA | | | | IAmb | IAmb | 15 06 07.1 | |
| | comp=Z,43nm,1.1s | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.24** | **295** | T | T | 15 37 55.1 | |
| | SNR=25 | | | | | | |
| **SALV** | **Santo Antonio** | **30.55** | **228** | eP | **P** | **15 06 13.0** | **+0.5** |
| **PP1B** | **Ponte de Pedra** | **31.09** | **224** | eP | **P** | **15 06 18.0** | **+0.8** |
| **PCMB** | **Pacaembu** | **31.76** | **214** | eP | **P** | **15 06 23.7** | **+0.6** |
| **PET01** | **Itanhaem-SP** | **32.02** | **206** | eP | **P** | **15 06 26.5** | **+1.2** |
| **PTLB** | **Pontes e Lacer** | **32.91** | **232** | eP | **P** | **15 06 34.0** | **+0.8** |
| **AQDB** | **Aquidauana** | **33.63** | **222** | eP | **P** | **15 06 40.2** | **+0.8** |
| **BIRV** | **Birongo** | **33.83** | **282** | P | **P** | **15 06 41.0** | **-0.4** |
| **PTGB** | **Pitanga** | **34.69** | **212** | eP | **P** | **15 06 49.9** | **+1.2** |
| **SIV** | **San Ignacio** | **34.76** | **233** | P | **P** | **15 06 50.4** | **+1.1** |
| | comp=Z,15nm,0.9s,baz=81,slow=8.6,SNR=33 | | | | | | |
| SIV | | | | LR | LR | 15 20 32.9 | |
| | comp=Z,608nm,18.8s,baz=96,slow=36 | | | | | | |
| **MTP** | **Monte Pirata** | **34.88** | **295** | P | **P** | **15 06 50.0** | **-0.3** |
| MTP | | | | IAmb | IAmb | 15 06 51.8 | |
| | comp=Z,53nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.95** | **74** | P | **P** | **15 06 49.8** | **-1.2** |
| | comp=Z,22nm,0.8s,baz=264,slow=9.4,SNR=70 | | | | | | |
| **HUMP** | **Col San Antoni** | **35.16** | **295** | P | **P** | **15 06 52.7** | **0.0** |
| HUMP | | | | IAmb | IAmb | 15 06 54.4 | |
| | comp=Z,51nm,1.0s | | | | | | |
| **SJG** | **San Juan** | **35.42** | **295** | P | **P** | **15 06 55.0** | **-0.1** |
| | comp=Z,22nm,0.9s,baz=8.7,slow=8.9,SNR=4.4 | | | | | | |
| **CELP** | **Cerrillos** | **35.80** | **295** | P | **P** | **15 06 56.5** | **-1.8** |
| CELP | | | | IAmb | IAmb | 15 06 58.9 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **ETMB** | **Extrema** | **36.37** | **247** | eP | **P** | **15 07 03.7** | **+0.5** |
| **ITAB** | **Concordia** | **36.79** | **210** | eP | **P** | **15 07 08.0** | **+1.4** |
| **SDV** | **Santo Domingo** | **37.96** | **279** | P | **P** | **15 07 17.3** | **+0.4** |
| | comp=Z,15nm,0.9s,baz=90,slow=5.5,SNR=13 | | | | | | |
| **SDV** | **Santo Domingo** | **37.96** | **279** | P | **P** | **15 07 16.8** | **-0.2** |
| **SDV** | **Santo Domingo** | **37.96** | **279** | eP | **P** | **15 07 18.1** | **+1.1** |
| **MDT** | **Midelt** | **38.42** | **40** | P | **P** | **15 07 20.9** | **+0.4** |
| | comp=Z,7.4nm,1.0s,baz=260,slow=10,SNR=3.8 | | | | | | |
| MDT | | | | LR | LR | 15 22 09.6 | |
| | comp=Z,356nm,19.5s,baz=263,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **38.91** | **217** | P | **P** | **15 07 24.6** | **0.0** |
| | comp=Z,9.9nm,1.0s,baz=27,slow=8.6,SNR=10 | | | | | | |
| CPUP | | | | LR | LR | 15 22 45.7 | |
| | comp=Z,253nm,20.4s,baz=50,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **38.91** | **217** | P | **P** | **15 07 24.3** | **-0.3** |
| **CPUP** | **Villa Florida** | **38.91** | **217** | eP | **P** | **15 07 25.2** | **+0.6** |
| **RUSC** | **La Rusia** | **40.29** | **274** | eP | **P** | **15 07 38.2** | **+1.4** |
| **SDDR** | **Presa de Saban** | **40.34** | **294** | P | **P** | **15 07 36.1** | **-0.6** |
| SDDR | | | | IAmb | IAmb | 15 07 38.4 | |
| | comp=Z,49nm,1.1s | | | | | | |
| **BARC** | **Barichara** | **40.39** | **275** | eP | **P** | **15 07 38.5** | **+1.1** |
| **LPAZ** | **La Paz** | **40.75** | **239** | P | **P** | **15 07 41.1** | **+0.4** |
| | comp=Z,6.8nm,0.9s,baz=64,slow=7.0,SNR=14 | | | | | | |
| **LPAZ** | **La Paz** | **40.75** | **239** | P | **P** | **15 07 40.4** | **-0.3** |
| **LPAZ** | **La Paz** | **40.75** | **239** | eP | **P** | **15 07 41.6** | **+0.9** |
| **LPAZ** | **La Paz** | **40.75** | **239** | eP | **P** | **15 07 41.4** | **+0.7** |
| **CHIC** | **Chingaza** | **40.95** | **272** | eP | **P** | **15 07 41.6** | **-0.7** |
| **ITQB** | **Itaqui** | **41.07** | **213** | P | **P** | **15 07 41.3** | **-1.1** |
| **ITQB** | **Itaqui** | **41.07** | **213** | eP | **P** | **15 07 43.4** | **+1.0** |
| **PLTB** | **Pedras Altas** | **41.27** | **208** | P | **P** | **15 07 43.1** | **-1.0** |
| **PLTB** | **Pedras Altas** | **41.27** | **208** | eP | **P** | **15 07 45.4** | **+1.4** |
| **SPBC** | **Sao Pablo de B** | **41.27** | **273** | eP | **P** | **15 07 44.2** | **-0.3** |
| **ROSC** | **El Rosal** | **41.53** | **272** | P | **P** | **15 07 48.0** | **+1.0** |
| | comp=Z,29nm,0.9s,baz=60,slow=2.8,SNR=16 | | | | | | |
| **ROSC** | **El Rosal** | **41.53** | **272** | P | **P** | **15 07 47.1** | **+0.1** |
| ROSC | | | | IAmb | IAmb | 15 07 49.4 | |
| | comp=Z,74nm,1.1s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **41.79** | **253** | eP | **P** | **15 07 48.6** | **-0.1** |
| **NORC** | **Norcasia** | **42.07** | **273** | eP | **P** | **15 07 50.1** | **-0.9** |
| **ZARC** | **Zaragoza, Cauc** | **42.07** | **276** | eP | **P** | **15 07 49.9** | **-1.1** |
| **ORTC** | **Ortega, Tolima** | **42.49** | **271** | eP | **P** | **15 07 54.0** | **-0.4** |
| **GUY2C** | **Guyana, Caldas** | **42.57** | **273** | eP | **P** | **15 07 55.1** | **-0.5** |
| **FLOC** | **Florencia** | **43.04** | **267** | eP | **P** | **15 07 57.8** | **-1.1** |
| **CBOC** | **Ciudad Bolivar** | **43.20** | **274** | eP | **P** | **15 07 59.5** | **-0.8** |
| **PLMC** | **San Jos del P** | **43.49** | **272** | eP | **P** | **15 08 01.2** | **-1.3** |
| **ESDC** | **Sonseca Array** | **43.52** | **33** | P | **P** | **15 08 03.1** | **+0.7** |
| | comp=Z,2.0nm,0.9s,baz=227,slow=9.0,SNR=9.7 | | | | | | |
| ESDC | | | | LR | LR | 15 23 03.0 | |
| | comp=Z,122nm,18.9s,baz=304,slow=32 | | | | | | |
| **POPC** | **Popayan, Colom** | **43.99** | **269** | eP | **P** | **15 08 06.1** | **-0.6** |
| **LVC** | **Limon Verde** | **44.55** | **231** | P | **P** | **15 08 09.6** | **-1.7** |
| | comp=Z,8.9nm,0.8s,baz=33,slow=11,SNR=3.4 | | | | | | |
| LVC | | | | LR | LR | 15 27 05.5 | |
| | comp=Z,140nm,21.2s,baz=54,slow=37 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.54** | **157** | T | T | 15 57 02.7 | |
| **H09W1** | **TRISTAN DA CUN** | **45.56** | **157** | T | T | 15 57 02.6 | |
| | SNR=26 | | | | | | |
| **OTAV** | **Otavalo** | **45.96** | **266** | P | **P** | **15 08 22.1** | **-0.6** |
| **OTAV** | **Otavalo** | **45.96** | **266** | eP | **P** | **15 08 22.4** | **-0.3** |
| **OTAV** | **Otavalo** | **45.96** | **266** | eP | **P** | **15 08 24.7** | **+2.0** |
| **DRLN** | **Deer Lake** | **49.29** | **339** | P | **P** | **15 08 47.6** | **+0.1** |
| **KEST** | **Kesra** | **49.56** | **46** | P | **P** | **15 08 50.8** | **+0.9** |
| | comp=Z,11nm,0.9s,baz=305,slow=2.6,SNR=6.2 | | | | | | |
| **KEST** | **Kesra** | **49.56** | **46** | P | **P** | **15 08 50.2** | **+0.3** |
| KEST | | | | IAmb | IAmb | 15 08 59.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **HRV** | **Adam Dziewonsk** | **51.20** | **323** | P | **P** | **15 09 03.2** | **+1.1** |
| | baz=127 | | | | | | |
| **PAL** | **Palisades** | **51.78** | **321** | P | **P** | **15 09 07.5** | **+1.0** |
| | baz=123 | | | | | | |
| **WUPA** | **West Chester U** | **52.31** | **319** | P | **P** | **15 09 10.1** | **-0.4** |
| **LUPA** | **Lehigh Univers** | **52.51** | **319** | P | **P** | **15 09 12.2** | **+0.3** |
| LUPA | | | | IAmb | IAmb | 15 09 18.2 | |
| | comp=Z,80nm,1.7s | | | | | | |
| **TRY** | **Troy** | **52.60** | **322** | P | **P** | **15 09 12.8** | **+0.3** |
| TRY | | | | IAmb | IAmb | 15 09 14.3 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **JSRW** | **J. Sargeant Re** | **52.78** | **315** | P | **P** | **15 09 13.5** | **-0.5** |
| **MVL** | **Millersville** | **52.84** | **318** | P | **P** | **15 09 14.3** | **0.0** |
| MVL | | | | IAmb | IAmb | 15 09 16.3 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **N59A** | **State Game Lan** | **52.93** | **320** | P | **P** | **15 09 15.6** | **+0.5** |
| | baz=121 | | | | | | |
| **BNI** | **Bardonecchia** | **52.97** | **34** | P | **P** | **15 09 16.6** | **+1.2** |
| **BIRD** | **Birdtown, Kers** | **53.38** | **310** | P | **P** | **15 09 18.2** | **-0.3** |
| BIRD | | | | IAmb | IAmb | 15 09 20.4 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **BINY** | **Binghamton** | **53.74** | **321** | P | **P** | **15 09 22.1** | **+1.1** |
| | baz=122 | | | | | | |
| **JSC** | **Jenkinsville** | **53.85** | **310** | P | **P** | **15 09 22.6** | **+0.6** |
| JSC | | | | IAmb | IAmb | 15 09 23.9 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **VAE** | **Valguarnera** | **53.98** | **46** | LR | LR | 15 31 49.8 | |
| | comp=Z,321nm,19.7s,baz=252,slow=36 | | | | | | |
| **KMSC** | **Kings Mountain** | **54.23** | **311** | P | **P** | **15 09 25.8** | **+1.0** |
| | baz=113 | | | | | | |
| **BLA** | **Blacksburg** | **54.39** | **313** | P | **P** | **15 09 26.5** | **+0.6** |
| **BLA** | **Blacksburg** | **54.39** | **313** | P | **P** | **15 09 27.0** | **+1.1** |
| | baz=115,SNR=6.6 | | | | | | |
| **O56A** | **Blue Knob Stat** | **54.45** | **317** | P | **P** | **15 09 27.5** | **+1.2** |
| | baz=118,SNR=6.0 | | | | | | |
| **TSUM** | **Tsumeb** | **54.76** | **117** | P | **P** | **15 09 28.6** | **-0.4** |
| | comp=Z,8.1nm,1.0s,baz=231,slow=2.3,SNR=5.9 | | | | | | |
| **TSUM** | **Tsumeb** | **54.76** | **117** | P | **P** | **15 09 27.7** | **-1.3** |
| TSUM | | | | IAmb | IAmb | 15 09 30.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **MCWV** | **Mont Chateau** | **55.04** | **316** | P | **P** | **15 09 31.6** | **+1.1** |
| | baz=117 | | | | | | |
| **DOU** | **Dourbes** | **55.15** | **28** | dP | **P** | **15 09 31.7** | **+0.6** |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **GOGA** | **Godfrey** | **55.25** | **308** | P | **P** | **15 09 33.1** | **+1.0** |
| | baz=110 | | | | | | |
| **N54A** | **Moraine State** | **55.74** | **318** | P | **P** | **15 09 36.2** | **+0.7** |
| | baz=118,SNR=5.2 | | | | | | |
| **M54A** | **Oil Creek Stat** | **55.77** | **318** | P | **P** | **15 09 36.4** | **+0.6** |
| | baz=118,SNR=5.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.91** | **20** | LR | LR | 15 30 54.4 | |
| | comp=Z,159nm,18.1s,baz=260,slow=33 | | | | | | |
| **DAVA** | **Damuels** | **56.09** | **34** | *i* P | **P** | **15 09 38.9** | **+0.8** |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **O53A** | **New Philadelph** | **56.25** | **316** | P | **P** | **15 09 39.8** | **+0.7** |
| | baz=116,SNR=7.8 | | | | | | |
| **CTI** | **Castel Tesino** | **56.39** | **36** | P | **P** | **15 09 40.7** | **+0.5** |
| **FETA** | **Feichten** | **56.41** | **34** | eP | **P** | **15 09 40.9** | **+0.5** |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **LC01** | **Cunco** | **56.41** | **216** | P | **P** | **15 09 39.2** | **-1.1** |
| **M53A** | **WI Miller and** | **56.41** | **318** | P | **P** | **15 09 41.0** | **+0.6** |
| | baz=117 | | | | | | |
| **TZTN** | **Tazewell** | **56.43** | **311** | P | **P** | **15 09 41.5** | **+0.9** |
| | baz=112 | | | | | | |
| **P52A** | **Corning** | **56.62** | **315** | P | **P** | **15 09 42.3** | **+0.4** |
| | baz=115,SNR=7.4 | | | | | | |
| **RETA** | **Reutte** | **56.69** | **34** | *i* P | **P** | **15 09 42.8** | **+0.5** |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | **56.80** | **34** | eP | **P** | **15 09 43.5** | **+0.3** |
| | comp=Z,11nm,1.5s | | | | | | |
| **PLCA** | **Paso Flores** | **56.88** | **214** | P | **P** | **15 09 43.0** | **-0.6** |
| | comp=Z,1.7nm,0.7s,baz=26,slow=6.0,SNR=5.3 | | | | | | |
| PLCA | | | | LR | LR | 15 34 01.0 | |
| | comp=Z,224nm,18.8s,baz=60,slow=36 | | | | | | |
| **WTTA** | **Wattenberg** | **57.06** | **35** | *i* P | **P** | **15 09 44.4** | **-0.6** |
| | comp=Z,8.3nm,1.3s | | | | | | |
| **WATA** | **Walderalm** | **57.06** | **34** | *i* P | **P** | **15 09 45.2** | **+0.2** |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **SCHQ** | **Schefferville** | **57.22** | **337** | P | **P** | **15 09 46.3** | **+0.4** |
| | comp=Z,17nm,1.1s,baz=140,slow=8.1,SNR=8.9 | | | | | | |
| SCHQ | | | | LR | LR | 15 31 11.8 | |
| | comp=Z,62nm,19.6s,baz=87,slow=33 | | | | | | |
| **SCHQ** | **Schefferville** | **57.22** | **337** | P | **P** | **15 09 45.6** | **-0.2** |
| SCHQ | | | | IAmb | IAmb | 15 09 46.5 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **57.27** | **35** | eP | **P** | **15 09 47.5** | **+1.1** |
| | comp=Z,13nm,1.0s | | | | | | |
| **FPAL** | **Fort Paine** | **57.31** | **308** | P | **P** | **15 09 47.6** | **+0.8** |
| FPAL | | | | IAmb | IAmb | 15 09 48.9 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **N51A** | **Ashland** | **57.34** | **317** | P | **P** | **15 09 47.0** | **+0.1** |
| **ACSO** | **Alum Creek Sta** | **57.47** | **316** | P | **P** | **15 09 48.8** | **+1.0** |
| | baz=114,SNR=5.8 | | | | | | |
| **LRAL** | **Lakeview Retre** | **57.94** | **306** | P | **P** | **15 09 51.7** | **+0.

RAZG Razgrad 64.80 44 ⇓P P 15 10 38.5 +0.9
DOPR Dopca 64.87 41 ⇓P P 15 10 39.3 +1.3
MLR Muntele Rosu 65.07 41 ⇑P P 15 10 40.7 +1.2
MLR Muntele Rosu 65.07 41 P P 15 10 40.3 +0.9
NB2 NORSAR Subarra 65.25 22 P P 15 10 40.6 +0.5
comp=Z,8.4nm,1.1s,baz=229,slow=6.5
NOA NORSAR Array B 65.25 22 P P 15 10 40.8 +0.6
comp=Z,4.6nm,1.1s,baz=229,slow=6.2,SNR=5.9
NOA LR LR 15 38 09.7
comp=Z,87nm,18.0s,baz=255,slow=35
ISR Istrita 65.34 42 ⇑P P 15 10 42.3 +1.2
BURAR Bucovina Array 65.36 39 ⇑P P 15 10 41.3 +0.1
COVR Voineasa-Covas 65.36 41 ⇑P P 15 10 42.5 +1.4
BISRR Bisoca 65.59 42 ⇓P P 15 10 42.0 -0.7
PLOR Plostina 65.66 41 ⇑P P 15 10 45.4 +2.3
TUL1 Leonard 65.70 307 P P 15 10 43.0 -0.5
baz=103,SNR=6.4
VRI Vrincioaia 65.71 41 ⇓P P 15 10 44.3 +0.9
TESR Tescani 65.88 41 ⇑P P 15 10 45.5 +1.0
SPMN Marine on St. 66.03 318 P P 15 10 44.7 -0.8
baz=109,SNR=9.7
I37A Lemond, Waseca 66.05 316 P P 15 10 44.7 -0.9
EYMN Ely 66.11 321 P P 15 10 44.9 -1.1
baz=111
HARR Harsova 66.13 43 ⇑P P 15 10 47.0 +0.9
CFR Carcaliu 66.42 42 ⇑P P 15 10 47.8 -0.2
DRBR Darabani 66.45 39 ⇓P P 15 10 46.3 -1.8
T35A Sooner Cattle 66.48 308 P 15 10 46.2 -2.3
TPGR Topolog 66.52 43 ⇑P P 15 10 49.6 +0.9
BORA Eskisehir 66.58 48 P P 15 10 49.5 +0.3
BORA IAmb IAmb 15 10 51.0
comp=Z,15nm,0.9s
N35A Tabor 66.76 313 P P 15 10 49.4 -0.9
KSU1 Kansas State U 67.05 311 P P 15 10 50.9 -1.3
baz=103
833A Chaparral WMA, 67.41 299 P P 15 10 54.7 +0.1
baz=97
MILM Milestii Mici 67.42 41 ⇓P P 15 10 54.0 -0.3
SORM Soroca 67.52 39 ⇑P P 15 10 54.3 -0.6
B35A Bob, Littlefor 67.65 321 P P 15 10 54.5 -1.2
B35A IAmb IAmb 15 10 55.7
comp=Z,32nm,1.2s
WMOK Wichita Mounta 67.86 306 P P 15 10 56.1 -1.3
baz=100
SUMG Summit 68.04 358 *i* P P 15 11 03.0 +4.8
JCT Junction City 68.05 301 P P 15 10 58.0 -0.6
JCT IAmb IAmb 15 10 59.6
comp=Z,28nm,1.2s
JCT Junction City 68.05 301 P P 15 10 58.3 -0.3
baz=98,SNR=6.4
ECSD EROS Data Cent 68.20 315 P P 15 10 58.5 -0.8
ECSD IAmb IAmb 15 10 59.4
comp=Z,19nm,0.9s
ECSD EROS Data Cent 68.20 315 P P 15 10 58.7 -0.6
baz=105,SNR=14
ABTX Abilene, Hawle 68.22 303 P P 15 10 59.1 -0.5
ABTX IAmb IAmb 15 11 00.3
comp=Z,31nm,1.4s
ABTX Abilene, Hawle 68.22 303 P P 15 10 59.2 -0.5
baz=99
R32A Long Quarter, 68.50 310 P P 15 11 00.2 -1.1
BGNE Belgrade 68.73 313 P P 15 11 02.0 -0.6
BGNE Belgrade 68.73 313 P P 15 11 02.4 -0.3
baz=103,SNR=8.5
AKASG Malin Array Be 68.92 37 P P 15 11 03.3 -0.3
comp=Z,6.7nm,0.9s,baz=249,slow=6.5,SNR=15
AKASG LR LR 15 41 04.3
comp=Z,70nm,18.1s,baz=273,slow=36
AKASG Malin Array Be 68.92 37 P P 15 11 02.5 -1.0
AKASG IAmb IAmb 15 11 10.0
comp=Z,19nm,1.6s
AKBB Malin Array Si 68.92 37 P P 15 11 04.6 +1.0
AKBB IAmb IAmb 15 11 11.2
comp=Z,44nm,1.8s
BR131 Keskin Array S 68.93 49 P P 15 11 04.2 0.0
BR131 IAmb IAmb 15 11 05.8
comp=Z,20nm,1.0s
BRTR Keskin Array B 68.93 49 P P 15 11 05.0 +0.8
comp=Z,9.3nm,0.9s,baz=233,slow=4.8,SNR=31
BRTR Keskin Array B 68.93 49 P P 15 11 04.3 +0.2
AGMN Agassiz Nation 68.98 320 P P 15 11 02.9 -1.2
AGMN IAmb IAmb 15 11 04.2
comp=Z,22nm,1.0s
AGMN Agassiz Nation 68.98 320 P P 15 11 03.4 -0.7
baz=108,SNR=11
NACGM Naroch 69.07 32 *i* P P 15 11 05.5 +1.1
CBKS Cedar Bluff 69.37 310 P P 15 11 04.0 -2.8
CBKS Cedar Bluff 69.37 310 P P 15 11 06.8 0.0
baz=101
K31A O'Neill 69.44 314 P P 15 11 06.1 -1.0
ULM Lac du Bonnet 69.59 322 P P 15 11 06.3 -1.5
comp=Z,12nm,1.0s,baz=122,slow=6.2,SNR=10
ULM Lac du Bonnet 69.59 322 P P 15 11 06.5 -1.3
ULM IAmb IAmb 15 11 07.7
comp=Z,33nm,1.2s
KMBO Kilima Mbogo 70.06 93 P P 15 11 12.7 +1.0
comp=Z,2.3nm,0.8s,baz=241,slow=11,SNR=3.4
AMTX Amarillo 70.24 305 P P 15 11 10.7 -1.6
AMTX IAmb IAmb 15 11 13.2
comp=Z,50nm,1.6s
AMTX Amarillo 70.24 305 P P 15 11 12.4 +0.2
baz=98
BNN Bunyan 70.45 50 P P 15 11 13.7 +0.2
MSTX Muleshoe 71.01 304 P P 15 11 16.3 -0.7
MSTX Muleshoe 71.01 304 P P 15 11 17.6 +0.6
baz=98,SNR=5.5
TX32 Lajitas Array 71.25 299 P P 15 11 18.1 -0.5
TXAR Lajitas Array 71.25 299 P P 15 11 18.4 -0.2
comp=Z,1.8nm,0.9s,baz=107,slow=6.7,SNR=12
TXAR Lajitas Array 71.25 299 P P 15 11 17.9 -0.6
MDND Maddock 71.27 319 P P 15 11 17.6 -0.6
MDND Maddock 71.27 319 P P 15 11 17.8 -0.4
baz=104,SNR=8.4
FINES FINESS Array B 71.47 26 P P 15 11 19.0 0.0
comp=Z,2.6nm,0.8s,baz=266,slow=5.6,SNR=4.7
OGNE Ogallala 71.50 312 P P 15 11 19.4 -0.5
OGNE Ogallala 71.50 312 P P 15 11 19.8 0.0
baz=100,SNR=6.9
KSCO Kaye Shedlock' 71.62 310 P P 15 11 21.0 +0.4
T25A Trinidad 72.75 307 P P 15 11 27.9 +0.4
T25A IAmb IAmb 15 11 29.6
comp=Z,34nm,1.4s
T25A Trinidad 72.75 307 P P 15 11 28.4 +0.9
baz=98,SNR=12
MNTX Cornudas Mount 72.94 302 P P 15 11 27.5 -1.0
MNTX Cornudas Mount 72.94 302 P P 15 11 28.0 -0.5
baz=95,SNR=7.5
RSSD Black Hills 73.52 315 P P 15 11 32.0 +0.1
baz=100
Q24A Divide 73.56 309 P P 15 11 33.3 +0.9
baz=98,SNR=18
SDCO Great Sand Dun 73.68 308 P P 15 11 33.8 +0.7
baz=97,SNR=17
ISCO Idaho Springs 74.03 310 P P 15 11 35.7 +0.6
ISCO IAmb IAmb 15 11 37.4
comp=Z,33nm,1.2s
ISCO Idaho Springs 74.03 310 P P 15 11 36.1 +1.0
baz=98,SNR=26
ANMO Albuquerque 74.14 305 P P 15 11 35.6 -0.2
ANMO Albuquerque 74.14 305 P P 15 11 36.0 +0.2
baz=96
DGMT Dagmar 74.41 319 P P 15 11 37.1 +0.3
DGMT Dagmar 74.41 319 P P 15 11 37.7 +0.9
baz=101,SNR=14
N23A Red Feather La 74.42 311 P P 15 11 37.7 +0.4
N23A Red Feather La 74.42 311 P P 15 11 38.4 +1.0
baz=98,SNR=21
FFC Flin Flon 74.44 326 P P 15 11 36.4 -0.4
FFC IAmb IAmb 15 11 37.8
comp=Z,41nm,1.2s
S22A 4UR Ranch, Cre 74.73 308 P P 15 11 39.8 +0.5
S22A 4UR Ranch, Cre 74.73 308 P P 15 11 40.3 +1.1
baz=96,SNR=10.0
ARCES ARCESS Array B 75.00 18 P P 15 11 39.4 -0.4
comp=Z,6.2nm,1.0s,baz=308,slow=6.0,SNR=3.5
ARCES LR LR 15 39 46.5
comp=Z,51nm,22.0s,baz=214,slow=32
121A Cookes Peak, D 75.04 302 P P 15 11 42.4 +1.4
baz=94,SNR=7.0
K22A Casper 75.08 313 P P 15 11 41.0 0.0
baz=98
LAO LASA Array 75.45 317 P P 15 11 43.3 +0.4
LAO LASA Array 75.45 317 P P 15 11 43.7 +0.8
baz=99,SNR=17
MVCO Mesa Verde 76.00 307 P P 15 11 45.7 -0.8
MVCO IAmb IAmb 15 11 48.9
comp=Z,34nm,1.6s
MVCO Mesa Verde 76.00 307 P P 15 11 47.4 +0.9
baz=95,SNR=7.3
O20A White River Ci 76.07 310 P P 15 11 46.6 -0.2
O20A IAmb IAmb 15 11 48.8
comp=Z,38nm,1.1s
O20A White River Ci 76.07 310 P P 15 11 47.6 +0.8
baz=96,SNR=17
KBZ Khabaz 76.42 46 P P 15 11 49.3 +0.9
comp=Z,2.7nm,0.8s,baz=5.2,slow=11,SNR=3.2
KBZ LR LR 15 47 35.1
comp=Z,52nm,19.6s,baz=269,slow=37
BW06 Boulder Array 77.32 313 P P 15 11 53.5 -0.3
baz=96,SNR=8.9
PDAR Pinedale Array 77.32 313 P P 15 11 53.5 -0.4
comp=Z,2.7nm,0.8s,baz=106,slow=6.5,SNR=23
RLMT Red Lodge 77.35 315 P P 15 11 54.6 +0.7
baz=96
NOR Nord 77.36 2 *i* P P 15 11 52.5 -0.5
KLMR Klimovskoe 77.39 29 *eP* P 15 11 53.1 -0.4
KLMR AMP 15 11 55.8
comp=Z,19nm,1.4s
TUC Tucson 77.56 302 P P 15 11 55.4 +0.1
TUC Tucson 77.56 302 P P 15 11 56.1 +0.9
baz=92
SRU San Rafael Swe 77.74 309 P P 15 11 56.5 +0.3
SRU IAmb IAmb 15 11 58.1
comp=Z,22nm,1.2s
EGMT Eagleton 78.01 318 P P 15 11 56.7 -0.7
EGMT IAmb IAmb 15 11 58.4
comp=Z,23nm,1.1s
EGMT Eagleton 78.01 318 P P 15 11 57.5 +0.1
baz=96,SNR=6.0
WUAZ Wupatki 78.20 305 P P 15 11 58.4 -0.4
WUAZ IAmb IAmb 15 12 01.3
comp=Z,27nm,1.2s
WUAZ Wupatki 78.20 305 P P 15 12 00.3 +1.5
baz=93,SNR=13
H17A Grant Village 78.21 314 P P 15 12 00.8 +2.0
baz=95,SNR=6.4
Q16A Castle Valley 78.23 309 P P 15 11 58.8 -0.1
SNAA Sanae 78.53 171 P P 15 12 00.4 +0.8
comp=Z,2.7nm,0.9s,baz=76,slow=23,SNR=1.7
MTPU Mount Pierson 78.97 308 P P 15 12 04.1 +0.9
MTPU IAmb IAmb 15 12 05.7
comp=Z,28nm,1.2s
BOZ Bozeman (W) 79.06 315 P P 15 12 03.7 +0.4
baz=95,SNR=5.5
214A Organ Pipe Nat 79.27 302 P P 15 12 05.9 +1.3
baz=91,SNR=9.3
Y14A Wickenburg 79.48 304 P P 15 12 05.3 -0.5
DUG Dugway, Tooele 79.57 310 P P 15 12 06.6 +0.4
baz=93,SNR=10.0
PDMCI Parker Dam,Lak 80.43 304 P P 15 12 12.0 +1.3
baz=91,SNR=5.7
BLYC Blythe 80.74 303 P P 15 12 12.8 +0.3
BLYC IAmb IAmb 15 12 14.9
comp=Z,23nm,1.2s
MSO Missoula 80.74 317 P P 15 12 12.6 +0.3
baz=93
EDM Edmonton 80.81 323 P P 15 12 12.3 -0.1
HLID Hailey 80.92 313 P P 15 12 13.1 -0.4
HLID Hailey 80.92 313 P P 15 12 14.2 +0.8
baz=92,SNR=9.3
IRM Iron Mountain 81.26 304 P P 15 12 16.6 +1.3
baz=90,SNR=10
BC3 Big Chuckawall 81.52 303 P P 15 12 17.5 +0.8
baz=90
R11A Ty Canyon, C 81.66 308 P P 15 12 18.6 +1.0
baz=91,SNR=13
GMRC Granite Mounta 81.69 304 P P 15 12 18.6 +1.0
baz=90,SNR=6.1
TUQ Turquoise Moun 81.91 305 P P 15 12 20.0 +1.1
baz=90,SNR=10
BELC Belle Mtn. Jos 81.97 304 P P 15 12 20.3 +1.1
baz=90
KIRV Kirov 81.99 32 LR LR 15 45 31.9
comp=Z,81nm,21.7s,baz=283,slow=33
TPNV Topopah Spring 82.18 307 P P 15 12 21.6 +1.4
baz=90,SNR=11
HEC Hector,Ludlow 82.25 304 P P 15 12 22.2 +1.7
baz=90,SNR=5.2
YKA Yellowknife Ar 82.27 332 P P 15 12 19.0 -0.9
comp=Z,6.8nm,1.0s,baz=97,slow=5.3,SNR=31
YKA Yellowknife Ar 82.27 332 P P 15 12 18.6 -1.3
BELA Belgrano 2 82.32 180 P P 15 12 19.8 -0.1
BELA IAmb IAmb 15 12 21.1
comp=Z,22nm,1.4s
MONP2 Monument Peak 82.33 302 P P 15 12 21.9 +0.8
baz=90
PFO Pinyon Flats O 82.36 303 P P 15 12 22.2 +1.0
baz=90
GSC Goldstone, Bar 82.63 305 P P 15 12 23.7 +1.2
baz=90,SNR=6.7
FURC Furnace Creek, 82.67 306 P P 15 12 24.4 +1.9
baz=90,SNR=5.2
NEW Newport 82.95 318 P P 15 12 23.4 -0.5
NEW IAmb IAmb 15 12 24.6
comp=Z,18nm,1.2s
NEW Newport 82.95 318 P P 15 12 23.5 -0.3
baz=91,SNR=5.2
MPMC Manual Prospec 83.18 306 P P 15 12 26.5 +1.0
baz=89,SNR=9.3
LRMC Laurel Mtn Rad 83.34 305 P P 15 12 27.2 +0.9
baz=89,SNR=9.3
EDW2 Edwards Air Fo 83.61 304 P P 15 12 28.0 +0.4
baz=89,SNR=9.7
CWC Cottonwood Cre 83.65 306 P P 15 12 28.5 +0.6
baz=89
NVAR Mina Array Bea 83.80 308 P P 15 12 29.1 +0.5
comp=Z,5.1nm,1.0s,baz=96,slow=5.6,SNR=20
NVAR Mina Array Bea 83.80 308 P P 15 12 28.5 -0.2
ISA Isabella, Lake 83.99 305 P P 15 12 30.9 +1.4
baz=89,SNR=13
J05D Fort Rock, OR 85.89 313 P P 15 12 40.4 +1.3
baz=88,SNR=5.9
I05D Terrebonne, OR 85.92 314 P P 15 12 40.1 +1.1
baz=88
F05D White Salmon 85.94 316 P P 15 12 40.4 +1.4
baz=88
B05A Bryant 86.27 318 P P 15 12 39.9 -0.7
baz=87
WRGLY Wrigley 86.34 333 P P 15 12 41.1 +0.5
baz=87,SNR=5.6
M04C Macdoel 86.40 311 P P 15 12 42.3 +0.7
baz=87
A36M Sachs Harbour 86.51 342 P P 15 12 41.4 +0.2
A36M IAmb IAmb 15 12 42.3
comp=Z,17nm,1.1s
A36M Sachs Harbour 86.51 342 P P 15 12 41.5 +0.2
baz=86,SNR=14
J04D Umpqua Nationa 86.53 313 P P 15 12 43.5 +1.3
baz=87,SNR=6.2
ARU Arti 86.91 34 P P 15 12 43.3 -0.2
AKTO Aktyubinsk 86.95 40 LR LR 15 54 43.1
comp=Z,48nm,18.0s,baz=299,slow=38
UOSS Minazif 87.06 65 P P 15 12 44.5 -0.5
SYO Syowa Base 87.93 160 *eP* P 15 12 45.4 -2.7
INK Inuvik 89.82 339 P P 15 12 56.7 -0.4
baz=78
FARO Faro, Yukon 90.98 333 P P 15 13 03.0 +0.3
baz=78
M31M Drury Creek, Y 91.46 333 P P 15 13 05.5 +0.6
baz=77
DAWY Dawson 93.18 335 P P 15 13 12.1 -0.8
baz=73,SNR=5.3
BMAR Burnt Mountain 94.08 339 P P 15 13 17.5 +0.6
J26L Joseph Creek 94.76 336 P P 15 13 20.0 -0.1
baz=69
SCRK Sand Creek 95.12 336 P P 15 13 21.3 -0.6
baz=69
TOLK Toolik Lake Re 95.28 341 P P 15 13 22.9 +0.5
baz=63,SNR=8.5
H24K Noodor Dome 95.92 338 P P 15 13 25.6 +0.2
baz=65
ILAR Eielson Array 95.98 337 P P 15 13 25.3 -0.3
comp=Z,4.0nm,1.1s,baz=54,slow=4.2,SNR=18
ILAR Eielson Array 95.98 337 P P 15 13 24.5 -1.2
H23K Yukon River 96.54 338 P P 15 13 27.6 -0.6
baz=63
PZH PanZhiHua 126.15 52 PKP PKPdf 15 19 00.8 -1.4
CMAR Chiang Mai Arr 127.10 63 PKP PKiKP 15 19 04.9 +0.4
comp=Z,0.3nm,0.4s,baz=310,slow=4.2,SNR=5.8
FITZ Fitzroy Crossi 154.85 124 PKPbc PKiKP 15 20 01.6 +0.4
comp=Z,2.2nm,0.9s,baz=211,slow=2.2,SNR=3.7
ASAR Alice Springs 156.99 147 PKP PKPdf 15 19 54.8 -0.5
comp=Z,0.5nm,0.9s,baz=197,slow=1.0,SNR=3.2
ASAR PKPab PKPab 15 20 24.9 -0.3
comp=Z,0.7nm,0.9s,baz=220,slow=3.6,SNR=1.8
WRA Warramunga Arr 160.13 141 PKP PKPdf 15 19 57.8 -1.4
comp=Z,0.8nm,1.0s,baz=275,slow=1.3,SNR=3.3
WRA PKPab PKPab 15 20 39.9 +0.9
comp=Z,2.2nm,1.2s,baz=221,slow=2.3,SNR=3.7

*NEIC* ***20*** *15:10:10.4±2.5,36.66N±0.08×127.1E±0.1,h51km±11km, mb4.2/14, Error ellipse: s-maj=20.5km s-min=8.4km az=67.0*

*IDC* ***20*** *15:10:17.4±9.8,36.62N×126.95E,h119km±94km, mb3.5/12, mb1 3.6/12,mb1mx3.4/45,mbtmpb3.9/12,MS2.8/1, Ms1 2.8/1,ms1mx2.4/51,Error ellipse: s-maj=51.6km s-min=16.9km az=61.0*

**ISC 20 15:10:09.5±0.6,36.67N±0.07×127.0E±0.1,h48km,n33, σ0998/32,mb4.0/17,1C,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| TNTI | Ternate | 2.90 | 173 | Pn | Pn | 15 10 54.1 | +0.9 |
| CTBH | Cotabato--PC H | 4.49 | 322 | ⇑*i* P | Pn | 15 11 15.9 | +0.9 |
| SIJI | Sorong | 6.18 | 137 | LR | LR | 15 14 28.4 | |
| | comp=Z,84nm,20.4s,baz=248,slow=40 | | | | | | |
| TOLI2 | Tolitoli | 6.74 | 248 | Pn | Pn | 15 11 46.0 | 0.0 |
| MYLDM | Lahad Datu | 8.64 | 280 | Pn | Pn | 15 12 13.1 | +1.2 |
| SOEI | Soe | 13.62 | 192 | Pn | Pn | 15 13 18.6 | -1.6 |
| MTN | Manton Dam | 16.90 | 166 | | Pn | 15 14 02.9 | +0.1 |
| MTN | | | | IAmb | IAmb | 15 14 24.6 | |
| | comp=Z,16nm,1.1s | | | | | | |
| KNRA | Kununurra | 19.30 | 175 | P | P | 15 14 30.9 | +0.3 |
| KNRA | | | | IAmb | IAmb | 15 14 56.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| TPUB | Ta-pu | 20.48 | 343 | P | P | 15 14 41.9 | -1.5 |
| FITZ | Fitzroy Crossi | 21.67 | 184 | P | P | 15 14 59.0 | +2.7 |
| | comp=Z,0.9nm,0.7s,baz=343,slow=4.8,SNR=7.0 | | | | | | |
| WB0 | Warramunga Arr | 24.39 | 163 | P | P | 15 15 24.0 | +0.5 |
| WB0 | | | | IAmb | IAmb | 15 15 31.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 24.54 | 163 | P | P | 15 15 25.2 | +0.4 |
| | comp=Z,1.7nm,0.7s,baz=344,slow=11,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 24.54 | 163 | P | P | 15 15 24.7 | -0.2 |
| WB2 | Warramunga Arr | 24.54 | 163 | P | P | 15 15 25.7 | +0.8 |
| WB2 | | | | IAmb | IAmb | 15 15 33.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 24.61 | 163 | P | P | 15 15 27.3 | +1.8 |
| WR0 | | | | IAmb | IAmb | 15 15 34.2 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| AS31 | Alice Springs | 27.98 | 166 | P | P | 15 15 55.0 | -0.9 |
| ASAR | Alice Springs | 27.98 | 166 | P | P | 15 15 57.0 | +1.1 |
| | comp=Z,0.2nm,0.3s,baz=341,slow=10,SNR=13 | | | | | | |
| CMAR | Chiang Mai Arr | 31.16 | 300 | P | P | 15 16 24.4 | +0.2 |
| | comp=Z,1.0nm,0.8s,baz=110,slow=6.9,SNR=12 | | | | | | |
| KSAR | Wonju Array Be | 33.62 | 1 | P | P | 15 16 44.5 | -0.9 |
| BBOO | Buckleboo | 37.28 | 167 | P | P | 15 17 16.6 | -0.3 |
| STKA | Stephens Creek | 37.97 | 160 | P | P | 15 17 23.4 | +0.6 |
| | comp=Z,2.1nm,0.8s,baz=337,slow=11,SNR=2.8 | | | | | | |
| STKA | Stephens Creek | 37.97 | 160 | P | P | 15 17 22.6 | -0.2 |
| STKA | | | | IAmb | IAmb | 15 17 47.0 | |
| | comp=Z,2.6nm,1.4s | | | | | | |
| SONM | Songino Array | 47.45 | 341 | P | P | 15 18 40.5 | +1.0 |
| | comp=Z,0.4nm,0.6s,baz=151,slow=8.3,SNR=3.0 | | | | | | |
| SONM | Songino Array | 47.45 | 341 | P | P | 15 18 39.7 | +0.1 |
| MK31 | Makanchi Array | 57.78 | 325 | P | P | 15 19 55.2 | -0.7 |
| MK31 | | | | IAmb | IAmb | 15 19 59.0 | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 57.78 | 325 | P | P | 15 19 56.1 | +0.3 |
| | comp=Z,1.5nm,0.5s,baz=122,slow=7.5,SNR=26 | | | | | | |
| MAKZ | Makanchi | 57.96 | 325 | P | P | 15 19 57.1 | 0.0 |
| MAKZ | | | | IAmb | IAmb | 15 20 07.9 | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| YAK | Yakutsk | 58.26 | 1 | P | P | 15 19 59.8 | +0.9 |
| | comp=Z,4.2nm,0.5s,baz=156,slow=1.7,SNR=4.1 | | | | | | |
| ZALV | Zalesovo Beam | 60.78 | 333 | P | P | 15 20 16.6 | +0.2 |
| | comp=Z,0.5nm,0.5s,baz=126,slow=7.3,SNR=2.2 | | | | | | |
| KURK | Kurchatov | 61.95 | 327 | P | P | 15 20 23.4 | -0.9 |
| BRTR | Keskin Array B | 90.29 | 310 | P | P | 15 23 05.8 | 0.0 |
| | comp=Z,0.7nm,0.8s,baz=106,slow=7.3,SNR=2.2 | | | | | | |
| ARCES | ARCESS Array B | 90.61 | 340 | P | P | 15 23 05.2 | -1.3 |
| | comp=Z,2.8nm,1.0s,baz=70,slow=7.8,SNR=3.6 | | | | | | |
| AKASG | Malin Array Be | 92.13 | 321 | P | P | 15 23 13.9 | 0.0 |
| | comp=Z,0.2nm,0.2s,baz=84,slow=3.0,SNR=1.6 | | | | | | |

*TUL* ***20*** *15:16:10.5±0.8,36.26N±0.01×97.36W±0.01,h7km±7km, ML3.0,mb_Lg3.0/68(NEIC),Error ellipse: s-maj=2.3km s-min=1.2km az=214.0*

**NEIC 20 15:16:10.4±0.7,36.26N±0.02×97.365W±0.006,h4km±7km, Error ellipse: s-maj=2.4km s-min=0.7km az=179.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| OKCFA | Oklahoma City | 0.85 | 185 | | Pg | 15 16 26.6 | -0.1 |
| OKCFA | | | | IAmb_Lg | | 15 16 37.5 | |
| | comp=Z,112nm,0.8s | | | | | | |
| OKCSW | OKLAHOMA CITY | 0.86 | 184 | Pg | Pg | 15 16 26.7 | -0.1 |
| T35A | Sooner Cattle | 0.95 | 46 | Pg | Pg | 15 16 28.4 | -0.2 |
| FNO | Franklin | 1.00 | 182 | Pg | Pg | 15 16 29.3 | -0.3 |
| W35A | Tecumseh | 1.18 | 160 | | Pg | 15 16 32.0 | -0.9 |
| TUL1 | Leonard | 1.32 | 105 | | Pn | 15 16 34.4 | -1.2 |
| U32A | Winter Ranch, | 1.33 | 276 | Pn | Pn | 15 16 35.3 | -0.4 |
| X34A | Smith Ranch, M | 1.70 | 193 | | Pb | 15 16 41.9 | -0.3 |
| WMOK | Wichita Mounta | 1.91 | 218 | | Pn | 15 16 44.4 | +0.7 |
| X37A | Clayton | 2.33 | 135 | IAmb_Lg | | 15 17 25.6 | |
| | comp=Z,68nm,0.8s | | | | | | |
| U38A | Gravette | 2.41 | 85 | | Pn | 15 16 52.2 | +1.6 |
| KSU1 | Kansas State U | 2.90 | 12 | IAmb_Lg | | 15 17 48.4 | |
| | comp=Z,35nm,0.8s | | | | | | |
| W39A | Magazine | 3.10 | 109 | IAmb_Lg | | 15 17 57.1 | |
| | comp=Z,33nm,0.8s | | | | | | |
| CBKS | Cedar Bluff | 3.17 | 324 | IAmb_Lg | | 15 17 55.8 | |
| | comp=Z,60nm,1.0s | | | | | | |
| MIAR | Mount Ida | 3.54 | 118 | Pn | Pn | 15 17 07.0 | +0.9 |
| S39A | Bolivar | 3.54 | 65 | | Pn | 15 17 07.1 | +1.0 |
| Z38A | Mt. Pleasant | 3.58 | 146 | IAmb_Lg | | 15 18 12.5 | |
| | comp=Z,44nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.78 | 250 | IAmb_Lg | | 15 18 18.8 | |
| | comp=Z,36nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 4.10 | 114 | IAmb_Lg | | 15 18 22.9 | |
| | comp=Z,28nm,0.7s | | | | | | |
| MGMO | Mountain Grove | 4.19 | 76 | IAmb_Lg | | 15 18 24.5 | |
| | comp=Z,34nm,0.9s | | | | | | |
| WHAR | Wooly Hollow | 4.24 | 102 | IAmb_Lg | | 15 18 31.1 | |
| | comp=Z,39nm,0.9s | | | | | | |
| FCAR | Ozark Folk Cen | 4.26 | 93 | IAmb_Lg | | 15 18 27.3 | |
| | comp=Z,22nm,0.7s | | | | | | |
| W41B | Gary Mavity, V | 4.30 | 103 | IAmb_Lg | | 15 18 36.5 | |
| | comp=Z,23nm,0.9s | | | | | | |
| WLAR | White Oak Lake | 4.33 | 125 | IAmb_Lg | | 15 18 29.8 | |
| | comp=Z,25nm,0.8s | | | | | | |
| P38A | Dawn | 4.52 | 41 | IAmb_Lg | | 15 18 34.0 | |
| | comp=Z,35nm,0.8s | | | | | | |
| R40A | Maddies Statio | 4.54 | 62 | IAmb_Lg | | 15 18 37.0 | |
| | comp=Z,45nm,0.9s | | | | | | |
| Z41A | Richland Creek | 4.80 | 127 | IAmb_Lg | | 15 18 52.4 | |
| | comp=Z,24nm,0.9s | | | | | | |
| KSCO | Kaye Shedlock' | 5.00 | 305 | IAmb_Lg | | 15 18 54.8 | |
| | comp=Z,22nm,0.7s | | | | | | |
| LCAR | Lake Charles | 5.03 | 90 | IAmb_Lg | | 15 18 47.6 | |
| | comp=Z,19nm,1.0s | | | | | | |
| BGNE | Belgrade | 5.18 | 353 | Pn | Pn | 15 17 27.8 | -0.8 |
| BGNE | | | | IAmb_Lg | | 15 19 07.4 | |
| | comp=Z,31nm,0.8s | | | | | | |
| CCM | Cathedral Cave | 5.21 | 68 | IAmb_Lg | | 15 19 03.8 | |
| | comp=Z,30nm,0.7s | | | | | | |
| P40A | Paris | 5.32 | 51 | IAmb_Lg | | 15 19 03.9 | |
| | comp=Z,26nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 5.61 | 83 | IAmb_Lg | | 15 19 16.7 | |
| | comp=Z,27nm,1.0s | | | | | | |
| L34A | Svendsen Farm, | 5.75 | 7 | IAmb_Lg | | 15 19 20.5 | |
| | comp=Z,31nm,0.8s | | | | | | |
| OGNE | Ogallala | 5.94 | 323 | IAmb_Lg | | 15 19 27.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| JCT | Junction City | 6.12 | 200 | IAmb_Lg | | 15 19 41.1 | |
| | comp=Z,19nm,0.7s | | | | | | |
| SCIA | State Center | 6.50 | 29 | IAmb_Lg | | 15 19 47.9 | |
| | comp=Z,25nm,0.7s | | | | | | |
| Q24A | Divide | 6.74 | 296 | IAmb_Lg | | 15 19 44.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| VBMS | Vicksburg | 6.96 | 123 | IAmb_Lg | | 15 19 48.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| PHWY | Pilot Hill | 8.08 | 311 | IAmb_Lg | | 15 20 35.6 | |
| | comp=Z,15nm,1.1s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **N23A** | **Red Feather La** | **8.16** | **307** | IAmb_Lg | | 15 20 43.4 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.62** | **37** | IAmb_Lg | | 15 20 48.0 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **K22A** | **Casper** | **9.53** | **315** | IAmb_Lg | | 15 21 37.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.60** | **4** | IAmb_Lg | | 15 21 23.4 | |
| | comp=Z,8.7nm,1.3s | | | | | | |

*IDC **20** 15:16:21.6±2.0, 37°.05N×142°.47E, h0km, mb3.3/3, mb1 3.4/5, mb1mx3.1/45, mbtmp3.4/5, ML2.8/2, Error ellipse: s-maj=38.4km s-min=29.5km az=77.0*
*JMA **20** 15:16:24.8±0.2, 37°.17N×142°.18E, h38km, M3.4*
**ISC 20 15:16:23.2±3.6, 37°.20N±0°.06×142°.15E±0°.07, h5km±23km, n24, σ1°.24/29, mb3.3/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JFK** | **Kawauchi** | **1.03** | **280** | P | | **Pb** | | **15 16 43.6** | **0.0** |
| JFK | | | | *eS* | | **Sb** | | **15 16 56.6** | **-0.9** |
| **ONAJ** | **Iwakimizuishiy** | **1.09** | **265** | P | | **Pb** | | **15 16 44.2** | **-0.3** |
| **JMST** | **Minamisoumatoc** | **1.14** | **298** | P | | **Pn** | | **15 16 45.1** | **-0.7** |
| JMST | | | | S | | **Sb** | | **15 16 59.3** | **-1.1** |
| **JIKH** | **Ishinomakiboku** | **1.24** | **334** | P | | **Pn** | | **15 16 46.4** | **-0.7** |
| **JMM** | **Marumori** | **1.27** | **302** | P | | **Pn** | | **15 16 47.2** | **-0.4** |
| JMM | | | | *eS* | | **Sb** | | **15 17 03.0** | **-1.3** |
| **JFFD** | **Fukushimafurud** | **1.28** | **266** | P | | **Pn** | | **15 16 47.0** | **-0.7** |
| JFFD | | | | *eS* | | **Sb** | | **15 17 03.0** | **-1.5** |
| **JHO** | **Hitachi** | **1.40** | **246** | P | | **Pn** | | **15 16 48.3** | **-1.1** |
| **JIO** | **Ouri** | **1.41** | **333** | P | | **Pn** | | **15 16 49.2** | **-0.3** |
| JIO | | | | *eS* | | **Sn** | | **15 17 06.9** | **-1.5** |
| **JFT** | **Otama** | **1.48** | **283** | P | | **Pn** | | **15 16 51.1** | **+0.6** |
| JFT | | | | S | | **Sn** | | **15 17 09.9** | **-0.4** |
| **JOU** | **Okura** | **1.66** | **315** | P | | **Pn** | | **15 16 54.1** | **+1.1** |
| JOU | | | | S | | **Sn** | | **15 17 14.7** | **0.0** |
| **JYS** | **Shirataka** | **1.95** | **302** | S | | **Sb** | | **15 17 23.5** | **-0.2** |
| **JFY** | **Yanaizu** | **1.96** | **277** | P | | **Pn** | | **15 16 59.2** | **+2.0** |
| JFY | | | | S | | **Sn** | | **15 17 22.9** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **3.23** | **259** | Pn | | **Pn** | | **15 17 16.4** | **+1.8** |
| | 0.5nm,0.3s,baz=83,slow=15,SNR=21 | | | | | | | | |
| MJAR | | | | Sn | | **Sb** | | **15 17 58.8** | **-1.9** |
| | 0.3nm,0.3s,baz=97,slow=28,SNR=4.1 | | | | | | | | |
| **MAT** | **Matsushiro** | **3.23** | **260** | P | | **Pn** | | **15 17 16.7** | **+2.1** |
| MAT | | | | *eS* | | **Sn** | | **15 17 52.7** | **-0.8** |
| **ASAJ** | **Asahikawa** | **6.92** | **3** | P | | **Pn** | | **15 18 05.9** | **+0.6** |
| | 0.2nm,0.3s,baz=179,slow=17,SNR=2.1 | | | | | | | | |
| ASAJ | | | | Sn | | **Sn** | | **15 19 23.7** | **-0.6** |
| | 0.3nm,0.3s,baz=162,slow=20,SNR=1.7 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.73** | **122** | T | | T | | 15 51 35.6 | |
| | baz=314 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.74** | **122** | T | | T | | 15 51 40.8 | |
| | baz=314,slow=74 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.75** | **122** | T | | T | | 15 51 39.4 | |
| | baz=314,slow=74 | | | | | | | | |
| **SONM** | **Songino Array** | **28.19** | **304** | P | | **P** | | **15 22 17.9** | **+1.2** |
| | 0.2nm,0.5s,baz=96,slow=10,SNR=2.6 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.46** | **124** | T | | T | | 15 52 03.5 | |
| | baz=316,slow=74 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.46** | **124** | T | | T | | 15 52 00.5 | |
| | baz=316 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.47** | **124** | T | | T | | 15 52 01.6 | |
| | baz=316,slow=74 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.53** | **302** | P | | **P** | | **15 24 37.8** | **+2.0** |
| | 0.3nm,0.7s,baz=90,slow=8.6,SNR=3.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.31** | **189** | P | | **P** | | **15 26 10.4** | **-1.7** |
| | 0.3nm,0.6s,baz=5.0,slow=6.9,SNR=5.0 | | | | | | | | |

*NEIC **20** 15:35:46.0±0.8, 19°.07N±0°.08×66°.44W±0°.04, h45km±19km, Error ellipse: s-maj=11.9km s-min=5.3km az=185.0*
*RSPR **20** 15:35:47.0, 19°.09N×66°.43W, h41km±3km, MD3.1/14*
**ISC 20 15:35:45.8±1.7, 19°.07N±0°.08×66°.43W±0°.04, h50km, n55, σ0°.60/59, 12C-1D, Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EMPR** | **Esperanza - Ma** | **0.60** | **189** | ⇑*iP* | | **Pn** | | **15 35 58.4** | **+0.1** |
| **EMPR** | **Esperanza - Ma** | **0.60** | **189** | *eS* | | **Sn** | | **15 36 07.2** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **0.60** | **189** | | | **Pn** | | **15 35 58.4** | **+0.1** |
| EMPR | | | | | | **Sn** | | **15 36 07.2** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **0.60** | **189** | IAML | | | | 15 36 08.2 | |
| | comp=E,2μm,0.7s | | | | | | | | |
| EMPR | | | | IAML | | | | 15 36 10.1 | |
| | comp=N,958nm,0.6s | | | | | | | | |
| **AOPR** | **Arecibo Observ** | **0.78** | **203** | ⇑*iP* | | **Pn** | | **15 36 00.6** | **0.0** |
| **AOPR** | **Arecibo Observ** | **0.78** | **203** | *eS* | | **Sn** | | **15 36 11.1** | **-0.4** |
| **AOPR** | **Arecibo Observ** | **0.78** | **203** | | | **Pn** | | **15 36 00.6** | **0.0** |
| AOPR | | | | | | **Sn** | | **15 36 11.1** | **-0.4** |
| **GCPR** | **Guaynabo City** | **0.83** | **156** | ⇓*eP* | | **Pn** | | **15 36 01.2** | **0.0** |
| **GCPR** | **Guaynabo City** | **0.83** | **156** | *eS* | | **Sn** | | **15 36 12.5** | **0.0** |
| **GCPR** | **Guaynabo City** | **0.83** | **156** | | | **Pn** | | **15 36 01.2** | **0.0** |
| GCPR | | | | | | **Sn** | | **15 36 12.5** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **199** | ⇑*eP* | | **Pn** | | **15 36 01.6** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **199** | *eS* | | **Sn** | | **15 36 13.2** | **-0.1** |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **199** | | | **Pn** | | **15 36 01.6** | **0.0** |
| UUPR | | | | | | **Sn** | | **15 36 13.2** | **-0.1** |
| **AGPR** | **Aguadilla, PR** | **0.88** | **227** | ⇑*eP* | | **Pn** | | **15 36 01.2** | **-0.7** |
| **AGPR** | **Aguadilla, PR** | **0.88** | **227** | *eS* | | **Sn** | | **15 36 13.4** | **-0.3** |
| **AGPR** | **Aguadilla, PR** | **0.88** | **227** | | | **Pn** | | **15 36 01.2** | **-0.7** |
| AGPR | | | | | | **Sn** | | **15 36 13.4** | **-0.3** |
| **AGPR** | **Aguadilla, PR** | **0.88** | **227** | IAML | | | | 15 36 21.9 | |
| | comp=E,319nm,0.5s | | | | | | | | |
| AGPR | | | | IAML | | | | 15 36 25.3 | |
| | comp=N,371nm,0.4s | | | | | | | | |
| **SJG** | **San Juan** | **0.99** | **164** | | | **Pn** | | **15 36 03.2** | **-0.3** |
| SJG | | | | IAML | | | | 15 36 19.3 | |
| | comp=N,245nm,0.2s | | | | | | | | |
| SJG | | | | IAML | | | | 15 36 22.6 | |
| | comp=N,258nm,0.5s | | | | | | | | |
| **CELP** | **Cerrillos** | **1.00** | **188** | ⇑*eP* | | **Pn** | | **15 36 03.9** | **+0.3** |
| **CELP** | **Cerrillos** | **1.00** | **188** | *eS* | | **Sn** | | **15 36 16.8** | **+0.1** |
| **CELP** | **Cerrillos** | **1.00** | **188** | | | **Pn** | | **15 36 03.9** | **+0.3** |
| CELP | | | | | | **Sn** | | **15 36 16.8** | **+0.1** |
| **CELP** | **Cerrillos** | **1.00** | **188** | IAML | | | | 15 36 25.0 | |
| | comp=E,242nm,0.3s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.04** | **189** | ⇑*eP* | | **Pn** | | **15 36 03.4** | **-0.6** |
| **OBIP** | **Obispado Ponce** | **1.04** | **189** | *eS* | | **Sn** | | **15 36 17.5** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **1.04** | **189** | | | **Pn** | | **15 36 03.4** | **-0.6** |
| OBIP | | | | | | **Sn** | | **15 36 17.5** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **1.04** | **189** | IAML | | | | 15 36 22.1 | |
| | comp=N,237nm,0.6s | | | | | | | | |
| **HUMP** | **Col San Antoni** | **1.08** | **149** | ⇑*eP* | | **Pn** | | **15 36 04.8** | **+0.2** |
| **HUMP** | **Col San Antoni** | **1.08** | **149** | *eS* | | **Sn** | | **15 36 18.1** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.08** | **149** | | | **Pn** | | **15 36 04.8** | **+0.2** |
| HUMP | | | | | | **Sn** | | **15 36 18.1** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.08** | **149** | IAML | | | | 15 36 20.7 | |
| | comp=N,425nm,0.2s | | | | | | | | |
| **LSP** | **Las Mesas** | **1.08** | **215** | ⇑*eP* | | **Pn** | | **15 36 05.0** | **+0.3** |
| **LSP** | **Las Mesas** | **1.08** | **215** | *eS* | | **Sn** | | **15 36 18.7** | **0.0** |
| **PRSN** | **Puerto Rico Se** | **1.08** | **219** | | | **Pn** | | **15 36 04.2** | **-0.5** |
| **PDPR** | **Patillas Dam,** | **1.12** | **160** | | | **Pn** | | **15 36 05.5** | **+0.3** |
| PDPR | | | | IAML | | | | 15 36 23.4 | |
| | comp=E,235nm,0.1s | | | | | | | | |
| **IGPR** | **InterUniversit** | **1.14** | **164** | ⇑*eP* | | **Pn** | | **15 36 05.9** | **+0.4** |
| **IGPR** | **InterUniversit** | **1.14** | **164** | *eS* | | **Sn** | | **15 36 20.3** | **+0.3** |
| **IDE** | **Isla Desecheo** | **1.20** | **236** | ⇑*eP* | | **Pn** | | **15 36 06.2** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.24** | **211** | ⇑*eP* | | **Pn** | | **15 36 07.1** | **+0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.24** | **211** | *eS* | | **Sn** | | **15 36 22.8** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **1.24** | **211** | | | **Pn** | | **15 36 07.1** | **+0.3** |
| CRPR | | | | | | **Sn** | | **15 36 22.8** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **1.24** | **211** | IAML | | | | 15 36 34.8 | |
| | comp=N,230nm,0.7s | | | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.24** | **208** | ⇑*eP* | | **Pn** | | **15 36 06.2** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **1.24** | **208** | *eS* | | **Sn** | | **15 36 22.2** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **1.24** | **208** | | | **Pn** | | **15 36 06.2** | **-0.5** |
| MLPR | | | | | | **Sn** | | **15 36 22.2** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **1.24** | **208** | IAML | | | | 15 36 22.9 | |
| | comp=N,182nm,0.6s | | | | | | | | |
| MLPR | | | | IAML | | | | 15 36 23.8 | |
| | comp=E,223nm,0.2s | | | | | | | | |
| **MTP** | **Monte Pirata** | **1.28** | **139** | ⇑*eP* | | **Pn** | | **15 36 07.4** | **0.0** |
| **MTP** | **Monte Pirata** | **1.28** | **139** | *eS* | | **Sn** | | **15 36 23.2** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.28** | **139** | | | **Pn** | | **15 36 07.4** | **0.0** |
| MTP | | | | | | **Sn** | | **15 36 23.2** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.28** | **139** | IAML | | | | 15 36 24.0 | |
| | comp=E,175nm,0.3s | | | | | | | | |
| **CUPR** | **Culebra, Puert** | **1.33** | **125** | ⇑*eP* | | **Pn** | | **15 36 07.9** | **-0.1** |
| **CUPR** | **Culebra, Puert** | **1.33** | **125** | *eS* | | **Sn** | | **15 36 24.4** | **-0.2** |
| **CUPR** | **Culebra, Puert** | **1.33** | **125** | | | **Pn** | | **15 36 07.9** | **-0.1** |
| CUPR | | | | | | **Sn** | | **15 36 24.4** | **-0.2** |
| **PCDR** | **Punta Cana, DR** | **1.93** | **254** | Pn | | **Pn** | | **15 36 18.2** | **+2.0** |
| PCDR | | | | IAML | | | | 15 36 54.0 | |
| | comp=N,302nm,1.2s | | | | | | | | |
| PCDR | | | | IAML | | | | 15 37 00.8 | |
| | comp=E,143nm,1.7s | | | | | | | | |
| **DR12** | **Loma Pena Alta** | **2.80** | **265** | | | **Pn** | | **15 36 25.4** | **-2.9** |
| **SDDR** | **Presa de Saban** | **4.59** | **270** | Pn | | **Pn** | | **15 36 54.6** | **+1.8** |

*IDC **20** 15:42:16.2±1.3, 52°.45N×175°.01W, h0km, mb3.4/6, mb1 3.8/8, mb1mx3.5/74, mbtmp3.5/8, ML3.5/2, Error ellipse: s-maj=40.1km s-min=24.1km az=164.0*
*NEIC **20** 15:42:39.8±1.4, 52°.7N±0°.3×174°.5W±0°.2, h192km±10km, Error ellipse: s-maj=39.9km s-min=10.1km az=165.0*
*AEIC **20** 15:42:41.1±3.2, 52°.4N±0°.3×174°.4W±0°.2, h192km±6km, ML3.5/30, mb4.2/40(NEIC), Error ellipse: s-maj=40.1km s-min=10.0km az=164.0*
**ISC 20 15:42:39.3±0.7, 52°.7N±0°.2×174°.46W±0°.07, h194km±8km, n75, σ0°.80/79, mb3.2/6, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KOWE** | **Korovin West** | **0.31** | **156** | | | **Pn** | | **15 43 05.6** | **+0.4** |
| **KOKL** | **Mount Kliuchef** | **0.36** | **154** | | | **Pn** | | **15 43 06.0** | **+0.6** |
| **KOFP** | **Korovin Flat P** | **0.43** | **149** | | | **Pn** | | **15 43 05.6** | **0.0** |
| **ATKA** | **Atka Island** | **0.47** | **160** | | | **Pn** | | **15 43 05.3** | **-0.4** |
| ATKA | | | | | | **Sn** | | **15 43 25.4** | **-0.5** |
| **GSIG** | **Igitkin Island** | **1.12** | **234** | | | **Pn** | | **15 43 09.2** | **-0.1** |
| **GSTR** | **Great Sitkin T** | **1.13** | **241** | | | **Pn** | | **15 43 09.6** | **+0.2** |
| **GSMY** | **Great Sitkin M** | **1.15** | **239** | | | **Pn** | | **15 43 09.6** | **0.0** |
| **GSTD** | **Great Sitkin T** | **1.19** | **241** | | | **Pn** | | **15 43 10.0** | **0.0** |
| GSTD | | | | | | **Sn** | | **15 43 33.1** | **-0.6** |
| **GSCK** | **Great Sitkin C** | **1.23** | **239** | | | **Pn** | | **15 43 10.3** | **+0.2** |
| GSCK | | | | | | **Sn** | | **15 43 34.9** | **+0.9** |
| **ETKA** | **Kagalaska Isla** | **1.43** | **238** | | | **Pn** | | **15 43 12.2** | **+0.3** |
| **ADAG** | **Mount Adagdak** | **1.48** | **244** | | | **Pn** | | **15 43 13.0** | **+0.7** |
| **ADK** | **Adak** | **1.57** | **242** | | | **Pn** | | **15 43 13.3** | **+0.2** |
| ADK | | | | | | **Sn** | | **15 43 38.4** | **-0.9** |
| **KIKV** | **Kanaga Island** | **1.84** | **246** | | | **Pn** | | **15 43 16.5** | **+0.8** |
| **KIWB** | **Kanaga Island** | **1.84** | **245** | | | **Pn** | | **15 43 16.3** | **+0.6** |
| **KIMD** | **Kanaga Island** | **1.93** | **244** | | | **Pn** | | **15 43 17.0** | **+0.4** |
| KIMD | | | | | | **Sn** | | **15 43 45.9** | **+0.4** |
| **TAPA** | **Tanaga Point A** | **2.23** | **249** | | | **Pn** | | **15 43 20.3** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **2.29** | **252** | | | **Pn** | | **15 43 21.1** | **+0.6** |
| **TASE** | **Tanaga Southea** | **2.35** | **251** | | | **Pn** | | **15 43 22.0** | **+0.8** |
| **GAEA** | **Gareloi East** | **2.78** | **254** | | | **Pn** | | **15 43 26.7** | **+0.7** |
| **GANO** | **Gareloi North** | **2.80** | **255** | | | **Pn** | | **15 43 27.2** | **+0.9** |
| **GALAA** | **Gareloi Lava P** | **2.80** | **253** | | | **Pn** | | **15 43 26.9** | **+0.6** |
| **MREP** | **Makushin Rep't** | **4.78** | **73** | | | **Pn** | | **15 43 51.1** | **+0.4** |
| **UNV** | **Unalaska Valle** | **4.92** | **73** | | | **Pn** | | **15 43 52.7** | **+0.2** |
| **CAST** | **Castle Rocks** | **15.92** | **39** | P | | **P** | | **15 46 14.3** | **+1.9** |
| **CUT** | **Chulitna** | **16.15** | **43** | P | | **P** | | **15 46 15.0** | **+0.1** |
| **PWL** | **Port Wells** | **16.42** | **50** | P | | **P** | | **15 46 17.2** | **-0.7** |
| **KTH** | **Kantishna Hill** | **16.43** | **39** | P | | **P** | | **15 46 19.4** | **+1.3** |
| KTH | | | | IAmb | | IAmb | | 15 46 21.1 | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **16.47** | **46** | P | | **P** | | **15 46 17.9** | **-0.6** |
| GHO | | | | IAmb | | IAmb | | 15 46 27.6 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **KNK** | **Knik Glacier** | **16.54** | **48** | P | | **P** | | **15 46 18.7** | **-0.6** |
| KNK | | | | IAmb | | IAmb | | 15 46 37.1 | |
| | comp=Z,17nm,1.3s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **16.63** | **40** | P | | **P** | | **15 46 21.4** | **+1.0** |
| TRF | | | | IAmb | | IAmb | | 15 46 23.8 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **16.70** | **37** | P | | **P** | | **15 46 22.5** | **+1.5** |
| BPAW | | | | IAmb | | IAmb | | 15 46 26.9 | |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| **SML** | **Sawmill** | **16.74** | **47** | P | | **P** | | **15 46 21.4** | **-0.1** |
| SML | | | | IAmb | | IAmb | | 15 46 31.3 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.78** | **283** | Pn | | P | | 15 46 06.9 | -15 |
| | comp=Z,0.2nm,0.3s,baz=87,slow=12,SNR=4.6 | | | | | | | | |
| **IMAR** | **Indian Mountai** | **16.91** | **30** | P | | **P** | | **15 46 24.0** | **+0.7** |
| **H21K** | **Melozitna Rive** | **16.99** | **32** | P | | **P** | | **15 46 25.4** | **+1.2** |
| **RND** | **Reindeer** | **17.18** | **41** | P | | **P** | | **15 46 26.3** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **17.20** | **47** | P | | **P** | | **15 46 27.5** | **+1.0** |
| **FID** | **Port Fidalgo** | **17.25** | **51** | P | | **P** | | **15 46 26.8** | **-0.3** |
| **MCK** | **McKinley** | **17.30** | **40** | P | | **P** | | **15 46 27.9** | **+0.4** |
| MCK | | | | IAmb | | IAmb | | 15 46 29.8 | |
| | comp=Z,7.3nm,0.6s | | | | | | | | |
| **DHY** | **Denali Highway** | **17.64** | **43** | P | | **P** | | **15 46 31.6** | **+0.2** |
| DHY | | | | IAmb | | IAmb | | 15 46 34.1 | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **KLU** | **Klutina** | **17.72** | **49** | P | | **P** | | **15 46 33.1** | **+0.9** |
| **I23K** | **Minto, Yukon-K** | **17.85** | **36** | P | | **P** | | **15 46 34.5** | **+1.0** |
| **WRH** | **Wood River Hil** | **17.98** | **39** | P | | **P** | | **15 46 34.9** | **0.0** |
| **MDM** | **Murphy Dome** | **18.16** | **37** | P | | **P** | | **15 46 37.0** | **+0.1** |
| MDM | | | | IAmb | | IAmb | | 15 46 41.5 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **H23K** | **Yukon River** | **18.17** | **34** | P | | **P** | | **15 46 36.2** | **-0.7** |
| **CCB** | **Clear Creek Bu** | **18.17** | **38** | P | | **P** | | **15 46 36.3** | **-0.6** |
| CCB | | | | IAmb | | IAmb | | 15 46 39.6 | |
| | comp=Z,5.1nm,0.6s | | | | | | | | |
| **BMRM** | **Bremner River** | **18.20** | **51** | P | | **P** | | **15 46 37.9** | **+0.5** |
| **HMT** | **Hamilton** | **18.22** | **53** | P | | **P** | | **15 46 38.5** | **+0.9** |
| **N25K** | **Chitina, Valde** | **18.36** | **49** | P | | **P** | | **15 46 40.3** | **+1.1** |
| **HDA** | **Harding Lake** | **18.39** | **39** | P | | **P** | | **15 46 40.4** | **+1.1** |
| HDA | | | | IAmb | | IAmb | | 15 46 41.5 | |
| | comp=Z,8.4nm,0.6s | | | | | | | | |
| **PAX** | **Paxson** | **18.41** | **45** | P | | **P** | | **15 46 40.4** | **+0.7** |
| PAX | | | | IAmb | | IAmb | | 15 46 42.1 | |
| | comp=Z,4.4nm,0.6s | | | | | | | | |
| **IL31** | | **18.57** | **39** | P | | **P** | | **15 46 41.8** | **+0.5** |
| **ILAR** | **Eielson Array** | **18.57** | **39** | P | | **P** | | **15 46 39.2** | **-2.1** |
| | comp=Z,0.5nm,0.3s,baz=243,slow=10,SNR=28 | | | | | | | | |
| **ILAR** | **Eielson Array** | **18.57** | **39** | P | | **P** | | **15 46 42.2** | **+0.8** |
| **GLB** | **Gilahina Butte** | **18.69** | **50** | P | | **P** | | **15 46 44.2** | **+1.5** |
| GLB | | | | IAmb | | IAmb | | 15 47 06.2 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **H24K** | **Noodor Dome** | **18.75** | **35** | P | | **P** | | **15 46 44.0** | **+0.7** |
| H24K | | | | IAmb | | IAmb | | 15 46 45.6 | |
| | comp=Z,5.6nm,0.8s | | | | | | | | |
| **VRDI** | **Verde Repeater** | **18.80** | **51** | P | | **P** | | **15 46 45.7** | **+1.6** |
| VRDI | | | | IAmb | | IAmb | | 15 46 57.0 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| **RIDG** | **Independent Ri** | **18.95** | **43** | P | | **P** | | **15 46 45.7** | **+0.2** |
| **DOT** | **Dot Lake** | **19.24** | **43** | P | | **P** | | **15 46 49.0** | **+0.4** |
| DOT | | | | IAmb | | IAmb | | 15 46 52.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **19.34** | **45** | P | | **P** | | **15 46 50.4** | **+0.7** |
| **SCRK** | **Sand Creek** | **19.39** | **42** | P | | **P** | | **15 46 49.6** | **-0.7** |
| **M27K** | **Edge Creek, AK** | **19.80** | **48** | P | | **P** | | **15 46 56.0** | **+1.3** |
| M27K | | | | IAmb | | IAmb | | 15 47 03.7 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **19.90** | **27** | P | | **P** | | **15 46 54.7** | **-0.9** |
| TOLK | | | | IAmb | | IAmb | | 15 46 59.3 | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **20.03** | **46** | P | | **P** | | **15 46 56.3** | **-0.8** |
| **BMAR** | **Burnt Mountain** | **20.70** | **33** | P | | **P** | | **15 47 04.2** | **0.0** |
| **EGAK** | **Eagle** | **20.82** | **41** | P | | **P** | | **15 47 05.5** | **+0.1** |
| EGAK | | | | IAmb | | IAmb | | 15 47 08.3 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **DAWY** | **Dawson** | **21.34** | **44** | P | | **P** | | **15 47 11.2** | **+0.3** |
| **INK** | **Inuvik** | **24.87** | **35** | P | | **P** | | **15 47 43.4** | **-0.3** |
| | comp=Z,0.7nm,0.3s,baz=230,slow=5.3,SNR=9.6 | | | | | | | | |
| **INK** | **Inuvik** | **24.87** | **35** | P | | **P** | | **15 47 43.3** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **32.40** | **49** | P | | **P** | | **15 48 49.8** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=286,slow=7.3,SNR=3.6 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.77** | **87** | P | | **P** | | **15 50 02.8** | **+1.3** |
| | comp=Z,0.4nm,0.6s,baz=311,slow=6.8,SNR=3.6 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **55.84** | **85** | P | | **P** | | **15 51 56.6** | **+0.1** |
| | comp=Z,0.1nm,0.4s,baz=328,slow=4.3,SNR=2.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **55.84** | **85** | P | | **P** | | **15 51 56.4** | **-0.1** |
| **MKAR** | **Makanchi Array** | **61.30** | **310** | P | | **P** | | **15 52 32.7** | **-1.2** |
| | comp=Z,0.2nm,0.7s,baz=46,slow=5.6,SNR=2.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **84.82** | **227** | P | | **P** | | **15 54 50.9** | **-0.9** |
| | comp=Z,0.3nm,0.6s,baz=35,slow=6.1,SNR=1.9 | | | | | | | | |

*IDC **20** 15:42:39.5±3.3, 41°.35N×79°.11E, h0km, mb3.0/1, mb1 3.5/5, mb1mx3.3/65, mbtmp3.5/5, ML3.3/4, Error ellipse: s-maj=42.1km s-min=18.9km az=167.0*
*SOME **20** 15:42:40.0, 41°.62N×78°.87E, h10km*
*NNC **20** 15:42:41.5±2.2, 41°.56N×78°.92E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=17.4km s-min=9.0km az=167.0*
*KRNET **20** 15:42:44.5±0.1, 41°.77N×78°.59E, h14km, mb3.7*
**ISC 20 15:42:43.9±1.5, 41°.80N±0°.04×78°.81E±0°.03, h0km±10km, n66, σ2°.00/113, 29C-21D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PRZ** | **Przheval'sk** | **0.75** | **336** | ⇓*iP* | | **Pg** | | **15 42 58.5** | **+0.2** |
| | baz=49 | | | | | | | | |
| PRZ | | | | ⇓*iS* | | **Sb** | | **15 43 09.6** | **-1.2** |
| | baz=49 | | | | | | | | |
| **KDJ** | **Kajisay** | **1.26** | **286** | ⇓*iP* | | **Pg** | | **15 43 05.5** | **-2.5** |
| | baz=89 | | | | | | | | |
| KDJ | | | | ⇓*iS* | | **Sg** | | **15 43 20.6** | **-3.7** |
| | baz=89 | | | | | | | | |
| **SATY** | **Saty** | **1.30** | **347** | *eP* | | **Pg** | | **15 43 08.6** | **-0.1** |
| | 23nm,0.1s | | | | | | | | |
| SATY | | | | *eS* | | **Sn** | | **15 43 29.3** | **+1.9** |
| | 164nm,0.0s | | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.30** | **320** | ⇓*iP* | | **Pg** | | **15 43 08.1** | **-0.7** |
| | baz=26 | | | | | | | | |
| ANVS | | | | ⇓*iS* | | **Sg** | | **15 43 24.8** | **-0.8** |
| | baz=26 | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.36** | **7** | *eP* | | **Pg** | | **15 43 08.6** | **-1.3** |
| | 17nm,0.3s | | | | | | | | |
| UZB | | | | *eS* | | **Sn** | | **15 43 29.6** | **+0.6** |
| | 132nm,0.2s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.40** | **349** | *eP* | | **Pg** | | **15 43 10.1** | **-0.6** |
| | 80nm,0.1s | | | | | | | | |
| ZHN | | | | *eS* | | **Sn** | | **15 43 31.7** | **+1.8** |
| | 453nm,0.3s | | | | | | | | |
| **PDGK** | **Podgornoye** | **1.61** | **18** | ⇑Pn | | **Pn** | | **15 43 12.6** | **-1.1** |
| | 35nm,0.3s | | | | | | | | |
| PDGK | | | | ⇓Sn | | **Sg** | | **15 43 38.1** | **+2.4** |
| | 187nm,0.6s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.67** | **357** | *eP* | | **Pn** | | **15 43 14.6** | **+0.2** |
| | 135nm,0.2s | | | | | | | | |
| KPKS | | | | *eS* | | **Sg** | | **15 43 39.7** | **+2.1** |
| | 238nm,0.3s | | | | | | | | |
| **KURS** | **Kuram** | **1.75** | **345** | *eP* | | **Pb** | | **15 43 17.1** | **+0.1** |
| | 23nm,0.3s | | | | | | | | |
| KURS | | | | *eS* | | **Sg** | | **15 43 43.8** | **+3.5** |
| | 103nm,0.1s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.85** | **313** | *eP* | | **Pn** | | **15 43 17.9** | **+0.6** |
| | 111nm,0.1s | | | | | | | | |
| TNSS | | | | *eS* | | **Sg** | | **15 43 45.1** | **+1.6** |
| | 121nm,0.0s | | | | | | | | |
| **MDOK** | **Medeo** | **1.89** | **317** | *eP* | | **Pn** | | **15 43 18.5** | **+1.0** |
| | 94nm,0.3s | | | | | | | | |
| MDOK | | | | *eS* | | **Sg** | | **15 43 46.0** | **+1.5** |
| | 110nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **1.89** | **317** | ⇑Pn | | **Pn** | | **15 43 18.3** | **+0.8** |
| | 52nm,0.4s | | | | | | | | |
| MDOK | | | | ⇑Sn | | **Sg** | | **15 43 46.3** | **+1.9** |
| | 94nm,0.5s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.91** | **319** | *eP* | | **Pn** | | **15 43 19.1** | **+1.4** |
| | 80nm,0.2s | | | | | | | | |
| KOTS | | | | *eS* | | **Sg** | | **15 43 47.6** | **+2.5** |
| | 285nm,0.4s | | | | | | | | |
| **ULHL** | **Ulahol** | **1.96** | **284** | ⇑*eP* | | **Pn** | | **15 43 18.1** | **-0.5** |
| | baz=86 | | | | | | | | |
| ULHL | | | | ⇑*iS* | | **Sn** | | **15 43 43.1** | **-0.9** |
| | baz=86 | | | | | | | | |
| **KNDC** | **Almaty** | **1.97** | **317** | ⇑Pn | | **Pn** | | **15 43 20.2** | **+1.7** |
| | 46nm,0.3s | | | | | | | | |
| KNDC | | | | ⇓Sn | | **Sg** | | **15 43 49.9** | **+2.8** |
| | 260nm,0.5s | | | | | | | | |
| **AAA** | **Alma-Ata** | **

baz=87
**ARLS Aral 3.35 273**⇑*iP* **Pn 15 43 38.0 +0.4**
baz=73
ARLS ⇑*iS* **Sn 15 44 16.8 -1.4**
baz=73
**SGDS Sogindy 3.50 300** *eP* **Pb 15 43 46.2 -0.5**
comp=E,24nm,0.5s
SGDS *eS* **Sb 15 44 33.6 +3.9**
comp=E,31nm,0.8s
**USP Ospenovka 3.50 296** P **Pn 15 43 41.4 +1.8**
SNR=11
**USP Ospenovka 3.50 296**⇑*iP* **Pn 15 43 40.2 +0.6**
baz=98
USP ⇑*iS* **Sn 15 44 21.2 -0.6**
baz=98
**KAPS Kapalarasan 3.51 6** *eP* **Pb 15 43 47.0 +0.1**
comp=E,13nm,0.1s
KAPS *eS* **Sg 15 44 35.2 -1.4**
comp=E,52nm,0.0s
**AML Almayashu 3.83 277** P **Pb 15 43 51.1 -1.4**
SNR=35
**EKS2 Erkin-Say 3.83 285** P **Pb 15 43 52.0 -0.4**
SNR=19
**EKS2 Erkin-Say 3.83 285**⇑*iP* **Pn 15 43 45.1 +0.9**
baz=86
EKS2 ⇑*iS* **Sn 15 44 28.8 -1.2**
baz=86
**MRKS Merke 4.25 285** *eP* **Pb 15 44 00.5 +1.0**
comp=E,16nm,0.3s
MRKS *eS* **Sg 15 44 58.0 -2.3**
comp=E,9.4nm,0.6s
**BTLS Baital 4.75 315** *eP* **Pb 15 44 09.5 +1.6**
comp=E,1.5nm,0.3s
BTLS *eS* **Sg 15 45 13.5 -2.8**
comp=E,4.1nm,0.1s
**MAKZ Makanchi 5.50 23**⇑Pn **Pn 15 44 08.0 +1.0**
comp=E,1.0nm,0.2s
MAKZ ⇑Sn **Sn 15 45 15.5 +4.5**
comp=E,4.3nm,0.5s
MAKZ ⇓Lg Lg 15 45 41.4
comp=E,4.6nm,0.4s
**MK31 Makanchi Array 5.59 25** ⇓Pn **Pn 15 44 09.3 +1.1**
comp=E,0.6nm,0.2s,baz=208,slow=14
MK31 ⇑Sn **Sn 15 45 15.7 +2.6**
comp=E,4.9nm,0.5s,baz=210,slow=26
MK31 ⇓Lg Lg 15 45 45.4
comp=E,8.9nm,0.5s,baz=202,slow=25
**MKAR Makanchi Array 5.59 25** Pn **Pn 15 44 08.8 +0.6**
comp=E,1.7nm,0.3s,baz=202,slow=13,SNR=91
MKAR Sn **Sn 15 45 16.9 +3.8**
comp=E,1.7nm,0.3s,baz=204,slow=21,SNR=9.3
MKAR Lg Lg 15 45 38.5
comp=E,2.4nm,0.3s,baz=202,slow=27,SNR=5.2
**KK08 Karatay Array 6.29 285**⇑Pg **Pb 15 44 38.8 +4.5**
comp=E,6.6nm,0.7s
KK08 ⇑Lg Lg 15 46 04.2
comp=E,8.9nm,0.8s
**ZSN Zaisan 7.11 35** *eP* **Pb 15 44 50.3 +2.0**
comp=E,2.5nm,0.0s
ZSN *eS* **Sg 15 46 23.4 -8.9**
comp=E,7.5nm,0.2s
**OTUK Ortayu 7.91 327**⇑Pn **Pn 15 44 42.6 +2.5**
comp=E,2.3nm,0.8s
OTUK ⇑Lg Lg 15 46 59.7
comp=E,27nm,1.1s
**KURBB Kurchatov Arra 8.83 359** Sn **Sn 15 46 32.9 +0.1**
comp=E,0.1nm,0.3s,baz=262,slow=32,SNR=2.1
KURBB Lg Lg 15 47 24.0
comp=E,0.1nm,0.3s,baz=180,slow=30,SNR=7.6
**KURBB Kurchatov Arra 8.83 359** ⇓Lg Lg 15 47 29.8
comp=E,27nm,0.8s
**KURK Kurchatov 8.92 359**⇑Lg Lg 15 47 32.8
comp=E,16nm,1.2s
**BVAR Borovoye Array 12.59 336** Pn **Pn 15 45 45.4 +1.3**
comp=E,0.2nm,0.3s,baz=42,slow=49,SNR=1.5
BVAR Lg Lg 15 49 30.0
comp=E,0.2nm,0.3s,baz=136,slow=32,SNR=4.0
**ZALV Zalesovo Beam 12.80 16** Pn **Pn 15 45 48.1 +1.1**
comp=E,0.2nm,0.3s,baz=200,slow=12,SNR=2.9
ZALV Sn **Sn 15 48 08.0 -2.1**
comp=E,0.2nm,0.3s,baz=121,slow=41,SNR=2.6
**SONM Songino Array 20.42 63** P **P 15 47 19.1 -3.5**
comp=E,0.6nm,0.8s,baz=254,slow=9.9,SNR=5.2

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*MAN **20** 15:46:54.6, 14°.53N×120°.04E, h27km, mb4.5, ML3.4, MS3.2*
*IDC **20** 15:46:58.1±0.9, 14°.59N×120°.45E, h81km±11km, mb2.9/6, mb1 3.1/6, mb1mx2.9/63, mbtmp3.2/6, Error ellipse: s-maj=41.7km s-min=17.3km az=63.0*
**ISC 20 15:46:55.9**±0.9, **14°.51N**±0°.03×**120.11E**±0°.06, **h55**km±12km, **n20**, σ1**§91**/31, **mb3.3**/5, **10C-2D**, **Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MACP** | **Maragondon, Ca** | **0.64** | **112**⇑ | *eP* | **Pn** | **15 47 08.6** | **-0.5** |
| MACP | | | | *eS* | **Sn** | **15 47 19.8** | **+1.1** |
| **LUBP** | **Lubang** | **0.78** | **170**⇑ | *eP* | **Pn** | **15 47 10.5** | **-0.4** |
| LUBP | | | | *eS* | **Sn** | **15 47 24.0** | **+2.2** |
| **TGY** | **Tagaytay City** | **0.90** | **116** | P | **Pn** | **15 47 13.8** | **+1.3** |
| | 210nm,0.3s,baz=281,slow=1.8,SNR=15 | | | | | | |
| TGY | | | | S | **Sn** | **15 47 26.9** | **+2.2** |
| | 194nm,0.3s,baz=204,slow=22,SNR=17 | | | | | | |
| **PGP** | **Puerto Galera** | **1.29** | **141**⇓ | *eP* | **Pn** | **15 47 18.4** | **+0.7** |
| PGP | | | | *eS* | **Sn** | **15 47 31.0** | **-3.0** |
| **PCPH** | **Palayan** | **1.42** | **42**⇓ | *eP* | **Pn** | **15 47 19.0** | **-0.4** |
| PCPH | | | | *eS* | **Sn** | **15 47 36.5** | **-0.6** |
| **LQP** | **Lukban** | **1.44** | **106**⇑ | *iP* | **Pn** | **15 47 21.1** | **+1.3** |
| LQP | | | | *i* S | Sn | **15 47 52.6** | **+15** |
| **SMPP** | **San Manuel, Pa** | **1.73** | **19**⇑ | *iP* | **Pn** | **15 47 22.9** | **-0.7** |
| SMPP | | | | *i* S | **Sn** | **15 47 43.9** | **-0.7** |
| **BALP** | **Baler** | **1.88** | **49**⇑ | *iP* | **Pn** | **15 47 26.2** | **+0.6** |
| BALP | | | | *i* S | **Sn** | **15 47 49.8** | **+1.6** |
| **BOLP** | **Bolinao** | **1.88** | **354**⇑ | *iP* | **Pn** | **15 47 26.5** | **+0.8** |
| BOLP | | | | *i* S | **Sn** | **15 47 45.7** | **-2.4** |
| **BOAC** | **Boac** | **1.98** | **121**⇑ | *iP* | **Pn** | **15 47 25.4** | **-1.6** |
| BOAC | | | | *i* S | **Sn** | **15 47 53.6** | **+2.9** |
| **SAMP** | **Sagada Mountai** | **2.67** | **16**⇑ | *iP* | **Pn** | **15 47 37.2** | **+0.7** |
| SAMP | | | | *i* S | **Sn** | **15 48 12.3** | **+4.6** |
| **CAUP** | **Cauayan** | **2.93** | **34**⇑ | *iP* | **Pn** | **15 47 41.6** | **+1.6** |
| **ENPP** | **El Nido** | **3.35** | **192**⇑ | *iP* | **Pn** | **15 47 46.4** | **+0.6** |
| ENPP | | | | *i* S | **Sn** | **15 48 23.8** | **-0.5** |
| **JOW** | **Kunigami** | **14.44** | **31** | P | **Pn** | **15 50 13.8** | **-3.6** |
| | 6.8nm,0.3s,baz=279,slow=19,SNR=1.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.67** | **284** | P | **P** | **15 51 34.6** | **+3.2** |
| | 0.4nm,0.4s,baz=96,slow=9.7,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **35.13** | **344** | P | **P** | **15 53 43.6** | **-0.7** |
| | 0.2nm,0.6s,baz=163,slow=10,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.98** | **157** | P | **P** | **15 53 59.1** | **-1.1** |
| | 0.2nm,0.7s,baz=330,slow=10.0,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **40.27** | **160** | P | **P** | **15 54 27.1** | **-0.7** |
| | 0.3nm,0.5s,baz=333,slow=6.8,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.05** | **323** | P | **P** | **15 55 07.1** | **+0.8** |
| | 0.1nm,0.5s,baz=120,slow=8.5,SNR=2.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.20** | **326** | P | **P** | **15 55 40.1** | **+1.5** |
| | 0.3nm,0.6s,baz=132,slow=8.0,SNR=4.2 | | | | | | |

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*BJI **20** 15:51:21.4±0.0, 21°.56S×178°.95W, h574km, mb5.3/71, mB5.2/47*
*MOS **20** 15:51:22.5±0.8, 21°.90S×179°.43W, h583km, mb5.8/44, Error ellipse: s-maj=8.1km s-min=7.0km az=75.3*
*NEIC **20** 15:51:23.3±2.0, 21°.96S±0°.09×179°.4W±0°.1, h583km±4km, mb5.8/277, Mwb5.8/24, Mww5.8, Error ellipse: s-maj=14.1km s-min=12.4km az=114.0*
*NEIC **20** 15:51:23.1, 21°.97S×179°.36W, h589km, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr4.84; Mθθ1.01; Mϕϕ-5.85; Mrθ3.04; Mθϕ0.49; Mϕr-3.08; Fault plane solution: Mo6.95000×10¹⁷ NP1:φs152.09000°, δ65.38000°, λ65.81000°. NP2:φs19.24000°, δ33.98000°, λ131.80000°. Principal axes: T 7.0062, Plg62.0000°, Azm24.0000°; N -0.1127, Plg22.0000°, Azm163.0000°; P -6.8936, Plg17.0000°, Azm260.0000°;*
*NOU **20** 15:51:23.4, 21°.97S×179°.33W, h583km, ML5.8/131, Fiji Islands Region*
*IDC **20** 15:51:24.2±0.3, 21°.90S×179°.43W, h590km±3km, mb5.0/40, mb1 5.1/43, mb1mx5.0/47, mbtmp5.9/43, Error ellipse: s-maj=7.0km s-min=6.8km az=69.0*
*BGR **20** 15:51:25.6±0.0, 21°.90S×178°.10W, h613km±2km*
*GCMT **20** 15:51:26.3±0.1, 22°.01S±0°.02×179°.40W±0°.01, h593km±1km, MW5.8/145, Moment Tensor Solution. s145,c261; s80,c83; Duration: 1§9 Moment tensor: Scale 10¹⁷Nm; Mrr3.84±.06; Mθθ2.07±.10; Mϕϕ-5.91±.09; Mrθ2.60±.10; Mθϕ-0.08±.09; Mϕr-2.68±.09; Best double couple: Mo6.38200×10¹⁷ NP1:φs31.00000°, δ40.00000°, λ142.00000°. NP2:φs152.00000°, δ67.00000°, λ57.00000°. Principal axes: T 6.1270, Plg56.0000°, Azm19.0000°; N 0.5110, Plg30.0000°, Azm167.0000°; P -6.6380, Plg15.0000°, Azm266.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to mantle waves, cutoff=125s. Triangular moment-rate function*
*NEIC **20** 15:51:28, 21°.91S×179°.36W, h580km, Moment Tensor Solution. Duration: 12§0 Moment tensor: Scale 10¹⁷Nm; Mrr4.09; Mθθ1.19; Mϕϕ-5.28; Mrθ2.49; Mθϕ-0.04; Mϕr-2.39; Fault plane solution: Mo5.91000×10¹⁷ NP1:φs26.00000°, δ38.00000°, λ134.00000°. NP2:φs155.00000°, δ64.00000°, λ62.00000°. Principal axes: T 5.9228, Plg60.0000°, Azm22.0000°; N -0.0210, Plg25.0000°, Azm168.0000°; P -5.9018, Plg15.0000°, Azm265.0000°;*
**ISC 20 15:51:23.5**±0.2, **21.99S**±0°.03×**179.34W**±0°.03, **h590**km±2km, **h591**km:**pP-P**, **n1803**, σ1**§43**/2110, **mb5.7**/281, **247C-184D**, **Fault plane solution: NP1:**φs147.63854°, δ70.89305°, λ29.90840°. **NP2:**φs46.97524°, δ61.89130°, λ158.21640°. **Principal axes:** T Plg34.3752°, Azm9.6825°; N Plg54.9918°, Azm177.2808°; P Plg5.8366°, Azm275.6727°; **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.89** | **329** | P | **P** | **15 52 56.1** | **+1.0** |
| | 409nm,0.3s,baz=192,slow=4.6,SNR=100 | | | | | | |
| MSVF | | | | S | **S** | **15 54 11.1** | **+1.4** |
| | baz=311,slow=23,SNR=14 | | | | | | |
| **MSVF** | **Nonsavu** | **4.89** | **329** | P | **P** | **15 52 55.7** | **+0.6** |
| **MSVF** | **Nonsavu** | **4.89** | **329** | P | **P** | **15 52 55.7** | **+0.6** |
| **MSVF** | **Nonsavu** | **4.89** | **329** | P | **P** | **15 52 55.9** | **+0.8** |
| **RIZ** | **Raoul Island** | **7.34** | **170** | P | **P** | **15 53 15.4** | **-0.7** |
| RIZ | | | | S | **S** | **15 54 47.5** | **-0.9** |
| **RAO** | **Raoul Island** | **7.35** | **170** | P | **P** | **15 53 15.8** | **-0.3** |
| | 2μm,0.3s,baz=250,slow=4.9,SNR=22 | | | | | | |
| RAO | | | | S | **S** | **15 54 46.9** | **-1.7** |
| | 1μm,0.3s,baz=119,slow=23,SNR=9.5 | | | | | | |
| **RAO** | **Raoul Island** | **7.35** | **170** | P | **P** | **15 53 14.9** | **-1.3** |
| **RAO** | **Raoul Island** | **7.35** | **170** | P | **P** | **15 53 16.2** | **0.0** |
| **RAO** | **Raoul Island** | **7.35** | **170** | P | **P** | **15 53 15.9** | **-0.3** |
| **GLKZ** | **Green Lake** | **7.36** | **170** | P | **P** | **15 53 15.9** | **-0.4** |
| GLKZ | | | | S | **S** | **15 54 45.3** | **-3.4** |
| **NIUE** | **Niue** | **9.29** | **74** | P | **P** | **15 53 35.2** | **+0.1** |
| | baz=9.3 | | | | | | |
| NIUE | | | | S | **S** | **15 55 30.3** | **+7.3** |
| | baz=9.3 | | | | | | |
| **NIUE** | **Niue** | **9.29** | **74** | P | **P** | **15 53 34.2** | **-0.8** |
| **NIUE** | **Niue** | **9.29** | **74** | P | **P** | **15 53 35.3** | **+0.3** |
| **AFI** | **Afiamalu** | **10.78** | **43** | P | **P** | **15 53 47.6** | **-2.5** |
| | 25nm,0.3s,baz=310,slow=1.7,SNR=46 | | | | | | |
| AFI | | | | S | **S** | **15 55 42.2** | **-8.3** |
| | 11nm,0.3s,baz=5.6,slow=22,SNR=3.2 | | | | | | |
| **AFI** | **Afiamalu** | **10.78** | **43** | P | **P** | **15 53 47.7** | **-2.5** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,1μm,0.9s | | | | | | |
| **AFI** | **Afiamalu** | **10.78** | **43** | P | **P** | **15 53 48.0** | **-2.1** |
| **RTV** | **Rentapao** | **12.24** | **288** | P | **P** | **15 54 06.1** | **+1.4** |
| **RTV** | **Rentapao** | **12.24** | **288** | P | **P** | **15 54 05.1** | **+0.4** |
| **PINNC** | **Pines Island,** | **12.25** | **265** | P | **P** | **15 54 05.1** | **-1.6** |
| **PINNC** | **Pines Island,** | **12.25** | **265** | P | **P** | **15 54 04.3** | **-0.4** |
| **DVP** | **Devils Point** | **12.47** | **288** | P | **P** | **15 54 07.5** | **+0.4** |
| **DVP** | **Devils Point** | **12.47** | **288** | P | **P** | **15 54 06.5** | **-0.6** |
| **LIFNC** | **LIFOU** | **12.56** | **273** | P | **P** | **15 54 05.7** | **-2.2** |
| **LIFNC** | **LIFOU** | **12.56** | **273** | P | **P** | **15 54 05.9** | **-2.0** |
| **LIFNC** | **LIFOU** | **12.56** | **273** | P | **P** | **15 54 06.7** | **-1.2** |
| **YATNC** | **Mamie plateau,** | **12.77** | **267** | P | **P** | **15 54 10.2** | **+0.1** |
| **YATNC** | **Mamie plateau,** | **12.77** | **267** | P | **P** | **15 54 09.4** | **-0.7** |
| **OUENC** | **Ouen Island, N** | **12.81** | **265** | P | **P** | **15 54 09.7** | **-0.7** |
| **OUENC** | **Ouen Island, N** | **12.81** | **265** | P | **P** | **15 54 09.2** | **-1.2** |
| **ONTNC** | **Ouen Toro** | **13.17** | **266** | P | **P** | **15 54 12.3** | **-1.8** |
| **ONTNC** | **Ouen Toro** | **13.17** | **266** | P | **P** | **15 54 14.3** | **+0.2** |
| **DZM** | **Mont Dzumac** | **13.18** | **267** | P | **P** | **15 54 13.5** | **-1.0** |
| | comp=Z,74nm,0.3s,baz=76,slow=20,SNR=479 | | | | | | |
| **DZM** | **Mont Dzumac** | **13.18** | **267** | *eP* | **P** | **15 54 13.4** | **-1.0** |
| | comp=Z,2μm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **13.18** | **267** | P | **P** | **15 54 13.6** | **-0.8** |
| **DZM** | **Mont Dzumac** | **13.18** | **267** | P | **P** | **15 54 13.8** | **-0.6** |
| **DZM** | **Mont Dzumac** | **13.18** | **267** | P | **P** | **15 54 13.5** | **-1.0** |
| **NOUC** | **Port Laguerre** | **13.31** | **267** | P | **P** | **15 54 15.3** | **-0.3** |
| **NOUC** | **Port Laguerre** | **13.31** | **267** | P | **P** | **15 54 14.7** | **-0.9** |
| **FUNA** | **Funafuti** | **13.46** | **354** | P | **P** | **15 54 15.6** | **-1.6** |
| **NFK** | **Norfolk Island** | **13.46** | **236** | P | **P** | **15 54 18.3** | **+1.4** |
| | baz=14,SNR=47 | | | | | | |
| **NFK** | **Norfolk Island** | **13.46** | **236** | P | **P** | **15 54 17.7** | **+0.7** |
| **NFK** | **Norfolk Island** | **13.46** | **236** | P | **P** | **15 54 18.4** | **+1.4** |
| **SANVU** | **Saraoutou** | **14.30** | **295** | P | **P** | **15 54 23.5** | **-2.0** |
| **SANVU** | **Saraoutou** | **14.30** | **295** | P | **P** | **15 54 26.1** | **+0.5** |
| **SANVU** | **Saraoutou** | **14.30** | **295** | P | **P** | **15 54 23.6** | **-2.0** |
| **OUZ** | **Omahuta** | **14.56** | **204** | P | **P** | **15 54 29.0** | **+1.3** |
| **OUZ** | **Omahuta** | **14.56** | **204** | P | **P** | **15 54 29.4** | **+1.7** |
| **OUZ** | **Omahuta** | **14.56** | **204** | P | **P** | **15 54 29.2** | **+1.5** |
| **WCZ** | **Waipu Caves** | **14.95** | **200** | P | **P** | **15 54 33.0** | **+1.6** |
| **KUZ** | **Kuaotunu** | **15.32** | **195** | P | **P** | **15 54 35.6** | **+0.9** |
| **KOUNC** | **Koumac, New Ca** | **15.33** | **272** | P | **P** | **15 54 34.8** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **15.33** | **272** | P | **P** | **15 54 37.2** | **+2.1** |
| **WIAZ** | **Waiheke Island** | **15.52** | **197** | P | **P** | **15 54 37.8** | **+1.2** |
| **MXZ** | **Matakaoa Point** | **15.66** | **187** | P | **P** | **15 54 36.4** | **-1.4** |
| **MXZ** | **Matakaoa Point** | **15.66** | **187** | P | **P** | **15 54 36.5** | **-1.4** |
| **MYRZ** | **Mayor Island** | **15.71** | **193** | P | **P** | **15 54 41.5** | **+3.0** |
| **WMGZ** | **Waiomatatini S** | **15.90** | **186** | P | **P** | **15 54 39.1** | **-1.0** |
| **HAZ** | **Te Kaha** | **15.91** | **188** | P | **P** | **15 54 38.4** | **-1.8** |
| HAZ | | | | S | **S** | **15 57 13.2** | **-7.5** |
| **PKGZ** | **Pakihiroa** | **16.00** | **187** | P | **P** | **15 54 40.0** | **-1.2** |
| **RUGZ** | **Raukumara Rang** | **16.13** | **189** | P | **P** | **15 54 40.6** | **-1.9** |
| RUGZ | | | | S | **S** | **15 57 27.6** | **-6.2** |
| **TGRZ** | **Tauranga** | **16.14** | **193** | P | **P** | **15 54 44.0** | **+1.6** |
| **OPRZ** | **Ohinepanea** | **16.20** | **192** | P | **P** | **15 54 43.3** | **+0.4** |
| OPRZ | | | | S | **S** | **15 57 26.8** | **+1.5** |
| **MARZ** | **Manawahe** | **16.31** | **191** | P | **P** | **15 54 44.2** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **16.31** | **195** | P | **P** | **15 54 45.7** | **+1.8** |
| **KMRZ** | **Kaimai** | **16.32** | **193** | P | **P** | **15 54 46.3** | **+2.2** |
| **EDRZ** | **Edgecumbe** | **16.42** | **191** | P | **P** | **15 54 45.0** | **0.0** |
| EDRZ | | | | S | **S** | **15 57 24.6** | **-4.5** |
| **KARZ** | **Kaharoa** | **16.43** | **192** | P | **P** | **15 54 45.1** | **+0.1** |
| **OMRZ** | **Omania** | **16.49** | **192** | P | **P** | **15 54 47.2** | **+1.6** |
| **URZ** | **Urewera** | **16.50** | **190** | P | **P** | **15 54 43.6** | **-2.1** |
| | comp=Z,34nm,0.3s,baz=14,slow=2.0,SNR=105 | | | | | | |
| URZ | | | | S | **S** | **15 57 23.6** | **-6.7** |
| | comp=Z,32nm,0.3s,baz=67,slow=23,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **16.50** | **190** | P | **P** | **15 54 43.3** | **-2.4** |
| **URZ** | **Urewera** | **16.50** | **190** | P | **P** | **15 54 43.1** | **-2.6** |
| URZ | | | | S | **S** | **15 57 22.7** | **-7.7** |
| **URZ** | **Urewera** | **16.50** | **190** | P | **P** | **15 54 42.9** | **-2.8** |
| **MWZ** | **Matawai** | **16.52** | **189** | P | **P** | **15 54 44.1** | **-1.8** |
| MWZ | | | | S | **S** | **15 57 24.1** | **-6.6** |
| **NGRZ** | **Ngongotaha** | **16.52** | **192** | P | **P** | **15 54 48.2** | **+2.3** |
| **TARZ** | **Mount Tarawera** | **16.59** | **192** | P | **P** | **15 54 46.9** | **+0.3** |
| TARZ | | | | S | **S** | **15 57 33.1** | **+1.2** |
| **UTU** | **Utuhina** | **16.59** | **192** | P | **P** | **15 54 48.6** | **+2.1** |
| **HLRZ** | **Highlands Stat** | **16.63** | **192** | P | **P** | **15 54 48.0** | **+1.0** |
| **RRRZ** | **Republican Roa** | **16.68** | **191** | P | **P** | **15 54 47.5** | **+0.1** |
| RRRZ | | | | S | **S** | **15 57 32.4** | **-1.0** |
| **RAGZ** | **Rawiri** | **16.69** | **189** | P | **P** | **15 54 46.7** | **-0.8** |
| RAGZ | | | | S | **S** | **15 57 30.3** | **-3.3** |
| **MUGZ** | **Murupara** | **16.77** | **191** | P | **P** | **15 54 45.9** | **-2.2** |
| MUGZ | | | | S | **S** | **15 57 27.7** | **-7.1** |
| **TLZ** | **Tolley Road** | **16.87** | **194** | P | **P** | **15 54 50.6** | **+1.5** |
| **KNZ** | **Kokohu** | **17.17** | **188** | P | **P** | **15 54 50.6** | **-1.1** |
| KNZ | | | | S | **S** | **15 57 35.9** | **-5.3** |
| **HIZ** | **Hauiti** | **17.21** | **196** | P | **P** | **15 54 54.2** | **+2.1** |
| HIZ | | | | IAmb | IAmb | 15 55 09.0 | |
| | comp=Z,220nm,0.7s | | | | | | |
| **HIZ** | **Hauiti** | **17.21** | **196** | P | **P** | **15 54 54.3** | **+2.1** |
| **HIZ** | **Hauiti** | **17.21** | **196** | P | **P** | **15 54 54.1** | **+2.0** |
| **MHGZ** | **Mahia Peninsul** | **17.27** | **187** | P | **P** | **15 54 52.3** | **-0.4** |
| MHGZ | | | | S | **S** | **15 57 39.3** | **-3.6** |
| **WHHZ** | **Waihua** | **17.29** | **189** | P | **P** | **15 54 55.1** | **+2.2** |
| WHHZ | | | | S | **S** | **15 57 41.3** | **-1.9** |
| **HATZ** | **Hinemaiaia** | **17.30** | **192** | P | **P** | **15 54 52.9** | **0.0** |
| **RITZ** | **Rihia Road** | **17.43** | **193** | P | **P** | **15 54 54.1** | **-0.1** |
| RITZ | | | | S | **S** | **15 57 45.6** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **17.49** | **191** | P | **P** | **15 54 52.4** | **-2.4** |
| BKZ | | | | IAmb | IAmb | 15 55 03.5 | |
| | comp=Z,136nm,0.7s | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.49** | **191** | P | **P** | **15 54 52.5** | **-2.3** |
| **ARHZ** | **Aropaoanui** | **17.50** | **189** | P | **P** | **15 54 53.6** | **-1.3** |
| ARHZ | | | | S | **S** | **15 57 42.4** | **-4.3** |
| **NTVZ** | **North Tongarir** | **17.58** | **193** | P | **P** | **15 54 55.2** | **-0.5** |
| **KRVZ** | **Karewarewa** | **17.59** | **193** | P | **P** | **15 54 55.4** | **-0.3** |
| **TMVZ** | **Te Maari** | **17.59** | **193** | P | **P** | **15 54 54.7** | **-1.1** |
| **TWVZ** | **Taurewa** | **17.61** | **194** | P | **P** | **15 54 55.5** | **-0.4** |
| **ETVZ** | **East Tongariro** | **17.61** | **193** | P | **P** | **15 54 54.7** | **-1.2** |
| **WTVZ** | **West Tongariro** | **17.62** | **193** | P | **P** | **15 54 55.1** | **-0.9** |
| WTVZ | | | | S | **S** | **15 57 52.8** | **+4.1** |
| **OTVZ** | **Oturere** | **17.65** | **193** | P | **P** | **15 54 54.7** | **-1.6** |
| OTVZ | | | | S | **S** | **15 57 44.9** | **-4.4** |
| **NGZ** | **Ngauruhoe** | **17.67** | **193** | P | **P** | **15 54 55.7** | **-0.9** |
| NGZ | | | | S | **S** | **15 57 46.7** | **-3.0** |
| **SNVZ** | **South Ngauruho** | **17.68** | **193** | P | **P** | **15 54 55.5** | **-1.1** |
| **MCHZ** | **McNeill Hill** | **17.73** | **190** | P | **P** | **15 54 55.1** | **-1.8** |
| MCHZ | | | | S | **S** | **15 57 45.3** | **-5.0** |
| **TUVZ** | **Tukino** | **17.75** | **193** | P | **P** | **15 54 56.1** | **-1.2** |
| TUVZ | | | | S | **S** | **15 57 45.8** | **-5.2** |
| **KWHZ** | **Kaweka Forest** | **17.75** | **191** | P | **P** | **15 54 56.1** | **-1.1** |
| KWHZ | | | | S | **S** | **15 57 46.7** | **-4.1** |
| **FWVZ** | **Far West T-bar** | **17.76** | **193** | P | **P** | **15 54 56.3** | **-1.1** |
| FWVZ | | | | S | **S** | **15 57 46.5** | **-4.8** |
| **DRZ** | **Dome Shelter** | **17.78** | **193** | P | **P** | **15 54 58.4** | **+0.7** |
| DRZ | | | | S | **S** | **15 57 54.7** | **+3.1** |
| **WHVZ** | **Whangaehu Hut** | **17.78** | **193** | P | **P** | **15 54 56.6** | **-1.0** |
| WHVZ | | | | S | **S** | **15 57 49.4** | **-2.1** |
| **TRVZ** | **Turoa** | **17.80** | **193** | P | **P** | **15 54 56.6** | **-1.2** |
| TRVZ | | | | S | **S** | **15 57 46.8** | **-5.2** |
| **VRZ** | **Vera Road** | **17.81** | **195** | P | **P** | **15 54 59.4** | **+1.8** |
| **WNVZ** | **Wahianoa** | **17.82** | **193** | P | **P** | **15 54 56.4** | **-1.5** |
| WNVZ | | | | S | **S** | **15 57 49.6** | **-2.5** |
| **PKVZ** | **Pokaka** | **17.84** | **194** | P | **P** | **15 54 57.1** | **-0.9** |
| PKVZ | | | | S | **S** | **15 57 49.4** | **-2.8** |
| **CKHZ** | **Cape Kidnapper** | **17.88** | **189** | P | **P** | **15 54 56.6** | **-1.7** |
| CKHZ | | | | S | **S** | **15 57 50.2** | **-2.5** |
| **BHHZ** | **Black Hill Sta** | **17.88** | **192** | P | **P** | **15 54 55.8** | **-2.5** |
| BHHZ | | | | S | **S** | **15 57 46.4** | **-6.5** |
| **MTVZ** | **Mangateitei** | **17.90** | **193** | P | **P** | **15 54 59.2** | **+0.6** |
| MTVZ | | | | S | **S** | **15 57 52.0** | **-1.3** |
| **KRHZ** | **Kereru** | **17.98** | **191** | P | **P** | **15 54 56.9** | **-2.3** |
| KRHZ | | | | S | **S** | **15 57 47.9** | **-6.5** |
| **DREZ** | **Durham Road** | **18.02** | **196** | P | **P** | **15 55 03.3** | **+3.8** |
| **KAHZ** | **Kahuranaki** | **18.04** | **189** | P | **P** | **15 54 58.7** | **-1.1** |
| KAHZ | | | | S | **S** | **15 57 51.5** | **-4.0** |
| **PKE** | **Pukeiti** | **18.08** | **197** | P | **P** | **15 55 04.3** | **+4.2** |
| **NEZ** | **North Egmont** | **18.12** | **197** | P | **P** | **15 55 04.3** | **+3.8** |
| **KHEZ** | **Kahui Hut** | **18.16** | **197** | P | **P** | **15 55 04.7** | **+3.8** |
| **PREZ** | **Palmer Road** | **18.17** | **196** | P | **P** | **15 55 04.8** | **+3.9** |
| **NBEZ** | **Newall Road No** | **18.18** | **197** | P | **P** | **15 55 05.3** | **+4.3** |
| **RAR** | **Rarotonga** | **18.22** | **91** | P | **P** | **15 55 02.2** | **+0.7** |
| | comp=Z,2.9nm,0.3s,baz=244,slow=7.6,SNR=6.9 | | | | | | |
| **RAR** | **Rarotonga** | **18.22** | **91** | P | **P** | **15 55 02.4** | **+0.8** |
| **LREZ** | **Lake Rotokare** | **18.22** | **196** | P | **P** | **15 55 04.0** | **+2.6** |
| **PNHZ** | **Pukenui** | **18.27** | **191** | P | **P** | **15 54 59.8** | **-2.1** |
| PNHZ | | | | S | **S** | **15 57 52.6** | **-6.6** |
| **PXZ** | **Pawanui** | **18.28** | **189** | P | **P** | **15 55 00.6** | **-1.2** |
| PXZ | | | | S | **S** | **15 57 52.5** | **-6.6** |
| **NMEZ** | **Namu Road** | **18.31** | **197** | P | **P** | **15 55 05.4** | **+3.2** |
| **WAZ** | **Wanganui** | **18.36** | **194** | P | **P** | **15 55 02.1** | **-0.6** |
| **WPHZ** | **Waipukurau** | **18.38** | **190** | P | **P** | **15 55 02.2** | **-0.6** |
| WPHZ | | | | S | **S** | **15 57 57.7** | **-3.1** |
| **TSZ** | **Takapari Road** | **18.45** | **191** | P | **P** | **15 55 03.1** | **-0.4** |
| TSZ | | | | S | **S** | **15 57 54.6** | **-7.5** |
| **PRHZ** | **Porangahau** | **18.54** | **190** | P | **P** | **15 55 04.1** | **-0.2** |
| PRHZ | | | | S | **S** | **15 58 00.8** | **-2.6** |
| **PRWZ** | **Pori Road** | **18.93** | **191** | P | **P** | **15 55 07.3** | **-0.5** |
| **BFZ** | **Birch Farm** | **19.01** | **190** | P | **P** | **15 55 06.7** | **-1.8** |
| BFZ | | | | IAmb | IAmb | 15 55 11.8 | |
| | comp=Z,138nm,0.6s | | | | | | |
| **BFZ** | **Birch Farm** | **19.01** | **190** | P | **P** | **15 55 07.4** | **-1.1** |
| **MRZ** | **Mangatainoka R** | **19.11** | **192** | P | **P** | **15 55 07.2** | **-2.2** |
| **CPWZ** | **Castlepoint** | **19.24** | **190** | P | **P** | **15 55 10.9** | **+0.3** |
| **OGWZ** | **Otaki Gorge** | **19.34** | **193** | P | **P** | **15 55 10.0** | **-1.5** |
| **TMWZ** | **Te Maipa** | **19.48** | **191** | P | **P** | **15 55 12.2** | **-0.7** |
| **MTW** | **Mount Morrison** | **19.61** | **192** | P | **P** | **15 55 12.4** | **-1.5** |
| **PAWZ** | **Paruwai Farm** | **19.84** | **192** | P | **P** | **15 55 15.6** | **-0.5** |
| **MSWZ** | **Moikau Station** | **19.90** | **192** | P | **P** | **15 55 15.1** | **-1.5** |
| **MSWZ** | **Moikau Station** | **19.90** | **192** | P | **P** | **15 55 15.7** | **-0.9** |
| **SNZO** | **South Karori** | **19.91** | **193** | P | **P** | **15 55 15.5** | **-1.1** |
| **SNZO** | **South Karori** | **19.91** | **193** | P | **P** | **15 55 16.0** | **-0.6** |
| **BHW** | **Baring Head** | **19.97** | **193** | P | **P** | **15 55 16.4** | **-0.8** |
| **BHW** | **Baring Head** | **19.97** | **193** | P | **P** | **15 55 16.3** | **-0.9** |
| **QRZ** | **Quartz Range** | **20.00** | **198** | P | **P** | **15 55 18.2** | **+0.7** |
| **QRZ** | **Quartz Range** | **20.00** | **198** | P | **P** | **15 55 18.0** | **+0.5** |
| **PLWZ** | **Pal

TVO epP pP 15 58 03.5 -2.3
comp=Z,128nm,1.2s
**SYDH Sydney Hard Ro 28.83 240** P P 15 56 36.9 +1.3
**RMQ Roma 29.39 255** P P 15 56 41.6 +1.0
baz=29,SNR=617
**RMQ Roma 29.39 255** P P 15 56 42.5 +1.9
**RMQ Roma 29.39 255** P P 15 56 41.9 +1.3
**CNB Canberra Magne 30.36 237** P P 15 56 50.0 +1.0
baz=30,SNR=1000
**CNB Canberra Magne 30.36 237** P P 15 56 50.2 +1.3
**CNB Canberra Magne 30.36 237** P P 15 56 50.4 +1.5
**PMOR Pomariorio Ree 30.58 82** eP P 15 56 51.8 +0.9
comp=Z,359nm,1.2s
**CAN Canberra 30.65 237** P P 15 56 52.1 +0.8
CAN pmax pmax
comp=Z,2µm,1.0s
**CAN Canberra 30.65 237** P P 15 56 52.1 +0.8
**CAN Canberra 30.65 237** P P 15 56 52.7 +1.3
**CAN Canberra 30.65 237** P P 15 56 52.5 +1.1
**CAN Canberra 30.65 237** P P 15 56 52.2 +0.9
**VAH Vaihoa 30.76 83** eP P 15 56 53.0 +0.6
comp=Z,151nm,1.0s
VAH epP pP 15 58 23.4 -2.4
comp=Z,181nm,1.4s
**MILA Mila 31.08 234** P P 15 56 55.6 +0.6
baz=31,SNR=76
**XMAS Kiritimati 32.06 45** P P 15 57 01.5 -2.0
XMAS IAmb IAmb 15 57 05.8
comp=Z,308nm,0.8s
**XMAS Kiritimati 32.06 45** P P 15 57 04.4 +0.9
**CTA Charters Tower 32.13 267** P P 15 57 04.1 0.0
comp=Z,1µm,0.6s,baz=91,slow=9.9,SNR=1952
**CTA Charters Tower 32.13 267** P P 15 57 04.0 0.0
baz=32
**CTA Charters Tower 32.13 267** P P 15 57 04.2 +0.1
**CTAO Charters Tower 32.13 267** P P 15 57 04.0 0.0
**CMSA Cobar Meteorol 32.52 246** P P 15 57 07.6 +0.4
baz=32,SNR=1000
**CMSA Cobar Meteorol 32.52 246** P P 15 57 08.0 +0.8
**CMSA Cobar Meteorol 32.52 246** P P 15 57 07.8 +0.6
**RABL Rabaul 32.80 299** P P 15 57 09.1 -0.7
RABL IAmb IAmb 15 57 12.0
comp=Z,103nm,0.7s
**RABL Rabaul 32.80 299** P P 15 57 09.3 -0.5
**GLAD Gladstone 33.40 228** P P 15 57 15.3 +0.8
**QLP Quilpie 33.44 255** P P 15 57 15.1 +0.1
baz=33,SNR=283
**QLP Quilpie 33.44 255** P P 15 57 15.4 +0.4
**QLP Quilpie 33.44 255** P P 15 57 15.3 +0.3
**TOO Toolangi 34.02 235** P P 15 57 20.3 +0.5
baz=34,SNR=1000
**TOO Toolangi 34.02 235** P P 15 57 19.7 0.0
TOO pmax pmax
comp=Z,1µm,0.7s
**TOO Toolangi 34.02 235** P P 15 57 19.7 0.0
**TOO Toolangi 34.02 235** P P 15 57 20.7 +1.0
**CORO Coronation Par 34.19 228** P P 15 57 22.5 +1.5
**MTSU Mount Surprise 34.30 270** P P 15 57 22.2 -0.1
baz=34,SNR=1000
**MTSU Mount Surprise 34.30 270** P P 15 57 22.6 +0.3
**PMG Port Moresby 34.50 286** P P 15 57 23.6 -0.3
comp=Z,912nm,0.8s,baz=85,slow=5.5,SNR=613
PMG S S 16 02 09.7 -2.4
comp=Z,26nm,0.9s,baz=360,slow=23,SNR=7.9
**PMG Port Moresby 34.50 286** P P 15 57 23.5 -0.5
PMG pmax pmax
comp=Z,1µm,0.8s
**PMG Port Moresby 34.50 286** P P 15 57 23.5 -0.5
**PMG Port Moresby 34.50 286** P P 15 57 24.0 0.0
**PMG Port Moresby 34.50 286** P P 15 57 23.7 -0.3
**MLBS Spotswood, Mel 34.55 235** P P 15 57 25.1 +1.1
**MOO Moorlands 34.58 226** P P 15 57 25.0 +0.8
baz=35,SNR=16
**MOO Moorlands 34.58 226** P P 15 57 25.1 +0.8
**TAU Tasmania Unive 34.69 225** P P 15 57 25.3 +0.1
TAU pmax pmax
comp=Z,170nm,0.8s
**TAU Tasmania Unive 34.69 225** P P 15 57 25.3 +0.1
TAU IAmb IAmb 15 57 26.4
comp=Z,170nm,0.8s
**TAU Tasmania Unive 34.69 225** P P 15 57 25.8 +0.6
**TAU Tasmania Unive 34.69 225** P P 15 57 25.7 +0.6
**GEXS Deakin Univers 35.11 234** P P 15 57 29.8 +1.1
**BRAT Ballarat 35.20 236** P P 15 57 30.9 +1.4
**STKA Stephens Creek 36.03 246** P P 15 57 36.6 +0.2
comp=Z,731nm,0.6s,baz=88,slow=9.6,SNR=1100
STKA SKKS 16 28 02.2
comp=Z,5.7nm,1.0s,baz=307,slow=7.8,SNR=5.7
**STKA Stephens Creek 36.03 246** P P 15 57 37.0 +0.6
baz=36,SNR=282
**STKA Stephens Creek 36.03 246** P P 15 57 36.9 +0.4
STKA pmax pmax
comp=Z,196nm,0.8s
**STKA Stephens Creek 36.03 246** P P 15 57 36.9 +0.4
STKA IAmb IAmb 15 57 38.2
comp=Z,196nm,0.8s
**STKA Stephens Creek 36.03 246** P P 15 57 37.1 +0.6
**PATS Pohnpei 36.06 320** P P 15 57 37.4 +0.6
PATS IAmb IAmb 15 58 06.4
comp=Z,328nm,1.3s
**COEN Coen 36.46 276** P P 15 57 40.2 0.0
**COEN Coen 36.46 276** P P 15 57 40.7 +0.5
**INKA Innaminka 36.55 253** P P 15 57 42.0 +1.2
**ARPS Mount Arapiles 36.63 238** P P 15 57 41.5 +0.3
baz=37,SNR=239
**ARPS Mount Arapiles 36.63 238** P P 15 57 41.7 +0.4
**MANU Manus Island 37.95 297** P P 15 57 52.2 -0.2
MANU IAmb IAmb 15 57 53.4
comp=Z,460nm,1.5s
**QIS Mount Isa 38.20 264** P P 15 57 53.5 -0.8
baz=38,SNR=196
**QIS Mount Isa 38.20 264** P P 15 57 53.9 -0.5
**HTT Hallett 38.44 244** P P 15 57 56.2 +0.1
baz=38,SNR=448
**HTT Hallett 38.44 244** P P 15 57 56.5 +0.4
**LCRK Leigh Creek 38.81 248** P P 15 57 59.6 +0.5
**GHSS Government Hou 38.88 241** P P 15 57 59.8 +0.2
**TWOA Tennyson Woods 38.92 241** P P 15 57 59.9 0.0
**NAPP Napperby 39.06 244** P P 15 58 01.7 +0.7
**PTPS Port Pirie 39.18 244** P P 15 58 02.7 +0.7
**WHYH Whyalla 39.52 244** P P 15 58 05.0 +0.3
**JOHN Johnston Islan 39.66 15** P P 15 58 06.3 +0.3
**BBOO Buckleboo 40.78 245** P P 15 58 14.5 -0.3
baz=41,SNR=925
**BBOO Buckleboo 40.78 245** P P 15 58 14.3 -0.5
**BBOO Buckleboo 40.78 245** P P 15 58 14.6 -0.2
**MMPI Merauke 40.98 283** P P 15 58 16.2 -0.4
comp=Z,25µmcomp=Z,3µm,0.7s
**OOD Oodnadatta 41.03 253** P P 15 58 18.0 +1.2
**OOD Oodnadatta 41.03 253** P P 15 58 17.7 +0.9
**MULG Mulgathing 42.40 249** P P 15 58 28.2 +0.6
**MULG Mulgathing 42.40 249** P P 15 58 27.7 +0.1
**AS31 Alice Springs 42.98 258** P P 15 58 31.8 -0.4
AS31 IAmb IAmb 15 58 33.4
comp=Z,560nm,1.1s
**ASAR Alice Springs 42.98 258** P P 15 58 31.9 -0.4
comp=Z,1µm,0.8s,baz=100,slow=7.9,SNR=6511
ASAR ScP ScP 16 03 04.2 -0.3
comp=Z,59nm,1.1s,baz=98,slow=4.5,SNR=8.1
ASAR S S 16 04 13.0 -3.0
comp=Z,98nm,0.9s,baz=97,slow=15,SNR=19
**ASAR Alice Springs 42.98 258** P P 15 58 31.7 -0.5
**ASPA Alice Springs 42.98 258** P P 15 58 31.9 -0.3
baz=43
**WR0 Warramunga Arr 42.99 264** P P 15 58 31.1 -1.2
**WC3 Warramunga Arr 43.14 264** P P 15 58 32.8 -0.7
baz=43
**WB0 Warramunga Arr 43.16 264** P P 15 58 32.5 -1.1
**WB2 Warramunga Arr 43.16 264** P P 15 58 32.8 -0.9
**WRAB Tennant Creek 43.17 264** deP P 15 58 32.7 -1.0
WRAB pmax pmax
comp=Z,2µm,1.3s
**WRAB Tennant Creek 43.17 264** P P 15 58 32.6 -1.1
**WRAB Tennant Creek 43.17 264** P P 15 58 32.9 -0.8
**WRAB Tennant Creek 43.17 264** P P 15 58 32.6 -1.1
**WRA Warramunga Arr 43.18 264** P P 15 58 32.9 -0.9
comp=Z,886nm,0.8s,baz=96,slow=8.1,SNR=987
WRA ScP ScP 16 03 05.7 +0.4
comp=Z,78nm,1.0s,baz=93,slow=4.3,SNR=15
WRA S S 16 04 15.6 -3.2
comp=Z,49nm,0.9s,baz=98,slow=13,SNR=12
**WRA Warramunga Arr 43.18 264** P P 15 58 32.7 -1.1
**JAY Jayapura 43.36 291** P P 15 58 34.8 -0.6
comp=Z,658nm,0.8s,baz=143,slow=4.1,SNR=174

JAY S S 16 04 18.7 -2.9
comp=Z,70nm,1.1s,baz=126,slow=19,SNR=8.4
**JAY Jayapura 43.36 291** P P 15 58 34.7 -0.6
comp=Z,4µmcomp=Z,475nm,1.2s
**GENI Genyem 43.79 290** P P 15 58 38.2 -0.3
comp=Z,3µmcomp=Z,9µmcomp=Z,940nm,0.9s
**GENI Genyem 43.79 290** P P 15 58 38.7 +0.2
**SMPI Sarmi 45.35 290** P P 15 58 49.9 -0.6
comp=Z,3µmcomp=Z,245nm,1.2s
**KDU Kakadu 46.75 273** P P 15 59 00.3 -0.8
baz=47,SNR=277
**KDU Kakadu 46.75 273** P P 15 59 00.6 -0.5
**KHU Kahuku 47.09 31** P P 15 59 03.4 -0.3
**KHU Kahuku 47.09 31** P P 15 59 03.4 -0.3
**KHLU Kahalu`u 47.26 31** P P 15 59 05.2 +0.3
**AIN Ainahou 47.27 31** P P 15 59 03.6 -1.5
AIN IAmb IAmb 15 59 08.2
comp=Z,290nm,1.2s
**HLP Hilina Pali 47.28 32** P P 15 59 06.0 +1.0
HLP IAmb IAmb 15 59 07.4
comp=Z,462nm,1.5s
**MWH Moku'aweowe 47.30 31** P P 15 59 03.6 -2.1
MWH IAmb IAmb 15 59 07.3
comp=Z,276nm,1.4s
**MLOA Mauna Loa Obse 47.36 31** P P 15 59 05.4 -0.6
MLOA IAmb IAmb 15 59 07.9
comp=Z,589nm,1.7s
**HUH Hualalai 47.36 31** P P 15 59 05.5 -0.4
**MLH Mauna Loa 47.41 31** P P 15 59 07.2 +1.0
MLH IAmb IAmb 15 59 08.3
comp=Z,222nm,0.7s
**HMH Humu'ula Sheep 47.46 31** P P 15 59 07.2 +0.6
**FORT Forrest 47.57 248** P P 15 59 06.4 -0.6
baz=48,SNR=170
**FORT Forrest 47.57 248** P P 15 59 06.2 -0.8
**FORT Forrest 47.57 248** P P 15 59 07.0 0.0
**FORT Forrest 47.57 248** P P 15 59 06.7 -0.3
**POHA Pohakuloa 47.57 31** P P 15 59 07.3 -0.1
POHA IAmb IAmb 15 59 09.4
comp=Z,428nm,1.3s
**POHA Pohakuloa 47.57 31** P P 15 59 07.4 +0.1
**HPAH Hawaii Prepara 47.73 31** P P 15 59 08.9 +0.6
**HON Honolulu 47.82 27** P P 15 59 09.7 +0.9
HON pmax pmax
comp=Z,922nm,1.3s
**HON Honolulu 47.82 27** P P 15 59 09.7 +0.9
**WRKA Warakurna 47.87 256** P P 15 59 09.0 -0.3
baz=48,SNR=1000
**WRKA Warakurna 47.87 256** P P 15 59 09.6 +0.2
**WRKA Warakurna 47.87 256** P P 15 59 09.1 -0.3
**KIP Kipapa 47.90 27** ceP P 15 59 10.7 +1.2
KIP pmax pmax
comp=Z,524nm,1.7s
**KIP Kipapa 47.90 27** P P 15 59 09.9 +0.5
KIP IAmb IAmb 15 59 12.3
comp=Z,578nm,1.4s
**KIP Kipapa 47.90 27** P P 15 59 10.1 +0.6
**KIP Kipapa 47.90 27** P P 15 59 10.2 +0.7
**MTN Manton Dam 47.95 272** P P 15 59 08.8 -1.2
baz=48,SNR=227
**MTN Manton Dam 47.95 272** P P 15 59 08.8 -1.2
**MTN Manton Dam 47.95 272** P P 15 59 09.6 -0.4
**MTN Manton Dam 47.95 272** P P 15 59 09.1 -0.9
**HLK Haleakala 48.10 30** P P 15 59 11.6 +0.4
**KHLH Kahului Airpor 48.14 29** P P 15 59 12.3 +1.1
**DRS Darwin Rock St 48.29 273** P P 15 59 11.8 -0.8
**KNRA Kununurra 49.33 268** P P 15 59 19.8 -0.5
baz=49,SNR=403
**KNRA Kununurra 49.33 268** P P 15 59 19.7 -0.5
**KNRA Kununurra 49.33 268** P P 15 59 20.4 +0.2
**KNRA Kununurra 49.33 268** P P 15 59 19.9 -0.3
**SAUI Saumlaki 49.45 278** P P 15 59 21.2 +0.1
**SAUI Saumlaki 49.45 278** P P 15 59 21.6 +0.5
comp=Z,17µmcomp=Z,2µm,1.1s
**SAUI Saumlaki 49.45 278** P P 15 59 22.0 +0.9
**MIDW Midway 49.94 2** P P 15 59 23.5 -0.8
**MIDW Midway 49.94 2** P P 15 59 24.9 +0.5
**FAKI Fak Fak 50.64 285** P P 15 59 28.9 -1.0
FAKI IAmb IAmb 15 59 30.4
comp=Z,434nm,1.0s
**FAKI Fak Fak 50.64 285** P P 15 59 29.0 -0.8
comp=Z,5µmcomp=Z,454nm,1.2s
**FAKI Fak Fak 50.64 285** P P 15 59 30.3 +0.5
**FAKI Fak Fak 50.64 285** P P 15 59 29.4 -0.4
**FITZ Fitzroy Crossi 51.61 264** S S 16 06 12.9 -1.9
comp=Z,58nm,1.1s,baz=273,slow=21,SNR=20
**FITZ Fitzroy Crossi 51.61 264** P P 15 59 36.4 -0.4
baz=52,SNR=646
**FITZ Fitzroy Crossi 51.61 264** P P 15 59 36.6 -0.1
FITZ IAmb IAmb 15 59 37.8
comp=Z,724nm,1.2s
**FITZ Fitzroy Crossi 51.61 264** P P 15 59 36.8 +0.1
**FITZ Fitzroy Crossi 51.61 264** P P 15 59 36.6 -0.1
**BNDI Bandanaira 52.08 282** P P 15 59 42.2 +2.0
**BNDI Bandanaira 52.08 282** P P 15 59 39.9 -0.3
**SIJI Sorong 52.44 287** P P 15 59 42.4 -0.3
comp=Z,1µm,0.8s,baz=96,slow=4.5,SNR=500
SIJI S S 16 06 23.9 -2.0
comp=Z,23nm,1.0s,baz=260,slow=21,SNR=22
**MSAI Masohi 53.45 283** P P 15 59 49.5 -0.4
comp=Z,87nm,0.6s
**AAI Ambon 53.98 282** P P 15 59 52.7 -0.9
comp=Z,8µmcomp=Z,525nm,1.0s
**SOEI Soe 55.31 273** P P 16 00 04.3 +1.2
**SOEI Soe 55.31 273** P P 16 00 04.0 +0.9
comp=Z,3µmcomp=Z,18µmcomp=Z,2µm,1.0s
**SOEI Soe 55.31 273** P P 16 00 05.0 +1.9
**SOEI Soe 55.31 273** P P 16 00 04.5 +1.4
**BATI Baumata 55.72 273** P P 16 00 06.9 +1.1
comp=Z,835nm,0.6s,baz=179,slow=1.7,SNR=320
BATI S S 16 07 09.6 +0.6
comp=Z,28nm,0.8s,baz=127,slow=23,SNR=14
**BATI Baumata 55.72 273** P P 16 00 07.0 +1.1
comp=Z,4µmcomp=Z,613nm,0.7s
**PSA00 Pilbara Seismi 56.12 258** P P 16 00 07.5 -1.0
PSA00 IAmb IAmb 16 00 09.1
comp=Z,738nm,0.9s
**MEEK Meekatharra 56.26 252** P P 16 00 08.3 -1.1
baz=56,SNR=188
**MEEK Meekatharra 56.26 252** P P 16 00 09.7 +0.3
**MEEK Meekatharra 56.26 252** P P 16 00 08.7 -0.7
**KLBR Kellerberrin 56.30 246** P P 16 00 09.1 -0.4
baz=56,SNR=92
**KLBR Kellerberrin 56.30 246** P P 16 00 09.7 +0.2
**KLBR Kellerberrin 56.30 246** P P 16 00 09.3 -0.2
**SBA Scott Base 56.32 184** P P 16 00 12.8 +4.6
**MBWA Marble Bar 56.32 259** P P 16 00 09.2 -0.6
**VNDA Vanda 56.33 185** P P 16 00 11.3 +2.5
comp=Z,17nm,0.8s,baz=1.1,slow=7.6,SNR=34
**VNDA Vanda 56.33 185** P P 16 00 11.4 +2.5
**NWAO Narrogin (SRO) 56.59 244** P P 16 00 11.3 -0.2
NWAO pP pP 16 02 02.6 +0.2
**RKGY Rocky Gully 56.64 242** P P 16 00 12.2 +0.4
baz=57,SNR=29
**RKGY Rocky Gully 56.64 242** P P 16 00 12.7 +0.9
**RKGY Rocky Gully 56.64 242** P P 16 00 12.2 +0.4
**TNTI Ternate 56.65 286** P P 16 00 11.1 -1.1
TNTI IAmb IAmb 16 00 13.1
comp=Z,392nm,1.0s
**TNTI Ternate 56.65 286** P P 16 00 11.9 -0.2
comp=Z,4µmcomp=Z,427nm,1.1s
**TNTI Ternate 56.65 286** P P 16 00 11.4 -0.7
**SANI Sanana 56.66 283** P P 16 00 11.3 -0.9
comp=Z,3µmcomp=Z,368nm,1.1s
**SANI Sanana 56.66 283** P P 16 00 12.7 +0.5
**SANI Sanana 56.66 283** P P 16 00 11.4 -0.8
**BLDU Ballidu 57.31 247** P P 16 00 15.9 -0.6
baz=57,SNR=309
**BLDU Ballidu 57.31 247** P P 16 00 16.4 -0.1
**BLDU Ballidu 57.31 247** P P 16 00 16.2 -0.3
**MUN Mundaring 57.56 245** P P 16 00 18.0 -0.1
baz=58,SNR=89
**MUN Mundaring 57.56 245** P P 16 00 18.9 +0.8
**MUN Mundaring 57.56 245** P P 16 00 18.5 +0.4
**MMRI Maumere 57.58 274** P P 16 00 17.8 -0.7
MMRI IAmb IAmb 16 00 19.0
comp=Z,920nm,1.2s
**MMRI Maumere 57.58 274** P P 16 00 17.8 -0.7
comp=Z,8µmcomp=Z,692nm,1.0s
**MMRI Maumere 57.58 274** P P 16 00 18.6 +0.1
**MMRI Maumere 57.58 274** P P 16 00 18.1 -0.4
**MTKN Mount Kenneth 57.94 245** P P 16 00 22.7 +2.1
**MORW Morawa 58.12 249** P P 16 00 21.4 -0.5
baz=58,SNR=145

**MORW Morawa 58.12 249** P P 16 00 21.5 -0.5
MORW IAmb IAmb 16 00 22.8
comp=Z,524nm,1.1s
**MORW Morawa 58.12 249** P P 16 00 22.2 +0.3
**MORW Morawa 58.12 249** P P 16 00 21.8 -0.1
**BBSI Bau Bau 58.41 277** P P 16 00 24.7 +0.6
comp=Z,266nmcomp=Z,38nm,1.0s
**BASI Baing, Sumba 58.58 271** P P 16 00 25.7 +0.5
comp=Z,947nmcomp=Z,7µmcomp=Z,801nm,1.2s
**KMSI Cibinong 59.59 284** P P 16 00 31.7 -0.3
comp=Z,2µmcomp=Z,230nm,1.1s
**WBSI Waikabubak, Su 59.87 271** P P 16 00 33.5 -0.4
comp=Z,5µmcomp=Z,527nm,1.3s
**LUWI Luwuk 60.00 282** P P 16 00 33.8 -0.9
LUWI IAmb IAmb 16 00 36.0
comp=Z,508nm,1.0s
**LUWI Luwuk 60.00 282** P P 16 00 35.1 +0.4
comp=Z,6µmcomp=Z,528nm,1.2s
**LUWI Luwuk 60.00 282** P P 16 00 34.9 +0.2
**BSSI Bau Bau, Buton 60.09 276** P P 16 00 34.3 -1.0
comp=Z,2µmcomp=Z,140nm,1.2s
**GTOI Gorontalo 60.49 284** P P 16 00 38.5 +0.6
comp=Z,1µmcomp=Z,163nm,0.9s
**CCD Concordia, Ant 60.72 194** P P 16 00 40.2 +1.3
CCD pP pP 16 02 32.5 -0.3
**BKSI Bulukumba 60.73 276** P P 16 00 38.6 -0.9
comp=Z,2µmcomp=Z,281nm,0.8s
**GIRL Giralia 60.96 256** P P 16 00 41.6 +0.8
baz=61,SNR=68
**GIRL Giralia 60.96 256** P P 16 00 41.5 +0.7
**GIRL Giralia 60.96 256** P P 16 00 42.3 +1.4
**GIRL Giralia 60.96 256** P P 16 00 41.9 +1.0
**APSI Ampana 61.07 282** P P 16 00 42.5 +0.8
comp=Z,2µmcomp=Z,260nm,1.1s
**BNSI Bone 61.09 277** P P 16 00 41.4 -0.5
comp=Z,4µmcomp=Z,354nm,1.4s
**KAPI Kappang 61.19 277** P P 16 00 42.2 -0.2
comp=Z,30nm,0.6s,baz=157,slow=3.5,SNR=24
KAPI S S 16 08 18.2 +0.4
comp=Z,5.8nm,0.3s,baz=352,slow=21,SNR=5.8
**KAPI Kappang 61.19 277** P P 16 00 42.4 -0.1
comp=Z,120nm,1.5s
**KAPI Kappang 61.19 277** P P 16 00 41.9 -0.6
KAPI pP pwP 16 02 49.9 +9.4
**DAV Davao City (W) 61.20 292** P P 16 00 43.9 +1.4
comp=Z,284nm,1.1s
**JCJ Chichijima 61.37 321** P P 16 00 43.3 0.0
JCJ IAmb IAmb 16 00 50.6
comp=Z,1µm,2.0s
**MRSI Marisa 61.39 283** P P 16 00 42.8 -1.0
comp=Z,1µmcomp=Z,130nm,1.2s
**SPSI Sidrap Palu 61.57 278** P P 16 00 43.6 -1.4
comp=Z,1µmcomp=Z,188nm,1.1s
**PLAI Plampang 61.65 272** P P 16 00 44.9 -0.6
comp=Z,8µmcomp=Z,866nm,1.2s
**PLAI Plampang 61.65 272** P P 16 00 45.6 +0.1
**PLAI Plampang 61.65 272** P P 16 00 45.2 -0.3
**TTSI Tana Toraja 61.88 279** P P 16 00 46.7 -0.3
comp=Z,1µmcomp=Z,96nm,1.0s
**CASY Casey 62.09 206** P P 16 00 48.0 +0.6
**TOLI2 Tolitoli 62.71 283** P P 16 00 51.8 -0.4
**TOLI2 Tolitoli 62.71 283** P P 16 00 53.4 +1.1
**TOLI2 Tolitoli 62.71 283** P P 16 00 51.9 -0.4
**MPSI Mapaga 63.18 282** P P 16 00 54.7 -0.6
comp=Z,2µmcomp=Z,270nm,1.1s
**IGBI Denpasar 64.09 271** P P 16 01 00.9 -0.2
comp=Z,7µmcomp=Z,789nm,1.2s
**JAGI Jajag, Banyuwa 65.13 271** P P 16 01 06.6 -1.2
JAGI IAmb IAmb 16 01 07.5
comp=Z,460nm,1.0s
**JAGI Jajag, Banyuwa 65.13 271** P P 16 01 06.3 -1.4
comp=Z,5µmcomp=Z,508nm,1.0s
**JAGI Jajag, Banyuwa 65.13 271** P P 16 01 07.4 -0.3
**JAGI Jajag, Banyuwa 65.13 271** P P 16 01 06.6 -1.2
**KBKI Kotabaru 65.14 277** P P 16 01 08.1 +0.3
comp=Z,1µmcomp=Z,155nm,1.1s
**ABJI Asem Bagus 65.29 271** P P 16 01 09.0 +0.3
comp=Z,4µmcomp=Z,440nm,1.1s
**SMKI Samarinda 65.31 280** P P 16 01 11.3 +2.5
comp=Z,218nm,1.2s
**GMJI Gumukmas 65.86 271** P P 16 01 11.3 -0.9
comp=Z,3µmcomp=Z,310nm,1.0s
**BLJI Banyuglugur 65.90 271** P P 16 01 12.5 0.0
comp=Z,3µmcomp=Z,300nm,0.8s
**MTKI Muara Teweh, K 67.23 279** P P 16 01 20.6 -0.1
comp=Z,4µmcomp=Z,77nm,0.9s
**GRJI Gresik 67.23 272** P P 16 01 21.3 +0.6
comp=Z,5µmcomp=Z,556nm,1.0s
**JHJ Hachijo jima 2 67.26 323** P P 16 01 20.1 -0.3
comp=Z,174nm,0.7s,baz=225,slow=13,SNR=3.0
**PWJI Pagerwojo 67.47 270** P P 16 01 21.7 -0.4
comp=Z,3µmcomp=Z,411nm,1.1s
**PCJI Pacitan 67.99 270** P P 16 01 25.4 +0.1
comp=Z,13µmcomp=Z,1µm,0.9s
**QSPA South Pole Qui 68.09 180** P P 16 01 26.6 +1.5
comp=Z,148nm,0.9s,baz=26,slow=1.9,SNR=393
QSPA pP pwP 16 03 26.2 +0.9
comp=Z,261nm,1.0s,baz=35,slow=3.4,SNR=20
QSPA S S 16 09 41.4 +2.6
comp=Z,4.6nm,1.0s,baz=160,slow=23,SNR=13
**QSPA South Pole Qui 68.09 180** P P 16 01 26.8 +1.6
QSPA IAmb IAmb 16 03 31.7
comp=Z,288nm,1.0s
**QSPA South Pole Qui 68.09 180** P P 16 01 27.0 +1.9
QSPA pP pP 16 03 24.0 +0.7
**UGM Wanagama 68.69 270** P P 16 01 29.2 -0.4
UGM IAmb IAmb 16 01 30.4
comp=Z,347nm,0.8s
**UGM Wanagama 68.69 270** P P 16 01 29.3 -0.4
comp=Z,5µmcomp=Z,481nm,1.0s
**UGM Wanagama 68.69 270** P P 16 01 30.2 +0.6
**UGM Wanagama 68.69 270** P P 16 01 29.5 -0.1
**UWJI Ujung Watu 68.83 272** P P 16 01 30.6 +0.2
comp=Z,4µmcomp=Z,417nm,0.9s
**YOGI Yogyakarta 68.94 270** P P 16 01 31.0 -0.1
comp=Z,3µmcomp=Z,336nm,0.9s
**KKM Kota Kinabalu 68.94 286** P P 16 01 30.9 -0.2
**SMRI Semarang 69.07 271** P P 16 01 32.6 +0.7
comp=Z,4µmcomp=Z,377nm,1.1s
**SMRI Semarang 69.07 271** P P 16 01 32.4 +0.5
**PBKI Pangkalan Bun 69.52 276** P P 16 01 35.4 +0.9
comp=Z,3µmcomp=Z,287nm,1.0s
**JOW Kunigami 70.18 311** P P 16 01 38.5 +0.4
baz=0.0,slow=2.0
**JOW Kunigami 70.18 311** P P 16 01 39.9 +1.8
**JMM Marumori 70.35 327** P P 16 01 39.3 +0.5
**KPJI Karang Pucung 70.38 270** P P 16 01 39.2 -0.4
comp=Z,3µmcomp=Z,301nm,0.9s
**JGF Kuroka 70.44 324** P P 16 01 39.4 -0.1
**INU Inuyama 70.45 323** P P 16 01 39.5 +0.1
**INU Inuyama 70.45 323** P P 16 01 40.5 +1.0
**CMJI Cimerak 70.67 269** P P 16 01 40.1 -1.2
comp=Z,1µmcomp=Z,175nm,1.0s
**MJAR Matsushiro Arr 70.68 325** P P 16 01 40.8 0.0
comp=Z,77nm,0.8s,baz=159,slow=5.5,SNR=115
MJAR pP pwP 16 03 41.8 -0.9
comp=Z,16nm,1.1s,baz=152,slow=6.8,SNR=4.0
MJAR PKP2ab 16 29 33.8
comp=Z,0.5nm,0.3s,baz=286,slow=5.9,SNR=4.8
**MJAR Matsushiro Arr 70.68 325** P P 16 01 40.8 0.0
MJAR pmax pmax
comp=Z,92nm,0.9s
**MJAR Matsushiro Arr 70.68 325** P P 16 01 40.8 0.0
**MAJO Matsushiro 70.68 325** i P P 16 01 40.8 -0.1
MAJO pmax pmax
comp=Z,111nm,0.9s
**MAJO Matsushiro 70.68 325** P P 16 01 41.0 +0.1
**MAJO Matsushiro 70.68 325** P P 16 01 41.2 +0.3
**MAJO Matsushiro 70.68 325** P P 16 01 41.0 +0.1
**MAT Matsushiro 70.68 325** P P 16 01 40.8 -0.1
MAT S S 16 10 10.2 +1.2
**MJB9 Matsu-Tunnel 70.68 325** P P 16 01 40.9 0.0
**STKI Sintang 70.76 278** P P 16 01 42.8 +0.9
comp=Z,97nm,1.1s
**SBUM Sibu 71.03 281** P P 16 01 41.4 -2.1
**JMN Monobe 71.09 320** P P 16 01 42.5 -0.9
JMN IAmb IAmb 16 01 45.8
comp=Z,230nm,1.2s
**JCJI Jatiwangi 71.28 270** P P 16 01 44.8 -0.1
comp=Z,8µmcomp=Z,537nm,1.3s
**JSU Suzuyama 71.71 316** P P 16 01 47.3 +0.3
**JSD Sado 71.77 326** P P 16 01 48.0 +0.9
JSD IAmb IAmb 16 01 49.1
comp=Z,236nm,1.3s
**LEM Lembang 71.77 270** P P 16 01 48.1 +0.1
comp=Z,506nm,0.9s,baz=55,slow=5.2,SNR=81

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CNJI | Cibinong | 72.06 | 269 | | P | | P | 16 01 48.3 | -1.1 | |
| | comp=Z,3µmcomp=Z,323nm,1.3s | | | | | | | | | |
| XMI | Christmas Isla | 72.31 | 266 | | P | | P | 16 01 51.1 | +0.2 | |
| XMIS | Christmas Isla | 72.33 | 266 | | P | | P | 16 01 51.0 | 0.0 | |
| XMIS | Christmas Isla | 72.33 | 266 | | P | | P | 16 01 51.0 | 0.0 | |
| KSM | Kuching | 72.39 | 279 | | P | | P | 16 01 51.2 | -0.1 | |
| KSM | Kuching | 72.39 | 279 | | P | | P | 16 01 51.6 | +0.3 | |
| JHS | Saijyo | 72.43 | 321 | | P | | P | 16 01 51.9 | +0.9 | |
| JHS | | | | | IAmb | | IAmb | 16 01 53.2 | | |
| | comp=Z,278nm,0.9s | | | | | | | | | |
| JTM | Tenmabayashi | 72.49 | 330 | | P | | P | 16 01 51.8 | +0.6 | |
| JTM | | | | | IAmb | | IAmb | 16 01 53.4 | | |
| | comp=Z,271nm,0.9s | | | | | | | | | |
| ERM | Erimo | 72.51 | 332 | *i* | P | | P | 16 01 53.1 | +1.8 | |
| ERM | | | | | pmax | | pmax | | | |
| | comp=Z,68nm,0.8s | | | | | | | | | |
| JNU | Nakatsue | 72.51 | 318 | | P | | P | 16 01 51.2 | -0.4 | |
| | comp=Z,63nm,0.9s,baz=82,slow=3.3,SNR=13 | | | | | | | | | |
| JNU | Nakatsue | 72.51 | 318 | | P | | P | 16 01 50.9 | -0.7 | |
| JNU | Nakatsue | 72.51 | 318 | | P | | P | 16 01 52.6 | +1.0 | |
| DBJI | Dramaga | 72.67 | 270 | | P | | P | 16 01 52.8 | -0.2 | |
| | comp=Z,758µmcomp=Z,16µmcomp=Z,176nm,1.2s | | | | | | | | | |
| KUR | Kuril'sk | 73.27 | 336 | ⇑*i* | P | | P | 16 01 56.6 | +1.1 | |
| KUR | | | | | | | | 16 02 04.2 | | |
| KUR | | | | | | | | 16 04 47.4 | | |
| KUR | | | | *i* | S | | S | 16 10 40.2 | +3.0 | |
| KUR | | | | | pmax | | pmax | | | |
| | comp=Z,1µm,2.1s | | | | | | | | | |
| KUR | | | | | pmax | | pmax | | | |
| | comp=Z,417nm,1.5s | | | | | | | | | |
| YULB | Yu-li | 73.28 | 304 | | P | | P | 16 01 55.1 | -1.1 | |
| NACB | Ninganchiao | 73.49 | 305 | | P | | P | 16 01 56.8 | -0.5 | |
| KIWB | Kanaga Island | 73.54 | 1 | | P | | P | 16 01 57.2 | +0.2 | |
| ADK | Adak | 73.59 | 2 | | P | | P | 16 01 57.0 | -0.2 | |
| ADK | | | | | pmax | | pmax | | | |
| | comp=Z,648nm,1.2s | | | | | | | | | |
| ADK | Adak | 73.59 | 2 | | P | | P | 16 01 57.0 | -0.2 | |
| ADK | Adak | 73.59 | 2 | | P | | P | 16 01 57.5 | +0.3 | |
| CGJI | Cibinong | 73.63 | 269 | | P | | P | 16 01 57.2 | -1.2 | |
| | comp=Z,3µmcomp=Z,221nm,1.0s | | | | | | | | | |
| TPUB | Ta-pu | 73.75 | 304 | | P | | P | 16 01 57.8 | -1.1 | |
| TPUB | | | | | IAmb | | IAmb | 16 01 59.0 | | |
| | comp=Z,186nm,0.8s | | | | | | | | | |
| TPUB | Ta-pu | 73.75 | 304 | | P | | P | 16 01 58.0 | -0.8 | |
| SSLB | Suanglung | 73.76 | 305 | | P | | P | 16 01 57.9 | -1.1 | |
| SSLB | Suanglung | 73.76 | 305 | | P | | P | 16 01 58.4 | -0.5 | |
| YHNB | Yeheng | 73.93 | 306 | | P | | P | 16 01 58.8 | -1.1 | |
| YHNB | Yeheng | 73.93 | 306 | | P | | P | 16 02 00.3 | +0.4 | |
| JEW | Eniwo | 73.93 | 331 | | P | | P | 16 01 59.9 | +0.5 | |
| ATKA | Atka Island | 74.01 | 3 | | P | | P | 16 01 59.7 | +0.1 | |
| | comp=Z,779nm,1.2s | | | | | | | | | |
| TATO | Taipei | 74.01 | 306 | | P | | P | 16 01 59.2 | -1.1 | |
| TATO | | | | | IAmb | | IAmb | 16 02 01.2 | | |
| | comp=Z,158nm,0.8s | | | | | | | | | |
| TATO | Taipei | 74.01 | 306 | | P | | P | 16 01 60.0 | -0.3 | |
| BLSI | Bandar Lampung | 74.49 | 270 | | P | | P | 16 02 02.8 | -0.5 | |
| | comp=Z,146nm,1.3s | | | | | | | | | |
| SHEM | Shemya Is, Ala | 74.62 | 356 | | P | | P | 16 02 02.5 | -0.5 | |
| | comp=Z,317nm,0.9s,baz=346,slow=2.0,SNR=9.3 | | | | | | | | | |
| PPBI | Pangkal Pinang | 74.84 | 274 | | P | | P | 16 02 06.4 | +1.2 | |
| KASI | Kota Agung | 75.13 | 270 | | P | | P | 16 02 06.0 | -0.8 | |
| | comp=Z,1µmcomp=Z,156nm,1.2s | | | | | | | | | |
| NIKH | Nikolski High | 75.20 | 7 | | P | | P | 16 02 06.4 | +0.2 | |
| | baz=190,SNR=7.5 | | | | | | | | | |
| KLSI | | 75.22 | 271 | | P | | P | 16 02 06.3 | -1.0 | |
| | comp=Z,22nm,1.7s | | | | | | | | | |
| MDSI | Maura Dua | 75.80 | 271 | | P | | P | 16 02 09.2 | -1.3 | |
| | comp=Z,694nmcomp=Z,57nm,1.2s | | | | | | | | | |
| QZH | Quanzhou | 76.20 | 304 | ⇑*i* | P | | P | 16 02 13.1 | +0.7 | |
| QZH | | | | | S | | S | 16 11 10.1 | +0.4 | |
| QZH | | | | | pmax | | pmax | | | |
| | comp=Z,81nm,0.9s | | | | | | | | | |
| UNV | Unalaska Valle | 76.33 | 8 | | P | | P | 16 02 12.0 | -0.4 | |
| UNV | Unalaska Valle | 76.33 | 8 | | P | | P | 16 02 12.1 | -0.3 | |
| | baz=192,SNR=7.4 | | | | | | | | | |
| LHSI | Lahat | 76.65 | 271 | | P | | P | 16 02 15.3 | +0.1 | |
| | comp=Z,94nm,1.4s | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 76.67 | 334 | *ce* | P | | P | 16 02 15.8 | +1.3 | |
| YSS | | | | *e* | PP | | pP | 16 04 17.0 | +0.8 | |
| YSS | | | | *i* | S | | S | 16 11 17.7 | +3.8 | |
| YSS | | | | | pmax | | pmax | | | |
| | comp=Z,1µm,2.8s | | | | | | | | | |
| YSS | | | | | pmax | | pmax | | | |
| | comp=N,300nm,2.2s | | | | | | | | | |
| YSS | | | | | pmax | | pmax | | | |
| | comp=Z,170nm,1.2s | | | | | | | | | |
| YSS | | | | | smax | | smax | | | |
| | comp=N,800nm,6.3s | | | | | | | | | |
| YSS | | | | | smax | | smax | | | |
| | comp=E,600nm,6.3s | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 76.67 | 334 | | P | | P | 16 02 15.7 | +1.2 | |
| YSS | | | | | IAmb | | IAmb | 16 02 17.3 | | |
| | comp=Z,264nm,1.2s | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 76.67 | 334 | | P | | P | 16 02 16.0 | +1.5 | |
| YSS | Yuzh-Sakhalins | 76.67 | 334 | | P | | P | 16 02 15.9 | +1.5 | |
| AKUT | Akutan | 76.70 | 8 | | P | | P | 16 02 13.7 | -0.7 | |
| AKUT | | | | | IAmb | | IAmb | 16 03 04.1 | | |
| | comp=Z,671nm,1.7s | | | | | | | | | |
| TJN | Taejon | 76.83 | 318 | *ce* | P | | P | 16 02 16.5 | +0.9 | |
| TJN | Taejon | 76.83 | 318 | | P | | P | 16 02 15.4 | -0.1 | |
| TJN | | | | | IAmb | | IAmb | 16 02 18.2 | | |
| | comp=Z,293nm,1.0s | | | | | | | | | |
| TJN | Taejon | 76.83 | 318 | | P | | P | 16 02 17.0 | +1.4 | |
| PET | Petropavlovsk | 77.10 | 347 | *α i* | P | | P | 16 02 16.8 | +0.1 | |
| PET | | | | *e* | PP | | pP | 16 04 20.0 | +1.4 | |
| PET | | | | *e* | SP | | sP | 16 05 16.9 | -1.5 | |
| PET | | | | *i* | S | | S | 16 11 18.6 | +0.4 | |
| PET | | | | | pmax | | pmax | | | |
| | comp=Z,158nm,1.0s | | | | | | | | | |
| PET | | | | | pmax | | pmax | | | |
| | comp=Z,1µm,8.1s | | | | | | | | | |
| PET | | | | | pmax | | pmax | | | |
| | comp=Z,500nm,9.4s | | | | | | | | | |
| PET | | | | | MLR | | MLR | | | |
| | comp=Z,100nm,19.0s | | | | | | | | | |
| PET | Petropavlovsk | 77.10 | 347 | | P | | P | 16 02 16.3 | -0.3 | |
| PET | Petropavlovsk | 77.10 | 347 | | P | | P | 16 02 16.6 | -0.1 | |
| KSRS | Korea Array | 77.18 | 319 | | P | | P | 16 02 18.6 | +1.1 | |
| | comp=Z,23nm,0.9s,baz=139,slow=5.9,SNR=44 | | | | | | | | | |
| JMBI | JAMBI | 77.35 | 273 | | P | | P | 16 02 21.1 | +2.1 | |
| | comp=Z,169nm,1.2s | | | | | | | | | |
| PEA0B | Petropavlovsk- | 77.39 | 346 | | P | | P | 16 02 18.4 | +0.1 | |
| PEA0B | | | | | pmax | | pmax | | | |
| | comp=Z,417nm,1.1s | | | | | | | | | |
| PEA0B | Petropavlovsk- | 77.39 | 346 | | P | | P | 16 02 18.4 | +0.1 | |
| PEA0B | | | | | IAmb | | IAmb | 16 02 20.0 | | |
| | comp=Z,417nm,1.1s | | | | | | | | | |
| PETK | Petropavlovsk- | 77.39 | 346 | | P | | P | 16 02 17.9 | -0.3 | |
| | comp=Z,184nm,0.8s,baz=152,slow=6.7,SNR=119 | | | | | | | | | |
| PETK | Petropavlovsk- | 77.39 | 346 | | P | | P | 16 02 18.0 | -0.3 | |
| PETK | Petropavlovsk- | 77.39 | 346 | | P | | P | 16 02 17.8 | -0.5 | |
| KSI | Kapahiang | 77.58 | 271 | | P | | P | 16 02 19.6 | -0.7 | |
| | comp=Z,163nm,1.1s | | | | | | | | | |
| SMAI | San Martin Ant | 77.67 | 159 | | P | | P | 16 02 21.4 | +1.7 | |
| SMAI | | | | | IAmb | | IAmb | 16 02 23.0 | | |
| | comp=Z,191nm,0.8s | | | | | | | | | |
| FALS | False Pass | 77.74 | 9 | | P | | P | 16 02 20.1 | +0.1 | |
| | baz=195 | | | | | | | | | |
| INCN | Inchon | 77.98 | 319 | | P | | P | 16 02 23.3 | +1.4 | |
| | comp=Z,126nm,1.5s | | | | | | | | | |
| BELA | Belgrano 2 | 78.25 | 173 | | P | | P | 16 02 23.2 | +0.5 | |
| CNBA | Chernabura Isl | 78.35 | 12 | | P | | P | 16 02 22.5 | -0.8 | |
| CHNA | Chernabura Isl | 78.36 | 12 | | P | | P | 16 02 23.3 | -0.1 | |
| | baz=199 | | | | | | | | | |
| UGL | Uglegorsk | 78.66 | 335 | ⇑*i* | P | | P | 16 02 26.1 | +1.0 | |
| UGL | | | | *e* | S | | S | 16 11 37.4 | +2.8 | |
| UGL | | | | | pmax | | pmax | | | |
| | comp=Z,300nm,0.9s | | | | | | | | | |
| UGL | | | | | smax | | smax | | | |
| | comp=E,1µm,6.2s | | | | | | | | | |
| UGL | | | | | smax | | smax | | | |
| | comp=N,600nm,8.1s | | | | | | | | | |
| SDPT | Sand Point | 78.69 | 11 | | P | | P | 16 02 24.8 | -0.3 | |
| SDPT | | | | | IAmb | | IAmb | 16 02 26.3 | | |
| | comp=Z,365nm,1.2s | | | | | | | | | |
| SDPT | Sand Point | 78.69 | 11 | | P | | P | 16 02 24.9 | -0.3 | |
| | baz=198 | | | | | | | | | |
| VLA | Vladivostok | 78.79 | 326 | *c i* | P | | P | 16 02 26.6 | +0.6 | |
| VLA | | | | | pmax | | pmax | | | |
| | comp=Z,146nm,1.2s | | | | | | | | | |
| MSHR | Mys Shultsa | 78.80 | 325 | *ce* | P | | P | 16 02 27.2 | +1.2 | |
| MSHR | | | | | pmax | | pmax | | | |
| | comp=Z,99nm,1.0s | | | | | | | | | |
| KRJI | Kerinci | 79.20 | 272 | | P | | P | 16 02 35.7 | +6.7 | |
| USA0B | Ussuriysk Arra | 79.50 | 327 | *i* | P | | P | 16 02 30.1 | +0.4 | |
| USRK | Ussuriysk Ar. | 79.50 | 327 | | P | | P | 16 02 30.9 | +1.3 | |
| | comp=Z,112nm,1.0s,baz=128,slow=3.4,SNR=102 | | | | | | | | | |
| USRK | | | | | pP | | pP | 16 04 34.2 | +1.7 | |
| | comp=Z,2.6nm,0.8s,baz=34,slow=18,SNR=2.0 | | | | | | | | | |
| SCI2 | San Clemente I | 79.69 | 48 | | P | | P | 16 02 33.3 | +2.3 | |
| | baz=235 | | | | | | | | | |
| MAW | Mawson | 79.75 | 200 | | P | | P | 16 02 32.1 | +1.4 | |
| | comp=Z,34nm,0.8s,baz=127,slow=7.6,SNR=7.4 | | | | | | | | | |
| MAW | | | | | pP | | pwP | 16 04 36.7 | +0.2 | |
| | comp=Z,29nm,0.9s,baz=110,slow=4.3,SNR=4.5 | | | | | | | | | |
| MAW | Mawson | 79.75 | 200 | | P | | P | 16 02 31.9 | +1.3 | |
| NJ2 | Nanjing | 79.87 | 311 | ⇑ | P | | P | 16 02 33.0 | +1.1 | |
| NJ2 | | | | | PcP | | PcP | 16 02 38.8 | +1.6 | |
| NJ2 | | | | | S | | S | 16 11 49.6 | +1.8 | |
| NJ2 | | | | | SS | | SS | 16 17 13.4 | -2.0 | |
| NJ2 | | | | | pmax | | pmax | | | |
| | comp=Z,73nm,1.0s | | | | | | | | | |
| NJ2 | | | | | pmax | | pmax | | | |
| | comp=Z,450nm,3.6s | | | | | | | | | |
| TYV | Tymovskoe | 79.89 | 337 | *e* | P | | P | 16 02 32.8 | +1.2 | |
| TYV | | | | *e* | S | | S | 16 11 44.5 | -2.7 | |
| TYV | | | | | pmax | | pmax | | | |
| | comp=Z,1µm,3.4s | | | | | | | | | |
| TYV | | | | | pmax | | pmax | | | |
| | comp=Z,208nm,1.0s | | | | | | | | | |
| TYV | | | | | smax | | smax | | | |
| | comp=N,800nm,8.6s | | | | | | | | | |
| TYV | | | | | smax | | smax | | | |
| | comp=E,1µm,8.6s | | | | | | | | | |
| TYV | | | | | smax | | smax | | | |
| | comp=E,18nm,2.0s | | | | | | | | | |
| PKM | Mcpherson Peak | 79.92 | 46 | | P | | P | 16 02 34.6 | +2.2 | |
| | baz=234 | | | | | | | | | |
| CHGN | Chignik | 79.97 | 12 | | P | | P | 16 02 31.9 | +0.1 | |
| CHGN | | | | | IAmb | | IAmb | 16 02 33.3 | | |
| | comp=Z,376nm,1.2s | | | | | | | | | |
| CHGN | Chignik | 79.97 | 12 | | P | | P | 16 02 32.4 | +0.6 | |
| | baz=200 | | | | | | | | | |
| CIS | Catalina Islan | 80.02 | 48 | | P | | P | 16 02 34.7 | +1.9 | |
| | baz=235,SNR=5.2 | | | | | | | | | |
| FMP | Fort Macarthur | 80.28 | 48 | | P | | P | 16 02 36.4 | +2.4 | |
| | baz=235 | | | | | | | | | |
| HOPS | Hopland Field | 80.31 | 41 | | P | | P | 16 02 35.1 | +1.0 | |
| HOPS | | | | | IAmb | | IAmb | 16 02 37.5 | | |
| | comp=Z,326nm,1.2s | | | | | | | | | |
| QIZ | Qiongzhong | 80.33 | 295 | | P | | P | 16 02 33.8 | -0.8 | |
| QIZ | | | | | S | | S | 16 11 53.6 | +0.6 | |
| QIZ | | | | | sS | | sS | 16 15 36.8 | +3.3 | |
| QIZ | | | | | pmax | | pmax | | | |
| | comp=Z,250nm,3.9s | | | | | | | | | |
| PMSA | Palmer Station | 80.42 | 157 | | P | | P | 16 02 35.7 | +1.4 | |
| | comp=Z,127nm,0.9s,baz=111,slow=19,SNR=15 | | | | | | | | | |
| PMSA | Palmer Station | 80.42 | 157 | *e* | P | | P | 16 02 37.2 | +3.0 | |
| OSI | Osito Audit: C | 80.50 | 47 | | P | | P | 16 02 37.6 | +2.4 | |
| | baz=235,SNR=8.1 | | | | | | | | | |
| DECC | Green Verdugo | 80.56 | 47 | | P | | P | 16 02 37.7 | +2.2 | |
| | baz=235 | | | | | | | | | |
| 109C | Camp Elliot, M | 80.64 | 49 | | P | | P | 16 02 38.2 | +2.2 | |
| | baz=236,SNR=7.9 | | | | | | | | | |
| ARVC | Arvin | 80.72 | 46 | | P | | P | 16 02 38.6 | +2.3 | |
| | baz=235,SNR=14 | | | | | | | | | |
| ELS | Elsinore Mount | 80.84 | 48 | | P | | P | 16 02 37.7 | +0.7 | |
| VES | Vestal, Richgr | 80.96 | 46 | | P | | P | 16 02 39.2 | +1.7 | |
| | baz=235,SNR=23 | | | | | | | | | |
| MURC | Murrieta | 80.97 | 48 | | P | | P | 16 02 39.6 | +1.9 | |
| | baz=236,SNR=31 | | | | | | | | | |
| MDJ | Mudanjiang | 81.02 | 326 | | P | | P | 16 02 38.5 | +0.9 | |
| MDJ | | | | | S | | S | 16 12 02.1 | +3.1 | |
| MDJ | | | | | SS | | SS | 16 17 36.3 | +4.4 | |
| MDJ | | | | | pmax | | pmax | | | |
| | comp=Z,130nm,1.7s | | | | | | | | | |
| MDJ | | | | | pmax | | pmax | | | |
| | comp=Z,720nm,3.9s | | | | | | | | | |
| MDJ | Mudanjiang | 81.02 | 326 | | P | | P | 16 02 38.3 | +0.7 | |
| MDJ | Mudanjiang | 81.02 | 326 | | P | | P | 16 02 38.8 | +1.2 | |
| VOG | Valley Oaks Go | 81.04 | 45 | | P | | P | 16 02 39.7 | +1.8 | |
| | baz=234 | | | | | | | | | |
| MONP2 | Monument Peak | 81.12 | 49 | | P | | P | 16 02 40.4 | +1.7 | |
| | baz=237,SNR=43 | | | | | | | | | |
| EDW2 | Edwards Air Fo | 81.14 | 47 | | P | | P | 16 02 40.3 | +1.8 | |
| | baz=236,SNR=80 | | | | | | | | | |
| IKP | In-Ko-Pah, Jac | 81.21 | 50 | | P | | P | 16 02 41.1 | +2.1 | |
| | baz=237,SNR=26 | | | | | | | | | |
| O02D | Mt. Diablo Mer | 81.21 | 40 | | P | | P | 16 02 41.3 | +2.5 | |
| | baz=232,SNR=79 | | | | | | | | | |
| LPIG | La Paz | 81.24 | 60 | | P | | P | 16 02 40.4 | +1.3 | |
| | comp=Z,26nm,0.3s,baz=358,slow=2.3,SNR=12 | | | | | | | | | |
| ISA | Isabella, Lake | 81.26 | 46 | | P | | P | 16 02 40.6 | +1.4 | |
| ISA | | | | | pmax | | pmax | | | |
| | comp=Z,249nm,1.2s | | | | | | | | | |
| ISA | Isabella, Lake | 81.26 | 46 | | P | | P | 16 02 40.5 | +1.4 | |
| ISA | | | | | IAmb | | IAmb | 16 02 42.4 | | |
| | comp=Z,249nm,1.2s | | | | | | | | | |
| ISA | Isabella, Lake | 81.26 | 46 | | P | | P | 16 02 40.8 | +1.7 | |
| | baz=235,SNR=111 | | | | | | | | | |
| SLBS | Sierra La Lagu | 81.33 | 60 | | P | | P | 16 02 41.6 | +1.8 | |
| YUH | Yuha Desert | 81.34 | 50 | | P | | P | 16 02 40.2 | +0.6 | |
| CMB | Columbia Colle | 81.40 | 43 | | P | | P | 16 02 41.0 | +1.2 | |
| CMB | | | | | pmax | | pmax | | | |
| | comp=Z,167nm,1.1s | | | | | | | | | |
| CMB | Columbia Colle | 81.40 | 43 | | P | | P | 16 02 41.0 | +1.2 | |
| PFO | Pinyon Flats O | 81.49 | 49 | | P | | P | 16 02 41.4 | +0.9 | |
| | comp=Z,33nm,1.1s,baz=240,slow=4.7,SNR=26 | | | | | | | | | |
| PFO | Pinyon Flats O | 81.49 | 49 | | P | | P | 16 02 41.2 | +0.7 | |
| PFO | Pinyon Flats O | 81.49 | 49 | | P | | P | 16 02 41.9 | +1.4 | |
| | baz=237,SNR=23 | | | | | | | | | |
| TPFO | Pinon Flats | 81.49 | 49 | | P | | P | 16 02 41.8 | +1.4 | |
| | baz=237,SNR=25 | | | | | | | | | |
| BBRC | Big Bear Solar | 81.53 | 48 | | P | | P | 16 02 42.4 | +1.6 | |
| | baz=236 | | | | | | | | | |
| SWSC | Sam W. Stewart | 81.59 | 50 | | P | | P | 16 02 42.6 | +1.8 | |
| | baz=237,SNR=25 | | | | | | | | | |
| ORV | Oroville | 81.61 | 41 | | P | | P | 16 02 42.0 | +1.2 | |
| ORV | | | | | pmax | | pmax | | | |
| | comp=Z,252nm,1.3s | | | | | | | | | |
| ORV | Oroville | 81.61 | 41 | | P | | P | 16 02 42.0 | +1.2 | |
| ORV | | | | | IAmb | | IAmb | 16 02 43.9 | | |
| | comp=Z,252nm,1.3s | | | | | | | | | |
| LRMC | Laurel Mtn Rad | 81.69 | 47 | | P | | P | 16 02 42.9 | +1.5 | |
| | baz=236,SNR=41 | | | | | | | | | |
| N02D | Trinity Center | 81.76 | 40 | | P | | P | 16 02 44.1 | +2.5 | |
| | baz=232,SNR=78 | | | | | | | | | |
| RRX | Edison Barstow | 81.82 | 47 | | P | | P | 16 02 43.6 | +1.7 | |
| | baz=236 | | | | | | | | | |
| OHAK | Old Harbor | 81.88 | 14 | | P | | P | 16 02 42.2 | +0.6 | |
| OHAK | Old Harbor | 81.88 | 14 | | P | | P | 16 02 42.5 | +0.9 | |
| | baz=204 | | | | | | | | | |
| M02C | Callahan | 81.93 | 39 | | P | | P | 16 02 44.8 | +2.3 | |
| | baz=231,SNR=61 | | | | | | | | | |
| CWC | Cottonwood Cre | 81.97 | 46 | | P | | P | 16 02 44.2 | +1.3 | |
| | baz=235 | | | | | | | | | |
| L02E | Cave Junction | 81.98 | 38 | | P | | P | 16 02 44.8 | +2.3 | |
| | baz=231,SNR=10 | | | | | | | | | |
| MNSI | Mandailing Nat | 82.02 | 274 | | P | | P | 16 02 42.5 | -0.9 | |
| | comp=Z,1µmcomp=Z,47nm,0.8s | | | | | | | | | |
| BELC | Belle Mtn. Jos | 82.03 | 49 | | P | | P | 16 02 44.7 | +1.5 | |
| | baz=237,SNR=70 | | | | | | | | | |
| IPM | Ipoh | 82.09 | 278 | | P | | P | 16 02 43.9 | +0.1 | |
| IPM | Ipoh | 82.09 | 278 | | P | | P | 16 02 44.2 | +0.4 | |
| MPMC | Manual Prospec | 82.15 | 46 | | P | | P | 16 02 45.1 | +1.3 | |
| | baz=236,SNR=82 | | | | | | | | | |
| MLAC | Mammoth, Mammo | 82.16 | 44 | | P | | P | 16 02 45.6 | +1.7 | |
| | baz=235,SNR=21 | | | | | | | | | |
| GSC | Goldstone, Bar | 82.19 | 47 | | P | | P | 16 02 45.3 | +1.4 | |
| | baz=236,SNR=64 | | | | | | | | | |
| BC3 | Big Chuckawall | 82.22 | 49 | | P | | P | 16 02 46.1 | +2.0 | |
| | baz=237,SNR=46 | | | | | | | | | |
| TIN | Tinemaha, Big | 82.22 | 45 | | P | | P | 16 02 45.8 | +1.7 | |
| | baz=235 | | | | | | | | | |
| YBH | Yreka Blue Hor | 82.23 | 39 | | P | | P | 16 02 45.9 | +2.0 | |
| YBH | | | | | pmax | | pmax | | | |
| | comp=Z,249nm,1.2s | | | | | | | | | |
| YBH | Yreka Blue Hor | 82.23 | 39 | | P | | P | 16 02 45.9 | +2.0 | |
| YBH | | | | | IAmb | | IAmb | 16 02 47.6 | | |
| | comp=Z,249nm,1.2s | | | | | | | | | |
| HEC | Hector,Ludlow | 82.25 | 48 | | P | | P | 16 02 45.5 | +1.3 | |
| | baz=236,SNR=78 | | | | | | | | | |
| GRNR | Gornyy | 82.26 | 333 | ⇑*i* | P | | P | 16 02 46.0 | +2.2 | |
| GRNR | | | | | pmax | | pmax | | | |
| | comp=E,30nm,0.9s | | | | | | | | | |
| GRNR | | | | | pmax | | pmax | | | |
| | comp=N,30nm,1.0s | | | | | | | | | |
| GRNR | | | | | pmax | | pmax | | | |
| | comp=Z,140nm,1.0s | | | | | | | | | |
| GRNR | | | | | MLR | | MLR | | | |
| | comp=E,60nm,12.0s | | | | | | | | | |
| GRNR | | | | | MLR | | MLR | | | |
| | comp=N,50nm,16.0s | | | | | | | | | |
| GRNR | | | | | MLR | | MLR | | | |
| | comp=Z,70nm,15.0s | | | | | | | | | |
| K02D | Willamette Mer | 82.28 | 38 | | P | | P | 16 02 46.0 | +1.8 | |
| | baz=231,SNR=19 | | | | | | | | | |
| WHN | Wuhan | 82.33 | 307 | ⇑ | P | | P | 16 02 45.6 | +1.1 | |
| WHN | | | | | S | | S | 16 12 16.4 | +3.9 | |
| WHN | | | | | pmax | | pmax | | | |
| | comp=Z,140nm,1.2s | | | | | | | | | |
| GLA | Glamis | 82.34 | 50 | | P | | P | 16 02 46.7 | +2.0 | |
| | baz=238,SNR=51 | | | | | | | | | |
| MPK | Martis Peak | 82.37 | 42 | | P | | P | 16 02 46.3 | +1.4 | |
| MPK | | | | | IAmb | | IAmb | 16 02 48.2 | | |
| | comp=Z,556nm,1.3s | | | | | | | | | |
| J01E | Myrtle Point | 82.42 | 37 | | P | | P | 16 02 46.6 | +1.9 | |
| | baz=230,SNR=6.8 | | | | | | | | | |
| UBPT | Khong Chiam | 82.44 | 290 | | P | | P | 16 02 45.5 | 0.0 | |
| PNTR | Pine Nut | 82.52 | 43 | | P | | P | 16 02 47.1 | +1.5 | |
| PNTR | | | | | IAmb | | IAmb | 16 02 48.7 | | |
| | comp=Z,277nm,0.9s | | | | | | | | | |
| SNY | Shenyang | 82.55 | 321 | ⇑ | P | | P | 16 02 45.8 | +0.4 | |
| SNY | | | | | SKS | | S | 16 12 11.6 | -2.7 | |
| SNY | | | | | S | | SKKSac | 16 12 14.0 | -2.1 | |
| SNY | | | | | SS | | SS | 16 17 53.3 | -1.0 | |
| SNY | | | | | pmax | | pmax | | | |
| | comp=Z,82nm,0.8s | | | | | | | | | |
| KDAK | Kodiak Island | 82.55 | 14 | | P | | P | 16 02 45.4 | +0.4 | |
| | comp=Z,154nm,1.2s,baz=285,slow=5.6,SNR=12 | | | | | | | | | |
| KDAK | Kodiak Island | 82.55 | 14 | | P | | P | 16 02 45.0 | 0.0 | |
| KDAK | | | | | IAmb | | IAmb | 16 02 47.2 | | |
| | comp=Z,341nm,1.4s | | | | | | | | | |
| KDAK | Kodiak Island | 82.55 | 14 | | P | | P | 16 02 45.6 | +0.6 | |
| | baz=205 | | | | | | | | | |
| HUMO | Hull Mountain | 82.63 | 38 | | P | | P | 16 02 48.0 | +2.1 | |
| HUMO | | | | | IAmb | | IAmb | 16 02 49.7 | | |
| | comp=Z,422nm,1.3s | | | | | | | | | |
| YERR | Yerington | 82.68 | 43 | | P | | P | 16 02 48.0 | +1.5 | |
| YERR | | | | | IAmb | | IAmb | 16 02 49.3 | | |
| | comp=Z,361nm,1.3s | | | | | | | | | |
| GMRC | Granite Mounta | 82.69 | 48 | | P | | P | 16 02 48.0 | +1.5 | |
| | baz=237,SNR=46 | | | | | | | | | |
| IRM | Iron Mountain | 82.70 | 49 | | P | | P | 16 02 48.3 | +1.9 | |
| | baz=237,SNR=120 | | | | | | | | | |
| LCH | Last Change Ra | 82.70 | 45 | | P | | P | 16 02 47.6 | +1.1 | |
| CN2 | Changchun | 82.72 | 323 | *e* | P | | P | 16 02 45.4 | -0.8 | |
| CN2 | | | | *e* | pP | | pwP | 16 04 53.6 | -1.6 | |
| CN2 | | | | *e* | PP | | PP | 16 06 08.5 | +0.8 | |
| CN2 | | | | | SKS | | S | 16 12 07.6 | -8.3 | |
| CN2 | | | | *e* | sS | | sS | 16 16 00.0 | +1.6 | |
| CN2 | | | | *e* | SS | | SS | 16 17 59.6 | +2.8 | |
| CN2 | | | | | pmax | | pmax | | | |
| | comp=Z,190nm,1.2s | | | | | | | | | |
| CN2 | | | | | pmax | | pmax | | | |
| | comp=Z,770nm,3.5s | | | | | | | | | |
| LHV | Little Huntoon | 82.73 | 44 | | P | | P | 16 02 48.2 | +1.9 | |
| LHV | | | | | IAmb | | IAmb | 16 02 49.8 | | |
| | comp=Z,229nm,1.2s | | | | | | | | | |
| KULM | Kulim | 82.75 | 279 | | P | | P | 16 02 47.0 | -0.1 | |
| GRAC | Grapevine Rang | 82.76 | 45 | | P | | P | 16 02 48.3 | +1.7 | |
| GRAC | | | | | IAmb | | IAmb | 16 02 50.0 | | |
| | comp=Z,388nm,1.3s | | | | | | | | | |
| GRAC | Grapevine Rang | 82.76 | 45 | | P | | P | 16 02 48.4 | +1.7 | |
| | baz=236,SNR=109 | | | | | | | | | |
| L04D | Klamath Falls | 82.77 | 39 | | | | P | 16 02 48.3 | +1.6 | |
| L04D | | | | | IAmb | | IAmb | 16 02 50.0 | | |
| | comp=Z,428nm,1.2s | | | | | | | | | |
| L04D | Klamath Falls | 82.77 | 39 | | P | | P | 16 02 48.7 | +2.0 | |
| | baz=232,SNR=44 | | | | | | | | | |
| GWY | Greenwater Val | 82.77 | 46 | | P | | P | 16 02 47.9 | +1.0 | |
| M04C | Macdoel | 82.77 | 39 | | P | | P | 16 02 48.6 | +1.9 | |
| | baz=232,SNR=40 | | | | | | | | | |
| DBO | Dodson Butte | 82.79 | 38 | | P | | P | 16 02 48.4 | +1.6 | |
| DBO | | | | | IAmb | | IAmb | 16 02 50.2 | | |
| | comp=Z,222nm,1.1s | | | | | | | | | |
| FURC | Furnace Creek, | 82.79 | 46 | | P | | P | 16 02 48.2 | +1.4 | |
| | baz=236,SNR=27 | | | | | | | | | |
| GULI | GuiLin | 82.81 | 301 | | P | | P | 16 02 50.8 | +3.7 | |
| TUQ | Turquoise Moun | 82.86 | 47 | | P | | P | 16 02 48.7 | +1.4 | |
| | baz=237,SNR=84 | | | | | | | | | |
| BNX | BinXian | 82.92 | 326 | ⇓ | P | | P | 16 02 47.8 | +0.6 | |
| BNX | | | | | pP | | pP | 16 04 51.8 | +0.3 | |
| BNX | | | | | sP | | sP | 16 05 47.5 | -3.3 | |
| BNX | | | | | PP | | PP | 16 06 13.9 | +4.6 | |
| BNX | | | | | S | | S | 16 12 20.5 | +2.7 | |
| BNX | | | | | pmax | | pmax | | | |
| | comp=Z,320nm,0.9s | | | | | | | | | |
| BNX | | | | | pmax | | pmax | | | |
| | comp=Z,870nm,4.2s | | | | | | | | | |
| RYN | Ryan | 82.93 | 44 | | P | | P | 16 02 48.4 | +0.7 | |
| NVAR | Mina Array Bea | 82.96 | 44 | | P | | P | 16 02 49.1 | +1.2 | |
| | comp=Z,81nm,1.0s,baz=224,slow=7.7,SNR=278 | | | | | | | | | |
| NVAR | | | | | pP | | pwP | 16 04 54.7 | -1.2 | |
| | comp=Z,4.0nm,0.8s,baz=222,slow=6.4,SNR=4.8 | | | | | | | | | |
| NVAR | | | | | PKKPbc | | PKKPbc | 16 21 07.0 | +0.3 | |
| | comp=Z,1.6nm,0.8s,baz=85,slow=2.5,SNR=10.0 | | | | | | | | | |
| NVAR | | | | | PKPPKP | | P'P'df | 16 29 09.8 | -0.1 | |
| | comp=Z,1.2nm,0.9s,baz=77,slow=4.4,SNR=5.4 | | | | | | | | | |
| PAHR | Pah Rah Range | 83.02 | 42 | | P | | P | 16 02 49.4 | +1.4 | |
| PAHR | | | | | IAmb | | IAmb | 16 02 51.0 | | |
| | comp=Z,204nm,1.2s | | | | | | | | | |
| NV11 | Mina Array Sit | 83.06 | 44 | | P | | P | 16 02 49.3 | +1.1 | |
| I02E | Swisshome, OR | 83.08 | 37 | | P | | P | 16 02 49.9 | +1.9 | |
| | baz=230 | | | | | | | | | |
| I03D | Drain, OR | 83.09 | 37 | | P | | P | 16 02 50.3 | +2.2 | |
| | baz=231,SNR=12 | | | | | | | | | |
| KLR | Kul'dur | 83.18 | 330 | *ce* | P | | P | 16 02 49.2 | +0.8 | |
| KLR | | | | | pmax | | pmax | | | |
| | comp=Z,93nm,1.0s | | | | | | | | | |
| 214A | Organ P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **W13A** | **Hualapai Mount** | **84.08** | **49** | P | **P** | **16 02 55.0** | **+1.5** |
| **G03D** | **McMinnville, O** | **84.10** | **36** | P | **P** | **16 02 55.1** | **+2.1** |
| | baz=231 | | | | | | |
| **Y14A** | **Wickenburg** | **84.10** | **50** | P | **P** | **16 02 54.8** | **+1.4** |
| **H04A** | **Detroit Lake** | **84.36** | **37** | P | **P** | **16 02 55.7** | **+1.3** |
| H04A | | | | IAmb | IAmb | 16 02 57.2 | |
| | comp=Z,342nm,1.4s | | | | | | |
| **O19K** | **Port Alsworth** | **84.39** | **12** | P | **P** | **16 02 53.7** | **-0.4** |
| **O19K** | **Port Alsworth** | **84.39** | **12** | P | **P** | **16 02 53.9** | **-0.1** |
| | baz=203,SNR=88 | | | | | | |
| **CNPM** | **China Poot** | **84.43** | **14** | P | **P** | **16 02 54.8** | **+0.5** |
| CNPM | | | | IAmb | IAmb | 16 02 56.3 | |
| | comp=Z,392nm,1.2s | | | | | | |
| **HOM** | **Homer** | **84.46** | **14** | P | **P** | **16 02 55.4** | **+1.0** |
| | baz=206 | | | | | | |
| **PINE** | **Pine Mountain** | **84.52** | **38** | P | **P** | **16 02 57.1** | **+1.7** |
| **I05D** | **Terrebonne, OR** | **84.63** | **38** | P | **P** | **16 02 57.5** | **+1.8** |
| | baz=232,SNR=11 | | | | | | |
| **O20K** | **Slope Mountain** | **84.63** | **13** | P | **P** | **16 02 55.6** | **+0.3** |
| | baz=205,SNR=8.6 | | | | | | |
| **R11A** | **Troy Canyon, C** | **84.68** | **45** | P | **P** | **16 02 56.9** | **+0.6** |
| **R11A** | **Troy Canyon, C** | **84.68** | **45** | P | **P** | **16 02 57.4** | **+1.1** |
| | baz=237,SNR=23 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **84.72** | **276** | P | P | 16 03 03.0 | +6.1 |
| **BRLK** | **Bradley Lake** | **84.72** | **14** | P | **P** | **16 02 56.0** | **+0.2** |
| BRLK | | | | IAmb | IAmb | 16 02 57.5 | |
| | comp=Z,316nm,1.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **84.74** | **14** | P | **P** | **16 02 56.5** | **+0.7** |
| | baz=206,SNR=21 | | | | | | |
| **F04D** | **Rainier, OR** | **84.78** | **36** | P | **P** | **16 02 58.7** | **+2.3** |
| | baz=231,SNR=6.7 | | | | | | |
| **TUC** | **Tucson** | **84.88** | **52** | P | **P** | **16 02 58.4** | **+1.1** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,177nm,1.2s | | | | | | |
| **TUC** | **Tucson** | **84.88** | **52** | P | **P** | **16 02 58.4** | **+1.1** |
| TUC | | | | IAmb | IAmb | 16 03 01.1 | |
| | comp=Z,177nm,1.1s | | | | | | |
| **TUC** | **Tucson** | **84.88** | **52** | P | **P** | **16 02 59.5** | **+2.2** |
| | baz=240 | | | | | | |
| **TUC** | **Tucson** | **84.88** | **52** | P | **P** | **16 02 59.5** | **+2.2** |
| TUC | | | | pP | **pwP** | **16 05 05.5** | **-0.8** |
| **MA2** | **Magadan** | **84.89** | **345** | *ce*P | **P** | **16 02 56.1** | **-0.5** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,451nm,1.7s | | | | | | |
| **MA2** | **Magadan** | **84.89** | **345** | P | **P** | **16 02 56.3** | **-0.3** |
| MA2 | | | | IAmb | IAmb | 16 02 57.9 | |
| | comp=Z,238nm,1.0s | | | | | | |
| **MA2** | **Magadan** | **84.89** | **345** | P | **P** | **16 02 56.7** | **+0.2** |
| **MA2** | **Magadan** | **84.89** | **345** | P | **P** | **16 02 56.0** | **-0.5** |
| **N19K** | **Bonanza Creek** | **84.93** | **12** | P | **P** | **16 02 56.3** | **-0.5** |
| N19K | | | | IAmb | IAmb | 16 02 57.8 | |
| | comp=Z,169nm,1.1s | | | | | | |
| **N19K** | **Bonanza Creek** | **84.93** | **12** | P | **P** | **16 02 56.3** | **-0.5** |
| | baz=203 | | | | | | |
| **RSO** | **Redoubt South** | **84.95** | **13** | P | **P** | **16 02 56.9** | **-0.2** |
| **SVW2** | **Sparrevohn** | **84.99** | **11** | P | **P** | **16 02 56.6** | **-0.5** |
| **SYO** | **Syowa Base** | **85.00** | **193**⇑ | *e*P | **P** | **16 02 57.2** | **+0.1** |
| **SYO** | **Syowa Base** | **85.00** | **193**⇓ | *i*pP | pP | 16 05 04.2 | +1.8 |
| **NLWA** | **Neilton Lookou** | **85.16** | **34** | P | **P** | **16 02 59.1** | **+0.9** |
| **G05D** | **Wamic, OR** | **85.19** | **37** | P | **P** | **16 03 00.2** | **+1.8** |
| | baz=232,SNR=8.0 | | | | | | |
| **E04D** | **Cinebar** | **85.32** | **35** | P | **P** | **16 03 01.0** | **+2.1** |
| | baz=231,SNR=21 | | | | | | |
| **SEW** | **Seward** | **85.36** | **15** | P | **P** | **16 02 58.7** | **-0.1** |
| SEW | | | | IAmb | IAmb | 16 03 00.2 | |
| | comp=Z,166nm,1.0s | | | | | | |
| **SEW** | **Seward** | **85.36** | **15** | P | **P** | **16 02 58.6** | **-0.1** |
| | baz=208,SNR=11 | | | | | | |
| **F05D** | **White Salmon** | **85.51** | **36** | P | **P** | **16 03 01.5** | **+1.6** |
| | baz=232,SNR=12 | | | | | | |
| **LCMT** | **Little Creek M** | **85.53** | **47** | P | **P** | **16 03 00.5** | **+0.2** |
| **D04E** | **Lakebay** | **85.60** | **35** | P | **P** | **16 03 02.9** | **+2.7** |
| | baz=231,SNR=6.8 | | | | | | |
| **O22K** | **Cooper Landing** | **85.63** | **14** | P | **P** | **16 03 00.4** | **+0.4** |
| O22K | | | | IAmb | IAmb | 16 03 06.9 | |
| | comp=Z,192nm,0.7s | | | | | | |
| **O22K** | **Cooper Landing** | **85.63** | **14** | P | **P** | **16 03 00.4** | **+0.4** |
| | baz=207,SNR=12 | | | | | | |
| **HNS** | **HongShan** | **85.63** | **313** | ⇑P | **P** | **16 03 01.9** | **+1.3** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,89nm,1.0s | | | | | | |
| **D03D** | **Eldon** | **85.66** | **34** | P | **P** | **16 03 02.6** | **+2.1** |
| | baz=231,SNR=9.5 | | | | | | |
| **GAMB** | **Gambell** | **85.69** | **3** | P | **P** | **16 03 00.5** | **+0.3** |
| **GAMB** | **Gambell** | **85.69** | **3** | P | **P** | **16 03 01.2** | **+1.0** |
| | baz=187,SNR=23 | | | | | | |
| **LYN** | **LuoYang** | **85.73** | **310**⇑ | *i*P | **P** | **16 03 02.5** | **+1.3** |
| LYN | | | | SKS | **SKSac** | **16 12 27.0** | **-4.0** |
| LYN | | | | S | **S** | **16 12 48.1** | **+2.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,50nm,1.0s | | | | | | |
| **SPCR** | **Spurr Chakacha** | **85.74** | **13** | P | **P** | **16 03 00.3** | **-0.4** |
| | baz=205,SNR=36 | | | | | | |
| **TLCB** | **Telegraph Cove** | **85.77** | **31** | P | **P** | **16 03 01.9** | **+0.9** |
| TLCB | | | | IAmb | IAmb | 16 03 03.9 | |
| | comp=Z,212nm,1.5s | | | | | | |
| **B04A** | **Port Angeles** | **85.78** | **34** | P | **P** | **16 03 02.4** | **+1.3** |
| B04A | | | | IAmb | IAmb | 16 03 04.5 | |
| | comp=Z,318nm,1.4s | | | | | | |
| **ENH** | **Enshi** | **85.84** | **305** | P | **P** | **16 03 02.7** | **+0.8** |
| ENH | | | | pP | **pP** | **16 05 07.6** | **+0.3** |
| **CLRS** | **Cowichan Lake** | **85.95** | **33** | P | **P** | **16 03 02.3** | **+0.5** |
| CLRS | | | | IAmb | IAmb | 16 03 04.8 | |
| | comp=Z,221nm,1.2s | | | | | | |
| **M19K** | **Big River Lodg** | **85.96** | **12** | P | **P** | **16 03 01.6** | **0.0** |
| **M19K** | **Big River Lodg** | **85.96** | **12** | P | **P** | **16 03 01.9** | **+0.3** |
| | baz=203 | | | | | | |
| **WUAZ** | **Wupatki** | **86.06** | **49** | P | **P** | **16 03 04.6** | **+1.7** |
| | baz=240,SNR=51 | | | | | | |
| **BJI** | **Beijing** | **86.08** | **316** | P | **P** | **16 03 03.5** | **+0.8** |
| BJI | | | | SKS | **SKSac** | **16 12 28.1** | **-4.7** |
| BJI | | | | S | **S** | **16 12 50.8** | **+2.4** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,62nm,0.9s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,480nm,4.0s | | | | | | |
| **L19K** | **White Mountain** | **86.13** | **11** | P | **P** | **16 03 03.0** | **+0.6** |
| | baz=203,SNR=96 | | | | | | |
| **RC01** | **Rabbit Creek A** | **86.17** | **14** | P | **P** | **16 03 02.7** | **+0.1** |
| **RC01** | **Rabbit Creek A** | **86.17** | **14** | P | **P** | **16 03 03.0** | **+0.4** |
| | baz=207,SNR=45 | | | | | | |
| **ELK** | **Elko** | **86.22** | **43** | P | **P** | **16 03 03.6** | **0.0** |
| ELK | | | | pmax | pmax | | |
| | comp=Z,57nm,1.1s | | | | | | |
| **ELK** | **Elko** | **86.22** | **43** | P | **P** | **16 03 03.6** | **0.0** |
| **PWL** | **Port Wells** | **86.29** | **15** | P | **P** | **16 03 03.1** | **-0.1** |
| **PWL** | **Port Wells** | **86.29** | **15** | P | **P** | **16 03 03.2** | **-0.1** |
| | baz=209,SNR=38 | | | | | | |
| **GYA** | **Guiyang** | **86.30** | **300** | ⇓P | **P** | **16 03 05.8** | **+1.6** |
| GYA | | | | pP | pP | 16 05 10.4 | +0.6 |
| GYA | | | | SKS | **SKSac** | **16 12 36.9** | **+1.8** |
| GYA | | | | S | **S** | **16 12 52.8** | **+1.3** |
| GYA | | | | SS | **SS** | **16 18 53.8** | **+4.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,260nm,3.5s | | | | | | |
| **KAIM** | **Kayak Island** | **86.46** | **17** | P | **P** | **16 03 05.4** | **+1.4** |
| | baz=212,SNR=5.4 | | | | | | |
| **SNAA** | **Sanae** | **86.56** | **179** | P | **P** | **16 03 04.5** | **-0.1** |
| SNAA | | | | S | **S** | **16 12 50.8** | **-1.5** |
| **SNAA** | **Sanae** | **86.56** | **179** | pP | pP | 16 05 13.0 | +2.0 |
| **SNAA** | **Sanae** | **86.56** | **179** | *ce*P | **P** | **16 03 04.2** | **-0.4** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **86.56** | **179** | P | **P** | **16 03 04.3** | **-0.2** |
| **CRAG** | **Craig** | **86.58** | **24** | P | **P** | **16 03 06.6** | **+2.0** |
| | baz=222 | | | | | | |
| **L20K** | **Farewell, AK** | **86.58** | **12** | P | **P** | **16 03 04.8** | **+0.2** |
| | baz=204 | | | | | | |
| **GLI** | **Glacier Island** | **86.60** | **15** | P | **P** | **16 03 04.5** | **-0.1** |
| **GLI** | **Glacier Island** | **86.60** | **15** | P | **P** | **16 03 05.1** | **+0.4** |
| | baz=210,SNR=22 | | | | | | |
| **A04D** | **Lummi Island** | **86.61** | **34** | P | **P** | **16 03 07.1** | **+2.2** |
| | baz=231,SNR=22 | | | | | | |
| **TTA** | **Tatalina** | **86.62** | **10** | P | **P** | **16 03 05.3** | **+0.5** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,166nm,1.2s | | | | | | |
| **TTA** | **Tatalina** | **86.62** | **10** | P | **P** | **16 03 05.3** | **+0.5** |
| TTA | | | | IAmb | IAmb | 16 03 06.8 | |
| | comp=Z,166nm,1.2s | | | | | | |
| **TTA** | **Tatalina** | **86.62** | **10** | P | **P** | **16 03 05.3** | **+0.5** |
| | baz=202,SNR=48 | | | | | | |
| **FID** | **Port Fidalgo** | **86.64** | **15** | P | **P** | **16 03 04.8** | **0.0** |
| FID | | | | IAmb | IAmb | 16 03 06.3 | |
| | comp=Z,313nm,1.2s | | | | | | |
| **B05A** | **Bryant** | **86.64** | **34** | P | **P** | **16 03 06.9** | **+1.8** |
| | baz=231,SNR=47 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **86.65** | **16** | P | **P** | **16 03 05.1** | **+0.2** |
| EYAK | | | | IAmb | IAmb | 16 03 06.7 | |
| | comp=Z,263nm,1.2s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **86.65** | **16** | P | **P** | **16 03 05.5** | **+0.6** |
| | baz=211,SNR=17 | | | | | | |
| **M22K** | **Willow** | **86.68** | **13** | P | **P** | **16 03 04.8** | **-0.1** |
| **M22K** | **Willow** | **86.68** | **13** | P | **P** | **16 03 05.2** | **+0.2** |
| | baz=207,SNR=43 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.74** | **177** | P | **P** | **16 03 05.5** | **+0.1** |
| VNA3 | | | | S | **S** | **16 12 53.1** | **-0.8** |
| **VNA3** | **Neumayer Olymp** | **86.74** | **177** | pP | pP | 16 05 14.2 | +2.5 |
| **KNK** | **Knik Glacier** | **86.75** | **14** | P | **P** | **16 03 05.6** | **+0.2** |
| KNK | | | | IAmb | IAmb | 16 03 07.1 | |
| | comp=Z,286nm,1.1s | | | | | | |
| **KNK** | **Knik Glacier** | **86.75** | **14** | P | **P** | **16 03 05.6** | **+0.2** |
| | baz=208,SNR=37 | | | | | | |
| **PMR** | **Palmer** | **86.75** | **14** | P | **P** | **16 03 05.0** | **-0.3** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,286nm,1.2s | | | | | | |
| **PMR** | **Palmer** | **86.75** | **14** | P | **P** | **16 03 05.0** | **-0.3** |
| PMR | | | | IAmb | IAmb | 16 03 06.9 | |
| | comp=Z,286nm,1.2s | | | | | | |
| **PMR** | **Palmer** | **86.75** | **14** | P | **P** | **16 03 05.4** | **+0.1** |
| | baz=208,SNR=43 | | | | | | |
| **LTY** | **Liberty** | **86.78** | **36** | P | **P** | **16 03 06.9** | **+0.9** |
| LTY | | | | IAmb | IAmb | 16 03 08.6 | |
| | comp=Z,172nm,1.1s | | | | | | |
| **RAGM** | **Ragged Mountai** | **86.79** | **16** | P | **P** | **16 03 06.2** | **+0.6** |
| RAGM | | | | IAmb | IAmb | 16 03 07.7 | |
| | comp=Z,306nm,1.2s | | | | | | |
| **E07A** | **Sunnyside** | **86.80** | **37** | P | **P** | **16 03 07.3** | **+1.3** |
| E07A | | | | IAmb | IAmb | 16 03 09.2 | |
| | comp=Z,324nm,1.1s | | | | | | |
| **HMT** | **Hamilton** | **86.85** | **17** | P | **P** | **16 03 06.0** | **+0.1** |
| HMT | | | | IAmb | IAmb | 16 03 08.0 | |
| | comp=Z,236nm,1.2s | | | | | | |
| **ANM** | **Nome** | **86.95** | **6** | P | **P** | **16 03 06.4** | **+0.2** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| **ANM** | **Nome** | **86.95** | **6** | P | **P** | **16 03 06.4** | **+0.2** |
| **ANM** | **Nome** | **86.95** | **6** | P | **P** | **16 03 06.7** | **+0.5** |
| | baz=193,SNR=20 | | | | | | |
| **GHO** | **Glory Hole Cre** | **86.96** | **14** | P | **P** | **16 03 06.8** | **+0.4** |
| **SIT** | **Sitka** | **86.97** | **22** | P | **P** | **16 03 07.8** | **+1.4** |
| | baz=220 | | | | | | |
| **W18A** | **Petrified Fore** | **87.02** | **50** | P | **P** | **16 03 08.8** | **+1.3** |
| | baz=241,SNR=20 | | | | | | |
| **BERG** | **Berg Lake** | **87.05** | **17** | P | **P** | **16 03 07.4** | **+0.6** |
| BERG | | | | IAmb | IAmb | 16 03 09.1 | |
| | comp=Z,307nm,1.1s | | | | | | |
| **C06D** | **Leavenworth** | **87.06** | **35** | P | **P** | **16 03 08.7** | **+1.5** |
| | baz=232,SNR=9.1 | | | | | | |
| **SML** | **Sawmill** | **87.12** | **14** | P | **P** | **16 03 07.2** | **0.0** |
| SML | | | | IAmb | IAmb | 16 03 09.8 | |
| | comp=Z,195nm,1.4s | | | | | | |
| **SML** | **Sawmill** | **87.12** | **14** | P | **P** | **16 03 07.3** | **+0.2** |
| | baz=209,SNR=14 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.17** | **177** | P | **P** | **16 03 07.5** | **+0.1** |
| | baz=194,slow=3.6 | | | | | | |
| VNA2 | | | | S | **S** | **16 12 58.2** | **+0.3** |
| **VNA2** | **Neumayer--Watz** | **87.17** | **177** | pP | pP | 16 05 15.9 | +1.9 |
| | baz=182,slow=4.4 | | | | | | |
| **121A** | **Cookes Peak, D** | **87.20** | **53** | P | **P** | **16 03 10.4** | **+2.0** |
| | baz=242,SNR=44 | | | | | | |
| **CUT** | **Chulitna** | **87.23** | **13** | P | **P** | **16 03 07.5** | **-0.1** |
| **CUT** | **Chulitna** | **87.23** | **13** | P | **P** | **16 03 07.4** | **-0.1** |
| | baz=207,SNR=66 | | | | | | |
| **PPLA** | **Purkeypile** | **87.28** | **12** | P | **P** | **16 03 07.0** | **-1.0** |
| **PPLA** | **Purkeypile** | **87.28** | **12** | P | **P** | **16 03 06.8** | **-1.2** |
| | baz=205,SNR=17 | | | | | | |
| **BMRM** | **Bremner River** | **87.30** | **16** | P | **P** | **16 03 08.6** | **+0.6** |
| BMRM | | | | IAmb | IAmb | 16 03 09.9 | |
| | comp=Z,324nm,1.1s | | | | | | |
| **BMRM** | **Bremner River** | **87.30** | **16** | P | **P** | **16 03 08.4** | **+0.4** |
| | baz=212,SNR=49 | | | | | | |
| **WAX** | **Waxell Ridge** | **87.33** | **17** | P | **P** | **16 03 09.4** | **+1.2** |
| **TIY** | **Taiyuan** | **87.34** | **313** | ⇑P | **P** | **16 03 10.3** | **+1.5** |
| TIY | | | | S | **S** | **16 13 05.3** | **+4.7** |
| TIY | | | | SS | **SS** | **16 19 07.0** | **+2.7** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,69nm,1.1s | | | | | | |
| **MESA** | **MESA** | **87.35** | **18** | P | **P** | **16 03 09.5** | **+1.1** |
| **MESA** | **MESA** | **87.35** | **18** | P | **P** | **16 03 09.5** | **+1.1** |
| | baz=214,SNR=12 | | | | | | |
| **K20K** | **Telida** | **87.36** | **11** | P | **P** | **16 03 08.4** | **+0.3** |
| K20K | | | | IAmb | IAmb | 16 03 09.9 | |
| | comp=Z,245nm,1.1s | | | | | | |
| **K20K** | **Telida** | **87.36** | **11** | P | **P** | **16 03 08.3** | **+0.2** |
| | baz=203 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **87.38** | **15** | P | **P** | **16 03 08.9** | **+0.5** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,490nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **87.38** | **15** | P | **P** | **16 03 08.8** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **87.38** | **15** | P | **P** | **16 03 08.7** | **+0.3** |
| | baz=210,SNR=40 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.40** | **177** | P | **P** | **16 03 08.6** | **+0.2** |
| **KLU** | **Klutina** | **87.42** | **15** | P | **P** | **16 03 09.0** | **+0.4** |
| KLU | | | | IAmb | IAmb | 16 03 10.4 | |
| | comp=Z,248nm,1.3s | | | | | | |
| **KLU** | **Klutina** | **87.42** | **15** | P | **P** | **16 03 08.8** | **+0.2** |
| | baz=211,SNR=35 | | | | | | |
| **DUG** | **Dugway, Tooele** | **87.49** | **45** | P | **P** | **16 03 08.6** | **-0.9** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,156nm,1.8s | | | | | | |
| **DUG** | **Dugway, Tooele** | **87.49** | **45** | P | **P** | **16 03 08.6** | **-0.9** |
| **DUG** | **Dugway, Tooele** | **87.49** | **45** | P | **P** | **16 03 10.8** | **+1.2** |
| | baz=238,SNR=27 | | | | | | |
| **SEY** | **Seymchan** | **87.54** | **347** | P | **P** | **16 03 09.4** | **+0.4** |
| | comp=Z,162nm,1.0s,baz=153,slow=4.8,SNR=384 | | | | | | |
| SEY | | | | pP | **pP** | **16 05 17.0** | **+1.6** |
| | comp=Z,18nm,1.0s,baz=133,slow=6.2,SNR=2.5 | | | | | | |
| **WRAK** | **Wrangell Islan** | **87.58** | **24** | P | **P** | **16 03 11.1** | **+1.8** |
| | baz=223,SNR=13 | | | | | | |
| **ISLE** | **Juniper Island** | **87.60** | **17** | P | **P** | **16 03 09.7** | **+0.2** |
| ISLE | | | | IAmb | IAmb | 16 03 11.6 | |
| | comp=Z,276nm,1.1s | | | | | | |
| **D08A** | **Wollman Farm,** | **87.61** | **37** | P | **P** | **16 03 11.1** | **+1.3** |
| **PNL** | **Peninsula** | **87.68** | **19** | P | **P** | **16 03 10.8** | **+1.0** |
| | baz=217,SNR=7.2 | | | | | | |
| **TNA** | **Tin City** | **87.71** | **5** | P | **P** | **16 03 10.6** | **+0.9** |
| TNA | | | | IAmb | IAmb | 16 03 11.7 | |
| | comp=Z,278nm,1.6s | | | | | | |
| **TNA** | **Tin City** | **87.71** | **5** | P | **P** | **16 03 10.4** | **+0.7** |
| | baz=191,SNR=33 | | | | | | |
| **PCA** | **Pinnacle** | **87.77** | **18** | P | **P** | **16 03 10.3** | **0.0** |
| PCA | | | | IAmb | IAmb | 16 03 12.4 | |
| | comp=Z,143nm,1.0s | | | | | | |
| **PINM** | **Pinnacle** | **87.77** | **18** | P | **P** | **16 03 11.1** | **+0.9** |
| | baz=216 | | | | | | |
| **CAST** | **Castle Rocks** | **87.78** | **12** | P | **P** | **16 03 08.9** | **-1.3** |
| CAST | | | | IAmb | IAmb | 16 03 10.5 | |
| | comp=Z,217nm,0.9s | | | | | | |
| **CAST** | **Castle Rocks** | **87.78** | **12** | P | **P** | **16 03 09.0** | **-1.2** |
| | baz=205,SNR=137 | | | | | | |
| **TABL** | **Table Mountain** | **87.80** | **18** | P | **P** | **16 03 11.5** | **+0.9** |
| **VRDI** | **Verde Repeater** | **87.82** | **16** | P | **P** | **16 03 10.9** | **+0.3** |
| VRDI | | | | IAmb | IAmb | 16 03 12.6 | |
| | comp=Z,243nm,1.2s | | | | | | |
| **N25K** | **Chitina, Valde** | **87.84** | **16** | P | **P** | **16 03 11.3** | **+0.7** |
| **N25K** | **Chitina, Valde** | **87.84** | **16** | P | **P** | **16 03 11.1** | **+0.5** |
| | baz=212,SNR=52 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **87.89** | **15** | P | **P** | **16 03 11.5** | **+0.7** |
| **M24K** | **Tolsona, Glenn** | **87.89** | **15** | P | **P** | **16 03 11.7** | **+1.0** |
| | baz=210,SNR=28 | | | | | | |
| **GLB** | **Gilahina Butte** | **87.91** | **16** | P | **P** | **16 03 11.6** | **+0.7** |
| GLB | | | | IAmb | IAmb | 16 03 12.8 | |
| | comp=Z,270nm,1.2s | | | | | | |
| **WAT6** | **Susitna Watana** | **87.94** | **14** | P | **P** | **16 03 11.4** | **+0.3** |
| | baz=209,SNR=98 | | | | | | |
| **F10A** | **Beach Ranch, E** | **87.94** | **38** | P | **P** | **16 03 12.0** | **+0.6** |
| **WAT1** | **Susitna Watana** | **87.97** | **14** | P | **P** | **16 03 10.9** | **-0.2** |
| | baz=208 | | | | | | |
| **XAN** | **Xi'an** | **88.04** | **308** | P | **P** | **16 03 13.4** | **+1.3** |
| XAN | | | | pP | pwP | 16 05 22.8 | -0.3 |
| XAN | | | | SKS | **SKSac** | **16 12 42.1** | **-2.9** |
| XAN | | | | S | **ScS** | **16 13 12.0** | **+1.1** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,130nm,1.0s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,300nm,3.6s | | | | | | |
| **XAN** | **Xi'an** | **88.04** | **308** | P | **P** | **16 03 13.3** | **+1.1** |
| **J20K** | **Nowinta River** | **88.10** | **11** | P | **P** | **16 03 11.7** | **+0.1** |
| J20K | | | | IAmb | IAmb | 16 03 13.4 | |
| | comp=Z,194nm,1.1s | | | | | | |
| **J20K** | **Nowinta River** | **88.10** | **11** | P | **P** | **16 03 11.7** | **+0.1** |
| | baz=203 | | | | | | |
| **KTH** | **Kantishna Hill** | **88.13** | **12** | P | **P** | **16 03 10.8** | **-1.0** |
| KTH | | | | IAmb | IAmb | 16 03 12.9 | |
| | comp=Z,165nm,0.9s | | | | | | |
| **PLID** | **Pearl Lake** | **88.15** | **39** | P | **P** | **16 03 13.4** | **+0.8** |
| PLID | | | | IAmb | IAmb | 16 03 15.2 | |
| | comp=Z,259nm,1.4s | | | | | | |
| **CHUM** | **Lake Minchumin** | **88.16** | **12** | P | **P** | **16 03 11.2** | **-0.7** |
| | baz=205,SNR=61 | | | | | | |
| **B08A** | **Colville Reser** | **88.16** | **35** | P | **P** | **16 03 12.9** | **+0.6** |
| B08A | | | | IAmb | IAmb | 16 03 14.5 | |
| | comp=Z,204nm,1.1s | | | | | | |
| **TRF** | **Thorofare Moun** | **88.16** | **13** | P | **P** | **16 03 11.5** | **-0.6** |
| **TRF** | **Thorofare Moun** | **88.16** | **13** | P | **P** | **16 03 11.5** | **-0.6** |
| | baz=207,SNR=103 | | | | | | |
| **BARN** | **Barnard Glacie** | **88.16** | **17** | P | **P** | **16 03 13.0** | **+0.8** |
| **GCSA** | **Galena City Sc** | **88.18** | **9** | P | **P** | **16 03 12.4** | **+0.5** |
| | baz=201,SNR=49 | | | | | | |
| **LLLB** | **Lillooet** | **88.21** | **33** | P | **P** | **16 03 13.5** | **+1.0** |
| LLLB | | | | IAmb | IAmb | 16 03 15.2 | |
| | comp=Z,227nm,1.2s | | | | | | |
| **XLT** | **XiLinHaoTe** | **88.23** | **319**⇑ | *i*P | **P** | **16 03 13.3** | **+0.5** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,59nm,1.0s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,170nm,4.0s | | | | | | |
| **HLID** | **Hailey** | **88.26** | **41** | P | **P** | **16 03 14.5** | **+1.4** |
| HLID | | | | IAmb | IAmb | 16 03 16.3 | |
| | comp=Z,166nm,1.2s | | | | | | |
| **HLID** | **Hailey** | **88.26** | **41** | P | **P** | **16 03 14.7** | **+1.6** |
| | baz=237,SNR=138 | | | | | | |
| **BESE** | **Bessie Mountai** | **88.29** | **22** | P | **P** | **16 03 13.9** | **+1.2** |
| BESE | | | | IAmb | IAmb | 16 03 15.6 | |
| | comp=Z,164nm,1.2s | | | | | | |
| **ZEA** | **Zeya** | **88.32** | **331** | *ce*P | **P** | **16 03 13.8** | **+0.9** |
| ZEA | | | | *e*S | **S** | **16 13 11.6** | **+2.9** |
| ZEA | | | | *e* | | 16 14 18.0 | |
| ZEA | | | | pmax | pmax | | |
| | comp=N,40nm,1.2s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.2s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,70nm,1.1s | | | | | | |
| ZEA | | | | smax | smax | | |
| | comp=E,400nm,8.5s | | | | | | |
| ZEA | | | | smax | smax | | |
| | comp=N,700nm,6.1s | | | | | | |
| **HVU** | **Hansel Valley** | **88.34** | **43** | P | **P** | **16 03 14.4** | **+0.9** |
| HVU | | | | pmax | pmax | | |
| | comp=Z,272nm,1.3s | | | | | | |
| **HVU** | **Hansel Valley** | **88.34** | **43** | P | **P** | **16 03 14.3** | **+0.9** |
| HVU | | | | IAmb | IAmb | 16 03 16.4 | |
| | comp=Z,272nm,1.3s | | | | | | |
| **HARP** | **HAARP** | **88.38** | **15** | P | **P** | **16 03 13.8** | **+0.8** |
| | baz=211,SNR=18 | | | | | | |
| **RND** | **Reindeer** | **88.42** | **13** | P | **P** | **16 03 13.0** | **-0.2** |
| RND | | | | pmax | pmax | | |
| | comp=Z,425nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **88.42** | **13** | P | **P** | **16 03 13.0** | **-0.2** |
| **DHY** | **Denali Highway** | **88.45** | **14** | P | **P** | **16 03 13.2** | **-0.3** |
| DHY | | | | IAmb | IAmb | 16 03 15.0 | |
| | comp=Z,198nm,1.3s | | | | | | |
| **DHY** | **Denali Highway** | **88.45** | **14** | P | **P** | **16 03 13.4** | **-0.1** |
| | baz=209,SNR=35 | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **88.56** | **52** | P | **P** | **16 03 16.9** | **+2.2** |
| | baz=242,SNR=6.7 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **88.61** | **12** | P | **P** | **16 03 13.3** | **-0.7** |
| BPAW | | | | IAmb | IAmb | 16 03 14.4 | |
| | comp=Z,119nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **88.61** | **12** | P | **P** | **16 03 13.1** | **-1.0** |
| | baz=206,SNR=19 | | | | | | |
| **MNTX** | **Cornudas Mount** | **88.63** | **55** | P | **P** | **16 03 16.3** | **+1.4** |
| MNTX | | | | IAmb | IAmb | 16 03 18.1 | |
| | comp=Z,146nm,1.1s | | | | | | |
| **MNTX** | **Cornudas Mount** | **88.63** | **55** | P | **P** | **16 03 16.5** | **+1.6** |
| | baz=243 | | | | | | |
| **MCK** | **McKinley** | **88.69** | **13** | P | **P** | **16 03 14.0** | **-0.4** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,258nm,1.2s | | | | | | |
| **MCK** | **McKinley** | **88.69** | **13** | P | **P** | **16 03 14.0** | **-0.4** |
| **MCK** | **McKinley** | **88.69** | **13** | P | **P** | **16 03 14.0** | **-0.4** |
| | baz=208,SNR=68 | | | | | | |
| **PAX** | **Paxson** | **88.80** | **15** | P | **P** | **16 03 14.8** | **-0.2** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,110nm,1.2s | | | | | | |
| **PAX** | **Paxson** | **88.80** | **15** | P | **P** | **16 03 14.8** | **-0.2** |
| PAX | | | | IAmb | IAmb | 16 03 16.3 | |
| | comp=Z,110nm,1.2s | | | | | | |
| **PAX** | **Paxson** | **88.80** | **15** | P | **P** | **16 03 14.9** | **-0.2** |
| | baz=211,SNR=32 | | | | | | |
| **SKAG** | **Skagway** | **88.81** | **21** | P | **P** | **16 03 16.8** | **+1.8** |
| **SKAG** | **Skagway** | **88.81** | **21** | P | **P** | **16 03 16.8** | **+1.8** |
| | baz=220,SNR=20 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **88.91** | **58** | P | **P** | **16 03 17.3** | **+1.0** |
| **TXAR** | **Lajitas Array** | **88.91** | **58** | P | **P** | **16 03 18.1** | **+1.8** |
| | comp=Z,78nm,1.0s,baz=212,slow=4.4,SNR=310 | | | | | | |
| TXAR | | | | pP | **pwP** | **16 05 26.1** | **+0.3** |
| | comp=Z,2.5nm,0.8s,baz=193,slow=3.7,SNR=3.1 | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **16 20 52.5** | **+0.6** |
| | comp=Z,1.7nm,0.7s,baz=90,slow=3.0,SNR=13 | | | | | | |
| TXAR | | | | PKPPKP | | 16 28 56.7 | |
| | comp=Z,1.5nm,1.1s,baz=90,slow=1.5,SNR=4.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.91** | **58** | P | **P** | **16 03 16.2** | **-0.1** |
| **MVCO** | **Mesa Verde** | **88.91** | **49** | P | **P** | **16 03 16.8** | **+0.4** |
| | baz=241,SNR=12 | | | | | | |
| **KMI** | **Kunming** | **88.91** | **298** | ⇑P | **P** | **16 03 18.3** | **+1.7** |
| KMI | | | | sP | sP | 16 06 21.3 | -0.3 |
| KMI | | | | PP | **PP** | **16 06 57.8** | **+0.3** |
| KMI | | | | SKS | **SKSac** | **16 12 51.8** | **

baz=242
**ANMO Albuquerque 89.31 52** P **P** **16 03 19.2 +1.0**
**NEW Newport 89.31 36** P **P** **16 03 18.5 +0.8**
baz=235,SNR=13
**L26K Log Cabin Wild 89.36 16** P **P** **16 03 18.4 +0.9**
L26K IAmb IAmb 16 03 19.6
comp=Z,111nm,1.2s
**L26K Log Cabin Wild 89.36 16** P **P** **16 03 18.3 +0.8**
baz=213,SNR=33
**I21K Tanana 89.40 11** P **P** **16 03 17.9 +0.3**
**I21K Tanana 89.40 11** P **P** **16 03 17.6 0.0**
baz=205,SNR=64
**NEA2 Nenana 89.43 13** P **P** **16 03 17.0 -0.7**
baz=208,SNR=8.4
**CMAR Chiang Mai Arr 89.44 290** P **P** **16 03 20.7 +1.8**
comp=Z,36nm,0.8s,baz=132,slow=3.1,SNR=207
CMAR pP **pP** **16 05 26.0 +0.6**
comp=Z,12nm,1.0s,baz=143,slow=3.9,SNR=6.8
CMAR PP **PP** **16 06 59.4 -2.1**
comp=Z,12nm,0.8s,baz=123,slow=5.9,SNR=8.7
CMAR PKKPbc **PKKPbc** **16 20 50.9 +0.7**
comp=Z,3.1nm,0.8s,baz=287,slow=4.3,SNR=20
CMAR PKPPKP P'P'df 16 28 51.4 -8.1
comp=Z,0.7nm,0.8s,baz=265,slow=3.8,SNR=5.0
**CMAR Chiang Mai Arr 89.44 290** *i* P **P** **16 03 20.7 +1.8**
CMAR pmax pmax
comp=Z,38nm,0.8s
**MLY Manley 89.49 12** P **P** **16 03 17.5 -0.7**
MLY IAmb IAmb 16 03 18.9
comp=Z,126nm,1.2s
**MLY Manley 89.49 12** P **P** **16 03 17.2 -0.9**
baz=206
**BVCY Beaver Creek 89.50 17** P **P** **16 03 19.0 +0.8**
baz=215,SNR=37
**HHC Hu-ho-hao-te 89.50 315**⇑ *i* P **P** **16 03 20.3 +1.5**
HHC SKS **SKSac** **16 12 53.0 -0.3**
HHC S **ScS** **16 13 26.8 +3.9**
HHC SS **SS** **16 19 37.3 +2.2**
HHC pmax pmax
comp=Z,89nm,1.0s
HHC pmax pmax
comp=Z,100nm,4.5s
**WRH Wood River Hil 89.52 13** P **P** **16 03 17.7 -0.5**
**CHTO Chiang Mai 89.58 290** P **P** **16 03 20.8 +1.3**
**CHTO Chiang Mai 89.58 290** P **P** **16 03 21.4 +1.8**
**CHTO Chiang Mai 89.58 290** P **P** **16 03 21.1 +1.6**
**RIDG Independent Ri 89.60 15** P **P** **16 03 19.0 +0.3**
baz=212,SNR=31
**H21K Melozitna Rive 89.69 11** P **P** **16 03 19.3 +0.3**
H21K IAmb IAmb 16 03 20.8
comp=Z,96nm,1.1s
**H21K Melozitna Rive 89.69 11** P **P** **16 03 19.5 +0.5**
baz=204
**HDA Harding Lake 89.71 13** P **P** **16 03 18.9 -0.1**
HDA IAmb IAmb 16 03 21.2
comp=Z,78nm,0.7s
**HDA Harding Lake 89.71 13** P **P** **16 03 19.1 0.0**
baz=210,SNR=26
**DOT Dot Lake 89.71 15** P **P** **16 03 18.8 -0.3**
DOT IAmb IAmb 16 03 20.9
comp=Z,139nm,1.1s
**CCB Clear Creek Bu 89.73 13** P **P** **16 03 18.8 -0.4**
CCB IAmb IAmb 16 03 20.1
comp=Z,228nm,1.2s
**L27K Beaver Creek, 89.78 16** P **P** **16 03 19.8 +0.4**
**L27K Beaver Creek, 89.78 16** P **P** **16 03 19.9 +0.5**
baz=214
**BCAR Beaver Creek A 89.79 16** P **P** **16 03 19.9 +0.4**
**IMAR Indian Mountai 89.83 10** P **P** **16 03 19.7 +0.1**
**I23K Minto, Yukon-K 89.86 12** P **P** **16 03 19.1 -0.7**
I23K IAmb IAmb 16 03 21.5
comp=Z,157nm,1.4s
**I23K Minto, Yukon-K 89.86 12** P **P** **16 03 19.2 -0.5**
baz=208,SNR=31
**MDM Murphy Dome 89.92 13** P **P** **16 03 19.8 -0.3**
MDM IAmb IAmb 16 03 20.9
comp=Z,205nm,1.1s
**TCOL CIGO, UAF Yank 89.92 13** P **P** **16 03 20.2 +0.2**
**COLA College 89.92 13** *i* P **P** **16 03 18.9 -1.1**
COLA pmax pmax
comp=Z,256nm,1.2s
**COLA College 89.92 13** P **P** **16 03 20.4 +0.4**
**COLA College 89.92 13** P **P** **16 03 19.7 -0.3**
baz=209
**COLA College 89.92 13** P **P** **16 03 19.6 -0.4**
**SCRK Sand Creek 90.01 15** P **P** **16 03 20.8 +0.2**
SCRK IAmb IAmb 16 03 22.5
comp=Z,87nm,1.1s
**SCRK Sand Creek 90.01 15** P **P** **16 03 21.1 +0.4**
baz=212,SNR=42
**IL31 90.04 13** P **P** **16 03 20.1 -0.4**
IL31 IAmb IAmb 16 03 21.6
comp=Z,219nm,1.4s
**ILAR Eielson Array 90.04 13** P **P** **16 03 19.9 -0.6**
comp=Z,38nm,1.0s,baz=209,slow=5.5,SNR=196
ILAR pP **pwP** **16 05 29.5 -0.8**
comp=Z,6.3nm,1.0s,baz=242,slow=4.8,SNR=5.9
ILAR PP **PP** **16 07 01.0 -4.2**
comp=Z,4.5nm,1.0s,baz=228,slow=6.2,SNR=4.6
ILAR PKKP **PKKPdf** **16 20 47.8 +1.3**
comp=Z,0.3nm,0.4s,baz=324,slow=3.1,SNR=8.4
ILAR PKPPKP 16 28 47.1
comp=Z,0.4nm,0.9s,baz=210,slow=2.5,SNR=4.1
**ILAR Eielson Array 90.04 13** P **P** **16 03 20.0 -0.6**
**ILAR Eielson Array 90.04 13** P **P** **16 03 20.0 -0.6**
**P33M Teslin, Yukon 90.21 21** P **P** **16 03 22.5 +0.9**
baz=222,SNR=8.2
**POKR Poker Plat Res 90.22 13** **P** **16 03 20.7 -0.7**
POKR IAmb IAmb 16 03 22.3
comp=Z,126nm,1.2s
**POKR Poker Plat Res 90.22 13** P **P** **16 03 20.8 -0.7**
baz=209,SNR=43
**PZH PanZhiHua 90.30 298** P **P** **16 03 23.6 +0.7**
PZH pP **pP** **16 05 27.6 -2.0**
PZH SKS **SKSac** **16 12 54.4 -4.1**
PZH S **S** **16 13 28.5 +0.4**
PZH SS **SS** **16 19 48.0 +0.9**
PZH pmax pmax
comp=Z,40nm,0.9s
PZH pmax pmax
comp=Z,210nm,4.1s
**MSO Missoula 90.31 39** P **P** **16 03 22.8 +0.4**
baz=238,SNR=14
**S22A 4UR Ranch, Cre 90.33 49** P **P** **16 03 24.6 +1.6**
baz=242,SNR=99
**TPAW Teton Pass 90.37 43** P **P** **16 03 22.9 -0.1**
TPAW IAmb IAmb 16 03 25.0
comp=Z,98nm,1.1s
**BILL Bilibino 90.39 355** *d* i P **P** **16 03 22.3 +0.2**
BILL *e* *PP **pwP** **16 05 31.7 -0.7**
BILL *e* 16 07 08.3
BILL *e* SS SS 16 19 49.8 +3.4
BILL pmax pmax
comp=Z,176nm,1.1s
**BILL Bilibino 90.39 355** P **P** **16 03 22.4 +0.3**
BILL IAmb IAmb 16 03 24.0
comp=Z,144nm,1.0s
**BILL Bilibino 90.39 355** P **P** **16 03 22.7 +0.6**
BILL pP **pwP** **16 05 31.9 -0.5**
**BTO Baotou 90.40 314** *e* P **P** **16 03 24.3 +1.3**
BTO S **S** **16 13 22.3 -6.1**
**H23K Yukon River 90.43 12** P **P** **16 03 21.7 -0.7**
**H23K Yukon River 90.43 12** P **P** **16 03 21.8 -0.6**
baz=208
**O20A White River Ci 90.49 46** P **P** **16 03 24.5 +1.0**
baz=241,SNR=21
**EFI East Falkland 90.50 148** *de* P **P** **16 03 25.0 +1.8**
EFI pmax pmax
comp=Z,83nm,0.9s
**CD2 Chengdu 90.54 303** P **P** **16 03 24.9 +1.1**
CD2 SKS **SKSac** **16 12 58.8 -0.7**
CD2 S **ScS** **16 13 33.1 +1.3**
CD2 pmax pmax
comp=Z,30nm,1.2s
CD2 pmax pmax
comp=Z,230nm,4.5s
**J26L Joseph Creek 90.55 15** P **P** **16 03 23.9 +0.8**
baz=213
**RDOG Red Dog Mine 90.59 6** P **P** **16 03 23.8 +0.7**
baz=195,SNR=38
**MOOW Moose Ponds 90.63 42** P **P** **16 03 24.8 +0.6**
**LOHW Long Hollow 90.65 43** P **P** **16 03 24.9 +0.7**
LOHW IAmb IAmb 16 03 27.0
comp=Z,78nm,1.2s
**M30M Minto, Yukon 90.76 18** P **P** **16 03 24.7 +0.6**
M30M IAmb IAmb 16 03 26.1
comp=Z,209nm,1.6s
**M30M Minto, Yukon 90.76 18** P **P** **16 03 24.6 +0.5**
baz=219,SNR=35
**H24K Noodor Dome 90.77 12** P **P** **16 03 22.5 -1.5**
**H24K Noodor Dome 90.77 12** P **P** **16 03 22.7 -1.3**
baz=209
**BW06 Boulder Array 90.90 44** P **P** **16 03 25.7 +0.3**
BW06 IAmb IAmb 16 03 27.6
comp=Z,87nm,1.1s
**BW06 Boulder Array 90.90 44** P **P** **16 03 25.9 +0.5**
baz=241,SNR=80
**PD31 Pinedale Array 90.90 44** P **P** **16 03 26.4 +0.9**
PD31 IAmb IAmb 16 03 27.6
comp=Z,79nm,1.1s
**PDAR Pinedale Array 90.90 44** P **P** **16 03 25.9 +0.4**
comp=Z,68nm,1.1s,baz=204,slow=2.9,SNR=146
PDAR pP **pwP** **16 05 35.1 -1.1**
comp=Z,2.2nm,0.9s,baz=214,slow=3.1,SNR=2.4
PDAR PP **PP** **16 07 12.1 -0.6**
comp=Z,2.5nm,1.0s,baz=231,slow=5.7,SNR=4.2
PDAR PKKP **PKKPbc** **16 20 47.1 -0.7**
comp=Z,1.7nm,0.8s,baz=83,slow=5.7,SNR=11
PDAR PKPPKP **P'P'df** **16 28 50.6 -4.6**
comp=Z,0.7nm,0.9s,baz=84,slow=7.6,SNR=3.7
**PDAR Pinedale Array 90.90 44** P **P** **16 03 26.0 +0.6**
**PRP Porcupine Dome 90.97 13** P **P** **16 03 24.8 -0.3**
baz=211,SNR=26
**BOZ Bozeman (W) 91.03 41** P **P** **16 03 26.7 +0.9**
BOZ pmax pmax
comp=Z,76nm,1.2s
**BOZ Bozeman (W) 91.03 41** **P** **16 03 26.7 +0.9**
BOZ IAmb IAmb 16 03 28.6
comp=Z,76nm,1.1s
**BOZ Bozeman (W) 91.03 41** P **P** **16 03 27.1 +1.2**
baz=239,SNR=45
**H17A Grant Village 91.06 42** P **P** **16 03 28.5 +2.3**
baz=240,SNR=27
**M31M Drury Creek, Y 91.19 19** P **P** **16 03 26.2 +0.2**
**M31M Drury Creek, Y 91.19 19** P **P** **16 03 26.3 +0.2**
baz=221,SNR=12
**DAWY Dawson 91.23 16** P **P** **16 03 26.5 +0.4**
DAWY IAmb IAmb 16 03 28.1
comp=Z,92nm,1.1s
**DAWY Dawson 91.23 16** P **P** **16 03 26.6 +0.4**
baz=217,SNR=60
**SDCO Great Sand Dun 91.27 50** P **P** **16 03 28.2 +0.9**
baz=243,SNR=57
**EGAK Eagle 91.36 15** P **P** **16 03 27.0 +0.3**
EGAK IAmb IAmb 16 03 28.4
comp=Z,135nm,1.2s
**EGAK Eagle 91.36 15** P **P** **16 03 27.0 +0.3**
baz=215
**WALA Waterton Lakes 91.52 37** P **P** **16 03 28.5 +0.5**
WALA IAmb IAmb 16 03 30.2
comp=Z,69nm,1.2s
**WTLY Watson Lake, Y 91.54 23** P **P** **16 03 28.6 +0.9**
baz=226
**FARO Faro, Yukon 91.54 20** P **P** **16 03 28.1 +0.5**
baz=222,SNR=7.0
**COLD Coldfoot 91.56 11** P **P** **16 03 28.1 +0.5**
COLD IAmb IAmb 16 03 29.8
comp=Z,98nm,1.2s
**COLD Coldfoot 91.56 11** P **P** **16 03 28.2 +0.6**
baz=207,SNR=54
**MSTX Muleshoe 91.60 54** P **P** **16 03 29.6 +0.9**
baz=244
**T25A Trinidad 91.77 51** P **P** **16 03 29.8 +0.3**
T25A IAmb IAmb 16 03 31.8
comp=Z,64nm,1.1s
**T25A Trinidad 91.77 51** P **P** **16 03 30.3 +0.7**
baz=244,SNR=37
**MAYO Mayo, Yukon 91.82 18** P **P** **16 03 30.0 +1.1**
baz=220,SNR=13
**J29M Klondike Camp 91.85 17** P **P** **16 03 29.8 +0.8**
baz=218,SNR=17
**833A Chaparral WMA, 91.88 60** P **P** **16 03 31.0 +1.0**
baz=246
**Q24A Divide 92.06 49** P **P** **16 03 31.4 +0.4**
Q24A IAmb IAmb 16 03 33.6
comp=Z,68nm,1.2s
**Q24A Divide 92.06 49** P **P** **16 03 32.0 +1.0**
baz=243,SNR=22
**ISCO Idaho Springs 92.12 48** P **P** **16 03 32.3 +1.1**
baz=243,SNR=15
**RLMT Red Lodge 92.23 42** P **P** **16 03 31.9 +0.4**
**RLMT Red Lodge 92.23 42** P **P** **16 03 32.7 +1.3**
baz=241
**N23A Red Feather La 92.39 47** P **P** **16 03 33.5 +1.2**
baz=243,SNR=19
**JCT Junction City 92.43 58** P **P** **16 03 33.0 +0.5**
baz=246
**MMPY Sheldon Lake, 92.48 20** P **P** **16 03 33.0 +1.0**
baz=224,SNR=22
**I29M Ogilvie Camp, 92.55 16** P **P** **16 03 32.3 +0.1**
baz=218,SNR=6.9
**PEL Peldehue 92.67 127** P **P** **16 03 35.5 +1.8**
**LZH Lanzhou 92.68 308**⇑ P **P** **16 03 35.0 +1.3**
LZH pP pwP 16 05 43.5 -2.0
LZH sP sP 16 06 38.0 -0.9
LZH SKS **SKSac** **16 13 09.8 -1.6**
LZH S **ScS** **16 13 54.3 +4.6**
LZH SS **SS** **16 20 23.3 +2.7**
LZH pmax pmax
comp=Z,95nm,1.1s
LZH pmax pmax
comp=Z,140nm,4.8s
**AMTX Amarillo 92.80 54** P **P** **16 03 34.8 +0.7**
baz=245
**K22A Casper 92.81 45** P **P** **16 03 35.0 +0.8**
baz=243,SNR=12
**BMAR Burnt Mountain 92.81 13** P **P** **16 03 34.2 +0.8**
**TOLK Toolik Lake Re 92.94 10** P **P** **16 03 34.3 +0.4**
baz=208,SNR=16
**YAK Yakutsk 93.02 338** P **P** **16 03 34.4 +0.1**
comp=Z,75nm,0.8s,baz=109,slow=1.3,SNR=88
YAK pP **pP** **16 05 41.2 -0.3**
baz=90,slow=1.6
**YAK Yakutsk 93.02 338** *c* i P **P** **16 03 33.5 -0.8**
YAK *e* *SS 16 15 55.0
YAK *e* SS SS 16 20 36.6 +13
YAK pmax pmax
comp=Z,214nm,1.0s
YAK pmax pmax
comp=N,14nm,0.9s
YAK pmax pmax
comp=E,8.0nm,0.9s
**YAK Yakutsk 93.02 338** P **P** **16 03 34.1 -0.2**
**YAK Yakutsk 93.02 338** P **P** **16 03 33.9 -0.5**
YAK pP **pP** **16 05 41.0 -0.5**
**ABTX Abilene, Hawle 93.42 56** P **P** **16 03 37.9 +1.0**
baz=246
**EPYK Eagle Plains 93.75 16** P **P** **16 03 37.9 +0.2**
baz=219,SNR=12
**KSCO Kaye Shedlock' 93.85 49** P **P** **16 03 40.2 +1.3**
baz=245
**EDM Edmonton 94.03 33** P **P** **16 03 39.4 +0.2**
EDM pmax pmax
comp=Z,104nm,1.4s
**EDM Edmonton 94.03 33** P **P** **16 03 39.4 +0.2**
EDM IAmb IAmb 16 03 40.9
comp=Z,104nm,1.4s
**435B Jarrell 94.30 59** P **P** **16 03 42.0 +1.0**
baz=247
**A21K Barrow 94.39 7** P **P** **16 03 40.4 +0.1**
baz=201
**LAO LASA Array 94.84 41** P **P** **16 03 44.5 +1.4**
baz=243,SNR=22
**WHTX Lake Whitney, 94.87 58** P **P** **16 03 44.4 +0.8**
baz=247
**WMOK Wichita Mounta 94.92 55** P **P** **16 03 43.9 +0.2**
baz=247
**OGNE Ogallala 95.08 48** P **P** **16 03 45.0 +0.6**
baz=245
**RSSD Black Hills 95.09 44** P **P** **16 03 44.6 +0.1**
RSSD pmax pmax
comp=Z,31nm,1.0s
**RSSD Black Hills 95.09 44** P **P** **16 03 44.6 +0.1**
**RSSD Black Hills 95.09 44** P **P** **16 03 44.8 +0.3**
baz=244
**ULN Ulaanbaatar 95.67 320** *ce* P **P** **16 03 46.1 -0.8**
ULN pmax pmax
comp=Z,16nm,1.0s
**ULN Ulaanbaatar 95.67 320** P **P** **16 03 47.2 +0.2**
**CBKS Cedar Bluff 95.83 51** P **P** **16 03 48.4 +0.6**
baz=247
**INK Inuvik 96.03 16** P **P** **16 03 47.2 -0.6**
comp=Z,32nm,1.1s,baz=210,slow=5.2,SNR=45
INK pP **pP** **16 05 57.3 +1.4**
comp=Z,5.9nm,1.2s,baz=211,slow=1.6,SNR=2.1
**INK Inuvik 96.03 16** P **P** **16 03 47.5 -0.3**
INK pmax pmax
comp=Z,39nm,1.1s
**INK Inuvik 96.03 16** P **P** **16 03 47.5 -0.3**
INK IAmb IAmb 16 03 49.0
comp=Z,39nm,1.1s
**INK Inuvik 96.03 16** P **P** **16 03 47.8 0.0**
baz=222,SNR=30
**SONM Songino Array 96.05 319** P **P** **16 03 48.7 0.0**
comp=Z,4.7nm,1.0s,baz=120,slow=4.3,SNR=24
SONM pP **pP** **16 05 58.2 +2.2**
comp=Z,3.6nm,1.0s,baz=40,slow=2.5,SNR=5.1
SONM PKKP **PKKPbc** **16 20 34.2 -0.3**
comp=Z,2.9nm,0.8s,baz=260,slow=2.9,SNR=13
SONM PKPPKP 16 28 47.2
comp=Z,0.5nm,0.9s,baz=204,slow=3.3,SNR=3.5
**SONM Songino Array 96.05 319** P **P** **16 03 48.3 -0.3**
SONM pmax pmax
comp=Z,13nm,1.2s
**SONM Songino Array 96.05 319** P **P** **16 03 48.3 -0.3**
**DGMT Dagmar 96.86 40** Pdiff **P** **16 03 53.4 +1.3**
baz=245,SNR=8.7
**GTA Gaotai 96.95 310**⇑ P **P** **16 03 53.6 +0.7**
GTA pP pwP 16 06 03.8 -1.3
GTA SKS **SKSac** **16 13 31.9 -1.7**
GTA S **ScS** **16 14 28.3 +3.2**
GTA SS **SS** **16 21 17.3 -2.8**
GTA pmax pmax
comp=Z,14nm,1.6s
GTA pmax pmax
comp=Z,120nm,4.7s
**BGNE Belgrade 97.95 49** Pdiff **P** **16 03 59.1 +1.9**
baz=248
**YKA Yellowknife Ar 98.38 25** P **P** **16 03 58.5 0.0**
comp=Z,6.0nm,0.8s,baz=243,slow=4.4,SNR=65
YKA pP **pP** **16 06 07.2 0.0**
comp=Z,0.3nm,0.6s,baz=238,slow=3.9,SNR=1.9
YKA PP **PP** **16 08 05.8 -3.2**
comp=Z,3.8nm,1.0s,baz=242,slow=7.3,SNR=8.0
YKA PKiKP **PKiKP** **16 08 25.4 -1.3**
comp=Z,1.4nm,0.7s,baz=239,slow=1.6,SNR=7.8
YKA PKKPbc **PKKPbc** **16 20 26.5 -1.9**
comp=Z,0.5nm,0.4s,baz=35,slow=2.5,SNR=12
YKA SKKP 16 23 09.4
comp=Z,3.6nm,1.1s,baz=47,slow=4.5,SNR=3.6
YKA PKPPKP **P'P'df** **16 28 41.5 +2.0**
comp=Z,0.9nm,1.0s,baz=60,slow=2.1,SNR=6.9
**YKA Yellowknife Ar 98.38 25** Pdif **P** **16 03 58.7 +0.2**
**ZAK Zakamensk 98.98 321** *e* Pdif Pdif 16 04 01.0 -0.6
ZAK *e* 16 06 11.8
ZAK pmax pmax
comp=Z,12nm,1.1s
ZAK pmax pmax
comp=Z,6.0nm,1.5s
**C36M Paulatuk 99.23 17** Pdiff **Pdif** **16 04 02.1 0.0**
baz=231,SNR=13
**GOMU GeErMu 99.47 305** P **Pdif** **16 04 05.3 +0.9**
GOMU PP **PP** **16 08 19.8 +1.6**
GOMU S **S** **16 14 49.8 +2.6**
GOMU pmax pmax
comp=Z,2.0nm,0.8s
GOMU pmax pmax
comp=Z,79nm,6.7s
**TIXI Tiksi 99.86 345** P **Pdif** **16 04 03.7 -1.1**
comp=Z,7.1nm,1.1s,baz=273,slow=23,SNR=15
**TIXI Tiksi 99.86 345** *ce* P **Pdif** **16 04 04.1 -0.7**
TIXI pmax pmax
comp=Z,9.0nm,1.2s
**ECSD EROS Data Cent 99.86 47** Pdiff **Pdif** **16 04 06.2 +0.6**
baz=249
**U40A Yellville 100.01 55** Pdiff **Pdif** **16 04 06.9 +0.5**
baz=250
**A36M Sachs Harbour 100.63 15** Pdiff **Pdif** **16 04 08.8 +0.6**
baz=230
**LPAZ La Paz 102.64 113** *e* P **Pdif** **16 04 22.1 +2.8**
**ZSN Zaisan 109.69 314** *e* PKiKP **PKiKP** **16 08 47.3 -0.7**
baz=314
**ZALV Zalesovo Beam 110.86 321** Pdiff **Pdif** **16 04 54.2 0.0**
comp=Z,0.5nm,0.5s,baz=91,slow=14,SNR=4.6
ZALV PKiKP **PKiKP** **16 08 48.8 -1.1**
comp=Z,12nm,0.8s,baz=166,slow=0.8,SNR=33
ZALV PKKPbc **PKKPbc** **16 19 48.9 -1.9**
comp=Z,1.1nm,0.6s,baz=228,slow=5.8,SNR=3.7
ZALV PKKPab **PKKPab** **16 20 01.9 +0.9**
comp=Z,0.5nm,0.6s,baz=278,slow=4.3,SNR=3.6
**N54A Moraine State 110.94 53** PKiKP **PKiKP** **16 08 50.4 -0.2**
baz=259
**MK31 Makanchi Array 111.30 313** *i* PKiKP **PKiKP** **16 08 49.8 -1.3**
**MKAR Makanchi Array 111.30 313** Pdiff **Pdif** **16 04 56.4 0.0**
comp=Z,2.2nm,0.9s,baz=89,slow=6.0,SNR=13
MKAR PKiKP **PKiKP** **16 08 50.3 -0.8**
comp=Z,8.2nm,0.6s,baz=178,slow=0.9,SNR=70
MKAR PKKPbc **PKKPbc** **16 19 48.8 -0.4**
comp=Z,6.9nm,0.8s,baz=276,slow=4.2,SNR=26
MKAR PKPab **PKKPab** **16 20 01.2 +2.0**
comp=Z,4.4nm,0.8s,baz=283,slow=4.3,SNR=12
**NRIK Noril'sk 111.46 338** PKiKP **PKiKP** **16 08 49.2 -1.5**
comp=Z,6.1nm,0.7s,baz=97,slow=3.0,SNR=13
NRIK PP **PP** **16 09 41.2 -2.5**
comp=Z,19nm,1.1s,baz=105,slow=9.0,SNR=10
**O56A Blue Knob Stat 111.87 54** PKiKP **PKiKP** **16 08 52.2 -0.2**
baz=259
**SSPA Standing Stone 112.44 54** PKiKP **PKiKP** **16 08 53.6 +0.2**
baz=260
**UZB Uzynbulak 112.99 309** *i* PKiKP **PKiKP** **16 08 53.7 -0.9**
**UZB Uzynbulak 112.99 309** *e* PKiKP **PKiKP** **16 08 53.8 -0.9**
baz=309
**SEM Semipalatinsk 113.16 317** *i* PKiKP **PKiKP** **16 08 53.1 -1.7**
**SEM Semipalatinsk 113.16 317** *e* PKiKP **PKiKP** **16 08 53.1 -1.7**
baz=317
**KPKS Kokpek 113.29 309** *i* PKiKP **PKiKP** **16 08 54.2 -0.9**
**KPKS Kokpek 113.29 309** *e* PKiKP **PKiKP** **16 08 54.3 -0.9**
baz=309
**SATY Saty 113.43 309** *i* PKiKP **PKiKP** **16 08 54.4 -1.0**
**SATY Saty 113.43 309** *e* PKiKP **PKiKP** **16 08 54.5 -1.0**
baz=309
**TDK Taldyqorghan 113.71 311** *i* PKiKP **PKiKP** **16 08 54.6 -1.1**
**TDK Taldyqorghan 113.71 311** *e* PKiKP **PKiKP** **16 08 54.6 -1.1**
baz=311
**KURK Kurchatov 114.23 317** *i* PKiKP PKPdf 16 08 54.8 -1.7
KURK pmax pmax
comp=Z,28nm,0.9s
**KURK Kurchatov 114.23 317** P PKPdf 16 08 54.9 -1.6
**KURBB Kurchatov Arra 114.28 317** PKiKP PKPdf 16 08 54.4 -2.2
**MDOK Medeo 114.43 309** *e* PKiKP PKPdf 16 08 56.2 -1.2
**MDOK Medeo 114.43 309** *e* PKP PKPdf 16 08 56.2 -1.1
baz=309
**CHKK Chushkaly 114.56 309** *e* PKP PKPdf 16 08 56.1 -1.4
baz=309
**KSH Kashi 114.70 305** PKP **PKiKP** **16 08 59.3 +1.3**
**KUU Kurty 115.03 309** *e* PKiKP **PKPdf** **16 08 57.1 -1.2**
**KUU Kurty 115.03 309** *e* PKP **PKPdf** **16 08 57.1 -1.2**
baz=309
**TKM2 Tokmak 2 115.45 308** P **PKPdf** **16 08 59.0 -0.5**
SNR=17
**TKM2 Tokmak 2 115.45 308** PKiKP **PKPdf** **16 08 58.1 -1.3**
**KBK Karagaybulak 115.89 308** P **PKPdf** **16 08 59.9 -0.3**
SNR=8.9
**NIL Nilore 115.91 298** P **PKiKP** **16 09 00.7 +0.3**
**TULEG Thule 115.98 14** *i* P **PKPdf** **16 08 58.1 -1.1**
**CHMS Chumysh 116.08 308** P **PKPdf** **16 09 00.1 -0.3**
SNR=19
**UCH Uchtor 116.16 307** P **PKiKP** **16 09 01.5 +0.3**
SNR=31
**SGDS Sogindy 116.21 309** *e* PKP **PKPdf** **16 08 59.7 -1.0**
baz=309
**AAK Ala-Archa 116.22 308** PKP **PKPdf** **16 09 00.4 -0.5**
baz=167,slow=2.5
AAK PKKPbc **PKKPbc** **16 19 32.7 -0.2**
comp=Z,14nm,1.0s,baz=226,slow=3.6,SNR=20
**AAK Ala-Archa 116.22 308** P **PKiKP** **16 09 00.9 0.0**
SNR=14
**AAK Ala-Archa 116.22 308** PKiKP **PKPdf** **16 08 59.4 -1.5**
**AAK Ala-Archa 116.22 308** PKPdf **PKPdf** **16 09 00.5 -0.4**
**AAK Ala-Archa 116.22 308** *i* PKPdf **PKPdf** **16 09 00.7 -0.1**
SNR=16
**USP Ospenovka 116.29 309** P **PKPdf** **16 09 00.6 -0.2**
SNR=16
**EKS2 Erkin-Say 116.75 308** P **PKPdf** **16 09 01.6 -0.2**
SNR=11
**AML Almayashu 116.76 307** P **PKiKP** **16 09 02.2 0.0**
SNR=26

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AML | Almayashu | 116.76 | 307 | *i* PKPdf | PKPdf | 16 09 01.7 | -0.5 |
| | SNR=26 | | | | | | | |
| BTLS | Baital | 116.78 | 310 | *e*PKIKP | PKPdf | 16 09 00.8 | -0.8 |
| BTLS | Baital | 116.78 | 310 | *e*PKP | PKPdf | 16 09 00.8 | -0.8 |
| | baz=310 | | | | | | | |
| VOI | Vohitsoka | 117.34 | 229 | P | PKPdf | 16 09 03.4 | -0.2 |
| VOI | Vohitsoka | 117.34 | 229 | PKP | PKiKP | 16 09 05.5 | +1.9 |
| BRZS | Berezniki | 117.98 | 316 | *e*PKIKP | PKPdf | 16 09 02.5 | -1.3 |
| BRZS | Berezniki | 117.98 | 316 | *e*PKP | PKPdf | 16 09 02.5 | -1.3 |
| | baz=316 | | | | | | | |
| OTUK | Ortayu | 118.15 | 314 | PKIKP | PKPdf | 16 09 03.4 | -0.8 |
| DZA | Taraz | 118.57 | 308 | *e*PKIKP | PKPdf | 16 09 04.4 | -0.7 |
| DZA | Taraz | 118.57 | 308 | *e*PKP | PKPdf | 16 09 04.5 | -0.7 |
| | baz=308 | | | | | | | |
| FRB | Frobisher Bay | 118.68 | 28 | PKP | PKPdf | 16 09 04.0 | -0.7 |
| | comp=Z,21nm,0.8s,baz=300,slow=2.5,SNR=14 | | | | | | | |
| FRB | Frobisher Bay | 118.68 | 28 | PKIKP | PKPdf | 16 09 04.0 | -0.7 |
| KK31 | Karatay Array | 119.18 | 308 | PKIKP | PKPdf | 16 09 05.3 | -1.0 |
| PKME | Peaks-Kenny Pk | 119.23 | 49 | P | PKiKP | 16 09 06.5 | +0.1 |
| | baz=268 | | | | | | | |
| NEEM | North Greenlan | 119.27 | 11 | *i* P | PKPdf | 16 09 05.9 | 0.0 |
| BDFB | Brasilia | 119.39 | 124 | PKP | PKPdf | 16 09 07.1 | -0.6 |
| | comp=Z,14nm,0.9s,baz=181,slow=3.5,SNR=15 | | | | | | | |
| BDFB | | | | PKKPbc | PKKPbc | 16 19 21.2 | -0.5 |
| | comp=Z,5.0nm,0.8s,baz=58,slow=7.5,SNR=6.0 | | | | | | | |
| BRVK | Borovoye | 119.46 | 319 | P | PKPdf | 16 09 06.0 | -0.5 |
| KBL | Kabul | 119.49 | 298 | P | PKPdf | 16 09 07.3 | -0.1 |
| | SNR=27 | | | | | | | |
| BRLS | Borolday | 119.67 | 308 | *e*PKIKP | PKPdf | 16 09 06.9 | -0.4 |
| BRLS | Borolday | 119.67 | 308 | *e*PKP | PKPdf | 16 09 07.0 | -0.4 |
| | baz=308 | | | | | | | |
| NOR | Nord | 119.90 | 3 | *i* P | PKPdf | 16 09 04.7 | -2.0 |
| UPNV | Upernavik | 120.44 | 17 | *i* P | PKPdf | 16 09 06.2 | -1.7 |
| SCHQ | Schefferville | 120.61 | 38 | PKP | PKPdf | 16 09 07.7 | -1.0 |
| | comp=Z,20nm,1.0s,baz=321,slow=2.0,SNR=14 | | | | | | | |
| NUUG | Nuugaatsiaq | 121.82 | 18 | *i* P | PKPdf | 16 09 09.2 | -1.3 |
| KBS | Kingsbay | 122.76 | 357 | *i* P | PKPdf | 16 09 11.8 | -0.3 |
| KBS | Kingsbay | 122.76 | 357 | *e*PKPdf | PKiKP | 16 09 12.7 | +0.3 |
| PRPB | Parauapebas | 123.20 | 114 | *e*P | PKiKP | 16 09 19.0 | +3.8 |
| SPA0 | Spitsbergen Ar | 123.26 | 356 | *e*PKPdf | PKPdf | 16 09 13.1 | -0.1 |
| SPITS | Spitsbergen Ar | 123.26 | 356 | PKP | PKPdf | 16 09 12.7 | -0.5 |
| | comp=Z,80nm,0.8s,baz=73,slow=4.8,SNR=12 | | | | | | | |
| SPITS | | | | SKKP | | 16 22 22.4 | | |
| | comp=Z,10nm,1.0s,baz=230,slow=10,SNR=3.6 | | | | | | | |
| ILULI | Ilulissat | 123.56 | 20 | *i* P | PKPdf | 16 09 12.2 | -1.7 |
| BOSA | Boshof | 124.38 | 206 | PKP | PKPdf | 16 09 16.9 | -0.1 |
| | comp=Z,8.7nm,0.3s,baz=122,slow=1.9,SNR=9.8 | | | | | | | |
| BOSA | | | | PKKPbc | PKKPbc | 16 19 02.7 | -1.1 |
| | comp=Z,13nm,0.9s,baz=357,slow=3.1,SNR=9.7 | | | | | | | |
| SVE | Sverdlovsk | 124.49 | 325 | *e*PKIKP | PKPdf | 16 09 16.1 | +0.1 |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,86nm,1.0s | | | | | | | |
| GBN | Guysborough | 124.71 | 49 | PKPdf | PKiKP | 16 09 17.2 | 0.0 |
| SFJD | Kangerlussuaq | 124.78 | 22 | PKP | PKPdf | 16 09 15.5 | -0.7 |
| | comp=Z,16nm,0.5s,baz=173,slow=2.1,SNR=20 | | | | | | | |
| SFJD | Kangerlussuaq | 124.78 | 22 | PKIKP | PKPdf | 16 09 16.1 | -0.2 |
| SFJD | Kangerlussuaq | 124.78 | 22 | *i* P | PKPdf | 16 09 14.6 | -1.7 |
| SFJD | Kangerlussuaq | 124.78 | 22 | PKPdf | PKPdf | 16 09 16.1 | -0.2 |
| SUMG | Summit | 124.88 | 13 | *i* P | PKPdf | 16 09 16.0 | -0.9 |
| ARU | Arti | 125.69 | 325 | *i* PKIKP | PKPdf | 16 09 18.4 | +0.1 |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,134nm,1.1s | | | | | | | |
| ARU | Arti | 125.69 | 325 | PKPdf | PKPdf | 16 09 18.4 | +0.1 |
| JLN | Jalan Bani Buh | 125.86 | 282 | P | PKiKP | 16 09 21.0 | +0.8 |
| | SNR=12 | | | | | | | |
| AB31 | Akbulak array | 126.28 | 316 | *i* PKIKP | PKPdf | 16 09 14.9 | -4.8 |
| ABKAR | Akbulak array | 126.28 | 316 | PKPdf | PKPdf | 16 09 19.8 | +0.1 |
| WBK | Wadi Bani Khal | 126.36 | 282 | P | PKiKP | 16 09 23.0 | +1.8 |
| | SNR=5.9 | | | | | | | |
| DBG | Daneborg | 126.45 | 7 | *i* P | PKPdf | 16 09 18.4 | -0.9 |
| DY2G | Dye2 | 126.54 | 21 | *i* P | PKPdf | 16 09 18.4 | -1.6 |
| MHTO | MHTO | 126.94 | 280 | P | PKiKP | 16 09 22.1 | -0.2 |
| | SNR=16 | | | | | | | |
| ICESG | Greenland Ices | 126.98 | 17 | *i* P | PKPdf | 16 09 19.6 | -1.3 |
| DRLN | Deer Lake | 127.01 | 44 | PKPdf | PKPdf | 16 09 20.9 | -0.2 |
| JMDO | Jabal Madar | 127.09 | 282 | P | PKiKP | 16 09 23.0 | +0.3 |
| | SNR=8.0 | | | | | | | |
| DQM | DQM | 127.10 | 279 | P | PKiKP | 16 09 23.0 | +0.3 |
| | SNR=8.0 | | | | | | | |
| SMDO | Samad | 127.28 | 283 | P | PKiKP | 16 09 23.0 | -0.2 |
| | SNR=18 | | | | | | | |
| BIDO | Bidbid | 127.29 | 283 | P | PKiKP | 16 09 24.0 | +0.9 |
| | SNR=7.9 | | | | | | | |
| AKTO | Aktyubinsk | 127.32 | 317 | PKIKP | PKPdf | 16 09 20.7 | -1.0 |
| LBTB | Lobatse | 127.38 | 209 | PKP | PKPdf | 16 09 22.8 | 0.0 |
| | comp=Z,5.7nm,0.3s,baz=176,slow=14 | | | | | | | |
| BSY | Bisya | 127.99 | 282 | P | PKPdf | 16 09 24.0 | +0.2 |
| | SNR=7.8 | | | | | | | |
| HOQ | Hoqain | 128.04 | 283 | P | PKiKP | 16 09 25.0 | +0.4 |
| | SNR=6.1 | | | | | | | |
| ARQ | Araqi | 128.71 | 283 | P | PKiKP | 16 09 26.0 | +0.1 |
| | SNR=6.4 | | | | | | | |
| UOSS | Minazif | 129.26 | 285 | P | PKPdf | 16 09 25.9 | -0.3 |
| UOSS | Minazif | 129.26 | 285 | *i* PKPdf | PKPdf | 16 09 25.6 | -0.5 |
| | SNR=5.8 | | | | | | | |
| HATD | Hatta, Dubai | 129.30 | 285 | P | PKiKP | 16 09 27.0 | -0.1 |
| | SNR=17 | | | | | | | |
| HATD | Hatta, Dubai | 129.30 | 285 | *i* PKPdf | PKPdf | 16 09 26.3 | 0.0 |
| | SNR=27 | | | | | | | |
| ASHO | Ashiyiah | 129.35 | 284 | P | PKiKP | 16 09 27.0 | -0.2 |
| | SNR=12 | | | | | | | |
| ASHO | Ashiyiah | 129.35 | 284 | *i* PKPdf | PKPdf | 16 09 26.2 | -0.2 |
| | SNR=5.5 | | | | | | | |
| MSFE | Esma-Masafi | 129.36 | 285 | *i* PKPdf | PKPdf | 16 09 26.3 | -0.1 |
| | SNR=20 | | | | | | | |
| MASF | Masafi | 129.36 | 285 | P | PKPdf | 16 09 26.5 | +0.1 |
| | SNR=11 | | | | | | | |
| SHME | Shamm | 129.47 | 286 | P | PKPdf | 16 09 26.6 | +0.1 |
| SHME | Shamm | 129.47 | 286 | PKPdf | PKPdf | 16 09 25.6 | -0.9 |
| ISOG | Isortoq, Green | 129.49 | 20 | *i* P | PKPdf | 16 09 24.7 | -0.6 |
| ALNE | Al Ain | 129.53 | 284 | P | PKiKP | 16 09 27.9 | +0.3 |
| | SNR=12 | | | | | | | |
| ALNE | Al Ain | 129.53 | 284 | *i* PKPdf | PKPdf | 16 09 26.4 | -0.3 |
| | SNR=8.7 | | | | | | | |
| RBK | Rabkut | 129.61 | 275 | P | PKiKP | 16 09 29.0 | +1.1 |
| | SNR=5.3 | | | | | | | |
| SCO | Scoresbysund | 129.68 | 10 | *i* P | PKPdf | 16 09 25.0 | -0.5 |
| NAZ | Nazwa, Dubai | 129.75 | 285 | P | PKiKP | 16 09 28.0 | +0.1 |
| | SNR=7.8 | | | | | | | |
| NAZ | Nazwa, Dubai | 129.75 | 285 | *i* PKPdf | PKPdf | 16 09 26.7 | -0.3 |
| | SNR=7.2 | | | | | | | |
| FAQ | Al Faqa, Dubai | 129.78 | 284 | P | PKPdf | 16 09 27.4 | +0.3 |
| FAQ | Al Faqa, Dubai | 129.78 | 284 | PKiKP | PKPdf | 16 09 27.3 | +0.3 |
| UMZA | Um Al Zommool | 129.83 | 282 | P | PKPdf | 16 09 27.3 | +0.1 |
| MATP | Matopo | 129.84 | 215 | PKP | PKPdf | 16 09 27.2 | -0.4 |
| | comp=Z,12nm,0.8s,baz=164,slow=6.6,SNR=7.0 | | | | | | | |
| MATP | | | | SKPbc | SKPab | 16 11 56.6 | +0.8 |
| | comp=Z,179nm,1.1s,baz=149,slow=8.2,SNR=67 | | | | | | | |
| PRGR | Permogore | 129.84 | 334 | *e*PKIKP | PKPdf | 16 09 22.4 | -3.7 |
| PRGR | | | | pmax | pmax | | | |
| | comp=Z,135nm,1.0s | | | | | | | |
| ANGG | Ammassalik, Gr | 129.87 | 20 | *i* P | PKPdf | 16 09 24.7 | -1.3 |
| DOK | Doka | 129.94 | 276 | P | PKiKP | 16 09 29.0 | +0.5 |
| | SNR=6.9 | | | | | | | |
| ASUD | Al Ashush, Dub | 129.99 | 284 | P | PKPdf | 16 09 27.3 | -0.3 |
| ASUD | Al Ashush, Dub | 129.99 | 284 | PKPdf | PKPdf | 16 09 27.2 | -0.3 |
| NBLA | Lagarto - SE | 130.03 | 127 | *e*P | PKiKP | 16 09 29.6 | +0.8 |
| APA | Apatity | 130.04 | 344 | ⇓*i* PKIKP | PKPdf | 16 09 25.7 | -0.6 |
| APA | | | | *i* | | 16 11 33.9 | | |
| APA | | | | *i* | | 16 11 55.2 | | |
| APA | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| ARA0 | ARCESS Array S | 130.14 | 349 | *e*PKPdf | PKPdf | 16 09 26.5 | 0.0 |
| ARCES | ARCESS Array B | 130.14 | 349 | PKhKP | PKPpre | 16 09 16.8 | | |
| | comp=Z,3.8nm,0.7s,baz=292,slow=1.0,SNR=13 | | | | | | | |
| ARCES | | | | PKP | PKPdf | 16 09 26.1 | -0.4 |
| | comp=Z,31nm,0.7s,baz=2.9,slow=1.8,SNR=56 | | | | | | | |
| ARCES | | | | SKPbc | SKPab | 16 11 56.0 | +0.5 |
| | comp=Z,32nm,0.9s,baz=46,slow=2.6,SNR=11 | | | | | | | |
| ARCES | ARCESS Array B | 130.14 | 349 | PKIKP | PKPdf | 16 09 26.7 | +0.2 |
| ARCES | ARCESS Array B | 130.14 | 349 | PKPdf | PKPdf | 16 09 26.7 | +0.2 |
| AJN | Ajban | 130.29 | 284 | P | PKPdf | 16 09 27.9 | -0.2 |
| AJN | Ajban | 130.29 | 284 | PKPdf | PKPdf | 16 09 27.0 | -1.0 |
| ABTO | Aybut | 130.41 | 274 | P | PKPdf | 16 09 28.5 | -0.1 |
| KTK1 | Kautokeino | 130.99 | 349 | *e*PKPdf | PKPdf | 16 09 27.7 | -0.4 |
| TRO | Tromso | 131.09 | 352 | *e*PKPdf | PKPdf | 16 09 28.1 | -0.1 |
| MZWR | Madinat Zayed | 131.17 | 283 | P | PKPdf | 16 09 29.6 | -0.1 |
| MZR | Muzera | 131.41 | 282 | P | PKiKP | 16 09 30.9 | -0.5 |
| | SNR=12 | | | | | | | |
| MZR | Muzera | 131.41 | 282 | *i* PKiKP | PKPdf | 16 09 30.6 | +0.3 |
| | SNR=16 | | | | | | | |
| NBPB | Pedra_Branca-C | 132.03 | 120 | *e*P | PKiKP | 16 09 34.0 | +1.1 |
| GHWR | Ruwais | 132.11 | 283 | P | PKiKP | 16 09 32.6 | -0.1 |
| KLMR | Klimovskoe | 132.72 | 335 | *e*PKHKP | PKPpre | 16 09 23.9 | |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,78nm,1.0s | | | | | | | |
| KLMR | Klimovskoe | 132.72 | 335 | *e*PKPdf | PKPdf | 16 09 23.9 | -7.6 |
| KLMR | | | | AMP | | 16 09 33.5 | | |
| | comp=Z,78nm,1.0s | | | | | | | |
| KLMR | | | | *e*PP | pPKPdf | 16 11 45.1 | -2.5 |
| STEI | Steigen | 133.16 | 353 | *e*PKPdf | PKPdf | 16 09 32.5 | +0.3 |
| LOF | Lofoten | 133.16 | 353 | *e*PKPdf | PKiKP | 16 09 33.7 | +0.2 |
| SLWR | Sila | 133.19 | 283 | P | PKiKP | 16 09 34.6 | -0.3 |
| FAUS | Fauske | 133.68 | 352 | *e*PKPdf | PKPdf | 16 09 33.8 | +0.6 |
| TRNA | Turayna | 133.72 | 284 | P | PKiKP | 16 09 35.3 | -0.7 |
| SHMA | Al-Shehemyia | 134.07 | 285 | P | PKiKP | 16 09 36.5 | -0.2 |
| LSZ | Lusaka | 134.18 | 218 | PKP | PKPdf | 16 09 35.7 | -0.2 |
| | comp=Z,20nm,0.8s,baz=181,slow=2.7,SNR=24 | | | | | | | |
| LSZ | | | | SKPbc | SKPbc | 16 12 11.5 | +0.7 |
| | comp=Z,22nm,0.8s,baz=114,slow=1.9,SNR=13 | | | | | | | |
| SAKB | Bahrain | 134.47 | 285 | P | PKiKP | 16 09 37.0 | -0.4 |
| KONS | Konsvik | 134.78 | 353 | *e*PKPdf | PKPdf | 16 09 35.9 | +0.7 |
| TSUM | Tsumeb | 135.84 | 203 | PKP | PKPdf | 16 09 38.8 | -0.1 |
| | comp=Z,18nm,0.9s,baz=149,slow=5.4,SNR=14 | | | | | | | |
| TSUM | | | | SKPbc | SKPbc | 16 12 16.4 | +0.5 |
| | comp=Z,24nm,0.9s,baz=121,slow=4.7,SNR=11 | | | | | | | |
| KIBK | Kibwezi | 136.20 | 241 | P | PKiKP | 16 09 41.2 | -0.3 |
| | SNR=5.4 | | | | | | | |
| MOS | Moscow | 136.58 | 330 | *i* PKIKP | PKPdf | 16 09 37.5 | -1.4 |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,68nm,1.3s | | | | | | | |
| NSS | Namsos | 136.82 | 353 | *e*PKPdf | PKiKP | 16 09 40.3 | -0.7 |
| FINES | FINESS Array B | 136.82 | 342 | PKhKP | PKPpre | 16 09 26.8 | |
| | comp=Z,3.5nm,0.5s,baz=44,slow=4.6,SNR=18 | | | | | | | |
| FINES | | | | PKP | PKPdf | 16 09 38.5 | -0.7 |
| | comp=Z,34nm,0.8s,baz=100,slow=3.1,SNR=18 | | | | | | | |
| FINES | | | | SKPbc | SKPbc | 16 12 17.1 | -0.1 |
| | comp=Z,4.9nm,0.7s,baz=42,slow=3.6,SNR=3.8 | | | | | | | |
| FINES | | | | SKKPbc | SKKPbc | 16 21 08.1 | -6.2 |
| | comp=Z,8.8nm,1.2s,baz=249,slow=12,SNR=3.6 | | | | | | | |
| VRH | Novokhopyorsk | 136.85 | 323 | *e*PKIKP | PKPdf | 16 09 39.4 | -0.1 |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,80nm,0.8s | | | | | | | |
| GROC | Groznyy | 137.11 | 310 | *e*PKIKP | PKPdf | 16 09 38.9 | -1.4 |
| GROC | | | | *e* | | 16 12 31.0 | | |
| GROC | | | | *e* | | 16 12 50.2 | | |
| GROC | | | | pmax | pmax | | | |
| | comp=Z,56nm,0.9s | | | | | | | |
| OBN | Obninsk | 137.44 | 330 | SKPbc | SKPbc | 16 12 20.0 | +0.8 |
| | comp=Z,3.7nm,0.4s,baz=126,slow=14,SNR=3.4 | | | | | | | |
| OBN | Obninsk | 137.44 | 330⇑ | *e*PKIKP | PKPdf | 16 09 38.4 | -2.1 |
| OBN | | | | *e* | | 16 12 31.3 | | |
| OBN | | | | *e*SSS | SSS | 16 35 10.6 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,56nm,1.1s | | | | | | | |
| KMBO | Kilima Mbogo | 137.54 | 242 | PKP | PKiKP | 16 09 43.5 | -0.9 |
| | comp=Z,12nm,0.8s,baz=48,slow=1.9,SNR=19 | | | | | | | |
| KMBO | | | | SKP | | 16 12 23.2 | | |
| | comp=Z,36nm,1.1s,baz=71,slow=2.8,SNR=18 | | | | | | | |
| KMBO | Kilima Mbogo | 137.54 | 242 | *i* PKiKP | PKiKP | 16 09 43.4 | -1.1 |
| | SNR=10.0 | | | | | | | |
| LPSR | Galich'ya Gora | 137.68 | 326 | *e*PKIKP | PKPdf | 16 09 40.2 | -0.8 |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,50nm,1.2s | | | | | | | |
| VORR | Voronezh | 138.01 | 325 | *e*PKHKP | PKPpre | 16 09 34.5 | |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.4s | | | | | | | |
| VSR | Storozhevoye | 138.26 | 324 | *e*PKIKP | PKPdf | 16 09 42.3 | +0.2 |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,80nm,1.0s | | | | | | | |
| VORD | Divnogorie | 138.31 | 324 | *e*PKIKP | PKPdf | 16 09 42.8 | +0.6 |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| ZEI | Tsey | 138.56 | 310 | *i* PKIKP | PKPdf | 16 09 43.5 | +0.2 |
| ZEI | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| GNI | Garni | 138.60 | 306 | *i* P | PKPdf | 16 09 43.5 | +0.1 |
| GNI | Garni | 138.60 | 306 | P | PKiKP | 16 09 44.7 | -1.0 |
| GNI | Garni | 138.60 | 306 | PKPdf | PKPdf | 16 09 38.1 | -5.3 |
| RAYN | Ar Rayn | 138.74 | 281 | P | PKiKP | 16 09 45.6 | -0.7 |
| RAYN | Ar Rayn | 138.74 | 281 | *i* PKPdf | PKPdf | 16 09 40.3 | -3.6 |
| | SNR=7.4 | | | | | | | |
| KBZ | Khabaz | 138.98 | 312 | PKhKP | PKPpre | 16 09 37.4 | |
| | comp=Z,5.1nm,0.9s,baz=110,slow=4.3,SNR=5.6 | | | | | | | |
| KBZ | | | | PKP | PKPdf | 16 09 44.4 | +0.7 |
| | comp=Z,14nm,0.9s,baz=135,slow=5.1,SNR=10 | | | | | | | |
| KBZ | Khabaz | 138.98 | 312 | *i* PKIKP | PKPdf | 16 09 44.2 | +0.5 |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| VSU | Vasula | 139.01 | 339 | *i* PKIKP | PKiKP | 16 09 45.0 | -0.7 |
| VSU | | | | pmax | pmax | | | |
| | comp=Z,107nm,1.0s | | | | | | | |
| VSU | Vasula | 139.01 | 339 | *e*P | PKPdf | 16 09 34.8 | -8.4 |
| KIV | Kislovodsk | 139.06 | 312 | *e*PKIKP | PKPdf | 16 09 40.9 | -3.1 |
| KIV | | | | *e* | | 16 12 41.4 | | |
| KIV | | | | *e*SSS | SSS | 16 35 35.2 | | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.1s | | | | | | | |
| KIV | Kislovodsk | 139.06 | 312 | P | PKPdf | 16 09 40.2 | -3.8 |
| SHA1 | Shidzhatmaz | 139.15 | 312 | *i* PKIKP | PKPdf | 16 09 44.5 | +0.2 |
| AKH | Akhalkalaki | 139.22 | 308 | ⇓P | PKPdf | 16 09 38.3 | -6.2 |
| NEY | Neytrino | 139.25 | 311 | *i* PKIKP | PKiKP | 16 09 46.5 | -0.4 |
| AKN | Aaknes | 139.60 | 355 | *e*PKPdf | PKPdf | 16 09 38.6 | -5.7 |
| NB2 | NORSAR Subarra | 140.28 | 352 | PKP | PKPdf | 16 09 38.9 | -6.7 |
| | comp=Z,73nm,1.1s,baz=19,slow=3.2 | | | | | | | |
| NB2 | NORSAR Subarra | 140.28 | 352 | PKPab | PKPdf | 16 09 38.9 | -6.7 |
| | baz=19,slow=3.2 | | | | | | | |
| NOA | NORSAR Array B | 140.28 | 352 | PKhKP | PKPpre | 16 09 39.0 | |
| | comp=Z,32nm,0.9s,baz=16,slow=4.6,SNR=56 | | | | | | | |
| NC602 | NORSAR Array S | 140.54 | 352 | *e*PKPdf | PKPdf | 16 09 39.7 | -6.3 |
| HFS | Hagfors | 140.79 | 350 | PKhKP | PKPpre | 16 09 40.2 | |
| | comp=Z,48nm,0.7s,baz=104,slow=3.1,SNR=125 | | | | | | | |
| HFS | | | | SKKPbc | SKKPbc | 16 20 58.9 | -0.1 |
| | comp=Z,7.4nm,0.9s,baz=171,slow=12,SNR=3.9 | | | | | | | |
| SUE | Sulen | 140.85 | 357 | *e*PKPdf | PKPdf | 16 09 42.1 | -4.4 |
| SKAR | Skarslia | 140.97 | 354 | *e*PKPdf | PKPdf | 16 09 42.8 | -4.1 |
| GURO | Guroymak-BITLI | 141.00 | 305 | *i* P | PKPdf | 16 09 44.0 | -3.7 |
| SOC | Sochi | 141.21 | 313 | *i* PKIKP | PKiKP | 16 09 49.8 | -0.9 |
| SOC | | | | *e* | | 16 12 54.4 | | |
| SOC | | | | *e*PPP | PPP | 16 16 17.3 | | |
| VRTB | Varto-Mus | 141.29 | 306 | *i* P | PKPdf | 16 09 45.2 | -3.0 |
| ASK | Askoy | 141.40 | 356 | *e*PKPdf | PKPdf | 16 09 44.1 | -3.4 |
| OSL | Oslo | 141.42 | 352 | *e*PKPdf | PKPdf | 16 09 43.9 | -3.6 |
| IDID | Didziasalis | 141.44 | 336 | *e*P | PKPdf | 16 09 43.7 | -4.1 |
| BER | Bergen | 141.49 | 356 | *e*PKPdf | PKPdf | 16 09 43.3 | -4.4 |
| KARO | Karlsova-Bingo | 141.56 | 306 | *i* P | PKPdf | 16 09 45.7 | -3.1 |
| MNK | Minsk | 141.60 | 335 | *i* PKHKP | PKPpre | 16 09 44.4 | |
| MNK | | | | *i* | | 16 15 59.5 | | |
| MNK | | | | *i* SS | SS | 16 30 46.2 | +2.2 |
| MNK | | | | *i* SSS | SSS | 16 36 13.7 | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,3.0nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,126nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,40nm,1.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,176nm,18.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,31nm,15.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,278nm,18.0s | | | | | | | |
| MNK | Minsk | 141.60 | 335 | *i* PKP | PKPdf | 16 09 44.5 | -3.6 |
| | comp=E,3.0nm,0.8s | | | | | | | |
| MNK | | | | *i* PKP | PKPdf | 16 09 44.5 | -3.6 |
| | comp=N,40nm,1.0s | | | | | | | |
| MNK | | | | *i* PKP | PKPdf | 16 09 44.5 | -3.6 |
| | comp=Z,126nm,0.9s,baz=223 | | | | | | | |
| MNK | | | | *i* pPKP | pPKPdf | 16 11 59.2 | -5.1 |
| MNK | | | | *i* PP | PP | 16 12 55.6 | -4.0 |
| MNK | | | | *i* SKS | SKSdf | 16 15 59.6 | -2.9 |
| MNK | | | | *i* PPP | PPP | 16 16 08.8 | |
| MNK | | | | *i* SKKS | SKKSdf | 16 25 21.6 | -4.3 |
| MNK | | | | *i* SS | SS | 16 30 46.3 | +2.3 |
| MNK | | | | *i* SSS | SSS | 16 36 13.7 | |
| MNK | | | | *i* LRM | MLR | 17 13 11.3 | |
| | comp=Z,176nm,18.1s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 17 13 19.0 | |
| | comp=E,31nm,15.2s | | | | | | | |
| MNK | | | | *i* LRM | MLR | 17 13 20.5 | |
| | comp=N,278nm,18.1s | | | | | | | |
| IIGN | Ignalina | 141.60 | 337 | *e*P | PKPdf | 16 09 44.5 | -3.5 |
| LODK | Lodwar | 141.61 | 246 | P | PKPdf | 16 09 46.7 | -2.7 |
| | SNR=5.7 | | | | | | | |
| SVAN | Silvan-Diyarba | 141.73 | 304 | *i* P | PKPdf | 16 09 45.8 | -3.1 |
| NACGM | Naroch | 141.73 | 336 | *i* PKP | PKPdf | 16 09 44.7 | -3.6 |
| SHEL | Horse Pasture | 141.77 | 170 | PKIKP | PKPdf | 16 09 48.5 | -1.1 |
| SHEL | Horse Pasture | 141.77 | 170 | PKPdf | PKPdf | 16 09 48.5 | -1.1 |
| KONO | Kongsberg | 141.84 | 353 | *i* PKIKP | PKPdf | 16 09 49.6 | +1.3 |
| ODD1 | Odda | 141.87 | 355 | *e*PKPdf | PKPdf | 16 09 44.8 | -3.6 |
| BNGB | Bingl | 141.92 | 306 | *i* P | PKPdf | 16 09 46.3 | -3.0 |
| PABE | Paberze | 142.28 | 338 | *e*P | PKPdf | 16 09 45.7 | -3.5 |
| BLS5 | Blasjo | 142.37 | 355 | *e*PKPdf | PKPdf | 16 09 46.5 | -2.8 |
| MBAR | Mbarara | 143.06 | 236 | PKP | PKPbc | 16 09 50.6 | +0.2 |
| | comp=N,95nm,0.8s,baz=117,slow=3.7,SNR=104 | | | | | | | |
| MBAR | | | | SKPbc | SKiKP | 16 12 37.0 | +0.6 |
| | comp=N,13nm,0.8s,baz=82,slow=3.2,SNR=7.8 | | | | | | | |
| MBAR | Mbarara | 143.06 | 236 | PKIKP | PKPdf | 16 09 51.9 | -0.3 |
| MBAR | Mbarara | 143.06 | 236 | PKPdf | PKPdf | 16 09 51.9 | -0.3 |
| MBAR | Mbarara | 143.06 | 236 | P | PKPdf | 16 09 51.6 | -0.5 |
| SVRC | Svrice-ELAZID | 143.12 | 305 | *i* P | PKPdf | 16 09 50.9 | -0.6 |
| HOMB | Homborsund | 143.31 | 353 | *e*PKPab | PKPbc | 16 09 49.6 | +0.1 |
| ILIC | ilic-Erzincan | 143.37 | 307 | *i* P | PKPdf | 16 09 51.5 | -0.4 |
| SNART | Snartemo | 143.38 | 354 | *e*PKPab | PKPbc | 16 09 49.9 | +0.1 |
| LEWI | Lewis, Hebride | 143.47 | 7 | *e*P | PKPab | 16 09 49.9 | 0.0 |
| ARPR | Arapgir-MALATY | 143.65 | 307 | *i* P | PKPdf | 16 09 52.9 | +0.5 |
| AKASG | Malin Array Be | 143.67 | 329 | PKP | PKPbc | 16 09 50.0 | -0.9 |
| | comp=N,176nm,0.7s,baz=42,slow=4.4,SNR=806 | | | | | | | |
| AKASG | | | | pPKP | pPKPdf | 16 12 07.0 | -0.7 |
| | comp=N,4.3nm,0.7s,baz=43,slow=3.6,SNR=2.6 | | | | | | | |
| AKASG | Malin Array Be | 143.67 | 329 | PKHKP | PKPpre | 16 09 50.4 | |
| AKASG | Malin Array Be | 143.67 | 329 | PKPdf | PKPbc | 16 09 50.4 | -0.5 |
| AKBB | Malin Array Si | 143.67 | 329 | PKHKP | PKPpre | 16 09 50.3 | |
| AKBB | Malin Array Si | 143.67 | 329 | PKPdf | PKPbc | 16 09 50.3 | -0.6 |
| SUW | Suwalki | 143.75 | 338 | *e*PKP | PKPbc | 16 09 50.7 | -0.3 |
| SUW | Suwalki | 143.75 | 338 | *e*P | PKPab | 16 09 51.2 | +0.1 |
| RSDY | Resadiye-TOKAT | 143.98 | 309 | *i* P | PKPdf | 16 09 53.3 | +0.5 |
| OVD | Ostervraa, Den | 144.02 | 351 | *i* P | PKPbc | 16 09 50.7 | -1.0 |
| DEL | Delary | 144.20 | 347 | *e*P | PKPbc | 16 09 52.0 | -0.4 |
| KLNR | Kaliningrad | 144.25 | 341 | *i* PKIKP | PKPbc | 16 09 52.2 | -0.4 |
| KLNR | | | | pmax | pmax | | | |
| | comp=Z,1μm,1.1s | | | | | | | |
| SIM | Simferopol' | 144.29 | 318 | *e*PKIKP | PKPab | 16 09 53.5 | 0.0 |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,654nm,1.6s | | | | | | | |
| GOET | G??ttrup | 144.43 | 352 | *i* P | PKPdf | 16 09 52.5 | -0.4 |
| TOKT | Tokat | 144.57 | 309 | *i* P | PKPab | 16 09 54.6 | -0.3 |
| KVT | Kavak | 144.65 | 311 | *i* P | PKPab | 16 09 55.4 | +0.3 |
| SNOP | Sinop | 144.87 | 313 | *i* P | PKPab | 16 09 55.5 | +0.4 |
| MUD | Monsted U'grnd | 145.00 | 352 | *i* P | PKPdf | 16 09 53.4 | -0.5 |
| GAZ | Gaziantep | 145.03 | 304 | *i* P | PKPdf | 16 09 43.2 | -12 |
| DRUM | Mains of Drumt | 145.04 | 3 | *e*P | PKPbc | 16 09 54.5 | -0.4 |
| COP | Copenhagen | 145.22 | 348 | *i* P | PKPdf | 16 09 54.6 | +0.3 |
| BSD | Bornholm Skovb | 145.23 | 346 | *i* P | PKPdf | 16 09 54.6 | +0.3 |
| BSD | Bornholm Skovb | 145.23 | 346 | *e*P | PKPbc | 16 09 55.3 | -0.2 |
| SARI | SarD1z-Kayseri | 145.28 | 306 | *i* P | PKPbc | 16 09 56.1 | -0.4 |
| BNN | Bunyan | 145.57 | 307 | *i* P | PKPdf | 16 09 56.2 | +0.5 |
| BNN | Bunyan | 145.57 | 307 | PKPbc | PKPbc | 16 09 58.0 | +0.8 |
| BZK | Bozkurt | 145.71 | 313 | ⇑P | PKPbc | 16 09 58.1 | +0.8 |
| BZK | Bozkurt | 145.71 | 313 | *i* P | PKPbc | 16 09 57.9 | +0.6 |
| BZK | Bozkurt | 145.71 | 313 | | PKPbc | 16 09 58.1 | +0.8 |
| SORM | Soroca | 145.78 | 326 | ⇓P | PKPbc | 16 09 57.4 | +0.1 |
| SORM | Soroca | 145.78 | 326 | ⇓PKIKP | PKPbc | 16 09 57.4 | +0.1 |
| PURM | Purcari | 145.95 | 323 | ⇑P | PKPdf | 16 09 56.5 | +0.6 |
| CORM | Corum | 145.99 | 310 | *i* P | PKPbc | 16 09 59.1 | +0.7 |
| KOZT | Kozan | 146.01 | 305 | *i* P | PKPbc | 16 09 58.5 | +0.1 |
| TAHT | Tahtakop

HARR Harsova 148.14 322 ⇑P PKiKP 16 10 04.4 -0.5
HARR Harsova 148.14 322 ⇑PKHKP PKPpre 16 10 04.4
STHS Stebnicka Huta 148.14 334 ePKHKP PKPpre 16 10 04.2
STHS Stebnicka Huta 148.14 334 ePKP PKiKP 16 10 04.2 -0.6
AKKU Akkuyu-Mersin 148.14 304 iP PKPbc 16 10 03.7 -0.3
TEVE Tevekalti-Mers 148.14 304 iP PKPbc 16 10 04.4 +0.3
MFTR Murfatlar 148.15 321 ⇑P PKiKP 16 10 04.5 -0.4
TLBR Topalu 148.16 321 ⇓P PKiKP 16 10 04.5 -0.5
MANR Mangalia 148.26 320 ⇑P PKiKP 16 10 05.0 -0.2
MDUB Mudurnu 148.26 313 iP PKPbc 16 10 04.2 -0.1
CVDA Cernavoda 148.28 321 ⇑P PKiKP 16 10 04.8 -0.4
EIL Elat 148.28 291 PKP PKPdf 16 10 00.2 -0.1
comp=Z,25nm,1.1s,baz=100,slow=2.7,SNR=14
EIL PKPbc PKiKP 16 10 05.3 -0.4
comp=Z,102nm,0.8s,baz=116,slow=2.3,SNR=44
EIL Elat 148.28 291 iP PKPbc 16 10 04.9 +0.4
BISRR Bisoca 148.29 324 ⇑P PKPbc 16 10 04.7 +0.5
UZH Uzhgorod 148.31 332⇑iPKHKP PKPpre 16 10 05.0
UZH i 16 10 08.8
BERE Bereket-Mersin 148.34 304 iP PKPbc 16 10 04.8 +0.1
LADK Ladik-KONYA 148.36 308 iP PKPbc 16 10 04.0 -0.6
COVR Voineasa-Covas 148.38 325 ⇓P PKPbc 16 10 04.7 +0.4
LFK Lefkose 148.41 302 iP PKPbc 16 10 04.8 +0.1
OZUR 148.44 326 ⇑P PKPbc 16 10 05.0 +0.5
CRVS Cervenica-Dubn 148.45 333 ePKHKP PKPpre 16 10 00.9
CRVS Cervenica-Dubn 148.45 333 ePKP PKPdf 16 10 00.9 +0.9
CRVS e 16 10 05.3
KIZT Kizilcal 148.45 309 iP PKPbc 16 10 04.8 0.0
KONT Konya--Tatoy 148.45 307 iP PKPbc 16 10 04.0 -0.8
AUSIV SIVRIHISAR 148.47 311 iP PKPbc 16 10 04.7 -0.1
BMR Baia Mare 148.48 330 ⇓P PKiKP 16 10 05.1 -0.4
BMR Baia Mare 148.48 330 ⇓PKHKP PKPpre 16 10 05.1
SVRH Sivrihisar-ESK 148.48 311 iP PKPbc 16 10 04.6 -0.2
ARCR ARCALIA 148.49 328 ⇓P PKiKP 16 10 05.8 +0.2
NIE Niedzica 148.51 335 ePKPbc PKiKP 16 10 06.4 +0.8
PGOR Pogoanele 148.54 323 ⇓P PKiKP 16 10 05.8 +0.1
ICOR Ion Corvin 148.55 321 ⇓P PKiKP 16 10 06.0 +0.3
LMK Market Rasen 148.57 1 eP PKPbc 16 10 04.6 +0.2
PSN Preselentsi 148.57 320 P PKiKP 16 10 05.9 +0.1
TRPA Tarpa 148.58 331 ⇓P PKiKP 16 10 05.4 -0.3
RETH Rethem/Aller, 148.58 350 ePKPdf PKPdf 16 10 00.3 +0.4
baz=22,slow=1.5
RETH ePKPbc PKPbc 16 10 04.9 +0.5
baz=18,slow=2.4
RETH ePP PP 16 13 35.9 -4.1
baz=21,slow=4.9
KALB Balgarevo 148.59 319 ⇑P PKiKP 16 10 05.8 -0.1
NEHR Nehoiu 148.60 324 ⇓P PKiKP 16 10 05.5 -0.4
FLTG Flechtingen 148.63 348 ePKPdf PKPdf 16 09 59.8 -0.2
baz=22,slow=1.5
FLTG ePKPbc PKPbc 16 10 04.9 +0.3
baz=18,slow=2.4
CSS Mathiatis 148.65 302 iP PKPbc 16 10 05.5 +0.2
ISR Istrita 148.66 324 ⇑P PKiKP 16 10 05.6 -0.4
ISR Istrita 148.66 324 ⇑PKHKP PKPpre 16 10 05.6
NRDL Niedersach Rie 148.69 349 ePKPdf PKPdf 16 10 00.4 +0.3
baz=22,slow=1.5
NRDL ePKPbc PKPbc 16 10 05.1 +0.4
baz=18,slow=2.4
HDMB Hadim 148.70 306 iP PKPbc 16 10 05.3 -0.3
KSP Ksiaz 148.71 341 ePKPbc PKiKP 16 10 05.9 0.0
DOPR Dopca 148.73 326 ⇑P PKiKP 16 10 06.3 +0.2
SAUV Serdivan-Sakar 148.73 314 iP PKPbc 16 10 05.3 0.0
MLR Muntele Rosu 148.75 325 ⇓P PKiKP 16 10 05.8 -0.5
MLR Muntele Rosu 148.75 325 PKP PKPdf 16 10 00.6 -0.1
comp=Z,185nm,1.1s,baz=0.5,slow=3.7,SNR=48
MLR PKPbc PKPbc 16 10 05.6 +0.2
comp=Z,185nm,1.1s,baz=358,slow=4.2,SNR=64
MLR ePKPbc pPKPab 16 12 22.2 +1.1
comp=Z,35nm,1.0s,baz=160,slow=0.9,SNR=3.0
MLR Muntele Rosu 148.75 325 ⇓PKHKP PKPpre 16 10 05.8
MLR Muntele Rosu 148.75 325 PKPbc 16 10 05.4 0.0
CIFT Cifteler, Eski 148.84 311 iP PKPbc 16 10 05.6 -0.1
RASA Rasa 148.87 322 ⇓P PKiKP 16 10 06.4 0.0
LEHL Lehliu 148.90 322 ⇑P PKPbc 16 10 05.9 +0.4
ASSE Asse, Remlinge 148.93 348 ePKPbc PKiKP 16 10 05.9 -0.3
baz=18,slow=2.4
LEF Lefka 148.96 302 ⇑P PKiKP 16 10 06.5 -0.4
LEF Lefka 148.96 302 iP PKPbc 16 10 06.2 +0.2
OKC Ostrava-Krasne 148.96 338 ePKHKP PKPpre 16 10 06.5
OKC Ostrava-Krasne 148.96 338⇑ePKP PKiKP 16 10 06.5 +0.1
SECR 148.97 324 ⇓P PKPbc 16 10 06.0 +0.3
OSTC Ostas 148.98 341 ePKPdf PKPdf 16 10 01.4 +0.6
OSTC ⇑ePKP PKiKP 16 10 07.0 +0.5
SILT Sile 148.99 315 iP PKPbc 16 10 06.3 +0.4
CHVC Chvalec 149.00 341⇑ePKP PKiKP 16 10 06.5 -0.1
BORA Eskisehir 149.04 312 iP PKPbc 16 10 06.4 +0.2
GAZI Gazipasa 149.07 304 iP PKPbc 16 10 05.6 -0.7
UPC Upice 149.09 341 ePKIKP PKPdf 16 10 01.9 +1.0
UPC e 16 10 06.6
UPC Upice 149.09 341 ePKPDF PKPdf 16 10 01.9 +1.0
UPC ⇑ePKP PKiKP 16 10 06.6 -0.1
UPC epPKP pPKPab 16 12 23.0 +0.8
SULR 149.09 323 ⇑P PKiKP 16 10 06.4 -0.5
CBBR Cluj-Babes-Bol 149.10 329 ⇑P PKiKP 16 10 07.3 +0.4
MESR Meseseni 149.11 330 ⇓P PKiKP 16 10 07.1 +0.3
CJR Cluj-Napoca 149.12 328 ⇓P PKiKP 16 10 06.8 -0.2
CJR Cluj-Napoca 149.12 328 ⇓PKHKP PKPpre 16 10 06.8
DPC Dobruska-Polom 149.13 340 ePKIKP PKPdf 16 10 00.8 -0.2
DPC e 16 10 07.0
DPC Dobruska-Polom 149.13 340 ePKPDF PKPdf 16 10 00.8 -0.2
DPC ⇑ePKP PKiKP 16 10 07.0 +0.1
DPC epPKP pPKPab 16 12 25.4 +2.9
MDB Medias 149.13 327 ⇑P PKPbc 16 10 06.4 +0.3
MDB Medias 149.13 327 ⇑PKHKP PKPpre 16 10 06.4
JAWL J.Aulia 149.13 263 iP PKiKP 16 10 07.7 -0.1
JAWL AMP 16 33 17.3
comp=N,2μm,0.1s
HRT Hereke 149.14 314 iP PKPbc 16 10 06.1 -0.2
KECS Kecovo 149.18 334 ePKHKP PKPpre 16 10 07.8
KECS Kecovo 149.18 334 ePKP PKiKP 16 10 07.8 +0.8
CLL Collm 149.19 345 ePKPdf PKPdf 16 10 02.0 +1.0
CLL ⇑iPKPbc PKiKP 16 10 06.8 -0.1
comp=Z,550nm,0.9s
CLL ⇓iPKPab PKPab 16 10 13.5 +0.5
comp=Z,206nm,1.0s
CLL epPKPab pPKPbc 16 12 21.0 +0.5
CLL ex x 16 12 26.0
CLL ex x 16 12 30.0
CLL eSKPdf SKPdf 16 12 41.0 +1.6
CLL e(PKSdf) 16 13 41.0
CLL Collm 149.19 345 ePKPdf PKPdf 16 10 01.0 -0.1
baz=22,slow=1.5
CLL ePKPbc PKPbc 16 10 06.4 +0.4
baz=18,slow=2.4
KRLC Kraliky 149.22 340 ePKIKP PKPdf 16 10 01.5 +0.3
KRLC e 16 10 06.9
KRLC Kraliky 149.22 340 ePKPDF PKPdf 16 10 01.5 +0.3
KRLC ⇑ePKP PKiKP 16 10 06.9 -0.2
KRLC epPKP pPKPab 16 12 25.8 +3.0
MORC Moravsky Berou 149.22 338 ⇑P PKiKP 16 10 06.8 -0.3
MORC Moravsky Berou 149.22 338 ⇑PKHKP PKPpre 16 10 06.8
MORC Moravsky Berou 149.22 338 ePKP PKPdf 16 10 01.3 +0.1
MORC ePKIKP PKiKP 16 10 07.0 -0.1
MORC e 16 10 14.2
IBBN Ibbenburen 149.24 351 ePKPdf PKPdf 16 10 00.9 -0.2
baz=22,slow=1.5
IBBN ePKPbc PKiKP 16 10 06.7 -0.2
baz=18,slow=2.4
VOIR 149.26 325 ⇓P PKiKP 16 10 07.0 -0.3
VOIR 149.26 325 ⇓PKHKP PKPpre 16 10 07.0
CLZ Clausthal 149.26 348 ePKPdf PKPdf 16 10 01.2 +0.1
baz=22,slow=1.5
CLZ ePKPbc PKiKP 16 10 07.1 0.0
baz=18,slow=2.4
CWF Charnwood Fore 149.26 2 eP PKPbc 16 10 06.3 +0.1
CAVI Cavuskoy 149.31 313 iP PKPbc 16 10 06.3 -0.4
WACR West Acre 149.31 0 eP PKPbc 16 10 05.7 -0.5
PRD Provadia 149.32 320 P PKiKP 16 10 07.2 -0.2
KLYT Kilyos 149.34 315 iP PKPbc 16 10 06.1 -0.6
BRG Berggiesshubel 149.35 343⇓iPKPf 16 10 01.6
BRG Amp 16 10 03.7
comp=Z,69nm,1.5s
BRG ⇑iPKP PKiKP 16 10 07.0 -0.3
BRG Amp 16 10 08.5
comp=Z,420nm,0.9s
BRG ePKPab PKPab 16 10 14.2 +0.5
BRG Amp 16 10 15.2
comp=Z,249nm,1.1s
BRG pPKP pPKPbc 16 12 22.1 +1.0
BRG Amp 16 12 27.1
comp=Z,64nm,1.3s

BRG Berggiesshubel 149.35 343 iPKIKP PKPdf 16 10 01.6 +0.3
BRG pmax pmax
comp=Z,69nm,1.5s
BRG Berggiesshubel 149.35 343 ePKPdf PKPdf 16 10 01.2 -0.1
baz=22,slow=1.5
BRG ePKPbc PKiKP 16 10 07.1 -0.1
baz=18,slow=2.4
BRG ePKPab PKPab 16 10 14.5 +0.8
ISK Istanbul-Kandi 149.42 315 iP PKPbc 16 10 06.7 -0.2
LTVH Ltavrtes, Hu 149.42 331 ⇑P PKiKP 16 10 07.9 +0.5
IZAB Izabela 149.42 335 ePKHKP PKPpre 16 10 07.7
YLV Yalova 149.46 314 iP PKPbc 16 10 06.9 -0.2
FBE Freiberg 149.46 344 ePKPdf PKPdf 16 10 01.7 +0.3
baz=22,slow=1.5
FBE ePKPbc PKiKP 16 10 07.6 +0.1
baz=18,slow=2.4
DRGR 149.49 329 ⇓P PKPbc 16 10 07.3 +0.3
DRGR 149.49 329 ⇓PKHKP PKPpre 16 10 07.3
PVCC Panska Ves 149.49 342 ePKIKP PKPdf 16 10 02.7 +1.2
PVCC e 16 10 07.7
PVCC Panska Ves 149.49 342 ePKPDF PKPdf 16 10 02.7 +1.2
PVCC ⇑ePKP PKiKP 16 10 07.7 +0.2
ARR Arges 149.52 326 ⇑P PKiKP 16 10 08.9 +1.0
SHUT Suhut-Afyon 149.53 310 iP PKPbc 16 10 07.7 +0.2
TRML Termal-Yalova 149.57 314 iP PKPbc 16 10 07.5 +0.2
NEUB Neuenburg 149.57 346 ePKPbc PKiKP 16 10 07.6 -0.1
baz=18,slow=2.4
GTTG Gottingen 149.62 348 ePKPdf PKPdf 16 10 01.9 +0.2
baz=22,slow=1.5
GTTG ePKPbc PKiKP 16 10 07.6 -0.1
baz=18,slow=2.4
GTTG ePP PP 16 13 43.6 -2.4
baz=21,slow=4.9
RAZG Razgrad 149.63 321 ⇑P PKiKP 16 10 07.9 -0.2
SUTC Sutluce-Ispart 149.63 307 iP PKPbc 16 10 06.6 -1.1
GEMT Gemlik 149.64 314 iP PKPbc 16 10 07.1 -0.4
BORR Bors 149.69 331 ⇓P PKiKP 16 10 08.9 +0.8
CTKS Kestanelik-??a 149.69 316 iP PKPbc 16 10 07.6 +0.1
CTYL Yalikoy Yolu 149.71 316 iP PKPbc 16 10 07.3 -0.3
VYHS Vyhne 149.83 336 ePKIKP PKPdf 16 10 02.5 +0.3
VYHS e 16 10 08.4
VYHS e 16 10 16.7
VYHS Vyhne 149.83 336 ePKP PKPdf 16 10 02.5 +0.3
VYHS e 16 10 08.4
VYHS e 16 10 16.7
VYHS e 16 12 23.7
ISP Isparta 149.85 308 iP PKPbc 16 10 07.6 -0.6
ISP Isparta 149.85 308 iPKIKP PKPdf 16 10 02.3 -0.3
PSZ Piszkesteto 149.87 334 ⇑P PKiKP 16 10 08.5 0.0
PSZ Piszkesteto 149.87 334 ⇑PKHKP PKPpre 16 10 08.5
PCED Cedros 149.88 50 ePKP PKiKP 16 10 08.4 -0.3
SLVT Silivri 149.89 316 iP PKPbc 16 10 08.3 +0.3
CALA Caldeira 149.90 50 ePKP PKPdf 16 10 03.6 +0.9
TVSB Tavsanli 149.91 312 iP PKPbc 16 10 08.4 +0.1
LOT Lotru 149.92 327 ⇓P PKPbc 16 10 08.3 +0.1
BCK Bucak 149.94 308 iP PKPbc 16 10 07.5 -0.9
VRAC Vranov 149.94 339 ⇑P PKiKP 16 10 09.0 +0.4
VRAC Vranov 149.94 339 PKP PKPdf 16 10 01.7 -0.6
comp=Z,5.1nm,0.9s,baz=280,slow=1.9,SNR=9.2
VRAC PKPbc PKiKP 16 10 08.6 +0.1
comp=Z,118nm,1.0s,baz=33,slow=1.0,SNR=92
VRAC Vranov 149.94 339 ePKP PKPdf 16 10 02.0 -0.3
VRAC ePKIKP PKiKP 16 10 08.6 +0.1
VRAC e 16 17.5
JAVC Velka Javorina 149.96 337 ePKP PKPdf 16 10 03.3 +0.9
JAVC ePKIKP PKiKP 16 10 09.9 +1.3
HOR Horta 149.98 50 ePKP PKiKP 16 10 08.9 0.0
PRU Pruhonice 149.98 342 ePKIKP PKPdf 16 10 02.8 +0.5
PRU e 16 10 08.4
PRU e 16 10 17.6
PRU Pruhonice 149.98 342 ePKPDF PKPdf 16 10 02.8 +0.5
PRU ⇑ePKP PKiKP 16 10 08.4 -0.2
PRU ePKPAB PKPab 16 10 17.6 +1.3
PRU epPKP pPKPbc 16 12 23.7 +0.9
COPA Copaceanca 150.01 323 ⇑P PKiKP 16 10 08.5 -0.3
DEV Deva 150.05 328 ⇓P PKiKP 16 10 09.1 +0.3
DEV Deva 150.05 328 ⇓PKIKP PKiKP 16 10 09.1 +0.3
PCAN Candelaria 150.11 50 ePKP PKiKP 16 10 09.0 -0.2
GEDZ Gediz 150.13 311 iP PKiKP 16 10 09.2 -0.1
MOX Moxa 150.13 346 ePKPdf PKPdf 16 10 02.5 -0.1
baz=22,slow=1.5
MOX ePKPbc PKiKP 16 10 08.7 -0.2
baz=18,slow=2.4
MOX ePKPab PKPab 16 10 17.5 +0.6
MOX epPKPbc pPKPab 16 12 28.4 +2.0
baz=22,slow=2.3
MOX ePP PP 16 13 46.6 -2.3
baz=21,slow=4.9
PICO Pico 150.13 50 ePKP PKiKP 16 10 09.3 0.0
SZH Strazhica 150.14 321 P PKPbc 16 10 08.6 0.0
TANN Tannenbergstha 150.15 345 ePKPdf PKPdf 16 10 02.5 -0.1
baz=22,slow=1.5
TANN ePKPbc PKiKP 16 10 09.1 +0.1
baz=18,slow=2.4
BUG Bochum--Univer 150.15 352 ePKPbc PKPbc 16 10 08.5 +0.2
baz=18,slow=2.4
BUG ePP PP 16 13 45.1 -3.8
baz=21,slow=4.9
WERD Werda 150.16 345 ePKPdf PKPdf 16 10 02.6 0.0
baz=22,slow=1.5
WERD ePKPbc PKiKP 16 10 09.2 +0.2
baz=18,slow=2.4
PLN Plauen 150.16 345 ePKPdf PKPdf 16 10 02.5 -0.1
baz=22,slow=1.5
PLN ePKPbc PKiKP 16 10 09.1 +0.2
baz=18,slow=2.4
ROSA Rosais 150.17 49 PKPbc PKiKP 16 10 09.8 +0.4
ROSA Rosais 150.17 49 ePKP PKPbc 16 10 08.9 +0.1
BSZH Besenyszg 150.20 333 ⇓P PKiKP 16 10 10.0 +0.9
KASTN Kahler Asten 150.22 350 ePKPdf PKPdf 16 10 02.5 -0.1
baz=22,slow=1.5
KASTN ePKPbc PKiKP 16 10 09.0 0.0
baz=18,slow=2.4
PGRA Graciosa 150.22 49 ePKP PKPbc 16 10 09.0 +0.1
KRUC Moravsky 150.22 339 ePKP PKPdf 16 10 02.4 -0.3
KRUC ePKIKP PKiKP 16 10 09.2 +0.1
KRUC e 16 10 18.4
KRUC epPKP pPKPbc 16 12 24.7 +1.5
JMB Yambol 150.23 319 P PKiKP 16 10 09.1 -0.2
PPNO Prainha do Nor 150.26 50 ePKP PKiKP 16 10 09.9 +0.3
WERN Wernitzgruen 150.29 345 ePKPdf PKPdf 16 10 03.0 +0.2
baz=22,slow=1.5
WERN ePKPbc PKiKP 16 10 09.6 +0.3
baz=18,slow=2.4
WERN ePKPab PKPab 16 10 18.8 +1.1
WERN ePP PP 16 13 48.0 -1.9
baz=21,slow=4.9
KORT Korkueli 150.29 307 iP PKPbc 16 10 08.4 -0.9
UBBA Unterbreizbach 150.31 348 ePKPdf PKPdf 16 10 02.7 +0.1
baz=22,slow=1.5
UBBA ePKPbc PKiKP 16 10 09.1 0.0
baz=18,slow=2.4
UBBA epPKPbc pPKPab 16 12 28.5 +1.6
baz=22,slow=2.3
TREC Trest 150.31 340 ePKIKP PKiKP 16 10 09.2 -0.1
TREC Trest 150.31 340⇑ePKP PKiKP 16 10 09.2 -0.1
PMAN Manadas 150.32 50 ePKP PKiKP 16 10 10.0 +0.4
NKC Novy Kostel 150.32 345 ePKIKP PKPdf 16 10 03.5 +0.6
NKC e 16 10 09.6
NKC Novy Kostel 150.32 345 ePKPDF PKPdf 16 10 03.5 +0.6
NKC ⇑ePKP PKiKP 16 10 09.6 +0.3
SMOL Smolenice 150.33 337 ePKIKP PKiKP 16 10 10.1 +0.8
SMOL e 16 10 19.5
SMOL e 16 12 26.0
SMOL Smolenice 150.33 337 ePKP PKiKP 16 10 10.1 +0.8
SMOL e 16 10 19.5
SMOL e 16 12 26.0
SIRR Siria 150.36 330 ⇓P PKiKP 16 10 09.8 +0.3
SIMA Simav-Kutahya 150.41 312 iP PKPbc 16 10 09.5 +0.1
GZR Gura Zlata 150.46 327 ⇓P PKPbc 16 10 09.2 -0.1
GZR Gura Zlata 150.46 327 ⇓PKIKP PKPbc 16 10 09.2 -0.1
EDRB Edirne 150.48 318 iP PKPbc 16 10 09.1 -0.3
MODS Modra-Piesok 150.50 337 ePKIKP PKPbc 16 10 06.9 -2.4
MODS e 16 10 23.4
MODS Modra-Piesok 150.50 337 ePKP PKPbc 16 10 06.9 -2.4
MODS e 16 10 13.4
MODS e 16 10 23.4
MODS e 16 12 26.7
VLAD Vladila 150.55 324 ⇓P PKiKP 16 10 10.5 +0.6
EDC Edincik 150.57 315 iP PKPbc 16 10 09.5 -0.1
SRO Srobarova 150.59 335 ePKIKP PKiKP 16 10 10.2 +0.4
SRO e 16 10 20.1
SRO Srobarova 150.59 335 ePKP PKiKP 16 10 10.2 +0.4
SRO e 16 10 20.0
SRO2 Moca 150.59 335 ePKIKP PKPbc 16 10 09.3 -0.1
SRO2 Moca 150.59 335 ePKP PKPbc 16 10 09.3 -0.1
MANZ Manzenberg 150.63 345 ePKPdf PKPdf 16 10 03.5 +0.1
baz=22,slow=1.5
MANZ ePKPbc PKiKP 16 10 10.3 +0.4
baz=18,slow=2.4
MANZ epPKPbc pPKPab 16 12 29.8 +1.3
baz=22,slow=2.3
ELL Elmali 150.71 307 iP PKPbc 16 10 10.4 +0.1
ZST Bratislava 150.72 337 ePKIKP PKPdf 16 10 04.3 +0.8
ZST e 16 10 10.5
ZST e 16 10 20.4
ZST Bratislava 150.72 337 ePKP PKPdf 16 10 04.3 +0.8
ZST e 16 10 10.5
ZST e 16 10 20.4
ZST e 16 12 26.5
AMBH Ambrzfalva 150.73 331 ⇑P PKiKP 16 10 11.0 +0.9
SRE Strehaia 150.75 326 ⇓P PKPbc 16 10 10.0 +0.1
SRE Strehaia 150.75 326 ⇓PKIKP PKPbc 16 10 10.0 +0.1
ROTZ Rotzenmuhle 150.81 345 ePKPdf PKPdf 16 10 03.2 -0.5
baz=22,slow=1.5
ROTZ ePKPbc PKiKP 16 10 10.3 0.0
baz=18,slow=2.4
ROTZ epPKPbc pPKPab 16 12 29.9 +0.8
baz=22,slow=2.3
ROTZ ePP PP 16 13 50.7 -2.0
baz=21,slow=4.9
BZS Buzias 150.86 329 ⇑P PKiKP 16 10 10.6 +0.1
BZS Buzias 150.86 329 ⇑PKIKP PKiKP 16 10 10.6 +0.1
PAGU Agualva, Azore 150.89 49 ePKP PKPbc 16 10 10.5 +0.1
ADH Angra Heroismo 150.91 49 ePKP PKiKP 16 10 10.6 -0.2
KRBG Karabiga-Canak 150.91 315 iP PKPbc 16 10 10.2 -0.2
UKOP Uzunkopru-Edir 150.95 317 iP PKiKP 16 10 10.7 -0.1
BEBN Eben Emael 150.98 353 dPKIKP PKiKP 16 10 10.6 0.0
BEBN dPKPab PKPab 16 10 20.8 +0.4
HERR Herculane 151.00 327 ⇑P PKPbc 16 10 10.0 -0.4
KHC Kasperske Hory 151.03 342 iPKIKP PKiKP 16 10 04.3 +0.3
KHC Kasperske Hory 151.03 342 ePKPDF PKPdf 16 10 04.3 +0.3
KHC ⇑ePKP PKiKP 16 10 11.0 +0.2
KHC ePKPAB PKPab 16 10 22.0 +1.2
KHC epPKP pPKPbc 16 12 26.3 +0.9
AHRW Bad Neuenahr-A 151.06 352 ePKPbc PKiKP 16 10 10.9 +0.2
baz=18,slow=2.4
AHRW epPKPbc pPKPab 16 12 30.7 +0.5
baz=22,slow=2.3
AHRW ePP PP 16 13 51.9 -2.1
baz=21,slow=4.9
CKRC Cesky Krumlov 151.10 341⇑ePKP PKiKP 16 10 11.2 +0.3
CKRC epPKP pPKPbc 16 12 26.5 +0.9
UCC Uccle 151.10 355 dPKIKP PKiKP 16 10 11.0 +0.2
DIM Dimitrovgrad 151.11 320 P PKiKP 16 10 11.5 +0.4
GRF Grafenberg Arr 151.11 346 ePKPdf PKPdf 16 10 04.4 +0.3
baz=22,slow=1.5
GRF ePKPbc PKPbc 16 10 10.7 +0.1
baz=18,slow=2.4
GRF epPKPbc pPKPab 16 12 30.5 +0.1
baz=22,slow=2.3
GRF ePP PP 16 13 52.4 -2.0
baz=21,slow=4.9
MEM Membach 151.12 353 dPKPdf PKPdf 16 10 04.4 +0.4
MEM dPKiKP PKPbc 16 10 10.5 0.0
MEM dPKPab PKPab 16 10 19.9 -1.2
AKAS Kas 151.13 306 iP PKPbc 16 10 10.7 -0.5
BTNL Ternell 151.13 353 dPKPdf PKPdf 16 10 04.3 +0.2
BTNL dPKiKP PKiKP 16 10 11.0 0.0
BTNL dPKPab PKPab 16 10 20.6 -0.6
PUNG Punghina 151.15 326 ⇑P PKPbc 16 10 10.7 -0.1
TNS Taunus Mts 151.16 350 ePKPdf PKPdf 16 10 04.3 +0.1
baz=22,slow=1.5
TNS ePKPbc PKiKP 16 10 11.4 +0.3
baz=18,slow=2.4
TNS epPKPbc pPKPab 16 12 31.1 +0.5
baz=22,slow=2.3
HMNX Herstmonceux 151.17 0 eP PKiKP 16 10 11.0 +0.1
BSTI Sart Tilman 151.20 353 dPKPdf PKPdf 16 10 04.5 +0.4
BSTI dPKiKP PKiKP 16 10 11.2 +0.2
WET Wettzell 151.21 343 ePKPdf PKPdf 16 10 03.6 -0.6
baz=22,slow=1.5
WET ePKPbc PKiKP 16 10 11.2 0.0
baz=18,slow=2.4
WET ePKPab PKPab 16 10 22.7 +1.1
WET epPKPbc pPKPab 16 12 30.9 +0.1
baz=22,slow=2.3
WET ePP PP 16 13 53.4 -1.7
baz=21,slow=4.9
GEC2 GERESS Array S 151.25 342 ePKPdf PKPdf 16 10 04.1 -0.4
baz=22,slow=1.5
GEC2 ePKPbc PKiKP 16 10 11.4 0.0
baz=18,slow=2.4
GEC2 epPKPbc pPKPab 16 12 31.1 +0.1
baz=22,slow=2.3
GERES GERESS Array B 151.25 342 PKP PKPdf 16 10 04.3 -0.2
comp=Z,8.7nm,0.9s,baz=11,slow=1.4,SNR=34
GERES PKPbc PKiKP 16 10 11.0 -0.1
comp=Z,104nm,1.0s,baz=5.7,slow=3.0,SNR=100
GERES PKPab PKPab 16 10 22.0 +0.2
comp=Z,36nm,1.0s,baz=63,slow=6.1,SNR=7.3
GERES pPKPbc pPKPbc 16 12 25.3 -0.7
comp=Z,11nm,0.9s,baz=29,slow=2.2,SNR=5.8
BANR Banloc 151.26 329 ⇑P PKiKP 16 10 11.8 +0.5
ERIK Erikli-Kesan 151.28 316 iP PKPbc 16 10 10.8 -0.4
FETY Fethiye 151.37 307 iP PKPbc 16 10 11.7 +0.1
BHOU Houvegnez 151.38 353 dPKPdf PKPdf 16 10 04.7 +0.2
BHOU dPKiKP PKiKP 16 10 11.7 +0.2
BHOU dPKPab PKPab 16 10 22.0 -0.2
DYA Yadsworthy 151.38 6 eP PKPbc 16 10 10.6 -0.5
CONA Conrad Observa 151.38 338 eP PKPdf 16 10 04.4 -0.2
comp=Z,38nm,1.6s,SNR=10
CONA iP PKiKP 16 10 11.9 +0.3
comp=Z,227nm,1.2s
CONA iP PKPab 16 10 23.5 +1.1
comp=Z,78nm,1.0s
CONA eP pPKPbc 16 12 27.4 +1.1
comp=Z,80nm,1.2s
BCLA Clavier 151.39 354 dPKiKP PKiKP 16 10 11.3 -0.1
BCLA dPKPab PKPab 16 10 22.1 -0.1
SNF Seneffe 151.39 355 dPKPdf PKPdf 16 10 05.2 +0.8
SNF dPKiKP PKiKP 16 10 11.5 +0.1
SNF dPKPab PKPab 16 10 22.2 0.0
KDZ Kurdzhali 151.41 319 P PKiKP 16 10 11.7 -0.1
MDVR Moldovita 151.42 328 ⇓P PKiKP 16 10 12.0 +0.3
BGES Gesves 151.44 354 dPKiKP PKPbc 16 10 11.2 -0.1
BGES dPKPab PKPab 16 10 22.4 -0.1
GELI Tayfur-Gelibol 151.45 316 iP PKPbc 16 10 11.1 -0.5
ENEZ Enez 151.47 317 iP PKPbc 16 10 11.2 -0.4
BMRD Maredsous 151.56 354 dPKPdf PKPdf 16 10 05.0 +0.3
BMRD dPKiKP PKiKP 16 10 11.8 +0.1
BMRD dPKPab PKPab 16 10 23.0 +0.1
PLD Plovdiv 151.57 320 iP PKPbc 16 10 11.6 -0.2
DALY Dalyan (Mula) 151.61 308 iP PKPbc 16 10 11.8 -0.3
RDO Rodhopi 151.63 318 iP PKPbc 16 10 11.7 -0.3
RCHB Rochefort 151.66 354 dPKPdf PKPdf 16 10 04.8 -0.1
RCHB dPKiKP PKiKP 16 10 12.1 +0.1
MORH Mrgy, Hungar 151.74 333 ⇑P PKiKP 16 10 12.2 -0.1
MORH Mrgy, Hungar 151.74 333 eP PKPdf 16 10 04.6 -0.5
GIVF Givet 151.75 354 ePKIKP PKPdf 16 10 05.4 +0.4
GIVF pmax pmax
comp=Z,309nm,1.2s
YER Yerkesik 151.75 308 iP PKiKP 16 10 12.8 +0.1
DOU Dourbes 151.78 355 dPKiKP PKiKP 16 10 12.6 +0.3
DKL Dikili 151.84 313 iP PKPbc 16 10 12.2 -0.3
BAIF Baives 151.84 355 ePKIKP PKPdf 16 10 06.8 +1.7
BAIF pmax pmax
comp=Z,263nm,1.3s
EZN Ezine 151.85 315 iP PKPbc 16 10 12.4 -0.1
GADA Gvkgeada 151.93 316 iP PKPbc 16 10 11.9 -0.8
MOA Molln 151.97 340 iP PKPdf 16 10 04.9 -0.6
comp=Z,30nm,2.2s
MOA eP PKiKP 16 10 12.7 -0.1
comp=Z,99nm,1.7s
MOA iP PKPab 16 10 25.5 +0.6
comp=Z,102nm,1.1s
MOA eP pPKPbc 16 12 28.2 +0.3
comp=Z,21nm,1.0s
BOZC Bozcaada 152.02 315 iP PKPbc 16 10 12.4 -0.5
WLF Walferdange 152.04 352 ePKPdf PKPdf 16 10 06.1 +0.7
baz=22,slow=1.5
WLF ePKPbc PKiKP 16 10 13.6 +0.8
baz=18,slow=2.4
WLF epPKPbc pPKPab 16 12 33.5 -0.6
baz=22,slow=2.3
WLF Walferdange 152.04 352 dPKPdf PKPdf 16 10 06.1 +0.7
WLF dPKiKP PKiKP 16 10 13.5 +0.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WLF | | | | *d*PKPab | **PKPab** | 16 10 25.3 | +0.4 | |
| **FRGS** | **Fruska Gora** | **152.05** | **330** | ⇑P | **PKPbc** | 16 10 12.4 | -0.4 | |
| **FRGS** | **Fruska Gora** | **152.05** | **330** | *e*P | **PKPdf** | 16 10 04.4 | -1.2 | |
| **MLSB** | **Milas** | **152.05** | **309** | *i* P | **PKiKP** | 16 10 13.5 | +0.2 | |
| **ARSA** | **Arzberg** | **152.08** | **338** | *e*P | **PKPdf** | 16 10 04.9 | -0.8 | |
| | comp=Z,24nm,1.6s,SNR=7.6 | | | | | | | |
| ARSA | | | | *e*P | **PKPbc** | 16 10 12.7 | -0.1 | |
| | comp=Z,51nm,1.2s,SNR=5.2 | | | | | | | |
| ARSA | | | | *i* P | **PKPab** | 16 10 25.5 | +0.1 | |
| | comp=Z,65nm,1.2s | | | | | | | |
| ARSA | | | | *e*P | **pPKPbc** | 16 12 28.6 | +0.7 | |
| | comp=Z,29nm,1.3s | | | | | | | |
| **VTS** | **Vitosha** | **152.09** | **323** | ⇑P | **PKPbc** | 16 10 13.1 | -0.1 | |
| **VTS** | **Vitosha** | **152.09** | **323** | ⇑PKiKP | **PKPbc** | 16 10 13.1 | -0.1 | |
| **VTS** | **Vitosha** | **152.09** | **323** | P | **PKiKP** | 16 10 13.4 | 0.0 | |
| **GCAM** | **G?zelcaml?** | **152.26** | **310** | *i* P | **PKiKP** | 16 10 13.7 | +0.1 | |
| **BEHE** | **Becsehely** | **152.29** | **336** | *e*P | **PKPdf** | 16 10 04.9 | -1.0 | |
| **PSET** | **Sete Cidades** | **152.35** | **49** | *e*PKP | **PKPdf** | 16 10 08.9 | +2.6 | |
| **URLA** | **Izmir** | **152.40** | **312** | *i* P | **PKPbc** | 16 10 13.5 | -0.3 | |
| **STU** | **Stuttgart** | **152.42** | **348** | *e*PKPdf | **PKPdf** | 16 10 06.3 | +0.3 | |
| | baz=22,slow=1.5 | | | | | | | |
| STU | | | | *e*PKPbc | **PKiKP** | 16 10 13.8 | +0.1 | |
| | baz=18,slow=2.4 | | | | | | | |
| STU | | | | *e*pPKPbc | **pPKPab** | 16 12 33.9 | -1.8 | |
| | baz=22,slow=2.3 | | | | | | | |
| **MMB** | **Musomiste** | **152.46** | **321** | P | **PKPbc** | 16 10 13.6 | -0.3 | |
| **KOGS** | **Kog** | **152.50** | **336** | *e*PKPdf | **PKPdf** | 16 10 05.6 | -0.6 | |
| KOGS | | | | *e*PKPbc | **PKPbc** | 16 10 13.6 | -0.2 | |
| KOGS | | | | *e*PKPab | **PKPab** | 16 10 27.1 | 0.0 | |
| **CMLA** | **Cha da Macela** | **152.51** | **49** | *e*PKP | **PKPdf** | 16 10 08.5 | +2.0 | |
| **PCALD** | **Caldeiras da R** | **152.52** | **49** | *e*PKP | **PKPdf** | 16 10 07.8 | +1.3 | |
| **FUR** | **Furstenfeldbru** | **152.53** | **344** | *e*PKPdf | **PKPdf** | 16 10 05.9 | -0.3 | |
| | baz=22,slow=1.5 | | | | | | | |
| FUR | | | | *e*PKPbc | **PKiKP** | 16 10 14.2 | +0.3 | |
| | baz=18,slow=2.4 | | | | | | | |
| FUR | | | | *e*PKPab | **PKPab** | 16 10 28.3 | +1.1 | |
| **TEKS** | **Tekeris** | **152.65** | **330** | *e*P | **PKPdf** | 16 10 05.9 | -0.6 | |
| **KKB** | **Krupnik** | **152.66** | **322** | P | **PKPbc** | 16 10 14.3 | 0.0 | |
| **KALN** | **Kalnik** | **152.69** | **336** | P | **PKPbc** | 16 10 13.1 | -1.1 | |
| **A252A** | **Venje** | **152.70** | **333** | P | **PKPbc** | 16 10 13.7 | -0.6 | |
| **SOKA** | **Soboth** | **152.75** | **338** | *i* P | **PKPdf** | 16 10 06.0 | -0.7 | |
| | comp=Z,42nm,1.4s,SNR=14 | | | | | | | |
| SOKA | | | | *i* P | **PKPbc** | 16 10 14.0 | -0.4 | |
| | comp=Z,108nm,1.5s | | | | | | | |
| SOKA | | | | *i* P | **PKPab** | 16 10 28.1 | -0.2 | |
| | comp=Z,95nm,1.1s | | | | | | | |
| SOKA | | | | *e*P | **pPKPbc** | 16 12 29.8 | +0.3 | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **PERS** | **Pernice** | **152.75** | **338** | *i* PKPbc | **PKPbc** | 16 10 14.1 | -0.3 | |
| **DIVS** | **Divibare** | **152.76** | **329** | *e*P | **PKPdf** | 16 10 06.3 | -0.5 | |
| **KBA** | **Koelnbreinsper** | **152.94** | **341** | *e*P | **PKPdf** | 16 10 06.1 | -1.0 | |
| | comp=Z,34nm,1.4s,SNR=11 | | | | | | | |
| KBA | | | | *i* P | **PKPbc** | 16 10 14.3 | -0.7 | |
| | comp=Z,38nm,0.7s | | | | | | | |
| KBA | | | | *i* P | **PKPab** | 16 10 29.3 | +0.1 | |
| | comp=Z,61nm,0.8s | | | | | | | |
| **MOSL** | **Moslavina** | **153.00** | **335** | P | **PKPbc** | 16 10 14.1 | -0.8 | |
| **BFO** | **Black Forest** | **153.00** | **349** | *e*PKPbc | **PKiKP** | 16 10 14.9 | 0.0 | |
| | baz=18,slow=2.4 | | | | | | | |
| BFO | | | | *e*PKPab | **PKPab** | 16 10 29.5 | +0.3 | |
| BFO | | | | *e*pPKPbc | **pPKPab** | 16 12 34.9 | -3.3 | |
| | baz=22,slow=2.3 | | | | | | | |
| **OBKA** | **Obir** | **153.06** | **339** | *e*P | **PKPdf** | 16 10 06.3 | -0.9 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| OBKA | | | | *e*P | **PKPbc** | 16 10 14.6 | -0.4 | |
| | comp=Z,39nm,1.1s | | | | | | | |
| OBKA | | | | *i* P | **PKPab** | 16 10 28.0 | -1.6 | |
| | comp=Z,34nm,0.8s | | | | | | | |
| **CDF** | **Champ du Feu** | **153.10** | **350** | *e*PKIKP | **PKPdf** | 16 10 07.8 | +0.7 | |
| CDF | | | | pmax | pmax | | | |
| | comp=Z,106nm,1.2s | | | | | | | |
| **ZAG** | **Zagreb** | **153.12** | **336** | *e*P | **PKPdf** | 16 10 07.9 | +0.8 | |
| **PSMA** | **Santa Maria** | **153.14** | **50** | *e*PKP | **PKPdf** | 16 10 08.0 | +0.6 | |
| **PSMN** | **Pico do Norte,** | **153.18** | **50** | *e*PKP | **PKPdf** | 16 10 06.3 | -1.2 | |
| **WATA** | **Walderalm** | **153.22** | **343** | *i* P | **PKPdf** | 16 10 06.9 | -0.5 | |
| | comp=Z,43nm,1.2s,SNR=11 | | | | | | | |
| WATA | | | | *i* P | **PKPbc** | 16 10 15.3 | -0.2 | |
| | comp=Z,91nm,1.2s | | | | | | | |
| WATA | | | | *i* P | **PKPab** | 16 10 30.4 | +0.1 | |
| | comp=Z,148nm,1.1s | | | | | | | |
| WATA | | | | *e*P | **pPKPbc** | 16 12 31.0 | +0.1 | |
| | comp=Z,57nm,1.3s | | | | | | | |
| **BBLS** | **Lazići** | **153.22** | **329** | *e*P | **PKPdf** | 16 10 07.6 | +0.2 | |
| **MYKA** | **Terra Mystica** | **153.25** | **340** | *i* P | **PKPdf** | 16 10 06.6 | -0.8 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| MYKA | | | | *i* P | **PKPbc** | 16 10 14.8 | -0.6 | |
| | comp=Z,30nm,0.6s | | | | | | | |
| MYKA | | | | *i* P | **PKPab** | 16 10 29.5 | -0.8 | |
| | comp=Z,73nm,1.0s | | | | | | | |
| MYKA | | | | *e*P | **pPKPbc** | 16 12 30.4 | -0.5 | |
| | comp=Z,29nm,1.0s | | | | | | | |
| **UBR** | **Ueberruh** | **153.26** | **346** | *e*PKPdf | **PKPdf** | 16 10 06.9 | -0.5 | |
| | baz=22,slow=1.5 | | | | | | | |
| UBR | | | | *e*PKPbc | **PKiKP** | 16 10 15.6 | +0.2 | |
| | baz=18,slow=2.4 | | | | | | | |
| UBR | | | | *e*pPKPbc | **pPKPab** | 16 12 35.1 | -4.1 | |
| | baz=22,slow=2.3 | | | | | | | |
| **FLN** | **La Foliniere** | **153.26** | **2** | *e*PKIKP | **PKPdf** | 16 10 07.0 | -0.2 | |
| FLN | | | | pmax | pmax | | | |
| | comp=Z,65nm,0.7s | | | | | | | |
| **WTTA** | **Wattenberg** | **153.27** | **343** | *e*P | **PKPdf** | 16 10 07.2 | -0.3 | |
| | comp=Z,43nm,1.0s,SNR=16 | | | | | | | |
| WTTA | | | | *i* P | **PKiKP** | 16 10 15.7 | +0.1 | |
| | comp=Z,165nm,1.2s | | | | | | | |
| WTTA | | | | *i* P | **PKPab** | 16 10 30.4 | -0.2 | |
| | comp=Z,124nm,0.8s | | | | | | | |
| WTTA | | | | *e*P | **pPKPbc** | 16 12 31.5 | +0.4 | |
| | comp=Z,64nm,1.4s | | | | | | | |
| **RETA** | **Reutte** | **153.28** | **345** | *i* P | **PKPdf** | 16 10 07.1 | -0.4 | |
| | comp=Z,21nm,1.1s,SNR=5.8 | | | | | | | |
| RETA | | | | *i* P | **PKPbc** | 16 10 15.4 | -0.1 | |
| | comp=Z,86nm,1.5s | | | | | | | |
| RETA | | | | *i* P | **PKPab** | 16 10 30.6 | +0.1 | |
| | comp=Z,125nm,1.1s,SNR=11 | | | | | | | |
| RETA | | | | *e*P | **pPKPbc** | 16 12 30.2 | -0.8 | |
| | comp=Z,43nm,1.7s | | | | | | | |
| **STIP** | **Stip** | **153.29** | **322** | *i* PKP | **PKPdf** | 16 10 07.4 | -0.1 | |
| STIP | | | | *i* PKP | **PKPbc** | 16 10 15.1 | -0.5 | |
| STIP | | | | *i* PKP | **PKPab** | 16 10 30.4 | -0.2 | |
| **VAY** | **Valandovo** | **153.31** | **321** | *i* PKP | **PKPdf** | 16 10 06.2 | -1.3 | |
| VAY | | | | *i* PKP | **PKPbc** | 16 10 15.1 | -0.5 | |
| VAY | | | | *i* PKP | **PKPab** | 16 10 31.2 | +0.5 | |
| **CRES** | **Cresnjev** | **153.32** | **337** | *e*P | **PKPdf** | 16 10 07.1 | -0.3 | |
| **MOTA** | **Moosalm** | **153.33** | **344** | *i* P | **PKPdf** | 16 10 07.1 | -0.5 | |
| | comp=Z,53nm,1.0s,SNR=16 | | | | | | | |
| MOTA | | | | *i* P | **PKPbc** | 16 10 15.6 | -0.1 | |
| | comp=Z,92nm,1.1s | | | | | | | |
| MOTA | | | | *i* P | **PKPab** | 16 10 31.0 | +0.2 | |
| | comp=Z,151nm,1.1s | | | | | | | |
| MOTA | | | | *e*P | **pPKPbc** | 16 12 30.1 | -1.1 | |
| | comp=Z,59nm,1.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **153.42** | **344** | *i* P | **PKPdf** | 16 10 07.3 | -0.4 | |
| | comp=Z,39nm,1.0s | | | | | | | |
| SQTA | | | | *i* P | **PKiKP** | 16 10 15.9 | 0.0 | |
| | comp=Z,101nm,1.3s | | | | | | | |
| SQTA | | | | *i* P | **PKPab** | 16 10 31.2 | 0.0 | |
| | comp=Z,130nm,1.1s | | | | | | | |
| **RUDO** | **Rudo** | **153.42** | **329** | *e*P | **PKPdf** | 16 10 07.0 | -0.6 | |
| **MRAK** | **Mrakovica** | **153.44** | **334** | *e*P | **PKPdf** | 16 10 07.3 | -0.4 | |
| **LJU** | **Ljubljana** | **153.47** | **338** | *e*PKPdf | **PKPdf** | 16 10 07.6 | 0.0 | |
| **LJU** | **Ljubljana** | **153.47** | **338** | *i* PKPdf | **PKPdf** | 16 10 07.3 | -0.3 | |
| LJU | | | | *i* PKPbc | **PKiKP** | 16 10 16.1 | +0.2 | |
| LJU | | | | *i* PKPab | **PKPab** | 16 10 30.7 | -0.5 | |
| **ABTA** | **Abfaltersbach** | **153.49** | **342** | *e*P | **PKPdf** | 16 10 06.9 | -0.8 | |
| | comp=Z,72nm,1.1s,SNR=18 | | | | | | | |
| ABTA | | | | *i* P | **PKPbc** | 16 10 15.6 | -0.4 | |
| | comp=Z,97nm,1.1s | | | | | | | |
| ABTA | | | | *i* P | **PKPab** | 16 10 30.7 | -0.7 | |
| | comp=Z,111nm,1.0s | | | | | | | |
| ABTA | | | | *e*P | **pPKPbc** | 16 12 31.1 | -0.2 | |
| | comp=Z,46nm,1.0s | | | | | | | |
| **SKO** | **Skopje** | **153.52** | **324** | *i* PKP | **PKPdf** | 16 10 07.8 | 0.0 | |
| SKO | | | | *i* PKP | **PKiKP** | 16 10 16.2 | +0.1 | |
| SKO | | | | *i* PKP | **PKPab** | 16 10 32.5 | +0.9 | |
| **BLY** | **Banja Luka** | **153.53** | **333** | *e*P | **PKPdf** | 16 10 07.3 | -0.4 | |
| **GRR** | **Gorron** | **153.63** | **2** | *e*PKIKP | **PKPdf** | 16 10 07.6 | -0.1 | |
| GRR | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.0s | | | | | | | |
| **HAU** | **Haudompre** | **153.64** | **351** | *e*PKIKP | **PKPdf** | 16 10 07.8 | 0.0 | |
| HAU | | | | pmax | pmax | | | |
| | comp=Z,37nm,0.9s | | | | | | | |
| **SGMF** | **Saint Gilles** | **153.66** | **5** | *e*PKIKP | **PKPdf** | 16 10 07.4 | -0.4 | |
| SGMF | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.0s | | | | | | | |
| **BOJS** | **Bojanci** | **153.67** | **336** | *e*PKPdf | **PKPdf** | 16 10 08.1 | +0.2 | |
| BOJS | | | | *e*PKPbc | **PKiKP** | 16 10 16.8 | +0.5 | |
| BOJS | | | | *e*PKPab | **PKPab** | 16 10 32.6 | +0.5 | |
| **DAVA** | **Damuels** | **153.68** | **346** | *i* P | **PKPdf** | 16 10 07.8 | -0.3 | |
| | comp=Z,28nm,1.0s,SNR=7.8 | | | | | | | |
| DAVA | | | | *i* P | **PKiKP** | 16 10 16.6 | +0.1 | |
| | comp=Z,69nm,1.2s | | | | | | | |
| DAVA | | | | *i* P | **PKPab** | 16 10 32.4 | +0.1 | |
| | comp=Z,92nm,0.9s | | | | | | | |
| DAVA | | | | *e*P | **pPKPbc** | 16 12 30.8 | -1.2 | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **FETA** | **Feichten** | **153.73** | **344** | *i* P | **PKPdf** | 16 10 07.9 | -0.2 | |
| | comp=Z,79nm,1.0s,SNR=32 | | | | | | | |
| FETA | | | | *i* P | **PKiKP** | 16 10 16.8 | +0.2 | |
| | comp=Z,69nm,1.2s | | | | | | | |
| FETA | | | | *i* P | **PKPab** | 16 10 31.6 | -1.0 | |
| | comp=Z,80nm,1.1s | | | | | | | |
| FETA | | | | *e*P | **pPKPbc** | 16 12 32.2 | +0.2 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **HINF** | **Hinteralfeld** | **153.75** | **351** | *e*PKIKP | **PKPdf** | 16 10 07.8 | -0.2 | |
| HINF | | | | pmax | pmax | | | |
| | comp=Z,52nm,1.4s | | | | | | | |
| **CEY** | **Cerknica** | **153.77** | **338** | *e*P | **PKPdf** | 16 10 07.6 | -0.5 | |
| **MGRS** | **Mrkonjic Grad** | **153.84** | **333** | *e*P | **PKPbc** | 16 10 16.5 | -0.2 | |
| **SKDS** | **Skadanscina** | **154.08** | **338** | *e*P | **PKPdf** | 16 10 07.8 | -0.7 | |
| **RIY** | **Rijeka** | **154.11** | **337** | *e*P | **PKPdf** | 16 10 07.4 | -1.1 | |
| **A250A** | **Rusevo Krmpots** | **154.16** | **336** | P | **PKPbc** | 16 10 14.5 | -2.9 | |
| **UDBI** | **Udbina** | **154.30** | **335** | P | **PKiKP** | 16 10 17.0 | -0.7 | |
| **PDG** | **Podgorica** | **154.35** | **327** | ⇓P | **PKPbc** | 16 10 18.1 | +0.2 | |
| **PDG** | **Podgorica** | **154.35** | **327** | *e*P | **PKiKP** | 16 10 14.4 | -3.4 | |
| **BRY** | **Bratogost** | **154.36** | **329** | *e*P | **PKPdf** | 16 10 06.9 | -2.2 | |
| **OHR** | **Ohrid** | **154.45** | **323** | *i* PKP | **PKPdf** | 16 10 08.7 | -0.6 | |
| OHR | | | | *i* PKP | **PKPbc** | 16 10 18.3 | +0.1 | |
| OHR | | | | *i* PKP | **PKPab** | 16 10 35.4 | -0.3 | |
| **KJJV** | **Kijevo** | **154.46** | **333** | P | **PKiKP** | 16 10 15.9 | -2.1 | |
| **SMRN** | **Sveta Marina** | **154.47** | **337** | P | **PKiKP** | 16 10 17.1 | -0.9 | |
| **RICI** | **Ricice** | **154.56** | **331** | P | **PKiKP** | 16 10 16.5 | -1.8 | |
| **DRME** | **Dracevica, Mon** | **154.57** | **327** | *e*P | **PKPdf** | 16 10 13.4 | +4.1 | |
| **LOR** | **Lormes** | **154.64** | **355** | *e*PKIKP | **PKPdf** | 16 10 09.3 | +0.1 | |
| LOR | | | | pmax | pmax | | | |
| | comp=Z,45nm,1.2s | | | | | | | |
| **MAKA** | **Makarska** | **154.77** | **331** | P | **PKiKP** | 16 10 17.2 | -1.4 | |
| **STON** | **Ston** | **154.78** | **330** | *e*P | **PKPdf** | 16 10 08.2 | -1.3 | |
| **MORI** | **Morici** | **154.87** | **334** | P | **PKiKP** | 16 10 17.2 | -1.6 | |
| **SSF** | **Saint Saulge** | **154.88** | **355** | *e*PKIKP | **PKPdf** | 16 10 09.6 | +0.1 | |
| SSF | | | | pmax | pmax | | | |
| | comp=Z,66nm,1.2s | | | | | | | |
| **IDI** | **Anoyia** | **155.02** | **307** | ⇓P | **PKPdf** | 16 10 10.8 | +0.7 | |
| **IDI** | **Anoyia** | **155.02** | **307** | PKP | **PKPdf** | 16 10 10.4 | +0.2 | |
| | comp=Z,56nm,1.0s,baz=172,slow=2.7,SNR=8.7 | | | | | | | |
| **DUGI** | **Dugi Otok** | **155.02** | **335** | P | PKPdf | 16 10 19.6 | +10 | |
| **CABF** | **La Chapelle** | **155.04** | **351** | *e*PKIKP | **PKPdf** | 16 10 10.4 | +0.5 | |
| CABF | | | | pmax | pmax | | | |
| | comp=Z,109nm,1.3s | | | | | | | |
| **ZIRJ** | **Zirje** | **155.07** | **334** | P | PKPdf | 16 10 18.7 | +8.8 | |
| **AVF** | **Avril sur Loir** | **155.16** | **356** | *e*PKIKP | **PKPdf** | 16 10 09.6 | -0.3 | |
| AVF | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **BGF** | **Bois d'Agland** | **155.42** | **356** | *e*PKIKP | **PKPdf** | 16 10 10.4 | +0.1 | |
| BGF | | | | pmax | pmax | | | |
| | comp=Z,69nm,1.2s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **155.72** | **357** | *e*PKIKP | **PKPdf** | 16 10 10.6 | -0.1 | |
| TCF | | | | pmax | pmax | | | |
| | comp=Z,64nm,1.1s | | | | | | | |
| **LPL** | **La Plagne** | **156.01** | **349** | *e*PKIKP | **PKPdf** | 16 10 11.7 | +0.3 | |
| LPL | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.3s | | | | | | | |
| **LPG** | **La Plagne** | **156.02** | **349** | *e*PKIKP | **PKPdf** | 16 10 11.8 | +0.3 | |
| LPG | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **156.73** | **351** | *e*PKIKP | **PKPdf** | 16 10 12.2 | +0.1 | |
| ORIF | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **156.73** | **358** | *e*PKIKP | **PKPdf** | 16 10 12.1 | +0.1 | |
| RJF | | | | pmax | pmax | | | |
| | comp=Z,67nm,1.3s | | | | | | | |
| **MBDF** | **Montbardon** | **156.76** | **349** | *e*PKIKP | **PKPdf** | 16 10 12.4 | +0.1 | |
| MBDF | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.3s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **156.95** | **353** | *e*PKIKP | **PKPdf** | 16 10 12.4 | +0.1 | |
| VIVF | | | | pmax | pmax | | | |
| | comp=Z,68nm,1.4s | | | | | | | |
| **CAF** | **Calviac** | **157.09** | **357** | *e*PKIKP | **PKPdf** | 16 10 12.8 | +0.3 | |
| CAF | | | | pmax | pmax | | | |
| | comp=Z,51nm,1.3s | | | | | | | |
| **FRF** | **La Foret Royal** | **157.92** | **348** | *e*PKIKP | **PKPdf** | 16 10 13.2 | -0.3 | |
| FRF | | | | pmax | pmax | | | |
| | comp=Z,44nm,1.4s | | | | | | | |
| **TIP** | **Timpagrande** | **158.02** | **325** | ⇑P | **PKPdf** | 16 10 13.3 | -0.5 | |
| **MTLF** | **Montolieu** | **158.66** | **357** | *e*PKIKP | **PKPdf** | 16 10 14.6 | +0.2 | |
| MTLF | | | | pmax | pmax | | | |
| | comp=Z,73nm,1.2s | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **158.71** | **19** | *e*PKPdf | **PKPdf** | 16 10 15.2 | +0.6 | |
| **PGAV** | **Gavieira, Arco** | **158.71** | **19** | *e*PKPab | **PKPab** | 16 10 55.1 | +1.0 | |
| **SJPF** | **Ste Jean** | **158.87** | **4** | *e*PKIKP | **PKPdf** | 16 10 15.3 | +0.6 | |
| SJPF | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.2s | | | | | | | |
| **EPF** | **Esparros** | **159.01** | **1** | *e*PKIKP | **PKPdf** | 16 10 15.2 | +0.3 | |
| EPF | | | | pmax | pmax | | | |
| | comp=Z,56nm,1.3s | | | | | | | |
| **PCAB** | **Cabril** | **159.02** | **18** | *e*PKPdf | **PKPdf** | 16 10 16.2 | +1.3 | |
| **PCAB** | **Cabril** | **159.02** | **18** | *e*PKPab | **PKPab** | 16 10 55.8 | +0.4 | |
| **ETSF** | **Etsaut** | **159.12** | **3** | *e*PKIKP | **PKPdf** | 16 10 15.5 | +0.4 | |
| ETSF | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **PBRG** | **Braganca** | **159.28** | **16** | *e*PKPdf | **PKPdf** | 16 10 15.4 | +0.2 | |
| **PBRG** | **Braganca** | **159.28** | **16** | *e*PKPab | **PKPab** | 16 10 57.1 | +0.6 | |
| **POLO** | **Lamas de Olo** | **159.40** | **18** | *e*PKPdf | **PKPdf** | 16 10 16.7 | +1.3 | |
| **POLO** | **Lamas de Olo** | **159.40** | **18** | *e*PKPab | **PKPab** | 16 10 58.0 | +0.9 | |
| **PVRL** | **Vila Real** | **159.51** | **18** | *e*PKPdf | **PKPdf** | 16 10 16.8 | +1.3 | |
| **PVRL** | **Vila Real** | **159.51** | **18** | *e*PKPab | **PKPab** | 16 10 58.8 | +1.2 | |
| **MVO** | **Moncorvo** | **159.81** | **17** | *e*PKPdf | **PKPdf** | 16 10 16.8 | +0.9 | |
| **MVO** | **Moncorvo** | **159.81** | **17** | *e*PKPab | **PKPab** | 16 11 00.0 | +1.1 | |
| **PVIS** | **Viseu** | **159.97** | **19** | *e*PKPdf | **PKPdf** | 16 10 16.9 | +0.8 | |
| **PVIS** | **Viseu** | **159.97** | **19** | *e*PKPab | **PKPab** | 16 11 00.4 | +0.8 | |
| **MTE** | **Manteigas** | **160.37** | **19** | *e*PKPdf | **PKPdf** | 16 10 17.3 | +0.8 | |
| **MTE** | **Manteigas** | **160.37** | **19** | *e*PKPab | **PKPab** | 16 11 01.8 | +0.4 | |
| **PSBE** | **So Bento** | **160.75** | **23** | *e*PKPdf | **PKPdf** | 16 10 18.6 | +1.7 | |
| **PSBE** | **So Bento** | **160.75** | **23** | *e*PKPab | **PKPab** | 16 11 03.7 | +0.7 | |
| **PCBR** | **Castelo Branco** | **160.90** | **19** | *e*PKPdf | **PKPdf** | 16 10 17.6 | +0.6 | |
| **PCBR** | **Castelo Branco** | **160.90** | **19** | *e*PKPab | **PKPab** | 16 11 04.0 | +0.4 | |
| **PMAFR** | **Mafra** | **161.06** | **25** | *e*PKPdf | **PKPdf** | 16 10 18.5 | +1.3 | |
| **PMAFR** | **Mafra** | **161.06** | **25** | *e*PKPab | **PKPab** | 16 11 04.9 | +0.5 | |
| **PMRV** | **Marv??o** | **161.30** | **20** | *e*PKPdf | **PKPdf** | 16 10 18.4 | +0.9 | |
| **PMRV** | **Marv??o** | **161.30** | **20** | *e*PKPab | **PKPab** | 16 11 06.1 | +0.7 | |
| **PMTG** | **Montargil** | **161.35** | **22** | *e*PKPdf | **PKPdf** | 16 10 18.0 | +0.5 | |
| **PMTG** | **Montargil** | **161.35** | **22** | *e*PKPab | **PKPab** | 16 11 06.0 | +0.4 | |
| **PESTR** | **Estremoz** | **161.75** | **21** | *e*PKPdf | **PKPdf** | 16 10 18.1 | +0.2 | |
| **PESTR** | **Estremoz** | **161.75** | **21** | *e*PKPab | **PKPab** | 16 11 07.4 | 0.0 | |
| **PESTR** | **Estremoz** | **161.75** | **21** | P | **PKPdf** | 16 10 18.9 | +1.0 | |
| **ESDC** | **Sonseca Array** | **161.93** | **12** | PKP | **PKPdf** | 16 10 18.1 | -0.1 | |
| | comp=Z,5.1nm,1.0s,baz=334,slow=3.5,SNR=16 | | | | | | | |
| ESDC | | | | PKPab | **PKPab** | 16 11 08.7 | +0.5 | |
| | comp=Z,43nm,1.1s,baz=342,slow=3.8,SNR=42 | | | | | | | |
| ESDC | | | | PP | **PP** | 16 14 52.9 | -0.3 | |
| | comp=Z,4.4nm,1.1s,baz=345,slow=4.2,SNR=5.4 | | | | | | | |
| **PAB** | **San Pablo** | **161.98** | **13** | ⇓PKIKP | **PKPdf** | 16 10 19.4 | +1.1 | |
| **PAB** | **San Pablo** | **161.98** | **13** | P | **PKPdf** | 16 10 19.4 | +1.1 | |
| **PNCL** | **Nicolau / Gran** | **162.09** | **24** | *e*PKPdf | **PKPdf** | 16 10 19.6 | +1.4 | |
| **PNCL** | **Nicolau / Gran** | **162.09** | **24** | *e*PKPab | **PKPab** | 16 11 09.3 | +0.4 | |
| **PBEJ** | **Beja** | **162.41** | **23** | *e*PKPdf | **PKPdf** | 16 10 20.1 | +1.5 | |
| **PBEJ** | **Beja** | **162.41** | **23** | *e*PKPab | **PKPab** | 16 11 10.5 | +0.2 | |
| **MESJ** | **Messejana** | **162.44** | **24** | *e*PKPdf | **PKPdf** | 16 10 19.4 | +0.8 | |
| **MESJ** | **Messejana** | **162.44** | **24** | *e*PKPdf | **PKPdf** | 16 10 20.3 | +1.7 | |
| **MESJ** | **Messejana** | **162.44** | **24** | *e*PKPab | **PKPab** | 16 11 10.8 | +0.4 | |
| **PTEO** | **Sao Teotonio** | **162.50** | **26** | *e*PKPdf | **PKPdf** | 16 10 20.5 | +1.8 | |
| **PTEO** | **Sao Teotonio** | **162.50** | **26** | *e*PKPab | **PKPab** | 16 11 11.5 | +0.8 | |
| **PCVE** | **Castro Verde** | **162.69** | **24** | *e*PKPdf | **PKPdf** | 16 10 20.1 | +1.2 | |
| **PCVE** | **Castro Verde** | **162.69** | **24** | *e*PKPab | **PKPab** | 16 11 12.4 | +0.8 | |
| **MORF** | **Marmelete** | **162.74** | **26** | *e*PKPdf | **PKPdf** | 16 10 19.8 | +0.8 | |
| **MORF** | **Marmelete** | **162.74** | **26** | *e*PKPdf | **PKPdf** | 16 10 20.4 | +1.4 | |
| **MORF** | **Marmelete** | **162.74** | **26** | *e*PKPab | **PKPab** | 16 11 12.9 | +1.0 | |
| **PFVI** | **Vila Bisbo** | **162.81** | **26** | *e*PKPdf | **PKPdf** | 16 10 20.6 | +1.6 | |
| **PFVI** | **Vila Bisbo** | **162.81** | **26** | *e*PKPab | **PKPab** | 16 11 12.5 | +0.4 | |
| **PVAQ** | **Vaqueiros** | **163.01** | **23** | *e*PKPdf | **PKPdf** | 16 10 20.5 | +1.3 | |
| **PVAQ** | **Vaqueiros** | **163.01** | **23** | *e*PKPab | **PKPab** | 16 11 13.9 | +0.9 | |
| **PBDV** | **Barranco-do-Ve** | **163.07** | **24** | *e*PKPdf | **PKPdf** | 16 10 20.7 | +1.4 | |
| **PBDV** | **Barranco-do-Ve** | **163.07** | **24** | *e*PKPab | **PKPab** | 16 11 15.3 | +2.0 | |
| **LIC** | **Lamto** | **163.40** | **160** | *e*PKIKP | **PKPdf** | 16 10 19.8 | -0.4 | |
| | comp=Z,276nm,1.1s | | | | | | | |
| **LIC** | **Lamto** | **163.40** | **160** | *e*PKP2 | **PKPab** | 16 11 16.6 | +1.5 | |
| | comp=Z,144nm,0.8s | | | | | | | |
| **KIC** | **Kosan Boka** | **163.61** | **161** | *e*PKIKP | **PKPdf** | 16 10 20.0 | -0.4 | |
| | comp=Z,78nm,1.0s | | | | | | | |
| **KIC** | **Kosan Boka** | **163.61** | **161** | *e*PKP2 | **PKPab** | 16 11 17.5 | +1.4 | |
| | comp=Z,73nm,0.7s | | | | | | | |
| **TIC** | **Toumodi** | **163.79** | **159** | *e*PKIKP | **PKPdf** | 16 10 20.1 | -0.5 | |
| **TIC** | **Toumodi** | **163.79** | **159** | *e*PKP2 | **PKPab** | 16 11 18.3 | +1.4 | |
| **DBIC** | **Dimbokro** | **163.87** | **160** | PKP | **PKPdf** | 16 10 20.5 | -0.1 | |
| | comp=Z,50nm,1.0s,baz=163,slow=0.9,SNR=34 | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | 16 11 18.4 | +1.1 | |
| | comp=Z,33nm,0.9s,baz=218,slow=4.1,SNR=14 | | | | | | | |
| **KEST** | **Kesra** | **164.34** | **333** | PKP | **PKPdf** | 16 10 20.2 | -0.4 | |
| | comp=Z,10nm,1.0s,baz=177,slow=4.3,SNR=5.7 | | | | | | | |
| KEST | | | | PKPab | **PKPab** | 16 11 19.3 | +0.3 | |
| | comp=Z,44nm,1.0s,baz=57,slow=0.9,SNR=15 | | | | | | | |
| KEST | | | | pPKPab | **pPKPab** | 16 13 29.7 | +2.6 | |
| | comp=Z,25nm,1.2s,baz=71,slow=6.0,SNR=6.0 | | | | | | | |
| **SRHM** | **Skhour des Reh** | **167.09** | **34** | P | **PKPdf** | 16 10 24.1 | +1.3 | |
| **LCRM** | **LCR** | **167.37** | **21** | P | **PKPdf** | 16 10 26.0 | +2.9 | |
| **JBK** | **JBK** | **167.37** | **12** | P | **PKPdf** | 16 10 26.0 | +2.8 | |
| **CZD** | **Col de Zad** | **167.89** | **23** | P | **PKPdf** | 16 10 26.0 | +2.3 | |
| **OUK** | **Oukaimeden** | **168.07** | **38** | P | **PKPdf** | 16 10 26.0 | +2.1 | |
| **MDT** | **Midelt** | **168.25** | **22** | PKP | **PKPdf** | 16 10 24.6 | +1.0 | |
| | comp=Z,36nm,1.1s,baz=353,slow=1.8,SNR=20 | | | | | | | |
| MDT | | | | PKPab | **PKPab** | 16 11 37.2 | +0.9 | |
| | comp=Z,50nm,1.1s,baz=10,slow=1.0,SNR=14 | | | | | | | |
| MDT | | | | PP | **PP** | 16 15 26.2 | +0.4 | |
| | comp=Z,8.1nm,1.1s,baz=26,slow=6.0,SNR=3.5 | | | | | | | |
| **MDT** | **Midelt** | **168.25** | **22** | P | **PKPdf** | 16 10 25.5 | +1.8 | |
| **OUZM** | **OUZ** | **168.91** | **35** | P | **PKPdf** | 16 10 26.0 | +1.8 | |
| **GOLM** | **Goulmima** | **169.10** | **26** | P | **PKPdf** | 16 10 27.0 | +2.7 | |
| **TZRR** | **Tazzarine** | **169.61** | **31** | P | **PKPdf** | 16 10 26.2 | +1.6 | |
| **ZGR** | **Zagora** | **170.13** | **34** | P | **PKPdf** | 16 10 26.1 | +1.2 | |
| **TORD** | **Torodi Ar. Bea** | **171.16** | **187** | PKP | **PKPdf** | 16 10 24.8 | -0.9 | |
| | comp=Z,33nm,0.9s

WNVZ S **S** **16 02 48.3 +4.0**
**QRZ Quartz Range 19.98 198** P **P** **16 00 10.5 +0.6**
**NNZ Nelson 20.12 196** P **P** **16 00 10.9 -0.2**
NNZ IAmb IAmb 16 00 20.0
comp=Z,66nm,0.8s
**KHZ Kahutara 21.21 195** P **P** **16 00 19.9 -1.0**
**LHI Lord Howe Isla 21.40 239** P **P** **16 00 25.6 +2.9**
baz=22,SNR=5.5
**LTZ Lake Taylor 21.87 197** P **P** **16 00 25.8 -1.1**
**RPZ Rata Peaks 23.07 198** P **P** **16 00 36.7 -0.7**
comp=Z,25nm,0.6s,baz=9.5,slow=6.1,SNR=1.2
RPZ S **S** **16 04 11.8 +4.2**
comp=Z,10nm,0.9s,baz=23,slow=18,SNR=1.7
**RPZ Rata Peaks 23.07 198** P **P** **16 00 37.9 +0.4**
**ODZ Otahua Downs 24.41 197** P **P** **16 00 50.6 +1.3**
comp=Z,38nm,1.9s
**EIDS Eidsvold 27.20 257** P **P** **16 01 14.9 +0.8**
baz=27,SNR=12
**EIDS Eidsvold 27.20 257** P **P** **16 01 14.7 +0.7**
**ARMA Armidale 27.24 246** P **P** **16 01 15.9 +1.4**
baz=27,SNR=64
**ARMA Armidale 27.24 246** P **P** **16 01 15.9 +1.4**
**ARMA Armidale 27.24 246** P **P** **16 01 16.3 +1.8**
**NTLS Newcastle Soft 27.71 241** P **P** **16 01 20.9 +2.4**
**NTLH Newcastle Hard 27.75 241** P **P** **16 01 20.9 +2.1**
**MGCD Mangrove Creek 28.32 240** P **P** **16 01 25.3 +1.6**
baz=28,SNR=79
**MGCD Mangrove Creek 28.32 240** P **P** **16 01 25.7 +2.0**
**PPT Papeete 28.41 86** P **P** **16 01 24.4 -0.3**
comp=Z,29nm,0.8s,baz=163,slow=11,SNR=2.4
**RIV Riverview 28.45 239** P **P** **16 01 26.4 +1.5**
baz=29,SNR=6.6
**SYDH Sydney Hard Ro 28.76 239** P **P** **16 01 29.3 +1.7**
**RMQ Roma 29.32 255** P **P** **16 01 34.3 +1.8**
baz=29,SNR=28
**RMQ Roma 29.32 255** P **P** **16 01 34.6 +2.1**
**CNB Canberra Magne 30.30 237** P **P** **16 01 42.3 +1.4**
baz=30,SNR=62
**CNB Canberra Magne 30.30 237** P **P** **16 01 42.8 +1.9**
**CAN Canberra 30.59 237** P **P** **16 01 44.4 +1.0**
CAN pmax pmax
comp=Z,193nm,0.9s
**CAN Canberra 30.59 237** P **P** **16 01 44.4 +1.0**
**CAN Canberra 30.59 237** P **P** **16 01 45.1 +1.7**
**MILA Mila 31.02 234** P **P** **16 01 48.0 +0.9**
baz=31
**CTA Charters Tower 32.05 267** P **P** **16 01 56.2 +0.3**
comp=Z,163nm,0.4s,baz=87,slow=8.8,SNR=68
CTA S **S** **16 06 26.5 -1.0**
comp=Z,3.9nm,0.7s,baz=0.0,slow=20,SNR=1.6
CTA ScP **ScP** **16 07 17.6 +2.3**
comp=Z,9.3nm,0.8s,baz=40,slow=6.9,SNR=3.6
**CTA Charters Tower 32.05 267** P **P** **16 01 56.0 0.0**
baz=32
**CTA Charters Tower 32.05 267** P **P** **16 01 56.8 +0.9**
**CMSA Cobar Meteorol 32.45 246** P **P** **16 01 59.8 +0.6**
baz=32
**CMSA Cobar Meteorol 32.45 246** P **P** **16 02 00.4 +1.2**
**QLP Quilpie 33.37 255** P **P** **16 02 07.2 +0.2**
baz=33
**QLP Quilpie 33.37 255** P **P** **16 02 08.3 +1.4**
**TOO Toolangi 33.96 235** P **P** **16 02 13.0 +1.3**
baz=34
**TOO Toolangi 33.96 235** P **P** **16 02 12.5 +0.7**
TOO pmax pmax
comp=Z,178nm,0.7s
**TOO Toolangi 33.96 235** P **P** **16 02 12.5 +0.7**
**TOO Toolangi 33.96 235** P **P** **16 02 13.1 +1.3**
**MTSU Mount Surprise 34.22 270** P **P** **16 02 14.7 +0.5**
baz=34
**MTSU Mount Surprise 34.22 270** P **P** **16 02 15.2 +1.0**
**PMG Port Moresby 34.42 286** P **P** **16 02 15.5 -0.4**
comp=Z,110nm,0.7s,baz=75,slow=6.7,SNR=18
PMG S **S** **16 07 01.9 -1.4**
comp=Z,12nm,1.0s,baz=218,slow=17,SNR=3.5
**PMG Port Moresby 34.42 286** *i* P **P** **16 02 15.4 -0.4**
PMG pmax pmax
comp=Z,135nm,0.8s
**PMG Port Moresby 34.42 286** P **P** **16 02 16.5 +0.6**
**PMG Port Moresby 34.42 286** P **P** **16 02 16.8 +0.9**
**TAU Tasmania Unive 34.64 225** P **P** **16 02 18.3 +1.0**
TAU pmax pmax
comp=Z,86nm,1.2s
**TAU Tasmania Unive 34.64 225** P **P** **16 02 18.3 +1.0**
TAU IAmb IAmb 16 02 35.7
comp=Z,86nm,1.1s
**STKA Stephens Creek 35.96 246** P **P** **16 02 28.8 +0.3**
comp=Z,135nm,0.6s,baz=72,slow=10,SNR=26
STKA ScP **ScP** **16 07 31.6 +2.5**
comp=Z,17nm,0.9s,baz=46,slow=1.8,SNR=4.5
**STKA Stephens Creek 35.96 246** P **P** **16 02 30.1 +1.7**
baz=36
**STKA Stephens Creek 35.96 246** *eP* **P** **16 02 29.6 +1.2**
STKA pmax pmax
comp=Z,135nm,0.6s
**STKA Stephens Creek 35.96 246** P **P** **16 02 29.2 +0.8**
STKA IAmb IAmb 16 02 30.4
comp=Z,30nm,0.7s
**COEN Coen 36.38 276** P **P** **16 02 32.4 +0.3**
COEN IAmb IAmb 16 02 34.0
comp=Z,81nm,0.8s
**ARPS Mount Arapiles 36.57 237** P **P** **16 02 33.8 +0.5**
baz=37
**QIS Mount Isa 38.13 264** P **P** **16 02 46.1 -0.2**
baz=38
**JOHN Johnston Islan 39.68 15** P **P** **16 02 58.5 0.0**
**BBOO Buckleboo 40.71 245** P **P** **16 03 07.2 +0.5**
baz=41,SNR=14
**BBOO Buckleboo 40.71 245** P **P** **16 03 07.0 +0.2**
**BBOO Buckleboo 40.71 245** P **P** **16 03 07.2 +0.5**
**MULG Mulgathing 42.34 249** P **P** **16 03 20.2 +0.6**
**AS31 Alice Springs 42.90 258** P **P** **16 03 24.7 +0.6**
AS31 IAmb IAmb 16 03 25.2
comp=Z,41nm,0.7s
**ASAR Alice Springs 42.90 258** P **P** **16 03 24.2 +0.1**
comp=Z,186nm,0.8s,baz=97,slow=8.5,SNR=32
ASAR ScP **ScP** **16 07 59.5 +3.0**
comp=Z,6.1nm,0.8s,baz=100,slow=3.8,SNR=3.2
ASAR S **S** **16 09 05.8 -1.5**
comp=Z,17nm,0.9s,baz=97,slow=16,SNR=9.4
**ASAR Alice Springs 42.90 258** P **P** **16 03 24.7 +0.6**
**ASAR Alice Springs 42.90 258** P **P** **16 03 24.7 +0.6**
**ASPA Alice Springs 42.91 258** P **P** **16 03 24.2 +0.1**
baz=43
**WR0 Warramunga Arr 42.91 264** P **P** **16 03 23.7 -0.5**
WR0 IAmb IAmb 16 03 24.8
comp=Z,72nm,1.1s
**WC3 Warramunga Arr 43.07 264** P **P** **16 03 25.3 -0.1**
baz=43
**WB0 Warramunga Arr 43.09 264** P **P** **16 03 25.5 -0.1**
**WB2 Warramunga Arr 43.09 264** P **P** **16 03 25.5 -0.1**
**WRAB Tennant Creek 43.09 264** *i* P **P** **16 03 25.1 -0.5**
WRAB pmax pmax
comp=Z,158nm,0.9s
**WRAB Tennant Creek 43.09 264** P **P** **16 03 25.2 -0.4**
**WRA Warramunga Arr 43.10 264** P **P** **16 03 24.7 -1.0**
comp=Z,52nm,0.4s,baz=95,slow=7.7,SNR=53
WRA ScP **ScP** **16 07 59.8 +2.4**
comp=Z,14nm,1.0s,baz=99,slow=4.1,SNR=4.5
WRA S **S** **16 09 08.0 -2.2**
comp=Z,5.0nm,0.9s,baz=101,slow=14,SNR=3.9
**WRA Warramunga Arr 43.10 264** P **P** **16 03 25.0 -0.7**
WRA pmax pmax
comp=Z,13nm,0.9s
**WRA Warramunga Arr 43.10 264** P **P** **16 03 25.0 -0.7**
**JAY Jayapura 43.29 291** P **P** **16 03 26.2 -1.0**
comp=Z,59nm,0.6s,baz=140,slow=3.1,SNR=15
**KDU Kakadu 46.68 273** P **P** **16 03 53.2 +0.2**
baz=47,SNR=14
**KHLU Kahalu`u 47.29 31** P **P** **16 03 57.4 -0.2**
**MLOA Mauna Loa Obse 47.39 31** P **P** **16 03 57.1 -1.6**
MLOA IAmb IAmb 16 04 07.7
comp=Z,87nm,1.2s
**HUH Hualalai 47.40 31** P **P** **16 03 58.5 0.0**
HUH IAmb IAmb 16 03 59.8
comp=Z,58nm,0.7s
**MLH Mauna Loa 47.45 31** P **P** **16 03 59.3 +0.3**
MLH IAmb IAmb 16 04 00.8
comp=Z,81nm,0.7s
**HMH Humu'ula Sheep 47.49 31** P **P** **16 04 00.1 +0.7**
**FORT Forrest 47.50 248** P **P** **16 03 59.4 +0.4**
baz=48,SNR=14
**FORT Forrest 47.50 248** P **P** **16 03 58.6 -0.4**
**HPAH Hawaii Prepara 47.76 31** P **P** **16 04 01.6 +0.5**
**WRKA Warakurna 47.80 256** P **P** **16 04 01.6 +0.2**
baz=48
**WRKA Warakurna 47.80 256** P **P** **16 04 02.0 +0.6**
**HON Honolulu 47.85 27** P **P** **16 04 01.7 +0.1**
HON pmax pmax
comp=Z,123nm,0.7s
**HON Honolulu 47.85 27** P **P** **16 04 01.7 +0.1**
**MTN Manton Dam 47.87 272** P **P** **16 04 01.8 -0.2**
baz=48,SNR=7.8
**MTN Manton Dam 47.87 272** P **P** **16 04 01.7 -0.2**
**KIP Kipapa 47.93 27** *i* P **P** **16 04 02.0 -0.2**
KIP pmax pmax
comp=Z,72nm,1.0s
**HLK Haleakala 48.13 30** P **P** **16 04 04.3 +0.3**
**KHLH Kahului Airpor 48.17 29** P **P** **16 04 03.8 -0.2**
**KNRA Kununurra 49.26 268** P **P** **16 04 12.4 +0.2**
baz=49
**KNRA Kununurra 49.26 268** P **P** **16 04 12.3 +0.1**
**FAKI Fak Fak 50.57 285** P **P** **16 04 22.0 +0.2**
**FITZ Fitzroy Crossi 51.53 264** P **P** **16 04 28.7 0.0**
comp=Z,29nm,0.5s,baz=66,slow=6.6,SNR=28
FITZ S **S** **16 11 05.5 -0.7**
comp=Z,7.1nm,0.9s,baz=253,slow=19,SNR=2.0
**FITZ Fitzroy Crossi 51.53 264** P **P** **16 04 29.2 +0.5**
**SIJI Sorong 52.36 287** P **P** **16 04 34.6 -0.1**
comp=Z,131nm,0.7s,baz=81,slow=4.9,SNR=34
**SOEI Soe 55.24 273** P **P** **16 04 56.5 +1.5**
**SOEI Soe 55.24 273** P **P** **16 04 56.9 +1.8**
**BATI Baumata 55.65 273** P **P** **16 04 58.6 +0.9**
comp=Z,132nm,0.6s,baz=172,slow=3.3,SNR=20
**PSA00 Pilbara Seismi 56.05 258** P **P** **16 05 00.5 +0.1**
PSA00 IAmb IAmb 16 05 01.2
comp=Z,114nm,1.0s
**KLBR Kellerberrin 56.23 246** P **P** **16 05 01.8 +0.2**
baz=56,SNR=25
**KLBR Kellerberrin 56.23 246** P **P** **16 05 02.1 +0.5**
**VNDA Vanda 56.33 185** P **P** **16 05 03.6 +2.2**
comp=Z,4.9nm,0.6s,baz=27,slow=7.2,SNR=5.6
**VNDA Vanda 56.33 185** P **P** **16 05 03.8 +2.4**
VNDA pmax pmax
comp=Z,11nm,1.1s
**VNDA Vanda 56.33 185** P **P** **16 05 03.8 +2.4**
**RKGY Rocky Gully 56.58 242** P **P** **16 05 04.8 +1.0**
baz=57,SNR=8.9
**BLDU Ballidu 57.25 247** P **P** **16 05 08.7 +0.3**
baz=57,SNR=12
**MMRI Maumere 57.50 274** P **P** **16 05 09.8 -0.6**
MMRI IAmb IAmb 16 05 10.8
comp=Z,66nm,0.5s
**MORW Morawa 58.05 249** P **P** **16 05 14.3 +0.3**
MORW IAmb IAmb 16 05 15.0
comp=Z,92nm,1.1s
**GIRL Giralia 60.89 256** P **P** **16 05 34.0 +1.2**
baz=61,SNR=8.3
**GIRL Giralia 60.89 256** P **P** **16 05 33.5 +0.7**
GIRL IAmb IAmb 16 05 35.1
comp=Z,151nm,0.8s
**JCJ Chichijima 61.32 321** P **P** **16 05 34.4 -1.1**
JCJ IAmb IAmb 16 05 49.6
comp=Z,172nm,1.0s
**TOLI2 Tolitoli 62.63 283** P **P** **16 05 43.2 -1.1**
**JAGI Jajag, Banyuwa 65.06 271** P **P** **16 05 58.6 -1.1**
JAGI IAmb IAmb 16 05 59.8
comp=Z,63nm,1.0s
**JHJ Hachijo jima 2 67.21 324** P **P** **16 06 12.6 0.0**
baz=60,slow=20
**QSPA South Pole Qui 68.09 180** P **P** **16 06 19.4 +1.8**
comp=Z,4.2nm,0.5s,baz=211,slow=3.7,SNR=8.0
**QSPA South Pole Qui 68.09 180** P **P** **16 06 18.9 +1.3**
**UGM Wanagama 68.62 270** P **P** **16 06 21.3 -0.4**
UGM IAmb IAmb 16 06 22.5
comp=Z,54nm,0.6s
**KKM Kota Kinabalu 68.87 286** P **P** **16 06 22.9 -0.3**
**JYT Yasato 69.35 326** P **P** **16 06 26.0 +0.6**
JYT IAmb IAmb 16 06 26.8
comp=Z,33nm,0.6s
**JMM Marumori 70.30 327** P **P** **16 06 31.6 +0.6**
JMM IAmb IAmb 16 06 36.2
comp=Z,48nm,1.1s
**JGF Kuroka 70.39 324** P **P** **16 06 31.9 +0.2**
**MJA0 Matsu Arr-Jizo 70.61 325** *eP* **P** **16 06 33.2 +0.2**
MJA0 pmax pmax
comp=Z,28nm,0.8s
**MJAR Matsushiro Arr 70.63 325** P **P** **16 06 33.3 +0.2**
comp=Z,27nm,0.8s,baz=149,slow=5.5,SNR=35
**MJAR Matsushiro Arr 70.63 325** P **P** **16 06 33.2 +0.1**
**MAJO Matsushiro 70.63 325** *i* P **P** **16 06 33.0 0.0**
MAJO pmax pmax
comp=Z,32nm,0.8s
**MAJO Matsushiro 70.63 325** P **P** **16 06 33.2 +0.1**
MAJO IAmb IAmb 16 06 34.1
comp=Z,30nm,0.8s
**MAJO Matsushiro 70.63 325** P **P** **16 06 33.4 +0.4**
**MAT Matsushiro 70.63 325** P **P** **16 06 32.8 -0.2**
**MJB9 Matsu-Tunnel 70.64 325** P **P** **16 06 33.2 +0.2**
**JSU Suzuyama 71.65 316** P **P** **16 06 38.6 -0.5**
JSU IAmb IAmb 16 06 40.6
comp=Z,57nm,1.0s
**JHS Saijyo 72.38 321** P **P** **16 06 44.0 +0.8**
JHS IAmb IAmb 16 06 45.2
comp=Z,78nm,0.8s
**JTM Tenmabayashi 72.44 330** P **P** **16 06 44.2 +0.8**
JTM IAmb IAmb 16 06 46.2
comp=Z,98nm,1.0s
**JNU Nakatsue 72.45 318** P **P** **16 06 44.0 +0.2**
comp=Z,21nm,1.0s,baz=49,slow=5.5,SNR=3.7
**YULB Yu-li 73.22 304** P **P** **16 06 47.5 -0.7**
**NACB Ninganchiao 73.42 305** P **P** **16 06 48.6 -0.8**
NACB IAmb IAmb 16 06 50.1
comp=Z,52nm,0.8s
**KIWB Kanaga Island 73.54 1** P **P** **16 06 48.8 -0.6**
**ADK Adak 73.58 2** P **P** **16 06 49.5 -0.2**
ADK pmax pmax
comp=Z,126nm,0.7s
**ADK Adak 73.58 2** P **P** **16 06 49.5 -0.2**
**ADK Adak 73.58 2** P **P** **16 06 49.9 +0.3**
**TPUB Ta-pu 73.68 304** P **P** **16 06 50.1 -0.8**
TPUB IAmb IAmb 16 06 51.4
comp=Z,74nm,0.8s
**SSLB Suanglung 73.70 305** P **P** **16 06 50.1 -0.9**
SSLB IAmb IAmb 16 06 51.1
comp=Z,40nm,0.6s
**YHNB Yeheng 73.86 306** P **P** **16 06 51.5 -0.5**
**JEW Eniwo 73.89 331** P **P** **16 06 52.3 +0.7**
**ATKA Atka Island 74.00 3** P **P** **16 06 52.1 +0.1**
**ASAJ Asahikawa 74.41 333** P **P** **16 06 56.1 +1.6**
comp=Z,35nm,0.8s,baz=216,slow=5.7,SNR=28
**SHEM Shemya Is, Ala 74.61 356** P **P** **16 06 55.3 -0.1**
comp=Z,145nm,0.8s,baz=251,slow=18,SNR=5.9
**SMY Shemya 74.61 356** P **P** **16 06 55.1 -0.3**
SMY pmax pmax
comp=Z,187nm,1.0s
**SMY Shemya 74.61 356** P **P** **16 06 55.1 -0.3**
**UNV Unalaska Valle 76.33 8** P **P** **16 07 04.4 -0.5**
UNV IAmb IAmb 16 07 04.8
comp=Z,49nm,0.7s
**YSS Yuzh-Sakhalins 76.63 334** *eP* **P** **16 07 08.2 +1.5**
YSS pmax pmax
comp=Z,50nm,1.5s
**YSS Yuzh-Sakhalins 76.63 334** P **P** **16 07 08.7 +2.0**
**AKUT Akutan 76.71 8** P **P** **16 07 06.0 -0.9**
AKUT IAmb IAmb 16 07 07.9
comp=Z,68nm,1.0s
**TJN Taejon 76.77 318** *i* P **P** **16 07 09.2 +1.5**
**PET Petropavlovsk 77.08 347** *i* P **P** **16 07 09.1 +0.1**
PET pmax pmax
comp=Z,70nm,0.6s
**PET Petropavlovsk 77.08 347** P **P** **16 07 08.9 -0.1**
**PET Petropavlovsk 77.08 347** P **P** **16 07 09.2 +0.2**
**KSRS Korea Array 77.13 320** P **P** **16 07 09.9 +0.3**
comp=Z,5.9nm,0.8s,baz=134,slow=5.4,SNR=14
**KSRS Korea Array 77.13 320** *eP* **P** **16 07 11.0 +1.3**
KSRS pmax pmax
comp=Z,6.0nm,0.8s
**KS19 Wonju Array Si 77.19 320** P **P** **16 07 10.7 +0.7**
**PEA0B Petropavlovsk- 77.37 346** *i* P **P** **16 07 10.8 +0.2**
**PEA0B Petropavlovsk- 77.37 346** P **P** **16 07 10.7 +0.1**
PEA0B IAmb IAmb 16 07 12.0
comp=Z,98nm,0.8s
**PETK Petropavlovsk- 77.37 346** P **P** **16 07 10.3 -0.3**
comp=Z,68nm,0.7s,baz=115,slow=6.7,SNR=64
**BELA Belgrano 2 78.27 173** P **P** **16 07 15.5 +0.3**
**VLA Vladivostok 78.74 326** *i* P **P** **16 07 18.8 +0.6**
VLA pmax pmax
comp=Z,62nm,1.4s
**MSHR Mys Shultsa 78.75 325** *i* P **P** **16 07 18.8 +0.6**
MSHR pmax pmax
comp=Z,28nm,0.9s
**USA0B Ussuriysk Arra 79.45 327** *i* P **P** **16 07 22.5 +0.6**
**USRK Ussuriysk Ar. 79.45 327** P **P** **16 07 22.4 +0.5**
comp=Z,35nm,1.0s,baz=134,slow=3.7,SNR=15
**USRK Ussuriysk Ar. 79.45 327** P **P** **16 07 22.8 +0.9**
**USRK Ussuriysk Ar. 79.45 327** P **P** **16 07 22.8 +0.9**
**NJ2 Nanjing 79.81 311** *eP* **P** **16 07 25.5 +1.4**
NJ2 pmax pmax
comp=Z,23nm,0.8s
**TYV Tymovskoe 79.85 337** *eP* **P** **16 07 24.8 +1.0**
TYV *eS* **S** **16 16 34.3 -4.8**
TYV pmax pmax
comp=Z,300nm,3.4s
TYV pmax pmax
comp=Z,60nm,0.9s
TYV smax smax
comp=N,400nm,8.6s
TYV smax smax
comp=E,500nm,8.6s
**CHGN Chignik 79.98 12** P **P** **16 07 24.4 +0.1**
CHGN IAmb IAmb 16 07 25.3
comp=Z,69nm,0.8s
**HOPS Hopland Field 80.35 41** P **P** **16 07 28.1 +1.4**
HOPS IAmb IAmb 16 07 29.6
comp=Z,75nm,1.1s
**PMSA Palmer Station 80.46 157** P **P** **16 07 28.6 +1.8**
comp=Z,19nm,0.8s,baz=325,slow=19,SNR=4.9
**MDJ Mudanjiang 80.98 326** P **P** **16 07 30.9 +1.1**
**MDJ Mudanjiang 80.98 326** P **P** **16 07 31.3 +1.5**
**VES Vestal, Richgr 81.01 46** P **P** **16 07 31.5 +1.3**
baz=235,SNR=6.2
**MURC Murrieta 81.03 48** P **P** **16 07 31.6 +1.2**
baz=236,SNR=7.9
**MONP2 Monument Peak 81.18 49** P **P** **16 07 33.1 +1.7**
baz=237,SNR=16
**EDW2 Edwards Air Fo 81.19 47** P **P** **16 07 32.5 +1.2**
baz=236,SNR=17
**O02D Mt. Diablo Mer 81.26 40** P **P** **16 07 33.9 +2.4**
baz=232,SNR=22
**IKP In-Ko-Pah, Jac 81.27 50** P **P** **16 07 33.4 +1.6**
baz=237,SNR=6.6
**ISA Isabella, Lake 81.31 46** P **P** **16 07 32.6 +0.7**
ISA pmax pmax
comp=Z,44nm,1.0s
**ISA Isabella, Lake 81.31 46** P **P** **16 07 32.6 +0.7**
ISA IAmb IAmb 16 07 34.4
comp=Z,44nm,0.9s
**ISA Isabella, Lake 81.31 46** P **P** **16 07 33.3 +1.4**
baz=235,SNR=16
**SLBS Sierra La Lagu 81.39 60** P **P** **16 07 33.0 +0.4**
**YUH Yuha Desert 81.40 50** P **P** **16 07 33.6 +1.3**
**CMB Columbia Colle 81.45 43** P **P** **16 07 33.8 +1.3**
CMB pmax pmax
comp=Z,42nm,1.0s
**CMB Columbia Colle 81.45 43** P **P** **16 07 33.8 +1.3**
CMB IAmb IAmb 16 07 34.7
comp=Z,42nm,1.0s
**PFO Pinyon Flats O 81.55 49** P **P** **16 07 34.1 +0.9**
comp=Z,7.1nm,0.7s,baz=259,slow=4.1,SNR=8.7
**PFO Pinyon Flats O 81.55 49** P **P** **16 07 34.3 +1.1**
PFO pmax pmax
comp=Z,9.0nm,0.9s
**PFO Pinyon Flats O 81.55 49** P **P** **16 07 34.3 +1.1**
**PFO Pinyon Flats O 81.55 49** P **P** **16 07 34.6 +1.4**
baz=237,SNR=5.8
**TPFO Pinon Flats 81.55 49** P **P** **16 07 34.4 +1.2**
baz=237,SNR=6.3
**SWSC Sam W. Stewart 81.64 50** P **P** **16 07 35.2 +1.7**
baz=237,SNR=6.9
**ORV Oroville 81.66 41** P **P** **16 07 33.6 +0.1**
ORV pmax pmax
comp=Z,31nm,1.0s
**ORV Oroville 81.66 41** P **P** **16 07 33.6 +0.1**
**LRMC Laurel Mtn Rad 81.74 47** P **P** **16 07 35.4 +1.2**
baz=236,SNR=6.6
**N02D Trinity Center 81.80 40** P **P** **16 07 36.3 +2.1**
baz=232,SNR=17
**M02C Callahan 81.97 39** P **P** **16 07 37.4 +2.2**
baz=231,SNR=18
**BELC Belle Mtn. Jos 82.08 49** P **P** **16 07 37.4 +1.5**
baz=237,SNR=17
**EMB Emerald Bay 82.18 43** P **P** **16 07 37.3 +0.9**
**MPMC Manual Prospec 82.20 46** P **P** **16 07 37.8 +1.3**
baz=236,SNR=15
**GSC Goldstone, Bar 82.24 47** P **P** **16 07 37.9 +1.3**
baz=236,SNR=14
**TIN Tinemaha, Big 82.27 45** P **P** **16 07 38.4 +1.7**
baz=235,SNR=6.2
**YBH Yreka Blue Hor 82.27 39** P **P** **16 07 37.9 +1.3**
comp=Z,30nm,0.8s,baz=193,slow=1.7,SNR=39
**YBH Yreka Blue Hor 82.27 39** P **P** **16 07 38.6 +2.0**
YBH pmax pmax
comp=Z,42nm,1.0s
**YBH Yreka Blue Hor 82.27 39** P **P** **16 07 38.5 +2.0**
YBH IAmb IAmb 16 07 39.6
comp=Z,42nm,0.9s
**BC3 Big Chuckawall 82.27 49** P **P** **16 07 38.7 +1.8**
baz=237,SNR=9.6
**HEC Hector,Ludlow 82.30 48** P **P** **16 07 38.1 +1.2**
baz=237,SNR=20
**K02D Willamette Mer 82.32 38** P **P** **16 07 38.6 +1.7**
baz=231,SNR=5.9
**GLA Glamis 82.39 50** P **P** **16 07 39.6 +2.2**
baz=238,SNR=8.4
**MPK Martis Peak 82.42 42** P **P** **16 07 39.4 +1.7**
MPK IAmb IAmb 16 07 39.7
comp=Z,48nm,0.7s
**BEKR Beckworth 82.55 42** P **P** **16 07 39.4 +1.2**
**QSM Queen of Sheba 82.56 47** P **P** **16 07 39.2 +1.1**
**KDAK Kodiak Island 82.56 14** P **P** **16 07 37.9 +0.3**
comp=Z,51nm,1.1s,baz=141,slow=4.1,SNR=10
**KDAK Kodiak Island 82.56 14** P **P** **16 07 38.1 +0.6**
KDAK pmax pmax
comp=Z,65nm,1.1s
**KDAK Kodiak Island 82.56 14** P **P** **16 07 38.1 +0.6**
KDAK IAmb IAmb 16 07 38.6
comp=Z,65nm,1.1s
**PNTR Pine Nut 82.56 43** P **P** **16 07 40.1 +1.7**
PNTR IAmb IAmb 16 07 40.8
comp=Z,100nm,0.8s
**HUMO Hull Mountain 82.67 38** P **P** **16 07 40.7 +2.2**
HUMO IAmb IAmb 16 07 41.2
comp=Z,39nm,0.8s
**YERR Yerington 82.73 43** P **P** **16 07 40.4 +1.2**
YERR IAmb IAmb 16 07 41.3
comp=Z,45nm,0.7s
**GMRC Granite Mounta 82.74 48** P **P** **16 07 40.5 +1.3**
baz=237,SNR=10
**LCH Last Change Ra 82.76 45** P **P** **16 07 40.6 +1.4**
**IRM Iron Mountain 82.76 49** P **P** **16 07 40.9 +1.8**
baz=237,SNR=16
**LHV Little Huntoon 82.78 44** P **P** **16 07 41.1 +2.0**
LHV IAmb IAmb 16 07 41.8
comp=Z,45nm,1.0s
**GRAC Grapevine Rang 82.81 45** P **P** **16 07 41.1 +1.8**
GRAC IAmb IAmb 16 07 42.0
comp=Z,51nm,0.9s
**GRAC Grapevine Rang 82.81 45** P **P** **16 07 41.1 +1.8**
baz=236,SNR=20
**L04D Klamath Falls 82.81 39** P **P** **16 07 41.1 +1.7**
baz=232,SNR=9.8
**M04C Macdoel 82.81 40** P **P** **16 07 41.1 +1.7**
baz=232,SNR=8.8
**GWY Greenwater Val 82.82 46** P **P** **16 07 40.9 +1.3**
**FURC Furnace Creek, 82.84 46** P **P** **16 07 41.2 +1.7**
baz=236,SNR=7.6
**BNX BinXian 82.88 326** ⇓P **P** **16 07 39.9 +0.5**
BNX pmax pmax
comp=Z,88nm,0.9s
**TUQ Turquoise Moun 82.91 47** P **P** **16 07 41.3 +1.2**
baz=237,SNR=18
**RYN Ryan 82.98 44** P **P** **16 07 41.7 +1.4**
**NVAR Mina Array Bea 83.01 44** P **P** **16 07 41.3 +0.7**
comp=Z,26nm,0.9s,baz=224,slow=8.7,SNR=34
**NVAR Mina Array Bea 83.01 44** P **P** **16 07 41.8 +1.2**
**PAHR Pah Rah Range 83.06 42** P **P** **16 07 41.5 +0.8**
PAHR IAmb IAmb 16 07 43.0
comp=Z,40nm,1.0s
**NV11 Mina Array Sit 83.11 44** P **P** **16 07 42.0 +1.0**
**KLR Kul'dur 83.13 330** *i* P **P** **16 07 41.4 +0.8**
KLR pmax pmax
comp=Z,16nm,0.9s
**KVN Kaiserville 83.49 43** P **P** **16 07 43.9 +1.0**
KVN pmax pmax
comp=Z,27nm,0.9s

KVN **Kaiserville** 83.49 43 P P 16 07 43.9 +1.0
TPNV **Topopah Spring** 83.52 46 P P 16 07 44.1 +1.0
TPNV pmax pmax
comp=Z,14nm,1.1s
TPNV **Topopah Spring** 83.52 46 P P 16 07 44.1 +1.0
TPNV **Topopah Spring** 83.52 46 P P 16 07 44.3 +1.3
baz=236,SNR=10
PDMCI **Parker Dam,Lak** 83.54 49 P P 16 07 44.6 +1.7
baz=238,SNR=25
J04D **Umpqua Nationa** 83.55 38 P P 16 07 45.1 +1.9
baz=232,SNR=20
I04A **Tendick Farm,** 83.72 38 P P 16 07 45.2 +1.5
baz=232,SNR=6.5
MOD **Modoc Plateau** 83.80 40 P P 16 07 45.0 +0.6
K05A **Summer Lake** 83.94 39 P P 16 07 46.6 +1.6
K05A IAmb IAmb 16 07 47.9
comp=Z,84nm,1.0s
J05D **Fort Rock, OR** 84.09 39 P P 16 07 47.4 +1.7
baz=232,SNR=24
W13A **Hualapai Mount** 84.14 49 P P 16 07 47.1 +0.8
Y14A **Wickenburg** 84.15 50 P P 16 07 46.6 +0.5
H04A **Detroit Lake** 84.40 37 P P 16 07 48.1 +1.0
H04A IAmb IAmb 16 07 49.0
comp=Z,41nm,1.0s
O19K **Port Alsworth** 84.40 12 P P 16 07 46.6 0.0
O19K **Port Alsworth** 84.40 12 P P 16 07 46.7 +0.1
baz=203,SNR=29
R11A **Troy Canyon, C** 84.73 45 P P 16 07 49.7 +0.7
baz=237,SNR=5.5
BRLK **Bradley Lake** 84.74 14 P P 16 07 48.8 +0.5
BRLK IAmb IAmb 16 07 49.5
comp=Z,96nm,1.0s
BRSE **Bradley Lake S** 84.75 14 P P 16 07 49.0 +0.7
baz=207,SNR=5.9
E03A **Lebam** 84.82 35 P P 16 07 50.4 +1.5
BMN **Battle Mountai** 84.84 43 P P 16 07 50.8 +1.4
BMN pmax pmax
comp=Z,20nm,0.8s
BMN **Battle Mountai** 84.84 43 P P 16 07 50.8 +1.4
MA2 **Magadan** 84.86 345 *i* P P 16 07 48.6 -0.3
MA2 pmax pmax
comp=Z,47nm,1.0s
MA2 **Magadan** 84.86 345 P P 16 07 48.9 0.0
MA2 IAmb IAmb 16 07 49.8
comp=Z,55nm,0.9s
MA2 **Magadan** 84.86 345 P P 16 07 48.7 -0.2
TUC **Tucson** 84.93 52 P P 16 07 52.0 +2.0
TUC pmax pmax
comp=Z,30nm,0.9s
TUC **Tucson** 84.93 52 P P 16 07 52.0 +2.0
TUC IAmb IAmb 16 07 53.2
comp=Z,30nm,0.9s
WVOR **Wild Horse Val** 85.11 40 P P 16 07 52.1 +1.4
WVOR pmax pmax
comp=Z,35nm,1.1s
I07A **Izee** 85.57 39 P P 16 07 54.3 +1.5
I07A IAmb IAmb 16 07 55.4
comp=Z,48nm,1.1s
HNS **HongShan** 85.58 313 ⇓P P 16 07 54.4 +1.6
HNS pmax pmax
comp=Z,27nm,1.0s
LYN **LuoYang** 85.67 310 *e*P P 16 07 54.8 +1.5
LYN S S 16 17 40.3 +3.1
LYN pmax pmax
comp=Z,20nm,1.0s
LYN pmax pmax
comp=Z,80nm,7.3s
GAMB **Gambell** 85.68 3 P P 16 07 53.6 +1.0
baz=187,SNR=7.5
SPCR **Spurr Chakacha** 85.75 13 P P 16 07 52.7 -0.5
baz=205,SNR=7.7
SPU **Mount Spurr** 85.77 13 P P 16 07 52.6 -0.6
CCUT **Cedar City** 85.79 47 P P 16 07 55.3 +1.1
U15A **North Rim** 85.94 48 P P 16 07 56.7 +1.8
U15A IAmb IAmb 16 07 57.6
comp=Z,40nm,0.8s
BJI **Beijing** 86.02 316 P P 16 07 55.8 +1.0
BJI pmax pmax
comp=Z,18nm,0.7s
D05A **Enumclaw** 86.07 35 P P 16 07 54.3 -0.6
L19K **White Mountain** 86.14 11 P P 16 07 55.7 +0.7
L19K IAmb IAmb 16 07 56.6
comp=Z,77nm,0.9s
L19K **White Mountain** 86.14 11 P P 16 07 55.5 +0.6
baz=203,SNR=17
RC01 **Rabbit Creek A** 86.18 14 P P 16 07 55.3 +0.2
RC01 IAmb IAmb 16 07 56.3
comp=Z,94nm,1.1s
RC01 **Rabbit Creek A** 86.18 14 P P 16 07 55.5 +0.3
baz=207,SNR=8.7
GYA **Guiyang** 86.23 300 ⇑P P 16 07 58.3 +1.9
GYA pmax pmax
comp=Z,14nm,1.4s
PWL **Port Wells** 86.30 15 P P 16 07 56.0 +0.2
PWL **Port Wells** 86.30 15 P P 16 07 56.0 +0.2
baz=209,SNR=12
G08A **Pilot Rock** 86.59 38 P P 16 07 59.3 +1.7
G08A IAmb IAmb 16 08 00.1
comp=Z,66nm,1.0s
GLI **Glacier Island** 86.61 15 P P 16 07 57.4 +0.2
baz=210,SNR=8.6
TTA **Tatalina** 86.63 10 P P 16 07 58.0 +0.6
TTA pmax pmax
comp=Z,35nm,1.0s
TTA **Tatalina** 86.63 10 P P 16 07 58.0 +0.6
TTA IAmb IAmb 16 07 58.8
comp=Z,35nm,1.0s
TTA **Tatalina** 86.63 10 P P 16 07 57.9 +0.6
baz=202,SNR=11
A04D **Lummi Island** 86.65 34 P P 16 07 59.6 +2.0
baz=231,SNR=5.3
EYAK **Cordova Ski Ar** 86.66 16 P P 16 07 57.7 +0.3
baz=211,SNR=5.4
B05A **Bryant** 86.68 34 P P 16 07 59.3 +1.5
baz=232,SNR=14
M22K **Willow** 86.69 13 P P 16 07 57.6 +0.2
baz=207,SNR=11
KNK **Knik Glacier** 86.76 14 P P 16 07 58.3 +0.4
baz=209,SNR=11
PMR **Palmer** 86.76 14 P P 16 07 58.0 +0.2
PMR pmax pmax
comp=Z,84nm,1.1s
PMR **Palmer** 86.76 14 P P 16 07 58.0 +0.2
PMR IAmb IAmb 16 07 58.8
comp=Z,84nm,1.1s
PMR **Palmer** 86.76 14 P P 16 07 58.1 +0.3
baz=208,SNR=14
LTY **Liberty** 86.82 36 P P 16 07 59.7 +1.1
LTY IAmb IAmb 16 08 00.6
comp=Z,46nm,1.0s
E07A **Sunnyside** 86.84 37 P P 16 08 00.2 +1.6
E07A IAmb IAmb 16 08 01.2
comp=Z,75nm,0.9s
HAWA **Hanford** 86.92 37 P P 16 08 00.5 +1.5
HAWA IAmb IAmb 16 08 01.5
comp=Z,75nm,0.9s
SNH **Sunshine Point** 87.12 17 P P 16 08 01.2 +1.5
CUT **Chulitna** 87.24 13 P P 16 08 00.3 +0.3
baz=207,SNR=16
BMO **Blue Mountains** 87.30 39 P P 16 08 01.9 +1.0
BMO pmax pmax
comp=Z,23nm,0.9s
BMO **Blue Mountains** 87.30 39 P P 16 08 01.9 +1.0
BMO IAmb IAmb 16 08 02.9
comp=Z,23nm,0.8s
BMRM **Bremner River** 87.31 16 P P 16 08 01.3 +0.7
BMRM **Bremner River** 87.31 16 P P 16 08 01.1 +0.6
baz=212,SNR=13
SCM **Sheep Creek Mo** 87.39 15 P P 16 08 01.3 +0.4
baz=210,SNR=27
KLU **Klutina** 87.43 15 P P 16 08 01.6 +0.5
baz=211,SNR=9.4
SEY **Seymchan** 87.52 348 P P 16 08 01.9 +0.5
comp=Z,34nm,0.8s,baz=148,slow=6.3,SNR=33
SEY **Seymchan** 87.52 348 *i* P P 16 08 02.4 +1.1
D08A **Wollman Farm,** 87.66 37 P P 16 08 04.0 +1.6
D08A IAmb IAmb 16 08 04.8
comp=Z,68nm,0.9s
TNA **Tin City** 87.71 5 P P 16 08 02.6 +0.5
TNA IAmb IAmb 16 08 04.4
comp=Z,19nm,0.8s
TNA **Tin City** 87.71 5 P P 16 08 02.8 +0.6
baz=191,SNR=6.3
CAST **Castle Rocks** 87.79 12 P P 16 08 01.8 -0.9
CAST **Castle Rocks** 87.79 12 P P 16 08 01.8 -0.9
baz=205,SNR=39

VRDI **Verde Repeater** 87.84 17 P P 16 08 03.9 +0.7
VRDI IAmb IAmb 16 08 04.6
comp=Z,50nm,1.0s
N25K **Chitina, Valde** 87.86 16 P P 16 08 03.9 +0.8
baz=212,SNR=17
GLB **Gilahina Butte** 87.92 16 P P 16 08 04.1 +0.7
GLB IAmb IAmb 16 08 04.7
comp=Z,47nm,0.7s
WAT6 **Susitna Watana** 87.95 14 P P 16 08 03.8 +0.2
baz=209,SNR=18
XAN **Xi'an** 87.98 308 P P 16 08 05.5 +1.2
XAN sP sP 16 11 10.9 +1.3
XAN pmax pmax
comp=Z,43nm,1.0s
F10A **Beach Ranch, E** 87.98 38 P P 16 08 04.7 +0.7
F10A IAmb IAmb 16 08 05.8
comp=Z,60nm,0.8s
CHUM **Lake Minchumin** 88.17 12 P P 16 08 03.9 -0.4
baz=205,SNR=14
TRF **Thorofare Moun** 88.17 13 P P 16 08 04.4 -0.3
TRF **Thorofare Moun** 88.17 13 P P 16 08 04.4 -0.3
baz=207,SNR=32
XLT **XiLinHaoTe** 88.18 319 ⇓*i* P P 16 08 05.6 +0.6
XLT pmax pmax
comp=Z,19nm,1.0s
XLT pmax pmax
comp=Z,160nm,4.0s
GCSA **Galena City Sc** 88.19 9 P P 16 08 05.3 +0.8
baz=201,SNR=10
PLID **Pearl Lake** 88.19 39 P P 16 08 06.4 +1.1
PLID IAmb IAmb 16 08 06.7
comp=Z,21nm,0.9s
B08A **Colville Reser** 88.20 35 P P 16 08 05.5 +0.6
B08A IAmb IAmb 16 08 06.5
comp=Z,49nm,0.8s
ZEA **Zeya** 88.28 332 *e*P P 16 08 06.4 +1.3
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=Z,20nm,1.3s
HLID **Hailey** 88.31 41 P P 16 08 07.1 +1.3
HLID IAmb IAmb 16 08 08.3
comp=Z,29nm,0.8s
HLID **Hailey** 88.31 41 P P 16 08 07.2 +1.3
baz=237,SNR=32
RND **Reindeer** 88.43 13 P P 16 08 06.0 +0.3
RND pmax pmax
comp=Z,120nm,0.8s
RND **Reindeer** 88.43 13 P P 16 08 06.0 +0.3
DHY **Denali Highway** 88.46 14 P P 16 08 06.1 +0.1
baz=210,SNR=6.8
SRU **San Rafael Swe** 88.50 47 P P 16 08 07.9 +1.1
SRU pmax pmax
comp=Z,44nm,0.9s
SRU **San Rafael Swe** 88.50 47 P P 16 08 07.9 +1.1
SRU IAmb IAmb 16 08 09.0
comp=Z,44nm,0.9s
LENM **Lemitar** 88.62 52 P P 16 08 08.2 +0.8
MNTX **Cornudas Mount** 88.69 55 P P 16 08 09.0 +1.3
MNTX IAmb IAmb 16 08 10.1
comp=Z,33nm,0.8s
MCK **McKinley** 88.70 13 P P 16 08 07.0 +0.1
MCK pmax pmax
comp=Z,75nm,1.1s
MCK **McKinley** 88.70 13 P P 16 08 07.0 +0.1
MCK **McKinley** 88.70 13 P P 16 08 06.7 -0.2
baz=208,SNR=16
KMI **Kunming** 88.84 298 ⇑P P 16 08 12.0 +3.3
KMI pP pP 16 10 10.5 -5.1
KMI pmax pmax
comp=Z,14nm,0.9s
TXAR **Lajitas Array** 88.97 58 P P 16 08 10.7 +1.6
comp=Z,19nm,0.9s,baz=215,slow=6.4,SNR=37
TXAR PKKPbc **PKKPbc** 16 25 44.0 -0.3
comp=Z,0.3nm,0.5s,baz=100,slow=3.0,SNR=4.5
YUK3 **Moose Creek** 89.10 17 P P 16 08 10.0 +1.0
baz=216,SNR=27
HIA **Hailar** 89.13 325 *i* P P 16 08 09.9 +0.6
HIA pmax pmax
comp=Z,11nm,1.2s
HYT **Haines Junctio** 89.20 19 P P 16 08 10.5 +1.1
HYT IAmb IAmb 16 08 11.3
comp=Z,18nm,1.0s
PLCA **Paso Flores** 89.21 134 P P 16 08 11.6 +1.5
comp=Z,6.9nm,0.9s,baz=242,slow=5.5,SNR=11
PLCA **Paso Flores** 89.21 134 *e*P P 16 08 12.2 +2.1
PLCA pmax pmax
comp=Z,7.0nm,0.9s
PLCA **Paso Flores** 89.21 134 P P 16 08 11.2 +1.1
ANMO **Albuquerque** 89.36 52 P P 16 08 11.1 +0.2
ANMO pmax pmax
comp=Z,20nm,1.0s
ANMO **Albuquerque** 89.36 52 P P 16 08 11.1 +0.2
ANMO IAmb IAmb 16 08 13.0
comp=Z,20nm,0.9s
CMAR **Chiang Mai Arr** 89.36 290 P P 16 08 12.5 +1.5
comp=Z,15nm,0.9s,baz=133,slow=3.7,SNR=9.4
CMAR PKKPbc **PKKPbc** 16 25 43.7 +0.9
comp=Z,1.1nm,0.6s,baz=279,slow=3.9,SNR=9.9
CMAR **Chiang Mai Arr** 89.36 290 *e*P P 16 08 13.4 +2.4
CMAR pmax pmax
comp=Z,15nm,0.9s
L26K **Log Cabin Wild** 89.37 16 P P 16 08 10.7 +0.6
baz=213,SNR=8.6
I21K **Tanana** 89.41 11 P P 16 08 10.1 0.0
baz=205,SNR=18
HHC **Hu-ho-hao-te** 89.44 315 *e*P P 16 08 12.3 +1.3
HHC pmax pmax
comp=Z,28nm,0.8s
HHC pmax pmax
comp=Z,140nm,5.2s
BVCY **Beaver Creek** 89.51 17 P P 16 08 12.0 +1.3
baz=215,SNR=12
RIDG **Independent Ri** 89.62 15 P P 16 08 11.9 +0.7
baz=212,SNR=5.6
HDA **Harding Lake** 89.72 13 P P 16 08 11.4 -0.2
baz=210,SNR=11
BCAR **Beaver Creek A** 89.80 16 P P 16 08 12.0 -0.1
IMAR **Indian Mountai** 89.84 10 P P 16 08 12.0 -0.1
I23K **Minto, Yukon-K** 89.87 12 P P 16 08 11.7 -0.5
baz=208,SNR=6.6
TCOL **CIGO, UAF Yank** 89.93 13 P P 16 08 12.2 -0.4
baz=209,SNR=15
COLA **College** 89.94 13 P P 16 08 12.1 -0.4
COLA pmax pmax
comp=Z,50nm,0.8s
COLA **College** 89.94 13 P P 16 08 12.1 -0.4
SCRK **Sand Creek** 90.02 15 P P 16 08 13.2 +0.1
SCRK IAmb IAmb 16 08 14.5
comp=Z,24nm,1.0s
SCRK **Sand Creek** 90.02 15 P P 16 08 13.1 0.0
baz=213,SNR=7.2
ILAR **Eielson Array** 90.05 13 P P 16 08 12.5 -0.6
comp=Z,11nm,0.8s,baz=220,slow=4.2,SNR=44
ILAR PKiKP **PKiKP** 16 13 04.0 -0.7
comp=Z,0.4nm,0.4s,baz=279,slow=2.8,SNR=5.0
ILAR **Eielson Array** 90.05 13 P P 16 08 12.8 -0.3
ILAR **Eielson Array** 90.05 13 P P 16 08 12.8 -0.3
PZH **PanZhiHua** 90.23 298 P P 16 08 16.5 +1.5
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,120nm,5.3s
POKR **Poker Plat Res** 90.23 13 P P 16 08 13.5 -0.5
baz=209,SNR=9.9
BILL **Bilibino** 90.37 355 *d* *i* P P 16 08 14.6 +0.1
BILL *e* 16 12 01.7
BILL pmax pmax
comp=Z,39nm,0.8s
BILL **Bilibino** 90.37 355 P P 16 08 14.8 +0.3
BILL IAmb IAmb 16 08 15.9
comp=Z,36nm,0.8s
RDOG **Red Dog Mine** 90.59 6 P P 16 08 16.3 +0.8
baz=195,SNR=8.3
M30M **Minto, Yukon** 90.78 18 P P 16 08 17.2 +0.6
baz=219,SNR=13
PDAR **Pinedale Array** 90.94 44 P P 16 08 17.8 -0.3
comp=Z,12nm,0.9s,baz=197,slow=2.8,SNR=20
PDAR PP **PP** 16 12 03.4 -2.2
comp=Z,1.1nm,0.9s,baz=251,slow=4.5,SNR=3.9
PDAR **Pinedale Array** 90.94 44 P P 16 08 18.6 +0.5
PRP **Porcupine Dome** 90.99 13 P P 16 08 17.5 -0.1
baz=211,SNR=6.0
BOZ **Bozeman (W)** 91.07 41 P P 16 08 19.3 +0.8
baz=239,SNR=13
H17A **Grant Village** 91.11 42 P P 16 08 20.6 +1.8

baz=240,SNR=5.6
DAWY **Dawson** 91.24 16 P P 16 08 19.1 +0.4
DAWY IAmb IAmb 16 08 20.1
comp=Z,18nm,0.8s
DAWY **Dawson** 91.24 16 P P 16 08 19.1 +0.4
baz=217,SNR=11
COLD **Coldfoot** 91.57 11 P P 16 08 21.2 +1.1
baz=207,SNR=7.4
ISCO **Idaho Springs** 92.17 48 P P 16 08 24.3 +0.4
ISCO pmax pmax
comp=Z,4.0nm,0.8s
ISCO **Idaho Springs** 92.17 48 P P 16 08 24.3 +0.4
LZH **Lanzhou** 92.62 308 *e*P P 16 08 27.8 +2.0
LZH pmax pmax
comp=Z,39nm,0.9s
YAK **Yakutsk** 92.99 339 *i* P P 16 08 25.8 -0.8
YAK pmax pmax
comp=Z,65nm,0.8s
ULN **Ulaanbaatar** 95.61 320 *i* P P 16 08 38.6 -0.6
ULN pmax pmax
comp=Z,5.0nm,1.0s
SONM **Songino Array** 96.00 319 P P 16 08 40.0 -0.9
comp=Z,0.7nm,0.4s,baz=132,slow=4.4,SNR=4.5
SONM **Songino Array** 96.00 319 P P 16 08 40.0 -0.9
INK **Inuvik** 96.04 16 P P 16 08 39.9 -0.5
comp=Z,5.1nm,0.6s,baz=237,slow=2.3,SNR=10
INK **Inuvik** 96.04 16 P P 16 08 40.1 -0.2
INK pmax pmax
comp=Z,11nm,1.1s
INK **Inuvik** 96.04 16 P P 16 08 40.1 -0.2
INK IAmb IAmb 16 08 40.9
comp=Z,11nm,1.1s
GTA **Gaotai** 96.88 310 *e*P P 16 08 45.4 +0.4
GTA pmax pmax
comp=Z,7.0nm,1.2s
YKA **Yellowknife Ar** 98.41 25 P Pdif 16 08 50.6 -0.4
comp=Z,2.3nm,0.7s,baz=240,slow=4.6,SNR=7.9
YKA PP **PP** 16 12 56.2 -5.5
comp=Z,1.7nm,1.1s,baz=241,slow=7.2,SNR=4.5
YKA PKiKP **PKiKP** 16 13 18.2 -0.9
comp=Z,0.4nm,0.6s,baz=264,slow=1.5,SNR=4.2
YKA PKKPbc **PKKPbc** 16 25 18.6 -2.2
comp=Z,0.2nm,0.4s,baz=45,slow=2.5,SNR=6.0
TIXI **Tiksi** 99.83 345 *i* P **Pdif** 16 08 58.2 +1.0
TIXI pmax pmax
comp=Z,5.0nm,1.2s
WMQ **Urumqi** 106.89 311 *e*P **Pdif** 16 09 30.6 +1.3
WMQ pmax pmax
comp=Z,340nm,4.9s
RES **Resolute Bay** 109.58 16 PKiKP **PKiKP** 16 13 38.9 -0.5
comp=Z,2.2nm,0.7s,baz=293,slow=3.8,SNR=4.9
ZALV **Zalesovo Beam** 110.80 321 PKiKP **PKiKP** 16 13 41.5 -0.8
comp=Z,3.1nm,0.5s,baz=135,slow=2.1,SNR=10
MKAR **Makanchi Array** 111.24 313 PKiKP **PKiKP** 16 13 42.8 -0.7
comp=Z,2.2nm,0.5s,baz=236,slow=1.4,SNR=22
MKAR PKKPbc **PKKPbc** 16 24 41.8 -0.1
comp=Z,1.2nm,0.7s,baz=267,slow=4.3,SNR=7.8
MKAR PKKPab **PKKPab** 16 24 53.4 +1.3
comp=Z,0.6nm,0.7s,baz=289,slow=4.0,SNR=3.9
KURK **Kurchatov** 114.17 317 *i* PKiKP PKPdf 16 13 47.6 -1.2
KSH **Kashi** 114.64 305 PKP PKPdf 16 13 49.5 -0.8
AAK **Ala-Archa** 116.16 308 PKP **PKPdf** 16 13 52.5 -0.7
comp=Z,4.0nm,0.9s,baz=150,slow=8.3,SNR=3.9
AAK **Ala-Archa** 116.16 308 *i* PKiKP **PKPdf** 16 13 52.8 -0.4
FRB **Frobisher Bay** 118.71 28 PKP **PKPdf** 16 13 56.3 -0.8
comp=Z,7.0nm,0.7s,baz=321,slow=2.3,SNR=12
NEEM **North Greenlan** 119.28 11 *i* P **PKPdf** 16 13 56.6 -1.8
BRVK **Borovoye** 119.41 319 *i* PKiKP **PKPdf** 16 13 57.0 -1.8
UPNV **Upernavik** 120.46 17 *i* P **PKPdf** 16 13 59.0 -1.4
NUUG **Nuugaatsiaq** 121.83 18 *i* P **PKPdf** 16 14 01.7 -1.3
SUR **Sutherland** 122.59 200 PKP **PKPdf** 16 14 05.9 -0.1
comp=Z,8nm,1.1s,baz=134,slow=3.5,SNR=5.0
SPA0 **Spitsbergen Ar** 123.25 356 *e*PKPdf **PKPdf** 16 14 05.8 +0.2
SPITS **Spitsbergen Ar** 123.25 356 PKP **PKPdf** 16 14 05.6 0.0
comp=Z,25nm,0.6s,baz=67,slow=5.2,SNR=29
SPB2 **Spitsbergen Ar** 123.25 356 PKPdf **PKiKP** 16 14 05.9 +0.1
BOSA **Boshof** 124.35 206 PKP **PKiKP** 16 14 10.1 +0.4
comp=Z,10nm,1.2s,baz=146,slow=3.6,SNR=3.2
BOSA PKKPbc **PKKPbc** 16 23 55.4 -1.0
comp=Z,5.2nm,0.8s,baz=313,slow=4.8,SNR=4.5
SFJD **Kangerlussuaq** 124.81 22 PKP **PKPdf** 16 14 08.3 -0.4
comp=Z,4.1nm,0.4s,baz=161,slow=2.0,SNR=9.1
ARU **Arti** 125.65 325 *i* PKiKP **PKPdf** 16 14 10.6 -0.1
ARU pmax pmax
comp=Z,21nm,0.6s
DBG **Daneborg** 126.46 7 *i* P **PKPdf** 16 14 11.0 -0.8
DY2G **Dye2** 126.56 21 *i* P **PKPdf** 16 14 11.3 -1.2
ICESG **Greenland Ices** 126.99 17 *i* P **PKPdf** 16 14 11.7 -1.7
AKTO **Aktyubinsk** 127.27 317 PKP **PKPdf** 16 14 14.2 +0.1
comp=Z,7.9nm,0.8s,baz=76,slow=5.8,SNR=9.1
LVZ **Lovozero** 129.45 344 *i* PKiKP **PKPdf** 16 14 17.7 0.0
LVZ pmax pmax
comp=Z,11nm,0.7s
HAMF **Hanmerfest** 129.46 350 *e*PKPdf **PKPdf** 16 14 18.0 +0.4
ISOG **Isortoq, Green** 129.51 20 *i* P **PKPdf** 16 14 16.8 -1.0
KIRV **Kirov** 129.57 329 PKP **PKPdf** 16 14 18.0 -0.1
comp=Z,30nm,0.6s,baz=231,slow=0.5,SNR=7.9
KIRV SKPbc SKPab 16 16 46.3 +0.8
comp=Z,48nm,0.7s,baz=170,slow=0.4,SNR=20
KIRV **Kirov** 129.57 329 PKiKP **PKPdf** 16 14 18.0 -0.1
SCO **Scoresbysund** 129.69 10 *i* P **PKPdf** 16 14 18.0 0.0
MATP **Matopo** 129.80 215 SKPbc SKPab 16 16 48.1 +0.1
comp=Z,46nm,1.1s,baz=152,slow=8.7,SNR=31
PRGR **Permogore** 129.80 334 *e*PKiKP **PKPdf** 16 14 17.7 -0.7
PRGR *e* 16 16 35.7
PRGR pmax pmax
comp=Z,23nm,0.8s
ARA0 **ARCESS Array S** 130.12 349 *e*PKPdf **PKPdf** 16 14 19.1 +0.2
ARCES **ARCESS Array B** 130.12 349 PKhKP PKPpre 16 14 06.2
comp=Z,1.0nm,0.4s,baz=20,slow=0.7,SNR=8.1
ARCES PKP **PKPdf** 16 14 18.8 -0.1
comp=Z,16nm,0.7s,baz=13,slow=1.1,SNR=25
ARCES SKPbc **SKPab** 16 16 48.1 +0.4
comp=Z,27nm,1.0s,baz=35,slow=4.4,SNR=13
ARCES **ARCESS Array B** 130.12 349 PKiKP **PKPdf** 16 14 19.0 +0.1
ARCES **ARCESS Array B** 130.12 349 PKiPdf **PKPdf** 16 14 19.0 +0.1
KTK1 **Kautokeino** 130.97 349 *e*PKPdf **PKPdf** 16 14 20.1 -0.4
KLMR **Klimovskoe** 132.68 335 *e*PKiKP **PKPdf** 16 14 16.6 -7.3
KLMR pmax pmax
comp=Z,21nm,1.0s
KLMR **Klimovskoe** 132.68 335 *e*PKPdf **PKPdf** 16 14 16.6 -7.3
KLMR AMP 16 14 25.5
comp=Z,21nm,1.0s
KLMR *e*PP **pPKPdf** 16 16 44.3 +4.2
STEI **Steigen** 133.15 352 *e*PKPdf **PKiKP** 16 14 25.3 -0.6
LSZ **Lusaka** 134.13 219 SKPbc **SKPbc** 16 17 04.5 +1.6
comp=Z,8.3nm,0.8s,baz=127,slow=3.4,SNR=8.9
KONS **Konsvik** 134.77 353 *e*PKPdf **PKPdf** 16 14 28.3 +0.6
TSUM **Tsumeb** 135.82 203 SKPbc **SKPbc** 16 17 09.3 +1.1
comp=Z,9.8nm,0.9s,baz=131,slow=5.8,SNR=6.1
FINES **FINESS Array B** 136.79 342 PKhKP PKPpre 16 14 19.1
comp=Z,2.4nm,0.5s,baz=33,slow=3.7,SNR=9.9
FINES PKP **PKPdf** 16 14 31.3 -0.2
comp=Z,8.7nm,0.6s,baz=101,slow=2.8,SNR=13
FINES SKPbc **SKPbc** 16 17 10.0 +0.6
comp=Z,4.9nm,0.8s,baz=64,slow=4.4,SNR=4.8
OBN **Obninsk** 137.40 330 SKPbc **SKPbc** 16 17 12.1 +0.8
comp=Z,2.1nm,0.4s,baz=54,slow=13,SNR=3.1
OBN **Obninsk** 137.40 330 ⇑*e*PKiKP **PKPdf** 16 14 31.0 -1.8
OBN *e* 16 17 22.1
OBN pmax pmax
comp=Z,15nm,1.0s
KMBO **Kilima Mbogo** 137.48 242 SKP 16 17 15.5
comp=Z,11nm,1.1s,baz=33,slow=4.9,SNR=8.2
VORR **Voronezh** 137.96 325 *e*PKiKP **PKPdf** 16 14 34.9 +0.9
VORR pmax pmax
comp=Z,80nm,0.4s
GNI **Garni** 138.53 306 PKP **PKPdf** 16 14 35.8 +0.1
comp=Z,12nm,0.9s,baz=345,slow=12,SNR=4.3
KBZ **Khabaz** 138.92 312 *i* PKiKP **PKPdf** 16 14 36.4 +0.4
KIV **Kislovodsk** 139.00 312 *e*PKiKP **PKPdf** 16 14 36.4 +0.1
KIV pmax pmax
comp=Z,12nm,1.1s
SHA1 **Shidzhatmaz** 139.09 312 *i* PKiKP **PKPdf** 16 14 36.7 0.0
DOMB **Dombas** 139.54 354 *e*PKPdf **PKPdf** 16 14 29.8 -6.9
AKN **Aaknes** 139.59 355 *e*PKPdf **PKPdf** 16 14 31.1 -5.7
NB2 **NORSAR Subarra** 140.27 352 PKP **PKPdf** 16 14 31.1 -6.9
comp=Z,1.8nm,0.4s,baz=10,slow=3.2
NB2 **NORSAR Subarra** 140.27 352 PKPab **PKPdf** 16 14 31.1 -6.9
baz=10,slow=3.2
NOA **NORSAR Array B** 140.27 352 PKhKP PKPpre 16 14 30.7
comp=Z,3.4nm,0.6s,baz=6.1,slow=1.3,SNR=18
NOA PKP **PKiKP** 16 14 39.8 -0.9
comp=Z,5.7nm,0.7s,baz=14,slow=3.9,SNR=5.7
NC602 **NORSAR Array S** 140.52 352 *e*PKPdf **PKPdf** 16 14 31.9 -6.6
HFS **Hagfors** 140.77 350 PKhKP PKPpre 16 14 32.4

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,0.4s,baz=90,slow=1.3,SNR=88 | | | | | | | | |
| SKAR | **Skarslia** | 140.95 | 354 | *e* | PKPdf | **PKPdf** | 16 14 33.8 | -5.5 | |
| OSL | **Oslo** | 141.40 | 352 | *e* | PKPdf | **PKPdf** | 16 14 34.5 | -5.5 | |
| IDID | **Didziasalis** | 141.40 | 336 | *e* | P | **PKPdf** | 16 14 36.1 | -4.0 | |
| BER | **Bergen** | 141.48 | 356 | *e* | PKPdf | **PKPdf** | 16 14 36.4 | -3.7 | |
| IIGN | **Ignalina** | 141.57 | 337 | *e* | P | **PKPdf** | 16 14 37.1 | -3.4 | |
| NACGM | **Naroch** | 141.70 | 336 | *i* | PKP | **PKPdf** | 16 14 35.9 | -4.8 | |
| KONO | **Kongsberg** | 141.82 | 353 | *e* | PKPdf | **PKPdf** | 16 14 37.0 | -3.8 | |
| ODD1 | **Odda** | 141.86 | 355 | *e* | PKPdf | **PKPdf** | 16 14 37.7 | -3.2 | |
| ANN | **Anapa** | 142.19 | 316 | *c* | *i* PKIKP | **PKiK** | 16 14 45.1 | 0.0 | |
| ANN | | | | | pmax | pmax | | | |
| | comp=Z,198nm,1.1s | | | | | | | | |
| PABE | **Paberze** | 142.25 | 338 | | *e*P | **PKPdf** | 16 14 38.2 | -3.4 | |
| BLS5 | **Blasjo** | 142.36 | 355 | | *e*PKPdf | **PKPdf** | 16 14 39.1 | -2.6 | |
| MBAR | **Mbarara** | 143.00 | 237 | | PKP | **PKPdf** | 16 14 43.0 | -1.5 | |
| | comp=Z,8.1nm,0.5s,baz=100,slow=3.1,SNR=8.4 | | | | | | | | |
| MBAR | **Mbarara** | 143.00 | 237 | | PKIKP | **PKPdf** | 16 14 43.0 | -1.5 | |
| HOMB | **Homborsund** | 143.30 | 353 | | *e*PKPab | PKPbc | 16 14 42.2 | +0.2 | |
| SNART | **Snartemo** | 143.36 | 354 | | *e*PKPbc | PKPbc | 16 14 42.1 | -0.1 | |
| AKASG | **Malin Array Be** | 143.63 | 329 | | PKP | PKPbc | 16 14 42.5 | -0.8 | |
| | comp=Z,19nm,0.3s,baz=44,slow=4.2,SNR=104 | | | | | | | | |
| AKASG | | | | | SKPbc | **SKiK** | **16 17 28.6** | **+0.2** | |
| | comp=Z,2.3nm,0.7s,baz=52,slow=2.5,SNR=6.1 | | | | | | | | |
| AKASG | **Malin Array Be** | 143.63 | 329 | | PKIKP | PKPbc | 16 14 42.6 | -0.6 | |
| AKASG | **Malin Array Be** | 143.63 | 329 | | | PKPbc | 16 14 42.6 | -0.7 | |
| AKBB | **Malin Array Si** | 143.63 | 329 | | PKIKP | PKPbc | 16 14 42.8 | -0.4 | |
| AKBB | **Malin Array Si** | 143.63 | 329 | | | PKPbc | 16 14 42.8 | -0.5 | |
| SUW | **Suwalki** | 143.72 | 337 | | *e*PKP | PKPbc | 16 14 43.2 | -0.2 | |
| SUW | **Suwalki** | 143.72 | 337 | | *e*P | PKPbc | 16 14 43.3 | -0.1 | |
| DEL | **Delary** | 144.18 | 347 | | *e*P | PKPbc | 16 14 44.7 | 0.0 | |
| MUD | **Monsted U'grnd** | 144.99 | 352 | | *i* P | **PKPdf** | **16 14 46.3** | **0.0** | |
| DRUM | **Mains of Drumt** | 145.04 | 3 | | *e*P | **PKPdf** | **16 14 46.7** | **+0.3** | |
| BSD | **Bornholm Skovb** | 145.21 | 346 | | *i* P | **PKPbc** | **16 14 47.4** | **-0.5** | |
| BSD | **Bornholm Skovb** | 145.21 | 346 | | *e*P | **PKPbc** | **16 14 48.0** | **+0.1** | |
| BNN | **Bunyan** | 145.51 | 307 | | PKPbc | **PKPab** | **16 14 50.4** | **-0.7** | |
| BZK | **Bozkurt** | 145.65 | 313 | | ⇓P | **PKPbc** | **16 14 50.4** | **+0.8** | |
| SORM | **Soroca** | 145.73 | 326 | | ⇓P | **PKPbc** | **16 14 49.8** | **+0.2** | |
| SORM | **Soroca** | 145.73 | 326 | | ⇓PKP2 | **PKPbc** | **16 14 49.8** | **+0.2** | |
| PURM | **Purcari** | 145.90 | 323 | | ⇑P | **PKPbc** | **16 14 50.8** | **+0.6** | |
| ASF | **Jabal al Asfar** | 146.24 | 295 | | PKPbc | **PKPbc** | **16 14 52.0** | **+0.3** | |
| | comp=Z,26nm,0.8s,baz=132,slow=2.0,SNR=11 | | | | | | | | |
| ASF | **Jabal al Asfar** | 146.24 | 295 | | PKP2 | **PKPbc** | **16 14 52.0** | **+0.3** | |
| MILM | **Milestii Mici** | 146.25 | 324 | | ⇓P | **PKPbc** | **16 14 51.5** | **+0.4** | |
| MILM | **Milestii Mici** | 146.25 | 324 | | ⇓PKP2 | **PKPbc** | **16 14 51.5** | **+0.4** | |
| GKP | **Gorka Klasztor** | 146.26 | 342 | | *e*PKPbc | **PKPbc** | **16 14 51.2** | **+0.3** | |
| GKP | **Gorka Klasztor** | 146.26 | 342 | | *e*P | **PKPbc** | **16 14 50.5** | **-0.4** | |
| BEL | **Belsk** | 146.33 | 337 | | *e*PKPbc | **PKPbc** | **16 14 51.8** | **+0.6** | |
| DRBR | **Darabani** | 146.56 | 328 | | ⇓P | **PKPbc** | **16 14 51.9** | **-0.1** | |
| EKA | **Eskdalemuir Ar** | 146.58 | 4 | | PKPbc | **PKPbc** | **16 14 51.4** | **-0.3** | |
| | comp=Z,21nm,0.6s,baz=7.5,slow=3.6,SNR=28 | | | | | | | | |
| ESK | **Eskdalemuir** | 146.59 | 4 | | *e*P | **PKPbc** | **16 14 51.6** | **-0.2** | |
| NEWG | **New Galloway** | 146.71 | 5 | | *e*P | **PKPbc** | **16 14 52.0** | **-0.1** | |
| BRTR | **Keskin Array B** | 146.80 | 310 | | PKPbc | **PKPbc** | **16 14 53.2** | **+0.1** | |
| | comp=Z,16nm,0.6s,baz=142,slow=5.6,SNR=34 | | | | | | | | |
| BRTR | **Keskin Array B** | 146.80 | 310 | | | **PKPbc** | **16 14 53.0** | **-0.1** | |
| VASR | **Vaslui** | 146.97 | 325 | | ⇓P | **PKPbc** | **16 14 53.7** | **+0.6** | |
| EDMD | **Edmundbyers** | 147.14 | 3 | | *e*P | **PKPbc** | **16 14 53.4** | **+0.1** | |
| BSEG | **Bad Segeberg** | 147.25 | 349 | | *e*PKPbc | **PKPbc** | **16 14 54.4** | **+0.8** | |
| | baz=21,slow=2.3 | | | | | | | | |
| BSEG | | | | | *e*PKPab | **PKPab** | **16 14 58.1** | **+0.8** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| TLCR | | 147.28 | 322 | | ⇓P | **PKPbc** | **16 14 54.4** | **+0.5** | |
| TLCR | | 147.28 | 322 | | ⇓PKP2 | **PKPbc** | **16 14 54.4** | **+0.5** | |
| VLDR | **Vladesti** | 147.31 | 323 | | ⇓P | **PKiK** | **16 14 54.9** | **-0.7** | |
| PRAR | **RASCA** | 147.32 | 327 | | ⇓P | **PKPbc** | **16 14 54.4** | **+0.4** | |
| KWP | **Kalwaria Pacla** | 147.33 | 335 | | *e*PKPbc | **PKPbc** | **16 14 54.6** | **+0.6** | |
| MMAI | **Mount Meron Ar** | 147.35 | 297 | | PKPbc | **PKPbc** | **16 14 55.2** | **+0.6** | |
| | comp=Z,15nm,0.4s,baz=69,slow=9.3,SNR=44 | | | | | | | | |
| HLG | **Helgoland** | 147.37 | 352 | | *e*PKPbc | **PKiK** | **16 14 54.9** | **-0.5** | |
| | baz=21,slow=2.3 | | | | | | | | |
| VARL | **Varlezi** | 147.40 | 324 | | ⇓P | **PKiK** | **16 14 55.2** | **-0.6** | |
| SCTR | **Scanteiesti** | 147.46 | 323 | | ⇑P | **PKiK** | **16 14 55.5** | **-0.4** | |
| JURR | **Jurilovca** | 147.49 | 321 | | ⇑P | **PKPbc** | **16 14 54.6** | **+0.1** | |
| GHRR | | 147.54 | 324 | | ⇑P | **PKiK** | **16 14 55.5** | **-0.6** | |
| GDLE | **Glaisdale, N Y** | 147.59 | 2 | | *e*P | **PKPbc** | **16 14 54.7** | **+0.3** | |
| SLCR | **Slobozia Conac** | 147.63 | 323 | | ⇓P | **PKiK** | **16 14 55.7** | **-0.5** | |
| BURAR | **Bucovina Array** | 147.65 | 328 | | ⇓P | **PKiK** | **16 14 56.3** | **-0.1** | |
| BURAR | **Bucovina Array** | 147.65 | 328 | | ⇓PKP2 | **PKiK** | **16 14 56.3** | **-0.1** | |
| BURAR | **Bucovina Array** | 147.65 | 328 | | | **PKiK** | **16 14 56.0** | **-0.4** | |
| TESR | **Tescani** | 147.66 | 325 | | ⇑P | **PKPbc** | **16 14 55.4** | **+0.5** | |
| IZVR | **Izvoarele** | 147.66 | 323 | | ⇑P | **PKiK** | **16 14 55.9** | **-0.4** | |
| CFR | **Carcaliu** | 147.68 | 322 | | ⇑P | **PKPbc** | **16 14 55.2** | **+0.3** | |
| CFR | **Carcaliu** | 147.68 | 322 | | ⇑PKP2 | **PKPbc** | **16 14 55.2** | **+0.3** | |
| TPGR | **Topolog** | 147.71 | 322 | | ⇓P | **PKiK** | **16 14 55.9** | **-0.6** | |
| PANC | **Panciu** | 147.80 | 324 | | ⇑P | **PKiK** | **16 14 56.0** | **-0.6** | |
| H07S1 | **FLORES T-PHASB** | 147.85 | 50 | | *e*PKP | **PKPbc** | **16 14 55.2** | **-0.4** | |
| RUE | **Ruedersdorf** | 147.90 | 345 | | *e*P | **PKPbc** | **16 14 55.9** | **+0.7** | |
| RUE | **Ruedersdorf** | 147.90 | 345 | | *e*PKPbc | **PKPbc** | **16 14 56.0** | **+0.7** | |
| | baz=21,slow=2.3 | | | | | | | | |
| ODBI | **Odobesti** | 147.92 | 324 | | ⇑P | **PKiK** | **16 14 57.3** | **+0.4** | |
| TIRR | **Tirgusor** | 147.94 | 321 | | ⇓P | **PKiK** | **16 14 55.9** | **+0.3** | |
| TIRR | **Tirgusor** | 147.94 | 321 | | PKP2 | **PKPbc** | **16 14 56.2** | **+0.6** | |
| TIRR | **Tirgusor** | 147.94 | 321 | | | **PKPbc** | **16 14 56.2** | **+0.6** | |
| OJC | **Ojcow** | 148.02 | 336 | | *e*PKPbc | **PKPbc** | **16 14 55.9** | **+0.2** | |
| OJC | **Ojcow** | 148.02 | 336 | | PKP2 | **PKPbc** | **16 14 56.2** | **+0.6** | |
| OJC | **Ojcow** | 148.02 | 336 | | | **PKPbc** | **16 14 56.2** | **+0.6** | |
| VRI | **Vrincioaia** | 148.03 | 324 | | ⇓P | **PKPbc** | **16 14 56.1** | **+0.2** | |
| VRI | **Vrincioaia** | 148.03 | 324 | | ⇓PKP2 | **PKPbc** | **16 14 56.1** | **+0.2** | |
| HARR | **Harsova** | 148.09 | 322 | | ⇑P | **PKPbc** | **16 14 56.6** | **+0.6** | |
| HARR | **Harsova** | 148.09 | 322 | | ⇑PKP2 | **PKPbc** | **16 14 56.6** | **+0.6** | |
| PLOR | **Plostina** | 148.09 | 324 | | ⇑P | **PKPbc** | **16 14 56.0** | **0.0** | |
| PLOR | **Plostina** | 148.09 | 324 | | ⇑PKHKP | PKPpre | 16 14 56.0 | | |
| MFTR | **Murfatlar** | 148.10 | 321 | | ⇑P | **PKiK** | **16 14 56.7** | **-0.5** | |
| STHS | **Stebnicka Huta** | 148.10 | 334 | | *e*PKP2 | **PKPbc** | **16 14 56.1** | **+0.2** | |
| STHS | **Stebnicka Huta** | 148.10 | 334 | | *e*PKP | **PKPbc** | **16 14 56.1** | **+0.2** | |
| TLBR | **Topalu** | 148.10 | 321 | | ⇓P | **PKiK** | **16 14 56.9** | **-0.4** | |
| MANR | **Mangalia** | 148.20 | 320 | | ⇑P | **PKiK** | **16 14 57.4** | **-0.1** | |
| MDUB | **Mudurnu** | 148.21 | 312 | | | **PKiK** | **16 14 57.2** | **-0.5** | |
| EIL | **Elat** | 148.21 | 291 | | PKPbc | **PKiK** | **16 14 57.5** | **-0.5** | |
| | comp=Z,21nm,0.7s,baz=48,slow=0.6,SNR=12 | | | | | | | | |
| BISRR | **Bisoca** | 148.25 | 324 | | ⇑P | **PKPbc** | **16 14 56.6** | **+0.1** | |
| UZH | **Uzhgorod** | 148.27 | 332 | | ⇑PKP2 | **PKiK** | **16 14 57.0** | **-0.5** | |
| OZUR | | 148.39 | 326 | | ⇓P | **PKPbc** | **16 14 57.3** | **+0.5** | |
| CRVS | **Cervenica-Dubn** | 148.41 | 333 | | *e*PKP2 | **PKiK** | **16 14 57.7** | **-0.1** | |
| CRVS | **Cervenica-Dubn** | 148.41 | 333 | | *e*PKP | **PKiK** | **16 14 57.7** | **-0.1** | |
| BMR | **Baia Mare** | 148.43 | 330 | | ⇓P | **PKiK** | **16 14 57.5** | **-0.4** | |
| BMR | **Baia Mare** | 148.43 | 330 | | ⇓PKP2 | **PKiK** | **16 14 57.5** | **-0.4** | |
| ARCR | **ARCALIA** | 148.44 | 328 | | ⇑P | **PKiK** | **16 14 57.9** | **-0.1** | |
| NIE | **Niedzica** | 148.47 | 335 | | *e*PKPbc | **PKiK** | **16 14 58.3** | **+0.4** | |
| TRPA | **Tarpa** | 148.53 | 331 | | ⇓P | **PKiK** | **16 14 57.6** | **-0.4** | |
| NEHR | **Nehoiu** | 148.55 | 324 | | ⇑P | **PKPbc** | **16 14 57.0** | **-0.1** | |
| RETH | **Rethem/Aller,** | 148.56 | 350 | | *e*PKPbc | **PKiK** | **16 14 57.5** | **-0.4** | |
| | baz=21,slow=2.3 | | | | | | | | |
| RETH | | | | | *e*PKPab | **PKPab** | **16 15 02.9** | **+0.1** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| LMK | **Market Rasen** | 148.57 | 1 | | *e*P | **PKPbc** | **16 14 56.8** | **-0.1** | |
| FLTG | **Flechtingen** | 148.60 | 347 | | *e*PKPbc | **PKPbc** | **16 14 57.5** | **+0.5** | |
| | baz=21,slow=2.3 | | | | | | | | |
| FLTG | | | | | *e*PKPab | **PKPab** | **16 15 03.2** | **+0.2** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| NRDL | **Niedersach Rie** | 148.66 | 349 | | *e*PKPbc | **PKiK** | **16 14 57.9** | **-0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| KSP | **Ksiaz** | 148.68 | 341 | | *e*PKPbc | **PKiK** | **16 14 58.2** | **-0.1** | |
| DOPR | **Dopca** | 148.68 | 326 | | ⇑P | **PKiK** | **16 14 58.3** | **-0.1** | |
| MLR | **Muntele Rosu** | 148.70 | 325 | | ⇑P | **PKPbc** | **16 14 57.2** | **-0.5** | |
| MLR | | | | | ⇓P | **PKPbc** | **16 14 57.6** | **0.0** | |
| MLR | **Muntele Rosu** | 148.70 | 325 | | PKPbc | **PKPbc** | **16 14 57.7** | **0.0** | |
| | comp=Z,26nm,0.7s,baz=312,slow=5.2,SNR=16 | | | | | | | | |
| LEF | **Lefka** | 148.89 | 302 | | ⇑P | **PKPbc** | **16 14 58.7** | **+0.5** | |
| ASSE | **Asse, Remlinge** | 148.91 | 348 | | *e*PKPbc | **PKiK** | **16 14 58.5** | **-0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| SECR | | 148.92 | 324 | | ⇑P | **PKiK** | **16 14 58.8** | **-0.2** | |
| OKC | **Ostrava-Krasne** | 148.93 | 338 | | *e*PKP2 | **PKiK** | **16 14 58.8** | **0.0** | |
| OKC | **Ostrava-Krasne** | 148.93 | 338 | ⇑ | *e*PKP | **PKiK** | **16 14 58.8** | **0.0** | |
| OSTC | **Ostas** | 148.95 | 341 | ⇑ | *e*PKP | **PKiK** | **16 14 59.0** | **+0.1** | |
| OSTC | | | | | *e*PKPAB | **PKPab** | **16 15 05.7** | **+1.2** | |
| CHVC | **Chvalec** | 148.97 | 341 | ⇑ | *e*PKP | **PKiK** | **16 14 59.0** | **+0.1** | |
| BORA | **Eskisehir** | 148.98 | 312 | | | **PKPbc** | **16 14 58.7** | **+0.3** | |
| UPC | **Upice** | 149.06 | 341 | | *e*PKHKP | PKPpre | 16 14 59.0 | | |
| UPC | | | | | smax | smax | | | |
| | comp=N,53nm,0.5s | | | | | | | | |
| UPC | **Upice** | 149.06 | 341 | ⇑ | *e*PKP | **PKiK** | **16 14 59.0** | **-0.1** | |
| CBBR | **Cluj-Babes-Bol** | 149.06 | 329 | | ⇑P | **PKiK** | **16 14 59.3** | **+0.1** | |
| MESR | **Meseseni** | 149.07 | 330 | | ⇑P | **PKiK** | **16 14 59.2** | **0.0** | |
| CJR | **Cluj-Napoca** | 149.07 | 328 | | ⇓P | **PKiK** | **16 14 59.3** | **0.0** | |
| CJR | **Cluj-Napoca** | 149.07 | 328 | | ⇓PKP2 | **PKiK** | **16 14 59.3** | **0.0** | |
| DPC | **Dobruska-Polom** | 149.10 | 340 | | *e*PKP2 | **PKiK** | **16 14 59.2** | **0.0** | |
| DPC | **Dobruska-Polom** | 149.10 | 340 | ⇑ | *e*PKP | **PKiK** | **16 14 59.2** | **0.0** | |
| DPC | | | | | *e*PKPAB | **PKPab** | **16 15 06.7** | **+1.5** | |
| KECS | **Kecovo** | 149.14 | 334 | | *e*PKP2 | **PKiK** | **16 14 59.6** | **+0.3** | |
| KECS | **Kecovo** | 149.14 | 334 | | *e*PKP | **PKiK** | **16 14 59.6** | **+0.3** | |
| CLL | **Collm** | 149.16 | 345 | | PKHKP | PKPpre | 16 14 59.3 | | |
| CLL | **Collm** | 149.16 | 345 | ⇑ | *i*PKPbc | **PKPbc** | **16 14 58.8** | **+0.4** | |
| | comp=Z,146nm,1.0s | | | | | | | | |
| CLL | | | | | *e*PKiKP | **PKiKP** | **16 15 01.0** | **+1.8** | |
| CLL | | | | | *i* PKPab | **PKPab** | **16 15 05.3** | **0.0** | |
| | comp=Z,53nm,0.8s | | | | | | | | |
| CLL | | | | | *ex* | x | 16 17 07.0 | | |
| CLL | | | | | *ex* | x | 16 17 19.0 | | |
| CLL | | | | | *e*(PKSdf) | | 16 18 33.0 | | |
| CLL | **Collm** | 149.16 | 345 | | | **PKiKP** | **16 14 59.3** | **+0.1** | |
| CLL | **Collm** | 149.16 | 345 | | *e*PKPbc | **PKiKP** | **16 14 59.1** | **-0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| CLL | | | | | *e*PKPab | **PKPab** | **16 15 05.7** | **+0.4** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| KRLC | **Kraliky** | 149.19 | 339 | | *e*PKHKP | PKPpre | 16 14 59.5 | | |
| KRLC | | | | | *e* | | 16 15 06.6 | | |
| KRLC | **Kraliky** | 149.19 | 339 | ⇑ | *e*PKP | **PKiKP** | **16 14 59.5** | **+0.1** | |
| KRLC | | | | | *e*PKPAB | **PKPab** | **16 15 06.6** | **+1.0** | |
| MORC | **Moravsky Berou** | 149.19 | 338 | ⇑ | P | **PKiK** | **16 14 59.4** | **-0.1** | |
| MORC | **Moravsky Berou** | 149.19 | 338 | | PKP2 | **PKiK** | **16 14 59.7** | **+0.2** | |
| MORC | **Moravsky Berou** | 149.19 | 338 | | | **PKiK** | **16 14 59.7** | **+0.2** | |
| MORC | **Moravsky Berou** | 149.19 | 338 | | *e*PKP | **PKiK** | **16 14 59.3** | **-0.1** | |
| VOIR | | 149.21 | 325 | ⇓ | P | **PKPbc** | **16 14 59.1** | **+0.2** | |
| VOIR | | 149.21 | 325 | ⇓ | PKHKP | PKPpre | 16 14 59.1 | | |
| IBBN | **Ibbenburen** | 149.22 | 351 | | *e*PKPbc | **PKiKP** | **16 14 59.1** | **-0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| CLZ | **Clausthal** | 149.24 | 348 | | *e*PKPbc | **PKiKP** | **16 14 59.6** | **+0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| CWF | **Charnwood Fore** | 149.26 | 2 | | *e*P | **PKPbc** | **16 14 58.6** | **0.0** | |
| WACR | **West Acre** | 149.31 | 360 | | *e*P | **PKPbc** | **16 14 58.1** | **-0.6** | |
| BRG | **Berggiesshubel** | 149.32 | 343 | | *e*PKPbc | **PKiKP** | **16 14 59.8** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| BRG | | | | | *e*PKPab | **PKPab** | **16 15 06.7** | **+0.7** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| FBE | **Freiberg** | 149.43 | 344 | | *e*PKPbc | **PKiKP** | **16 15 00.2** | **+0.4** | |
| | baz=21,slow=2.3 | | | | | | | | |
| DRGR | | 149.44 | 329 | ⇓ | P | **PKiK** | **16 14 59.9** | **-0.2** | |
| DRGR | | 149.44 | 329 | ⇓ | PKHKP | PKPpre | 16 14 59.9 | | |
| PVCC | **Panska Ves** | 149.46 | 342 | | *e*PKHKP | PKPpre | 16 15 00.3 | | |
| PVCC | | | | | smax | smax | | | |
| | comp=N,77nm,0.2s | | | | | | | | |
| PVCC | **Panska Ves** | 149.46 | 342 | ⇑ | *e*PKP | **PKiKP** | **16 15 00.3** | **+0.4** | |
| ARR | **Arges** | 149.47 | 326 | | ⇑P | **PKiK** | **16 15 01.4** | **+1.2** | |
| RAZG | **Razgrad** | 149.58 | 321 | | ⇑P | **PKPbc** | **16 14 60.0** | **+0.3** | |
| GTTG | **Gottingen** | 149.60 | 348 | | *e*PKPbc | **PKiKP** | **16 15 00.3** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| VYHS | **Vyhne** | 149.79 | 336 | | *e*PKHKP | PKPpre | 16 15 00.8 | | |
| VYHS | | | | | *e* | | 16 15 08.8 | | |
| VYHS | **Vyhne** | 149.79 | 336 | | *e*PKP | **PKiKP** | **16 15 00.8** | **+0.1** | |
| VYHS | | | | | *e* | | 16 15 08.8 | | |
| PSZ | **Piszkesteto** | 149.83 | 334 | ⇑ | P | **PKPbc** | **16 15 00.5** | **+0.3** | |
| PSZ | **Piszkesteto** | 149.83 | 334 | | PKHKP | PKPpre | 16 15 01.0 | | |
| PSZ | **Piszkesteto** | 149.83 | 334 | | | **PKiKP** | **16 15 00.9** | **+0.1** | |
| HUMR | **Humele** | 149.84 | 324 | ⇓ | P | **PKPbc** | **16 14 59.7** | **-0.5** | |
| LOT | **Lotru** | 149.87 | 326 | ⇑ | P | **PKPbc** | **16 14 59.9** | **-0.6** | |
| VRAC | **Vranov** | 149.91 | 339 | ⇑ | P | **PKiK** | **16 15 01.1** | **+0.1** | |
| VRAC | **Vranov** | 149.91 | 339 | | PKPbc | **PKiKP** | **16 15 01.0** | **+0.1** | |
| | comp=N,28nm,0.9s,baz=23,slow=2.1,SNR=14 | | | | | | | | |
| VRAC | **Vranov** | 149.91 | 339 | ⇑ | PKHKP | PKPpre | 16 15 01.1 | | |
| VRAC | **Vranov** | 149.91 | 339 | | *e*PKP | **PKiKP** | **16 15 00.9** | **0.0** | |
| VRAC | | | | | *e* | | 16 15 09.6 | | |
| JAVC | **Velka Javorina** | 149.92 | 337 | | *e*PKP | **PKiK** | **16 15 02.0** | **+1.0** | |
| PCED | **Cedros** | 149.94 | 50 | | *e*PKP | **PKiK** | **16 15 01.3** | **0.0** | |
| PRU | **Pruhonice** | 149.95 | 342 | | *e*PKHKP | PKPpre | 16 15 01.1 | | |
| PRU | | | | | *e* | | 16 15 09.6 | | |
| PRU | **Pruhonice** | 149.95 | 342 | ⇑ | *e*PKP | **PKiK** | **16 15 01.1** | **+0.2** | |
| PRU | | | | | *e*PKPAB | **PKPab** | **16 15 09.6** | **+0.9** | |
| CALA | **Caldeira** | 149.96 | 50 | | *e*PKP | **PKPbc** | **16 14 59.3** | **-1.5** | |
| DEV | **Deva** | 150.00 | 328 | ⇑ | P | **PKPbc** | **16 15 00.6** | **0.0** | |
| DEV | **Deva** | 150.00 | 328 | ⇑ | PKHKP | PKPpre | 16 15 00.6 | | |
| MOX | **Moxa** | 150.11 | 346 | | *e*PKPbc | **PKiKP** | **16 15 01.4** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| TANN | **Tannenbergstha** | 150.12 | 345 | | *e*PKPbc | **PKiKP** | **16 15 01.7** | **+0.3** | |
| | baz=21,slow=2.3 | | | | | | | | |
| WERD | **Werda** | 150.13 | 345 | | *e*PKPbc | **PKiKP** | **16 15 01.5** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| PLN | **Plauen** | 150.13 | 345 | | *e*PKPbc | **PKiKP** | **16 15 01.5** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| BUG | **Bochum--Univer** | 150.13 | 352 | | *e*PKPbc | **PKiKP** | **16 15 01.1** | **-0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| PCAN | **Candelaria** | 150.16 | 50 | | *e*PKP | **PKiKP** | **16 15 02.3** | **+0.5** | |
| ZIMR | | 150.18 | 322 | ⇓ | P | **PKiK** | **16 15 01.6** | **0.0** | |
| ZIMR | | 150.18 | 322 | ⇓ | PKIKP | **PKiK** | **16 15 01.6** | **0.0** | |
| PICO | **Pico** | 150.19 | 50 | | *e*PKP | **PKiK** | **16 15 01.8** | **-0.1** | |
| KRUC | **Moravsky** | 150.19 | 339 | | *e*PKP | **PKiK** | **16 15 01.3** | **-0.2** | |
| KRUC | | | | | *e* | | 16 15 10.5 | | |
| KASTN | **Kahler Asten** | 150.20 | 350 | | *e*PKPbc | **PKiKP** | **16 15 01.5** | **+0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| ROSA | **Rosais** | 150.22 | 49 | | | **PKiK** | **16 15 02.6** | **+0.8** | |
| ROSA | **Rosais** | 150.22 | 49 | | *e*PKP | **PKPbc** | **16 15 01.6** | **+0.2** | |
| WERN | **Wernitzgruen** | 150.26 | 345 | | *e*PKPbc | **PKiKP** | **16 15 01.9** | **+0.3** | |
| | baz=21,slow=2.3 | | | | | | | | |
| WERN | | | | | *e*PKPab | **PKPab** | **16 15 10.8** | **+0.8** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| PGRA | **Graciosa** | 150.27 | 49 | | *e*PKP | **PKPbc** | **16 15 00.4** | **-1.0** | |
| NKC | **Novy Kostel** | 150.29 | 345 | | *e*PKIKP | **PKiKP** | **16 15 02.2** | **+0.5** | |
| NKC | | | | | smax | smax | | | |
| | comp=N,14nm,0.3s | | | | | | | | |
| NKC | **Novy Kostel** | 150.29 | 345 | ⇑ | *e*PKP | **PKiKP** | **16 15 02.2** | **+0.5** | |
| SMOL | **Smolenice** | 150.30 | 337 | | *e*PKIKP | **PKiKP** | **16 15 02.2** | **+0.5** | |
| SMOL | | | | | *e* | | 16 15 11.9 | | |
| SMOL | **Smolenice** | 150.30 | 337 | | *e*PKP | **PKiKP** | **16 15 02.2** | **+0.5** | |
| SMOL | | | | | *e* | | 16 15 11.9 | | |
| PPNO | **Prainha do Nor** | 150.32 | 50 | | *e*PKP | **PKPbc** | **16 15 01.8** | **+0.2** | |
| SIRR | **Siria** | 150.32 | 330 | ⇓ | P | **PKiK** | **16 15 02.2** | **+0.3** | |
| PMAN | **Manadas** | 150.37 | 49 | | *e*PKP | **PKPbc** | **16 15 01.7** | **0.0** | |
| GZR | **Gura Zlata** | 150.41 | 327 | ⇓ | P | **PKPbc** | **16 15 01.4** | **-0.2** | |
| GZR | **Gura Zlata** | 150.41 | 327 | ⇓ | PKIKP | **PKPbc** | **16 15 01.5** | **-0.2** | |
| MODS | **Modra-Piesok** | 150.47 | 337 | | *e*PKIKP | **PKiKP** | **16 15 05.6** | **+3.5** | |
| MODS | **Modra-Piesok** | 150.47 | 337 | | *e*PKP | **PKiKP** | **16 15 05.6** | **+3.5** | |
| MODS | | | | | *e* | | 16 15 15.7 | | |
| SRO | **Srobarova** | 150.55 | 335 | | *e*PKIKP | **PKiKP** | **16 15 02.6** | **+0.3** | |
| SRO | **Srobarova** | 150.55 | 335 | | *e*PKP | **PKiKP** | **16 15 02.5** | **+0.3** | |
| MANZ | **Manzenberg** | 150.60 | 345 | | *e*PKPbc | **PKiKP** | **16 15 02.8** | **+0.5** | |
| | baz=21,slow=2.3 | | | | | | | | |
| ELL | **Elmali** | 150.65 | 307 | | PKIKP | **PKiK** | **16 15 03.2** | **+0.2** | |
| ELL | **Elmali** | 150.65 | 307 | | | **PKiK** | **16 15 03.2** | **+0.2** | |
| ZST | **Bratislava** | 150.68 | 337 | | *e*PKIKP | **PKiKP** | **16 15 03.2** | **+0.7** | |
| ZST | | | | | *e* | | 16 15 12.7 | | |
| ZST | **Bratislava** | 150.68 | 337 | | *e*PKP | **PKiKP** | **16 15 03.2** | **+0.7** | |
| ZST | | | | | *e* | | 16 15 12.7 | | |
| SRE | **Strehaia** | 150.70 | 326 | ⇓ | P | **PKiK** | **16 15 03.1** | **+0.4** | |
| SRE | **Strehaia** | 150.70 | 326 | ⇓ | PKIKP | **PKiK** | **16 15 03.1** | **+0.4** | |
| ROTZ | **Rotzenmuhle** | 150.78 | 344 | | *e*PKPbc | **PKiKP** | **16 15 02.9** | **+0.2** | |
| | baz=21,slow=2.3 | | | | | | | | |
| BZS | **Buzias** | 150.82 | 329 | ⇑ | P | **PKPbc** | **16 15 02.4** | **-0.1** | |
| BZS | **Buzias** | 150.82 | 329 | ⇑ | PKIKP | **PKPbc** | **16 15 02.4** | **-0.1** | |
| HERR | **Herculane** | 150.95 | 327 | ⇓ | P | **PKPbc** | **16 15 02.7** | **-0.1** | |
| BEBN | **Eben Emael** | 150.96 | 353 | | *d*PKP | **PKiKP** | **16 15 03.2** | **+0.3** | |
| BEBN | | | | | *d*PKPab | **PKPab** | **16 15 13.3** | **+0.4** | |
| KHC | **Kasperske Hory** | 151.00 | 342 | | *e*PKIKP | **PKPdf** | **16 14 56.6** | **+0.2** | |
| KHC | | | | | *e* | | 16 15 03.5 | | |
| KHC | | | | | *e* | | 16 15 14.1 | | |
| KHC | **Kasperske Hory** | 151.00 | 342 | | *e*PKPDF | **PKPdf** | **16 14 56.6** | **+0.2** | |
| KHC | | | | ⇑ | *e*PKP | **PKiKP** | **16 15 03.5** | **+0.3** | |
| KHC | | | | | *e*PKPAB | **PKPab** | **16 15 14.1** | **+0.9** | |
| KHC | | | | | *e*pPKP | **pPKPab** | **16 17 21.7** | **-1.0** | |
| AHRW | **Bad Neuenahr-A** | 151.04 | 351 | | *e*PKPbc | **PKiKP** | **16 15 03.3** | **+0.1** | |
| | baz=21,slow=2.3 | | | | | | | | |
| AHRW | | | | | *e*PKPab | **PKPab** | **16 15 08.5** | **-4.7** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| CKRC | **Cesky Krumlov** | 151.07 | 341 | | *e*PKPDF | **PKPdf** | **16 14 57.7** | **+1.2** | |
| CKRC | | | | ⇑ | *e*PKP | **PKiKP** | **16 15 03.6** | **+0.3** | |
| CKRC | | | | | *e*PKPAB | **PKPab** | **16 15 14.2** | **+0.8** | |
| MEM | **Membach** | 151.11 | 353 | | *d*PKP | **PKiKP** | **16 15 03.3** | **+0.1** | |
| BTNL | **Ternell** | 151.12 | 353 | | *d*PKP | **PKPbc** | **16 15 03.0** | **0.0** | |
| BTNL | | | | | *d*PKPab | **PKPab** | **16 15 13.0** | **-0.6** | |
| TNS | **Taunus Mts** | 151.14 | 349 | | *e*PKPbc | **PKiKP** | **16 15 03.7** | **+0.3** | |
| | baz=21,slow=2.3 | | | | | | | | |
| TNS | | | | | *e*PKPab | **PKPab** | **16 15 14.1** | **+0.4** | |
| | baz=9.7,slow=4.0 | | | | | | | | |
| WET | **Wettzell** | 151.18 | 343 | | *e*PKPbc | **PKiKP** | **16 15 03.8** | **+0.3** | |
| | baz=21,slow=2.3 | | | | | | | | |
| WET | | | | | *e*PKPab | **PKPab** | **16 15 14.9**

comp=Z,42nm,3.8s
**BOSA Boshof 3.20 273** *e*P **Pn 16 08 05.6 +1.0**
BOSA *e*S **Sn 16 08 42.5 -0.5**
**BOSA Boshof 3.20 273** *e*P **Pn 16 08 05.6 +1.0**
BOSA *e*S **Sn 16 08 42.5 -0.5**
**SWZ Schweizer 3.55 297** *e*P **Pn 16 08 06.8 -2.7**
SWZ *e*S **Sn 16 08 48.5 -3.2**
SWZ IAML 16 09 07.5
comp=Z,12nm,1.3s
**CNG Changalane 3.87 50** *e*P **Pn 16 08 15.9 +2.2**
CNG *i* S **Sn 16 09 01.3 +1.8**
**CNG Changalane 3.87 50** *e*P **Pn 16 08 15.9 +2.2**
CNG *i* S **Sn 16 09 01.3 +1.8**
**LBTB Lobatse 4.81 322** *e*P **Pn 16 08 29.4 +2.6**
LBTB *e*S **Sn 16 09 24.9 +2.1**
**LBTB Lobatse 4.81 322** *e*P **Pn 16 08 29.4 +2.6**
LBTB *e*S **Sn 16 09 24.9 +2.1**
**MOPA Mopani 5.76 24** *e*P **Pn 16 08 37.5 -2.2**
MOPA *e*S **Sn 16 09 41.9 -4.1**
MOPA IAML 16 09 53.8
comp=Z,11nm,3.4s
**MOPA Mopani 5.76 24** *e*P **Pn 16 08 39.9 +0.1**
MOPA *e*S **Sn 16 09 41.7 -4.2**
**MOPA Mopani 5.76 24** *e*P **Pn 16 08 39.9 +0.1**
MOPA *e*S **Sn 16 09 41.7 -4.2**
**MSNA Messina 6.55 9** *e*P **Pn 16 08 53.5 +2.9**
MSNA *e*S **Sn 16 10 07.0 +1.6**
**MSNA Messina 6.55 9** *e*P **Pn 16 08 53.5 +2.9**
MSNA *e*S **Sn 16 10 07.0 +1.6**
**MATP Matopo 8.38 357** *e*P **Pn 16 09 18.1 +2.2**
MATP *e*S **Sn 16 10 49.9 -1.0**
**MATP Matopo 8.38 357** *e*P **Pn 16 09 18.1 +2.2**
MATP *e*S **Sn 16 10 49.9 -1.0**
**BLWY Bulawayo 8.67 358** *e*P **Pn 16 09 20.9 +1.1**
BLWY *e*S **Sn 16 10 55.6 -2.2**
**BLWY Bulawayo 8.67 358** *e*P **Pn 16 09 20.9 +1.1**
BLWY *e*S **Sn 16 10 55.6 -2.2**

*IDC **20** 16:09:40.8±1.4,52.°93N×35.°15W,h0km,mb3.7/8, mb1 4.1/11,mb1mx3.8/64,mbtmp3.9/11,ML3.3/2,MS3.8/1, Ms1 3.8/1,ms1mx2.8/92,Error ellipse: s-maj=48.0km s-min=19.7km az=2.0*
*NEIC **20** 16:09:40.3±2.7,53.°11N±0.°06×34.°4W±0.°2,h10km±1km, mb4.5/14,Error ellipse: s-maj=20.9km s-min=6.2km az=66.0*
**ISC 20 16:09:41.4**±0.6,**53.°03N**±0.°09×**34.°69W**±0.°08,**h10**km,**n32**, σ2§**19**/32,**mb4.2**/13,**Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANGG** | **Ammassalik, Gr** | **12.71** | **354** | Pn | **Pn** | **16 12 39.0** | **-2.9** |
| **ROSA** | **Rosais** | **14.99** | **160** | Pn | **Pn** | **16 13 11.3** | **-1.9** |
| **SFJD** | **Kangerlussuaq** | **16.03** | **337** | Pn | **P** | **16 13 28.6** | **-1.4** |
| | 0.2nm,0.3s,baz=158,slow=11,SNR=5.8 | | | | | | |
| **CMLA** | **Cha da Macela** | **16.55** | **154** | Pn | **Pn** | **16 13 31.8** | **-1.6** |
| **EKA** | **Eskdalemuir Ar** | **18.52** | **70** | P | **Pn** | **16 14 02.4** | **+4.6** |
| | baz=276,slow=13,SNR=6.1 | | | | | | |
| **SCHQ** | **Schefferville** | **18.92** | **288** | P | **P** | **16 14 00.6** | **-1.6** |
| | 0.9nm,0.3s,baz=87,slow=6.5,SNR=14 | | | | | | |
| **SCHQ** | **Schefferville** | **18.92** | **288** | PKPdf | **P** | **16 14 00.8** | **-1.3** |
| **SCHQ** | **Schefferville** | **18.92** | **288** | | **P** | **16 14 00.8** | **-1.3** |
| **GBN** | **Guysborough** | **19.02** | **257** | P | **Pn** | **16 14 09.2** | **+5.2** |
| GBN | | | | IAmb | IAmb | 16 14 10.3 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **SUMG** | **Summit** | **19.69** | **357** | *i* P | **P** | **16 14 08.0** | **-2.7** |
| **SUMG** | **Summit** | **19.69** | **357** | | **P** | **16 14 09.1** | **-1.7** |
| **LMN** | **Caledonia Moun** | **20.74** | **262** | P | **P** | **16 14 22.3** | **+0.3** |
| LMN | | | | IAmb | IAmb | 16 14 42.1 | |
| | comp=Z,35nm,1.3s | | | | | | |
| **MTE** | **Manteigas** | **22.34** | **114** | P | **P** | **16 14 34.3** | **-4.9** |
| **TRQ** | **Mont Tremblant** | **26.43** | **271** | P | **P** | **16 15 19.2** | **+1.0** |
| TRQ | | | | IAmb | IAmb | 16 15 21.6 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **ECH** | **Echery** | **26.70** | **83** | P | **P** | **16 15 18.3** | **-2.2** |
| ECH | | | | IAmb | IAmb | 16 15 23.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **32.79** | **51** | LR | LR | 16 28 07.6 | |
| | comp=Z,160nm,18.2s,baz=268,slow=34 | | | | | | |
| **A36M** | **Sachs Harbour** | **40.92** | **332** | P | **P** | **16 17 24.1** | **+0.8** |
| A36M | | | | IAmb | IAmb | 16 17 25.6 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **40.97** | **283** | P | **P** | **16 17 24.0** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **40.97** | **316** | P | **P** | **16 17 23.5** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=63,slow=8.7,SNR=3.2 | | | | | | |
| YKA | | | | PcP | **PcP** | **16 19 23.6** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=65,slow=3.8,SNR=6.9 | | | | | | |
| **INK** | **Inuvik** | **45.14** | **329** | P | **P** | **16 17 57.2** | **-0.3** |
| | comp=Z,1.1nm,0.7s,baz=54,slow=9.6,SNR=3.5 | | | | | | |
| **INK** | **Inuvik** | **45.14** | **329** | P | **P** | **16 17 57.0** | **-0.5** |
| INK | | | | IAmb | IAmb | 16 18 00.2 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **47.21** | **78** | P | **P** | **16 18 17.8** | **+3.5** |
| | comp=Z,1.8nm,0.9s,baz=309,slow=4.0,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **47.21** | **78** | P | **P** | **16 18 15.4** | **+1.1** |
| **N23A** | **Red Feather La** | **48.17** | **286** | P | **P** | **16 18 21.3** | **-0.6** |
| N23A | | | | IAmb | IAmb | 16 18 24.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **49.05** | **290** | P | **P** | **16 18 27.7** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=60,slow=7.6,SNR=9.3 | | | | | | |
| **ILAR** | **Eielson Array** | **51.51** | **330** | P | **P** | **16 18 47.2** | **+0.5** |
| | comp=Z,0.6nm,0.8s,baz=41,slow=5.5,SNR=5.9 | | | | | | |
| ILAR | | | | PcP | **PcP** | **16 20 01.1** | **+0.4** |
| | comp=Z,0.6nm,0.8s,baz=23,slow=3.0,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.71** | **273** | P | **P** | **16 19 10.4** | **-0.4** |
| | comp=Z,0.4nm,0.8s,baz=50,slow=8.4,SNR=2.5 | | | | | | |
| **BRVK** | **Borovoye** | **57.23** | **44** | P | P | 16 19 20.1 | -8.3 |
| BRVK | | | | IAmb | IAmb | 16 19 22.6 | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.99** | **42** | P | **P** | **16 20 36.2** | **+2.1** |
| | comp=Z,1.0nm,0.6s,baz=320,slow=5.3,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **74.20** | **26** | P | **P** | **16 21 20.6** | **+2.5** |
| | comp=Z,1.1nm,0.8s,baz=335,slow=7.5,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Ar** | **145.90** | **19** | PKPbc | **PKPab** | **16 29 21.9** | **+0.5** |
| | comp=Z,2.3nm,0.9s,baz=349,slow=3.4,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **149.43** | **21** | PKPbc | **PKPbc** | **16 29 31.0** | **+0.4** |
| | comp=Z,1.9nm,0.9s,baz=355,slow=2.0,SNR=7.7 | | | | | | |

*IDC **20** 16:18:49.1±5.8,4.°87N×32.°61W,h0km,mb3.7/5,mb1 3.8/5, mb1mx3.6/42,mbtmp3.7/5,MS3.7/2,Ms1 3.7/2, ms1mx3.0/79,Error ellipse: s-maj=194.4km s-min=36.1km az=4.0*
**ISC 20 16:18:50.3**±5.4,**5.°N**±1.°×**32.°6W**±0.°2,**h11**km,**n10**,σ0§**37**/5, **mb3.7**/5,**Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **21.96** | **125** | T | T | 16 46 20.6 | |
| | baz=304,slow=75,SNR=34 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.96** | **124** | T | T | 16 46 20.9 | |
| | baz=304,slow=75,SNR=30 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.98** | **125** | T | T | 16 46 22.2 | |
| | baz=304,slow=75,SNR=37 | | | | | | |
| **PTGA** | **Pitinga** | **27.85** | **260** | LR | LR | 16 35 24.5 | |
| | comp=Z,180nm,18.1s,baz=42,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.88** | **74** | P | **P** | **16 25 42.2** | **+0.1** |
| | 0.8nm,0.7s,baz=264,slow=8.9,SNR=3.2 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.19** | **310** | LR | LR | 16 50 25.6 | |
| | comp=Z,52nm,18.6s,baz=162,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.77** | **37** | P | **P** | **16 29 54.6** | **+0.3** |
| | 1.3nm,0.9s,baz=260,slow=5.4,SNR=6.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.81** | **49** | P | **P** | **16 29 54.6** | **-0.4** |
| | 1.0nm,0.8s,baz=243,slow=6.3,SNR=5.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.23** | **313** | P | **P** | **16 30 45.1** | **+0.1** |
| | 0.5nm,0.8s,baz=94,slow=7.3,SNR=3.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.14** | **332** | P | **P** | **16 31 10.9** | **-0.1** |
| | 0.1nm,0.5s,baz=93,slow=6.0,SNR=1.7 | | | | | | |

*AEIC **20** 16:39:07.2±2.4,51.°56N±0.°08×175.°26W±0.°07,h26km±5km, ML4.3,mb4.6/74(NEIC),Error ellipse: s-maj=11.8km s-min=5.1km az=163.0*
*MOS **20** 16:39:08.2±1.0,51.°78N×175.°39W,h50km,mb4.4/11, Error ellipse: s-maj=10.1km s-min=7.5km az=83.4*
*NEIC **20** 16:39:09.5±2.3,51.°65N±0.°08×175.°29W±0.06,h45km±7km, Error ellipse: s-maj=11.9km s-min=4.3km az=165.0*
*IDC **20** 16:39:10.8±2.4,51.°81N×175.°37W,h58km±20km,mb3.9/33, mb1 4.0/37,mb1mx3.9/63,mbtmp4.2/37,ML3.8/4,MS3.8/35, Ms1 3.8/35,ms1mx3.6/99,Error ellipse: s-maj=17.9km s-min=9.3km az=168.0*
**ISC 20 16:39:09.4**±0.4,**51.°68N**±0.°07×**175.°38W**±0.°03,**h47**km,
**n326**,σ1§**14**/310,**mb4.4**/67,**MS3.8**/35,**4C-2D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.56** | **311** | | **Pn** | **16 39 21.6** | **+0.5** |
| **GSCK** | **Great Sitkin C** | **0.59** | **304** | | **Pn** | **16 39 22.0** | **+0.4** |
| **GSTD** | **Great Sitkin T** | **0.61** | **308** | | **Pn** | **16 39 22.4** | **+0.5** |
| GSTD | | | | | **Sn** | **16 39 33.0** | **+2.2** |
| **ADK** | **Adak** | **0.84** | **284** | P | **Pn** | **16 39 24.6** | **-0.2** |
| **ADK** | **Adak** | **0.84** | **284** | | **Sn** | **16 39 36.6** | **+0.5** |
| **ADK** | **Adak** | **0.84** | **284** | Pn | **Pn** | **16 39 24.6** | **-0.2** |
| **ATKA** | **Atka Island** | **0.90** | **54** | | **Pn** | **16 39 24.3** | **-1.3** |
| ATKA | | | | | **Sn** | **16 39 35.9** | **-1.5** |
| **KOFP** | **Korovin Flat P** | **0.99** | **53** | | **Pn** | **16 39 26.2** | **-0.7** |
| **KIWB** | **Kanaga Island** | **1.12** | **279** | Pn | **Pn** | **16 39 28.6** | **0.0** |
| **KIKV** | **Kanaga Island** | **1.13** | **281** | | **Pn** | **16 39 29.0** | **+0.2** |
| **KICM** | **Kanaga Island** | **1.16** | **283** | | **Pn** | **16 39 29.1** | **0.0** |
| **KIMD** | **Kanaga Island** | **1.16** | **275** | | **Pn** | **16 39 28.8** | **-0.3** |
| **TAPA** | **Tanaga Point A** | **1.52** | **276** | | **Pn** | **16 39 34.5** | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.63** | **279** | | **Pn** | **16 39 36.4** | **+0.7** |
| TAFP | | | | | **Sn** | **16 39 57.6** | **+2.1** |
| **TASE** | **Tanaga Southea** | **1.66** | **276** | | **Pn** | **16 39 36.8** | **+0.7** |
| **GAEA** | **Gareloi East** | **2.10** | **274** | | **Pn** | **16 39 43.1** | **+1.1** |
| **GALAA** | **Gareloi Lava P** | **2.11** | **273** | | **Pn** | **16 39 43.6** | **+1.4** |
| **GANO** | **Gareloi North** | **2.14** | **275** | | **Pn** | **16 39 43.4** | **+0.9** |
| **NIKH** | **Nikolski High** | **4.20** | **70** | | **Pn** | **16 40 12.5** | **+1.7** |
| **NIKH** | **Nikolski High** | **4.20** | **70** | P | **Pn** | **16 40 12.7** | **+1.9** |
| | baz=253 | | | | | | |
| **MSW** | **Makushin Switc** | **5.67** | **63** | | **Pn** | **16 40 32.4** | **+1.4** |
| **UNV** | **Unalaska Valle** | **5.80** | **65** | Pn | **Pn** | **16 40 36.4** | **+3.6** |
| **UNV** | **Unalaska Valle** | **5.80** | **65** | P | **Pn** | **16 40 35.4** | **+2.6** |
| | baz=250,SNR=5.9 | | | | | | |
| **ZRO** | **Akutan Zero** | **6.18** | **63** | | **Pn** | **16 40 39.2** | **+1.2** |
| **AKBBA** | **Akutan Broad B** | **6.21** | **63** | | **Pn** | **16 40 39.7** | **+1.4** |
| **SPIA** | **Saint Paul Isl** | **6.26** | **26** | Pn | **Pn** | **16 40 41.5** | **+2.4** |
| **SPIA** | **Saint Paul Isl** | **6.26** | **26** | P | **Pn** | **16 40 41.1** | **+2.0** |
| | baz=210 | | | | | | |
| **AKUT** | **Akutan** | **6.31** | **63** | Pn | **Pn** | **16 40 43.6** | **+4.0** |
| **SHEM** | **Shemya Is, Ala** | **6.56** | **283** | P | **Pn** | **16 40 43.6** | **+0.5** |
| | 3.7nm,0.3s,baz=56,slow=7.3,SNR=1.4 | | | | | | |
| SHEM | | | | LR | LR | 16 43 17.7 | |
| | comp=Z,996nm,21.7s,baz=110,slow=38 | | | | | | |
| **ISLZ** | **Isanotski Laza** | **7.64** | **62** | | **Pn** | **16 40 59.4** | **+1.5** |
| **FALS** | **False Pass** | **7.84** | **61** | | **Pn** | **16 41 02.4** | **+1.7** |
| **SDPT** | **Sand Point** | **9.60** | **62** | Pn | **Pn** | **16 41 27.4** | **+2.6** |
| **SDPT** | **Sand Point** | **9.60** | **62** | P | **Pn** | **16 41 25.1** | **+0.3** |
| | baz=253 | | | | | | |
| **GAMB** | **Gambell** | **12.28** | **8** | Pn | **Pn** | **16 42 03.1** | **+1.9** |
| **GAMB** | **Gambell** | **12.28** | **8** | P | **Pn** | **16 42 03.8** | **+2.5** |
| | baz=190 | | | | | | |
| **ANM** | **Nome** | **13.93** | **18** | P | **P** | **16 42 27.8** | **-2.9** |
| **ANM** | **Nome** | **13.93** | **18** | | **P** | **16 42 27.8** | **-2.9** |
| **ANM** | **Nome** | **13.93** | **18** | P | **P** | **16 42 27.8** | **-2.9** |
| | baz=206 | | | | | | |
| **O18K** | **Koktuh Hills** | **13.94** | **46** | P | **P** | **16 42 31.1** | **+0.2** |
| **OHAK** | **Old Harbor** | **13.96** | **58** | P | **Pn** | **16 42 22.7** | **-1.5** |
| | baz=255 | | | | | | |
| **SVW2** | **Sparrevohn** | **14.40** | **41** | | **Pn** | **16 42 31.6** | **+1.5** |
| **TNA** | **Tin City** | **14.43** | **13** | P | **P** | **16 42 34.8** | **-1.5** |
| | baz=198 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.47** | **56** | P | **Pn** | **16 42 30.2** | **-0.8** |
| | 1.0nm,0.3s,baz=284,slow=2.3,SNR=15 | | | | | | |
| KDAK | | | | S | **Sn** | **16 45 13.2** | **+3.2** |
| | 0.2nm,0.3s,baz=286,slow=18,SNR=1.7 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.47** | **56** | | **Pn** | **16 42 30.0** | **-1.0** |
| **KDAK** | **Kodiak Island** | **14.47** | **56** | P | **P** | **16 42 36.4** | **-0.4** |
| | baz=254 | | | | | | |
| **O19K** | **Port Alsworth** | **14.50** | **46** | P | **P** | **16 42 37.6** | **+0.6** |
| | baz=243 | | | | | | |
| **N19K** | **Bonanza Creek** | **14.71** | **43** | P | **P** | **16 42 37.6** | **-1.9** |
| **N19K** | **Bonanza Creek** | **14.71** | **43** | P | **P** | **16 42 37.4** | **-2.2** |
| | baz=240 | | | | | | |
| **L19K** | **White Mountain** | **15.28** | **39** | | **P** | **16 42 46.1** | **+0.4** |
| L19K | | | | IAmb | IAmb | 16 42 52.3 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **15.28** | **39** | P | **P** | **16 42 47.6** | **+1.8** |
| | baz=235,SNR=13 | | | | | | |
| **TTA** | **Tatalina** | **15.29** | **35** | P | **P** | **16 42 45.3** | **-0.7** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| **TTA** | **Tatalina** | **15.29** | **35** | | **P** | **16 42 45.3** | **-0.7** |
| TTA | | | | IAmb | IAmb | 16 42 50.7 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **TTA** | **Tatalina** | **15.29** | **35** | P | **P** | **16 42 49.0** | **+3.0** |
| | baz=231,SNR=9.4 | | | | | | |
| **M19K** | **Big River Lodg** | **15.31** | **40** | P | **P** | **16 42 45.2** | **-0.9** |
| M19K | | | | IAmb | IAmb | 16 42 51.9 | |
| | comp=Z,51nm,1.6s | | | | | | |
| **M19K** | **Big River Lodg** | **15.31** | **40** | P | **P** | **16 42 46.8** | **+0.7** |
| | baz=237 | | | | | | |
| **L20K** | **Farewell, AK** | **15.83** | **39** | P | **P** | **16 42 54.2** | **+2.4** |
| | baz=236 | | | | | | |
| **BRLK** | **Bradley Lake** | **15.91** | **50** | Pn | **Pn** | **16 42 49.9** | **0.0** |
| **K20K** | **Telida** | **16.26** | **36** | P | **P** | **16 42 57.7** | **+1.2** |
| **K20K** | **Telida** | **16.26** | **36** | P | **P** | **16 42 57.1** | **+0.5** |
| | baz=233,SNR=9.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.46** | **286** | P | **P** | **16 42 58.2** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=88,slow=12,SNR=4.1 | | | | | | |
| PETK | | | | LR | LR | 16 48 54.2 | |
| | comp=Z,228nm,21.5s,baz=91,slow=36 | | | | | | |
| **O22K** | **Cooper Landing** | **16.71** | **48** | Pn | **Pn** | **16 42 59.6** | **-0.2** |
| O22K | | | | IAmb | IAmb | 16 43 17.2 | |
| | comp=Z,63nm,0.8s | | | | | | |
| **SEW** | **Seward** | **16.71** | **50** | Pn | **Pn** | **16 42 59.0** | **-0.7** |
| **PPLA** | **Purkeypile** | **16.71** | **39** | P | **P** | **16 43 04.5** | **+2.8** |
| | baz=238 | | | | | | |
| **J20K** | **Nowinta River** | **16.73** | **33** | P | **P** | **16 43 03.8** | **+2.0** |
| **J20K** | **Nowinta River** | **16.73** | **33** | P | **P** | **16 43 05.0** | **+3.3** |
| | baz=231 | | | | | | |
| **CAST** | **Castle Rocks** | **17.03** | **37** | | **P** | **16 43 06.0** | **+0.9** |
| **CAST** | **Castle Rocks** | **17.03** | **37** | P | **P** | **16 43 06.2** | **+1.1** |
| | baz=237,SNR=7.6 | | | | | | |
| **CHUM** | **Lake Minchumin** | **17.20** | **36** | P | **P** | **16 43 09.2** | **+2.3** |
| | baz=235,SNR=7.9 | | | | | | |
| **PWL** | **Port Wells** | **17.48** | **48** | Pn | **Pn** | **16 43 06.7** | **-2.7** |
| PWL | | | | IAmb | IAmb | 16 43 33.3 | |
| | comp=Z,72nm,1.6s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.54** | **38** | P | **P** | **16 43 12.2** | **+1.3** |
| KTH | | | | IAmb | IAmb | 16 43 17.5 | |
| | comp=Z,73nm,1.1s | | | | | | |
| **GHO** | **Glory Hole Cre** | **17.55** | **45** | | **Pn** | **16 43 10.5** | **+0.2** |
| GHO | | | | IAmb | IAmb | 16 43 54.0 | |
| | comp=Z,83nm,2.0s | | | | | | |
| **KNK** | **Knik Glacier** | **17.62** | **46** | | **Pn** | **16 43 10.1** | **-1.0** |
| KNK | | | | IAmb | IAmb | 16 43 34.4 | |
| | comp=Z,94nm,1.8s | | | | | | |
| **KNK** | **Knik Glacier** | **17.62** | **46** | P | **Pn** | **16 43 09.8** | **-1.3** |
| | baz=248 | | | | | | |
| **TRF** | **Thorofare Moun** | **17.73** | **39** | P | **P** | **16 43 14.6** | **+1.6** |
| **TRF** | **Thorofare Moun** | **17.73** | **39** | P | **P** | **16 43 14.8** | **+1.7** |
| | baz=240 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **17.81** | **36** | | **P** | **16 43 15.4** | **+1.7** |
| **BPAW** | **Bear Paw Mtn.** | **17.81** | **36** | P | **P** | **16 43 15.3** | **+1.6** |
| | baz=237 | | | | | | |
| **SML** | **Sawmill** | **17.82** | **45** | Pn | **Pn** | **16 43 11.4** | **-2.2** |
| SML | | | | IAmb | IAmb | 16 43 54.7 | |
| | comp=Z,52nm,1.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **18.03** | **29** | P | **Pn** | **16 43 18.3** | **+2.2** |
| **I21K** | **Tanana** | **18.08** | **33** | P | **Pn** | **16 43 18.9** | **+2.2** |
| | baz=232 | | | | | | |
| **H21K** | **Melozitna Rive** | **18.11** | **31** | P | **Pn** | **16 43 18.8** | **+1.7** |
| **H21K** | **Melozitna Rive** | **18.11** | **31** | P | **Pn** | **16 43 19.7** | **+2.6** |
| | baz=230 | | | | | | |
| **WAT1** | **Susitna Watana** | **18.14** | **42** | P | **Pn** | **16 43 18.0** | **+0.4** |
| | baz=244 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **18.27** | **45** | P | **P** | **16 43 17.9** | **-1.0** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,118nm,1.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **18.27** | **45** | P | **P** | **16 43 17.9** | **-1.0** |
| SCM | | | | IAmb | IAmb | 16 44 16.4 | |
| | comp=Z,118nm,1.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **18.27** | **45** | P | **P** | **16 43 18.7** | **-0.2** |
| | baz=248 | | | | | | |
| **RND** | **Reindeer** | **18.28** | **40** | P | **P** | **16 43 18.8** | **-0.1** |
| RND | | | | pmax | pmax | | |
| | comp=Z,37nm,1.2s | | | | | | |
| **RND** | **Reindeer** | **18.28** | **40** | P | **P** | **16 43 18.8** | **-0.1** |
| RND | | | | IAmb | IAmb | 16 43 37.8 | |
| | comp=Z,37nm,1.2s | | | | | | |
| **FID** | **Port Fidalgo** | **18.31** | **49** | P | **P** | **16 43 17.4** | **-1.8** |
| **WAT6** | **Susitna Watana** | **18.38** | **43** | P | **P** | **16 43 20.0** | **-0.2** |
| | baz=246 | | | | | | |
| **MCK** | **McKinley** | **18.40** | **39** | P | **P** | **16 43 20.0** | **-0.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MCK** | **McKinley** | **18.40** | **39** | P | **P** | **16 43 20.0** | **-0.2** |
| **MCK** | **McKinley** | **18.40** | **39** | P | **Pn** | **16 43 20.6** | **-0.1** |
| | baz=241 | | | | | | |
| **MLY** | **Manley** | **18.42** | **34** | P | **Pn** | **16 43 22.5** | **+1.6** |
| | baz=235 | | | | | | |
| **BILL** | **Bilibino** | **18.67** | **338** | ⇓ *e*P | **Pn** | **16 43 25.4** | **+1.5** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,32nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,379nm,21.0s | | | | | | |
| **DHY** | **Denali Highway** | **18.73** | **42** | P | **P** | **16 43 24.0** | **0.0** |
| **DHY** | **Denali Highway** | **18.73** | **42** | P | **P** | **16 43 23.9** | **-0.1** |
| | baz=245 | | | | | | |
| **DIV** | **Divide** | **18.75** | **48** | P | **P** | **16 43 23.0** | **-1.1** |
| **KLU** | **Klutina** | **18.79** | **47** | P | **P** | **16 43 24.2** | **-0.3** |
| **KLU** | **Klutina** | **18.79** | **47** | P | **P** | **16 43 24.3** | **-0.3** |
| | baz=251 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **18.88** | **45** | P | **Pn** | **16 43 26.0** | **-0.4** |
| **M24K** | **Tolsona, Glenn** | **18.88** | **45** | P | **Pn** | **16 43 27.0** | **+0.5** |
| | baz=249 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **18.97** | **35** | P | **Pn** | **16 43 28.3** | **+0.9** |
| | baz=237,SNR=9.7 | | | | | | |
| **WRH** | **Wood River Hil** | **19.09** | **37** | P | **P** | **16 43 26.8** | **-0.8** |
| **HMT** | **Hamilton** | **19.26** | **51** | P | **P** | **16 43 29.6** | **-0.1** |
| **MDM** | **Murphy Dome** | **19.28** | **36** | P | **P** | **16 43 29.4** | **-0.4** |
| **CCB** | **Clear Creek Bu** | **19.28** | **37** | P | **P** | **16 43 29.1** | **-0.7** |
| **H23K** | **Yukon River** | **19.29** | **33** | Pn | **Pn** | **16 43 31.8** | **+0.6** |
| H23K | | | | IAmb | IAmb | 16 43 48.2 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **19.29** | **33** | P | **Pn** | **16 43 31.6** | **+0.4** |
| | baz=235 | | | | | | |
| **COLA** | **College** | **19.37** | **36** | *i* P | **Pn** | **16 43 32.7** | **+0.5** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| **HARP** | **HAARP** | **19.43** | **45** | P | **Pn** | **16 43 33.2** | **+0.2** |
| | baz=250 | | | | | | |
| **N25K** | **Chitina, Valde** | **19.43** | **47** | P | **P** | **16 43 31.9** | **+0.3** |
| N25K | | | | IAmb | IAmb | 16 44 09.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **19.43** | **47** | P | **Pn** | **16 43 32.8** | **-0.2** |
| | baz=253 | | | | | | |
| **HDA** | **Harding Lake** | **19.49** | **38** | P | **P** | **16 43 32.6** | **+0.5** |
| HDA | | | | IAmb | IAmb | 16 43 41.1 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **HDA** | **Harding Lake** | **19.49** | **38** | P | **Pn** | **16 43 33.1** | **-0.6** |
| | baz=242 | | | | | | |
| **PAX** | **Paxson** | **19.49** | **43** | P | **Pn** | **16 43 33.1** | **-0.7** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,32nm,1.6s | | | | | | |
| **PAX** | **Paxson** | **19.49** | **43** | P | **Pn** | **16 43 33.1** | **-0.7** |
| PAX | | | | IAmb | IAmb | 16 44 01.5 | |
| | comp=Z,32nm,1.6s | | | | | | |
| **PAX** | **Paxson** | **19.49** | **43** | P | **Pn** | **16 43 33.3** | **-0.6** |
| | baz=248 | | | | | | |
| **IL31** | | **19.68** | **37** | P | **P** | **16 43 34.9** | **+0.8** |
| **ILAR** | **Eielson Array** | **19.68** | **37** | P | **P** | **16 43 32.5** | **-1.8** |
| | comp=Z,0.7nm,0.3s,baz=238,slow=9.7,SNR=39 | | | | | | |
| ILAR | | | | LR | LR | 16 51 58.3 | |
| | comp=Z,182nm,18.3s,baz=258,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **19.68** | **37** | *e*P | **Pn** | **16 43 35.1** | **-0.9** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **19.68** | **37** | P | **Pn** | **16 43 35.6** | **-0.4** |
| **GLB** | **Gilahina Butte** | **19.75** | **48** | P | **P** | **16 43 35.7** | **+0.7** |
| GLB | | | | IAmb | IAmb | 16 44 11.0 | |
| | comp=Z,41nm,1.9s | | | | | | |
| **H24K** | **Noodor Dome** | **19.86** | **34** | P | **Pn** | **16 43 37.6** | **-0.5** |
| H24K | | | | IAmb | IAmb | 16 43 42.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **19.86** | **34** | P | **Pn** | **16 43 37.4** | **-0.7** |
| | baz=237,SNR=17 | | | | | | |
| **COLD** | **Coldfoot** | **19.92** | **29** | P | **Pn** | **16 43 39.0** | **+0.3** |
| | baz=231 | | | | | | |
| **RIDG** | **Independent Ri** | **20.05** | **41** | P | **P** | **16 43 38.7** | **+0.5** |
| **RIDG** | **Independent Ri** | **20.05** | **41** | P | **P** | **16 43 38.1** | **-0.1** |
| | baz=247 | | | | | | |
| **DOT** | **Dot Lake** | **20.33** | **42** | P | **P** | **16 43 41.0** | **-0.3** |
| DOT | | | | IAmb | IAmb | 16 43 45.4 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **M26K** | **Nabesna, AK** | **20.38** | **46** | P | **P** | **16 43 42.1** | **+0.2** |
| **M26K** | **Nabesna, AK** | **20.38** | **46** | P | Pn | **16 43 43.8** | **-0.5** |
| | baz=253 | | | | | | |
| **L26K** | **Log Cabin Wild** | **20.42** | **44** | P | **P** | **16 43 42.4** | **+0.1** |
| L26K | | | | IAmb | IAmb | 16 44 17.5 | |
| | comp=Z,45nm,1.8s | | | | | | |
| **SEY** | **Seymchan** | **20.48** | **316** | P | Pn | **16 43 44.2** | **-1.2** |
| | comp=Z,11nm,1.0s,baz=109,slow=9.5,SNR=11 | | | | | | |
| SEY | | | | LR | LR | 16 51 22.1 | |
| | comp=Z,499nm,21.5s,baz=141,slow=36 | | | | | | |
| **SEY** | **Seymchan** | **20.48** | **316** | *i* P | **P** | **16 43 42.5** | **-0.4** |
| **MA2** | **Magadan** | **20.49** | **306** | P | **P** | **16 43 43.6** | **+0.6** |
| | comp=Z,4.1nm,0.9s,baz=350,slow=22,SNR=4.3 | | | | | | |
| MA2 | | | | LR | LR | 16 50 57.3 | |
| | comp=Z,273nm,21.8s,baz=100,sl

ASAJ LR LR 16 56 52.5
comp=Z,88nm,20.0s,baz=328,slow=37
**C36M Paulatuk 29.57 34** P **P** **16 45 08.9 -0.3**
baz=260
**A36M Sachs Harbour 29.79 29** P **P** **16 45 11.1 +0.1**
A36M IAmb IAmb 16 45 12.6
comp=Z,11nm,0.8s
**A36M Sachs Harbour 29.79 29** P **P** **16 45 11.3 +0.2**
baz=254,SNR=9.7
**YAK Yakutsk 30.83 311** LR LR 16 57 29.2
comp=Z,258nm,21.5s,baz=80,slow=36
**YAK Yakutsk 30.83 311** *eP* **P** **16 45 20.1 -0.3**
YAK pmax pmax
comp=Z,9.0nm,1.1s
**TIXI Tiksi 31.43 330** LR LR 16 58 52.2
comp=Z,156nm,19.8s,baz=170,slow=38
**TIXI Tiksi 31.43 330** *i* P **P** **16 45 25.4 -0.2**
TIXI pmax pmax
comp=Z,5.0nm,2.7s
**KLR Kul'dur 33.15 287** LR LR 16 58 54.6
comp=Z,147nm,21.9s,baz=78,slow=36
**KLR Kul'dur 33.15 287** *i* P **P** **16 45 39.8 -1.1**
KLR pmax pmax
comp=Z,3.0nm,1.0s
**YKA Yellowknife Ar 33.46 47** P **P** **16 45 42.9 -0.5**
comp=Z,1.8nm,0.9s,baz=278,slow=8.6,SNR=14
YKA PcP **PcP** **16 48 24.2 +0.8**
comp=Z,0.8nm,0.7s,baz=284,slow=3.0,SNR=6.2
YKA LR LR 16 59 36.9
comp=Z,217nm,20.1s,baz=316,slow=37
**YKA Yellowknife Ar 33.46 47** *eP* **P** **16 45 44.4 +0.9**
YKA pmax pmax
comp=Z,2.0nm,0.9s
**ZEA Zeya 34.01 297** *i* P **P** **16 45 48.0 -0.4**
**H11N2 WAKE ISLAND Hy 34.79 210** T T 17 22 37.8
baz=18,slow=76,SNR=88
**H11N3 WAKE ISLAND Hy 34.80 210** T T 17 22 37.1
baz=18,slow=76,SNR=69
**H11N1 WAKE ISLAND Hy 34.81 210** T T 17 22 48.5
baz=18,slow=76,SNR=74
**USRK Ussuriysk Ar. 35.37 279** P **P** **16 46 00.2 +0.1**
comp=Z,7.6nm,0.9s,baz=67,slow=8.6,SNR=11
USRK LR LR 16 59 26.8
comp=Z,158nm,22.0s,baz=54,slow=34
**USRK Ussuriysk Ar. 35.37 279** P **P** **16 45 59.1 -1.1**
**MJAR Matsushiro Arr 35.95 264** P **P** **16 46 06.6 +1.4**
comp=Z,1.9nm,0.8s,baz=50,slow=8.3,SNR=4.6
MJAR LR LR 16 59 05.4
comp=Z,118nm,20.0s,baz=56,slow=33
**MJAR Matsushiro Arr 35.95 264** P **P** **16 46 05.6 +0.4**
MJAR IAmb IAmb 16 46 12.3
comp=Z,13nm,1.4s
**H11S1 WAKE ISLAND Hy 36.00 210** T T 17 24 45.3
baz=22,slow=74
**H11S2 WAKE ISLAND Hy 36.02 210** T T 17 24 31.9
baz=22
**H11S3 WAKE ISLAND Hy 36.02 210** T T 17 24 40.0
baz=22,slow=74
**YBH Yreka Blue Hor 36.72 84** LR LR 16 57 37.6
comp=Z,192nm,20.2s,baz=308,slow=30
**MSHR Mys Shultsa 36.75 277** *ceP* **P** **16 46 10.7 -1.2**
MSHR pmax pmax
comp=Z,16nm,0.9s
**NEW Newport 36.76 72** LR LR 16 59 53.5
comp=Z,104nm,18.2s,baz=308,slow=34
**NEW Newport 36.76 72** P **P** **16 46 12.9 +0.8**
NEW pmax pmax
comp=Z,8.0nm,0.7s
**NEW Newport 36.76 72** P **P** **16 46 12.9 +0.8**
NEW IAmb IAmb 16 46 20.1
comp=Z,8.3nm,0.7s
**NEW Newport 36.76 72** P **P** **16 46 13.0 +0.8**
baz=298,SNR=6.6
**EDM Edmonton 36.78 62** P **P** **16 46 12.9 +0.7**
EDM pmax pmax
comp=Z,33nm,1.0s
**EDM Edmonton 36.78 62** P **P** **16 46 12.9 +0.7**
**RES Resolute Bay 38.57 25** LR LR 17 05 38.7
comp=Z,126nm,18.1s,baz=280,slow=41
**MSO Missoula 39.34 72** P **P** **16 46 34.6 +0.6**
baz=300
**HLID Hailey 40.79 77** P **P** **16 46 46.9 +0.9**
baz=304,SNR=5.8
**BCYI Bear Canyon 40.99 75** P **P** **16 46 48.4 +0.7**
**MCMT McKenzie Canyo 41.04 74** P **P** **16 46 48.4 +0.2**
**BOZ Bozeman (W) 41.36 72** P **P** **16 46 50.6 0.0**
BOZ pmax pmax
comp=Z,6.0nm,0.8s
**BOZ Bozeman (W) 41.36 72** P **P** **16 46 50.5 0.0**
BOZ IAmb IAmb 16 47 01.3
comp=Z,6.3nm,0.8s
**BOZ Bozeman (W) 41.36 72** P **P** **16 46 50.6 0.0**
baz=302,SNR=8.0
**NVAR Mina Array Bea 41.39 86** P **P** **16 46 52.2 +1.2**
comp=Z,2.1nm,0.9s,baz=302,slow=5.4,SNR=4.2
NVAR PcP **PcP** **16 48 49.3 +0.9**
comp=Z,0.7nm,0.7s,baz=117,slow=0.3,SNR=4.0
NVAR ScP **ScP** **16 52 33.9 -0.4**
comp=Z,0.7nm,0.9s,baz=289,slow=4.5,SNR=3.9
NVAR LR LR 16 59 50.6
comp=Z,128nm,20.6s,baz=321,slow=30
**KSRS Korea Array 41.77 273** P **P** **16 46 55.1 +1.3**
comp=Z,7.3nm,0.9s,baz=60,slow=7.7,SNR=13
KSRS LR LR 17 03 49.9
comp=Z,29nm,20.2s,baz=65,slow=35
**ELK Elko 41.90 81** LR LR 17 03 34.1
comp=Z,154nm,19.1s,baz=318,slow=35
**YHH Holmes Hill 42.26 73** P **P** **16 46 58.3 +0.1**
YHH IAmb IAmb 16 46 59.5
comp=Z,6.4nm,0.7s
**H17A Grant Village 42.64 73** P **P** **16 47 03.3 +2.1**
baz=304,SNR=5.8
**RLMT Red Lodge 43.01 72** P **P** **16 47 05.5 +1.4**
baz=303
**R11A Troy Canyon, C 43.13 84** P **P** **16 47 05.0 -0.2**
**DUG Dugway, Tooele 43.71 80** P **P** **16 47 08.8 -1.0**
DUG pmax pmax
comp=Z,6.0nm,0.9s
**DUG Dugway, Tooele 43.71 80** P **P** **16 47 08.8 -1.0**
DUG IAmb IAmb 16 47 30.6
comp=Z,5.7nm,0.9s
**DUG Dugway, Tooele 43.71 80** P **P** **16 47 11.0 +1.2**
baz=307
**BW06 Boulder Array 44.17 75** P **P** **16 47 14.1 +0.6**
BW06 IAmb IAmb 16 47 14.8
comp=Z,10nm,0.8s
**BW06 Boulder Array 44.17 75** P **P** **16 47 14.0 +0.4**
baz=305,SNR=14
**PD31 Pinedale Array 44.17 75** P **P** **16 47 13.7 +0.1**
PD31 IAmb IAmb 16 47 14.8
comp=Z,9.0nm,0.8s
**PDAR Pinedale Array 44.17 75** P **P** **16 47 13.9 +0.4**
comp=Z,9.4nm,0.7s,baz=306,slow=4.1,SNR=86
PDAR LR LR 17 03 52.2
comp=Z,82nm,19.8s,baz=320,slow=34
**PDAR Pinedale Array 44.17 75** P **P** **16 47 14.0 +0.4**
**NRIK Noril'sk 45.22 330** P **P** **16 47 21.2 0.0**
comp=Z,1.2nm,0.5s,baz=16,slow=7.4,SNR=2.1
NRIK LR LR 17 08 44.9
comp=Z,106nm,19.7s,baz=32,slow=39
**NRIK Noril'sk 45.22 330** *i* P **P** **16 47 20.9 -0.3**
NRIK pmax pmax
comp=Z,4.0nm,1.1s
**O20A White River Ci 46.53 77** P **P** **16 47 31.5 -0.8**
**O20A White River Ci 46.53 77** P **P** **16 47 32.5 +0.3**
baz=308,SNR=5.2
**MDND Maddock 47.04 63** P **P** **16 47 36.1 +0.3**
baz=304,SNR=9.4
**PV13 Radium Mtn., P 47.41 79** P **P** **16 47 39.5 +0.3**
**N23A Red Feather La 47.45 74** P **P** **16 47 40.2 +0.7**
baz=308
**ULM Lac du Bonnet 47.71 59** P **P** **16 47 40.9 -0.1**
comp=Z,4.2nm,0.7s,baz=307,slow=7.9,SNR=4.0
**ULN Ulaanbaatar 48.03 298** *i* P **P** **16 47 42.4 -1.3**
ULN pmax pmax
comp=Z,1.0nm,0.9s
**ISCO Idaho Springs 48.33 75** P **P** **16 47 47.1 +0.8**
baz=308
**SONM Songino Array 48.41 298** P **P** **16 47 45.8 -0.8**
comp=Z,1.0nm,1.0s,baz=49,slow=6.7,SNR=3.7
SONM PcP **PcP** **16 49 12.5 +0.2**
comp=Z,2.9nm,0.9s,baz=78,slow=4.5,SNR=9.8
SONM LR LR 17 08 47.3
comp=Z,102nm,19.8s,baz=53,slow=37
**ZAK Zakamensk 48.61 302** *eP* **P** **16 47 47.4 -0.7**
ZAK pmax pmax
comp=Z,4.0nm,1.3s

**AGMN Agassiz Nation 48.84 61** P **P** **16 47 49.5 -0.2**
baz=306
**S22A 4UR Ranch, Cre 48.89 78** P **P** **16 47 52.2 +1.6**
baz=310
**HHC Hu-ho-hao-te 49.65 288** *eP* **P** **16 47 55.4 -0.8**
HHC pmax pmax
comp=Z,11nm,1.1s
HHC pmax pmax
comp=Z,130nm,5.2s
**SDCO Great Sand Dun 49.70 77** P **P** **16 47 57.5 +0.7**
baz=310,SNR=5.8
**HNS HongShan 49.95 282** ||P **P** **16 47 59.8 +1.5**
HNS pmax pmax
comp=Z,25nm,1.1s
**SPITS Spitsbergen Ar 50.20 357** P **P** **16 47 57.2 -2.6**
comp=Z,15nm,1.0s,baz=146,slow=6.1,SNR=2.2
SPITS LR LR 17 09 34.7
comp=Z,162nm,20.1s,baz=298,slow=36
**T25A Trinidad 50.75 77** P **P** **16 48 05.6 +1.0**
baz=310,SNR=7.9
**ANMO Albuquerque 50.94 81** *i* P **P** **16 48 05.8 -0.3**
ANMO pmax pmax
comp=Z,2.0nm,1.2s
**ECSD EROS Data Cent 51.17 66** P **P** **16 48 06.5 -0.9**
baz=308
**EYMN Ely 51.40 59** P **P** **16 48 09.0 -0.1**
**EYMN Ely 51.40 59** P **P** **16 48 08.7 -0.4**
baz=308
**F36A Milaca 51.58 62** P **P** **16 48 09.7 -0.8**
F36A IAmb IAmb 16 48 10.7
comp=Z,5.9nm,0.8s
**FRB Frobisher Bay 51.63 33** P **P** **16 48 09.4 -1.1**
comp=Z,3.9nm,0.7s,baz=337,slow=7.9,SNR=7.1
**MNTX Cornudas Mount 53.79 83** P **P** **16 48 27.6 +0.6**
baz=314
**MSTX Muleshoe 53.85 79** P **P** **16 48 28.0 +0.4**
baz=313
**JFWS Jewell Farm 55.27 63** P **P** **16 48 36.7 -0.9**
**ZALV Zalesovo Beam 55.35 315** P **P** **16 48 36.8 -1.2**
comp=Z,0.6nm,0.8s,baz=55,slow=7.8,SNR=2.1
ZALV PcP **PcP** **16 49 38.1 +0.1**
comp=Z,1.6nm,0.8s,baz=56,slow=5.4,SNR=6.5
ZALV LR LR 17 14 00.4
comp=Z,172nm,18.9s,baz=42,slow=38
**XAN Xi'an 55.69 283** P **P** **16 48 41.3 +0.5**
XAN pP pP 16 48 55.9 +2.2
XAN pmax pmax
comp=Z,10.0nm,1.3s
XAN LR LR
comp=N,210nm,15.8s
XAN LR LR
comp=E,210nm,15.1s
XAN LR LR
comp=Z,400nm,18.5s
**WMOK Wichita Mounta 55.75 76** P **P** **16 48 41.5 +0.3**
baz=313
**TXAR Lajitas Array 56.49 84** P **P** **16 48 46.3 -0.3**
comp=Z,1.6nm,0.8s,baz=294,slow=5.2,SNR=13
**GTA Gaotai 57.42 294** *eP* **P** **16 48 52.9 -0.2**
GTA pP pP 16 48 58.3 -7.9
GTA sP sP 16 49 02.1 -10
GTA pmax pmax
comp=Z,2.0nm,1.0s
**SCHQ Schefferville 58.42 40** P **P** **16 48 59.3 -0.4**
comp=Z,3.2nm,0.9s,baz=319,slow=7.1,SNR=4.2
**SCHQ Schefferville 58.42 40** P **P** **16 48 59.1 -0.6**
SCHQ IAmb IAmb 16 50 04.3
comp=Z,10.0nm,1.2s
**SFIN Lafayette 58.72 63** P **P** **16 49 02.0 0.0**
baz=313
**MIAR Mount Ida 59.00 72** P **P** **16 49 04.0 -0.1**
baz=314,SNR=5.3
**O48B Farmland 59.87 62** P **P** **16 49 09.2 -0.8**
baz=314,SNR=5.1
**SADO Sadowa 59.93 55** P **P** **16 49 09.8 -0.5**
comp=Z,5.2nm,0.7s,baz=280,slow=9.0,SNR=1.2
**KURK Kurchatov 60.33 315** *i* P **P** **16 49 12.3 -0.7**
KURK pmax pmax
comp=Z,4.0nm,1.0s
**KURK Kurchatov 60.33 315** P **P** **16 49 12.1 -0.9**
KURK IAmb IAmb 16 49 58.7
comp=Z,7.5nm,1.2s
**P49A Miami Univ. Ec 60.62 63** P **P** **16 49 14.4 -0.7**
baz=314
**WMQ Urumqi 60.95 305** *eP* **P** **16 49 18.3 +0.9**
WMQ LR LR
comp=Z,130nm,20.3s
**CD2 Chengdu 60.99 284** P **P** **16 49 18.5 +0.7**
CD2 pmax pmax
comp=Z,20nm,1.0s
**M53A WI Miller and 61.47 59** P **P** **16 49 21.1 +0.2**
baz=315,SNR=5.5
**MKAR Makanchi Array 61.49 310** P **P** **16 49 19.6 -1.4**
comp=Z,0.5nm,0.5s,baz=40,slow=6.2,SNR=9.8
**M54A Oil Creek Stat 61.96 58** P **P** **16 49 24.0 -0.2**
baz=315
**O53A New Philadelph 62.03 60** P **P** **16 49 24.7 +0.1**
baz=315
**N54A Moraine State 62.17 58** P **P** **16 49 25.1 -0.5**
**N54A Moraine State 62.17 58** P **P** **16 49 25.7 +0.1**
baz=315,SNR=6.6
**M55A Ridgway 62.46 57** P **P** **16 49 26.4 -1.1**
**P53A Whipple 62.47 61** P **P** **16 49 27.1 -0.6**
**L56A Greenwood 62.61 56** P **P** **16 49 28.9 +0.4**
**MCWV Mont Chateau 63.18 59** P **P** **16 49 32.7 +0.4**
baz=316
**BINY Binghamton 63.37 55** P **P** **16 49 34.0 +0.5**
baz=316
**M57A Sunshine Farm, 63.41 56** P **P** **16 49 33.1 -0.7**
**O56A Blue Knob Stat 63.42 58** P **P** **16 49 33.7 -0.3**
baz=316
**ARU Arti 63.44 330** P **P** **16 49 34.7 +1.0**
comp=Z,0.4nm,0.4s,baz=21,slow=2.3,SNR=3.9
ARU LR LR 17 20 48.6
comp=Z,90nm,18.6s,baz=329,slow=39
**ARU Arti 63.44 330** *c i* P **P** **16 49 33.4 -0.4**
ARU S **S** **16 58 04.1 +1.3**
ARU SS **SS** **17 02 05.6 -3.7**
ARU pmax pmax
comp=Z,11nm,2.3s
**SSPA Standing Stone 63.52 57** P **P** **16 49 34.5 0.0**
**SSPA Standing Stone 63.52 57** P **P** **16 49 34.6 0.0**
baz=316
**N59A State Game Lan 64.41 56** P **P** **16 49 40.8 +0.4**
baz=317
**BLA Blacksburg 64.64 62** P **P** **16 49 43.0 +1.0**
baz=317
**PZH PanZhiHua 65.39 282** P **P** **16 49 47.4 +0.3**
PZH pmax pmax
comp=Z,30nm,1.0s
PZH pmax pmax
comp=Z,80nm,5.3s
**JAY Jayapura 65.55 230** LR LR 17 13 27.0
comp=Z,46nm,20.9s,baz=356,slow=31
**FINES FINESS Array B 65.93 349** P **P** **16 49 50.2 +0.4**
comp=Z,2.3nm,0.8s,baz=182,slow=23,SNR=1.4
**NOA NORSAR Array B 67.50 357** P **P** **16 49 59.7 -0.3**
comp=Z,1.1nm,0.8s,baz=16,slow=6.5,SNR=1.2
**HFS Hagfors 68.30 355** P **P** **16 50 03.9 -1.0**
comp=Z,1.4nm,0.4s,baz=241,slow=1.5,SNR=7.9
**AKTO Aktyubinsk 68.64 327** P **P** **16 50 06.9 -0.4**
comp=Z,2.2nm,0.8s,baz=11,slow=3.6,SNR=5.9
**PPT2 Papeete2 72.57 154** *eLR* LR 17 12 42.2
comp=Z,171nm,22.2s
**PPT2 Papeete2 72.57 154** *eT* T 18 10 05.6
comp=Z,6.0nm,0.3s
**TAPN Taplejung 73.08 293** *eP* **P** **16 50 35.2 +0.3**
comp=Z,23nm,1.0s
**CMAR Chiang Mai Arr 73.10 278** P **P** **16 50 35.6 +0.9**
comp=Z,3.3nm,0.9s,baz=26,slow=6.7,SNR=21
CMAR LR LR 17 23 37.1
comp=Z,34nm,21.5s,baz=50,slow=36
**CMAR Chiang Mai Arr 73.10 278** P **P** **16 50 34.6 -0.1**
**GUN Gumba 73.70 294** *eP* **P** **16 50 39.2 +0.6**
comp=Z,23nm,0.6s
**RAR Rarotonga 73.86 165** LR LR 17 16 00.0
comp=Z,153nm,21.5s,baz=349,slow=30
**RAMN Ramite 74.03 293** *eP* **P** **16 50 40.9 +0.5**
comp=Z,4.0nm,0.4s
**KKN Kakani 74.14 295** *eP* **P** **16 50 41.4 +0.4**
**PKI Pulchoki 74.23 294** *eP* **P** **16 50 41.7 0.0**
**PKIN Phulchoki 74.23 294** *eP* **P** **16 50 42.1 +0.5**
comp=Z,7.9nm,0.6s
**GKN Gorkha 74.33 295** *eP* **P** **16 50 42.3 +0.2**
**DMN Daman 74.37 295** *eP* **P** **16 50 42.9 +0.5**
**DANN Dangsing 74.56 296** *eP* **P** **16 50 43.6 +0.1**
comp=Z,18nm,0.7s
**KOLN Koldanda 75.10 296** *eP* **P** **16 50 47.6 +1.1**
comp=Z,69nm,1.3s
**DZM Mont Dzumac 75.15 197** LR LR 17 20 24.6
comp=Z,113nm,19.2s,baz=32,slow=33
**DZM Mont Dzumac 75.15 197** *e*LR LR 17 13 54.7
comp=Z,220nm,29.1s
**PYUN Piuthan 75.18 296** *eP* **P** **16 50 47.4 +0.4**
comp=Z,22nm,0.9s
**AKASG Malin Array Be 75.88 344** P **P** **16 50 49.4 -0.9**
comp=Z,0.3nm,0.4s,baz=16,slow=6.0,SNR=4.2
**AKASG Malin Array Be 75.88 344** *eP* **P** **16 50 51.1 +0.7**
comp=Z,81nm,18.6s,baz=320,slow=39
**CTA Charters Tower 78.96 216** LR LR 17 18 49.0
comp=Z,40nm,20.4s,baz=24,slow=30
**GERES GERESS Array B 79.55 354** P **P** **16 51 09.6 -1.4**
comp=Z,0.4nm,0.6s,baz=113,slow=3.5,SNR=3.8
**GERES GERESS Array B 79.55 354** *eP* **P** **16 51 11.5 +0.5**
**WRAB Tennant Creek 83.73 227** *ce*P **P** **16 51 33.7 +0.5**
WRAB pmax pmax
comp=Z,5.0nm,1.3s
**WRA Warramunga Arr 83.75 227** P **P** **16 51 32.7 -0.6**
comp=Z,2.5nm,1.0s,baz=42,slow=6.5,SNR=11
WRA LR LR 17 22 38.8
comp=Z,45nm,21.2s,baz=106,slow=31
**WRA Warramunga Arr 83.75 227** P **P** **16 51 31.8 -1.5**
**BRTR Keskin Array B 85.51 338** P **P** **16 51 42.0 -0.2**
comp=Z,0.6nm,0.7s,baz=167,slow=33,SNR=2.9
**FITZ Fitzroy Crossi 86.36 235** P **P** **16 51 46.5 +0.2**
**ASAR Alice Springs 87.19 225** P **P** **16 51 50.4 0.0**
comp=Z,3.2nm,0.8s,baz=29,slow=4.5,SNR=27
ASAR LR LR 17 27 34.0
comp=Z,57nm,19.7s,baz=46,slow=33
**STKA Stephens Creek 91.38 216** P **P** **16 52 10.2 +0.4**
comp=Z,3.2nm,0.9s,baz=0.0,slow=10,SNR=4.9
**STKA Stephens Creek 91.38 216** *eP* **P** **16 52 10.9 +1.1**
STKA pmax pmax
comp=Z,3.0nm,0.9s
**RPZ Rata Peaks 95.74 190** LR LR 17 31 05.9
comp=Z,72nm,18.9s,baz=46,slow=32
**TORD Torodi Ar. Bea 115.39 3** PKP **PKiKP** **16 57 45.5 -0.5**
comp=Z,1.4nm,0.8s,baz=2.8,slow=3.8,SNR=2.1
**PLCA Paso Flores 129.03 109** *e*PKiKP **PKiKP** **16 58 12.9 +0.8**
PLCA pmax pmax
comp=Z,4.0nm,1.2s
**EFI East Falkland 142.21 115** *i* PKiKP **PKPdf** **16 58 35.0 -0.3**
EFI pmax pmax
comp=Z,46nm,1.1s
**TSUM Tsumeb 146.02 338** PKPbc **PKPbc** **16 58 44.2 +0.1**
comp=Z,2.1nm,0.3s,baz=357,slow=6.6,SNR=3.4
**BOSA Boshof 152.26 318** PKPbc **PKPbc** **16 58 59.1 -0.6**
comp=Z,3.7nm,0.7s,baz=2.0,slow=3.6,SNR=14
**BOSA Boshof 152.26 318** **PKiKP** **16 59 00.1 +0.1**

*VIE* ***20*** *16:42:16.8±0.7,51°.38N×16°.19E,h0km,ml2.5/2,Error ellipse: s-maj=8.0km s-min=4.2km az=63.0 65 km WNW of Wroclaw Suspected Mining induced.*
*PRU* ***20*** *16:42:16.4±0.0,51°.46N×16°.08E,h0km*
**ISC 20 16:42:15.9±1.6, 51°.48N±0°.07×16°.10E±0°.05, h0km, n23, σ0s81/43, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.65** | **169** | *e*Pg | **Pg** | **16 42 28.2** | **-0.1** |
| KSP | | | | *e*Sg | **Sg** | **16 42 36.9** | **+0.2** |
| **CHVC** | **Chvalec** | **0.89** | **182** | *e*PG | **Pg** | **16 42 33.1** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **16 42 45.1** | **+0.6** |
| | comp=Z,20nm,0.7s | | | | | | |
| **OSTC** | **Ostas** | **0.93** | **175** | *e*PG | **Pg** | **16 42 33.9** | **+0.3** |
| OSTC | | | | *e*SG | **Sg** | **16 42 46.2** | **+0.6** |
| | comp=Z,26nm,0.4s | | | | | | |
| **UPC** | **Upice** | **0.97** | **183** | *e*PG | **Pg** | **16 42 34.2** | **-0.3** |
| UPC | | | | *e*SG | **Sg** | **16 42 47.4** | **+0.3** |
| | comp=Z,53nm,0.5s | | | | | | |
| **UPC** | **Upice** | **0.97** | **183** | *e* | **Sg** | **16 42 47.4** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **1.14** | **173** | *e*PG | **Pg** | **16 42 37.0** | **-0.7** |
| DPC | | | | *e*SG | **Sg** | **16 42 51.8** | **-0.6** |
| | comp=Z,14nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **226** | *e*PG | **Pg** | **16 42 41.9** | **0.0** |
| PVCC | | | | *e*SG | **Sb** | **16 43 00.4** | **+0.4** |
| | comp=Z,77nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **226** | *e* | **Sb** | **16 43 00.4** | **+0.4** |
| **KRLC** | **Kraliky** | **1.47** | **163** | *e*PG | **Pn** | **16 42 42.9** | **-0.8** |
| KRLC | | | | *e*SG | **Sg** | **16 43 02.9** | **-0.2** |
| | comp=Z,15nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.49** | **247** | Pg | **Pn** | **16 42 44.0** | **+0.1** |
| BRG | | | | Sg | **Sn** | **16 43 04.1** | **+0.1** |
| BRG | | | | Amp | | 16 43 04.6 | |
| | comp=Z,34nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.79** | **214** | *e*PG | **Pb** | **16 42 49.1** | **-0.4** |
| PRU | | | | *e*SG | **Sb** | **16 43 12.4** | **-0.1** |
| | comp=Z,10nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.94** | **151** | *e*PN | **Pn** | **16 42 49.1** | **-1.0** |
| MORC | | | | *e*SG | **Sn** | **16 43 15.9** | **+0.8** |
| **CLL** | **Collm** | **1.95** | **266** | *e*Pg | **Pb** | **16 42 52.0** | **-0.2** |
| CLL | | | | *e*Sg | **Sg** | **16 43 18.0** | **-0.4** |
| | comp=Z,13nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.10** | **141** | *e*SG | **Sb** | **16 43 22.2** | **+0.9** |
| **VRAC** | **Vranov** | **2.19** | **172** | *e*PN | **Pn** | **16 42 52.8** | **-0.8** |
| VRAC | | | | *e*SG | **Sb** | **16 43 24.5** | **+0.3** |
| **TREC** | **Trest** | **2.22** | **190** | *e*SG | **Sg** | **16 43 26.1** | **-1.1** |
| **KRUC** | **Moravsky** | **2.43** | **175** | *e*PN | **Pn** | **16 42 56.0** | **-0.8** |
| KRUC | | | | *e*SG | **Sb** | **16 43 31.5** | **+0.7** |
| **NKC** | **Novy Kostel** | **2.63** | **243** | *e*PG | **Pb** | **16 43 04.7** | **+0.8** |
| NKC | | | | *e*SG | **Sg** | **16 43 40.2** | **-0.1** |
| | comp=Z,14nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **2.63** | **243** | *e* | **Pb** | **16 43 04.7** | **+0.8** |
| **KHC** | **Kasperske Hory** | **2.85** | **216** | *e*PN | **Pn** | **16 43 02.5** | **-0.2** |
| KHC | | | | *e*PG | **Pb** | **16 43 07.9** | **+0.2** |
| KHC | | | | *e*SN | **Sn** | **16 43 36.5** | **-1.2** |
| KHC | | | | *e*SG | **Sg** | **16 43 45.8** | **-1.7** |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.90** | **204** | *e*PG | **Pb** | **16 43 09.7** | **+1.2** |
| CKRC | | | | *e*SG | **Sb** | **16 43 46.5** | **+2.0** |
| **CONA** | **Conrad Observa** | **3.56** | **183** | *i* Pn | **Pn** | **16 43 12.7** | **+0.2** |
| | comp=Z,0.1nm,0.1s | | | | | | |
| CONA | | | | Sg | **Sg** | **16 44 08.1** | **-2.0** |
| | comp=Z,4.8nm,0.3s | | | | | | |
| **MOA** | **Molln** | **3.82** | **199** | *i* Pn | **Pn** | **16 43 16.6** | **+0.6** |
| | comp=Z,0.6nm,0.3s | | | | | | |
| MOA | | | | *e*Sg | **Sg** | **16 44 17.5** | **-1.1** |
| | comp=Z,1.9nm,0.3s | | | | | | |

*IDC* ***20*** *16:48:23.5±0.5,4°.61N×32°.64W,h0km,mb4.4/27, mb1 4.6/28,mb1mx4.5/41,mbtmp4.4/28,ML3.7/1,MS4.1/60, Ms1 4.1/60,ms1mx4.0/82,Error ellipse: s-maj=16.7km s-min=11.4km az=151.0*
*NEIC* ***20*** *16:48:26.0±2.0,4°.8N±0°.1×32°.63W±0°.03,h10km±1km, mb5.1/69,Error ellipse: s-maj=20.2km s-min=3.5km az=170.0*
*GCMT* ***20*** *16:48:27.0±0.3,4°.73N±0°.04×32°.64W±0°.02,h18km±1km, MW5.0/103, Moment Tensor Solution. s24,c26; s103,c125; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-3.81±.26; Mθθ0.32±.16; Mϕϕ3.49±.18; Mrθ0.17±.52; Mθϕ0.09±.10; Mϕr1.03±.38; Best double couple: Ms3.79700×10^16 NP1:ϕs360.00000°,δ37.00000°, λ-93.00000°. NP2:ϕs184.00000°,δ53.00000°, λ-88.00000°. Principal axes: T 3.6370, Plg8.0000°, Azm272.0000°; N 0.3200, Plg2.0000°, Azm2.0000°; P -3.9580, Plg82.0000°, Azm105.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 20 16:48:25.5±0.3, 4.73N±0°.07×32°.56W±0°.07, h11km, n295, σ1s28/257, mb4.9/80, MS4.1/62, 11C-11D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBMO** | **Morrinhos-CE** | **10.94** | **223** | *e*P | **Pn** | **16 51 03.7** | **+1.6** |
| **NBLA** | **Lagarto - SE** | **16.46** | **198** | *e*P | **Pn** | **16 52 17.4** | **+0.7** |
| **NBPN** | **Ponto Novo - B** | **17.24** | **206** | *e*P | **P** | **16 52 27.8** | **-0.2** |
| **MDP** | **Montagnes des** | **20.01** | **272** | P | **P** | **16 52 56.0** | **-2.5** |
| | 0.2nm,0.3s,baz=79,slow=10,SNR=2.4 | | | | | | |
| MDP | | | | LR | LR | 16 59 01.2 | |
| | comp=Z,500nm,21.5s,baz=76,slow=32 | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **20.99** | **216** | *e*P | **P** | **16 53 10.0** | **+0.9** |
| **CMC01** | **Camacan, BA** | **21.12** | **199** | *e*P | **P** | **16 53 11.1** | **+0.7** |
| **H10N3** | **ASCENSION HYDF** | **21.92** | **125** | T | T | 17 15 54.7 | |
| | baz=304,slow=75,SNR=183 | | | | | | |

H10N2 **ASCENSION HYDR** 21.93 125 T T 17 15 54.5
baz=304,slow=75,SNR=201
H10N1 **ASCENSION HYDR** 21.94 125 T T 17 15 55.7
baz=304,slow=75,SNR=197
GUA01 **Guaratinga, BA** 22.36 199 *eP* **P** **16 53 25.4 +1.6**
ITTB **Itaituba** 24.85 249 *eP* **P** **16 53 51.8 +3.5**
SNDB **Serra Nova Dou** 24.95 228 *eP* **P** **16 53 50.1 +1.0**
RIB01 **Linhares ES** 25.11 198 *eP* **P** **16 53 51.3 +0.7**
DIAM **Diamantina, MG** 25.37 205 *eP* **P** **16 53 54.3 +1.2**
BDFB **Brasilia** 25.37 217 P **P** **16 53 51.6 -1.5**
3.0nm,0.8s,baz=35,slow=18,SNR=4.8
BDFB LR LR 17 02 40.7
comp=Z,505nm,21.1s,baz=7.8,slow=34
BDFB **Brasilia** 25.37 217 P **P** **16 53 53.4 +0.3**
IPMB **Ipameri, GO** 27.35 214 *eP* **P** **16 54 12.9 +2.1**
DBIC **Dimbokro** 27.63 85 P **P** **16 54 13.5 0.0**
3.6nm,0.7s,baz=287,slow=16,SNR=4.7
DBIC LR LR 17 02 45.8
comp=Z,566nm,20.2s,baz=270,slow=31
DBIC **Dimbokro** 27.63 85 P **P** **16 54 13.6 +0.1**
CLDB **Colider** 27.84 236 *eP* **P** **16 54 17.9 +2.5**
PTGA **Pitinga** 27.91 259 P **P** **16 54 15.5 -0.4**
0.9nm,0.3s,baz=82,slow=12,SNR=1.8
PTGA LR LR 17 04 16.9
comp=Z,593nm,20.1s,baz=60,slow=34
BOAV **Boa Vista** 28.00 266 *eP* **P** **16 54 20.5 +3.7**
PDRB **Porto dos Gac** 29.01 236 *eP* **P** **16 54 26.7 +1.0**
MACA **Manacapuru-AM** 29.17 255 *eP* **P** **16 54 31.6 +4.4**
H05S1 **Guadeloupe/Mar** 29.46 291 T T 17 25 16.8
SNR=26
KOWA **Kowa** 29.73 69 P **P** **16 54 34.0 +1.9**
KOWA IAmb IAmb 16 54 39.6
comp=Z,37nm,1.5s
H05N1 **Guadeloupe/Mar** 30.24 295 T T 17 26 15.9
SNR=15
PCMB **Pacaembu** 31.95 214 *eP* **P** **16 54 55.1 +3.4**
TORD **Torodi Ar. Bea** 34.82 74 P **P** **16 55 16.7 -0.1**
comp=Z,5.7nm,0.9s,baz=266,slow=9.0,SNR=17
SIV **San Ignacio** 34.93 233 P **P** **16 55 15.9 -1.9**
comp=Z,3.7nm,1.1s,baz=64,slow=5.8,SNR=5.7
SIV LR LR 17 08 43.2
comp=Z,895nm,20.8s,baz=73,slow=35
SJG **San Juan** 35.42 295 LR LR 17 06 29.5
comp=Z,393nm,21.7s,baz=91,slow=31
SDV **Santo Domingo** 38.01 278 LR LR 17 11 27.0
comp=Z,229nm,20.6s,baz=126,slow=36
SDV **Santo Domingo** 38.01 278 *eP* **P** **16 55 48.2 +3.8**
MDT **Midelt** 38.23 40 LR LR 17 10 48.3
comp=Z,291nm,18.0s,baz=258,slow=35
CPUP **Villa Florida** 39.10 217 P **P** **16 55 51.6 -1.4**
comp=Z,4.1nm,1.2s,baz=351,slow=13,SNR=1.9
CPUP LR LR 17 11 37.4
comp=Z,391nm,19.3s,baz=44,slow=36
CPUP **Villa Florida** 39.10 217 P **P** **16 55 54.8 +1.7**
PBDV **Barranco-do-Ve** 39.44 32 *eP* **P** **16 55 57.8 +2.0**
comp=Z,105nm,1.8s
PVAQ **Vaqueiros** 39.67 32 *eP* **P** **16 55 59.8 +2.1**
PMTG **Montargil** 40.68 29 *eP* **P** **16 56 08.0 +1.9**
comp=Z,34nm,1.9s
LPAZ **La Paz** 40.91 239 P **P** **16 56 08.2 -0.8**
comp=Z,1.2nm,0.6s,baz=64,slow=12,SNR=4.0
LPAZ LR LR 17 12 09.4
comp=Z,352nm,19.9s,baz=51,slow=35
LPAZ **La Paz** 40.91 239 P **P** **16 56 10.8 +1.8**
LPAZ **La Paz** 40.91 239 *eP* **P** **16 56 11.6 +2.6**
ITQB **Itaqui** 41.27 213 P **P** **16 56 10.4 -0.5**
ITQB IAmb IAmb 16 56 11.8
comp=Z,52nm,1.7s
ITQB **Itaqui** 41.27 213 *eP* **P** **16 56 11.4 +0.5**
PMRV **Marv??o** 41.37 30 *eP* **P** **16 56 14.0 +2.2**
comp=Z,40nm,1.7s
ROSC **El Rosal** 41.61 272 P **P** **16 56 14.6 +0.1**
comp=Z,5.8nm,0.4s,baz=80,slow=6.1,SNR=1.2
ROSC LR LR 17 14 26.5
comp=Z,438nm,18.5s,baz=84,slow=38
ZARC **Zaragoza, Cauc** 42.13 276 P **P** **16 56 17.0 -1.4**
ESDC **Sonseca Array** 43.33 33 P **P** **16 56 29.1 +1.3**
comp=Z,5.7nm,1.2s,baz=228,slow=8.5,SNR=14
ESDC LR LR 17 12 47.5
comp=Z,122nm,18.1s,baz=292,slow=34
LVC **Limon Verde** 44.73 231 LR LR 17 15 34.6
comp=Z,199nm,21.4s,baz=46,slow=37
NNA **Nana** 47.06 249 LR LR 17 16 39.2
comp=Z,286nm,18.1s,baz=82,slow=36
ATAH **Atahualpa** 47.23 256 LR LR 17 17 21.2
comp=Z,568nm,18.2s,baz=70,slow=37
KEST **Kesra** 49.38 46 LR LR 17 17 45.8
comp=Z,312nm,19.8s,baz=218,slow=36
JTS **Las Juntas de** 52.19 279 LR LR 17 21 52.0
comp=Z,55nm,19.6s,baz=153,slow=38
D62A **Allapoint, All** 52.60 329 P **P** **16 57 39.0 -0.3**
D62A IAmb IAmb 16 57 47.8
comp=Z,29nm,1.1s
BNI **Bardonecchia** 52.78 34 P **P** **16 57 41.1 +0.3**
VAE **Valguarnera** 53.80 46 LR LR 17 20 33.9
comp=Z,278nm,19.4s,baz=226,slow=36
TSUM **Tsumeb** 54.77 117 P **P** **16 57 55.8 -0.1**
comp=Z,1.8nm,0.3s,baz=207,slow=4.5,SNR=2.6
TSUM LR LR 17 15 46.3
comp=Z,404nm,21.9s,baz=302,slow=30
ZCCA **Zocca** 54.87 37 P **P** **16 57 57.9 +1.8**
DOU **Dourbes** 54.95 28 *dP* **P** **16 57 57.2 +0.6**
comp=Z,13nm,1.1s
BG3 **Lake Jocassee** 55.34 310 P **P** **16 58 00.5 +0.8**
BG3 IAmb IAmb 16 58 01.7
comp=Z,12nm,0.9s
N54A **Moraine State** 55.66 318 P **P** **16 58 01.9 +0.1**
baz=117
M54A **Oil Creek Stat** 55.70 318 P **P** **16 58 01.6 -0.5**
baz=118
MEM **Membach** 55.97 29 *dP* **P** **16 58 02.5 -1.3**
comp=Z,10nm,0.9s
P53A **Whipple** 55.97 315 P **P** **16 58 03.2 -0.9**
P53A IAmb IAmb 16 58 05.6
comp=Z,17nm,0.9s
BTNL **Ternell** 56.01 29 *dP* **P** **16 58 03.9 -0.3**
comp=Z,8.2nm,1.0s
O53A **New Philadelph** 56.17 316 P **P** **16 58 06.0 +0.5**
baz=116
CTI **Castel Tesino** 56.20 36 P **P** **16 58 05.5 -0.3**
FETA **Feichten** 56.22 34 *eP* **P** **16 58 06.5 +0.6**
comp=Z,9.9nm,1.1s
TKL **Tuckaleechee C** 56.22 310 LR LR 17 17 20.1
comp=Z,171nm,20.6s,baz=106,slow=31
RETA **Reutte** 56.50 34 *i* P **P** **16 58 08.4 +0.6**
comp=Z,8.7nm,1.1s
MOTA **Moosalm** 56.61 34 *i* P **P** **16 58 09.1 +0.4**
comp=Z,8.1nm,1.3s
WTTA **Wattenberg** 56.86 35 *i* P **P** **16 58 11.0 +0.5**
comp=Z,12nm,1.8s
WATA **Walderalm** 56.87 34 *i* P **P** **16 58 10.9 +0.4**
comp=Z,9.2nm,1.3s
SADO **Sadowa** 56.95 322 LR LR 17 19 31.3
comp=Z,158nm,18.3s,baz=160,slow=33
PLCA **Paso Flores** 57.07 214 P **P** **16 58 11.4 -0.5**
comp=Z,3.5nm,1.2s,baz=14,slow=8.3,SNR=3.4
PLCA LR LR 17 22 22.1
comp=Z,437nm,19.3s,baz=55,slow=36
ABTA **Abfaltersbach** 57.08 35 *eP* **P** **16 58 13.1 +1.1**
comp=Z,13nm,1.2s
SCHQ **Schefferville** 57.09 337 P **P** **16 58 12.3 +0.5**
comp=Z,15nm,0.9s,baz=127,slow=6.9,SNR=16
SCHQ LR LR 17 20 44.1
comp=Z,108nm,18.0s,baz=91,slow=34
SCHQ **Schefferville** 57.09 337 P **P** **16 58 11.9 +0.1**
SCHQ IAmb IAmb 16 58 19.9
comp=Z,21nm,1.0s
Q51A **Peebles** 57.17 314 P **P** **16 58 12.6 0.0**
Q51A IAmb IAmb 16 58 14.1
comp=Z,23nm,1.0s
ACSO **Alum Creek Sta** 57.40 316 P **P** **16 58 13.5 -0.7**
ACSO IAmb IAmb 16 58 15.6
comp=Z,23nm,0.9s
R50A **Paris** 57.59 313 P **P** **16 58 14.6 -1.0**
R50A IAmb IAmb 16 58 17.4
comp=Z,16nm,1.0s
MYKA **Terra Mystica** 57.67 36 *eP* **P** **16 58 17.5 +1.3**
comp=Z,8.9nm,1.0s
SWET **Sewanee** 57.73 309 P **P** **16 58 15.3 -1.4**
SWET IAmb IAmb 16 58 18.2
comp=Z,14nm,0.9s
KBA **Koelnbreinsper** 57.74 35 *i* P **P** **16 58 17.4 +0.7**
comp=Z,5.8nm,1.2s
GRF **Grafenberg Arr** 58.02 32 *eP* **P** **16 58 19.4 +0.9**
baz=235,slow=6.5
OBKA **Obir** 58.15 37 *eP* **P** **16 58 20.4 +0.9**
comp=Z,9.1nm,1.2s

P49A **Miami Univ. Ec** 58.34 314 P **P** **16 58 20.9 0.0**
baz=112
SOKA **Soboth** 58.52 37 *eP* **P** **16 58 23.2 +1.1**
comp=Z,12nm,1.1s
V48A **Smith Brothers** 58.59 309 P **P** **16 58 22.7 0.0**
GERES **GERESS Array B** 58.89 34 P **P** **16 58 25.4 +0.7**
comp=Z,5.9nm,1.0s,baz=243,slow=5.8,SNR=18
GERES **GERESS Array B** 58.89 34 P **P** **16 58 23.8 -0.8**
O48B **Farmland** 58.93 315 P **P** **16 58 25.0 0.0**
baz=112
KHC **Kasperske Hory** 58.98 34 *eP* **P** **16 58 25.2 +0.1**
KHC **Kasperske Hory** 58.98 34 P **P** **16 58 25.3 +0.1**
WCI **Wyandotte Cave** 59.02 312 P **P** **16 58 26.1 +0.5**
WCI IAmb IAmb 16 58 27.4
comp=Z,13nm,0.9s
ARSA **Arzberg** 59.10 36 *eP* **P** **16 58 26.8 +0.7**
comp=Z,6.3nm,1.0s
T47A **Sharon Grove** 59.20 311 P **P** **16 58 26.4 -0.5**
T47A IAmb IAmb 16 58 28.2
comp=Z,17nm,0.8s
CKRC **Cesky Krumlov** 59.22 34 *eP* **P** **16 58 27.5 +0.7**
CONA **Conrad Observa** 59.64 36 *eP* **P** **16 58 30.8 +1.0**
comp=Z,5.9nm,1.3s
PRU **Pruhonice** 59.97 33 *eP* **P** **16 58 32.3 +0.3**
BRG **Berggiesshubel** 60.13 32 *eP* **P** **16 58 34.2 +1.1**
BRG Amp 16 58 36.4
comp=Z,7.9nm,1.2s
PVCC **Panska Ves** 60.28 33 *eP* **P** **16 58 35.8 +1.8**
SFIN **Lafayette** 60.36 314 P **P** **16 58 35.0 +0.2**
baz=111
MODS **Modra-Piesok** 60.68 36 *eP* **P** **16 58 40.7 +3.8**
IDI **Anoyia** 60.94 52 LR LR 17 25 26.9
comp=Z,135nm,21.0s,baz=257,slow=36
UPC **Upice** 61.05 33 *eP* **P** **16 58 40.7 +1.4**
DPC **Dobruska-Polom** 61.13 33 *eP* **P** **16 58 41.2 +1.2**
Q44A **Meyer Farm, Va** 61.25 312 P **P** **16 58 40.2 -0.7**
O44A **Mansfield** 61.26 314 P **P** **16 58 39.7 -1.2**
PSZ **Piszkesteto** 62.02 37 P **P** **16 58 46.5 +0.5**
PSZ IAmb IAmb 16 58 48.6
comp=Z,17nm,1.1s
BZS **Buzias** 62.11 40 ⇓P **P** **16 58 48.7 +2.1**
DY2G **Dye2** 62.37 354 *eP* **P** **16 58 47.2 -1.0**
SUR **Sutherland** 62.65 130 LR LR 17 21 16.5
comp=Z,144nm,18.2s,baz=314,slow=32
W41B **Gary Mavity, V** 62.67 307 P **P** **16 58 49.8 -0.8**
baz=104
WHAR **Wooly Hollow** 62.73 307 P **P** **16 58 49.5 -1.5**
WHAR IAmb IAmb 16 58 51.1
comp=Z,19nm,1.4s
GZR **Gura Zlata** 62.77 41 ⇓P **P** **16 58 52.9 +1.8**
X40A **Basin Creek Fa** 62.97 306 P **P** **16 58 51.6 -1.0**
baz=104
OJC **Ojcow** 63.02 35 P **P** **16 58 53.1 +0.6**
OJC IAmb IAmb 16 58 54.9
comp=Z,20nm,1.3s
LSZ **Lusaka** 63.35 110 LR LR 17 22 07.3
comp=Z,95nm,20.1s,baz=300,slow=32
SFJD **Kangerlussuaq** 63.40 352 LR LR 17 20 38.1
comp=Z,146nm,20.2s,baz=101,slow=30
U40A **Yellville** 63.45 308 P **P** **16 58 54.4 -1.3**
U40A IAmb IAmb 16 58 55.5
comp=Z,8.8nm,0.9s
U40A **Yellville** 63.45 308 P **P** **16 58 54.7 -1.0**
baz=105
MBAR **Mbara** 63.45 93 LR LR 17 24 57.2
comp=Z,225nm,18.1s,baz=280,slow=34
R40A **Maddies Statio** 63.50 311 P **P** **16 58 53.9 -2.1**
R40A IAmb IAmb 16 58 56.2
comp=Z,13nm,0.8s
P40A **Paris** 63.69 312 P **P** **16 58 55.0 -2.2**
LBTB **Lobatse** 63.73 121 LR LR 17 21 22.1
comp=Z,229nm,20.3s,baz=283,slow=31
LBTB **Lobatse** 63.73 121 P P 16 58 52.7 -5.1
LBTB IAmb IAmb 16 58 53.4
comp=Z,14nm,0.8s
W39A **Magazine** 63.90 307 P **P** **16 58 58.1 -0.6**
baz=103
ARR **Arges** 63.98 41 ⇑P **P** **16 59 01.1 +2.0**
VOIR 64.28 41 ⇑P **P** **16 59 02.6 +1.5**
FRB **Frobisher Bay** 64.40 343 LR LR 17 22 37.9
comp=Z,141nm,21.3s,baz=188,slow=32
ARCR **ARCALIA** 64.43 39 ⇑P **P** **16 59 03.7 +1.8**
ICESG **Greenland Ices** 64.44 357 *i* P **P** **16 59 01.5 -0.5**
ICESG IAmb IAmb 16 59 09.2
comp=Z,9.9nm,0.9s
BOSA **Boshof** 64.68 125 LR LR 17 21 18.2
comp=Z,232nm,21.8s,baz=312,slow=30
DOPR **Dopca** 64.69 41 ⇑P **P** **16 59 05.3 +1.6**
MLR **Muntele Rosu** 64.88 41 ⇑P **P** **16 59 06.8 +1.7**
MLR **Muntele Rosu** 64.88 41 LR LR 17 25 19.7
comp=Z,189nm,20.1s,baz=310,slow=34
MLR **Muntele Rosu** 64.88 41 P **P** **16 59 06.1 +1.0**
N38A **Joes South For** 64.92 313 P **P** **16 59 03.3 -1.9**
MATP **Matopo** 64.92 115 LR LR 17 22 10.4
comp=Z,112nm,21.6s,baz=272,slow=31
OZUR 64.99 41 ⇑P **P** **16 59 07.1 +1.4**
NB2 **NORSAR Subarra** 65.05 22 P **P** **16 59 07.1 +1.3**
comp=Z,1.7nm,0.9s,baz=230,slow=6.5
NOA **NORSAR Array B** 65.05 22 P **P** **16 59 06.5 +0.7**
comp=Z,7.5nm,1.1s,baz=230,slow=6.3,SNR=6.4
ISR **Istrita** 65.15 42 ⇑P **P** **16 59 08.0 +1.2**
BURAR **Bucovina Array** 65.17 39 ⇓P **P** **16 59 09.1 +2.1**
COVR **Voineasa-Covas** 65.18 41 ⇓P **P** **16 59 08.5 +1.6**
ELL **Elmali** 65.24 52 P **P** **16 59 08.2 +0.6**
VRI **Vrincioaia** 65.53 41 ⇑P **P** **16 59 09.8 +0.6**
TUL1 **Leonard** 65.65 307 P **P** **16 59 09.2 -1.0**
baz=102
TESR **Tescani** 65.70 41 ⇑P **P** **16 59 11.0 +0.8**
HARR **Harsova** 65.95 43 ⇓P **P** **16 59 12.9 +1.0**
SPMN **Marine on St.** 65.95 318 P **P** **16 59 10.7 -1.1**
SPMN IAmb IAmb 16 59 19.1
comp=Z,14nm,0.8s
SPMN **Marine on St.** 65.95 318 P **P** **16 59 10.9 -0.9**
baz=109
TLBR **Topalu** 65.98 43 ⇑P **P** **16 59 13.2 +1.1**
CFR **Carcaliu** 66.24 42 ⇓P **P** **16 59 14.5 +0.9**
BORA **Eskisehir** 66.40 48 P **P** **16 59 12.5 -2.4**
BORA IAmb IAmb 16 59 16.8
comp=Z,17nm,1.1s
N35A **Tabor** 66.70 313 P **P** **16 59 14.8 -1.9**
MDUB **Mudurnu** 67.10 48 P **P** **16 59 20.1 +0.7**
SORM **Soroca** 67.33 39 ⇑P **P** **16 59 20.5 -0.1**
833A **Chaparral WMA,** 67.40 299 P **P** **16 59 20.8 -0.7**
baz=97
SUMG **Summit** 67.86 358 *i* P **P** **16 59 24.1 +0.1**
SUMG IAmb IAmb 16 59 31.5
comp=Z,6.6nm,1.0s
JMIC **Jan Mayen** 67.93 8 LR LR 17 23 29.2
comp=Z,63nm,18.6s,baz=76,slow=31
ECSD **EROS Data Cent** 68.13 315 P **P** **16 59 25.0 -0.8**
ECSD IAmb IAmb 16 59 32.4
comp=Z,11nm,0.9s
ANTO **Ankara** 68.15 49 P **P** **16 59 23.2 -2.8**
ANTO IAmb IAmb 16 59 28.4
comp=Z,19nm,0.9s
EIL **Elat** 68.16 60 LR LR 17 30 08.2
comp=Z,205nm,18.1s,baz=271,slow=37
ABTX **Abilene, Hawle** 68.19 303 P **P** **16 59 25.7 -0.7**
baz=99
BGNE **Belgrade** 68.67 313 P **P** **16 59 27.8 -1.4**
BGNE **Belgrade** 68.67 313 P **P** **16 59 28.8 -0.4**
baz=103
AKASG **Malin Array Be** 68.72 37 P **P** **16 59 29.6 +0.3**
comp=Z,11nm,1.0s,baz=251,slow=6.6,SNR=26
AKASG LR LR 17 27 55.3
comp=Z,100nm,19.1s,baz=348,slow=34
AKASG **Malin Array Be** 68.72 37 P **P** **16 59 28.5 -0.8**
AKASG IAmb IAmb 16 59 36.8
comp=Z,18nm,1.5s
BRTR **Keskin Array B** 68.76 49 P **P** **16 59 31.1 +1.1**
comp=Z,9.5nm,1.0s,baz=235,slow=4.4,SNR=30
BRTR **Keskin Array B** 68.76 49 P **P** **16 59 30.7 +0.7**
BR131 **Keskin Array S** 68.76 49 P **P** **16 59 30.1 +0.2**
NACGM **Naroch** 68.88 32 *i* P **P** **16 59 30.1 -0.1**
MMAI **Mount Meron Ar** 68.99 57 LR LR 17 31 57.5
comp=Z,62nm,18.1s,baz=46,slow=38
MNK **Minsk** 69.31 33 *i* P **P** **16 59 33.4 +0.5**
MNK comp=E,2.0nm,0.7s *i* P **P** **16 59 33.4 +0.5**
MNK comp=N,13nm,1.0s *i* P **P** **16 59 33.4 +0.5**
MNK comp=Z,18nm,0.9s,baz=247
MNK *i* PP **PP** **17 02 06.4 +0.4**
MNK *i* PPP PPP 17 03 50.9
MNK *i* S **S** **17 08 40.8 +1.4**

MNK *i* SS **SS** **17 13 08.7 +2.5**
MNK *i* SSS SSS 17 16 25.9
MNK *i* LQ LQ 17 26 14.8
MNK *i* LR LR 17 31 14.1
MNK *i* LRM MLR 17 32 01.3
comp=E,110nm,22.4s
MNK *i* LRM MLR 17 32 05.8
comp=N,1μm,23.6s
MNK *i* LRM MLR 17 32 33.2
comp=Z,132nm,16.0s
ULM **Lac du Bonnet** 69.50 322 P **P** **16 59 32.8 -1.3**
comp=Z,3.2nm,0.8s,baz=88,slow=7.4,SNR=3.3
ULM LR LR 17 26 10.4
comp=Z,99nm,19.1s,baz=96,slow=33
DBG **Daneborg** 69.89 4 *eP* **P** **16 59 33.3 -2.8**
SUSD **Miller** 69.94 316 P **P** **16 59 36.2 -0.8**
baz=104
KMBO **Kilima Mbogo** 69.99 93 P **P** **16 59 38.4 +0.2**
comp=Z,0.8nm,0.2s,baz=300,slow=8.1,SNR=3.5
KMBO LR LR 17 27 40.1
comp=Z,198nm,19.2s,baz=280,slow=34
ASF **Jabal al Asfar** 70.12 58 P **P** **16 59 40.2 +1.7**
comp=Z,14nm,1.1s,baz=314,slow=1.5,SNR=5.8
BNN **Bunyan** 70.27 50 P **P** **16 59 39.5 +0.2**
MSTX **Muleshoe** 70.97 304 P **P** **16 59 41.5 -2.2**
MSTX IAmb IAmb 16 59 44.7
comp=Z,17nm,1.2s
MSTX **Muleshoe** 70.97 304 P **P** **16 59 42.8 -0.9**
baz=97
MDND **Maddock** 71.19 319 P **P** **16 59 43.6 -1.0**
MDND **Maddock** 71.19 319 P **P** **16 59 44.2 -0.4**
baz=104
TXAR **Lajitas Array** 71.23 299 P **P** **16 59 44.7 -0.6**
comp=Z,2.6nm,1.2s,baz=72,slow=4.1,SNR=7.9
TXAR LR LR 17 30 01.1
comp=Z,32nm,21.8s,baz=74,slow=35
FINES **FINESS Array B** 71.27 26 P **P** **16 59 45.9 +1.1**
comp=Z,9.5nm,1.1s,baz=198,slow=12,SNR=5.8
FINES LR LR 17 29 09.8
comp=Z,103nm,18.1s,baz=240,slow=34
KSCO **Kaye Shedlock'** 71.57 309 P **P** **16 59 47.6 +0.4**
baz=99
T25A **Trinidad** 72.70 307 P **P** **16 59 54.6 +0.5**
baz=97
NEEM **North Greenlan** 73.34 356 *i* P **P** **16 59 56.1 -1.2**
NEEM IAmb IAmb 16 59 57.5
comp=Z,4.4nm,0.8s
Q24A **Divide** 73.51 309 P **P** **16 59 58.1 -1.0**
Q24A IAmb IAmb 17 00 00.8
comp=Z,18nm,1.0s
Q24A **Divide** 73.51 309 P **P** **16 59 59.5 +0.4**
baz=97
MARD **Mardin** 73.90 53 P **P** **17 00 01.6 +0.5**
MARD IAmb IAmb 17 00 09.9
comp=Z,17nm,1.1s
ANMO **Albuquerque** 74.11 305 LR LR 17 28 36.2
comp=Z,316nm,21.2s,baz=96,slow=33
ANMO **Albuquerque** 74.11 305 P **P** **17 00 01.3 -1.2**
BNM **Barren Site** 74.18 304 P **P** **17 00 02.0 -1.0**
DGMT **Dagmar** 74.33 319 P **P** **17 00 02.2 -1.0**
FFC **Flin Flon** 74.34 326 P **P** **17 00 02.4 -0.7**
N23A **Red Feather La** 74.37 311 P **P** **17 00 04.5 +0.6**
baz=97
TULEG **Thule** 74.46 352 *i* P **P** **17 00 02.4 -1.0**
TULEG IAmb IAmb 17 00 03.2
comp=Z,5.6nm,0.8s
TULEG **Thule** 74.46 352 P **P** **17 00 02.4 -1.0**
TULEG IAmb IAmb 17 00 11.3
comp=Z,18nm,1.0s
S22A **4UR Ranch, Cre** 74.68 308 P **P** **17 00 06.3 +0.4**
baz=96
ATD **Ata Tunnel** 74.79 79 LR LR 17 30 22.3
comp=Z,113nm,21.6s,baz=108,slow=34
ARCES **ARCESS Array B** 74.81 18 P **P** **17 00 06.6 +1.0**
comp=Z,7.4nm,1.1s,baz=306,slow=4.3,SNR=4.5
ARCES LR LR 17 26 31.5
comp=Z,88nm,21.6s,baz=248,slow=30
121A **Cookes Peak, D** 75.02 302 P **P** **17 00 08.2 +0.5**
baz=94
GURO **Guroymak-BITLI** 75.02 51 P **P** **17 00 08.7 +1.1**
GURO IAmb IAmb 17 00 16.9
comp=Z,23nm,1.6s
SIRT **Sirnak** 75.24 53 P **P** **17 00 09.8 +1.0**
O20A **White River Ci** 76.02 310 P **P** **17 00 14.3 +0.9**
baz=96
KBZ **Khabaz** 76.24 46 P **P** **17 00 16.0 +1.7**
comp=Z,4.1nm,1.1s,baz=263,slow=7.7,SNR=3.2
W18A **Petrified Fore** 76.80 305 P **P** **17 00 18.9 +1.0**
baz=94
NOR **Nord** 77.17 2 *eP* **P** **17 00 18.2 -0.7**
KLMR **Klimovskoe** 77.20 29 *eP* **P** **17 00 18.1 -1.2**
KLMR AMP 17 00 28.2
comp=Z,28nm,1.5s
PD31 **Pinedale Array** 77.26 313 P **P** **17 00 18.7 -1.7**
PDAR **Pinedale Array** 77.26 313 P **P** **17 00 20.1 -0.2**
comp=Z,1.7nm,0.7s,baz=102,slow=6.2,SNR=18
PDAR LR LR 17 29 48.5
comp=Z,112nm,21.8s,baz=110,slow=32
PDAR **Pinedale Array** 77.26 313 P **P** **17 00 19.5 -0.9**
GNI **Garni** 77.26 50 LR LR 17 37 32.2
comp=Z,76nm,18.1s,baz=273,slow=38
P18A **Preston Nutter** 77.51 309 P **P** **17 00 21.7 -0.2**
TUC **Tucson** 77.54 302 P **P** **17 00 20.4 -1.6**
H17A **Grant Village** 78.14 314 P **P** **17 00 26.2 +0.9**
baz=95
TPAW **Teton Pass** 78.34 313 P **P** **17 00 25.4 -1.1**
TPAW IAmb IAmb 17 00 26.7
comp=Z,30nm,1.6s
YMR **Madison River** 78.44 314 P **P** **17 00 26.9 0.0**
YMR IAmb IAmb 17 00 28.9
comp=Z,22nm,1.1s
MTPU **Mount Pierson** 78.93 308 P **P** **17 00 29.5 -0.4**
MSU **Marysvale** 78.95 308 P **P** **17 00 29.5 -0.3**
214A **Organ Pipe Nat** 79.24 301 P **P** **17 00 31.7 +0.3**
baz=91
MCMT **McKenzie Canyo** 79.79 315 P **P** **17 00 33.0 -1.4**
PDMCI **Parker Dam,Lak** 80.40 304 P **P** **17 00 37.8 +0.3**
baz=91
RPN **Rapa Nui** 80.44 242 LR LR 17 33 40.6
comp=Z,101nm,18.2s,baz=119,slow=34
EDM **Edmonton** 80.71 323 P **P** **17 00 36.7 -2.1**
IRM **Iron Mountain** 81.23 304 P **P** **17 00 42.7 +0.6**
baz=90
ELK **Elko** 81.39 310 LR LR 17 32 18.2
comp=Z,132nm,22.0s,baz=86,slow=32
ELK **Elko** 81.39 310 P **P** **17 00 42.3 -0.7**
R11A **Troy Canyon, C** 81.62 308 P **P** **17 00 44.4 +0.2**
baz=91
GMRC **Granite Mounta** 81.66 304 P **P** **17 00 44.8 +0.4**
baz=90
SWSC **Sam W. Stewart** 81.78 302 P **P** **17 00 45.1 +0.3**
baz=90
KIRV **Kirov** 81.80 32 LR LR 17 34 26.4
comp=Z,73nm,19.3s,baz=292,slow=34
TUQ **Turquoise Moun** 81.87 305 P **P** **17 00 46.0 +0.4**
baz=90
BELC **Belle Mtn. Jos** 81.94 304 P **P** **17 00 46.2 +0.3**
baz=90
YKA **Yellowknife Ar** 82.15 332 P **P** **17 00 45.5 -0.6**
comp=Z,5.4nm,1.1s,baz=95,slow=5.4,SNR=20
YKA LR LR 17 32 41.9
comp=Z,62nm,21.9s,baz=29,slow=32
YKA **Yellowknife Ar** 82.15 332 P **P** **17 00 45.0 -1.1**
HEC **Hector,Ludlow** 82.21 304 P **P** **17 00 47.8 +0.6**
baz=90
MONP2 **Monument Peak** 82.30 302 P **P** **17 00 48.4 +0.5**
baz=89
PFO **Pinyon Flats O** 82.33 303 LR LR 17 33 59.0
comp=Z,117nm,21.1s,baz=56,slow=33
BELA **Belgrano 2** 82.50 180 P **P** **17 00 47.1 -0.7**
GSC **Goldstone, Bar** 82.59 305 P **P** **17 00 50.1 +0.8**
baz=89
NEW **Newport** 82.87 318 LR LR 17 33 12.1
comp=Z,140nm,21.4s,baz=82,slow=32
MURC **Murrieta** 82.94 303 P **P** **17 00 51.5 +0.5**
baz=89
MPMC **Manual Prospec** 83.14 306 P **P** **17 00 52.6 +0.3**
baz=89
LRMC **Laurel Mtn Rad** 83.31 305 P **P** **17 00 53.7 +0.7**
baz=89
EDW2 **Edwards Air Fo** 83.58 304 P **P** **17 00 54.2 -0.1**
baz=89
CWC **Cottonwood Cre** 83.61 306 P **P** **17 00 54.8 +0.2**
baz=89
NVAR **Mina Array Bea** 83.75 308 P **P** **17 00 55.7 +0.4**
comp=Z,3.7nm,1.1s,baz=98,slow=5.6,SNR=10

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NVAR | | | | LR | LR | 17 35 27.7 | | |
| | comp=Z,34nm,20.9s,baz=92,slow=34 | | | | | | | |
| **RYN** | **Ryan** | **83.92** | **308** | P | **P** | **17 00 54.6** | **-1.5** | |
| RYN | | | | IAmb | IAmb | 17 00 57.0 | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **ISA** | **Isabella, Lake** | **83.95** | **305** | P | **P** | **17 00 57.2** | **+1.0** | |
| | baz=88 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **85.82** | **313** | P | **P** | **17 01 06.4** | **+0.8** | |
| | baz=87 | | | | | | | |
| **I05D** | **Terrebonne, OR** | **85.85** | **314** | P | **P** | **17 01 05.9** | **+0.3** | |
| | baz=87 | | | | | | | |
| **F05D** | **White Salmon** | **85.87** | **316** | P | **P** | **17 01 06.2** | **+0.6** | |
| | baz=88 | | | | | | | |
| **B05A** | **Bryant** | **86.19** | **318** | P | **P** | **17 01 06.3** | **-0.8** | |
| | baz=87 | | | | | | | |
| **K04D** | **Chiloquin, OR** | **86.24** | **312** | P | **P** | **17 01 08.2** | **+0.6** | |
| | baz=87 | | | | | | | |
| **M04C** | **Macdoel** | **86.34** | **311** | P | **P** | **17 01 07.8** | **-0.4** | |
| | baz=87 | | | | | | | |
| **A36M** | **Sachs Harbour** | **86.37** | **342** | P | **P** | **17 01 07.4** | **-0.1** | |
| | baz=86 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **86.46** | **313** | P | **P** | **17 01 08.3** | **-0.5** | |
| | baz=87 | | | | | | | |
| **E04D** | **Cinebar** | **86.61** | **316** | P | **P** | **17 01 08.7** | **-0.5** | |
| | baz=87 | | | | | | | |
| **ARU** | **Arti** | **86.72** | **34** | LR | LR | 17 36 59.8 | | |
| | comp=Z,71nm,21.5s,baz=283,slow=34 | | | | | | | |
| **ARU** | **Arti** | **86.72** | **34** | P | **P** | **17 01 09.8** | **+0.3** | |
| ARU | | | | IAmb | IAmb | 17 01 11.7 | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **UOSS** | **Minazif** | **86.91** | **65** | P | **P** | **17 01 09.8** | **-1.3** | |
| UOSS | | | | IAmb | IAmb | 17 01 12.4 | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **87.00** | **311** | LR | LR | 17 40 15.9 | | |
| | comp=Z,52nm,18.0s,baz=71,slow=36 | | | | | | | |
| **SYO** | **Syowa Base** | **88.07** | **160** | ⇓*eX* | | P | 17 01 26.6 | +11 |
| **WSAR** | **Wadi Sarin** | **89.25** | **67** | LR | LR | 17 41 18.2 | | |
| | comp=Z,256nm,21.9s,baz=310,slow=36 | | | | | | | |
| **INK** | **Inuvik** | **89.68** | **339** | LR | LR | 17 37 29.6 | | |
| | comp=Z,120nm,21.1s,baz=63,slow=33 | | | | | | | |
| **INK** | **Inuvik** | **89.68** | **339** | P | **P** | **17 01 23.2** | **-0.1** | |
| | baz=78 | | | | | | | |
| **BBB** | **Bella Bella** | **89.70** | **322** | LR | LR | 17 38 42.5 | | |
| | comp=Z,72nm,19.9s,baz=295,slow=34 | | | | | | | |
| **DLBC** | **Dease Lake** | **89.91** | **329** | LR | LR | 17 39 32.1 | | |
| | comp=Z,74nm,19.6s,baz=44,slow=34 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **91.34** | **333** | P | **P** | **17 01 32.1** | **+0.8** | |
| | baz=77 | | | | | | | |
| **DAWY** | **Dawson** | **93.06** | **335** | P | **P** | **17 01 39.6** | **+0.4** | |
| | baz=73 | | | | | | | |
| **PNL** | **Peninsula** | **94.35** | **331** | P | **P** | **17 01 45.1** | **-0.1** | |
| | baz=73 | | | | | | | |
| **L27K** | **Beaver Creek,** | **94.41** | **334** | P | **P** | **17 01 45.5** | **+0.1** | |
| | baz=71 | | | | | | | |
| **J26L** | **Joseph Creek** | **94.63** | **336** | P | **P** | **17 01 46.3** | **-0.2** | |
| | baz=69 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **94.66** | **334** | P | **P** | **17 01 46.3** | **-0.4** | |
| | baz=71 | | | | | | | |
| **SCRK** | **Sand Creek** | **95.00** | **336** | P | **P** | **17 01 47.8** | **-0.4** | |
| | baz=69 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **95.14** | **341** | P | **P** | **17 01 49.1** | **+0.4** | |
| | baz=63 | | | | | | | |
| **H24K** | **Noodor Dome** | **95.78** | **338** | P | **P** | **17 01 51.6** | **0.0** | |
| | baz=65 | | | | | | | |
| **ILAR** | **Eielson Array** | **95.85** | **337** | P | **P** | **17 01 51.6** | **-0.3** | |
| | comp=Z,2.1nm,0.9s,baz=57,slow=4.1,SNR=13 | | | | | | | |
| ILAR | | | | LR | LR | 17 42 33.5 | | |
| | comp=Z,72nm,19.8s,baz=94,slow=34 | | | | | | | |
| **ILAR** | **Eielson Array** | **95.85** | **337** | P | **P** | **17 01 50.6** | **-1.4** | |
| **H23K** | **Yukon River** | **96.41** | **338** | P | **P** | **17 01 54.8** | **+0.4** | |
| | baz=63 | | | | | | | |
| **LZH** | **Lanzhou** | **122.45** | **41** | *e*PKP | **PKPdf** | **17 07 18.8** | **-3.0** | |
| LZH | | | | LR | LR | | | |
| | comp=Z,180nm,15.7s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,290nm,19.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **124.00** | **32** | *e*PKP | **PKPdf** | **17 07 19.9** | **-4.6** | |
| **KLR** | **Kul'dur** | **124.55** | **12** | PKP | **PKPdf** | **17 07 23.9** | **-1.3** | |
| | comp=Z,1.2nm,0.8s,baz=346,slow=4.2,SNR=3.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.95** | **63** | PKP | **PKPdf** | **17 07 30.4** | **-0.3** | |
| | comp=Z,3.3nm,1.1s,baz=283,slow=3.1,SNR=14 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.95** | **63** | | **PKPdf** | **17 07 30.9** | **+0.2** | |
| **GYA** | **Guiyang** | **129.81** | **50** | ⇓PKP | **PKPdf** | **17 07 36.3** | **+0.2** | |
| **NJ2** | **Nanjing** | **134.42** | **35** | *e*PKP | **PKPdf** | **17 07 42.8** | **-1.6** | |
| **ASAR** | **Alice Springs** | **157.09** | **147** | PKP | **PKPdf** | **17 08 20.4** | **-1.9** | |
| | comp=Z,2.6nm,1.1s,baz=205,slow=0.8,SNR=7.7 | | | | | | | |
| ASAR | | | | PKPab | **PKPab** | **17 08 50.8** | **-1.8** | |
| | comp=Z,1.4nm,1.1s,baz=220,slow=4.2,SNR=2.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **157.09** | **147** | | **PKPdf** | **17 08 21.3** | **-1.0** | |
| **WRA** | **Warramunga Arr** | **160.22** | **141** | PKP | **PKPdf** | **17 08 24.4** | **-1.7** | |
| | comp=Z,1.6nm,1.1s,baz=229,slow=2.1,SNR=5.5 | | | | | | | |
| WRA | | | | PKPab | **PKPab** | **17 09 05.3** | **-0.9** | |
| | comp=Z,2.5nm,1.1s,baz=230,slow=1.9,SNR=6.3 | | | | | | | |

*DJA* ***20*** *17:21:30.1±0.7,3˚S±7˚×12˚8E±˚, h54km±24km, M3.6/7, mb3.8/1, MLv3.6/7*

*IDC* ***20*** *17:21:34.6±3.7,2.˚90S×128˚.26E, h80km±38km, mb3.5/2, mb1 3.7/5, mb1mx3.3/30, mbtmp3.8/5, MS2.5/1, Ms1 2.5/1, ms1mx2.2/40, Error ellipse: s-maj=30.3km s-min=17.0km az=78.0*

**ISC 20 17:21:30.3±0.9, 2.˚87S±0.˚06×127.˚98E±0.˚06, h38km, n11, σ1f21/13, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.84** | **165** | P | **Pn** | **17 21 46.9** | **+1.3** |
| **MSAI** | **Masohi** | **1.06** | **117** | P | **Pn** | **17 21 49.5** | **+0.9** |
| **SANI** | **Sanana** | **2.15** | **292** | P | **Pn** | **17 22 03.5** | **-0.1** |
| **TNTI** | **Ternate** | **3.67** | **350** | P | **Pn** | **17 22 24.5** | **-0.1** |
| **SIJI** | **Sorong** | **3.84** | **59** | P | **Pn** | **17 22 27.1** | **+0.2** |
| | 6.3nm,0.3s,baz=248,slow=13,SNR=27 | | | | | | |
| SIJI | | | | S | **Sn** | **17 23 11.0** | **+0.2** |
| | 5.1nm,0.3s,baz=35,slow=21,SNR=20 | | | | | | |
| SIJI | | | | LR | LR | 17 24 18.7 | |
| | comp=Z,69nm,20.5s,baz=215,slow=45 | | | | | | |
| **FAKI** | **Fak Fak** | **4.26** | **91** | P | **Pn** | **17 22 32.5** | **-0.2** |
| **GTOI** | **Gorontalo** | **6.07** | **305** | P | **Pn** | **17 22 59.1** | **+1.6** |
| **FITZ** | **Fitzroy Crossi** | **15.31** | **188** | P | **P** | **17 25 07.0** | **-1.0** |
| | 0.1nm,0.3s,baz=353,slow=8.1,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.07** | **160** | P | **Pn** | **17 25 37.9** | **-0.7** |
| | 0.3nm,0.3s,baz=341,slow=12,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **21.45** | **165** | P | **P** | **17 26 16.1** | **+0.5** |
| | 7.6nm,0.9s,baz=346,slow=12,SNR=63 | | | | | | |
| ASAR | | | | S | **S** | **17 30 09.0** | **-2.6** |
| | 1.0nm,0.9s,baz=342,slow=20,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.69** | **327** | P | **P** | **17 31 58.9** | **+0.9** |
| | 0.4nm,0.7s,baz=140,slow=4.7,SNR=4.1 | | | | | | |

*IASPEI* ***20*** *17:27:21.8±0.9, 47.˚54N±0.˚02×122.˚78W±0.˚02, h26km±4km, Error ellipse: s-maj=2.7km s-min=2.5km az=61.2, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*

*ANF* ***20*** *17:27:21.9±0.5, 47.˚59N×122.˚78W, h20km±7km, ML3.6/13, Error ellipse: s-maj=8.6km s-min=4.1km az=99.0*

*NEIC* ***20*** *17:27:22.1±2.0, 47.˚54N±0.˚02×122.˚80W±0.˚02, h23km±6km, Error ellipse: s-maj=2.5km s-min=2.4km az=188.0*

*SEA* ***20*** *17:27:22.4±2.0, 47.˚55N±0.˚02×122.˚82W±0.˚02, h24km±5km, ML3.4/190, ML3.3/86(NEIC), Error ellipse: s-maj=2.5km s-min=1.9km az=147.0*

**ISC 20 17:27:22.0±0.8, 47.˚54N±0.˚02×122.˚79W±0.˚02, h26km±4km, n200, σ0f91/234, Washington**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GNW** | **Green Mountain** | **0.03** | **316** | | **Pb** | **17 27 25.9** | **-0.6** |
| GNW | | | | | **Sb** | **17 27 28.6** | **-0.8** |
| **KIMR** | **Kitsap County** | **0.04** | **156** | | **Pb** | **17 27 26.0** | **-0.5** |
| KIMR | | | | | **Sb** | **17 27 29.0** | **-0.4** |
| **PSNS** | **PSNS Bremerton** | **0.10** | **81** | | **Pb** | **17 27 26.4** | **-0.4** |
| PSNS | | | | | **Sb** | **17 27 29.8** | **-0.2** |
| **KITP** | **Kitsap County** | **0.17** | **40** | | **Pb** | **17 27 27.8** | **+0.3** |
| KITP | | | | | **Sb** | **17 27 32.6** | **+1.4** |
| **MNWA** | **Manchester** | **0.18** | **83** | | **Pb** | **17 27 27.1** | **-0.6** |
| MNWA | | | | | **Sb** | **17 27 31.6** | **+0.1** |
| **BABE** | **Bainbridge Sch** | **0.19** | **70** | | **Sb** | **17 27 33.3** | **+2.0** |
| **D03D** | **Eldon** | **0.20** | **268** | | **Pb** | **17 27 27.4** | **-0.4** |
| D03D | | | | | **Sb** | **17 27 31.4** | **-0.3** |
| **D03D** | **Eldon** | **0.20** | **268** | P | **Pb** | **17 27 27.3** | **-0.4** |
| | baz=86,SNR=1000 | | | | | | |
| D03D | | | | S | **Sb** | **17 27 31.4** | **-0.3** |
| | baz=86 | | | | | | |
| **HDW** | **Hoodsport** | **0.21** | **301** | | **Pb** | **17 27 27.5** | **-0.5** |
| **C04A** | **Brinnon** | **0.21** | **325** | | **Pb** | **17 27 27.3** | **-0.6** |
| C04A | | | | | **Sb** | **17 27 31.3** | **-0.6** |
| **KINR** | **Kitsap County** | **0.23** | **26** | | **Pb** | **17 27 28.3** | **+0.1** |
| KINR | | | | | **Sb** | **17 27 33.4** | **+1.0** |
| **ALKI** | **Alki Wastewate** | **0.26** | **83** | | **Pb** | **17 27 28.7** | **+0.3** |
| **VVHS** | **Vashon High Sc** | **0.26** | **117** | | **Pb** | **17 27 28.2** | **-0.2** |
| VVHS | | | | | **Sb** | **17 27 33.8** | **+0.9** |
| **B013** | **Quilcene** | **0.28** | **344** | | **Pb** | **17 27 28.3** | **-0.6** |
| B013 | | | | | **Sb** | **17 27 32.9** | **-0.6** |
| **B013** | **Quilcene** | **0.28** | **344** | | **Pb** | **17 27 28.2** | **-0.6** |
| **LAWT** | **Lawton Element** | **0.30** | **67** | | **Pb** | **17 27 29.5** | **+0.5** |
| LAWT | | | | | **Sn** | **17 27 36.0** | **-0.3** |
| **SSS1** | **John Stanford** | **0.32** | **83** | | **Sn** | **17 27 36.9** | **+0.2** |
| **TKCO** | **King County** | **0.33** | **91** | | **Sn** | **17 27 36.2** | **-1.0** |
| **MEAN** | **Meany Midle Sc** | **0.34** | **76** | | **Sn** | **17 27 37.5** | **+0.2** |
| **UPS** | **University of** | **0.35** | **143** | | **Pb** | **17 27 29.8** | **0.0** |
| **SCCW** | **Shoreline CC** | **0.36** | **55** | | **Pb** | **17 27 30.2** | **+0.2** |
| **D04E** | **Lakebay** | **0.36** | **178** | | **Pb** | **17 27 30.3** | **+0.3** |
| D04E | | | | | **Sn** | **17 27 37.7** | **-0.2** |
| **D04E** | **Lakebay** | **0.36** | **178** | P | **Pb** | **17 27 30.3** | **+0.3** |
| | baz=355,SNR=1000 | | | | | | |
| D04E | | | | S | **Sn** | **17 27 37.6** | **-0.2** |
| | baz=355 | | | | | | |
| **HICC** | **Highline Commu** | **0.37** | **114** | | **Pb** | **17 27 30.1** | **-0.1** |
| **SP2** | **Seward Park 2** | **0.37** | **88** | | **Pb** | **17 27 30.4** | **+0.3** |
| SP2 | | | | | **Sn** | **17 27 37.3** | **-0.7** |
| **NOWS** | **NOAA--Sand Poi** | **0.39** | **68** | | **Pb** | **17 27 31.1** | **+0.6** |
| **BRKS** | **Brookside Elem** | **0.40** | **58** | | **Pb** | **17 27 30.8** | **+0.2** |
| **TBPA** | **Tacoma Substat** | **0.41** | **134** | | **Pb** | **17 27 30.7** | **0.0** |
| TBPA | | | | | **Sn** | **17 27 38.1** | **-0.8** |
| **FINN** | **Finn Hill Juni** | **0.42** | **65** | | **Pb** | **17 27 31.5** | **+0.6** |
| FINN | | | | | **Sn** | **17 27 39.2** | **0.0** |
| **MPL** | **Maple valley S** | **0.42** | **100** | | **Pb** | **17 27 30.8** | **-0.1** |
| **SMW** | **South Mountain** | **0.43** | **239** | | **Pb** | **17 27 31.1** | **-0.1** |
| **LYNC** | **Lynnwood City** | **0.44** | **50** | | **Pb** | **17 27 31.1** | **-0.1** |
| **PAYL** | **Puyallup Schoo** | **0.48** | **137** | | **Pb** | **17 27 31.6** | **-0.3** |
| PAYL | | | | | **Sb** | **17 27 39.5** | **+0.9** |
| **BLN** | **Blyn Mountain** | **0.48** | **346** | | **Pb** | **17 27 31.3** | **-0.7** |
| **EGRN** | **Evergreen Coll** | **0.49** | **195** | | **Pb** | **17 27 31.6** | **-0.4** |
| **SMNR** | **Sumner High Sc** | **0.51** | **131** | | **Pb** | **17 27 32.2** | **-0.2** |
| SMNR | | | | | **Sb** | **17 27 40.7** | **+1.2** |
| **LEOT** | **Leota Junior H** | **0.51** | **64** | | **Pb** | **17 27 32.5** | **+0.1** |
| **BEVT** | **Boeing Everett** | **0.52** | **43** | | **Pb** | **17 27 32.5** | **-0.1** |
| BEVT | | | | | **Sn** | **17 27 40.8** | **-0.9** |
| **EARN** | **East Ridge Ele** | **0.55** | **69** | | **Pb** | **17 27 33.0** | **0.0** |
| **PCEP** | **Pierce County** | **0.55** | **141** | | **Pb** | **17 27 32.5** | **-0.5** |
| **SQM** | **Sequim** | **0.56** | **342** | | **Pb** | **17 27 33.0** | **-0.2** |
| **PCFR** | **Pierce County** | **0.60** | **156** | | **Pb** | **17 27 33.2** | **-0.7** |
| **EVCC** | **Everett Colleg** | **0.61** | **40** | | **Pb** | **17 27 33.9** | **-0.3** |
| **GHW** | **Garrison Hill** | **0.61** | **144** | | **Pb** | **17 27 33.4** | **-0.7** |
| **CPW** | **Capitol Peak** | **0.61** | **202** | | **Pb** | **17 27 33.6** | **-0.6** |
| CPW | | | | | **Sb** | **17 27 43.0** | **+0.4** |
| **RAW** | **Raver** | **0.62** | **109** | | **Pb** | **17 27 33.9** | **-0.3** |
| **ELW** | **Echo Lake** | **0.63** | **94** | | **Pb** | **17 27 33.7** | **-0.7** |
| **D05A** | **Enumclaw** | **0.65** | **123** | | **Pb** | **17 27 34.5** | **-0.3** |
| D05A | | | | Sg | **Sb** | **17 27 43.2** | **-0.3** |
| **B941** | **Kapowsin** | **0.68** | **145** | | **Pb** | **17 27 34.2** | **-1.0** |
| **RATT** | **Rattlesnake La** | **0.68** | **100** | | **Pb** | **17 27 34.5** | **-0.8** |
| **OLQ** | **Olympics--Lake** | **0.69** | **268** | | **Pb** | **17 27 35.0** | **-0.3** |
| **B04A** | **Port Angeles** | **0.70** | **317** | | **Pb** | **17 27 35.5** | **-0.2** |
| B04A | | | | Sg | **Sb** | **17 27 45.5** | **+0.6** |
| B04A | | | | IAML | | 17 27 45.8 | |
| | comp=N,1μm,0.5s | | | | | | |
| **B04A** | **Port Angeles** | **0.70** | **317** | | **Pb** | **17 27 35.5** | **-0.2** |
| **HTW** | **Haystack Looko** | **0.74** | **69** | | **Pb** | **17 27 35.4** | **-1.0** |
| **NLWA** | **Neilton Lookou** | **0.74** | **259** | | **Pb** | **17 27 36.0** | **-0.4** |
| NLWA | | | | Sg | **Sb** | **17 27 46.5** | **+0.3** |
| NLWA | | | | IAML | | 17 27 50.8 | |
| | comp=N,1μm,0.6s | | | | | | |
| NLWA | | | | IAML | | 17 27 51.6 | |
| | comp=N,1μm,0.8s | | | | | | |
| **B017** | **Montesano** | **0.76** | **224** | | **Pb** | **17 27 36.4** | **0.0** |
| **GSM** | **Grass Mountain** | **0.76** | **116** | | **Pb** | **17 27 35.9** | **-0.7** |
| **GSM** | **Grass Mountain** | **0.76** | **116** | | **Sb** | **17 27 46.5** | **-0.1** |
| **C05A** | **Tolt Reservoir** | **0.76** | **78** | | **Pb** | **17 27 35.6** | **-1.1** |
| **WISH** | **Wishkah** | **0.79** | **238** | | **Pn** | **17 27 37.4** | **-0.1** |
| WISH | | | | | **Sn** | **17 27 49.5** | **+1.2** |
| WISH | | | | IAML | | 17 27 56.3 | |
| | comp=E,906nm,0.7s | | | | | | |
| WISH | | | | IAML | | 17 27 57.4 | |
| | comp=N,1μm,0.7s | | | | | | |
| **RVC** | **Mount Rainier-** | **0.82** | **137** | | **Pb** | **17 27 36.8** | **-0.9** |
| **STW** | **Striped Peak** | **0.85** | **316** | | **Pn** | **17 27 38.2** | **0.0** |
| **B05A** | **Bryant** | **0.86** | **33** | | **Pb** | **17 27 37.1** | **-1.2** |
| **B05A** | **Bryant** | **0.86** | **33** | P | **Pb** | **17 27 37.1** | **-1.2** |
| | baz=214,SNR=184 | | | | | | |
| B05A | | | | S | **Sb** | **17 27 48.3** | **-1.1** |
| | baz=214 | | | | | | |
| **OBSR** | **Observation Ro** | **0.93** | **134** | | **Pb** | **17 27 38.5** | **-1.0** |
| **VGZ** | **Gonzales** | **0.94** | **338** | | **Pn** | **17 27 38.2** | **-1.3** |
| **REMR** | **Mount Rainier-** | **0.97** | **138** | | **Pn** | **17 27 39.1** | **-1.0** |
| **FMW** | **Mount Fremont** | **0.98** | **128** | | **Pn** | **17 27 39.3** | **-1.0** |
| **RCS** | **Mount Rainier-** | **0.99** | **132** | | **Pn** | **17 27 39.5** | **-1.0** |
| **CMW** | **Cultus Mountai** | **0.99** | **27** | | **Pn** | **17 27 39.7** | **-0.7** |
| **OBC** | **Olympics--Boni** | **1.00** | **300** | | **Pb** | **17 27 41.4** | **+0.8** |
| **E04D** | **Cinebar** | **1.00** | **171** | Pn | **Pn** | **17 27 39.4** | **-0.9** |
| E04D | | | | Sg | **Sb** | **17 27 52.9** | **-0.4** |
| E04D | | | | IAML | | 17 27 54.4 | |
| | comp=N,777nm,0.3s | | | | | | |
| E04D | | | | IAML | | 17 27 54.6 | |
| | comp=E,835nm,0.4s | | | | | | |
| **E04D** | **Cinebar** | **1.00** | **171** | P | **Pn** | **17 27 39.6** | **-0.7** |
| | baz=350,SNR=773 | | | | | | |
| E04D | | | | S | **Sb** | **17 27 53.0** | **-0.4** |
| | baz=350 | | | | | | |
| **LON** | **Longmire** | **1.04** | **139** | | **Pn** | **17 27 40.1** | **-0.9** |
| **PANH** | **Panhandle Gap,** | **1.04** | **131** | | **Pn** | **17 27 40.3** | **-0.9** |
| **P403** | **Sandy Floe Qua** | **1.05** | **300** | | **Pb** | **17 27 42.0** | **+0.6** |
| **B019** | **Raymond** | **1.07** | **214** | | **Pn** | **17 27 41.5** | **+0.3** |
| **BMW** | **Boistfort Moun** | **1.11** | **196** | | **Pn** | **17 27 41.4** | **-0.5** |
| **E03A** | **Lebam** | **1.13** | **208** | | **Pn** | **17 27 41.9** | **-0.2** |
| E03A | | | | IAML | | 17 28 01.9 | |
| | comp=N,554nm,0.5s | | | | | | |
| E03A | | | | IAML | | 17 28 02.7 | |
| | comp=E,859nm,0.5s | | | | | | |
| **MCW** | **Mount Constitu** | **1.14** | **359** | | **Pn** | **17 27 41.8** | **-0.5** |
| **OTR** | **Olympics--Tyee** | **1.18** | **298** | | **Pb** | **17 27 45.3** | **+1.6** |
| **A04D** | **Lummi Island** | **1.18** | **3** | | **Pn** | **17 27 42.7** | **-0.1** |
| **A04D** | **Lummi Island** | **1.18** | **3** | P | **Pn** | **17 27 42.4** | **-0.4** |
| | baz=184,SNR=16 | | | | | | |
| **B011** | **North Saanich** | **1.19** | **339** | | **Pn** | **17 27 42.2** | **-0.7** |
| **PGC** | **Sidney** | **1.19** | **339** | Pn | **Pn** | **17 27 42.3** | **-0.7** |
| PGC | | | | Sn | **Sn** | **17 27 57.4** | **-1.0** |
| PGC | | | | Sg | **Sb** | **17 27 59.6** | **+0.7** |
| PGC | | | | IAML | | 17 28 02.9 | |
| | comp=E,640nm,0.5s | | | | | | |
| **RPW** | **Rockport** | **1.25** | **43** | | **Pn** | **17 27 43.8** | **-0.1** |
| **GPW** | **Glacier Peak** | **1.25** | **62** | | **Pn** | **17 27 43.9** | **-0.2** |
| **SNB** | **Saturna Island** | **1.26** | **349** | | **Pn** | **17 27 43.9** | **-0.1** |
| **C03A** | **Quillayute Air** | **1.26** | **289** | | **Pb** | **17 27 46.1** | **+1.0** |
| **ERK** | **Elk Rock** | **1.28** | **166** | | **Pn** | **17 27 43.7** | **-0.6** |
| **B201** | **Coldwater, Mou** | **1.29** | **164** | | **Pn** | **17 27 44.0** | **-0.4** |
| **JRO** | **Jston Ridge Ob** | **1.33** | **162** | | **Pn** | **17 27 44.8** | **-0.2** |
| **C06D** | **Leavenworth** | **1.34** | **73** | | **Pn** | **17 27 45.2** | **+0.2** |
| **C06D** | **Leavenworth** | **1.34** | **73** | P | **Pn** | **17 27 45.2** | **+0.2** |
| | baz=254,SNR=27 | | | | | | |
| C06D | | | | S | **Sn** | **17 28 01.8** | **-0.2** |
| | baz=254 | | | | | | |
| **STD** | **Studebaker Rid** | **1.36** | **163** | | **Pn** | **17 27 45.3** | **-0.2** |
| **TWW** | **Teanaway** | **1.37** | **106** | | **Pb** | **17 27 46.6** | **-0.5** |
| **SOSW** | **Source of Smit** | **1.38** | **161** | | **Pn** | **17 27 45.5** | **-0.1** |
| **MBW** | **Mount Baker** | **1.38** | **25** | | **Pn** | **17 27 46.1** | **+0.3** |
| **FL2** | **Flat Top 2** | **1.38** | **167** | | **Pn** | **17 27 45.5** | **-0.2** |
| **VALT** | **Mount Saint He** | **1.39** | **162** | | **Pn** | **17 27 46.1** | **+0.2** |
| **BOLM** | **Sugar Bowl** | **1.39** | **162** | | **Pn** | **17 27 46.2** | **+0.3** |
| **RVW** | **Rose Valley** | **1.39** | **179** | | **Pn** | **17 27 45.8** | **0.0** |
| **SHW** | **Mount Saint He** | **1.40** | **164** | | **Pn** | **17 27 46.1** | **0.0** |
| **SEPW** | **September Lobe** | **1.41** | **163** | | **Pn** | **17 27 46.3** | **+0.2** |
| **ESD** | **East Dome** | **1.42** | **162** | | **Pn** | **17 27 46.5** | **+0.3** |
| **HSR** | **South Ridge** | **1.43** | **163** | | **Pn** | **17 27 47.0** | **+0.5** |
| **B023** | **Clatskanie** | **1.45** | **188** | | **Pn** | **17 27 46.6** | **+0.2** |
| **F04D** | **Rainier, OR** | **1.47** | **186** | | **Pn** | **17 27 47.3** | **+0.5** |
| **F04D** | **Rainier, OR** | **1.47** | **186** | P | **Pn** | **17 27 47.3** | **+0.5** |
| | baz=5.2,SNR=27 | | | | | | |
| F04D | | | | S | **Sb** | **17 28 06.3** | **-0.6** |
| | baz=5.2 | | | | | | |
| **LTY** | **Liberty** | **1.47** | **100** | | **Pn** | **17 27 47.5** | **+0.6** |
| LTY | | | | Sn | **Sn** | **17 28 06.3** | **+0.9** |
| **SHUK** | **Shuksan-Mt. Ba** | **1.51** | **29** | | **Pn** | **17 27 48.2** | **+0.7** |
| **CDFW** | **Cedar Flats** | **1.52** | **160** | | **Pn** | **17 27 48.0** | **+0.5** |
| **TBM** | **Table Mountain** | **1.54** | **103** | | **Pb** | **17 27 49.0** | **-0.9** |
| **VDB** | **Vedder Mountai** | **1.56** | **17** | | **Pn** | **17 27 48.6** | **+0.6** |
| **CLRS** | **Cowichan Lake** | **1.56** | **326** | | **Pn** | **17 27 48.2** | **+0.1** |
| **NAC** | **Naches** | **1.57** | **120** | | **Pb** | **17 27 49.4** | **-1.0** |
| **MTMW** | **Mount Mitchell** | **1.57** | **165** | | **Pn** | **17 27 48.8** | **+0.5** |
| **F04A** | **Amboy** | **1.63** | **171** | | **Pn** | **17 27 49.7** | **+0.7** |
| F04A | | | | IAML | | 17 28 12.5 | |
| | comp=N,516nm,0.4s | | | | | | |
| **EBG** | **Ellensburg** | **1.64** | **112** | | **Pb** | **17 27 50.6** | **-1.0** |
| **NLW** | **Nelson Butte** | **1.74** | **71** | | **Pn** | **17 27 51.8** | **+1.2** |
| **CBSW** | **Chelan Butte S** | **1.88** | **81** | | **Pn** | **17 27 53.7** | **+1.2** |
| **F05D** | **White Salmon** | **1.90** | **151** | | **Pn** | **17 27 53.8** | **+1.1** |
| **F05D** | **White Salmon** | **1.90** | **151** | P | **Pb** | **17 27 54.7** | **-1.2** |
| | baz=331,SNR=16 | | | | | | |
| F05D | | | | S | **Sb** | **17 28 18.6** | **-0.5** |
| | baz=331 | | | | | | |
| **WTV** | **Waterville** | **1.93** | **84** | | **Pn** | **17 27 54.2** | **+1.0** |
| **APM** | **Augspurger Mou** | **1.96** | **157** | | **Pb** | **17 27 55.5** | **-1.6** |
| **KMOR** | **Kings Mountain** | **1.97** | **194** | | **Pn** | **17 27 54.6** | **+0.8** |
| **TRW** | **Toppenish Ridg** | **1.99** | **128** | | **Pb** | **17 27 56.8** | **-0.6** |
| **DHW2** | **Dyer Hill 2** | **2.09** | **77** | | **Pn** | **17 27 57.3** | **+1.9** |
| **EPH** | **Ephrata** | **2.18** | **94** | | **Pn** | **17 27 57.1** | **+0.5** |
| **SHB** | **Sechelt** | **2.18** | **341** | | **Pb** | **17 27 59.9** | **-0.9** |
| **E07A** | **Sunnyside** | **2.24** | **115** | | **Pn** | **17 27 58.6** | **+1.2** |
| E07A | | | | IAML | | 17 28 34.4 | |
| | comp=N,286nm,0.4s | | | | | | |
| **MDW** | **Midway** | **2.27** | **113** | | **Pn** | **17 27 59.1** | **+1.3** |
| **SAW** | **Saint Andrews** | **2.30** | **85** | | **Pn** | **17 27 58.8** | **+0.6** |
| **FHE** | **Frenchman Hill** | **2.32** | **104** | | **Pn** | **17 27 59.6** | **+1.1** |
| **BENWA** | **Benson Ranch** | **2.34** | **115** | | **Pn** | **17 28 00.1** | **+1.3** |
| **WAH2** | **Wahluke Slope** | **2.34** | **108** | | **Pn** | **17 28 00.2** | **+1.5** |
| **G04A** | **Mulino** | **2.35** | **175** | | **Pb** | **17 28 01.4** | **-2.2** |
| **G03D** | **McMinnville, O** | **2.35** | **188** | | **Pn** | **17 28 01.0** | **+2.0** |
| G03D | | | | IAML | | 17 28 43.4 | |
| | comp=N,194nm,1.0s | | | | | | |
| G03D | | | | IAML | | 17 28 48.2 | |
| | comp=E,197nm,0.8s | | | | | | |
| **G03D** | **McMinnville, O** | **2.35** | **188** | P | **Pn** | **17 28 01.0** | **+2.0** |
| | baz=7.4,SNR=33 | | | | | | |
| **HOOD** | **Mount Hood Mea** | **2.36** | **160** | | **Pn** | **17 27 59.8** | **+0.7** |
| HOOD | | | | IAML | | 17 28 37.5 | |
| | comp=N,141nm,0.8s | | | | | | |
| HOOD | | | | IAML | | 17 28 42.1 | |
| | comp=E,149nm,1.0s | | | | | | |
| **TDH** | **Tom, Dick, Har** | **2.36** | **163** | | **Pb** | **17 28 02.4** | **-1.5** |
| **SNIWA** | **Snively Ranch** | **2.40** | **116** | | **Pn** | **17 28 00.9** | **+1.3** |
| **HEBO** | **Mount Hebo** | **2.42** | **196** | Pn | **Pn** | **17 28 01.2** | **+1.2** |
| HEBO | | | | IAML | | 17 28 17.0 | |
| | comp=N,228nm,2.2s | | | | | | |
| **LOCW** | **Locke Island** | **2.44** | **109** | | **Pn** | **17 28 01.4** | **+1.2** |
| **B08A** | **Colville Reser** | **2.46** | **69** | | **Pn** | **17 28 00.7** | **+0.1** |
| B08A | | | | IAML | | 17 28 37.4 | |
| | comp=N,149nm,0.7s | | | | | | |
| B08A | | | | IAML | | 17 28 39.2 | |
| | comp=E,115nm,0.4s | | | | | | |
| **GBL** | **Gable Mountain** | **2.47** | **111** | | **Pn** | **17 28 01.8** | **+1.3** |
| **RSW** | **Rattlesnake Hi** | **2.48** | **116** | | **Pn** | **17 28 01.9** | **+1.2** |
| **HAWA** | **Hanford** | **2.51** | **116** | Pn | **Pn** | **17 28 01.7** | **+0.5** |
| **G05D** | **Wamic, OR** | **2.52** | **156** | P | **Pb** | **17 28 05.3** | **-1.3** |
| | baz=336,SNR=19 | | | | | | |
| G05D | | | | S | **Sb** | **17 28 37.3** | **+0.3** |
| | baz=336 | | | | | | |
| **MJ2** | **May Junction 2** | **2.55** | **112** | | **Pn** | **17 28 03.2** | **+1.6** |
| **F07A** | **Phinny Hill Vi** | **2.57** | **129** | | **Pn** | **17 28 04.0** | **+2.1** |
| F07A | | | | IAML | | 17 28 41.5 | |
| | comp=N,160nm,0.4s | | | | | | |
| F07A | | | | IAML | | 17 28 45.8 | |
| | comp=E,182nm,0.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MCMT** | **McKenzie Canyo** | **7.42** | **108** | Pn | **Pn** | **17 29 08.8** | **0.0** |
| **BOZ** | **Bozeman (W)** | **7.94** | **100** | Pn | **Pn** | **17 29 14.5** | **-1.3** |

**IDC 20 17:36:46.9±37.0, 55°39S×143°85E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.4/38, mbtmp3.6/3, MS3.3/1, Ms1 3.3/1, ms1mx2.7/39, Error ellipse: s-maj=666.2km s-min=201.6km az=141.0, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **23.56** | **355** | P | P | 17 41 58.7 | -0.1 |
| | 1.7nm,0.7s,baz=176,slow=12,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.53** | **343** | P | P | 17 43 19.0 | -0.4 |
| | 0.4nm,0.7s,baz=165,slow=10,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.11** | **345** | P | P | 17 43 50.7 | +0.2 |
| | 1.1nm,0.9s,baz=171,slow=7.6,SNR=9.4 | | | | | | |
| **KAPI** | **Kappang** | **53.83** | **330** | LR | LR | 18 07 13.0 | |
| | comp=Z,30nm,21.8s,baz=288,slow=34 | | | | | | |

*IDC **20** 17:38:08.7±3.4, 1°.53N×97°.92E, h47km±30km, mb3.9/14, mb1 4.0/16, mb1mx3.7/48, mbtmp4.1/16, ML3.7/2, MS3.8/1, Ms1 3.7/1, ms1mx2.6/82, Error ellipse: s-maj=34.8km s-min=15.1km az=50.0*

*DJA **20** 17:38:12.5±0.3, 2°N±3°×9°8E±°, h65km±5km, M4.2/12, mb4.4/6, MLv4.2/12*

*NEIC **20** 17:38:13.0±1.3, 1°.76N±0°.05×98°.24E±0°.05, h74km±6km, mb4.4/35, Error ellipse: s-maj=9.4km s-min=3.8km az=135.0*

**ISC 20 17:38:12.2±0.4, 1°.75N±0°.05×98°.20E±0°.05, h74km, n84, σ1§17/93, mb4.3/39, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **0.76** | **235** | Pn | **Pn** | **17 38 29.2** | **+1.1** |
| **GSI** | **Gunungsitoli** | **0.76** | **235** | P | **Pn** | **17 38 30.0** | **+1.9** |
| GSI | | | | S | **Sn** | **17 38 39.5** | **-0.4** |
| **RPSI** | **Rantau Prapat** | **1.19** | **38** | | **Pn** | **17 38 34.0** | **+0.7** |
| RPSI | | | | | **Sn** | **17 38 48.9** | **-0.1** |
| **PSI** | **Prapat** | **1.27** | **35** | P | **Pn** | **17 38 34.0** | **-0.5** |
| | 44nm,0.3s,baz=355,slow=8.3,SNR=141 | | | | | | |
| PSI | | | | S | **Sn** | **17 38 48.9** | **-2.3** |
| | 67nm,0.3s,baz=344,slow=6.4,SNR=8.1 | | | | | | |
| PSI | | | | LR | LR | 17 39 26.7 | |
| | comp=Z,130nm,18.4s,baz=229,slow=51 | | | | | | |
| **MNSI** | **Mandailing Nat** | **1.67** | **124** | P | **Pn** | **17 38 41.2** | **+1.6** |
| **TSI** | **Tuntungan** | **1.78** | **12** | P | **Pn** | **17 38 41.7** | **+0.7** |
| **KCSI** | **Kotacane, Aceh** | **1.81** | **346** | P | **Pn** | **17 38 41.8** | **+0.3** |
| **SNSI** | **Sinabang, Aceh** | **1.98** | **289** | P | **Pn** | **17 38 44.2** | **+0.5** |
| **PPI** | **Padang Panjang** | **3.10** | **135** | P | **Pn** | **17 38 59.5** | **+0.6** |
| **BKNI** | **Bangkinang** | **3.17** | **116** | Pn | **Pn** | **17 38 59.9** | **+0.1** |
| **BKNI** | **Bangkinang** | **3.17** | **116** | P | **Pn** | **17 38 59.9** | **+0.1** |
| **LHMI** | **Lhok Sumawe** | **3.68** | **340** | Pn | **Pn** | **17 39 08.0** | **+1.3** |
| **LHMI** | **Lhok Sumawe** | **3.68** | **340** | P | **Pn** | **17 39 06.7** | **0.0** |
| **IPM** | **Ipoh** | **3.92** | **46** | Pn | **Pn** | **17 39 11.5** | **+1.5** |
| **KULM** | **Kulim** | **4.29** | **35** | Pn | **Pn** | **17 39 15.9** | **+0.9** |
| **KRJI** | **Kerinci** | **5.02** | **139** | P | **Pn** | **17 39 24.4** | **-0.7** |
| | 1.0nm103nm,0.6s | | | | | | |
| MYKOM | **Kota Tinggi** | **5.65** | **89** | Pn | **Pn** | **17 39 35.1** | **+1.4** |
| **MDSI** | **Maura Dua** | **8.61** | **136** | P | **Pn** | **17 40 15.5** | **+1.4** |
| | 0.0nm9.1nm,0.8s | | | | | | |
| **KASI** | **Kota Agung** | **9.58** | **139** | P | **Pn** | **17 40 26.2** | **-1.2** |
| | 16nm,0.5s | | | | | | |
| **CGJI** | **Cibinong** | **11.18** | **138** | P | **Pn** | **17 40 45.1** | **-4.1** |
| **CMAR** | **Chiang Mai Arr** | **16.62** | **2** | P | **Pn** | **17 42 00.7** | **0.0** |
| | 0.2nm,0.3s,baz=196,slow=11,SNR=13 | | | | | | |
| **PALK** | **Pallekele** | **18.28** | **288** | P | **P** | **17 42 15.4** | **-4.9** |
| | 0.1nm,0.3s,baz=93,slow=11,SNR=1.4 | | | | | | |
| PALK | | | | S | S | 17 45 31.1 | -14 |
| | 0.2nm,0.3s,baz=282,slow=18,SNR=1.5 | | | | | | |
| **SHL** | **Shillong** | **24.45** | **346** | P | **P** | **17 43 23.1** | **-1.3** |
| SHL | | | | IAmb | IAmb | 17 43 25.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **24.85** | **8** | P | **P** | **17 43 31.3** | **+3.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **MMRI** | **Maumere** | **26.09** | **114** | P | **P** | **17 43 38.9** | **-0.4** |
| MMRI | | | | IAmb | IAmb | 17 43 40.3 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **27.04** | **338** | *eP* | **P** | **17 43 49.0** | **+1.0** |
| | comp=Z,10nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **27.37** | **339** | *eP* | **P** | **17 43 51.6** | **+0.6** |
| | comp=Z,11nm,0.7s | | | | | | |
| **JIRN** | **Jiri** | **28.22** | **337** | *eP* | **P** | **17 43 59.6** | **+1.0** |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **28.56** | **337** | *eP* | **P** | **17 44 02.4** | **+0.7** |
| | comp=Z,9.8nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **29.15** | **335** | *eP* | **P** | **17 44 07.4** | **+0.7** |
| | comp=Z,4.4nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **29.41** | **333** | *eP* | **P** | **17 44 10.3** | **+1.3** |
| | comp=Z,7.3nm,0.5s | | | | | | |
| **DANN** | **Dangsing** | **29.83** | **334** | *eP* | **P** | **17 44 13.7** | **+0.8** |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **PYUN** | **Piuthan** | **29.97** | **332** | *eP* | **P** | **17 44 15.6** | **+1.6** |
| | comp=Z,7.5nm,0.3s | | | | | | |
| **YOJ** | **Yonaguni jima** | **32.94** | **45** | P | **P** | **17 44 40.6** | **+0.8** |
| **MORW** | **Morawa** | **35.09** | **152** | P | **P** | **17 44 58.6** | **+0.2** |
| **MTN** | **Manton Dam** | **35.76** | **115** | P | **P** | **17 45 03.1** | **-1.2** |
| **JOW** | **Kunigami** | **38.14** | **46** | P | **P** | **17 45 24.3** | **-0.2** |
| **NIL** | **Nilore** | **39.41** | **326** | P | **P** | **17 45 34.7** | **-0.3** |
| **HHC** | **Hu-ho-hao-te** | **40.76** | **16** | *eP* | P | 17 45 51.8 | +5.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,7.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.45** | **123** | P | **P** | **17 45 50.9** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 17 46 18.5 | |
| | comp=Z,12nm,1.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.49** | **123** | P | **P** | **17 45 51.7** | **-0.6** |
| | comp=Z,0.5nm,0.3s,baz=303,slow=9.2,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.49** | **123** | P | **P** | **17 45 51.8** | **-0.6** |
| **WRAB** | **Tennant Creek** | **41.49** | **123** | P | **P** | **17 45 52.3** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 17 46 11.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.50** | **123** | P | **P** | **17 45 51.9** | **-0.6** |
| **WR0** | **Warramunga Arr** | **41.66** | **123** | P | **P** | **17 45 53.2** | **-0.6** |
| **KSH** | **Kashi** | **42.70** | **334** | P | **P** | **17 46 02.0** | **-0.1** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **42.92** | **349** | *eP* | **P** | **17 46 05.8** | **+2.1** |
| **ASAR** | **Alice Springs** | **42.94** | **128** | P | **P** | **17 46 03.8** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=301,slow=7.6,SNR=6.8 | | | | | | |
| **FORT** | **Forrest** | **43.06** | **141** | P | **P** | **17 46 06.0** | **+1.0** |
| **CHGR** | **Chuyangaron** | **45.33** | **328** | P | **P** | **17 46 23.1** | **-0.1** |
| CHGR | | | | IAmb | IAmb | 17 46 25.3 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **45.91** | **336** | P | **P** | **17 46 28.6** | **+0.9** |
| AAK | | | | IAmb | IAmb | 17 46 38.0 | |
| | comp=Z,3.9nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **46.45** | **8** | P | **P** | **17 46 32.3** | **+0.4** |
| | comp=Z,1.2nm,0.5s,baz=189,slow=9.7,SNR=14 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 48 06.0** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=193,slow=3.9,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **46.45** | **8** | P | **P** | **17 46 31.4** | **-0.4** |
| SONM | | | | PcP | **PcP** | **17 48 06.2** | **+0.8** |
| **ULN** | **Ulaanbaatar** | **46.57** | **8** | P | **P** | **17 46 33.0** | **+0.2** |
| **MK31** | **Makanchi Array** | **46.96** | **345** | P | **P** | **17 46 36.0** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 17 46 37.0 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.96** | **345** | P | **P** | **17 46 36.3** | **+0.6** |
| | comp=Z,4.4nm,0.7s,baz=160,slow=8.1,SNR=59 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.96** | **345** | P | **P** | **17 46 36.3** | **+0.6** |
| MKAR | | | | pP | **pP** | **17 46 55.3** | **+1.1** |
| **MAKZ** | **Makanchi** | **47.06** | **345** | P | **P** | **17 46 36.6** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 17 46 37.6 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| MAKZ | | | | pP | **pP** | **17 46 55.9** | **+1.0** |
| MAKZ | | | | PcP | **PcP** | **17 48 08.2** | **+0.7** |
| **BBOO** | **Buckleboo** | **49.59** | **137** | P | **P** | **17 46 56.3** | **+0.1** |
| **KURK** | **Kurchatov** | **51.53** | **344** | P | **P** | **17 47 11.2** | **+0.7** |
| KURK | | | | IAmb | IAmb | 17 47 11.9 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **52.99** | **133** | P | **P** | **17 47 22.0** | **+0.4** |
| | comp=Z,1.2nm,0.5s,baz=325,slow=5.9,SNR=5.8 | | | | | | |
| STKA | | | | LR | LR | 18 12 39.1 | |
| | comp=Z,77nm,18.7s,baz=207,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **52.99** | **133** | P | **P** | **17 47 21.8** | **+0.2** |
| **ZAA0** | **Zalesovo Array** | **53.19** | **350** | P | **P** | **17 47 22.9** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **53.19** | **350** | P | **P** | **17 47 22.9** | **+0.3** |
| | comp=Z,7.9nm,0.3s,baz=164,slow=6.8,SNR=60 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.19** | **350** | P | **P** | **17 47 22.8** | **+0.1** |
| ZALV | | | | pP | **pP** | **17 47 39.8** | **-1.6** |
| **BRVK** | **Borovoye** | **56.13** | **340** | P | **P** | **17 47 44.1** | **+0.1** |
| BRVK | | | | IAmb | IAmb | 17 47 44.7 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.51** | **331** | P | **P** | **17 47 53.9** | **+0.1** |
| **ARU** | **Arti** | **63.08** | **337** | P | **P** | **17 48 31.3** | **-0.3** |
| ARU | | | | IAmb | IAmb | 17 48 35.1 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **KBZ** | **Khabaz** | **64.32** | **319** | P | **P** | **17 48 38.7** | **-1.3** |
| | comp=Z,3.2nm,0.9s,baz=125,slow=5.9,SNR=5.0 | | | | | | |
| **NRIK** | **Noril'sk** | **67.85** | **356** | P | **P** | **17 49 02.1** | **-0.2** |
| | comp=Z,1.7nm,0.5s,baz=143,slow=10,SNR=2.5 | | | | | | |
| **NRIK** | **Noril'sk** | **67.85** | **356** | IAmb | IAmb | 17 49 03.5 | |
| | comp=Z,10nm,1.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **69.49** | **312** | P | **P** | **17 49 13.0** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=135,slow=7.2,SNR=7.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.49** | **312** | P | **P** | **17 49 13.2** | **0.0** |
| **TIXI** | **Tiksi** | **72.48** | **10** | P | **P** | **17 49 29.2** | **-1.2** |
| TIXI | | | | IAmb | IAmb | 17 49 30.9 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.44** | **322** | P | **P** | **17 49 48.0** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=86,slow=5.3,SNR=9.7 | | | | | | |
| **AKBB** | **Malin Array Si** | **75.44** | **322** | P | **P** | **17 49 48.0** | **-0.2** |
| AKBB | | | | IAmb | IAmb | 17 50 09.1 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **BURAR** | **Bucovina Array** | **77.28** | **318** | P | **P** | **17 49 59.9** | **+1.0** |
| **BUR08** | **Bucovina Ar. S** | **77.29** | **318** | P | **P** | **17 49 59.9** | **+1.0** |
| BUR08 | | | | IAmb | IAmb | 17 50 01.0 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **FIA1** | **FINESS Array S** | **79.98** | **332** | P | **P** | **17 50 13.7** | **+0.5** |
| FIA1 | | | | pP | **pP** | **17 50 31.5** | **-1.6** |
| **FINES** | **FINESS Array B** | **79.98** | **332** | P | **P** | **17 50 13.8** | **+0.6** |
| | comp=Z,1.4nm,0.4s,baz=114,slow=6.3,SNR=16 | | | | | | |
| **FINES** | **FINESS Array B** | **79.98** | **332** | P | **P** | **17 50 14.0** | **+0.8** |
| FINES | | | | pP | **pP** | **17 50 31.5** | **-1.6** |
| **ARCES** | **ARCESS Array B** | **82.36** | **340** | P | **P** | **17 50 25.7** | **0.0** |
| | comp=Z,2.6nm,0.9s,baz=93,slow=6.1,SNR=9.4 | | | | | | |
| **GERES** | **GERESS Array B** | **85.06** | **319** | P | **P** | **17 50 38.2** | **-1.9** |
| | comp=Z,0.3nm,0.5s,baz=129,slow=4.2,SNR=1.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.02** | **331** | P | **P** | **17 50 50.2** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=103,slow=5.6,SNR=1.7 | | | | | | |

*IDC **20** 17:48:24.8±0.5, 4°.59N×32°.56W, h0km, mb4.2/26, mb1 4.4/26, mb1mx4.3/36, mbtmp4.2/26, MS4.0/60, Ms1 4.0/60, ms1mx3.9/85, Error ellipse: s-maj=18.4km s-min=11.8km az=149.0*

*NEIC **20** 17:48:29.7±1.7, 5°.1N±0°.1×32°.52W±0°.08, h15km±4km, mb4.8/68, Error ellipse: s-maj=14.6km s-min=11.7km az=191.0*

*GCMT **20** 17:48:29.7±0.3, 4°.80N±0°.04×32°.57W±0°.02, h17km±1km, MW4.9/92, Moment Tensor Solution. s19,c23; s92,c114; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=2.88±.22; Mθθ=0.31±.13; Mϕϕ=2.57±.15; Mrθ=0.54±.46; Mrϕ=0.69±.09; Mθϕ=0.43±.34; Best double couple: Mo=2.90400×10^16 NP1: ϕs=9.00000°, δ=40.00000°, λ=-101.00000°. NP2: ϕs=203.00000°, δ=51.00000°, λ=-81.00000°. Principal axes: T 2.8210, Plg=6.0000°, Azm=287.0000°; N 0.1630, Plg=7.0000°, Azm=17.0000°; P -2.9860, Plg=81.0000°, Azm=159.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 17:48:27.0±0.4, 4°.86N±0°.08×32°.53W±0°.07, h11km, n166, σ1§39/123, mb4.7/64, MS4.0/60, 10C-5D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SACV** | **Santiago Islan** | **13.34** | **41** | Pn | **Pn** | **17 51 33.0** | **-3.5** |
| **MDP** | **Montagnes des** | **20.03** | **272** | P | **P** | **17 52 57.7** | **-2.5** |
| | 19nm,0.9s,baz=92,slow=10,SNR=2.2 | | | | | | |
| MDP | | | | LR | LR | 17 59 02.9 | |
| | comp=Z,312nm,20.3s,baz=87,slow=32 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.97** | **125** | T | T | 18 15 59.6 | |
| | baz=304,slow=75,SNR=162 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.98** | **125** | T | T | 18 15 60.0 | |
| | baz=304,slow=75,SNR=147 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.99** | **125** | T | T | 18 16 01.1 | |
| | baz=304,slow=75,SNR=198 | | | | | | |
| **BDFB** | **Brasilia** | **25.50** | **217** | P | **P** | **17 53 52.1** | **-3.7** |
| | 0.8nm,0.3s,baz=15,slow=16,SNR=1.8 | | | | | | |
| BDFB | | | | LR | LR | 18 03 05.0 | |
| | comp=Z,188nm,19.3s,baz=317,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **27.59** | **85** | P | **P** | **17 54 13.9** | **-0.7** |
| | 3.5nm,0.8s,baz=267,slow=9.0,SNR=3.3 | | | | | | |
| DBIC | | | | LR | LR | 18 02 46.0 | |
| | comp=Z,312nm,20.3s,baz=274,slow=31 | | | | | | |
| **DBIC** | **Dimbokro** | **27.59** | **85** | P | **P** | **17 54 14.1** | **-0.5** |
| DBIC | | | | IAmb | IAmb | 17 54 27.7 | |
| | comp=Z,48nm,1.8s | | | | | | |
| **PTGA** | **Pitinga** | **27.96** | **259** | P | **P** | **17 54 15.1** | **-2.8** |
| | comp=Z,2.8nm,0.3s,baz=96,slow=14,SNR=3.3 | | | | | | |
| PTGA | | | | LR | LR | 18 04 19.0 | |
| | comp=Z,349nm,20.4s,baz=82,slow=34 | | | | | | |
| **KOWA** | **Kowa** | **29.66** | **69** | P | **P** | **17 54 33.1** | **+0.1** |
| KOWA | | | | IAmb | IAmb | 17 54 40.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.76** | **74** | P | **P** | **17 55 17.5** | **-0.3** |
| | comp=Z,2.0nm,0.6s,baz=269,slow=6.7,SNR=9.4 | | | | | | |
| TORD | | | | PcP | **PcP** | **17 57 49.8** | **-1.7** |
| | comp=Z,2.1nm,1.2s,baz=282,slow=2.2,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.76** | **74** | P | **P** | **17 55 17.2** | **-0.5** |
| TORD | | | | IAmb | IAmb | 17 55 25.1 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **SIV** | **San Ignacio** | **35.03** | **233** | P | **P** | **17 55 18.6** | **-1.5** |
| | comp=Z,2.4nm,0.9s,baz=63,slow=8.8,SNR=5.9 | | | | | | |
| SIV | | | | LR | LR | 18 08 44.9 | |
| | comp=Z,441nm,20.2s,baz=86,slow=35 | | | | | | |
| **PDPR** | **Patillas Dam,** | **35.25** | **295** | P | **P** | **17 55 21.8** | **-0.1** |
| **SJG** | **San Juan** | **35.39** | **295** | LR | LR | 18 06 52.2 | |
| | comp=Z,256nm,19.1s,baz=102,slow=31 | | | | | | |
| **CELP** | **Cerrillos** | **35.77** | **294** | P | **P** | **17 55 24.8** | **-1.7** |
| **MLPR** | **Magueyes Islan** | **36.16** | **294** | P | **P** | **17 55 28.1** | **-1.6** |
| **CRPR** | **Cabo Rojo, PR** | **36.23** | **294** | P | **P** | **17 55 30.1** | **-0.2** |
| **SDV** | **Santo Domingo** | **38.02** | **278** | P | **P** | **17 55 45.9** | **0.0** |
| | comp=Z,1.4nm,0.3s,baz=267,slow=11,SNR=1.6 | | | | | | |
| SDV | | | | LR | LR | 18 11 28.5 | |
| | comp=Z,139nm,19.6s,baz=100,slow=36 | | | | | | |
| **SDV** | **Santo Domingo** | **38.02** | **278** | P | **P** | **17 55 45.0** | **-1.0** |
| **MDT** | **Midelt** | **38.11** | **40** | LR | LR | 18 09 59.8 | |
| | comp=Z,154nm,19.5s,baz=246,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **39.23** | **217** | P | **P** | **17 55 54.1** | **-1.5** |
| | comp=Z,1.0nm,0.4s,baz=45,slow=7.5,SNR=3.4 | | | | | | |
| CPUP | | | | LR | LR | 18 11 40.3 | |
| | comp=Z,157nm,18.8s,baz=59,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **39.23** | **217** | P | **P** | **17 55 59.4** | **+3.8** |
| **GRTK** | **Grand Turk** | **40.90** | **297** | P | **P** | **17 56 09.0** | **-0.6** |
| **LPAZ** | **La Paz** | **41.01** | **238** | P | **P** | **17 56 10.9** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=82,slow=13,SNR=3.9 | | | | | | |
| LPAZ | | | | LR | LR | 18 12 10.1 | |
| | comp=Z,146nm,19.5s,baz=58,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **41.01** | **238** | P | **P** | **17 56 11.9** | **+0.7** |
| **COI** | **Coimbra** | **41.35** | **28** | P | **P** | **17 56 09.4** | **-3.7** |
| **ROSC** | **El Rosal** | **41.63** | **272** | LR | LR | 18 14 28.8 | |
| | comp=Z,265nm,19.2s,baz=98,slow=38 | | | | | | |
| **ROSC** | **El Rosal** | **41.63** | **272** | P | **P** | **17 56 16.1** | **-0.1** |
| **ZARC** | **Zaragoza, Cauc** | **42.15** | **276** | P | **P** | **17 56 19.6** | **-0.4** |
| **SJCC** | **San Jacinto, C** | **42.56** | **279** | P | **P** | **17 56 25.4** | **+2.0** |
| SJCC | | | | IAmb | IAmb | 17 57 00.7 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **43.20** | **33** | P | **P** | **17 56 30.4** | **+2.2** |
| | comp=Z,2.5nm,0.8s,baz=227,slow=8.6,SNR=13 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.20** | **33** | P | **P** | **17 56 26.7** | **-1.6** |
| **CART** | **Cartagena** | **43.46** | **37** | P | **P** | **17 56 26.9** | **-3.3** |
| **GTBY** | **Guantanamo Bay** | **44.04** | **294** | P | **P** | **17 56 34.1** | **-1.1** |
| **LVC** | **Limon Verde** | **44.83** | **231** | LR | LR | 18 14 34.8 | |
| | comp=Z,134nm,21.9s,baz=36,slow=35 | | | | | | |
| **NNA** | **Nana** | **47.13** | **249** | LR | LR | 18 16 41.0 | |
| | comp=Z,140nm,18.0s,baz=72,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.30** | **256** | LR | LR | 18 17 23.3 | |
| | comp=Z,313nm,18.1s,baz=71,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.26** | **46** | P | **P** | **17 57 18.4** | **+2.3** |
| | comp=Z,3.6nm,0.9s,baz=190,slow=7.3,SNR=2.3 | | | | | | |
| KEST | | | | LR | LR | 18 18 36.5 | |
| | comp=Z,140nm,19.1s,baz=300,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.26** | **46** | P | **P** | **17 57 16.2** | **+0.1** |
| KEST | | | | IAmb | IAmb | 17 57 24.9 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **49.59** | **226** | P | **P** | **17 57 21.6** | **+3.1** |
| **JTS** | **Las Juntas de** | **52.19** | **279** | LR | LR | 18 21 23.6 | |
| | comp=Z,43nm,20.4s,baz=158,slow=38 | | | | | | |
| **ACCN** | **Adirondack Com** | **52.79** | **323** | P | **P** | **17 57 42.0** | **-0.3** |
| **VAE** | **Valguarnera** | **53.69** | **46** | LR | LR | 18 20 11.5 | |
| | comp=Z,159nm,18.9s,baz=162,slow=35 | | | | | | |
| **TSUM** | **Tsumeb** | **54.81** | **117** | LR | LR | 18 15 57.0 | |
| | comp=Z,264nm,21.2s,baz=302,slow=30 | | | | | | |
| **DOU** | **Dourbes** | **54.83** | **28** | *dP* | **P** | **17 57 57.8** | **+0.7** |
| **MEM** | **Membach** | **55.84** | **29** | *dP* | **P** | **17 58 05.5** | **+1.1** |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **CTI** | **Castel Tesino** | **56.08** | **36** | P | **P** | **17 58 06.6** | **+0.3** |
| CTI | | | | IAmb | IAmb | 17 58 08.2 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **FETA** | **Feichten** | **56.09** | **34** | *eP* | **P** | **17 58 07.6** | **+1.1** |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.16** | **310** | LR | LR | 18 18 47.4 | |
| | comp=Z,145nm,18.9s,baz=119,slow=32 | | | | | | |
| **WTTA** | **Wattenberg** | **56.74** | **35** | *i P* | **P** | **17 58 12.1** | **+0.9** |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **56.74** | **34** | *i P* | **P** | **17 58 12.0** | **+0.8** |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **SADO** | **Sadowa** | **56.86** | **322** | LR | LR | 18 18 40.4 | |
| | comp=Z,109nm,19.5s,baz=165,slow=32 | | | | | | |
| **ABTA** | **Abfaltersbach** | **56.96** | **35** | *eP* | **P** | **17 58 14.1** | **+1.5** |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **56.98** | **337** | P | **P** | **17 58 13.3** | **+0.8** |
| | comp=Z,5.1nm,0.8s,baz=146,slow=7.1,SNR=4.9 | | | | | | |
| SCHQ | | | | LR | LR | 18 19 53.3 | |
| | comp=Z,92nm,19.5s,baz=119,slow=33 | | | | | | |
| **PLCA** | **Paso Flores** | **57.19** | **214** | P | **P** | **17 58 11.7** | **-2.7** |
| | comp=Z,3.2nm,1.1s,baz=14,slow=4.2,SNR=3.3 | | | | | | |
| PLCA | | | | LR | LR | 18 22 36.3 | |
| | comp=Z,146nm,18.8s,baz=64,slow=36 | | | | | | |
| **PLCA** | **Paso Flores** | **57.19** | **214** | P | **P** | **17 58 17.0** | **+2.7** |
| PLCA | | | | IAmb | IAmb | 17 58 57.8 | |
| | comp=Z,14nm,1.6s | | | | | | |
| **T50A** | **Nancy** | **57.44** | **311** | P | **P** | **17 58 15.5** | **-0.6** |
| T50A | | | | IAmb | IAmb | 17 58 19.6 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | **57.62** | **36** | *eP* | **P** | **17 58 18.3** | **+0.9** |
| | comp=Z,7.4nm,1.6s | | | | | | |
| **APG** | **El Apazote** | **57.80** | **285** | LR | LR | 18 25 21.4 | |
| | comp=Z,47nm,18.0s,baz=72,slow=38 | | | | | | |
| **MOA** | **Molln** | **58.55** | **35** | *eP* | **P** | **17 58 24.4** | **+0.7** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **58.77** | **34** | P | **P** | **17 58 26.0** | **+0.7** |
| | comp=Z,2.9nm,0.9s,baz=245,slow=5.7,SNR=8.7 | | | | | | |
| **KHC** | **Kasperske Hory** | **58.85** | **34** | *eP* | **P** | **17 58 26.9** | **+1.1** |
| **CKRC** | **Cesky Krumlov** | **59.09** | **34** | *eP* | **P** | **17 58 28.7** | **+1.2** |
| **IDI** | **Anoyia** | **60.83** | **52** | LR | LR | 18 24 52.9 | |
| | comp=Z,78nm,21.3s,baz=262,slow=36 | | | | | | |
| **PSZ** | **Piszkesteto** | **61.90** | **37** | P | **P** | **17 58 46.4** | **-0.3** |
| PSZ | | | | IAmb | IAmb | 17 58 51.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **CMIG** | **Matias Romero** | **62.17** | **287** | LR | LR | 18 28 13.9 | |
| | comp=Z,48nm,18.1s,baz=45,slow=38 | | | | | | |
| **SUR** | **Sutherland** | **62.71** | **130** | LR | LR | 18 21 25.2 | |
| | comp=Z,135nm,18.4s,baz=310,slow=32 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **63.27** | **352** | LR | LR | 18 21 08.3 | |
| | comp=Z,109nm,20.1s,baz=120,slow=31 | | | | | | |
| **LSZ** | **Lusaka** | **63.37** | **110** | LR | LR | 18 20 32.5 | |
| | comp=Z,114nm,21.5s,baz=294,slow=30 | | | | | | |
| **MBAR** | **Mbarara** | **63.43** | **93** | LR | LR | 18 23 38.1 | |
| | comp=Z,165nm,19.2s,baz=266,slow=33 | | | | | | |
| **P40A** | **Paris** | **63.62** | **312** | P | **P** | **17 58 58.8** | **+0.5** |
| P40A | | | | IAmb | IAmb | 17 59 05.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **LBTB** | **Lobatse** | **63.77** | **121** | LR | LR | 18 22 01.8 | |
| | comp=Z,152nm,19.7s,baz=276,slow=32 | | | | | | |
| **HUMR** | **Humele** | **63.79** | **42** | ⇑P | **P** | **17 59 01.7** | **+2.5** |
| **FRB** | **Frobisher Bay** | **64.29** | **343** | LR | LR | 18 22 14.9 | |
| | comp=Z,112nm,21.0s,baz=109,slow=32 | | | | | | |
| **ICESG** | **Greenland Ices** | **64.31** | **357** | *i P* | **P** | **17 59 02.6** | **0.0** |
| ICESG | | | | IAmb | IAmb | 17 59 05.4 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **DOPR** | **Dopca** | **64.57** | **41** | ⇓P | **P** | **17 59 05.9** | **+1.5** |
| **BOSA** | **Boshof** | **64.73** | **125** | P | **P** | **17 59 04.3** | **-1.6** |
| | comp=Z,6.9nm,1.0s,baz=274,slow=7.1,SNR=4.8 | | | | | | |
| BOSA | | | | LR | LR | 18 21 28.5 | |
| | comp=Z,178nm,21.4s,baz=310

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NOR | **Nord** | **77.04** | **2** | *i* P | | **P** | | **18 00 19.4** | **-0.2** |
| NOR | | | | | IAmb | IAmb | | 18 00 52.3 | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **77.11** | **67** | P | | **P** | | **18 00 22.4** | **+1.2** |
| **GNI** | **Garni** | **77.15** | **50** | LR | | LR | | 18 35 43.1 | |
| | comp=Z,58nm,19.1s,baz=298,slow=37 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.19** | **313** | P | | **P** | | **18 00 21.5** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=107,slow=7.9,SNR=6.3 | | | | | | | | |
| PDAR | | | | LR | | LR | | 18 33 02.8 | |
| | comp=Z,77nm,18.6s,baz=107,slow=35 | | | | | | | | |
| **P18A** | **Preston Nutter** | **77.45** | **309** | P | | **P** | | **18 00 24.1** | **+1.0** |
| P18A | | | | | IAmb | IAmb | | 18 00 32.0 | |
| | comp=Z,9.0nm,1.2s | | | | | | | | |
| **LOHW** | **Long Hollow** | **78.03** | **313** | P | | **P** | | **18 00 26.6** | **+0.5** |
| LOHW | | | | | IAmb | IAmb | | 18 00 35.1 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **WUAZ** | **Wupatki** | **78.11** | **305** | P | | **P** | | **18 00 27.4** | **+0.7** |
| WUAZ | | | | | IAmb | IAmb | | 18 00 35.9 | |
| | comp=Z,8.2nm,1.2s | | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **78.12** | **304** | P | | **P** | | **18 00 27.0** | **+0.2** |
| **MOOW** | **Moose Ponds** | **78.14** | **314** | P | | **P** | | **18 00 26.9** | **+0.2** |
| MOOW | | | | | IAmb | IAmb | | 18 00 49.5 | |
| | comp=Z,21nm,1.9s | | | | | | | | |
| **REDW** | **Red Top Meadow** | **78.19** | **313** | P | | **P** | | **18 00 27.2** | **+0.2** |
| REDW | | | | | IAmb | IAmb | | 18 00 36.0 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **RES** | **Resolute Bay** | **78.23** | **346** | LR | | LR | | 18 31 11.8 | |
| | comp=Z,110nm,20.4s,baz=100,slow=33 | | | | | | | | |
| **RES** | **Resolute Bay** | **78.23** | **346** | P | | **P** | | **18 00 26.6** | **+0.3** |
| **YHH** | **Holmes Hill** | **78.30** | **315** | P | | **P** | | **18 00 28.4** | **+0.6** |
| **MTPU** | **Mount Pierson** | **78.87** | **308** | P | | **P** | | **18 00 31.7** | **+0.6** |
| MTPU | | | | | IAmb | IAmb | | 18 00 40.2 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **NLU** | **North Lily Min** | **78.88** | **310** | P | | **P** | | **18 00 31.9** | **+1.0** |
| **EUNU** | **Eureka** | **79.34** | **352** | P | | **P** | | **18 00 33.1** | **+0.6** |
| EUNU | | | | | IAmb | IAmb | | 18 00 34.7 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **79.65** | **311** | P | | **P** | | **18 00 34.9** | **-0.2** |
| BGU | | | | | IAmb | IAmb | | 18 00 43.6 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **CCUT** | **Cedar City** | **79.79** | **307** | P | | **P** | | **18 00 36.7** | **+0.7** |
| CCUT | | | | | IAmb | IAmb | | 18 00 45.2 | |
| | comp=Z,9.4nm,1.2s | | | | | | | | |
| **RPN** | **Rapa Nui** | **80.53** | **242** | LR | | LR | | 18 31 45.1 | |
| | comp=Z,56nm,19.9s,baz=141,slow=32 | | | | | | | | |
| **EDM** | **Edmonton** | **80.62** | **323** | P | | **P** | | **18 00 39.9** | **0.0** |
| EDM | | | | | IAmb | IAmb | | 18 00 48.4 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **PRN** | **Pahroc Range** | **81.13** | **307** | P | | **P** | | **18 00 43.8** | **+0.8** |
| PRN | | | | | IAmb | IAmb | | 18 00 52.6 | |
| | comp=Z,9.3nm,1.2s | | | | | | | | |
| **ELK** | **Elko** | **81.32** | **310** | LR | | LR | | 18 32 19.3 | |
| | comp=Z,117nm,21.8s,baz=71,slow=32 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.05** | **332** | P | | **P** | | **18 00 46.7** | **-0.5** |
| | comp=Z,1.3nm,1.0s,baz=96,slow=5.5,SNR=8.3 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **82.28** | **303** | LR | | LR | | 18 35 29.0 | |
| | comp=Z,98nm,19.1s,baz=36,slow=34 | | | | | | | | |
| **QSM** | **Queen of Sheba** | **82.59** | **306** | P | | **P** | | **18 00 51.7** | **+1.1** |
| QSM | | | | | IAmb | IAmb | | 18 00 52.8 | |
| | comp=Z,8.3nm,1.3s | | | | | | | | |
| **NEW** | **Newport** | **82.80** | **318** | LR | | LR | | 18 32 40.5 | |
| | comp=Z,142nm,21.8s,baz=80,slow=32 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.69** | **308** | P | | **P** | | **18 00 57.2** | **+0.6** |
| | comp=Z,0.9nm,0.9s,baz=84,slow=6.1,SNR=5.3 | | | | | | | | |
| NVAR | | | | LR | | LR | | 18 36 32.1 | |
| | comp=Z,40nm,18.2s,baz=55,slow=34 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **86.25** | **342** | P | | **P** | | **18 01 08.6** | **+0.2** |
| A36M | | | | | IAmb | IAmb | | 18 01 09.2 | |
| | comp=Z,6.5nm,1.1s | | | | | | | | |
| **ARU** | **Arti** | **86.59** | **34** | LR | | LR | | 18 40 19.1 | |
| | comp=Z,77nm,18.1s,baz=296,slow=36 | | | | | | | | |
| **UOSS** | **Minazif** | **86.83** | **65** | P | | **P** | | **18 01 12.5** | **+0.2** |
| UOSS | | | | | IAmb | IAmb | | 18 01 13.5 | |
| | comp=Z,10nm,1.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **86.93** | **311** | LR | | LR | | 18 36 26.3 | |
| | comp=Z,55nm,21.8s,baz=60,slow=33 | | | | | | | | |
| **SYO** | **Syowa Base** | **88.19** | **160** | ‖ *e*P | | **P** | | **18 01 19.4** | **+1.7** |
| **WSAR** | **Wadi Sarin** | **89.17** | **67** | LR | | LR | | 18 41 50.1 | |
| | comp=Z,149nm,21.0s,baz=294,slow=36 | | | | | | | | |
| **INK** | **Inuvik** | **89.57** | **339** | LR | | LR | | 18 39 46.6 | |
| | comp=Z,136nm,18.4s,baz=51,slow=34 | | | | | | | | |
| **BBB** | **Bella Bella** | **89.62** | **322** | LR | | LR | | 18 39 23.6 | |
| | comp=Z,69nm,18.6s,baz=236,slow=34 | | | | | | | | |
| **DLBC** | **Dease Lake** | **89.81** | **329** | LR | | LR | | 18 39 27.0 | |
| | comp=Z,72nm,18.2s,baz=114,slow=34 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **91.24** | **333** | P | | **P** | | **18 01 32.4** | **+0.1** |
| **ILAR** | **Eielson Array** | **95.74** | **337** | P | | **P** | | **18 01 52.9** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=41,slow=4.1,SNR=6.3 | | | | | | | | |
| ILAR | | | | LR | | LR | | 18 42 26.3 | |
| | comp=Z,96nm,20.1s,baz=88,slow=34 | | | | | | | | |
| **AAK** | **Ala-Archa** | **99.12** | **46** | LR | | LR | | 18 50 32.4 | |
| | comp=Z,42nm,20.1s,baz=311,slow=38 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.86** | **63** | PKP | | **PKPdf** | | **18 07 31.6** | **-0.4** |
| | comp=Z,1.9nm,0.9s,baz=290,slow=4.1,SNR=11 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.86** | **63** | | | **PKPdf** | | **18 07 31.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **157.19** | **146** | PKP | | **PKPdf** | | **18 08 22.9** | **-1.0** |
| | comp=Z,1.2nm,0.9s,baz=228,slow=1.1,SNR=6.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **160.30** | **141** | PKPab | | **PKPab** | | **18 09 06.6** | **-1.5** |
| | comp=Z,1.8nm,1.0s,baz=200,slow=2.3,SNR=4.7 | | | | | | | | |

*IDC **20** 17:59:46.9±4.4,33°.97S×179°.55E,h142km±35km,mb4.1/8, mb1 4.2/9,mb1mx3.9/25,mbtmp4.6/9, Error ellipse: s-maj=34.5km s-min=16.4km az=45.0*

*WEL **20** 17:59:46.8±0.5,34°.5±5°×18°.0W±°,h174km±11km,M4.1/54, mB4.7/27,ML5.2/50,MLv4.9/54,Mw(mB)3.9/27, Error ellipse: s-maj=0.0km s-min=0.0km az=111.3*

*NEIC **20** 17:59:50.2±2.3,34°.33S±0°.09×179°.4E±0°.1,h163km±6km, mb4.4/22, Error ellipse: s-maj=13.8km s-min=12.5km az=118.0*

**ISC 20 17:59:47.3±0.5,34°.31S±0°.04×179°.71E±0°.07,h150km, n148,σ1°.82/146,mb4.5/17,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.44** | **199** | Pn | **Pn** | **18 00 41.4** | **+1.2** |
| MXZ | | | | Sn | **Sn** | **18 01 21.8** | **+0.5** |
| **WMGZ** | **Waiomatatini S** | **3.65** | **196** | P | **Pn** | **18 00 45.3** | **+2.3** |
| **HAZ** | **Te Kaha** | **3.77** | **204** | P | **Pn** | **18 00 46.8** | **+2.2** |
| HAZ | | | | S | **Sn** | **18 01 30.1** | **+1.0** |
| **PKGZ** | **Pakihiroa** | **3.81** | **200** | P | **Pn** | **18 00 46.7** | **+1.7** |
| PKGZ | | | | S | **Sn** | **18 01 30.8** | **+0.9** |
| **PUZ** | **Puketiti** | **3.93** | **197** | P | **Pn** | **18 00 48.1** | **+1.5** |
| PUZ | | | | S | **Sn** | **18 01 33.8** | **+0.9** |
| **RUGZ** | **Raukumara Rang** | **4.00** | **204** | P | **Pn** | **18 00 49.6** | **+2.0** |
| RUGZ | | | | S | **Sn** | **18 01 34.2** | **-0.4** |
| **KUZ** | **Kuaotunu** | **4.06** | **232** | P | **Pn** | **18 00 51.5** | **+3.2** |
| **TWGZ** | **Tauwhareparae** | **4.10** | **199** | P | **Pn** | **18 00 51.8** | **+2.9** |
| TWGZ | | | | S | **Sn** | **18 01 38.9** | **+2.1** |
| **CNGZ** | **Carnagh Statio** | **4.34** | **196** | P | **Pn** | **18 00 53.7** | **+1.8** |
| **OPRZ** | **Ohinepanea** | **4.35** | **215** | P | **Pn** | **18 00 54.1** | **+1.9** |
| **MWZ** | **Matawai** | **4.38** | **203** | P | **Pn** | **18 00 53.7** | **+1.1** |
| MWZ | | | | S | **Sn** | **18 01 42.7** | **-0.8** |
| **TKGZ** | **Te Karaka** | **4.38** | **200** | P | **Pn** | **18 00 53.5** | **+1.0** |
| TKGZ | | | | S | **Sn** | **18 01 43.6** | **+0.2** |
| **MARZ** | **Manawahe** | **4.41** | **213** | P | **Pn** | **18 00 56.4** | **+3.5** |
| **URZ** | **Urewera** | **4.46** | **207** | P | **Pn** | **18 00 54.5** | **+0.9** |
| | 12nm,0.3s,baz=280,slow=3.2,SNR=80 | | | | | | |
| URZ | | | | S | **Sn** | **18 01 44.3** | **-0.9** |
| | 33nm,0.3s,baz=78,slow=5.0,SNR=6.1 | | | | | | |
| **URZ** | **Urewera** | **4.46** | **207** | Pn | **Pn** | **18 00 53.7** | **+0.1** |
| **URZ** | **Urewera** | **4.46** | **207** | P | **Pn** | **18 00 55.1** | **+1.5** |
| URZ | | | | S | **Sn** | **18 01 44.1** | **-1.2** |
| **WIAZ** | **Waiheke Island** | **4.48** | **235** | P | **Pn** | **18 00 56.8** | **+3.0** |
| **RAGZ** | **Rawiri** | **4.57** | **203** | P | **Pn** | **18 00 56.1** | **+1.0** |
| **KARZ** | **Kaharoa** | **4.64** | **216** | P | **Pn** | **18 00 59.1** | **+3.1** |
| **RIGZ** | **Rimuhau** | **4.66** | **199** | P | **Pn** | **18 00 56.9** | **+0.7** |
| RIGZ | | | | S | **Sn** | **18 01 50.2** | **+0.3** |
| **WCZ** | **Waipu Caves** | **4.69** | **248** | P | **Pn** | **18 00 58.9** | **+2.4** |
| **RRRZ** | **Republican Roa** | **4.78** | **212** | P | **Pn** | **18 01 00.4** | **+2.7** |
| **MUGZ** | **Murupara** | **4.79** | **209** | S | **Sn** | **18 01 50.8** | **-2.1** |
| **TOZ** | **Tahuroa Road** | **4.83** | **224** | P | **Pn** | **18 01 01.4** | **+3.1** |
| **RTZ** | **Ruatahuna** | **4.83** | **206** | P | **Pn** | **18 00 58.4** | **0.0** |
| RTZ | | | | S | **Sn** | **18 01 51.9** | **-2.0** |
| **PRGZ** | **Paritu Road** | **4.83** | **197** | P | **Pn** | **18 00 59.6** | **+1.1** |
| **SNGZ** | **Shannon Statio** | **4.85** | **202** | P | **Pn** | **18 01 00.0** | **+1.3** |
| SNGZ | | | | S | **Sn** | **18 01 54.4** | **-0.1** |
| **PRRZ** | **Plateau Road** | **4.96** | **212** | P | **Pn** | **18 01 01.2** | **+1.0** |
| **KNZ** | **Kokohu** | **4.98** | **199** | P | **Pn** | **18 01 00.2** | **-0.1** |
| **MHGZ** | **Mahia Peninsul** | **5.04** | **196** | P | **Pn** | **18 01 01.7** | **+0.4** |
| **RAHZ** | **Arahi** | **5.06** | **204** | P | **Pn** | **18 01 01.8** | **+0.3** |
| RAHZ | | | | S | **Sn** | **18 02 00.3** | **+1.0** |
| **MTHZ** | **Maungataniwha** | **5.09** | **206** | P | **Pn** | **18 01 02.7** | **+0.9** |
| **OUZ** | **Omahuta** | **5.12** | **258** | Pn | **Pn** | **18 01 02.7** | **+0.5** |
| **OUZ** | **Omahuta** | **5.12** | **258** | P | **Pn** | **18 01 03.9** | **+1.7** |
| **WHHZ** | **Waihua** | **5.16** | **202** | P | Pn | 18 01 07.5 | +4.7 |
| **KUTZ** | **Kaahu Road** | **5.22** | **216** | P | **Pn** | **18 01 05.8** | **+2.3** |
| **MRHZ** | **Matea Rd** | **5.23** | **209** | P | **Pn** | **18 01 03.8** | **0.0** |
| **TLZ** | **Tolley Road** | **5.24** | **219** | P | **Pn** | **18 01 05.8** | **+1.9** |
| **NMHZ** | **Naumai** | **5.32** | **205** | P | **Pn** | **18 01 04.7** | **-0.2** |
| **ARHZ** | **Aropaoanui** | **5.40** | **203** | P | **Pn** | **18 01 05.8** | **-0.2** |
| **GLKZ** | **Green Lake** | **5.42** | **22** | P | **Pn** | **18 01 04.1** | **-2.3** |
| GLKZ | | | | S | **Sn** | **18 02 05.5** | **-2.6** |
| **BKZ** | **Black Stump Fm** | **5.49** | **207** | Pn | **Pn** | **18 01 06.7** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **5.49** | **207** | P | **Pn** | **18 01 07.0** | **-0.2** |
| **RITZ** | **Rihia Road** | **5.59** | **213** | P | **Pn** | **18 01 11.0** | **+2.5** |
| **MCHZ** | **McNeill Hill** | **5.66** | **204** | P | **Pn** | **18 01 09.7** | **+0.2** |
| **HIZ** | **Hauiti** | **5.74** | **222** | | **Pn** | **18 01 10.4** | **0.0** |
| **HIZ** | **Hauiti** | **5.74** | **222** | P | **Pn** | **18 01 13.1** | **+2.6** |
| **CKHZ** | **Cape Kidnapper** | **5.74** | **201** | P | **Pn** | **18 01 10.5** | **+0.1** |
| **NTVZ** | **North Tongarir** | **5.77** | **213** | P | **Pn** | **18 01 11.2** | **+0.1** |
| **TMVZ** | **Te Maari** | **5.77** | **213** | P | **Pn** | **18 01 11.0** | **0.0** |
| **KRVZ** | **Karewarewa** | **5.79** | **213** | P | **Pn** | **18 01 12.7** | **+1.5** |
| **WTVZ** | **West Tongariro** | **5.83** | **213** | P | **Pn** | **18 01 12.6** | **+0.8** |
| **NNVZ** | **North Ngauruho** | **5.83** | **213** | P | **Pn** | **18 01 12.8** | **+1.0** |
| **OTVZ** | **Oturere** | **5.83** | **213** | P | **Pn** | **18 01 11.3** | **-0.6** |
| OTVZ | | | | S | **Sn** | **18 02 16.3** | **-1.6** |
| **SNVZ** | **South Ngauruho** | **5.86** | **213** | P | **Pn** | **18 01 12.1** | **-0.1** |
| **NGZ** | **Ngauruhoe** | **5.87** | **213** | P | **Pn** | **18 01 12.2** | **-0.1** |
| **KAHZ** | **Kahuranaki** | **5.92** | **202** | P | **Pn** | **18 01 12.5** | **-0.4** |
| **BHHZ** | **Black Hill Sta** | **5.94** | **208** | P | **Pn** | **18 01 12.1** | **-1.1** |
| **FWVZ** | **Far West T-bar** | **5.96** | **213** | P | **Pn** | **18 01 14.2** | **+0.6** |
| **KRHZ** | **Kereru** | **5.96** | **206** | P | **Pn** | **18 01 12.0** | **-1.4** |
| **MOVZ** | **Moawhango** | **5.99** | **211** | P | **Pn** | **18 01 13.9** | **0.0** |
| **TRVZ** | **Turoa** | **5.99** | **213** | P | **Pn** | **18 01 14.5** | **+0.4** |
| **WNVZ** | **Wahianoa** | **5.99** | **212** | P | **Pn** | **18 01 13.7** | **-0.4** |
| **PKVZ** | **Pokaka** | **6.08** | **214** | P | **Pn** | **18 01 15.6** | **+0.6** |
| **PXZ** | **Pawanui** | **6.14** | **201** | P | **Pn** | **18 01 13.8** | **-2.0** |
| **VRZ** | **Vera Road** | **6.24** | **218** | P | **Pn** | **18 01 20.3** | **+3.2** |
| **PNHZ** | **Pukenui** | **6.25** | **206** | P | **Pn** | **18 01 16.3** | **-1.1** |
| **WPHZ** | **Waipukurau** | **6.31** | **204** | P | **Pn** | **18 01 17.1** | **-1.0** |
| **PRHZ** | **Porangahau** | **6.43** | **202** | P | **Pn** | **18 01 18.6** | **-1.0** |
| **DVHZ** | **Dannevirke** | **6.61** | **204** | P | **Pn** | **18 01 20.4** | **-1.7** |
| **WAZ** | **Wanganui** | **6.62** | **213** | P | **Pn** | **18 01 22.3** | **+0.1** |
| **NEZ** | **North Egmont** | **6.69** | **221** | P | **Pn** | **18 01 26.2** | **+2.9** |
| **PRWZ** | **Pori Road** | **6.91** | **204** | P | **Pn** | **18 01 25.3** | **-0.7** |
| **BFZ** | **Birch Farm** | **6.93** | **202** | Pn | **Pn** | **18 01 22.7** | **-3.7** |
| **BFZ** | **Birch Farm** | **6.93** | **202** | P | **Pn** | **18 01 23.7** | **-2.6** |
| **TIWZ** | **Tintock** | **7.13** | **204** | P | **Pn** | **18 01 26.9** | **-2.2** |
| **HOWZ** | **Holdsworth Sta** | **7.37** | **206** | P | **Pn** | **18 01 28.5** | **-3.7** |
| **OGWZ** | **Otaki Gorge** | **7.43** | **208** | P | **Pn** | **18 01 29.9** | **-3.1** |
| **TMWZ** | **Te Maipa** | **7.43** | **203** | P | **Pn** | **18 01 30.3** | **-2.7** |
| **KIW** | **Kapiti Island** | **7.57** | **209** | P | **Pn** | **18 01 31.7** | **-3.2** |
| **CAW** | **Cannon Point** | **7.72** | **207** | P | **Pn** | **18 01 33.2** | **-3.7** |
| **PAWZ** | **Paruwai Farm** | **7.83** | **204** | P | **Pn** | **18 01 35.1** | **-3.2** |
| **MSWZ** | **Moikau Station** | **7.92** | **205** | Pn | Pn | 18 01 34.5 | -5.1 |
| **SNZO** | **South Karori** | **8.03** | **208** | Pn | **Pn** | **18 01 36.4** | **-4.6** |
| **BHW** | **Baring Head** | **8.05** | **207** | Pn | **Pn** | **18 01 36.7** | **-4.6** |
| **PLWZ** | **Palliser** | **8.05** | **205** | Pn | **Pn** | **18 01 37.1** | **-4.3** |
| **TUWZ** | **Tuamarina** | **8.44** | **211** | Pn | Pn | 18 01 41.7 | -4.8 |
| **NNZ** | **Nelson** | **8.52** | **214** | Pn | Pn | 18 01 40.2 | -7.4 |
| **CMWZ** | **Cape Campbell** | **8.60** | **209** | Pn | Pn | 18 01 39.9 | -8.7 |
| **BSWZ** | **Blackbirch Sta** | **8.71** | **210** | Pn | Pn | 18 01 43.0 | -7.0 |
| **THZ** | **Tophouse** | **9.17** | **214** | Pn | Pn | 18 01 51.1 | -5.1 |
| **KHZ** | **Kahutara** | **9.43** | **209** | Pn | Pn | 18 01 54.2 | -5.4 |
| **LTZ** | **Lake Taylor** | **10.27** | **212** | Pn | Pn | 18 02 04.9 | -5.8 |
| **OXZ** | **Oxford** | **10.80** | **211** | Pn | Pn | 18 02 11.0 | -6.9 |
| **MQZ** | **McQueen's Vall** | **10.86** | **208** | Pn | Pn | 18 02 11.8 | -6.8 |
| **RPZ** | **Rata Peaks** | **11.55** | **213** | P | Pn | 18 02 20.4 | -7.1 |
| | 0.9nm,0.3s,baz=118,slow=21,SNR=2.0 | | | | | | |
| RPZ | | | | S | Sn | 18 04 21.7 | -13 |
| | 4.6nm,0.3s,baz=100,slow=21,SNR=12 | | | | | | |
| **RPZ** | **Rata Peaks** | **11.55** | **213** | Pn | Pn | 18 02 16.8 | -11 |
| **FOZ** | **Fox Glacier** | **12.00** | **217** | Pn | Pn | 18 02 25.5 | -7.9 |
| **ODZ** | **Otahua Downs** | **12.78** | **210** | Pn | Pn | 18 02 34.2 | -9.4 |
| **WKZ** | **Wanaka** | **13.34** | **215** | | Pn | 18 02 38.9 | -12 |
| **DZM** | **Mont Dzumac** | **16.88** | **313** | P | **Pn** | **18 03 36.1** | **+1.3** |
| | 0.8nm,0.3s,baz=182,slow=11,SNR=7.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.88** | **313** | P | **Pn** | **18 03 36.0** | **+1.2** |
| **NIUE** | **Niue** | **17.76** | **34** | P | **Pn** | **18 03 48.5** | **+3.3** |
| **SANVU** | **Saraoutou** | **21.91** | **326** | P | **P** | **18 04 28.8** | **+0.1** |
| **TOO** | **Toolangi** | **27.81** | **253** | P | **P** | **18 05 22.0** | **-0.4** |
| TOO | | | | IAmb | IAmb | 18 05 22.2 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **STKA** | **Stephens Creek** | **31.91** | **264** | P | **P** | **18 05 59.7** | **+1.1** |
| | comp=Z,2.1nm,0.7s,baz=115,slow=15,SNR=4.8 | | | | | | |
| **STKA** | **Stephens Creek** | **31.91** | **264** | P | **P** | **18 05 59.2** | **+0.6** |
| **CTA** | **Charters Tower** | **32.79** | **287** | P | **P** | **18 06 06.5** | **0.0** |
| | comp=Z,4.8nm,0.6s,baz=113,slow=11,SNR=13 | | | | | | |
| **BBOO** | **Buckleboo** | **36.20** | **260** | P | **P** | **18 06 35.0** | **-0.7** |
| **COEN** | **Coen** | **38.73** | **292** | P | **P** | **18 06 56.6** | **-0.4** |
| COEN | | | | IAmb | IAmb | 18 06 58.3 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **41.15** | **272** | P | **P** | **18 07 15.7** | **-1.3** |
| **ASAR** | **Alice Springs** | **41.15** | **272** | P | **P** | **18 07 15.8** | **-1.3** |
| | comp=Z,3.7nm,0.7s,baz=111,slow=7.9,SNR=78 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 09 12.2** | **-1.3** |
| | comp=Z,0.7nm,0.5s,baz=113,slow=3.6,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **41.15** | **272** | P | **P** | **18 07 15.2** | **-1.8** |
| **WR0** | **Warramunga Arr** | **42.33** | **278** | P | **P** | **18 07 25.3** | **-1.3** |
| **WB2** | **Warramunga Arr** | **42.49** | **278** | P | **P** | **18 07 26.3** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 18 07 30.1 | |
| | comp=Z,6.3nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.50** | **278** | P | **P** | **18 07 26.4** | **-1.5** |
| **WRA** | **Warramunga Arr** | **42.50** | **278** | P | **P** | **18 07 26.6** | **-1.4** |
| | comp=Z,2.4nm,0.3s,baz=118,slow=7.7,SNR=62 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 09 16.7** | **-1.3** |
| | comp=Z,0.4nm,0.5s,baz=126,slow=2.9,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.50** | **278** | P | **P** | **18 07 25.0** | **-3.0** |
| **WB0** | **Warramunga Arr** | **42.54** | **278** | P | **P** | **18 07 26.9** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 18 07 28.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **43.31** | **260** | P | **P** | **18 07 33.3** | **-1.1** |
| FORT | | | | IAmb | IAmb | 18 08 02.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **284** | P | **P** | **18 08 16.6** | **-1.3** |
| MTN | | | | IAmb | IAmb | 18 08 31.6 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **49.23** | **279** | P | **P** | **18 08 19.2** | **-1.5** |
| KNRA | | | | IAmb | IAmb | 18 08 19.5 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.56** | **274** | P | **P** | **18 08 28.9** | **-1.9** |
| FITZ | | | | IAmb | IAmb | 18 08 30.1 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **CASY** | **Casey** | **50.79** | **209** | P | **P** | **18 08 32.0** | **+0.2** |
| **MORW** | **Morawa** | **53.66** | **257** | P | **P** | **18 08 51.7** | **-1.9** |
| MORW | | | | IAmb | IAmb | 18 09 26.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **55.81** | **180** | P | **P** | **18 09 12.3** | **+3.7** |
| | comp=Z,7.4nm,0.5s,baz=215,slow=1.2,SNR=160 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.81** | **180** | P | **P** | **18 09 12.0** | **+3.4** |
| **GIRL** | **Giralia** | **57.85** | **263** | P | **P** | **18 09 22.3** | **-1.2** |
| **MAW** | **Mawson** | **67.97** | **202** | P | **P** | **18 10 30.8** | **+1.2** |
| | comp=Z,13nm,0.7s,baz=140,slow=7.9,SNR=2.4 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.12** | **124** | T | T | 19 40 36.2 | |
| | baz=237,slow=72,SNR=7.4 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.12** | **124** | T | T | 19 40 35.9 | |
| | baz=237,slow=72,SNR=4.5 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.14** | **124** | T | T | 19 40 35.2 | |
| | baz=237,slow=72,SNR=5.1 | | | | | | |
| **PLCA** | **Paso Flores** | **81.24** | **134** | P | **P** | **18 11 50.7** | **+4.0** |
| | comp=Z,0.7nm,0.5s,baz=213,slow=5.2,SNR=5.9 | | | | | | |
| **PLCA** | **Paso Flores** | **81.24** | **134** | IAmb | IAmb | 18 12 20.9 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **89.14** | **347** | P | **P** | **18 12 25.5** | **+0.2** |
| | comp=Z,4.7nm,0.8s,baz=176,slow=5.8,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **118.76** | **309** | PKP | **PKPdf** | **18 18 15.8** | **-1.5** |
| | comp=Z,0.3nm,0.5s,baz=199,slow=1.7,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **119.63** | **317** | PKP | **PKPdf** | **18 18 17.0** | **-1.7** |
| | comp=Z,0.4nm,0.5s,baz=190,slow=5.4,SNR=3.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **141.94** | **346** | PKP | **PKPdf** | **18 18 59.7** | **-0.6** |
| | comp=Z,6.4nm,1.1s,baz=29,slow=2.1,SNR=4.9 | | | | | | |
| **FINES** | **FINESS Array B** | **148.04** | **336** | PKPbc | **PKPbc** | **18 19 13.5** | **-0.8** |
| | comp=Z,1.7nm,0.4s,baz=33,slow=6.4,SNR=36 | | | | | | |
| **LIC** | **Lamto** | **151.71** | **170** | *e*PKIKP | **PKiKP** | **18 19 26.3** | **+1.3** |
| | comp=Z,25nm,0.5s | | | | | | |
| **KIC** | **Kosan Boka** | **151.88** | **171** | *e*PKIKP | **PKiKP** | **18 19 26.7** | **+1.3** |
| | comp=Z,11nm,0.5s | | | | | | |
| **TIC** | **Toumodi** | **152.12** | **170** | *e*PKIKP | **PKiKP** | **18 19 26.8** | **+0.9** |
| **DBIC** | **Dimbokro** | **152.17** | **170** | PKPbc | **PKiKP** | **18 19 26.9** | **+0.9** |
| | comp=Z,2.7nm,0.4s,baz=223,slow=0.8,SNR=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **152.25** | **348** | PKP | **PKPbc** | **18 19 23.8** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=15,slow=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **152.25** | **348** | PKPbc | **PKPbc** | **18 19 24.1** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=12,slow=4.4,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **152.48** | **291** | PKPbc | **PKPbc** | **18 19 24.4** | **-1.4** |
| | comp=Z,1.7nm,0.4s,baz=152,slow=4.4,SNR=19 | | | | | | |
| **AKASG** | **Malin Array Be** | **153.01** | **316** | PKPbc | **PKPbc** | **18 19 25.5** | **-1.0** |
| | comp=Z,1.2nm,0.5s,baz=55,slow=2.7,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **158.85** | **185** | PKPab | **PKPab** | **18 20 04.7** | **+0.4** |
| | comp=Z,1.1nm,0.5s,baz=168,slow=5.4,SNR=6.4 | | | | | | |

*NEIC **20** 18:15:24.4±1.5,59°.60N±0°.04×153°.49W±0°.06, h127km±4km, Error ellipse: s-maj=5.3km s-min=4.6km az=207.0*

*AEIC **20** 18:15:26±1.7,59°.60N±0°.03×153°.44W±0°.07,h116km±4km, ML3.2,ML3.6/108(NEIC), Error ellipse: s-maj=5.3km s-min=4.7km az=224.0*

**ISC 20 18:15:24.6±1.0,59°.58N±0°.03×153°.46W±0°.04, h125km±7km,n211,σ0°.81/240,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.14** | **58** | | **Pn** | **18 15 41.7** | **0.0** |
| **OPT** | **Oil Point** | **0.14** | **58** | P | **Pn** | **18 15 41.7** | **0.0** |
| | baz=245 | | | | | | |
| **AUL** | **Augustine Lava** | **0.20** | **176** | | **Pn** | **18 15 42.1** | **+0.3** |
| AUL | | | | | **Sn** | **18 15 54.8** | **-0.1** |
| **AUH** | **Augustine H** | **0.22** | **178** | | **Pn** | **18 15 42.3** | **+0.4** |
| **AUQ** | **Augustine Qik'** | **0.23** | **174** | | **Pn** | **18 15 42.3** | **+0.4** |
| **O20K** | **Slope Mountain** | **0.66** | **40** | | **Pn** | **18 15 44.3** | **+0.1** |
| O20K | | | | | **Sn** | **18 15 58.5** | **-0.5** |
| **O20K** | **Slope Mountain** | **0.66** | **40** | P | **Pn** | **18 15 44.3** | **+0.1** |
| | baz=221 | | | | | | |
| O20K | | | | S | **Sn** | **18 15 58.5** | **-0.5** |
| | baz=221 | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.66** | **188** | | **Pn** | **18 15 44.3** | **+0.1** |
| Q19K | | | | Sn | **Sn** | **18 15 58.6** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.66** | **188** | P | **Pn** | **18 15 44.5** | **+0.3** |
| | baz=8.5 | | | | | | |
| Q19K | | | | S | **Sn** | **18 15 58.8** | **-0.2** |
| | ba

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PWL | | | | | Sn | **Sn** | **18 16 41.0** | **-2.6** |
| **L20K** | **Farewell, AK** | **2.92** | **356** | | | **Pn** | **18 16 10.3** | **+0.5** |
| **L20K** | **Farewell, AK** | **2.92** | **356** | P | | **Pn** | **18 16 10.3** | **+0.5** |
| | baz=176 | | | | | | | |
| **PMR** | **Palmer** | **2.94** | **45** | | | **Pn** | **18 16 09.4** | **-0.6** |
| PMR | | | | | IAML | | 18 16 44.5 | |
| | comp=E,116nm,0.2s | | | | | | | |
| PMR | | | | | IAML | | 18 16 44.8 | |
| | comp=N,111nm,0.3s | | | | | | | |
| **PMR** | **Palmer** | **2.94** | **45** | P | | **Pn** | **18 16 09.6** | **-0.5** |
| | baz=229 | | | | | | | |
| **KNK** | **Knik Glacier** | **3.08** | **51** | | | **Pn** | **18 16 11.5** | **-0.5** |
| **KNK** | **Knik Glacier** | **3.08** | **51** | P | | **Pn** | **18 16 11.6** | **-0.5** |
| | baz=236 | | | | | | | |
| **GHO** | **Glory Hole Cre** | **3.13** | **43** | | | **Pn** | **18 16 12.2** | **-0.6** |
| GHO | | | | | IAML | | 18 16 49.7 | |
| | comp=E,211nm,0.3s | | | | | | | |
| GHO | | | | | IAML | | 18 16 50.6 | |
| | comp=N,139nm,0.4s | | | | | | | |
| **CUT** | **Chulitna** | **3.23** | **27** | | | **Pn** | **18 16 14.6** | **+0.7** |
| CUT | | | | | IAML | | 18 16 52.4 | |
| | comp=E,124nm,0.3s | | | | | | | |
| CUT | | | | | IAML | | 18 16 54.5 | |
| | comp=N,131nm,0.4s | | | | | | | |
| **CUT** | **Chulitna** | **3.23** | **27** | P | | **Pn** | **18 16 15.1** | **+1.2** |
| | baz=210 | | | | | | | |
| **SML** | **Sawmill** | **3.37** | **46** | | | **Pn** | **18 16 15.1** | **-0.7** |
| SML | | | | | IAML | | 18 16 55.0 | |
| | comp=E,106nm,0.9s | | | | | | | |
| SML | | | | | IAML | | 18 17 03.7 | |
| | comp=N,108nm,0.7s | | | | | | | |
| **SML** | **Sawmill** | **3.37** | **46** | P | | **Pn** | **18 16 15.3** | **-0.5** |
| | baz=231 | | | | | | | |
| **PPLA** | **Purkeypile** | **3.38** | **10** | Pn | | **Pn** | **18 16 17.6** | **+1.5** |
| **PPLA** | **Purkeypile** | **3.38** | **10** | P | | **Pn** | **18 16 17.4** | **+1.4** |
| | baz=191 | | | | | | | |
| **GLI** | **Glacier Island** | **3.43** | **65** | Pn | | **Pn** | **18 16 14.9** | **-1.7** |
| GLI | | | | | IAML | | 18 16 57.2 | |
| | comp=E,206nm,0.3s | | | | | | | |
| GLI | | | | | IAML | | 18 16 57.2 | |
| | comp=N,148nm,0.2s | | | | | | | |
| **GLI** | **Glacier Island** | **3.43** | **65** | P | | **Pn** | **18 16 16.7** | **+0.2** |
| | baz=251 | | | | | | | |
| **TT01** | **Tatalina** | **3.56** | **341** | | | **Pn** | **18 16 18.3** | **+0.1** |
| **TTA** | **Tatalina** | **3.58** | **341** | Pn | | **Pn** | **18 16 18.2** | **-0.4** |
| **TTA** | **Tatalina** | **3.58** | **341** | P | | **Pn** | **18 16 18.5** | **-0.1** |
| | baz=158 | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.63** | **89** | Pn | | **Pn** | **18 16 18.4** | **-0.7** |
| **MID** | **Middleton Isla** | **3.63** | **89** | Pn | | **Pn** | **18 16 18.6** | **-0.7** |
| **FID** | **Port Fidalgo** | **3.68** | **68** | Pn | | **Pn** | **18 16 18.7** | **-1.2** |
| FID | | | | | IAML | | 18 17 02.1 | |
| | comp=N,186nm,0.4s | | | | | | | |
| **JPK** | **Jack Peak** | **3.72** | **64** | | | **Pn** | **18 16 19.9** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **3.77** | **51** | | | **Pn** | **18 16 20.5** | **-0.6** |
| SCM | | | | | IAML | | 18 17 07.8 | |
| | comp=N,93nm,0.8s | | | | | | | |
| SCM | | | | | IAML | | 18 17 07.9 | |
| | comp=E,88nm,0.6s | | | | | | | |
| **K20K** | **Telida** | **3.80** | **356** | | | **Pn** | **18 16 21.7** | **+0.2** |
| **K20K** | **Telida** | **3.80** | **356** | P | | **Pn** | **18 16 21.6** | **+0.2** |
| | baz=175 | | | | | | | |
| **CAST** | **Castle Rocks** | **3.91** | **9** | Pn | | **Pn** | **18 16 23.4** | **+0.5** |
| **CAST** | **Castle Rocks** | **3.91** | **9** | P | | **Pn** | **18 16 23.4** | **+0.5** |
| | baz=190 | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.98** | **73** | Pn | | **Pn** | **18 16 24.4** | **+0.5** |
| **EYAK** | **Cordova Ski Ar** | **3.98** | **73** | P | | **Pn** | **18 16 23.7** | **-0.1** |
| | baz=260 | | | | | | | |
| **WAT1** | **Susitna Watana** | **4.03** | **34** | | | **Pn** | **18 16 24.4** | **-0.2** |
| **WAT1** | **Susitna Watana** | **4.03** | **34** | P | | **Pn** | **18 16 24.4** | **-0.2** |
| | baz=218 | | | | | | | |
| **WAT6** | **Susitna Watana** | **4.09** | **40** | | | **Pn** | **18 16 25.1** | **-0.5** |
| **WAT6** | **Susitna Watana** | **4.09** | **40** | P | | **Pn** | **18 16 25.0** | **-0.5** |
| | baz=225 | | | | | | | |
| **DIV** | **Divide** | **4.12** | **65** | Pn | | **Pn** | **18 16 25.5** | **-0.3** |
| **KTH** | **Kantishna Hill** | **4.17** | **16** | | | **Pn** | **18 16 25.9** | **-0.4** |
| KTH | | | | | IAML | | 18 18 27.6 | |
| | comp=N,29nm,3.7s | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.17** | **20** | Pn | | **Pn** | **18 16 26.4** | **-0.1** |
| TRF | | | | | IAML | | 18 17 00.1 | |
| | comp=E,31nm,2.9s | | | | | | | |
| TRF | | | | | IAML | | 18 17 05.9 | |
| | comp=N,35nm,4.0s | | | | | | | |
| **TRF** | **Thorofare Moun** | **4.17** | **20** | P | | **Pn** | **18 16 26.6** | **+0.1** |
| | baz=203 | | | | | | | |
| **KLU** | **Klutina** | **4.19** | **60** | | | **Pn** | **18 16 26.3** | **-0.3** |
| **KLU** | **Klutina** | **4.19** | **60** | P | | **Pn** | **18 16 26.3** | **-0.3** |
| | baz=246 | | | | | | | |
| **CHGN** | **Chignik** | **4.22** | **221** | Pn | | **Pn** | **18 16 26.0** | **-1.0** |
| CHGN | | | | | IAML | | 18 18 18.9 | |
| | comp=E,105nm,0.1s | | | | | | | |
| CHGN | | | | | IAML | | 18 18 26.1 | |
| | comp=N,103nm,0.1s | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.35** | **7** | | | **Pn** | **18 16 29.5** | **+0.7** |
| **CHUM** | **Lake Minchumin** | **4.35** | **7** | P | | **Pn** | **18 16 29.5** | **+0.7** |
| | baz=188 | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.37** | **51** | | | **Pn** | **18 16 29.2** | **+0.1** |
| M24K | | | | | IAML | | 18 17 20.1 | |
| | comp=N,76nm,0.9s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.37** | **51** | P | | **Pn** | **18 16 29.4** | **+0.3** |
| | baz=238 | | | | | | | |
| **RND** | **Reindeer** | **4.43** | **28** | Pn | | **Pn** | **18 16 29.1** | **-0.7** |
| **RAGM** | **Ragged Mountai** | **4.49** | **76** | Pn | | **Pn** | **18 16 30.6** | **0.0** |
| RAGM | | | | | IAML | | 18 17 27.5 | |
| | comp=E,91nm,1.6s | | | | | | | |
| **GOAT** | **Goat Mountain** | **4.49** | **73** | | | **Pn** | **18 16 30.6** | **0.0** |
| **DHY** | **Denali Highway** | **4.57** | **37** | | | **Pn** | **18 16 31.5** | **-0.3** |
| DHY | | | | | IAML | | 18 17 24.1 | |
| | comp=E,45nm,0.4s | | | | | | | |
| DHY | | | | | IAML | | 18 17 27.9 | |
| | comp=N,35nm,0.4s | | | | | | | |
| **DHY** | **Denali Highway** | **4.57** | **37** | P | | **Pn** | **18 16 31.5** | **-0.3** |
| | baz=223 | | | | | | | |
| **VNSG** | **Veniaminof 6** | **4.58** | **223** | | | **Pn** | **18 16 33.1** | **+1.1** |
| **KAIM** | **Kayak Island** | **4.59** | **82** | Pn | | **Pn** | **18 16 33.2** | **+1.3** |
| **BMRM** | **Bremner River** | **4.62** | **69** | Pn | | **Pn** | **18 16 32.8** | **+0.3** |
| BMRM | | | | | IAML | | 18 17 24.8 | |
| | comp=N,55nm,0.4s | | | | | | | |
| BMRM | | | | | IAML | | 18 17 29.2 | |
| | comp=E,62nm,0.4s | | | | | | | |
| **BMRM** | **Bremner River** | **4.62** | **69** | P | | **Pn** | **18 16 32.4** | **0.0** |
| | baz=257 | | | | | | | |
| **J20K** | **Nowinta River** | **4.62** | **356** | | | **Pn** | **18 16 32.8** | **+0.4** |
| J20K | | | | | IAML | | 18 17 23.0 | |
| | comp=N,19nm,3.6s | | | | | | | |
| **J20K** | **Nowinta River** | **4.62** | **356** | P | | **Pn** | **18 16 32.5** | **+0.1** |
| | baz=176 | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.64** | **54** | | | **Pn** | **18 16 32.7** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **4.68** | **13** | Pn | | **Pn** | **18 16 32.8** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **4.68** | **13** | P | | **Pn** | **18 16 33.3** | **0.0** |
| | baz=196 | | | | | | | |
| **HMT** | **Hamilton** | **4.69** | **77** | Pn | | **Pn** | **18 16 33.5** | **+0.3** |
| HMT | | | | | IAML | | 18 18 29.0 | |
| | comp=N,81nm,2.3s | | | | | | | |
| **MCK** | **McKinley** | **4.69** | **25** | | | **Pn** | **18 16 33.0** | **-0.3** |
| MCK | | | | | IAML | | 18 17 28.4 | |
| | comp=E,24nm,1.9s | | | | | | | |
| MCK | | | | | IAML | | 18 17 31.0 | |
| | comp=N,26nm,3.4s | | | | | | | |
| **MCK** | **McKinley** | **4.69** | **25** | P | | **Pn** | **18 16 33.6** | **+0.3** |
| | baz=209 | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.82** | **61** | | | **Pn** | **18 16 34.7** | **-0.3** |
| N25K | | | | | IAML | | 18 17 32.7 | |
| | comp=N,54nm,0.3s | | | | | | | |
| N25K | | | | | IAML | | 18 17 32.7 | |
| | comp=E,43nm,0.6s | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.82** | **61** | P | | **Pn** | **18 16 34.9** | **-0.1** |
| | baz=249 | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.91** | **80** | Pn | | **Pn** | **18 16 36.9** | **+0.6** |
| **HARP** | **HAARP** | **4.93** | **51** | | | **Pn** | **18 16 36.6** | **+0.1** |
| **HARP** | **HAARP** | **4.93** | **51** | P | | **Pn** | **18 16 36.6** | **+0.1** |
| | baz=239 | | | | | | | |
| **BERG** | **Berg Lake** | **4.97** | **76** | Pn | | **Pn** | **18 16 37.0** | **-0.1** |
| BERG | | | | | IAML | | 18 17 34.1 | |
| | comp=N,69nm,0.2s | | | | | | | |
| **BWN** | **Browne** | **4.98** | **21** | Pn | | **Pn** | **18 16 37.5** | **+0.3** |
| BWN | | | | | IAML | | 18 17 38.9 | |
| | comp=E,49nm,3.0s | | | | | | | |
| BWN | | | | | IAML | | 18 19 42.1 | |
| | comp=N,44nm,3.8s | | | | | | | |
| **GLB** | **Gilahina Butte** | **5.12** | **64** | Pn | | **Pn** | **18 16 38.7** | **-0.4** |
| GLB | | | | | IAML | | 18 17 38.5 | |
| | comp=N,60nm,0.5s | | | | | | | |
| GLB | | | | | IAML | | 18 17 38.9 | |
| | comp=E,35nm,0.5s | | | | | | | |
| **PAX** | **Paxson** | **5.14** | **45** | Pn | | **Pn** | **18 16 39.3** | **0.0** |
| **PAX** | **Paxson** | **5.14** | **45** | P | | **Pn** | **18 16 39.4** | **0.0** |
| | baz=232 | | | | | | | |
| **GRIN** | **Grindle Hills** | **5.15** | **78** | | | **Pn** | **18 16 39.5** | **0.0** |
| **KHIT** | **Khitrov Hills** | **5.20** | **76** | | | **Pn** | **18 16 40.3** | **+0.1** |
| **VRDI** | **Verde Repeater** | **5.23** | **67** | Pn | | **Pn** | **18 16 40.2** | **-0.5** |
| VRDI | | | | | IAML | | 18 17 38.9 | |
| | comp=E,37nm,0.5s | | | | | | | |
| VRDI | | | | | IAML | | 18 17 39.1 | |
| | comp=N,48nm,0.5s | | | | | | | |
| **SNH** | **Sunshine Point** | **5.38** | **79** | Pn | | **Pn** | **18 16 42.8** | **+0.1** |
| **WAX** | **Waxell Ridge** | **5.39** | **76** | Pn | | **Pn** | **18 16 42.6** | **-0.2** |
| **NEA2** | **Nenana** | **5.43** | **20** | Pn | | **Pn** | **18 16 42.6** | **-0.7** |
| **NEA2** | **Nenana** | **5.43** | **20** | P | | **Pn** | **18 16 43.0** | **-0.3** |
| | baz=204 | | | | | | | |
| **WRH** | **Wood River Hil** | **5.52** | **25** | | | **Pn** | **18 16 43.4** | **-1.0** |
| **MLY** | **Manley** | **5.62** | **12** | | | **Pn** | **18 16 45.7** | **0.0** |
| **MLY** | **Manley** | **5.62** | **12** | P | | **Pn** | **18 16 45.7** | **0.0** |
| | baz=194 | | | | | | | |
| **ISLE** | **Juniper Island** | **5.66** | **75** | Pn | | **Pn** | **18 16 47.0** | **+0.5** |
| **I21K** | **Tanana** | **5.66** | **6** | | | **Pn** | **18 16 46.1** | **-0.1** |
| **I21K** | **Tanana** | **5.66** | **6** | P | | **Pn** | **18 16 46.4** | **+0.2** |
| | baz=188 | | | | | | | |
| **SDPT** | **Sand Point** | **5.69** | **225** | Pn | | **Pn** | **18 16 46.7** | **+0.1** |
| **SDPT** | **Sand Point** | **5.69** | **225** | P | | **Pn** | **18 16 46.7** | **+0.1** |
| | baz=39 | | | | | | | |
| **KIAG** | **Kiagna River** | **5.69** | **72** | | | **Pn** | **18 16 47.1** | **+0.3** |
| **BALM** | **Baldy** | **5.71** | **70** | | | **Pn** | **18 16 47.3** | **+0.2** |
| **HDA** | **Harding Lake** | **5.73** | **30** | | | **Pn** | **18 16 46.5** | **-0.8** |
| **CCB** | **Clear Creek Bu** | **5.73** | **25** | | | **Pn** | **18 16 46.6** | **-0.6** |
| **BAGL** | **Bagley Icefiel** | **5.77** | **76** | | | **Pn** | **18 16 48.2** | **+0.4** |
| **MENT** | **Mentasta** | **5.78** | **50** | | | **Pn** | **18 16 48.5** | **+0.6** |
| **CNBA** | **Chernabura Isl** | **5.82** | **218** | Pn | | **Pn** | **18 16 49.0** | **+0.6** |
| **M26K** | **Nabesna, AK** | **5.82** | **56** | | | **Pn** | **18 16 49.8** | **+1.3** |
| **MESA** | **MESA** | **5.83** | **79** | Pn | | **Pn** | **18 16 49.0** | **+0.2** |
| **MESA** | **MESA** | **5.83** | **79** | P | | **Pn** | **18 16 49.2** | **+0.5** |
| | baz=269 | | | | | | | |
| **RIDG** | **Independent Ri** | **5.85** | **41** | | | **Pn** | **18 16 48.8** | **0.0** |
| **RIDG** | **Independent Ri** | **5.85** | **41** | P | | **Pn** | **18 16 48.9** | **0.0** |
| | baz=228 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.90** | **17** | | | **Pn** | **18 16 47.6** | **-1.9** |
| **I23K** | **Minto, Yukon-K** | **5.90** | **17** | P | | **Pn** | **18 16 49.2** | **-0.3** |
| | baz=201 | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **5.92** | **24** | Pn | | **Pn** | **18 16 48.6** | **-1.1** |
| **COLA** | **College** | **5.92** | **24** | | | **Pn** | **18 16 48.7** | **-1.1** |
| **MDM** | **Murphy Dome** | **5.92** | **22** | | | **Pn** | **18 16 48.9** | **-0.9** |
| **YAH** | **Yahtse** | **5.94** | **77** | Pn | | **Pn** | **18 16 50.7** | **+0.5** |
| **L26K** | **Log Cabin Wild** | **5.97** | **50** | | | **Pn** | **18 16 51.0** | **+0.5** |
| **BARN** | **Barnard Glacie** | **6.05** | **71** | Pn | | **Pn** | **18 16 52.7** | **+1.0** |
| **IL31** | | **6.05** | **28** | | | **Pn** | **18 16 50.6** | **-0.8** |
| **ILAR** | **Eielson Array** | **6.05** | **28** | Pn | | **Pn** | **18 16 50.7** | **-0.8** |
| **DOT** | **Dot Lake** | **6.06** | **44** | | | **Pn** | **18 16 51.0** | **-0.7** |
| **H21K** | **Melozitna Rive** | **6.11** | **3** | | | **Pn** | **18 16 52.5** | **+0.2** |
| **H21K** | **Melozitna Rive** | **6.11** | **3** | P | | **Pn** | **18 16 52.5** | **+0.2** |
| | baz=183 | | | | | | | |
| **POKR** | **Poker Plat Res** | **6.22** | **24** | | | **Pn** | **18 16 53.2** | **-0.7** |
| **POKR** | **Poker Plat Res** | **6.22** | **24** | P | | **Pn** | **18 16 53.1** | **-0.7** |
| | baz=210 | | | | | | | |
| **TABL** | **Table Mountain** | **6.24** | **77** | Pn | | **Pn** | **18 16 55.3** | **+1.0** |
| **M27K** | **Edge Creek, AK** | **6.29** | **59** | Pn | | **Pn** | **18 16 55.5** | **+0.7** |
| **SCRK** | **Sand Creek** | **6.29** | **41** | Pn | | **Pn** | **18 16 53.9** | **-1.0** |
| **SCRK** | **Sand Creek** | **6.29** | **41** | P | | **Pn** | **18 16 54.1** | **-0.9** |
| | baz=230 | | | | | | | |
| **IM03** | | **6.43** | **359** | | | **Pn** | **18 16 57.3** | **+0.7** |
| **IMAR** | **Indian Mountai** | **6.43** | **359** | Pn | | **Pn** | **18 16 57.0** | **+0.4** |
| **H23K** | **Yukon River** | **6.52** | **14** | | | **Pn** | **18 16 56.9** | **-1.0** |
| **H23K** | **Yukon River** | **6.52** | **14** | P | | **Pn** | **18 16 57.6** | **-0.2** |
| | baz=198 | | | | | | | |
| **YUK2** | **White River** | **6.58** | **65** | | | **Pn** | **18 16 58.9** | **+0.1** |
| **L27K** | **Beaver Creek,** | **6.59** | **53** | | | **Pn** | **18 16 58.8** | **-0.2** |
| **BC03** | | **6.61** | **53** | | | **Pn** | **18 16 58.8** | **-0.3** |
| **BCAR** | **Beaver Creek A** | **6.61** | **53** | | | **Pn** | **18 16 58.5** | **-0.7** |
| **J26L** | **Joseph Creek** | **6.78** | **39** | P | | **Pn** | **18 17 01.3** | **-0.1** |
| | baz=228 | | | | | | | |
| **H24K** | **Noodor Dome** | **6.78** | **20** | | | **Pn** | **18 17 00.5** | **-0.9** |
| **H24K** | **Noodor Dome** | **6.78** | **20** | P | | **Pn** | **18 17 01.0** | **-0.4** |
| | baz=205 | | | | | | | |
| **PRP** | **Porcupine Dome** | **6.99** | **28** | Pn | | **Pn** | **18 17 03.5** | **-0.8** |
| **PRP** | **Porcupine Dome** | **6.99** | **28** | P | | **Pn** | **18 17 04.3** | **0.0** |
| | baz=215 | | | | | | | |
| **BCPM** | **Bancas Point** | **6.99** | **81** | Pn | | **Pn** | **18 17 05.1** | **+0.8** |
| **ANM** | **Nome** | **7.49** | **317** | Pn | | **Pn** | **18 17 11.7** | **+0.8** |
| **COLD** | **Coldfoot** | **7.81** | **9** | Pn | | **Pn** | **18 17 14.7** | **-0.6** |
| **FYU** | **Fort Yukon** | **7.94** | **24** | | | **Pn** | **18 17 15.8** | **-1.0** |
| **DAWY** | **Dawson** | **8.03** | **50** | Pn | | **Pn** | **18 17 16.5** | **-1.7** |
| **HYT** | **Haines Junctio** | **8.05** | **74** | Pn | | **Pn** | **18 17 20.5** | **+2.0** |
| **M30M** | **Minto, Yukon** | **8.61** | **62** | Pn | | **Pn** | **18 17 25.7** | **-0.4** |
| **BM03** | **Burnt Mountain** | **8.79** | **23** | | | **Pn** | **18 17 27.2** | **-1.3** |
| **BMAR** | **Burnt Mountain** | **8.81** | **23** | Pn | | **Pn** | **18 17 27.3** | **-1.5** |
| **UNV** | **Unalaska Valle** | **9.18** | **237** | Pn | | **Pn** | **18 17 34.4** | **+0.6** |
| **SKAG** | **Skagway** | **9.21** | **83** | Pn | | **Pn** | **18 17 36.9** | **+2.8** |
| **BESE** | **Beside Mountai** | **9.63** | **88** | Pn | | **Pn** | **18 17 43.5** | **+3.7** |
| **M31M** | **Drury Creek, Y** | **9.65** | **66** | Pn | | **Pn** | **18 17 41.3** | **+1.2** |
| **SIT** | **Sitka** | **9.87** | **97** | Pn | | **Pn** | **18 17 43.4** | **+0.5** |
| **JIS** | **Juneau Island** | **9.95** | **89** | Pn | | **Pn** | **18 17 47.0** | **+3.1** |
| **EPYK** | **Eagle Plains** | **10.19** | **41** | Pn | | **Pn** | **18 17 48.0** | **+0.8** |
| **P33M** | **Teslin, Yukon** | **10.38** | **78** | Pn | | **Pn** | **18 17 51.6** | **+1.7** |
| **CRAG** | **Craig** | **11.66** | **102** | Pn | | **Pn** | **18 18 08.2** | **+1.3** |
| **DLBC** | **Dease Lake** | **12.12** | **85** | Pn | | **Pn** | **18 18 14.7** | **+1.7** |
| **C36M** | **Paulatuk** | **15.81** | **40** | Pn | | **Pn** | **18 18 58.5** | **-1.3** |

*SJA **20** 18:22:59.5±0.8, 32°.52S×69°.85W, h137km±5km, ML5.0, MW4.4*

*VAO **20** 18:23:01.6±0.8, 32°.53S×69°.73W, h116km, mb4.5*

*NEIC **20** 18:23:01.5±2.6, 32°.48S±0°.04×69°.84W±0°.07, h116km±3km, mb4.7/100, Mwr4.5/21, Md4.4(SJA), ML4.9(GUC), Error ellipse: s-maj=8.2km s-min=5.7km az=108.0*

*GUC **20** 18:23:01.1±0.7, 32°.50S×70°.01W, h129km±3km, ML4.9*

*NEIC **20** 18:23:01.2, 32°.50S×69°.87W, h117km, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr=5.82; Mθθ0.64; Mφφ5.18; Mrθ=0.83; Mrφ2.35; Mθφ-2.32; Fault plane solution: Mo6.49000×10^15^ NP1:φ204.38000°, δ33.89000°, λ-87.72000°. NP2:φ21.64000°, δ56.14000°, λ-91.53000°. Principal axes: T 6.6604, Plg11.0000°, Azm113.0000°; N -0.3544, Plg1.0000°, Azm22.0000°; P -6.3060, Plg79.0000°, Azm286.0000°;*

*IDC **20** 18:23:02.6±0.5, 32°.51S×69°.73W, h124km±3km, mb4.2/14, mb1 4.2/18, mb1mx4.1/33, mbtmp4.5/18 Error ellipse: s-maj=16.7km s-min=11.4km az=71.0*

**ISC 20 18:23:01.6±0.3, 32°.48S±0°.03×69°.89W±0°.03, h122km±2km, h122km:pP-P, n281, o1934/368, mb4.7/59, 22C-1D, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AUSP** | **Uspallata** | **0.50** | **59** | *eP* | | **Pn** | **18 23 20.1** | **0.0** |
| AUSP | | | | *eS* | | **Sn** | **18 23 38.5** | **+4.5** |
| **VA03** | **San Esteban** | **0.62** | **243** | | | **Pn** | **18 23 20.8** | **+0.2** |
| VA03 | | | | | Sn | **Sn** | **18 23 35.6** | **+0.4** |
| **VA03** | **San Esteban** | **0.62** | **243** | ⇑*iP* | | **Pn** | **18 23 20.9** | **+0.2** |
| VA03 | | | | *i* S | | **Sn** | **18 23 35.8** | **+0.6** |
| VA03 | | | | | IAML | | 18 23 36.8 | |
| | comp=N,93μm,0.4s | | | | | | | |
| **VA03** | **San Esteban** | **0.62** | **243** | *eP* | | **Pn** | **18 23 20.9** | **+0.2** |
| VA03 | | | | *eS* | | **Sn** | **18 23 36.8** | **+1.6** |
| VA03 | | | | | IAML | | 18 23 37.5 | |
| | comp=Z,23μm,0.4s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **0.89** | **114** | *eP* | | **Pn** | **18 23 23.0** | **+0.1** |
| ARCO | | | | *eS* | | **Sn** | **18 23 39.4** | **+0.3** |
| ARCO | | | | | IAML | | 18 23 40.7 | |
| | comp=Z,33μm,0.3s | | | | | | | |
| **ASAL** | **Salagasta** | **0.90** | **97** | *eP* | | **Pn** | **18 23 22.9** | **-0.1** |
| **PEL** | **Peldehue** | **0.94** | **225** | | | **Pn** | **18 23 22.9** | **-0.3** |
| PEL | | | | | Sn | **Sn** | **18 23 39.6** | **-0.1** |
| **PEL** | **Peldehue** | **0.94** | **225** | ⇑*iP* | | **Pn** | **18 23 22.6** | **-0.7** |
| PEL | | | | *i* S | | **Sn** | **18 23 39.9** | **+0.1** |
| PEL | | | | | IAML | | 18 23 41.1 | |
| | comp=E,22μm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **0.94** | **225** | *eP* | | **Pn** | **18 23 23.0** | **-0.3** |
| PEL | | | | *eS* | | **Sn** | **18 23 40.6** | **+0.8** |
| **ROCH** | **El Roble** | **1.06** | **242** | ⇑*iP* | | **Pn** | **18 23 24.5** | **-0.2** |
| ROCH | | | | *i* S | | **Sn** | **18 23 42.2** | **+0.1** |
| **ROC1** | **El Roble** | **1.07** | **242** | | | **Pn** | **18 23 22.4** | **-2.3** |
| ROC1 | | | | | Sn | **Sn** | **18 23 40.6** | **-1.7** |
| **AAGR** | **Agrelo** | **1.08** | **124** | *eP* | | **Pn** | **18 23 23.8** | **-0.9** |
| AAGR | | | | *eP* | | **Pn** | **18 23 25.0** | **+0.3** |
| AAGR | | | | *eS* | | Sn | 18 23 30.2 | -12 |
| **MT03** | **Universidad Ad** | **1.14** | **207** | | | **Pn** | **18 23 25.4** | **+0.1** |
| MT03 | | | | | Sn | **Sn** | **18 23 44.2** | **+0.9** |
| **MT03** | **Universidad Ad** | **1.14** | **207** | ⇑*iP* | | **Pn** | **18 23 25.6** | **+0.3** |
| MT03 | | | | *i* S | | **Sn** | **18 23 44.2** | **+0.9** |
| MT03 | | | | | IAML | | 18 23 45.0 | |
| | comp=N,37μm,0.3s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.14** | **207** | *eP* | | **Pn** | **18 23 20.1** | **-5.2** |
| MT03 | | | | *eP* | | **Pn** | **18 23 25.0** | **-0.3** |
| MT03 | | | | *eS* | | **Sn** | **18 23 44.7** | **+1.4** |
| MT03 | | | | | IAML | | 18 23 46.7 | |
| | comp=Z,20μm,0.2s | | | | | | | |
| **MT05** | **Renca** | **1.16** | **218** | | Pn | **Pn** | **18 23 25.5** | **+0.1** |
| MT05 | | | | | Sn | **Sn** | **18 23 44.1** | **+0.6** |
| **MT05** | **Renca** | **1.16** | **218** | ⇑*iP* | | **Pn** | **18 23 25.7** | **+0.3** |
| MT05 | | | | *i* S | | **Sn** | **18 23 44.3** | **+0.7** |
| **MT05** | **Renca** | **1.16** | **218** | *eP* | | **Pn** | **18 23 25.0** | **-0.4** |
| MT05 | | | | *eS* | | **Sn** | **18 23 44.6** | **+1.0** |
| MT05 | | | | *eS* | | **Sn** | **18 23 44.7** | **+1.2** |
| MT05 | | | | | IAML | | 18 23 45.6 | |
| | comp=Z,25μm,0.2s | | | | | | | |
| **VA06** | **Catapilco** | **1.19** | **266** | | Pn | **Pn** | **18 23 25.2** | **-0.5** |
| VA06 | | | | | Sn | **Sn** | **18 23 42.6** | **-1.4** |
| **VA06** | **Catapilco** | **1.19** | **266** | ⇑*iP* | | **Pn** | **18 23 25.4** | **-0.3** |
| VA06 | | | | *i* S | | **Sn** | **18 23 43.3** | **-0.7** |
| VA06 | | | | | IAML | | 18 23 46.2 | |
| | comp=E,25μm,0.4s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **1.30** | **62** | *eP* | | **Pn** | **18 23 26.8** | **-0.2** |
| RTCV | | | | *eS* | | **Sn** | **18 23 45.6** | **-0.6** |
| **MT02** | **Curacav** | **1.31** | **233** | | | **Pn** | **18 23 26.4** | **-0.5** |
| MT02 | | | | | Sn | **Sn** | **18 23 45.5** | **-0.8** |
| **MT02** | **Curacav** | **1.31** | **233** | ⇑*iP* | | **Pn** | **18 23 26.5** | **-0.5** |
| MT02 | | | | *i* S | | **Sn** | **18 23 45.6** | **-0.7** |
| **MT02** | **Curacav** | **1.31** | **233** | *eP* | | **Pn** | **18 23 26.6** | **-0.4** |
| MT02 | | | | *eS* | | **Sn** | **18 23 46.4** | **+0.1** |
| **LMEL** | **Las Melosas** | **1.39** | **191** | | | **Pn** | **18 23 28.4** | **+0.4** |
| **LMEL** | **Las Melosas** | **1.39** | **191** | ⇓*iP* | | **Pn** | **18 23 28.5** | **+0.4** |
| LMEL | | | | *i* S | | **Sn** | **18 23 49.4** | **+1.2** |
| LMEL | | | | | IAML | | 18 23 55.6 | |
| | comp=N,10μm,0.4s | | | | | | | |
| **ZON** | **Zonda** | **1.39** | **48** | Pn | | **Pn** | **18 23 27.5** | **-0.5** |
| ZON | | | | | Sn | **Sn** | **18 23 46.6** | **-1.4** |
| **ZON** | **Zonda** | **1.39** | **48** | *eP* | | **Pn** | **18 23 27.7** | **-0.3** |
| ZON | | | | *eS* | | **Sn** | **18 23 47.3** | **-0.7** |
| **VA01** | **Torpederas** | **1.58** | **249** | | | **Pn** | **18 23 29.3** | **-0.7** |
| **VA01** | **Torpederas** | **1.58** | **249** | ⇑*iP* | | **Pn** | **18 23 29.2** | **-0.7** |
| VA01 | | | | *i* S | | **Sn** | **18 23 50.9** | **-0.8** |
| VA01 | | | | | IAML | | 18 23 55.2 | |
| | comp=N,9μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **1.58** | **323** | | | **Pn** | **18 23 30.7** | **+0.4** |
| CO02 | | | | | Sn | **Sn** | **18 23 52.7** | **+0.6** |
| **CO02** | **Combarbal** | **1.58** | **323** | ⇑*iP* | | **Pn** | **18 23 30.7** | **+0.4** |
| CO02 | | | | *i* S | | **Sn** | **18 23 52.9** | **+0.8** |
| CO02 | | | | | IAML | | 18 23 54.7 | |
| | comp=N,38μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **1.58** | **323** | *eP* | | **Pn** | **18 23 30.8** | **+0.4** |
| CO02 | | | | *eP* | | **Pn** | **18 23 31.0** | **+0.7** |
| CO02 | | | | *eS* | | **Sn** | **18 23 53.4** | **+1.3** |
| CO02 | | | | | IAML | | 18 23 55.4 | |
| | comp=Z,10μm,0.9s | | | | | | | |
| **MT09** | **Talagante** | **1.59** | **215** | | | **Pn** | **18 23 29.8** | **-0.5** |
| MT09 | | | | | Sn | **Sn** | **18 23 51.3** | **-0.9** |
| **MT09** | **Talagante** | **1.59** | **215** | ⇑*iP* | | **Pn** | **18 23 29.9** | **-0.4** |
| MT09 | | | | *i* S | | **Sn** | **18 23 52.0** | **-0.2** |
| MT09 | | | | | IAML | | 18 23 53.3 | |
| | comp=E,21μm,0.4s | | | | | | | |
| **BO04** | **La Punta** | **1.62** | **202** | | | **Pn** | **18 23 30.6** | **+0.1** |
| **BO04** | **La Punta** | **1.62** | **202** | ⇑*iP* | | **Pn** | **18 23 30.7** | **+0.1** |
| BO04 | | | | *i* S | | **Sn** | **18 23 53.4** | **+0.6** |
| BO04 | | | | | IAML | | 18 23 56.2 | |
| | comp=N,11μm,0.2s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **1.66** | **47** | *eP* | | **Pn** | **18 23 31.0** | **-0.1** |
| RTLL | | | | *eS* | | **Sn** | **18 23 53.7** | **0.0** |
| **CO03** | **El Pedregal** | **1.77** | **337** | | | **Pn** | **18 23 33.1** | **+0.7** |
| **CO03** | **El Pedregal** | **1.77** | **337** | ⇑*iP* | | **Pn** | **18 23 33.3** | **+0.8** |
| CO03 | | | | *i* S | | **Sn** | **18 23 57.3** | **+1.3** |
| CO03 | | | | | IAML | | 18 23 59.1 | |
| | comp=N,9μm,0.6s | | | | | | | |
| **CO03** | **El Pedregal** | **1.77** | **337** | *e

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PLTB** | **Pedras Altas** | **13.82** | **91** | Pn | Pn | 18 26 07.2 | -5.2 | | |
| **PB16** | **IPOC Station P** | **14.09** | **1** | | **Pn** | **18 26 17.1** | **+0.8** | | |
| **GO08** | **Villa O'Higgin** | **16.09** | **186** | | **Pn** | **18 26 39.0** | **-1.7** | | |
| **LPAZ** | **La Paz** | **16.20** | **6** | P | **P** | **18 26 44.3** | **+0.6** | | |
| | comp=E,1.4nm,0.3s,baz=138,slow=5.5,SNR=15 | | | | | | | | |
| **LPAZ** | **La Paz** | **16.20** | **6** | | **Pn** | **18 26 38.8** | **-4.0** | | |
| **LPAZ** | **La Paz** | **16.20** | **6** | *eP* | **P** | **18 26 44.4** | **+0.6** | | |
| **ITAB** | **Concordia** | **16.27** | **76** | Pn | **Pn** | **18 26 39.0** | **-4.0** | | |
| ITAB | | | | IAmb | IAmb | 18 26 46.9 | | | |
| | comp=Z,56nm,0.8s | | | | | | | | |
| **AQDB** | **Aquidauana** | **17.42** | **50** | P | **P** | **18 26 51.8** | **-4.7** | | |
| **AQDB** | **Aquidauana** | **17.42** | **50** | *eP* | **P** | **18 26 55.5** | **-1.0** | | |
| **PTGB** | **Pitanga** | **17.45** | **68** | *eP* | **P** | **18 26 56.0** | **-0.9** | | |
| **SIV** | **San Ignacio** | **18.26** | **28** | P | **Pn** | **18 27 07.0** | **-0.3** | | |
| | comp=Z,1.0nm,0.3s,baz=202,slow=9.1,SNR=13 | | | | | | | | |
| **TER01** | **Tubaro-SC** | **18.31** | **83** | *eP* | **P** | **18 27 05.8** | **-0.5** | | |
| **PTLB** | **Pontes e Lacer** | **19.57** | **32** | *eP* | **P** | **18 27 21.1** | **+1.0** | | |
| **TIJ01** | **Guaruva-PR** | **19.61** | **74** | *eP* | **P** | **18 27 16.8** | **-3.7** | | |
| **PCMB** | **Pacaembu** | **19.78** | **61** | *eP* | **P** | **18 27 21.8** | **-0.5** | | |
| **PP1B** | **Ponte de Pedra** | **20.07** | **46** | *eP* | **P** | **18 27 25.2** | **-0.3** | | |
| **SALV** | **Santo Antonio** | **20.94** | **41** | *eP* | **P** | **18 27 34.2** | **-0.6** | | |
| **EFI** | **East Falkland** | **21.04** | **159** | P | **P** | **18 27 33.1** | **-2.4** | | |
| EFI | | | | IAmb | IAmb | 18 28 11.8 | | | |
| | comp=Z,64nm,1.2s | | | | | | | | |
| **MG03** | **Isla Dawson** | **21.36** | **181** | P | **P** | **18 27 38.3** | **-0.6** | | |
| MG03 | | | | IAmb | IAmb | 18 27 49.0 | | | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| **VILB** | **Vilhena** | **21.37** | **27** | *eP* | **P** | **18 27 38.9** | **-0.5** | | |
| **NNA** | **Nana** | **21.37** | **341** | P | **P** | **18 27 41.7** | **+2.3** | | |
| | comp=Z,9.1nm,0.8s,baz=183,slow=12,SNR=7.0 | | | | | | | | |
| **PET01** | **Itanhaem-SP** | **21.48** | **73** | *eP* | **P** | **18 27 39.8** | **-0.7** | | |
| **ITRB** | **Iturama** | **21.62** | **59** | *eP* | **P** | **18 27 41.7** | **-0.4** | | |
| **BB19B** | **Bebedouro** | **22.16** | **64** | *eP* | **P** | **18 27 46.4** | **-1.3** | | |
| **VAO** | **Valinhos** | **22.34** | **71** | *eP* | **P** | **18 27 48.9** | **-0.7** | | |
| **USHA** | **Ushuaia** | **22.37** | **178** | P | **P** | **18 27 50.4** | **+1.0** | | |
| | comp=Z,59nm,0.9s,baz=351,slow=3.2,SNR=3.7 | | | | | | | | |
| **ETMB** | **Extrema** | **22.81** | **9** | *eP* | **P** | **18 27 54.7** | **+0.6** | | |
| **PARB** | **Paraibuna** | **23.26** | **73** | *eP* | **P** | **18 27 59.7** | **+1.3** | | |
| **ARAG** | **Araguaiana, MT** | **23.42** | **49** | *eP* | **P** | **18 28 00.5** | **+0.7** | | |
| **PDRB** | **Porto dos Gac** | **24.04** | **33** | *eP* | **P** | **18 28 06.0** | **+0.6** | | |
| **IPMB** | **Ipameri, GO** | **24.28** | **59** | *eP* | **P** | **18 28 07.6** | **-0.1** | | |
| **CZSB** | **Cruzeiro do Su** | **24.77** | **353** | *eP* | **P** | **18 28 13.4** | **+1.4** | | |
| **BSCB** | **Bom Sucesso** | **25.11** | **69** | *eP* | **P** | **18 28 15.1** | **-0.1** | | |
| **CLDB** | **Colider** | **25.12** | **34** | *eP* | **P** | **18 28 15.9** | **+0.6** | | |
| **BDFB** | **Brasilia** | **25.99** | **55** | P | **P** | **18 28 22.7** | **-0.5** | | |
| | comp=Z,2.0nm,0.5s,baz=236,slow=9.7,SNR=5.1 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.99** | **55** | P | **P** | **18 28 22.7** | **-0.5** | | |
| **SNDB** | **Serra Nova Dou** | **26.61** | **44** | *eP* | **P** | **18 28 28.1** | **-0.6** | | |
| **NPGB** | **Novo Progresso** | **28.70** | **31** | *eP* | **P** | **18 28 47.7** | **+0.4** | | |
| **JANB** | **Januaria** | **29.02** | **59** | *eP* | **P** | **18 28 50.2** | **+0.1** | | |
| **ITTB** | **Itaituba** | **30.95** | **28** | *eP* | **P** | **18 29 06.4** | **-0.7** | | |
| **ORCD** | **Orcadas** | **32.72** | **157** | P | **P** | **18 29 21.4** | **-0.7** | | |
| **PTGA** | **Pitinga** | **32.94** | **18** | P | **P** | **18 29 24.1** | **-0.4** | | |
| | comp=Z,1.3nm,0.3s,baz=256,slow=8.1,SNR=5.2 | | | | | | | | |
| PTGA | | | | PcP | **PcP** | **18 32 06.9** | **+0.8** | | |
| | comp=Z,4.2nm,0.4s,baz=213,slow=6.7,SNR=3.4 | | | | | | | | |
| **GDU01** | **Guandu, BA** | **33.38** | **63** | *eP* | **P** | **18 29 28.1** | **-0.3** | | |
| **OTAV** | **Otavalo** | **33.53** | **344** | P | **P** | **18 29 30.1** | **-0.1** | | |
| OTAV | | | | IAmb | IAmb | 18 29 35.5 | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **OTAV** | **Otavalo** | **33.53** | **344** | *eP* | **P** | **18 29 31.0** | **+0.7** | | |
| **MALB** | **Monte Alegre** | **33.83** | **29** | *eP* | **P** | **18 29 31.9** | **-0.4** | | |
| **NBPN** | **Ponto Novo - B** | **34.79** | **59** | *eP* | **P** | **18 29 41.4** | **+0.7** | | |
| **BOAV** | **Boa Vista** | **35.80** | **16** | *eP* | **P** | **18 29 49.3** | **+0.1** | | |
| **MCPB** | **Macapa, AP** | **36.11** | **31** | *eP* | **P** | **18 29 51.9** | **0.0** | | |
| **ZARC** | **Zaragoza, Cauc** | **40.03** | **352** | P | **P** | **18 30 24.7** | **0.0** | | |
| ZARC | | | | IAmb | IAmb | 18 30 26.9 | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| ZARC | | | | pP | **pP** | **18 30 54.4** | **+1.2** | | |
| **OCAC** | **Ocana** | **40.62** | **355** | P | **P** | **18 30 27.6** | **-2.2** | | |
| **MDP** | **Montagnes des** | **40.81** | **27** | PcP | **PcP** | **18 32 30.9** | **+0.9** | | |
| | comp=Z,11nm,0.7s,baz=214,slow=3.3,SNR=1.9 | | | | | | | | |
| **SDV** | **Santo Domingo** | **41.14** | **359** | P | **P** | **18 30 32.6** | **-1.4** | | |
| **SDV** | **Santo Domingo** | **41.14** | **359** | *eP* | **P** | **18 30 33.8** | **-0.2** | | |
| **MOTC** | **Monteria, Cord** | **41.40** | **351** | P | **P** | **18 30 34.9** | **-1.0** | | |
| MOTC | | | | IAmb | IAmb | 18 30 57.0 | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **42.44** | **352** | P | **P** | **18 30 45.0** | **+0.6** | | |
| **BIRV** | **Birongo** | **42.85** | **5** | P | **P** | **18 30 47.7** | **0.0** | | |
| **BELA** | **Belgrano 2** | **48.07** | **171** | P | **P** | **18 31 29.0** | **+0.9** | | |
| BELA | | | | PcP | **PcP** | **18 32 54.3** | **+0.4** | | |
| **VNA3** | **Neumayer Olymp** | **50.10** | **159** | P | **P** | **18 31 43.0** | **-0.7** | | |
| **MLPR** | **Magueyes Islan** | **50.24** | **4** | P | **P** | **18 31 44.2** | **-1.0** | | |
| **CRPR** | **Cabo Rojo, PR** | **50.27** | **3** | P | **P** | **18 31 44.8** | **-0.7** | | |
| **CELP** | **Cerrillos** | **50.37** | **4** | P | **P** | **18 31 46.1** | **-0.1** | | |
| **MTP** | **Monte Pirata** | **50.46** | **5** | P | **P** | **18 31 45.8** | **-1.1** | | |
| **VNA2** | **Neumayer--Watz** | **50.73** | **158** | P | **P** | **18 31 48.8** | **+0.5** | | |
| | baz=284,slow=8.2 | | | | | | | | |
| **APG** | **El Apazote** | **51.16** | **334** | P | **P** | **18 31 54.0** | **+1.5** | | |
| | comp=Z,13nm,0.9s,baz=153,slow=7.3,SNR=12 | | | | | | | | |
| **SNAA** | **Sanae** | **52.32** | **158** | P | **P** | **18 32 01.1** | **+0.7** | | |
| **SNAA** | **Sanae** | **52.32** | **158** | P | **P** | **18 32 00.6** | **+0.3** | | |
| | comp=Z,6.4nm,0.8s,baz=224,slow=12,SNR=9.0 | | | | | | | | |
| **SNAA** | **Sanae** | **52.32** | **158** | P | **P** | **18 32 01.0** | **+0.7** | | |
| SNAA | | | | IAmb | IAmb | 18 32 02.1 | | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| SNAA | | | | PcP | **PcP** | **18 33 10.3** | **+0.5** | | |
| **656A** | **Willston** | **62.67** | **348** | P | **P** | **18 33 13.8** | **+0.7** | | |
| **553A** | **Crawfordville** | **63.83** | **346** | P | **P** | **18 33 21.9** | **+1.1** | | |
| **VNDA** | **Vanda** | **65.93** | **191** | P | **P** | **18 33 34.5** | **+0.6** | | |
| **GOGA** | **Godfrey** | **66.78** | **348** | P | **P** | **18 33 40.1** | **+0.3** | | |
| GOGA | | | | IAmb | IAmb | 18 33 59.5 | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **Y52A** | **Lilburn** | **67.33** | **347** | P | **P** | **18 33 43.3** | **+0.1** | | |
| Y52A | | | | IAmb | IAmb | 18 33 44.7 | | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **W57A** | **Gilead** | **67.94** | **351** | P | **P** | **18 33 47.4** | **+0.4** | | |
| W57A | | | | IAmb | IAmb | 18 33 54.1 | | | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **X51A** | **Calhoun** | **68.16** | **347** | P | **P** | **18 33 48.6** | **+0.2** | | |
| **BG3** | **Lake Jocassee** | **68.23** | **348** | P | **P** | **18 33 49.0** | **+0.2** | | |
| BG3 | | | | IAmb | IAmb | 18 33 50.1 | | | |
| | comp=Z,9.1nm,0.9s | | | | | | | | |
| **X48A** | **Hartselle** | **68.50** | **345** | P | **P** | **18 33 50.3** | **-0.3** | | |
| X48A | | | | IAmb | IAmb | 18 33 52.4 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **W50A** | **Signal Mountai** | **68.86** | **346** | P | **P** | **18 33 53.0** | **+0.1** | | |
| W50A | | | | IAmb | IAmb | 18 33 54.4 | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **V53A** | **Saluda** | **68.87** | **349** | P | **P** | **18 33 52.7** | **-0.2** | | |
| V53A | | | | IAmb | IAmb | 18 33 53.8 | | | |
| | comp=Z,7.7nm,0.6s | | | | | | | | |
| **CPCT** | **Cooper Cave** | **68.95** | **347** | P | **P** | **18 33 53.4** | **0.0** | | |
| CPCT | | | | IAmb | IAmb | 18 33 54.3 | | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **SWET** | **Sewanee** | **69.00** | **346** | P | **P** | **18 33 53.9** | **+0.2** | | |
| **V52A** | **Sevierville** | **69.17** | **348** | P | **P** | **18 33 54.6** | **0.0** | | |
| V52A | | | | IAmb | IAmb | 18 33 55.7 | | | |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.33** | **329** | P | **P** | **18 33 56.4** | **+0.5** | | |
| TX31 | | | | IAmb | IAmb | 18 33 58.0 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **TX32** | **Lajitas Aray** | **69.33** | **329** | P | **P** | **18 33 56.4** | **+0.4** | | |
| **TXAR** | **Lajitas Aray** | **69.33** | **329** | P | **P** | **18 33 57.4** | **+1.5** | | |
| | comp=Z,1.8nm,0.6s,baz=155,slow=8.3,SNR=25 | | | | | | | | |
| TXAR | | | | pP | **pP** | **18 34 28.3** | **+0.9** | | |
| | comp=Z,1.0nm,0.6s,baz=151,slow=8.6,SNR=3.6 | | | | | | | | |
| **TXAR** | **Lajitas Aray** | **69.33** | **329** | P | **P** | **18 33 56.6** | **+0.7** | | |
| **U54A** | **Nelsons Funny** | **69.55** | **350** | P | **P** | **18 33 57.5** | **+0.5** | | |
| U54A | | | | IAmb | IAmb | 18 33 58.3 | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **V48A** | **Smith Brothers** | **69.69** | **345** | P | **P** | **18 33 58.5** | **+0.5** | | |
| **CLTN** | **Cedars of Leba** | **69.93** | **346** | P | **P** | **18 33 60.0** | **+0.6** | | |
| **WVT** | **Waverly** | **70.29** | **345** | P | **P** | **18 34 01.9** | **+0.4** | | |
| WVT | | | | pP | **pP** | **18 34 34.0** | **+0.9** | | |
| **ABTX** | **Abilene, Hawle** | **70.58** | **334** | IAmb | IAmb | 18 34 05.1 | | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **S51A** | **Beattyville** | **70.92** | **349** | P | **P** | **18 34 05.5** | **+0.2** | | |
| S51A | | | | IAmb | IAmb | 18 34 06.6 | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **T47A** | **Sharon Grove** | **70.96** | **345** | P | **P** | **18 34 05.2** | **-0.4** | | |
| T47A | | | | IAmb | IAmb | 18 34 06.7 | | | |
| | comp=Z,7.6nm,0.7s | | | | | | | | |
| **W39A** | **Magazine** | **70.96** | **339** | P | **P** | **18 34 06.5** | **+0.9** | | |
| W39A | | | | IAmb | IAmb | 18 34 08.0 | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| W39A | | | | pP | **pP** | **18 34 38.0** | **+0.6** | | |
| **LCAR** | **Lake Charles** | **71.04** | **342** | P | **P** | **18 34 06.5** | **+0.5** | | |
| LCAR | | | | pP | **pP** | **18 34 39.1** | **+1.5** | | |
| **R55A** | **Marlinton** | **71.04** | **352** | IAmb | IAmb | 18 34 08.4 | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **71.53** | **343** | P | **P** | **18 34 09.3** | **+0.3** | | |
| PBMO | | | | IAmb | IAmb | 18 34 10.4 | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| PBMO | | | | pP | **pP** | **18 34 41.5** | **+0.9** | | |
| **U40A** | **Yellville** | **71.77** | **341** | P | **P** | **18 34 10.9** | **+0.4** | | |
| U40A | | | | IAmb | IAmb | 18 34 12.1 | | | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| **HHAR** | **Hobbs** | **72.01** | **340** | IAmb | IAmb | 18 34 13.1 | | | |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **72.11** | **329** | P | **P** | **18 34 12.7** | **+0.1** | | |
| MNTX | | | | IAmb | IAmb | 18 34 13.9 | | | |
| | comp=Z,6.2nm,0.7s | | | | | | | | |
| MNTX | | | | pP | **pP** | **18 34 45.6** | **+1.3** | | |
| **TUL1** | **Leonard** | **72.23** | **338** | P | **P** | **18 34 13.4** | **+0.2** | | |
| TUL1 | | | | IAmb | IAmb | 18 34 14.8 | | | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **LIC** | **Lamto** | **72.58** | **71** | *eP* | **P** | **18 34 15.1** | **-0.7** | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **TIC** | **Toumodi** | **72.84** | **70** | *eP* | **P** | **18 34 17.5** | **+0.1** | | |
| **KIC** | **Kosan Boka** | **72.89** | **71** | *eP* | **P** | **18 34 17.9** | **+0.2** | | |
| | comp=Z,8.6nm,0.5s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **72.94** | **343** | P | **P** | **18 34 17.7** | **+0.3** | | |
| CCM | | | | IAmb | IAmb | 18 34 18.6 | | | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **DBIC** | **Dimbokro** | **72.98** | **70** | P | **P** | **18 34 18.3** | **+0.1** | | |
| | comp=Z,7.1nm,0.8s,baz=244,slow=6.0,SNR=9.9 | | | | | | | | |
| DBIC | | | | pP | **pP** | **18 34 49.2** | **-0.2** | | |
| | comp=Z,8.6nm,0.8s,baz=252,slow=7.3,SNR=6.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **72.98** | **70** | IAmb | IAmb | 18 34 49.9 | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **MSTX** | **Muleshoe** | **72.98** | **332** | P | **P** | **18 34 18.6** | **+0.7** | | |
| MSTX | | | | IAmb | IAmb | 18 34 19.8 | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| **P48A** | **Milroy** | **73.02** | **347** | P | **P** | **18 34 16.9** | **-0.9** | | |
| P48A | | | | IAmb | IAmb | 18 34 18.7 | | | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| **S39A** | **Bolivar** | **73.15** | **341** | P | **P** | **18 34 18.8** | **+0.2** | | |
| S39A | | | | IAmb | IAmb | 18 34 20.6 | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| S39A | | | | pP | **pP** | **18 34 52.0** | **+1.2** | | |
| **R40A** | **Maddies Statio** | **73.43** | **342** | P | **P** | **18 34 20.7** | **+0.5** | | |
| R40A | | | | pP | **pP** | **18 34 52.8** | **+0.4** | | |
| **121A** | **Cookes Peak, D** | **73.90** | **327** | P | **P** | **18 34 24.1** | **+0.7** | | |
| 121A | | | | IAmb | IAmb | 18 34 26.6 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| 121A | | | | pP | **pP** | **18 34 57.3** | **+2.1** | | |
| **P38A** | **Dawn** | **75.02** | **341** | P | **P** | **18 34 29.7** | **+0.3** | | |
| P38A | | | | pP | **pP** | **18 35 03.3** | **+1.6** | | |
| **ANMO** | **Albuquerque** | **75.35** | **330** | P | **P** | **18 34 33.3** | **+1.6** | | |
| ANMO | | | | IAmb | IAmb | 18 34 34.9 | | | |
| | comp=Z,19nm,1.6s | | | | | | | | |
| ANMO | | | | | **pP** | **18 35 05.5** | **+1.9** | | |
| **214A** | **Organ Pipe Nat** | **75.84** | **323** | P | **P** | **18 34 35.8** | **+1.5** | | |
| 214A | | | | IAmb | IAmb | 18 34 37.8 | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| 214A | | | | | **pP** | **18 35 08.5** | **+2.3** | | |
| **T25A** | **Trinidad** | **76.40** | **332** | P | **P** | **18 34 38.4** | **+0.8** | | |
| T25A | | | | IAmb | IAmb | 18 34 40.7 | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| T25A | | | | | **pP** | **18 35 11.3** | **+1.4** | | |
| **L40A** | **Anamosa** | **76.73** | **344** | P | **P** | **18 34 38.0** | **-1.1** | | |
| **N35A** | **Tabor** | **76.76** | **340** | P | **P** | **18 34 39.0** | **-0.3** | | |
| N35A | | | | pP | **pP** | **18 35 11.9** | **+0.3** | | |
| **S22A** | **4UR Ranch, Cre** | **77.89** | **331** | P | **P** | **18 34 47.2** | **+1.1** | | |
| S22A | | | | pP | **pP** | **18 35 20.1** | **+1.6** | | |
| **WUAZ** | **Wupatki** | **78.03** | **326** | P | **P** | **18 34 47.6** | **+0.9** | | |
| **MVCO** | **Mesa Verde** | **78.14** | **329** | P | **P** | **18 34 47.9** | **+0.5** | | |
| **W13A** | **Hualapai Mount** | **78.89** | **325** | P | **P** | **18 34 52.4** | **+0.9** | | |
| **I37A** | **Lemond, Waseca** | **79.10** | **343** | P | **P** | **18 34 52.6** | **+0.5** | | |
| I37A | | | | IAmb | IAmb | 18 34 53.4 | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **BOSA** | **Boshof** | **79.17** | **117** | P | **P** | **18 34 53.4** | **+0.1** | | |
| | comp=Z,7.1nm,1.0s,baz=223,slow=3.4,SNR=6.4 | | | | | | | | |
| **BOSA** | **Boshof** | **79.17** | **117** | IAmb | IAmb | 18 34 54.0 | | | |
| | comp=Z,7.5nm,0.9s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **79.17** | **333** | P | **P** | **18 34 54.3** | **+1.3** | | |
| **SMCO** | **Snowmass** | **79.17** | **332** | P | **P** | **18 34 54.8** | **+1.6** | | |
| SMCO | | | | IAmb | IAmb | 18 34 56.5 | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| SMCO | | | | | **pP** | **18 35 26.7** | **+1.0** | | |
| **ECSD** | **EROS Data Cent** | **79.68** | **341** | P | **P** | **18 34 55.1** | **-0.3** | | |
| ECSD | | | | IAmb | IAmb | 18 34 57.0 | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| ECSD | | | | pP | **pP** | **18 35 26.1** | **-1.8** | | |
| **Q16A** | **Castle Valley** | **80.73** | **329** | P | **P** | **18 35 02.6** | **+1.2** | | |
| Q16A | | | | IAmb | IAmb | 18 35 04.2 | | | |
| | comp=Z,9.6nm,1.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.99** | **69** | P | **P** | **18 35 08.5** | **+0.2** | | |
| | comp=Z,4.2nm,0.6s,baz=283,slow=6.5,SNR=26 | | | | | | | | |
| TORD | | | | pP | **pP** | **18 35 39.5** | **-0.9** | | |
| | comp=Z,9.4nm,0.9s,baz=263,slow=5.1,SNR=13 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.99** | **69** | P | **P** | **18 35 08.5** | **+0.2** | | |
| TORD | | | | | **pP** | **18 35 40.0** | **-0.3** | | |
| TORD | | | | IAmb | IAmb | 18 35 40.7 | | | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| **RSSD** | **Black Hills** | **82.36** | **336** | P | **P** | **18 35 09.7** | **-0.1** | | |
| RSSD | | | | IAmb | IAmb | 18 35 12.0 | | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **PDAR** | **Pinedale Aray** | **83.25** | **332** | P | **P** | **18 35 15.3** | **+0.9** | | |
| | comp=Z,1.4nm,0.5s,baz=137,slow=6.3,SNR=19 | | | | | | | | |
| PDAR | | | | pP | **pP** | **18 35 47.1** | **+0.1** | | |
| | comp=Z,0.8nm,0.7s,baz=136,slow=6.3,SNR=3.5 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.69** | **324** | P | **P** | **18 35 18.7** | **+1.9** | | |
| | comp=Z,4.2nm,0.8s,baz=158,slow=5.9,SNR=25 | | | | | | | | |
| NVAR | | | | pP | **pP** | **18 35 48.7** | **-0.6** | | |
| | comp=Z,1.8nm,0.9s,baz=145,slow=6.0,SNR=4.5 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **83.71** | **343** | IAmb | IAmb | 18 35 17.4 | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **ELK** | **Elko** | **84.04** | **327** | P | **P** | **18 35 18.5** | **0.0** | | |
| **PNTR** | **Pine Nut** | **84.85** | **323** | IAmb | IAmb | 18 35 25.9 | | | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **85.53** | **344** | P | **P** | **18 35 26.1** | **+0.6** | | |
| | comp=Z,6.5nm,0.9s,baz=141,slow=3.8,SNR=5.8 | | | | | | | | |
| **HLID** | **Hailey** | **85.92** | **329** | P | **P** | **18 35 28.6** | **+0.8** | | |
| HLID | | | | IAmb | IAmb | 18 35 30.6 | | | |
| | comp=Z,6.2nm,1.0s | | | | | | | | |
| **SCHQ** | **Schefferville** | **87.00** | **2** | P | **P** | **18 35 33.0** | **+0.4** | | |
| | comp=Z,3.4nm,0.6s,baz=178,slow=4.8,SNR=9.6 | | | | | | | | |
| SCHQ | | | | pP | **pP** | **18 36 04.5** | **-0.5** | | |
| | comp=Z,3.6nm,0.8s,baz=192,slow=9.5,SNR=3.2 | | | | | | | | |
| **SCHQ** | **Schefferville** | **87.00** | **2** | IAmb | IAmb | 18 35 34.4 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **PLID** | **Pearl Lake** | **87.83** | **329** | IAmb | IAmb | 18 35 39.4 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **PINE** | **Pine Mountain** | **89.07** | **326** | P | **P** | **18 35 43.8** | **+0.9** | | |
| **YKA** | **Yellowknife Ar** | **101.21** | **341** | P | **Pdif** | **18 36 38.0** | **+0.5** | | |
| | comp=Z,0.6nm,0.7s,baz=142,slow=4.5,SNR=9.8 | | | | | | | | |
| **CAST** | **Castle Rocks** | **115.19** | **330** | PKPdf | **PKPdf** | **18 41 25.6** | **-2.0** | | |
| **BRTR** | **Keskin Aray B** | **119.52** | **60** | PKP | **PKPdf** | **18 41 36.8** | **0.0** | | |
| | comp=Z,0.8nm,0.7s,baz=180,slow=2.6,SNR=5.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **119.72** | **205** | PKP | **PKPdf** | **18 41 37.4** | **-0.3** | | |
| | comp=Z,1.2nm,0.7s,baz=124,slow=1.7,SNR=4.3 | | | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **18 51 48.1** | **+0.4** | | |
| | comp=Z,0.5nm,0.5s,baz=344,slow=3.6,SNR=12 | | | | | | | | |
| **AKASG** | **Malin Aray Be** | **119.84** | **46** | PKP | **PKPdf** | **18 41 36.5** | **-0.4** | | |
| | comp=Z,1.0nm,0.6s,baz=267,slow=2.2,SNR=9.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.89** | **24** | PKP | **PKiKP** | **18 41 40.7** | **+0.2** | | |
| | comp=Z,5.4nm,0.9s,baz=256,slow=3.6,SNR=6.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **122.95** | **207** | PKP | **PKPdf** | **18 41 43.8** | **-0.2** | | |
| | comp=Z,3.5nm,0.6s,baz=165,slow=1.6,SNR=15 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **122.95** | **207** | PKPdf | **PKPdf** | **18 41 42.8** | **-1.2** | | |
| WRA | | | | pPKPdf | **pPKPdf** | **18 42 18.0** | **-0.5** | | |
| **PMG** | **Port Moresby** | **125.37** | **227** | PKP | **PKiKP** | **18 41 49.5** | **+0.4** | | |
| | comp=Z,3.1nm,0.7s,baz=225,slow=2.9,SNR=2.0 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **127.12** | **35** | *e*PKPdf | **PKPdf** | **18 41 50.5** | **0.0** | | |
| KLMR | | | | AMP | | 18 41 53.7 | | | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **JAY** | **Jayapura** | **134.71** | **226** | PKP | **PKiKP** | **18 42 08.4** | **+0.5** | | |
| | comp=Z,6.0nm,0.6s,baz=150,slow=14,SNR=1.9 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **139.33** | **51** | PKPdf | **PKPdf** | **18 42 14.3** | **+0.5** | | |
| ABKAR | | | | pPKPdf | **pPKPdf** | **18 42 47.0** | **-1.0** | | |
| **BRVK** | **Borovoye** | **144.88** | **42** | PKPdf | **PKPdf** | **18 42 23.7** | **+0.1** | | |
| **TOLI2** | **Tolitoli** | **147.22** | **200** | | **PKPdf** | **18 42 29.4** | **+0.5** | | |
| TOLI2 | | | | | **pPKPbc** | **18 43 05.3** | **0.0** | | |
| **KKAR** | **Karatay Array** | **147.23** | **60** | | **PKPdf** | **18 42 28.3** | **+0.4** | | |
| KKAR | | | | PKPbc | **PKPbc** | **18 42 31.0** | **+0.6** | | |
| KKAR | | | | | **pPKPdf** | **18 43 03.0** | **+0.9** | | |
| **YAK** | **Yakutsk** | **147.86** | **343** | | **PKPbc** | **18 42 31.8** | **+0.3** | | |
| **PSI** | **Prapat** | **148.66** | **158** | PKPbc | **PKPbc** | **18 42 35.0** | **-0.3** | | |
| | comp=Z,11nm,0.6s,baz=160,slow=2.6,SNR=16 | | | | | | | | |
| **NIL** | **Nilore** | **149.19** | **78** | PKPdf | **PKPdf** | **18 42 29.6** | **-1.9** | | |
| NIL | | | | | **PKPbc** | **18 42 36.0** | **+0.1** | | |
| **AAK** | **Ala-Archa** | **150.19** | **60** | PKPbc | **PKiKP** | **18 42 39.3** | **+0.4** | | |
| | comp=Z,13nm,0.7s,baz=177,slow=5.1,SNR=4.4 | | | | | | | | |
| AAK | | | | pPKPbc | **pPKPbc** | **18 43 11.7** | **-0.7** | | |
| | comp=Z,1.9nm,0.5s,baz=225,slow=5.2,SNR=1.8 | | | | | | | | |
| **AAK** | **Ala-Archa** | **150.19** | **60** | PKPdf | **PKPdf** | **18 42 30.9** | **-2.1** | | |
| AAK | | | | | **PKiKP** | **18 42 38.7** | **-0.3** | | |
| AAK | | | | PKPab | **PKPab** | **18 42 45.7** | **+1.0** | | |
| AAK | | | | | **pPKPbc** | **18 43 12.8** | **+0.3** | | |
| **KURBB** | **Kurchatov Arra** | **150.53** | **43** | PKP | **PKPdf** | **18 42 33.7** | **+0.8** | | |
| | comp=Z,1.0nm,0.9s,baz=297,slow=2.2,SNR=8.1 | | | | | | | | |
| KURBB | | | | PKPbc | **PKiKP** | **18 42 39.5** | **+0.3** | | |
| | comp=Z,12nm,0.7s,baz=302,slow=3.0,SNR=83 | | | | | | | | |
| KURBB | | | | pPKPbc | **pPKPbc** | **18 43 12.5** | **-0.2** | | |
| | comp=Z,2.7nm,0.5s,baz=302,slow=3.1,SNR=6.3 | | | | | | | | |
| **KURK** | **Kurchatov** | **150.54** | **42** | PKPdf | **PKPdf** | **18 42 32.7** | **-0.3** | | |
| KURK | | | | | **PKiKP** | **18 42 39.6** | **+0.4** | | |
| KURK | | | | | **pPKPbc** | **18 43 12.6** | **-0.1** | | |
| **IPM** | **Ipoh** | **150.88** | **161** | PKPdf | **PKPdf** | **18 42 33.7** | **-1.0** | | |
| IPM | | | | | **PKPbc** | **18 42 40.5** | **+0.1** | | |
| IPM | | | | pPKPdf | **pPKPdf** | **18 43 03.6** | **-5.6** | | |
| **KSH** | **Kashi** | **151.62** | **66** | PKPbc | **PKPdf** | **18 42 36.6** | **+1.4** | | |
| KSH | | | | sPKP | | 18 43 15.1 | | | |
| **ZAA0** | **Zalesovo Array** | **151.98** | **33** | | **PKiKP** | **18 42 42.5** | **+0.4** | | |
| ZAA0 | | | | | **pPKPbc** | **18 43 16.3** | **+0.7** | | |
| **ZALV** | **Zalesovo Beam** | **151.98** | **33** | PKP | **PKPdf** | **18 42 36.1** | **+1.0** | | |
| | comp=Z,1.6nm,0.7s,baz=307,slow=2.4,SNR=5.7 | | | | | | | | |
| ZALV | | | | PKPbc | **PKiKP** | **18 42 42.6** | **+0.5** | | |
| | comp=Z,34nm,0.5s,baz=313,slow=2.0,SNR=17 | | | | | | | | |
| ZALV | | | | pPKPbc | **pPKPbc** | **18 43 16.0** | **+0.5** | | |
| | comp=Z,6.3nm,0.5s,baz=320,slow=2.6,SNR=4.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.98** | **33** | PKPdf | **PKPdf** | **18 42 34.3** | **-0.8** | | |
| ZALV | | | | PKPbc | **PKiKP** | **18 42 42.5** | **+0.5** | | |
| ZALV | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ARMA** | **Armidale** | **24.02 177** | P | **P** | **18 39 50.4 +4.1** | | |
| **OOD** | **Oodnadatta** | **25.34 211** | P | **P** | **18 40 01.1 +2.9** | | |
| **SOEI** | **Soe** | **25.75 261** | P | **P** | **18 40 01.4 -0.8** | | |
| SOEI | | | IAmb | IAmb | 18 40 07.4 | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **25.75 261** | P | **P** | **18 40 01.7 -0.5** | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **26.39 260** | P | **P** | **18 40 07.5 -0.4** | | |
| | comp=Z,21nm,0.6s,baz=157,slow=2.1,SNR=10 | | | | | | |
| **BATI** | **Baumata** | **26.39 260** | P | **P** | **18 40 06.9 -1.0** | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.54 242** | P | **P** | **18 40 08.7 -0.5** | | |
| | comp=Z,3.7nm,0.3s,baz=54,slow=7.9,SNR=61 | | | | | | |
| FITZ | | | LR | LR | 18 50 05.1 | | |
| | comp=Z,41nm,20.4s,baz=46,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.54 242** | P | **P** | **18 40 08.1 -1.0** | | |
| **FITZ** | **Fitzroy Crossi** | **26.54 242** | P | **P** | **18 40 08.6 -0.5** | | |
| **STKA** | **Stephens Creek** | **26.63 196** | P | **P** | **18 40 10.4 +0.6** | | |
| | comp=Z,2.7nm,0.8s,baz=359,slow=12,SNR=4.1 | | | | | | |
| STKA | | | LR | LR | 18 51 42.3 | | |
| | comp=Z,103nm,18.1s,baz=28,slow=38 | | | | | | |
| **STKA** | **Stephens Creek** | **26.63 196** | P | **P** | **18 40 10.4 +0.6** | | |
| **MMRI** | **Maumere** | **27.67 263** | P | **P** | **18 40 16.5 -2.9** | | |
| **WRKA** | **Warakurna** | **27.94 226** | P | **P** | **18 40 21.9 +0.2** | | |
| **MULG** | **Mulgathing** | **28.19 210** | P | **P** | **18 40 25.8 +2.0** | | |
| **PLAI** | **Plampang** | **32.08 263** | P | **P** | **18 40 55.5 -3.0** | | |
| **MEEK** | **Meekatharra** | **36.12 232** | P | **P** | **18 41 33.4 +0.1** | | |
| **GIRL** | **Giralia** | **38.14 241** | P | **P** | **18 41 51.6 +1.1** | | |
| **UGM** | **Wanagama** | **39.25 265** | P | **P** | **18 41 58.1 -1.8** | | |
| **URZ** | **Urewera** | **40.16 146** | LR | LR | 18 56 49.3 | | |
| | comp=Z,101nm,18.1s,baz=296,slow=33 | | | | | | |
| **NACB** | **Ninganchiao** | **41.09 319** | P | **P** | **18 42 16.6 +1.6** | | |
| **TPUB** | **Ta-pu** | **41.15 317** | P | **P** | **18 42 15.4 -0.1** | | |
| **RPZ** | **Rata Peaks** | **41.57 157** | LR | LR | 18 57 56.4 | | |
| | comp=Z,54nm,21.7s,baz=299,slow=34 | | | | | | |
| **LEM** | **Lembang** | **42.15 267** | LR | LR | 19 01 17.7 | | |
| | comp=Z,41nm,21.5s,baz=165,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.05 346** | LR | LR | 19 01 03.0 | | |
| | comp=Z,42nm,19.8s,baz=182,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **48.20 336** | P | **P** | **18 43 09.6 -1.8** | | |
| | comp=Z,1.7nm,0.7s,baz=150,slow=7.9,SNR=4.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **50.65 353** | LR | LR | 19 05 18.3 | | |
| | comp=Z,32nm,19.1s,baz=168,slow=36 | | | | | | |
| **PZH** | **PanZhiHua** | **57.05 307** | P | **P** | **18 44 19.8 +2.4** | | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,100nm,4.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.73 326** | *e*P | **P** | **18 44 31.4 +2.5** | | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,120nm,4.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.55 5** | P | **P** | **18 44 32.8 -1.4** | | |
| | comp=Z,4.2nm,0.9s,baz=129,slow=5.9,SNR=4.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.55 5** | P | **P** | **18 44 33.1 -1.0** | | |
| **SONM** | **Songino Array** | **66.19 329** | P | **P** | **18 45 16.6 -1.9** | | |
| | comp=Z,0.8nm,0.6s,baz=140,slow=5.0,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **66.19 329** | P | **P** | **18 45 17.5 -1.1** | | |
| **PALK** | **Pallekele** | **70.49 280** | LR | LR | 19 19 48.3 | | |
| | comp=Z,16nm,18.8s,baz=236,slow=38 | | | | | | |
| **WMQ** | **Urumqi** | **75.02 318** | *e*P | **P** | **18 46 14.4 +2.0** | | |
| **MKAR** | **Makanchi Array** | **79.69 320** | P | **P** | **18 46 37.7 -0.7** | | |
| | comp=Z,0.2nm,0.5s,baz=98,slow=8.9,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.91 327** | P | **P** | **18 46 43.0 -1.7** | | |
| | comp=Z,0.5nm,0.5s,baz=118,slow=6.4,SNR=3.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.31 323** | P | **P** | **18 46 55.9 -1.5** | | |
| | comp=Z,0.2nm,0.6s,baz=111,slow=4.1,SNR=1.6 | | | | | | |
| **ILAR** | **Eielson Array** | **84.59 23** | P | **P** | **18 47 01.9 -1.8** | | |
| | comp=Z,0.7nm,0.7s,baz=247,slow=5.3,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.11 285** | PKPbc | **PKPdf** | **18 54 15.5 +1.4** | | |
| | comp=Z,2.4nm,0.6s,baz=62,slow=2.4,SNR=20 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | | **PKPbc** | **18 54 15.7 -1.6** | | |
| **BDFB** | **Brasilia** | **151.78 141** | PKPbc | **PKPbc** | **18 54 25.8 -0.6** | | |
| | comp=Z,3.4nm,0.7s,baz=269,slow=1.9,SNR=5.7 | | | | | | |

*NOU **20** 18:41:56.1,38°.54S×176°.07E,h194km,MLv4.3/7,North Island, New Zealand*
*WEL **20** 18:42:04.3±0.6,39°.S±4°×17°.6E±°,h114km±5km,M2.9/58, ML2.6/30,MLv2.9/58,Error ellipse: s-maj=0.0km s-min=0.0km az=144.2*
**ISC 20 18:41:59.8**±1.6,**38.76S**±0°.04×**175.83E**±0°.04,**h153**km±8km, **n135**,σ1**37**/139,**North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATZ** | **Wairara** | **0.09 304** | | P | **Pn** | **18 42 21.1** | **+0.8** |
| **RATZ** | **Rangitukua** | **0.12 204** | | P | **Pn** | **18 42 21.1** | **+0.7** |
| **RITZ** | **Rihia Road** | **0.22 175** | | P | **Pn** | **18 42 21.8** | **+1.2** |
| **HATZ** | **Hinemaiaia** | **0.24 123** | | P | **Pn** | **18 42 21.3** | **+0.7** |
| HATZ | | | | S | **Sn** | **18 42 34.7** | **-1.7** |
| **KATZ** | **Kakaramea** | **0.24 207** | | P | **Pn** | **18 42 21.8** | **+1.1** |
| **KUTZ** | **Kaahu Road** | **0.27 358** | | P | **Pn** | **18 42 21.5** | **+0.8** |
| **WPRZ** | **Whakapapatarin** | **0.35 47** | | P | **Pn** | **18 42 21.6** | **+0.7** |
| **NTVZ** | **North Tongarir** | **0.36 200** | | P | **Pn** | **18 42 22.2** | **+1.2** |
| **KRVZ** | **Karewarewa** | **0.37 204** | | P | **Pn** | **18 42 22.3** | **+1.2** |
| **TMVZ** | **Te Maari** | **0.37 196** | | P | **Pn** | **18 42 22.2** | **+1.1** |
| **ETVZ** | **East Tongariro** | **0.39 194** | | P | **Pn** | **18 42 22.4** | **+1.2** |
| **WTVZ** | **West Tongariro** | **0.40 208** | | P | **Pn** | **18 42 22.4** | **+1.2** |
| **NNVZ** | **North Ngauruho** | **0.41 205** | | P | **Pn** | **18 42 22.4** | **+1.1** |
| **OTVZ** | **Oturere** | **0.42 198** | | P | **Pn** | **18 42 22.4** | **+1.1** |
| **TWVZ** | **Taurewa** | **0.44 225** | | P | **Pn** | **18 42 22.5** | **+1.1** |
| **ALRZ** | **Allen Road** | **0.45 64** | | P | **Pn** | **18 42 21.9** | **+0.6** |
| ALRZ | | | | S | **Sn** | **18 42 36.0** | **-1.6** |
| **SNVZ** | **South Ngauruho** | **0.45 199** | | P | **Pn** | **18 42 22.6** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **0.45 204** | | P | **Pn** | **18 42 22.5** | **+1.1** |
| **MRHZ** | **Matea Rd** | **0.46 99** | | P | **Pn** | **18 42 22.0** | **+0.6** |
| MRHZ | | | | S | **Sn** | **18 42 35.6** | **-2.1** |
| **TLZ** | **Tolley Road** | **0.49 332** | | P | **Pn** | **18 42 22.5** | **+1.0** |
| TLZ | | | | S | **Sn** | **18 42 37.0** | **-1.0** |
| **HRRZ** | **Handcock Road** | **0.51 44** | | P | **Pn** | **18 42 22.5** | **+0.8** |
| HRRZ | | | | S | **Sn** | **18 42 37.2** | **-0.9** |
| **TUVZ** | **Tukino** | **0.53 195** | | P | **Pn** | **18 42 23.2** | **+1.4** |
| **FWVZ** | **Far West T-bar** | **0.54 204** | | P | **Pn** | **18 42 23.0** | **+1.1** |
| **HSRZ** | **Hossack Road** | **0.55 36** | | P | **Pn** | **18 42 22.7** | **+0.9** |
| **WHVZ** | **Whangaehu Hut** | **0.56 200** | | P | **Pn** | **18 42 23.3** | **+1.2** |
| **DRZ** | **Dome Shelter** | **0.56 202** | | P | **Pn** | **18 42 23.7** | **+1.5** |
| **TRVZ** | **Turoa** | **0.58 202** | | P | **Pn** | **18 42 23.5** | **+1.3** |
| **WNVZ** | **Wahianoa** | **0.59 198** | | P | **Pn** | **18 42 23.6** | **+1.4** |
| **MOVZ** | **Moawhango** | **0.65 186** | | P | **Pn** | **18 42 23.6** | **+1.2** |
| **PKVZ** | **Pokaka** | **0.65 216** | | P | **Pn** | **18 42 23.8** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **0.65 128** | | P | **Pn** | **18 42 23.5** | **+1.1** |
| **RRRZ** | **Republican Roa** | **0.68 52** | | P | **Pn** | **18 42 23.2** | **+0.7** |
| **MTVZ** | **Mangateitei** | **0.69 204** | | P | **Pn** | **18 42 24.1** | **+1.5** |
| **TARZ** | **Mount Tarawera** | **0.74 45** | | P | **Pn** | **18 42 23.9** | **+0.8** |
| **BHHZ** | **Black Hill Sta** | **0.75 166** | | P | **Pn** | **18 42 24.3** | **+1.3** |
| **OMRZ** | **Omania** | **0.78 33** | | P | **Pn** | **18 42 23.9** | **+0.7** |
| **MUGZ** | **Murupara** | **0.79 69** | | P | **Pn** | **18 42 24.1** | **+0.8** |
| **MTHZ** | **Maungataniwha** | **0.79 97** | | P | **Pn** | **18 42 24.4** | **+1.1** |
| **HIZ** | **Hauiti** | **0.81 288** | | P | **Pn** | **18 42 24.7** | **+1.4** |
| **HIZ** | **Hauiti** | **0.81 288** | | P | **Pn** | **18 42 25.0** | **+1.7** |
| **KARZ** | **Kaharoa** | **0.81 24** | | P | **Pn** | **18 42 24.2** | **+0.8** |
| **KWHZ** | **Kaweka Forest** | **0.81 146** | | P | **Pn** | **18 42 25.0** | **+1.6** |
| **NMHZ** | **Naumai** | **0.83 114** | | P | **Pn** | **18 42 25.6** | **+2.0** |
| **RTZ** | **Ruatahuna** | **0.91 81** | | P | **Pn** | **18 42 25.1** | **+0.9** |
| **VRZ** | **Vera Road** | **0.91 246** | | P | **Pn** | **18 42 26.0** | **+1.8** |
| **MCHZ** | **McNeill Hill** | **0.96 136** | | P | **Pn** | **18 42 26.9** | **+2.4** |
| **KRHZ** | **Kereru** | **0.97 155** | | P | **Pn** | **18 42 26.5** | **+1.8** |
| **RAHZ** | **Arahi** | **0.99 99** | | P | **Pn** | **18 42 26.6** | **+1.9** |
| **MARZ** | **Manawahe** | **1.02 41** | | P | **Pn** | **18 42 25.9** | **+0.8** |
| **ARHZ** | **Aropaoanui** | **1.03 119** | | P | **Pn** | **18 42 27.2** | **+2.1** |
| **TOZ** | **Tahuroa Road** | **1.06 346** | | P | **Pn** | **18 42 26.8** | **+1.4** |
| **OPRZ** | **Ohinepanea** | **1.08 32** | | P | **Pn** | **18 42 26.2** | **+0.7** |
| **TGRZ** | **Tauranga** | **1.08 18** | | P | **Pn** | **18 42 26.6** | **+1.0** |
| **URZ** | **Urewera** | **1.12 64** | | P | **Pn** | **18 42 26.3** | **+0.4** |
| **SNGZ** | **Shannon Statio** | **1.18 92** | | P | **Pn** | **18 42 28.2** | **+1.7** |
| **PNHZ** | **Pukenui** | **1.19 166** | | P | **Pn** | **18 42 28.3** | **+1.7** |
| **WAZ** | **Wanganui** | **1.19 213** | | P | **Pn** | **18 42 28.6** | **+2.1** |
| **RAGZ** | **Rawiri** | **1.27 78** | | P | **Pn** | **18 42 28.5** | **+1.2** |
| **TSZ** | **Takapari Road** | **1.30 176** | | P | **Pn** | **18 42 29.4** | **+1.8** |
| **KAHZ** | **Kahuranaki** | **1.31 142** | | P | **Pn** | **18 42 29.9** | **+2.2** |
| **LREZ** | **Lake Rotokare** | **1.31 237** | | P | **Pn** | **18 42 30.2** | **+2.5** |
| **CKHZ** | **Cape Kidnapper** | **1.32 133** | | P | **Pn** | **18 42 30.0** | **+2.3** |
| **DREZ** | **Durham Road** | **1.34 251** | | P | **Pn** | **18 42 30.0** | **+2.0** |
| **WPHZ** | **Waipukurau** | **1.39 160** | | P | **Pn** | **18 42 30.3** | **+1.9** |
| **MWZ** | **Matawai** | **1.40 73** | | P | **Pn** | **18 42 29.6** | **+1.0** |
| **NEZ** | **North Egmont** | **1.40 249** | | P | **Pn** | **18 42 31.8** | **+2.7** |
| **KNZ** | **Kokohu** | **1.46 101** | | P | **Pn** | **18 42 30.8** | **+1.6** |
| **PXZ** | **Pawanui** | **1.50 148** | | P | **Pn** | **18 42 31.4** | **+1.9** |
| **PKE** | **Pukeiti** | **1.50 253** | | P | **Pn** | **18 42 32.1** | **+2.5** |
| **RIGZ** | **Rimuhau** | **1.51 89** | | P | **Pn** | **18 42 31.3** | **+1.6** |
| **KHEZ** | **Kahui Hut** | **1.51 249** | | P | **Pn** | **18 42 32.4** | **+2.6** |
| **DVHZ** | **Dannevirke** | **1.56 171** | | P | **Pn** | **18 42 31.8** | **+1.6** |
| **PRGZ** | **Paritu Road** | **1.61 96** | | P | **Pn** | **18 42 32.4** | **+1.6** |
| **TKGZ** | **Te Karaka** | **1.61 79** | | P | **Pn** | **18 42 32.5** | **+1.8** |
| **PRHZ** | **Porangahau** | **1.63 158** | | P | **Pn** | **18 42 32.9** | **+1.9** |
| **POWZ** | **Post Office Ro** | **1.63 182** | | P | **Pn** | **18 42 32.6** | **+1.7** |
| **RUGZ** | **Raukumara Rang** | **1.65 62** | | P | **Pn** | **18 42 31.5** | **+0.1** |
| **MHGZ** | **Mahia Peninsul** | **1.66 104** | | P | **Pn** | **18 42 33.3** | **+2.0** |
| **ANWZ** | **Angora Road** | **1.77 164** | | P | **Pn** | **18 42 34.4** | **+2.0** |
| **TWGZ** | **Tauwhareparae** | **1.78 72** | | P | **Pn** | **18 42 34.2** | **+1.5** |
| **PRWZ** | **Pori Road** | **1.79 177** | | P | **Pn** | **18 42 34.7** | **+1.9** |
| **HAZ** | **Te Kaha** | **1.83 57** | | P | **Pn** | **18 42 33.5** | **+0.4** |
| **CNGZ** | **Carnagh Statio** | **1.88 82** | | P | **Pn** | **18 42 35.5** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **1.91 186** | | P | **Pn** | **18 42 35.5** | **+1.4** |
| **ETAZ** | **East Tamaki Re** | **1.94 338** | | P | **Pn** | **18 42 36.2** | **+1.8** |
| **BFZ** | **Birch Farm** | **1.94 171** | | P | **Pn** | **18 42 36.0** | **+1.5** |
| **BFZ** | **Birch Farm** | **1.94 171** | | P | **Pn** | **18 42 36.0** | **+1.5** |
| **PKGZ** | **Pakihiroa** | **1.97 64** | | P | **Pn** | **18 42 36.0** | **+1.2** |
| **KUZ** | **Kuaotunu** | **2.01 357** | | P | **Pn** | **18 42 36.7** | **+1.4** |
| **TIWZ** | **Tintock** | **2.01 179** | | P | **Pn** | **18 42 36.8** | **+1.5** |
| **PUZ** | **Puketiti** | **2.02 71** | | P | **Pn** | **18 42 36.6** | **+1.2** |
| **WIAZ** | **Waiheke Island** | **2.04 344** | | P | **Pn** | **18 42 37.4** | **+1.8** |
| **OGWZ** | **Otaki Gorge** | **2.12 194** | | P | **Pn** | **18 42 38.0** | **+1.6** |
| **MBAZ** | **Motutapu North** | **2.12 339** | | P | **Pn** | **18 42 38.4** | **+1.8** |
| **HOWZ** | **Holdsworth Sta** | **2.15 186** | | P | **Pn** | **18 42 38.1** | **+1.3** |
| **CPWZ** | **Castlepoint** | **2.17 173** | | P | **Pn** | **18 42 39.0** | **+2.0** |
| **KIW** | **Kapiti Island** | **2.21 198** | | P | **Pn** | **18 42 38.9** | **+1.3** |
| **WMGZ** | **Waiomatatini S** | **2.24 66** | | P | **Pn** | **18 42 38.9** | **+1.0** |
| **MXZ** | **Matakaoa Point** | **2.29 59** | | P | **Pn** | **18 42 39.8** | **+1.4** |
| **TMWZ** | **Te Maipa** | **2.34 179** | | P | **Pn** | **18 42 40.4** | **+1.2** |
| **MTW** | **Mount Morrison** | **2.41 186** | | P | **Pn** | **18 42 40.8** | **+0.9** |
| **CAW** | **Cannon Point** | **2.42 194** | | P | **Pn** | **18 42 41.2** | **+1.2** |
| **OUWZ** | **D'Urville Isla** | **2.52 215** | | P | **Pn** | **18 42 42.3** | **+1.0** |
| **PAWZ** | **Paruwai Farm** | **2.64 187** | | P | **Pn** | **18 42 43.5** | **+0.8** |
| **TRWZ** | **Traveller** | **2.64 182** | | P | **Pn** | **18 42 43.8** | **+1.1** |
| **WEL** | **Wellington** | **2.65 198** | | P | **Pn** | **18 42 44.1** | **+1.3** |
| **MSWZ** | **Moikau Station** | **2.69 189** | | P | **Pn** | **18 42 44.1** | **+0.7** |
| **SNZO** | **South Karori** | **2.69 198** | | P | **Pn** | **18 42 44.5** | **+1.2** |
| **TCW** | **Tory Channel** | **2.72 206** | | P | **Pn** | **18 42 44.8** | **+1.1** |
| **BHW** | **Baring Head** | **2.75 195** | | P | **Pn** | **18 42 44.8** | **+0.8** |
| **PLWZ** | **Palliser** | **2.84 189** | | P | **Pn** | **18 42 45.8** | **+0.6** |
| **TUWZ** | **Tuamarina** | **3.04 208** | | P | **Pn** | **18 42 48.4** | **+0.8** |
| **NNZ** | **Nelson** | **3.09 217** | | P | **Pn** | **18 42 49.5** | **+1.1** |
| **QRZ** | **Quartz Range** | **3.28 230** | | P | **Pn** | **18 42 51.3** | **+0.6** |
| **QRZ** | **Quartz Range** | **3.28 230** | | P | **Pn** | **18 42 52.5** | **+1.8** |
| **BSWZ** | **Blackbirch Sta** | **3.31 206** | | P | **Pn** | **18 42 52.0** | **+0.8** |
| **MRNZ** | **Matariki Terra** | **3.54 221** | | P | **Pn** | **18 42 54.7** | **+0.6** |
| **THZ** | **Tophouse** | **3.74 216** | | P | **Pn** | **18 42 57.3** | **+0.5** |
| **KHZ** | **Kahutara** | **4.05 205** | | P | **Pn** | **18 43 01.0** | **+0.4** |
| **KHZ** | **Kahutara** | **4.05 205** | | P | **Pn** | **18 43 01.7** | **+1.0** |
| **DSZ** | **Denniston Nort** | **4.29 225** | | P | **Pn** | **18 43 04.1** | **+0.2** |
| **GVZ** | **Greta Valley S** | **4.71 206** | | P | **Pn** | **18 43 09.3** | **0.0** |
| **LTZ** | **Lake Taylor** | **4.84 213** | | P | **Pn** | **18 43 10.8** | **-0.4** |
| **AMCZ** | **Amberley** | **5.03 208** | | P | **Pn** | **18 43 13.4** | **-0.1** |
| **INZ** | **Inchbonnie** | **5.18 219** | | P | **Pn** | **18 43 15.4** | **-0.1** |
| **OKCZ** | **Okains Bay** | **5.38 202** | | P | **Pn** | **18 43 18.3** | **0.0** |
| **AKCZ** | **Akaroa Harbour** | **5.56 202** | | P | **Pn** | **18 43 20.1** | **-0.6** |
| **MHCZ** | **Mount Hutt** | **5.75 213** | | P | **Pn** | **18 43 23.3** | **+0.1** |
| **RPZ** | **Rata Peaks** | **6.12 215** | | P | **Pn** | **18 43 28.3** | **+0.2** |
| **RPZ** | **Rata Peaks** | **6.12 215** | | P | **Pn** | **18 43 28.9** | **+0.8** |
| **ARCZ** | **Arundel** | **6.25 213** | | P | **Pn** | **18 43 29.8** | **0.0** |
| **FOZ** | **Fox Glacier** | **6.58 222** | | P | **Pn** | **18 43 33.9** | **-0.2** |
| **ODZ** | **Otahua Downs** | **7.37 210** | | P | **Pn** | **18 43 44.2** | **-0.6** |
| **ODZ** | **Otahua Downs** | **7.37 210** | | P | **Pn** | **18 43 44.6** | **-0.1** |
| **CTZ** | **Chatham Island** | **7.55 134** | | P | Pn | 18 43 53.4 | +6.3 |

*BJI **20** 18:43:43.0±0.0,36°.50N×70°.10E,h185km,mb4.1/12, mB4.8/5*
*IDC **20** 18:43:44.8±2.8,36°.37N×70°.49E,h179km±25km,mb3.4/17, mb1 3.5/22,mb1mx3.4/57,mbtmp4.0/22,Error ellipse: s-maj=18.7km s-min=12.0km az=15.0*
*MOS **20** 18:43:46.1±1.0,36°.51N×70°.44E,h196km,mb4.0/15,Error ellipse: s-maj=9.9km s-min=5.3km az=94.3*
*NEIC **20** 18:43:47.1±2.2,36°.49N±0°.06×70°.35E±0°.04,h199km±5km, mb4.4/32,Error ellipse: s-maj=8.9km s-min=4.5km az=171.0*
*NNC **20** 18:43:48.5±11.0,37°.06N×70°.19E,h0km,mb4.8,mpv4.4, Error ellipse: s-maj=88.4km s-min=76.8km az=174.0*
**ISC 20 18:43:47.1**±0.4,**36.43N**±0°.04×**70.58E**±0°.05,**h204**km,**n156**, σ2**21**/182,**mb4.1**/34,**13C-7D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.26 214** | | PN | **Pn** | **18 44 27.9** | **-1.0** |
| **KBL** | **Kabul** | **2.26 214** | | Pn | **Pn** | **18 44 27.9** | **-1.0** |
| **CHGR** | **Chuyangaron** | **2.50 334** | | PN | **Pn** | **18 44 28.5** | **-2.7** |
| **CHGR** | **Chuyangaron** | **2.50 334** | | | **Pn** | **18 44 28.5** | **-2.7** |
| **GAR** | **Garm** | **2.58 355** | | | **Pn** | **18 44 30.3** | **-1.9** |
| **CEP** | **Cherat** | **2.82 157** | | ⇓P | **Pn** | **18 44 36.4** | **+1.4** |
| CEP | | | | S | **S** | **18 45 13.0** | **+1.2** |
| **NIL** | **Nilore** | **3.53 141** | | PN | **Pn** | **18 44 45.6** | **+2.2** |
| **NIL** | **Nilore** | **3.53 141** | | Pn | **Pn** | **18 44 45.5** | **+2.2** |
| **THW** | **Thamme Wali** | **3.75 165** | | P | **Pn** | **18 44 47.1** | **+1.1** |
| **SARP** | **Sargodha** | **4.82 158** | | P | **Pn** | **18 45 00.4** | **+1.1** |
| **TAS** | **Tashkent** | **4.99 349** | | PN | **Pn** | **18 44 59.9** | **-1.6** |
| **TAS** | **Tashkent** | **4.99 349** | | Pn | **Pn** | **18 44 59.9** | **-1.6** |
| **JMU** | **Jammu** | **5.14 135** | | *e*P | **Pn** | **18 45 02.7** | **-0.7** |
| JMU | | | | *e*P | Pn | 18 45 15.0 | +12 |
| JMU | | | | *e*S | **S** | **18 46 00.0** | **-3.1** |
| JMU | | | | *e*S | **S** | **18 46 03.1** | **0.0** |
| **KSH** | **Kashi** | **5.26 52** | | P | **Pn** | **18 45 01.3** | **-3.7** |
| KSH | | | | S | S | 18 45 57.0 | -9.2 |
| KSH | | | | smax | smax | | |
| | comp=N,300nm,0.7s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,170nm,0.5s | | | | | | |
| **THN** | **Thein Dam** | **5.82 132** | | *e*P | **Pn** | **18 45 14.0** | **+1.9** |
| THN | | | | ⇑*e*S | **S** | **18 46 19.9** | **+0.9** |
| **AML** | **Almayashu** | **6.19 22** | | P | **Pn** | **18 45 16.0** | **-1.1** |
| | SNR=266 | | | | | | |
| **UCH** | **Uchtor** | **6.55 27** | | P | **Pn** | **18 45 21.0** | **-0.8** |
| | SNR=45 | | | | | | |
| **KK31** | **Karatay Array** | **6.67 360** | | PN | **Pn** | **18 45 20.9** | **-2.1** |
| **KKAR** | **Karatay Array** | **6.67 360** | | PN | **Pn** | **18 45 20.8** | **-2.2** |
| **KKAR** | **Karatay Array** | **6.67 360** | | Pn | **Pn** | **18 45 20.8** | **-2.2** |
| **KK09** | **Karatay Array** | **6.69 360** | | ⇑P | **Pn** | **18 45 21.0** | **-2.2** |
| | 41nm,0.6s,baz=180,slow=12 | | | | | | |
| KK09 | | | | ⇓S | **S** | **18 46 32.1** | **-7.3** |
| | 36nm,0.6s,baz=190,slow=24 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.70 21** | | P | **Pn** | **18 45 22.7** | **-0.8** |
| | SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **6.90 25** | | P | **Pn** | **18 45 25.4** | **-0.8** |
| | 6.8nm,0.3s,baz=190,slow=6.5,SNR=98 | | | | | | |
| AAK | | | | S | **S** | **18 46 40.7** | **-3.9** |
| | 3.9nm,0.3s,baz=321,slow=21,SNR=24 | | | | | | |
| **AAK** | **Ala-Archa** | **6.90 25** | | P | **Pn** | **18 45 25.6** | **-0.6** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.90 25** | | *d* | *i*PN | **Pn** | **18 45 25.6** | **-0.6** |
| **AAK** | **Ala-Archa** | **6.90 25** | | ⇓P | **Pn** | **18 45 25.4** | **-0.8** |
| | 4.3nm,0.2s | | | | | | |
| AAK | | | | ⇓S | **S** | **18 46 40.2** | **-4.5** |
| | 54nm,0.6s | | | | | | |
| **BHK** | **Bhakra** | **6.96 134** | | *e*P | **Pn** | **18 45 27.9** | **+1.0** |
| **KBK** | **Karagaybulak** | **7.08 27** | | P | **Pn** | **18 45 28.1** | **-0.3** |
| | SNR=9.8 | | | | | | |
| **HRA** | **Herat** | **7.10 256** | | Pn | Pn | 18 45 22.8 | -6.1 |
| **CHMS** | **Chumysh** | **7.31 25** | | P | **Pn** | **18 45 30.6** | **-0.6** |
| | SNR=6.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.55 29** | | P | **Pn** | **18 45 34.1** | **-0.5** |
| | SNR=14 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.55 29** | | *i* | PN | **Pn** | **18 45 33.7** | **-0.9** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.55 29** | | ⇑P | **Pn** | **18 45 34.0** | **-0.7** |
| | comp=Z,14nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **S** | **18 46 56.0** | **-4.1** |
| | comp=Z,14nm,0.7s | | | | | | |
| **SMLA** | **Simla** | **7.61 132** | | *e*P | **Pn** | **18 45 35.3** | **0.0** |
| SMLA | | | | *e*S | **S** | **18 46 58.6** | **-2.8** |
| SMLA | | | | IAML | | 18 47 02.1 | |
| | comp=E,179nm,0.2s | | | | | | |
| SMLA | | | | IAML | | 18 47 02.1 | |
| | comp=N,303nm,0.3s | | | | | | |
| **NDI** | **New Delhi** | **9.54 142** | | *e*P | **Pn** | **18 46 00.6** | **+0.2** |
| NDI | | | | *e*P | **Pn** | **18 46 01.0** | **+0.7** |
| NDI | | | | *e*S | **S** | **18 47 41.1** | **-6.2** |
| NDI | | | | *e*S | **S** | **18 47 43.0** | **-4.3** |
| **KUDL** | **Kundal** | **9.65 147** | | *e*P | **Pn** | **18 46 02.0** | **+0.2** |
| KUDL | | | | *e*S | **S** | **18 47 43.3** | **-6.7** |
| **SONA** | **Sohna** | **9.83 144** | | ⇑*e*S | **S** | **18 47 47.8** | **-6.5** |
| **AJM** | **Ajmer** | **10.50 160** | | *e*P | **Pn** | **18 46 13.1** | **+0.3** |
| AJM | | | | *e*S | S | 18 47 59.5 | -11 |
| **PTH** | **Pithoragarh** | **10.60 128** | | ⇑*e*S | **S** | **18 48 06.1** | **-7.0** |
| **LGTI** | **Lohaghat** | **10.69 128** | | *e*P | **Pn** | **18 46 13.7** | **-1.4** |
| LGTI | | | | *e*S | **S** | **18 48 07.5** | **-7.4** |
| **JHNI** | **Jhansi** | **12.88 146** | | *e*S | **S** | **18 48 58.2** | **-8.1** |
| **PYUN** | **Piuthan** | **13.38 125** | | *e*P | **Pn** | **18 46 49.0** | **-0.4** |
| | comp=N,22nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **13.41 36** | | P | **Pn** | **18 46 49.8** | **+0.3** |
| **MAKZ** | **Makanchi** | **13.41 36** | | Pn | **Pn** | **18 46 49.8** | **+0.3** |
| **MK31** | **Makanchi Array** | **13.55 37** | | *i* P | **Pn** | **18 46 51.6** | **+0.4** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **13.55 37** | | | **Pn** | **18 46 51.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **13.55 37** | | P | **Pn** | **18 46 51.7** | **+0.5** |
| | comp=Z,1.0nm,0.3s,baz=202,slow=9.4,SNR=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.55 37** | | P | **Pn** | **18 46 51.3** | **+0.1** |
| **MKAR** | **Makanchi Array** | **13.55 37** | | Pn | **Pn** | **18 46 51.3** | **+0.1** |
| **DANN** | **Dangsing** | **13.73 122** | | *e*P | **Pn** | **18 46 54.9** | **+1.0** |
| | comp=Z,59nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **14.00 124** | | *e*P | **Pn** | **18 46 57.4** | **+0.3** |
| | comp=Z,9.8nm,0.3s | | | | | | |
| **BHPL** | **Bhopal** | **14.41 154** | | *e*P | **P** | **18 47 06.8** | **+3.4** |
| BHPL | | | | *e*S | **S** | **18 49 35.8** | **-6.3** |
| BHPL | | | | IAML | | 18 49 37.4 | |
| | comp=N,10nm,0.5s | | | | | | |
| **VLK** | **Valmikinagar** | **14.48 125** | | *e*P | **P** | **18 47 05.0** | **+1.1** |
| **GKN** | **Gorkha** | **14.55 121** | | *e*P | **P** | **18 47 05.2** | **+0.2** |
| | comp=N,35nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.99 332** | | *i* P | **Pn** | **18 47 05.9** | **-2.9** |
| **ABKAR** | **Akbulak array** | **14.99 332** | | Pn | **Pn** | **18 47 05.6** | **-3.2** |
| **WMQ** | **Urumqi** | **15.02 55** | | *e*P | **Pn** | **18 47 09.3** | **0.0** |
| WMQ | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.1s | | | | | | |
| **DMN** | **Daman** | **15.12 121** | | *e*P | **P** | **18 47 12.1** | **+0.7** |
| | comp=N,18nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **15.13 121** | | *e*P | **P** | **18 47 11.9** | **+0.5** |
| | comp=N,40nm,0.5s | | |

comp=Z,8.0nm,0.9s
MNK pmax pmax
comp=N,20nm,1.1s
MNK pmax pmax
comp=E,1.0nm,0.9s
MNK MLR MLR
comp=Z,152nm,17.0s
MNK MLR MLR
comp=E,39nm,19.0s
MNK MLR MLR
comp=N,270nm,19.0s
**MNK Minsk 34.31 315** *i* P **P 18 50 16.4 +2.5**
comp=E,1.0nm,0.9s
MNK *i* P **P 18 50 16.4 +2.5**
comp=N,20nm,1.1s
MNK *i* P **P 18 50 16.4 +2.5**
comp=Z,8.0nm,0.9s,baz=285
MNK *i* pP **pP 18 50 55.9 -0.2**
MNK *i* PP **PnPn 18 51 37.8 +1.5**
MNK *i* S **S 18 55 28.9 +3.2**
MNK *i* sS **sS 18 56 40.1 -2.0**
MNK *i* SS **SS 18 58 03.0 +2.1**
MNK *i* LRM MLR 19 05 21.3
comp=Z,152nm,17.4s
MNK *i* LRM MLR 19 05 29.0
comp=E,39nm,18.7s
MNK *i* LRM MLR 19 05 31.6
comp=N,270nm,19.3s
**BURAR Bucovina Array 35.04 303** P **P 18 50 20.2 -0.2**
BURAR pmax pmax
comp=Z,3.0nm,1.6s
**BURAR Bucovina Array 35.04 303** P **P 18 50 20.2 -0.2**
**BUR08 Bucovina Ar. S 35.05 303** P **P 18 50 19.6 -0.9**
BUR08 IAmb IAmb 18 50 43.4
comp=Z,10.0nm,1.6s
**FIA1 FINESS Array S 37.35 326** P **P 18 50 39.9 +0.3**
FIA1 IAmb IAmb 18 50 53.2
comp=Z,16nm,1.1s
**FINES FINESS Array B 37.36 326** P **P 18 50 40.0 +0.3**
comp=Z,2.9nm,0.4s,baz=119,slow=8.9,SNR=31
**FINES FINESS Array B 37.36 326***ce*P **P 18 50 39.7 +0.1**
FINES pmax pmax
comp=Z,3.0nm,0.4s
**FINES FINESS Array B 37.36 326** P **P 18 50 39.8 +0.1**
**UBPT Khong Chiam 37.51 115** P **P 18 50 41.9 +0.5**
**VYHS Vyhne 39.32 304** *e*P **P 18 50 57.9 +1.7**
**VYHS Vyhne 39.32 304** *e*P **P 18 50 57.9 +1.7**
**KEV Kevo 40.74 338** P **P 18 51 07.8 +0.2**
KEV pmax pmax
comp=Z,55nm,1.6s
**KEV Kevo 40.74 338** P **P 18 51 07.8 +0.2**
**ARCES ARCESS Array B 41.08 338** P **P 18 51 10.8 +0.4**
comp=Z,3.2nm,0.6s,baz=110,slow=7.0,SNR=14
**ARCES ARCESS Array B 41.08 338** *e*P **P 18 51 11.1 +0.7**
ARCES pmax pmax
comp=Z,3.0nm,0.6s
**ARCES ARCESS Array B 41.08 338** P **P 18 51 09.7 -0.7**
ARCES IAmb IAmb 18 51 15.7
comp=Z,48nm,1.6s
**NC405 NORSAR Array S 44.00 323** P **P 18 51 33.9 -0.1**
**NC602 NORSAR Array S 44.05 323** P **P 18 51 33.7 -0.6**
NC602 IAmb IAmb 18 51 58.2
comp=Z,35nm,1.2s
**NORES NORESS Array B 44.05 323** P **P 18 51 33.7 -0.6**
**NC303 NORSAR Array S 44.18 323** P **P 18 51 35.6 +0.3**
NC303 IAmb IAmb 18 52 08.0
comp=Z,39nm,1.6s
**NB201 NORSAR Array S 44.20 323** P **P 18 51 35.2 -0.4**
**NB2 NORSAR Subarra 44.23 323** P **P 18 51 35.3 -0.6**
comp=Z,1.8nm,0.5s,baz=95,slow=7.9
**NOA NORSAR Array B 44.23 323** P **P 18 51 35.6 -0.3**
comp=Z,2.4nm,0.5s,baz=98,slow=7.7,SNR=13
**NAO01 NORSAR Array S 44.38 323** P **P 18 51 36.0 -0.9**
**NB000 NORSAR Array S 44.45 323** P **P 18 51 36.5 -1.1**
**NC204 NORSAR Array S 44.48 323** P **P 18 51 37.6 -0.2**
**KONO Kongsberg 44.93 321** P **P 18 51 40.8 -0.5**
KONO pmax pmax
comp=Z,11nm,1.0s
**KONO Kongsberg 44.93 321** P **P 18 51 40.8 -0.5**
KONO IAmb IAmb 18 52 02.1
comp=Z,11nm,1.0s
**TIXI Tiksi 45.97 22***ce*P **P 18 51 50.8 +1.5**
TIXI pmax pmax
comp=Z,1.0nm,0.5s
**TIXI Tiksi 45.97 22** P **P 18 51 49.9 +0.7**
**SPB2 Spitsbergen Ar 47.48 347** P **P 18 52 03.2 +1.4**
**SPITS Spitsbergen Ar 47.49 347** P **P 18 52 02.5 +1.5**
SPITS pmax pmax
comp=Z,69nm,1.6s
**KBS Kingsbay 48.61 347** P **P 18 52 10.1 +0.5**
KBS pmax pmax
comp=Z,105nm,1.6s
**KBS Kingsbay 48.61 347** P **P 18 52 10.1 +0.5**
**SEY Seymchan 54.67 34** *i* P **P 18 52 56.5 +2.0**
**BILL Bilibino 58.82 26***e*P **P 18 53 25.5 +1.8**
BILL *e**PP **PcP 18 54 09.1 -1.7**
BILL *e* 18 55 37.5
BILL pmax pmax
comp=Z,6.0nm,1.7s
**TORD Torodi Ar. Bea 65.38 268** P **P 18 54 06.6 -1.4**
comp=Z,0.3nm,0.4s,baz=48,slow=6.1,SNR=9.8
**TORD Torodi Ar. Bea 65.38 268** IAmb IAmb 18 54 18.0
comp=Z,1.7nm,0.7s
**TOLK Toolik Lake Re 71.08 14** P **P 18 54 43.5 +0.9**
TOLK IAmb IAmb 18 54 48.9
comp=Z,9.3nm,1.6s
**A36M Sachs Harbour 71.31 5** P **P 18 54 45.0 +1.1**
A36M IAmb IAmb 18 54 46.3
comp=Z,2.9nm,0.8s
**C36M Paulatuk 73.98 5** P **P 18 55 00.3 +0.7**
**INK Inuvik 74.03 9** P **P 18 55 01.2 +1.3**
comp=Z,0.9nm,0.6s,baz=36,slow=9.9,SNR=3.6
**INK Inuvik 74.03 9** P **P 18 55 01.5 +1.6**
INK pmax pmax
comp=Z,1.0nm,0.9s
**INK Inuvik 74.03 9** P **P 18 55 01.5 +1.6**
**DHY Denali Highway 76.30 17** P **P 18 55 13.1 0.0**
DHY IAmb IAmb 18 55 17.1
comp=Z,13nm,1.5s
**YKA Yellowknife Ar 81.33 2** P **P 18 55 41.3 +0.9**
comp=Z,0.3nm,0.4s,baz=346,slow=5.3,SNR=8.6
**YKA Yellowknife Ar 81.33 2** *e*P **P 18 55 41.4 +1.1**
**WRA Warramunga Arr 82.24 122** P **P 18 55 45.6 -0.1**
comp=Z,0.4nm,0.7s,baz=323,slow=5.2,SNR=2.8
**ASAR Alice Springs 84.49 125** P **P 18 55 57.2 0.0**
comp=Z,0.3nm,0.6s,baz=314,slow=5.2,SNR=7.3

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**IDC 20 18:45:53.7±2.0, 1.77S×125.70E, h0km, mb3.2/2, mb1 3.5/3, mb1mx3.3/36, mbtmp3.3/3, ML3.3/1, Error ellipse: s-maj=174.3km s-min=28.6km az=64.0, Southern Moluccas Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.94** | **156** | P | P | P | 18 50 27.5 | +0.1 |
| | 0.1nm,0.3s,baz=334,slow=11,SNR=4.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.18** | **161** | P | P | P | 18 51 02.1 | -0.1 |
| | 0.8nm,0.8s,baz=339,slow=10,SNR=7.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.53** | **328** | P | P | P | 18 56 12.6 | 0.0 |
| | 0.1nm,0.5s,baz=124,slow=7.7,SNR=1.7 | | | | | | | |

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*IDC **20** 19:01:21.8±3.0, 1.02N×129.18E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.3/26, mbtmp3.4/3, Error ellipse: s-maj=221.7km s-min=29.0km az=69.0*
*DJA **20** 19:01:23.7±0.4, 1.1N±5.5×12.9E±.1, h10km, M4.0/9, mb4.4/2, MLv3.8/9*
**ISC 20 19:01:26.0±1.4, 0.9N±0.1×129.6E±0.0, 8h27km, 9n, σ1$23/10, mb3.1/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.80** | **265** | P | P | Pn | 19 01 55.0 | -0.3 |
| TNTI | | | | S | S | Sb | 19 02 21.0 | +0.6 |
| **MSAI** | **Masohi** | **4.25** | **183** | P | P | Pn | 19 02 28.9 | -0.2 |
| **SANI** | **Sanana** | **4.33** | **227** | P | P | Pn | 19 02 27.7 | -2.5 |
| **AAI** | **Ambon** | **4.68** | **192** | P | P | Pn | 19 02 36.5 | +1.5 |
| **FAKI** | **Fak Fak** | **4.91** | **141** | P | P | Pn | 19 02 37.8 | -0.4 |
| **KMSI** | **Cibinong** | **5.19** | **266** | P | P | Pn | 19 02 42.9 | +1.0 |
| | 0.2nm62nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.35** | **167** | P | P | P | 19 06 11.6 | +0.3 |
| | 0.4nm,0.5s,baz=347,slow=12,SNR=3.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.88** | **170** | P | P | P | 19 06 47.3 | +0.6 |
| | 1.8nm,0.8s,baz=345,slow=9.5,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.23** | **325** | P | P | P | 19 11 38.2 | -0.5 |
| | 0.1nm,0.6s,baz=117,slow=8.9,SNR=1.8 | | | | | | | |

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*NIED **20** 19:14:34.8, 30.04N×131.24E, h26km, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale 10^15 Nm; Mrr3.06; Mθθ0.37; Mϕϕ-3.43; Mrθ1.83; Mθϕ-1.69; Mϕr3.47; Fault plane solution: M0 5.31000×10^15 NP1:ϕs27.00000°, δ69.00000°, λ.96.00000°. NP2:ϕs191.00000°, δ22.00000°, λ.76.00000°.*
*MOS **20** 19:14:34.6±0.7, 30.10N×131.06E, h35km, mb4.5/17 Error ellipse: s-maj=9.3km s-min=5.2km az=110.9*
*JMA **20** 19:14:34.7±0.2, 30.04N×131.24E, h26km±1km, M4.3*
*JMA Felt I J1.*
*IDC **20** 19:14:37.5±1.6, 30.13N×131.00E, h40km±13km, mb4.1/28, mb1 4.2/34, mb1mx4.1/55, mbtmp4.3/34, ML3.5/6, MS3.9/29, Ms1 3.9/29, ms1mx3.5/90, Error ellipse: s-maj=14.9km s-min=8.2km az=104.0*
*NEIC **20** 19:14:37.4±1.2, 30.09N±0.05×131.08E±0.09, h41km±7km, mb4.6/70, Error ellipse: s-maj=11.2km s-min=7.3km az=101.0*
**ISC 20 19:14:35.2±1.1, 30.05N±0.04×131.14E±0.05, h28km±7km, n235, σ1$02/237, mb4.5/86, MS3.9/31, 11C-6D, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JMTN** | **Minamitane** | **0.40** | **329** | ⇓P | | **Pb** | **19 14 44.0** | **0.0** |
| JMTN | | | | *e*S | | **Sb** | **19 14 50.4** | **+0.4** |
| **JYAK** | **Yakushimahirau** | **0.58** | **289** | ⇓P | | **Pb** | **19 14 47.4** | **+0.6** |
| JYAK | | | | *e*S | | **Sn** | **19 14 56.5** | **+0.4** |
| **JTN** | **Tanegashima 3** | **0.62** | **347** | ⇓P | | **Pb** | **19 14 47.5** | **0.0** |
| JTN | | | | *e*S | | **Sb** | **19 14 56.7** | **+0.8** |
| **JKC** | **Kuchinoerabu** | **0.92** | **297** | ⇓P | | **Pb** | **19 14 53.1** | **+0.7** |
| JKC | | | | *e*S | | **Sb** | **19 15 05.9** | **+1.7** |
| **JNN** | **Nakanoshima** | **1.12** | **260** | P | | **Pn** | **19 14 56.3** | **+0.4** |
| **JTSR** | **Tashiro 2** | **1.13** | **350** | ⇑P | | **Pn** | **19 14 55.2** | **0.0** |
| JTSR | | | | *e*S | | **Sn** | **19 15 10.7** | **+0.9** |
| **JNAR** | **Kushima--Naru** | **1.48** | **4** | ⇑P | | **Pn** | **19 15 00.2** | **+0.2** |
| JNAR | | | | *e*S | | **Sn** | **19 15 18.9** | **+0.5** |
| **JSU** | **Suzuyama** | **1.57** | **338** | ⇑P | | **Pn** | **19 15 01.5** | **+0.3** |
| JSU | | | | *e*S | | **Sn** | **19 15 22.1** | **+1.5** |
| **JSU** | **Suzuyama** | **1.57** | **338** | | | **Pn** | **19 15 01.6** | **+0.4** |
| JSU | | | | | Sn | **Sn** | **19 15 21.5** | **+0.9** |
| **JNU** | **Nakatsue** | **3.07** | **356** | P | | **Pn** | **19 15 22.5** | **+0.5** |
| | 20nm,0.3s,baz=261,slow=2.6,SNR=59 | | | | | | | |
| JNU | | | | S | | **Sn** | **19 15 57.5** | **-0.3** |
| | 12nm,0.3s,baz=43,slow=17,SNR=1.9 | | | | | | | |
| **JOW** | **Kunigami** | **4.08** | **219** | P | | **Pn** | **19 15 37.8** | **+2.0** |
| | 5.1nm,0.3s,baz=97,slow=18,SNR=2.6 | | | | | | | |
| JOW | | | | S | | **Sn** | **19 16 23.1** | **+0.5** |
| | 18nm,0.3s,baz=196,slow=28,SNR=7.5 | | | | | | | |
| **JOW** | **Kunigami** | **4.08** | **219** | | | **Pn** | **19 15 36.8** | **+1.1** |
| JOW | | | | | Sn | **Sn** | **19 16 23.0** | **+0.4** |
| **JMN** | **Monobe** | **4.34** | **32** | | Pn | **Pn** | **19 15 39.8** | **+0.3** |
| **JTU** | **Tsushima** | **4.70** | **342** | | Pn | **Pn** | **19 15 45.2** | **+0.9** |
| **JHS** | **Saijyo** | **5.21** | **18** | | Pn | **Pn** | **19 15 52.3** | **+1.0** |
| **TJN** | **Taejon** | **7.06** | **334** | P | | **Pn** | **19 16 18.2** | **+1.5** |
| **TJN** | **Taejon** | **7.06** | **334** | | Pn | **Pn** | **19 16 18.1** | **+1.5** |
| **INU** | **Inuyama** | **7.24** | **42** | | Pn | **Pn** | **19 16 20.3** | **+1.1** |
| **JGF** | **Kuroka** | **7.62** | **42** | | Pn | **Pn** | **19 16 25.9** | **+1.5** |
| **KSAR** | **Wonju Array Be** | **7.86** | **341** | P | | **Pn** | **19 16 29.3** | **+1.7** |
| **KSAR** | **Wonju Array Be** | **7.86** | **341** | | Pn | **Pn** | **19 16 29.3** | **+1.7** |
| **KSRS** | **Korea Array** | **7.86** | **341** | P | | **Pn** | **19 16 29.3** | **+1.7** |
| | 0.7nm,0.3s,baz=157,slow=14,SNR=16 | | | | | | | |
| **KSRS** | **Korea Array** | **7.86** | **341** | *e*P | | **Pn** | **19 16 30.1** | **+2.5** |
| KSRS | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **KS19** | **Wonju Array Si** | **7.92** | **341** | | | **Pn** | **19 16 29.4** | **+0.9** |
| **MAJO** | **Matsushiro** | **8.77** | **41** | *i* P | | **Pn** | **19 16 40.7** | **+0.6** |
| **MAT** | **Matsushiro** | **8.77** | **41** | P | | **Pn** | **19 16 41.0** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **8.77** | **41** | P | | **Pn** | **19 16 41.2** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=239,slow=14,SNR=11 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.77** | **41** | | Pn | **Pn** | **19 16 41.0** | **+0.9** |
| **MJB9** | **Matsu-Tunnel** | **8.77** | **41** | | | **Pn** | **19 16 40.9** | **+0.7** |
| **SSLB** | **Suanglung** | **11.02** | **238** | | Pn | **Pn** | **19 17 10.4** | **-0.7** |
| **TIA** | **Tai'an** | **13.25** | **301** | *e*P | | **P** | **19 17 46.6** | **-4.4** |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.3s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=N,460nm,11.0s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=E,890nm,13.1s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,1μm,14.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.14** | **2** | P | | **P** | **19 17 58.5** | **-2.3** |
| | baz=170,slow=12,SNR=7.9 | | | | | | | |
| USRK | | | | | LR | LR | 19 23 46.3 | |
| | comp=Z,268nm,18.1s,baz=180,slow=39 | | | | | | | |
| **CN2** | **Changchun** | **14.46** | **343** | *e*P | | **P** | **19 18 03.5** | **-0.8** |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **HNS** | **HongShan** | **15.50** | **303** | ⇑P | | **P** | **19 18 19.8** | **+3.8** |
| HNS | | | | *e*S | | **S** | **19 21 20.8** | **+2.9** |
| HNS | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.5s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=N,660nm,15.3s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=E,530nm,14.8s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,690nm,14.6s | | | | | | | |
| **BNX** | **BinXian** | **15.94** | **350** | ⇓P | | **P** | **19 18 21.3** | **+0.5** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,180nm,4.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **16.73** | **30** | P | | **Pn** | **19 18 28.6** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=233,slow=5.1,SNR=1.6 | | | | | | | |
| ASAJ | | | | | LR | LR | 19 25 11.3 | |
| | comp=Z,315nm,20.1s,baz=188,slow=38 | | | | | | | |
| **ENH** | **Enshi** | **18.73** | **276** | P | | **P** | **19 18 51.7** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **19.13** | **25** | *e*P | | Pn | 19 19 04.5 | +7.5 |
| YSS | | | | | MLR | MLR | | |
| | comp=Z,300nm,13.0s | | | | | | | |
| **KLR** | **Kul'dur** | **19.16** | **1** | P | | **P** | **19 18 56.5** | **+0.1** |
| | comp=Z,0.6nm,0.3s,baz=189,slow=8.0,SNR=16 | | | | | | | |
| KLR | | | | | LR | LR | 19 26 44.1 | |
| | comp=Z,139nm,18.5s,baz=174,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **19.16** | **1** | *ce*P | | **P** | **19 18 56.4** | **+0.1** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **XAN** | **Xi'an** | **19.24** | **288** | P | | **P** | **19 18 57.8** | **+0.4** |
| XAN | | | | | pP | Pn | 19 19 01.8 | +3.3 |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=N,570nm,14.5s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=E,370nm,16.5s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,550nm,13.7s | | | | | | | |
| **GUMO** | **Guam** | **20.72** | **139** | | LR | LR | 19 25 45.6 | |
| | comp=Z,75nm,19.3s,baz=50,slow=32 | | | | | | | |
| **HIA** | **Hailar** | **21.06** | **339** | *i* P | | **P** | **19 19 17.2** | **+0.2** |
| HIA | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **CD2** | **Chengdu** | **23.60** | **279** | P | | **P** | **19 19 44.1** | **+0.3** |
| CD2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | | LR | LR | | |
| | comp=N,50nm,12.7s | | | | | | | |
| CD2 | | | | | LR | LR | | |
| | comp=E,520nm,13.2s | | | | | | | |
| CD2 | | | | | LR | LR | | |
| | comp=Z,650nm,12.0s | | | | | | | |
| **LZH** | **Lanzhou** | **23.61** | **292** | *e*P | | **P** | **19 19 46.5** | **+2.4** |
| LZH | | | | | pP | pP | 19 19 53.0 | +1.1 |
| LZH | | | | | sP | sP | 19 19 55.8 | +0.9 |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=N,420nm,14.6s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=E,670nm,14.1s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=Z,810nm,15.7s | | | | | | | |
| **ZEA** | **Zeya** | **23.84** | **354** | *e*P | | **P** | **19 19 43.9** | **-2.0** |
| ZEA | | | | *e* | | | 19 20 02.1 | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.66** | **321** | *ce*P | | **P** | **19 20 02.8** | **0.0** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.66** | **321** | | | **P** | **19 20 01.9** | **-0.8** |
| **SONM** | **Songino Array** | **26.01** | **320** | P | | **P** | **19 20 05.1** | **-0.8** |
| | comp=Z,2.5nm,0.4s,baz=137,slow=10,SNR=55 | | | | | | | |
| SONM | | | | | LR | LR | 19 31 35.5 | |
| | comp=Z,343nm,18.4s,baz=114,slow=39 | | | | | | | |
| **SONM** | **Songino Array** | **26.01** | **320** | P | | **P** | **19 20 04.8** | **-1.1** |
| **GTA** | **Gaotai** | **27.27** | **298** | *e*P | | **P** | **19 20 16.8** | **-0.6** |
| GTA | | | | | sP | pP | 19 20 27.8 | +2.6 |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,140nm,4.4s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=N,270nm,14.9s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=E,340nm,14.9s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,380nm,13.8s | | | | | | | |
| **UBPT** | **Khong Chiam** | **27.79** | **244** | P | | **P** | **19 20 22.8** | **+0.8** |
| UBPT | | | | | IAmb | IAmb | 19 20 23.4 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.11** | **33** | LR | | LR | 19 34 17.5 | |
| | comp=Z,108nm,18.6s,baz=231,slow=39 | | | | | | | |
| **SIJI** | **Sorong** | **30.75** | **180** | LR | | LR | 19 34 34.0 | |
| | comp=Z,73nm,18.1s,baz=84,slow=39 | | | | | | | |
| **GOMU** | **GeErMu** | **30.91** | **291** | P | | **P** | **19 20 47.6** | **-2.4** |
| GOMU | | | | pP | | pP | 19 20 50.1 | -7.9 |
| GOMU | | | | sP | | sP | 19 20 55.3 | -5.7 |
| **CHTO** | **Chiang Mai** | **31.27** | **256** | P | | **P** | **19 20 52.3** | **-0.6** |
| CHTO | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **CHTO** | **Chiang Mai** | **31.27** | **256** | P | | **P** | **19 20 52.2** | **-0.6** |
| CHTO | | | | | IAmb | IAmb | 19 20 53.4 | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **31.44** | **256** | P | | **P** | **19 20 54.1** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **31.44** | **256** | P | | **P** | **19 20 54.4** | **0.0** |
| | comp=Z,1.3nm,0.7s,baz=46,slow=8.4,SNR=20 | | | | | | | |
| CMAR | | | | | PcP | **PcP** | **19 23 48.4** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=36,slow=1.8,SNR=5.6 | | | | | | | |
| CMAR | | | | | LR | LR | 19 35 28.4 | |
| | comp=Z,157nm,18.1s,baz=70,slow=40 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.44** | **256** | *e*P | | **P** | **19 20 54.2** | **-0.2** |
| CMAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.44** | **256** | P | | **P** | **19 20 53.0** | **-1.4** |
| **YAK** | **Yakutsk** | **32.00** | **359** | LR | | LR | 19 34 38.6 | |
| | comp=Z,110nm,18.4s,baz=78,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **32.00** | **359** | *e*P | | **P** | **19 20 58.5** | **-0.3** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,2.0nm,1.1s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,1.0nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **32.00** | **359** | P | | **P** | **19 20 58.1** | **-0.8** |
| YAK | | | | | IAmb | IAmb | 19 20 58.7 | |
| | comp=Z,8.2nm,0.5s | | | | | | | |
| **MA2** | **Magadan** | **32.38** | **19** | LR | | LR | 19 35 33.2 | |
| | comp=Z,84nm,18.5s,baz=212,slow=39 | | | | | | | |
| **MA2** | **Magadan** | **32.38** | **19***ce*P | | | **P** | **19 21 01.8** | **-0.4** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.1s | | | | | | | |
| **MA2** | **Magadan** | **32.38** | **19** | P | | **P** | **19 21 03.6** | **+1.4** |
| **H11N2** | **WAKE ISLAND Hy** | **33.90** | **99** | T | | T | 19 57 18.3 | |
| | baz=296,slow=74,SNR=8.5 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.90** | **99** | T | | T | 19 57 22.4 | |
| | baz=296,slow=74,SNR=7.1 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.92** | **99** | T | | T | 19 57 23.5 | |
| | baz=296,slow=74,SNR=5.3 | | | | | | | |
| **SHL** | **Shillong** | **34.89** | **272** | P | | **P** | **19 21 23.5** | **-1.2** |
| **SHL** | **Shillong** | **34.89** | **272** | P | | **P** | **19 21 23.5** | **-1.2** |
| **SEY** | **Seymchan** | **35.64** | **17** | *i* P | | **P** | **19 21 31.3** | **+0.9** |
| **KULM** | **Kulim** | **37.85** | **235** | P | | **P** | **19 21 50.3** | **+0.6** |
| KULM | | | | | IAmb | IAmb | 19 22 18.2 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **TAPN** | **Taplejung** | **38.02** | **277** | *e*P | | **P** | **19 21 50.5** | **-1.0** |
| | comp=Z,11nm,1.0s | | | | | | | |
| **JIRN** | **Jiri** | **39.25** | **278** | *e*P | | **P** | **19 22 01.8** | **-0.1** |
| | comp=Z,20nm,0.7s | | | | | | | |
| **GUN** | **Gumba** | **39.46** | **278** | *e*P | | **P** | **19 22 03.5** | **-0.1** |
| | comp=Z,60nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **39.95** | **278** | *e*P | | **P** | **19 22 06.9** | **-0.8** |
| | comp=Z,19nm,0.9s | | | | | | | |
| **PKIN** | **Phulchoki** | **39.95** | **278** | *e*P | | **P** | **19 22 06.9** | **-0.8** |
| | comp=Z,10nm,0.5s | | | | | | | |
| **KKN** | **Kakani** | **40.00** | **278** | *e*P | | **P** | **19 22 07.5** | **-0.5** |
| | comp=Z,28nm,0.8s | | | | | | | |
| **GKN** | **Gorkha** | **40.50** | **279** | *e*P | | **P** | **19 22 11.4** | **-0.7** |
| | comp=Z,8.4nm,0.5s | | | | | | | |
| **BATI** | **Baumata** | **40.66** | **191** | LR | | LR | 19 37 31.6 | |
| | comp=Z,64nm,20.7s,baz=336,slow=34 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.90** | **319** | P | | **P** | **19 22 13.4** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **40.90** | **319** | P | | **P** | **19 22 14.2** | **-0.7** |
| | comp=Z,1.1nm,0.4s,baz=110,slow=8.3,SNR=8.1 | | | | | | | |
| ZALV | | | | | PcP | **PcP** | **19 24 14.7** | **-0.3** |
| | comp=Z,1.8nm,0.8s,baz=97,slow=6.1,SNR=6.2 | | | | | | | |
| ZALV | | | | | LR | LR | 19 41 54.7 | |
| | comp=Z,57nm,20.1s,baz=114,slow=40 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.90** | **319** | *e*P | | **P** | **19 22 14.4** | **-0.4** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.90** | **319** | P | | **P** | **19 22 13.8** | **-1.0** |
| **MK31** | **Makanchi Array** | **41.06** | **308** | *i* P | | **P** | **19 22 15.8** | **-0.5** |
| **MK31** | **Makanchi Array** | **41.06** | **308** | P | | **P** | **19 22 15.3** | **-0.9** |
| **MKAR** | **Makanchi Array** | **41.06** | **308** | P | | **P** | **19 22 15.8** | **-0.5** |
| | comp=Z,2.3nm,0.5s,baz=89,slow=10,SNR=47 | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **19 24 15.0** | **-0.7** |
| | comp=Z,1.2nm,0.7s,baz=76,slow=5.1,SNR=6.7 | | | | | | | |
| MKAR | | | | | LR | LR | 19 41 07.4 | |
| | comp=Z,135nm,18.1s,baz=106,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.06** | **308** | *e*P | | **P** | **19 22 16.1** | **-0.2** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.06** | **308** | P | | **P** | **19 22 15.1** | **-1.2** |
| **DANN** | **Dangsing** | **41.16** | **280** | *e*P | | **P** | **19 22 17.1** | **-0.6** |
| | comp=Z,24nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **41.28** | **308** | P | | **P** | **19 22 17.6** | **-0.5** |
| MAKZ | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **MAKZ** | **Makanchi** | **41.28** | **308** | P | | **P** | **19 22 17.6** | **-0.5** |
| **KOLN** | **Koldanda** | **41.45** | **279** | *e*P | | **P** | **19 22 18.8** | **-1.1** |
| | comp=Z,18nm,0.8s | | | | | | | |
| **TIXI** | **Tiksi** | **41.67** | **359** | P | | **P** | **19 22 20.6** | **-0.3** |
| | comp=Z,2.9nm,0.4s,baz=302,slow=7.6,SNR=13 | | | | | | | |
| **TIXI** | **Tiksi** | **41.67** | **359** | P | | **P** | **19 22 20.4** | **-0.4** |
| **PYUN** | **Piuthan** | **41.88** | **280** | *e*P | | **P** | **19 22 22.9** | **-0.6** |
| | comp=Z,17nm,0.7s | | | | | | | |
| **MTN** | **Manton Dam** | **42.64** | **180** | P | | **P** | **19 22 30.2** | **+0.9** |
| MTN | | | | | IAmb | IAmb | 19 22 41.1 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **LEM** | **Lembang** | **43.06** | **215** | LR | | LR | 19 41 40.0 | |
| | comp=Z,50nm,21.0s,baz=13,slow=38 | | | | | | | |
| **BILL** | **Bilibino** | **43.25** | **18** | *e*P | | **P** | **19 22 33.9** | **+0.1** |
| BILL | | | | *e* | | | 19 24 22.4 | |
| BILL | | | | *e*S | | **S** | **19 29 00.8** | **+1.9** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,20nm,3.8s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,264nm,23.0s | | | | | | | |
| **BILL** | **Bilibino** | **43.25** | **18** | P | | **P** | **19 22 34.8** | **+1.0** |
| BILL | | | | | IAmb | IAmb | 19 22 44.8 | |
| | comp=Z,9.2nm,1.5s | | | | | | | |
| **KURK** | **Kurchatov** | **43.95** | **313***ce*P | | | **P** | **19 22 38.5** | **-1.1** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | | |
| **KURK** | **Kurchatov** | **43.95** | **313** | P | | **P** | **19 22 38.7** | **-0.9** |

AAK pmax pmax
comp=Z,4.0nm,0.7s
**AAK Ala-Archa 46.53 302** P **P** **19 22 60.0 -0.5**
AAK IAmb IAmb 19 23 02.3
comp=Z,4.1nm,0.7s
**OTUK Ortayu 47.87 310** P **P** **19 23 10.0 -0.7**
**FITZ Fitzroy Crossi 48.16 187** P **P** **19 23 12.4 -0.7**
FITZ IAmb IAmb 19 23 30.7
comp=Z,7.1nm,1.3s
**BVAR Borovoye Array 49.23 316** P **P** **19 23 20.5 -0.5**
comp=Z,7.2nm,0.6s,baz=68,slow=19,SNR=28
**BRVK Borovoye 49.30 316***ce*P **P** **19 23 20.7 -0.8**
BRVK pmax pmax
comp=Z,12nm,0.7s
**BRVK Borovoye 49.30 316** P **P** **19 23 21.1 -0.4**
**KK31 Karatay Array 49.41 303** P **P** **19 23 22.0 -0.6**
**KKAR Karatay Array 49.41 303** P **P** **19 23 22.2 -0.4**
**KKAR Karatay Array 49.41 303** P **P** **19 23 22.2 -0.4**
**WB0 Warramunga Arr 49.63 176** P **P** **19 23 23.8 -0.5**
**WRA Warramunga Arr 49.80 176** P **P** **19 23 26.6 +0.9**
comp=Z,1.9nm,1.0s,baz=356,slow=8.5,SNR=10
**WRA Warramunga Arr 49.80 176** *eP* **P** **19 23 25.4 -0.2**
WRA pmax pmax
comp=Z,2.0nm,1.0s
**WRA Warramunga Arr 49.80 176** P **P** **19 23 25.8 +0.2**
**GAR Garm 50.09 298** P **P** **19 23 27.9 0.0**
**CHGR Chuyangaron 51.04 297** P **P** **19 23 35.1 +0.1**
**KBL Kabul 51.96 292** P **P** **19 23 42.3 +0.1**
KBL pmax pmax
comp=Z,3.0nm,0.6s
**KBL Kabul 51.96 292** P **P** **19 23 42.3 +0.1**
KBL IAmb IAmb 19 23 48.6
comp=Z,2.5nm,0.6s
**PALK Pallekele 52.37 255** LR LR 19 47 17.5
comp=Z,71nm,21.4s,baz=156,slow=38
**AS31 Alice Springs 53.47 177** P **P** **19 23 54.0 +1.0**
**ASAR Alice Springs 53.47 177** P **P** **19 23 55.2 +2.2**
comp=Z,0.9nm,0.6s,baz=7.6,slow=11,SNR=19
**ASAR Alice Springs 53.47 177** P **P** **19 23 54.6 +1.6**
**SVE Sverdlovsk 54.88 321** *eP* **P** **19 24 00.5 -2.5**
**AB31 Akbulak array 55.98 312** *i* P **P** **19 24 10.6 -0.4**
**ABKAR Akbulak array 55.98 312** P **P** **19 24 10.7 -0.3**
**ARU Arti 56.05 320** P **P** **19 24 11.1 -0.3**
comp=Z,2.3nm,0.4s,baz=93,slow=4.9,SNR=16
ARU LR LR 19 50 46.6
comp=Z,272nm,18.6s,baz=67,slow=39
**ARU Arti 56.05 320***d i*P **P** **19 24 10.8 -0.6**
ARU 19 26 13.2
ARU S **S** **19 31 57.4 -0.7**
ARU pmax pmax
comp=Z,6.0nm,0.7s
**ARU Arti 56.05 320** P **P** **19 24 11.1 -0.3**
**J20K Nowinta River 56.77 30** P **P** **19 24 17.8 +1.4**
**K20K Telida 56.82 31** P **P** **19 24 18.2 +1.4**
K20K IAmb IAmb 19 24 39.0
comp=Z,9.7nm,1.1s
**AKTO Aktyubinsk 57.04 313** P **P** **19 24 19.0 +0.4**
comp=Z,1.3nm,0.5s,baz=68,slow=11,SNR=7.3
AKTO LR LR 19 50 34.3
comp=Z,274nm,19.9s,baz=80,slow=38
**HRA Herat 57.43 294** P **P** **19 24 22.0 +0.1**
HRA IAmb IAmb 19 24 23.1
comp=Z,6.4nm,0.7s
**PPLA Purkeypile 57.69 32** P **P** **19 24 24.1 +1.0**
**CAST Castle Rocks 57.71 31** P **P** **19 24 23.8 +0.7**
CAST IAmb IAmb 19 24 32.2
comp=Z,5.1nm,1.2s
**MDM Murphy Dome 59.27 29** P **P** **19 24 34.7 +0.7**
MDM IAmb IAmb 19 24 53.1
comp=Z,7.8nm,1.2s
**H24K Noodor Dome 59.34 28** P **P** **19 24 35.2 +0.8**
H24K IAmb IAmb 19 24 54.1
comp=Z,4.1nm,1.1s
**ILAR Eielson Array 59.87 29** P **P** **19 24 38.2 +0.2**
comp=Z,0.6nm,0.8s,baz=276,slow=7.8,SNR=5.7
ILAR LR LR 19 53 13.5
comp=Z,60nm,18.3s,baz=322,slow=39
**ILAR Eielson Array 59.87 29** *eP* **P** **19 24 39.3 +1.3**
ILAR pmax pmax
comp=Z,1.0nm,0.8s
**BMAR Burnt Mountain 60.46 26** P **P** **19 24 44.1 +1.9**
**KIRV Kirov 60.67 324** P **P** **19 24 43.2 -0.3**
comp=Z,14nm,0.6s,baz=70,slow=4.8,SNR=5.9
KIRV LR LR 19 54 32.3
comp=Z,163nm,19.8s,baz=280,slow=40
**SCRK Sand Creek 61.23 30** P **P** **19 24 47.4 -0.1**
SCRK IAmb IAmb 19 25 03.1
comp=Z,5.9nm,1.5s
**DOT Dot Lake 61.25 30** P **P** **19 24 48.0 +0.4**
DOT IAmb IAmb 19 25 05.8
comp=Z,7.3nm,1.2s
**BMRM Bremner River 61.49 34** P **P** **19 24 49.6 +0.3**
**M26K Nabesna, AK 61.96 32** P **P** **19 24 53.1 +0.7**
M26K IAmb IAmb 19 24 54.9
comp=Z,12nm,1.4s
**STKA Stephens Creek 62.38 170** P **P** **19 24 57.0 +1.6**
comp=Z,2.5nm,0.8s,baz=325,slow=8.6,SNR=5.3
**STKA Stephens Creek 62.38 170** *eP* **P** **19 24 57.8 +2.4**
STKA pmax pmax
comp=Z,3.0nm,0.8s
**STKA Stephens Creek 62.38 170** P **P** **19 24 55.4 0.0**
**M27K Edge Creek, AK 62.48 32** P **P** **19 24 56.5 +0.5**
M27K IAmb IAmb 19 25 23.4
comp=Z,12nm,1.4s
**EPYK Eagle Plains 63.71 27** P **P** **19 25 04.6 +0.7**
EPYK IAmb IAmb 19 25 17.7
comp=Z,7.1nm,0.8s
**INK Inuvik 64.37 24** P **P** **19 25 08.5 +0.4**
comp=Z,1.5nm,0.5s,baz=354,slow=5.5,SNR=9.0
**INK Inuvik 64.37 24** P **P** **19 25 08.8 +0.7**
INK pmax pmax
comp=Z,10.0nm,1.5s
**INK Inuvik 64.37 24** P **P** **19 25 08.8 +0.7**
INK IAmb IAmb 19 25 34.4
comp=Z,9.9nm,1.5s
**LVZ Lovozero 64.91 335** P **P** **19 25 11.2 -0.5**
LVZ pmax pmax
comp=Z,33nm,1.2s
**LVZ Lovozero 64.91 335** P **P** **19 25 11.2 -0.5**
**SPB2 Spitsbergen Ar 65.63 348** P **P** **19 25 16.6 +0.4**
**SPITS Spitsbergen Ar 65.63 348** P **P** **19 25 16.3 0.0**
SPITS pmax pmax
comp=Z,40nm,1.3s
**A36M Sachs Harbour 65.80 19** P **P** **19 25 18.1 +0.8**
A36M IAmb IAmb 19 25 18.9
comp=Z,8.2nm,0.8s
**M31M Drury Creek, Y 65.89 31** P **P** **19 25 18.9 +0.6**
M31M IAmb IAmb 19 25 31.8
comp=Z,9.5nm,1.5s
**LKRN Lenkeran, Azer 66.39 302** P **P** **19 25 21.8 0.0**
**SEKA Sheki 66.67 305** P **P** **19 25 23.0 -0.6**
**MNGR Mingechevir, A 66.90 305** P **P** **19 25 24.9 -0.1**
**ZKTA Zakatala 66.93 306** P **P** **19 25 25.7 +0.5**
**C36M Paulatuk 67.21 22** P **P** **19 25 26.7 +0.2**
**ARCES ARCESS Array B 67.41 338** P **P** **19 25 27.5 -0.2**
comp=Z,1.2nm,0.4s,baz=60,slow=7.3,SNR=19
ARCES LR LR 19 59 22.6
comp=Z,159nm,18.0s,baz=62,slow=40
**ARCES ARCESS Array B 67.41 338** *eP* **P** **19 25 26.5 -1.2**
ARCES pmax pmax
comp=Z,1.0nm,0.4s
**ARCES ARCESS Array B 67.41 338** P **P** **19 25 27.6 -0.2**
**GANJ Ganja 67.49 305** P **P** **19 25 28.7 -0.1**
**EUNU Eureka 68.22 7** P **P** **19 25 33.0 +0.3**
**OBN Obninsk 68.40 322**‖ *eP* **P** **19 25 32.1 -2.0**
OBN *e* 19 28 00.5
OBN *eS* **S** **19 34 36.2 +2.5**
OBN pmax pmax
comp=Z,4.0nm,0.8s
OBN MLR MLR
comp=Z,169nm,17.0s
**ZEI Tsey 68.41 308** *eP* **P** **19 25 33.5 -1.2**
ZEI pmax pmax
comp=Z,6.0nm,0.8s
**NAX Nakhchivan 68.62 304** P **P** **19 25 35.8 -0.1**
**KBZ Khabaz 68.75 309** P **P** **19 25 36.8 +0.3**
comp=Z,6.3nm,0.8s,baz=69,slow=9.7,SNR=12
**KBZ Khabaz 68.75 309** *i* P **P** **19 25 36.3 -0.2**
KBZ pmax pmax
comp=Z,8.0nm,0.8s
**ONI Oni 68.79 308** P **P** **19 25 36.9 -0.1**
ONI pmax pmax
comp=Z,6.0nm,0.9s
**ONI Oni 68.79 308** P **P** **19 25 36.9 -0.1**
ONI IAmb IAmb 19 25 39.1
comp=Z,5.6nm,0.9s
**KIV Kislovodsk 68.81 309** *eP* **P** **19 25 36.7 -0.4**
KIV pmax pmax
comp=Z,12nm,1.0s
**KIV Kislovodsk 68.81 309** P **P** **19 25 37.0 -0.1**
**SHA1 Shidzhatmaz 68.91 309** *i* P **P** **19 25 37.9 0.0**
**GEVA Gevas 70.70 304** P **P** **19 25 48.7 -0.2**
GEVA IAmb IAmb 19 25 50.1
comp=Z,17nm,1.5s
**FIA1 FINESS Array S 70.81 331** P **P** **19 25 48.2 -0.7**
**FINES FINESS Array B 70.81 331** P **P** **19 25 48.5 -0.4**
comp=Z,5.7nm,0.5s,baz=72,slow=6.0,SNR=81
FINES LR LR 19 57 54.5
comp=Z,151nm,18.4s,baz=274,slow=37
**FINES FINESS Array B 70.81 331** P **P** **19 25 47.8 -1.1**
**RES Resolute Bay 71.31 12** P **P** **19 25 51.9 +0.1**
comp=Z,2.4nm,0.8s,baz=315,slow=5.9,SNR=7.1
**YKA Yellowknife Ar 73.98 26** P **P** **19 26 08.4 +0.6**
comp=Z,1.3nm,0.8s,baz=301,slow=5.4,SNR=17
**AKASG Malin Array Be 74.30 320** P **P** **19 26 09.4 -0.4**
comp=Z,1.0nm,0.4s,baz=56,slow=6.2,SNR=9.3
**AKASG Malin Array Be 74.30 320** *eP* **P** **19 26 09.0 -0.9**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKASG Malin Array Be 74.30 320** P **P** **19 26 09.9 0.0**
**AKBB Malin Array Si 74.30 320** P **P** **19 26 09.7 -0.1**
AKBB pmax pmax
comp=Z,3.0nm,0.7s
**AKBB Malin Array Si 74.30 320** P **P** **19 26 09.7 -0.1**
AKBB IAmb IAmb 19 26 11.7
comp=Z,2.5nm,0.7s
**RAYN Ar Rayn 75.03 289** P **P** **19 26 14.6 -0.1**
RAYN pmax pmax
comp=Z,6.0nm,1.2s
**RAYN Ar Rayn 75.03 289** P **P** **19 26 14.6 -0.1**
RAYN IAmb IAmb 19 26 16.4
comp=Z,5.8nm,1.1s
**HFS Hagfors 76.62 333** P **P** **19 26 22.9 -0.1**
comp=Z,2.9nm,0.5s,baz=104,slow=6.3,SNR=25
**BR131 Keskin Array S 76.71 308** *i* P **P** **19 26 23.6 -0.5**
**BR131 Keskin Array S 76.71 308** P **P** **19 26 23.4 -0.7**
BR131 IAmb IAmb 19 26 25.5
comp=Z,5.2nm,0.8s
**BRTR Keskin Array B 76.71 308** P **P** **19 26 23.8 -0.3**
comp=Z,2.7nm,0.7s,baz=103,slow=5.3,SNR=16
BRTR LR LR 20 05 23.1
comp=Z,192nm,18.1s,baz=330,slow=40
**BRTR Keskin Array B 76.71 308** P **P** **19 26 23.2 -0.9**
**NB2 NORSAR Subarra 77.01 334** P **P** **19 26 24.8 -0.5**
comp=Z,1.7nm,0.5s,baz=49,slow=5.6
**NOA NORSAR Array B 77.01 334** P **P** **19 26 25.1 -0.2**
comp=Z,2.3nm,0.5s,baz=50,slow=5.6,SNR=11
NOA LR LR 20 02 15.6
comp=Z,72nm,18.2s,baz=255,slow=37
**NOA NORSAR Array B 77.01 334** *eP* **P** **19 26 25.2 -0.1**
NOA pmax pmax
comp=Z,2.0nm,0.5s
**SUMG Summit 77.40 357** P **P** **19 26 28.3 +0.6**
**SUMG Summit 77.40 357** P **P** **19 26 28.2 +0.6**
**BUR08 Bucovina Ar. S 78.11 318** P **P** **19 26 31.1 -0.7**
BUR08 IAmb IAmb 19 26 39.9
comp=Z,5.7nm,1.5s
**BURAR Bucovina Array 78.12 318** P **P** **19 26 31.0 -0.8**
**ELL Elmali 80.73 307** P **P** **19 26 45.5 -0.7**
ELL pmax pmax
comp=Z,19nm,0.9s
**ELL Elmali 80.73 307** P **P** **19 26 45.5 -0.7**
**O02D Mt. Diablo Mer 82.17 48** P **P** **19 26 54.9 +1.1**
O02D IAmb IAmb 19 27 08.1
comp=Z,6.1nm,1.2s
**CLL Collm 82.46 326** *i* P **P** **19 26 55.6 +0.6**
CLL *i* PcP **PcP** **19 27 01.8 +1.7**
**SFJD Kangerlussuaq 83.25 1** P **P** **19 26 58.7 0.0**
comp=Z,4.2nm,0.7s,baz=11,slow=3.4,SNR=4.2
**GERES GERESS Array B 83.68 324** P **P** **19 27 01.3 -0.2**
comp=Z,0.7nm,0.8s,baz=41,slow=4.3,SNR=4.4
**GERES GERESS Array B 83.68 324** *eP* **P** **19 27 02.3 +0.8**
GERES pmax pmax
comp=Z,1.0nm,0.8s
**FRB Frobisher Bay 85.23 9** LR LR 20 08 27.5
comp=Z,106nm,18.1s,baz=342,slow=38
**HLID Hailey 85.34 42** P **P** **19 27 10.7 +0.6**
HLID IAmb IAmb 19 27 31.8
comp=Z,5.7nm,1.4s
**KVN Kaiserville 85.80 47** P **P** **19 27 12.1 -0.4**
KVN pmax pmax
comp=Z,6.0nm,1.2s
**KVN Kaiserville 85.80 47** P **P** **19 27 12.1 -0.4**
KVN IAmb IAmb 19 27 15.8
comp=Z,6.1nm,1.2s
**STAL STALIGIAL 85.85 322** P **P** **19 27 11.8 -0.6**
STAL IAmb IAmb 19 27 23.2
comp=Z,4.7nm,1.0s
**ITM Ithomi 85.88 311** P **P** **19 27 11.7 -0.9**
**NVAR Mina Array Bea 86.03 47** P **P** **19 27 14.3 +0.7**
comp=Z,2.2nm,0.7s,baz=308,slow=5.9,SNR=7.9
**NVAR Mina Array Bea 86.03 47** P **P** **19 27 14.5 +0.8**
**NV11 Mina Array Sit 86.12 47** P **P** **19 27 14.8 +0.8**
**EKA Eskdalemuir Ar 86.39 336** P **P** **19 27 15.0 +0.2**
comp=Z,1.3nm,0.5s,baz=48,slow=4.8,SNR=10.0
EKA LR LR 20 08 27.7
comp=Z,338nm,18.7s,baz=354,slow=37
**PDAR Pinedale Array 88.59 40** P **P** **19 27 26.2 +0.2**
comp=Z,1.2nm,0.8s,baz=298,slow=1.9,SNR=8.9
**PDAR Pinedale Array 88.59 40** P **P** **19 27 26.0 +0.1**
**SCHQ Schefferville 94.06 10** LR LR 20 12 17.3
comp=Z,42nm,19.9s,baz=76,slow=37

*IDC **20** 19:20:21.6±1.0, 11°.08N×138°.86E, h0km, mb3.6/9, mb1 3.9/10, mb1mx3.7/39, mbtmp3.7/10, ML4.5/1, MS3.2/2, Ms1 3.2/2, ms1mx2.6/62, Error ellipse: s-maj=35.6km s-min=18.9km az=84.0*
**ISC 20 19:20:26.4±0.8, 11°.1N±0°.1×138°.8E±0°.2, h31km, n12, σ0s36/10, mb3.6/9, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **13.63** | **172** | Pn | | **Pn** | | **19 23 38.3** | **+0.5** |
| | 2.2nm,0.3s,baz=270,slow=6.2,SNR=5.9 | | | | | | | | |
| **KSRS** | **Korea Array** | **28.03** | **341** | LR | | LR | | 19 37 17.7 | |
| | comp=Z,21nm,18.3s,baz=330,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.14** | **188** | P | | **P** | | **19 26 42.2** | **-0.3** |
| | 0.4nm,0.9s,baz=1.1,slow=9.3,SNR=1.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **34.86** | **188** | P | | **P** | | **19 27 14.6** | **-0.5** |
| | 0.5nm,0.5s,baz=18,slow=13,SNR=9.5 | | | | | | | | |
| **KLR** | **Kul'dur** | **38.49** | **353** | P | | **P** | | **19 27 46.0** | **+0.4** |
| | 1.3nm,0.7s,baz=156,slow=7.2,SNR=5.6 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.19** | **286** | P | | **P** | | **19 27 51.9** | **-0.1** |
| | 0.8nm,0.7s,baz=96,slow=6.9,SNR=11 | | | | | | | | |
| **SONM** | **Songino Array** | **45.63** | **330** | P | | **P** | | **19 28 44.3** | **+0.1** |
| | 0.4nm,0.8s,baz=125,slow=7.6,SNR=2.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.30** | **318** | P | | **P** | | **19 30 25.3** | **0.0** |
| | 1.0nm,0.8s,baz=100,slow=9.4,SNR=13 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **68.28** | **323** | P | | **P** | | **19 31 24.5** | **+0.1** |
| | 1.2nm,0.7s,baz=99,slow=14,SNR=5.3 | | | | | | | | |
| **RAR** | **Rarotonga** | **68.30** | **118** | LR | | LR | | 19 55 44.7 | |
| | comp=Z,46nm,21.7s,baz=116,slow=31 | | | | | | | | |
| **ILAR** | **Eielson Array** | **73.36** | **26** | P | | **P** | | **19 31 54.7** | **-0.3** |
| | 0.3nm,0.9s,baz=262,slow=5.4,SNR=1.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.76** | **26** | P | | **P** | | **19 33 12.0** | **-0.1** |
| | 0.2nm,0.6s,baz=291,slow=5.3,SNR=5.1 | | | | | | | | |

**IDC 20 19:43:38.3±1.8, 5°.58S×127°.82E, h0km, mb3.0/1, mb1 3.6/4, mb1mx3.2/34, mbtmp3.4/4, ML3.4/3, Error ellipse: s-maj=54.7km s-min=28.9km az=81.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.81** | **36** | Pn | | Pn | | 19 45 06.5 | +0.7 |
| | 1.7nm,0.3s,baz=165,slow=20,SNR=42 | | | | | | | | |
| SIJI | | | | Sn | | Sn | | 19 45 58.6 | -15 |
| | 1.2nm,0.3s,baz=102,slow=20,SNR=11 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.62** | **157** | Pn | | Pn | | 19 47 19.9 | -0.1 |
| | 0.1nm,0.3s,baz=337,slow=12,SNR=6.2 | | | | | | | | |
| WRA | | | | Sn | | Sn | | 19 50 03.1 | -11 |
| | 0.1nm,0.3s,baz=336,slow=23,SNR=2.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **18.91** | **163** | P | | P | | 19 48 00.8 | 0.0 |
| | 0.2nm,0.3s,baz=347,slow=11,SNR=13 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.86** | **328** | P | | P | | 19 54 25.6 | -0.2 |
| | 0.7nm,1.2s,baz=121,slow=7.2,SNR=2.0 | | | | | | | | |

*IDC **20** 20:01:12.8±1.5, 5°.81N×124°.80E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.1/35, mbtmp3.2/3, Error ellipse: s-maj=39.5km s-min=15.0km az=110.0*
*MAN **20** 20:01:19.6, 6°.25N×126°.59E, h20km, mb4.1, ML2.9, MS2.6*
**ISC 20 20:01:20.9±1.2, 6°.4N±0°.1×126°.2E±0°.1, h100km, n7, σ1s87/10, mb3.2/3, 3C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.52** | **4**‖ | *eP* | | **Pn** | | **20 01 34.3** | **-2.6** |
| MATI | | | | *eS* | | **Sn** | | **20 01 47.5** | **-1.3** |
| **DDMP** | **Don Marcelino,** | **0.60** | **238**‖ | *eP* | | **Pn** | | **20 01 35.6** | **-1.8** |
| DDMP | | | | *eS* | | **Sn** | | **20 01 48.5** | **-1.3** |
| **DAV** | **Davao City (W)** | **0.90** | **315** | Pg | | **Pn** | | **20 01 40.3** | **0.0** |
| | 64nm,0.3s,baz=270,slow=3.0,SNR=4.8 | | | | | | | | |
| DAV | | | | Lg | | Lg | | 20 01 59.0 | |
| | 38nm,0.3s,baz=265,slow=22,SNR=9.9 | | | | | | | | |
| **GSPH** | **General Santos** | **1.31** | **255**‖ | *eP* | | **Pn** | | **20 01 43.6** | **-1.4** |
| GSPH | | | | *i* S | | **Sn** | | **20 02 02.1** | **-1.0** |
| **WRA** | **Warramunga Arr** | **27.39** | **163** | P | | **P** | | **20 06 59.3** | **+2.1** |
| | 0.5nm,0.8s,baz=337,slow=11,SNR=2.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.84** | **166** | P | | **P** | | **20 07 28.6** | **+0.9** |
| | 0.5nm,1.1s,baz=340,slow=6.8,SNR=4.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.07** | **324** | P | | **P** | | **20 10 44.3** | **+1.8** |
| | 0.3nm,0.8s,baz=106,slow=4.8,SNR=2.6 | | | | | | | | |

*IDC **20** 20:16:55.0±1.6, 43°.32N×105°.26W, h0km, mb1 3.5/5, mb1mx3.3/46, mbtmp3.2/5, ML3.2/5, Error ellipse: s-maj=33.6km s-min=10.2km az=155.0*
*NEIC **20** 20:16:57.6±1.4, 43°.59N±0°.06×105°.29W±0°.07, h0km±2km, ML3.3/38, Error ellipse: s-maj=10.8km s-min=8.3km az=338.0*
**ISC 20 20:16:55.8±1.0, 43°.61N±0°.06×105°.24W±0°.06, h0km, n35, σ1s27/34, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.01** | **59** | | | **Pn** | | **20 17 17.9** | **+0.4** |
| **K22A** | **Casper** | **1.34** | **225** | | | **Pg** | | **20 17 20.5** | **-1.1** |
| K22A | | | | IAML | | | | 20 17 48.2 | |
| | comp=E,395nm,0.8s | | | | | | | | |
| **PHWY** | **Pilot Hill** | **2.31** | **184** | | | **Pn** | | **20 17 36.9** | **+1.4** |
| **RWWY** | **Rawlins** | **2.41** | **218** | | | **Pn** | | **20 17 39.0** | **+2.2** |
| RWWY | | | | IAML | | | | 20 18 14.8 | |
| | comp=E,188nm,0.9s | | | | | | | | |
| **N23A** | **Red Feather La** | **2.77** | **191** | | | **Pn** | | **20 17 43.2** | **+1.5** |
| N23A | | | | IAML | | | | 20 18 30.0 | |
| | comp=N,136nm,0.7s | | | | | | | | |
| **RLMT** | **Red Lodge** | **3.26** | **299** | | | **Pn** | | **20 17 50.1** | **+1.7** |
| RLMT | | | | IAML | | | | 20 18 47.0 | |
| | comp=N,72nm,0.6s | | | | | | | | |
| RLMT | | | | IAML | | | | 20 19 02.7 | |
| | comp=N,55nm,2.2s | | | | | | | | |
| **BW06** | **Boulder Array** | **3.27** | **257** | | | **Pn** | | **20 17 50.1** | **+1.6** |
| BW06 | | | | IAML | | | | 20 18 43.0 | |
| | comp=N,66nm,0.8s | | | | | | | | |
| **PD31** | **Pinedale Array** | **3.27** | **257** | | | **Pn** | | **20 17 49.4** | **+0.9** |
| **PDAR** | **Pinedale Array** | **3.27** | **257** | Pn | | **Pn** | | **20 17 50.1** | **+1.5** |
| | comp=N,2.7nm,0.3s,baz=80,slow=16,SNR=60 | | | | | | | | |
| PDAR | | | | Lg | | Lg | | 20 18 35.0 | |
| | comp=N,7.4nm,0.3s,baz=56,slow=30,SNR=4.4 | | | | | | | | |
| **OGNE** | **Ogallala** | **3.57** | **137** | | | **Pn** | | **20 17 54.1** | **+1.5** |
| **ISCO** | **Idaho Springs** | **3.82** | **184** | | | **Pn** | | **20 17 56.5** | **+0.3** |
| **LOHW** | **Long Hollow** | **3.90** | **272** | | | **Pn** | | **20 17 57.2** | **+0.1** |
| LOHW | | | | IAML | | | | 20 19 05.1 | |
| | comp=N,42nm,1.0s | | | | | | | | |
| LOHW | | | | IAML | | | | 20 19 11.7 | |
| | comp=N,34nm,0.8s | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.98** | **279** | | | **Pn** | | **20 17 58.5** | **+0.2** |
| FLWY | | | | IAML | | | | 20 19 15.6 | |
| | comp=N,49nm,1.8s | | | | | | | | |
| **O20A** | **White River Ci** | **4.13** | **214** | | | **Pn** | | **20 18 00.4** | **0.0** |
| **TPAW** | **Teton Pass** | **4.15** | **270** | | | **Pn** | | **20 18 00.8** | **0.0** |
| TPAW | | | | IAML | | | | 20 19 28.8 | |
| | comp=N,51nm,0.9s | | | | | | | | |
| TPAW | | | | IAML | | | | 20 19 50.9 | |
| | comp=N,34nm,1.1s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.37** | **261** | | | **Pn** | | **20 18 03.6** | **0.0** |
| AHID | | | | IAML | | | | 20 19 22.8 | |
| | comp=N,36nm,1.1s | | | | | | | | |
| AHID | | | | IAML | | | | 20 19 23.8 | |
| | comp=N,48nm,0.9s | | | | | | | | |
| **ECR** | **Eagle Creek** | **4.51** | **265** | | | **Pn** | | **20 18 05.7** | **+0.2** |
| **Q24A** | **Divide** | **4.64** | **179** | Pn | | **Pn** | | **20 18 09.5** | **+2.0** |
| **K31A** | **O'Neill** | **4.85** | **100** | Pn | | **Pn** | | **20 18 11.0** | **+1.0** |
| **BOZ** | **Bozeman (W)** | **4.98** | **296** | | | **Pn** | | **20 18 13.4** | **+1.5** |
| BOZ | | | | IAML | | | | 20 19 37.3 | |
| | comp=N,18nm,1.0s | | | | | | | | |
| BOZ | | | | IAML | | | | 20 19 43.2 | |
| | comp=N,24nm,0.8s | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.00** | **156** | Pn | | **Pn** | | **20 18 13.7** | **+1.4** |
| **HWUT** | **Hardware Ranch** | **5.08** | **249** | Pn | | **Pn** | | **20 18 14.8** | **+1.4** |
| **P18A** | **Preston Nutter** | **5.47** | **225** | | | **Pn** | | **20 18 19.8** | **+0.9** |
| **SDCO** | **Great Sand Dun** | **5.86** | **182** | Pn | | **Pn** | | **20 18 25.9** | **+1.6** |
| **PV23** | **Carpenter Ridg** | **5.89** | **210** | | | **Pn** | | **20 18 25.7** | **+1.1** |
| **S22A** | **4UR Ranch, Cre** | **5.98** | **192** | Pn | | **Pn** | | **20 18 28.2** | **+2.4** |
| **PV13** | **Radium Mtn., P** | **6.08** | **208** | | | **Pn** | | **20 18 28.1** | **+0.9** |
| **ECSD** | **EROS Data Cent** | **6.26** | **86** | Pn | | **Pn** | | **20 18 30.0** | **+0.6** |
| **CBKS** | **Cedar Bluff** | **6.34** | **137** | Pn | | **Pn** | | **20 18 32.3** | **+1.8** |
| **T25A** | **Trinidad** | **6.50** | **174** | Pn | | **Pn** | | **20 18 34.2** | **+1.3** |
| **I10CA** | **LAC DU BONNET** | **9.12** | **40** | *i* | | | | 21 13 10.0 | |
| | baz=222,slow=323,SNR=4.7 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.22** | **41** | Pn | | **Pn** | | **20 19 10.0** | **0.0** |
| | comp=N,0.6nm,0.3s,baz=233,slow=12,SNR=2.1 | | | | | | | | |
| ULM | | | | Lg | | Lg | | 20 21 46.3 | |
| | comp=N,0.4nm,0.3s,baz=174,slow=18,SNR=2.9 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.14** | **247** | Pn | | **Pn** | | **20 19 36.4** | **-0.1** |
| | comp=N,0.1nm,0.3s,baz=53,slow=15,SNR=2.9 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **18.31** | **108** | P | | **Pn** | | **20 21 09.9** | **-1.3** |
| | comp=N,0.2nm,0.3s,baz=306,slow=8.7,SNR=1.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.70** | **347** | P | | **Pn** | | **20 21 28.4** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=154,slow=12,SNR=3.8 | | | | | | | | |

*JMA **20** 20:29:31.4±0.2, 36°.28N×142°.22E, h73km, M3.1*
*IDC **20** 20:29:33.7±2.5, 36°.66N×141°.83E, h0km, mb3.6/4, mb1 3.7/5, mb1mx3.5/30, mbtmp3.5/5, ML2.6/1, MS2.8/1, Ms1 2.8/1, ms1mx2.2/77, Error ellipse: s-maj=70.0km s-min=25.2km az=58.0*
**ISC 20 20:29:35.2±1.2, 36°.34N±0°.05×141°.81E±0°.08, h19km, n23, σ2s30/20, mb3.6/4, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHYU** | **Hitachinakayam** | **0.99** | **271** | P | | **Pg** | | **20 29 54.5** | **+0.1** |
| **CHOJ** | **Chosi** | **1.00** | **231** | P | | **Pb** | | **20 29 53.4** | **-0.4** |
| CHOJ | | | | S | | **Sn** | | **20 30 10.2** | **+2.5** |
| **JHO** | **Hitachi** | **1.04** | **286** | P | | **Pg** | | **20 29 54.9** | **-0.5** |
| **JIHU** | **Itakohorinouch** | **1.11** | **251** | P | | **Pg** | | **20 29 55.9** | **-0.7** |
| **JMM** | **Marumori** | **1.73** | **332** | P | | **Pn** | | **20 30 03.1** | **-1.2** |
| **BSO3** | **Boso 3** | **1.86** | **215** | P | | **Pn** | | **20 30 04.3** | **-1.5** |
| **JAG** | **Ashikaga** | **1.91** | **273** | P | | **Pn** | | **20 30 07.0** | **+0.3** |
| **JRY** | **Ryogami san** | **2.38** | **263** | P | | **Pn** | | **20 30 13.5** | **+0.3** |
| **JMK** | **Ichinoseki** | **2.66** | **350** | P | | **Pn** | | **20 30 15.0** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **2.91** | **275** | Pn | | **Pn** | | **20 30 21.4** | **+0.8** |
| | 0.8nm,0.3s,baz=89,slow=15,SNR=56 | | | | | | | | |
| MJAR | | | | Sn | | **Sn** | | **20 30 51.8** | **-3.3** |
| | 0.3nm,0.3s,baz=90,slow=15,SNR=5.4 | | | | | | | | |
| **MAT** | **Matsushiro** | **2.92** | **275** | P | | **Pn** | | **20 30 22.3** | **+1.7** |
| MAT | | | | *eS* | | **Sb** | | **20 31 00.5** | **-1.3** |
| **JHJ** | **Hachijo jima 2** | **3.62** | **208** | Pn | | **Pn** | | **20 30 28.2** | **-1.9** |
| | 16nm,0.3s,baz=298,slow=16,SNR=2.3 | | | | | | | | |
| JHJ | | | | Sn | | **Sn** | | **20 31 07.2** | **-5.1** |
| | 12nm,0.3s,baz=73,slow=17,SNR=1.5 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.52** | **120** | T | | T | | 21 03 45.6 | |
| | baz=312,slow=75,SNR=6.4 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.52** | **120** | T | | T | | 21 03 41.0 | |
| | baz=312,slow=75,SNR=5.4 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.53** | **120** | T | | T | | 21 03 38.2 | |
| | baz=312,slow=75,SNR=4.6 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.21** | **122** | T | | T | | 21 04 33.4 | |
| | baz=314 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.21** | **122** | T | | T | | 21 04 34.0 | |
| | baz=314 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28

0.2nm,0.4s,baz=2.4,slow=8.1,SNR=4.5
**ASAR Alice Springs 60.14 188** P **P** **20 39 45.4 +3.9**
0.5nm,0.9s,baz=8.1,slow=8.5,SNR=4.7

*IDC **20** 20:48:04.7±5.2, 16°.38S×167°.67E, h0km, mb4.1/4, mb1 4.2/4, mb1mx3.9/21, mbtmp4.1/4, Error ellipse: s-maj=137.9km s-min=43.6km az=120.0*
*NOU **20** 20:48:12.8, 17°.01S×168°.22E, h69km, MLv5.0/16, Vanuatu Islands*
*NEIC **20** 20:48:12.2±1.8, 17°.23S±0°.04×167°.3E±0°.2, h10km±1km, mb4.1/7, Error ellipse: s-maj=28.1km s-min=6.5km az=85.0*
**ISC 20 20:48:11.1**±0.8, **17°.17S**±0°.04×**167°.37E**±0°.10, **h10**km, **n30, σ2s04/30, mb4.2/8, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.96** | **126** | P | **Pg** | **20 48 28.7** | **-0.9** |
| **RTV** | **Rentapao** | **1.18** | **122** | P | Pn | 20 48 30.0 | -3.7 |
| **SANVU** | **Saraoutou** | **1.72** | **355** | | **Pn** | **20 48 41.6** | **+0.5** |
| SANVU | | | | Sn | **Sn** | **20 49 04.9** | **+1.7** |
| **SANVU** | **Saraoutou** | **1.72** | **355** | P | **Pn** | **20 48 41.8** | **+0.7** |
| **LIFNC** | **LIFOU** | **3.59** | **182** | Pn | **Pn** | **20 49 06.3** | **-0.6** |
| LIFNC | | | | Sn | **Sn** | **20 49 47.3** | **-2.1** |
| **LIFNC** | **LIFOU** | **3.59** | **182** | P | **Pn** | **20 49 09.3** | **+2.4** |
| **KOUNC** | **Koumac, New Ca** | **4.46** | **220** | P | **Pb** | **20 49 27.0** | **-2.5** |
| **YATNC** | **Mamie plateau,** | **4.89** | **185** | P | **Pn** | **20 49 26.7** | **+2.0** |
| **DZM** | **Mont Dzumac** | **4.96** | **190** | | **Pn** | **20 49 28.6** | **+2.8** |
| **DZM** | **Mont Dzumac** | **4.96** | **190** | P | **Pn** | **20 49 29.2** | **+3.4** |
| **NOUC** | **Port Laguerre** | **5.01** | **191** | P | **Pn** | **20 49 30.5** | **+4.1** |
| **ONTNC** | **Ouen Toro** | **5.19** | **189** | | **Pn** | **20 49 30.9** | **+2.1** |
| **ONTNC** | **Ouen Toro** | **5.19** | **189** | P | **Pn** | **20 49 32.8** | **+4.0** |
| **OUENC** | **Ouen Island, N** | **5.25** | **185** | | **Pn** | **20 49 31.8** | **+2.1** |
| **OUENC** | **Ouen Island, N** | **5.25** | **185** | P | **Pn** | **20 49 32.8** | **+3.1** |
| **PINNC** | **Pines Island,** | **5.42** | **179** | Pn | **Pn** | **20 49 33.5** | **+1.5** |
| **PINNC** | **Pines Island,** | **5.42** | **179** | P | **Pn** | **20 49 34.1** | **+2.1** |
| **STKA** | **Stephens Creek** | **27.55** | **233** | P | **P** | **20 53 59.2** | **+0.8** |
| | 1.7nm,0.6s,baz=64,slow=11,SNR=5.0 | | | | | | |
| **STKA** | **Stephens Creek** | **27.55** | **233** | P | **P** | **20 53 57.8** | **-0.6** |
| STKA | | | | IAmb | IAmb | 20 54 00.6 | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.36** | **260** | P | **P** | **20 54 31.7** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 20 54 31.9 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **260** | P | **P** | **20 54 31.8** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=90,slow=9.0,SNR=8.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **260** | P | **P** | **20 54 31.2** | **-1.5** |
| **AS31** | **Alice Springs** | **31.97** | **253** | P | **P** | **20 54 36.9** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 20 54 38.3 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **31.97** | **253** | P | **P** | **20 54 37.5** | **-0.2** |
| | comp=Z,3.9nm,0.7s,baz=74,slow=9.1,SNR=58 | | | | | | |
| **ASAR** | **Alice Springs** | **31.97** | **253** | P | **P** | **20 54 36.9** | **-0.8** |
| **KNRA** | **Kununurra** | **37.02** | **267** | P | **P** | **20 55 20.3** | **-1.2** |
| **FAKI** | **Fak Fak** | **37.27** | **288** | P | **P** | **20 55 24.6** | **+1.0** |
| FAKI | | | | IAmb | IAmb | 20 55 40.2 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.72** | **262** | P | **P** | **20 55 43.0** | **-1.1** |
| **QSPA** | **South Pole Qui** | **72.87** | **180** | P | **P** | **20 59 41.1** | **+0.9** |
| QSPA | | | | IAmb | IAmb | 21 00 00.6 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **84.51** | **324** | P | P | 21 00 37.5 | -7.0 |
| | comp=Z,1.4nm,1.0s,baz=127,slow=3.9,SNR=5.6 | | | | | | |

*IDC **20** 21:05:57.0±1.4, 34°.63N×46°.09E, h0km, mb3.4/5, mb1 3.6/6, mb1mx3.3/38, mbtmp3.5/6, ML3.3/1, MS2.9/2, Ms1 2.9/2, ms1mx2.5/57, Error ellipse: s-maj=29.7km s-min=24.8km az=0.0*
*TEH **20** 21:05:58.4, 34°.57N×46°.17E, h7km, ML3.6*
*ISN **20** 21:05:59.2±1.2, 34°.59N×46°.22E, h17km±7km, ML3.6*
*AZER **20** 21:05:59.2±4.1, 34°.08N×48°.11E, h10km, Error ellipse: s-maj=46.7km s-min=29.9km az=93.0*
*DDA **20** 21:06:13.6±0.0, 35°.46N×44°.93E, h7km±4km, ML3.0*
**ISC 20 21:05:57.8**±1.1, **34°.58N**±0°.02×**46°.12E**±0°.02, **h7**km±8km, **n74, σ2s16/93, mb3.5/4, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.25** | **61** | *e*Pn | **Pg** | **21 06 02.8** | **-0.1** |
| IDHR | | | | *e*Sg | **Sg** | **21 06 07.0** | **+0.7** |
| **IGHG** | **Ghaleghazi** | **0.45** | **123** | *e*Sg | **Sg** | **21 06 13.1** | **+0.8** |
| IGHG | | | | *e*Pg | **Pg** | **21 06 06.8** | **+0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.82** | **111** | *e*Pg | **Pg** | **21 06 13.7** | **+0.2** |
| KCHF | | | | *e*Sg | **Sb** | **21 06 25.6** | **-0.2** |
| **KER** | **Kermanshah** | **0.86** | **103** | *e*Pg | **Pg** | **21 06 13.9** | **-0.4** |
| KER | | | | *e*Sg | **Sg** | **21 06 26.1** | **+0.7** |
| **SNGE** | **Sanandaj** | **1.13** | **63** | *e*Pg | **Pg** | **21 06 18.4** | **-1.2** |
| **IBZA** | **Bozab** | **1.44** | **94** | *e*Pg | **Pg** | **21 06 25.5** | **0.0** |
| IBZA | | | | *e* | | 21 06 53.0 | |
| | comp=Z,15μm,0.3s | | | | | | |
| **IBDR** | **Badra** | **1.47** | **186** | *e*Pg | **Pg** | **21 06 27.0** | **+1.0** |
| IBDR | | | | *e*Sg | **Sg** | **21 06 46.0** | **+0.9** |
| IBDR | | | | AML | AML | 21 06 51.2 | |
| | comp=E,908nm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 21 06 53.2 | |
| | comp=N,1μm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.68** | **300** | *e*Pn | **Pg** | **21 06 30.0** | **0.0** |
| IKRK | | | | *e*Sn | **Sg** | **21 06 54.0** | **+2.3** |
| IKRK | | | | AML | AML | 21 06 55.8 | |
| | comp=E,948nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 21 06 56.3 | |
| | comp=N,822nm,0.4s | | | | | | |
| **IALM** | **Almabolaq** | **1.71** | **80** | *e*Pn | **Pb** | **21 06 29.7** | **-0.1** |
| **IKFM** | **Kafar-mosalman** | **1.78** | **126** | *e*Pn | **Pb** | **21 06 30.5** | **-0.2** |
| **IDOB** | **Doab** | **1.88** | **114** | *e*Pn | **Pb** | **21 06 32.5** | **-0.1** |
| IDOB | | | | *e* | | 21 07 05.0 | |
| | comp=Z,4μm,0.4s | | | | | | |
| **BHD** | **Baghdad** | **1.95** | **228** | *e*Pn | **Pb** | **21 06 34.0** | **+0.4** |
| BHD | | | | *e*Sn | **Sg** | **21 07 00.0** | **-0.4** |
| **HSAM** | **Samen** | **2.08** | **99** | *e*Pn | **Pb** | **21 06 35.9** | **-0.3** |
| **MAHB** | **Mahabad** | **2.21** | **351** | *e*Pn | **Pb** | **21 06 38.0** | **-0.3** |
| MAHB | | | | *e* | | 21 07 13.3 | |
| | comp=Z,7μm,0.3s | | | | | | |
| **BMDN** | **Meydan** | **2.42** | **111** | *e*Pn | **Pb** | **21 06 40.1** | **-1.7** |
| BMDN | | | | *e* | | 21 07 21.4 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **HAGD** | **Aghdareh** | **2.50** | **84** | *e*Pn | **Pn** | **21 06 41.2** | **+2.0** |
| HAGD | | | | *e* | | 21 07 31.2 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.84** | **180** | *e*Pn | **Pn** | **21 06 46.0** | **+2.3** |
| RAFI | | | | *e*Sn | **Sn** | **21 07 21.0** | **+2.8** |
| RAFI | | | | AML | AML | 21 07 37.1 | |
| | comp=E,208nm,0.4s | | | | | | |
| **ZNJK** | **Zanjan** | **2.96** | **44** | *e*Pn | **Pn** | **21 06 47.0** | **+1.6** |
| **QABG** | **Abgarm-Qazvin** | **3.05** | **67** | *e*Pn | **Pn** | **21 06 49.5** | **+2.7** |
| **IAZR** | **Azarshahr** | **3.10** | **358** | *e*Pn | **Pn** | **21 06 50.2** | **+2.8** |
| **IBST** | **Bostanabad** | **3.18** | **11** | *e*Pn | **Pn** | **21 06 51.0** | **+2.5** |
| **ASAO** | **Ashtian** | **3.22** | **89** | *e*Pn | **Pn** | **21 06 52.1** | **+3.0** |
| **IRAZ** | **Razeghan** | **3.23** | **74** | *e*Pn | **Pn** | **21 06 51.5** | **+2.2** |
| IRAZ | | | | *e* | | 21 07 52.4 | |
| | comp=Z,800nm,0.8s | | | | | | |
| **KHMZ** | **Khomeyn** | **3.29** | **104** | *e*Pn | **Pn** | **21 06 52.5** | **+2.5** |
| **YOVA** | **Hakkari_Yksek** | **3.35** | **334** | P | **Pn** | **21 06 53.1** | **+2.2** |
| YOVA | | | | S | **Sn** | **21 07 34.8** | **+3.7** |
| **CUKT** | **Cukurca** | **3.36** | **323** | P | **Pn** | **21 06 52.2** | **+1.4** |
| CUKT | | | | S | **Sn** | **21 07 33.4** | **+2.3** |
| CUKT | | | | *i* AML | AML | 21 07 55.0 | |
| | comp=Z,140nm,0.5s | | | | | | |
| **ISRB** | **Sarab** | **3.48** | **21** | *e*Pn | **Pn** | **21 06 54.6** | **+2.0** |
| ISRB | | | | *e* | | 21 07 53.6 | |
| | comp=Z,677nm,0.7s | | | | | | |
| **HAKT** | **HAKKARI** | **3.56** | **327** | P | **Pn** | **21 06 55.6** | **+1.8** |
| HAKT | | | | S | **Sn** | **21 07 31.0** | **-5.3** |
| HAKT | | | | *i* AML | AML | 21 07 57.0 | |
| | comp=Z,60nm,0.6s | | | | | | |
| **ISHB** | **Shabestar** | **3.72** | **354** | *e*Pn | **Pn** | **21 06 58.0** | **+2.0** |
| ISHB | | | | *e* | | 21 07 10.4 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IMHD** | **Mahdasht** | **3.89** | **72** | *e*Pn | **Pn** | **21 06 59.2** | **+1.1** |
| **AMIS** | **Naft Sefid** | **3.94** | **137** | *e*Pn | **Pn** | **21 07 00.2** | **+1.5** |
| AMIS | | | | *e* | | 21 07 49.6 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **IMRD** | **Marand** | **4.14** | **355** | *e* | | 21 07 25.7 | |
| | comp=Z,572nm,0.6s | | | | | | |
| IMRD | | | | *e*Pn | **Pn** | **21 07 04.8** | **+3.1** |
| **GHVR** | **GHOM** | **4.27** | **90** | *e*Pn | **Pn** | **21 07 06.0** | **+2.6** |
| **ORD** | **Ordubad** | **4.34** | **359** | P | **Pb** | **21 07 16.4** | **+1.8** |
| | SNR=4.8 | | | | | | |
| ORD | | | | S | **Sg** | **21 08 17.2** | **-0.1** |
| **LRK** | **Lerik** | **4.43** | **23** | P | **Pn** | **21 07 08.2** | **+2.5** |
| LRK | | | | S | **Sn** | **21 08 01.6** | **+3.9** |
| **PERV** | **Siirt/Pervari-** | **4.43** | **320** | P | **Pn** | **21 07 07.1** | **+1.4** |
| PERV | | | | S | **Sn** | **21 07 55.6** | **-2.1** |
| PERV | | | | *i* AML | AML | 21 08 04.0 | |
| | comp=Z,101nm,0.5s | | | | | | |
| PERV | | | | *i* AML | AML | 21 08 05.0 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **QAMS** | **Qamsar** | **4.45** | **99** | *e*Pn | **Pn** | **21 07 09.0** | **+2.9** |
| QAMS | | | | *e* | | 21 08 31.8 | |
| | comp=Z,485nm,0.4s | | | | | | |
| **GRMI** | **Germi** | **4.46** | **18** | *e*Pn | **Pn** | **21 07 08.4** | **+2.4** |
| **ASTR** | **Astara** | **4.52** | **28** | P | **Pn** | **21 07 09.0** | **+2.2** |
| ASTR | | | | S | **Sn** | **21 08 01.9** | **+2.3** |
| **NAX** | **Nakhchivan** | **4.62** | **354** | P | **Pb** | **21 07 21.7** | **+2.5** |
| | SNR=5.8 | | | | | | |
| NAX | | | | S | **Sg** | **21 08 25.0** | **-1.1** |
| **IVRN** | **Varamin** | **4.63** | **83** | *e*Pn | **Pn** | **21 07 11.7** | **+3.3** |
| **LKRN** | **Lenkeran, Azer** | **4.65** | **27** | P | **Pn** | **21 07 11.1** | **+2.7** |
| LKRN | | | | S | **Sn** | **21 08 03.2** | **+0.5** |
| **YRD** | **Yardimli** | **4.66** | **21** | P | **Pn** | **21 07 12.3** | **+3.6** |
| YRD | | | | S | **Sn** | **21 08 08.3** | **+5.2** |
| **MIDY** | **Mardin/Midyat-** | **4.76** | **308** | P | **Pn** | **21 07 11.3** | **+1.2** |
| **SBZ** | **Shahbuz** | **4.83** | **355** | P | **Pb** | **21 07 23.5** | **+0.5** |
| | SNR=10.0 | | | | | | |
| SBZ | | | | S | **Sg** | **21 08 31.6** | **-1.4** |
| **QRD** | **Qoradiz** | **4.97** | **11** | P | Pb | 21 07 19.7 | -5.4 |
| QRD | | | | S | **Sb** | **21 08 23.5** | **-1.6** |
| **GLBA** | **Clilabad** | **5.00** | **21** | P | **Pn** | **21 07 16.2** | **+2.9** |
| | SNR=4.6 | | | | | | |
| GLBA | | | | S | **Sn** | **21 08 16.9** | **+5.5** |
| **BLIS** | **Bitlis-Merkez** | **5.01** | **321** | P | **Pn** | **21 07 11.6** | **-2.0** |
| **KRSH** | **Karshahi** | **5.02** | **95** | *e*Pn | **Pn** | **21 07 14.3** | **+0.6** |
| **ISFB** | **Sefidab** | **5.06** | **91** | *e*Pn | **Pn** | **21 07 16.2** | **+1.9** |
| **BLQ** | **Beylaqan** | **5.26** | **12** | P | Pn | 21 07 23.3 | +6.4 |
| BLQ | | | | S | **Sb** | **21 08 30.5** | **-3.1** |
| **SVAN** | **Silvan-Diyarba** | **5.34** | **313** | P | **Pn** | **21 07 18.9** | **+0.9** |
| **IGAR** | **Gharneh** | **5.40** | **112** | *e*Pn | **Pn** | **21 07 19.8** | **+0.7** |
| **AGDM** | **Agdam** | **5.58** | **8** | P | Pb | 21 07 29.7 | -5.9 |
| AGDM | | | | S | **Sb** | **21 08 40.6** | **-2.1** |
| **GNI** | **Garni** | **5.67** | **349** | Pg | **Pb** | **21 07 38.5** | **+1.3** |
| | comp=Z,0.4nm,0.3s,baz=346,slow=20,SNR=2.2 | | | | | | |
| GNI | | | | LR | LR | 21 09 44.3 | |
| | comp=Z,35nm,21.1s,baz=349,slow=40 | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **5.71** | **337** | P | **Pn** | **21 07 24.8** | **+1.5** |
| **NASN** | **Na'in** | **5.85** | **106** | *e*Pn | **Pn** | **21 07 28.0** | **+2.7** |
| **IRAM** | **Ramesheh** | **5.93** | **116** | *e*Pn | **Pn** | **21 07 27.3** | **+1.0** |
| **HANI** | **Diyarbakir_Han** | **5.99** | **311** | P | **Pn** | **21 07 27.1** | **+0.1** |
| **KOVA** | **Elazig, Kovanc** | **6.53** | **311** | P | **Pn** | **21 07 35.3** | **+0.8** |
| **ASF** | **Jabal al Asfar** | **8.08** | **255** | Pn | **Pn** | **21 07 56.6** | **+0.9** |
| | comp=Z,0.4nm,0.3s,baz=70,slow=18,SNR=1.7 | | | | | | |
| **RAYN** | **Ar Rayn** | **11.03** | **183** | Pn | **Pn** | **21 08 35.3** | **-0.8** |
| **BANOM** | **Banah** | **12.31** | **132** | Pn | **Pn** | **21 08 51.4** | **-2.3** |
| BANOM | | | | Sn | Sn | 21 11 00.4 | -11 |
| **MSFE** | **Esma-Masafi** | **12.64** | **134** | Pn | **Pn** | **21 08 55.9** | **-2.4** |
| **UOSS** | **Minazif** | **12.98** | **135** | Pn | **Pn** | **21 09 00.6** | **-2.2** |
| **HATD** | **Hatta, Dubai** | **13.03** | **136** | Pn | **Pn** | **21 08 59.3** | **-4.2** |
| **ASHO** | **Ashiyiah** | **13.10** | **136** | Pn | **Pn** | **21 09 01.2** | **-3.3** |
| ASHO | | | | Sn | Sn | 21 11 20.1 | -10 |
| **WSAR** | **Wadi Sarin** | **15.72** | **133** | Pn | **Pn** | **21 09 37.2** | **-2.6** |
| | comp=Z,0.4nm,0.3s,baz=311,slow=12,SNR=9.0 | | | | | | |
| WSAR | | | | Sn | Sn | 21 12 21.5 | -13 |
| | comp=Z,0.1nm,0.3s,baz=174,slow=15,SNR=1.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **20.27** | **328** | P | **P** | **21 10 33.1** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=134,slow=8.9,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.76** | **55** | P | **P** | **21 12 05.4** | **+0.5** |
| | comp=Z,0.2nm,0.6s,baz=251,slow=13,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **29.79** | **341** | P | **P** | **21 12 04.1** | **-0.8** |
| | comp=Z,3.3nm,0.9s,baz=163,slow=7.3,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.43** | **253** | P | **P** | **21 14 17.4** | **-0.2** |
| | comp=Z,0.3nm,0.6s,baz=56,slow=6.6,SNR=1.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.38** | **95** | P | **P** | **21 14 48.6** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=286,slow=7.0,SNR=4.2 | | | | | | |
| **MA2** | **Magadan** | **67.66** | **32** | LR | LR | 21 51 18.8 | |
| | comp=Z,26nm,21.6s,baz=16,slow=40 | | | | | | |

*NOU **20** 21:16:45.7, 39°.96S×177°.18E, h13km, MLv4.4/7, Off E. Coast of N. Island, N.Z.*
*WEL **20** 21:16:49.9, 40°.5±2°×17°.7E±°, h37km±3km, M3.3/63, ML3.5/64, MLv3.3/63, Error ellipse: s-maj=0.0km s-min=0.0km az=75.2*
**ISC 20 21:16:49.1**±1.3, **39°.86S**±0°.03×**177°.02E**±0°.04, **h45**km±7km, **n133, σ1s21/150, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAHZ** | **Kahuranaki** | **0.13** | **303** | P | **Pn** | **21 16 56.3** | **-0.3** |
| KAHZ | | | | S | **Sn** | **21 17 01.1** | **-0.7** |
| **PXZ** | **Pawanui** | **0.20** | **215** | P | **Pn** | **21 16 57.3** | **+0.8** |
| PXZ | | | | S | **Sn** | **21 17 03.9** | **+1.5** |
| **CKHZ** | **Cape Kidnapper** | **0.21** | **13** | P | **Pn** | **21 16 57.1** | **+0.1** |
| CKHZ | | | | S | **Sn** | **21 17 02.4** | **-0.1** |
| **MCHZ** | **McNeill Hill** | **0.49** | **329** | P | **Pn** | **21 16 59.6** | **-0.3** |
| MCHZ | | | | S | **Sn** | **21 17 06.7** | **-0.9** |
| **WPHZ** | **Waipukurau** | **0.49** | **245** | P | **Pn** | **21 17 00.6** | **+0.7** |
| WPHZ | | | | S | **Sn** | **21 17 08.3** | **+0.7** |
| **PRHZ** | **Porangahau** | **0.50** | **216** | P | **Pn** | **21 17 01.2** | **+1.2** |
| PRHZ | | | | S | **Sn** | **21 17 09.7** | **+1.8** |
| **KRHZ** | **Kereru** | **0.55** | **294** | P | **Pn** | **21 17 00.2** | **-0.5** |
| KRHZ | | | | S | **Sn** | **21 17 07.4** | **-1.6** |
| **ARHZ** | **Aropaoanui** | **0.60** | **358** | P | **Pn** | **21 17 01.6** | **+0.2** |
| ARHZ | | | | S | **Sn** | **21 17 10.4** | **+0.3** |
| **PNHZ** | **Pukenui** | **0.63** | **265** | P | **Pn** | **21 17 02.0** | **+0.2** |
| PNHZ | | | | S | **Sn** | **21 17 10.8** | **-0.1** |
| **KWHZ** | **Kaweka Forest** | **0.64** | **314** | P | **Pn** | **21 17 01.4** | **-0.5** |
| KWHZ | | | | S | **Sn** | **21 17 09.7** | **-1.3** |
| **ANWZ** | **Angora Road** | **0.73** | **215** | P | **Pn** | **21 17 04.1** | **+1.1** |
| ANWZ | | | | S | **Sn** | **21 17 15.3** | **+2.2** |
| **NMHZ** | **Naumai** | **0.78** | **348** | P | **Pn** | **21 17 04.1** | **+0.2** |
| NMHZ | | | | S | **Sn** | **21 17 14.3** | **-0.2** |
| **DVHZ** | **Dannevirke** | **0.78** | **236** | P | **Pn** | **21 17 04.5** | **+0.7** |
| DVHZ | | | | S | **Sn** | **21 17 15.4** | **+0.9** |
| **WHHZ** | **Waihua** | **0.80** | **12** | P | **Pn** | **21 17 07.3** | **+3.2** |
| WHHZ | | | | S | **Sn** | **21 17 18.5** | **+3.6** |
| **BKZ** | **Black Stump Fm** | **0.81** | **330** | P | **Pn** | **21 17 03.9** | **-0.3** |
| BKZ | | | | S | **Sn** | **21 17 14.0** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **0.81** | **330** | P | **Pn** | **21 17 04.0** | **-0.2** |
| **BHHZ** | **Black Hill Sta** | **0.82** | **297** | P | **Pn** | **21 17 04.1** | **-0.4** |
| BHHZ | | | | S | **Sn** | **21 17 13.3** | **-2.3** |
| **TSZ** | **Takapari Road** | **0.83** | **256** | P | **Pn** | **21 17 04.8** | **+0.3** |
| TSZ | | | | S | **Sn** | **21 17 15.4** | **-0.3** |
| **RAHZ** | **Arahi** | **0.95** | **3** | P | **Pn** | **21 17 06.3** | **+0.3** |
| RAHZ | | | | S | **Sn** | **21 17 18.9** | **+0.4** |
| **KNZ** | **Kokohu** | **0.98** | **31** | P | **Pn** | **21 17 06.8** | **+0.3** |
| **MHGZ** | **Mahia Peninsul** | **0.99** | **44** | P | **Pn** | **21 17 07.4** | **+0.8** |
| **BFZ** | **Birch Farm** | **1.01** | **216** | P | **Pn** | **21 17 07.6** | **+0.7** |
| BFZ | | | | S | **Sn** | **21 17 19.8** | **-0.1** |
| **MTHZ** | **Maungataniwha** | **1.02** | **352** | P | **Pn** | **21 17 07.1** | **0.0** |
| MTHZ | | | | S | **Sn** | **21 17 19.2** | **-1.1** |
| **PRWZ** | **Pori Road** | **1.06** | **229** | P | **Pn** | **21 17 08.5** | **+1.0** |
| **MOVZ** | **Moawhango** | **1.08** | **295** | P | **Pn** | **21 17 08.1** | **+0.2** |
| MOVZ | | | | S | **Sn** | **21 17 20.8** | **-0.9** |
| **POWZ** | **Post Office Ro** | **1.09** | **241** | P | **Pn** | **21 17 09.3** | **+1.3** |
| **SNGZ** | **Shannon Statio** | **1.11** | **13** | P | **Pn** | **21 17 08.6** | **+0.4** |
| **MRHZ** | **Matea Rd** | **1.13** | **336** | P | **Pn** | **21 17 08.8** | **+0.2** |
| **PRGZ** | **Paritu Road** | **1.16** | **36** | P | **Pn** | **21 17 09.3** | **+0.5** |
| **HATZ** | **Hinemaiaia** | **1.21** | **323** | P | **Pn** | **21 17 10.0** | **+0.5** |
| **TUVZ** | **Tukino** | **1.21** | **299** | P | **Pn** | **21 17 10.7** | **+1.0** |
| **CPWZ** | **Castlepoint** | **1.22** | **211** | P | **Pn** | **21 17 10.7** | **+1.0** |
| **WNVZ** | **Wahianoa** | **1.22** | **296** | P | **Pn** | **21 17 10.8** | **+0.9** |
| **ETVZ** | **East Tongariro** | **1.25** | **305** | P | **Pn** | **21 17 11.7** | **+1.5** |
| **RTZ** | **Ruatahuna** | **1.25** | **359** | P | **Pn** | **21 17 10.3** | **+0.1** |
| **WHVZ** | **Whangaehu Hut** | **1.25** | **297** | P | **Pn** | **21 17 11.4** | **+1.0** |
| **TIWZ** | **Tintock** | **1.26** | **223** | P | **Pn** | **21 17 10.9** | **+0.6** |
| **OTVZ** | **Oturere** | **1.26** | **303** | P | **Pn** | **21 17 11.3** | **+0.9** |
| **RITZ** | **Rihia Road** | **1.26** | **314** | P | **Pn** | **21 17 11.1** | **+0.8** |
| **SNVZ** | **South Ngauruho** | **1.26** | **302** | P | **Pn** | **21 17 11.3** | **+0.8** |
| **TMVZ** | **Te Maari** | **1.26** | **306** | P | **Pn** | **21 17 11.2** | **+0.8** |
| **DRZ** | **Dome Shelter** | **1.27** | **297** | P | **Pn** | **21 17 12.5** | **+1.9** |
| **TRVZ** | **Turoa** | **1.27** | **296** | P | **Pn** | **21 17 11.7** | **+1.1** |
| **FWVZ** | **Far West T-bar** | **1.28** | **298** | P | **Pn** | **21 17 11.6** | **+0.7** |
| **MTVZ** | **Mangateitei** | **1.29** | **291** | P | **Pn** | **21 17 12.0** | **+1.3** |
| **NTVZ** | **North Tongarir** | **1.29** | **306** | P | **Pn** | **21 17 11.6** | **+0.8** |
| **NGZ** | **Ngauruhoe** | **1.29** | **302** | P | **Pn** | **21 17 11.8** | **+0.9** |
| **RIGZ** | **Rimuhau** | **1.29** | **27** | P | **Pn** | **21 17 11.0** | **+0.2** |
| **NNVZ** | **North Ngauruho** | **1.31** | **304** | P | **Pn** | **21 17 12.0** | **+1.0** |
| **KRVZ** | **Karewarewa** | **1.31** | **305** | P | **Pn** | **21 17 12.2** | **+1.1** |
| **WTVZ** | **West Tongariro** | **1.33** | **304** | P | **Pn** | **21 17 12.7** | **+1.3** |
| **OHWZ** | **Ohakea** | **1.35** | **255** | P | **Pn** | **21 17 15.4** | **+3.9** |
| **KATZ** | **Kakaramea** | **1.35** | **311** | P | **Pn** | **21 17 13.8** | **+2.1** |
| **MRZ** | **Mangatainoka R** | **1.36** | **234** | P | **Pn** | **21 17 12.0** | **+0.4** |
| **RATZ** | **Rangitukua** | **1.39** | **316** | P | **Pn** | **21 17 13.7** | **+1.6** |
| **MUGZ** | **Murupara** | **1.40** | **352** | P | **Pn** | **21 17 12.5** | **+0.4** |
| **ALRZ** | **Allen Road** | **1.40** | **338** | P | **Pn** | **21 17 12.5** | **+0.2** |
| **RAGZ** | **Rawiri** | **1.40** | **13** | P | **Pn** | **21 17 12.3** | **0.0** |
| **PKVZ** | **Pokaka** | **1.41** | **293** | P | **Pn** | **21 17 14.4** | **+1.9** |
| **PRRZ** | **Plateau Road** | **1.45** | **340** | P | **Pn** | **21 17 13.0** | **+0.1** |
| **WHTZ** | **Whakaora** | **1.45** | **325** | P | **Pn** | **21 17 14.6** | **+1.7** |
| **TWVZ** | **Taurewa** | **1.46** | **302** | P | **Pn** | **21 17 16.3** | **+3.2** |
| **WPRZ** | **Whakapapatarin** | **1.50** | **333** | P | **Pn** | **21 17 13.7** | **+0.1** |
| **TMWZ** | **Te Maipa** | **1.51** | **214** | P | **Pn** | **21 17 13.8** | **+0.1** |
| **WATZ** | **Wairara** | **1.52** | **319** | P | **Pn** | **21 17 17.2** | **+3.2** |
| **HOWZ** | **Holdsworth Sta** | **1.54** | **228** | P | **Pn** | **21 17 14.1** | **-0.1** |
| **TKGZ** | **Te Karaka** | **1.56** | **25** | P | **Pn** | **21 17 14.3** | **-0.1** |
| **WAZ** | **Wanganui** | **1.57** | **273** | P | **Pn** | **21 17 16.5** | **+2.0** |
| **RRRZ** | **Republican Roa** | **1.57** | **345** | P | **Pn** | **21 17 15.0** | **+0.4** |
| **HRRZ** | **Handcock Road** | **1.58** | **339** | P | **Pn** | **21 17 15.3** | **+0.6** |
| **MWZ** | **Matawai** | **1.58** | **15** | P | **Pn** | **21 17 14.4** | **-0.2** |
| **URZ** | **Urewera** | **1.60** | **3** | P | **Pn** | **21 17 14.7** | **-0.2** |
| **URZ** | **Urewera** | **1.60** | **3** | P | **Pn** | **21 17 14.8** | **-0.2** |
| **KUTZ** | **Kaahu Road** | **1.66** | **326** | P | **Pn** | **21 17 15.8** | **+0.1** |
| **CNGZ** | **Carnagh Statio** | **1.66** | **34** | P | **Pn** | **21 17 15.9** | **+0.2** |
| **HSRZ** | **Hossack Road** | **1.66** | **339** | P | **Pn** | **21 17 16.0** | **+0.2** |
| **GRRZ** | **Galatos Road** | **1.67** | **335** | P | **Pn** | **21 17 16.6** | **+0.7** |
| **TARZ** | **Mount Tarawera** | **1.67** | **346** | P | **Pn** | **21 17 16.4** | **+0.4** |
| **HLRZ** | **Highlands Stat** | **1.69** | **342** | P | **Pn** | **21 17 18.9** | **+2.7** |
| **OGWZ** | **Otaki Gorge** | **1.70** | **235** | P | **Pn** | **21 17 16.4** | **+0.1** |
| **MTW** | **Mount Morrison** | **1.73** | **221** | P | **Pn** | **21 17 16.3** | **-0.5** |
| **EDRZ** | **Edgecumbe** | **1.77** | **353** | P | **Pn** | **21 17 17.5** | **+0.2** |
| **OMRZ** | **Omania** | **1.82** | **344** | P | **Pn** | **21 17 17.9** | **-0.1** |
| **TRWZ** | **Traveller** | **1.84** | **213** | P | **Pn** | **21 17 17.6** | **-0.6** |
| **TWGZ** | **Tauwhareparae** | **1.84** | **24** | P | **Pn** | **21 17 18.5** | **+0.1** |
| **KIW** | **Kapiti Island** | **1.89** | **238** | P | **Pn** | **21 17 19.1** | **+0.2** |
| **MARZ** | **Manawatu** | **1.90** | **352** | P | **Pn** | **21 17 19.3** | **+0.3** |
| **VRZ** | **Vera Road** | **1.90** | **292** | P | Pn | 21 17 24.7 | +5.7 |
| **TLZ** | **Tolley Road** | **1.92** | **323** | P | **Pn** | **21 17 19.1** | **-0.2** |
| **CAW** | **Cannon Point** | **1.94** | **230** | P | **Pn** | **21 17 19.3** | **-0.3** |
| **PAWZ** | **Paruwai Farm** | **1.94** | **218** | P | **Pn** | **21 17 19.1** | **-0.5** |
| **RUGZ** | **Raukumara Rang** | **1.96** | **15** | P | **Pn** | **21 17 19.9** | **-0.1** |
| **WHRZ** | **Whale Island** | **2.00** | **359** | P | **Pn** | **21 17 21.0** | **+0.5** |
| **MSWZ** | **Moikau Station** | **2.05** | **220** | P | **Pn** | **21 17 20.1** | **-1.1** |
| **PKGZ** | **Pakihiroa** | **2.14** | **23** | P | **Pn** | **21 17 22.1** | **-0.3** |
| **HIZ** | **Hauiti** | **2.15** | **308** | P | **Pn** | **21 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RACZ | Rakaia | 1.63 | 99 | P | | Pb | 21 32 30.3 | -0.1 |
| ODZ | Otahua Downs | 1.64 | 162 | | | Pn | 21 32 29.3 | +0.3 |
| ODZ | Otahua Downs | 1.64 | 162 | P | | Pn | 21 32 29.6 | +0.5 |
| ODZ | Otahua Downs | 1.64 | 162 | P | | Pb | 21 32 30.8 | +0.2 |
| EAZ | Earnscleugh | 1.79 | 194 | P | | Pn | 21 32 31.6 | +0.4 |
| LTZ | Lake Taylor | 1.86 | 68 | Pn | | Pb | 21 32 33.5 | -0.8 |
| LTZ | Lake Taylor | 1.86 | 68 | P | | Pb | 21 32 33.7 | -0.7 |
| MSZ | Milford Sound | 1.86 | 230 | P | | Pb | 21 32 34.2 | -0.2 |
| MQZ | McQueen's Vall | 2.00 | 97 | Pn | | Pn | 21 32 34.3 | +0.4 |
| MQZ | McQueen's Vall | 2.00 | 97 | P | | Pn | 21 32 34.3 | +0.4 |
| AMCZ | Amberley | 2.02 | 82 | P | | Pb | 21 32 35.8 | -1.2 |
| AKCZ | Akaroa Harbour | 2.20 | 101 | P | | Pn | 21 32 37.4 | +0.6 |
| DSZ | Denniston Nort | 2.23 | 39 | P | | Pn | 21 32 37.1 | -0.1 |
| MLZ | Mavora Lakes | 2.28 | 214 | | | Pn | 21 32 38.8 | +0.9 |
| MLZ | Mavora Lakes | 2.28 | 214 | P | | Pn | 21 32 39.2 | +1.4 |
| OKCZ | Okains Bay | 2.29 | 97 | P | | Pn | 21 32 39.3 | +1.3 |
| GVZ | Greta Valley S | 2.33 | 78 | P | | Pn | 21 32 39.9 | +1.2 |
| HHSZ | Highcliff Hill | 2.44 | 169 | P | | Pn | 21 32 41.6 | +1.5 |
| TUZ | Tuapeka | 2.47 | 185 | P | | Pn | 21 32 41.1 | +0.6 |
| WHZ | Wether Hill Ro | 2.78 | 210 | | | Pn | 21 32 44.9 | +0.1 |
| WHZ | Wether Hill Ro | 2.78 | 210 | P | | Pn | 21 32 45.7 | +0.9 |
| DCZ | Deep Cove | 2.80 | 224 | | | Pn | 21 32 46.1 | +1.2 |
| DCZ | Deep Cove | 2.80 | 224 | P | | Pn | 21 32 47.5 | +2.6 |
| THZ | Tophouse | 2.80 | 53 | | | Pn | 21 32 45.9 | +0.8 |
| THZ | Tophouse | 2.80 | 53 | P | | Pn | 21 32 45.7 | +0.7 |
| KHZ | Kahutara | 2.86 | 69 | Pn | | Pn | 21 32 46.9 | +1.1 |
| KHZ | Kahutara | 2.86 | 69 | P | | Pn | 21 32 47.0 | +1.1 |
| KHZ | Kahutara | 2.86 | 69 | P | | Pn | 21 32 47.2 | +1.3 |
| MRNZ | Matariki Terra | 2.96 | 46 | P | | Pn | 21 32 47.8 | +0.6 |
| SYZ | Scrubby Hill | 3.10 | 190 | P | | Pn | 21 32 49.3 | +0.3 |
| QRZ | Quartz Range | 3.29 | 37 | | | Pn | 21 32 52.0 | +0.1 |
| QRZ | Quartz Range | 3.29 | 37 | P | | Pn | 21 32 51.9 | +0.1 |
| QRZ | Quartz Range | 3.29 | 37 | P | | Pn | 21 32 52.5 | +0.7 |
| BSWZ | Blackbirch Sta | 3.42 | 60 | Pn | | Pn | 21 32 55.2 | +1.8 |
| BSWZ | Blackbirch Sta | 3.42 | 60 | P | | Pn | 21 32 55.8 | +2.3 |
| NNZ | Nelson | 3.42 | 50 | | | Pn | 21 32 54.6 | +1.0 |
| NNZ | Nelson | 3.42 | 50 | P | | Pn | 21 32 54.8 | +1.2 |
| PYZ | Puysegur Point | 3.53 | 220 | Pn | | Pn | 21 32 55.0 | -0.1 |
| APZ | The Paps | 3.61 | 202 | P | | Pn | 21 32 57.1 | +0.9 |
| TUWZ | Tuamarina | 3.62 | 57 | | | Pn | 21 32 57.5 | +1.3 |
| TUWZ | Tuamarina | 3.62 | 57 | P | | Pn | 21 32 58.0 | +1.7 |
| TCW | Tory Channel | 3.95 | 56 | P | | Pn | 21 33 01.8 | +1.0 |
| DUWZ | D'Urville Isla | 4.01 | 49 | P | | Pn | 21 33 02.8 | +1.2 |
| SNZO | South Karori | 4.16 | 60 | Pn | | Pn | 21 33 04.0 | +0.3 |
| SNZO | South Karori | 4.16 | 60 | P | | Pn | 21 33 04.4 | +0.7 |
| BHW | Baring Head | 4.21 | 62 | | | Pn | 21 33 04.6 | +0.2 |
| BHW | Baring Head | 4.21 | 62 | P | | Pn | 21 33 05.1 | +0.7 |
| PLWZ | Palliser | 4.38 | 66 | Pn | | Pn | 21 33 06.9 | +0.1 |
| PLWZ | Palliser | 4.38 | 66 | P | | Pn | 21 33 06.8 | 0.0 |
| MSWZ | Moikau Station | 4.45 | 64 | | | Pn | 21 33 07.1 | -0.6 |
| MSWZ | Moikau Station | 4.45 | 64 | P | | Pn | 21 33 07.5 | -0.3 |
| CAW | Cannon Point | 4.50 | 60 | P | | Pn | 21 33 08.3 | -0.1 |
| KIW | Kapiti Island | 4.54 | 56 | P | | Pn | 21 33 09.1 | +0.1 |
| PAWZ | Paruwai Farm | 4.59 | 65 | P | | Pn | 21 33 08.0 | -1.6 |
| OGWZ | Otaki Gorge | 4.73 | 57 | P | | Pn | 21 33 11.2 | -0.3 |
| MTW | Mount Morrison | 4.75 | 62 | P | | Pn | 21 33 11.9 | +0.1 |
| HOWZ | Holdsworth Sta | 4.90 | 60 | P | | Pn | 21 33 14.0 | +0.1 |
| TMWZ | Te Maipa | 5.03 | 64 | P | | Pn | 21 33 15.4 | -0.3 |
| NMEZ | Namu Road | 5.04 | 37 | P | | Pn | 21 33 17.7 | +1.9 |
| MRZ | Mangatainoka R | 5.07 | 58 | P | | Pn | 21 33 15.6 | -0.6 |
| NBEZ | Newall Road No | 5.16 | 36 | P | | Pn | 21 33 18.4 | +1.0 |
| TIWZ | Tintock | 5.20 | 61 | P | | Pn | 21 33 17.7 | -0.3 |
| KHEZ | Kahui Hut | 5.20 | 38 | P | | Pn | 21 33 19.1 | +1.0 |
| PREZ | Palmer Road | 5.23 | 39 | P | | Pn | 21 33 20.0 | +1.6 |
| LREZ | Lake Rotokare | 5.25 | 41 | P | | Pn | 21 33 20.7 | +2.0 |
| NEZ | North Egmont | 5.26 | 38 | P | | Pn | 21 33 20.6 | +1.7 |
| PKE | Pukeiti | 5.27 | 37 | P | | Pn | 21 33 20.3 | +1.2 |
| WAZ | Wanganui | 5.32 | 47 | P | | Pn | 21 33 22.1 | +2.4 |
| POWZ | Post Office Ro | 5.35 | 57 | P | | Pn | 21 33 25.8 | +5.8 |
| DREZ | Durham Road | 5.37 | 38 | P | | Pn | 21 33 21.8 | +1.5 |
| PRWZ | Pori Road | 5.38 | 59 | P | | Pn | 21 33 19.6 | -0.8 |
| BFZ | Birch Farm | 5.48 | 61 | Pn | | Pn | 21 33 20.8 | -1.0 |
| BFZ | Birch Farm | 5.48 | 61 | P | | Pn | 21 33 21.0 | -0.8 |
| BFZ | Birch Farm | 5.48 | 61 | P | | Pn | 21 33 22.8 | +1.0 |
| MHEZ | Mangahewa | 5.52 | 38 | P | | Pn | 21 33 24.4 | +2.1 |
| DVHZ | Dannevirke | 5.65 | 58 | P | | Pn | 21 33 24.3 | +0.2 |
| TSZ | Takapari Road | 5.67 | 55 | P | | Pn | 21 33 23.8 | -0.7 |
| VRZ | Vera Road | 5.68 | 41 | P | | Pn | 21 33 25.8 | +1.2 |
| MTVZ | Mangateitei | 5.85 | 47 | P | | Pn | 21 33 29.6 | +2.6 |
| PKVZ | Pokaka | 5.85 | 46 | P | | Pn | 21 33 28.3 | +1.3 |
| PNHZ | Pukenui | 5.90 | 55 | P | | Pn | 21 33 27.1 | -0.6 |
| PNHZ | | | | P | | Pn | 21 33 27.6 | -0.1 |
| TRVZ | Turoa | 5.95 | 47 | P | | Pn | 21 33 29.7 | +1.2 |
| WNVZ | Wahianoa | 5.96 | 48 | P | | Pn | 21 33 29.6 | +1.0 |
| DHZ | Dome Shelter | 5.98 | 47 | P | | Pn | 21 33 32.1 | +4.0 |
| WHVZ | Whangaehu Hut | 5.99 | 47 | P | | Pn | 21 33 32.6 | +3.6 |
| FWVZ | Far West T-bar | 5.99 | 47 | P | | Pn | 21 33 30.6 | +1.6 |
| MOVZ | Moawhango | 5.99 | 49 | P | | Pn | 21 33 29.4 | +0.5 |
| TUVZ | Tukino | 6.03 | 48 | P | | Pn | 21 33 33.3 | +3.8 |
| TWVZ | Taurewa | 6.06 | 45 | P | | Pn | 21 33 31.9 | +2.0 |
| NGZ | Ngauruhoe | 6.07 | 47 | P | | Pn | 21 33 32.3 | +2.2 |
| SNVZ | South Ngauruho | 6.08 | 47 | P | | Pn | 21 33 33.0 | +2.7 |
| BHHZ | Black Hill Sta | 6.10 | 51 | P | | Pn | 21 33 29.9 | -0.6 |
| WTVZ | West Tongariro | 6.11 | 46 | P | | Pn | 21 33 32.8 | +2.2 |
| NNVZ | North Ngauruho | 6.11 | 46 | P | | Pn | 21 33 32.9 | +2.3 |
| OTVZ | Oturere | 6.11 | 47 | P | | Pn | 21 33 32.5 | +1.8 |
| KRVZ | Karewarewa | 6.15 | 46 | P | | Pn | 21 33 33.3 | +2.1 |
| NTVZ | North Tongarir | 6.17 | 47 | P | | Pn | 21 33 34.1 | +2.7 |
| TMVZ | Te Maari | 6.17 | 47 | P | | Pn | 21 33 34.1 | +2.6 |
| KRHZ | Kereru | 6.18 | 54 | P | | Pn | 21 33 30.6 | -0.9 |
| HIZ | Hauiti | 6.22 | 39 | Pn | | Pn | 21 33 32.0 | 0.0 |
| HIZ | Hauiti | 6.22 | 39 | P | | Pn | 21 33 32.4 | +0.4 |
| HIZ | Hauiti | 6.22 | 39 | P | | Pn | 21 33 32.3 | +0.3 |
| KATZ | Kakaramea | 6.27 | 46 | P | | Pn | 21 33 36.2 | +3.4 |
| KWHZ | Kaweka Forest | 6.35 | 52 | P | | Pn | 21 33 41.4 | +7.5 |
| RITZ | Rihia Road | 6.35 | 47 | P | | Pn | 21 33 38.7 | +4.8 |
| KAHZ | Kahuranaki | 6.38 | 57 | P | | Pn | 21 33 34.5 | +0.1 |
| RATZ | Rangitukua | 6.39 | 46 | P | | Pn | 21 33 38.1 | +3.7 |
| WATZ | Wairara | 6.49 | 45 | P | | Pn | 21 33 37.7 | +2.0 |
| MCHZ | McNeill Hill | 6.50 | 54 | P | | Pn | 21 33 41.3 | +5.5 |
| BKZ | Black Stump Fm | 6.57 | 51 | Pn | | Pn | 21 33 37.0 | +0.2 |
| BKZ | Black Stump Fm | 6.57 | 51 | P | | Pn | 21 33 37.4 | +0.6 |
| BKZ | Black Stump Fm | 6.57 | 51 | P | | Pn | 21 33 37.5 | +0.7 |
| TLZ | Tolley Road | 6.68 | 41 | P | | Pn | 21 33 39.4 | +1.0 |
| NMHZ | Naumai | 6.79 | 52 | P | | Pn | 21 33 38.7 | -1.2 |
| MTHZ | Maungataniwha | 6.98 | 51 | P | | Pn | 21 33 47.4 | +4.9 |
| AWAZ | Awhitu Peninsu | 7.36 | 31 | P | | Pn | 21 33 48.5 | +0.8 |
| URZ | Urewera | 7.55 | 49 | Pn | | Pn | 21 33 49.1 | -1.1 |
| | 0.4nm,0.3s,baz=160,slow=6.6,SNR=1.9 | | | | | | | |
| URZ | | | | Sn | | Sn | 21 35 13.8 | -1.8 |
| | 2.8nm,0.3s,baz=339,slow=19,SNR=5.7 | | | | | | | |
| URZ | Urewera | 7.55 | 49 | P | | Pn | 21 33 51.0 | +0.8 |
| OUZ | Omahuta | 8.73 | 20 | Pn | | Pn | 21 34 07.1 | +0.5 |
| OUZ | Omahuta | 8.73 | 20 | P | | Pn | 21 34 07.5 | +1.0 |
| ASAR | Alice Springs | 35.56 | 292 | P | | P | 21 38 57.3 | -0.3 |
| | 0.4nm,0.6s,baz=125,slow=6.9,SNR=9.1 | | | | | | | |
| ASAR | | | | PcP | | PcP | 21 41 26.3 | -0.2 |
| | 0.6nm,0.6s,baz=131,slow=4.0,SNR=8.9 | | | | | | | |
| WR0 | Warramunga Arr | 37.73 | 297 | P | | P | 21 39 17.3 | +1.2 |
| WRA | Warramunga Arr | 37.86 | 297 | P | | P | 21 39 16.9 | -0.4 |
| | 0.6nm,0.8s,baz=133,slow=8.0,SNR=13 | | | | | | | |
| FITZ | Fitzroy Crossi | 44.98 | 290 | P | | P | 21 40 15.2 | -0.4 |
| FITZ | | | | IAmb | | IAmb | 21 40 28.6 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| QSPA | South Pole Qui | 46.63 | 180 | P | | P | 21 40 30.6 | +2.3 |
| BELA | Belgrano 2 | 57.97 | 174 | P | | P | 21 41 53.4 | +1.3 |
| BELA | | | | IAmb | | IAmb | 21 42 08.2 | |
| | comp=Z,3.9nm,1.3s | | | | | | | |
| BRTR | Keskin Array B | 147.38 | 279 | PKPbc | | PKPbc | 21 51 44.5 | +0.6 |
| | comp=Z,1.3nm,0.6s,baz=131,slow=4.4,SNR=9.0 | | | | | | | |
| TORD | Torodi Ar. Bea | 148.11 | 202 | PKPbc | | PKPbc | 21 51 46.8 | +0.5 |
| | comp=Z,1.0nm,0.9s,baz=172,slow=1.6,SNR=3.9 | | | | | | | |
| ARCES | ARCESS Array B | 148.23 | 337 | PKPbc | | PKPbc | 21 51 45.1 | +0.1 |
| | comp=Z,1.5nm,0.4s,baz=79,slow=2.0,SNR=17 | | | | | | | |
| FINES | FINESS Array B | 152.10 | 323 | PKPbc | | PKPbc | 21 51 54.5 | -0.1 |
| | comp=Z,2.2nm,0.6s,baz=131,slow=2.2,SNR=9.8 | | | | | | | |
| AKASG | Malin Array Be | 152.55 | 299 | PKPbc | | PKPbc | 21 51 55.3 | -0.6 |
| | comp=Z,0.7nm,0.5s,baz=72,slow=2.7,SNR=5.0 | | | | | | | |
| NB2 | NORSAR Subarra | 158.30 | 331 | PKP | | PKPab | 21 52 26.3 | -4.5 |
| | comp=Z,0.7nm,0.5s,baz=42,slow=2.7 | | | | | | | |

**IDC 20 21:33:29.5±1.8, 4.54N×127.14E, h0km, mb3.3/3, mb1 3.4/3, mb1mx3.3/31, mbtmp3.3/3, Error ellipse: s-maj=167.0km s-min=28.3km az=69.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| WRA | Warramunga Arr | 25.33 | 164 | P | | 21 | 38 58.3 | 0.0 |
| | 0.7nm,0.8s,baz=345,slow=10,SNR=4.8 | | | | | | | |
| SONM | Songino Array | 46.67 | 341 | P | | 21 | 42 00.8 | +0.8 |
| | 0.1nm,0.4s,baz=148,slow=9.3,SNR=1.4 | | | | | | | |
| MKAR | Makanchi Array | 57.14 | 325 | P | | 21 | 43 17.4 | -0.7 |
| | 0.2nm,0.4s,baz=115,slow=6.9,SNR=6.3 | | | | | | | |

*NEIC **20** 21:34:05.3±2.2, 19.2S×0.1W×177.5W±0.1, h565km±6km, mb4.7/86, Error ellipse: s-maj=16.4km s-min=14.8km az=140.0*

*NOU **20** 21:34:06.0, 19.19S×177.35W, h581km, mb4.8/46, Fiji Islands Region*

*IDC **20** 21:34:07.4±1.2, 19.23S×177.60W, h588km±14km, mb3.8/16, mb1 3.9/19, mb1mx3.8/28, mbtmp4.7/19, Error ellipse: s-maj=15.0km s-min=9.9km az=149.0*

**ISC 20 21:34:05.3±0.4, 19.19S±0.07×177.47W±0.07, h570km, n325, σ 0 93/338, mb4.8/85, 31C-30D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| MSVF | Nonsavu | 4.49 | 288 | P | | P | 21 35 34.8 | +2.4 |
| | 48nm,0.3s,baz=138,slow=21,SNR=16 | | | | | | | |
| MSVF | Nonsavu | 4.49 | 288 | P | | P | 21 35 33.5 | +1.1 |
| AFI | Afiamalu | 7.57 | 47 | P | | P | 21 35 59.3 | -0.4 |
| | 41nm,0.3s,baz=185,slow=1.1,SNR=31 | | | | | | | |
| AFI | | | | S | | S | 21 37 29.4 | -3.9 |
| | 7.8nm,0.3s,baz=55,slow=19,SNR=2.2 | | | | | | | |
| AFI | Afiamalu | 7.57 | 47 | P | | P | 21 35 58.8 | -0.9 |
| AFI | Afiamalu | 7.57 | 47 | P | | P | 21 35 59.3 | -0.4 |
| LIFNC | LIFOU | 14.46 | 261 | | | P | 21 37 06.6 | -2.4 |
| PINNC | Pines Island, | 14.50 | 254 | | | P | 21 37 09.1 | -0.3 |
| SANVU | Saraoutou | 15.10 | 282 | P | | P | 21 37 14.8 | -0.6 |
| SANVU | | | | IAmb | | IAmb | 21 37 29.5 | |
| | comp=Z,38nm,0.7s | | | | | | | |
| SANVU | Saraoutou | 15.10 | 282 | P | | P | 21 37 16.9 | +1.5 |
| DZM | Mont Dzumac | 15.33 | 256 | P | | P | 21 37 17.8 | +0.1 |
| | comp=Z,0.8nm,0.3s,baz=93,slow=20,SNR=6.8 | | | | | | | |
| DZM | Mont Dzumac | 15.33 | 256 | | | P | 21 37 17.7 | 0.0 |
| DZM | | | | IAmb | | IAmb | 21 37 33.1 | |
| | comp=Z,94nm,1.8s | | | | | | | |
| URZ | Urewera | 19.58 | 193 | P | | P | 21 37 55.3 | -1.1 |
| | comp=Z,3.6nm,0.3s,baz=309,slow=1.1,SNR=9.2 | | | | | | | |
| URZ | | | | S | | S | 21 40 56.1 | -7.6 |
| | comp=Z,0.3nm,0.3s,baz=217,slow=20,SNR=1.8 | | | | | | | |
| URZ | Urewera | 19.58 | 193 | P | | P | 21 37 54.4 | -1.9 |
| URZ | | | | IAmb | | IAmb | 21 37 56.5 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| BKZ | Black Stump Fm | 20.58 | 193 | P | | P | 21 38 04.2 | -1.3 |
| BKZ | | | | IAmb | | IAmb | 21 38 15.5 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| BFZ | Birch Farm | 22.09 | 193 | P | | P | 21 38 17.7 | -1.2 |
| BFZ | | | | IAmb | | IAmb | 21 38 24.2 | |
| | comp=Z,41nm,1.2s | | | | | | | |
| QRZ | Quartz Range | 23.20 | 200 | P | | P | 21 38 29.5 | +0.6 |
| | comp=Z,41nm,1.4s | | | | | | | |
| KHZ | Kahutara | 24.37 | 196 | P | | P | 21 38 39.9 | +0.7 |
| RPZ | Rata Peaks | 26.28 | 199 | P | | P | 21 38 56.7 | +0.6 |
| | comp=Z,5.6nm,0.6s,baz=22,slow=21,SNR=1.9 | | | | | | | |
| PPT | Papeete | 26.51 | 91 | P | | P | 21 38 59.8 | +1.4 |
| | comp=Z,55nm,1.0s,baz=322,slow=5.7,SNR=3.9 | | | | | | | |
| EIDS | Eidsvold | 29.70 | 252 | P | | P | 21 39 26.7 | +0.5 |
| EIDS | | | | IAmb | | IAmb | 21 39 42.6 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| ARMA | Armidale | 30.10 | 242 | P | | P | 21 39 30.6 | +0.9 |
| ARMA | | | | IAmb | | IAmb | 21 39 48.2 | |
| | comp=Z,46nm,1.7s | | | | | | | |
| CAN | Canberra | 33.66 | 235 | P | | P | 21 40 00.1 | +0.3 |
| CAN | | | | IAmb | | IAmb | 21 40 13.9 | |
| | comp=Z,59nm,1.7s | | | | | | | |
| CTA | Charters Tower | 34.14 | 262 | P | | P | 21 40 04.3 | +0.3 |
| | comp=Z,18nm,0.6s,baz=93,slow=9.3,SNR=30 | | | | | | | |
| CTA | Charters Tower | 34.14 | 262 | P | | P | 21 40 04.8 | +0.9 |
| PMG | Port Moresby | 35.56 | 281 | P | | P | 21 40 16.4 | +0.6 |
| PMG | Port Moresby | 35.56 | 281 | P | | P | 21 40 17.0 | +1.2 |
| PMG | Port Moresby | 35.56 | 281 | P | | P | 21 40 16.8 | +1.0 |
| QLP | Quilpie | 35.94 | 251 | P | | P | 21 40 20.2 | +1.4 |
| MTSU | Mount Surprise | 36.17 | 265 | P | | P | 21 40 21.3 | +0.4 |
| | comp=Z,12nm,0.8s | | | | | | | |
| TOO | Toolangi | 37.08 | 233 | P | | P | 21 40 28.7 | +0.7 |
| TOO | | | | IAmb | | IAmb | 21 40 29.9 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| TOO | Toolangi | 37.08 | 233 | P | | P | 21 40 28.7 | +0.7 |
| TAU | Tasmania Unive | 37.91 | 224 | P | | P | 21 40 35.2 | +0.6 |
| COEN | Coen | 38.02 | 272 | P | | P | 21 40 36.3 | +0.4 |
| COEN | | | | IAmb | | IAmb | 21 40 37.4 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| COEN | Coen | 38.02 | 272 | P | | P | 21 40 37.0 | +1.0 |
| BRAT | Ballarat | 38.25 | 233 | P | | P | 21 40 38.8 | +1.4 |
| STKA | Stephens Creek | 38.82 | 243 | P | | P | 21 40 42.8 | +0.6 |
| | comp=Z,20nm,0.8s,baz=100,slow=9.3,SNR=28 | | | | | | | |
| STKA | Stephens Creek | 38.82 | 243 | P | | P | 21 40 42.5 | +0.4 |
| INKA | Innaminka | 39.11 | 249 | P | | P | 21 40 45.9 | +1.3 |
| ARPS | Mount Arapiles | 39.63 | 235 | P | | P | 21 40 49.4 | +0.8 |
| QIS | Mount Isa | 40.31 | 261 | P | | P | 21 40 55.0 | +0.7 |
| HTT | Hallett | 41.28 | 241 | P | | P | 21 41 02.6 | +0.7 |
| LCRK | Leigh Creek | 41.52 | 246 | P | | P | 21 41 04.5 | +0.8 |
| NAPP | Napperby | 41.89 | 241 | P | | P | 21 41 08.1 | +1.5 |
| | comp=Z,40nm,0.9s | | | | | | | |
| WHYH | Whyalla | 42.35 | 242 | P | | P | 21 41 11.1 | +0.9 |
| | comp=Z,54nm,0.7s | | | | | | | |
| BBOO | Buckleboo | 43.58 | 242 | P | | P | 21 41 20.0 | +0.2 |
| BBOO | Buckleboo | 43.58 | 242 | P | | P | 21 41 20.4 | +0.5 |
| | comp=Z,67nm,0.8s | | | | | | | |
| OOD | Oodnadatta | 43.59 | 250 | P | | P | 21 41 21.3 | +1.3 |
| MULG | Mulgathing | 45.09 | 246 | P | | P | 21 41 31.8 | +0.3 |
| WR0 | Warramunga Arr | 45.10 | 261 | P | | P | 21 41 31.1 | -0.6 |
| WB2 | Warramunga Arr | 45.28 | 261 | P | | P | 21 41 32.6 | -0.5 |
| WB2 | | | | IAmb | | IAmb | 21 41 33.6 | |
| | comp=Z,52nm,1.3s | | | | | | | |
| WRAB | Tennant Creek | 45.28 | 261 | P | | P | 21 41 32.0 | -1.1 |
| WRAB | | | | IAmb | | IAmb | 21 41 33.5 | |
| | comp=Z,43nm,1.3s | | | | | | | |
| WRAB | Tennant Creek | 45.28 | 261 | P | | P | 21 41 32.9 | -0.2 |
| WRA | Warramunga Arr | 45.29 | 261 | P | | P | 21 41 32.6 | -0.6 |
| | comp=Z,6.9nm,0.3s,baz=97,slow=7.7,SNR=233 | | | | | | | |
| WRA | | | | PcP | | PcP | 21 43 00.8 | +0.1 |
| | comp=Z,2.6nm,0.4s,baz=90,slow=3.8,SNR=8.4 | | | | | | | |
| WRA | | | | S | | S | 21 47 29.6 | -3.2 |
| | comp=Z,3.2nm,0.9s,baz=95,slow=14,SNR=13 | | | | | | | |
| WRA | Warramunga Arr | 45.29 | 261 | P | | P | 21 41 31.6 | -1.6 |
| AS31 | Alice Springs | 45.32 | 255 | P | | P | 21 41 33.3 | -0.1 |
| ASAR | Alice Springs | 45.32 | 255 | P | | P | 21 41 33.5 | +0.1 |
| | comp=Z,26nm,0.7s,baz=86,slow=8.6,SNR=194 | | | | | | | |
| ASAR | | | | PcP | | PcP | 21 43 00.9 | +0.1 |
| | comp=Z,8.6nm,0.8s,baz=100,slow=4.1,SNR=13 | | | | | | | |
| ASAR | | | | S | | S | 21 47 31.3 | -1.9 |
| | comp=Z,3.2nm,0.7s,baz=90,slow=14,SNR=22 | | | | | | | |
| ASAR | Alice Springs | 45.32 | 255 | P | | P | 21 41 33.3 | -0.1 |
| KDU | Kakadu | 48.44 | 270 | P | | P | 21 41 57.0 | +0.2 |
| MTN | Manton Dam | 49.66 | 269 | P | | P | 21 42 05.2 | -0.7 |
| MTN | Manton Dam | 49.66 | 269 | P | | P | 21 42 05.8 | -0.1 |
| FORT | Forrest | 50.28 | 246 | P | | P | 21 42 09.7 | -0.5 |
| FORT | Forrest | 50.28 | 246 | P | | P | 21 42 09.9 | -0.3 |
| WRKA | Warakurna | 50.31 | 251 | P | | P | 21 42 10.9 | +0.3 |
| KNRA | Kununurra | 51.26 | 265 | P | | P | 21 42 17.2 | -0.3 |
| KNRA | Kununurra | 51.26 | 265 | P | | P | 21 42 17.6 | +0.1 |
| FAKI | Fak Fak | 51.71 | 282 | P | | P | 21 42 20.2 | -0.5 |
| FITZ | Fitzroy Crossi | 53.71 | 261 | P | | P | 21 42 34.7 | -0.2 |
| FITZ | | | | IAmb | | IAmb | 21 42 35.6 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| FITZ | Fitzroy Crossi | 53.71 | 261 | P | | P | 21 42 34.9 | 0.0 |
| SOEI | Soe | 56.97 | 271 | P | | P | 21 42 58.7 | +0.9 |
| SOEI | Soe | 56.97 | 271 | P | | P | 21 42 59.1 | +1.3 |
| | comp=Z,1μmcomp=Z,130nm,0.8s | | | | | | | |
| BATI | Baumata | 57.42 | 270 | P | | P | 21 43 02.1 | +1.4 |
| | comp=Z,26nm,0.7s | | | | | | | |
| TNTI | Ternate | 57.63 | 284 | P | | P | 21 43 02.0 | -0.1 |
| TNTI | | | | IAmb | | IAmb | 21 43 03.1 | |
| | comp=Z,44nm,0.8s | | | | | | | |
| TNTI | Ternate | 57.63 | 284 | P | | P | 21 43 03.0 | +0.9 |
| SANI | Sanana | 57.84 | 280 | P | | P | 21 43 03.0 | -0.6 |
| | comp=Z,48nm,0.8s | | | | | | | |
| SANI | Sanana | 57.84 | 280 | P | | P | 21 43 03.7 | +0.1 |
| PSA00 | Pilbara Seismi | 58.46 | 256 | P | | P | 21 43 07.3 | -0.4 |
| PSA00 | | | | IAmb | | IAmb | 21 43 08.2 | |
| | comp=Z,39nm,0.8s | | | | | | | |
| MEEK | Meekatharra | 58.83 | 250 | P | | P | 21 43 09.9 | -0.2 |
| KLBR | Kellerberrin | 59.07 | 244 | P | | P | 21 43 11.5 | -0.1 |
| MMRI | Maumere | 59.21 | 271 | P | | P | 21 43 12.2 | -0.6 |
| MMRI | | | | IAmb | | IAmb | 21 43 13.1 | |
| | comp=Z,42nm,0.9s | | | | | | | |
| MMRI | Maumere | 59.21 | 271 | P | | P | 21 43 12.5 | -0.3 |
| | comp=Z,2μmcomp=Z,43nm,0.5s | | | | | | | |
| MMRI | Maumere | 59.21 | 271 | P | | P | 21 43 12.8 | 0.0 |
| VNDA | Vanda | 59.25 | 185 | P | | P | 21 43 14.1 | +2.1 |
| | comp=Z,1.1nm,0.6s,baz=338,slow=5.4,SNR=0.9 | | | | | | | |
| VNDA | Vanda | 59.25 | 185 | P | | P | 21 43 14.0 | +2.0 |
| VNDA | | | | IAmb | | IAmb | 21 43 29.8 | |
| | comp=Z,49nm,1.8s | | | | | | | |
| BLDU | Ballidu | 60.05 | 245 | P | | P | 21 43 18.3 | +0.2 |
| MORW | Morawa | 60.79 | 247 | P | | P | 21 43 22.7 | -0.3 |
| MORW | Morawa | 60.79 | 247 | P | | P | 21 43 23.1 | 0.0 |
| LUWI | Luwuk | 61.20 | 280 | P | | P | 21 43 26.1 | +0.2 |
| LUWI | | | | IAmb | | IAmb | 21 43 27.4 | |
| | comp=Z,37nm,0.7s | | | | | | | |
| KAPI | Kappang | 62.67 | 274 | P | | P | 21 43 34.7 | -0.8 |
| KAPI | | | | IAmb | | IAmb | 21 43 44.6 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| PLAI | Plampang | 63.37 | 270 | P | | P | 21 43 39.5 | -0.5 |
| | comp=Z,731nmcomp=Z,62nm,0.9s | | | | | | | |
| PLAI | Plampang | 63.37 | 270 | P | | P | 21 43 39.9 | -0.1 |
| GIRL | Giralia | 63.39 | 254 | P | | P | 21 43 40.6 | +0.7 |
| TOLI2 | Tolitoli | 63.83 | 281 | P | | P | 21 43 41.8 | -1.1 |
| TOLI2 | | | | IAmb | | IAmb | 21 44 01.9 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| CASY | Casey | 65.35 | 205 | P | | P | 21 43 52.5 | +1.0 |
| CASY | | | | IAmb | | IAmb | 21 44 09.7 | |
| | comp=Z,86nm,1.6s | | | | | | | |
| JAGI | Jajag, Banyuwa | 66.90 | 269 | P | | P | 21 44 00.8 | -1.3 |
| JAGI | Jajag, Banyuwa | 66.90 | 269 | P | | P | 21 44 01.0 | -1.1 |
| | comp=Z,56nm,0.8s | | | | | | | |
| GMJI | Gumukmas | 67.63 | 269 | P | | P | 21 44 06.4 | -0.2 |
| | comp=Z,33nm,0.8s | | | | | | | |
| BLJI | Banyuglugur | 67.64 | 269 | P | | P | 21 44 06.9 | +0.3 |
| | comp=Z,38nm,0.8s | | | | | | | |
| JMM | Marumori | 69.00 | 326 | P | | P | 21 44 12.1 | -2.2 |
| MJAR | Matsushiro Arr | 69.46 | 323 | P | | P | 21 44 16.8 | -0.3 |
| | comp=Z,10nm,0.6s,baz=157,slow=5.8,SNR=30 | | | | | | | |
| MJAR | Matsushiro Arr | 69.46 | 323 | P | | P | 21 44 16.5 | -0.7 |
| MAT | Matsushiro | 69.47 | 323 | P | | P | 21 44 17.0 | -0.2 |
| MJB9 | Matsu-Tunnel | 69.47 | 323 | P | | P | 21 44 16.7 | -0.5 |
| MJB9 | | | | IAmb | | IAmb | 21 44 17.9 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| PCJI | Pacitan | 69.79 | 268 | P | | P | 21 44 19.9 | +0.3 |
| | comp=Z,2μmcomp=Z,205nm,0.6s | | | | | | | |
| KKM | Kota Kinabalu | 69.92 | 284 | P | | P | 21 44 20.3 | -0.1 |
| KKM | | | | IAmb | | IAmb | 21 44 21.1 | |
| | comp=Z,24nm,0.5s | | | | | | | |
| UGM | Wanagama | 70.50 | 268 | P | | P | 21 44 23.4 | -0.4 |
| UGM | Wanagama | 70.50 | 268 | P | | P | 21 44 24.1 | +0.3 |
| | comp=Z,92nm,0.7s | | | | | | | |
| UGM | Wanagama | 70.50 | 268 | P | | P | 21 44 24.5 | +0.7 |
| ADK | Adak | 70.77 | 1 | P | | P | 21 44 23.5 | -0.9 |
| QSPA | South Pole Qui | 70.87 | 180 | P | | P | 21 44 26.5 | +1.3 |
| JHS | Saijyo | 71.45 | 319 | P | | P | 21 44 29.6 | +0.7 |
| JHS | | | | IAmb | | IAmb | 21 44 30.8 | |
| | comp=Z,46nm,1.1s | | | | | | | |
| KPJI | Karang Pucung | 72.17 | 268 | P | | P | 21 44 37.7 | +4.1 |
| JKA | Kamikawa-asahi | 72.82 | 331 | P | | P | 21 44 37.7 | +1.1 |
| JKA | | | | IAmb | | IAmb | 21 44 38.8 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| TWG | Pinlang | 73.11 | 302 | P | | P | 21 44 36.9 | -1.8 |
| YULB | Yu-li | 73.21 | 303 | P | | P | 21 44 37.6 | -1.7 |
| YULB | | | | IAmb | | IAmb | 21 44 51.1 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| SSLB | Suanglung | 73.68 | 303 | P | | P | 21 44 40.7 | -1.3 |
| TPUB | Ta-pu | 73.70 | 302 | P | | P | 21 44 40.8 | -1.3 |
| KSM | Kuching

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CCB | **Clear Creek Bu** | **86.64** | **12** | P | **P** | **21 45 47.9** | **-0.5** |
| CCB | | | | IAmb | IAmb | 21 45 48.2 | |
| | comp=Z,8.7nm,0.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **86.64** | **10** | P | **P** | **21 45 48.3** | **-0.1** |
| **IMAR** | **Indian Mountai** | **86.79** | **9** | P | **P** | **21 45 48.9** | **-0.2** |
| **TCOL** | **CIGO, UAF Yank** | **86.83** | **12** | P | **P** | **21 45 48.9** | **-0.4** |
| TCOL | | | | IAmb | IAmb | 21 45 49.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **COLA** | **College** | **86.83** | **12** | P | **P** | **21 45 48.7** | **-0.5** |
| COLA | | | | IAmb | IAmb | 21 45 49.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **86.83** | **12** | P | **P** | **21 45 48.7** | **-0.6** |
| **IL31** | | **86.94** | **13** | P | **P** | **21 45 49.1** | **-0.7** |
| **ILAR** | **Eielson Array** | **86.94** | **13** | P | **P** | **21 45 49.4** | **-0.5** |
| | comp=Z,2.1nm,0.7s,baz=235,slow=5.0,SNR=33 | | | | | | |
| **XLT** | **XiLinHaoTe** | **87.30** | **318** | *e*P | **P** | **21 45 52.8** | **+0.7** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,220nm,5.6s | | | | | | |
| **XAN** | **Xi'an** | **87.74** | **307** | P | **P** | **21 45 55.3** | **+0.9** |
| XAN | | | | pP | pP | 21 47 52.9 | -4.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **87.79** | **354** | P | **P** | **21 45 53.8** | **+0.1** |
| **DAWY** | **Dawson** | **88.07** | **16** | P | **P** | **21 45 55.4** | **+0.2** |
| **HHC** | **Hu-ho-hao-te** | **88.80** | **314** | *e*P | **P** | **21 46 00.5** | **+1.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,200nm,5.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **89.41** | **176** | P | **P** | **21 46 01.9** | **+0.5** |
| **AIS** | **Amsterdam Isla** | **89.65** | **230** | P | **P** | **21 46 01.6** | **-1.6** |
| **BMAR** | **Burnt Mountain** | **89.72** | **12** | P | **P** | **21 46 03.2** | **+0.5** |
| **VNA2** | **Neumayer--Watz** | **89.85** | **177** | P | **P** | **21 46 04.3** | **+0.8** |
| | baz=184,slow=3.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.08** | **176** | P | **P** | **21 46 05.4** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **90.15** | **289** | P | **P** | **21 46 07.2** | **+1.3** |
| | comp=Z,6.4nm,0.8s,baz=116,slow=2.7,SNR=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.15** | **289** | P | **P** | **21 46 06.1** | **+0.2** |
| **CHTO** | **Chiang Mai** | **90.27** | **290** | P | **P** | **21 46 07.1** | **+0.7** |
| CHTO | | | | IAmb | IAmb | 21 46 08.3 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **90.27** | **290** | P | **P** | **21 46 07.3** | **+0.9** |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **90.54** | **298** | P | **P** | **21 46 08.6** | **+0.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.3s | | | | | | |
| **LZH** | **Lanzhou** | **92.38** | **307** | *e*P | **P** | **21 46 16.0** | **+0.1** |
| LZH | | | | pP | pP | 21 48 13.4 | -6.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **95.10** | **319** | P | **P** | **21 46 27.6** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=124,slow=3.6,SNR=6.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.12** | **25** | P | **P** | **21 46 27.4** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=235,slow=4.2,SNR=5.1 | | | | | | |
| **GTA** | **Gaotai** | **96.53** | **309** | *e*P | **P** | **21 46 35.0** | **+0.3** |
| GTA | | | | pP | pP | 21 48 44.3 | +5.1 |
| GTA | | | | sP | sP | 21 49 50.9 | +15 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **109.79** | **322** | PKiKP | **PKiKP** | **21 51 30.3** | **-1.5** |
| | comp=Z,1.3nm,0.6s,baz=335,slow=0.7,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **110.66** | **314** | Pdiff | **Pdif** | **21 47 38.2** | **+1.0** |
| | comp=Z,0.3nm,0.7s,baz=110,slow=4.7,SNR=3.9 | | | | | | |
| MKAR | | | | PKiKP | **PKiKP** | **21 51 32.8** | **-1.0** |
| | comp=Z,1.2nm,0.5s,baz=181,slow=0.8,SNR=34 | | | | | | |
| **KSH** | **Kashi** | **114.55** | **305** | *e*PKP | **PKiKP** | **21 51 41.8** | **+0.3** |
| **GAR** | **Garm** | **118.90** | **305** | | **PKPdf** | **21 51 49.7** | **-0.2** |
| **KBL** | **Kabul** | **119.69** | **299** | | **PKPdf** | **21 51 51.5** | **-0.2** |
| **ARU** | **Arti** | **124.41** | **326** | | **PKPdf** | **21 51 59.4** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **127.73** | **350** | PKP | **PKPdf** | **21 52 05.8** | **+0.1** |
| | comp=Z,2.3nm,0.4s,baz=62,slow=0.6,SNR=15 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.73** | **350** | | **PKPdf** | **21 52 05.7** | **0.0** |
| **FINES** | **FINESS Array B** | **134.66** | **344** | PKP | **PKPdf** | **21 52 19.1** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=48,slow=5.2,SNR=6.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **137.75** | **354** | PKP | **PKPdf** | **21 52 25.0** | **+0.1** |
| | comp=Z,2.6nm,0.9s,baz=14,slow=4.0,SNR=4.2 | | | | | | |
| **MARD** | **Mardin** | **142.09** | **307** | PKPdf | **PKPdf** | **21 52 30.5** | **-3.0** |
| **AKASG** | **Malin Array Be** | **142.10** | **332** | PKhKP | PKPpre | 21 52 28.4 | |
| | comp=Z,2.8nm,0.3s,baz=42,slow=4.3,SNR=38 | | | | | | |
| **GKP** | **Gorka Klasztor** | **144.13** | **345** | *e*PKP | **PKPab** | **21 52 36.1** | **-0.2** |
| **SORM** | **Soroca** | **144.34** | **330** | ⇑P | PKPbc | 21 52 36.3 | -0.6 |
| **PURM** | **Purcari** | **144.69** | **327** | ⇓P | PKPbc | 21 52 38.0 | +0.1 |
| **DRBR** | **Darabani** | **145.09** | **332** | ⇑P | **PKPdf** | **21 52 37.8** | **-0.5** |
| **LEOM** | **Leova** | **145.55** | **328** | ⇓P | **PKPbc** | **21 52 40.8** | **+0.3** |
| **RUE** | **Ruedersdorf** | **145.63** | **348** | *e*PKPbc | **PKPbc** | **21 52 41.1** | **+0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **VLDR** | **Vladesti** | **146.07** | **327** | ⇓P | **PKPbc** | **21 52 42.7** | **+0.7** |
| **OJC** | **Ojcow** | **146.12** | **340** | *e*PKP | **PKPbc** | **21 52 42.1** | **0.0** |
| **TLCR** | | **146.13** | **326** | ⇑P | **PKPbc** | **21 52 42.1** | **-0.1** |
| **BUR08** | **Bucovina Ar. S** | **146.15** | **332** | | **PKPbc** | **21 52 42.6** | **+0.3** |
| **VARL** | **Varlezi** | **146.15** | **328** | ⇓P | **PKPbc** | **21 52 42.8** | **+0.6** |
| **BURAR** | **Bucovina Array** | **146.16** | **332** | ⇑P | **PKPbc** | **21 52 43.1** | **+0.7** |
| **BURAR** | **Bucovina Array** | **146.16** | **332** | | **PKPbc** | **21 52 41.7** | **-0.7** |
| **SCTR** | **Scanteiesti** | **146.23** | **327** | ⇑P | **PKPbc** | **21 52 43.1** | **+0.6** |
| **FLTG** | **Flechtingen** | **146.23** | **350** | *e*PKPbc | **PKPbc** | **21 52 42.5** | **+0.3** |
| | baz=16,slow=2.5 | | | | | | |
| **NRDL** | **Niedersach Rie** | **146.24** | **352** | *e*PKPbc | **PKPbc** | **21 52 42.8** | **+0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **GHRR** | | **146.26** | **328** | ⇓P | **PKiKP** | **21 52 43.8** | **-1.1** |
| **TESR** | **Tescani** | **146.31** | **329** | ⇑P | **PKPbc** | **21 52 42.3** | **-0.4** |
| **BR131** | **Keskin Array S** | **146.31** | **314** | | **PKPbc** | **21 52 42.9** | **-0.3** |
| **BRTR** | **Keskin Array B** | **146.31** | **314** | PKPbc | **PKPbc** | **21 52 42.8** | **-0.3** |
| | comp=Z,7.2nm,0.8s,baz=143,slow=4.8,SNR=25 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.31** | **314** | | **PKPbc** | **21 52 42.4** | **-0.7** |
| **CFR** | **Carcaliu** | **146.49** | **326** | ⇑P | **PKPbc** | **21 52 43.2** | **0.0** |
| **PANC** | **Panciu** | **146.52** | **328** | ⇓P | **PKPbc** | **21 52 44.0** | **+0.7** |
| **TPGR** | **Topolog** | **146.56** | **326** | ⇓P | **PKPbc** | **21 52 43.8** | **+0.4** |
| **KSP** | **Ksiaz** | **146.59** | **344** | *e*PKP | **PKPbc** | **21 52 43.9** | **+0.6** |
| **ODBI** | **Odobesti** | **146.64** | **328** | ⇓P | **PKPbc** | **21 52 44.4** | **+0.8** |
| **CRVS** | **Cervenica-Dubn** | **146.66** | **337** | *e*PKP | **PKPab** | **21 52 46.4** | **-0.1** |
| **VRI** | **Vrincioaia** | **146.73** | **329** | ⇑P | **PKPbc** | **21 52 44.0** | **+0.1** |
| **PLOR** | **Plostina** | **146.78** | **329** | ⇑P | **PKPbc** | **21 52 44.2** | **+0.2** |
| **CLZ** | **Clausthal** | **146.84** | **351** | *e*PKPbc | **PKPbc** | **21 52 44.8** | **+0.8** |
| | baz=16,slow=2.5 | | | | | | |
| **BMR** | **Baia Mare** | **146.85** | **334** | ⇓P | **PKPbc** | **21 52 44.4** | **+0.3** |
| **OSTC** | **Ostas** | **146.87** | **344** | ⇑*e*PKP | **PKPbc** | **21 52 44.8** | **+0.7** |
| OSTC | | | | *e*PKPAB | **PKPab** | **21 52 47.8** | **+0.6** |
| **CHVC** | **Chvalec** | **146.88** | **344** | ⇑*e*PKP | **PKPbc** | **21 52 43.8** | **-0.3** |
| **TRPA** | **Tarpa** | **146.88** | **335** | ⇓P | **PKPbc** | **21 52 44.5** | **+0.3** |
| **CLL** | **Collm** | **146.90** | **348** | *e*PKPdf | **PKPdf** | **21 52 42.0** | **+0.8** |
| CLL | | | | ⇓*i*PKPbc | **PKPbc** | **21 52 43.9** | **-0.2** |
| | comp=Z,17nm,0.6s | | | | | | |
| CLL | | | | ⇑*i*PKPab | **PKPab** | **21 52 47.1** | **-0.2** |
| | comp=Z,12nm,1.0s | | | | | | |
| **CLL** | **Collm** | **146.90** | **348** | | **PKPbc** | **21 52 43.9** | **-0.2** |
| **CLL** | **Collm** | **146.90** | **348** | *e*PKPbc | **PKPbc** | **21 52 44.7** | **+0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **HARR** | **Harsova** | **146.93** | **326** | ⇑P | **PKPbc** | **21 52 44.9** | **+0.5** |
| **ARCR** | **ARCALIA** | **146.94** | **332** | ⇓P | **PKPbc** | **21 52 45.0** | **+0.6** |
| **TLBR** | **Topalu** | **146.96** | **326** | ⇓P | **PKPbc** | **21 52 45.0** | **+0.5** |
| **UPC** | **Upice** | **146.96** | **344** | ⇑*e*PKP | **PKPbc** | **21 52 44.9** | **+0.6** |
| UPC | | | | *e*PKPAB | **PKPab** | **21 52 48.4** | **+0.8** |
| **BISRR** | **Bisoca** | **146.97** | **328** | ⇓P | **PKiKP** | **21 52 45.5** | **-0.9** |
| **COVR** | **Voineasa-Covas** | **147.00** | **329** | ⇓P | **PKPbc** | **21 52 44.3** | **-0.3** |
| **OZUR** | | **147.03** | **330** | ⇓P | **PKPbc** | **21 52 45.2** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **147.03** | **344** | ⇑*e*PKP | **PKPbc** | **21 52 45.3** | **+0.7** |
| DPC | | | | *e*PKPAB | **PKPab** | **21 52 48.7** | **+0.8** |
| **BRG** | **Berggiesshubel** | **147.12** | **347** | *e*PKP | **PKPbc** | **21 52 44.7** | **0.0** |
| BRG | | | | Amp | | 21 52 46.0 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **147.12** | **347** | *e*PKPbc | **PKPbc** | **21 52 45.3** | **+0.7** |
| | baz=16,slow=2.5 | | | | | | |
| **MANR** | **Mangalia** | **147.15** | **324** | ⇑P | **PKPbc** | **21 52 44.6** | **-0.4** |
| **KRLC** | **Kraliky** | **147.15** | **343** | ⇑*e*PKP | **PKPbc** | **21 52 45.3** | **+0.4** |
| **GTTG** | **Gottingen** | **147.19** | **351** | *e*PKPbc | **PKPbc** | **21 52 45.5** | **+0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **FBE** | **Freiberg** | **147.20** | **347** | *e*PKPbc | **PKiKP** | **21 52 45.9** | **-0.7** |
| | baz=16,slow=2.5 | | | | | | |
| **MORC** | **Moravsky Berou** | **147.20** | **342** | *e*PKP | **PKPbc** | **21 52 45.1** | **+0.1** |
| **PVCC** | **Panska Ves** | **147.30** | **346** | ⇑*e*PKP | **PKPbc** | **21 52 45.7** | **+0.5** |
| **DOPR** | **Dopca** | **147.31** | **330** | ⇓P | **PKiKP** | **21 52 46.2** | **-0.8** |
| **MLR** | **Muntele Rosu** | **147.39** | **329** | ⇑P | **PKPbc** | **21 52 45.2** | **-0.5** |
| **MLR** | **Muntele Rosu** | **147.39** | **329** | | **PKPbc** | **21 52 45.1** | **-0.7** |
| **CBBR** | **Cluj-Babes-Bol** | **147.54** | **333** | ⇑P | **PKPbc** | **21 52 46.4** | **+0.5** |
| **CJR** | **Cluj-Napoca** | **147.56** | **333** | ⇑P | **PKPbc** | **21 52 46.5** | **+0.5** |
| **SECR** | | **147.65** | **328** | ⇓P | **PKPbc** | **21 52 46.7** | **+0.4** |
| **LEHL** | **Lehliu** | **147.66** | **327** | ⇓P | **PKPbc** | **21 52 46.6** | **+0.4** |
| **KASTN** | **Kahler Asten** | **147.72** | **353** | *e*PKPbc | **PKPbc** | **21 52 46.8** | **+0.5** |
| | baz=16,slow=2.5 | | | | | | |
| **MOX** | **Moxa** | **147.80** | **349** | *e*PKPbc | **PKPbc** | **21 52 47.0** | **+0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **PRU** | **Pruhonice** | **147.81** | **345** | ⇑*e*PKP | **PKPbc** | **21 52 46.6** | **+0.1** |
| PRU | | | | *e*PKPAB | **PKPab** | **21 52 50.9** | **-0.1** |
| **WERD** | **Werda** | **147.86** | **348** | *e*PKPbc | **PKiKP** | **21 52 47.5** | **-0.6** |
| | baz=16,slow=2.5 | | | | | | |
| **TANN** | **Tannenbergstha** | **147.86** | **348** | *e*PKPbc | **PKiKP** | **21 52 47.4** | **-0.7** |
| | baz=16,slow=2.5 | | | | | | |
| **VOIR** | | **147.86** | **330** | ⇑P | **PKPbc** | **21 52 47.1** | **+0.2** |
| **DRGR** | | **147.88** | **334** | ⇑P | **PKPbc** | **21 52 47.2** | **+0.3** |
| **UBBA** | **Unterbreizbach** | **147.89** | **351** | *e*PKPbc | **PKPbc** | **21 52 46.9** | **+0.4** |
| | baz=16,slow=2.5 | | | | | | |
| **VRAC** | **Vranov** | **147.90** | **343** | ⇑P | **PKPbc** | **21 52 47.1** | **+0.4** |
| **VRAC** | **Vranov** | **147.90** | **343** | *e*PKP | **PKPbc** | **21 52 47.0** | **+0.2** |
| **VYHS** | **Vyhne** | **147.93** | **339** | *e*PKP | **PKiKP** | **21 52 47.6** | **-0.6** |
| **JAVC** | **Velka Javorina** | **147.98** | **341** | *e*PKP | **PKiKP** | **21 52 48.4** | **0.0** |
| **WERN** | **Wernitzgruen** | **148.00** | **348** | *e*PKPbc | **PKiKP** | **21 52 47.9** | **-0.5** |
| | baz=16,slow=2.5 | | | | | | |
| **PSZ** | **Piszkesteto** | **148.06** | **338** | ⇓P | **PKPbc** | **21 52 47.0** | **-0.3** |
| **PSZ** | **Piszkesteto** | **148.06** | **338** | | **PKPbc** | **21 52 47.1** | **-0.2** |
| **ARR** | **Arges** | **148.11** | **330** | ⇑P | **PKiKP** | **21 52 48.6** | **-0.1** |
| **KRUC** | **Moravsky** | **148.18** | **343** | *e*PKP | **PKPbc** | **21 52 47.5** | **0.0** |
| **MANZ** | **Manzenberg** | **148.34** | **348** | *e*PKPbc | **PKiKP** | **21 52 48.7** | **-0.3** |
| | baz=16,slow=2.5 | | | | | | |
| **SMOL** | **Smolenice** | **148.36** | **341** | *e*PKP | **PKiKP** | **21 52 49.0** | **-0.1** |
| **ROTZ** | **Rotzenmuhle** | **148.53** | **348** | *e*PKPbc | **PKiKP** | **21 52 49.1** | **-0.3** |
| | baz=16,slow=2.5 | | | | | | |
| **MODS** | **Modra-Piesok** | **148.53** | **341** | *e*PKP | **PKPab** | **21 52 52.5** | **-1.6** |
| **TNS** | **Taunus Mts** | **148.68** | **353** | *e*PKPbc | **PKiKP** | **21 52 49.5** | **-0.3** |
| | baz=16,slow=2.5 | | | | | | |
| **SIRR** | **Siria** | **148.74** | **334** | ⇓P | **PKPbc** | **21 52 49.2** | **+0.2** |
| **LEF** | **Lefka** | **148.83** | **307** | ⇑P | **PKPbc** | **21 52 48.9** | **-0.6** |
| **KHC** | **Kasperske Hory** | **148.84** | **346** | *e*PKP | **PKPbc** | **21 52 49.5** | **+0.4** |
| KHC | | | | *e*PKPAB | **PKPab** | **21 52 55.5** | **+0.2** |
| **KHC** | **Kasperske Hory** | **148.84** | **346** | | **PKPbc** | **21 52 49.1** | **-0.1** |
| KHC | | | | PKPab | **PKPab** | **21 52 55.5** | **+0.2** |
| **GZR** | **Gura Zlata** | **148.94** | **332** | ⇓P | **PKPbc** | **21 52 49.4** | **-0.1** |
| **CKRC** | **Cesky Krumlov** | **148.95** | **345** | ⇑*e*PKP | **PKPbc** | **21 52 49.8** | **+0.4** |
| **WET** | **Wettzell** | **148.98** | **347** | *e*PKPbc | **PKiKP** | **21 52 50.0** | **-0.4** |
| | baz=16,slow=2.5 | | | | | | |
| **GEC2** | **GERESS Array S** | **149.07** | **346** | | **PKPbc** | **21 52 50.0** | **+0.1** |
| **GEC2** | **GERESS Array S** | **149.07** | **346** | *e*PKPbc | **PKiKP** | **21 52 50.3** | **-0.4** |
| | baz=16,slow=2.5 | | | | | | |
| **GERES** | **GERESS Array B** | **149.07** | **346** | PKPbc | **PKPbc** | **21 52 49.9** | **+0.1** |
| | comp=Z,6.7nm,0.8s,baz=29,slow=3.0,SNR=27 | | | | | | |
| GERES | | | | PKPab | **PKPab** | **21 52 56.5** | **0.0** |
| | comp=Z,0.6nm,0.5s,baz=23,slow=7.2,SNR=4.6 | | | | | | |
| **VLAD** | **Vladila** | **149.22** | **328** | ⇓P | **PKPbc** | **21 52 49.6** | **-0.6** |
| **BZS** | **Buzias** | **149.28** | **333** | ⇑P | **PKPbc** | **21 52 50.0** | **-0.3** |
| **CONA** | **Conrad Observa** | **149.35** | **342** | *i* P | **PKiKP** | **21 52 51.0** | **-0.3** |
| | comp=Z,10.0nm,0.7s,SNR=6.1 | | | | | | |
| **WLF** | **Walferdange** | **149.46** | **355** | *e*PKPbc | **PKiKP** | **21 52 51.8** | **+0.5** |
| | baz=16,slow=2.5 | | | | | | |
| **HERR** | **Herculane** | **149.50** | **332** | ⇓P | **PKPbc** | **21 52 50.8** | **-0.1** |
| **MOA** | **Molln** | **149.86** | **344** | *i* P | **PKPbc** | **21 52 51.7** | **+0.1** |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **MORH** | **Mrgy, Hungar** | **149.96** | **337** | ⇓P | **PKPbc** | **21 52 51.8** | **0.0** |
| **STU** | **Stuttgart** | **150.00** | **351** | *e*PKPbc | **PKiKP** | **21 52 52.5** | **+0.1** |
| | baz=16,slow=2.5 | | | | | | |
| **ARSA** | **Arzberg** | **150.06** | **342** | *i* P | **PKPbc** | **21 52 51.9** | **-0.2** |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **FUR** | **Furstenfeldbru** | **150.24** | **348** | *e*PKPbc | **PKiKP** | **21 52 52.9** | **-0.1** |
| | baz=16,slow=2.5 | | | | | | |
| **RJOB** | **Jochberg** | **150.32** | **346** | *e*PKPbc | **PKiKP** | **21 52 53.0** | **-0.2** |
| | baz=16,slow=2.5 | | | | | | |
| **FRGS** | **Fruska Gora** | **150.39** | **335** | ⇓P | **PKPbc** | **21 52 52.1** | **-0.9** |
| **BFO** | **Black Forest** | **150.56** | **352** | | **PKPbc** | **21 52 52.5** | **-0.8** |
| **BFO** | **Black Forest** | **150.56** | **352** | *e*PKPbc | **PKiKP** | **21 52 53.6** | **0.0** |
| | baz=16,slow=2.5 | | | | | | |
| **SOKA** | **Soboth** | **150.72** | **342** | *i* P | **PKPbc** | **21 52 53.3** | **-0.4** |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.81** | **345** | *i* P | **PKPbc** | **21 52 53.3** | **-0.7** |
| | comp=Z,8.5nm,0.5s | | | | | | |
| **UBR** | **Ueberruh** | **150.92** | **349** | *e*PKPbc | **PKiKP** | **21 52 54.5** | **0.0** |
| | baz=16,slow=2.5 | | | | | | |
| **WATA** | **Walderalm** | **150.97** | **347** | *e*P | **PKPbc** | **21 52 54.2** | **-0.2** |
| | comp=Z,10.0nm,0.5s,SNR=6.9 | | | | | | |
| **RETA** | **Reute** | **150.99** | **348** | *i* P | **PKPbc** | **21 52 54.3** | **0.0** |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **151.02** | **343** | *e*P | **PKPbc** | **21 52 53.8** | **-0.7** |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **WTTA** | **Wattenberg** | **151.03** | **347** | *e*P | **PKPbc** | **21 52 54.5** | **0.0** |
| | comp=Z,20nm,0.5s,SNR=9.3 | | | | | | |
| **MOTA** | **Moosalm** | **151.06** | **348** | *i* P | **PKPbc** | **21 52 54.4** | **-0.2** |
| | comp=Z,12nm,0.9s | | | | | | |
| **MYKA** | **Terra Mystica** | **151.15** | **344** | *e*P | **PKPbc** | **21 52 53.9** | **-0.8** |
| | comp=Z,9.1nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **151.32** | **346** | *i* P | **PKPbc** | **21 52 54.6** | **-0.5** |
| | comp=Z,19nm,0.6s,SNR=8.6 | | | | | | |
| **DAVA** | **Damuels** | **151.34** | **350** | *i* P | **PKiKP** | **21 52 55.8** | **+0.3** |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **151.44** | **348** | *i* P | **PKiKP** | **21 52 55.5** | **-0.2** |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **STAL** | **STALIGIAL** | **151.73** | **345** | | **PKPbc** | **21 52 55.0** | **-0.9** |
| **KEST** | **Kesra** | **162.46** | **341** | PKPab | **PKPab** | **21 53 54.4** | **0.0** |
| | comp=Z,2.4nm,0.6s,baz=52,slow=1.7,SNR=4.9 | | | | | | |

*NEIC* ***20*** *21:42:30.7±1.2, 36.24N±0.02×117.52W±0.02, h3km±7km, Error ellipse: s-maj=3.2km s-min=2.4km az=136.0*
*ANF* ***20*** *21:42:30.5±0.1, 36.22N×117.53W, h12km±1km, ML3.2/31, ML3.1/31, Error ellipse: s-maj=1.3km s-min=1.0km az=41.0*
*REN* ***20*** *21:42:31.0, 36.24N×117.52W, h9km*
*PAS* ***20*** *21:42:31.2±1.3, 36.23N±0.02×117.52W±0.02, h4km±7km, ML3.2/266, ML2.9/74(NEIC), Error ellipse: s-maj=3.2km s-min=2.4km az=137.0*

**ISC 20 21:42:31.0±0.9, 36.23N±0.02×117.53W±0.02, h9km±8km, n69, σ1s03/98, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MPMC** | **Manual Prospec** | **0.17** | **170** | P | **Pg** | **21 42 34.8** | **0.0** |
| | baz=351,SNR=1000 | | | | | | |
| MPMC | | | | S | **Sg** | **21 42 37.6** | **+0.1** |
| | baz=351 | | | | | | |
| **CWC** | **Cottonwood Cre** | **0.49** | **295** | P | **Pg** | **21 42 40.6** | **-0.1** |
| | baz=114 | | | | | | |
| CWC | | | | S | **Sg** | **21 42 47.8** | **+0.5** |
| | baz=114 | | | | | | |
| **FURC** | **Furnace Creek,** | **0.58** | **66** | P | **Pg** | **21 42 42.5** | **+0.2** |
| | baz=247,SNR=173 | | | | | | |
| FURC | | | | S | **Sg** | **21 42 50.6** | **+0.6** |
| | baz=247 | | | | | | |
| **QSM** | **Queen of Sheba** | **0.59** | **116** | Pg | **Pg** | **21 42 42.4** | **-0.1** |
| QSM | | | | Sg | **Sg** | **21 42 50.5** | **+0.2** |
| QSM | | | | IAML | | 21 42 55.6 | |
| | comp=E,555nm,0.2s | | | | | | |
| **GWY** | **Greenwater Val** | **0.69** | **93** | Pg | **Pg** | **21 42 44.2** | **-0.2** |
| GWY | | | | Sg | **Sg** | **21 42 53.7** | **+0.2** |
| GWY | | | | IAML | | 21 42 56.9 | |
| | comp=N,528nm,0.3s | | | | | | |
| GWY | | | | IAML | | 21 42 58.1 | |
| | comp=E,697nm,0.3s | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **0.76** | **190** | P | **Pg** | **21 42 45.4** | **-0.3** |
| | baz=9.6,SNR=242 | | | | | | |
| LRMC | | | | S | **Sg** | **21 42 55.9** | **+0.3** |
| | baz=9.6 | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.77** | **9** | Pg | **Pg** | **21 42 45.8** | **-0.2** |
| GRAC | | | | IAML | | 21 43 01.3 | |
| | comp=E,557nm,0.6s | | | | | | |
| GRAC | | | | IAML | | 21 43 03.5 | |
| | comp=N,629nm,0.5s | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.77** | **9** | P | **Pg** | **21 42 45.8** | **-0.2** |
| | baz=190,SNR=18 | | | | | | |
| **ISA** | **Isabella, Lake** | **0.96** | **234** | Pg | **Pg** | **21 42 49.1** | **-0.2** |
| ISA | | | | Sg | **Sg** | **21 43 02.1** | **+0.2** |
| ISA | | | | IAML | | 21 43 05.0 | |
| | comp=E,410nm,0.4s | | | | | | |
| ISA | | | | IAML | | 21 43 05.2 | |
| | comp=N,469nm,0.7s | | | | | | |
| **ISA** | **Isabella, Lake** | **0.96** | **234** | P | **Pg** | **21 42 49.2** | **-0.2** |
| | baz=53,SNR=75 | | | | | | |
| ISA | | | | S | **Sg** | **21 43 01.9** | **+0.1** |
| | baz=53 | | | | | | |
| **TIN** | **Tinemaha, Big** | **1.00** | **326** | P | **Pg** | **21 42 49.8** | **-0.4** |
| | baz=145,SNR=19 | | | | | | |
| TIN | | | | S | **Sb** | **21 43 03.6** | **-0.3** |
| | baz=145 | | | | | | |
| **LCH** | **Last Change Ra** | **1.00** | **355** | Pg | **Pg** | **21 42 49.3** | **-1.1** |
| LCH | | | | IAML | | 21 43 06.5 | |
| | comp=E,288nm,0.4s | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.10** | **148** | Pg | **Pg** | **21 42 51.8** | **+0.1** |
| GSC | | | | IAML | | 21 43 08.6 | |
| | comp=N,351nm,0.6s | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.10** | **148** | P | **Pg** | **21 42 51.8** | **-0.3** |
| | baz=328,SNR=81 | | | | | | |
| GSC | | | | S | **Sg** | **21 43 06.4** | **+0.1** |
| | baz=328 | | | | | | |
| **CCAC** | **Calif City Air** | **1.15** | **201** | Pg | **Pg** | **21 42 52.4** | **-0.7** |
| CCAC | | | | IAML | | 21 43 10.9 | |
| | comp=N,252nm,0.7s | | | | | | |
| **TPNV** | **Topopah Spring** | **1.25** | **55** | Pg | **Pg** | **21 42 54.3** | **-0.7** |
| TPNV | | | | IAML | | 21 43 14.8 | |
| | comp=N,296nm,0.5s | | | | | | |
| TPNV | | | | IAML | | 21 43 16.2 | |
| | comp=N,283nm,0.5s | | | | | | |
| **TPNV** | **Topopah Spring** | **1.25** | **55** | P | **Pg** | **21 42 54.4** | **-0.7** |
| | baz=236,SNR=216 | | | | | | |
| TPNV | | | | S | **Sg** | **21 43 10.5** | **-0.8** |
| | baz=236 | | | | | | |
| **HELL** | **Mitchell Peak,** | **1.29** | **291** | | **Pg** | **21 42 54.7** | **-1.1** |
| **VES** | **Vestal, Richgr** | **1.32** | **253** | Pg | **Pn** | **21 42 56.0** | **+0.3** |
| | baz=72,SNR=52 | | | | | | |
| VES | | | | Sg | **Sb** | **21 43 13.7** | **+0.6** |
| | baz=72 | | | | | | |
| **MTUM** | **Tungsten Hills** | **1.40** | **324** | | **Pn** | **21 42 56.7** | **-0.2** |
| **EDW2** | **Edwards Air Fo** | **1.40** | **196** | Pb | **Pn** | **21 42 56.8** | **-0.1** |
| | baz=16,SNR=78 | | | | | | |
| **RRX** | **Edison Barstow** | **1.42** | **162** | Pg | **Pg** | **21 42 58.0** | **-0.3** |
| | baz=343 | | | | | | |
| RRX | | | | Sg | **Sn** | **21 43 17.7** | **+1.8** |
| | baz=343 | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.50** | **274** | Pg | **Pb** | **21 42 59.2** | **+0.1** |
| | baz=93,SNR=5.9 | | | | | | |
| **TUQ** | **Turquoise Moun** | **1.52** | **121** | P | **Pn** | **21 42 57.5** | **-1.1** |
| | baz=302,SNR=165 | | | | | | |
| TUQ | | | | Sg | **Sg** | **21 43 20.2** | **+0.2** |
| | baz=302 | | | | | | |
| **ARVC** | **Arvin** | **1.53** | **224** | Pg | **Pb** | **21 42 59.7** | **+0.2** |
| | baz=43 | | | | | | |
| **HEC** | **Hector,Ludlow** | **1.70** | **145** | Pn | **Pn** | **21 43 00.1** | **-0.9** |
| | baz=326 | | | | | | |
| HEC | | | | Pg | **Pb** | **21 43 02.5** | **-0.1** |
| | baz=326,SNR=14 | | | | | | |
| HEC | | | | Sb | **Sg** | **21 43 25.2** | **-0.5** |
| | baz=326 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **1.75** | **323** | Pg | **Pg** | **21 43 04.0** | **-0.5** |
| | baz=143,SNR=14 | | | | | | |
| MLAC | | | | Sb | **Sg** | **21 43 26.9** | **-0.4** |
| | baz=143 | | | | | | |
| **KCC** | **Kaiser Creek** | **1.81** | **308** | | **Pb** | **21 43 03.7** | **-0.7** |
| **TPH** | **Tonopah** | **1.86** | **7** | Pn | **Pn** | **21 43 03.0** | **-0.3** |
| TPH | | | | IAML | | 21 43 32.8 | |
| | comp=E,168nm,0.4s | | | | | | |
| **OSI** | **Osito Audit: C** | **1.89** | **212** | Pg | **Pb** | **21 43 06.2** | **+0.5** |
| | baz=31,SNR=6.3 | | | | | | |
| **SHPR** | **

comp=N,5.7nm,0.9s

*DDA **20** 21:48:35.2±0.0,38°.68N×23°.57E,h6km±3km,ML3.1*
*ISK **20** 21:48:36.0,38°.69N×23°.48E,h2km,ML3.3/13*
*ATH **20** 21:48:37.4,38°.61N×23°.44E,h24km±1km,ML3.4/20,Error ellipse: s-maj=1.4km s-min=0.6km az=207.0*
*IDC **20** 21:48:38.2±1.5,38°.68N×23°.58E,h0km,mb3.4/3, mb1 3.4/4,mb1mx3.3/38,mbtmp3.4/4,ML2.7/1,MS3.4/1, Ms1 3.4/1,ms1mx2.5/47,Error ellipse: s-maj=61.3km s-min=24.0km az=161.0*
*THE **20** 21:48:38.0,38°.61N×23°.43E,h9km±1km,ML3.3/15,Error ellipse: s-maj=1.0km s-min=0.4km az=102.0*

**ISC 20 21:48:37.8±1.0,38°.63N±0°.02×23°.46E±0°.01,h7km±8km, n112,σ1§12/157,mb3.2/3,1C-1D,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAL** | **Atalanti** | **0.35** | **280** | P | **Pg** | **21 48 44.4** | **-0.2** |
| ATAL | | | | S | **Sg** | **21 48 48.9** | **-0.3** |
| | 4μm,0.2s | | | | | | |
| **ATAL** | **Atalanti** | **0.35** | **280** | P | **Pg** | **21 48 44.5** | **-0.1** |
| ATAL | | | | S | **Sg** | **21 48 49.4** | **+0.2** |
| ATAL | | | | AML | AML | 21 48 50.9 | |
| | comp=E,8787μm,0.2s | | | | | | |
| ATAL | | | | AML | AML | 21 48 56.6 | |
| | comp=N,14415μm,0.4s | | | | | | |
| **LKR** | **Lokris** | **0.36** | **273** | P | **Pg** | **21 48 44.4** | **-0.5** |
| LKR | | | | S | **Sg** | **21 48 49.6** | **0.0** |
| | comp=N,8μm,0.1s | | | | | | |
| **LKR** | **Lokris** | **0.36** | **273** | P | **Pg** | **21 48 44.4** | **-0.5** |
| LKR | | | | AML | AML | 21 48 50.9 | |
| | comp=E,16854μm,0.2s | | | | | | |
| LKR | | | | AML | AML | 21 48 56.6 | |
| | comp=N,20265μm,0.2s | | | | | | |
| **VIL2** | **Platees** | **0.45** | **200** | P | **Pg** | **21 48 46.7** | **+0.2** |
| VIL2 | | | | S | **Sb** | **21 48 54.2** | **-0.8** |
| VIL2 | | | | AML | AML | 21 48 56.2 | |
| | comp=N,11103μm,0.3s | | | | | | |
| VIL2 | | | | AML | AML | 21 48 59.3 | |
| | comp=E,12632μm,0.3s | | | | | | |
| **VILL** | **Villia** | **0.48** | **194** | P | **Pg** | **21 48 46.5** | **-0.7** |
| VILL | | | | S | **Sg** | **21 48 54.0** | **+0.5** |
| | comp=E,7μm,0.3s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **0.50** | **90** | P | **Pg** | **21 48 47.8** | **+0.3** |
| KYMI | | | | S | **Sg** | **21 48 54.8** | **+0.7** |
| | comp=E,3μm,0.5s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **0.50** | **90** | P | **Pg** | **21 48 47.9** | **+0.3** |
| KYMI | | | | S | **Sb** | **21 48 55.3** | **-1.3** |
| KYMI | | | | AML | AML | 21 48 58.7 | |
| | comp=N,5456μm,0.2s | | | | | | |
| KYMI | | | | AML | AML | 21 48 60.0 | |
| | comp=E,5591μm,0.5s | | | | | | |
| **ALNA** | **Alonissos** | **0.60** | **32** | P | **Pb** | **21 48 50.5** | **-0.3** |
| **PTL** | **Penteli** | **0.67** | **151** | P | **Pg** | **21 48 50.3** | **-0.3** |
| PTL | | | | S | **Sg** | **21 49 00.0** | **+0.7** |
| | comp=E,6μm,0.6s | | | | | | |
| **PTL** | **Penteli** | **0.67** | **151** | P | **Pg** | **21 48 50.6** | **-0.1** |
| PTL | | | | S | **Sg** | **21 48 59.3** | **0.0** |
| PTL | | | | AML | AML | 21 49 04.0 | |
| | comp=E,12413μm,0.7s | | | | | | |
| PTL | | | | AML | AML | 21 49 04.3 | |
| | comp=N,11780μm,0.5s | | | | | | |
| **DION** | **Dionisos Attik** | **0.67** | **146** | P | **Pg** | **21 48 50.5** | **-0.2** |
| DION | | | | S | **Sg** | **21 48 59.8** | **+0.4** |
| | comp=N,21μm,0.3s | | | | | | |
| **DION** | **Dionisos Attik** | **0.67** | **146** | P | **Pg** | **21 48 50.6** | **-0.2** |
| DION | | | | S | **Sg** | **21 48 59.6** | **+0.2** |
| DION | | | | AML | AML | 21 49 03.3 | |
| | comp=N,30162μm,0.3s | | | | | | |
| DION | | | | AML | AML | 21 49 04.5 | |
| | comp=E,23160μm,0.3s | | | | | | |
| **ATH** | **Athens Observa** | **0.69** | **163** | P | **Pg** | **21 48 50.9** | **-0.2** |
| ATH | | | | S | **Sb** | **21 49 01.5** | **-0.4** |
| | comp=E,17μm,0.4s | | | | | | |
| **ATH** | **Athens Observa** | **0.69** | **163** | P | **Pg** | **21 48 51.0** | **-0.2** |
| ATH | | | | S | **Sg** | **21 49 01.0** | **+0.9** |
| ATH | | | | AML | AML | 21 49 04.2 | |
| | comp=E,32887μm,0.3s | | | | | | |
| ATH | | | | AML | AML | 21 49 04.3 | |
| | comp=N,35744μm,0.5s | | | | | | |
| **NEO** | **Neokhori** | **0.70** | **345** | P | **Pb** | **21 48 51.8** | **-0.6** |
| NEO | | | | S | **Sb** | **21 49 02.8** | **+0.5** |
| NEO | | | | AML | AML | 21 49 03.9 | |
| | comp=N,7741μm,0.3s | | | | | | |
| NEO | | | | AML | AML | 21 49 04.9 | |
| | comp=E,11708μm,0.3s | | | | | | |
| **ATHU** | **Athens Univers** | **0.71** | **159** | P | **Pg** | **21 48 51.4** | **-0.2** |
| ATHU | | | | S | **Sg** | **21 49 01.6** | **+0.8** |
| | comp=E,5μm,0.4s | | | | | | |
| **ATHU** | **Athens Univers** | **0.71** | **159** | P | **Pg** | **21 48 51.6** | **0.0** |
| ATHU | | | | S | **Sg** | **21 49 01.6** | **+0.8** |
| ATHU | | | | AML | AML | 21 49 04.3 | |
| | comp=E,6460μm,0.3s | | | | | | |
| ATHU | | | | AML | AML | 21 49 04.6 | |
| | comp=N,12123μm,0.5s | | | | | | |
| **XOR** | **Xorichti** | **0.76** | **344** | P | **Pb** | **21 48 52.8** | **-0.7** |
| **XOR** | **Xorichti** | **0.76** | **344** | P | **Pb** | **21 48 52.8** | **-0.7** |
| XOR | | | | S | **Sb** | **21 49 04.3** | **+0.2** |
| XOR | | | | AML | AML | 21 49 06.8 | |
| | comp=N,5758μm,0.5s | | | | | | |
| XOR | | | | AML | AML | 21 49 07.7 | |
| | comp=E,3369μm,0.4s | | | | | | |
| **DLFA** | **Delphi** | **0.77** | **259** | P | **Pg** | **21 48 51.5** | **-1.1** |
| DLFA | | | | S | **Sg** | **21 49 02.5** | **-0.2** |
| DLFA | | | | AML | AML | 21 49 06.1 | |
| | comp=E,3928μm,0.7s | | | | | | |
| DLFA | | | | AML | AML | 21 49 06.2 | |
| | comp=N,3191μm,0.5s | | | | | | |
| **VLY** | **Voula,Athens** | **0.82** | **161** | P | **Pg** | **21 48 53.0** | **-0.7** |
| **VLY** | **Voula,Athens** | **0.82** | **161** | P | **Pg** | **21 48 53.7** | **0.0** |
| VLY | | | | S | **Sg** | **21 49 04.6** | **+0.3** |
| VLY | | | | AML | AML | 21 49 07.9 | |
| | comp=E,17730μm,0.3s | | | | | | |
| VLY | | | | AML | AML | 21 49 08.3 | |
| | comp=N,11381μm,0.4s | | | | | | |
| **THAL** | **Thalero** | **0.86** | **227** | P | **Pg** | **21 48 53.6** | **-0.8** |
| **THAL** | **Thalero** | **0.86** | **227** | P | **Pg** | **21 48 53.6** | **-0.8** |
| THAL | | | | S | **Sg** | **21 49 05.2** | **-0.4** |
| THAL | | | | AML | AML | 21 49 09.7 | |
| | comp=N,13904μm,0.3s | | | | | | |
| THAL | | | | AML | AML | 21 49 11.2 | |
| | comp=E,11901μm,0.3s | | | | | | |
| **SKY** | **Skiros Island** | **0.89** | **74** | P | **Pb** | **21 48 55.5** | **-0.1** |
| SKY | | | | S | **Sn** | **21 49 09.3** | **-0.6** |
| | comp=E,6μm,0.4s | | | | | | |
| **SKY** | **Skiros Island** | **0.89** | **74** | P | **Pb** | **21 48 55.1** | **-0.5** |
| SKY | | | | S | **Sn** | **21 49 08.8** | **-1.1** |
| SKY | | | | AML | AML | 21 49 10.4 | |
| | comp=N,12450μm,0.5s | | | | | | |
| SKY | | | | AML | AML | 21 49 12.5 | |
| | comp=E,9903μm,0.3s | | | | | | |
| **AGG** | **Agios Georgios** | **0.96** | **294** | P | **Pg** | **21 48 55.6** | **-0.7** |
| AGG | | | | S | **Sb** | **21 49 09.9** | **0.0** |
| | comp=E,595nm,0.5s | | | | | | |
| **AGG** | **Agios Georgios** | **0.96** | **294** | P | **Pg** | **21 48 55.5** | **-0.9** |
| AGG | | | | S | **Sb** | **21 49 10.2** | **+0.3** |
| AGG | | | | AML | AML | 21 49 13.5 | |
| | comp=N,1292μm,0.8s | | | | | | |
| AGG | | | | AML | AML | 21 49 14.8 | |
| | comp=E,1165μm,0.5s | | | | | | |
| **AGG** | **Agios Georgios** | **0.96** | **294** | P | **Pg** | **21 48 55.2** | **-1.1** |
| AGG | | | | S | **Sg** | **21 49 09.1** | **+0.3** |
| **KARY** | **Karystos** | **0.98** | **128** | P | **Pg** | **21 48 56.3** | **-0.3** |
| KARY | | | | S | **Sg** | **21 49 09.4** | **+0.2** |
| **EPID** | **Epidavros** | **1.05** | **195** | P | **Pg** | **21 48 57.5** | **-0.5** |
| EPID | | | | S | **Sg** | **21 49 12.2** | **+0.5** |
| | comp=E,4μm,0.4s | | | | | | |
| **EPID** | **Epidavros** | **1.05** | **195** | P | **Pg** | **21 48 57.3** | **-0.7** |
| **MAKR** | **Makrakomi, Fth** | **1.10** | **291** | P | **Pg** | **21 48 58.9** | **-0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.10** | **291** | P | **Pg** | **21 48 58.6** | **-0.4** |
| MAKR | | | | S | **Sb** | **21 49 14.5** | **+0.6** |
| **TRIZ** | **Trizonia** | **1.12** | **257** | P | **Pg** | **21 48 57.5** | **-1.9** |
| TRIZ | | | | S | **Sg** | **21 49 13.0** | **-0.9** |
| **ALIK** | **Aliki, Aigiali** | **1.12** | **251** | P | **Pg** | **21 48 58.2** | **-1.2** |
| **KLV** | **Kalavryta, Ach** | **1.19** | **241** | P | **Pg** | **21 48 58.6** | **-2.0** |
| **KLV** | **Kalavryta, Ach** | **1.19** | **241** | P | **Pg** | **21 48 59.4** | **-1.2** |
| KLV | | | | S | **Sg** | **21 49 15.8** | **-0.2** |
| KLV | | | | AML | AML | 21 49 23.5 | |
| | comp=E,860μm,0.8s | | | | | | |
| KLV | | | | AML | AML | 21 49 24.6 | |
| | comp=N,917μm,0.5s | | | | | | |
| **ANX** | **Ano Chora** | **1.21** | **269** | P | **Pg** | **21 48 59.3** | **-1.7** |
| ANX | | | | S | **Sg** | **21 49 16.5** | **-0.1** |
| | comp=N,1μm,0.5s | | | | | | |
| **ANX** | **Ano Chora** | **1.21** | **269** | P | **Pg** | **21 48 59.3** | **-1.7** |
| ANX | | | | S | **Sn** | **21 49 17.8** | **-0.1** |
| ANX | | | | AML | AML | 21 49 20.6 | |
| | comp=N,2158μm,0.4s | | | | | | |
| ANX | | | | AML | AML | 21 49 25.5 | |
| | comp=E,2080μm,0.7s | | | | | | |
| **LAKA** | **Lakka** | **1.23** | **252** | P | **Pg** | **21 48 59.5** | **-1.8** |
| **LAKA** | **Lakka** | **1.23** | **252** | P | **Pg** | **21 48 59.6** | **-1.8** |
| LAKA | | | | S | **Sb** | **21 49 18.0** | **+0.5** |
| LAKA | | | | AML | AML | 21 49 23.0 | |
| | comp=E,2937μm,0.6s | | | | | | |
| LAKA | | | | AML | AML | 21 49 23.0 | |
| | comp=N,1949μm,0.5s | | | | | | |
| **EFP** | **Efpalio** | **1.23** | **261** | P | **Pg** | **21 48 59.2** | **-2.3** |
| EFP | | | | S | **Sg** | **21 49 17.5** | **-0.1** |
| | comp=N,675nm,0.4s | | | | | | |
| **EFP** | **Efpalio** | **1.23** | **261** | P | **Pg** | **21 48 59.2** | **-2.3** |
| EFP | | | | S | **Sb** | **21 49 17.9** | **+0.2** |
| EFP | | | | AML | AML | 21 49 25.4 | |
| | comp=E,1336μm,0.3s | | | | | | |
| EFP | | | | AML | AML | 21 49 25.9 | |
| | comp=N,1273μm,0.4s | | | | | | |
| **KRND** | **KRANIDI** | **1.27** | **191** | P | **Pn** | **21 49 01.3** | **-0.7** |
| KRND | | | | S | **Sg** | **21 49 18.9** | **+0.2** |
| | comp=N,2μm,0.5s | | | | | | |
| **KRND** | **KRANIDI** | **1.27** | **191** | P | **Pn** | **21 49 01.4** | **-0.7** |
| KRND | | | | S | **Sg** | **21 49 18.9** | **+0.2** |
| **PAIG** | **Paliouri** | **1.30** | **7** | P | **Pn** | **21 49 01.9** | **-0.6** |
| **PAIG** | **Paliouri** | **1.30** | **7** | P | **Pn** | **21 49 02.0** | **-0.6** |
| **EVR** | **Evrytania** | **1.32** | **283** | P | **Pn** | **21 49 02.5** | **-0.3** |
| **EVR** | **Evrytania** | **1.32** | **283** | P | **Pn** | **21 49 02.9** | **0.0** |
| **THL** | **Klokotos Trika** | **1.46** | **310** | P | **Pn** | **21 49 04.3** | **-0.3** |
| **THL** | **Klokotos Trika** | **1.46** | **310** | P | **Pn** | **21 49 04.3** | **-0.3** |
| **DRO** | **Drossia** | **1.54** | **244** | P | **Pn** | **21 49 05.1** | **-0.6** |
| **DRO** | **Drossia** | **1.54** | **244** | P | **Pn** | **21 49 05.4** | **-0.2** |
| **LIT** | **Litokhoron** | **1.65** | **333** | P | **Pn** | **21 49 06.9** | **-0.4** |
| **LIT** | **Litokhoron** | **1.65** | **333** | P | **Pn** | **21 49 06.8** | **-0.4** |
| **LIT** | **Litokhoron** | **1.65** | **333** | P | **Pn** | **21 49 06.3** | **-0.9** |
| **TNSA** | **Tinos** | **1.73** | **129** | P | **Pn** | **21 49 07.8** | **-0.6** |
| **PLG** | **Polygyros** | **1.74** | **360** | P | **Pn** | **21 49 08.1** | **-0.4** |
| **PLG** | **Polygyros** | **1.74** | **360** | P | **Pn** | **21 49 08.2** | **-0.4** |
| PLG | | | | AML | AML | 21 49 31.4 | |
| | comp=N,431μm,0.4s | | | | | | |
| PLG | | | | AML | AML | 21 49 31.5 | |
| | comp=E,458μm,0.5s | | | | | | |
| **ITM** | **Ithomi** | **1.89** | **220** | PN | **Pn** | **21 49 10.9** | **+0.3** |
| ITM | | | | SN | **Sb** | **21 49 36.9** | **+0.4** |
| **SIGR** | **SIGRI** | **1.96** | **72** | P | **Pn** | **21 49 10.8** | **-0.7** |
| **SIGR** | **SIGRI** | **1.96** | **72** | P | **Pn** | **21 49 10.8** | **-0.7** |
| **VLI** | **Veliai** | **1.96** | **192** | P | **Pn** | **21 49 10.8** | **-0.7** |
| VLI | | | | S | **Sn** | **21 49 34.8** | **-1.5** |
| | comp=E,395nm,0.6s | | | | | | |
| **VLI** | **Veliai** | **1.96** | **192** | P | **Pn** | **21 49 10.7** | **-0.7** |
| **CHOS** | **Chios island** | **2.05** | **96** | P | **Pn** | **21 49 12.7** | **-0.2** |
| **CHOS** | **Chios island** | **2.05** | **96** | P | **Pn** | **21 49 12.6** | **-0.2** |
| **KZN** | **Kozani** | **2.12** | **323** | P | **Pn** | **21 49 14.3** | **+0.5** |
| **SOH** | **Sokhos** | **2.19** | **358** | P | **Pn** | **21 49 15.1** | **+0.4** |
| **KOCA** | **Canakkale, Ayv** | **2.26** | **67** | P | **Pn** | **21 49 14.4** | **-1.2** |
| KOCA | | | | S | **Sn** | **21 49 40.1** | **-3.7** |
| **PRK** | **Paraskevi** | **2.28** | **74** | P | **Pn** | **21 49 16.5** | **+0.6** |
| **ZEYE** | **Izmir, Urla-Ze** | **2.42** | **98** | P | **Pn** | **21 49 16.9** | **-0.9** |
| ZEYE | | | | S | **Sg** | **21 49 53.8** | **-1.9** |
| **GADA** | **Gvkgeada** | **2.45** | **50** | PN | **Pn** | **21 49 17.8** | **-0.4** |
| GADA | | | | SN | **Sn** | **21 49 48.2** | **-0.2** |
| **GADA** | **Gvkgeada** | **2.45** | **50** | P | **Pb** | **21 49 22.3** | **+0.1** |
| **URLA** | **Izmir** | **2.48** | **95** | PN | **Pn** | **21 49 18.7** | **+0.1** |
| URLA | | | | SN | **Sn** | **21 49 49.7** | **+0.5** |
| **URLA** | **Izmir** | **2.48** | **95** | P | **Pn** | **21 49 17.9** | **-0.8** |
| **SRS** | **Serrai** | **2.48** | **2** | P | **Pn** | **21 49 18.6** | **-0.2** |
| **EZN** | **Ezine** | **2.52** | **61** | PN | **Pn** | **21 49 19.3** | **0.0** |
| **EZN** | **Ezine** | **2.52** | **61** | P | **Pb** | **21 49 22.3** | **-1.2** |
| **AYVA** | **Ayvalik** | **2.61** | **74** | P | **Pn** | **21 49 16.3** | **-4.1** |
| AYVA | | | | *i* AML | AML | 21 50 06.0 | |
| | comp=E,79nm,0.7s | | | | | | |
| **FNA** | **Florina** | **2.68** | **324** | P | **Pn** | **21 49 22.4** | **+0.9** |
| **FNA** | **Florina** | **2.68** | **324** | P | **Pn** | **21 49 22.5** | **+1.0** |
| **DKL** | **Dikili** | **2.73** | **80** | PN | **Pn** | **21 49 21.9** | **-0.1** |
| **NVR** | **Nevrokopi** | **2.73** | **6** | P | **Pn** | **21 49 22.1** | **-0.1** |
| **DGB** | **zmir** | **2.75** | **101** | P | **Pn** | **21 49 21.5** | **-0.9** |
| DGB | | | | S | **Sg** | **21 50 04.5** | **-1.8** |
| **VAY** | **Valandovo** | **2.77** | **346** | *i* Pn | **Pn** | **21 49 23.4** | **+0.8** |
| **ZEDA** | **zmir-Bergama** | **2.85** | **82** | P | **Pn** | **21 49 21.6** | **-2.1** |
| ZEDA | | | | S | **Sn** | **21 49 52.3** | **-5.9** |
| **GELI** | **Tayfur-Gelibol** | **2.92** | **52** | PN | **Pn** | **21 49 24.2** | **-0.5** |
| GELI | | | | SN | **Sn** | **21 50 00.1** | **0.0** |
| **BUHA** | **Balikesir, Bur** | **2.95** | **72** | P | **Pn** | **21 49 23.7** | **-1.3** |
| **RDO** | **Rodhopi** | **2.98** | **32** | PN | **Pn** | **21 49 24.9** | **-0.6** |
| RDO | | | | SN | **Sn** | **21 50 00.9** | **-0.5** |
| **ERIK** | **Erikli-Kesan** | **3.11** | **48** | PN | **Pn** | **21 49 26.4** | **-1.0** |
| **GCAM** | **G?zelcami?** | **3.12** | **106** | PN | **Pn** | **21 49 27.9** | **+0.5** |
| **GCAM** | **G?zelcami?** | **3.12** | **106** | P | **Pn** | **21 49 24.7** | **-2.7** |
| **IMMV** | **Iera Moni Meta** | **3.19** | **172** | PN | **Pn** | **21 49 30.1** | **+1.6** |
| **STIP** | **Stip** | **3.21** | **343** | *i* Pn | **Pn** | **21 49 29.2** | **+0.5** |
| **BOJT** | **Bodrum** | **3.43** | **116** | PN | **Pn** | **21 49 32.0** | **+0.3** |
| **KRBG** | **Karabiga-Canak** | **3.45** | **58** | PN | **Pn** | **21 49 16.8** | **-0.2** |
| **IDI** | **Anoyia** | **3.53** | **161** | PN | **Pn** | **21 49 34.7** | **+1.5** |
| **PLD** | **Plovdiv** | **3.60** | **15** | PN | **Pn** | **21 49 34.2** | **+0.2** |
| **EDRB** | **Edirne** | **4.08** | **37** | PN | **Pn** | **21 49 40.9** | **+0.3** |
| **DEMI** | **Demirci** | **4.12** | **83** | P | Pn | 21 49 35.5 | -5.8 |
| **TURN** | **Turunc** | **4.22** | **115** | P | **Pn** | **21 49 42.5** | **-0.2** |
| TURN | | | | *i* AML | AML | 21 50 53.0 | |
| | comp=E,23nm,1.6s | | | | | | |
| TURN | | | | *i* AML | AML | 21 50 55.0 | |
| | comp=E,27nm,2.5s | | | | | | |
| **USAK** | **Uak-Merkez** | **4.35** | **87** | P | **Pn** | **21 49 44.2** | **-0.2** |
| USAK | | | | *i* AML | AML | 21 50 31.0 | |
| | comp=E,28nm,1.2s | | | | | | |
| USAK | | | | *i* AML | AML | 21 50 31.0 | |
| | comp=E,28nm,1.1s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **4.46** | **103** | P | **Pn** | **21 49 44.6** | **-1.3** |
| **VOIR** | | **6.90** | **9** | ⇓P | **Pn** | **21 50 20.0** | **+0.5** |
| **MLR** | **Muntele Rosu** | **7.10** | **14** | ⇑P | **Pn** | **21 50 25.6** | **+3.4** |
| **BRTR** | **Keskin Array B** | **7.98** | **79** | Pn | **Pn** | **21 50 36.0** | **+1.6** |
| | comp=E,0.1nm,0.3s,baz=262,slow=12,SNR=5.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **21.26** | **281** | P | **P** | **21 53 26.9** | **+2.1** |
| | comp=E,1.0nm,1.1s,baz=85,slow=14,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.89** | **223** | P | **P** | **21 55 06.2** | **+2.3** |
| | comp=E,1.1nm,0.8s,baz=24,slow=8.9,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.09** | **59** | P | **P** | **21 56 38.9** | **+0.4** |
| | comp=E,0.3nm,0.5s,baz=264,slow=9.4,SNR=5.1 | | | | | | |
| **NRIK** | **Noril'sk** | **45.35** | **27** | LR | LR | 22 19 58.5 | |
| | comp=E,48nm,19.8s,baz=308,slow=42 | | | | | | |

**NOU 20 21:59:17.9,14°.62S×167°.42E,h129km,MLv4.7/9, Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **0.85** | **194** | P | Pn | 21 59 39.5 | +0.1 |
| **DVP** | **Devils Point** | **3.17** | **167** | P | Pn | 22 00 07.3 | +0.5 |
| **KOUNC** | **Koumac, New Ca** | **6.61** | **206** | P | Pn | 22 00 53.0 | +0.4 |
| **YATNC** | **Mamie plateau,** | **7.42** | **184** | P | Pn | 22 01 03.3 | -0.2 |
| **DZM** | **Mont Dzumac** | **7.47** | **187** | P | Pn | 22 01 03.8 | -0.5 |

*IDC **20** 22:10:55.4±2.1,9°.11S×124°.29E,h100km±23km,mb3.7/6, mb1 4.0/11,mb1mx3.7/37,mbtmp4.3/11,Error ellipse: s-maj=38.7km s-min=16.1km az=56.0*
*DJA **20** 22:10:56.1±0.3,9°.5S±2°×12°.4E±°,h95km±4km,M4.4/12, mb4.5/6,mB5.2/3,MLv4.2/12,Mw(mB)4.7/3*
*NEIC **20** 22:10:57.0±1.8,9°.25S±0°.07×123°.99E±0°.06,h111km±5km, mb4.3/20,Error ellipse: s-maj=11.9km s-min=6.1km az=215.0*

**ISC 20 22:10:57.1±0.6,9°.26S±0°.05×124°.00E±0°.05,h116km±6km, n95,σ1§82/100,mb4.5/24,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **0.56** | **152** | Pn | **Pn** | **22 11 13.6** | **-1.6** |
| SOEI | | | | Sn | **Sn** | **22 11 27.4** | **-1.3** |
| **SOEI** | **Soe** | **0.56** | **152** | P | **Pn** | **22 11 14.3** | **-0.9** |
| SOEI | | | | S | **Sn** | **22 11 27.5** | **-1.3** |
| **BATI** | **Baumata** | **1.00** | **199** | P | **Pn** | **22 11 19.4** | **+0.6** |
| | 359nm,0.3s,baz=30,slow=2.8,SNR=278 | | | | | | |
| BATI | | | | S | **Sn** | **22 11 36.1** | **+0.9** |
| | 469nm,0.3s,baz=79,slow=3.3,SNR=9.8 | | | | | | |
| **BATI** | **Baumata** | **1.00** | **199** | P | **Pn** | **22 11 19.5** | **+0.6** |
| BATI | | | | S | **Sn** | **22 11 36.9** | **+1.7** |
| **MMRI** | **Maumere** | **1.85** | **289** | Pn | **Pn** | **22 11 27.1** | **-1.4** |
| MMRI | | | | Sn | **Sn** | **22 11 50.8** | **-1.7** |
| **MMRI** | **Maumere** | **1.85** | **289** | P | **Pn** | **22 11 27.2** | **-1.3** |
| MMRI | | | | S | **Sn** | **22 11 51.0** | **-1.5** |
| **MMRI** | **Maumere** | **1.85** | **289** | P | **Pn** | **22 11 27.6** | **-0.9** |
| **BASI** | **Baing, Sumba** | **3.51** | **254** | P | **Pn** | **22 11 51.5** | **+1.5** |
| **BBSI** | **Bau Bau** | **4.01** | **339** | P | **Pn** | **22 11 55.5** | **-1.2** |
| **WBSI** | **Waikabubak, Su** | **4.56** | **265** | P | **Pn** | **22 12 03.8** | **-0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.66** | **311** | P | **Pn** | **22 12 05.1** | **-0.4** |
| **BKSI** | **Bulukumba** | **5.49** | **315** | P | **Pn** | **22 12 15.4** | **-1.2** |
| | 0.1nm45nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **5.96** | **315** | P | **Pn** | **22 12 23.1** | **0.0** |
| | 1.5nm,0.3s,baz=175,slow=6.6,SNR=10.0 | | | | | | |
| **KAPI** | **Kappang** | **5.96** | **315** | P | **Pn** | **22 12 24.1** | **+1.0** |
| **PLAI** | **Plampang** | **6.16** | **274** | P | **Pn** | **22 12 26.1** | **+0.3** |
| | 0.3nm1μm34nm,0.6s | | | | | | |
| **PLAI** | **Plampang** | **6.16** | **274** | P | **Pn** | **22 12 26.0** | **+0.3** |
| **BNSI** | **Bone** | **6.19** | **321** | P | **Pn** | **22 12 25.5** | **-0.6** |
| | 0.1nm35nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **7.43** | **16** | P | **Pn** | **22 12 42.1** | **-0.9** |
| **SANI** | **Sanana** | **7.43** | **16** | P | **Pn** | **22 12 44.6** | **+1.6** |
| **DRS** | **Darwin Rock St** | **7.47** | **116** | P | **Pn** | **22 12 42.3** | **-1.2** |
| **MTN** | **Manton Dam** | **7.85** | **118** | Pn | **Pn** | **22 12 47.4** | **-1.3** |
| **MTN** | **Manton Dam** | **7.85** | **118** | P | **Pn** | **22 12 48.1** | **-0.6** |
| **KNRA** | **Kununurra** | **7.89** | **144** | Pn | **Pn** | **22 12 48.0** | **-1.2** |
| **KNRA** | **Kununurra** | **7.89** | **144** | P | **Pn** | **22 12 48.4** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **8.93** | **170** | P | **Pn** | **22 13 01.6** | **-1.6** |
| | 6.1nm,0.3s,baz=359,slow=11,SNR=241 | | | | | | |
| FITZ | | | | S | **Sn** | **22 14 36.7** | **-5.4** |
| | 24nm,0.3s,baz=99,slow=17,SNR=17 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.93** | **170** | P | **Pn** | **22 13 02.4** | **-0.8** |
| **KDU** | **Kakadu** | **8.99** | **113** | P | **Pn** | **22 13 02.5** | **-1.5** |
| **JAGI** | **Jajag, Banyuwa** | **9.76** | **274** | | **Pn** | **22 13 11.8** | **-2.8** |
| **JAGI** | **Jajag, Banyuwa** | **9.76** | **274** | P | **Pn** | **22 13 17.0** | **+2.5** |
| **FAKI** | **Fak Fak** | **10.34** | **53** | Pn | **Pn** | **22 13 23.0** | **+0.7** |
| **FAKI** | **Fak Fak** | **10.34** | **53** | P | **Pn** | **22 13 23.8** | **+1.5** |
| **TOLI2** | **Tolitoli** | **10.79** | **343** | Pn | **Pn** | **22 13 29.5** | **+1.1** |
| **UGM** | **Wanagama** | **13.39** | **275** | Pn | **Pn** | **22 14 00.6** | **-2.2** |
| **UGM** | **Wanagama** | **13.39** | **275** | P | **P** | **22 14 05.8** | **-2.2** |
| **WB0** | **Warramunga Arr** | **14.49** | **137** | | **Pn** | **22 14 14.4** | **-2.4** |
| **WRA** | **Warramunga Arr** | **14.58** | **138** | P | **Pn** | **22 14 14.9** | **-3.0** |
| | 2.8nm,0.3s,baz=320,slow=14,SNR=105 | | | | | | |
| WRA | | | | S | Sn | 22 16 48.9 | -10 |
| | 3.8nm,0.3s,baz=307,slow=26,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.58** | **138** | Pn | **Pn** | **22 14 15.3** | **-2.6** |
| **WRKA** | **Warakurna** | **16.21** | **166** | P | **P** | **22 14 38.0** | **-1.3** |
| **LEM** | **Lembang** | **16.40** | **277** | P | **P** | **22 14 42.9** | **+1.4** |
| | 2.3nm,0.3s,baz=108,slow=6.4,SNR=3.9 | | | | | | |
| **KKM** | **Kota Kinabalu** | **17.07** | **333** | P | **P** | **22 14 48.5** | **-0.4** |
| KKM | | | | IAmb | IAmb | 22 15 15.5 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **17.07** | **333** | P | **Pn** | **22 14 53.5** | **+4.6** |
| **AS31** | **Alice Springs** | **17.17** | **148** | P | **Pn** | **22 14 50.1** | **0.0** |
| **ASAR** | **Alice Springs** | **17.17** | **148** | P | **Pn** | **22 14 50.5** | **+0.4** |
| | comp=Z,2.0nm,0.3s,baz=327,slow=12,SNR=81 | | | | | | |
| ASAR | | | | S | **Sn** | **22 17 53.4** | **-8.1** |
| | comp=Z,1.1nm,0.3s,baz=310,slow=19,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **17.17** | **148** | | **Pn** | **22 14 50.0** | **-0.1** |
| **MEEK** | **Meekatharra** | **18.02** | **196** | P | **Pn** | **22 15 03.3** | **+3.1** |
| **QIS** | **Mount Isa** | **18.78** | **128** | P | **Pn** | **22 15 11.0** | **+1.7** |
| **COEN** | **Coen** | **19.35** | **106** | | **Pn** | **22 15 15.7** | **-0.3** |
| COEN | | | | IAmb | IAmb | 22 15 21.4 | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| **COEN** | **Coen** | **19.35** | **106** | P | **Pn** | **22 15 16.1** | **+0.1** |
| **MORW** | **Morawa** | **21.07** | **200** | P | **P** | **22 15 33.1** | **+0.9** |
| **OOD** | **Oodnadatta** | **21.48** | **151** | P | **P** | **22 15 39.8** | **+3.3** |
| **BLDU** | **Ballidu** | **22.31** | **197** | P | **P** | **22 15 47.9** | **+2.7** |
| **PMG** | **Port Moresby** | **22.85** | **92** | P | **P** | **22 15 54.8** | **+4.0** |
| **PMG** | **Port Moresby** | **22.85** | **92** | P | **P** | **22 15 55.1** | **+4.3** |
| **MULG** | **Mulgathing** | **22.93** | **157** | P | **P** | **22 15 54.8** | **+3.5** |
| **BBOO** | **Buckleboo** | **25.95** | **156** | P | **P** | **22 16 18.0** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 22 16 41.5 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **25.95** | **156** | P | **P** | **22 16 22.7** | **+3.9** |
| **STKA** | **Stephens Creek** | **27.80** | **147** | P | **P** | **22 16 35.2** | **-0.2** |
| | comp=Z,1.1nm,0.8s,baz=333,slow=9.0,SNR=1.9 | | | | | | |
| **GSI** | **Gunungsitoli** | **28.34** | **290** | P | **P** | **22 16 38.8** | **-1.6** |
| GSI | | | | IAmb | IAmb | 22 16 56.8 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.02** | **318** | P | **P** | **22 17 57.0** | **+1.2** |
| | comp=Z,0.8nm,0.5s,baz=135,slow=6.1,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.02** | **318** | P | **P** | **22 17 56.0** | **+0.2** |
| **KSRS** | **Korea Array** | **46.61** | **4** | P | **P** | **22 19 12.4** | **-

**IDC 20 22:34:42.9±2.5, 2°23S×128°56E, h64km±30km, mb3.4/2, mb1 3.6/5, mb1mx3.2/37, mbtmp3.7/5, ML3.4/3, MS3.9/2, Ms1 3.9/2, ms1mx2.7/33, Error ellipse: s-maj=24.8km s-min=17.5km az=133.0, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **3.03** | **64** | P | Pn | 22 35 27.8 | -0.7 |
| | 3.9nm,0.3s,baz=223,slow=22,SNR=20 | | | | | | |
| SIJI | | | | S | Sn | 22 36 04.2 | +0.7 |
| | 7.9nm,0.3s,baz=163,slow=23,SNR=17 | | | | | | |
| SIJI | | | | LR | LR | 22 37 17.7 | |
| | comp=Z,88nm,20.7s,baz=278,slow=51 | | | | | | |
| **KAPI** | **Kappang** | **9.21** | **252** | P | Pn | 22 36 53.6 | +0.5 |
| | 1.3nm,0.3s,baz=54,slow=8.0,SNR=9.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.49** | **163** | P | P | 22 38 53.6 | -0.3 |
| | 0.1nm,0.3s,baz=340,slow=11,SNR=9.0 | | | | | | |
| **ASAR** | **Alice Springs** | **21.93** | **167** | P | P | 22 39 31.2 | +0.1 |
| | 1.8nm,0.8s,baz=347,slow=11,SNR=19 | | | | | | |
| **DZM** | **Mont Dzumac** | **41.76** | **121** | LR | LR | 23 00 11.4 | |
| | comp=Z,169nm,18.7s,baz=19,slow=37 | | | | | | |
| **AFI** | **Afiamalu** | **60.05** | **105** | LR | LR | 23 08 44.6 | |
| | comp=Z,102nm,22.0s,baz=294,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.48** | **326** | P | P | 22 45 06.3 | 0.0 |
| | 0.7nm,0.7s,baz=127,slow=7.7,SNR=8.3 | | | | | | |

**IDC 20 22:36:46.7±20.0, 3°62N×33°03W, h0km, mb3.6/4, mb1 3.7/4, mb1mx3.5/32, mbtmp3.6/4, MS3.5/12, Ms1 3.5/12, ms1mx3.2/73, Error ellipse: s-maj=462.2km s-min=84.7km az=32.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MDP** | **Montagnes des** | **19.61** | **275** | LR | LR | 22 48 03.6 | |
| | comp=Z,54nm,19.6s,baz=72,slow=34 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.71** | **122** | T | T | 23 04 21.9 | |
| | baz=303,slow=75,SNR=25 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.71** | **122** | T | T | 23 04 22.3 | |
| | baz=303,slow=75,SNR=17 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.73** | **122** | T | T | 23 04 23.5 | |
| | baz=303,slow=75,SNR=24 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.16** | **124** | T | T | 23 05 01.0 | |
| | baz=304,slow=74,SNR=15 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.18** | **124** | T | T | 23 05 03.8 | |
| | baz=276,slow=74,SNR=5.1 | | | | | | |
| **PTGA** | **Pitinga** | **27.27** | **261** | LR | LR | 22 52 12.6 | |
| | comp=Z,79nm,19.9s,baz=92,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **28.22** | **83** | LR | LR | 22 50 39.3 | |
| | comp=Z,75nm,21.8s,baz=321,slow=30 | | | | | | |
| **SIV** | **San Ignacio** | **33.90** | **234** | LR | LR | 22 57 01.2 | |
| | comp=Z,108nm,18.7s,baz=68,slow=36 | | | | | | |
| **SJG** | **San Juan** | **35.48** | **296** | LR | LR | 22 55 51.2 | |
| | comp=Z,44nm,19.5s,baz=134,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.59** | **72** | P | P | 22 43 46.0 | -0.3 |
| | 1.5nm,0.9s,baz=265,slow=9.3,SNR=4.9 | | | | | | |
| **LPAZ** | **La Paz** | **39.94** | **239** | LR | LR | 22 59 35.9 | |
| | comp=Z,61nm,19.5s,baz=60,slow=34 | | | | | | |
| **ROSC** | **El Rosal** | **41.19** | **273** | LR | LR | 23 03 06.8 | |
| | comp=Z,72nm,18.6s,baz=38,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **43.67** | **232** | LR | LR | 23 03 39.8 | |
| | comp=Z,63nm,18.2s,baz=208,slow=37 | | | | | | |
| **NNA** | **Nana** | **46.23** | **250** | LR | LR | 23 02 45.1 | |
| | comp=Z,36nm,18.3s,baz=168,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **46.52** | **257** | LR | LR | 23 05 41.7 | |
| | comp=Z,75nm,18.0s,baz=46,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **54.69** | **116** | LR | LR | 23 07 26.1 | |
| | comp=Z,39nm,18.0s,baz=334,slow=34 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.59** | **311** | LR | LR | 23 09 14.4 | |
| | comp=Z,74nm,18.1s,baz=71,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **60.07** | **34** | P | P | 22 46 56.4 | +0.6 |
| | 0.2nm,0.3s,baz=257,slow=8.9,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.84** | **49** | P | P | 22 48 00.6 | +0.9 |
| | 0.5nm,0.8s,baz=260,slow=8.6,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **69.89** | **37** | P | P | 22 47 58.5 | -1.1 |
| | 0.1nm,0.3s,baz=245,slow=8.1,SNR=5.5 | | | | | | |

*IDC **20** 22:42:06.3±0.5, 3°60S×141°46E, h0km, mb4.4/22, mb1 4.6/27, mb1mx4.4/44, mbtmp4.5/27, ML4.2/3, MS3.7/30, Ms1 3.7/30, ms1mx3.6/57, Error ellipse: s-maj=17.7km s-min=9.8km az=65.0*

*NEIC **20** 22:42:08.9±1.4, 3°59S±0°06×141°39E±0°07, h10km±1km, mb5.0/74, Error ellipse: s-maj=13.8km s-min=9.3km az=55.0*

*DJA **20** 22:42:12.2±0.2, 4°S±2°×14°1E±°, h10km, M4.8/34, mb5.0/34, mB5.2/19, MLv5.2/6, Mw(mB)4.6/19*

*GCMT **20** 22:42:14.9±0.4, 3°56S±0°02×141°42E±0°03, h39km±1km, MW5.0/68, Moment Tensor Solution. s20,c22; s68,c91; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.00±.27; Mθθ-0.53±.17; Mφφ2.53±.21; Mrθ-1.56±.18; Mθφ 1.82±.10; Mφr0.97±.17; Best double couple: Mo3.46600×10¹⁶ NP1:φs172.00000°, δ60.00000°, λ-138.00000°. Principal axes: T 3.3890, Plg3.0000°, Azm294.0000°; N 0.1580, Plg40.0000°, Azm202.0000°; P -3.5440, Plg50.0000°, Azm27.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 20 22:42:08.5±0.3, 3°63S±0°04×141°35E±0°05, h10km, n273, σ1§69/254, mb4.9/82, MS3.8/29, 3C-1D, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.28** | **330** | Pg | **Pb** | **22 42 32.9** | **0.0** |
| | 296nm,0.3s,baz=169,slow=8.8,SNR=455 | | | | | | |
| JAY | | | | Lg | Lg | 22 42 47.5 | |
| | 548nm,0.3s,baz=260,slow=14,SNR=11 | | | | | | |
| JAY | | | | LR | LR | 22 43 13.5 | |
| | comp=Z,3μm,21.7s,baz=84,slow=51 | | | | | | |
| **JAY** | **Jayapura** | **1.28** | **330** | P | **Pg** | **22 42 33.7** | **+0.5** |
| JAY | | | | S | **Sn** | **22 42 52.3** | **+2.4** |
| **GENI** | **Genyem** | **1.57** | **311** | P | **Pb** | **22 42 37.8** | **+0.2** |
| GENI | | | | S | **Sg** | **22 42 58.9** | **-0.1** |
| **SMPI** | **Sarmi** | **3.10** | **302** | P | **Pn** | **22 43 00.8** | **+3.3** |
| **MMPI** | **Merauke** | **4.90** | **191** | P | **Pn** | **22 43 26.1** | **+3.8** |
| MMPI | | | | S | **Sg** | **22 44 51.9** | **+6.0** |
| **PMG** | **Port Moresby** | **8.13** | **135** | Pn | **Pn** | **22 44 06.6** | **-0.1** |
| | 2.1nm,0.3s,baz=258,slow=19,SNR=2.6 | | | | | | |
| PMG | | | | Sn | **Sn** | **22 45 37.5** | **-1.4** |
| | baz=296,slow=5.9,SNR=3.3 | | | | | | |
| **PMG** | **Port Moresby** | **8.13** | **135** | Pn | **Pn** | **22 44 09.2** | **+2.5** |
| **PMG** | **Port Moresby** | **8.13** | **135** | P | Pn | 22 44 12.5 | +5.8 |
| **PMG** | **Port Moresby** | **8.13** | **135** | P | Pn | 22 44 12.6 | +5.9 |
| **FAKI** | **Fak Fak** | **9.12** | **274** | Pn | **Pn** | **22 44 21.4** | **+1.2** |
| **FAKI** | **Fak Fak** | **9.12** | **274** | P | **Pn** | **22 44 22.4** | **+2.2** |
| | 58nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **9.12** | **274** | P | **Pn** | **22 44 23.5** | **+3.3** |
| **COEN** | **Coen** | **10.42** | **170** | Pn | **Pn** | **22 44 41.0** | **+2.9** |
| **COEN** | **Coen** | **10.42** | **170** | P | **Pn** | **22 44 42.3** | **+4.2** |
| **SIJI** | **Sorong** | **10.45** | **285** | Pn | **Pn** | **22 44 40.5** | **+2.1** |
| | 4.5nm,0.3s,baz=73,slow=9.0,SNR=22 | | | | | | |
| SIJI | | | | LR | LR | 22 49 46.7 | |
| | comp=Z,611nm,18.4s,baz=182,slow=44 | | | | | | |
| **RABL** | **Rabaul** | **10.80** | **93** | Pn | **Pn** | **22 44 45.5** | **+2.1** |
| **SAUI** | **Saumlaki** | **10.89** | **246** | Pn | **Pn** | **22 44 46.1** | **+1.5** |
| **SAUI** | **Saumlaki** | **10.89** | **246** | P | **Pn** | **22 44 47.3** | **+2.7** |
| | 6μm207nm,0.7s | | | | | | |
| **KDU** | **Kakadu** | **12.57** | **224** | P | **Pn** | **22 45 08.4** | **+0.8** |
| **AAI** | **Ambon** | **13.13** | **269** | P | **Pn** | **22 45 17.4** | **+2.2** |
| | 51nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **13.54** | **229** | P | **Pn** | **22 45 22.6** | **+1.8** |
| **MTN** | **Manton Dam** | **13.63** | **227** | Pn | **Pn** | **22 45 22.4** | **+0.3** |
| **MTN** | **Manton Dam** | **13.63** | **227** | P | **Pn** | **22 45 22.3** | **+0.2** |
| **TNTI** | **Ternate** | **14.65** | **287** | | **Pn** | **22 45 35.2** | **-0.7** |
| **TNTI** | **Ternate** | **14.65** | **287** | P | **P** | **22 45 40.3** | **-2.0** |
| | 56nm,1.1s | | | | | | |
| **MTSU** | **Mount Surprise** | **14.70** | **169** | P | **P** | **22 45 41.8** | **-1.1** |
| **SANI** | **Sanana** | **15.43** | **275** | P | **Pn** | **22 45 47.0** | **+0.6** |
| | 41nm,1.0s | | | | | | |
| **QIS** | **Mount Isa** | **16.91** | **186** | P | **Pn** | **22 46 07.4** | **+2.0** |
| **CTA** | **Charters Tower** | **17.04** | **164** | P | **Pn** | **22 46 06.0** | **-1.1** |
| | 0.2nm,0.3s,baz=17,slow=7.3,SNR=1.5 | | | | | | |
| CTA | | | | Lg | Lg | 22 51 03.3 | |
| | 0.1nm,0.3s,baz=293,slow=7.8,SNR=3.1 | | | | | | |
| CTA | | | | LR | LR | 22 52 46.3 | |
| | comp=Z,252nm,20.2s,baz=348,slow=38 | | | | | | |
| **KNRA** | **Kununurra** | **17.23** | **225** | Pn | **Pn** | **22 46 09.1** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 22 46 30.4 | |
| | comp=Z,82nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **17.23** | **225** | P | **Pn** | **22 46 09.4** | **0.0** |
| **WB0** | **Warramunga Arr** | **17.42** | **202** | | **Pn** | **22 46 11.3** | **-0.5** |
| **GUMO** | **Guam** | **17.46** | **11** | LR | LR | 22 51 42.9 | |
| | comp=Z,221nm,20.0s,baz=196,slow=33 | | | | | | |
| **WRAB** | **Tennant Creek** | **17.58** | **202** | | **Pn** | **22 46 13.2** | **-0.7** |
| **WRAB** | **Tennant Creek** | **17.58** | **202** | P | **Pn** | **22 46 14.8** | **+0.9** |
| **WRA** | **Warramunga Arr** | **17.60** | **202** | P | **Pn** | **22 46 14.0** | **0.0** |
| | comp=Z,1.3nm,0.3s,baz=22,slow=13,SNR=36 | | | | | | |
| WRA | | | | S | **Sn** | **22 49 22.8** | **-7.4** |
| | comp=Z,0.4nm,0.3s,baz=23,slow=22,SNR=2.6 | | | | | | |
| WRA | | | | Lg | Lg | 22 51 24.9 | |
| | comp=Z,0.1nm,0.3s,baz=36,slow=29,SNR=5.7 | | | | | | |
| WRA | | | | LR | LR | 22 53 35.2 | |
| | comp=Z,504nm,18.2s,baz=17,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.60** | **202** | | **Pn** | **22 46 13.8** | **-0.2** |
| **KMSI** | **Cibinong** | **17.86** | **283** | P | **P** | **22 46 24.6** | **+6.7** |
| **SOEI** | **Soe** | **18.02** | **249** | | **Pn** | **22 46 19.1** | **-0.3** |
| **SOEI** | **Soe** | **18.02** | **249** | P | **P** | **22 46 21.3** | **+1.4** |
| | comp=Z,2μmcomp=Z,301nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **18.02** | **249** | P | **Pn** | **22 46 20.1** | **+0.7** |
| **BATI** | **Baumata** | **18.73** | **249** | P | **Pn** | **22 46 29.4** | **+1.5** |
| | comp=Z,7.4nm,0.3s,baz=158,slow=2.5,SNR=8.2 | | | | | | |
| BATI | | | | S | **Sn** | **22 49 54.7** | **-3.0** |
| | comp=Z,2.5nm,0.3s,baz=324,slow=22,SNR=2.2 | | | | | | |
| **BATI** | **Baumata** | **18.73** | **249** | P | **Pn** | **22 46 31.3** | **+3.3** |
| | comp=Z,107nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **18.74** | **277** | P | **P** | **22 46 27.4** | **-0.2** |
| LUWI | | | | IAmb | IAmb | 22 47 01.4 | |
| | comp=Z,78nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **18.74** | **277** | P | **Pn** | **22 46 31.0** | **+2.9** |
| | comp=Z,2μmcomp=Z,91nm,1.0s | | | | | | |
| **BBSI** | **Bau Bau** | **18.81** | **264** | P | **Pn** | **22 46 32.3** | **+3.3** |
| | comp=Z,167nmcomp=Z,8.4nm,1.0s | | | | | | |
| **GTOI** | **Gorontalo** | **18.82** | **283** | P | **Pn** | **22 46 31.9** | **+2.9** |
| | comp=Z,342nmcomp=Z,36nm,1.0s | | | | | | |
| **MMRI** | **Maumere** | **19.64** | **254** | P | **P** | **22 46 37.4** | **-0.2** |
| MMRI | | | | IAmb | IAmb | 22 47 14.9 | |
| | comp=Z,63nm,1.2s | | | | | | |
| **MMRI** | **Maumere** | **19.64** | **254** | P | Pn | 22 46 50.6 | +12 |
| **MRSI** | **Marisa** | **19.82** | **281** | P | **Pn** | **22 46 42.0** | **+0.9** |
| | comp=Z,930nmcomp=Z,85nm,1.0s | | | | | | |
| **APSI** | **Ampana** | **19.87** | **277** | P | **Pn** | **22 46 42.7** | **+1.0** |
| | comp=Z,1μmcomp=Z,109nm,0.9s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **20.93** | **262** | P | **P** | **22 46 53.5** | **+1.8** |
| | comp=Z,1μmcomp=Z,77nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.06** | **226** | P | **P** | **22 46 52.9** | **-0.1** |
| | comp=Z,7.8nm,0.8s,baz=41,slow=13,SNR=16 | | | | | | |
| FITZ | | | | S | **S** | **22 50 38.6** | **-8.9** |
| | comp=Z,29nm,0.9s,baz=112,slow=7.4,SNR=6.1 | | | | | | |
| FITZ | | | | LR | LR | 22 55 38.6 | |
| | comp=Z,430nm,18.1s,baz=40,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.06** | **226** | P | **P** | **22 46 52.3** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **21.06** | **226** | P | **P** | **22 46 53.1** | **+0.2** |
| **TOLI2** | **Tolitoli** | **21.09** | **283** | P | **P** | **22 46 51.6** | **-1.7** |
| TOLI2 | | | | IAmb | IAmb | 22 47 12.4 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **21.09** | **283** | P | **P** | **22 46 56.5** | **+3.1** |
| **AS31** | **Alice Springs** | **21.18** | **199** | P | **P** | **22 46 53.2** | **-1.0** |
| **ASAR** | **Alice Springs** | **21.18** | **199** | P | **P** | **22 46 54.2** | **0.0** |
| | comp=Z,7.6nm,0.8s,baz=29,slow=10,SNR=26 | | | | | | |
| ASAR | | | | Lg | Lg | 22 53 23.4 | |
| | comp=Z,8.1nm,1.0s,baz=18,slow=30,SNR=2.7 | | | | | | |
| ASAR | | | | LR | LR | 22 55 28.8 | |
| | comp=Z,521nm,20.6s,baz=26,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **21.18** | **199** | P | **P** | **22 46 53.2** | **-1.0** |
| **BNSI** | **Bone** | **21.21** | **267** | P | **P** | **22 46 59.6** | **+5.0** |
| | comp=Z,666nmcomp=Z,48nm,0.9s | | | | | | |
| **BKSI** | **Bulukumba** | **21.23** | **265** | P | **P** | **22 46 59.6** | **+4.7** |
| | comp=Z,691nmcomp=Z,61nm,1.0s | | | | | | |
| **TTSI** | **Tana Toraja** | **21.50** | **271** | P | **P** | **22 47 02.2** | **+4.4** |
| | comp=Z,61nm,1.0s | | | | | | |
| **SPSI** | **Sidrap Palu** | **21.54** | **268** | P | P | 22 47 05.5 | +7.3 |
| **KAPI** | **Kappang** | **21.58** | **266** | P | **P** | **22 46 59.3** | **+0.6** |
| | comp=Z,12nm,1.0s,baz=156,slow=10.0,SNR=3.6 | | | | | | |
| KAPI | | | | LR | LR | 22 58 09.4 | |
| | comp=Z,54nm,18.9s,baz=113,slow=44 | | | | | | |
| **KAPI** | **Kappang** | **21.58** | **266** | P | **P** | **22 46 57.9** | **-0.7** |
| **BASI** | **Baing, Sumba** | **21.63** | **251** | P | **P** | **22 47 03.7** | **+4.6** |
| | comp=Z,2μmcomp=Z,165nm,1.0s | | | | | | |
| **MPSI** | **Mapaga** | **21.80** | **280** | P | **P** | **22 47 04.4** | **+3.4** |
| | comp=Z,890nmcomp=Z,25nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **22.61** | **254** | P | **P** | **22 47 08.0** | **-1.7** |
| **EIDS** | **Eidsvold** | **23.55** | **158** | P | **P** | **22 47 19.8** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 22 47 30.6 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **23.55** | **158** | P | **P** | **22 47 22.0** | **+2.8** |
| **RMQ** | **Roma** | **23.81** | **163** | P | **P** | **22 47 24.3** | **+2.6** |
| **PLAI** | **Plampang** | **23.99** | **256** | P | **P** | **22 47 21.4** | **-2.2** |
| **PLAI** | **Plampang** | **23.99** | **256** | P | **P** | **22 47 26.4** | **+2.8** |
| | comp=Z,42nm,0.9s | | | | | | |
| **MYLDM** | **Lahad Datu** | **24.45** | **291** | P | **P** | **22 47 28.9** | **+1.1** |
| MYLDM | | | | IAmb | IAmb | 22 48 06.9 | |
| | comp=Z,61nm,1.1s | | | | | | |
| **OOD** | **Oodnadatta** | **24.63** | **192** | P | **P** | **22 47 32.6** | **+3.3** |
| **LCRK** | **Leigh Creek** | **26.84** | **186** | P | **P** | **22 47 53.1** | **+3.9** |
| **STKA** | **Stephens Creek** | **28.10** | **180** | P | **P** | **22 48 01.2** | **+0.6** |
| | comp=Z,1.1nm,0.3s,baz=336,slow=18,SNR=1.0 | | | | | | |
| STKA | | | | LR | LR | 23 00 32.1 | |
| | comp=Z,280nm,21.6s,baz=359,slow=39 | | | | | | |
| **ARMA** | **Armidale** | **28.36** | **161** | P | **P** | **22 48 03.6** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 22 48 40.6 | |
| | comp=Z,46nm,1.7s | | | | | | |
| **BBOO** | **Buckleboo** | **29.45** | **189** | P | **P** | **22 48 13.0** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 22 48 43.6 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **29.78** | **203** | P | **P** | **22 48 15.7** | **+0.2** |
| FORT | | | | IAmb | IAmb | 22 48 48.4 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **30.47** | **129** | eP | P | 22 48 30.4 | +8.6 |
| | comp=Z,57nm,1.1s | | | | | | |
| DZM | | | | eLR | LR | 22 56 22.7 | |
| | comp=Z,314nm,23.8s | | | | | | |
| **CAN** | **Canberra** | **32.32** | **168** | P | **P** | **22 48 38.6** | **+0.7** |
| CAN | | | | IAmb | IAmb | 22 48 49.6 | |
| | comp=Z,41nm,1.5s | | | | | | |
| **GIRL** | **Giralia** | **32.36** | **232** | P | **P** | **22 48 39.3** | **+1.0** |
| **GIRL** | **Giralia** | **32.36** | **232** | P | **P** | **22 48 39.7** | **+1.3** |
| | comp=Z,113nm,1.7s | | | | | | |
| **JOW** | **Kunigami** | **32.82** | **338** | LR | LR | 22 58 49.6 | |
| | comp=Z,100nm,20.4s,baz=342,slow=31 | | | | | | |
| **TOO** | **Toolangi** | **33.99** | **174** | P | **P** | **22 48 52.2** | **-0.3** |
| TOO | | | | IAmb | IAmb | 22 49 13.9 | |
| | comp=Z,25nm,1.6s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.18** | **46** | T | T | 23 24 18.4 | |
| | baz=230,slow=75,SNR=18 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.20** | **46** | T | T | 23 24 22.7 | |
| | baz=230,slow=75,SNR=24 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.20** | **46** | T | T | 23 24 27.0 | |
| | baz=230,slow=75,SNR=9.1 | | | | | | |
| **MORW** | **Morawa** | **34.89** | **221** | P | **P** | **22 49 00.5** | **0.0** |
| MORW | | | | IAmb | IAmb | 22 49 12.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **34.89** | **221** | P | **P** | **22 49 01.2** | **+0.8** |
| **BLDU** | **Ballidu** | **35.52** | **218** | P | **P** | **22 49 07.5** | **+1.7** |
| **KASI** | **Kota Agung** | **36.78** | **266** | P | P | 22 49 29.4 | +13 |
| **MDSI** | **Maura Dua** | **37.09** | **267** | P | P | 22 49 30.6 | +11 |
| **LWLI** | **Liwa** | **37.21** | **267** | P | P | 22 49 36.8 | +16 |
| **MJAR** | **Matsushiro Arr** | **40.07** | **356** | LR | LR | 23 02 41.1 | |
| | comp=Z,110nm,20.7s,baz=179,slow=31 | | | | | | |
| **PPI** | **Padang Panjang** | **41.05** | **273** | P | P | 22 50 04.3 | +12 |
| **KSRS** | **Korea Array** | **42.74** | **344** | LR | LR | 23 07 36.5 | |
| | comp=Z,45nm,19.1s,baz=155,slow=36 | | | | | | |
| **RPSI** | **Rantau Prapat** | **42.87** | **278** | P | **P** | **22 50 06.0** | **-1.4** |
| **PSI** | **Prapat** | **42.88** | **278** | P | **P** | **22 50 06.0** | **-1.7** |
| | comp=Z,2.9nm,0.6s,baz=92,slow=4.8,SNR=3.8 | | | | | | |
| **GSI** | **Gunungsitoli** | **44.03** | **276** | P | **P** | **22 50 16.8** | **-0.1** |
| **GYA** | **Guiyang** | **44.95** | **314** | ⇓P | **P** | **22 50 27.0** | **+2.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **ENH** | **Enshi** | **45.44** | **320** | P | **P** | **22 50 27.5** | **-0.4** |
| ENH | | | | IAmb | IAmb | 22 50 43.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **47.19** | **299** | P | **P** | **22 50 41.3** | **-0.4** |
| CM31 | | | | IAmb | IAmb | 22 51 01.3 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.19** | **299** | P | **P** | **22 50 41.8** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=125,slow=6.2,SNR=18 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.19** | **299** | P | **P** | **22 50 41.3** | **-0.5** |
| **CHTO** | **Chiang Mai** | **47.33** | **300** | P | **P** | **22 50 42.3** | **-0.6** |
| **URZ** | **Urewera** | **47.44** | **141** | P | **P** | **22 50 43.2** | **-0.3** |
| | comp=Z,2.6nm,0.5s,baz=270,slow=2.0,SNR=1.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **47.55** | **1** | LR | LR | 23 16 58.9 | |
| | comp=Z,13nm,18.2s,baz=296,slow=44 | | | | | | |
| **BKZ** | **Black Stump Fm** | **47.62** | **143** | P | **P** | **22 50 45.4** | **+0.4** |
| BKZ | | | | IAmb | IAmb | 22 51 06.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TUWZ** | **Tuamarina** | **47.64** | **147** | P | **P** | **22 50 44.6** | **-0.4** |
| **HNS** | **HongShan** | **47.75** | **331** | ⇑P | P | 22 51 00.3 | +14 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **RPZ** | **Rata Peaks** | **47.78** | **151** | P | **P** | **22 50 46.2** | **+0.2** |
| | comp=Z,6.6nm,0.6s,baz=352,slow=7.1,SNR=1.8 | | | | | | |
| RPZ | | | | LR | LR | 23 09 32.3 | |
| | comp=Z,171nm,20.1s,baz=316,slow=34 | | | | | | |
| **RPZ** | **Rata Peaks** | **47.78** | **151** | P | **P** | **22 50 45.4** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **48.35** | **351** | P | **P** | **22 50 49.6** | **-0.8** |
| | comp=Z,1.2nm,0.8s,baz=160,slow=17,SNR=1.6 | | | | | | |
| USRK | | | | LR | LR | 23 07 43.8 | |
| | comp=Z,57nm,21.9s,baz=166,slow=32 | | | | | | |
| **XAN** | **Xi'an** | **48.36** | **323** | P | **P** | **22 50 50.8** | **+0.1** |
| XAN | | | | pP | pP | 22 50 54.4 | +0.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,260nm,15.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,200nm,18.6s | | | | | | |
| **PZH** | **PanZhiHua** | **48.62** | **310** | P | **P** | **22 50 53.0** | **+0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | |
| **BJI** | **Beijing** | **49.23** | **334** | P | **P** | **22 50 58.3** | **+1.2** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **CN2** | **Changchun** | **49.34** | **345** | eP | **P** | **22 50 58.1** | **+0.1** |
| CN2 | | | | ePP | sP | 22 51 10.6 | +8.2 |
| CN2 | | | | ePP | **PP** | **22 52 53.4** | **+1.3** |
| CN2 | | | | eS | **S** | **22 58 01.8** | **-2.8** |
| **CD2** | **Chengdu** | **49.65** | **317** | P | **P** | **22 51 01.5** | **+0.9** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **BNX** | **BinXian** | **50.70** | **347** | ⇑P | **P** | **22 51 08.5** | **+0.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,36nm,1.1s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,290nm,4.2s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **51.97** | **331** | eP | **P** | **22 51 21.8** | **+3.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,89nm,5.2s | | | | | | |
| **XLT** | **XiLinHaoTe** | **52.49** | **337** | eP | **P** | **22 51 23.8** | **+2.0** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.5s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,290nm,5.6s | | | | | | |
| **LZH** | **Lanzhou** | **52.82** | **322** | eP | **P** | **22 51 25.8** | **+1.3** |
| LZH | | | | sP | sP | 22 51 37.0 | +8.0 |
| LZH | | | | S | S | 22 58 29.0 | -24 |
| LZH | | | | sS | pS | 22 58 38.3 | -19 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,210nm,14.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,280nm,13.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,400nm,13.0s | | | | | | |
| **KLR** | **Kul'dur** | **53.30** | **352** | LR | LR | 23 12 35.4 | |
| | comp=Z,27nm,20.2s,baz=162,slow=34 | | | | | | |
| **SHL** | **Shillong** | **56.03** | **304** | P | **P** | **22 51 47.9** | **-0.2** |
| **GTA** | **Gaotai** | **57.39** | **322** | ⇑P | **P** | **22 51 58.4** | **+1.0** |
| GTA | | | | pP | sP | 22 52 06.3 | +4.3 |
| GTA | | | | sP | pP | 22 52 10.0 | +9.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,150nm,5.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,140nm,17.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,150nm,17.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,140nm,18.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.19** | **12** | P | **P** | **22 52 01.4** | **-1.2** |
| | comp=Z,4.2nm,0.7s,baz=188,slow=9.0,SNR=3.9 | | | | | | |
| PETK | | | | LR | LR | 23 13 34.7 | |
| | comp=Z,37nm,21.4s,baz=198,slow=32 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.19** | **12** | P | **P** | **22 52 02.2** | **-0.4** |
| **LSA** | **Lhasa** | **58.35** | **308** | P | **P** | **22 52 05.9** | **+1.1** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **GOMU** | **GeErMu** | **58.78** | **317** | P | **P** | **22 52 08.3** | **+0.7** |
| GOMU | | | | pP | pP | 22 52 09.9 | -1.0 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,120nm,5.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.43** | **334** | P | **P** | **22 52 11.3** | **-0.2** |
| **SONM** | **Songino Array** | **59.70** | **333** | P | **P** | **22 52 13.3** | **-0.1** |
| | comp=Z,1.3nm,1.1s,baz=157,slow=8.0,SNR=6.4 | | | | | | |
| SONM | | | | LR | LR | 23 18 03.9 | |
| | comp=Z,33nm,19.6s,baz=124,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **59.70** | **333** | P | **P** | **22 52 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KBL | **Kabul** | 77.59 | 306 | P | | **P** | 22 54 05.3 | -0.2 |
| GAR | **Garm** | 77.69 | 311 | P | | **P** | 22 54 05.5 | -0.4 |
| GAR | | | | IAmb | | IAmb | 22 54 26.6 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| TNA | **Tin City** | 78.13 | 19 | P | | **P** | 22 54 08.2 | +0.7 |
| | baz=232 | | | | | | | |
| ANM | **Nome** | 78.41 | 21 | P | | **P** | 22 54 09.9 | +0.8 |
| | baz=235 | | | | | | | |
| CHGR | **Chuyangaron** | 78.47 | 310 | P | | **P** | 22 54 09.5 | -0.7 |
| CHGR | | | | IAmb | | IAmb | 22 54 30.8 | |
| | comp=Z,21nm,1.0s | | | | | | | |
| KKAR | **Karatay Array** | 78.64 | 315 | P | | **P** | 22 54 10.2 | -0.7 |
| OHAK | **Old Harbor** | 80.01 | 30 | P | | **P** | 22 54 18.3 | +0.4 |
| Q19K | **Cape Douglas,** | 80.51 | 28 | P | | **P** | 22 54 22.1 | +1.4 |
| | baz=246 | | | | | | | |
| KDAK | **Kodiak Island** | 80.57 | 30 | LR | | LR | 23 24 08.5 | |
| | comp=Z,106nm,20.4s,baz=275,slow=31 | | | | | | | |
| N19K | **Bonanza Creek** | 80.89 | 27 | P | | **P** | 22 54 23.4 | +0.6 |
| | baz=245 | | | | | | | |
| TTA | **Tatalina** | 81.14 | 24 | P | | **P** | 22 54 24.2 | +0.1 |
| TTA | **Tatalina** | 81.14 | 24 | P | | **P** | 22 54 24.7 | +0.6 |
| | baz=244 | | | | | | | |
| RDOG | **Red Dog Mine** | 81.20 | 18 | P | | **P** | 22 54 25.1 | +0.9 |
| | baz=236 | | | | | | | |
| L19K | **White Mountain** | 81.30 | 25 | P | | **P** | 22 54 24.4 | -0.5 |
| L19K | | | | IAmb | | IAmb | 22 54 27.1 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| L19K | **White Mountain** | 81.30 | 25 | P | | **P** | 22 54 25.3 | +0.4 |
| | baz=245 | | | | | | | |
| NRIK | **Noril'sk** | 81.35 | 343 | P | | **P** | 22 54 24.7 | -0.2 |
| | comp=Z,6.6nm,0.7s,baz=130,slow=4.6,SNR=14 | | | | | | | |
| NRIK | **Noril'sk** | 81.35 | 343 | P | | **P** | 22 54 24.9 | -0.1 |
| NRIK | | | | IAmb | | IAmb | 22 54 27.4 | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| BVAR | **Borovoye Array** | 81.58 | 325 | P | | **P** | 22 54 26.7 | +0.2 |
| | comp=Z,7.8nm,0.7s,baz=72,slow=14,SNR=43 | | | | | | | |
| BRVK | **Borovoye** | 81.65 | 325 | P | | **P** | 22 54 26.5 | -0.4 |
| BRVK | | | | IAmb | | IAmb | 22 54 28.5 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| K20K | **Telida** | 82.13 | 24 | P | | **P** | 22 54 28.6 | -0.6 |
| K20K | | | | IAmb | | IAmb | 22 54 30.4 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| K20K | **Telida** | 82.13 | 24 | P | | **P** | 22 54 29.6 | +0.4 |
| | baz=246 | | | | | | | |
| BRLK | **Bradley Lake** | 82.13 | 28 | P | | **P** | 22 54 29.3 | 0.0 |
| J20K | **Nowinta River** | 82.44 | 24 | P | | **P** | 22 54 31.4 | +0.7 |
| J20K | **Nowinta River** | 82.44 | 24 | P | | **P** | 22 54 30.9 | +0.2 |
| | baz=245 | | | | | | | |
| CAST | **Castle Rocks** | 82.97 | 25 | P | | **P** | 22 54 33.9 | +0.3 |
| CAST | **Castle Rocks** | 82.97 | 25 | P | | **P** | 22 54 33.3 | -0.3 |
| | baz=247 | | | | | | | |
| CHUM | **Lake Minchumin** | 83.06 | 24 | P | | **P** | 22 54 34.4 | +0.4 |
| | baz=247 | | | | | | | |
| RC01 | **Rabbit Creek A** | 83.14 | 27 | P | | **P** | 22 54 34.0 | -0.5 |
| | baz=250 | | | | | | | |
| M22K | **Willow** | 83.20 | 26 | P | | **P** | 22 54 34.5 | -0.2 |
| | baz=249 | | | | | | | |
| IMAR | **Indian Mountai** | 83.35 | 22 | P | | **P** | 22 54 35.6 | +0.1 |
| CUT | **Chulitna** | 83.36 | 26 | P | | **P** | 22 54 35.4 | -0.2 |
| | baz=249 | | | | | | | |
| KTH | **Kantishna Hill** | 83.50 | 25 | P | | **P** | 22 54 35.9 | -0.6 |
| H21K | **Melozitna Rive** | 83.57 | 22 | P | | **P** | 22 54 36.9 | +0.3 |
| H21K | | | | IAmb | | IAmb | 22 54 39.6 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| H21K | **Melozitna Rive** | 83.57 | 22 | P | | **P** | 22 54 39.0 | +2.4 |
| | baz=246 | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 83.68 | 24 | P | | **P** | 22 54 37.1 | -0.1 |
| | baz=248 | | | | | | | |
| I21K | **Tanana** | 83.69 | 23 | P | | **P** | 22 54 37.7 | +0.4 |
| | baz=247 | | | | | | | |
| PWL | **Port Wells** | 83.70 | 28 | P | | **P** | 22 54 38.7 | +1.2 |
| | baz=251 | | | | | | | |
| KNK | **Knik Glacier** | 83.83 | 27 | P | | **P** | 22 54 39.0 | +0.9 |
| | baz=251 | | | | | | | |
| SML | **Sawmill** | 84.01 | 27 | P | | **P** | 22 54 39.4 | +0.3 |
| | baz=251 | | | | | | | |
| MLY | **Manley** | 84.12 | 23 | P | | **P** | 22 54 39.5 | -0.1 |
| MLY | | | | IAmb | | IAmb | 22 54 41.3 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| MLY | **Manley** | 84.12 | 23 | P | | **P** | 22 54 39.9 | +0.4 |
| | baz=248 | | | | | | | |
| RND | **Reindeer** | 84.32 | 25 | P | | **P** | 22 54 39.6 | -1.0 |
| MCK | **McKinley** | 84.40 | 25 | P | | **P** | 22 54 40.6 | -0.3 |
| | baz=250 | | | | | | | |
| SCM | **Sheep Creek Mo** | 84.47 | 27 | P | | **P** | 22 54 41.0 | -0.4 |
| | baz=252 | | | | | | | |
| WAT6 | **Susitna Watana** | 84.53 | 26 | P | | **P** | 22 54 41.1 | -0.7 |
| | baz=251 | | | | | | | |
| I23K | **Minto, Yukon-K** | 84.71 | 23 | P | | **P** | 22 54 42.4 | 0.0 |
| I23K | | | | IAmb | | IAmb | 22 54 43.3 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| I23K | **Minto, Yukon-K** | 84.71 | 23 | P | | **P** | 22 54 42.5 | 0.0 |
| | baz=250 | | | | | | | |
| WSAR | **Wadi Sarin** | 84.74 | 294 | LR | | LR | 23 34 34.5 | |
| | comp=Z,20nm,20.2s,baz=328,slow=37 | | | | | | | |
| A21K | **Barrow** | 84.77 | 17 | P | | **P** | 22 54 43.0 | +0.4 |
| | baz=242 | | | | | | | |
| DHY | **Denali Highway** | 84.84 | 26 | P | | **P** | 22 54 43.2 | -0.2 |
| DHY | **Denali Highway** | 84.84 | 26 | P | | **P** | 22 54 42.9 | -0.5 |
| | baz=252 | | | | | | | |
| H23K | **Yukon River** | 84.88 | 23 | P | | **P** | 22 54 43.5 | +0.2 |
| | baz=249 | | | | | | | |
| WRH | **Wood River Hil** | 85.00 | 24 | P | | **P** | 22 54 42.7 | -1.2 |
| WRH | | | | IAmb | | IAmb | 22 54 43.8 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| KLU | **Klutina** | 85.01 | 27 | P | | **P** | 22 54 44.3 | +0.1 |
| | baz=253 | | | | | | | |
| M24K | **Tolsona, Glenn** | 85.08 | 27 | P | | **P** | 22 54 44.3 | -0.2 |
| | baz=253 | | | | | | | |
| CCB | **Clear Creek Bu** | 85.17 | 24 | P | | **P** | 22 54 43.6 | -1.1 |
| CCB | | | | IAmb | | IAmb | 22 54 44.4 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| HDA | **Harding Lake** | 85.44 | 24 | P | | **P** | 22 54 44.8 | -1.4 |
| | baz=252 | | | | | | | |
| H24K | **Noodor Dome** | 85.53 | 23 | P | | **P** | 22 54 46.0 | -0.6 |
| H24K | **Noodor Dome** | 85.53 | 23 | P | | **P** | 22 54 46.4 | -0.2 |
| | baz=251 | | | | | | | |
| IL31 | | 85.58 | 24 | P | | **P** | 22 54 45.4 | -1.4 |
| IL31 | | | | IAmb | | IAmb | 22 54 46.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | | |
| ILAR | **Eielson Array** | 85.58 | 24 | P | | **P** | 22 54 45.2 | -1.6 |
| | comp=Z,7.0nm,0.8s,baz=259,slow=4.8,SNR=40 | | | | | | | |
| ILAR | **Eielson Array** | 85.58 | 24 | P | | **P** | 22 54 45.0 | -1.8 |
| PAX | **Paxson** | 85.64 | 26 | P | | **P** | 22 54 46.7 | -0.5 |
| | baz=253 | | | | | | | |
| TOLK | **Toolik Lake Re** | 85.87 | 20 | P | | **P** | 22 54 48.5 | +0.3 |
| TOLK | **Toolik Lake Re** | 85.87 | 20 | P | | **P** | 22 54 48.6 | +0.3 |
| | baz=249 | | | | | | | |
| RIDG | **Independent Ri** | 86.13 | 25 | P | | **P** | 22 54 49.0 | -0.6 |
| | baz=254 | | | | | | | |
| QSPA | **South Pole Qui** | 86.32 | 180 | P | | **P** | 22 54 49.5 | -1.2 |
| | comp=Z,2.1nm,0.7s,baz=300,slow=2.2,SNR=12 | | | | | | | |
| QSPA | | | | LR | | LR | 23 33 02.8 | |
| | comp=Z,199nm,20.2s,baz=29,slow=35 | | | | | | | |
| QSPA | **South Pole Qui** | 86.32 | 180 | P | | **P** | 22 54 49.0 | -1.6 |
| QSPA | | | | IAmb | | IAmb | 22 55 03.0 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| DOT | **Dot Lake** | 86.44 | 26 | P | | **P** | 22 54 50.2 | -1.0 |
| DOT | | | | IAmb | | IAmb | 22 54 51.8 | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| SCRK | **Sand Creek** | 86.56 | 25 | P | | **P** | 22 54 50.6 | -1.3 |
| SCRK | | | | IAmb | | IAmb | 22 54 53.4 | |
| | comp=Z,9.3nm,1.3s | | | | | | | |
| SCRK | **Sand Creek** | 86.56 | 25 | P | | **P** | 22 54 52.1 | +0.3 |
| | baz=255 | | | | | | | |
| L26K | **Log Cabin Wild** | 86.59 | 26 | P | | **P** | 22 54 52.0 | +0.2 |
| | baz=255 | | | | | | | |
| FYU | **Fort Yukon** | 86.78 | 23 | P | | **P** | 22 54 52.8 | +0.1 |
| J26L | **Joseph Creek** | 86.88 | 25 | P | | **P** | 22 54 53.2 | -0.1 |
| | baz=255 | | | | | | | |
| M27K | **Edge Creek, AK** | 87.08 | 27 | P | | **P** | 22 54 54.7 | +0.2 |
| | baz=257 | | | | | | | |
| ABKAR | **Akbulak array** | 87.13 | 320 | P | | **P** | 22 54 53.5 | -1.2 |
| BMAR | **Burnt Mountain** | 87.27 | 22 | P | | **P** | 22 54 55.6 | +0.4 |
| L27K | **Beaver Creek,** | 87.27 | 26 | P | | **P** | 22 54 55.5 | +0.2 |
| | baz=257 | | | | | | | |
| BCAR | **Beaver Creek A** | 87.29 | 26 | P | | **P** | 22 54 55.3 | 0.0 |
| PNL | **Peninsula** | 87.69 | 30 | P | | **P** | 22 54 57.2 | -0.1 |
| | baz=259 | | | | | | | |
| EGAK | **Eagle** | 87.95 | 25 | P | | **P** | 22 54 57.9 | -0.5 |
| EGAK | | | | IAmb | | IAmb | 22 54 59.9 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| AKTO | **Aktyubinsk** | 88.53 | 321 | P | | **P** | 22 54 59.8 | -1.7 |
| | comp=Z,1.3nm,0.9s,baz=146,slow=7.3,SNR=2.8 | | | | | | | |
| DAWY | **Dawson** | 88.55 | 26 | P | | **P** | 22 55 01.4 | +0.1 |
| DAWY | **Dawson** | 88.55 | 26 | P | | **P** | 22 55 01.1 | -0.3 |
| | baz=259 | | | | | | | |
| HYT | **Haines Junctio** | 88.83 | 29 | P | | **P** | 22 55 02.6 | -0.2 |
| HYT | | | | IAmb | | IAmb | 22 55 04.1 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| ARU | **Arti** | 89.01 | 327 | P | | **P** | 22 55 01.7 | -1.8 |
| | comp=Z,0.3nm,0.4s,baz=355,slow=5.8,SNR=4.8 | | | | | | | |
| ARU | | | | LR | | LR | 23 35 50.9 | |
| | comp=Z,69nm,19.2s,baz=293,slow=36 | | | | | | | |
| J29M | **Klondike Camp** | 89.13 | 25 | P | | **P** | 22 55 04.3 | +0.3 |
| | baz=260 | | | | | | | |
| I29M | **Ogilvie Camp,** | 89.25 | 24 | P | | **P** | 22 55 04.1 | -0.4 |
| I29M | **Ogilvie Camp,** | 89.25 | 24 | P | | **P** | 22 55 04.7 | +0.1 |
| | baz=260 | | | | | | | |
| M30M | **Minto, Yukon** | 89.44 | 27 | P | | **P** | 22 55 05.8 | +0.2 |
| | baz=261 | | | | | | | |
| M31M | **Drury Creek, Y** | 90.50 | 28 | P | | **P** | 22 55 10.4 | -0.1 |
| | baz=263 | | | | | | | |
| P33M | **Teslin, Yukon** | 91.05 | 30 | P | | **P** | 22 55 13.1 | 0.0 |
| | baz=265 | | | | | | | |
| INK | **Inuvik** | 91.54 | 22 | LR | | LR | 23 30 58.9 | |
| | comp=Z,52nm,20.6s,baz=80,slow=32 | | | | | | | |
| INK | **Inuvik** | 91.54 | 22 | P | | **P** | 22 55 14.5 | -0.6 |
| | baz=264 | | | | | | | |
| BBB | **Bella Bella** | 93.17 | 38 | LR | | LR | 23 28 21.1 | |
| | comp=Z,44nm,21.1s,baz=247,slow=30 | | | | | | | |
| A36M | **Sachs Harbour** | 94.49 | 18 | P | | **P** | 22 55 27.6 | -1.0 |
| | baz=272 | | | | | | | |
| YBH | **Yreka Blue Hor** | 96.83 | 49 | LR | | LR | 23 29 01.1 | |
| | comp=Z,77nm,21.1s,baz=316,slow=29 | | | | | | | |
| YKA | **Yellowknife Ar** | 99.68 | 27 | P | | **Pdif** | 22 55 50.9 | -1.4 |
| | comp=Z,0.9nm,0.7s,baz=280,slow=4.8,SNR=12 | | | | | | | |
| NVAR | **Mina Array Bea** | 100.35 | 52 | P | | **Pdif** | 22 55 55.9 | -0.3 |
| | comp=Z,0.2nm,0.5s,baz=273,slow=3.3,SNR=3.0 | | | | | | | |
| ARCES | **ARCESS Array B** | 102.23 | 341 | P | | **Pdif** | 22 56 02.0 | -1.5 |
| | comp=Z,5.3nm,0.9s,baz=19,slow=5.1,SNR=4.3 | | | | | | | |
| TORD | **Torodi Ar. Bea** | 139.04 | 286 | PKP | | **PKPdf** | 23 01 36.6 | 0.0 |
| | comp=Z,0.4nm,0.8s,baz=57,slow=5.3,SNR=2.0 | | | | | | | |
| KOWA | **Kowa** | 144.20 | 290 | PKPdf | | **PKPab** | 23 01 42.7 | -0.8 |
| LPAZ | **La Paz** | 144.77 | 125 | PKP | | **PKPab** | 23 01 45.1 | -1.2 |
| | comp=Z,2.4nm,1.0s,baz=267,slow=4.4,SNR=4.5 | | | | | | | |
| DBIC | **Dimbokro** | 146.22 | 277 | PKPbc | | **PKPdf** | 23 01 47.6 | -1.7 |
| | comp=Z,1.8nm,0.5s,baz=96,slow=4.2,SNR=6.4 | | | | | | | |
| DBIC | **Dimbokro** | 146.22 | 277 | | | **PKPdf** | 23 01 47.3 | -2.0 |

*ASRS* ***20*** *22:56:09.3±0.3, 53.5°N±1.0°×8.3°E±°, h10km, MLh3.7/14, Error ellipse: s-maj=3.9km s-min=1.9km az=73.5, confirmed*

*NNC* ***20*** *22:56:12.4±1.0, 52.98°N×83.46°E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=27.2km s-min=5.4km az=125.0*

**ISC 20 22:56:08.0±1.2, 53.46°N±0.02°×82.67°E±0.03, h8km±11km, n31, σ1°72/67, 4C-10D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BSTK | **Bystrovka, Nov** | 1.11 | 360 | ⇓Pg | **Pg** | 22 56 29.4 | +0.2 |
| BSTK | | | | Sg | **Sn** | 22 56 45.1 | -0.2 |
| ZAA0 | **Zalesovo Array** | 1.37 | 68 | ⇓P | **Pg** | 22 56 34.8 | +0.6 |
| | 4.2nm,0.6s | | | | | | |
| ZAA0 | | | | ⇓S | **Sn** | 22 56 54.1 | +2.4 |
| | 19nm,0.2s | | | | | | |
| NHES | **Novosibirsk, N** | 1.41 | 8 | Pg | **Pb** | 22 56 35.0 | +0.4 |
| NHES | | | | Sg | **Sg** | 22 56 54.7 | +1.3 |
| NVS | **Novosibirsk** | 1.42 | 13 | Pg | **Pb** | 22 56 35.0 | +0.2 |
| NVS | | | | Sg | **Sg** | 22 56 55.4 | +1.7 |
| NVSII | **Novosibirsk** | 1.42 | 13 | Pg | **Pb** | 22 56 34.8 | +0.1 |
| NVSII | | | | Sg | **Sg** | 22 56 55.5 | +1.8 |
| ALXA | **Alekseevka, NS** | 1.47 | 358 | Pg | **Pn** | 22 56 35.4 | +0.5 |
| ALXA | | | | Sg | **Sg** | 22 56 56.9 | +1.7 |
| SALR | **Pechorkino, Sa** | 2.03 | 61 | Pg | **Pb** | 22 56 44.5 | -0.7 |
| SALR | | | | Sg | **Sg** | 22 57 13.5 | +0.2 |
| ELT | **Eltsovka** | 2.15 | 94 | Pn | **Pn** | 22 56 44.7 | +0.5 |
| ELT | | | | Pg | **Pg** | 22 56 50.3 | +1.1 |
| ELT | | | | Sg | **Sg** | 22 57 18.2 | +1.1 |
| KEM | **Kemerovo** | 2.75 | 45 | Pg | **Pg** | 22 56 59.2 | -1.5 |
| KEM | | | | Sg | **Sg** | 22 57 35.1 | -1.1 |
| UKR | **Ust'-Kan** | 2.84 | 152 | Pn | **Pn** | 22 56 53.6 | -0.2 |
| UKR | | | | Pg | **Pb** | 22 57 01.0 | +1.9 |
| UKR | | | | Sg | **Sg** | 22 57 39.6 | +0.3 |
| TASR | **Tashtagol** | 3.22 | 101 | Pg | **Pg** | 22 57 10.2 | +0.5 |
| TASR | | | | Sg | **Sg** | 22 57 52.4 | +1.0 |
| ASR1 | **Anjero-Sudjens** | 3.24 | 35 | Sg | **Sg** | 22 57 50.6 | -1.6 |
| ARTR | **Artybash** | 3.27 | 119 | Pn | **Pn** | 22 56 59.4 | -0.2 |
| ARTR | | | | Pg | **Pg** | 22 57 10.9 | +0.3 |
| ARTR | | | | Sg | **Sg** | 22 57 54.3 | +1.3 |
| SEM | **Semipalatinsk** | 3.41 | 207 | Pg | **Pb** | 22 57 09.5 | +0.8 |
| | 6.5nm,0.2s | | | | | | |
| SEM | | | | Lg | Lg | 22 57 38.1 | |
| | 15nm,0.2s | | | | | | |
| KURK | **Kurchatov** | 3.71 | 224 | ⇑Pn | **Pb** | 22 57 13.0 | -0.9 |
| | 2.4nm,0.4s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 22 58 11.0 | |
| | 27nm,0.6s | | | | | | |
| LUZB | **Luzhba, Kemero** | 3.72 | 84 | Pn | **Pn** | 22 57 08.1 | +2.2 |
| LUZB | | | | Pg | **Pg** | 22 57 17.6 | -1.7 |
| LUZB | | | | Sg | **Sg** | 22 58 03.8 | -3.7 |
| KURBB | **Kurchatov Arra** | 3.82 | 224 | ⇓Pn | Pn | 22 57 13.7 | +6.5 |
| | 0.8nm,0.2s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 22 58 13.0 | |
| | 71nm,0.7s | | | | | | |
| BRCR | **Berchikul'** | 3.95 | 54 | Pn | **Pn** | 22 57 10.6 | +1.7 |
| BRCR | | | | Pg | **Pg** | 22 57 20.2 | -3.4 |
| BRCR | | | | Sg | **Sg** | 22 58 10.5 | -4.2 |
| ULGR | **Ulagan, Altay** | 4.33 | 129 | Pn | **Pn** | 22 57 15.6 | +1.3 |
| ULGR | | | | Pg | **Pg** | 22 57 29.9 | -1.1 |
| ULGR | | | | Sg | **Sg** | 22 58 28.6 | +1.5 |
| CHBI | **Chibit, Altay** | 4.35 | 135 | Pn | **Pn** | 22 57 16.0 | +1.4 |
| CHBI | | | | Pg | **Pg** | 22 57 30.6 | -0.8 |
| CHBI | | | | S | **Sn** | 22 58 07.8 | +2.3 |
| CHBI | | | | Sg | **Sg** | 22 58 30.1 | +2.4 |
| AKAR | **Aktash** | 4.40 | 134 | Pn | **Pn** | 22 57 15.8 | +0.6 |
| AKAR | | | | Pg | **Pg** | 22 57 31.0 | -1.2 |
| AKAR | | | | S | **Sn** | 22 58 07.5 | +0.9 |
| AKAR | | | | Sg | **Sg** | 22 58 29.7 | +0.5 |
| DGZ | **Jazzator, Alta** | 4.80 | 140 | Pn | **Pn** | 22 57 21.3 | +0.5 |
| DGZ | | | | Pg | **Pg** | 22 57 39.0 | -0.9 |
| DGZ | | | | S | **Sn** | 22 58 16.3 | -0.3 |
| DGZ | | | | Sg | **Sg** | 22 58 41.3 | -0.8 |
| CUR | **Chagan-Uzun** | 4.88 | 131 | Pn | **Pn** | 22 57 22.8 | +0.9 |
| CUR | | | | Pg | **Pg** | 22 57 40.1 | -1.3 |
| CUR | | | | Sg | **Sg** | 22 58 45.5 | +0.9 |
| DJO | **Djoy, Khakassi** | 5.20 | 94 | Pn | **Pn** | 22 57 26.8 | +0.7 |
| DJO | | | | Sg | **Sg** | 22 58 52.7 | -2.1 |
| CERR | **Cheremushki** | 5.30 | 93 | Sg | **Sg** | 22 58 59.0 | +0.9 |
| ZSN | **Zaisan** | 6.18 | 166 | Pg | **Pg** | 22 58 09.9 | +3.5 |
| | 1.3nm,0.7s | | | | | | |
| ZSN | | | | Lg | Lg | 22 59 22.9 | |
| | 16nm,0.5s | | | | | | |
| MAKZ | **Makanchi** | 6.68 | 184 | ⇑Pn | **Pn** | 22 57 46.2 | -0.2 |
| | 1.3nm,0.8s | | | | | | |
| MAKZ | | | | ⇓Pg | Pb | 22 57 54.0 | -10 |
| | 2.9nm,0.9s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | 22 58 59.2 | -3.5 |
| | 1.3nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 22 59 32.7 | |
| | 5.8nm,0.8s | | | | | | |
| MAKZ | **Makanchi** | 6.68 | 184 | Pn | **Pn** | 22 57 47.0 | +0.6 |
| MAKZ | | | | S | **Sn** | 22 59 01.2 | -1.5 |
| MAKZ | | | | Sg | **Sg** | 22 59 37.5 | -4.8 |
| MK31 | **Makanchi Array** | 6.68 | 182 | Pn | **Pn** | 22 57 47.3 | +0.8 |
| | 1.3nm,0.5s,baz=226,slow=24,SNR=34 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | 22 58 02.4 | -2.1 |
| | 0.9nm,0.5s,baz=16,slow=12,SNR=6.2 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | 22 58 59.8 | -3.0 |
| | 1.0nm,0.4s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 22 59 33.7 | |
| | 3.6nm,0.5s,baz=22,slow=30,SNR=6.8 | | | | | | |
| MINR | **Mina** | 6.92 | 73 | Sg | **Sg** | 22 59 49.2 | -0.9 |
| KAPS | **Kapalarasan** | 8.47 | 196 | Pg | Pg | 22 58 45.4 | -4.6 |
| | 2.2nm,1.1s | | | | | | |
| KAPS | | | | Lg | Lg | 23 00 23.6 | |
| | 4.6nm,0.7s | | | | | | |

**IDC 20 23:08:59.1±2.4, 9.19S×129.72E, h0km, mb3.0/1, mb1 3.3/3, mb1mx3.2/30, mbtmp3.1/3, ML3.0/2, Error ellipse: s-maj=166.1km s-min=33.4km az=66.0, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | 11.59 | 158 | Pn | Pn | 23 11 44.9 | -1.1 |
| | 0.1nm,0.3s,baz=331,slow=14,SNR=9.8 | | | | | | |
| WRA | | | | Sn | Sn | 23 13 53.0 | -3.2 |
| | 0.1nm,0.3s,baz=335,slow=23,SNR=4.3 | | | | | | |
| ASAR | **Alice Springs** | 14.94 | 165 | Pn | Pn | 23 12 33.5 | +1.7 |
| | 0.1nm,0.3s,baz=343,slow=11,SNR=4.0 | | | | | | |
| ASAR | | | | Sn | Sn | 23 15 19.8 | +1.6 |
| | 0.0nm,0.3s,baz=359,slow=25,SNR=2.2 | | | | | | |
| MKAR | **Makanchi Array** | 69.90 | 327 | P | P | 23 20 12.0 | 0.0 |
| | 0.1nm,0.3s,baz=124,slow=7.1,SNR=1.7 | | | | | | |

*IDC* ***20*** *23:11:30.7±3.5, 16.51°S×167.75°E, h0km, mb3.7/3, mb1 3.9/4, mb1mx3.5/37, mbtmp3.7/4, ML2.9/1, Error ellipse: s-maj=74.0km s-min=33.7km az=95.0*

**NOU 20 23:11:50.1, 18.75°S×169.77°E, h243km, MLv4.4/6, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DVP | **Devils Point** | 1.82 | 304 | P | Pn | 23 12 30.7 | +0.3 |
| SANVU | **Saraoutou** | 4.10 | 323 | P | Pn | 23 12 54.7 | -0.1 |
| DZM | **Mont Dzumac** | 4.54 | 223 | Pn | Pn | 23 12 56.6 | -3.6 |
| | 0.4nm,0.3s,baz=60,slow=20,SNR=1.2 | | | | | | |
| DZM | | | | Sn | S | 23 14 05.1 | +9.3 |
| | 0.5nm,0.3s,baz=150,slow=22,SNR=2.0 | | | | | | |
| WRA | **Warramunga Arr** | 33.41 | 262 | P | P | 23 17 58.9 | -7.4 |
| | 0.1nm,0.3s,baz=98,slow=7.7,SNR=9.9 | | | | | | |
| ASAR | **Alice Springs** | 33.73 | 255 | P | P | 23 18 02.5 | -6.6 |
| | 2.0nm,0.4s,baz=80,slow=9.0,SNR=39 | | | | | | |
| SONM | **Songino Array** | 87.13 | 323 | P | P | 23 24 04.2 | -4.5 |
| | 0.2nm,0.5s,baz=131,slow=4.0,SNR=4.2 | | | | | | |

*IDC* ***20*** *23:21:46.4±2.5, 4.25°S×102.24°E, h44km±21km, mb3.9/19, mb1 3.9/20, mb1mx3.7/49, mbtmp4.1/20, ML3.6/1, MS3.0/4, Ms1 3.0/4, ms1mx2.7/78, Error ellipse: s-maj=36.8km s-min=12.3km az=52.0*

*DJA* ***20*** *23:21:46.3±1.1, 4°S±5°×102°2E±°, h16km±7km, M4.6/16, mb4.6/6, mb5.3/2, MLv4.6/16, Mw(mB)4.7/2, MwMwp6.3/1, Mwp6.3/1*

*NEIC* ***20*** *23:21:47.0±1.7, 4.24°S±0.07°×102.21°E±0.07, h48km±3km, mb4.4/35, Error ellipse: s-maj=11.4km s-min=9.2km az=50.0*

**ISC 20 23:21:46.6±0.5, 4.27°S±0.07°×102.28°E±0.07, h50km, n100, σ1°60/98, mb4.3/35, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KSI | **Kapahiang** | 0.69 | 27 | P | **Pn** | 23 22 02.5 | +2.2 |
| MASI | **Maura Aman, Be** | 1.12 | 358 | P | **Pn** | 23 22 08.2 | +2.2 |
| LHSI | **Lahat** | 1.31 | 71 | P | **Pn** | 23 22 11.9 | +3.3 |
| MDSI | **Maura Dua** | 1.91 | 97 | P | **Pn** | 23 22 19.6 | +3.0 |
| LWLI | **Liwa** | 1.92 | 113 | P | **Pn** | 23 22 19.3 | +2.3 |
| KRJI | **Kerinci** | 2.31 | 339 | P | **Pn** | 23 22 24.1 | +1.8 |
| KLSI | | 2.48 | 100 | P | **Pn** | 23 22 28.0 | +3.5 |
| KASI | **Kota Agung** | 2.54 | 120 | P | **Pn** | 23 22 27.4 | +2.1 |
| KLI | **Kotabumi** | 2.64 | 103 | P | **Pn** | 23 22 29.1 | +2.4 |
| PMBI | **Palembang** | 2.82 | 62 | Pn | **Pn** | 23 22 28.5 | -0.8 |
| PMBI | **Palembang** | 2.82 | 62 | P | **Pn** | 23 22 33.2 | +4.0 |
| JMBI | **JAMBI** | 2.95 | 28 | P | **Pn** | 23 22 34.5 | +3.5 |
| CGJI | **Cibinong** | 4.12 | 125 | P | **Pn** | 23 22 48.6 | +1.6 |
| PPI | **Padang Panjang** | 4.23 | 334 | P | **Pn** | 23 22 51.0 | +2.5 |
| DSRI | **Dabo** | 4.41 | 31 | P | **Pn** | 23 22 54.6 | +3.6 |
| BKNI | **Bangkinang** | 4.73 | 345 | Pn | **Pn** | 23 22 54.5 | -0.9 |
| TPRI | **Tanjung Pinang** | 5.62 | 24 | P | **Pn** | 23 23 08.0 | +0.4 |
| CNJI | **Cibinong** | 5.69 | 122 | P | **Pn** | 23 23 10.2 | +1.6 |
| | 0.5nm1μm45nm,1.0s | | | | | | |
| MNSI | **Mandailing Nat** | 5.71 | 332 | P | **Pn** | 23 23 11.3 | +2.5 |
| | 0.3nm19nm,0.6s | | | | | | |
| LEM | **Lembang** | 5.89 | 116 | P | **Pn** | 23 23 14.4 | +3.0 |
| | 3.2nm,0.3s,baz=182,slow=18,SNR=2.0 | | | | | | |
| LEM | | | | LR | LR | 23 25 44.2 | |
| | comp=Z,57nm,20.6s,baz=212,slow=40 | | | | | | |
| GSI | **Gunungsitoli** | 7.26 | 320 | Pn | **Pn** | 23 23 30.5 | +0.4 |
| GSI | **Gunungsitoli** | 7.26 | 320 | P | **Pn** | 23 23 31.5 | +1.3 |
| KPJI | **Karang Pucung** | 7.28 | 115 | P | **Pn** | 23 23 34.2 | +3.7 |
| | 0.1nm21nm,0.8s | | | | | | |
| PSI | **Prapat** | 7.78 | 334 | P | **Pn** | 23 23 36.6 | -0.8 |
| | 0.9nm,0.3s,baz=335,slow=21,SNR=2.2 | | | | | | |
| PSI | | | | LR | LR | 23 26 38.5 | |
| | comp=Z,98nm,19.0s,baz=128,slow=38 | | | | | | |
| IPM | **Ipoh** | 8.78 | 352 | Pn | **Pn** | 23 23 50.4 | -0.6 |
| UGM | **Wanagama** | 8.96 | 114 | Pn | **Pn** | 23 23 54.8 | +1.3 |
| COCO | **West Island** | 9.54 | 214 | Pn | **Pn** | 23 23 59.5 | -1.9 |
| KULM | **Kulim** | 9.63 | 350 | Pn | **Pn** | 23 24 03.0 | +0.3 |
| JAGI | **Jajag, Banyuwa** | 12.51 | 110 | | **Pn** | 23 24 42.2 | +0.1 |
| JAGI | **Jajag, Banyuwa** | 12.51 | 110 | P | **Pn** | 23 24 43.6 | +1.5 |
| PLAI | **Plampang** | 16.05 | 107 | P | **Pn** | 23 25 26.3 | -2.7 |
| KAPI | **Kappang** | 17.43 | 93 | LR | LR | 23 33 01.2 | |
| | comp=Z,32nm,19.4s,baz=290,slow=39 | | | | | | |
| MYLDM | **Lahad Datu** | 18.72 | 60 | P | **P** | 23 26 01.9 | +0.7 |
| MYLDM | | | | IAmb | IAmb | 23 26 07.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| TOLI2 | **Tolitoli** | 19.25 | 74 | P | **P** | 23 26 03.7 | -3.3 |
| UBPT | **Khong Chiam** | 19.68 | 9 | P | **P** | 23 26 12.3 | +0.6 |
| UBPT | | | | IAmb | IAmb | 23 26 14.0 | |
| | comp=Z,20nm,0.7s | | | | | | |
| BATI | **Baumata** | 22.01 | 107 | P | **P** | 23 26 36.0 | -0.9 |
| | comp=Z,9

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CHGR** | **Chuyangaron** | **52.56** | **327** | P | | **P** | **23 30 54.2** | **-1.1** |
| **AAK** | **Ala-Archa** | **53.05** | **335** | P | | **P** | **23 30 59.4** | **+0.5** |
| | comp=Z,0.3nm,0.4s,baz=176,slow=15,SNR=1.5 | | | | | | | |
| **AAK** | **Ala-Archa** | **53.05** | **335** | P | | **P** | **23 30 58.6** | **-0.3** |
| AAK | | | | IAmb | | IAmb | 23 31 25.2 | |
| | comp=Z,4.6nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **53.83** | **343** | P | | **P** | **23 31 04.5** | **+0.1** |
| MK31 | | | | IAmb | | IAmb | 23 31 05.2 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **343** | P | | **P** | **23 31 04.6** | **+0.2** |
| | comp=Z,2.7nm,0.6s,baz=146,slow=8.0,SNR=47 | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **343** | P | | **P** | **23 31 04.4** | **0.0** |
| **MAKZ** | **Makanchi** | **53.93** | **343** | P | | **P** | **23 31 04.9** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **55.13** | **26** | P | | **P** | **23 31 14.3** | **+0.5** |
| | comp=Z,2.8nm,0.5s,baz=210,slow=4.3,SNR=6.7 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.13** | **26** | P | | **P** | **23 31 13.9** | **0.0** |
| **KKAR** | **Karatay Array** | **55.20** | **332** | P | | **P** | **23 31 13.6** | **-0.9** |
| **KURBB** | **Kurchatov Area** | **58.37** | **342** | P | | **P** | **23 31 36.8** | **+0.1** |
| | comp=Z,1.3nm,0.6s,baz=161,slow=6.7,SNR=14 | | | | | | | |
| **KURK** | **Kurchatov** | **58.42** | **343** | P | | **P** | **23 31 36.6** | **-0.4** |
| KURK | | | | IAmb | | IAmb | 23 31 37.8 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **59.11** | **22** | P | | **P** | **23 31 41.8** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=219,slow=6.1,SNR=6.6 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **59.82** | **348** | P | | **P** | **23 31 46.1** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **59.82** | **348** | P | | **P** | **23 31 46.4** | **-0.3** |
| | comp=Z,2.5nm,0.3s,baz=170,slow=5.4,SNR=24 | | | | | | | |
| ZALV | | | | LR | | LR | 00 01 44.3 | |
| | comp=Z,60nm,19.4s,baz=312,slow=40 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.82** | **348** | P | | **P** | **23 31 46.1** | **-0.5** |
| **BVAR** | **Borovoye Array** | **63.09** | **339** | P | | **P** | **23 32 08.4** | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=91,slow=14,SNR=8.5 | | | | | | | |
| **ABKAR** | **Akbulak array** | **64.71** | **331** | P | | **P** | **23 32 19.1** | **-0.4** |
| **ARU** | **Arti** | **70.19** | **336** | P | | **P** | **23 32 53.8** | **-0.2** |
| **NRIK** | **Noril'sk** | **74.14** | **355** | P | | **P** | **23 33 16.6** | **-0.8** |
| | comp=Z,1.5nm,0.6s,baz=198,slow=16,SNR=1.7 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **75.08** | **129** | P | | **P** | **23 33 24.3** | **+0.7** |
| BKZ | | | | IAmb | | IAmb | 23 33 46.6 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **76.52** | **312** | P | | **P** | **23 33 32.1** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=128,slow=5.6,SNR=3.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **76.52** | **312** | P | | **P** | **23 33 31.8** | **-0.1** |
| **TIXI** | **Tiksi** | **77.74** | **8** | P | | **P** | **23 33 36.7** | **-1.1** |
| TIXI | | | | IAmb | | IAmb | 23 33 51.0 | |
| | comp=Z,6.2nm,1.5s | | | | | | | |
| **BURAR** | **Bucovina Array** | **84.45** | **319** | P | | **P** | **23 34 15.2** | **+1.0** |
| BURAR | | | | IAmb | | IAmb | 23 34 31.1 | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **84.47** | **319** | P | | **P** | **23 34 15.0** | **+0.7** |
| BUR08 | | | | IAmb | | IAmb | 23 34 18.7 | |
| | comp=Z,3.9nm,1.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **85.71** | **180** | P | | **P** | **23 34 20.7** | **+0.6** |
| QSPA | | | | IAmb | | IAmb | 23 34 22.3 | |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **87.17** | **332** | P | | **P** | **23 34 27.4** | **+0.3** |
| | comp=Z,4.2nm,0.9s,baz=104,slow=5.9,SNR=2.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **89.37** | **340** | P | | **P** | **23 34 37.7** | **+0.3** |
| | comp=Z,1.9nm,0.8s,baz=99,slow=5.6,SNR=1.1 | | | | | | | |
| **PDAR** | **Pinedale Array** | **132.37** | **32** | SKPbc | | **SKPbc** | **23 44 18.1** | **-0.6** |
| | comp=Z,0.4nm,0.7s,baz=326,slow=2.6,SNR=4.1 | | | | | | | |
| **BDFB** | **Brasilia** | **144.56** | **235** | PKP | | **PKPdf** | **23 41 19.0** | **+0.2** |
| | comp=Z,1.9nm,0.5s,baz=148,slow=6.7,SNR=3.9 | | | | | | | |
| **BDFB** | **Brasilia** | **144.56** | **235** | | | **PKPdf** | **23 41 18.6** | **-0.2** |
| **TXAR** | **Lajitas Array** | **144.99** | **42** | PKPbc | | **PKPdf** | **23 41 19.4** | **+0.2** |
| | comp=Z,2.0nm,0.5s,baz=265,slow=0.6,SNR=60 | | | | | | | |
| TXAR | | | | SKPbc | | **SKPbc** | **23 44 54.2** | **-0.5** |
| | comp=Z,0.2nm,0.6s,baz=242,slow=1.9,SNR=2.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **144.99** | **42** | | | **PKPab** | **23 41 19.2** | **+0.7** |

**IDC 20 23:28:42.6±5.7, 4°.86N×32°.64W, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/41, mbtmp3.6/4, MS3.6/7, Ms1 3.6/7, ms1mx3.1/80, Error ellipse: s-maj=196.6km s-min=39.0km az=4.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **22.06** | **125** | T | T | 23 56 06.1 | |
| | baz=304,slow=75,SNR=55 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.06** | **125** | T | T | 23 56 06.4 | |
| | baz=304,slow=75,SNR=55 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.08** | **125** | T | T | 23 56 07.6 | |
| | baz=304,slow=76,SNR=60 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.57** | **127** | T | T | 23 56 44.5 | |
| | baz=304,slow=74,SNR=51 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.59** | **127** | T | T | 23 56 47.4 | |
| | baz=276,slow=74,SNR=22 | | | | | | |
| **PTGA** | **Pitinga** | **27.86** | **259** | LR | LR | 23 44 56.4 | |
| | comp=Z,77nm,18.3s,baz=55,slow=35 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.35** | **291** | T | T | 00 05 39.2 | |
| | SNR=13 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.12** | **294** | T | T | 00 06 33.2 | |
| | SNR=3.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.86** | **74** | P | P | 23 35 35.4 | -0.6 |
| | 1.1nm,0.7s,baz=267,slow=8.3,SNR=5.5 | | | | | | |
| **SIV** | **San Ignacio** | **34.94** | **233** | LR | LR | 23 49 04.9 | |
| | comp=Z,76nm,20.1s,baz=88,slow=35 | | | | | | |
| **MDT** | **Midelt** | **38.18** | **40** | LR | LR | 23 48 55.0 | |
| | comp=Z,102nm,20.8s,baz=356,slow=32 | | | | | | |
| **TSUM** | **Tsumeb** | **54.90** | **117** | LR | LR | 23 59 06.3 | |
| | comp=Z,75nm,18.1s,baz=232,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **53.86** | **121** | LR | LR | 00 03 01.2 | |
| | comp=Z,52nm,18.6s,baz=272,slow=32 | | | | | | |
| **EIL** | **Elat** | **68.16** | **60** | LR | LR | 00 10 50.3 | |
| | comp=Z,32nm,19.1s,baz=240,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.67** | **37** | P | P | 23 39 47.3 | -0.6 |
| | 0.3nm,0.5s,baz=251,slow=7.7,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.73** | **49** | P | P | 23 39 50.0 | +1.3 |
| | 1.4nm,1.1s,baz=219,slow=8.9,SNR=3.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.12** | **313** | P | P | 23 40 38.5 | 0.0 |
| | 0.2nm,0.4s,baz=119,slow=3.1,SNR=3.6 | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.27** | **67** | LR | LR | 00 21 54.7 | |
| | comp=Z,27nm,20.3s,baz=275,slow=36 | | | | | | |

*IDC **20** 23:48:57.1±4.4, 19°.61N×123°.03E, h0km, mb3.1/3, mb1 3.4/3, mb1mx3.0/36, mbtmp3.1/3, Error ellipse: s-maj=333.1km s-min=28.3km az=62.0*
*MAN **20** 23:49:03.8, 19°.13N×121°.17E, h13km, mb4.6, ML3.5, MS3.3*

**ISC 20 23:48:59.4±2.9, 19°.6N±0°.2×121°.2E±0°.2, h35km, n12, σ1°38/8, mb3.0/3, 3C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGCP** | **Gonzaga** | **1.54** | **150** | ⇑*e*P | Pn | **23 49 25.3** | **+1.0** |
| SGCP | | | | *e*S | Sn | **23 49 43.4** | **+0.3** |
| **CVP** | **Callao Caves** | **1.95** | **163** | ⇑*e*P | Pn | **23 49 30.9** | **+0.9** |
| CVP | | | | *i* S | Sn | **23 49 52.9** | **-0.4** |
| **SMPP** | **San Manuel, Pa** | **3.46** | **189** | ⇑*e*P | Pn | **23 49 52.6** | **+1.9** |
| SMPP | | | | *i* S | Sn | **23 50 29.1** | **-1.5** |
| **WRA** | **Warramunga Arr** | **41.33** | **161** | P | P | **23 56 40.7** | **-1.3** |
| | 0.2nm,0.5s,baz=344,slow=9.3,SNR=8.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.76** | **320** | P | P | 23 56 56.8 | +12 |
| | 0.1nm,0.4s,baz=108,slow=7.4,SNR=4.7 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.88** | **84** | T | T | 00 42 31.4 | |
| | baz=279,slow=75,SNR=3.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.89** | **84** | T | T | 00 42 32.4 | |
| | baz=279,slow=75,SNR=8.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.89** | **82** | T | T | 00 42 35.0 | |
| | baz=277,slow=75,SNR=7.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.89** | **82** | T | T | 00 42 32.9 | |
| | baz=277,slow=75,SNR=5.4 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.90** | **84** | T | T | 00 42 32.8 | |
| | baz=279,slow=75,SNR=4.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.91** | **82** | T | T | 00 42 29.4 | |
| | baz=277,slow=75,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.73** | **163** | P | P | **23 57 08.8** | **-0.6** |
| | 0.1nm,0.4s,baz=350,slow=7.2,SNR=2.4 | | | | | | |

*IPEC **21** 00:09:02.3±0.3, 51°.58N×16°.15E, h2km±1km, ML2.9/3, Error ellipse: s-maj=2.3km s-min=1.4km az=29.0*
*MCSM **21** 00:09:02.5±0.5, 52°.N±4°.×1°.6E±°, h4km±2km, ML3.4/2, MLv3.3/8*
*VIE **21** 00:09:02.9±0.5, 51°.52N×16°.09E, h0km, mb2.9/14, ml3.0/12, ms3.9/2, Error ellipse: s-maj=5.1km s-min=3.2km az=53.0 80 km NW of Wroclaw Suspected Mining induced.*
*LDG **21** 00:09:03.6±0.3, 51°.43N×15°.96E, h1km, Ml2.9/5, Error ellipse: s-maj=7.5km s-min=2.6km az=13.0, Suspected Mining induced.*
*PRU **21** 00:09:03.7±0.0, 51°.50N×16°.07E, h0km*

*BGR **21** 00:09:03.2±0.8, 51°.53N×16°.07E, h1km, ML3.1/9, Error ellipse: s-maj=8.9km s-min=3.3km az=23.0*
*IDC **21** 00:09:03.2±0.8, 51°.53N×15°.97E, h0km, mb3.4/2, mb1 3.5/6, mb1mx3.3/48, mbtmp3.3/6, ML3.0/4, MS3.5/2, Ms1 3.5/2, ms1mx2.6/49, Error ellipse: s-maj=13.1km s-min=7.1km az=125.0*

**ISC 21 00:09:00.7±0.6, 51°.63N±0°.03×16°.00E±0°.02, h0km, n85, σ2°01/138, 2C-5D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.81** | **167** | *i* Pg | **Pg** | **00 09 16.8** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **00 09 26.6** | **-0.1** |
| **KSP** | **Ksiaz** | **0.81** | **167** | *e*Pg | **Pg** | **00 09 16.9** | **+0.6** |
| **KSP** | **Ksiaz** | **0.81** | **167** | Pg | **Pg** | **00 09 16.8** | **+0.6** |
| KSP | | | | Sg | **Sg** | **00 09 26.8** | **+0.1** |
| **CHVC** | **Chvalec** | **1.05** | **178** | *e*PG | **Pg** | **00 09 21.1** | **+0.4** |
| CHVC | | | | *e*SG | **Sg** | **00 09 32.5** | **-1.8** |
| | comp=Z,146nm,1.0s | | | | | | |
| **OSTC** | **Ostas** | **1.08** | **173** | *e*PG | **Pg** | **00 09 21.5** | **0.0** |
| OSTC | | | | *e*SG | **Sg** | **00 09 34.1** | **-1.4** |
| | comp=Z,83nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.13** | **180** | Pg | **Pg** | **00 09 22.7** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **1.30** | **171** | *e*PG | **Pg** | **00 09 25.5** | **-0.1** |
| DPC | | | | *e*SG | **Sg** | **00 09 40.2** | **-2.2** |
| | comp=Z,94nm,0.8s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.30** | **171** | *e*Pg | **Pg** | **00 09 25.6** | **0.0** |
| DPC | | | | *e*Sg | **Sg** | **00 09 40.8** | **-1.6** |
| **DPC** | **Dobruska-Polom** | **1.30** | **171** | Pg | **Pg** | **00 09 25.5** | **-0.1** |
| **PVCC** | **Panska Ves** | **1.43** | **220** | *e*PG | **Pb** | **00 09 28.9** | **+0.7** |
| PVCC | | | | *e*SG | **Sn** | **00 09 47.5** | **+0.2** |
| | comp=Z,281nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **1.43** | **220** | Pg | **Pb** | **00 09 28.8** | **+0.6** |
| **BRG** | **Berggiesshubel** | **1.50** | **240** | Pn | **Pn** | **00 09 29.6** | **+0.7** |
| BRG | | | | Pg | **Pb** | **00 09 31.2** | **+1.8** |
| BRG | | | | Sg | **Sn** | **00 09 51.2** | **+2.1** |
| BRG | | | | Amp | | 00 09 51.8 | |
| | comp=Z,174nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **240** | *e*Pn | **Pg** | **00 09 29.8** | **+0.4** |
| BRG | | | | *e*Pg | **Pb** | **00 09 31.1** | **+1.8** |
| BRG | | | | *e*Sg | **Sn** | **00 09 51.2** | **+2.1** |
| **KRLC** | **Kraliky** | **1.64** | **162** | *e*PG | **Pn** | **00 09 30.7** | **-0.1** |
| KRLC | | | | *e*SG | **Sn** | **00 09 52.2** | **-0.3** |
| | comp=Z,128nm,0.8s | | | | | | |
| **FBE** | **Freiberg** | **1.81** | **248** | *e*Sg | **Sg** | **00 10 00.6** | **+1.8** |
| **PRU** | **Pruhonice** | **1.89** | **210** | *e*PG | **Pn** | **00 09 35.0** | **+0.8** |
| PRU | | | | *e*SG | **Sg** | **00 10 00.7** | **-0.6** |
| | comp=Z,47nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.89** | **210** | Pn | **Pn** | **00 09 34.6** | **+0.4** |
| **CLL** | **Collm** | **1.90** | **261** | *i* Pn | **Pn** | **00 09 35.6** | **+1.2** |
| | comp=Z,29nm,0.5s | | | | | | |
| CLL | | | | *e*Pg | **Pg** | **00 09 39.0** | **+1.8** |
| CLL | | | | *i* x | x | 00 09 42.4 | |
| CLL | | | | *ex* | x | 00 09 54.0 | |
| CLL | | | | *e*Sg | **Sg** | **00 10 04.0** | **+2.2** |
| | comp=Z,52nm,0.6s | | | | | | |
| **CLL** | **Collm** | **1.90** | **261** | *e*Pn | **Pn** | **00 09 35.5** | **+1.1** |
| CLL | | | | *e*Sg | **Sg** | **00 10 03.9** | **+2.0** |
| **RAC** | **Raciborz** | **2.08** | **137** | *e*PG | **Pg** | **00 09 40.7** | **+0.1** |
| RAC | | | | *e*SG | **Sg** | **00 10 07.3** | **-0.2** |
| **MORC** | **Moravsky Berou** | **2.10** | **152** | ⇓P | **Pn** | **00 09 37.2** | **+0.1** |
| MORC | | | | ⇓S | **Sg** | **00 10 08.8** | **+0.7** |
| **MORC** | **Moravsky Berou** | **2.10** | **152** | *e*Pn | **Pn** | **00 09 37.0** | **-0.1** |
| | baz=334 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **00 10 05.1** | **-1.2** |
| | comp=Z,54nm,0.6s,baz=334 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.10** | **152** | *e*Pn | **Pn** | **00 09 37.1** | **-0.1** |
| MORC | | | | *e*Sg | **Sb** | **00 10 06.2** | **-0.1** |
| **OKC** | **Ostrava-Krasne** | **2.25** | **142** | *e*PG | **Pb** | **00 09 42.2** | **-0.1** |
| OKC | | | | *e*SG | **Sb** | **00 10 10.4** | **-0.3** |
| | comp=Z,137nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **2.36** | **171** | ⇑P | **Pn** | **00 09 41.4** | **+0.7** |
| VRAC | | | | ⇓S | **Sg** | **00 10 15.0** | **-1.4** |
| **VRAC** | **Vranov** | **2.36** | **171** | Pn | **Pn** | **00 09 41.2** | **+0.6** |
| | comp=Z,2.8nm,0.3s,baz=345,slow=16,SNR=25 | | | | | | |
| VRAC | | | | Lg | Lg | 00 10 13.7 | |
| | comp=Z,5.8nm,0.3s,baz=61,slow=16,SNR=12 | | | | | | |
| **VRAC** | **Vranov** | **2.36** | **171** | *e*Pn | **Pn** | **00 09 41.1** | **+0.4** |
| | baz=353 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **00 10 13.9** | **+0.3** |
| | comp=Z,75nm,0.8s,baz=353 | | | | | | |
| **VRAC** | **Vranov** | **2.36** | **171** | *e*PN | **Pn** | **00 09 41.2** | **+0.6** |
| VRAC | | | | *e*SG | **Sb** | **00 10 14.0** | **+0.3** |
| **TANN** | **Tannenbergstha** | **2.55** | **243** | *e*Pg | **Pg** | **00 09 51.9** | **+2.5** |
| TANN | | | | *e*Sg | **Sg** | **00 10 23.8** | **+1.3** |
| **KRUC** | **Moravsky** | **2.58** | **174** | *e*Pn | **Pn** | **00 09 44.2** | **+0.4** |
| | baz=357 | | | | | | |
| **KRUC** | **Moravsky** | **2.58** | **174** | *e*Pg | **Pb** | **00 09 48.4** | **+0.5** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **00 10 21.3** | **+1.1** |
| | comp=Z,63nm,1.1s,baz=357 | | | | | | |
| **WERD** | **Werda** | **2.62** | **245** | *e*Pn | **Pn** | **00 09 45.9** | **+1.6** |
| **NKC** | **Novy Kostel** | **2.65** | **239** | *e*PN | **Pn** | **00 09 46.3** | **+1.6** |
| NKC | | | | *e*SG | **Sg** | **00 10 27.3** | **+1.5** |
| | comp=Z,103nm,0.5s | | | | | | |
| **NKC** | **Novy Kostel** | **2.65** | **239** | Pn | **Pn** | **00 09 46.4** | **+1.7** |
| **OJC** | **Ojcow** | **2.79** | **119** | *e*Pn | **Pn** | **00 09 46.7** | **+0.2** |
| OJC | | | | *e*Pg | **Pg** | **00 09 55.1** | **+1.0** |
| OJC | | | | *e*Sg | **Sg** | **00 10 54.0** | **-0.2** |
| **KHC** | **Kasperske Hory** | **2.95** | **213** | *e*PN | **Pn** | **00 09 49.8** | **+1.0** |
| KHC | | | | *e*PG | **Pb** | **00 09 55.6** | **+1.5** |
| KHC | | | | *e*SN | **Sn** | **00 10 23.0** | **-1.8** |
| KHC | | | | *e*SG | **Sg** | **00 10 34.4** | **-0.9** |
| | comp=Z,29nm,0.5s | | | | | | |
| **JAVC** | **Velka Javorina** | **2.98** | **158** | *e*PN | **Pn** | **00 09 49.5** | **+0.3** |
| **CKRC** | **Cesky Krumlov** | **3.02** | **202** | *e*PN | **Pn** | **00 09 50.9** | **+1.1** |
| CKRC | | | | *e*PG | **Pb** | **00 09 56.7** | **+1.4** |
| CKRC | | | | *e*SG | **Sg** | **00 10 35.7** | **-1.9** |
| **GERES** | **GERESS Array B** | **3.16** | **209** | Pn | **Pn** | **00 09 52.9** | **+1.2** |
| | comp=Z,1.4nm,0.3s,baz=29,slow=13,SNR=43 | | | | | | |
| GERES | | | | Pg | **Pb** | **00 09 59.0** | **+1.2** |
| | comp=Z,3.2nm,0.3s,baz=26,slow=16,SNR=25 | | | | | | |
| GERES | | | | Sn | **Sn** | **00 10 30.8** | **+0.7** |
| | comp=Z,1.9nm,0.3s,baz=32,slow=24,SNR=6.4 | | | | | | |
| GERES | | | | Lg | Lg | 00 10 39.9 | |
| | comp=Z,3.6nm,0.3s,baz=23,slow=25,SNR=9.0 | | | | | | |
| **WET** | **Wettzell** | **3.19** | **220** | *e*Pn | **Pn** | **00 09 53.5** | **+1.4** |
| **SMOL** | **Smolenice** | **3.25** | **163** | *e*PG | **Pg** | **00 10 04.0** | **+1.0** |
| SMOL | | | | *e*SG | **Sg** | **00 10 45.6** | **+0.4** |
| **MODS** | **Modra-Piesok** | **3.36** | **165** | *e*PG | **Pg** | **00 10 07.6** | **+2.5** |
| MODS | | | | *e*SG | **Sg** | **00 10 48.9** | **+0.2** |
| **ZST** | **Bratislava** | **3.51** | **168** | *e*PG | **Pg** | **00 10 07.5** | **-0.5** |
| ZST | | | | *e*SG | **Sg** | **00 10 51.2** | **-2.3** |
| **NIE** | **Niedzica** | **3.52** | **127** | *e*P | **Pg** | **00 10 08.0** | **-0.2** |
| NIE | | | | *e*S | **Sg** | **00 10 54.0** | **+0.8** |
| **VYHS** | **Vyhne** | **3.63** | **149** | *e*PN | **Pn** | **00 09 58.2** | **0.0** |
| VYHS | | | | *e*PG | **Pg** | **00 10 11.9** | **+1.6** |
| VYHS | | | | *e*SG | **Sg** | **00 10 54.8** | **-2.6** |
| **VYHS** | **Vyhne** | **3.63** | **149** | Pn | **Pn** | **00 09 57.9** | **-0.3** |
| **CONA** | **Conrad Observa** | **3.71** | **181** | *e*Pn | **Pn** | **00 09 59.8** | **+0.5** |
| | comp=Z,3.1nm,0.5s,SNR=8.5 | | | | | | |
| CONA | | | | Pg | **Pg** | **00 10 11.3** | **-0.5** |
| | comp=Z,10nm,0.5s | | | | | | |
| CONA | | | | Sg | **Sg** | **00 11 00.1** | **+0.3** |
| | comp=Z,19nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.95** | **197** | *i* Pn | **Pn** | **00 10 03.5** | **+0.9** |
| | comp=Z,6.2nm,0.4s,SNR=6.0 | | | | | | |
| MOA | | | | Sg | **Sg** | **00 11 08.6** | **+1.0** |
| | comp=Z,18nm,0.5s | | | | | | |
| **SOP** | **Sopron** | **3.97** | **175** | PN | **Pn** | **00 10 04.6** | **+1.8** |
| **KECS** | **Kecovo** | **4.27** | **136** | *e*PG | **Pg** | **00 10 23.1** | **+0.5** |
| **ARSA** | **Arzberg** | **4.40** | **184** | *e*Pn | **Pn** | **00 10 10.3** | **+1.6** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| ARSA | | | | Pg | **Pg** | **00 10 24.5** | **-0.4** |
| | comp=Z,3.0nm,0.3s | | | | | | |
| ARSA | | | | Sg | **Sg** | **00 11 26.7** | **+4.8** |
| | comp=Z,38nm,0.8s | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **4.44** | **126** | *e*PG | **Pg** | **00 10 27.6** | **+1.8** |
| **PSZ** | **Piszkesteto** | **4.49** | **144** | ⇓P | **Pn** | **00 10 10.9** | **+0.9** |
| **PSZ** | **Piszkesteto** | **4.49** | **144** | PN | **Pn** | **00 10 10.7** | **+0.6** |
| **PSZ** | **Piszkesteto** | **4.49** | **144** | Pn | **Pn** | **00 10 10.4** | **+0.4** |
| **CSKK** | **Cskako** | **4.52** | **160** | PG | **Pg** | **00 10 30.2** | **+2.9** |
| **MPLH** | **Magyarpolny** | **4.58** | **167** | PN | **Pn** | **00 10 11.4** | **+0.2** |
| **KBA** | **Koelnbreinsper** | **4.88** | **202** | Pn | **Pn** | **00 10 16.6** | **+1.2** |
| | comp=Z,6.6nm,0.5s,SNR=13 | | | | | | |
| **SOKA** | **Soboth** | **5.00** | **188** | *e*Pn | **Pn** | **00 10 18.3** | **+1.3** |
| | comp=Z,2.1nm,0.6s,SNR=4.7 | | | | | | |
| SOKA | | | | Pg | **Pg** | **00 10 36.4** | **-0.1** |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **5.18** | **216** | *e*Pn | **Pn** | **00 10 20.7** | **+1.1** |
| | comp=Z,5.3nm,0.7s,SNR=4.4 | | | | | | |
| **OBKA** | **Obir** | **5.21** | **191** | *e*Pn | **Pn** | **00 10 21.3** | **+1.3** |
| | comp=Z,1.1nm,0.6s | | | | | | |
| OBKA | | | | Sg | **Sg** | **00 11 50.7** | **+2.5** |
| | comp=Z,17nm,0.7s | | | | | | |
| **WTTA** | **Wattenberg** | **5.22** | **215** | *e*Pn | **Pn** | **00 10 22.0** | **+1.9** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **5.35** | **219** | *e*Pn | **Pn** | **00 10 23.0** | **+1.1** |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **5.37** | **221** | *e*Pn | **Pn** | **00 10 23.1** | **+1.0** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.40** | **206** | *e*Pn | **Pn** | **00 10 24.1** | **+1.6** |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **5.76** | **219** | *e*Pn | **Pn** | **00 10 29.9** | **+2.4** |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **6.48** | **244** | *e*Pg | **Pg** | **00 11 01.3** | **-3.5** |
| CDF | | | | *e*Sg | **Sg** | **00 12 23.6** | **-5.1** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **DRGR** | | **6.54** | **135** | ⇓P | Pn | 00 10 46.0 | +7.9 |
| **HINF** | **Hinteralfeld** | **7.05** | **241** | *e*Pg | **Pg** | **00 11 11.6** | **-4.2** |
| HINF | | | | *e*Sg | **Sg** | **00 12 41.3** | **-5.8** |
| | comp=Z,19nm,1.0s | | | | | | |
| **BURAR** | **Bucovina Array** | **7.21** | **120** | ⇓P | **Pn** | **00 10 47.6** | **+0.2** |
| **HAU** | **Haudompre** | **7.22** | **244** | *e*Sg | **Sg** | **00 12 46.6** | **-5.9** |
| | comp=Z,34nm,1.1s | | | | | | |
| **SAVF** | **Savonnieres en** | **7.62** | **251** | *e*Pg | **Pg** | **00 11 22.4** | **-4.1** |
| **BAIF** | **Baives** | **7.63** | **263** | *e*Sg | **Sg** | **00 13 01.1** | **-4.6** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **7.65** | **98** | Pn | **Pn** | **00 10 52.8** | **-0.5** |
| **SFTF** | **Sexfontaines** | **7.86** | **248** | *e*Pg | **Pg** | **00 11 27.3** | **-4.0** |
| SFTF | | | | *e*Sg | **Sg** | **00 13 09.1** | **-4.0** |
| | comp=Z,0.1nm,0.1s | | | | | | |
| **CABF** | **La Chapelle** | **8.21** | **236** | *e*Pg | **Pg** | **00 11 35.7** | **-2.3** |
| CABF | | | | *e*Sg | **Sg** | **00 13 16.0** | **-8.4** |
| **AKASG** | **Malin Array Be** | **8.37** | **91** | Pn | **Pn** | **00 11 02.0** | **-1.1** |
| | comp=Z,0.8nm,0.3s,baz=282,slow=12,SNR=9.2 | | | | | | |
| AKASG | | | | Sn | **Sn** | **00 12 35.0** | **-3.1** |
| | comp=Z,0.2nm,0.3s,baz=275,slow=23,SNR=1.4 | | | | | | |
| AKASG | | | | Lg | Lg | 00 13 34.4 | |
| | comp=Z,0.2nm,0.3s,baz=64,slow=27,SNR=1.7 | | | | | | |
| **AKBB** | **Malin Array Si** | **8.37** | **91** | Pn | **Pn** | **00 11 02.1** | **-1.0** |
| AKBB | | | | pP | **Pn** | **00 11 04.2** | **+1.1** |
| **SBF** | **Sospel** | **9.67** | **220** | *e*Pn | **Pn** | **00 11 19.3** | **-1.8** |
| SBF | | | | *e*Sg | Sg | 00 13 58.5 | |
| **FINES** | **FINESS Array B** | **11.28** | **25** | Pn | **Pn** | **00 11 42.7** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=220,slow=15,SNR=5.5 | | | | | | |
| FINES | | | | Sn | **Sn** | **00 13 42.2** | **-7.4** |
| | comp=Z,0.2nm,0.3s,baz=208,slow=21,SNR=4.3 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **11.99** | **295** | Pn | **Pn** | **00 11 51.7** | **-1.0** |
| | baz=101,slow=13,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.23** | **69** | P | **P** | **00 16 58.3** | **+3.0** |
| | comp=Z,0.3nm,0.9s,baz=297,slow=6.3,SNR=2.2 | | | | | | |
| **SONM** | **Songino Array** | **54.90** | **55** | LR | LR | 00 46 34.7 | |
| | comp=Z,45nm,18.0s,baz=108,slow=41 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **55.56** | **154** | LR | LR | 00 47 10.6 | |
| | comp=Z,35nm,18.7s,baz=184,slow=41 | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.72** | **336** | P | **P** | **00 19 08.9** | **+2.3** |
| | comp=Z,0.4nm,0.7s,baz=32,slow=6.4,SNR=4.4 | | | | | | |

*GCG **21** 00:09:29.5±0.5, 13°.83N×93°.21W, h32km±999km, MD4.2*
*MEX **21** 00:09:31.5±1.1, 14°.00N×93°.11W, h10km±668km, MD4.2*
*NEIC **21** 00:09:32.1±1.8, 14°.19N±0°.07×93°.00W±0°.09, h10km±1km, mb4.2/38, Md4.2/16(MEX), Error ellipse: s-maj=19.3km s-min=3.9km az=233.0*
*IDC **21** 00:09:38.2±3.4, 14°.54N×92°.80W, h43km±25km, mb3.6/7, mb1 3.9/11, mb1mx3.6/43, mbtmp3.8/11, 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **S39A** | **Bolivar** | **23.40** | **359** | P | **P** | **00 14 39.2** | **-1.3** |
| S39A | | | | IAmb | IAmb | 00 14 40.5 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **LENM** | **Lemitar** | **23.54** | **330** | P | **P** | **00 14 42.6** | **+0.6** |
| **ANMO** | **Albuquerque** | **23.93** | **332** | P | **P** | **00 14 48.5** | **+2.6** |
| | comp=Z,1.3nm,0.9s,baz=142,slow=15,SNR=5.7 | | | | | | |
| **V55A** | **Taylorsville** | **24.05** | **24** | P | **P** | **00 14 44.9** | **-1.9** |
| V55A | | | | IAmb | IAmb | 00 15 12.0 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **KSU1** | **Kansas State U** | **25.01** | **353** | P | **P** | **00 14 54.1** | **-1.4** |
| **ATAH** | **Atahualpa** | **25.71** | **145** | LR | LR | 00 22 43.9 | |
| | comp=Z,72nm,19.4s,baz=353,slow=30 | | | | | | |
| **SDCO** | **Great Sand Dun** | **25.93** | **337** | P | **P** | **00 15 03.9** | **-0.3** |
| SDCO | | | | IAmb | IAmb | 00 15 16.3 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **26.46** | **335** | P | **P** | **00 15 10.0** | **+1.0** |
| S22A | | | | IAmb | IAmb | 00 15 15.6 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **PFO** | **Pinyon Flats O** | **28.71** | **316** | LR | LR | 00 26 57.3 | |
| | comp=Z,192nm,18.4s,baz=10,slow=36 | | | | | | |
| **ECSD** | **EROS Data Cent** | **29.60** | **355** | P | **P** | **00 15 36.0** | **-0.6** |
| **PASC** | **Pasadena Art C** | **30.20** | **316** | P | **P** | **00 15 40.5** | **-1.6** |
| **PDAR** | **Pinedale Array** | **31.82** | **337** | P | **P** | **00 15 58.1** | **+1.5** |
| | comp=Z,0.3nm,0.6s,baz=137,slow=11,SNR=2.8 | | | | | | |
| **REDW** | **Red Top Meadow** | **32.84** | **336** | P | **P** | **00 16 05.8** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **32.88** | **322** | P | **P** | **00 16 08.1** | **+2.2** |
| | comp=Z,1.9nm,0.7s,baz=129,slow=8.2,SNR=18 | | | | | | |
| **NVAR** | **Mina Array Bea** | **32.88** | **322** | P | **P** | **00 16 06.8** | **+0.9** |
| **LOHW** | **Long Hollow** | **32.95** | **336** | P | **P** | **00 16 06.6** | **+0.2** |
| LOHW | | | | IAmb | IAmb | 00 16 13.0 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **MOOW** | **Moose Ponds** | **33.12** | **336** | P | **P** | **00 16 08.1** | **+0.1** |
| MOOW | | | | IAmb | IAmb | 00 16 12.5 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **34.85** | **335** | P | **P** | **00 16 24.2** | **+1.2** |
| **PLID** | **Pearl Lake** | **36.42** | **332** | P | **P** | **00 16 36.9** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **50.61** | **347** | P | **P** | **00 18 30.1** | **-0.2** |
| | comp=Z,3.3nm,0.7s,baz=152,slow=7.5,SNR=43 | | | | | | |
| YKA | | | | PcP | **PcP** | **00 19 47.3** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=149,slow=3.1,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.61** | **347** | P | **P** | **00 18 29.4** | **-0.9** |
| **BDFB** | **Brasilia** | **53.50** | **122** | P | **P** | **00 18 55.7** | **+3.0** |
| | comp=Z,0.7nm,0.4s,baz=234,slow=8.7,SNR=2.2 | | | | | | |
| **BDFB** | **Brasilia** | **53.50** | **122** | P | **P** | **00 18 52.0** | **-0.7** |
| BDFB | | | | IAmb | IAmb | 00 19 06.4 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **BCAR** | **Beaver Creek A** | **59.45** | **337** | P | **P** | **00 19 34.7** | **+0.4** |
| **INK** | **Inuvik** | **59.96** | **344** | P | **P** | **00 19 37.5** | **-0.2** |
| **ILAR** | **Eielson Array** | **62.26** | **337** | P | **P** | **00 19 53.1** | **-0.3** |
| | comp=Z,0.8nm,0.9s,baz=131,slow=5.8,SNR=7.9 | | | | | | |
| **ILAR** | **Eielson Array** | **62.26** | **337** | P | **P** | **00 19 53.6** | **+0.3** |
| **BMAR** | **Burnt Mountain** | **62.76** | **340** | P | **P** | **00 19 56.9** | **+0.2** |
| **CMAR** | **Chiang Mai Air** | **145.46** | **340** | PKPbc | **PKPbc** | **00 29 10.0** | **-0.8** |
| | comp=Z,1.7nm,0.4s,baz=345,slow=3.2,SNR=8.6 | | | | | | |

*IDC **21** 00:16:40.7±1.6, 7°.14S×129°.18E, h170km±19km, mb2.8/1, mb1 3.2/6, mb1mx3.0/25, mbtmp3.6/6, Error ellipse: s-maj=22.5km s-min=13.2km az=105.0*

**ISC 21 00:16:40.1±0.9, 7°.22S±0°.06×129°.25E±0°.10, h156km, n6, σ2s18/11, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **6.27** | **241** | P | | **Pn** | **00 18 11.7** | **+1.1** |
| | 0.8nm,0.3s,baz=75,slow=7.6,SNR=1.1 | | | | | | | |
| BATI | | | | S | | **Sn** | **00 19 21.9** | **+0.6** |
| | 1.3nm,0.3s,baz=50,slow=23,SNR=2.2 | | | | | | | |
| **SIJI** | **Sorong** | **6.62** | **18** | P | | **Pn** | **00 18 16.4** | **+1.2** |
| | 0.4nm,0.3s,baz=268,slow=23,SNR=1.8 | | | | | | | |
| SIJI | | | | S | | **Sn** | **00 19 28.2** | **-1.7** |
| | 0.5nm,0.3s,baz=236,slow=23,SNR=2.0 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.37** | **198** | P | | **Pn** | **00 19 19.4** | **+1.3** |
| | 0.1nm,0.3s,baz=20,slow=13,SNR=7.3 | | | | | | | |
| FITZ | | | | S | | **Sn** | **00 21 19.2** | **-4.8** |
| | 0.3nm,0.3s,baz=126,slow=23,SNR=6.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.58** | **159** | P | | **Pn** | **00 19 47.8** | **+1.2** |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=2.0 | | | | | | | |
| WRA | | | | S | | **Sn** | **00 22 16.5** | **-0.6** |
| | 0.3nm,0.3s,baz=334,slow=22,SNR=7.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.95** | **165** | P | | **Pn** | **00 20 30.1** | **+1.8** |
| | 0.4nm,0.3s,baz=342,slow=10.0,SNR=36 | | | | | | | |
| ASAR | | | | S | | **S** | **00 23 36.4** | **0.0** |
| | 0.1nm,0.3s,baz=342,slow=24,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | | **P** | **00 27 20.8** | **-1.7** |
| | 0.1nm,0.4s,baz=123,slow=7.9,SNR=8.1 | | | | | | | |

*BER **21** 00:36:09.3±4.6, 80°.12N×0°.45E, h26km±45km, ML2.3, MW2.9, ML3.1(NAO), Confirmed Earthquake*
*DNK **21** 00:36:09.9±3.9, 80°.08N×1°.03E, h36km±30km, ML2.2*
*IEPN **21** 00:36:11.0, 79°.62N×1°.65E, h10km*

**ISC 21 00:36:04.8±0.9, 80°.09N±0°.07×0°.77E±0°.05, h10km, n30, σ2s46/52, 1C, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **2.36** | **114** | Pn | | **Pn** | **00 36 44.7** | **+1.2** |
| KBS | | | | Sn | | **Sn** | **00 37 10.6** | **-1.9** |
| **KBS** | **Kingsbay** | **2.36** | **114** | *i* P | | **Pn** | **00 36 44.7** | **+1.2** |
| KBS | | | | *i* S | | **Sn** | **00 37 09.4** | **-3.0** |
| **KBS** | **Kingsbay** | **2.36** | **114** | *e*P | | **Pn** | **00 36 44.8** | **+1.2** |
| KBS | | | | *e*S | | **Sn** | **00 37 10.5** | **-1.9** |
| KBS | | | | IAML | | | 00 37 11.9 | |
| | comp=Z,30nm,0.4s | | | | | | | |
| **KBS** | **Kingsbay** | **2.36** | **114** | *e*P | | **Pn** | **00 36 44.3** | **+0.9** |
| KBS | | | | *e*S | | **Sn** | **00 37 08.5** | **-3.9** |
| **NOR** | **Nord** | **3.16** | **307** | Pn | | **Pn** | **00 36 54.0** | **-0.5** |
| NOR | | | | Sn | | **Sn** | **00 37 30.4** | **-1.9** |
| **NOR** | **Nord** | **3.16** | **307** | *e*P | | **Pn** | **00 36 56.4** | **+1.8** |
| NOR | | | | *i* S | | **Sn** | **00 37 30.0** | **-2.2** |
| NOR | | | | IAML | | | 00 37 36.2 | |
| | comp=Z,7.8nm,0.4s | | | | | | | |
| **NOR** | **Nord** | **3.16** | **307** | *e*P | | **Pn** | **00 36 54.0** | **-0.5** |
| NOR | | | | *e*S | | **Sn** | **00 37 30.5** | **-1.7** |
| **BRBB** | **Barentsburg B** | **3.24** | **121** | Pn | | **Pn** | **00 36 58.3** | **+2.6** |
| BRBB | | | | Sn | | **Sn** | **00 37 34.8** | **+0.5** |
| **BRBB** | **Barentsburg B** | **3.24** | **121** | *e*P | | **Pn** | **00 36 58.3** | **+2.6** |
| BRBB | | | | *e*S | | **Sn** | **00 37 33.8** | **-0.5** |
| **BRBA** | **Barentsburg A** | **3.27** | **122** | Pn | | **Pn** | **00 36 58.7** | **+2.7** |
| BRBA | | | | Sn | | **Sn** | **00 37 34.5** | **-0.4** |
| **BRBA** | **Barentsburg A** | **3.27** | **122** | *e*P | | **Pn** | **00 36 58.6** | **+2.7** |
| BRBA | | | | *e*S | | **Sn** | **00 37 35.1** | **+0.2** |
| BRBA | | | | IAML | | | 00 37 38.1 | |
| | comp=Z,22nm,0.3s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **3.52** | **115** | Pn | | **Pn** | **00 37 01.6** | **+2.1** |
| | baz=322,slow=10 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **00 37 39.7** | **-1.3** |
| | baz=339,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **3.52** | **115** | Pn | | **Pn** | **00 37 01.6** | **+2.1** |
| | baz=322,slow=10 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **00 37 39.7** | **-1.3** |
| | baz=339,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **3.52** | **115** | ⇑*i* P | | **Pn** | **00 37 01.3** | **+1.9** |
| SPA0 | | | | *i* S | | **Sn** | **00 37 38.7** | **-2.3** |
| **HSPB** | **Hornsund (broa** | **4.26** | **129** | Pn | | **Pn** | **00 37 12.5** | **+2.8** |
| HSPB | | | | Sn | | **Sn** | **00 37 58.5** | **-0.9** |
| **HSPB** | **Hornsund (broa** | **4.26** | **129** | *e*P | | **Pn** | **00 37 12.5** | **+2.8** |
| HSPB | | | | *e*S | | **Sn** | **00 37 58.6** | **-0.8** |
| HSPB | | | | IAML | | | 00 38 01.6 | |
| | comp=Z,10nm,0.3s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **4.26** | **129** | *e*P | | **Pn** | **00 37 11.8** | **+2.1** |
| HSPB | | | | *e*S | | **Sn** | **00 37 56.9** | **-2.5** |
| **HOPEN** | **Hopen** | **6.05** | **114** | Pn | | **Pn** | **00 37 35.6** | **+1.5** |
| HOPEN | | | | Sn | | **Sn** | **00 38 39.8** | **-3.5** |
| **HOPEN** | **Hopen** | **6.05** | **114** | *e*S | | **Sn** | **00 38 40.8** | **-2.4** |
| HOPEN | | | | IAML | | | 00 38 42.4 | |
| | comp=Z,12nm,0.3s | | | | | | | |
| **HOPEN** | **Hopen** | **6.05** | **114** | P | | **Pn** | **00 37 37.8** | **+3.7** |
| HOPEN | | | | *e*S | | **Sn** | **00 38 39.5** | **-3.7** |
| **DBG** | **Daneborg** | **7.38** | **229** | Pn | | **Pn** | **00 37 52.5** | **+0.2** |
| DBG | | | | Sn | | **Sn** | **00 39 07.8** | **-8.2** |
| **DBG** | **Daneborg** | **7.38** | **229** | *i* P | | **Pn** | **00 37 52.4** | **0.0** |
| DBG | | | | *i* S | | Sn | 00 39 05.6 | -10 |
| DBG | | | | IAML | | | 00 39 13.1 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **DBG** | **Daneborg** | **7.38** | **229** | *e*P | | **Pn** | **00 37 52.6** | **+0.2** |
| DBG | | | | *e*S | | Sn | 00 39 06.1 | -10 |
| **ZFI2** | **Zemlya Franca-** | **7.65** | **62** | *e*P | | **Pn** | **00 37 57.8** | **+1.8** |
| ZFI2 | | | | *e*S | | **Sn** | **00 39 18.3** | **-4.2** |
| **ZFI** | **Zemlya Franca-** | **7.65** | **62** | *e*P | | **Pn** | **00 37 58.6** | **+2.5** |
| ZFI | | | | *e*S | | **Sn** | **00 39 18.8** | **-3.7** |
| | comp=Z,20nm,2.5s | | | | | | | |
| **NEEM** | **North Greenlan** | **10.12** | **282** | *i* P | | **Pn** | **00 38 29.7** | **-0.5** |
| NEEM | | | | *i* S | | Sn | 00 40 12.1 | -12 |
| NEEM | | | | IAML | | | 00 40 17.7 | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **SCO** | **Scoresbysund** | **11.10** | **222** | *i* P | | **Pn** | **00 38 43.5** | **+0.2** |
| **SUMG** | **Summit** | **11.61** | **251** | *i* P | | **Pn** | **00 38 49.2** | **-1.4** |
| SUMG | | | | *i* S | | Sn | 00 40 48.2 | -12 |
| SUMG | | | | IAML | | | 00 40 51.1 | |
| | comp=Z,1.6nm,0.3s | | | | | | | |
| **ARA0** | **ARCESS Array S** | **12.24** | **136** | Pn | | **Pn** | **00 39 00.8** | **+1.9** |
| | baz=354,slow=11 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **12.24** | **136** | Pn | | **Pn** | **00 39 00.8** | **+1.9** |
| | baz=354,slow=11 | | | | | | | |

*NNC **21** 00:47:08.7±3.0, 39°.81N×73°.92E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=25.0km s-min=18.0km az=155.0*
*SOME **21** 00:47:13.0, 40°.02N×74°.02E, h10km*

**ISC 21 00:47:08.8±2.5, 39°.7N±0°.1×74°.06E±0°.05, h10km, n17, σ2s28/26, 4C-4D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **2.91** | **6** | Pn | | **Pn** | **00 47 56.6** | **+1.2** |
| | 5.7nm,0.8s | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 00 48 39.9 | |
| | 10nm,1.0s | | | | | | | |
| **MRKS** | **Merke** | **3.07** | **348** | *e*P | | **Pb** | **00 48 04.1** | **+0.6** |
| | 4.2nm,1.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **00 48 45.4** | **-1.9** |
| | 5.1nm,0.5s | | | | | | | |
| **MRKS** | **Merke** | **3.07** | **348** | Pg | | **Pn** | **00 48 00.2** | **+2.8** |
| | 4.0nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 00 48 41.6 | |
| | 7.7nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.38** | **20** | ⇓Pn | | **Pn** | **00 48 04.1** | **+2.2** |
| | 1.9nm,0.7s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 00 48 55.7 | |
| | 9.3nm,0.8s | | | | | | | |
| **DGS** | **Degeres** | **3.73** | **20** | *e*P | | **Pb** | **00 48 16.1** | **+1.3** |
| | 3.8nm,0.8s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **00 49 06.7** | **-1.8** |
| | 4.5nm,0.6s | | | | | | | |
| **SGDS** | **Sogindy** | **3.73** | **6** | *e*P | | **Pb** | **00 48 16.1** | **+1.3** |
| | 2.6nm,0.3s | | | | | | | |
| SGDS | | | | *e*S | | **Sg** | **00 49 06.5** | **-2.2** |
| | 5.4nm,0.8s | | | | | | | |
| **MDOK** | **Medeo** | **4.09** | **32** | ⇑Pg | | **Pb** | **00 48 20.7** | **-0.3** |
| | 6.2nm,0.6s | | | | | | | |
| MDOK | | | | ⇓Lg | | Lg | 00 49 18.3 | |
| | 4.3nm,0.7s | | | | | | | |
| **KRBS** | **Karabastau** | **4.13** | **16** | *e*P | | **Pg** | **00 48 25.5** | **-2.5** |
| | 2.7nm,0.3s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **00 49 24.3** | **+2.8** |
| | 4.1nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **4.13** | **16** | Pg | | **Pb** | **00 48 23.9** | **+2.2** |
| | 2.7nm,0.3s | | | | | | | |
| KRBS | | | | Lg | | Lg | 00 49 24.3 | |
| | 4.1nm,0.6s | | | | | | | |
| **KK02** | **Karatay Array** | **4.29** | **323** | ⇓Pn | | **Pn** | **00 48 14.5** | **+0.3** |
| | 1.4nm,0.8s,baz=128,slow=14 | | | | | | | |
| KK02 | | | | ⇑Pg | | **Pb** | **00 48 25.2** | **+0.9** |
| | 1.3nm,0.6s | | | | | | | |
| KK02 | | | | ⇑Lg | | Lg | 00 49 22.2 | |
| | 2.1nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **4.43** | **25** | *e*P | | **Pg** | **00 48 30.5** | **-3.1** |
| | 3.0nm,0.5s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **00 49 33.1** | **+2.2** |
| | 6.3nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **4.43** | **25** | Pg | | **Pb** | **00 48 28.6** | **+1.9** |
| | 3.0nm,0.5s | | | | | | | |
| KTBS | | | | Lg | | Lg | 00 49 32.8 | |
| | 6.3nm,0.7s | | | | | | | |
| **KUU** | **Kurty** | **4.49** | **22** | *e*P | | **Pb** | **00 48 30.9** | **+3.2** |
| | 3.7nm,1.6s | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **00 49 33.9** | **+1.2** |
| | 7.2nm,0.6s | | | | | | | |
| **KUU** | **Kurty** | **4.49** | **22** | Pg | | **Pb** | **00 48 30.1** | **+2.5** |
| KUU | | | | Lg | | Lg | 00 49 34.6 | |
| **BRLS** | **Borolday** | **4.57** | **317** | *e*P | | **Pg** | **00 48 33.4** | **-2.9** |
| | 2.1nm,0.5s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **00 49 37.6** | **+2.1** |
| | 2.8nm,0.6s | | | | | | | |
| **ARXS** | **Arharly** | **5.28** | **31** | *e*P | | **Pg** | **00 48 45.5** | **-4.3** |
| | 3.7nm,0.5s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **00 49 59.6** | **+1.4** |
| | 3.6nm,0.8s | | | | | | | |
| **ARXS** | **Arharly** | **5.28** | **31** | Pg | | **Pb** | **00 48 40.5** | **-0.7** |
| | 3.7nm,0.5s | | | | | | | |
| ARXS | | | | Lg | | Lg | 00 49 53.3 | |
| | 3.6nm,0.8s | | | | | | | |

*IDC **21** 01:04:23.2±0.5, 8°.01N×38°.49W, h0km, mb4.3/30, mb1 4.5/30, mb1mx4.3/51, mbtmp4.3/30, MS4.1/10, Ms1 4.1/10, ms1mx3.6/81, Error ellipse: s-maj=15.5km s-min=10.9km az=139.0*
*NEIC **21** 01:04:26.0±1.5, 8°.06N±0°.07×38°.45W±0°.09, h10km±1km, mb4.9/195, Error ellipse: s-maj=15.6km s-min=11.0km az=94.0*
*GCMT **21** 01:04:28.0±0.2, 8°.14N±0°.02×38°.45W±0°.01, h28km±1km, MW5.0/96, Moment Tensor Solution. s20,c21; s96,c125; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.53±.18; $M_{\theta\theta}$-0.02±.17; $M_{\phi\phi}$0.54±.13; $M_{r\theta}$0.27±.23; $M_{\theta\phi}$-4.07±.13; $M_{\phi r}$0.97±.20; Best double couple: $M_o$4.21600×$10^{16}$ NP1:$\phi_s$273.00000°,δ76.00000°,λ-174.00000°. NP2: $\phi_s$181.00000°,δ85.00000°,λ-14.00000°. Principal axes: T 4.4000, Plg6.0000°, Azm228.0000°; N -0.3680, Plg75.0000°, Azm341.0000°; P -4.0320, Plg14.0000°, Azm136.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 21 01:04:25.7±0.3, 8°.08N±0°.05×38°.49W±0°.06, h14km, n294, σ1s25/271, mb4.8/127, MS4.0/9, 1D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NBMO** | **Morrinhos-CE** | **11.42** | **188** | *e*P | | **Pn** | **01 07 08.3** | **-0.3** |
| **NBCL** | **Cascavel-CE** | **12.22** | **179** | *e*P | | **Pn** | **01 07 20.3** | **+0.7** |
| **ROSB** | **Rosrio** | **12.26** | **207** | *e*P | | **Pn** | **01 07 19.5** | **-0.6** |
| **NBPS** | **Pedro II - PI** | **12.73** | **193** | *e*P | | **Pn** | **01 07 26.4** | **-0.3** |
| **NBPB** | **Pedra_Branca-C** | **13.57** | **185** | *e*P | | **Pn** | **01 07 40.4** | **+2.3** |
| **RCBR** | **Riachuelo** | **14.05** | **169** | Pn | | **Pn** | **01 07 44.8** | **+0.1** |
| **RCBR** | **Riachuelo** | **14.05** | **169** | *e*P | | **Pn** | **01 07 46.3** | **+1.7** |
| **TMAB** | **Tom-Au,PA,Br** | **14.12** | **223** | *e*P | | **Pn** | **01 07 43.1** | **-2.5** |
| **MDP** | **Montagnes des** | **14.36** | **259** | Pn | | Pn | 01 07 44.3 | -4.6 |
| | 1.0nm,0.3s,baz=62,slow=16,SNR=20 | | | | | | | |
| MDP | | | | Sn | | Sn | 01 10 07.3 | -21 |
| | 0.9nm,0.3s,baz=162,slow=22,SNR=7.1 | | | | | | | |
| MDP | | | | LR | | LR | 01 12 41.0 | |
| | comp=Z,394nm,18.5s,baz=75,slow=35 | | | | | | | |
| **NBPV** | **Pedro Velho** | **14.75** | **167** | *e*P | | **P** | **01 07 57.8** | **-2.3** |
| **NBMA** | **Muriti-CE** | **15.34** | **181** | *e*P | | **P** | **01 08 04.9** | **-1.9** |
| **NBLV** | **Livramento - P** | **15.41** | **174** | *e*P | | **Pn** | **01 08 05.0** | **+2.0** |
| **MCPB** | **Macapa, AP** | **15.91** | **239** | *e*P | | **Pn** | **01 08 07.0** | **-2.4** |
| **SACV** | **Santiago Islan** | **16.11** | **64** | Pn | | **Pn** | **01 08 06.8** | **-5.1** |
| SACV | | | | IAmb | | IAmb | 01 08 07.6 | |
| | comp=Z,62nm,0.8s | | | | | | | |
| **NBAN** | **Anadia - AL** | **17.77** | **173** | *e*P | | **P** | **01 08 35.2** | **+1.6** |
| **PRPB** | **Parauapebas** | **18.11** | **219** | *e*P | | **Pn** | **01 08 35.1** | **-2.0** |
| **MALB** | **Monte Alegre** | **18.57** | **239** | *e*P | | **P** | **01 08 40.6** | **-1.9** |
| **NBPN** | **Ponto Novo - B** | **18.88** | **185** | *e*P | | **P** | **01 08 45.6** | **-0.2** |
| **NBLA** | **Lagarto - SE** | **18.96** | **178** | *e*P | | **Pn** | **01 08 50.7** | **+3.3** |
| **SMTB** | **Santa Maria do** | **19.11** | **208** | *e*P | | **P** | **01 08 48.3** | **-0.2** |
| **ITTB** | **Itaituba** | **21.18** | **235** | *e*P | | **P** | **01 09 10.3** | **-0.6** |
| **SDBA** | **SAO DESIDERIO** | **21.33** | **197** | *e*P | | **P** | **01 09 12.9** | **+0.3** |
| **GDU01** | **Guandu, BA** | **21.68** | **183** | *e*P | | **P** | **01 09 18.2** | **+1.9** |
| **TOSP** | **Speyside** | **21.96** | **280** | P | | **P** | **01 09 20.0** | **+0.7** |
| TOSP | | | | IAmb | | IAmb | 01 09 24.9 | |
| | comp=Z,72nm,1.2s | | | | | | | |
| **MBO** | **M'Bour** | **22.03** | **72** | P | | **P** | **01 09 18.6** | **-1.4** |
| **PEXB** | **Peixe** | **22.30** | **206** | *e*P | | **P** | **01 09 24.5** | **+1.5** |
| **NPGB** | **Novo Progresso** | **22.55** | **229** | *e*P | | **P** | **01 09 24.9** | **-0.8** |
| **BOAV** | **Boa Vista** | **22.64** | **257** | *e*P | | **P** | **01 09 25.6** | **-1.2** |
| **MCLT** | **Moule a Chique** | **22.73** | **286** | P | | **P** | **01 09 24.7** | **-2.9** |
| **H05S1** | **Guadeloupe/Mar** | **22.79** | **288** | T | | T | 01 32 42.2 | |
| | SNR=9.5 | | | | | | | |
| **NBIT** | **Itapeh - BA** | **22.88** | **182** | *e*P | | **P** | **01 09 33.4** | **+4.3** |
| **PTGA** | **Pitinga** | **23.13** | **249** | P | | **P** | **01 09 30.6** | **-1.2** |
| | comp=Z,15nm,0.8s,baz=68,slow=14,SNR=27 | | | | | | | |
| **CMC01** | **Camacan, BA** | **23.31** | **182** | *e*P | | **P** | **01 09 35.6** | **+2.1** |
| **H05N1** | **Guadeloupe/Mar** | **23.50** | **293** | T | | T | 01 33 33.1 | |
| | SNR=5.4 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SNDB** | **Serra Nova Dou** | **23.64** | **213** | *e*P | | **P** | **01 09 36.9** | **+0.1** |
| **JANB** | **Januaria** | **23.70** | **194** | *e*P | | **P** | **01 09 38.8** | **+1.3** |
| **MACA** | **Manacapuru-AM** | **24.79** | **244** | *e*P | | **P** | **01 09 48.0** | **+0.4** |
| **BDFB** | **Brasilia** | **25.38** | **202** | P | | **P** | **01 09 52.2** | **-0.8** |
| | comp=Z,13nm,1.0s,baz=37,slow=13,SNR=15 | | | | | | | |
| BDFB | | | | LR | | LR | 01 19 33.4 | |
| | comp=Z,438nm,19.3s,baz=344,slow=36 | | | | | | | |
| **BDFB** | **Brasilia** | **25.38** | **202** | P | | **P** | **01 09 53.2** | **+0.3** |
| BDFB | | | | IAmb | | IAmb | 01 10 11.0 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| **CLDB** | **Colider** | **25.51** | **223** | *e*P | | **P** | **01 09 54.5** | **+0.4** |
| **NAN01** | **Guarapari, ES** | **25.81** | **184** | *e*P | | **P** | **01 10 00.1** | **+3.4** |
| **PDRB** | **Porto dos Gac** | **26.68** | **223** | *e*P | | **P** | **01 10 04.9** | **+0.3** |
| **DIAM** | **Diamantina, MG** | **26.70** | **191** | *e*P | | **P** | **01 10 07.3** | **+2.4** |
| **SJMB** | **Sao Joao De Ma** | **26.74** | **186** | *e*P | | **P** | **01 10 08.7** | **+3.6** |
| **ARAG** | **Araguaiana, MT** | **27.06** | **209** | *e*P | | **P** | **01 10 09.1** | **+1.0** |
| **IPMB** | **Ipameri, GO** | **27.62** | **200** | *e*P | | **P** | **01 10 13.3** | **+0.3** |
| **H10N3** | **ASCENSION HYDR** | **28.67** | **123** | T | | T | 01 40 26.4 | |
| | baz=303,slow=75,SNR=110 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **28.68** | **123** | T | | T | 01 40 26.6 | |
| | baz=303,slow=75,SNR=108 | | | | | | | |
| **SJG** | **San Juan** | **28.68** | **293** | LR | | LR | 01 20 39.1 | |
| | comp=Z,194nm,18.3s,baz=106,slow=34 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **28.69** | **123** | T | | T | 01 40 28.5 | |
| | baz=303,slow=75,SNR=100 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **29.16** | **125** | T | | T | 01 41 01.0 | |
| | baz=301,slow=74,SNR=43 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **29.17** | **125** | T | | T | 01 41 02.4 | |
| | baz=279,slow=74,SNR=15 | | | | | | | |
| **SALV** | **Santo Antonio** | **29.29** | **216** | *e*P | | **P** | **01 10 27.6** | **-0.3** |
| **VILB** | **Vilhena** | **30.03** | **226** | *e*P | | **P** | **01 10 35.7** | **+1.2** |
| **PTLB** | **Pontes e Lacer** | **31.06** | **221** | *e*P | | **P** | **01 10 44.4** | **+0.8** |
| **SDV** | **Santo Domingo** | **31.79** | **274** | P | | **P** | **01 10 49.2** | **-1.1** |
| **ROSA** | **Rosais** | **31.88** | **15** | P | | **P** | **01 10 51.5** | **+0.9** |
| **PCMB** | **Pacaembu** | **32.05** | **203** | *e*P | | **P** | **01 10 53.4** | **+1.1** |
| **SIV** | **San Ignacio** | **32.74** | **223** | P | | **P** | **01 10 58.4** | **-0.1** |
| | comp=Z,15nm,0.8s,baz=59,slow=9.8,SNR=69 | | | | | | | |
| SIV | | | | LR | | LR | 01 23 47.3 | |
| | comp=Z,508nm,18.8s,baz=88,slow=36 | | | | | | | |
| **ETMB** | **Extrema** | **32.83** | **238** | *e*P | | **P** | **01 10 59.2** | **0.0** |
| **URIC** | **Uribia, Colomb** | **33.18** | **279** | P | | **P** | **01 11 01.2** | **-1.1** |
| URIC | | | | IAmb | | IAmb | 01 11 14.7 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **33.38** | **90** | P | | **P** | **01 11 02.9** | **-1.2** |
| | comp=Z,8.6nm,0.9s,baz=292,slow=9.4,SNR=7.6 | | | | | | | |
| **DBIC** | **Dimbokro** | **33.38** | **90** | P | | **P** | **01 11 03.3** | **-0.8** |
| DBIC | | | | IAmb | | IAmb | 01 11 06.3 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **SDDR** | **Presa de Saban** | **33.61** | **292** | P | | **P** | **01 11 07.5** | **+1.4** |
| **KOWA** | **Kowa** | **34.38** | **76** | P | | **P** | **01 11 11.7** | **-1.1** |
| KOWA | | | | IAmb | | IAmb | 01 11 15.7 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **ROSC** | **El Rosal** | **35.73** | **267** | P | | **P** | **01 11 24.7** | **-0.2** |
| | comp=Z,4.6nm,0.4s,baz=155,slow=8.3,SNR=7.8 | | | | | | | |
| **ROSC** | **El Rosal** | **35.73** | **267** | P | | **P** | **01 11 25.4** | **+0.5** |
| ROSC | | | | IAmb | | IAmb | 01 11 27.3 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **36.03** | **272** | P | | **P** | **01 11 27.9** | **+0.9** |
| **ITAB** | **Concordia** | **37.51** | **200** | P | | **P** | **01 11 38.8** | **-0.6** |
| ITAB | | | | IAmb | | IAmb | 01 11 48.8 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **ITAB** | **Concordia** | **37.51** | **200** | *e*P | | **P** | **01 11 41.9** | **+2.6** |
| **CZSB** | **Cruzeiro do Su** | **37.55** | **246** | *e*P | | **P** | **01 11 38.9** | **-1.0** |
| **LPAZ** | **La Paz** | **38.03** | **230** | P | | **P** | **01 11 44.0** | **-0.7** |
| | comp=Z,11nm,0.8s,baz=48,slow=7.1,SNR=39 | | | | | | | |
| LPAZ | | | | LR | | LR | 01 27 54.8 | |
| | comp=Z,197nm,18.6s,baz=76,slow=37 | | | | | | | |
| **LPAZ** | **La Paz** | **38.03** | **230** | P | | **P** | **01 11 45.1** | **+0.4** |
| LPAZ | | | | IAmb | | IAmb | 01 11 46.4 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **38.03** | **230** | *e*P | | **P** | **01 11 45.4** | **+0.7** |
| **CPUP** | **Villa Florida** | **38.79** | **208** | LR

P53A IAmb IAmb 01 13 17.6
comp=Z,14nm,1.0s
**TKL Tuckaleechee C 49.58 311** LR LR 01 31 25.6
comp=Z,233nm,19.0s,baz=111,slow=33
**TKL Tuckaleechee C 49.58 311** P **P** **01 13 16.5 -0.1**
**O53A New Philadelph 49.71 317** P **P** **01 13 18.4 +0.8**
O53A IAmb IAmb 01 13 30.5
comp=Z,21nm,1.1s
**TZTN Tazewell 49.75 312** P **P** **01 13 18.0 0.0**
TZTN IAmb IAmb 01 13 21.1
comp=Z,28nm,1.4s
**Z51A Franklin 49.82 307** P **P** **01 13 20.4 +1.8**
Z51A IAmb IAmb 01 13 22.8
comp=Z,12nm,1.3s
**ERPA Erie 49.83 320** P **P** **01 13 18.7 +0.3**
**Q52A Bidwell 49.84 315** P **P** **01 13 19.3 +0.7**
Q52A IAmb IAmb 01 13 20.7
comp=Z,20nm,1.1s
**P52A Corning 50.05 316** IAmb IAmb 01 13 22.1
comp=Z,16nm,1.0s
**CPCT Cooper Cave 50.06 310** P **P** **01 13 20.1 -0.2**
CPCT IAmb IAmb 01 13 22.6
comp=Z,19nm,1.5s
**O52A Adamsville 50.07 317** P **P** **01 13 20.4 +0.1**
O52A IAmb IAmb 01 13 22.6
comp=Z,18nm,0.9s
**S51A Beattyville 50.23 313** P **P** **01 13 22.1 +0.5**
S51A IAmb IAmb 01 13 39.2
comp=Z,23nm,1.5s
**250A Grady 50.27 305** P **P** **01 13 21.9 0.0**
**W50A Signal Mountai 50.58 309** P **P** **01 13 25.1 +0.8**
W50A IAmb IAmb 01 13 27.5
comp=Z,12nm,1.1s
**P51A Williamsport 50.63 315** P **P** **01 13 25.3 +0.8**
P51A IAmb IAmb 01 13 26.6
comp=Z,16nm,0.9s
**Q51A Peebles 50.63 315** P **P** **01 13 25.5 +0.9**
Q51A IAmb IAmb 01 13 26.8
comp=Z,11nm,0.8s
**T50A Nancy 50.89 312** P **P** **01 13 27.5 +0.9**
**ACSO Alum Creek Sta 50.90 316** P **P** **01 13 27.3 +0.7**
ACSO IAmb IAmb 01 13 28.8
comp=Z,15nm,0.9s
**R50A Paris 51.02 313** P **P** **01 13 28.5 +1.0**
R50A IAmb IAmb 01 13 30.9
comp=Z,16nm,1.2s
**SWET Sewanee 51.06 309** P **P** **01 13 26.2 -1.7**
SWET IAmb IAmb 01 13 30.6
comp=Z,20nm,1.3s
**H09W1 TRISTAN DA CUN 51.19 153** T T 02 08 42.6
SNR=3.8
**U49A Red Boiling Sp 51.40 311** P **P** **01 13 31.0 +0.6**
U49A IAmb IAmb 01 13 34.3
comp=Z,15nm,1.4s
**M50A Fremont 51.48 318** P **P** **01 13 30.9 0.0**
M50A IAmb IAmb 01 13 32.9
comp=Z,17nm,1.1s
**KEST Kesra 51.54 50** P **P** **01 13 32.1 +0.6**
comp=Z,7.4nm,0.9s,baz=224,slow=5.0,SNR=6.2
**KEST Kesra 51.54 50** P **P** **01 13 31.8 +0.2**
KEST IAmb IAmb 01 13 40.4
comp=Z,28nm,1.4s
**CLTN Cedars of Leba 51.67 310** P **P** **01 13 33.3 +0.9**
**P49A Miami Univ. Ec 51.81 315** P **P** **01 13 34.2 +0.8**
P49A IAmb IAmb 01 13 44.3
comp=Z,21nm,1.3s
**K50A Casco 51.84 319** P **P** **01 13 33.6 0.0**
**V48A Smith Brothers 51.92 309** P **P** **01 13 35.7 +1.4**
**P48A Milroy 52.28 314** P **P** **01 13 38.1 +1.2**
P48A IAmb IAmb 01 13 38.4
comp=Z,10.0nm,0.9s
**WCI Wyandotte Cave 52.42 313** P **P** **01 13 38.6 +0.6**
WCI IAmb IAmb 01 13 39.1
comp=Z,10nm,0.8s
**T47A Sharon Grove 52.57 311** P **P** **01 13 40.3 +1.2**
T47A IAmb IAmb 01 13 41.4
comp=Z,20nm,1.1s
**L48A N Adams 52.65 318** P **P** **01 13 39.7 +0.1**
L48A IAmb IAmb 01 13 41.5
comp=Z,24nm,1.1s
**WVT Waverly 52.82 310** P **P** **01 13 41.9 +0.9**
**BLO Bloomington 52.95 314** P **P** **01 13 42.8 +0.9**
**OXF Oxford 53.54 307** P **P** **01 13 46.4 +0.2**
OXF IAmb IAmb 01 13 51.3
comp=Z,23nm,1.2s
**W45A Hickory Valley 53.56 308** P **P** **01 13 47.4 +1.0**
**P46A Rosedale 53.60 314** P **P** **01 13 48.0 +1.3**
P46A IAmb IAmb 01 13 49.0
comp=Z,18nm,0.9s
**344A Westbrook Farm 53.79 303** P **P** **01 13 49.0 +0.8**
344A IAmb IAmb 01 14 03.9
comp=Z,11nm,0.9s
**VBMS Vicksburg 53.80 304** P **P** **01 13 49.2 +1.0**
VBMS IAmb IAmb 01 13 51.1
comp=Z,14nm,1.0s
**SFIN Lafayette 53.82 315** P **P** **01 13 48.8 +0.5**
SFIN IAmb IAmb 01 13 51.1
comp=Z,19nm,1.1s
**HALT Halls 53.91 309** P **P** **01 13 50.1 +1.2**
**OLIL Olney 53.92 313** P **P** **01 13 50.6 +1.6**
**GLAT Glass 53.98 309** P **P** **01 13 50.0 +0.5**
**HICK Hickman 54.02 310** P **P** **01 13 49.8 0.0**
**LNXT Lenox 54.08 309** P **P** **01 13 50.4 +0.2**
**S44A Carbondale 54.42 311** P **P** **01 13 52.6 -0.1**
S44A IAmb IAmb 01 13 55.2
comp=Z,20nm,1.1s
**143A Socs Landing, 54.65 304** P **P** **01 13 56.4 +1.9**
**Q44A Meyer Farm, Va 54.65 312** P **P** **01 13 55.9 +1.6**
**O44A Mansfield 54.70 314** P **P** **01 13 55.5 +0.8**
O44A IAmb IAmb 01 13 56.9
comp=Z,11nm,0.7s
**M44A Midewin, Midew 54.88 316** P **P** **01 13 56.6 +0.7**
**FVM French Village 55.39 311** P **P** **01 14 00.3 +0.6**
**HDIL Hopedale 55.44 314** P **P** **01 14 00.4 +0.4**
HDIL IAmb IAmb 01 14 01.5
comp=Z,24nm,1.4s
**SLM Saint Louis 55.46 312** P **P** **01 14 00.4 +0.2**
**ECH Echery 55.48 35** P **P** **01 14 00.3 +0.1**
ECH IAmb IAmb 01 14 22.7
comp=Z,12nm,1.3s
**CCM Cathedral Cave 56.02 311** P **P** **01 14 04.5 +0.3**
CCM IAmb IAmb 01 14 06.2
comp=Z,12nm,1.2s
**LC01 Cunco 56.09 211** P **P** **01 14 04.9 +0.2**
LC01 IAmb IAmb 01 14 13.1
comp=Z,11nm,0.9s
**BFO Black Forest 56.21 36** P **P** **01 14 07.3 +1.8**
BFO IAmb IAmb 01 14 13.9
comp=Z,19nm,1.4s
**WLAR White Oak Lake 56.28 305** P **P** **01 14 06.6 +0.4**
**MGMO Mountain Grove 56.53 309** P **P** **01 14 08.7 +0.8**
MGMO IAmb IAmb 01 14 10.0
comp=Z,17nm,1.3s
**DAVA Damuels 56.63 38** *eP* **P** **01 14 10.9 +2.3**
comp=Z,9.1nm,1.1s
**PLCA Paso Flores 56.84 209** P **P** **01 14 09.3 -0.7**
comp=Z,2.7nm,0.7s,baz=25,slow=7.1,SNR=9.2
**PLCA Paso Flores 56.84 209** *eP* **P** **01 14 09.4 -0.7**
**R40A Maddies Statio 56.86 311** P **P** **01 14 10.4 +0.2**
**JFWS Jewell Farm 56.97 317** P **P** **01 14 10.7 -0.2**
JFWS IAmb IAmb 01 14 12.3
comp=Z,14nm,1.0s
**FETA Feichten 57.02 38** *eP* **P** **01 14 11.1 -0.3**
comp=Z,7.0nm,1.2s
**P40A Paris 57.08 312** IAmb IAmb 01 14 13.6
comp=Z,19nm,1.1s
**RETA Reutte 57.25 38** *eP* **P** **01 14 12.6 -0.3**
comp=Z,13nm,1.4s
**L40A Anamosa 57.34 315** P **P** **01 14 12.2 -1.3**
L40A IAmb IAmb 01 14 14.7
comp=Z,12nm,1.0s
**MOTA Moosalm 57.40 38** *eP* **P** **01 14 17.1 +3.1**
comp=Z,9.5nm,1.6s
**S39A Bolivar 57.49 310** P **P** **01 14 12.9 -1.8**
**WATA Walderalm 57.68 38** *eP* **P** **01 14 16.3 +0.2**
comp=Z,7.3nm,1.8s
**ABTA Abfaltersbach 58.01 39** *eP* **P** **01 14 17.8 -0.5**
comp=Z,5.3nm,1.2s
**P38A Dawn 58.20 312** P **P** **01 14 19.3 -0.4**
P38A IAmb IAmb 01 14 20.9
comp=Z,11nm,1.2s
**OBKA Obir 59.19 40** *eP* **P** **01 14 27.0 +0.4**
comp=Z,5.5nm,1.1s
**LL02 Futaleuf 59.35 208** P **P** **01 14 27.7 +0.2**
LL02 IAmb IAmb 01 14 34.0
comp=Z,11nm,1.1s
**NKC Novy Kostel 59.49 35** *eP* **P** **01 14 32.9 +4.5**
**MOA Molln 59.55 38** *eP* **P** **01 14 30.7 +1.8**
comp=Z,12nm,1.4s
**SOKA Soboth 59.57 40** *eP* **P** **01 14 30.5 +1.4**
comp=Z,9.9nm,1.5s
**Z35A Perchaven, San 59.58 304** P **P** **01 14 28.2 -1.2**
Z35A IAmb IAmb 01 14 31.4
comp=Z,9.6nm,0.8s
**FRB Frobisher Bay 59.59 345** P **P** **01 14 29.1 +0.3**
comp=Z,6.0nm,1.1s,baz=131,slow=5.4,SNR=4.5
**GERES GERESS Array B 59.62 37** P **P** **01 14 28.5 -1.0**
comp=Z,0.4nm,0.6s,baz=282,slow=4.9,SNR=2.3
**KHC Kasperske Hory 59.66 37** *eP* **P** **01 14 28.5 -1.2**
KHC *ep*P **pP** **01 14 32.5 -0.7**
**T35A Sooner Cattle 59.75 308** P **P** **01 14 30.4 -0.1**
T35A IAmb IAmb 01 14 31.6
comp=Z,22nm,1.5s
**CKRC Cesky Krumlov 59.97 37** *eP* **P** **01 14 34.8 +3.0**
CKRC *ex* x 01 14 38.5
**ARSA Arzberg 60.10 39** *eP* **P** **01 14 34.3 +1.6**
comp=Z,3.9nm,1.1s
**N35A Tabor 60.11 313** P **P** **01 14 33.0 +0.1**
**KSU1 Kansas State U 60.35 311** P **P** **01 14 34.4 -0.1**
KSU1 IAmb IAmb 01 14 41.5
comp=Z,17nm,1.2s
**CONA Conrad Observa 60.57 39** *eP* **P** **01 14 37.7 +1.8**
comp=Z,4.5nm,1.5s
**PRU Pruhonice 60.60 36** *eP* **P** **01 14 34.6 -1.4**
**833A Chaparral WMA, 60.63 298** P **P** **01 14 33.0 -3.6**
833A IAmb IAmb 01 14 38.9
comp=Z,11nm,1.1s
**L34A Svendsen Farm, 60.95 314** P **P** **01 14 37.4 -1.2**
**WMOK Wichita Mounta 61.09 305** P **P** **01 14 38.7 -1.0**
**KRUC Moravsky 61.33 38** *eP* P 01 14 48.3 +7.3
**VRAC Vranov 61.55 38** *eP* P 01 14 49.8 +7.3
**ECSD EROS Data Cent 61.62 316** P **P** **01 14 43.8 +0.7**
ECSD IAmb IAmb 01 14 44.0
comp=Z,11nm,1.1s
**R32A Long Quarter, 61.79 309** P **P** **01 14 44.2 -0.1**
**DPC Dobruska-Polom 61.79 36** *eP* **P** **01 14 44.0 -0.2**
DPC *ex* x 01 14 51.6
**OSTC Ostas 61.81 36** *eP* **P** **01 14 43.5 -0.8**
**KRLC Kraliky 61.95 37** *eP* **P** **01 14 49.2 +3.9**
**CBKS Cedar Bluff 62.66 310** P **P** **01 14 50.0 -0.2**
**D32A Dogwood Acres, 62.93 319** P **P** **01 14 51.1 -0.7**
**PSZ Piszkesteto 63.10 40** P **P** **01 14 53.6 +0.6**
PSZ IAmb IAmb 01 15 00.7
comp=Z,17nm,1.5s
**SCO Scoresbysund 63.22 6** P **P** **01 14 53.3 0.0**
**ULM Lac du Bonnet 63.27 323** P **P** **01 14 53.4 -0.6**
comp=Z,4.1nm,0.7s,baz=133,slow=7.2,SNR=4.4
**ULM Lac du Bonnet 63.27 323** P **P** **01 14 54.0 0.0**
**SUSD Miller 63.44 316** P **P** **01 14 54.9 -0.4**
**NOA NORSAR Array B 64.30 24** P **P** **01 15 00.9 +0.3**
comp=Z,1.7nm,1.0s,baz=222,slow=6.6,SNR=1.7
**SUMG Summit 64.44 0** *i* P **P** **01 15 02.0 +0.2**
**TXAR Lajitas Array 64.46 299** P **P** **01 15 01.6 -0.8**
comp=Z,0.8nm,0.5s,baz=103,slow=5.9,SNR=15
**TX31 Lajitas Ar. Si 64.46 299** IAmb IAmb 01 15 04.3
comp=Z,4.8nm,0.8s
**KSCO Kaye Shedlock' 64.91 309** P **P** **01 15 05.7 +0.5**
**E28A Huff 65.19 318** P **P** **01 15 06.6 -0.1**
**T25A Trinidad 65.99 307** P **P** **01 15 12.7 +0.3**
**MNTX Cornudas Mount 66.15 301** P **P** **01 15 11.8 -1.4**
**MLR Muntele Rosu 66.44 44** P **P** **01 15 15.3 +0.4**
**BURAR Bucovina Array 66.45 41** P **P** **01 15 16.1 +1.2**
**Q24A Divide 66.84 309** P **P** **01 15 17.4 -0.4**
**SDCO Great Sand Dun 66.94 308** P **P** **01 15 19.0 +0.5**
**ISCO Idaho Springs 67.32 310** P **P** **01 15 22.0 +1.1**
**DGMT Dagmar 67.95 319** P **P** **01 15 25.0 +0.6**
**S22A 4UR Ranch, Cre 67.98 307** P **P** **01 15 24.6 -0.4**
**FFC Flin Flon 68.27 326** P **P** **01 15 25.9 -0.3**
**LAO LASA Array 68.92 317** P **P** **01 15 30.1 -0.4**
LAO IAmb IAmb 01 15 36.6
comp=Z,6.9nm,0.8s
**PV13 Radium Mtn., P 69.59 308** P **P** **01 15 35.8 +0.8**
**AKASG Malin Array Be 69.73 39** P **P** **01 15 35.6 +0.3**
comp=Z,0.5nm,0.5s,baz=255,slow=6.6,SNR=2.5
**X18A Snowflake 70.20 304** P **P** **01 15 37.4 -1.4**
X18A IAmb IAmb 01 15 41.3
comp=Z,8.6nm,1.3s
**RDMU Red Mountain 70.42 310** P **P** **01 15 40.2 +0.1**
RDMU IAmb IAmb 01 15 41.9
comp=Z,12nm,1.4s
**PDAR Pinedale Array 70.67 312** P **P** **01 15 42.0 +0.4**
comp=Z,0.3nm,0.6s,baz=115,slow=8.1,SNR=2.4
**RLMT Red Lodge 70.76 315** P **P** **01 15 42.5 +0.5**
RLMT IAmb IAmb 01 15 43.9
comp=Z,9.8nm,1.4s
**P18A Preston Nutter 70.84 309** P **P** **01 15 43.6 +0.8**
P18A IAmb IAmb 01 16 01.6
comp=Z,9.2nm,1.3s
**FINES FINESS Array B 70.93 27** P **P** **01 15 44.2 +1.8**
comp=Z,5.6nm,1.0s,baz=225,slow=18,SNR=2.1
**BR131 Keskin Array S 71.14 51** P **P** **01 15 44.2 -0.1**
BR131 IAmb IAmb 01 15 54.7
comp=Z,8.3nm,1.1s
**BRTR Keskin Array B 71.14 51** P **P** **01 15 44.1 -0.3**
comp=Z,2.4nm,1.0s,baz=246,slow=6.2,SNR=7.8
**X16A Lo Mia Camp, P 71.42 304** P **P** **01 15 46.5 +0.3**
**WUAZ Wupatki 71.42 305** P **P** **01 15 46.3 +0.1**
**LKWY Lake 71.49 314** P **P** **01 15 47.4 +0.8**
LKWY IAmb IAmb 01 15 49.5
comp=Z,12nm,1.4s
**LOHW Long Hollow 71.52 313** P **P** **01 15 47.6 +0.9**
**FLWY Flagg Ranch 71.65 314** P **P** **01 15 47.8 +0.3**
FLWY IAmb IAmb 01 16 04.7
comp=Z,10nm,1.1s
**TPAW Teton Pass 71.76 313** IAmb IAmb 01 15 49.4
comp=Z,19nm,1.4s
**YHH Holmes Hill 71.84 314** P **P** **01 15 49.3 +0.6**
YHH IAmb IAmb 01 15 52.0
comp=Z,13nm,1.5s
**JLU Jordanelle 71.85 310** P **P** **01 15 49.7 +0.9**
JLU IAmb IAmb 01 15 51.1
comp=Z,16nm,1.5s
**YMR Madison River 71.90 314** P **P** **01 15 50.1 +1.2**
YMR IAmb IAmb 01 16 06.7
comp=Z,16nm,1.0s
**BOZ Bozeman (W) 72.48 315** P **P** **01 15 53.4 +1.1**
**HRY Holter Researc 72.74 316** P **P** **01 15 54.2 +0.4**
**DUG Dugway, Tooele 72.86 309** P **P** **01 15 55.1 +0.5**
**BGU Big Grassy Mou 73.07 310** IAmb IAmb 01 15 58.8
comp=Z,8.1nm,1.0s
**LRM Limekiln Ridge 73.07 315** P **P** **01 15 56.3 +0.3**
**DLMT Dillon 73.13 315** P **P** **01 15 57.7 +1.5**
DLMT IAmb IAmb 01 16 13.8
comp=Z,11nm,1.1s
**RES Resolute Bay 73.73 347** P **P** **01 15 59.9 +1.0**
comp=Z,4.6nm,1.1s,baz=121,slow=6.2,SNR=5.5
**RES Resolute Bay 73.73 347** P **P** **01 15 59.8 +0.9**
**HLID Hailey 74.28 313** P **P** **01 16 03.5 +0.5**
**WALA Waterton Lakes 74.39 319** P **P** **01 16 02.8 -0.6**
WALA IAmb IAmb 01 16 05.8
comp=Z,15nm,1.5s
**EDM Edmonton 74.51 323** P **P** **01 16 04.1 +0.2**
EDM IAmb IAmb 01 16 05.8
comp=Z,16nm,1.1s
**JTMT Jette 74.51 317** P **P** **01 16 03.8 -0.4**
**ELK Elko 74.74 310** P **P** **01 16 06.7 +0.9**
comp=Z,1.1nm,0.5s,baz=72,slow=4.1,SNR=4.1
**R11A Troy Canyon, C 74.92 307** P **P** **01 16 07.2 +0.4**
**NEW Newport 76.45 318** P **P** **01 16 15.0 -0.2**
comp=Z,0.8nm,0.6s,baz=157,slow=7.9,SNR=3.8
**YKA Yellowknife Ar 76.47 332** P **P** **01 16 13.8 -1.1**
comp=Z,2.0nm,0.8s,baz=98,slow=5.9,SNR=24
**KVN Kaiserville 76.90 308** P **P** **01 16 18.7 +0.6**
**NVAR Mina Array Bea 77.06 308** P **P** **01 16 18.9 -0.1**
comp=Z,0.7nm,0.8s,baz=122,slow=2.7,SNR=5.7
**KLMR Klimovskoe 77.15 29** *eP* **P** **01 16 21.5 +2.7**
KLMR AMP 01 16 26.9
comp=Z,25nm,1.3s
**KBZ Khabaz 78.25 47** P **P** **01 16 26.7 +1.4**
comp=Z,5.1nm,1.0s,baz=285,slow=9.9,SNR=5.3
**MOD Modoc Plateau 78.57 311** P **P** **01 16 28.2 +0.8**
MOD IAmb IAmb 01 16 30.9
comp=Z,11nm,1.1s
**A36M Sachs Harbour 81.37 342** IAmb IAmb 01 16 43.9
comp=Z,10nm,1.0s
**SNAA Sanae 82.99 169** P **P** **01 16 49.5 -0.7**
comp=Z,1.4nm,0.7s,baz=337,slow=13,SNR=6.8
**INK Inuvik 84.42 338** P **P** **01 16 58.7 +1.2**
comp=Z,5.7nm,1.0s,baz=55,slow=5.8,SNR=9.8
**INK Inuvik 84.42 338** P **P** **01 16 57.7 +0.2**
INK IAmb IAmb 01 17 01.3
comp=Z,7.8nm,1.0s
**M31M Drury Creek, Y 85.66 332** P **P** **01 17 05.0 +1.0**
**ILAR Eielson Array 90.44 336** P **P** **01 17 28.1 +1.3**
comp=Z,1.0nm,0.9s,baz=91,slow=3.1,SNR=5.1
**SYO Syowa Base 93.24 159** *ep*P pP 01 17 42.4 -0.8
**PZH PanZhiHua 128.32 47** PKP **PKPdf** **01 23 33.0 +0.1**
**ASAR Alice Springs 162.87 156** PKPab **PKPab** **01 25 16.6 -0.8**
comp=Z,0.4nm,0.7s,baz=198,slow=4.7,SNR=6.6
**WRA Warramunga Arr 166.31 150** PKPab **PKPab** **01 25 31.7 -0.9**
comp=Z,0.5nm,0.9s,baz=212,slow=4.1,SNR=2.0

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*NEIC* ***21*** *01:10:38.6±2.5, 18°.2N±0°.1×65°.14W±0°.06, h149km±6km,*
*Error ellipse: s-maj=15.2km s-min=8.8km az=184.0*
*OSPL* ***21*** *01:10:41.1±1.4, 18°.07N×64°.94W, h70km±17km, ML3.8*
*RSPR* ***21*** *01:10:41.2, 18°.14N×65°.12W, h127km, MD3.5/18*

**ISC 21 01:10:39.4±1.3, 18°.26N±0°.09×65°.13W±0°.03, h137km±7km,**
**n98, σ1°54/117, 16C-4D, Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | h m s | ISC |
| **CUPR** | **Culebra, Puert** | **0.15** | **288** | *i*P | | **Pn 01 10 58.6** | **+0.6** |
| **CUPR** | **Culebra, Puert** | **0.15** | **288** | eS | | **Sn 01 11 12.0** | **-0.1** |
| **CUPR** | **Culebra, Puert** | **0.15** | **288** | Pn | | **Pn 01 10 58.5** | **+0.6** |
| CUPR | | | | | | **Sn 01 11 12.0** | **-0.1** |
| **MTP** | **Monte Pirata** | **0.43** | **248** | *i*P | | **Pn 01 10 59.2** | **+0.2** |
| **MTP** | **Monte Pirata** | **0.43** | **248** | eS | | **Sn 01 11 13.0** | **-0.7** |
| **MTP** | **Monte Pirata** | **0.43** | **248** | Pn | | **Pn 01 10 59.0** | **+0.1** |
| MTP | | | | | | **Sn 01 11 13.0** | **-0.7** |
| **TBVI** | **Tortola** | **0.51** | **72** | *i*P | | **Pn 01 10 59.8** | **+0.5** |
| **TBVI** | **Tortola** | **0.51** | **72** | eS | | **Sn 01 11 14.1** | **-0.3** |
| **HUMP** | **Col San Antoni** | **0.69** | **260** | *i*P | | **Pn 01 11 01.1** | **+0.6** |
| **HUMP** | **Col San Antoni** | **0.69** | **260** | eS | | **Sn 01 11 16.1** | **-0.3** |
| **HUMP** | **Col San Antoni** | **0.69** | **260** | Pn | | **Pn 01 11 01.1** | **+0.6** |
| **HUMP** | **Col San Antoni** | **0.69** | **260** | | | **Sn 01 11 16.1** | **-0.3** |
| **HUMP** | **Col San Antoni** | **0.69** | **260** | IAML | | 01 11 17.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| **PDPR** | **Patillas Dam,** | **0.88** | **254** | *i*P | | **Pn 01 11 02.2** | **+0.3** |
| **PDPR** | **Patillas Dam,** | **0.88** | **254** | eS | | **Sn 01 11 18.6** | **-0.3** |
| **PDPR** | **Patillas Dam,** | **0.88** | **254** | Pn | | **Pn 01 11 01.9** | **+0.1** |
| PDPR | | | | | | **Sn 01 11 18.4** | **-0.6** |
| PDPR | | | | IAML | | 01 11 20.3 | |
| | comp=E,2μm,0.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **0.91** | **273** | *i*P | | **Pn 01 11 02.6** | **+0.5** |
| **GCPR** | **Guaynabo City** | **0.91** | **273** | eS | | **Sn 01 11 19.6** | **+0.2** |
| **GCPR** | **Guaynabo City** | **0.91** | **273** | Pn | | **Pn 01 11 02.2** | **+0.1** |
| GCPR | | | | | | **Sn 01 11 19.6** | **+0.2** |
| **IGPR** | **InterUniversit** | **0.97** | **253** | *i*P | | **Pn 01 11 03.0** | **+0.3** |
| **IGPR** | **InterUniversit** | **0.97** | **253** | eS | | **Sn 01 11 19.5** | **-0.9** |
| **SJG** | **San Juan** | **0.98** | **261** | Pn | | **Pn 01 11 02.9** | **+0.1** |
| SJG | | | | Sn | | **Sn 01 11 20.3** | **-0.2** |
| SJG | | | | IAML | | 01 11 20.7 | |
| | comp=E,2μm,0.2s | | | | | | |
| SJG | | | | IAML | | 01 11 20.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.35** | **279** | *i*P | | **Pn 01 11 06.7** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.35** | **279** | eS | | **Sn 01 11 27.3** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **1.35** | **279** | | | **Sn 01 11 27.3** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **1.35** | **279** | | | **Pn 01 11 07.2** | **+0.9** |
| **EMPR** | **Esperanza - Ma** | **1.35** | **279** | IAML | | 01 11 29.6 | |
| | comp=E,1μm,0.2s | | | | | | |
| EMPR | | | | IAML | | 01 11 30.3 | |
| | comp=N,777nm,0.3s | | | | | | |
| **ICMP** | **Isla Caja de M** | **1.38** | **255** | *i*P | | **Pn 01 11 07.2** | **+0.5** |
| **ICMP** | **Isla Caja de M** | **1.38** | **255** | eS | | **Sn 01 11 26.3** | **-1.1** |
| **ICMP** | **Isla Caja de M** | **1.38** | **255** | | | **Sn 01 11 26.3** | **-1.1** |
| **ICMP** | **Isla Caja de M** | **1.38** | **255** | Pn | | **Pn 01 11 06.8** | **+0.1** |
| **ICMP** | **Isla Caja de M** | **1.38** | **255** | IAML | | 01 11 26.6 | |
| | comp=E,703nm,0.6s | | | | | | |
| ICMP | | | | IAML | | 01 11 27.5 | |
| | comp=N,523nm,0.3s | | | | | | |
| **CELP** | **Cerrillos** | **1.39** | **263** | *i*P | | **Pn 01 11 07.4** | **+0.6** |
| **CELP** | **Cerrillos** | **1.39** | **263** | eS | | **Sn 01 11 27.3** | **-0.4** |
| **CELP** | **Cerrillos** | **1.39** | **263** | | | **Pn 01 11 07.3** | **+0.5** |
| CELP | | | | | | **Sn 01 11 27.3** | **-0.4** |
| CELP | | | | IAML | | 01 11 28.6 | |
| | comp=N,1μm,0.4s | | | | | | |
| CELP | | | | IAML | | 01 11 30.0 | |
| | comp=E,863nm,0.2s | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.42** | **261** | *i*P | | **Pn 01 11 06.5** | **-0.6** |
| **OBIP** | **Obispado Ponce** | **1.42** | **261** | eS | | **Sn 01 11 26.7** | **-1.5** |
| **OBIP** | **Obispado Ponce** | **1.42** | **261** | | | **Sn 01 11 26.5** | **-1.8** |
| **UUPR** | **Utuado, UPR, P** | **1.51** | **270** | *i*P | | **Pn 01 11 08.8** | **+0.7** |
| UUPR | | | | eS | | **Sn 01 11 30.4** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **1.51** | **270** | | | **Pn 01 11 08.8** | **+0.7** |
| UUPR | | | | | | **Sn 01 11 30.4** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.54** | **273** | *i*P | | **Pn 01 11 08.8** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **1.54** | **273** | eS | | **Sn 01 11 30.5** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **1.54** | **273** | | | **Pn 01 11 08.6** | **+0.1** |
| AOPR | | | | | | **Sn 01 11 30.7** | **0.0** |
| **AOPR** | **Arecibo Observ** | **1.54** | **273** | eP | | **Pn 01 11 08.9** | **+0.5** |
| AOPR | | | | eS | | **Sn 01 11 31.2** | **+0.5** |
| **GBPR** | **Guanica, Bosqu** | **1.69** | **261** | *i*P | | **Pn 01 11 10.2** | **+0.1** |
| GBPR | | | | eS | | **Sn 01 11 32.9** | **-0.6** |
| **MLPR** | **Magueyes Islan** | **1.84** | **261** | *i*P | | **Pn 01 11 10.8** | **-1.1** |
| **MLPR** | **Magueyes Islan** | **1.84** | **261** | eS | | **Sn 01 11 34.3** | **-2.5** |
| **MLPR** | **Magueyes Islan** | **1.84** | **261** | Pn | | **Pn 01 11 10.4** | **-1.4** |
| MLPR | | | | | | **Sn 01 11 34.2** | **-2.5** |
| MLPR | | | | IAML | | 01 11 35.0 | |
| | comp=N,540nm,0.4s | | | | | | |
| MLPR | | | | IAML | | 01 11 35.7 | |
| | comp=E,459nm,0.5s | | | | | | |
| **LSP** | **Las Mesas** | **1.86** | **268** | *i*P | | **Pn 01 11 13.0** | **+0.9** |
| **LSP** | **Las Mesas** | **1.86** | **268** | eS | | **Sn 01 11 38.1** | **+0.9** |
| **AGPR** | **Aguadilla, PR** | **1.89** | **277** | *i*P | | **Pn 01 11 13.9** | **+1.5** |
| **AGPR** | **Aguadilla, PR** | **1.89** | **277** | | | **Pn 01 11 12.7** | **+0.2** |
| AGPR | | | | | | **Sn 01 11 37.2** | **-0.6** |
| AGPR | | | | IAML | | 01 11 37.7 | |
| | comp=E,854nm,0.3s | | | | | | |
| AGPR | | | | IAML | | 01 11 39.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.89** | **277** | *i*P | | **Pn 01 11 12.6** | **+0.2** |
| AGPR | | | | eS | | **Sn 01 11 37.0** | **-0.7** |
| AGPR | | | | IAML | | 01 11 42.2 | |
| | comp=Z,528nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.90** | **263** | *i*P | | **Pn 01 11 12.4** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.90** | **263** | eS | | **Sn 01 11 37.3** | **-0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.90** | **263** | | | **Pn 01 11 12.1** | **-0.4** |
| CRPR | | | | | | **Sn 01 11 37.0** | **-0.9** |
| CRPR | | | | IAML | | 01 11 40.9 | |
| | comp=N,378nm,0.6s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.90** | **263** | *i*P | | **Pn 01 11 12.3** | **-0.2** |
| CRPR | | | | eS | | **Sn 01 11 36.1** | **-1.8** |
| CRPR | | | | IAML | | 01 11 39.5 | |
| | comp=Z,573nm,0.6s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **1.92** | **269** | *i*P | | **Pn 01 11 13.5** | **+0.8** |
| **PRSN** | **Puerto Rico Se** | **1.92** | **269** | eS | | **Sn 01 11 38.4** | **+0.1** |
| **PRSN** | **Puerto Rico Se** | **1.92** | **269** | | | **Sn 01 11 38.4** | **+0.1** |
| **PRSN** | **Puerto Rico Se** | **1.92** | **269** | | | **Pn 01 11 13.2** | **+0.5** |
| **PRSN** | **Puerto Rico Se** | **1.92** | **269** | IAML | | 01 11 40.0 | |
| | comp=E,5μm,0.3s | | | | | | |
| PRSN | | | | IAML | | 01 11 43.2 | |
| | comp=N,5μm,0.3s | | | | | | |
| **SMRT** | **St. Maarten** | **1.97** | **96** | | | **Pn 01 11 13.2** | **-0.1** |
| **SMRT** | **St. Maarten** | **1.97** | **96** | *e*P | | **Pn 01 11 13.3** | **-0.1** |
| SMRT | | | | eS | | **Sn 01 11 37.6** | **-1.8** |
| **IDE** | **Isla Desecheo** | **2.23** | **274** | *i*P | | **Pn 01 11 17.4** | **+0.8** |
| **IDE** | **Isla Desecheo** | **2.23** | **274** | eS | | **Sn 01 11 44.4** | **-0.7** |
| **SKI** | **Saint Kitts** | **2.46** | **112** | eP | | **Pn 01 11 20.0** | **+0.6** |
| SKI | | | | eS | | **Sn 01 11 49.2** | **-1.0** |
| **PCDR** | **Punta Cana, DR** | **3.10** | **275** | eS | | **Sn 01 12 05.3** | **+0.7** |
| **PCDR** | **Punta Cana, DR** | **3.10** | **275** | | | **Sn 01 12 05.3** | **+0.7** |
| **PCDR** | **Punta Cana, DR** | **3.10** | **275** | Pn | | **Pn 01 11 29.9** | **+2.5** |
| PCDR | | | | IAML | | 01 12 05.2 | |
| | comp=E,154nm,1.1s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.10** | **275** | IAML | | 01 12 29.3 | |
| | comp=N,264nm,1.6s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.10** | **275** | *i*P | | **Pn 01 11 30.0** | **+2.5** |
| PCDR | | | | eS | | **Sn 01 12 03.5** | **-1.1** |
| **ANWB** | **Willy Bob** | **3.24** | **100** | Pn | | **Pn 01 11 28.1** | **-1.3** |
| ANWB | | | | IAML | | 01 13 01.7 | |
| | comp=N,153nm,3.9s | | | | | | |
| ANWB | | | | IAML | | 01 13 08.4 | |
| | comp=N,120nm,3.0s | | | | | | |
| **ANWB** | **Willy Bob** | **3.24** | **100** | *e*P | | **Pn 01 11 27.8** | **-1.5** |
| ANWB | | | | eS | | **Sn 01 12 03.5** | **-4.4** |
| **ANBD** | **Bethesda, Anti** | **3.43** | **110** | *e*P | | **Pn 01 11 30.8** | **-1.0** |
| ANBD | | | | eS | | **Sn 01 12 08.5** | **-3.8** |
| **GDHS** | **Morne Mazeau,** | **3.77** | **121** | Pn | | **Pn 01 11 36.5** | **+0.1** |
| GDHS | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,270nm,0.6s | | | | | | | | |
| GDHS | | | | | IAML | | | 01 12 27.3 | |
| | comp=N,248nm,0.5s | | | | | | | | |
| **ABD** | **La Joyeuse, An** | **3.91** | **117** | *e*S | | **Sn** | | **01 12 21.5** | **-2.1** |
| **CBE** | **Ff, Capester** | **4.01** | **122** | Pn | | **Pn** | | **01 11 40.3** | **+0.7** |
| **CBE** | **Ff, Capester** | **4.01** | **122** | *e*P | | **Pn** | | **01 11 40.0** | **+0.5** |
| **CBE** | **Ff, Capester** | **4.01** | **122** | *e*S | | **Sn** | | **01 12 28.8** | **+2.7** |
| **DR12** | **Loma Pena Alta** | **4.07** | **278** | Pn | | Pn | | 01 11 35.1 | -5.2 |
| DR12 | | | | Sn | | Sn | | **01 12 19.3** | **-8.2** |
| **TBG** | **Guadaloupe-3** | **4.11** | **125** | *e*P | | **Pn** | | **01 11 40.0** | **-0.7** |
| **TBG** | **Guadaloupe-3** | **4.11** | **125** | *e*S | | **Sn** | | **01 12 33.5** | **+5.2** |
| **TDBA** | **Terre de Bas,** | **4.11** | **125** | *e*P | | **Pn** | | **01 11 41.8** | **+1.0** |
| **TDBA** | **Terre de Bas,** | **4.11** | **125** | *e*S | | **Sn** | | **01 12 34.5** | **+6.0** |
| **MAGL** | **Barre de l'ile** | **4.34** | **121** | *e*P | | **Pn** | | **01 11 44.5** | **+0.7** |
| **MAGL** | **Barre de l'ile** | **4.34** | **121** | *e*S | | **Sn** | | **01 12 34.4** | **+0.5** |
| **DSLB** | **Salisbury** | **4.53** | **128** | *e*P | | **Pn** | | **01 11 46.0** | **-0.4** |
| **BIM** | **Bigot** | **5.39** | **133** | Pn | | **Pn** | | **01 11 57.0** | **-0.9** |
| BIM | | | | IAML | | | | 01 13 58.5 | |
| | comp=N,52nm,2.8s | | | | | | | | |
| BIM | | | | IAML | | | | 01 14 51.6 | |
| | comp=E,62nm,2.0s | | | | | | | | |
| **SC01** | **Santiago de lo** | **5.43** | **283** | Pn | | **Pn** | | **01 11 59.6** | **+1.3** |
| SC01 | | | | | | **Sn** | | **01 13 00.7** | **+0.9** |
| **MPOM** | **Morne Pois Mar** | **5.59** | **132** | Pn | | **Pn** | | **01 12 00.1** | **-0.3** |
| **MPOM** | **Morne Pois Mar** | **5.59** | **132** | *e*S | | **Sn** | | **01 13 04.5** | **+0.8** |
| **SDDR** | **Presa de Saban** | **5.88** | **278** | Pn | | **Pn** | | **01 12 05.9** | **+1.5** |
| SDDR | | | | | | **Sn** | | **01 13 10.4** | **-0.5** |
| **SDDR** | **Presa de Saban** | **5.88** | **278** | *i* P | | **Pn** | | **01 12 05.8** | **+1.4** |
| SDDR | | | | *e*S | | **Sn** | | **01 13 08.8** | **-2.1** |
| SDDR | | | | IAML | | | | 01 13 18.3 | |
| | comp=Z,43nm,0.3s | | | | | | | | |
| **LONE2** | **Loma La Sidra** | **6.03** | **274** | *i* P | | **Pn** | | **01 12 07.2** | **+0.8** |
| LONE2 | | | | IAML | | | | 01 13 15.8 | |
| | comp=Z,28nm,1.9s | | | | | | | | |
| **SVB** | **Belmont** | **6.21** | **142** | Pn | | **Pn** | | **01 12 08.7** | **-0.1** |
| **GRTK** | **Grand Turk** | **6.51** | **301** | Pn | | **Pn** | | **01 12 12.0** | **-0.7** |
| **URIC** | **Uribia, Colomb** | **9.30** | **226** | Pn | | **Pn** | | **01 12 48.1** | **-2.2** |

**DJA 21 01:12:21.5**±0.3,**9˚S**±6˚×**11˚8E**±˚,**h10**km,**M4.0**/10,**mb4.6**/2, **MLv3.6**/10,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **0.08** | **287** | P | Pg | 01 12 24.5 | +0.7 |
| PLAI | | | | S | Sg | 01 12 26.5 | +1.0 |
| **WBSI** | **Waikabubak, Su** | **1.71** | **117** | Pn | Pn | 01 12 49.6 | -1.9 |
| **IGBI** | **Denpasar** | **2.67** | **270** | P | Pn | 01 13 04.6 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **3.68** | **276** | P | Pn | 01 13 18.8 | +0.3 |
| **BSSI** | **Bau Bau, Buton** | **3.75** | **44** | P | Pn | 01 13 19.3 | -0.2 |
| **BKSI** | **Bulukumba** | **4.17** | **33** | P | Pn | 01 13 25.1 | -0.1 |
| **GMJI** | **Gumukmas** | **4.39** | **277** | P | Pn | 01 13 27.5 | -0.8 |
| **BATI** | **Baumata** | **5.89** | **104** | P | Pn | 01 13 50.9 | +2.0 |
| | 0.1nm9.2nm,0.4s | | | | | | |
| **BWJI** | **Bawean** | **5.95** | **300** | P | Pn | 01 13 50.4 | +0.7 |

*MAN* ***21*** *01:25:09.2, 11˚.30N×126˚.60E, h105km, mb4.9, ML3.8, MS3.8*

*BJI* ***21*** *01:25:11.6±0.0, 10˚.88N×126˚.40E, h49km, mb4.3/16, mB4.9/8, Ms4.2/2, Ms7 3.9/2*

*IDC* ***21*** *01:25:14.9±0.7, 11˚.18N×126˚.17E, h38km±5km, mb4.0/15, mb1 4.1/15, mb1mx4.0/33, mbtmp4.2/15, MS3.4/7, Ms1 3.4/7, ms1mx3.0/75, Error ellipse: s-maj=30.9km s-min=10.7km az=73.0*

*NEIC* ***21*** *01:25:17.0±2.0, 11˚.25N±0˚.08×126˚.1E±0˚.1, h49km±8km, mb4.6/36, Error ellipse: s-maj=15.2km s-min=11.5km az=84.0*

*DJA* ***21*** *01:25:26.6±2.4, 11˚N±7˚×12˚6E±1˚.0, h149km±23km, M4.7/14, mB5.5/3, mb4.7/14, Mw(mB)5.0/3*

**ISC 21 01:25:16.3**±0.4,**11˚.28N**±0˚.04×**126˚.25E**±0˚.06,**h50**km,**n100, σ1§45**/103,**mb4.5**/41,**MS3.3**/4,**4C-9D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLSP** | **General Luna,** | **1.49** | **185** | *i* P | | **Pn** | **01 25 36.7** | **-4.1** |
| **OCLP** | **Ormoc** | **1.63** | **262** | *e*P | | **Pn** | **01 25 41.3** | **-1.3** |
| **SCPH** | **Surigao** | **1.66** | **207** | *e*P | | **Pn** | **01 25 41.2** | **-1.9** |
| SCPH | | | | *e*S | | Sn | **01 25 58.8** | **+1.5** |
| **MSLP** | **Maasin** | **1.78** | **231** | *i* P | | **Pn** | **01 25 43.1** | **-1.6** |
| MSLP | | | | *e*S | | Sn | 01 26 14.0 | +7.9 |
| **BUTP** | **Butuan** | **2.38** | **195** | *e*P | | **Pn** | **01 25 56.2** | **+3.3** |
| **LLP** | **Lapu-Lapu** | **2.44** | **247** | *i* P | | **Pn** | **01 25 50.8** | **-2.9** |
| LLP | | | | *i* S | | **Sn** | **01 26 27.4** | **+5.0** |
| **TBP** | **Tagbilaran** | **2.83** | **236** | *e*P | | **Pn** | **01 25 58.1** | **-1.0** |
| TBP | | | | *i* S | | **Sn** | **01 26 35.2** | **+3.1** |
| **PVCP** | **Virac** | **3.09** | **319** | *e*P | | **Pn** | **01 26 00.9** | **-1.7** |
| **RCP** | **Roxas** | **3.45** | **275** | *e*P | | **Pn** | **01 26 06.8** | **-0.8** |
| **CNOP** | **Candoni, Negro** | **3.83** | **248** | *e*P | | **Pn** | **01 26 11.7** | **-1.2** |
| **DAV** | **Davao City (W)** | **4.23** | **189** | LR | | LR | 01 28 25.7 | |
| | comp=Z,574nm,20.9s,baz=334,slow=46 | | | | | | | |
| **DAV** | **Davao City (W)** | **4.23** | **189** | Pn | | **Pn** | **01 26 17.4** | **-1.0** |
| **PAGZ** | **Pagadian** | **4.43** | **220** | *e*P | | **Pn** | **01 26 20.0** | **-1.0** |
| **BOAC** | **Boac** | **4.82** | **297** | *e*P | | **Pn** | **01 26 28.6** | **-1.8** |
| **LQP** | **Lukban** | **5.40** | **302** | *e*P | | **Pn** | **01 26 32.5** | **-2.0** |
| **MYLDM** | **Lahad Datu** | **9.77** | **232** | Pn | | **Pn** | **01 27 33.0** | **-1.4** |
| **TNTI** | **Ternate** | **10.49** | **174** | Pn | | **Pn** | **01 27 44.9** | **+0.7** |
| **KKM** | **Kota Kinabalu** | **11.20** | **243** | Pn | | **Pn** | **01 27 52.5** | **-1.5** |
| **TTSI** | **Tana Toraja** | **15.60** | **205** | P | | **P** | **01 28 53.9** | **-2.6** |
| | 1μm15nm,0.6s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **16.46** | **203** | P | | **P** | **01 29 08.5** | **+2.5** |
| | 12nm,0.8s | | | | | | | |
| **KAPI** | **Kappang** | **17.43** | **202** | LR | | LR | 01 37 57.7 | |
| | comp=Z,98nm,18.1s,baz=3.0,slow=44 | | | | | | | |
| **GUMO** | **Guam** | **18.32** | **81** | LR | | LR | 01 36 19.7 | |
| | comp=Z,153nm,18.1s,baz=127,slow=36 | | | | | | | |
| **MMRI** | **Maumere** | **20.18** | **192** | P | | **P** | **01 29 47.2** | **+0.2** |
| MMRI | | | | IAmb | | IAmb | 01 29 56.3 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **20.99** | **185** | P | | **P** | **01 29 56.0** | **+0.2** |
| SOEI | | | | IAmb | | IAmb | 01 30 16.6 | |
| | comp=Z,23nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | **20.99** | **185** | P | | Pn | 01 29 58.4 | -0.5 |
| | comp=Z,36nm,0.7s | | | | | | | |
| **BATI** | **Baumata** | **21.50** | **187** | P | | **P** | **01 30 00.1** | **-1.1** |
| | comp=Z,23nm,0.5s,baz=136,slow=0.7,SNR=8.1 | | | | | | | |
| **BATI** | **Baumata** | **21.50** | **187** | P | | **P** | **01 30 01.6** | **+0.5** |
| | comp=Z,31nm,0.7s | | | | | | | |
| **PLAI** | **Plampang** | **21.68** | **203** | P | | **P** | **01 30 02.9** | **-0.1** |
| | comp=Z,21nm,0.6s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **23.02** | **212** | P | | **P** | **01 30 16.5** | **-0.8** |
| JAGI | | | | IAmb | | IAmb | 01 30 19.1 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **23.02** | **212** | P | | **P** | **01 30 16.0** | **-1.3** |
| | comp=Z,32nm,1.0s | | | | | | | |
| **MTN** | **Manton Dam** | **24.45** | **168** | P | | **P** | **01 30 30.3** | **-0.3** |
| MTN | | | | IAmb | | IAmb | 01 30 34.0 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **ENH** | **Enshi** | **24.50** | **323** | P | | **P** | **01 30 28.4** | **-2.6** |
| ENH | | | | IAmb | | IAmb | 01 30 52.0 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **KULM** | **Kulim** | **26.01** | **259** | P | | **P** | **01 30 44.7** | **-0.3** |
| KULM | | | | IAmb | | IAmb | 01 30 46.3 | |
| | comp=Z,34nm,1.4s | | | | | | | |
| **KSRS** | **Korea Array** | **26.11** | **3** | P | | **P** | **01 30 47.0** | **+1.5** |
| | comp=Z,3.0nm,1.0s,baz=187,slow=9.8,SNR=5.0 | | | | | | | |
| KSRS | | | | LR | | LR | 01 43 02.6 | |
| | comp=Z,67nm,18.1s,baz=165,slow=41 | | | | | | | |
| **KNRA** | **Kununurra** | **26.89** | **175** | P | | **P** | **01 30 54.0** | **+1.2** |
| KNRA | | | | IAmb | | IAmb | 01 31 12.2 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.32** | **288** | P | | **P** | **01 30 55.5** | **-1.3** |
| | comp=Z,1.9nm,0.3s,baz=95,slow=6.8,SNR=10 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.32** | **288** | P | | **P** | **01 30 54.3** | **-2.4** |
| **MJAR** | **Matsushiro Arr** | **27.37** | **21** | LR | | LR | 01 42 12.3 | |
| | comp=Z,117nm,18.0s,baz=166,slow=37 | | | | | | | |
| **XAN** | **Xi'an** | **27.65** | **328** | P | | **P** | **01 30 58.8** | **-0.7** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.19** | **181** | P | | **P** | **01 31 12.8** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=22,slow=12,SNR=7.4 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.19** | **181** | P | | **P** | **01 31 14.2** | **+0.9** |
| **COEN** | **Coen** | **30.17** | **146** | P | | **P** | **01 31 21.9** | **-0.1** |
| COEN | | | | IAmb | | IAmb | 01 31 38.8 | |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **31.87** | **165** | P | | **P** | **01 31 35.5** | **-1.5** |
| **WRA** | **Warramunga Arr** | **32.03** | **166** | P | | **P** | **01 31 36.0** | **-2.3** |
| | comp=Z,1.1nm,0.6s,baz=345,slow=9.4,SNR=13 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **01 34 27.6** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=339,slow=3.2,SNR=5.2 | | | | | | | |
| WRA | | | | pPcP | | | 01 34 38.3 | |
| | comp=Z,0.4nm,0.5s,baz=342,slow=2.9,SNR=9.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.03** | **166** | P | | **P** | **01 31 38.6** | **+0.3** |
| **WB2** | **Warramunga Arr** | **32.03** | **166** | P | | **P** | **01 31 37.4** | **-0.9** |
| WB2 | | | | IAmb | | IAmb | 01 32 04.5 | |
| | comp=Z,7.9nm,1.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **32.09** | **165** | P | | **P** | **01 31 38.5** | **-0.4** |
| WR0 | | | | IAmb | | IAmb | 01 31 55.8 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **33.24** | **191** | P | | **P** | **01 31 48.0** | **-0.9** |
| PSA00 | | | | IAmb | | IAmb | 01 32 00.3 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **35.52** | **168** | P | | **P** | **01 32 09.8** | **+1.1** |
| **ASAR** | **Alice Springs** | **35.52** | **168** | P | | **P** | **01 32 07.5** | **-1.3** |
| | comp=Z,1.1nm,0.4s,baz=345,slow=7.2,SNR=18 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 34 37.1** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=338,slow=2.5,SNR=4.3 | | | | | | | |
| ASAR | | | | pPcP | | | 01 34 48.2 | |
| | comp=Z,1.7nm,0.6s,baz=341,slow=2.9,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **35.52** | **168** | P | | **P** | **01 32 09.8** | **+1.1** |
| **GTA** | **Gaotai** | **36.55** | **325** | P | | **P** | **01 32 18.6** | **+1.1** |
| GTA | | | | pP | | pP | 01 32 25.8 | -2.6 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **CTA** | **Charters Tower** | **36.86** | **148** | LR | | LR | 01 49 28.3 | |
| | comp=Z,56nm,18.4s,baz=255,slow=40 | | | | | | | |
| **GOMU** | **GeErMu** | **37.70** | **316** | P | | **P** | **01 32 28.8** | **+1.2** |
| GOMU | | | | pP | | pP | 01 32 38.3 | -1.0 |
| GOMU | | | | sP | | sP | 01 32 43.0 | -1.6 |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,86nm,5.6s | | | | | | | |
| **KLR** | **Kul'dur** | **38.11** | **6** | LR | | LR | 01 50 31.0 | |
| | comp=Z,26nm,18.7s,baz=343,slow=40 | | | | | | | |
| **TAPN** | **Taplejung** | **39.54** | **299** | *e*P | | **P** | **01 32 41.8** | **-1.2** |
| | comp=Z,5.5nm,0.4s | | | | | | | |
| **ODAN** | **Odare** | **39.68** | **299** | *e*P | | **P** | **01 32 43.2** | **-0.9** |
| **ULN** | **Ulaanbaatar** | **39.88** | **340** | P | | **P** | **01 32 46.7** | **+1.3** |
| **SONM** | **Songino Array** | **40.08** | **339** | P | | **P** | **01 32 47.7** | **+0.7** |
| | comp=Z,2.0nm,0.9s,baz=159,slow=7.8,SNR=9.1 | | | | | | | |
| SONM | | | | pP | | **pP** | **01 32 58.5** | **+0.1** |
| | comp=Z,1.6nm,0.7s,baz=156,slow=8.6,SNR=7.2 | | | | | | | |
| **JIRN** | **Jiri** | **40.92** | **299** | *e*P | | **P** | **01 32 53.8** | **-0.8** |
| | comp=Z,20nm,0.5s | | | | | | | |
| **GUN** | **Gumba** | **41.25** | **300** | *e*P | | **P** | **01 32 56.3** | **-1.0** |
| **PKI** | **Pulchoki** | **41.57** | **299** | *e*P | | **P** | **01 32 58.2** | **-1.6** |
| | comp=Z,12nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **41.85** | **178** | P | | **P** | **01 33 03.1** | **+1.5** |
| **KOLN** | **Koldanda** | **43.17** | **299** | *e*P | | **P** | **01 33 11.5** | **-1.2** |
| | comp=Z,18nm,0.7s | | | | | | | |
| **DANN** | **Dangsing** | **43.17** | **300** | *e*P | | **P** | **01 33 11.5** | **-1.4** |
| | comp=Z,24nm,0.5s | | | | | | | |
| **PYUN** | **Piuthan** | **43.77** | **299** | *e*P | | **P** | **01 33 15.9** | **-1.7** |
| | comp=Z,18nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **44.83** | **168** | P | | **P** | **01 33 25.9** | **+0.4** |
| **STKA** | **Stephens Creek** | **45.35** | **162** | P | | **P** | **01 33 29.2** | **-0.5** |
| | comp=Z,3.5nm,0.7s,baz=329,slow=10,SNR=7.7 | | | | | | | |
| STKA | | | | pP | | **pP** | **01 33 40.4** | **-0.3** |
| | comp=Z,4.1nm,0.5s,baz=331,slow=8.7,SNR=6.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **45.35** | **162** | P | | **P** | **01 33 29.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **48.73** | **25** | P | | **P** | **01 33 57.1** | **+1.2** |
| **MK31** | **Makanchi Array** | **51.22** | **322** | P | | **P** | **01 34 15.6** | **+0.6** |
| MK31 | | | | IAmb | | IAmb | 01 34 16.4 | |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.22** | **322** | P | | **P** | **01 34 15.4** | **+0.4** |
| | comp=Z,5.8nm,0.6s,baz=118,slow=8.4,SNR=87 | | | | | | | |
| MKAR | | | | pP | | **pP** | **01 34 26.5** | **+0.1** |
| | comp=Z,4.8nm,0.7s,baz=126,slow=8.2,SNR=9.6 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **01 35 30.0** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=112,slow=5.0,SNR=1.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.22** | **322** | P | | **P** | **01 34 15.7** | **+0.7** |
| **MAKZ** | **Makanchi** | **51.42** | **322** | P | | **P** | **01 34 16.9** | **+0.5** |
| MAKZ | | | | IAmb | | IAmb | 01 34 17.4 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **TOO** | **Toolangi** | **51.83** | **161** | P | | **P** | **01 34 19.7** | **+0.2** |
| TOO | | | | IAmb | | IAmb | 01 34 28.5 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **KSH** | **Kashi** | **52.55** | **311** | P | | **P** | **01 34 28.0** | **+2.9** |
| **NIL** | **Nilore** | **53.16** | **304** | P | | **P** | **01 34 28.2** | **-1.4** |
| **ZAA0** | **Zalesovo Array** | **53.74** | **331** | P | | **P** | **01 34 33.1** | **-0.3** |
| ZAA0 | | | | IAmb | | IAmb | 01 34 45.7 | |
| | comp=Z,4.6nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.74** | **331** | P | | **P** | **01 34 33.4** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=123,slow=5.5,SNR=7.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.74** | **331** | P | | **P** | **01 34 32.4** | **-1.0** |
| **KURK** | **Kurchatov** | **55.24** | **325** | P | | **P** | **01 34 44.2** | **-0.1** |
| **GAR** | **Garm** | **56.64** | **309** | P | | **P** | **01 34 53.5** | **-1.3** |
| GAR | | | | IAmb | | IAmb | 01 35 05.4 | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| **KBL** | **Kabul** | **56.76** | **304** | P | | **P** | **01 34 54.9** | **-0.9** |
| KBL | | | | IAmb | | IAmb | 01 35 06.1 | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **57.54** | **314** | P | | **P** | **01 34 59.9** | **-1.0** |
| **KIWB** | **Kanaga Island** | **60.83** | **36** | P | | **P** | **01 35 24.2** | **+0.8** |
| **BRVK** | **Borovoye** | **60.91** | **325** | P | | **P** | **01 35 23.9** | **0.0** |
| **HRA** | **Herat** | **62.31** | **303** | P | | **P** | **01 35 32.3** | **-1.7** |
| **NRIK** | **Noril'sk** | **63.04** | **346** | P | | **P** | **01 35 38.2** | **+0.2** |
| | comp=Z,1.9nm,0.7s,baz=76,slow=4.8,SNR=3.8 | | | | | | | |
| **ABKAR** | **Akbulak array** | **66.11** | **319** | P | | **P** | **01 35 57.5** | **-0.8** |
| **RPZ** | **Rata Peaks** | **68.23** | **147** | P | | **P** | **01 36 12.2** | **+0.4** |
| **TUWZ** | **Tuamarina** | **68.38** | **143** | P | | **P** | **01 36 11.9** | **-0.9** |
| **ARU** | **Arti** | **68.38** | **326** | P | | **P** | **01 36 12.3** | **-0.4** |
| ARU | | | | IAmb | | IAmb | 01 36 23.6 | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **CMWZ** | **Cape Campbell** | **68.74** | **143** | P | | **P** | **01 36 14.7** | **-0.3** |
| **KTH** | **Kantishna Hill** | **76.79** | **27** | P | | **P** | **01 37 04.9** | **+2.3** |
| **ILAR** | **Eielson Array** | **78.55** | **26** | P | | **P** | **01 37 13.1** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=235,slow=3.2,SNR=2.0 | | | | | | | |
| ILAR | | | | pP | | **PcP** | **01 37 23.1** | **+1.9** |
| | comp=Z,0.5nm,0.8s,baz=241,slow=5.1,SNR=2.0 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **79.36** | **23** | P | | **P** | **01 37 18.6** | **+2.0** |
| **ARCES** | **ARCESS Array B** | **83.25** | **340** | P | | **P** | **01 37 37.1** | **-0.1** |
| | comp=Z,4.4nm,0.8s,baz=28,slow=5.5,SNR=9.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.00** | **332** | P | | **P** | **01 37 46.2** | **-0.1** |
| | comp=Z,6.3nm,1.0s,baz=78,slow=4.4,SNR=9.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **85.78** | **321** | P | | **P** | **01 37 48.7** | **-1.6** |
| | comp=Z,0.3nm,0.4s,baz=60,slow=4.9,SNR=5.4 | | | | | | | |
| **PLCA** | **Paso Flores** | **147.13** | **156** | PKPbc | | **PKPbc** | **01 44 53.6** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=349,slow=3.3,SNR=5.3 | | | | | | | |

*MOS* ***21*** *01:25:59.5±0.9, 4˚.74N×32˚.61W, h10km, mb5.2/84, MS4.8/6, Error ellipse: s-maj=7.8km s-min=4.4km az=49.9*

*BGR* ***21*** *01:25:60.0±0.0, 4˚.33N×32˚.00W, h10km, mb5.1, Ms4.9*

*IDC* ***21*** *01:25:59.1±0.4, 4˚.77N×32˚.67W, h0km, mb4.6/30, mb1 4.7/31, mb1mx4.7/41, mbtmp4.6/31, ML4.1/1, MS4.9/70, Ms1 4.9/70, ms1mx4.8/75, Error ellipse: s-maj=13.7km s-min=9.9km az=154.0*

*BJI* ***21*** *01:26:00.8±0.0, 4˚.76N×32˚.76W, h14km, mB5.4/1, Ms5.4/11, MS7 5.1/11*

*NEIC* ***21*** *01:26:02.3±1.2, 4˚.70N±0˚.07×32˚.63W±0˚.06, h10km±1km, mb5.2/537, Ms_20 5.1/191, Mwc5.5(GCMT), Error ellipse: s-maj=16.0km s-min=2.7km az=317.0*

*GCMT* ***21*** *01:26:04.3±0.1, 4˚.79N±0˚.01×32˚.56W, h12km, MW5.5/158, Moment Tensor Solution. s116,c195; s158,c321; Duration: 1§3 Moment tensor: Scale 10¹⁷Nm; Mrr-2.06±.02; Mθθ0.20±.02; Mϕϕ 1.86±.02; Mrθ0.06±.06; Mθϕ0.04±.02; Mϕr0.07±.05; Best double couple: M₀1.96200×10¹⁷ NP1:ϕ₁360.00000°, δ44.00000°, λ-92.00000°. NP2:ϕ₂183.00000°, δ46.00000°, λ-88.00000°. Principal axes: T 1.8620, Plg1.0000°; Azm271.0000°; N 0.2040, Plg1.0000°, Azm1.0000°; P -2.0630, Plg88.0000°, Azm144.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***21*** *01:26:04, 4˚.74N×32˚.58W, h12km, Moment Tensor Solution. Duration: 2§6 Moment tensor: Scale 10¹⁷Nm; Mrr-2.19; Mθθ0.23; Mϕϕ 1.97; Mrθ-0.23; Mθϕ-0.02; Mϕr0.18; Fault plane solution: M₀2.11000×10¹⁷ NP1:ϕ₁5.00000°, δ43.00000°, λ-82.00000°. NP2:ϕ₂174.00000°, δ48.00000°, λ-97.00000°. Principal axes: T 1.9767, Plg3.0000°, Azm269.0000°; N 0.2446, Plg5.0000°, Azm179.0000°; P -2.2213, Plg84.0000°, Azm24.0000°;*

**ISC 21 01:26:01.1**±0.2,**4.70N**±0˚.05×**32˚.66W**±0˚.05,**h11**km,**n1054, σ1§09**/831,**mb5.2**/363,**MS5.1**/163,**61C-24D,Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **10.94** | **197** | P | | **Pn** | **01 28 36.7** | **-1.1** |
| **RCBR** | **Riachuelo** | **10.94** | **197** | Pn | | **Pn** | **01 28 36.7** | **-1.1** |
| **NBPB** | **Pedra_Branca-C** | **12.30** | **214** | *e*P | | **Pn** | **01 28 56.3** | **-0.1** |
| **NBPS** | **Pedro II - PI** | **12.59** | **224** | *e*P | | **Pn** | **01 29 00.8** | **+0.4** |
| **NBLV** | **Livramento - P** | **12.71** | **200** | *e*P | | **Pn** | **01 29 01.3** | **-0.7** |
| **NBMA** | **Muriti-CE** | **13.44** | **207** | *e*P | | **Pn** | **01 29 11.2** | **-0.8** |
| **SACV** | **Santiago Islan** | **13.55** | **40** | | | **Pn** | **01 29 12.1** | **-1.4** |
| **ROSB** | **Rosrio** | **13.72** | **237** | *e*P | | **Pn** | **01 29 15.1** | **-0.7** |
| **NBAN** | **Anadia - AL** | **14.72** | **194** | *e*P | | **Pn** | **01 29 31.1** | **+1.6** |
| **NBLA** | **Lagarto - SE** | **16.40** | **198** | *e*P | | **P** | **01 29 54.2** | **-0.1** |
| **TMAB** | **Tom-Au,PA,Br** | **16.95** | **246** | *e*P | | **Pn** | **01 29 57.9** | **-0.5** |
| **NBPN** | **Ponto Novo - B** | **17.17** | **206** | *e*P | | **P** | **01 30 02.3** | **-0.6** |
| **MBO** | **M'Bour** | **18.22** | **57** | P | | **P** | **01 30 14.7** | **+0.2** |
| **GDU01** | **Guandu, BA** | **19.54** | **200** | *e*P | | **Pn** | **01 30 31.2** | **+0.9** |
| **MDP** | **Montagnes des** | **19.92** | **272** | Pn | | **P** | **01 30 32.4** | **-0.7** |
| | 0.6nm,0.3s,baz=100,slow=9.6,SNR=5.5 | | | | | | | |
| MDP | | | | LR | | LR | 01 36 37.5 | |
| | comp=Z,3μm,21.0s,baz=102,slow=32 | | | | | | | |
| **MCPB** | **Macapa, AP** | **20.02** | **256** | *e*P | | **P** | **01 30 34.5** | **+0.3** |
| **SMTB** | **Santa Maria do** | **20.08** | **228** | *e*P | | **P** | **01 30 33.8** | **-1.0** |
| **PRPB** | **Parauapebas** | **20.25** | **238** | *e*P | | **P** | **01 30 36.0** | **-0.7** |
| **NBIT** | **Itapeh - BA** | **20.62** | **199** | *e*P | | Pn | 01 30 43.2 | +0.2 |
| **SDBA** | **SAO DESIDERIO** | **20.90** | **216** | *e*P | | **P** | **01 30 42.7** | **-1.1** |
| **CMC01** | **Camacan, BA** | **21.05** | **199** | *e*P | | **P** | **01 30 47.1** | **+1.7** |
| **H10N3** | **ASCENSION HYDR** | **21.98** | **124** | T | | T | 01 53 35.8 | |
| | baz=304,slow=75,SNR=1006 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.98** | **124** | T | | T | 01 53 36.1 | |
| | baz=304,slow=75,SNR=1138 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.00** | **124** | T | | T | 01 53 37.3 | |
| | baz=304,slow=75,SNR=738 | | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.29** | **198** | *e*P | | **P** | **01 31 00.3** | **+1.6** |
| **H10S3** | **ASCENSION HYDR** | **22.49** | **127** | T | | T | 01 54 15.7 | |
| | baz=304,slow=74,SNR=1040 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.50** | **127** | T | | T | 01 54 17.4 | |
| | baz=276,slow=74,SNR=176 | | | | | | | |
| **MALB** | **Monte Alegre** | **22.55** | **254** | *e*P | | **P** | **01 31 01.5** | **0.0** |
| **JANB** | **Januaria** | **22.77** | **210** | *e*P | | **P** | **01 31 03.0** | **-0.9** |
| **PEXB** | **Peixe** | **22.82** | **223** | *e*P | | **P** | **01 31 04.2** | **-0.2** |
| **NAN01** | **Guarapari, ES** | **23.58** | **198** | *e*P | | **P** | **01 31 14.0** | **+2.0** |
| **SJMB** | **Sao Joao De Ma** | **24.72** | **200** | *e*P | | **P** | **01 31 24.6** | **+1.9** |
| **ITTB** | **Itaituba** | **24.75** | **249** | *e*P | | **P** | **01 31 22.9** | **-0.1** |
| **SNDB** | **Serra Nova Dou** | **24.86** | **228** | *e*P | | **P** | **01 31 24.2** | **+0.2** |
| **RIB01** | **Linhares ES** | **25.05** | **197** | *e*P | | **P** | **01 31 27.3** | **+1.7** |
| **BDFB** | **Brasilia** | **25.29** | **217** | P | | **P** | **01 31 28.2** | **+0.3** |
| | 5.1nm,0.8s,baz=32,slow=16,SNR=8.5 | | | | | | | |
| BDFB | | | | LR | | LR | 01 40 18.9 | |
| | comp=Z,4μm,21.3s,baz=29,slow=34 | | | | | | | |
| **BDFB** | **Brasilia** | **25.29** | **217** | P | | **P** | **01 31 28.4** | **+0.4** |
| BDFB | | | | pmax | | pmax | | |
| | comp=Z,31nm,1.4s | | | | | | | |
| **BDFB** | **Brasilia** | **25.29** | **217** | P | | **P** | **01 31 28.4** | **+0.4** |
| **DIAM** | **Diamantina, MG** | **25.30** | **205** | *e*P | | **P** | **01 31 29.2** | **+1.2** |
| **NPGB** | **Novo Progresso** | **25.48** | **243** | *e*P | | **P** | **01 31 28.7** | **-0.9** |
| **ALF01** | **Guarapari-ES** | **26.37** | **197** | *e*P | | **P** | **01 31 39.1** | **+1.5** |
| **IPMB** | **Ipameri, GO** | **27.27** | **214** | *e*P | | **P** | **01 31 46.8** | **+1.0** |
| **LIC** | **Lamto** | **27.54** | **

CPUP Villa Florida 39.02 217 eP P 01 33 28.4 +0.4
PTGC Puerto Gaitan, 39.36 271 eP P 01 33 34.2 +3.1
PBDV Barranco-do-Ve 39.51 32 eP P 01 33 33.5 +1.5
URIC Uribia, Colomb 39.52 283 eP P 01 33 28.5 -3.8
PVAQ Vaqueiros 39.75 32 eP P 01 33 34.9 +1.0
comp=Z,57nm,1.7s
PVAQ Vaqueiros 39.75 32 eLR LR 01 44 23.8
comp=Z,1µm,20.0s
PNCL Nicolau / Gran 39.87 30 eP P 01 33 36.2 +1.3
CPSB Cacapava Do Su 40.17 208 eP P 01 33 37.6 0.0
SDDR Presa de Saban 40.27 294 P P 01 33 40.3 +1.7
SDDR IAmb IAmb 01 34 01.5
comp=Z,52nm,1.2s
SDDR IAMs_20 IAMs_20 01 46 49.9
comp=Z,2µm,22.0s
RUSC La Rusia 40.27 274 eP P 01 33 39.9 +0.8
EVO Evora 40.45 30 eP P 01 33 40.9 +1.1
comp=Z,61nm,1.8s
OCAC Ocana 40.54 277 P P 01 33 42.0 +1.0
OCAC Ocana 40.54 277 eP P 01 33 39.9 -1.1
LL6C La Loma 6 Bece 40.58 279 eP P 01 33 43.7 +2.5
PMTG Montargil 40.76 30 eP P 01 33 43.4 +1.1
comp=Z,44nm,1.8s
LPAZ La Paz 40.81 239 P P 01 33 44.3 +0.6
comp=Z,2.7nm,0.7s,baz=69,slow=7.0,SNR=8.3
LPAZ LR LR 01 49 55.6
comp=Z,2µm,18.7s,baz=56,slow=35
LPAZ La Paz 40.81 239 P P 01 33 44.2 +0.5
LPAZ La Paz 40.81 239 eP P 01 33 47.6 +3.8
LPAZ La Paz 40.81 239 eP P 01 33 44.1 +0.3
GRTK Grand Turk 40.87 298 P P 01 33 44.1 +0.6
PESTR Estremoz 40.92 30 eP P 01 33 44.6 +0.9
comp=Z,37nm,1.8s
PESTR Estremoz 40.92 30 P P 01 33 44.2 +0.6
ITQB Itaqui 41.19 212 P P 01 33 46.1 +0.2
ITQB IAmb IAmb 01 33 50.4
comp=Z,70nm,1.4s
ITQB Itaqui 41.19 212 eP P 01 33 47.2 +1.3
MACC Macarena, Meta 41.19 268 eP P 01 33 49.5 +3.2
SPBC San Pablo de B 41.25 273 eP P 01 33 48.5 +1.6
PLTB Pedras Altas 41.39 207 P P 01 33 48.7 +1.1
PLTB Pedras Altas 41.39 207 eP P 01 33 49.6 +2.1
PMRV Marv??o 41.45 30 eP P 01 33 49.3 +1.3
comp=Z,51nm,1.7s
PMRV Marv??o 41.45 30 eLR LR 01 45 28.7
comp=Z,1µm,22.0s
ROSC El Rosal 41.52 272 P P 01 33 49.8 +0.4
comp=Z,6.3nm,0.5s,baz=100,slow=6.2,SNR=7.6
ROSC LR LR 01 52 03.2
comp=Z,4µm,18.7s,baz=98,slow=38
ROSC El Rosal 41.52 272 P P 01 33 49.8 +0.4
ROSC pmax pmax
comp=Z,21nm,1.0s
ROSC El Rosal 41.52 272 P P 01 33 49.8 +0.4
ROSC El Rosal 41.52 272 eP P 01 33 48.5 -0.9
COI Coimbra 41.56 28 P P 01 33 49.3 +0.4
COI pmax pmax
comp=Z,34nm,1.1s
COI Coimbra 41.56 28 P P 01 33 49.3 +0.4
COI IAmb IAmb 01 34 04.8
comp=Z,34nm,1.1s
COI IAMs_20 IAMs_20 01 46 32.7
comp=Z,2µm,20.0s
CZSB Cruzeiro do Su 41.82 253 eP P 01 33 50.4 -1.0
ZARC Zaragoza, Cauc 42.04 276 P P 01 33 52.7 -0.5
ZARC Zaragoza, Cauc 42.04 276 eP P 01 33 51.4 -1.9
NORC Norcasia 42.05 273 eP P 01 33 43.7 -10
MTE Manteigas 42.12 29 eP P 01 33 54.5 +0.9
comp=Z,51nm,1.5s
MTE Manteigas 42.12 29 eLR LR 01 45 59.9
comp=Z,1µm,22.0s
MTE Manteigas 42.12 29 P P 01 33 53.8 +0.2
ORTC Ortega, Tolima 42.47 271 eP P 01 33 56.1 -0.7
GUY2C Guyana, Caldas 42.55 273 eP P 01 33 60.0 +2.1
HELC Santa Helena 42.70 274 eP P 01 34 00.9 +1.9
UREC San Jos de Ur 42.72 276 eP P 01 33 55.2 -3.6
POLO Lamas de Olo 42.77 28 eP P 01 33 59.6 +0.8
comp=Z,16nm,1.5s
GARC Garzon, Huila 42.83 268 eP P 01 34 03.8 +3.8
MOTC Monteria, Cord 42.88 278 P P 01 33 59.9 -0.2
MVO Moncorvo 42.96 29 eP P 01 34 01.2 +0.8
comp=Z,36nm,1.2s
MVO Moncorvo 42.96 29 eLR LR 01 45 56.2
comp=Z,1µm,22.0s
PGAV Gavieira, Arco 43.02 27 eP P 01 34 01.7 +0.8
comp=Z,45nm,1.5s
PGAV Gavieira, Arco 43.02 27 eLR LR 01 46 07.4
comp=Z,1µm,20.0s
FLOC Florencia 43.04 267 eP P 01 34 01.9 +0.5
PAB San Pablo 43.11 32 P P 01 34 01.9 +0.3
PAB pmax pmax
comp=Z,14nm,1.1s
PAB San Pablo 43.11 32 P P 01 34 01.9 +0.3
CBOC Ciudad Bolivar 43.18 274 eP P 01 34 00.9 -1.8
DBBC Dabeiba 43.38 275 eP P 01 34 01.9 -2.3
ESDC Sonseca Array 43.41 33 P P 01 34 04.0 0.0
comp=Z,6.5nm,0.8s,baz=233,slow=9.8,SNR=22
ESDC LR LR 01 50 31.4
comp=Z,657nm,18.7s,baz=209,slow=34
ESDC Sonseca Array 43.41 33 P P 01 34 04.6 +0.5
PLMC San Jos del P 43.47 272 eP P 01 34 04.7 -0.2
YOTC Yotoco, Valle 43.56 271 eP P 01 33 59.0 -6.7
PCON Cinco Dias 43.72 268 eP P 01 34 08.5 +1.1
SOTA Rioblanco 43.94 268 eP P 01 34 12.3 +3.1
POPC Popayan, Colom 43.98 269 eP P 01 34 08.5 -0.7
GTBY Guantanamo Bay 43.99 294 P P 01 34 06.9 -2.1
GTBY IAmb IAmb 01 34 34.0
comp=Z,65nm,1.1s
PB09 IPOC Station P 44.46 232 IAmb IAmb 01 34 19.4
comp=Z,45nm,1.5s
BBAC Balboa, Cauca 44.59 268 eP P 01 34 14.3 +0.2
LVC Limon Verde 44.63 231 LR LR 01 53 12.5
comp=Z,1µm,20.8s,baz=56,slow=37
LVC Limon Verde 44.63 231 P P 01 34 14.4 -0.1
LVC pmax pmax
comp=Z,25nm,1.5s
LVC Limon Verde 44.63 231 P P 01 34 14.4 -0.1
LVC Limon Verde 44.63 231 eP P 01 34 14.2 -0.2
PB02 IPOC Station P 44.73 233 P P 01 34 16.4 +1.5
PB02 IAmb IAmb 01 34 19.8
comp=Z,31nm,1.4s
PB03 IPOC Station P 44.99 232 P P 01 34 17.4 +0.3
PB03 IAmb IAmb 01 34 32.7
comp=Z,31nm,1.5s
PB06 IPOC Station P 45.20 231 P P 01 34 19.5 +0.8
PB15 IPOC Station P 45.39 231 P P 01 34 20.9 +0.6
PB15 IAmb IAmb 01 34 27.6
comp=Z,54nm,1.4s
PB04 IPOC Station P 45.46 232 P P 01 34 21.6 +0.8
H09N1 TRISTAN DA CUN 45.68 157 T T 02 23 12.2
SNR=28
H09W1 TRISTAN DA CUN 45.70 157 T T 02 23 31.9
SNR=34
OTAV Otavalo 45.95 266 P P 01 34 26.4 +1.2
OTAV pmax pmax
comp=Z,26nm,1.5s
OTAV Otavalo 45.95 266 P P 01 34 26.4 +1.2
OTAV Otavalo 45.95 266 IAMs_20 IAMs_20 01 51 59.0
comp=Z,4µm,22.0s
OTAV Otavalo 45.95 266 eP P 01 34 25.3 +0.1
PB14 IPOC Station P 46.88 230 P P 01 34 31.7 -0.4
PB14 IAmb IAmb 01 34 43.7
comp=Z,31nm,1.1s
NNA Nana 46.96 249 LR LR 01 54 07.3
comp=Z,2µm,19.1s,baz=88,slow=36
NNA Nana 46.96 249 P P 01 34 31.5 -1.1
NNA pmax pmax
comp=Z,40nm,1.4s
NNA MLR MLR
comp=Z,2µm,19.0s
NNA Nana 46.96 249 P P 01 34 31.5 -1.1
NNA IAmb IAmb 01 34 38.1
comp=Z,40nm,1.4s
NNA Nana 46.96 249 IAMs_20 IAMs_20 01 53 55.6
comp=Z,2µm,19.0s
ATAH Atahualpa 47.13 256 P P 01 34 35.0 +0.6
comp=Z,2.8nm,0.6s,baz=77,slow=7.7,SNR=4.8
ATAH LR LR 01 54 58.3
comp=Z,5µm,18.2s,baz=69,slow=37
AC02 Maricunga 47.19 226 P P 01 34 35.3 +0.6
AC02 IAmb IAmb 01 34 42.5
comp=Z,25nm,1.3s
HAL Halifax 48.14 330 P P 01 34 42.5 +1.2
HAL pmax pmax
comp=Z,83nm,1.3s

HAL Halifax 48.14 330 P P 01 34 42.5 +1.2
LCCY Blossom Villag 48.50 292 P P 01 34 44.1 -0.3
DRLN Deer Lake 49.16 339 P P 01 34 50.7 +1.8
AC04 Llanos de Chal 49.38 226 P P 01 34 52.5 +1.4
KEST Kesra 49.47 46 P P 01 34 51.8 +0.1
comp=Z,15nm,1.0s,baz=264,slow=2.6,SNR=10.0
KEST Kesra 49.47 46 P P 01 34 52.2 +0.5
KEST IAmb IAmb 01 34 55.6
comp=Z,22nm,1.0s
BRU2 Volcan 49.83 278 P P 01 34 56.7 +1.8
RIOS Rincon, Osa 50.64 277 P P 01 35 01.9 +1.1
BRYW Bryant College 50.72 323 P P 01 35 01.2 +0.1
BRYW IAmb IAmb 01 35 08.1
comp=Z,40nm,1.3s
RIMA Rio Macho 51.01 279 P P 01 35 04.0 +0.1
RIMA IAmb IAmb 01 35 16.2
comp=Z,48nm,1.4s
S61A Accomac 51.12 316 P P 01 35 06.4 +2.3
BATG Bathurst New B 51.24 331 P P 01 35 05.6 +0.8
BATG IAmb IAmb 01 35 19.8
comp=Z,35nm,1.1s
VSL Villasalto 51.37 42 IAMs_20 IAMs_20 01 55 27.4
comp=Z,2µm,18.0s
WSPT Westport, CT 51.39 321 P P 01 35 07.0 +0.9
WSPT IAmb IAmb 01 35 19.2
comp=Z,28nm,1.0s
QUA2 Belchertown 51.42 323 IAMs_20 IAMs_20 01 53 41.6
comp=Z,1µm,18.0s
CNNC Cliffs of the 51.59 312 P P 01 35 08.5 +0.8
CNNC IAmb IAmb 01 35 15.6
comp=Z,55nm,1.5s
PAL Palisades 51.66 320 P P 01 35 08.7 +0.6
PAL pmax pmax
comp=Z,26nm,1.0s
PAL Palisades 51.66 320 P P 01 35 08.7 +0.6
PAL IAmb IAmb 01 35 11.4
comp=Z,26nm,1.0s
PAL Palisades 51.66 320 P P 01 35 08.3 +0.2
baz=123
PQI Presque Isle 51.78 330 P P 01 35 09.4 +0.5
PQI IAmb IAmb 01 35 26.6
comp=Z,34nm,1.3s
PQI IAMs_20 IAMs_20 01 51 43.9
comp=Z,2µm,21.0s
BRNJ Basking Ridge 51.91 320 P P 01 35 11.0 +1.0
BRNJ IAmb IAmb 01 35 13.6
comp=Z,46nm,1.4s
U59A Littleton 52.01 313 P P 01 35 11.4 +0.6
JTS Las Juntas de 52.10 279 LR LR 01 59 09.2
comp=Z,437nm,19.9s,baz=184,slow=38
JTS Las Juntas de 52.10 279 i P P 01 35 12.3 +0.5
JTS pmax pmax
comp=Z,9.0nm,1.1s
T59A Double "B" Far 52.11 314 P P 01 35 11.8 +0.3
ODNJ Oqdensburg 52.15 320 P P 01 35 12.2 +0.5
WUPA West Chester U 52.20 318 P P 01 35 12.9 +0.7
HNH Hanover 52.22 324 P P 01 35 13.7 +1.5
NHSC New Hope 52.47 309 P P 01 35 14.8 +0.5
NHSC IAmb IAmb 01 35 28.7
comp=Z,54nm,1.2s
NHSC IAMs_20 IAMs_20 01 52 18.9
comp=Z,2µm,20.0s
TRY Troy 52.47 322 P P 01 35 15.0 +0.9
TRY IAmb IAmb 01 35 18.4
comp=Z,36nm,1.3s
TRY IAMs_20 IAMs_20 01 51 15.5
comp=Z,2µm,22.0s
CBN Corbin Frederi 52.55 316 IAMs_20 IAMs_20 01 52 29.8
comp=Z,1µm,19.0s
BO04 La Punta 52.57 220 P P 01 35 15.8 +0.7
BO04 IAmb IAmb 01 35 18.3
comp=Z,52nm,1.4s
D62A Allapoint, All 52.58 329 P P 01 35 14.9 +0.1
MVL Millersville 52.73 318 P P 01 35 16.8 +0.7
R58B Mineral 52.79 315 P P 01 35 17.3 +0.7
N59A State Game Lan 52.81 319 P P 01 35 17.7 +1.0
N59A IAmb IAmb 01 35 21.0
comp=Z,37nm,1.4s
N59A State Game Lan 52.81 319 P P 01 35 18.0 +1.3
baz=121
BNI Bardonecchia 52.86 34 P P 01 35 17.6 +0.5
BNI pmax pmax
comp=Z,23nm,1.1s
BNI Bardonecchia 52.86 34 P P 01 35 17.6 +0.5
BNI IAmb IAmb 01 35 21.3
comp=Z,23nm,1.1s
VT1 Waterbury 52.86 325 IAMs_20 IAMs_20 01 52 54.4
comp=Z,1µm,20.0s
BOAB BOACO BROADBAND 52.90 282 IAMs_20 IAMs_20 01 59 08.0
comp=Z,2µm,20.0s
Y57A Sumter 52.98 310 P P 01 35 17.9 -0.2
Y57A IAmb IAmb 01 35 26.8
comp=Z,18nm,0.5s
W57A Gilead 53.12 311 P P 01 35 19.9 +0.8
BO01 Tunca 53.13 220 P P 01 35 19.3 +0.1
BO01 IAmb IAmb 01 35 22.2
comp=Z,37nm,1.4s
MATN Matagalpa 53.19 283 P P 01 35 20.0 +0.1
BIRD Birdtown, Kers 53.28 310 P P 01 35 20.9 +0.7
BIRD IAmb IAmb 01 35 31.6
comp=Z,36nm,1.4s
J59A Piesco 53.39 323 P P 01 35 20.6 -0.4
S57A Dark Hollow, R 53.46 315 P P 01 35 22.6 +1.1
JSC Jenkinsville 53.75 310 P P 01 35 24.9 +1.2
JSC pmax pmax
comp=Z,14nm,1.1s
JSC Jenkinsville 53.75 310 P P 01 35 24.9 +1.2
J58A Remsen 53.81 322 P P 01 35 25.1 +1.1
J58A IAmb IAmb 01 35 36.7
comp=Z,28nm,1.2s
255A Hazlehurst 53.87 306 P P 01 35 25.5 +0.9
255A IAmb IAmb 01 35 40.2
comp=Z,20nm,1.0s
VAE Valguarnera 53.89 46 LR LR 01 57 57.0
comp=Z,2µm,20.9s,baz=220,slow=36
SENIN Lac Senin/Sane 54.00 33 P P 01 35 25.2 -0.5
CASP Castiglione de 54.05 39 P P 01 35 27.1 +1.3
CASP IAmb IAmb 01 35 52.3
comp=Z,18nm,1.1s
SSPA Standing Stone 54.06 318 IAMs_20 IAMs_20 01 52 24.7
comp=Z,2µm,22.0s
GO05 Huala 54.06 220 P P 01 35 26.6 +0.6
MSSA Maissana 54.07 37 P P 01 35 25.8 -0.1
Q56A Snyder Ridge, 54.20 316 P P 01 35 28.6 +1.7
ML02 Panimavida 54.21 219 P P 01 35 27.7 +0.7
K57A Scipio Center 54.23 321 P P 01 35 28.5 +1.4
K57A IAmb IAmb 01 35 30.6
comp=Z,45nm,1.4s
BLA Blacksburg 54.28 313 P P 01 35 28.5 +0.9
BLA pmax pmax
comp=Z,44nm,1.4s
BLA Blacksburg 54.28 313 P P 01 35 28.5 +0.9
BLA IAmb IAmb 01 35 36.6
comp=Z,44nm,1.4s
BLA IAMs_20 IAMs_20 01 53 41.6
comp=Z,2µm,21.0s
V55A Taylorsville 54.31 311 P P 01 35 28.7 +0.9
V55A IAmb IAmb 01 35 39.3
comp=Z,38nm,1.4s
O56A Blue Knob Stat 54.34 317 P P 01 35 28.9 +0.9
O56A IAmb IAmb 01 35 30.0
comp=Z,22nm,1.2s
O56A IAMs_20 IAMs_20 01 52 56.1
comp=Z,1µm,22.0s
O56A Blue Knob Stat 54.34 317 P P 01 35 28.8 +0.8
baz=118
PAULI Pauline 54.37 310 P P 01 35 29.0 +0.8
VLC Villacollemand 54.50 37 P P 01 35 29.9 +0.9
R55A Marlinton 54.52 315 P P 01 35 29.9 +0.6
R55A IAmb IAmb 01 35 52.7
comp=Z,24nm,1.4s
TGUH Tegucigalpa,Un 54.57 284 P P 01 35 31.3 +1.1
L56A Greenwood 54.59 320 P P 01 35 31.0 +1.2
L56A IAmb IAmb 01 35 31.3
comp=Z,32nm,1.2s
TIGA Tifton 54.61 306 P P 01 35 30.6 +0.6
TIGA IAmb IAmb 01 35 38.3
comp=Z,34nm,1.4s
TIGA Tifton 54.61 306 P P 01 35 30.4 +0.4
baz=108
LATQ La Tuque 54.72 328 P P 01 35 31.2 +0.7
LATQ IAmb IAmb 01 35 34.4
comp=Z,18nm,1.0s
TSUM Tsumeb 54.84 117 P P 01 35 33.8 +1.8
comp=Z,8.6nm,1.0s,baz=306,slow=5.8,SNR=5.4

TSUM LR LR 01 53 32.9
comp=Z,3µm,21.1s,baz=293,slow=30
TSUM Tsumeb 54.84 117 P P 01 35 32.6 +0.6
TSUM IAmb IAmb 01 35 35.6
comp=Z,24nm,1.2s
TSUM Tsumeb 54.84 117 IAMs_20 IAMs_20 01 53 11.0
comp=Z,3µm,21.0s
553A Crawfordville 54.92 304 P P 01 35 32.9 +0.6
MCWV Mont Chateau 54.93 316 IAMs_20 IAMs_20 01 53 12.8
comp=Z,2µm,22.0s
ZCCA Zocca 54.96 37 P P 01 35 33.3 +0.9
TRQ Mont Tremblant 55.00 326 P P 01 35 33.9 +1.3
TRQ IAmb IAmb 01 35 47.2
comp=Z,38nm,1.2s
U54A Nelsons Funny 55.03 312 P P 01 35 33.9 +0.8
U54A IAmb IAmb 01 35 38.4
comp=Z,25nm,1.2s
DOU Dourbes 55.03 28 dP P 01 35 32.2 -0.5
comp=Z,26nm,1.0s
M55A Ridgway 55.04 319 IAmb IAmb 01 35 37.1
comp=Z,26nm,1.2s
ECH Echery 55.08 31 P P 01 35 32.6 -0.5
ECH pmax pmax
comp=Z,30nm,1.3s
ECH Echery 55.08 31 P P 01 35 32.6 -0.5
ECH IAmb IAmb 01 35 36.1
comp=Z,30nm,1.3s
GOGA Godfrey 55.16 308 IAMs_20 IAMs_20 01 53 29.0
comp=Z,3µm,22.0s
S54A Dingess, Beckl 55.17 314 P P 01 35 34.6 +0.6
S54A IAmb IAmb 01 35 35.9
comp=Z,31nm,1.4s
BMRD Maredsous 55.25 28 dP P 01 35 34.6 +0.3
BG3 Lake Jocassee 55.29 310 P P 01 35 36.1 +1.2
BG3 IAmb IAmb 01 36 04.9
comp=Z,34nm,1.3s
Q54A Coxs Mills 55.32 315 P P 01 35 35.8 +0.7
Q54A IAmb IAmb 01 35 48.9
comp=Z,40nm,1.3s
MURB Monte Urbino 55.34 39 P P 01 35 35.1 0.0
MURB IAmb IAmb 01 35 55.6
comp=Z,22nm,1.1s
RCHB Rochefort 55.37 29 dP P 01 35 34.5 -0.6
comp=Z,7.8nm,1.2s
SALO Salr 55.39 36 IAmb IAmb 01 35 35.8
comp=Z,17nm,1.0s
UCC Uccle 55.40 28 P P 01 35 35.1 -0.2
UCC pmax pmax
comp=Z,14nm,1.2s
UCC Uccle 55.40 28 P P 01 35 35.1 -0.2
UCC Uccle 55.40 28 dP P 01 35 35.5 +0.1
AQU L'Aquila 55.44 40 P P 01 35 36.7 +0.8
AQU pmax pmax
comp=Z,16nm,1.0s
AQU L'Aquila 55.44 40 P P 01 35 36.7 +0.8
V53A Saluda 55.45 311 P P 01 35 36.2 +0.2
BGES Gesves 55.46 28 dP P 01 35 35.6 -0.2
O54A Avella 55.53 317 P P 01 35 37.1 +0.6
BCLA Clavier 55.58 28 dP P 01 35 37.4 +0.6
N54A Moraine State 55.62 318 P P 01 35 37.8 +0.6
N54A Moraine State 55.62 318 P P 01 35 37.4 +0.2
baz=118
M54A Oil Creek Stat 55.66 318 IAmb IAmb 01 35 41.6
comp=Z,46nm,1.4s
M54A Oil Creek Stat 55.66 318 P P 01 35 37.6 +0.1
baz=118
MEDO Medina 55.68 321 P P 01 35 39.3 +1.7
MEDO IAmb IAmb 01 35 46.1
comp=Z,27nm,1.1s
BFO Black Forest 55.76 32 P P 01 35 38.5 +0.4
BFO pmax pmax
comp=Z,38nm,1.5s
BFO Black Forest 55.76 32 P P 01 35 38.5 +0.4
BFO IAmb IAmb 01 35 50.8
comp=Z,38nm,1.5s
BFO Black Forest 55.76 32 eP P 01 35 38.1 0.0
comp=Z,22nm,1.3s,baz=234,slow=7.0
Y52A Lilburn 55.78 308 P P 01 35 40.0 +1.6
EKA Eskdalemuir Ar 55.78 20 LR LR 01 55 04.1
comp=Z,1µm,20.3s,baz=202,slow=31
BHOU Houvegnez 55.88 29 dP P 01 35 40.0 +1.1
TEOL Teolo 55.92 36 IAmb IAmb 01 35 41.3
comp=Z,41nm,1.2s
P53A Whipple 55.93 315 IAmb IAmb 01 35 41.2
comp=Z,19nm,1.1s
DAVA Damuels 55.98 34 eP P 01 35 39.4 -0.4
comp=Z,14nm,0.9s
MEM Membach 56.05 29 dP P 01 35 40.3 +0.3
comp=Z,21nm,1.0s
BTNL Ternell 56.09 29 dP P 01 35 40.9 +0.6
comp=Z,17nm,1.1s
N53A Lisbon 56.12 317 IAmb IAmb 01 35 57.0
comp=Z,50nm,1.5s
O53A New Philadelph 56.13 316 IAmb IAmb 01 35 43.2
comp=Z,31nm,1.2s
O53A IAMs_20 IAMs_20 01 54 43.6
comp=Z,1µm,20.0s
O53A New Philadelph 56.13 316 P P 01 35 41.4 +0.5
baz=116
ERPA Erie 56.16 319 P P 01 35 41.5 +0.4
ERPA IAmb IAmb 01 35 57.9
comp=Z,42nm,1.3s
ERPA IAMs_20 IAMs_20 01 53 52.1
comp=Z,1µm,22.0s
TKL Tuckaleechee C 56.17 310 LR LR 01 54 35.0
comp=Z,1µm,21.6s,baz=115,slow=31
TKL Tuckaleechee C 56.17 310 P P 01 35 41.7 +0.5
TKL pmax pmax
comp=Z,26nm,1.5s
TKL Tuckaleechee C 56.17 310 P P 01 35 41.7 +0.5
TKL IAmb IAmb 01 36 10.4
comp=Z,26nm,1.4s
CTI Castel Tesino 56.28 36 IAmb IAmb 01 35 46.2
comp=Z,24nm,0.8s
FETA Feichten 56.30 34 eP P 01 35 41.7 -0.4
comp=Z,11nm,0.9s,SNR=6.5
M53A WI Miller and 56.30 318 P P 01 35 41.8 -0.3
baz=117
TZTN Tazewell 56.32 311 P P 01 35 42.7 +0.3
Q52A Bidwell 56.33 314 IAmb IAmb 01 35 57.7
comp=Z,21nm,1.0s
Z51A Franklin 56.48 307 P P 01 35 44.9 +1.4
O52A Adamsville 56.51 316 IAmb IAmb 01 35 45.4
comp=Z,33nm,1.1s
P52A Corning 56.51 315 IAMs_20 IAMs_20 01 54 53.6
comp=Z,1µm,21.0s
P52A Corning 56.51 315 P P 01 35 43.8 +0.3
baz=115
LC01 Cunco 56.52 216 P P 01 35 43.9 +0.3
LC01 IAmb IAmb 01 35 46.2
comp=Z,25nm,1.4s
RETA Reutte 56.58 34 eP P 01 35 43.7 -0.3
comp=Z,14nm,1.3s
X51A Calhoun 56.63 309 P P 01 35 45.0 +0.5
CPCT Cooper Cave 56.67 310 IAmb IAmb 01 35 48.7
comp=Z,25nm,1.4s
MOTA Moosalm 56.69 34 eP P 01 35 43.9 -1.0
comp=Z,9.3nm,1.0s
SADO Sadowa 56.91 322 LR LR 01 56 13.8
comp=Z,730nm,19.7s,baz=164,slow=32
SADO Sadowa 56.91 322 P P 01 35 47.7 +1.4
SADO IAmb IAmb 01 36 12.1
comp=Z,26nm,1.4s
WTTA Wattenberg 56.95 35 eP P 01 35 46.1 -0.6
comp=Z,9.7nm,0.9s
250A Grady 56.95 305 P P 01 35 46.9 0.0
WATA Walderalm 56.95 34 eP P 01 35 46.0 -0.8
comp=Z,9.8nm,1.0s
PLCA Paso Flores 56.99 214 P P 01 35 48.5 +1.5
comp=Z,8.1nm,1.2s,baz=87,slow=3.3,SNR=4.8
PLCA LR LR 02 00 00.7
comp=Z,2µm,21.1s,baz=50,slow=36
PLCA Paso Flores 56.99 214 P P 01 35 47.4 +0.4
PLCA IAmb IAmb 01 35 50.1
comp=Z,31nm,1.5s
PLCA Paso Flores 56.99 214 eP P 01 35 48.4 +1.4
STAL STALIGIAL 57.02 36 IAmb IAmb 01 35 49.8
comp=Z,27nm,1.1s
SCHQ Schefferville 57.09 337 P P 01 35 47.3 -0.1
comp=Z,13nm,0.6s,baz=148,slow=5.9,SNR=29
SCHQ LR LR 01 58 02.6
comp=Z,636nm,18.6s,baz=105,slow=34
SCHQ Schefferville 57.09 337 IAmb IAmb 01 35 48.6
comp=Z,17nm,0.8s
P51A Williamsport 57.10 315 P P 01 35 48.1 +0.4
P51A IAmb IAmb 01 35 49.4

comp=Z,43nm,1.4s
**Q51A Peebles 57.12 314 P P 01 35 48.2 +0.2**
Q51A IAmb IAmb 01 35 52.8
comp=Z,22nm,1.1s
**ABTA Abfaltersbach 57.16 35** *eP* **P 01 35 47.9 -0.3**
comp=Z,18nm,1.0s,SNR=6.7
**W50A Signal Mountai 57.19 309** P P **01 35 49.7 +1.1**
**FPAL Fort Paine 57.21 308** IAmb IAmb 01 35 60.0
comp=Z,25nm,1.3s
**N51A Ashland 57.22 317** P P **01 35 48.2 -0.4**
N51A IAmb IAmb 01 35 50.1
comp=Z,35nm,1.2s
**PETF Flores 57.30 287** P P **01 35 49.7 +0.2**
PETF IAmb IAmb 01 35 59.5
comp=Z,37nm,1.3s
**ACSO Alum Creek Sta 57.35 316** IAmb IAmb 01 35 51.2
comp=Z,20nm,1.1s
ACSO IAMs_20 IAMs_20 01 55 20.9
comp=Z,2µm,21.0s
**TRI Trieste 57.35 37** P P **01 35 49.1 -0.3**
TRI pmax pmax
comp=Z,27nm,1.0s
**TRI Trieste 57.35 37** P P **01 35 49.1 -0.3**
TRI IAmb IAmb 01 35 52.5
comp=Z,27nm,1.0s
**BRAL Brewton 57.37 304** P P **01 35 51.5 +1.7**
**SKDS Skadanscina 57.42 37** *eP* P **01 35 49.7 -0.2**
**T50A Nancy 57.46 311** P P **01 35 51.9 +1.5**
**R50A Paris 57.55 313** IAmb IAmb 01 35 59.9
comp=Z,21nm,1.1s
**IVI Ivigtut 57.58 351** P P **01 35 51.6 +0.9**
**KASTN Kahler Asten 57.59 29** *eP* P **01 35 50.8 -0.3**
comp=Z,19nm,1.1s,baz=234,slow=7.0
**CADS Cadrg 57.60 37** *eP* P **01 35 50.8 -0.4**
**Y49A Blount Mountai 57.62 307** IAmb IAmb 01 36 02.7
comp=Z,26nm,1.4s
**SWET Sewanee 57.68 309** IAmb IAmb 01 36 03.1
comp=Z,46nm,1.4s
**VLDQ Val d'Or 57.70 326** P P **01 35 53.3 +1.5**
VLDQ IAmb IAmb 01 36 04.9
comp=Z,38nm,1.5s
**MYKA Terra Mystica 57.76 36** *eP* P **01 35 52.5 +0.1**
comp=Z,19nm,1.2s,SNR=6.2
**KBA Koelnbreinsper 57.82 36** *eP* P **01 35 54.0 +1.1**
comp=Z,4.5nm,0.7s
**M50A Fremont 57.88 317** P P **01 35 53.2 0.0**
M50A IAmb IAmb 01 36 01.1
comp=Z,18nm,1.0s
**U49A Red Boiling Sp 57.99 311** IAmb IAmb 01 35 59.2
comp=Z,22nm,1.1s
**GRFO Grafenberg 58.10 32** P P **01 35 55.6 +1.0**
GRFO pmax pmax
comp=Z,33nm,1.0s
**GRFO Grafenberg 58.10 32** P P **01 35 55.6 +1.0**
GRFO IAmb IAmb 01 35 57.6
comp=Z,32nm,1.0s
**GRA1 Grafenberg Arr 58.10 32** P P **01 35 54.9 +0.2**
GRA1 IAmb IAmb 01 35 57.7
comp=Z,32nm,1.0s
**GRF Grafenberg Arr 58.10 32** P P **01 35 54.9 +0.2**
GRF pmax pmax
comp=Z,33nm,1.0s
**GRF Grafenberg Arr 58.10 32** *eL* L 01 59 20.6
comp=Z,1µm,18.8s
**R49A Shelbyville 58.17 313** IAmb IAmb 01 35 57.0
comp=Z,30nm,1.3s
**K50A Casco 58.19 318** P P **01 35 56.7 +1.3**
K50A IAmb IAmb 01 36 03.7
comp=Z,35nm,1.1s
**OBKA Obir 58.23 37** *eP* P **01 35 56.5 +0.8**
comp=Z,16nm,0.8s
**CLTN Cedars of Leba 58.27 310** P P **01 35 56.8 +0.7**
CLTN IAmb IAmb 01 36 17.6
comp=Z,30nm,1.4s
**O49A Covington 58.28 315** IAmb IAmb 01 35 57.2
comp=Z,17nm,1.1s
**P49A Miami Univ. Ec 58.30 314** IAmb IAmb 01 36 04.6
comp=Z,49nm,1.5s
P49A IAMs_20 IAMs_20 01 56 20.0
comp=Z,1µm,20.0s
**P49A Miami Univ. Ec 58.30 314** P P **01 35 56.7 +0.5**
baz=113
**X48A Hartselle 58.31 308** P P **01 35 57.6 +1.2**
**N49A Columbus Grove 58.47 316** P P **01 35 57.8 +0.4**
**V48A Smith Brothers 58.53 309** P P **01 35 58.2 +0.3**
V48A IAmb IAmb 01 36 02.4
comp=Z,14nm,1.0s
**SOKA Soboth 58.60 37** *eP* P **01 35 58.3 0.0**
comp=Z,15nm,0.9s,SNR=15
**ROTZ Rotzenmuhle 58.67 32** *eP* P **01 35 58.2 -0.4**
comp=Z,5.2nm,1.2s,baz=234,slow=7.0
**AAM Ann Arbor 58.68 318** P P **01 35 59.5 +0.7**
AAM pmax pmax
comp=Z,34nm,1.1s
**AAM Ann Arbor 58.68 318** P P **01 35 59.5 +0.7**
AAM IAmb IAmb 01 36 07.4
comp=Z,34nm,1.1s
AAM IAMs_20 IAMs_20 01 55 30.9
comp=Z,1µm,21.0s
**WET Wettzell 58.68 33** *eP* P **01 35 58.1 -0.6**
comp=Z,28nm,1.5s,baz=234,slow=7.0
**VLO Vlora 58.73 45** P P **01 36 00.6 +1.5**
VLO pmax pmax
comp=Z,145nm,1.3s
**VLO Vlora 58.73 45** P P **01 36 00.6 +1.5**
**Z47A Carrollton 58.76 306** P P **01 35 59.4 -0.1**
Z47A IAmb IAmb 01 36 26.4
comp=Z,40nm,1.3s
**MOA Molln 58.76 35** *eP* P **01 35 58.4 -0.9**
comp=Z,4.2nm,0.6s
**GROS Grobnik 58.78 37** *eP* P **01 35 59.4 -0.1**
**P48A Milroy 58.78 314** IAmb IAmb 01 36 00.5
comp=Z,23nm,1.2s
**MOX Moxa 58.86 31** *eL* L 01 57 27.9
comp=Z,904nm,21.9s
**O48B Farmland 58.89 315** P P **01 36 00.2 -0.1**
baz=113
**WCI Wyandotte Cave 58.97 312** P P **01 36 01.2 +0.3**
WCI pmax pmax
comp=Z,12nm,0.9s
**WCI Wyandotte Cave 58.97 312** P P **01 36 01.1 +0.3**
WCI IAmb IAmb 01 36 10.2
comp=Z,12nm,0.8s
**WCI Wyandotte Cave 58.97 312** IAMs_20 IAMs_20 01 57 56.8
comp=Z,1µm,20.0s
**GEC2 GERESS Array S 58.97 34** IAmb IAmb 01 36 03.4
comp=Z,28nm,1.3s
**GEC2 GERESS Array S 58.97 34** *eP* P **01 36 00.4 -0.5**
comp=Z,27nm,1.3s,baz=234,slow=7.0
**GERES GERESS Array B 58.97 34** P P **01 36 00.1 -0.8**
comp=Z,9.0nm,1.0s,baz=244,slow=5.8,SNR=29
GERES LR LR 02 00 36.9
comp=Z,702nm,18.0s,baz=254,slow=35
**GERES GERESS Array B 58.97 34** *eP* P **01 36 00.7 -0.1**
GERES pmax pmax
comp=Z,9.0nm,1.0s
**RETH Rethem/Aller, 59.02 28** *eP* P **01 36 01.1 +0.3**
comp=Z,26nm,1.3s,baz=234,slow=7.0
**PLN Plauen 59.05 32** *eP* P **01 36 01.3 +0.1**
comp=Z,35nm,1.3s,baz=234,slow=7.0
**L48A N Adams 59.05 317** IAmb IAmb 01 36 02.2
comp=Z,12nm,0.8s
**WERN Wernitzgruen 59.05 32** *eP* P **01 36 00.9 -0.4**
comp=Z,31nm,1.2s,baz=234,slow=7.0
**KHC Kasperske Hory 59.06 34** *i* P P **01 36 01.5 +0.1**
KHC pmax pmax
comp=Z,29nm,1.1s
**KHC Kasperske Hory 59.06 34** *eP* P **01 36 00.5 -0.9**
**KHC Kasperske Hory 59.06 34** IAmb IAmb 01 36 04.1
comp=Z,16nm,1.1s
**NKC Novy Kostel 59.06 32** *eP* P **01 36 01.8 +0.5**
**NKC Novy Kostel 59.06 32** *eP* P **01 36 01.8 +0.5**
**T47A Sharon Grove 59.16 311** IAmb IAmb 01 36 07.0
comp=Z,32nm,1.1s
**TANN Tannenbergstha 59.17 32** *eP* P **01 36 02.0 -0.1**
comp=Z,33nm,1.2s,baz=234,slow=7.0
**ARSA Arzberg 59.18 36** *eP* P **01 36 02.1 -0.1**
comp=Z,4.4nm,0.9s
**NRDL Niedersach Rie 59.22 29** *eP* P **01 36 02.7 +0.5**
comp=Z,28nm,1.2s,baz=234,slow=7.0
**PLAL Pickwick Lake 59.27 308** P P **01 36 03.7 +0.6**
PLAL IAmb IAmb 01 36 13.6
comp=Z,28nm,1.4s
PLAL IAMs_20 IAMs_20 01 55 46.1
comp=Z,2µm,22.0s
**CKRC Cesky Krumlov 59.30 34** *eP* P **01 36 02.4 -0.6**

**146A Union 59.40 305** P P **01 36 04.8 +0.8**
**WVT Waverly 59.43 309** P P **01 36 04.3 +0.2**
WVT pmax pmax
comp=Z,8.0nm,1.0s
**WVT Waverly 59.43 309** P P **01 36 04.3 +0.2**
**WVT Waverly 59.43 309** IAMs_20 IAMs_20 01 56 02.2
comp=Z,1µm,22.0s
**N47A Urbana 59.51 315** IAmb IAmb 01 36 05.6
comp=Z,26nm,1.1s
**FLTG Flechtingen 59.67 30** *eP* P **01 36 05.2 -0.2**
comp=Z,42nm,1.7s,baz=234,slow=7.0
**KBN Korca 59.70 45** P P **01 36 07.3 +1.3**
KBN pmax pmax
comp=Z,39nm,1.3s
**KBN Korca 59.70 45** P P **01 36 07.3 +1.3**
**CONA Conrad Observa 59.72 36** *eP* P **01 36 05.9 -0.1**
comp=Z,8.2nm,1.3s
**USIN University of 59.90 312** P P **01 36 08.0 +0.7**
USIN IAmb IAmb 01 36 12.1
comp=Z,30nm,1.1s
**FBE Freiberg 59.93 32** *eP* P **01 36 07.5 +0.3**
comp=Z,25nm,1.2s,baz=234,slow=7.0
**CLL Collm 59.96 31** P P **01 36 07.5 0.0**
CLL pmax pmax
comp=Z,11nm,1.1s
**CLL Collm 59.96 31** *i* P P **01 36 07.3 -0.2**
comp=Z,22nm,1.6s
CLL *eS* S **01 44 18.0 -1.7**
CLL *e*SSS SSS 01 51 00.0
CLL LmV 02 01 00.0
comp=Z,800nm,18.5s
**CLL Collm 59.96 31** P P **01 36 07.5 0.0**
**SOP Sopron 60.01 36** P P **01 36 08.8 +1.0**
**PRU Pruhonice 60.05 33** *eP* P **01 36 07.1 -1.0**
**PRU Pruhonice 60.05 33** *eP* P **01 36 07.1 -1.0**
**Y45A Yeager Farm, C 60.12 307** IAmb IAmb 01 36 13.5
comp=Z,36nm,1.2s
**FNA Florina 60.17 45** P P **01 36 09.3 +0.1**
FNA pmax pmax
comp=Z,32nm,1.5s
**FNA Florina 60.17 45** P P **01 36 09.3 +0.1**
FNA IAmb IAmb 01 36 10.5
comp=Z,32nm,1.5s
**OXF Oxford 60.19 307** IAmb IAmb 01 36 29.1
comp=Z,21nm,1.0s
**BRG Berggiesshubel 60.21 32** *eP* P **01 36 08.7 -0.5**
BRG Amp 01 36 10.8
comp=Z,31nm,1.5s
**BRG Berggiesshubel 60.21 32** *eP* P **01 36 08.7 -0.5**
BRG pmax pmax
comp=Z,31nm,1.5s
**BRG Berggiesshubel 60.21 32** *eP* P **01 36 09.2 0.0**
comp=Z,31nm,1.5s,baz=234,slow=7.0
**BSEG Bad Segeberg 60.21 28** *eP* P **01 36 08.8 -0.3**
comp=Z,60nm,1.4s,baz=234,slow=7.0
**SFIN Lafayette 60.31 314** P P **01 36 10.6 +0.5**
baz=111
**T45A Paducah 60.33 310** P P **01 36 11.0 +0.7**
**EGYH Egyhazaskeszo 60.34 37** P P **01 36 11.0 +0.8**
**MPLH Magyarpolny 60.34 37** P P **01 36 10.0 -0.2**
**PVCC Panska Ves 60.36 33** *eP* P **01 36 10.5 +0.3**
**PVCC Panska Ves 60.36 33** *eP* P **01 36 10.5 +0.3**
**BORG Borgarnes 60.48 6** LR LR 01 56 52.4
comp=Z,267nm,19.3s,baz=171,slow=31
**344A Westbrook Farm 60.48 304** P P **01 36 12.3 +0.9**
**VBMS Vicksburg 60.49 304** P P **01 36 12.5 +1.0**
**DIVS Divibare 60.52 41** P P **01 36 11.8 +0.2**
**MORH Mrgy, Hungar 60.58 38** P P **01 36 11.8 0.0**
**ZST Bratislava 60.58 36** *eP* P **01 36 12.1 +0.3**
**ZST Bratislava 60.58 36** *eP* P **01 36 12.1 +0.3**
**KRUC Moravsky 60.60 35** *eP* P **01 36 11.6 -0.3**
**LIT Litokhoron 60.72 46** P P **01 36 12.8 -0.2**
LIT pmax pmax
comp=Z,51nm,1.4s
**LIT Litokhoron 60.72 46** P P **01 36 12.8 -0.2**
**MODS Modra-Piesok 60.77 36** *eP* P **01 36 16.2 +3.1**
MODS pmax pmax
comp=Z,69nm,2.0s
**MODS Modra-Piesok 60.77 36** *eP* P **01 36 16.2 +3.1**
**VRAC Vranov 60.84 35** ⇓P P **01 36 13.5 -0.1**
**VRAC Vranov 60.84 35** LR LR 02 00 16.0
comp=Z,466nm,19.9s,baz=243,slow=34
**VRAC Vranov 60.84 35** ⇓P P **01 36 13.5 -0.1**
**VRAC Vranov 60.84 35** *eP* P **01 36 13.3 -0.2**
**CSKK Cskako 60.87 37** P P **01 36 13.7 -0.1**
**ISOG Isortoq, Green 60.90 357** *i* P P 01 36 05.2 -8.4
ISOG IAmb IAmb 01 36 11.2
comp=N,67nm,0.3s
**ANGG Ammassalik, Gr 60.91 358** P P **01 36 14.8 +1.2**
**SMOL Smolenice 60.92 36** *eP* P **01 36 14.2 +0.1**
SMOL pmax pmax
comp=Z,42nm,2.4s
**SMOL Smolenice 60.92 36** *eP* P **01 36 14.2 +0.1**
**S44A Carbondale 61.00 311** P P **01 36 14.7 -0.2**
S44A IAmb IAmb 01 36 18.1
comp=Z,35nm,1.5s
**IDI Anoyia 61.03 52** IAMs_20 IAMs_20 02 04 58.4
comp=Z,2µm,18.0s
**SRO Srobarova 61.11 37** *eP* P **01 36 15.9 +0.5**
SRO pmax pmax
comp=Z,53nm,1.4s
**SRO Srobarova 61.11 37** *eP* P **01 36 15.9 +0.5**
**SRO2 Moca 61.13 37** *eP* P **01 36 15.1 -0.4**
SRO2 pmax pmax
comp=Z,12nm,0.8s
**SRO2 Moca 61.13 37** *eP* P **01 36 15.1 -0.4**
**G45A Suttons Bay 61.14 320** P P **01 36 16.3 +0.6**
G45A IAmb IAmb 01 36 17.2
comp=Z,27nm,0.9s
**CHVC Chvalec 61.19 33** *eP* P **01 36 15.5 -0.5**
**DPC Dobruska-Polom 61.22 33** *eP* P **01 36 16.1 0.0**
**DPC Dobruska-Polom 61.22 33** *eP* P **01 36 16.1 0.0**
**O44A Mansfield 61.22 314** IAmb IAmb 01 36 20.2
comp=Z,25nm,0.9s
**JAVC Velka Javorina 61.23 35** *eP* P **01 36 16.6 +0.3**
**OSTC Ostas 61.26 33** *eP* P **01 36 16.3 -0.1**
**KRLC Kraliky 61.33 34** *eP* P **01 36 16.3 -0.6**
**KRLC Kraliky 61.33 34** *eP* P **01 36 16.3 -0.6**
**M44A Midewin, Midew 61.34 315** P P **01 36 16.8 -0.3**
M44A IAmb IAmb 01 36 17.9
comp=Z,23nm,1.1s
**HBAR Harrisburg 61.46 308** P P **01 36 18.6 +0.6**
**L44A Lake County Fo 61.53 316** P P **01 36 18.8 +0.4**
L44A IAMs_20 IAMs_20 01 57 40.6
comp=Z,2µm,21.0s
**L44A Lake County Fo 61.53 316** P P **01 36 18.5 +0.1**
baz=111
**MORC Moravsky Berou 61.61 34** ⇓P P **01 36 18.7 -0.1**
**MORC Moravsky Berou 61.61 34** ⇓P P **01 36 18.7 -0.1**
**MORC Moravsky Berou 61.61 34** P P **01 36 18.8 0.0**
MORC IAmb IAmb 01 36 19.5
comp=Z,22nm,1.4s
**MORC Moravsky Berou 61.61 34** *eP* P **01 36 18.8 -0.1**
**VYHS Vyhne 61.74 36** *eP* P **01 36 21.7 +2.0**
**VYHS Vyhne 61.74 36** *eP* P **01 36 21.7 +2.0**
**MDVR Moldovita 61.93 41** ⇑P P **01 36 22.1 +1.1**
**AMBH Ambrzfalva 61.94 39** P P **01 36 22.4 +1.4**
**HDIL Hopedale 61.95 314** IAMs_20 IAMs_20 01 58 52.6
comp=Z,2µm,19.0s
**FVM French Village 61.97 311** IAmb IAmb 01 36 24.3
comp=Z,26nm,1.4s
**LCAR Lake Charles 61.99 309** P P **01 36 21.0 -0.5**
LCAR IAmb IAmb 01 36 44.6
comp=Z,16nm,1.4s
**K43A Burlington 62.02 316** P P **01 36 21.4 -0.2**
**CMIG Matias Romero 62.10 287** LR LR 02 05 21.5
comp=Z,485nm,18.7s,baz=98,slow=38
**PSZ Piszkesteto 62.11 37** ⇑P P **01 36 23.1 +0.8**
**PSZ Piszkesteto 62.11 37** ⇑P P **01 36 23.1 +0.8**
**PSZ Piszkesteto 62.11 37** P P **01 36 23.1 +0.8**
**PSZ Piszkesteto 62.11 37** P P **01 36 22.1 -0.2**
**VTS Vitosha 62.13 44** ⇑P P **01 36 23.7 +1.1**
**VTS Vitosha 62.13 44** ⇑P P **01 36 23.7 +1.1**
**VTS Vitosha 62.13 44** P P **01 36 23.6 +1.1**
VTS IAmb IAmb 01 36 24.2
comp=Z,23nm,1.4s
**BZS Buzias 62.20 40** ⇑P P **01 36 23.8 +1.0**
**BZS Buzias 62.20 40** ⇑P P **01 36 23.8 +1.0**
**H43A Windswept, Lux 62.30 318** P P **01 36 24.0 +0.5**
**DY2G Dye2 62.40 354** *i* P P **01 36 23.1 -0.9**
DY2G IAmb IAmb 01 36 25.5
comp=Z,4.8nm,0.7s
**E43A Lone Tree Farm 62.55 321** P P **01 36 26.6 +1.5**
**Z41A Richland Creek 62.61 305** P P **01 36 25.2 -0.5**

**Z41A Richland Creek 62.61 305** P P **01 36 25.7 -0.1**
baz=103
**CCM Cathedral Cave 62.61 311** P P **01 36 25.1 -0.6**
CCM pmax pmax
comp=Z,13nm,0.7s
**CCM Cathedral Cave 62.61 311** P P **01 36 25.1 -0.6**
CCM IAmb IAmb 01 36 33.2
comp=Z,13nm,0.7s
**CCM Cathedral Cave 62.61 311** IAMs_20 IAMs_20 01 58 24.3
comp=Z,1µm,21.0s
**W41B Gary Mavity, V 62.62 307** IAmb IAmb 01 36 35.7
comp=Z,15nm,1.1s
**W41B Gary Mavity, V 62.62 307** P P **01 36 25.1 -0.7**
baz=105
**WHAR Wooly Hollow 62.68 307** P P **01 36 26.4 +0.2**
WHAR IAmb IAmb 01 36 36.0
comp=Z,18nm,1.2s
**L42A Oliver, Polo 62.70 315** P P **01 36 26.8 +0.6**
L42A IAmb IAmb 01 36 34.0
comp=Z,27nm,1.1s
**SUR Sutherland 62.70 130** LR LR 01 57 33.8
comp=Z,1µm,21.3s,baz=300,slow=30
**GZR Gura Zlata 62.86 41** ⇑P P **01 36 28.5 +1.2**
**GZR Gura Zlata 62.86 41** ⇑P P **01 36 28.5 +1.2**
**OJC Ojcow 63.10 35** *eP* P **01 36 29.6 +0.9**
**OJC Ojcow 63.10 35** P P **01 36 29.0 +0.3**
OJC pmax pmax
comp=Z,30nm,1.2s
**OJC Ojcow 63.10 35** P P **01 36 29.0 +0.3**
OJC IAmb IAmb 01 36 30.5
comp=Z,30nm,1.2s
**LTVH Ltavrtes, Hu 63.10 38** P P **01 36 29.9 +1.1**
**DEV Deva 63.13 40** ⇑P P **01 36 29.6 +0.6**
**DEV Deva 63.13 40** ⇑P P **01 36 29.6 +0.6**
**MGMO Mountain Grove 63.15 309** IAmb IAmb 01 36 39.3
comp=Z,25nm,1.1s
**DRGR 63.37 39** ⇑P P **01 36 31.3 +0.6**
**DRGR 63.37 39** ⇑P P **01 36 31.3 +0.6**
**U40A Yellville 63.39 308** IAmb IAmb 01 36 40.4
comp=Z,20nm,1.2s
U40A IAMs_20 IAMs_20 01 59 15.1
comp=Z,2µm,20.0s
**U40A Yellville 63.39 308** P P **01 36 30.2 -0.8**
baz=105
**JFWS Jewell Farm 63.41 316** IAMs_20 IAMs_20 01 59 07.2
comp=Z,1µm,21.0s
**SFJD Kangerlussuaq 63.42 352** LR LR 02 00 15.4
comp=Z,741nm,18.0s,baz=160,slow=32
**LSZ Lusaka 63.43 110** LR LR 01 58 19.2
comp=Z,785nm,21.5s,baz=291,slow=31
**LSZ Lusaka 63.43 110** P P **01 36 31.8 +0.2**
LSZ pmax pmax
comp=Z,17nm,1.4s
**LSZ Lusaka 63.43 110** P P **01 36 31.8 +0.2**
LSZ IAmb IAmb 01 36 47.5
comp=Z,17nm,1.4s
**R40A Maddies Statio 63.45 311** IAmb IAmb 01 36 34.9
comp=Z,21nm,1.1s
**CRVS Cervenica-Dubn 63.48 37** *eP* P **01 36 32.0 +0.7**
CRVS pmax pmax
comp=Z,82nm,1.8s
**CRVS Cervenica-Dubn 63.48 37** *eP* P **01 36 32.0 +0.7**
**LOT Lotru 63.53 41** ⇓P P **01 36 36.2 +4.4**
**MIAR Mount Ida 63.53 306** P P **01 36 32.5 +0.6**
MIAR pmax pmax
comp=Z,14nm,1.2s
**MIAR Mount Ida 63.53 306** P P **01 36 32.5 +0.6**
MIAR IAmb IAmb 01 36 50.6
comp=Z,14nm,1.2s
**MBAR Mbarara 63.55 93** LR LR 02 01 23.6
comp=Z,2µm,19.1s,baz=276,slow=33
**MBAR Mbarara 63.55 93** P P **01 36 33.1 +0.5**
MBAR pmax pmax
comp=Z,10.0nm,1.1s
**MBAR Mbarara 63.55 93** P P **01 36 33.1 +0.5**
**LBTB Lobatse 63.79 121** LR LR 01 59 08.4
comp=Z,2µm,20.3s,baz=286,slow=31
**LBTB Lobatse 63.79 121** P P **01 36 33.4 -0.5**
LBTB pmax pmax
comp=Z,13nm,1.3s
**LBTB Lobatse 63.79 121** P P **01 36 33.4 -0.5**
**TRPA Tarpa 63.80 38** ⇑P P **01 36 33.7 +0.3**
**TRPA Tarpa 63.80 38** P P **01 36 33.6 +0.3**
**L40A Anamosa 63.81 315** IAmb IAmb 01 36 47.7
comp=Z,20nm,1.0s
**NATX Nacogdoches 63.82 303** IAMs_20 IAMs_20 02 00 20.7
comp=Z,2µm,21.0s
**W39A Magazine 63.84 307** IAmb IAmb 01 36 44.3
comp=Z,23nm,1.2s
**W39A Magazine 63.84 307** P P **01 36 33.6 -0.4**
baz=104
**UZH Uzhgorod 63.86 37** ⇑ *i* P P **01 36 33.5 -0.3**
UZH *e* 01 36 39.6
UZH *i* 01 37 15.2
**CBBR Cluj-Babes-Bol 63.89 40** ⇓P P **01 36 34.6 +0.6**
**CJR Cluj-Napoca 63.90 40** ⇓P P **01 36 35.0 +0.8**
**CJR Cluj-Napoca 63.90 40** ⇓P P **01 36 35.0 +0.8**
**I40A Norwalk 63.99 317** IAmb IAmb 01 36 35.5
comp=Z,14nm,1.0s
**HUMR Humele 64.00 42** ⇑P P **01 36 35.7 +0.9**
**COPA Copaceanca 64.02 43** ⇑P P **01 36 36.1 +1.2**
**ARR Arges 64.06 41** ⇑P P **01 36 36.2 +0.9**
**S39A Bolivar 64.10 310** IAmb IAmb 01 36 47.7
comp=Z,23nm,1.4s
**G40A Rib Lake 64.20 319** P P **01 36 36.9 +0.8**
G40A IAmb IAmb 01 36 36.9
comp=Z,20nm,1.3s
**BMR Baia Mare 64.21 39** ⇓P P **01 36 37.4 +1.3**
**BMR Baia Mare 64.21 39** ⇓P P **01 36 37.4 +1.3**
**HHAR Hobbs 64.22 308** P P **01 36 37.4 +1.0**
**VOIR 64.36 41** ⇑P P **01 36 37.8 +0.5**
**VOIR 64.36 41** ⇑P P **01 36 37.8 +0.5**
**FRB Frobisher Bay 64.41 343** LR LR 02 01 31.4
comp=Z,153nm,19.3s,baz=150,slow=33
**ICESG Greenland Ice 64.47 357** *i* P P **01 36 36.6 -1.2**
ICESG IAmb IAmb 01 36 37.9
comp=Z,9.5nm,0.9s
**ARCR ARCALIA 64.52 39** ⇑P P **01 36 38.6 +0.5**
**KWP Kalwaria Pacla 64.53 36** P P **01 36 38.5 +0.3**
KWP pmax pmax
comp=Z,331nm,1.3s
**KWP Kalwaria Pacla 64.53 36** P P **01 36 38.5 +0.3**
**U38A Gravette 64.61 308** P P **01 36 39.2 +0.2**
**BOSA Boshof 64.74 125** P P **01 36 39.7 -0.3**
comp=Z,6.3nm,0.8s,baz=304,slow=8.2,SNR=8.3
BOSA LR LR 01 59 05.2
comp=Z,1µm,21.5s,baz=286,slow=31
**BOSA Boshof 64.74 125** P P **01 36 39.7 -0.3**
BOSA pmax pmax
comp=Z,17nm,1.1s
**BOSA Boshof 64.74 125** IAmb IAmb 01 36 40.5
comp=Z,17nm,1.1s
**P38A Dawn 64.77 312** IAmb IAmb 01 36 47.3
comp=Z,12nm,0.9s
**DOPR Dopca 64.77 41** ⇑P P **01 36 40.6 +0.7**
**NAO01 NORSAR Array S 64.87 22** P P **01 36 39.2 -0.9**
**NBO00 NORSAR Array S 64.95 22** P P **01 36 41.4 +0.7**
**MLR Muntele Rosu 64.97 42** ⇑P P **01 36 42.1 +0.8**
**MLR Muntele Rosu 64.97 42** LR LR 02 03 15.0
comp=Z,2µm,21.3s,baz=259,slow=34
**MLR Muntele Rosu 64.97 42** ⇑P P **01 36 42.1 +0.8**
**MATP Matopo 64.99 115** LR LR 01 59 46.0
comp=Z,724nm,21.1s,baz=292,slow=31
**NB2 NORSAR Subarra 65.12 22** P P **01 36 41.3 -0.5**
comp=Z,49nm,1.2s,baz=230,slow=6.5
**NB2 NORSAR Subarra 65.12 22** P P **01 36 41.3 -0.5**
baz=230,slow=6.5
**NOA NORSAR Array B 65.12 22** P P **01 36 40.4 -1.5**
comp=Z,13nm,1.1s,baz=231,slow=6.4,SNR=14
NOA LR LR 02 03 01.2
comp=Z,688nm,18.7s,baz=225,slow=34
**NOA NORSAR Array B 65.12 22** *eP* P **01 36 41.3 -0.5**
NOA pmax pmax
comp=Z,13nm,1.0s
**NB201 NORSAR Array S 65.16 22** P P **01 36 42.4 +0.3**
**SCIA State Center 65.18 314** IAMs_20 IAMs_20 01 59 54.0
comp=Z,1µm,22.0s
**ISR Istrita 65.24 42** ⇑P P **01 36 43.4 +0.4**
**ISR Istrita 65.24 42** ⇑P P **01 36 43.4 +0.4**
**BUR08 Bucovina Ar. S 65.26 39** IAmb IAmb 01 36 45.3
comp=Z,24nm,1.4s
**BURAR Bucovina Array 65.26 39** ⇑P P **01 36 44.1 +1.0**
**BURAR Bucovina Array 65.26 39** ⇑P P **01 36 44.1 +1.0**
**BURAR Bucovina Array 65.26 39** P P **01 36 43.3 +0.2**
**COVR Voineasa-Covas 65.27 41** ⇑P P **01 36 43.5 +0.4**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NC300 | **NORSAR Array S** | 65.34 | 22 | P | | P | | 01 36 44.0 | +0.8 |
| NC300 | comp=Z,31nm,1.4s | | | IAmb | | IAmb | | 01 36 48.5 | |
| LVV | **L'vov** | 65.39 | 37 | *e*P | | P | | 01 36 43.4 | -0.3 |
| PGOR | **Pogoanele** | 65.47 | 42 | ⇑P | | P | | 01 36 45.1 | +0.8 |
| BISRR | **Bisoca** | 65.50 | 42 | ⇑P | | P | | 01 36 45.1 | +0.5 |
| HFS | **Hagfors** | 65.50 | 23 | LR | | LR | | 02 03 33.8 | |
| | comp=Z,307nm,18.9s,baz=234,slow=34 | | | | | | | | |
| PLOR | **Plostina** | 65.56 | 41 | ⇑P | | P | | 01 36 46.3 | +1.3 |
| PLOR | **Plostina** | 65.56 | 41 | ⇑P | | P | | 01 36 46.3 | +1.3 |
| TUL1 | **Leonard** | 65.60 | 307 | IAmb | | IAmb | | 01 36 55.2 | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| TUL1 | | | | IAMs_20 | | IAMs_20 | | 01 59 52.5 | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| TUL1 | **Leonard** | 65.60 | 307 | P | | P | | 01 36 45.0 | -0.4 |
| | baz=102 | | | | | | | | |
| VRI | **Vrincioaia** | 65.62 | 41 | ⇓P | | P | | 01 36 46.0 | +0.7 |
| VRI | **Vrincioaia** | 65.62 | 41 | ⇓P | | P | | 01 36 46.0 | +0.7 |
| ICOR | **Ion Corvin** | 65.77 | 43 | ⇓P | | P | | 01 36 46.7 | +0.4 |
| TESR | **Tescani** | 65.78 | 41 | ⇑P | | P | | 01 36 45.8 | -0.6 |
| PRAR | **RASCA** | 65.81 | 40 | ⇑P | | P | | 01 36 47.1 | +0.6 |
| SPMN | **Marine on St.** | 65.91 | 318 | IAmb | | IAmb | | 01 36 47.5 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| SPMN | **Marine on St.** | 65.91 | 318 | P | | P | | 01 36 46.6 | -0.6 |
| | baz=109 | | | | | | | | |
| I37A | **Lemond, Waseca** | 65.94 | 316 | IAmb | | IAmb | | 01 36 47.5 | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| HARR | **Harsova** | 66.04 | 43 | ⇑P | | P | | 01 36 48.3 | +0.3 |
| HARR | **Harsova** | 66.04 | 43 | ⇑P | | P | | 01 36 48.3 | +0.3 |
| ISP | **Isparta** | 66.06 | 51 | IAMs_20 | | IAMs_20 | | 02 05 54.3 | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| TLBR | **Topalu** | 66.07 | 43 | ⇑P | | P | | 01 36 48.3 | 0.0 |
| 435B | **Jarrell** | 66.12 | 302 | P | | P | | 01 36 48.7 | -0.2 |
| 435B | | | | IAmb | | IAmb | | 01 37 05.9 | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| 435B | | | | IAMs_20 | | IAMs_20 | | 02 02 51.5 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| WHTX | **Lake Whitney,** | 66.20 | 303 | P | | P | | 01 36 49.7 | +0.3 |
| WHTX | | | | IAmb | | IAmb | | 01 37 16.8 | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| WHTX | **Lake Whitney,** | 66.20 | 303 | P | | P | | 01 36 48.8 | -0.5 |
| | baz=100 | | | | | | | | |
| SLCR | **Slobozia Conac** | 66.22 | 42 | ⇑P | | P | | 01 36 49.2 | 0.0 |
| SCHL | **Schela** | 66.23 | 42 | ⇓P | | P | | 01 36 49.2 | 0.0 |
| Z35A | **Perchaven, San** | 66.27 | 304 | P | | P | | 01 36 49.2 | -0.5 |
| Z35A | | | | IAmb | | IAmb | | 01 36 59.7 | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| TIRR | **Tirgusor** | 66.29 | 43 | P | | P | | 01 36 49.5 | -0.2 |
| TIRR | | | | pmax | | pmax | | | |
| | comp=Z,71nm,1.2s | | | | | | | | |
| TIRR | **Tirgusor** | 66.29 | 43 | P | | P | | 01 36 49.5 | -0.2 |
| USHA | **Ushuaia** | 66.33 | 202 | LR | | LR | | 02 03 23.2 | |
| | comp=Z,531nm,21.5s,baz=42,slow=34 | | | | | | | | |
| CFR | **Carcaliu** | 66.33 | 42 | ⇑P | | P | | 01 36 49.4 | -0.5 |
| CFR | **Carcaliu** | 66.33 | 42 | ⇑P | | P | | 01 36 49.4 | -0.5 |
| TPGR | **Topolog** | 66.42 | 43 | ⇑P | | P | | 01 36 48.8 | -1.7 |
| BORA | **Eskisehir** | 66.50 | 48 | P | | P | | 01 36 51.8 | +0.5 |
| F36A | **Milaca** | 66.59 | 318 | P | | P | | 01 36 52.1 | +0.5 |
| SUW | **Suwalki** | 66.67 | 32 | *e*P | | P | | 01 36 52.1 | +0.2 |
| SUW | **Suwalki** | 66.67 | 32 | *e*P | | P | | 01 36 52.5 | +0.6 |
| TLCR | | 66.79 | 43 | ⇑P | | P | | 01 36 52.9 | +0.1 |
| TLCR | | 66.79 | 43 | ⇑P | | P | | 01 36 52.9 | +0.1 |
| KSU1 | **Kansas State U** | 66.94 | 311 | IAmb | | IAmb | | 01 37 00.8 | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| X34A | **Smith Ranch, M** | 66.97 | 306 | P | | P | | 01 36 55.7 | +1.4 |
| X34A | | | | IAmb | | IAmb | | 01 36 58.4 | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| MDUB | **Mudurnu** | 67.19 | 48 | P | | P | | 01 36 56.2 | +0.6 |
| MILM | **Milestii Mici** | 67.32 | 41 | ⇑P | | P | | 01 36 55.5 | -0.7 |
| MILM | **Milestii Mici** | 67.32 | 41 | ⇑P | | P | | 01 36 55.5 | -0.7 |
| 833A | **Chaparral WMA,** | 67.33 | 299 | P | | P | | 01 36 56.2 | -0.4 |
| | baz=97 | | | | | | | | |
| SORM | **Soroca** | 67.42 | 39 | ⇑P | | P | | 01 36 56.0 | -0.8 |
| SORM | **Soroca** | 67.42 | 39 | ⇑P | | P | | 01 36 56.0 | -0.8 |
| B35A | **Bob, Littlefor** | 67.53 | 321 | P | | P | | 01 36 56.6 | -0.9 |
| B35A | | | | IAmb | | IAmb | | 01 37 03.9 | |
| | comp=Z,31nm,1.4s | | | | | | | | |
| CSS | **Mathiatis** | 67.70 | 54 | P | | P | | 01 36 59.3 | +0.5 |
| LODK | **Lodwar** | 67.84 | 88 | P | | P | | 01 37 00.0 | -0.1 |
| PURM | **Purcari** | 67.90 | 41 | ⇑P | | P | | 01 36 59.9 | 0.0 |
| SUMG | **Summit** | 67.90 | 358 | P | | P | | 01 36 59.5 | -0.3 |
| SUMG | | | | pmax | | pmax | | | |
| | comp=Z,56nm,1.5s | | | | | | | | |
| SUMG | **Summit** | 67.90 | 358 | *i* P | | P | | 01 36 58.3 | -1.6 |
| SUMG | | | | IAmb | | IAmb | | 01 37 00.6 | |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| SUMG | **Summit** | 67.90 | 358 | P | | P | | 01 36 59.5 | -0.3 |
| JCT | **Junction City** | 67.96 | 301 | IAmb | | IAmb | | 01 37 19.0 | |
| | comp=Z,36nm,1.4s | | | | | | | | |
| JMIC | **Jan Mayen** | 67.98 | 8 | LR | | LR | | 02 01 17.8 | |
| | comp=Z,336nm,19.6s,baz=258,slow=31 | | | | | | | | |
| ECSD | **EROS Data Cent** | 68.09 | 315 | IAmb | | IAmb | | 01 37 08.3 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| ECSD | **EROS Data Cent** | 68.09 | 315 | IAMs_20 | | IAMs_20 | | 02 01 41.0 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| ABTX | **Abilene, Hawle** | 68.13 | 303 | IAmb | | IAmb | | 01 37 29.2 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| ABTX | **Abilene, Hawle** | 68.13 | 303 | P | | P | | 01 37 01.1 | -0.6 |
| | baz=99 | | | | | | | | |
| BR231 | **Keskin MP Arra** | 68.23 | 49 | P | | P | | 01 37 03.1 | +0.9 |
| U32A | **Winter Ranch,** | 68.24 | 307 | P | | P | | 01 37 02.3 | 0.0 |
| U32A | | | | IAmb | | IAmb | | 01 37 10.3 | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| ANTO | **Ankara** | 68.25 | 49 | P | | P | | 01 37 03.0 | +0.7 |
| ANTO | | | | pmax | | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| ANTO | | | | MLR | | MLR | | | |
| | comp=Z,500nm,19.0s | | | | | | | | |
| ANTO | **Ankara** | 68.25 | 49 | P | | P | | 01 37 03.0 | +0.7 |
| EIL | **Elat** | 68.25 | 60 | LR | | LR | | 02 08 01.4 | |
| | comp=Z,3μm,18.1s,baz=271,slow=37 | | | | | | | | |
| F33A | **5 Mile Ranch,** | 68.44 | 318 | IAmb | | IAmb | | 01 37 16.4 | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| BGNE | **Belgrade** | 68.62 | 313 | P | | P | | 01 37 03.9 | -0.6 |
| | baz=103 | | | | | | | | |
| AKASG | **Malin Array Be** | 68.81 | 37 | P | | P | | 01 37 04.9 | -0.5 |
| | comp=Z,13nm,0.8s,baz=251,slow=6.4,SNR=23 | | | | | | | | |
| AKASG | | | | LR | | LR | | 02 07 18.9 | |
| | comp=Z,397nm,18.8s,baz=238,slow=36 | | | | | | | | |
| AKASG | **Malin Array Be** | 68.81 | 37 | *e*P | | P | | 01 37 04.9 | -0.5 |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| AKASG | **Malin Array Be** | 68.81 | 37 | IAmb | | IAmb | | 01 37 05.2 | |
| | comp=Z,26nm,1.5s | | | | | | | | |
| AKBB | **Malin Array Si** | 68.81 | 37 | *ce*P | | P | | 01 37 04.7 | -0.7 |
| AKBB | **Malin Array Si** | 68.81 | 37 | IAmb | | IAmb | | 01 37 05.6 | |
| | comp=Z,37nm,1.4s | | | | | | | | |
| IIGN | **Ignalina** | 68.84 | 32 | *e*P | | P | | 01 37 06.5 | +1.0 |
| BR131 | **Keskin Array S** | 68.85 | 49 | *i* P | | P | | 01 37 06.1 | -0.1 |
| BRTR | **Keskin Array B** | 68.85 | 49 | P | | P | | 01 37 06.2 | +0.1 |
| | comp=Z,12nm,0.9s,baz=242,slow=5.0,SNR=41 | | | | | | | | |
| BRTR | **Keskin Array B** | 68.85 | 49 | *e*P | | P | | 01 37 06.2 | +0.1 |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| AGMN | **Agassiz Nation** | 68.87 | 320 | P | | P | | 01 37 05.1 | -0.8 |
| AGMN | | | | IAmb | | IAmb | | 01 37 13.0 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| NACGM | **Naroch** | 68.96 | 32 | *i* P | | P | | 01 37 05.9 | -0.4 |
| GHAJ | **Ghor Haditha** | 68.99 | 58 | P | | P | | 01 37 07.3 | +0.3 |
| GHAJ | | | | IAmb | | IAmb | | 01 37 31.7 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| GHAJ | | | | IAMs_20 | | IAMs_20 | | 02 07 20.2 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| MMAI | **Mount Meron Ar** | 69.08 | 57 | LR | | LR | | 02 09 24.4 | |
| | comp=Z,401nm,19.5s,baz=68,slow=38 | | | | | | | | |
| IDID | **Didziasalis** | 69.10 | 32 | *e*P | | P | | 01 37 08.2 | +1.1 |
| ILGA | **Ilgaz** | 69.19 | 48 | P | | P | | 01 37 08.6 | +0.3 |
| CBKS | **Cedar Bluff** | 69.27 | 310 | IAmb | | IAmb | | 01 37 18.8 | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| CBKS | | | | IAMs_20 | | IAMs_20 | | 02 02 20.5 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| D32A | **Dogwood Acres,** | 69.28 | 319 | P | | P | | 01 37 08.2 | -0.3 |
| D32A | | | | IAmb | | IAmb | | 01 37 15.7 | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| MNK | **Minsk** | 69.39 | 33 | *i* P | | P | | 01 37 06.7 | -2.3 |
| MNK | | | | *i* | | | | 01 37 29.9 | |
| MNK | | | | *i* | | | | 01 39 39.7 | |
| MNK | | | | *i* PPP | | PPP | | 01 41 20.3 | |
| MNK | | | | *i* S | | S | | 01 46 14.2 | -1.7 |
| MNK | | | | *i* SSS | | SSS | | 01 53 47.6 | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,8.0nm,0.9s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,1.0nm,0.9s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=E,42nm,17.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=Z,312nm,17.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=N,106nm,17.0s | | | | | | | | |
| MNK | **Minsk** | 69.39 | 33 | *i* P | | P | | 01 37 06.7 | -2.3 |
| | comp=E,1.0nm,0.9s | | | | | | | | |
| MNK | | | | *i* P | | P | | 01 37 06.7 | -2.3 |
| | comp=N,8.0nm,0.9s | | | | | | | | |
| MNK | | | | *i* P | | P | | 01 37 06.7 | -2.3 |
| | comp=Z,24nm,0.9s,baz=248 | | | | | | | | |
| MNK | | | | *i* PP | | PP | | 01 39 39.8 | -2.6 |
| MNK | | | | *i* PPP | | PPP | | 01 41 20.3 | |
| MNK | | | | *i* S | | S | | 01 46 14.2 | -1.7 |
| MNK | | | | *i* SS | | SS | | 01 50 29.2 | -14 |
| MNK | | | | *i* SSS | | SSS | | 01 53 47.7 | |
| MNK | | | | *i* LQ | | LQ | | 02 02 31.1 | |
| MNK | | | | *i* LR | | LR | | 02 05 38.1 | |
| MNK | | | | *i* LRM | | MLR | | 02 11 18.9 | |
| | comp=E,42nm,17.2s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | | 02 11 20.0 | |
| | comp=Z,312nm,17.2s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | | 02 11 22.5 | |
| | comp=N,106nm,17.2s | | | | | | | | |
| ULM | **Lac du Bonnet** | 69.47 | 322 | P | | P | | 01 37 08.6 | -1.0 |
| | comp=N,5.1nm,0.9s,baz=179,slow=5.6,SNR=4.5 | | | | | | | | |
| ULM | | | | LR | | LR | | 02 03 55.8 | |
| | comp=N,538nm,18.7s,baz=109,slow=33 | | | | | | | | |
| ULM | **Lac du Bonnet** | 69.47 | 322 | IAmb | | IAmb | | 01 37 32.3 | |
| | comp=Z,25nm,1.4s | | | | | | | | |
| ZAIG | **Zacatecas** | 69.68 | 292 | P | | P | | 01 37 12.3 | +0.5 |
| SUSD | **Miller** | 69.90 | 316 | P | | P | | 01 37 11.7 | -0.7 |
| | baz=104 | | | | | | | | |
| KMBO | **Kilima Mbogo** | 70.08 | 93 | P | | P | | 01 37 14.9 | +0.6 |
| | comp=Z,2.1nm,0.9s,baz=240,slow=6.7,SNR=8.1 | | | | | | | | |
| KMBO | | | | LR | | LR | | 02 05 25.2 | |
| | comp=Z,2μm,19.0s,baz=274,slow=34 | | | | | | | | |
| KMBO | **Kilima Mbogo** | 70.08 | 93 | *i* P | | P | | 01 37 14.0 | -0.3 |
| KMBO | **Kilima Mbogo** | 70.08 | 93 | P | | P | | 01 37 15.1 | +0.8 |
| KMBO | **Kilima Mbogo** | 70.08 | 93 | IAMs_20 | | IAMs_20 | | 02 04 53.9 | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| KMBO | **Kilima Mbogo** | 70.08 | 93 | *i* P | | P | | 01 37 15.9 | +1.5 |
| | SNR=5.5 | | | | | | | | |
| AMTX | **Amarillo** | 70.15 | 305 | P | | P | | 01 37 14.3 | +0.1 |
| AMTX | | | | IAmb | | IAmb | | 01 37 24.5 | |
| | comp=Z,29nm,1.4s | | | | | | | | |
| BNN | **Bunyan** | 70.37 | 50 | P | | P | | 01 37 15.8 | +0.3 |
| FURI | **Furi** | 70.87 | 82 | P | | P | | 01 37 21.1 | +1.8 |
| FURI | **Furi** | 70.87 | 82 | IAMs_20 | | IAMs_20 | | 02 05 27.8 | |
| | comp=Z,934nm,20.0s | | | | | | | | |
| MSTX | **Muleshoe** | 70.92 | 304 | IAmb | | IAmb | | 01 37 29.7 | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| MSTX | **Muleshoe** | 70.92 | 304 | P | | P | | 01 37 19.0 | 0.0 |
| | baz=97 | | | | | | | | |
| KIBK | **Kibwezi** | 70.98 | 94 | P | | P | | 01 37 20.5 | +0.8 |
| TOKA | **Tokat** | 71.11 | 49 | IAmb | | IAmb | | 01 37 22.9 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| MDND | **Maddock** | 71.16 | 319 | P | | P | | 01 37 18.9 | -1.1 |
| | baz=104 | | | | | | | | |
| TX31 | **Lajitas Ar. Si** | 71.17 | 299 | IAmb | | IAmb | | 01 37 36.6 | |
| | comp=Z,30nm,1.3s | | | | | | | | |
| TXAR | **Lajitas Array** | 71.17 | 299 | P | | P | | 01 37 19.7 | -0.8 |
| | comp=Z,0.5nm,0.5s,baz=114,slow=5.7,SNR=16 | | | | | | | | |
| TXAR | | | | LR | | LR | | 02 06 06.3 | |
| | comp=Z,378nm,21.9s,baz=71,slow=34 | | | | | | | | |
| FINES | **FINESS Array B** | 71.34 | 26 | P | | P | | 01 37 20.8 | 0.0 |
| | comp=Z,9.2nm,0.9s,baz=261,slow=3.8,SNR=9.0 | | | | | | | | |
| FINES | | | | LR | | LR | | 02 07 27.5 | |
| | comp=Z,266nm,18.1s,baz=232,slow=35 | | | | | | | | |
| OGNE | **Ogallala** | 71.40 | 312 | P | | P | | 01 37 21.8 | +0.1 |
| OGNE | | | | IAMs_20 | | IAMs_20 | | 02 03 20.8 | |
| | comp=Z,861nm,21.0s | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 71.52 | 309 | IAmb | | IAmb | | 01 37 42.7 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 71.52 | 309 | P | | P | | 01 37 21.9 | -0.6 |
| | baz=99 | | | | | | | | |
| T25A | **Trinidad** | 72.65 | 307 | P | | P | | 01 37 29.3 | -0.2 |
| | baz=97 | | | | | | | | |
| MNTX | **Cornudas Mount** | 72.86 | 302 | IAMs_20 | | IAMs_20 | | 02 07 30.9 | |
| | comp=Z,900nm,21.0s | | | | | | | | |
| PMSA | **Palmer Station** | 73.08 | 193 | LR | | LR | | 02 04 56.1 | |
| | comp=Z,165nm,20.6s,baz=20,slow=32 | | | | | | | | |
| NEEM | **North Greenlan** | 73.37 | 356 | *i* P | | P | | 01 37 31.8 | -1.2 |
| NEEM | | | | IAmb | | IAmb | | 01 37 35.6 | |
| | comp=Z,7.6nm,0.7s | | | | | | | | |
| RSSD | **Black Hills** | 73.41 | 315 | P | | P | | 01 37 34.9 | +1.1 |
| RSSD | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| RSSD | **Black Hills** | 73.41 | 315 | P | | P | | 01 37 34.9 | +1.1 |
| RSSD | **Black Hills** | 73.41 | 315 | IAMs_20 | | IAMs_20 | | 02 06 22.7 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| Q24A | **Divide** | 73.46 | 309 | IAmb | | IAmb | | 01 37 43.4 | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| Q24A | **Divide** | 73.46 | 309 | P | | P | | 01 37 34.6 | +0.2 |
| | baz=98 | | | | | | | | |
| SDCO | **Great Sand Dun** | 73.58 | 308 | IAMs_20 | | IAMs_20 | | 02 04 12.9 | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| EPT | **El Paso** | 73.81 | 302 | IAMs_20 | | IAMs_20 | | 02 08 09.4 | |
| | comp=Z,1μm,19.0s | | | | | | | | |
| ISCO | **Idaho Springs** | 73.92 | 310 | IAmb | | IAmb | | 01 37 48.7 | |
| | comp=Z,40nm,1.4s | | | | | | | | |
| ISCO | | | | IAMs_20 | | IAMs_20 | | 02 05 40.8 | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| MARD | **Mardin** | 74.00 | 53 | P | | P | | 01 37 37.6 | +0.3 |
| MARD | | | | IAmb | | IAmb | | 01 37 41.5 | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| PHWY | **Pilot Hill** | 74.01 | 312 | P | | P | | 01 37 37.5 | 0.0 |
| PHWY | | | | IAMs_20 | | IAMs_20 | | 02 05 04.9 | |
| | comp=Z,804nm,21.0s | | | | | | | | |
| SOC | **Sochi** | 74.03 | 46 | *e*P | | P | | 01 37 36.8 | -0.3 |
| SOC | | | | *e* | | | | 01 40 19.4 | |
| SOC | | | | *e*PPP | | PPP | | 01 42 04.0 | |
| SOC | | | | *e*S | | S | | 01 47 10.6 | +0.8 |
| SOC | | | | *e*SS | | SS | | 01 51 57.7 | +3.2 |
| SOC | | | | *e*SSS | | SSS | | 01 55 12.4 | |
| SOC | | | | MLR | | MLR | | | |
| | comp=Z,302nm,18.0s | | | | | | | | |
| ANMO | **Albuquerque** | 74.05 | 305 | LR | | LR | | 02 06 12.2 | |
| | comp=Z,3μm,21.1s,baz=94,slow=33 | | | | | | | | |
| ANMO | **Albuquerque** | 74.05 | 305 | *ce*P | | P | | 01 37 37.7 | 0.0 |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.3s | | | | | | | | |
| ANMO | **Albuquerque** | 74.05 | 305 | P | | P | | 01 37 38.3 | +0.6 |
| BNM | **Barren Site** | 74.12 | 304 | P | | P | | 01 37 39.0 | +0.8 |
| FFC | **Flin Flon** | 74.31 | 326 | P | | P | | 01 37 38.2 | -0.4 |
| FFC | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.3s | | | | | | | | |
| FFC | **Flin Flon** | 74.31 | 326 | P | | P | | 01 37 38.2 | -0.4 |
| FFC | | | | IAmb | | IAmb | | 01 37 46.7 | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| N23A | **Red Feather La** | 74.32 | 311 | P | | P | | 01 37 39.7 | +0.5 |
| N23A | | | | IAmb | | IAmb | | 01 37 56.6 | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| N23A | **Red Feather La** | 74.32 | 311 | P | | P | | 01 37 40.0 | +0.7 |
| | baz=98 | | | | | | | | |
| OBN | **Obninsk** | 74.36 | 34 | LR | | LR | | 02 08 25.4 | |
| | comp=Z,102nm,20.0s,baz=221,slow=34 | | | | | | | | |
| OBN | **Obninsk** | 74.36 | 34 | *e*P | | P | | 01 37 38.6 | -0.2 |
| OBN | | | | *e* | | | | 01 40 24.9 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.7s | | | | | | | | |
| OBN | **Obninsk** | 74.36 | 34 | P | | P | | 01 37 38.2 | -0.5 |
| LENM | **Lemitar** | 74.41 | 304 | P | | P | | 01 37 40.7 | +0.9 |
| TULEG | **Thule** | 74.48 | 352 | IAmb | | IAmb | | 01 37 47.0 | |
| | comp=Z,48nm,1.5s | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 74.63 | 308 | P | | P | | 01 37 41.9 | +0.7 |
| | baz=96 | | | | | | | | |
| ARCES | **ARCESS Array B** | 74.87 | 18 | LR | | LR | | 02 07 13.9 | |
| | comp=Z,227nm,19.3s,baz=230,slow=33 | | | | | | | | |
| ARCES | **ARCESS Array B** | 74.87 | 18 | P | | P | | 01 37 43.0 | +1.5 |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,34nm,1.5s | | | | | | | | |
| ARCES | **ARCESS Array B** | 74.87 | 18 | P | | P | | 01 37 43.0 | +1.5 |
| ARCES | | | | IAmb | | IAmb | | 01 37 54.1 | |
| | comp=Z,34nm,1.5s | | | | | | | | |
| ATD | **Arta Tunnel** | 74.89 | 79 | IAMs_20 | | IAMs_20 | | 02 07 47.2 | |
| | comp=Z,760nm,21.0s | | | | | | | | |
| SMCO | **Snowmass** | 74.90 | 309 | IAmb | | IAmb | | 01 37 59.4 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| SMCO | | | | IAMs_20 | | IAMs_20 | | 02 05 50.5 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| 121A | **Cookes Peak, D** | 74.95 | 302 | P | | P | | 01 37 43.7 | +0.7 |
| | baz=94 | | | | | | | | |
| K22A | **Casper** | 74.98 | 313 | P | | P | | 01 37 42.4 | -0.5 |
| | baz=98 | | | | | | | | |
| VSR | **Storozhevoye** | 75.00 | 38 | *e*P | | P | | 01 37 42.1 | -0.5 |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| VORD | **Divnogorie** | 75.03 | 38 | *e*P | | P | | 01 37 43.5 | +0.7 |
| VORD | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| MOS | **Moscow** | 75.09 | 33 | *e*P | | P | | 01 37 41.9 | -1.1 |
| MOS | | | | pmax | | pmax | | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| MOS | | | | MLR | | MLR | | | |
| | comp=Z,500nm,18.0s | | | | | | | | |
| GURO | **Guroymak-BITLI** | 75.12 | 51 | IAmb | | IAmb | | 01 37 47.8 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| VORR | **Voronezh** | 75.12 | 38 | *e*P | | P | | 01 37 42.5 | -0.8 |
| VORR | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.4s | | | | | | | | |
| LPSR | **Galich'ya Gora** | 75.14 | 37 | *e*P | | P | | 01 37 43.2 | -0.2 |
| LPSR | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| LAO | **LASA Array** | 75.34 | 317 | IAMs_20 | | IAMs_20 | | 02 04 38.8 | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| RWWY | **Rawlins** | 75.36 | 312 | P | | P | | 01 37 46.2 | +0.9 |
| RWWY | | | | IAmb | | IAmb | | 01 38 01.7 | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| KEV | **Kevo** | 75.44 | 18 | P | | P | | 01 37 45.1 | +0.3 |
| KEV | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.2s | | | | | | | | |
| KEV | **Kevo** | 75.44 | 18 | P | | P | | 01 37 45.1 | +0.3 |
| KEV | | | | IAmb | | IAmb | | 01 37 45.5 | |
| | comp=Z,41nm,1.2s | | | | | | | | |
| GEVA | **Gevas** | 75.90 | 52 | IAmb | | IAmb | | 01 37 52.5 | |
| | comp=Z,37nm,1.3s | | | | | | | | |
| MVCO | **Mesa Verde** | 75.90 | 307 | IAmb | | IAmb | | 01 38 00.2 | |
| | comp=Z,26nm,1.5s | | | | | | | | |
| MVCO | | | | IAMs_20 | | IAMs_20 | | 02 06 30.3 | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| O20A | **White River Ci** | 75.97 | 310 | IAmb | | IAmb | | 01 38 05.4 | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| O20A | **White River Ci** | 75.97 | 310 | P | | P | | 01 37 49.0 | +0.2 |
| | baz=96 | | | | | | | | |
| PV15 | **Paradox Valley** | 75.99 | 308 | P | | P | | 01 37 49.6 | +0.7 |
| PV01 | **Paradox Valley** | 76.04 | 308 | P | | P | | 01 37 49.8 | +0.6 |
| PV07 | **Paradox Valley** | 76.12 | 308 | P | | P | | 01 37 49.9 | +0.2 |
| NEY | **Neytrino** | 76.15 | 47 | *i* P | | P | | 01 37 51.7 | +2.0 |
| NEY | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| 319A | **Douglas** | 76.15 | 301 | P | | P | | 01 37 50.9 | +1.1 |
| 319A | | | | IAmb | | IAmb | | 01 38 03.2 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| SHA1 | **Shidzhatmaz** | 76.16 | 46 | *i* P | | P | | 01 37 50.0 | +0.2 |
| PV02 | **Paradox Valley** | 76.17 | 308 | P | | P | | 01 37 50.8 | +0.8 |
| PV02 | | | | IAmb | | IAmb | | 01 37 52.1 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| KIV | **Kislovodsk** | 76.21 | 46 | *e*P | | P | | 01 37 48.4 | -1.5 |
| KIV | | | | *e*S | | S | | 01 47 33.0 | -1.3 |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| KIV | **Kislovodsk** | 76.21 | 46 | P | | P | | 01 37 50.0 | +0.1 |
| KIV | **Kislovodsk** | 76.21 | 46 | *i* P | | P | | 01 37 50.9 | +1.0 |
| | SNR=5.8 | | | | | | | | |
| PV12 | **Saucer Basin,** | 76.23 | 308 | P | | P | | 01 37 50.9 | +0.6 |
| PV12 | | | | IAmb | | IAmb | | 01 38 19.3 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| PV03 | **Paradox Valley** | 76.27 | 308 | P | | P | | 01 37 52.0 | +1.6 |
| PV11 | **David Mesa, Pa** | 76.29 | 308 | P | | P | | 01 37 51.0 | +0.4 |
| PV11 | | | | IAmb | | IAmb | | 01 38 04.4 | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| PV18 | **Skein Mesa, Pa** | 76.31 | 308 | P | | P | | 01 37 51.0 | +0.3 |
| PV18 | | | | IAmb | | IAmb | | 01 38 04.7 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| PV04 | **Paradox Valley** | 76.32 | 308 | P | | P | | 01 37 51.7 | +0.9 |
| PV04 | | | | IAmb | | IAmb | | 01 38 10.9 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| PV16 | **Nyswonger Mesa** | 76.32 | 308 | P | | P | | 01 37 51.4 | +0.6 |
| PV16 | | | | IAmb | | IAmb | | 01 38 16.4 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| KBZ | **Khabaz** | 76.33 | 46 | P | | P | | 01 37 50.6 | +0.2 |
| | comp=Z,16nm,0.9s,baz=299,slow=0.5,SNR=17 | | | | | | | | |
| KBZ | | | | LR | | LR | | 02 15 43.7 | |
| | comp=Z,311nm,18.7s,baz=272,slow=39 | | | | | | | | |
| KBZ | **Khabaz** | 76.33 | 46 | *ce*P | | P | | 01 37 51.9 | +1.5 |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| PV17 | **East Wray Mesa** | 76.36 | 308 | P | | P | | 01 37 50.7 | -0.2 |
| PV17 | | | | IAmb | | IAmb | | 01 38 04.2 | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| PV20 | **West Nyswonger** | 76.37 | 308 | P | | P | | 01 37 51.5 | +0.5 |
| PV20 | | | | IAmb | | IAmb | | 01 38 16.0 | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| PV19 | **Morning Glory** | 76.38 | 308 | P | | P | | 01 37 51.1 | 0.0 |
| PV21 | **Cone Mtn., Par** | 76.39 | 308 | P | | P | | 01 37 51.6 | +0.4 |
| PV23 | **Carpenter Ridg** | 76.41 | 308 | IAmb | | IAmb | | 01 38 05.6 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| PV14 | **Lion Creek, Pa** | 76.41 | 308 | P | | P | | 01 37 51.6 | +0.3 |
| PV14 | | | | IAmb | | IAmb | | 01 38 11.3 | |
| | comp=Z,28nm,1.3s | | | | | | | | |
| PV10 | **Paradox Valley** | 76.43 |

GNI pmax pmax
comp=Z,37nm,1.7s
**GNI Garni 77.36 50** P **P** **01 37 57.7 +1.2**
GNI IAmb IAmb 01 38 19.0
comp=Z,24nm,1.3s
**GNI Garni 77.36 50** P **P** **01 37 56.8 +0.3**
**P18A Preston Nutter 77.46 309** IAmb IAmb 01 38 17.1
comp=Z,20nm,1.1s
**TUC Tucson 77.47 302** P **P** **01 37 57.8 +0.6**
TUC pmax pmax
comp=Z,8.0nm,1.0s
**TUC Tucson 77.47 302** P **P** **01 37 57.8 +0.6**
**TUC Tucson 77.47 302** IAMs_20 IAMs_20 02 10 34.2
comp=Z,925nm,18.0s
**SPB2 Spitsbergen Ar 77.62 9** P **P** **01 37 58.7 +1.6**
**SPITS Spitsbergen Ar 77.62 9** LR LR 02 05 08.6
comp=Z,354nm,19.6s,baz=83,slow=30
**SRU San Rafael Swe 77.64 309** IAmb IAmb 01 38 17.8
comp=Z,16nm,1.1s
**P17A Butcher Ranch, 77.83 309** P **P** **01 37 59.6 +0.4**
P17A IAmb IAmb 01 38 12.7
comp=Z,17nm,1.2s
**YMP Mirror Lake Pl 77.83 315** IAmb IAmb 01 38 12.6
comp=Z,43nm,1.3s
**NAX Nakhchivan 77.86 51** P **P** **01 37 59.7 +0.4**
**EGMT Eagleton 77.90 318** IAmb IAmb 01 37 59.7
comp=Z,28nm,1.4s
EGMT IAMs_20 IAMs_20 02 07 06.4
comp=Z,1µm,22.0s
**LKWY Lake 77.99 314** IAmb IAmb 01 38 17.9
comp=Z,37nm,1.4s
**LOHW Long Hollow 78.05 313** IAmb IAmb 01 38 08.9
comp=Z,28nm,1.4s
**H17A Grant Village 78.10 314** P **P** **01 38 01.7 +1.0**
**H17A Grant Village 78.10 314** P **P** **01 38 01.2 +0.5**
baz=95
**WUAZ Wupatki 78.11 305** P **P** **01 38 01.8 +1.0**
WUAZ IAmb IAmb 01 38 26.7
comp=Z,16nm,1.1s
**X16A Lo Mia Camp, P 78.11 304** P **P** **01 38 02.0 +1.2**
**SNOW Snow King Moun 78.15 313** IAmb IAmb 01 38 20.4
comp=Z,32nm,1.3s
**FLWY Flagg Ranch 78.16 314** IAmb IAmb 01 38 19.1
comp=Z,40nm,1.2s
**MOOW Moose Ponds 78.16 314** IAmb IAmb 01 38 08.6
comp=Z,24nm,1.4s
**YNR Norris Junctio 78.20 315** P **P** **01 38 02.5 +1.3**
**REDW Red Top Meadow 78.21 313** IAmb IAmb 01 38 17.3
comp=Z,33nm,1.2s
**TPAW Teton Pass 78.29 313** IAmb IAmb 01 38 16.9
comp=Z,19nm,1.1s
**YHH Holmes Hill 78.33 315** IAmb IAmb 01 38 11.1
comp=Z,24nm,1.4s
**AHID Auburn Hatcher 78.34 313** IAmb IAmb 01 38 19.4
comp=Z,22nm,1.4s
**RES Resolute Bay 78.36 346** LR LR 02 09 08.5
comp=Z,335nm,20.0s,baz=103,slow=33
**RES Resolute Bay 78.36 346** IAmb IAmb 01 38 08.9
comp=Z,22nm,1.1s
**YMR Madison River 78.40 314** IAmb IAmb 01 38 11.7
comp=Z,30nm,1.1s
**JLU Jordanelle 78.45 310** IAmb IAmb 01 38 24.7
comp=Z,36nm,1.5s
**GANJ Ganja 78.59 50** P **P** **01 38 04.2 +1.0**
**SNAA Sanae 78.67 171** P **P** **01 38 00.4 -2.6**
**SNAA Sanae 78.67 171** P **P** **01 38 02.2 -0.7**
comp=Z,6.2nm,0.9s,baz=334,slow=10.0,SNR=5.0
**MTPU Mount Pierson 78.88 308** IAmb IAmb 01 38 19.4
comp=Z,25nm,1.2s
**U15A North Rim 78.89 306** P **P** **01 38 06.5 +1.2**
**BOZ Bozeman (W) 78.94 315** IAMs_20 IAMs_20 02 10 45.3
comp=Z,709nm,19.0s
**TCRU Three Creeks R 79.11 308** IAmb IAmb 01 38 27.6
comp=Z,30nm,1.3s
**MNGR Mingechevir, A 79.18 50** P **P** **01 38 07.4 +1.0**
**214A Organ Pipe Nat 79.18 301** P **P** **01 38 07.3 +0.6**
**214A Organ Pipe Nat 79.18 301** P **P** **01 38 07.1 +0.4**
baz=91
**SEKA Sheki 79.29 49** P **P** **01 38 08.4 +1.3**
**Y14A Wickenburg 79.39 304** P **P** **01 38 09.2 +1.5**
**DUG Dugway, Tooele 79.47 310** IAMs_20 IAMs_20 02 09 24.5
comp=Z,1µm,20.0s
**EUNU Eureka 79.48 352** IAmb IAmb 01 38 15.3
comp=Z,30nm,1.1s
**SZCU Shurtz Canyon 79.57 307** IAmb IAmb 01 38 29.5
comp=Z,27nm,1.5s
**DLMT Dillon 79.61 315** P **P** **01 38 09.8 +1.0**
DLMT IAmb IAmb 01 38 18.0
comp=Z,32nm,1.4s
**MAK Makhachkala 79.62 47** *eP* P 01 38 02.5 -6.2
MAK pmax pmax
comp=Z,64nm,1.0s
**BGU Big Grassy Mou 79.67 311** IAmb IAmb 01 38 38.7
comp=Z,34nm,1.5s
**MCMT McKenzie Canyo 79.75 315** P **P** **01 38 09.9 +0.1**
**CCUT Cedar City 79.79 307** P **P** **01 38 10.7 +0.6**
**113A Mohawk Valley, 80.00 302** P **P** **01 38 12.7 +1.7**
**PSUT Pine Spring 80.21 308** P **P** **01 38 13.5 +1.2**
PSUT IAmb IAmb 01 38 32.5
comp=Z,22nm,1.2s
**PRGR Permogore 80.32 28** *eP* **P** **01 38 09.6 -2.5**
PRGR pmax pmax
comp=Z,192nm,1.4s
**RPN Rapa Nui 80.34 242** LR LR 02 11 35.7
comp=Z,517nm,18.4s,baz=86,slow=34
**PDMCI Parker Dam,Lak 80.34 304** P **P** **01 38 13.2 +0.4**
baz=91
**LKRN Lenkeran, Azer 80.40 52** P **P** **01 38 13.0 0.0**
**BLYC Blythe 80.65 303** P **P** **01 38 15.6 +1.1**
**WALA Waterton Lakes 80.74 319** IAmb IAmb 01 38 23.2
comp=Z,37nm,1.4s
**GLA Glamis 80.90 303** P **P** **01 38 16.5 +0.6**
GLA pmax pmax
comp=Z,12nm,1.0s
**GLA Glamis 80.90 303** P **P** **01 38 16.5 +0.6**
**GLA Glamis 80.90 303** P **P** **01 38 15.6 -0.3**
baz=90
**JTMT Jette 80.91 317** P **P** **01 38 15.6 -0.2**
**PRN Pahroc Range 81.13 307** P **P** **01 38 18.4 +1.3**
PRN IAmb IAmb 01 38 31.9
comp=Z,22nm,1.2s
**IRM Iron Mountain 81.17 304** P **P** **01 38 17.3 -0.1**
baz=90
**SHPR Sheep Range 81.20 306** P **P** **01 38 18.3 +0.7**
**ELK Elko 81.34 310** LR LR 02 13 18.9
comp=Z,726nm,18.0s,baz=93,slow=35
**ELK Elko 81.34 310** IAmb IAmb 01 38 31.3
ELK IAMs_20 IAMs_20 02 09 19.9
comp=Z,1µm,22.0s
**BC3 Big Chuckawall 81.43 303** P **P** **01 38 18.1 -0.7**
baz=90
**R11A Troy Canyon, C 81.56 308** P **P** **01 38 19.7 +0.2**
baz=91
**GMRC Granite Mounta 81.60 304** P **P** **01 38 20.0 +0.3**
baz=90
**TUQ Turquoise Moun 81.82 305** P **P** **01 38 21.6 +0.7**
baz=90
**YUH Yuha Desert 81.82 302** P **P** **01 38 22.6 +1.8**
**MFID Camas Ranch 81.83 313** P **P** **01 38 21.5 +0.7**
**KIRV Kirov 81.88 32** *ceP* **P** **01 38 21.1 +0.7**
**BELC Belle Mtn. Jos 81.88 304** P **P** **01 38 22.0 +0.8**
baz=90
**IKP In-Ko-Pah, Jac 81.98 302** P **P** **01 38 21.7 0.0**
baz=90
**TPNV Topopah Spring 82.08 307** P **P** **01 38 22.8 +0.6**
TPNV pmax pmax
comp=Z,12nm,1.4s
**TPNV Topopah Spring 82.08 307** P **P** **01 38 22.8 +0.6**
TPNV IAMs_20 IAMs_20 02 10 17.9
comp=Z,849nm,22.0s
**YKA Yellowknife Ar 82.14 332** P **P** **01 38 20.9 -0.8**
comp=Z,4.7nm,1.1s,baz=93,slow=5.3,SNR=20
YKA LR LR 02 11 19.3
comp=Z,487nm,20.4s,baz=92,slow=33
**HEC Hector,Ludlow 82.15 304** P **P** **01 38 22.5 -0.1**
baz=90
**MONP2 Monument Peak 82.24 302** P **P** **01 38 23.4 +0.2**
baz=89
**TPFO Pinon Flats 82.26 303** P **P** **01 38 23.8 +0.5**
baz=90
**PFO Pinyon Flats O 82.27 303** LR LR 02 13 02.8
comp=Z,1µm,19.1s,baz=94,slow=34
**PFO Pinyon Flats O 82.27 303** P **P** **01 38 23.8 +0.5**
baz=90
**BELA Belgrano 2 82.47 180** P **P** **01 38 23.1 -0.1**
BELA IAmb IAmb 01 38 30.3
comp=Z,32nm,1.5s
**GSC Goldstone, Bar 82.54 305** P **P** **01 38 25.3 +0.7**
baz=90
**FURC Furnace Creek, 82.58 306** P **P** **01 38 26.1 +1.6**
baz=90
**QSM Queen of Sheba 82.58 306** IAmb IAmb 01 38 38.9
comp=Z,23nm,1.2s
**NEW Newport 82.83 318** LR LR 02 10 47.9
comp=Z,1µm,21.7s,baz=88,slow=32
**NEW Newport 82.83 318** IAmb IAmb 01 38 33.7
comp=Z,16nm,1.3s
**BMN Battle Mountai 82.84 310** P **P** **01 38 26.6 +0.4**
BMN pmax pmax
comp=Z,14nm,1.2s
**BMN Battle Mountai 82.84 310** P **P** **01 38 26.6 +0.4**
BMN IAmb IAmb 01 38 40.3
comp=Z,14nm,1.2s
**TPH Tonopah 82.85 308** P **P** **01 38 26.7 +0.4**
TPH pmax pmax
comp=Z,112nm,1.3s
**TPH Tonopah 82.85 308** P **P** **01 38 26.7 +0.4**
**F10A Beach Ranch, E 82.88 316** P **P** **01 38 27.6 +1.5**
**MURC Murrieta 82.88 303** P **P** **01 38 25.7 -0.6**
baz=89
**BMO Blue Mountains 82.92 314** IAmb IAmb 01 38 42.6
comp=Z,29nm,1.5s
**GRAC Grapevine Rang 82.97 307** P **P** **01 38 27.1 +0.3**
baz=89
**ELS Elsinore Mount 83.07 303** IAmb IAmb 01 38 45.6
comp=Z,16nm,1.3s
**MPMC Manual Prospec 83.08 306** P **P** **01 38 27.7 +0.1**
baz=89
**LRMC Laurel Mtn Rad 83.25 305** P **P** **01 38 29.1 +0.8**
baz=89
**E09A Wood Farm, Sta 83.52 316** P **P** **01 38 29.2 -0.1**
E09A IAmb IAmb 01 38 41.5
comp=Z,26nm,1.4s
**EDW2 Edwards Air Fo 83.52 304** P **P** **01 38 29.6 0.0**
baz=89
**CWC Cottonwood Cre 83.56 306** P **P** **01 38 30.7 +0.8**
baz=89
**NVAR Mina Array Bea 83.70 308** P **P** **01 38 30.3 -0.4**
comp=Z,2.3nm,0.9s,baz=103,slow=5.8,SNR=15
NVAR LR LR 02 13 14.5
comp=Z,360nm,19.8s,baz=100,slow=34
**RYN Ryan 83.87 308** IAmb IAmb 01 38 51.1
comp=Z,25nm,1.4s
**ISA Isabella, Lake 83.89 305** IAmb IAmb 01 38 45.9
comp=Z,18nm,1.1s
**ISA Isabella, Lake 83.89 305** P **P** **01 38 31.7 +0.1**
baz=89
**WVOR Wild Horse Val 83.89 312** P **P** **01 38 32.5 +1.0**
WVOR pmax pmax
comp=Z,17nm,1.5s
**WVOR Wild Horse Val 83.89 312** P **P** **01 38 32.5 +1.0**
WVOR IAmb IAmb 01 38 45.0
comp=Z,18nm,1.5s
**D08A Wollman Farm, 84.05 317** P **P** **01 38 32.5 +0.5**
**E08A Dider Farm, El 84.15 316** IAmb IAmb 01 38 48.4
comp=Z,22nm,1.4s
**B08A Colville Reser 84.31 318** IAmb IAmb 01 38 40.5
comp=Z,15nm,1.4s
**HAWA Hanford 84.47 316** IAmb IAmb 01 38 35.1
comp=Z,18nm,1.4s
**PNT Penticton 84.49 319** P **P** **01 38 36.8 +2.6**
PNT pmax pmax
comp=Z,18nm,1.2s
**PAHR Pah Rah Range 84.51 309** P **P** **01 38 35.7 +1.0**
**E07A Sunnyside 84.69 316** IAmb IAmb 01 38 53.2
comp=Z,23nm,1.4s
**PNTR Pine Nut 84.70 309** P **P** **01 38 36.8 +1.0**
PNTR IAmb IAmb 01 38 54.4
comp=Z,18nm,1.2s
**F07A Phinny Hill Vi 84.76 316** P **P** **01 38 36.4 +0.7**
**PKM Mcpherson Peak 85.01 304** P **P** **01 38 38.4 +1.0**
baz=88
**MPK Martis Peak 85.02 309** P **P** **01 38 38.2 +0.7**
MPK IAmb IAmb 01 38 39.6
comp=Z,19nm,1.4s
**EMB Emerald Bay 85.09 309** P **P** **01 38 37.8 0.0**
EMB IAmb IAmb 01 38 39.3
comp=Z,16nm,1.4s
**MOD Modoc Plateau 85.14 312** IAmb IAmb 01 38 52.5
comp=Z,24nm,1.0s
MOD IAMs_20 IAMs_20 02 09 32.6
comp=Z,993nm,19.0s
**SMMC Simmler 85.14 305** P **P** **01 38 38.5 +0.6**
baz=88
**LTY Liberty 85.23 317** IAmb IAmb 01 38 54.3
comp=Z,21nm,1.4s
**BEKR Beckworth 85.26 309** IAmb IAmb 01 38 51.5
comp=Z,21nm,1.4s
**CMB Columbia Colle 85.35 308** P **P** **01 38 39.4 +0.5**
CMB pmax pmax
comp=Z,13nm,1.5s
**CMB Columbia Colle 85.35 308** P **P** **01 38 39.4 +0.5**
CMB IAMs_20 IAMs_20 02 12 04.4
comp=Z,1µm,22.0s
**PINE Pine Mountain 85.54 313** IAmb IAmb 01 38 57.2
comp=Z,24nm,1.2s
**SOCY Socotra 85.75 78** IAMs_20 IAMs_20 02 14 52.4
comp=Z,622nm,20.0s
**J05D Fort Rock, OR 85.78 313** P **P** **01 38 41.4 +0.4**
baz=88
**I05D Terrebonne, OR 85.81 314** P **P** **01 38 41.8 +0.8**
baz=88
**F05D White Salmon 85.83 316** P **P** **01 38 41.5 +0.5**
baz=88
**C36M Paulatuk 86.14 339** IAMs_20 IAMs_20 02 12 25.0
comp=Z,1µm,22.0s
**ORV Oroville 86.15 309** IAmb IAmb 01 38 55.3
comp=Z,20nm,1.3s
**B05A Bryant 86.16 318** P **P** **01 38 41.4 -1.2**
baz=87
**K04D Chiloquin, OR 86.19 312** P **P** **01 38 43.1 +0.1**
baz=87
**M04C Macdoel 86.30 311** P **P** **01 38 43.5 0.0**
baz=87
**A36M Sachs Harbour 86.37 342** IAmb IAmb 01 38 46.0
comp=Z,14nm,1.1s
**A36M Sachs Harbour 86.37 342** P **P** **01 38 42.9 -0.2**
baz=86
**J04D Umpqua Nationa 86.42 313** P **P** **01 38 44.4 +0.1**
**J04D Umpqua Nationa 86.42 313** P **P** **01 38 44.1 -0.1**
baz=87
**FAQ Al Faqa, Dubai 86.47 66** *i* P **P** **01 38 44.9 +0.3**
SNR=5.8
**NAZ Nazwa, Dubai 86.52 65** P **P** **01 38 45.6 +0.7**
**A04D Lummi Island 86.54 318** P **P** **01 38 43.7 -0.7**
baz=87
**E04D Cinebar 86.56 316** P **P** **01 38 44.1 -0.5**
baz=87
**I04A Tendick Farm, 86.61 313** P **P** **01 38 45.1 +0.1**
baz=87
**L04D Klamath Falls 86.62 312** P **P** **01 38 44.2 -0.9**
baz=87
**D04E Lakebay 86.67 317** P **P** **01 38 45.2 +0.2**
baz=87
**ARU Arti 86.80 34** LR LR 02 15 08.4
comp=Z,886nm,21.6s,baz=264,slow=34
**ARU Arti 86.80 34** *c i* P **P** **01 38 46.5 +1.0**
ARU 01 42 09.4
ARU S **SKSac** **01 49 13.9 +1.5**
ARU SS **SS** **01 55 08.5 +3.8**
ARU pmax pmax
comp=Z,24nm,1.3s
**ARU Arti 86.80 34** P **P** **01 38 45.1 -0.4**
ARU IAmb IAmb 01 39 03.7
comp=Z,14nm,1.1s
**H04D Lebanon 86.80 314** P **P** **01 38 45.0 -0.8**
baz=87
**AKTO Aktyubinsk 86.84 40** LR LR 02 17 31.2
comp=Z,268nm,20.1s,baz=291,slow=36
**D03D Eldon 86.86 317** P **P** **01 38 46.1 0.0**
baz=86
**MSFE Esma-Masafi 86.95 65** P **P** **01 38 47.1 +0.1**
**HATD Hatta, Dubai 86.96 65** *i* P **P** **01 38 47.5 +0.5**
SNR=9.1
**N02D Trinity Center 86.99 311** P **P** **01 38 46.6 -0.4**
baz=86
**UOSS Minazif 87.01 65** P **P** **01 38 47.0 -0.2**
UOSS IAmb IAmb 01 38 57.8
comp=Z,28nm,1.2s
**UOSS Minazif 87.01 65** *i* P **P** **01 38 47.4 +0.1**
SNR=6.4
**BANOM Banah 87.04 64** P **P** **01 38 46.6 -0.8**
**M02C Callahan 87.08 311** P **P** **01 38 47.5 +0.1**
baz=86
**L02E Cave Junction 87.58 312** P **P** **01 38 50.2 +0.5**
baz=86
**SYO Syowa Base 88.07 160⇑** *eP* **P** **01 38 47.4 -3.9**
**WSAR Wadi Sarin 89.35 67** LR LR 02 19 25.9
comp=Z,2µm,21.0s,baz=317,slow=36
**M31M Drury Creek, Y 91.33 333** P **P** **01 39 07.5 +0.7**
baz=77
**I29M Ogilvie Camp, 92.23 336** P **P** **01 39 11.7 +0.7**
baz=74
**DAWY Dawson 93.05 335** P **P** **01 39 14.6 -0.2**
baz=73
**BRVK Borovoye 94.01 36** *ceP* **P** **01 39 21.6 +2.3**
BRVK pmax pmax
comp=Z,21nm,4.9s
**L27K Beaver Creek, 94.40 334** P **P** **01 39 20.2 -0.8**
baz=71
**J26L Joseph Creek 94.63 336** P **P** **01 39 21.4 -0.7**
baz=69
**M27K Edge Creek, AK 94.65 334** P **P** **01 39 21.9 -0.4**
baz=71
**QSPA South Pole Qui 94.74 180** LR LR 02 15 06.4
comp=Z,362nm,21.6s,baz=178,slow=31
**QSPA South Pole Qui 94.74 180** P **P** **01 39 22.4 -0.1**
**SCRK Sand Creek 94.99 336** P **P** **01 39 23.3 -0.5**
baz=69
**TOLK Toolik Lake Re 95.14 341** IAmb IAmb 01 39 25.6
comp=Z,12nm,1.1s
TOLK IAMs_20 IAMs_20 02 16 09.7
comp=Z,764nm,22.0s
**TOLK Toolik Lake Re 95.14 341** P **P** **01 39 24.1 -0.2**
baz=63
**VRDI Verde Repeater 95.74 333** IAMs_20 IAMs_20 02 18 13.2
comp=Z,958nm,20.0s
**H24K Noodor Dome 95.78 338** P **P** **01 39 27.7 +0.4**
baz=65
**ILAR Eielson Array 95.84 337** P **P** **01 39 26.1 -1.4**
comp=Z,2.3nm,0.9s,baz=58,slow=4.7,SNR=13
ILAR LR LR 02 19 59.8
comp=Z,716nm,20.1s,baz=80,slow=34
**ILAR Eielson Array 95.84 337** *eP* **P** **01 39 26.9 -0.6**
ILAR pmax pmax
comp=Z,2.0nm,0.9s
**NRIK Noril'sk 95.85 18** LR LR 02 21 02.9
comp=Z,420nm,21.8s,baz=301,slow=34
**A21K Barrow 95.88 344** IAMs_20 IAMs_20 02 20 57.0
comp=Z,624nm,21.0s
**PAX Paxson 95.98 335** P **P** **01 39 27.9 -0.4**
baz=67
**COLD Coldfoot 96.00 340** P **P** **01 39 28.3 +0.1**
baz=63
**BERG Berg Lake 96.15 332** P **P** **01 39 30.0 +1.0**
**CCB Clear Creek Bu 96.26 337** IAMs_20 IAMs_20 02 19 30.5
comp=Z,879nm,21.0s
**MDM Murphy Dome 96.29 337** IAMs_20 IAMs_20 02 19 52.3
comp=Z,1µm,21.0s
**H23K Yukon River 96.40 338** P **P** **01 39 30.4 +0.3**
baz=63
**KLU Klutina 96.75 334** P **P** **01 39 31.9 +0.1**
baz=67
**H21K Melozitna Rive 97.67 339** P **P** **01 39 35.7 -0.1**
baz=60
**BPAW Bear Paw Mtn. 97.74 337** IAMs_20 IAMs_20 02 20 45.7
comp=Z,850nm,20.0s
**GHO Glory Hole Cre 97.94 335** IAMs_20 IAMs_20 02 19 39.3
comp=Z,995nm,20.0s
**AAK Ala-Archa 99.32 46** LR LR 02 30 19.0
comp=Z,215nm,18.5s,baz=304,slow=39
**AAK Ala-Archa 99.32 46** *ceP* **Pdif** **01 39 44.3 +0.4**
AAK pmax pmax
comp=Z,3.0nm,1.3s
**KURBB Kurchatov Arra 99.60 37** LR LR 02 23 14.2
comp=Z,434nm,21.2s,baz=268,slow=34
**KURK Kurchatov 99.62 37** IAMs_20 IAMs_20 02 20 21.7
comp=Z,512nm,19.0s
**NIL Nilore 100.55 55** IAMs_20 IAMs_20 02 29 37.0
comp=Z,684nm,20.0s
**KSH Kashi 101.23 48** P **Pdif** **01 39 53.0 +0.6**
**ANM Nome 102.63 341** IAMs_20 IAMs_20 02 22 58.6
comp=Z,492nm,21.0s
**TAOE Nuku Hiva Isla 107.97 262** *e*LR LR 02 16 13.1
comp=Z,652nm,23.4s
**PALK Pallekele 112.44 80** IAMs_20 IAMs_20 02 29 58.6
comp=Z,745nm,19.0s
**MA2 Magadan 115.87 358** IAMs_20 IAMs_20 02 28 51.8
comp=Z,425nm,22.0s
**ULN Ulaanbaatar 116.86 29** IAMs_20 IAMs_20 02 36 18.1
comp=Z,636nm,20.0s
**PPT2 Papeete2 117.06 253** *e*PS PS 01 55 43.5 +2.3
comp=Z,291nm,28.8s
**PPT2 Papeete2 117.06 253** *e*LR LR 02 20 21.5
comp=Z,710nm,22.2s
**XLT XiLinHaoTe 124.03 27** *e*PKP **PKPdf** **01 44 59.4 -0.7**
XLT SS SS 02 03 33.6 +0.8
XLT AMB AMB
comp=Z,160nm,10.8s
XLT LR LR
comp=Z,36nm,17.1s
XLT LR LR
comp=Z,300nm,17.5s
XLT LR LR
comp=Z,560nm,20.7s
**HHC Hu-ho-hao-te 124.08 32** *e*PKP **PKPdf** **01 44 55.8 -4.5**
HHC LR LR
comp=Z,340nm,18.4s
HHC LR LR
comp=Z,550nm,16.5s
**CD2 Chengdu 125.38 47** PKP **PKPdf** **01 45 02.6 -0.4**
CD2 PP **PP** **01 46 52.4 -0.5**
CD2 LR LR
comp=Z,60nm,15.0s
CD2 LR LR
comp=Z,310nm,8.3s
**PZH PanZhiHua 126.07 52** PKP **PKPdf** **01 45 03.5 -1.0**
PZH PP **PP** **01 47 04.9 +7.1**
PZH LR LR
comp=Z,660nm,25.1s
PZH LR LR
comp=Z,420nm,24.5s
**CHTO Chiang Mai 126.92 62** IAMs_20 IAMs_20 02 45 18.0
comp=Z,414nm,20.0s
**CMAR Chiang Mai Arr 127.05 63** PKP **PKPdf** **01 45 05.3 -1.1**
comp=Z,2.6nm,0.7s,baz=287,slow=3.8,SNR=12
**CMAR Chiang Mai Arr 127.05 63** *e*PKIKP **PKiKP** **01 45 06.8 -0.1**
CMAR pmax pmax
comp=Z,3.0nm,0.6s
**GYA Guiyang 129.91 50** ⇑PKP **PKPdf** **01 45 11.5 -0.4**
**KULM Kulim 132.32 79** IAMs_20 IAMs_20 02 37 31.3
comp=Z,459nm,22.0s
**NJ2 Nanjing 134.50 35** *e*PKP **PKPdf** **01 45 19.3 -0.9**
**MYKOM Kota Tinggi 136.07 83** IAMs_20 IAMs_20 02 40 51.7
comp=Z,498nm,22.0s
**QIZ Qiongzhong 136.19 56** PKP **PKPdf** **01 45 23.0 -0.7**
QIZ PP **PP** **01 48 00.8 -2.5**
QIZ SS SS 02 06 05.3 +0.9
QIZ LR LR
comp=Z,400nm,18.2s
QIZ LR LR
comp=Z,350nm,23.5s
**KSM Kuching 142.49 81** IAMs_20 IAMs_20 02 44 18.0
comp=Z,382nm,20.0s
**JAGI Jajag, Banyuwa 146.82 98** **PKPdf** **01 45 42.3 -0.5**
**FORT Forrest 148.33 147** PKPbc **PKPbc** **01 45 46.7 -1.6**
**BBOO Buckleboo 150.11 161** **PKPbc** **01 45 51.4 -1.3**
**STKA Stephens Creek 152.43 169** PKPbc **PKPbc** **01 45 57.6 -0.5**
comp=Z,6.6nm,0.9s,baz=111,slow=1.1,SNR=9.8
**STKA Stephens Creek 152.43 169** PKIKP **PKPbc** **01 45 56.6 -1.5**
**STKA Stephens Creek 152.43 169** **PKPbc** **01 45 56.6 -1.5**
STKA PKPab **PKPab** **01 46 08.2 +0.2**
**KAPI Kappang 152.51 92** PKIKP **PKPbc** **01 45 57.2 -1.6**
**KAPI Kappang 152.51 92** **PKPbc** **01 45 57.2 -1.6**
**TOLI2 Tolitoli 152.84 78** IAMs_20 IAMs_20 02 51 30.2
comp=Z,364nm,21.0s
**DZM Mont Dzumac 154.69 225** *e*LR LR 02 37 51.0
comp=Z,426nm,22.6s
**FITZ Fitzroy Crossi 154.94 124** PKPdf **PKPdf** **01 45 55.4 +0.2**
**ASAR Alice Springs 157.11 147** PKP **PKPdf** **01 45 55.7 -2.3**
comp=Z,1.5nm,0.9s,baz=184,slow=1.4,SNR=10
ASAR PKPab **PKPab** **01 46 27.9 -0.4**
comp=Z,1.0nm,0.6s,baz=200,slow=4.2,SNR=7.5
**ASAR Alice Springs 157.11 147** PKIKP **PKPdf** **01 45 56.4 -1.6**
**ASAR Alice Springs 157.11 147** PKPdf **PKPdf** **01 45 56.4 -1.6**
**WRA Warramunga Arr 160.25 141** PKP **PKPdf** **01 45 59.1 -2.7**
comp=Z,1.8nm,1.0s,baz=255,slow=2.4,SNR=6.5
WRA PKPab **PKPab** **01 46 41.4 -0.6**
comp=Z,1.6nm,0.9s,baz=217,slow=2.2,SNR=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **160.25** | **141** | PKIKP | **PKPdf** | **01 45 59.9** | **-1.9** |
| **WRA** | **Warramunga Arr** | **160.25** | **141** | PKPdf | **PKPdf** | **01 45 59.9** | **-1.9** |

*TUL **21** 02:02:05.9±1.0, 35°.72N±0°.01×97°.17W±0°.01, h5km±4km, ML3.2, mb_Lg2.8/50(NEIC), Error ellipse: s-maj=1.7km s-min=1.6km az=138.0*

**NEIC 21 02:02:06.2±1.1, 35°.735N±0°.010×97°.17W±0°.01, h5km±1km, Error ellipse: s-maj=3.0km s-min=1.9km az=182.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.08** | **191** | Pg | Pg | 02 02 07.8 | -0.2 |
| OK005 | | | | Sg | Sg | 02 02 09.2 | -0.1 |
| **OK001** | **Jones High Sch** | **0.20** | **209** | | Pg | 02 02 10.0 | -0.1 |
| OK001 | | | | Sg | Sg | 02 02 12.7 | -0.1 |
| **OK009** | **Oakdale Elemen** | **0.26** | **233** | Pg | Pg | 02 02 11.2 | -0.1 |
| OK009 | | | | Sg | Sg | 02 02 15.1 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.39** | **216** | | Pg | 02 02 13.6 | -0.2 |
| OKCFA | | | | Sg | Sg | 02 02 19.2 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **214** | Pg | Pg | 02 02 13.6 | -0.3 |
| OKCSW | | | | Sg | Sg | 02 02 19.2 | +0.2 |
| **FNO** | **Franklin** | **0.51** | **201** | Pg | Pg | 02 02 15.8 | -0.3 |
| FNO | | | | Sg | Sg | 02 02 23.0 | +0.2 |
| **W35A** | **Tecumseh** | **0.63** | **157** | | Pg | 02 02 17.7 | -0.6 |
| W35A | | | | Sg | Sg | 02 02 26.5 | 0.0 |
| **TUL1** | **Leonard** | **1.14** | **81** | Pg | Pg | 02 02 26.7 | -1.3 |
| TUL1 | | | | Sg | Sg | 02 02 42.6 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.25** | **206** | | Pg | 02 02 29.4 | -0.9 |
| X34A | | | | | Sn | 02 02 47.7 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.29** | **24** | Pn | Pn | 02 02 29.9 | -1.1 |
| **U32A** | **Winter Ranch,** | **1.62** | **294** | Pn | Pn | 02 02 35.3 | -0.1 |
| U32A | | | | IAmb_Lg | | 02 03 01.0 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.65** | **233** | Pn | Pn | 02 02 35.2 | -0.7 |
| **X37A** | **Clayton** | **1.87** | **127** | Pn | Pn | 02 02 38.8 | -0.1 |
| X37A | | | | IAmb_Lg | | 02 03 07.7 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **2.36** | **72** | | Pn | 02 02 46.5 | +0.8 |
| **Z35A** | **Perchaven, San** | **2.40** | **182** | Pn | Pn | 02 02 45.7 | -0.5 |
| **HHAR** | **Hobbs** | **2.68** | **77** | | Pn | 02 02 50.4 | +0.3 |
| **W39A** | **Magazine** | **2.82** | **100** | | Pn | 02 02 51.8 | -0.2 |
| **R32A** | **Long Quarter,** | **2.95** | **336** | | Pg | 02 03 01.8 | -1.0 |
| **Z38A** | **Mt. Pleasant** | **3.05** | **143** | | Pn | 02 02 55.4 | +0.1 |
| **MIAR** | **Mount Ida** | **3.18** | **111** | | Pn | 02 02 56.7 | -0.2 |
| MIAR | | | | IAmb_Lg | | 02 03 52.1 | |
| | comp=Z,36nm,1.2s | | | | | | |
| **KSU1** | **Kansas State U** | **3.39** | **7** | | Pn | 02 02 59.3 | -0.5 |
| KSU1 | | | | IAmb_Lg | | 02 03 59.9 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **3.55** | **79** | | Pn | 02 03 01.8 | -0.3 |
| **S39A** | **Bolivar** | **3.66** | **57** | | Pn | 02 03 03.8 | +0.3 |
| **CBKS** | **Cedar Bluff** | **3.69** | **327** | | Pn | 02 03 03.9 | -0.2 |
| CBKS | | | | IAmb_Lg | | 02 04 08.1 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.72** | **214** | | Pn | 02 03 05.5 | +1.2 |
| **WHTX** | **Lake Whitney,** | **3.74** | **184** | Pn | Pn | 02 03 03.3 | -1.4 |
| **X40A** | **Basin Creek Fa** | **3.77** | **108** | | Pn | 02 03 05.0 | 0.0 |
| X40A | | | | IAmb_Lg | | 02 04 12.2 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.78** | **258** | | Pn | 02 03 05.6 | +0.2 |
| AMTX | | | | IAmb_Lg | | 02 04 10.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **3.89** | **163** | Pn | Pn | 02 03 06.2 | -0.5 |
| **WLAR** | **White Oak Lake** | **3.92** | **120** | Pn | Pn | 02 03 06.4 | -0.7 |
| WLAR | | | | IAmb_Lg | | 02 04 13.8 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.01** | **95** | | Pn | 02 03 08.2 | -0.1 |
| **W41B** | **Gary Mavity, V** | **4.06** | **97** | | Pn | 02 03 08.8 | -0.2 |
| **FCAR** | **Ozark Folk Cen** | **4.11** | **86** | | Pn | 02 03 08.8 | -0.8 |
| FCAR | | | | IAmb_Lg | | 02 04 20.4 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.20** | **69** | IAmb_Lg | | 02 04 19.8 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **4.37** | **123** | Pn | Pn | 02 03 12.4 | -0.9 |
| **R40A** | **Maddies Statio** | **4.68** | **56** | Pn | Pn | 02 03 17.0 | -0.5 |
| R40A | | | | IAmb_Lg | | 02 04 31.4 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.84** | **36** | Pn | Pn | 02 03 18.7 | -1.0 |
| P38A | | | | IAmb_Lg | | 02 04 46.8 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **LCAR** | **Lake Charles** | **4.90** | **84** | IAmb_Lg | | 02 04 40.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **435B** | **Jarrell** | **4.95** | **184** | IAmb_Lg | | 02 04 47.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.29** | **62** | Pn | Pn | 02 03 24.5 | -1.3 |
| CCM | | | | IAmb_Lg | | 02 04 58.4 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.44** | **309** | IAmb_Lg | | 02 05 14.2 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.56** | **45** | IAmb_Lg | | 02 05 04.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.69** | **204** | IAmb_Lg | | 02 05 14.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **5.72** | **353** | IAmb_Lg | | 02 05 19.6 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **GNAR** | **Gosnell** | **5.81** | **86** | IAmb_Lg | | 02 05 10.9 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.86** | **65** | IAmb_Lg | | 02 05 18.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **N38A** | **Joes South For** | **5.92** | **30** | IAmb_Lg | | 02 05 26.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **6.00** | **286** | Pn | Pn | 02 03 34.9 | -1.0 |
| **SLM** | **Saint Louis** | **6.25** | **60** | IAmb_Lg | | 02 05 26.8 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **6.45** | **325** | IAmb_Lg | | 02 05 35.1 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.98** | **289** | | Pn | 02 03 49.9 | +0.5 |
| **K31A** | **O'Neill** | **6.99** | **350** | IAmb_Lg | | 02 06 07.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **K38A** | **Parkersburg** | **7.70** | **25** | IAmb_Lg | | 02 06 30.8 | |
| | comp=Z,11nm,1.0s | | | | | | |

*IDC **21** 02:14:16.7±1.7, 4°.53N×32°.59W, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.7/45, mbtmp3.8/6, MS3.5/1, Ms1 3.5/1, ms1mx3.0/80, Error ellipse: s-maj=55.0km s-min=31.0km az=20.0*

*NEIC **21** 02:14:17.1±1.1, 4°.0N±0°.1×32°.6W±0°.1, h10km±1km, mb4.5/44, Error ellipse: s-maj=20.5km s-min=18.7km az=160.0*

**ISC 21 02:14:18.6±0.8, 4°.2N±0°.2×32°.6W±0°.1, h19km, n55, σ0°81/48, mb4.4/25, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MDP** | **Montagnes des** | **19.98** | **273** | LR | LR | 02 25 15.2 | |
| | comp=Z,128nm,19.3s,baz=87,slow=33 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.69** | **124** | T | T | 02 41 45.3 | |
| | baz=303,slow=74,SNR=37 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.69** | **123** | T | T | 02 41 45.4 | |
| | baz=151,slow=74,SNR=33 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.71** | **124** | T | T | 02 41 47.8 | |
| **ASCN** | **Ascension** | **21.85** | **124** | P | **P** | **02 19 08.7** | **-1.7** |
| **H10S3** | **ASCENSION HYDR** | **22.18** | **126** | T | T | 02 42 16.7 | |
| | baz=304,slow=74,SNR=46 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.19** | **126** | T | T | 02 42 18.1 | |
| | baz=276,slow=74,SNR=26 | | | | | | |
| **TOSP** | **Speyside** | **28.52** | **286** | P | **P** | **02 20 11.9** | **-1.4** |
| **H05S1** | **Guadeloupe/Mar** | **29.60** | **292** | T | T | 02 51 09.0 | |
| | SNR=6.5 | | | | | | |
| **KOWA** | **Kowa** | **29.96** | **68** | P | **P** | **02 20 25.6** | **-0.6** |
| KOWA | | | | IAmb | IAmb | 02 20 33.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.01** | **73** | P | **P** | **02 21 09.6** | **-0.7** |
| | comp=Z,1.5nm,0.8s,baz=266,slow=9.3,SNR=7.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.01** | **73** | P | **P** | **02 21 09.3** | **-1.0** |
| **PDPR** | **Patillas Dam,** | **35.44** | **295** | P | **P** | **02 21 13.2** | **-0.7** |
| PDPR | | | | IAmb | IAmb | 02 21 14.8 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **SJG** | **San Juan** | **35.59** | **295** | P | **P** | **02 21 15.2** | **0.0** |
| **CRPR** | **Cabo Rojo, PR** | **36.42** | **295** | P | **P** | **02 21 20.9** | **-1.5** |
| **SC01** | **Santiago de lo** | **40.11** | **295** | P | **P** | **02 21 53.0** | **-0.5** |
| **PVAQ** | **Vaqueiros** | **40.12** | **31** | P | **P** | **02 21 53.9** | **+0.6** |
| PVAQ | | | | IAmb | IAmb | 02 22 07.3 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **SDMD** | **Soldier's Deli** | **53.13** | **318** | P | **P** | **02 23 35.0** | **-0.3** |
| SDMD | | | | IAmb | IAmb | 02 23 51.7 | |
| | comp=Z,6.2nm,1.3s | | | | | | |
| **BOSA** | **Boshof** | **64.44** | **124** | P | **P** | **02 24 56.6** | **+2.3** |
| | comp=Z,3.5nm,1.1s,baz=304,slow=8.7,SNR=3.0 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.29** | **41** | P | **P** | **02 25 00.2** | **+0.7** |
| **K38A** | **Parkersburg** | **65.44** | **315** | P | **P** | **02 25 01.8** | **+1.3** |
| **CSS** | **Mathiatis** | **67.93** | **54** | P | **P** | **02 25 15.8** | **-0.7** |
| **BR131** | **Keskin Array S** | **69.12** | **49** | P | **P** | **02 25 24.3** | **+0.3** |
| BR131 | | | | IAmb | IAmb | 02 25 32.2 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **69.12** | **49** | P | **P** | **02 25 24.6** | **+0.5** |
| | comp=Z,1.2nm,0.8s,baz=217,slow=5.9,SNR=7.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.12** | **49** | P | **P** | **02 25 23.8** | **-0.3** |
| **AKASG** | **Malin Array Be** | **69.16** | **37** | P | **P** | **02 25 23.4** | **-0.4** |
| | comp=Z,0.2nm,0.2s,baz=252,slow=5.9,SNR=4.6 | | | | | | |
| **AKBB** | **Malin Array Si** | **69.16** | **37** | P | **P** | **02 25 23.5** | **-0.3** |
| **AMTX** | **Amarillo** | **70.45** | **305** | P | **P** | **02 25 31.8** | **-0.5** |
| AMTX | | | | IAmb | IAmb | 02 25 33.1 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **71.43** | **299** | P | **P** | **02 25 39.1** | **+0.7** |
| **TX32** | **Lajitas Array** | **71.43** | **299** | P | **P** | **02 25 38.9** | **+0.5** |
| TX32 | | | | IAmb | IAmb | 02 25 45.4 | |
| | comp=Z,3.1nm,1.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **71.43** | **299** | P | **P** | **02 25 38.0** | **-0.3** |
| **ISCO** | **Idaho Springs** | **74.26** | **310** | P | **P** | **02 25 55.6** | **+0.5** |
| ISCO | | | | IAmb | IAmb | 02 26 03.1 | |
| | comp=Z,5.1nm,1.3s | | | | | | |
| **N23A** | **Red Feather La** | **74.65** | **311** | P | **P** | **02 25 56.6** | **-0.8** |
| N23A | | | | IAmb | IAmb | 02 25 59.4 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **DGMT** | **Dagmar** | **74.67** | **319** | P | **P** | **02 25 57.4** | **+0.4** |
| DGMT | | | | IAmb | IAmb | 02 26 00.1 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **O20A** | **White River Ci** | **76.30** | **310** | P | **P** | **02 26 06.9** | **+0.1** |
| O20A | | | | IAmb | IAmb | 02 26 11.0 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **PV07** | **Paradox Valley** | **76.44** | **308** | P | **P** | **02 26 07.0** | **-0.7** |
| PV07 | | | | IAmb | IAmb | 02 26 25.2 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **PV02** | **Paradox Valley** | **76.49** | **308** | P | **P** | **02 26 06.5** | **-1.5** |
| PV02 | | | | IAmb | IAmb | 02 26 15.1 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **PV13** | **Radium Mtn., P** | **76.56** | **308** | P | **P** | **02 26 08.7** | **+0.4** |
| PV13 | | | | IAmb | IAmb | 02 26 11.2 | |
| | comp=Z,3.3nm,1.2s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.56** | **313** | P | **P** | **02 26 13.8** | **-0.1** |
| | comp=Z,0.5nm,0.9s,baz=96,slow=9.5,SNR=3.5 | | | | | | |
| **TPAW** | **Teton Pass** | **78.64** | **313** | P | **P** | **02 26 19.8** | **-0.1** |
| TPAW | | | | IAmb | IAmb | 02 26 29.9 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **YHH** | **Holmes Hill** | **78.69** | **315** | P | **P** | **02 26 21.3** | **+1.1** |
| **NLU** | **North Lily Min** | **79.22** | **310** | P | **P** | **02 26 22.8** | **-0.3** |
| NLU | | | | IAmb | IAmb | 02 26 24.7 | |
| | comp=Z,2.9nm,1.3s | | | | | | |
| **PKCU** | **Pink Cliffs** | **79.26** | **307** | P | **P** | **02 26 23.3** | **-0.2** |
| **BOZ** | **Bozeman (W)** | **79.31** | **315** | P | **P** | **02 26 22.9** | **-0.5** |
| **214A** | **Organ Pipe Nat** | **79.46** | **302** | P | **P** | **02 26 23.8** | **-0.6** |
| **EUNU** | **Eureka** | **79.95** | **352** | P | **P** | **02 26 26.7** | **+0.6** |
| **BGU** | **Big Grassy Mou** | **80.00** | **311** | P | **P** | **02 26 27.7** | **+0.4** |
| **W13A** | **Hualapai Mount** | **80.44** | **305** | P | **P** | **02 26 30.1** | **+0.2** |
| **EDM** | **Edmonton** | **81.08** | **323** | P | **P** | **02 26 32.8** | **+0.1** |
| EDM | | | | IAmb | IAmb | 02 26 44.3 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **YUH** | **Yuha Desert** | **82.11** | **302** | P | **P** | **02 26 37.5** | **-0.9** |
| YUH | | | | IAmb | IAmb | 02 26 52.4 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **RMX** | **La Rumorosa** | **82.24** | **302** | P | **P** | **02 26 38.8** | **-0.5** |
| RMX | | | | IAmb | IAmb | 02 26 45.8 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **PLID** | **Pearl Lake** | **82.35** | **315** | P | **P** | **02 26 38.6** | **-1.1** |
| **YKA** | **Yellowknife Ar** | **82.57** | **332** | P | **P** | **02 26 40.2** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=99,slow=5.6,SNR=4.7 | | | | | | |
| **NEW** | **Newport** | **83.21** | **318** | P | **P** | **02 26 43.9** | **0.0** |
| **ISA** | **Isabella, Lake** | **84.19** | **305** | P | **P** | **02 26 48.6** | **-0.7** |
| ISA | | | | IAmb | IAmb | 02 26 49.6 | |
| | comp=Z,2.4nm,1.1s | | | | | | |

*IDC **21** 02:15:44.5±1.3, 4°.59N×32°.63W, h0km, mb3.9/4, mb1 4.0/4, mb1mx3.6/47, mbtmp3.9/4, Error ellipse: s-maj=62.4km s-min=27.0km az=153.0*

*NEIC **21** 02:15:44.9±2.0, 4°.55N±0°.07×32°.70W±0°.09, h10km±1km, mb4.7/40, Error ellipse: s-maj=19.3km s-min=4.1km az=126.0*

**ISC 21 02:15:44.3±0.5, 4°.5N±0°.1×32°.72W±0°.08, h11km, n54, σ1°15/48, mb4.6/23, 1D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SACV** | **Santiago Islan** | **13.72** | **40** | Pn | **Pn** | **02 18 58.9** | **-0.1** |
| **H10N3** | **ASCENSION HYDR** | **21.94** | **124** | T | T | 02 43 14.5 | |
| | baz=304,slow=75,SNR=12 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.94** | **124** | T | T | 02 43 12.8 | |
| | baz=304,slow=75,SNR=17 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.96** | **124** | T | T | 02 43 16.0 | |
| | baz=304,slow=75,SNR=16 | | | | | | |
| **ASCN** | **Ascension** | **22.10** | **124** | P | **P** | **02 20 38.3** | **-1.6** |
| **H10S3** | **ASCENSION HYDR** | **22.43** | **127** | T | T | 02 43 49.4 | |
| | baz=304,slow=74,SNR=18 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.45** | **127** | T | T | 02 43 50.8 | |
| | baz=276,slow=74,SNR=14 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.39** | **291** | T | T | 02 52 37.5 | |
| | SNR=4.2 | | | | | | |
| **GDHS** | **Morne Mazeau,** | **30.81** | **294** | P | **P** | **02 21 59.8** | **-0.7** |
| **BIRV** | **Birongo** | **33.77** | **282** | P | **P** | **02 22 26.2** | **-0.3** |
| BIRV | | | | IAmb | IAmb | 02 22 39.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **SIV** | **San Ignacio** | **34.68** | **233** | P | **P** | **02 22 37.2** | **+2.8** |
| | comp=Z,1.5nm,0.9s,baz=75,slow=6.4,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.03** | **74** | P | **P** | **02 22 37.9** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=261,slow=8.3,SNR=6.5 | | | | | | |
| **CELP** | **Cerrillos** | **35.74** | **295** | P | **P** | **02 22 43.9** | **+0.3** |
| **PAB** | **San Pablo** | **43.29** | **32** | P | **P** | **02 23 47.5** | **+1.2** |
| **PB06** | **IPOC Station P** | **45.05** | **232** | P | **P** | **02 23 58.8** | **-1.9** |
| PB06 | | | | IAmb | IAmb | 02 24 16.1 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **NNA** | **Nana** | **46.84** | **249** | P | **P** | **02 24 14.7** | **-0.2** |
| NNA | | | | IAmb | IAmb | 02 24 22.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **GBN** | **Guysborough** | **47.85** | **333** | P | **P** | **02 24 21.1** | **-1.1** |
| **RIOS** | **Rincon, Osa** | **50.60** | **277** | P | **P** | **02 24 44.0** | **+0.3** |
| **RIMA** | **Rio Macho** | **50.97** | **279** | P | **P** | **02 24 46.4** | **-0.5** |
| RIMA | | | | IAmb | IAmb | 02 24 57.8 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **WSPT** | **Westport, CT** | **51.48** | **321** | P | **P** | **02 24 48.5** | **-1.5** |
| WSPT | | | | IAmb | IAmb | 02 24 51.3 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **F64A** | **Sherman** | **51.52** | **329** | P | **P** | **02 24 47.4** | **-2.8** |
| F64A | | | | IAmb | IAmb | 02 25 06.8 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **51.54** | **280** | P | **P** | **02 24 51.6** | **+0.7** |
| **P61A** | **Hammonton** | **51.61** | **319** | P | **P** | **02 24 50.3** | **-0.7** |
| **FFD** | **Franklin Falls** | **51.81** | **324** | P | **P** | **02 24 52.1** | **-0.3** |
| **VA06** | **Catapilco** | **51.96** | **222** | P | **P** | **02 24 53.0** | **-0.6** |
| **LMEL** | **Las Melosas** | **52.05** | **220** | P | **P** | **02 24 55.3** | **+0.8** |
| LMEL | | | | IAmb | IAmb | 02 25 14.2 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **WUPA** | **West Chester U** | **52.28** | **319** | P | **P** | **02 24 55.2** | **-0.7** |
| **TRY** | **Troy** | **52.57** | **323** | P | **P** | **02 24 57.2** | **-0.8** |
| TRY | | | | IAmb | IAmb | 02 25 13.1 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **VA05** | **Santo Domingo** | **52.85** | **221** | P | **P** | **02 25 01.9** | **+1.6** |
| **BNI** | **Bardonecchia** | **53.03** | **34** | P | **P** | **02 25 00.9** | **-0.7** |
| **VLC** | **Villacollemand** | **54.67** | **37** | P | **P** | **02 25 15.0** | **+1.5** |
| VLC | | | | IAmb | IAmb | 02 25 20.5 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **TSUM** | **Tsumeb** | **54.82** | **117** | P | **P** | **02 25 14.4** | **-0.7** |
| TSUM | | | | IAmb | IAmb | 02 25 20.5 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **Q54A** | **Coxs Mills** | **55.40** | **315** | P | **P** | **02 25 20.6** | **+1.8** |
| Q54A | | | | IAmb | IAmb | 02 25 22.2 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **P52A** | **Corning** | **56.59** | **315** | P | **P** | **02 25 27.3** | **-0.1** |
| P52A | | | | IAmb | IAmb | 02 25 33.2 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **LRAL** | **Lakeview Retre** | **57.90** | **306** | P | **P** | **02 25 37.1** | **+0.4** |
| LRAL | | | | IAmb | IAmb | 02 25 40.6 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **L48A** | **N Adams** | **59.14** | **317** | P | **P** | **02 25 45.2** | **0.0** |
| L48A | | | | IAmb | IAmb | 02 25 48.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **PSZ** | **Piszkesteto** | **62.28** | **37** | P | **P** | **02 26 07.5** | **+0.9** |
| PSZ | | | | IAmb | IAmb | 02 26 09.8 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **MLR** | **Muntele Rosu** | **65.14** | **41** | P | **P** | **02 26 26.4** | **+0.8** |
| MLR | | | | IAmb | IAmb | 02 26 34.0 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **67.82** | **306** | P | **P** | **02 26 43.7** | **+0.9** |
| **AKBB** | **Malin Array Si** | **68.98** | **37** | P | **P** | **02 26 49.9** | **+0.2** |
| AKBB | | | | IAmb | IAmb | 02 27 02.9 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **BR131** | **Keskin Array S** | **69.01** | **49** | P | **P** | **02 26 48.2** | **-2.1** |
| **BRTR** | **Keskin Array B** | **69.01** | **49** | P | **P** | **02 26 52.1** | **+1.7** |
| | comp=Z,1.3nm,0.8s,baz=264,slow=3.7,SNR=7.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.01** | **49** | P | **P** | **02 26 48.9** | **-1.4** |
| **TX31** | **Lajitas Ar. Si** | **71.20** | **299** | P | **P** | **02 27 02.9** | **-1.0** |
| **TX32** | **Lajitas Array** | **71.20** | **299** | P | **P** | **02 27 02.6** | **-1.3** |
| **TOKA** | **Tokat** | **71.26** | **49** | P | **P** | **02 27 04.8** | **+0.7** |
| **ISCO** | **Idaho Springs** | **73.99** | **310** | P | **P** | **02 27 20.8** | **+0.1** |
| **DGMT** | **Dagmar** | **74.38** | **319** | P | **P** | **02 27 22.7** | **+0.3** |
| DGMT | | | | IAmb | IAmb | 02 27 26.4 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **PV16** | **Nyswonger Mesa** | **76.38** | **308** | P | **P** | **02 27 34.3** | **-0.1** |
| **PV19** | **Morning Glory** | **76.43** | **308** | P | **P** | **02 27 34.0** | **-0.6** |
| PV19 | | | | IAmb | IAmb | 02 27 46.5 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.26** | **332** | P | **P** | **02 28 07.2** | **+1.7** |
| | comp=Z,0.8nm,0.9s,baz=94,slow=5.2,SNR=5.2 | | | | | | |
| **NEW** | **Newport** | **82.92** | **318** | P | **P** | **02 28 09.2** | **-0.3** |
| **KVN** | **Kaiserville** | **83.59** | **309** | P | **P** | **02 28 12.7** | **-0.6** |
| **SYO** | **Syowa Base** | **87.93** | **160** | PKiKP | **PKiKP** | **02 33 36.6** | **+0.4** |

*IDC **21** 02:16:13.6±62.0, 20°.52S×177°.82W, h0km, mb4.0/3, mb1 4.1/3, mb1mx3.7/36, mbtmp4.0/3, Error ellipse: s-maj=1137.0km s-min=166.0km az=83.0*

*NEIC **21** 02:16:17.5±1.2, 22°.1S±0°.1×176°.33W±0°.05, h99km±9km, mb4.3/17, Error ellipse: s-maj=18.3km s-min=6.9km az=178.0*

**ISC 21 02:16:16.9±0.7, 22°.1S±0°.1×176°.31W±0°.10, h100km, n25, σ0°70/25, mb4.1/10, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **7.27** | **191** | Pn | **Pn** | **02 18 00.1** | **-0.4** |
| **FUNA** | **Funafuti** | **14.17** | **342** | Pn | **Pn** | **02 19 33.5** | **+0.4** |
| **PINNC** | **Pines Island,** | **15.04** | **265** | | **Pn** | **02 19 44.7** | **+0.6** |
| **RAR** | **Rarotonga** | **15.40** | **90** | Pn | **Pn** | **02 19 49.1** | **+0.2** |
| **OUENC** | **Ouen Island, N** | **15.60** | **266** | Pn | **Pn** | **02 19 51.2** | **0.0** |
| OUENC | | | | IAmb | IAmb | 02 20 00.7 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **ONTNC** | **Ouen Toro** | **15.96** | **266** | Pn | **Pn** | **02 19 55.7** | **-0.1** |
| ONTNC | | | | IAmb | IAmb | 02 19 56.9 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **29.84** | **247** | P | **P** | **02 22 14.3** | **-0.7** |
| ARMA | | | | IAmb | IAmb | 02 22 30.2 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **36.27** | **236** | P | **P** | **02 23 10.8** | **0.0** |
| TOO | | | | IAmb | IAmb | 02 23 15.3 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.55** | **246** | P | **P** | **02 23 30.9** | **+0.9** |
| | comp=Z,2.5nm,0.9s,baz=97,slow=11,SNR=3.7 | | | | | | |
| **STKA** | **Stephens Creek** | **38.55** | **246** | P | **P** | **02 23 29.4** | **-0.6** |
| **AS31** | **Alice Springs** | **45.70** | **258** | P | **P** | **02 24 26.8** | **-1.5** |
| **ASAR** | **Alice Springs** | **45.70** | **258** | P | **P** | **02 24 29.1** | **+0.8** |
| | comp=Z,1.3nm,0.7s,baz=99,slow=6.5,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **45.70** | **258** | P | **P** | **02 24 29.0** | **+0.8** |
| **WB0** | **Warramunga Arr** | **45.94** | **263** | P | **P** | **02 24 29.4** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 02 24 31.5 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.94** | **263** | P | **P** | **02 24 30.7** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 02 24 44.3 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.95** | **263** | P | **P** | **02 24 29.9** | **-0.4** |
| | comp=Z,1.1nm,0.6s,baz=91,slow=8.5,SNR=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.95** | **263** | P | **P** | **02 24 30.6** | **+0.3** |
| **KNRA** | **Kununurra** | **52.13** | **267** | P | **P** | **02 25 17.4** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **54.38** | **263** | P | **P** | **02 25 33.4** | **-0.6** |
| **QSPA** | **South Pole Qui** | **67.98** | **180** | P | **P** | **02 27 06.3** | **+1.2** |
| **RUBR** | **Rubicon Trail** | **80.36** | **41** | P | **P** | **02 28 18.2** | **+0.7** |
| RUBR | | | | IAmb | IAmb | 02 28 33.8 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **PNTR** | **Pine Nut** | **80.72** | **41** | P | **P** | **02 28 19.0** | **-0.4** |
| PNTR | | | | IAmb | IAmb | 02 28 33.8 | |
| | comp=Z,3.5nm,1.2s | | | | | | |
| **E03A** | **Lebam** | **83.29** | **34** | P | **P** | **02 28 32.3** | **-0.1** |
| **TXAR** | **Lajitas Array** | **86.60** | **57** | P | **P** | **02 28 49.7** | **+0.1** |
| **K22A** | **Casper** | **90.92** | **44** | P | **P** | **02 29 08.4** | **-1.3** |
| K22A | | | | IAmb | IAmb | 02 29 12.8 | |
| | comp=Z,2.0nm,0.8s | | | | | | |

*IDC **21** 02:20:28.0±0.9, 4°.73N×32°.68W, h0km, mb3.9/10, mb1 4.1/10, mb1mx3.9/44, mbtmp3.9/10, Error ellipse: s-maj=40.1km s-min=18.0km az=149.0*

*NEIC **21** 02:20:29.8±1.2, 

comp=Z,1.0nm,0.7s,baz=250,slow=6.9,SNR=6.4
**AKASG Malin Array Be 68.95 37** IAmb IAmb 02 31 39.7
comp=Z,2.2nm,1.1s
**BR131 Keskin Array S 68.96 49** P **P** **02 31 34.9 +0.1**
BR131 IAmb IAmb 02 31 36.3
comp=Z,6.0nm,1.0s
**BRTR Keskin Array B 68.96 49** P **P** **02 31 35.5 +0.8**
comp=Z,2.3nm,0.9s,baz=237,slow=5.3,SNR=12
**Q24A Divide 73.63 309** P **P** **02 32 02.7 -0.6**
Q24A IAmb IAmb 02 32 05.7
comp=Z,7.1nm,1.0s
**SDCO Great Sand Dun 73.75 308** P **P** **02 32 03.8 -0.2**
**MARD Mardin 74.09 53** P **P** **02 32 06.1 +0.3**
MARD IAmb IAmb 02 32 08.3
comp=Z,8.8nm,1.2s
**ISCO Idaho Springs 74.10 310** P **P** **02 32 07.0 +1.0**
**DGMT Dagmar 74.48 319** P **P** **02 32 07.7 0.0**
**N23A Red Feather La 74.49 311** P **P** **02 32 07.5 -0.8**
N23A IAmb IAmb 02 32 10.1
comp=Z,5.2nm,0.8s
**FFC Flin Flon 74.52 326** P **P** **02 32 08.0 +0.3**
**PDAR Pinedale Array 77.39 313** P **P** **02 32 23.9 -0.8**
comp=Z,0.4nm,0.8s,baz=93,slow=8.0,SNR=4.4
**YMR Madison River 78.58 315** P **P** **02 32 32.2 +0.9**
YMR IAmb IAmb 02 32 33.7
comp=Z,8.5nm,1.1s
**EDM Edmonton 80.88 323** P **P** **02 32 43.5 +0.2**
**YKA Yellowknife Ar 82.35 332** P **P** **02 32 49.6 -1.2**
comp=Z,1.3nm,0.9s,baz=96,slow=5.2,SNR=9.4
**E09A Wood Farm, Sta 83.70 316** P **P** **02 32 56.9 -1.3**
E09A IAmb IAmb 02 33 04.1
comp=Z,2.6nm,0.5s
**NVAR Mina Array Bea 83.87 308** P **P** **02 32 59.1 -0.4**
comp=Z,0.4nm,0.7s,baz=84,slow=6.7,SNR=3.8
**A36M Sachs Harbour 86.59 342** P **P** **02 33 12.6 +0.5**
A36M IAmb IAmb 02 33 13.8
comp=Z,4.9nm,1.0s
**ASAR Alice Springs 156.91 147** PKP **PKPdf** **02 40 25.7 0.0**
comp=Z,0.8nm,1.1s,baz=170,slow=2.3,SNR=4.2

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*IDC **21** 02:26:18.2±0.5, 4.°50N×32.°56W, h0km, mb4.2/27, mb1 4.3/27, mb1mx4.2/43, mbtmp4.2/27, MS4.3/70, Ms1 4.3/70, ms1mx4.2/82, Error ellipse: s-maj=18.0km s-min=11.4km az=155.0*
*MOS **21** 02:26:19.6±1.0, 4.°62N×32.°67W, h10km, mb5.1/42, Error ellipse: s-maj=9.3km s-min=7.7km az=145.3*
*NEIC **21** 02:26:21.8±1.3, 4.°51N±0.°09×32.°66W±0.°09, h10km±1km, mb5.0/261, Error ellipse: s-maj=16.4km s-min=12.8km az=135.0*
*GCMT **21** 02:26:21.8±0.2, 4.°63N±0.°02×32.°59W±0.°01, h12km, MW5.0/117, Moment Tensor Solution. s44,c51; s117,c176; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-3.98±.09; Mθθ0.20±.09; Mϕϕ3.78±.07; Mrθ0.07±.44; Mθϕ-0.09±.07; Mrϕ-0.03±.28; Best double couple: M=3.88200×10^16^ NP1:ϕ=179.00000°, δ=45.00000°, λ=-89.00000°. NP2:ϕ=358.00000°, δ=45.00000°, λ=-91.00000°. Principal axes: T 3.7830, Plg0.0000°; Azm89.0000°; N 0.1960, Plg1.0000°, Azm358.0000°; P -3.9810, Plg89.0000°, Azm193.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BGR **21** 02:26:30.7±0.0, 5.°35N×30.°98W, h10km*
**ISC 21 02:26:20.6±0.3, 4.°54N±0.°06×32.°64W±0.°06, h11km, n491, σ1§14/386, mb5.0/177, MS4.3/69, 10C-8D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NBMO** | **Morrinhos-CE** | **10.75** | **224** | *eP* | | **Pn** | **02 28 52.5** | **-2.2** |
| **RCBR** | **Riachuelo** | **10.80** | **198** | P | | **Pn** | **02 28 53.8** | **-1.6** |
| **RCBR** | **Riachuelo** | **10.80** | **198** | Pn | | **Pn** | **02 28 53.8** | **-1.6** |
| **NBPB** | **Pedra_Branca-C** | **12.19** | **215** | *eP* | | **Pn** | **02 29 12.6** | **-1.8** |
| **SACV** | **Santiago Islan** | **13.65** | **40** | Pn | | **Pn** | **02 29 34.1** | **-0.3** |
| **NBPN** | **Ponto Novo - B** | **17.04** | **206** | *eP* | | **P** | **02 30 20.9** | **0.0** |
| **MBO** | **M'Bour** | **18.29** | **57** | Pn | | **Pn** | **02 30 32.9** | **-1.7** |
| MBO | | | | IAmb | IAmb | | 02 30 53.5 | |
| comp=Z,220nm,1.5s | | | | | | | | |
| **GDU01** | **Guandu, BA** | **19.41** | **201** | *eP* | | **Pn** | **02 30 51.9** | **+3.8** |
| **MDP** | **Montagnes des** | **19.94** | **272** | P | | **P** | **02 30 50.9** | **-2.0** |
| comp=Z,13nm,1.0s,baz=59,slow=5.9,SNR=2.2 | | | | | | | | |
| MDP | | | | LR | LR | | 02 36 55.9 | |
| comp=Z,758nm,20.8s,baz=92,slow=32 | | | | | | | | |
| **SMTB** | **Santa Maria do** | **19.99** | **228** | *eP* | | **P** | **02 30 53.0** | **-0.4** |
| **MCPB** | **Macapa, AP** | **20.00** | **256** | *eP* | | **P** | **02 30 51.2** | **-2.4** |
| **PRPB** | **Parauapebas** | **20.19** | **238** | *eP* | | **P** | **02 30 53.8** | **-1.7** |
| **SDBA** | **SAO DESIDERIO** | **20.79** | **218** | *eP* | | **P** | **02 31 01.7** | **-0.4** |
| **CMC01** | **Camacan, BA** | **20.91** | **199** | *eP* | | Pn | 02 31 07.1 | +1.2 |
| **H10N3** | **ASCENSION HYDR** | **21.88** | **124** | T | | T | 02 53 49.3 | |
| baz=304,slow=75,SNR=166 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.88** | **124** | T | | T | 02 53 48.3 | |
| baz=304,slow=75,SNR=126 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.90** | **124** | T | | T | 02 53 52.2 | |
| baz=304,slow=75,SNR=194 | | | | | | | | |
| **ASCN** | **Ascension** | **22.04** | **124** | P | | **P** | **02 31 15.4** | **-0.2** |
| ASCN | | | | IAmb | IAmb | | 02 31 32.9 | |
| comp=Z,110nm,1.1s | | | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.15** | **199** | *eP* | | **P** | **02 31 21.0** | **+4.3** |
| **H10S3** | **ASCENSION HYDR** | **22.38** | **127** | T | | T | 02 54 30.2 | |
| baz=304,slow=74,SNR=139 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.39** | **127** | T | | T | 02 54 31.6 | |
| baz=276,slow=74,SNR=89 | | | | | | | | |
| **PEXB** | **Peixe** | **22.72** | **223** | *eP* | | **P** | **02 31 22.5** | **-0.3** |
| **ITTB** | **Itaituba** | **24.71** | **249** | *eP* | | **P** | **02 31 42.1** | **-0.1** |
| **DIAM** | **Diamantina, MG** | **25.17** | **205** | *eP* | | **P** | **02 31 47.7** | **+1.3** |
| **BDFB** | **Brasilia** | **25.18** | **217** | P | | **P** | **02 31 46.7** | **+0.2** |
| comp=Z,1.8nm,0.6s,baz=50,slow=14,SNR=3.9 | | | | | | | | |
| BDFB | | | | LR | LR | | 02 40 44.7 | |
| comp=Z,766nm,20.0s,baz=7.3,slow=34 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.18** | **217** | P | | **P** | **02 31 45.9** | **-0.6** |
| BDFB | | | | pmax | pmax | | | |
| comp=Z,7.0nm,1.0s | | | | | | | | |
| **BDFB** | **Brasilia** | **25.18** | **217** | P | | **P** | **02 31 45.9** | **-0.6** |
| **NPGB** | **Novo Progresso** | **25.43** | **243** | *eP* | | **P** | **02 31 48.2** | **-0.5** |
| **DBIC** | **Dimbokro** | **27.73** | **84** | P | | **P** | **02 32 07.5** | **-1.9** |
| comp=Z,3.7nm,0.7s,baz=243,slow=14,SNR=4.2 | | | | | | | | |
| DBIC | | | | LR | LR | | 02 41 07.3 | |
| comp=Z,876nm,18.0s,baz=282,slow=32 | | | | | | | | |
| **DBIC** | **Dimbokro** | **27.73** | **84** | P | | **P** | **02 32 09.1** | **-0.3** |
| DBIC | | | | pmax | pmax | | | |
| comp=Z,33nm,1.4s | | | | | | | | |
| **DBIC** | **Dimbokro** | **27.73** | **84** | P | | **P** | **02 32 09.1** | **-0.3** |
| DBIC | | | | IAmb | IAmb | | 02 32 15.0 | |
| comp=Z,33nm,1.4s | | | | | | | | |
| **PTGA** | **Pitinga** | **27.80** | **260** | P | | **P** | **02 32 10.2** | **+0.1** |
| comp=Z,1.5nm,0.5s,baz=335,slow=23,SNR=1.7 | | | | | | | | |
| PTGA | | | | LR | LR | | 02 42 11.1 | |
| comp=Z,1μm,19.9s,baz=60,slow=34 | | | | | | | | |
| **BOAV** | **Boa Vista** | **27.91** | **267** | *eP* | | **P** | **02 32 10.1** | **-1.1** |
| **MACI** | **Morro de la Ar** | **28.13** | **31** | P | | **P** | **02 32 14.0** | **+0.9** |
| **H05S1** | **Guadeloupe/Mar** | **29.46** | **291** | T | | T | 03 03 27.3 | |
| SNR=19 | | | | | | | | |
| **KOWA** | **Kowa** | **29.87** | **69** | P | | **P** | **02 32 28.8** | **+0.3** |
| KOWA | | | | IAmb | IAmb | | 02 32 29.3 | |
| comp=Z,28nm,1.4s | | | | | | | | |
| **SVN** | **Savane Anatole** | **29.89** | **292** | P | | **P** | **02 32 28.0** | **-0.8** |
| **H05N1** | **Guadeloupe/Mar** | **30.25** | **295** | T | | T | 03 04 16.8 | |
| SNR=10 | | | | | | | | |
| **CBE** | **Ff, Capester** | **30.67** | **294** | P | | **P** | **02 32 33.4** | **-2.2** |
| **ABD** | **La Joyeuse, An** | **30.69** | **295** | P | | **P** | **02 32 32.9** | **-2.9** |
| **BIRV** | **Birongo** | **33.84** | **282** | P | | **P** | **02 33 04.0** | **+0.5** |
| BIRV | | | | IAmb | IAmb | | 02 33 09.8 | |
| comp=Z,38nm,1.2s | | | | | | | | |
| **CUPR** | **Culebra, Puert** | **34.72** | **296** | P | | **P** | **02 33 09.9** | **-1.1** |
| CUPR | | | | IAmb | IAmb | | 02 33 18.1 | |
| comp=Z,27nm,1.0s | | | | | | | | |
| **SIV** | **San Ignacio** | **34.76** | **233** | P | | **P** | **02 33 11.2** | **-0.2** |
| comp=Z,5.1nm,0.8s,baz=86,slow=9.5,SNR=22 | | | | | | | | |
| SIV | | | | LR | LR | | 02 46 47.1 | |
| comp=Z,1μm,19.9s,baz=9.0,slow=35 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.94** | **74** | P | | **P** | **02 33 11.2** | **-1.8** |
| comp=Z,4.0nm,0.9s,baz=264,slow=9.3,SNR=13 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.94** | **74** | P | | **P** | **02 33 12.4** | **-0.6** |
| **HUMP** | **Col San Antoni** | **35.17** | **295** | P | | **P** | **02 33 14.4** | **-0.5** |
| HUMP | | | | IAmb | IAmb | | 02 33 15.4 | |
| comp=Z,33nm,1.1s | | | | | | | | |
| **SJG** | **San Juan** | **35.43** | **295** | LR | | LR | 02 44 35.7 | |
| comp=Z,544nm,21.6s,baz=100,slow=31 | | | | | | | | |
| **ETMB** | **Extrema** | **36.37** | **247** | *eP* | | **P** | **02 33 26.1** | **+0.9** |
| **SDV** | **Santo Domingo** | **37.97** | **279** | P | | **P** | **02 33 38.8** | **-0.3** |
| comp=Z,1.8nm,0.4s,baz=43,slow=22,SNR=4.4 | | | | | | | | |
| SDV | | | | LR | LR | | 02 49 31.4 | |
| comp=Z,386nm,19.2s,baz=98,slow=37 | | | | | | | | |
| **MDT** | **Midelt** | **38.42** | **40** | LR | | LR | 02 48 27.2 | |
| comp=Z,584nm,19.2s,baz=244,slow=35 | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.91** | **217** | P | | **P** | **02 33 45.3** | **-1.2** |
| comp=Z,3.2nm,0.9s,baz=47,slow=8.3,SNR=6.6 | | | | | | | | |
| CPUP | | | | LR | LR | | 02 49 09.9 | |
| comp=Z,590nm,21.6s,baz=42,slow=35 | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.91** | **217** | P | | **P** | **02 33 47.0** | **+0.4** |
| CPUP | | | | pmax | pmax | | | |
| comp=Z,8.0nm,1.2s | | | | | | | | |
| **CPUP** | **Villa Florida** | **38.91** | **217** | P | | **P** | **02 33 47.0** | **+0.4** |
| **URIC** | **Uribia, Colomb** | **39.57** | **283** | P | | **P** | **02 33 51.5** | **-0.8** |
| URIC | | | | IAmb | IAmb | | 02 33 54.2 | |
| comp=Z,39nm,1.3s | | | | | | | | |
| **OCAC** | **Ocana** | **40.58** | **277** | P | | **P** | **02 34 02.1** | **+1.2** |
| **LPAZ** | **La Paz** | **40.75** | **239** | P | | **P** | **02 34 02.1** | **-0.7** |
| comp=Z,1.9nm,0.8s,baz=55,slow=4.8,SNR=7.6 | | | | | | | | |
| LPAZ | | | | LR | LR | | 02 50 02.8 | |
| comp=Z,570nm,19.8s,baz=45,slow=35 | | | | | | | | |
| **LPAZ** | **La Paz** | **40.75** | **239** | *eP* | | **P** | **02 34 03.4** | **+0.6** |
| LPAZ | | | | pmax | pmax | | | |
| comp=Z,2.0nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **40.75** | **239** | P | | **P** | **02 34 03.0** | **+0.3** |
| **LPAZ** | **La Paz** | **40.75** | **239** | *eP* | | **P** | **02 34 03.1** | **+0.3** |
| **PLTB** | **Pedras Altas** | **41.26** | **208** | P | | **P** | **02 34 06.9** | **+0.9** |
| **ROSC** | **El Rosal** | **41.54** | **272** | P | | **P** | **02 34 09.8** | **+0.7** |
| comp=Z,2.9nm,0.3s,baz=117,slow=7.4,SNR=7.3 | | | | | | | | |
| ROSC | | | | LR | LR | | 02 52 21.0 | |
| comp=Z,915nm,18.4s,baz=76,slow=38 | | | | | | | | |
| **ROSC** | **El Rosal** | **41.54** | **272** | P | | **P** | **02 34 10.1** | **+1.0** |
| ROSC | | | | pmax | pmax | | | |
| comp=Z,60nm,1.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **41.54** | **272** | P | | **P** | **02 34 10.1** | **+1.0** |
| ROSC | | | | IAmb | IAmb | | 02 34 28.2 | |
| comp=Z,60nm,1.4s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **42.08** | **276** | P | | **P** | **02 34 10.6** | **-2.5** |
| **MTE** | **Manteigas** | **42.25** | **29** | P | | **P** | **02 34 16.6** | **+2.5** |
| **PB16** | **IPOC Station P** | **42.87** | **237** | P | | **P** | **02 34 19.6** | **-0.4** |
| **ESDC** | **Sonseca Array** | **43.53** | **33** | P | | **P** | **02 34 24.2** | **-0.2** |
| comp=Z,1.8nm,1.0s,baz=211,slow=8.4,SNR=5.4 | | | | | | | | |
| ESDC | | | | LR | LR | | 02 49 31.6 | |
| comp=Z,165nm,20.0s,baz=262,slow=32 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **43.53** | **33** | P | | **P** | **02 34 24.5** | **0.0** |
| **LVC** | **Limon Verde** | **44.55** | **231** | LR | | LR | 02 53 39.8 | |
| comp=Z,331nm,21.1s,baz=54,slow=37 | | | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.53** | **157** | T | | T | 03 23 26.1 | |
| SNR=9.3 | | | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.55** | **157** | T | | T | 03 23 28.4 | |
| **OTAV** | **Otavalo** | **45.96** | **266** | P | | **P** | **02 34 45.1** | **+0.3** |
| OTAV | | | | pmax | pmax | | | |
| comp=Z,9.0nm,1.3s | | | | | | | | |
| **OTAV** | **Otavalo** | **45.96** | **266** | P | | **P** | **02 34 45.1** | **+0.3** |
| **OTAV** | **Otavalo** | **45.96** | **266** | *eP* | | **P** | **02 34 45.4** | **+0.6** |
| **NNA** | **Nana** | **46.92** | **249** | LR | | LR | 02 54 24.5 | |
| comp=Z,497nm,19.1s,baz=81,slow=36 | | | | | | | | |
| **ATAH** | **Atahualpa** | **47.12** | **256** | LR | | LR | 02 55 15.5 | |
| comp=Z,1μm,18.0s,baz=66,slow=37 | | | | | | | | |
| **KEST** | **Kesra** | **49.56** | **46** | LR | | LR | 02 56 41.7 | |
| comp=Z,679nm,19.2s,baz=197,slow=37 | | | | | | | | |
| **BRU2** | **Volcan** | **49.87** | **278** | P | | **P** | **02 35 15.5** | **+0.8** |
| **SRBA** | **San Rafael, Bu** | **50.54** | **278** | P | | **P** | **02 35 20.5** | **+0.7** |
| SRBA | | | | IAmb | IAmb | | 02 35 34.6 | |
| comp=Z,20nm,1.4s | | | | | | | | |
| **PAL** | **Palisades** | **51.80** | **321** | P | | **P** | **02 35 29.9** | **+1.3** |
| baz=123 | | | | | | | | |
| **DUNO** | **Dulce Nombre,** | **52.67** | **279** | P | | **P** | **02 35 36.4** | **+0.8** |
| DUNO | | | | IAmb | IAmb | | 02 35 41.3 | |
| comp=Z,23nm,1.2s | | | | | | | | |
| **D62A** | **Allapoint, All** | **52.72** | **329** | P | | **P** | **02 35 36.5** | **+1.1** |
| **R58B** | **Mineral** | **52.92** | **315** | P | | **P** | **02 35 37.9** | **+0.9** |
| **N59A** | **State Game Lan** | **52.94** | **320** | P | | **P** | **02 35 39.5** | **+2.3** |
| baz=122 | | | | | | | | |
| **VAE** | **Valguarnera** | **53.98** | **46** | LR | | LR | 02 58 39.5 | |
| comp=Z,467nm,19.9s,baz=186,slow=36 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **54.25** | **311** | P | | **P** | **02 35 48.5** | **+1.7** |
| baz=113 | | | | | | | | |
| **Q56A** | **Snyder Ridge,** | **54.32** | **316** | P | | **P** | **02 35 49.2** | **+1.8** |
| Q56A | | | | IAmb | IAmb | | 02 35 54.7 | |
| comp=Z,25nm,1.1s | | | | | | | | |
| **BLA** | **Blacksburg** | **54.40** | **313** | P | | **P** | **02 35 48.2** | **+0.2** |
| BLA | | | | pmax | pmax | | | |
| comp=Z,16nm,1.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **54.40** | **313** | P | | **P** | **02 35 48.2** | **+0.2** |
| BLA | | | | IAmb | IAmb | | 02 35 55.9 | |
| comp=Z,16nm,0.9s | | | | | | | | |
| **V55A** | **Taylorsville** | **54.43** | **312** | P | | **P** | **02 35 49.0** | **+0.8** |
| V55A | | | | IAmb | IAmb | | 02 35 56.2 | |
| comp=Z,13nm,1.1s | | | | | | | | |
| **O56A** | **Blue Knob Stat** | **54.47** | **318** | P | | **P** | **02 35 49.1** | **+0.6** |
| baz=118 | | | | | | | | |
| **HODGE** | **Hodges** | **54.61** | **309** | P | | **P** | **02 35 51.0** | **+1.5** |
| HODGE | | | | IAmb | IAmb | | 02 35 57.2 | |
| comp=Z,13nm,1.2s | | | | | | | | |
| **TSUM** | **Tsumeb** | **54.75** | **117** | LR | | LR | 02 53 40.1 | |
| comp=Z,656nm,21.8s,baz=306,slow=30 | | | | | | | | |
| **TSUM** | **Tsumeb** | **54.75** | **117** | P | | **P** | **02 35 51.8** | **+0.9** |
| **OSSC** | **Osservatorio P** | **54.79** | **38** | P | | **P** | **02 35 51.7** | **+1.1** |
| OSSC | | | | IAmb | IAmb | | 02 35 56.7 | |
| comp=Z,28nm,1.5s | | | | | | | | |
| **J56A** | **Wolcott** | **54.87** | **321** | P | | **P** | **02 35 53.0** | **+1.9** |
| **BG3** | **Lake Jocassee** | **55.41** | **310** | P | | **P** | **02 35 56.2** | **+0.9** |
| BG3 | | | | IAmb | IAmb | | 02 36 03.5 | |
| comp=Z,16nm,1.1s | | | | | | | | |
| **MURB** | **Monte Urbino** | **55.45** | **39** | P | | **P** | **02 35 56.9** | **+1.4** |
| MURB | | | | IAmb | IAmb | | 02 35 59.2 | |
| comp=Z,29nm,1.5s | | | | | | | | |
| **N54A** | **Moraine State** | **55.75** | **318** | P | | **P** | **02 35 57.7** | **+0.1** |
| baz=118 | | | | | | | | |
| **M54A** | **Oil Creek Stat** | **55.79** | **318** | P | | **P** | **02 35 58.0** | **+0.1** |
| baz=118 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.92** | **20** | LR | | LR | 02 56 44.9 | |
| comp=Z,335nm,19.3s,baz=316,slow=33 | | | | | | | | |
| **P53A** | **Whipple** | **56.05** | **315** | P | | **P** | **02 36 01.0** | **+1.2** |
| P53A | | | | IAmb | IAmb | | 02 36 07.4 | |
| comp=Z,30nm,1.1s | | | | | | | | |
| **DAVA** | **Damuels** | **56.09** | **34** | *eP* | | **P** | **02 35 59.1** | **-1.1** |
| comp=Z,9.1nm,1.1s | | | | | | | | |
| **N53A** | **Lisbon** | **56.25** | **317** | P | | **P** | **02 36 02.4** | **+1.1** |
| **O53A** | **New Philadelph** | **56.26** | **316** | P | | **P** | **02 36 04.0** | **+2.7** |
| O53A | | | | IAmb | IAmb | | 02 36 08.9 | |
| comp=Z,22nm,1.1s | | | | | | | | |
| **O53A** | **New Philadelph** | **56.26** | **316** | P | | **P** | **02 36 01.2** | **-0.1** |
| baz=116 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.29** | **310** | LR | | LR | 02 54 44.2 | |
| comp=Z,335nm,21.9s,baz=114,slow=30 | | | | | | | | |
| **FETA** | **Feichten** | **56.41** | **34** | *eP* | | **P** | **02 36 02.1** | **-0.3** |
| comp=Z,5.1nm,1.1s | | | | | | | | |
| **M53A** | **WI Miller and** | **56.43** | **318** | P | | **P** | **02 36 01.9** | **-0.5** |
| baz=117 | | | | | | | | |
| **TZTN** | **Tazewell** | **56.44** | **311** | P | | **P** | **02 36 01.8** | **-0.9** |
| TZTN | | | | IAmb | IAmb | | 02 36 10.5 | |
| comp=Z,16nm,1.2s | | | | | | | | |
| **Q52A** | **Bidwell** | **56.45** | **315** | P | | **P** | **02 36 03.4** | **+0.7** |
| Q52A | | | | IAmb | IAmb | | 02 36 10.1 | |
| comp=Z,22nm,1.1s | | | | | | | | |
| **O52A** | **Adamsville** | **56.63** | **316** | P | | **P** | **02 36 04.7** | **+0.8** |
| O52A | | | | IAmb | IAmb | | 02 36 11.0 | |
| comp=Z,17nm,1.1s | | | | | | | | |
| **P52A** | **Corning** | **56.64** | **315** | P | | **P** | **02 36 04.0** | **0.0** |
| baz=115 | | | | | | | | |
| **RETA** | **Reutte** | **56.70** | **34** | *eP* | | **P** | **02 36 03.4** | **-1.0** |
| comp=Z,9.5nm,1.3s | | | | | | | | |
| **MOTA** | **Moosalm** | **56.81** | **34** | *eP* | | **P** | **02 36 03.9** | **-1.4** |
| comp=Z,6.7nm,1.0s | | | | | | | | |
| **PLCA** | **Paso Flores** | **56.87** | **214** | LR | | LR | 03 00 16.2 | |
| comp=Z,398nm,21.1s,baz=46,slow=36 | | | | | | | | |
| **SADO** | **Sadowa** | **57.05** | **322** | LR | | LR | 02 57 55.5 | |
| comp=Z,196nm,18.2s,baz=158,slow=33 | | | | | | | | |
| **WTTA** | **Wattenberg** | **57.06** | **35** | *eP* | | **P** | **02 36 06.2** | **-0.9** |
| comp=Z,9.2nm,1.3s | | | | | | | | |
| **WATA** | **Walderalm** | **57.07** | **34** | *eP* | | **P** | **02 36 06.8** | **-0.3** |
| comp=Z,9.1nm,1.3s | | | | | | | | |
| **P51A** | **Williamsport** | **57.23** | **315** | P | | **P** | **02 36 08.4** | **+0.2** |
| P51A | | | | IAmb | IAmb | | 02 36 15.0 | |
| comp=Z,17nm,1.0s | | | | | | | | |
| **SCHQ** | **Schefferville** | **57.24** | **337** | P | | **P** | **02 36 07.3** | **-0.7** |
| comp=Z,3.5nm,0.8s,baz=144,slow=10,SNR=3.6 | | | | | | | | |
| SCHQ | | | | LR | LR | | 02 56 49.6 | |
| comp=Z,149nm,19.6s,baz=82,slow=32 | | | | | | | | |
| **SCHQ** | **Schefferville** | **57.24** | **337** | P | | **P** | **02 36 08.0** | **+0.1** |
| SCHQ | | | | IAmb | IAmb | | 02 36 15.1 | |
| comp=Z,15nm,1.1s | | | | | | | | |
| **Q51A** | **Peebles** | **57.25** | **314** | P | | **P** | **02 36 09.1** | **+0.7** |
| Q51A | | | | IAmb | IAmb | | 02 36 15.8 | |
| comp=Z,18nm,1.1s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **57.28** | **35** | *eP* | | **P** | **02 36 08.8** | **+0.2** |
| comp=Z,7.3nm,1.2s | | | | | | | | |
| **FPAL** | **Fort Paine** | **57.32** | **308** | P | | **P** | **02 36 08.9** | **-0.1** |
| FPAL | | | | IAmb | IAmb | | 02 36 16.9 | |
| comp=Z,14nm,1.2s | | | | | | | | |
| **N51A** | **Ashland** | **57.35** | **317** | P | | **P** | **02 36 09.7** | **+0.7** |
| N51A | | | | IAmb | IAmb | | 02 36 16.4 | |
| comp=Z,22nm,0.9s | | | | | | | | |
| **R50A** | **Paris** | **57.67** | **313** | IAmb | IAmb | | 02 36 14.9 | |
| comp=Z,14nm,1.2s | | | | | | | | |
| **Y49A** | **Blount Mountai** | **57.74** | **307** | P | | **P** | **02 36 12.4** | **+0.5** |
| **APG** | **El Apazote** | **57.78** | **285** | LR | | LR | 03 01 31.0 | |
| comp=Z,146nm,20.0s,baz=92,slow=36 | | | | | | | | |
| **SWET** | **Sewanee** | **57.79** | **309** | IAmb | IAmb | | 02 36 20.0 | |
| comp=Z,25nm,1.3s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **57.87** | **36** | *eP* | | **P** | **02 36 13.1** | **+0.4** |
| comp=Z,2.1nm,0.5s | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **58.11** | **311** | IAmb | IAmb | | 02 36 22.2 | |
| comp=Z,19nm,1.2s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **58.22** | **32** | *eP* | | **P** | **02 36 14.9** | **-0.1** |
| baz=228,slow=6.8 | | | | | | | | |
| **R49A** | **Shelbyville** | **58.29** | **313** | P | | **P** | **02 36 16.7** | **+1.0** |
| R49A | | | | IAmb | IAmb | | 02 36 22.7 | |
| comp=Z,14nm,1.1s | | | | | | | | |
| **OBKA** | **Obir** | **58.34** | **37** | *eP* | | **P** | **02 36 17.4** | **+1.4** |
| comp=Z,7.5nm,1.1s | | | | | | | | |
| **CLTN** | **Cedars of Leba** | **58.39** | **310** | P | | **P** | **02 36 16.2** | **-0.2** |
| CLTN | | | | IAmb | IAmb | | 02 36 24.0 | |
| comp=Z,19nm,1.4s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **58.42** | **314** | IAmb | IAmb | | 02 36 23.9 | |
| comp=Z,24nm,1.2s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **58.42** | **314** | P | | **P** | **02 36 16.4** | **-0.2** |
| baz=113 | | | | | | | | |
| **V48A** | **Smith Brothers** | **58.65** | **309** | IAmb | IAmb | | 02 36 25.8 | |
| comp=Z,18nm,1.2s | | | | | | | | |
| **SOKA** | **Soboth** | **58.72** | **37** | *eP* | | **P** | **02 36 18.7** | **+0.1** |
| comp=Z,4.7nm,1.0s | | | | | | | | |
| **AAM** | **Ann Arbor** | **58.81** | **318** | P | | **P** | **02 36 20.0** | **+0.8** |
| AAM | | | | pmax | pmax | | | |
| comp=Z,37nm,1.2s | | | | | | | | |
| **AAM** | **Ann Arbor** | **58.81** | **318** | P | | **P** | **02 36 20.0** | **+0.8** |
| **Z47A** | **Carrollton** | **58.86** | **306** | P | | **P** | **02 36 20.0** | **+0.3** |
| **MOA** | **Molln** | **58.88** | **35** | P | | **P** | **02 36 19.7** | **+0.1** |
| comp=Z,7.2nm,1.7s | | | | | | | | |
| **O48B** | **Farmland** | **59.01** | **315** | P | | **P** | **02 36 20.5** | **-0.2** |
| baz=113 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **59.09** | **34** | P | | **P** | **02 36 20.2** | **-1.0** |
| GEC2 | | | | IAmb | IAmb | | 02 36 28.2 | |
| comp=Z,10nm,1.2s | | | | | | | | |
| **GERES** | **GERESS Array B** | **59.09** | **34** | P | | **P** | **02 36 20.2** | **-1.0** |
| comp=Z,1.8nm,0.9s,baz=240,slow=4.5,SNR=7.7 | | | | | | | | |
| **GERES** | **GERESS Array B** | **59.09** | **34** | P | | **P** | **02 36 21.6** | **+0.4** |
| **WCI** | **Wyandotte Cave** | **59.09** | **312** | P | | **P** | **02 36 21.6** | **+0.4** |
| WCI | | | | pmax | pmax | | | |
| comp=Z,13nm,1.1s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **59.09** | **312** | P | | **P** | **02 36 21.6** | **+0.4** |
| WCI | | | | IAmb | IAmb | | 02 36 28.9 | |
| comp=Z,13nm,1.1s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **59.18** | **34** | *i P* | | **P** | **02 36 22.4** | **+0.7** |
| KHC | | | | pmax | pmax | | | |
| comp=Z,13nm,1.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **59.18** | **34** | *eP* | | **P** | **02 36 21.4** | **-0.3** |
| **KHC** | **Kasperske Hory** | **59.18** | **34** | P | | **P** | **02 36 21.7** | **0.0** |
| KHC | | | | IAmb | IAmb | | 02 36 28.3 | |
| comp=Z,11nm,1.3s | | | | | | | | |
| **ARSA** | **Arzberg** | **59.30** | **36** | *eP* | | **P** | **02 36 23.2** | **+0.7** |
| comp=Z,3.2nm,1.1s | | | | | | | | |
| **ITM** | **Ithomi** | **59.40** | **49** | P | | **P** | **02 36 26.2** | **+2.7** |
| **CKRC** | **Cesky Krumlov** | **59.41** | **34** | *eP* | | **P** | **02 36 22.6** | **-0.7** |
| **WVT** | **Waverly** | **59.55** | **310** | P | | **P** | **02 36 24.1** | **-0.3** |
| WVT | | | | pmax | pmax | | | |
| comp=Z,13nm,1.4s | | | | | | | | |
| **WVT** | **Waverly** | **59.55** | **310** | P | | **P** | **02 36 24.1** | **-0.3** |
| WVT | | | | IAmb | IAmb | | 02 36 31.5 | |
| comp=Z,13nm,1.4s | | | | | | | | |
| **N47A** | **Urbana** | **59.63** | **315** | IAmb | IAmb | | 02 36 31.9 | |
| comp=Z,20nm,1.0s | | | | | | | | |
| **CONA** | **Conrad Observa** | **59.84** | **36** | *eP* | | **P** | **02 36 28.1** | **+1.7** |
| comp=Z,5.3nm,1.1s | | | | | | | | |
| **P46A** | **Rosedale** | **60.24** | **314** | P | | **P** | **02 36 30.1** | **+1.0** |
| **W45A** | **Hickory Valley** | **60.31** | **308** | P | | **P** | **02 36 30.8** | **+1.1** |
| **BRG** | **Berggiesshubel** | **60.33** | **32** | *eP* | | P | 02 36 36.4 | +6.8 |
| BRG | | | | Amp | | | 02 36 38.2 | |
| comp=Z,16nm,1.4s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **60.33** | **32** | *eP* | | P | 02 36 36.3 | +6.8 |
| BRG | | | | pmax | pmax | | | |
| comp=Z,16nm,1.4s | | | | | | | | |
| **SFIN** | **Lafayette** | **60.44** | **314** | IAmb | IAmb | | 02 36 37.1 | |
| comp=Z,19nm,1.1s | | | | | | | | |
| **SFIN** | **Lafayette** | **60.44** | **314** | P | | **P** | **02 36 30.6** | **+0.1** |
| baz=111 | | | | | | | | |
| **DIVS** | **Divibare** | **60.63** | **41** | P | | **P** | **02 36 33.5** | **+1

L40A **Anamosa** 63.94 315 P P 02 36 56.0 +2.1
W39A **Magazine** 63.95 307 P P 02 36 55.1 +0.9
baz=104
UZH **Uzhgorod** 63.97 37⇑ *i* P P 02 36 53.7 -0.3
CJR **Cluj-Napoca** 64.00 40 ⇓P P 02 36 55.3 +1.0
ARR **Arges** 64.17 41 ⇑P P 02 36 56.6 +1.1
S39A **Bolivar** 64.21 310 IAmb IAmb 02 37 01.5
comp=Z,11nm,1.2s
VOIR 64.47 41 ⇑P P 02 36 57.6 +0.1
FRB **Frobisher Bay** 64.56 343 P P 02 36 56.7 -0.9
comp=Z,3.8nm,1.0s,baz=188,slow=6.5,SNR=4.8
FRB LR LR 03 00 34.7
comp=Z,137nm,22.0s,baz=164,slow=32
ARCR **ARCALIA** 64.62 39 ⇓P P 02 36 59.6 +1.3
BOSA **Boshof** 64.63 124 P P 02 36 56.1 -2.8
comp=Z,6.5nm,1.1s,baz=309,slow=7.1,SNR=5.5
BOSA LR LR 02 59 32.5
comp=Z,366nm,20.6s,baz=311,slow=31
DOPR **Dopca** 64.88 41 ⇑P P 02 37 00.9 +0.8
MATP **Matopo** 64.91 115 LR LR 03 00 34.2
comp=Z,169nm,19.5s,baz=286,slow=32
237A **Washetta, Mont** 64.93 303 P P 02 37 00.2 -0.5
237A IAmb IAmb 02 37 08.2
comp=Z,14nm,1.1s
AKAS **Kas** 65.06 52 P P 02 37 02.0 +0.4
MLR **Muntele Rosu** 65.08 41 ⇓P P 02 37 02.2 +0.7
MLR **Muntele Rosu** 65.08 41 LR LR 03 03 35.9
comp=Z,242nm,21.4s,baz=285,slow=34
NOA **NORSAR Array B** 65.25 22 P P 02 37 00.6 -1.7
comp=Z,1.9nm,1.0s,baz=231,slow=6.4,SNR=3.2
NOA LR LR 03 03 42.6
comp=Z,94nm,18.7s,baz=250,slow=34
ISR **Istrita** 65.34 42 ⇑P P 02 37 03.9 +0.8
BUR08 **Bucovina Ar. S** 65.37 39 P P 02 37 04.4 +1.1
BUR08 IAmb IAmb 02 37 11.7
comp=Z,14nm,1.3s
BURAR **Bucovina Array** 65.37 39 P P 02 37 04.0 +0.7
COVR **Voineasa-Covas** 65.37 41 ⇑P P 02 37 03.6 +0.3
ELL **Elmali** 65.42 52 P P 02 37 04.0 +0.1
ELL pmax pmax
comp=Z,131nm,1.2s
ELL **Elmali** 65.42 52 P P 02 37 04.0 +0.1
LVV **L'vov** 65.50 36 *e*P P 02 37 04.3 +0.3
HFS **Hagfors** 65.63 23 LR LR 03 04 17.5
comp=Z,233nm,18.0s,baz=282,slow=35
TUL1 **Leonard** 65.71 307 P P 02 37 05.4 -0.2
baz=103
VRI **Vrincioaia** 65.72 41 ⇓P P 02 37 05.6 +0.1
TESR **Tescani** 65.89 41 ⇓P P 02 37 07.5 +0.9
SPMN **Marine on St.** 66.04 318 P P 02 37 06.0 -1.5
baz=109
I37A **Lemond, Waseca** 66.06 316 IAmb IAmb 02 37 13.8
comp=Z,17nm,1.1s
TLBR **Topalu** 66.17 43 ⇓P P 02 37 08.3 -0.1
USHA **Ushuia** 66.19 202 LR LR 03 05 15.0
comp=Z,123nm,18.0s,baz=40,slow=35
WHTX **Lake Whitney,** 66.31 303 P P 02 37 11.5 +2.0
baz=100
TIRR **Tirgusor** 66.39 43 P P 02 37 09.1 -0.7
TIRR pmax pmax
comp=Z,72nm,1.4s
TIRR **Tirgusor** 66.39 43 P P 02 37 09.1 -0.7
MDUB **Mudurnu** 67.28 48 P P 02 37 16.1 +0.4
833A **Chaparral WMA,** 67.42 299 P P 02 37 17.2 +0.5
baz=97
MILM **Milestii Mici** 67.43 41 ⇓P P 02 37 13.8 -2.5
SORM **Soroca** 67.53 39 ⇑P P 02 37 16.3 -0.6
B35A **Bob, Littlefor** 67.67 321 P P 02 37 18.9 +1.0
B35A IAmb IAmb 02 37 23.9
comp=Z,19nm,1.1s
LODK **Lodwar** 67.82 88 P P 02 37 20.1 +0.6
LODK IAmb IAmb 02 37 27.4
comp=Z,13nm,1.3s
SUMG **Summit** 68.05 358 *i* P P 02 37 19.0 -1.3
JCT **Junction City** 68.06 301 P P 02 37 21.2 +0.4
JCT pmax pmax
comp=Z,15nm,1.4s
JCT **Junction City** 68.06 301 P P 02 37 21.1 +0.4
JCT IAmb IAmb 02 37 31.4
comp=Z,15nm,1.4s
ECSD **EROS Data Cent** 68.21 315 IAmb IAmb 02 37 27.4
comp=Z,10nm,1.0s
ABTX **Abilene, Hawle** 68.24 303 P P 02 37 22.1 +0.3
ABTX IAmb IAmb 02 37 27.6
comp=Z,8.9nm,1.2s
ABTX **Abilene, Hawle** 68.24 303 P P 02 37 21.9 +0.1
baz=99
BR231 **Keskin MP Arra** 68.31 49 P P 02 37 23.2 +0.9
EIL **Elat** 68.31 60 LR LR 03 08 04.3
comp=Z,498nm,18.3s,baz=268,slow=37
ANTO **Ankara** 68.33 49 P P 02 37 23.8 +1.5
ANTO pmax pmax
comp=Z,26nm,1.3s
ANTO **Ankara** 68.33 49 P P 02 37 23.8 +1.5
F33A **5 Mile Ranch,** 68.56 318 IAmb IAmb 02 37 29.5
comp=Z,12nm,1.2s
BGNE **Belgrade** 68.74 313 P P 02 37 24.4 -0.4
baz=103
AKASG **Malin Array Be** 68.92 37 P P 02 37 25.4 -0.2
comp=Z,1.2nm,0.6s,baz=250,slow=6.0,SNR=15
AKASG **Malin Array Be** 68.92 37 IAmb IAmb 02 37 39.2
comp=Z,11nm,1.5s
AKBB **Malin Array Si** 68.92 37 P P 02 37 26.4 +0.8
AKBB pmax pmax
comp=Z,24nm,1.5s
AKBB **Malin Array Si** 68.92 37 P P 02 37 26.4 +0.8
AKBB IAmb IAmb 02 37 32.0
comp=Z,24nm,1.5s
BR131 **Keskin Array S** 68.94 49 P P 02 37 26.4 +0.2
BR131 pmax pmax
comp=Z,49nm,1.5s
BR131 **Keskin Array S** 68.94 49 P P 02 37 26.4 +0.2
BRTR **Keskin Array B** 68.94 49 P P 02 37 25.8 -0.4
comp=Z,4.5nm,1.0s,baz=243,slow=5.3,SNR=17
BRTR LR LR 03 09 33.3
comp=Z,133nm,18.6s,baz=268,slow=38
BRTR **Keskin Array B** 68.94 49 *e*P P 02 37 26.7 +0.5
BRTR pmax pmax
comp=Z,5.0nm,1.0s
BRTR **Keskin Array B** 68.94 49 P P 02 37 26.2 0.0
AGMN **Agassiz Nation** 69.00 320 IAmb IAmb 02 37 32.2
comp=Z,11nm,0.9s
GHAJ **Ghor Haditha** 69.05 58 P P 02 37 28.6 +1.8
NACGM **Naroch** 69.08 32 *i* P P 02 37 32.2 +5.6
MMAI **Mount Meron Ar** 69.15 56 LR LR 03 09 55.7
comp=Z,123nm,19.1s,baz=60,slow=38
ILGA **Ilgaz** 69.28 48 P P 02 37 28.2 -0.2
CBKS **Cedar Bluff** 69.38 310 P P 02 37 28.9 0.0
CBKS pmax pmax
comp=Z,23nm,1.2s
CBKS **Cedar Bluff** 69.38 310 P P 02 37 28.9 0.0
CBKS IAmb IAmb 02 37 35.6
comp=Z,23nm,1.2s
ULM **Lac du Bonnet** 69.61 322 P P 02 37 31.7 +1.7
ULM LR LR 03 02 29.8
comp=Z,7.4nm,1.0s,baz=122,slow=4.7,SNR=5.3
ULM **Lac du Bonnet** 69.61 322 P P 02 37 29.7 -0.2
comp=Z,102nm,21.5s,baz=111,slow=31
ULM pmax pmax
comp=Z,15nm,1.1s
ULM **Lac du Bonnet** 69.61 322 P P 02 37 29.7 -0.2
ULM IAmb IAmb 02 37 35.8
comp=Z,15nm,1.1s
SUSD **Miller** 70.02 316 P P 02 37 32.2 -0.5
baz=104
KMBO **Kilima Mbogo** 70.05 93 P P 02 37 34.4 +0.7
comp=Z,0.3nm,0.3s,baz=213,slow=5.5,SNR=5.3
KMBO LR LR 03 05 44.0
comp=Z,386nm,18.9s,baz=274,slow=34
KMBO **Kilima Mbogo** 70.05 93 *i* P P 02 37 35.8 +2.1
KMBO **Kilima Mbogo** 70.05 93 IAmb IAmb 02 37 42.5
comp=Z,12nm,1.5s
MSTX **Muleshoe** 71.02 304 IAmb IAmb 02 37 45.7
comp=Z,15nm,1.4s
MSTX **Muleshoe** 71.02 304 P P 02 37 39.4 +0.3
baz=98
TXAR **Lajitas Array** 71.26 299 P P 02 37 42.0 +1.4
comp=Z,0.5nm,0.9s,baz=126,slow=6.1,SNR=3.4
TXAR LR LR 03 08 40.2
comp=Z,41nm,20.5s,baz=66,slow=36
TXAR **Lajitas Array** 71.26 299 P P 02 37 40.9 +0.3
TXAR **Lajitas Array** 71.26 299 P P 02 37 40.9 +0.3
MDND **Maddock** 71.29 319 P P 02 37 40.4 +0.1
baz=104
FINES **FINESS Array B** 71.47 26 P P 02 37 41.0 0.0
comp=Z,1.6nm,0.7s,baz=224,slow=13,SNR=4.1
FINES LR LR 03 05 07.5
comp=Z,89nm,21.0s,baz=236,slow=33
FINES **FINESS Array B** 71.47 26 *e*P P 02 37 42.6 +1.5
FINES pmax pmax
comp=Z,2.0nm,0.6s
KSCO **Kaye Shedlock'** 71.64 310 P P 02 37 43.8 +1.0
KSCO **Kaye Shedlock'** 71.64 310 P P 02 37 42.9 +0.1
baz=99
E28A **Huff** 71.71 318 P P 02 37 42.7 -0.2
T25A **Trinidad** 72.76 307 P P 02 37 49.9 +0.3
T25A **Trinidad** 72.76 307 P P 02 37 48.8 -0.8
baz=98
Q24A **Divide** 73.58 309 IAmb IAmb 02 38 02.6
comp=Z,22nm,1.1s
Q24A **Divide** 73.58 309 P P 02 37 55.6 +1.1
baz=98
SDCO **Great Sand Dun** 73.69 308 P P 02 37 56.0 +0.8
ISCO **Idaho Springs** 74.04 310 IAmb IAmb 02 38 05.4
comp=Z,18nm,1.1s
MARD **Mardin** 74.08 53 P P 02 37 57.7 +0.5
MARD IAmb IAmb 02 38 05.3
comp=Z,28nm,1.4s
ANMO **Albuquerque** 74.16 305 LR LR 03 06 42.6
comp=Z,533nm,20.9s,baz=92,slow=33
ANMO **Albuquerque** 74.16 305 *i* P P 02 37 58.5 +0.6
ANMO pmax pmax
comp=Z,11nm,1.7s
ANMO **Albuquerque** 74.16 305 P P 02 37 58.6 +0.8
BNM **Barren Site** 74.22 304 P P 02 37 58.9 +0.6
N23A **Red Feather La** 74.44 311 P P 02 38 00.5 +1.0
N23A IAmb IAmb 02 38 07.5
comp=Z,24nm,1.1s
N23A **Red Feather La** 74.44 311 P P 02 37 59.7 +0.2
baz=98
FFC **Flin Flon** 74.45 326 P P 02 37 58.3 -0.6
FFC pmax pmax
comp=Z,23nm,1.2s
FFC **Flin Flon** 74.45 326 P P 02 37 58.3 -0.6
FFC IAmb IAmb 02 38 05.9
comp=Z,23nm,1.1s
OBN **Obninsk** 74.47 34 *e*P P 02 38 01.4 +2.4
OBN pmax pmax
comp=Z,32nm,1.4s
S22A **4UR Ranch, Cre** 74.74 308 P P 02 38 02.2 +0.9
baz=96
ATD **Arta Tunnel** 74.90 79 LR LR 03 08 05.6
comp=Z,182nm,21.4s,baz=295,slow=34
ARCES **ARCESS Array B** 75.01 18 LR LR 03 07 16.0
comp=Z,139nm,19.1s,baz=235,slow=33
SMCO **Snowmass** 75.01 309 IAmb IAmb 02 38 11.1
comp=Z,16nm,1.2s
121A **Cookes Peak, D** 75.05 302 P P 02 38 04.0 +0.9
baz=94
GURO **Guroymak-BITLI** 75.20 51 IAmb IAmb 02 38 06.1
comp=Z,15nm,1.5s
VORR **Voronezh** 75.23 38 *e*P P 02 38 02.9 -0.5
VORR pmax pmax
comp=Z,10.0nm,0.3s
LAO **LASA Array** 75.47 317 P P 02 38 05.5 +0.5
GEVA **Gevas** 75.98 52 P P 02 38 09.7 +1.4
GEVA IAmb IAmb 02 38 23.0
comp=Z,24nm,1.4s
MVCO **Mesa Verde** 76.01 307 P P 02 38 09.4 +0.8
O20A **White River Ci** 76.09 310 IAmb IAmb 02 38 16.8
comp=Z,20nm,1.1s
O20A **White River Ci** 76.09 310 P P 02 38 09.5 +0.6
baz=96
PV01 **Paradox Valley** 76.15 308 P P 02 38 10.3 +1.0
PV01 IAmb IAmb 02 38 17.6
comp=Z,12nm,1.3s
KIV **Kislovodsk** 76.30 46 *e*P P 02 38 11.2 +1.3
KIV pmax pmax
comp=Z,10.0nm,1.1s
KBZ **Khabaz** 76.43 46 LR LR 03 14 36.5
comp=Z,65nm,19.6s,baz=310,slow=38
PV20 **West Nyswonger** 76.48 308 P P 02 38 12.0 +0.8
PV20 IAmb IAmb 02 38 24.0
comp=Z,17nm,1.4s
ONI **Oni** 76.70 47 P P 02 38 13.8 +1.6
ONI pmax pmax
comp=Z,12nm,1.3s
ONI **Oni** 76.70 47 P P 02 38 13.8 +1.6
ONI IAmb IAmb 02 38 36.5
comp=Z,12nm,1.3s
LPIG **La Paz** 76.91 294 LR LR 03 11 11.6
comp=Z,83nm,19.3s,baz=76,slow=35
X18A **Snowflake** 76.99 304 P P 02 38 14.8 +0.7
RDMU **Red Mountain** 77.14 310 IAmb IAmb 02 38 27.2
comp=Z,19nm,1.5s
BW06 **Boulder Array** 77.33 313 IAmb IAmb 02 38 36.3
comp=Z,12nm,1.4s
PDAR **Pinedale Array** 77.33 313 P P 02 38 15.0 -0.9
comp=Z,0.7nm,0.8s,baz=100,slow=6.2,SNR=7.0
PDAR LR LR 03 08 38.0
comp=Z,202nm,20.9s,baz=114,slow=33
RAYN **Ar Rayn** 77.33 67 P P 02 38 17.2 +1.1
RAYN pmax pmax
comp=Z,13nm,1.5s
RAYN **Ar Rayn** 77.33 67 P P 02 38 17.2 +1.1
KLMR **Klimovskoe** 77.40 29 *e*P P 02 38 13.8 -1.8
KLMR *e* 02 41 08.3
KLMR pmax pmax
comp=Z,28nm,1.4s
KLMR **Klimovskoe** 77.40 29 *e*P P 02 38 13.8 -1.8
KLMR AMP 02 38 28.7
comp=Z,28nm,1.4s
KLMR *e*PP PP 02 41 08.3 -1.6
GNI **Garni** 77.44 50 LR LR 03 15 36.3
comp=Z,102nm,18.2s,baz=264,slow=38
GNI **Garni** 77.44 50 *i* P P 02 38 17.0 +0.5
GNI pmax pmax
comp=Z,29nm,1.9s
TUC **Tucson** 77.57 302 P P 02 38 18.0 +0.7
TUC pmax pmax
comp=Z,5.0nm,1.1s
TUC **Tucson** 77.57 302 P P 02 38 18.0 +0.7
P18A **Preston Nutter** 77.58 309 IAmb IAmb 02 38 25.4
comp=Z,24nm,1.4s
SRU **San Rafael Swe** 77.75 309 P P 02 38 18.3 0.0
SRU pmax pmax
comp=Z,11nm,1.2s
SRU **San Rafael Swe** 77.75 309 P P 02 38 18.3 0.0
SRU IAmb IAmb 02 38 30.9
comp=Z,11nm,1.2s
SPITS **Spitsbergen Ar** 77.77 9 LR LR 03 05 21.5
comp=Z,94nm,20.6s,baz=79,slow=30
SPB2 **Spitsbergen Ar** 77.77 9 P P 02 38 18.3 +0.9
NAX **Nakhchivan** 77.94 51 P P 02 38 21.0 +1.8
YMP **Mirror Lake Pl** 77.95 315 IAmb IAmb 02 38 42.6
comp=Z,30nm,1.5s
EGMT **Eagleton** 78.03 318 IAmb IAmb 02 38 26.5
comp=Z,21nm,1.3s
LKWY **Lake** 78.11 314 P P 02 38 21.3 +1.0
LKWY pmax pmax
comp=Z,16nm,1.3s
LKWY **Lake** 78.11 314 P P 02 38 21.3 +1.0
LKWY IAmb IAmb 02 38 32.9
comp=Z,16nm,1.3s
LOHW **Long Hollow** 78.17 313 IAmb IAmb 02 38 28.0
comp=Z,19nm,1.3s
WUAZ **Wupatki** 78.21 305 IAmb IAmb 02 38 34.1
comp=Z,13nm,1.1s
X16A **Lo Mia Camp, P** 78.22 304 P P 02 38 22.8 +1.8
H17A **Grant Village** 78.22 314 P P 02 38 21.6 +0.7
H17A **Grant Village** 78.22 314 P P 02 38 21.9 +1.0
baz=95
SNOW **Snow King Moun** 78.27 313 P P 02 38 22.6 +1.4
SNOW IAmb IAmb 02 38 28.2
comp=Z,12nm,1.1s
FLWY **Flagg Ranch** 78.28 314 IAmb IAmb 02 38 29.0
comp=Z,28nm,1.3s
TMUT **Trail Mountain** 78.30 309 P P 02 38 21.7 +0.2
REDW **Red Top Meadow** 78.33 313 IAmb IAmb 02 38 28.9
comp=Z,15nm,1.2s
TPAW **Teton Pass** 78.41 313 P P 02 38 22.5 +0.5
TPAW IAmb IAmb 02 38 29.3
comp=Z,12nm,1.2s
YHH **Holmes Hill** 78.45 315 IAmb IAmb 02 38 30.2
comp=Z,11nm,1.2s
AHID **Auburn Hatcher** 78.46 313 P P 02 38 22.5 +0.3
RES **Resolute Bay** 78.52 346 LR LR 03 09 51.6
comp=Z,91nm,20.1s,baz=92,slow=33
RES **Resolute Bay** 78.52 346 IAmb IAmb 02 38 29.0
comp=Z,14nm,1.2s
YMR **Madison River** 78.52 315 P P 02 38 22.6 +0.1
YMR IAmb IAmb 02 38 30.7
comp=Z,17nm,1.1s
JLU **Jordanelle** 78.57 310 IAmb IAmb 02 38 37.9
comp=Z,21nm,1.5s
GANJ **Ganja** 78.68 50 P P 02 38 25.3 +2.1
QLMT **Earthquake Lak** 78.87 315 P P 02 38 25.6 +1.2
MTPU **Mount Pierson** 78.99 308 IAmb IAmb 02 38 38.5
comp=Z,28nm,1.4s
U15A **North Rim** 79.00 306 P P 02 38 26.3 +0.9
NLU **North Lily Min** 79.00 310 IAmb IAmb 02 38 38.0
comp=Z,15nm,1.3s
PKCU **Pink Cliffs** 79.06 307 P P 02 38 26.1 +0.3
PKCU IAmb IAmb 02 38 33.7
comp=Z,19nm,1.5s
TCRU **Three Creeks R** 79.22 308 P P 02 38 27.4 +0.9
MNGR **Mingechevir, A** 79.27 50 P P 02 38 28.4 +2.1
214A **Organ Pipe Nat** 79.28 302 P P 02 38 27.4 +0.7
214A **Organ Pipe Nat** 79.28 302 P P 02 38 27.5 +0.8
baz=91
HRY **Holter Researc** 79.30 317 P P 02 38 27.0 +0.4
SEKA **Sheki** 79.38 49 P P 02 38 29.4 +2.3
Y14A **Wickenburg** 79.49 304 P P 02 38 29.0 +1.1
DUG **Dugway, Tooele** 79.58 310 P P 02 38 28.9 +0.6
DUG pmax pmax
comp=Z,10.0nm,1.1s
DUG **Dugway, Tooele** 79.58 310 P P 02 38 28.9 +0.6
EUNU **Eureka** 79.64 352 P P 02 38 28.1 +0.3
EUNU IAmb IAmb 02 38 35.4
comp=Z,36nm,1.5s
DLMT **Dillon** 79.73 315 P P 02 38 29.6 +0.6
DLMT IAmb IAmb 02 38 37.1
comp=Z,15nm,1.2s
BGU **Big Grassy Mou** 79.78 311 IAmb IAmb 02 38 37.0
comp=Z,16nm,1.3s
MCMT **McKenzie Canyo** 79.87 315 P P 02 38 31.1 +1.2
CCUT **Cedar City** 79.90 307 IAmb IAmb 02 38 43.5
comp=Z,18nm,1.3s
BCYI **Bear Canyon** 80.24 314 P P 02 38 32.4 +0.5
PDMCI **Parker Dam,Lak** 80.44 304 P P 02 38 34.3 +1.4
baz=91
PRGR **Permogore** 80.45 28 *e*P P 02 38 31.6 -0.7
PRGR pmax pmax
comp=Z,327nm,1.8s
LKRN **Lenkeran, Azer** 80.48 52 P P 02 38 34.9 +1.9
MSO **Missoula** 80.76 317 P P 02 38 34.9 +0.4
EDM **Edmonton** 80.82 323 P P 02 38 35.1 +0.5
EDM pmax pmax
comp=Z,53nm,1.2s
EDM **Edmonton** 80.82 323 P P 02 38 35.1 +0.5
WALA **Waterton Lakes** 80.87 319 IAmb IAmb 02 38 42.3
comp=Z,25nm,1.2s
GLA **Glamis** 81.00 303 P P 02 38 36.4 +0.4
GLA pmax pmax
comp=Z,4.0nm,0.8s
GLA **Glamis** 81.00 303 P P 02 38 36.4 +0.4
JTMT **Jette** 81.04 317 P P 02 38 36.3 +0.3
PRN **Pahroc Range** 81.24 307 P P 02 38 38.1 +0.8
IRM **Iron Mountain** 81.27 304 P P 02 38 38.4 +1.0
baz=90
SHPR **Sheep Range** 81.31 306 P P 02 38 38.6 +0.9
ELK **Elko** 81.45 310 LR LR 03 10 14.1
comp=Z,201nm,21.9s,baz=92,slow=32
R11A **Troy Canyon, C** 81.67 308 P P 02 38 40.4 +0.8
baz=91
GMRC **Granite Mounta** 81.70 304 P P 02 38 40.2 +0.4
baz=90
S11A **Rachel** 81.80 307 P P 02 38 40.4 +0.1
TUQ **Turquoise Moun** 81.92 305 P P 02 38 41.5 +0.6
baz=90
BELC **Belle Mtn. Jos** 81.98 304 P P 02 38 41.5 +0.2
baz=90
KIRV **Kirov** 82.00 32 LR LR 03 14 01.7
comp=Z,115nm,18.2s,baz=295,slow=35
TPNV **Topopah Spring** 82.19 307 P P 02 38 42.6 +0.2
TPNV pmax pmax
comp=Z,9.0nm,1.5s
TPNV **Topopah Spring** 82.19 307 P P 02 38 42.6 +0.2
YKA **Yellowknife Ar** 82.28 332 P P 02 38 40.3 -1.7
comp=Z,3.1nm,1.0s,baz=96,slow=5.3,SNR=15
YKA LR LR 03 11 52.3
comp=Z,93nm,20.5s,baz=303,slow=33
YKA **Yellowknife Ar** 82.28 332 *e*P P 02 38 40.9 -1.1
YKA pmax pmax
comp=Z,3.0nm,1.0s
BELA **Belgrano 2** 82.31 180 P P 02 38 41.9 +0.1
BELA IAmb IAmb 02 38 43.0
comp=Z,13nm,1.2s
PFO **Pinyon Flats O** 82.37 303 LR LR 03 13 32.6
comp=Z,238nm,19.2s,baz=64,slow=34
PFO **Pinyon Flats O** 82.37 303 P P 02 38 43.6 +0.3
PFO pmax pmax
comp=Z,9.0nm,1.5s
PFO **Pinyon Flats O** 82.37 303 P P 02 38 43.6 +0.3
QSM **Queen of Sheba** 82.69 306 IAmb IAmb 02 38 52.5
comp=Z,16nm,1.2s
BMN **Battle Mountai** 82.96 310 P P 02 38 47.0 +0.7
BMN pmax pmax
comp=Z,11nm,1.3s
BMN **Battle Mountai** 82.96 310 P P 02 38 47.0 +0.7
BMN IAmb IAmb 02 38 59.0
comp=Z,11nm,1.3s
NEW **Newport** 82.96 318 LR LR 03 10 57.3
comp=Z,245nm,21.8s,baz=84,slow=32
NEW **Newport** 82.96 318 P P 02 38 46.2 +0.2
NEW pmax pmax
comp=Z,7.0nm,1.1s
NEW **Newport** 82.96 318 P P 02 38 46.2 +0.2
MURC **Murrieta** 82.98 303 P P 02 38 46.7 +0.3
baz=89
BMO **Blue Mountains** 83.04 314 IAmb IAmb 02 38 59.0
comp=Z,14nm,1.4s
GRAC **Grapevine Rang** 83.08 307 P P 02 38 47.4 +0.5
GRAC IAmb IAmb 02 38 54.6
comp=Z,14nm,1.4s
GRAC **Grapevine Rang** 83.08 307 P P 02 38 48.2 +1.3
baz=90
MPMC **Manual Prospec** 83.19 306 P P 02 38 48.1 +0.5
baz=89
LCH **Last Change Ra** 83.31 307 P P 02 38 48.4 +0.3
LCH IAmb IAmb 02 39 01.1
comp=Z,15nm,1.5s
LRMC **Laurel Mtn Rad** 83.36 305 P P 02 38 49.1 +0.7
baz=89
EDW2 **Edwards Air Fo** 83.62 304 P P 02 38 50.5 +0.8
baz=89
CCAC **Calif City Air** 83.64 305 P P 02 38 50.2 +0.5
CCAC IAmb IAmb 02 38 51.7
comp=Z,12nm,1.2s
E09A **Wood Farm, Sta** 83.64 316 P P 02 38 50.3 +0.8
E09A IAmb IAmb 02 38 56.0
comp=Z,8.7nm,0.8s
KVN **Kaiserville** 83.64 309 P P 02 38 50.7 +0.8
KVN pmax pmax
comp=Z,4.0nm,1.1s
KVN **Kaiserville** 83.64 309 P P 02 38 50.7 +0.8
CWC **Cottonwood Cre** 83.67 306 P P 02 38 50.5 +0.5
baz=89
NVAR **Mina Array Bea** 83.81 308 P P 02 38 50.1 -0.7
comp=Z,0.2nm,0.4s,baz=113,slow=5.4,SNR=4.5
NVAR LR LR 03 13 44.1
comp=Z,91nm,19.7s,baz=108,slow=34
NVAR **Mina Array Bea** 83.81 308 P P 02 38 51.7 +0.9
J08A **Circle Bar Ran** 83.88 313 P P 02 38 52.2 +1.3
LHV **Little Huntoon** 83.97 308 P P 02 38 52.8 +1.5
LHV IAmb IAmb 02 39 05.3
comp=Z,16nm,1.3s
RYN **Ryan** 83.98 308 P P 02 38 52.4 +0.8
RYN IAmb IAmb 02 39 04.2
comp=Z,10nm,1.3s
ISA **Isabella, Lake** 84.00 305 P P 02 38 53.0 +1.4
ISA pmax pmax
comp=Z,8.0nm,1.1s
ISA **Isabella, Lake** 84.00 305 P P 02 38 53.0 +1.4
ISA IAmb IAmb 02 38 59.5
comp=Z,8.2nm,1.1s
ISA **Isabella, Lake** 84.00 305 P P 02 38 52.1 +0.5
baz=89
E08A **Dider Farm, El** 84.27 316 P P 02 38 52.2 -0.4
E08A IAmb IAmb 02 38 59.8
comp=Z,12nm,1.2s
B08A **Colville Reser** 84.44 318 P P 02 38 53.2 -0.3
YERR **Yerington** 84.53 309 P P 02 38 54.6 +0.2
PNT **Penticton** 84.62 319 P P 02 38 55.9 +1.5
PNT pmax pmax
comp=Z,6.0nm,1.0s
PNTR **Pine Nut** 84.81 309 P P 02 38 55.9 +0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **E07A** | **Sunnyside** | **84.82** | **316** | P | **P** | **02** | **38** | **56.3 +0.8** |
| E07A | | | | IAmb | IAmb | 02 | 39 | 03.3 |
| | comp=Z,18nm,1.3s | | | | | | | |
| **VCNR** | **Virginia City** | **84.84** | **309** | P | **P** | **02** | **38** | **56.6 +0.6** |
| VCNR | | | | IAmb | IAmb | 02 | 39 | 08.0 |
| | comp=Z,11nm,1.5s | | | | | | | |
| **MOD** | **Modoc Plateau** | **85.26** | **312** | IAmb | IAmb | 02 | 39 | 06.3 |
| | comp=Z,19nm,1.2s | | | | | | | |
| **BEKR** | **Beckworth** | **85.37** | **310** | IAmb | IAmb | 02 | 39 | 11.3 |
| | comp=Z,20nm,1.5s | | | | | | | |
| **I05D** | **Terrebonne, OR** | **85.93** | **314** | P | **P** | **02** | **39** | **01.2 0.0** |
| | baz=88 | | | | | | | |
| **F05D** | **White Salmon** | **85.95** | **316** | P | **P** | **02** | **39** | **02.2 +1.1** |
| | baz=88 | | | | | | | |
| **ORV** | **Oroville** | **86.27** | **309** | IAmb | IAmb | 02 | 39 | 10.1 |
| | comp=Z,16nm,1.5s | | | | | | | |
| **B05A** | **Bryant** | **86.29** | **318** | P | **P** | **02** | **39** | **01.5 -1.1** |
| | baz=87 | | | | | | | |
| **M04C** | **Macdoel** | **86.41** | **311** | P | **P** | **02** | **39** | **04.3 +0.6** |
| | baz=87 | | | | | | | |
| **A36M** | **Sachs Harbour** | **86.53** | **342** | IAmb | IAmb | 02 | 39 | 10.3 |
| | comp=Z,14nm,1.2s | | | | | | | |
| **A36M** | **Sachs Harbour** | **86.53** | **342** | P | **P** | **02** | **39** | **02.8 -0.6** |
| | baz=86 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **86.54** | **313** | P | **P** | **02** | **39** | **04.6 +0.3** |
| | baz=87 | | | | | | | |
| **L04D** | **Klamath Falls** | **86.74** | **312** | P | **P** | **02** | **39** | **05.6 +0.3** |
| | baz=87 | | | | | | | |
| **D04E** | **Lakebay** | **86.80** | **317** | P | **P** | **02** | **39** | **05.4 +0.2** |
| | baz=87 | | | | | | | |
| **ARU** | **Arti** | **86.92** | **34** | LR | LR | 03 | 18 | 07.1 |
| | comp=Z,139nm,19.2s,baz=286,slow=36 | | | | | | | |
| **ARU** | **Arti** | **86.92** | **34***d* | *i* P | **P** | **02** | **39** | **01.9 -3.7** |
| ARU | | | | S | **SKSac** | **02** | **49** | **27.4 -5.2** |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,16nm,2.0s | | | | | | | |
| **D03D** | **Eldon** | **86.99** | **317** | P | **P** | **02** | **39** | **07.3 +1.1** |
| | baz=87 | | | | | | | |
| **UOSS** | **Minazif** | **87.06** | **65** | P | **P** | **02** | **39** | **06.9 -0.1** |
| **YBH** | **Yreka Blue Hor** | **87.07** | **311** | LR | LR | 03 | 14 | 20.4 |
| | comp=Z,102nm,21.5s,baz=61,slow=33 | | | | | | | |
| **ABKAR** | **Akbulak array** | **88.28** | **41** | P | **P** | **02** | **39** | **13.1 +0.7** |
| **WSAR** | **Wadi Sarin** | **89.39** | **67** | LR | LR | 03 | 19 | 34.9 |
| | comp=Z,422nm,21.2s,baz=310,slow=36 | | | | | | | |
| **BBB** | **Bella Bella** | **89.81** | **322** | LR | LR | 03 | 17 | 08.0 |
| | comp=Z,124nm,19.2s,baz=126,slow=34 | | | | | | | |
| **INK** | **Inuvik** | **89.83** | **339** | LR | LR | 03 | 17 | 52.0 |
| | comp=Z,135nm,18.8s,baz=46,slow=34 | | | | | | | |
| **DLBC** | **Dease Lake** | **90.03** | **329** | LR | LR | 03 | 15 | 35.3 |
| | comp=Z,118nm,21.3s,baz=102,slow=33 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **91.48** | **333** | P | **P** | **02** | **39** | **28.3 +1.2** |
| | baz=78 | | | | | | | |
| **EPYK** | **Eagle Plains** | **91.48** | **337** | P | **P** | **02** | **39** | **27.4 +0.4** |
| | baz=75 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **92.38** | **336** | IAmb | IAmb | 02 | 39 | 36.3 |
| | comp=Z,12nm,1.4s | | | | | | | |
| **DAWY** | **Dawson** | **93.20** | **335** | P | **P** | **02** | **39** | **34.2 -0.8** |
| | baz=73 | | | | | | | |
| **BRVK** | **Borovoye** | **94.12** | **36** | *i* P | **P** | **02** | **39** | **40.3 +0.9** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,22nm,5.8s | | | | | | | |
| **BRVK** | **Borovoye** | **94.12** | **36** | P | **P** | **02** | **39** | **35.4 -3.9** |
| BRVK | | | | IAmb | IAmb | 02 | 39 | 37.6 |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **94.58** | **180** | LR | LR | 03 | 16 | 21.4 |
| | comp=Z,89nm,18.9s,baz=256,slow=32 | | | | | | | |
| **QSPA** | **South Pole Qui** | **94.58** | **180** | P | **P** | **02** | **39** | **42.3 +0.9** |
| **J26L** | **Joseph Creek** | **94.78** | **336** | P | **P** | **02** | **39** | **41.7 -0.6** |
| | baz=69 | | | | | | | |
| **M27K** | **Edge Creek, AK** | **94.80** | **334** | P | **P** | **02** | **39** | **41.9 -0.6** |
| | baz=71 | | | | | | | |
| **SCRK** | **Sand Creek** | **95.14** | **336** | P | **P** | **02** | **39** | **41.8 -2.2** |
| | baz=69 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **95.30** | **341** | P | **P** | **02** | **39** | **44.6 +0.1** |
| | baz=63 | | | | | | | |
| **NRIK** | **Noril'sk** | **95.99** | **18** | LR | LR | 03 | 20 | 28.6 |
| | comp=Z,112nm,21.0s,baz=303,slow=34 | | | | | | | |
| **IL31** | | **96.00** | **337** | P | **P** | **02** | **39** | **49.4 +1.8** |
| IL31 | | | | IAmb | IAmb | 02 | 39 | 56.4 |
| | comp=Z,11nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **96.00** | **337** | P | **P** | **02** | **39** | **47.1 -0.6** |
| | comp=Z,1.1nm,0.9s,baz=51,slow=5.1,SNR=6.7 | | | | | | | |
| ILAR | | | | LR | LR | 03 | 20 | 10.0 |
| | comp=Z,136nm,20.2s,baz=74,slow=34 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **99.71** | **37** | LR | LR | 03 | 23 | 25.9 |
| | comp=Z,83nm,21.3s,baz=294,slow=34 | | | | | | | |
| **CD2** | **Chengdu** | **125.47** | **47** | PKP | **PKPdf** | **02** | **45** | **21.9 -0.8** |
| **CMAR** | **Chiang Mai Arr** | **127.10** | **63** | PKP | **PKPdf** | **02** | **45** | **25.2 -0.9** |
| | comp=Z,0.6nm,0.3s,baz=306,slow=3.3,SNR=5.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **156.97** | **147** | PKP | **PKPdf** | **02** | **46** | **16.5 -0.8** |
| | comp=Z,1.5nm,1.2s,baz=159,slow=0.9,SNR=4.7 | | | | | | | |

*IDC **21** 02:28:19.3±0.3,27.˚88N×127.˚66E,h0km,mb3.7/6, mb1 3.8/7,mb1mx3.5/55,mbtmp3.7/7,ML3.6/1,Error ellipse: s-maj=10.9km s-min=3.0km az=67.0*
*JMA **21** 02:28:19.2±0.1,28.˚13N×128.˚07E,h13km±2km,M3.8*
*NIED **21** 02:28:19.2,28.˚13N×128.˚07E,h13km,MW4.1,Moment Tensor Solution. s3 Moment tensor: Scale 10^15^Nm; Mrr-0.27; Mθθ0.57; Mφφ-0.30; Mrθ-0.24; Mθφ1.16; Mφr-0.47; Fault plane solution: Mo1.34000×10^15^ NP1:φs11.00000°, δ89.00000°,λ-157.00000°. NP2:φs281.00000°, δ67.00000°,λ-1.00000°.*

**ISC 21 02:28:19.1±1.6,28.˚03N±0.˚04×128.˚03E±0.˚05,h5km±11km, n19,σ1§42/28,mb3.6/6,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **JOKE** | **Okinoerabujima** | **0.82** | **144** | P | **Pg** | **02** | **28** | **35.9 +1.0** |
| JOKE | | | | *e*S | **Sg** | **02** | **28** | **47.3 +1.7** |
| **JTK** | **Tokunoshima** | **0.85** | **106** | P | **Pg** | **02** | **28** | **35.2 -0.3** |
| JTK | | | | *e*S | **Sg** | **02** | **28** | **46.5 0.0** |
| **JIH** | **Iheya** | **0.99** | **183** | P | **Pn** | **02** | **28** | **39.4 -0.3** |
| JIH | | | | *e*S | **Sn** | **02** | **28** | **53.8 -0.4** |
| **JAMN** | **Amaminishikomi** | **1.03** | **78** | P | **Pg** | **02** | **28** | **37.5 -1.5** |
| JAMN | | | | *e*S | **Sg** | **02** | **28** | **51.1 -1.3** |
| **JYRO** | **Yoronjima** | **1.07** | **159** | P | **Pb** | **02** | **28** | **40.6 +0.5** |
| JYRO | | | | *e*S | **Sb** | **02** | **28** | **55.8 +1.4** |
| **JOW** | **Kunigami** | **1.21** | **170** | Pn | **Pn** | **02** | **28** | **43.1 +0.3** |
| | 120nm,0.3s,baz=27,slow=11,SNR=79 | | | | | | | |
| JOW | | | | Sn | **Sg** | **02** | **28** | **58.6 +0.5** |
| | 94nm,0.3s,baz=122,slow=22,SNR=7.9 | | | | | | | |
| **JOW** | **Kunigami** | **1.21** | **170** | P | **Pn** | **02** | **28** | **42.9 +0.1** |
| JOW | | | | *e*S | **Sn** | **02** | **28** | **59.9 +0.3** |
| **JAM** | **Amami Oshima** | **1.44** | **74** | P | **Pn** | **02** | **28** | **44.2 -1.7** |
| JAM | | | | *e*S | **Sn** | **02** | **29** | **02.8 -2.4** |
| **JNTH** | **Nagotoyohara** | **1.51** | **180** | P | **Pb** | **02** | **28** | **47.4 -0.2** |
| JNTH | | | | *e*S | **Sg** | **02** | **29** | **07.1 -0.4** |
| **JAGN** | **Aguni-jima** | **1.60** | **206** | P | **Pg** | **02** | **28** | **48.5 -1.3** |
| **JZK** | **Kikaishima** | **1.74** | **80** | P | **Pn** | **02** | **28** | **51.6 +1.6** |
| **JJT3** | **Tamagusuku3** | **1.89** | **187** | P | **Pb** | **02** | **28** | **53.5 -0.7** |
| **JNU** | **Nakatsue** | **5.64** | **25** | Pn | **Pn** | **02** | **29** | **48.2 +4.6** |
| | 1.7nm,0.3s,baz=169,slow=7.0,SNR=8.5 | | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **325** | P | **P** | **02** | **33** | **52.8 +0.1** |
| | 2.4nm,0.9s,baz=140,slow=8.8,SNR=10 | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.22** | **310** | P | **P** | **02** | **35** | **56.8 +0.1** |
| | 0.6nm,0.8s,baz=98,slow=10,SNR=5.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.72** | **322** | P | **P** | **02** | **35** | **59.9 -0.7** |
| | 0.4nm,0.5s,baz=90,slow=8.6,SNR=2.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.44** | **315** | P | **P** | **02** | **36** | **21.7 -1.3** |
| | 0.3nm,0.3s,baz=103,slow=8.7,SNR=4.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.08** | **172** | P | **P** | **02** | **36** | **59.2 -0.7** |
| | 0.7nm,0.9s,baz=350,slow=8.4,SNR=2.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **51.71** | **173** | P | **P** | **02** | **37** | **28.3 +0.9** |
| | 0.4nm,0.6s,baz=5.1,slow=14,SNR=1.9 | | | | | | | |

*IDC **21** 02:29:04.3±1.5,6.˚98N×126.˚80E,h82km±13km,mb3.7/11, mb1 3.9/14,mb1mx3.7/45,mbtmp4.2/14,Error ellipse: s-maj=22.1km s-min=10.8km az=63.0*
*MAN **21** 02:29:04.6,6.˚87N×126.˚71E,h28km,mb4.7,ML3.6,MS3.6*
*NEIC **21** 02:29:05.9±1.6,6.˚92N±0.˚06×126.˚73E±0.˚07,h86km±6km, mb4.6/31,Error ellipse: s-maj=11.2km s-min=8.6km az=57.0*
*DJA **21** 02:29:06.9±0.8,7.˚1N±7.˚1×12.˚7E±.˚,h66km±9km,M4.5/10, mB5.0/4,mb4.6/10,MLv4.6/7,Mw(mB)4.3/4*

**ISC 21 02:29:05.2±0.4,6.˚89N±0.˚04×126.˚73E±0.˚06,h86km,n80, σ1§17/90,mb4.3/24,5C-4D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **MATI** | **Mati** | **0.47** | **277** | *e*P | Pn | 02 | 29 | 15.2 -4.1 |
| **DAV** | **Davao City (W)** | **1.15** | **279** | P | **Pn** | **02** | **29** | **25.2 -1.3** |
| | 572nm,0.3s,baz=258,slow=1.3,SNR=33 | | | | | | | |
| DAV | | | | S | **Sn** | **02** | **29** | **42.6 +0.1** |
| | 500nm,0.3s,baz=281,slow=23,SNR=7.1 | | | | | | | |
| DAV | | | | LR | LR | 02 | 29 | 58.1 |
| | comp=Z,754nm,18.6s,baz=95,slow=44 | | | | | | | |
| **DAV** | **Davao City (W)** | **1.15** | **279** | Pn | **Pn** | **02** | **29** | **26.2 -0.3** |
| DAV | | | | Sn | **Sn** | **02** | **29** | **42.8 +0.4** |
| **DDMP** | **Don Marcelino,** | **1.27** | **232** | *i* P | **Pn** | **02** | **29** | **26.0 -2.0** |
| **BIPH** | **Bislig** | **1.33** | **344** | *i* P | **Pn** | **02** | **29** | **28.6 -0.1** |
| BIPH | | | | *i* S | **Sn** | **02** | **29** | **44.5 -1.9** |
| **BUKP** | **Musuan** | **1.92** | **301** | *i* P | **Pn** | **02** | **29** | **36.2 -0.1** |
| BUKP | | | | *i* S | **Sn** | **02** | **29** | **59.6 -0.4** |
| **BUTP** | **Butuan** | **2.34** | **332** | *i* P | **Pn** | **02** | **29** | **43.6 +1.8** |
| **CTBH** | **Cotabato--PC H** | **2.48** | **278** | *i* P | Pn | 02 | 29 | 52.0 +8.3 |
| CTBH | | | | *i* S | **Sn** | **02** | **30** | **11.9 -1.4** |
| **GLSP** | **General Luna,** | **2.94** | **348** | *e*P | **Pn** | **02** | **29** | **49.2 -0.6** |
| **SGSI** | **Sangihe** | **3.40** | **201** | P | **Pn** | **02** | **29** | **55.8 -0.3** |
| **PAGZ** | **Pagadian** | **3.45** | **286** | *i* P | **Pn** | **02** | **29** | **57.3 +0.6** |
| **MSLP** | **Maasin** | **3.71** | **330** | *e*P | **Pn** | **02** | **30** | **00.8 +0.5** |
| **TBP** | **Tagbilaran** | **3.97** | **315** | *e*P | **Pn** | **02** | **30** | **04.0 +0.2** |
| TBP | | | | *i* S | **Sn** | **02** | **30** | **48.9 -0.4** |
| **TNTI** | **Ternate** | **6.11** | **174** | Pn | **Pn** | **02** | **30** | **32.7 -0.3** |
| **TNTI** | **Ternate** | **6.11** | **174** | P | **Pn** | **02** | **30** | **32.7 -0.3** |
| | 0.3nm3µm39nm,0.7s | | | | | | | |
| **GTOI** | **Gorontalo** | **7.23** | **211** | P | **Pn** | **02** | **30** | **47.2 -1.2** |
| | 0.1nm398nm47nm,0.6s | | | | | | | |
| **MRSI** | **Marisa** | **7.96** | **217** | P | **Pn** | **02** | **30** | **58.4 +0.1** |
| | 0.3nm920nm58nm,1.2s | | | | | | | |
| **TOLI2** | **Tolitoli** | **8.25** | **226** | Pn | **Pn** | **02** | **31** | **00.9 -1.3** |
| **MYLDM** | **Lahad Datu** | **8.35** | **259** | Pn | **Pn** | **02** | **31** | **04.2 +0.6** |
| **LUWI** | **Luwuk** | **8.81** | **207** | Pn | **Pn** | **02** | **31** | **10.4 +0.5** |
| LUWI | | | | | **Sn** | **02** | **32** | **44.3 -3.3** |
| **SIJI** | **Sorong** | **8.94** | **149** | P | **Pn** | **02** | **31** | **10.6 -1.1** |
| | 2.4nm,0.3s,baz=174,slow=23,SNR=8.4 | | | | | | | |
| **FAKI** | **Fak Fak** | **11.20** | **150** | Pn | **Pn** | **02** | **31** | **41.4 -1.0** |
| **TTSI** | **Tana Toraja** | **12.04** | **215** | P | **Pn** | **02** | **31** | **55.9 +2.1** |
| | 35nm,1.0s | | | | | | | |
| **SBUM** | **Sibu** | **15.11** | **254** | | **Pn** | **02** | **32** | **35.0 +0.8** |
| SBUM | | | | IAmb | IAmb | 02 | 32 | 41.0 |
| | comp=Z,18nm,0.9s | | | | | | | |
| **TWG** | **Pinlang** | **16.75** | **342** | Pn | **Pn** | **02** | **32** | **52.9 -1.7** |
| TWG | | | | IAmb | IAmb | 02 | 33 | 02.2 |
| | comp=Z,80nm,1.5s | | | | | | | |
| **JAY** | **Jayapura** | **16.79** | **123** | P | **Pn** | **02** | **32** | **55.8 +0.5** |
| | comp=Z,0.3nm,0.3s,baz=326,slow=2.9,SNR=4.6 | | | | | | | |
| **JAY** | **Jayapura** | **16.79** | **123** | P | **P** | **02** | **32** | **58.3 +2.2** |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **KSM** | **Kuching** | **17.23** | **253** | | **Pn** | **02** | **33** | **01.0 +0.5** |
| KSM | | | | IAmb | IAmb | 02 | 33 | 12.4 |
| | comp=Z,36nm,1.1s | | | | | | | |
| **BATI** | **Baumata** | **17.26** | **190** | P | **P** | **02** | **33** | **02.7 +1.6** |
| | comp=Z,2.8nm,0.3s,baz=293,slow=3.7,SNR=4.8 | | | | | | | |
| **BATI** | **Baumata** | **17.26** | **190** | P | **P** | **02** | **33** | **03.5 +2.4** |
| | comp=Z,17nm,0.7s | | | | | | | |
| **PLAI** | **Plampang** | **17.98** | **210** | P | **P** | **02** | **33** | **09.0 -0.1** |
| **DLV** | **T Lat** | **18.68** | **287** | P | **P** | **02** | **33** | **16.5 -0.4** |
| DLV | | | | IAmb | IAmb | 02 | 33 | 22.2 |
| | comp=Z,30nm,1.2s | | | | | | | |
| **KNMB** | **Chin-men Tao** | **19.21** | **336** | P | **P** | **02** | **33** | **21.9 -0.6** |
| KNMB | | | | IAmb | IAmb | 02 | 33 | 36.5 |
| | comp=Z,92nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **22.51** | **175** | P | **P** | **02** | **33** | **59.0 +1.0** |
| KNRA | | | | IAmb | IAmb | 02 | 34 | 01.4 |
| | comp=Z,26nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.85** | **182** | P | **P** | **02** | **34** | **19.9 0.0** |
| | comp=Z,10nm,0.8s,baz=360,slow=6.2,SNR=23 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.85** | **182** | P | **P** | **02** | **34** | **21.0 +1.1** |
| FITZ | | | | IAmb | IAmb | 02 | 34 | 24.2 |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **JCJ** | **Chichijima** | **24.89** | **34** | P | **P** | **02** | **34** | **20.3 +0.1** |
| **COEN** | **Coen** | **26.38** | **142** | P | **P** | **02** | **34** | **33.2 -0.5** |
| **JNU** | **Nakatsue** | **26.38** | **8** | P | **P** | **02** | **34** | **32.9 -0.8** |
| | comp=Z,16nm,0.4s,baz=139,slow=0.3,SNR=5.7 | | | | | | | |
| **JNU** | **Nakatsue** | **26.38** | **8** | P | **P** | **02** | **34** | **34.2 +0.6** |
| JNU | | | | IAmb | IAmb | 02 | 34 | 36.0 |
| | comp=Z,30nm,0.9s | | | | | | | |
| JNU | | | | pP | **pP** | **02** | **34** | **53.7 +1.3** |
| **WB0** | **Warramunga Arr** | **27.55** | **164** | P | **P** | **02** | **34** | **44.8 +0.6** |
| **WRA** | **Warramunga Arr** | **27.70** | **164** | P | **P** | **02** | **34** | **45.5 0.0** |
| | comp=Z,0.9nm,0.4s,baz=349,slow=10,SNR=19 | | | | | | | |
| WRA | | | | ScP | **ScP** | **02** | **41** | **34.1 +0.2** |
| | comp=Z,0.8nm,0.6s,baz=341,slow=3.2,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.70** | **164** | P | **P** | **02** | **34** | **46.8 +1.2** |
| **WB2** | **Warramunga Arr** | **27.70** | **164** | P | **P** | **02** | **34** | **46.1 +0.6** |
| **PSA00** | **Pilbara Seismi** | **29.08** | **193** | P | **P** | **02** | **34** | **58.8 +1.0** |
| PSA00 | | | | IAmb | IAmb | 02 | 35 | 08.1 |
| | comp=Z,44nm,1.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **30.75** | **312** | P | **P** | **02** | **35** | **15.3 +2.6** |
| **AS31** | **Alice Springs** | **31.17** | **167** | P | **P** | **02** | **35** | **16.9 +0.7** |
| **ASAR** | **Alice Springs** | **31.17** | **167** | P | **P** | **02** | **35** | **16.2 -0.1** |
| | comp=Z,0.5nm,0.4s,baz=343,slow=7.1,SNR=23 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **02** | **38** | **09.9 +0.4** |
| | comp=Z,0.3nm,0.4s,baz=349,slow=2.2,SNR=4.2 | | | | | | | |
| ASAR | | | | ScP | **ScP** | **02** | **41** | **44.7 -0.3** |
| | comp=Z,0.5nm,0.6s,baz=339,slow=3.1,SNR=6.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **31.17** | **167** | P | **P** | **02** | **35** | **16.8 +0.5** |
| **PATS** | **Pohnpei** | **31.36** | **88** | P | **P** | **02** | **35** | **18.0 0.0** |
| **HHC** | **Hu-ho-hao-te** | **36.42** | **340** | *e*P | **P** | **02** | **36** | **05.4 +3.7** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,180nm,7.2s | | | | | | | |
| **MORW** | **Morawa** | **37.20** | **196** | P | **P** | **02** | **36** | **08.6 +0.3** |
| MORW | | | | IAmb | IAmb | 02 | 36 | 10.7 |
| | comp=Z,4.6nm,1.1s | | | | | | | |
| **FORT** | **Forrest** | **37.48** | **178** | P | **P** | **02** | **36** | **11.1 +0.5** |
| **ERM** | **Erimo** | **37.89** | **20** | P | **P** | **02** | **36** | **15.4 +1.4** |
| **BBOO** | **Buckleboo** | **40.47** | **168** | P | **P** | **02** | **36** | **36.2 +0.6** |
| BBOO | | | | IAmb | IAmb | 02 | 36 | 54.7 |
| | comp=Z,17nm,1.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **41.08** | **161** | P | **P** | **02** | **36** | **40.3 -0.3** |
| | comp=Z,2.2nm,0.6s,baz=317,slow=8.5,SNR=7.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **41.08** | **161** | P | **P** | **02** | **36** | **40.8 +0.2** |
| **SONM** | **Songino Array** | **44.33** | **340** | P | **P** | **02** | **37** | **06.1 -0.8** |
| | comp=Z,0.3nm,0.5s,baz=161,slow=6.1,SNR=3.2 | | | | | | | |
| **DZM** | **Mont Dzumac** | **48.40** | **128** | P | **P** | **02** | **37** | **38.9 -0.2** |
| **WMQ** | **Urumqi** | **50.17** | **324** | *e*P | **P** | **02** | **37** | **54.1 +1.8** |
| **MK31** | **Makanchi Array** | **54.99** | **324** | P | **P** | **02** | **38** | **27.7 -0.1** |
| MK31 | | | | IAmb | IAmb | 02 | 38 | 30.8 |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.99** | **324** | P | **P** | **02** | **38** | **27.6 -0.1** |
| | comp=Z,2.3nm,0.5s,baz=114,slow=6.7,SNR=38 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **02** | **39** | **28.4 -0.1** |
| | comp=Z,1.2nm,0.6s,baz=135,slow=2.7,SNR=6.5 | | | | | | | |
| **MAKZ** | **Makanchi** | **55.18** | **324** | P | **P** | **02** | **38** | **29.9 -0.2** |
| MAKZ | | | | IAmb | IAmb | 02 | 38 | 32.1 |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **KSH** | **Kashi** | **55.84** | **314** | P | **P** | **02** | **38** | **36.3 +2.2** |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.80** | **332** | P | **P** | **02** | **38** | **45.9 -1.6** |
| | comp=Z,0.7nm,0.3s,baz=127,slow=6.5,SNR=5.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.80** | **332** | P | **P** | **02** | **38** | **46.1 -1.4** |
| **AAK** | **Ala-Archa** | **58.05** | **317** | P | **P** | **02** | **38** | **49.8 +0.1** |
| AAK | | | | IAmb | IAmb | 02 | 38 | 59.8 |
| | comp=Z,3.1nm,1.4s | | | | | | | |
| **KURK** | **Kurchatov** | **59.10** | **327** | P | **P** | **02** | **38** | **56.1 -0.5** |
| KURK | | | | IAmb | IAmb | 02 | 38 | 59.6 |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **60.95** | **316** | P | **P** | **02** | **39** | **08.9 -0.6** |
| **BKZ** | **Black Stump Fm** | **64.94** | **139** | P | **P** | **02** | **39** | **36.1 +0.2** |
| BKZ | | | | IAmb | IAmb | 02 | 39 | 38.8 |
| | comp=Z,17nm,1.5s | | | | | | | |
| **KHZ** | **Kahutara** | **64.97** | **143** | P | **P** | **02** | **39** | **35.9 -0.1** |
| **ABKAR** | **Akbulak array** | **69.73** | **320** | P | **P** | **02** | **40** | **05.4 -0.6** |
| **RAYN** | **Ar Rayn** | **79.26** | **293** | P | **P** | **02** | **41** | **01.3 -0.5** |
| **IMAR** | **Indian Mountai** | **79.48** | **24** | P | **P** | **02** | **41** | **03.1 +1.0** |
| **BPAW** | **Bear Paw Mtn.** | **80.47** | **26** | P | **P** | **02** | **41** | **05.4 -2.1** |
| BPAW | | | | IAmb | IAmb | 02 | 41 | 09.7 |
| | comp=Z,7.6nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.27** | **26** | P | **P** | **02** | **41** | **16.0 -1.0** |
| | comp=Z,0.5nm,0.9s,baz=248,slow=5.9,SNR=5.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.50** | **340** | P | **P** | **02** | **41** | **41.2 -1.9** |
| | comp=Z,1.4nm,0.7s,baz=67,slow=4.1,SNR=5.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **89.06** | **332** | P | **P** | **02** | **41** | **49.0 -1.6** |
| | comp=Z,2.5nm,0.7s,baz=234,slow=6.6,SNR=5.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **89.45** | **321** | P | **P** | **02** | **41** | **50.8 -1.9** |
| | comp=Z,0.1nm,0.3s,baz=61,slow=5.8,SNR=2.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.89** | **290** | PKP | **PKPdf** | **02** | **47** | **49.8 -0.7** |
| | comp=Z,0.5nm,0.7s,baz=57,slow=1.7,SNR=5.4 | | | | | | | |

*ROM **21** 02:59:27.9±0.5,41.˚84N±0.˚01×10.˚34E±0.˚03,h8km±2km, ML2.5/7,Error ellipse: s-maj=2.0km s-min=1.1km az=294.0*

*STR **21** 02:59:27.4±1.1,42.˚N±8.˚×1.˚0E±.˚,h9km±5km,MLv2.8/7, preliminary*
*LDG **21** 02:59:30.3±0.2,41.˚90N×10.˚27E,h5km,Md2.5/1,Ml2.5/11, Error ellipse: s-maj=5.2km s-min=4.1km az=164.0*

**ISC 21 02:59:29.1±1.1,41.˚93N±0.˚03×10.˚30E±0.˚02,h17km±9km, n61,σ1§53/84,1D,Tyrrhenian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **SMPL** | **Sampolo** | **0.78** | **283** | P | **Pb** | **02** | **59** | **44.4 +0.3** |
| **SMPL** | **Sampolo** | **0.78** | **283** | Pg | **Pb** | **02** | **59** | **44.4 +0.3** |
| SMPL | | | | Sg | **Sb** | **02** | **59** | **56.1 +1.7** |
| **SMPL** | **Sampolo** | **0.78** | **283** | P | **Pb** | **02** | **59** | **44.4 +0.3** |
| SMPL | | | | S | **Sb** | **02** | **59** | **56.0 +1.6** |
| **MAON** | **Monte Argentar** | **0.80** | **51** | P | **Pn** | **02** | **59** | **44.9 -0.7** |
| MAON | | | | S | **Sb** | **02** | **59** | **55.8 +0.8** |
| MAON | | | | AML | AML | | | |
| | comp=E,606µm,0.2s | | | | | | | |
| MAON | | | | AML | AML | | | |
| | comp=N,509µm,0.3s | | | | | | | |
| **CELB** | **S.Piero in Cam** | **0.82** | **355** | P | **Pb** | **02** | **59** | **45.4 +0.4** |
| CELB | | | | S | **Sn** | **02** | **59** | **58.7 +0.9** |
| CELB | | | | AML | AML | | | |
| | comp=E,210µm,0.7s | | | | | | | |
| CELB | | | | AML | AML | | | |
| | comp=N,238µm,0.5s | | | | | | | |
| **CORF** | **Corte** | **0.93** | **294** | P | **Pb** | **02** | **59** | **47.1 +0.3** |
| **CASP** | **Castiglione de** | **0.96** | **26** | P | **Pb** | **02** | **59** | **47.4 +0.1** |
| CASP | | | | S | **Sn** | **03** | **00** | **01.1 0.0** |
| **AJAC** | **Base Areonaval** | **1.15** | **271** | P | **Pn** | **02** | **59** | **51.4 +1.0** |
| **AJAC** | **Base Areonaval** | **1.15** | **271** | Pn | **Pn** | **02** | **59** | **51.2 +0.9** |
| AJAC | | | | Sg | **Sn** | **03** | **00** | **08.0 +2.4** |
| **AJAC** | **Base Areonaval** | **1.15** | **271** | P | **Pn** | **02** | **59** | **51.3 +0.9** |
| AJAC | | | | S | **Sn** | **03** | **00** | **07.0 +1.3** |
| **AJAC** | **Base Areonaval** | **1.15** | **271** | AML | AML | | | |
| | comp=E,158µm,1.1s | | | | | | | |
| AJAC | | | | AML | AML | | | |
| | comp=N,186µm,0.5s | | | | | | | |
| **PGF** | **Pioggiola** | **1.15** | **303** | *e*Pn | **Pg** | **02** | **59** | **50.8 -0.6** |
| **PGF** | **Pioggiola** | **1.15** | **303** | *e*P | **Pn** | **02** | **59** | **53.2 +2.7** |
| PGF | | | | *e*Sn | **Sg** | **03** | **00** | **06.0 -0.4** |
| | comp=N,24nm,0.3s | | | | | | | |
| **PGF** | **Pioggiola** | **1.15** | **303** | P | **Pg** | **02** | **59** | **50.8 -0.6** |
| **PGF** | **Pioggiola** | **1.15** | **303** | Pg | **Pg** | **02** | **59** | **50.7 -0.6** |
| **TRIF** | **Trifonti** | **1.27** | **20** | P | **Pn** | **02** | **59** | **52.2 +0.1** |
| TRIF | | | | AML | AML | | | |
| | comp=E,410µm,1.4s | | | | | | | |
| TRIF | | | | AML | AML | | | |
| | comp=N,532µm,0.2s | | | | | | | |
| **ARCI** | **Arcidosso** | **1.27** | **43** | P | **Pn** | **02** | **59** | **52.0 -0.2** |
| ARCI | | | | AML | AML | | | |
| | comp=N,108µm,1.3s | | | | | | | |
| ARCI | | | | AML | AML | | | |
| | comp=E,122µm,0.7s | | | | | | | |
| **TOLF** | **Tolfa** | **1.27** | **83** | P | **Pn** | **02** | **59** | **51.1 -1.1** |
| **LATE** | **Laterza** | **1.31** | **58** | P | **Pg** | **02** | **59** | **53.0 -1.5** |
| **MCIV** | **Monte Civitell** | **1.33** | **50** | P | **Pn** | **02** | **59** | **52.7 -0.2** |
| MCIV | | | | AML | AML | | | |
| | comp=N,189µm,0.7s | | | | | | | |
| MCIV | | | | AML | AML | | | |
| | comp=E,208µm,1.2s | | | | | | | |
| **FROS** | **Frosini** | **1.43** | **26** | P | **Pn** | **02** | **59** | **54.6 +0.3** |
| FROS | | | | S | **Sg** | **03** | **00** | **15.0 -0.4** |
| FROS | | | | AML | AML | | | |
| | comp=E,354µm,

*mb4.7/65, Error ellipse: s-maj=20.2km s-min=15.2km az=137.0*

**ISC 21 03:21:05.3**±0.4, **7°60N**±0°06×**36°71W**±0°07, **h24**km, **n123,** σ1ᵍ**08**/106, **mb4.6**/41, **MS3.5**/14, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NBMO** | **Morrinhos-CE** | **11.34** | **197** | *eP* | **Pn** | **03 23 44.1** | **-1.8** |
| **NBCL** | **Cascavel-CE** | **11.85** | **188** | *eP* | **Pn** | **03 23 51.7** | **-1.3** |
| **ROSB** | **Rosrio** | **12.79** | **216** | *eP* | **Pn** | **03 24 03.5** | **-2.3** |
| **NBPS** | **Pedro II - PI** | **12.82** | **202** | *eP* | **Pn** | **03 24 04.6** | **-1.7** |
| **RCBR** | **Riachuelo** | **13.36** | **177** | Pn | **Pn** | **03 24 11.8** | **-1.9** |
| **RCBR** | **Riachuelo** | **13.36** | **177** | *eP* | **Pn** | **03 24 12.4** | **-1.2** |
| **NBPB** | **Pedra_Branca-C** | **13.37** | **192** | *eP* | **Pn** | **03 24 12.8** | **-0.9** |
| **NBPV** | **Pedro Velho** | **14.00** | **174** | *eP* | **Pn** | **03 24 23.6** | **+1.3** |
| **SACV** | **Santiago Islan** | **14.78** | **59** | Pn | **Pn** | **03 24 30.7** | **-2.4** |
| **NBLV** | **Livramento - P** | **14.86** | **181** | *eP* | **Pn** | **03 24 35.3** | **+1.1** |
| **NBMA** | **Muriti-CE** | **15.01** | **188** | *eP* | **Pn** | **03 24 37.0** | **+0.9** |
| **MDP** | **Montagnes des** comp=Z,180nm,18.7s,baz=50,slow=33 | **16.02** | **262** | LR | LR | 03 29 45.8 | |
| **NBRF** | **Rio Formoso -** | **16.25** | **174** | *eP* | **P** | **03 24 54.9** | **-0.2** |
| **NBAN** | **Anadia - AL** | **17.16** | **179** | *eP* | **P** | **03 25 05.8** | **+0.6** |
| **MCPB** | **Macapa, AP** | **17.23** | **243** | *eP* | **Pn** | **03 25 02.8** | **-1.7** |
| **NBLA** | **Lagarto - SE** | **18.50** | **183** | *eP* | **Pn** | **03 25 22.1** | **+1.8** |
| **PRPB** | **Parauapebas** | **18.92** | **224** | *eP* | **P** | **03 25 24.0** | **-0.6** |
| **SMTB** | **Santa Maria do** | **19.62** | **214** | *eP* | **P** | **03 25 31.4** | **-0.8** |
| **MALB** | **Monte Alegre** | **19.87** | **242** | *eP* | **P** | **03 25 34.7** | **-0.3** |
| **MBO** | **M'Bour** | **20.52** | **69** | P | **P** | **03 25 40.4** | **-1.7** |
| **GDU01** | **Guandu, BA** | **21.37** | **188** | *eP* | **P** | **03 25 51.0** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **21.48** | **202** | *eP* | **P** | **03 25 51.7** | **-0.7** |
| **ITTB** | **Itaituba** | **22.40** | **239** | *eP* | **P** | **03 26 01.8** | **-0.5** |
| **NBIT** | **Itapeh - BA** | **22.55** | **187** | *eP* | **P** | **03 26 05.3** | **+1.5** |
| **PEXB** | **Peixe** | **22.72** | **211** | *eP* | **P** | **03 26 05.9** | **+0.2** |
| **NPGB** | **Novo Progresso** | **23.61** | **232** | *eP* | **P** | **03 26 14.5** | **-0.3** |
| **JANB** | **Januaria** | **23.74** | **199** | *eP* | **P** | **03 26 16.1** | **+0.1** |
| **GUA01** | **Guaratinga, BA** | **24.22** | **187** | *eP* | **P** | **03 26 22.8** | **+2.3** |
| **SNDB** | **Serra Nova Dou** | **24.26** | **217** | *eP* | **P** | **03 26 22.1** | **+1.3** |
| **BOAV** | **Boa Vista** | **24.27** | **259** | *eP* | **P** | **03 26 21.0** | **0.0** |
| **PTGA** | **Pitinga** 3.6nm,0.5s,baz=86,slow=12,SNR=8.1 | **24.62** | **251** | P | **P** | **03 26 22.7** | **-1.5** |
| PTGA | | | | LR | LR | 03 35 13.4 | |
| **BDFB** | **Brasilia** 7.0nm,1.0s,baz=32,slow=12,SNR=8.6 comp=Z,207nm,21.9s,baz=64,slow=35 | **25.66** | **206** | P | **P** | **03 26 33.8** | **+0.1** |
| **BDFB** | **Brasilia** | **25.66** | **206** | P | **P** | **03 26 33.5** | **-0.2** |
| **H10N3** | **ASCENSION HYDR** baz=304,slow=75,SNR=6.6 | **26.94** | **124** | T | T | 03 54 53.7 | |
| **H10N2** | **ASCENSION HYDR** baz=304,slow=75,SNR=6.8 | **26.94** | **124** | T | T | 03 54 52.9 | |
| **H10N1** | **ASCENSION HYDR** baz=304,slow=75,SNR=7.2 | **26.96** | **124** | T | T | 03 54 55.2 | |
| **H10S3** | **ASCENSION HYDR** baz=303,slow=74,SNR=8.6 | **27.44** | **126** | T | T | 03 55 31.1 | |
| **H10S2** | **ASCENSION HYDR** baz=277,slow=74,SNR=4.4 | **27.46** | **126** | T | T | 03 55 33.7 | |
| **BIRV** | **Birongo** | **29.32** | **278** | P | **P** | **03 27 06.4** | **0.0** |
| **MTP** | **Monte Pirata** | **29.94** | **293** | P | **P** | **03 27 09.8** | **-2.1** |
| **SALV** | **Santo Antonio** | **29.98** | **219** | *eP* | **P** | **03 27 12.6** | **+0.4** |
| **HUMP** | **Col San Antoni** | **30.23** | **293** | P | **P** | **03 27 14.9** | **+0.5** |
| **PDPR** | **Patillas Dam,** | **30.35** | **293** | P | **P** | **03 27 13.9** | **-1.6** |
| **SJG** | **San Juan** comp=Z,74nm,20.0s,baz=96,slow=32 | **30.49** | **293** | LR | LR | 03 37 14.0 | |
| **PCMB** | **Pacaembu** | **32.35** | **206** | *eP* | **P** | **03 27 35.5** | **+2.5** |
| **SDV** | **Santo Domingo** comp=Z,68nm,19.2s,baz=88,slow=35 | **33.59** | **275** | LR | LR | 03 40 46.4 | |
| **SIV** | **San Ignacio** comp=Z,39nm,18.8s,baz=98,slow=38 | **33.63** | **226** | LR | LR | 03 42 15.6 | |
| **ETMB** | **Extrema** | **34.10** | **240** | *eP* | **P** | **03 27 48.4** | **-0.1** |
| **ROSC** | **El Rosal** comp=Z,132nm,20.5s,baz=114,slow=35 | **37.48** | **268** | LR | LR | 03 42 47.3 | |
| **TORD** | **Torodi Ar. Bea** 1.3nm,0.9s,baz=277,slow=5.4,SNR=5.7 | **38.15** | **78** | P | **P** | **03 28 22.6** | **-0.6** |
| **MDT** | **Midelt** 3.2nm,0.8s,baz=301,slow=6.3,SNR=4.4 | **38.92** | **45** | P | **P** | **03 28 30.1** | **+0.6** |
| MDT | | | | LR | LR | 03 43 51.6 | |
| **CZSB** | **Cruzeiro do Su** | **38.98** | **248** | *eP* | **P** | **03 28 29.7** | **-0.5** |
| **LPAZ** | **La Paz** 5.1nm,0.7s,baz=58,slow=8.9,SNR=17 | **39.12** | **233** | P | **P** | **03 28 32.5** | **+0.5** |
| LPAZ | | | | LR | LR | 03 43 22.3 | |
| **LPAZ** | **La Paz** comp=Z,74nm,19.7s,baz=52,slow=34 | **39.12** | **233** | P | **P** | **03 28 32.2** | **+0.3** |
| **LPAZ** | **La Paz** | **39.12** | **233** | *eP* | **P** | **03 28 32.4** | **+0.5** |
| **MTE** | **Manteigas** | **41.76** | **34** | P | **P** | **03 28 54.3** | **+1.4** |
| MTE | comp=Z,16nm,1.0s | | | IAmb | IAmb | 03 28 56.9 | |
| **GO01** | **Chusmiza** | **41.92** | **229** | P | **P** | **03 28 55.1** | **+0.2** |
| **OTAV** | **Otavalo** | **42.25** | **262** | *eP* | **P** | **03 28 59.3** | **+1.7** |
| **ESDC** | **Sonseca Array** comp=Z,1.5nm,1.0s,baz=245,slow=8.4,SNR=3.9 | **43.36** | **37** | P | **P** | **03 29 06.8** | **+0.9** |
| ESDC | comp=Z,88nm,18.6s,baz=321,slow=34 | | | LR | LR | 03 45 54.3 | |
| **ESDC** | **Sonseca Array** comp=Z,5.5nm,1.5s | **43.36** | **37** | IAmb | IAmb | 03 29 11.2 | |
| **ATAH** | **Atahualpa** comp=Z,48nm,19.9s,baz=61,slow=36 | **44.07** | **252** | LR | LR | 03 47 19.7 | |
| **PB04** | **IPOC Station P** | **44.25** | **227** | P | **P** | **03 29 11.2** | **-2.2** |
| **NNA** | **Nana** comp=Z,46nm,21.9s,baz=108,slow=35 | **44.40** | **244** | LR | LR | 03 46 49.6 | |
| **DRLN** | **Deer Lake** | **45.05** | **341** | P | **P** | **03 29 20.0** | **+0.8** |
| DRLN | comp=Z,8.8nm,0.9s | | | IAmb | IAmb | 03 29 48.4 | |
| **SRBA** | **San Rafael, Bu** | **46.15** | **275** | P | **P** | **03 29 28.1** | **-0.4** |
| SRBA | comp=Z,13nm,1.1s | | | IAmb | IAmb | 03 29 38.8 | |
| **UCCT** | **U. Connecticut** | **46.32** | **323** | P | **P** | **03 29 29.2** | **-0.1** |
| **AC02** | **Maricunga** | **46.47** | **221** | P | **P** | **03 29 31.5** | **+0.2** |
| AC02 | comp=Z,11nm,1.0s | | | IAmb | IAmb | 03 29 33.9 | |
| **ORTG** | **Ortega, Santa** | **48.19** | **277** | P | **P** | **03 29 44.0** | **-0.5** |
| **BIRD** | **Birdtown, Kers** | **48.34** | **310** | P | **P** | **03 29 46.5** | **+1.3** |
| **BG3** | **Lake Jocassee** | **50.35** | **310** | P | **P** | **03 29 59.9** | **-0.7** |
| BG3 | comp=Z,13nm,1.2s | | | IAmb | IAmb | 03 30 02.7 | |
| **KEST** | **Kesra** comp=Z,85nm,19.5s,baz=313,slow=34 | **50.50** | **49** | LR | LR | 03 49 48.7 | |
| **Y52A** | **Lilburn** | **50.82** | **308** | P | **P** | **03 30 04.7** | **+0.5** |
| Y52A | comp=Z,12nm,1.3s | | | IAmb | IAmb | 03 30 09.2 | |
| **O52A** | **Adamsville** | **51.63** | **316** | P | **P** | **03 30 12.2** | **+2.0** |
| O52A | comp=Z,17nm,1.4s | | | IAmb | IAmb | 03 30 17.3 | |
| **250A** | **Grady** | **51.99** | **305** | P | **P** | **03 30 14.3** | **+1.4** |
| 250A | comp=Z,11nm,1.2s | | | IAmb | IAmb | 03 30 14.9 | |
| **LRAL** | **Lakeview Retre** | **52.89** | **306** | P | **P** | **03 30 17.7** | **-1.9** |
| LRAL | comp=Z,8.4nm,1.4s | | | IAmb | IAmb | 03 30 24.8 | |
| **SCHQ** | **Schefferville** comp=Z,2.2nm,0.6s,baz=141,slow=5.0,SNR=4.3 | **52.90** | **339** | P | **P** | **03 30 18.4** | **-0.9** |
| **U49A** | **Red Boiling Sp** | **53.05** | **310** | P | **P** | **03 30 22.2** | **+1.5** |
| U49A | comp=Z,14nm,1.5s | | | IAmb | IAmb | 03 30 29.6 | |
| **R49A** | **Shelbyville** | **53.25** | **313** | P | **P** | **03 30 23.1** | **+0.9** |
| R49A | comp=Z,12nm,1.4s | | | IAmb | IAmb | 03 30 23.9 | |
| **L48A** | **N Adams** | **54.19** | **317** | P | **P** | **03 30 29.9** | **+0.9** |
| **WVT** | **Waverly** | **54.48** | **309** | P | **P** | **03 30 31.2** | **-0.1** |
| WVT | comp=Z,4.4nm,1.2s | | | IAmb | IAmb | 03 30 41.5 | |
| **ECH** | **Echery** | **54.85** | **35** | P | **P** | **03 30 32.5** | **-1.3** |
| **WLF** | **Walferdange** | **55.11** | **33** | P | **P** | **03 30 33.5** | **-2.0** |
| **BFO** | **Black Forest** | **55.58** | **35** | P | **P** | **03 30 39.8** | **+0.8** |
| BFO | comp=Z,14nm,1.4s | | | IAmb | IAmb | 03 30 41.8 | |
| **NRCA** | **Norcia** | **55.98** | **43** | P | **P** | **03 30 42.6** | **+0.5** |
| NRCA | comp=Z,9.9nm,1.3s | | | IAmb | IAmb | 03 30 51.2 | |
| **CTI** | **Castel Tesino** | **56.42** | **39** | P | **P** | **03 30 45.5** | **+0.3** |
| CTI | comp=Z,7.0nm,1.0s | | | IAmb | IAmb | 03 30 47.2 | |
| **WLAR** | **White Oak Lake** | **58.00** | **305** | P | **P** | **03 30 56.2** | **-0.2** |
| WLAR | comp=Z,8.4nm,0.8s | | | IAmb | IAmb | 03 31 05.2 | |
| **GERES** | **GERESS Array B** comp=Z,0.7nm,0.7s,baz=222,slow=5.4,SNR=4.9 | **58.94** | **36** | P | **P** | **03 31 01.1** | **-1.6** |
| **KHC** | **Kasperske Hory** | **59.00** | **36** | P | **P** | **03 31 03.5** | **+0.4** |
| KHC | comp=Z,10nm,1.4s | | | IAmb | IAmb | 03 31 06.6 | |
| **S39A** | **Bolivar** | **59.15** | **310** | P | **P** | **03 31 04.1** | **-0.3** |
| **TSUM** | **Tsumeb** comp=Z,76nm,18.9s,baz=180,slow=31 | **59.75** | **117** | LR | LR | 03 51 37.7 | |
| **TUL1** | **Leonard** | **60.64** | **307** | P | **P** | **03 31 15.1** | **+0.4** |
| TUL1 | comp=Z,4.9nm,0.8s | | | IAmb | IAmb | 03 31 15.8 | |
| **DIVS** | **Divibare** | **61.10** | **43** | P | **P** | **03 31 18.7** | **+1.0** |
| **PSZ** | **Piszkesteto** | **62.34** | **39** | P | **P** | **03 31 26.6** | **+0.6** |
| PSZ | comp=Z,5.9nm,1.1s | | | IAmb | IAmb | 03 31 28.1 | |
| **833A** | **Chaparral WMA,** | **62.41** | **298** | P | **P** | **03 31 25.5** | **-1.2** |
| 833A | comp=Z,4.7nm,0.8s | | | IAmb | IAmb | 03 31 46.9 | |
| **IDI** | **Anoyia** comp=Z,34nm,19.4s,baz=6.0,slow=36 | **62.53** | **54** | LR | LR | 03 58 20.7 | |
| **NOA** | **NORSAR Array B** comp=Z,2.6nm,1.0s,baz=236,slow=6.4,SNR=3.6 | **64.02** | **24** | P | **P** | **03 31 37.7** | **+0.9** |
| **SUMG** | **Summit** | **64.92** | **359** | *i* P | **P** | **03 31 43.0** | **0.0** |
| **MLR** | **Muntele Rosu** | **65.56** | **43** | P | **P** | **03 31 48.1** | **+0.8** |
| **BURAR** | **Bucovina Array** | **65.65** | **41** | P | **P** | **03 31 47.7** | **-0.1** |
| **TXAR** | **Lajitas Array** comp=Z,0.3nm,0.6s,baz=108,slow=7.5,SNR=4.8 | **66.24** | **299** | P | **P** | **03 31 52.3** | **+0.3** |
| **AKASG** | **Malin Array Be** comp=Z,1.8nm,0.6s,baz=262,slow=5.3,SNR=8.1 | **68.99** | **38** | P | **P** | **03 32 09.2** | **+0.5** |
| **BOSA** | **Boshof** comp=Z,52nm,18.4s,baz=158,slow=32 | **69.69** | **124** | LR | LR | 03 58 42.9 | |
| **BR131** | **Keskin Array S** | **70.08** | **51** | P | **P** | **03 32 16.4** | **+0.5** |
| BR131 | comp=Z,3.3nm,0.9s | | | IAmb | IAmb | 03 32 17.9 | |
| **BRTR** | **Keskin Array B** comp=Z,1.3nm,0.8s,baz=254,slow=7.5,SNR=7.0 | **70.08** | **51** | P | **P** | **03 32 16.8** | **+0.8** |
| **FINES** | **FINESS Array B** comp=Z,7.9nm,1.0s,baz=208,slow=6.1,SNR=4.8 | **70.55** | **27** | P | **P** | **03 32 18.6** | **+0.5** |
| **PDAR** | **Pinedale Array** comp=Z,0.2nm,0.6s,baz=117,slow=5.6,SNR=3.5 | **72.29** | **312** | P | **P** | **03 32 29.3** | **-0.1** |
| **RLMT** | **Red Lodge** | **72.35** | **315** | P | **P** | **03 32 29.9** | **+0.3** |
| RLMT | comp=Z,3.7nm,0.9s | | | IAmb | IAmb | 03 32 31.1 | |
| **P18A** | **Preston Nutter** | **72.51** | **309** | P | **P** | **03 32 31.1** | **+0.2** |
| **FLWY** | **Flagg Ranch** | **73.25** | **314** | P | **P** | **03 32 36.5** | **+1.5** |
| FLWY | comp=Z,4.5nm,0.9s | | | IAmb | IAmb | 03 32 36.8 | |
| **YMR** | **Madison River** | **73.50** | **314** | P | **P** | **03 32 37.2** | **+0.7** |
| YMR | comp=Z,6.7nm,1.1s | | | IAmb | IAmb | 03 32 39.1 | |
| **MTPU** | **Mount Pierson** | **73.92** | **307** | P | **P** | **03 32 40.4** | **+1.1** |
| **MSU** | **Marysvale** | **73.94** | **308** | P | **P** | **03 32 38.2** | **-1.0** |
| **NLU** | **North Lily Min** | **73.94** | **309** | P | **P** | **03 32 38.0** | **-1.2** |
| **HVU** | **Hansel Valley** | **74.58** | **311** | P | **P** | **03 32 43.4** | **+0.6** |
| **RES** | **Resolute Bay** | **74.60** | **346** | P | **P** | **03 32 42.9** | **+0.9** |
| **YUH** | **Yuha Desert** | **76.87** | **302** | P | **P** | **03 32 56.6** | **+0.7** |
| YUH | comp=Z,9.8nm,1.4s | | | IAmb | IAmb | 03 33 02.8 | |
| **YKA** | **Yellowknife Ar** comp=Z,0.9nm,0.9s,baz=98,slow=5.8,SNR=6.5 | **77.71** | **332** | P | **P** | **03 32 59.0** | **-0.8** |
| **TPH** | **Tonopah** | **77.90** | **307** | P | **P** | **03 33 02.1** | **+0.4** |
| **BMN** | **Battle Mountai** | **77.90** | **310** | P | **P** | **03 33 02.4** | **+0.7** |
| BMN | comp=Z,7.0nm,1.4s | | | IAmb | IAmb | 03 33 03.5 | |
| **LCH** | **Last Change Ra** | **78.24** | **306** | P | **P** | **03 33 04.0** | **+0.4** |
| **KVN** | **Kaiserville** | **78.58** | **308** | P | **P** | **03 33 05.5** | **0.0** |
| **NVAR** | **Mina Array Bea** comp=Z,0.4nm,0.6s,baz=169,slow=3.0,SNR=4.2 | **78.74** | **308** | P | **P** | **03 33 07.0** | **+0.5** |
| **ASAR** | **Alice Springs** comp=Z,0.2nm,0.6s,baz=195,slow=4.2,SNR=5.8 | **161.66** | **152** | PKPab | **PKPab** | **03 41 49.9** | **-0.3** |

*BUL **21** 03:38:36.2±0.7, 26°.53S×23°.45E, h10km, MD4.0*
*PRE **21** 03:38:38.6±1.0, 26°.86S×26°.74E, h2km, ML2.8*

**ISC 21 03:38:38.8**±1.3, **26°81S**±0°04×**26°73E**±0°04, **h8**km±11km, **n10,** σ1ᵍ**72**/19, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRYS** | **Parys** | **0.57** | **102** | *eP* | **Pg** | **03 38 50.2** | **+0.3** |
| PRYS | | | | *eS* | **Sg** | **03 38 57.2** | **-0.2** |
| PRYS | comp=Z,235nm,0.6s | | | IAML | | 03 39 03.8 | |
| **KSR** | **Koster** | **0.97** | **9** | *eP* | **Pb** | **03 38 58.7** | **+0.7** |
| KSR | | | | *eS* | **Sb** | **03 39 12.2** | **+1.2** |
| KSR | comp=Z,489nm,0.1s | | | IAML | | 03 39 18.6 | |
| **SWZ** | **Schweizer** | **1.30** | **253** | *eP* | **Pn** | **03 39 04.0** | **+0.5** |
| SWZ | | | | *eS* | **Sb** | **03 39 21.2** | **+0.6** |
| SWZ | comp=Z,205nm,0.4s | | | IAML | | 03 39 26.2 | |
| **SLR** | **Silverton** | **1.76** | **53** | *eP* | **Pb** | **03 39 11.3** | **-0.1** |
| SLR | | | | *eS* | **Sn** | **03 39 34.3** | **+1.8** |
| SLR | comp=Z,210nm,0.3s | | | IAML | | 03 39 39.2 | |
| **LBTB** | **Lobatse** | **2.06** | **330** | *i* P | **Pb** | **03 39 16.4** | **-0.2** |
| LBTB | | | | *i* S | **Sg** | **03 39 45.4** | **+0.4** |
| **BOSA** | **Boshof** | **2.22** | **216** | *eP* | **Pn** | **03 39 17.4** | **+1.2** |
| BOSA | | | | *eS* | **Sn** | **03 39 44.7** | **+0.8** |
| BOSA | comp=Z,32nm,0.3s | | | IAML | | 03 39 50.1 | |
| **BOSA** | **Boshof** | **2.22** | **216** | *eP* | **Pb** | **03 39 18.9** | **-0.5** |
| BOSA | | | | *i* S | **Sg** | **03 39 49.0** | **-1.3** |
| **POGA** | **Pongola** | **4.47** | **98** | *eP* | **Pn** | **03 39 47.5** | **+0.6** |
| POGA | | | | *eS* | **Sn** | **03 40 38.5** | **-0.7** |
| POGA | comp=Z,33nm,3.2s | | | IAML | | 03 40 48.0 | |
| **UPI** | **Upington** | **5.10** | **251** | *eP* | **Pn** | **03 39 56.7** | **+1.0** |
| UPI | | | | *eS* | **Sn** | **03 40 53.9** | **-1.0** |
| UPI | comp=Z,28nm,9.2s | | | IAML | | 03 41 09.1 | |
| **MATP** | **Matopo** | **6.56** | **15** | *i* P | Pb | 03 40 25.8 | -7.5 |
| MATP | | | | *i* S | **Sb** | **03 41 46.4** | **-5.6** |

*IDC **21** 03:39:34.0±0.6, 7°.00N×92°.33E, h0km, mb4.2/14, mb1 4.3/17, mb1mx4.0/38, mbtmp4.2/17, ML4.3/3, MS3.3/4, Ms1 3.4/4, ms1mx2.9/89, Error ellipse: s-maj=24.1km s-min=14.1km az=51.0*
*NDI **21** 03:39:37.4±1.5, 7°.09N×92°.66E, h50km, mb4.7, mb4.8(NEIC)*
*BJI **21** 03:39:38.1±0.0, 6°.99N×92°.22E, h41km, mb4.3/32, mB4.9/13, Ms4.2/6, Ms7 3.9/6*
*NEIC **21** 03:39:38.2±1.3, 6°.94N±0°.08×92°.41E±0°.07, h24km±4km, mb4.8/44, Error ellipse: s-maj=11.8km s-min=9.7km az=222.0*

**ISC 21 03:39:37.4**±0.4, **6°98N**±0°06×**92°39E**±0°06, **h23**km, **n101,** σ1ᵍ**23**/94, **mb4.5**/39, **1C-2D, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PBA** | **Port Blair** | **4.66** | **4** | Pn | **Pn** | **03 40 47.2** | **+0.8** |
| **LHMI** | **Lhok Sumawe** | **4.85** | **111** | Pn | **Pn** | **03 40 48.2** | **-0.8** |
| **SRIT** | **Nakonsritamara** | **7.32** | **77** | Pn | **Pn** | **03 41 23.5** | **+0.5** |
| **GSI** | **Gunungsitoli** | **7.65** | **137** | Pn | **Pn** | **03 41 27.2** | **-0.3** |
| **PSI** | **Prapat** 1.7nm,0.3s,baz=350,slow=12,SNR=5.2 | **7.72** | **122** | Pn | **Pn** | **03 41 28.4** | **-0.2** |
| **RPSI** | **Rantau Prapat** | **7.78** | **123** | | **Pn** | **03 41 28.4** | **-0.9** |
| **PALK** | **Pallekele** 1.9nm,0.3s,baz=190,slow=15,SNR=8.5 | **11.60** | **272** | Pn | **Pn** | **03 42 21.4** | **-0.5** |
| PALK | 2.7nm,0.3s,baz=107,slow=18,SNR=2.4 | | | Sn | Sn | 03 44 21.7 | -9.1 |
| PALK | comp=Z,98nm,19.9s,baz=190,slow=34 | | | LR | LR | 03 46 09.1 | |
| **PALK** | **Pallekele** | **11.60** | **272** | Pn | **Pn** | **03 42 22.6** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** 1.1nm,0.3s,baz=229,slow=14,SNR=16 | **13.07** | **29** | Pn | **Pn** | **03 42 42.6** | **+0.8** |
| CMAR | comp=Z,44nm,20.2s,baz=205,slow=37 | | | LR | LR | 03 47 38.0 | |
| **CHTO** | **Chiang Mai** | **13.38** | **28** | Pn | **Pn** | **03 42 47.5** | **+1.4** |
| **SALM** | **Salem** | **14.75** | **289** | *eP* | **Pn** | **03 43 04.2** | **-0.6** |
| SALM | | | | ⇑*eS* | Sn | 03 45 32.5 | -15 |
| **VJD** | **Vijayawada** | **14.89** | **311** | *eP* | **Pn** | **03 43 05.3** | **-1.3** |
| **UBPT** | **Khong Chiam** | **15.25** | **56** | | **Pn** | **03 43 12.7** | **+1.3** |
| UBPT | comp=Z,20nm,0.8s | | | IAmb | IAmb | 03 43 30.8 | |
| **HYB** | **Hyderabad** | **17.03** | **309** | *eP* | **Pn** | **03 43 35.0** | **+0.7** |
| **IMP** | **Imphal** | **17.81** | **5** | *eP* | **Pn** | **03 43 42.4** | **-1.6** |
| **SHL** | **Shillong** | **18.49** | **359** | | **Pn** | **03 43 52.5** | **+0.1** |
| **KOHI** | **KOHIMA** | **18.71** | **5** | *eP* | **P** | **03 43 53.1** | **-1.5** |
| KOHI | comp=Z,67nm,0.7s | | | IAmb | IAmb | 03 44 01.7 | |
| **MOKO** | **MOKOCHONG** | **19.34** | **6** | *eP* | **P** | **03 44 00.8** | **-0.7** |
| MOKO | comp=Z,23nm,0.7s | | | IAmb | IAmb | 03 44 10.0 | |
| **GTK** | **Tadong** | **20.55** | **350** | *eP* | **P** | **03 44 15.8** | **+1.2** |
| GTK | comp=Z,26nm,0.8s | | | IAmb | IAmb | 03 44 16.9 | |
| **KKM** | **Kota Kinabalu** | **23.69** | **91** | P | **P** | **03 44 46.8** | **-1.1** |
| KKM | comp=Z,28nm,1.1s | | | IAmb | IAmb | 03 45 29.3 | |
| **DGAR** | **Diego Garcia** | **24.49** | **235** | P | **P** | **03 44 54.9** | **-0.3** |
| **H08S3** | **Diego Garcia H** baz=54,slow=75,SNR=512 | **24.59** | **234** | T | T | 04 11 10.9 | |
| **H08S2** | **Diego Garcia H** baz=54,slow=75,SNR=80 | **24.59** | **234** | T | T | 04 11 05.3 | |
| **H08S1** | **Diego Garcia H** baz=54,slow=75,SNR=68 | **24.61** | **234** | T | T | 04 11 16.4 | |
| **MYLDM** | **Lahad Datu** | **26.02** | **92** | P | **P** | **03 45 07.8** | **-1.2** |
| MYLDM | comp=Z,18nm,0.8s | | | IAmb | IAmb | 03 45 28.0 | |
| **JAGI** | **Jajag, Banyuwa** | **26.57** | **125** | P | **P** | **03 45 13.6** | **-0.5** |
| JAGI | comp=Z,15nm,1.0s | | | IAmb | IAmb | 03 45 26.7 | |
| **TOLI2** | **Tolitoli** | **28.90** | **100** | P | **P** | **03 45 33.6** | **-1.3** |
| TOLI2 | comp=Z,17nm,1.4s | | | IAmb | IAmb | 03 46 03.4 | |
| **GOMU** | **GeErMu** | **29.17** | **4** | P | **P** | **03 45 36.9** | **-0.5** |
| GOMU | | | | S | **S** | **03 50 21.4** | **-7.4** |
| GOMU | comp=Z,1.0nm,1.1s | | | pmax | pmax | | |
| **XAN** | **Xi'an** | **30.96** | **27** | P | **P** | **03 45 51.4** | **-1.6** |
| XAN | comp=Z,5.0nm,1.1s | | | pmax | pmax | | |
| **WHN** | **Wuhan** | **31.20** | **39** | ⇓P | P | 03 46 01.3 | +6.2 |
| **NIL** | **Nilore** | **31.91** | **329** | P | **P** | **03 46 01.7** | **+0.3** |
| NIL | comp=Z,5.2nm,0.7s | | | IAmb | IAmb | 03 46 51.9 | |
| **SSLB** | **Suanglung** | **32.10** | **55** | P | **P** | **03 46 02.5** | **-0.6** |
| **GTA** | **Gaotai** | **32.97** | **11** | ⇓P | **P** | **03 46 11.4** | **+0.7** |
| GTA | | | | pP | sP | 03 46 18.4 | -0.3 |
| GTA | | | | sP | pwP | 03 46 23.5 | +1.8 |
| GTA | comp=Z,6.0nm,1.0s | | | pmax | pmax | | |
| **NJ2** | **Nanjing** | **35.08** | **41** | *eP* | **P** | **03 46 30.6** | **+1.7** |
| NJ2 | comp=Z,12nm,0.6s | | | pmax | pmax | | |
| **KSH** | **Kashi** | **35.60** | **338** | P | **P** | **03 46 31.8** | **-1.7** |
| KSH | | | | pP | pP | 03 46 40.0 | +0.8 |
| KSH | comp=Z,3.0nm,1.2s | | | pmax | pmax | | |
| **WMQ** | **Urumqi** | **36.93** | **354** | *eP* | **P** | **03 46 47.6** | **+2.9** |
| **TARG** | **Taragay, Kyrgy** | **36.95** | **342** | P | **P** | **03 46 45.7** | **+0.3** |
| **HHC** | **Hu-ho-hao-te** | **37.82** | **24** | *eP* | **P** | **03 46 55.6** | **+3.3** |
| HHC | comp=Z,10.0nm,0.9s | | | pmax | pmax | | |
| HHC | comp=Z,220nm,6.1s | | | pmax | pmax | | |
| **SOCY** | **Socotra** | **38.19** | **281** | P | **P** | **03 46 55.6** | **-0.2** |
| SOCY | comp=Z,29nm,1.1s | | | IAmb | IAmb | 03 47 06.0 | |
| **UCH** | **Uchtor** SNR=7.5 | **38.51** | **339** | P | **P** | **03 46 59.9** | **+1.4** |
| **KBK** | **Karagaybulak** SNR=8.0 | **38.73** | **339** | P | **P** | **03 47 01.7** | **+1.6** |
| **AML** | **Almayashu** SNR=19 | **38.73** | **338** | P | **P** | **03 47 01.6** | **+1.3** |
| **AAK** | **Ala-Archa** comp=Z,3.0nm,0.7s,baz=151,slow=4.1,SNR=9.0 | **38.87** | **339** | P | **P** | **03 47 02.2** | **+1.0** |
| **AAK** | **Ala-Archa** | **38.87** | **339** | P | **P** | **03 47 02.0** | **+0.8** |
| **EKS2** | **Erkin-Say** SNR=6.4 | **39.16** | **338** | P | **P** | **03 47 05.1** | **+1.5** |
| **USP** | **Ospenovka** SNR=9.4 | **39.42** | **339** | P | **P** | **03 47 06.6** | **+0.9** |
| **MK31** | **Makanchi Array** | **40.61** | **349** | P | **P** | **03 47 15.4** | **0.0** |
| **MKAR** | **Makanchi Array** comp=Z,3.5nm,0.5s,baz=166,slow=8.4,SNR=79 | **40.61** | **349** | P | **P** | **03 47 15.2** | **-0.2** |
| **MKAR** | **Makanchi Array** | **40.61** | **349** | P | **P** | **03 47 15.5** | **0.0** |
| **MAKZ** | **Makanchi** | **40.68** | **349** | P | **P** | **03 47 16.0** | **-0.1** |
| **KKAR** | **Karatay Array** | **40.81** | **335** | P | **P** | **03 47 18.0** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **41.20** | **128** | P | **P** | **03 47 20.2** | **-0.5** |
| **SONM** | **Songino Array** comp=Z,1.1nm,0.6s,baz=194,slow=7.1,SNR=6.0 | **42.43** | **14** | P | **P** | **03 47 30.3** | **-0.2** |
| **SONM** | **Songino Array** comp=Z,2.5nm,1.1s | **42.43** | **14** | IAmb | IAmb | 03 47 37.8 | |
| **MTN** | **Manton Dam** | **43.24** | **117** | P | **P** | **03 47 36.6** | **-0.8** |
| MTN | comp=Z,29nm,1.3s | | | IAmb | IAmb | 03 49 00.9 | |
| **KURK** | **Kurchatov** | **45.08** | **348** | P | **P** | **03 47 51.8** | **+0.2** |
| KURK | comp=Z,4.6nm,0.7s | | | IAmb | IAmb | 03 47 59.4 | |
| **ZAA0** | **Zalesovo Array** | **47.23** | **354** | P | **P** | **03 48 08.8** | **+0.3** |
| ZAA0 | comp=Z,5.9nm,1.2s | | | IAmb | IAmb | 03 48 16.6 | |
| **ZALV** | **Zalesovo Beam** comp=Z,2.2nm,0.6s,baz=169,slow=8.1,SNR=11 | **47.23** | **354** | P | **P** | **03 48 08.5** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **47.23** | **354** | P | **P** | **03 48 08.6** | **+0.2** |
| **WB0** | **Warramunga Arr** | **49.14** | **124** | P | **P** | **03 48 23.9** | **+0.1** |
| WB0 | comp=Z,15nm,1.6s | | | IAmb | IAmb | 03 48 46.8 | |
| **WRA** | **Warramunga Arr** comp=Z,2.8nm,0.8s,baz=305,slow=8.9,SNR=25 | **49.18** | **124** | P | **P** | **03 48 24.5** | **+0.4** |
| **WRA** | **Warramunga Arr** | **49.18** | **124** | P | **P** | **03 48 24.7** | **+0.5** |
| **WRAB** | **Tennant Creek** | **49.19** | **124** | P | **P** | **03 48 23.8** | **-0.3** |
| WRAB | comp=Z,6.4nm,0.8s | | | IAmb | IAmb | 03 48 32.7 | |
| **WB2** | **Warramunga Arr** | **49.19** | **124** | P | **P** | **03 48 24.2** | **0.0** |
| WB2 | comp=Z,5.5nm,0.8s | | | IAmb | IAmb | 03 48 32.6 | |
| **BRVK** | **Borovoye** | **49.36** | **343** | P | **P** | **03 48 24.8** | **-0.1** |
| BRVK | comp=Z,4.4nm,1.1s | | | IAmb | IAmb | 03 48 33.2 | |
| **WR0** | **Warramunga Arr** | **49.36** | **124** | P | **P** | **03 48 24.9** | **-0.6** |
| WR0 | com

comp=Z,3.4nm,1.1s,baz=190,slow=4.5,SNR=4.0

*NAO* ***21*** *03:49:03.0±2.0, 79.61N×3.17E, ML2.6*
*DNK* ***21*** *03:49:04.4±2.4, 79.43N×3.59E, h17km±31km, ML1.2*
*BER* ***21*** *03:49:05.9±2.9, 79.42N×3.29E, h10km, ML2.1, ML2.6(NAO), Confirmed Earthquake*
*IEPN* ***21*** *03:49:07.0, 79.28N×3.84E, h10km*

**ISC 21 03:49:01.8±1.1, 79.56N±0.08×3.27E±0.06, h10km, n29, σ2.37/44, 1C, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KBS** | **Kingsbay** | **1.75** | **107** | Pg | | **Pn** | **03 49 33.7** | **+1.6** |
| KBS | | | | Lg | | Lg | 03 49 52.8 | |
| **KBS** | **Kingsbay** | **1.75** | **107** | *i* P | | **Pn** | **03 49 32.7** | **+0.6** |
| **KBS** | **Kingsbay** | **1.75** | **107** | *e*P | | **Pn** | **03 49 33.6** | **+1.5** |
| KBS | | | | *e*S | | **Sn** | **03 49 52.5** | **-1.9** |
| KBS | | | | IAML | | | 03 50 03.0 | |
| | comp=Z,26nm,0.3s | | | | | | | |
| **KBS** | **Kingsbay** | **1.75** | **107** | *e*P | | **Pn** | **03 49 33.3** | **+1.1** |
| KBS | | | | *e*S | | **Sn** | **03 49 52.5** | **-1.9** |
| **BRBB** | **Barentsburg B** | **2.59** | **119** | Pn | | **Pn** | **03 49 45.8** | **+2.2** |
| BRBB | | | | Sn | | **Sn** | **03 50 13.6** | **-1.4** |
| **BRBB** | **Barentsburg B** | **2.59** | **119** | *e*P | | **Pn** | **03 49 46.4** | **+2.8** |
| BRBB | | | | *e*S | | **Sn** | **03 50 13.7** | **-1.3** |
| **BRBA** | **Barentsburg A** | **2.61** | **120** | Pn | | **Pn** | **03 49 46.2** | **+2.2** |
| BRBA | | | | Sn | | **Sn** | **03 50 14.8** | **-0.9** |
| **BRBA** | **Barentsburg A** | **2.61** | **120** | *e*P | | **Pn** | **03 49 46.9** | **+2.9** |
| BRBA | | | | *e*S | | **Sn** | **03 50 14.0** | **-1.6** |
| BRBA | | | | IAML | | | 03 50 17.6 | |
| | comp=Z,16nm,0.3s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.89** | **112** | Pn | | **Pn** | **03 49 50.2** | **+2.3** |
| | baz=309,slow=10 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **03 50 21.8** | **-0.8** |
| | baz=288,slow=18 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.89** | **112** | Pn | | **Pn** | **03 49 50.2** | **+2.3** |
| | baz=309,slow=10 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **03 50 21.8** | **-0.8** |
| | baz=288,slow=18 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.89** | **112** | *i* P | | **Pn** | **03 49 50.2** | **+2.3** |
| SPA0 | | | | *e*S | | **Sn** | **03 50 21.4** | **-1.2** |
| **HSPB** | **Hornsund (broa** | **3.58** | **130** | Pn | | **Pn** | **03 49 59.3** | **+2.0** |
| HSPB | | | | Sn | | **Sn** | **03 50 37.0** | **-2.4** |
| **HSPB** | **Hornsund (broa** | **3.58** | **130** | *e*P | | **Pn** | **03 49 58.8** | **+1.5** |
| HSPB | | | | *e*S | | **Sn** | **03 50 37.2** | **-2.3** |
| HSPB | | | | IAML | | | 03 50 39.1 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.58** | **130** | *e*P | | **Pn** | **03 49 59.1** | **+1.9** |
| HSPB | | | | *e*S | | **Sn** | **03 50 36.9** | **-2.6** |
| **NOR** | **Nord** | **3.85** | **312** | Pn | | **Pn** | **03 50 03.1** | **+2.2** |
| **NOR** | **Nord** | **3.85** | **312** | *i* P | | **Pn** | **03 50 03.1** | **+2.2** |
| NOR | | | | IAML | | | 03 50 10.4 | |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **NOR** | **Nord** | **3.85** | **312** | *e*P | | **Pn** | **03 50 03.5** | **+2.5** |
| **HOPEN** | **Hopen** | **5.42** | **113** | Pn | | **Pn** | **03 50 25.2** | **+2.6** |
| HOPEN | | | | Sn | | **Sn** | **03 51 21.7** | **-3.2** |
| **HOPEN** | **Hopen** | **5.42** | **113** | *e*S | | **Sn** | **03 51 21.5** | **-3.4** |
| HOPEN | | | | IAML | | | 03 51 29.2 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **HOPEN** | **Hopen** | **5.42** | **113** | P | | **Pn** | **03 50 24.9** | **+2.3** |
| HOPEN | | | | *e*S | | **Sn** | **03 51 22.0** | **-2.9** |
| **DBG** | **Daneborg** | **7.41** | **237** | Pn | | **Pn** | **03 50 50.8** | **+0.9** |
| DBG | | | | Sn | | Sn | 03 52 06.2 | -7.6 |
| **DBG** | **Daneborg** | **7.41** | **237** | *i* P | | **Pn** | **03 50 48.5** | **-1.4** |
| DBG | | | | *i* S | | **Sn** | **03 52 07.5** | **-6.3** |
| DBG | | | | IAML | | | 03 52 12.3 | |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| **DBG** | **Daneborg** | **7.41** | **237** | *e*P | | **Pn** | **03 50 51.9** | **+2.0** |
| DBG | | | | *e*S | | Sn | 03 52 05.4 | -8.5 |
| **ZFI2** | **Zemlya Franca-** | **7.53** | **59** | *e*P | | **Pn** | **03 50 54.1** | **+2.7** |
| ZFI2 | | | | *e*S | | **Sn** | **03 52 13.4** | **-3.1** |
| **ZFI** | **Zemlya Franca-** | **7.53** | **59** | *e*P | | **Pn** | **03 50 53.8** | **+2.4** |
| ZFI | | | | *e*S | | Sn | 03 52 12.4 | -4.2 |
| | comp=Z,16nm,1.5s | | | | | | | |
| **NEEM** | **North Greenlan** | **10.68** | **286** | *i* P | | Pn | 03 51 34.3 | -0.6 |
| NEEM | | | | *i* S | | Sn | 03 53 25.3 | -9.1 |
| NEEM | | | | IAML | | | 03 53 29.1 | |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **ARA0** | **ARCESS Array S** | **11.54** | **138** | Pn | | **Pn** | **03 51 48.4** | **+2.1** |
| | baz=333,slow=12 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **11.54** | **138** | Pn | | **Pn** | **03 51 48.4** | **+2.1** |
| | baz=333,slow=12 | | | | | | | |
| **SUMG** | **Summit** | **11.89** | **257** | *i* P | | **Pn** | **03 51 51.0** | **-0.4** |

*GII* ***21*** *04:19:31.1±0.5, 29.91N×32.15E, h40km, MD3.0/4, Mm3.0/6*
*HLW* ***21*** *04:19:32.5, 29.88N×32.49E, h4km±5km, Md3.0, Ml3.2*

**ISC 21 04:19:32.3±1.2, 29.91N±0.05×32.47E±0.05, h10km, n21, σ0.74/34, Egypt**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **HRDS** | **Abu Rudays** | **1.39** | **149** | P | | **Pn** | **04 19 57.5** | **-0.2** |
| | baz=148 | | | | | | | |
| **HNAT** | **Natroun** | **1.64** | **261** | P | | **Pn** | **04 20 01.6** | **+0.5** |
| | baz=262 | | | | | | | |
| HNAT | | | | S | | **Sn** | **04 20 22.5** | **+0.2** |
| | baz=262 | | | | | | | |
| **NBNS** | **Bani Suef** | **1.64** | **219** | S | | **Sn** | **04 20 22.2** | **-0.2** |
| | baz=220 | | | | | | | |
| **GRB** | **Gharib** | **1.65** | **170** | P | | **Pn** | **04 20 00.9** | **-0.4** |
| | baz=170 | | | | | | | |
| **HKAT** | **Jabal Katrina** | **1.91** | **136** | P | | **Pn** | **04 20 04.7** | **-0.4** |
| | baz=135 | | | | | | | |
| **KRMI** | **Paran Flat** | **1.96** | **83** | Pn | | **Pn** | **04 20 05.2** | **-0.5** |
| KRMI | | | | Sn | | **Sb** | **04 20 32.1** | **-0.6** |
| **MBRI** | **Mt Berech** | **2.12** | **92** | Pn | | **Pn** | **04 20 08.2** | **+0.3** |
| **EIL** | **Elat** | **2.17** | **96** | Pn | | **Pn** | **04 20 08.8** | **+0.4** |
| EIL | | | | Sn | | **Sb** | **04 20 38.4** | **-0.1** |
| **PRNI** | **Paran** | **2.24** | **78** | Pn | | **Pn** | **04 20 09.7** | **+0.3** |
| PRNI | | | | Sn | | **Sb** | **04 20 40.0** | **-0.6** |
| **ZFRI** | **Zfri** | **2.43** | **74** | Pn | | **Pn** | **04 20 12.3** | **+0.3** |
| ZFRI | | | | Sn | | **Sb** | **04 20 44.3** | **-1.7** |
| **TAMRE** | **El Minia** | **2.60** | **212** | P | | **Pn** | **04 20 14.2** | **-0.2** |
| | baz=213 | | | | | | | |
| **AMAZ** | **Amatzia** | **2.66** | **52** | Pn | | **Pn** | **04 20 14.9** | **-0.3** |
| AMAZ | | | | Sn | | **Sn** | **04 20 48.6** | **+1.1** |
| **YTIR** | **Yattir** | **2.70** | **57** | Pn | | **Pn** | **04 20 15.8** | **-0.1** |
| YTIR | | | | Sn | | **Sn** | **04 20 49.6** | **+0.9** |
| **HHRG** | **Al Ghardaqah** | **2.84** | **160** | P | | **Pn** | **04 20 19.4** | **+1.6** |
| | baz=160 | | | | | | | |
| **DSI** | **Dead Sea** | **3.00** | **56** | Pn | | **Pn** | **04 20 20.1** | **+0.2** |
| **SLTI** | **Sal'it** | **3.21** | **43** | Pn | | **Pn** | **04 20 23.4** | **+0.7** |
| SLTI | | | | Sn | | **Sn** | **04 21 01.6** | **+0.6** |
| **HMDT** | **Nahal Hemdat** | **3.51** | **47** | Pn | | **Pn** | **04 20 27.1** | **+0.1** |
| HMDT | | | | Sn | | **Sn** | **04 21 09.9** | **+1.3** |
| **MMLI** | **Mount Malkishu** | **3.57** | **44** | Pn | | **Pn** | **04 20 27.4** | **-0.4** |
| MMLI | | | | Sn | | **Sn** | **04 21 11.6** | **+1.5** |
| **MMA0B** | **Mount Meron ar** | **3.98** | **38** | Pn | | **Pn** | **04 20 33.2** | **-0.3** |
| MMA0B | | | | Sn | | **Sn** | **04 21 20.2** | **-0.1** |
| **GEM** | **Giv'at Ha'Em** | **4.28** | **39** | Pn | | **Pn** | **04 20 37.8** | **+0.4** |
| GEM | | | | Sn | | **Sn** | **04 21 26.4** | **-1.0** |
| **NATI** | **Neve Ativ** | **4.35** | **39** | Pn | | **Pn** | **04 20 37.8** | **-0.7** |
| NATI | | | | Sn | | **Sn** | **04 21 29.6** | **+0.3** |

*IDC* ***21*** *04:25:54.9±4.4, 3.90S×153.85E, h394km±42km, mb3.0/5, mb1 3.2/7, mb1mx2.9/38, mbtmp3.9/7, Error ellipse: s-maj=47.4km s-min=27.1km az=104.0*

**ISC 21 04:25:55.2±1.2, 3.93S±0.2×153.9E±0.3, h398km, n8, σ0.60/8, mb3.3/5, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PMG** | **Port Moresby** | **8.62** | **230** | P | | **Pn** | **04 27 57.3** | **0.0** |
| | 1.3nm,0.3s,baz=74,slow=18,SNR=3.6 | | | | | | | |
| **CTA** | **Charters Tower** | **17.71** | **204** | P | | **P** | **04 29 37.2** | **+0.3** |
| | 0.4nm,0.3s,baz=22,slow=12,SNR=7.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.83** | **228** | P | | **P** | **04 30 42.8** | **-0.9** |
| | 0.6nm,0.5s,baz=53,slow=9.6,SNR=9.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.52** | **223** | P | | **P** | **04 31 07.3** | **-0.2** |
| | 0.8nm,0.4s,baz=55,slow=8.5,SNR=9.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.36** | **319** | P | | **P** | **04 37 24.2** | **+0.7** |
| | 0.2nm,0.5s,baz=90,slow=7.5,SNR=4.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **80.94** | **22** | P | | **P** | **04 37 25.6** | **-0.5** |
| | 0.4nm,0.7s,baz=245,slow=5.6,SNR=4.5 | | | | | | | |
| **QSPA** | **South Pole Qui** | **86.05** | **180** | P | | **P** | **04 37 52.3** | **+0.3** |
| | 1.3nm,0.7s,baz=120,slow=0.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.03** | **290** | PKPbc | | **PKPbc** | **04 45 02.8** | **-0.1** |
| | 0.4nm,0.3s,baz=60,slow=1.9,SNR=12 | | | | | | | |

**KRSC 21 04:51:01.7±1.9, 54.01N×165.99E, h41km±26km, ML3.9, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **BKI** | **Bering** | **1.20** | **359** | *e*P | | Pn | 04 51 21.1 | -0.8 |
| BKI | | | | *e*S | | Sn | 04 51 36.1 | -0.8 |
| **MKZ** | **Mys Kozlova** | **2.56** | **284** | *i* P | | Pn | 04 51 44.8 | +4.2 |
| MKZ | | | | *e*S | | Sn | 04 52 15.8 | +5.3 |
| **KBTR** | **Krutoberegovo** | **2.86** | **322** | *e*P | | Pn | 04 51 46.3 | +1.5 |
| **KBG** | **Krutoberegovo** | **2.94** | **321** | *e*S | | Sn | 04 52 22.3 | +2.5 |
| **TUMD** | **Tumrok D** | **3.47** | **292** | *e*P | | Pn | 04 51 57.8 | +4.7 |
| TUMD | | | | *e*S | | Sn | 04 52 37.7 | +4.8 |
| **ZLN** | **Zelenaya** | **3.60** | **306** | *e*P | | Pn | 04 51 59.8 | +4.7 |
| **BZGR** | **Bezymyannyi-Gr** | **3.61** | **304** | *e*P | | Pn | 04 51 59.9 | +4.7 |
| **TUMR** | **Tumrok** | **3.63** | **293** | *e*P | | Pn | 04 52 00.4 | +4.9 |
| **SPN** | **Mys Shipunski** | **3.68** | **258** | *e*P | | Pn | 04 52 00.0 | +4.0 |
| SPN | | | | *e*S | | Sn | 04 52 41.8 | +3.7 |
| **CIRR** | **Tsirk** | **3.68** | **307** | *e*P | | Pn | 04 52 01.3 | +5.1 |
| **BZWR** | **Bezymyannyi-We** | **3.72** | **304** | *e*P | | Pn | 04 52 01.6 | +4.8 |
| **KMNR** | **Kamenistaya** | **3.76** | **300** | *e*P | | Pn | 04 52 01.8 | +4.6 |
| KMNR | | | | *e*S | | Sn | 04 52 44.8 | +4.6 |
| **KIRR** | **Kirishev** | **3.79** | **303** | *e*P | | Pn | 04 52 03.0 | +5.3 |
| **KRSR** | **Krestovskiy** | **3.82** | **308** | *e*P | | Pn | 04 52 02.3 | +4.2 |
| **KPT** | **Kopyto** | **3.86** | **303** | *e*P | | Pn | 04 52 03.7 | +5.1 |
| **KII** | **Karymskiy** | **3.86** | **273** | *e*P | | Pn | 04 52 03.9 | +5.3 |
| KII | | | | *e*S | | Sn | 04 52 48.1 | +5.4 |
| **NLC** | **Nalytchevo** | **4.05** | **261** | *e*P | | Pn | 04 52 05.4 | +4.3 |
| NLC | | | | *e*S | | Sn | 04 52 51.1 | +3.9 |
| **KOZ** | **Kozyrevsk** | **4.08** | **303** | *e*S | | Sn | 04 52 53.6 | +5.7 |
| **SDLR** | **Sedlovina** | **4.29** | **263** | *e*P | | Pn | 04 52 09.2 | +4.6 |
| **UGLR** | **Uglovaya** | **4.34** | **262** | *e*P | | Pn | 04 52 10.2 | +4.9 |
| **SMAR** | **Somma** | **4.35** | **263** | *e*P | | Pn | 04 52 10.2 | +4.8 |
| **KRER** | **Koryakskii** | **4.37** | **264** | *e*P | | Pn | 04 52 10.9 | +5.2 |
| **AVH** | **Avacha** | **4.38** | **263** | *e*P | | Pn | 04 52 10.9 | +5.1 |
| **DALK** | **Dalny** | **4.43** | **260** | *e*P | | Pn | 04 52 10.3 | +4.0 |
| **KOK** | **Koryaka** | **4.44** | **264** | *e*P | | Pn | 04 52 11.3 | +4.8 |
| **RUS** | **Russkaya** | **4.76** | **254** | *e*P | | Pn | 04 52 14.9 | +4.0 |
| RUS | | | | *e*S | | Sn | 04 53 08.0 | +3.2 |
| **GNL** | **Ganaly** | **4.78** | **269** | *e*P | | Pn | 04 52 16.8 | +5.6 |
| **KRMR** | **Karymshinskiy** | **4.85** | **259** | *e*P | | Pn | 04 52 16.7 | +4.6 |
| KRMR | | | | *e*S | | Sn | 04 53 10.4 | +3.5 |
| **MTVR** | **Mutnovka** | **4.93** | **255** | *e*P | | Pn | 04 52 17.9 | +4.5 |
| MTVR | | | | *e*S | | Sn | 04 53 12.7 | +3.5 |
| **GRL** | **Gorelyy** | **4.97** | **256** | *e*P | | Pn | 04 52 18.9 | +5.0 |
| **KDTR** | **Khodutka, Kamc** | **5.27** | **248** | *e*P | | Pn | 04 52 21.5 | +3.6 |
| KDTR | | | | *e*S | | Sn | 04 53 19.9 | +2.5 |

*IDC* ***21*** *05:08:37.9±1.1, 60.08N×139.36W, h0km, mb3.4/2, mb1 3.5/7, mb1mx3.3/55, mbtmp3.3/7, ML3.1/5, Error ellipse: s-maj=19.8km s-min=10.8km az=27.0*
*AEIC* ***21*** *05:08:37±2.3, 60.08N±0.03×139.43W±0.03, h1km±6km, Error ellipse: s-maj=5.3km s-min=1.5km az=161.0*
*NEIC* ***21*** *05:08:37.9±2.0, 60.06N±0.03×139.41W±0.03, h2km±7km, Error ellipse: s-maj=4.8km s-min=1.1km az=154.0*
*PGC* ***21*** *05:08:38.8, 60.05N×139.43W, h1km, ML2.8/11, 84km northeast of Yakutat, Ak Southeastern Alaska*

**ISC 21 05:08:37.8±1.1, 60.08N±0.02×139.41W±0.02, h5km±8km, n116, σ1.25/146, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **BCPM** | **Bancas Point** | **0.17** | **222** | Pg | | **Pg** | **05 08 40.9** | **-0.1** |
| BCPM | | | | Sg | | **Sg** | **05 08 43.4** | **+0.2** |
| **PNL** | **Peninsula** | **0.41** | **179** | | | **Pg** | **05 08 45.6** | **0.0** |
| PNL | | | | | | **Sg** | **05 08 51.3** | **+0.3** |
| **PNL** | **Peninsula** | **0.41** | **179** | P | | **Pg** | **05 08 45.7** | **0.0** |
| **PINM** | **Pinnacle** | **0.42** | **273** | P | | **Pg** | **05 08 46.0** | **+0.2** |
| | baz=92 | | | | | | | |
| PINM | | | | S | | **Sg** | **05 08 52.4** | **+1.0** |
| | baz=92 | | | | | | | |
| **PCA** | **Pinnacle** | **0.42** | **273** | | | **Pg** | **05 08 46.1** | **+0.1** |
| **PCA** | **Pinnacle** | **0.42** | **273** | | | **Sg** | **05 08 52.4** | **+0.9** |
| **PCA** | **Pinnacle** | **0.42** | **273** | P | | **Pg** | **05 08 46.0** | **+0.1** |
| **YKU2** | **Yakutat** | **0.58** | **193** | | | **Pg** | **05 08 48.4** | **-0.5** |
| YKU2 | | | | IAML | | | 05 09 05.9 | |
| | comp=E,7μm,0.9s | | | | | | | |
| **SAMH** | **Samovar Hills** | **0.69** | **275** | | | **Pb** | **05 08 51.9** | **-0.4** |
| **SAMH** | **Samovar Hills** | **0.69** | **275** | P | | **Pb** | **05 08 51.9** | **-0.4** |
| SAMH | | | | S | | **Sb** | **05 09 02.5** | **+0.4** |
| **YUK7** | **Dusty Glacier** | **0.78** | **54** | | | **Pg** | **05 08 53.0** | **+0.2** |
| YUK7 | | | | | | **Sb** | **05 09 04.6** | **-0.3** |
| **YUK7** | **Dusty Glacier** | **0.78** | **54** | P | | **Pg** | **05 08 52.9** | **+0.2** |
| YUK7 | | | | S | | **Sb** | **05 09 04.3** | **-0.6** |
| **TABL** | **Table Mountain** | **0.94** | **294** | | | **Pg** | **05 08 54.8** | **-0.9** |
| TABL | | | | IAML | | | 05 09 13.1 | |
| | comp=N,1μm,1.1s | | | | | | | |
| TABL | | | | IAML | | | 05 09 14.3 | |
| | comp=E,1μm,0.8s | | | | | | | |
| **TABL** | **Table Mountain** | **0.94** | **294** | P | | **Pg** | **05 08 55.1** | **-0.6** |
| TABL | | | | S | | **Sb** | **05 09 09.2** | **-0.2** |
| **YUK6** | **Outpost Mounta** | **1.01** | **30** | | | **Pg** | **05 08 57.4** | **+0.2** |
| YUK6 | | | | | | **Sb** | **05 09 11.6** | **-0.2** |
| **YUK6** | **Outpost Mounta** | **1.01** | **30** | P | | **Pg** | **05 08 57.4** | **+0.2** |
| YUK6 | | | | S | | **Sb** | **05 09 11.5** | **-0.2** |
| **YUK6** | **Outpost Mounta** | **1.01** | **30** | P | | **Pg** | **05 08 57.4** | **+0.2** |
| | baz=212 | | | | | | | |
| YUK6 | | | | S | | **Sb** | **05 09 11.6** | **-0.2** |
| | baz=212 | | | | | | | |
| **YAH** | **Yahtse** | **1.20** | **285** | | | **Pg** | **05 09 00.4** | **-0.3** |
| YAH | | | | IAML | | | 05 09 22.8 | |
| | comp=N,1μm,0.6s | | | | | | | |
| YAH | | | | IAML | | | 05 09 24.9 | |
| | comp=E,831nm,1.0s | | | | | | | |
| **HYT** | **Haines Junctio** | **1.21** | **51** | | | **Pg** | **05 09 00.2** | **-0.7** |
| **HYT** | **Haines Junctio** | **1.21** | **51** | P | | **Pg** | **05 09 00.3** | **-0.7** |
| HYT | | | | S | | **Sg** | **05 09 16.7** | **+0.1** |
| **HYT** | **Haines Junctio** | **1.21** | **51** | P | | **Pg** | **05 09 00.8** | **-0.1** |
| | baz=233 | | | | | | | |
| HYT | | | | S | | **Sb** | **05 09 17.8** | **+0.6** |
| | baz=233 | | | | | | | |
| **YUK8** | **Steele Glacier** | **1.22** | **352** | P | | **Pg** | **05 09 00.5** | **-0.7** |
| YUK8 | | | | S | | **Sg** | **05 09 17.3** | **+0.2** |
| **MESA** | **MESA** | **1.27** | **276** | | | **Pg** | **05 09 01.7** | **-0.5** |
| MESA | | | | IAML | | | 05 09 31.8 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **MESA** | **MESA** | **1.27** | **276** | P | | **Pg** | **05 09 01.7** | **-0.5** |
| **MESA** | **MESA** | **1.27** | **276** | P | | **Pg** | **05 09 01.7** | **-0.5** |
| | baz=94 | | | | | | | |
| MESA | | | | S | | **Sb** | **05 09 19.3** | **+0.2** |
| | baz=94 | | | | | | | |
| **YUK5** | **Granite Creek** | **1.31** | **35** | | | **Pg** | **05 09 02.7** | **-0.1** |
| **YUK5** | **Granite Creek** | **1.31** | **35** | P | | **Pg** | **05 09 02.7** | **-0.1** |
| YUK5 | | | | S | | **Sb** | **05 09 20.3** | **+0.3** |
| **YUK4** | **Talbot Arm** | **1.33** | **16** | Pn | | **Pn** | **05 09 05.0** | **+1.8** |
| YUK4 | | | | Sn | | **Sn** | **05 09 23.9** | **+2.6** |
| **BAGL** | **Bagley Icefiel** | **1.40** | **288** | | | **Pn** | **05 09 03.9** | **0.0** |
| **BARN** | **Barnard Glacie** | **1.48** | **313** | | | **Pn** | **05 09 04.3** | **-1.0** |
| BARN | | | | IAML | | | 05 09 33.1 | |
| | comp=N,932nm,0.8s | | | | | | | |
| **ISLE** | **Juniper Island** | **1.55** | **291** | | | **Pn** | **05 09 05.7** | **-0.5** |
| ISLE | | | | IAML | | | 05 09 32.3 | |
| | comp=E,1μm,0.7s | | | | | | | |
| ISLE | | | | IAML | | | 05 09 35.8 | |
| | comp=N,810nm,1.3s | | | | | | | |
| **KIAG** | **Kiagna River** | **1.69** | **302** | | | **Pn** | **05 09 07.7** | **-0.4** |
| KIAG | | | | | | **Sn** | **05 09 31.2** | **+1.0** |
| **KIAG** | **Kiagna River** | **1.69** | **302** | Pn | | **Pn** | **05 09 07.9** | **-0.2** |
| KIAG | | | | Sg | | **Sn** | **05 09 31.1** | **+0.9** |
| **BALM** | **Baldy** | **1.74** | **305** | | | **Pn** | **05 09 08.5** | **-0.3** |
| **BALM** | **Baldy** | **1.74** | **305** | Pn | | **Pn** | **05 09 08.2** | **-0.5** |
| BALM | | | | Sg | | **Sb** | **05 09 33.1** | **+0.7** |
| **WAX** | **Waxell Ridge** | **1.75** | **284** | | | **Pn** | **05 09 09.4** | **+0.5** |
| **YUK3** | **Moose Creek** | **1.78** | **344** | | | **Pn** | **05 09 10.2** | **+0.8** |
| **YUK3** | **Moose Creek** | **1.78** | **344** | Pn | | **Pn** | **05 09 10.2** | **+0.8** |
| YUK3 | | | | Sg | | **Sg** | **05 09 36.0** | **+1.1** |
| **YUK3** | **Moose Creek** | **1.78** | **344** | P | | **Pn** | **05 09 10.2** | **+0.8** |
| | baz=163 | | | | | | | |
| **YUK2** | **White River** | **1.85** | **339** | | | **Pn** | **05 09 11.3** | **+1.0** |
| YUK2 | | | | | | **Sg** | **05 09 36.8** | **-0.4** |
| **YUK2** | **White River** | **1.85** | **339** | Pn | | **Pn** | **05 09 11.5** | **+1.2** |
| YUK2 | | | | Sg | | **Sg** | **05 09 36.7** | **+1.5** |
| **KHIT** | **Khitrov Hills** | **1.95** | **283** | | | **Pn** | **05 09 12.1** | **+0.5** |
| **GRIN** | **Grindle Hills** | **1.96** | **278** | | | **Pn** | **05 09 13.1** | **+1.4** |
| **SKAG** | **Skagway** | **2.16** | **105** | | | **Pn** | **05 09 15.5** | **+1.1** |
| SKAG | | | | IAML | | | 05 09 53.7 | |
| | comp=E,245nm,0.7s | | | | | | | |
| **SKAG** | **Skagway** | **2.16** | **105** | P | | **Pn** | **05 09 15.6** | **+1.2** |
| | baz=288 | | | | | | | |
| **VRDI** | **Verde Repeater** | **2.30** | **302** | | | **Pn** | **05 09 17.1** | **+0.5** |
| VRDI | | | | IAML | | | 05 09 53.3 | |
| VRDI | | | | IAML | | | 05 09 56.4 | |
| | comp=N,289nm,0.8s | | | | | | | |
| **HMT** | **Hamilton** | **2.43** | **278** | | | **Pn** | **05 09 19.3** | **+1.1** |
| **BVCY** | **Beaver Creek** | **2.45** | **344** | | | **Pn** | **05 09 20.2** | **+1.8** |
| **BVCY** | **Beaver Creek** | **2.45** | **344** | Pn | | **Pn** | **05 09 20.3** | **+1.8** |
| BVCY | | | | Sg | | **Sg** | **05 09 54.9** | **-1.4** |
| **BVCY** | **Beaver Creek** | **2.45** | **344** | P | | **Pn** | **05 09 20.2** | **+1.8** |
| | baz=163 | | | | | | | |
| **GLB** | **Gilahina Butte** | **2.56** | **304** | | | **Pn** | **05 09 20.8** | **+0.9** |
| GLB | | | | IAML | | | 05 10 02.0 | |
| | comp=E,154nm,1.1s | | | | | | | |
| GLB | | | | IAML | | | 05 10 02.0 | |
| | comp=N,217nm,1.0s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **2.58** | **334** | | | **Pn** | **05 09 22.4** | **+2.0** |
| M27K | | | | IAML | | | 05 10 04.2 | |
| | comp=E,381nm,0.9s | | | | | | | |
| M27K | | | | IAML | | | 05 10 13.7 | |
| | comp=N,196nm,0.8s | | | | | | | |
| **BMRM** | **Bremner River** | **2.72** | **291** | | | **Pn** | **05 09 23.0** | **+0.9** |
| **BMRM** | **Bremner River** | **2.72** | **291** | P | | **Pn** | **05 09 23.1** | **+0.9** |
| | baz=107 | | | | | | | |
| **BESE** | **Bessie Mountai** | **2.78** | **121** | | | **Pn** | **05 09 23.4** | **+0.4** |
| **BESE** | **Bessie Mountai** | **2.78** | **121** | Pn | | **Pn** | **05 09 23.0** | **0.0** |
| BESE | | | | Sg | | **Sb** | **05 10 03.3** | **+1.1** |
| **M30M** | **Minto, Yukon** | **2.81** | **26** | | | **Pn** | **05 09 25.5** | **+2.1** |
| **M26K** | **Nabesna, AK** | **2.91** | **325** | | | **Pn** | **05 09 25.6** | **+0.9** |
| M26K | | | | IAML | | | 05 10 11.5 | |
| | comp=E,147nm,0.9s | | | | | | | |
| M26K | | | | IAML | | | 05 10 15.5 | |
| | comp=N,124nm,1.6s | | | | | | | |
| **M26K** | **Nabesna, AK** | **2.91** | **325** | P | | **Pn** | **05 09 25.6** | **+0.9** |
| | baz=142 | | | | | | | |
| **N25K** | **Chitina, Valde** | **2.96** | **303** | | | **Pn** | **05 09 27.0** | **+1.4** |
| N25K | | | | IAML | | | 05 10 21.1 | |
| | comp=N,223nm,0.8s | | | | | | | |
| **N25K** | **Chitina, Valde** | **2.96** | **303** | P | | **Pn** | **05 09 26.7** | **+1.2** |
| | baz=119 | | | | | | | |
| **JIS** | **Juneau Island** | **3.16** | **123** | | | **Pn** | **05 09 28.4** | **+0.3** |
| **EYAK** | **Cordova Ski Ar** | **3.19** | **281** | | | **Pn** | **05 09 30.3** | **+1.8** |
| **BC03** | | **3.21** | **340** | | | **Pn** | **05 09 29.5** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **3.21** | **340** | Pn | | **Pn** | **05 09 29.4** | **+0.6** |
| **L27K** | **Beaver Creek,** | **3.21** | **340** | | | **Pn** | **05 09 29.9** | **+1.0** |
| **M31M** | **Drury Creek, Y** | **3.24** | **47** | | | **Pn** | **05 09 31.2** | **+1.9** |
| M31M | | | | IAML | | | 05 10 24.5 | |
| | comp=N,94nm,0.8s | | | | | | | |
| **P33M** | **Teslin, Yukon** | **3.30** | **85** | | | **Pn** | **05 09 30.6** | **+0.4** |
| **DIV** | **Divide** | **3.31** | **291** | | | **Pn** | **05 09 31.1** | **+0.8** |
| **DIV** | **Divide** | **3.31** | **291** | Pn | | **Pn** | **05 09 31.1** | **+0.8** |
| **KLU** | **Klutina** | **3.49** | **297** | | | **Pn** | **05 09 32.8** | **-0.1** |
| **KLU** | **Klutina** | **3.49** | **297** | P | | **Pn** | **05 09 32.7** | **-0.1** |
| | baz=111 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.51** | **329** | Pn | | **Pn** | **05 09 34.4** | **+1.4** |
| L26K | | | | IAML | | | 05 10 26.4 | |
| | comp=N,87nm,0.5s | | | | | | | |
| L26K | | | | IAML | | | 05 10 41.2 | |
| | comp=E,108nm,1.3s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.51** | **329** | P | | **Pn** | **05 09 34.0** | **+1.0** |
| | baz=146 | | | | | | | |
| **PS11** | **TAPS Pump St11** | **3.56** | **307** | | | **Pn** | **05 09 35.7** | **+2.0** |
| **FID** | **Port Fidalgo** | **3.57** | **284** | Pn | | **Pn** | **05 09 35.0** | **+1.3** |
| **FARO** | **Faro, Yukon** | **3.65** | **51** | Pn | | **Pn** | **05 09 36.6** | **+1.7** |
| FARO | | | | Sg | | **Sg** | **05 10 31.6** | **-3.2** |
| **M24K** | **Tolsona, Glenn** | **3.86** | **305** | | | **Pn** | **05 09 39.8** | **+1.9** |
| **MAYO** | **Mayo, Yukon** | **3.91** | **24** | Pg | | **Pn** | **05 09 41.9** | **+3.5** |
| **DAWY** | **Dawson** | **4.00** | **0** | | | **Pn** | **05 09 41.3** | **+1.6** |
| **DAWY** | **Dawson** | **4.00** | **0** | Pn | | **Pn** | **05 09 41.4** | **+1.6** |
| DAWY | | | | Sn | | **Sn** | **05 10 29.4** | **+2.3** |
| **DAWY** | **Dawson** | **4.00** | **0** | P | | **Pn** | **05 09 41.6** | **+1.8** |
| | baz=180 | | | | | | | |
| **DOT** | **Dot Lake** | **4.21** | **330** | | | **Pn** | **05 09 45.0** | **+2.5** |
| **DOT** | **Dot Lake** | **4.21** | **330** | Pn | | **Pn** | **05 09 44.8** | **+2.3** |
| **SCM** | **Sheep Creek Mo** | **4.24** | **298** | | | **Pn** | **05 09 42.6** | **-0.5** |
| **SCRK** | **Sand Creek** | **4.47** | **333** | | | **Pn** | **05 09 47

*IDC 21 05:22:32.9±1.1, 36°.08N×141°.24E, h0km, mb3.6/6, mb1 3.8/8, mb1mx3.6/35, mbtmp3.6/8, ML3.4/2, MS2.7/1, Ms1 2.7/1, ms1mx2.2/82, Error ellipse: s-maj=33.3km s-min=21.5km az=76.0*
*JMA 21 05:22:38.4±0.1, 36°.23N×140°.88E, h45km±1km, M3.7*
*JMA Felt II J1.*

**ISC 21 05:22:38.5±1.1, 36°.23N±0°.04×140°.96E±0°.06, h33km±5km, n25, σ1°97/30, mb3.6/6, 5C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JHYU | **Hitachinakayam** | **0.32** | **291** | ⇑P | **Pb** | **05 22 46.8** | **+0.3** |
| JHYU | | | | S | **Sb** | **05 22 52.5** | **+0.5** |
| JIHU | **Itakohorinouch** | **0.44** | **234** | P | **Pn** | **05 22 48.7** | **+0.2** |
| JIHU | | | | S | **Sn** | **05 22 55.9** | **+0.6** |
| JHO | **Hitachi** | **0.50** | **321** | ⇑P | **Pb** | **05 22 48.6** | **-0.5** |
| JHO | | | | S | **Sb** | **05 22 55.7** | **-0.6** |
| CHOJ | **Chosi** | **0.53** | **189** | ⇑P | **Pn** | **05 22 49.5** | **-0.2** |
| CHOJ | | | | S | **Sb** | **05 22 57.0** | **-0.1** |
| JYT | **Yasato** | **0.62** | **270** | ⇓P | **Pn** | **05 22 50.1** | **-0.9** |
| JYT | | | | S | **Sn** | **05 22 58.0** | **-1.8** |
| JSMT | **Sammumatsuo** | **0.71** | **216** | ⇑P | **Pn** | **05 22 52.2** | **-0.1** |
| JSMT | | | | S | **Sn** | **05 23 02.3** | **+0.2** |
| JFK | **Kawauchi** | **1.14** | **356** | ⇑P | **Pn** | **05 22 57.3** | **-0.9** |
| JAG | **Ashikaga** | **1.23** | **280** | ⇓P | **Pn** | **05 22 58.6** | **-0.9** |
| JAG | | | | S | **Sn** | **05 23 13.0** | **-2.0** |
| JFT | **Otama** | **1.38** | **339** | P | **Pn** | **05 23 02.1** | **+0.6** |
| JFT | | | | S | **Sn** | **05 23 19.4** | **+0.7** |
| JKT | **Katashina** | **1.48** | **292** | ⇓P | **Pn** | **05 23 02.9** | **-0.1** |
| JKT | | | | S | **Sn** | **05 23 20.4** | **-0.8** |
| **MJAR** | **Matsushiro Arr** | **2.24** | **279** | Pn | **Pn** | **05 23 13.2** | **-0.1** |
| | 3.3nm,0.3s,baz=85,slow=9.6,SNR=125 | | | | | | |
| MJAR | | | | Sn | **Sn** | **05 23 40.5** | **+0.6** |
| | 3.6nm,0.3s,baz=314,slow=52,SNR=3.5 | | | | | | |
| MJAR | | | | LR | LR | 05 24 11.0 | |
| | comp=Z,130nm,19.0s,baz=84,slow=39 | | | | | | |
| **MAT** | **Matsushiro** | **2.25** | **279** | P | **Pn** | **05 23 13.7** | **+0.3** |
| MAT | | | | S | **Sn** | **05 23 40.5** | **+0.5** |
| **KLR** | **Kul'dur** | **14.64** | **335** | Pn | **Pn** | **05 26 03.6** | **+0.5** |
| | 0.5nm,0.3s,baz=180,slow=12,SNR=8.2 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.06** | **119** | T | T | 05 57 52.9 | |
| | baz=312,slow=75,SNR=9.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.07** | **119** | T | T | 05 58 03.4 | |
| | baz=312,slow=75,SNR=8.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.08** | **119** | T | T | 05 57 46.8 | |
| | baz=312,slow=75,SNR=7.0 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.74** | **121** | T | T | 05 58 41.3 | |
| | baz=314,slow=76,SNR=29 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.74** | **121** | T | T | 05 58 39.1 | |
| | baz=314,slow=76,SNR=18 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.76** | **121** | T | T | 05 58 40.3 | |
| | baz=314,slow=76,SNR=24 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.20** | **313** | P | **P** | **05 30 30.5** | **+2.5** |
| | 0.4nm,0.4s,baz=70,slow=8.3,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.24** | **303** | P | **P** | **05 30 47.0** | **+2.3** |
| | 0.3nm,0.8s,baz=79,slow=9.2,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **50.37** | **32** | P | **P** | **05 31 31.6** | **-0.5** |
| | 0.8nm,1.0s,baz=263,slow=4.1,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.21** | **188** | P | **P** | **05 32 14.1** | **-1.3** |
| | 0.4nm,0.4s,baz=3.2,slow=7.4,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **59.94** | **187** | P | **P** | **05 32 39.9** | **-1.6** |
| | 0.3nm,0.6s,baz=13,slow=6.9,SNR=6.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **74.79** | **337** | P | **P** | **05 34 14.6** | **-0.5** |
| | 0.4nm,0.6s,baz=32,slow=7.3,SNR=1.7 | | | | | | |

**IDC 21 05:27:36.8±1.1, 30°.37S×71°.90W, h0km, mb3.9/2, mb1 3.9/5, mb1mx3.7/24, mbtmp3.8/5, ML3.6/3, MS3.3/1, Ms1 3.3/1, ms1mx2.7/55, Error ellipse: s-maj=32.8km s-min=7.4km az=103.0, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLCA** | **Paso Flores** | **10.39** | **174** | Pn | Pn | 05 30 07.8 | +0.6 |
| | 0.1nm,0.3s,baz=335,slow=11,SNR=5.4 | | | | | | |
| **LPAZ** | **La Paz** | **14.44** | **15** | Pn | Pn | 05 31 03.5 | +0.4 |
| | 0.1nm,0.3s,baz=178,slow=10,SNR=5.3 | | | | | | |
| **SIV** | **San Ignacio** | **17.41** | **37** | P | Pn | 05 31 41.5 | +0.2 |
| | 0.3nm,0.3s,baz=224,slow=12,SNR=12 | | | | | | |
| **ATAH** | **Atahualpa** | **23.91** | **344** | LR | LR | 05 40 43.4 | |
| | comp=Z,66nm,19.2s,baz=51,slow=33 | | | | | | |
| **BDFB** | **Brasilia** | **26.34** | **62** | P | P | 05 33 13.7 | -1.1 |
| | 0.8nm,0.6s,baz=234,slow=12,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.87** | **70** | P | P | 05 40 03.0 | -0.6 |
| | 0.8nm,0.7s,baz=253,slow=4.4,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.05** | **29** | PKPbc | PKPbc | 05 47 30.0 | -1.2 |
| | 1.2nm,0.8s,baz=318,slow=2.0,SNR=3.8 | | | | | | |

**NNC 21 05:37:37.7±3.7, 39°.04N×69°.43E, h0km±15km, mb3.5, mpv3.2, 7C-1D, Error ellipse: s-maj=28.3km s-min=14.3km az=3.0, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK02** | **Karatay Array** | **4.14** | **11** | ⇑Pn | Pn | 05 38 43.6 | +1.3 |
| | 1.1nm,0.7s,baz=194,slow=14 | | | | | | |
| KK02 | | | | ⇓Pg | Pb | 05 38 53.3 | +1.7 |
| | 1.6nm,0.3s | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 05 39 48.7 | |
| | 13nm,0.7s,baz=193,slow=31 | | | | | | |
| **AAK** | **Ala-Archa** | **5.26** | **45** | Pn | Pn | 05 38 56.7 | -1.1 |
| | 2.2nm,0.3s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 05 40 00.9 | +1.7 |
| | 3.5nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.07** | **48** | ⇑Pn | Pn | 05 39 08.1 | -0.8 |
| | 2.2nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Sn | Sn | 05 40 19.9 | +0.8 |
| | 5.0nm,0.9s | | | | | | |
| **AB31** | **Akbulak array** | **12.27** | **329** | ⇑Pn | Pn | 05 40 34.5 | +0.9 |
| | 0.2nm,0.4s,baz=156,slow=11,SNR=4.5 | | | | | | |
| AB31 | | | | ⇑Sn | Sn | 05 42 51.7 | +0.8 |
| | 1.1nm,0.6s,baz=148,slow=25,SNR=5.3 | | | | | | |

**IDC 21 05:41:08.4±3.1, 4°.21S×152°.50E, h0km, mb3.1/2, mb1 3.4/2, mb1mx3.0/34, mbtmp3.2/2, Error ellipse: s-maj=150.4km s-min=30.2km az=122.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.61** | **227** | P | P | 05 46 21.3 | 0.0 |
| | 0.6nm,0.6s,baz=52,slow=9.7,SNR=9.8 | | | | | | |
| **ASAR** | **Alice Springs** | **26.38** | **221** | P | P | 05 46 46.6 | -0.1 |
| | 0.1nm,0.5s,baz=55,slow=9.5,SNR=1.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.83** | **289** | PKPbc | PKPbc | 06 01 01.0 | -0.6 |
| | 0.2nm,0.6s,baz=70,slow=2.2,SNR=1.8 | | | | | | |

*IDC 21 05:48:02.0±1.0, 1°.06N×100°.27E, h213km±9km, mb3.5/7, mb1 3.5/8, mb1mx3.1/41, mbtmp3.9/8, Error ellipse: s-maj=61.5km s-min=11.9km az=50.0*
*DJA 21 05:48:02.3±0.5, 1°.4±4°×10°.0E±°, h216km±7km, M3.9/14, mb4.1/3, mB5.0/1, MLv3.8/14, Mw(mB)4.4/1*

**ISC 21 05:48:01.2±0.7, 0°.95N±0°.09×100°.19E±0°.09, h200km, n21, σ1°97/24, mb3.8/7, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNSI** | **Mandailing Nat** | **0.63** | **256** | P | **Pn** | **05 48 31.4** | **+2.6** |
| **BKNI** | **Bangkinang** | **1.05** | **126** | P | **Pn** | **05 48 33.8** | **+2.5** |
| **PPI** | **Padang Panjang** | **1.41** | **171** | P | **Pn** | **05 48 36.8** | **+2.7** |
| **PSI** | **Prapat** | **2.23** | **326** | P | **Pn** | **05 48 43.4** | **+1.1** |
| | 3.1nm,0.3s,baz=70,slow=5.2,SNR=7.2 | | | | | | |
| PSI | | | | S | **Sn** | **05 49 15.1** | **+0.7** |
| | 1.8nm,0.3s,baz=3.0,slow=20,SNR=16 | | | | | | |
| **RGRI** | **Rengat** | **2.50** | **121** | P | **Pn** | **05 48 48.5** | **+3.4** |
| **GSI** | **Gunungsitoli** | **2.64** | **278** | P | **Pn** | **05 48 49.2** | **+2.6** |
| **TSI** | **Tuntungan** | **3.01** | **327** | P | **Pn** | **05 48 53.9** | **+2.9** |
| **KRJI** | **Kerinci** | **3.28** | **157** | P | **Pn** | **05 48 55.7** | **+1.5** |
| **SNSI** | **Sinabang, Aceh** | **4.12** | **291** | P | **Pn** | **05 49 07.8** | **+3.3** |
| **DSRI** | **Dabo** | **4.61** | **108** | P | **Pn** | **05 49 13.4** | **+2.7** |
| **KSI** | **Kapahiang** | **5.16** | **152** | P | **Pn** | **05 49 19.0** | **+1.2** |
| **LHMI** | **Lhok Sumawe** | **5.34** | **323** | P | **Pn** | **05 49 20.8** | **+0.8** |
| | 0.9nm3µm175nm,0.7s | | | | | | |
| **MDSI** | **Maura Dua** | **6.71** | **144** | P | **Pn** | **05 49 38.1** | **+0.4** |
| | 0.1nm14nm,1.0s | | | | | | |
| **KLSI** | | **7.21** | **141** | P | **Pn** | **05 49 44.6** | **+0.4** |
| **WRA** | **Warramunga Arr** | **39.39** | **124** | P | **P** | **05 55 10.8** | **-1.0** |
| | 1.7nm,0.6s,baz=303,slow=9.0,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 57 15.0** | **-1.0** |
| | 0.4nm,0.8s,baz=317,slow=2.5,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **40.89** | **129** | P | **P** | **05 55 22.8** | **-1.3** |
| | 0.3nm,0.4s,baz=301,slow=7.8,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 57 19.9** | **-0.9** |
| | 0.3nm,0.9s,baz=308,slow=2.7,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.27** | **344** | P | **P** | **05 56 20.9** | **-1.1** |
| | 0.5nm,0.3s,baz=159,slow=8.5,SNR=22 | | | | | | |
| **STKA** | **Stephens Creek** | **51.00** | **134** | P | **P** | **05 56 44.3** | **+1.4** |
| | 1.2nm,0.4s,baz=331,slow=6.0,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.33** | **349** | P | **P** | **05 57 05.7** | **-1.1** |
| | 0.7nm,0.3s,baz=168,slow=7.0,SNR=5.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **71.50** | **312** | P | **P** | **05 58 59.4** | **-1.1** |
| | 1.0nm,0.6s,baz=132,slow=7.4,SNR=7.4 | | | | | | |
| **FINES** | **FINESS Array B** | **81.61** | **332** | P | **P** | **05 59 55.8** | **-0.7** |
| | 3.0nm,0.9s,baz=178,slow=5.7,SNR=4.6 | | | | | | |

**NNC 21 06:03:18.3±8.3, 37°.02N×70°.42E, h0km, mb3.5, mpv3.1, 3C-3D, Error ellipse: s-maj=68.8km s-min=58.1km az=151.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK02** | **Karatay Array** | **6.08** | **1** | ⇑Pn | Pn | 06 04 50.2 | +0.7 |
| | 0.3nm,0.3s,baz=172,slow=11 | | | | | | |
| KK02 | | | | ⇑Pg | Pb | 06 05 08.1 | +3.0 |
| | 1.1nm,0.5s,baz=174,slow=11 | | | | | | |
| KK02 | | | | ⇓Sn | Sn | 06 06 00.4 | +0.7 |
| | 1.8nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **6.43** | **28** | ⇑Pn | Pn | 06 04 54.6 | +0.3 |
| | 1.2nm,0.4s | | | | | | |
| AAK | | | | ⇓Sn | Sn | 06 06 10.7 | +2.2 |
| | 5.1nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **14.41** | **331** | ⇓Pn | Pn | 06 06 41.2 | -2.3 |
| | 0.7nm,0.7s,baz=158,slow=12,SNR=10 | | | | | | |

**TEH 21 06:23:22.5, 38°.24N×56°.52E, h11km, ML3.5, Iran-Turkmenistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRVT** | **Maraveh tapeh** | **0.67** | **211** | *e*Pg | Pg | 06 23 35.7 | +0.2 |
| **BJRD** | **Bojnurd** | **0.88** | **127** | *e*Pg | Pg | 06 23 38.6 | -0.9 |
| **IMND** | **Minoodasht** | **1.32** | **222** | *e*Pg | Pb | 06 23 47.5 | +0.3 |
| IMND | | | | *e*Sg | Sg | 06 24 06.6 | +1.7 |
| IMND | | | | *e* | | 06 24 09.9 | |
| | comp=Z,7µm,0.2s | | | | | | |
| **ISFR** | **Sfrayin** | **1.66** | **135** | *e*Pg | Pb | 06 23 53.4 | +0.1 |
| ISFR | | | | *e* | | 06 24 26.0 | |
| | comp=Z,5µm,0.4s | | | | | | |
| **SBZV** | **Sabzevar** | **2.04** | **154** | *e*Pn | Pb | 06 23 58.9 | -0.8 |
| **SHRO** | **Shahrood** | **2.28** | **191** | *e*Pn | Pn | 06 24 01.9 | +1.7 |
| **IAKL** | **Akhelmad** | **2.41** | **132** | *e*Pn | Pb | 06 24 04.6 | -1.5 |
| IAKL | | | | *e* | | 06 24 44.9 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **IPAY** | **Payeh** | **2.66** | **131** | *e*Pn | Pb | 06 24 08.5 | -1.8 |
| **IGLO** | **Ghaloghah** | **2.75** | **232** | *e*Pn | Pn | 06 24 09.1 | +2.3 |
| **IKRD** | **Kardeh** | **2.79** | **121** | *e*Pn | Pb | 06 24 10.5 | -2.0 |
| IKRD | | | | *e* | | 06 24 16.0 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **IMOG** | **Moghan** | **3.09** | **132** | *e*Pn | Pb | 06 24 15.3 | -2.4 |
| IMOG | | | | *e* | | 06 25 06.8 | |
| | comp=Z,825nm,0.8s | | | | | | |
| **IMYA** | **Miami** | **3.42** | **122** | *e*Pn | Pn | 06 24 17.1 | +1.1 |
| **ISHM** | **Shahmirzad** | **3.54** | **228** | *e*Pn | Pn | 06 24 20.0 | +2.3 |
| ISHM | | | | *e* | | 06 25 09.3 | |
| | comp=Z,1000nm,0.3s | | | | | | |
| **IFIR** | **Firoozkooh** | **3.98** | **231** | *e*Pn | Pn | 06 24 25.6 | +1.9 |
| **TBJM** | **Torbat-e-JAM** | **4.26** | **133** | *e*Pn | Pn | 06 24 29.5 | +2.0 |
| **TNSJ** | **Nastanj** | **4.26** | **179** | *e*Pn | Pn | 06 24 29.6 | +2.1 |
| **TABS** | **Tabas** | **4.60** | **174** | *e*Pn | Pn | 06 24 34.7 | +2.6 |
| **TKDS** | **Koohdasht(Taba** | **4.64** | **174** | *e*Pn | Pn | 06 24 34.5 | +1.9 |
| **TPRV** | **Parvadeh(Tabas** | **5.20** | **178** | *e*Pn | Pn | 06 24 42.5 | +2.2 |
| **AFRZ** | **Afriz** | **5.21** | **156** | *e*Pn | Pn | 06 24 42.8 | +2.3 |
| **ANAR** | **Anarak** | **5.52** | **205** | *e*Pn | Pn | 06 24 46.6 | +1.8 |
| **YZKH** | **Yazd** | **6.04** | **196** | *e*Pn | Pn | 06 24 54.4 | +2.5 |

**IDC 21 06:25:25.1±4.0, 22°.57N×94°.85E, h102km±35km, mb3.5/4, mb1 3.7/5, mb1mx3.2/49, mbtmp3.8/5, Error ellipse: s-maj=83.3km s-min=17.0km az=61.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **5.60** | **136** | P | Pn | 06 26 46.1 | 0.0 |
| | 1.0nm,0.3s,baz=310,slow=13,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **26.22** | **340** | P | P | 06 30 50.2 | -0.2 |
| | 0.6nm,0.6s,baz=156,slow=9.8,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **32.24** | **349** | P | P | 06 31 43.9 | +0.3 |
| | 0.4nm,0.3s,baz=170,slow=8.8,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.20** | **135** | P | P | 06 35 01.7 | -0.2 |
| | 1.3nm,0.6s,baz=323,slow=7.5,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **59.61** | **138** | P | P | 06 35 18.6 | 0.0 |
| | 1.0nm,0.5s,baz=321,slow=6.7,SNR=25 | | | | | | |

**IDC 21 06:31:09.2±4.5, 23°.71S×176°.85W, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.5/35, mbtmp3.4/3, MS3.2/1, Ms1 3.2/1, ms1mx2.6/21, Error ellipse: s-maj=450.6km s-min=37.1km az=163.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.48** | **273** | LR | LR | 06 39 28.3 | |
| | comp=Z,74nm,18.2s,baz=200,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **44.91** | **260** | P | P | 06 39 26.0 | 0.0 |
| | 0.2nm,0.7s,baz=100,slow=7.7,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.30** | **265** | P | P | 06 39 28.8 | -0.3 |
| | 0.5nm,1.0s,baz=103,slow=8.0,SNR=1.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.90** | **57** | P | P | 06 44 01.1 | 0.0 |
| | 0.5nm,0.9s,baz=223,slow=4.9,SNR=4.6 | | | | | | |

*JMA 21 07:06:43.4±0.2, 44°.49N×142°.29E, h240km±2km, M3.2*
*IDC 21 07:06:44.0±1.1, 44°.41N×142°.14E, h230km±7km, mb2.9/4, mb1 3.1/6, mb1mx2.8/42, mbtmp3.5/6, Error ellipse: s-maj=42.9km s-min=20.6km az=50.0*

**ISC 21 07:06:43.7±0.9, 44°.40N±0°.08×142°.28E±0°.07, h238km±7km, n26, σ1°08/36, mb3.1/4, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSS** | **Shosan** | **0.31** | **270** | P | **Pn** | **07 07 14.9** | **+0.2** |
| JSS | | | | *e*S | **S** | **07 07 38.8** | **-0.2** |
| **ASAJ** | **Asahikawa** | **0.36** | **141** | P | **Pn** | **07 07 15.3** | **+0.3** |
| | 6.8nm,0.3s,baz=264,slow=3.5,SNR=38 | | | | | | |
| ASAJ | | | | S | **S** | **07 07 38.9** | **-0.4** |
| | 1.9nm,0.3s,baz=334,slow=33,SNR=9.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **0.36** | **141** | P | **Pn** | **07 07 15.2** | **+0.3** |
| ASAJ | | | | *e*S | **S** | **07 07 39.2** | **-0.1** |
| **JSE** | **Soyaes** | **0.60** | **21** | P | **Pn** | **07 07 15.4** | **-0.1** |
| **JYG** | **Yagishiri** | **0.61** | **273** | P | **Pn** | **07 07 15.6** | **0.0** |
| **JKK2** | **Kamakawa 2** | **0.63** | **147** | P | **Pn** | **07 07 16.3** | **+0.6** |
| JKK2 | | | | *e*S | **S** | **07 07 41.3** | **+0.5** |
| **JHR** | **Hokuryu** | **0.77** | **212** | P | **Pn** | **07 07 17.0** | **+0.7** |
| **JWK2** | **Keihoku** | **0.96** | **344** | P | **Pn** | **07 07 16.8** | **-0.3** |
| **JRR** | **Rishiri** | **1.01** | **317** | P | **Pn** | **07 07 17.3** | **-0.1** |
| **JTKR** | **Abashiri--Toko** | **1.25** | **110** | P | **Pn** | **07 07 19.7** | **+0.7** |
| JTKR | | | | *e*S | **S** | **07 07 47.2** | **+0.6** |
| **JFR** | **Furan** | **1.26** | **169** | P | **Pn** | **07 07 20.2** | **+1.0** |
| **JRBN** | **Rebuntou** | **1.34** | **320** | P | **Pn** | **07 07 18.5** | **-1.1** |
| **JAR** | **Ashorobuto** | **1.54** | **135** | P | **Pn** | **07 07 22.1** | **+0.9** |
| JAR | | | | *e*S | **S** | **07 07 52.3** | **+1.7** |
| **JEW** | **Eniwo** | **1.67** | **201** | P | **Pn** | **07 07 23.5** | **+1.2** |
| **JCH** | **Churui** | **1.95** | **156** | P | **Pn** | **07 07 24.1** | **-0.7** |
| JCH | | | | *e*S | **S** | **07 07 54.8** | **-2.1** |
| **JRA** | **Rausu** | **2.10** | **102** | P | **Pn** | **07 07 26.7** | **+0.6** |
| **JNBK** | **Urakawa-nobuka** | **2.15** | **171** | P | **Pn** | **07 07 27.1** | **+0.5** |
| **JAK** | **Akkeshi** | **2.25** | **128** | P | **Pn** | **07 07 26.8** | **-0.7** |
| JAK | | | | *e*S | **S** | **07 08 00.2** | **-1.7** |
| **JKB** | **Kayabe** | **2.67** | **200** | P | **Pn** | **07 07 31.9** | **0.0** |
| JKB | | | | *e*S | **S** | **07 08 07.4** | **-2.4** |
| **NEM2** | **Nemuro 2** | **2.71** | **111** | P | **Pn** | **07 07 31.2** | **-1.1** |
| NEM2 | | | | *e*S | **S** | **07 08 07.9** | **-2.5** |
| **USRK** | **Ussuriysk Ar.** | **7.39** | **272** | P | **Pn** | **07 08 29.2** | **+0.1** |
| | baz=80,slow=14,SNR=5.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.44** | **203** | P | **Pn** | **07 08 42.7** | **+0.1** |
| | 0.1nm,0.3s,baz=40,slow=11,SNR=1.6 | | | | | | |
| **SONM** | **Songino Array** | **24.97** | **291** | P | **P** | **07 11 44.0** | **-1.6** |
| | 1.4nm,0.7s,baz=76,slow=7.6,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.15** | **295** | P | **P** | **07 14 05.3** | **+0.6** |
| | 0.3nm,0.6s,baz=80,slow=10,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.44** | **188** | P | **P** | **07 16 55.4** | **+0.7** |
| | 0.5nm,1.0s,baz=2.0,slow=6.1,SNR=1.3 | | | | | | |
| **ASAR** | **Alice Springs** | **68.17** | **188** | P | **P** | **07 17 19.6** | **+1.3** |
| | 0.2nm,0.6s,baz=355,slow=5.5,SNR=5.1 | | | | | | |

*JMA 21 07:19:37.9±0.1, 37°.92N×139°.25E, h153km±1km, M2.8*
*IDC 21 07:19:39.7±1.3, 37°.80N×138°.80E, h170km±46km, mb3.3/3, mb1 3.4/3, mb1mx2.9/44, mbtmp3.8/3, MS3.0/1, Ms1 3.0/1, ms1mx2.3/39, Error ellipse: s-maj=86.8km s-min=31.4km az=170.0*

**ISC 21 07:19:37.3±1.0, 37°.94N±0°.07×139°.24E±0°.08, h158km±7km, n17, σ0°40/22, mb3.5/3, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNS** | **Sasagawa** | **0.13** | **152** | P | **Pn** | **07 19 58.3** | **-0.2** |
| JNS | | | | *e*S | **Sn** | **07 20 14.0** | **-0.6** |
| **JIZZ** | **Izumozaki** | **0.58** | **226** | P | **Pn** | **07 20 00.6** | **+0.6** |
| **JFY** | **Yanaizu** | **0.65** | **145** | P | **Pn** | **07 20 00.4** | **0.0** |
| **JYS** | **Shirataka** | **0.71** | **66** | P | **Pn** | **07 20 01.2** | **+0.4** |
| JYS | | | | S | **Sn** | **07 20 19.2** | **+0.5** |
| **JYA** | **Atsumi** | **0.76** | **30** | P | **Pn** | **07 20 01.5** | **+0.5** |
| JYA | | | | S | **Sn** | **07 20 19.2** | **-0.1** |
| **JSD** | **Sado** | **0.78** | **278** | P | **Pn** | **07 20 01.2** | **0.0** |
| JSD | | | | *e*S | **Sn** | **07 20 19.1** | **-0.3** |
| **JFT** | **Otama** | **0.96** | **115** | P | **Pn** | **07 20 02.7** | **+0.1** |
| **JYK** | **Kaneyama** | **1.32** | **42** | P | **Pn** | **07 20 05.8** | **+0.1** |
| **JAG** | **Ashikaga** | **1.52** | **173** | P | **Pn** | **07 20 07.9** | **+0.2** |
| **JSZ** | **Suzu** | **1.57** | **252** | P | **Pn** | **07 20 08.6** | **+0.5** |
| **MAT** | **Matsushiro** | **1.62** | **211** | P | **Pn** | **07 20 09.1** | **+0.3** |
| MAT | | | | S | **Sn** | **07 20 33.2** | **+0.3** |
| **MAT** | **Matsushiro** | **1.62** | **211** | P | **Pn** | **07 20 09.1** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **1.62** | **211** | P | **Pn** | **07 20 09.4** | **+0.6** |
| | 1.0nm,0.3s,baz=16,slow=13,SNR=48 | | | | | | |
| MJAR | | | | S | **Sn** | **07 20 32.2** | **-0.7** |
| | 0.3nm,0.3s,baz=1.8,slow=7.5,SNR=8.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.85** | **34** | LR | LR | 07 34 04.2 | |
| | comp=Z,44nm,18.4s,baz=357,slow=43 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.03** | **312** | P | **P** | **07 26 56.2** | **-0.3** |
| | 0.4nm,0.3s,baz=102,slow=6.5,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.17** | **301** | P | **P** | **07 27 14.2** | **0.0** |
| | 0.2nm,0.6s,baz=88,slow=7.8,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **67.20** | **331** | P | **P** | **07 30 13.9** | **0.0** |
| | 3.5nm,1.0s,baz=53,slow=8.0,SNR=5.5 | | | | | | |

*DJA 21 07:30:29.1±1.9, 3°.5±14°.×13°.8E±°, h28km±19km, M4.2/5, mb4.5/2, mB5.4/1, MLv4.0/5, Mw(mB)4.8/1*
*IDC 21 07:30:30.5±1.0, 2°.85S×138°.56E, h77km±15km, mb2.9/2, mb1 3.2/5, mb1mx3.1/25, mbtmp3.4/5, MS2.3/1, Ms1 2.3/1, ms1mx2.1/15, Error ellipse: s-maj=13.6km s-min=10.3km az=95.0*

**ISC 21 07:30:28.5±0.8, 2°.81S±0°.07×138°.41E±0°.05, h62km, n15, σ3°13/20, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMPI** | **Sarmi** | **0.86** | **20** | P | **Pn** | **07 30 43.0** | **-1.9** |
| SMPI | | | | S | **Sn** | **07 30 54.0** | **-3.0** |
| **GENI** | **Genyem** | **1.77** | **83** | P | **Pn** | **07 30 57.7** | **+0.9** |
| **GENI** | **Genyem** | **1.77** | **83** | P | **Pn** | **07 30 58.4** | **+1.6** |
| **JAY** | **Jayapura** | **2.31** | **83** | P | **Pn** | **07 31 04.7** | **+0.4** |
| | 29nm,0.3s,baz=238,slow=11,SNR=64 | | | | | | |
| JAY | | | | S | **Sn** | **07 31 32.0** | **+0.4** |
| | 14nm,0.3s,baz=134,slow=20,SNR=7.0 | | | | | | |
| JAY | | | | LR | LR | 07 31 53.8 | |
| | comp=Z,61nm,18.9s,baz=290,slow=38 | | | | | | |
| **JAY** | **Jayapura** | **2.31** | **83** | P | **Pn** | **07 31 04.3** | **+0.1** |
| JAY | | | | S | **Sn** | **07 31 31.8** | **+0.2** |
| **FAKI** | **Fak Fak** | **6.16** | **269** | P | **Pn** | **07 31 58.3** | **+1.4** |
| | 0.1nm20nm,0.5s | | | | | | |
| **FAKI** | **Fak Fak** | **6.16** | **269** | P | **Pn** | **07 31 58.7** | **+1.8** |
| **DRS** | **Darwin Rock St** | **12.12** | **217** | P | Pn | 07 33 24.7 | +6.3 |
| | 8.2nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **15.93** | **216** | P | **Pn** | **07 34 10.6** | **+1.7** |
| **WRAB** | **Tennant Creek** | **17.48** | **193** | P | **P** | **07 34 29.8** | **+1.2** |
| **WRA** | **Warramunga Arr** | **17.49** | **193** | P | **P** | **07 34 29.9** | **+1.2** |
| | 0.1nm,0.3s,baz=17,slow=12,SNR=4.7 | | | | | | |
| WRA | | | | S | **Sn** | **07 37 32.7** | **-10** |
| | 0.2nm,0.3s,baz=13,slow=22,SNR=5.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.69** | **219** | P | **P** | **07 34 54.5** | **+1.7** |
| | 0.1nm,0.3s,baz=36,slow=13,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **21.19** | **191** | P | **P** | **07 35 10.7** | **+1.6** |
| | 0.2nm,0.4s,baz=19,slow=11,SNR=5.2 | | | | | | |
| ASAR | | | | S | **S** | **07 39 01.4** | **0.0** |
| | 0.8nm,0.9s,baz=15,slow=25,SNR=6.5 | | | | | | |
| **PLAI** | **Plamp

13nm,0.3s,baz=300,slow=9.1,SNR=128
LPAZ S Sn 07 57 20.4 +1.1
1.8nm,0.3s,baz=314,slow=7.1,SNR=4.4
**LPAZ La Paz 3.94 111** *eP* Pn 07 56 35.1 +1.8
**NNA Nana 5.56 301** P Pn 07 56 56.1 +1.7
12nm,0.3s,baz=132,slow=11,SNR=21
NNA S Sn 07 57 57.5 +0.3
15nm,0.3s,baz=59,slow=20,SNR=11
**ETMB Extrema 7.57 49** *eP* Pn 07 57 20.6 -0.8
**LVC Limon Verde 8.19 160** P Pn 07 57 29.3 -0.8
2.1nm,0.3s,baz=27,slow=9.4,SNR=22
LVC S Sn 07 58 57.1 -4.1
2.5nm,0.3s,baz=250,slow=21,SNR=12
**LVC Limon Verde 8.19 160** *eP* Pn 07 57 29.4 -0.6
**SIV San Ignacio 10.56 97** P Pn 07 57 59.7 -2.1
1.4nm,0.3s,baz=277,slow=9.5,SNR=43
**TBTG Tabatinga, AM 10.85 11** *eP* Pn 07 58 02.9 -2.8
**PDRB Porto dos Gac 15.19 79** *eP* P 07 59 04.0 0.0
**SALV Santo Antonio 15.73 96** *eP* Pn 07 59 09.0 +0.4
**CLDB Colider 16.27 78** *eP* P 07 59 16.5 +0.5
**OTAV Otavalo 16.36 336** *eP* Pn 07 59 08.1 -8.7
**AQDB Aquidauana 16.46 112** *eP* Pn 07 59 17.4 -0.1
**PP1B Ponte de Pedra 16.63 102** *eP* P 07 59 21.4 +1.5
**CPUP Villa Florida 17.78 132** P Pn 07 59 33.9 +0.4
0.2nm,0.3s,baz=316,slow=12,SNR=6.3
**CPUP Villa Florida 17.78 132** *eP* P 07 59 33.4 +0.9
**NPGB Novo Progresso 18.08 66** *eP* P 07 59 36.2 +0.3
**PTGA Pitinga 18.42 41** P P 07 59 38.9 -0.8
0.7nm,0.3s,baz=172,slow=23,SNR=7.4
**ITTB Itaituba 19.11 58** *eP* P 07 59 47.3 +0.1
**ARAG Araguaiana, MT 19.46 95** *eP* P 07 59 51.5 +0.5
**SNDB Serra Nova Dou 20.32 84** *eP* P 08 00 01.0 +0.8
**PCMB Pacaembu 20.75 112** *eP* P 08 00 05.5 +0.7
**PTGB Pitanga 21.09 121** *eP* P 08 00 09.8 +1.2
**ITRB Iturama 21.17 106** *eP* P 08 00 08.3 -1.1
**MALB Monte Alegre 21.77 55** *eP* P 08 00 15.3 -0.5
**ITAB Concordia 22.17 127** *eP* P 08 00 20.1 +0.4
**CPSB Cacapava Do Su 22.97 135** *eP* P 08 00 27.9 +0.2
**IPMB Ipameri, GO 22.99 101** *eP* P 08 00 26.8 -1.3
**BB19B Bebedouro 23.11 109** *eP* P 08 00 28.3 -0.8
**BDFB Brasilia 23.12 95** P P 08 00 28.2 -1.1
3.1nm,0.4s,baz=262,slow=10,SNR=16
**PEXB Peixe 23.18 86** *eP* P 08 00 29.2 -0.6
**PRPB Parauapebas 23.43 71** *eP* P 08 00 31.9 -0.1
**SMTB Santa Maria do 24.59 79** *eP* P 08 00 42.7 +0.1
**VAO Valinhos 24.95 113** *eP* P 08 00 46.1 +0.2
**PLCA Paso Flores 25.75 178** P P 08 00 54.9 +1.9
1.7nm,0.6s,baz=357,slow=9.2,SNR=11
**PARB Paraibuna 26.23 113** *eP* P 08 00 58.2 +0.7
**JANB Januaria 26.71 94** *eP* P 08 01 00.6 -1.2
**DIAM Diamantina, MG 27.31 101** *eP* P 08 01 07.6 +0.3
**ROSB Rosrio 29.94 69** *eP* P 08 01 31.3 +0.9
**GUA01 Guaratinga, BA 30.99 97** *eP* P 08 01 38.6 -1.0
**NBPN Ponto Novo - B 31.22 86** *eP* P 08 01 41.7 -0.1
**CMC01 Camacan, BA 31.32 95** *eP* P 08 01 42.2 -0.3
**GDU01 Guandu, BA 31.40 92** *eP* P 08 01 42.8 -0.5
**NBIT Itapeh - BA 31.43 94** *eP* P 08 01 43.7 +0.2
**NBLA Lagarto - SE 33.52 87** *eP* P 08 02 00.9 -0.9
**TORD Torodi Ar. Bea 78.05 73** P P 08 07 18.8 -0.6
0.3nm,0.4s,baz=260,slow=4.4,SNR=3.3
**YKA Yellowknife Ar 84.05 342** P P 08 07 52.1 +2.0
0.4nm,0.9s,baz=132,slow=5.5,SNR=4.5
**WRA Warramunga Arr 136.76 217** PKP PKiKP 08 14 45.1 +0.8
0.4nm,0.8s,baz=171,slow=1.3,SNR=4.9

*NNC **21** 08:00:55.8±2.3,35˚.25N×68˚.94E,h0km,mb4.2,mpv4.0, Error ellipse: s-maj=23.8km s-min=18.9km az=128.0*
*IDC **21** 08:01:00.1±6.6,35˚.04N×69˚.23E,h74km±51km,mb3.2/6, mb1 3.4/11,mb1mx3.2/47,mbtmp3.6/11,ML3.4/5,Error ellipse: s-maj=45.1km s-min=31.6km az=24.0*
**ISC 21 08:00:55.6±1.2,34˚.9N±0˚.1×69˚.0E±0˚.1,h35km,n27, σ1$28/30,mb3.4/6,4C-4D,Southeastern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** SNR=62 | **8.11** | **26** | P | **Pn** | **08 02 52.3** | **+1.1** |
| **KK02** | **Karatay Array** 1.8nm,0.3s | **8.28** | **8** | ⇓Pn | **Pn** | **08 02 52.6** | **-0.6** |
| KK02 | 2.5nm,0.6s | | | ⇑Sn | **Sn** | **08 04 24.6** | **-0.9** |
| KK02 | 4.3nm,0.7s | | | ⇓Lg | Lg | 08 05 07.9 | |
| **UCH** | **Uchtor** SNR=23 | **8.50** | **29** | P | **Pn** | **08 02 57.6** | **+1.0** |
| **EKS2** | **Erkin-Say** SNR=8.5 | **8.61** | **24** | P | **Pn** | **08 02 58.8** | **+1.0** |
| **AAK** | **Ala-Archa** 2.2nm,0.3s,baz=198,slow=6.7,SNR=35 | **8.84** | **27** | P | **Pn** | **08 03 02.3** | **+1.3** |
| AAK | 0.3nm,0.3s,baz=140,slow=19,SNR=1.8 | | | S | **Sn** | **08 04 40.6** | **+1.2** |
| **AAK** | **Ala-Archa** SNR=13 | **8.84** | **27** | P | **Pn** | **08 03 02.4** | **+1.4** |
| **AAK** | **Ala-Archa** 8.1nm,0.6s | **8.84** | **27** | ⇑Pn | **Pn** | **08 03 02.2** | **+1.2** |
| AAK | 5.5nm,0.7s | | | ⇑Sn | **Sn** | **08 04 38.7** | **-0.8** |
| **KBK** | **Karagaybulak** SNR=6.3 | **9.03** | **29** | P | **Pn** | **08 03 06.0** | **+2.4** |
| **CHMS** | **Chumysh** SNR=15 | **9.25** | **27** | P | **Pn** | **08 03 07.4** | **+0.9** |
| **ULHL** | **Ulahol** SNR=5.4 | **9.27** | **36** | P | **Pn** | **08 03 09.6** | **+2.6** |
| **USP** | **Ospenovka** SNR=9.1 | **9.39** | **25** | P | **Pn** | **08 03 09.2** | **+0.7** |
| **TKM2** | **Tokmak 2** SNR=12 | **9.52** | **31** | P | **Pn** | **08 03 11.3** | **+1.0** |
| **TKM2** | **Tokmak 2** 10.0nm,0.6s | **9.52** | **31** | ⇓Pn | **Pn** | **08 03 10.7** | **+0.4** |
| **MAKZ** | **Makanchi** 2.0nm,0.7s | **15.40** | **36** | ⇓P | **Pn** | **08 04 29.3** | **-1.0** |
| **MK31** | **Makanchi Array** 1.0nm,0.6s,baz=229,slow=14,SNR=16 | **15.55** | **36** | P | **Pn** | **08 04 32.1** | **0.0** |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=237,slow=13,SNR=5.1 | **15.55** | **36** | P | **Pn** | **08 04 31.1** | **-1.0** |
| **AB31** | **Akbulak array** 2.4nm,0.9s,baz=160,slow=9.0,SNR=25 | **15.83** | **338** | P | **Pn** | **08 04 33.1** | **-2.5** |
| **KURBB** | **Kurchatov Arra** 0.1nm,0.3s,baz=210,slow=11,SNR=7.9 | **17.18** | **21** | P | **Pn** | **08 04 51.3** | **-1.5** |
| **AKTO** | **Aktyubinsk** 0.1nm,0.3s,baz=144,slow=9.9,SNR=2.6 | **17.47** | **336** | P | **Pn** | **08 04 56.1** | **-0.3** |
| **AKTO** | **Aktyubinsk** 3.3nm,0.9s | **17.47** | **336** | ⇑P | **P** | **08 04 57.4** | **+0.1** |
| **BVAR** | **Borovoye Array** 0.2nm,0.3s,baz=252,slow=29,SNR=3.5 | **18.15** | **3** | P | **Pn** | **08 05 04.1** | **-0.7** |
| **ZALV** | **Zalesovo Beam** 3.1nm,0.5s,baz=215,slow=15,SNR=14 | **22.06** | **25** | P | **P** | **08 05 46.7** | **-0.4** |
| **ARU** | **Arti** 0.5nm,0.3s,baz=167,slow=19,SNR=3.0 | **22.69** | **345** | P | **P** | **08 05 55.1** | **+1.2** |
| **AKASG** | **Malin Array Be** 0.1nm,0.3s,baz=91,slow=7.8,SNR=2.4 | **32.73** | **311** | P | **P** | **08 07 26.8** | **+2.1** |
| **INK** | **Inuvik** 0.8nm,0.9s,baz=357,slow=6.0,SNR=4.8 | **75.74** | **8** | P | **P** | **08 12 36.1** | **-1.0** |
| **YKA** | **Yellowknife Ar** 0.1nm,0.6s,baz=348,slow=5.7,SNR=2.8 | **82.91** | **2** | P | **P** | **08 13 15.6** | **-0.7** |
| **ASAR** | **Alice Springs** 0.2nm,0.7s,baz=314,slow=4.4,SNR=2.7 | **84.70** | **123** | P | **P** | **08 13 25.8** | **-0.3** |

*IDC **21** 08:28:04.3±2.2,5˚.85S×130˚.31E,h0km,mb3.6/1, mb1 3.6/4,mb1mx3.4/26,mbtmp3.5/4,ML3.5/3,MS3.4/1, Ms1 3.4/1,ms1mx2.4/53,Error ellipse: s-maj=94.0km s-min=27.6km az=77.0*
**ISC 21 08:28:15.2±1.6,6˚.5S±0˚.1×130˚.3E±0˚.2,h100km,n5, σ3$06/7,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** 0.3nm,0.3s,baz=38,slow=7.3,SNR=10 | **12.39** | **201** | Pn | **Pn** | **08 31 10.2** | **+2.1** |
| FITZ | 0.3nm,0.3s,baz=102,slow=19,SNR=6.0 | | | Sn | **Sn** | **08 33 22.2** | **-2.2** |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=348,slow=12,SNR=10.0 | **13.95** | **164** | Pn | **P** | **08 31 32.2** | **-1.1** |
| WRA | 0.5nm,0.3s,baz=331,slow=21,SNR=8.4 | | | Sn | **Sn** | **08 33 59.5** | **-2.7** |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=346,slow=10,SNR=11 | **17.43** | **169** | P | **Pn** | **08 32 16.4** | **+4.2** |
| ASAR | 0.1nm,0.3s,baz=358,slow=25,SNR=5.5 | | | S | **Sn** | **08 35 26.2** | **-0.2** |
| **PSI** | **Prapat** comp=Z,61nm,18.2s,baz=185,slow=38 | **32.63** | **285** | LR | LR | 08 48 40.9 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=115,slow=7.6,SNR=8.8 | **67.95** | **327** | P | **P** | **08 39 01.9** | **-1.4** |

*NOU **21** 08:45:09.8,43˚.45S×169˚.91E,h0km,MLv4.3/8, South Island, New Zealand*
*WEL **21** 08:45:09.9±0.4,43˚.5±4˚×17˚.0E±˚,h4km±2km,M3.6/26, ML3.8/30,MLv3.6/26,Error ellipse: s-maj=0.0km s-min=0.0km az=139.0*
**ISC 21 08:45:10.1±0.9,43.49S±0.04×169.92E±0.04,h10km±8km, n76,σ0.99/76,South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FOZ** | **Fox Glacier** | **0.09** | **242** | P | **Pg** | **08 45 12.5** | **0.0** |
| FOZ | | | | S | **Sg** | **08 45 14.1** | **-0.1** |
| **GCSZ** | **Gaunt Creek Bo** | **0.34** | **59** | P | **Pg** | **08 45 17.0** | **+0.1** |
| GCSZ | | | | S | **Sg** | **08 45 21.8** | **+0.3** |
| **WVZ** | **Waitaha Valley** | **0.73** | **55** | P | **Pg** | **08 45 24.2** | **+0.1** |
| **RPZ** | **Rata Peaks** | **0.85** | **106** | P | **Pg** | **08 45 26.4** | **-0.2** |
| **RPZ** | **Rata Peaks** | **0.85** | **106** | P | **Pg** | **08 45 26.3** | **-0.2** |
| **LBZ** | **Lake Benmore** | **0.91** | **168** | P | **Pg** | **08 45 27.1** | **-0.6** |
| **JCZ** | **Jackson Bay** | **1.01** | **234** | P | **Pg** | **08 45 28.5** | **-1.0** |
| **ARCZ** | **Arundel** | **1.02** | **117** | P | **Pg** | **08 45 29.2** | **-0.5** |
| **TMZ** | **Timaru** | **1.19** | **139** | P | **Pg** | **08 45 32.1** | **-0.8** |
| **MHCZ** | **Mount Hutt** | **1.20** | **92** | P | **Pg** | **08 45 33.0** | **-0.2** |
| **INZ** | **Inchbonnie** | **1.35** | **56** | P | **Pg** | **08 45 34.4** | **-1.8** |
| INZ | | | | S | **Sg** | **08 45 52.5** | **-1.2** |
| **WACZ** | **Wakanui South** | **1.46** | **109** | P | **Pn** | **08 45 36.7** | **+0.1** |
| **WKZ** | **Wanaka** | **1.48** | **206** | P | **Pn** | **08 45 36.5** | **-0.5** |
| **OXZ** | **Oxford** | **1.55** | **85** | P | **Pn** | **08 45 38.3** | **+0.4** |
| **RACZ** | **Rakaia** | **1.63** | **99** | P | **Pn** | **08 45 39.8** | **+0.9** |
| **ODZ** | **Otahua Downs** | **1.64** | **162** | P | **Pn** | **08 45 39.9** | **-0.1** |
| **ODZ** | **Otahua Downs** | **1.64** | **162** | P | **Pn** | **08 45 39.8** | **+0.8** |
| **EAZ** | **Earnscleugh** | **1.79** | **194** | P | **Pn** | **08 45 41.0** | **-0.2** |
| **MSZ** | **Milford Sound** | **1.86** | **230** | P | **Pn** | **08 45 42.8** | **+0.7** |
| **LTZ** | **Lake Taylor** | **1.86** | **68** | P | **Pn** | **08 45 42.9** | **+0.8** |
| LTZ | | | | S | **Sb** | **08 46 08.0** | **+0.4** |
| **MQZ** | **McQueen's Vall** | **2.00** | **97** | P | **Pn** | **08 45 43.7** | **-0.2** |
| **AMCZ** | **Amberley** | **2.02** | **82** | P | **Pn** | **08 45 45.3** | **+1.1** |
| **AKCZ** | **Akaroa Harbour** | **2.20** | **101** | P | **Pn** | **08 45 48.2** | **+1.4** |
| **DSZ** | **Denniston Nort** | **2.20** | **23** | P | **Pn** | **08 45 46.3** | **-0.9** |
| **MLZ** | **Mavora Lakes** | **2.28** | **214** | P | **Pn** | **08 45 50.2** | **+2.4** |
| **OKCZ** | **Okains Bay** | **2.29** | **97** | P | **Pn** | **08 45 48.9** | **+0.9** |
| **GVZ** | **Greta Valley S** | **2.34** | **78** | P | **Pn** | **08 45 49.3** | **+0.7** |
| **HHSZ** | **Highcliff Hill** | **2.44** | **169** | P | **Pb** | **08 45 53.8** | **-0.3** |
| **TUZ** | **Tuapeka** | **2.47** | **185** | P | **Pn** | **08 45 50.9** | **+0.4** |
| **WHZ** | **Wether Hill Ro** | **2.78** | **210** | P | **Pn** | **08 45 55.3** | **+0.5** |
| **DCZ** | **Deep Cove** | **2.79** | **224** | P | **Pb** | **08 46 00.4** | **+0.3** |
| **THZ** | **Tophouse** | **2.80** | **53** | P | **Pn** | **08 45 55.0** | **0.0** |
| **KHZ** | **Kahutara** | **2.87** | **69** | P | **Pn** | **08 45 56.5** | **+0.7** |
| **KHZ** | **Kahutara** | **2.87** | **69** | P | **Pn** | **08 45 56.6** | **+0.7** |
| **MRNZ** | **Matariki Terra** | **2.96** | **46** | P | **Pn** | **08 45 57.2** | **-0.1** |
| **SYZ** | **Scrubby Hill** | **3.10** | **190** | P | **Pn** | **08 45 58.8** | **-0.2** |
| **QRZ** | **Quartz Range** | **3.30** | **37** | P | **Pn** | **08 46 01.3** | **-0.5** |
| **QRZ** | **Quartz Range** | **3.30** | **37** | P | **Pn** | **08 46 01.9** | **+0.1** |
| **BSWZ** | **Blackbirch Sta** | **3.42** | **60** | P | **Pn** | **08 46 05.2** | **+1.8** |
| **NNZ** | **Nelson** | **3.43** | **50** | P | **Pn** | **08 46 03.9** | **+0.4** |
| **APZ** | **The Paps** | **3.61** | **202** | P | **Pn** | **08 46 06.4** | **+0.2** |
| **TUWZ** | **Tuamarina** | **3.62** | **57** | P | **Pn** | **08 46 07.1** | **+0.9** |
| **TCW** | **Tory Channel** | **3.95** | **56** | P | **Pn** | **08 46 11.9** | **+1.1** |
| **DUWZ** | **D'Urville Isla** | **4.01** | **49** | P | **Pn** | **08 46 12.2** | **+0.5** |
| **SNZO** | **South Karori** | **4.16** | **60** | P | **Pn** | **08 46 14.3** | **+0.7** |
| **CAW** | **Cannon Point** | **4.50** | **60** | P | **Pn** | **08 46 17.1** | **-1.2** |
| **KIW** | **Kapiti Island** | **4.54** | **56** | P | **Pn** | **08 46 18.6** | **-0.4** |
| **OGWZ** | **Otaki Gorge** | **4.73** | **57** | P | **Pn** | **08 46 20.7** | **-0.8** |
| **HOWZ** | **Holdsworth Sta** | **4.90** | **60** | P | Pn | 08 46 30.2 | +6.3 |
| **MRZ** | **Mangatainoka R** | **5.07** | **58** | P | **Pn** | **08 46 25.5** | **-0.7** |
| **NBEZ** | **Newall Road No** | **5.16** | **36** | P | **Pn** | **08 46 27.9** | **+0.5** |
| **KHEZ** | **Kahui Hut** | **5.20** | **38** | P | **Pn** | **08 46 28.3** | **+0.2** |
| **PREZ** | **Palmer Road** | **5.23** | **39** | P | **Pn** | **08 46 29.2** | **+0.8** |
| **NEZ** | **North Egmont** | **5.26** | **38** | P | **Pn** | **08 46 29.2** | **+0.4** |
| **PKE** | **Pukeiti** | **5.27** | **37** | P | **Pn** | **08 46 29.7** | **+0.7** |
| **WAZ** | **Wanganui** | **5.32** | **47** | P | **Pn** | **08 46 31.1** | **+1.4** |
| **DREZ** | **Durham Road** | **5.37** | **38** | P | **Pn** | **08 46 30.9** | **+0.6** |
| **TSZ** | **Takapari Road** | **5.67** | **55** | P | Pn | 08 46 40.1 | +5.6 |
| **VRZ** | **Vera Road** | **5.68** | **41** | P | **Pn** | **08 46 35.2** | **+0.6** |
| **PKVZ** | **Pokaka** | **5.85** | **46** | P | **Pn** | **08 46 38.6** | **+1.5** |
| **PNHZ** | **Pukenui** | **5.91** | **55** | P | Pn | 08 46 43.4 | +5.7 |
| **TRVZ** | **Turoa** | **5.95** | **47** | P | **Pn** | **08 46 40.6** | **+2.1** |
| **WNVZ** | **Wahianoa** | **5.96** | **48** | P | **Pn** | **08 46 39.8** | **+1.2** |
| **NGZ** | **Ngauruhoe** | **6.07** | **47** | P | **Pn** | **08 46 42.3** | **+2.2** |
| **SNVZ** | **South Ngauruho** | **6.08** | **47** | P | **Pn** | **08 46 42.9** | **+2.6** |
| **BHHZ** | **Black Hill Sta** | **6.10** | **51** | P | **Pn** | **08 46 39.8** | **-0.6** |
| **WTVZ** | **West Tongariro** | **6.11** | **46** | P | **Pn** | **08 46 42.0** | **+1.5** |
| **NNVZ** | **North Ngauruho** | **6.11** | **46** | P | **Pn** | **08 46 42.3** | **+1.6** |
| **OTVZ** | **Oturere** | **6.12** | **47** | P | **Pn** | **08 46 42.7** | **+2.0** |
| **ETVZ** | **East Tongariro** | **6.16** | **47** | P | **Pn** | **08 46 43.2** | **+1.9** |
| **HIZ** | **Hauiti** | **6.22** | **39** | P | **Pn** | **08 46 41.6** | **-0.4** |
| **HIZ** | **Hauiti** | **6.22** | **39** | P | **Pn** | **08 46 41.9** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **6.57** | **51** | P | Pn | 08 46 51.6 | +4.8 |
| **BKZ** | **Black Stump Fm** | **6.57** | **51** | P | **Pn** | **08 46 47.6** | **+0.8** |
| **TLZ** | **Tolley Road** | **6.69** | **41** | P | **Pn** | **08 46 48.7** | **+0.3** |
| **OUZ** | **Omahuta** | **8.74** | **20** | P | **Pn** | **08 47 16.9** | **+0.4** |

**IDC 21 08:53:03.3±2.2,5˚.33S×153˚.00E,h0km,mb3.5/3, mb1 3.8/3,mb1mx3.5/24,mbtmp3.5/3,MS2.4/1,Ms1 2.4/1, ms1mx2.2/39,Error ellipse: s-maj=159.7km s-min=27.8km az=128.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** comp=Z,31nm,19.5s,baz=355,slow=32 | **7.07** | **235** | LR | LR | 08 56 49.7 | |
| **WRA** | **Warramunga Arr** 0.7nm,0.9s,baz=55,slow=10,SNR=4.3 | **23.25** | **230** | P | P | 08 58 11.8 | -0.7 |
| **ASAR** | **Alice Springs** 0.7nm,0.8s,baz=62,slow=8.2,SNR=6.6 | **25.90** | **223** | P | P | 08 58 37.8 | +0.6 |
| **ILAR** | **Eielson Array** 0.6nm,0.6s,baz=240,slow=5.1,SNR=9.0 | **82.57** | **22** | P | P | 09 05 27.9 | 0.0 |

*MOS **21** 09:12:06.2±0.9,36˚.51N×70˚.93E,h175km,mb5.6/50, MS4.2/5,Error ellipse: s-maj=4.3km s-min=3.1km az=93.0*
*BJI **21** 09:12:07.4±0.0,36˚.63N×70˚.98E,h174km,mb5.6/78, mB5.1/44*
*NNC **21** 09:12:07.8±1.9,36˚.69N×70˚.65E,h169km±17km,mb5.6, mpv6.5,Error ellipse: s-maj=15.5km s-min=10.8km az=25.0*
*BGR **21** 09:12:07.2±0.0,36˚.52N×70˚.95E,h181km,mb5.6*
*GCMT **21** 09:12:08.1±0.1,36˚.53N±0˚.01×70˚.80E±0˚.01,h174km±1km, MW5.3/146,Moment Tensor Solution. s83,c109; s146,c251; Duration: 1$0 Moment tensor: Scale 10^17 Nm; Mrr0.38±.01; Mθθ0.17±.02; Mφφ-0.55±.02; Mrθ0.80±.01; Mθφ-0.37±.02; Mφr0.03±.01; Best double couple: M0:0.98600×10^17 NP1:φs173.00000°,δ38.00000°, λ23.00000°. NP2:φs64.00000°,δ76.00000°,λ126.00000°. Principal axes: T 1.1170, Plg47.0000°, Azm12.0000°; N -0.2610, Plg35.0000°, Azm234.0000°; P -0.8550, Plg23.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*IDC **21** 09:12:08.2±0.4,36˚.40N×70˚.95E,h188km±3km,mb5.0/39, mb1 5.1/43,mb1mx5.0/45,mbtmp5.5/43,MS3.9/13, Ms1 3.9/13,ms1mx3.4/87 Error ellipse: s-maj=6.8km s-min=5.9km az=171.0*
*NEIC **21** 09:12:08.1±1.5,36˚.49N±0˚.03×70˚.86E±0˚.07,h174km±1km, mb5.4/191,Mww5.2,Error ellipse: s-maj=10.7km s-min=2.9km az=63.0*
*NEIC **21** 09:12:09,36˚.58N×70˚.73E,h180km,Moment Tensor Solution. Duration: 2$0 Moment tensor: Scale 10^16Nm; Mrr3.66; Mθθ0.79; Mφφ-4.45; Mrθ7.08; Mθφ-2.76; Mφr-0.46; Fault plane solution: M0:8.65000×10^16 NP1: φs179.00000°,δ36.00000°,λ26.00000°. NP2:φs67.00000°, δ75.00000°,λ123.00000°. Principal axes: T 9.7684, Plg49.0000°, Azm13.0000°; N -3.0608, Plg32.0000°, Azm238.0000°; P -6.7075, Plg23.0000°, Azm133.0000°;*
*SOME **21** 09:12:19.9,38˚.43N×71˚.08E,h5km,MS4.5*
**ISC 21 09:12:07.1±0.2,36˚.45N±0˚.02×70˚.89E±0˚.02,h175km±1km, h175km:pP-P,n1267,σ1$62/1496,mb5.4/335,117C-46D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.43** | **219** | PN | **Pn** | **09 12 49.5** | **+0.6** |
| **KBL** | **Kabul** | **2.43** | **219** | Pn | **Pn** | **09 12 49.5** | **+0.6** |
| **KBL** | **Kabul** SNR=4908 | **2.43** | **219** | P | **Pn** | **09 12 49.0** | **+0.1** |
| KBL | | | | S | **Sn** | **09 13 19.6** | **-1.7** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GAR** | **Garm** | **2.59** | **350** | | **Pn** | **09 12 50.7** | **+0.1** |
| **CHGR** | **Chuyangaron** | **2.60** | **329** | PN | **Pn** | **09 12 50.9** | **+0.2** |
| **CHGR** | **Chuyangaron** | **2.60** | **329** | | **Pn** | **09 12 50.9** | **+0.2** |
| **CEP** | **Cherat** | **2.75** | **162** | P | **Pn** | **09 12 53.5** | **+0.9** |
| CEP | | | | S | **Sn** | **09 13 28.0** | **0.0** |
| **NIL** | **Nilore** | **3.40** | **145** | PN | **Pn** | **09 13 01.7** | **+1.2** |
| **NIL** | **Nilore** | **3.40** | **145** | Pn | **Pn** | **09 13 01.7** | **+1.2** |
| **NIL** | **Nilore** | **3.40** | **145** | P | **Pn** | **09 13 01.8** | **+1.3** |
| NIL | | | | S | **Sn** | **09 13 39.9** | **-2.3** |
| **THW** | **Thamme Wali** | **3.71** | **169** | P | **Pn** | **09 13 04.8** | **+0.4** |
| **SARP** | **Sargodha** | **4.75** | **161** | P | **Pn** | **09 13 17.3** | **-0.4** |
| **JMU** | **Jammu** | **4.98** | **137** | *eP* | **Pn** | **09 13 18.0** | **-2.7** |
| JMU | | | | *eP* | **Pn** | **09 13 21.0** | **+0.3** |
| **TAS** | **Tashkent** | **5.03** | **346** | PN | **Pn** | **09 13 21.5** | **+0.3** |
| **TAS** | **Tashkent** | **5.03** | **346** | Pn | **Pn** | **09 13 21.5** | **+0.3** |
| **KSH** | **Kashi** | **5.05** | **51** | P | **Pn** | **09 13 17.8** | **-3.8** |
| KSH | | | | S | Sn | 09 14 10.5 | -10 |
| KSH | comp=Z,7μm,0.7s | | | pmax | pmax | | |
| **THN** | **Thein Dam** | **5.65** | **134** | *eP* | **Pn** | **09 13 29.8** | **+0.3** |
| THN | | | | *eS* | **Sn** | **09 14 30.2** | **-3.9** |
| **CHM** | **Chimkent** | **5.95** | **351** | *c iPN* | **Pn** | **09 13 33.6** | **+0.4** |
| **CHM** | **Chimkent** 2μm,0.4s | **5.95** | **351** | *eP* | **Pn** | **09 13 36.0** | **+2.7** |
| CHM | 27μm,0.5s | | | *eS* | **Sn** | **09 14 37.1** | **-3.9** |
| **CHM** | **Chimkent** baz=350 | **5.95** | **351** | ⇑*iP* | **Pn** | **09 13 33.6** | **+0.4** |
| **AML** | **Almayashu** SNR=5132 | **6.08** | **20** | P | **Pn** | **09 13 35.0** | **-0.4** |
| AML | | | | S | **Sn** | **09 14 41.5** | **-3.3** |
| **AML** | **Almayashu** SNR=6016 | **6.08** | **20** | *i* P | **Pn** | **09 13 35.0** | **-0.4** |
| **UCH** | **Uchtor** SNR=994 | **6.42** | **25** | P | **Pn** | **09 13 39.4** | **-0.5** |
| **DZA** | **Taraz** | **6.44** | **3** | *c iPN* | **Pn** | **09 13 39.6** | **-0.2** |
| **DZA** | **Taraz** 6μm,0.9s | **6.44** | **3** | *eP* | **Pn** | **09 13 42.7** | **+3.0** |
| DZA | 17μm,0.9s | | | *eS* | **Sn** | **09 14 48.6** | **-4.3** |
| **DZA** | **Taraz** baz=2.6 | **6.44** | **3** | ⇑*iP* | **Pn** | **09 13 39.6** | **-0.2** |
| **MRKS** | **Merke** 917nm,0.8s | **6.54** | **15** | *eP* | **Pn** | **09 13 44.7** | **+3.6** |
| MRKS | 8μm,0.9s | | | *eS* | **Sn** | **09 14 52.5** | **-2.8** |
| **EKS2** | **Erkin-Say** SNR=2049 | **6.59** | **19** | P | **Pn** | **09 13 41.6** | **-0.2** |
| **BRLS** | **Borolday** | **6.62** | **353** | *e*PN | **Pn** | **09 13 38.2** | **-3.9** |
| BRLS | comp=Z,75nm,0.1s | | | pmax | pmax | | |
| **BRLS** | **Borolday** comp=Z,519nm,0.4s | **6.62** | **353** | *eP* | **Pn** | **09 13 40.8** | **-1.3** |
| BRLS | comp=Z,2μm,0.5s | | | *eS* | Sn | 09 14 45.8 | -11 |
| **BRLS** | **Borolday** comp=Z,75nm,0.1s,baz=352 | **6.62** | **353** | *eP* | **Pn** | **09 13 38.2** | **-3.9** |
| **KK02** | **Karatay Array** comp=Z,2μm,0.7s | **6.65** | **358** | ⇑P | **Pn** | **09 13 40.7** | **-1.9** |
| KK02 | comp=Z,3μm,0.7s | | | ⇑S | **Sn** | **09 14 52.4** | **-5.4** |
| **KKAR** | **Karatay Array** | **6.65** | **358** | PN | **Pn** | **09 13 42.1** | **-0.4** |
| **KKAR** | **Karatay Array** | **6.65** | **358** | Pn | **Pn** | **09 13 42.1** | **-0.4** |
| **AAK** | **Ala-Archa** comp=Z,134nm,0.3s,baz=211,slow=6.9,SNR=3539 | **6.78** | **23** | P | **Pn** | **09 13 44.1** | **-0.2** |
| AAK | comp=Z,70nm,0.3s,baz=210,slow=13,SNR=3.7 | | | S | **Sn** | **09 14 58.4** | **-2.6** |
| AAK | comp=Z,719nm,21.9s,baz=204,slow=36 | | | LR | LR | 09 16 16.8 | |
| **AAK** | **Ala-Archa** SNR=2271 | **6.78** | **23** | P | **Pn** | **09 13 43.7** | **-0.6** |
| **AAK** | **Ala-Archa** | **6.78** | **23** | PN | **Pn** | **09 13 44.6** | **+0.3** |
| **AAK** | **Ala-Archa** | **6.78** | **23** | Pn | **Pn** | **09 13 44.6** | **+0.3** |
| **AAK** | **Ala-Archa** | **6.78** | **23** | P | **Pn** | **09 13 44.1** | **-0.2** |
| AAK | | | | S | **Sn** | **09 14 58.5** | **-2.6** |
| **AAK** | **Ala-Archa** comp=Z,2μm,0.7s | **6.78** | **23** | ⇑P | **Pn** | **09 13 43.3** | **-1.0** |
| AAK | comp=Z,7μm,0.8s | | | S | **Sn** | **09 14 58.5** | **-2.5** |
| **AAK** | **Ala-Archa** SNR=459 | **6.78** | **23** | *i* P | **Pn** | **09 13 44.2** | **-0.1** |
| **KBK** | **Karagaybulak** SNR=1206 | **6.95** | **26** | P | **Pn** | **09 13 46.3** | **-0.3** |
| **ULHL** | **Ulahol** SNR=142 | **7.12** | **34** | P | **Pn** | **09 13 47.9** | **-1.0** |
| **CHMS** | **Chumysh** SNR=175 | **7.19** | **23** | P | **Pn** | **09 13 49.0** | **-0.5** |
| **HRA** | **Herat** | **7.35** | **256** | Pn | **Pn** | **09 13 52.0** | **0.0** |
| **USP** | **Ospenovka** SNR=1071 | **7.35** | **21** | P | **Pn** | **09 13 50.7** | **-1.0** |
| **TKM2** | **Tokmak 2** SNR=342 | **7.41** | **28** | P | **Pn** | **09 13 52.3** | **-0.5** |
| **TKM2** | **Tokmak 2** | **7.41** | **28** | PN | **Pn** | **09 13 52.2** | **-0.5** |
| **TKM2** | **Tokmak 2** comp=Z,4μm,0.9s | **7.41** | **28** | ⇑P | **Pn** | **09 13 52.2** | **-0.5** |
| TKM2 | comp=Z,1μm,0.9s | | | ⇑S | **Sn** | **09 15 15.6** | **-0.6** |
| **TARG** | **Taragay, Kyrgy** | **7.53** | **43** | Pn | **Pn** | **09 13 54.3** | **-0.2** |
| **SGDS** | **Sogindy** | **7.56** | **21** | *e*PN | **Pn** | **09 13 53.4** | **-1.1** |
| **SGDS** | **Sogindy** baz=21 | **7.56** | **21** | *i* P | **Pn** | **09 13 53.4** | **-1.1** |
| **TNSS** | **Tian-Shan** baz=34 | **8.06** | **33** | *i* P | **Pn** | **09 14 00.5** | **-1.0** |
| **KKR** | **Kur

comp=Z,249nm,0.9s
**KUDL Kundal 9.54 149** *e*P **Pn** **09 14 18.1 -2.6**
KUDL *e*S **Sn** **09 16 00.3 -6.5**
**ASOR Ausora 9.62 141** *e*P **Pn** **09 14 20.6 -1.0**
ASOR *e*S **Sn** **09 15 59.8 -9.0**
**SONA Sohna 9.71 146** *e*P **Pn** **09 14 21.6 -1.2**
SONA *e*S **Sn** **09 16 02.5 -8.4**
**PTH Pithoragarh 10.42 129** *e*P **Pn** **09 14 29.0 -3.4**
PTH *e*S Sn 09 16 19.0 -9.3
**AJM Ajmer 10.44 161** *e*P **Pn** **09 14 30.6 -1.9**
AJM *e*S Sn 09 16 17.8 -11
**LGTI Lohaghat 10.51 129** *e*P **Pn** **09 14 30.0 -3.3**
**OTUK Ortayu 11.84 5** P **Pn** **09 14 48.2 -2.1**
**OTUK Ortayu 11.84 5** ⇑P **Pn** **09 14 48.2 -2.1**
comp=Z,583nm,1.1s
OTUK ⇓S **Sn** **09 16 56.9 -4.7**
comp=Z,834nm,0.8s
**BRCI Bahraich 12.67 131** *e*P **Pn** **09 15 01.2 0.0**
BRCI ⇑*e*S Sn 09 17 12.3 -10
**JHNI Jhansi 12.76 147** *e*P **Pn** **09 14 57.8 -4.6**
JHNI *e*S Sn 09 17 12.3 -12
**PYUN Piuthan 13.19 126** *e*Pn **Pn** **09 15 05.1 -2.9**
PYUN *e*Sn Sn 09 17 22.6 -12
PYUN *e*Sn Sn 09 17 22.7 -12
comp=Z,1μm,0.7s
**MAKZ Makanchi 13.25 35** P **Pn** **09 15 07.4 -1.0**
**MAKZ Makanchi 13.25 35** *e*S **Pn** **09 15 07.4 -1.0**
**MAKZ Makanchi 13.25 35** ⇑P **Pn** **09 15 06.9 -1.5**
comp=Z,2μm,0.7s
MAKZ ⇓S **Sn** **09 17 36.7 +1.2**
comp=Z,796nm,1.2s
**MK31 Makanchi Array 13.38 36** P **Pn** **09 15 09.9 -0.2**
**MK31 Makanchi Array 13.38 36** *e*S **Pn** **09 15 09.9 -0.2**
**MK31 Makanchi Array 13.38 36** P **Pn** **09 15 08.2 -1.8**
comp=Z,780nm,0.7s,baz=210,slow=12,SNR=6907
MK31 ⇑S **Sn** **09 17 39.1 +0.3**
comp=Z,156nm,1.0s,baz=218,slow=26,SNR=4.3
**MKAR Makanchi Array 13.38 36** P **Pn** **09 15 08.1 -2.0**
comp=Z,6.6nm,0.3s,baz=220,slow=9.6,SNR=561
MKAR S **S** **09 17 44.9 +0.6**
baz=243,slow=14,SNR=1.8
**MKAR Makanchi Array 13.38 36** P **Pn** **09 15 09.6 -0.5**
**MKAR Makanchi Array 13.38 36** *e*S **Pn** **09 15 09.6 -0.5**
**DANN Dangsing 13.54 123** *e*Pn **Pn** **09 15 09.9 -2.5**
DANN *e*Sn Sn 09 17 30.5 -13
comp=Z,1μm,0.7s
**BRZS Berezniki 13.59 5***c i*P **Pn** **09 15 10.5 -2.1**
BRZS pmax pmax
comp=Z,278nm,0.5s
**BRZS Berezniki 13.59 5**⇑*i*P **Pn** **09 15 10.6 -2.1**
comp=Z,278nm,0.5s,baz=4.8
**KOLN Koldanda 13.81 125** *e*Pn **Pn** **09 15 13.4 -2.4**
**GKN Gorkha 14.35 122** *e*Pn **Pn** **09 15 20.1 -2.4**
GKN *e*Sn Sn 09 17 48.8 -14
comp=Z,509nm,0.5s
GKN *e*Sn Sn 09 17 48.9 -14
**ALBI Allahabad 14.52 137** *e*P **Pn** **09 15 20.2 -4.2**
**WMQ Urumqi 14.80 55** ⇓P **Pn** **09 15 28.4 +0.6**
WMQ S **Sn** **09 18 04.3 -8.5**
WMQ pmax pmax
comp=Z,530nm,0.9s
WMQ pmax pmax
comp=Z,1μm,3.7s
**DMN Daman 14.92 122** *e*Pn **Pn** **09 15 27.3 -2.4**
**KKN Kakani 14.93 121** *e*Pn **Pn** **09 15 27.2 -2.5**
KKN *e*Sn Sn 09 18 01.5 -15
comp=Z,842nm,0.8s
**AB31 Akbulak array 15.09 331** *e*P **Pn** **09 15 29.6 -1.5**
AB31 S Sn 09 18 08.1 -11
**AB31 Akbulak array 15.09 331** ⇓P **Pn** **09 15 29.7 -1.5**
comp=Z,297nm,0.6s,baz=143,slow=12,SNR=4570
AB31 ⇑S **Sn** **09 18 12.4 -6.9**
comp=Z,235nm,0.5s,baz=152,slow=23,SNR=12
**ABKAR Akbulak array 15.09 331** P **Pn** **09 15 30.3 -0.9**
**ZSN Zaisan 15.11 39** *e*P **Pn** **09 15 29.5 -1.9**
ZSN *e*S **Sn** **09 18 16.9 -3.0**
**ZSN Zaisan 15.11 39** *e*P **Pn** **09 15 29.6 -1.9**
baz=39
ZSN *e*S **Sn** **09 18 17.0 -3.0**
baz=39
**PKIN Phulchoki 15.14 122** *e*Pn **Pn** **09 15 29.8 -2.6**
PKIN *e*Sn Sn 09 18 07.3 -14
comp=Z,506nm,0.7s
**PKI Pulchoki 15.15 122** *e*Pn **Pn** **09 15 30.0 -2.6**
**KURBB Kurchatov Arra 15.20 19** P **Pn** **09 15 29.9 -2.7**
comp=Z,5.3nm,0.3s,baz=209,slow=10,SNR=201
KURBB S **Sn** **09 18 21.1 -0.9**
baz=193,slow=20,SNR=2.7
**KURBB Kurchatov Arra 15.20 19** P **Pn** **09 15 30.0 -2.5**
**KURBB Kurchatov Arra 15.20 19** ⇑P **Pn** **09 15 30.1 -2.5**
comp=Z,1μm,0.7s
**GUN Gumba 15.27 120** *e*Pn **Pn** **09 15 31.6 -2.4**
**KURK Kurchatov 15.31 19***c i*P **Pn** **09 15 31.1 -2.8**
**KURK Kurchatov 15.31 19** P **Pn** **09 15 31.7 -2.2**
**KURK Kurchatov 15.31 19** P **Pn** **09 15 32.6 -1.3**
**JBP Jabalpur 15.40 147** *e*P **Pn** **09 15 32.7 -2.5**
**SEM Semipalatinsk 15.50 23***ce*P **Pn** **09 15 34.4 -2.1**
SEM *e*S **Sn** **09 18 26.5 -3.1**
SEM pmax pmax
comp=Z,330nm,0.9s
**SEM Semipalatinsk 15.50 23**⇑*e*P **Pn** **09 15 34.4 -2.1**
comp=Z,330nm,0.9s,baz=23
SEM *e*S **Sn** **09 18 26.5 -3.1**
baz=23
**JIRN Jiri 15.64 120** *e*Pn **Pn** **09 15 36.7 -1.9**
**BANOM Banah 16.29 234** P **Pn** **09 15 46.0 -0.1**
SNR=48
BANOM S **S** **09 18 45.2 -1.1**
**BANOM Banah 16.29 234** P **P** **09 15 45.2 -0.6**
**SHME Shamm 16.30 235** *i* P **P** **09 15 45.5 -0.4**
SNR=39
**RAMN Ramite 16.37 121** *e*Pn **P** **09 15 46.1 -0.8**
**BVAR Borovoye Array 16.58 359** P **P** **09 15 47.8 -0.9**
comp=Z,100nm,0.3s,baz=130,slow=9.5,SNR=302
BVAR S **S** **09 18 49.9 -2.3**
comp=Z,7.1nm,0.3s,baz=140,slow=18,SNR=4.7
**AKL Akola 16.58 159** *e*P **P** **09 15 48.4 -0.6**
**BRVK Borovoye 16.61 359***c i*P **P** **09 15 48.4 -0.7**
BRVK pmax pmax
comp=Z,2μm,1.3s
**BRVK Borovoye 16.61 359** P **Pn** **09 15 49.4 -0.3**
**BRVK Borovoye 16.61 359** P **P** **09 15 48.2 -0.9**
BRVK P **P** **09 15 48.2 -0.9**
BRVK S **S** **09 18 50.9 -2.1**
BRVK S **S** **09 18 50.9 -2.1**
**BRVK Borovoye 16.61 359** ⇑P **P** **09 15 48.8 -0.3**
comp=Z,1μm,1.1s
**MASF Masafi 16.76 233** P **P** **09 15 51.3 +0.3**
SNR=32
**MSFE Esma-Masafi 16.77 233** *i* P **P** **09 15 51.1 0.0**
SNR=49
**AKTO Aktyubinsk 16.78 330** P **Pn** **09 15 51.3 -0.4**
comp=Z,110nm,0.3s,baz=147,slow=11,SNR=1581
AKTO S **S** **09 18 47.5 -9.2**
comp=Z,4.9nm,0.3s,baz=74,slow=18,SNR=3.7
**AKTO Aktyubinsk 16.78 330** P **Pn** **09 15 51.6 -0.1**
AKTO S **S** **09 18 51.6 -5.0**
**AKTO Aktyubinsk 16.78 330** ⇑P **P** **09 15 50.1 -0.8**
comp=Z,986nm,0.7s
AKTO ⇑S **S** **09 18 51.7 -5.0**
comp=Z,639nm,0.8s
**WSAR Wadi Sarin 16.90 222** P **Pn** **09 15 53.8 +0.4**
comp=Z,6.6nm,0.3s,baz=62,slow=9.9,SNR=66
WSAR LR LR 09 24 28.3
comp=Z,278nm,18.1s,baz=62,slow=44
**WSAR Wadi Sarin 16.90 222** P **Pn** **09 15 54.4 +0.9**
SNR=21
**TAPN Taplejung 16.90 118** *e*Pn **P** **09 15 53.1 +0.2**
**BIDO Bidbid 16.95 224** P **Pn** **09 15 53.8 -0.2**
SNR=16
**ODAN Odare 16.97 120** *e*Pn **P** **09 15 54.0 +0.4**
**UOSS Minazif 17.03 232** P **P** **09 15 52.6 -1.4**
UOSS IAmb IAmb 09 15 57.8
comp=Z,210nm,0.8s
**UOSS Minazif 17.03 232** P **P** **09 15 54.5 +0.5**
**UOSS Minazif 17.03 232** *i* P **P** **09 15 52.4 -1.6**
SNR=16
**HATD Hatta, Dubai 17.16 232** P **Pn** **09 15 56.8 +0.2**
**HATD Hatta, Dubai 17.16 232** *i* P **P** **09 15 55.1 -0.4**
SNR=91
**WBK Wadi Bani Khal 17.23 220** P **Pn** **09 15 58.4 +1.0**
SNR=43
**ASHO Ashiyiah 17.31 231** P **Pn** **09 15 58.2 -0.1**
SNR=125
**ASHO Ashiyiah 17.31 231** *i* P **Pn** **09 15 57.8 -0.6**
SNR=233
**NAZ Nazwa, Dubai 17.35 233** P **Pn** **09 15 58.6 -0.2**
SNR=55
**NAZ Nazwa, Dubai 17.35 233** *i* P **P** **09 15 58.0 +0.5**
SNR=50
**SMDO Samad 17.36 223** P **Pn** **09 15 59.1 +0.1**
SNR=17
**HOQ Hoqain 17.37 226** P **Pn** **09 15 59.1 0.0**
SNR=11
**JLN Jalan Bani Buh 17.39 218** P **Pn** **09 16 00.1 +0.9**
SNR=29
JLN S **S** **09 19 10.2 +0.3**
**SOHO SOHO 17.42 229** P **Pn** **09 15 59.0 -0.6**
**SOHO SOHO 17.42 229** *i* P **P** **09 15 58.3 +0.1**
SNR=17
**GTK Tadong 17.56 116** *e*P **P** **09 16 00.6 +0.7**
GTK IAmb IAmb 09 16 12.1
comp=Z,316nm,0.8s
**FAQ Al Faqa, Dubai 17.57 233** P **Pn** **09 16 00.6 -0.7**
SNR=25
**FAQ Al Faqa, Dubai 17.57 233** P **P** **09 15 59.8 0.0**
**LKRN Lenkeran, Azer 17.67 284** P **P** **09 16 01.5 +0.7**
**ASUD Al Ashush, Dub 17.82 233** P **Pn** **09 16 03.6 -0.7**
SNR=17
**ASUD Al Ashush, Dub 17.82 233** *i* P **P** **09 16 03.0 +0.5**
SNR=15
**DGZ Jazzator, Alta 17.88 37***c i*P **Pn** **09 16 04.1 -0.8**
**JMDO Jabal Madar 17.89 222** P **Pn** **09 16 05.2 +0.1**
SNR=35
**ALNE Al Ain 17.96 231** P **Pn** **09 16 05.4 -0.5**
SNR=44
**ALNE Al Ain 17.96 231** *i* P **P** **09 16 04.5 +0.3**
SNR=38
**ARQ Araqi 18.02 227** P **Pn** **09 16 06.3 -0.5**
SNR=27
**AJN Ajban 18.08 233** P **P** **09 16 06.3 +0.8**
SNR=40
AJN P **P** **09 16 06.3 +0.8**
SNR=40
**AJN Ajban 18.08 233** *i* P **P** **09 16 05.6 +0.2**
SNR=27
**BSY Bisya 18.09 225** P **Pn** **09 16 08.0 +0.5**
SNR=37
**LSA Lhasa 18.25 106** P **Pn** **09 16 10.9 +1.1**
LSA S **S** **09 19 25.4 -2.3**
**SRSP Sriramsagar 18.65 157** *e*P **P** **09 16 12.8 +1.2**
SRSP *e*S **S** **09 19 33.0 -1.9**
**KLRI Killari 18.99 163** *e*P **P** **09 16 16.7 +1.3**
KLRI *e*S **S** **09 19 42.2 +0.4**
**RPR Rampur 19.02 155** *e*P **Pn** **09 16 17.7 -0.7**
RPR *e*S **S** **09 19 42.5 +0.2**
**SEKA Sheki 19.04 292** P **Pn** **09 16 17.2 -1.3**
**MNGR Mingechevir, A 19.08 290** P **Pn** **09 16 17.8 -1.1**
**MHTO MHTO 19.09 220** P **Pn** **09 16 19.0 -0.3**
SNR=39
**MAK Makhachkala 19.10 297***d i*P **P** **09 16 14.7 -1.6**
MAK *e*S **S** **09 19 42.8 -0.6**
MAK pmax pmax
comp=Z,184nm,0.9s
MAK MLR MLR
comp=Z,352nm,12.0s
**GOMU GeErMu 19.27 84** P **P** **09 16 20.0 +1.3**
GOMU S **S** **09 19 41.4 -6.3**
GOMU pmax pmax
comp=Z,25nm,0.7s
GOMU LR LR
comp=Z,270nm,8.5s
GOMU LR LR
comp=Z,370nm,9.2s
GOMU LR LR
comp=Z,210nm,8.1s
**UMZA Um Al Zommool 19.31 229** P **P** **09 16 19.6 +0.8**
**DHUB DHUBRI 19.33 117** *e*P **P** **09 16 19.7 +0.8**
DHUB IAmb IAmb 09 16 27.0
comp=Z,535nm,0.7s
**MZWR Madinat Zayed 19.36 234** P **P** **09 16 19.4 +0.1**
MZWR P **P** **09 16 19.4 +0.1**
**GANJ Ganja 19.64 290** P **P** **09 16 22.8 +0.5**
**KHOR Al-Khor Airpor 19.77 242** P **P** **09 16 23.2 -0.4**
**GHWR Ruwais 19.89 236** P **P** **09 16 24.9 0.0**
**ZAA0 Zalesovo Array 20.00 25** P **P** **09 16 26.5 +0.6**
**ZAA0 Zalesovo Array 20.00 25** ⇑P **P** **09 16 26.0 +0.1**
comp=Z,266nm,0.6s
**ZALV Zalesovo Beam 20.00 25** P **P** **09 16 26.0 +0.1**
comp=Z,2μm,0.6s,baz=222,slow=11,SNR=5615
ZALV S **S** **09 19 57.7 -3.2**
comp=Z,94nm,0.7s,baz=221,slow=20,SNR=5.9
**ZALV Zalesovo Beam 20.00 25** P **P** **09 16 26.6 +0.7**
**ZALV Zalesovo Beam 20.00 25** P **P** **09 16 26.6 +0.7**
**SHMA Al-Shehemyia 20.02 244** P **P** **09 16 26.1 -0.2**
**HYBB Hyderabad (bro 20.13 158** *e*P **P** **09 16 28.8 +1.1**
HYBB *e*S **S** **09 20 04.5 +0.3**
**MZR Muzera 20.16 233** P **P** **09 16 27.7 -0.2**
SNR=48
**MZR Muzera 20.16 233** *i* P **P** **09 16 26.9 -1.0**
SNR=18
**DQM DQM 20.19 219** P **P** **09 16 29.1 +0.8**
**NAX Nakhchivan 20.23 285** P **P** **09 16 30.6 +2.0**
**SAKB Bahrain 20.26 245** P **P** **09 16 28.5 -0.4**
**CUPL Choutuppal 20.36 157** *e*P **P** **09 16 31.1 +1.0**
CUPL *e*S **S** **09 20 09.2 +0.5**
**GROC Groznyy 20.37 297** *e*P **P** **09 16 31.5 +1.5**
GROC *e**PP **pP** **09 17 00.5 +0.4**
GROC *e**SP **sP** **09 17 23.1 +0.8**
GROC *e*S **S** **09 20 11.0 +2.5**
GROC pmax pmax
comp=Z,362nm,0.9s
**GUWA GUWAHATI 20.46 114** *e*P **P** **09 16 31.9 +0.8**
GUWA IAmb IAmb 09 16 37.5
comp=Z,483nm,0.7s
**TRNA Turayna 20.53 241** P **P** **09 16 30.9 -0.9**
**SLWR Sila 20.62 239** P **P** **09 16 33.0 +0.2**
**BWNR Bhubaneshwar 20.72 137** *e*S **S** **09 20 18.6 +3.0**
**GNI Garni 20.82 288** P **P** **09 16 37.4 +2.4**
comp=Z,161nm,0.8s,baz=54,slow=5.6,SNR=59
**GNI Garni 20.82 288***d i*P **P** **09 16 37.6 +2.6**
GNI pmax pmax
comp=Z,191nm,0.9s
**GNI Garni 20.82 288** P Pn 09 16 38.1 -2.2
**GNI Garni 20.82 288** P **P** **09 16 34.3 -0.7**
**GNI Garni 20.82 288** P Pn 09 16 37.6 -2.6
**SHL Shillong 20.97 115** P **P** **09 16 37.7 +1.0**
SHL pmax pmax
comp=Z,981nm,0.8s
**SHL Shillong 20.97 115** P **P** **09 16 37.7 +1.0**
**SHL Shillong 20.97 115** P **P** **09 16 37.6 +1.0**
SNR=266
**NJS Nagarjunasagar 21.18 157** *e*P **P** **09 16 39.5 +0.7**
NJS *e*S **S** **09 20 24.2 +0.2**
**CHLP Challavanipeta 21.31 144** *e*P **P** **09 16 41.1 +0.9**
CHLP *e*S **S** **09 20 27.5 +1.3**
**PVM Polavaram 21.36 151** *e*P **P** **09 16 42.1 +1.4**
PVM *e*S **S** **09 20 27.8 +0.8**
**MYLAV Mylavaram 21.44 154** *e*P **P** **09 16 43.1 +1.5**
MYLAV *e*S **S** **09 20 30.6 +2.2**
**SRLM Srisailam 21.48 159** *e*P **P** **09 16 42.6 +0.6**
SRLM *e*S **S** **09 20 30.6 +1.5**
**SVE Sverdlovsk 21.52 345***d i*P **P** **09 16 42.5 +0.5**
SVE *e*S **S** **09 20 31.8 +2.8**
SVE pmax pmax
comp=Z,818nm,1.0s
**AGT Agartala 21.55 120** *e*P **P** **09 16 45.8 +3.2**
AGT IAmb IAmb 09 16 46.0
comp=Z,805nm,0.7s
**ARU Arti 21.65 341** P **P** **09 16 43.8 +0.4**
comp=Z,344nm,0.9s,baz=159,slow=6.8,SNR=514
ARU S **S** **09 20 39.4 +8.2**
comp=Z,15nm,0.7s,baz=168,slow=23,SNR=1.6
**ARU Arti 21.65 341***c i*P **P** **09 16 43.8 +0.4**
ARU *PP **pP** **09 17 14.0 -0.3**
ARU S **S** **09 20 33.5 +2.3**
ARU *SS **sS** **09 21 26.0 +0.1**
ARU pmax pmax
comp=Z,1μm,0.9s
**ARU Arti 21.65 341** P **P** **09 16 44.3 +0.9**
**ZEI Tsey 21.68 295** *e*P **P** **09 16 43.1 -1.0**
ZEI pmax pmax
comp=Z,95nm,0.9s
**CUKT Cukurca 21.82 280** P **P** **09 16 48.7 +3.2**
**ONI Oni 21.98 295** P **P** **09 16 49.6 +2.6**
ONI pmax pmax
comp=Z,159nm,0.8s
**ONI Oni 21.98 295** P **P** **09 16 49.6 +2.6**
ONI IAmb IAmb 09 17 24.6
comp=Z,160nm,0.8s
**ADKI Addanki 22.06 156** *e*P **P** **09 16 49.0 +1.2**
ADKI *e*S **S** **09 20 40.5 +2.1**
**BELO BELONIA 22.10 121** *e*P **P** **09 16 49.5 +1.3**
**KARS Kars 22.11 289** P **P** **09 16 49.7 +1.3**
**KARS Kars 22.11 289** P **P** **09 16 51.8 +3.4**
KARS pmax pmax
comp=Z,496nm,1.2s
**KARS Kars 22.11 289** P **P** **09 16 51.8 +3.4**
**RCLA Racherla 22.11 159** *e*P **P** **09 16 49.4 +1.1**
RCLA *e*S **S** **09 20 38.6 -0.7**
**URV Uravakonda 22.16 163** *e*P **P** **09 16 49.7 +0.9**
URV *e*S **S** **09 20 38.6 -1.5**
**GEVA Gevas 22.16 283** P **P** **09 16 52.4 +3.5**
GEVA IAmb IAmb 09 17 49.9
comp=Z,121nm,1.0s
**AKDM Akdamar-Van 22.22 283** P **P** **09 16 48.7 -0.8**
**MOKO MOKOCHONG 22.50 110** *e*P **P** **09 16 52.8 +0.6**
MOKO IAmb IAmb 09 17 04.4
comp=Z,1μm,1.3s
**MLAZ Malazgirt-MUS 22.52 285** P P 09 17 01.7 +9.5
**KOHI KOHIMA 22.52 112** *e*P **P** **09 16 53.0 +0.6**
KOHI IAmb IAmb 09 17 02.5
comp=Z,236nm,0.9s
**KBZ Khabaz 22.54 297** P **P** **09 16 52.5 +0.3**
comp=Z,36nm,0.8s,baz=121,slow=5.9,SNR=71
KBZ S **S** **09 20 51.5 +5.6**
comp=Z,18nm,0.9s,baz=11,slow=20,SNR=1.5
**NEY Neytrino 22.60 296***d i*P **P** **09 16 55.6 +2.6**
NEY pmax pmax
comp=Z,12nm,0.8s
**GOF Gofitskoye 22.69 301**⇑*i*P **P** **09 16 55.3 +1.7**
GOF *e*S **S** **09 20 46.1 -2.3**
GOF pmax pmax
comp=Z,223nm,0.8s
GOF smax smax
comp=E,158nm,1.0s
**KIV Kislovodsk 22.73 298** *e*P **P** **09 16 54.5 +0.5**
KIV *e*S **S** **09 20 51.2 +2.0**
KIV pmax pmax
comp=Z,43nm,0.9s
KIV MLR MLR
comp=Z,281nm,14.0s
**KIV Kislovodsk 22.73 298** P **P** **09 16 54.8 +0.7**
KIV IAmb IAmb 09 17 26.5
comp=Z,202nm,0.9s
**KIV Kislovodsk 22.73 298** P **P** **09 16 52.7 -1.4**
**KIV Kislovodsk 22.73 298** *i* P **P** **09 16 54.5 +0.5**
SNR=5.6
**SHAO Shalim 22.77 220** P **P** **09 16 56.0 +1.5**
**SHAO Shalim 22.77 220** *i* P **P** **09 16 55.4 +0.9**
SNR=9.4
**IMP Imphal 22.91 114** *e*P **P** **09 16 57.8 +1.9**
IMP IAmb IAmb 09 17 00.0
comp=Z,148nm,0.8s
**GURO Guroymak-BITLI 22.95 284** P **P** **09 16 59.0 +2.8**
**GTA Gaotai 22.97 74** ⇑P **P** **09 16 58.3 +2.0**
GTA pP pP 09 17 33.8 +4.0
GTA sP sP 09 17 54.9 +2.7
GTA S **S** **09 20 46.4 -6.8**
GTA ScS **ScS** **09 27 45.8 -2.0**
GTA pmax pmax
comp=Z,110nm,1.0s
**LKP Lekhapani 23.01 106** IAmb IAmb 09 17 04.0
comp=Z,249nm,0.8s
**KOPR Koprukoy-ERZUR 23.04 288** P **P** **09 16 59.6 +2.6**
**DOK Doka 23.10 224** P **P** **09 16 58.2 +0.7**
SNR=6.8
**VRTB Varto-Mus 23.37 286** P **P** **09 17 05.9 +6.0**
**DMTO DMTO 23.38 221** P **P** **09 17 00.7 +0.6**
**SVAN Silvan-Diyarba 23.64 283** P **P** **09 17 03.9 +1.6**
**KARO Karliova-Bingo 23.68 286** P **P** **09 17 06.9 +4.1**
**KNGR Kungurtug, Tuv 23.77 45***c i*P **P** **09 17 05.2 +1.7**
**WHFO Wadi Hawf 23.86 224** P **P** **09 17 04.3 -0.2**
**CHOM Cayeli-Rize 23.88 290** P **P** **09 17 00.3 -4.1**
**RBK Rabkut 23.96 222** P **P** **09 17 05.1 -0.2**
**SKHT Srikalahasti 23.96 158** *e*P **P** **09 17 06.6 +1.4**
SKHT *e*S **S** **09 21 12.0 +2.9**
**BNGB Bingl 23.98 285** P **P** **09 17 09.1 +3.6**
**MARD Mardin 24.05 281** P **P** **09 17 08.4 +2.2**
MARD IAmb IAmb 09 17 44.6
comp=Z,108nm,1.0s
**ABTO Aybut 24.58 224** P **P** **09 17 10.9 -0.1**
**KRAR Krasnoyarsk 24.59 30***d i*P **P** **09 17 10.2 -0.4**
**SOC Sochi 24.81 296** *e*P **P** **09 17 12.1 -0.7**
SOC *e**PP **pP** **09 17 42.2 -6.0**
SOC *e* 09 17 52.4
SOC *e**SP **sP** **09 18 07.0 -2.2**
SOC *e*S **S** **09 21 23.0 +0.7**
SOC pmax pmax
comp=Z,50nm,0.8s
**RAYN Ar Rayn 25.39 247** P **P** **09 17 18.9 +0.5**
RAYN pmax pmax
comp=Z,56nm,0.9s
**RAYN Ar Rayn 25.39 247** P **P** **09 17 18.9 +0.5**
RAYN IAmb IAmb 09 18 00.6
comp=Z,56nm,0.8s
**RAYN Ar Rayn 25.39 247** P **P** **09 17 18.1 -0.2**
**RAYN Ar Rayn 25.39 247** *i* P **P** **09 17 18.0 -0.4**
SNR=9.2
**VRH Novokhopyorsk 25.48 315** *e*P **P** **09 17 18.9 +0.1**
VRH pmax pmax
comp=Z,260nm,0.8s
**MOY Mondy 26.21 45** *e*P **P** **09 17 27.0 +1.5**
MOY pmax pmax
comp=Z,122nm,1.5s
**KIRV Kirov 26.25 334** P **P** **09 17 26.7 +1.2**
comp=Z,666nm,0.6s,baz=132,slow=2.8,SNR=265
**KIRV Kirov 26.25 334***c i*P **P** **09 17 26.6 +1.1**
**RSDY Resadiye-TOKAT 26.49 289** P P 09 17 42.6 +15
**LZH Lanzhou 26.51 81** ⇑P **P** **09 17 30.5 +2.1**
LZH PcP **PcP** **09 20 49.0 +0.5**
LZH S **S** **09 21 53.0 +3.5**
LZH SS **SnSn** **09 23 17.6 +4.1**
LZH ScP **ScP** **09 24 10.8 -1.0**
LZH ScS **ScS** **09 28 00.6 -2.0**
LZH pmax pmax
comp=Z,79nm,1.0s
LZH pmax pmax
comp=Z,160nm,4.9s
LZH LR LR
comp=Z,300nm,15.7s
LZH LR LR
comp=Z,370nm,14.1s
LZH LR LR
comp=Z,450nm,16.8s
**ANN Anapa 26.58 299***c i*P **P** **09 17 29.5 +0.8**
ANN *e**PP **pP** **09 18 04.8 0.0**
ANN *e* 09 18 19.0
ANN *e*S **S** **09 21 50.6 +0.5**
ANN pmax pmax
comp=Z,97nm,0.6s
**VSR Storozhevoye 26.97 313** *e*P **P** **09 17 32.6 +0.5**
VSR pmax pmax
comp=Z,230nm,0.8s
**ZAK Zakamensk 27.09 49** *e*P **P** **09 17 34.3 +0.9**
ZAK pmax pmax
comp=Z,93nm,1.2s
**VORR Voronezh 27.11 314** *e*P **P** **09 17 34.2 +0.8**
**TOKA Tokat 27.14 289** P **P** **09 17 36.3 +2.4**
TOKA IAmb IAmb 09 18 36.6
comp=Z,63nm,1.0s
**SARI SarD1z-Kayseri 27.35 285** P **P** **09 17 38.4 +2.5**
**LPSR Galich'ya Gora 27.63 316** *e*P **P** **09 17 38.8 +0.9**
LPSR pmax pmax
comp=Z,500nm,0.8s
**CD2 Chengdu 27.82 92** P **P** **09 17 42.1 +2.1**
CD2 S **S** **09 22 12.5 +2.4**
CD2 pmax pmax
comp=Z,90nm,0.5s
CD2 LR LR
comp=Z,900nm,10.8s
CD2 LR LR
comp=Z,500nm,9.3s
**PZH PanZhiHua 28.02 102** P **P** **09 17 44.3 +2.4**
PZH sP **sP** **09 18 38.9 -1.0**
PZH PcP **PcP** **09 20 51.5 -0.7**
PZH S **S** **09 22 14.6 +1.2**
PZH SS **SnSn** **09 23 55.8 +5.7**
PZH ScP **ScP** **09 24 14.0 -2.5**
PZH ScS **ScS** **09 28 06.1 -3.4**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax

comp=Z,200nm,5.3s
**SNOP Sinop 28.05 292** P **P** **09 17 43.6 +1.7**
SNOP IAmb IAmb 09 18 43.1
comp=Z,80nm,0.9s
**IRK Irkutsk 28.30 46** *eP* **P** **09 17 45.2 +1.2**
IRK *e* 09 18 25.8
IRK pmax pmax
comp=Z,145nm,1.0s
**SONM Songino Array 28.44 55** P **P** **09 17 46.7 +1.4**
comp=Z,52nm,0.8s,baz=257,slow=9.9,SNR=123
SONM ScP **ScP** **09 24 16.1 -1.4**
comp=Z,1.7nm,0.5s,baz=216,slow=2.1,SNR=2.6
SONM P3KPbc 09 50 00.6
comp=Z,1.1nm,0.6s,baz=96,slow=3.0,SNR=4.4
**SONM Songino Array 28.44 55** P **P** **09 17 46.8 +1.4**
SONM pmax pmax
comp=Z,67nm,1.0s
**SONM Songino Array 28.44 55** P **P** **09 17 46.8 +1.4**
SONM IAmb IAmb 09 17 47.9
comp=Z,67nm,1.0s
**SOCY Socotra 28.55 216** P **P** **09 17 45.7 -0.9**
**SOCY Socotra 28.55 216** P **P** **09 17 45.5 -1.2**
**CORM Corum 28.57 289** P **P** **09 17 48.5 +1.9**
**ULN Ulaanbaatar 28.88 55***c iP* **P** **09 17 50.3 +1.0**
ULN pmax pmax
comp=Z,58nm,0.8s
**ULN Ulaanbaatar 28.88 55** P **P** **09 17 50.6 +1.3**
ULN IAmb IAmb 09 17 51.1
comp=Z,45nm,0.7s
**SIM Simferopol' 28.94 299** *eP* **P** **09 17 50.1 +0.4**
SIM *e**PP **pP** **09 18 27.6 +1.4**
SIM *e* 09 18 47.0
SIM *e* 09 20 51.0
SIM pmax pmax
comp=Z,50nm,0.9s
**BZK Bozkurt 28.95 292** P **P** **09 17 51.7 +1.9**
**ILGA Ilgaz 29.20 291** P **P** **09 17 54.1 +1.7**
ILGA IAmb IAmb 09 18 52.9
comp=Z,177nm,1.1s
**MMAI Mount Meron Ar 29.26 274** PcP **PcP** **09 20 55.9 +0.7**
comp=Z,16nm,0.5s,baz=64,slow=7.8,SNR=11
**BR131 Keskin Array S 29.36 288***c iP* **P** **09 17 54.2 +0.6**
**BR131 Keskin Array S 29.36 288** P **P** **09 17 54.4 +0.7**
BR131 IAmb IAmb 09 18 54.8
comp=Z,45nm,0.8s
**BR131 Keskin Array S 29.36 288** P **P** **09 17 51.7 -2.0**
**BRTR Keskin Array B 29.36 288** P **P** **09 17 54.3 +0.6**
comp=Z,3.2nm,0.6s,baz=107,slow=8.3,SNR=22
BRTR PcP **PcP** **09 20 56.2 +0.8**
comp=Z,4.2nm,0.6s,baz=104,slow=2.5,SNR=5.2
BRTR ScP **ScP** **09 24 20.5 -0.1**
comp=Z,2.7nm,0.8s,baz=122,slow=5.2,SNR=3.9
**BRTR Keskin Array B 29.36 288** P **P** **09 17 54.0 +0.4**
**KMI Kunming 29.47 104** ⇓P **P** **09 17 58.3 +3.4**
KMI pP pP 09 18 31.8 -0.6
KMI S **S** **09 22 37.8 +1.4**
KMI sS sS 09 23 37.8 -4.5
KMI pmax pmax
comp=Z,39nm,0.7s
**HMDM Hanimaadhoo 29.61 175** P **P** **09 17 58.1 +2.2**
HMDM IAmb IAmb 09 17 59.2
comp=Z,171nm,0.9s
**HMDM Hanimaadhoo 29.61 175** P **P** **09 17 58.4 +2.5**
**MOS Moscow 29.64 321** *eP* **P** **09 17 55.1 -0.6**
MOS *e**PP **pP** **09 18 34.1 +1.6**
MOS *e* 09 18 50.7
MOS *eS* **S** **09 22 37.3 -0.7**
MOS *e* 09 23 40.4
MOS *e* 09 28 11.4
MOS pmax pmax
comp=Z,700nm,1.1s
MOS pmax pmax
comp=Z,568nm,1.0s
**PRGR Permogore 29.78 336**⇑*iP* **P** **09 17 57.7 +0.8**
PRGR 09 19 00.6
**OBN Obninsk 29.92 319** ⇑P **P** **09 17 59.2 +1.0**
**OBN Obninsk 29.92 319** P **P** **09 17 59.0 +0.9**
comp=Z,84nm,0.4s,baz=92,slow=1.2,SNR=83
**OBN Obninsk 29.92 319***c iP* **P** **09 17 58.9 +0.8**
OBN *i* *PP **pP** **09 18 32.6 -2.2**
OBN *e* 09 19 03.0
OBN *i* S **S** **09 22 45.6 +3.3**
OBN pmax pmax
comp=Z,786nm,1.3s
**OBN Obninsk 29.92 319** P **P** **09 17 58.7 +0.5**
**ANTO Ankara 30.00 288** P **P** **09 18 00.5 +1.3**
ANTO pmax pmax
comp=Z,46nm,1.1s
**ANTO Ankara 30.00 288** P **P** **09 18 00.5 +1.3**
**CHTO Chiang Mai 30.28 118** P **P** **09 18 03.4 +1.6**
CHTO pmax pmax
comp=Z,28nm,0.7s
**CHTO Chiang Mai 30.28 118** P **P** **09 18 03.4 +1.6**
**CHTO Chiang Mai 30.28 118** P **P** **09 18 03.3 +1.6**
**CHTO Chiang Mai 30.28 118** P **P** **09 18 03.1 +1.3**
**PALK Pallekele 30.39 160** P **P** **09 18 04.2 +1.4**
PALK pmax pmax
comp=Z,89nm,0.7s
**PALK Pallekele 30.39 160** P **P** **09 18 04.2 +1.4**
PALK IAmb IAmb 09 18 05.2
comp=Z,89nm,0.7s
**PALK Pallekele 30.39 160** P **P** **09 18 04.6 +1.8**
**CM31 Chiang Mai Arr 30.51 118** P **P** **09 18 05.1 +1.3**
CM31 IAmb IAmb 09 19 04.0
comp=Z,138nm,1.3s
**CM31 Chiang Mai Arr 30.51 118** P **P** **09 18 05.1 +1.3**
SNR=17
**CMAR Chiang Mai Arr 30.51 118** P **P** **09 18 04.7 +0.9**
comp=Z,36nm,0.8s,baz=298,slow=8.3,SNR=147
CMAR pP **pP** **09 18 42.7 +1.1**
comp=Z,23nm,0.7s,baz=301,slow=10,SNR=2.0
CMAR ScP **ScP** **09 24 22.8 -1.6**
comp=Z,10nm,0.8s,baz=297,slow=4.9,SNR=11
**CMAR Chiang Mai Arr 30.51 118** P **P** **09 18 05.6 +1.8**
**LADK Ladik-KONYA 30.54 285** P **P** **09 18 03.9 -0.1**
**KONT Konya--Tatoy 30.58 285** P **P** **09 18 02.9 -1.4**
**BTO Baotou 30.72 70** *eP* **P** **09 18 06.1 +0.5**
BTO S **S** **09 22 58.6 +3.2**
BTO LR LR
comp=Z,1μm,4.7s
BTO LR LR
comp=Z,860nm,6.1s
**SVRH Sivrihisar-ESK 31.02 288** P **P** **09 18 09.8 +1.6**
**XAN Xi'an 31.02 83** P **P** **09 18 09.4 +1.1**
XAN S **S** **09 23 01.8 +1.6**
XAN pmax pmax
comp=Z,290nm,0.7s
XAN LR LR
comp=Z,370nm,6.2s
XAN LR LR
comp=Z,280nm,4.9s
XAN LR LR
comp=Z,410nm,9.3s
**KLMR Klimovskoe 31.48 331** *eP* **P** **09 18 09.8 -2.0**
KLMR *e**SP **sP** **09 19 07.3 -1.8**
KLMR *e* 09 19 24.4
KLMR *eS* **S** **09 23 09.2 +2.7**
KLMR pmax pmax
comp=Z,250nm,0.7s
**KLMR Klimovskoe 31.48 331** *eP* **P** **09 18 09.8 -2.0**
KLMR AMP 09 18 12.9
comp=Z,250nm,0.7s
KLMR *es*P **sP** **09 19 07.3 -1.8**
KLMR *e*PP **PnPn** **09 19 24.4 +1.8**
KLMR *eS* **S** **09 23 09.3 +2.7**
KLMR *eS* **S** **09 23 09.3 +2.7**
**PBA Port Blair 31.59 136** P **P** **09 18 15.7 +2.4**
**PBA Port Blair 31.59 136** P **P** **09 18 15.9 +2.6**
SNR=9.0
**SUTC Sutluce-Ispart 31.73 284** P **P** **09 18 15.4 +0.9**
**HHC Hu-ho-hao-te 31.87 69** *eP* **P** **09 18 17.4 +1.8**
HHC S **S** **09 23 14.4 +1.1**
HHC SS **SnSn** **09 25 17.5 -6.0**
HHC pmax pmax
comp=Z,53nm,1.2s
**GYA Guiyang 31.95 98** ⇑P **P** **09 18 19.1 +2.6**
GYA pP pP 09 18 56.0 +1.9
GYA PcP **PcP** **09 21 04.6 +2.2**
GYA S **S** **09 23 18.0 +3.2**
GYA pmax pmax
comp=Z,120nm,0.7s
GYA pmax pmax
comp=Z,230nm,3.5s
GYA LR LR
comp=Z,170nm,6.9s
GYA LR LR
comp=Z,210nm,6.3s
GYA LR LR
comp=Z,230nm,7.0s
**PURM Purcari 32.01 301**⇑P **P** **09 18 18.4 +1.7**
**ISP Isparta 32.04 285**⇑*eP* **P** **09 18 17.0 -0.2**
ISP pmax pmax
comp=Z,10.0nm,1.2s
**YLV Yalova 32.53 290** P **P** **09 18 20.9 -0.5**
**TVSB Tavsanli 32.60 288** P **P** **09 18 21.8 -0.2**
**ENH Enshi 32.67 90** P **P** **09 18 24.2 +1.5**
**MILM Milestii Mici 32.76 302** P **P** **09 18 23.9 +0.7**
**AKASG Malin Array Be 32.91 309** P **P** **09 18 24.6 +0.2**
comp=Z,123nm,0.5s,baz=81,slow=7.0,SNR=918
AKASG pP **pP** **09 19 03.1 +1.8**
comp=Z,52nm,0.7s,baz=83,slow=7.0,SNR=2.8
AKASG sP **sP** **09 19 22.7 +1.1**
comp=Z,20nm,0.6s,baz=95,slow=9.0,SNR=2.6
AKASG ScP **ScP** **09 24 29.7 -2.3**
comp=Z,9.4nm,0.9s,baz=77,slow=3.4,SNR=6.0
**AKASG Malin Array Be 32.91 309** P **P** **09 18 24.7 +0.3**
**AKBB Malin Array Si 32.91 309***c iP* **P** **09 18 24.8 +0.4**
**AKBB Malin Array Si 32.91 309** P **P** **09 18 24.8 +0.4**
**TIY Taiyuan 32.98 75** ⇓P **P** **09 18 27.3 +2.0**
TIY pP **pP** **09 19 02.4 -1.1**
TIY S **S** **09 23 31.9 +1.4**
TIY sS **ScP** **09 24 30.6 -2.0**
TIY pmax pmax
comp=Z,100nm,0.7s
**TPGR Topolog 32.98 298** P **P** **09 18 25.7 +0.5**
**SORM Soroca 33.16 304** ⇑P **P** **09 18 26.6 0.0**
**CFR Carcaliu 33.18 299** ⇓P **P** **09 18 27.9 +1.0**
**VLDR Vladesti 33.23 300** ⇑P **P** **09 18 29.1 +1.9**
**SCTR Scanteiesti 33.29 300** ⇑P **P** **09 18 29.7 +1.9**
**KULA Kula-Manisa 33.36 287** P **P** **09 18 28.4 -0.2**
**VASR Vaslui 33.45 301** ⇑P **P** **09 18 30.4 +1.3**
**LYN LuoYang 33.72 81**⇑*iP* **P** **09 18 33.9 +2.2**
LYN sP sP 09 19 30.8 +0.7
LYN PP **PP** **09 19 53.0 +1.4**
LYN S **S** **09 23 45.9 +4.0**
LYN pmax pmax
comp=Z,130nm,0.6s
**CIT Chita 33.75 49** *eP* **P** **09 18 32.6 +0.8**
CIT *e* 09 19 30.4
CIT *e* 09 19 51.8
CIT pmax pmax
comp=Z,318nm,1.4s
**PANC Panciu 33.88 300** ⇓P **P** **09 18 35.4 +2.5**
**VRI Vrincioaia 34.17 300** ⇑P **P** **09 18 37.9 +2.4**
**NRIK Noril'sk 34.19 10** P **P** **09 18 36.9 +1.6**
comp=Z,686nm,0.8s,baz=202,slow=5.6,SNR=799
NRIK LR LR 09 33 50.9
comp=Z,240nm,20.7s,baz=210,slow=38
**NRIK Noril'sk 34.19 10***c iP* **P** **09 18 36.7 +1.4**
NRIK pmax pmax
comp=Z,1μm,1.1s
**NRIK Noril'sk 34.19 10** P **P** **09 18 37.0 +1.7**
**PLOR Plostina 34.23 300** ⇓P **P** **09 18 38.0 +2.0**
**TESR Tescani 34.23 301** ⇑P **P** **09 18 37.5 +1.6**
**ISR Istrita 34.31 299** ⇑P **P** **09 18 39.3 +2.6**
**MNK Minsk 34.47 315** *i* P **P** **09 18 38.6 +0.8**
MNK *i* *PP **pP** **09 19 14.5 -0.5**
MNK *i* S **S** **09 23 55.1 +2.2**
MNK *i* *SS **sS** **09 24 59.0 -0.5**
MNK pmax pmax
comp=N,33nm,0.9s
MNK pmax pmax
comp=E,34nm,0.9s
MNK pmax pmax
comp=Z,370nm,0.9s
**MNK Minsk 34.47 315** *i* P **P** **09 18 38.6 +0.8**
comp=E,34nm,0.9s
MNK *i* P **P** **09 18 38.6 +0.8**
comp=N,33nm,0.9s
MNK *i* P **P** **09 18 38.6 +0.8**
comp=Z,370nm,0.9s,baz=104
MNK *i* pP **pP** **09 19 14.5 -0.5**
MNK *i* S **S** **09 23 55.2 +2.2**
MNK *i* sS **sS** **09 24 59.0 -0.5**
MNK *i* SS SS 09 26 46.1 +18
**COVR Voineasa-Covas 34.54 300** ⇓P **P** **09 18 40.6 +1.9**
**PRAR RASCA 34.54 303** ⇓P **P** **09 18 42.2 +1.6**
**MLR Muntele Rosu 34.73 299** ⇑P **P** **09 18 42.7 +2.3**
**MLR Muntele Rosu 34.73 299** P **P** **09 18 42.6 +2.3**
MLR pmax pmax
comp=Z,101nm,1.0s
**MLR Muntele Rosu 34.73 299** P **P** **09 18 42.6 +2.3**
MLR IAmb IAmb 09 19 41.9
comp=Z,101nm,1.0s
**HNS HongShan 34.81 75** ⇑P **P** **09 18 42.8 +1.8**
HNS PcP **PcP** **09 21 10.5 +0.3**
HNS S **S** **09 23 56.8 -1.7**
HNS ScS **ScS** **09 28 42.4 -0.3**
HNS pmax pmax
comp=Z,120nm,0.9s
**PUL Pulkovo 34.90 325***c iP* **P** **09 18 42.6 +1.1**
PUL pmax pmax
comp=Z,403nm,0.6s
**PUL Pulkovo 34.90 325** *eP* **P** **09 18 43.0 +1.5**
**XLT XiLinHaoTe 34.97 63**⇑*iP* **P** **09 18 44.0 +1.6**
XLT pP pP 09 19 25.1 +4.3
XLT sP sP 09 19 41.8 +0.8
XLT PcP **PcP** **09 21 11.0 +0.3**
XLT S **S** **09 24 03.0 +2.0**
XLT ScP **ScP** **09 24 38.8 -0.7**
XLT sS sS 09 25 06.3 -1.4
XLT ScS **ScS** **09 28 41.0 -2.6**
XLT pmax pmax
comp=Z,30nm,1.2s
XLT LR LR
comp=Z,280nm,8.6s
XLT LR LR
comp=Z,220nm,12.5s
**DOPR Dopca 35.11 300** ⇓P **P** **09 18 45.3 +1.8**
**NACGM Naroch 35.19 316** *iP* **P** **09 18 44.9 +0.9**
**BURAR Bucovina Array 35.24 303** ⇑P **P** **09 18 45.5 +0.9**
**BURAR Bucovina Array 35.24 303** P **P** **09 18 45.9 +1.2**
BURAR IAmb IAmb 09 18 47.1
comp=Z,41nm,0.7s
**BUR08 Bucovina Ar. S 35.25 303** P **P** **09 18 46.0 +1.2**
**IDID Didziasalis 35.31 316** *eP* **P** **09 18 46.7 +1.7**
**VOIR 35.36 299** ⇓P **P** **09 18 47.0 +1.3**
**BOD Bodaibo 35.45 39**⇓*iP* **P** **09 18 42.6 -3.6**
BOD pmax pmax
comp=Z,124nm,1.0s
**BJT Baijiatuau 35.46 70** P **P** **09 18 48.6 +2.1**
BJT pmax pmax
comp=Z,56nm,0.7s
**BJT Baijiatuau 35.46 70** P **P** **09 18 48.6 +2.1**
BJT IAmb IAmb 09 18 49.1
comp=Z,56nm,0.7s
**BJI Beijing 35.46 70** P **P** **09 18 48.1 +1.6**
BJI PcP **PcP** **09 21 12.5 +0.5**
BJI S **S** **09 24 09.5 +1.1**
BJI ScP **ScP** **09 24 39.5 -1.7**
BJI pmax pmax
comp=Z,77nm,0.7s
**IIGN Ignalina 35.60 316** *eP* **P** **09 18 49.4 +1.8**
**ARR Arges 35.65 299** ⇓P **P** **09 18 49.8 +1.6**
**ARCR ARCALIA 35.82 302** ⇑P **P** **09 18 52.5 +3.0**
**KAAM Kaadhehdhoo 35.83 176** P **P** **09 18 51.7 +1.9**
KAAM IAmb IAmb 09 18 52.7
comp=Z,168nm,0.8s
**LVV L'vov 36.12 307** *eP* **P** **09 18 52.9 +0.9**
LVV *e* 09 20 29.3
**VSU Vasula 36.17 322***c iP* **P** **09 18 52.6 +0.3**
**VSU Vasula 36.17 322** *eP* **P** **09 18 53.3 +1.0**
**CNSH ChangSha 36.25 91** ⇑P P 09 18 44.0 -9.3
CNSH pmax pmax
comp=Z,130nm,0.9s
**BMR Baia Mare 36.40 303** ⇓P **P** **09 18 56.9 +2.5**
**WHN Wuhan 36.49 86** ⇑P **P** **09 18 57.1 +1.8**
WHN pmax pmax
comp=Z,380nm,0.7s
**VTS Vitosha 36.87 295** P **P** **09 19 00.6 +2.0**
VTS pmax pmax
comp=Z,18nm,0.9s
**VTS Vitosha 36.87 295** P **P** **09 19 00.6 +2.0**
**PABE Paberze 36.89 316** P **P** **09 18 59.3 +0.9**
**PABE Paberze 36.89 316** *eP* **P** **09 18 60.0 +1.6**
**DRGR 36.95 302** ⇑P **P** **09 18 59.1 -0.1**
**GZR Gura Zlata 36.96 299** ⇓P **P** **09 19 00.1 +0.8**
**KWP Kalwaria Pacla 36.97 306** P **P** **09 18 59.1 -0.1**
**KWP Kalwaria Pacla 36.97 306** P **P** **09 18 59.1 -0.1**
**TIA Tai'an 36.97 76** P **P** **09 19 01.0 +1.6**
TIA pmax pmax
comp=Z,100nm,0.9s
**TRPA Tarpa 37.05 304** ⇑P **P** **09 19 01.5 +1.7**
**TRPA Tarpa 37.05 304** P **P** **09 19 01.6 +1.7**
**SUW Suwalki 37.09 314** *eP* **P** **09 19 00.4 +0.3**
**SUW Suwalki 37.09 314** P **P** **09 19 00.5 +0.4**
SUW pmax pmax
comp=Z,344nm,0.9s
**SUW Suwalki 37.09 314** P **P** **09 19 00.5 +0.4**
**SUW Suwalki 37.09 314** *eP* **P** **09 19 00.8 +0.7**
**UZH Uzhgorod 37.21 305**⇑*iP* **P** **09 19 00.8 -0.5**
UZH *e* 09 20 02.9
**UBPT Khong Chiam 37.29 115** P **P** **09 19 03.0 +0.8**
**HIA Hailar 37.40 54** P **P** **09 19 04.4 +1.6**
HIA pmax pmax
comp=Z,37nm,0.7s
**HIA Hailar 37.40 54** P **P** **09 19 04.4 +1.6**
HIA IAmb IAmb 09 19 04.8
comp=Z,37nm,0.7s
**LVZ Lovozero 37.47 338***c iP* **P** **09 19 03.8 +0.6**
LVZ pmax pmax
comp=Z,488nm,0.7s
**LVZ Lovozero 37.47 338** P **P** **09 19 03.9 +0.6**
**FIA1 FINESS Array S 37.48 326** P **P** **09 19 03.8 +0.6**
**FINES FINESS Array B 37.48 326** P **P** **09 19 04.2 +0.9**
comp=Z,294nm,0.7s,baz=115,slow=9.0,SNR=864
FINES sP **sP** **09 20 01.4 +0.1**
comp=Z,58nm,0.9s,baz=101,slow=10,SNR=2.5
**FINES FINESS Array B 37.48 326** P **P** **09 19 03.6 +0.4**
**APA Apatity 37.65 338**⇓*iP* **P** **09 19 04.2 -0.5**
APA *i* 09 20 37.1
APA pmax pmax
comp=Z,144nm,0.6s
APA MLR MLR
comp=Z,500nm,10.0s
**MTSE Matsula 37.71 321** *eP* **P** **09 19 06.7 +1.5**
**MDVR Moldovita 37.75 298** ⇓P **P** **09 19 07.1 +1.2**
**BZS Buzias 37.76 300** ⇓P **P** **09 19 07.5 +1.6**
**CRVS Cervenica-Dubn 37.77 305** *eP* **P** **09 19 07.4 +1.5**
CRVS *e* 09 20 40.0
**CRVS Cervenica-Dubn 37.77 305** *eP* **P** **09 19 07.4 +1.5**
CRVS *e*PP **PnPn** **09 20 40.0 +0.9**
**STIP Stip 37.77 293** *i* Pn **P** **09 19 05.1 -0.9**
**STHS Stebnicka Huta 37.91 306** *eP* **P** **09 19 07.8 +0.6**
**STHS Stebnicka Huta 37.91 306** *eP* **P** **09 19 07.8 +0.6**
**SRIT Nakonsritamara 38.08 130** P **P** **09 19 10.3 +1.4**
SRIT IAmb IAmb 09 19 11.1
comp=Z,65nm,0.6s
**PBUR Paburge 38.12 317** *eP* **P** **09 19 10.1 +1.4**
**SLIT Slitere, Latvi 38.23 319** *eP* **P** **09 19 10.1 +0.5**
**QIZ Qiongzhong 38.29 106** P **P** **09 19 13.5 +2.9**
QIZ S **S** **09 24 52.5 +0.8**
QIZ sS **sS** **09 26 01.0 +1.9**
QIZ pmax pmax
comp=Z,180nm,3.5s
**BEL Belsk 38.30 310** *eP* **P** **09 19 11.2 +0.9**
**KECS Kecovo 38.41 304** *eP* **P** **09 19 13.0 +1.7**
**KECS Kecovo 38.41 304** *eP* **P** **09 19 13.0 +1.7**
**FNA Florina 38.52 292** P **P** **09 19 12.8 +0.4**
FNA pmax pmax
comp=Z,23nm,0.7s
**FNA Florina 38.52 292** P **P** **09 19 12.8 +0.4**
**NIE Niedzica 38.53 306** *eP* **P** **09 19 14.7 +2.4**
**BSZH Besenyszg 38.60 303** P **P** **09 19 16.2 +3.4**
**PSZ Piszkesteto 38.83 304** P **P** **09 19 16.2 +1.3**
PSZ pmax pmax
comp=Z,30nm,1.0s
**PSZ Piszkesteto 38.83 304** P **P** **09 19 16.2 +1.3**
**PSZ Piszkesteto 38.83 304** P **P** **09 19 16.8 +1.9**
**OJC Ojcow 38.86 307** *eP* **P** **09 19 15.7 +0.7**
**OJC Ojcow 38.86 307** P **P** **09 19 15.6 +0.6**
OJC pmax pmax
comp=Z,89nm,0.8s
**OJC Ojcow 38.86 307** P **P** **09 19 15.6 +0.6**
OJC IAmb IAmb 09 19 17.1
comp=Z,89nm,0.8s
**KLNR Kaliningrad 38.89 314***c iP* **P** **09 19 15.8 +0.7**
KLNR pmax pmax
comp=Z,470nm,0.9s
**DIVS Divibare 39.05 297** P **P** **09 19 17.5 +0.7**
DIVS IAmb IAmb 09 20 18.0
comp=Z,82nm,1.0s
**DIVS Divibare 39.05 297** *eP* **P** **09 19 17.4 +0.6**
**FRGS Fruska Gora 39.06 299** ⇓P **P** **09 19 17.1 +0.3**
**FRGS Fruska Gora 39.06 299** *eP* **P** **09 19 16.6 -0.2**
**LHMI Lhok Sumawe 39.20 136** P **P** **09 19 19.6 +1.4**
**LHMI Lhok Sumawe 39.20 136** P **P** **09 19 19.5 +1.3**
comp=Z,391nm,0.9s
**BUD Budapest 39.43 303** P **P** **09 19 22.3 +2.6**
**BBLS Lazići 39.50 297** *eP* **P** **09 19 20.7 +0.2**
**VYHS Vyhne 39.51 304** *eP* **P** **09 19 21.9 +1.4**
VYHS pmax pmax
comp=Z,36nm,1.5s
**VYHS Vyhne 39.51 304** *eP* **P** **09 19 21.9 +1.4**
**RUDO Rudo 39.55 297** *eP* **P** **09 19 18.6 -2.3**
**NJ2 Nanjing 39.57 82**⇑*iP* **P** **09 19 22.8 +1.7**
NJ2 pP **pP** **09 19 55.3 -4.7**
NJ2 sP **sP** **09 20 16.3 -4.0**
NJ2 PcP **PcP** **09 21 24.4 -0.4**
NJ2 ScP **ScP** **09 24 54.4 -2.5**
NJ2 S **S** **09 25 13.8 +3.2**
NJ2 pmax pmax
comp=Z,330nm,0.7s
NJ2 pmax pmax
comp=Z,290nm,3.8s
**MORH Mrgy, Hungar 39.78 301** *eP* **P** **09 19 23.4 +0.7**
**MORH Mrgy, Hungar 39.78 301** P **P** **09 19 22.9 +0.2**
**KOLL Kolacno 39.80 305** *eP* **P** **09 19 24.4 +1.6**
**PDG Podgorica 39.81 295** *eP* **P** **09 19 23.6 +0.6**
**DL2 Dalian 39.82 71** P **P** **09 19 24.5 +1.4**
DL2 *es*P **sP** **09 20 23.3 +0.5**
DL2 S **S** **09 25 16.8 +2.7**
DL2 pmax pmax
comp=Z,270nm,0.6s
**SRO2 Moca 39.84 303** *eP* **P** **09 19 24.1 +1.0**
SRO2 pmax pmax
comp=Z,66nm,0.8s
**SRO2 Moca 39.84 303** *eP* **P** **09 19 24.1 +1.0**
**SRO Srobarova 39.89 303** *eP* **P** **09 19 25.5 +1.9**
SRO pmax pmax
comp=Z,55nm,0.9s
**SRO Srobarova 39.89 303** *eP* **P** **09 19 25.5 +1.9**
**DRME Dracevica, Mon 39.90 295** *eP* **P** **09 19 23.4 -0.4**
**OKC Ostrava-Krasne 39.93 307** *eP* **P** **09 19 25.5 +1.7**
**OKC Ostrava-Krasne 39.93 307** *eP* **P** **09 19 25.5 +1.7**
**UPM Unac-Piva 39.95 296** *eP* **P** **09 19 24.7 +0.3**
**CSKK Cskako 39.96 303** P **P** **09 19 26.1 +2.0**
**BRY Bratogost 40.26 296** *eP* **P** **09 19 25.7 -1.2**
**JAVC Velka Javorina 40.27 305** *eP* **P** **09 19 28.7 +1.9**
**MORC Moravsky Berou 40.32 307** P **P** **09 19 28.1 +1.0**
MORC pmax pmax
comp=Z,52nm,0.7s
**MORC Moravsky Berou 40.32 307** P **P** **09 19 28.1 +1.0**
MORC IAmb IAmb 09 19 29.7
comp=Z,52nm,0.7s
**MORC Moravsky Berou 40.32 307** *eP* **P** **09 19 27.9 +0.7**
**HCY Herceg Novi 40.37 295** *eP* **P** **09 19 27.2 -0.4**
**A252A Venje 40.41 300** P **P** **09 19 28.2 +0.3**
**TREB Trebinje 40.43 296** *eP* **P** **09 19 27.3 -0.8**
**SMOL Smolenice 40.45 305** *eP* **P** **09 19 29.8 +1.7**
SMOL pmax pmax
comp=Z,10.0nm,0.7s
**SMOL Smolenice 40.45 305** *eP* **P** **09 19 29.8 +1.7**
**MPLH Magyarpolny 40.46 302** P **P** **09 19 29.9 +1.6**
**GKP Gorka Klasztor 40.54 312** *eP* **P** **09 19 30.0 +1.2**
**GKP Gorka Klasztor 40.54 312** *eP* **P** **09 19 30.9 +2.1**
**MODS Modra-Piesok 40.55 304** *eP* **P** **09 19 33.1 +4.0**
**MODS Modra-Piesok 40.55 304** *eP* **P** **09 19 33.1 +4.0**
**EGYH Egyhazaskeszo 40.58 303** P **P** **09 19 31.5 +2.2**
**SNY Shenyang 40.69 66** ⇑P **P** **09 19 30.6 +0.4**
SNY pmax pmax
comp=Z,110nm,0.7s
**KRLC Kraliky 40.80 307** *eP* **P** **09 19 32.1 +1.0**
**KRLC Kraliky 40.80 307** *eP* **P** **09 19 32.1 +1.0**
**KEV Kevo 40.81 338** P **P** **09 19 32.0 +1.2**
KEV pmax pmax
comp=Z,411nm,0.9s
**KEV Kevo 40.81 338** P **P** **09 19 32.0 +1.2**
**STON Ston 40.87 296** *eP* **P** **09 19 32.6 +0.9**

STON Ston 40.87 296 P P 09 19 31.9 +0.2
VRAC Vranov 40.96 306 eP P 09 19 33.4 +1.1
BLY Banja Luka 40.96 299 eP P 09 19 29.7 -2.7
BEHE Becsehely 41.05 301 P P 09 19 36.6 +3.6
UPP Uppsala 41.06 322 eP P 09 19 33.9 +1.0
MGRS Mrkonjic Grad 41.08 298 eP P 09 19 34.4 +1.0
SOP Sopron 41.08 303 P P 09 19 35.3 +2.0
DPC Dobruska-Polom 41.09 307 eP P 09 19 34.6 +1.2
DPC Dobruska-Polom 41.09 307 eP P 09 19 34.6 +1.2
KSP Ksiaz 41.10 308 eP P 09 19 34.4 +0.9
KRUC Moravsky 41.10 305 eP P 09 19 34.3 +0.8
MRAK Mrakovica 41.13 299 eP P 09 19 33.4 -0.5
OSTC Ostas 41.15 308 eP P 09 19 35.1 +1.2
ARA0 ARCESS Array S 41.16 338⇑iP P 09 19 35.0 +1.4
ARCES ARCESS Array B 41.16 338 P P 09 19 34.8 +1.2
comp=Z,553nm,0.7s,baz=111,slow=8.0,SNR=2190
ARCES ARCESS Array B 41.16 338 P P 09 19 34.5 +0.9
RICI Ricice 41.18 297 P P 09 19 33.5 -0.8
SNSI Sinabang, Aceh 41.22 139 P P 09 19 36.1 +1.3
comp=Z,687nm,0.9s
CHVC Chvalec 41.25 308 eP P 09 19 35.8 +1.0
MAKA Makarska 41.30 297 P P 09 19 33.0 -2.1
KALN Kalnik 41.30 301 P P 09 19 35.1 -0.1
VIKU Vikbolandet 41.31 320 eP P 09 19 35.9 +0.9
KOGS Kog 41.41 302 eP P 09 19 36.6 +0.6
LSTV Lastovo 41.48 296 P P 09 19 35.0 -1.7
TSI Tuntungan 41.53 136 P P 09 19 36.2 -1.1
comp=Z,155nm,1.0s
CONA Conrad Observa 41.53 304 iP P 09 19 38.0 +0.9
comp=Z,40nm,0.8s,SNR=22
BLEU Blekinge 41.55 316 iP P 09 19 36.8 -0.2
LOBO Lobor 41.57 301 P P 09 19 37.5 +0.2
KIJV Kijevo 41.62 298 P P 09 19 36.5 -1.3
KTK1 Kautokeino 41.63 336⇑iP P 09 19 38.4 +0.9
CN2 Changchun 41.71 62 eP P 09 19 38.9 +0.4
CN2 pmax pmax
comp=Z,30nm,0.8s
HVAR Hvar 41.73 297 P P 09 19 38.3 -0.3
SSE Sheshan 41.77 82 P P 09 19 40.8 +1.7
SSE S S 09 25 46.3 +3.1
SSE pmax pmax
comp=Z,160nm,0.8s
SSE pmax pmax
comp=Z,220nm,3.8s
ARSA Arzberg 41.82 303 eP P 09 19 40.1 +0.7
comp=Z,13nm,1.0s
GROS Grobnik 41.92 302 eP P 09 19 40.9 +0.6
BSD Bornholm Skovb 41.98 315 iP P 09 19 40.3 -0.2
BSD IAmb IAmb 09 19 40.7
comp=Z,125nm,0.8s
BSD Bornholm Skovb 41.98 315 eP P 09 19 40.6 +0.1
UDBI Udbina 42.00 299 P P 09 19 42.1 +1.1
CRES Cresnjev 42.03 301 eP P 09 19 41.5 +0.4
PLIT Plitvice 42.05 299 P P 09 19 41.3 +0.1
MORI Morici 42.14 298 P P 09 19 40.8 -1.2
ZEA Zeya 42.17 47 eP P 09 19 43.8 +1.7
ZEA pmax pmax
comp=N,50nm,0.6s
ZEA pmax pmax
comp=E,70nm,0.7s
ZEA pmax pmax
comp=Z,150nm,0.7s
IPM Ipoh 42.18 132 P P 09 19 43.8 +1.2
IPM IAmb IAmb 09 19 44.1
comp=Z,146nm,0.6s
IPM Ipoh 42.18 132 P P 09 19 43.4 +0.8
PVCC Panska Ves 42.20 308 eP P 09 19 43.7 +1.3
PVCC Panska Ves 42.20 308 eP P 09 19 43.7 +1.3
SOKA Soboth 42.22 302 eP P 09 19 43.6 +0.9
comp=Z,27nm,0.6s,SNR=25
SOKA eS ScP 09 25 05.3 -1.9
comp=Z,0.7nm,0.5s
ZIRJ Zirje 42.22 297 P P 09 19 42.2 -0.4
HAMF Hammerfest 42.24 339⇑iP P 09 19 44.0 +1.6
PRU Pruhonice 42.25 307 eP P 09 19 43.8 +1.0
PRU e 09 25 49.0
PRU Pruhonice 42.25 307 eP P 09 19 43.8 +1.0
PRU Pruhonice 42.25 307 eSG S 09 25 49.0 -0.8
CKRC Cesky Krumlov 42.49 305 eP P 09 19 45.5 +0.7
SGRT San Giovanni R 42.50 295 P P 09 19 45.1 0.0
SGRT IAmb IAmb 09 20 45.9
comp=Z,98nm,1.3s
A250A Rusevo Krmpots 42.52 300 P P 09 19 44.9 -0.2
OBKA Obir 42.57 302 eP P 09 19 46.4 +0.9
comp=Z,18nm,1.1s,SNR=7.2
OBKA eS ScP 09 25 07.4 -1.3
comp=Z,2.9nm,0.9s
BRG Berggiesshubel 42.58 308 iP P 09 19 46.4 +0.9
BRG Amp 09 19 47.9
comp=Z,86nm,0.8s
BRG ex x 09 19 53.5
BRG Amp 09 19 54.4
comp=Z,13nm,0.6s
BRG pP pP 09 20 28.1 +4.1
BRG Amp 09 20 29.2
comp=Z,36nm,0.9s
BRG ⇑SP ScP 09 25 06.8 -1.7
BRG Amp 09 25 11.0
comp=Z,18nm,1.3s
BRG Berggiesshubel 42.58 308 iP P 09 19 46.4 +0.9
BRG 09 20 28.1
BRG pmax pmax
comp=Z,86nm,0.8s
BRG Berggiesshubel 42.58 308 eP P 09 19 46.9 +1.5
comp=Z,86nm,0.8s,baz=85,slow=7.8
DUGI Dugi Otok 42.59 298 P P 09 19 45.7 +0.1
MOA Molln 42.61 304 eP P 09 19 46.3 +0.5
comp=Z,26nm,0.8s,SNR=5.6
NVLJ Novalja 42.62 299 P P 09 19 45.3 -0.6
RUE Ruedersdorf 42.63 311 eP P 09 19 47.1 +1.4
RUE Ruedersdorf 42.63 311 eP P 09 19 46.6 +0.9
comp=Z,151nm,0.8s,baz=85,slow=7.8
DEL Delary 42.64 317 iP P 09 19 46.2 +0.4
DEL Delary 42.64 317 eP P 09 19 46.7 +0.9
LJU Ljubljana 42.65 301 eP P 09 19 46.7 +0.6
LJU Ljubljana 42.65 301 eP P 09 19 47.0 +0.9
RABC Rab 42.66 299 P P 09 19 46.0 -0.1
MOZS Mozjanca 42.67 302 eP P 09 19 47.3 +1.0
CEY Cerknica 42.76 301 eP P 09 19 47.2 +0.2
JETT Jettan, Norway 42.77 336⇑iP P 09 19 48.8 +2.0
RIY Rijeka 42.78 300 eP P 09 19 46.5 -0.6
RIY Rijeka 42.78 300 P P 09 19 47.0 -0.1
BNX BinXian 42.80 59 ⇑P P 09 19 48.1 +0.8
BNX pmax pmax
comp=Z,180nm,1.3s
BNX pmax pmax
comp=Z,200nm,4.3s
GSI Gunungsitoli 42.81 139 P P 09 19 49.4 +1.7
GSI Gunungsitoli 42.81 139 P P 09 19 49.2 +1.5
comp=Z,5μmcomp=Z,636nm,0.7s
GSI Gunungsitoli 42.81 139 P P 09 19 49.7 +2.0
LUNU Lund 42.84 315 iP P 09 19 48.0 +0.6
GEC2 GERESS Array S 42.88 305 P P 09 19 48.9 +0.8
GEC2 GERESS Array S 42.88 305 eP P 09 19 49.0 +0.9
baz=85,slow=7.8
GERES GERESS Array B 42.88 305 P P 09 19 48.7 +0.6
comp=Z,7.7nm,0.6s,baz=69,slow=6.7,SNR=17
GERES PP PcP 09 21 35.8 +0.2
comp=Z,6.3nm,0.8s,baz=65,slow=7.8,SNR=3.6
GERES ScP ScP 09 25 08.6 -1.3
comp=Z,4.1nm,0.9s,baz=65,slow=4.9,SNR=4.1
GERES GERESS Array B 42.88 305 P P 09 19 49.0 +0.9
GERES GERESS Array B 42.88 305 P P 09 19 49.0 +0.9
RGN Rugen 42.89 314 P P 09 19 49.7 +1.9
RGN Rugen 42.89 314 eP P 09 19 49.8 +1.9
RGN Rugen 42.89 314 eP P 09 19 49.5 +1.7
comp=Z,801nm,1.0s,baz=85,slow=7.8
KHC Kasperske Hory 42.94 306⇓eP P 09 19 49.5 +1.1
KHC pmax pmax
comp=Z,22nm,0.9s
KHC Kasperske Hory 42.94 306 eP P 09 19 49.2 +0.8
KHC epP pP 09 20 24.5 -2.4
KHC ePP PP 09 21 31.5 -0.1
KHC ex x 09 22 03.0
KHC Kasperske Hory 42.94 306 P P 09 19 49.8 +1.4
FBE Freiberg 42.95 308 eP P 09 19 50.5 +2.1
comp=Z,106nm,0.8s,baz=85,slow=7.8
SMRN Sveta Marina 43.05 300 P P 09 19 48.6 -0.7
SKDS Skadanscina 43.07 300 eP P 09 19 49.4 -0.1
CLL Collm 43.15 309 P P 09 19 50.8 +0.8
CLL pmax pmax
comp=Z,48nm,0.8s
CLL Collm 43.15 309⇓iP P 09 19 51.3 +1.3
comp=Z,55nm,0.7s
CLL epP pP 09 20 29.0 +0.4
CLL ePP PP 09 21 33.0 -0.7
CLL epPP 09 22 04.0
CLL Collm 43.15 309 P P 09 19 50.8 +0.8
CLL Collm 43.15 309 eP P 09 19 50.9 +0.9
comp=Z,55nm,0.7s,baz=85,slow=7.8
MYKA Terra Mystica 43.18 302 eP P 09 19 51.1 +0.7
comp=Z,9.5nm,0.7s,SNR=6.0
TRO Tromso 43.28 336⇑iP P 09 19 51.7 +1.0
FABU Falkenberg 43.30 317 iP P 09 19 51.3 +0.2
BORU Boraas 43.30 318 iP P 09 19 51.6 +0.5
KBA Koelnbreinsper 43.32 303 eP P 09 19 52.1 +0.5
comp=Z,10nm,0.5s,SNR=7.2
BRJN Brijuni 43.36 300 P P 09 19 51.4 -0.3
COP Copenhagen 43.41 315 iP P 09 19 53.1 +1.1
COP IAmb IAmb 09 19 54.0
comp=Z,2μm,0.7s
LLD Lille Linde 43.53 315 iP P 09 19 54.2 +1.3
TANN Tannenbergstha 43.55 308 eP P 09 19 54.6 +1.3
comp=Z,35nm,1.0s,baz=85,slow=7.8
NKC Novy Kostel 43.58 307 eP P 09 19 54.7 +1.2
NKC Novy Kostel 43.58 307 eP P 09 19 54.7 +1.2
WERD Werda 43.65 308 eP P 09 19 55.4 +1.3
comp=Z,42nm,1.1s,baz=85,slow=7.8
PLN Plauen 43.74 308 eP P 09 19 56.1 +1.3
comp=Z,31nm,0.9s,baz=85,slow=7.8
ONAU Onsala 43.75 318 iP P 09 19 54.5 -0.1
FAUS Fauske 43.81 333⇑iP P 09 19 56.1 +1.1
MANZ Manzenberg 43.82 307 eP P 09 19 57.1 +1.7
comp=Z,11nm,1.0s,baz=85,slow=7.8
ABTA Abfaltersbach 43.93 302 eP P 09 19 56.1 -0.3
comp=Z,13nm,0.6s,SNR=5.5
ABTA eS ScP 09 25 12.1 -2.1
comp=Z,9.8nm,1.1s
NEUB Neuenburg 43.93 309 eP P 09 19 57.4 +1.2
comp=Z,103nm,0.8s,baz=85,slow=7.8
TJOU Tjoern 43.94 319 iP P 09 19 55.8 -0.4
STEI Steigen 43.98 333⇑iP P 09 19 57.3 +1.0
INCN Inchon 43.99 71 P P 09 19 57.8 +0.9
INCN pmax pmax
comp=Z,49nm,0.7s
INCN Inchon 43.99 71 P P 09 19 57.8 +0.9
INCN IAmb IAmb 09 19 58.5
comp=Z,49nm,0.7s
INCN Inchon 43.99 71 P P 09 19 58.3 +1.4
YAK Yakutsk 44.06 35 P P 09 19 57.2 +0.1
comp=Z,148nm,0.6s,baz=248,slow=4.1,SNR=72
YAK Yakutsk 44.06 35c iP P 09 19 57.1 +0.1
YAK e*PP pP 09 20 38.6 +2.0
YAK e 09 21 37.9
YAK e 09 21 44.4
YAK eS S 09 26 14.3 -1.5
YAK e*SS sS 09 27 26.3 +1.9
YAK e 09 29 35.0
YAK pmax pmax
comp=Z,272nm,0.9s
YAK pmax pmax
comp=E,60nm,1.2s
YAK pmax pmax
comp=N,16nm,1.1s
YAK pmax pmax
comp=Z,64nm,1.0s
YAK pmax pmax
comp=E,67nm,1.5s
YAK pmax pmax
comp=N,12nm,0.7s
YAK smax smax
comp=N,104nm,1.5s
YAK smax smax
comp=E,190nm,1.5s
YAK Yakutsk 44.06 35 P P 09 19 57.0 -0.1
MOX Moxa 44.07 308 eP P 09 19 58.7 +1.3
comp=E,47nm,0.9s,baz=85,slow=7.8
AQU L'Aquila 44.09 296 P P 09 19 57.8 +0.1
AQU pmax pmax
comp=Z,40nm,0.9s
AQU L'Aquila 44.09 296 P P 09 19 57.8 +0.1
NC405 NORSAR Array S 44.13 323 P P 09 19 58.1 +0.3
NC602 NORSAR Array S 44.18 323⇑iP P 09 19 58.3 +0.2
FLTG Flechtingen 44.19 311 eP P 09 19 59.1 +0.9
comp=Z,273nm,0.7s,baz=85,slow=7.8
STRU Stroemstad 44.22 320 iP P 09 19 57.8 -0.6
MNSI Mandailing Nat 44.33 137 P P 09 20 00.6 +0.8
comp=Z,4μmcomp=Z,340nm,0.6s
NB2 NORSAR Subarra 44.37 323 P P 09 19 59.9 +0.3
comp=Z,340nm,0.7s,baz=94,slow=7.9
NB2 NORSAR Subarra 44.37 323 P P 09 19 59.9 +0.3
baz=94,slow=7.9
NOA NORSAR Array B 44.37 323 P P 09 19 59.6 0.0
comp=Z,307nm,0.7s,baz=96,slow=7.8,SNR=1131
KONS Konsvik 44.41 331⇑iP P 09 20 00.4 +0.6
STOK Stokkvaagen 44.41 331 eP P 09 20 00.7 +0.8
GRA1 Grafenberg Arr 44.42 307 P P 09 20 02.2 +2.0
GRF Grafenberg Arr 44.42 307 P P 09 20 02.2 +2.0
GRF pmax pmax
comp=Z,40nm,0.7s
GRF Grafenberg Arr 44.42 307 eP P 09 20 02.2 +2.0
comp=Z,39nm,0.7s,baz=85,slow=7.8
GRF epP pP 09 20 41.2 +2.2
WTTA Wattenberg 44.45 303 iP P 09 20 00.6 0.0
comp=Z,24nm,0.5s,SNR=10
WATA Walderalm 44.48 303 eP P 09 20 00.4 -0.4
comp=Z,21nm,0.7s,SNR=9.7
WATA eS ScP 09 25 14.0 -2.5
comp=Z,5.4nm,0.7s
NSS Namsos 44.49 328⇑iP P 09 20 00.7 +0.2
MDJ Mudanjiang 44.51 61 P P 09 20 01.6 +0.7
MDJ Mudanjiang 44.51 61 P P 09 20 01.6 +0.7
MDJ pmax pmax
comp=Z,33nm,1.0s
MDJ pmax pmax
comp=Z,160nm,3.6s
MDJ Mudanjiang 44.51 61 P P 09 20 01.6 +0.7
OSL Oslo 44.52 321⇑iP P 09 20 01.2 +0.5
MURB Monte Urbino 44.53 298 P P 09 20 03.2 +2.0
ASSE Asse, Remlinge 44.55 310 eP P 09 20 01.9 +0.8
comp=Z,22nm,0.8s,baz=85,slow=7.8
FUR Furstenfeldbru 44.56 305 eP P 09 20 03.1 +1.8
comp=Z,52nm,1.0s,baz=85,slow=7.8
YHNB Yeheng 44.58 91 P P 09 20 04.1 +2.2
CTI Castel Tesino 44.63 302 P P 09 20 02.3 +0.3
CTI pmax pmax
comp=Z,38nm,0.6s
CTI Castel Tesino 44.63 302 P P 09 20 02.3 +0.3
LOF Lofoten 44.65 333⇑iP P 09 20 01.8 +0.1
SSLB Suanglung 44.66 92 P P 09 20 04.3 +1.9
SSLB IAmb IAmb 09 20 05.6
comp=Z,127nm,0.8s
SSLB Suanglung 44.66 92 P P 09 20 04.8 +2.4
BSEG Bad Segeberg 44.66 313 eP P 09 20 03.6 +1.6
comp=Z,199nm,0.7s,baz=85,slow=7.8
OVD Ostervraa, Den 44.68 318 iP P 09 20 02.6 +0.5
TEOL Teolo 44.73 301 P P 09 20 03.6 +0.9
CLZ Clausthal 44.76 310 eP P 09 20 04.1 +1.2
comp=Z,68nm,0.8s,baz=85,slow=7.8
MOTA Moosalm 44.80 303 eP P 09 20 03.0 -0.4
comp=Z,20nm,0.7s,SNR=12
MOTA eS ScP 09 25 15.5 -2.3
comp=Z,4.5nm,0.7s
NRDL Niedersach Rie 44.87 311 eP P 09 20 05.2 +1.6
comp=Z,88nm,0.8s,baz=85,slow=7.8
TJN Taejon 44.87 72c iP P 09 20 03.5 -0.4
TJN Taejon 44.87 72 P P 09 20 04.2 +0.3
TJN IAmb IAmb 09 20 04.4
comp=Z,196nm,0.7s
TJN Taejon 44.87 72 P P 09 20 04.1 +0.2
KS19 Wonju Array Si 44.92 71 P P 09 20 05.5 +1.1
KS19 IAmb IAmb 09 20 06.2
comp=Z,49nm,0.6s
KSAR Wonju Array Be 44.96 71 P P 09 20 04.9 +0.3
KSAR Wonju Array Be 44.96 71 P P 09 20 04.9 +0.3
KSRS Korea Array 44.98 71 P P 09 20 05.0 +0.3
comp=Z,45nm,0.7s,baz=272,slow=7.1,SNR=185
KSRS PcP PcP 09 21 42.2 -0.5
comp=Z,24nm,0.7s,baz=287,slow=3.3,SNR=12
KSRS ScP ScP 09 25 15.7 -2.9
comp=Z,4.5nm,0.6s,baz=294,slow=3.7,SNR=10
RETA Reutte 45.00 304 iP P 09 20 04.8 -0.1
comp=Z,8.5nm,0.5s
HOPEN Hopen 45.03 346⇑iP P 09 20 06.9 +2.3
GTTG Gottingen 45.03 310 eP P 09 20 06.4 +1.5
comp=Z,122nm,0.8s,baz=85,slow=7.8
TBLU Trondheim 45.05 326⇑iP P 09 20 05.2 +0.3
KONO Kongsberg 45.07 321c iP P 09 20 05.4 +0.3
KONO pmax pmax
comp=Z,384nm,1.3s
KONO Kongsberg 45.07 321 P P 09 20 05.9 +0.8
KONO IAmb IAmb 09 20 06.4
comp=Z,223nm,0.8s
KONO Kongsberg 45.07 321⇑iP P 09 20 05.7 +0.6
UBBA Unterbreizbach 45.08 308 eP P 09 20 06.4 +1.1
comp=Z,36nm,0.6s,baz=85,slow=7.8
FETA Feichten 45.10 303 eP P 09 20 05.5 -0.3
comp=Z,20nm,0.5s,SNR=10
FETA eS ScP 09 25 18.0 -1.1
comp=Z,5.3nm,0.8s
YULB Yu-li 45.12 92 P P 09 20 08.0 +1.9
YULB IAmb IAmb 09 20 09.5
comp=Z,90nm,0.8s
GOET G??ttrup 45.21 317 iP P 09 20 07.2 +1.0
GOET IAmb IAmb 09 20 08.1
comp=Z,255nm,0.8s
TWG Pinlang 45.21 93 P P 09 20 09.6 +2.9
TWG IAmb IAmb 09 20 10.7
comp=Z,181nm,0.6s
MUD Monsted U'grnd 45.24 316 iP P 09 20 07.3 +0.8
KLR Kul'dur 45.25 54 P P 09 20 07.4 +0.7
comp=Z,61nm,0.5s,baz=282,slow=7.5,SNR=386
BJO1 Bjornoya 45.29 343⇑iP P 09 20 07.9 +1.3
UBR Ueberruh 45.41 304 eP P 09 20 08.7 +0.6
comp=Z,42nm,0.6s,baz=85,slow=7.8
SALO Salr 45.48 301 P P 09 20 09.4 +0.8
SALO IAmb IAmb 09 20 10.9
comp=Z,61nm,0.8s
DOMB Dombas 45.48 324⇑iP P 09 20 09.0 +0.6
BKNI Bangkinang 45.53 135 P P 09 20 09.7 +0.4
BKNI Bangkinang 45.53 135 P P 09 20 09.7 +0.4
comp=Z,5μmcomp=Z,516nm,0.8s
BKNI Bangkinang 45.53 135 P P 09 20 10.1 +0.8
HOMB Homborsund 45.60 319 iP P 09 20 09.3 +0.1
HOMB Homborsund 45.60 319 eP P 09 20 09.8 +0.5
DAVA Damuels 45.63 304 iP P 09 20 09.9 0.0
comp=Z,78nm,0.5s,SNR=33
SKAR Skarslia 45.76 322⇑iP P 09 20 11.5 +0.9
PPI Padang Panjang 45.81 137 P P 09 20 11.9 +0.4
comp=Z,2μmcomp=Z,159nm,0.7s
STU Stuttgart 45.85 306 P P 09 20 12.3 +0.9
STU pmax pmax
comp=Z,33nm,0.7s
STU Stuttgart 45.85 306 P P 09 20 12.3 +0.9
STU Stuttgart 45.85 306 eP P 09 20 12.6 +1.1
comp=Z,101nm,0.8s,baz=85,slow=7.8
TIXI Tiksi 45.85 22 P P 09 20 11.6 +0.5
comp=Z,188nm,0.6s,baz=271,slow=23,SNR=737
TIXI pP pP 09 20 52.5 +1.6
comp=Z,14nm,0.4s,baz=276,slow=17,SNR=1.2
TIXI Tiksi 45.85 22c iP P 09 20 11.5 +0.4
TIXI pmax pmax
comp=Z,254nm,0.8s
TIXI Tiksi 45.85 22 P P 09 20 11.8 +0.7
MYKOM Kota Tinggi 46.01 131 P P 09 20 13.8 +0.8
MYKOM IAmb IAmb 09 20 15.2
comp=Z,93nm,0.8s
MSHR Mys Shultsa 46.04 63⇓iP P 09 20 14.1 +1.1
MSHR pmax pmax
comp=Z,33nm,1.0s
TUE Stuetta 46.13 303 P P 09 20 13.9 0.0
TNS Taunus Mts 46.13 308 eP P 09 20 14.8 +1.1
comp=Z,36nm,1.1s,baz=85,slow=7.8
MOL Molde 46.23 325 eP P 09 20 15.0 +0.9
USA0B Ussuriysk Arra 46.27 61⇑iP P 09 20 14.8 0.0
USRK Ussuriysk Ar. 46.27 61 P P 09 20 15.1 +0.3
comp=Z,26nm,0.8s,baz=285,slow=8.7,SNR=23
USRK PcP PcP 09 21 46.6 -0.6
comp=Z,6.9nm,0.5s,baz=307,slow=5.1,SNR=7.0
USRK Ussuriysk Ar. 46.27 61 P P 09 20 15.2 +0.4
USRK Ussuriysk Ar. 46.27 61 P P 09 20 15.2 +0.4
SNART Snartemo 46.28 319 iP P 09 20 15.3 +0.7
SNART Snartemo 46.28 319 eP P 09 20 15.8 +1.2
IBBN Ibbenburen 46.32 311 eP P 09 20 16.3 +1.3
comp=Z,164nm,0.7s,baz=85,slow=7.8
LODK Lodwar 46.36 233 P P 09 20 16.6 +0.7
LODK Lodwar 46.36 233 P P 09 20 16.2 +0.3
SNR=7.2
VLA Vladivostok 46.44 62c iP P 09 20 16.3 +0.2
VLA pmax pmax
comp=Z,189nm,0.9s
AKN Aaknes 46.46 324 eP P 09 20 16.8 +0.8
BFO Black Forest 46.49 305 P P 09 20 16.9 +0.5
BFO pmax pmax
comp=Z,28nm,1.1s
BFO Black Forest 46.49 305 P P 09 20 16.9 +0.5
BFO Black Forest 46.49 305 eP P 09 20 16.9 +0.5
baz=85,slow=7.8
ODD1 Odda 46.58 321 eP P 09 20 18.3 +1.3
BLS5 Blasjo 46.66 321⇑iP P 09 20 18.9 +1.3
BUG Bochum--Univer 46.72 310 eP P 09 20 19.4 +1.2
comp=Z,74nm,1.0s,baz=85,slow=7.8
HYA Hoyanger 46.81 323⇑iP P 09 20 19.7 +1.0
AHRW Bad Neuenahr-A 46.96 308 eP P 09 20 21.4 +1.4
comp=Z,51nm,0.7s,baz=85,slow=7.8
HSPB Hornsund (broa 47.16 345 eP P 09 20 23.1 +1.9
HSPB Hornsund (broa 47.16 345⇑iP P 09 20 23.1 +1.9
BER Bergen 47.22 322 eP P 09 20 23.1 +1.2
ECH Echery 47.28 305 P P 09 20 22.7 +0.1
ECH pmax pmax
comp=Z,16nm,1.0s
ECH Echery 47.28 305 P P 09 20 22.7 +0.1
KMY Karmoy 47.29 320 eP P 09 20 23.8 +1.4
ASK Askoy 47.29 322 eP P 09 20 23.4 +1.0
SUE Sulen 47.50 323 eP P 09 20 24.8 +0.8
SPB2 Spitsbergen Ar 47.52 347 P P 09 20 25.8 +1.9
SPA0 Spitsbergen Ar 47.52 347⇑iP P 09 20 25.9 +1.8
SPITS Spitsbergen Ar 47.52 347 P P 09 20 25.6 +1.6
comp=Z,241nm,0.6s,baz=128,slow=11,SNR=769
SENIN Lac Senin/Sane 47.54 303 P P 09 20 25.1 +0.2
SENIN IAmb IAmb 09 20 26.2
comp=Z,56nm,0.7s
BTNL Ternell 47.55 309 dP P 09 20 25.7 +1.0
comp=Z,35nm,0.8s
MEM Membach 47.62 309 dP P 09 20 25.8 +0.7
comp=Z,32nm,0.8s
BHOU Houvegnez 47.66 308 dP P 09 20 26.6 +1.1
WLF Walferdange 47.68 307 P P 09 20 27.1 +1.5
WLF pmax pmax
comp=Z,89nm,1.0s
WLF Walferdange 47.68 307 P P 09 20 27.1 +1.5
WLF IAmb IAmb 09 20 28.8
comp=Z,89nm,1.0s
WLF Walferdange 47.68 307 eP P 09 20 27.2 +1.6
comp=Z,83nm,0.8s,baz=85,slow=7.8
WLF Walferdange 47.68 307 dP P 09 20 26.9 +1.3
comp=Z,54nm,0.9s
KRJI Kerinci 47.76 137 P P 09 20 26.4 -0.3
comp=Z,7μmcomp=Z,585nm,0.8s
BSTI Sart Tilman 47.91 309 dP P 09 20 28.6 +1.3
comp=Z,5.4nm,0.6s
GRNR Gornyy 48.01 51⇑iP P 09 20 29.3 +1.2
GRNR eS S 09 27 16.4 +3.9
GRNR pmax pmax
comp=E,40nm,0.7s
GRNR pmax pmax
comp=Z,90nm,0.8s
GRNR smax smax
comp=E,6.0nm,0.8s
GRNR MLR MLR
comp=E,270nm,15.0s
GRNR MLR MLR
comp=N,130nm,19.0s
GRNR MLR MLR
comp=Z,190nm,14.0s
BCLA Clavier 48.10 308 dP P 09 20 29.3 +0.5
BCLA dPcP PcP 09 21 53.1 -0.4
RCHB Rochefort 48.19 308 dP P 09 20 30.4 +0.9
comp=Z,27nm,0.7s
BGES Gesves 48.24 308 dP P 09 20 30.7 +0.8
DSRI Dabo 48.25 132 P P 09 20 31.5 +1.2
comp=Z,1μmcomp=Z,106nm,0.8s
BMRD Maredsous 48.46 308 dP P 09 20 33.2 +1.7
comp=Z,36nm,0.7s
DOU Dourbes 48.60 308 dP P 09 20 32.8 +0.2
JMBI JAMBI 48.62 134 P P 09 20 33.6 +0.4
comp=Z,79nm,0.4s
KBS Kingsbay 48.64 347c iP P 09 20 34.1 +1.6
KBS pmax pmax
comp=Z,854nm,1.3s
KBS Kingsbay 48.64 347 P P 09 20 34.2 +1.6
KBS Kingsbay 48.64 347⇑iP P 09 20 34.3 +1.8
JNU Nakatsue 48.69 75 P P 09 20 35.0 +1.3

JNU IAmb IAmb 09 20 35.7
comp=Z,102nm,0.9s
**JNU Nakatsue 48.69 75** P **P** **09 20 35.2 +1.5**
**SNF Seneffe 48.73 309** *d*P **P** **09 20 35.3 +1.8**
comp=Z,40nm,0.9s
**KMBO Kilima Mbogo 48.73 227** P **P** **09 20 35.5 +1.3**
comp=Z,9.5nm,0.6s,baz=36,slow=12,SNR=27
KMBO pP **pP** **09 21 16.1 +1.6**
comp=Z,9.4nm,0.8s,baz=44,slow=11,SNR=3.0
**KMBO Kilima Mbogo 48.73 227** P **P** **09 20 35.6 +1.3**
**KMBO Kilima Mbogo 48.73 227** P **P** **09 20 35.6 +1.3**
**KMBO Kilima Mbogo 48.73 227** *i* P **P** **09 20 35.7 +1.4**
SNR=13
**KEST Kesra 48.97 289** P **P** **09 20 36.5 +0.8**
comp=Z,17nm,0.7s,baz=36,slow=5.4,SNR=28
KEST pP **pP** **09 21 16.8 +1.6**
comp=Z,16nm,0.7s,baz=14,slow=4.5,SNR=3.9
**KEST Kesra 48.97 289** P **P** **09 20 36.6 +0.9**
KEST IAmb IAmb 09 21 39.2
comp=Z,104nm,1.2s
**JSU Suzuyama 48.97 77** P **P** **09 20 36.6 +0.8**
**MASI Maura Aman, Be 49.05 137** P **P** **09 20 36.0 -0.5**
comp=Z,5µmcomp=Z,524nm,0.8s
**KIBK Kibwezi 49.24 226** P **P** **09 20 39.4 +1.4**
**CMAH Djebel Manchou 50.13 290** P P 09 20 37.3 -7.2
**ABSA Djebel Ababsia 50.20 290** P **P** **09 20 45.7 +0.6**
**PPBI Pangkal Pinang 50.52 132** P **P** **09 20 48.1 +0.6**
comp=Z,16µmcomp=Z,86nm,1.1s
**CLF Chambon-Foret 50.53 306** P **P** **09 20 47.5 +0.3**
CLF IAmb IAmb 09 21 52.3
comp=Z,73nm,1.1s
**WACR West Acre 50.57 312** *e*P **P** **09 20 48.1 +0.6**
WACR IAmb IAmb 09 20 49.2
comp=Z,372nm,0.8s
**LMK Market Rasen 51.00 313** *e*P **P** **09 20 51.4 +0.7**
LMK IAmb IAmb 09 20 52.3
comp=Z,158nm,0.7s
**GDLE Glaisdale, N Y 51.10 315** *e*P **P** **09 20 52.0 +0.6**
GDLE IAmb IAmb 09 20 52.6
comp=Z,100nm,0.9s
**MDSI Maura Dua 51.25 135** P **P** **09 20 50.1 -2.8**
comp=Z,19nm,0.9s
**DFRA Djebel Bou Aff 51.32 291** P **P** **09 20 52.5 -1.0**
**DRUM Mains of Drumt 51.60 318** *e*P **P** **09 20 55.2 +0.2**
DRUM IAmb IAmb 09 20 56.6
comp=Z,94nm,0.7s
**LWLI Liwa 51.61 136** P **P** **09 20 54.4 -1.4**
comp=Z,159nm,0.9s
**EDMD Edmundbyers 51.68 315** *e*P **P** **09 20 55.5 -0.2**
EDMD IAmb IAmb 09 20 56.9
comp=Z,182nm,0.6s
**CWF Charnwood Fore 51.72 312** *e*P **P** **09 20 55.4 -0.6**
**KLSI 51.73 135** P **P** **09 20 53.9 -2.6**
comp=Z,34nm,0.8s
**CKHR Kef el Ahmar 51.78 290** P **P** **09 20 56.9 0.0**
**TYV Tymovskoe 51.87 50** *e*P **P** **09 20 58.5 +1.3**
TYV *e*S **S** **09 28 10.3 +4.4**
TYV pmax pmax
comp=Z,56nm,0.7s
TYV pmax pmax
comp=Z,200nm,3.5s
TYV smax smax
comp=N,500nm,8.0s
TYV smax smax
comp=E,600nm,8.0s
**UGL Uglegorsk 51.92 52** *e*P **P** **09 20 58.4 +0.8**
UGL *e* 09 22 08.8
UGL pmax pmax
comp=E,240nm,0.5s
UGL pmax pmax
comp=Z,190nm,0.7s
**STKI Sintang 52.20 125** P **P** **09 21 01.2 +1.2**
**KASI Kota Agung 52.27 136** P **P** **09 20 58.0 -2.6**
comp=Z,1µmcomp=Z,117nm,0.6s
**ESK Eskdalemuir 52.29 316** *e*P **P** **09 21 00.1 -0.1**
ESK IAmb IAmb 09 21 01.6
comp=Z,72nm,0.9s
**ESK Eskdalemuir 52.29 316** P **P** **09 21 00.5 +0.3**
ESK pmax pmax
comp=Z,68nm,0.9s
**ESK Eskdalemuir 52.29 316** P **P** **09 21 00.5 +0.3**
ESK IAmb IAmb 09 21 01.4
comp=Z,68nm,0.8s
**MBAR Mbarara 52.40 234** LR LR 09 45 03.7
comp=Z,107nm,18.1s,baz=108,slow=38
**MBAR Mbarara 52.40 234** *d* P **P** **09 21 02.7 +0.9**
**MBAR Mbarara 52.40 234** P **P** **09 21 01.9 +0.2**
**INU Inuyama 52.60 70** P **P** **09 21 03.2 +0.4**
INU IAmb IAmb 09 22 05.7
comp=Z,193nm,2.0s
**INU Inuyama 52.60 70** P **P** **09 21 04.3 +1.5**
**NEWG New Galloway 52.91 316** *e*P **P** **09 21 05.1 +0.4**
NEWG IAmb IAmb 09 21 06.1
comp=Z,148nm,0.7s
**YSS Yuzh-Sakhalins 52.93 55** *e*P **P** **09 21 05.3 +0.3**
YSS *e* 09 22 03.6
YSS *e*S **S** **09 28 15.0 -5.4**
YSS *e* 09 30 27.0
YSS pmax pmax
comp=Z,150nm,0.7s
YSS pmax pmax
comp=Z,300nm,3.1s
YSS MLR MLR
comp=Z,300nm,16.0s
**YSS Yuzh-Sakhalins 52.93 55** P **P** **09 21 06.0 +1.1**
YSS IAmb IAmb 09 21 07.0
comp=Z,136nm,0.9s
**YSS Yuzh-Sakhalins 52.93 55** P **P** **09 21 06.1 +1.1**
**MAJO Matsushiro 53.05 68** *d* P **P** **09 21 06.2 +0.1**
MAJO pmax pmax
comp=Z,40nm,0.9s
**MAJO Matsushiro 53.05 68** P **P** **09 21 07.1 +1.0**
**MAT Matsushiro 53.05 68** P **P** **09 21 05.6 -0.5**
**MJAR Matsushiro Arr 53.06 68** P **P** **09 21 06.3 +0.2**
comp=Z,28nm,0.9s,baz=292,slow=9.8,SNR=34
MJAR pP **pP** **09 21 48.4 +1.3**
comp=Z,15nm,1.1s,baz=281,slow=9.4,SNR=1.9
MJAR PcP **PcP** **09 22 11.2 -1.1**
comp=Z,16nm,0.8s,baz=279,slow=3.9,SNR=7.4
MJAR ScP **ScP** **09 25 51.1 -1.9**
comp=Z,3.5nm,0.8s,baz=277,slow=5.7,SNR=5.0
**MJAR Matsushiro Arr 53.06 68** P **P** **09 21 07.0 +0.9**
**JSA Saint Aubin 53.09 308** *e*P **P** **09 21 06.2 +0.1**
**ASAJ Asahikawa 53.66 58** P **P** **09 21 10.1 -0.3**
comp=Z,14nm,0.8s,baz=286,slow=5.1,SNR=12
ASAJ PcP **PcP** **09 22 13.7 -0.7**
comp=Z,18nm,0.5s,baz=259,slow=4.0,SNR=8.4
**JKA Kamikawa-asahi 53.66 58** P **P** **09 21 10.7 +0.3**
**NOR Nord 53.84 350** *i* P **P** **09 21 10.9 -0.2**
NOR IAmb IAmb 09 21 12.5
comp=Z,42nm,0.6s
**CGJI Cibinong 53.84 135** P **P** **09 21 08.8 -3.2**
comp=Z,1µmcomp=Z,85nm,0.5s
**CLGH Cloghs, Cushen 53.97 316** *e*P **P** **09 21 12.7 +0.3**
CLGH IAmb IAmb 09 21 13.5
comp=Z,113nm,1.3s
**ILTH Belurgan, Co L 54.35 315** *e*P **P** **09 21 15.1 -0.1**
**MA2 Magadan 54.46 38** P **P** **09 21 16.3 +0.3**
comp=Z,29nm,0.7s,baz=294,slow=8.2,SNR=81
MA2 LR LR 09 45 12.7
comp=Z,80nm,20.2s,baz=283,slow=36
**MA2 Magadan 54.46 38** *c* *i* P **P** **09 21 16.1 +0.2**
MA2 pmax pmax
comp=Z,84nm,1.3s
**MA2 Magadan 54.46 38** P **P** **09 21 15.9 0.0**
MA2 IAmb IAmb 09 21 17.6
comp=Z,85nm,1.2s
**MA2 Magadan 54.46 38** P **P** **09 21 16.7 +0.8**
**SEY Seymchan 54.51 34** P **P** **09 21 17.1 +0.8**
comp=Z,56nm,0.9s,baz=276,slow=8.2,SNR=209
**SEY Seymchan 54.51 34** *c* *i* P **P** **09 21 17.2 +1.0**
**CCA1 Carmenellis 54.73 310** *e*P **P** **09 21 18.2 +0.2**
CCA1 IAmb IAmb 09 21 19.6
comp=Z,105nm,0.9s
**IWEX Carrickbyrne, 55.04 313** *e*P **P** **09 21 20.8 +0.6**
IWEX IAmb IAmb 09 21 21.8
comp=Z,44nm,0.6s
**DBG Daneborg 55.60 341** *i* P **P** **09 21 24.5 +0.6**
DBG IAmb IAmb 09 21 25.7
comp=Z,56nm,0.6s
**KPJI Karang Pucung 56.30 133** P **P** **09 21 30.8 +1.2**
comp=Z,26nm,0.6s
**SCO Scoresbysund 57.06 336** *i* P **P** **09 21 35.0 +0.8**
SCO IAmb IAmb 09 21 36.8
comp=Z,31nm,0.6s

**ESBB Sonseca Array 57.40 298** P **P** **09 21 37.5 +0.2**
**ESDC Sonseca Array 57.40 298** P **P** **09 21 36.9 -0.3**
comp=Z,7.3nm,0.7s,baz=61,slow=7.7,SNR=49
ESDC pP **pP** **09 22 17.4 -0.5**
comp=Z,7.7nm,0.8s,baz=56,slow=6.5,SNR=3.6
ESDC sP **sP** **09 22 37.4 +0.1**
comp=Z,16nm,0.9s,baz=60,slow=6.8,SNR=4.7
**ESDC Sonseca Array 57.40 298** P **P** **09 21 36.8 -0.3**
**PAB San Pablo 57.73 298** P **P** **09 21 40.0 +0.5**
PAB pmax pmax
comp=Z,27nm,1.1s
**PAB San Pablo 57.73 298** P **P** **09 21 40.0 +0.5**
**KBKI Kotabaru 57.82 123** P **P** **09 21 42.1 +1.8**
comp=Z,1µmcomp=Z,66nm,0.8s
**MPSI Mapaga 57.84 117** P **P** **09 21 42.4 +1.9**
comp=Z,43nm,1.3s
**PBRG Braganca 58.53 301** *e*P **P** **09 21 46.1 +1.0**
comp=Z,31nm,1.6s
**BILL Bilibino 58.69 26** *d* *i* P **P** **09 21 46.7 +1.0**
BILL *i* 09 23 57.1
BILL *e*S **S** **09 29 40.0 +4.0**
BILL pmax pmax
comp=Z,142nm,1.0s
**BILL Bilibino 58.69 26** P **P** **09 21 46.9 +1.3**
**MVO Moncorvo 58.98 301** *e*P **P** **09 21 48.9 +0.7**
comp=Z,49nm,1.1s
MVO *e*pP **pP** **09 22 30.0 +1.0**
**MRSI Marisa 59.22 115** P **P** **09 21 51.8 +1.8**
comp=Z,2µmcomp=Z,87nm,0.8s
**POLO Lamas de Olo 59.43 301** *e*P **P** **09 21 52.2 +0.9**
comp=Z,22nm,1.7s
POLO *e*pP **pP** **09 22 33.1 +0.9**
**PCAB Cabril 59.46 301** *e*P **P** **09 21 52.1 +0.7**
comp=Z,76nm,1.3s
PCAB *e*pP **pP** **09 22 31.0 -1.4**
**PGAV Gavieira, Arco 59.52 302** *e*P **P** **09 21 52.4 +0.5**
comp=Z,74nm,1.6s
**MTE Manteigas 59.65 300** *e*P **P** **09 21 53.4 +0.7**
comp=Z,61nm,1.6s
MTE *e*pP **pP** **09 22 33.8 +0.1**
**PVIS Viseu 59.76 300** *e*P **P** **09 21 54.1 +0.6**
comp=Z,59nm,1.3s
PVIS *e*pP **pP** **09 22 35.7 +1.2**
**PCBR Castelo Branco 59.82 299** *e*P **P** **09 21 54.8 +0.9**
comp=Z,41nm,1.6s
PCBR *e*pP **pP** **09 22 35.6 +0.8**
**ABJI Asem Bagus 59.91 128** P **P** **09 21 55.3 +0.6**
comp=Z,74nm,0.8s
**PMRV Marv??o 59.93 299** *e*P **P** **09 21 55.5 +0.8**
comp=Z,46nm,1.9s
PMRV *e*pP **pP** **09 22 37.1 +1.5**
**APSI Ampana 59.96 117** P **P** **09 21 56.2 +1.1**
comp=Z,73nm,1.5s
**PEA0B Petropavlovsk- 60.07 44** P **P** **09 21 56.0 +0.7**
PEA0B pmax pmax
comp=Z,21nm,0.9s
**PEA0B Petropavlovsk- 60.07 44** P **P** **09 21 56.0 +0.7**
**PETK Petropavlovsk- 60.07 44** P **P** **09 21 54.3 -1.0**
comp=Z,8.6nm,0.6s,baz=326,slow=4.4,SNR=27
**PETK Petropavlovsk- 60.07 44** P **P** **09 21 54.6 -0.7**
**PETK Petropavlovsk- 60.07 44** P **P** **09 21 54.6 -0.7**
**TTSI Tana Toraja 60.15 120** P **P** **09 21 57.3 +0.9**
comp=Z,2µmcomp=Z,28nm,0.8s
**PESTR Estremoz 60.30 298** *e*P **P** **09 21 57.3 +0.1**
comp=Z,43nm,1.5s
PESTR *e*pP **pP** **09 22 39.0 +0.8**
**COI Coimbra 60.33 300** *e*P **P** **09 21 58.4 +1.1**
comp=Z,117nm,1.1s
COI *e*pP **pP** **09 22 38.5 +0.2**
**COI Coimbra 60.33 300** P **P** **09 21 58.6 +1.3**
COI pmax pmax
comp=Z,76nm,1.0s
**COI Coimbra 60.33 300** P **P** **09 21 58.6 +1.3**
COI IAmb IAmb 09 23 04.2
comp=Z,76nm,0.9s
**PET Petropavlovsk 60.63 44** *i* P **P** **09 21 57.5 -1.6**
PET *e**PP **pP** **09 22 39.7 -1.3**
PET *e**SP **sP** **09 22 57.9 -2.7**
PET *e*S **S** **09 29 56.3 -4.9**
PET pmax pmax
comp=Z,48nm,1.1s
**PET Petropavlovsk 60.63 44** P **P** **09 21 58.1 -1.0**
**EVO Evora 60.74 298** *e*P **P** **09 22 00.2 +0.1**
comp=Z,50nm,1.1s
EVO *e*pP **PcP** **09 22 42.1 -0.2**
**PBEJ Beja 60.85 298** *e*P **P** **09 22 01.4 +0.5**
comp=Z,39nm,2.0s
PBEJ *e*pP **PcP** **09 22 43.8 +1.0**
**SOEG Soedalen 61.00 335** *i* P **P** **09 22 01.8 +0.5**
SOEG IAmb IAmb 09 22 03.4
comp=Z,46nm,0.7s
**PVAQ Vaqueiros 61.01 297** *e*P **P** **09 22 00.6 -1.4**
comp=Z,88nm,1.8s
PVAQ *e*pP **PcP** **09 22 44.5 +1.1**
**NEEM North Greenlan 61.06 348** *i* P **P** **09 22 01.9 -0.1**
NEEM IAmb IAmb 09 22 04.1
comp=Z,161nm,0.7s
**SUMG Summit 61.08 341** P **P** **09 22 03.8 +1.5**
SUMG pmax pmax
comp=Z,252nm,0.8s
**SUMG Summit 61.08 341** *i* P **P** **09 22 02.7 +0.4**
SUMG IAmb IAmb 09 22 04.6
comp=Z,175nm,0.6s
**SUMG Summit 61.08 341** P **P** **09 22 03.8 +1.5**
**PCVE Castro Verde 61.14 297** *e*P **P** **09 22 03.2 +0.3**
**MESJ Messejana 61.19 297** *e*P **P** **09 22 03.4 +0.3**
MESJ IAmb IAmb 09 22 04.6
comp=Z,21nm,0.9s
**MESJ Messejana 61.19 297** *e*P **P** **09 22 03.5 +0.3**
comp=Z,70nm,1.6s
**MESJ Messejana 61.19 297** *e*P **P** **09 22 03.4 +0.3**
MESJ pmax pmax
comp=Z,21nm,0.9s
**PBDV Barranco-do-Ve 61.23 297** *e*P **P** **09 22 04.3 +0.8**
comp=Z,143nm,1.9s
**PNCL Nicolau / Gran 61.29 298** *e*P **P** **09 22 04.8 +1.0**
comp=Z,90nm,2.1s
PNCL *e*pP **pP** **09 22 46.9 +2.0**
**PMAFR Mafra 61.46 299** *e*P **P** **09 22 06.0 +1.0**
comp=Z,189nm,2.1s
**BKSI Bulukumba 61.98 121** P **P** **09 22 09.3 +0.6**
comp=Z,419nmcomp=Z,15nm,0.8s
**VOI Vohitsoka 62.35 205** P **P** **09 22 14.4 +3.4**
SNR=8.5
**VOI Vohitsoka 62.35 205** P **P** **09 22 12.9 +1.8**
**BSSI Bau Bau, Buton 62.83 122** P **P** **09 22 14.1 -0.2**
comp=Z,672nmcomp=Z,16nm,0.6s
**EUNU Eureka 63.05 356** P **P** **09 22 16.4 +1.4**
EUNU IAmb IAmb 09 22 17.6
comp=Z,56nm,0.8s
**ICESG Greenland Ices 63.22 338** *i* P **P** **09 22 17.1 +0.5**
ICESG IAmb IAmb 09 22 18.5
comp=Z,113nm,0.8s
**SANI Sanana 63.90 114** P **P** **09 22 21.2 -0.1**
comp=Z,1µmcomp=Z,58nm,0.7s
**SANI Sanana 63.90 114** P **P** **09 22 21.8 +0.5**
comp=Z,58nm,0.7s
**ANGG Ammassalik, Gr 64.42 334** *i* P **P** **09 22 24.1 +0.2**
ANGG IAmb IAmb 09 22 25.6
comp=Z,104nm,0.7s
**ANGG Ammassalik, Gr 64.42 334** P **P** **09 22 25.4 +1.5**
**TULEG Thule 64.47 350** *i* P **P** **09 22 23.2 -1.0**
TULEG IAmb IAmb 09 22 24.9
comp=Z,40nm,1.0s
**TULEG Thule 64.47 350** P **P** **09 22 24.9 +0.8**
**WBSI Waikabubak, Su 64.64 125** P **P** **09 22 24.4 -1.8**
comp=Z,938nmcomp=Z,112nm,1.0s
**ISOG Isortoq, Green 64.92 334** *i* P **P** **09 22 26.6 -0.6**
ISOG IAmb IAmb 09 22 28.1
comp=Z,46nm,0.6s
**UPNV Upernavik 65.16 345** *i* P **P** **09 22 28.4 -0.3**
UPNV IAmb IAmb 09 22 30.2
comp=Z,71nm,0.7s
**LSZ Lusaka 65.35 226** P **P** **09 22 31.1 +0.3**
LSZ pmax pmax
comp=Z,28nm,0.9s
**LSZ Lusaka 65.35 226** P **P** **09 22 31.1 +0.3**
**TORD Torodi Ar. Bea 65.63 269** P **P** **09 22 30.9 -1.6**
comp=Z,62nm,0.6s,baz=48,slow=5.8,SNR=300
TORD pP **pP** **09 23 15.6 +1.0**
comp=Z,21nm,0.6s,baz=43,slow=6.1,SNR=3.7
TORD PKP2bc 09 51 11.2
comp=Z,1.3nm,1.0s,baz=279,slow=3.7,SNR=4.5
**TORD Torodi Ar. Bea 65.63 269** P **P** **09 22 31.7 -0.9**
TORD IAmb IAmb 09 22 32.6
comp=Z,61nm,0.6s
**BASI Baing, Sumba 65.85 125** P **P** **09 22 33.0 -0.9**
comp=Z,1µmcomp=Z,152nm,0.8s
**ILULI Ilulissat 66.42 341** P **P** **09 22 37.6 +0.9**
ILULI pmax pmax
comp=Z,210nm,0.7s
**ILULI Ilulissat 66.42 341** *i* P **P** **09 22 37.3 +0.5**
ILULI IAmb IAmb 09 22 38.4
comp=Z,174nm,0.5s
**ILULI Ilulissat 66.42 341** P **P** **09 22 37.6 +0.9**
**DY2G Dye2 66.79 337** *i* P **P** **09 22 40.0 +0.5**
DY2G IAmb IAmb 09 22 41.4
comp=Z,166nm,0.4s
**A21K Barrow 67.39 15** P **P** **09 22 43.7 +0.9**
**A21K Barrow 67.39 15** P **P** **09 22 43.8 +1.0**
baz=320
**SFJD Kangerlussuaq 67.77 339** P **P** **09 22 46.1 +0.8**
comp=Z,36nm,0.3s,baz=86,slow=6.7,SNR=68
SFJD PP **PP** **09 25 17.8 +1.4**
comp=Z,7.1nm,0.6s,baz=49,slow=9.8,SNR=4.6
SFJD LR LR 09 53 29.9
comp=Z,180nm,18.9s,baz=56,slow=37
**SFJD Kangerlussuaq 67.77 339** P **P** **09 22 46.4 +1.1**
SFJD pmax pmax
comp=Z,123nm,1.1s
**SFJD Kangerlussuaq 67.77 339** *i* P **P** **09 22 44.8 -0.5**
SFJD IAmb IAmb 09 22 46.4
comp=Z,36nm,1.0s
**SFJD Kangerlussuaq 67.77 339** P **P** **09 22 46.4 +1.1**
SFJD IAmb IAmb 09 22 46.8
comp=Z,123nm,1.1s
**BATI Baumata 67.91 122** P **P** **09 22 47.3 +0.3**
comp=Z,62nm,0.7s
**RDOG Red Dog Mine 68.34 19** P **P** **09 22 49.4 +0.5**
RDOG IAmb IAmb 09 22 50.5
comp=Z,65nm,1.0s
**RDOG Red Dog Mine 68.34 19** P **P** **09 22 49.1 +0.3**
baz=316
**GAMB Gambell 68.59 25** P **P** **09 22 51.2 +0.8**
GAMB IAmb IAmb 09 22 52.3
comp=Z,61nm,1.2s
**GAMB Gambell 68.59 25** P **P** **09 22 51.2 +0.8**
baz=310,SNR=14
**TNA Tin City 68.64 22** P **P** **09 22 51.8 +1.1**
TNA IAmb IAmb 09 22 52.3
comp=Z,48nm,0.7s
**TNA Tin City 68.64 22** P **P** **09 22 51.7 +1.0**
baz=312,SNR=42
**RES Resolute Bay 68.74 356** P **P** **09 22 51.8 +0.6**
comp=Z,14nm,0.8s,baz=32,slow=5.8
RES LR LR 09 56 50.1
comp=Z,85nm,18.3s,baz=23,slow=39
**FAKI Fak Fak 69.14 110** P **P** **09 22 54.7 0.0**
FAKI IAmb IAmb 09 22 55.7
comp=Z,46nm,0.8s
**FAKI Fak Fak 69.14 110** P **P** **09 22 54.4 -0.2**
comp=Z,62nm,0.8s
**FAKI Fak Fak 69.14 110** P **P** **09 22 55.2 +0.6**
**MATP Matopo 69.31 223** *i* P **P** **09 22 56.6 +1.0**
**MATP Matopo 69.31 223** *i* P **P** **09 22 56.6 +1.0**
**KOWA Kowa 69.48 273** P **P** **09 22 55.6 -1.1**
KOWA IAmb IAmb 09 22 57.2
comp=Z,46nm,0.6s
**NRS Narsarsuaq 69.87 332** P **P** **09 22 59.5 +1.1**
NRS pmax pmax
comp=Z,117nm,1.1s
**NRS Narsarsuaq 69.87 332** *i* P **P** **09 22 58.6 +0.2**
NRS IAmb IAmb 09 23 00.1
comp=Z,54nm,0.6s
**NRS Narsarsuaq 69.87 332** P **P** **09 22 59.5 +1.1**
NRS IAmb IAmb 09 23 00.2
comp=Z,117nm,1.1s
**NUUK Nuuk 70.03 337** *i* P **P** **09 22 59.3 0.0**
NUUK IAmb IAmb 09 23 00.9
comp=Z,31nm,0.6s
**MSNA Messina 70.07 220** *i* P **P** **09 23 00.8 +0.7**
**MSNA Messina 70.07 220** *i* P **P** **09 23 00.8 +0.7**
**ANM Nome 70.11 22** P **P** **09 23 01.2 +1.4**
ANM pmax pmax
comp=Z,74nm,0.8s
**ANM Nome 70.11 22** P **P** **09 23 01.2 +1.4**
ANM IAmb IAmb 09 23 02.3
comp=Z,74nm,0.8s
**ANM Nome 70.11 22** P **P** **09 23 01.2 +1.4**
baz=315,SNR=70
**MOPA Mopani 70.34 218** *i* P **P** **09 23 02.5 +0.8**
**MOPA Mopani 70.34 218** *i* P **P** **09 23 02.5 +0.8**
**IVI Ivigtut 70.85 333** *i* P **P** **09 23 05.6 +1.3**
IVI IAmb IAmb 09 23 10.1
comp=N,17nm,0.5s
**IVI Ivigtut 70.85 333** P **P** **09 23 05.3 +1.0**
IVI IAmb IAmb 09 23 05.7
comp=Z,119nm,1.5s
**TOLK Toolik Lake Re 70.99 15** P **P** **09 23 06.2 +1.0**
**TOLK Toolik Lake Re 70.99 15** P **P** **09 23 06.1 +1.0**
baz=326
**A36M Sachs Harbour 71.27 5** P **P** **09 23 07.5 +0.9**
**A36M Sachs Harbour 71.27 5** P **P** **09 23 07.7 +1.0**
baz=346,SNR=195
**SAUI Saumlaki 71.78 115** P **P** **09 23 11.6 +1.0**
**SAUI Saumlaki 71.78 115** P **P** **09 23 11.7 +1.1**
comp=Z,262nm,0.9s
**SAUI Saumlaki 71.78 115** P **P** **09 23 12.2 +1.6**
comp=Z,264nm,0.9s
**COLD Coldfoot 72.04 16** P **P** **09 23 12.3 +0.9**
COLD IAmb IAmb 09 23 13.4
comp=Z,165nm,1.1s
**COLD Coldfoot 72.04 16** P **P** **09 23 12.3 +0.9**
baz=326
**IMAR Indian Mountai 72.25 18** P **P** **09 23 12.7 +0.1**
**CNG Changalane 72.28 216** *i* P **P** **09 23 13.6 +0.3**
**CNG Changalane 72.28 216** *i* P **P** **09 23 13.6 +0.3**
**GCSA Galena City Sc 72.43 19** P **P** **09 23 14.6 +0.9**
baz=321,SNR=13
**H21K Melozitna Rive 72.74 17** P **P** **09 23 16.2 +0.6**
H21K IAmb IAmb 09 23 17.4
comp=Z,142nm,1.2s
**H21K Melozitna Rive 72.74 17** P **P** **09 23 16.2 +0.6**
baz=324
**BMAR Burnt Mountain 73.01 14** P **P** **09 23 18.5 +1.3**
**I21K Tanana 73.33 17** P **P** **09 23 19.8 +0.8**
baz=325
**H23K Yukon River 73.36 16** P **P** **09 23 20.6 +1.3**
baz=327
**J20K Nowinta River 73.61 19** P **P** **09 23 21.6 +1.0**
baz=324
**FYU Fort Yukon 73.64 14** P **P** **09 23 21.8 +1.0**
**H24K Noodor Dome 73.72 16** P **P** **09 23 22.4 +1.1**
baz=328
**MLY Manley 73.75 17** P **P** **09 23 22.3 +0.8**
MLY IAmb IAmb 09 23 22.8
comp=Z,48nm,0.7s
**MLY Manley 73.75 17** P **P** **09 23 22.2 +0.7**
baz=326
**C36M Paulatuk 73.94 5** P **P** **09 23 22.7 +0.3**
baz=348,SNR=247
**PSA00 Pilbara Seismi 73.95 133** P **P** **09 23 23.6 +0.5**
**INK Inuvik 73.97 9** S **S** **09 32 40.5 +0.6**
comp=Z,3.0nm,0.9s,baz=177,slow=18,SNR=7.7
INK LR LR 09 58 50.6
comp=Z,34nm,21.1s,baz=356,slow=38
**INK Inuvik 73.97 9** P **P** **09 23 23.7 +1.1**
INK pmax pmax
comp=Z,360nm,1.5s
**INK Inuvik 73.97 9** P **P** **09 23 23.7 +1.1**
**INK Inuvik 73.97 9** P **P** **09 23 23.6 +1.1**
baz=340,SNR=138
**I23K Minto, Yukon-K 73.98 17** P **P** **09 23 23.7 +1.0**
baz=327,SNR=47
**TTA Tatalina 74.10 20** P **P** **09 23 24.6 +1.0**
TTA pmax pmax
comp=Z,41nm,0.7s
**TTA Tatalina 74.10 20** P **P** **09 23 24.6 +1.0**
TTA IAmb IAmb 09 23 25.0
comp=Z,41nm,0.7s
**TTA Tatalina 74.10 20** P **P** **09 23 24.4 +0.8**
baz=322,SNR=23
**K20K Telida 74.29 19** P **P** **09 23 25.5 +0.9**
K20K IAmb IAmb 09 23 26.7
comp=Z,245nm,1.2s
**K20K Telida 74.29 19** P **P** **09 23 25.7 +1.0**
baz=324
**CHUM Lake Minchumin 74.32 18** P **P** **09 23 25.6 +0.9**
baz=325,SNR=49
**POKR Poker Plat Res 74.44 16** P **P** **09 23 26.5 +1.1**
baz=329,SNR=49

**BPAW Bear Paw Mtn. 74.47 18** P **P** **09 23 26.0 +0.3**
baz=326,SNR=11
**PRP Porcupine Dome 74.50 15** P **P** **09 23 26.9 +1.0**
baz=330
**DRS Darwin Rock St 74.50 119** P **P** **09 23 26.7 +0.2**
**NEA2 Nenana 74.51 17** P **P** **09 23 26.4 +0.5**
baz=328,SNR=9.0
**TCOL CIGO, UAF Yank 74.55 16** P **P** **09 23 26.7 +0.7**
**TCOL CIGO, UAF Yank 74.55 16** P **P** **09 23 26.8 +0.7**
baz=328,SNR=40
**COLA College 74.55 16***c i*P **P** **09 23 26.4 +0.4**
COLA pmax pmax
comp=Z,132nm,0.9s
**COLA College 74.55 16** P **P** **09 23 26.8 +0.7**
COLA IAmb IAmb 09 23 27.8
comp=Z,173nm,0.8s
**LBTB Lobatse 74.58 222** P **P** **09 23 27.8 +1.0**
LBTB pmax pmax
comp=Z,77nm,1.0s
**LBTB Lobatse 74.58 222** P **P** **09 23 27.8 +1.0**
LBTB IAmb IAmb 09 24 13.3
comp=Z,77nm,0.9s
**DBIC Dimbokro 74.60 267** P **P** **09 23 25.8 -1.4**
comp=Z,16nm,0.7s,baz=63,slow=6.8,SNR=19
DBIC pP **pP** **09 24 08.6 -1.7**
comp=Z,22nm,0.8s,baz=57,slow=5.8,SNR=4.3
**DBIC Dimbokro 74.60 267** P **P** **09 23 26.5 -0.7**
DBIC pmax pmax
comp=Z,23nm,0.9s
**DBIC Dimbokro 74.60 267** P **P** **09 23 26.5 -0.7**
**KIC Kosan Boka 74.69 267** *e*P **P** **09 23 26.2 -1.5**
comp=Z,31nm,0.5s
**TIC Toumodi 74.75 267** *e*P **P** **09 23 26.6 -1.5**
**CAST Castle Rocks 74.76 19** P **P** **09 23 28.0 +0.7**
**CAST Castle Rocks 74.76 19** P **P** **09 23 28.1 +0.7**
baz=325,SNR=104
**TSUM Tsumeb 74.81 232** LR LR 10 01 27.1
comp=Z,102nm,18.8s,baz=334,slow=40
**IL31 74.85 16** P **P** **09 23 27.6 -0.2**
IL31 IAmb IAmb 09 23 28.9
comp=Z,77nm,1.1s
**ILAR Eielson Array 74.85 16** P **P** **09 23 27.4 -0.4**
comp=Z,22nm,0.5s,baz=303,slow=4.7,SNR=299
ILAR pP **pP** **09 24 12.9 +1.7**
comp=Z,15nm,1.0s,baz=315,slow=4.7,SNR=3.1
ILAR PP **PP** **09 26 17.9 +1.0**
comp=Z,16nm,0.9s,baz=318,slow=8.3,SNR=6.6
**ILAR Eielson Array 74.85 16** P **P** **09 23 27.6 -0.2**
**ILAR Eielson Array 74.85 16** P **P** **09 23 27.6 -0.2**
**FITZ Fitzroy Crossi 74.93 126** S **S** **09 32 50.5 -1.5**
comp=Z,3.9nm,0.9s,baz=103,slow=20,SNR=6.5
**FITZ Fitzroy Crossi 74.93 126** P **P** **09 23 28.9 0.0**
**FITZ Fitzroy Crossi 74.93 126** P **P** **09 23 29.2 +0.3**
**MTN Manton Dam 74.95 119** P **P** **09 23 29.0 -0.1**
**MTN Manton Dam 74.95 119** P **P** **09 23 29.0 -0.1**
**LIC Lamto 75.00 267** *e*P **P** **09 23 28.0 -1.5**
comp=Z,60nm,0.6s
**L19K White Mountain 75.02 20** P **P** **09 23 29.8 +0.9**
baz=323,SNR=16
**GENI Genyem 75.03 105** P **P** **09 23 30.1 +0.5**
comp=Z,152nm,0.9s
**GENI Genyem 75.03 105** P **P** **09 23 30.2 +0.6**
**L20K Farewell, AK 75.05 20** P **P** **09 23 29.9 +0.8**
baz=324,SNR=22
**FRB Frobisher Bay 75.08 343** P **P** **09 23 29.4 +0.3**
comp=Z,38nm,0.6s,baz=20,slow=6.2,SNR=178
**HDA Harding Lake 75.15 16** P **P** **09 23 28.8 -0.7**
baz=329,SNR=15
**PPLA Purkeypile 75.16 19** P **P** **09 23 30.1 +0.3**
baz=325,SNR=12
**TRF Thorofare Moun 75.18 18** P **P** **09 23 29.9 0.0**
baz=327,SNR=5.6
**MCK McKinley 75.27 17** P **P** **09 23 29.8 -0.5**
baz=328,SNR=24
**KNRA Kununurra 75.28 122** P **P** **09 23 31.1 +0.3**
KNRA IAmb IAmb 09 23 33.1
comp=Z,99nm,0.7s
**KNRA Kununurra 75.28 122** P **P** **09 23 31.5 +0.6**
**EPYK Eagle Plains 75.33 11** P **P** **09 23 31.0 +0.4**
EPYK IAmb IAmb 09 23 32.2
comp=Z,260nm,1.8s
**EPYK Eagle Plains 75.33 11** P **P** **09 23 31.0 +0.4**
baz=337,SNR=26
**M19K Big River Lodg 75.38 20** P **P** **09 23 32.0 +1.1**
baz=324,SNR=10
**J26L Joseph Creek 75.79 15** P **P** **09 23 33.9 +0.6**
baz=332,SNR=63
**KDU Kakadu 75.80 118** P **P** **09 23 33.7 -0.2**
**I29M Ogilvie Camp, 76.00 12** P **P** **09 23 34.6 +0.3**
I29M IAmb IAmb 09 23 35.9
comp=Z,309nm,1.6s
**I29M Ogilvie Camp, 76.00 12** P **P** **09 23 34.8 +0.4**
baz=336,SNR=73
**EGAK Eagle 76.02 14** P **P** **09 23 34.8 +0.3**
EGAK IAmb IAmb 09 23 36.2
comp=Z,210nm,1.6s
**EGAK Eagle 76.02 14** P **P** **09 23 34.9 +0.5**
baz=334,SNR=28
**CUT Chulitna 76.07 18** P **P** **09 23 34.5 -0.2**
baz=327,SNR=7.7
**SCRK Sand Creek 76.17 15** P **P** **09 23 36.0 +0.5**
SCRK IAmb IAmb 09 23 36.7
comp=Z,68nm,0.6s
**SCRK Sand Creek 76.17 15** P **P** **09 23 36.1 +0.6**
baz=332,SNR=47
**RIDG Independent Ri 76.19 16** P **P** **09 23 35.5 0.0**
baz=331,SNR=30
**DHY Denali Highway 76.20 17** P **P** **09 23 35.5 -0.2**
baz=329,SNR=29
**N19K Bonanza Creek 76.23 21** P **P** **09 23 36.8 +1.0**
baz=324
**WAT6 Susitna Watana 76.54 17** P **P** **09 23 37.3 -0.4**
baz=329,SNR=17
**SPCR Spurr Chakacha 76.56 20** P **P** **09 23 37.8 +0.1**
baz=326
**M22K Willow 76.65 19** P **P** **09 23 37.8 -0.2**
baz=327,SNR=8.2
**PAX Paxson 76.73 16** P **P** **09 23 38.9 +0.2**
baz=331,SNR=38
**O19K Port Alsworth 76.78 21** P **P** **09 23 39.7 +0.9**
baz=324,SNR=7.5
**O18K Koktuh Hills 76.80 22** P **P** **09 23 40.2 +1.3**
baz=323,SNR=9.7
**J29M Klondike Camp 76.85 13** P **P** **09 23 40.3 +1.1**
baz=336,SNR=28
**DAWY Dawson 76.99 13** P **P** **09 23 40.5 +0.5**
DAWY IAmb IAmb 09 23 41.8
comp=Z,270nm,1.7s
**DAWY Dawson 76.99 13** P **P** **09 23 40.5 +0.5**
baz=335,SNR=37
**PMR Palmer 77.04 18** P **P** **09 23 40.3 +0.1**
baz=328,SNR=7.1
**SML Sawmill 77.06 18** P **P** **09 23 40.6 +0.2**
baz=328,SNR=20
**L26K Log Cabin Wild 77.15 15** P **P** **09 23 41.7 +0.8**
baz=332,SNR=18
**P18K Big Mountain, 77.16 22** P **P** **09 23 41.7 +0.7**
baz=324
**MEEK Meekatharra 77.19 137** P **P** **09 23 42.1 +0.6**
**SCM Sheep Creek Mo 77.28 18** P **P** **09 23 42.2 +0.5**
baz=329,SNR=11
**HARP HAARP 77.30 16** P **P** **09 23 43.2 +1.5**
baz=331,SNR=31
**RC01 Rabbit Creek A 77.31 19** P **P** **09 23 41.8 0.0**
baz=328,SNR=9.4
**M24K Tolsona, Glenn 77.32 17** P **P** **09 23 43.3 +1.4**
baz=330,SNR=20
**KNK Knik Glacier 77.37 18** P **P** **09 23 42.8 +0.7**
baz=328,SNR=8.9
**L27K Beaver Creek, 77.43 15** P **P** **09 23 43.6 +1.2**
L27K IAmb IAmb 09 23 44.6
comp=Z,194nm,1.6s
**L27K Beaver Creek, 77.43 15** P **P** **09 23 43.6 +1.2**
baz=334
**BCAR Beaver Creek A 77.44 15** P **P** **09 23 43.3 +0.8**
**BOSA Boshof 77.65 220** P **P** **09 23 44.4 +0.3**
comp=Z,29nm,0.7s,baz=11,slow=4.0,SNR=44
BOSA pP **pP** **09 24 28.8 +0.4**
comp=Z,56nm,1.0s,baz=37,slow=6.5,SNR=8.2
**BOSA Boshof 77.65 220** P **P** **09 23 44.5 +0.3**
BOSA pmax pmax
comp=Z,83nm,1.1s
**BOSA Boshof 77.65 220** P **P** **09 23 44.5 +0.3**
BOSA IAmb IAmb 09 24 30.4
comp=Z,83nm,1.1s
**MORW Morawa 77.77 141** P **P** **09 23 44.4 -0.3**
**MORW Morawa 77.77 141** P **P** **09 23 45.4 +0.8**

**M26K Nabesna, AK 77.78 15** P **P** **09 23 45.4 +0.9**
M26K IAmb IAmb 09 23 47.8
comp=Z,63nm,1.2s
**M26K Nabesna, AK 77.78 15** P **P** **09 23 45.3 +0.9**
baz=333
**O22K Cooper Landing 77.83 19** P **P** **09 23 44.6 0.0**
baz=328
**PWL Port Wells 77.87 18** P **P** **09 23 45.3 +0.4**
baz=329
**KLU Klutina 77.92 17** P **P** **09 23 46.2 +1.0**
baz=330,SNR=11
**MAYO Mayo, Yukon 78.04 12** P **P** **09 23 46.7 +1.0**
baz=338,SNR=15
**M27K Edge Creek, AK 78.05 15** P **P** **09 23 47.3 +1.3**
baz=334
**N25K Chitina, Valde 78.13 16** P **P** **09 23 47.2 +0.8**
baz=332,SNR=7.7
**GLI Glacier Island 78.17 18** P **P** **09 23 46.5 0.0**
baz=330
**BRSE Bradley Lake S 78.18 20** P **P** **09 23 45.6 -1.0**
baz=327
**BVCY Beaver Creek 78.21 14** P **P** **09 23 48.2 +1.4**
baz=334,SNR=31
**SEW Seward 78.22 19** P **P** **09 23 46.8 0.0**
baz=328
**BMRM Bremner River 78.69 17** P **P** **09 23 50.3 +0.9**
baz=332,SNR=8.0
**EYAK Cordova Ski Ar 78.78 17** P **P** **09 23 50.9 +1.1**
baz=331
**M30M Minto, Yukon 78.83 13** P **P** **09 23 50.9 +0.7**
baz=338
**YUK3 Moose Creek 78.87 15** P **P** **09 23 51.5 +0.9**
baz=335,SNR=19
**BARN Barnard Glacie 79.27 15** P **P** **09 23 53.7 +0.9**
BARN IAmb IAmb 09 23 55.6
comp=Z,212nm,1.6s
**KDAK Kodiak Island 79.28 22** LR LR 10 02 24.6
comp=Z,168nm,20.1s,baz=8.4,slow=38
**KDAK Kodiak Island 79.28 22** P **P** **09 23 53.1 +0.5**
KDAK pmax pmax
comp=Z,83nm,0.7s
**KDAK Kodiak Island 79.28 22** P **P** **09 23 53.1 +0.5**
KDAK IAmb IAmb 09 23 53.6
comp=Z,83nm,0.7s
**KDAK Kodiak Island 79.28 22** P **P** **09 23 53.2 +0.7**
baz=326
**CHNA Chernabura Isl 79.31 27** P **P** **09 23 52.5 -0.3**
baz=321
**BLDU Ballidu 79.36 141** P **P** **09 23 53.3 0.0**
**OHAK Old Harbor 79.53 23** P **P** **09 23 54.8 +0.9**
baz=325
**M31M Drury Creek, Y 79.59 12** P **P** **09 23 54.9 +0.6**
M31M IAmb IAmb 09 23 56.2
comp=Z,166nm,1.6s
**M31M Drury Creek, Y 79.59 12** P **P** **09 23 55.0 +0.8**
baz=340,SNR=26
**YUK4 Talbot Arm 79.62 14** P **P** **09 23 55.5 +0.8**
baz=336,SNR=5.8
**MMPY Sheldon Lake, 79.67 10** P **P** **09 23 56.0 +1.3**
baz=342,SNR=13
**FARO Faro, Yukon 79.73 11** P **P** **09 23 55.8 +0.8**
baz=340,SNR=26
**YAH Yahtse 79.87 16** P **P** **09 23 57.4 +1.3**
YAH IAmb IAmb 09 23 57.6
comp=Z,118nm,1.2s
**MESA MESA 80.00 16** P **P** **09 23 58.2 +1.5**
baz=334
**WRGLY Wrigley 80.00 7** P **P** **09 23 57.9 +1.6**
baz=348,SNR=20
**YUK6 Outpost Mounta 80.05 14** P **P** **09 23 58.3 +1.3**
baz=336,SNR=7.0
**HYT Haines Junctio 80.32 14** P **P** **09 23 59.7 +1.4**
HYT IAmb IAmb 09 24 00.8
comp=Z,106nm,1.3s
**HYT Haines Junctio 80.32 14** P **P** **09 23 59.7 +1.4**
baz=337,SNR=15
**KLBR Kelberrin 80.67 141** P **P** **09 24 00.8 +0.5**
**PNL Peninsula 81.01 15** P **P** **09 24 02.8 +1.0**
baz=336
**YKA Yellowknife Ar 81.30 3** P **P** **09 24 03.5 +0.2**
comp=Z,51nm,0.6s,baz=350,slow=5.3,SNR=624
YKA pP **pP** **09 24 48.2 +0.9**
comp=Z,11nm,0.6s,baz=350,slow=5.3,SNR=2.4
YKA PP **PP** **09 27 12.7 +2.2**
comp=Z,8.3nm,0.9s,baz=354,slow=7.6,SNR=4.9
YKA PKKPbc **PKKPbc** **09 42 34.3 -2.7**
comp=Z,0.7nm,0.6s,baz=167,slow=2.3,SNR=13
YKA LR LR 10 04 34.7
comp=Z,77nm,18.2s,baz=293,slow=39
**WRKA Warakurna 81.66 129** P **P** **09 24 05.6 -0.2**
**P33M Teslin, Yukon 81.73 12** P **P** **09 24 06.2 +0.5**
baz=341
**WB0 Warramunga Arr 81.96 122** P **P** **09 24 06.7 -0.7**
WB0 IAmb IAmb 09 24 09.0
comp=Z,39nm,0.8s
**SKAG Skagway 82.00 13** P **P** **09 24 08.5 +1.5**
baz=339
**WRA Warramunga Arr 82.04 122** P **P** **09 24 07.0 -0.9**
comp=Z,50nm,0.8s,baz=324,slow=4.9,SNR=551
WRA pP **pP** **09 24 52.7 +0.4**
comp=Z,29nm,0.9s,baz=321,slow=5.2,SNR=5.2
WRA S **S** **09 34 02.5 -5.1**
comp=Z,2.2nm,0.9s,baz=325,slow=12,SNR=6.6
WRA PKKPbc **PKKPbc** **09 42 35.6 +0.1**
comp=Z,2.0nm,0.8s,baz=121,slow=2.2,SNR=12
**WRA Warramunga Arr 82.04 122** P **P** **09 24 06.9 -0.9**
**WRAB Tennant Creek 82.04 122** P **P** **09 24 07.2 -0.6**
WRAB pmax pmax
comp=Z,53nm,0.8s
**WRAB Tennant Creek 82.04 122** P **P** **09 24 07.2 -0.6**
WRAB IAmb IAmb 09 24 08.7
comp=Z,53nm,0.8s
**WRAB Tennant Creek 82.04 122** P **P** **09 24 07.3 -0.6**
**WB2 Warramunga Arr 82.05 122** P **P** **09 24 07.4 -0.4**
WB2 IAmb IAmb 09 24 08.8
comp=Z,59nm,0.8s
**SCHQ Schefferville 82.11 337** P **P** **09 24 07.7 0.0**
comp=Z,19nm,0.6s,baz=30,slow=5.6,SNR=69
SCHQ pP **pP** **09 24 52.8 +1.4**
comp=Z,14nm,0.8s,baz=25,slow=6.6,SNR=3.0
SCHQ PP **PP** **09 27 14.1 -3.3**
comp=Z,18nm,0.8s,baz=31,slow=8.4,SNR=5.9
**SCHQ Schefferville 82.11 337** P **P** **09 24 08.4 +0.7**
**WR0 Warramunga Arr 82.19 122** P **P** **09 24 08.1 -0.4**
**DRLN Deer Lake 83.18 329** P **P** **09 24 13.8 +0.6**
DRLN IAmb IAmb 09 24 14.8
comp=Z,34nm,0.8s
**JIS Juneau Island 83.28 13** P **P** **09 24 15.0 +1.4**
JIS IAmb IAmb 09 25 06.9
comp=Z,71nm,1.4s
**DLBC Dease Lake 83.86 11** P **P** **09 24 16.0 -0.7**
DLBC IAmb IAmb 09 24 19.0
comp=Z,75nm,1.3s
**AS31 Alice Springs 84.30 125** P **P** **09 24 18.5 -0.8**
**ASAR Alice Springs 84.30 125** P **P** **09 24 18.6 -0.8**
comp=Z,34nm,0.6s,baz=310,slow=5.1,SNR=729
ASAR pP **pP** **09 25 04.2 +0.3**
comp=Z,20nm,0.9s,baz=324,slow=5.4,SNR=4.0
ASAR S SKSac 09 34 14.8 -12
comp=Z,1.2nm,1.0s,baz=343,slow=2.9,SNR=4.5
ASAR PKKPbc **PKKPbc** **09 42 30.8 +0.3**
comp=Z,1.1nm,0.8s,baz=131,slow=2.9,SNR=8.5
ASAR PKP2ab 09 50 33.3
comp=Z,1.1nm,0.9s,baz=128,slow=2.9,SNR=8.2
**COEN Coen 84.47 112** P **P** **09 24 19.3 -1.0**
COEN IAmb IAmb 09 24 20.5
comp=Z,40nm,0.7s
**COEN Coen 84.47 112** P **P** **09 24 19.7 -0.6**
**PMG Port Moresby 84.68 106***c i*P **P** **09 24 20.8 -0.6**
PMG pmax pmax
comp=Z,31nm,1.0s
**PMG Port Moresby 84.68 106** P **P** **09 24 21.0 -0.3**
**PMG Port Moresby 84.68 106** P **P** **09 24 22.1 +0.7**
**FORT Forrest 85.70 134** P **P** **09 24 26.0 0.0**
**FORT Forrest 85.70 134** P **P** **09 24 26.1 0.0**
comp=Z,146nm,0.7s
**QIS Mount Isa 86.11 119** P **P** **09 24 27.6 -0.8**
**MTSU Mount Surprise 87.95 114** P **P** **09 24 37.0 -0.3**
**BATG Bathurst New B 88.17 332** P **P** **09 24 39.5 +1.6**
BATG IAmb IAmb 09 25 52.8
comp=Z,108nm,2.0s
**MULG Mulgathing 88.97 129** P **P** **09 24 40.6 -1.1**
**PQI Presque Isle 89.40 333** P **P** **09 24 44.0 +0.3**
PQI IAmb IAmb 09 24 46.1
comp=Z,27nm,1.0s
**BBB Bella Bella 90.19 12** LR LR 10 11 24.3
comp=Z,57nm,18.5s,baz=342,slow=39

**CTA Charters Tower 90.60 115** P **P** **09 24 49.1 -0.5**
comp=Z,72nm,0.7s
**EDM Edmonton 90.62 3** P **P** **09 24 50.1 +0.8**
EDM pmax pmax
comp=Z,91nm,0.8s
**EDM Edmonton 90.62 3** P **P** **09 24 50.1 +0.8**
**VLDQ Val d'Or 91.20 339** P **P** **09 24 53.0 +1.0**
VLDQ IAmb IAmb 09 25 57.6
comp=Z,36nm,1.3s
**LCRK Leigh Creek 91.71 127** P **P** **09 24 53.8 -0.7**
**LLLB Lillooet 92.59 8** P **P** **09 24 59.9 +1.5**
LLLB IAmb IAmb 09 25 00.6
comp=Z,26nm,1.0s
**ULM Lac du Bonnet 92.89 352** P **P** **09 24 59.1 -0.7**
comp=Z,14nm,0.6s,baz=5.4,slow=4.6,SNR=17
ULM pP **pP** **09 25 45.8 +1.5**
comp=Z,5.4nm,0.6s,baz=0.5,slow=4.7,SNR=3.4
ULM PP **PP** **09 28 46.3 +2.8**
comp=Z,6.2nm,0.7s,baz=12,slow=7.1,SNR=5.8
**ULM Lac du Bonnet 92.89 352** P **P** **09 24 59.5 -0.2**
ULM IAmb IAmb 09 25 00.4
comp=Z,20nm,0.8s
**QLP Quilpie 93.23 121** P **P** **09 25 01.2 -0.4**
**LONY Lake Ozonia 93.46 336** P **P** **09 25 02.8 +0.3**
baz=27
**HTT Hallett 94.14 129** P **P** **09 25 04.9 -0.8**
**B35A Bob, Littlefor 94.46 350** P **P** **09 25 07.0 0.0**
**DELO Deloro Mine 94.50 338** P **P** **09 25 08.2 +0.9**
DELO IAmb IAmb 09 25 09.1
comp=Z,15nm,0.7s
**EYMN Ely 94.52 348** P **P** **09 25 07.4 0.0**
baz=14
**SADO Sadowa 94.72 339** P **P** **09 25 08.1 -0.2**
comp=Z,3.2nm,0.6s,baz=24,slow=2.2,SNR=6.0
**SADO Sadowa 94.72 339** P **P** **09 25 08.6 +0.3**
SADO IAmb IAmb 09 27 44.4
comp=Z,48nm,1.8s
**WALA Waterton Lakes 94.76 3** P **P** **09 25 09.0 +0.4**
WALA IAmb IAmb 09 25 09.8
comp=Z,25nm,0.8s
**AGMN Agassiz Nation 94.80 351** P **P** **09 25 08.7 +0.1**
baz=11
**STKA Stephens Creek 94.83 126** P **P** **09 25 07.4 -1.4**
comp=Z,3.7nm,0.4s,baz=325,slow=4.2,SNR=20
STKA PP **PP** **09 29 03.3 +2.9**
comp=Z,1.0nm,0.6s,baz=334,slow=9.3,SNR=2.8
STKA S **SKSac** **09 35 20.9 -6.6**
comp=Z,1.2nm,0.8s,baz=148,slow=22,SNR=9.6
**STKA Stephens Creek 94.83 126** P **P** **09 25 07.5 -1.4**
STKA pmax pmax
comp=Z,7.0nm,2.0s
**STKA Stephens Creek 94.83 126** P **P** **09 25 07.5 -1.4**
**STKA Stephens Creek 94.83 126** P **P** **09 25 09.8 +1.0**
**B05A Bryant 94.87 9** P **P** **09 25 09.4 +0.5**
baz=350
**B08A Colville Reser 95.08 7** P **P** **09 25 10.6 +0.7**
**DGMT Dagmar 95.34 357** P **P** **09 25 12.3 +1.1**
baz=4.0
**NEW Newport 95.36 5** P **P** **09 25 11.6 +0.5**
comp=Z,11nm,0.8s,baz=335,slow=4.3,SNR=24
NEW pP **pP** **09 25 57.1 +1.2**
comp=Z,4.0nm,0.8s,baz=349,slow=10,SNR=2.5
NEW PP **PP** **09 29 01.7 -1.1**
comp=Z,11nm,0.9s,baz=336,slow=8.9,SNR=6.9
NEW LR LR 10 12 50.3
comp=Z,95nm,18.4s,baz=2.0,slow=38
**NEW Newport 95.36 5** P **P** **09 25 11.7 +0.5**
baz=354
**MDND Maddock 95.65 354** P **P** **09 25 13.0 +0.5**
baz=7.7
**EGMT Eagleton 95.90 0** P **P** **09 25 14.4 +0.7**
EGMT IAmb IAmb 09 25 15.8
comp=Z,24nm,1.1s
**EGMT Eagleton 95.90 0** P **P** **09 25 14.0 +0.3**
baz=360
**JTMT Jette 96.05 4** P **P** **09 25 14.9 +0.4**
JTMT IAmb IAmb 09 29 08.2
comp=Z,18nm,1.0s
**BINY Binghamton 96.08 336** P **P** **09 25 14.3 -0.2**
baz=26
**GLMI Grayling 96.12 343** P **P** **09 25 14.2 -0.5**
baz=20
**CMSA Cobar Meteorol 97.32 124** P **P** **09 25 19.2 -0.9**
**BOZ Bozeman (W) 98.30 2** Pdiff Pdif 09 25 25.3 +0.6
baz=358
**PLID Pearl Lake 98.60 5** P Pdif 09 25 26.2 0.0
**RLMT Red Lodge 98.81 0** Pdiff Pdif 09 25 28.4 +1.4
baz=360
**JFWS Jewell Farm 99.16 346** Pdiff **Pdif** **09 25 28.4 0.0**
baz=15
**ECSD EROS Data Cent 99.39 351** Pdif **Pdif** **09 25 30.1 +0.7**
ECSD IAmb IAmb 09 29 33.6
comp=Z,13nm,0.9s
**ECSD EROS Data Cent 99.39 351** Pdiff **Pdif** **09 25 29.8 +0.5**
baz=10
**H17A Grant Village 99.52 1** Pdiff **Pdif** **09 25 32.9 +2.6**
baz=359
**HLID Hailey 100.22 4** Pdiff **Pdif** **09 25 34.1 +0.8**
baz=356
**BW06 Boulder Array 101.16 0** Pdiff **Pdif** **09 25 38.1 +0.5**
baz=360
**PDAR Pinedale Array 101.16 0** P **Pdif** **09 25 38.1 +0.6**
comp=Z,1.4nm,0.8s,baz=41,slow=3.1,SNR=10.0
PDAR PP **PP** **09 29 40.9 -6.4**
comp=Z,1.7nm,0.9s,baz=352,slow=4.6,SNR=3.7
PDAR PKiKP **PKiKP** **09 30 01.0 -0.5**
comp=Z,1.6nm,0.8s,baz=31,slow=2.6,SNR=2.4
**DUG Dugway, Tooele 103.65 3** Pdiff **Pdif** **09 25 49.7 +1.1**
baz=357
**NVAR Mina Array Bea 105.01 7** Pdiff **Pdif** **09 25 56.1 +1.3**
comp=Z,1.6nm,1.0s,baz=326,slow=3.3,SNR=6.7
NVAR PP **PKiKP** **09 30 03.8 -4.8**
comp=Z,2.6nm,1.0s,baz=352,slow=6.3,SNR=4.3
NVAR PKiKP **PP** **09 30 09.0 -7.0**
comp=Z,1.6nm,0.7s,baz=354,slow=2.7,SNR=5.7
**ANMO Albuquerque 108.93 358** Pdiff **Pdif** **09 26 14.6 +2.4**
comp=Z,0.4nm,0.4s,baz=12,slow=7.6,SNR=2.8
**TXAR Lajitas Array 114.36 355** Pdiff **Pdif** **09 26 39.3 +2.9**
comp=Z,0.2nm,0.7s,baz=347,slow=3.7,SNR=2.7
TXAR PKP **PKiKP** **09 30 24.2 -2.0**
comp=Z,1.1nm,0.8s,baz=335,slow=0.4,SNR=4.9
TXAR PKKPbc **PKKPbc** **09 41 04.7 -0.9**
comp=Z,0.2nm,0.5s,baz=182,slow=6.1,SNR=4.6
TXAR PKKPab **PKKPab** **09 41 13.6 -2.6**
comp=Z,0.8nm,0.7s,baz=185,slow=6.3,SNR=7.5
TXAR PKKP **PKKPdf** **09 41 28.0 +1.5**
comp=Z,0.2nm,0.6s,baz=179,slow=6.3,SNR=3.6
**SNAA Sanae 119.32 200** PKPdf **PKPdf** **09 30 33.4 -0.9**
**AFI Afiamalu 120.06 85** PKP **PKiKP** **09 30 37.6 +0.2**
comp=Z,36nm,0.8s,baz=288,slow=2.8
**DIAM Diamantina, MG 120.20 269** *e*P **PKPdf** **09 30 37.2 -0.5**
**VNA2 Neumayer--Watz 120.32 202** PKPdf **PKPdf** **09 30 35.7 -0.5**
baz=38,slow=2.8
**CAM01 Campos-RJ 120.39 264** *e*P **PKiKP** **09 30 38.2 +0.4**
**PEXB Peixe 120.52 278** *e*P **PKPdf** **09 30 37.9 -0.4**
**BOAV Boa Vista 120.55 300** *e*P **PKiKP** **09 30 38.5 0.0**
**RPZ Rata Peaks 120.70 124** PKP **PKPdf** **09 30 36.3 -1.4**
comp=Z,7.4nm,0.6s,baz=327,slow=3.4,SNR=7.1
**DUB01 Friburgo-RJ 121.09 264** *e*P **PKiKP** **09 30 39.5 +0.2**
**VNA3 Neumayer Olymp 121.13 202** PKPdf **PKPdf** **09 30 37.0 -0.7**
**HIZ Hauiti 121.30 117** P **PKPdf** **09 30 38.2 -0.8**
**TOZ Tahuroa Road 121.45 116** P **PKPdf** **09 30 39.0 -0.2**
**DUWZ D'Urville Isla 121.54 120** P **PKPdf** **09 30 36.9 -2.6**
**ITTB Itaituba 121.62 290** *e*P **PKPdf** **09 30 39.6 -0.7**
**WHTZ Whakaora 122.15 117** P **PKiKP** **09 30 43.4 +2.4**
**RITZ Rihia Road 122.20 117** P **PKPdf** **09 30 39.3 -1.5**
**SDV Santo Domingo 122.20 313** PKP **PKPdf** **09 30 40.2 -1.5**
comp=Z,11nm,0.9s,baz=40,slow=5.7,SNR=8.1
**SDV Santo Domingo 122.20 313** **PKPdf** **09 30 41.3 -0.5**
**SDV Santo Domingo 122.20 313** *e*P **PKPdf** **09 30 40.4 -1.3**
**BDFB Brasilia 122.27 274** PKP **PKPdf** **09 30 41.1 -0.5**
comp=Z,3.7nm,0.5s,baz=35,slow=1.7,SNR=11
BDFB PKKPab **PKKPbc** **09 40 37.4 +0.8**
comp=Z,4.0nm,0.7s,baz=218,slow=5.0,SNR=8.5
**PTGA Pitinga 122.33 296** PKP **PKPdf** **09 30 41.2 -0.5**
comp=Z,3.1nm,0.4s,baz=335,slow=1.8,SNR=18
PTGA PKKPab **PKKPbc** **09 40 36.8 +0.5**
comp=Z,1.2nm,0.7s,baz=148,slow=13,SNR=6.4
**BHW Baring Head 122.43 120** P **PKPdf** **09 30 39.8 -1.3**
**CAW Cannon Point 122.46 120** P **PKPdf** **09 30 39.9 -1.3**
**BSCB Bom Sucesso 122.48 267** *e*P **PKPdf** **09 30 41.1 -0.8**
**MRZ Mangataiinoka R 122.65 119** P **PKPdf** **09 30 40.1 -1.5**
**HOWZ Holdsworth Sta 122.69 119** P **PKPdf** **09 30 40.3 -1.3**
**BKZ Black Stump Fm 122.73 117** P **PKPdf** **09 30 39.6 -2.2**
**MAN01 Angra dos Reis 122.76 264** *e*P **PKiKP** **09 30 43.0 +0.5**
**MTW Mount Morrison 122.78 120** P **PKPdf** **09 30 40.8 -0.9**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **122.83 116** | PKP | **PKPdf** | **09 30 39.2** | **-2.7** | |
| | comp=Z,26nm,0.6s,baz=270,slow=2.1,SNR=27 | | | | | | |
| **URZ** | **Urewera** | **122.83 116** | P | **PKPdf** | **09 30 39.1** | **-2.7** | |
| **SNDB** | **Serra Nova Dou** | **122.83 280** | *eP* | **PKiKP** | **09 30 42.9** | **0.0** | |
| **MTHZ** | **Maungataniwha** | **122.86 117** | P | **PKPdf** | **09 30 41.2** | **-0.9** | |
| **DVHZ** | **Dannevirke** | **122.93 118** | P | **PKPdf** | **09 30 40.7** | **-1.4** | |
| **NPGB** | **Novo Progresso** | **123.04 287** | *eP* | **PKiKP** | **09 30 43.4** | **0.0** | |
| **MWZ** | **Matawai** | **123.16 116** | P | **PKPdf** | **09 30 41.5** | **-1.1** | |
| **KAHZ** | **Kahuranaki** | **123.24 118** | P | **PKPdf** | **09 30 42.0** | **-0.7** | |
| **TWGZ** | **Tauwhareparae** | **123.43 115** | P | **PKPdf** | **09 30 42.4** | **-0.8** | |
| **IPMB** | **Ipameri, GO** | **123.69 272** | *eP* | **PKPdf** | **09 30 43.6** | **-0.7** | |
| **PETF** | **Flores** | **123.89 338** | | **PKPdf** | **09 30 43.9** | **-0.8** | |
| **OCAC** | **Oceana** | **124.27 316** | | **PKPdf** | **09 30 45.3** | **-0.6** | |
| **PARB** | **Paraibuna** | **124.32 265** | *eP* | **PKiKP** | **09 30 46.3** | **+0.6** | |
| **MACA** | **Manacapuru-AM** | **124.52 295** | *eP* | **PKPdf** | **09 30 45.5** | **-0.5** | |
| **CMIG** | **Matias Romero** | **125.08 343** | PKP | **PKPdf** | **09 30 46.3** | **-0.7** | |
| | baz=23,slow=7.7 | | | | | | |
| **VAO** | **Valinhos** | **125.24 266** | *eP* | **PKiKP** | **09 30 47.7** | **+0.2** | |
| **ARAG** | **Araguaiana, MT** | **125.36 276** | *eP* | **PKiKP** | **09 30 47.7** | **-0.1** | |
| **VNDA** | **Vanda** | **125.47 165** | PKP | **PKPdf** | **09 30 45.0** | **-0.8** | |
| | comp=Z,2.1nm,0.7s,baz=292,slow=2.6,SNR=1.5 | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **125.70 334** | | **PKPdf** | **09 30 48.4** | **+0.1** | |
| **CLDB** | **Colider** | **125.73 284** | *eP* | **PKiKP** | **09 30 48.8** | **+0.1** | |
| **ZARC** | **Zaragoza, Cauc** | **125.75 317** | | **PKPdf** | **09 30 48.5** | **+0.2** | |
| **APG** | **El Apazote** | **125.88 338** | PKP | **PKPdf** | **09 30 48.4** | **-0.5** | |
| | comp=Z,1.4nm,0.5s,baz=28,slow=2.6,SNR=1.7 | | | | | | |
| **PET01** | **Itanhaem-SP** | **126.10 265** | *eP* | **PKiKP** | **09 30 49.0** | **-0.1** | |
| **QSPA** | **South Pole Qui** | **126.25 180** | PKKPbc | PKKPbc | 09 40 22.2 | -0.6 | |
| | comp=Z,1.1nm,0.7s,baz=55,slow=17,SNR=1.8 | | | | | | |
| **ITRB** | **Iturama** | **126.32 271** | *eP* | **PKPdf** | **09 30 49.3** | **+0.1** | |
| **PDRB** | **Porto dos Gac** | **126.91 284** | *eP* | **PKiKP** | **09 30 50.8** | **-0.2** | |
| **ROSC** | **El Rosal** | **127.61 314** | PKP | **PKiKP** | **09 30 52.7** | **-0.3** | |
| | comp=Z,52nm,0.9s,baz=51,slow=2.1,SNR=18 | | | | | | |
| ROSC | | | pPKP | **pPKPdf** | **09 31 40.0** | **+0.5** | |
| | comp=Z,13nm,0.7s,baz=28,slow=23,SNR=2.1 | | | | | | |
| ROSC | | | sPKP | | 09 32 00.1 | | |
| | comp=Z,22nm,0.9s,baz=145,slow=9.2,SNR=3.6 | | | | | | |
| **ROSC** | **El Rosal** | **127.61 314** | PKIKP | **PKiKP** | **09 30 52.9** | **0.0** | |
| **ROSC** | **El Rosal** | **127.61 314** | | **PKiKP** | **09 30 52.9** | **0.0** | |
| **PCMB** | **Pacaembu** | **128.01 270** | *eP* | **PKiKP** | **09 30 53.0** | **0.0** | |
| **SALV** | **Santo Antonio** | **128.57 279** | *eP* | **PKiKP** | **09 30 54.2** | **-0.1** | |
| **PP1B** | **Ponte de Pedra** | **128.85 276** | *eP* | **PKiKP** | **09 30 55.1** | **+0.3** | |
| **TER01** | **Tubaro-SC** | **129.49 261** | *eP* | **PKiKP** | **09 30 55.8** | **+0.1** | |
| **PTGB** | **Pitanga** | **130.15 267** | *eP* | **PKPdf** | **09 30 56.7** | **+0.3** | |
| **VILB** | **Vilhena** | **130.42 285** | *eP* | **PKiKP** | **09 30 57.6** | **-0.4** | |
| **AQDB** | **Aquidauana** | **131.02 274** | | **PKPdf** | **09 30 58.4** | **+0.3** | |
| **AQDB** | **Aquidauana** | **131.02 274** | *eP* | **PKPdf** | **09 30 58.4** | **+0.3** | |
| **PTLB** | **Pontes e Lacer** | **131.04 282** | *eP* | **PKiKP** | **09 30 58.8** | **-0.4** | |
| **ITAB** | **Concordia** | **131.34 264** | *eP* | **PKPdf** | **09 30 58.8** | **+0.3** | |
| **TBTG** | **Tabatinga, AM** | **131.76 302** | *eP* | **PKPdf** | **09 30 59.2** | **-0.5** | |
| **SIV** | **San Ignacio** | **132.88 283** | PKhKP | PKPpre | 09 30 53.8 | | |
| | comp=Z,6.8nm,0.7s,baz=101,slow=9.4,SNR=5.9 | | | | | | |
| SIV | | | PKP | **PKPdf** | **09 31 01.3** | **-0.4** | |
| | comp=Z,6.8nm,0.7s,baz=74,slow=1.6,SNR=38 | | | | | | |
| SIV | | | SKPab | **SKPbc** | **09 34 13.4** | **+0.5** | |
| | comp=Z,6.0nm,0.9s,baz=61,slow=5.3,SNR=6.3 | | | | | | |
| **ETMB** | **Extrema** | **133.03 293** | *eP* | **PKPdf** | **09 31 01.8** | **-0.3** | |
| **RAR** | **Rarotonga** | **133.60 85** | PKKPab | PKKPab | 09 39 46.0 | | |
| | comp=Z,16nm,0.4s,baz=191,slow=5.8,SNR=7.4 | | | | | | |
| **CPSB** | **Cacapava Do Su** | **133.69 261** | *eP* | **PKPdf** | **09 31 03.3** | **+0.4** | |
| **OTAV** | **Otavalo** | **133.72 315** | PKIKP | **PKiKP** | **09 31 04.8** | **-0.6** | |
| **OTAV** | **Otavalo** | **133.72 315** | | **PKiKP** | **09 31 04.8** | **-0.6** | |
| **OTAV** | **Otavalo** | **133.72 315** | *eP* | **PKPdf** | **09 31 04.3** | **+0.2** | |
| **PLTB** | **Pedras Altas** | **134.33 259** | | **PKiKP** | **09 31 05.5** | **0.0** | |
| **PLTB** | **Pedras Altas** | **134.33 259** | *eP* | **PKPdf** | **09 31 04.5** | **+0.4** | |
| **CPUP** | **Villa Florida** | **135.12 268** | PKhKP | PKPpre | 09 30 52.2 | | |
| | comp=Z,1.7nm,0.8s,baz=120,slow=5.6,SNR=3.1 | | | | | | |
| CPUP | | | PKP | **PKPdf** | **09 31 04.6** | **-1.0** | |
| | comp=Z,20nm,0.7s,baz=66,slow=2.0,SNR=48 | | | | | | |
| CPUP | | | SKPbc | **SKPbc** | **09 34 16.7** | **-3.2** | |
| | comp=Z,5.1nm,0.9s,baz=38,slow=4.4,SNR=4.5 | | | | | | |
| **CPUP** | **Villa Florida** | **135.12 268** | PKIKP | **PKPdf** | **09 31 05.3** | **-0.4** | |
| **CPUP** | **Villa Florida** | **135.12 268** | | **PKPdf** | **09 31 05.2** | **-0.4** | |
| **CPUP** | **Villa Florida** | **135.12 268** | *eP* | **PKPdf** | **09 31 04.8** | **-0.8** | |
| **ITQB** | **Itaqui** | **135.94 263** | PKPdf | **PKPdf** | **09 31 07.2** | **+0.1** | |
| **ITQB** | **Itaqui** | **135.94 263** | *eP* | **PKPdf** | **09 31 07.4** | **+0.4** | |
| **LPAZ** | **La Paz** | **138.54 288** | PKP | **PKPdf** | **09 31 12.1** | **-0.9** | |
| | comp=Z,7.8nm,0.9s,baz=66,slow=4.0,SNR=17 | | | | | | |
| LPAZ | | | SKPbc | **SKPbc** | **09 34 27.6** | **-3.5** | |
| | comp=Z,2.0nm,0.9s,baz=42,slow=8.4,SNR=2.6 | | | | | | |
| **LPAZ** | **La Paz** | **138.54 288** | PKIKP | **PKPdf** | **09 31 13.3** | **+0.3** | |
| **LPAZ** | **La Paz** | **138.54 288** | | **PKPdf** | **09 31 13.3** | **+0.3** | |
| **LPAZ** | **La Paz** | **138.54 288** | *eP* | **PKPdf** | **09 31 12.7** | **-0.3** | |
| **ATAH** | **Atahualpa** | **139.54 309** | PKP | **PKPdf** | **09 31 15.9** | **+1.2** | |
| | comp=Z,4.8nm,0.8s,baz=71,slow=3.3,SNR=4.2 | | | | | | |
| **NNA** | **Nana** | **142.11 302** | PKhKP | PKPpre | 09 31 14.0 | | |
| | comp=Z,6.9nm,0.8s,baz=74,slow=7.4,SNR=1.6 | | | | | | |
| NNA | | | PKP | **PKPdf** | **09 31 18.9** | **0.0** | |
| | comp=Z,10nm,0.8s,baz=14,slow=4.7,SNR=5.3 | | | | | | |
| **LVC** | **Limon Verde** | **142.67 280** | PKhKP | PKPpre | 09 31 15.3 | | |
| | comp=Z,4.9nm,0.9s,baz=49,slow=4.8,SNR=2.3 | | | | | | |
| LVC | | | PKP | **PKPdf** | **09 31 19.8** | **-0.2** | |
| | comp=Z,7.9nm,0.6s,baz=98,slow=3.1,SNR=4.8 | | | | | | |
| LVC | | | SKPbc | **SKPbc** | **09 34 39.8** | **-1.7** | |
| | comp=Z,8.7nm,0.7s,baz=36,slow=2.4,SNR=5.1 | | | | | | |
| **LVC** | **Limon Verde** | **142.67 280** | *eP* | **PKPdf** | **09 31 20.7** | **+0.7** | |
| **AC02** | **Maricunga** | **144.85 274** | | **PKPdf** | **09 31 23.8** | **-0.1** | |
| **DSPA** | **Despedida** | **146.89 225** | | **PKPbc** | **09 31 28.2** | **+0.2** | |
| **PEL** | **Peldehue** | **148.41 265** | PKHKP | PKPpre | 09 31 28.1 | | |
| PEL | | | | | 09 31 33.0 | | |
| **PEL** | **Peldehue** | **148.41 265** | PKPdf | **PKPdf** | **09 31 28.1** | **-1.0** | |
| PEL | | | | **PKPbc** | **09 31 33.0** | **+0.2** | |
| **PLCA** | **Paso Flores** | **149.72 250** | PKP | **PKPdf** | **09 31 30.8** | **-0.2** | |
| | comp=Z,5.9nm,0.7s,baz=102,slow=2.4,SNR=25 | | | | | | |
| PLCA | | | PKPbc | **PKPbc** | **09 31 36.2** | **+0.3** | |
| | comp=Z,64nm,0.8s,baz=106,slow=3.2,SNR=63 | | | | | | |
| **PLCA** | **Paso Flores** | **149.72 250** | | **PKPdf** | **09 31 32.2** | **+1.2** | |
| PLCA | | | PKPbc | **PKiKP** | **09 31 37.2** | **+0.3** | |
| **PLCA** | **Paso Flores** | **149.72 250** | *eP* | **PKPdf** | **09 31 31.6** | **+0.6** | |

*JMA* ***21*** *09:23:24.3±0.1,24°.57N×122°.80E,h82km±1km,M2.9*
*TAP* ***21*** *09:23:24.2,24°.58N×122°.82E,h83km,ML3.8,D*
**ISC 21 09:23:25.2±1.2,24°.49N±0°.03×122°.82E±0°.02,h76km±7km,**
**n110,σ1°06/205,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.12** | **108** | P | | **Pn** | **09 23 36.4** | **+0.2** |
| JYNG | | | | S | | **Sn** | **09 23 45.3** | **+1.0** |
| **YOJ** | **Yonaguni jima** | **0.18** | **99** | P | | **Pn** | **09 23 36.5** | **+0.1** |
| YOJ | | | | S | | **Sn** | **09 23 45.3** | **+0.6** |
| **YOJ** | **Yonaguni jima** | **0.18** | **99** | P | | **Pn** | **09 23 36.5** | **+0.1** |
| | baz=130 | | | | | | | |
| YOJ | | | | S | | **Sn** | **09 23 45.8** | **+1.1** |
| | baz=130 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.85** | **100** | P | | **Pn** | **09 23 42.1** | **-0.1** |
| IRIF | | | | S | | **Sn** | **09 23 55.4** | **+0.6** |
| **TWC** | **Suao** | **0.89** | **278** | *i* P | | **Pn** | **09 23 42.0** | **-0.7** |
| | baz=276 | | | | | | | |
| TWC | | | | *i* S | | **Sn** | **09 23 54.6** | **-1.1** |
| | baz=276 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.91** | **305** | *i* P | | **Pn** | **09 23 42.0** | **-0.9** |
| | baz=294 | | | | | | | |
| TWB1 | | | | S | | **Sn** | **09 23 55.1** | **-1.0** |
| | baz=294 | | | | | | | |
| **EWUT** | **Wuta** | **0.95** | **268** | P | | **Pn** | **09 23 43.2** | **-0.2** |
| | baz=261 | | | | | | | |
| EWUT | | | | S | | **Sn** | **09 23 56.5** | **-0.4** |
| | baz=261 | | | | | | | |
| **NTC** | **Toucheng** | **0.97** | **292** | *i* P | | **Pn** | **09 23 42.9** | **-0.7** |
| | baz=286 | | | | | | | |
| NTC | | | | *i* S | | **Sn** | **09 23 56.7** | **-0.6** |
| | baz=286 | | | | | | | |
| **ENA** | **Nanau** | **0.98** | **267** | *i* P | | **Pn** | **09 23 43.4** | **-0.4** |
| | baz=260 | | | | | | | |
| ENA | | | | *i* S | | **Sn** | **09 23 58.3** | **+0.6** |
| | baz=260 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.00** | **115** | P | | **Pn** | **09 23 44.6** | **+0.6** |
| HATJ | | | | S | | **Sn** | **09 23 59.8** | **+1.8** |
| **NDS** | **Dongshan** | **1.01** | **278** | P | | **Pn** | **09 23 43.5** | **-0.7** |
| | baz=272 | | | | | | | |
| NDS | | | | S | | **Sn** | **09 23 57.8** | **-0.5** |
| | baz=272 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.02** | **298** | *i* P | | **Pn** | **09 23 43.4** | **-0.9** |
| | baz=287 | | | | | | | |
| TIPB | | | | *i* S | | **Sn** | **09 23 58.7** | **+0.1** |
| | baz=287 | | | | | | | |
| **TWE** | **Neicheng** | **1.07** | **283** | *i* P | | **Pn** | **09 23 44.3** | **-0.5** |
| | baz=271 | | | | | | | |
| TWE | | | | S | | **Sn** | **09 23 58.7** | **-0.9** |
| | baz=271 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.10** | **302** | *i* P | | **Pn** | **09 23 45.0** | **-0.4** |
| | baz=289 | | | | | | | |
| NWF | | | | S | | **Sn** | **09 24 00.6** | **+0.1** |
| | baz=289 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.10** | **302** | P | | **Pn** | **09 23 45.0** | **-0.3** |
| | baz=290 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.12** | **103** | P | | **Pn** | **09 23 45.7** | **+0.3** |
| JKRS | | | | S | | **Sn** | **09 24 01.8** | **+1.2** |
| **ETL** | **Fush Village** | **1.14** | **253** | P | | **Pn** | **09 23 45.4** | **-0.4** |
| | baz=248 | | | | | | | |
| ETL | | | | S | | **Sn** | **09 24 00.5** | **-0.7** |
| | baz=248 | | | | | | | |
| **ENTT** | **Nioudou** | **1.15** | **278** | *i* P | | **Pn** | **09 23 46.1** | **+0.2** |
| | baz=272 | | | | | | | |
| ENTT | | | | S | | **Sn** | **09 24 02.0** | **+0.6** |
| | baz=272 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.15** | **284** | P | | **Pn** | **09 23 45.6** | **-0.3** |
| | baz=278 | | | | | | | |
| FUSB | | | | S | | **Sn** | **09 24 01.1** | **-0.4** |
| | baz=278 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.16** | **254** | P | | **Pn** | **09 23 45.5** | **-0.5** |
| | baz=241 | | | | | | | |
| NACB | | | | S | | **Sn** | **09 24 00.4** | **-1.2** |
| | baz=241 | | | | | | | |
| **LATG** | **Datong** | **1.18** | **272** | P | | **Pn** | **09 23 46.3** | **0.0** |
| | baz=272 | | | | | | | |
| LATG | | | | S | | **Sn** | **09 24 02.3** | **+0.2** |
| | baz=272 | | | | | | | |
| **TWD** | **Chiawan** | **1.19** | **250** | *i* P | | **Pn** | **09 23 46.0** | **-0.3** |
| | baz=245 | | | | | | | |
| TWD | | | | *i* S | | **Sn** | **09 24 01.3** | **-0.9** |
| | baz=245 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.19** | **276** | *i* P | | **Pn** | **09 23 46.7** | **+0.3** |
| | baz=270 | | | | | | | |
| NDT | | | | *i* S | | **Sn** | **09 24 02.5** | **+0.2** |
| | baz=270 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.22** | **96** | P | | **Pn** | **09 23 46.3** | **-0.4** |
| JIJ | | | | S | | **Sn** | **09 24 02.5** | **-0.3** |
| **HWA** | **Hwalien** | **1.22** | **245** | *eP* | | **Pn** | **09 23 46.9** | **+0.2** |
| | baz=241 | | | | | | | |
| HWA | | | | S | | **Sn** | **09 24 03.1** | **+0.3** |
| | baz=241 | | | | | | | |
| **TWA** | **Mucha** | **1.22** | **294** | *i* P | | **Pn** | **09 23 46.6** | **-0.2** |
| | baz=281 | | | | | | | |
| TWA | | | | S | | **Sn** | **09 24 03.1** | **+0.1** |
| | baz=281 | | | | | | | |
| **NWLT** | **Wulai** | **1.23** | **284** | *i* P | | **Pn** | **09 23 46.5** | **-0.4** |
| | baz=284 | | | | | | | |
| NWLT | | | | *i* S | | **Sn** | **09 24 02.8** | **-0.4** |
| | baz=284 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.25** | **257** | P | | **Pn** | **09 23 46.9** | **-0.3** |
| | baz=245 | | | | | | | |
| ETLH | | | | S | | **Sn** | **09 24 02.6** | **-1.1** |
| | baz=245 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.27** | **292** | *i* P | | **Pn** | **09 23 46.8** | **-0.5** |
| | baz=280 | | | | | | | |
| NHDH | | | | *i* S | | **Sn** | **09 24 04.6** | **+0.7** |
| | baz=280 | | | | | | | |
| **NNSB** | **Datong** | **1.31** | **268** | P | | **Pn** | **09 23 47.7** | **-0.3** |
| | baz=254 | | | | | | | |
| NNSB | | | | S | | **Sn** | **09 24 04.2** | **-0.9** |
| | baz=254 | | | | | | | |
| **NNS** | **Nan Shan** | **1.32** | **268** | *i* P | | **Pn** | **09 23 47.8** | **-0.3** |
| | baz=254 | | | | | | | |
| NNS | | | | *i* S | | **Sn** | **09 24 04.4** | **-1.0** |
| | baz=254 | | | | | | | |
| **YHNB** | **Yeheng** | **1.32** | **278** | P | | **Pn** | **09 23 48.2** | **+0.1** |
| | baz=273 | | | | | | | |
| YHNB | | | | S | | **Sn** | **09 24 03.7** | **-1.7** |
| | baz=273 | | | | | | | |
| **NSK** | **Sanguang** | **1.34** | **278** | *i* P | | **Pn** | **09 23 48.5** | **+0.1** |
| | baz=273 | | | | | | | |
| NSK | | | | *i* S | | **Sn** | **09 24 05.4** | **-0.4** |
| | baz=273 | | | | | | | |
| **TWY** | **Chenhua** | **1.35** | **306** | *eP* | | **Pn** | **09 23 48.1** | **-0.4** |
| | baz=295 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.36** | **86** | P | | **Pn** | **09 23 48.3** | **-0.3** |
| JISG | | | | S | | **Sn** | **09 24 06.0** | **-0.2** |
| **TWS1** | **Kuangyinshan** | **1.41** | **296** | *i* P | | **Pn** | **09 23 48.9** | **-0.3** |
| | baz=285 | | | | | | | |
| TWS1 | | | | S | | **Sn** | **09 24 07.6** | **+0.4** |
| | baz=285 | | | | | | | |
| **NTST** | **Danshui** | **1.41** | **299** | P | | **Pn** | **09 23 48.9** | **-0.3** |
| | baz=287 | | | | | | | |
| **ESL** | **Shilin** | **1.43** | **242** | *i* P | | **Pn** | **09 23 48.8** | **-0.7** |
| | baz=238 | | | | | | | |
| ESL | | | | S | | **Sn** | **09 24 07.1** | **-0.7** |
| | baz=238 | | | | | | | |
| **FUSS** | **Fushou** | **1.46** | **261** | *i* P | | **Pn** | **09 23 50.0** | **0.0** |
| | baz=256 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **09 24 08.5** | **-0.2** |
| | baz=256 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.46** | **257** | *i* P | | **Pn** | **09 23 50.1** | **-0.1** |
| | baz=252 | | | | | | | |
| WHF | | | | *i* S | | **Sn** | **09 24 08.3** | **-0.7** |
| | baz=252 | | | | | | | |
| **TDCB** | **Techi** | **1.53** | **261** | P | | **Pn** | **09 23 51.2** | **+0.3** |
| | baz=251 | | | | | | | |
| TDCB | | | | S | | **Sn** | **09 24 09.9** | **-0.4** |
| | baz=251 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.55** | **276** | P | | **Pn** | **09 23 50.9** | **-0.2** |
| | baz=271 | | | | | | | |
| NFF | | | | S | | **Sn** | **09 24 10.4** | **-0.3** |
| | baz=271 | | | | | | | |
| **NCU** | **National Centr** | **1.56** | **288** | P | | **Pn** | **09 23 51.1** | **0.0** |
| | baz=284 | | | | | | | |
| NCU | | | | S | | **Sn** | **09 24 11.9** | **+1.2** |
| | baz=284 | | | | | | | |
| **CHGB** | **Renai** | **1.56** | **254** | P | | **Pn** | **09 23 51.5** | **+0.1** |
| | baz=242 | | | | | | | |
| CHGB | | | | S | | **Sn** | **09 24 10.1** | **-1.0** |
| | baz=242 | | | | | | | |
| **NCUH** | **Zhongli** | **1.56** | **288** | P | | **Pn** | **09 23 51.4** | **+0.3** |
| | baz=284 | | | | | | | |
| **HGSD** | **Ruisui** | **1.62** | **232** | P | | **Pn** | **09 23 51.6** | **-0.2** |
| | baz=225 | | | | | | | |
| HGSD | | | | S | | **Sn** | **09 24 12.1** | **0.0** |
| | baz=225 | | | | | | | |
| **WUSB** | **Renai** | **1.63** | **253** | P | | **Pn** | **09 23 52.3** | **+0.2** |
| | baz=242 | | | | | | | |
| WUSB | | | | S | | **Sn** | **09 24 12.1** | **-0.5** |
| | baz=242 | | | | | | | |
| **LIOB** | **Emei** | **1.65** | **276** | *i* P | | **Pn** | **09 23 52.4** | **+0.1** |
| | baz=271 | | | | | | | |
| LIOB | | | | *i* S | | **Sn** | **09 24 13.0** | **+0.1** |
| | baz=271 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.66** | **275** | *i* P | | **Pn** | **09 23 52.5** | **+0.1** |
| | baz=271 | | | | | | | |
| NSTT | | | | *i* S | | **Sn** | **09 24 12.8** | **-0.3** |
| | baz=271 | | | | | | | |
| **EHY** | **Hungye** | **1.68** | **235** | *i* P | | **Pn** | **09 23 52.3** | **-0.5** |
| | baz=231 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **09 24 12.8** | **-0.9** |
| | baz=231 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.69** | **281** | P | | **Pn** | **09 23 53.1** | **+0.2** |
| | baz=277 | | | | | | | |
| **WHP** | **Taichung City** | **1.72** | **263** | *i* P | | **Pn** | **09 23 54.5** | **+1.1** |
| | baz=255 | | | | | | | |
| WHP | | | | *i* S | | **Sn** | **09 24 15.1** | **+0.4** |
| | baz=255 | | | | | | | |
| **JTJ** | **Tarama** | **1.72** | **85** | P | | **Pn** | **09 23 53.2** | **-0.1** |
| JTJ | | | | *e*S | | **Sn** | **09 24 13.7** | **-0.9** |
| **YULB** | **Yu-li** | **1.77** | **232** | P | | **Pn** | **09 23 53.5** | **-0.5** |
| | baz=239 | | | | | | | |
| **EYUL** | **Yuli** | **1.78** | **231** | *i* P | | **Pn** | **09 23 54.2** | **+0.2** |
| | baz=223 | | | | | | | |
| EYUL | | | | *i* S | | **Sn** | **09 24 16.4** | **+0.4** |
| | baz=223 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.79** | **256** | P | | **Pn** | **09 23 55.3** | **+1.1** |
| | baz=248 | | | | | | | |
| WCS | | | | S | | **Sn** | **09 24 16.9** | **+0.6** |
| | baz=248 | | | | | | | |
| **TWF1** | **Yuli** | **1.79** | **231** | *i* P | | **Pn** | **09 23 54.3** | **+0.1** |
| | baz=225 | | | | | | | |
| **SSLB** | **Suanglung** | **1.84** | **248** | P | | **Pn** | **09 23 55.2** | **+0.4** |
| | baz=244 | | | | | | | |
| SSLB | | | | S | | **Sn** | **09 24 17.2** | **-0.2** |
| | baz=244 | | | | | | | |
| **NMLH** | **Miaoli** | **1.85** | **272** | *i* P | | **Pn** | **09 23 55.2** | **+0.3** |
| | baz=267 | | | | | | | |
| NMLH | | | | *i* S | | **Sn** | **09 24 17.7** | **+0.1** |
| | baz=267 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.85** | **251** | *i* P | | **Pn** | **09 23 55.9** | **+0.8** |
| | baz=243 | | | | | | | |
| SMLT | | | | *i* S | | **Sn** | **09 24 19.0** | **+1.1** |
| | baz=243 | | | | | | | |
| **TYC** | **Yuchr** | **1.88** | **252** | *i* P | | **Pn** | **09 23 56.2** | **+0.8** |
| | baz=244 | | | | | | | |
| TYC | | | | *i* S | | **Sn** | **09 24 19.4** | **+1.0** |
| | baz=244 | | | | | | | |
| **FULB** | **Fuli** | **1.90** | **228** | *i* P | | **Pn** | **09 23 55.0** | **-0.6** |
| | baz=219 | | | | | | | |
| FULB | | | | *i* S | | **Sn** | **09 24 18.0** | **-0.8** |
| | baz=219 | | | | | | | |
| **CHKT** | **Chengkung** | **1.92** | **224** | *i* P | | **Pn** | **09 23 55.0** | **-0.9** |
| | baz=217 | | | | | | | |
| CHKT | | | | *i* S | | **Sn** | **09 24 16.4** | **-2.9** |
| | baz=217 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.98** | **240** | *i* P | | **Pn** | **09 23 57.2** | **+0.1** |
| | baz=236 | | | | | | | |
| YUS | | | | *i* S | | **Sn** | **09 24 20.0** | **-1.3** |
| | baz=236 | | | | | | | |
| **TCU** | **Taichung** | **1.98** | **261** | *i* S | | **Sn** | **09 24 22.3** | **+1.5** |
| | baz=267 | | | | | | | |
| **WDJ** | **Dajia District** | **1.99** | **266** | *i* P | | **Pn** | **09 23 57.4** | **+0.6** |
| | baz=262 | | | | | | | |
| WDJ | | | | *i* S | | **Sn** | **09 24 20.3** | **-0.6** |
| | baz=262 | | | | | | | |
| **WJS** | **Zhushan** | **2.02** | **251** | *i* P | | **Pn** | **09 23 58.8** | **+1.5** |
| | baz=240 | | | | | | | |
| WJS | | | | *i* S | | **Sn** | **09 24 23.5** | **+1.8** |
| | baz=240 | | | | | | | |
| **WNT** | **Mingjian** | **2.04** | **253** | *i* P | | **Pn** | **09 23 59.7** | **+2.2** |
| | baz=260 | | | | | | | |
| WNT | | | | *i* S | | **Sn** | **09 24 24.4** | **+2.2** |
| | baz=260 | | | | | | | |
| **EDH** | **Donghe** | **2.05** | **223** | *i* P | | **Pn** | **09 23 57.0** | **-0.6** |
| | baz=217 | | | | | | | |
| EDH | | | | *i* S | | **Sn** | **09 24 20.8** | **-1.6** |
| | baz=217 | | | | | | | |
| **ALS** | **Alishan** | **2.08** | **242** | *i* P | | **Pn** | **09 23 59.2** | **+0.8** |
| | baz=235 | | | | | | | |
| ALS | | | | *i* S | | **Sn** | **09 24 24.9** | **+1.2** |
| | baz=235 | | | | | | | |
| **ELDTW** | **Lidau** | **2.10** | **232** | *i* P | | **Pn** | **09 23 58.1** | **-0.3** |
| | baz=224 | | | | | | | |
| ELDTW | | | | *i* S | | **Sn** | **09 24 22.2** | **-1.5** |
| | baz=224 | | | | | | | |
| **WCHH** | **Zhanghua** | **2.10** | **259** | *eP* | | **Pn** | **09 23 59.1** | **+0.8** |
| | baz=264 | | | | | | | |
| WCHH | | | | *i* S | | **Sn** | **09 24 24.5** | **+0.9** |
| | baz=264 | | | | | | | |
| **JIRB** | **Irabujima** | **2.17** | **81** | P | | **Pn** | **09 23 59.2** | **0.0** |
| JIRB | | | | *e*S | | **Sn** | **09 24 24.0** | **-1.3** |
| **LDUT** | **Ludao** | **2.19** | **215** | *i* P | | **Pn** | **09 23 58.8** | **-0.7** |
| | baz=216 | | | | | | | |
| LDUT | | | | *i* S | | **Sn** | **09 24 23.8** | **-2.0** |
| | baz=216 | | | | | | | |
| **LONT** | **Longtian** | **2.21** | **225** | *i* P | | **Pn** | **09 23 59.3** | **-0.5** |
| | baz=230 | | | | | | | |
| LONT | | | | *i* S | | **Sn** | **09 24 24.9** | **-1.4** |
| | baz=230 | | | | | | | |
| **WDLH** | **Douliu** | **2.23** | **250** | *i* P | | **Pn** | **09 24 01.9** | **+1.8** |
| | baz=258 | | | | | | | |
| WDLH | | | | *i* S | | **Sn** | **09 24 28.1** | **+1.4** |
| | baz=258 | | | | | | | |
| **JIKM** | **Ikemajima** | **2.25** | **78** | P | | **Pn** | **09 23 59.7** | **-0.7** |
| **STYH** | **Taoyuan** | **2.29** | **235** | P | | **Pn** | **09 24 01.8** | **+1.0** |
| | baz=228 | | | | | | | |
| STYH | | | | S | | **Sn** | **09 24 28.8** | **+0.8** |
| | baz=228 | | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.30** | **83** | P | | **Pn** | **09 24 01.0** | **0.0** |
| JMJ2 | | | | S | | **Sn** | **09 24 27.9** | **-0.5** |
| **TWGBT** | **Beinan** | **2.30** | **224** | P | | **Pn** | **09 24 00.7** | **-0.4** |
| | baz=228 | | | | | | | |
| TWGBT | | | | S | | **Sn** | **09 24 27.5** | **-1.0** |
| | baz=228 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.30** | **256** | P | | **Pn** | **09 24 01.4** | **+0.3** |
| | baz=262 | | | | | | | |
| WRL | | | | S | | **Sn** | **09 24 28.4** | **-0.1** |
| | baz=262 | | | | | | | |
| **TWG** | **Pinlang** | **2.31** | **224** | *i* P | | **Pn** | **09 24 01.0** | **-0.1** |
| | baz=228 | | | | | | | |
| TWG | | | | *i* S | | **Sn** | **09 24 27.1** | **-1.5** |
| | baz=228 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.33** | **240** | P | | **Pn** | **09 24 03.1** | **+1.7** |
| | baz=236 | | | | | | | |
| TPUB | | | | S | | **Sn** | **09 24 31.1** | **+2.0** |
| | baz=236 | | | | | | | |
| **CHN4** | **Tsaushan** | **2.33** | **241** | *i* P | | **Pn** | **09 24 03.1** | **+1.7** |
| | baz=231 | | | | | | | |
| CHN4 | | | | *i* S | | **Sn** | **09 24 31.6** | **+2.5** |
| | baz=231 | | | | | | | |
| **CHN2** | **Minshiung** | **2.34** | **246** | *i* S | | **Sn** | **09 24 32.5** | **+3.0** |
| | baz=243 | | | | | | | |
| **WTK** | **Tuku** | **2.36** | **251** | *i* P | | **Pn** | **09 24 02.4** | **+0.6** |
| | baz=258 | | | | | | | |
| WTK | | | | *i* S | | **Sn** | **09 24 31.3** | **+1.5** |
| | baz=258 | | | | | | | |
| **JOGS** | **Gusukube** | **2.37** | **83** | P | | **Pn** | **09 24 02.3** | **+0.3** |
| JOGS | | | | S | | **Sn** | **09 24 30.9** | **+0.8** |
| **WTCT** | **Ta-ch'eng** | **2.40** | **255** | S | | **Sn** | **09 24 31.1** | **+0.3** |
| | baz=251 | | | | | | | |
| **CHY** | **Chiayi** | **2.40** | **246** | *eP* | | **Pn** | **09 24 03.7** | **+1.3** |
| | baz=242 | | | | | | | |
| CHY | | | | *i* S | | **Sn** | **09 24 33.1** | **+2.2** |
| | baz=242 | | | | | | | |
| **TWK** | **Hsinying** | **2.46** | **241** | *i* P | | **Pn** | **09 24 04.9** | **+1.7** |
| | baz=237 | | | | | | | |
| TWK | | | | *i* S | | **Sn** | **09 24 34.5** | **+2.2** |
| | baz=237 | | | | | | | |
| **

baz=249
**WDGT Dungji** 3.14 248 P Pn 09 24 12.4 +0.1
baz=244
WDGT baz=244 eS Sn 09 24 47.9 -0.8

*PRU **21** 09:24:19.1±0.0,50.22N×18.93E, h0km*
**ISC 21 09:24:19.0±1.0,50°24N±0.05×18°95E±0.03,h10km,n13, σ0s74/24,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.55** | **92** | *e*Pg | **Pg** | **09 24 29.2** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **09 24 36.1** | **-0.7** |
| **OKC** | **Ostrava-Krasne** | **0.65** | **232** | *e*SG | **Sg** | **09 24 39.9** | **-0.3** |
| | comp=Z,18nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.02** | **244** | *e*PG | **Pg** | **09 24 38.4** | **-0.1** |
| MORC | | | | *e*SG | **Sg** | **09 24 51.4** | **-0.3** |
| **NIE** | **Niedzica** | **1.20** | **133** | *e*Pg | **Pg** | **09 24 42.4** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **09 24 58.9** | **+0.7** |
| **KRLC** | **Kraliky** | **1.40** | **264** | *e*PG | **Pb** | **09 24 44.9** | **-0.4** |
| KRLC | | | | *e*SG | **Sg** | **09 25 03.9** | **-0.2** |
| | comp=Z,13nm,0.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.69** | **275** | *e*PG | **Pb** | **09 24 49.5** | **-0.6** |
| DPC | | | | *e*SG | **Sg** | **09 25 13.7** | **+0.5** |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **VYHS** | **Vyhne** | **1.75** | **182** | *e*PN | **Pn** | **09 24 49.6** | **+0.2** |
| VYHS | | | | *e*SN | **Sn** | **09 25 12.2** | **+0.5** |
| **OSTC** | **Ostas** | **1.78** | **281** | *e*PG | **Pb** | **09 24 50.9** | **-0.7** |
| OSTC | | | | *e*SG | **Sg** | **09 25 15.8** | **-0.3** |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **VRAC** | **Vranov** | **1.79** | **240** | *e*PN | **Pn** | **09 24 50.7** | **+0.8** |
| VRAC | | | | *e*SG | **Sb** | **09 25 14.6** | **+0.3** |
| **KSP** | **Ksiaz** | **1.80** | **291** | *e*Pg | **Pg** | **09 24 53.4** | **-0.1** |
| KSP | | | | *e*Sg | **Sg** | **09 25 16.9** | **+0.1** |
| **CHVC** | **Chvalec** | **1.88** | **282** | *e*PG | **Pn** | **09 24 52.1** | **+0.9** |
| CHVC | | | | *e*SG | **Sg** | **09 25 18.8** | **-0.7** |
| | comp=Z,15nm,1.0s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.34** | **247** | *e*SG | **Sg** | **09 26 04.5** | **-1.6** |
| **KHC** | **Kasperske Hory** | **3.66** | **254** | *e*PN | **Pn** | **09 25 16.5** | **+0.9** |
| KHC | | | | *e*SG | **Sg** | **09 26 14.7** | **-1.7** |
| | comp=Z,22nm,1.6s | | | | | | |

**NEIC 21 09:34:53.8±1.0,36.53N±0.02×98.70W±0.03,h2km±6km, ML2.1/26,Error ellipse: s-maj=3.9km s-min=1.7km az=124.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.29** | **239** | Pg | Pg | 09 34 59.1 | -0.3 |
| U32A | | | | Sg | Sg | 09 35 03.6 | +0.5 |
| **OKCFA** | **Oklahoma City** | **1.50** | **137** | | Pn | 09 35 21.7 | -0.2 |
| **FNO** | **Franklin** | **1.65** | **140** | | Pn | 09 35 23.0 | -0.8 |
| **WMOK** | **Wichita Mounta** | **1.79** | **182** | Pn | Pn | 09 35 25.0 | -0.8 |
| **T35A** | **Sooner Cattle** | **1.80** | **77** | Pn | Pn | 09 35 25.4 | -0.5 |
| **R32A** | **Long Quarter,** | **1.89** | **360** | Pn | Pn | 09 35 27.3 | +0.1 |
| **W35A** | **Tecumseh** | **2.02** | **132** | Pn | Pn | 09 35 28.8 | -0.2 |
| **X34A** | **Smith Ranch, M** | **2.05** | **160** | Pn | Pn | 09 35 29.0 | -0.4 |
| **TUL1** | **Leonard** | **2.43** | **104** | Pn | Pn | 09 35 35.0 | +0.5 |
| **AMTX** | **Amarillo** | **2.93** | **237** | Pn | Pn | 09 35 41.9 | +0.3 |
| **X37A** | **Clayton** | **3.33** | **125** | Pn | Pn | 09 35 46.6 | -0.4 |
| **U38A** | **Gravette** | **3.47** | **90** | Pn | Pn | 09 35 49.2 | +0.3 |
| **HHAR** | **Hobbs** | **3.84** | **92** | Pn | Pn | 09 35 53.7 | -0.4 |
| **MIAR** | **Mount Ida** | **4.62** | **114** | Pn | Pn | 09 36 05.8 | +1.1 |
| **MGMO** | **Mountain Grove** | **5.19** | **81** | Pn | Pn | 09 36 14.1 | +1.5 |
| **X40A** | **Basin Creek Fa** | **5.20** | **111** | Pn | Pn | 09 36 13.5 | +0.9 |
| **WHAR** | **Wooly Hollow** | **5.35** | **102** | Pn | Pn | 09 36 14.9 | +0.3 |
| **SDCO** | **Great Sand Dun** | **5.57** | **285** | Pn | Pn | 09 36 16.0 | -2.0 |
| **Q24A** | **Divide** | **5.66** | **297** | Pn | Pn | 09 36 18.8 | -0.5 |

*KNET **21** 09:39:25.3±0.5,42.91N×75.03E,h20km±3km,ml1.2,Error ellipse: s-maj=3.8km s-min=3.1km az=60.0*
*NNC **21** 09:39:25.6±0.1,42.92N×75.04E,h0km,mpv2.6,Error ellipse: s-maj=1.9km s-min=0.6km az=161.0*
*SOME **21** 09:39:26.2,42.93N×75.03E,h10km*
**ISC 21 09:39:26.0±0.9,42°92N±0.02×75°05E±0.02,h12km±8km, n32,σ0s49/62,15C-4D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHMS** | **Chumysh** | **0.23** | **290** | ⇑P | **Pg** | **09 39 30.8** | **-0.1** |
| | 1.7nm,0.1s,SNR=13 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **09 39 34.4** | **+0.2** |
| | 33nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **0.27** | **196** | ⇑P | **Pb** | **09 39 32.1** | **-0.9** |
| | 5.6nm,0.1s,SNR=20 | | | | | | |
| KBK | | | | ⇑S | **Sg** | **09 39 36.1** | **+0.6** |
| | 96nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.40** | **89** | ⇑P | **Pg** | **09 39 33.9** | **-0.1** |
| | 1.7nm,0.1s,SNR=34 | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **09 39 39.7** | **+0.2** |
| | 27nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.40** | **89** | ⇑P | **Pg** | **09 39 33.6** | **-0.4** |
| | 1.5nm,0.4s | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **09 39 39.5** | **0.0** |
| | 1.6nm,0.1s | | | | | | |
| **AAK** | **Ala-Archa** | **0.49** | **236** | ⇓P | **Pg** | **09 39 35.6** | **-0.1** |
| | 3.2nm,0.2s,SNR=9.6 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **09 39 42.5** | **+0.2** |
| | 6.7nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **0.49** | **236** | ⇓P | **Pg** | **09 39 35.3** | **-0.4** |
| | 1.8nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sg** | **09 39 42.5** | **+0.2** |
| | 8.5nm,0.5s | | | | | | |
| **USP** | **Ospenovka** | **0.53** | **311** | ⇑P | **Pg** | **09 39 36.2** | **-0.2** |
| | 2.2nm,0.1s,SNR=8.5 | | | | | | |
| USP | | | | ⇑S | **Sg** | **09 39 43.5** | **0.0** |
| | 8.6nm,0.2s | | | | | | |
| **SGDS** | **Sogindy** | **0.61** | **330** | *e*P | **Pb** | **09 39 37.9** | **-0.8** |
| | 2.3nm,0.1s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **09 39 46.0** | **-0.1** |
| | 12nm,0.1s | | | | | | |
| **SGDS** | **Sogindy** | **0.61** | **330** | P | **Pb** | **09 39 37.9** | **-0.8** |
| | 1.6nm,0.0s | | | | | | |
| SGDS | | | | S | **Sg** | **09 39 46.0** | **-0.1** |
| | 12nm,0.1s | | | | | | |
| **DGS** | **Degeres** | **0.62** | **58** | *e*P | **Pb** | **09 39 38.3** | **-0.6** |
| | 1.7nm,0.1s | | | | | | |
| DGS | | | | *e*S | **Sg** | **09 39 46.6** | **+0.2** |
| | 7.5nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.62** | **58** | P | **Pb** | **09 39 38.3** | **-0.6** |
| | 1.7nm,0.1s | | | | | | |
| DGS | | | | S | **Sg** | **09 39 46.6** | **+0.2** |
| | 7.5nm,0.2s | | | | | | |
| **UCH** | **Uchtor** | **0.80** | **210** | ⇓P | **Pg** | **09 39 41.0** | **-0.4** |
| | 2.2nm,0.1s,SNR=12 | | | | | | |
| UCH | | | | ⇑S | **Sg** | **09 39 51.6** | **-0.2** |
| | 2.2nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **0.90** | **30** | ⇓*e*P | **Pg** | **09 39 43.1** | **-0.3** |
| | 4.0nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **09 39 55.0** | **-0.2** |
| | 4.5nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **0.90** | **30** | P | **Pg** | **09 39 43.1** | **-0.3** |
| | 4.0nm,0.2s | | | | | | |
| KRBS | | | | S | **Sg** | **09 39 55.0** | **-0.2** |
| | 4.5nm,0.1s | | | | | | |
| **EKS2** | **Erkin-Say** | **0.97** | **255** | ⇑P | **Pb** | **09 39 44.4** | **-0.4** |
| | 0.7nm,0.1s,SNR=7.1 | | | | | | |
| EKS2 | | | | ⇑S | **Sb** | **09 39 57.5** | **0.0** |
| | 2.3nm,0.1s | | | | | | |
| **IZV** | **Izvestkoviy** | **1.16** | **84** | *e*P | **Pn** | **09 39 48.4** | **+0.2** |
| | 3.1nm,0.1s | | | | | | |
| IZV | | | | *e*S | **Sn** | **09 40 04.0** | **+0.1** |
| | 10nm,0.1s | | | | | | |
| **IZV** | **Izvestkoviy** | **1.16** | **84** | P | **Pn** | **09 39 48.4** | **+0.2** |
| | 1.6nm,0.1s | | | | | | |
| IZV | | | | S | **Sn** | **09 40 04.0** | **+0.1** |
| | 10nm,0.1s | | | | | | |
| **MRKS** | **Merke** | **1.35** | **263** | *e*P | **Pg** | **09 39 51.6** | **-0.3** |
| | 1.6nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **09 40 09.4** | **0.0** |
| | 4.7nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **1.35** | **263** | P | **Pg** | **09 39 51.6** | **-0.3** |
| | 1.6nm,0.1s | | | | | | |
| MRKS | | | | S | **Sg** | **09 40 09.4** | **0.0** |
| | 4.7nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **1.35** | **44** | *e*P | **Pb** | **09 39 51.1** | **-0.2** |
| | 1.3nm,0.2s | | | | | | |
| KUU | | | | *e*S | **Sn** | **09 40 09.0** | **+0.3** |
| | 5.4nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **1.35** | **44** | P | **Pb** | **09 39 51.1** | **-0.2** |
| | 1.3nm,0.2s | | | | | | |
| KUU | | | | S | **Sn** | **09 40 09.0** | **+0.3** |
| | 5.4nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.40** | **84** | *e*P | **Pb** | **09 39 52.3** | **0.0** |
| | 0.5nm,0.1s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **09 40 11.2** | **+0.1** |
| | 2.1nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.40** | **84** | P | **Pb** | **09 39 52.3** | **0.0** |
| | 0.5nm,0.1s | | | | | | |
| TNSS | | | | S | **Sg** | **09 40 11.2** | **+0.1** |
| | 2.1nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.43** | **56** | *e*P | **Pb** | **09 39 52.4** | **-0.3** |
| | 0.5nm,0.1s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **09 40 11.4** | **-0.7** |
| | 4.6nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.43** | **56** | P | **Pb** | **09 39 52.4** | **-0.3** |
| | 0.5nm,0.1s | | | | | | |
| KTBS | | | | S | **Sg** | **09 40 11.4** | **-0.7** |
| | 4.6nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **1.49** | **80** | *e*P | **Pb** | **09 39 54.0** | **+0.3** |
| | 1.1nm,0.1s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **09 40 13.7** | **-0.2** |
| | 3.1nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **1.49** | **80** | Pg | **Pb** | **09 39 54.0** | **+0.3** |
| | 1.1nm,0.1s | | | | | | |
| MDOK | | | | Lg | Lg | 09 40 13.7 | |
| | 3.1nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.55** | **78** | *e*P | **Pg** | **09 39 55.2** | **-0.4** |
| | 1.2nm,0.1s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **09 40 15.9** | **+0.2** |
| | 2.5nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.55** | **78** | P | **Pg** | **09 39 55.2** | **-0.4** |
| | 1.2nm,0.1s | | | | | | |
| KOTS | | | | S | **Sg** | **09 40 15.9** | **+0.2** |
| | 2.5nm,0.2s | | | | | | |
| **BTLS** | **Baital** | **2.24** | **342** | *e*P | **Pb** | **09 40 06.6** | **+0.2** |
| | 0.5nm,0.3s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **09 40 35.6** | **+1.5** |
| | 3.0nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.40** | **56** | *e*P | **Pb** | **09 40 10.0** | **+0.9** |
| | 0.9nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **09 40 41.1** | **-2.0** |
| | 1.9nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **2.40** | **56** | Pg | **Pb** | **09 40 08.5** | **-0.6** |
| | 0.2nm,0.1s | | | | | | |
| ARXS | | | | Lg | Lg | 09 40 39.4 | |
| | 1.9nm,0.4s | | | | | | |

*NEIC **21** 09:41:37.8±1.3,54.12N±0.07×159.0E±0.2,h172km±7km, mb4.8/7,Error ellipse: s-maj=16.6km s-min=8.6km az=68.0*
*KRSC **21** 09:41:37.5±0.8,53.82N×159.20E,h181km±8km,ML4.0*
*IDC **21** 09:41:38.3±2.6,54.08N×159.03E,h172km±12km,mb3.3/5, mb1 3.5/6,mb1mx3.1/33,mbtmp3.8/6,Error ellipse: s-maj=52.8km s-min=25.1km az=84.0*
**ISC 21 09:41:38.5±0.6,53.85N±0.05×159.12E±0.06,h178km±5km, n63,σ1s04/78,mb3.8/8,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KII** | **Karymskiy** | **0.27** | **46** | *e*P | **Pn** | **09 42 02.6** | **+0.2** |
| **SDLR** | **Sedlovina** | **0.59** | **194** | *i* P | **Pn** | **09 42 04.0** | **+0.3** |
| **KRER** | **Koryakskii** | **0.59** | **202** | *e*P | **Pn** | **09 42 04.6** | **+0.8** |
| **SMAR** | **Somma** | **0.62** | **198** | *e*P | **Pn** | **09 42 04.6** | **+0.7** |
| **AVH** | **Avacha** | **0.63** | **202** | *e*P | **Pn** | **09 42 04.5** | **+0.7** |
| **KOK** | **Koryaka** | **0.63** | **208** | *e*P | **Pn** | **09 42 04.5** | **+0.7** |
| **UGLR** | **Uglovaya** | **0.67** | **196** | *e*P | **Pn** | **09 42 04.7** | **+0.7** |
| UGLR | | | | *e*S | **Sn** | **09 42 24.1** | **+0.5** |
| **NLC** | **Nalytchevo** | **0.69** | **169** | *i* P | **Pn** | **09 42 04.2** | **+0.2** |
| NLC | | | | *e*S | **Sn** | **09 42 23.3** | **-0.2** |
| **GNL** | **Ganaly** | **0.72** | **258** | *e*P | **Pn** | **09 42 04.1** | **-0.2** |
| GNL | | | | *e*S | **Sn** | **09 42 23.2** | **-0.9** |
| **DALK** | **Dalny** | **0.85** | **195** | *e*P | **Pn** | **09 42 05.1** | **+0.1** |
| DALK | | | | *e*S | **Sn** | **09 42 24.8** | **-0.5** |
| **PET** | **Petropavlovsk** | **0.87** | **199** | Pn | **Pn** | **09 42 05.5** | **+0.4** |
| **PET** | **Petropavlovsk** | **0.87** | **199** | *i* P | **Pn** | **09 42 05.6** | **+0.5** |
| PET | | | | *e*S | **Sn** | **09 42 25.3** | **-0.2** |
| **SPN** | **Mys Shipunski** | **0.93** | **144** | *i* P | **Pn** | **09 42 05.3** | **-0.2** |
| SPN | | | | *e*S | **Sn** | **09 42 24.8** | **-1.4** |
| **PEA0B** | **Petropavlovsk-** | **1.13** | **229** | | **Pn** | **09 42 07.2** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **1.13** | **229** | P | **Pn** | **09 42 06.5** | **-0.6** |
| | 3.5nm,0.3s,baz=81,slow=9.3,SNR=10 | | | | | | |
| PETK | | | | S | **Sn** | **09 42 30.2** | **+1.2** |
| | 1.4nm,0.3s,baz=49,slow=8.2,SNR=2.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **1.13** | **229** | | **Pn** | **09 42 06.6** | **-0.4** |
| **KRMR** | **Karymshinskiy** | **1.18** | **211** | *i* P | **Pn** | **09 42 07.6** | **+0.2** |
| KRMR | | | | *e*S | **Sn** | **09 42 30.0** | **+0.3** |
| **GRL** | **Gorelyy** | **1.44** | **206** | *e*P | **Pn** | **09 42 10.8** | **+0.9** |
| **RUS** | **Russkaya** | **1.47** | **195** | *e*P | **Pn** | **09 42 09.8** | **-0.2** |
| RUS | | | | *e*S | **Sn** | **09 42 33.5** | **-0.7** |
| **MTVR** | **Mutnovka** | **1.48** | **203** | *e*P | **Pn** | **09 42 11.3** | **+1.0** |
| **APC** | **Apacha** | **1.50** | **233** | *e*P | **Pn** | **09 42 10.6** | **+0.4** |
| APC | | | | *e*S | **Sn** | **09 42 35.1** | **+0.4** |
| **TUMD** | **Tumrok D** | **1.55** | **28** | *i* P | **Pn** | **09 42 11.2** | **+0.5** |
| **TUMR** | **Tumrok** | **1.56** | **22** | *i* P | **Pn** | **09 42 11.9** | **+1.0** |
| TUMR | | | | *e*S | **Sn** | **09 42 36.8** | **+0.7** |
| **MKZ** | **Mys Kozlova** | **1.69** | **64** | *e*P | **Pn** | **09 42 12.3** | **+0.2** |
| MKZ | | | | *e*S | **Sn** | **09 42 36.3** | **-1.8** |
| **KMNR** | **Kamenistaya** | **2.02** | **18** | *i* P | **Pn** | **09 42 16.5** | **+0.8** |
| **ESO** | **Esso** | **2.10** | **353** | *e*P | **Pn** | **09 42 16.6** | **+0.2** |
| **KDTR** | **Khodutka, Kamc** | **2.14** | **198** | *e*P | **Pn** | **09 42 16.3** | **-0.6** |
| KDTR | | | | *e*S | **Sn** | **09 42 44.6** | **-2.1** |
| **KPT** | **Kopyto** | **2.21** | **16** | *i* P | **Pn** | **09 42 18.1** | **+0.3** |
| **KIRR** | **Kirishev** | **2.22** | **18** | *e*P | **Pn** | **09 42 18.3** | **+0.3** |
| **KOZ** | **Kozyrevsk** | **2.26** | **11** | *i* P | **Pn** | **09 42 18.5** | **+0.3** |
| **BZWR** | **Bezymyannyi-We** | **2.26** | **20** | *e*P | **Pn** | **09 42 19.2** | **+0.7** |
| **BZGR** | **Bezymyannyi-Gr** | **2.28** | **23** | *i* P | **Pn** | **09 42 19.4** | **+0.8** |
| **ZLN** | **Zelenaya** | **2.38** | **23** | *e*P | **Pn** | **09 42 20.4** | **+0.7** |
| **CIRR** | **Tsirk** | **2.46** | **22** | *e*P | **Pn** | **09 42 21.6** | **+0.9** |
| **KRSR** | **Krestovskiy** | **2.51** | **19** | *i* P | **Pn** | **09 42 21.6** | **+0.3** |
| **KLY** | **Klyuchi** | **2.62** | **19** | *e*P | **Pn** | **09 42 23.8** | **+1.4** |
| **BDR** | **Baidarnaya** | **2.98** | **23** | *i* P | **Pn** | **09 42 27.6** | **+0.9** |
| **SRKR** | **Sorokina** | **3.05** | **22** | *e*P | **Pn** | **09 42 28.5** | **+0.9** |
| **SMKR** | **Semkarok** | **3.05** | **25** | *e*P | **Pn** | **09 42 29.3** | **+1.6** |
| **KBG** | **Krutoberegovo** | **3.17** | **39** | *e*P | **Pn** | **09 42 29.0** | **0.0** |
| KBG | | | | *e*S | **Sn** | **09 43 08.3** | **-0.2** |
| **KBTR** | **Krutoberegovo** | **3.18** | **40** | *e*P | **Pn** | **09 42 29.0** | **-0.2** |
| **SKR** | **Severo-Kuril's** | **3.67** | **211** | *e*P | **Pn** | **09 42 35.2** | **-0.1** |
| SKR | | | | *e*S | **Sn** | **09 43 19.0** | **-0.6** |
| **BKI** | **Bering** | **4.22** | **68** | *e*P | **Pn** | **09 42 42.9** | **+0.7** |
| BKI | | | | *e*S | **Sn** | **09 43 29.0** | **-3.0** |
| **ASAJ** | **Asahikawa** | **14.54** | **235** | P | **P** | **09 44 57.6** | **0.0** |
| | 0.4nm,0.3s,baz=76,slow=9.1,SNR=4.5 | | | | | | |
| **ERM** | **Erimo** | **15.91** | **228** | | **Pn** | **09 45 11.8** | **-0.9** |
| ERM | | | | IAmb | IAmb | 09 45 37.4 | |
| | comp=Z,54nm,1.1s | | | | | | |
| **JMM** | **Marumori** | **20.36** | **226** | P | **P** | **09 46 02.4** | **+1.3** |
| JMM | | | | IAmb | IAmb | 09 46 04.3 | |
| | comp=Z,104nm,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.59** | **228** | P | **P** | **09 46 25.2** | **+1.3** |
| | comp=Z,1.0nm,0.4s,baz=25,slow=6.8,SNR=2.0 | | | | | | |
| **BMAR** | **Burnt Mountain** | **29.54** | **41** | P | **P** | **09 47 27.5** | **+1.6** |
| **BCAR** | **Beaver Creek A** | **31.15** | **49** | P | P | 09 47 34.3 | -5.9 |
| **KURK** | **Kurchatov** | **46.84** | **301** | P | **P** | **09 49 48.1** | **-2.0** |
| **MKAR** | **Makanchi Array** | **47.31** | **294** | P | **P** | **09 49 52.4** | **-1.4** |
| | comp=Z,0.3nm,0.7s,baz=58,slow=8.3,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.31** | **294** | P | **P** | **09 49 52.1** | **-1.8** |
| **KEV** | **Kevo** | **51.91** | **341** | P | **P** | **09 50 27.3** | **-0.9** |
| KEV | | | | IAmb | IAmb | 09 50 48.0 | |
| | comp=Z,68nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **56.86** | **309** | P | **P** | **09 51 01.9** | **-2.2** |
| **PDAR** | **Pinedale Array** | **57.66** | **61** | P | **P** | **09 51 09.4** | **-0.7** |
| **FINES** | **FINESS Array B** | **59.19** | **336** | P | **P** | **09 51 19.5** | **-0.6** |
| | comp=Z,6.1nm,1.0s,baz=46,slow=6.0,SNR=3.4 | | | | | | |
| **FINES** | **FINESS Array B** | **59.19** | **336** | P | **P** | **09 51 18.7** | **-1.4** |
| **COEN** | **Coen** | **68.90** | **197** | P | **P** | **09 52 25.0** | **+1.1** |
| COEN | | | | IAmb | IAmb | 09 52 43.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **76.53** | **204** | P | **P** | **09 53 10.1** | **+1.4** |
| WB2 | | | | IAmb | IAmb | 09 53 25.6 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **76.53** | **204** | P | **P** | **09 53 09.9** | **+1.2** |
| | comp=Z,0.6nm,0.8s,baz=22,slow=6.2,SNR=4.9 | | | | | | |
| **NIUE** | **Niue** | **77.36** | **150** | P | **P** | **09 53 15.8** | **+2.5** |
| **ASAR** | **Alice Springs** | **80.22** | **203** | P | **P** | **09 53 30.6** | **+1.7** |
| | comp=Z,0.6nm,0.6s,baz=18,slow=4.8,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **80.22** | **203** | P | **P** | **09 53 29.4** | **+0.5** |

*IDC **21** 10:39:48.3±0.5,22.53S×68.84W,h92km±4km,mb3.6/5, mb1 3.6/8,mb1mx3.5/28,mbtmp3.8/8,MS3.6/2,Ms1 3.6/2, ms1mx2.9/42,Error ellipse: s-maj=25.9km s-min=13.2km az=128.0*
*NEIC **21** 10:39:48.4±2.9,22.55S±0.05×68.97W±0.06,h86km±5km, Error ellipse: s-maj=10.0km s-min=4.0km az=128.0*
*VAO **21** 10:39:48.8±1.1,22.50S×69.09W,h116km,mb4.3*
*GUC **21** 10:39:49.0±0.8,22.51S×68.95W,h86km±4km,ML4.2*
**ISC 21 10:39:48.4±0.5,22°53S±0.04×68°94W±0.05,h94km±4km, n79,σ1s02/95,mb3.9/7,5C-1D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **0.08** | **160** | LR | LR | 10 39 36.7 | |
| | comp=Z,68nm,18.7s,baz=44,slow=106 | | | | | | |
| LVC | | | | P | **Pn** | **10 40 02.5** | **+0.3** |
| | 779nm,0.3s,baz=32,slow=3.6,SNR=9918 | | | | | | |
| LVC | | | | S | **Sn** | **10 40 12.7** | **+0.4** |
| | 1µm,0.3s,baz=204,slow=22,SNR=23 | | | | | | |
| **LVC** | **Limon Verde** | **0.08** | **160** | *e*P | **Pn** | **10 40 01.8** | **-0.3** |
| LVC | | | | *e*S | **Sn** | **10 40 11.3** | **-1.0** |
| **PB06** | **IPOC Station P** | **0.61** | **254** | Pn | **Pn** | **10 40 05.2** | **+0.5** |
| **PB06** | **IPOC Station P** | **0.61** | **254** | ⇑*i*P | **Pn** | **10 40 04.8** | **+0.1** |
| PB06 | | | | *e*S | **Sn** | **10 40 17.2** | **+0.4** |
| PB06 | | | | IAML | | 10 40 18.3 | |
| | comp=E,8µm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **0.79** | **339** | ⇓*i*P | **Pn** | **10 40 07.4** | **+1.1** |
| PB09 | | | | *e*S | **Sn** | **10 40 20.1** | **+0.3** |
| **PB15** | **IPOC Station P** | **0.83** | **216** | ⇑*i*P | **Pn** | **10 40 07.4** | **+0.5** |
| PB15 | | | | *i* S | **Sn** | **10 40 21.8** | **+1.1** |
| **PB03** | **IPOC Station P** | **0.89** | **303** | *e*P | **Pn** | **10 40 07.7** | **+0.3** |
| PB03 | | | | *i* S | **Sn** | **10 40 21.8** | **+0.1** |
| PB03 | | | | IAML | | 10 40 22.4 | |
| | comp=N,24µm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **1.14** | **280** | ⇑*i*P | **Pn** | **10 40 10.2** | **0.0** |
| PB04 | | | | *i* S | **Sn** | **10 40 26.6** | **+0.1** |
| PB04 | | | | IAML | | 10 40 28.6 | |
| | comp=E,7µm,0.6s | | | | | | |
| **PB07** | **IPOC Station P** | **1.19** | **312** | *e*P | **Pn** | **10 40 11.1** | **+0.3** |
| PB07 | | | | *e*S | **Sn** | **10 40 27.6** | **0.0** |
| PB07 | | | | IAML | | 10 40 28.8 | |
| | comp=N,13µm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **1.50** | **324** | ⇑*e*P | **Pn** | **10 40 15.0** | **+0.5** |
| PB02 | | | | *e*S | **Sn** | **10 40 33.9** | **-0.4** |
| PB02 | | | | IAML | | 10 40 39.7 | |
| | comp=E,9µm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.57** | **341** | ⇑*e*P | **Pn** | **10 40 16.1** | **+0.7** |
| PB01 | | | | *e*S | **Sn** | **10 40 36.5** | **+0.7** |
| PB01 | | | | IAML | | 10 40 37.6 | |
| | comp=E,6µm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **2.04** | **326** | Pn | **Pn** | **10 40 21.0** | **-0.5** |
| **PATCX** | **Punta Patache** | **2.04** | **326** | *e*P | **Pn** | **10 40 20.9** | **-0.5** |
| PATCX | | | | *e*S | **Sn** | **10 40 46.6** | **0.0** |
| PATCX | | | | IAML | | 10 40 50.0 | |
| | comp=E,1µm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **2.27** | **329** | | **Pn** | **10 40 22.9** | **-1.4** |
| **TA01** | **Diego Aracena** | **2.27** | **329** | *e*P | **Pn** | **10 40 23.7** | **-0.7** |
| TA01 | | | | IAML | | 10 41 12.8 | |
| | comp=E,646nm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **2.41** | **338** | *e*P | **Pn** | **10 40 25.9** | **-0.4** |
| HMBC | | | | IAML | | 10 41 01.1 | |
| | comp=N,673nm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **2.86** | **355** | *e*P | **Pn** | **10 40 33.3** | **+0.6** |
| GO01 | | | | IAML | | 10 41 09.7 | |
| | comp=N,1µm,0.2s | | | | | | |
| **AC02** | **Maricunga** | **4.29** | **182** | | **Pn** | **10 40 52.8** | **+1.0** |
| **GO03** | **Copiap** | **5.17** | **193** | Pn | **Pn** | **10 41 01.4** | **-2.1** |
| **AC04** | **Llanos de Chal** | **5.97** | **198** | Pn | **Pn** | **10 41 10.1** | **-4.2** |
| **LPAZ** | **La Paz** | **6.26** | **7** | P | **Pn** | **10 41 18.8** | **0.0** |
| | comp=N,0.5nm,0.3s,baz=170,slow=9.7,SNR=22 | | | | | | |
| LPAZ | | | | LR | LR | 10 44 21.1 | |
| | comp=N,114nm,20.2s,baz=212,slow=44 | | | | | | |
| **CO03** | **El Pedregal** | **8.42** | **190** | Pn | **Pn** | **10 41 44.2** | **-3.5** |
| **SIV** | **San Ignacio** | **9.88** | **50** | P | **Pn** | **10 42 04.6** | **-2.9** |
| | comp=N,1.1nm,0.3s,baz=237,slow=9.2,SNR=18 | | | | | | |
| SIV | | | | S | **Sn** | **10 43 55.5** | **-1.1** |
| | comp=N,0.1nm,0.3s,baz=309,slow=23,SNR=1.4 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **11.64** | **54** | *e*P | **Pn** | **10 42 31.3** | **-0.2** |
| **AQDB** | **Aquidauana** | **12.49** | **83** | *e*P | **Pn** | **10 42 45.3** | **+2.4** |
| **ETMB** | **Extrema** | **12.91** | **12** | *e*P | **Pn** | **10 42 47.6** | **-0.9** |
| **SALV** | **Santo Antonio** | **14.14** | **65** | *e*P | **Pn** | **10 43 05.5** | **+1.0** |
| **CPSB** | **Cacapava Do Su** | **15.93** | **123** | *e*P | **Pn** | **10 43 28.5** | **+1.4** |
| **PDRB** | **Porto dos Gac** | **15.93** | **49** | *e*P | **P** | **10 43 28.8** | **-0.2** |
| **ITAB** | **Concordia** | **15.95** | **110** | | **P** | **10 43 29.4** | **+0.2** |
| **ITAB** | **Concordia** | **15.95** | **110** | *e*P | **Pn** | **10 43 28.3** | **+0.9** |
| **PCMB** | **Pacaembu** | **16.42** | **90** | *e*P | **P** | **10 43 35.2** | **+0.9** |
| **LC01** | **Cunco** | **16.50** | **188** | | **P** | **10 43 35.5** | **+0.3** |
| **CLDB** | **Colider** | **17.10** | **49** | *e*P | **Pn** | **10 43 42.1** | **+0.4** |
| **ARAG** | **Araguaiana, MT** | **17.54** | **70** | *e*P | **P** | **10 43

*IDC **21** 10:42:20.8±1.6,39˚.50N×20˚.66E,h0km,mb3.6/4, mb1 3.6/5,mb1mx3.4/35,mbtmp3.5/5,ML2.8/1, Error ellipse: s-maj=29.5km s-min=20.0km az=63.0*
*TIR **21** 10:42:22.0,39˚.29N×20˚.67E,h25km±1km,Md3.2,Ml3.5*
*ATH **21** 10:42:23.9,39˚.43N×20˚.72E,h13km±5km,ML3.1/8, Error ellipse: s-maj=5.1km s-min=0.8km az=326.0*
*THE **21** 10:42:24.2,39˚.41N×20˚.70E,h0km±2km,ML3.1/10, Error ellipse: s-maj=2.3km s-min=0.6km az=238.0*

**ISC 21 10:42:23.7±0.9,39˚.44N±0˚.02×20˚.67E±0˚.02,h19km±2km, n91,σ1§78/122,mb3.6/4,Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAN** | **Janina** | **0.26** | **32** | P | **Pg** | **10 42 28.7** | **-1.0** |
| JAN | | | | S | **Sg** | **10 42 33.8** | **-0.1** |
| | 14μm,0.3s | | | | | | |
| **JAN** | **Janina** | **0.26** | **32** | P | **Pg** | **10 42 29.1** | **-0.7** |
| JAN | | | | S | **Sg** | **10 42 33.0** | **-0.8** |
| JAN | | | | AML | AML | 10 42 34.1 | |
| | comp=N,25947μm,0.3s | | | | | | |
| JAN | | | | AML | AML | 10 42 34.4 | |
| | comp=E,27832μm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.28** | **290** | P | **Pg** | **10 42 30.0** | **0.0** |
| IGT | | | | S | **Sb** | **10 42 35.4** | **+1.1** |
| | comp=E,7μm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.28** | **290** | P | **Pg** | **10 42 30.2** | **+0.1** |
| IGT | | | | S | **Sb** | **10 42 35.5** | **+1.1** |
| IGT | | | | AML | AML | 10 42 36.0 | |
| | comp=E,16789μm,0.3s | | | | | | |
| IGT | | | | AML | AML | 10 42 39.0 | |
| | comp=N,9584μm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.28** | **290** | P | **Pg** | **10 42 30.1** | **+0.1** |
| | baz=313 | | | | | | |
| IGT | | | | S | **Sb** | **10 42 35.8** | **+1.4** |
| | baz=313 | | | | | | |
| **KASA** | **Kassiopi** | **0.65** | **299** | P | **Pb** | **10 42 37.0** | **+0.6** |
| KASA | | | | S | **Sg** | **10 42 46.5** | **+1.2** |
| KASA | | | | AML | AML | 10 42 53.4 | |
| | comp=N,3993μm,0.3s | | | | | | |
| KASA | | | | AML | AML | 10 42 53.5 | |
| | comp=E,6638μm,0.3s | | | | | | |
| **SRN** | **Sarande** | **0.68** | **311** | P | **Pb** | **10 42 37.3** | **+0.4** |
| SRN | | | | S | **Sn** | **10 42 48.7** | **+0.2** |
| | comp=E,720nm,0.3s | | | | | | |
| **SRN** | **Sarande** | **0.68** | **311** | P | **Pb** | **10 42 37.4** | **+0.4** |
| | baz=319 | | | | | | |
| SRN | | | | S | **Sn** | **10 42 49.0** | **+0.5** |
| | baz=319 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,3.5nm,0.3s,baz=319 | | | | | | |
| **LSK** | **Leskovik** | **0.72** | **356** | P | **Pg** | **10 42 39.0** | **+1.2** |
| | baz=357 | | | | | | |
| LSK | | | | S | **Sn** | **10 42 51.8** | **+2.3** |
| | baz=357 | | | | | | |
| LSK | | | | AMP | | | |
| | comp=E,7.6nm,0.7s,baz=357 | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.72** | **178** | P | **Pb** | **10 42 36.8** | **-0.8** |
| NYDR | | | | S | **Sg** | **10 42 47.8** | **+0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.72** | **178** | P | **Pb** | **10 42 37.5** | **-0.2** |
| NYDR | | | | S | **Sg** | **10 42 47.8** | **+0.3** |
| **KEK** | **Kerkira** | **0.73** | **293** | P | **Pb** | **10 42 37.9** | **+0.1** |
| **KEK** | **Kerkira** | **0.73** | **293** | P | **Pg** | **10 42 38.7** | **+0.6** |
| KEK | | | | AML | AML | 10 42 54.6 | |
| | comp=E,3093μm,0.2s | | | | | | |
| KEK | | | | AML | AML | 10 42 54.8 | |
| | comp=N,3664μm,0.3s | | | | | | |
| **KPRO** | **Kipourio** | **0.74** | **46** | P | **Pb** | **10 42 38.0** | **-0.1** |
| **KPRO** | **Kipourio** | **0.74** | **46** | P | **Pb** | **10 42 38.0** | **-0.1** |
| KPRO | | | | AML | AML | 10 42 53.1 | |
| | comp=N,1802μm,0.4s | | | | | | |
| KPRO | | | | AML | AML | 10 42 55.0 | |
| | comp=E,2859μm,0.5s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.75** | **186** | P | **Pb** | **10 42 37.8** | **-0.4** |
| DRAG | | | | S | **Sn** | **10 42 49.9** | **-0.4** |
| | comp=E,3μm,0.5s | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.75** | **186** | P | **Pb** | **10 42 38.0** | **-0.2** |
| **EVGI** | **Lefkada island** | **0.81** | **181** | P | **Pb** | **10 42 38.5** | **-0.7** |
| **PENT** | **Pentalofos** | **0.84** | **25** | P | **Pb** | **10 42 40.1** | **+0.4** |
| **FSK** | **Fiskardo** | **0.98** | **185** | P | **Pb** | **10 42 42.5** | **+0.5** |
| **FSK** | **Fiskardo** | **0.98** | **185** | P | **Pb** | **10 42 42.7** | **+0.6** |
| FSK | | | | AML | AML | 10 43 00.1 | |
| | comp=N,1778μm,0.4s | | | | | | |
| FSK | | | | AML | AML | 10 43 00.9 | |
| | comp=E,2765μm,0.4s | | | | | | |
| **NEST** | **Nestorio** | **1.02** | **16** | P | **Pb** | **10 42 43.5** | **+0.7** |
| NEST | | | | AML | AML | 10 43 06.0 | |
| | comp=E,2170μm,0.4s | | | | | | |
| NEST | | | | AML | AML | 10 43 07.9 | |
| | comp=N,1225μm,0.4s | | | | | | |
| **EVR** | **Evrytania** | **1.02** | **120** | P | **Pb** | **10 42 42.9** | **0.0** |
| **EVR** | **Evrytania** | **1.02** | **120** | P | **Pb** | **10 42 42.8** | **0.0** |
| **THL** | **Klokotos Trika** | **1.05** | **82** | P | **Pb** | **10 42 43.2** | **0.0** |
| **THL** | **Klokotos Trika** | **1.05** | **82** | P | **Pb** | **10 42 42.8** | **-0.4** |
| THL | | | | AML | AML | 10 43 03.7 | |
| | comp=N,461μm,0.6s | | | | | | |
| THL | | | | AML | AML | 10 43 04.7 | |
| | comp=E,716μm,0.7s | | | | | | |
| **KBN** | **Korca** | **1.19** | **4** | P | **Pg** | **10 42 48.5** | **+1.7** |
| | baz=3.0 | | | | | | |
| KBN | | | | S | **Sg** | **10 43 06.0** | **+3.6** |
| | baz=3.0 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,2.6nm,0.5s,baz=3.0 | | | | | | |
| **KEF4** | **Livadi, Kephal** | **1.19** | **189** | P | **Pb** | **10 42 46.4** | **+0.7** |
| **KEF4** | **Livadi, Kephal** | **1.19** | **189** | P | **Pb** | **10 42 46.3** | **+0.7** |
| **KZN** | **Kozani** | **1.21** | **44** | P | **Pb** | **10 42 46.9** | **+0.8** |
| KZN | | | | S | **Sg** | **10 43 06.1** | **+3.0** |
| | comp=N,708nm,0.7s | | | | | | |
| **KZN** | **Kozani** | **1.21** | **44** | P | **Pn** | **10 42 46.2** | **+0.5** |
| **DMLN** | **Damoulianata-K** | **1.22** | **191** | P | **Pb** | **10 42 46.6** | **+0.5** |
| DMLN | | | | S | **Sg** | **10 43 05.2** | **+2.0** |
| | comp=N,1μm,0.5s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.22** | **191** | P | **Pb** | **10 42 47.0** | **+0.8** |
| **KEF3** | **Kipouria, Keph** | **1.26** | **192** | P | **Pn** | **10 42 46.9** | **+0.7** |
| KEF3 | | | | S | **Sg** | **10 43 06.2** | **+1.8** |
| | comp=N,2μm,0.6s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **1.26** | **192** | P | **Pb** | **10 42 47.1** | **+0.3** |
| **VLS** | **Valsamata** | **1.26** | **183** | P | **Pn** | **10 42 46.5** | **+0.2** |
| VLS | | | | S | **Sg** | **10 43 04.9** | **+0.4** |
| | comp=N,795nm,0.4s | | | | | | |
| **VLS** | **Valsamata** | **1.26** | **183** | P | **Pb** | **10 42 47.1** | **+0.3** |
| **ANX** | **Ano Chora** | **1.28** | **130** | P | **Pb** | **10 42 48.5** | **+1.1** |
| **ANX** | **Ano Chora** | **1.28** | **130** | P | **Pn** | **10 42 47.6** | **+0.8** |
| **PSDA** | **Pessada-Kefalo** | **1.32** | **183** | P | **Pn** | **10 42 47.8** | **+0.7** |
| PSDA | | | | S | **Sg** | **10 43 08.4** | **+1.9** |
| **AGG** | **Agios Georgios** | **1.35** | **107** | P | **Pn** | **10 42 48.2** | **+0.6** |
| **AGG** | **Agios Georgios** | **1.35** | **107** | P | **Pn** | **10 42 48.6** | **+1.0** |
| **VLO** | **Vlora** | **1.37** | **319** | S | **Sg** | **10 43 11.0** | **+2.8** |
| | baz=323 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=E,5.4nm,0.5s,baz=323 | | | | | | |
| **FNA** | **Florina** | **1.45** | **22** | P | **Pb** | **10 42 50.6** | **+0.5** |
| **FNA** | **Florina** | **1.45** | **22** | P | **Pg** | **10 42 51.8** | **+0.1** |
| | baz=20 | | | | | | |
| FNA | | | | S | **Sg** | **10 43 13.4** | **+2.7** |
| | baz=20 | | | | | | |
| **KTI** | **Kastanea** | **1.47** | **49** | P | **Pb** | **10 42 51.4** | **+0.9** |
| **LIT** | **Litokhoron** | **1.55** | **64** | P | **Pb** | **10 42 52.1** | **+0.3** |
| LIT | | | | S | **Sg** | **10 43 14.8** | **+1.0** |
| | comp=E,428nm,0.6s | | | | | | |
| **LIT** | **Litokhoron** | **1.55** | **64** | P | **Pb** | **10 42 52.8** | **+0.9** |
| **OHR** | **Ohrid** | **1.68** | **3** | *i* Pn | **Pg** | **10 42 56.6** | **+0.6** |
| OHR | | | | *i* Sn | **Sg** | **10 43 20.9** | **+3.0** |
| **SCTE** | **Santa Cesarea** | **1.81** | **291** | P | **Pb** | **10 42 55.9** | **-0.4** |
| | baz=296 | | | | | | |
| **VAY** | **Valandovo** | **2.38** | **37** | *i* Pn | **Pb** | **10 43 05.2** | **-0.7** |
| VAY | | | | *i* Sn | **Sg** | **10 43 38.6** | **-1.6** |
| **SOH** | **Sokhos** | **2.48** | **55** | P | **Pn** | **10 43 06.2** | **+3.1** |
| SOH | | | | S | **Sb** | **10 43 37.6** | **-0.2** |
| | comp=E,170nm,0.6s | | | | | | |
| **STIP** | **Stip** | **2.54** | **27** | *i* Pn | **Pb** | **10 43 09.5** | **+0.9** |
| **BCI** | **Bajram Curri** | **2.96** | **351** | P | **Pb** | **10 43 13.9** | **-2.0** |
| | baz=352 | | | | | | |
| **DRME** | **Dracevica, Mon** | **2.97** | **338** | *e*Pn | **Pn** | **10 43 12.6** | **+2.7** |
| **PDG** | **Podgorica** | **3.18** | **341** | *e*Pn | **Pn** | **10 43 15.0** | **+2.3** |
| **HCY** | **Herceg Novi** | **3.43** | **332** | *e*Pn | Pn | 10 43 12.0 | -4.2 |
| **TREB** | **Trebinje** | **3.72** | **333** | *e*Pn | **Pn** | **10 43 20.5** | **+0.4** |
| **BRY** | **Bratogost** | **3.82** | **336** | *e*Pn | **Pn** | **10 43 23.1** | **+1.4** |
| **UPM** | **Unac-Piva** | **3.99** | **341** | *e*Pn | **Pn** | **10 43 26.3** | **+2.2** |
| **STON** | **Ston** | **4.10** | **328** | *e*Pn | **Pn** | **10 43 25.4** | **0.0** |
| **STON** | **Ston** | **4.10** | **328** | *e*Pn | **Pn** | **10 43 26.2** | **+0.8** |
| STON | | | | Sn | **Sn** | **10 44 07.7** | **-5.1** |
| **RUDO** | **Rudo** | **4.29** | **347** | *e*Pn | **Pg** | **10 43 44.4** | **-1.5** |
| **LSTV** | **Lastovo** | **4.39** | **321** | *e*Pn | **Pn** | **10 43 29.5** | **+0.2** |
| LSTV | | | | Sn | **Sn** | **10 44 15.1** | **-4.7** |
| **BBLS** | **Lazići** | **4.53** | **348** | *e*Pn | **Pb** | **10 43 40.5** | **-2.1** |
| **DIVS** | **Divibare** | **4.69** | **354** | *e*Pn | **Pn** | **10 43 34.1** | **+0.6** |
| **MAKA** | **Makarska** | **4.73** | **326** | *e*Pn | **Pn** | **10 43 34.8** | **+0.8** |
| MAKA | | | | Sn | **Sn** | **10 44 23.0** | **-5.3** |
| **RICI** | **Ricice** | **4.85** | **328** | *e*Pn | **Pn** | **10 43 36.3** | **+0.6** |
| RICI | | | | Sn | **Sn** | **10 44 26.6** | **-4.7** |
| **HVAR** | **Hvar** | **4.91** | **321** | *e*Pn | **Pn** | **10 43 37.6** | **+1.1** |
| HVAR | | | | Sn | **Sn** | **10 44 27.7** | **-5.0** |
| **KIJV** | **Kijevo** | **5.57** | **326** | *e*Pn | **Pn** | **10 43 46.8** | **+1.2** |
| KIJV | | | | Sn | **Sn** | **10 44 45.0** | **-4.1** |
| **MGRS** | **Mrkonjic Grad** | **5.65** | **333** | *e*Pn | Pn | 10 43 54.6 | +7.9 |
| **ZIRJ** | **Zirje** | **5.66** | **320** | *e*Pn | **Pn** | **10 43 47.3** | **+0.6** |
| ZIRJ | | | | Sn | **Sn** | **10 44 46.7** | **-4.4** |
| **FRGS** | **Fruska Gora** | **5.75** | **354** | *e*Pn | Pn | 10 43 42.6 | -5.5 |
| **MORI** | **Morici** | **5.78** | **322** | *e*Pn | **Pn** | **10 43 49.4** | **+1.0** |
| MORI | | | | Sn | **Sn** | **10 44 49.0** | **-5.2** |
| **BLY** | **Banja Luka** | **5.91** | **335** | *e*Pn | **Pn** | **10 43 49.0** | **-1.2** |
| **DUGI** | **Dugi Otok** | **6.19** | **319** | *e*Pn | **Pn** | **10 43 55.3** | **+1.2** |
| DUGI | | | | Sn | Sn | 10 44 57.7 | -6.7 |
| **MRAK** | **Mrakovica** | **6.24** | **335** | *e*Pn | **Pn** | **10 43 55.6** | **+0.8** |
| **UDBI** | **Udbina** | **6.27** | **326** | *e*Pn | **Pn** | **10 43 57.3** | **+2.2** |
| **NVLJ** | **Novalja** | **6.70** | **322** | *e*Pn | **Pn** | **10 44 02.4** | **+1.3** |
| **A250A** | **Rusevo Krmpots** | **7.08** | **325** | *e*Pn | **Pn** | **10 44 07.5** | **+1.2** |
| **CRES** | **Cresnjev** | **7.45** | **331** | *e*Pn | **Pn** | **10 44 10.8** | **-0.6** |
| **BRJN** | **Brijuni** | **7.50** | **319** | *e*Pn | **Pn** | **10 44 11.8** | **-0.3** |
| BRJN | | | | Sn | Sn | 10 45 26.4 | -10 |
| **CEY** | **Cerknica** | **7.80** | **326** | *e*Pn | **Pn** | **10 44 16.1** | **-0.1** |
| **SKDS** | **Skadanscina** | **7.84** | **323** | *e*Pn | **Pn** | **10 44 19.1** | **+2.4** |
| **SOKA** | **Soboth** | **8.33** | **332** | *e*Pn | **Pn** | **10 44 24.4** | **+0.9** |
| | comp=E,0.2nm,0.2s | | | | | | |
| SOKA | | | | *e*Sn | **Sn** | **10 45 52.5** | **-4.6** |
| | comp=E,1.1nm,0.4s | | | | | | |
| **OBKA** | **Obir** | **8.37** | **330** | *e*Pn | **Pn** | **10 44 25.0** | **+0.9** |
| | comp=E,0.4nm,0.2s | | | | | | |
| OBKA | | | | *e*Sn | **Sn** | **10 45 58.0** | **-0.2** |
| | comp=E,1.6nm,0.4s | | | | | | |
| **GERES** | **GERESS Array B** | **10.65** | **334** | Pn | **Pn** | **10 44 54.0** | **-1.3** |
| | comp=E,0.0nm,0.3s,baz=172,slow=14,SNR=1.5 | | | | | | |
| GERES | | | | Sn | **Sn** | **10 46 52.2** | **-1.9** |
| | comp=E,0.2nm,0.3s,baz=131,slow=34,SNR=1.6 | | | | | | |
| **FINES** | **FINESS Array B** | **22.29** | **7** | P | **P** | **10 47 20.4** | **+0.9** |
| | comp=E,2.0nm,0.8s,baz=182,slow=11,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.09** | **218** | P | **P** | **10 48 41.5** | **+0.6** |
| | comp=E,0.3nm,0.5s,baz=35,slow=9.5,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.55** | **59** | P | **P** | **10 50 33.1** | **-1.2** |
| | comp=E,0.4nm,0.5s,baz=285,slow=8.3,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.77** | **49** | P | **P** | **10 50 35.9** | **+0.1** |
| | comp=E,0.7nm,0.4s,baz=266,slow=6.6,SNR=3.7 | | | | | | |

*IDC **21** 11:03:42.1±0.6,11˚.22N×140˚.12E,h0km,mb4.4/17, mb1 4.6/18,mb1mx4.4/35,mbtmp4.4/18,ML3.9/1,MS3.8/44, Ms1 3.8/44,ms1mx3.7/78,Error ellipse: s-maj=25.8km s-min=12.8km az=82.0*
*BJI **21** 11:03:43.2±0.0,10˚.94N×140˚.21E,h27km,mb4.5/47, mB5.0/21,Ms4.6/5,Ms7 4.3/5*
*GCMT **21** 11:03:47.0±0.4,11˚.02N±0˚.03×139˚.73E±0˚.07,h19km±1km, MW4.8/74,Moment Tensor Solution. s17,c18; s74,c87; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr2.29±.22; Mθθ-1.93±.14; Mϕϕ-0.35±.14; Mrθ0.43±.27; Mrϕ0.06±.10; Mθϕ0.00±.45; Best double couple: Mo2.15500×10^16 NP1:ϕ273.00000°,δ39.00000°,λ91.00000°. NP2: ϕ92.00000°,δ51.00000°,λ90.00000°. Principal axes: T 2.3340, Plg84.0000°, Azm358.0000°; N -0.3520, Plg0.0000°, Azm92.0000°; P -1.9770, Plg6.0000°, Azm182.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **21** 11:03:50.1±1.7,11˚.2N±0˚.1×140˚.1E±0˚.1,h50km±7km, mb4.7/65 Error ellipse: s-maj=17.4km s-min=14.0km az=118.0*
*DJA **21** 11:03:51.6±1.6,11˚N±6˚×14˚0E±˚,h63km±15km,M4.8/19, mB5.5/4,mb4.7/19,Mw(mB)5.0/4*

**ISC 21 11:03:48.6±0.4,11˚.18N±0˚.05×139˚.95E±0˚.07,h38km,n166, σ1§36/134,mb4.7/65,MS3.8/41,2C-3D,Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.37** | **63** | Pn | **Pn** | **11 05 09.5** | **+3.3** |
| | 10nm,0.3s,baz=217,slow=6.0,SNR=4.2 | | | | | | |
| GUMO | | | | Sn | **Sn** | **11 06 10.3** | **+3.4** |
| | 7.1nm,0.3s,baz=226,slow=18,SNR=1.4 | | | | | | |
| GUMO | | | | LR | LR | 11 06 59.5 | |
| | comp=Z,853nm,19.3s,baz=256,slow=38 | | | | | | |
| **GUMO** | **Guam** | **5.37** | **63** | | **Pn** | **11 05 05.7** | **-0.6** |
| **JAY** | **Jayapura** | **13.62** | **177** | Pn | **Pn** | **11 06 57.0** | **-2.5** |
| | 0.6nm,0.3s,baz=356,slow=12,SNR=3.0 | | | | | | |
| JAY | | | | LR | LR | 11 11 27.4 | |
| | comp=Z,360nm,18.4s,baz=9.0,slow=34 | | | | | | |
| **GENI** | **Genyem** | **13.68** | **179** | P | **Pn** | **11 07 02.5** | **+2.3** |
| | 69nm,0.8s | | | | | | |
| **GENI** | **Genyem** | **13.68** | **179** | P | **Pn** | **11 07 01.7** | **+1.5** |
| **SIJI** | **Sorong** | **14.76** | **216** | LR | LR | 11 11 47.3 | |
| | comp=Z,257nm,18.6s,baz=244,slow=33 | | | | | | |
| **FAKI** | **Fak Fak** | **15.96** | **209** | | **P** | **11 07 33.8** | **+0.2** |
| **FAKI** | **Fak Fak** | **15.96** | **209** | P | **Pn** | **11 07 31.7** | **+1.2** |
| **FAKI** | **Fak Fak** | **15.96** | **209** | P | **Pn** | **11 07 30.9** | **+0.4** |
| **JOW** | **Kunigami** | **19.06** | **326** | LR | LR | 11 13 43.6 | |
| | comp=Z,215nm,20.6s,baz=126,slow=31 | | | | | | |
| **MRSI** | **Marisa** | **20.81** | **240** | P | **P** | **11 08 27.1** | **+0.2** |
| | 1um57nm,1.8s | | | | | | |
| **LUWI** | **Luwuk** | **20.95** | **236** | P | **P** | **11 08 28.7** | **+0.2** |
| **LUWI** | **Luwuk** | **20.95** | **236** | P | **P** | **11 08 27.9** | **-0.5** |
| | 2um140nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **20.95** | **236** | P | **P** | **11 08 28.0** | **-0.5** |
| **PMG** | **Port Moresby** | **21.67** | **160** | P | **P** | **11 08 34.9** | **-1.2** |
| | 7.9nm,0.7s,baz=247,slow=7.7,SNR=2.0 | | | | | | |
| PMG | | | | LR | LR | 11 16 32.3 | |
| | comp=Z,117nm,20.5s,baz=330,slow=36 | | | | | | |
| **PMG** | **Port Moresby** | **21.67** | **160** | P | **P** | **11 08 38.5** | **+2.4** |
| **PMG** | **Port Moresby** | **21.67** | **160** | P | **P** | **11 08 38.6** | **+2.4** |
| **APSI** | **Ampana** | **21.80** | **238** | P | **P** | **11 08 40.1** | **+2.6** |
| | 63m33nm,1.2s | | | | | | |
| **SSLB** | **Suanglung** | **22.00** | **307** | P | **P** | **11 08 41.8** | **+2.1** |
| SSLB | | | | IAmb | IAmb | 11 08 46.6 | |
| | comp=Z,64nm,1.3s | | | | | | |
| **TTSI** | **Tana Toraja** | **24.51** | **236** | P | **P** | **11 09 04.6** | **0.0** |
| | comp=Z,19nm,1.2s | | | | | | |
| **KDU** | **Kakadu** | **24.84** | **198** | P | **P** | **11 09 07.4** | **-0.2** |
| **BNSI** | **Bone** | **25.09** | **233** | P | **P** | **11 09 08.4** | **-1.4** |
| | comp=Z,24nm,1.2s | | | | | | |
| **COEN** | **Coen** | **25.18** | **173** | P | **P** | **11 09 10.6** | **0.0** |
| COEN | | | | IAmb | IAmb | 11 09 15.7 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **COEN** | **Coen** | **25.18** | **173** | P | **P** | **11 09 11.5** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **25.30** | **357** | P | **P** | **11 09 09.1** | **-2.5** |
| | comp=Z,2.8nm,0.7s,baz=174,slow=9.0,SNR=5.7 | | | | | | |
| **MAJO** | **Matsushiro** | **25.30** | **357** | P | P | 11 09 22.8 | +11 |
| **MAT** | **Matsushiro** | **25.30** | **357** | P | **P** | **11 09 10.4** | **-1.2** |
| **BKSI** | **Bulukumba** | **25.65** | **231** | P | **P** | **11 09 18.8** | **+3.8** |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **26.58** | **1** | P | **P** | **11 09 25.2** | **+2.0** |
| **BATI** | **Baumata** | **26.71** | **218** | LR | LR | 11 18 37.3 | |
| | comp=Z,166nm,21.1s,baz=82,slow=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.29** | **69** | T | T | 11 38 30.8 | |
| | baz=254,slow=75,SNR=12 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.30** | **69** | T | T | 11 38 28.2 | |
| | baz=254,slow=75,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.31** | **69** | T | T | 11 38 25.5 | |
| | baz=254,slow=75,SNR=10 | | | | | | |
| **KSRS** | **Korea Array** | **28.31** | **340** | P | **P** | **11 09 37.5** | **-1.1** |
| | comp=Z,0.8nm,0.7s,baz=159,slow=11,SNR=2.4 | | | | | | |
| KSRS | | | | LR | LR | 11 20 21.4 | |
| | comp=Z,202nm,18.1s,baz=150,slow=35 | | | | | | |
| **NJ2** | **Nanjing** | **28.46** | **320** | *e*P | **P** | **11 09 42.1** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **HNR** | **Honiara** | **28.55** | **135** | LR | LR | 11 21 06.2 | |
| | comp=Z,100nm,19.1s,baz=140,slow=37 | | | | | | |
| **KNRA** | **Kununurra** | **28.89** | **203** | P | **P** | **11 09 43.8** | **-0.1** |
| **KNRA** | **Kununurra** | **28.89** | **203** | P | **P** | **11 09 42.7** | **-1.3** |
| **WHN** | **Wuhan** | **30.58** | **313** | ⇓P | P | 11 10 08.9 | +10 |
| **WB0** | **Warramunga Arr** | **31.23** | **190** | P | **P** | **11 10 03.6** | **-1.1** |
| **WR0** | **Warramunga Arr** | **31.40** | **190** | P | **P** | **11 10 05.2** | **-0.9** |
| **WRAB** | **Tennant Creek** | **31.40** | **190** | P | **P** | **11 10 04.9** | **-1.3** |
| **WRAB** | **Tennant Creek** | **31.40** | **190** | P | **P** | **11 10 05.3** | **-0.9** |
| **WB2** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 10 05.3** | **-1.0** |
| **WRA** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 10 04.4** | **-1.9** |
| | comp=Z,3.0nm,0.6s,baz=5.7,slow=9.9,SNR=26 | | | | | | |
| WRA | | | | LR | LR | 11 23 02.6 | |
| | comp=Z,247nm,18.8s,baz=0.5,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 10 05.2** | **-1.1** |
| **QIS** | **Mount Isa** | **31.54** | **181** | P | **P** | **11 10 07.9** | **+0.5** |
| **CTA** | **Charters Tower** | **31.68** | **169** | LR | LR | 11 22 23.6 | |
| | comp=Z,113nm,18.7s,baz=346,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.34** | **206** | P | **P** | **11 10 15.2** | **+0.8** |
| **ASAJ** | **Asahikawa** | **32.90** | **4** | LR | LR | 11 23 43.9 | |
| | comp=Z,64nm,19.3s,baz=193,slow=37 | | | | | | |
| **USRK** | **Ussurisk Ar.** | **33.61** | **350** | LR | | 11 21 54.5 | |
| | comp=Z,155nm,20.1s,baz=158,slow=32 | | | | | | |
| **HNS** | **HongShan** | **34.58** | **323** | ⇑P | **P** | **11 10 33.6** | **-0.2** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 10 38.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 10 38.1** | **-0.6** |
| | comp=Z,2.8nm,0.8s,baz=15,slow=12,SNR=39 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 13 10.1** | **+0.4** |
| | comp=Z,1.0nm,1.0s,baz=15,slow=3.9,SNR=2.5 | | | | | | |
| ASAR | | | | LR | LR | 11 25 01.6 | |
| | comp=Z,150nm,18.5s,baz=34,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 10 39.1** | **+0.4** |
| **BJT** | **Baijiatuan** | **35.61** | **328** | P | **P** | **11 10 43.5** | **+0.8** |
| BJT | | | | IAmb | IAmb | 11 10 48.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BJI** | **Beijing** | **35.62** | **328** | P | **P** | **11 10 42.8** | **+0.1** |
| BJI | | | | pP | **pP** | **11 10 53.3** | **+0.8** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **BNX** | **BinXian** | **36.07** | **345** | ⇑P | **P** | **11 10 47.3** | **+0.8** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,370nm,4.7s | | | | | | |
| **XAN** | **Xi'an** | **36.33** | **314** | P | **P** | **11 10 48.4** | **-0.6** |
| XAN | | | | pP | pP | 11 11 00.3 | +1.4 |
| XAN | | | | sP | pwP | 11 11 03.3 | +0.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **LEM** | **Lembang** | **36.81** | **242** | LR | LR | 11 27 09.6 | |
| | comp=Z,64nm,19.8s,baz=78,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **38.54** | **351** | P | **P** | **11 11 07.4** | **0.0** |
| | comp=Z,20nm,0.9s,baz=160,slow=6.3,SNR=42 | | | | | | |
| KLR | | | | LR | LR | 11 24 13.0 | |
| | comp=Z,80nm,21.5s,baz=168,slow=32 | | | | | | |
| **XLT** | **XiLinHaoTe** | **38.58** | **332** | ⇓*i*P | **P** | **11 11 08.3** | **+0.4** |
| XLT | | | | pP | sP | 11 11 22.6 | +0.8 |
| XLT | | | | S | **S** | **11 17 02.9** | **+1.4** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,240nm,4.5s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,21nm,11.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,180nm,14.4s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,200nm,14.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **38.70** | **325** | *e*P | **P** | **11 11 11.3** | **+2.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,5.0s | | | | | | |
| **CD2** | **Chengdu** | **38.82** | **306** | *e*P | **P** | **11 11 11.0** | **+0.9** |
| **PZH** | **PanZhiHua** | **39.06** | **298** | P | **P** | **11 11 09.6** | **-2.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.1s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **40.22** | **285** | P | **P** | **11 11 23.4** | **+1.5** |
| CM31 | | | | IAmb | IAmb | 11 11 28.1 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.22** | **285** | P | **P** | **11 11 22.5** | **+0.6** |
| | comp=Z,7.1nm,0.9s,baz=90,slow=6.4,SNR=29 | | | | | | |
| CMAR | | | | LR | LR | 11 28 17.1 | |
| | comp=Z,43nm,18.6s,baz=295,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.22** | **285** | P | **P** | **11 11 22.6** | **+0.7** |
| **CHTO** | **Chiang Mai** | **40.25** | **286** | P | **P** | **11 11 22.5** | **+0.4** |
| **DZM** | **Mont Dzumac** | **42.04** | **142** | LR | LR | 11 29 15.5 | |
| | comp=Z,57nm,18.5s,baz=300,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **42.04** | **142** | *e*S | **S** | **11 17 54.0** | **+0.3** |
| | comp=Z,94nm,29.5s | | | | | | |
| DZM | | | | *e*LR | LR | 11 23 15.3 | |
| | comp=Z,212nm,23.1s | | | | | | |
| **STKA** | **Stephens Creek** | **42.84** | **178** | P | **P** | **11 11 42.4** | **-0.7** |
| | comp=Z,4.0nm,0.9s,baz=359,slow=9.5,SNR=7.4 | | | | | | |
| STKA | | | | LR | LR | 11 29 17.4 | |
| | comp=Z,136nm,21.0s,baz=26,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **42.84** | **178** | P | **P** | **11 11 44.0** | **+1.0** |
| **FORT** | **Forrest** | **43.25** | **195** | P | **P** | **11 11 46.4** | **0.0** |
| FORT | | | | IAmb | IAmb

comp=Z,5.6nm,0.9s
**NRIK Noril'sk 66.88 342** P **P** **11 14 34.7 -1.7**
comp=Z,3.5nm,1.1s,baz=129,slow=6.9,SNR=5.4
NRIK LR LR 11 43 54.9
comp=Z,114nm,18.2s,baz=322,slow=36
**NRIK Noril'sk 66.88 342** P **P** **11 14 37.0 +0.5**
**GAR Garm 67.24 308** P **P** **11 14 39.0 -0.6**
GAR IAmb IAmb 11 14 44.0
comp=Z,17nm,1.3s
**KKAR Karatay Array 67.44 312** P **P** **11 14 40.5 -0.1**
**CHGR Chuyangaron 68.12 307** P **P** **11 14 45.1 +0.1**
**KDAK Kodiak Island 68.65 32** LR LR 11 44 49.1
comp=Z,34nm,19.0s,baz=261,slow=36
**BRVK Borovoye 68.94 323** P **P** **11 14 49.5 -0.2**
BRVK IAmb IAmb 11 14 54.1
comp=Z,6.5nm,0.8s
**K20K Telida 69.39 26** P **P** **11 14 52.7 +0.4**
K20K IAmb IAmb 11 14 57.2
comp=Z,7.1nm,0.8s
**J20K Nowinta River 69.60 25** P **P** **11 14 54.2 +0.6**
J20K IAmb IAmb 11 14 58.5
comp=Z,7.4nm,0.8s
**CAST Castle Rocks 70.27 26** P **P** **11 14 57.3 -0.4**
CAST IAmb IAmb 11 15 02.3
comp=Z,11nm,0.8s
**IMAR Indian Mountai 70.30 23** P **P** **11 14 58.0 +0.2**
**H21K Melozitna Rive 70.57 24** P **P** **11 15 00.0 +0.4**
H21K IAmb IAmb 11 15 00.7
comp=Z,9.6nm,0.9s
**I21K Tanana 70.77 24** P **P** **11 15 00.8 +0.1**
I21K IAmb IAmb 11 15 06.0
comp=Z,14nm,1.1s
**I23K Minto, Yukon-K 71.84 25** P **P** **11 15 07.0 -0.2**
I23K IAmb IAmb 11 15 11.7
comp=Z,14nm,0.9s
**H23K Yukon River 71.92 24** P **P** **11 15 07.5 -0.2**
H23K IAmb IAmb 11 15 08.9
comp=Z,10nm,0.9s
**COLD Coldfoot 72.00 23** P **P** **11 15 08.2 0.0**
COLD IAmb IAmb 11 15 13.5
comp=Z,11nm,0.9s
**TOLK Toolik Lake Re 72.58 21** P **P** **11 15 11.8 +0.2**
TOLK IAmb IAmb 11 15 16.6
comp=Z,7.4nm,0.8s
**H24K Noodor Dome 72.59 24** P **P** **11 15 12.0 +0.2**
H24K IAmb IAmb 11 15 12.8
comp=Z,19nm,1.4s
**IL31 72.79 25** P **P** **11 15 11.2 -1.6**
IL31 IAmb IAmb 11 15 12.0
comp=Z,5.4nm,0.7s
**ILAR Eielson Array 72.79 25** P **P** **11 15 11.2 -1.7**
comp=Z,4.1nm,0.7s,baz=248,slow=6.1,SNR=52
ILAR LR LR 11 45 09.8
comp=Z,45nm,20.1s,baz=286,slow=34
**ILAR Eielson Array 72.79 25** P **P** **11 15 11.8 -1.2**
**PAX Paxson 73.11 27** P **P** **11 15 14.4 -0.5**
PAX IAmb IAmb 11 15 20.5
comp=Z,12nm,1.1s
**DOT Dot Lake 73.84 27** P **P** **11 15 17.2 -1.9**
**L26K Log Cabin Wild 74.08 27** P **P** **11 15 22.0 +1.4**
L26K IAmb IAmb 11 15 24.9
comp=Z,9.7nm,0.9s
**BMAR Burnt Mountain 74.17 23** P **P** **11 15 21.6 +0.5**
**BCAR Beaver Creek A 74.79 28** P **P** **11 15 24.6 -0.1**
**ABKAR Akbulak array 75.10 318** P **P** **11 15 29.8 +3.1**
**EGAK Eagle 75.22 26** P **P** **11 15 26.9 -0.2**
**ARU Arti 76.00 326** LR LR 11 51 18.1
comp=Z,206nm,18.1s,baz=97,slow=38
**AKTO Aktyubinsk 76.34 319** LR LR 11 51 15.0
comp=Z,119nm,19.0s,baz=338,slow=37
**HYT Haines Junctio 76.69 30** P **P** **11 15 34.4 -1.3**
**INK Inuvik 78.41 22** LR LR 11 51 15.3
comp=Z,21nm,19.0s,baz=52,slow=36
**KIRV Kirov 80.83 328** LR LR 11 56 11.7
comp=Z,187nm,18.0s,baz=304,slow=39
**A36M Sachs Harbour 80.94 18** P **P** **11 15 55.5 -3.1**
A36M IAmb IAmb 11 16 02.7
comp=Z,8.5nm,0.8s
**SPITS Spitsbergen Ar 85.61 350** LR LR 11 56 04.7
comp=Z,130nm,18.5s,baz=112,slow=37
**YKA Yellowknife Ar 87.18 27** P **P** **11 16 30.3 -0.3**
comp=Z,6.6nm,0.8s,baz=291,slow=5.2,SNR=54
**YKA Yellowknife Ar 87.18 27** P **P** **11 16 30.0 -0.6**
**ARCES ARCESS Array B 87.85 341** P **P** **11 16 32.2 -1.5**
comp=Z,5.9nm,0.9s,baz=64,slow=5.6,SNR=6.5
ARCES LR LR 11 59 42.8
comp=Z,164nm,19.1s,baz=243,slow=38
**ARCES ARCESS Array B 87.85 341** P **P** **11 16 31.6 -2.1**
**YBH Yreka Blue Hor 88.06 48** LR LR 11 47 16.8
comp=Z,41nm,20.4s,baz=303,slow=30
**PINE Pine Mountain 88.84 46** P **P** **11 16 38.4 -0.8**
**VNDA Vanda 89.42 175** LR LR 11 55 57.0
comp=Z,96nm,18.2s,baz=302,slow=35
**ORV Oroville 89.47 50** P **P** **11 16 41.4 -0.6**
**NEW Newport 90.20 41** LR LR 11 49 29.7
comp=Z,53nm,20.0s,baz=350,slow=30
**BEKR Beckworth 90.24 49** P **P** **11 16 43.3 -2.5**
**MPK Martis Peak 90.63 50** P **P** **11 16 44.5 -3.3**
**CMB Columbia Colle 90.68 51** P **P** **11 16 45.8 -2.0**
**FINES FINESS Array B 91.25 334** P **P** **11 16 47.6 -2.1**
comp=Z,1.7nm,0.8s,baz=45,slow=3.0,SNR=3.3
**FINES FINESS Array B 91.25 334** P **P** **11 16 48.3 -1.5**
**NVAR Mina Array Bea 92.16 50** P **P** **11 16 53.4 -1.4**
comp=Z,2.3nm,0.9s,baz=267,slow=5.5,SNR=11
**NVAR Mina Array Bea 92.16 50** P **P** **11 16 53.2 -1.7**
**MFID Camas Ranch 92.51 45** P **P** **11 16 55.2 -1.0**
MFID IAmb IAmb 11 16 57.6
comp=Z,5.9nm,1.1s
**AKASG Malin Array Be 94.14 323** LR LR 12 02 10.8
comp=Z,120nm,18.1s,baz=354,slow=37
**MAW Mawson 95.38 202** LR LR 12 00 13.5
comp=Z,99nm,18.1s,baz=60,slow=36
**PDAR Pinedale Array 97.05 44** LR LR 12 01 23.5
comp=Z,44nm,18.2s,baz=21,slow=36
**NOA NORSAR Array B 97.50 337** LR LR 12 03 15.2
comp=Z,104nm,18.4s,baz=345,slow=37
**CLL Collm 102.72 329** *e*PP **PP** **11 21 56.0 +0.8**
**TORD Torodi Ar. Bea 132.04 299** PKP **PKiKP** **11 23 00.5 +0.3**
comp=Z,0.2nm,0.6s,baz=50,slow=2.0,SNR=1.3
**LPAZ La Paz 152.27 104** PKPbc **PKPbc** **11 23 42.1 0.0**
comp=Z,1.9nm,0.7s,baz=248,slow=1.5,SNR=7.0
**LPAZ La Paz 152.27 104** PKPdf **PKPdf** **11 23 31.0 -4.3**
LPAZ **PKiKP** **11 23 42.4 0.0**

*IDC **21** 11:08:14.0±0.9, 11°.10N×140°.16E, h0km, mb3.7/9, mb1 4.0/9, mb1mx3.8/35, mbtmp3.7/9, Error ellipse: s-maj=34.8km s-min=20.5km az=95.0*
**ISC 21 11:08:19.7±0.9, 11°.1N±0°.1×140°.1E±0°.2, h38km, n12, σ1s08/9, mb3.7/9, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11N1** | **WAKE ISLAND Hy** | **27.23** | **68** | T | T | 11 42 58.7 | |
| | baz=255 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.23** | **68** | T | T | 11 43 00.5 | |
| | baz=255 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.24** | **68** | T | T | 11 43 05.9 | |
| | baz=255 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.32** | **190** | P | **P** | **11 14 35.2** | **-1.4** |
| | 0.3nm,0.7s,baz=2.9,slow=9.7,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **35.04** | **190** | P | **P** | **11 15 10.0** | **+1.0** |
| | 0.4nm,0.4s,baz=23,slow=11,SNR=8.8 | | | | | | |
| **KLR** | **Kul'dur** | **38.67** | **351** | P | **P** | **11 15 39.6** | **0.0** |
| | 2.3nm,0.6s,baz=196,slow=4.6,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.37** | **285** | P | **P** | **11 15 54.2** | **0.0** |
| | 0.4nm,0.3s,baz=113,slow=4.6,SNR=2.2 | | | | | | |
| **SONM** | **Songino Array** | **46.27** | **329** | P | **P** | **11 16 41.0** | **-0.6** |
| | 0.7nm,0.6s,baz=152,slow=6.5,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.12** | **318** | P | **P** | **11 18 24.2** | **+0.8** |
| | 0.3nm,0.6s,baz=104,slow=9.1,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **72.85** | **25** | P | **P** | **11 19 43.0** | **-1.4** |
| | 0.7nm,0.5s,baz=245,slow=6.3,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.23** | **27** | P | **P** | **11 21 02.2** | **+0.3** |
| | 0.8nm,0.8s,baz=293,slow=5.1,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.15** | **50** | P | **P** | **11 21 26.9** | **+1.1** |
| | 0.2nm,0.7s,baz=255,slow=7.1,SNR=1.8 | | | | | | |

*IDC **21** 11:24:39.3±0.8, 11°.21N×140°.07E, h0km, mb4.2/11, mb1 4.4/11, mb1mx4.1/33, mbtmp4.2/11, MS3.5/15, Ms1 3.5/15, ms1mx3.2/79, Error ellipse: s-maj=27.1km s-min=19.6km az=87.0*
*NEIC **21** 11:24:45.5±1.2, 11°.2N±0°.1×140°.0E±0°.1, h35km±2km, mb4.5/33, Error ellipse: s-maj=22.7km s-min=17.5km az=101.0*
**ISC 21 11:24:45.2±0.5, 11°.18N±0°.09×139°.92E±0°.08, h38km, n70, σ0s78/56, mb4.4/27, MS3.4/13, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.39** | **63** | Pn | **Pn** | **11 26 05.4** | **+2.3** |
| | 4.4nm,0.3s,baz=122,slow=6.0,SNR=2.5 | | | | | | |
| GUMO | | | | Sn | **Sn** | **11 27 02.0** | **-1.9** |
| | 5.7nm,0.3s,baz=58,slow=22,SNR=1.0 | | | | | | |
| **JAY** | **Jayapura** | **13.63** | **177** | LR | LR | 11 32 15.1 | |
| | comp=Z,156nm,19.2s,baz=340,slow=33 | | | | | | |
| **FAKI** | **Fak Fak** | **15.95** | **209** | Pn | **P** | **11 28 28.5** | **-1.6** |
| **TNTI** | **Ternate** | **16.20** | **231** | P | **P** | **11 28 33.5** | **+0.6** |
| TNTI | | | | IAmb | IAmb | 11 28 43.2 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **JOW** | **Kunigami** | **19.05** | **326** | LR | LR | 11 35 27.6 | |
| | comp=Z,64nm,21.3s,baz=312,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **21.68** | **160** | LR | LR | 11 37 19.1 | |
| | comp=Z,134nm,20.0s,baz=339,slow=35 | | | | | | |
| **COEN** | **Coen** | **25.18** | **173** | P | **P** | **11 30 08.3** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **25.30** | **357** | LR | LR | 11 38 57.7 | |
| | comp=Z,92nm,18.1s,baz=162,slow=34 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.31** | **69** | T | T | 11 59 09.1 | |
| | baz=254,slow=75,SNR=9.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.32** | **69** | T | T | 11 59 09.9 | |
| | baz=254,slow=75,SNR=10.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.33** | **69** | T | T | 11 59 10.5 | |
| | baz=254,slow=75,SNR=6.1 | | | | | | |
| **KSRS** | **Korea Array** | **28.30** | **340** | LR | LR | 11 40 02.1 | |
| | comp=Z,46nm,21.5s,baz=150,slow=33 | | | | | | |
| **KNRA** | **Kununurra** | **28.88** | **203** | P | **P** | **11 30 40.8** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 11 30 46.0 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.23** | **190** | P | **P** | **11 31 01.2** | **-0.1** |
| **WR0** | **Warramunga Arr** | **31.39** | **190** | P | **P** | **11 31 02.7** | **-0.1** |
| **WRAB** | **Tennant Creek** | **31.40** | **190** | P | **P** | **11 31 03.0** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 11 31 11.0 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 31 02.6** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 11 31 03.1 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 31 01.9** | **-1.0** |
| | comp=Z,0.7nm,0.9s,baz=6.3,slow=9.7,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 11 44 00.1 | |
| | comp=Z,130nm,18.7s,baz=24,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **190** | P | **P** | **11 31 02.2** | **-0.7** |
| **CTA** | **Charters Tower** | **31.69** | **169** | LR | LR | 11 43 53.5 | |
| | comp=Z,71nm,18.2s,baz=358,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.33** | **206** | LR | LR | 11 45 29.2 | |
| | comp=Z,29nm,19.5s,baz=28,slow=39 | | | | | | |
| **ENH** | **Enshi** | **34.05** | **308** | P | **P** | **11 31 25.9** | **-0.2** |
| **AS31** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 31 34.6** | **-0.7** |
| **ASAR** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 31 35.0** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=21,slow=11,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 11 46 08.8 | |
| | comp=Z,86nm,18.3s,baz=42,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **35.13** | **190** | P | **P** | **11 31 34.8** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **40.20** | **285** | P | **P** | **11 32 20.2** | **+1.9** |
| | comp=Z,3.2nm,0.7s,baz=89,slow=6.7,SNR=16 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.20** | **285** | P | **P** | **11 32 19.4** | **+1.1** |
| **CHTO** | **Chiang Mai** | **40.23** | **286** | P | **P** | **11 32 18.4** | **-0.2** |
| **DZM** | **Mont Dzumac** | **42.06** | **142** | LR | LR | 11 50 22.4 | |
| | comp=Z,47nm,18.1s,baz=53,slow=37 | | | | | | |
| **PETK** | **Petropavlovsk-** | **44.19** | **15** | LR | LR | 11 49 10.1 | |
| | comp=Z,33nm,19.4s,baz=227,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **46.10** | **329** | P | **P** | **11 33 05.1** | **-0.6** |
| | comp=Z,1.1nm,0.6s,baz=153,slow=6.9,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **46.10** | **329** | P | **P** | **11 33 05.9** | **+0.2** |
| **MORW** | **Morawa** | **46.18** | **209** | P | **P** | **11 33 06.5** | **+0.1** |
| MORW | | | | IAmb | IAmb | 11 33 24.9 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **MA2** | **Magadan** | **48.98** | **7** | LR | LR | 11 56 23.2 | |
| | comp=Z,28nm,18.5s,baz=256,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **51.31** | **354** | P | **P** | **11 33 45.2** | **-0.2** |
| **MK31** | **Makanchi Array** | **59.94** | **318** | P | **P** | **11 34 48.1** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 11 34 49.3 | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.94** | **318** | P | **P** | **11 34 47.9** | **+0.2** |
| | comp=Z,1.7nm,0.8s,baz=97,slow=9.9,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.94** | **318** | P | **P** | **11 34 48.6** | **+0.9** |
| **MAKZ** | **Makanchi** | **60.15** | **318** | P | **P** | **11 34 49.2** | **+0.1** |
| MAKZ | | | | IAmb | IAmb | 11 34 50.2 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **60.84** | **326** | P | **P** | **11 34 53.9** | **+0.2** |
| ZAA0 | | | | IAmb | IAmb | 11 34 54.3 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.84** | **326** | P | **P** | **11 34 53.7** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=72,slow=5.3,SNR=6.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.84** | **326** | P | **P** | **11 34 53.2** | **-0.4** |
| **XMAS** | **Kiritimati** | **62.76** | **93** | P | **P** | **11 35 06.5** | **-0.8** |
| **KURK** | **Kurchatov** | **63.37** | **321** | P | **P** | **11 35 10.4** | **-0.3** |
| KURK | | | | IAmb | IAmb | 11 35 11.7 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **NRIK** | **Noril'sk** | **66.88** | **342** | LR | LR | 12 04 17.6 | |
| | comp=Z,151nm,19.6s,baz=313,slow=36 | | | | | | |
| **BRVK** | **Borovoye** | **68.92** | **323** | P | **P** | **11 35 45.8** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 11 35 46.9 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **70.31** | **23** | P | **P** | **11 35 54.3** | **-0.2** |
| **H21K** | **Melozitna Rive** | **70.58** | **24** | P | **P** | **11 35 56.7** | **+0.4** |
| H21K | | | | IAmb | IAmb | 11 35 57.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **RC01** | **Rabbit Creek A** | **70.81** | **29** | P | **P** | **11 35 57.6** | **-0.1** |
| **SML** | **Sawmill** | **71.61** | **28** | P | **P** | **11 36 02.8** | **+0.2** |
| **H23K** | **Yukon River** | **71.93** | **24** | P | **P** | **11 36 04.9** | **+0.5** |
| H23K | | | | IAmb | IAmb | 11 36 05.7 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **72.59** | **21** | P | **P** | **11 36 08.8** | **+0.5** |
| TOLK | | | | IAmb | IAmb | 11 36 09.6 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **72.67** | **28** | P | **P** | **11 36 09.5** | **+0.6** |
| **IL31** | | **72.80** | **25** | P | **P** | **11 36 08.8** | **-0.7** |
| IL31 | | | | IAmb | IAmb | 11 36 09.1 | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **72.80** | **25** | P | **P** | **11 36 08.5** | **-1.1** |
| | comp=Z,3.1nm,0.6s,baz=246,slow=6.0,SNR=44 | | | | | | |
| ILAR | | | | LR | LR | 12 04 41.4 | |
| | comp=Z,29nm,21.4s,baz=302,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **72.80** | **25** | P | **P** | **11 36 08.8** | **-0.8** |
| **BMAR** | **Burnt Mountain** | **74.18** | **23** | P | **P** | **11 36 18.2** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **74.80** | **28** | P | **P** | **11 36 21.4** | **0.0** |
| **ABKAR** | **Akbulak array** | **75.09** | **318** | P | **P** | **11 36 22.8** | **-0.4** |
| **EGAK** | **Eagle** | **75.23** | **26** | P | **P** | **11 36 23.7** | **-0.1** |
| EGAK | | | | IAmb | IAmb | 11 36 43.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **DAWY** | **Dawson** | **75.95** | **27** | P | **P** | **11 36 28.4** | **+0.4** |
| DAWY | | | | IAmb | IAmb | 11 36 29.4 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **ARU** | **Arti** | **75.99** | **326** | LR | LR | 12 13 17.4 | |
| | comp=Z,70nm,18.2s,baz=69,slow=38 | | | | | | |
| **INK** | **Inuvik** | **78.42** | **22** | P | **P** | **11 36 41.4** | **-0.2** |
| INK | | | | IAmb | IAmb | 11 36 42.0 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.19** | **27** | P | **P** | **11 37 27.5** | **+0.2** |
| | comp=Z,4.8nm,0.8s,baz=292,slow=5.2,SNR=41 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.19** | **27** | P | **P** | **11 37 26.9** | **-0.4** |
| **ARCES** | **ARCESS Array B** | **87.84** | **341** | P | **P** | **11 37 29.0** | **-1.3** |
| | comp=Z,1.9nm,0.7s,baz=90,slow=6.1,SNR=6.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.84** | **341** | P | **P** | **11 37 29.1** | **-1.2** |
| **FINES** | **FINESS Array B** | **91.24** | **334** | P | **P** | **11 37 45.2** | **-1.2** |
| | comp=Z,4.8nm,1.0s,baz=79,slow=9.9,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.18** | **50** | P | **P** | **11 37 52.1** | **+0.6** |
| | comp=Z,1.0nm,0.8s,baz=266,slow=5.3,SNR=8.6 | | | | | | |
| **LPAZ** | **La Paz** | **152.29** | **104** | PKPbc | **PKiKP** | **11 44 39.6** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=8.7,slow=8.3,SNR=4.3 | | | | | | |

*IDC **21** 11:27:09.2±0.8, 11°.15N×140°.15E, h0km, mb4.1/10, mb1 4.3/10, mb1mx4.0/33, mbtmp4.1/10, MS4.2/2, Ms1 4.2/2, ms1mx2.9/75, Error ellipse: s-maj=29.0km s-min=19.7km az=92.0*
*NEIC **21** 11:27:14.3±0.4, 11°.25N±0°.09×140°.4E±0°.2, h37km±5km, mb4.3/17, Error ellipse: s-maj=22.4km s-min=11.8km az=78.0*
**ISC 21 11:27:14.1±0.6, 11°.16N±0°.09×140°.2E±0°.1, h35km, n36, σ0s79/33, mb4.3/17, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.16** | **62** | Pn | Pn | 11 28 34.2 | +5.3 |
| | 8.2nm,0.3s,baz=169,slow=12,SNR=2.4 | | | | | | |
| **SIJI** | **Sorong** | **14.89** | **217** | LR | LR | 11 35 01.3 | |
| | comp=Z,114nm,20.4s,baz=357,slow=32 | | | | | | |
| **FAKI** | **Fak Fak** | **16.07** | **210** | Pn | **Pn** | **11 30 57.6** | **+0.2** |
| FAKI | | | | IAmb | IAmb | 11 31 02.3 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **COEN** | **Coen** | **25.12** | **173** | P | **P** | **11 32 35.8** | **-0.1** |
| **HNR** | **Honiara** | **28.35** | **135** | P | **P** | **11 33 03.9** | **-1.2** |
| **KNRA** | **Kununurra** | **28.97** | **203** | P | **P** | **11 33 10.6** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 11 33 23.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.26** | **191** | P | **P** | **11 33 31.0** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 11 33 42.4 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **31.42** | **190** | P | **P** | **11 33 32.2** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 11 33 44.0 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.43** | **191** | P | **P** | **11 33 32.6** | **+0.3** |
| **WRA** | **Warramunga Arr** | **31.44** | **191** | P | **P** | **11 33 30.7** | **-1.6** |
| | comp=Z,0.8nm,0.7s,baz=5.7,slow=9.7,SNR=8.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.44** | **191** | P | **P** | **11 33 32.3** | **0.0** |
| **AS31** | **Alice Springs** | **35.15** | **190** | P | **P** | **11 34 05.1** | **+0.4** |
| **ASAR** | **Alice Springs** | **35.15** | **190** | P | **P** | **11 34 05.8** | **+1.1** |
| | comp=Z,1.3nm,0.6s,baz=15,slow=12,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **35.15** | **190** | P | **P** | **11 34 05.1** | **+0.4** |
| **KULM** | **Kulim** | **39.55** | **265** | P | **P** | **11 34 42.5** | **+0.3** |
| **CM31** | **Chiang Mai Arr** | **40.48** | **285** | P | **P** | **11 34 49.8** | **0.0** |
| CM31 | | | | IAmb | IAmb | 11 34 51.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.48** | **285** | P | **P** | **11 34 50.0** | **+0.3** |
| | comp=Z,3.3nm,0.6s,baz=89,slow=6.5,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.48** | **285** | P | **P** | **11 34 49.8** | **0.0** |
| **FORT** | **Forrest** | **43.30** | **195** | P | **P** | **11 35 12.8** | **+0.3** |
| **SONM** | **Songino Array** | **46.26** | **329** | P | **P** | **11 35 36.6** | **+0.4** |
| | comp=Z,1.2nm,0.8s,baz=131,slow=6.3,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **46.26** | **329** | P | **P** | **11 35 35.7** | **-0.5** |
| SONM | | | | IAmb | IAmb | 11 35 49.1 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **60.14** | **318** | P | **P** | **11 37 18.1** | **-0.2** |
| MK31 | | | | IAmb | IAmb | 11 37 25.3 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.14** | **318** | P | **P** | **11 37 18.7** | **+0.4** |
| | comp=Z,1.3nm,0.9s,baz=102,slow=10,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.14** | **318** | P | **P** | **11 37 18.2** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **61.02** | **326** | P | **P** | **11 37 23.8** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=72,slow=6.4,SNR=3.8 | | | | | | |
| **KURK** | **Kurchatov** | **63.56** | **321** | P | **P** | **11 37 40.8** | **-0.3** |
| KURK | | | | IAmb | IAmb | 11 37 47.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **67.65** | **312** | P | **P** | **11 38 07.6** | **-0.1** |
| **IL31** | | **72.71** | **25** | P | **P** | **11 38 37.2** | **-0.9** |
| IL31 | | | | IAmb | IAmb | 11 38 38.9 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **72.71** | **25** | P | **P** | **11 38 38.5** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=245,slow=5.9,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **72.71** | **25** | P | **P** | **11 38 37.0** | **-1.2** |
| **BCAR** | **Beaver Creek A** | **74.69** | **28** | P | **P** | **11 38 48.7** | **-1.3** |
| **ABKAR** | **Akbulak array** | **75.29** | **318** | P | **P** | **11 38 53.1** | **-0.5** |
| **YKA** | **Yellowknife Ar** | **87.08** | **27** | P | **P** | **11 39 57.7** | **+1.7** |
| | comp=Z,1.9nm,0.7s,baz=291,slow=5.1,SNR=15 | | | | | | |
| **FINES** | **FINESS Array B** | **91.39** | **334** | P | **P** | **11 40 15.1** | **-1.2** |
| | comp=Z,2.8nm,0.9s,baz=63,slow=10,SNR=1.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.98** | **50** | P | **P** | **11 40 21.6** | **+1.8** |
| | comp=Z,0.7nm,0.8s,baz=284,slow=4.9,SNR=5.2 | | | | | | |
| **ASF** | **Jabal al Asfar** | **95.15** | **304** | LR | LR | 12 28 39.3 | |
| | comp=Z,866nm,19.9s,baz=108,slow=39 | | | | | | |

**IDC 21 11:34:56.2±1.2, 11°.28N×139°.92E, h0km, mb3.5/5, mb1 3.8/5, mb1mx3.5/32, mbtmp3.5/5, MS3.2/1, Ms1 3.2/1, ms1mx2.5/47, Error ellipse: s-maj=41.1km s-min=28.1km az=103.0, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **14.83** | **216** | LR | LR | 11 43 37.0 | |
| | comp=Z,82nm,18.2s,baz=190,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **35.23** | **190** | P | P | 11 41 52.6 | 0.0 |
| | 0.3nm,0.6s,baz=21,slow=11,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.17** | **285** | P | P | 11 42 33.2 | -1.4 |
| | 0.5nm,0.3s,baz=88,slow=9.5,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.86** | **318** | P | P | 11 45 05.3 | +1.4 |
| | 0.2nm,0.7s,baz=90,slow=5.8,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **72.71** | **25** | P | P | 11 46 25.0 | -0.9 |
| | 0.5nm,0.7s,baz=240,slow=6.5,SNR=7.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.09** | **27** | P | P | 11 47 44.7 | +0.9 |
| | 0.5nm,0.7s,baz=292,slow=5.4,SNR=5.9 | | | | | | |

*NORS **21** 11:42:08.7±0.0, 41°.24N×46°.11E, h5km, MPVA3.6*
*DRS **21** 11:42:08.4±0.0, 41°.08N×45°.89E, h15km*
*TIF **21** 11:42:11.6, 41°.16N×45°.96E, h28km±2km*
**ISC 21 11:42:11.2±1.6, 41°.07N±0°.06×46°.04E±0°.04, h17km±10km, n22, σ1s39/41, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DDFL** | **Dedoflistskaro** | **0.38** | **9** | P | **Pg** | **11 42 19.4** | **+0.3** |
| DDFL | | | | S | **Sb** | **11 42 26.8** | **+1.6** |
| **LGD** | **Lagodekhi** | **0.78** | **11** | P | **Pb** | **11 42 24.4** | **-1.9** |
| LGD | | | | S | **Sb** | **11 42 34.7** | **-1.9** |
| **BTNK** | **Botanikuri** | **1.12** | **304** | P | Pn | 11 42 27.8 | -4.3 |
| BTNK | | | | S | **Sb** | **11 42 42.2** | **-4.2** |
| **SEAG** | **Tbilisi Sea** | **1.16** | **307** | P | **Pn** | **11 42 31.8** | **-0.9** |
| SEAG | | | | S | **Sb** | **11 42 46.9** | **-0.8** |
| **KZRT** | **Kazreti** | **1.28** | **285** | P | **Pn** | **11 42 33.8** | **-0.5** |
| KZRT | | | | S | **Sb** | **11 42 49.7** | **-1.3** |
| **AKT** | **Akhty** | **1.34** | **72** | *e*Pg | **Pn** | **11 42 34.8** | **-0.4** |
| AKT | | | | *e*Sg | **Sn** | **11 42 52.4** | **-0.2** |
| **DMNI** | **Dmanisi** | **1.42** | **281** | P | **Pn** | **11 42 35.9** | **-0.4** |
| DMNI | | | | S | **Sn** | **11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WR0 | | | | | IAmb | IAmb | 11 56 15.8 | |
| | comp=Z,7.4nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.38** | **190** | P | **P** | | **11 56 15.5** | **-0.9** |
| | comp=Z,0.4nm,0.8s,baz=6.8,slow=9.8,SNR=2.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.34** | **206** | P | **P** | | **11 56 26.1** | **+1.2** |
| FITZ | | | | | IAmb | IAmb | 11 56 43.1 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **35.09** | **190** | P | **P** | | **11 56 50.4** | **+1.5** |
| **ASAR** | **Alice Springs** | **35.10** | **190** | P | **P** | | **11 56 49.8** | **+0.9** |
| | comp=Z,0.4nm,0.6s,baz=16,slow=12,SNR=12 | | | | | | | |
| **ASAR** | **Alice Springs** | **35.10** | **190** | P | **P** | | **11 56 48.9** | **0.0** |
| **KLR** | **Kul'dur** | **38.62** | **351** | P | **P** | | **11 57 19.3** | **+0.8** |
| | comp=Z,4.3nm,0.8s,baz=146,slow=6.6,SNR=15 | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **40.37** | **285** | P | **P** | | **11 57 34.1** | **+0.5** |
| CM31 | | | | | IAmb | IAmb | 11 57 34.8 | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.37** | **285** | P | **P** | | **11 57 34.4** | **+0.8** |
| | comp=Z,2.2nm,0.7s,baz=91,slow=6.8,SNR=13 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.37** | **285** | P | **P** | | **11 57 33.6** | **0.0** |
| **LIFNC** | **LIFOU** | **41.44** | **140** | P | **P** | | **11 57 40.4** | **-1.8** |
| **SONM** | **Songino Array** | **46.23** | **329** | P | **P** | | **11 58 19.3** | **-1.3** |
| | comp=Z,1.0nm,0.7s,baz=132,slow=6.0,SNR=2.7 | | | | | | | |
| **YAK** | **Yakutsk** | **51.38** | **354** | P | **P** | | **11 58 59.2** | **-0.5** |
| YAK | | | | | IAmb | IAmb | 11 59 05.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **SEY** | **Seymchan** | **52.48** | **7** | P | **P** | | **11 59 07.7** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=216,slow=13,SNR=6.6 | | | | | | | |
| **NIUE** | **Niue** | **57.69** | **121** | P | **P** | | **11 59 45.9** | **-0.2** |
| **MK31** | **Makanchi Array** | **60.09** | **318** | P | **P** | | **12 00 02.6** | **0.0** |
| MK31 | | | | | IAmb | IAmb | 12 00 10.2 | |
| | comp=Z,3.3nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.09** | **318** | P | **P** | | **12 00 02.7** | **+0.2** |
| | comp=Z,1.0nm,0.9s,baz=104,slow=8.9,SNR=7.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.09** | **318** | P | **P** | | **12 00 03.0** | **+0.5** |
| **ZALV** | **Zalesovo Beam** | **60.98** | **326** | P | **P** | | **12 00 06.9** | **-1.5** |
| | comp=Z,0.7nm,0.6s,baz=72,slow=4.8,SNR=3.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.98** | **326** | P | **P** | | **12 00 07.5** | **-1.0** |
| **KURK** | **Kurchatov** | **63.52** | **321** | P | **P** | | **12 00 25.6** | **+0.2** |
| KURK | | | | | IAmb | IAmb | 12 00 32.7 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.55** | **321** | P | **P** | | **12 00 25.0** | **-0.7** |
| | comp=Z,1.7nm,1.0s,baz=102,slow=7.3,SNR=6.4 | | | | | | | |
| **KDAK** | **Kodiak Island** | **68.63** | **32** | P | **P** | | **12 00 57.9** | **-0.2** |
| **BVAR** | **Borovoye Array** | **69.00** | **323** | P | **P** | | **12 00 59.8** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=68,slow=12,SNR=5.4 | | | | | | | |
| **BRVK** | **Borovoye** | **69.07** | **323** | P | **P** | | **12 01 01.2** | **+0.2** |
| BRVK | | | | | IAmb | IAmb | 12 01 05.8 | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **J20K** | **Nowinta River** | **69.59** | **25** | P | **P** | | **12 01 05.2** | **+1.2** |
| J20K | | | | | IAmb | IAmb | 12 01 24.4 | |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **PPLA** | **Purkeypile** | **70.08** | **27** | P | **P** | | **12 01 06.9** | **-0.3** |
| **IL31** | | **72.79** | **25** | P | **P** | | **12 01 22.9** | **-0.4** |
| **ILAR** | **Eielson Array** | **72.79** | **25** | P | **P** | | **12 01 22.6** | **-0.8** |
| | comp=Z,1.3nm,0.7s,baz=245,slow=6.3,SNR=20 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.79** | **25** | P | **P** | | **12 01 23.1** | **-0.2** |
| **BMAR** | **Burnt Mountain** | **74.18** | **23** | | **P** | | **12 01 32.6** | **+1.1** |
| **BCAR** | **Beaver Creek A** | **74.78** | **28** | P | **P** | | **12 01 36.5** | **+1.4** |
| **ABKAR** | **Akbulak array** | **75.24** | **318** | P | **P** | | **12 01 36.7** | **-1.2** |
| **DAWY** | **Dawson** | **75.93** | **27** | P | **P** | | **12 01 43.1** | **+1.5** |
| DAWY | | | | | IAmb | IAmb | 12 01 43.7 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **INK** | **Inuvik** | **78.41** | **22** | P | **P** | | **12 01 55.5** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=243,slow=5.3,SNR=3.2 | | | | | | | |
| **INK** | **Inuvik** | **78.41** | **22** | P | **P** | | **12 01 55.0** | **-0.4** |
| **YKA** | **Yellowknife Ar** | **87.17** | **27** | P | **P** | | **12 02 42.0** | **+1.0** |
| | comp=Z,1.9nm,0.8s,baz=290,slow=5.1,SNR=18 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.17** | **27** | P | **P** | | **12 02 40.4** | **-0.7** |
| **VNDA** | **Vanda** | **89.35** | **175** | P | **P** | | **12 02 51.0** | **0.0** |
| VNDA | | | | | IAmb | IAmb | 12 03 03.8 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.09** | **50** | P | **P** | | **12 03 06.9** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=257,slow=5.3,SNR=5.0 | | | | | | | |

*NOU **21** 11:54:00.9, 42°.32S×176°.73E, h0km, MLv4.0/5, Off E. Coast of S. Island, N.Z.*
*WEL **21** 11:54:17.9±0.3, 41°.S±2°×17°.6E±°, h17km±2km, M2.9/25, ML3.2/25, MLv2.9/25, Error ellipse: s-maj=0.0km s-min=0.0km az=129.6*
**ISC 21 11:54:18.0±1.0, 41°.18S±0°.03×175°.73E±0°.03, h24km±6km, n74, σ1°.02/83, North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TMWZ** | **Te Maipa** | **0.14** | **58** | P | P | | **Pn** | **11 54 22.9** | **-1.8** |
| **MTW** | **Mount Morrison** | **0.17** | **278** | P | P | | **Pb** | **11 54 22.3** | **-0.9** |
| MTW | | | | S | S | | **Sb** | **11 54 25.6** | **-1.2** |
| **TRWZ** | **Traveller** | **0.22** | **188** | P | P | | Pn | 11 54 24.2 | -1.6 |
| TRWZ | | | | S | S | | **Sn** | **11 54 29.4** | **+1.7** |
| **PAWZ** | **Paruwai Farm** | **0.30** | **229** | P | P | | **Pb** | **11 54 25.1** | **+0.1** |
| PAWZ | | | | S | S | | **Sb** | **11 54 30.7** | **+0.9** |
| **HOWZ** | **Holdsworth Sta** | **0.33** | **330** | P | P | | **Pb** | **11 54 24.8** | **-0.5** |
| HOWZ | | | | S | S | | **Sb** | **11 54 30.4** | **0.0** |
| **TIWZ** | **Tintock** | **0.42** | **16** | P | P | | **Pn** | **11 54 27.4** | **-1.2** |
| TIWZ | | | | S | S | | **Sn** | **11 54 35.1** | **-0.5** |
| **MSWZ** | **Moikau Station** | **0.43** | **237** | P | P | | **Pb** | **11 54 27.0** | **0.0** |
| MSWZ | | | | S | S | | **Sb** | **11 54 33.9** | **+0.8** |
| **CPWZ** | **Castlepoint** | **0.45** | **53** | P | P | | **Pn** | **11 54 28.6** | **-0.3** |
| CPWZ | | | | S | S | | **Sn** | **11 54 38.5** | **+2.3** |
| **CAW** | **Cannon Point** | **0.51** | **278** | P | P | | **Pb** | **11 54 28.0** | **-0.2** |
| CAW | | | | S | S | | **Sb** | **11 54 35.2** | **-0.1** |
| **PLWZ** | **Palliser** | **0.53** | **223** | P | P | | **Pb** | **11 54 28.8** | **+0.2** |
| PLWZ | | | | S | S | | **Sn** | **11 54 37.6** | **-0.7** |
| **MRZ** | **Mangatainoka R** | **0.53** | **347** | P | P | | **Pb** | **11 54 28.6** | **-0.1** |
| MRZ | | | | S | S | | **Sb** | **11 54 36.6** | **+0.6** |
| **OGWZ** | **Otaki Gorge** | **0.56** | **310** | P | P | | **Pn** | **11 54 28.9** | **-1.5** |
| **BFZ** | **Birch Farm** | **0.63** | **38** | P | P | | **Pn** | **11 54 30.9** | **-0.5** |
| **BFZ** | **Birch Farm** | **0.63** | **38** | P | P | | **Pn** | **11 54 31.0** | **-0.5** |
| **PRWZ** | **Pori Road** | **0.65** | **16** | P | P | | **Pb** | **11 54 31.4** | **+0.7** |
| **BHW** | **Baring Head** | **0.69** | **250** | P | P | | **Pn** | **11 54 31.0** | **-1.2** |
| **KIW** | **Kapiti Island** | **0.70** | **297** | P | P | | **Pn** | **11 54 31.3** | **-1.0** |
| **WEL** | **Wellington** | **0.73** | **262** | P | P | | **Pn** | **11 54 31.8** | **-1.0** |
| **SNZO** | **South Karori** | **0.78** | **260** | P | P | | **Pn** | **11 54 32.8** | **-0.7** |
| **POWZ** | **Post Office Ro** | **0.79** | **2** | P | P | | **Pb** | **11 54 33.3** | **+0.3** |
| **ANWZ** | **Angora Road** | **0.92** | **38** | P | P | | **Pb** | **11 54 34.8** | **-0.4** |
| **DVHZ** | **Dannevirke** | **0.94** | **21** | P | P | | **Pb** | **11 54 35.2** | **-0.4** |
| **OHWZ** | **Ohakea** | **1.02** | **342** | P | P | | **Pb** | **11 54 37.6** | **+0.6** |
| **TCW** | **Tory Channel** | **1.10** | **268** | P | P | | **Pn** | **11 54 37.2** | **-0.7** |
| **TSZ** | **Takapari Road** | **1.14** | **9** | P | P | | **Pb** | **11 54 38.2** | **-0.7** |
| **PRHZ** | **Porangahau** | **1.14** | **37** | P | P | | **Pb** | **11 54 38.0** | **-1.0** |
| **WPHZ** | **Waipukurau** | **1.24** | **26** | P | P | | **Pb** | **11 54 39.5** | **-1.2** |
| **CMWZ** | **Cape Campbell** | **1.27** | **243** | P | P | | **Pb** | **11 54 43.2** | **+1.9** |
| **PNHZ** | **Pukenui** | **1.32** | **16** | P | P | | **Pb** | **11 54 40.8** | **-1.2** |
| **TUWZ** | **Tuamarina** | **1.37** | **259** | P | P | | **Pn** | **11 54 40.2** | **-1.3** |
| **DUWZ** | **D'Urville Isla** | **1.42** | **285** | P | P | | **Pn** | **11 54 42.4** | **+0.1** |
| **BSWZ** | **Blackbirck Sta** | **1.49** | **248** | P | P | | **Pn** | **11 54 42.3** | **-1.0** |
| **WAZ** | **Wanganui** | **1.53** | **338** | P | P | | **Pb** | **11 54 45.9** | **+0.2** |
| **KRHZ** | **Kereru** | **1.61** | **18** | P | P | | **Pn** | **11 54 44.6** | **-0.3** |
| **KAHZ** | **Kahuranaki** | **1.64** | **33** | P | P | | **Pn** | **11 54 44.9** | **-0.4** |
| **BHHZ** | **Black Hill Sta** | **1.71** | **9** | P | P | | **Pn** | **11 54 46.7** | **+0.4** |
| **MOVZ** | **Moawhango** | **1.77** | **1** | P | P | | **Pb** | **11 54 48.5** | **-1.3** |
| **NNZ** | **Nelson** | **1.77** | **268** | P | P | | **Pn** | **11 54 46.6** | **-0.5** |
| **MTVZ** | **Mangateitei** | **1.81** | **354** | P | P | | **Pn** | **11 54 48.8** | **+1.1** |
| **KWHZ** | **Kaweka Forest** | **1.83** | **17** | P | P | | **Pn** | **11 54 47.7** | **-0.3** |
| **WNVZ** | **Wahianoa** | **1.85** | **357** | P | P | | **Pb** | **11 54 49.6** | **-1.6** |
| **TRVZ** | **Turoa** | **1.89** | **356** | P | P | | **Pn** | **11 54 49.7** | **+0.8** |
| **PKVZ** | **Pokaka** | **1.91** | **351** | P | P | | **Pb** | **11 54 53.0** | **+0.8** |
| **TUVZ** | **Tukino** | **1.91** | **358** | P | P | | **Pn** | **11 54 50.3** | **+1.1** |
| **FWVZ** | **Far West T-bar** | **1.93** | **356** | P | P | | **Pn** | **11 54 50.4** | **+0.9** |
| **SNVZ** | **South Ngauruho** | **1.99** | **358** | P | P | | **Pn** | **11 54 51.3** | **+1.0** |
| **LREZ** | **Lake Rotokare** | **2.00** | **329** | P | P | | **Pb** | **11 54 53.8** | **+0.3** |
| **NGZ** | **Ngauruhoe** | **2.01** | **357** | P | P | | **Pn** | **11 54 51.5** | **+1.0** |
| **OTVZ** | **Oturere** | **2.02** | **359** | P | P | | **Pn** | **11 54 51.5** | **+0.8** |
| **ETVZ** | **East Tongariro** | **2.04** | **360** | P | P | | **Pn** | **11 54 52.0** | **+1.0** |
| **NNVZ** | **North Ngauruho** | **2.05** | **357** | P | P | | **Pn** | **11 54 52.2** | **+1.1** |
| **KHZ** | **Kahutara** | **2.05** | **232** | P | P | | **Pn** | **11 54 49.2** | **-1.8** |
| **TMVZ** | **Te Maari** | **2.06** | **359** | P | P | | **Pn** | **11 54 52.2** | **+1.0** |
| **WTVZ** | **West Tongariro** | **2.07** | **357** | P | P | | **Pb** | **11 54 54.0** | **-0.8** |
| **NTVZ** | **North Tongarir** | **2.08** | **359** | P | P | | **Pb** | **11 54 52.5** | **+1.0** |
| **KRVZ** | **Karewarewa** | **2.08** | **358** | P | P | | **Pb** | **11 54 57.3** | **+2.1** |
| **BKZ** | **Black Stump Fm** | **2.10** | **16** | P | P | | **Pn** | **11 54 50.9** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **2.10** | **16** | P | P | | **Pn** | **11 54 51.3** | **-0.3** |
| **VRZ** | **Vera Road** | **2.19** | **340** | P | P | | **Pb** | **11 54 56.7** | **0.0** |
| **PREZ** | **Palmer Road** | **2.19** | **326** | P | P | | **Pb** | **11 54 56.3** | **-0.7** |
| **THZ** | **Tophouse** | **2.20** | **254** | P | P | | **Pn** | **11 54 52.7** | **-0.4** |
| **KATZ** | **Kakaramea** | **2.20** | **359** | P | P | | **Pb** | **11 54 59.5** | **+2.4** |
| **MRNZ** | **Matariki Terra** | **2.25** | **263** | P | P | | **Pn** | **11 54 53.1** | **-0.6** |
| **NEZ** | **North Egmont** | **2.28** | **326** | P | P | | **Pb** | **11 54 58.3** | **-0.2** |
| **KHEZ** | **Kahui Hut** | **2.30** | **325** | P | P | | **Pb** | **11 54 57.6** | **-1.1** |
| **DREZ** | **Durham Road** | **2.31** | **329** | P | P | | **Pb** | **11 54 57.5** | **-1.4** |
| **PKE** | **Pukeiti** | **2.39** | **325** | P | P | | **Pb** | **11 54 59.9** | **-0.5** |
| **QRZ** | **Quartz Range** | **2.45** | **277** | P | P | | **Pn** | **11 54 56.7** | **+0.3** |
| **QRZ** | **Quartz Range** | **2.45** | **277** | P | P | | **Pn** | **11 54 56.5** | **+0.1** |
| **HIZ** | **Hauiti** | **2.75** | **346** | P | P | | **Pb** | **11 55 04.7** | **-1.6** |
| **HIZ** | **Hauiti** | **2.75** | **346** | P | P | | **Pb** | **11 55 04.6** | **-1.8** |
| **DSZ** | **Denniston Nort** | **3.00** | **258** | P | P | | **Pn** | **11 55 03.4** | **-0.7** |
| **PKGZ** | **Pakihiroa** | **3.76** | **30** | P | P | | **Pn** | **11 55 15.5** | **+1.1** |
| **HAZ** | **Te Kaha** | **3.77** | **26** | P | P | | **Pn** | **11 55 13.6** | **-1.0** |

*IDC **21** 11:58:28.5±1.6, 12°.62N×87°.58W, h61km±15km, mb3.7/10, mb1 3.9/13, mb1mx3.7/42, mbtmp3.9/13, MS3.1/6, Ms1 3.1/6, ms1mx2.8/66, Error ellipse: s-maj=32.5km s-min=10.4km az=49.0*
*UCR **21** 11:58:28.1±2.9, 12°.42N×87°.88W, h37km±15km, ML4.2, MW4.5, mb4.3(NEIC)*
*INET **21** 11:58:28.3±0.6, 12°.44N×87°.79W, h45km±9km, MW4.5*
*SNET **21** 11:58:29.6±0.8, 12°.50N×88°.13W, h10km±9km, ML4.2*
*NEIC **21** 11:58:30.3±2.4, 12°.55N±0°.08×87°.73W±0°.07, h61km±9km, mb4.3/62, Md4.0(SNET), Error ellipse: s-maj=13.1km s-min=7.7km az=215.0*
**ISC 21 11:58:28.6±0.9, 12°.51N±0°.05×87°.80W±0°.04, h59km±8km, n163, σ1°.12/178, mb4.2/38, MS3.3/3, 2C-4D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.75** | **75** | Pn | P | | **Pn** | **11 58 43.2** | **-0.3** |
| **CRIN** | **San Cristobal** | **0.75** | **75** | eP | P | | **Pn** | **11 58 43.2** | **-0.3** |
| CRIN | | | | eS | S | | **Sn** | **11 58 55.0** | **+0.6** |
| **TEL3** | **Telica 3** | **0.93** | **86** | eP | P | | **Pn** | **11 58 44.6** | **-1.1** |
| **LCY** | **Lacayo** | **1.03** | **332** | eP | P | | **Pn** | **11 58 46.9** | **-0.2** |
| **LCY** | **Lacayo** | **1.03** | **332** | eP | P | | **Pn** | **11 58 46.9** | **-0.2** |
| **CNGN** | **Cerro Negro** | **1.07** | **90** | Pn | P | | **Pn** | **11 58 46.5** | **-1.2** |
| **CNGN** | **Cerro Negro** | **1.07** | **90** | eP | P | | **Pn** | **11 58 46.3** | **-1.3** |
| CNGN | | | | eS | S | | **Sn** | **11 59 00.4** | **-1.4** |
| **PACA** | **Pacayal** | **1.08** | **332** | eP | P | | **Pn** | **11 58 47.8** | **0.0** |
| PACA | | | | eS | S | | **Sn** | **11 59 02.3** | **+0.2** |
| **PACA** | **Pacayal** | **1.08** | **332** | eP | P | | **Pn** | **11 58 47.8** | **0.0** |
| PACA | | | | eS | S | | **Sn** | **11 59 02.3** | **+0.2** |
| **COEB** | **Comit de Eme** | **1.21** | **324** | eP | P | | **Pn** | **11 58 49.2** | **-0.4** |
| COEB | | | | IAML | | | | 11 59 07.5 | |
| | comp=Z,6μm,0.3s | | | | | | | | |
| **COEB** | **Comit de Eme** | **1.21** | **324** | eP | P | | **Pn** | **11 58 49.2** | **-0.4** |
| COEB | | | | IAML | | | | 11 59 07.5 | |
| | comp=Z,6μm,0.3s | | | | | | | | |
| **MOMN** | **Momotombo** | **1.23** | **95** | eP | P | | **Pn** | **11 58 48.4** | **-1.3** |
| **PQSS** | **Presa 15 de Se** | **1.33** | **326** | iP | P | | **Pn** | **11 58 51.2** | **+0.1** |
| **PQSS** | **Presa 15 de Se** | **1.33** | **326** | iP | P | | **Pn** | **11 58 51.2** | **+0.1** |
| **TECO** | **Alcaldia de Te** | **1.40** | **317** | eP | P | | **Pn** | **11 58 51.4** | **-0.6** |
| **TECO** | **Alcaldia de Te** | **1.40** | **317** | eP | P | | **Pn** | **11 58 51.4** | **-0.6** |
| **SCLA** | **Alcaldia de Sa** | **1.49** | **323** | eP | P | | **Pn** | **11 58 53.5** | **+0.2** |
| SCLA | | | | eS | S | | **Sn** | **11 59 12.6** | **+0.9** |
| **SCLA** | **Alcaldia de Sa** | **1.49** | **323** | eP | P | | **Pn** | **11 58 53.5** | **+0.2** |
| SCLA | | | | eS | S | | **Sn** | **11 59 12.6** | **+0.9** |
| **COEG** | **Centro de Oper** | **1.53** | **316** | eP | P | | **Pn** | **11 58 53.5** | **-0.2** |
| COEG | | | | eS | S | | **Sn** | **11 59 12.0** | **-0.6** |
| COEG | | | | IAML | | | | 11 59 16.3 | |
| | comp=Z,4μm,0.4s | | | | | | | | |
| **COEG** | **Centro de Oper** | **1.53** | **316** | eP | P | | **Pn** | **11 58 53.5** | **-0.2** |
| COEG | | | | eS | S | | **Sn** | **11 59 12.0** | **-0.6** |
| COEG | | | | IAML | | | | 11 59 16.3 | |
| | comp=Z,4μm,0.4s | | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.54** | **104** | eP | P | | **Pn** | **11 58 52.8** | **-1.0** |
| **MGAN** | **Managua** | **1.56** | **103** | eP | P | | **Pn** | **11 58 52.8** | **-1.2** |
| **HUEN** | | **1.60** | **96** | eP | P | | **Pn** | **11 58 53.6** | **-1.0** |
| HUEN | | | | eS | S | | **Sn** | **11 59 13.3** | **-0.9** |
| **SJTE** | **Alcalda de S** | **1.61** | **313** | eP | P | | **Pn** | **11 58 54.4** | **-0.4** |
| SJTE | | | | eS | S | | **Sn** | **11 59 13.7** | **-0.9** |
| SJTE | | | | IAML | | | | 11 59 20.1 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **SJTE** | **Alcalda de S** | **1.61** | **313** | eP | P | | **Pn** | **11 58 54.4** | **-0.4** |
| SJTE | | | | eS | S | | **Sn** | **11 59 13.7** | **-0.9** |
| SJTE | | | | IAML | | | | 11 59 20.1 | |
| | comp=Z,2μm,0.4s | | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **1.62** | **18** | Pn | P | | **Pn** | **11 58 55.7** | **+0.6** |
| **TGUH** | **Tegucigalpa,Un** | **1.62** | **18** | eP | P | | **Pn** | **11 58 55.7** | **+0.6** |
| **PAVA** | **Las Pavas** | **1.63** | **317** | eP | P | | **Pn** | **11 58 55.2** | **+0.1** |
| **PAVA** | **Las Pavas** | **1.63** | **317** | eP | P | | **Pn** | **11 58 55.2** | **+0.1** |
| **PAVA** | **Las Pavas** | **1.63** | **317** | eP | P | | **Pn** | **11 58 55.2** | **+0.1** |
| **LFRS** | **El Faro** | **1.66** | **312** | eP | P | | **Pn** | **11 58 55.0** | **-0.5** |
| **LFRS** | **El Faro** | **1.66** | **312** | eP | P | | **Pn** | **11 58 55.0** | **-0.5** |
| **LBRS** | **Las Brisas** | **1.72** | **315** | eP | P | | **Pn** | **11 58 56.8** | **+0.4** |
| **LBRS** | **Las Brisas** | **1.72** | **315** | eP | P | | **Pn** | **11 58 56.8** | **+0.4** |
| **LALI** | **Alcalda de L** | **1.77** | **303** | eP | P | | **Pn** | **11 58 56.4** | **-0.6** |
| **LALI** | **Alcalda de L** | **1.77** | **303** | eP | P | | **Pn** | **11 58 56.4** | **-0.6** |
| **LFU** | **La Fuente** | **1.78** | **314** | eP | P | | **Pn** | **11 58 57.3** | **+0.2** |
| **LFU** | **La Fuente** | **1.78** | **314** | eP | P | | **Pn** | **11 58 57.3** | **+0.2** |
| **SNET** | **Serv Nac Est T** | **1.82** | **310** | Pn | P | | **Pn** | **11 58 57.3** | **-0.4** |
| **SNET** | **Serv Nac Est T** | **1.82** | **310** | eP | P | | **Pn** | **11 58 57.3** | **-0.4** |
| SNET | | | | IAML | | | | 11 59 22.9 | |
| | comp=Z,4μm,0.3s | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.82** | **310** | eP | P | | **Pn** | **11 58 57.3** | **-0.4** |
| SNET | | | | IAML | | | | 11 59 22.9 | |
| | comp=Z,4μm,0.3s | | | | | | | | |
| **UEES** | **Universidad Ev** | **1.85** | **311** | eP | P | | **Pn** | **11 58 57.7** | **-0.3** |
| **UEES** | **Universidad Ev** | **1.85** | **311** | eP | P | | **Pn** | **11 58 57.7** | **-0.3** |
| **MATN** | **Matagalpa** | **1.87** | **77** | Pn | P | | **Pn** | **11 58 57.6** | **-0.8** |
| **MATN** | **Matagalpa** | **1.87** | **77** | eP | P | | **Pn** | **11 58 57.7** | **-0.8** |
| **BOQS** | **Boqueron** | **1.89** | **310** | eP | P | | **Pn** | **11 58 58.7** | **-0.1** |
| **BOQS** | **Boqueron** | **1.89** | **310** | eP | P | | **Pn** | **11 58 58.7** | **-0.1** |
| **JAYA** | **Jayaque - finc** | **1.97** | **305** | eP | P | | **Pn** | **11 58 59.4** | **-0.4** |
| JAYA | | | | IAML | | | | 11 59 27.6 | |
| | comp=Z,5μm,0.2s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.97** | **305** | eP | P | | **Pn** | **11 58 59.4** | **-0.4** |
| JAYA | | | | IAML | | | | 11 59 27.6 | |
| | comp=Z,5μm,0.2s | | | | | | | | |
| **CEDA** | **San Andres** | **2.02** | **310** | eP | P | | **Pn** | **11 59 01.1** | **+0.7** |
| **CEDA** | **San Andres** | **2.02** | **310** | eP | P | | **Pn** | **11 59 01.1** | **+0.7** |
| **BOAB** | **BOACO BROADBAN** | **2.08** | **91** | Pn | P | | **Pn** | **11 58 59.9** | **-1.2** |
| **CEVE** | **Cerro Verde** | **2.21** | **307** | eP | P | | **Pn** | **11 59 03.7** | **+0.6** |
| **CEVE** | **Cerro Verde** | **2.21** | **307** | eP | P | | **Pn** | **11 59 03.7** | **+0.6** |
| **SBLS** | **San Blas** | **2.21** | **307** | eP | P | | **Pn** | **11 59 03.4** | **+0.1** |
| **SBLS** | **San Blas** | **2.21** | **307** | eP | P | | **Pn** | **11 59 03.4** | **+0.1** |
| **NUBE** | **Las Nubes** | **2.38** | **306** | eP | P | | **Pn** | **11 59 05.1** | **-0.2** |
| **NUBE** | **Las Nubes** | **2.38** | **306** | eP | P | | **Pn** | **11 59 05.1** | **-0.2** |
| **MTO3** | **Montecristo** | **2.42** | **321** | Pn | P | | **Pn** | **11 59 06.2** | **+0.2** |
| **MTO3** | **Montecristo** | **2.42** | **321** | eP | P | | **Pn** | **11 59 06.3** | **+0.4** |
| **MTO3** | **Montecristo** | **2.42** | **321** | eP | P | | **Pn** | **11 59 06.2** | **+0.2** |
| **MTO3** | **Montecristo** | **2.42** | **321** | eP | P | | **Pn** | **11 59 06.3** | **+0.4** |
| **ESQI** | **Esquipulas** | **2.53** | **324** | Pn | P | | **Pn** | **11 59 08.2** | **+0.8** |
| **ACON** | **Acoyapa** | **2.62** | **102** | Pn | P | | **Pn** | **11 59 08.0** | **-0.5** |
| **HZTE** | **Horizontes, Gu** | **2.80** | **129** | Pn | P | | **Pn** | **11 59 11.5** | **+0.4** |
| **BUEV** | **Buena Vista** | **2.90** | **126** | i | P | | **Pn** | **11 59 15.3** | **+2.9** |
| BUEV | | | | i | S | | **Sn** | **11 59 48.8** | **+2.8** |
| **ORTG** | **Ortega, Santa** | **3.13** | **133** | Pn | P | | **Pn** | **11 59 15.4** | **-0.3** |
| **GUAI** | **GUAI** | **3.16** | **135** | i | P | | **Pn** | **11 59 15.7** | **-0.2** |
| GUAI | | | | i | S | | **Sn** | **11 59 49.1** | **-3.4** |
| **DUNO** | **Dulce Nombre,** | **3.31** | **137** | | | | **Pn** | **11 59 18.9** | **+1.0** |
| **ESPN** | **Las Esperanzas** | **3.43** | **95** | | | | **Pn** | **11 59 20.0** | **+0.4** |
| **JTS** | **Las Juntas de** | **3.56** | **128** | P | | | **Pn** | **11 59 21.0** | **-0.4** |
| | comp=Z,9.8nm,0.3s,baz=14,slow=9.9,SNR=9.7 | | | | | | | | |
| JTS | | | | S | | | **Sn** | **11 59 59.6** | **-2.6** |
| | comp=Z,10nm,0.3s,baz=197,slow=22,SNR=3.7 | | | | | | | | |
| JTS | | | | LR | | | LR | 12 00 28.6 | |
| | comp=Z,39nm,19.0s,baz=18,slow=35 | | | | | | | | |
| **JTS** | **Las Juntas de** | **3.56** | **128** | | | | **Pn** | **11 59 21.0** | **-0.4** |
| **APG** | **El Apazote** | **3.58** | **314** | P | | | **Pn** | **11 59 22.6** | **+0.6** |
| | comp=Z,0.5nm,0.3s,baz=105,slow=14,SNR=3.4 | | | | | | | | |
| **CAO2** | **Cobano, Puntar** | **3.85** | **136** | Pn | | | **Pn** | **11 59 24.8** | **-0.6** |
| **JACO** | **JACO, Garabito** | **4.18** | **132** | Pn | | | **Pn** | **11 59 32.9** | **+3.0** |
| **RIMA** | **Rio Macho** | **4.73** | **125** | | | | **Pn** | **11 59 39.7** | **+2.1** |
| **PETF** | **Flores** | **4.81** | **336** | | | | **Pn** | **11 59 41.3** | **+2.7** |
| **PEZE** | **Perez Zeledon,** | **5.10** | **127** | Pn | | | **Pn** | **11 59 44.2** | **+1.6** |
| **SRBA** | **San Rafael, Bu** | **5.44** | **126** | | | | **Pn** | **11 59 48.9** | **+1.6** |
| **RIOS** | **Rincon, Osa** | **5.66** | **132** | Pn | | | **Pn** | **11 59 51.0** | **+0.8** |
| **CMIG** | **Matias Romero** | **8.23** | **304** | P | | | **Pn** | **12 00 26.9** | **+1.5** |
| | comp=Z,0.4nm,0.3s,baz=320,slow=17,SNR=2.1 | | | | | | | | |
| CMIG | | | | S | | | **Sn** | **12 01 53.7** | **-3.2** |
| | comp=Z,0.1nm,0.3s,baz=329,slow=19,SNR=1.3 | | | | | | | | |
| CMIG | | | | LR | | | LR | 12 03 47.4 | |
| | comp=Z,81nm,20.7s,baz=108,slow=38 | | | | | | | | |
| **ROSC** | **El Rosal** | **15.34** | **119** | LR | | | LR | 12 08 10.8 | |
| | comp=Z,64nm,18.8s,baz=272,slow=38 | | | | | | | | |
| **451A** | **Vernon** | **18.12** | **6** | P | | | **Pn** | **12 02 39.4** | **+3.2** |
| **833A** | **Chaparral WMA,** | **19.10** | **327** | P | | | **P** | **12 02 48.2** | **+1.6** |
| **152A** | **Waverly Hall** | **20.26** | **8** | P | | | Pn | 12 03 02.2 | +0.5 |
| 152A | | | | IAmb | | | IAmb | 12 03 03.3 | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **20.44** | **2** | P | | | Pn | 12 03 04.2 | +0.4 |
| **JCT** | **Junction City** | **21.05** | **330** | P | | | **P** | **12 03 11.2** | **+3.4** |
| **GOGA** | **Godfrey** | **21.18** | **10** | P | | | **P** | **12 03 11.3** | **+2.2** |
| **BIRV** | **Birongo** | **21.19** | **93** | P | | | **P** | **12 03 09.6** | **+0.1** |
| BIRV | | | | IAmb | | | IAmb | 12 03 16.9 | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| **Y49A** | **Blount Mountai** | **21.29** | **3** | P | | | **P** | **12 03 11.9** | **+1.6** |
| **Y52A** | **Lilburn** | **21.53** | **8** | P | | | **P** | **12 03 15.4** | **+2.5** |
| Y52A | | | | IAmb | | | IAmb | 12 03 16.0 | |
| | comp=Z,8.8nm,0.7s | | | | | | | | |
| **SJG** | **San Juan** | **21.60** | **72** | LR | | | LR | 12 12 48.3 | |
| | comp=Z,4.3nm,18.5s,baz=275,slow=40 | | | | | | | | |
| **MTP** | **Monte Pirata** | **22.15** | **73** | P | | | **P** | **12 03 19.2** | **-0.5** |
| **HODGE** | **Hodges** | **22.20** | **12** | P | | | **P** | **12 03 22.3** | **+2.2** |
| HODGE | | | | IAmb | | | IAmb | 12 03 23.9 | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **22.31** | **321** | P | | | **P** | **12 03 22.4** | **+0.9** |
| | comp=Z,4.3nm,0.7s,baz=144,slow=9.0,SNR=49 | | | | | | | | |
| TXAR | | | | PcP | | | **PcP** | **12 07 16.0** | **+0.6** |
| | comp=Z,0.1nm,0

**IDC 21 12:27:10.7±3.8, 10°48N×141°30E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.4/40, mbtmp3.4/3, MS2.5/1, Ms1 2.5/1, ms1mx2.2/42, Error ellipse: s-maj=632.1km s-min=34.9km az=107.0, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **12.92** | **183** | LR | LR | 12 35 01.0 | |
| | comp=Z,22nm,18.3s,baz=64,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **34.70** | **192** | P | P | 12 34 02.3 | -0.2 |
| | 0.3nm,1.0s,baz=18,slow=12,SNR=1.9 | | | | | | |
| **ILAR** | **Eielson Array** | **72.86** | **25** | P | P | 12 38 40.6 | -0.6 |
| | 0.3nm,0.8s,baz=256,slow=5.3,SNR=2.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.20** | **27** | P | P | 12 39 59.4 | +0.7 |
| | 0.5nm,0.8s,baz=294,slow=4.7,SNR=3.9 | | | | | | |

**IDC 21 12:28:35.0±1.4, 4°80N×32°86W, h0km, mb3.9/5, mb1 3.9/5, mb1mx3.6/35, mbtmp3.9/5, MS3.6/15, Ms1 3.6/15, ms1mx3.3/84, Error ellipse: s-maj=71.3km s-min=28.4km az=150.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MDP** | **Montagnes des** | **19.71** | **272** | LR | LR | 12 39 33.7 | |
| | comp=Z,105nm,18.6s,baz=118,slow=33 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **22.20** | **124** | T | T | 12 56 05.7 | |
| | baz=304,slow=75,SNR=34 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.21** | **124** | T | T | 12 56 05.7 | |
| | baz=304,slow=75,SNR=33 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.22** | **124** | T | T | 12 56 06.9 | |
| | baz=304,slow=75,SNR=46 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.71** | **127** | T | T | 12 56 44.0 | |
| | baz=304,slow=74,SNR=21 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.73** | **127** | T | T | 12 56 46.0 | |
| | baz=276,slow=74,SNR=10.0 | | | | | | |
| **PTGA** | **Pitinga** | **27.63** | **259** | LR | LR | 12 44 18.6 | |
| | comp=Z,117nm,19.5s,baz=84,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **27.92** | **85** | P | P | 12 34 27.2 | 0.0 |
| | 3.6nm,1.0s,baz=270,slow=11,SNR=2.0 | | | | | | |
| DBIC | | | | LR | LR | 12 43 23.6 | |
| | comp=Z,69nm,18.8s,baz=322,slow=32 | | | | | | |
| **SIV** | **San Ignacio** | **34.73** | **233** | P | P | 12 35 27.1 | -0.1 |
| | 0.5nm,0.5s,baz=349,slow=16,SNR=2.2 | | | | | | |
| SIV | | | | LR | LR | 12 48 47.1 | |
| | comp=Z,94nm,19.9s,baz=102,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.09** | **74** | P | P | 12 35 29.9 | -0.3 |
| | 1.7nm,1.0s,baz=262,slow=7.3,SNR=6.1 | | | | | | |
| **SJG** | **San Juan** | **35.12** | **295** | LR | LR | 12 46 52.8 | |
| | comp=Z,66nm,19.1s,baz=152,slow=31 | | | | | | |
| **LPAZ** | **La Paz** | **40.70** | **238** | LR | LR | 12 52 13.4 | |
| | comp=Z,49nm,19.7s,baz=90,slow=35 | | | | | | |
| **ROSC** | **El Rosal** | **41.31** | **272** | LR | LR | 12 54 46.8 | |
| | comp=Z,68nm,18.0s,baz=51,slow=38 | | | | | | |
| **NNA** | **Nana** | **46.81** | **249** | LR | LR | 12 55 34.3 | |
| | comp=Z,49nm,18.4s,baz=55,slow=35 | | | | | | |
| **ATAH** | **Atahualpa** | **46.97** | **256** | LR | LR | 12 57 24.8 | |
| | comp=Z,73nm,18.4s,baz=52,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **55.07** | **117** | LR | LR | 12 55 56.8 | |
| | comp=Z,64nm,20.9s,baz=331,slow=30 | | | | | | |
| **TKL** | **Tuckaleechee C** | **55.95** | **310** | LR | LR | 12 59 00.8 | |
| | comp=Z,35nm,18.3s,baz=88,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **64.02** | **121** | LR | LR | 13 01 54.8 | |
| | comp=Z,47nm,19.4s,baz=249,slow=31 | | | | | | |
| **EIL** | **Elat** | **68.38** | **60** | LR | LR | 13 09 42.0 | |
| | comp=Z,43nm,18.8s,baz=266,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.85** | **37** | P | P | 12 39 40.9 | -0.5 |
| | 0.3nm,0.4s,baz=249,slow=7.2,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.94** | **49** | P | P | 12 39 43.0 | +0.7 |
| | 1.4nm,0.9s,baz=264,slow=7.1,SNR=8.1 | | | | | | |
| **ANMO** | **Albuquerque** | **73.83** | **305** | LR | LR | 13 07 54.8 | |
| | comp=Z,58nm,21.4s,baz=55,slow=32 | | | | | | |
| **WSAR** | **Wadi Sarin** | **89.50** | **67** | LR | LR | 13 23 44.7 | |
| | comp=Z,52nm,18.2s,baz=313,slow=37 | | | | | | |

**MAN 21 12:57:02.5, 13°59N×120°89E, h5km, mb3.8, ML2.6, MS2.1, Mindoro**

*IDC **21** 13:03:22.2±2.1, 7°13S×129°29E, h135km±26km, mb3.0/1, mb1 3.4/6, mb1mx3.2/34, mbtmp3.8/6, MS2.7/1, Ms1 2.7/1, ms1mx2.2/19, Error ellipse: s-maj=27.1km s-min=19.2km az=114.0*

**ISC 21 13:03:21.0±0.9, 7°24S±0°06×129°5E±0°1, h139km, n7, σ3°19/11, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **6.44** | **242** | P | **Pn** | **13 04 53.2** | **-0.3** |
| | 3.1nm,0.3s,baz=88,slow=21,SNR=1.9 | | | | | | |
| BATI | | | | S | **Sn** | **13 06 05.7** | **-0.2** |
| | 3.4nm,0.3s,baz=233,slow=23,SNR=2.0 | | | | | | |
| **SIJI** | **Sorong** | **6.58** | **16** | P | **Pn** | **13 04 56.5** | **+1.1** |
| | 1.0nm,0.3s,baz=84,slow=9.0,SNR=40 | | | | | | |
| SIJI | | | | S | **Sn** | **13 06 05.8** | **-3.5** |
| | 2.6nm,0.3s,baz=245,slow=23,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.42** | **199** | P | **Pn** | **13 06 02.0** | **+2.0** |
| | 0.6nm,0.3s,baz=28,slow=9.7,SNR=29 | | | | | | |
| FITZ | | | | S | **Sn** | **13 08 01.1** | **-4.9** |
| | 0.3nm,0.3s,baz=289,slow=12,SNR=2.4 | | | | | | |
| **JAY** | **Jayapura** | **12.15** | **68** | LR | LR | 13 11 52.8 | |
| | comp=Z,31nm,18.4s,baz=33,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.49** | **160** | P | **Pn** | **13 06 28.9** | **+2.0** |
| | 0.6nm,0.3s,baz=339,slow=13,SNR=18 | | | | | | |
| WRA | | | | S | **Sn** | **13 08 52.9** | **-3.2** |
| | 0.4nm,0.3s,baz=334,slow=21,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **16.88** | **166** | P | **Pn** | **13 07 13.8** | **+4.7** |
| | 0.4nm,0.3s,baz=344,slow=10.0,SNR=72 | | | | | | |
| ASAR | | | | S | **Sn** | **13 10 15.8** | **-1.8** |
| | 0.1nm,0.3s,baz=121,slow=13,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.13** | **327** | P | **P** | **13 14 06.4** | **+0.4** |
| | 0.2nm,0.4s,baz=121,slow=7.5,SNR=5.2 | | | | | | |

*IDC **21** 13:09:52.3±23.0, 41°14N×142°36E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/29, mbtmp3.4/3, MS3.0/2, Ms1 3.1/2, ms1mx2.6/57, Error ellipse: s-maj=640.1km s-min=41.2km az=168.0*

*SKHL **21** 13:10:16.5±0.6, 46°40N×140°60E, h9km±3km, mb4.6/6*

*NIED **21** 13:10:16.7, 46°29N×140°49E, h6km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr0.99; Mθθ2.02; Mϕϕ-3.01; Mrθ1.43; Mθϕ-0.72; Mϕr-1.53; Fault plane solution: M₀3.46000×10¹⁴ NP1: φs149.00000°, δ78.00000°, λ41.00000°. NP2: φs48.00000°, δ50.00000°, λ164.00000°.*

*JMA **21** 13:10:16.6±0.4, 46°29N×140°49E, h6km, M3.6*

**ISC 21 13:10:17.6±1.1, 46°33N±0°03×140°54E±0°08, h10km, n17, σ2°53/29, mb3.5/3, Primorye**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JRBN** | **Rebuntou** | **0.98** | **158** | P | **Pg** | **13 10 34.5** | **-1.8** |
| JRBN | | | | *eS* | **Sg** | **13 10 47.0** | **-2.0** |
| **KHLM** | **Kholmsk** | **1.27** | **55** | *i* Pg | **Pn** | **13 10 41.2** | **-0.2** |
| KHLM | | | | *eSg* | **Sb** | **13 10 58.4** | **+0.4** |
| **JRR** | **Rishiri** | **1.31** | **155** | P | **Pg** | **13 10 41.2** | **-1.4** |
| **JWK2** | **Keihoku** | **1.39** | **136** | P | **Pn** | **13 10 42.2** | **-0.8** |
| JWK2 | | | | *eS* | **Sg** | **13 11 00.9** | **-1.3** |
| **YSS** | **Yuzh-Sakhalins** | **1.65** | **67** | *eP* | **Pn** | **13 10 46.4** | **-0.2** |
| YSS | | | | P | **Pb** | **13 10 47.7** | **-0.4** |
| | 20nm,0.4s | | | | | | |
| YSS | | | | *eS* | **Sn** | **13 11 07.2** | **-0.7** |
| YSS | | | | S | **Sb** | **13 11 09.2** | **+0.2** |
| | 200nm,0.4s | | | | | | |
| YSS | | | | S | **Sb** | **13 11 09.2** | **+0.2** |
| | 130nm,0.4s | | | | | | |
| **JSE** | **Soyaes** | **1.98** | **133** | P | **Pn** | **13 10 50.1** | **-1.0** |
| **JYG** | **Yagishiri** | **2.00** | **161** | P | **Pn** | **13 10 50.5** | **-0.9** |
| **JSS** | **Shosan** | **2.14** | **154** | P | **Pn** | **13 10 53.3** | **0.0** |
| **ASAJ** | **Asahikawa** | **2.65** | **146** | LR | LR | 13 11 49.5 | |
| | comp=Z,42nm,21.8s,baz=83,slow=39 | | | | | | |
| **JHR** | **Hokuryu** | **2.72** | **161** | P | **Pn** | **13 11 01.6** | **+0.4** |
| **UGL** | **Uglegorsk** | **2.94** | **20** | *eP* | **Pb** | **13 11 08.9** | **-1.1** |
| UGL | | | | P | **Pg** | **13 11 09.6** | **-4.3** |
| | 40nm,0.8s | | | | | | |
| UGL | | | | *eS* | **Sb** | **13 11 43.6** | **-2.4** |
| UGL | | | | S | **Sn** | **13 11 45.2** | **+5.6** |
| | 50nm,0.7s | | | | | | |
| UGL | | | | S | **Sn** | **13 11 45.2** | **+5.6** |
| | 70nm,0.7s | | | | | | |
| UGL | | | | *eSg* | **Sg** | **13 11 53.2** | **+1.2** |
| UGL | | | | A | A | 13 12 00.5 | |
| | 80nm,0.9s | | | | | | |
| UGL | | | | A | A | 13 12 00.5 | |
| | 110nm,0.9s | | | | | | |
| **TYV** | **Tymovskoe** | **4.75** | **16** | *eP* | **Pn** | **13 11 29.5** | **+0.3** |
| TYV | | | | AMB | AMB | 13 11 35.2 | |
| | 10.0nm,0.8s | | | | | | |
| TYV | | | | *eS* | **Sn** | **13 12 23.0** | **-1.3** |
| TYV | | | | A | A | 13 12 25.0 | |
| | 7.0nm,0.5s | | | | | | |
| TYV | | | | A | A | 13 12 25.0 | |
| | 7.0nm,0.5s | | | | | | |
| TYV | | | | *eS* | **Sb** | **13 12 33.3** | **-4.8** |
| TYV | | | | S | **Sb** | **13 12 35.1** | **-3.0** |
| | 8.0nm,0.8s | | | | | | |
| TYV | | | | S | **Sb** | **13 12 35.1** | **-3.0** |
| | 8.0nm,0.8s | | | | | | |
| **GRNR** | **Gornyy** | **5.22** | **330** | *eP* | Pn | 13 11 40.8 | +5.2 |
| GRNR | | | | AMB | AMB | 13 11 41.6 | |
| | 5.0nm,0.4s | | | | | | |
| **GUMO** | **Guam** | **32.84** | **172** | LR | LR | 13 26 23.9 | |
| | comp=Z,24nm,20.4s,baz=90,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.25** | **293** | P | P | 13 17 50.6 | +4.6 |
| | 0.3nm,0.8s,baz=77,slow=6.4,SNR=2.6 | | | | | | |
| **ILAR** | **Eielson Array** | **42.24** | **37** | P | **P** | **13 18 14.6** | **+4.1** |
| | 0.7nm,0.7s,baz=281,slow=8.8,SNR=5.6 | | | | | | |
| ILAR | | | | LR | LR | 13 37 35.1 | |
| | comp=Z,26nm,19.9s,baz=100,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.22** | **33** | P | **P** | **13 19 59.1** | **+1.8** |
| | 0.3nm,0.7s,baz=304,slow=6.7,SNR=4.6 | | | | | | |

*ISK **21** 13:11:04.2, 38°24N×26°39E, h6km, ML3.2/19*

*ATH **21** 13:11:05.5, 38°23N×26°52E, h29km±1km, ML3.3/4, Error ellipse: s-maj=3.2km s-min=1.1km az=228.0*

*DDA **21** 13:11:05.9±0.0, 38°24N×26°54E, h11km, ML3.0*

*THE **21** 13:11:06.6, 38°22N×26°51E, h9km±2km, ML3.3/3, Error ellipse: s-maj=3.0km s-min=0.7km az=229.0*

**ISC 21 13:11:06.0±0.8, 38°24N±0°02×26°52E±0°02, h12km±5km, n50, σ0°52/69, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEYE** | **Izmir, Urla-Ze** | **0.01** | **266** | P | **Pg** | **13 11 08.1** | **0.0** |
| ZEYE | | | | S | **Sg** | **13 11 09.7** | **+0.2** |
| ZEYE | | | | *i* AML | AML | 13 11 10.0 | |
| | comp=E,1μm,0.2s | | | | | | |
| ZEYE | | | | *i* AML | AML | 13 11 10.0 | |
| | comp=N,1μm,0.2s | | | | | | |
| **URLA** | **Izmir** | **0.14** | **28** | PG | **Pg** | **13 11 09.1** | **-0.3** |
| **URLA** | **Izmir** | **0.14** | **28** | P | **Pg** | **13 11 09.2** | **-0.3** |
| URLA | | | | S | **Sg** | **13 11 11.5** | **-0.3** |
| **DGB** | **zmir** | **0.34** | **123** | P | **Pg** | **13 11 12.7** | **-0.2** |
| DGB | | | | S | **Sg** | **13 11 17.6** | **0.0** |
| DGB | | | | *i* AML | AML | 13 11 18.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| DGB | | | | *i* AML | AML | 13 11 18.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| **CHOS** | **Chios island** | **0.39** | **292** | P | **Pb** | **13 11 14.6** | **-0.2** |
| CHOS | | | | S | **Sb** | **13 11 20.5** | **-0.4** |
| | 3μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.39** | **292** | P | **Pb** | **13 11 14.6** | **-0.2** |
| CHOS | | | | S | **Sb** | **13 11 20.5** | **-0.4** |
| CHOS | | | | AML | AML | 13 11 21.3 | |
| | comp=N,4451μm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 13 11 22.3 | |
| | comp=E,7420μm,0.2s | | | | | | |
| **FOCM** | **Foa** | **0.50** | **20** | PG | **Pg** | **13 11 15.4** | **-0.4** |
| FOCM | | | | SG | **Sg** | **13 11 23.1** | **+0.6** |
| **SMG** | **Samos** | **0.59** | **154** | P | **Pg** | **13 11 17.2** | **-0.2** |
| SMG | | | | S | **Sb** | **13 11 26.5** | **+0.1** |
| | comp=E,3μm,0.3s | | | | | | |
| **SMG** | **Samos** | **0.59** | **154** | P | **Pg** | **13 11 17.3** | **-0.2** |
| SMG | | | | S | **Sb** | **13 11 26.5** | **+0.1** |
| SMG | | | | AML | AML | 13 11 29.2 | |
| | comp=N,6172μm,0.4s | | | | | | |
| SMG | | | | AML | AML | 13 11 29.4 | |
| | comp=E,6766μm,0.3s | | | | | | |
| **CAND** | **Candarli** | **0.75** | **17** | PG | **Pg** | **13 11 19.9** | **-0.6** |
| CAND | | | | SG | **Sb** | **13 11 31.2** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **0.78** | **133** | PG | **Pg** | **13 11 20.7** | **-0.4** |
| GCAM | | | | SG | **Sb** | **13 11 31.9** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.78** | **133** | P | **Pg** | **13 11 20.4** | **-0.7** |
| **PSRA** | **Psara** | **0.81** | **292** | P | **Pb** | **13 11 22.1** | **+0.2** |
| PSRA | | | | S | **Sb** | **13 11 33.6** | **+0.9** |
| PSRA | | | | AML | AML | 13 11 37.2 | |
| | comp=N,5969μm,0.2s | | | | | | |
| PSRA | | | | AML | AML | 13 11 37.6 | |
| | comp=E,6511μm,0.2s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.85** | **31** | P | **Pg** | **13 11 21.7** | **-0.7** |
| ZEDA | | | | S | **Sg** | **13 11 33.7** | **+0.2** |
| ZEDA | | | | *i* AML | AML | 13 11 37.0 | |
| | comp=E,372nm,0.9s | | | | | | |
| ZEDA | | | | *i* AML | AML | 13 11 37.0 | |
| | comp=E,630nm,0.4s | | | | | | |
| **DKL** | **Dikili** | **0.89** | **20** | PG | **Pg** | **13 11 22.4** | **-0.7** |
| DKL | | | | SG | **Sb** | **13 11 35.6** | **+0.6** |
| **DDIM** | **Aydin, Didim** | **0.97** | **143** | P | **Pg** | **13 11 24.2** | **-0.5** |
| DDIM | | | | S | **Sn** | **13 11 38.5** | **-0.5** |
| **PRK** | **Paraskevi** | **1.02** | **349** | P | **Pn** | **13 11 26.2** | **+0.1** |
| PRK | | | | S | **Sn** | **13 11 41.4** | **+1.0** |
| | comp=E,2μm,0.6s | | | | | | |
| **PRK** | **Paraskevi** | **1.02** | **349** | P | **Pn** | **13 11 26.2** | **+0.1** |
| PRK | | | | S | **Sb** | **13 11 39.5** | **+0.5** |
| PRK | | | | AML | AML | 13 11 46.2 | |
| | comp=N,4045μm,0.5s | | | | | | |
| PRK | | | | AML | AML | 13 11 47.2 | |
| | comp=E,3413μm,0.7s | | | | | | |
| **AYVA** | **Ayvalik** | **1.08** | **7** | P | **Pb** | **13 11 26.0** | **-0.5** |
| AYVA | | | | S | **Sn** | **13 11 41.9** | **+0.2** |
| **GOMA** | **Golmarmara-Man** | **1.20** | **67** | PN | **Pg** | **13 11 29.5** | **+0.5** |
| **AKS** | **Akhisar** | **1.20** | **58** | PN | **Pg** | **13 11 29.4** | **+0.3** |
| **AKHS** | **Akhisar** | **1.20** | **58** | P | **Pn** | **13 11 28.2** | **-0.4** |
| AKHS | | | | S | **Sb** | **13 11 44.3** | **+0.1** |
| AKHS | | | | *i* AML | AML | 13 11 46.0 | |
| | comp=E,446nm,0.6s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **1.25** | **346** | PN | **Pn** | **13 11 28.0** | **-1.2** |
| **TNSA** | **Tinos** | **1.28** | **237** | P | **Pn** | **13 11 29.0** | **-0.6** |
| **KOCA** | **Canakkale, Ayv** | **1.29** | **347** | P | **Pn** | **13 11 29.2** | **-0.6** |
| KOCA | | | | *i* AML | AML | 13 11 56.0 | |
| | comp=E,279nm,0.8s | | | | | | |
| **BODT** | **Bodrum** | **1.33** | **152** | PN | **Pb** | **13 11 30.8** | **-0.1** |
| **BUHA** | **Balikesir, Bur** | **1.33** | **19** | P | **Pn** | **13 11 29.9** | **-0.5** |
| BUHA | | | | *i* AML | AML | 13 11 52.0 | |
| | comp=E,274nm,0.5s | | | | | | |
| BUHA | | | | *i* AML | AML | 13 11 54.0 | |
| | comp=E,219nm,0.4s | | | | | | |
| **MLSB** | **Milas** | **1.37** | **133** | PN | **Pb** | **13 11 31.8** | **+0.2** |
| **STEP** | **BALIKESIR_Sava** | **1.47** | **39** | P | **Pn** | **13 11 32.4** | **0.0** |
| STEP | | | | S | **Sg** | **13 11 52.8** | **-0.6** |
| STEP | | | | *i* AML | AML | 13 11 55.0 | |
| | comp=E,416nm,0.5s | | | | | | |
| STEP | | | | *i* AML | AML | 13 12 02.0 | |
| | comp=E,209nm,0.5s | | | | | | |
| **KOSK** | **Kos Island** | **1.53** | **166** | PN | **Pn** | **13 11 33.4** | **+0.3** |
| **EZN** | **Ezine** | **1.59** | **355** | P | **Pn** | **13 11 33.3** | **-0.6** |
| **EZN** | **Ezine** | **1.59** | **355** | PN | **Pn** | **13 11 33.7** | **-0.2** |
| **BOZC** | **Bozcaada** | **1.64** | **347** | PN | **Pn** | **13 11 33.9** | **-0.7** |
| **BOZC** | **Bozcaada** | **1.64** | **347** | P | **Pn** | **13 11 34.0** | **-0.7** |
| BOZC | | | | *i* AML | AML | 13 12 01.0 | |
| | comp=E,85nm,0.4s | | | | | | |
| **KARY** | **Karystos** | **1.65** | **263** | P | **Pn** | **13 11 35.1** | **+0.4** |
| **KARY** | **Karystos** | **1.65** | **263** | P | **Pn** | **13 11 35.1** | **+0.4** |
| **KULA** | **Kula-Manisa** | **1.71** | **80** | PN | **Pb** | **13 11 36.5** | **-0.8** |
| **BALY** | **Balya** | **1.73** | **30** | P | **Pn** | **13 11 36.5** | **+0.6** |
| BALY | | | | *i* AML | AML | 13 12 04.0 | |
| | comp=E,263nm,0.7s | | | | | | |
| BALY | | | | *i* AML | AML | 13 12 07.0 | |
| | comp=E,131nm,0.3s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **1.74** | **124** | P | **Pb** | **13 11 37.9** | **+0.1** |
| **YER** | **Yerkesik** | **1.78** | **128** | PN | **Pb** | **13 11 37.7** | **-0.9** |
| **ECEA** | **Canakkale, Ece** | **1.82** | **352** | P | **Pb** | **13 11 39.9** | **+0.7** |
| ECEA | | | | *i* AML | AML | 13 12 09.0 | |
| | comp=E,116nm,0.6s | | | | | | |
| ECEA | | | | *i* AML | AML | 13 12 12.0 | |
| | comp=E,151nm,0.7s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **1.94** | **282** | P | **Pn** | **13 11 39.1** | **+0.4** |
| **LIA** | **Limnos Island** | **1.95** | **328** | P | **Pn** | **13 11 39.0** | **+0.1** |
| **LIA** | **Limnos Island** | **1.95** | **328** | P | **Pn** | **13 11 38.7** | **-0.2** |
| **GADA** | **Gvkgeada** | **2.01** | **346** | PN | **Pn** | **13 11 39.2** | **-0.4** |
| **TURN** | **Turunc** | **2.01** | **136** | PN | **Pn** | **13 11 40.5** | **+0.9** |
| **SIMA** | **Simav-Kutahya** | **2.11** | **66** | PN | **Pn** | **13 11 42.4** | **+1.3** |
| **GELI** | **Tayfur-Gelibol** | **2.16** | **359** | PN | **Pn** | **13 11 41.6** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **2.23** | **16** | PN | **Pn** | **13 11 43.3** | **+0.5** |
| **SMTH** | **Samothraki Isl** | **2.35** | **341** | P | **Pn** | **13 11 44.2** | **-0.3** |

*IDC **21** 13:29:41.1±0.9, 11°.22S×161°.67E, h0km, mb4.1/11, mb1 4.3/14, mb1mx4.1/44, mbtmp4.1/14, ML3.7/3, MS3.4/6, Ms1 3.4/6, ms1mx3.0/58, Error ellipse: s-maj=25.4km s-min=19.1km az=128.0*

*NEIC **21** 13:29:43.8±1.9, 11°.16S±0°.09×161°.66E±0°.10, h10km±1km, mb4.7/50, Error ellipse: s-maj=18.8km s-min=11.5km az=232.0*

**ISC 21 13:29:45.6±0.5, 11°16S±0°08×161°64E±0°09, h28km, n76, σ0°99/72, mb4.6/36, MS3.7/3, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **2.40** | **316** | Pn | **Pn** | **13 30 23.5** | **+0.5** |
| | 24nm,0.3s,baz=141,slow=17,SNR=4.8 | | | | | | |
| HNR | | | | Sn | **Sn** | **13 30 50.3** | **-1.1** |
| | 55nm,0.3s,baz=259,slow=23,SNR=6.8 | | | | | | |
| HNR | | | | LR | LR | 13 31 22.0 | |
| | comp=Z,257nm,19.0s,baz=132,slow=41 | | | | | | |
| **HNR** | **Honiara** | **2.40** | **316** | | **Pn** | **13 30 22.0** | **-0.9** |
| **SANVU** | **Saraoutou** | **6.89** | **129** | | **Pn** | **13 31 23.9** | **-0.8** |
| **DZM** | **Mont Dzumac** | **11.78** | **158** | Pn | **Pn** | **13 32 31.2** | **-0.7** |
| | 0.3nm,0.3s,baz=22,slow=9.5,SNR=6.3 | | | | | | |
| **PMG** | **Port Moresby** | **14.36** | **276** | LR | LR | 13 38 21.4 | |
| | comp=Z,158nm,18.1s,baz=126,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **17.26** | **237** | P | **Pn** | **13 33 44.9** | **+0.1** |
| | 0.2nm,0.3s,baz=76,slow=9.7,SNR=2.5 | | | | | | |
| CTA | | | | LR | LR | 13 39 02.3 | |
| | comp=Z,89nm,21.1s,baz=104,slow=32 | | | | | | |
| **COEN** | **Coen** | **18.24** | **259** | P | **P** | **13 33 59.2** | **+2.4** |
| **WR0** | **Warramunga Arr** | **27.50** | **248** | P | **P** | **13 35 29.9** | **0.0** |
| WR0 | | | | IAmb | IAmb | 13 35 32.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **27.59** | **249** | P | **P** | **13 35 30.6** | **0.0** |
| WB0 | | | | IAmb | IAmb | 13 35 40.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.67** | **248** | P | **P** | **13 35 31.4** | **+0.1** |
| **WB2** | **Warramunga Arr** | **27.67** | **248** | P | **P** | **13 35 31.7** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 13 35 41.4 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.68** | **248** | P | **P** | **13 35 30.9** | **-0.7** |
| | comp=Z,3.3nm,0.9s,baz=77,slow=10.0,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.68** | **248** | P | **P** | **13 35 30.3** | **-1.2** |
| **STKA** | **Stephens Creek** | **27.70** | **219** | P | **P** | **13 35 30.1** | **-1.5** |
| | comp=Z,1.3nm,0.7s,baz=45,slow=4.3,SNR=2.1 | | | | | | |
| STKA | | | | LR | LR | 13 45 33.6 | |
| | comp=Z,179nm,18.5s,baz=27,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **29.17** | **241** | P | **P** | **13 35 44.1** | **-0.7** |
| **ASAR** | **Alice Springs** | **29.17** | **241** | P | **P** | **13 35 44.0** | **-0.8** |
| | comp=Z,2.9nm,0.8s,baz=70,slow=9.4,SNR=23 | | | | | | |
| ASAR | | | | ScP | **ScP** | **13 42 34.6** | **+2.7** |
| | comp=Z,0.9nm,1.1s,baz=132,slow=2.8,SNR=4.1 | | | | | | |
| **MTN** | **Manton Dam** | **29.88** | **264** | P | **P** | **13 35 51.5** | **+0.4** |
| MTN | | | | IAmb | IAmb | 13 36 02.6 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.89** | **10** | T | T | 14 06 50.3 | |
| | baz=189,slow=75,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.89** | **10** | T | T | 14 06 46.9 | |
| | baz=189,slow=75,SNR=7.8 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.90** | **10** | T | T | 14 06 51.4 | |
| | baz=189,slow=75,SNR=7.7 | | | | | | |
| **TOO** | **Toolangi** | **30.03** | **206** | P | **P** | **13 35 52.6** | **+0.4** |
| **BBOO** | **Buckleboo** | **31.89** | **224** | P | **P** | **13 36 08.9** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 13 36 11.9 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **32.27** | **258** | P | **P** | **13 36 12.9** | **+0.7** |
| KNRA | | | | IAmb | IAmb | 13 36 15.0 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.46** | **255** | P | **P** | **13 36 39.4** | **-0.5** |
| | comp=Z,2.9nm,0.9s,baz=86,slow=11,SNR=6.0 | | | | | | |
| FITZ | | | | LR | LR | 13 50 37.4 | |
| | comp=Z,47nm,19.2s,baz=95,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.46** | **255** | P | **P** | **13 36 39.8** | **-0.1** |
| **FORT** | **Forrest** | **36.72** | **233** | P | **P** | **13 36 49.6** | **-1.0** |
| FORT | | | | IAmb | IAmb | 13 36 53.9 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **36.77** | **269** | P | **P** | **13 36 51.7** | **+0.4** |
| SOEI | | | | IAmb | IAmb | 13 37 17.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **TOLI2** | **Tolitoli** | **42.41** | **284** | P | **P** | **13 37 36.6** | **-1.6** |
| TOLI2 | | | | IAmb | IAmb | 13 37 52.6 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.33** | **336** | P | **P** | **13 38 56.0** | **+1.0** |
| **MAJO** | **Matsushiro** | **52.33** | **336** | P | **P** | **13 38 55.9** | **+0.9** |
| MAJO | | | | IAmb | IAmb | 13 38 59.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **52.34** | **336** | P | **P** | **13 38 56.0** | **+0.9** |
| MJB9 | | | | IAmb | IAmb | 13 38 59.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **61.33** | **336** | P | **P** | **13 39 58.1** | **-0.6** |
| USA0B | | | | IAmb | IAmb | 13 40 12.7 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **61.33** | **336** | P | **P** | **13 39 57.8** | **-0.9** |
| **UBPT** | **Khong Chiam** | **61.52** | **294** | P | **P** | **13 40 01.5** | **+1.0** |
| UBPT | | | | IAmb | IAmb | 13 40 08.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ENH** | **Enshi** | **64.89** | **311** | P | **P** | **13 40 21.9** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** | **68.49** | **295** | P | **P** | **13 40 47.5** | **+1.7** |
| | comp=Z,0.6nm,0.7s,baz=101,slow=4.8,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **76.42** | **325** | P | **P** | **13 41 33.3** | **+0.6** |
| | comp=Z,0.4nm,0.3s,baz=156,slow=7.3,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **76.42** | **325** | P | **P** | **13 41 32.6** | **-0.1** |
| **QSPA** | **South Pole Qui** | **78.84** | **180** | P | **P** | **13 41 46.1** | **+0.2** |
| | comp=Z,2.3nm,1.0s,baz=219,slow=0.7,SNR=3.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **78.84** | **180** | IAmb | IAmb | 13 42 11.8 | |
| | comp=Z,6.8nm,1.4s | |

comp=Z,0.4nm,0.6s,baz=233,slow=5.5,SNR=5.3
**MKAR Makanchi Array 90.87 318** P **P 13 42 45.4 -1.3**
comp=Z,0.3nm,0.6s,baz=96,slow=6.1,SNR=4.7
**LPIG La Paz 92.73 66** LR LR 14 15 07.1
comp=Z,39nm,19.3s,baz=18,slow=29
**YKA Yellowknife Ar 96.94 28** P **P 13 43 13.8 -0.4**
comp=Z,0.5nm,0.6s,baz=260,slow=4.5,SNR=8.4
**YKA Yellowknife Ar 96.94 28** P **P 13 43 12.8 -1.3**

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*IDC **21** 13:37:37.8±1.2,45°.82S×77°.39W,h0km,mb3.9/5, mb1 4.0/6,mb1mx3.8/32,mbtmp3.8/6,ML3.4/1,MS4.2/26, Ms1 4.2/26,ms1mx4.0/47,Error ellipse: s-maj=50.9km s-min=23.8km az=115.0*
*NEIC **21** 13:37:38.4±1.6,45°.73S±0°.07×77°.5W±0°.2,h10km±1km, mb4.4/8,Error ellipse: s-maj=20.7km s-min=12.3km az=270.0*
*GCMT **21** 13:37:40.4±0.3,45°.72S±0°.02×77°.76W±0°.03,h19km±1km, MW4.9/94,Moment Tensor Solution. s14,c15; s94,c116; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=0.75±.16; Mθθ 1.44±.12; Mϕϕ-0.68±.12; Mrθ 1.16±.23; Mrϕ-2.12±.10; Mθϕ-1.43±.29; Best double couple: M=2.91700×10^16^ NP1:ϕs341.00000°,δ85.00000°,λ-39.00000°. Principal axes: T 3.4750, Plg23.0000°, Azm34.0000°; N -1.1160, Plg50.0000°, Azm155.0000°; P -2.3590, Plg30.0000°, Azm290.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 21 13:37:38.0±0.9,45°.75S±0°.07×77°.7W±0°.1,h10km,n79, σ1§20/53,mb4.1/6,MS4.2/24,1C,Off coast of southern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO07** | **Milladeo Hill,** | **3.91** | **49** | Pn | **Pn** | **13 38 36.1** | **-1.9** |
| **GO07** | **Milladeo Hill,** | **3.91** | **49** | *eP* | **Pn** | **13 38 36.5** | **-1.5** |
| GO07 | | | | *eS* | **Sn** | **13 39 24.9** | **+1.1** |
| **COYC** | **Coyhaique** | **3.94** | **89** | Pn | **Pn** | **13 38 38.2** | **-0.2** |
| **COYC** | **Coyhaique** | **3.94** | **89** | *eP* | **Pn** | **13 38 38.0** | **-0.4** |
| COYC | | | | *eS* | **Sn** | **13 39 25.9** | **+1.3** |
| **LL07** | **Hotel Espejo d** | **4.20** | **48** | Pn | **Pn** | **13 38 40.7** | **-1.3** |
| **LL07** | **Hotel Espejo d** | **4.20** | **48** | *eP* | **Pn** | **13 38 42.2** | **+0.2** |
| **GO08** | **Villa O'Higgin** | **4.43** | **130** | Pn | **Pn** | **13 38 44.5** | **-0.8** |
| **GO08** | **Villa O'Higgin** | **4.43** | **130** | *eP* | **Pn** | **13 38 44.5** | **-0.8** |
| **LL06** | **Loncomilla** | **4.59** | **41** | *eP* | **Pn** | **13 38 46.6** | **-0.8** |
| **LL02** | **Futaleuf** | **4.90** | **61** | | **Pn** | **13 38 50.8** | **-0.9** |
| **LL01** | **San Ignacio de** | **5.08** | **50** | *eP* | **Pn** | **13 38 53.0** | **-1.1** |
| **LL05** | **Los Muermos** | **5.31** | **37** | Pn | **Pn** | **13 38 56.9** | **-0.4** |
| **LL05** | **Los Muermos** | **5.31** | **37** | *eP* | **Pn** | **13 38 56.2** | **-1.1** |
| **LL03** | **Petrohue** | **6.00** | **42** | *eP* | **Pn** | **13 39 05.4** | **-1.5** |
| **LR04** | **Corral** | **6.65** | **30** | Pn | **Pn** | **13 39 15.2** | **-0.5** |
| **LR04** | **Corral** | **6.65** | **30** | *eP* | **Pn** | **13 39 16.1** | **-0.6** |
| **MG05** | **Puerto Natales** | **6.85** | **152** | Pn | **Pn** | **13 39 18.3** | **-0.1** |
| **MG05** | **Puerto Natales** | **6.85** | **152** | *eP* | **Pn** | **13 39 16.9** | **-1.5** |
| **PLCA** | **Paso Flores** | **7.23** | **49** | Pn | **Pn** | **13 39 22.9** | **-0.9** |
| | 0.2nm,0.3s,baz=230,slow=12,SNR=8.3 | | | | | | |
| PLCA | | | | LR | LR | 13 42 06.0 | |
| | comp=Z,4μm,19.0s,baz=210,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **7.23** | **49** | Pn | **Pn** | **13 39 23.8** | **0.0** |
| **LR03** | **Panguipulli** | **7.27** | **35** | | **Pn** | **13 39 23.8** | **-0.4** |
| **LR03** | **Panguipulli** | **7.27** | **35** | *eP* | **Pn** | **13 39 23.6** | **-0.6** |
| **LC01** | **Cunco** | **8.09** | **34** | Pn | **Pn** | **13 39 34.5** | **-0.9** |
| **MG04** | **Isla Riesco** | **8.16** | **153** | Pn | **Pn** | **13 39 35.5** | **-0.8** |
| **GO10** | **Punta Arenas** | **8.58** | **152** | *eP* | **Pn** | **13 39 41.4** | **-0.7** |
| **MG02** | **Cerro Sombrero** | **8.95** | **145** | Pn | **Pn** | **13 39 46.4** | **-0.8** |
| **MG03** | **Isla Dawson** | **9.35** | **153** | Pn | **Pn** | **13 39 51.4** | **-1.3** |
| **USHA** | **Ushuaia** | **10.84** | **150** | LR | LR | 13 44 01.5 | |
| | comp=Z,1μm,21.1s,baz=314,slow=36 | | | | | | |
| **ML02** | **Panimavida** | **11.05** | **28** | Pn | **Pn** | **13 40 14.1** | **-1.9** |
| **GO05** | **Huala** | **11.59** | **24** | Pn | **Pn** | **13 40 22.4** | **-1.0** |
| **H03S1** | **Juan Fernandez** | **11.93** | **355** | T | T | 13 52 41.6 | |
| | baz=173 | | | | | | |
| **H03S2** | **Juan Fernandez** | **11.94** | **355** | T | T | 13 52 45.7 | |
| | baz=173 | | | | | | |
| **H03S3** | **Juan Fernandez** | **11.95** | **355** | T | T | 13 52 41.8 | |
| | baz=173 | | | | | | |
| **BO02** | **Sierra Bellavi** | **12.14** | **28** | Pn | **Pn** | **13 40 30.9** | **-0.2** |
| **BO01** | **Tunca** | **12.41** | **26** | Pn | **Pn** | **13 40 33.3** | **-1.4** |
| **MT01** | **Popeta** | **12.85** | **25** | Pn | **Pn** | **13 40 39.5** | **-1.2** |
| **MT09** | **Talagante** | **13.01** | **26** | Pn | **Pn** | **13 40 41.5** | **-1.5** |
| **LMEL** | **Las Melosas** | **13.20** | **28** | Pn | **Pn** | **13 40 44.2** | **-1.3** |
| **MT05** | **Renca** | **13.45** | **26** | Pn | **Pn** | **13 40 47.1** | **-1.7** |
| **MT02** | **Curacav** | **13.45** | **24** | Pn | **Pn** | **13 40 45.9** | **-3.0** |
| **ROC1** | **El Roble** | **13.75** | **24** | Pn | **Pn** | **13 40 51.3** | **-1.9** |
| **VA06** | **Catapilco** | **14.06** | **23** | Pn | **Pn** | **13 40 55.9** | **-1.3** |
| **VA03** | **San Esteban** | **14.09** | **25** | Pn | **Pn** | **13 40 56.7** | **-1.0** |
| **CO02** | **Combarbal** | **15.43** | **22** | Pn | **Pn** | **13 41 15.0** | **-0.8** |
| **ZON** | **Zonda** | **15.81** | **29** | P | **P** | **13 41 23.6** | **-1.0** |
| **CO03** | **El Pedregal** | **15.86** | **23** | Pn | **Pn** | **13 41 20.6** | **-0.8** |
| **AC02** | **Maricunga** | **20.07** | **23** | P | **P** | **13 42 10.0** | **-2.0** |
| AC02 | | | | IAmb | IAmb | 13 42 20.8 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **PMSA** | **Palmer Station** | **20.50** | **163** | LR | LR | 13 48 10.1 | |
| | comp=Z,492nm,19.0s,baz=2.5,slow=31 | | | | | | |
| **PLTB** | **Pedras Altas** | **23.29** | **62** | P | **P** | **13 42 45.9** | **0.0** |
| PLTB | | | | IAmb | IAmb | 13 42 53.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **LVC** | **Limon Verde** | **24.17** | **20** | LR | LR | 13 52 47.2 | |
| | comp=Z,355nm,18.8s,baz=190,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **25.30** | **47** | P | **P** | **13 43 04.9** | **+0.3** |
| | comp=Z,1.3nm,0.8s,baz=23,slow=16,SNR=2.0 | | | | | | |
| **CPUP** | **Villa Florida** | **25.30** | **47** | IAmb | IAmb | 13 43 33.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **RPN** | **Rapa Nui** | **31.23** | **296** | LR | LR | 13 53 02.5 | |
| | comp=Z,496nm,19.4s,baz=125,slow=29 | | | | | | |
| **SIV** | **San Ignacio** | **32.78** | **31** | P | **P** | **13 44 12.0** | **+0.7** |
| | comp=Z,1.4nm,1.0s,baz=223,slow=9.2,SNR=6.2 | | | | | | |
| SIV | | | | LR | LR | 13 58 17.1 | |
| | comp=Z,421nm,21.4s,baz=274,slow=38 | | | | | | |
| **NNA** | **Nana** | **33.66** | **1** | LR | LR | 13 54 24.4 | |
| | comp=Z,296nm,19.1s,baz=182,slow=30 | | | | | | |
| **ATAH** | **Atahualpa** | **38.47** | **359** | LR | LR | 13 56 52.5 | |
| | comp=Z,408nm,21.5s,baz=192,slow=30 | | | | | | |
| **BDFB** | **Brasilia** | **38.98** | **49** | P | **P** | **13 45 05.2** | **+0.7** |
| | comp=Z,1.1nm,0.4s,baz=186,slow=9.2,SNR=3.3 | | | | | | |
| BDFB | | | | LR | LR | 14 02 36.8 | |
| | comp=Z,1μm,18.5s,baz=223,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **38.98** | **49** | IAmb | IAmb | 13 45 16.6 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **44.50** | **180** | P | **P** | **13 45 50.0** | **+0.7** |
| | comp=Z,4.3nm,1.0s,baz=141,slow=5.4,SNR=5.9 | | | | | | |
| QSPA | | | | LR | LR | 14 02 34.8 | |
| | comp=Z,195nm,18.4s,baz=142,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **44.50** | **180** | IAmb | IAmb | 13 45 54.0 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **47.47** | **24** | LR | LR | 14 07 48.9 | |
| | comp=Z,281nm,18.5s,baz=154,slow=38 | | | | | | |
| **ROSC** | **El Rosal** | **50.45** | **4** | LR | LR | 14 05 50.1 | |
| | comp=Z,441nm,20.1s,baz=214,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **54.75** | **9** | LR | LR | 14 08 44.0 | |
| | comp=Z,239nm,20.8s,baz=202,slow=34 | | | | | | |
| **MDP** | **Montagnes des** | **55.33** | **31** | LR | LR | 14 11 37.0 | |
| | comp=Z,320nm,18.9s,baz=241,slow=37 | | | | | | |
| **JTS** | **Las Juntas de** | **56.16** | **351** | LR | LR | 14 06 12.9 | |
| | comp=Z,82nm,18.2s,baz=230,slow=30 | | | | | | |
| **RPZ** | **Rata Peaks** | **72.09** | **225** | LR | LR | 14 12 59.4 | |
| | comp=Z,307nm,20.2s,baz=133,slow=29 | | | | | | |
| **URZ** | **Urewera** | **72.80** | **233** | LR | LR | 14 12 56.7 | |
| | comp=Z,129nm,18.7s,baz=162,slow=29 | | | | | | |
| **SUR** | **Sutherland** | **72.97** | **119** | LR | LR | 14 16 59.1 | |
| | comp=Z,119nm,19.9s,baz=220,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **78.33** | **119** | LR | LR | 14 20 07.8 | |
| | comp=Z,94nm,20.8s,baz=194,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **78.37** | **337** | P | **P** | **13 49 40.8** | **+2.4** |
| | comp=Z,0.8nm,1.1s,baz=160,slow=11,SNR=4.4 | | | | | | |
| **TSUM** | **Tsumeb** | **80.06** | **107** | LR | LR | 14 18 37.2 | |
| | comp=Z,65nm,21.4s,baz=327,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **81.13** | **117** | LR | LR | 14 20 38.9 | |
| | comp=Z,60nm,21.8s,baz=204,slow=32 | | | | | | |
| **MSVF** | **Nonsavu** | **87.03** | **248** | LR | LR | 14 21 27.1 | |
| | comp=Z,117nm,21.4s,baz=333,slow=30 | | | | | | |
| **LSZ** | **Lusaka** | **89.88** | **112** | LR | LR | 14 26 03.3 | |
| | comp=Z,111nm,20.4s,baz=180,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **90.95** | **237** | LR | LR | 14 24 32.5 | |
| | comp=Z,44nm,19.1s,baz=204,slow=31 | | | | | | |
| **STKA** | **Stephens Creek** | **94.93** | **213** | LR | LR | 14 26 03.8 | |
| | comp=Z,151nm,19.2s,baz=201,slow=31 | | | | | | |
| **NEW** | **Newport** | **99.78** | **334** | LR | LR | 14 30 02.4 | |
| | comp=Z,88nm,18.3s,baz=43,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **152.64** | **173** | PKPbc | **PKiKP** | **13 57 35.9** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=204,slow=2.0,SNR=2.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **152.64** | **173** | | **PKPbc** | **13 57 33.8** | **-1.2** |

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*IDC **21** 13:52:13.2±2.3,59°.78N×153°.11W,h98km±35km,mb2.7/1, mb1 3.0/4,mb1mx2.8/56,mbtmp3.1/4,Error ellipse: s-maj=48.6km s-min=20.7km az=106.0*
*NEIC **21** 13:52:13.8±0.9,59°.78N±0°.04×153°.04W±0°.08, h110km±3km,Error ellipse: s-maj=6.2km s-min=4.8km az=114.0*
*AEIC **21** 13:52:15.0±1.2,59°.78N±0°.04×153°.01W±0°.08, h103km±4km,ML2.6/79,ML3.1/90(NEIC),Error ellipse: s-maj=6.1km s-min=4.9km az=120.0*
**ISC 21 13:52:13.7±1.0,59°.79N±0°.04×153°.02W±0°.04, h109km±7km,n114,σ0§85/114,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPT** | **Oil Point** | **0.18** | **218** | | **Pn** | **13 52 29.2** | **+0.2** |
| **O20K** | **Slope Mountain** | **0.35** | **34** | | **Pn** | **13 52 30.1** | **+0.3** |
| O20K | | | | | **Sn** | **13 52 42.1** | **+0.3** |
| **AUL** | **Augustine Lava** | **0.46** | **207** | | **Pn** | **13 52 30.6** | **+0.3** |
| AUL | | | | | **Sn** | **13 52 42.8** | **+0.1** |
| **AUH** | **Augustine H** | **0.48** | **207** | | **Pn** | **13 52 30.8** | **+0.3** |
| **AUQ** | **Augustine Qik'** | **0.48** | **205** | | **Pn** | **13 52 30.7** | **+0.2** |
| **RED** | **Redoubt Volcan** | **0.64** | **11** | | **Pn** | **13 52 31.7** | **+0.1** |
| **RSO** | **Redoubt South** | **0.69** | **11** | Pn | **Pn** | **13 52 32.1** | **0.0** |
| **RDWB** | **Redoubt West** | **0.70** | **7** | | **Pn** | **13 52 32.2** | **0.0** |
| **HOM** | **Homer** | **0.71** | **100** | | **Pn** | **13 52 32.2** | **+0.1** |
| HOM | | | | IAML | | 13 52 48.7 | |
| | comp=N,682nm,0.4s | | | | | | |
| **O19K** | **Port Alsworth** | **0.77** | **302** | Pn | **Pn** | **13 52 32.7** | **+0.1** |
| O19K | | | | IAML | | 13 52 47.1 | |
| | comp=E,426nm,0.5s | | | | | | |
| **NCT** | **North Crescent** | **0.77** | **3** | | **Pn** | **13 52 32.9** | **+0.1** |
| **RDJH** | **Redoubt Jeurge** | **0.81** | **8** | | **Pn** | **13 52 33.3** | **+0.1** |
| RDJH | | | | | **Sn** | **13 52 47.7** | **0.0** |
| **DFR** | **Drift River** | **0.82** | **12** | | **Pn** | **13 52 33.4** | **+0.2** |
| **RDT** | **Redoubt** | **0.84** | **21** | | **Pn** | **13 52 33.5** | **+0.1** |
| **Q19K** | **Cape Douglas,** | **0.92** | **201** | | **Pn** | **13 52 33.9** | **-0.3** |
| **CNPM** | **China Poot** | **0.94** | **106** | | **Pn** | **13 52 34.4** | **+0.1** |
| **CNPM** | **China Poot** | **0.94** | **106** | IAML | | 13 52 50.6 | |
| | comp=N,434nm,0.5s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.08** | **91** | | **Pn** | **13 52 35.4** | **-0.3** |
| BRLK | | | | IAML | | 13 52 52.2 | |
| | comp=N,332nm,0.3s | | | | | | |
| BRLK | | | | IAML | | 13 52 53.4 | |
| | comp=E,349nm,0.1s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.15** | **92** | | **Pn** | **13 52 36.5** | **0.0** |
| **P18K** | **Big Mountain,** | **1.19** | **251** | | **Sn** | **13 52 53.9** | **-0.7** |
| **P18K** | **Big Mountain,** | **1.19** | **251** | | **Pn** | **13 52 36.6** | **-0.3** |
| **P18K** | **Big Mountain,** | **1.19** | **251** | IAML | | 13 52 48.2 | |
| | comp=N,38nm,4.7s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.26** | **325** | | **Pn** | **13 52 37.9** | **+0.2** |
| **CAPN** | **Captain Cook N** | **1.35** | **43** | Pn | **Pn** | **13 52 40.4** | **+1.7** |
| **SPCR** | **Spurr Chakacha** | **1.47** | **15** | | **Pn** | **13 52 40.5** | **+0.4** |
| SPCR | | | | | **Sn** | **13 53 00.6** | **+0.4** |
| **SPU** | **Mount Spurr** | **1.47** | **18** | Pn | **Pn** | **13 52 40.3** | **+0.1** |
| **SPWE** | **Spurr West** | **1.50** | **9** | | **Pn** | **13 52 41.6** | **+0.9** |
| **SPBG** | **Spurr Blockage** | **1.51** | **12** | | **Pn** | **13 52 41.4** | **+0.7** |
| **SLKM** | **Skilak Lake** | **1.57** | **62** | | **Pn** | **13 52 41.6** | **+0.2** |
| SLKM | | | | | **Sn** | **13 53 01.4** | **-1.0** |
| **SPCG** | **Spurr Capps Gl** | **1.58** | **18** | | **Pn** | **13 52 42.2** | **+0.6** |
| **O22K** | **Cooper Landing** | **1.79** | **66** | Pn | **Pn** | **13 52 44.3** | **+0.3** |
| O22K | | | | IAML | | 13 53 22.2 | |
| | comp=N,162nm,0.8s | | | | | | |
| **O22K** | **Cooper Landing** | **1.79** | **66** | | **Sn** | **13 53 06.1** | **-0.8** |
| **STLK** | **Strandline Lak** | **1.81** | **18** | | **Pn** | **13 52 45.1** | **+0.8** |
| **SEW** | **Seward** | **1.82** | **79** | Pn | **Pn** | **13 52 44.1** | **-0.2** |
| **SVW2** | **Sparrevohn** | **1.82** | **317** | | **Pn** | **13 52 44.2** | **-0.2** |
| **KDAK** | **Kodiak Island** | **2.03** | **173** | P | **Pn** | **13 52 46.3** | **-0.7** |
| | comp=N,14nm,0.3s,baz=15,slow=14,SNR=109 | | | S | **Sn** | **13 53 11.2** | **-1.2** |
| KDAK | | | | | | | |
| | comp=N,6.8nm,0.3s,baz=155,slow=22,SNR=16 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.03** | **173** | | **Pn** | **13 52 46.3** | **-0.7** |
| KDAK | | | | IAML | | 13 53 05.1 | |
| | comp=N,136nm,3.0s | | | | | | |
| KDAK | | | | IAML | | 13 53 22.2 | |
| | comp=N,127nm,3.1s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.08** | **50** | Pn | **Pn** | **13 52 47.8** | **+0.1** |
| RC01 | | | | IAML | | 13 53 15.2 | |
| | comp=E,90nm,0.3s | | | | | | |
| **M19K** | **Big River Lodg** | **2.22** | **343** | | **Pn** | **13 52 49.8** | **+0.3** |
| **M22K** | **Willow** | **2.43** | **35** | Pn | **Pn** | **13 52 52.7** | **+0.6** |
| M22K | | | | IAML | | 13 53 23.4 | |
| | comp=E,128nm,1.1s | | | | | | |
| M22K | | | | IAML | | 13 54 09.2 | |
| | comp=N,118nm,3.4s | | | | | | |
| **L19K** | **White Mountain** | **2.56** | **340** | | **Pn** | **13 52 53.9** | **0.0** |
| **PWL** | **Port Wells** | **2.56** | **63** | | **Sn** | **13 53 23.6** | **-1.2** |
| PWL | | | | IAML | | 13 53 26.9 | |
| | comp=N,74nm,0.5s | | | | | | |
| PWL | | | | IAML | | 13 53 37.5 | |
| | comp=E,77nm,3.4s | | | | | | |
| **PWL** | **Port Wells** | **2.56** | **63** | | **Pn** | **13 52 54.2** | **+0.3** |
| **OHAK** | **Old Harbor** | **2.58** | **183** | Pn | **Pn** | **13 52 53.0** | **-1.2** |
| OHAK | | | | IAML | | 13 53 09.5 | |
| | comp=E,118nm,4.9s | | | | | | |
| OHAK | | | | IAML | | 13 54 29.0 | |
| | comp=N,125nm,4.7s | | | | | | |
| **PMR** | **Palmer** | **2.63** | **45** | | **Pn** | **13 52 55.0** | **+0.3** |
| PMR | | | | | **Sn** | **13 53 24.2** | **-2.1** |
| **L20K** | **Farewell, AK** | **2.73** | **352** | | **Pn** | **13 52 56.8** | **+0.7** |
| **KNK** | **Knik Glacier** | **2.77** | **52** | | **Pn** | **13 52 56.2** | **-0.5** |
| **KNK** | **Knik Glacier** | **2.77** | **52** | IAML | | 13 53 29.9 | |
| | comp=E,43nm,0.5s | | | | | | |
| KNK | | | | IAML | | 13 53 31.5 | |
| | comp=N,61nm,2.5s | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.82** | **44** | | **Pn** | **13 52 57.3** | **-0.1** |
| GHO | | | | | **Sn** | **13 53 29.2** | **-1.8** |
| **GHO** | **Glory Hole Cre** | **2.82** | **44** | IAML | | 13 53 46.5 | |
| | comp=N,42nm,3.8s | | | | | | |
| GHO | | | | IAML | | 13 54 29.2 | |
| | comp=E,43nm,4.6s | | | | | | |
| **CUT** | **Chulitna** | **2.94** | **26** | | **Pn** | **13 52 59.1** | **+0.3** |
| **CUT** | **Chulitna** | **2.94** | **26** | IAML | | 13 53 41.1 | |
| | comp=N,79nm,2.5s | | | | | | |
| CUT | | | | IAML | | 13 54 18.8 | |
| | comp=E,57nm,3.8s | | | | | | |
| **SML** | **Sawmill** | **3.06** | **47** | Pn | **Pn** | **13 53 00.8** | **+0.4** |
| SML | | | | IAML | | 13 54 01.4 | |
| | comp=N,80nm,4.8s | | | | | | |
| SML | | | | IAML | | 13 54 46.8 | |
| | comp=E,50nm,5.0s | | | | | | |
| **PPLA** | **Purkeypile** | **3.14** | **7** | | **Pn** | **13 53 03.0** | **+1.4** |
| **TT01** | **Tatalina** | **3.44** | **336** | | **Pn** | **13 53 05.5** | **0.0** |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | | **Pn** | **13 53 05.8** | **0.0** |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | IAML | | 13 54 09.4 | |
| | comp=E,61nm,4.4s | | | | | | |
| SCM | | | | IAML | | 13 54 46.2 | |
| | comp=N,61nm,4.5s | | | | | | |
| **TTA** | **Tatalina** | **3.46** | **337** | | **Pn** | **13 53 05.7** | **-0.1** |
| **TTA** | **Tatalina** | **3.46** | **337** | IAML | | 13 53 41.9 | |
| | comp=E,29nm,4.8s | | | | | | |
| TTA | | | | IAML | | 13 55 05.5 | |
| | comp=N,26nm,5.0s | | | | | | |
| **K20K** | **Telida** | **3.61** | **352** | Pn | **Pn** | **13 53 08.4** | **+0.6** |
| K20K | | | | IAML | | 13 53 53.2 | |
| | comp=E,24nm,4.9s | | | | | | |
| **CAST** | **Castle Rocks** | **3.67** | **7** | Pn | **Pn** | **13 53 09.5** | **+1.0** |
| CAST | | | | IAML | | 13 54 13.9 | |
| | comp=E,26nm,4.4s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **75** | Pn | **Pn** | **13 53 09.4** | **+0.3** |
| **WAT6** | **Susitna Watana** | **3.79** | **40** | | **Pn** | **13 53 10.3** | **0.0** |
| **DIV** | **Divide** | **3.83** | **66** | Pn | **Pn** | **13 53 11.2** | **+0.4** |
| **KLU** | **Klutina** | **3.89** | **61** | | **Pn** | **13 53 12.2** | **+0.6** |
| **KLU** | **Klutina** | **3.89** | **61** | IAML | | 13 54 57.1 | |
| | comp=N,49nm,4.7s | | | | | | |
| KLU | | | | IAML | | 13 55 02.0 | |
| | comp=E,44nm,4.5s | | | | | | |
| **TRF** | **Thorofare Moun** | **3.90** | **18** | Pn | **Pn** | **13 53 11.8** | **+0.1** |
| TRF | | | | IAML | | 13 54 46.5 | |
| | comp=E,43nm,4.8s | | | | | | |
| TRF | | | | IAML | | 13 55 32.4 | |
| | comp=N,32nm,4.7s | | | | | | |
| **KTH** | **Kantishna Hill** | **3.90** | **14** | Pn | **Pn** | **13 53 11.9** | **+0.1** |
| KTH | | | | IAML | | 13 54 04.4 | |
| | comp=N,31nm,4.7s | | | | | | |
| KTH | | | | IAML | | 13 54 13.9 | |
| | comp=E,26nm,4.2s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.07** | **52** | Pn | **Pn** | **13 53 13.9** | **0.0** |
| **CHUM** | **Lake Minchumin** | **4.12** | **4** | | **Pn** | **13 53 15.3** | **+0.8** |
| **RND** | **Reindeer** | **4.14** | **27** | | **Pn** | **13 53 15.1** | **+0.2** |
| RND | | | | IAML | | 13 54 51.0 | |
| | comp=E,38nm,5.0s | | | | | | |
| RND | | | | IAML | | 13 55 35.7 | |
| | comp=N,33nm,4.4s | | | | | | |
| **DHY** | **Denali Highway** | **4.26** | **37** | Pn | **Pn** | **13 53 16.6** | **0.0** |
| DHY | | | | IAML | | 13 54 19.5 | |
| | comp=N,41nm,4.8s | | | | | | |
| DHY | | | | IAML | | 13 55 45.4 | |
| | comp=E,22nm,4.9s | | | | | | |
| **BMRM** | **Bremner River** | **4.34** | **71** | Pn | **Pn** | **13 53 17.7** | **+0.1** |
| **MCK** | **McKinley** | **4.40** | **24** | | **Pn** | **13 53 18.9** | **+0.5** |
| **MCK** | **McKinley** | **4.40** | **24** | IAML | | 13 55 04.2 | |
| | comp=N,33nm,3.9s | | | | | | |
| MCK | | | | IAML | | 13 55 52.2 | |
| | comp=E,32nm,4.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.43** | **12** | Pn | **Pn** | **13 53 20.3** | **+1.6** |
| BPAW | | | | IAML | | 13 55 30.7 | |
| | comp=E,21nm,4.1s | | | | | | |
| **J20K** | **Nowinta River** | **4.43** | **354** | Pn | **Pn** | **13 53 19.2** | **+0.5** |
| J20K | | | | IAML | | 13 56 00.5 | |
| | comp=N,24nm,3.9s | | | | | | |
| J20K | | | | IAML | | 13 56 00.8 | |
| | comp=E,23nm,5.0s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | | **Pn** | **13 53 20.9** | **+0.8** |
| **GLB** | **Gilahina Butte** | **4.83** | **66** | | **Pn** | **13 53 24.6** | **+0.4** |
| **PAX** | **Paxson** | **4.83** | **45** | Pn | **Pn** | **13 53 25.0** | **+0.8** |
| **VRDI** | **Verde Repeater** | **4.94** | **69** | | **Pn** | **13 53 26.2** | **+0.3** |
| **WAX** | **Waxell Ridge** | **5.13** | **78** | Pn | **Pn** | **13 53 28.4** | **+0.1** |
| **NEA2** | **Nenana** | **5.16** | **19** | Pn | **Pn** | **13 53 28.3** | **-0.3** |
| NEA2 | | | | IAML | | 13 54 50.7 | |
| | comp=N,21nm,4.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.23** | **24** | | **Pn** | **13 53 29.3** | **-0.2** |
| **MLY** | **Manley** | **5.36** | **10** | Pn | **Pn** | **13 53 32.0** | **+0.7** |
| **ISLE** | **Juniper Island** | **5.39** | **77** | Pn | **Pn** | **13 53 32.2** | **+0.4** |
| **KIAG** | **Kiagna River** | **5.41** | **73** | | **Pn** | **13 53 32.4** | **+0.3** |
| **HDA** | **Harding Lake** | **5.44** | **29** | Pn | **Pn** | **13 53 32.8** | **+0.5** |
| **CCB** | **Clear Creek Bu** | **5.45** | **24** | | **Pn** | **13 53 32.0** | **-0.4** |
| **M26K** | **Nabesna, AK** | **5.52** | **57** | Pn | **Pn** | **13 53 34.5** | **+1.0** |
| **TCOL** | **CIGO, UAF Yank** | **5.63** | **23** | Pn | **Pn** | **13 53 34.9** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **5.64** | **16** | Pn | **Pn** | **13 53 35.1** | **+0.1** |
| **COLA** | **College** | **5.64** | **23** | | **Pn** | **13 53 34.8** | **-0.2** |
| **MDM** | **Murphy Dome** | **5.64** | **21** | | **Pn** | **13 53 34.9** | **-0.2** |
| **YAH** | **Yahtse** | **5.67** | **79** | Pn | **Pn** | **13 53 36.5** | **+0.8** |
| **IL31** | | **5.76** | **27** | | **Pn** | **13 53 36.2** | **-0.4** |
| **ILAR** | **Eielson Array** | **5.76** | **27** | P | **Pn** | **13 53 36.1** | **-0.5** |
| | comp=N,0.5nm,0.3s,baz=205,slow=13,SNR=25 | | | | | | |
| ILAR | | | | S | **Sn** | **13 54 35.9** | **-5.3** |
| | comp=N,0.4nm,0.3s,baz=272,slow=33,SNR=7.9 | | | | | | |
| **BARN** | **Barnard Glacie** | **5.77** | **72** | Pn | **Pn** | **13 53 37.7** | **+0.8** |
| **H21K** | **Melozitna Rive** | **5.89** | **1** | Pn | **Pn** | **13 53 38.9** | **+0.4** |
| **TABL** | **Table Mountain** | **5.97** | **79** | Pn | **Pn** | **13 53 40.5** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **5.99** | **60** | Pn | **Pn** | **13 53 41.1** | **+1.2** |
| **IMAR** | **Indian Mountai** | **6.22** | **357** | Pn | **Pn** | **13 53 43.9** | **+1.0** |
| **L27K** | **Beaver Creek,** | **6.29** | **54** | Pn | **Pn** | **13 53 45.1** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **6.31** | **54** | Pn | **Pn** | **13 53 45.2** | **+1.1** |
| **PCA** | **Pinnacle** | **6.42** | **82** | Pn | **Pn** | **13 53 46.6** | **+0.9** |
| **H24K** | **Noodor Dome** | **6.51** | **19** | Pn | **Pn** | **13 53 46.5** | **-0.3** |
| **COLD** | **Coldfoot** | **7.57** | **8** | Pn | **Pn** | **13 54 01.8** | **+0.6** |
| **FYU** | **Fort Yukon** | **7.65** | **24** | Pn | **Pn** | **13 54 02.7** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **8.53** | **22** | Pn | **Pn** | **13 54 14.2** | **+0.1** |
| **SKAG** | **Skagway** | **8.97** | **84** | Pn | **Pn** | **13 54 21.3** | **+1.2** |
| **TOLK** | **Toolik Lake Re** | **9.01** | **8** | Pn | **Pn** | **13 54 21.9** | **+1.3** |
| **P33M** | **Teslin, Yukon** | **10.12** | **79** | Pn | **Pn** | **13 54 37.1** | **+1.2** |
| **YKA** | **Yellowknife Ar** | **18.55** | **65** | P | **P** | **13 56 22.8** | **+1.4** |
| | comp=N,0.1nm,0.3s,baz=281,slow=9.6,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.59** | **321** | P | **P** | **14 02 39.3** | **+0.4** |
| | comp=N,0.1nm,0.5s,baz=15,slow=6.0,SNR=1.3 | | | | | | |

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*IDC **21** 13:52:48.0±3.6,8°.79S×120°.31E,h140km±35km,mb2.9/1, mb1 3.4/6,mb1mx3.0/49,mbtmp3.8/6,MS2.8/1,Ms1 2.8/1, ms1mx2.3/15,Error ellipse: s-maj=93.7km s-min=13.5km az=61.0*
*DJA **21** 13:52:48.3±0.2,9°S±2°×120°E±°,h131km±3km,M3.9/15, mb4.1/8,mB5.1/2,MLv3.8/15,Mw(mB)4.5/2*
**ISC 21 13:52:47.2±0.8,8°.85S±0°.05×120°.49E±0°.05,h150km,n21, σ1§65/28,Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |

*ellipse: s-maj=81.1km s-min=42.0km az=95.0*
*NEIC **21** 13:56:56.4±0.8, 7.1S±0.1×154.8E±0.1, h226km±10km, mb4.1/10, Error ellipse: s-maj=22.8km s-min=12.9km az=210.0*

**ISC 21 13:56:57.4±0.8, 7.1S±0.1×154.9E±0.1, h250km, n23, σ1.9 39/19, mb4.0/12, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **3.93** | **317** | | **Pn** | **13 57 58.1** | **-2.4** |
| **HNR** | **Honiara** | **5.55** | **115** | Pn | **Pn** | **13 58 18.5** | **-1.5** |
| **ARMA** | **Armidale** | **23.41** | **187** | P | **P** | **14 01 45.3** | **+0.9** |
| **WR0** | **Warramunga Arr** | **23.50** | **235** | P | **P** | **14 01 45.2** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 14 01 46.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.53** | **236** | P | **P** | **14 01 45.5** | **0.0** |
| **WRAB** | **Tennant Creek** | **23.64** | **235** | P | **P** | **14 01 46.4** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 14 02 18.9 | |
| | comp=Z,10nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.65** | **235** | P | **P** | **14 01 46.5** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 14 02 14.1 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.66** | **235** | P | **P** | **14 01 46.6** | **-0.1** |
| | comp=Z,1.7nm,0.6s,baz=63,slow=9.8,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **26.01** | **228** | P | **P** | **14 02 06.3** | **-1.6** |
| | comp=Z,0.3nm,0.7s,baz=57,slow=10,SNR=2.2 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 05 29.3** | **+0.1** |
| | comp=Z,1.1nm,1.3s,baz=72,slow=3.0,SNR=1.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.97** | **25** | T | T | 14 30 35.6 | |
| | baz=202,slow=75,SNR=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.97** | **25** | T | T | 14 30 37.5 | |
| | baz=202,slow=75,SNR=19 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.98** | **25** | T | T | 14 30 33.7 | |
| | baz=202,slow=75,SNR=8.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.49** | **246** | P | **P** | **14 02 48.1** | **+0.5** |
| | comp=Z,1.7nm,1.0s,baz=59,slow=5.9,SNR=1.9 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **64.32** | **96** | eLR | LR | 14 07 20.4 | |
| | comp=Z,79nm,25.6s | | | | | | |
| **SONM** | **Songino Array** | **69.34** | **327** | P | **P** | **14 07 37.9** | **-0.3** |
| | comp=Z,0.8nm,0.6s,baz=108,slow=4.7,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **69.34** | **327** | IAmb | IAmb | 14 08 02.2 | |
| | comp=Z,6.6nm,1.8s | | | | | | |
| **MK31** | **Makanchi Array** | **83.38** | **319** | P | **P** | **14 08 59.0** | **+2.1** |
| **MKAR** | **Makanchi Array** | **83.38** | **319** | P | **P** | **14 08 59.2** | **+2.4** |
| | comp=Z,2.5nm,0.7s,baz=102,slow=6.2,SNR=29 | | | | | | |
| **MAKZ** | **Makanchi** | **83.59** | **319** | P | **P** | **14 08 60.0** | **+2.1** |
| MAKZ | | | | IAmb | IAmb | 14 09 01.3 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **84.18** | **326** | P | **P** | **14 09 01.4** | **+0.9** |
| ZAA0 | | | | IAmb | IAmb | 14 09 02.0 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.18** | **326** | P | **P** | **14 09 01.2** | **+0.7** |
| | comp=Z,2.0nm,0.5s,baz=116,slow=5.2,SNR=9.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.18** | **326** | P | **P** | **14 09 01.1** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **96.48** | **28** | P | **P** | **14 09 59.7** | **+1.6** |
| | comp=Z,0.1nm,0.6s,baz=271,slow=6.7,SNR=2.2 | | | | | | |

**KRSC 21 14:04:07.5±2.1, 54.78N×165.63E, h30km±12km, ML3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **0.47** | **25** | *eP* | Pb | 14 04 16.3 | -1.1 |
| BKI | | | | *eS* | Sb | 14 04 21.3 | -2.9 |
| **KBTR** | **Krutoberegovo** | **2.15** | **313** | *eP* | Pn | 14 04 41.7 | +0.5 |
| **MKZ** | **Mys Kozlova** | **2.28** | **266** | *eP* | Pb | 14 04 46.9 | -0.9 |
| MKZ | | | | *eS* | Sb | 14 05 13.4 | -2.1 |
| **ZLN** | **Zelenaya** | **3.02** | **296** | *eP* | Pb | 14 04 57.5 | -3.0 |
| **TUMD** | **Tumrok D** | **3.04** | **280** | *eP* | Pb | 14 04 58.8 | -2.1 |
| **BZGR** | **Bezymyannyi-Gr** | **3.05** | **294** | *eP* | Pb | 14 04 58.5 | -2.5 |
| **CIRR** | **Tsirk** | **3.09** | **298** | *eP* | Pn | 14 04 57.5 | +3.3 |
| **BZNR** | **Bezymyannyi-We** | **3.16** | **294** | *eP* | Pb | 14 04 59.7 | -3.3 |
| **TUMR** | **Tumrok** | **3.20** | **281** | *eP* | Pb | 14 05 00.8 | -2.7 |
| TUMR | | | | *eS* | Sn | 14 05 36.6 | +3.8 |
| **KLY** | **Klyuchi** | **3.22** | **301** | *eS* | Sn | 14 05 34.0 | +0.9 |
| **KRSR** | **Krestovskiy** | **3.22** | **299** | *eP* | Pb | 14 05 01.3 | -2.7 |
| **KMNR** | **Kamenistaya** | **3.24** | **290** | *eP* | Pb | 14 05 01.2 | -3.0 |
| **KOZ** | **Kozyrevsk** | **3.52** | **294** | *eP* | Pb | 14 05 05.1 | -3.9 |
| **SPN** | **Mys Shipunski** | **3.72** | **245** | *eP* | Pn | 14 05 06.7 | +4.0 |
| SPN | | | | *eS* | Sn | 14 05 48.1 | +2.7 |
| **NLC** | **Nalytchevo** | **4.04** | **249** | *eS* | Sn | 14 05 56.8 | +3.3 |
| **SDLR** | **Sedlovina** | **4.25** | **252** | *eP* | Pn | 14 05 15.5 | +5.3 |
| **SMAR** | **Somma** | **4.30** | **252** | *eP* | Pn | 14 05 16.5 | +5.5 |
| **UGLR** | **Uglovaya** | **4.31** | **251** | *eP* | Pn | 14 05 16.5 | +5.5 |
| **KRER** | **Koryakskii** | **4.32** | **253** | *eP* | Pb | 14 05 17.0 | -5.6 |
| KRER | | | | *eS* | Sn | 14 06 04.8 | +4.3 |
| **AVH** | **Avacha** | **4.34** | **252** | *eP* | Pb | 14 05 17.4 | -5.5 |
| AVH | | | | *eS* | Sn | 14 06 06.0 | +5.2 |
| **KOK** | **Koryaka** | **4.38** | **253** | *eP* | Pn | 14 05 17.5 | +5.5 |
| **DALK** | **Dalny** | **4.43** | **250** | *eP* | Pn | 14 05 17.5 | +5.1 |
| DALK | | | | *eS* | Sn | 14 06 05.9 | +3.0 |
| **PET** | **Petropavlovsk** | **4.49** | **250** | *eP* | Pn | 14 05 18.7 | +5.5 |
| PET | | | | *eS* | Sn | 14 06 07.8 | +3.5 |
| **GNL** | **Ganaly** | **4.64** | **260** | *eP* | Pn | 14 05 19.1 | +3.6 |
| **RUS** | **Russkaya** | **4.84** | **244** | *eP* | Pn | 14 05 23.0 | +4.8 |
| RUS | | | | *eS* | Sn | 14 06 16.6 | +3.4 |
| **KRMR** | **Karymshinskiy** | **4.85** | **249** | *eP* | Pn | 14 05 23.9 | +5.6 |
| KRMR | | | | *eS* | Sn | 14 06 17.7 | +4.3 |
| **MTVR** | **Mutnovka** | **4.99** | **246** | *eP* | Pn | 14 05 26.0 | +5.6 |
| MTVR | | | | *eS* | Sn | 14 06 21.6 | +4.5 |
| **GRL** | **Gorelyy** | **5.02** | **247** | *eP* | Pn | 14 05 26.7 | +6.0 |
| **KDTR** | **Khodutka, Kamc** | **5.42** | **240** | *eP* | Pn | 14 05 30.5 | +4.5 |
| KDTR | | | | *eS* | Sn | 14 06 29.1 | +1.8 |

*IDC **21** 14:15:46.2±0.9, 68.26N×136.56W, h0km, mb3.7/6, mb1 4.0/10, mb1mx3.7/45, mbtmp3.8/10, ML3.8/4, MS3.3/1, Ms1 3.3/1, ms1mx2.6/92, Error ellipse: s-maj=14.3km s-min=9.8km az=172.0*
*ANF **21** 14:15:46.9±0.5, 68.07N×136.40W, h2km, ML4.0/12, Error ellipse: s-maj=8.0km s-min=4.8km az=145.0*
*NEIC **21** 14:15:47.7±1.3, 68.71N±0.06×136.75W±0.1, h14km±4km, mb4.3/10, ML3.6(OTT), ML3.5(AEIC), Error ellipse: s-maj=9.2km s-min=7.5km az=170.0*
*PGC **21** 14:15:48.1±6.7, 68.10N×136.41W, h3km±3km, ML3.5, ML3.6/3, 111km Wnw of Fort McPherson, Nt Northern Yukon Territory, Canada*
*AEIC **21** 14:15:48.2±2.0, 68.06N±0.07×136.4W±0.1, h40km±7km, Error ellipse: s-maj=9.6km s-min=7.0km az=170.0*

**ISC 21 14:15:46.8±0.5, 68.10N±0.04×136.40W±0.04, h10km, n159, σ1.9 39/182, mb4.1/10, Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **INK** | **Inuvik** | **1.09** | **78** | Pg | **Pb** | **14 16 07.8** | **+0.1** |
| | 32nm,0.3s,baz=260,slow=20,SNR=540 | | | | | | |
| INK | | | | Lg | Lg | 14 16 22.8 | |
| | 139nm,0.3s,baz=336,slow=20,SNR=18 | | | | | | |
| **INK** | **Inuvik** | **1.09** | **78** | | **Sb** | **14 16 23.3** | **+1.2** |
| **INK** | **Inuvik** | **1.09** | **78** | Pn | **Pb** | **14 16 07.5** | **-0.3** |
| **INK** | **Inuvik** | **1.09** | **78** | P | **Pb** | **14 16 07.9** | **+0.1** |
| INK | | | | S | **Sb** | **14 16 23.1** | **+1.0** |
| **INK** | **Inuvik** | **1.09** | **78** | P | **Pb** | **14 16 07.9** | **+0.1** |
| | baz=260,SNR=215 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **2.86** | **196** | | **Pn** | **14 16 32.8** | **+0.5** |
| **I29M** | **Ogilvie Camp,** | **2.86** | **196** | | **Sn** | **14 17 05.6** | **-1.2** |
| **I29M** | **Ogilvie Camp,** | **2.86** | **196** | P | **Pn** | **14 16 33.1** | **+0.7** |
| | baz=14,SNR=23 | | | | | | |
| **BMAR** | **Burnt Mountain** | **3.18** | **262** | Pn | **Pn** | **14 16 36.9** | **0.0** |
| **BM03** | **Burnt Mountain** | **3.19** | **261** | | **Pn** | **14 16 37.3** | **+0.2** |
| **J29M** | **Klondike Camp** | **3.74** | **192** | P | **Pn** | **14 16 47.4** | **+2.9** |
| | baz=10,SNR=10.0 | | | | | | |
| **FYU** | **Fort Yukon** | **3.75** | **250** | | **Pn** | **14 16 44.6** | **0.0** |
| **EGAK** | **Eagle** | **3.85** | **212** | | **Pn** | **14 16 46.2** | **+0.2** |
| **EGAK** | **Eagle** | **3.85** | **212** | P | **Pn** | **14 16 46.6** | **+0.6** |
| | baz=28,SNR=9.3 | | | | | | |
| EGAK | | | | S | **Sn** | **14 17 30.1** | **-1.0** |
| | baz=28 | | | | | | |
| **DAWY** | **Dawson** | **4.23** | **198** | | **Pn** | **14 16 51.4** | **+0.1** |
| **DAWY** | **Dawson** | **4.23** | **198** | | **Sn** | **14 17 38.9** | **-1.9** |
| **DAWY** | **Dawson** | **4.23** | **198** | Pn | **Pn** | **14 16 51.6** | **+0.2** |
| DAWY | | | | Sn | **Sn** | **14 17 38.9** | **-1.9** |
| **DAWY** | **Dawson** | **4.23** | **198** | P | **Pn** | **14 16 52.1** | **+0.8** |
| | baz=15,SNR=5.7 | | | | | | |
| DAWY | | | | S | **Sn** | **14 17 40.0** | **-0.7** |
| | baz=15 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.44** | **239** | Pn | **Pn** | **14 16 55.4** | **+1.1** |
| **MAYO** | **Mayo, Yukon** | **4.53** | **177** | Pn | **Pn** | **14 16 56.8** | **+1.4** |
| MAYO | | | | Sn | **Sn** | **14 17 48.9** | **+0.9** |
| **MAYO** | **Mayo, Yukon** | **4.53** | **177** | P | **Pn** | **14 16 57.1** | **+1.7** |
| | baz=358 | | | | | | |
| **J26L** | **Joseph Creek** | **4.63** | **222** | P | **Pn** | **14 16 58.3** | **+1.5** |
| | baz=35 | | | | | | |
| J26L | | | | S | **Sn** | **14 17 49.5** | **-1.0** |
| | baz=35 | | | | | | |
| **C36M** | **Paulatuk** | **4.66** | **69** | | **Pn** | **14 16 58.7** | **+1.6** |
| **C36M** | **Paulatuk** | **4.66** | **69** | Pn | **Pn** | **14 16 58.3** | **+1.2** |
| C36M | | | | Sn | **Sn** | **14 17 50.7** | **-0.4** |
| **C36M** | **Paulatuk** | **4.66** | **69** | P | **Pn** | **14 16 58.6** | **+1.6** |
| | baz=260,SNR=70 | | | | | | |
| C36M | | | | S | **Sn** | **14 17 50.8** | **-0.4** |
| | baz=260 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **4.90** | **282** | | **Pn** | **14 17 02.7** | **+2.2** |
| **TOLK** | **Toolik Lake Re** | **4.90** | **282** | P | **Pn** | **14 17 02.9** | **+2.4** |
| | baz=90,SNR=35 | | | | | | |
| TOLK | | | | S | **Sn** | **14 18 00.1** | **+2.9** |
| | baz=90 | | | | | | |
| **H24K** | **Noodor Dome** | **5.05** | **249** | | **Pn** | **14 17 02.5** | **0.0** |
| **H24K** | **Noodor Dome** | **5.05** | **249** | P | **Pn** | **14 17 02.5** | **0.0** |
| | baz=58 | | | | | | |
| H24K | | | | S | **Sn** | **14 18 00.6** | **-0.2** |
| | baz=58 | | | | | | |
| **SCRK** | **Sand Creek** | **5.17** | **220** | | **Pn** | **14 17 05.0** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.17** | **220** | P | **Pn** | **14 17 05.8** | **+1.6** |
| | baz=33,SNR=7.1 | | | | | | |
| SCRK | | | | S | **Sn** | **14 18 01.5** | **-2.4** |
| | baz=33 | | | | | | |
| **POKR** | **Poker Plat Res** | **5.32** | **241** | | **Pn** | **14 17 07.1** | **+1.0** |
| **POKR** | **Poker Plat Res** | **5.32** | **241** | P | **Pn** | **14 17 08.1** | **+1.9** |
| | baz=51 | | | | | | |
| **COLD** | **Coldfoot** | **5.33** | **267** | | **Pn** | **14 17 07.8** | **+1.5** |
| **COLD** | **Coldfoot** | **5.33** | **267** | Pn | **Pn** | **14 17 07.6** | **+1.2** |
| COLD | | | | Sn | **Sn** | **14 18 06.0** | **-1.8** |
| **COLD** | **Coldfoot** | **5.33** | **267** | P | **Pn** | **14 17 07.8** | **+1.5** |
| | baz=74,SNR=18 | | | | | | |
| COLD | | | | S | **Sn** | **14 18 07.4** | **-0.4** |
| | baz=74 | | | | | | |
| **IL31** | | **5.37** | **236** | | **Pn** | **14 17 07.6** | **+0.8** |
| **ILAR** | **Eielson Array** | **5.37** | **236** | Pn | **Pn** | **14 17 07.6** | **+0.7** |
| | 1.5nm,0.3s,baz=44,slow=13,SNR=68 | | | | | | |
| ILAR | | | | Sn | **Sn** | **14 18 07.0** | **-1.7** |
| | 1.7nm,0.3s,baz=46,slow=23,SNR=6.2 | | | | | | |
| ILAR | | | | Lg | Lg | 14 18 39.7 | |
| | 2.7nm,0.3s,baz=27,slow=30,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **5.37** | **236** | | **Pn** | **14 17 07.2** | **+0.3** |
| **A36M** | **Sachs Harbour** | **5.45** | **39** | | **Pn** | **14 17 09.0** | **+1.0** |
| **A36M** | **Sachs Harbour** | **5.45** | **39** | Pn | **Pn** | **14 17 09.4** | **+1.5** |
| A36M | | | | Sn | **Sn** | **14 18 10.1** | **-0.5** |
| **A36M** | **Sachs Harbour** | **5.45** | **39** | P | **Pn** | **14 17 09.6** | **+1.6** |
| | baz=230,SNR=29 | | | | | | |
| A36M | | | | S | **Sn** | **14 18 11.3** | **+0.7** |
| | baz=230 | | | | | | |
| **DOT** | **Dot Lake** | **5.46** | **219** | | **Pn** | **14 17 09.5** | **+1.3** |
| **DOT** | **Dot Lake** | **5.46** | **219** | Pn | **Pn** | **14 17 09.0** | **+0.9** |
| **BC03** | | **5.53** | **206** | | **Pn** | **14 17 10.1** | **+1.1** |
| **BCAR** | **Beaver Creek A** | **5.53** | **206** | Pn | **Pn** | **14 17 09.4** | **+0.3** |
| **L27K** | **Beaver Creek,** | **5.54** | **207** | | **Pn** | **14 17 10.0** | **+0.8** |
| **L27K** | **Beaver Creek,** | **5.54** | **207** | P | **Pn** | **14 17 10.2** | **+1.0** |
| | baz=22 | | | | | | |
| **M30M** | **Minto, Yukon** | **5.55** | **182** | | **Pn** | **14 17 10.2** | **+0.8** |
| **M30M** | **Minto, Yukon** | **5.55** | **182** | P | **Pn** | **14 17 10.3** | **+0.8** |
| | baz=1.5 | | | | | | |
| M30M | | | | S | **Sn** | **14 18 12.6** | **-0.6** |
| | baz=1.5 | | | | | | |
| **RIDG** | **Independent Ri** | **5.58** | **222** | | **Pn** | **14 17 10.3** | **+0.5** |
| **COLA** | **College** | **5.61** | **240** | | **Pn** | **14 17 12.1** | **+1.9** |
| **TCOL** | **CIGO, UAF Yank** | **5.61** | **240** | | **Pn** | **14 17 11.8** | **+1.6** |
| **TCOL** | **CIGO, UAF Yank** | **5.61** | **240** | P | **Pn** | **14 17 12.2** | **+2.0** |
| | baz=50 | | | | | | |
| **HDA** | **Harding Lake** | **5.64** | **234** | | **Pn** | **14 17 12.0** | **+1.3** |
| **MDM** | **Murphy Dome** | **5.68** | **242** | | **Pn** | **14 17 11.3** | **+0.2** |
| **CCB** | **Clear Creek Bu** | **5.75** | **238** | | **Pn** | **14 17 12.3** | **+0.3** |
| **L26K** | **Log Cabin Wild** | **5.85** | **213** | | **Pn** | **14 17 14.8** | **+1.2** |
| **MMPY** | **Sheldon Lake,** | **5.91** | **156** | Pn | **Pn** | **14 17 15.4** | **+1.0** |
| MMPY | | | | Sn | **Sn** | **14 18 21.1** | **-1.0** |
| **MMPY** | **Sheldon Lake,** | **5.91** | **156** | P | **Pn** | **14 17 16.0** | **+1.6** |
| | baz=341,SNR=5.7 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.95** | **246** | | **Pn** | **14 17 14.6** | **-0.2** |
| **I23K** | **Minto, Yukon-K** | **5.95** | **246** | P | **Pn** | **14 17 14.5** | **-0.2** |
| | baz=54 | | | | | | |
| I23K | | | | S | **Sn** | **14 18 23.1** | **+0.3** |
| | baz=54 | | | | | | |
| **WRH** | **Wood River Hil** | **5.96** | **238** | Pn | **Pn** | **14 17 14.3** | **-0.5** |
| **M31M** | **Drury Creek, Y** | **5.99** | **171** | | **Pn** | **14 17 16.3** | **+1.0** |
| **M31M** | **Drury Creek, Y** | **5.99** | **171** | P | **Pn** | **14 17 16.7** | **+1.4** |
| | baz=353 | | | | | | |
| M31M | | | | S | **Sn** | **14 18 22.6** | **-1.3** |
| | baz=353 | | | | | | |
| **MENT** | **Mentasta** | **6.01** | **214** | | **Pn** | **14 17 16.2** | **+0.5** |
| **BVCY** | **Beaver Creek** | **6.01** | **200** | Pn | **Pn** | **14 17 15.8** | **+0.2** |
| BVCY | | | | Sn | **Sn** | **14 18 20.6** | **-3.9** |
| **BVCY** | **Beaver Creek** | **6.01** | **200** | P | **Pn** | **14 17 17.5** | **+1.8** |
| | baz=16 | | | | | | |
| **FARO** | **Faro, Yukon** | **6.04** | **166** | Pn | **Pn** | **14 17 16.9** | **+0.9** |
| FARO | | | | Sn | **Sn** | **14 18 23.4** | **-1.7** |
| **FARO** | **Faro, Yukon** | **6.04** | **166** | P | **Pn** | **14 17 17.1** | **+1.1** |
| | baz=349,SNR=8.3 | | | | | | |
| **NEA2** | **Nenana** | **6.19** | **241** | Pn | **Pn** | **14 17 18.7** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **6.21** | **204** | | **Pn** | **14 17 18.9** | **+0.3** |
| **M27K** | **Edge Creek, AK** | **6.21** | **204** | P | **Pn** | **14 17 19.0** | **+0.4** |
| | baz=19 | | | | | | |
| M27K | | | | S | **Sn** | **14 18 29.6** | **+0.1** |
| | baz=19 | | | | | | |
| **M26K** | **Nabesna, AK** | **6.36** | **209** | | **Pn** | **14 17 21.3** | **+0.9** |
| **M26K** | **Nabesna, AK** | **6.36** | **209** | P | **Pn** | **14 17 21.5** | **+1.0** |
| | baz=23 | | | | | | |
| **PAX** | **Paxson** | **6.38** | **220** | Pn | **Pn** | **14 17 22.8** | **+2.0** |
| **PAX** | **Paxson** | **6.38** | **220** | P | **Pn** | **14 17 23.6** | **+2.8** |
| | baz=32 | | | | | | |
| **MLY** | **Manley** | **6.49** | **248** | | **Pn** | **14 17 22.4** | **+0.2** |
| **YUK3** | **Moose Creek** | **6.58** | **197** | Pn | **Pn** | **14 17 24.1** | **+0.4** |
| YUK3 | | | | Sn | **Sn** | **14 18 35.9** | **-2.9** |
| **YUK3** | **Moose Creek** | **6.58** | **197** | P | **Pn** | **14 17 24.5** | **+0.8** |
| | baz=13 | | | | | | |
| **YUK2** | **White River** | **6.62** | **199** | Pn | **Pn** | **14 17 24.3** | **+0.2** |
| **MCK** | **McKinley** | **6.74** | **235** | | **Pn** | **14 17 26.6** | **+0.9** |
| **MCK** | **McKinley** | **6.74** | **235** | P | **Pn** | **14 17 26.7** | **+0.9** |
| | baz=44 | | | | | | |
| **DHY** | **Denali Highway** | **6.79** | **227** | | **Pn** | **14 17 27.2** | **+0.7** |
| **DHY** | **Denali Highway** | **6.79** | **227** | P | **Pn** | **14 17 29.3** | **+2.8** |
| | baz=37 | | | | | | |
| DHY | | | | S | **Sn** | **14 18 45.0** | **+1.3** |
| | baz=37 | | | | | | |
| **HARP** | **HAARP** | **6.80** | **217** | P | **Pn** | **14 17 30.6** | **+4.1** |
| | baz=29,SNR=5.4 | | | | | | |
| **I21K** | **Tanana** | **6.85** | **252** | Pn | **Pn** | **14 17 27.8** | **+0.7** |
| **YUK4** | **Talbot Arm** | **6.85** | **189** | Pn | **Pn** | **14 17 27.0** | **-0.4** |
| YUK4 | | | | Sn | **Sn** | **14 18 39.6** | **-5.9** |
| **YUK4** | **Talbot Arm** | **6.85** | **189** | P | **Pn** | **14 17 27.3** | **-0.1** |
| | baz=6.8 | | | | | | |
| **H21K** | **Melozitna Rive** | **6.90** | **257** | | **Pn** | **14 17 28.3** | **+0.4** |
| **H21K** | **Melozitna Rive** | **6.90** | **257** | P | **Pn** | **14 17 29.0** | **+1.2** |
| | baz=62 | | | | | | |
| H21K | | | | S | **Sn** | **14 18 44.3** | **-2.1** |
| | baz=62 | | | | | | |
| **RND** | **Reindeer** | **6.96** | **233** | Pn | **Pn** | **14 17 29.7** | **+1.0** |
| **YUK8** | **Steele Glacier** | **7.00** | **193** | Pn | **Pn** | **14 17 29.9** | **+0.5** |
| **IMAR** | **Indian Mountai** | **7.10** | **261** | Pn | **Pn** | **14 17 31.3** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **7.15** | **243** | Pn | **Pn** | **14 17 31.8** | **+0.6** |
| **WRGLY** | **Wrigley** | **7.24** | **126** | P | **Pn** | **14 17 33.6** | **+1.2** |
| | baz=318 | | | | | | |
| **YUK6** | **Outpost Mounta** | **7.24** | **188** | Pn | **Pn** | **14 17 33.6** | **+0.8** |
| **YUK6** | **Outpost Mounta** | **7.24** | **188** | P | **Pn** | **14 17 34.5** | **+1.8** |
| | baz=5.8 | | | | | | |
| **HYT** | **Haines Junctio** | **7.32** | **184** | Pn | **Pn** | **14 17 35.3** | **+1.5** |
| **HYT** | **Haines Junctio** | **7.32** | **184** | Pn | **Pn** | **14 17 35.1** | **+1.3** |
| HYT | | | | Sg | Sg | 14 19 35.6 | -6.0 |
| **HYT** | **Haines Junctio** | **7.32** | **184** | P | **Pn** | **14 17 36.0** | **+2.2** |
| | baz=3.2 | | | | | | |
| **N25K** | **Chitina, Valde** | **7.39** | **212** | Pn | **Pn** | **14 17 36.1** | **+1.4** |
| **GLB** | **Gilahina Butte** | **7.39** | **209** | Pn | **Pn** | **14 17 35.7** | **+1.0** |
| **BARN** | **Barnard Glacie** | **7.42** | **200** | Pn | **Pn** | **14 17 36.3** | **+1.1** |
| **KTH** | **Kantishna Hill** | **7.50** | **239** | Pn | **Pn** | **14 17 36.6** | **+0.5** |
| **BALM** | **Baldy** | **7.54** | **203** | Pn | **Pn** | **14 17 38.0** | **+1.3** |
| **YUK7** | **Dusty Glacier** | **7.64** | **186** | Pn | **Pn** | **14 17 39.6** | **+1.4** |
| **KIAG** | **Kiagna River** | **7.65** | **202** | Pn | **Pn** | **14 17 39.6** | **+1.3** |
| **A21K** | **Barrow** | **7.71** | **304** | | **Pn** | **14 17 38.9** | **0.0** |
| **A21K** | **Barrow** | **7.71** | **304** | P | **Pn** | **14 17 40.2** | **+1.3** |
| | baz=105,SNR=74 | | | | | | |
| A21K | | | | S | **Sn** | **14 19 03.8** | **-2.3** |
| | baz=105 | | | | | | |
| **CHUM** | **Lake Minchumin** | **7.73** | **244** | P | **Pn** | **14 17 41.6** | **+2.3** |
| | baz=50 | | | | | | |
| **KLU** | **Klutina** | **7.77** | **216** | Pn | **Pn** | **14 17 42.2** | **+2.3** |
| **CAST** | **Castle Rocks** | **7.97** | **241** | Pn | **Pn** | **14 17 42.7** | **+0.2** |
| **BMRM** | **Bremner River** | **7.98** | **210** | Pn | **Pn** | **14 17 44.1** | **+1.4** |
| **KUKN** | **Kugluktuk,NWT** | **8.01** | **82** | Pn | **Pn** | **14 17 43.9** | **+0.9** |
| KUKN | | | | Sn | **Sn** | **14 19 09.1** | **-4.4** |
| **P33M** | **Teslin, Yukon** | **8.07** | **167** | Pn | **Pn** | **14 17 44.7** | **+0.7** |
| **P33M** | **Teslin, Yukon** | **8.07** | **167** | P | **Pn** | **14 17 44.7** | **+0.7** |
| | baz=350 | | | | | | |
| **SML** | **Sawmill** | **8.08** | **224** | | **Pn** | **14 17 44.9** | **+0.8** |
| **J20K** | **Nowinta River** | **8.18** | **250** | Pn | **Pn** | **14 17 45.5** | **+0.1** |
| **J20K** | **Nowinta River** | **8.18** | **250** | P | **Pn** | **14 17 45.8** | **+0.4** |
| | baz=53,SNR=14 | | | | | | |
| **PPLA** | **Purkeypile** | **8.37** | **239** | Pn | **Pn** | **14 17 48.2** | **+0.1** |
| **K20K** | **Telida** | **8.67** | **245** | Pn | **Pn** | **14 17 52.6** | **+0.4** |
| **K20K** | **Telida** | **8.67** | **245** | P | **Pn** | **14 17 54.3** | **+2.1** |
| | baz=49 | | | | | | |
| **SKAG** | **Skagway** | **8.69** | **176** | Pn | **Pn** | **14 17 54.3** | **+1.9** |
| **SKAG** | **Skagway** | **8.69** | **176** | P | **Pn** | **14 17 54.4** | **+2.1** |
| | baz=357 | | | | | | |
| **BESE** | **Bessie Mountai** | **9.59** | **175** | Pn | **Pn** | **14 18 06.0** | **+1.3** |
| **BESE** | **Bessie Mountai** | **9.59** | **175** | Pn | **Pn** | **14 18 06.0** | **+1.3** |
| **TTA** | **Tatalina** | **9.62** | **247** | Pn | **Pn** | **14 18 04.9** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **9.88** | **282** | Pn | **Pn** | **14 18 08.5** | **-0.1** |
| **JIS** | **Juneau Island** | **9.91** | **174** | Pn | **Pn** | **14 18 10.2** | **+1.2** |
| **DLBC** | **Dease Lake** | **10.11** | **161** | Pn | **Pn** | **14 18 10.9** | **-1.0** |
| | 0.5nm,0.3s,baz=3.6,slow=14,SNR=13 | | | | | | |
| DLBC | | | | Lg | Lg | 14 21 10.7 | |
| | 0.4nm,0.3s,baz=89,slow=19,SNR=4.6 | | | | | | |
| **DLBC** | **Dease Lake** | **10.11** | **161** | Pn | **Pn** | **14 18 13.4** | **+1.5** |
| **DLBC** | **Dease Lake** | **10.11** | **161** | Pn | **Pn** | **14 18 12.8** | **+0.9** |
| **NBC2** | **NorthernBC 2** | **10.32** | **137** | Pn | **Pn** | **14 18 16.9** | **+2.1** |
| **YKA** | **Yellowknife Ar** | **10.67** | **111** | Pn | **Pn** | **14 18 18.2** | **-1.2** |
| | 1.0nm,0.3s,baz=308,slow=14,SNR=48 | | | | | | |
| YKA | | | | Sn | Sn | 14 20 10.6 | -8.2 |
| | 2.2nm,0.3s,baz=312,slow=23,SNR=14 | | | | | | |
| YKA | | | | Lg | Lg | 14 21 22.4 | |
| | 0.1nm,0.3s,baz=308,slow=27,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **10.67** | **111** | Pn | **Pn** | **14 18 18.5** | **-0.9** |
| **FNBB** | **Fort Nelson** | **10.98** | **141** | Pn | **Pn** | **14 18 22.6** | **-1.2** |
| FNBB | | | | Sn | Sn | 14 20 18.7 | -7.7 |
| **NBC6** | **NorthernBC 6** | **11.66** | **138** | Pn | **Pn** | **14 18 32.3** | **-0.7** |
| NBC6 | | | | Sn | Sn | 14 20 37.2 | -5.8 |
| **RES** | **Resolute Bay** | **14.46** | **45** | Pn | Pn | 14 19 08.8 | -2.4 |
| | 0.5nm,0.3s,baz=248,slow=10.0,SNR=11 | | | | | | |
| RES | | | | Sn | Sn | 14 21 43.0 | -8.2 |
| | 0.4nm,0.3s,baz=315,slow=17,SNR=4.1 | | | | | | |
| **RES** | **Resolute Bay** | **14.46** | **45** | Pn | Pn | 14 19 08.9 | -2.2 |
| **RES** | **Resolute Bay** | **14.46** | **45** | P | **Pn** | **14 19 09.1** | **-2.1** |
| RES | | | | S | Sn | 14 21 41.9 | -9.3 |
| **EUNU** | **Eureka** | **17.29** | **27** | Pn | **Pn** | **14 19 46.1** | **-1.9** |
| **PDAR** | **Pinedale Array** | **29.12** | **137** | P | **P** | **14 21 50.0** | **+2.3** |
| | 0.2nm,0.5s,baz=14,slow=4.0,SNR=2.9 | | | | | | |
| **MA2** | **Magadan** | **31.32** | **291** | LR | LR | 14 36 31.2 | |
| | comp=Z,46nm,18.8s,baz=0.5,slow=40 | | | | | | |
| **NVAR** | **Mina Array Bea** | **31.37** | **152** | P | **P** | **14 22 09.3** | **+1.7** |
| **NV11** | **Mina Array Sit** | **31.39** | **152** | P | **P** | **14 22 09.7** | **+2.0** |
| NV11 | | | | IAmb | IAmb | 14 22 16.0 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| **LCH** | **Last Change Ra** | **32.65** | **152** | P | **P** | **14 22 19.8** | **+1.1** |
| **TPNV** | **Topopah Spring** | **33.18** | **150** | P | **P** | **14 22 25.2** | **+1.8** |
| TPNV | | | | IAmb | IAmb | 14 22 27.6 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **34.89** | **135** | P | **P** | **14 22 36.9** | **-1.5** |
| SDCO | | | | IAmb | IAmb | 14 22 38.7 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** |

| | | | | | |
|---|---|---|---|---|---|
| **SLM** | **Saint Louis** | **6.23** | **60** | IAmb_Lg | 14 24 13.6 |
| | comp=Z,21nm,0.8s | | | | |
| **OGNE** | **Ogallala** | **6.45** | **325** | IAmb_Lg | 14 24 31.1 |
| | comp=Z,22nm,0.8s | | | | |
| **OLIL** | **Olney** | **7.82** | **65** | IAmb_Lg | 14 25 10.2 |
| | comp=Z,15nm,0.8s | | | | |
| **N23A** | **Red Feather La** | **8.60** | **309** | IAmb_Lg | 14 25 39.0 |
| | comp=Z,8.6nm,0.8s | | | | |

*BEO* ***21*** *14:32:36.6±0.3, 43°.79N×19°.81E, h5km±3km, ML2.9/16*
*PDG* ***21*** *14:32:36.4±0.1, 43°.78N×19°.79E, h10km, MD3.2/1, ML2.6/14, Error ellipse: s-maj=0.2km s-min=0.2km az=0.0*
*RHSSO* ***21*** *14:32:36.8±0.3, 43°.76N×19°.79E, h3km±1km, ML3.1/13*
*PRU* ***21*** *14:32:41.7±0.0, 44°.10N×19°.95E, h1km*

**ISC 21 14:32:36.7±1.0, 43°.79N±0°.01×19°.80E±0°.01, h8km±8km, n119, σ1§19/199, 21C-15D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BBLS** | **Lazići** | **0.30** | **285** | *e*Pg | **Pg** | | **14 32 42.1** | **-0.5** |
| BBLS | | | | *e*Sg | **Sg** | | **14 32 47.3** | **+0.7** |
| **BBLS** | **Lazići** | **0.30** | **285** | *e*Pg | **Pg** | | **14 32 42.2** | **-0.4** |
| BBLS | | | | *e*Sg | **Sg** | | **14 32 46.6** | **0.0** |
| **IVAS** | **Ivanjica** | **0.33** | **130** | *e*Pg | **Pg** | | **14 32 42.4** | **-0.8** |
| IVAS | | | | *e*Sg | **Sg** | | **14 32 47.0** | **-0.6** |
| **DIVS** | **Divibare** | **0.34** | **24** | *e*Pg | **Pg** | | **14 32 43.7** | **+0.4** |
| DIVS | | | | *e*Sg | **Sg** | | **14 32 47.7** | **-0.1** |
| **DIVS** | **Divibare** | **0.34** | **24** | *e*Pg | **Pg** | | **14 32 43.3** | **0.0** |
| DIVS | | | | *e*Sg | **Sg** | | **14 32 48.4** | **+0.6** |
| **RUDO** | **Rudo** | **0.36** | **241** | *e*Pg | **Pg** | | **14 32 42.0** | **-1.7** |
| RUDO | | | | *e*Sg | **Sg** | | **14 32 47.4** | **-1.0** |
| **SJES** | **Sjenica** | **0.54** | **167** | *e*Pg | **Pg** | | **14 32 46.8** | **-0.4** |
| SJES | | | | *e*Sg | **Sg** | | **14 32 55.3** | **+1.0** |
| **PLE** | **Pljevlja** | **0.55** | **213** | ⇑*i*Pg | **Pg** | | **14 32 46.3** | **-1.0** |
| PLE | | | | *i* Sg | **Sg** | | **14 32 54.7** | **+0.2** |
| **TRUS** | **Trudelj** | **0.61** | **45** | *e*Pg | **Pg** | | **14 32 49.0** | **+0.5** |
| TRUS | | | | *e*Sg | **Sb** | | **14 32 58.3** | **-0.1** |
| **GRUS** | **Gruza** | **0.67** | **81** | *e*Pg | **Pg** | | **14 32 49.5** | **0.0** |
| GRUS | | | | *e*Sg | **Sg** | | **14 32 58.5** | **+0.3** |
| **TEKS** | **Tekeris** | **0.78** | **346** | *e*Sg | **Sg** | | **14 33 01.1** | **-0.9** |
| **TEKS** | **Tekeris** | **0.78** | **346** | *e*Pg | **Pg** | | **14 32 51.0** | **-0.8** |
| TEKS | | | | *e*Sg | **Sg** | | **14 33 02.9** | **+0.9** |
| **UPM** | **Unac-Piva** | **0.88** | **228** | *e*Pg | **Pg** | | **14 32 52.7** | **-0.8** |
| UPM | | | | *e*Sg | **Sg** | | **14 33 04.1** | **-0.9** |
| **UPM** | **Unac-Piva** | **0.88** | **228** | ⇓*i*Pg | **Pg** | | **14 32 52.4** | **-1.1** |
| UPM | | | | *i* Sg | **Sg** | | **14 33 05.8** | **+0.8** |
| **IVA** | **Berane** | **0.92** | **176** | ⇑*i*Pg | **Pg** | | **14 32 53.3** | **-1.0** |
| IVA | | | | *i* Sg | **Sb** | | **14 33 07.5** | **+0.2** |
| **KOME** | **Kolasin** | **0.96** | **193** | *e*Pg | **Pg** | | **14 32 54.0** | **-1.1** |
| KOME | | | | *i* Sg | **Sb** | | **14 33 08.8** | **+0.3** |
| **BLJ** | **Bijeljina** | **1.06** | **339** | *e*Pg | **Pg** | | **14 32 56.7** | **-0.4** |
| BLJ | | | | *e*Sg | **Sg** | | **14 33 11.6** | **+0.7** |
| **SELS** | **Selova** | **1.11** | **120** | *e*Pg | **Pg** | | **14 32 57.3** | **-0.7** |
| SELS | | | | *e*Sg | **Sg** | | **14 33 12.2** | **-0.3** |
| **SVIS** | **Svilajnac** | **1.12** | **64** | *e*Pg | **Pg** | | **14 32 57.7** | **-0.5** |
| SVIS | | | | *e*Sg | **Sg** | | **14 33 13.0** | **+0.2** |
| **NKY** | **Niksic** | **1.14** | **211** | *e*Pg | **Pg** | | **14 32 57.2** | **-1.4** |
| NKY | | | | *i* Sg | **Sb** | | **14 33 14.7** | **+1.0** |
| **NKME** | **Niksic** | **1.20** | **212** | ⇑*i*Pg | **Pg** | | **14 32 58.1** | **-1.5** |
| NKME | | | | *i* Sg | **Sn** | | **14 33 16.7** | **+0.6** |
| **PVY** | **Plav** | **1.20** | **175** | *e*Pg | **Pg** | | **14 32 58.4** | **-1.3** |
| PVY | | | | *i* Sg | **Sn** | | **14 33 17.0** | **+0.7** |
| **BRY** | **Bratogost** | **1.28** | **227** | *e*Pg | **Pg** | | **14 32 59.4** | **-1.8** |
| BRY | | | | *e*Sg | **Sg** | | **14 33 16.4** | **-1.4** |
| **BRY** | **Bratogost** | **1.28** | **227** | ⇑*i*Pg | **Pg** | | **14 32 59.5** | **-1.8** |
| BRY | | | | *i* Sg | **Sn** | | **14 33 19.5** | **+1.2** |
| **FRGS** | **Fruska Gora** | **1.37** | **0** | ⇑P | **Pn** | | **14 33 01.0** | **-1.0** |
| FRGS | | | | ⇑S | **Sb** | | **14 33 19.0** | **-1.2** |
| **FRGS** | **Fruska Gora** | **1.37** | **0** | *e*Pg | **Pn** | | **14 33 01.0** | **-1.0** |
| FRGS | | | | *e*Sg | **Sb** | | **14 33 19.1** | **-1.0** |
| **FRGS** | **Fruska Gora** | **1.37** | **0** | *e*Pg | **Pn** | | **14 33 01.9** | **-0.1** |
| FRGS | | | | *e*Sg | **Sn** | | **14 33 21.3** | **+0.9** |
| **BOVS** | **Bovan** | **1.39** | **96** | *e*Pg | **Pn** | | **14 33 01.6** | **-0.7** |
| BOVS | | | | *e*Sg | **Sb** | | **14 33 20.1** | **-0.6** |
| **CEME** | **Cevo** | **1.40** | **208** | ⇓*i*Pg | **Pn** | | **14 33 02.0** | **-0.5** |
| CEME | | | | *i* Sg | **Sn** | | **14 33 23.6** | **+2.4** |
| **PDG** | **Podgorica** | **1.42** | **197** | ⇑P | **Pn** | | **14 33 02.9** | **+0.2** |
| PDG | | | | ⇓S | **Sg** | | **14 33 23.1** | **+0.9** |
| **PDG** | **Podgorica** | **1.42** | **197** | ⇑*i*Pg | **Pn** | | **14 33 02.0** | **-0.7** |
| PDG | | | | *e*Sg | **Sb** | | **14 33 20.7** | **-0.8** |
| **TTG** | **Podgorica** | **1.42** | **197** | ⇑*i*Pg | **Pn** | | **14 33 02.2** | **-0.5** |
| TTG | | | | *i* Sg | **Sg** | | **14 33 24.3** | **+2.1** |
| **KUBS** | **Kucevo** | **1.48** | **65** | *e*Pg | **Pn** | | **14 33 02.6** | **-1.0** |
| KUBS | | | | *e*Sg | **Sg** | | **14 33 24.6** | **+0.2** |
| **TREB** | **Trebinje** | **1.51** | **225** | *e*Pg | **Pn** | | **14 33 03.8** | **-0.2** |
| TREB | | | | *e*Sg | **Sn** | | **14 33 24.4** | **+0.6** |
| **DOB** | **Doboj** | **1.54** | **308** | *e*Pn | **Pn** | | **14 33 05.1** | **+0.7** |
| DOB | | | | *e*Sn | **Sg** | | **14 33 26.4** | **+0.1** |
| **BUM** | **Brajici-Budva** | **1.63** | **204** | ⇑*i*Pn | **Pn** | | **14 33 06.1** | **+0.4** |
| BUM | | | | *i* Sn | **Sg** | | **14 33 29.6** | **+0.5** |
| **HCY** | **Herceg Novi** | **1.65** | **216** | *e*Pn | **Pn** | | **14 33 06.3** | **+0.4** |
| HCY | | | | *e*Sn | **Sn** | | **14 33 27.6** | **+0.4** |
| **HCY** | **Herceg Novi** | **1.65** | **216** | ⇓*i*Pn | **Pn** | | **14 33 06.2** | **+0.4** |
| HCY | | | | *i* Sn | **Sg** | | **14 33 29.8** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **1.67** | **196** | *e*Pn | **Pn** | | **14 33 06.1** | **+0.6** |
| DRME | | | | *e*Sn | **Sn** | | **14 33 27.4** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **1.67** | **196** | ⇑*i*Pn | **Pn** | | **14 33 06.5** | **+0.4** |
| DRME | | | | *i* Sn | **Sg** | | **14 33 30.3** | **+0.1** |
| **MDVR** | **Moldovita** | **1.69** | **53** | ⇑P | **Pn** | | **14 33 07.0** | **+0.5** |
| MDVR | | | | ⇓S | **Sg** | | **14 33 31.9** | **+0.9** |
| **ZAGS** | **Zajecar** | **1.76** | **88** | *e*Pg | **Pn** | | **14 33 07.3** | **-0.1** |
| ZAGS | | | | *e*Sg | **Sb** | | **14 33 32.4** | **+1.1** |
| **BARS** | **Barje** | **1.76** | **123** | *e*Pg | **Pn** | | **14 33 04.6** | **-2.8** |
| **BARS** | **Barje** | **1.76** | **123** | *e*Pg | **Pn** | | **14 33 07.6** | **+0.2** |
| BARS | | | | *e*Sg | **Sn** | | **14 33 27.1** | **-2.9** |
| BARS | | | | *e*Sg | **Sb** | | **14 33 32.1** | **+0.7** |
| **STON** | **Ston** | **1.79** | **240** | *e*Pn | **Pn** | | **14 33 08.6** | **+0.8** |
| STON | | | | *e*Sn | **Sn** | | **14 33 30.8** | **+0.2** |
| **STON** | **Ston** | **1.79** | **240** | *e*Pn | **Pn** | | **14 33 08.0** | **+0.2** |
| STON | | | | Sn | **Sb** | | **14 33 32.4** | **+0.3** |
| **BANR** | **Banloc** | **1.85** | **30** | ⇓P | **Pn** | | **14 33 09.0** | **+0.3** |
| **ULC** | **Ulcinj** | **1.87** | **193** | ⇓*i*Pn | **Pn** | | **14 33 09.6** | **+0.6** |
| ULC | | | | *i* Sn | **Sb** | | **14 33 35.3** | **+0.7** |
| **RICI** | **Ricice** | **1.96** | **262** | *e*Pn | **Pn** | | **14 33 10.4** | **+0.2** |
| **MGRS** | **Mrkonjic Grad** | **2.06** | **289** | *e*Pn | **Pn** | | **14 33 11.9** | **+0.4** |
| MGRS | | | | *e*Sn | **Sn** | | **14 33 38.3** | **+0.9** |
| **MAKA** | **Makarska** | **2.08** | **257** | *e*Pn | **Pn** | | **14 33 13.4** | **+1.5** |
| MAKA | | | | Sn | **Sb** | | **14 33 40.6** | **-0.1** |
| **BLKB** | **Belogradchik** | **2.09** | **94** | ⇓S | **Sb** | | **14 33 42.1** | **+1.2** |
| **BLY** | **Banja Luka** | **2.11** | **298** | *e*Pn | **Pn** | | **14 33 12.8** | **+0.6** |
| BLY | | | | *e*Sn | **Sn** | | **14 33 39.6** | **+0.9** |
| **ZAPS** | **Zavoj** | **2.12** | **103** | *e*Pg | **Pn** | | **14 33 13.0** | **+0.6** |
| ZAPS | | | | *e*Sg | **Sb** | | **14 33 43.5** | **+1.7** |
| **A252A** | **Venje** | **2.16** | **320** | *e*Pn | **Pn** | | **14 33 12.6** | **-0.3** |
| **HERR** | **Herculane** | **2.17** | **59** | ⇑P | **Pn** | | **14 33 13.7** | **+0.7** |
| **BZS** | **Buzias** | **2.24** | **35** | ⇑P | **Pn** | | **14 33 14.0** | **0.0** |
| BZS | | | | ⇓S | **Sn** | | **14 33 43.5** | **+1.7** |
| **BOSS** | **Bosilegrad** | **2.35** | **123** | *e*Pg | **Pb** | | **14 33 19.3** | **+0.1** |
| BOSS | | | | *e*Sg | **Sb** | | **14 33 49.9** | **+1.6** |
| **LSTV** | **Lastovo** | **2.36** | **245** | *e*Pn | **Pn** | | **14 33 16.0** | **+0.4** |
| LSTV | | | | Sn | **Sn** | | **14 33 45.3** | **+0.6** |
| **HVAR** | **Hvar** | **2.52** | **257** | *e*Pn | **Pn** | | **14 33 18.7** | **+0.9** |
| HVAR | | | | Sn | **Sn** | | **14 33 51.1** | **+2.4** |
| **MORH** | **Mrgy, Hungar** | **2.56** | **342** | ⇑P | **Pn** | | **14 33 18.1** | **-0.3** |
| MORH | | | | ⇓S | **Sn** | | **14 33 48.0** | **-1.7** |
| **MORH** | **Mrgy, Hungar** | **2.56** | **342** | *e*Pn | **Pn** | | **14 33 19.5** | **+1.1** |
| MORH | | | | *e*Sn | **Sn** | | **14 33 51.6** | **+1.9** |
| **MORH** | **Mrgy, Hungar** | **2.56** | **342** | PN | **Pn** | | **14 33 18.3** | **-0.1** |
| **KOVH** | **Kovagotottos** | **2.60** | **333** | PN | **Pn** | | **14 33 18.9** | **0.0** |
| **GZR** | **Gura Zlata** | **2.66** | **52** | ⇓P | **Pn** | | **14 33 20.3** | **+0.4** |
| **STIP** | **Stip** | **2.73** | **139** | *i* Pn | **Pn** | | **14 33 21.8** | **+1.0** |
| **VTS** | **Vitosha** | **2.77** | **114** | ⇑P | **Pn** | | **14 33 21.9** | **+0.5** |
| VTS | | | | ⇑S | **Sb** | | **14 33 59.9** | **-0.7** |
| **MOSL** | **Moslavina** | **2.84** | **311** | *e*Pn | **Pn** | | **14 33 22.2** | **0.0** |
| **MORI** | **Morici** | **2.96** | **273** | *e*Pn | **Pn** | | **14 33 25.2** | **+1.2** |
| MORI | | | | Sn | **Sn** | | **14 34 00.0** | **+0.3** |
| **UDBI** | **Udbina** | **3.00** | **286** | *e*Pn | **Pn** | | **14 33 25.0** | **+0.5** |
| **ZIRJ** | **Zirje** | **3.02** | **269** | *e*Pn | **Pn** | | **14 33 25.6** | **+0.9** |
| ZIRJ | | | | Sn | **Sn** | | **14 34 01.3** | **+0.3** |
| **PLIT** | **Plitvice** | **3.19** | **291** | *e*Pn | **Pn** | | **14 33 27.7** | **+0.6** |
| **LOT** | **Lotru** | **3.28** | **58** | ⇓P | **Pn** | | **14 33 30.0** | **+1.5** |
| **KALN** | **Kalnik** | **3.33** | **316** | *e*Pn | **Pn** | | **14 33 28.8** | **-0.3** |
| **TIH** | **Tihany** | **3.39** | **337** | PN | **Pn** | | **14 33 30.0** | **+0.2** |
| **BEHE** | **Becsehely** | **3.43** | **322** | *e*Pn | **Pn** | | **14 33 30.7** | **+0.3** |
| BEHE | | | | *e*Sn | **Sn** | | **14 34 12.3** | **+1.1** |
| **BEHE** | **Becsehely** | **3.43** | **322** | PN | **Pn** | | **14 33 31.2** | **+0.8** |
| **DUGI** | **Dugi Otok** | **3.44** | **275** | *e*Pn | **Pn** | | **14 33 31.3** | **+0.8** |
| **PTJ** | **Puntijarka** | **3.45** | **309** | *e*Pn | **Pn** | | **14 33 30.7** | **-0.1** |
| **LOBO** | **Lobor** | **3.55** | **313** | *e*Pn | **Pn** | | **14 33 31.8** | **-0.3** |
| LOBO | | | | Sn | **Sn** | | **14 34 13.0** | **-1.2** |
| **NVLJ** | **Novalja** | **3.63** | **284** | *e*Pn | **Pn** | | **14 33 33.9** | **+0.8** |
| **DRGR** | | **3.64** | **33** | ⇑P | **Pn** | | **14 33 33.5** | **+0.3** |
| DRGR | | | | ⇓S | **Sn** | | **14 34 17.0** | **+0.6** |
| **KOGS** | **Kog** | **3.66** | **318** | *i* Pn | **Pn** | | **14 33 33.8** | **+0.3** |
| **CRES** | **Cresnjev** | **3.70** | **305** | *e*Pn | **Pn** | | **14 33 34.4** | **+0.3** |
| CRES | | | | *e*Sn | **Sn** | | **14 34 18.6** | **+0.7** |
| **CSKK** | **Cskako** | **3.73** | **344** | PN | **Pn** | | **14 33 35.2** | **+0.6** |
| **A250A** | **Rusevo Krmpots** | **3.73** | **292** | *e*Pn | **Pn** | | **14 33 35.4** | **+0.7** |
| **MPLH** | **Magyarpolny** | **3.74** | **336** | PN | **Pn** | | **14 33 35.1** | **+0.5** |
| MPLH | | | | SN | **Sn** | | **14 34 17.7** | **-1.0** |
| **ARR** | **Arges** | **3.79** | **64** | ⇓P | **Pn** | | **14 33 36.9** | **+1.5** |
| **EGYH** | **Egyhazaskeszo** | **4.02** | **335** | PN | **Pn** | | **14 33 39.0** | **+0.5** |
| EGYH | | | | SN | **Sn** | | **14 34 28.0** | **+2.3** |
| **GROS** | **Grobnik** | **4.05** | **313** | *i* Pn | **Pn** | | **14 33 39.0** | **0.0** |
| **VOIR** | | **4.09** | **64** | ⇑P | **Pn** | | **14 33 41.0** | **+1.4** |
| **RIY** | **Rijeka** | **4.10** | **294** | *e*Pn | **Pn** | | **14 33 39.8** | **+0.2** |
| RIY | | | | *e*Sn | **Sn** | | **14 34 27.8** | **+0.1** |
| **PSZ** | **Piszkesteto** | **4.13** | **1** | ⇑P | **Pn** | | **14 33 39.3** | **-0.7** |
| **PSZ** | **Piszkesteto** | **4.13** | **1** | PN | **Pn** | | **14 33 40.2** | **+0.1** |
| PSZ | | | | SN | **Sn** | | **14 34 25.5** | **-3.0** |
| **SRO** | **Srobarova** | **4.16** | **346** | *e*PN | **Pn** | | **14 33 41.4** | **+1.1** |
| SRO | | | | *e*SN | **Sn** | | **14 34 28.5** | **-0.6** |
| **SMRN** | **Sveta Marina** | **4.23** | **289** | *e*Pn | **Pn** | | **14 33 41.7** | **+0.3** |
| **CEY** | **Cerknica** | **4.30** | **299** | *e*Pn | **Pn** | | **14 33 42.8** | **+0.5** |
| CEY | | | | *e*Sn | **Sn** | | **14 34 31.9** | **-0.7** |
| **PERS** | **Pernice** | **4.37** | **312** | *i* Pn | **Pn** | | **14 33 43.4** | **+0.2** |
| **SOKA** | **Soboth** | **4.44** | **312** | *i* Pn | **Pn** | | **14 33 44.4** | **+0.1** |
| | 1.3nm,0.2s,SNR=8.4 | | | | | | | |
| SOKA | | | | *e*Sn | **Sn** | | **14 34 34.2** | **-1.9** |
| | 1.3nm,0.3s | | | | | | | |
| **SKDS** | **Skadanscina** | **4.49** | **295** | *e*Pn | **Pn** | | **14 33 45.2** | **+0.3** |
| SKDS | | | | *e*Sn | **Sn** | | **14 34 36.3** | **-1.0** |
| **DOPR** | **Dopca** | **4.53** | **59** | ⇑P | **Pn** | | **14 33 46.4** | **+1.0** |
| **ARSA** | **Arzberg** | **4.58** | **320** | *i* Pn | **Pn** | | **14 33 46.3** | **0.0** |
| | 7.6nm,0.4s,SNR=13 | | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | | **14 34 37.0** | **-2.7** |
| | 1.5nm,0.2s | | | | | | | |
| **OBKA** | **Obir** | **4.61** | **308** | *e*Pn | **Pn** | | **14 33 47.1** | **+0.5** |
| | 1.0nm,0.2s,SNR=6.1 | | | | | | | |
| **KECS** | **Kecovo** | **4.72** | **6** | *e*PN | **Pn** | | **14 33 50.6** | **+2.5** |
| KECS | | | | *e*SN | **Sn** | | **14 34 40.5** | **-2.4** |
| **TRPA** | **Tarpa** | **4.74** | **23** | SN | **Sn** | | **14 34 40.5** | **-2.9** |
| **VYHS** | **Vyhne** | **4.75** | **352** | *e*PN | **Pn** | | **14 33 49.3** | **+0.8** |
| VYHS | | | | *e*SN | **Sn** | | **14 34 40.6** | **-3.2** |
| **ZST** | **Bratislava** | **4.79** | **338** | *e*PN | **Pn** | | **14 33 50.0** | **+0.9** |
| ZST | | | | *e*SN | **Sn** | | **14 34 43.6** | **-1.1** |
| **OZUR** | | **4.83** | **59** | ⇓P | **Pn** | | **14 33 51.3** | **+1.6** |
| **MODS** | **Modra-Piesok** | **4.91** | **340** | *e*PN | **Pn** | | **14 33 54.8** | **+4.1** |
| MODS | | | | *e*SN | **Sn** | | **14 34 49.6** | **+1.9** |
| **CONA** | **Conrad Observa** | **4.97** | **328** | *i* Pn | **Pn** | | **14 33 51.6** | **0.0** |
| | 1.3nm,0.3s | | | | | | | |
| CONA | | | | *e*Sn | **Sn** | | **14 34 49.2** | **-0.1** |
| | 1.7nm,0.4s | | | | | | | |
| **MYKA** | **Terra Mystica** | **5.20** | **305** | *e*Pn | **Pn** | | **14 33 56.1** | **+1.4** |
| | 2.3nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.93** | **302** | *e*Pn | **Pn** | | **14 34 06.1** | **+1.3** |
| | 0.9nm,0.2s,SNR=5.3 | | | | | | | |
| **KRLC** | **Kraliky** | **6.62** | **343** | *e*PN | **Pn** | | **14 34 15.6** | **+1.4** |
| KRLC | | | | *e*SN | **Sn** | | **14 35 27.3** | **-2.5** |
| **WTTA** | **Wattenberg** | **6.71** | **304** | *e*Pn | **Pn** | | **14 34 18.1** | **+2.6** |
| | 0.9nm,0.1s | | | | | | | |
| **WATA** | **Walderalm** | **6.78** | **304** | *e*Pn | **Pn** | | **14 34 18.4** | **+1.9** |
| | 2.1nm,0.2s,SNR=6.1 | | | | | | | |
| **KHC** | **Kasperske Hory** | **6.86** | **323** | *e*PN | **Pn** | | **14 34 20.1** | **+2.7** |
| KHC | | | | *e*SN | **Sn** | | **14 35 33.8** | **-1.8** |
| **DPC** | **Dobruska-Polom** | **6.98** | **341** | *e*PN | **Pn** | | **14 34 20.5** | **+1.4** |
| DPC | | | | *e*SN | **Sn** | | **14 35 34.8** | **-3.9** |
| **MOTA** | **Moosalm** | **7.06** | **303** | *i* Pn | **Pn** | | **14 34 22.4** | **+2.0** |
| | 0.5nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **7.16** | **300** | *e*Pn | **Pn** | | **14 34 23.9** | **+2.2** |
| | 1.9nm,0.6s | | | | | | | |

**MAN 21 14:47:59.1, 13°.81N×120°.87E, h3km, mb4.0, ML2.8, MS2.4, Mindoro**

*IDC* ***21*** *14:53:56.1±1.4, 13°.10N×91°.40W, h0km, mb3.7/5, mb1 4.0/9, mb1mx3.8/47, mbtmp3.7/9, ML3.5/4, MS3.4/7, Ms1 3.4/7, ms1mx3.0/69, Error ellipse: s-maj=20.2km s-min=19.0km az=152.0*
*GCG* ***21*** *14:53:57.0±1.1, 13°.29N×92°.08W, h26km, MD4.4*

**ISC 21 14:54:02.5±1.6, 13°.4N±0°.1×91°.48W±0°.08, h28km, n18, σ1§65/15, mb3.9/5, MS3.5/5, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FUG** | **Fuego 3** | **1.24** | **30** | *e*P | **Pn** | | **14 54 25.0** | **+0.8** |
| **PCG** | **Pacaya** | **1.33** | **40** | *e*P | **Pn** | | **14 54 26.8** | **+1.3** |
| **NBG** | **Las Nubes** | **1.64** | **42** | *e*P | **Pn** | | **14 54 31.7** | **+1.9** |
| **APG** | **El Apazote** | **1.90** | **31** | Pn | **Pn** | | **14 54 34.5** | **+1.1** |
| | 25nm,0.3s,baz=195,slow=7.3,SNR=298 | | | | | | | |
| APG | | | | LR | LR | | 14 54 47.9 | |
| | comp=Z,100nm,20.0s,baz=180,slow=25 | | | | | | | |
| APG | | | | Sn | **Sb** | | **14 54 59.0** | **-1.1** |
| | 30nm,0.3s,baz=264,slow=11,SNR=7.9 | | | | | | | |
| APG | | | | Lg | Lg | | 14 55 04.1 | |
| | 36nm,0.3s,baz=260,slow=11,SNR=4.3 | | | | | | | |
| **MRL** | **Marmol** | **2.44** | **46** | *e*P | **Pb** | | **14 54 44.6** | **-1.3** |
| **CMIG** | **Matias Romero** | **4.95** | **319** | Pn | **Pn** | | **14 55 14.0** | **-1.0** |
| | 0.5nm,0.3s,baz=131,slow=11,SNR=5.2 | | | | | | | |
| CMIG | | | | Sn | **Sn** | | **14 56 15.0** | **+3.6** |
| | 1.4nm,0.3s,baz=70,slow=3.6,SNR=4.4 | | | | | | | |
| **JTS** | **Las Juntas de** | **7.09** | **115** | Pn | Pn | | 14 55 38.7 | -5.8 |
| | 0.5nm,0.3s,baz=315,slow=20,SNR=1.3 | | | | | | | |
| JTS | | | | Lg | Lg | | 14 57 32.3 | |
| | 0.6nm,0.3s,baz=211,slow=22,SNR=1.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **19.50** | **326** | P | **P** | | **14 58 28.0** | **+0.4** |
| | 0.1nm,0.3s,baz=153,slow=13,SNR=14 | | | | | | | |
| TXAR | | | | LR | LR | | 15 07 29.6 | |
| | comp=Z,54nm,19.1s,baz=52,slow=41 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.26** | **16** | P | **P** | | **14 59 06.7** | **-1.1** |
| | 2.5nm,0.6s,baz=184,slow=12,SNR=7.4 | | | | | | | |
| TKL | | | | LR | LR | | 15 09 18.6 | |
| | comp=Z,152nm,18.0s,baz=162,slow=39 | | | | | | | |
| **SJG** | **San Juan** | **24.82** | **76** | LR | LR | | 15 10 08.6 | |
| | comp=Z,124nm,18.7s,baz=232,slow=39 | | | | | | | |
| **SADO** | **Sadowa** | **33.02** | **16** | LR | LR | | 15 14 53.0 | |
| | comp=Z,139nm,18.9s,baz=168,slow=38 | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.20** | **335** | P | **P** | | **15 00 36.7** | **-0.5** |
| | 0.5nm,0.9s,baz=100,slow=4.7,SNR=3.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.48** | **321** | P | **P** | | **15 00 49.5** | **+1.2** |
| | 1.2nm,0.8s,baz=134,slow=8.0,SNR=8.6 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.95** | **355** | LR | LR | | 15 20 05.7 | |
| | comp=Z,58nm,19.9s,baz=48,slow=42 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.75** | **347** | P | **P** | | **15 03 05.8** | **-1.4** |
| | 0.7nm,0.7s,baz=148,slow=7.7,SNR=12 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **59.96** | **17** | LR | LR | | 15 33 58.7 | |
| | comp=Z,100nm,18.9s,baz=118,slow=40 | | | | | | | |
| **ILAR** | **Eielson Array** | **63.61** | **337** | P | **P** | | **15 04 30.0** | **-0.7** |
| | 1.3nm,0.9s,baz=138,slow=4.3,SNR=8.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.75** | **342** | PKPbc | **PKPdf** | | **15 13 42.9** | **+1.7** |
| | 1.4nm,0.8s,baz=350,slow=4.2,SNR=11 | | | | | | | |

*SJA* ***21*** *14:57:48.3±0.6, 22°.90S×66°.46W, h273km±8km, ML4.4, MW4.8*
*IDC* ***21*** *14:57:49.5±1.1, 22°.84S×66°.36W, h234km±13km, mb3.5/3, mb1 3.7/8, mb1mx3.4/37, mbtmp4.1/8, Error ellipse: s-maj=22.6km s-min=14.5km az=120.0*
*VAO* ***21*** *14:57:49.6±0.3, 22°.86S×66°.36W, h238km, mb4.0*
*NEIC* ***21*** *14:57:49.1±2.1, 22°.91S±0°.08×66°.4W±0°.1, h241km±10km, mb4.0/3, Error ellipse: s-maj=15.5km s-min=10.5km az=107.0*
*GUC* ***21*** *14:57:50.7±0.5, 22°.87S×66°.74W, h277km±7km, ML4.5*

**ISC 21 14:57:48.8±0.6, 22°.90S±0°.05×66°.39W±0°.06, h240km±7km, n119, σ1§27/147, mb3.9/3, 11C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **2.35** | **277** | P | **Pn** | | **14 58 35.9** | **+1.6** |
| | 93nm,0.3s,baz=120,slow=4.9,SNR=728 | | | | | | | |
| LVC | | | | S | **S** | | **14 59 10.3** | **+0.5** |
| | 34nm,0.3s,baz=62,slow=23,SNR=32 | | | | | | | |
| **LVC** | **Limon Verde** | **2.35** | **277** | Pn | **Pn** | | **14 58 35.5** | **+1.3** |
| **LVC** | **Limon Verde** | **2.35** | **277** | ⇑*i*P | **Pn** | | **14 58 35.8** | **+1.6** |
| LVC | | | | *i* S | **S** | | **14 59 09.9** | **+0.1** |
| **LVC** | **Limon Verde** | **2.35** | **277** | *e*P | **Pn** | | **14 58 35.9** | **+1.6** |
| **LVC** | **Limon Verde** | **2.35** | **277** | *e*P | **Pn** | | **14 58 35.9** | **+1.6** |
| LVC | | | | *e*S | **S** | | **14 59 10.6** | **+0.7** |
| **PB15** | **IPOC Station P** | **2.86** | **263** | | **Pn** | | **14 58 40.7** | **+1.3** |
| **PB15** | **IPOC Station P** | **2.86** | **263** | ⇑*i*P | **Pn** | | **14 58 40.8** | **+1.5** |
| PB15 | | | | *i* S | **S** | | **14 59 19.1** | **-0.1** |
| **PB15** | **IPOC Station P** | **2.86** | **263** | *e*P | **Pn** | | **14 58 40.8** | **+1.5** |
| PB15 | | | | *e*S | **S** | | **14 59 19.6** | **+0.4** |
| PB15 | | | | IAML | | | 14 59 22.7 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.86** | **292** | | **Pn** | | **14 58 41.1** | **+1.7** |
| **PB09** | **IPOC Station P** | **2.86** | **292** | ⇑*i*P | **Pn** | | **14 58 41.3** | **+1.9** |
| PB09 | | | | *i* S | **S** | | **14 59 19.6** | **+0.4** |
| PB09 | | | | IAML | | | 14 59 20.7 | |
| | comp=N,374nm,0.2s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.86** | **292** | *e*P | **Pn** | | **14 58 40.8** | **+1.4** |
| PB09 | | | | *e*S | **S** | | **14 59 19.8** | **+0.6** |
| PB09 | | | | *e*S | S | | 14 59 20.9 | +1.7 |
| PB09 | | | | IAML | | | 14 59 21.4 | |
| | comp=Z,417nm,0.7s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.95** | **273** | | **Pn** | | **14 58 41.3** | **+1.0** |
| **PB06** | **IPOC Station P** | **2.95** | **273** | ⇑*i*P | **Pn** | | **14 58 41.5** | **+1.2** |
| PB06 | | | | *i* S | **S** | | **14 59 20.3** | **-0.6** |
| PB06 | | | | IAML | | | 14 59 23.9 | |
| | comp=E,520nm,0.3s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.95** | **273** | *e*P | **Pn** | | **14 58 41.7** | **+1.4** |
| PB06 | | | | *e*P | **Pn** | | **14 58 41.9** | **+1.6** |
| PB06 | | | | *e*S | **S** | | **14 59 20.9** | **+0.1** |
| PB06 | | | | IAML | | | 14 59 23.6 | |
| | comp=Z,387nm,0.2s | | | | | | | |
| **FSA** | **Cafayete** | **3.22** | **173** | *e*P | **Pn** | | **14 58 45.1** | **+1.8** |
| FSA | | | | *e*S | **S** | | **14 59 21.8** | **-4.6** |
| **PB03** | **IPOC Station P** | **3.23** | **285** | | **Pn** | | **14 58 44.3** | **+0.9** |
| **PB03** | **IPOC Station P** | **3.23** | **285** | ⇑*i*P | **Pn** | | **14 58 44.5** | **+1.1** |
| PB03 | | | | *i* S | **S** | | **14 59 25.1** | **-1.3** |
| PB03 | | | | IAML | | | 14 59 26.7 | |
| | comp=N,666nm,0.3s | | | | | | | |
| **PB03** | **IPOC Station P** | **3.23** | **285** | *e*P | **Pn** | | **14 58 44.6** | **+1.1** |
| PB03 | | | | *e*S | **S** | | **14 59 25.6** | **-0.9** |
| PB03 | | | | IAML | | | 14 59 27.7 | |
| | comp=Z,479nm,0.2s | | | | | | | |
| **PB01** | **IPOC Station P** | **3.42** | **302** | | **Pn** | | **14 58

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NAN01** | **Guarapari, ES** | **25.11** | **83** | *e*P | **P** | | **15 02 51.8** | **-0.2** |
| **GUA01** | **Guaratinga, BA** | **25.77** | **81** | *e*P | **P** | | **15 02 58.3** | **+0.3** |
| **GDU01** | **Guandu, BA** | **27.00** | **75** | *e*P | **P** | | **15 03 08.3** | **-0.6** |
| **NBPN** | **Ponto Novo - B** | **27.72** | **69** | *e*P | **P** | | **15 03 16.1** | **+0.8** |
| **NBLA** | **Lagarto - SE** | **29.74** | **71** | *e*P | **P** | | **15 03 32.3** | **-0.9** |
| **NBMA** | **Muriti-CE** | **30.72** | **64** | *e*P | **P** | | **15 03 41.8** | **-0.1** |
| **SDV** | **Santo Domingo** | **31.86** | **352** | *e*P | **P** | | **15 03 52.0** | **+0.1** |
| **NBPV** | **Pedro Velho** | **34.14** | **66** | *e*P | **P** | | **15 04 12.3** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** | **75.65** | **69** | P | **P** | | **15 09 09.1** | **+1.1** |
| | comp=Z,1.3nm,0.4s,baz=259,slow=5.8,SNR=18 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.65** | **69** | IAmb | IAmb | | 15 09 10.4 | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.29** | **340** | P | **P** | | **15 10 36.0** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=135,slow=4.8,SNR=6.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **129.69** | **204** | PKP | **PKiKP** | | **15 16 31.0** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=132,slow=1.8,SNR=7.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **132.86** | **207** | PKP | **PKiKP** | | **15 16 37.3** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=157,slow=1.7,SNR=7.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.16** | **28** | PKP | **PKPdf** | | **15 16 53.7** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=291,slow=4.5,SNR=2.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.32** | **39** | PKPbc | **PKPab** | | **15 16 59.8** | **+1.1** |
| | comp=Z,0.3nm,0.4s,baz=351,slow=2.6,SNR=7.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.32** | **39** | | **PKPab** | | **15 16 59.2** | **+0.6** |
| **PZH** | **PanZhiHua** | **168.63** | **69** | PKP | **PKPdf** | | **15 17 25.6** | **-1.9** |

**IDC 21 15:19:34.2±1.9, 2°38N×123°28E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.2/40, mbtmp3.2/3, Error ellipse: s-maj=215.8km s-min=28.5km az=62.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **24.69** | **154** | P | | P | 15 24 56.6 | -0.5 |
| | 0.4nm,0.8s,baz=332,slow=11,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.88** | **159** | P | | P | 15 25 26.7 | +0.8 |
| | 0.4nm,1.0s,baz=344,slow=7.2,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.76** | **327** | P | | P | 15 29 19.9 | -0.2 |
| | 0.1nm,0.4s,baz=129,slow=6.5,SNR=4.1 | | | | | | | |

*JMA **21** 15:22:40.3±0.1, 24°.03N×122°.03E, h52km±3km, M2.4*
*TAP **21** 15:22:41.4, 24°.09N×122°.07E, h35km, ML2.9, C*
**ISC 21 15:22:41.2±1.0, 24°08N±0°.02×122°08E±0°.02, h32km±10km, n88, σ0°73/167, 3C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **EHP** | **Heping Village** | **0.39** | **307** | *e*P | | **Pn** | **15 22 51.0** | **+0.4** |
| | baz=306 | | | | | | | |
| EHP | | | | *e*S | | **Sn** | **15 22 57.5** | **+0.6** |
| | baz=306 | | | | | | | |
| **ETL** | **Fush Village** | **0.42** | **281** | P | | **Pn** | **15 22 51.2** | **0.0** |
| | baz=279 | | | | | | | |
| ETL | | | | S | | **Sn** | **15 22 58.6** | **+0.7** |
| | baz=279 | | | | | | | |
| **TWD** | **Chiawan** | **0.44** | **270** | *i* P | | **Pn** | **15 22 51.2** | **-0.1** |
| | baz=269 | | | | | | | |
| TWD | | | | *i* S | | **Sn** | **15 22 58.6** | **+0.3** |
| | baz=269 | | | | | | | |
| **HWA** | **Hwalien** | **0.45** | **257** | *i* P | | **Pn** | **15 22 51.8** | **+0.4** |
| | baz=254 | | | | | | | |
| HWA | | | | *e*S | | **Sn** | **15 22 58.5** | **+0.2** |
| | baz=254 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.45** | **282** | P | | **Pb** | **15 22 51.0** | **0.0** |
| | baz=281 | | | | | | | |
| NACB | | | | S | | **Sn** | **15 22 58.5** | **-0.1** |
| | baz=281 | | | | | | | |
| **EWUT** | **Wuta** | **0.46** | **323** | P | | **Pn** | **15 22 51.7** | **+0.1** |
| | baz=323 | | | | | | | |
| EWUT | | | | S | | **Sn** | **15 22 59.3** | **+0.6** |
| | baz=323 | | | | | | | |
| **ENA** | **Nanau** | **0.47** | **318** | ⇑*i* P | | **Pn** | **15 22 51.6** | **0.0** |
| | baz=319 | | | | | | | |
| ENA | | | | *i* S | | **Sn** | **15 22 59.2** | **+0.3** |
| | baz=319 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.49** | **245** | P | | **Pn** | **15 22 52.2** | **+0.2** |
| | baz=246 | | | | | | | |
| TEYL | | | | *e*S | | **Sn** | **15 22 59.8** | **+0.5** |
| | baz=246 | | | | | | | |
| **ETM** | **Tongmen** | **0.55** | **258** | *e*P | | **Pb** | **15 22 52.6** | **+0.1** |
| | baz=257 | | | | | | | |
| ETM | | | | *e*S | | **Sn** | **15 23 00.8** | **-0.1** |
| | baz=257 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.56** | **283** | P | | **Pn** | **15 22 53.0** | **0.0** |
| | baz=282 | | | | | | | |
| ETLH | | | | S | | **Sn** | **15 23 01.3** | **-0.1** |
| | baz=282 | | | | | | | |
| **TWC** | **Suao** | **0.57** | **338** | ⇑*i* P | | **Pn** | **15 22 52.9** | **-0.2** |
| | baz=339 | | | | | | | |
| TWC | | | | *i* S | | **Sn** | **15 23 01.0** | **-0.4** |
| | baz=339 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.62** | **233** | *e*P | | **Pn** | **15 22 54.0** | **+0.3** |
| | baz=231 | | | | | | | |
| TEGC | | | | *e*S | | **Sn** | **15 23 03.2** | **+0.6** |
| | baz=231 | | | | | | | |
| **NDS** | **Dongshan** | **0.65** | **329** | P | | **Pn** | **15 22 54.4** | **+0.3** |
| | baz=329 | | | | | | | |
| NDS | | | | S | | **Sn** | **15 23 03.4** | **+0.1** |
| | baz=329 | | | | | | | |
| **ESL** | **Shilin** | **0.65** | **246** | *i* P | | **Pn** | **15 22 53.9** | **-0.3** |
| | baz=244 | | | | | | | |
| ESL | | | | *i* S | | **Sn** | **15 23 03.6** | **+0.3** |
| | baz=244 | | | | | | | |
| **NNSB** | **Datong** | **0.73** | **299** | P | | **Pb** | **15 22 55.3** | **-0.2** |
| | baz=298 | | | | | | | |
| NNSB | | | | S | | **Sn** | **15 23 05.2** | **-0.2** |
| | baz=298 | | | | | | | |
| **ENTT** | **Nioudou** | **0.73** | **320** | *i* P | | **Pb** | **15 22 55.3** | **-0.2** |
| | baz=320 | | | | | | | |
| ENTT | | | | S | | **Sn** | **15 23 05.5** | **+0.1** |
| | baz=320 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.73** | **315** | *i* P | | **Pn** | **15 22 55.2** | **-0.2** |
| | baz=315 | | | | | | | |
| NDT | | | | *i* S | | **Sn** | **15 23 05.5** | **0.0** |
| | baz=315 | | | | | | | |
| **NNS** | **Nan Shan** | **0.74** | **299** | *i* P | | **Pn** | **15 22 55.3** | **-0.2** |
| | baz=299 | | | | | | | |
| NNS | | | | *i* S | | **Sn** | **15 23 05.5** | **-0.3** |
| | baz=299 | | | | | | | |
| **TWE** | **Neicheng** | **0.74** | **330** | ⇑*i* P | | **Pb** | **15 22 55.5** | **-0.2** |
| | baz=330 | | | | | | | |
| TWE | | | | *i* S | | **Sn** | **15 23 05.7** | **0.0** |
| | baz=330 | | | | | | | |
| **ILA** | **Ilan** | **0.75** | **336** | S | | **Sn** | **15 23 06.6** | **+0.8** |
| | baz=337 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.75** | **275** | *i* P | | **Pn** | **15 22 55.5** | **-0.5** |
| | baz=274 | | | | | | | |
| WHF | | | | *i* S | | **Sb** | **15 23 06.0** | **-0.2** |
| | baz=274 | | | | | | | |
| **FUSS** | **Fushou** | **0.78** | **283** | P | | **Pn** | **15 22 56.1** | **-0.2** |
| | baz=281 | | | | | | | |
| FUSS | | | | S | | **Sn** | **15 23 07.1** | **+0.1** |
| | baz=281 | | | | | | | |
| **NTC** | **Toucheng** | **0.81** | **344** | *e*P | | **Pb** | **15 22 56.9** | **+0.2** |
| | baz=344 | | | | | | | |
| NTC | | | | *e*S | | **Sb** | **15 23 08.0** | **+0.7** |
| | baz=344 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.81** | **327** | P | | **Pb** | **15 22 56.7** | **-0.3** |
| | baz=326 | | | | | | | |
| FUSB | | | | S | | **Sb** | **15 23 07.3** | **-0.4** |
| | baz=326 | | | | | | | |
| **CHGB** | **Renai** | **0.83** | **269** | P | | **Pn** | **15 22 56.8** | **-0.1** |
| | baz=268 | | | | | | | |
| CHGB | | | | S | | **Sn** | **15 23 08.0** | **-0.1** |
| | baz=268 | | | | | | | |
| **HGSD** | **Ruisui** | **0.84** | **226** | P | | **Pn** | **15 22 56.5** | **-0.3** |
| | baz=224 | | | | | | | |
| HGSD | | | | S | | **Sn** | **15 23 08.5** | **+0.4** |
| | baz=224 | | | | | | | |
| **TWT** | **Tachien** | **0.84** | **282** | P | | **Pb** | **15 22 57.3** | **-0.2** |
| | baz=281 | | | | | | | |
| TWT | | | | *i* S | | **Sb** | **15 23 08.9** | **+0.3** |
| | baz=281 | | | | | | | |
| **TDCB** | **Techi** | **0.86** | **282** | P | | **Pn** | **15 22 57.3** | **+0.1** |
| | baz=281 | | | | | | | |
| TDCB | | | | S | | **Sn** | **15 23 08.3** | **-0.5** |
| | baz=281 | | | | | | | |
| **YHNB** | **Yeheng** | **0.87** | **313** | P | | **Pn** | **15 22 57.3** | **0.0** |
| | baz=312 | | | | | | | |
| YHNB | | | | S | | **Sn** | **15 23 08.0** | **-1.0** |
| | baz=312 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.87** | **65** | P | | **Pb** | **15 22 57.4** | **-0.5** |
| JYNG | | | | S | | **Sb** | **15 23 09.0** | **-0.2** |
| **NWLT** | **Wulai** | **0.87** | **323** | *e*P | | **Pb** | **15 22 58.5** | **+0.6** |
| | baz=323 | | | | | | | |
| NWLT | | | | *e*S | | **Sb** | **15 23 09.0** | **-0.3** |
| | baz=323 | | | | | | | |
| **WUSB** | **Renai** | **0.88** | **265** | P | | **Pn** | **15 22 57.5** | **0.0** |
| | baz=263 | | | | | | | |
| WUSB | | | | S | | **Sn** | **15 23 09.5** | **+0.1** |
| | baz=263 | | | | | | | |
| **NSK** | **Sanguang** | **0.89** | **312** | *i* P | | **Pn** | **15 22 57.4** | **-0.1** |
| | baz=312 | | | | | | | |
| NSK | | | | S | | **Sn** | **15 23 08.5** | **-0.8** |
| | baz=312 | | | | | | | |
| **EHY** | **Hungye** | **0.90** | **231** | P | | **Pn** | **15 22 57.1** | **-0.5** |
| | baz=229 | | | | | | | |
| EHY | | | | S | | **Sn** | **15 23 08.8** | **-0.7** |
| | baz=229 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.92** | **345** | P | | **Pb** | **15 22 58.2** | **-0.5** |
| | baz=345 | | | | | | | |
| TIPB | | | | S | | **Sb** | **15 23 10.6** | **0.0** |
| | baz=345 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.93** | **66** | P | | **Pn** | **15 22 58.0** | **0.0** |
| | baz=65 | | | | | | | |
| YOJ | | | | *e*S | | **Sb** | **15 23 11.8** | **+0.9** |
| | baz=65 | | | | | | | |
| **YULB** | **Yu-li** | **0.99** | **227** | P | | **Pn** | **15 22 58.4** | **-0.5** |
| | baz=225 | | | | | | | |
| YULB | | | | S | | **Sn** | **15 23 10.9** | **-0.9** |
| | baz=225 | | | | | | | |
| **TWA** | **Mucha** | **1.00** | **333** | *e*P | | **Pn** | **15 22 59.0** | **-0.1** |
| | baz=333 | | | | | | | |
| TWA | | | | S | | **Sb** | **15 23 12.8** | **-0.2** |
| | baz=333 | | | | | | | |
| **EYUL** | **Yuli** | **1.01** | **224** | *e*P | | **Pn** | **15 22 59.2** | **+0.1** |
| | baz=222 | | | | | | | |
| EYUL | | | | *e*S | | **Sb** | **15 23 13.3** | **+0.3** |
| | baz=222 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.02** | **330** | *e*S | | **Sb** | **15 23 12.8** | **-0.5** |
| | baz=330 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.04** | **302** | P | | **Pb** | **15 23 00.8** | **+0.1** |
| | baz=302 | | | | | | | |
| NFF | | | | S | | **Sn** | **15 23 13.1** | **0.0** |
| | baz=302 | | | | | | | |
| **WHP** | **Taichung City** | **1.05** | **281** | *e*P | | **Pb** | **15 23 00.9** | **0.0** |
| | baz=280 | | | | | | | |
| WHP | | | | S | | **Sn** | **15 23 13.9** | **+0.4** |
| | baz=280 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.07** | **269** | P | | **Pn** | **15 22 59.9** | **0.0** |
| | baz=268 | | | | | | | |
| WCS | | | | *e*S | | **Sb** | **15 23 14.6** | **-0.2** |
| | baz=268 | | | | | | | |
| **SSLB** | **Suanglung** | **1.07** | **255** | P | | **Pn** | **15 23 00.1** | **+0.1** |
| | baz=253 | | | | | | | |
| SSLB | | | | S | | **Sn** | **15 23 13.7** | **-0.2** |
| | baz=253 | | | | | | | |
| **LIOB** | **Emei** | **1.12** | **300** | P | | **Pb** | **15 23 01.7** | **-0.4** |
| | baz=300 | | | | | | | |
| LIOB | | | | *e*S | | **Sb** | **15 23 16.3** | **-0.1** |
| | baz=300 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.13** | **299** | P | | **Pb** | **15 23 01.7** | **-0.4** |
| | baz=299 | | | | | | | |
| NSTT | | | | S | | **Sb** | **15 23 15.9** | **-0.6** |
| | baz=299 | | | | | | | |
| **TYC** | **Yuchr** | **1.13** | **261** | *i* P | | **Pn** | **15 23 01.4** | **+0.5** |
| | baz=260 | | | | | | | |
| TYC | | | | S | | **Sn** | **15 23 15.5** | **+0.2** |
| | baz=260 | | | | | | | |
| **FULB** | **Fuli** | **1.13** | **220** | *e*P | | **Pn** | **15 23 00.7** | **-0.2** |
| | baz=218 | | | | | | | |
| FULB | | | | *e*S | | **Sn** | **15 23 15.3** | **-0.1** |
| | baz=218 | | | | | | | |
| **YM01** | **YM01** | **1.16** | **337** | *e*P | | **Pb** | **15 23 02.3** | **-0.4** |
| | baz=336 | | | | | | | |
| YM01 | | | | *e*S | | **Sn** | **15 23 15.9** | **-0.2** |
| | baz=336 | | | | | | | |
| **CHKT** | **Chengkung** | **1.18** | **214** | P | | **Pn** | **15 23 01.2** | **-0.2** |
| | baz=212 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.18** | **329** | *e*S | | **Sb** | **15 23 17.4** | **-0.7** |
| | baz=329 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.19** | **241** | P | | **Pn** | **15 23 02.6** | **+0.5** |
| | baz=239 | | | | | | | |
| YUS | | | | *e*S | | **Sn** | **15 23 17.2** | **-0.2** |
| | baz=239 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.22** | **283** | P | | **Pb** | **15 23 03.2** | **-0.6** |
| | baz=282 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sb** | **15 23 19.5** | **+0.3** |
| | baz=282 | | | | | | | |
| **NSY** | **Sanyi** | **1.25** | **286** | P | | **Pn** | **15 23 03.2** | **+0.7** |
| | baz=285 | | | | | | | |
| NSY | | | | *e*S | | **Sn** | **15 23 18.4** | **+0.1** |
| | baz=285 | | | | | | | |
| **NMLH** | **Miaoli** | **1.26** | **291** | *e*P | | **Pb** | **15 23 03.5** | **-0.9** |
| | baz=291 | | | | | | | |
| NMLH | | | | *e*S | | **Sb** | **15 23 20.4** | **+0.1** |
| | baz=291 | | | | | | | |
| **WJS** | **Zhushan** | **1.26** | **259** | *e*P | | **Pb** | **15 23 04.3** | **-0.1** |
| | baz=257 | | | | | | | |
| WJS | | | | *e*S | | **Sb** | **15 23 20.0** | **-0.4** |
| | baz=257 | | | | | | | |
| **WWF** | **Wufeng** | **1.26** | **269** | P | | **Pb** | **15 23 04.7** | **+0.3** |
| | baz=267 | | | | | | | |
| **TCU** | **Taichung** | **1.28** | **273** | *e*P | | **Pn** | **15 23 03.5** | **+0.6** |
| | baz=272 | | | | | | | |
| TCU | | | | *e*S | | **Sb** | **15 23 21.2** | **+0.2** |
| | baz=272 | | | | | | | |
| **WNT** | **Mingjian** | **1.29** | **261** | P | | **Pb** | **15 23 04.7** | **-0.2** |
| | baz=260 | | | | | | | |
| WNT | | | | S | | **Sb** | **15 23 21.2** | **0.0** |
| | baz=260 | | | | | | | |
| **ALS** | **Alishan** | **1.30** | **244** | P | | **Pn** | **15 23 04.2** | **+0.8** |
| | baz=243 | | | | | | | |
| ALS | | | | *e*S | | **Sn** | **15 23 19.8** | **0.0** |
| | baz=243 | | | | | | | |
| **EDH** | **Donghe** | **1.31** | **213** | *e*P | | **Pn** | **15 23 02.7** | **-0.6** |
| | baz=212 | | | | | | | |
| EDH | | | | *e*S | | **Sn** | **15 23 19.8** | **+0.1** |
| | baz=212 | | | | | | | |
| **ELDTW** | **Lidau** | **1.32** | **228** | P | | **Pn** | **15 23 03.0** | **-0.5** |
| | baz=226 | | | | | | | |
| ELDTW | | | | S | | **Sn** | **15 23 19.5** | **-0.6** |
| | baz=226 | | | | | | | |
| **CHN5** | **Tsauling** | **1.37** | **250** | P | | **Pb** | **15 23 05.7** | **-0.6** |
| | baz=249 | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **15 23 23.2** | **-0.3** |
| | baz=249 | | | | | | | |
| **LONT** | **Longtian** | **1.46** | **217** | *e*P | | **Pn** | **15 23 05.1** | **-0.2** |
| | baz=216 | | | | | | | |
| LONT | | | | *e*S | | **Sn** | **15 23 22.4** | **-0.9** |
| | baz=216 | | | | | | | |
| **WDLH** | **Douliu** | **1.46** | **255** | *e*P | | **Pb** | **15 23 06.9** | **-0.9** |
| | baz=254 | | | | | | | |
| WDLH | | | | *e*S | | **Sb** | **15 23 25.0** | **-1.0** |
| | baz=254 | | | | | | | |
| **STYH** | **Taoyuan** | **1.50** | **233** | *e*P | | **Pn** | **15 23 07.0** | **+1.1** |
| | baz=232 | | | | | | | |
| STYH | | | | *e*S | | **Sn** | **15 23 25.2** | **+0.9** |
| | baz=232 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.53** | **80** | P | | **Pn** | **15 23 06.4** | **+0.1** |
| IRIF | | | | *e*S | | **Sn** | **15 23 25.8** | **+0.7** |
| **TPUB** | **Ta-pu** | **1.54** | **240** | *e*P | | **Pn** | **15 23 07.9** | **+1.4** |
| | baz=239 | | | | | | | |
| TPUB | | | | *e*S | | **Sb** | **15 23 27.6** | **-0.6** |
| | baz=239 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.54** | **360** | *e*P | | **Pn** | **15 23 07.4** | **+0.9** |
| PCYT | | | | *e*S | | **Sn** | **15 23 25.7** | **+0.2** |
| **TWGBT** | **Beinan** | **1.56** | **216** | *e*P | | **Pn** | **15 23 06.5** | **-0.2** |
| | baz=215 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.57** | **264** | *e*P | | **Pn** | **15 23 07.9** | **+1.0** |
| | baz=263 | | | | | | | |
| WRL | | | | *e*S | | **Sb** | **15 23 27.9** | **-1.2** |
| | baz=263 | | | | | | | |
| **WTP** | **Ta-pu** | **1.58** | **239** | *e*P | | **Pn** | **15 23 08.4** | **+1.3** |
| | baz=237 | | | | | | | |
| WTP | | | | *e*S | | **Sb** | **15 23 28.6** | **-0.8** |
| | baz=237 | | | | | | | |
| **WTK** | **Tuku** | **1.60** | **256** | P | | **Pb** | **15 23 09.2** | **-0.8** |
| | baz=255 | | | | | | | |
| WTK | | | | *e*S | | **Sb** | **15 23 28.5** | **-1.4** |
| | baz=255 | | | | | | | |
| **TWK** | **Hsinying** | **1.67** | **241** | P | | **Pb** | **15 23 10.0** | **-1.3** |
| | baz=240 | | | | | | | |
| TWK | | | | *e*S | | **Sn** | **15 23 28.8** | **+0.2** |
| | baz=240 | | | | | | | |
| **CHN1** | **Nanshi** | **1.68** | **238** | *e*P | | **Pb** | **15 23 10.3** | **-1.1** |
| | baz=237 | | | | | | | |
| CHN1 | | | | *e*S | | **Sb** | **15 23 31.1** | **-1.1** |
| | baz=237 | | | | | | | |
| **SGST** | **Jiashian** | **1.69** | **234** | *e*P | | **Pn** | **15 23 09.6** | **+1.0** |
| | baz=233 | | | | | | | |
| SGST | | | | *e*S | | **Sn** | **15 23 30.9** | **+1.6** |
| | baz=233 | | | | | | | |
| **SLGT** | **Liugui** | **1.70** | **231** | *e*P | | **Pn** | **15 23 09.6** | **+0.9** |
| | baz=230 | | | | | | | |
| SLGT | | | | *e*S | | **Sn** | **15 23 30.5** | **+1.1** |
| | baz=230 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.77** | **84** | P | | **Pn** | **15 23 10.5** | **+0.9** |
| JKRS | | | | *e*S | | **Sn** | **15 23 32.4** | **+1.4** |
| **WSL** | **Shuilin Townsh** | **1.79** | **252** | *e*P | | **Pn** | **15 23 11.0** | **+1.2** |
| | baz=251 | | | | | | | |
| WSL | | | | *e*S | | **Sn** | **15 23 33.4** | **+2.0** |
| | baz=251 | | | | | | | |
| **SSD** | **Sandimen** | **1.88** | **225** | *e*P | | **Pn** | **15 23 12.6** | **+1.4** |
| | baz=224 | | | | | | | |
| SSD | | | | *e*S | | **Sn** | **15 23 35.9** | **+2.1** |
| | baz=224 | | | | | | | |
| **TSMG** | **Majia** | **1.90** | **224** | *e*P | | **Pb** | **15 23 13.6** | **-1.6** |
| | baz=223 | | | | | | | |
| TSMG | | | | *e*S | | **Sn** | **15 23 36.1** | **+1.9** |
| | baz=223 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.90** | **81** | P | | **Pn** | **15 23 11.5** | **0.0** |
| JIJ | | | | S | | **Sn** | **15 23 32.5** | **-1.9** |
| **MASBT** | **Mashibuluo** | **1.98** | **223** | *e*P | | **Pn** | **15 23 13.5** | **+1.1** |
| | baz=221 | | | | | | | |
| MASBT | | | | *e*S | | **Sn** | **15 23 37.7** | **+1.6** |
| | baz=221 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.10** | **76** | P | | **Pn** | **15 23 13.9** | **-0.2** |
| JISG | | | | S | | **Sn** | **15 23 38.2** | **-0.9** |
| **SCZT** | **Fangliau** | **2.17** | **219** | *e*P | | **Pn** | **15 23 17.5** | **+2.5** |
| | baz=217 | | | | | | | |
| SCZT | | | | *e*S | | **Sn** | **15 23 43.2** | **+2.4** |
| | baz=217 | | | | | | | |
| **SLIU** | **Shizi** | **2.20** | **213** | *e*P | | **Pn** | **15 23 16.6** | **+1.1** |
| | baz=212 | | | | | | | |
| **WDGT** | **Dungji** | **2.36** | **250** | *e*P | | **Pn** | **15 23 18.4** | **+0.6** |
| | baz=249 | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.37** | **257** | *e*P | | **Pn** | **15 23 18.2** | **+0.4** |
| | baz=255 | | | | | | | |

*EAF **21** 15:27:37.5±1.8, 25°.80S×29°.83E, h10km, MD3.9*
**BUL 21 15:27:37.8±0.4, 25°82S×29°80E, h10km, MD4.1, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.20** | **103** | *i* P | | Pn | 15 28 14.0 | -0.4 |
| CNG | | | | *i* S | | Sn | 15 28 40.6 | -1.0 |
| **CNG** | **Changalane** | **2.20** | **103** | *i* P | | Pn | 15 28 14.0 | -0.4 |
| CNG | | | | *i* S | | Sn | 15 28 40.6 | -1.0 |
| **MOPA** | **Mopani** | **2.72** | **33** | *i* P | | Pn | 15 28 19.1 | -2.4 |
| MOPA | | | | *i* S | | Sn | 15 28 49.8 | -4.7 |
| **MOPA** | **Mopani** | **2.72** | **33** | *i* P | | Pn | 15 28 19.1 | -2.4 |
| MOPA | | | | *i* S | | Sn | 15 28 49.8 | -4.7 |
| **MSNA** | **Messina** | **3.47** | **3** | *i* P | | Pn | 15 28 31.4 | -0.6 |
| MSNA | | | | *i* S | | Sn | 15 29 10.8 | -2.3 |
| **MSNA** | **Messina** | **3.47** | **3** | *i* P | | Pn | 15 28 31.4 | -0.6 |
| MSNA | | | | *i* S | | Sn | 15 29 10.8 | -2.3 |
| **LBTB** | **Lobatse** | **3.89** | **281** | *i* P | | Pn | 15 28 37.4 | -0.4 |
| LBTB | | | | *i* S | | Sn | 15 29 20.8 | -2.7 |
| **LBTB** | **Lobatse** | **3.89** | **281** | *i* P | | Pn | 15 28 37.4 | -0.4 |
| LBTB | | | | *i* S | | Sn | 15 29 20.8 | -2.7 |
| **BOSA** | **Boshof** | **4.91** | **235** | *i* P | | Pn | 15 28 50.9 | -1.0 |
| BOSA | | | | *i* S | | Sn | 15 29 44.9 | -3.9 |
| **BOSA** | **Boshof** | **4.91** | **235** | *i* P | | Pn | 15 28 50.9 | -1.0 |
| BOSA | | | | *i* S | | Sn | 15 29 44.9 | -3.9 |
| **BLWY** | **Bulawayo** | **5.76** | **349** | *i* P | | Pn | 15 29 02.4 | -1.2 |
| BLWY | | | | *i* S | | Sn | 15 30 04.9 | -5.0 |
| **BLWY** | **Bulawayo** | **5.76** | **349** | *i* P | | Pn | 15 29 02.4 | -1.2 |
| BLWY | | | | *i* S | | Sn | 15 30 04.9 | -5.0 |

*TAP **21** 15:31:12.4, 24°.76N×122°.13E, h73km, ML3.0, C*
*JMA **21** 15:31:12.5±0.1, 24°.75N×122°.12E, h69km±2km*
**ISC 21 15:31:13.3±1.4, 24°75N±0°.04×122°15E±0°.03, h66km±8km, n49, σ0°74/90, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **EGS** | | **0.22** | **295** | *e*P | | **Pn** | **15 31 23.6** | **+0.1** |
| | baz=288 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.29** | **330** | P | | **Pn** | **15 31 23.8** | **-0.2** |
| | baz=329 | | | | | | | |
| TWB1 | | | | S | | **Sn** | **15 31 32.0** | **+0.2** |
| | baz=329 | | | | | | | |
| **NTC** | **Toucheng** | **0.31** | **289** | *e*P | | **Pn** | **15 31 23.8** | **-0.3** |
| | baz=293 | | | | | | | |
| NTC | | | | *e*S | | **Sn** | **15 31 31.8** | **-0.2** |
| | baz=293 | | | | | | | |
| **TWC** | **Suao** | **0.31** | **242** | P | | **Pn** | **15 31 24.0** | **-0.1** |
| | baz=237 | | | | | | | |
| TWC | | | | *e*S | | **Sn** | **15 31 31.8** | **-0.2** |
| | baz=237 | | | | | | | |
| **ILA** | **Ilan** | **0.36** | **272** | *e*S | | **Sn** | **15 31 34.0** | **+1.2** |
| | baz=269 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.36** | **306** | P | | **Pn** | **15 31 24.4** | **-0.2** |
| | baz=307 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **15 31 33.0** | **+0.1** |
| | baz=307 | | | | | | | |
| **NDS** | **Dongshan** | **0.41** | **253** | P | | **Pn** | **15 31 24.9** | **0.0** |
| | baz=249 | | | | | | | |
| NDS | | | | S | | **Sn** | **15 31 33.8** | **+0.3** |
| | baz=249 | | | | | | | |
| **TWE** | **Neicheng** | **0.44** | **266** | P | | **Pn** | **15 31 25.2** | **0.0** |
| | baz=269 | | | | | | | |
| TWE | | | | S | | **Sn** | **15 31 34.3** | **+0.5** |
| | baz=269 | | | | | | | |
| **EWUT** | **Wuta** | **0.46** | **228** | P | | **Pn** | **15 31 25.5** | **+0.1** |
| | baz=225 | | | | | | | |
| EWUT | | | | S | | **Sn** | **15 31 34.9** | **+0.7** |
| | baz=225 | | | | | | | |
| **ENA** | **Nanau** | **0.49** | **229** | P | | **Pn** | **15 31 25.9** | **+0.2** |
| | baz=225 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **15 31 36.2** | **+1.4** |
| | baz=225 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **271** | P | | **Pn** | **15 31 25.7** | **-0.2** |
| | baz=275 | | | | | | | |
| FUSB | | | | *e*S | | **Sn** | **15 31 34.9** | **-0.3** |
| | baz=275 | | | | | | | |
| **TWA** | **Mucha** | **0.56** | **294** | *e*P | | **Pn** | **15 31 25.9** | **-0.6** |
| | baz=294 | | | | | | | |
| TWA | | | | S | | **Sn** | **15 31 35.7** | **-0.4** |
| | baz=294 | | | | | | | |
| **NWLT** | **Wulai** | **0.59** | **272** | P | | **Pn** | **15 31 26.2** | **-0.5** |
| | baz=277 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **15 31 35.7** | **-0.9** |
| | baz=277 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.60** | **290** | P | | **Pn** | **15 31 26.4** | **-0.5** |
| | baz=289 | | | | | | | |
| NHDH | | | | S | | **Sn** | **15 31 36.3** | **-0.5** |
| | baz=289 | | | | | | | |
| **YM01** | **YM01** | **0.66** | **307** | P | | **Pn** | **15 31 27.0** | **-0.5** |
| | baz=299 | | | | | | | |
| YM01 | | | | S | | **Sn** | **15 31 37.4** | **-0.5** |
| | baz=299 | | | | | | | |
| **YHNB** | **Yeheng** | **0.71** | **263** | *e*P | | **Pn** | **15 31 28.1** | **0.0** |
| | baz=268 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **15 31 40.0** | **+1.0** |
| | baz=268 | | | | | | | |
| **NSK** | **Sanguang** | **0.72** | **264** | *e*P | | **Pn** | **15 31 28.4** | **+0.1** |
| | baz=268 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **15 31 39.8** | **+0.4** |
| | baz=268 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.75** | **298** | *e*P | | **Pn** | **15 31 28.0** | **-0.5** |
| | baz=303 | | | | | | | |
| TWS1 | | | | S | | **Sn** | **15 31 39.6** | **-0.1** |
| | baz=303 | | | | | | | |
| **NTST** | **Danshui** | **0.76** | **303** | P | | **Pn** | **15 31 28.1** | **-0.5** |
| | baz=302 | | | | | | | |
| NTST | | | | S | | **Sn** | **15 31 39.6** | **-0.2** |
| | baz=302 | | | | | | | |
| **ETL** | **Fush Village** | **0.76** | **219** | *e*P | | **Pn** | **15 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** baz=107 | **0.84** | **110** | *e*P | **Pn** | **15 31 29.2** | **-0.3** |
| **TWD** | **Chiawan** baz=226 | **0.84** | **217** | *e*P | **Pn** | **15 31 29.1** | **-0.5** |
| TWD | baz=226 | | | *e*S | **Sn** | **15 31 41.5** | **-0.2** |
| **NFF** | **Wufeng Townshi** baz=265 | **0.95** | **263** | *e*P | **Pn** | **15 31 30.7** | **-0.3** |
| NFF | baz=265 | | | *e*S | **Sn** | **15 31 44.3** | **+0.2** |
| **FUSS** | **Fushou** baz=229 | **0.97** | **239** | *e*P | **Pn** | **15 31 31.4** | **-0.1** |
| FUSS | baz=229 | | | *e*S | **Sn** | **15 31 44.9** | **0.0** |
| **TDCB** | **Techi** baz=228 | **1.03** | **241** | *e*P | **Pn** | **15 31 32.5** | **+0.3** |
| TDCB | baz=228 | | | *e*S | **Sn** | **15 31 46.6** | **+0.5** |
| **LIOB** | **Emei** baz=262 | **1.04** | **264** | *e*P | **Pn** | **15 31 31.9** | **-0.2** |
| LIOB | baz=262 | | | *e*S | **Sn** | **15 31 46.6** | **+0.5** |
| **NSTT** | **Nanjuang** baz=261 | **1.05** | **264** | *e*P | **Pn** | **15 31 32.0** | **-0.3** |
| NSTT | baz=261 | | | *e*S | **Sn** | **15 31 46.6** | **+0.2** |
| **CHGB** | **Renai** baz=228 | **1.13** | **232** | *e*P | **Pn** | **15 31 33.4** | **-0.1** |
| CHGB | baz=228 | | | *e*S | **Sn** | **15 31 48.3** | **-0.1** |
| **ESL** | **Shilin** baz=219 | **1.14** | **215** | *e*P | **Pn** | **15 31 32.0** | **-1.5** |
| ESL | baz=219 | | | *e*S | **Sn** | **15 31 47.3** | **-1.1** |
| **WHP** | **Taichung City** baz=244 | **1.20** | **247** | *e*P | **Pn** | **15 31 34.5** | **+0.3** |
| WHP | baz=244 | | | *e*S | **Sn** | **15 31 50.5** | **+0.6** |
| **WUSB** | **Renai** baz=227 | **1.21** | **231** | *e*P | **Pn** | **15 31 34.3** | **-0.1** |
| WUSB | baz=227 | | | *e*S | **Sn** | **15 31 50.7** | **+0.5** |
| **NSY** | **Sanyi** baz=252 | **1.31** | **255** | *e*P | **Pn** | **15 31 35.3** | **-0.3** |
| NSY | baz=252 | | | *e*S | **Sn** | **15 31 53.1** | **+0.7** |
| **TWQ1** | **Liyutan** baz=249 | **1.32** | **252** | *e*S | **Sn** | **15 31 52.9** | **+0.3** |
| **WCS** | **Beigang Elemen** baz=227 | **1.32** | **239** | *e*P | **Pn** | **15 31 35.9** | **+0.1** |
| WCS | baz=227 | | | *e*S | **Sn** | **15 31 54.6** | **+1.9** |
| **HGSD** | **Ruisui** baz=216 | **1.42** | **208** | *e*P | **Pn** | **15 31 36.1** | **-1.0** |
| **SMLT** | **Sun Moon Lake** baz=229 | **1.43** | **233** | *e*P | **Pn** | **15 31 37.9** | **+0.6** |
| SMLT | baz=229 | | | *e*S | **Sn** | **15 31 57.9** | **+2.4** |
| **TYC** | **Yuchr** baz=224 | **1.45** | **235** | *e*P | **Pn** | **15 31 38.2** | **+0.7** |
| TYC | baz=224 | | | *e*S | **Sn** | **15 31 57.1** | **+1.4** |
| **EHY** | **Hungye** baz=210 | **1.45** | **211** | *e*P | **Pn** | **15 31 35.6** | **-2.0** |
| **SSLB** | **Suanglung** baz=217 | **1.46** | **229** | *e*P | **Pn** | **15 31 37.6** | **0.0** |
| SSLB | baz=217 | | | *e*S | **Sn** | **15 31 57.8** | **+1.9** |
| **IRIF** | **Iriomote-Funau** | **1.50** | **106** | P | **Pn** | **15 31 37.9** | **-0.2** |
| IRIF | | | | *e*S | **Sn** | **15 31 57.3** | **+0.5** |
| **YULB** | **Yu-li** baz=206 | **1.56** | **210** | *e*P | **Pn** | **15 31 37.0** | **-2.0** |
| YULB | baz=206 | | | *e*S | **Sn** | **15 31 56.6** | **-1.8** |
| **JKRS** | **Kuro-shima** | **1.77** | **107** | P | **Pn** | **15 31 41.8** | **0.0** |
| JKRS | | | | *e*S | **Sn** | **15 32 03.7** | **+0.3** |
| **JIJ** | **Ishigaki jima** | **1.86** | **102** | P | **Pn** | **15 31 42.8** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **15 32 06.2** | **+0.8** |
| **JISG** | **Ishigakijimahi** | **1.97** | **94** | P | **Pn** | **15 31 44.6** | **+0.1** |

*IDC **21** 15:37:25.9±1.1,0.°79N×128.°87E,h0km,mb3.6/5, mb1 3.7/6,mb1mx3.4/35,mbtmp3.6/6,ML3.6/1,Error ellipse: s-maj=63.5km s-min=18.6km az=61.0*
*DJA **21** 15:37:27.2±0.7,1.°N±5.°×12.°9E±.°,h139km±11km,M3.6/7, MLv3.6/7*
**ISC 21 15:37:27.7**±1.1,**0.°7N**±0.°1×**128.°97E**±0.°06,**h10**km,**n16,** σ1°**37**/12,**mb3.7**/5,**Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.60** | **273** | P | **Pg** | **15 37 58.8** | **+0.3** |
| TNTI | | | | S | **Sg** | **15 38 21.3** | **+2.0** |
| **SIJI** | **Sorong** 8.6nm,0.3s,baz=338,slow=19,SNR=46 | **2.77** | **124** | Pn | **Pn** | **15 38 12.1** | **-0.1** |
| SIJI | 3.0nm,0.3s,baz=0.0,slow=20,SNR=12 | | | Sn | **Sn** | **15 38 44.0** | **-1.8** |
| **MSAI** | **Masohi** | **4.01** | **181** | P | **Pn** | **15 38 28.4** | **-0.8** |
| **SANI** | **Sanana** | **4.03** | **228** | P | **Pn** | **15 38 27.8** | **-1.7** |
| **FAKI** | **Fak Fak** | **4.86** | **138** | P | **Pn** | **15 38 41.7** | **+0.8** |
| **WRA** | **Warramunga Arr** 0.7nm,0.8s,baz=343,slow=10,SNR=4.6 | **21.17** | **166** | P | **P** | **15 42 13.7** | **+0.4** |
| **ASAR** | **Alice Springs** 0.8nm,0.7s,baz=356,slow=9.0,SNR=25 | **24.68** | **169** | P | **P** | **15 42 50.2** | **+1.2** |
| **STKA** | **Stephens Creek** 0.8nm,0.4s,baz=346,slow=8.2,SNR=2.9 | **34.53** | **161** | P | **P** | **15 44 17.4** | **+1.1** |
| **H11S3** | **WAKE ISLAND Hy 41.03** baz=248,slow=75,SNR=26 | **62** | | T | T | 16 28 44.0 | |
| **H11S2** | **WAKE ISLAND Hy 41.05** baz=248,slow=75,SNR=28 | **62** | | T | T | 16 28 44.9 | |
| **H11S1** | **WAKE ISLAND Hy 41.05** baz=248,slow=75,SNR=29 | **62** | | T | T | 16 28 45.1 | |
| **H11N1** | **WAKE ISLAND Hy 41.66** baz=247,slow=75,SNR=34 | **61** | | T | T | 16 29 27.7 | |
| **H11N2** | **WAKE ISLAND Hy 41.67** baz=247,slow=75,SNR=25 | **61** | | T | T | 16 29 29.4 | |
| **H11N3** | **WAKE ISLAND Hy 41.68** baz=247,slow=75,SNR=27 | **61** | | T | T | 16 29 28.9 | |
| **MKAR** | **Makanchi Array** 0.3nm,0.5s,baz=119,slow=7.5,SNR=11 | **61.31** | **325** | P | **P** | **15 47 42.5** | **-1.0** |
| **KURBB** | **Kurchatov Arra** 0.4nm,0.5s,baz=128,slow=6.0,SNR=5.5 | **65.49** | **327** | P | **P** | **15 48 09.8** | **-1.3** |

*JMA **21** 15:45:37.7,33.°06N×140.°31E,h86km±2km,M3.0*
*IDC **21** 15:45:41.0±4.4,32.°93N×139.°41E,h118km±83km,mb2.8/3, mb1 3.0/4,mb1mx2.8/27,mbtmp3.1/4,ML2.3/1,Error ellipse: s-maj=186.0km s-min=28.0km az=64.0*
**ISC 21 15:45:36.9**±1.2,**32.°98N**±0.°06×**140.°2E**±0.°1,**h100**km,**n18,** σ1°**24**/20,**mb3.3**/3,**Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **0.36** | **291** | P | **Pn** | **15 45 51.5** | **-0.3** |
| JHJ2 | | | | S | **Sn** | **15 46 01.8** | **-1.1** |
| **JHCJ** | **Hachijojimakas** | **0.36** | **284** | P | **Pn** | **15 45 51.6** | **-0.2** |
| JHCJ | | | | S | **Sn** | **15 46 01.7** | **-1.3** |
| **JAOM** | **Aogashimamukai** | **0.64** | **216** | P | **Pn** | **15 45 54.6** | **+0.7** |
| JAOM | | | | *e*S | **Sn** | **15 46 06.9** | **+0.3** |
| **JMKN** | **Mikurajimanish** | **1.04** | **330** | *e*S | **Sn** | **15 46 12.3** | **-1.3** |
| **JTHY** | **Toshimahigashi** | **1.72** | **334** | P | **Pn** | **15 46 06.4** | **+0.5** |
| **BSO3** | **Boso 3** | **1.83** | **8** | P | **Pn** | **15 46 07.5** | **+0.4** |
| **JIM2** | **Oshima 3** | **1.85** | **340** | P | **Pn** | **15 46 07.6** | **0.0** |
| **JIZS** | **Izushimoda** | **2.06** | **328** | P | **Pn** | **15 46 10.7** | **+0.5** |
| **TK02** | **Tokai 2** | **2.27** | **296** | P | **Pn** | **15 46 13.9** | **+1.1** |
| **JOD2** | **Odawara 2** | **2.46** | **338** | P | **Pn** | **15 46 16.1** | **+0.6** |
| **MJAR** | **Matsushiro Arr** 0.2nm,0.3s,baz=158,slow=11,SNR=13 | **3.91** | **336** | P | **Pn** | **15 46 37.2** | **+2.2** |
| MJAR | 0.1nm,0.3s,baz=188,slow=20,SNR=1.1 | | | S | **Sn** | **15 47 19.9** | **0.0** |
| **MAT** | **Matsushiro** | **3.92** | **336** | P | **Pn** | **15 46 37.2** | **+2.2** |
| MAT | | | | *e*S | **Sn** | **15 47 19.8** | **-0.1** |
| **H11N2** | **WAKE ISLAND Hy 27.22** baz=306,slow=75,SNR=6.8 | **112** | | T | T | 16 20 07.1 | |
| **H11N1** | **WAKE ISLAND Hy 27.22** baz=306,slow=75,SNR=6.2 | **112** | | T | T | 16 20 12.4 | |
| **H11N3** | **WAKE ISLAND Hy 27.24** baz=306,slow=75,SNR=5.1 | **112** | | T | T | 16 20 14.9 | |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=91,slow=8.9,SNR=6.5 | **45.54** | **305** | P | **P** | **15 53 44.7** | **-1.9** |
| **WRA** | **Warramunga Arr** 0.2nm,0.6s,baz=1.4,slow=7.5,SNR=1.1 | **52.93** | **187** | P | **P** | **15 54 42.7** | **-0.3** |
| **ASAR** | **Alice Springs** 0.1nm,0.7s,baz=354,slow=6.4,SNR=4.8 | **56.66** | **187** | P | **P** | **15 55 12.1** | **+2.2** |

# 2016 FEB

**MEX 21 16:05:21.8**±0.4,**19.°27N**×**104.°07W,h28**km±4km,**MD2.7,1C, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **R15V** | | **0.14** | **140** | *e*P | Pb | 16 05 25.9 | -1.3 |
| R15V | | | | *e*S | Sb | 16 05 29.3 | -1.7 |
| **R15V** | | **0.14** | **140** | *e*P | Pb | 16 05 25.9 | -1.3 |
| R15V | | | | *e*S | Sb | 16 05 29.5 | -1.5 |
| **CDAR** | **Ciudad de Arme** | **0.34** | **170** | *e*P | Pb | 16 05 28.5 | -1.2 |
| CDAR | | | | *e*S | Sb | 16 05 33.2 | -1.8 |
| **CDAR** | **Ciudad de Arme** | **0.34** | **170** | *e*P | Pb | 16 05 28.4 | -1.2 |
| CDAR | | | | *e*S | Sb | 16 05 33.1 | -1.8 |
| **COIG** | **Colima** | **0.38** | **104** | *e*P | Pb | 16 05 29.0 | -1.2 |
| COIG | | | | *e*S | Sb | 16 05 34.2 | -1.8 |
| **COIG** | **Colima** | **0.38** | **104**⇑ | *e*P | Pb | 16 05 29.1 | -1.2 |
| COIG | | | | *e*S | Sb | 16 05 34.3 | -1.8 |

*MOS **21** 16:32:02.7±1.1,35.°90N×77.°93E,h63km,mb4.3/10,Error ellipse: s-maj=7.9km s-min=4.0km az=97.0*
*NEIC **21** 16:32:02.6±2.0,36.°13N±0.°07×78.°10E±0.°09,h36km±5km, mb4.5/54,ML4.7(BJI),Error ellipse: s-maj=11.3km s-min=10.3km az=49.0*
*BJI **21** 16:32:08.2±0.0,36.°16N×78.°02E,h96km,mb4.3/35, mB4.6/24*
*IDC **21** 16:32:09.6±0.6,36.°21N×78.°03E,h111km±5km,mb3.6/25, mb1 3.7/29,mb1mx3.6/52,mbtmp4.0/29,MS2.4/1, Ms1 2.4/1,ms1mx2.3/83,Error ellipse: s-maj=12.2km s-min=9.1km az=34.0*
*NNC **21** 16:32:11.3±2.9,36.°30N×77.°99E,h102km±25km,mb4.1, mpv4.9,Error ellipse: s-maj=24.3km s-min=20.1km az=150.0*
**ISC 21 16:32:07.5**±0.3,**36.°09N**±0.°03×**78.°09E**±0.°04,**h88**km,**n263,** σ2°**32**/311,**mb4.2**/58,**16C-22D,Kashmir-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **3.81** | **335** | P | **Pn** | **16 33 03.4** | **-0.6** |
| KSH | | | | *s*P | | 16 33 24.0 | |
| KSH | | | | S | **Sn** | **16 33 43.8** | **-4.0** |
| KSH | comp=Z,260nm,0.6s | | | pmax | pmax | | |
| KSH | comp=N,3μm,0.8s | | | smax | smax | | |
| KSH | comp=E,1μm,0.7s | | | smax | smax | | |
| **THN** | **Thein Dam** | **4.14** | **209** | *e*P | **Pn** | **16 33 11.8** | **+3.3** |
| THN | | | | *e*S | **Sn** | **16 33 55.2** | **-0.5** |
| **JMU** | **Jammu** | **4.28** | **219** | *e*P | **Pn** | **16 33 12.7** | **+2.5** |
| JMU | | | | *e*S | **Sn** | **16 33 59.4** | **+0.5** |
| **NIL** | **Nilore** | **4.66** | **240** | P | **Pn** | **16 33 11.1** | **-4.5** |
| **NIL** | **Nilore** | **4.66** | **240** | Pn | **Pn** | **16 33 11.1** | **-4.5** |
| **BHK** | **Bhakra** | **4.87** | **197** | *e*P | **Pn** | **16 33 22.2** | **+4.0** |
| **SMLA** | **Simla** | **5.01** | **189** | *e*P | **Pn** | **16 33 23.1** | **+2.9** |
| SMLA | | | | *e*S | **Sn** | **16 34 16.2** | **-0.6** |
| SMLA | comp=E,700nm,0.2s | | | IAML | | 16 34 19.1 | |
| SMLA | comp=N,1μm,0.3s | | | IAML | | 16 34 19.9 | |
| **CEP** | **Cherat** | **5.56** | **248** | P | **Pn** | **16 33 27.3** | **-0.5** |
| **THW** | **Thamme Wali** | **6.19** | **240** | P | **Pn** | **16 33 35.8** | **-0.5** |
| **ULHL** | **Ulahol** SNR=26 | **6.31** | **347** | P | **Pn** | **16 33 39.6** | **+1.5** |
| **UCH** | **Uchtor** SNR=83 | **6.73** | **337** | P | **Pn** | **16 33 44.9** | **+0.9** |
| **PTH** | **Pithoragarh** | **6.76** | **164** | *e*P | **Pn** | **16 33 45.7** | **+1.4** |
| PTH | | | | *e*S | **Sn** | **16 34 56.8** | **-3.1** |
| **GAR** | **Garm** | **6.83** | **298** | | Pn | 16 33 40.0 | -5.1 |
| **LGTI** | **Lohaghat** | **6.87** | **164** | *e*P | **Pn** | **16 33 48.0** | **+2.5** |
| LGTI | | | | *e*S | **Sn** | **16 34 59.6** | **-2.5** |
| **AML** | **Almayashu** SNR=29 | **6.93** | **332** | P | **Pn** | **16 33 48.0** | **+1.3** |
| **SATY** | **Saty** baz=2.7 | **6.96** | **2** | *i* P | **Pn** | **16 33 47.8** | **+0.9** |
| **SATY** | **Saty** baz=2.9 | **6.96** | **2** | *i* P | **Pn** | **16 33 47.8** | **+0.9** |
| **KBK** | **Karagaybulak** SNR=18 | **6.99** | **341** | P | **Pn** | **16 33 50.1** | **+2.8** |
| **TNSS** | **Tian-Shan** baz=354 | **6.99** | **353** | *i* P | **Pn** | **16 33 49.0** | **+1.4** |
| **ZHN** | **Zhinishke** | **7.07** | **2** | *e*P | **Pn** | **16 33 49.5** | **+1.1** |
| **ZHN** | **Zhinishke** baz=2.9 | **7.07** | **2** | *e*P | **Pn** | **16 33 49.5** | **+1.1** |
| **UZB** | **Uzynbulak** | **7.08** | **6** | *i* P | **Pn** | **16 33 49.7** | **+1.1** |
| **UZB** | **Uzynbulak** baz=6.3 | **7.08** | **6** | *i* P | **Pn** | **16 33 49.7** | **+1.1** |
| **TKM2** | **Tokmak 2** SNR=31 | **7.09** | **345** | P | **Pn** | **16 33 50.3** | **+1.6** |
| **TKM2** | **Tokmak 2** comp=N,8.0nm,0.4s | **7.09** | **345** | ⇑P | **Pn** | **16 33 50.0** | **+1.3** |
| **AAK** | **Ala-Archa** comp=N,7.8nm,0.3s,baz=160,slow=7.2,SNR=53 | **7.11** | **338** | P | **Pn** | **16 33 49.3** | **+0.5** |
| AAK | comp=N,6.9nm,0.3s,baz=153,slow=18,SNR=6.6 | | | S | **Sn** | **16 35 06.2** | **-2.0** |
| AAK | comp=N,29nm,21.2s,baz=131,slow=35 | | | LR | LR | 16 36 11.7 | |
| **AAK** | **Ala-Archa** SNR=46 | **7.11** | **338** | P | **Pn** | **16 33 50.3** | **+1.4** |
| **AAK** | **Ala-Archa** | **7.11** | **338** | *d* iP | **Pn** | **16 33 49.9** | **+1.0** |
| AAK | comp=Z,42nm,1.3s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** comp=Z,30nm,0.6s | **7.11** | **338** | ⇓P | **Pn** | **16 33 50.2** | **+1.4** |
| **MDOK** | **Medeo** | **7.11** | **354** | P | **Pn** | **16 33 50.5** | **+1.6** |
| MDOK | | | | | | 16 35 17.8 | |
| **MDOK** | **Medeo** baz=355 | **7.11** | **354** | *e*P | **Pn** | **16 33 50.0** | **+1.1** |
| **MDOK** | **Medeo** comp=Z,104nm,0.5s | **7.11** | **354** | ⇑P | **Pn** | **16 33 50.5** | **+1.6** |
| MDOK | comp=Z,154nm,0.8s | | | ⇓S | **Sn** | **16 35 08.1** | **-0.1** |
| **AAA** | **Alma-Ata** | **7.17** | **353** | *e*P | **Pn** | **16 33 50.8** | **+1.2** |
| **AAA** | **Alma-Ata** baz=354 | **7.17** | **353** | *e*P | **Pn** | **16 33 50.8** | **+1.2** |
| **KNDC** | **Almaty** | **7.17** | **353** | P | **Pn** | **16 33 51.6** | **+2.0** |
| **KNDC** | **Almaty** comp=Z,176nm,0.7s | **7.17** | **353** | ⇓P | **Pn** | **16 33 51.7** | **+2.0** |
| KNDC | comp=Z,701nm,1.2s | | | ⇓S | **Sn** | **16 35 11.4** | **+1.8** |
| **PDGK** | **Podgornoye** | **7.31** | **8** | P | **Pn** | **16 33 52.5** | **+0.9** |
| PDGK | | | | | | 16 35 10.5 | |
| **PDGK** | **Podgornoye** comp=Z,456nm,0.5s | **7.31** | **8** | ⇓P | **Pn** | **16 33 52.6** | **+0.9** |
| PDGK | comp=Z,792nm,0.8s | | | ⇓S | **Sn** | **16 35 11.3** | **-1.8** |
| **EKS2** | **Erkin-Say** SNR=13 | **7.36** | **334** | P | **Pn** | **16 33 54.3** | **+2.0** |
| **CHMS** | **Chumysh** SNR=18 | **7.37** | **341** | P | **Pn** | **16 33 53.2** | **+0.9** |
| **KPKS** | **Kokpek** | **7.38** | **3** | *i* P | **Pn** | **16 33 53.8** | **+1.2** |
| **KPKS** | **Kokpek** baz=4.1 | **7.38** | **3** | *i* P | **Pn** | **16 33 53.8** | **+1.2** |
| **NDI** | **New Delhi** | **7.42** | **186** | *e*P | **Pn** | **16 33 54.9** | **+1.8** |
| NDI | | | | *e*P | **Pn** | **16 33 56.0** | **+2.9** |
| NDI | | | | *e*S | **Sn** | **16 35 11.0** | **-4.8** |
| NDI | | | | *e*S | **Sn** | **16 35 11.5** | **-4.3** |
| **KBL** | **Kabul** | **7.56** | **261** | P | | 16 33 48.9 | -6.2 |
| **KBL** | **Kabul** | **7.56** | **261** | Pn | **Pn** | 16 33 48.9 | -6.2 |
| **CHGR** | **Chuyangaron** | **7.56** | **292** | P | **Pn** | **16 33 50.8** | **-4.2** |
| **CHGR** | **Chuyangaron** | **7.56** | **292** | | **Pn** | **16 33 50.8** | **-4.2** |
| **AYAN** | **Aya Nagar** | **7.63** | **186** | *e*P | **Pn** | **16 33 57.6** | **+1.7** |
| AYAN | | | | *e*S | **Sn** | **16 35 15.3** | **-5.5** |
| **USP** | **Ospenovka** SNR=6.2 | **7.68** | **340** | P | **Pn** | **16 33 58.0** | **+1.3** |
| **CHKK** | **Chushkaly** baz=355 | **7.80** | **354** | *e*P | **Pn** | **16 33 59.9** | **+1.7** |
| **SGDS** | **Sogindy** baz=342 | **7.82** | **341** | *e*P | **Pn** | **16 33 59.2** | **+0.7** |
| **KUU** | **Kurty** | **7.91** | **351** | *e*P | **Pn** | **16 34 00.6** | **+0.9** |
| **KUU** | **Kurty** baz=352 | **7.91** | **351** | *e*P | **Pn** | **16 34 00.6** | **+0.9** |
| **ARXS** | **Arharly** | **8.12** | **359** | *e*P | **Pn** | **16 34 03.8** | **+1.2** |
| **PYUN** | **Piuthan** | **8.98** | **151** | *e*Pn | **Pn** | **16 34 15.0** | **+0.4** |
| PYUN | comp=Z,434nm,0.6s | | | *e*Sn | **Sn** | **16 35 51.3** | **-2.9** |
| **DANN** | **Dangsing** | **9.09** | **147** | *e*Pn | **Pn** | **16 34 15.8** | **-0.3** |
| DANN | | | | *e*Sn | **Sn** | **16 35 52.3** | **-4.5** |
| **KK02** | **Karatay Array** comp=Z,3.5nm,0.5s | **9.12** | **322** | ⇓P | **Pn** | **16 34 15.8** | **-0.4** |
| KK02 | comp=Z,12nm,0.5s | | | ⇑S | **Sn** | **16 35 53.5** | **-3.6** |
| **KKAR** | **Karatay Array** | **9.12** | **322** | P | **Pn** | **16 34 13.0** | **-3.2** |
| **KKAR** | **Karatay Array** | **9.12** | **322** | Pn | **Pn** | **16 34 13.0** | **-3.2** |
| **BRLS** | **Borolday** | **9.41** | **320** | *e*P | **Pn** | **16 34 16.6** | **-3.5** |
| **BRLS** | **Borolday** baz=319 | **9.41** | **320** | *e*P | **Pn** | **16 34 16.7** | **-3.5** |
| **BTLS** | **Baital** | **9.45** | **342** | *e*P | **Pn** | **16 34 19.0** | **-1.7** |
| **BTLS** | **Baital** baz=343 | **9.45** | **342** | *e*P | **Pn** | **16 34 19.1** | **-1.7** |
| **KOLN** | **Koldanda** | **9.52** | **149** | *e*Pn | **Pn** | **16 34 22.2** | **+0.3** |
| KOLN | comp=Z,108nm,0.4s | | | *e*Sn | **Sn** | **16 36 03.2** | **-4.1** |
| **GKN** | **Gorkha** | **9.79** | **144** | *e*Pn | **Pn** | **16 34 25.7** | **+0.2** |
| GKN | comp=Z,57nm,0.3s | | | *e*Sn | **Sn** | **16 36 09.1** | **-4.6** |
| **AJM** | **Ajmer** | **10.02** | **198** | *e*P | **Pn** | **16 34 28.2** | **-0.4** |
| AJM | | | | *e*S | **Sn** | **16 36 12.6** | **-6.7** |
| **VLK** | **Valmikinagar** | **10.03** | **149** | *e*P | **Pn** | **16 34 28.0** | **-0.6** |
| VLK | | | | *e*S | **Sn** | **16 36 11.7** | **-7.7** |
| **KKN** | **Kakani** | **10.28** | **142** | *e*Pn | **Pn** | **16 34 32.0** | **-0.3** |
| KKN | comp=Z,20nm,0.2s | | | *e*Sn | **Sn** | **16 36 20.5** | **-5.3** |
| **DMN** | **Daman** | **10.34** | **143** | *e*Pn | **Pn** | **16 34 33.0** | **-0.2** |
| DMN | | | | *e*Sn | **Sn** | **16 36 22.0** | **-5.4** |
| **GUN** | **Gumba** | **10.49** | **139** | *e*Pn | **Pn** | **16 34 34.9** | **-0.4** |
| GUN | comp=Z,14nm,0.3s | | | *e*Sn | **Sn** | **16 36 25.3** | **-5.9** |
| **PKIN** | **Phulchoki** | **10.51** | **142** | *e*Pn | **Pn** | **16 34 35.0** | **-0.5** |
| PKIN | comp=Z,20nm,0.2s | | | *e*Sn | **Sn** | **16 36 25.8** | **-5.8** |
| **PKI** | **Pulchoki** | **10.53** | **142** | *e*Pn | **Pn** | **16 34 34.9** | **-0.8** |
| PKI | | | | *e*Sn | **Sn** | **16 36 26.0** | **-5.9** |
| **JHNI** | **Jhansi** | **10.60** | **178** | *e*P | **Pn** | **16 34 35.5** | **-0.9** |
| JHNI | | | | *e*S | **Sn** | **16 36 24.6** | **-8.7** |
| **WMQ** | **Urumqi** | **10.67** | **41** | *e*P | **Pn** | **16 34 36.9** | **-0.4** |
| WMQ | | | | PP | | 16 34 50.4 | |
| WMQ | | | | S | **Sn** | **16 36 30.8** | **-4.0** |
| WMQ | comp=Z,360nm,5.7s | | | pmax | pmax | | |
| **JIRN** | **Jiri** | **10.86** | **138** | *e*Pn | **Pn** | **16 34 40.1** | **-0.2** |
| JIRN | comp=Z,37nm,0.4s | | | *e*Sn | **Sn** | **16 36 34.6** | **-5.5** |
| **MAKZ** | **Makanchi** | **11.10** | **14** | P | **Pn** | **16 34 38.8** | **-4.3** |
| **MAKZ** | **Makanchi** | **11.10** | **14** | Pn | **Pn** | **16 34 38.8** | **-4.3** |
| **MK31** | **Makanchi Array** | **11.15** | **15** | *d* iP | **Pn** | **16 34 42.5** | **-1.3** |
| **MK31** | **Makanchi Array** | **11.15** | **15** | Pn | **Pn** | **16 34 40.1** | **-3.7** |
| **MK31** | **Makanchi Array** comp=Z,36nm,0.5s,baz=200,slow=13,SNR=1159 | **11.15** | **15** | P | **Pn** | **16 34 42.8** | **-1.0** |
| **MKAR** | **Makanchi Array** comp=Z,15nm,0.3s,baz=204,slow=12,SNR=278 | **11.15** | **15** | P | **Pn** | **16 34 42.6** | **-1.2** |
| MKAR | comp=Z,11nm,0.3s,baz=198,slow=23,SNR=16 | | | S | **Sn** | **16 36 39.6** | **-6.8** |
| **MKAR** | **Makanchi Array** | **11.15** | **15** | Pn | Pn | 16 34 37.4 | -6.3 |
| **ALBI** | **Allahabad** | **11.21** | **162** | *e*P | **Pn** | **16 34 43.0** | **-1.7** |
| ALBI | | | | *e*S | Sn | 16 36 38.0 | -10 |
| **RAMN** | **Ramite** | **11.64** | **139** | *e*Pn | **Pn** | **16 34 49.9** | **-0.9** |
| RAMN | | | | *e*Sn | **Sn** | **16 36 52.5** | **-6.5** |
| **TAPN** | **Taplejung** | **11.95** | **134** | *e*Pn | **Pn** | **16 34 54.1** | **-0.9** |
| TAPN | | | | *e*Sn | **Sn** | **16 36 58.6** | **-8.0** |
| **ODAN** | **Odare** | **12.14** | **137** | *e*Pn | **Pn** | **16 34 56.7** | **-0.9** |
| ODAN | | | | *e*Sn | **Sn** | **16 37 04.6** | **-6.6** |
| **GTK** | **Tadong** | **12.50** | **131** | *e*P | **Pn** | **16 35 00.4** | **-1.9** |
| GTK | comp=Z,10nm,0.7s | | | IAmb | IAmb | 16 35 08.0 | |
| **BHPL** | **Bhopal** | **12.82** | **183** | *e*P | **Pn** | **16 35 06.1** | **-0.3** |
| BHPL | comp=Z,10nm,0.5s | | | IAmb | IAmb | 16 35 14.9 | |
| BHPL | | | | *e*S | Sn | 16 37 17.1 | -10 |
| **OTUK** | **Ortayu** | **12.87** | **342** | P | **Pn** | **16 35 05.2** | **-1.7** |
| **OTUK** | **Ortayu** comp=Z,8.0nm,1.1s | **12.87** | **342** | ⇑P | **Pn** | **16 35 06.1** | **-0.8** |
| **GOMU** | **GeErMu** | **13.52** | **85** | P | **Pn** | **16 35 18.0** | **+2.1** |
| GOMU | comp=Z,9.0nm,1.0s | | | pmax | pmax | | |
| GOMU | comp=Z,140nm,5.9s | | | pmax | pmax | | |
| GOMU | comp=Z,82nm,9.6s | | | LR | LR | | |
| GOMU | comp=Z,120nm,9.1s | | | LR | LR | | |
| GOMU | comp=Z,87nm,9.7s | | | LR | LR | | |
| **BOK** | **Bokaro** | **13.98** | **149** | *e*P | **Pn** | **16 35 20.9** | **-0.8** |
| BOK | | | | *e*S | Sn | 16 37 43.8 | -12 |
| **DHUB** | **DHUBRI** | **14.30** | **131** | *e*P | **Pn** | **16 35 24.3** | **-1.5** |
| **SEM** | **Semipalatinsk** | **14.40** | **6** | *e*P | **Pn** | **16 35 26.3** | **-0.8** |
| **SEM** | **Semipalatinsk** baz=5.9 | **14.40** | **6** | *e*P | **Pn** | **16 35 26.3** | **-0.8** |
| **BRZS** | **Berezniki** | **14.43** | **346** | *e*P | **Pn** | **16 35 28.7** | **+1.4** |
| **BRZS** | **Berezniki** baz=346 | **14.43** | **346** | *e*P | **Pn** | **16 35 28.7** | **+1.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.2nm,0.3s,baz=184,slow=12,SNR=46 | **14.53** | **1** | P | **Pn** | **16 35 26.5** | **-2.0** |
| **KURBB** | **Kurchatov Arra** comp=Z,5.2nm,0.7s | **14.53** | **1** | P | **Pn** | **16 35 28.3** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **14.53** | **1** | ⇓P | **Pn** | **16 35 28.7** | **+0.1** |
| **KURK** | **Kurchatov** | **14.62** | **1** | ⇑*e*P | **Pn** | **16 35 29.9** | **+0.2** |
| **KURK** | **Kurchatov** | **14.62** | **1** | Pn | **Pn** | **16 35 24.9** | **-4.8** |
| **KURK** | **Kurchatov** comp=Z,8.5nm,0.6s | **14.62** | **1** | ⇑P | **Pn** | **16 35 27.8** | **-1.9** |
| **DGZ** | **Jazzator, Alta** | **15.21** | **24** | *d* iP | **Pn** | **16 35 36.3** | **-1.1** |
| DGZ | comp=Z,23nm,0.8s | | | pmax | pmax | | |
| **AKL** | **Akola** | **15.36** | **184** | *e*S | Sn | 16 38 15.8 | -13 |
| **SHL** | **Shillong** | **15.80** | **128** | P | **Pn** | **16 35 40.1** | **-5.0** |
| SHL | comp=Z,21nm,0.7s | | | pmax | pmax | | |
| **SHL** | **Shillong** | **15.80** | **128** | Pn | **Pn** | **16 35 40.1** | **-5.0** |
| SHL | comp=Z,21nm,0.7s | | | IAmb | IAmb | 16 35 49.3 | |
| **MOKO** | **MOKOCHONG** | **17.07** | **120** | *e*P | **Pn** | **16 35 59.5** | **-1.3** |
| MOKO | comp=Z,26nm,0.7s | | | IAmb | IAmb | 16 36 04.1 | |
| **SRSP** | **Sriramsagar** | **17.10** | **179** | *e*P | **P** | **16 36 02.4** | **+1.0** |
| SRSP | | | | *e* | | 16 38 55.5 | |
| SRSP | | | | *e*S | **Sn** | **16 39 08.6** | **-2.2** |
| **KOHI** | **KOHIMA** | **17.18** | **123** | *e*P | **Pn** | **16 36 01.2** | **-0.8** |
| KOHI | comp=Z,44nm,0.8s | | | IAmb | IAmb | 16 36 06.9 | |
| **RPR** | **Rampur** | **17.20** | **176** | *e* | | 16 38 57.1 | |
| RPR | | | | *e*S | **S** | **16 39 15.4** | **-1.5** |
| **RAGD** | **RAYAGADA** | **17.43** | **163** | *e*P | **P** | **16 36 03.0** | **-2.1** |
| RAGD | | | | *e*S | Sn | 16 39 05.1 | -14 |
| **GTA** | **Gaotai** | **17.49** | **73** | ⇑P | **Pn** | **16 36 08.6** | **+2.8** |
| GTA | comp=Z,7.0nm,1.0s | | | pmax | pmax | | |
| **IMP** | **Imphal** | **17.66** | **125** | *e*P | **P** | **16 36 07.5** | **-0.1** |
| IMP | comp=Z,59nm,0.8s | | | IAmb | IAmb | 16 36 13.4 | |
| **BVAR** | **Borovoye Array** comp=Z,1.0nm,0.3s,baz=101,slow=15,SNR=19 | **17.78** | **345** | P | **P** | **16 36 08.3** | **-0.4** |
| BVAR | comp=Z

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PVM** | **Polavaram** | **19.03** | **170** | *e*P | | **Pn** | **16 36 24.7** | **+0.5** |
| PVM | | | | *e* | | | 16 39 40.4 | |
| PVM | | | | *e*S | | **S** | **16 39 55.3** | **+1.4** |
| **MYLAV** | **Mylavaram** | **19.40** | **173** | *e*P | | **Pn** | **16 36 28.6** | **+0.1** |
| MYLAV | | | | *e*S | | **S** | **16 40 02.6** | **+1.4** |
| **NJS** | **Nagarjunasagar** | **19.49** | **177** | *e*P | | **Pn** | **16 36 29.2** | **-0.4** |
| NJS | | | | *e* | | | 16 39 52.1 | |
| NJS | | | | *e*S | | **S** | **16 40 04.3** | **+1.2** |
| **SRLM** | **Srisailam** | **19.92** | **178** | *e*P | | **Pn** | **16 36 33.5** | **-1.2** |
| SRLM | | | | *e* | | | 16 40 04.9 | |
| **KNGR** | **Kungurtug, Tuv** | **20.16** | **38**⇓ | *e*P | | Pn | 16 36 38.5 | +1.1 |
| **AKTO** | **Aktyubinsk** | **20.38** | **321** | P | | **P** | **16 36 36.3** | **-0.7** |
| | comp=Z,2.7nm,0.8s,baz=113,slow=12,SNR=6.5 | | | | | | | |
| AKTO | | | | S | | **S** | **16 40 14.2** | **-6.2** |
| | comp=Z,0.4nm,0.3s,baz=128,slow=19,SNR=1.4 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **20.38** | **321** | P | | **P** | **16 36 36.5** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **20.38** | **321** | ⇓P | | **P** | **16 36 38.1** | **+1.1** |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **RCLA** | **Racherla** | **20.56** | **178** | *e*P | | **P** | **16 36 40.4** | **+1.2** |
| RCLA | | | | *e* | | | 16 40 18.3 | |
| **LZH** | **Lanzhou** | **20.80** | **82** | *e*P | | Pn | 16 36 44.1 | -0.9 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **URV** | **Uravakonda** | **21.07** | **182** | *e*P | | **P** | **16 36 45.4** | **+0.7** |
| URV | | | | *e*S | | **S** | **16 40 34.9** | **+0.5** |
| **WSAR** | **Wadi Sarin** | **21.16** | **238** | P | | **P** | **16 36 46.9** | **+1.3** |
| | comp=Z,1.5nm,0.5s,baz=87,slow=9.7,SNR=5.3 | | | | | | | |
| **SKHT** | **Srikalahasti** | **22.30** | **176** | *e*P | | **P** | **16 37 00.3** | **+2.6** |
| SKHT | | | | *e* | | | 16 40 49.5 | |
| SKHT | | | | *e*S | | **S** | **16 40 59.1** | **+1.8** |
| **PZH** | **PanZhiHua** | **22.31** | **109** | P | | **P** | **16 37 00.5** | **+2.6** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,190nm,4.7s | | | | | | | |
| **MOY** | **Mondy** | **22.55** | **39** | *e*P | | **P** | **16 37 06.4** | **+6.1** |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,31nm,3.4s | | | | | | | |
| **ZAK** | **Zakamensk** | **23.11** | **44** | *e*P | | **P** | **16 37 07.1** | **+1.2** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **KMI** | **Kunming** | **23.80** | **110** | ⇓P | | **P** | **16 37 14.3** | **+1.8** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.7s | | | | | | | |
| **SONM** | **Songino Array** | **23.96** | **52** | P | | **P** | **16 37 13.9** | **+0.3** |
| | comp=Z,3.0nm,0.6s,baz=248,slow=10.0,SNR=18 | | | | | | | |
| **SONM** | **Songino Array** | **23.96** | **52** | P | | **P** | **16 37 12.6** | **-1.0** |
| **ARU** | **Arti** | **24.25** | **333** | P | | **P** | **16 37 15.1** | **-0.9** |
| | comp=Z,1.1nm,0.4s,baz=121,slow=4.7,SNR=5.8 | | | | | | | |
| **ARU** | **Arti** | **24.25** | **333** | *c* *i*P | | **P** | **16 37 15.3** | **-0.7** |
| ARU | | | | | | | 16 37 47.0 | |
| ARU | | | | S | | **S** | **16 41 31.1** | **+2.8** |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **24.25** | **333** | P | | **P** | **16 37 14.8** | **-1.2** |
| ARU | | | | IAmb | IAmb | | 16 37 44.0 | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **24.39** | **52**⇓ | *e*P | | **P** | **16 37 19.6** | **+2.1** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **24.39** | **52** | P | | **P** | **16 37 15.6** | **-1.9** |
| **CHTO** | **Chiang Mai** | **25.18** | **128** | P | | **P** | **16 37 23.8** | **-1.0** |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **CHTO** | **Chiang Mai** | **25.18** | **128** | P | | **P** | **16 37 23.8** | **-1.0** |
| CHTO | | | | IAmb | IAmb | | 16 37 29.2 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **XAN** | **Xi'an** | **25.27** | **86** | P | | **P** | **16 37 27.0** | **+1.4** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **25.44** | **128** | P | | **P** | **16 37 26.4** | **-0.7** |
| CM31 | | | | IAmb | IAmb | | 16 37 30.2 | |
| | comp=Z,7.7nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.44** | **128** | P | | **P** | **16 37 27.4** | **+0.2** |
| | comp=Z,6.1nm,0.8s,baz=311,slow=9.1,SNR=56 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **16 40 56.1** | **-1.0** |
| | comp=Z,0.6nm,0.7s,baz=290,slow=2.6,SNR=4.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.44** | **128** | *ce*P | | **P** | **16 37 28.1** | **+0.9** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.44** | **128** | P | | **P** | **16 37 27.5** | **+0.3** |
| CMAR | | | | | | **PcP** | **16 40 58.1** | **+1.0** |
| **GYA** | **Guiyang** | **26.16** | **103** | ⇓P | | **P** | **16 37 34.1** | **+0.3** |
| GYA | | | | S | | **S** | **16 42 05.3** | **+6.0** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,300nm,5.4s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,130nm,3.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,140nm,3.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,110nm,3.9s | | | | | | | |
| **GNI** | **Garni** | **26.46** | **289** | P | | **P** | **16 37 34.7** | **-1.7** |
| | comp=Z,1.5nm,0.4s,baz=135,slow=17,SNR=1.4 | | | | | | | |
| **GNI** | **Garni** | **26.46** | **289**⇑ | *e*P | | **P** | **16 37 35.2** | **-1.2** |
| **HHC** | **Hu-ho-hao-te** | **26.54** | **69** | *e*P | | **P** | **16 37 36.9** | **-0.1** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,200nm,6.8s | | | | | | | |
| **UBPT** | **Khong Chiam** | **32.03** | **123** | P | | **P** | **16 38 26.4** | **+0.6** |
| UBPT | | | | IAmb | IAmb | | 16 38 45.5 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **QIZ** | **Qiongzhong** | **32.69** | **113** | P | | **P** | **16 38 31.6** | **+0.1** |
| QIZ | | | | S | | **S** | **16 43 48.4** | **+6.9** |
| QIZ | | | | LR | LR | | | |
| | comp=Z,200nm,7.9s | | | | | | | |
| **NRIK** | **Noril'sk** | **33.71** | **6** | P | | **P** | **16 38 39.2** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=168,slow=7.2,SNR=1.9 | | | | | | | |
| **NRIK** | **Noril'sk** | **33.71** | **6**⇑ | *e*P | | **P** | **16 38 40.3** | **+0.4** |
| NRIK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,2.0s | | | | | | | |
| **NRIK** | **Noril'sk** | **33.71** | **6** | IAmb | IAmb | | 16 38 46.0 | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **NJ2** | **Nanjing** | **33.83** | **85** | *e*P | | **P** | **16 38 39.8** | **-1.5** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **34.06** | **317**⇓ | *e*P | | **P** | **16 38 42.7** | **-0.3** |
| OBN | | | | *e* | | | 16 40 00.3 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **BR131** | **Keskin Array S** | **34.99** | **290**⇑ | *e*P | | **P** | **16 38 51.8** | **+0.3** |
| **BR131** | **Keskin Array S** | **34.99** | **290** | P | | **P** | **16 38 52.8** | **+1.3** |
| BR131 | | | | IAmb | IAmb | | 16 39 08.3 | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **34.99** | **290** | P | | **P** | **16 38 50.5** | **-1.0** |
| | comp=Z,0.7nm,0.6s,baz=107,slow=9.3,SNR=5.2 | | | | | | | |
| BRTR | | | | pP | | **pP** | **16 39 16.7** | **+3.4** |
| | comp=Z,1.6nm,0.8s,baz=104,slow=9.0,SNR=6.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **34.99** | **290** | *ce*P | | **P** | **16 38 52.5** | **+1.1** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **34.99** | **290** | P | | **P** | **16 38 52.6** | **+1.1** |
| **AKASG** | **Malin Array Be** | **37.68** | **308** | P | | **P** | **16 39 12.9** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=81,slow=7.5,SNR=12 | | | | | | | |
| AKASG | | | | pP | | **pP** | **16 39 38.4** | **+2.1** |
| | comp=Z,0.7nm,0.4s,baz=79,slow=7.3,SNR=2.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **37.68** | **308** | *ce*P | | **P** | **16 39 13.6** | **-0.4** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **AKASG** | **Malin Array Be** | **37.68** | **308** | P | | **P** | **16 39 13.9** | **-0.1** |
| **AKBB** | **Malin Array Si** | **37.68** | **308**⇓ | *e*P | | **P** | **16 39 13.6** | **-0.4** |
| **AKBB** | **Malin Array Si** | **37.68** | **308** | P | | **P** | **16 39 13.4** | **-0.6** |
| AKBB | | | | IAmb | IAmb | | 16 39 15.2 | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **39.56** | **73** | P | | **P** | **16 39 30.0** | **+0.1** |
| | comp=Z,0.4nm,0.5s,baz=282,slow=6.9,SNR=2.2 | | | | | | | |
| **LVZ** | **Lovozero** | **40.06** | **336** | P | | **P** | **16 39 33.6** | **-0.1** |
| LVZ | | | | pmax | pmax | | | |
| | comp=Z,97nm,1.5s | | | | | | | |
| **LVZ** | **Lovozero** | **40.06** | **336** | P | | **P** | **16 39 33.6** | **-0.1** |
| **BURAR** | **Bucovina Array** | **40.30** | **303** | P | | **P** | **16 39 36.2** | **+0.1** |
| **BUR08** | **Bucovina Ar. S** | **40.31** | **304** | P | | **P** | **16 39 35.5** | **-0.7** |
| **KLR** | **Kul'dur** | **40.75** | **54** | P | | **P** | **16 39 38.9** | **-0.7** |
| | comp=Z,1.7nm,0.8s,baz=264,slow=5.3,SNR=7.3 | | | | | | | |
| **KLR** | **Kul'dur** | **40.75** | **54**⇓ | *e*P | | **P** | **16 39 41.0** | **+1.4** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,16nm,3.5s | | | | | | | |
| **YAK** | **Yakutsk** | **41.02** | **34** | P | | **P** | **16 39 41.2** | **-0.4** |
| | comp=Z,1.6nm,0.4s,baz=188,slow=0.9,SNR=2.0 | | | | | | | |
| **FIA1** | **FINESS Array S** | **41.07** | **325** | P | | **P** | **16 39 41.8** | **-0.3** |
| **FINES** | **FINESS Array B** | **41.07** | **325** | P | | **P** | **16 39 40.4** | **-1.7** |
| | comp=Z,1.1nm,0.3s,baz=114,slow=9.2,SNR=19 | | | | | | | |
| FINES | | | | pP | | **pP** | **16 40 06.1** | **+1.6** |
| | comp=Z,3.4nm,0.7s,baz=113,slow=8.8,SNR=2.7 | | | | | | | |
| **FINES** | **FINESS Array B** | **41.07** | **325** | *i* P | | **P** | **16 39 42.2** | **+0.1** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **41.07** | **325** | P | | **P** | **16 39 41.8** | **-0.3** |
| **PABE** | **Paberze** | **41.20** | **316** | P | | **P** | **16 39 42.7** | **-0.5** |
| PABE | | | | IAmb | IAmb | | 16 39 44.1 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.35** | **62** | P | | **P** | **16 39 44.5** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=287,slow=7.1,SNR=1.6 | | | | | | | |
| **IDI** | **Anoyia** | **42.76** | **285** | P | | **P** | **16 39 56.1** | **-0.2** |
| **OJC** | **Ojcow** | **43.70** | **308** | P | | **P** | **16 40 03.5** | **-0.1** |
| OJC | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **OJC** | **Ojcow** | **43.70** | **308** | P | | **P** | **16 40 03.5** | **-0.1** |
| OJC | | | | IAmb | IAmb | | 16 40 04.1 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.77** | **336** | P | | **P** | **16 40 02.9** | **-1.0** |
| | comp=Z,0.7nm,0.3s,baz=107,slow=8.1,SNR=20 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.77** | **336** | P | | **P** | **16 40 04.2** | **+0.3** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.77** | **336** | P | | **P** | **16 40 04.2** | **+0.3** |
| ARCES | | | | IAmb | IAmb | | 16 40 24.0 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **TIXI** | **Tiksi** | **44.07** | **21** | P | | **P** | **16 40 05.6** | **-0.6** |
| | comp=Z,0.6nm,0.3s,baz=306,slow=6.7,SNR=8.3 | | | | | | | |
| **TIXI** | **Tiksi** | **44.07** | **21** | P | | **P** | **16 40 06.8** | **+0.6** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **TIXI** | **Tiksi** | **44.07** | **21** | P | | **P** | **16 40 06.8** | **+0.6** |
| **DIVS** | **Divibare** | **44.35** | **299** | P | | **P** | **16 40 09.8** | **+0.9** |
| **DPC** | **Dobruska-Polom** | **45.91** | **308** | *e*P | | **P** | **16 40 21.1** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **45.91** | **308** | *e*P | | **P** | **16 40 21.1** | **-0.1** |
| **KKM** | **Kota Kinabalu** | **45.97** | **121** | P | | **P** | **16 40 24.1** | **+2.0** |
| **SBUM** | **Sibu** | **45.99** | **129** | P | | **P** | **16 40 23.4** | **+1.3** |
| SBUM | | | | IAmb | IAmb | | 16 40 48.8 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **CHVC** | **Chvalec** | **46.05** | **309** | *e*P | | **P** | **16 40 22.4** | **+0.1** |
| **MJB9** | **Matsu-Tunnel** | **47.72** | **71** | P | | **P** | **16 40 36.4** | **+0.9** |
| **MAJO** | **Matsushiro** | **47.73** | **71** | P | | **P** | **16 40 36.4** | **+0.9** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **MAJO** | **Matsushiro** | **47.73** | **71** | P | | **P** | **16 40 36.4** | **+0.9** |
| **MAT** | **Matsushiro** | **47.73** | **71** | P | | **P** | **16 40 35.3** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **47.73** | **71** | P | | **P** | **16 40 35.5** | **0.0** |
| | comp=Z,2.7nm,0.8s,baz=290,slow=11,SNR=5.5 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **47.73** | **71** | P | | **P** | **16 40 36.3** | **+0.8** |
| MJAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **47.73** | **71** | P | | **P** | **16 40 36.2** | **+0.8** |
| **GERES** | **GERESS Array B** | **47.81** | **306** | P | | **P** | **16 40 35.5** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=52,slow=10,SNR=2.0 | | | | | | | |
| **KHC** | **Kasperske Hory** | **47.84** | **307** | *e*P | | **P** | **16 40 36.7** | **+0.5** |
| **KHC** | **Kasperske Hory** | **47.84** | **307** | *e*P | | **P** | **16 40 36.7** | **+0.5** |
| KHC | | | | *ex* | | x | 16 41 20.6 | |
| **KHC** | **Kasperske Hory** | **47.84** | **307** | P | | **P** | **16 40 36.7** | **+0.5** |
| KHC | | | | IAmb | IAmb | | 16 40 37.6 | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **NC405** | **NORSAR Array S** | **47.91** | **323** | P | | **P** | **16 40 36.8** | **+0.2** |
| **NC602** | **NORSAR Array S** | **48.00** | **323** | P | | **P** | **16 40 37.7** | **+0.5** |
| **NC303** | **NORSAR Array S** | **48.08** | **323** | P | | **P** | **16 40 38.3** | **+0.5** |
| **NB201** | **NORSAR Array S** | **48.12** | **323** | P | | **P** | **16 40 38.4** | **+0.2** |
| NB201 | | | | IAmb | IAmb | | 16 40 50.5 | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **48.15** | **323** | P | | **P** | **16 40 38.2** | **-0.2** |
| | comp=Z,0.5nm,0.5s,baz=91,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **48.15** | **323** | P | | **P** | **16 40 36.8** | **-1.6** |
| | comp=Z,0.5nm,0.5s,baz=112,slow=4.9,SNR=4.9 | | | | | | | |
| NOA | | | | pP | | **pP** | **16 41 04.2** | **+2.9** |
| | comp=Z,0.9nm,0.9s,baz=106,slow=6.4,SNR=1.4 | | | | | | | |
| **NC204** | **NORSAR Array S** | **48.37** | **323** | P | | **P** | **16 40 40.1** | **0.0** |
| **SPB2** | **Spitsbergen Ar** | **49.23** | **346** | P | | **P** | **16 40 48.6** | **+2.2** |
| **SPITS** | **Spitsbergen Ar** | **49.23** | **346** | P | | **P** | **16 40 48.4** | **+1.9** |
| SPITS | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.4s | | | | | | | |
| **MURB** | **Monte Urbino** | **49.82** | **299** | P | | **P** | **16 40 52.9** | **+1.4** |
| MURB | | | | IAmb | IAmb | | 16 40 53.6 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **TNG** | **Tangerang** | **49.85** | **142** | P | | **P** | **16 40 47.6** | **-4.3** |
| TNG | | | | P | | **P** | **16 40 50.3** | **-1.6** |
| **SENIN** | **Lac Senin/Sane** | **52.58** | **305** | P | | **P** | **16 41 13.0** | **+0.7** |
| SENIN | | | | IAmb | IAmb | | 16 41 39.9 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **TOLI2** | **Tolitoli** | **52.66** | **121** | P | | **P** | **16 41 13.7** | **+0.8** |
| TOLI2 | | | | IAmb | IAmb | | 16 41 18.3 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **MBAR** | **Mbarara** | **57.14** | **241**⇓ | *e*P | | **P** | **16 41 44.4** | **-1.1** |
| **MMRI** | **Maumere** | **60.84** | **128** | P | | **P** | **16 42 09.4** | **-1.4** |
| **AAI** | **Ambon** | **61.25** | **119** | P | | **P** | **16 42 14.5** | **+0.9** |
| | comp=Z,1µmcomp=Z,52nm,0.5s | | | | | | | |
| **MSAI** | **Masohi** | **61.53** | **118** | P | | P | 16 42 28.5 | +13 |
| **ESDC** | **Sonseca Array** | **62.66** | **301** | P | | **P** | **16 42 21.6** | **-1.2** |
| | comp=Z,0.5nm,0.7s,baz=67,slow=7.1,SNR=5.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **62.66** | **301** | IAmb | IAmb | | 16 42 27.3 | |
| | comp=Z,1.9nm,1.4s | | | | | | | |
| **SOEI** | **Soe** | **62.99** | **127** | P | | **P** | **16 42 24.8** | **-0.6** |
| **SOEI** | **Soe** | **62.99** | **127** | P | | **P** | **16 42 26.1** | **+0.8** |
| | comp=Z,30nm,1.0s | | | | | | | |
| **EUNU** | **Eureka** | **63.78** | **357** | P | | **P** | **16 42 29.6** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **70.19** | **132** | P | | **P** | **16 43 11.3** | **+0.3** |
| FITZ | | | | IAmb | IAmb | | 16 43 12.2 | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **KNRA** | **Kununurra** | **70.31** | **128** | P | | **P** | **16 43 12.3** | **+0.6** |
| KNRA | | | | IAmb | IAmb | | 16 43 26.1 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **IMAR** | **Indian Mountai** | **70.71** | **20** | P | | **P** | **16 43 13.9** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** | **71.45** | **273** | P | | **P** | **16 43 17.7** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=53,slow=5.2,SNR=14 | | | | | | | |
| TORD | | | | pP | | **pP** | **16 43 45.2** | **+2.1** |
| | comp=Z,4.2nm,0.9s,baz=43,slow=5.7,SNR=11 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.45** | **273** | P | | **P** | **16 43 17.9** | **-0.9** |
| TORD | | | | IAmb | IAmb | | 16 43 45.7 | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **73.48** | **18** | P | | **P** | **16 43 29.4** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=308,slow=4.4,SNR=4.9 | | | | | | | |
| **MORW** | **Morawa** | **74.00** | **146** | P | | **P** | **16 43 33.5** | **0.0** |
| MORW | | | | IAmb | IAmb | | 16 43 34.5 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **KOWA** | **Kowa** | **75.31** | **277** | P | | **P** | **16 43 41.2** | **-0.3** |
| KOWA | | | | IAmb | IAmb | | 16 44 09.6 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **76.94** | **126** | P | | **P** | **16 43 50.9** | **+0.4** |
| WB0 | | | | IAmb | IAmb | | 16 43 52.0 | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.03** | **127** | P | | **P** | **16 43 51.3** | **+0.3** |
| | comp=Z,4.4nm,0.9s,baz=328,slow=5.3,SNR=24 | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.03** | **127** | P | | **P** | **16 43 51.3** | **+0.3** |
| **WRAB** | **Tennant Creek** | **77.03** | **127** | *ce*P | | **P** | **16 43 51.4** | **+0.4** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **77.03** | **127** | P | | **P** | **16 43 51.4** | **+0.4** |
| WRAB | | | | IAmb | IAmb | | 16 43 53.1 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **77.03** | **127** | P | | **P** | **16 43 51.5** | **+0.5** |
| WB2 | | | | IAmb | IAmb | | 16 43 52.1 | |
| | comp=Z,7.4nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **77.17** | **126** | P | | **P** | **16 43 52.2** | **+0.4** |
| WR0 | | | | IAmb | IAmb | | 16 43 53.2 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **79.44** | **130** | P | | **P** | **16 44 04.4** | **+0.1** |
| **ASAR** | **Alice Springs** | **79.44** | **130** | P | | **P** | **16 44 04.8** | **+0.4** |
| | comp=Z,3.4nm,0.8s,baz=318,slow=5.7,SNR=36 | | | | | | | |
| ASAR | | | | pP | | **pP** | **16 44 33.0** | **+3.8** |
| | comp=Z,0.6nm,0.7s,baz=310,slow=5.8,SNR=2.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **79.44** | **130** | P | | **P** | **16 44 04.6** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **81.22** | **6** | P | | **P** | **16 44 12.8** | **-0.4** |
| | comp=Z,1.1nm,0.4s,baz=341,slow=5.8,SNR=16 | | | | | | | |
| YKA | | | | pP | | **pP** | **16 44 39.6** | **+1.7** |
| | comp=Z,0.4nm,0.4s,baz=340,slow=5.8,SNR=2.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **90.05** | **130** | P | | **P** | **16 44 57.0** | **-0.3** |
| | comp=Z,0.4nm,0.4s,baz=243,slow=4.5,SNR=1.4 | | | | | | | |

**NEIC 21 17:00:02.1±0.3,36°47N±0°.01×98°.740W±0°.009,h4km±1km, ML2.2/22,Error ellipse: s-maj=1.9km s-min=0.9km az=176.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.23** | **246** | Pg | | Pg | 17 00 06.4 | -0.2 |
| U32A | | | | Sg | | Sg | 17 00 10.2 | +0.6 |
| U32A | | | | IAML | | | 17 00 11.3 | |
| | comp=E,307nm,0.1s | | | | | | | |

*IDC **21** 17:01:06.5±1.3,30°.27S×72°.84W,h0km,mb3.5/2, mb1 3.7/6,mb1mx3.6/22,mbtmp3.5/6,ML3.4/4,Error ellipse: s-maj=51.8km s-min=30.4km az=95.0*

*GUC **21** 17:01:09.8±0.6,30°.45S×72°.47W,h28km,ML3.2*

**ISC 21 17:01:07.5±2.1,30°.35S±0°.06×72°.55W±0°.09,h11km±11km, n18,σ1§58/21,4C,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.85** | **112** | *i*P | | **Pg** | **17 01 24.1** | **+0.1** |
| CO06 | | | | *i* S | | **Sg** | **17 01 35.9** | **+0.8** |
| CO06 | | | | IAML | | | 17 01 37.6 | |
| | comp=N,803nm,0.8s | | | | | | | |
| **CO05** | **La Serena** | **1.22** | **69**⇑ | *e*P | | **Pg** | **17 01 30.2** | **-0.7** |
| CO05 | | | | *i* S | | **Sg** | **17 01 46.2** | **-0.5** |
| CO05 | | | | AMP | | | 17 01 46.9 | |
| | comp=E,1µm,0.4s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.53** | **84** | *e*P | | **Pn** | **17 01 35.4** | **+0.4** |
| GO04 | | | | *i* S | | **Sn** | **17 01 55.1** | **+0.1** |
| **CO02** | **Combarbal** | **1.58** | **123**⇑ | *i*P | | **Pn** | **17 01 35.2** | **-0.4** |
| CO02 | | | | *i* S | | **Sn** | **17 01 54.2** | **-2.0** |
| CO02 | | | | IAML | | | 17 01 57.3 | |
| | comp=E,2µm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.68** | **107**⇑ | *e*P | | **Pn** | **17 01 37.0** | **+0.1** |
| CO03 | | | | *i* S | | **Sn** | **17 01 57.7** | **-0.9** |
| CO03 | | | | IAML | | | 17 01 59.2 | |
| | comp=N,604nm,0.5s | | | | | | | |
| **LMEL** | **Las Melosas** | **4.01** | **151** | *i* S | | **Sn** | **17 02 52.5** | **-3.8** |
| **H03N1** | **Juan Fernandez** | **6.22** | **239** | T | | T | 17 08 54.1 | |
| | baz=65 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.24** | **239** | T | | T | 17 08 57.0 | |
| | baz=65 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.24** | **239** | T | | T | 17 08 55.5 | |
| | baz=65 | | | | | | | |
| **LVC** | **Limon Verde** | **8.37** | **24** | Pn | | **Pn** | **17 03 08.5** | **-0.7** |
| | comp=N,0.2nm,0.3s,baz=174,slow=9.2,SNR=1.7 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **17 04 41.1** | **-2.9** |
| | comp=N,0.3nm,0.3s,baz=16,slow=22,SNR=2.2 | | | | | | | |
| **PLCA** | **Paso Flores** | **10.48** | **172** | Pn | | **Pn** | **17 03 37.7** | **-0.2** |
| | comp=N,0.2nm,0.3s,baz=336,slow=13,SNR=7.0 | | | | | | | |
| PLCA | | | | Sn | | Sn | 17 05 27.5 | -7.9 |
| | comp=N,0.1nm,0.3s,baz=4.8,slow=6.8,SNR=3.0 | | | | | | | |
| **LPAZ** | **La Paz** | **14.58** | **17** | Pn | | **Pn** | **17 04 34.4** | **0.0** |
| | comp=N,0.1nm,0.3s,baz=203,slow=6.3,SNR=1.7 | | | | | | | |
| **SIV** | **San Ignacio** | **17.75** | **39** | P | | **Pn** | **17 05 15.2** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=212,slow=14,SNR=4.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.35** | **330** | P | | **P** | **17 11 55.6** | **-0.9** |
| | comp=N,0.2nm,0.6s,baz=150,slow=9.3,SNR=2.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.40** | **71** | P | | **P** | **17 13 38.0** | **+2.7** |
| | comp=N,1.2nm,1.2s,baz=252,slow=5.0,SNR=3.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.41** | **39** | PKPbc | | **PKPbc** | **17 20 59.7** | **+1.0** |
| | comp=N,0.8nm,0.7s,baz=300,slow=3.0,SNR=7.2 | | | | | | | |
| **AAK** | **Ala-Archa** | **151.00** | **56** | PKPbc | | **PKPbc** | **17 21 02.3** | **+1.7** |
| | comp=N,0.7nm,0.6s,baz=229,slow=9.3,SNR=7.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.30** | **28** | PKPbc | | **PKPbc** | **17 21 01.4** | **+0.6** |
| | comp=N,1.1nm,0.5s,baz=319,slow=4.1,SNR=6.6 | | | | | | | |

*TUL **21** 17:19:37.1±0.4,36°.46N±0°.01×98°.77W±0°.01,h6km±1km, ML2.8,mb_Lg2.5/20(NEIC),Error ellipse: s-maj=1.6km s-min=1.4km az=181.0*

**NEIC 21 17:19:37.8±0.4,36°.45N±0°.01×98°.77W±0°.01,h5km±2km, Error ellipse: s-maj=2.3km s-min=1.2km az=157.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.20** | **250** | Pg | | Pg | 17 19 41.6 | -0.1 |
| U32A | | | | | | Sg | 17 19 44.9 | +0.5 |
| **OKCFA** | **Oklahoma City** | **1.48** | **134** | | | Pn | 17 20 04.3 | -0.8 |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **134** | | | Pn | 17 20

**n41,σ1$11/52,mb3.8/6,Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GVD** | **Gavdhos** | **0.68** | **335** | P | **Pb** | **17 34 38.6** | **-0.1** |
| GVD | | | | S | **Sg** | **17 34 46.6** | **+0.5** |
| | 16μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.68** | **335** | P | **Pb** | **17 34 38.7** | **-0.1** |
| GVD | | | | S | **Sg** | **17 34 44.6** | **-1.5** |
| GVD | | | | AML | AML | 17 34 50.1 | |
| | comp=N,29032μm,0.3s | | | | | | |
| GVD | | | | AML | AML | 17 34 52.0 | |
| | comp=E,36630μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **0.68** | **335** | PG | **Pb** | **17 34 38.7** | **-0.1** |
| GVD | | | | SG | **Sg** | **17 34 47.1** | **+1.0** |
| **GVDS** | **Gavdos** | **0.69** | **336** | P | **Pb** | **17 34 38.8** | **0.0** |
| GVDS | | | | S | **Sg** | **17 34 46.8** | **+0.6** |
| | comp=E,9μm,0.3s | | | | | | |
| **SIVA** | **Sivas** | **0.86** | **21** | P | **Pb** | **17 34 42.2** | **+0.5** |
| **SIVA** | **Sivas** | **0.86** | **21** | P | **Pb** | **17 34 42.2** | **+0.5** |
| SIVA | | | | AML | AML | 17 34 57.0 | |
| | comp=N,14163μm,0.9s | | | | | | |
| SIVA | | | | AML | AML | 17 34 57.3 | |
| | comp=E,16623μm,0.7s | | | | | | |
| **TMBK** | **Timbaki Herakl** | **0.90** | **18** | P | **Pb** | **17 34 43.0** | **+0.7** |
| **IDI** | **Anoyia** | **1.13** | **19** | LR | LR | 17 35 08.8 | |
| | comp=E,99nm,21.0s,baz=186,slow=47 | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **19** | P | **Pg** | **17 34 46.2** | **+0.3** |
| IDI | | | | S | **Sg** | **17 35 00.9** | **+0.3** |
| | comp=E,1μm,0.9s | | | | | | |
| **IDI** | **Anoyia** | **1.13** | **19** | P | **Pg** | **17 34 46.0** | **+0.2** |
| **IDI** | **Anoyia** | **1.13** | **19** | PG | **Pb** | **17 34 46.8** | **+0.4** |
| IDI | | | | SG | **Sn** | **17 35 03.0** | **-0.1** |
| **PRNS** | **Prines Rethymn** | **1.15** | **3** | P | **Pg** | **17 34 45.2** | **-0.9** |
| **KNDR** | **Palaiochora Ch** | **1.19** | **329** | P | **Pn** | **17 34 47.6** | **0.0** |
| KNDR | | | | S | **Sb** | **17 35 03.4** | **+0.3** |
| | comp=E,1μm,0.8s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **1.19** | **329** | PN | **Pn** | **17 34 47.9** | **+0.3** |
| KNDR | | | | SN | **Sn** | **17 35 04.2** | **-0.1** |
| **VAM** | **Vamos** | **1.20** | **351** | P | **Pg** | **17 34 46.5** | **-0.7** |
| **VAM** | **Vamos** | **1.20** | **351** | P | **Pg** | **17 34 46.4** | **-0.7** |
| VAM | | | | AML | AML | 17 35 09.3 | |
| | comp=E,4518μm,0.9s | | | | | | |
| VAM | | | | AML | AML | 17 35 09.5 | |
| | comp=N,3659μm,0.5s | | | | | | |
| **HRKL** | **Herakleio** | **1.22** | **27** | PN | **Pn** | **17 34 49.5** | **+1.4** |
| HRKL | | | | SN | **Sn** | **17 35 06.1** | **+0.9** |
| **IMMV** | **Iera Moni Meta** | **1.30** | **343** | P | **Pg** | **17 34 48.1** | **-0.9** |
| IMMV | | | | S | **Sb** | **17 35 06.4** | **+0.2** |
| | comp=N,3μm,0.6s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.30** | **343** | P | **Pg** | **17 34 48.1** | **-0.9** |
| IMMV | | | | AML | AML | 17 35 10.1 | |
| | comp=E,5896μm,0.5s | | | | | | |
| IMMV | | | | AML | AML | 17 35 11.2 | |
| | comp=N,5317μm,0.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.30** | **343** | PN | **Pb** | **17 34 49.7** | **+0.5** |
| IMMV | | | | SN | **Sb** | **17 35 06.8** | **+0.6** |
| **NPS** | **Neapolis** | **1.43** | **43** | P | **Pg** | **17 34 51.9** | **+0.4** |
| **NPS** | **Neapolis** | **1.43** | **43** | P | **Pg** | **17 34 53.6** | **+2.2** |
| **RODP** | **Rodopos** | **1.45** | **338** | P | **Pn** | **17 34 51.4** | **+0.1** |
| RODP | | | | S | **Sg** | **17 35 10.1** | **-0.7** |
| | comp=N,342nm,0.5s | | | | | | |
| **RODP** | **Rodopos** | **1.45** | **338** | PN | **Pg** | **17 34 52.6** | **+0.6** |
| RODP | | | | SN | **Sn** | **17 35 11.4** | **+0.5** |
| **ZKR** | **Zakros** | **1.72** | **58** | PN | **Pg** | **17 34 57.3** | **+0.2** |
| **ANKY** | **Antikythira Is** | **1.89** | **331** | P | **Pg** | **17 34 60.0** | **-0.4** |
| **KTHA** | **Kythira Island** | **2.32** | **332** | P | **Pb** | **17 35 06.6** | **-0.1** |
| **MHLO** | **Agia Marina, M** | **2.47** | **359** | P | **Pn** | **17 35 06.0** | **+0.7** |
| **KARP** | **Karpathos** | **2.61** | **59** | PN | **Pb** | **17 35 10.6** | **-0.9** |
| **ITM** | **Ithomi** | **3.59** | **326** | PN | **Pn** | **17 35 23.0** | **+2.2** |
| **ARG** | **Arkhangelos** | **3.62** | **56** | PN | **Pb** | **17 35 25.2** | **-3.6** |
| **BRTR** | **Keskin Array B** | **9.19** | **51** | Pn | **Pn** | **17 36 39.9** | **+2.2** |
| | comp=N,0.1nm,0.3s,baz=228,slow=13,SNR=4.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **16.84** | **11** | Pn | **Pn** | **17 38 19.9** | **-0.9** |
| | comp=N,0.6nm,0.3s,baz=198,slow=11,SNR=8.0 | | | | | | |
| **KBZ** | **Khabaz** | **17.18** | **51** | P | **P** | **17 38 26.2** | **-0.6** |
| | comp=N,0.1nm,0.3s,baz=288,slow=6.4,SNR=5.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **23.29** | **292** | P | **P** | **17 39 33.9** | **+0.7** |
| | comp=N,0.5nm,0.8s,baz=82,slow=9.2,SNR=7.1 | | | | | | |
| **FINES** | **FINESS Array B** | **27.26** | **2** | P | **P** | **17 40 08.1** | **-1.3** |
| | comp=N,2.5nm,0.8s,baz=198,slow=16,SNR=2.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **28.16** | **346** | P | **P** | **17 40 14.7** | **-2.8** |
| | comp=N,0.6nm,0.8s,baz=151,slow=10,SNR=1.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.43** | **230** | P | **P** | **17 40 31.2** | **+2.1** |
| | comp=N,0.9nm,0.4s,baz=33,slow=9.0,SNR=8.0 | | | | | | |
| **ARU** | **Arti** | **32.17** | **36** | LR | LR | 17 56 36.4 | |
| | comp=N,125nm,18.1s,baz=0.0,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.80** | **56** | P | **P** | **17 42 39.1** | **-0.1** |
| | comp=N,2.0nm,0.7s,baz=277,slow=6.7,SNR=22 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.09** | **46** | P | **P** | **17 42 48.1** | **-1.1** |
| | comp=N,0.3nm,0.4s,baz=275,slow=8.8,SNR=2.1 | | | | | | |

**IDC 21 17:42:48.5±2.4,1°.57S×133°.77E,h0km,mb3.0/2, mb1 3.3/5,mb1mx3.2/25,mbtmp3.2/5,ML2.9/3,Error ellipse: s-maj=49.0km s-min=24.7km az=59.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **2.60** | **286** | Pn | Pn | 17 43 33.3 | +1.5 |
| | 1.6nm,0.3s,baz=170,slow=23,SNR=12 | | | | | | |
| SIJI | | | | Sn | Sn | 17 44 03.1 | -1.0 |
| | 5.0nm,0.3s,baz=155,slow=23,SNR=9.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.26** | **205** | P | Pn | 17 47 02.5 | -0.9 |
| | 0.0nm,0.3s,baz=32,slow=12,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.27** | **178** | P | Pn | 17 47 03.7 | +0.1 |
| | 0.0nm,0.3s,baz=356,slow=11,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **21.96** | **180** | P | P | 17 47 44.4 | +0.2 |
| | 0.4nm,1.0s,baz=5.5,slow=11,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.92** | **324** | P | P | 17 53 36.1 | -0.4 |
| | 0.2nm,0.6s,baz=126,slow=7.4,SNR=2.2 | | | | | | |

**NNC 21 17:53:23.7±3.5,38°.72N×69°.23E,h0km,mb3.7,mpv3.3, 4C-3D,Error ellipse: s-maj=30.6km s-min=20.7km az=3.0,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BRLS** | **Boroldaу** | **4.33** | **6** | Pg | Pn | 17 54 29.6 | -1.3 |
| | 2.5nm,0.4s | | | | | | |
| BRLS | | | | Lg | Lg | 17 55 37.4 | |
| | 15nm,1.2s | | | | | | |
| **KK02** | **Karatay Array** | **4.49** | **12** | ⇑Pn | Pn | 17 54 33.3 | +0.3 |
| | 1.6nm,0.6s,baz=179,slow=11 | | | | | | |
| KK02 | | | | ⇓Pg | Pb | 17 54 45.0 | +1.6 |
| | 4.2nm,0.5s,baz=191,slow=15 | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 17 55 47.1 | |
| | 15nm,0.8s,baz=195,slow=33 | | | | | | |
| **MRKS** | **Merke** | **5.04** | **36** | Pg | Pn | 17 54 41.9 | +1.3 |
| | 2.9nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 17 55 58.2 | |
| | 14nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **5.60** | **44** | ⇓Pn | Pn | 17 54 49.7 | +1.3 |
| | 2.1nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **47** | ⇑Pn | Pn | 17 54 57.8 | -1.6 |
| | 4.5nm,1.3s | | | | | | |
| TKM2 | | | | ⇑Sn | Sn | 17 56 14.5 | +1.2 |
| | 5.3nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **6.70** | **46** | Pg | Pb | 17 55 14.1 | -7.0 |
| | 1.0nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 17 56 53.9 | |
| | 3.9nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **12.47** | **331** | P | Pn | 17 56 23.2 | +0.8 |
| | 0.4nm,0.5s,baz=158,slow=10.0,SNR=14 | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.16** | **329** | ⇑P | Pn | 17 56 45.0 | -0.5 |
| | 5.3nm,0.9s | | | | | | |

**IDC 21 17:56:43.2±2.4,1°.14N×127°.42E,h0km,mb3.2/4, mb1 3.3/4,mb1mx3.1/56,mbtmp3.2/4,Error ellipse: s-maj=234.3km s-min=23.1km az=67.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.02** | **162** | P | P | 18 01 38.1 | -1.3 |
| | 0.5nm,0.7s,baz=341,slow=11,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **25.45** | **166** | P | P | 18 02 13.8 | +0.8 |
| | 0.3nm,0.8s,baz=343,slow=9.9,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.07** | **326** | P | P | 18 06 52.1 | 0.0 |
| | 0.2nm,0.5s,baz=121,slow=7.9,SNR=6.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.28** | **328** | P | P | 18 07 20.2 | -0.1 |
| | 0.2nm,0.6s,baz=130,slow=5.9,SNR=4.1 | | | | | | |

*BJI **21** 18:03:23.3±0.0,37°.27N×142°.09E,h18km,mb4.1/44, mB5.0/24,Ms4.4/16,Ms7 4.1/16*

*IDC **21** 18:03:24.5±0.6,37°.44N×141°.83E,h0km,mb4.2/28, mb1 4.3/36,mb1mx4.2/64,mbtmp4.2/36,ML3.6/7,MS3.8/20, Ms1 3.8/20,ms1mx3.4/85,Error ellipse: s-maj=13.9km s-min=11.6km az=139.0*

*JMA **21** 18:03:26.2±0.1,37°.42N×141°.86E,h29km±2km,M4.7 Broadband fault plane solution: P waves. NP1: φs107.00000°,δ42.00000°,λ73.00000°. NP2: φs309.00000°,δ50.00000°,λ105.00000°. Principal axes: T Plg78.0000°, Azm279.0000°; N Plg11.0000°, Azm120.0000°; P Plg4.0000°, Azm29.0000°;*

*JMA Felt II J1.*

*NIED **21** 18:03:26.3,37°.42N×141°.86E,h29km,MW4.4,Moment Tensor Solution. s3 Moment tensor: Scale 10$15Nm; Mrr-2.44; Mθθ1.96; Mφφ0.48; Mrθ-2.43; Mθφ3.39; Mφ0.85; Fault plane solution: M0 4.80000×10$15 NP1:φs85.00000°, δ68.00000°,λ-45.00000°. NP2:φs196.00000°,δ49.00000°, λ-150.00000°.*

*NEIC **21** 18:03:26.9±2.4,37°.47N±0°.05×141°.75E±0°.04,h14km±4km, mb4.8/23 Error ellipse: s-maj=8.1km s-min=3.4km az=210.0*

*MOS **21** 18:03:27.7±1.0,37°.77N×141°.77E,h23km,mb4.7/15,Error ellipse: s-maj=8.3km s-min=5.0km az=96.1*

**ISC 21 18:03:26.2±1.2,37°.44N±0°.04×141°.87E±0°.04,h15km±6km, n170,σ1$56/181,mb4.4/56,MS4.0/19,22C-11D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JFK** | **Kawauchi** | **0.80** | **265** | ⇓P | **Pg** | **18 03 40.9** | **-0.9** |
| JFK | | | | S | **Sg** | **18 03 51.2** | **-1.1** |
| **JMST** | **Minamisoumatoc** | **0.83** | **291** | ⇑P | **Pg** | **18 03 41.4** | **-1.0** |
| JMST | | | | eS | **Sg** | **18 03 52.3** | **-1.1** |
| **ONAJ** | **Iwakimizuishiy** | **0.92** | **249** | P | **Pb** | **18 03 42.5** | **-1.4** |
| ONAJ | | | | eS | **Sb** | **18 03 54.1** | **-1.9** |
| **JIKH** | **Ishinomakikobu** | **0.93** | **340** | P | **Pb** | **18 03 43.4** | **-0.7** |
| **JMM** | **Marumori** | **0.96** | **297** | ⇑P | **Pb** | **18 03 43.4** | **-1.1** |
| JMM | | | | S | **Sb** | **18 03 56.1** | **-1.0** |
| **JMM** | **Marumori** | **0.96** | **297** | | **Pb** | **18 03 43.5** | **-1.1** |
| **JIO** | **Ouri** | **1.10** | **338** | P | **Pb** | **18 03 45.9** | **-1.1** |
| JIO | | | | S | **Sb** | **18 04 00.2** | **-0.9** |
| **JFT** | **Otama** | **1.23** | **274** | ⇑P | **Pn** | **18 03 48.3** | **-0.6** |
| JFT | | | | eS | **Sb** | **18 04 03.9** | **-0.8** |
| **JHO** | **Hitachi** | **1.33** | **232** | P | **Pn** | **18 03 48.5** | **-1.8** |
| JHO | | | | S | **Sn** | **18 04 04.7** | **-3.0** |
| **JOU** | **Okura** | **1.33** | **315** | ⇑P | **Pn** | **18 03 50.3** | **-0.1** |
| JOU | | | | S | **Sn** | **18 04 07.9** | **0.0** |
| **JMK** | **Ichinoseki** | **1.60** | **341** | ⇓P | **Pn** | **18 03 53.7** | **-0.3** |
| **JYS** | **Shirataka** | **1.63** | **299** | P | **Pb** | **18 03 55.4** | **-0.7** |
| JYS | | | | eS | **Sb** | **18 04 16.5** | **0.0** |
| **JFY** | **Yanaizu** | **1.73** | **270** | ⇑P | **Pn** | **18 03 55.9** | **+0.1** |
| JFY | | | | eS | **Sn** | **18 04 18.1** | **+0.6** |
| **JYT** | **Yasato** | **1.81** | **229** | Pn | **Pn** | **18 03 55.5** | **-1.4** |
| **JSD** | **Sado** | **2.93** | **283** | Pn | **Pn** | **18 04 12.5** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **3.07** | **254** | Pn | **Pn** | **18 04 15.0** | **+0.8** |
| | 1.3nm,0.3s,baz=79,slow=16,SNR=51 | | | | | | |
| MJAR | | | | Sn | **Sn** | **18 04 52.5** | **+1.9** |
| | 3.3nm,0.3s,baz=85,slow=18,SNR=3.1 | | | | | | |
| MJAR | | | | LR | LR | 18 05 36.5 | |
| | comp=Z,773nm,20.7s,baz=68,slow=44 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.07** | **254** | Pn | **Pn** | **18 04 15.2** | **+1.0** |
| **MAJO** | **Matsushiro** | **3.07** | **254** | *de*P | **Pn** | **18 04 15.2** | **+1.0** |
| **MAJO** | **Matsushiro** | **3.07** | **254** | Pn | **Pn** | **18 04 15.2** | **+1.0** |
| **MAT** | **Matsushiro** | **3.07** | **254** | P | **Pn** | **18 04 15.0** | **+0.8** |
| MAT | | | | eS | **Sn** | **18 04 50.4** | **-0.2** |
| **MJB9** | **Matsu-Tunnel** | **3.07** | **254** | | **Pn** | **18 04 15.2** | **+0.9** |
| **JTM** | **Tenmabayashi** | **3.41** | **350** | Pn | **Pn** | **18 04 20.0** | **+1.2** |
| **JGF** | **Kuroka** | **4.07** | **245** | | **Pn** | **18 04 29.1** | **+1.0** |
| **INU** | **Inuyama** | **4.44** | **243** | Pn | **Pn** | **18 04 34.8** | **+1.8** |
| **JHJ2** | **Mitsune** | **4.63** | **202** | Pn | **Pn** | **18 04 37.2** | **+1.5** |
| **JHJ** | **Hachijo jima 2** | **4.63** | **202** | Pn | **Pn** | **18 04 35.9** | **+0.2** |
| | 35nm,0.3s,baz=73,slow=11,SNR=12 | | | | | | |
| JHJ | | | | Sn | **Sn** | **18 05 25.5** | **-3.7** |
| | 54nm,0.3s,baz=256,slow=22,SNR=2.0 | | | | | | |
| JHJ | | | | LR | LR | 18 06 42.9 | |
| | comp=Z,728nm,20.7s,baz=87,slow=43 | | | | | | |
| **ERM** | **Erimo** | **4.68** | **12** | ⇑*i*P | **Pn** | **18 04 36.0** | **-0.3** |
| **NMR** | **Nemuro--Hokkai** | **6.62** | **25** | *i*P | **Pn** | **18 05 00.9** | **-2.0** |
| NMR | | | | eS | **Sn** | **18 06 13.1** | **-4.9** |
| **ASAJ** | **Asahikawa** | **6.70** | **4** | Pn | **Pn** | **18 05 04.0** | **-0.1** |
| | 4.5nm,0.3s,baz=218,slow=8.8,SNR=41 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **18 06 23.1** | **+3.1** |
| | 1.0nm,0.3s,baz=217,slow=26,SNR=1.9 | | | | | | |
| ASAJ | | | | LR | LR | 18 08 00.6 | |
| | comp=Z,555nm,18.2s,baz=199,slow=41 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **6.70** | **4** | | **Pn** | **18 05 04.1** | **+0.1** |
| **GLVR** | **Golovnino** | **6.88** | **23** | *e*P | **Pn** | **18 05 04.4** | **-2.1** |
| GLVR | | | | eS | **Sn** | **18 06 19.6** | **-4.9** |
| GLVR | | | | smax | smax | | |
| | comp=N,257nm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,131nm,0.2s | | | | | | |
| **RUSJ** | **Misakicho** | **7.14** | **20** | ⇓*i*P | **Pn** | **18 05 09.2** | **-0.8** |
| RUSJ | | | | eS | **Sn** | **18 06 29.2** | **-1.6** |
| **YUK** | **Yuzh-Kuril'sk** | **7.25** | **23** | P | **Pn** | **18 05 10.5** | **-1.1** |
| YUK | | | | S | **Sn** | **18 06 30.1** | **-3.6** |
| **SHO** | **Shikotan** | **7.45** | **29** | *e*P | **Pn** | **18 05 11.4** | **-2.9** |
| SHO | | | | S | **Sn** | **18 06 31.6** | **-6.9** |
| SHO | | | | pmax | pmax | | |
| | comp=N,14nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,14nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,28nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **9.00** | **28** | *e*P | **Pn** | **18 05 35.7** | **+0.1** |
| KUR | | | | *i* S | **Sn** | **18 07 11.5** | **-5.1** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,75nm,1.0s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,66nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,31nm,0.3s | | | | | | |
| **VLA** | **Vladivostok** | **9.51** | **310** | ⇑*e*P | **Pn** | **18 05 40.0** | **-2.6** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,25nm,1.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.54** | **4** | *ce*P | **Pn** | **18 05 43.1** | **+0.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,33nm,1.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.54** | **4** | Pn | **Pn** | **18 05 42.4** | **-0.5** |
| **MSHR** | **Mys Shultsa** | **9.69** | **305** | ⇑*e*P | **Pn** | **18 05 45.5** | **+0.4** |
| **JNU** | **Nakatsue** | **9.96** | **248** | Pn | **Pn** | **18 05 49.0** | **+0.1** |
| | comp=Z,1.1nm,0.3s,baz=69,slow=12,SNR=2.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.08** | **315** | Pn | **Pn** | **18 05 50.4** | **-0.1** |
| | baz=146,slow=14,SNR=6.7 | | | | | | |
| USRK | | | | LR | LR | 18 09 23.5 | |
| | comp=Z,480nm,19.5s,baz=149,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.08** | **315** | | **Pn** | **18 05 49.1** | **-1.4** |
| **USA0B** | **Ussuriysk Arra** | **10.08** | **315** | *i* P | **Pn** | **18 05 50.2** | **-0.3** |
| **KSRS** | **Korea Array** | **11.09** | **274** | Pn | **Pn** | **18 06 03.9** | **-0.4** |
| | comp=Z,0.0nm,0.3s,baz=86,slow=13,SNR=2.4 | | | | | | |
| KSRS | | | | LR | LR | 18 10 06.9 | |
| | comp=Z,126nm,20.1s,baz=80,slow=36 | | | | | | |
| **MDJ** | **Mudanjiang** | **11.72** | **312** | P | **Pn** | **18 06 16.0** | **+3.2** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,270nm,6.8s | | | | | | |
| **KLR** | **Kul'dur** | **13.88** | **331** | Pn | **Pn** | **18 06 43.3** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=132,slow=11,SNR=2.9 | | | | | | |
| KLR | | | | LR | LR | 18 11 54.9 | |
| | comp=Z,426nm,18.9s,baz=137,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **13.88** | **331** | ⇑*e*P | **Pn** | **18 06 40.1** | **-2.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,2.0s | | | | | | |
| **GRNR** | **Gornyy** | **13.89** | **345** | *e*P | **P** | **18 06 51.0** | **+0.4** |
| GRNR | | | | MLR | MLR | | |
| | comp=E,130nm,12.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=N,190nm,13.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=Z,310nm,16.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.16** | **30** | P | **P** | **18 07 48.2** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=201,slow=14,SNR=3.5 | | | | | | |
| PETK | | | | LR | LR | 18 14 45.1 | |
| | comp=Z,108nm,22.0s,baz=245,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.16** | **30** | P | **P** | **18 07 48.6** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **19.16** | **30** | P | **P** | **18 07 48.5** | **-0.3** |
| **ZEA** | **Zeya** | **19.18** | **333** | *e*P | **P** | **18 07 49.5** | **+0.3** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=E,200nm,16.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,300nm,13.0s | | | | | | |
| **NJ2** | **Nanjing** | **19.65** | **261** | *e*P | **Pn** | **18 07 57.3** | **+1.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **TIA** | **Tai'an** | **19.84** | **274** | P | **Pn** | **18 08 00.3** | **+2.2** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,110nm,4.9s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,410nm,6.9s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,380nm,11.4s | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.56** | **296** | ⇓*i*P | **P** | **18 08 04.6** | **+0.3** |
| XLT | | | | pP | pP | 18 08 09.0 | +0.6 |
| XLT | | | | sP | sP | 18 08 13.1 | +2.8 |
| XLT | | | | PP | **PnPn** | **18 08 26.1** | **+4.3** |
| XLT | | | | S | **S** | **18 11 53.6** | **-0.2** |
| XLT | | | | sS | sS | 18 12 01.3 | +0.9 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,270nm,4.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,440nm,13.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,330nm,14.3s | | | | | | |
| **HNS** | **HongShan** | **21.55** | **278** | ⇑P | **P** | **18 08 12.8** | **-2.2** |
| HNS | | | | *e*S | **S** | **18 12 08.4** | **-5.0** |
| HNS | | | | LR | LR | | |
| | comp=Z,700nm,13.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,330nm,13.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,480nm,13.5s | | | | | | |
| **MA2** | **Magadan** | **22.89** | **12** | P | **P** | **18 08 29.0** | **0.0** |
| | comp=Z,5.1nm,0.7s,baz=195,slow=9.4,SNR=13 | | | | | | |
| MA2 | | | | LR | LR | 18 18 30.9 | |
| | comp=Z,99nm,19.1s,baz=186,slow=40 | | | | | | |
| **MA2** | **Magadan** | **22.89** | **12** | ⇓*e*P | **P** | **18 08 28.7** | **-0.4** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **22.89** | **12** | P | **P** | **18 08 29.2** | **+0.1** |
| **HHC** | **Hu-ho-hao-te** | **23.70** | **288** | *e*P | **P** | **18 08 36.9** | **-0.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,180nm,6.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,520nm,15.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,560nm,15.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,770nm,15.6s | | | | | | |
| **GUMO** | **Guam** | **23.90** | **173** | LR | LR | 18 18 29.4 | |
| | comp=Z,36nm,21.6s,baz=7.0,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **25.76** | **347** | P | **P** | **18 08 55.8** | **-0.2** |
| | comp=Z,5.5nm,0.5s,baz=101,slow=0.5,SNR=13 | | | | | | |
| YAK | | | | LR | LR | 18 19 12.8 | |
| | comp=Z,228nm,18.1s,baz=246,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **25.76** | **347** | *e*P | **P** | **18 08 56.0** | **0.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,6.0nm,1.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,406nm,15.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,74nm,13.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,231nm,13.0s | | | | | | |
| **YAK** | **Yakutsk** | **25.76** | **347** | P | **P** | **18 08 55.2** | **-0.8** |
| YAK | | | | IAmb | IAmb | 18 08 56.8 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **26.33** | **11** | P | **P** | **18 09 02.6** | **+1.4** |
| | comp=Z,9.0nm,1.0s,baz=204,slow=7.3,SNR=30 | | | | | | |
| **BOD** | **Bodaibo** | **27.39** | **327** | *e*P | **P** | **18 09 10.5** | **-0.3** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.44** | **303** | ⇓*e*P | **P** | **18 09 11.9** | **+0.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.44** | **303** | P | **P** | **18 09 10.1** | **-1.4** |
| **ENH** | **Enshi** | **27.73** | **265** | P | **P** | **18 09 11.9** | **-2.3** |
| ENH | | | | IAmb | IAmb | 18 09 25.3 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **27.87** | **303** | P | **P** | **18 09 15.7** | **+0.3** |
| | comp=Z,2.7nm,0.9s,baz=98,slow=8.5,SNR=15 | | | | | | |
| SONM | | | | LR | LR | 18 20 05.1 | |
| | comp=Z,75nm,18.0s,baz=231,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.04** | **122** | T | T | 18 38 33.4 | |
| | baz=315,slow=75,SNR=1754 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.05** | **122** | T | T | 18 38 36.5 | |
| | baz=315,slow=75,SNR=1202 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.06** | **122** | T | T | 18 38 38.9 | |
| | baz=315,slow=76,SNR=740 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.77** | **124** | T | T | 18 39 34.5 | |
| | baz=316,slow=76,SNR=1218 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.78** | **124** | T | T | 18 39 34.4 | |
| | baz=316,slow=76,SNR=672 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.79** | **124** | T | T | 18 39 31.6 | |
| | baz=316,slow=76,SNR=756 | | | | | | |
| **ZAK** | **Zakamensk** | **30.31** | **308** | *e*P | **P** | **18 09 36.8** | **-0.2** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **GYA** | **Guiyang** | **31.65** | **260** | ⇓P | **P** | **18 09 49.8** | **+0.7** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **32.04** | **270** | *e*P | **P** | **18 09 51.3** | **-1.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **GTA** | **Gaotai** | **32.80** | **287** | *e*P | **P** | **18 09 59.8** | **+0.8** |
| GTA | | | | pP | pP | 18 10 04.1 | +0.6 |
| GTA | | | | sP | sP | 18 10 07.1 | +1.8 |
| GTA | | | | pmax | pmax | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 39.36 | 197 | LR | LR | 18 23 35.4 | | | |
| | comp=Z,108nm,20.1s,baz=50,slow=31 | | | | | | | | |
| DGZ | Jazzator, Alta | 40.46 | 306 | *c i* P | P | 18 11 05.9 | +1.7 | | |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| WMQ | Urumqi | 40.99 | 297 | *e* P | P | 18 11 10.6 | +2.0 | | |
| ZAA0 | Zalesovo Array | 41.92 | 312 | P | P | 18 11 15.2 | -0.7 | | |
| ZALV | Zalesovo Beam | 41.92 | 312 | P | P | 18 11 16.0 | +0.1 | | |
| | comp=Z,4.3nm,0.8s,baz=79,slow=7.7,SNR=18 | | | | | | | | |
| CMAR | Chiang Mai Arr | 41.95 | 255 | P | P | 18 11 18.2 | +1.5 | | |
| | comp=Z,0.4nm,0.4s,baz=32,slow=7.4,SNR=4.7 | | | | | | | | |
| NRIK | Noril'sk | 43.06 | 335 | P | P | 18 11 24.9 | -0.2 | | |
| | comp=Z,0.9nm,0.3s,baz=90,slow=8.1,SNR=1.6 | | | | | | | | |
| MKAR | Makanchi Array | 44.22 | 302 | P | P | 18 11 35.2 | +0.4 | | |
| | comp=Z,2.7nm,0.7s,baz=88,slow=9.7,SNR=16 | | | | | | | | |
| MAKZ | Makanchi | 44.43 | 302 | P | P | 18 11 36.0 | -0.4 | | |
| MAKZ | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| MAKZ | Makanchi | 44.43 | 302 | P | P | 18 11 36.0 | -0.4 | | |
| MAKZ | | | | IAmb | IAmb | 18 11 46.6 | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| J20K | Nowinta River | 45.81 | 33 | P | P | 18 11 49.2 | +2.2 | | |
| J20K | | | | IAmb | IAmb | 18 13 29.1 | | | |
| | comp=Z,30nm,2.0s | | | | | | | | |
| A21K | Barrow | 45.95 | 23 | P | P | 18 11 47.8 | -0.2 | | |
| KURK | Kurchatov | 45.98 | 308 | *ce* P | P | 18 11 49.0 | +0.4 | | |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| KURK | Kurchatov | 45.98 | 308 | P | P | 18 11 48.9 | +0.4 | | |
| KURBB | Kurchatov Arra | 46.05 | 308 | P | P | 18 11 49.5 | +0.4 | | |
| | comp=Z,7.2nm,0.7s,baz=82,slow=7.9,SNR=36 | | | | | | | | |
| KURBB | | | | LR | LR | 18 31 45.2 | | | |
| | comp=Z,168nm,18.3s,baz=328,slow=37 | | | | | | | | |
| IMAR | Indian Mountai | 46.12 | 31 | P | P | 18 11 51.4 | +1.9 | | |
| H21K | Melozitna Rive | 46.48 | 31 | P | P | 18 11 54.4 | +2.0 | | |
| H21K | | | | IAmb | IAmb | 18 13 07.5 | | | |
| | comp=Z,26nm,1.9s | | | | | | | | |
| H24K | Noodor Dome | 48.52 | 31 | P | P | 18 12 10.5 | +2.2 | | |
| IL31 | | 48.96 | 33 | P | P | 18 12 10.9 | -0.7 | | |
| IL31 | | | | IAmb | IAmb | 18 13 00.5 | | | |
| | comp=Z,25nm,1.8s | | | | | | | | |
| ILAR | Eielson Array | 48.96 | 33 | P | P | 18 12 12.7 | +1.1 | | |
| | comp=Z,2.4nm,0.7s,baz=265,slow=6.4,SNR=25 | | | | | | | | |
| ILAR | Eielson Array | 48.96 | 33 | P | P | 18 12 11.4 | -0.2 | | |
| ILAR | Eielson Array | 48.96 | 33 | P | P | 18 12 11.4 | -0.2 | | |
| BVAR | Borovoye Array | 50.57 | 312 | P | P | 18 12 24.3 | +0.3 | | |
| | comp=Z,0.7nm,0.4s,baz=63,slow=16,SNR=4.4 | | | | | | | | |
| KSH | Kashi | 50.58 | 294 | P | P | 18 12 31.1 | +6.7 | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | |
| AAK | Ala-Archa | 50.62 | 298 | P | P | 18 12 25.0 | +0.2 | | |
| | comp=Z,0.8nm,0.4s,baz=45,slow=1.4,SNR=6.5 | | | | | | | | |
| AAK | Ala-Archa | 50.62 | 298 | *e* P | P | 18 12 25.2 | +0.4 | | |
| AAK | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| BRVK | Borovoye | 50.63 | 312 | *de* P | P | 18 12 24.6 | +0.1 | | |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | |
| BRVK | Borovoye | 50.63 | 312 | P | P | 18 12 24.8 | +0.3 | | |
| BRVK | | | | IAmb | IAmb | 18 12 41.6 | | | |
| | comp=Z,5.7nm,1.0s | | | | | | | | |
| INK | Inuvik | 53.86 | 27 | P | P | 18 12 48.6 | +0.4 | | |
| | comp=Z,1.2nm,0.5s,baz=272,slow=8.1,SNR=5.0 | | | | | | | | |
| INK | Inuvik | 53.86 | 27 | P | P | 18 12 48.6 | +0.4 | | |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| INK | Inuvik | 53.86 | 27 | P | P | 18 12 48.6 | +0.4 | | |
| INK | | | | IAmb | IAmb | 18 12 51.5 | | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| GAR | Garm | 54.86 | 295 | P | P | 18 12 56.9 | +0.8 | | |
| SVE | Sverdlovsk | 55.09 | 319 | *e* P | P | 18 12 58.2 | +0.9 | | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| A36M | Sachs Harbour | 55.75 | 22 | P | P | 18 13 03.8 | +2.0 | | |
| A36M | | | | IAmb | IAmb | 18 13 04.9 | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| ARU | Arti | 56.30 | 318 | P | P | 18 13 05.6 | -0.5 | | |
| | comp=Z,1.5nm,0.4s,baz=52,slow=4.9,SNR=9.4 | | | | | | | | |
| ARU | | | | LR | LR | 18 40 52.1 | | | |
| | comp=Z,196nm,18.4s,baz=12,slow=40 | | | | | | | | |
| ARU | Arti | 56.30 | 318 | *c i* P | P | 18 13 06.7 | +0.6 | | |
| ARU | | | | | | 18 15 06.8 | | | |
| ARU | | | | S | S | 18 20 58.1 | +2.7 | | |
| ARU | | | | SS | SS | 18 24 37.4 | -4.3 | | |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| ARU | Arti | 56.30 | 318 | P | P | 18 13 05.2 | -0.8 | | |
| ARU | | | | IAmb | IAmb | 18 13 07.4 | | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| C36M | Paulatuk | 56.91 | 25 | P | P | 18 13 10.9 | +0.7 | | |
| WB0 | Warramunga Arr | 57.33 | 188 | P | P | 18 13 13.8 | +0.1 | | |
| WB0 | | | | IAmb | IAmb | 18 13 19.7 | | | |
| | comp=Z,8.6nm,1.1s | | | | | | | | |
| WRA | Warramunga Arr | 57.51 | 188 | P | P | 18 13 14.0 | -0.9 | | |
| | comp=Z,1.6nm,0.6s,baz=7.0,slow=7.0,SNR=11 | | | | | | | | |
| WRA | Warramunga Arr | 57.51 | 188 | P | P | 18 13 14.0 | -0.9 | | |
| WRA | Warramunga Arr | 57.51 | 188 | P | P | 18 13 14.9 | 0.0 | | |
| ABKAR | Akbulak array | 57.96 | 310 | P | P | 18 13 17.9 | 0.0 | | |
| AKTO | Aktyubinsk | 58.68 | 312 | P | P | 18 13 23.4 | +0.5 | | |
| | comp=Z,2.3nm,0.7s,baz=68,slow=11,SNR=8.4 | | | | | | | | |
| KIRV | Kirov | 60.15 | 323 | P | P | 18 13 33.5 | +0.6 | | |
| | comp=Z,10nm,0.8s,baz=63,slow=16,SNR=3.6 | | | | | | | | |
| KIRV | Kirov | 60.15 | 323 | *ce* P | P | 18 13 33.7 | +0.8 | | |
| SPITS | Spitsbergen Ar | 60.20 | 349 | LR | LR | 18 41 35.1 | | | |
| | comp=Z,138nm,18.8s,baz=139,slow=38 | | | | | | | | |
| PRGR | Permogore | 60.63 | 327 | *e* P | P | 18 13 36.1 | 0.0 | | |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,58nm,1.6s | | | | | | | | |
| ASAR | Alice Springs | 61.24 | 188 | P | P | 18 13 41.1 | +0.5 | | |
| | comp=Z,1.1nm,0.6s,baz=11,slow=7.4,SNR=14 | | | | | | | | |
| ASAR | Alice Springs | 61.24 | 188 | P | P | 18 13 41.0 | +0.3 | | |
| ASAR | Alice Springs | 61.24 | 188 | P | P | 18 13 41.0 | +0.3 | | |
| YKA | Yellowknife Ar | 63.28 | 30 | P | P | 18 13 54.6 | +0.7 | | |
| | comp=Z,1.4nm,0.7s,baz=300,slow=6.6,SNR=18 | | | | | | | | |
| YKA | Yellowknife Ar | 63.28 | 30 | *ce* P | P | 18 13 55.0 | +1.1 | | |
| YKA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| KLMR | Klimovskoe | 63.61 | 328 | *e* P | P | 18 13 54.9 | -1.2 | | |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.5s | | | | | | | | |
| KLMR | Klimovskoe | 63.61 | 328 | *e* P | P | 18 13 55.0 | -1.2 | | |
| KLMR | | | | AMP | | 18 13 58.1 | | | |
| | comp=Z,19nm,1.5s | | | | | | | | |
| FINES | FINESS Array B | 68.63 | 332 | P | P | 18 14 28.8 | +0.4 | | |
| | comp=Z,1.4nm,0.4s,baz=35,slow=8.5,SNR=12 | | | | | | | | |
| KBZ | Khabaz | 70.92 | 311 | P | P | 18 14 45.3 | +2.5 | | |
| | comp=Z,1.6nm,1.0s,baz=58,slow=9.5,SNR=1.9 | | | | | | | | |
| KBZ | | | | LR | LR | 18 47 05.2 | | | |
| | comp=Z,180nm,18.2s,baz=15,slow=37 | | | | | | | | |
| KIV | Kislovodsk | 70.92 | 311 | *e* P | P | 18 14 44.1 | +1.2 | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| EGMT | Eagleton | 73.73 | 42 | P | P | 18 14 59.9 | +0.3 | | |
| EGMT | | | | IAmb | IAmb | 18 15 02.1 | | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| NB2 | NORSAR Subarra | 73.96 | 337 | P | P | 18 15 01.4 | +0.7 | | |
| | comp=Z,0.9nm,0.6s,baz=39,slow=6.2 | | | | | | | | |
| NOA | NORSAR Array B | 73.96 | 337 | P | P | 18 15 01.1 | +0.5 | | |
| | comp=Z,2.7nm,0.9s,baz=39,slow=5.8,SNR=5.3 | | | | | | | | |
| AKASG | Malin Array Be | 74.20 | 322 | P | P | 18 15 01.9 | -0.2 | | |
| | comp=Z,0.9nm,0.4s,baz=45,slow=6.0,SNR=20 | | | | | | | | |
| AKASG | | | | LR | LR | 18 49 21.9 | | | |
| | comp=Z,146nm,18.1s,baz=18,slow=37 | | | | | | | | |
| AKASG | Malin Array Be | 74.20 | 322 | *ce* P | P | 18 15 02.5 | +0.3 | | |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| AKBB | Malin Array Si | 74.20 | 322 | *e* P | P | 18 15 01.5 | -0.7 | | |
| NVAR | Mina Array Bea | 74.45 | 53 | P | P | 18 15 06.2 | +2.0 | | |
| | comp=Z,2.7nm,0.8s,baz=283,slow=5.4,SNR=18 | | | | | | | | |
| TPNV | Topopah Spring | 76.64 | 54 | P | P | 18 15 17.1 | +0.4 | | |
| TPNV | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| TPNV | Topopah Spring | 76.64 | 54 | P | P | 18 15 17.1 | +0.4 | | |
| PDAR | Pinedale Array | 77.12 | 46 | P | P | 18 15 20.6 | +1.2 | | |
| | comp=Z,1.4nm,0.6s,baz=272,slow=2.0,SNR=17 | | | | | | | | |
| PDAR | Pinedale Array | 77.12 | 46 | P | P | 18 15 20.6 | +1.1 | | |
| BRTR | Keskin Array B | 78.86 | 312 | P | P | 18 15 30.1 | +1.1 | | |
| | comp=Z,1.0nm,1.1s,baz=212,slow=8.7,SNR=3.7 | | | | | | | | |
| MLR | Muntele Rosu | 79.31 | 320 | LR | LR | 18 52 53.4 | | | |
| | comp=Z,321nm,18.1s,baz=30,slow=37 | | | | | | | | |
| MMAI | Mount Meron Ar | 82.03 | 306 | LR | LR | 18 55 10.2 | | | |
| | comp=Z,59nm,18.6s,baz=222,slow=38 | | | | | | | | |
| ANMO | Albuquerque | 84.05 | 50 | *e* P | P | 18 15 58.7 | +2.1 | | |
| ANMO | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | |
| SCHQ | Schefferville | 84.85 | 16 | P | P | 18 16 00.7 | +0.6 | | |
| | comp=Z,4.2nm,1.0s,baz=0.0,slow=7.1,SNR=2.1 | | | | | | | | |
| TXAR | Lajitas Array | 89.59 | 53 | P | P | 18 16 24.4 | +0.8 | | |
| | comp=Z,1.0nm,0.9s,baz=276,slow=3.5,SNR=9.2 | | | | | | | | |
| TXAR | Lajitas Array | 89.59 | 53 | P | P | 18 16 24.2 | +0.6 | | |
| TXAR | Lajitas Array | 89.59 | 53 | P | P | 18 16 24.2 | +0.6 | | |
| LPAZ | La Paz | 146.17 | 60 | PKPbc | PKPab | 18 23 07.8 | 0.0 | | |
| | comp=Z,3.5nm,0.7s,baz=343,slow=3.7,SNR=9.9 | | | | | | | | |
| LPAZ | La Paz | 146.17 | 60 | PKPbc | PKPab | 18 23 08.1 | +0.3 | | |
| H03N2 | Juan Fernandez | 146.70 | 96 | T | T | 21 07 04.3 | | | |
| | baz=291,slow=76,SNR=42 | | | | | | | | |
| H03N3 | Juan Fernandez | 146.71 | 96 | T | T | 21 07 07.2 | | | |
| | baz=291,slow=76,SNR=45 | | | | | | | | |
| H03N1 | Juan Fernandez | 146.72 | 96 | T | T | 21 07 04.6 | | | |
| | baz=291,slow=76,SNR=50 | | | | | | | | |
| SIV | San Ignacio | 150.54 | 50 | PKPbc | PKiKP | 18 23 18.4 | -0.3 | | |
| | comp=Z,2.8nm,1.0s,baz=348,slow=9.3,SNR=3.0 | | | | | | | | |

*IDC **21** 18:05:18.6±1.3, 32°.49N×47°.83E, h0km, mb3.7/14, mb1 3.8/19, mb1mx3.7/54, mbtmp3.7/19, ML3.7/5, MS4.0/2, Ms1 4.0/2, ms1mx2.8/86, Error ellipse: s-maj=29.6km s-min=14.3km az=172.0*

*ISN **21** 18:05:20.8±0.3, 32°.48N×48°.12E, h35km±33km, ML3.4*

*TEH **21** 18:05:21.0, 32°.49N×47°.91E, h11km, ML3.9*

**ISC 21 18:05:21.4±0.5, 32°.48N±0°.04×47°.88E±0°.04, h15km, n91, σ1§64/94, mb3.8/15, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| AHWZ | Ahwaz | 1.32 | 150 | | *e* Pg | Pn | 18 05 46.1 | +0.9 |
| AHWZ | | | | | *e* Sg | Sg | 18 06 05.1 | +1.2 |
| IDOB | Doab | 1.33 | 11 | | *e* Pg | Pn | 18 05 46.4 | +0.8 |
| BMDN | Meydan | 1.43 | 33 | | *e* Pg | Pn | 18 05 47.8 | +0.8 |
| BMDN | | | | | *e* | | 18 06 16.6 | |
| | comp=Z,26μm,0.8s | | | | | | | |
| AMIS | Naft Sefid | 1.44 | 124 | | *e* Pg | Pn | 18 05 48.1 | +1.1 |
| AMIS | | | | | *e* Sg | Sg | 18 06 09.2 | +1.3 |
| RAFI | Al-Rafai | 1.68 | 244 | | *i* P | Pb | 18 05 52.3 | +0.3 |
| RAFI | | | | | IAML | | 18 06 27.5 | |
| | comp=N,560nm,0.6s | | | | | | | |
| RAFI | | | | | IAML | | 18 06 28.0 | |
| | comp=E,454nm,1.1s | | | | | | | |
| IBDR | Badra | 1.76 | 291 | | *i* P | Pb | 18 05 53.4 | 0.0 |
| IBDR | | | | | *i* S | Sg | 18 06 17.1 | -1.0 |
| IBDR | | | | | IAML | | 18 06 32.5 | |
| | comp=N,317nm,0.9s | | | | | | | |
| IBDR | | | | | IAML | | 18 06 42.0 | |
| | comp=E,371nm,0.7s | | | | | | | |
| HSAM | Samen | 1.83 | 19 | | *e* Pg | Pn | 18 05 54.7 | +2.1 |
| KCHF | Cheshme Sefid, | 1.93 | 339 | | *e* Pn | Pb | 18 05 56.5 | +0.2 |
| KCHF | | | | | *e* | | 18 06 29.1 | |
| | comp=Z,8μm,0.4s | | | | | | | |
| IBZA | Bozab | 1.98 | 359 | | *e* Pn | Pn | 18 05 56.3 | +1.6 |
| IBZA | | | | | *e* | | 18 06 30.8 | |
| | comp=Z,7μm,0.6s | | | | | | | |
| KER | Kermanshah | 2.00 | 342 | | *e* Pn | Pb | 18 05 58.2 | +0.6 |
| KHMZ | Khomeyn | 2.15 | 54 | | *e* Pn | Pn | 18 05 59.6 | +2.7 |
| IALM | Almabolaq | 2.39 | 6 | | *e* Pn | Pn | 18 06 02.5 | +2.3 |
| IDHR | Dehrash | 2.54 | 331 | | *e* | | 18 06 08.9 | |
| | comp=Z,4μm,0.4s | | | | | | | |
| IDHR | | | | | *e* Pn | Pn | 18 06 03.9 | +1.6 |
| SHK1 | Shahrekord | 2.54 | 93 | | *e* Pn | Pn | 18 06 03.7 | +1.3 |
| SHK1 | | | | | *e* | | 18 06 54.8 | |
| | comp=Z,6μm,0.5s | | | | | | | |
| IPIR | Pirpir | 2.55 | 85 | | *e* Pn | Pn | 18 06 04.6 | +2.1 |
| IPIR | | | | | *e* | | 18 06 45.6 | |
| | comp=Z,7μm,0.5s | | | | | | | |
| HAGD | Aghdareh | 2.56 | 24 | | *e* Pn | Pn | 18 06 04.4 | +1.8 |
| HAGD | | | | | *e* | | 18 06 50.9 | |
| | comp=Z,6μm,0.6s | | | | | | | |
| SNGE | Sanandaj | 2.64 | 350 | | *e* Pn | Pn | 18 06 07.0 | +3.3 |
| ASAO | Ashtian | 2.73 | 40 | | *e* Pn | Pn | 18 06 07.0 | +2.0 |
| ABEH | Behbahan | 2.76 | 132 | | *e* Pn | Pn | 18 06 07.8 | +2.7 |
| IBRJ | Brojen | 2.92 | 100 | | *e* Pn | Pn | 18 06 08.8 | +1.2 |
| IBRJ | | | | | *e* | | 18 07 12.0 | |
| | comp=Z,4μm,0.8s | | | | | | | |
| QAMS | Qamsar | 3.20 | 66 | | *e* Pn | Pn | 18 06 13.7 | +2.2 |
| IKLH | Kolahrood | 3.22 | 74 | | *e* Pn | Pn | 18 06 13.8 | +2.1 |
| IKLH | | | | | *e* | | 18 07 06.9 | |
| | comp=Z,4μm,0.4s | | | | | | | |
| IRAZ | Razeghan | 3.38 | 30 | | *e* Pn | Pn | 18 06 16.4 | +2.6 |
| GHVR | GHOM | 3.48 | 54 | | *e* Pn | Pn | 18 06 18.2 | +3.1 |
| KLNJ | Kolanjah | 3.48 | 114 | | *e* Pn | Pn | 18 06 16.9 | +1.5 |
| KLNJ | | | | | *e* | | 18 07 01.4 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| QABG | Abgarm-Qazvin | 3.52 | 23 | | *e* Pn | Pn | 18 06 16.7 | +1.0 |
| IGAR | Gharneh | 3.52 | 90 | | *e* Pn | Pn | 18 06 17.0 | +1.3 |
| IGAR | | | | | *e* | | 18 07 01.9 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| IQOM | Qom | 3.55 | 48 | | *e* Pn | Pn | 18 06 17.7 | +1.4 |
| IQOM | | | | | *e* | | 18 06 27.3 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| IZEF | Zefreh | 3.77 | 82 | | *e* Pn | Pn | 18 06 20.5 | +1.2 |
| IZEF | | | | | *e* | | 18 06 22.7 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| KRSH | Kashahi | 3.86 | 66 | | *e* Pn | Pn | 18 06 21.9 | +1.5 |
| IRAM | Ramesheh | 3.87 | 99 | | *e* Pn | Pn | 18 06 21.5 | +0.9 |
| IRAM | | | | | *e* | | 18 07 41.7 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| IMHD | Mahdasht | 3.94 | 35 | | *e* Pn | Pn | 18 06 24.3 | +2.8 |
| IVRN | Varamin | 4.07 | 51 | | *e* Pn | Pn | 18 06 24.8 | +1.6 |
| IHSB | Hasanabad | 4.08 | 43 | | *e* Pn | Pn | 18 06 25.1 | +1.7 |
| ISFB | Sefidab | 4.09 | 62 | | *e* Pn | Pn | 18 06 24.8 | +1.2 |
| IKRK | Kirkuk | 4.14 | 316 | | *i* P | Pn | 18 06 25.7 | +1.6 |
| IKRK | | | | | IAML | | 18 07 44.0 | |
| | comp=N,98nm,1.1s | | | | | | | |
| IKRK | | | | | IAML | | 18 07 52.0 | |
| | comp=E,99nm,1.1s | | | | | | | |
| NASN | Na'in | 4.17 | 84 | | *e* Pn | Pn | 18 06 25.5 | +0.7 |
| THKV | Tehran--Karaj | 4.23 | 35 | | *e* Pn | Pn | 18 06 27.2 | +1.7 |
| ZNJK | Zanjan | 4.23 | 9 | | *e* Pn | Pn | 18 06 28.5 | +2.9 |
| KAZ1 | Kazerun | 4.30 | 130 | | *e* Pn | Pn | 18 06 27.5 | +1.1 |
| CHTH | Charan | 4.35 | 37 | | *e* Pn | Pn | 18 06 29.3 | +2.1 |
| JIR1 | Jirandeh | 4.50 | 20 | | *e* Pn | Pn | 18 06 30.8 | +1.5 |
| QALM | Alamut, Qazvin | 4.56 | 29 | | *e* Pn | Pn | 18 06 31.5 | +1.5 |
| DAMV | Damavand | 4.62 | 46 | | *e* Pn | Pn | 18 06 32.5 | +1.5 |
| IDMV | Damavand | 4.63 | 47 | | *e* Pn | Pn | 18 06 32.3 | +1.2 |
| MAHB | Mahabad | 4.64 | 338 | | *e* Pn | Pn | 18 06 32.9 | +1.8 |
| ANAR | Anarak | 4.97 | 80 | | *e* Pn | Pn | 18 06 37.0 | +1.3 |
| LHJ2 | Lahijan - Gila | 5.01 | 20 | | *e* Pn | Pn | 18 06 38.5 | +2.5 |
| ILAS | Lasjerd | 5.12 | 54 | | *e* Pn | Pn | 18 06 38.8 | +1.1 |
| IFIR | Firoozkooh | 5.13 | 51 | | *e* Pn | Pn | 18 06 39.0 | +1.1 |
| IPRN | Peran | 5.26 | 43 | | *e* Pn | Pn | 18 06 42.4 | +2.8 |
| ISHM | Shahmirzad | 5.58 | 52 | | *e* Pn | Pn | 18 06 45.6 | +1.5 |
| YZKH | Yazd | 5.67 | 89 | | *e* Pn | Pn | 18 06 46.1 | +0.8 |
| IMEH | Mehriz | 5.82 | 99 | | *e* Pn | Pn | 18 06 49.1 | +1.6 |
| IANJ | Anjilo | 5.83 | 58 | | *e* Pn | Pn | 18 06 48.7 | +1.2 |
| GHIR | Ghir-Karzin | 6.08 | 132 | | *e* Pn | Pn | 18 06 50.2 | -0.6 |
| ISHB | Shabestar | 6.08 | 343 | | *e* Pn | Pn | 18 06 53.2 | +2.2 |
| GRMI | Germi | 6.32 | 0 | | *e* Pn | Pn | 18 06 56.6 | +2.5 |
| TPRV | Parvadeh(Tabas | 7.44 | 83 | | *e* Pn | Pn | 18 07 11.0 | +1.5 |
| TNSJ | Nastanj | 7.46 | 76 | | *e* Pn | Pn | 18 07 11.5 | +1.7 |
| SHRO | Shahrood | 7.59 | 60 | | *e* Pn | Pn | 18 07 13.1 | +1.6 |
| TKDS | Koohdasht(Taba | 7.84 | 79 | | *e* Pn | Pn | 18 07 16.1 | +1.1 |
| TABS | Tabas | 7.84 | 79 | | *e* Pn | Pn | 18 07 15.8 | +0.8 |
| NGRK | Negar Kerman | 8.10 | 108 | | *e* Pn | Pn | 18 07 19.1 | +0.3 |
| MRVT | Maraveh tapeh | 8.48 | 50 | | *e* Pn | Pn | 18 07 25.6 | +1.8 |
| SBZV | Sabzevar | 8.93 | 61 | | *e* Pn | Pn | 18 07 31.2 | +1.1 |
| ASF | Jabal al Asfar | 9.30 | 271 | | Pn | Pn | 18 07 34.5 | -0.6 |
| | comp=E,0.4nm,0.3s,baz=73,slow=14,SNR=1.9 | | | | | | | |
| ASF | | | | | Sn | Sn | 18 09 23.1 | +3.6 |
| | baz=356,slow=22,SNR=1.2 | | | | | | | |
| ASF | | | | | Lg | Lg | 18 10 14.2 | |
| | baz=126,slow=22,SNR=1.2 | | | | | | | |
| IKOO | Kooshah | 9.40 | 87 | | *e* Pn | Pn | 18 07 37.8 | +1.3 |
| AFRZ | Afriz | 9.40 | 81 | | *e* Pn | Pn | 18 07 37.5 | +1.0 |
| BSRN | Basiran | 9.54 | 90 | | *e* Pn | Pn | 18 07 39.3 | +0.9 |
| SHRT | Shahrakht | 10.48 | 80 | | *e* Pn | Pn | 18 07 52.1 | +0.9 |
| WSAR | Wadi Sarin | 13.22 | 131 | | Pn | Pn | 18 08 27.2 | -1.5 |
| | comp=E,0.6nm,0.3s,baz=350,slow=16,SNR=6.7 | | | | | | | |
| WSAR | | | | | Sn | Sn | 18 10 42.9 | -13 |
| | comp=E,0.1nm,0.3s,baz=151,slow=16,SNR=2.1 | | | | | | | |
| BRTR | Keskin Array B | 13.59 | 306 | | Pn | Pn | 18 08 35.6 | +1.9 |
| | comp=E,0.1nm,0.3s,baz=126,slow=15,SNR=2.2 | | | | | | | |
| IDI | Anoyia | 19.29 | 285 | | P | P | 18 09 46.4 | +0.7 |
| | comp=E,1.0nm,0.3s,baz=90,slow=9.1,SNR=5.6 | | | | | | | |
| AKTO | Aktyubinsk | 19.45 | 20 | | P | P | 18 09 47.0 | -0.3 |
| | comp=E,0.4nm,0.3s,baz=186,slow=6.5,SNR=5.6 | | | | | | | |
| MLR | Muntele Rosu | 21.35 | 314 | | P | P | 18 10 10.2 | +2.0 |
| | comp=E,6.0nm,0.8s,baz=299,slow=22,SNR=3.2 | | | | | | | |
| AKASG | Malin Array Be | 22.83 | 328 | | P | P | 18 10 21.1 | -2.6 |
| | comp=E,0.6nm,0.4s,baz=139,slow=9.2,SNR=8.4 | | | | | | | |
| AAK | Ala-Archa | 23.32 | 57 | | P | P | 18 10 28.8 | -0.3 |
| | comp=E,0.2nm,0.3s,baz=211,slow=18,SNR=2.1 | | | | | | | |
| ARU | Arti | 25.07 | 14 | | P | P | 18 10 45.6 | +0.5 |
| | comp=E,0.7nm,0.7s,baz=212,slow=11,SNR=4.5 | | | | | | | |
| BVAR | Borovoye Array | 26.16 | 32 | | P | P | 18 10 54.5 | -0.4 |
| | comp=E,2.6nm,0.8s,baz=112,slow=3.5,SNR=16 | | | | | | | |
| KURBB | Kurchatov Arra | 28.94 | 42 | | P | P | 18 11 20.3 | +0.5 |
| | comp=E,1.6nm,0.8s,baz=246,slow=9.4,SNR=12 | | | | | | | |
| MKAR | Makanchi Array | 29.84 | 51 | | P | P | 18 11 28.3 | +0.3 |
| | comp=E,1.9nm,0.8s,baz=248,slow=7.5,SNR=23 | | | | | | | |
| FINES | FINESS Array B | 32.25 | 340 | | P | P | 18 11 47.3 | -1.7 |
| | comp=E,1.6nm,0.8s,baz=146,slow=10,SNR=9.8 | | | | | | | |
| ZALV | Zalesovo Beam | 33.86 | 40 | | P | P | 18 12 02.7 | -0.5 |
| | comp=E,1.7nm,0.4s,baz=226,slow=7.7,SNR=10 | | | | | | | |
| ZALV | | | | | LR | LR | 18 27 46.1 | |
| | comp=E,127nm,19.3s,baz=14,slow=40 | | | | | | | |
| ESDC | Sonseca Array | 42.03 | 295 | | P | P | 18 13 11.2 | -1.1 |
| | comp=E,0.3nm,0.7s,baz=76,slow=8.6,SNR=2.0 | | | | | | | |
| SONM | Songino Array | 46.18 | 53 | | P | P | 18 13 45.4 | -0.3 |
| | comp=E,0.3nm,0.6s,baz=267,slow=6.5,SNR=2.8 | | | | | | | |
| TORD | Torodi Ar. Bea | 46.31 | 256 | | P | P | 18 13 46.0 | -0.8 |
| | comp=E,0.3nm,0.6s,baz=53,slow=7.3,SNR=2.1 | | | | | | | |
| KSRS | Korea Array | 63.90 | 61 | | P | P | 18 15 51.7 | -1.9 |
| | comp=E,0.6nm,0.7s,baz=276,slow=6.4,SNR=2.8 | | | | | | | |
| SEY | Seymchan | 67.76 | 29 | | P | P | 18 16 18.3 | +0.1 |
| | comp=E,1.2nm,0.5s,baz=282,slow=7.7,SNR=15 | | | | | | | |
| YKA | Yellowknife Ar | 84.31 | 352 | | P | P | 18 17 51.0 | -1.4 |
| | comp=E,0.1nm,0.5s,baz=15,slow=5.1,SNR=3.0 | | | | | | | |
| JAY | Jayapura | 93.72 | 91 | | LR | LR | 19 04 22.5 | |
| | comp=E,110nm,19.7s,baz=129,slow=38 | | | | | | | |

*NDI **21** 18:09:56.6±3.3, 28°.29N×84°.22E, h30km, ML4.7, mb5.1(NEIC)*

*BJI **21** 18:09:59.9±0.0, 28°.13N×84°.88E, h13km, mb4.7/62, mB4.9/34, Ms4.3/42, Ms7 4.1/41*

*DMN **21** 18:10:00.0±0.2, 28°.02N×84°.72E, h10km, Ml5.5/6, Error ellipse: s-maj=7.7km s-min=2.0km az=16.0*

*NEIC **21** 18:10:01.0±1.8, 27°.96N±0°.09×84°.69E±0°.07, h17km±4km, mb5.1/94, Error ellipse: s-maj=14.0km s-min=6.1km az=207.0*

*MOS **21** 18:10:00.9±1.3, 27°.97N×84°.80E, h28km, mb5.0/35, MS4.1/4, Error ellipse: s-maj=6.6km s-min=3.6km az=114.7*

*IDC **21** 18:10:02.8±2.2, 27°.81N×84°.63E, h36km±17km, mb4.4/39, mb1 4.5/43, mb1mx4.5/49, mbtmp4.6/43, ML4.3/4, MS3.7/14, Ms1 3.7/14, ms1mx3.3/80, Error ellipse: s-maj=10.4km s-min=8.7km az=56.0*

**ISC 21 18:10:00.3±0.5, 27°.96N±0°.03×84°.72E±0°.02, h14km±2km, h14km:pP-P, n527, σ1§69/562, mb5.0/146, MS4.0/25, 32C-43D, Nepal-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| GKN | Gorkha | 0.08 | 302 | | *e* Pg | Pg | 18 10 02.9 | -0.5 |
| GKN | | | | | *e* Sg | Sg | 18 10 04.8 | -0.8 |
| DMN | Daman | 0.49 | 135 | | *e* Pg | Pg | 18 10 10.8 | +0.7 |
| DMN | | | | | *e* Sg | Sb | 18 10 18.2 | +0.2 |
| KKN | Kakani | 0.53 | 108 | | *e* Pg | Pg | 18 10 11.0 | +0.3 |
| PKIN | Phulchoki | 0.71 | 122 | | *e* Pg | Pg | 18 10 14.4 | +0.2 |
| PKIN | | | | | *e* Sg | Sg | 18 10 24.6 | +0.9 |
| PKI | Pulchoki | 0.72 | 122 | | *e* Pg | Pg | 18 10 14.6 | +0.1 |
| PKI | | | | | *e* Sg | Sg | 18 10 25.0 | +0.9 |
| DANN | Dangsing | 0.93 | 295 | | *e* Pg | Pg | 18 10 17.4 | -1.0 |
| DANN | | | | | *e* Sg | Sg | 18 10 29.0 | -1.6 |
| | 25μm,0.5s | | | | | | | |
| KOLN | Koldanda | 1.01 | 260 | | *e* Pg | Pb | 18 10 19.4 | -0.3 |
| GUN | Gumba | 1.03 | 92 | | *e* Pg | Pb | 18 10 20.0 | -0.1 |
| GUN | | | | | *e* Sg | Sb | 18 10 33.5 | -0.2 |
| | 11μm,0.2s | | | | | | | |
| JIRN | Jiri | 1.34 | 102 | | *e* Pg | Pb | 18 10 26.0 | +0.6 |
| JIRN | | | | | *e* Sg | S

KSH PP PnPn 18 13 20.4 -0.8
KSH S Sn 18 15 33.8 -11
KSH pmax pmax
comp=N,33nm,0.7s
KSH LR LR
comp=N,540nm,13.7s
KSH LR LR
comp=N,820nm,11.0s
KSH LR LR
comp=N,400nm,11.5s
**URV Uravakonda 14.68 210** *e*P **Pn 18 13 24.1 -3.7**
URV *e* 18 15 59.0
**TARG Taragay, Kyrgy 14.86 339** Pn **Pn 18 13 29.4 -0.9**
**SKHT Srikalahasti 14.90 199** *e*P **Pn 18 13 29.1 -1.5**
SKHT *e* 18 16 05.4
**KBL Kabul 14.92 300** P **Pn 18 13 30.9 -0.1**
**KBL Kabul 14.92 300** Pn **Pn 18 13 30.9 -0.1**
**PZH PanZhiHua 15.22 92** P **Pn 18 13 32.1 -2.9**
PZH pP **P 18 13 40.9 +1.0**
PZH sP **pP 18 13 44.8 +0.7**
PZH PP **sP 18 13 48.5 +2.6**
PZH S **Sn 18 16 20.9 -2.5**
PZH SS **S 18 16 43.0 +2.7**
PZH pmax pmax
comp=N,10.0nm,0.6s
PZH pmax pmax
comp=N,150nm,4.3s
PZH LR LR
comp=N,1μm,16.4s
PZH LR LR
comp=N,890nm,15.0s
PZH LR LR
comp=N,1μm,13.2s
**UZB Uzynbulak 15.84 345** *e*P **Pn 18 13 43.4 +0.4**
UZB pmax pmax
comp=Z,12nm,0.8s
**UZB Uzynbulak 15.84 345** *e*P **Pn 18 13 43.5 +0.4**
comp=Z,12nm,0.8s,baz=344
**CHTO Chiang Mai 15.91 122** P **Pn 18 13 41.3 -2.6**
CHTO pmax pmax
comp=Z,123nm,1.1s
**CHTO Chiang Mai 15.91 122** Pn **Pn 18 13 41.3 -2.6**
CHTO IAmb IAmb 18 13 48.6
comp=Z,122nm,1.1s
**SATY Saty 15.91 343** *e*P **Pn 18 13 43.8 -0.1**
**SATY Saty 15.91 343** *e*P **Pn 18 13 43.8 -0.1**
baz=342
**ZHN Zhinishke 16.00 343** *e*P **Pn 18 13 45.9 +0.8**
**ZHN Zhinishke 16.00 343** *e*P **Pn 18 13 46.0 +0.8**
baz=343
**WMQ Urumqi 16.01 8** *e*P **Pn 18 13 45.8 +0.7**
WMQ pP P 18 13 49.9 +1.3
WMQ sP sP 18 13 53.9 -0.8
WMQ pmax pmax
comp=Z,39nm,0.9s
**CM31 Chiang Mai Arr 16.12 123** Pn **Pn 18 13 45.9 -0.8**
CM31 IAmb IAmb 18 13 53.1
comp=Z,80nm,0.8s
**CMAR Chiang Mai Arr 16.12 123** Pn **Pn 18 13 45.0 -1.7**
comp=Z,0.9nm,0.3s,baz=297,slow=13,SNR=67
CMAR LR LR 18 22 02.1
comp=Z,88nm,18.9s,baz=305,slow=45
CMAR ScP **ScP 18 22 12.7 -3.8**
comp=Z,0.0nm,0.3s,baz=284,slow=2.9,SNR=4.2
**CMAR Chiang Mai Arr 16.12 123** Pn **Pn 18 13 44.3 -2.4**
**KPKS Kokpek 16.22 344** *e*P **Pn 18 13 48.7 +0.8**
**KPKS Kokpek 16.22 344** *e*P **Pn 18 13 48.8 +0.8**
baz=344
**GAR Garm 16.27 316** Pn **Pn 18 13 45.4 -3.2**
GAR IAmb IAmb 18 13 57.5
comp=Z,140nm,1.1s
**KMI Kunming 16.37 96** ⇓P **P 18 13 53.3 +0.4**
KMI pP pP 18 13 56.4 -0.6
KMI sP sP 18 13 59.1 +0.2
KMI pmax pmax
comp=Z,23nm,0.7s
KMI LR LR
comp=Z,310nm,11.5s
KMI LR LR
comp=Z,410nm,16.6s
KMI LR LR
comp=Z,440nm,16.0s
**MDOK Medeo 16.39 340** *e*P **Pn 18 13 51.2 +1.1**
**MDOK Medeo 16.39 340** *e*P **Pn 18 13 51.2 +1.1**
baz=339
**AAA Alma-Ata 16.47 340** *e*P **P 18 13 52.4 -1.3**
**AAA Alma-Ata 16.47 340** *e*P **P 18 13 52.4 -1.3**
baz=339
**CHGR Chuyangaron 16.80 313** P **Pn 18 13 54.0 -1.2**
**CHGR Chuyangaron 16.80 313** Pn **Pn 18 13 54.0 -1.2**
CHGR IAmb IAmb 18 14 02.9
comp=Z,126nm,0.8s
**AAK Ala-Archa 16.84 333** Pn **Pn 18 13 54.5 -1.2**
comp=Z,0.5nm,0.3s,baz=168,slow=11,SNR=4.4
AAK LR LR 18 20 17.6
comp=Z,324nm,18.4s,baz=146,slow=36
**AAK Ala-Archa 16.84 333** *de*P **Pn 18 13 56.3 +0.5**
AAK pmax pmax
comp=Z,10.0nm,1.3s
**AAK Ala-Archa 16.84 333 Pn 18 13 56.0 +0.3**
**CD2 Chengdu 16.85 75** P **P 18 13 57.6 -0.3**
CD2 S **Sn 18 17 04.6 +1.7**
CD2 pmax pmax
comp=Z,110nm,0.6s
CD2 LR LR
comp=Z,60nm,10.3s
CD2 LR LR
comp=Z,410nm,10.8s
CD2 LR LR
comp=Z,690nm,11.3s
**GTA Gaotai 16.95 44** ⇓P **Pn 18 13 55.0 -2.2**
GTA pP P 18 14 00.0 +0.8
GTA sP pP 18 14 03.3 0.0
GTA pmax pmax
comp=Z,200nm,5.6s
GTA LR LR
comp=Z,350nm,12.3s
GTA LR LR
comp=Z,390nm,12.7s
GTA LR LR
comp=Z,440nm,11.9s
**CHKK Chushkaly 17.04 341** *e*P **P 18 13 59.6 -0.4**
baz=340
**KUU Kurty 17.27 339** *e*P **Pn 18 14 00.6 -0.5**
**KUU Kurty 17.27 339** *e*P **Pn 18 14 00.6 -0.5**
baz=339
**SGDS Sogindy 17.47 335** *e*P **P 18 14 05.1 +0.3**
baz=334
**PBA Port Blair 17.88 154** P **P 18 14 10.2 +0.8**
**LZH Lanzhou 18.11 59** *e*P **Pn 18 14 10.8 -0.9**
LZH pP pP 18 14 15.3 -0.9
LZH sP sP 18 14 19.8 +1.8
LZH pmax pmax
comp=Z,23nm,1.3s
LZH pmax pmax
comp=Z,170nm,4.9s
LZH LR LR
comp=Z,540nm,11.4s
LZH LR LR
comp=Z,470nm,14.1s
LZH LR LR
comp=Z,550nm,14.9s
**DZA Taraz 18.43 327** *e*P **Pn 18 14 15.9 +0.6**
**DZA Taraz 18.43 327** *e*P **Pn 18 14 16.0 +0.6**
baz=327
**MK31 Makanchi Array 18.90 355***c i*P **P 18 14 20.4 0.0**
**MK31 Makanchi Array 18.90 355** P **Pn 18 14 20.9 -0.2**
**MKAR Makanchi Array 18.90 355** P **Pn 18 14 21.4 +0.3**
comp=Z,3.0nm,0.3s,baz=176,slow=11,SNR=81
**MKAR Makanchi Array 18.90 355 P 18 14 20.2 -0.2**
**MAKZ Makanchi 18.94 354** P **P 18 14 20.7 -0.2**
MAKZ pmax pmax
comp=Z,14nm,0.7s
**MAKZ Makanchi 18.94 354** P **P 18 14 20.7 -0.2**
**KKAR Karatay Array 18.98 326** P **Pn 18 14 19.9 -1.5**
**KKAR Karatay Array 18.98 326** P **P 18 14 19.9 -1.5**
**BTLS Baital 19.05 336** *e*P **Pn 18 14 23.5 +0.6**
**BTLS Baital 19.05 336** *e*P **Pn 18 14 23.6 +0.6**
baz=336
**BRLS Borolday 19.27 325** *e*P **P 18 14 24.1 -0.4**
**BRLS Borolday 19.27 325** *e*P **P 18 14 24.1 -0.4**
baz=324
**ZSN Zaisan 19.46 0** *e*P **Pn 18 14 27.4 -0.3**
**ZSN Zaisan 19.46 0** *e*P **Pn 18 14 27.4 -0.3**
baz=0.1

**GYA Guiyang 19.58 89** ⇑P **Pn 18 14 29.9 +0.4**
GYA sP sP 18 14 37.4 +3.2
GYA S **S 18 18 06.0 -3.0**
GYA pmax pmax
comp=Z,32nm,0.7s
GYA pmax pmax
comp=Z,190nm,3.5s
GYA LR LR
comp=Z,170nm,5.0s
GYA LR LR
comp=Z,320nm,5.2s
GYA LR LR
comp=Z,310nm,8.8s
**HRA Herat 20.25 294 P 18 14 35.3 -0.2**
**PALK Pallekele 20.92 191** P **P 18 14 41.1 -1.6**
comp=Z,4.1nm,0.6s,baz=190,slow=12,SNR=1.8
PALK S **S 18 18 26.2 -9.5**
comp=Z,6.8nm,0.5s,baz=172,slow=17,SNR=3.4
PALK LR LR 18 22 05.1
comp=Z,49nm,18.4s,baz=124,slow=35
**PALK Pallekele 20.92 191** P **P 18 14 44.1 +1.4**
PALK pmax pmax
comp=Z,40nm,1.4s
**PALK Pallekele 20.92 191** P **P 18 14 44.1 +1.4**
**XAN Xi'an 21.59 68** P **P 18 14 49.0 -0.8**
XAN pP pP 18 14 53.5 -0.5
XAN pmax pmax
comp=Z,58nm,0.6s
XAN LR LR
comp=Z,960nm,13.1s
XAN LR LR
comp=Z,270nm,11.7s
XAN LR LR
comp=Z,430nm,12.4s
**ENH Enshi 21.75 78** P **P 18 14 52.0 +0.5**
ENH IAmb IAmb 18 14 56.3
comp=Z,52nm,0.7s
**DGZ Jazzator, Alta 21.81 5**⇑*e*P **P 18 14 52.6 +0.5**
DGZ pmax pmax
comp=Z,8.0nm,0.5s
**SEM Semipalatinsk 22.68 353** *e*P **P 18 15 00.6 -0.9**
**SEM Semipalatinsk 22.68 353** *e*P **P 18 15 00.6 -0.9**
baz=352
**UBPT Khong Chiam 23.01 119** P **P 18 15 04.3 -0.6**
KURBB **Kurchatov Arra 23.12 350** P **PcP 18 15 06.0 +0.2**
comp=Z,15nm,0.7s,baz=173,slow=9.6,SNR=69
KURBB PcP **PcP 18 18 53.9 -0.4**
comp=Z,1.6nm,0.6s,baz=184,slow=2.4,SNR=4.6
KURBB ScP **ScP 18 22 29.1 -2.9**
comp=Z,0.9nm,0.7s,baz=180,slow=2.4,SNR=6.2
**KURK Kurchatov 23.20 350***c i*P **P 18 15 07.5 +0.9**
KURK pmax pmax
comp=Z,67nm,1.0s
**KURK Kurchatov 23.20 350** P **P 18 15 06.9 +0.3**
KURK IAmb IAmb 18 15 12.6
comp=Z,64nm,1.1s
**BRZS Berezniki 23.84 341** *e*P **P 18 15 14.1 +1.1**
**BRZS Berezniki 23.84 341** *e*P **P 18 15 14.2 +1.2**
baz=340
**WSAR Wadi Sarin 23.97 265** P **P 18 15 16.4 +1.9**
comp=Z,8.3nm,1.0s,baz=103,slow=8.2,SNR=5.6
WSAR LR LR 18 24 36.6
comp=Z,93nm,20.9s,baz=110,slow=37
**BTO Baotou 24.32 52** *e*P **P 18 15 16.4 -1.3**
BTO S **S 18 19 37.5 +1.0**
BTO LR LR
comp=Z,1μm,6.6s
BTO LR LR
comp=Z,1μm,6.2s
**LYN LuoYang 24.57 68**⇑*i*P **P 18 15 20.8 +0.9**
LYN pmax pmax
comp=Z,10.0nm,0.8s
**KNGR Kungurtug, Tuv 24.62 20**⇓*e*P **P 18 15 21.5 +1.2**
**QIZ Qiongzhong 24.66 106** P **P 18 15 20.5 -0.3**
QIZ IAmb IAmb 18 15 31.6
comp=Z,62nm,1.5s
**QIZ Qiongzhong 24.66 106** P **P 18 15 20.8 0.0**
QIZ S **S 18 19 43.1 +1.0**
QIZ LR LR
comp=Z,340nm,15.3s
QIZ LR LR
comp=Z,270nm,13.3s
QIZ LR LR
comp=Z,170nm,13.7s
**HHC Hu-ho-hao-te 25.50 53** *e*P **P 18 15 29.1 +0.7**
HHC pmax pmax
comp=Z,16nm,0.9s
HHC pmax pmax
comp=Z,200nm,5.0s
HHC LR LR
comp=Z,250nm,10.5s
HHC LR LR
comp=Z,560nm,9.8s
HHC LR LR
comp=Z,760nm,10.2s
**WHN Wuhan 25.95 77** ⇑P **P 18 15 32.9 +0.5**
**ZAA0 Zalesovo Array 25.97 0** P **P 18 15 32.6 +0.3**
ZAA0 IAmb IAmb 18 15 38.2
comp=Z,54nm,1.6s
**ZALV Zalesovo Beam 25.97 0** P **P 18 15 32.6 +0.4**
comp=Z,13nm,0.6s,baz=185,slow=9.0,SNR=57
**SONM Songino Array 26.04 35** P **P 18 15 34.7 +1.5**
comp=Z,7.7nm,0.8s,baz=224,slow=9.7,SNR=43
SONM PcP **PcP 18 19 01.0 0.0**
comp=Z,0.5nm,0.4s,baz=217,slow=4.1,SNR=2.1
**SONM Songino Array 26.04 35** P **P 18 15 33.5 +0.2**
SONM IAmb IAmb 18 15 41.2
comp=Z,58nm,1.8s
**ULN Ulaanbaatar 26.39 35***ce*P **P 18 15 37.3 +0.8**
ULN pmax pmax
comp=Z,17nm,1.0s
**ULN Ulaanbaatar 26.39 35** P **P 18 15 34.5 -1.9**
**ZAK Zakamensk 26.48 27** *e*P **P 18 15 37.6 +0.5**
ZAK pmax pmax
comp=Z,12nm,1.1s
**MOY Mondy 26.66 23** *e*P **P 18 15 43.1 +4.4**
MOY pmax pmax
comp=Z,30nm,2.0s
**HNS HongShan 26.85 62** ⇓P **P 18 15 41.8 +1.4**
HNS S **S 18 20 21.5 +5.0**
HNS pmax pmax
comp=Z,24nm,1.1s
HNS LR LR
comp=Z,240nm,12.2s
HNS LR LR
comp=Z,430nm,11.2s
HNS LR LR
comp=Z,490nm,11.4s
**KULM Kulim 27.16 143** P **P 18 15 43.2 -0.2**
KULM IAmb IAmb 18 15 48.8
comp=Z,29nm,0.9s
**BVAR Borovoye Array 27.20 341** P **P 18 15 43.3 -0.2**
comp=Z,1.4nm,0.7s,baz=95,slow=10,SNR=5.5
**BRVK Borovoye 27.26 341**⇑*e*P **P 18 15 44.8 +0.8**
BRVK pmax pmax
comp=Z,4.0nm,1.3s
**BRVK Borovoye 27.26 341** P **P 18 15 44.3 +0.3**
**DLV T Lat 27.36 121** P **P 18 15 46.6 +1.1**
DLV IAmb IAmb 18 15 50.0
comp=Z,73nm,1.6s
**PSI Prapat 28.46 149** P **P 18 15 54.8 -0.4**
comp=Z,4.4nm,0.2s,baz=312,slow=15,SNR=6.8
**ABKAR Akbulak array 28.53 325** P **P 18 15 55.5 +0.1**
**TIA Tai'an 28.56 65** P **P 18 15 56.3 +0.4**
TIA pmax pmax
comp=Z,4.0nm,0.5s
**KRAR Krasnoyarsk 28.64 10**⇓*e*P **P 18 15 56.4 +0.1**
**GSI Gunungsitoli 29.22 153** P **P 18 16 02.3 +0.4**
GSI IAmb IAmb 18 16 04.2
comp=Z,25nm,0.5s
**GSI Gunungsitoli 29.22 153** P **P 18 16 04.3 +2.5**
**XLT XiLinHaoTe 29.74 49**⇓*i*P **P 18 16 07.6 +1.3**
XLT pP sP 18 16 12.3 -0.4
XLT S **S 18 21 03.6 +1.4**
XLT pmax pmax
comp=Z,10.0nm,1.4s
XLT pmax pmax
comp=Z,340nm,9.5s
XLT LR LR
comp=Z,40nm,18.5s
XLT LR LR
comp=Z,350nm,15.9s
XLT LR LR
comp=Z,280nm,13.1s
**NJ2 Nanjing 29.77 74** *e*P **P 18 16 07.4 +0.8**
NJ2 pmax pmax
comp=Z,4.0nm,0.6s
**AKTO Aktyubinsk 30.24 325** P **P 18 16 10.6 0.0**
comp=Z,2.5nm,0.6s,baz=117,slow=9.0,SNR=7.7
AKTO LR LR 18 29 46.5
comp=Z,391nm,21.6s,baz=134,slow=39
**LKRN Lenkeran, Azer 31.70 299** P **P 18 16 27.6 +4.1**
**SSE Sheshan 31.80 75** P **P 18 16 25.6 +1.1**
SSE pmax pmax
comp=Z,32nm,0.6s
SSE LR LR
comp=Z,180nm,17.8s
**MYKOM Kota Tinggi 31.81 142** P **P 18 16 24.0 -0.7**
MYKOM IAmb IAmb 18 17 14.1
comp=Z,44nm,1.3s
**SSLB Suanglung 32.79 89** P **P 18 16 33.6 +0.3**
**MNGR Mingechevir, A 33.34 302** P **P 18 16 41.6 +3.7**
**SEKA Sheki 33.34 303** P **P 18 16 41.1 +3.1**
**SVE Sverdlovsk 33.53 336** *e*P **P 18 16 43.7 +4.3**
SVE pmax pmax
comp=Z,17nm,1.0s
**GANJ Ganja 33.89 302** P **P 18 16 46.7 +4.0**
**ARU Arti 34.02 334** P **P 18 16 43.5 -0.1**
comp=Z,2.5nm,0.5s,baz=136,slow=5.5,SNR=14
**ARU Arti 34.02 334***d i*P **P 18 16 43.5 -0.1**
ARU 18 17 51.5
ARU S **S 18 22 09.3 +1.0**
ARU pmax pmax
comp=Z,21nm,1.2s
**ARU Arti 34.02 334** P **P 18 16 42.6 -0.9**
ARU IAmb IAmb 18 16 48.0
comp=Z,22nm,1.2s
**NAX Nakhchivan 34.30 299** P **P 18 16 51.0 +4.6**
**GROC Groznyy 34.78 306** *e*P **P 18 16 54.3 +3.9**
GROC *e* 18 18 09.7
GROC *e* 18 19 25.9
GROC pmax pmax
comp=Z,23nm,0.9s
**GNI Garni 35.00 301**⇑*e*P **P 18 16 57.1 +4.5**
GNI pmax pmax
comp=Z,8.0nm,0.9s
**KSM Kuching 35.96 133** P **P 18 16 59.0 -1.8**
**ZEI Tsey 36.05 305** *e*P **P 18 17 02.6 +1.0**
ZEI pmax pmax
comp=Z,14nm,0.7s
**AKH Akhalkalaki 36.12 303** ⇑P **P 18 17 04.6 +2.4**
**CN2 Changchun 36.19 53** *e*P **P 18 17 02.5 0.0**
CN2 *e*S **S 18 22 39.6 -2.5**
CN2 pmax pmax
comp=Z,20nm,0.8s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,300nm,13.0s
CN2 LR LR
comp=Z,300nm,13.0s
CN2 LR LR
comp=Z,200nm,13.7s
**BOD Bodaibo 36.21 26** *e*P **P 18 17 02.4 -0.1**
BOD pmax pmax
comp=Z,12nm,0.8s
**SBUM Sibu 36.51 129** P **P 18 17 04.0 -1.5**
SBUM IAmb IAmb 18 18 01.8
comp=Z,43nm,1.9s
**KBZ Khabaz 36.95 306** P **P 18 17 08.0 -1.0**
comp=Z,2.3nm,0.7s,baz=79,slow=11,SNR=1.9
**KBZ Khabaz 36.95 306**⇑*e*P **P 18 17 10.9 +1.9**
KBZ pmax pmax
comp=Z,5.0nm,1.0s
**KKM Kota Kinabalu 36.98 120** P **P 18 17 11.1 +1.5**
**KIV Kislovodsk 37.15 307** *e*P **P 18 17 10.9 +0.1**
KIV pmax pmax
comp=Z,10.0nm,1.1s
**KSRS Korea Array 37.30 64** P **P 18 17 11.2 -0.8**
comp=Z,4.4nm,0.6s,baz=263,slow=8.0,SNR=21
KSRS LR LR 18 32 57.6
comp=Z,92nm,18.5s,baz=265,slow=37
**BNX BinXian 37.98 51** ⇓P **P 18 17 17.9 +0.3**
BNX pmax pmax
comp=Z,42nm,1.2s
BNX pmax pmax
comp=Z,280nm,3.5s
**JOW Kunigami 38.54 81** P **P 18 17 20.5 -2.1**
JOW IAmb IAmb 18 17 23.2
comp=Z,31nm,0.7s
**JOW Kunigami 38.54 81** P **P 18 17 22.3 -0.3**
**KIRV Kirov 39.16 331** P **P 18 17 27.5 +0.2**
comp=Z,12nm,0.4s,baz=111,slow=3.8,SNR=8.0
**SOC Sochi 39.20 306** *e*P **P 18 17 28.4 +0.4**
SOC *e* 18 18 58.3
SOC *e*S **S 18 23 28.5 +0.7**
SOC MLR MLR
comp=Z,99nm,13.0s
**VRH Novokhopyorsk 39.69 318** *e*P **P 18 17 34.7 +2.8**
VRH pmax pmax
comp=Z,30nm,0.7s
**ZEA Zeya 40.32 38** *e*P **P 18 17 38.7 +1.5**
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**VLA Vladivostok 40.71 55**⇑*e*P **P 18 17 40.8 +0.3**
VLA pmax pmax
comp=Z,11nm,0.9s
**MTKI Muara Teweh, K 40.80 130** P **P 18 17 43.4 +1.8**
comp=Z,22nm,1.6s
**USA0B Ussuriysk Arra 40.91 54**⇓*e*P **P 18 17 42.5 +0.3**
**USRK Ussuriysk Ar. 40.91 54** P **P 18 17 42.2 +0.1**
comp=Z,5.7nm,0.6s,baz=256,slow=8.4,SNR=9.5
**USRK Ussuriysk Ar. 40.91 54** P **P 18 17 40.9 -1.3**
**VORR Voronezh 41.33 318** *e*P **P 18 17 43.5 -2.0**
VORR pmax pmax
comp=Z,50nm,0.4s
**NRIK Noril'sk 41.45 2** P **P 18 17 46.8 +0.7**
comp=Z,6.1nm,0.7s,baz=163,slow=5.3,SNR=10.0
**NRIK Noril'sk 41.45 2***ce*P **P 18 17 46.9 +0.7**
NRIK pmax pmax
comp=Z,13nm,1.0s
**KLR Kul'dur 41.63 46**⇓*e*P **P 18 17 48.6 +0.6**
KLR pmax pmax
comp=Z,8.0nm,1.1s
**LPSR Galich'ya Gora 41.77 319** *e*P **P 18 17 51.4 +2.3**
LPSR pmax pmax
comp=Z,30nm,0.6s
**KPJI Karang Pucung 42.17 143** P **P 18 17 54.6 +1.9**
comp=Z,25nm,1.2s
**PRGR Permogore 42.47 334** *e*P **P 18 17 53.8 -0.8**
PRGR pmax pmax
comp=Z,43nm,1.4s
**SIM Simferopol' 43.36 307** *e*P **P 18 18 04.6 +2.5**
SIM *e*S **S 18 24 27.0 -2.5**
SIM pmax pmax
comp=Z,42nm,1.1s
**MPSI Mapaga 43.47 123** P **P 18 18 06.3 +3.0**
comp=Z,18nm,1.1s
**BR131 Keskin Array S 43.49 299**⇑*e*P **P 18 18 07.2 +3.7**
**BR131 Keskin Array S 43.49 299** P **P 18 18 03.4 -0.1**
**BRTR Keskin Array B 43.49 299** P **P 18 18 03.4 -0.1**
comp=Z,6.9nm,0.9s,baz=98,slow=9.0,SNR=22
**BRTR Keskin Array B 43.49 299** P **P 18 18 03.0 -0.4**
**MOS Moscow 43.51 323** *e*P **P 18 18 03.7 +0.5**
**TOLI2 Tolitoli 43.62 121** P **P 18 18 02.4 -2.1**
TOLI2 IAmb IAmb 18 18 06.5
comp=Z,25nm,1.1s
**TOLI2 Tolitoli 43.62 121** P **P 18 18 06.3 +1.7**
**DAV Davao City (W) 43.86 110** LR LR 18 37 53.0
comp=Z,61nm,19.2s,baz=320,slow=38
**OBN Obninsk 43.88 322** P **P 18 18 05.9 -0.3**
comp=Z,5.8nm,0.6s,baz=79,slow=5.2,SNR=3.7
**OBN Obninsk 43.88 322***de*P **P 18 18 05.8 -0.3**
OBN *e* 18 19 52.6
OBN pmax pmax
comp=Z,55nm,1.7s
**LEF Lefka 44.34 293** ⇓P **P 18 18 14.3 +4.2**
**KLMR Klimovskoe 44.62 330** *e*P **P 18 18 11.2 -0.8**
KLMR *e* 18 19 56.8
KLMR pmax pmax
comp=Z,12nm,0.7s
**KLMR Klimovskoe 44.62 330** *e*P **P 18 18 11.2 -0.8**
KLMR AMP 18 18 17.4
comp=Z,12nm,0.7s
KLMR *e*PP **PP 18 19 56.9 +0.9**
**GRNR Gornyy 44.90 45**⇑*i*P **P 18 18 14.6 +0.2**
GRNR pmax pmax
comp=Z,5.0nm,0.8s
GRNR MLR MLR
comp=E,110nm,16.0s
GRNR MLR MLR

comp=N,100nm,17.0s
GRNR MLR MLR

**MRSI Marisa 44.91 121** P **P** **18 18 16.9 +2.0**
comp=Z,220nm,18.0s
comp=Z,56nm,0.7s
**YAK Yakutsk 45.06 28** P **P** **18 18 16.1 +0.7**
comp=Z,18nm,0.7s,baz=211,slow=1.4,SNR=22
**YAK Yakutsk 45.06 28** *eP* **P** **18 18 15.7 +0.2**
YAK pmax pmax
comp=Z,18nm,0.8s
**YAK Yakutsk 45.06 28** P **P** **18 18 14.1 -1.4**
**MAJO Matsushiro 45.55 65**⇓ *eP* **P** **18 18 19.5 -0.3**
MAJO pmax pmax
comp=Z,13nm,1.0s
**MAT Matsushiro 45.55 65** P **P** **18 18 19.1 -0.7**
**MJAR Matsushiro Arr 45.55 65** P **P** **18 18 19.5 -0.3**
comp=Z,6.8nm,0.8s,baz=280,slow=10,SNR=11
MJAR LR LR 18 38 31.5
comp=Z,80nm,18.9s,baz=294,slow=37
**ABJI Asem Bagus 45.58 137** P **P** **18 18 21.6 +1.5**
comp=Z,53nm,1.0s
**TTSI Tana Toraja 45.73 127** P **P** **18 18 23.1 +1.8**
comp=Z,48nm,1.0s
**ISP Isparta 46.00 297**⇑ *eP* **P** **18 18 26.6 +3.1**
ISP pmax pmax
comp=Z,15nm,0.9s
**JAGI Jajag, Banyuwa 46.06 138** P **P** **18 18 24.0 0.0**
**KAPI Kappang 47.07 129** P **P** **18 18 30.9 -1.0**
KAPI pmax pmax
comp=Z,10.0nm,0.8s
**KAPI Kappang 47.07 129** P **P** **18 18 30.9 -1.0**
KAPI IAmb IAmb 18 18 32.9
comp=Z,10nm,0.8s
**MILM Milestii Mici 47.20 309**⇓ P **P** **18 18 35.4 +2.9**
**MILM Milestii Mici 47.20 309**⇓ P **P** **18 18 35.4 +2.9**
**AKASG Malin Array Be 47.27 314** P **P** **18 18 32.1 -0.8**
comp=Z,5.9nm,0.7s,baz=79,slow=7.0,SNR=26
**AKASG Malin Array Be 47.27 314** P **P** **18 18 32.2 -0.8**
AKASG IAmb IAmb 18 18 36.6
comp=Z,15nm,0.7s
**AKBB Malin Array Si 47.27 314**⇓ *eP* **P** **18 18 32.5 -0.5**
**AKBB Malin Array Si 47.27 314** P **P** **18 18 32.3 -0.7**
**BKSI Bulukumba 47.55 129** P **P** **18 18 39.7 +4.1**
comp=Z,20nm,0.8s
**SORM Soroca 47.59 311**⇓ P **P** **18 18 34.9 -0.6**
**SORM Soroca 47.59 311**⇓ P **P** **18 18 34.9 -0.6**
**CFR Carcaliu 47.60 307**⇓ P **P** **18 18 35.8 +0.1**
**CFR Carcaliu 47.60 307**⇓ P **P** **18 18 35.8 +0.1**
**VLDR Vladesti 47.66 308**⇓ P **P** **18 18 40.6 +4.5**
**ICOR Ion Corvin 47.83 305**⇑ P **P** **18 18 41.9 +4.4**
**PANC Panciu 48.31 308**⇑ P P 18 18 46.0 +4.8
**ODBI Odobesti 48.37 308**⇑ P **P** **18 18 44.5 +2.8**
**ASAJ Asahikawa 48.53 55** LR LR 18 42 41.1
comp=Z,60nm,19.2s,baz=304,slow=40
**PLAI Plampang 48.58 134** P **P** **18 18 44.9 +1.3**
**VRI Vrincioaia 48.60 308**⇓ P **P** **18 18 47.8 +4.3**
**VRI Vrincioaia 48.60 308**⇓ P **P** **18 18 47.8 +4.3**
**MNK Minsk 48.62 319** *i* P **P** **18 18 42.8 -0.6**
MNK *i* 18 20 08.2
MNK *i* 18 20 35.8
MNK *i* PPP PPP 18 21 24.9
MNK *i* S **S** **18 25 44.1 -0.7**
MNK pmax pmax
comp=E,3.0nm,0.8s
MNK pmax pmax
comp=N,5.0nm,0.8s
MNK pmax pmax
comp=Z,30nm,0.8s
MNK MLR MLR
comp=Z,130nm,17.0s
MNK MLR MLR
comp=N,192nm,18.0s
MNK MLR MLR
comp=E,39nm,17.0s
**MNK Minsk 48.62 319** *i* P **P** **18 18 42.9 -0.6**
comp=E,3.0nm,0.8s
MNK *i* P **P** **18 18 42.9 -0.6**
comp=N,5.0nm,0.8s
MNK *i* P **P** **18 18 42.9 -0.6**
comp=Z,30nm,0.8s,baz=99
MNK *i* PcP **PcP** **18 20 08.2 -0.6**
MNK *i* PP **PP** **18 20 35.9 -0.3**
MNK *i* PPP PPP 18 21 25.0
MNK *i* S **S** **18 25 44.2 -0.6**
MNK *i* SS **ScS** **18 28 45.6 +10**
MNK *i* SSS SSS 18 29 54.6
MNK *i* LQ LQ 18 35 44.0
MNK *i* LR LR 18 37 42.8
MNK *i* LRM MLR 18 41 02.3
comp=Z,130nm,17.1s
MNK *i* LRM MLR 18 41 30.2
comp=N,192nm,17.6s
MNK *i* LRM MLR 18 41 52.4
comp=E,39nm,17.1s
**YSS Yuzh-Sakhalins 48.66 51** *eP* **P** **18 18 44.0 +0.1**
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS MLR MLR
comp=Z,400nm,16.0s
**TESR Tescani 48.67 309**⇓ P **P** **18 18 44.2 +0.2**
**ISR Istrita 48.73 307**⇓ P P 18 18 50.2 +5.6
**ISR Istrita 48.73 307**⇓ P P 18 18 50.2 +5.7
**COVR Voineasa-Covas 48.97 308**⇑ P **P** **18 18 47.4 +1.1**
**MLR Muntele Rosu 49.15 307**⇓ P **P** **18 18 49.2 +1.3**
**MLR Muntele Rosu 49.15 307** P **P** **18 18 48.8 +0.9**
comp=Z,45nm,0.8s,baz=108,slow=3.5,SNR=18
**MLR Muntele Rosu 49.15 307**⇓ P **P** **18 18 49.2 +1.3**
**OZUR 49.26 308**⇑ P **P** **18 18 47.8 -0.8**
**NACGM Naroch 49.31 320** *i* P **P** **18 18 48.0 -0.8**
**BBSI Bau Bau 49.38 126** P P 18 18 55.8 +6.0
**IDID Didziasalis 49.40 320** *eP* **P** **18 18 51.2 +1.8**
**DOPR Dopca 49.54 308**⇓ P **P** **18 18 51.3 +0.7**
**BURAR Bucovina Array 49.67 310**⇑ P **P** **18 18 52.0 +0.2**
**BURAR Bucovina Array 49.67 310**⇑ P **P** **18 18 52.0 +0.2**
**BURAR Bucovina Array 49.67 310** P **P** **18 18 51.7 -0.1**
BURAR IAmb IAmb 18 18 56.5
comp=Z,18nm,0.8s
**BUR08 Bucovina Ar. S 49.68 310** P **P** **18 18 52.0 +0.1**
**IIGN Ignalina 49.70 320** *eP* **P** **18 18 52.5 +0.8**
**MTUR Matau 49.77 307**⇓ P P 18 18 59.0 +6.5
**MTUR Matau 49.77 307**⇓ P P 18 18 59.0 +6.4
**VOIR 49.78 307**⇓ P **P** **18 18 55.4 +2.8**
**VOIR 49.78 307**⇓ P **P** **18 18 55.4 +2.8**
**TIXI Tiksi 49.95 17** *ceP* **P** **18 18 53.4 0.0**
TIXI pmax pmax
comp=Z,12nm,0.6s
**TIXI Tiksi 49.95 17** P **P** **18 18 53.4 0.0**
TIXI IAmb IAmb 18 18 54.4
comp=Z,17nm,0.8s
**VSU Vasula 49.96 324** *eP* **P** **18 18 56.2 +2.5**
**APA Apatity 49.99 337**⇓ *i* P P 18 18 39.8 -14
APA pmax pmax
comp=Z,8.0nm,1.1s
APA MLR MLR
comp=Z,2μm,18.0s
**LOT Lotru 50.68 307** P **P** **18 19 00.1 +0.6**
**IDI Anoyia 50.81 294** P **P** **18 18 59.9 -0.6**
comp=Z,12nm,0.7s,baz=24,slow=14,SNR=2.3
**BMR Baia Mare 50.84 310** P **P** **18 19 01.7 +1.2**
**BMR Baia Mare 50.84 310** P **P** **18 19 01.7 +1.2**
**FIA1 FINESS Array S 50.93 328** P **P** **18 19 00.8 -0.1**
FIA1 IAmb IAmb 18 19 05.5
comp=Z,18nm,0.9s
**FINES FINESS Array B 50.94 328** P **P** **18 19 00.6 -0.3**
comp=Z,11nm,0.8s,baz=114,slow=7.6,SNR=24
**FINES FINESS Array B 50.94 328** P **P** **18 19 00.8 -0.1**
**FINES FINESS Array B 50.94 328** P **P** **18 19 00.8 -0.1**
**PABE Paberze 50.99 320** P **P** **18 19 01.3 -0.2**
**PABE Paberze 50.99 320** *eP* **P** **18 19 02.2 +0.8**
**VTS Vitosha 51.22 304** P **P** **18 19 04.3 +0.7**
**VTS Vitosha 51.22 304** P **P** **18 19 04.3 +0.7**
**SUW Suwalki 51.30 319** *eP* **P** **18 19 04.7 +0.9**
**KWP Kalwaria Pacla 51.37 313** *eP* **P** **18 19 08.3 +3.9**
**MMRI Maumere 51.38 130** P **P** **18 19 02.9 -2.0**
**GZR Gura Zlata 51.38 307**⇑ P **P** **18 19 08.1 +3.4**
**GZR Gura Zlata 51.38 307**⇑ P **P** **18 19 08.1 +3.4**
**TRPA Tarpa 51.48 311**⇓ P **P** **18 19 08.5 +3.2**
**TRPA Tarpa 51.48 311** P **P** **18 19 05.7 +0.5**
**MTSE Matsula 51.51 324** *eP* **P** **18 19 06.7 +1.3**
**UZH Uzhgorod 51.64 311** *eP* **P** **18 19 06.2 -0.2**
**VAY Valandovo 51.83 302** *i* P **P** **18 19 11.2 +3.2**
**STIP Stip 52.08 303** *i* P **P** **18 19 11.6 +1.8**
**MDVR Moldovita 52.17 307**⇓ P **P** **18 19 12.1 +1.5**
**BZS Buzias 52.19 308**⇓ P P 18 18 60.0 -11

**CRVS Cervenica-Dubn 52.19 312** *eP* P 18 19 15.4 +4.8
**CRVS Cervenica-Dubn 52.19 312** *eP* P 18 19 15.4 +4.8
**AGG Agios Georgios 52.28 299** P **P** **18 19 10.2 -1.3**
AGG pmax pmax
comp=Z,19nm,0.8s
**AGG Agios Georgios 52.28 299** P **P** **18 19 10.2 -1.3**
AGG IAmb IAmb 18 19 14.3
comp=Z,19nm,0.8s
**SKO Skopje 52.60 303** *i* P **P** **18 19 16.6 +2.8**
**NIE Niedzica 52.94 312** *eP* P 18 19 21.3 +5.2
**KEV Kevo 53.01 338** P **P** **18 19 15.2 -1.1**
KEV pmax pmax
comp=Z,176nm,1.9s
**KEV Kevo 53.01 338** P **P** **18 19 15.2 -1.1**
**OJC Ojcow 53.25 313** P **P** **18 19 17.1 -1.3**
OJC pmax pmax
comp=Z,10.0nm,0.8s
**OJC Ojcow 53.25 313** P **P** **18 19 17.1 -1.3**
**PSZ Piszkesteto 53.26 311** P **P** **18 19 21.2 +2.6**
**ARCES ARCESS Array B 53.43 338** P **P** **18 19 17.9 -1.5**
comp=Z,9.1nm,0.8s,baz=93,slow=7.4,SNR=14
**ARCES ARCESS Array B 53.43 338** P **P** **18 19 18.4 -1.0**
ARCES pmax pmax
comp=Z,111nm,1.9s
**ARCES ARCESS Array B 53.43 338** P **P** **18 19 18.4 -1.0**
**FRGS Fruska Gora 53.49 307**⇑ P **P** **18 19 19.7 -0.6**
**SOEI Soe 53.57 129** P **P** **18 19 20.5 -0.8**
**SOEI Soe 53.57 129** P **P** **18 19 20.9 -0.4**
comp=Z,79nm,0.9s
**SOEI Soe 53.57 129** P **P** **18 19 21.1 -0.2**
**KMBO Kilima Mbogo 53.93 246** P **P** **18 19 22.9 -1.2**
comp=Z,8.6nm,0.9s,baz=46,slow=11,SNR=19
**KMBO Kilima Mbogo 53.93 246**⇑ *eP* **P** **18 19 27.1 +3.0**
**VYHS Vyhne 53.94 311** *eP* **P** **18 19 26.8 +3.3**
VYHS pmax pmax
comp=Z,14nm,1.4s
**VYHS Vyhne 53.94 311** *eP* **P** **18 19 26.8 +3.3**
**PDG Podgorica 54.16 304**⇑ P **P** **18 19 24.3 -0.9**
**MORH Mrgy, Hungar 54.22 309**⇑ P **P** **18 19 29.1 +3.6**
**MORH Mrgy, Hungar 54.22 309** P **P** **18 19 24.8 -0.7**
**KOLL Kolacno 54.22 311** *eP* **P** **18 19 28.8 +3.3**
**MA2 Magadan 54.25 35** P **P** **18 19 25.7 +0.1**
comp=Z,5.7nm,0.4s,baz=264,slow=6.8,SNR=43
MA2 LR LR 18 41 50.5
comp=Z,34nm,21.2s,baz=353,slow=35
**MA2 Magadan 54.25 35** *ceP* **P** **18 19 26.0 +0.4**
MA2 pmax pmax
comp=Z,18nm,1.0s
**MA2 Magadan 54.25 35** P **P** **18 19 24.9 -0.7**
MA2 IAmb IAmb 18 19 27.0
comp=Z,14nm,0.9s
**SRO2 Moca 54.27 310** *eP* **P** **18 19 28.9 +3.0**
SRO2 pmax pmax
comp=Z,26nm,0.9s
**SRO2 Moca 54.27 310** *eP* **P** **18 19 28.9 +3.0**
**SRO Srobarova 54.33 311** *eP* **P** **18 19 30.8 +4.5**
SRO pmax pmax
comp=Z,25nm,0.9s
**SRO Srobarova 54.33 311** *eP* **P** **18 19 30.8 +4.5**
**OKC Ostrava-Krasne 54.33 313** *eP* **P** **18 19 25.4 -0.9**
OKC *e* 18 19 29.6
**OKC Ostrava-Krasne 54.33 313** *eP* **P** **18 19 25.4 -0.9**
OKC *ep*P **pP** **18 19 29.6 -1.3**
**JAVC Velka Javorina 54.69 312** *eP* **P** **18 19 33.3 +4.3**
**MORC Moravsky Berou 54.72 313**⇓ P **P** **18 19 31.4 +2.2**
**MORC Moravsky Berou 54.72 313**⇓ P **P** **18 19 31.4 +2.2**
**MORC Moravsky Berou 54.72 313** *eP* **P** **18 19 32.9 +3.7**
**UPP Uppsala 54.80 325** *eP* **P** **18 19 32.1 +2.6**
**SMOL Smolenice 54.87 311** *eP* **P** **18 19 33.7 +3.4**
**SMOL Smolenice 54.87 311** *eP* **P** **18 19 33.7 +3.4**
**MPLH Magyarpolny 54.90 310** P **P** **18 19 33.2 +2.8**
**MODS Modra-Piesok 54.98 311** *eP* P 18 19 38.5 +7.4
**MODS Modra-Piesok 54.98 311** *eP* P 18 19 38.5 +7.4
**VIKU Vikbolandet 55.20 324** *eP* **P** **18 19 35.4 +3.0**
**STON Ston 55.24 305** P **P** **18 19 34.8 +1.7**
**SEY Seymchan 55.35 31** P **P** **18 19 34.0 +0.5**
comp=Z,7.2nm,0.8s,baz=263,slow=7.5,SNR=37
**VRAC Vranov 55.37 312** P **P** **18 19 33.7 -0.1**
comp=Z,11nm,0.8s,baz=92,slow=10,SNR=5.4
**VRAC Vranov 55.37 312** *eP* **P** **18 19 34.1 +0.3**
VRAC *e* 18 19 37.5
**DPC Dobruska-Polom 55.48 314** *eP* **P** **18 19 34.2 -0.4**
DPC *e* 18 19 38.4
**DPC Dobruska-Polom 55.48 314** *eP* **P** **18 19 34.2 -0.4**
DPC *ep*P **pP** **18 19 38.4 -0.9**
**KRUC Moravsky 55.51 312** *eP* **P** **18 19 34.9 0.0**
KRUC *e* 18 19 38.4
**OSTC Ostas 55.53 314** *eP* **P** **18 19 34.8 -0.2**
OSTC *ex* x 18 19 37.8
**CHVC Chvalec 55.63 314** *eP* **P** **18 19 35.7 0.0**
CHVC *ex* x 18 19 39.0
**LSTV Lastovo 55.85 305** P **P** **18 19 39.7 +2.3**
**CONA Conrad Observa 55.96 311** *eP* **P** **18 19 38.2 0.0**
comp=Z,4.3nm,0.8s,SNR=4.3
**LOBO Lobor 56.00 309** P **P** **18 19 40.5 +2.1**
**HVAR Hvar 56.11 305** P **P** **18 19 37.6 -1.7**
**ARSA Arzberg 56.26 310** *i* P **P** **18 19 39.7 -0.5**
comp=Z,2.1nm,0.7s
**MATE Matera 56.31 302**⇓ P **P** **18 19 43.7 +3.0**
**TIP Timpagrande 56.53 300** P **P** **18 19 39.6 -2.8**
TIP IAmb IAmb 18 19 60.0
comp=Z,33nm,1.6s
**MORI Morici 56.55 306** P **P** **18 19 40.9 -1.4**
**ZIRJ Zirje 56.62 306** P **P** **18 19 41.2 -1.6**
**PRU Pruhonice 56.64 313** *eP* **P** **18 19 42.7 -0.2**
PRU *e* 18 19 46.6
**PRU Pruhonice 56.64 313** *eP* **P** **18 19 42.7 -0.2**
PRU *ep*P **pP** **18 19 46.6 -1.0**
**SOKA Soboth 56.66 309** *i* P **P** **18 19 43.1 0.0**
comp=Z,2.3nm,0.6s
**HFS Hagfors 56.79 326** LR LR 18 47 55.9
comp=Z,327nm,20.3s,baz=336,slow=40
**SGRT San Giovanni R 56.85 303** P **P** **18 19 44.1 -0.6**
SGRT IAmb IAmb 18 19 48.8
comp=Z,25nm,1.0s
**CKRC Cesky Krumlov 56.90 312** *eP* **P** **18 19 46.6 +1.7**
**BRG Berggiesshubel 56.95 314** *eP* **P** **18 19 44.7 -0.4**
BRG Amp 18 19 45.4
comp=Z,2.7nm,0.5s
BRG *ex* x 18 19 48.7
BRG Amp 18 19 50.1
comp=Z,7.1nm,0.9s
**BRG Berggiesshubel 56.95 314** *eP* **P** **18 19 44.7 -0.4**
BRG *e* 18 19 48.6
BRG pmax pmax
comp=Z,3.0nm,0.5s
**DUGI Dugi Otok 56.99 306** P **P** **18 19 44.3 -1.3**
**OBKA Obir 57.01 309** *eP* **P** **18 19 45.2 -0.5**
comp=Z,3.6nm,0.8s,SNR=4.7
**NVLJ Novalja 57.04 307** P **P** **18 19 44.8 -1.0**
**GERES GERESS Array B 57.30 312** P **P** **18 19 48.3 +0.5**
comp=Z,4.0nm,1.0s,baz=69,slow=5.4,SNR=4.0
GERES PcP **PcP** **18 20 43.8 +1.9**
comp=Z,1.3nm,0.5s,baz=94,slow=2.9,SNR=2.7
**KHC Kasperske Hory 57.35 312** *eP* **P** **18 19 47.0 -1.0**
KHC pmax pmax
comp=Z,4.0nm,0.9s
**KHC Kasperske Hory 57.35 312** *eP* **P** **18 19 46.7 -1.3**
KHC *ep*P **pP** **18 19 51.2 -1.5**
**NC405 NORSAR Array S 57.77 327** P **P** **18 19 49.4 -1.3**
**NB2 NORSAR Subarra 58.02 327** P **P** **18 19 51.2 -1.3**
comp=Z,1.7nm,0.7s,baz=89,slow=6.9
**NOA NORSAR Array B 58.02 327** P **P** **18 19 51.5 -1.0**
comp=Z,3.6nm,0.9s,baz=90,slow=7.0,SNR=7.2
**PETK Petropavlovsk- 58.12 43** P **P** **18 19 52.7 -0.6**
comp=Z,3.4nm,0.8s,baz=287,slow=5.3,SNR=2.8
**STAL STALIGIAL 58.30 309** P **P** **18 19 53.4 -1.4**
STAL IAmb IAmb 18 19 58.5
comp=Z,14nm,0.9s
**ABTA Abfaltersbach 58.37 310** *eP* **P** **18 19 53.4 -1.9**
comp=Z,1.1nm,0.6s
**SPITS Spitsbergen Ar 58.42 347** P **P** **18 19 54.6 -0.5**
SPITS pmax pmax
comp=Z,217nm,2.0s
**NRCA Norcia 58.58 305** P **P** **18 19 56.0 -0.8**
**WTTA Wattenberg 58.88 310** *eP* **P** **18 19 57.4 -1.6**
comp=Z,1.1nm,0.5s
**WATA Walderalm 58.91 311** *eP* **P** **18 19 57.5 -1.6**
comp=Z,1.2nm,0.5s
**MBAR Mbarara 58.98 251** *deP* **P** **18 20 02.7 +2.6**
**MBAR Mbarara 58.98 251** P **P** **18 19 59.0 -1.1**
MBAR IAmb IAmb 18 20 03.8
comp=Z,14nm,0.6s

**MOTA Moosalm 59.23 311** *eP* **P** **18 20 00.1 -1.2**
comp=Z,5.1nm,0.8s
**RETA Reutte 59.43 311** *eP* **P** **18 20 01.2 -1.4**
comp=Z,1.9nm,0.6s
**FETA Feichten 59.53 310** *eP* **P** **18 20 01.9 -1.6**
comp=Z,1.3nm,0.7s,SNR=4.3
**DAVA Damuels 60.06 311** *eP* **P** **18 20 05.8 -1.2**
comp=Z,8.7nm,0.9s
**MTN Manton Dam 60.54 126** P **P** **18 20 09.8 -0.7**
**FITZ Fitzroy Crossi 60.55 134** P **P** **18 20 10.4 0.0**
FITZ IAmb IAmb 18 20 11.0
comp=Z,10nm,0.7s
**FITZ Fitzroy Crossi 60.55 134** P **P** **18 20 10.8 +0.3**
**KNRA Kununurra 60.84 130** P **P** **18 20 12.9 +0.4**
**BILL Bilibino 61.25 25**⇓ *i* P **P** **18 20 15.7 +1.0**
BILL *i* 18 20 19.5
BILL pmax pmax
comp=Z,12nm,1.3s
**BILL Bilibino 61.25 25** P **P** **18 20 15.6 +1.0**
BILL IAmb IAmb 18 20 16.7
comp=Z,14nm,1.2s
**GENI Genyem 61.30 110** P **P** **18 20 17.1 +1.3**
comp=Z,43nm,1.2s
**SENIN Lac Senin/Sane 61.97 310** P **P** **18 20 18.8 -1.4**
SENIN IAmb IAmb 18 20 24.0
comp=Z,15nm,1.0s
**KEST Kesra 63.07 298** P **P** **18 20 27.7 +0.2**
comp=Z,23nm,0.8s,baz=56,slow=1.1,SNR=8.5
**MORW Morawa 64.14 150** P **P** **18 20 33.5 -0.9**
MORW IAmb IAmb 18 20 34.8
comp=Z,33nm,1.5s
**WRKA Warakurna 67.36 137** P **P** **18 20 56.0 +0.8**
**WB0 Warramunga Arr 67.52 129** P **P** **18 20 56.6 +0.2**
**WRA Warramunga Arr 67.61 129** P **P** **18 20 57.2 +0.3**
comp=Z,13nm,0.7s,baz=323,slow=6.5,SNR=239
**WRA Warramunga Arr 67.61 129** P **P** **18 20 56.8 -0.1**
**WRAB Tennant Creek 67.61 129** P **P** **18 20 57.5 +0.6**
WRAB pmax pmax
comp=Z,23nm,0.9s
**WRAB Tennant Creek 67.61 129** P **P** **18 20 57.5 +0.6**
**WRAB Tennant Creek 67.61 129** P **P** **18 20 57.8 +0.9**
**WB2 Warramunga Arr 67.61 129** P **P** **18 20 57.5 +0.5**
**WR0 Warramunga Arr 67.75 129** P **P** **18 20 58.2 +0.3**
WR0 IAmb IAmb 18 20 59.1
comp=Z,18nm,1.1s
**LSZ Lusaka 69.59 239** LR LR 18 51 23.6
comp=Z,44nm,18.3s,baz=83,slow=36
**AS31 Alice Springs 69.88 132** P **P** **18 21 11.4 +0.3**
**ASAR Alice Springs 69.88 132** P **P** **18 21 11.4 +0.4**
comp=Z,12nm,0.7s,baz=316,slow=6.3,SNR=284
**COEN Coen 70.28 118** P **P** **18 21 13.6 0.0**
COEN IAmb IAmb 18 23 23.1
comp=Z,20nm,1.6s
**PMG Port Moresby 70.85 112** P **P** **18 21 17.5 +0.4**
PMG pmax pmax
comp=Z,17nm,0.8s
**PMG Port Moresby 70.85 112** P **P** **18 21 17.4 +0.4**
PMG IAmb IAmb 18 21 18.6
comp=Z,16nm,0.8s
**PMG Port Moresby 70.85 112** P **P** **18 21 17.9 +0.8**
**PMG Port Moresby 70.85 112** P **P** **18 21 17.8 +0.7**
**FORT Forrest 71.57 141** P **P** **18 21 19.2 -1.9**
FORT IAmb IAmb 18 21 21.6
comp=Z,15nm,0.7s
**ESDC Sonseca Array 71.80 306** P **P** **18 21 21.9 -0.7**
comp=Z,3.8nm,1.0s,baz=66,slow=5.3,SNR=8.8
**ESDC Sonseca Array 71.80 306** P **P** **18 21 22.0 -0.7**
**A21K Barrow 72.25 17** P **P** **18 21 25.2 +0.5**
**A21K Barrow 72.25 17** P **P** **18 21 25.1 +0.4**
baz=305
**SUMG Summit 72.61 345** *i* P **P** **18 21 27.0 -0.3**
**ANM Nome 73.11 25** P **P** **18 21 30.6 +0.7**
baz=300
**MTSU Mount Surprise 73.66 121** P **P** **18 21 35.0 +1.1**
**OOD Oodnadatta 73.91 134** P **P** **18 21 35.3 +0.2**
**MULG Mulgathing 74.66 137** P **P** **18 21 39.6 +0.2**
**TOLK Toolik Lake Re 75.83 18** P **P** **18 21 46.4 +0.7**
TOLK IAmb IAmb 18 21 47.5
comp=Z,13nm,0.8s
**TOLK Toolik Lake Re 75.83 18** P **P** **18 21 46.2 +0.4**
baz=312
**CTA Charters Tower 76.29 122** P **P** **18 21 49.5 +0.5**
**COLD Coldfoot 76.61 19** P **P** **18 21 50.4 +0.3**
**COLD Coldfoot 76.61 19** P **P** **18 21 50.6 +0.5**
baz=312
**H21K Melozitna Rive 76.85 21** P **P** **18 21 52.1 +0.6**
**H21K Melozitna Rive 76.85 21** P **P** **18 21 52.2 +0.6**
baz=310
**INKA Innaminka 77.16 131** P **P** **18 21 55.1 +1.3**
**LCRK Leigh Creek 77.33 135** P **P** **18 21 55.2 +0.5**
**J20K Nowinta River 77.35 23** P **P** **18 21 55.5 +1.2**
**J20K Nowinta River 77.35 23** P **P** **18 21 55.4 +1.0**
baz=309
**I21K Tanana 77.42 21** P **P** **18 21 55.0 +0.3**
baz=311
**TTA Tatalina 77.48 24** P **P** **18 21 56.3 +1.1**
baz=308
**LBTB Lobatse 77.54 233** LR LR 18 55 53.4
comp=Z,38nm,18.2s,baz=94,slow=36
**LBTB Lobatse 77.54 233** P **P** **18 21 55.6 -0.5**
LBTB pmax pmax
comp=Z,13nm,0.8s
**LBTB Lobatse 77.54 233** P **P** **18 21 55.6 -0.5**
LBTB IAmb IAmb 18 22 00.1
comp=Z,13nm,0.8s
**BBOO Buckleboo 77.65 138** P **P** **18 21 56.2 -0.2**
BBOO IAmb IAmb 18 21 57.2
comp=Z,20nm,0.8s
**BBOO Buckleboo 77.65 138** P **P** **18 21 56.5 +0.1**
**TORD Torodi Ar. Bea 77.87 279** P **P** **18 21 57.2 -0.9**
comp=Z,4.6nm,0.8s,baz=41,slow=3.6,SNR=19
**TORD Torodi Ar. Bea 77.87 279** P **P** **18 21 56.9 -1.2**
**K20K Telida 77.90 23** P **P** **18 21 58.9 +1.4**
K20K IAmb IAmb 18 22 00.0
comp=Z,23nm,1.2s
**K20K Telida 77.90 23** P **P** **18 21 58.8 +1.3**
baz=309
**MLY Manley 77.92 21** P **P** **18 21 58.4 +0.9**
baz=312
**BMAR Burnt Mountain 78.02 17** P **P** **18 21 59.4 +1.3**
**CHUM Lake Minchumin 78.16 22** P **P** **18 21 59.8 +0.9**
baz=311
**A36M Sachs Harbour 78.18 9** P **P** **18 21 58.8 0.0**
baz=333
**H24K Noodor Dome 78.24 20** P **P** **18 22 00.3 +0.9**
H24K IAmb IAmb 18 23 39.2
comp=Z,32nm,1.9s
**H24K Noodor Dome 78.24 20** P **P** **18 21 59.5 +0.2**
baz=314
**I23K Minto, Yukon-K 78.27 20** P **P** **18 22 00.2 +0.8**
I23K IAmb IAmb 18 22 07.2
comp=Z,29nm,1.6s
**I23K Minto, Yukon-K 78.27 20** P **P** **18 22 00.3 +0.9**
baz=313
**L19K White Mountain 78.36 24** P **P** **18 22 00.6 +0.5**
baz=309
**BPAW Bear Paw Mtn. 78.46 22** P **P** **18 22 01.3 +0.8**
baz=312
**L20K Farewell, AK 78.53 24** P **P** **18 22 02.4 +1.5**
baz=310
**CAST Castle Rocks 78.54 23** P **P** **18 22 01.7 +0.7**
baz=311
**M19K Big River Lodg 78.71 24** P **P** **18 22 02.7 +0.8**
baz=309
**NEA2 Nenana 78.74 21** P **P** **18 22 02.4 +0.3**
baz=313
**MDM Murphy Dome 78.75 20** P **P** **18 22 02.5 +0.4**
MDM IAmb IAmb 18 22 04.0
comp=Z,43nm,1.6s
**QLP Quilpie 78.80 128** P **P** **18 22 04.3 +1.4**
**PPLA Purkeypile 78.85 23** P **P** **18 22 03.6 +0.7**
baz=311
**POKR Poker Plat Res 78.88 20** P **P** **18 22 03.4 +0.6**
baz=315
**TCOL CIGO, UAF Yank 78.92 20** P **P** **18 22 03.8 +0.7**
baz=314
**CCB Clear Creek Bu 79.09 20** P **P** **18 22 04.0 0.0**
CCB IAmb IAmb 18 25 00.2
comp=Z,43nm,2.0s
**PRP Porcupine Dome 79.15 19** P **P** **18 22 05.6 +1.1**
baz=316
**NAPP Napperby 79.17 137** P **P** **18 22 05.5 +0.7**
**IL31 79.29 20** P **P** **18 22 03.8 -1.2**
IL31 IAmb IAmb 18 22 15.8
comp=Z,49nm,2.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ILAR | **Eielson Array** | **79.29** | **20** | P | | **P** | | **18 22 04.5** | **-0.6** |
| | comp=Z,4.5nm,0.7s,baz=304,slow=4.7,SNR=45 | | | | | | | | |
| ILAR | | | | PP | | **PP** | | **18 25 02.1** | **-2.1** |
| | comp=Z,0.8nm,0.9s,baz=307,slow=5.8,SNR=3.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **79.29** | **20** | P | | **P** | | **18 22 02.9** | **-2.2** |
| **N19K** | **Bonanza Creek** | **79.37** | **25** | P | | **P** | | **18 22 07.0** | **+1.3** |
| | baz=309 | | | | | | | | |
| **MCK** | **McKinley** | **79.38** | **21** | P | | **P** | | **18 22 05.8** | **+0.3** |
| | baz=314 | | | | | | | | |
| **RND** | **Reindeer** | **79.63** | **22** | P | | **P** | | **18 22 06.6** | **-0.4** |
| RND | | | | pmax | pmax | | | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **RND** | **Reindeer** | **79.63** | **22** | P | | **P** | | **18 22 06.6** | **-0.4** |
| RND | | | | IAmb | IAmb | | | 18 22 07.2 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **HTT** | **Hallett** | **79.81** | **136** | P | | **P** | | **18 22 08.7** | **+0.4** |
| **J25K** | **Salcha River,** | **79.86** | **20** | P | | **P** | | **18 22 07.5** | **-0.7** |
| | baz=316 | | | | | | | | |
| **INK** | **Inuvik** | **79.94** | **14** | P | | **P** | | **18 22 08.4** | **-0.1** |
| | baz=326 | | | | | | | | |
| **BOSA** | **Boshof** | **80.04** | **230** | P | | **P** | | **18 22 08.7** | **-1.1** |
| | comp=Z,5.6nm,0.8s,baz=50,slow=6.7,SNR=5.1 | | | | | | | | |
| **BOSA** | **Boshof** | **80.04** | **230** | PKHKP | PKPpre | | | 18 22 07.7 | |
| **BOSA** | **Boshof** | **80.04** | **230** | P | | **P** | | **18 22 07.7** | **-2.1** |
| **BOSA** | **Boshof** | **80.04** | **230** | pmax | pmax | | | | |
| | comp=Z,67nm,2.0s | | | | | | | | |
| **DHY** | **Denali Highway** | **80.34** | **21** | P | | **P** | | **18 22 11.2** | **+0.2** |
| | baz=315 | | | | | | | | |
| **STKA** | **Stephens Creek** | **80.44** | **134** | P | | **P** | | **18 22 11.3** | **-0.4** |
| | comp=Z,7.1nm,0.4s,baz=332,slow=4.4,SNR=34 | | | | | | | | |
| **STKA** | **Stephens Creek** | **80.44** | **134** | P | | **P** | | **18 22 11.6** | **-0.1** |
| STKA | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **STKA** | **Stephens Creek** | **80.44** | **134** | P | | **P** | | **18 22 11.6** | **-0.1** |
| **STKA** | **Stephens Creek** | **80.44** | **134** | P | | **P** | | **18 22 11.8** | **+0.1** |
| **J26L** | **Joseph Creek** | **80.47** | **19** | P | | **P** | | **18 22 11.4** | **-0.1** |
| | baz=318 | | | | | | | | |
| **RIDG** | **Independent Ri** | **80.65** | **20** | P | | **P** | | **18 22 12.0** | **-0.5** |
| | baz=317 | | | | | | | | |
| **TWOA** | **Tennyson Woods** | **80.70** | **138** | P | | **P** | | **18 22 13.7** | **+0.7** |
| **SCRK** | **Sand Creek** | **80.73** | **20** | P | | **P** | | **18 22 12.1** | **-0.9** |
| | baz=316 | | | | | | | | |
| **C36M** | **Paulatuk** | **80.74** | **10** | P | | **P** | | **18 22 11.7** | **-1.1** |
| **C36M** | **Paulatuk** | **80.74** | **10** | P | | **P** | | **18 22 11.9** | **-0.8** |
| | baz=334 | | | | | | | | |
| **PMR** | **Palmer** | **80.79** | **23** | P | | **P** | | **18 22 13.0** | **-0.2** |
| | baz=314 | | | | | | | | |
| **SML** | **Sawmill** | **80.92** | **23** | P | | **P** | | **18 22 14.0** | **0.0** |
| **SML** | **Sawmill** | **80.92** | **23** | P | | **P** | | **18 22 14.3** | **+0.3** |
| | baz=314 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **80.93** | **24** | P | | **P** | | **18 22 14.1** | **+0.1** |
| | baz=313 | | | | | | | | |
| **PAX** | **Paxson** | **81.02** | **21** | P | | **P** | | **18 22 15.4** | **+0.8** |
| | baz=317 | | | | | | | | |
| **KNK** | **Knik Glacier** | **81.15** | **23** | P | | **P** | | **18 22 15.3** | **+0.2** |
| **KNK** | **Knik Glacier** | **81.15** | **23** | P | | **P** | | **18 22 15.4** | **+0.2** |
| | baz=314 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.24** | **22** | P | | **P** | | **18 22 16.4** | **+0.7** |
| SCM | | | | pmax | pmax | | | | |
| | comp=Z,144nm,1.8s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.24** | **22** | P | | **P** | | **18 22 16.4** | **+0.7** |
| **SCM** | **Sheep Creek Mo** | **81.24** | **22** | P | | **P** | | **18 22 16.5** | **+0.7** |
| | baz=315 | | | | | | | | |
| **BRLK** | **Bradley Lake** | **81.41** | **25** | P | | **P** | | **18 22 16.6** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **81.42** | **22** | P | | **P** | | **18 22 16.8** | **+0.2** |
| **HARP** | **HAARP** | **81.54** | **21** | P | | **P** | | **18 22 18.2** | **+0.9** |
| | baz=317 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **81.64** | **20** | P | | **P** | | **18 22 18.3** | **+0.5** |
| | baz=318 | | | | | | | | |
| **RMQ** | **Roma** | **81.94** | **126** | P | | **P** | | **18 22 21.8** | **+1.9** |
| **DAWY** | **Dawson** | **81.98** | **18** | P | | **P** | | **18 22 18.7** | **-0.9** |
| DAWY | | | | IAmb | IAmb | | | 18 22 47.0 | |
| | comp=Z,34nm,1.9s | | | | | | | | |
| **DAWY** | **Dawson** | **81.98** | **18** | P | | **P** | | **18 22 19.3** | **-0.2** |
| | baz=322 | | | | | | | | |
| **L27K** | **Beaver Creek,** | **82.06** | **20** | P | | **P** | | **18 22 20.9** | **+0.9** |
| | baz=320 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **82.07** | **19** | P | | **P** | | **18 22 20.7** | **+0.6** |
| **M26K** | **Nabesna, AK** | **82.21** | **20** | P | | **P** | | **18 22 21.7** | **+0.9** |
| | baz=319 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **82.30** | **21** | P | | **P** | | **18 22 21.7** | **+0.3** |
| | baz=317 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.59** | **20** | P | | **P** | | **18 22 23.9** | **+1.0** |
| | baz=320 | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **82.89** | **131** | P | | **P** | | **18 22 25.5** | **+0.8** |
| **FRB** | **Frobisher Bay** | **86.19** | **348** | LR | LR | | | 19 05 00.8 | |
| | comp=Z,85nm,18.9s,baz=18,slow=38 | | | | | | | | |
| **DBIC** | **Dimbokro** | **86.54** | **276** | P | | **P** | | **18 22 42.5** | **-1.1** |
| | comp=Z,6.9nm,0.7s,baz=64,slow=6.0,SNR=7.8 | | | | | | | | |
| **KIC** | **Kosan Boka** | **86.58** | **275** | *e*P | | **P** | | **18 22 47.0** | **+3.2** |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **TIC** | **Toumodi** | **86.69** | **276** | *e*P | | **P** | | **18 22 47.4** | **+3.0** |
| **LIC** | **Lamto** | **86.90** | **275** | *e*P | | **P** | | **18 22 48.5** | **+3.2** |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.54** | **9** | P | | **P** | | **18 22 51.7** | **-0.6** |
| | comp=Z,1.3nm,0.8s,baz=340,slow=4.7,SNR=16 | | | | | | | | |
| **SCHQ** | **Schefferville** | **93.99** | **344** | P | | **P** | | **18 23 16.9** | **-0.9** |
| | comp=Z,2.6nm,0.8s,baz=139,slow=16,SNR=2.2 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **108.41** | **11** | PKKPbc | PKKPbc | | | 18 39 37.1 | -2.5 |
| | comp=Z,0.3nm,0.5s,baz=143,slow=3.2,SNR=5.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **122.47** | **9** | PKP | | **PKiKP** | | **18 28 56.2** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=78,slow=0.2,SNR=9.2 | | | | | | | | |
| **SDV** | **Santo Domingo** | **136.29** | **323** | PKP | | **PKPdf** | | **18 29 22.4** | **-0.2** |
| | comp=Z,2.4nm,0.3s,baz=76,slow=3.9,SNR=3.6 | | | | | | | | |
| **SIV** | **San Ignacio** | **146.23** | **283** | PKPbc | | **PKPdf** | | **18 29 40.0** | **-0.1** |
| | comp=Z,8.1nm,0.7s,baz=85,slow=4.2,SNR=32 | | | | | | | | |
| **CPUP** | **Villa Florida** | **146.27** | **264** | PKPbc | | **PKPdf** | | **18 29 38.3** | **-1.5** |
| | comp=Z,5.4nm,0.7s,baz=68,slow=2.1,SNR=6.1 | | | | | | | | |
| **LPAZ** | **La Paz** | **152.36** | **289** | PKPbc | | **PKPbc** | | **18 29 54.5** | **-2.9** |
| | comp=Z,2.1nm,0.6s,baz=67,slow=3.4,SNR=6.4 | | | | | | | | |

*IDC **21** 18:40:36.4±0.9,20.˚72S×174.˚31E,h0km,mb4.2/12, mb1 4.4/15,mb1mx4.3/37,mbtmp4.2/15,ML3.9/2,MS4.2/56, Ms1 4.2/56,ms1mx4.2/65,Error ellipse: s-maj=31.9km s-min=17.0km az=149.0*

*NEIC **21** 18:40:40.9±2.9,20.˚7S±0.˚1×174.˚36E±0.˚09,h32km±6km, mb4.8/16,Error ellipse: s-maj=16.4km s-min=12.2km az=158.0*

*GCMT **21** 18:40:41.9±0.2,20.˚70S±0.˚01×174.˚30E±0.˚01,h16km, MW5.1/118,Moment Tensor Solution. s62,c77; s118,c169; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$0.02±.11; $M_{\theta\theta}$-1.69±.12; $M_{\phi\phi}$1.67±.10; $M_{r\theta}$-0.97±.30; $M_{\theta\phi}$-4.59±.10; $M_{\phi r}$0.01±.26; Best double couple: $M_o$4.98400×10$^{16}$ NP1:$\phi_s$10.00000°,$\delta$79.00000°, $\lambda$-2.00000° NP2:$\phi_s$100.00000°,$\delta$88.00000°, $\lambda$-169.00000°. Principal axes: T 4.9440, Plg7.0000°, Azm235.0000°; N 0.0810, Plg79.0000°, Azm109.0000°; P -5.0240, Plg9.0000°, Azm326.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BJI **21** 18:40:45.0±0.0,20.˚80S×174.˚10E,h53km,mb4.6/21, mB5.2/12,Ms5.1/1,Ms7 4.8/1*

**ISC 21 18:40:41.8±0.5,20.˚78S±0.˚09×174.˚37E±0.˚07,h35km,n117, σ1ᵖ73/77,mb4.8/35,MS4.3/52,1C,Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.61** | **49** | Pn | **Pn** | **18 41 47.0** | **-2.2** |
| | 21nm,0.3s,baz=156,slow=14,SNR=6.6 | | | | | | |
| MSVF | | | | LR | LR | 18 43 08.3 | |
| | comp=Z,4μm,19.0s,baz=262,slow=33 | | | | | | |
| **MSVF** | **Nonsavu** | **4.61** | **49** | | **Pn** | **18 41 47.5** | **-1.6** |
| **PINNC** | **Pines Island,** | **6.69** | **253** | Pn | **Pn** | **18 42 16.0** | **-1.6** |
| **DZM** | **Mont Dzumac** | **7.50** | **259** | Pn | **Pn** | **18 42 28.3** | **-0.5** |
| | 1.4nm,0.3s,baz=87,slow=22,SNR=13 | | | | | | |
| DZM | | | | LR | LR | 18 45 07.5 | |
| | comp=Z,6μm,18.0s,baz=76,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **7.50** | **259** | *e*Pn | **Pn** | **18 42 29.8** | **+1.0** |
| | 310nm,1.6s | | | | | | |
| DZM | | | | *e*LR | LR | 18 44 14.2 | |
| | comp=Z,6μm,25.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **7.50** | **259** | Pn | **Pn** | **18 42 29.1** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **9.45** | **270** | Pn | **Pn** | **18 42 55.8** | **+0.3** |
| **RAO** | **Raoul Island** | **10.95** | **142** | LR | LR | 18 46 40.8 | |
| | comp=Z,2μm,18.7s,baz=334,slow=33 | | | | | | |
| **AFI** | **Afiamalu** | **14.88** | **65** | LR | LR | 18 48 45.6 | |
| | comp=Z,1μm,21.1s,baz=230,slow=33 | | | | | | |
| **URZ** | **Urewera** | **17.58** | **173** | P | **P** | **18 44 45.4** | **+0.6** |
| | 0.5nm,0.3s,baz=2.0,slow=9.0,SNR=9.5 | | | | | | |
| URZ | | | | LR | LR | 18 50 00.2 | |
| | comp=Z,545nm,18.4s,baz=360,slow=32 | | | | | | |
| **URZ** | **Urewera** | **17.58** | **173** | | **P** | **18 44 46.9** | **+2.2** |
| URZ | | | | IAmb | IAmb | 18 44 56.5 | |
| | comp=Z,78nm,1.2s | | | | | | |
| **HNR** | **Honiara** | **17.91** | **307** | LR | LR | 18 50 34.5 | |
| | comp=Z,782nm,19.4s,baz=142,slow=34 | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.41** | **175** | | **Pn** | **18 44 56.1** | **+1.8** |
| **PLWZ** | **Palliser** | **20.74** | **178** | P | **P** | **18 45 20.4** | **+1.0** |
| **EIDS** | **Eidsvold** | **21.90** | **254** | P | **P** | **18 45 31.1** | **-0.9** |
| **ARMA** | **Armidale** | **22.61** | **240** | P | **P** | **18 45 39.8** | **+0.1** |
| ARMA | | | | IAmb | IAmb | 18 45 44.1 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **23.03** | **186** | LR | LR | 18 53 43.8 | |
| | comp=Z,1μm,19.1s,baz=358,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **24.14** | **96** | LR | LR | 18 53 17.1 | |
| | comp=Z,166nm,21.4s,baz=266,slow=31 | | | | | | |
| **CTA** | **Charters Tower** | **26.35** | **267** | P | **P** | **18 46 14.9** | **+0.1** |
| | comp=Z,22nm,1.2s,baz=106,slow=9.3,SNR=4.3 | | | | | | |
| CTA | | | | LR | LR | 18 55 52.6 | |
| | comp=Z,589nm,19.2s,baz=90,slow=35 | | | | | | |
| **PMG** | **Port Moresby** | **28.55** | **289** | LR | LR | 18 56 21.9 | |
| | comp=Z,284nm,18.4s,baz=360,slow=33 | | | | | | |
| **COEN** | **Coen** | **30.50** | **278** | P | **P** | **18 46 49.9** | **-2.0** |
| **STKA** | **Stephens Creek** | **31.27** | **243** | P | **P** | **18 46 56.6** | **-1.9** |
| | comp=Z,4.8nm,1.0s,baz=83,slow=9.1,SNR=6.5 | | | | | | |
| STKA | | | | LR | LR | 18 58 08.3 | |
| | comp=Z,627nm,21.8s,baz=52,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **31.27** | **243** | P | **P** | **18 46 55.5** | **-3.0** |
| **PPT2** | **Papeete2** | **34.15** | **91** | *e*LR | LR | 18 56 11.5 | |
| | comp=Z,492nm,26.5s | | | | | | |
| **PPT** | **Papeete** | **34.16** | **91** | LR | LR | 18 57 05.9 | |
| | comp=Z,243nm,20.0s,baz=36,slow=29 | | | | | | |
| **BBOO** | **Buckleboo** | **36.05** | **243** | P | **P** | **18 47 37.0** | **-3.0** |
| BBOO | | | | IAmb | IAmb | 18 47 41.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **37.29** | **264** | P | **P** | **18 47 48.1** | **-2.7** |
| WR0 | | | | IAmb | IAmb | 18 47 51.0 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **37.45** | **264** | P | **P** | **18 47 50.1** | **-2.1** |
| WB0 | | | | IAmb | IAmb | 18 47 53.1 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **37.47** | **264** | P | **P** | **18 47 49.4** | **-2.9** |
| WB2 | | | | IAmb | IAmb | 18 47 52.6 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.48** | **264** | P | **P** | **18 47 50.0** | **-2.4** |
| | comp=Z,5.0nm,1.0s,baz=101,slow=8.0,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 50 10.9** | **+0.4** |
| | comp=Z,1.6nm,1.0s,baz=92,slow=2.9,SNR=3.9 | | | | | | |
| WRA | | | | LR | LR | 19 02 21.3 | |
| | comp=Z,600nm,21.6s,baz=93,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.48** | **264** | P | **P** | **18 47 50.5** | **-1.9** |
| **AS31** | **Alice Springs** | **37.49** | **258** | P | **P** | **18 47 51.3** | **-1.2** |
| **ASAR** | **Alice Springs** | **37.49** | **258** | P | **P** | **18 47 50.5** | **-2.0** |
| | comp=Z,3.3nm,0.8s,baz=86,slow=8.7,SNR=36 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 50 11.1** | **+0.7** |
| | comp=Z,1.3nm,1.1s,baz=100,slow=3.9,SNR=4.2 | | | | | | |
| ASAR | | | | LR | LR | 19 02 15.8 | |
| | comp=Z,875nm,21.8s,baz=102,slow=35 | | | | | | |
| **GENI** | **Genyem** | **37.91** | **294** | P | **P** | **18 47 58.1** | **+2.0** |
| | comp=Z,49nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **43.51** | **269** | P | **P** | **18 48 40.7** | **-1.6** |
| **GUMO** | **Guam** | **44.81** | **317** | LR | LR | 19 06 12.5 | |
| | comp=Z,180nm,18.6s,baz=132,slow=34 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **45.39** | **82** | *e*S | **S** | **18 55 37.0** | **+0.5** |
| | comp=Z,98nm,27.9s | | | | | | |
| TAOE | | | | *e*LR | LR | 19 01 44.8 | |
| | comp=Z,520nm,28.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.90** | **265** | LR | LR | 19 08 33.5 | |
| | comp=Z,517nm,18.0s,baz=101,slow=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.90** | **265** | P | **P** | **18 48 59.6** | **-1.7** |
| **SIJI** | **Sorong** | **46.50** | **290** | LR | LR | 19 08 14.8 | |
| | comp=Z,151nm,21.8s,baz=118,slow=36 | | | | | | |
| **AAI** | **Ambon** | **48.00** | **284** | P | **P** | **18 49 20.5** | **+2.7** |
| | comp=Z,27nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **49.81** | **274** | LR | LR | 19 11 52.5 | |
| | comp=Z,288nm,18.3s,baz=145,slow=38 | | | | | | |
| **SANI** | **Sanana** | **50.69** | **285** | P | **P** | **18 49 39.6** | **+1.3** |
| | comp=Z,11nm,1.3s | | | | | | |
| **MORW** | **Morawa** | **53.09** | **249** | P | **P** | **18 49 53.9** | **-2.2** |
| MORW | | | | IAmb | IAmb | 18 49 57.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **DAV** | **Davao City (W)** | **55.34** | **295** | LR | LR | 19 12 22.8 | |
| | comp=Z,76nm,20.2s,baz=318,slow=34 | | | | | | |
| **PLAI** | **Plampang** | **55.74** | **273** | P | **P** | **18 50 15.0** | **-0.5** |
| | comp=Z,29nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **57.11** | **183** | LR | LR | 19 12 23.6 | |
| | comp=Z,124nm,18.1s,baz=14,slow=33 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **59.25** | **272** | P | **P** | **18 50 41.1** | **+0.9** |
| | comp=Z,33nm,1.2s | | | | | | |
| **PCJI** | **Pacitan** | **62.12** | **272** | P | **P** | **18 51 02.2** | **+2.4** |
| | comp=Z,51nm,1.5s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **62.96** | **328** | LR | LR | 19 17 16.1 | |
| | comp=Z,96nm,18.4s,baz=60,slow=35 | | | | | | |
| **KPJI** | **Karang Pucung** | **64.50** | **272** | P | **P** | **18 51 18.4** | **+2.8** |
| | comp=Z,28nm,1.3s | | | | | | |
| **JOW** | **Kunigami** | **65.08** | **315** | LR | LR | 19 14 54.6 | |
| | comp=Z,175nm,21.7s,baz=201,slow=32 | | | | | | |
| **LEM** | **Lembang** | **65.90** | **272** | LR | LR | 19 20 35.2 | |
| | comp=Z,114nm,20.4s,baz=135,slow=36 | | | | | | |
| **MJAR** | **Mushiro Arr** | **66.47** | **329** | P | **P** | **18 51 28.1** | **+0.2** |
| | comp=Z,2.4nm,0.8s,baz=163,slow=7.9,SNR=2.7 | | | | | | |
| MJAR | | | | LR | LR | 19 16 04.5 | |
| | comp=Z,104nm,22.0s,baz=134,slow=32 | | | | | | |
| **DBJI** | **Dramaga** | **66.80** | **272** | P | **P** | **18 51 31.9** | **+1.4** |
| | comp=Z,48nm,1.2s | | | | | | |
| **CGJI** | **Cibinong** | **67.77** | **271** | P | **P** | **18 51 37.0** | **+0.4** |
| | comp=Z,36nm,1.2s | | | | | | |
| **BLSI** | **Bandar Lampung** | **68.61** | **272** | P | **P** | **18 51 43.3** | **+1.4** |
| | comp=Z,41nm,1.1s | | | | | | |
| **KASI** | **Kota Agung** | **69.26** | **272** | P | **P** | **18 51 46.2** | **+0.3** |
| | comp=Z,42nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.28** | **180** | LR | LR | 19 16 51.9 | |
| | comp=Z,220nm,21.5s,baz=44,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.28** | **180** | P | **P** | **18 51 45.3** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 18 51 51.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **LWLI** | **Liwa** | **69.84** | **272** | P | P | 18 51 58.5 | +8.9 |
| **MDSI** | **Maura Dua** | **69.91** | **273** | P | **P** | **18 51 49.8** | **-0.1** |
| **ASAJ** | **Asahikawa** | **70.84** | **336** | LR | LR | 19 16 39.8 | |
| | comp=Z,283nm,21.4s,baz=166,slow=31 | | | | | | |
| **MASI** | **Maura Aman, Be** | **72.19** | **273** | P | P | 18 52 09.7 | +5.9 |
| **KSRS** | **Korea Array** | **72.58** | **323** | P | **P** | **18 52 05.2** | **-0.2** |
| | comp=Z,1.1nm,0.9s,baz=125,slow=3.6,SNR=3.8 | | | | | | |
| KSRS | | | | LR | LR | 19 20 32.4 | |
| | comp=Z,76nm,20.1s,baz=135,slow=33 | | | | | | |
| **NJ2** | **Nanjing** | **74.72** | **313** | *e*P | **P** | **18 52 20.9** | **+2.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.99** | **350** | LR | LR | 19 20 04.4 | |
| | comp=Z,160nm,19.4s,baz=160,slow=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **75.40** | **330** | LR | LR | 19 22 53.0 | |
| | comp=Z,80nm,18.1s,baz=131,slow=34 | | | | | | |
| **MAW** | **Mawson** | **78.79** | **201** | LR | LR | 19 24 14.9 | |
| | comp=Z,132nm,18.5s,baz=300,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **79.34** | **333** | LR | LR | 19 21 45.3 | |
| | comp=Z,133nm,21.1s,baz=150,slow=31 | | | | | | |
| **MA2** | **Magadan** | **82.37** | **348** | LR | LR | 19 23 22.2 | |
| | comp=Z,169nm,21.1s,baz=164,slow=31 | | | | | | |
| **KDAK** | **Kodiak Island** | **82.97** | **17** | LR | LR | 19 27 55.0 | |
| | comp=Z,132nm,18.1s,baz=228,slow=34 | | | | | | |
| **KMI** | **Kunming** | **83.20** | **300** | ⇑P | **P** | **18 53 07.1** | **+1.9** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.55** | **292** | P | **P** | **18 53 07.4** | **+0.6** |
| | comp=Z,4.8nm,0.9s,baz=132,slow=4.0,SNR=25 | | | | | | |
| CMAR | | | | LR | LR | 19 32 37.2 | |
| | comp=Z,16nm,18.0s,baz=140,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.55** | **292** | P | **P** | **18 53 07.5** | **+0.7** |
| **HHC** | **Hu-ho-hao-te** | **84.58** | **317** | *e*P | **P** | **18 53 15.8** | **+4.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **PZH** | **PanZhiHua** | **84.62** | **301** | P | **P** | **18 53 14.8** | **+2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.5s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **85.13** | **42** | LR | LR | 19 23 53.0 | |
| | comp=Z,142nm,20.6s,baz=238,slow=30 | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.22** | **52** | LR | LR | 19 22 29.0 | |
| | comp=Z,212nm,21.1s,baz=229,slow=30 | | | | | | |
| **SEY** | **Seymchan** | **85.23** | **350** | LR | LR | 19 24 18.6 | |
| | comp=Z,170nm,21.2s,baz=293,slow=31 | | | | | | |
| **LPIG** | **La Paz** | **85.79** | **62** | LR | LR | 19 22 14.0 | |
| | comp=Z,259nm,21.8s,baz=215,slow=29 | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.27** | **47** | P | **P** | **18 53 18.7** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=233,slow=7.5,SNR=3.1 | | | | | | |
| NVAR | | | | LR | LR | 19 23 33.3 | |
| | comp=Z,351nm,21.6s,baz=212,slow=30 | | | | | | |
| **LZH** | **Lanzhou** | **87.38** | **310** | *e*P | **P** | **18 53 23.4** | **-2.3** |
| LZH | | | | pP | pwP | 18 53 39.1 | -0.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **USHA** | **Ushuaia** | **87.69** | **149** | LR | LR | 19 23 58.7 | |
| | comp=Z,110nm,20.2s,baz=236,slow=30 | | | | | | |
| **BBB** | **Bella Bella** | **88.20** | **31** | LR | LR | 19 27 17.0 | |
| | comp=Z,174nm,18.4s,baz=262,slow=32 | | | | | | |
| **ELK** | **Elko** | **89.47** | **46** | LR | LR | 19 27 01.5 | |
| | comp=Z,361nm,19.7s,baz=260,slow=31 | | | | | | |
| **YAK** | **Yakutsk** | **89.86** | **341** | LR | LR | 19 27 28.3 | |
| | comp=Z,135nm,21.4s,baz=90,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **90.34** | **16** | P | **P** | **18 53 36.8** | **-2.0** |
| | comp=Z,0.9nm,0.9s,baz=224,slow=5.6,SNR=4.5 | | | | | | |
| ILAR | | | | LR | LR | 19 26 53.4 | |
| | comp=Z,118nm,19.7s,baz=220,slow=31 | | | | | | |
| **DLBC** | **Dease Lake** | **91.26** | **26** | LR | LR | 19 26 38.4 | |
| | comp=Z,155nm,20.7s,baz=255,slow=30 | | | | | | |
| **SONM** | **Songino Array** | **91.39** | **321** | P | **P** | **18 53 45.0** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=96,slow=5.8,SNR=2.5 | | | | | | |
| SONM | | | | LR | LR | 19 34 36.5 | |
| | comp=Z,87nm,18.1s,baz=106,slow=36 | | | | | | |
| **NEW** | **Newport** | **91.91** | **38** | LR | LR | 19 29 20.9 | |
| | comp=Z,148nm,18.1s,baz=228,slow=32 | | | | | | |
| **ANMO** | **Albuquerque** | **93.25** | **54** | LR | LR | 19 29 30.2 | |
| | comp=Z,206nm,18.4s,baz=262,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.31** | **60** | P | **P** | **18 53 53.8** | **+0.2** |
| | comp=Z,0.5nm,0.8s,baz=226,slow=7.3,SNR=4.3 | | | | | | |
| TXAR | | | | LR | LR | 19 28 23.4 | |
| | comp=Z,204nm,19.1s,baz=256,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **94.13** | **136** | LR | LR | 19 30 15.3 | |
| | comp=Z,82nm,18.0s,baz=213,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **94.17** | **46** | P | **P** | **18 53 58.0** | **+0.6** |
| | comp=Z,0.1nm,0.4s,baz=224,slow=3.8,SNR=1.9 | | | | | | |
| PDAR | | | | LR | LR | 19 30 32.3 | |
| | comp=Z,227nm,18.7s,baz=268,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **95.96** | **275** | LR | LR | 19 40 27.4 | |
| | comp=Z,89nm,18.0s,baz=222,slow=37 | | | | | | |
| **INK** | **Inuvik** | **96.53** | **17** | LR | LR | 19 29 56.1 | |
| | comp=Z,86nm,20.5s,baz=168,slow=31 | | | | | | |
| **CMIG** | **Matias Romero** | **96.58** | **74** | LR | LR | 19 28 30.1 | |
| | comp=Z,136nm,20.1s,baz=218,slow=30 | | | | | | |
| **TIXI** | **Tiksi** | **97.29** | **347** | LR | LR | 19 32 39.6 | |
| | comp=Z,49nm,19.4s,baz=176,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.85** | **26** | LR | LR | 19 32 09.3 | |
| | comp=Z,118nm,21.3s,baz=288,slow=31 | | | | | | |
| **WMQ** | **Urumqi** | **101.78** | **312** | *e*P | **Pdif** | **18 54 33.6** | **+2.2** |
| **DPC** | **Dobruska-Polom** | **145.78** | **335** | *e*PKP | **PKPbc** | **19 00 17.2** | **+0.1** |
| **CLL** | **Collm** | **146.22** | **339** | *i* PKPbc | **PKPab** | **19 00 19.4** | **+0.3** |
| | comp=Z,5.0nm,0.7s | | | | | | |
| CLL | | | | *e*PKiKP | **PKiKP** | **19 00 22.0** | **+0.5** |
| CLL | | | | *ex* | x | 19 00 25.0 | |
| CLL | | | | *e*PKSdf | **PKSdf** | **19 03 50.0** | **-2.5** |
| **VRAC** | **Vranov** | **146.48** | **333** | *e*PKP | **PKPab** | **19 00 20.2** | **0.0** |
| **KRUC** | **Moravsky** | **146.75** | **333** | *e*PKP | **PKPab** | **19 00 20.6** | **-0.6** |
| **PRU** | **Pruhonice** | **146.76** | **336** | *e*PKP | **PKiKP** | **19 00 28.3** | **+5.6** |
| **CKRC** | **Cesky Krumlov** | **147.79** | **335** | *e*PKP | **PKPbc** | **19 00 23.9** | **+0.9** |
| **KHC** | **Kasperske Hory** | **147.82** | **336** | *e*PKP | **PKPbc** | **19 00 23.9** | **+0.8** |
| **GERES** | **GERESS Array B** | **148.01** | **336** | PKPbc | **PKPbc** | **19 00 24.2** | **+0.6** |
| | comp=Z,1.3nm,0.5s,baz=242,slow=2.1,SNR=2.7 | | | | | | |
| **SOKA** | **Soboth** | **149.17** | **332** | *e*P | **PKPbc** | **19 00 26.8** | **+0.1** |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **WATA** | **Walderalm** | **150.06** | **336** | *e*P | **PKPbc** | **19 00 29.2** | **+0.3** |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **WTTA** | **Wattenberg** | **150.10** | **336** | *e*P | **PKPbc** | **19 00 29.3** | **+0.3** |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.18** | **335** | *e*P | **PKiKP** | **19 00 31.2** | **+1.2** |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **150.23** | **337** | *e*P | **PKPbc** | **19 00 29.7** | **+0.4** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **FETA**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PV10** | **Paradox Valley** | **2.56** | **80** | | Pn | 18 50 00.9 | +1.1 |
| PV10 | | | | IAML | | 18 50 40.9 | |
| | comp=E,73nm,0.3s | | | | | | |
| **WUAZ** | **Wupatki** | **2.57** | **164** | Pn | Pn | 18 50 00.2 | +0.3 |
| **PV23** | **Carpenter Ridg** | **2.59** | **79** | | Pn | 18 50 01.3 | +1.0 |
| **R11A** | **Troy Canyon, C** | **2.65** | **279** | | Pn | 18 50 01.1 | +0.1 |
| R11A | | | | IAML | | 18 50 41.6 | |
| | comp=E,20nm,0.4s | | | | | | |
| R11A | | | | IAML | | 18 50 41.9 | |
| | comp=N,24nm,0.5s | | | | | | |
| **JLU** | **Jordanelle** | **2.67** | **13** | | Pn | 18 50 01.2 | -0.1 |
| **PV11** | **David Mesa, Pa** | **2.68** | **82** | | Pn | 18 50 02.8 | +1.3 |
| **PV13** | **Radium Mtn., P** | **2.71** | **86** | | Pn | 18 50 02.1 | +0.3 |
| **SHPR** | **Sheep Range** | **2.76** | **238** | | Pn | 18 50 02.0 | -0.5 |
| **PV07** | **Paradox Valley** | **2.87** | **80** | | Pn | 18 50 05.1 | +1.0 |
| PV07 | | | | IAML | | 18 50 51.2 | |
| | comp=N,44nm,0.6s | | | | | | |
| PV07 | | | | IAML | | 18 50 53.2 | |
| | comp=E,32nm,0.6s | | | | | | |
| **PV15** | **Paradox Valley** | **2.99** | **82** | | Pn | 18 50 06.4 | +0.7 |
| PV15 | | | | IAML | | 18 50 56.9 | |
| | comp=E,36nm,0.8s | | | | | | |
| PV15 | | | | IAML | | 18 50 58.9 | |
| | comp=N,46nm,0.8s | | | | | | |
| **MVCO** | **Mesa Verde** | **3.08** | **104** | Pn | Pn | 18 50 07.6 | +0.7 |
| MVCO | | | | IAML | | 18 51 00.1 | |
| | comp=N,45nm,0.6s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.35** | **253** | | Pn | 18 50 10.9 | +0.3 |
| **W18A** | **Petrified Fore** | **3.51** | **144** | | Pn | 18 50 14.5 | +1.6 |
| **X18A** | **Snowflake** | **3.93** | **151** | | Pn | 18 50 18.9 | +0.3 |

**IDC 21 18:51:58.6±2.6, 17°51S×177°92W, h0km, mb3.7/3, mb1 4.1/3, mb1mx3.6/35, mbtmp3.7/3, Error ellipse: s-maj=285.2km s-min=33.0km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.16** | **259** | P | P | 19 00 16.9 | -0.7 |
| | 0.3nm,0.4s,baz=96,slow=7.2,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | P | 19 00 19.4 | +0.4 |
| | 1.9nm,0.7s,baz=86,slow=8.7,SNR=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.39** | **57** | P | P | 19 04 38.5 | 0.0 |
| | 0.3nm,0.7s,baz=223,slow=5.9,SNR=4.5 | | | | | | |
| **H03S2** | **Juan Fernandez** | **87.62** | **125** | T | T | 20 41 22.0 | |
| | baz=249 | | | | | | |
| **H03S1** | **Juan Fernandez** | **87.63** | **125** | T | T | 20 41 24.8 | |
| | baz=249 | | | | | | |
| **H03S3** | **Juan Fernandez** | **87.64** | **125** | T | T | 20 41 20.6 | |
| | baz=249 | | | | | | |

*IDC **21** 19:25:49.8±7.8, 19°.00S×169°.09E, h165km±38km, mb3.8/6, mb1 3.9/7, mb1mx3.5/34, mbtmp4.2/7, Error ellipse: s-maj=92.1km s-min=46.1km az=91.0*
*NOU **21** 19:25:49.4, 18°.99S×169°.21E, h162km, MLv4.4/14, Vanuatu Islands*
*NEIC **21** 19:25:49.1±1.2, 18°.96S±0°.08×169°.21E±0°.07, h164km±12km, mb4.0/11, Error ellipse: s-maj=13.8km s-min=7.2km az=144.0*

**ISC 21 19:25:47.7±1.5, 19°.01S±0°.06×169°.3E±0°.2, h147km, n37, σ1s73/38, mb4.0/10, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.44** | **327** | P | **Pn** | **19 26 19.0** | **+2.5** |
| **DVP** | **Devils Point** | **1.63** | **322** | P | **Pn** | **19 26 21.5** | **+3.0** |
| **LIFNC** | **LIFOU** | **2.58** | **227** | Pn | **Pn** | **19 26 29.3** | **-0.4** |
| **LIFNC** | **LIFOU** | **2.58** | **227** | P | **Pn** | **19 26 30.7** | **+1.0** |
| **YATNC** | **Mamie plateau,** | **3.75** | **216** | P | **Pn** | **19 26 46.8** | **+2.1** |
| **PINNC** | **Pines Island,** | **3.96** | **205** | Pn | **Pn** | **19 26 49.1** | **+1.8** |
| **DZM** | **Mont Dzumac** | **4.02** | **220** | P | **Pn** | **19 26 49.6** | **+1.3** |
| | 7.4nm,0.3s,baz=127,slow=14,SNR=69 | | | | | | |
| DZM | | | | S | **Sn** | **19 27 36.7** | **+1.4** |
| | 1.4nm,0.3s,baz=132,slow=23,SNR=1.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.02** | **220** | | **Pn** | **19 26 50.0** | **+1.8** |
| **DZM** | **Mont Dzumac** | **4.02** | **220** | P | **Pn** | **19 26 50.1** | **+1.8** |
| **SANVU** | **Saraoutou** | **4.05** | **331** | Pn | **Pn** | **19 26 49.7** | **+1.1** |
| **SANVU** | **Saraoutou** | **4.05** | **331** | P | **Pn** | **19 26 50.0** | **+1.4** |
| **OUENC** | **Ouen Island, N** | **4.07** | **213** | Pn | **Pn** | **19 26 51.6** | **+2.8** |
| **OUENC** | **Ouen Island, N** | **4.07** | **213** | P | **Pn** | **19 26 51.3** | **+2.5** |
| **NOUC** | **Port Laguerre** | **4.13** | **221** | P | **Pn** | **19 26 51.8** | **+2.2** |
| **ONTNC** | **Ouen Toro** | **4.20** | **218** | Pn | **Pn** | **19 26 52.2** | **+1.8** |
| **ONTNC** | **Ouen Toro** | **4.20** | **218** | P | **Pn** | **19 26 52.4** | **+1.9** |
| **KOUNC** | **Koumac, New Ca** | **4.92** | **251** | Pn | **Pn** | **19 27 02.3** | **+2.2** |
| **KOUNC** | **Koumac, New Ca** | **4.92** | **251** | P | **Pn** | **19 27 02.2** | **+2.2** |
| **CTA** | **Charters Tower** | **21.70** | **263** | P | **P** | **19 30 27.2** | **0.0** |
| | 2.7nm,0.6s,baz=96,slow=13,SNR=1.5 | | | | | | |
| **PMG** | **Port Moresby** | **23.42** | **291** | P | **P** | **19 30 43.3** | **-0.5** |
| | 8.3nm,0.7s,baz=145,slow=6.3,SNR=4.5 | | | | | | |
| **PMG** | **Port Moresby** | **23.42** | **291** | P | **P** | **19 30 42.8** | **-1.0** |
| PMG | | | | IAmb | IAmb | 19 30 44.6 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 31 24.8** | **0.0** |
| | comp=Z,2.7nm,0.7s,baz=70,slow=11,SNR=10 | | | | | | |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 31 24.7** | **0.0** |
| STKA | | | | IAmb | IAmb | 19 31 25.6 | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.70** | **262** | P | **P** | **19 32 04.7** | **-1.7** |
| WR0 | | | | IAmb | IAmb | 19 32 12.7 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **32.71** | **239** | P | **P** | **19 32 06.1** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 19 32 23.0 | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.85** | **263** | P | **P** | **19 32 05.8** | **-2.0** |
| **WB2** | **Warramunga Arr** | **32.88** | **262** | P | **P** | **19 32 06.0** | **-2.0** |
| WB2 | | | | IAmb | IAmb | 19 32 14.8 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.89** | **262** | P | **P** | **19 32 05.9** | **-2.2** |
| | comp=Z,0.6nm,0.5s,baz=96,slow=8.3,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.89** | **262** | P | **P** | **19 32 06.0** | **-2.1** |
| **AS31** | **Alice Springs** | **33.19** | **256** | P | **P** | **19 32 09.5** | **-1.2** |
| **ASAR** | **Alice Springs** | **33.19** | **256** | P | **P** | **19 32 09.6** | **-1.2** |
| | comp=Z,8.2nm,0.4s,baz=82,slow=8.6,SNR=303 | | | | | | |
| **ASAR** | **Alice Springs** | **33.19** | **256** | P | **P** | **19 32 09.4** | **-1.3** |
| **MTN** | **Manton Dam** | **37.11** | **274** | P | **P** | **19 32 43.0** | **-1.2** |
| MTN | | | | IAmb | IAmb | 19 32 57.2 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **38.73** | **268** | P | **P** | **19 32 56.3** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **41.27** | **264** | P | **P** | **19 33 17.8** | **-1.1** |
| | comp=Z,2.9nm,0.6s,baz=83,slow=7.3,SNR=17 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.27** | **264** | P | **P** | **19 33 17.7** | **-1.2** |
| FITZ | | | | IAmb | IAmb | 19 33 18.7 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.04** | **180** | P | **P** | **19 36 49.5** | **0.0** |

*JMA **21** 19:26:32.2±0.1, 25°.91N×126°.28E, h81km±3km, M3.9*
*NEIC **21** 19:26:32.4±1.9, 25°.91N±0°.08×126°.26E±0°.08, h71km±8km, mb4.4/29, Error ellipse: s-maj=12.4km s-min=8.7km az=147.0*
*NIED **21** 19:26:32.3, 25°.91N×126°.28E, h81km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr1.62; Mθθ-1.42; Mφφ-0.20; Mrθ-1.10; Mθφ0.20; Mφr0.16; Fault plane solution: M0 1.90000×10^15 NP1: φs278.00000°, δ63.00000°, λ90.00000°. NP2:φs99.00000°, δ27.00000°, λ91.00000°.*
*IDC **21** 19:26:33.4±0.7, 25°.99N×126°.39E, h87km±6km, mb3.6/17, mb1 3.8/18, mb1mx3.7/46, mbtmp4.0/18, MS3.0/5, Ms1 3.0/5, ms1mx2.7/79 Error ellipse: s-maj=10.8km s-min=8.3km az=137.0*

**ISC 21 19:26:33.0±0.6, 25°.91N±0°.05×126°.28E±0°.04, h84km±5km, n92, σ1s31/113, mb4.2/30, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKE** | **Kume jima 2** | **0.61** | **48** | P | **Pn** | **19 26 47.3** | **-0.9** |
| JKE | | | | S | **Sn** | **19 26 57.8** | **-1.6** |
| **JAGN** | **Aguni-jima** | **1.10** | **52** | P | **Pn** | **19 26 53.0** | **-0.4** |
| JAGN | | | | S | **Sn** | **19 27 07.7** | **-1.0** |
| **JIKM** | **Ikemajima** | **1.36** | **224** | P | **Pn** | **19 26 56.1** | **-0.6** |
| JIKM | | | | S | **Sn** | **19 27 13.6** | **-0.9** |
| **JJT3** | **Tamagusuku3** | **1.37** | **80** | P | **Pn** | **19 26 56.7** | **-0.2** |
| JJT3 | | | | S | **Sn** | **19 27 14.4** | **-0.4** |
| **JOGS** | **Gusukube** | **1.39** | **215** | P | **Pn** | **19 26 56.8** | **-0.3** |
| JOGS | | | | S | **Sn** | **19 27 14.7** | **-0.6** |
| **JMJ** | **Miyako jima 2** | **1.41** | **220** | P | **Pn** | **19 26 57.6** | **+0.2** |
| **JMJ2** | **Miyako jima3** | **1.45** | **217** | P | **Pn** | **19 26 57.5** | **-0.4** |
| JMJ2 | | | | S | **Sn** | **19 27 16.2** | **-0.4** |
| **JIRB** | **Irabujima** | **1.47** | **223** | P | **Pn** | **19 26 57.3** | **-0.8** |
| JIRB | | | | S | **Sn** | **19 27 15.8** | **-1.3** |
| **JNTH** | **Nagotoyohara** | **1.68** | **68** | P | **Pn** | **19 27 00.2** | **-0.6** |
| JNTH | | | | S | **Sn** | **19 27 19.9** | **-1.9** |
| **JIH** | **Iheya** | **1.88** | **53** | P | **Pn** | **19 27 02.9** | **-0.6** |
| JIH | | | | S | **Sn** | **19 27 25.4** | **-1.2** |
| **JTJ** | **Tarama** | **1.91** | **229** | P | **Pn** | **19 27 03.1** | **-0.7** |
| JTJ | | | | S | **Sn** | **19 27 25.4** | **-1.8** |
| **JOW** | **Kunigami** | **2.01** | **62** | P | **Pn** | **19 27 04.4** | **-0.8** |
| | 39nm,0.3s,baz=229,slow=10.0,SNR=72 | | | | | | |
| JOW | | | | S | **Sn** | **19 27 27.3** | **-2.4** |
| | 105nm,0.3s,baz=140,slow=20,SNR=14 | | | | | | |
| **JOW** | **Kunigami** | **2.01** | **62** | P | **Pn** | **19 27 04.4** | **-0.8** |
| JOW | | | | S | **Sn** | **19 27 28.4** | **-1.3** |
| **JOW** | **Kunigami** | **2.01** | **62** | P | **Pn** | **19 27 04.4** | **-0.8** |
| **JISG** | **Ishigakijimahi** | **2.22** | **234** | P | **Pn** | **19 27 06.9** | **-1.0** |
| JISG | | | | S | **Sn** | **19 27 32.1** | **-2.5** |
| **JYRO** | **Yoronjima** | **2.24** | **60** | P | **Pn** | **19 27 07.3** | **-0.9** |
| JYRO | | | | S | **Sn** | **19 27 32.9** | **-2.2** |
| **JIJ** | **Ishigaki jima** | **2.48** | **232** | P | **Pn** | **19 27 10.0** | **-1.4** |
| JIJ | | | | S | **Sn** | **19 27 37.1** | **-3.7** |
| **JOKE** | **Okinoerabujima** | **2.51** | **54** | P | **Pn** | **19 27 10.5** | **-1.3** |
| JOKE | | | | S | **Sn** | **19 27 39.0** | **-2.6** |
| **JKRS** | **Kuro-shima** | **2.65** | **232** | P | **Pn** | **19 27 12.7** | **-1.0** |
| JKRS | | | | S | **Sn** | **19 27 43.3** | **-1.6** |
| **IRIF** | **Iriomote-Funau** | **2.79** | **236** | P | **Pn** | **19 27 14.5** | **-1.2** |
| IRIF | | | | S | **Sn** | **19 27 46.8** | **-1.6** |
| **HATJ** | **Hateruma jima** | **2.91** | **231** | S | **Sn** | **19 27 49.6** | **-1.6** |
| **YOJ** | **Yonaguni jima** | **3.29** | **245** | | **Pn** | **19 27 22.0** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **3.29** | **245** | P | **Pn** | **19 27 22.4** | **0.0** |
| **NACB** | **Ninganchiao** | **4.59** | **249** | Pn | **Pn** | **19 27 38.9** | **-1.1** |
| **YHNB** | **Yeheng** | **4.61** | **256** | | **Pn** | **19 27 42.3** | **+2.0** |
| **YHNB** | **Yeheng** | **4.61** | **256** | P | **Pn** | **19 27 42.5** | **+2.1** |
| | 96nm,0.9s | | | | | | |
| **YULB** | **Yu-li** | **5.18** | **242** | | **Pn** | **19 27 45.4** | **-2.7** |
| **SSLB** | **Suanglung** | **5.28** | **248** | | **Pn** | **19 27 48.3** | **-1.2** |
| **SSLB** | **Suanglung** | **5.28** | **248** | P | **Pn** | **19 27 48.6** | **-0.9** |
| **TWG** | **Pinlang** | **5.66** | **238** | | **Pn** | **19 27 50.6** | **-4.0** |
| **TPUB** | **Ta-pu** | **5.76** | **244** | | **Pn** | **19 27 55.5** | **-0.5** |
| **TPUB** | **Ta-pu** | **5.76** | **244** | P | **Pn** | **19 27 55.6** | **-0.5** |
| **JSU** | **Suzuyama** | **6.67** | **32** | Pn | **Pn** | **19 28 07.5** | **-0.9** |
| **JNU** | **Nakatsue** | **8.23** | **28** | P | **Pn** | **19 28 29.8** | **+0.1** |
| | 2.0nm,0.3s,baz=187,slow=4.8,SNR=14 | | | | | | |
| **JMN** | **Monobe** | **10.21** | **38** | Pn | **Pn** | **19 28 53.1** | **-3.5** |
| **KSRS** | **Korea Array** | **11.59** | **7** | P | **Pn** | **19 29 17.6** | **+2.2** |
| | 0.4nm,0.3s,baz=182,slow=13,SNR=20 | | | | | | |
| KSRS | | | | LR | LR | 19 34 07.0 | |
| | comp=Z,35nm,19.0s,baz=200,slow=40 | | | | | | |
| **MAJO** | **Matsushiro** | **14.70** | **41** | Pn | **Pn** | **19 29 56.3** | **-0.3** |
| **MAT** | **Matsushiro** | **14.70** | **41** | P | **P** | **19 29 58.1** | **-2.5** |
| MAT | | | | *e*S | **Sn** | **19 32 39.2** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **14.70** | **41** | P | **P** | **19 30 01.9** | **+1.3** |
| | 0.3nm,0.3s,baz=232,slow=10,SNR=26 | | | | | | |
| MJAR | | | | LR | LR | 19 35 28.4 | |
| | comp=Z,63nm,18.6s,baz=222,slow=37 | | | | | | |
| **JMM** | **Marumori** | **17.12** | **42** | | **Pn** | **19 30 26.4** | **-0.5** |
| JMM | | | | IAmb | IAmb | 19 30 38.6 | |
| | comp=Z,78nm,1.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **22.48** | **32** | P | **P** | **19 31 25.8** | **+0.4** |
| | comp=Z,7.5nm,0.7s,baz=227,slow=9.1,SNR=8.6 | | | | | | |
| **KLR** | **Kul'dur** | **23.67** | **9** | P | **P** | **19 31 36.4** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=214,slow=7.3,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.34** | **259** | P | **P** | **19 32 01.9** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=50,slow=7.6,SNR=4.4 | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.63** | **330** | P | **P** | **19 32 02.8** | **-1.1** |
| **SONM** | **Songino Array** | **26.91** | **330** | P | **P** | **19 32 06.0** | **-0.3** |
| | comp=Z,1.2nm,0.6s,baz=139,slow=10,SNR=10 | | | | | | |
| SONM | | | | pP | **pwP** | **19 32 26.2** | **-1.4** |
| | comp=Z,2.2nm,0.7s,baz=144,slow=10,SNR=8.9 | | | | | | |
| **SONM** | **Songino Array** | **26.91** | **330** | P | **P** | **19 32 07.2** | **+0.9** |
| **SBUM** | **Sibu** | **26.96** | **212** | P | **P** | **19 32 07.6** | **+0.7** |
| SBUM | | | | IAmb | IAmb | 19 32 10.9 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **SIJI** | **Sorong** | **27.05** | **169** | LR | LR | 19 41 08.6 | |
| | comp=Z,25nm,21.2s,baz=30,slow=32 | | | | | | |
| **GSI** | **Gunungsitoli** | **36.91** | **233** | P | **P** | **19 33 34.5** | **+0.6** |
| **MA2** | **Magadan** | **37.70** | **20** | LR | LR | 19 51 49.0 | |
| | comp=Z,40nm,18.3s,baz=302,slow=40 | | | | | | |
| **MTN** | **Manton Dam** | **38.81** | **172** | P | **P** | **19 33 49.4** | **-0.5** |
| **MK31** | **Makanchi Array** | **40.45** | **313** | P | **P** | **19 34 01.9** | **-1.4** |
| **MKAR** | **Makanchi Array** | **40.45** | **313** | P | **P** | **19 34 02.8** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=97,slow=11,SNR=25 | | | | | | |
| **MAKZ** | **Makanchi** | **40.66** | **313** | P | **P** | **19 34 03.9** | **-1.2** |
| **KNRA** | **Kununurra** | **41.41** | **176** | P | **P** | **19 34 10.2** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **41.45** | **324** | P | **P** | **19 34 10.4** | **-0.9** |
| | comp=Z,0.8nm,0.5s,baz=118,slow=9.5,SNR=4.6 | | | | | | |
| **COEN** | **Coen** | **42.91** | **156** | P | **P** | **19 34 24.3** | **+0.7** |
| COEN | | | | IAmb | IAmb | 19 34 24.8 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.75** | **181** | P | **P** | **19 34 29.7** | **-0.5** |
| | comp=Z,3.8nm,0.6s,baz=6.0,slow=6.5,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.75** | **181** | P | **P** | **19 34 29.8** | **-0.5** |
| FITZ | | | | IAmb | IAmb | 19 34 30.8 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **43.86** | **317** | P | **P** | **19 34 29.5** | **-1.3** |
| **KURBB** | **Kurchatov Arra** | **43.88** | **317** | P | **P** | **19 34 30.4** | **-0.6** |
| | comp=Z,0.6nm,0.7s,baz=106,slow=9.0,SNR=6.4 | | | | | | |
| **TIXI** | **Tiksi** | **45.80** | **1** | LR | LR | 19 57 24.8 | |
| | comp=Z,28nm,18.1s,baz=238,slow=40 | | | | | | |
| **TIXI** | **Tiksi** | **45.80** | **1** | P | **P** | **19 34 45.2** | **-0.7** |
| TIXI | | | | IAmb | IAmb | 19 35 04.5 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.08** | **169** | P | **P** | **19 34 48.7** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 19 34 49.3 | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.25** | **169** | P | **P** | **19 34 50.1** | **0.0** |
| | comp=Z,3.4nm,0.6s,baz=352,slow=8.6,SNR=27 | | | | | | |
| WRA | | | | pP | **pP** | **19 35 12.0** | **+1.7** |
| | comp=Z,2.0nm,0.8s,baz=352,slow=8.7,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.25** | **169** | P | **P** | **19 34 50.1** | **0.0** |
| **WB2** | **Warramunga Arr** | **46.25** | **169** | P | **P** | **19 34 50.1** | **0.0** |
| WB2 | | | | IAmb | IAmb | 19 34 51.0 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.30** | **169** | P | **P** | **19 34 50.5** | **0.0** |
| WR0 | | | | IAmb | IAmb | 19 34 51.0 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **49.83** | **171** | P | **P** | **19 35 17.7** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 19 35 18.9 | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **49.83** | **171** | P | **P** | **19 35 18.4** | **+0.6** |
| | comp=Z,2.0nm,0.5s,baz=356,slow=13,SNR=49 | | | | | | |
| ASAR | | | | pP | **pP** | **19 35 41.2** | **+3.0** |
| | comp=Z,0.8nm,0.7s,baz=357,slow=7.7,SNR=4.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 36 38.0** | **+0.7** |
| | comp=Z,1.0nm,0.6s,baz=351,slow=2.8,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **49.83** | **171** | P | **P** | **19 35 18.2** | **+0.5** |
| **ABKAR** | **Akbulak array** | **55.59** | **313** | P | **P** | **19 36 00.4** | **+0.5** |
| **BBOO** | **Buckleboo** | **59.13** | **170** | P | **P** | **19 36 24.7** | **-0.2** |
| **STKA** | **Stephens Creek** | **59.29** | **165** | P | **P** | **19 36 26.2** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=351,slow=4.2,SNR=7.4 | | | | | | |
| **STKA** | **Stephens Creek** | **59.29** | **165** | P | **P** | **19 36 25.5** | **-0.5** |
| **A21K** | **Barrow** | **61.56** | **21** | P | **P** | **19 36 40.4** | **-0.6** |
| **TTA** | **Tatalina** | **61.70** | **31** | P | **P** | **19 36 42.7** | **+0.6** |
| TTA | | | | IAmb | IAmb | 19 37 07.0 | |
| | comp=Z,3.2nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **62.48** | **29** | P | **P** | **19 36 49.3** | **+2.1** |
| **K20K** | **Telida** | **62.56** | **30** | P | **P** | **19 36 49.8** | **+2.0** |
| K20K | | | | IAmb | IAmb | 19 37 14.8 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **H21K** | **Melozitna Rive** | **62.97** | **27** | P | **P** | **19 36 51.7** | **+1.1** |
| **TOLK** | **Toolik Lake Re** | **64.02** | **24** | P | **P** | **19 36 59.0** | **+1.5** |
| TOLK | | | | IAmb | IAmb | 19 37 00.4 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **RND** | **Reindeer** | **64.89** | **30** | P | **P** | **19 37 03.2** | **-0.1** |
| RND | | | | IAmb | IAmb | 19 37 05.4 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **65.55** | **28** | P | **P** | **19 37 07.2** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=246,slow=4.1,SNR=10.0 | | | | | | |
| **BMAR** | **Burnt Mountain** | **66.04** | **25** | P | **P** | **19 37 11.7** | **+1.2** |
| **L27K** | **Beaver Creek,** | **68.08** | **29** | P | **P** | **19 37 24.6** | **+1.0** |
| L27K | | | | IAmb | IAmb | 19 37 34.2 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **BCAR** | **Beaver Creek A** | **68.09** | **29** | P | **P** | **19 37 24.8** | **+1.1** |
| **A36M** | **Sachs Harbour** | **71.08** | **18** | P | **P** | **19 37 43.2** | **+1.4** |
| A36M | | | | IAmb | IAmb | 19 37 47.3 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **72.27** | **330** | P | **P** | **19 37 48.8** | **-0.3** |
| | comp=Z,4.9nm,1.0s,baz=66,slow=3.4,SNR=6.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.63** | **319** | P | **P** | **19 38 02.6** | **-0.6** |
| | comp=Z,0.2nm,0.4s,baz=61,slow=6.1,SNR=1.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.84** | **307** | P | **P** | **19 38 10.9** | **+0.4** |
| | comp=Z,0.4nm,0.4s,baz=109,slow=4.5,SNR=4.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.82** | **333** | P | **P** | **19 38 26.2** | **-0.4** |
| | comp=Z,1.2nm,0.9s,baz=56,slow=5.5,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.55** | **24** | P | **P** | **19 38 31.2** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=302,slow=5.3,SNR=13 | | | | | | |
| YKA | | | | pP | **pP** | **19 38 52.2** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=308,slow=4.9,SNR=3.7 | | | | | | |

**IDC 21 19:30:07.7±13.0, 12°.07N×139°.93E, h0km, mb3.6/3, mb1 3.9/3, mb1mx3.4/43, mbtmp3.6/3, Error ellipse: s-maj=468.6km s-min=39.4km az=164.0, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H11N1** | **WAKE ISLAND Hy** | **26.99** | **70** | T | T | 20 04 40.6 | |
| | baz=255 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.00** | **70** | T | T | 20 04 48.9 | |
| | baz=255 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.01** | **70** | T | T | 20 04 50.4 | |
| | baz=255 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.99** | **284** | P | P | 19 37 44.4 | -0.1 |
| | 0.4nm,0.6s,baz=96,slow=7.3,SNR=5.6 | | | | | | |
| **ILAR** | **Eielson Array** | **72.00** | **26** | P | P | 19 41 33.0 | -0.1 |
| | 0.3nm,0.5s,baz=244,slow=5.6,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.40** | **27** | P | P | 19 42 51.9 | +0.1 |
| | 0.2nm,0.6s,baz=292,slow=5.3,SNR=4.7 | | | | | | |

*ISK **21** 19:32:36.3, 38°.25N×26°.47E, h4km, ML2.6/9*
*DDA **21** 19:32:37.5±0.0, 38°.24N×26°.57E, h7km±1km, ML2.2*

**ISC 21 19:32:37.5±1.1, 38°.25N±0°.03×26°.54E±0°.07, h11km±6km, n16, σ0s56/25, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEYE** | **Izmir, Urla-Ze** | **0.03** | **255** | P | **Pg** | **19 32 39.4** | **-0.1** |
| ZEYE | | | | S | **Sg** | **19 32 40.6** | **-0.3** |
| ZEYE | | | | *i* AML | AML | 19 32 41.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| ZEYE | | | | *i* AML | AML | 19 32 41.0 | |
| | comp=N,3μm,0.3s | | | | | | |
| **URLA** | **Izmir** | **0.12** | **21** | PG | **Pg** | **19 32 40.3** | **-0.2** |
| URLA | | | | SG | **Sg** | **19 32 42.9** | **+0.2** |
| **URLA** | **Izmir** | **0.12** | **21** | P | **Pg** | **19 32 40.4** | **-0.1** |
| URLA | | | | S | **Sg** | **19 32 42.9** | **+0.2** |
| URLA | | | | *i* AML | AML | 19 32 43.0 | |
| | comp=E,3μm,0.3s | | | | | | |
| **DGB** | **zmir** | **0.33** | **126** | P | **Pg** | **19 32 44.0** | **-0.2** |
| DGB | | | | S | **Sg** | **19 32 48.9** | **+0.3** |
| DGB | | | | *i* AML | AML | 19 32 49.0 | |
| | comp=N,426nm,0.3s | | | | | | |
| DGB | | | | *i* AML | AML | 19 32 49.0 | |
| | comp=E,394nm,0.2s | | | | | | |
| **FOCM** | **Foa** | **0.49** | **18** | PG | **Pg** | **19 32 46.7** | **-0.3** |
| FOCM | | | | SG | **Sb** | **19 32 54.4** | **-0.9** |
| **GCAM** | **G?zelcaml?** | **0.77** | **135** | PG | **Pg** | **19 32 52.0** | **-0.5** |
| **GCAM** | **G?zelcaml?** | **0.77** | **135** | P | **Pg** | **19 32 51.9** | **-0.5** |
| GCAM | | | | S | **Sb** | **19 33 03.0** | **-0.4** |
| GCAM | | | | *i* AML | AML | 19 33 05.0 | |
| | comp=E,76nm,0.5s | | | | | | |
| GCAM | | | | *i* AML | AML | 19 33 05.0 | |
| | comp=N,66nm,0.7s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.83** | **30** | P | **Pg** | **19 32 53.3** | **-0.3** |
| ZEDA | | | | S | **Sb** | **19 33 05.0** | **-0.1** |
| ZEDA | | | | *i* AML | AML | 19 33 08.0 | |
| | comp=E,66nm,0.6s | | | | | | |
| ZEDA | | | | *i* AML | AML | 19 33 08.0 | |
| | comp=N,119nm,0.5s | | | | | | |
| **DKL** | **Dikili** | **0.87** | **19** | PG | **Pg** | **19 32 53.8** | **-0.5** |
| DKL | | | | SG | **Sb** | **19 33 07.1** | **+0.8** |
| **AYVA** | **Ayvalik** | **1.07** | **6** | P | **Pg** | **19 32 56.8** | **-1.2** |
| AYVA | | | | S | **Sn** | **19 33 13.9** | **+0.7** |
| **BODT** | **Bodrum** | **1.33** | **152** | PN | **Pg** | **19 33 02.9** | **-0.2** |
| **MLSB** | **Milas** | **1.36** | **134** | PN | **Pg** | **19 33 03.3** | **-0.4** |
| **BOZC** | **Bozcaada** | **1.64** | **347** | PN | **Pn** | **19 33 06.5** | **+0.2** |
| **KULA** | **Kula-Manisa** | **1.69** | **80** | PN | **Pb** | **19 33 08.1** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **2.15** | **359** | PN | **Pn** | **19 33 13.9** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **2.22** | **15** | PN | **Pn** | **19 33 15.2** | **+0.9** |

*IDC **21** 19:45:49.0±0.8, 62°.71S×157°.83W, h0km, mb3.8/6, mb1 4.0/7, mb1mx4.

0.7nm,0.7s,baz=207,slow=2.3,SNR=2.1
**BATI Baumata 75.75 275** LR LR 20 27 25.4
comp=Z,93nm,20.8s,baz=184,slow=33
**ATAH Atahualpa 78.83 84** LR LR 20 24 20.7
comp=Z,58nm,22.0s,baz=191,slow=29
**SIJI Sorong 80.57 287** LR LR 20 34 01.3
comp=Z,46nm,18.3s,baz=136,slow=36
**KAPI Kappang 82.11 274** LR LR 20 31 13.7
comp=Z,60nm,20.9s,baz=182,slow=33
**SUR Sutherland 85.24 179** LR LR 20 32 11.5
comp=Z,181nm,20.2s,baz=202,slow=33
**LEM Lembang 86.10 263** LR LR 20 33 24.1
comp=Z,58nm,18.4s,baz=172,slow=33
**BOSA Boshof 88.97 183** LR LR 20 33 58.1
comp=Z,75nm,21.6s,baz=189,slow=32
**LBTB Lobatse 92.54 183** LR LR 20 38 10.7
comp=Z,84nm,18.1s,baz=216,slow=34
**LPIG La Paz 94.34 42** LR LR 20 31 39.5
comp=Z,51nm,20.4s,baz=188,slow=29
**TSUM Tsumeb 98.28 176** LR LR 20 39 03.7
comp=Z,61nm,19.9s,baz=228,slow=32
**ILAR Eielson Array 127.43 6** PKP **PKPdf 20 04 54.8 +0.8**
0.8nm,0.9s,baz=222,slow=1.2,SNR=5.0
**TORD Torodi Ar. Bea 128.40 154** PKP **PKPdf 20 04 57.5 +0.2**
0.6nm,0.8s,baz=204,slow=3.2,SNR=2.9
**YKA Yellowknife Ar 129.04 24** PKP **PKPdf 20 04 57.5 +0.5**
0.1nm,0.3s,baz=197,slow=1.9,SNR=2.0
**TIXI Tiksi 143.12 330** PKhKP PKPpre 20 05 16.0
0.8nm,0.7s,baz=270,slow=22,SNR=5.0
**MKAR Makanchi Array 143.40 273** PKP PKPab 20 05 22.1 +1.8
0.4nm,0.8s,baz=121,slow=6.9,SNR=4.1
**AAK Ala-Archa 143.81 261** PKP PKPab 20 05 23.5 +1.3
1.4nm,0.7s,baz=190,slow=6.1,SNR=4.8
**ZALV Zalesovo Beam 147.27 284** PKPbc **PKPbc 20 05 33.3 +0.4**
1.2nm,0.8s,baz=104,slow=6.1,SNR=5.7
**KURBB Kurchatov Arra 147.88 275** PKPbc **PKPdf 20 05 33.4 +1.8**
0.6nm,0.8s,baz=136,slow=2.5,SNR=1.5
**ESDC Sonseca Array 152.07 133** PKPbc **PKPbc 20 05 45.0 -0.4**
0.4nm,0.7s,baz=183,slow=2.4,SNR=2.4

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*TUL* ***21*** *19:53:17.8±0.6,36˚.45N±0˚.02×98˚.774W±0˚.008,h7km±1km, ML2.4,mb_Lg2.4/7(NEIC),Error ellipse: s-maj=2.4km s-min=0.7km az=166.0*

**NEIC 21 19:53:18.4±0.4,36˚.45N±0˚.01×98˚.77W±0˚.02,h5km±5km, Error ellipse: s-maj=3.2km s-min=1.3km az=118.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.20** | **250** | Pg | Pg | 19 53 22.3 | -0.1 |
| U32A | | | | Sg | Sg | 19 53 25.6 | +0.6 |
| **WMOK** | **Wichita Mounta** | **1.71** | **180** | Pn | Pn | 19 53 48.2 | -0.7 |
| **FCAR** | **Ozark Folk Cen** | **5.41** | **94** | IAmb_Lg | | 19 56 06.0 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **N38A** | **Joes South For** | **6.13** | **43** | IAmb_Lg | | 19 56 35.7 | |
| | comp=Z,13nm,1.2s | | | | | | |

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*IDC* ***21*** *19:53:16.1±2.4,6˚.24S×130˚.01E,h0km,mb3.2/1, mb1 3.7/3,mb1mx3.3/36,mbtmp3.4/3,ML3.7/2,Error ellipse: s-maj=146.2km s-min=32.1km az=70.0*

**ISC 21 19:53:33.2±1.6,7˚.2S±0˚.2×129˚.1E±0˚.3,h150km,n10, σ2s53/11,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRS** | **Darwin Rock St** | **5.51** | **162** | P | **Pn** | **19 54 56.5** | **+3.0** |
| **MTN** | **Manton Dam** | **5.98** | **161** | P | **Pn** | **19 55 02.0** | **+2.4** |
| **KDU** | **Kakadu** | **6.40** | **149** | P | **Pn** | **19 55 06.4** | **+1.2** |
| **KNRA** | **Kununurra** | **8.47** | **182** | P | **Pn** | **19 55 35.5** | **+2.6** |
| **WRAB** | **Tennant Creek** | **13.66** | **159** | P | **Pn** | **19 56 40.1** | **-0.9** |
| **WRA** | **Warramunga Arr** | **13.67** | **159** | Pn | **Pn** | **19 56 39.3** | **-1.7** |
| | 0.3nm,0.3s,baz=346,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 19 59 04.3 | -8.1 |
| | 0.2nm,0.3s,baz=358,slow=20,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.04** | **165** | P | **Pn** | **19 57 24.6** | **+2.0** |
| | 0.3nm,0.3s,baz=342,slow=9.6,SNR=36 | | | | | | |
| ASAR | | | | S | **S** | **20 00 27.7** | **-4.3** |
| | 0.0nm,0.3s,baz=346,slow=26,SNR=2.4 | | | | | | |
| **WRKA** | **Warakurna** | **17.79** | **182** | P | **Pn** | **19 57 31.8** | **+0.2** |
| **OOD** | **Oodnadatta** | **21.44** | **164** | P | **P** | **19 58 10.8** | **+1.2** |
| **MKAR** | **Makanchi Array** | **67.90** | **327** | P | **P** | **20 04 14.7** | **-0.9** |
| | 0.1nm,0.4s,baz=113,slow=7.3,SNR=4.1 | | | | | | |

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*TUL* ***21*** *20:18:09.3±0.4,35˚.664N±0˚.008×97˚.40W±0˚.01,h7km±2km, ML2.4,mb_Lg2.3/5(NEIC),Error ellipse: s-maj=1.5km s-min=1.1km az=100.0*

**NEIC 21 20:18:09.8±0.5,35˚.673N±0˚.008×97˚.41W±0˚.01,h7km±1km, Error ellipse: s-maj=1.6km s-min=1.2km az=98.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.09** | **188** | Pg | Pg | 20 18 11.6 | -0.4 |
| OK009 | | | | Sg | Sg | 20 18 13.3 | -0.1 |
| **OK005** | **Luther M Schoo** | **0.18** | **96** | Pg | Pg | 20 18 13.1 | -0.3 |
| OK005 | | | | Sg | Sg | 20 18 16.0 | +0.1 |
| **OKCFA** | **Oklahoma City** | **0.26** | **188** | Pg | Pg | 20 18 14.2 | -0.7 |
| OKCFA | | | | Sg | Sg | 20 18 18.5 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **185** | Pg | Pg | 20 18 14.6 | -0.5 |
| OKCSW | | | | Sg | Sg | 20 18 18.7 | 0.0 |
| **FNO** | **Franklin** | **0.41** | **179** | Pg | Pg | 20 18 17.4 | -0.5 |
| FNO | | | | Sg | Sg | 20 18 23.5 | +0.1 |
| **W35A** | **Tecumseh** | **0.68** | **140** | | Pg | 20 18 21.9 | -1.0 |
| W35A | | | | Sg | Sg | 20 18 31.2 | -0.5 |
| **X34A** | **Smith Ranch, M** | **1.12** | **198** | Pg | Pg | 20 18 30.6 | -0.8 |
| **TUL1** | **Leonard** | **1.33** | **79** | | Pn | 20 18 32.9 | -2.0 |
| **T35A** | **Sooner Cattle** | **1.44** | **30** | | Pn | 20 18 35.4 | -1.0 |
| **X37A** | **Clayton** | **1.99** | **122** | IAmb_Lg | | 20 19 14.5 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **2.88** | **77** | Pn | Pn | 20 18 54.8 | -1.4 |
| **MIAR** | **Mount Ida** | **3.34** | **29** | Pn | Pn | 20 19 01.9 | -0.6 |
| **U40A** | **Yellville** | **3.75** | **78** | Pn | Pn | 20 19 07.7 | -0.6 |
| **X40A** | **Basin Creek Fa** | **3.93** | **106** | Pn | Pn | 20 19 11.2 | +0.6 |

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**TAP 21 20:34:44.9,23˚.19N×120˚.60E,h11km,ML2.8,9C-5D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WTP** | **Ta-pu** | **0.06** | **13** | ⇑*i*P | Pg | 20 34 47.7 | +0.5 |
| | baz=20 | | | | | | |
| WTP | | | | *i* S | Sg | 20 34 49.7 | +0.8 |
| | baz=20 | | | | | | |
| **CHN1** | **Nanshi** | **0.07** | **264** | ⇓*i*P | Pg | 20 34 47.8 | +0.5 |
| | baz=266 | | | | | | |
| CHN1 | | | | *i* S | Sg | 20 34 49.9 | +0.9 |
| | baz=266 | | | | | | |
| **SNST** | **Tainan City** | **0.10** | **286** | ⇓*i*P | Pg | 20 34 48.3 | +0.6 |
| | baz=288 | | | | | | |
| SNST | | | | *i* S | Sg | 20 34 50.8 | +1.2 |
| | baz=288 | | | | | | |
| **SGST** | **Jiashian** | **0.11** | **189** | ⇑*i*P | Pg | 20 34 47.5 | -0.2 |
| | baz=185 | | | | | | |
| SGST | | | | *i* S | Sg | 20 34 50.0 | +0.2 |
| | baz=185 | | | | | | |
| **TPUB** | **Ta-pu** | **0.11** | **14** | ⇑*i*P | Pg | 20 34 48.4 | +0.6 |
| | baz=13 | | | | | | |
| TPUB | | | | *i* S | Sg | 20 34 50.7 | +0.7 |
| | baz=13 | | | | | | |
| **TWK** | **Hsinying** | **0.13** | **306** | ⇓*i*P | Pg | 20 34 48.7 | +0.6 |
| | baz=309 | | | | | | |
| TWK | | | | *i* S | Sg | 20 34 51.3 | +1.0 |
| | baz=309 | | | | | | |
| **CHN4** | **Tsaushan** | **0.16** | **357** | ⇑*i*P | Pb | 20 34 49.2 | -0.7 |
| | baz=358 | | | | | | |
| CHN4 | | | | S | Sg | 20 34 52.3 | +1.2 |
| | baz=358 | | | | | | |
| **STYH** | **Taoyuan** | **0.16** | **98** | ⇓*i*P | Pb | 20 34 49.4 | -0.5 |
| | baz=89 | | | | | | |
| STYH | | | | S | Sg | 20 34 52.7 | +1.6 |
| | baz=89 | | | | | | |
| **CHN3** | **Shinhua** | **0.25** | **242** | P | Pb | 20 34 51.7 | +0.3 |
| | baz=253 | | | | | | |
| **SHHT** | **Tainan City** | **0.29** | **234** | *e*P | Pb | 20 34 52.6 | +0.5 |
| | baz=248 | | | | | | |
| **SSHA** | **Shanhua** | **0.29** | **259** | *e*P | Pb | 20 34 52.5 | +0.3 |
| | baz=265 | | | | | | |
| **ICHU** | **Yijhu** | **0.34** | **300** | *e*P | Pb | 20 34 52.9 | -0.1 |
| | baz=300 | | | | | | |
| **CHY** | **Chiayi** | **0.34** | **332** | P | Pb | 20 34 52.9 | -0.2 |
| | baz=333 | | | | | | |
| **CHN2** | **Minshiung** | **0.36** | **341** | P | Pb | 20 34 53.3 | 0.0 |
| | baz=341 | | | | | | |
| **ALS** | **Alishan** | **0.37** | **31** | ⇑*i*P | Pb | 20 34 53.1 | -0.6 |
| | baz=31 | | | | | | |
| ALS | | | | *i* S | Sb | 20 34 58.9 | -0.6 |
| | baz=31 | | | | | | |
| **SCLT** | **Jiali** | **0.38** | **267** | P | Pb | 20 34 53.7 | +0.1 |
| | baz=282 | | | | | | |
| **ELDTW** | **Lidau** | **0.38** | **90** | ⇓*i*P | Pb | 20 34 53.4 | -0.4 |
| | baz=90 | | | | | | |
| ELDTW | | | | *e*S | Sb | 20 34 59.8 | 0.0 |
| | baz=90 | | | | | | |
| **TWM1** | **Shoushan** | **0.40** | **204** | *e*P | Pb | 20 34 55.0 | +1.0 |
| | baz=203 | | | | | | |
| **CHN5** | **Tsauling** | **0.41** | **10** | ⇑*i*P | Pb | 20 34 53.7 | -0.6 |
| | baz=10.0 | | | | | | |
| **SSD** | **Sandimen** | **0.45** | **176** | ⇑*i*P | Pb | 20 34 54.8 | 0.0 |
| | baz=166 | | | | | | |
| SSD | | | | S | Sb | 20 35 01.8 | +0.3 |
| | baz=166 | | | | | | |
| **TSMG** | **Majia** | **0.49** | **175** | P | Pb | 20 34 55.6 | +0.1 |
| | baz=170 | | | | | | |
| **WDLH** | **Douliu** | **0.50** | **353** | *e*P | Pb | 20 34 55.9 | +0.2 |
| | baz=354 | | | | | | |
| **WTK** | **Tuku** | **0.53** | **338** | *e*P | Pb | 20 34 56.2 | 0.0 |
| | baz=339 | | | | | | |
| **LONT** | **Longtian** | **0.56** | **120** | *e*P | Pb | 20 34 57.2 | +0.3 |
| | baz=110 | | | | | | |
| **WSF** | **Szhu** | **0.56** | **322** | *e*P | Pb | 20 34 56.7 | -0.2 |
| | baz=323 | | | | | | |
| WSF | | | | *e*S | Sb | 20 35 05.7 | +0.8 |
| | baz=323 | | | | | | |
| **TWG** | **Pinlang** | **0.57** | **130** | P | Pb | 20 34 57.1 | +0.2 |
| | baz=117 | | | | | | |
| TWG | | | | *e*S | Sb | 20 35 05.7 | +0.6 |
| | baz=117 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.58** | **177** | P | Pb | 20 34 57.2 | +0.2 |
| | baz=177 | | | | | | |
| **TWGBT** | **Beinan** | **0.58** | **130** | *e*P | Pb | 20 34 57.2 | +0.2 |
| | baz=117 | | | | | | |
| TWGBT | | | | *e*S | Sb | 20 35 05.5 | +0.2 |
| | baz=117 | | | | | | |
| **FULB** | **Fuli** | **0.64** | **89** | *e*P | Pb | 20 34 58.4 | +0.3 |
| | baz=79 | | | | | | |
| **WJS** | **Zhushan** | **0.64** | **10** | *e*P | Pb | 20 34 58.2 | +0.1 |
| | baz=11 | | | | | | |
| **YULB** | **Yu-li** | **0.67** | **73** | *e*P | Pg | 20 34 58.1 | +0.1 |
| | baz=72 | | | | | | |
| **SSLB** | **Suanglung** | **0.68** | **29** | *e*P | Pb | 20 34 58.5 | -0.3 |
| | baz=29 | | | | | | |
| **WNT** | **Mingjian** | **0.69** | **6** | P | Pb | 20 34 59.2 | +0.3 |
| | baz=7.0 | | | | | | |
| **SSPT** | **Xinbi** | **0.71** | **182** | *e*P | Pn | 20 35 00.2 | -0.6 |
| | baz=168 | | | | | | |
| **EHY** | **Hungye** | **0.73** | **65** | *e*P | Pb | 20 34 59.4 | -0.3 |
| | baz=72 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.74** | **22** | ⇑P | Pb | 20 35 00.0 | +0.1 |
| | baz=22 | | | | | | |
| **TYC** | **Yuchr** | **0.75** | **18** | P | Pb | 20 35 00.1 | +0.2 |
| | baz=19 | | | | | | |
| **HGSD** | **Ruisui** | **0.81** | **68** | *e*P | Pb | 20 35 01.3 | +0.2 |
| | baz=67 | | | | | | |
| **SCZT** | **Fangliau** | **0.82** | **179** | P | Pb | 20 35 01.5 | +0.3 |
| | baz=178 | | | | | | |
| **EAST** | **Anshuo** | **0.84** | **164** | ⇑*i*P | Pb | 20 35 02.0 | +0.5 |
| | baz=158 | | | | | | |
| **WDGT** | **Dungji** | **0.87** | **275** | *e*P | Pg | 20 35 01.4 | -0.2 |
| | baz=275 | | | | | | |
| **WUSB** | **Renai** | **0.93** | **31** | *e*P | Pg | 20 35 02.9 | +0.1 |
| | baz=18 | | | | | | |
| **ESL** | **Shilin** | **0.98** | **51** | *e*P | Pb | 20 35 04.3 | +0.3 |
| | baz=51 | | | | | | |
| **SLIU** | **Shizi** | **0.99** | **169** | *e*P | Pn | 20 35 04.8 | +0.1 |
| | baz=169 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.00** | **289** | *e*P | Pg | 20 35 03.2 | -0.9 |
| | baz=289 | | | | | | |
| **CHGB** | **Renai** | **1.01** | **31** | *e*P | Pg | 20 35 04.5 | +0.1 |
| | baz=20 | | | | | | |
| **PNG** | **Penghu** | **1.03** | **291** | *e*P | Pg | 20 35 03.9 | -0.9 |
| | baz=292 | | | | | | |
| **WHP** | **Taichung City** | **1.13** | **16** | *e*P | Pg | 20 35 06.6 | 0.0 |
| | baz=1.0 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.13** | **33** | *e*P | Pn | 20 35 07.1 | +0.1 |
| | baz=33 | | | | | | |
| **TWQ1** | **Liyutan** | **1.16** | **8** | *e*P | Pg | 20 35 07.2 | -0.1 |
| | baz=355 | | | | | | |
| **NSY** | **Sanyi** | **1.23** | **7** | *e*P | Pb | 20 35 08.3 | +0.2 |
| | baz=354 | | | | | | |

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**TAP 21 20:34:54.8,23˚.19N×120˚.60E,h10km,ML3.6,5C-5D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WTP** | **Ta-pu** | **0.06** | **12** | ⇑*i*P | Pg | 20 34 57.6 | +0.5 |
| | baz=19 | | | | | | |
| WTP | | | | *i* S | Sg | 20 34 59.4 | +0.8 |
| | baz=19 | | | | | | |
| **CHN1** | **Nanshi** | **0.07** | **267** | ⇓*i*P | Pg | 20 34 57.6 | +0.5 |
| | baz=268 | | | | | | |
| CHN1 | | | | *i* S | Sg | 20 34 59.7 | +0.9 |
| | baz=268 | | | | | | |
| **SNST** | **Tainan City** | **0.10** | **288** | ⇓*i*P | Pg | 20 34 58.1 | +0.6 |
| | baz=289 | | | | | | |
| SNST | | | | *i* S | Sg | 20 35 00.6 | +1.2 |
| | baz=289 | | | | | | |
| **SGST** | **Jiashian** | **0.11** | **189** | ⇑*i*P | Pg | 20 34 57.4 | -0.2 |
| | baz=185 | | | | | | |
| SGST | | | | *i* S | Sg | 20 34 59.9 | +0.3 |
| | baz=185 | | | | | | |
| **TPUB** | **Ta-pu** | **0.11** | **13** | ⇑*i*P | Pg | 20 34 58.2 | +0.5 |
| | baz=13 | | | | | | |
| TPUB | | | | *i* S | Sg | 20 35 00.8 | +1.0 |
| | baz=13 | | | | | | |
| **TWK** | **Hsinying** | **0.13** | **307** | ⇓*i*P | Pg | 20 34 58.5 | +0.5 |
| | baz=310 | | | | | | |
| TWK | | | | *i* S | Sg | 20 35 01.1 | +0.9 |
| | baz=310 | | | | | | |
| **CHN4** | **Tsaushan** | **0.16** | **357** | ⇑*i*P | Pg | 20 34 59.1 | +0.7 |
| | baz=358 | | | | | | |
| CHN4 | | | | *e*S | Sg | 20 35 02.6 | +1.7 |
| | baz=358 | | | | | | |
| **STYH** | **Taoyuan** | **0.16** | **97** | ⇓*i*P | Pb | 20 34 59.3 | -0.6 |
| | baz=88 | | | | | | |
| STYH | | | | *i* S | Sg | 20 35 02.3 | +1.4 |
| | baz=88 | | | | | | |
| **CHN3** | **Shinhua** | **0.24** | **243** | *e*P | Pb | 20 35 01.7 | +0.4 |
| | baz=253 | | | | | | |
| CHN3 | | | | S | Sg | 20 35 07.1 | +3.9 |
| | baz=253 | | | | | | |
| **SHHT** | **Tainan City** | **0.29** | **234** | *e*P | Pb | 20 35 02.6 | +0.6 |
| | baz=244 | | | | | | |
| SHHT | | | | *e*S | Sb | 20 35 08.5 | +1.6 |
| | baz=244 | | | | | | |
| **SSHA** | **Shanhua** | **0.29** | **260** | *e*P | Pb | 20 35 02.5 | +0.4 |
| | baz=260 | | | | | | |
| SSHA | | | | *e*S | Sb | 20 35 08.7 | +1.7 |
| | baz=260 | | | | | | |
| **SCST** | **Cishan** | **0.32** | **198** | *e*P | Pb | 20 35 03.7 | +1.1 |
| | baz=198 | | | | | | |
| SCST | | | | *e*S | Sb | 20 35 09.8 | +2.1 |
| | baz=198 | | | | | | |
| **ICHU** | **Yijhu** | **0.34** | **300** | P | Pb | 20 35 02.6 | -0.4 |
| | baz=301 | | | | | | |
| ICHU | | | | S | Sb | 20 35 08.4 | 0.0 |
| | baz=301 | | | | | | |
| **CHY** | **Chiayi** | **0.35** | **332** | P | Pb | 20 35 03.0 | 0.0 |
| | baz=333 | | | | | | |
| CHY | | | | S | Sb | 20 35 08.8 | +0.2 |
| | baz=333 | | | | | | |
| **CHN2** | **Minshiung** | **0.36** | **341** | ⇑P | Pb | 20 35 03.3 | 0.0 |
| | baz=341 | | | | | | |
| CHN2 | | | | S | Sb | 20 35 09.8 | +0.8 |
| | baz=341 | | | | | | |
| **ALS** | **Alishan** | **0.37** | **30** | *e*P | Pb | 20 35 03.0 | -0.7 |
| | baz=31 | | | | | | |
| ALS | | | | S | Sb | 20 35 08.7 | -0.9 |
| | baz=31 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.37** | **247** | *e*P | Pb | 20 35 04.2 | +0.7 |
| | baz=258 | | | | | | |
| TAI1 | | | | *e*S | Sb | 20 35 12.3 | +3.0 |
| | baz=258 | | | | | | |
| **SCLT** | **Jiali** | **0.38** | **268** | P | Pb | 20 35 03.6 | +0.1 |
| | baz=268 | | | | | | |
| SCLT | | | | *e*S | Sb | 20 35 11.3 | +1.9 |
| | baz=268 | | | | | | |
| **ELDTW** | **Lidau** | **0.38** | **90** | ⇓*i*P | Pb | 20 35 03.5 | -0.2 |
| | baz=89 | | | | | | |
| ELDTW | | | | *i* S | Sb | 20 35 09.2 | -0.5 |
| | baz=89 | | | | | | |
| **TWM1** | **Shoushan** | **0.40** | **204** | *e*P | Pn | 20 35 05.6 | -1.0 |
| | baz=203 | | | | | | |
| **CHN5** | **Tsauling** | **0.41** | **10** | *e*P | Pg | 20 35 03.1 | +0.1 |
| | baz=10.0 | | | | | | |
| CHN5 | | | | *e*S | Sb | 20 35 10.3 | -0.3 |
| | baz=10.0 | | | | | | |
| **YUS** | **Yu-Shan** | **0.44** | **47** | P | Pb | 20 35 04.9 | -0.1 |
| | baz=47 | | | | | | |
| YUS | | | | S | Sb | 20 35 11.0 | -0.8 |
| | baz=47 | | | | | | |
| **SSD** | **Sandimen** | **0.44** | **176** | P | Pb | 20 35 04.8 | +0.1 |
| | baz=166 | | | | | | |
| SSD | | | | S | Sb | 20 35 11.9 | +0.5 |
| | baz=166 | | | | | | |
| **SGLT** | **Jiouru** | **0.47** | **192** | *e*P | Pb | 20 35 06.3 | +1.1 |
| | baz=191 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.48** | **314** | *e*P | Pb | 20 35 05.3 | 0.0 |
| | baz=315 | | | | | | |
| WSL | | | | *e*S | Sb | 20 35 12.9 | +0.5 |
| | baz=315 | | | | | | |
| **TSMG** | **Majia** | **0.48** | **175** | *e*P | Pb | 20 35 05.4 | 0.0 |
| | baz=167 | | | | | | |
| TSMG | | | | *e*S | Sb | 20 35 12.7 | +0.2 |
| | baz=167 | | | | | | |
| **WGK** | **Gukeng** | **0.50** | **356** | P | Pb | 20 35 05.5 | -0.1 |
| | baz=357 | | | | | | |
| WGK | | | | S | Sb | 20 35 13.9 | +1.0 |
| | baz=357 | | | | | | |
| **WDLH** | **Douliu** | **0.50** | **353** | *e*P | Pb | 20 35 05.7 | 0.0 |
| | baz=353 | | | | | | |
| WDLH | | | | *e*S | Sb | 20 35 14.3 | +1.2 |
| | baz=353 | | | | | | |
| **WTK** | **Tuku** | **0.53** | **339** | *e*P | Pb | 20 35 06.1 | -0.2 |
| | baz=339 | | | | | | |
| WTK | | | | *e*S | Sb | 20 35 15.3 | +1.3 |
| | baz=339 | | | | | | |
| **LONT** | **Longtian** | **0.56** | **120** | *e*P | Pb | 20 35 07.0 | +0.2 |
| | baz=109 | | | | | | |
| LONT | | | | *e*S | Sb | 20 35 15.5 | +0.6 |
| | baz=109 | | | | | | |
| **WSF** | **Szhu** | **0.57** | **322** | *e*P | Pb | 20 35 06.6 | -0.2 |
| | baz=323 | | | | | | |
| WSF | | | | S | Sb | 20 35 15.6 | +0.6 |
| | baz=323 | | | | | | |
| **TWG** | **Pinlang** | **0.57** | **130** | *e*P | Pb | 20 35 07.0 | +0.1 |
| | baz=117 | | | | | | |
| TWG | | | | S | Sb | 20 35 15.7 | +0.7 |
| | baz=117 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.57** | **177** | *e*P | Pb | 20 35 07.0 | 0.0 |
| | baz=172 | | | | | | |
| MASBT | | | | *e*S | Sb | 20 35 15.6 | +0.4 |
| | baz=172 | | | | | | |
| **TWGBT** | **Beinan** | **0.58** | **130** | *e*S | Sb | 20 35 15.4 | +0.2 |
| | baz=117 | | | | | | |
| **FULB** | **Fuli** | **0.64** | **89** | *e*P | Pb | 20 35 08.6 | +0.5 |
| | baz=79 | | | | | | |
| FULB | | | | *e*S | Sb | 20 35 18.0 | +1.0 |
| | baz=79 | | | | | | |
| **WJS** | **Zhushan** | **0.64** | **10** | *e*P | Pb | 20 35 08.1 | 0.0 |
| | baz=10.0 | | | | | | |
| WJS | | | | *e*S | Sb | 20 35 18.0 | +0.9 |
| | baz=10.0 | | | | | | |
| **TTN** | **Taitung** | **0.66** | **131** | *e*P | Pn | 20 35 09.6 | -0.6 |
| | baz=130 | | | | | | |
| TTN | | | | *e*S | Sn | 20 35 19.8 | -0.9 |
| | baz=130 | | | | | | |
| **YULB** | **Yu-li** | **0.67** | **72** | *e*P | Pg | 20 35 08.0 | +0.1 |
| | baz=72 | | | | | | |
| YULB | | | | *e*S | Sg | 20 35 16.8 | +0.1 |
| | baz=72 | | | | | | |
| **SSLB** | **Suanglung** | **0.68** | **28** | *e*P | Pg | 20 35 08.1 | +0.1 |
| | baz=28 | | | | | | |
| SSLB | | | | *e*S | Sb | 20 35 18.4 | +0.2 |
| | baz=28 | | | | | | |
| **EYUL** | **Yuli** | **0.68** | **76** | *e*P | Pb | 20 35 08.8 | +0.1 |
| | baz=76 | | | | | | |
| EYUL | | | | *e*S | Sb | 20 35 17.7 | -0.5 |
| | baz=76 | | | | | | |
| **EDH** | **Donghe** | **0.68** | **108** | *e*P | Pb | 20 35 09.3 | +0.5 |
| | baz=108 | | | | | | |
| EDH | | | | *e*S | Sn | 20 35 19.9 | -1.2 |
| | baz=108 | | | | | | |
| **WNT** | **Mingjian** | **0.69** | **6** | P | Pb | 20 35 09.2 | +0.3 |
| | baz=7.0 | | | | | | |
| WNT | | | | S | Sb | 20 35 19.8 | +1.3 |
| | baz=7.0 | | | | | | |
| **CHKT** | **Chengkung** | **0.71** | **97** | *e*P | Pb | 20 35 09.8 | +0.5 |
| | baz=96 | | | | | | |
| CHKT | | | | *e*S | Sn | 20 35 21.1 | -0.7 |
| | baz=96 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.73** | **336** | *e*P | Pg | 20 35 09.3 | +0.3 |
| | baz=337 | | | | | | |
| WTCT | | | | *e*S | Sb | 20 35 20.6 | +0.8 |
| | baz=337 | | | | | | |
| **EHY** | **Hungye** | **0.73** | **64** | *e*P | Pb | 20 35 09.8 | +0.1 |
| | baz=72 | | | | | | |
| EHY | | | | *e*S | Sb | 20 35 19.3 | -0.5 |
| | baz=72 | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.74** | **344** | *e*P | Pg | 20 35 09.4 | +0.3 |
| | baz=332 | | | | | | |
| WRL | | | | *e*S | Sb | 20 35 20.4 | +0.5 |
| | baz=332 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.74** | **22** | *e*P | Pb | 20 35 10.0 | 0.0 |
| | baz=22 | | | | | | |
| SMLT | | | | *e*S | Sb | 20 35 21.2 | +1.1 |
| | baz=22 | | | | | | |
| **TYC** | **Yuchr** | **0.75** | **18** | P | Pb | 20 35 10.0 | 0.0 |
| | baz=19 | | | | | | |
| TYC | | | | S | Sb | 20 35 21.3 | +1.0 |
| | baz=19 | | | | | | |
| **SCZT** | **Fangliau** | **0.81** | **179** | P | Pb | 20 35 11.6 | +0.5 |
| | baz=169 | | | | | | |
| SCZT | | | | *e*S | Sn | 20 35 24.3 | -0.1 |
| | baz=169 | | | | | | |
| **HGSD** | **Ruisui** | **0.81** | **68** | *e*P | Pn | 20 35 12.3 | 0.0 |
| | baz=67 | | | | | | |
| **EAST** | **Anshuo** | **0.83** | **164** | *e*P | Pb | 20 35 11.8 | +0.4 |
| | baz=164 | | | | | | |
| EAST | | | | *e*S | Sn | 20 35 24.2 | -0.7 |
| | baz=164 | | | | | | |
| **WDGT** | **Dungji** | **0.87** | **275** | *e*P | Pg | 20 35 11.2 | -0.4 |
| | baz=275 | | | | | | |
| WDGT | | | | *e*S | Sb | 20 35 23.9 | +0.2 |
| | baz=275 | | | | | | |
| **TAW** | **Tawu** | **0.87** | **162** | *e*P | Pn | 20 35 12.6 | -0.5 |
| | baz=161 | | | | | | |
| TAW | | | | *e*S | Sn | 20 35 24.8 | -1.0 |
| | baz=161 | | | | | | |
| **TAWH** | **Dawu Township** | **0.89** | **163** | *e*P | Pb | 20 35 12.6 | +0.3 |
| | baz=163 | | | | | | |
| TAWH | | | | *e*S | Sn | 20 35 25.3 | -0.9 |
| | baz=163 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.91** | **18** | *e*P | Pg | 20 35 12.4 | +0.1 |
| | baz=18 | | | | | | |
| WCS | | | | *e*S | Sb | 20 35 24.9 | +0.1 |
| | baz=18 | | | | | | |
| **WUSB** | **Renai** | **0.93** | **31** | *e*P | Pb | 20 35 13.0 | -0.1 |
| | baz=30 | | | | | | |
| WUSB | | | | *e*S | Sb | 20 35 26.1 | +0.6 |
| | baz=30 | | | | | | |
| **LDUT** | **Ludao** | **0.95** | **122** | *e*P | Pb | 20 35 13.7 | +0.4 |
| | baz=122 | | | | | | |
| LDUT | | | | *e*S | Sn | 20 35 28.5 | +0.7 |
| | baz=122 | | | | | | |
| **TCU** | **Taichung** | **0.96** | **4** | *e*P | Pb | 20 35 13.5 | 0.0 |
| | baz=5.0 | | | | | | |
| TCU | | | | *e*S | Sn | 20 35 27.4 | -0.6 |
| | baz=5.0 | | | | | | |
| **ESL** | **Shilin** | **0.98** | **51** | *e*P | Pn | 20 35 14.4 | -0.3 |
| | baz=50 | | | | | | |
| ESL | | | | *e*S | Sn | 20 35 28.3 | -0.3 |
| | baz=50 | | | | | | |
| **SLIU** | **Shizi** | **0.98** | **169** | *e*P | Pn | 20 35 14.7 | 0.0 |
| | baz=169 | | | | | | |
| SLIU | | | | *e*S | Sn | 20 35 28.7 | +0.1 |
| | baz=169 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.00** | **289** | *e*P | Pg | 20 35 12.8 | -1.2 |
| | baz=289 | | | | | | |
| PHUB | | | | *e*S | Sg | 20 35 26.7 | -0.4 |
| | baz=289 | | | | | | |
| **CHGB** | **Renai** | **1.01** | **31** | *e*P | Pg | 20 35 14.4 | 0.0 |
| | baz=31 | | | | | | |
| CHGB | | | | *e*S | Sn | 20 35 29.4 | -0.3 |
| | baz=31 | | | | | | |
| **PNG** | **Penghu** | **1.03** | **292** | P | Pg | 20 35 13.8 | -1.0 |
| | baz=292 | | | | | | |
| PNG | | | | *e*S | Sg | 20 35 27.9 | -0.2 |
| | baz=292 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **VCHM** | **Qimei** | **1.08** | **271** | *e*P | | Pb | 20 35 14.4 | -1.1 |
| | baz=272 | | | | | | | | |
| VCHM | | | | *e*S | | Sg | 20 35 29.2 | -0.4 |
| | baz=272 | | | | | | | | |
| **WHP** | **Taichung City** | **1.13** | **16** | *e*P | | Pn | 20 35 16.7 | 0.0 |
| | baz=25 | | | | | | | | |
| WHP | | | | *e*S | | Sn | 20 35 33.2 | +0.9 |
| | baz=25 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.13** | **32** | *e*P | | Pb | 20 35 16.9 | +0.1 |
| | baz=32 | | | | | | | | |
| WHF | | | | *e*S | | Sn | 20 35 32.6 | -0.2 |
| | baz=32 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.15** | **2** | *e*P | | Pn | 20 35 17.0 | 0.0 |
| | baz=2.0 | | | | | | | | |
| WDJ | | | | *e*S | | Sn | 20 35 34.1 | +1.3 |
| | baz=2.0 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.16** | **8** | *e*P | | Pg | 20 35 17.4 | +0.1 |
| | baz=8.0 | | | | | | | | |
| TWQ1 | | | | *e*S | | Sn | 20 35 34.3 | +1.2 |
| | baz=8.0 | | | | | | | | |
| **TDCB** | **Techi** | **1.18** | **26** | *e*P | | Pb | 20 35 16.4 | -0.9 |
| | baz=25 | | | | | | | | |
| TDCB | | | | *e*S | | Sn | 20 35 33.4 | -0.2 |
| | baz=25 | | | | | | | | |
| **TWT** | **Tachien** | **1.18** | **26** | *e*P | | Pg | 20 35 17.7 | +0.1 |
| | baz=26 | | | | | | | | |
| TWT | | | | *e*S | | Sn | 20 35 34.0 | +0.2 |
| | baz=26 | | | | | | | | |
| **HEN** | **Hengchun** | **1.19** | **174** | *e*P | | Pg | 20 35 18.5 | +0.9 |
| | baz=173 | | | | | | | | |
| **FUSS** | **Fushou** | **1.21** | **29** | *e*P | | Pb | 20 35 17.7 | -0.2 |
| | baz=29 | | | | | | | | |
| FUSS | | | | *e*S | | Sn | 20 35 35.1 | +0.6 |
| | baz=29 | | | | | | | | |
| **NSY** | **Sanyi** | **1.23** | **7** | *e*P | | Pg | 20 35 18.4 | -0.1 |
| | baz=355 | | | | | | | | |
| NSY | | | | *e*S | | Sn | 20 35 36.0 | +1.2 |
| | baz=355 | | | | | | | | |
| **TWD** | **Chiawan** | **1.27** | **46** | *e*P | | Pg | 20 35 19.2 | -0.1 |
| | baz=45 | | | | | | | | |
| TWD | | | | *e*S | | Sg | 20 35 36.2 | +0.4 |
| | baz=45 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.30** | **38** | *e*P | | Pg | 20 35 19.6 | -0.2 |
| | baz=38 | | | | | | | | |
| ETLH | | | | *e*S | | Sg | 20 35 37.8 | +1.2 |
| | baz=38 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.34** | **43** | *e*P | | Pn | 20 35 19.6 | +0.1 |
| | baz=42 | | | | | | | | |
| NACB | | | | *e*S | | Sg | 20 35 38.1 | +0.2 |
| | baz=42 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.35** | **7** | *e*P | | Pb | 20 35 20.1 | -0.2 |
| | baz=356 | | | | | | | | |
| NMLH | | | | *e*S | | Sg | 20 35 38.6 | +0.1 |
| | baz=356 | | | | | | | | |
| **NNSB** | **Datong** | **1.43** | **30** | *e*P | | Pn | 20 35 21.1 | +0.3 |
| | baz=30 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.43** | **29** | P | | Pb | 20 35 21.7 | 0.0 |
| | baz=30 | | | | | | | | |
| NNS | | | | *e*S | | Sb | 20 35 40.3 | +0.3 |
| | baz=30 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.48** | **14** | *e*P | | Pn | 20 35 21.6 | +0.1 |
| | baz=15 | | | | | | | | |
| NSTT | | | | *e*S | | Sb | 20 35 41.9 | +0.6 |
| | baz=15 | | | | | | | | |
| **LIOB** | **Emei** | **1.50** | **15** | *e*P | | Pn | 20 35 22.3 | +0.5 |
| | baz=357 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.51** | **18** | *e*P | | Pn | 20 35 22.5 | +0.5 |
| | baz=360 | | | | | | | | |
| NFF | | | | *e*S | | Sg | 20 35 43.5 | 0.0 |
| | baz=360 | | | | | | | | |
| **ENA** | **Nanau** | **1.62** | **40** | *e*P | | Pb | 20 35 25.1 | +0.4 |
| | baz=54 | | | | | | | | |
| **NSK** | **Sanguang** | **1.63** | **25** | *e*P | | Pb | 20 35 24.5 | -0.6 |
| | baz=16 | | | | | | | | |
| NSK | | | | *e*S | | Sb | 20 35 45.9 | +0.1 |
| | baz=16 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.64** | **26** | *e*P | | Pn | 20 35 24.4 | +0.7 |
| | baz=16 | | | | | | | | |
| YHNB | | | | *e*S | | Sn | 20 35 45.3 | +0.4 |
| | baz=16 | | | | | | | | |
| **EWUT** | **Wuta** | **1.65** | **41** | *e*P | | Pb | 20 35 25.0 | -0.4 |
| | baz=53 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.69** | **31** | *e*P | | Pb | 20 35 25.8 | -0.3 |
| | baz=20 | | | | | | | | |
| **NDS** | **Dongshan** | **1.76** | **35** | *e*P | | Pg | 20 35 28.1 | -0.6 |
| | baz=21 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.81** | **30** | *e*P | | Pb | 20 35 27.7 | -0.3 |
| | baz=30 | | | | | | | | |
| **TWE** | **Neicheng** | **1.81** | **32** | *e*P | | Pb | 20 35 27.9 | -0.1 |
| | baz=32 | | | | | | | | |

*TEH **21** 20:34:55.1,30.90N×48.73E,h18km,ML3.3*
*ISN **21** 20:34:57.5±0.3,31.15N×48.96E,h10km,ML3.4*
**ISC 21 20:34:57.9±1.4,31.00N±0.07×48.85E±0.06,h10km,n29,**
**σ0.70/31,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AHWZ** | **Ahwaz** | **0.37** | **331** | | *e*Sg | **Sg** | | **20 35 10.2** | **0.0** |
| AHWZ | | | | | *e*Pg | **Pg** | | **20 35 04.1** | **-1.1** |
| **AMIS** | **Naft Sefid** | **0.76** | **29** | | *e*Pg | **Pg** | | **20 35 12.7** | **+0.2** |
| **ABEH** | **Behbahan** | **1.27** | **108** | | *e*Pg | **Pg** | | **20 35 20.5** | **-1.2** |
| **SHK1** | **Shahrekord** | **2.18** | **52** | | *e*Pn | **Pn** | | **20 35 34.4** | **0.0** |
| SHK1 | | | | | *e* | | | 20 36 16.4 | |
| | comp=Z,2μm,0.6s | | | | | | | | |
| **IBRJ** | **Brojen** | **2.25** | **66** | | *e*Pn | **Pn** | | **20 35 35.4** | **0.0** |
| IBRJ | | | | | *e* | | | 20 36 16.6 | |
| | comp=Z,820nm,0.8s | | | | | | | | |
| **KLNJ** | **Kolanjah** | **2.35** | **89** | | *e*Pn | **Pn** | | **20 35 35.8** | **-1.1** |
| KLNJ | | | | | *e* | | | 20 36 29.1 | |
| | comp=Z,966nm,0.8s | | | | | | | | |
| **IPIR** | **Pirpir** | **2.41** | **45** | | *e*Pn | **Pn** | | **20 35 38.7** | **+1.0** |
| IPIR | | | | | *e* | | | 20 36 21.7 | |
| | comp=Z,957nm,0.5s | | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **2.65** | **342** | | *e*Pn | **Pn** | | **20 35 40.5** | **-0.2** |
| **BMDN** | **Meydan** | **2.66** | **359** | | *e*Pn | **Pn** | | **20 35 40.6** | **-0.4** |
| BMDN | | | | | *e* | | | 20 36 29.2 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| **IDOB** | **Doab** | **2.83** | **349** | | *e*Pn | **Pn** | | **20 35 42.7** | **-0.7** |
| **KHMZ** | **Khomeyn** | **2.88** | **19** | | *e*Pn | **Pn** | | **20 35 44.5** | **+0.4** |
| **IGAR** | **Gharneh** | **3.06** | **62** | | *e*Pn | **Pn** | | **20 35 47.0** | **+0.5** |
| **IRAM** | **Ramesheh** | **3.12** | **74** | | *e*Pn | **Pn** | | **20 35 47.8** | **+0.4** |
| IRAM | | | | | *e* | | | 20 36 49.8 | |
| | comp=Z,333nm,1.0s | | | | | | | | |
| **IBDR** | **Badra** | **3.25** | **311** | | *i*P | **Pn** | | **20 35 50.2** | **+1.3** |
| IBDR | | | | | *i*S | **Sn** | | **20 36 28.4** | **+0.7** |
| | baz=126 | | | | | | | | |
| IBDR | | | | | IAML | | | 20 36 50.7 | |
| | comp=E,136nm,1.2s | | | | | | | | |
| IBDR | | | | | IAML | | | 20 36 51.5 | |
| | comp=N,230nm,1.2s | | | | | | | | |
| **IKLH** | **Kolahrood** | **3.27** | **44** | | *e*Pn | **Pn** | | **20 35 50.8** | **+1.4** |
| IKLH | | | | | *e* | | | 20 35 51.0 | |
| | comp=Z,747nm,0.5s | | | | | | | | |
| **IZEF** | **Zefreh** | **3.50** | **57** | | *e*Pn | **Pn** | | **20 35 53.1** | **+0.4** |
| IZEF | | | | | *e* | | | 20 36 43.5 | |
| | comp=Z,276nm,0.6s | | | | | | | | |
| **ASAO** | **Ashtian** | **3.67** | **15** | | *e*Pn | **Pn** | | **20 35 55.1** | **+0.2** |
| **NASN** | **Na'in** | **3.81** | **61** | | *e*Pn | **Pn** | | **20 35 57.0** | **+0.1** |
| **KRSH** | **Karshahi** | **4.05** | **42** | | *e*Pn | **Pn** | | **20 36 00.8** | **+0.7** |
| **ISAD** | **Sadrabad** | **4.23** | **76** | | *e*Pn | **Pn** | | **20 36 02.5** | **-0.1** |
| **IQOM** | **Qom** | **4.26** | **25** | | *e*Pn | **Pn** | | **20 36 02.9** | **-0.1** |
| **SNGE** | **Sanandaj** | **4.27** | **343** | | *e*Pn | **Pn** | | **20 36 02.8** | **-0.3** |
| **ISFB** | **Sefidab** | **4.39** | **40** | | *e*Pn | **Pn** | | **20 36 04.2** | **-0.5** |
| **IRAZ** | **Razeghan** | **4.48** | **11** | | *e*Pn | **Pn** | | **20 36 06.4** | **+0.4** |
| **GHIR** | **Ghir-Karzin** | **4.50** | **126** | | *e*Pn | **Pn** | | **20 36 07.5** | **+1.2** |
| **ANAR** | **Anarak** | **4.68** | **61** | | *e*Pn | **Pn** | | **20 36 08.5** | **-0.2** |
| **YZKH** | **Yazd** | **5.08** | **73** | | *e*Pn | **Pn** | | **20 36 14.4** | **+0.2** |
| **CHTH** | **Charan** | **5.25** | **21** | | *e*Pn | **Pn** | | **20 36 16.5** | **-0.1** |
| **DAMV** | **Damavand** | **5.30** | **29** | | *e*Pn | **Pn** | | **20 36 16.6** | **-0.8** |

**IDC 21 20:58:04.3±26.0,2.20N×127.34E,h310km±282km,**
**mb2.8/6,mb1 3.0/6,mb1mx2.8/34,mbtmp3.5/6,MS3.0/1,**
**Ms1 3.0/1,ms1mx2.2/15,Error ellipse: s-maj=139.6km**
**s-min=21.3km az=51.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.24** | **185** | | | P | P | 21 02 18.9 | +1.7 |
| | 0.6nm,0.4s,baz=15,slow=10,SNR=2.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.05** | **163** | | | P | P | 21 02 42.9 | -0.4 |
| | 0.5nm,0.3s,baz=342,slow=10,SNR=13 | | | | | | | | |
| WRA | | | | | | LR | LR | 21 14 14.8 | |
| | comp=Z,33nm,18.4s,baz=116,slow=42 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **26.49** | **166** | | | P | P | 21 03 14.3 | +0.2 |
| | 0.4nm,0.3s,baz=351,slow=7.0,SNR=15 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.18** | **302** | | | P | P | 21 04 02.2 | -2.0 |
| | 0.1nm,0.3s,baz=113,slow=6.9,SNR=1.4 | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.49** | **159** | | | P | P | 21 04 39.3 | -1.5 |
| | 1.1nm,0.9s,baz=306,slow=14,SNR=3.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.15** | **326** | | | P | P | 21 07 33.9 | +0.8 |
| | 0.4nm,0.5s,baz=115,slow=8.3,SNR=9.5 | | | | | | | | |

*IDC **21** 21:03:21.4±14.0,37.08N×72.77E,h215km±233km,*
*mb3.2/1,mb1 2.9/3,mb1mx2.5/52,mbtmp3.6/3,ML2.9/2,*
*Error ellipse: s-maj=557.0km s-min=75.0km az=129.0*
*NNC **21** 21:03:24.0±0.8,37.65N×72.04E,h122km±17km,mb2.8,*
*mpv3.5,Error ellipse: s-maj=7.5km s-min=6.0km az=20.0*
**ISC 21 21:03:23.8±1.9,37.7N±0.1×72.2E±0.2,h200km,n12,**
**σ1.9/11/14,3C-1D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **4.57** | **14** | | P | **Pn** | | **21 04 33.3** | **+0.3** |
| | SNR=47 | | | | | | | | |
| **UCH** | **Uchtor** | **4.86** | **21** | | P | **Pn** | | **21 04 37.1** | **+0.4** |
| | SNR=10 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **5.10** | **13** | | P | **Pn** | | **21 04 40.7** | **+1.2** |
| | SNR=8.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **5.23** | **19** | | P | **Pn** | | **21 04 41.9** | **+0.7** |
| | SNR=13 | | | | | | | | |
| **AAK** | **Ala-Archa** | **5.23** | **19** | | P | **Pn** | | **21 04 41.4** | **+0.2** |
| | 4.1nm,0.5s | | | | | | | | |
| AAK | | | | | ⇓S | **Sn** | | **21 05 42.1** | **-0.3** |
| | 8.6nm,0.8s | | | | | | | | |
| **KK02** | **Karatay Array** | **5.54** | **347** | | ⇑P | **Pn** | | **21 04 44.4** | **-0.5** |
| | 1.0nm,0.3s | | | | | | | | |
| KK02 | | | | | ⇑S | **Sn** | | **21 05 48.0** | **-1.2** |
| | 3.8nm,0.3s | | | | | | | | |
| **CHMS** | **Chumysh** | **5.64** | **20** | | P | **Pn** | | **21 04 46.9** | **+0.6** |
| | SNR=5.0 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.83** | **26** | | P | **Pn** | | **21 04 49.3** | **+0.4** |
| | SNR=5.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **11.76** | **36** | | P | **Pn** | | **21 06 05.9** | **+0.4** |
| | 0.0nm,0.3s,baz=220,slow=13,SNR=1.7 | | | | | | | | |
| **AB31** | **Akbulak array** | **14.54** | **326** | | ⇑P | **P** | | **21 06 43.5** | **+2.2** |
| | 0.8nm,0.7s,baz=138,slow=10,SNR=10 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.43** | **24** | | P | **Pn** | | **21 07 24.8** | **-1.7** |
| | 0.5nm,0.3s,baz=211,slow=9.5,SNR=14 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.68** | **269** | | P | **P** | | **21 13 52.4** | **-1.0** |
| | 0.4nm,0.4s,baz=53,slow=6.0,SNR=11 | | | | | | | | |

*MOS **21** 21:26:40.1±1.0,24.54N×142.23E,h21km,mb6.0/50,*
*MS5.3/36,Error ellipse: s-maj=7.2km s-min=3.5km*
*az=110.3*
*NIED **21** 21:26:41.1,24.61N×143.36E,h120km,MW5.7,Moment*
*Tensor Solution. s1 Moment tensor: Scale 10^17Nm;*
*Mrr1.86; Mθθ0.35; Mϕϕ-2.21; Mrθ0.96; Mrϕ1.14; Mθϕ3.17;*
*Fault plane solution: M04.06000×10^17 NP1:ϕs9.00000°,*
*δ75.00000°,λ112.00000°. NP2:ϕs131.00000°,δ27.00000°,*
*λ34.00000°.*
*JMA **21** 21:26:41.0±0.1,24.61N×143.36E,h120km±2km,M5.8*
*JMA Felt I J1.*
*NEIC **21** 21:26:42.3±1.9,24.55N±0.05×142.41E±0.09,h21km±1km,*
*mb5.8/495,Ms_20 5.4/176,Mwb5.5/66,Mww5.6,Error*
*ellipse: s-maj=13.2km s-min=9.3km az=85.0*
*BJI **21** 21:26:42.6±0.0,24.80N×142.71E,h57km,mb5.4/84,*
*mB5.4/62,Ms5.3/95,Ms7 5.2/89*
*NEIC **21** 21:26:44.6,24.60N×142.35E,h25km,Moment Tensor*
*Solution. Moment tensor: Scale 10^17Nm; Mrr2.33;*
*Mθθ-0.21; Mϕϕ-2.12; Mrθ0.59; Mθϕ0.28; Mrϕ1.02; Fault*
*plane solution: M05.24000×10^17 NP1:ϕs159.52000°,*
*δ35.11000°,λ67.05000°. NP2:ϕs6.89000°,δ58.02000°,*
*λ105.33000°. Principal axes: T 2.6912, Plg72.0000°,*
*Azm315.0000°; N -0.3382, Plg13.0000°, Azm179.0000°;*
*P -2.3530, Plg12.0000°, Azm86.0000°;*
*BGR **21** 21:26:44.3±0.0,25.75N×142.75E,h42km,mb5.7,Ms5.3*
*IDC **21** 21:26:46.6±1.2,24.55N×142.15E,h56km±10km,mb5.2/39,*
*mb1 5.2/45,mb1mx5.1/52,mbtmp5.4/45,MS5.1/80,*
*Ms1 5.1/80,ms1mx5.1/89,Error ellipse: s-maj=11.4km*
*s-min=6.8km az=86.0*
*GCMT **21** 21:26:46.3±0.1,24.54N±0.01×142.53E±0.01,h36km,*
*MW5.7/155,Moment Tensor Solution. s142,c259;*
*s155,c311; Duration: 1s7 Moment tensor: Scale 10^17*
*Nm; Mrr3.35±.04; Mθθ0.41±.03; Mϕϕ-3.76±.04;*
*Mrθ0.61±.04; Mθϕ0.28±.03; Mrϕ1.47±.05; Best double*
*couple: M03.91300×10^17 NP1:ϕs164.00000°,δ35.00000°,*
*λ70.00000°. NP2:ϕs8.00000°,δ57.00000°,λ103.00000°.*
*Principal axes: T 3.7690, Plg74.0000°, Azm314.0000°; N*
*0.2840, Plg11.0000°, Azm180.0000°; P -4.0570,*
*Plg11.0000°, Azm88.0000°; nsta1 refers to body waves,*
*cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*Triangular moment-rate function*
*NEIC **21** 21:26:47,24.45N×142.63E,h24km,Moment Tensor*
*Solution. Duration: 10s0 Moment tensor: Scale 10^17Nm;*
*Mrr2.98; Mθθ0.02; Mϕϕ-3.00; Mrθ0.62; Mθϕ0.16; Mrϕ1.99;*
*Fault plane solution: M03.64000×10^17 NP1:*
*ϕs166.00000°,δ29.00000°,λ71.00000°. NP2:ϕs8.00000°,*
*δ62.00000°,λ100.00000°. Principal axes: T 3.6852,*
*Plg71.0000°, Azm301.0000°; N -0.0875, Plg9.0000°,*
*Azm183.0000°; P -3.5977, Plg17.0000°, Azm90.0000°;*
**ISC 21 21:26:45.0±0.4,24.61N±0.03×142.41E±0.03,h43km±2km,**
**h43km:pP-P,n1279,σ1.52/1247,mb5.7/477,MS5.4/221,**
**152C-55D,Fault plane solution: NP1:**ϕs141.58646°,
δ40.39083°,λ71.53130°. **NP2:**ϕs345.26440°,δ52.07539°,
λ105.08389°. **Principal axes:** T Plg76.6971°,
Azm308.3666°; N Plg11.8457°, Azm155.8586°; P
Plg5.9671°, Azm64.6024°; **Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHH2** | **Haha-jima-NKT2** | **2.03** | **354** | | | P | **Pn** | **21 27 18.5** | **+1.8** |
| **CBIJ** | **Chichi jima** | **2.49** | **355** | | | P | **Pn** | **21 27 23.9** | **+0.9** |
| CBIJ | | | | | | *e*S | **Sn** | **21 27 56.7** | **+4.6** |
| **JCJ** | **Chichijima** | **2.49** | **355** | | | Pn | **Pn** | **21 27 22.7** | **-0.3** |
| JCJ | | | | | | Sn | **Sn** | **21 27 53.7** | **+1.6** |
| **JCJ** | **Chichijima** | **2.49** | **355** | | | P | **Pn** | **21 27 26.0** | **+3.0** |
| **JHJ2** | **Mitsune** | **8.78** | **346** | | | Pn | **Pn** | **21 28 49.3** | **+0.1** |
| **JHJ2** | **Mitsune** | **8.78** | **346** | | | P | **Pn** | **21 28 51.3** | **+2.0** |
| **JHJ** | **Hachijo jima 2** | **8.79** | **345** | | | P | **Pn** | **21 28 51.4** | **+1.9** |
| | 22nm,0.3s,baz=89,slow=23,SNR=7.1 | | | | | | | | |
| JHJ | | | | | | S | **Sn** | **21 30 27.6** | **+0.4** |
| | 52nm,0.3s,baz=251,slow=21,SNR=1.7 | | | | | | | | |
| JHJ | | | | | | LR | LR | 21 32 27.8 | |
| | comp=Z,18μm,19.0s,baz=156,slow=39 | | | | | | | | |
| **BSO1** | **Boso 1** | **10.09** | **353** | | | P | **Pn** | **21 29 06.1** | **-0.7** |
| **BSO3** | **Boso 3** | **10.29** | **351** | | | P | **Pn** | **21 29 09.3** | **-0.5** |
| **JIM2** | **Oshima 3** | **10.40** | **346** | | *e*S | | **Sn** | **21 31 08.1** | **+1.3** |
| **JTNC** | **Tanabenakahech** | **10.93** | **329** | | | P | **Pn** | **21 29 21.4** | **+2.6** |
| **JOD2** | **Odawara 2** | **11.00** | **346** | | | P | **Pn** | **21 29 20.6** | **+0.8** |
| **SHZ3** | **Shizuoka 3** | **11.04** | **342** | | | P | **Pn** | **21 29 21.9** | **+1.5** |
| **GUMO** | **Guam** | **11.20** | **168** | | | P | **Pn** | **21 29 22.6** | **+0.1** |
| | 3.9nm,0.3s,baz=349,slow=8.4,SNR=2.3 | | | | | | | | |
| **GUMO** | **Guam** | **11.20** | **168** | | | Pn | **Pn** | **21 29 21.1** | **-1.5** |
| **GUMO** | **Guam** | **11.20** | **168** | | | P | **Pn** | **21 29 21.1** | **-1.5** |
| **JSGW** | **Sagamiharawaka** | **11.30** | **347** | | | P | **Pn** | **21 29 23.7** | **-0.2** |
| **JHU** | **Hanno** | **11.53** | **347** | | | P | **Pn** | **21 29 25.2** | **-1.8** |
| JHU | | | | | | *e*S | **Sn** | **21 31 33.9** | **-0.5** |
| **INU** | **Inuyama** | **11.68** | **338** | | | Pn | **Pn** | **21 29 31.2** | **+2.2** |
| **INU** | **Inuyama** | **11.68** | **338** | | | P | **Pn** | **21 29 32.0** | **+3.0** |
| **JYT** | **Yasato** | **11.74** | **351** | | *e*S | | **Sn** | **21 31 37.9** | **-1.6** |
| **JYT** | **Yasato** | **11.74** | **351** | | | Pn | **Pn** | **21 29 30.3** | **+0.5** |
| **JMN** | **Monobe** | **11.75** | **323** | | | Pn | **Pn** | **21 29 30.7** | **+0.7** |
| **JRY** | **Ryogami san** | **11.77** | **346** | | | P | **Pn** | **21 29 29.6** | **-0.7** |
| **JGF** | **Kuroka** | **11.80** | **339** | | | | **Pn** | **21 29 31.9** | **+1.3** |
| **JNT** | **Takato** | **11.82** | **343** | | | P | **Pn** | **21 29 32.3** | **+1.2** |
| **JAG** | **Ashikaga** | **12.05** | **348** | | | P | **Pn** | **21 29 31.5** | **-2.6** |
| **JNG** | **Nsakai** | **12.33** | **343** | | | P | **Pn** | **21 29 37.9** | **-0.1** |
| **JGN** | **Niukaw** | **12.38** | **340** | | | P | **Pn** | **21 29 39.7** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **12.43** | **344** | | | P | **Pn** | **21 29 38.6** | **-0.7** |
| | 0.9nm,0.3s,baz=152,slow=10.0,SNR=36 | | | | | | | | |
| MJAR | | | | | | S | **Sn** | **21 31 55.5** | **-1.0** |
| | 0.3nm,0.3s,baz=157,slow=27,SNR=1.6 | | | | | | | | |
| MJAR | | | | | | LR | LR | 21 34 20.4 | |
| | comp=Z,15μm,22.0s,baz=166,slow=36 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.43** | **344** | | | P | **Pn** | **21 29 38.7** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **12.43** | **344** | | | Pn | **Pn** | **21 29 38.7** | **-0.6** |
| **MAJO** | **Matsushiro** | **12.44** | **344** | | ⇓*e* | P | **Pn** | **21 29 39.3** | **0.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MAJO** | **Matsushiro** | **12.44** | **344** | | | Pn | **Pn** | **21 29 38.8** | **-0.5** |
| **MJB9** | **Matsu-Tunnel** | **12.44** | **344** | | | | **Pn** | **21 29 38.6** | **-0.8** |
| **JSU** | **Suzuyama** | **12.60** | **306** | | | | **Pn** | **21 29 39.8** | **-1.8** |
| **JOW** | **Kunigami** | **12.94** | **283** | | | P | **Pn** | **21 29 44.4** | **-1.9** |
| | 0.9nm,0.3s,baz=118,slow=14,SNR=1.4 | | | | | | | | |
| JOW | | | | | | S | **Sn** | **21 32 09.6** | **+0.7** |
| | 1.7nm,0.3s,baz=24,slow=28,SNR=1.3 | | | | | | | | |
| JOW | | | | | | LR | LR | 21 34 16.4 | |
| | comp=Z,20μm,20.3s,baz=100,slow=35 | | | | | | | | |
| **JOW** | **Kunigami** | **12.94** | **283** | | | Pn | **Pn** | **21 29 45.4** | **-0.9** |
| **JOW** | **Kunigami** | **12.94** | **283** | | | P | **Pn** | **21 29 49.2** | **+2.9** |
| **JNU** | **Nakatsue** | **13.19** | **313** | | | P | **Pn** | **21 29 49.8** | **+0.1** |
| | 0.6nm,0.3s,baz=64,slow=15,SNR=1.8 | | | | | | | | |
| JNU | | | | | | S | **Sn** | **21 32 17.5** | **+2.5** |
| | 0.3nm,0.3s,baz=214,slow=16,SNR=0.9 | | | | | | | | |
| JNU | | | | | | LR | LR | 21 34 17.8 | |
| | comp=Z,10μm,21.4s,baz=111,slow=35 | | | | | | | | |
| **JNU** | **Nakatsue** | **13.19** | **313** | | | Pn | **Pn** | **21 29 48.6** | **-1.1** |
| **JNU** | **Nakatsue** | **13.19** | **313** | | | P | **P** | **21 29 54.4** | **-4.3** |
| **JSD** | **Sado** | **13.85** | **346** | | | Pn | **Pn** | **21 29 57.0** | **-1.6** |
| **ERM** | **Erimo** | **17.37** | **2** | | *e* | P | **P** | **21 30 45.3** | **+0.3** |
| ERM | | | | | | pmax | pmax | | |
| | comp=Z,572nm,1.7s | | | | | | | | |
| **ERM** | **Erimo** | **17.37** | **2** | | | P | **Pn** | **21 30 43.4** | **-0.8** |
| **ERM** | **Erimo** | **17.37** | **2** | | | P | **P** | **21 30 46.2** | **+1.2** |
| **TJN** | **Taejon** | **17.46** | **316** | | | P | **Pn** | **21 30 43.8** | **-1.5** |
| TJN | | | | | | pmax | pmax | | |
| | comp=Z,411nm,1.0s | | | | | | | | |
| **TJN** | **Taejon** | **17.46** | **316** | | | | **Pn** | **21 30 43.8** | **-1.5** |
| **TJN** | **Taejon** | **17.46** | **316** | | | P | **P** | **21 30 47.1** | **+1.0** |
| **YOJ** | **Yonaguni jima** | **17.66** | **274** | | | P | **P** | **21 30 50.2** | **+1.9** |
| **KSRS** | **Korea Array** | **17.81** | **319** | | | P | **P** | **21 30 50.0** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=130,slow=11,SNR=47 | | | | | | | | |
| KSRS | | | | | | S | **S** | **21 34 12.9** | **+0.6** |
| | baz=134,slow=19,SNR=1.8 | | | | | | | | |
| KSRS | | | | | | PcP | **PcP** | **21 35 26.8** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=176,slow=1.5,SNR=3.6 | | | | | | | | |
| KSRS | | | | | | LR | LR | 21 37 01.6 | |
| | comp=Z,11μm,21.0s,baz=130,slow=35 | | | | | | | | |
| KSRS | | | | | | ScP | **ScP** | **21 38 56.6** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=182,slow=1.6,SNR=7.6 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **17.82** | **319** | | | P | **P** | **21 30 50.0** | **-0.1** |
| **KSAR** | **Wonju Array Be** | **17.82** | **319** | | | | **P** | **21 30 50.0** | **-0.1** |
| **KS19** | **Wonju Array Si** | **17.88** | **319** | | | | **Pn** | **21 30 50.1** | **-0.3** |
| **JEW** | **Eniwo** | **18.20** | **358** | | | | **Pn** | **21 30 54.5** | **+0.2** |
| JEW | | | | | | IAmb | IAmb | 21 31 13.3 | |
| | comp=Z,1μm,1.2s | | | | | | | | |
| **INCN** | **Inchon** | **18.61** | **317** | | | P | **P** | **21 30 58.8** | **+0.1** |
| INCN | | | | | | pmax | pmax | | |
| | comp=Z,106nm,1.1s | | | | | | | | |
| **INCN** | **Inchon** | **18.61** | **317** | | | P | **P** | **21 30 58.8** | **+0.1** |
| **INCN** | **Inchon** | **18.61** | **317** | | | P | **P** | **21 30 57.7** | **-1.1** |
| INCN | | | | | | P | **P** | **21 30 57.7** | **-1.1** |
| INCN | | | | | | S | **Sn** | **21 34 26.8** | **+0.3** |
| INCN | | | | | | S | **Sn** | **21 34 26.8** | **+0.3** |
| **INCN** | **Inchon** | **18.61** | **317** | | | P | **Pn** | **21 31 00.4** | **+1.1** |
| **NACB** | **Ninganchiao** | **18.97** | **273** | | | P | **P** | **21 31 02.4** | **-0.4** |
| **TATO** | **Taipei** | **19.00** | **275** | | | P | **P** | **21 31 02.9** | **-0.2** |
| TATO | | | | | | P | **P** | **21 31 02.9** | **-0.2** |
| TATO | | | | | | S | **S** | **21 34 41.4** | **+4.7** |
| TATO | | | | | | S | **S** | **21 34 41.4** | **+4.7** |
| **YHNB** | **Yeheng** | **19.13** | **275** | | | P | **P** | **21 31 03.3** | **-1.2** |
| **YHNB** | **Yeheng** | **19.13** | **275** | | | P | **Pn** | **21 31 07.6** | **+1.9** |
| **YULB** | **Yu-li** | **19.33** | **271** | | | Pn | **Pn** | **21 31 07.5** | **-0.6** |
| YULB | | | | | | IAmb | IAmb | 21 31 16.5 | |
| | comp=Z,503nm,1.2s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **19.46** | **0** | | | P | **Pn** | **21 31 10.2** | **+0.8** |
| | comp=Z,3.2nm,0.3s,baz=225,slow=15,SNR=23 | | | | | | | | |
| ASAJ | | | | | | S | **S** | **21 34 40.5** | **-5.1** |
| | comp=Z,0.5nm,0.3s,baz=37,slow=33,SNR=1.7 | | | | | | | | |
| ASAJ | | | | | | LR | LR | 21 40 54.6 | |
| | comp=Z,1μm,20.1s,baz=194,slow=43 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **19.46** | **0** | | | Pn | **Pn** | **21 31 09.8** | **+0.3** |
| **HJU** | **Haeju** | **19.52** | **317** | | | P | **P** | **21 31 09.3** | **+0.7** |
| **SSLB** | **Suanglung** | **19.59** | **272** | | | P | **P** | **21 31 09.8** | **+0.2** |
| SSLB | | | | | | IAmb | IAmb | 21 31 25.0 | |
| | comp=Z,445nm,1.0s | | | | | | | | |
| **SSLB** | **Suanglung** | **19.59** | **272** | | | P | **Pn** | **21 31 13.4** | **+2.1** |
| **TWG** | **Pinlang** | **19.62** | **269** | | | P | **P** | **21 31 09.7** | **-0.2** |
| TWG | | | | | | IAmb | IAmb | 21 31 20.0 | |
| | comp=Z,446nm,1.2s | | | | | | | | |
| **HHU** | **Hamhung** | **19.75** | **324** | | | P | **Pn** | **21 31 17.4** | **+4.5** |
| HHU | | | | | | pP | **pwP** | **21 31 22.9** | **-1.3** |
| HHU | | | | | | S | Sn | 21 35 10.1 | +16 |
| HHU | | | | | | AmB | | | |
| | comp=Z,669nm,2.7s | | | | | | | | |
| HHU | | | | | | AMS | AMS | | |
| | comp=N,8μm,14.5s | | | | | | | | |
| HH

QZH LR LR
comp=Z,5µm,19.4s
KNMB **Chin-men Tao** **21.85 275** P **P** **21 31 31.5 -2.4**
KNMB IAmb IAmb 21 31 38.2
comp=Z,444nm,1.1s
NJ2 **Nanjing** **22.00 295** *e*P **P** **21 31 35.8 +0.3**
NJ2 pP **pP** **21 31 43.8 -1.5**
NJ2 sP **sP** **21 31 50.8 +0.3**
NJ2 PcP **PcP** **21 35 33.8 +1.1**
NJ2 pmax pmax
comp=Z,38nm,1.5s
NJ2 pmax pmax
comp=Z,2µm,4.9s
NJ2 LR LR
comp=Z,4µm,15.6s
NJ2 LR LR
comp=Z,7µm,15.6s
NJ2 LR LR
comp=Z,9µm,16.6s
YSS **Yuzh-Sakhalins** **22.30 1**⇑*e*P **P** **21 31 40.2 +1.6**
YSS *e* 21 31 51.0
YSS *e*S **S** **21 35 45.6 +4.5**
YSS pmax pmax
comp=Z,3µm,6.1s
YSS pmax pmax
comp=Z,70nm,1.0s
YSS smax smax
comp=N,4µm,9.4s
YSS MLR MLR
comp=Z,6µm,16.0s
YSS **Yuzh-Sakhalins** **22.30 1** P **P** **21 31 39.2 +0.6**
YSS IAmb IAmb 21 31 58.0
comp=Z,288nm,1.1s
YSS **Yuzh-Sakhalins** **22.30 1** P **P** **21 31 41.0 +2.4**
MDJ **Mudanjiang** **22.53 336** P **P** **21 31 39.1 -1.9**
MDJ **Mudanjiang** **22.53 336** P **P** **21 31 38.5 -2.5**
MDJ pP pP 21 31 46.8 -4.1
MDJ S **S** **21 35 43.4 -1.8**
MDJ sS Sn 21 35 58.1 -2.3
MDJ pmax pmax
comp=Z,20nm,1.2s
MDJ pmax pmax
comp=Z,2µm,7.1s
MDJ LR LR
comp=Z,5µm,19.4s
MDJ LR LR
comp=Z,2µm,20.8s
MDJ LR LR
comp=Z,10µm,19.0s
MDJ **Mudanjiang** **22.53 336** P **P** **21 31 40.5 -0.5**
DL2 **Dalian** **22.64 314** P **P** **21 31 41.4 -0.8**
DL2 pP **sP** **21 31 56.4 -0.9**
DL2 S **S** **21 35 44.5 -2.7**
DL2 pmax pmax
comp=Z,56nm,0.8s
DL2 pmax pmax
comp=Z,820nm,6.1s
DL2 LR LR
comp=Z,3µm,17.0s
DL2 LR LR
comp=Z,3µm,22.9s
DL2 LR LR
comp=Z,4µm,23.3s
TGY **Tagaytay City** **22.77 247** P **P** **21 31 43.8 -0.1**
comp=Z,90nm,0.3s,baz=42,slow=7.5,SNR=9.9
TGY LR LR 21 39 17.3
comp=Z,5µm,20.5s,baz=58,slow=33
H11N1 **WAKE ISLAND Hy** **23.17 97** T T 21 55 49.5
baz=281,slow=74
H11N2 **WAKE ISLAND Hy** **23.17 97** T T 21 55 46.4
baz=281,slow=74
H11N3 **WAKE ISLAND Hy** **23.19 97** T T 21 55 47.0
baz=281
SNY **Shenyang** **23.22 322** ⇑P **P** **21 31 45.3 -2.9**
SNY S **S** **21 35 52.1 -4.9**
SNY pmax pmax
comp=Z,210nm,0.9s
SNY pmax pmax
comp=Z,1µm,11.3s
SNY LR LR
comp=Z,4µm,23.1s
SNY LR LR
comp=Z,5µm,18.2s
SNY LR LR
comp=Z,8µm,25.1s
PATS **Pohnpei** **23.33 137** P **P** **21 31 46.6 -2.9**
PATS **Pohnpei** **23.33 137** P **P** **21 31 52.6 +3.1**
H11S3 **WAKE ISLAND Hy** **23.36 100** T T 21 55 54.6
baz=276,slow=75
H11S1 **WAKE ISLAND Hy** **23.37 100** T T 21 55 54.8
baz=276
H11S2 **WAKE ISLAND Hy** **23.38 100** T T 21 55 56.8
baz=276,slow=75
CN2 **Changchun** **23.65 328** *e*P **P** **21 31 51.9 -0.4**
CN2 pmax pmax
comp=Z,1µm,13.0s
CN2 LR LR
comp=Z,4µm,19.0s
CN2 LR LR
comp=Z,3µm,19.0s
CN2 LR LR
comp=Z,5µm,21.3s
DAV **Davao City (W)** **23.75 226** P **P** **21 31 53.6 +0.1**
comp=Z,74nm,0.4s,baz=246,slow=17,SNR=1.0
DAV LR LR 21 39 27.6
comp=Z,7µm,21.4s,baz=67,slow=32
DAV **Davao City (W)** **23.75 226** P **P** **21 31 54.7 +1.3**
DAV S **S** **21 36 10.9 +5.0**
BNX **BinXian** **24.32 334** ⇓P **P** **21 31 57.0 -1.4**
BNX pP **sP** **21 32 13.3 -0.8**
BNX sP pwP 21 32 20.8 +8.1
BNX S **S** **21 36 12.8 -1.8**
BNX pmax pmax
comp=Z,210nm,1.0s
BNX pmax pmax
comp=Z,2µm,9.4s
BNX LR LR
comp=Z,2µm,11.9s
BNX LR LR
comp=Z,2µm,13.4s
BNX LR LR
comp=Z,10µm,18.1s
UGL **Uglegorsk** **24.43 359***c i*P **P** **21 32 00.9 +1.5**
UGL pmax pmax
comp=Z,520nm,1.0s
UGL pmax pmax
comp=Z,3µm,6.5s
UGL MLR MLR
comp=N,5µm,17.0s
UGL MLR MLR
comp=E,6µm,18.0s
UGL MLR MLR
comp=Z,3µm,18.0s
TIA **Tai'an** **24.61 304** ⇑P **P** **21 32 00.8 -0.5**
TIA S **S** **21 36 16.8 -2.8**
TIA pmax pmax
comp=Z,73nm,0.7s
TIA LR LR
comp=Z,2µm,17.1s
TIA LR LR
comp=Z,4µm,16.4s
TIA LR LR
comp=Z,6µm,16.4s
WHN **Wuhan** **25.53 290** ⇑P **P** **21 32 10.3 +0.7**
WHN sP **sP** **21 32 25.0 -0.2**
WHN PcP **PcP** **21 35 38.6 -1.7**
WHN S **S** **21 36 34.0 -0.3**
WHN pmax pmax
comp=Z,1µm,1.1s
WHN LR LR
comp=Z,2µm,9.7s
WHN LR LR
comp=Z,18µm,20.6s
WHN LR LR
comp=Z,14µm,18.7s
KLR **Kul'dur** **25.96 344** P **P** **21 32 13.3 -0.1**
comp=Z,203nm,1.0s,baz=148,slow=9.5,SNR=259
KLR LR LR 21 42 45.0
comp=Z,7µm,19.1s,baz=158,slow=37
KLR **Kul'dur** **25.96 344***ce*P **P** **21 32 13.2 -0.1**
KLR pmax pmax
comp=Z,328nm,1.0s
HKPS **Hong Kong Po S** **26.02 271** P **P** **21 32 13.7 -0.5**
HKPS IAmb IAmb 21 32 19.8
comp=Z,270nm,1.2s
TYV **Tymovskoe** **26.21 0** *e*P **P** **21 32 16.8 +1.2**
TYV *e*S **S** **21 36 50.1 +5.5**
TYV pmax pmax
comp=Z,58nm,0.9s
TYV pmax pmax
comp=Z,300nm,3.1s
TYV smax smax
comp=N,100nm,3.3s
TYV smax smax
comp=E,200nm,3.3s
TYV MLR MLR
comp=N,3µm,16.0s
TYV MLR MLR
comp=Z,4µm,16.0s
GRNR **Gornyy** **26.53 351**⇓*i*P **P** **21 32 19.7 +1.3**
GRNR *e*S **S** **21 36 55.7 +6.0**
GRNR pmax pmax
comp=N,30nm,1.0s
GRNR pmax pmax
comp=Z,50nm,1.0s
GRNR smax smax
comp=N,6.0nm,0.9s
GRNR MLR MLR
comp=E,2µm,13.0s
GRNR MLR MLR
comp=N,2µm,18.0s
GRNR MLR MLR
comp=Z,3µm,17.0s
GZH **Guangzhou** **26.61 273** P **P** **21 32 17.8 -1.7**
CNSH **ChangSha** **26.62 284** ⇑P P 21 32 09.3 -10
CNSH S S 21 36 18.9 -33
CNSH pmax pmax
comp=Z,120nm,1.3s
CNSH LR LR
comp=N,3µm,18.3s
CNSH LR LR
comp=E,4µm,18.5s
CNSH LR LR
comp=Z,6µm,19.0s
HNS **HongShan** **26.85 305** ⇑P **P** **21 32 20.8 -0.6**
HNS pP **pP** **21 32 31.6 -0.6**
HNS PP **PnPn** **21 33 08.8 +4.2**
HNS pmax pmax
comp=Z,180nm,1.0s
HNS pmax pmax
comp=Z,690nm,6.2s
HNS LR LR
comp=Z,5µm,16.7s
HNS LR LR
comp=Z,3µm,15.9s
HNS LR LR
comp=Z,5µm,16.3s
BJT **Baijiatuau** **26.85 311** P **P** **21 32 19.5 -2.0**
BJT pmax pmax
comp=Z,49nm,1.0s
BJT MLR MLR
comp=Z,4µm,22.0s
BJT **Baijiatuau** **26.85 311** P **P** **21 32 19.5 -2.0**
BJI **Beijing** **26.86 311** P **P** **21 32 19.5 -2.0**
BJI PP **PnPn** **21 33 12.3 +7.6**
BJI pmax pmax
comp=Z,41nm,1.2s
BJI pmax pmax
comp=Z,540nm,6.1s
BJI LR LR
comp=Z,3µm,21.4s
BJI LR LR
comp=Z,3µm,22.4s
BJI LR LR
comp=Z,5µm,23.5s
JAY **Jayapura** **27.01 184** P **P** **21 32 22.1 -1.0**
comp=Z,10nm,0.7s,baz=290,slow=6.3,SNR=3.5
JAY LR LR 21 41 05.6
comp=Z,3µm,21.1s,baz=8.5,slow=32
JAY **Jayapura** **27.01 184** P **P** **21 32 23.6 +0.5**
comp=Z,720nmcomp=Z,29nm,1.1s
GENI **Genyem** **27.12 185** P **P** **21 32 23.7 -0.4**
comp=Z,4µmcomp=Z,147nm,1.4s
GENI **Genyem** **27.12 185** P **P** **21 32 27.0 +2.9**
SIJI **Sorong** **27.54 205** P **P** **21 32 26.1 -1.6**
comp=Z,20nm,0.8s,baz=6.6,slow=10,SNR=9.4
SIJI LR LR 21 41 00.1
comp=Z,4µm,20.1s,baz=28,slow=31
LYN **LuoYang** **27.78 298** ⇑P **P** **21 32 29.1 -0.7**
LYN sP sP 21 32 51.4 +5.9
LYN PP **PnPn** **21 33 19.8 +2.5**
LYN S **S** **21 37 09.1 -0.6**
LYN sS sS 21 37 33.8 +6.0
LYN pmax pmax
comp=Z,30nm,1.7s
LYN pmax pmax
comp=Z,610nm,10.8s
LYN LR LR
comp=Z,3µm,15.2s
LYN LR LR
comp=Z,4µm,19.6s
LYN LR LR
comp=Z,6µm,20.6s
TNTI **Ternate** **27.81 214** P **P** **21 32 32.0 +1.8**
comp=Z,1µmcomp=Z,39nm,0.8s
TNTI **Ternate** **27.81 214** P **P** **21 32 34.4 +4.2**
NKL **Nikolayevsk** **28.54 358** *e*P **P** **21 32 36.3 0.0**
NKL *e*S S 21 37 31.0 +10
NKL pmax pmax
comp=E,2.0nm,0.6s
NKL pmax pmax
comp=N,3µm,1.1s
NKL pmax pmax
comp=Z,194nm,1.1s
NKL smax smax
comp=N,1µm,1.3s
NKL smax smax
comp=E,2.0nm,1.3s
NKL MLR MLR
comp=E,67nm,12.0s
NKL MLR MLR
comp=N,244µm,23.0s
NKL MLR MLR
comp=Z,2µm,21.0s
TIY **Taiyuan** **28.66 304** ⇑P **P** **21 32 37.3 -0.4**
TIY pmax pmax
comp=Z,33nm,1.2s
TIY LR LR
comp=Z,4µm,17.2s
TIY LR LR
comp=Z,2µm,19.9s
TIY LR LR
comp=Z,4µm,26.8s
XLT **XiLinHaoTe** **28.86 318** *e*P **P** **21 32 38.0 -1.5**
XLT sP pwP 21 32 53.5 -0.2
XLT pmax pmax
comp=Z,13nm,1.6s
XLT pmax pmax
comp=Z,400nm,9.4s
XLT LR LR
comp=Z,6µm,18.9s
XLT LR LR
comp=Z,8µm,18.7s
GULI **GuiLin** **29.03 278** ⇓P **P** **21 32 45.4 +4.3**
GULI S **S** **21 37 35.8 +6.2**
GULI pmax pmax
comp=Z,90nm,1.4s
GULI LR LR
comp=Z,2µm,16.0s
GULI LR LR
comp=Z,5µm,21.7s
GULI LR LR
comp=Z,8µm,20.6s
FAKI **Fak Fak** **29.09 201** P **P** **21 32 40.6 -1.1**
FAKI **Fak Fak** **29.09 201** P **P** **21 32 39.6 -2.0**
comp=Z,2µmcomp=Z,666nmcomp=Z,46nm,1.0s
FAKI **Fak Fak** **29.09 201** P **P** **21 32 45.8 +4.2**
ENH **Enshi** **29.70 288** P **P** **21 32 46.8 -0.2**
ENH IAmb IAmb 21 32 49.1
comp=Z,165nm,1.1s
ENH IAMs_20 IAMs_20 21 45 17.7
comp=Z,6µm,18.0s
KMSI **Cibinong** **29.82 219** P P 21 33 02.4 +14
MYLDM **Lahad Datu** **30.02 234** P **P** **21 32 49.1 -0.8**
GTOI **Gorontalo** **30.34 221** P **P** **21 32 54.3 +1.6**
comp=Z,464nmcomp=Z,23nm,1.0s
HIA **Hailar** **30.34 330** P **P** **21 32 50.6 -1.9**
HIA pmax pmax
comp=Z,84nm,1.3s
HIA MLR MLR
comp=Z,5µm,20.0s
HIA **Hailar** **30.34 330** P **P** **21 32 50.6 -1.9**
HHC **Hu-ho-hao-te** **30.39 310** *e*P **P** **21 32 51.8 -1.3**
HHC pmax pmax
comp=Z,42nm,1.0s
HHC pmax pmax
comp=Z,570nm,7.4s
HHC LR LR
comp=Z,3µm,15.9s
HHC LR LR
comp=Z,4µm,16.5s
HHC LR LR
comp=Z,7µm,17.1s
XAN **Xi'an** **30.56 296** P **P** **21 32 54.1 -0.5**
XAN pmax pmax
comp=Z,15nm,0.7s
XAN pmax pmax
comp=Z,1µm,8.4s
XAN LR LR
comp=Z,3µm,15.1s
XAN LR LR
comp=Z,5µm,13.7s
XAN LR LR
comp=Z,5µm,15.1s
QIZ **Qiongzhong** **30.70 266** P **P** **21 32 55.3 -0.6**
QIZ **Qiongzhong** **30.70 266** P P 21 32 49.6 -6.3
QIZ sP pP 21 33 05.1 -1.7
QIZ PP **PP** **21 34 04.8 -0.9**
QIZ S S 21 38 04.9 +9.0
QIZ sS sS 21 38 16.9 +2.9
QIZ pmax pmax
comp=Z,20nm,1.9s
QIZ LR LR
comp=N,2µm,15.8s
QIZ LR LR
comp=E,3µm,18.4s
QIZ LR LR
comp=Z,3µm,19.4s
QIZ **Qiongzhong** **30.70 266** P **P** **21 32 57.4 +1.5**
PEA0B **Petropavlovsk-** **30.71 18***de*P **P** **21 32 58.1 +2.4**
PETK **Petropavlovsk-** **30.71 18** P **P** **21 32 57.6 +1.9**
comp=Z,17nm,0.9s,baz=201,slow=7.0,SNR=9.3
PETK PcP **PcP** **21 35 52.6 +0.1**
comp=Z,10nm,1.0s,baz=180,slow=2.9,SNR=3.4
PETK LR LR 21 44 16.9
comp=Z,1µm,21.5s,baz=200,slow=34
PETK **Petropavlovsk-** **30.71 18** P **P** **21 32 57.2 +1.5**
PET **Petropavlovsk** **30.92 19** *e*P **P** **21 32 59.1 +1.7**
PET *e*S **S** **21 38 02.5 +3.9**
PET pmax pmax
comp=Z,58nm,1.1s
PET pmax pmax
comp=Z,500nm,4.2s
PET pmax pmax
comp=Z,700nm,13.1s
PET **Petropavlovsk** **30.92 19** P **P** **21 32 56.8 -0.6**
PET **Petropavlovsk** **30.92 19** P **P** **21 32 59.9 +2.5**
SANI **Sanana** **30.93 213** P **P** **21 32 55.4 -2.5**
comp=Z,2µmcomp=Z,50nm,1.0s
SANI **Sanana** **30.93 213** P **P** **21 32 56.4 -1.5**
MRSI **Marisa** **31.11 223** P **P** **21 32 59.3 -0.2**
comp=Z,3µmcomp=Z,1µmcomp=Z,118nm,0.9s
ZEA **Zeya** **31.24 343** *e*P **P** **21 32 59.9 -0.4**
ZEA *e*S **S** **21 37 59.4 -4.2**
ZEA *e* 21 39 46.3
ZEA pmax pmax
comp=E,40nm,1.1s
ZEA pmax pmax
comp=N,140nm,0.9s
ZEA pmax pmax
comp=Z,230nm,0.9s
ZEA pmax pmax
comp=E,300nm,4.0s
ZEA pmax pmax
comp=N,300nm,6.0s
ZEA pmax pmax
comp=Z,500nm,5.6s
ZEA smax smax
comp=E,500nm,15.5s
ZEA MLR MLR
comp=E,600nm,17.0s
ZEA MLR MLR
comp=N,3µm,19.0s
ZEA MLR MLR
comp=Z,3µm,17.0s
AAI **Ambon** **31.34 208** P **P** **21 33 01.6 +0.1**
comp=Z,2µmcomp=Z,118nm,0.9s
TOLI2 **Tolitoli** **31.36 225** P **P** **21 33 01.7 0.0**
TOLI2 **Tolitoli** **31.36 225** P **P** **21 33 04.8 +3.1**
BTO **Baotou** **31.39 308** *e*P **P** **21 33 02.0 +0.1**
BTO LR LR
comp=Z,17µm,16.7s
BTO LR LR
comp=Z,16µm,15.5s
BNDI **Bandanaira** **31.41 204** P **P** **21 33 02.4 +0.3**
LUWI **Luwuk** **31.82 220** P **P** **21 33 05.3 -0.5**
LUWI IAmb IAmb 21 33 16.8
comp=Z,182nm,1.3s
LUWI **Luwuk** **31.82 220** P **P** **21 33 06.7 +0.9**
comp=Z,3µmcomp=Z,113nm,1.1s
LUWI **Luwuk** **31.82 220** P **P** **21 33 08.1 +2.3**
GYA **Guiyang** **32.25 281** ⇑P **P** **21 33 10.8 +1.1**
GYA pmax pmax
comp=Z,110nm,1.1s
GYA pmax pmax
comp=Z,840nm,7.9s
GYA LR LR
comp=Z,2µm,14.3s
GYA LR LR
comp=Z,4µm,18.8s
GYA LR LR
comp=Z,7µm,18.3s
APSI **Ampana** **32.38 221** P **P** **21 33 10.9 +0.2**
comp=Z,680nmcomp=Z,72nm,1.1s
MPSI **Mapaga** **32.51 225** P **P** **21 33 11.5 -0.3**
comp=Z,3µmcomp=Z,27nm,1.0s
PMG **Port Moresby** **34.12 172** P **P** **21 33 25.3 -0.5**
comp=Z,83nm,0.9s,baz=7.7,slow=6.2,SNR=33
PMG **Port Moresby** **34.12 172***c i*P **P** **21 33 24.6 -1.2**
PMG pmax pmax
comp=Z,118nm,1.3s
PMG **Port Moresby** **34.12 172** P **P** **21 33 24.2 -1.6**
PMG IAmb IAmb 21 33 41.0
comp=Z,114nm,0.9s
PMG **Port Moresby** **34.12 172** P **P** **21 33 26.0 +0.2**
PMG **Port Moresby** **34.12 172** P **P** **21 33 26.1 +0.2**
SAUI **Saumlaki** **34.16 200** P **P** **21 33 26.2 +0.1**
SAUI IAmb IAmb 21 33 32.9
comp=Z,112nm,1.0s
SAUI **Saumlaki** **34.16 200** P **P** **21 33 26.4 +0.3**
comp=Z,88nm,1.1s
SAUI **Saumlaki** **34.16 200** P **P** **21 33 29.2 +3.1**
DLV **T Lat** **34.48 255** P **P** **21 33 28.6 -0.7**
DLV IAmb IAmb 21 33 32.4
comp=Z,129nm,1.3s
DLV IAMs_20 IAMs_20 21 44 34.1
comp=Z,6µm,22.0s
DLV **T Lat** **34.48 255** P **P** **21 33 31.9 +2.6**
CD2 **Chengdu** **34.66 289** ⇓P **P** **21 33 30.3 -0.2**
CD2 pP pP 21 33 41.4 0.0
CD2 sS sS 21 39 23.6 +8.0
CD2 pmax pmax
comp=Z,340nm,0.8s
CD2 LR LR
comp=Z,5µm,17.2s
CD2 LR LR
comp=Z,5µm,17.2s
LZH **Lanzhou** **34.99 298** *e*P **P** **21 33 33.3 -0.1**
LZH S **S** **21 38 58.5 -4.1**
LZH pmax pmax
comp=Z,84nm,1.4s
LZH pmax pmax
comp=Z,740nm,7.6s
LZH LR LR
comp=Z,2µm,16.3s
LZH LR LR
comp=Z,4µm,15.2s
LZH LR LR
comp=Z,5µm,17.9s
CIT **Chita** **35.10 329** *e*P **P** **21 33 32.9 -1.1**
CIT *e* 21 33 44.0
CIT *e* 21 35 09.1
CIT *e* 21 36 06.3
CIT pmax pmax
comp=Z,99nm,1.5s
TTSI **Tana Toraja** **35.18 222** P **P** **21 33 34.9 -0.1**
comp=Z,41nm,1.3s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MA2** | **Magadan** | **35.44** | **7***c* | *i*P | **P** | **21 33 38.0** | **+1.3** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,121nm,1.7s | | | | | | |
| **MA2** | **Magadan** | **35.44** | **7** | P | **P** | **21 33 37.4** | **+0.7** |
| **MA2** | **Magadan** | **35.44** | **7** | P | **P** | **21 33 38.7** | **+2.0** |
| **BBSI** | **Bau Bau** | **35.61** | **215** | P | **P** | **21 33 40.0** | **+1.3** |
| | comp=Z,211nmcomp=Z,17nm,0.9s | | | | | | |
| **UBPT** | **Khong Chiam** | **35.85** | **262** | P | **P** | **21 33 40.8** | **0.0** |
| **KMI** | **Kunming** | **35.91** | **279** | ⇑P | **P** | **21 33 43.3** | **+1.8** |
| KMI | | | | S | **S** | **21 39 23.8** | **+6.7** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,210nm,1.4s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,910nm,13.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,19.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,5μm,20.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,5μm,20.3s | | | | | | |
| **SPSI** | **Sidrap Palu** | **35.94** | **221** | P | **P** | **21 33 41.0** | **-0.5** |
| | comp=Z,3μmcomp=Z,1μmcomp=Z,140nm,1.2s | | | | | | |
| **BNSI** | **Bone** | **36.09** | **220** | P | **P** | **21 33 43.5** | **+0.7** |
| | comp=Z,2μmcomp=Z,116nm,2.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.30** | **319** | *ce*P | **P** | **21 33 42.8** | **-1.7** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,51nm,1.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.30** | **319** | P | **P** | **21 33 43.0** | **-1.4** |
| **ULN** | **Ulaanbaatar** | **36.30** | **319** | IAMs_20 | IAMs_20 | 21 48 18.9 | |
| | comp=Z,5μm,21.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.30** | **319** | P | **P** | **21 33 43.1** | **-1.4** |
| ULN | | | | P | **P** | **21 33 43.1** | **-1.4** |
| ULN | | | | S | **S** | **21 39 16.1** | **-6.2** |
| ULN | | | | S | **S** | **21 39 16.1** | **-6.2** |
| **PZH** | **PanZhiHua** | **36.64** | **282** | P | **P** | **21 33 47.9** | **+0.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,300nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,820nm,6.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,4μm,21.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,12μm,22.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,6μm,20.0s | | | | | | |
| **SONM** | **Songino Array** | **36.68** | **318** | P | **P** | **21 33 46.5** | **-1.2** |
| | comp=Z,10nm,0.9s,baz=128,slow=7.8,SNR=51 | | | | | | |
| SONM | | | | PcP | **PcP** | **21 36 10.2** | **+0.4** |
| | comp=Z,9.7nm,1.1s,baz=162,slow=2.8,SNR=6.1 | | | | | | |
| SONM | | | | ScP | **ScP** | **21 39 52.0** | **-1.1** |
| | comp=Z,1.5nm,0.8s,baz=119,slow=1.9,SNR=4.1 | | | | | | |
| SONM | | | | LR | LR | 21 48 53.9 | |
| | comp=Z,6μm,21.1s,baz=120,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **36.68** | **318** | P | **P** | **21 33 46.1** | **-1.6** |
| **KAPI** | **Kappang** | **36.79** | **220** | P | **P** | **21 33 48.7** | **-0.1** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,89nm,1.2s | | | | | | |
| **KAPI** | **Kappang** | **36.79** | **220** | P | **P** | **21 33 48.7** | **-0.1** |
| **KAPI** | **Kappang** | **36.79** | **220** | P | **P** | **21 33 48.8** | **0.0** |
| KAPI | | | | S | **S** | **21 39 29.5** | **-0.6** |
| **KAPI** | **Kappang** | **36.79** | **220** | P | **P** | **21 33 50.4** | **+1.6** |
| **BKSI** | **Bulukumba** | **36.82** | **219** | P | **P** | **21 33 48.2** | **-0.9** |
| | comp=Z,2μmcomp=Z,755nmcomp=Z,60nm,1.1s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **36.83** | **230** | P | **P** | **21 33 49.0** | **-0.2** |
| | comp=Z,1μmcomp=Z,32nm,0.9s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **36.89** | **32** | P | **P** | **21 33 50.7** | **+1.5** |
| | comp=Z,42nm,0.7s,baz=215,slow=2.5,SNR=4.2 | | | | | | |
| SHEM | | | | LR | LR | 21 47 27.8 | |
| | comp=Z,3μm,20.3s,baz=242,slow=34 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **37.29** | **218** | P | **P** | **21 33 53.4** | **+0.4** |
| | comp=Z,1μmcomp=Z,85nm,1.4s | | | | | | |
| **HNR** | **Honiara** | **37.91** | **151** | LR | LR | 21 49 17.9 | |
| | comp=Z,818nm,19.7s,baz=319,slow=36 | | | | | | |
| **KDU** | **Kakadu** | **38.31** | **196** | P | **P** | **21 34 01.9** | **+0.3** |
| **COEN** | **Coen** | **38.34** | **179** | P | **P** | **21 34 01.5** | **-0.3** |
| COEN | | | | IAmb | IAmb | 21 34 09.0 | |
| | comp=Z,167nm,1.1s | | | | | | |
| **COEN** | **Coen** | **38.34** | **179** | P | **P** | **21 34 02.0** | **+0.2** |
| **YAK** | **Yakutsk** | **38.40** | **350** | P | **P** | **21 34 02.0** | **+0.1** |
| | comp=Z,118nm,0.8s,baz=152,slow=4.2,SNR=113 | | | | | | |
| YAK | | | | LR | LR | 21 49 58.9 | |
| | comp=Z,6μm,20.0s,baz=161,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **38.40** | **350** | *c* *i*P | **P** | **21 34 01.9** | **+0.1** |
| YAK | | | | *e**PP | **pP** | **21 34 10.7** | **-2.1** |
| YAK | | | | *e* | | 21 35 33.8 | |
| YAK | | | | *e*S | **S** | **21 39 52.6** | **-0.8** |
| YAK | | | | *e*SSS | SSS | 21 43 02.6 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,267nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,14nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,81nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,109nm,1.1s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,134nm,2.0s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,366nm,2.3s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,6μm,19.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,4μm,18.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,572nm,14.0s | | | | | | |
| **YAK** | **Yakutsk** | **38.40** | **350** | P | **P** | **21 34 01.5** | **-0.3** |
| YAK | | | | IAmb | IAmb | 21 34 03.2 | |
| | comp=Z,244nm,0.9s | | | | | | |
| YAK | | | | IAMs_20 | IAMs_20 | 21 49 37.0 | |
| | comp=Z,6μm,20.0s | | | | | | |
| **MMRI** | **Maumere** | **38.46** | **213** | P | **P** | **21 34 01.6** | **-1.3** |
| MMRI | | | | IAmb | IAmb | 21 34 17.6 | |
| | comp=Z,259nm,1.3s | | | | | | |
| **MMRI** | **Maumere** | **38.46** | **213** | P | **P** | **21 34 02.8** | **-0.1** |
| | comp=Z,3μmcomp=Z,147nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **38.46** | **213** | P | **P** | **21 34 07.3** | **+4.4** |
| **SOEI** | **Soe** | **38.47** | **210** | P | **P** | **21 34 01.4** | **-1.7** |
| SOEI | | | | IAmb | IAmb | 21 34 15.0 | |
| | comp=Z,144nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **38.47** | **210** | P | **P** | **21 34 01.4** | **-1.7** |
| | comp=Z,2μmcomp=Z,239nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **38.47** | **210** | P | **P** | **21 34 04.3** | **+1.2** |
| **DRS** | **Darwin Rock St** | **38.49** | **198** | P | **P** | **21 34 02.4** | **-0.7** |
| | comp=Z,44nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **38.66** | **303** | ⇑P | **P** | **21 34 03.8** | **-0.7** |
| GTA | | | | sS | sS | 21 40 24.8 | +8.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,36nm,1.3s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,590nm,9.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,17.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,20.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,3μm,20.5s | | | | | | |
| **MTN** | **Manton Dam** | **38.82** | **198** | P | **P** | **21 34 04.5** | **-1.3** |
| **MTN** | **Manton Dam** | **38.82** | **198** | P | **P** | **21 34 05.5** | **-0.3** |
| **SEY** | **Seymchan** | **38.89** | **7** | *ce*P | **P** | **21 34 07.6** | **+1.6** |
| **BOD** | **Bodaibo** | **38.90** | **336** | *e*P | **P** | **21 34 05.3** | **-0.8** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,67nm,1.3s | | | | | | |
| **BATI** | **Baumata** | **39.14** | **210** | P | **P** | **21 34 06.9** | **-1.7** |
| | comp=Z,986nmcomp=Z,79nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **39.64** | **321** | *e*P | **P** | **21 34 11.5** | **-1.0** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,36nm,1.1s | | | | | | |
| **IRK** | **Irkutsk** | **39.94** | **324** | *e*P | **P** | **21 34 13.3** | **-1.6** |
| IRK | | | | pmax | pmax | | |
| | comp=Z,78nm,1.6s | | | | | | |
| **PBKI** | **Pangkalan Bun** | **40.35** | **232** | P | **P** | **21 34 19.2** | **+0.5** |
| | comp=Z,3μmcomp=Z,274nm,1.0s | | | | | | |
| **BASI** | **Baing, Sumba** | **40.65** | **214** | P | **P** | **21 34 19.8** | **-1.3** |
| | comp=Z,844nmcomp=Z,2μmcomp=Z,182nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.67** | **271** | P | **P** | **21 34 20.4** | **-1.0** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,80nm,1.0s | | | | | | |
| CHTO | | | | MLR | MLR | | |
| | comp=Z,4μm,19.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.67** | **271** | P | **P** | **21 34 20.4** | **-1.0** |
| **CHTO** | **Chiang Mai** | **40.67** | **271** | IAMs_20 | IAMs_20 | 21 50 56.7 | |
| | comp=Z,4μm,19.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.67** | **271** | P | **P** | **21 34 22.1** | **+0.7** |
| CHTO | | | | P | **P** | **21 34 22.1** | **+0.7** |
| **CHTO** | **Chiang Mai** | **40.67** | **271** | P | **P** | **21 34 22.6** | **+1.2** |
| **CM31** | **Chiang Mai Arr** | **40.77** | **270** | P | **P** | **21 34 21.6** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **40.77** | **270** | P | **P** | **21 34 22.4** | **+0.1** |
| | comp=Z,28nm,0.9s,baz=58,slow=8.4,SNR=130 | | | | | | |
| CMAR | | | | PcP | **PcP** | **21 36 23.5** | **+0.6** |
| | comp=Z,6.6nm,0.9s,baz=66,slow=2.3,SNR=2.7 | | | | | | |
| CMAR | | | | ScP | **ScP** | **21 40 06.1** | **-3.0** |
| | comp=Z,1.2nm,0.9s,baz=56,slow=2.3,SNR=1.6 | | | | | | |
| CMAR | | | | LR | LR | 21 51 01.2 | |
| | comp=Z,4μm,19.6s,baz=80,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.77** | **270** | P | **P** | **21 34 22.7** | **+0.5** |
| **WBSI** | **Waikabubak, Su** | **40.78** | **216** | P | **P** | **21 34 19.7** | **-2.6** |
| | comp=Z,54nm,0.9s | | | | | | |
| **PLAI** | **Plampang** | **41.01** | **219** | P | **P** | **21 34 22.3** | **-1.8** |
| | comp=Z,1μmcomp=Z,73nm,1.2s | | | | | | |
| **PLAI** | **Plampang** | **41.01** | **219** | P | **P** | **21 34 24.4** | **+0.3** |
| **ADK** | **Adak** | **41.29** | **38** | IAMs_20 | IAMs_20 | 21 49 08.1 | |
| | comp=Z,7μm,21.0s | | | | | | |
| **MOY** | **Mondy** | **41.49** | **322** | *e*P | **P** | **21 34 25.8** | **-2.0** |
| MOY | | | | pmax | pmax | | |
| | comp=Z,41nm,2.1s | | | | | | |
| **KNRA** | **Kununurra** | **42.20** | **200** | P | **P** | **21 34 33.3** | **-0.5** |
| **KNRA** | **Kununurra** | **42.20** | **200** | P | **P** | **21 34 34.7** | **+1.0** |
| **GOMU** | **GeErMu** | **42.27** | **297** | P | **P** | **21 34 35.3** | **+0.5** |
| GOMU | | | | S | **S** | **21 40 56.3** | **+3.5** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,58nm,1.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,840nm,17.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,1μm,18.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,2μm,18.8s | | | | | | |
| **ABJI** | **Asem Bagus** | **42.33** | **224** | P | **P** | **21 34 35.5** | **+0.6** |
| | comp=Z,3μmcomp=Z,3μmcomp=Z,106nm,1.1s | | | | | | |
| **MTSU** | **Mount Surprise** | **42.52** | **177** | P | **P** | **21 34 39.4** | **+3.0** |
| **BLJI** | **Banyuglugur** | **42.70** | **225** | P | **P** | **21 34 38.0** | **+0.1** |
| | comp=Z,2μmcomp=Z,82nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **42.90** | **223** | P | **P** | **21 34 39.0** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **42.90** | **223** | P | **P** | **21 34 38.2** | **-1.4** |
| | comp=Z,1μmcomp=Z,99nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **42.90** | **223** | P | **P** | **21 34 39.0** | **-0.6** |
| **MOKO** | **MOKOCHONG** | **43.09** | **283** | *e*P | **P** | **21 34 40.9** | **-0.3** |
| MOKO | | | | IAmb | IAmb | 21 34 49.7 | |
| | comp=Z,72nm,0.5s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **43.11** | **319** | *de*P | **P** | **21 34 40.5** | **-0.6** |
| **GMJI** | **Gumukmas** | **43.20** | **224** | P | **P** | **21 34 41.7** | **-0.3** |
| | comp=Z,86nm,1.2s | | | | | | |
| **KOHI** | **KOHIMA** | **43.54** | **282** | *e*P | **P** | **21 34 43.8** | **-1.1** |
| **SRIT** | **Nakonsritamara** | **43.80** | **256** | P | **P** | **21 34 47.2** | **+0.4** |
| **IMP** | **Imphal** | **43.84** | **281** | *e*P | **P** | **21 34 46.2** | **-1.0** |
| **KULM** | **Kulim** | **44.44** | **251** | P | **P** | **21 34 52.0** | **0.0** |
| KULM | | | | IAmb | IAmb | 21 34 55.2 | |
| | comp=Z,190nm,1.3s | | | | | | |
| **IPM** | **Ipoh** | **44.52** | **250** | P | **P** | **21 34 52.0** | **-0.7** |
| **IPM** | **Ipoh** | **44.52** | **250** | P | **P** | **21 34 54.2** | **+1.5** |
| **CTA** | **Charters Tower** | **44.58** | **175** | P | **P** | **21 34 53.4** | **+0.4** |
| | comp=Z,139nm,0.8s,baz=356,slow=8.7,SNR=44 | | | | | | |
| CTA | | | | LR | LR | 21 53 37.3 | |
| | comp=Z,2μm,21.4s,baz=349,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **44.58** | **175** | P | **P** | **21 34 53.0** | **0.0** |
| **PCJI** | **Pacitan** | **44.62** | **227** | P | **P** | 21 35 06.8 | +13 |
| **WB0** | **Warramunga Arr** | **44.79** | **191** | P | **P** | **21 34 54.4** | **-0.3** |
| **UGM** | **Wanagama** | **44.85** | **228** | P | **P** | 21 35 07.1 | +12 |
| **UGM** | **Wanagama** | **44.85** | **228** | P | **P** | **21 34 55.5** | **+0.2** |
| **WRAB** | **Tennant Creek** | **44.96** | **191** | *de*P | **P** | **21 34 55.0** | **-1.0** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,249nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.96** | **191** | P | **P** | **21 34 55.7** | **-0.3** |
| **WRAB** | **Tennant Creek** | **44.96** | **191** | P | **P** | **21 34 56.1** | **+0.1** |
| **WB2** | **Warramunga Arr** | **44.97** | **191** | P | **P** | **21 34 55.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.97** | **191** | P | **P** | **21 34 55.2** | **-0.9** |
| | comp=Z,166nm,0.8s,baz=12,slow=8.7,SNR=223 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 36 37.7** | **+0.9** |
| | comp=Z,44nm,0.9s,baz=6.5,slow=3.4,SNR=6.3 | | | | | | |
| WRA | | | | ScP | **ScP** | **21 40 24.7** | **-1.2** |
| | comp=Z,3.7nm,0.9s,baz=14,slow=3.8,SNR=4.1 | | | | | | |
| WRA | | | | S | **S** | **21 41 27.0** | **-4.6** |
| | comp=Z,12nm,1.1s,baz=11,slow=14,SNR=7.9 | | | | | | |
| WRA | | | | LR | LR | 21 52 23.3 | |
| | comp=Z,2μm,21.1s,baz=8.0,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **191** | P | **P** | **21 34 54.8** | **-1.3** |
| **QIS** | **Mount Isa** | **44.98** | **184** | P | **P** | **21 34 55.7** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **45.49** | **203** | P | **P** | **21 34 59.6** | **-0.5** |
| FITZ | | | | IAmb | IAmb | 21 35 00.9 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.49** | **203** | P | **P** | **21 35 00.1** | **0.0** |
| **KPJI** | **Karang Pucung** | **45.53** | **230** | P | **P** | **21 35 01.8** | **+1.2** |
| | comp=Z,2μmcomp=Z,68nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **45.55** | **282** | *e*P | **P** | **21 35 00.9** | **0.0** |
| SHL | | | | IAmb | IAmb | 21 35 14.2 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **SHL** | **Shillong** | **45.55** | **282** | P | **P** | **21 35 00.8** | **-0.2** |
| | SNR=88 | | | | | | |
| **GUWA** | **GUWAHATI** | **45.61** | **283** | *e*P | **P** | **21 35 01.0** | **-0.2** |
| **JMBI** | **JAMBI** | **45.76** | **241** | P | **P** | **21 35 04.5** | **+2.0** |
| | comp=Z,107nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **45.83** | **12** | *d* *i*P | **P** | **21 35 03.7** | **+1.4** |
| BILL | | | | *e* | | 21 36 53.3 | |
| BILL | | | | *e*S | **S** | **21 41 45.6** | **+2.6** |
| BILL | | | | *i* SS | **SS** | **21 45 07.1** | **-0.6** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,141nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,946nm,19.0s | | | | | | |
| **BILL** | **Bilibino** | **45.83** | **12** | P | **P** | **21 35 03.2** | **+0.8** |
| BILL | | | | IAmb | IAmb | 21 35 05.1 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **RGRI** | **Rengat** | **46.06** | **243** | P | P | 21 35 16.0 | +11 |
| **LEM** | **Lembang** | **46.10** | **232** | LR | LR | 21 55 45.0 | |
| | comp=Z,867nm,20.4s,baz=29,slow=38 | | | | | | |
| **CBJI** | **Citeko** | **46.38** | **233** | P | **P** | **21 35 08.7** | **+1.4** |
| | comp=Z,155nm,1.1s | | | | | | |
| **BELO** | **BELONIA** | **46.39** | **279** | *e*P | **P** | **21 35 09.5** | **+2.1** |
| **DBJI** | **Dramaga** | **46.54** | **233** | P | **P** | **21 35 09.7** | **+1.1** |
| | comp=Z,3μmcomp=Z,128nm,1.7s | | | | | | |
| **SANVU** | **Saraoutou** | **46.58** | **146** | P | **P** | **21 35 08.1** | **-0.7** |
| **SANVU** | **Saraoutou** | **46.58** | **146** | P | **P** | **21 35 12.9** | **+4.1** |
| **BKNI** | **Bangkinang** | **46.73** | **245** | P | **P** | **21 35 12.7** | **+2.5** |
| | comp=Z,3μmcomp=Z,150nm,1.1s | | | | | | |
| **BKNI** | **Bangkinang** | **46.73** | **245** | P | **P** | **21 35 12.7** | **+2.5** |
| | comp=Z,144nm,1.3s | | | | | | |
| **CNJI** | **Cibinong** | **46.78** | **232** | P | **P** | **21 35 08.3** | **-2.2** |
| | comp=Z,112nm,1.2s | | | | | | |
| **KLSI** | | **46.81** | **237** | P | **P** | **21 35 11.0** | **+0.2** |
| | comp=Z,486nmcomp=Z,20nm,1.1s | | | | | | |
| **SKJI** | **Sukabumi** | **46.99** | **233** | P | P | 21 35 22.2 | +10 |
| **MDSI** | **Maura Dua** | **47.11** | **237** | P | **P** | **21 35 12.8** | **-0.2** |
| | comp=Z,2μmcomp=Z,417nmcomp=Z,24nm,1.0s | | | | | | |
| **PSI** | **Prapat** | **47.18** | **250** | LR | LR | 21 53 28.0 | |
| | comp=Z,2μm,21.5s,baz=65,slow=34 | | | | | | |
| **CGJI** | **Cibinong** | **47.35** | **234** | P | **P** | **21 35 14.2** | **-0.8** |
| | comp=Z,687nmcomp=Z,28nm,1.0s | | | | | | |
| **KASI** | **Kota Agung** | **47.53** | **236** | P | **P** | **21 35 14.6** | **-1.7** |
| | comp=Z,21nm,1.0s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **47.68** | **254** | P | **P** | **21 35 16.9** | **-0.6** |
| **LHMI** | **Lhok Sumawe** | **47.68** | **254** | P | **P** | **21 35 20.8** | **+3.3** |
| | comp=Z,5μmcomp=Z,3μmcomp=Z,225nm,0.9s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **47.68** | **254** | P | P | 21 35 22.9 | +5.4 |
| **MNSI** | **Mandailing Nat** | **47.69** | **247** | P | **P** | **21 35 18.4** | **+0.8** |
| | comp=Z,1μmcomp=Z,45nm,1.0s | | | | | | |
| **TIXI** | **Tiksi** | **47.70** | **354** | P | **P** | **21 35 17.3** | **+0.4** |
| | comp=Z,58nm,0.8s,baz=269,slow=23,SNR=193 | | | | | | |
| TIXI | | | | LR | LR | 21 56 25.1 | |
| | comp=Z,2μm,18.5s,baz=180,slow=37 | | | | | | |
| **TIXI** | **Tiksi** | **47.70** | **354** | P | **P** | **21 35 16.2** | **-0.6** |
| TIXI | | | | IAmb | IAmb | 21 35 24.5 | |
| | comp=Z,90nm,0.9s | | | | | | |
| **UNV** | **Unalaska Valle** | **47.75** | **39** | P | **P** | **21 35 18.3** | **+0.8** |
| UNV | | | | IAmb | IAmb | 21 35 29.7 | |
| | comp=Z,125nm,1.1s | | | | | | |
| **UNV** | **Unalaska Valle** | **47.75** | **39** | P | **P** | **21 35 19.3** | **+1.8** |
| **KRJI** | **Kerinci** | **47.78** | **242** | P | **P** | **21 35 19.8** | **+1.4** |
| | comp=Z,5μmcomp=Z,184nm,1.8s | | | | | | |
| **MASI** | **Maura Aman, Be** | **47.78** | **240** | P | **P** | **21 35 19.7** | **+1.3** |
| | comp=Z,2μmcomp=Z,188nm,1.1s | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **47.80** | **251** | P | **P** | **21 35 18.7** | **+0.2** |
| | comp=Z,1μmcomp=Z,64nm,1.0s | | | | | | |
| **KSI** | **Kapahiang** | **47.82** | **240** | P | **P** | **21 35 18.7** | **+0.1** |
| | comp=Z,2μmcomp=Z,186nm,1.3s | | | | | | |
| **DGPR** | **DIGLIPUR** | **47.95** | **266** | *e*P | **P** | **21 35 20.1** | **+0.5** |
| DGPR | | | | IAmb | IAmb | 21 35 23.7 | |
| | comp=Z,94nm,0.7s | | | | | | |
| **GTK** | **Tadong** | **48.15** | **285** | *e*P | **P** | **21 35 21.8** | **+0.6** |
| GTK | | | | IAmb | IAmb | 21 35 27.9 | |
| | comp=Z,183nm,1.2s | | | | | | |
| **WMQ** | **Urumqi** | **48.22** | **308** | ⇑P | **P** | **21 35 21.3** | **-0.2** |
| WMQ | | | | PcS | **PcS** | **21 40 37.3** | **-6.7** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,190nm,1.3s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,680nm,4.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,2μm,14.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,3μm,22.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,4μm,21.9s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **48.35** | **170** | P | **P** | **21 35 26.8** | **+4.4** |
| | comp=Z,58nm,1.0s | | | | | | |
| **PBA** | **Port Blair** | **48.68** | **264** | P | **P** | **21 35 25.6** | **+0.4** |
| PBA | | | | IAmb | IAmb | 21 35 33.8 | |
| | comp=Z,112nm,1.0s | | | | | | |
| **PBA** | **Port Blair** | **48.68** | **264** | *e*P | **P** | **21 35 25.5** | **+0.2** |
| PBA | | | | IAmb | IAmb | 21 35 33.6 | |
| | comp=Z,142nm,1.2s | | | | | | |
| **PBA** | **Port Blair** | **48.68** | **264** | P | **P** | **21 35 25.5** | **+0.2** |
| | SNR=9.3 | | | | | | |
| **AS31** | **Alice Springs** | **48.69** | **190** | P | **P** | **21 35 23.9** | **-1.2** |
| **ASAR** | **Alice Springs** | **48.69** | **190** | P | **P** | **21 35 24.1** | **-1.1** |
| | comp=Z,18nm,0.7s,baz=14,slow=10,SNR=157 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 36 50.6** | **+0.7** |
| | comp=Z,16nm,0.9s,baz=10,slow=5.1,SNR=4.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 40 39.3** | **-2.0** |
| | comp=Z,0.7nm,0.7s,baz=15,slow=3.8,SNR=1.4 | | | | | | |
| ASAR | | | | S | **S** | **21 42 23.1** | **-1.6** |
| | comp=Z,5.4nm,0.8s,baz=18,slow=19,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 21 54 39.5 | |
| | comp=Z,2μm,21.5s,baz=8.0,slow=34 | | | | | | |
| **TAPN** | **Taplejung** | **48.93** | **286** | *e*P | **P** | **21 35 28.4** | **+1.0** |
| | comp=Z,587nm,1.0s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **49.15** | **315** | *c* *i*P | **P** | **21 35 28.0** | **-0.6** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,74nm,1.1s | | | | | | |
| **GAMB** | **Gambell** | **49.27** | **25** | P | **P** | **21 35 30.3** | **+1.2** |
| **ODAN** | **Odare** | **49.29** | **285** | *e*P | **P** | **21 35 30.8** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **49.67** | **153** | IAMs_20 | IAMs_20 | 21 54 17.2 | |
| | comp=Z,5μm,22.0s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **49.67** | **153** | P | **P** | **21 35 36.6** | **+4.0** |
| **RAMN** | **Ramite** | **49.97** | **285** | *e*P | **P** | **21 35 35.8** | **+0.5** |
| | comp=Z,14nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **50.20** | **286** | *e*P | **P** | **21 35 38.2** | **+1.0** |
| **EIDS** | **Eidsvold** | **50.38** | **170** | P | **P** | **21 35 37.0** | **-0.9** |
| EIDS | | | | IAmb | IAmb | 21 35 50.2 | |
| | comp=Z,112nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **50.38** | **170** | P | **P** | **21 35 38.6** | **+0.6** |
| **GUN** | **Gumba** | **50.43** | **287** | *e*P | **P** | **21 35 39.8** | **+0.9** |
| **ZSN** | **Zaisan** | **50.54** | **312** | *e*P | **P** | **21 35 37.7** | **-1.3** |
| **ZSN** | **Zaisan** | **50.54** | **312** | *e*P | **P** | **21 35 37.7** | **-1.3** |
| | baz=312 | | | | | | |
| ZSN | | | | *i* S | **S** | **21 42 49.7** | **-0.5** |
| | baz=312 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **50.88** | **207** | P | **P** | **21 35 40.4** | **-1.4** |
| PSA00 | | | | IAmb | IAmb | 21 35 53.6 | |
| | comp=Z,85nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **50.88** | **207** | P | **P** | **21 35 41.6** | **-0.1** |
| **PKI** | **Pulchoki** | **50.90** | **286** | *e*P | **P** | **21 35 42.6** | **+0.2** |
| **PKIN** | **Phulchoki** | **50.91** | **286** | *e*P | **P** | **21 35 42.5** | **+0.1** |
| | comp=Z,41nm,0.5s | | | | | | |
| **QLP** | **Quilpie** | **50.92** | **178** | P | **P** | **21 35 44.5** | **+2.5** |
| **KKN** | **Kakani** | **50.97** | **287** | *e*P | **P** | **21 35 43.2** | **+0.4** |
| | comp=Z,208nm,0.8s | | | | | | |
| **DMN** | **Daman** | **51.16** | **286** | *e*P | **P** | **21 35 44.7** | **+0.4** |
| | comp=Z,241nm,0.9s | | | | | | |
| **RMQ** | **Roma** | **51.16** | **173** | P | **P** | **21 35 46.3** | **+2.5** |
| **WRKA** | **Warakurna** | **51.21** | **196** | P | **P** | **21 35 43.6** | **-0.6** |
| **BOK** | **Bokaro** | **51.25** | **282** | *e*P | **P** | **21 35 45.3** | **+0.6** |
| BOK | | | | IAmb | IAmb | 21 35 53.3 | |
| | comp=Z,305nm,1.0s | | | | | | |
| **GKN** | **Gorkha** | **51.50** | **287** | *e*P | **P** | **21 35 47.2** | **+0.5** |
| | comp=Z,402nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **51.51** | **320** | P | **P** | **21 35 44.8** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **51.51** | **320** | P | **P** | **21 35 44.9** | **-1.3** |
| | comp=Z,46nm,1.0s,baz=100,slow=6.2,SNR=88 | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 37 00.6** | **+0.8** |
| | comp=Z,9.0nm,0.6s,baz=121,slow=4.1,SNR=4.4 | | | | | | |
| ZALV | | | | LR | LR | 21 58 59.6 | |
| | comp=Z,2μm,19.6s,baz=98,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.51** | **320** | P | **P** | **21 35 44.0** | **-2.2** |
| **SDPT** | **Sand Point** | **51.52** | **38** | P | **P** | **21 35 45.9** | **-0.3** |
| SDPT | | | | IAmb | IAmb | 21 35 48.1 | |
| | comp=Z,151nm,0.8s | | | | | | |
| **TNA** | **Tin City** | **51.56** | **24** | P | **P** | **21 35 46.3** | **-0.1** |
| **NOUC** | **Port Laguerre** | **51.91** | **151** | P | **P** | **21 35 53.3** | **+3.9** |
| **DZM** | **Mont Dzumac** | **51.94** | **151** | LR | LR | 21 56 10.9 | |
| | comp=Z,1μm,21.6s,baz=346,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **51.94** | **151** | *e*S | S | 21 42 45.9 | -24 |
| | comp=Z,736nm,31.0s | | | | | | |
| DZM | | | | *e*LR | LR | 21 50 20.5 | |
| | comp=Z,9μm,25.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **51.94** | **151** | P | **P** | **21 35 49.7** | **-0.1** |
| DZM | | | | IAmb | IAmb | 21 35 59.2 | |

baz=307
KURBB **Kurchatov Arra** 54.94 316 P **P** 21 36 10.2 -1.2
comp=Z,66nm,0.9s,baz=93,slow=7.6,SNR=281
KURBB S **S** 21 43 46.8 -3.2
comp=Z,4.0nm,1.2s,baz=88,slow=11,SNR=5.2
KURBB LR LR 22 00 42.3
comp=Z,5µm,18.4s,baz=71,slow=37
**SATY** **Saty** 54.97 306 *e*P **P** 21 36 10.1 -1.8
SATY pmax pmax
comp=Z,47nm,1.1s
**SATY** **Saty** 54.97 306 *e*P **P** 21 36 10.1 -1.8
comp=Z,48nm,1.1s,baz=306
**LGTI** **Lohaghat** 55.02 290 *e*P **P** 21 36 13.4 +1.1
**PTH** **Pithoragarh** 55.03 290 *e*P **P** 21 36 12.9 +0.2
**NRIK** **Noril'sk** 55.04 339 P **P** 21 36 11.6 -0.2
comp=Z,47nm,0.8s,baz=114,slow=7.6,SNR=67
NRIK LR LR 22 00 45.2
comp=Z,4µm,18.7s,baz=114,slow=37
**NRIK** **Noril'sk** 55.04 339 *c i*P **P** 21 36 11.5 -0.3
NRIK pmax pmax
comp=Z,131nm,1.1s
**NRIK** **Noril'sk** 55.04 339 P **P** 21 36 11.8 -0.1
NRIK IAmb IAmb 21 36 13.3
comp=Z,128nm,1.1s
**MULG** **Mulgathing** 55.16 189 P **P** 21 36 13.8 +0.6
**O18K** **Koktuh Hills** 55.22 33 P **P** 21 36 14.0 +0.7
O18K IAmb IAmb 21 36 17.1
comp=Z,133nm,1.0s
**SVW2** **Sparrevohn** 55.28 31 P **P** 21 36 14.0 +0.2
SVW2 IAmb IAmb 21 36 17.5
comp=Z,73nm,1.0s
**ARMA** **Armidale** 55.42 170 P **P** 21 36 15.4 +0.3
**ARMA** **Armidale** 55.42 170 P P 21 36 20.0 +4.8
**TARG** **Taragay, Kyrgy** 55.48 305 P **P** 21 36 16.4 +0.4
TARG IAmb IAmb 21 36 18.4
comp=Z,127nm,1.0s
**TTA** **Tatalina** 55.50 29 P **P** 21 36 16.4 +1.0
TTA pmax pmax
comp=Z,27nm,1.0s
**TTA** **Tatalina** 55.50 29 P **P** 21 36 16.4 +1.0
**O19K** **Port Alsworth** 55.72 33 P **P** 21 36 18.1 +1.2
O19K IAmb IAmb 21 36 20.3
comp=Z,95nm,0.9s
**N19K** **Bonanza Creek** 55.75 32 P **P** 21 36 17.3 +0.1
**L19K** **White Mountain** 55.85 30 P **P** 21 36 17.5 -0.4
**MEEK** **Meekatharra** 55.89 206 P **P** 21 36 19.7 +1.2
**CMSA** **Cobar Meteorol** 55.91 177 P **P** 21 36 20.5 +2.0
**MDOK** **Medeo** 55.95 307 *e*P **P** 21 36 17.6 -1.5
**MDOK** **Medeo** 55.95 307 *e*P **P** 21 36 17.6 -1.5
baz=307
**CHKK** **Chushkaly** 55.96 307 *e*P **P** 21 36 17.4 -1.6
baz=308
**M19K** **Big River Lodg** 56.01 31 P **P** 21 36 19.3 +0.3
**TNSS** **Tian-Shan** 56.03 306 *e*P **P** 21 36 19.5 -0.4
baz=306
**AAA** **Alma-Ata** 56.05 307 *e*P **P** 21 36 18.9 -0.7
**AAA** **Alma-Ata** 56.05 307 *e*P **P** 21 36 18.9 -0.7
baz=307
**STKA** **Stephens Creek** 56.17 181 P **P** 21 36 19.7 -0.7
comp=Z,8.2nm,0.5s,baz=3.5,slow=7.2,SNR=32
STKA LR LR 22 01 04.9
comp=Z,2µm,21.8s,baz=351,slow=37
**STKA** **Stephens Creek** 56.17 181 P **P** 21 36 19.6 -0.8
**STKA** **Stephens Creek** 56.17 181 P **P** 21 36 20.0 -0.4
**KDAK** **Kodiak Island** 56.24 36 LR LR 21 59 27.4
comp=Z,5µm,20.2s,baz=264,slow=35
**KUU** **Kurty** 56.43 308 *e*P **P** 21 36 20.6 -1.7
**KUU** **Kurty** 56.43 308 *e*P **P** 21 36 20.7 -1.7
baz=308
**K20K** **Telida** 56.45 29 P **P** 21 36 21.7 -0.4
K20K IAmb IAmb 21 36 39.3
comp=Z,64nm,0.9s
**RSO** **Redoubt South** 56.53 33 P **P** 21 36 22.3 -0.6
**J20K** **Nowinta River** 56.60 28 P **P** 21 36 23.6 +0.5
J20K IAmb IAmb 21 36 27.1
comp=Z,127nm,1.2s
**ULHL** **Ulahol** 56.61 306 P **P** 21 36 23.8 -0.1
SNR=82
**FORT** **Forrest** 56.76 195 P **P** 21 36 24.3 -0.3
**FORT** **Forrest** 56.76 195 P **P** 21 36 25.8 +1.2
**PVM** **Polavaram** 56.87 275 *e*P **P** 21 36 25.7 0.0
PVM IVmB_BB 21 36 27.4
comp=Z,574nm,1.6s
**SPU** **Mount Spurr** 56.98 32 P **P** 21 36 26.9 +1.0
**TKM2** **Tokmak 2** 57.03 306 P **P** 21 36 27.0 +0.1
SNR=80
**KSH** **Kashi** 57.05 302 P **P** 21 36 30.8 +3.9
KSH pP sP 21 36 43.6 +0.4
KSH sP pwP 21 36 50.8 +8.9
KSH ScP **ScP** **21 41 12.0 -5.8**
KSH PcS **PcS** **21 41 23.8 +1.2**
KSH S **S** **21 44 24.6 +5.8**
KSH sS sS 21 44 41.3 +3.3
KSH pmax pmax
comp=Z,90nm,1.0s
KSH pmax pmax
comp=Z,430nm,4.7s
KSH LR LR
comp=Z,1µm,14.4s
KSH LR LR
comp=Z,2µm,16.1s
KSH LR LR
comp=Z,4µm,19.6s
**IMAR** **Indian Mountai** 57.18 26 P **P** 21 36 28.3 +1.1
**PPLA** **Purkeypile** 57.20 30 P **P** 21 36 28.7 +1.1
**POHA** **Pohakuloa** 57.25 82 P **P** 21 36 28.6 -0.2
**POHA** **Pohakuloa** 57.25 82 P **P** 21 36 32.2 +3.5
**SMLA** **Simla** 57.33 292 *e*P **P** 21 36 28.5 -0.3
SMLA IAmb IAmb 21 36 31.2
comp=Z,42nm,0.8s
**CAST** **Castle Rocks** 57.34 29 P **P** 21 36 29.3 +0.8
CAST IAmb IAmb 21 36 44.7
comp=Z,70nm,0.9s
**HMH** **Humu'ula Sheep** 57.34 82 P **P** 21 36 29.6 +0.2
**JHNI** **Jhansi** 57.36 285 *e*P **P** 21 36 27.2 -2.0
**BRLK** **Bradley Lake** 57.36 34 P **P** 21 36 29.9 +1.2
**BBOO** **Buckleboo** 57.42 186 P **P** 21 36 29.0 -0.2
BBOO IAmb IAmb 21 36 40.9
comp=Z,137nm,1.2s
**BBOO** **Buckleboo** 57.42 186 P **P** 21 36 30.2 +1.0
**AIN** **Ainahou** 57.43 82 P **P** 21 36 30.1 +0.1
**H21K** **Melozitna Rive** 57.48 26 P **P** 21 36 29.3 -0.1
H21K IAmb IAmb 21 36 33.5
comp=Z,124nm,1.2s
**WHYH** **Whyalla** 57.50 185 P P 21 36 34.8 +5.0
comp=Z,24nm,1.2s
**KBK** **Karagaybulak** 57.53 306 P **P** 21 36 30.6 +0.3
SNR=118
**COCO** **West Island** 57.59 236 P **P** 21 36 30.3 -0.4
COCO pmax pmax
comp=Z,147nm,1.0s
**COCO** **West Island** 57.59 236 P **P** 21 36 30.3 -0.4
COCO IAmb IAmb 21 36 32.5
comp=Z,147nm,1.0s
**COCO** **West Island** 57.59 236 P **P** 21 36 34.9 +4.2
COCO P **P** 21 36 34.9 +4.2
**NAPP** **Napperby** 57.61 184 P **P** 21 36 31.0 +0.5
comp=Z,96nm,1.2s
**CHMS** **Chumysh** 57.64 307 P **P** 21 36 30.6 -0.3
SNR=55
**SGDS** **Sogindy** 57.70 307 *e*P **P** 21 36 29.6 -1.7
baz=307
**A21K** **Barrow** 57.70 19 P **P** 21 36 31.6 +0.9
A21K IAmb IAmb 21 36 35.1
comp=Z,66nm,0.9s
**I21K** **Tanana** 57.72 27 P **P** 21 36 32.1 +1.1
**NDI** **New Delhi** 57.78 289 *e*P **P** 21 36 32.0 0.0
**USP** **Ospenovka** 57.81 307 P **P** 21 36 31.2 -0.9
SNR=72
**HTT** **Hallett** 57.81 183 P **P** 21 36 32.7 +0.7
**AAK** **Ala-Archa** 57.86 306 P **P** 21 36 32.0 -0.6
comp=Z,33nm,0.9s,baz=107,slow=5.7,SNR=131
AAK LR LR 22 03 41.5
comp=Z,3µm,19.3s,baz=82,slow=38
**AAK** **Ala-Archa** 57.86 306 P **P** 21 36 32.3 -0.3
SNR=53
**AAK** **Ala-Archa** 57.86 306 *c i*P **P** 21 36 32.4 -0.3
AAK pmax pmax
comp=Z,97nm,1.7s
**AAK** **Ala-Archa** 57.86 306 P **P** 21 36 32.6 0.0
**AAK** **Ala-Archa** 57.86 306 IAMs_20 IAMs_20 22 03 48.4
comp=Z,3µm,19.0s
**AAK** **Ala-Archa** 57.86 306 P **P** 21 36 32.3 -0.3
AAK P **P** 21 36 32.3 -0.3
AAK S **S** **21 44 32.0 +2.6**
AAK S **S** **21 44 32.0 +2.6**
**AAK** **Ala-Archa** 57.86 306 *i*P **P** 21 36 32.0 -0.6
**NTLH** **Newcastle Hard** 57.87 171 P **P** 21 36 33.7 +1.4
**KTH** **Kantishna Hill** 57.88 29 P **P** 21 36 32.8 +0.5
**UCH** **Uchtor** 57.89 306 P **P** 21 36 33.2 0.0
SNR=144
**AYAN** **Aya Nagar** 57.90 289 *e*P **P** 21 36 33.2 +0.3
**BHK** **Bhakra** 57.90 293 *e*P **P** 21 36 33.2 +0.3
**MYLAV** **Mylavaram** 57.93 275 *e*P **P** 21 36 33.6 +0.4
MYLAV IVmB_BB 21 36 35.1
comp=Z,585nm,1.4s
**BPAW** **Bear Paw Mtn.** 57.94 28 P **P** 21 36 32.5 -0.1
**M22K** **Willow** 57.98 31 P **P** 21 36 32.8 -0.1
M22K IAmb IAmb 21 36 51.7
comp=Z,141nm,1.1s
**BTLS** **Baital** 58.00 309 *e*P **P** 21 36 32.1 -1.2
BTLS pmax pmax
comp=Z,50nm,1.1s
**BTLS** **Baital** 58.00 309 *e*P **P** 21 36 32.1 -1.2
comp=Z,50nm,1.1s,baz=309
**CUT** **Chulitna** 58.00 30 IAMs_20 IAMs_20 21 58 59.5
comp=Z,4µm,21.0s
**RC01** **Rabbit Creek A** 58.09 32 P **P** 21 36 34.7 +1.1
RC01 IAmb IAmb 21 36 52.8
comp=Z,64nm,0.8s
**MGCD** **Mangrove Creek** 58.09 171 P **P** 21 36 35.6 +1.7
**SEW** **Seward** 58.12 33 P **P** 21 36 34.0 +0.1
**TRF** **Thorofare Moun** 58.14 29 P **P** 21 36 34.6 +0.4
TRF IAmb IAmb 21 36 50.1
comp=Z,81nm,0.9s
**MLY** **Manley** 58.21 27 P **P** 21 36 35.1 +0.6
MLY IAmb IAmb 21 36 38.3
comp=Z,88nm,1.3s
**THN** **Thein Dam** 58.30 294 *e*P **P** 21 36 34.8 -0.8
**EKS2** **Erkin-Say** 58.39 306 P **P** 21 36 36.4 +0.1
SNR=71
**PMR** **Palmer** 58.43 31 P **P** 21 36 35.9 -0.1
PMR pmax pmax
comp=Z,93nm,0.9s
**PMR** **Palmer** 58.43 31 P **P** 21 36 35.9 -0.1
PMR IAmb IAmb 21 36 38.2
comp=Z,93nm,0.9s
**RPR** **Rampur** 58.48 278 *e*P **P** 21 36 36.9 -0.2
RPR IVmBBB 21 36 38.2
comp=Z,328nm,1.7s
**AML** **Almayashu** 58.50 306 P **P** 21 36 37.6 +0.2
SNR=137
**AML** **Almayashu** 58.50 306 P **P** 21 36 37.0 -0.4
**AML** **Almayashu** 58.50 306 *i*P **P** 21 36 37.4 0.0
SNR=139
**KUDL** **Kundal** 58.52 289 *e*P **P** 21 36 37.2 0.0
**GHO** **Glory Hole Cre** 58.55 31 P **P** 21 36 36.5 -0.4
GHO IAmb IAmb 21 36 52.1
comp=Z,78nm,0.9s
**SYDH** **Sydney Hard Ro** 58.58 172 P **P** 21 36 39.9 +2.6
comp=Z,103nm,1.3s
**BWN** **Browne** 58.61 28 P **P** 21 36 38.6 +1.3
**BRZS** **Berezniki** 58.69 315 *e*P **P** 21 36 36.4 -1.6
**BRZS** **Berezniki** 58.69 315 *e*P **P** 21 36 36.4 -1.6
baz=315
**PWL** **Port Wells** 58.74 32 P **P** 21 36 38.8 +0.6
**RND** **Reindeer** 58.78 29 P **P** 21 36 39.2 +0.6
RND pmax pmax
comp=Z,67nm,1.0s
**RND** **Reindeer** 58.78 29 P **P** 21 36 39.1 +0.6
RND IAmb IAmb 21 36 53.5
comp=Z,67nm,1.0s
**MCK** **McKinley** 58.78 29 P **P** 21 36 37.6 -0.9
MCK pmax pmax
comp=Z,124nm,1.2s
**MCK** **McKinley** 58.78 29 P **P** 21 36 37.6 -0.9
MCK IAmb IAmb 21 36 41.1
comp=Z,124nm,1.2s
**I23K** **Minto, Yukon-K** 58.80 27 P **P** 21 36 39.5 +1.0
I23K IAmb IAmb 21 36 42.2
comp=Z,58nm,1.0s
**ADKI** **Addanki** 58.83 274 *e*P **P** 21 36 39.8 +0.4
ADKI IVmB_BB 21 36 41.4
comp=Z,477nm,1.8s
**SML** **Sawmill** 58.83 31 P **P** 21 36 39.2 +0.3
**AFI** **Afiamalu** 58.85 126 LR LR 21 59 58.5
comp=Z,1µm,19.0s,baz=302,slow=34
**BHPL** **Bhopal** 58.91 283 *e*P **P** 21 36 39.7 -0.4
BHPL IAmb IAmb 21 36 45.6
comp=Z,51nm,0.7s
**MORW** **Morawa** 59.09 207 P **P** 21 36 40.7 -0.3
**MORW** **Morawa** 59.09 207 P **P** 21 36 39.7 -1.2
**NJS** **Nagarjunasagar** 59.20 275 *e*P **P** 21 36 41.9 -0.2
NJS IVmB_BB 21 36 43.5
comp=Z,489nm,1.7s
**WRH** **Wood River Hil** 59.25 28 P **P** 21 36 42.2 +0.6
**MDM** **Murphy Dome** 59.25 28 P **P** 21 36 42.5 +0.8
MDM IAmb IAmb 21 36 45.1
comp=Z,93nm,1.1s
**CUPL** **Choutuppal** 59.31 276 *e*P **P** 21 36 42.1 -0.8
CUPL IVmB_BB 21 36 43.9
comp=Z,480nm,2.5s
**SCM** **Sheep Creek Mo** 59.31 31 P **P** 21 36 43.0 +0.8
SCM pmax pmax
comp=Z,171nm,0.9s
**SCM** **Sheep Creek Mo** 59.31 31 P **P** 21 36 43.0 +0.8
**SRSP** **Sriramsagar** 59.32 278 *e*P **P** 21 36 42.5 -0.5
SRSP IVmB_BB 21 36 44.0
comp=Z,148nm,0.5s
**TOLK** **Toolik Lake Re** 59.33 23 P **P** 21 36 43.2 +1.0
TOLK IAmb IAmb 21 36 46.1
comp=Z,118nm,1.0s
**CCB** **Clear Creek Bu** 59.39 28 P **P** 21 36 42.9 +0.2
CCB IAMs_20 IAMs_20 22 03 29.8
comp=Z,2µm,20.0s
**TCOL** **CIGO, UAF Yank** 59.40 28 P **P** 21 36 42.6 -0.1
TCOL IAmb IAmb 21 36 47.6
comp=Z,49nm,0.9s
**COLA** **College** 59.40 28 *e*P **P** 21 36 45.2 +2.5
COLA pmax pmax
comp=Z,44nm,0.9s
**COLA** **College** 59.40 28 P **P** 21 36 42.7 0.0
COLA IAmb IAmb 21 36 47.7
comp=Z,51nm,0.9s
**TWOA** **Tennyson Woods** 59.42 184 P **P** 21 36 43.6 +0.5
**H24K** **Noodor Dome** 59.52 27 P **P** 21 36 43.7 +0.2
H24K IAmb IAmb 21 36 47.4
comp=Z,100nm,0.9s
**MDRS** **Chennai** 59.53 271 *e*P **P** 21 36 45.4 +1.1
MDRS IAmb IAmb 21 36 46.8
comp=Z,125nm,1.2s
**HYB** **Hyderabad** 59.60 276 *e*P **P** 21 36 44.8 0.0
HYB IAmb IAmb 21 36 51.0
comp=Z,54nm,1.1s
**HYBB** **Hyderabad (bro** 59.60 276 *e*P **P** 21 36 44.6 -0.3
HYBB IVmB_BB 21 36 45.8
comp=Z,465nm,2.6s
**POKR** **Poker Plat Res** 59.61 27 P **P** 21 36 43.5 -0.6
POKR IAmb IAmb 21 36 47.9
comp=Z,73nm,0.9s
**SRLM** **Srisailam** 59.72 275 *e*P **P** 21 36 45.2 -0.5
SRLM IVmB_BB 21 36 46.9
comp=Z,615nm,1.5s
**HDA** **Harding Lake** 59.73 28 P **P** 21 36 43.3 -1.7
HDA IAmb IAmb 21 36 47.1
comp=Z,97nm,1.1s
**SKHT** **Srikalahasti** 59.78 272 *e*P **P** 21 36 46.5 +0.4
SKHT IVmB_BB 21 36 47.7
comp=Z,591nm,1.2s
**IL31** 59.80 28 P **P** 21 36 46.3 +0.9
**ILAR** **Eielson Array** 59.80 28 P **P** 21 36 46.2 +0.7
comp=Z,89nm,0.9s,baz=262,slow=5.4,SNR=378
ILAR LR LR 21 59 31.7
comp=Z,1µm,21.9s,baz=241,slow=33
ILAR PKPPKP **P'P'df** **22 06 11.7 -5.0**
comp=Z,0.7nm,0.9s,baz=184,slow=4.4,SNR=4.8
**ILAR** **Eielson Array** 59.80 28 P **P** 21 36 46.1 +0.6
**M24K** **Tolsona, Glenn** 59.88 31 P **P** 21 36 47.0 +0.8
M24K IAmb IAmb 21 36 58.9
comp=Z,128nm,1.2s
**RCLA** **Racherla** 59.88 274 *e*P **P** 21 36 46.2 -0.5
RCLA IVmB_BB 21 36 47.9
comp=Z,632nm,1.4s
**CAN** **Canberra** 59.93 174 P **P** 21 36 45.8 -0.9
CAN pmax pmax
comp=Z,160nm,1.2s
CAN MLR MLR
comp=Z,1µm,20.0s
**CAN** **Canberra** 59.93 174 P **P** 21 36 45.8 -0.9
**CAN** **Canberra** 59.93 174 P **P** 21 36 50.8 +4.1
**KLU** **Klutina** 59.95 32 IAmb IAmb 21 37 07.9
comp=Z,114nm,1.0s
**CNB** **Canberra Magne** 59.96 173 P **P** 21 36 51.0 +4.1
**AKL** **Akola** 59.98 281 *e*P **P** 21 36 48.3 +0.9
**BVAR** **Borovoye Array** 60.02 318 P **P** 21 36 46.4 -0.8
comp=Z,34nm,0.5s,baz=332,slow=29,SNR=306
**BRVK** **Borovoye** 60.09 318 *c i*P **P** 21 36 46.7 -0.9
BRVK pmax pmax
comp=Z,104nm,1.0s
**BRVK** **Borovoye** 60.09 318 P **P** 21 36 46.9 -0.7
BRVK IAmb IAmb 21 36 48.3
comp=Z,105nm,1.1s
**BRVK** **Borovoye** 60.09 318 IAMs_20 IAMs_20 22 03 15.0
comp=Z,2µm,18.0s
**BRVK** **Borovoye** 60.09 318 P **P** 21 36 47.2 -0.4
BRVK P **P** 21 36 47.2 -0.4
BRVK S **S** 21 44 55.2 -2.3
BRVK S **S** 21 44 55.2 -2.3
**NIL** **Nilore** 60.10 296 P **P** 21 36 48.6 +0.5
NIL pmax pmax
comp=Z,192nm,1.2s
NIL MLR MLR
comp=Z,2µm,19.0s
**NIL** **Nilore** 60.10 296 P **P** 21 36 48.6 +0.5
**NIL** **Nilore** 60.10 296 P **P** 21 36 48.6 +0.5
NIL P **P** 21 36 48.6 +0.5
**DZA** **Taraz** 60.15 307 *e*P **P** 21 36 47.4 -0.9
DZA pmax pmax
comp=Z,48nm,1.2s
**DZA** **Taraz** 60.15 307 *e*P **P** 21 36 47.4 -0.9
comp=Z,48nm,1.2s,baz=307
**BLDU** **Ballidu** 60.18 206 P **P** 21 36 48.8 +0.3
comp=Z,40nm,1.0s
**PAX** **Paxson** 60.26 30 P **P** 21 36 48.2 -0.6
PAX pmax pmax
comp=Z,149nm,1.4s
**PAX** **Paxson** 60.26 30 P **P** 21 36 48.2 -0.6
PAX IAmb IAmb 21 36 52.0
comp=Z,149nm,1.4s
**J25K** **Salcha River,** 60.43 28 P **P** 21 36 50.2 +0.3
**PRP** **Porcupine Dome** 60.45 27 P **P** 21 36 49.9 -0.2
PRP IAMs_20 IAMs_20 22 04 43.7
comp=Z,2µm,19.0s
**AJM** **Ajmer** 60.51 288 *e*P **P** 21 36 51.2 +0.2
**BMRM** **Bremner River** 60.57 32 P **P** 21 36 51.7 +0.8
**N25K** **Chitina, Valde** 60.59 32 P **P** 21 36 51.5 +0.5
**RIDG** **Independent Ri** 60.59 29 P **P** 21 36 49.9 -1.1
**KLBR** **Kellerberrin** 60.65 204 P **P** 21 36 52.0 +0.3
comp=Z,96nm,1.1s
**FYU** **Fort Yukon** 60.67 26 P **P** 21 36 51.9 +0.6
**KKAR** **Karatay Array** 60.72 307 P **P** 21 36 52.0 -0.2
**KKAR** **Karatay Array** 60.72 307 P **P** 21 36 52.0 -0.2
**DOT** **Dot Lake** 60.94 29 P **P** 21 36 54.7 +1.4
DOT IAmb IAmb 21 36 56.1
comp=Z,114nm,1.0s
**GLB** **Gilahina Butte** 60.97 32 P **P** 21 36 54.6 +1.0
GLB IAmb IAmb 21 36 56.8
comp=Z,88nm,1.1s
**SCRK** **Sand Creek** 60.99 29 P **P** 21 36 55.4 +1.6
**BMAR** **Burnt Mountain** 61.01 25 P **P** 21 36 55.6 +1.9
**ARPS** **Mount Arapiles** 61.05 181 P **P** 21 36 55.3 +1.1
**MENT** **Mentasta** 61.06 30 P **P** 21 36 55.0 +0.9
**KLRI** **Killari** 61.16 278 *e*P **P** 21 36 54.5 -1.1
KLRI IVmBBB 21 36 56.1
comp=Z,426nm,1.9s
**BRLS** **Boroldoy** 61.22 307 *e*P **P** 21 36 55.3 -0.3
**BRLS** **Boroldoy** 61.22 307 *e*P **P** 21 36 55.4 -0.3
baz=307
**L26K** **Log Cabin Wild** 61.23 30 P **P** 21 36 56.4 +1.0
L26K IAMs_20 IAMs_20 22 01 41.8
comp=Z,3µm,21.0s
**PALK** **Pallekele** 61.31 265 LR LR 22 02 45.4
comp=Z,982nm,19.5s,baz=165,slow=35
**PALK** **Pallekele** 61.31 265 P **P** 21 36 55.7 -0.9
PALK pmax pmax
comp=Z,50nm,1.0s
PALK MLR MLR
comp=Z,1µm,20.0s
**PALK** **Pallekele** 61.31 265 P **P** 21 36 55.7 -0.9
**PALK** **Pallekele** 61.31 265 P **P** 21 36 57.7 +1.1
PALK P **P** 21 36 57.7 +1.1
PALK S **S** 21 45 12.2 -2.1
PALK S **S** 21 45 12.2 -2.1
**M26K** **Nabesna, AK** 61.38 31 P **P** 21 36 57.1 +0.8
**WAX** **Waxell Ridge** 61.42 33 P **P** 21 36 57.8 +1.1
WAX IAmb IAmb 21 36 59.9
comp=Z,79nm,0.9s
**GAR** **Garm** 61.47 302 P **P** 21 36 56.6 -0.9
**URV** **Uravakonda** 61.59 274 *e*P **P** 21 36 57.9 -0.6
URV IVmB_BB 21 36 59.4
comp=Z,534nm,1.6s
**ISLE** **Juniper Island** 61.67 33 P **P** 21 36 57.9 -0.6
ISLE IAmb IAmb 21 37 00.7
comp=Z,68nm,1.1s
**BRAT** **Ballarat** 61.84 179 P **P** 21 37 00.8 +1.3
comp=Z,27nm,1.1s
**TAS** **Tashkent** 61.87 305 P **P** 21 36 58.6 -1.4
TAS pmax pmax
comp=Z,136nm,1.2s
**TAS** **Tashkent** 61.87 305 P **P** 21 36 58.6 -1.4
TAS IAmb IAmb 21 37 01.6
comp=Z,136nm,1.2s
**M27K** **Edge Creek, AK** 61.90 31 P **P** 21 36 59.6 -0.3
M27K IAmb IAmb 21 37 18.3
comp=Z,96nm,1.2s
**TOO** **Toolangi** 61.91 177 P **P** 21 36 59.7 -0.4
TOO pmax pmax
comp=Z,126nm,1.4s
**TOO** **Toolangi** 61.91 177 P **P** 21 36 59.7 -0.4
TOO IAmb IAmb 21 37 13.7
comp=Z,126nm,1.4s
**TOO** **Toolangi** 61.91 177 P **P** 21 37 01.9 +1.8
**L27K** **Beaver Creek,** 61.93 30 P **P** 21 37 00.0 0.0
L27K IAmb IAmb 21 37 03.3
comp=Z,56nm,1.0s
**BCAR** **Beaver Creek A** 61.95 30 P **P** 21 37 00.7 +0.6
**XMAS** **Kiritimati** 62.12 101 P **P** 21 37 01.5 -0.5
**XMAS** **Kiritimati** 62.12 101 P **P** 21 37 04.4 +2.4
**EGAK** **Eagle** 62.25 28 P **P** 21 37 02.7 +0.6
**TABL** **Table Mountain** 62.27 33 P **P** 21 37 02.8 +0.2
TABL IAmb IAmb 21 37 05.6
comp=Z,80nm,1.0s
**GEXS** **Deakin Univers** 62.50 178 P **P** 21 37 05.7 +1.8
**DAWY** **Dawson** 63.01 29 IAmb IAmb 21 37 10.7
comp=Z,88nm,0.9s
**KOD** **Kodaikanal** 63.10 269 *e*P **P** 21 37 08.8 -0.1
**KBL** **Kabul** 63.34 298 P **P** 21 37 09.8 -0.3
KBL pmax pmax
comp=Z,117nm,1.0s
**KBL** **Kabul** 63.34 298 P **P** 21 37 09.8 -0.3
**KBL** **Kabul** 63.34 298 P **P** 21 37 10.2 +0.1
SNR=69
KBL P **P** 21 37 10.2 +0.1
SNR=69
KBL S **S** 21 45 38.2 -1.5
KBL S **S** 21 45 38.2 -1.5
**POO** **Poona** 63.49 279 *e*P **P** 21 37 11.6 +0.5
POO IAmb IAmb 21 37 17.4
comp=Z,47nm,0.6s
**KAD** **Karad** 63.58 278 *e*P **P** 21 37 11.6 -0.1
**RKGY** **Rocky Gully** 63.65 203 P **P** 21 37 13.4 +1.7
**HYT** **Haines Junctio** 64.04 32 IAmb IAmb 21 37 18.1
comp=Z,109nm,1.0s
**M30M** **Minto, Yukon** 64.25 30 IAmb IAmb 21 37 19.1
comp=Z,50nm,0.9s
**INK** **Inuvik** 65.20 24 P **P** 21 37 22.4 +1.0
INK LR LR 22 06 02.3
comp=Z,1µm,20.2s,baz=258,slow=36
INK PKPPKP **P'P'df** **22 06 03.2 -4.5**
comp=Z,5.3nm,1.2s,baz=154,slow=6.3,SNR=3.2
**INK** **Inuvik** 65.20 24 IAmb IAmb 21 37 24.2
comp=Z,90nm,1.0s
**SKAG** **Skagway** 65.25 34 P **P** 21 37 22.8 +0.9
SKAG IAmb IAmb 21 37 25.7
comp=Z,55nm,0.9s
**SVE** **Sverdlovsk** 65.33 323 *e*P **P** 21 37 22.1 -0.4
SVE *e*S **S** 21 46 05.6 +2.5
SVE pmax pmax
comp=Z,128nm,1.5s
SVE MLR MLR
comp=Z,2µm,18.0s
**M31M** **Drury Creek, Y** 65.40 31 P **P** 21 37 22.4 -0.5
M31M IAmb IAmb 21 37 26.3

comp=Z,71nm,0.9s
**BESE Bessie Mountai 65.61 35** IAmb IAmb 21 37 28.1
comp=Z,113nm,1.0s
**CORO Coronation Par 65.87 176** P **P** **21 37 30.6 +4.7**
**P33M Teslin, Yukon 66.41 33** IAmb IAmb 21 37 33.0
comp=Z,74nm,1.0s
**ARU Arti 66.52 323** LR LR 22 08 50.0
comp=Z,2µm,20.9s,baz=70,slow=38
**ARU Arti 66.52 323** *d* iP **P** **21 37 29.0 -1.1**
ARU 21 37 56.4
ARU S **S** **21 46 19.6 +2.0**
ARU 21 47 15.8
ARU SSS SSS 21 53 34.3
ARU pmax pmax
comp=Z,226nm,1.3s
ARU MLR MLR
comp=Z,2µm,21.0s
**ARU Arti 66.52 323** P **P** **21 37 29.1 -1.0**
ARU IAMs_20 IAMs_20 22 08 13.2
comp=Z,2µm,19.0s
**MOO Moorlands 66.86 176** P **P** **21 37 34.2 +1.9**
**TAU Tasmania Unive 67.33 176** P **P** **21 37 36.6 +1.3**
**A36M Sachs Harbour 67.55 20** P **P** **21 37 37.1 +0.7**
**AKTO Aktyubinsk 67.97 317** LR LR 22 08 14.2
comp=Z,2µm,21.8s,baz=76,slow=37
**DLBC Dease Lake 68.13 34** LR LR 22 03 58.2
comp=Z,3µm,22.0s,baz=284,slow=33
**DLBC Dease Lake 68.13 34** P **P** **21 37 40.9 +0.5**
DLBC IAmb IAmb 21 37 44.5
comp=Z,98nm,1.1s
**HIZ Hauiti 69.77 153** IAMs_20 IAMs_20 22 03 22.2
comp=Z,2µm,21.0s
**URZ Urewera 70.50 152** P **P** **21 37 54.3 -0.8**
comp=Z,17nm,1.0s,baz=17,slow=7.7,SNR=4.2
URZ LR LR 22 07 24.9
comp=Z,802nm,20.3s,baz=325,slow=35
**URZ Urewera 70.50 152** P **P** **21 37 54.0 -1.1**
URZ IAmb IAmb 21 38 08.4
comp=Z,95nm,1.4s
**BBB Bella Bella 70.64 41** LR LR 22 03 19.0
comp=Z,1µm,21.5s,baz=278,slow=31
**KIRV Kirov 70.86 326** LR LR 22 12 09.3
comp=Z,3µm,18.0s,baz=72,slow=38
**KIRV Kirov 70.86 326** *c* iP **P** **21 37 56.7 -0.4**
**KAAM Kaadhehdhoo 71.12 262** P **P** **21 37 58.5 -1.0**
**PRGR Permogore 71.79 330**⇑ *i* P **P** **21 38 02.4 -0.3**
PRGR *e* S **S** **21 47 17.4 -2.3**
PRGR pmax pmax
comp=Z,339nm,1.0s
**BFZ Birch Farm 72.17 154** P **P** **21 38 05.1 0.0**
**EUNU Eureka 72.33 8** P **P** **21 38 05.0 -0.7**
**RAR Rarotonga 72.33 124** LR LR 22 06 42.0
comp=Z,1µm,19.1s,baz=302,slow=33
**LTZ Lake Taylor 72.48 157** P **P** **21 38 05.3 -1.7**
**SPA0 Spitsbergen Ar 72.86 350** *e* P **P** **21 38 10.2 +1.3**
**SPB2 Spitsbergen Ar 72.86 350** IAmb IAmb 21 38 25.3
comp=Z,137nm,1.1s
**SPITS Spitsbergen Ar 72.86 350** LR LR 22 11 33.4
comp=Z,2µm,20.8s,baz=258,slow=37
**RPZ Rata Peaks 72.89 159** P **P** **21 38 10.5 +1.1**
comp=Z,13nm,0.8s,baz=79,slow=21,SNR=2.7
RPZ LR LR 22 06 57.9
comp=Z,1µm,21.9s,baz=346,slow=33
**KBS Kingsbay 73.02 351** *c* iP **P** **21 38 11.2 +1.4**
KBS pmax pmax
comp=Z,95nm,0.7s
**KBS Kingsbay 73.02 351** P **P** **21 38 09.7 -0.1**
KBS IAmb IAmb 21 38 12.5
comp=Z,122nm,0.9s
**KBS Kingsbay 73.02 351** IAMs_20 IAMs_20 22 12 48.0
comp=Z,2µm,19.0s
**KBS Kingsbay 73.02 351**⇑ *i* P **P** **21 38 11.4 +1.6**
**NOR Nord 73.47 357** *i* P **P** **21 38 12.3 0.0**
NOR IAmb IAmb 21 38 25.4
comp=Z,7.3nm,0.8s
**HSPB Hornsund (broa 73.76 349** *e* P **P** **21 38 15.4 +1.3**
**HSPB Hornsund (broa 73.76 349**⇑ *i* P **P** **21 38 15.5 +1.3**
**LVZ Lovozero 73.85 338** *ce* P **P** **21 38 15.0 +0.1**
LVZ pmax pmax
comp=Z,175nm,1.7s
**LVZ Lovozero 73.85 338** P **P** **21 38 14.7 -0.1**
LVZ IAmb IAmb 21 38 16.2
comp=Z,125nm,1.2s
**CLRS Cowichan Lake 74.07 43** IAmb IAmb 21 38 38.2
comp=Z,102nm,1.3s
**YKA Yellowknife Ar 74.23 28** P **P** **21 38 18.2 +1.1**
comp=Z,83nm,0.8s,baz=292,slow=5.7,SNR=425
**APA Apatity 74.42 338**⇓ *i* P **P** **21 38 16.5 -1.6**
APA *i* 21 38 33.0
APA *i* 21 41 03.0
APA *i* 21 48 15.0
APA *i* SS SS 21 52 41.0 +5.6
APA pmax pmax
comp=Z,95nm,1.0s
APA MLR MLR
comp=Z,3µm,19.0s
**RES Resolute Bay 74.42 13** LR LR 22 12 16.8
comp=Z,530nm,21.4s,baz=289,slow=37
**NLWA Neilton Lookou 74.71 45** IAMs_20 IAMs_20 22 04 34.0
comp=Z,3µm,20.0s
**B04A Port Angeles 74.72 44** IAmb IAmb 21 38 24.2
comp=Z,73nm,0.9s
**KLMR Klimovskoe 74.83 330** *e* P **P** **21 38 17.9 -2.7**
KLMR *e* 21 38 31.3
KLMR pmax pmax
comp=Z,167nm,1.2s
**KLMR Klimovskoe 74.83 330** *e* P **P** **21 38 17.9 -2.7**
KLMR AMP 21 38 21.5
comp=Z,167nm,1.2s
KLMR *e* PcP **pP** **21 38 31.3 -1.2**
KLMR LQ LQ 22 04 27.6
KLMR LQ LQ 22 04 27.6
KLMR LR LR 22 11 22.0
**LLLB Lillooet 74.84 41** P **P** **21 38 19.9 -1.1**
LLLB IAmb IAmb 21 38 24.5
comp=Z,81nm,0.9s
**WISH Wishkah 74.86 45** P **P** **21 38 20.8 -0.3**
WISH IAmb IAmb 21 38 38.6
comp=Z,130nm,1.1s
**JLN Jalan Bani Buh 75.05 288** P **P** **21 38 22.2 -0.4**
SNR=12
JLN P **P** **21 38 22.2 -0.4**
SNR=12
**DGAR Diego Garcia 75.15 255** P **P** **21 38 23.2 0.0**
DGAR pmax pmax
comp=Z,178nm,1.1s
**DGAR Diego Garcia 75.15 255** P **P** **21 38 23.2 0.0**
**E03A Lebam 75.19 45** IAmb IAmb 21 38 27.3
comp=Z,120nm,0.9s
**WBK Wadi Bani Khal 75.27 288** P **P** **21 38 24.1 +0.2**
SNR=13
WBK P **P** **21 38 24.1 +0.2**
SNR=13
WBK S **S** **21 47 57.5 -2.9**
WBK S **S** **21 47 57.5 -2.9**
**WSAR Wadi Sarin 75.34 289** LR LR 22 14 03.0
comp=Z,524nm,20.9s,baz=93,slow=38
**KEV Kevo 75.39 341** P **P** **21 38 22.6 -1.1**
KEV pmax pmax
comp=Z,159nm,1.0s
**KEV Kevo 75.39 341** P **P** **21 38 22.6 -1.1**
**BIDO Bidbid 75.67 289** P **P** **21 38 26.7 +0.5**
SNR=24
**E04D Cinebar 75.83 45** IAmb IAmb 21 38 30.7
comp=Z,83nm,0.9s
E04D IAMs_20 IAMs_20 22 04 10.8
comp=Z,2µm,22.0s
**HAMF Hammerfest 75.85 342**⇑ *i* P **P** **21 38 26.9 +0.6**
**G03D McMinnville, O 75.85 47** P **P** **21 38 26.6 -0.2**
G03D IAmb IAmb 21 38 30.7
comp=Z,94nm,1.0s
G03D IAMs_20 IAMs_20 22 02 55.4
comp=Z,2µm,21.0s
**SMDO Samad 75.90 289** P **P** **21 38 28.1 +0.5**
SNR=13
SMDO P **P** **21 38 28.1 +0.5**
SNR=13
**ARA0 ARCESS Array S 75.95 341**⇑ *i* P **P** **21 38 27.7 +0.8**
**ARCES ARCESS Array B 75.95 341** P **P** **21 38 27.7 +0.8**
comp=Z,110nm,0.9s,baz=75,slow=7.9,SNR=83
ARCES LR LR 22 16 26.4
comp=Z,4µm,19.5s,baz=72,slow=39
**D05A Enumclaw 75.98 44** IAmb IAmb 21 38 31.6
comp=Z,81nm,0.9s
**JMDO Jabal Madar 76.10 288** P **P** **21 38 28.6 0.0**
SNR=11
JMDO P **P** **21 38 28.6 0.0**
SNR=11
**J01E Myrtle Point 76.13 49** IAmb IAmb 21 38 32.2
comp=Z,121nm,0.9s
**F04A Amboy 76.15 46** IAmb IAmb 21 38 32.0
comp=Z,116nm,0.9s
**HOQ Hoqain 76.35 290** P **P** **21 38 30.2 +0.2**
SNR=24
HOQ P **P** **21 38 30.2 +0.2**
SNR=24
HOQ S **S** **21 48 12.4 +0.1**
HOQ S **S** **21 48 12.4 +0.1**
**BANOM Banah 76.37 292** P **P** **21 38 30.5 +0.4**
SNR=5.6
BANOM S **S** **21 48 13.0 +0.5**
**BANOM Banah 76.37 292** *i* P **P** **21 38 30.4 +0.2**
SNR=11
**SHME Shamm 76.46 293** P **P** **21 38 31.1 +0.5**
SNR=7.0
SHME P **P** **21 38 31.1 +0.5**
SNR=7.0
SHME S **S** **21 48 15.9 +2.6**
SHME S **S** **21 48 15.9 +2.6**
**SHME Shamm 76.46 293** *i* P **P** **21 38 30.7 +0.1**
SNR=19
**MASF Masafi 76.69 292** P **P** **21 38 31.8 -0.2**
SNR=15
MASF P **P** **21 38 31.8 -0.2**
SNR=15
MASF S **S** **21 48 17.7 +1.7**
MASF S **S** **21 48 17.7 +1.7**
**MSFE Esma-Masafi 76.69 292** *i* P **P** **21 38 32.0 0.0**
SNR=21
**MHTO MHTO 76.72 287** P **P** **21 38 31.8 -0.3**
SNR=24
MHTO P **P** **21 38 31.8 -0.3**
SNR=24
MHTO S **S** **21 48 17.7 +1.4**
MHTO S **S** **21 48 17.7 +1.4**
**BSY Bisya 76.75 289** P **P** **21 38 32.4 +0.1**
SNR=15
BSY P **P** **21 38 32.4 +0.1**
SNR=15
BSY S **S** **21 48 17.4 +0.8**
BSY S **S** **21 48 17.4 +0.8**
**H04A Detroit Lake 76.76 47** IAmb IAmb 21 38 47.8
comp=Z,139nm,1.1s
**KRPM Rodgers 76.78 51** IAmb IAmb 21 38 36.4
comp=Z,75nm,0.9s
**LTY Liberty 76.79 44** P **P** **21 38 32.2 0.0**
**F05D White Salmon 76.79 46** IAmb IAmb 21 38 47.9
comp=Z,123nm,1.4s
F05D IAMs_20 IAMs_20 22 08 17.2
comp=Z,2µm,21.0s
**UOSS Minazif 76.80 292** P **P** **21 38 32.7 +0.2**
**UOSS Minazif 76.80 292** P **P** **21 38 32.1 -0.5**
UOSS P **P** **21 38 32.1 -0.5**
UOSS S **S** **21 48 17.0 -0.2**
UOSS S **S** **21 48 17.0 -0.2**
**UOSS Minazif 76.80 292** *i* P **P** **21 38 32.8 +0.2**
SNR=23
**HOOD Mount Hood Mea 76.88 46** P **P** **21 38 33.7 +0.9**
HOOD IAmb IAmb 21 38 49.5
comp=Z,130nm,0.9s
**JCC Jacoby Creek, 76.89 51** IAmb IAmb 21 38 36.9
comp=Z,92nm,1.1s
**HATD Hatta, Dubai 76.91 291** P **P** **21 38 33.3 +0.2**
SNR=24
HATD P **P** **21 38 33.3 +0.2**
SNR=24
HATD S **S** **21 48 17.8 -0.5**
HATD S **S** **21 48 17.8 -0.5**
**HATD Hatta, Dubai 76.91 291** *i* P **P** **21 38 33.2 0.0**
SNR=18
**KTK1 Kautokeino 76.92 341**⇑ *i* P **P** **21 38 33.2 +0.8**
**KMPM Mount Pierce 76.97 51** IAmb IAmb 21 38 37.5
comp=Z,87nm,0.9s
**HUMO Hull Mountain 76.99 49** IAmb IAmb 21 38 50.8
comp=Z,75nm,1.1s
**ASHO Ashiyiah 77.02 291** P **P** **21 38 33.8 0.0**
SNR=24
ASHO P **P** **21 38 33.8 0.0**
SNR=24
ASHO S **S** **21 48 18.3 -1.3**
ASHO S **S** **21 48 18.3 -1.3**
**ASHO Ashiyiah 77.02 291** *i* P **P** **21 38 34.1 +0.3**
SNR=28
**MAK Makhachkala 77.06 311** *e* P **P** **21 38 28.9 -4.7**
MAK *e* 21 41 20.6
MAK *e* SS SS 21 53 13.0 -3.4
MAK *e* SSS SSS 21 56 28.0
MAK pmax pmax
comp=Z,268nm,1.2s
MAK MLR MLR
comp=Z,3µm,18.0s
**ARQ Araqi 77.11 290** P **P** **21 38 34.7 +0.4**
SNR=22
ARQ P **P** **21 38 34.7 +0.4**
SNR=22
**B08A Colville Reser 77.21 43** IAmb IAmb 21 38 37.7
comp=Z,80nm,0.9s
**NAZ Nazwa, Dubai 77.25 292** P **P** **21 38 34.9 -0.2**
SNR=11
NAZ P **P** **21 38 34.9 -0.2**
SNR=11
**NAZ Nazwa, Dubai 77.25 292** *i* P **P** **21 38 34.6 -0.4**
SNR=9.3
**TULEG Thule 77.28 7** *i* P **P** **21 38 34.0 -0.3**
TULEG IAmb IAmb 21 38 37.4
comp=Z,25nm,0.8s
**TULEG Thule 77.28 7** P **P** **21 38 34.3 0.0**
TULEG IAmb IAmb 21 38 36.2
comp=Z,75nm,1.1s
**KMRM Mail Ridge 77.34 52** P **P** **21 38 34.9 -0.5**
**J04D Umpqua Nationa 77.34 48** IAMs_20 IAMs_20 22 08 33.8
comp=Z,2µm,18.0s
**FAQ Al Faqa, Dubai 77.39 292** P **P** **21 38 35.5 -0.3**
SNR=12
FAQ P **P** **21 38 35.5 -0.3**
SNR=12
**FAQ Al Faqa, Dubai 77.39 292** *i* P **P** **21 38 35.8 -0.1**
SNR=24
**JETT Jettan, Norway 77.40 342**⇑ *i* P **P** **21 38 37.0 +1.8**
**YBH Yreka Blue Hor 77.49 50** LR LR 22 07 35.9
comp=Z,2µm,20.1s,baz=304,slow=32
**YBH Yreka Blue Hor 77.49 50** IAmb IAmb 21 38 39.9
comp=Z,67nm,0.9s
YBH IAMs_20 IAMs_20 22 07 33.8
comp=Z,3µm,20.0s
**ALNE Al Ain 77.51 291** P **P** **21 38 36.7 +0.2**
SNR=32
**ALNE Al Ain 77.51 291** *i* P **P** **21 38 37.2 +0.6**
SNR=9.7
**M02C Callahan 77.51 50** IAmb IAmb 21 38 52.2
comp=Z,73nm,1.1s
**VRH Novokhopyorsk 77.55 321** *e* P **P** **21 38 35.1 -1.1**
VRH pmax pmax
comp=Z,170nm,0.9s
**E07A Sunnyside 77.57 44** IAmb IAmb 21 38 52.7
comp=Z,117nm,1.2s
**L04D Klamath Falls 77.59 49** IAmb IAmb 21 38 40.2
comp=Z,119nm,0.9s
**KCPM Cahto Peak 77.62 52** IAmb IAmb 21 38 40.8
comp=Z,131nm,0.9s
**ASUD Al Ashush, Dub 77.66 292** P **P** **21 38 37.5 +0.2**
SNR=11
ASUD P **P** **21 38 37.5 +0.2**
SNR=11
**ASUD Al Ashush, Dub 77.66 292** *i* P **P** **21 38 37.1 -0.2**
SNR=17
**TRO Tromso 77.76 343** *e* P **P** **21 38 37.6 +0.6**
**N02D Trinity Center 77.77 51** P **P** **21 38 37.9 +0.1**
**F07A Phinny Hill Vi 77.78 45** P **P** **21 38 36.4 -1.3**
**NEEM North Greenlan 77.86 3** *i* P **P** **21 38 38.0 +0.1**
NEEM IAmb IAmb 21 38 55.3
comp=Z,40nm,0.8s
**MOS Moscow 77.87 326** *e* P **P** **21 38 35.9 -2.0**
MOS *e* S **S** **21 48 22.6 -5.0**
MOS pmax pmax
comp=Z,281nm,1.3s
MOS pmax pmax
comp=N,102nm,1.2s
MOS pmax pmax
comp=E,90nm,1.2s
MOS pmax pmax
comp=Z,400nm,1.5s
MOS MLR MLR
comp=Z,3µm,17.0s
MOS MLR MLR
comp=N,2µm,18.0s
MOS MLR MLR
comp=E,2µm,17.0s
**D08A Wollman Farm, 77.97 44** IAmb IAmb 21 38 42.0
comp=Z,67nm,1.0s
**AJN Ajban 77.97 292** P **P** **21 38 39.0 -0.1**
AJN P **P** **21 38 39.0 -0.1**
SNR=9.8
**AJN Ajban 77.97 292** *i* P **P** **21 38 39.6 +0.5**
SNR=8.5
**O02D Mt. Diablo Mer 78.01 51** IAmb IAmb 21 38 55.0
comp=Z,93nm,1.1s
**WDC Whiskeytown Da 78.03 51** IAmb IAmb 21 38 54.5
comp=Z,80nm,1.1s
WDC IAMs_20 IAMs_20 22 05 51.4
comp=Z,2µm,22.0s
**M04C Macdoel 78.07 50** P **P** **21 38 38.9 -0.6**
M04C IAmb IAmb 21 38 43.1
comp=Z,118nm,0.9s
**C09A Chrisman Ranch 78.08 43** P **P** **21 38 39.7 +0.3**
C09A IAmb IAmb 21 38 56.8
comp=Z,70nm,1.1s
**GROC Groznyy 78.13 312** *e* P **P** **21 38 38.2 -1.4**
GROC *e* 21 41 37.4
GROC *e* S **S** **21 48 28.4 -2.4**
GROC *e* 21 48 49.2
GROC pmax pmax
comp=Z,81nm,1.0s
**HOPS Hopland Field 78.25 53** IAMs_20 IAMs_20 22 08 44.2
comp=Z,2µm,19.0s
**K05A Summer Lake 78.36 48** IAmb IAmb 21 38 45.0
comp=Z,131nm,0.9s
**PPT Papeete 78.41 115** LR LR 22 09 09.3
comp=Z,770nm,18.6s,baz=327,slow=32
**UMZA Um Al Zommool 78.51 290** P **P** **21 38 41.6 -0.5**
UMZA P **P** **21 38 41.6 -0.5**
**GDXM Geysers 78.52 53** IAmb IAmb 21 38 57.7
comp=Z,78nm,1.1s
**PMOR Pomariorio Ree 78.53 112** *e* T T 23 03 55.9
comp=Z,7.6nm,0.2s
**LPSR Galich'ya Gora 78.54 323** *e* P **P** **21 38 40.9 -0.8**
LPSR pmax pmax
comp=Z,200nm,1.1s
**NEW Newport 78.60 42** LR LR 22 11 18.8
comp=Z,1µm,18.2s,baz=292,slow=34
**NEW Newport 78.60 42** IAmb IAmb 21 38 58.1
comp=Z,103nm,1.1s
**G08A Pilot Rock 78.64 45** P **P** **21 38 41.7 -0.9**
**E09A Wood Farm, Sta 78.68 44** P **P** **21 38 43.1 +0.5**
E09A IAmb IAmb 21 38 58.6
comp=Z,118nm,1.1s
**OBN Obninsk 78.69 326** LR LR 22 17 10.5
comp=Z,633nm,18.0s,baz=46,slow=38
**OBN Obninsk 78.69 326** *c* iP **P** **21 38 41.8 -0.7**
OBN *i* 21 38 47.6
OBN *e* 21 41 44.7
OBN *i* S **S** **21 48 41.5 +5.1**
OBN pmax pmax
comp=Z,211nm,1.0s
OBN MLR MLR
comp=Z,3µm,18.0s
**OBN Obninsk 78.69 326** P **P** **21 38 41.9 -0.5**
**MCCM Marconi Confer 78.71 53** IAmb IAmb 21 38 57.9
comp=Z,163nm,1.1s
**VORR Voronezh 78.78 322** *e* P **P** **21 38 43.0 -0.1**
VORR *e* S **S** **21 48 35.6 -2.0**
VORR pmax pmax
comp=Z,209nm,1.1s
**VSR Storozhevoye 79.00 321** *e* P **P** **21 38 43.6 -0.7**
VSR pmax pmax
comp=Z,250nm,1.0s
**VORD Divnogorie 79.04 321** *e* P **P** **21 38 43.2 -1.3**
VORD pmax pmax
comp=Z,90nm,0.8s
**MOD Modoc Plateau 79.08 49** IAmb IAmb 21 39 00.3
comp=Z,113nm,1.2s
**ORV Oroville 79.16 52** P **P** **21 38 44.0 -1.4**
ORV pmax pmax
comp=Z,119nm,1.3s
ORV MLR MLR
comp=Z,1µm,20.0s
**ORV Oroville 79.16 52** P **P** **21 38 44.0 -1.4**
ORV IAmb IAmb 21 39 00.2
comp=Z,119nm,1.2s
**MZWR Madinat Zayed 79.21 291** P **P** **21 38 45.4 -0.5**
MZWR P **P** **21 38 45.4 -0.5**
**GOF Gofitskoye 79.22 315**⇑ *i* P **P** **21 38 45.5 -0.1**
GOF pmax pmax
comp=Z,107nm,1.1s
**PUL Pulkovo 79.40 332** *de* P **P** **21 38 46.7 +0.4**
PUL pmax pmax
comp=Z,162nm,1.0s
**ZEI Tsey 79.57 312** *e* P **P** **21 38 46.3 -1.5**
ZEI pmax pmax
comp=Z,69nm,1.0s
**J08A Circle Bar Ran 79.74 47** IAmb IAmb 21 39 04.6
comp=Z,127nm,1.1s
**MZR Muzera 79.83 291** P **P** **21 38 50.1 +0.7**
SNR=27
MZR P **P** **21 38 50.1 +0.7**
SNR=27
**MZR Muzera 79.83 291** *i* P **P** **21 38 50.1 +0.7**
SNR=11
**BEKR Beckworth 79.85 51** IAmb IAmb 21 38 52.3
comp=Z,99nm,0.9s
**KBZ Khabaz 79.86 313** P **P** **21 38 49.2 +0.2**
comp=Z,145nm,0.9s,baz=79,slow=3.7,SNR=157
KBZ LR LR 22 16 45.5
comp=Z,3µm,21.1s,baz=62,slow=38
**KBZ Khabaz 79.86 313** *ce* P **P** **21 38 49.3 +0.2**
KBZ pmax pmax
comp=Z,181nm,0.9s
**SHAO Shalim 79.87 285** P **P** **21 38 49.8 +0.1**
SHAO P **P** **21 38 49.8 +0.1**
**SHAO Shalim 79.87 285** P **P** **21 38 50.9 +1.2**
**STEI Steigen 79.89 342**⇑ *i* P **P** **21 38 49.3 +0.6**
**BMO Blue Mountains 79.89 45** IAmb IAmb 21 39 04.7
comp=Z,80nm,1.1s
BMO IAMs_20 IAMs_20 22 06 51.2
comp=Z,2µm,21.0s
**KIV Kislovodsk 79.90 314** *e* P **P** **21 38 49.5 +0.1**
KIV *e* S **S** **21 48 53.4 +3.5**
KIV pmax pmax
comp=Z,71nm,1.0s
KIV pmax pmax
comp=Z,196nm,4.3s
KIV MLR MLR
comp=Z,2µm,19.0s
**KIV Kislovodsk 79.90 314** P **P** **21 38 49.6 +0.1**
KIV IAmb IAmb 21 39 04.7
comp=Z,83nm,1.1s
KIV IAMs_20 IAMs_20 22 16 44.3
comp=Z,2µm,21.0s
**KIV Kislovodsk 79.90 314** *i* P **P** **21 38 49.2 -0.3**
SNR=25
**ONI Oni 79.95 312** P **P** **21 38 49.4 -0.3**
ONI pmax pmax
comp=Z,129nm,1.1s
**ONI Oni 79.95 312** P **P** **21 38 49.4 -0.3**
ONI IAmb IAmb 21 38 51.8
comp=Z,129nm,1.1s
**GHWR Ruwais 79.98 292** P **P** **21 38 49.9 -0.2**
GHWR P **P** **21 38 49.9 -0.2**
**WVOR Wild Horse Val 80.01 48** P **P** **21 38 49.8 -0.3**
WVOR pmax pmax
comp=Z,85nm,1.1s
WVOR MLR MLR
comp=Z,2µm,19.0s
**WVOR Wild Horse Val 80.01 48** P **P** **21 38 49.8 -0.3**
WVOR IAmb IAmb 21 39 06.0
comp=Z,85nm,1.1s
WVOR IAMs_20 IAMs_20 22 11 37.4
comp=Z,2µm,19.0s
**GNI Garni 80.05 310** LR LR 22 18 49.6
comp=Z,1µm,18.8s,baz=57,slow=39
**GNI Garni 80.05 310** *ce* P **P** **21 38 51.0 +0.6**
GNI pmax pmax
comp=Z,118nm,1.7s
**GNI Garni 80.05 310** P **P** **21 38 49.7 -0.8**
GNI IAmb IAmb 21 39 08.2
comp=Z,103nm,1.1s
**GNI Garni 80.05 310** IAMs_20 IAMs_20 22 18 29.5

comp=Z,1µm,19.0s
**GNI Garni** 80.05 310 P **P** 21 38 51.0 +0.6
**NEY Neytrino** 80.17 313 *de*P **P** 21 38 52.0 +1.0
NEY pmax pmax
comp=Z,16nm,1.2s
**WALA Waterton Lakes** 80.19 40 IAmb IAmb 21 38 54.7
comp=Z,94nm,0.9s
**LOF Lofoten** 80.22 343⇑ *i*P **P** 21 38 50.7 +0.2
**FAUS Fauske** 80.25 342⇑ *i*P **P** 21 38 51.1 +0.4
**FIA1 FINESS Array S** 80.26 334 IAmb IAmb 21 38 51.9
comp=Z,102nm,0.8s
**FINES FINESS Array B** 80.27 334 P **P** 21 38 50.4 -0.6
comp=Z,48nm,0.5s,baz=74,slow=5.2,SNR=333
FINES LR LR 22 18 02.9
comp=Z,1µm,18.9s,baz=47,slow=38
**SAO San Andreas Ge** 80.29 54 P **P** 21 38 50.8 -0.8
SAO pmax pmax
comp=Z,43nm,1.1s
SAO MLR MLR
comp=Z,2µm,21.0s
**SAO San Andreas Ge** 80.29 54 P **P** 21 38 50.8 -0.8
SAO IAMs_20 IAMs_20 22 07 00.5
comp=Z,2µm,21.0s
**MPK Martis Peak** 80.31 51 P **P** 21 38 52.1 +0.1
**RUBR Rubicon Trail** 80.32 52 IAmb IAmb 21 39 07.7
comp=Z,111nm,0.9s
**EMB Emerald Bay** 80.39 52 IAmb IAmb 21 39 07.5
comp=Z,128nm,1.2s
**KHOR Al-Khor Airpor** 80.49 294 P **P** 21 38 52.5 -0.4
**JTMT Jette** 80.55 42 IAmb IAmb 21 38 56.3
comp=Z,90nm,0.9s
**CMB Columbia Colle** 80.56 53 P **P** 21 38 53.6 +0.5
CMB pmax pmax
comp=Z,101nm,1.0s
CMB MLR MLR
comp=Z,1µm,20.0s
**CMB Columbia Colle** 80.56 53 P **P** 21 38 53.6 +0.5
CMB IAmb IAmb 21 39 08.7
comp=Z,101nm,0.9s
**VCNR Virginia City** 80.58 51 P **P** 21 38 54.0 +0.6
**DMTO DMTO** 80.58 285 P **P** 21 38 53.2 -0.3
**PAHR Pah Rah Range** 80.60 51 IAmb IAmb 21 39 08.3
comp=Z,103nm,1.2s
**PLID Pearl Lake** 80.63 45 IAMs_20 IAMs_20 22 11 17.7
comp=Z,3µm,21.0s
**DBG Daneborg** 80.68 355 *i* P **P** 21 38 52.6 -0.3
DBG IAmb IAmb 21 38 54.5
comp=Z,14nm,1.0s
**PNTR Pine Nut** 80.70 51 IAmb IAmb 21 39 09.3
comp=Z,108nm,1.1s
**SHMA Al-Shehemyia** 80.86 294 P **P** 21 38 54.1 -0.7
**SLWR Sila** 80.94 292 P **P** 21 38 55.0 -0.3
SLWR P **P** 21 38 55.0 -0.3
**DOK Doka** 80.95 286 P **P** 21 38 55.6 +0.1
SNR=9.4
DOK P **P** 21 38 55.6 +0.1
SNR=9.4
**PMPB Monarch Peak** 80.99 54 IAmb IAmb 21 39 10.7
comp=Z,76nm,1.1s
**YERR Yerington** 81.00 51 P **P** 21 38 55.5 -0.1
YERR IAmb IAmb 21 39 10.7
comp=Z,133nm,1.3s
**KARS Kars** 81.01 311 P **P** 21 38 55.0 -0.6
KARS pmax pmax
comp=Z,244nm,1.1s
**KARS Kars** 81.01 311 P **P** 21 38 55.0 -0.6
**TRNA Turayna** 81.09 293 P **P** 21 38 55.6 -0.5
**SAKB Bahrain** 81.17 294 P **P** 21 38 55.2 -1.2
**RBK Rabkut** 81.32 285 P **P** 21 38 57.1 -0.4
**MFID Camas Ranch** 81.47 46 IAmb IAmb 21 39 13.8
comp=Z,131nm,1.1s
MFID IAMs_20 IAMs_20 22 09 51.9
comp=Z,1µm,19.0s
**KONS Konsvik** 81.48 342 *e*P **P** 21 38 58.3 +1.0
**WHFO Wadi Hawf** 81.54 286 P **P** 21 38 57.8 -0.8
WHFO P **P** 21 38 57.8 -0.8
**PAGB Antelope Grade** 81.59 55 IAmb IAmb 21 39 14.1
comp=Z,127nm,0.9s
**STOK Stokkvaagen** 81.63 342 *e*P **P** 21 38 56.8 -1.2
**RYN Ryan** 81.66 51 IAmb IAmb 21 39 14.3
comp=Z,85nm,1.1s
**VSU Vasula** 81.67 331 *c i*P **P** 21 38 57.8 -0.6
VSU pmax pmax
comp=Z,303nm,1.0s
**VSU Vasula** 81.67 331 *e*P **P** 21 38 58.7 +0.2
**KVN Kaiserville** 81.78 51 P **P** 21 39 00.0 +0.3
KVN pmax pmax
comp=Z,110nm,1.2s
**KVN Kaiserville** 81.78 51 P **P** 21 39 00.0 +0.3
KVN IAmb IAmb 21 39 14.8
comp=Z,110nm,1.2s
**BMN Battle Mountai** 81.81 49 P **P** 21 38 59.5 -0.3
BMN pmax pmax
comp=Z,84nm,1.2s
**BMN Battle Mountai** 81.81 49 P **P** 21 38 59.5 -0.3
BMN IAmb IAmb 21 39 15.1
comp=Z,84nm,1.2s
**LHV Little Huntoon** 81.83 52 IAmb IAmb 21 39 15.4
comp=Z,128nm,1.2s
**NVAR Mina Array Bea** 81.89 52 P **P** 21 39 02.3 +1.9
comp=Z,34nm,0.8s,baz=274,slow=5.6,SNR=188
NVAR LR LR 22 11 39.7
comp=Z,1µm,19.3s,baz=294,slow=33
**NV11 Mina Array Sit** 82.00 51 IAmb IAmb 21 39 16.1
comp=Z,94nm,1.1s
**SOC Sochi** 82.01 314 *e*P **P** 21 38 58.9 -1.7
SOC *e* 21 42 06.2
SOC *e*PPP PPP 21 44 02.4
SOC *e*S **S** 21 49 11.9 +0.3
SOC *e*SS **SS** 21 54 32.2 +1.7
SOC pmax pmax
comp=Z,72nm,0.9s
SOC MLR MLR
comp=Z,2µm,17.0s
**UPNV Upernavik** 82.05 5 *e*P **P** 21 38 59.8 -0.5
UPNV IAmb IAmb 21 39 16.9
comp=Z,29nm,0.8s
**ABTO Aybut** 82.17 285 P **P** 21 39 01.7 -0.2
SNR=6.5
ABTO P **P** 21 39 01.7 -0.2
SNR=6.5
**HLID Hailey** 82.33 46 IAMs_20 IAMs_20 22 10 30.6
comp=Z,1µm,20.0s
**JMIC Jan Mayen** 82.50 351 LR LR 22 18 03.3
comp=Z,439nm,18.0s,baz=58,slow=37
**HRY Holter Researc** 82.51 42 P **P** 21 39 03.5 +0.2
**Q09A Carvers** 82.52 51 P **P** 21 39 03.5 -0.1
Q09A IAmb IAmb 21 39 13.9
comp=Z,60nm,0.9s
**DLMT Dillon** 82.66 43 IAmb IAmb 21 39 19.9
comp=Z,78nm,1.3s
**MCMT McKenzie Canyo** 82.75 44 P **P** 21 39 04.7 0.0
**MTSE Matsula** 82.77 332 *e*P **P** 21 39 04.3 +0.2
**SIRT Sirnak** 82.78 308 P **P** 21 39 04.7 -0.2
**LCH Last Change Ra** 82.87 52 IAmb IAmb 21 39 20.4
comp=Z,82nm,1.2s
**ANN Anapa** 82.92 316 *e*P **P** 21 39 04.5 -0.8
ANN *e* 21 42 16.8
ANN *e* 21 49 28.5
ANN pmax pmax
comp=Z,226nm,1.0s
ANN MLR MLR
comp=Z,2µm,18.0s
**ISA Isabella, Lake** 82.94 54 IAmb IAmb 21 39 20.0
comp=Z,85nm,1.2s
**ELK Elko** 83.03 48 LR LR 22 11 47.9
comp=Z,2µm,19.8s,baz=298,slow=32
**ELK Elko** 83.03 48 IAmb IAmb 21 39 21.5
comp=Z,85nm,1.2s
**SUMG Summit** 83.07 0 P **P** 21 39 06.3 +0.2
SUMG pmax pmax
comp=Z,125nm,1.4s
**SUMG Summit** 83.07 0 *i* P **P** 21 39 07.0 +0.9
SUMG IAmb IAmb 21 39 21.2
comp=Z,25nm,0.9s
**SUMG Summit** 83.07 0 P **P** 21 39 06.3 +0.2
SUMG IAmb IAmb 21 39 09.1
comp=Z,125nm,1.4s
**EGMT Eagleton** 83.12 40 P **P** 21 39 06.5 +0.1
EGMT IAmb IAmb 21 39 09.5
comp=Z,77nm,1.0s
**GRAC Grapevine Rang** 83.18 53 IAmb IAmb 21 39 22.1
comp=Z,93nm,1.2s
**NSS Namsos** 83.22 341⇑ *i*P **P** 21 39 06.3 -0.1
**MNK Minsk** 83.34 328 *i* P **P** 21 39 07.2 -0.1

MNK *i* 21 39 11.1
MNK *i* 21 42 19.7
MNK *i* PPP PPP 21 44 11.6
MNK *i* S **S** 21 49 23.2 -1.6
MNK pmax pmax
comp=N,32nm,1.0s
MNK pmax pmax
comp=E,10.0nm,1.0s
MNK pmax pmax
comp=Z,161nm,1.0s
MNK MLR MLR
comp=Z,2µm,19.0s
MNK MLR MLR
comp=N,1µm,19.0s
MNK MLR MLR
comp=E,243nm,19.0s
**MNK Minsk** 83.34 328 *i* P **P** 21 39 07.2 -0.1
comp=E,10.0nm,1.0s
MNK *i* P **P** 21 39 07.2 -0.1
comp=N,32nm,1.0s
MNK *i* P **P** 21 39 07.2 -0.1
comp=Z,161nm,1.0s,baz=56
MNK *i* PP **PP** 21 42 19.8 +0.9
MNK *i* PPP PPP 21 44 11.6
MNK *i* S **S** 21 49 23.3 -1.6
MNK *i* SS SS 21 54 27.5 -22
MNK *i* SSS SSS 21 57 53.1
MNK *i* LQ LQ 22 10 30.6
MNK *i* LR LR 22 13 01.3
MNK *i* LRM MLR 22 18 48.0
comp=Z,2µm,19.0s
MNK *i* LRM MLR 22 18 48.8
comp=N,1µm,19.0s
MNK *i* LRM MLR 22 18 49.0
comp=E,243nm,19.0s
**IDID Didziasalis** 83.44 329 *e*P **P** 21 39 07.8 0.0
**SOCY Socotra** 83.61 280 IAmb IAmb 21 39 14.6
comp=Z,54nm,0.9s
**SOCY Socotra** 83.61 280 P **P** 21 39 08.2 -1.3
**NACGM Naroch** 83.65 328 *i* P **P** 21 39 08.7 -0.2
**IIGN Ignalina** 83.66 329 *e*P **P** 21 39 09.0 +0.1
**FFC Flin Flon** 83.74 32 P **P** 21 39 10.2 +0.9
FFC pmax pmax
comp=Z,108nm,1.0s
FFC MLR MLR
comp=Z,2µm,22.0s
**FFC Flin Flon** 83.74 32 P **P** 21 39 10.2 +0.9
FFC IAMs_20 IAMs_20 22 13 17.3
comp=Z,3µm,22.0s
**PASC Pasadena Art C** 83.79 55 P **P** 21 39 09.8 -0.2
PASC IAmb IAmb 21 39 24.7
comp=Z,75nm,1.1s
**R11A Troy Canyon, C** 83.86 51 IAmb IAmb 21 39 25.6
comp=Z,102nm,1.2s
**YHH Holmes Hill** 84.03 43 IAmb IAmb 21 39 27.9
comp=Z,64nm,1.2s
**GWY Greenwater Val** 84.03 53 P **P** 21 39 10.6 -0.8
**MARD Mardin** 84.06 308 P **P** 21 39 10.6 -0.9
**SLIT Slitere, Latvi** 84.07 332 *e*P **P** 21 39 10.4 -0.5
**LKWY Lake** 84.42 43 P **P** 21 39 12.5 -0.9
LKWY pmax pmax
comp=Z,146nm,1.2s
**LKWY Lake** 84.42 43 P **P** 21 39 12.5 -0.9
**BGU Big Grassy Mou** 84.44 47 IAmb IAmb 21 39 28.6
comp=Z,65nm,1.3s
**FLWY Flagg Ranch** 84.46 44 IAMs_20 IAMs_20 22 12 07.0
comp=Z,2µm,21.0s
**SCO Scoresbysund** 84.53 355 IAmb IAmb 21 39 29.9
comp=Z,96nm,1.4s
**UPP Uppsala** 84.53 335 *e*P **P** 21 39 12.6 -0.6
**ELS Elsinore Mount** 84.58 56 P **P** 21 39 13.6 -0.6
ELS IAmb IAmb 21 39 28.9
comp=Z,82nm,1.2s
**TPAW Teton Pass** 84.59 44 P **P** 21 39 13.6 -0.6
TPAW IAmb IAmb 21 39 29.0
comp=Z,102nm,1.2s
TPAW IAMs_20 IAMs_20 22 09 43.8
comp=Z,2µm,22.0s
**PABE Paberze** 84.61 330 *e*P **P** 21 39 13.7 0.0
**PRN Pahroc Range** 84.66 51 IAmb IAmb 21 39 29.7
comp=Z,99nm,1.2s
**TBLU Trondheim** 84.67 340 *e*P **P** 21 39 13.1 -0.8
**REDW Red Top Meadow** 84.71 45 IAmb IAmb 21 39 30.4
comp=Z,81nm,1.4s
REDW IAMs_20 IAMs_20 22 09 48.7
comp=Z,2µm,22.0s
**SNOW Snow King Moun** 84.73 44 IAmb IAmb 21 39 30.6
comp=Z,55nm,1.1s
**AKASG Malin Array Be** 84.74 324 P **P** 21 39 13.0 -1.4
comp=Z,83nm,0.7s,baz=46,slow=5.3,SNR=248
AKASG ScS **S** 21 49 47.9 +8.9
comp=Z,0.2nm,0.4s,baz=54,slow=8.5,SNR=4.8
AKASG LR LR 22 19 07.3
comp=Z,2µm,21.2s,baz=56,slow=37
**AKASG Malin Array Be** 84.74 324 P **P** 21 39 13.2 -1.3
AKASG pmax pmax
comp=Z,131nm,1.0s
**AKASG Malin Array Be** 84.74 324 P **P** 21 39 13.2 -1.3
**AKBB Malin Array Si** 84.74 324 *c i*P **P** 21 39 13.5 -1.0
**LOHW Long Hollow** 84.75 44 P **P** 21 39 14.7 -0.3
LOHW IAmb IAmb 21 39 30.5
comp=Z,68nm,1.1s
LOHW IAMs_20 IAMs_20 22 10 35.6
comp=Z,3µm,22.0s
**AHID Auburn Hatcher** 84.84 45 IAmb IAmb 21 39 18.7
comp=Z,47nm,0.9s
AHID IAMs_20 IAMs_20 22 10 05.1
comp=Z,2µm,21.0s
**SIM Simferopol'** 84.92 317 *e*P **P** 21 39 14.3 -1.2
SIM *e**PP **pP** 21 39 27.0 -0.6
SIM pmax pmax
comp=Z,103nm,1.1s
**DUG Dugway, Tooele** 84.93 48 IAMs_20 IAMs_20 22 14 04.7
comp=Z,2µm,20.0s
**SHPR Sheep Range** 84.98 52 IAmb IAmb 21 39 31.6
comp=Z,91nm,1.1s
**109C Camp Elliot, M** 85.16 56 P **P** 21 39 15.9 -1.0
109C IAMs_20 IAMs_20 22 10 06.3
comp=Z,2µm,20.0s
**PBUR Paburge** 85.22 331 *e*P **P** 21 39 16.6 -0.1
**PFO Pinyon Flats O** 85.32 55 LR LR 22 11 40.9
comp=Z,2µm,20.0s,baz=264,slow=32
**PFO Pinyon Flats O** 85.32 55 P **P** 21 39 17.2 -0.8
PFO pmax pmax
comp=Z,140nm,1.4s
PFO MLR MLR
comp=Z,3µm,20.0s
**PFO Pinyon Flats O** 85.32 55 P **P** 21 39 17.1 -0.8
**JLU Jordanelle** 85.65 47 P **P** 21 39 18.1 -1.5
JLU IAmb IAmb 21 39 34.7
comp=Z,117nm,1.2s
**TKX Tecate** 85.67 56 P **P** 21 39 18.7 -0.8
TKX IAmb IAmb 21 39 34.2
comp=Z,113nm,1.4s
**CCUT Cedar City** 85.78 51 IAmb IAmb 21 39 35.6
comp=Z,80nm,1.3s
**HFS Hagfors** 85.78 337 LR LR 22 21 51.7
comp=Z,1µm,19.3s,baz=42,slow=38
**VIKU Vikbolandet** 85.79 335 *e*P **P** 21 39 18.8 -0.7
**BW06 Boulder Array** 85.83 45 P **P** 21 39 20.2 -0.2
**PD31 Pinedale Array** 85.83 45 P **P** 21 39 20.1 -0.3
**PDAR Pinedale Array** 85.83 45 P **P** 21 39 21.6 +1.2
comp=Z,19nm,0.9s,baz=276,slow=3.3,SNR=112
PDAR PKKP **PKKPdf** 21 57 14.1 +0.5
comp=Z,0.3nm,0.8s,baz=129,slow=2.4,SNR=1.8
PDAR LR LR 22 14 30.1
comp=Z,2µm,19.2s,baz=304,slow=33
**SUW Suwalki** 85.88 329 *e*P **P** 21 39 19.2 -0.8
**SUW Suwalki** 85.88 329 *e*P **P** 21 39 19.8 -0.3
**TCRU Three Creeks R** 85.92 49 IAmb IAmb 21 39 36.4
comp=Z,53nm,1.0s
**ILULI Ilulissat** 85.94 5 IAmb IAmb 21 39 21.9
comp=Z,130nm,1.4s
**DOMB Dombas** 85.94 340⇑ *i*P **P** 21 39 20.3 0.0
**SZCU Shurtz Canyon** 85.95 50 P **P** 21 39 20.3 -0.8
SZCU IAmb IAmb 21 39 36.1
comp=Z,74nm,1.3s
**NB201 NORSAR Array S** 85.96 338 P **P** 21 39 19.4 -1.0
**NB2 NORSAR Subarra** 85.99 338 P **P** 21 39 19.5 -1.1
comp=Z,168nm,1.2s,baz=45,slow=5.1
**NB2 NORSAR Subarra** 85.99 338 P **P** 21 39 19.5 -1.1
baz=45,slow=5.1
**NOA NORSAR Array B** 85.99 338 P **P** 21 39 19.8 -0.8
comp=Z,33nm,0.9s,baz=44,slow=4.8,SNR=54
NOA LR LR 22 21 56.6
comp=Z,1µm,20.1s,baz=45,slow=38

**MOL Molde** 86.01 341⇑ *i*P **P** 21 39 20.8 +0.3
**DGMT Dagmar** 86.07 38 IAmb IAmb 21 39 23.9
comp=Z,77nm,0.9s
**NC602 NORSAR Array S** 86.10 338⇑ *i*P **P** 21 39 19.9 -1.2
**NBO00 NORSAR Array S** 86.14 339 P **P** 21 39 20.8 -0.5
**YUH Yuha Desert** 86.15 56 P **P** 21 39 20.5 -1.4
**RAYN Ar Rayn** 86.34 294 P **P** 21 39 21.1 -1.9
RAYN pmax pmax
comp=Z,190nm,1.5s
RAYN MLR MLR
comp=Z,900nm,19.0s
**RAYN Ar Rayn** 86.34 294 P **P** 21 39 21.1 -1.9
**RAYN Ar Rayn** 86.34 294 P **P** 21 39 23.2 +0.1
**RAYN Ar Rayn** 86.34 294 *i* P **P** 21 39 23.0 0.0
SNR=48
**MTPU Mount Pierson** 86.38 50 IAmb IAmb 21 39 38.9
comp=Z,73nm,1.1s
**TMUT Trail Mountain** 86.44 48 P **P** 21 39 22.0 -1.6
**AKN Aaknes** 86.47 341 *e*P **P** 21 39 23.5 +0.6
**W13A Hualapai Mount** 86.55 53 P **P** 21 39 21.9 -2.2
W13A IAmb IAmb 21 39 39.1
comp=Z,54nm,1.1s
**ICESG Greenland Ices** 86.57 1 *i* P **P** 21 39 23.6 -0.1
ICESG IAmb IAmb 21 39 38.8
comp=Z,57nm,0.9s
**PKCU Pink Cliffs** 86.57 50 IAmb IAmb 21 39 29.6
comp=Z,92nm,1.5s
**BLYC Blythe** 86.70 54 IAmb IAmb 21 39 39.8
comp=Z,117nm,1.2s
**CPBX Cerro Prieto** 86.72 56 P **P** 21 39 23.2 -1.4
CPBX IAmb IAmb 21 39 39.8
comp=Z,99nm,1.2s
**BNN Bunyan** 86.79 311 P **P** 21 39 23.4 -1.7
**P18A Preston Nutter** 86.93 48 IAmb IAmb 21 39 41.1
comp=Z,46nm,1.1s
**OSL Oslo** 86.97 338 *e*P **P** 21 39 25.4 +0.1
**SRU San Rafael Swe** 87.00 48 IAmb IAmb 21 39 40.9
comp=Z,80nm,1.1s
**U15A North Rim** 87.07 51 IAmb IAmb 21 39 42.0
comp=Z,104nm,1.1s
**SKAR Skarslia** 87.21 339 *e*P **P** 21 39 27.2 +0.6
**KONO Kongsberg** 87.56 338‖ *e*P **P** 21 39 28.6 +0.4
KONO pmax pmax
comp=Z,64nm,1.7s
**SFX San Felipe** 87.70 57 P **P** 21 39 28.2 -1.2
**113A Mohawk Valley,** 87.72 55 P **P** 21 39 28.7 -0.7
**BR131 Keskin Array S** 87.84 313 *c i*P **P** 21 39 28.9 -1.3
**BR131 Keskin Array S** 87.84 313 IAmb IAmb 21 39 30.3
comp=Z,50nm,1.1s
**BRTR Keskin Array B** 87.84 313 P **P** 21 39 28.9 -1.3
comp=Z,23nm,1.0s,baz=98,slow=2.7,SNR=74
BRTR LR LR 22 22 54.2
comp=Z,1µm,19.8s,baz=64,slow=38
**BORU Boraas** 87.90 336 *i* P **P** 21 39 28.0 -1.8
**LVV L'vov** 87.98 325 *e*P **P** 21 39 29.7 -0.7
LVV *e* 21 43 04.7
LVV *e* 21 49 56.7
LVV *e*S **S** 21 50 16.4 +5.8
LVV MLR MLR
comp=Z,2µm,17.0s
**O20A White River Ci** 88.01 46 P **P** 21 39 30.8 -0.2
O20A IAmb IAmb 21 39 45.7
comp=Z,78nm,1.2s
**SFJD Kangerlussuaq** 88.15 5 LR LR 22 20 20.7
comp=Z,338nm,21.9s,baz=346,slow=36
**SFJD Kangerlussuaq** 88.15 5 P **P** 21 39 31.5 +0.7
SFJD pmax pmax
comp=Z,59nm,1.2s
**SFJD Kangerlussuaq** 88.15 5 *i* P **P** 21 39 30.4 -0.5
SFJD IAmb IAmb 21 39 53.8
comp=Z,7.0nm,1.1s
**SFJD Kangerlussuaq** 88.15 5 P **P** 21 39 31.5 +0.7
SFJD IAmb IAmb 21 39 34.7
comp=Z,59nm,1.2s
**WUAZ Wupatki** 88.16 52 P **P** 21 39 30.3 -1.5
WUAZ IAMs_20 IAMs_20 22 12 35.4
comp=Z,1µm,20.0s
**DEL Delary** 88.30 334 *i* P **P** 21 39 29.4 -2.4
**DEL Delary** 88.30 334 *e*P **P** 21 39 30.9 -0.9
**ANTO Ankara** 88.33 314 P **P** 21 39 31.5 -0.9
ANTO pmax pmax
comp=Z,39nm,1.2s
ANTO MLR MLR
comp=Z,1µm,20.0s
**ANTO Ankara** 88.33 314 P **P** 21 39 31.5 -0.9
ANTO IAMs_20 IAMs_20 22 23 01.4
comp=Z,1µm,20.0s
**BEL Belsk** 88.36 328 *e*P **P** 21 39 31.9 -0.2
**FABU Falkenberg** 88.37 335 *i* P **P** 21 39 28.9 -3.1
**PV11 David Mesa, Pa** 88.52 48 P **P** 21 39 32.2 -1.3
**RSSD Black Hills** 88.55 41 P **P** 21 39 33.2 -0.3
RSSD pmax pmax
comp=Z,54nm,1.2s
**RSSD Black Hills** 88.55 41 P **P** 21 39 33.2 -0.3
RSSD IAmb IAmb 21 39 49.2
comp=Z,54nm,1.2s
**PV07 Paradox Valley** 88.61 48 IAmb IAmb 21 39 48.8
comp=Z,93nm,1.4s
**TIRR Tirgusor** 88.63 319 IAmb IAmb 21 39 34.0
comp=Z,84nm,1.1s
**FRB Frobisher Bay** 88.64 13 LR LR 22 21 11.3
comp=Z,844nm,21.5s,baz=326,slow=37
**X16A Lo Mia Camp, P** 88.64 53 IAmb IAmb 21 39 49.8
comp=Z,88nm,1.3s
**BUR08 Bucovina Ar. S** 88.65 323 IAmb IAmb 21 39 34.6
comp=Z,49nm,1.0s
**BURAR Bucovina Array** 88.66 323 P **P** 21 39 32.2 -1.6
BURAR IAmb IAmb 21 39 35.0
comp=Z,55nm,0.9s
**PV15 Paradox Valley** 88.77 48 P **P** 21 39 33.7 -1.0
PV15 IAmb IAmb 21 39 49.6
comp=Z,84nm,1.3s
**KWP Kalwaria Pacla** 88.78 326 *e*P **P** 21 39 34.1 -0.1
**BSD Bornholm Skovb** 88.82 333 *i* P **P** 21 39 30.6 -3.7
BSD IAmb IAmb 21 39 33.6
comp=Z,12nm,0.8s
**DY2G Dye2** 88.97 3 *i* P **P** 21 39 35.2 +0.2
DY2G IAmb IAmb 21 39 50.0
comp=Z,16nm,0.7s
**GKP Gorka Klasztor** 89.08 331 *e*P **P** 21 39 34.7 -0.7
**GKP Gorka Klasztor** 89.08 331 *e*P **P** 21 39 35.1 -0.4
**N23A Red Feather La** 89.11 45 P **P** 21 39 36.5 +0.3
**PHWY Pilot Hill** 89.20 44 P **P** 21 39 36.7 0.0
PHWY IAMs_20 IAMs_20 22 13 41.5
comp=Z,2µm,20.0s
**MVCO Mesa Verde** 89.33 49 IAMs_20 IAMs_20 22 16 00.3
comp=Z,2µm,20.0s
**SMCO Snowmass** 89.34 47 IAmb IAmb 21 39 53.0
comp=Z,95nm,1.4s
SMCO IAMs_20 IAMs_20 22 13 48.4
comp=Z,2µm,20.0s
**ULM Lac du Bonnet** 89.41 33 P **P** 21 39 37.1 0.0
comp=Z,8.6nm,0.9s,baz=287,slow=5.4,SNR=9.7
ULM LR LR 22 18 30.9
comp=Z,863nm,20.2s,baz=316,slow=35
**COP Copenhagen** 89.42 334 *i* P **P** 21 39 36.0 -1.1
COP IAmb IAmb 21 39 37.8
comp=Z,250nm,0.7s
**MLR Muntele Rosu** 89.49 321 LR LR 22 21 52.2
comp=Z,2µm,21.2s,baz=62,slow=37
**MLR Muntele Rosu** 89.49 321 IAMs_20 IAMs_20 22 25 57.8
comp=Z,2µm,20.0s
**UZH Uzhgorod** 89.61 325⇓ *i*P **P** 21 39 37.0 -1.1
UZH *i* 21 39 40.7
UZH *i* 21 39 45.5
**X18A Snowflake** 89.66 52 IAmb IAmb 21 39 54.2
comp=Z,72nm,1.4s
**TRPA Tarpa** 89.79 324 P **P** 21 39 38.3 -0.6
**BORA Eskisehir** 89.86 314 P **P** 21 39 38.1 -1.5
**CRVS Cervenica-Dubn** 89.87 326 *e*P **P** 21 39 39.4 0.0
CRVS pmax pmax
comp=Z,183nm,1.2s
**CRVS Cervenica-Dubn** 89.87 326 *e*P **P** 21 39 39.4 0.0
**OJC Ojcow** 89.88 327 *e*P **P** 21 39 38.9 -0.3
**OJC Ojcow** 89.88 327 P **P** 21 39 39.0 -0.3
OJC pmax pmax
comp=Z,97nm,1.1s
**OJC Ojcow** 89.88 327 P **P** 21 39 39.0 -0.3
OJC IAmb IAmb 21 39 40.2
comp=Z,97nm,1.1s
**ISCO Idaho Springs** 89.91 46 IAMs_20 IAMs_20 22 13 22.2
comp=Z,2µm,22.0s
**PRD Provadia** 89.94 318 P **P** 21 39 39.0 -0.7
**MMAI Mount Meron Ar** 89.95 307 LR LR 22 24 48.2
comp=Z,390nm,18.9s,baz=212,slow=39

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MUD** | **Monsted U'grnd** | **90.10** | **336** | *i* P | | **P** | **21 39 38.1** | **-2.1** |
| MUD | | | | IAmb | | IAmb | 21 39 52.7 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **NIE** | **Niedzica** | **90.14** | **326** | *e*P | | **P** | **21 39 41.3** | **+0.7** |
| **TUC** | **Tucson** | **90.15** | **54** | P | | **P** | **21 39 40.6** | **-0.5** |
| TUC | | | | pmax | | pmax | | |
| | comp=Z,62nm,1.2s | | | | | | | |
| TUC | | | | MLR | | MLR | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **TUC** | **Tucson** | **90.15** | **54** | P | | **P** | **21 39 40.6** | **-0.5** |
| TUC | | | | IAmb | | IAmb | 21 39 56.6 | |
| | comp=Z,62nm,1.1s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **90.19** | **48** | IAmb | | IAmb | 21 39 57.0 | |
| | comp=Z,61nm,1.3s | | | | | | | |
| **KECS** | **Kecovo** | **90.64** | **326** | *e*P | | **P** | **21 39 43.3** | **+0.4** |
| **KECS** | **Kecovo** | **90.64** | **326** | *e*P | | **P** | **21 39 43.3** | **+0.4** |
| **AGMN** | **Agassiz Nation** | **90.65** | **35** | IAmb | | IAmb | 21 39 45.3 | |
| | comp=Z,39nm,0.9s | | | | | | | |
| AGMN | | | | IAMs_20 | | IAMs_20 | 22 17 54.0 | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **D32A** | **Dogwood Acres,** | **90.77** | **36** | P | | **P** | **21 39 43.4** | **-0.2** |
| **SZH** | **Strazhica** | **90.78** | **319** | P | | **P** | **21 39 42.0** | **-1.7** |
| **ISP** | **Isparta** | **90.91** | **313**⇑ | *e*P | | **P** | **21 39 43.0** | **-1.5** |
| ISP | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **90.93** | **328** | *e*P | | **P** | **21 39 42.7** | **-1.5** |
| OKC | | | | *ex* | | x | 21 39 56.1 | |
| OKC | | | | AMS | | AMS | 22 23 20.0 | |
| | comp=Z,3µm,19.3s | | | | | | | |
| **IZAB** | **Izabela** | **90.98** | **326** | *e*P | | **P** | **21 39 44.9** | **+0.4** |
| IZAB | | | | pmax | | pmax | | |
| | comp=Z,45nm,0.9s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **91.08** | **47** | P | | **P** | **21 39 44.7** | **-0.9** |
| SDCO | | | | IAmb | | IAmb | 21 40 00.7 | |
| | comp=Z,47nm,1.2s | | | | | | | |
| SDCO | | | | IAMs_20 | | IAMs_20 | 22 17 40.5 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **KSP** | **Ksiaz** | **91.14** | **329** | *e*P | | **P** | **21 39 44.9** | **-0.3** |
| **RUE** | **Ruedersdorf** | **91.14** | **331** | *e*P | | **P** | **21 39 44.6** | **-0.5** |
| | comp=Z,62nm,1.3s,baz=42,slow=4.6 | | | | | | | |
| **MORC** | **Moravsky Berou** | **91.27** | **328** | IAmb | | IAmb | 21 39 46.7 | |
| | comp=Z,35nm,0.9s | | | | | | | |
| **MORC** | **Moravsky Berou** | **91.27** | **328** | *e*P | | **P** | **21 39 45.3** | **-0.6** |
| **PSZ** | **Piszkesteto** | **91.31** | **325** | P | | **P** | **21 39 45.8** | **-0.3** |
| **OSTC** | **Ostas** | **91.38** | **329** | *e*P | | **P** | **21 39 46.0** | **-0.3** |
| OSTC | | | | *ex* | | x | 21 39 58.7 | |
| OSTC | | | | AMS | | AMS | 22 23 20.0 | |
| | comp=Z,2µm,25.4s | | | | | | | |
| **CHVC** | **Chvalec** | **91.43** | **329** | *e*P | | **P** | **21 39 46.0** | **-0.6** |
| CHVC | | | | *ex* | | x | 21 39 58.2 | |
| CHVC | | | | AMS | | AMS | 22 26 00.0 | |
| | comp=Z,2µm,17.5s | | | | | | | |
| **KRLC** | **Kraliky** | **91.43** | **328** | *e*P | | **P** | **21 39 45.6** | **-1.0** |
| KRLC | | | | AMS | | AMS | 22 23 20.0 | |
| | comp=Z,2µm,20.8s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **91.47** | **329** | *e*P | | **P** | **21 39 46.0** | **-0.8** |
| DPC | | | | *ex* | | x | 21 39 59.1 | |
| DPC | | | | AMS | | AMS | 22 23 40.0 | |
| | comp=Z,2µm,22.9s | | | | | | | |
| **VYHS** | **Vyhne** | **91.47** | **326** | *e*P | | **P** | **21 39 46.7** | **-0.1** |
| VYHS | | | | pmax | | pmax | | |
| | comp=Z,116nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | **91.47** | **326** | *e*P | | **P** | **21 39 46.7** | **-0.1** |
| VYHS | | | | *e*pP | | **pP** | **21 39 58.9** | **-0.1** |
| **BSZH** | **Besenyszg** | **91.51** | **325** | P | | **P** | **21 39 47.3** | **+0.4** |
| **BSEG** | **Bad Segeberg** | **91.54** | **334** | *e*P | | **P** | **21 39 46.3** | **-0.6** |
| | comp=Z,60nm,1.0s,baz=42,slow=4.6 | | | | | | | |
| BSEG | | | | *e*pP | | **pP** | **21 39 58.6** | **-0.5** |
| | baz=43,slow=4.6 | | | | | | | |
| **OGNE** | **Ogallala** | **91.55** | **43** | IAmb | | IAmb | 21 40 07.0 | |
| | comp=Z,60nm,0.9s | | | | | | | |
| **KOLL** | **Kolacno** | **91.64** | **327** | *e*P | | **P** | **21 39 47.6** | **+0.1** |
| KOLL | | | | *e*pP | | **pP** | **21 39 59.8** | **+0.1** |
| **B35A** | **Bob, Littlefor** | **91.70** | **34** | IAmb | | IAmb | 21 40 07.5 | |
| | comp=Z,94nm,1.4s | | | | | | | |
| **319A** | **Douglas** | **91.72** | **54** | P | | **P** | **21 39 47.2** | **-1.2** |
| 319A | | | | IAmb | | IAmb | 21 40 04.0 | |
| | comp=Z,57nm,1.1s | | | | | | | |
| **JAVC** | **Velka Javorina** | **91.81** | **327** | *e*P | | **P** | **21 39 49.1** | **+0.7** |
| **AMBH** | **Ambrzfalva** | **91.87** | **324** | P | | **P** | **21 39 48.4** | **-0.2** |
| **ANMO** | **Albuquerque** | **91.92** | **50** | LR | | LR | 22 19 24.6 | |
| | comp=Z,815nm,18.7s,baz=295,slow=34 | | | | | | | |
| **ANMO** | **Albuquerque** | **91.92** | **50***c* | *i*P | | **P** | **21 39 51.2** | **+1.8** |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,54nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **91.92** | **50** | P | | **P** | **21 39 47.3** | **-2.1** |
| **EIL** | **Elat** | **91.94** | **304** | LR | | LR | 22 27 27.0 | |
| | comp=Z,609nm,18.2s,baz=76,slow=40 | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **91.97** | **37** | IAmb | | IAmb | 21 39 51.9 | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **BUD** | **Budapest** | **92.03** | **325** | P | | **P** | **21 39 49.4** | **+0.1** |
| **KDZ** | **Kurdzhali** | **92.04** | **318** | P | | **P** | **21 39 48.0** | **-1.5** |
| **VRAC** | **Vranov** | **92.04** | **328** | LR | | LR | 22 24 51.0 | |
| | comp=Z,2µm,19.2s,baz=48,slow=38 | | | | | | | |
| **VRAC** | **Vranov** | **92.04** | **328** | *e*P | | **P** | **21 39 49.1** | **-0.3** |
| **Y22D** | **IRIS PASSCAL I** | **92.05** | **51** | IAMs_20 | | IAMs_20 | 22 16 53.4 | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **PVCC** | **Panska Ves** | **92.16** | **330** | *e*P | | **P** | **21 39 49.7** | **-0.2** |
| PVCC | | | | *ex* | | x | 21 40 01.1 | |
| **SMOL** | **Smolenice** | **92.16** | **327** | *e*P | | **P** | **21 39 50.2** | **+0.2** |
| SMOL | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **SMOL** | **Smolenice** | **92.16** | **327** | *e*P | | **P** | **21 39 50.2** | **+0.2** |
| **SRO** | **Srobarova** | **92.18** | **326** | *e*P | | **P** | **21 39 50.4** | **+0.4** |
| SRO | | | | pmax | | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | | |
| **SRO** | **Srobarova** | **92.18** | **326** | *e*P | | **P** | **21 39 50.4** | **+0.4** |
| SRO | | | | *e*pP | | **pP** | **21 40 02.4** | **+0.2** |
| **BRG** | **Berggiesshubel** | **92.20** | **330** | *e*P | | **P** | **21 39 49.5** | **-0.6** |
| BRG | | | | Amp | | | 21 39 50.9 | |
| | comp=Z,38nm,1.1s | | | | | | | |
| BRG | | | | *ex* | | x | 21 39 55.5 | |
| BRG | | | | Amp | | | 21 39 56.3 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| BRG | | | | *ex* | | x | 21 40 01.7 | |
| BRG | | | | Amp | | | 21 40 02.5 | |
| | comp=Z,43nm,1.0s | | | | | | | |
| BRG | | | | *ex* | | x | 21 40 23.2 | |
| BRG | | | | Amp | | | 21 40 26.1 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| BRG | | | | PP | | PP | 21 43 19.8 | -10 |
| BRG | | | | Amp | | | 21 43 45.3 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| BRG | | | | Amp | | | 22 26 24.0 | |
| | comp=N,1.5nm,17.8s | | | | | | | |
| BRG | | | | Amp | | | 22 26 28.0 | |
| | comp=E,0.8nm,17.8s | | | | | | | |
| BRG | | | | Amp | | | 22 26 37.0 | |
| | comp=Z,2.1nm,18.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **92.20** | **330** | *e*P | | **P** | **21 39 49.4** | **-0.6** |
| BRG | | | | *e* | | | 21 39 55.5 | |
| BRG | | | | *e* | | | 21 40 01.6 | |
| BRG | | | | pmax | | pmax | | |
| | comp=Z,38nm,1.1s | | | | | | | |
| BRG | | | | MLR | | MLR | | |
| | comp=N,1µm,17.8s | | | | | | | |
| BRG | | | | MLR | | MLR | | |
| | comp=E,790nm,17.8s | | | | | | | |
| BRG | | | | MLR | | MLR | | |
| | comp=Z,2µm,18.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **92.20** | **330** | *e*P | | **P** | **21 39 49.5** | **-0.6** |
| | comp=Z,38nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| BRG | | | | *e*pP | | **pP** | **21 40 01.6** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **92.27** | **45** | P | | **P** | **21 39 50.0** | **-0.8** |
| **KRUC** | **Moravsky** | **92.30** | **328** | *e*P | | **P** | **21 39 50.1** | **-0.5** |
| **CLL** | **Collm** | **92.32** | **331** | P | | **P** | **21 39 49.8** | **-0.8** |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,59nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **92.32** | **331** | *i* P | | **P** | **21 39 49.4** | **-1.2** |
| | comp=Z,62nm,1.1s | | | | | | | |
| CLL | | | | *i* pP | | **pP** | **21 40 01.3** | **-1.5** |
| CLL | | | | *e*PP | | **PP** | **21 43 31.0** | **+0.2** |
| CLL | | | | *ex* | | x | 21 43 56.0 | |
| CLL | | | | *e*PPS | | PPS | 21 52 42.0 | |
| CLL | | | | *e*SS | | SS | 21 57 12.0 | +12 |
| CLL | | | | Lm | | MLR | 22 23 00.0 | |
| | comp=N,1µm,18.5s | | | | | | | |
| CLL | | | | Lm | | MLR | 22 23 00.0 | |
| | comp=E,1µm,21.2s | | | | | | | |
| CLL | | | | Lm | | MLR | 22 23 00.0 | |
| | comp=Z,2µm,21.9s | | | | | | | |
| **CLL** | **Collm** | **92.32** | **331** | P | | **P** | **21 39 49.8** | **-0.8** |
| CLL | | | | IAmb | | IAmb | 21 40 03.1 | |
| | comp=Z,59nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **92.32** | **331** | *e*P | | **P** | **21 39 49.7** | **-0.9** |
| | comp=Z,62nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| **MODS** | **Modra-Piesok** | **92.33** | **327** | *e*P | | **P** | **21 39 54.1** | **+3.3** |
| MODS | | | | pmax | | pmax | | |
| | comp=Z,102nm,1.3s | | | | | | | |
| **MODS** | **Modra-Piesok** | **92.33** | **327** | *e*P | | **P** | **21 39 54.1** | **+3.3** |
| **FLTG** | **Flechtingen** | **92.34** | **332** | *e*P | | **P** | **21 39 49.5** | **-1.2** |
| | comp=Z,45nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| FLTG | | | | *e*pP | | **pP** | **21 40 01.7** | **-1.1** |
| | baz=43,slow=4.6 | | | | | | | |
| **FBE** | **Freiberg** | **92.43** | **331** | *e*P | | **P** | **21 39 50.8** | **-0.3** |
| | comp=Z,93nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| **CSKK** | **Cskako** | **92.51** | **326** | P | | **P** | **21 39 50.0** | **-1.6** |
| **ZST** | **Bratislava** | **92.54** | **327** | *e*P | | **P** | **21 39 52.0** | **+0.3** |
| ZST | | | | pmax | | pmax | | |
| | comp=Z,155nm,1.3s | | | | | | | |
| **ZST** | **Bratislava** | **92.54** | **327** | *e*P | | **P** | **21 39 52.0** | **+0.3** |
| **PRU** | **Pruhonice** | **92.55** | **329** | *e*P | | **P** | **21 39 50.3** | **-1.4** |
| PRU | | | | *ex* | | x | 21 40 03.4 | |
| PRU | | | | AMS | | AMS | 22 24 00.0 | |
| | comp=Z,2µm,24.0s | | | | | | | |
| **VTS** | **Vitosha** | **92.76** | **320** | IAmb | | IAmb | 21 39 54.1 | |
| | comp=Z,34nm,1.1s | | | | | | | |
| **VTS** | **Vitosha** | **92.76** | **320** | P | | **P** | **21 39 52.0** | **-1.1** |
| **RETH** | **Rethem/Aller,** | **92.81** | **334** | *e*P | | **P** | **21 39 52.0** | **-0.8** |
| | comp=Z,45nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| **NEUB** | **Neuenburg** | **92.92** | **331** | *e*P | | **P** | **21 39 52.7** | **-0.7** |
| | comp=Z,86nm,1.3s,baz=42,slow=4.6 | | | | | | | |
| **EGYH** | **Egyhazaskeszo** | **92.94** | **326** | P | | **P** | **21 39 52.4** | **-1.2** |
| **TIH** | **Tihany** | **93.00** | **326** | P | | **P** | **21 39 52.5** | **-1.3** |
| **MPLH** | **Magyarpolny** | **93.00** | **326** | P | | **P** | **21 39 53.3** | **-0.6** |
| **MORH** | **Mrgy, Hungar** | **93.06** | **325** | P | | **P** | **21 39 53.1** | **-1.0** |
| **CLZ** | **Clausthal** | **93.06** | **333** | *e*P | | **P** | **21 39 53.5** | **-0.6** |
| | comp=Z,67nm,1.6s,baz=42,slow=4.6 | | | | | | | |
| **EYMN** | **Ely** | **93.09** | **33** | IAMs_20 | | IAMs_20 | 22 17 14.8 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **93.11** | **38** | IAmb | | IAmb | 21 39 56.9 | |
| | comp=Z,45nm,1.1s | | | | | | | |
| **FRGS** | **Fruska Gora** | **93.12** | **323**⇑ | *i*P | | **P** | **21 39 52.5** | **-2.0** |
| **SOP** | **Sopron** | **93.15** | **327** | P | | **P** | **21 39 54.8** | **+0.3** |
| **TANN** | **Tannenbergstha** | **93.19** | **331** | *e*P | | **P** | **21 39 54.1** | **-0.7** |
| | comp=Z,25nm,1.2s,baz=42,slow=4.6 | | | | | | | |
| **WERD** | **Werda** | **93.24** | **331** | *e*P | | **P** | **21 39 54.3** | **-0.6** |
| | comp=Z,40nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| WERD | | | | *e*pP | | **pP** | **21 40 06.5** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| **PLN** | **Plauen** | **93.28** | **331** | *e*P | | **P** | **21 39 54.5** | **-0.6** |
| | comp=Z,32nm,1.2s,baz=42,slow=4.6 | | | | | | | |
| PLN | | | | *e*pP | | **pP** | **21 40 06.5** | **-0.8** |
| | baz=43,slow=4.6 | | | | | | | |
| **WERN** | **Wernitzgruen** | **93.32** | **331** | *e*P | | **P** | **21 39 54.9** | **-0.5** |
| | comp=Z,52nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| WERN | | | | *e*pP | | **pP** | **21 40 06.9** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| **NKC** | **Novy Kostel** | **93.33** | **330** | *e*P | | **P** | **21 39 54.8** | **-0.6** |
| NKC | | | | *ex* | | x | 21 40 06.5 | |
| NKC | | | | AMS | | AMS | 22 27 10.0 | |
| | comp=Z,2µm,13.3s | | | | | | | |
| **CONA** | **Conrad Observa** | **93.33** | **327** | *e*P | | **P** | **21 39 55.3** | **-0.2** |
| | comp=Z,60nm,1.2s,SNR=22 | | | | | | | |
| CONA | | | | *e*P | | **pP** | **21 40 07.5** | **-0.1** |
| | comp=Z,37nm,1.0s | | | | | | | |
| **MOX** | **Moxa** | **93.40** | **331** | *e*P | | **P** | **21 39 55.0** | **-0.6** |
| | comp=Z,40nm,1.2s,baz=42,slow=4.6 | | | | | | | |
| MOX | | | | *e*pP | | **pP** | **21 40 07.2** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| MOX | | | | *e*L | | L | 22 24 53.2 | |
| | comp=Z,1µm,21.8s | | | | | | | |
| **KOVH** | **Kovagotottos** | **93.43** | **325** | P | | **P** | **21 39 54.4** | **-1.4** |
| **CKRC** | **Cesky Krumlov** | **93.47** | **329** | *e*P | | **P** | **21 39 54.9** | **-1.1** |
| CKRC | | | | *ex* | | x | 21 40 07.9 | |
| **EPT** | **El Paso** | **93.55** | **53** | IAMs_20 | | IAMs_20 | 22 16 26.3 | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **KHC** | **Kasperske Hory** | **93.60** | **329** | P | | **P** | **21 39 54.4** | **-2.2** |
| KHC | | | | pmax | | pmax | | |
| | comp=Z,48nm,0.9s | | | | | | | |
| **KHC** | **Kasperske Hory** | **93.60** | **329** | *e*P | | **P** | **21 39 55.6** | **-1.0** |
| KHC | | | | *ex* | | x | 21 40 07.9 | |
| KHC | | | | *ex* | | x | 21 43 52.6 | |
| KHC | | | | AMS | | AMS | 22 24 50.0 | |
| | comp=Z,1µm,12.8s | | | | | | | |
| **KHC** | **Kasperske Hory** | **93.60** | **329** | P | | **P** | **21 39 54.4** | **-2.2** |
| KHC | | | | IAmb | | IAmb | 21 40 09.5 | |
| | comp=Z,48nm,0.9s | | | | | | | |
| **BGNE** | **Belgrade** | **93.65** | **41** | P | | **P** | **21 39 56.7** | **-0.4** |
| **MANZ** | **Manzenberg** | **93.66** | **330** | *e*P | | **P** | **21 39 56.4** | **-0.5** |
| | comp=Z,10.0nm,1.2s,baz=42,slow=4.6 | | | | | | | |
| MANZ | | | | *e*pP | | **pP** | **21 40 08.5** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| **DIVS** | **Divibare** | **93.70** | **322** | IAMs_20 | | IAMs_20 | 22 26 08.1 | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **DIVS** | **Divibare** | **93.70** | **322**⇑ | *i*P | | **P** | **21 39 56.0** | **-1.2** |
| **GEC2** | **GERESS Array S** | **93.74** | **329** | IAmb | | IAmb | 21 40 09.8 | |
| | comp=Z,37nm,0.9s | | | | | | | |
| **GEC2** | **GERESS Array S** | **93.74** | **329** | *e*P | | **P** | **21 39 56.4** | **-0.9** |
| | comp=Z,43nm,1.0s,baz=42,slow=4.6 | | | | | | | |
| GEC2 | | | | *e*pP | | **pP** | **21 40 08.4** | **-1.1** |
| | baz=43,slow=4.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **93.74** | **329** | P | | **P** | **21 39 56.4** | **-0.9** |
| | comp=Z,21nm,0.9s,baz=35,slow=4.9,SNR=58 | | | | | | | |
| GERES | | | | LR | | LR | 22 26 12.6 | |
| | comp=Z,1µm,18.8s,baz=55,slow=38 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **93.77** | **330** | *e*P | | **P** | **21 39 57.1** | **-0.3** |
| | comp=Z,16nm,1.3s,baz=42,slow=4.6 | | | | | | | |
| **IBBN** | **Ibbenburen** | **93.78** | **334** | *e*P | | **P** | **21 39 56.5** | **-0.8** |
| | comp=Z,72nm,1.0s,baz=42,slow=4.6 | | | | | | | |
| **ATD** | **Arta Tunnel** | **93.79** | **284** | LR | | LR | 22 21 18.6 | |
| | comp=Z,453nm,21.9s,baz=63,slow=35 | | | | | | | |
| **BEHE** | **Becsehely** | **93.86** | **326** | *e*P | | **P** | **21 39 57.1** | **-0.7** |
| **BEHE** | **Becsehely** | **93.86** | **326** | P | | **P** | **21 39 58.3** | **+0.5** |
| **WET** | **Wettzell** | **93.91** | **329** | *e*P | | **P** | **21 39 57.6** | **-0.5** |
| | comp=Z,34nm,1.3s,baz=42,slow=4.6 | | | | | | | |
| **STIP** | **Stip** | **93.94** | **320** | *i* P | | **P** | **21 39 56.8** | **-1.5** |
| **VAY** | **Valandovo** | **93.95** | **319** | *i* P | | **P** | **21 39 57.7** | **-0.6** |
| **ARSA** | **Arzberg** | **93.96** | **327** | *e*P | | **P** | **21 39 57.3** | **-1.0** |
| | comp=Z,32nm,1.1s,SNR=15 | | | | | | | |
| ARSA | | | | *e*P | | **pP** | **21 40 09.9** | **-0.6** |
| | comp=Z,28nm,1.1s | | | | | | | |
| **E38A** | **The Farm, Brul** | **93.97** | **34** | IAmb | | IAmb | 21 40 00.4 | |
| | comp=Z,33nm,0.9s | | | | | | | |
| **UBBA** | **Unterbreizbach** | **93.97** | **332** | *e*P | | **P** | **21 39 57.6** | **-0.5** |
| | comp=Z,46nm,1.7s,baz=42,slow=4.6 | | | | | | | |
| **MOA** | **Molln** | **94.17** | **328** | *i* P | | **P** | **21 39 58.7** | **-0.5** |
| | comp=Z,25nm,1.1s,SNR=7.4 | | | | | | | |
| MOA | | | | *e*P | | **pP** | **21 40 10.9** | **-0.5** |
| | comp=Z,18nm,0.8s | | | | | | | |
| **BBLS** | **Lazići** | **94.17** | **323** | *e*P | | **P** | **21 39 57.4** | **-2.0** |
| **SKO** | **Skopje** | **94.21** | **320** | *i* P | | **P** | **21 39 59.7** | **+0.1** |
| **CBKS** | **Cedar Bluff** | **94.23** | **44** | IAmb | | IAmb | 21 40 13.8 | |
| | comp=Z,70nm,1.1s | | | | | | | |
| CBKS | | | | IAMs_20 | | IAMs_20 | 22 18 40.4 | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **SPMN** | **Marine on St.** | **94.24** | **36** | P | | **P** | **21 39 59.7** | **+0.1** |
| **GRA1** | **Grafenberg Arr** | **94.27** | **331** | P | | **P** | **21 39 58.4** | **-1.3** |
| **GRF** | **Grafenberg Arr** | **94.27** | **331** | P | | **P** | **21 39 58.4** | **-1.3** |
| GRF | | | | pmax | | pmax | | |
| | comp=Z,70nm,1.1s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **94.27** | **331** | *e*P | | **P** | **21 39 59.4** | **-0.2** |
| | comp=Z,72nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| GRF | | | | *e*pP | | **pP** | **21 40 11.7** | **-0.2** |
| | baz=43,slow=4.6 | | | | | | | |
| GRF | | | | *e*L | | L | 22 25 30.1 | |
| | comp=Z,1µm,21.7s | | | | | | | |
| **GRFO** | **Grafenberg** | **94.27** | **331** | P | | **P** | **21 39 58.6** | **-1.1** |
| GRFO | | | | pmax | | pmax | | |
| | comp=Z,65nm,1.1s | | | | | | | |
| **GRFO** | **Grafenberg** | **94.27** | **331** | P | | **P** | **21 39 58.5** | **-1.1** |
| GRFO | | | | IAmb | | IAmb | 21 40 12.8 | |
| | comp=Z,65nm,1.1s | | | | | | | |
| **RUDO** | **Rudo** | **94.35** | **322**⇑ | *i*P | | **P** | **21 39 58.8** | **-1.4** |
| **L34A** | **Svendsen Farm,** | **94.35** | **40** | IAmb | | IAmb | 21 40 13.6 | |
| | comp=Z,58nm,1.0s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **94.40** | **52** | IAmb | | IAmb | 21 40 16.7 | |
| | comp=Z,50nm,1.2s | | | | | | | |
| MNTX | | | | IAMs_20 | | IAMs_20 | 22 17 45.8 | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **LPIG** | **La Paz** | **94.53** | **61** | LR | | LR | 22 16 05.9 | |
| | comp=Z,1µm,20.1s,baz=280,slow=31 | | | | | | | |
| **SOKA** | **Soboth** | **94.60** | **327** | *e*P | | **P** | **21 40 00.4** | **-0.9** |
| | comp=Z,35nm,1.1s,SNR=25 | | | | | | | |
| SOKA | | | | *e*P | | **pP** | **21 40 12.5** | **-1.0** |
| | comp=Z,46nm,1.0s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **94.72** | **37** | IAmb | | IAmb | 21 40 04.1 | |
| | comp=Z,39nm,1.3s | | | | | | | |
| **LIT** | **Litokhoron** | **94.74** | **318** | IAmb | | IAmb | 21 40 01.7 | |
| | comp=Z,62nm,1.2s | | | | | | | |
| **GOLS** | **Golise** | **94.76** | **326** | *i* P | | **P** | **21 40 01.0** | **-1.0** |
| **MRAK** | **Mrakovica** | **94.77** | **325**⇑ | *i*P | | **P** | **21 40 01.1** | **-1.0** |
| **BLY** | **Banja Luka** | **94.80** | **324**⇑ | *i*P | | **P** | **21 40 01.3** | **-0.9** |
| **RJOB** | **Jochberg** | **94.95** | **329** | *e*P | | **P** | **21 40 02.2** | **-0.7** |
| | comp=Z,41nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| RJOB | | | | *e*pP | | **pP** | **21 40 14.6** | **-0.5** |
| | baz=43,slow=4.6 | | | | | | | |
| **OBKA** | **Obir** | **94.96** | **327** | *e*P | | **P** | **21 40 01.7** | **-1.3** |
| | comp=Z,12nm,1.0s,SNR=6.3 | | | | | | | |
| OBKA | | | | *e*P | | **pP** | **21 40 13.8** | **-1.4** |
| | comp=Z,16nm,0.9s | | | | | | | |
| **CRES** | **Cresnjev** | **94.97** | **326**⇑ | *i*P | | **P** | **21 40 01.8** | **-1.2** |
| **CRES** | **Cresnjev** | **94.97** | **326** | *i* P | | **P** | **21 40 02.1** | **-0.9** |
| CRES | | | | *i* | | | 21 40 14.2 | |
| **FNA** | **Florina** | **94.99** | **319** | P | | **P** | **21 40 00.9** | **-2.3** |
| FNA | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **FNA** | **Florina** | **94.99** | **319** | P | | **P** | **21 40 00.8** | **-2.3** |
| **MSTX** | **Muleshoe** | **95.00** | **49** | P | | **P** | **21 40 01.9** | **-1.6** |
| MSTX | | | | IAmb | | IAmb | 21 40 17.9 | |
| | comp=Z,41nm,1.2s | | | | | | | |
| **MGRS** | **Mrkonjic Grad** | **95.07** | **324**⇑ | *i*P | | **P** | **21 40 03.0** | **-0.5** |
| **EKA** | **Eskdalemuir Ar** | **95.12** | **341** | LR | | LR | 22 27 36.7 | |
| | comp=Z,795nm,19.4s,baz=30,slow=38 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **95.15** | **328** | *e*P | | **P** | **21 40 02.5** | **-1.5** |
| | comp=Z,13nm,0.8s | | | | | | | |
| **PDG** | **Podgorica** | **95.18** | **322** | IAMs_20 | | IAMs_20 | 22 29 08.3 | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **PDG** | **Podgorica** | **95.18** | **322**⇑ | *i*P | | **P** | **21 40 02.7** | **-1.2** |
| **AMTX** | **Amarillo** | **95.23** | **48** | IAmb | | IAmb | 21 40 19.6 | |
| | comp=Z,76nm,1.3s | | | | | | | |
| AMTX | | | | IAMs_20 | | IAMs_20 | 22 20 51.4 | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **BRY** | **Bratogost** | **95.28** | **322**⇑ | *i*P | | **P** | **21 40 02.7** | **-1.9** |
| **LJU** | **Ljubljana** | **95.29** | **326**⇑ | *i*P | | **P** | **21 40 03.0** | **-1.4** |
| **LJU** | **Ljubljana** | **95.29** | **326** | *i* P | | **P** | **21 40 03.2** | **-1.2** |
| LJU | | | | *e* | | | 21 40 15.5 | |
| **BOJS** | **Bojanci** | **95.30** | **326** | *i* P | | **P** | **21 40 03.6** | **-0.9** |
| **MYKA** | **Terra Mystica** | **95.32** | **327** | *e*P | | **P** | **21 40 02.9** | **-1.8** |
| | comp=Z,17nm,1.2s,SNR=6.1 | | | | | | | |
| MYKA | | | | *e*P | | **pP** | **21 40 15.2** | **-1.6** |
| | comp=Z,17nm,0.8s | | | | | | | |
| **FUR** | **Furstenfeldbru** | **95.35** | **330** | *e*P | | **P** | **21 40 04.3** | **-0.4** |
| | comp=Z,100nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| FUR | | | | *e*pP | | **pP** | **21 40 16.5** | **-0.3** |
| | baz=43,slow=4.6 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **95.38** | **321**⇑ | *i*P | | **P** | **21 40 03.3** | **-1.6** |
| **KBN** | **Korca** | **95.44** | **319** | IAmb | | IAmb | 21 40 05.2 | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **N35A** | **Tabor** | **95.47** | **40** | IAmb | | IAmb | 21 40 19.5 | |
| | comp=Z,38nm,1.1s | | | | | | | |
| **TIR** | **Tirane** | **95.52** | **320** | IAMs_20 | | IAMs_20 | 22 26 46.6 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **CEY** | **Cerknica** | **95.55** | **326**⇑ | *i*P | | **P** | **21 40 04.2** | **-1.4** |
| **HCY** | **Herceg Novi** | **95.60** | **322**⇑ | *i*P | | **P** | **21 40 04.2** | **-1.7** |
| **STON** | **Ston** | **95.76** | **323**⇑ | *i*P | | **P** | **21 40 04.6** | **-2.0** |
| **ABTA** | **Abfaltersbach** | **95.79** | **328** | *e*P | | **P** | **21 40 05.0** | **-1.8** |
| | comp=Z,19nm,1.0s,SNR=14 | | | | | | | |
| ABTA | | | | *e*P | | **pP** | **21 40 17.0** | **-1.9** |
| | comp=Z,30nm,0.9s | | | | | | | |
| **RIY** | **Rijeka** | **95.81** | **326** | *e*P | | P | 21 39 59.9 | -6.9 |
| **WATA** | **Walderalm** | **95.81** | **329** | *e*P | | **P** | **21 40 05.4** | **-1.6** |
| | comp=Z,14nm,1.1s,SNR=6.1 | | | | | | | |
| WATA | | | | *e*P | | **pP** | **21 40 17.7** | **-1.4** |
| | comp=Z,15nm,1.1s | | | | | | | |
| **WTTA** | **Wattenberg** | **95.84** | **329** | *i* P | | **P** | **21 40 05.8** | **-1.3** |
| | comp=Z,15nm,1.1s,SNR=5.7 | | | | | | | |
| WTTA | | | | *e*P | | **pP** | **21 40 18.2** | **-1.1** |
| | comp=Z,16nm,1.1s | | | | | | | |
| **STU** | **Stuttgart** | **95.85** | **331** | P | | **P** | **21 40 05.2** | **-1.7** |
| **STU** | **Stuttgart** | **95.85** | **331** | P | | **P** | **21 40 05.2** | **-1.7** |
| STU | | | | IAmb | | IAmb | 21 40 07.5 | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **STU** | **Stuttgart** | **95.85** | **331** | *e*P | | **P** | **21 40 06.2** | **-0.7** |
| | comp=Z,122nm,1.1s,baz=42,slow=4.6 | | | | | | | |
| STU | | | | *e*pP | | **pP** | **21 40 18.5** | **-0.6** |
| | baz=43,slow=4.6 | | | | | | | |
| **SKDS** | **Skadanscina** | **95.90** | **326**⇑ | *i*P | | **P** | **21 40 05.3** | **-1.9** |
| **TRI** | **Trieste** | **95.91** | **327** | IAmb | | IAmb | 21 40 18.9 | |
| | comp=Z,31nm,1.1s | | | | | | | |
| **KSU1** | **Kansas State U**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1μm,22.0s | | | | | | | |
| **JCT** | **Junction City** | **99.05** | **51** | IAmb | IAmb | 21 40 36.2 | | |
| | comp=Z,36nm,1.1s | | | | | | | |
| JCT | | | | IAMs_20 | IAMs_20 | 22 18 01.8 | | |
| | comp=Z,986nm,21.0s | | | | | | | |
| **R40A** | **Maddies Statio** | **99.12** | **41** | P | **Pdif** | **21 40 20.7** | **-1.2** | |
| **HDIL** | **Hopedale** | **99.30** | **37** | IAMs_20 | IAMs_20 | 22 20 14.1 | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **CEL** | **Celeste** | **99.85** | **320** | IAMs_20 | IAMs_20 | 22 30 20.2 | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| **U40A** | **Yellville** | **100.03** | **42** | IAMs_20 | IAMs_20 | 22 21 16.0 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **W39A** | **Magazine** | **100.20** | **44** | IAMs_20 | IAMs_20 | 22 25 40.6 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **435B** | **Jarrell** | **100.42** | **49** | IAMs_20 | IAMs_20 | 22 22 17.9 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **MIAR** | **Mount Ida** | **100.75** | **44** | IAMs_20 | IAMs_20 | 22 21 10.1 | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **101.26** | **44** | IAMs_20 | IAMs_20 | 22 26 10.5 | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **NATX** | **Nacogdoches** | **101.80** | **47** | IAMs_20 | IAMs_20 | 22 19 59.3 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **VSL** | **Villasalto** | **102.61** | **325** | IAMs_20 | IAMs_20 | 22 32 00.9 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **M53A** | **WI Miller and** | **103.11** | **32** | IAMs_20 | IAMs_20 | 22 26 44.7 | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **LONY** | **Lake Ozonia** | **103.26** | **26** | IAMs_20 | IAMs_20 | 22 25 38.5 | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **PLAL** | **Pickwick Lake** | **103.84** | **41** | IAMs_20 | IAMs_20 | 22 27 10.6 | | |
| | comp=Z,1μm,18.0s | | | | | | | |
| **VBMS** | **Vicksburg** | **104.20** | **44** | IAMs_20 | IAMs_20 | 22 23 05.6 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **TZTN** | **Tazewell** | **105.31** | **37** | IAMs_20 | IAMs_20 | 22 29 56.2 | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **UNM** | **Universidad Na** | **105.83** | **60** | IAMs_20 | IAMs_20 | 22 20 52.1 | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **105.83** | **42** | IAMs_20 | IAMs_20 | 22 25 13.3 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **106.23** | **25** | IAMs_20 | IAMs_20 | 22 28 57.5 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **PAL** | **Palisades** | **106.52** | **28** | IAMs_20 | IAMs_20 | 22 28 18.1 | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **108.77** | **333** | PKiKP | **PKiKP** | **21 45 10.0** | **+0.3** | |
| | comp=Z,0.9nm,1.0s,baz=4.2,slow=5.3,SNR=2.7 | | | | | | | |
| ESDC | | | | PKKP | **PKKPdf** | **21 56 31.7** | **-0.8** | |
| | comp=Z,1.3nm,0.9s,baz=213,slow=4.4,SNR=6.6 | | | | | | | |
| **CNNC** | **Cliffs of the** | **109.29** | **34** | IAMs_20 | IAMs_20 | 22 27 47.3 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **NHSC** | **New Hope** | **109.72** | **37** | IAMs_20 | IAMs_20 | 22 32 49.8 | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **DWPF** | **Disney Wildern** | **112.69** | **42** | IAMs_20 | IAMs_20 | 22 34 22.1 | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **116.85** | **59** | IAMs_20 | IAMs_20 | 22 30 07.1 | | |
| | comp=Z,912nm,21.0s | | | | | | | |
| **SYO** | **Syowa Base** | **117.33** | **203** | *i* Pdiff | **Pdif** | **21 41 42.6** | **+0.7** | |
| **SYO** | **Syowa Base** | **117.33** | **203** | *i* pPdiff | pPdif | 21 41 50.6 | -3.5 | |
| **LBTB** | **Lobatse** | **123.14** | **255** | PKIKP | **PKiKP** | **21 45 37.9** | **+0.1** | |
| **LBTB** | **Lobatse** | **123.14** | **255** | PKPdf | **PKiKP** | **21 45 37.9** | **+0.1** | |
| **BOSA** | **Boshof** | **124.23** | **251** | PKP | **PKPdf** | **21 45 39.6** | **0.0** | |
| | comp=Z,11nm,1.0s,baz=38,slow=1.6,SNR=8.4 | | | | | | | |
| **BOSA** | **Boshof** | **124.23** | **251** | PKPdf | **PKPdf** | **21 45 37.9** | **-1.6** | |
| **TORD** | **Torodi Ar. Bea** | **126.35** | **310** | PKP | **PKPdf** | **21 45 43.6** | **-0.3** | |
| | comp=Z,14nm,1.0s,baz=12,slow=2.0,SNR=46 | | | | | | | |
| **TSUM** | **Tsumeb** | **128.81** | **265** | PKPdf | **PKPdf** | **21 45 47.5** | **-1.1** | |
| **SNAA** | **Sanae** | **129.01** | **193** | PKPdf | **PKiKP** | **21 45 48.1** | **+0.1** | |
| **SNAA** | **Sanae** | **129.01** | **193** | PKiKP | **PKPdf** | **21 45 47.0** | **-0.3** | |
| SNAA | | | | MLR | MLR | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| **SNAA** | **Sanae** | **129.01** | **193** | PKPdf | **PKPdf** | **21 45 47.0** | **-0.3** | |
| SNAA | | | | IAMs_20 | IAMs_20 | 22 39 19.0 | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| **KOWA** | **Kowa** | **129.17** | **316** | PKPdf | **PKPdf** | **21 45 46.9** | **-2.4** | |
| **SJCC** | **San Jacinto, C** | **129.79** | **51** | *e*P | **PKPdf** | **21 45 49.8** | **-0.8** | |
| **VNA2** | **Neumayer--Watz** | **130.52** | **193** | PKPdf | **PKiKP** | **21 45 51.5** | **+0.5** | |
| | baz=107,slow=2.0 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **130.69** | **192** | PKPdf | **PKiKP** | **21 45 51.5** | **+0.1** | |
| **UREC** | **San Jos de Ur** | **130.98** | **54** | *e*P | PKPpre | 21 45 41.4 | | |
| **LLSC** | **La Loma 6 Bece** | **131.24** | **50** | *e*P | **PKPdf** | **21 45 52.6** | **-0.6** | |
| **ZARC** | **Zaragoza, Cauc** | **131.65** | **53** | *e*P | **PKiKP** | **21 45 55.1** | **+0.1** | |
| **CBOC** | **Ciudad Bolivar** | **131.87** | **56** | *e*P | **PKiKP** | **21 45 55.7** | **+0.1** | |
| **OCAC** | **Ocana** | **132.25** | **51** | *e*P | **PKiKP** | **21 45 56.8** | **+0.4** | |
| **PLMC** | **San Jos del P** | **132.27** | **57** | *e*P | **PKiKP** | **21 45 56.5** | **+0.2** | |
| **PTBC** | **PUERTO BERRIO** | **132.58** | **54** | *e*P | PKPdf | 21 45 45.9 | -10 | |
| **BRRC** | **Barranca, Sant** | **132.75** | **53** | *e*P | **PKPdf** | **21 45 55.3** | **-0.7** | |
| **GUY2C** | **Guyana, Caldas** | **132.77** | **56** | *e*P | **PKPdf** | **21 45 49.4** | **-7.4** | |
| **YOTC** | **Yotoco, Valle** | **132.81** | **58** | *e*P | **PKPdf** | **21 45 53.6** | **-2.7** | |
| **PAC1** | **Pacto, Paraso** | **133.07** | **64** | *e*P | **PKPdf** | **21 45 55.7** | **-1.2** | |
| **BBAC** | **Balboa, Cauca** | **133.30** | **61** | *e*P | **PKPdf** | **21 45 53.8** | **-3.6** | |
| **PAMC** | **Pamplona, Colo** | **133.32** | **52** | *e*P | PKPdf | 21 45 48.6 | -9.2 | |
| **OTAV** | **Otavalo** | **133.37** | **64** | IAMs_20 | IAMs_20 | 22 41 33.5 | | |
| | comp=Z,661nm,20.0s | | | | | | | |
| **OTAV** | **Otavalo** | **133.37** | **64** | *e*P | PKPpre | 21 45 47.1 | | |
| **POPC** | **Popayan, Colom** | **133.44** | **60** | *e*P | **PKPdf** | **21 45 54.6** | **-3.1** | |
| **SPBC** | **San Pablo de B** | **133.46** | **55** | *e*P | **PKiKP** | **21 45 58.5** | **-0.3** | |
| **BARC** | **Barichara** | **133.48** | **53** | *e*P | **PKPdf** | **21 45 50.9** | **-6.8** | |
| **SDV** | **Santo Domingo** | **133.66** | **48** | PKPdf | **PKPdf** | **21 45 57.1** | **-0.9** | |
| **SDV** | **Santo Domingo** | **133.66** | **48** | IAMs_20 | IAMs_20 | 22 41 20.5 | | |
| | comp=Z,845nm,21.0s | | | | | | | |
| **SDV** | **Santo Domingo** | **133.66** | **48** | *e*P | **PKPdf** | **21 45 58.0** | **0.0** | |
| **GCUF** | **Volcan Galeras** | **133.69** | **62** | *e*P | **PKiKP** | **21 46 00.2** | **+0.5** | |
| **ORTC** | **Ortega, Tolima** | **133.70** | **57** | *e*P | PKPpre | 21 45 47.9 | | |
| **SOTA** | **Rioblanco** | **133.74** | **61** | *e*P | **PKPdf** | **21 45 54.7** | **-3.9** | |
| **PCON** | **Cinco Dias** | **133.79** | **60** | *e*P | **PKPdf** | **21 45 57.1** | **-1.7** | |
| **ROSC** | **El Rosal** | **133.81** | **56** | PKP | **PKiKP** | **21 45 59.5** | **-0.4** | |
| | comp=Z,3.3nm,0.4s,baz=96,slow=13,SNR=5.2 | | | | | | | |
| **SOCV** | **Socops** | **133.94** | **49** | *e*P | **PKPdf** | **21 45 56.4** | **-2.0** | |
| **RUSC** | **La Rusia** | **134.03** | **53** | *e*P | **PKPdf** | **21 45 55.0** | **-4.1** | |
| **CHIC** | **Chingaza** | **134.38** | **55** | *e*P | **PKPdf** | **21 46 00.3** | **+0.6** | |
| **GARC** | **Garzon, Huila** | **134.59** | **60** | *e*P | **PKPdf** | **21 45 58.5** | **-1.4** | |
| **VILC** | **Villavicencio,** | **134.75** | **56** | *e*P | **PKPdf** | **21 45 57.5** | **-2.5** | |
| **FLOC** | **Florencia** | **134.83** | **60** | *e*P | **PKPdf** | **21 46 00.7** | **+0.6** | |
| **BIRV** | **Birongo** | **135.28** | **42** | PKPdf | **PKPdf** | **21 45 59.8** | **-1.0** | |
| **DBIC** | **Dimbokro** | **135.47** | **310** | PKP | **PKPdf** | **21 46 01.8** | **+0.6** | |
| | comp=Z,8.4nm,1.0s,baz=53,slow=4.0,SNR=7.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **135.47** | **310** | PKPdf | **PKPdf** | **21 45 59.7** | **-1.5** | |
| **TIC** | **Toumodi** | **135.60** | **310** | *e*PKP1 | **PKiKP** | **21 46 02.2** | **-0.8** | |
| **KIC** | **Kosan Boka** | **135.60** | **310** | *e*PKP1 | **PKiKP** | **21 46 03.2** | **+0.2** | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **ELOV** | **Elorza** | **135.81** | **49** | *e*P | **PKiKP** | **21 46 03.5** | **+0.1** | |
| **LIC** | **Lamto** | **135.90** | **310** | *e*PKP1 | **PKiKP** | **21 46 02.8** | **-0.8** | |
| | comp=Z,64nm,1.1s | | | | | | | |
| **PTLC** | **Puerto Leguiza** | **136.36** | **61** | *e*P | **PKiKP** | **21 46 04.0** | **-0.6** | |
| **CZSB** | **Cruzeiro do Su** | **142.49** | **69** | *e*P | **PKPdf** | **21 46 13.5** | **-0.5** | |
| **COYC** | **Coyhaique** | **145.25** | **136** | PKPdf | **PKPbc** | **21 46 17.5** | **-0.1** | |
| **LC01** | **Cunco** | **147.76** | **125** | PKPdf | **PKPdf** | **21 46 22.3** | **0.0** | |
| **PLCA** | **Paso Flores** | **148.16** | **128** | PKPbc | **PKPbc** | **21 46 27.1** | **+0.8** | |
| | comp=Z,38nm,1.0s,baz=230,slow=3.3,SNR=48 | | | | | | | |
| **PLCA** | **Paso Flores** | **148.16** | **128** | PKPdf | **PKPdf** | **21 46 22.9** | **-0.2** | |
| **PB12** | **IPOC Station P** | **149.03** | **85** | | **PKPdf** | **21 46 24.6** | **-0.5** | |
| **PB10** | **IPOC Station P** | **149.91** | **95** | | **PKPbc** | **21 46 30.7** | **-0.4** | |
| **VA03** | **San Esteban** | **150.05** | **113** | | **PKPbc** | **21 46 31.6** | **+0.2** | |
| **LPAZ** | **La Paz** | **150.26** | **80** | PKPbc | **PKiKP** | **21 46 34.0** | **+0.3** | |
| | comp=Z,50nm,0.8s,baz=4.1,slow=1.1,SNR=69 | | | | | | | |
| **LPAZ** | **La Paz** | **150.26** | **80** | PKIKP | **PKiKP** | **21 46 34.0** | **+0.3** | |
| **LPAZ** | **La Paz** | **150.26** | **80** | *e*P | **PKiKP** | **21 46 34.3** | **+0.6** | |
| **HOPE** | **Hope Point** | **150.35** | **181** | PKIKP | **PKiKP** | **21 46 31.7** | **-0.2** | |
| **HOPE** | **Hope Point** | **150.35** | **181** | | **PKiKP** | **21 46 31.7** | **-0.2** | |
| **CPUP** | **Villa Florida** | **162.09** | **100** | PKP | **PKPdf** | **21 46 42.8** | **+0.6** | |
| | comp=Z,2.9nm,1.0s,baz=260,slow=1.1,SNR=3.1 | | | | | | | |
| CPUP | | | | PKPab | **PKPab** | **21 47 29.5** | **+0.6** | |
| | comp=Z,6.7nm,0.9s,baz=272,slow=6.3,SNR=5.9 | | | | | | | |
| **BDFB** | **Brasilia** | **166.76** | **50** | PKP | **PKPdf** | **21 46 47.5** | **+0.7** | |
| | comp=Z,3.3nm,0.9s,baz=73,slow=5.8,SNR=5.1 | | | | | | | |
| BDFB | | | | PKPab | **PKPab** | **21 47 49.5** | **-0.1** | |
| | comp=Z,7.0nm,0.9s,baz=308,slow=2.5,SNR=3.8 | | | | | | | |

*IDC **21** 21:42:32.5±0.9, 37.°65N×143.°96E, h0km, mb3.8/11, mb1 4.0/17, mb1mx3.7/59, mbtmp3.9/17, ML3.8/5 Error ellipse: s-maj=21.5km s-min=16.0km az=105.0*
*JMA **21** 21:42:36.0±0.2, 37.°79N×143.°76E, h50km, M3.8*
**ISC 21 21:42:37.9±0.8, 37.°76N±0.°05×143.°80E±0.°07, h35km, n39, σ2s9/3s4, mb3.8/11, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **1.92** | **287** | P | **Pn** | **21 43 06.8** | **-1.4** |
| JIKH | | | | S | **Sn** | **21 43 28.9** | **-2.2** |
| **JIO** | **Ouri** | **2.06** | **291** | P | **Pn** | **21 43 08.6** | **-1.3** |
| JIO | | | | *e*S | **Sn** | **21 43 32.4** | **-1.9** |
| **JKMT** | **Kesennumamotoy** | **2.11** | **301** | P | **Pn** | **21 43 09.3** | **-1.4** |
| JKMT | | | | S | **Sn** | **21 43 33.3** | **-2.4** |
| **OFUJ** | **Ofunato** | **2.13** | **309** | P | **Pn** | **21 43 09.4** | **-1.6** |
| OFUJ | | | | *e*S | **Sn** | **21 43 34.3** | **-2.0** |
| **JMK** | **Ichinoseki** | **2.35** | **301** | P | **Pn** | **21 43 12.9** | **-1.1** |
| **JOM** | **Ohasama** | **2.61** | **312** | P | **Pn** | **21 43 16.6** | **-0.9** |
| JOM | | | | *e*S | **Sn** | **21 43 46.9** | **-1.1** |
| **JFT** | **Otama** | **2.76** | **266** | P | **Pn** | **21 43 19.0** | **-0.7** |
| JFT | | | | S | **Sn** | **21 43 51.0** | **-0.8** |
| **JYK** | **Kaneyama** | **2.94** | **294** | P | **Pn** | **21 43 21.7** | **-0.5** |
| JYK | | | | *e*S | **Sn** | **21 43 56.2** | **-0.1** |
| **JANG** | **Nango** | **3.16** | **326** | P | **Pn** | **21 43 23.3** | **-1.9** |
| JANG | | | | S | **Sn** | **21 43 59.6** | **-2.0** |
| **JAW** | **Awa shima** | **3.66** | **282** | P | **Pn** | **21 43 32.3** | **+0.3** |
| **BSO1** | **Boso 1** | **3.85** | **217** | P | **Pn** | **21 43 31.9** | **-2.2** |
| BSO1 | | | | S | **Sn** | **21 44 15.5** | **-2.3** |
| **JOT** | **Ohata** | **4.20** | **330** | *e*S | **Sn** | **21 44 23.9** | **-3.3** |
| **JRY** | **Ryogami san** | **4.29** | **248** | P | **Pn** | **21 43 39.5** | **-1.3** |
| JRY | | | | *e*S | **Sn** | **21 44 26.9** | **-2.8** |
| **JOD2** | **Odawara 2** | **4.54** | **238** | P | **Pn** | **21 43 42.0** | **-2.2** |
| JOD2 | | | | *e*S | **Sn** | **21 44 31.6** | **-4.1** |
| **MJAR** | **Matsushiro Arr** | **4.63** | **256** | Pn | **Pn** | **21 43 45.1** | **-0.3** |
| | 2.1nm,0.3s,baz=100,slow=28,SNR=75 | | | | | | |
| MJAR | | | | Sn | **Sn** | **21 44 41.1** | **+3.2** |
| | baz=95,slow=26,SNR=1.2 | | | | | | |
| **MAT** | **Matsushiro** | **4.63** | **257** | P | **Pn** | **21 43 45.6** | **+0.2** |
| MAT | | | | *e*S | **Sn** | **21 44 38.0** | **+0.1** |
| **JKB** | **Kayabe** | **4.64** | **334** | P | **Pn** | **21 43 45.7** | **+0.2** |
| **JCH** | **Churui** | **4.86** | **356** | P | **Pn** | **21 43 46.5** | **-2.0** |
| JCH | | | | *e*S | **Sn** | **21 44 39.2** | **-4.4** |
| **JHJ2** | **Mitsune** | **5.66** | **216** | P | **Pn** | **21 43 57.7** | **-1.9** |
| **JHJ** | **Hachijo jima 2** | **5.67** | **216** | Pn | **Pn** | **21 43 57.1** | **-2.6** |
| | 24nm,0.3s,baz=339,slow=22,SNR=7.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **21 44 57.5** | **-6.0** |
| | 15nm,0.3s,baz=32,slow=20,SNR=2.1 | | | | | | |
| **NEM2** | **Nemuro 2** | **5.79** | **14** | P | **Pn** | **21 43 57.7** | **-3.6** |
| NEM2 | | | | *e*S | Sn | 21 44 57.9 | -8.6 |
| **ASAJ** | **Asahikawa** | **6.42** | **352** | Pn | **Pn** | **21 44 08.8** | **-1.1** |
| | 5.8nm,0.3s,baz=211,slow=7.4,SNR=23 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **21 45 19.8** | **-2.0** |
| | baz=1.7,slow=30,SNR=1.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.00** | **310** | Pn | **Pn** | **21 45 13.8** | **+1.2** |
| | baz=116,slow=13,SNR=1.5 | | | | | | |
| USRK | | | | Sn | **Sn** | **21 47 16.6** | **+2.2** |
| | baz=104,slow=24,SNR=3.1 | | | | | | |
| **KSRS** | **Korea Array** | **12.60** | **273** | Pn | **Pn** | **21 45 36.6** | **+2.1** |
| | 0.2nm,0.3s,baz=84,slow=14,SNR=6.6 | | | | | | |
| **KLR** | **Kul'dur** | **14.40** | **327** | Pn | **Pn** | **21 45 59.1** | **0.0** |
| | 0.1nm,0.3s,baz=148,slow=15,SNR=3.1 | | | | | | |
| **SEY** | **Seymchan** | **25.75** | **9** | P | **P** | **21 48 05.6** | **+0.7** |
| | 0.6nm,0.5s,baz=233,slow=15,SNR=1.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.95** | **125** | T | T | 22 16 23.1 | |
| | baz=317,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.96** | **125** | T | T | 22 16 26.4 | |
| | baz=317 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.97** | **125** | T | T | 22 16 25.6 | |
| | baz=317,slow=75 | | | | | | |
| **SONM** | **Songino Array** | **28.98** | **302** | P | **P** | **21 48 34.3** | **0.0** |
| | 0.4nm,0.4s,baz=95,slow=7.2,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.84** | **312** | P | **P** | **21 50 34.4** | **+2.0** |
| | 1.5nm,0.5s,baz=87,slow=7.9,SNR=2.6 | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 52 23.0** | **+0.1** |
| | 0.8nm,0.5s,baz=111,slow=3.2,SNR=4.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.52** | **256** | P | **P** | **21 50 39.4** | **+1.1** |
| | 0.7nm,0.5s,baz=45,slow=7.1,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.35** | **302** | P | **P** | **21 50 53.5** | **+0.9** |
| | 1.5nm,0.9s,baz=85,slow=9.9,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **47.86** | **33** | P | **P** | **21 51 12.8** | **+0.8** |
| | 0.4nm,0.7s,baz=245,slow=5.8,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.08** | **190** | P | **P** | **21 52 26.5** | **-1.2** |
| | 2.5nm,0.7s,baz=8.9,slow=7.5,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **61.80** | **190** | P | **P** | **21 52 52.8** | **-0.4** |
| | 0.6nm,0.7s,baz=11,slow=7.6,SNR=7.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.22** | **31** | P | **P** | **21 52 55.7** | **+0.1** |
| | 0.1nm,0.4s,baz=269,slow=7.4,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **69.05** | **333** | P | **P** | **21 53 40.1** | **+0.4** |
| | 1.6nm,0.8s,baz=39,slow=12,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.87** | **323** | P | **P** | **21 54 15.3** | **+0.6** |
| | 0.4nm,0.4s,baz=44,slow=5.9,SNR=8.6 | | | | | | |

*IDC **21** 21:55:58.4±3.1, 21.°30N×121.°30E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.3/54, mbtmp3.5/3, Error ellipse: s-maj=256.3km s-min=29.6km az=60.0*
*TAP **21** 21:56:02.4, 21.°12N×119.°96E, h75km±1km, ML3.7, D*
**ISC 21 21:56:00.8±2.0, 21.°04N±0.°07×119.°87E±0.°06, h23km±14km, n60, σ0s96/97, mb3.6/3, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWK1** | **Hengchun** | **1.25** | **44** | *i* P | **Pb** | **21 56 23.4** | **-0.3** |
| | baz=44 | | | | | | |
| TWK1 | | | | *i* S | **Sn** | **21 56 38.8** | **-0.2** |
| | baz=44 | | | | | | |
| **TWKBT** | **Hengchun** | **1.25** | **44** | P | **Pb** | **21 56 23.3** | **-0.4** |
| | baz=44 | | | | | | |
| TWKBT | | | | S | **Sn** | **21 56 38.9** | **-0.2** |
| | baz=44 | | | | | | |
| **HEN** | **Hengchun** | **1.25** | **40** | P | **Pb** | **21 56 23.6** | **-0.2** |
| | baz=47 | | | | | | |
| HEN | | | | S | **Sb** | **21 56 39.6** | **+0.1** |
| | baz=47 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.28** | **48** | *i* P | **Pn** | **21 56 23.1** | **-0.2** |
| | baz=47 | | | | | | |
| TSEB | | | | *i* S | **Sn** | **21 56 39.5** | **-0.3** |
| | baz=47 | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.33** | **43** | P | **Pb** | **21 56 24.3** | **-0.7** |
| | baz=42 | | | | | | |
| SMST | | | | S | **Sn** | **21 56 40.8** | **-0.1** |
| | baz=42 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.38** | **19** | *e*P | **Pb** | **21 56 25.7** | **-0.1** |
| | baz=17 | | | | | | |
| TWP | | | | *e*S | **Sb** | **21 56 43.5** | **+0.5** |
| | baz=17 | | | | | | |
| **WLCH** | **Liuqiu** | **1.39** | **20** | *i* P | **Pb** | **21 56 26.6** | **+0.5** |
| | baz=18 | | | | | | |
| WLCH | | | | *i* S | **Sb** | **21 56 44.9** | **+1.6** |
| | baz=18 | | | | | | |
| **SLIU** | **Shizi** | **1.45** | **36** | *i* P | **Pb** | **21 56 26.2** | **-1.0** |
| | baz=35 | | | | | | |
| SLIU | | | | *e*S | **Sn** | **21 56 44.2** | **+0.2** |
| | baz=35 | | | | | | |
| **SCZT** | **Fangliau** | **1.50** | **28** | *i* P | **Pb** | **21 56 26.7** | **-1.2** |
| | baz=36 | | | | | | |
| SCZT | | | | *i* S | **Sn** | **21 56 44.5** | **-0.5** |
| | baz=36 | | | | | | |
| **SSPT** | **Xinbi** | **1.57** | **24** | *e*P | **Pb** | **21 56 28.4** | **-0.9** |
| | baz=33 | | | | | | |
| SSPT | | | | S | **Sn** | **21 56 47.1** | **+0.1** |
| | baz=33 | | | | | | |
| **TAWH** | **Dawu Township** | **1.60** | **36** | *i* P | **Pb** | **21 56 28.2** | **-1.5** |
| | baz=42 | | | | | | |
| TAWH | | | | *i* S | **Sn** | **21 56 47.0** | **-0.7** |
| | baz=42 | | | | | | |
| **TAW** | **Tawu** | **1.62** | **36** | *i* P | **Pb** | **21 56 28.5** | **-1.6** |
| | baz=42 | | | | | | |
| TAW | | | | *i* S | **Sn** | **21 56 47.5** | **-0.6** |
| | baz=42 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.71** | **24** | P | **Pn** | **21 56 29.5** | **+0.2** |
| | baz=31 | | | | | | |
| MASBT | | | | S | **Sn** | **21 56 49.9** | **-0.6** |
| | baz=31 | | | | | | |
| **TSMG** | **Majia** | **1.81** | **23** | *i* P | **Pn** | **21 56 30.9** | **+0.4** |
| | baz=22 | | | | | | |
| TSMG | | | | *i* S | **Sn** | **21 56 52.0** | **-0.7** |
| | baz=22 | | | | | | |
| **SSD** | **Sandimen** | **1.84** | **23** | *i* P | **Pn** | **21 56 31.5** | **+0.6** |
| | baz=21 | | | | | | |
| SSD | | | | *i* S | **Sn** | **21 56 52.3** | **-1.2** |
| | baz=21 | | | | | | |
| **TWM1** | **Shoushan** | **1.84** | **16** | *i* P | **Pb** | **21 56 33.1** | **-0.8** |
| | baz=5.0 | | | | | | |
| TWM1 | | | | *i* S | **Sb** | **21 56 56.9** | **+0.4** |
| | baz=5.0 | | | | | | |
| **LAY** | **Lan-yu** | **1.85** | **57** | P | **Pb** | **21 56 34.3** | **+0.3** |
| | baz=58 | | | | | | |
| **TWG** | **Pinlang** | **2.09** | **32** | *i* P | **Pn** | **21 56 35.0** | **+0.5** |
| | baz=42 | | | | | | |
| **TWGBT** | **Beinan** | **2.09** | **32** | *i* P | **Pn** | **21 56 34.9** | **+0.5** |
| | baz=42 | | | | | | |
| **SGST** | **Jiashian** | **2.13** | **18** | *i* P | **Pn** | **21 56 35.0** | **-0.1** |
| | baz=17 | | | | | | |
| SGST | | | | *i* S | **Sn** | **21 56 59.9** | **-1.0** |
| | baz=17 | | | | | | |
| **LONT** | **Longtian** | **2.19** | **32** | *i* P | **Pn** | **21 56 36.1** | **+0.2** |
| | baz=31 | | | | | | |
| LONT | | | | *i* S | **Sn** | **21 57 02.6** | **+0.3** |
| | baz=31 | | | | | | |
| **VCHM** | **Qimei** | **2.19** | **349** | *i* P | **Pn** | **21 56 36.8** | **+1.0** |
| | baz=347 | | | | | | |
| VCHM | | | | *i* S | **Sn** | **21 57 02.0** | **-0.2** |
| | baz=347 | | | | | | |
| **LDUT** | **Ludao** | **2.20** | **42** | *i* P | **Pn** | **21 56 36.0** | **+0.1** |
| | baz=42 | | | | | | |
| LDUT | | | | *i* S | **Sn** | **21 57 00.8** | **-1.6** |
| | baz=42 | | | | | | |
| **WDGT** | **Dungji** | **2.21** | **355** | P | **Pb** | **21 56 37.5** | **-2.7** |
| | baz=353 | | | | | | |
| **CHN1** | **Nanshi** | **2.22** | **16** | S | **Sn** | **21 57 02.9** | **0.0** |
| | baz=14 | | | | | | |
| **STYH** | **Taoyuan** | **2.28** | **21** | *i* P | **Pn** | **21 56 38.0** | **+1.0** |
| | baz=11 | | | | | | |
| STYH | | | | *e*S | **Sn** | **21 57 04.3** | **-0.1** |
| | baz=11 | | | | | | |
| **EDH** | **Donghe** | **2.34** | **34** | *i* P | **Pn** | **21 56 38.1** | **+0.2** |
| | baz=34 | | | | | | |
| EDH | | | | *i* S | **Sn** | **21 57 06.0** | **+0.2** |
| | baz=34 | | | | | | |
| **ELDTW** | **Lidau** | **2.39** | **26** | *i* P | **Pn** | **21 56 39.6** | **+1.0** |
| | baz=25 | | | | | | |
| **CHKT** | **Chengkung** | **2.47** | **34** | *i* P | **Pn** | **21 56 40.5** | **+0.8** |
| | baz=33 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.47** | **354** | P | **Pn** | **21 56 41.1** | **+1.4** |
| | baz=352 | | | | | | |
| PHUB | | | | S | **Sn** | **21 57 08.2** | **-1.0** |
| | baz=352 | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.49** | **8** | *i* P | **Pn** | **21 56 40.4** | **+0.5** |
| | baz=6.0 | | | | | | |
| WSL | | | | *i* S | **Sn** | **21 57 09.2** | **-0.4** |
| | baz=6.0 | | | | | | |
| **FULB** | **Fuli** | **2.52** | **31** | *i* P | **Pn** | **21 56 41.6** | **+1.2** |
| | baz=40 | | | | | | |
| **ALS** | **Alishan** | **2.60** | **19** | *i* P | **Pn** | **21 56 42.8** | **+1.0** |
| | baz=10.0 | | | | | | |
| **YUS** | **Yu-Shan** | **2.63** | **22** | P | **Pn** | **21 56 43.5** | **+1.1** |
| | baz=13 | | | | | | |
| **WTK** | **Tuku** | **2.68** | **10** | *i* P | **Pn** | **21 56 42.7** | **+0.2** |
| WTK | | | | *i* S | **Sn** | **21 57 13.0** | **-1.2** |
| **YULB** | **Yu-li** | **2.69** | **29** | P | **Pn** | **21 56 43.3** | **+0.6** |
| | baz=29 | | | | | | |
| YULB | | | | S | **Sn** | **21 57 13.9** | **-0.6** |
| | baz=29 | | | | | | |
| **WDLH** | **Douliu** | **2.71** | **13** | *i* P | **Pn** | **21 56 43.6** | **+0.8** |
| | baz=12 | | | | | | |
| WDLH | | | | *i* S | **Sn** | **21 57 14.0** | **-0.9** |
| | baz=12 | | | | | | |
| **EHY** | **Hungye** | **2.80** | **28** | *i* P | **Pn** | **21 56 45.1** | **+0.9** |
| | baz=19 | | | | | | |
| EHY | | | | *i* S | **Sn** | **21 57 16.8** | **-0.4** |
| | baz=19 | | | | | | |
| **HGSD** | **Ruisui** | **2.83** | **30** | P | **Pn** | **21 56 46.2** | **+1.5** |
| | baz=20 | | | | | | |
| HGSD | | | | *i* S | **Sn** | **21 57 18.8** | **+0.8** |
| | baz=20 | | | | | | |
| **SSLB** | **Suanglung** | **2.91** | **20** | *i* P | **Pn** | **21 56 46.5** | **+0.7** |
| | baz=19 | | | | | | |
| SSLB | | | | *i* S | **Sn** | **21 57 19.3** | **-0.8** |
| | baz=19 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.98** | **18** | *i* P | **Pn** | **21 56 48.0** | **+1.2** |
| | baz=18 | | | | | | |
| **TYC** | **Yuchr** | **2.99** | **18** | *i* P | **Pn** | **21 56 48.3** | **+1.5** |
| | baz=17 | | | | | | |
| TYC | | | | *i* S | **Sn** | **21 57 21.6** | **-0.3** |
| | baz=17 | | | | | | |
| **WCS** | **Beigang Elemen** | **3.15** | **18** | P | **Pn** | **21 56 49.9** | **+0.9** |
| | baz=17 | | | | | | |
| WCS | | | | S | **Sn** | **21 57 25.

comp=Z,2.0nm,0.8s
**SONM Songino Array 46.14 10 P P 22 24 48.0 +1.5**
comp=Z,0.6nm,0.7s,baz=192,slow=7.8,SNR=6.3
**SONM Songino Array 46.14 10 P P 22 24 46.4 -0.1**
SONM IAmb IAmb 22 24 54.0
comp=Z,1.1nm,1.0s
**ZALV Zalesovo Beam 52.00 352 P P 22 25 28.8 -2.4**
comp=Z,0.6nm,0.4s,baz=165,slow=6.2,SNR=4.5
**ZALV Zalesovo Beam 52.00 352 P P 22 25 31.5 +0.4**
**STKA Stephens Creek 55.57 132 P P 22 26 01.3 +3.6**
comp=Z,1.0nm,0.6s,baz=325,slow=14,SNR=3.6

*IDC **21** 22:21:19.3±0.6,29˚.40S×68˚.36W,h0km,mb4.3/10,*
*mb1 4.3/15,mb1mx4.2/26,mbtmp4.1/15,ML3.8/5,MS3.3/3,*
*Ms1 3.4/3,ms1mx3.2/54,Error ellipse: s-maj=19.6km*
*s-min=17.1km az=79.0*
*SJA **21** 22:21:23.2±0.7,29˚.34S×68˚.33W,h14km±2km,ML4.4,*
*MW4.1*
*NEIC **21** 22:21:24.9±1.7,29˚.28S±0˚.05×68˚.22W±0˚.06,h22km±4km,*
*Mwr4.0/13,Md4.0(SJA),Error ellipse: s-maj=7.6km*
*s-min=6.3km az=48.0*
*NEIC **21** 22:21:25.2,29˚.28S×68˚.22W,h24km,Moment Tensor*
*Solution. Moment tensor: Scale 10^15^Nm; Mrr0.81;*
*Mθθ-0.39; Mϕϕ-0.42; Mrθ0.21; Mrϕ-0.69; Mθr-0.77; Fault*
*plane solution: M0 1.27000×10^15^ NP1:φs193.59000˚,*
*δ65.23000˚,λ55.48000˚. NP2:φs72.24000˚,δ41.57000˚,*
*λ140.84000˚. Principal axes: T 1.3304, Plg56.0000˚,*
*Azm58.0000˚; N -0.1375, Plg31.0000˚, Azm210.0000˚; P*
*-1.1929, Plg13.0000˚, Azm308.0000˚;*
*GUC **21** 22:21:25.3±0.7,29˚.24S×68˚.37W,h18km±6km,ML4.2*
**ISC 21 22:21:24.5±1.0,29˚.26S±0˚.02×68˚.21W±0˚.03,h29km±7km,**
**n109,σ1s70/138,mb4.2/10,3C-2D,San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VCA** | **Vinchina** | **0.52** | **0** | ⇑*iP* | | **Pb** | **22 21 34.8** | **-0.6** |
| VCA | | | | *i* S | | **Sb** | **22 21 42.9** | **+0.1** |
| VCA | | | | IAML | | | 22 21 43.5 | |
| | comp=E,42μm,0.2s | | | | | | | |
| **VCA** | **Vinchina** | **0.52** | **0** | *eP* | | **Pb** | **22 21 35.5** | **+0.1** |
| VCA | | | | IAML | | | 22 21 44.6 | |
| | comp=Z,16μm,0.2s | | | | | | | |
| VCA | | | | *eS* | | **Sn** | **22 21 44.7** | **+0.5** |
| **ACLC** | **CERRO LA CRUZ** | **1.11** | **99** | *eP* | | **Pb** | **22 21 46.0** | **+0.8** |
| ACLC | | | | *eS* | | **Sb** | **22 22 03.9** | **+4.5** |
| ACLC | | | | IAML | | | 22 22 05.8 | |
| | comp=Z,9μm,0.3s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **1.21** | **221** | *eP* | | **Pn** | **22 21 44.0** | **-1.6** |
| **ACDV** | **Cuesta del Vie** | **1.21** | **221** | *eS* | | **Pn** | **22 21 44.0** | **-1.6** |
| **TINO** | **Tinogasta** | **1.32** | **25** | *eP* | | **Pb** | **22 21 50.2** | **+1.5** |
| TINO | | | | *eS* | | **Sn** | **22 22 00.0** | **-3.8** |
| **ACCO** | **Cerro Coronel** | **1.52** | **209** | *eP* | | **Pn** | **22 21 50.0** | **0.0** |
| **APLL** | **PUNTA DE LOS L** | **1.85** | **128** | *eP* | | **Pb** | **22 21 57.4** | **-0.3** |
| **RTLL** | **Cerro Villicun** | **2.08** | **186** | *eP* | | **Pn** | **22 21 58.9** | **+1.5** |
| RTLL | | | | *eS* | | **Sb** | **22 22 26.2** | **-0.7** |
| **LCO** | **Las Campanas** | **2.19** | **276** | Pn | | **Pn** | **22 22 00.3** | **+1.0** |
| LCO | | | | Sn | | **Sn** | **22 22 26.6** | **+1.0** |
| **LCO** | **Las Campanas** | **2.19** | **276** | ⇓*iP* | | **Pn** | **22 22 00.5** | **+1.2** |
| LCO | | | | *i* S | | **Sn** | **22 22 26.8** | **+1.2** |
| **LCO** | **Las Campanas** | **2.19** | **276** | *eP* | | **Pn** | **22 22 00.3** | **+1.0** |
| **ZON** | **Zonda** | **2.31** | **190** | | | **Pn** | **22 22 02.5** | **+1.8** |
| ZON | | | | Sn | | **Sn** | **22 22 29.2** | **+1.0** |
| **ZON** | **Zonda** | **2.31** | **190** | *eP* | | **Pn** | **22 22 02.1** | **+1.4** |
| ZON | | | | *eS* | | **Sn** | **22 22 29.0** | **+0.8** |
| **GO04** | **Tololo Observa** | **2.43** | **247** | | | **Pn** | **22 22 03.6** | **+1.2** |
| GO04 | | | | Sn | | **Sb** | **22 22 34.7** | **-2.6** |
| **GO04** | **Tololo Observa** | **2.43** | **247** | ⇓*iP* | | **Pn** | **22 22 04.4** | **+1.9** |
| GO04 | | | | *i* S | | **Sn** | **22 22 34.4** | **+3.0** |
| **GO04** | **Tololo Observa** | **2.43** | **247** | *eP* | | **Pn** | **22 22 04.0** | **+1.5** |
| GO04 | | | | *eS* | | **Sn** | **22 22 32.0** | **+0.6** |
| **GO03** | **Copiap** | **2.44** | **312** | | | **Pn** | **22 22 04.2** | **+1.7** |
| **GO03** | **Copiap** | **2.44** | **312** | *i* P | | **Pn** | **22 22 04.3** | **+1.8** |
| GO03 | | | | *i* S | | **Sb** | **22 22 35.0** | **-2.4** |
| GO03 | | | | IAML | | | 22 22 37.9 | |
| | comp=N,919nm,0.3s | | | | | | | |
| **GO03** | **Copiap** | **2.44** | **312** | *eP* | | **Pn** | **22 22 04.7** | **+2.3** |
| GO03 | | | | *eS* | | **Sb** | **22 22 36.6** | **-0.8** |
| **AC02** | **Maricunga** | **2.55** | **341** | Pn | | **Pb** | **22 22 08.3** | **-1.6** |
| **AC02** | **Maricunga** | **2.55** | **341** | ⇑*iP* | | **Pb** | **22 22 08.6** | **-1.2** |
| AC02 | | | | *eS* | | **Sb** | **22 22 42.9** | **+1.9** |
| AC02 | | | | IAML | | | 22 22 49.0 | |
| | comp=N,729nm,0.6s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.61** | **186** | *eP* | | **Pn** | **22 22 06.2** | **+1.5** |
| RTCV | | | | *eS* | | **Sn** | **22 22 37.5** | **+2.0** |
| **CO03** | **El Pedregal** | **2.67** | **233** | | | **Pn** | **22 22 07.5** | **+2.0** |
| **CO03** | **El Pedregal** | **2.67** | **233** | *eP* | | **Pn** | **22 22 08.2** | **+2.6** |
| CO03 | | | | *i* S | | **Sn** | **22 22 40.7** | **+3.8** |
| CO03 | | | | IAML | | | 22 22 53.9 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **CO05** | **La Serena** | **2.72** | **255** | | | **Pn** | **22 22 07.5** | **+1.3** |
| **CO05** | **La Serena** | **2.72** | **255** | *eP* | | **Pn** | **22 22 07.9** | **+1.7** |
| CO05 | | | | *eS* | | **Sn** | **22 22 40.7** | **+2.5** |
| CO05 | | | | IAML | | | 22 22 55.3 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.73** | **292** | | | **Pn** | **22 22 07.2** | **+0.8** |
| **AC04** | **Llanos de Chal** | **2.73** | **292** | *eP* | | **Pn** | **22 22 07.3** | **+1.0** |
| AC04 | | | | *eS* | | **Sn** | **22 22 40.8** | **+2.4** |
| AC04 | | | | IAML | | | 22 22 52.8 | |
| | comp=E,665nm,0.5s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.73** | **292** | *eP* | | **Pn** | **22 22 08.2** | **+1.9** |
| AC04 | | | | *eS* | | **Sb** | **22 22 44.3** | **-1.3** |
| **CO02** | **Combarbal** | **3.10** | **231** | Pn | | **Pn** | **22 22 12.7** | **+1.2** |
| **CO02** | **Combarbal** | **3.10** | **231** | ⇑*iP* | | **Pn** | **22 22 13.1** | **+1.6** |
| CO02 | | | | *i* S | | **Sn** | **22 22 51.3** | **+3.7** |
| **CO02** | **Combarbal** | **3.10** | **231** | *eP* | | **Pn** | **22 22 13.2** | **+1.6** |
| CO02 | | | | *eS* | | **Sn** | **22 22 50.5** | **+2.9** |
| CO02 | | | | IAML | | | 22 22 57.6 | |
| | comp=Z,766nm,0.4s | | | | | | | |
| **AUSP** | **Uspallata** | **3.12** | **199** | *eP* | | **Pn** | **22 22 14.6** | **+2.5** |
| AUSP | | | | *eS* | | **Sn** | **22 22 52.0** | **+3.5** |
| **CO06** | **Fray Jorge** | **3.29** | **244** | | | **Pn** | **22 22 14.1** | **0.0** |
| **CO06** | **Fray Jorge** | **3.29** | **244** | *eP* | | **Pn** | **22 22 14.5** | **+0.4** |
| CO06 | | | | IAML | | | 22 23 00.8 | |
| | comp=N,998nm,0.6s | | | | | | | |
| **ASAL** | **Salagasta** | **3.36** | **189** | *eP* | | **Pn** | **22 22 17.0** | **+1.8** |
| ASAL | | | | *eS* | | **Sn** | **22 22 56.5** | **+2.3** |
| ASAL | | | | *eS* | | **Sb** | **22 23 00.0** | **-4.0** |
| **FSA** | **Cafayete** | **3.71** | **33** | *eP* | | **Pb** | **22 22 25.3** | **-4.1** |
| **TCA** | **Tantí** | **3.75** | **124** | *eP* | | **Pn** | **22 22 24.4** | **+4.0** |
| TCA | | | | *eS* | | **Sn** | **22 23 04.0** | **+0.3** |
| TCA | | | | *eS* | | **Sb** | **22 23 09.6** | **-5.4** |
| TCA | | | | IAML | | | 22 23 29.3 | |
| | comp=Z,765nm,0.6s | | | | | | | |
| **AAGR** | **Agrelo** | **3.85** | **188** | *eP* | | **Pn** | **22 22 24.3** | **+2.4** |
| AAGR | | | | *eS* | | Sb | 22 23 29.5 | +11 |
| **VA03** | **San Esteban** | **4.03** | **209** | | | **Pn** | **22 22 25.3** | **+1.0** |
| **VA03** | **San Esteban** | **4.03** | **209** | *eP* | | **Pn** | **22 22 26.4** | **+2.0** |
| **VA06** | **Catapilco** | **4.23** | **218** | | | **Pn** | **22 22 27.3** | **+0.3** |
| **ROCH** | **El Roble** | **4.41** | **212** | *eP* | | **Pn** | **22 22 30.6** | **+0.9** |
| **PEL** | **Peldehue** | **4.42** | **208** | | | **Pn** | **22 22 30.8** | **+1.2** |
| **ROC1** | **El Roble** | **4.42** | **212** | | | **Pn** | **22 22 29.1** | **-0.7** |
| **MT05** | **Renca** | **4.65** | **207** | | | **Pn** | **22 22 33.9** | **+1.0** |
| **MT03** | **Universidad Ad** | **4.66** | **204** | | | **Pn** | **22 22 33.9** | **+1.0** |
| **MT02** | **Curacav** | **4.71** | **211** | | | **Pn** | **22 22 34.0** | **+0.4** |
| **VA01** | **Torpederas** | **4.77** | **217** | | | **Pn** | **22 22 34.6** | **+0.2** |
| **LMEL** | **Las Melosas** | **4.88** | **200** | | | **Pn** | **22 22 37.8** | **+1.7** |
| **PB14** | **IPOC Station P** | **5.01** | **336** | | | **Pn** | **22 22 40.0** | **+1.9** |
| **MT09** | **Talagante** | **5.09** | **207** | | | **Pn** | **22 22 39.0** | **+0.1** |
| **BO04** | **La Punta** | **5.14** | **203** | | | **Pn** | **22 22 40.5** | **+0.9** |
| **VA05** | **Santo Domingo** | **5.26** | **213** | | | **Pn** | **22 22 40.7** | **-0.5** |
| **MT01** | **Popeta** | **5.27** | **209** | | | **Pn** | **22 22 41.0** | **-0.4** |
| **BO01** | **Tunca** | **5.67** | **205** | Pn | | **Pn** | **22 22 46.7** | **-0.1** |
| **BO02** | **Sierra Bellavi** | **5.93** | **201** | | | **Pn** | **22 22 51.0** | **+0.5** |
| **PB10** | **IPOC Station P** | **6.10** | **339** | Pn | | **Pn** | **22 22 54.0** | **+1.3** |
| **PB15** | **IPOC Station P** | **6.13** | **349** | | | **Pn** | **22 22 54.7** | **+1.3** |
| **GO05** | **Huala** | **6.54** | **208** | Pn | | **Pn** | **22 22 57.5** | **-1.3** |
| **PB06** | **IPOC Station P** | **6.64** | **349** | | | **Pn** | **22 23 01.3** | **+1.0** |
| **LVC** | **Limon Verde** | **6.65** | **354** | Pn | | **Pn** | **22 23 02.1** | **+1.4** |
| | comp=Z,4.5nm,0.3s,baz=161,slow=6.3,SNR=29 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **22 24 19.0** | **+3.3** |
| | comp=Z,3.4nm,0.3s,baz=149,slow=20,SNR=1.2 | | | | | | | |
| LVC | | | | Lg | | Lg | 22 24 52.7 | |
| | comp=Z,6.0nm,0.3s,baz=128,slow=21,SNR=3.3 | | | | | | | |
| **LVC** | **Limon Verde** | **6.65** | **354** | | | **Pn** | **22 23 02.5** | **+1.9** |
| **PB04** | **IPOC Station P** | **7.12** | **345** | | | **Pn** | **22 23 06.7** | **-0.2** |
| **PB03** | **IPOC Station P** | **7.32** | **349** | | | **Pn** | **22 23 09.3** | **-0.3** |
| **PB09** | **IPOC Station P** | **7.49** | **353** | | | **Pn** | **22 23 12.7** | **+0.7** |
| **PB07** | **IPOC Station P** | **7.65** | **348** | | | **Pn** | **22 23 13.7** | **-0.6** |
| **PB02** | **IPOC Station P** | **8.05** | **349** | | | **Pn** | **22 23 18.9** | **-0.8** |
| **PB01** | **IPOC Station P** | **8.26** | **352** | | | **Pn** | **22 23 21.7** | **-0.8** |
| **CPUP** | **Villa Florida** | **10.06** | **76** | Pn | | **Pn** | **22 23 48.4** | **+1.3** |
| | comp=Z,1.4nm,0.3s,baz=244,slow=12,SNR=11 | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **22 25 38.5** | **-0.6** |
| | comp=Z,3.8nm,0.3s,baz=168,slow=7.5,SNR=12 | | | | | | | |
| CPUP | | | | Lg | | Lg | 22 26 44.5 | |
| | comp=Z,1.0nm,0.3s,baz=155,slow=19,SNR=1.5 | | | | | | | |
| CPUP | | | | LR | | LR | 22 28 35.8 | |
| | comp=Z,144nm,20.4s,baz=210,slow=43 | | | | | | | |
| **CPUP** | **Villa Florida** | **10.06** | **76** | Pn | | **Pn** | **22 23 47.5** | **+0.4** |
| **LC01** | **Cunco** | **10.08** | **197** | Pn | | **Pn** | **22 23 47.3** | **0.0** |
| **ITQB** | **Itaqui** | **10.11** | **95** | Pn | | **Pn** | **22 23 48.8** | **+1.1** |
| **PLCA** | **Paso Flores** | **11.61** | **189** | Pn | | **Pn** | **22 24 04.4** | **-3.8** |
| | comp=Z,0.1nm,0.3s,baz=342,slow=13,SNR=1.4 | | | | | | | |
| PLCA | | | | LR | | LR | 22 28 03.1 | |
| | comp=Z,236nm,21.9s,baz=339,slow=35 | | | | | | | |
| **PLTB** | **Pedras Altas** | **12.84** | **105** | Pn | | **Pn** | **22 24 25.6** | **+0.6** |
| **LPAZ** | **La Paz** | **12.91** | **0** | Pn | | **Pn** | **22 24 28.6** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=162,slow=20,SNR=1.7 | | | | | | | |
| LPAZ | | | | LR | | LR | 22 30 37.3 | |
| | comp=Z,155nm,21.1s,baz=46,slow=43 | | | | | | | |
| **SIV** | **San Ignacio** | **14.75** | **28** | Pn | | **Pn** | **22 24 50.8** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=204,slow=12,SNR=3.8 | | | | | | | |
| **GO08** | **Villa O'Higgin** | **19.47** | **189** | P | | **Pn** | **22 25 49.9** | **-0.3** |
| **BDFB** | **Brasilia** | **23.02** | **58** | P | | **P** | **22 26 27.5** | **+0.2** |
| | comp=Z,1.0nm,0.4s,baz=248,slow=18,SNR=3.1 | | | | | | | |
| **PTGA** | **Pitinga** | **29.44** | **17** | P | | **P** | **22 27 25.8** | **+0.1** |
| | comp=Z,3.8nm,0.5s,baz=203,slow=10,SNR=8.1 | | | | | | | |
| **SNAA** | **Sanae** | **54.79** | **159** | P | | **P** | **22 30 51.3** | **-0.1** |
| **QSPA** | **South Pole Qui** | **60.96** | **180** | P | | **P** | **22 31 35.3** | **+0.5** |
| **TXAR** | **Lajitas Array** | **67.39** | **327** | P | | **P** | **22 32 17.6** | **+0.3** |
| | comp=Z,0.7nm,0.6s,baz=154,slow=8.7,SNR=11 | | | | | | | |
| **TXAR** | **Lajitas Array** | **67.39** | **327** | P | | **P** | **22 32 17.5** | **+0.2** |
| **DBIC** | **Dimbokro** | **70.54** | **70** | P | | **P** | **22 32 37.9** | **+0.8** |
| | comp=Z,8.2nm,0.6s,baz=246,slow=7.6,SNR=17 | | | | | | | |
| **DBIC** | **Dimbokro** | **70.54** | **70** | P | | **P** | **22 32 37.6** | **+0.5** |
| **BOSA** | **Boshof** | **79.32** | **117** | P | | **P** | **22 33 27.4** | **-0.5** |
| | comp=Z,2.7nm,0.7s,baz=241,slow=4.7,SNR=5.1 | | | | | | | |
| **BOSA** | **Boshof** | **79.32** | **117** | P | | **P** | **22 33 28.1** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **79.48** | **69** | P | | **P** | **22 33 29.3** | **+0.6** |
| | comp=Z,3.9nm,0.8s,baz=262,slow=5.5,SNR=22 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.48** | **69** | P | | **P** | **22 33 29.4** | **+0.7** |
| **PDAR** | **Pinedale Array** | **81.14** | **331** | P | | **P** | **22 33 37.0** | **-0.3** |
| | comp=Z,1.3nm,0.9s,baz=130,slow=6.8,SNR=7.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **81.14** | **331** | P | | **P** | **22 33 37.4** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **82.00** | **323** | P | | **P** | **22 33 41.4** | **-0.5** |
| | comp=Z,0.7nm,0.9s,baz=153,slow=5.0,SNR=3.6 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **82.88** | **343** | P | | **P** | **22 33 45.1** | **-0.8** |
| | comp=Z,3.9nm,0.8s,baz=158,slow=7.2,SNR=3.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.68** | **340** | P | | **P** | **22 34 59.8** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=136,slow=3.9,SNR=6.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **123.24** | **204** | PKP | | **PKPdf** | **22 40 17.8** | **-1.4** |
| | comp=Z,1.1nm,0.8s,baz=160,slow=2.5,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **126.47** | **207** | PKP | | **PKPdf** | **22 40 24.3** | **-1.1** |
| | comp=Z,2.4nm,0.8s,baz=154,slow=1.7,SNR=26 | | | | | | | |
| **WRA** | **Warramunga Arr** | **126.47** | **207** | | | **PKPdf** | **22 40 22.9** | **-2.5** |
| **ARU** | **Arti** | **134.02** | **38** | PKP | | **PKiKP** | **22 40 40.1** | **+0.4** |
| | comp=Z,0.4nm,0.4s,baz=0.8,slow=19,SNR=3.0 | | | | | | | |
| **SEY** | **Seymchan** | **137.39** | **334** | PKP | | **PKPdf** | **22 40 45.1** | **+0.6** |
| | comp=Z,2.2nm,0.9s,baz=53,slow=3.5,SNR=8.7 | | | | | | | |
| **SIJI** | **Sejong** | **144.72** | **215** | PKP | | **PKPab** | **22 40 58.0** | **-0.1** |
| | comp=Z,8.2nm,0.6s,baz=40,slow=4.5,SNR=4.3 | | | | | | | |
| **KAPI** | **Kappang** | **145.07** | **194** | PKP | | **PKPbc** | **22 40 59.2** | **-0.1** |
| | comp=Z,11nm,0.8s,baz=41,slow=0.9,SNR=7.3 | | | | | | | |
| **KAPI** | **Kappang** | **145.07** | **194** | | | **PKPbc** | **22 40 58.9** | **-0.3** |
| **YAK** | **Yakutsk** | **145.17** | **345** | PKPbc | | **PKPbc** | **22 40 56.0** | **-2.1** |
| | comp=Z,5.0nm,0.6s,baz=299,slow=1.8,SNR=4.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **147.17** | **40** | PKPbc | | **PKPdf** | **22 41 02.2** | **0.0** |
| | comp=Z,4.1nm,0.7s,baz=300,slow=3.3,SNR=29 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.49** | **31** | PKPbc | | **PKPbc** | **22 41 08.0** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=305,slow=3.5,SNR=49 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.49** | **31** | PKPdf | | **PKPdf** | **22 41 06.0** | **+1.6** |
| **MKAR** | **Makanchi Array** | **151.15** | **45** | PKPbc | | **PKPbc** | **22 41 14.8** | **+0.1** |
| | comp=Z,4.3nm,0.7s,baz=302,slow=2.2,SNR=54 | | | | | | | |

*IDC **21** 22:29:10.6±1.6,39˚.44N×73˚.30E,h0km,mb3.6/4,*
*mb1 3.5/9,mb1mx3.3/53,mbtmp3.3/9,ML2.8/5,Error*
*ellipse: s-maj=24.0km s-min=16.6km az=139.0*
*KRNET **21** 22:29:11.2±0.1,39˚.49N×73˚.43E,mb3.7*
*ISU **21** 22:29:11,39˚.50N×73˚.50E,h10km*
*SOME **21** 22:29:13.5,39˚.60N×73˚.50E,h5km*
*NNC **21** 22:29:17.8±1.0,39˚.79N×73˚.41E,h0km,mb3.8,mpv3.5,*
*Error ellipse: s-maj=7.8km s-min=4.7km az=178.0*
**ISC 21 22:29:13.6±1.3,39.47N±0.04×73.15E±0.03,h12km±9km,**
**n96,σ2s42/151,mb3.5/4,27C-32D,Tajikistan-Xinjiang**
**border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **1.04** | **271** | ⇓*iP* | | **Pn** | **22 29 35.6** | **+1.3** |
| | baz=70 | | | | | | | |
| DRK | | | | ⇓*iS* | | **Sn** | **22 29 52.4** | **+3.5** |
| | baz=70 | | | | | | | |
| **OHH** | **Osh** | **1.09** | **345** | ⇓*iP* | | **Pg** | **22 29 33.0** | **-1.6** |
| | baz=35 | | | | | | | |
| OHH | | | | ⇓*iS* | | **Sb** | **22 29 49.1** | **+0.5** |
| | baz=35 | | | | | | | |
| **TSTA** | **Tashata** | **1.22** | **335** | *eP* | | **Pb** | **22 29 36.0** | **-0.6** |
| TSTA | | | | *eS* | | **Sn** | **22 29 54.0** | **+1.0** |
| **FRG** | **Fergana** | **1.39** | **311** | *eP* | | **Pb** | **22 29 40.0** | **+0.6** |
| FRG | | | | *eS* | | **Sn** | **22 30 01.0** | **+4.0** |
| **ANR** | **Andizhan** | **1.42** | **335** | *eP* | | **Pb** | **22 29 40.0** | **0.0** |
| ANR | | | | *eS* | | **Sn** | **22 30 02.0** | **+4.2** |
| **BTK** | **Batken** | **1.89** | **289** | *i* P | | **Pg** | **22 29 50.0** | **+0.2** |
| BTK | | | | *i* S | | Sg | 22 30 21.0 | +6.6 |
| **BTK** | **Batken** | **1.89** | **289** | ⇓*iP* | | **Pg** | **22 29 49.1** | **-0.7** |
| | baz=86 | | | | | | | |
| BTK | | | | ⇓*iS* | | **Sg** | **22 30 17.7** | **+3.3** |
| | baz=86 | | | | | | | |
| **MINT** | **Mingtut** | **1.94** | **301** | *eP* | | **Pg** | **22 29 52.0** | **+1.1** |
| MINT | | | | *eS* | | **Sg** | **22 30 21.0** | **+4.9** |
| **GAR** | **Garm** | **2.25** | **259** | ⇑*iP* | | **Pg** | **22 29 55.0** | **-1.7** |
| | baz=59 | | | | | | | |
| GAR | | | | ⇑*iS* | | **Sg** | **22 30 26.4** | **+0.5** |
| | baz=59 | | | | | | | |
| **ARK** | **Arkit** | **2.50** | **339** | *eP* | | **Pn** | **22 29 56.0** | **+1.9** |
| ARK | | | | *eS* | | **Sb** | **22 30 29.0** | **-0.1** |
| **ARK** | **Arkit** | **2.50** | **339** | ⇓*iP* | | **Pn** | **22 29 55.8** | **+1.7** |
| | baz=35 | | | | | | | |
| ARK | | | | ⇓*iS* | | **Sb** | **22 30 28.8** | **-0.3** |
| | baz=35 | | | | | | | |
| **ARLS** | **Aral** | **2.55** | **20** | ⇓*iP* | | **Pn** | **22 29 55.0** | **+0.1** |
| | baz=16 | | | | | | | |
| ARLS | | | | ⇓*iS* | | **Sn** | **22 30 26.2** | **+0.2** |
| | baz=16 | | | | | | | |
| **TRKS** | **Terek-Say** | **2.57** | **324** | ⇑*iP* | | **Pn** | **22 29 56.5** | **+1.4** |
| | baz=20 | | | | | | | |
| TRKS | | | | ⇑*iS* | | **Sb** | **22 30 30.3** | **-0.9** |
| | baz=20 | | | | | | | |
| **AML** | **Almayashu** | **2.69** | **9** | P | | **Pn** | **22 29 58.6** | **+1.6** |
| | SNR=58 | | | | | | | |
| **UCH** | **Uchtor** | **2.94** | **20** | P | | **Pn** | **22 30 01.9** | **+1.3** |
| | SNR=26 | | | | | | | |
| **UCH** | **Uchtor** | **2.94** | **20** | ⇑*iP* | | **Pn** | **22 30 00.5** | **-0.1** |
| | baz=16 | | | | | | | |
| UCH | | | | ⇑*iS* | | **Sn** | **22 30 36.3** | **+0.3** |
| | baz=16 | | | | | | | |
| **CHGR** | **Chuyangaron** | **3.21** | **257** | ⇓*iP* | | **Pb** | **22 30 08.3** | **-2.3** |
| | baz=57 | | | | | | | |
| CHGR | | | | ⇓*iS* | | **Sb** | **22 30 49.6** | **-0.1** |
| | baz=57 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.23** | **8** | P | | **Pn** | **22 30 06.5** | **+2.3** |
| | SNR=20 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.23** | **8** | ⇑*iP* | | **Pn** | **22 30 04.3** | **+0.2** |
| | baz=5.0 | | | | | | | |
| EKS2 | | | | ⇑*iS* | | **Sn** | **22 30 43.7** | **+1.2** |
| | baz=5.0 | | | | | | | |
| **MRKS** | **Merke** | **3.27** | **1** | *eP* | | **Pb** | **22 30 12.0** | **+0.4** |
| | 16nm,0.5s | | | | | | | |
| MRKS | | | | *eS* | | **Sb** | **22 30 53.9** | **+2.4** |
| | 99nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **3.27** | **1** | Pg | | **Pn** | **22 30 08.6** | **+3.8** |
| | 8.0nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 22 30 48.5 | |
| | 99nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.33** | **17** | Pn | | **Pn** | **22 30 07.5** | **+2.0** |
| | 5.0nm,0.3s,baz=216,slow=14,SNR=91 | | | | | | | |
| AAK | | | | Sn | | **Sn** | **22 30 48.7** | **+3.7** |
| | 4.6nm,0.3s,baz=344,slow=19,SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.33** | **17** | P | | **Pn** | **22 30 07.5** | **+2.0** |
| **AAK** | **Ala-Archa** | **3.33** | **17** | ⇑Pn | | **Pn** | **22 30 07.5** | **+2.0** |
| | 9.6nm,0.3s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 22 30 51.9 | |
| | 60nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.33** | **17** | ⇑*iP* | | **Pn** | **22 30 05.4** | **-0.1** |
| | baz=14 | | | | | | | |
| AAK | | | | ⇑*iS* | | **Sn** | **22 30 45.3** | **+0.3** |
| | baz=14 | | | | | | | |
| **KBK** | **Karagaybulak** | **3.46** | **23** | P | | **Pn** | **22 30 09.6** | **+2.1** |
| | SNR=17 | | | | | | | |
| **KBK** | **Karagaybulak** | **3.46** | **23** | ⇑*iP* | | **Pn** | **22 30 07.2** | **-0.2** |
| | baz=19 | | | | | | | |
| KBK | | | | ⇑*iS* | | **Sn** | **22 30 48.1** | **-0.4** |
| | baz=19 | | | | | | | |
| **FRU1** | **Bishkek** | **3.52** | **18** | ⇑*iP* | | **Pn** | **22 30 08.6** | **+0.5** |
| | baz=15 | | | | | | | |
| FRU1 | | | | ⇑*iS* | | **Sn** | **22 30 50.3** | **+0.6** |
| | baz=15 | | | | | | | |
| **ULHL** | **Ulahol** | **3.63** | **39** | P | | **Pn** | **22 30 11.9** | **+2.1** |
| | SNR=6.3 | | | | | | | |
| **ULHL** | **Ulahol** | **3.63** | **39** | ⇓*iP* | | **Pn** | **22 30 09.0** | **-0.8** |
| | baz=37 | | | | | | | |
| ULHL | | | | ⇓*iS* | | **Sn** | **22 30 50.9** | **-1.8** |
| | baz=37 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.68** | **34** | ⇓*iP* | | **Pn** | **22 30 09.8** | **-0.7** |
| | baz=32 | | | | | | | |
| BOOM | | | | ⇓*iS* | | **Sn** | **22 30 52.5** | **-1.4** |
| | baz=32 | | | | | | | |
| **DZA** | **Taraz** | **3.69** | **339** | *eP* | | **Pg** | **22 30 22.0** | **-2.1** |
| | 36nm,0.2s | | | | | | | |
| DZA | | | | *eS* | | **Sg** | **22 31 11.3** | **-0.6** |
| | 99nm,0.5s | | | | | | | |
| **CHMS** | **Chumysh** | **3.73** | **18** | P | | **Pn** | **22 30 12.7** | **+1.7** |
| | SNR=11 | | | | | | | |
| **CHMS** | **Chumysh** | **3.73** | **18** | ⇓*iP* | | **Pn** | **22 30 11.1** | **+0.2** |
| | baz=15 | | | | | | | |
| CHMS | | | | ⇓*iS* | | **Sn** | **22 30 54.6** | **-0.2** |
| | baz=15 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **27** | P | | **Pn** | **22 30 15.0** | **+1.4** |
| | SNR=5.8 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **27** | ⇑Pn | | **Pn** | **22 30 14.5** | **+0.9** |
| | 1.3nm,0.3s | | | | | | | |
| TKM2 | | | | ⇑Pg | | **Pb** | **22 30 21.6** | **-0.9** |
| | 12nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 22 31 10.1 | |
| | 46nm,0.7s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **27** | ⇓*iP* | | **Pn** | **22 30 13.3** | **-0.3** |
| | baz=25 | | | | | | | |
| TKM2 | | | | ⇓*iS* | | **Sn** | **22 30 58.7** | **-0.9** |
| | baz=25 | | | | | | | |
| **CHM** | **Chimkent** | **3.92** | **318** | *eP* | | **Pg** | **22 30 27.1** | **-1.4** |
| | 56nm,0.2s | | | | | | | |
| CHM | | | | *eS* | | **Sg** | **22 31 19.9** | **+0.6** |
| | 165nm,0.3s | | | | | | | |
| **USP** | **Ospenovka** | **3.93** | **15** | P | | **Pn** | **22 30 15.9** | **+2.2** |
| | SNR=11 | | | | | | | |
| **USP** | **Ospenovka** | **3.93** | **15** | ⇑*iP* | | **Pn** | **22 30 14.0** | **+0.3** |
| | baz=12 | | | | | | | |
| USP | | | | ⇑*iS* | | **Sn** | **22 30 59.9** | **+0.2** |
| | baz=12 | | | | | | | |
| **KDJ** | **Kajisay** | **4.05** | **48** | ⇑*iP* | | **Pn** | **22 30 14.4** | **-1.1** |
| | baz=46 | | | | | | | |
| KDJ | | | | ⇑*iS* | | **Sn** | **22 31 00.9** | **-2.1** |
| | baz=46 | | | | | | | |
| **SGDS** | **Sogindy** | **4.13** | **15** | *eP* | | **Pb** | **22 30 26.2** | **-0.1** |
| SGDS | | | | *eS* | | **Sb** | **22 31 18.4** | **+2.3** |
| | 23nm,1.5s | | | | | | | |
| **SGDS** | **Sogindy** | **4.13** | **15** | Pg | | **Pb** | **22 30 26.2** | **-0.1** |
| SGDS | | | | Lg | | Lg | 22 31 18.5 | |
| | 23nm,1.5s | | | | | | | |
| **KK02** | **Karatay Array** | **4.14** | **332** | ⇓Pn | | **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 6.4nm,0.6s | | | | | | | |
| SATY | | | | | *e*S | **Sb** | **22 31 56.2** | **+5.2** |
| | 25nm,1.2s | | | | | | | |
| **SATY** | **Saty** | **5.34** | **46** | Pg | | **Pb** | **22 30 48.0** | **+1.1** |
| | 6.4nm,0.6s | | | | | | | |
| SATY | | | | | Lg | Lg | 22 31 56.2 | |
| | 25nm,1.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **5.43** | **45** | *e*P | | **Pb** | **22 30 49.0** | **+0.6** |
| | 4.0nm,0.4s | | | | | | | |
| ZHN | | | | | *e*S | **Sb** | **22 31 57.6** | **+4.1** |
| | 19nm,0.8s | | | | | | | |
| **ZHN** | **Zhinishke** | **5.43** | **45** | Pg | | **Pb** | **22 30 48.9** | **+0.6** |
| | 4.0nm,0.4s | | | | | | | |
| ZHN | | | | | Lg | Lg | 22 31 57.6 | |
| | 19nm,0.8s | | | | | | | |
| **KURS** | **Kuram** | **5.51** | **42** | *e*P | | **Pb** | **22 30 52.0** | **+2.4** |
| | 3.3nm,0.7s | | | | | | | |
| KURS | | | | | *e*S | **Sb** | **22 32 02.7** | **+7.0** |
| | 19nm,1.5s | | | | | | | |
| **KURS** | **Kuram** | **5.51** | **42** | Pg | | **Pb** | **22 30 52.0** | **+2.4** |
| | 3.3nm,0.7s | | | | | | | |
| KURS | | | | | Lg | Lg | 22 32 02.7 | |
| | 19nm,1.5s | | | | | | | |
| **BTLS** | **Baital** | **5.61** | **7** | *e*P | | **Pb** | **22 30 55.0** | **+3.6** |
| | 2.5nm,0.3s | | | | | | | |
| BTLS | | | | | *e*S | **Sg** | **22 32 08.4** | **-5.1** |
| | 9.7nm,0.6s | | | | | | | |
| **BTLS** | **Baital** | **5.61** | **7** | Pg | | **Pb** | **22 30 52.9** | **+1.6** |
| BTLS | | | | | Lg | Lg | 22 32 04.1 | |
| **UZB** | **Uzynbulak** | **5.75** | **48** | *e*P | | **Pb** | **22 30 55.1** | **+1.2** |
| | 3.9nm,0.2s | | | | | | | |
| UZB | | | | | *e*S | **Sb** | **22 32 07.9** | **+5.2** |
| | 14nm,0.9s | | | | | | | |
| **UZB** | **Uzynbulak** | **5.75** | **48** | Pg | | **Pb** | **22 30 55.1** | **+1.2** |
| | 3.9nm,0.2s | | | | | | | |
| UZB | | | | | Lg | Lg | 22 32 07.9 | |
| | 14nm,0.9s | | | | | | | |
| **ARXS** | **Arharly** | **5.89** | **35** | *e*P | | **Pb** | **22 30 57.6** | **+1.4** |
| | 2.1nm,0.6s | | | | | | | |
| ARXS | | | | | *e*S | **Sb** | **22 32 12.5** | **+5.8** |
| | 22nm,0.8s | | | | | | | |
| **ARXS** | **Arharly** | **5.89** | **35** | Pg | | **Pb** | **22 30 57.6** | **+1.4** |
| | 2.1nm,0.6s | | | | | | | |
| ARXS | | | | | Lg | Lg | 22 32 12.5 | |
| | 22nm,0.8s | | | | | | | |
| **BLB** | **Baldybastay** | **6.10** | **39** | *e*P | | **Pb** | **22 31 01.8** | **+1.9** |
| | 2.8nm,0.1s | | | | | | | |
| BLB | | | | | *e*S | **Sb** | **22 32 19.7** | **+6.8** |
| | 24nm,1.0s | | | | | | | |
| **BLB** | **Baldybastay** | **6.10** | **39** | Pg | | **Pb** | **22 31 01.8** | **+1.9** |
| | 2.8nm,0.1s | | | | | | | |
| BLB | | | | | Lg | Lg | 22 32 19.7 | |
| | 24nm,1.0s | | | | | | | |
| **PDGK** | **Podgornoye** | **6.13** | **49** | Pg | | **Pb** | **22 31 00.6** | **+0.2** |
| | 2.0nm,0.8s | | | | | | | |
| PDGK | | | | | Lg | Lg | 22 32 17.5 | |
| | 5.2nm,0.7s | | | | | | | |
| **PDGK** | **Podgornoye** | **6.13** | **49** | ⇑Pn | | **Pn** | **22 30 44.5** | **+0.5** |
| | 2.6nm,0.8s | | | | | | | |
| PDGK | | | | | ⇓Pg | **Pb** | **22 31 02.0** | **+1.7** |
| | 7.2nm,0.8s | | | | | | | |
| PDGK | | | | | ⇓Lg | Lg | 22 32 19.5 | |
| | 16nm,0.9s | | | | | | | |
| **DJR** | **Jarkent** | **6.94** | **43** | *e*P | | **Pb** | **22 31 16.2** | **+2.2** |
| | 0.7nm,0.2s | | | | | | | |
| DJR | | | | | *e*S | **Sb** | **22 32 44.8** | **+8.0** |
| | 11nm,1.2s | | | | | | | |
| **DJR** | **Jarkent** | **6.94** | **43** | Pg | | **Pb** | **22 31 16.2** | **+2.2** |
| | 0.7nm,0.2s | | | | | | | |
| DJR | | | | | Lg | Lg | 22 32 44.8 | |
| | 11nm,1.2s | | | | | | | |
| **OTUK** | **Ortayu** | **8.79** | **356** | ⇓Pn | | **Pn** | **22 31 22.2** | **+1.8** |
| | 1.8nm,1.0s | | | | | | | |
| OTUK | | | | | ⇑Lg | Lg | 22 33 47.5 | |
| | 11nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **9.91** | **39** | ⇓Pn | | **Pn** | **22 31 37.6** | **+1.9** |
| | 1.1nm,0.9s,baz=4.3,slow=1.7,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.91** | **39** | Pn | | **Pn** | **22 31 36.1** | **+0.4** |
| | 0.0nm,0.3s,baz=222,slow=13,SNR=1.8 | | | | | | | |
| MKAR | | | | | Lg | Lg | 22 34 19.8 | |
| | 0.1nm,0.3s,baz=218,slow=27,SNR=3.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **11.78** | **17** | Pn | | **Pn** | **22 31 58.1** | **-3.2** |
| | 0.0nm,0.3s,baz=208,slow=12,SNR=1.8 | | | | | | | |
| KURBB | | | | | Lg | Lg | 22 35 21.7 | |
| | 0.0nm,0.3s,baz=207,slow=28,SNR=12 | | | | | | | |
| **AB31** | **Akbulak array** | **13.58** | **320** | Pn | | **Pn** | **22 32 25.8** | **-0.1** |
| | 0.2nm,0.5s,baz=129,slow=15,SNR=11 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.30** | **321** | Pn | | **Pn** | **22 32 45.8** | **-3.4** |
| | 0.1nm,0.3s,baz=128,slow=12,SNR=1.7 | | | | | | | |
| AKTO | | | | | Sn | **Sn** | **22 35 34.1** | **-4.3** |
| | 0.1nm,0.3s,baz=98,slow=5.0,SNR=5.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.51** | **25** | Pn | | **Pn** | **22 33 03.3** | **-1.5** |
| | 0.1nm,0.3s,baz=212,slow=7.0,SNR=3.8 | | | | | | | |
| **SONM** | **Songino Array** | **25.31** | **60** | P | | **P** | **22 34 38.4** | **-1.6** |
| | 0.2nm,0.4s,baz=236,slow=10,SNR=2.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **36.05** | **323** | P | | **P** | **22 36 14.8** | **+0.4** |
| | 5.0nm,1.1s,baz=120,slow=8.3,SNR=2.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.48** | **269** | P | | **P** | **22 40 08.9** | **-0.8** |
| | 0.3nm,0.4s,baz=52,slow=5.5,SNR=2.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.19** | **4** | P | | **P** | **22 41 10.8** | **-1.6** |
| | 0.2nm,0.7s,baz=357,slow=6.1,SNR=4.0 | | | | | | | |

*JMA* ***21*** *22:38:08.4±0.1, 42°04′N×142°.60E, h63km±2km, M3.5*
*JMA Felt I J1.*
*IDC* ***21*** *22:38:11.9±1.9, 42°.23N×142°.58E, h89km±13km, mb3.3/12, mb1 3.5/15, mb1mx3.4/34, mbtmp3.6/15, MS3.0/1, Ms1 3.0/1, ms1mx2.5/40, Error ellipse: s-maj=22.5km s-min=13.4km az=121.0*

**ISC 21 22:38:08.3±0.8, 42°.02N±0°.05×142°.58E±0°.04, h61km±6km, n38, σ0°80/42, mb3.6/12, 6C-5D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JNBK** | **Urakawa-nobuka** | **0.29** | **26** | ⇑P | | **Pn** | **22 38 18.4** | **-0.1** |
| JNBK | | | | S | | **Sn** | **22 38 26.0** | **+0.1** |
| **JSHD** | **Hidakashinhida** | **0.40** | **348** | ⇑P | | **Pn** | **22 38 19.6** | **+0.2** |
| JSHD | | | | S | | **Sn** | **22 38 28.3** | **+0.9** |
| **JEM** | **Erimo** | **0.43** | **90** | ⇑P | | **Pn** | **22 38 20.1** | **+0.5** |
| **JTHR** | **Tokachihiroo** | **0.60** | **63** | ⇑P | | **Pn** | **22 38 21.6** | **+0.2** |
| JTHR | | | | *e*S | | **Sn** | **22 38 31.3** | **+0.3** |
| **JBT2** | **Biratori 2** | **0.78** | **348** | ⇓P | | **Pn** | **22 38 23.4** | **-0.2** |
| JBT2 | | | | S | | **Sn** | **22 38 34.6** | **-0.2** |
| **JIAM** | **Iburiatsuma** | **0.78** | **321** | ⇓P | | **Pn** | **22 38 24.4** | **+0.8** |
| **JCH** | **Churui** | **0.83** | **44** | ⇑P | | **Pn** | **22 38 24.2** | **0.0** |
| **JFR** | **Furan** | **1.15** | **0** | P | | **Pn** | **22 38 28.4** | **+0.1** |
| **JKB** | **Kayabe** | **1.16** | **264** | ⇓P | | **Pn** | **22 38 28.6** | **+0.1** |
| JKB | | | | S | | **Sn** | **22 38 43.6** | **+0.1** |
| **JEW** | **Eniwo** | **1.17** | **315** | ⇓P | | **Pn** | **22 38 28.9** | **+0.2** |
| JEW | | | | *e*S | | **Sn** | **22 38 44.6** | **+0.8** |
| **JNB** | **Noboribetsu** | **1.23** | **292** | ⇓P | | **Pn** | **22 38 28.9** | **-0.5** |
| JNB | | | | *e*S | | **Sn** | **22 38 44.3** | **-0.9** |
| **JOB** | **Onbets** | **1.28** | **46** | ⇑P | | **Pn** | **22 38 31.2** | **+1.1** |
| JOB | | | | *e*S | | **Sn** | **22 38 47.8** | **+1.5** |
| **JOT** | **Ohata** | **1.31** | **242** | P | | **Pn** | **22 38 30.7** | **+0.2** |
| JOT | | | | *e*S | | **Sn** | **22 38 47.8** | **+0.7** |
| **JAB** | **Ashibetsu** | **1.51** | **350** | P | | **Pn** | **22 38 33.5** | **+0.4** |
| JAB | | | | *e*S | | **Sn** | **22 38 52.4** | **+0.6** |
| **JISS** | **Ishikarishitsu** | **1.52** | **326** | P | | **Pn** | **22 38 33.8** | **+0.5** |
| JISS | | | | *e*S | | **Sn** | **22 38 52.7** | **+0.6** |
| **JAR** | **Ashorobuto** | **1.55** | **34** | *e*S | | **Sn** | **22 38 52.3** | **-0.5** |
| **ASAJ** | **Asahikawa** | **2.10** | **0** | P | | **Pn** | **22 38 42.1** | **+1.0** |
| | 29nm,0.3s,baz=196,slow=14,SNR=48 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **22 39 06.3** | **+0.2** |
| | 11nm,0.3s,baz=100,slow=28,SNR=7.5 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.43** | **213** | P | | Pn | 22 39 48.1 | +7.7 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=4.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.05** | **289** | P | | **Pn** | **22 40 05.0** | **+2.5** |
| | baz=95,slow=13,SNR=4.4 | | | | | | | |
| USRK | | | | | LR | LR | 22 42 32.4 | |
| | comp=Z,95nm,19.9s,baz=339,slow=33 | | | | | | | |
| **KSRS** | **Korea Array** | **12.17** | **253** | P | | Pn | 22 41 04.2 | +5.5 |
| | 0.3nm,0.3s,baz=63,slow=14,SNR=3.0 | | | | | | | |
| **SEY** | **Seymchan** | **21.73** | **12** | P | | **P** | **22 42 52.3** | **-1.8** |
| | 0.4nm,0.3s,baz=266,slow=23,SNR=5.2 | | | | | | | |
| **SONM** | **Songino Array** | **26.10** | **295** | P | | **P** | **22 43 37.0** | **+0.6** |
| | 0.4nm,0.5s,baz=82,slow=9.2,SNR=4.1 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.29** | **130** | T | | T | 23 15 48.2 | |
| | baz=323,slow=76,SNR=16 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.30** | **130** | T | | T | 23 15 55.3 | |
| | baz=323,slow=76,SNR=19 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.31** | **130** | T | | T | 23 15 55.8 | |
| | baz=323,slow=76,SNR=12 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.15** | **131** | T | | T | 23 16 59.0 | |
| | baz=324,slow=76,SNR=28 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.16** | **131** | T | | T | 23 16 40.8 | |
| | baz=324,slow=76,SNR=25 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.17** | **131** | T | | T | 23 16 57.3 | |
| | baz=324,slow=76,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.39** | **308** | P | | **P** | **22 45 31.5** | **-0.1** |
| | 1.6nm,0.6s,baz=86,slow=7.6,SNR=9.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.41** | **298** | P | | **P** | **22 45 56.7** | **0.0** |
| | 1.1nm,0.9s,baz=81,slow=8.7,SNR=7.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **44.85** | **35** | P | | **P** | **22 46 14.9** | **-1.0** |
| | 0.3nm,0.5s,baz=254,slow=6.5,SNR=1.9 | | | | | | | |
| **INK** | **Inuvik** | **49.57** | **29** | P | | **P** | **22 46 52.5** | **0.0** |
| | 0.4nm,0.4s,baz=275,slow=11,SNR=1.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.08** | **32** | P | | **P** | **22 48 02.3** | **+0.6** |
| | 0.2nm,0.5s,baz=306,slow=7.0,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **62.12** | **189** | P | | **P** | **22 48 22.9** | **0.0** |
| | 0.2nm,0.6s,baz=5.9,slow=6.9,SNR=1.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.85** | **332** | P | | **P** | **22 48 39.6** | **-0.8** |
| | 2.9nm,0.8s,baz=72,slow=6.2,SNR=8.8 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.95** | **337** | P | | **P** | **22 49 11.7** | **-1.0** |
| | 1.0nm,0.7s,baz=37,slow=6.0,SNR=3.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.93** | **322** | P | | **P** | **22 49 18.1** | **-0.6** |
| | 0.4nm,0.3s,baz=45,slow=6.3,SNR=5.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.39** | **53** | P | | **P** | **22 50 45.3** | **+1.1** |
| | 0.1nm,0.4s,baz=328,slow=3.2,SNR=1.8 | | | | | | | |

*IDC* ***21*** *22:47:49.3±1.1, 31°.91S×67°.96W, h0km, mb3.5/2, mb1 3.7/6, mb1mx3.6/25, mbtmp3.6/6, ML3.7/4, MS3.7/1, Ms1 3.7/1, ms1mx3.1/32, Error ellipse: s-maj=37.1km s-min=27.9km az=133.0*
*NEIC* ***21*** *22:47:55.9±1.2, 31°.72S±0°.06×67°.77W±0°.03, h10km±2km, mb3.9/2, Md3.6(SJA), Error ellipse: s-maj=11.3km s-min=3.2km az=13.0*

**ISC 21 22:47:54.0±0.7, 31°.72S±0°.07×67°.72W±0°.06, h10km, n41, σ1§97/42, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ZON** | **Zonda** | **0.84** | **282** | | | **Pg** | **22 48 09.4** | **-0.7** |
| ZON | | | | | Sg | **Sg** | **22 48 21.6** | **+0.4** |
| **VA03** | **San Esteban** | **2.62** | **246** | | | **Pn** | **22 48 39.2** | **+2.8** |
| VA03 | | | | | Sn | **Sn** | **22 49 09.7** | **+1.3** |
| **CO03** | **El Pedregal** | **2.69** | **288** | | | **Pn** | **22 48 40.1** | **+2.7** |
| **CO02** | **Combarbal** | **2.85** | **280** | | | **Pn** | **22 48 41.8** | **+2.1** |
| **PEL** | **Peldehue** | **2.88** | **240** | | | **Pn** | **22 48 41.3** | **+1.2** |
| **MT03** | **Universidad Ad** | **2.95** | **232** | | | **Pn** | **22 48 42.6** | **+1.6** |
| **LMEL** | **Las Melosas** | **2.98** | **224** | | | **Pn** | **22 48 43.0** | **+1.5** |
| **MT05** | **Renca** | **3.05** | **236** | | | **Pn** | **22 48 44.5** | **+2.2** |
| **ROC1** | **El Roble** | **3.06** | **245** | | | **Pn** | **22 48 42.7** | **0.0** |
| **GO04** | **Cololo Observa** | **3.06** | **299** | | | **Pn** | **22 48 44.7** | **+2.0** |
| **VA06** | **Catapilco** | **3.15** | **254** | | | **Pn** | **22 48 45.1** | **+1.5** |
| **MT02** | **Curacav** | **3.27** | **241** | | | **Pn** | **22 48 46.6** | **+1.2** |
| **BO04** | **La Punta** | **3.33** | **226** | | | **Pn** | **22 48 47.6** | **+1.5** |
| **MT09** | **Talagante** | **3.44** | **232** | | | **Pn** | **22 48 49.0** | **+1.2** |
| **CO06** | **Fray Jorge** | **3.52** | **286** | | | **Pn** | **22 48 49.0** | **+0.3** |
| **CO05** | **La Serena** | **3.52** | **300** | Pn | | **Pn** | **22 48 50.0** | **+1.3** |
| **VA01** | **Torpederas** | **3.57** | **248** | Pn | | **Pn** | **22 48 50.7** | **+1.3** |
| **MT01** | **Popeta** | **3.67** | **233** | | | **Pn** | **22 48 51.3** | **+0.6** |
| **LCO** | **Las Campanas** | **3.73** | **316** | | | **Pn** | **22 48 53.9** | **+1.9** |
| **VA05** | **Santo Domingo** | **3.81** | **239** | | | **Pn** | **22 48 53.7** | **+0.9** |
| **BO01** | **Tunca** | **3.89** | **226** | | | **Pn** | **22 48 55.0** | **+1.2** |
| **BO02** | **Sierra Bellavi** | **4.00** | **219** | | | **Pn** | **22 48 56.8** | **+1.4** |
| **AC04** | **Llanos de Chal** | **4.56** | **319** | Pn | | **Pn** | **22 49 05.2** | **+2.2** |
| **GO05** | **Huala** | **4.82** | **226** | Pn | | **Pn** | **22 49 07.3** | **+0.7** |
| **AC02** | **Maricunga** | **5.02** | **345** | | | **Pn** | **22 49 11.8** | **+2.0** |
| **ML02** | **Panimavida** | **5.08** | **216** | | | **Pn** | **22 49 11.5** | **+1.4** |
| **LC01** | **Cunco** | **7.93** | **204** | Pn | | **Pn** | **22 49 49.4** | **+0.1** |
| **LVC** | **Limon Verde** | **9.13** | **353** | Pn | | **Pn** | **22 50 05.4** | **-0.9** |
| | 0.2nm,0.3s,baz=264,slow=17,SNR=1.3 | | | | | | | |
| LVC | | | | | Lg | Lg | 22 52 40.0 | |
| | 0.6nm,0.3s,baz=211,slow=4.8,SNR=3.0 | | | | | | | |
| **PLCA** | **Paso Flores** | **9.28** | **193** | Pn | | **Pn** | **22 50 09.5** | **+1.6** |
| | 0.1nm,0.3s,baz=22,slow=10,SNR=6.7 | | | | | | | |
| PLCA | | | | | Lg | Lg | 22 52 42.2 | |
| | 0.4nm,0.3s,baz=77,slow=12,SNR=3.8 | | | | | | | |
| **ITQB** | **Itaqui** | **9.77** | **81** | | | **Pn** | **22 50 16.0** | **+1.5** |
| **CPUP** | **Villa Florida** | **10.55** | **62** | Pn | | **Pn** | **22 50 27.5** | **+2.1** |
| | 0.3nm,0.3s,baz=202,slow=9.2,SNR=3.5 | | | | | | | |
| CPUP | | | | | Lg | Lg | 22 53 30.9 | |
| | 0.9nm,0.3s,baz=149,slow=20,SNR=3.7 | | | | | | | |
| **LPAZ** | **La Paz** | **15.37** | **358** | Pn | | **Pn** | **22 51 31.2** | **-0.3** |
| | 0.1nm,0.3s,baz=350,slow=12,SNR=1.8 | | | | | | | |
| **LPAZ** | **La Paz** | **15.37** | **358** | Pn | | **Pn** | **22 51 32.8** | **+1.2** |
| LPAZ | | | | | IAmb | IAmb | 22 51 46.1 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **SIV** | **San Ignacio** | **16.79** | **23** | P | | **Pn** | **22 51 50.1** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=216,slow=14,SNR=2.7 | | | | | | | |
| **JTS** | **Las Juntas de** | **44.91** | **336** | LR | | LR | 23 14 53.8 | |
| | comp=Z,100nm,20.4s,baz=144,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.67** | **327** | P | | **P** | **22 59 00.4** | **-3.5** |
| | comp=Z,0.1nm,0.6s,baz=143,slow=7.7,SNR=1.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.00** | **68** | P | | **P** | **23 00 01.6** | **-2.3** |
| | comp=Z,0.8nm,0.9s,baz=247,slow=6.3,SNR=3.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **121.17** | **203** | PKP | | **PKPdf** | **23 06 43.9** | **-3.8** |
| | comp=Z,0.2nm,0.5s,baz=81,slow=2.9,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.45** | **205** | PKP | | **PKPdf** | **23 06 50.8** | **-3.3** |
| | comp=Z,0.6nm,0.4s,baz=158,slow=1.7,SNR=27 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.34** | **33** | PKPbc | | **PKPdf** | **23 07 42.9** | **+3.1** |
| | comp=Z,1.0nm,0.4s,baz=310,slow=4.3,SNR=7.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **152.53** | **48** | PKPbc | | **PKPdf** | **23 07 47.8** | **+4.3** |
| | comp=Z,0.7nm,0.7s,baz=283,slow=1.8,SNR=8.8 | | | | | | | |

*IDC* ***21*** *23:05:39.5±3.1, 6°.80S×105°.50E, h0km, mb4.0/5, mb1 4.1/5, mb1mx3.6/44, mbtmp4.0/5, MS3.5/1, Ms1 3.5/1, ms1mx2.5/76, Error ellipse: s-maj=139.3km s-min=29.9km az=50.0*
*NEIC* ***21*** *23:05:47.4±0.9, 7°.17S±0°.09×105°.2E±0°.1, h65km±10km, mb4.2/18, Error ellipse: s-maj=16.3km s-min=13.7km az=80.0*
*DJA* ***21*** *23:05:49.1±0.6, 7°.3×10°.5E±°, h38km±13km, M4.2/18, mb4.6/6, mB5.1/2, MLv4.0/18, Mw(mB)4.5/2*

**ISC 21 23:05:38.1±0.6, 7°.51S±0°.04×104°.78E±0°.07, h10km, n57, σ1§42/59, mb4.2/13, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **1.27** | **46** | P | | **Pb** | **23 06 03.7** | **+1.5** |
| CGJI | | | | S | | **Sb** | **23 06 13.6** | **-5.0** |
| **SKJI** | **Sukabumi** | **1.83** | **74** | P | | **Pn** | **23 06 10.4** | **+0.7** |
| SKJI | | | | S | | Sn | 23 06 26.1 | -6.9 |
| **SBJI** | **Serang** | **1.92** | **44** | P | | **Pn** | **23 06 12.0** | **+1.0** |
| **KASI** | **Kota Agung** | **1.99** | **352** | P | | **Pg** | **23 06 18.8** | **+2.4** |
| **DBJI** | **Dramaga** | **2.17** | **64** | P | | **Pn** | **23 06 14.8** | **+0.4** |
| DBJI | | | | S | | Sn | 23 06 34.2 | -7.3 |
| **BLSI** | **Bandar Lampung** | **2.18** | **12** | P | | **Pb** | **23 06 17.4** | **-0.3** |
| **TNG** | **Tangerang** | **2.28** | **55** | P | | **Pn** | **23 06 16.3** | **+0.4** |
| **CBJI** | **Citeko** | **2.32** | **62** | P | | **Pn** | **23 06 16.8** | **+0.3** |
| **CNJI** | **Cibinong** | **2.34** | **85** | P | | **Pn** | **23 06 17.2** | **+0.5** |
| **LWLI** | **Liwa** | **2.58** | **344** | P | | **Pg** | **23 06 27.6** | **0.0** |
| **KLJ** | **Kotabumi** | **2.63** | **2** | P | | **Pb** | **23 06 25.9** | **+0.5** |
| **KLSI** | | **2.80** | **359** | P | | **Pb** | **23 06 28.3** | **0.0** |
| **LEM** | **Lembang** | **2.90** | **77** | P | | **Pn** | **23 06 26.4** | **+1.9** |
| **XMI** | **Christmas Isla** | **3.06** | **163** | P | | **Pg** | **23 06 37.5** | **+0.7** |
| **MDSI** | **Maura Dua** | **3.06** | **349** | P | | **Pb** | **23 06 33.2** | **+0.5** |
| **XMIS** | **Christmas Isla** | **3.08** | **164** | | | **Pg** | **23 06 37.2** | **0.0** |
| XMIS | | | | | | **Sg** | **23 07 15.1** | **-2.0** |
| **XMIS** | **Christmas Isla** | **3.08** | **164** | P | | **Pg** | **23 06 37.2** | **0.0** |
| **JCJI** | **Jatiwangi** | **3.61** | **74** | P | | **Pn** | **23 06 34.1** | **-0.1** |
| **CMJI** | **Cimerak** | **3.65** | **95** | P | | **Pn** | **23 06 36.2** | **+1.5** |
| **LHSI** | **Lahat** | **3.86** | **341** | P | | **Pb** | **23 06 44.9** | **-1.6** |
| **KPJI** | **Karang Pucung** | **4.12** | **88** | P | | **Pn** | **23 06 42.7** | **+1.5** |
| **SMRI** | **Semarang** | **5.64** | **86** | Pn | | **Pn** | **23 07 03.6** | **+1.5** |
| **UGM** | **Wanagama** | **5.71** | **94** | | | **Pn** | **23 07 04.7** | **+1.7** |
| **UGM** | **Wanagama** | **5.71** | **94** | P | | **Pn** | **23 07 04.5** | **+1.4** |
| | 0.4nm54nm,0.5s | | | | | | | |
| **UGM** | **Wanagama** | **5.71** | **94** | P | | **Pn** | **23 07 04.8** | **+1.7** |
| **PCJI** | **Pacitan** | **6.38** | **97** | P | | **Pn** | **23 07 14.1** | **+1.9** |
| | 0.2nm2um36nm,0.8s | | | | | | | |
| **PWJI** | **Pagerwojo** | **6.98** | **95** | P | | **Pn** | **23 07 22.4** | **+1.9** |
| | 0.2nm18nm,0.5s | | | | | | | |
| **GMJI** | **Gumukmas** | **8.62** | **96** | P | | **Pn** | **23 07 45.8** | **+2.8** |
| | 16nm,0.8s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.33** | **97** | | | **Pn** | **23 07 54.2** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **9.33** | **97** | P | | **Pn** | **23 07 54.1** | **+1.3** |
| | 1µm28nm,0.6s | | | | | | | |
| **ABJI** | **Asem Bagus** | **9.38** | **92** | P | | **Pn** | **23 07 55.9** | **+2.5** |
| **PLAI** | **Plampang** | **12.93** | **97** | P | | **Pn** | **23 08 40.4** | **-1.8** |
| **WB0** | **Warramunga Arr** | **31.19** | **116** | P | | **P** | **23 11 58.6** | **+0.8** |
| **WRA** | **Warramunga Arr** | **31.20** | **116** | P | | **P** | **23 11 58.3** | **+0.4** |
| | 0.6nm,1.1s,baz=298,slow=8.7,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.20** | **116** | P | | **P** | **23 11 58.9** | **+1.0** |
| **WB2** | **Warramunga Arr** | **31.21** | **116** | P | | **P** | **23 11 58.6** | **+0.6** |
| **FORT** | **Forrest** | **31.79** | **140** | P | | **P** | **23 12 03.2** | **+0.3** |
| **CTA** | **Charters Tower** | **42.05** | **112** | LR | | LR | 23 31 18.7 | |
| | comp=Z,52nm,18.7s,baz=52,slow=37 | | | | | | | |
| **JNU** | **Nakatsue** | **47.42** | **30** | P | | **P** | **23 14 12.0** | **-1.0** |
| **ARMA** | **Armidale** | **49.37** | **124** | P | | **P** | **23 14 29.1** | **+0.8** |
| **JHS** | **Saijyo** | **50.03** | **31** | P | | **P** | **23 14 30.5** | **-2.6** |
| **TARG** | **Taragay, Kyrgy** | **54.87** | **335** | P | | **P** | **23 15 10.6** | **+1.2** |
| TARG | | | | | IAmb | IAmb | 23 15 18.2 | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **55.12** | **1** | P | | **P** | **23 15 09.3** | **-1.4** |
| | comp=Z,0.8nm,0.5s,baz=175,slow=7.6,SNR=7.3 | | | | | | | |
| SONM | | | | | PcP | **PcP** | **23 16 11.1** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=197,slow=3.8,SNR=2.1 | | | | | | | |
| **SONM** | **Songino Array** | **55.12** | **1** | P | | **P** | **23 15 09.3** | **-1.4** |
| SONM | | | | | IAmb | IAmb | 23 15 10.6 | |
| | comp=Z,1.9nm,1.1s | | | | | | | |
| **GAR** | **Garm** | **56.24** | **328** | P | | **P** | **23 15 19.9** | **+1.0** |
| GAR | | | | | IAmb | IAmb | 23 15 31.4 | |
| | comp=Z,3.4nm,1.2s | | | | | | | |
| **CHGR** | **Chuyangaron** | **56.61** | **327** | P | | **P** | **23 15 22.6** | **+1.1** |
| CHGR | | | | | IAmb | IAmb | 23 15 41.7 | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **57.65** | **342** | P | | **P** | **23 15 28.8** | **+0.2** |
| MK31 | | | | | IAmb | IAmb | 23 15 29.2 | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.65** | **342** | P | | **P** | **23 15 28.8** | **+0.1** |
| | comp=Z,1.9nm,0.6s,baz=146,slow=7.9,SNR=31 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.20** | **341** | P | | **P** | **23 15 59.9** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=156,slow=6.0,SNR=14 | | | | | | | |
| **KURK** | **Kurchatov** | **62.25** | **342** | P | | **P** | **23 16 00.7** | **+0.6** |
| KURK | | | | | IAmb | IAmb | 23 16 01.2 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **63.50** | **347** | P | | **P** | **23 16 07.7** | **-0.7** |
| ZAA0 | | | | | IAmb | IAmb | 23 16 08.8 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.50** | **347** | P | | **P** | **23 16 07.5** | **-0.8** |
| | comp=Z,1.6nm,0.3s,baz=156,slow=5.8,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.50** | **347** | P | | **P** | **23 16 07.7** | **-0.7** |
| **BRVK** | **Borovoye** | **67.06** | **338** | P | | **P** | **23 16 32.0** | **+0.5** |
| BRVK | | | | | IAmb | IAmb | 23 16 32.5 | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.74** | **330** | P | | **P** | **23 16 43.5** | **+1.4** |
| **ARU** | **Arti** | **74.14** | **335** | P | | **P** | **23 17 15.8** | **+1.1** |
| ARU | | | | | IAmb | IAmb | 23 17 31.6 | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.54** | **47** | PKP | | **PKPdf** | **23 25 17.2** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=259,slow=2.3,SNR=4.4 | | | | | | | |

*TAP* ***21*** *23:08:21.6, 24°.13N×122°.15E, h9km, ML2.5, D*
*JMA* ***21*** *23:08:21.1±0.2, 24°.10N×122°.25E, h25km, M2.2*

**ISC 21 23:08:20.6±1.2, 24°.09N±0°.04×122°.24E±0°.03, h17km±9km, n30, σ0°57/48, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.55** | **310** | *e*P | | **Pg** | **23 08 31.4** | **-0.1** |
| | baz=313 | | | | | | | |
| EWUT | | | | *e*S | | **Sb** | **23 08 39.1** | **-0.3** |
| | baz=313 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.60** | **278** | *e*P | | **Pb** | **23 08 32.8** | **

baz=1.1
CNB S Sb 23 17 01.8 +0.6
baz=1.1

*IDC* ***21*** *23:20:12.0±4.0, 25.°59S×68.°13W, h0km, mb4.0/2, mb1 4.0/2, mb1mx3.6/18, mbtmp4.0/2, Error ellipse: s-maj=373.8km s-min=71.3km az=165.0*
*GUC* ***21*** *23:20:31.9±0.6, 23.°43S×68.°35W, h149km±5km, ML3.6*
**ISC 21 23:20:31.9**±1.4, **23.°5S**±0.°1×**68.°3W**±0.°1, **h139**km±13km, **n19, σ0s45/23, 6C-4D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **1.00** | **326** | ⇓*iP* | | **Pn** | **23 20 56.0** | **-0.1** |
| LVC | | | | *i* S | | **Sn** | **23 21 13.8** | **-0.6** |
| **PB15** | **IPOC Station P** | **1.09** | **282** | ⇑*iP* | | Pn | 23 20 57.1 | +0.4 |
| PB15 | | | | *i* S | | **Sn** | **23 21 15.9** | **+0.3** |
| **PB06** | **IPOC Station P** | **1.38** | **302** | ⇑*iP* | | **Pn** | **23 20 60.0** | **+0.4** |
| PB06 | | | | *i* S | | **Sn** | **23 21 20.7** | **+0.1** |
| PB06 | | | | IAML | | | 23 21 23.0 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **PB09** | **IPOC Station P** | **1.85** | **332** | ⇓*iP* | | **Pn** | **23 21 05.7** | **+0.8** |
| PB09 | | | | *i* S | | **Sn** | **23 21 30.4** | **+0.3** |
| PB09 | | | | IAML | | | 23 21 34.6 | |
| | comp=N,234nm,0.3s | | | | | | | |
| **PB03** | **IPOC Station P** | **1.93** | **316** | ⇓*eP* | | **Pn** | **23 21 06.0** | **+0.3** |
| PB03 | | | | *i* S | | **Sn** | **23 21 31.2** | **-0.3** |
| PB03 | | | | IAML | | | 23 21 32.0 | |
| | comp=E,423nm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.02** | **303** | ⇑*iP* | | **Pn** | **23 21 07.1** | **+0.2** |
| PB04 | | | | *i* S | | **Sn** | **23 21 33.4** | **-0.2** |
| PB04 | | | | IAML | | | 23 21 40.5 | |
| | comp=N,534nm,0.3s | | | | | | | |
| **PB10** | **IPOC Station P** | **2.06** | **268** | ⇑*eP* | | Pn | 23 21 07.3 | +0.1 |
| PB10 | | | | *i* S | | **Sn** | **23 21 33.8** | **-0.3** |
| PB10 | | | | IAML | | | 23 21 40.9 | |
| | comp=N,203nm,0.2s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.24** | **238** | *eP* | | Pn | 23 21 09.8 | +0.2 |
| PB14 | | | | *i* S | | Sn | 23 21 39.1 | +0.5 |
| PB14 | | | | IAML | | | 23 21 39.6 | |
| | comp=E,236nm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.25** | **319** | ⇓*iP* | | **Pn** | **23 21 09.9** | **+0.3** |
| PB07 | | | | *i* S | | **Sn** | **23 21 38.1** | **-0.4** |
| PB07 | | | | IAML | | | 23 21 41.8 | |
| | comp=E,312nm,0.3s | | | | | | | |
| **PB02** | **IPOC Station P** | **2.58** | **325** | ⇑*iP* | | **Pn** | **23 21 13.7** | **0.0** |
| PB02 | | | | IAML | | | 23 21 53.3 | |
| | comp=E,232nm,0.1s | | | | | | | |
| **PB01** | **IPOC Station P** | **2.63** | **335** | *eP* | | **Pn** | **23 21 14.1** | **-0.2** |
| PB01 | | | | *i* S | | Sn | 23 21 46.1 | -0.7 |
| PB01 | | | | IAML | | | 23 21 48.5 | |
| | comp=N,214nm,0.3s | | | | | | | |
| **PATCX** | **Punta Patache** | **3.12** | **326** | *eP* | | **Pn** | **23 21 20.2** | **-0.4** |
| PATCX | | | | IAML | | | 23 22 05.3 | |
| | comp=N,96nm,0.3s | | | | | | | |
| **PB08** | **IPOC Station P** | **3.38** | **346** | ⇑*iP* | | **Pn** | **23 21 24.6** | **+0.4** |
| PB08 | | | | *i* S | | Sn | 23 22 04.1 | -0.5 |
| PB08 | | | | IAML | | | 23 22 06.5 | |
| | comp=E,38nm,0.2s | | | | | | | |
| **AC02** | **Maricunga** | **3.45** | **192** | *eP* | | Pn | 23 21 25.9 | +0.7 |
| **HMBC** | **Humberstone** | **3.48** | **335** | *eP* | | **Pn** | **23 21 25.7** | **+0.5** |
| **GO01** | **Chusmiza** | **3.85** | **348** | *eP* | | **Pn** | **23 21 30.6** | **+0.2** |
| **BDFB** | **Brasilia** | **20.63** | **72** | P | | **P** | **23 24 60.0** | **-0.7** |
| | comp=E,1.7nm,0.4s,baz=234,slow=14,SNR=4.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.50** | **70** | P | | **P** | **23 32 13.3** | **+0.6** |
| | comp=E,1.4nm,0.6s,baz=259,slow=5.5,SNR=20 | | | | | | | |
| **MKAR** | **Makanchi Array** | **146.85** | **38** | PKPbc | | **PKiKP** | **23 39 59.8** | **-0.5** |
| | comp=E,0.5nm,0.7s,baz=322,slow=3.0,SNR=6.3 | | | | | | | |

**IDC 21 23:24:27.6**±2.1, **3.°73S**×**151.°87E, h0**km, **mb3.4**/4, **mb1 3.6**/4, **mb1mx3.5**/31, **mbtmp3.4**/4, **Error ellipse: s-maj=92.9km s-min=29.7km az=120.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.50** | **225** | P | | P | 23 29 39.3 | -0.1 |
| | 0.6nm,0.7s,baz=55,slow=11,SNR=2.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.35** | **220** | P | | P | 23 30 06.6 | +1.0 |
| | 0.3nm,0.8s,baz=52,slow=9.5,SNR=1.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **78.92** | **319** | P | | P | 23 36 32.0 | -1.1 |
| | 0.5nm,0.9s,baz=97,slow=6.2,SNR=3.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **81.52** | **22** | P | | P | 23 36 47.1 | +0.4 |
| | 0.6nm,1.0s,baz=246,slow=5.7,SNR=4.2 | | | | | | | |

*IDC* ***21*** *23:33:42.2±0.9, 5.°28N×125.°58E, h203km±11km, mb3.4/8, mb1 3.6/8, mb1mx3.2/52, mbtmp3.9/8, Error ellipse: s-maj=49.8km s-min=11.9km az=74.0*
*DJA* ***21*** *23:33:42.3±0.5, 5.°1N±3.°×12.°6E±.°, h192km±6km, M4.3/12, mb4.1/7, mB5.1/3, MLv4.4/12, Mw(mB)4.5/3*
*NEIC* ***21*** *23:33:43.2±1.1, 5.°33N±0.°08×125.°6E±0.°1, h203km±8km, mb4.2/17, Error ellipse: s-maj=15.8km s-min=11.3km az=84.0*
**ISC 21 23:33:42.1**±0.5, **5.°25N**±0.°05×**125.°65E**±0.°08, **h200**km, **n44, σ1s30/47, mb4.1**/17, **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SGSI** | **Sangihe** | **1.56** | **185** | P | | **Pn** | **23 34 15.9** | **-0.5** |
| SGSI | | | | S | | **Sn** | **23 34 39.7** | **-3.4** |
| **DAV** | **Davao City (W)** | **1.81** | **358** | P | | **Pn** | **23 34 19.9** | **+1.1** |
| | 44nm,0.3s,baz=93,slow=23,SNR=1.6 | | | | | | | |
| DAV | | | | S | | **Sn** | **23 34 47.6** | **+0.2** |
| | 137nm,0.3s,baz=350,slow=21,SNR=12 | | | | | | | |
| **DAV** | **Davao City (W)** | **1.81** | **358** | | | **Pn** | **23 34 19.1** | **+0.4** |
| DAV | | | | | | **Sn** | **23 34 46.9** | **-0.5** |
| **TNTI** | **Ternate** | **4.76** | **159** | P | | **Pn** | **23 34 53.3** | **-0.3** |
| **GTOI** | **Gorontalo** | **5.29** | **210** | P | | **Pn** | **23 34 59.5** | **-0.7** |
| | 0.1nm23nm,0.8s | | | | | | | |
| **MRSI** | **Marisa** | **6.02** | **218** | P | | **Pn** | **23 35 10.6** | **+1.0** |
| | 0.2nm60nm,1.1s | | | | | | | |
| **TOLI2** | **Tolitoli** | **6.37** | **230** | | | **Pn** | **23 35 14.1** | **-0.1** |
| **LUWI** | **Luwuk** | **6.88** | **205** | Pn | | **Pn** | **23 35 23.2** | **+2.4** |
| **LUWI** | **Luwuk** | **6.88** | **205** | P | | **Pn** | **23 35 21.0** | **+0.2** |
| | 0.4nm5μm25nm,0.9s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **7.12** | **270** | Pn | | **Pn** | **23 35 24.5** | **+0.5** |
| **SANI** | **Sanana** | **7.26** | **177** | P | | **Pn** | **23 35 22.4** | **-3.4** |
| | 0.4nm3μm62nm,0.8s | | | | | | | |
| **APSI** | **Ampana** | **7.31** | **213** | P | | **Pn** | **23 35 26.5** | **+0.1** |
| **FAKI** | **Fak Fak** | **10.45** | **141** | Pn | | **Pn** | **23 36 09.2** | **+1.9** |
| **SBUM** | **Sibu** | **13.69** | **259** | P | | P | **23 36 53.8** | **+3.3** |
| **KNRA** | **Kununurra** | **21.02** | **172** | P | | **P** | **23 38 11.2** | **+0.8** |
| KNRA | | | | IAmb | | IAmb | 23 38 12.9 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **UBPT** | **Khong Chiam** | **22.20** | **298** | P | | **P** | **23 38 22.1** | **-0.3** |
| UBPT | | | | IAmb | | IAmb | 23 38 23.1 | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.20** | **180** | P | | **P** | **23 38 31.8** | **+0.4** |
| | comp=Z,2.8nm,0.4s,baz=351,slow=6.3,SNR=45 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.20** | **180** | P | | **P** | **23 38 31.8** | **+0.4** |
| **WB0** | **Warramunga Arr** | **26.30** | **161** | P | | **P** | **23 39 01.6** | **+2.2** |
| WB0 | | | | IAmb | | IAmb | 23 39 09.9 | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.45** | **161** | P | | **P** | **23 39 00.5** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=342,slow=11,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.45** | **161** | P | | **P** | **23 39 01.2** | **+0.4** |
| **WB2** | **Warramunga Arr** | **26.45** | **161** | P | | **P** | **23 39 01.1** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **27.25** | **192** | P | | **P** | **23 39 07.8** | **-0.1** |
| PSA00 | | | | IAmb | | IAmb | 23 39 11.3 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **29.84** | **165** | P | | **P** | **23 39 31.4** | **+0.4** |
| | comp=Z,0.5nm,0.5s,baz=345,slow=7.1,SNR=10 | | | | | | | |
| **JHS** | **Saijyo** | **30.40** | **12** | P | | **P** | **23 39 33.5** | **-2.2** |
| JHS | | | | IAmb | | IAmb | 23 39 45.6 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | **35.35** | **195** | P | | **P** | **23 40 18.5** | **-0.1** |
| MORW | | | | IAmb | | IAmb | 23 40 18.8 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **FORT** | **Forrest** | **35.90** | **176** | P | | **P** | **23 40 23.7** | **+0.5** |
| **BBOO** | **Buckleboo** | **39.12** | **166** | P | | **P** | **23 40 51.3** | **+1.1** |
| **PINNC** | **Pines Island,** | **49.36** | **126** | P | | **P** | **23 42 12.5** | **+0.9** |
| **MK31** | **Makanchi Array** | **55.70** | **325** | P | | **P** | **23 42 57.6** | **-0.3** |
| **MKAR** | **Makanchi Array** | **55.70** | **325** | P | | **P** | **23 42 57.6** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=118,slow=7.7,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.70** | **325** | P | | **P** | **23 42 57.5** | **-0.4** |
| **KURK** | **Kurchatov** | **59.89** | **327** | P | | **P** | **23 43 26.3** | **-0.5** |
| KURK | | | | IAmb | | IAmb | 23 43 28.4 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **60.11** | **312** | P | | **P** | **23 43 28.3** | **-0.5** |
| GAR | | | | IAmb | | IAmb | 23 43 29.2 | |
| | comp=Z,8.3nm,1.2s | | | | | | | |
| **MSWZ** | **Moikau Station** | **64.81** | **141** | P | | **P** | **23 44 01.5** | **+1.9** |
| **ABKAR** | **Akbulak array** | **70.30** | **321** | P | | **P** | **23 44 33.4** | **-0.4** |
| **CHGN** | **Chignik** | **77.86** | **34** | P | | **P** | **23 45 16.2** | **-1.2** |
| **SVW2** | **Sparrevohn** | **80.00** | **29** | P | | **P** | **23 45 29.3** | **+0.2** |
| SVW2 | | | | IAmb | | IAmb | 23 45 37.4 | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.20** | **25** | P | | **P** | **23 45 51.0** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=250,slow=3.6,SNR=1.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **88.23** | **310** | P | | **P** | **23 46 08.8** | **-2.3** |
| | comp=Z,0.5nm,0.9s,baz=82,slow=4.3,SNR=2.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.66** | **340** | P | | **P** | **23 46 11.4** | **-0.9** |
| | comp=Z,6.7nm,1.0s,baz=80,slow=5.6,SNR=2.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **90.00** | **332** | P | | **P** | **23 46 17.3** | **-1.4** |
| | comp=Z,1.6nm,0.8s,baz=151,slow=4.4,SNR=4.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.42** | **289** | PKP | | **PKPdf** | **23 52 12.4** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=60,slow=2.0,SNR=8.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **121.50** | **51** | PKP | | **PKiKP** | **23 52 12.7** | **-0.1** |
| | comp=Z,0.1nm,0.5s,baz=270,slow=0.3,SNR=1.4 | | | | | | | |

*IDC* ***21*** *23:37:55.4±2.4, 30.°59S×177.°51W, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.6/42, mbtmp3.6/3, Error ellipse: s-maj=58.9km s-min=32.8km az=123.0*
**ISC 21 23:38:02.9**±2.2, **30.°4S**±0.°1×**177.°6W**±0.°3, **h50**km, **n6, σ0s74/7, mb3.6**/3, **Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.13** | **347** | Pn | | **Pn** | **23 38 22.5** | **+0.1** |
| | 85nm,0.3s,baz=93,slow=22,SNR=1.6 | | | | | | | |
| RAO | | | | Sn | | **Sn** | **23 38 36.9** | **+0.1** |
| | 376nm,0.3s,baz=123,slow=19,SNR=8.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.80** | **257** | P | | **P** | **23 44 49.6** | **+0.7** |
| | 0.9nm,0.4s,baz=90,slow=8.1,SNR=4.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.43** | **267** | P | | **P** | **23 46 01.2** | **0.0** |
| | 0.3nm,0.7s,baz=107,slow=8.8,SNR=2.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.42** | **272** | P | | **P** | **23 46 07.8** | **-1.3** |
| | 0.4nm,0.4s,baz=110,slow=8.2,SNR=16 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.21** | **340** | PKPbc | | **PKPdf** | **23 57 34.3** | **+0.1** |
| | 0.9nm,0.4s,baz=32,slow=2.8,SNR=12 | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.46** | **323** | PKPbc | | **PKPbc** | **23 57 50.8** | **-0.1** |
| | 0.5nm,0.5s,baz=50,slow=2.3,SNR=5.1 | | | | | | | |

*IDC* ***21*** *23:41:30.8±2.4, 23.°60S×179.°88E, h504km±23km, mb3.5/8, mb1 3.7/9, mb1mx3.3/41, mbtmp4.3/9, Error ellipse: s-maj=39.9km s-min=20.1km az=166.0*
*NEIC* ***21*** *23:41:30.5±1.6, 23.°5S±0.°1×179.°8E±0.°2, h488km±6km, mb4.1/20, Error ellipse: s-maj=22.5km s-min=15.5km az=127.0*
**ISC 21 23:41:26.4**±0.7, **23.°4S**±0.°1×**179.°9E**±0.°1, **h450**km, **n40, σ1s82/40, mb4.0**/15, **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **11.51** | **271** | P | | **P** | **23 43 59.2** | **-0.7** |
| **OUENC** | **Ouen Island, N** | **12.09** | **272** | P | | **P** | **23 44 08.2** | **+2.0** |
| **OUZ** | **Omahuta** | **13.05** | **204** | P | | **P** | **23 44 19.3** | **+2.9** |
| **URZ** | **Urewera** | **15.06** | **189** | P | | **P** | **23 44 38.7** | **+0.8** |
| | 1.3nm,0.3s,baz=102,slow=4.0,SNR=6.1 | | | | | | | |
| **URZ** | **Urewera** | **15.06** | **189** | P | | **P** | **23 44 39.1** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **16.04** | **190** | P | | **P** | **23 44 49.9** | **+1.5** |
| **QRZ** | **Quartz Range** | **18.50** | **198** | P | | **P** | **23 45 14.2** | **+0.4** |
| **PLWZ** | **Palliser** | **18.58** | **191** | P | | **P** | **23 45 17.1** | **+2.5** |
| **NNZ** | **Nelson** | **18.64** | **196** | P | | **P** | **23 45 16.5** | **+1.4** |
| **KHZ** | **Kahutara** | **19.74** | **194** | P | | **P** | **23 45 26.5** | **+1.3** |
| KHZ | | | | IAmb | | IAmb | 23 45 42.3 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **LTZ** | **Lake Taylor** | **20.39** | **196** | P | | **P** | **23 45 31.2** | **0.0** |
| LTZ | | | | IAmb | | IAmb | 23 45 37.6 | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **EIDS** | **Eidsvold** | **26.32** | **260** | P | | **P** | **23 46 25.8** | **+1.2** |
| EIDS | | | | IAmb | | IAmb | 23 46 29.9 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **PMG** | **Port Moresby** | **34.24** | **288** | P | | **P** | **23 47 35.3** | **+1.9** |
| | comp=Z,7.1nm,0.3s,baz=160,slow=3.1,SNR=6.7 | | | | | | | |
| **COEN** | **Coen** | **35.95** | **278** | P | | **P** | **23 47 48.2** | **+0.4** |
| COEN | | | | IAmb | | IAmb | 23 48 06.9 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.59** | **246** | P | | **P** | **23 48 16.8** | **-0.6** |
| BBOO | | | | IAmb | | IAmb | 23 48 31.7 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **42.05** | **260** | P | | **P** | **23 48 37.7** | **+0.4** |
| **ASAR** | **Alice Springs** | **42.05** | **260** | P | | **P** | **23 48 37.5** | **+0.2** |
| | comp=Z,5.4nm,0.8s,baz=93,slow=8.2,SNR=40 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **23 53 23.1** | **-6.3** |
| | comp=Z,1.0nm,0.7s,baz=104,slow=4.7,SNR=8.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.05** | **260** | P | | **P** | **23 48 37.3** | **0.0** |
| **WR0** | **Warramunga Arr** | **42.18** | **266** | P | | **P** | **23 48 38.4** | **0.0** |
| WR0 | | | | IAmb | | IAmb | 23 48 38.7 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **42.36** | **266** | P | | **P** | **23 48 39.7** | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 23 48 40.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **42.36** | **266** | P | | **P** | **23 48 39.8** | **0.0** |
| WB0 | | | | IAmb | | IAmb | 23 48 40.4 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.37** | **266** | P | | **P** | **23 48 39.6** | **-0.3** |
| | comp=Z,4.6nm,0.6s,baz=103,slow=8.1,SNR=42 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **23 53 24.6** | **-6.1** |
| | comp=Z,0.8nm,0.9s,baz=98,slow=4.0,SNR=4.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.37** | **266** | P | | **P** | **23 48 39.6** | **-0.3** |
| **FORT** | **Forrest** | **46.43** | **249** | P | | **P** | **23 49 10.3** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **50.79** | **265** | P | | **P** | **23 49 43.8** | **-0.3** |
| | comp=Z,2.5nm,0.6s,baz=105,slow=6.2,SNR=10 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.79** | **265** | IAmb | | IAmb | 23 49 44.9 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **MORW** | **Morawa** | **56.99** | **250** | P | | **P** | **23 50 26.9** | **-1.2** |
| **QSPA** | **South Pole Qui** | **66.73** | **180** | P | | **P** | **23 51 30.1** | **-1.3** |
| **UNV** | **Unalaska Valle** | **77.77** | **8** | P | | **P** | **23 52 35.0** | **-0.4** |
| **USA0B** | **Ussuriysk Arra** | **80.26** | **327** | P | | **P** | **23 52 50.4** | **+1.4** |
| USA0B | | | | IAmb | | IAmb | 23 52 51.5 | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **80.26** | **327** | P | | **P** | **23 52 49.3** | **+0.3** |
| **M02C** | **Callahan** | **83.41** | **40** | P | | **P** | **23 53 06.7** | **+1.3** |
| **CMAR** | **Chiang Mai Arr** | **89.26** | **290** | P | | **P** | **23 53 33.7** | **-0.1** |
| | comp=Z,0.7nm,0.4s,baz=120,slow=3.6,SNR=5.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.21** | **58** | P | | **P** | **23 53 38.7** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=213,slow=5.9,SNR=9.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.21** | **58** | P | | **P** | **23 53 39.1** | **+1.0** |
| **PDAR** | **Pinedale Array** | **92.35** | **44** | P | | **P** | **23 53 47.7** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=207,slow=3.0,SNR=4.0 | | | | | | | |
| **SONM** | **Songino Array** | **96.64** | **319** | P | | **P** | **23 54 06.1** | **-1.1** |
| | comp=Z,0.5nm,0.9s,baz=64,slow=3.4,SNR=2.4 | | | | | | | |
| **OBN** | **Obninsk** | **138.26** | **329** | PKP | | **PKPdf** | **23 59 59.0** | **0.0** |
| | comp=Z,1.8nm,0.4s,baz=154,slow=3.7,SNR=3.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.47** | **328** | PKP | | PKPbc | 00 00 08.4 | -1.6 |
| | comp=Z,0.5nm,0.4s,baz=45,slow=4.3,SNR=10.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.18** | **308** | PKPbc | | **PKPdf** | **00 00 16.6** | **+1.1** |
| | comp=Z,0.8nm,0.7s,baz=60,slow=5.8,SNR=2.3 | | | | | | | |

*NEIC* ***21*** *23:42:19.1±1.2, 52.°4N±0.°3×175.°02W±0.°09, h146km±10km, mb3.9/6, ML3.2/21(AEIC), Error ellipse: s-maj=39.1km s-min=4.1km az=169.0*
*AEIC* ***21*** *23:42:19.6±5.6, 52.°2N±0.°2×175.°04W±0.°07, h137km±5km, Error ellipse: s-maj=32.0km s-min=3.4km az=171.0*
*IDC* ***21*** *23:42:38.7±9.3, 52.°77N×174.°71W, h358km±102km, mb2.8/6, mb1 2.8/7, mb1mx2.6/65, mbtmp3.4/7, Error ellipse: s-maj=48.7km s-min=39.4km az=64.0*
**ISC 21 23:42:18.1**±0.8, **52.°4N**±0.°2×**174.°98W**±0.°08, **h152**km±8km, **n40, σ0s89/47, mb3.3**/6, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ATKA** | **Atka Island** | **0.51** | **109** | | | **Pn** | **23 42 39.7** | **+0.1** |
| ATKA | | | | | | **Sn** | **23 42 55.9** | **-0.1** |
| **KOFP** | **Korovin Flat P** | **0.55** | **99** | | | **Pn** | **23 42 40.5** | **+0.5** |
| **GSTR** | **Great Sitkin T** | **0.72** | **248** | | | **Pn** | **23 42 41.2** | **+0.3** |
| GSTR | | | | | | Sn | **23 42 58.2** | **-0.1** |
| **GSMY** | **Great Sitkin M** | **0.74** | **244** | | | **Pn** | **23 42 41.4** | **+0.4** |
| GSMY | | | | | | **Sn** | **23 42 58.3** | **-0.2** |
| **GSTD** | **Great Sitkin T** | **0.78** | **247** | | | **Pn** | **23 42 41.8** | **+0.4** |
| GSTD | | | | | | **Sn** | **23 42 58.6** | **-0.5** |
| **GSCK** | **Great Sitkin C** | **0.81** | **244** | | | **Pn** | **23 42 42.0** | **+0.5** |
| GSCK | | | | | | **Sn** | **23 42 59.0** | **-0.4** |
| **ADK** | **Adak** | **1.16** | **246** | Pn | | **Pn** | **23 42 44.8** | **+0.4** |
| **ADK** | **Adak** | **1.16** | **246** | Sn | | **Sn** | **23 43 03.9** | **-0.5** |
| **KIWB** | **Kanaga Island** | **1.43** | **250** | | | **Pn** | **23 42 47.4** | **+0.4** |
| KIWB | | | | | | **Sn** | **23 43 10.4** | **+1.2** |
| **KIKV** | **Kanaga Island** | **1.43** | **251** | | | **Pn** | **23 42 47.9** | **+0.8** |
| **KIMD** | **Kanaga Island** | **1.52** | **247** | | | **Pn** | **23 42 48.5** | **+0.6** |
| KIMD | | | | | | **Sn** | **23 43 10.2** | **-0.6** |
| **TAPA** | **Tanaga Point A** | **1.83** | **254** | | | **Pn** | **23 42 52.0** | **+0.6** |
| **TAFP** | **Tanaga Falls P** | **1.91** | **257** | | | **Pn** | **23 42 52.9** | **+0.7** |
| TAFP | | | | | | **Sn** | **23 43 17.9** | **-0.6** |
| **TASE** | **Tanaga Southea** | **1.96** | **255** | | | **Pn** | **23 42 53.7** | **+0.9** |
| **GANO** | **Gareloi North** | **2.42** | **258** | | | **Pn** | **23 42 59.0** | **+0.8** |
| **UNV** | **Unalaska Valle** | **5.32** | **70** | Pn | | **Pn** | **23 43 37.5** | **+1.9** |
| **FALS** | **False Pass** | **7.32** | **66** | Pn | | **Pn** | **23 44 02.1** | **-0.1** |
| **CNBA** | **Chernabura Isl** | **9.48** | **69** | Pn | | **Pn** | **23 44 30.6** | **-0.4** |
| **O18K** | **Koktuh Hills** | **13.30** | **48** | P | | **P** | **23 45 24.5** | **-0.6** |
| **OHAK** | **Old Harbor** | **13.40** | **60** | Pn | | **Pn** | **23 45 20.7** | **-1.4** |
| **Q19K** | **Cape Douglas,** | **13.68** | **53** | Pn | | **Pn** | **23 45 26.1** | **+0.4** |
| **KDAK** | **Kodiak Island** | **13.90** | **58** | Pn | | **Pn** | **23 45 27.0** | **-1.4** |
| **N19K** | **Bonanza Creek** | **14.05** | **45** | Pn | | **Pn** | **23 45 28.4** | **-2.0** |
| **BRLK** | **Bradley Lake** | **15.29** | **52** | Pn | | **Pn** | **23 45 46.0** | **+0.2** |
| **PPLA** | **Purkeypile** | **16.03** | **40** | P | | **P** | **23 45 57.9** | **+2.5** |
| **GHO** | **Glory Hole Cre** | **16.89** | **46** | P | | **Pn** | **23 46 05.4** | **+0.1** |
| GHO | | | | IAmb | | IAmb | 23 46 18.3 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **17.62** | **47** | P | | **Pn** | **23 46 13.7** | **-0.3** |
| SCM | | | | IAmb | | IAmb | 23 46 28.7 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **MCK** | **McKinley** | **17.72** | **40** | P | | **P** | **23 46 14.5** | **+0.7** |
| MCK | | | | IAmb | | IAmb | 23 46 29.4 | |
| | comp=Z,3.7nm,1.2s | | | | | | | |
| **KLU** | **Klutina** | **18.15** | **48** | | | **Pn** | **23 46 20.1** | **-0.2** |
| **M24K** | **Tolsona, Glenn** | **18.23** | **46** | P | | **Pn** | **23 46 23.2** | **+2.1** |
| **ILAR** | **Eielson Array** | **19.00** | **38** | P | | **Pn** | **23 46 31.0** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=226,slow=10,SNR=4.6 | | | | | | | |
| **H24K** | **Noodor Dome** | **19.16** | **35** | P | | **Pn** | **23 46 31.7** | **-0.4** |
| **J25K** | **Salcha River,** | **19.51** | **40** | P | | **Pn** | **23 46 35.4** | **-0.8** |
| **SONM** | **Songino Array** | **48.30** | **298** | P | | **P** | **23 50 44.1** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=50,slow=6.7,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **48.30** | **298** | P | | **P** | **23 50 44.0** | **+0.2** |
| SONM | | | | IAmb | | IAmb | 23 50 44.2 | |
| | comp=Z,0.6nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.12** | **315** | P | | **P** | **23 52 08.6** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=54,slow=6.8,SNR=2.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.24** | **310** | P | | **P** | **23 52 15.7** | **-1.0** |
| | comp=Z,0.1nm,0.4s,baz=42,slow=6.8,SNR=6.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.28** | **344** | P | | P | 23 53 40.5 | -3.4 |
| | comp=Z,0.4nm,0.4s,baz=18,slow=6.2,SNR=3.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **84.39** | **227** | P | | **P** | **23 54 32.9** | **-0.3** |
| | comp=Z,0.2nm,0.4s,baz=35,slow=6.1,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **87.84** | **226** | P | | **P** | **23 54 50.5** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=38,slow=4.7,SNR=1.7 | | | | | | | |

**NEIC 21 23:52:14.8**±1.0, **37.°13N**±0.°01×**97.°66W**±0.°01, **h5**km±1km, **Error ellipse: s-maj=3.0km s-min=2.0km az=26.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.94** | **103** | Pg | | Pg | 23 52 32.4 | -0.4 |
| T35A | | | | Sg | | Sg | 23 52 44.6 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.31** | **236** | Pn | | Pn | 23 52 39.0 | -0.8 |
| **R32A** | **Long Quarter,** | **1.54** | **327** | | | Pn | 23 52 42.9 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.71** | **174** | | | Pn | 23 52 46.0 | +0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **1.73** | **174** | | | Pn | 23 52 45.6 | +0.1 |
| **FNO** | **Franklin** | **1.88** | **174** | | | Pn | 23 52 48.0 | +0.4 |
| **TUL1** | **Leonard** | **1.93** | **128** | | | Pn | 23 52 48.7 | +0.5 |
| **W35A** | **Tecumseh

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.06** | **121** | P | | P | 00 13 00.6 | -0.1 |
| | 0.2nm,0.7s,baz=276,slow=7.6,SNR=1.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.93** | **347** | P | | P | 00 13 31.7 | +0.6 |
| | 0.8nm,0.7s,baz=165,slow=7.8,SNR=9.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.34** | **352** | P | | P | 00 14 18.8 | -0.7 |
| | 1.0nm,0.6s,baz=160,slow=4.6,SNR=6.4 | | | | | | | | |

*KRNET* ***22*** *00:08:32.6±0.1, 39.˚46N×73.˚64E, mb3.0*
*SOME* ***22*** *00:08:36.5, 39.˚58N×73.˚50E, h10km*
*NNC* ***22*** *00:08:37.3±1.4, 39.˚55N×73.˚57E, h0km, mb3.5, mpv3.3, Error ellipse: s-maj=11.0km s-min=5.9km az=171.0*

**ISC 22 00:08:32.9±1.5, 39.˚52N±0.˚06×73.˚49E±0.˚03, h2km±13km, n40, σ1§77/63, 15C-9D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **OHH** | **Osh** | **1.14** | **332** | ⇑*i*P | | **Pg** | **00 08 56.4** | **+1.6** |
| | baz=29 | | | | | | | |
| OHH | | | | ⇑*i*S | | **Sn** | **00 09 14.0** | **+1.7** |
| | baz=29 | | | | | | | |
| **DRK** | **Karamyk** | **1.31** | **269** | ⇑*i*P | | **Pg** | **00 08 59.7** | **+1.7** |
| | baz=72 | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sn** | **00 09 19.5** | **+2.8** |
| | baz=72 | | | | | | | |
| **BTK** | **Batken** | **2.13** | **285** | ⇑*i*P | | **Pg** | **00 09 13.3** | **-0.4** |
| | baz=86 | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sg** | **00 09 42.8** | **+1.5** |
| | baz=86 | | | | | | | |
| **ARLS** | **Aral** | **2.42** | **15** | ⇑*i*P | | **Pb** | **00 09 15.9** | **-1.4** |
| | baz=12 | | | | | | | |
| ARLS | | | | ⇑*i*S | | **Sb** | **00 09 47.3** | **-0.4** |
| | baz=12 | | | | | | | |
| **GAR** | **Garm** | **2.52** | **259** | ⇑*i*P | | **Pb** | **00 09 18.3** | **-0.6** |
| | baz=61 | | | | | | | |
| GAR | | | | ⇑*i*S | | **Sg** | **00 09 51.6** | **-2.2** |
| | baz=61 | | | | | | | |
| **ARK** | **Arkit** | **2.56** | **333** | ⇑*i*P | | **Pb** | **00 09 18.8** | **-0.8** |
| | baz=32 | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sb** | **00 09 52.8** | **+1.3** |
| | baz=32 | | | | | | | |
| **TRKS** | **Terek-Say** | **2.69** | **319** | ⇑*i*P | | **Pb** | **00 09 20.0** | **-1.9** |
| | baz=18 | | | | | | | |
| TRKS | | | | ⇑*i*S | | **Sb** | **00 09 54.7** | **-0.8** |
| | baz=18 | | | | | | | |
| **UCH** | **Uchtor** | **2.81** | **16** | ⇓*i*P | | **Pb** | **00 09 21.6** | **-2.6** |
| | baz=13 | | | | | | | |
| UCH | | | | ⇓*i*S | | **Sb** | **00 09 57.4** | **-1.9** |
| | baz=13 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.15** | **4** | ⇓*e*P | | **Pb** | **00 09 26.3** | **-3.3** |
| | baz=2.0 | | | | | | | |
| EKS2 | | | | ⇓*i*S | | **Sb** | **00 10 05.6** | **-2.9** |
| | baz=2.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.21** | **13** | ⇓Pn | | **Pb** | **00 09 30.1** | **-0.5** |
| | 4.0nm,0.5s | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 00 10 15.1 | |
| | 21nm,0.9s | | | | | | | |
| **MRKS** | **Merke** | **3.23** | **357** | *e*P | | **Pg** | **00 09 32.9** | **-1.9** |
| | 3.0nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sb** | **00 10 13.2** | **+2.4** |
| | 7.9nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **3.23** | **357** | Pg | | **Pg** | **00 09 34.5** | **-0.2** |
| | 3.7nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 00 10 19.3 | |
| | 9.6nm,0.2s | | | | | | | |
| **DZA** | **Taraz** | **3.74** | **335** | *e*P | | **Pg** | **00 09 45.5** | **+0.9** |
| | 31nm,0.1s | | | | | | | |
| DZA | | | | *e*S | | **Sg** | **00 10 35.2** | **+2.1** |
| | 23nm,0.2s | | | | | | | |
| **DZA** | **Taraz** | **3.74** | **335** | Pg | | **Pg** | **00 09 43.8** | **-0.8** |
| | 31nm,0.1s | | | | | | | |
| DZA | | | | Lg | | Lg | 00 10 35.2 | |
| | 23nm,0.2s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.75** | **24** | ⇓Pg | | **Pg** | **00 09 45.7** | **+0.9** |
| | 1.0nm,0.3s | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 00 10 35.9 | |
| | 4.9nm,0.8s | | | | | | | |
| **SGDS** | **Sogindy** | **4.02** | **12** | *e*P | | **Pg** | **00 09 50.1** | **+0.2** |
| | 2.0nm,0.3s | | | | | | | |
| SGDS | | | | *e*S | | **Sg** | **00 10 43.2** | **+1.1** |
| | 6.9nm,0.7s | | | | | | | |
| **SGDS** | **Sogindy** | **4.02** | **12** | Pg | | **Pg** | **00 09 49.5** | **-0.4** |
| | 2.1nm,0.3s | | | | | | | |
| SGDS | | | | Lg | | Lg | 00 10 45.1 | |
| | 6.9nm,0.7s | | | | | | | |
| **DGS** | **Degeres** | **4.10** | **24** | *e*P | | **Pg** | **00 09 52.2** | **+0.8** |
| | 3.5nm,0.7s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **00 10 46.7** | **+2.3** |
| | 6.6nm,0.5s | | | | | | | |
| **DGS** | **Degeres** | **4.10** | **24** | Pg | | **Pg** | **00 09 50.4** | **-1.0** |
| | 3.5nm,0.7s | | | | | | | |
| DGS | | | | Lg | | Lg | 00 10 46.7 | |
| | 6.6nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **4.23** | **31** | *e*P | | **Pg** | **00 09 55.1** | **+1.2** |
| | 2.2nm,0.4s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **00 10 51.5** | **+2.8** |
| | 4.5nm,0.3s | | | | | | | |
| **MTBS** | **Maitube** | **4.23** | **31** | Pg | | **Pg** | **00 09 52.4** | **-1.5** |
| | 2.2nm,0.4s | | | | | | | |
| MTBS | | | | Lg | | Lg | 00 10 50.0 | |
| | 4.5nm,0.3s | | | | | | | |
| **KK09** | **Karatay Array** | **4.25** | **329** | ⇓Pn | | Pb | 00 09 43.0 | -5.3 |
| | 0.5nm,0.3s,baz=143,slow=14 | | | | | | | |
| KK09 | | | | ⇑Sn | | **Sb** | **00 10 35.8** | **-4.2** |
| | 2.1nm,0.5s,baz=144,slow=24 | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.37** | **35** | *e*P | | **Pg** | **00 09 57.5** | **+0.8** |
| | 1.7nm,0.3s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **00 10 55.7** | **+2.3** |
| | 2.2nm,0.3s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.37** | **35** | Pg | | **Pg** | **00 09 55.8** | **-0.9** |
| | 1.7nm,0.3s | | | | | | | |
| TNSS | | | | Lg | | Lg | 00 10 55.7 | |
| | 2.2nm,0.3s | | | | | | | |
| **BRLS** | **Boroldaу** | **4.46** | **323** | *e*P | | **Pg** | **00 09 55.7** | **-2.6** |
| | 1.0nm,0.2s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **00 10 52.9** | **-3.2** |
| | 7.2nm,0.3s | | | | | | | |
| **BRLS** | **Boroldaу** | **4.46** | **323** | Pg | | **Pb** | **00 09 54.5** | **+2.6** |
| | 1.0nm,0.2s | | | | | | | |
| BRLS | | | | Lg | | Lg | 00 10 53.8 | |
| | 7.2nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **4.48** | **21** | *e*P | | **Pg** | **00 09 59.4** | **+0.6** |
| | 1.9nm,0.3s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **00 10 58.9** | **+2.1** |
| | 3.3nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **4.48** | **21** | Pg | | **Pg** | **00 09 57.5** | **-1.3** |
| | 1.9nm,0.3s | | | | | | | |
| KRBS | | | | Lg | | Lg | 00 10 58.9 | |
| | 3.3nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **4.52** | **35** | *e*P | | **Pg** | **00 09 59.6** | **+0.1** |
| | 0.9nm,0.8s | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **00 10 59.4** | **+1.4** |
| | 5.2nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **4.52** | **35** | Pg | | **Pg** | **00 09 58.5** | **-0.9** |
| | 4.4nm,1.2s | | | | | | | |
| MDOK | | | | Lg | | Lg | 00 11 00.7 | |
| | 6.2nm,1.0s | | | | | | | |
| **MDOK** | **Medeo** | **4.52** | **35** | Pg | | **Pg** | **00 09 57.8** | **-1.7** |
| | 4.2nm,1.0s | | | | | | | |
| MDOK | | | | Lg | | Lg | 00 10 59.4 | |
| | 5.2nm,0.6s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.60** | **35** | *e*P | | **Pg** | **00 10 01.6** | **+0.5** |
| | 2.1nm,0.5s | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **00 11 02.5** | **+1.7** |
| | 8.5nm,0.6s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.60** | **35** | Pg | | **Pg** | **00 09 59.6** | **-1.4** |
| | 2.1nm,0.5s | | | | | | | |
| KOTS | | | | Lg | | Lg | 00 11 02.5 | |
| | 8.5nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **4.82** | **29** | *e*P | | **Pg** | **00 10 05.6** | **+0.3** |
| | 1.1nm,1.4s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **00 11 09.5** | **+1.7** |
| | 6.7nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **4.82** | **29** | Pg | | **Pg** | **00 10 03.6** | **-1.7** |
| | 1.7nm,0.6s | | | | | | | |
| KTBS | | | | Lg | | Lg | 00 11 09.5 | |
| | 6.7nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | **4.86** | **25** | *e*P | | **Pg** | **00 10 06.5** | **+0.5** |
| | 1.5nm,0.9s | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **00 11 11.4** | **+2.4** |
| | 4.4nm,0.6s | | | | | | | |
| **KUU** | **Kurty** | **4.86** | **25** | Pg | | **Pg** | **00 10 04.3** | **-1.7** |
| | 1.5nm,0.9s | | | | | | | |
| KUU | | | | Lg | | Lg | 00 11 10.6 | |
| | 4.4nm,0.6s | | | | | | | |
| **CHKK** | **Chushkaly** | **5.06** | **30** | *e*P | | **Pg** | **00 10 10.0** | **+0.1** |
| | 0.8nm,0.1s | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | **00 11 17.3** | **+1.9** |
| | 4.9nm,0.5s | | | | | | | |
| **CHKK** | **Chushkaly** | **5.06** | **30** | Pg | | **Pg** | **00 10 08.2** | **-1.7** |
| | 0.6nm,0.0s | | | | | | | |
| CHKK | | | | Lg | | Lg | 00 11 17.3 | |
| | 4.9nm,0.5s | | | | | | | |
| **KPKS** | **Kokpek** | **5.54** | **43** | *e*P | | **Pg** | **00 10 17.8** | **-1.3** |
| | 1.9nm,0.8s | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **00 11 31.1** | **+0.1** |
| | 3.1nm,0.5s | | | | | | | |

*ISK* ***22*** *00:10:01.9, 34.˚55N×25.˚56E, h14km, ML3.5/11*
*IDC* ***22*** *00:10:04.7±1.4, 34.˚72N×25.˚57E, h44km±11km, mb3.4/9, mb1 3.5/14, mb1mx3.4/46, mbtmp3.6/14, ML3.5/5, Error ellipse: s-maj=19.6km s-min=12.0km az=12.0*
*THE* ***22*** *00:10:04.6, 34.˚68N×25.˚55E, h7km±2km, ML3.2/8, Error ellipse: s-maj=2.2km s-min=0.6km az=22.0*
*NIC* ***22*** *00:10:04.4±0.0, 34.˚42N×25.˚92E, h10km±3km, Ml4.2/3*
*ATH* ***22*** *00:10:04.0, 34.˚70N×25.˚54E, h34km±5km, ML3.3/4, Error ellipse: s-maj=6.4km s-min=1.6km az=12.0*

**ISC 22 00:10:03.2±1.2, 34.˚65N±0.˚05×25.˚59E±0.˚03, h29km±9km, n66, σ1§61/85, mb3.6/9, Crete**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **FRMA** | **Ierapetra Chan** | **0.39** | **18** | P | | **Pn** | **00 10 13.5** | **+0.6** |
| FRMA | | | | S | | **Sn** | **00 10 19.9** | **+0.6** |
| | 3μm,0.4s | | | | | | | |
| **NPS** | **Neapolis** | **0.62** | **2** | P | | **Pb** | **00 10 15.3** | **-0.2** |
| NPS | | | | S | | **Sn** | **00 10 25.2** | **+0.2** |
| | 3μm,0.4s | | | | | | | |
| **NPS** | **Neapolis** | **0.62** | **2** | P | | **Pb** | **00 10 15.4** | **-0.2** |
| NPS | | | | S | | **Sn** | **00 10 25.2** | **+0.2** |
| NPS | | | | AML | | AML | 00 10 30.0 | |
| | comp=E,7334μm,0.4s | | | | | | | |
| NPS | | | | AML | | AML | 00 10 32.6 | |
| | comp=N,4085μm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **0.70** | **48** | P | | **Pn** | **00 10 18.0** | **+0.8** |
| ZKR | | | | S | | **Sn** | **00 10 28.7** | **+1.7** |
| | comp=N,3μm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **0.70** | **48** | P | | **Pn** | **00 10 18.0** | **+0.8** |
| ZKR | | | | S | | **Sn** | **00 10 28.7** | **+1.7** |
| ZKR | | | | AML | | AML | 00 10 32.0 | |
| | comp=N,4330μm,0.6s | | | | | | | |
| ZKR | | | | AML | | AML | 00 10 33.4 | |
| | comp=E,8696μm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **0.70** | **48** | PG | | **Pn** | **00 10 17.7** | **+0.5** |
| ZKR | | | | SG | | **Sn** | **00 10 29.1** | **+2.1** |
| **ZKR** | **Zakros** | **0.70** | **48** | P | | **Pn** | **00 10 18.2** | **+1.0** |
| ZKR | | | | S | | **Sn** | **00 10 29.6** | **+2.6** |
| ZKR | | | | AMI | | | 00 10 30.1 | |
| | comp=E,7.7nm,0.6s | | | | | | | |
| ZKR | | | | AMI | | | 00 10 30.1 | |
| | comp=E,7.7nm,0.6s | | | | | | | |
| ZKR | | | | AMI | | | 00 10 30.5 | |
| | comp=E,4.1nm,0.6s | | | | | | | |
| ZKR | | | | AMI | | | 00 10 30.5 | |
| | comp=E,4.1nm,0.6s | | | | | | | |
| **SIVA** | **Sivas** | **0.74** | **300** | P | | **Pn** | **00 10 18.3** | **+0.6** |
| SIVA | | | | S | | **Sn** | **00 10 28.6** | **+0.7** |
| | comp=E,11μm,0.5s | | | | | | | |
| **HRKL** | **Herakleio** | **0.77** | **329** | PG | | **Pn** | **00 10 18.8** | **+0.6** |
| HRKL | | | | SG | | **Sn** | **00 10 31.3** | **+2.5** |
| **KSTL** | **Kastelli Herak** | **0.78** | **327** | P | | **Pb** | **00 10 15.3** | **-3.0** |
| KSTL | | | | S | | **Sb** | **00 10 23.6** | **-4.9** |
| | comp=E,998nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **0.86** | **318** | P | | **Pb** | **00 10 19.2** | **-0.4** |
| | comp=E,24nm,0.3s,baz=151,slow=12,SNR=146 | | | | | | | |
| IDI | | | | LR | | LR | 00 10 23.5 | |
| | comp=E,41nm,18.8s,baz=70,slow=24 | | | | | | | |
| IDI | | | | S | | **Sn** | **00 10 31.5** | **+0.5** |
| | comp=E,99nm,0.3s,baz=295,slow=14,SNR=22 | | | | | | | |
| **IDI** | **Anoyia** | **0.86** | **318** | P | | **Pb** | **00 10 19.8** | **+0.2** |
| IDI | | | | S | | **Sn** | **00 10 32.4** | **+1.4** |
| | comp=E,1μm,0.7s | | | | | | | |
| **IDI** | **Anoyia** | **0.86** | **318** | P | | **Pb** | **00 10 19.2** | **-0.4** |
| IDI | | | | AML | | AML | 00 10 32.6 | |
| | comp=N,1799μm,0.5s | | | | | | | |
| IDI | | | | AML | | AML | 00 10 34.8 | |
| | comp=E,2828μm,0.9s | | | | | | | |
| **IDI** | **Anoyia** | **0.86** | **318** | PG | | **Pb** | **00 10 19.8** | **+0.2** |
| IDI | | | | SG | | **Sn** | **00 10 33.1** | **+2.1** |
| **GVDS** | **Gavdos** | **1.25** | **280** | P | | **Pb** | **00 10 27.0** | **+0.9** |
| GVDS | | | | S | | **Sb** | **00 10 44.0** | **+2.2** |
| | comp=E,982nm,0.5s | | | | | | | |
| **GVD** | **Gavdhos** | **1.25** | **279** | P | | **Pb** | **00 10 26.7** | **+0.5** |
| GVD | | | | AML | | AML | 00 10 53.2 | |
| | comp=N,2727μm,0.4s | | | | | | | |
| GVD | | | | AML | | AML | 00 10 54.7 | |
| | comp=E,2739μm,0.7s | | | | | | | |
| **GVD** | **Gavdhos** | **1.25** | **279** | PN | | **Pn** | **00 10 25.6** | **+0.9** |
| **VAM** | **Vamos** | **1.37** | **304** | P | | **Pb** | **00 10 28.2** | **0.0** |
| VAM | | | | S | | **Sb** | **00 10 46.0** | **+0.7** |
| | comp=E,1μm,0.5s | | | | | | | |
| **VAM** | **Vamos** | **1.37** | **304** | P | | **Pb** | **00 10 28.2** | **0.0** |
| **IMMV** | **Iera Moni Meta** | **1.55** | **302** | P | | **Pb** | **00 10 30.9** | **-0.3** |
| **IMMV** | **Iera Moni Meta** | **1.55** | **302** | P | | **Pb** | **00 10 30.9** | **-0.3** |
| **IMMV** | **Iera Moni Meta** | **1.55** | **302** | PN | | **Pb** | **00 10 30.6** | **-0.6** |
| **KARP** | **Karpathos** | **1.57** | **55** | PN | | **Pb** | **00 10 31.4** | **-0.3** |
| **KARP** | **Karpathos** | **1.57** | **55** | P | | **Pb** | **00 10 32.3** | **+0.6** |
| KARP | | | | S | | **Sb** | **00 10 53.7** | **+2.5** |
| **KNDR** | **Palaiochora Ch** | **1.67** | **291** | PN | | **Pb** | **00 10 32.5** | **-0.8** |
| **RODP** | **Rodopos** | **1.75** | **302** | PN | | **Pn** | **00 10 33.2** | **+1.5** |
| **THR3** | **Thira Island,** | **1.77** | **355** | P | | **Pn** | **00 10 33.6** | **+1.8** |
| **THR5** | **Thira Island,** | **1.78** | **354** | P | | **Pn** | **00 10 33.2** | **+1.2** |
| **SAP3** | **Santorini-Thir** | **1.80** | **354** | P | | **Pn** | **00 10 33.0** | **+0.7** |
| **THR2** | **Thira island,** | **1.80** | **356** | P | | **Pn** | **00 10 33.6** | **+1.2** |
| **ANKY** | **Antikythira Is** | **2.23** | **304** | P | | **Pn** | **00 10 39.5** | **+1.3** |
| **ANKY** | **Antikythira Is** | **2.23** | **304** | P | | **Pn** | **00 10 39.5** | **+1.3** |
| **KOSK** | **Kos Island** | **2.39** | **28** | PN | | **Pb** | **00 10 43.4** | **-2.1** |
| **ARG** | **Arkhangelos** | **2.60** | **52** | P | | **Pn** | **00 10 45.9** | **+2.6** |
| **ARG** | **Arkhangelos** | **2.60** | **52** | P | | **Pn** | **00 10 45.9** | **+2.6** |
| **ARG** | **Arkhangelos** | **2.60** | **52** | PN | | **Pn** | **00 10 45.8** | **+2.6** |
| **ARG** | **Arkhangelos** | **2.60** | **52** | P | | **Pn** | **00 10 45.6** | **+2.3** |
| **TURN** | **Turunc** | **3.03** | **45** | PN | | **Pn** | **00 10 51.2** | **+2.0** |
| **MLSB** | **Milas** | **3.19** | **33** | PN | | **Pn** | **00 10 53.8** | **+2.4** |
| **DALY** | **Dalyan (Mula)** | **3.31** | **48** | PN | | **Pn** | **00 10 56.1** | **+3.1** |
| **YER** | **Yerkesik** | **3.31** | **41** | PN | | **Pn** | **00 10 55.4** | **+2.3** |
| **KSL** | **Kastellorizon** | **3.59** | **64** | P | | **Pn** | **00 10 58.3** | **+1.3** |
| KSL | | | | S | | **Sn** | **00 11 40.7** | **+2.3** |
| **AKAS** | **Kas** | **3.64** | **63** | PN | | **Pn** | **00 11 00.4** | **+2.6** |
| **ELL** | **Elmali** | **4.10** | **58** | PN | | **Pn** | **00 11 06.9** | **+2.9** |
| **ELL** | **Elmali** | **4.10** | **58** | P | | **Pn** | **00 11 06.2** | **+2.3** |
| **OSC1** | **CSNet OBS 1** | **4.86** | **102** | S | | **Sn** | **00 12 07.5** | **-2.1** |
| **NATA** | **Nata** | **5.75** | **87** | P | | **Pn** | **00 11 27.4** | **+0.7** |
| **OSC2** | **CSNet OBS 4** | **5.78** | **104** | P | | **Pn** | **00 11 27.5** | **+0.6** |
| **ALFC** | **Alefka** | **5.79** | **83** | P | | **Pn** | **00 11 27.8** | **+0.7** |
| ALFC | | | | AMI | | | 00 12 28.6 | |
| | comp=E,0.4nm,1.5s | | | | | | | |
| ALFC | | | | AMI | | | 00 12 33.2 | |
| | comp=E,0.5nm,0.8s | | | | | | | |
| **SZAC** | **Souni** | **6.01** | **87** | P | | **Pn** | **00 11 30.9** | **+0.6** |
| **ASGA** | **Asgata** | **6.31** | **87** | P | | **Pn** | **00 11 34.5** | **+0.2** |
| ASGA | | | | AMI | | | 00 12 46.6 | |
| | comp=E,0.3nm,0.6s | | | | | | | |
| ASGA | | | | AMI | | | 00 12 48.4 | |
| | comp=E,0.3nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **8.18** | **49** | P | | **Pn** | **00 12 00.6** | **+0.5** |
| | comp=E,0.1nm,0.3s,baz=218,slow=12,SNR=5.0 | | | | | | | |
| BRTR | | | | S | | **Sn** | **00 13 29.9** | **-1.8** |
| | comp=E,0.0nm,0.3s,baz=221,slow=17,SNR=1.4 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **8.33** | **99** | P | | **Pn** | **00 12 02.6** | **+0.5** |
| | comp=E,1.8nm,0.3s,baz=287,slow=8.7,SNR=12 | | | | | | | |
| MMAI | | | | S | | **Sn** | **00 13 32.8** | **-2.4** |
| | comp=E,2.7nm,0.3s,baz=331,slow=20,SNR=6.5 | | | | | | | |
| **EIL** | **Elat** | **9.36** | **119** | P | | **Pn** | **00 12 17.9** | **+1.7** |
| | comp=E,0.3nm,0.3s,baz=6.7,slow=1.5,SNR=13 | | | | | | | |
| EIL | | | | S | | Sn | 00 13 54.4 | -6.0 |
| | comp=E,1.5nm,0.3s,baz=106,slow=2.6,SNR=12 | | | | | | | |
| **VAE** | **Valguarnera** | **9.48** | **291** | P | | **Pn** | **00 12 18.4** | **+0.7** |
| | comp=E,2.0nm,0.3s,baz=6.7,slow=17,SNR=8.3 | | | | | | | |
| **KBZ** | **Khabaz** | **16.17** | **51** | P | | **P** | **00 13 52.7** | **+1.5** |
| | comp=E,0.2nm,0.3s,baz=227,slow=8.7,SNR=14 | | | | | | | |
| **AKASG** | **Malin Array Be** | **16.26** | **8** | P | | **Pn** | **00 13 49.9** | **+0.5** |
| | comp=E,0.6nm,0.3s,baz=199,slow=11,SNR=4.9 | | | | | | | |
| **ESDC** | **Sonseca Array** | **24.02** | **291** | P | | **P** | **00 15 15.3** | **-0.3** |
| | comp=E,0.3nm,0.8s,baz=93,slow=9.4,SNR=1.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.82** | **1** | P | | **P** | **00 15 38.2** | **-2.4** |
| | comp=E,3.4nm,1.1s,baz=148,slow=11,SNR=5.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.43** | **231** | P | | **P** | **00 16 12.9** | **-0.3** |
| | comp=E,0.3nm,0.4s,baz=34,slow=8.3,SNR=5.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.94** | **360** | P | | **P** | **00 16 50.1** | **-2.0** |
| | comp=E,3.9nm,1.1s,baz=183,slow=8.4,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.77** | **56** | P | | **P** | **00 18 06.8** | **+0.8** |
| | comp=E,0.4nm,0.6s,baz=272,slow=7.1,SNR=9.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.11** | **46** | P | | **P** | **00 18 16.4** | **-0.2** |
| | comp=E,0.4nm,0.3s,baz=270,slow=9.1,SNR=2.7 | | | | | | | |
| **SONM** | **Songino Array** | **59.54** | **50** | P | | **P** | **00 20 04.4** | **+0.3** |
| | comp=E,0.2nm,0.4s,baz=284,slow=7.6,SNR=2.7 | | | | | | | |
| **SCHQ** | **Schefferville** | **63.80** | **320** | P | | **P** | **00 20 31.8** | **-0.7** |
| | comp=E,1.8nm,0.7s,baz=57,slow=7.0,SNR=5.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.04** | **342** | P | | **P** | **00 21 57.7** | **-1.0** |
| | comp=E,0.1nm,0.4s,baz=43,slow=5.6,SNR=2.4 | | | | | | | |

*IDC* ***22*** *00:13:38.8±1.9, 2.˚79N×94.˚86E, h0km, mb3.7/6, mb1 3.9/8, mb1mx3.6/37, mbtmp3.7/8, ML3.4/1, Error ellipse: s-maj=64.6km s-min=19.6km az=59.0*

**ISC 22 00:13:44.3±1.6, 2.˚9N±0.˚2×95.˚0E±0.˚2, h35km, n11, σ0§44/8, mb3.8/6, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **PSI** | **Prapat** | **3.96** | **91** | Pn | | **Pn** | **00 14 42.5** | **-0.1** |
| | 2.2nm,0.3s,baz=298,slow=4.1,SNR=2.9 | | | | | | | |
| PSI | | | | Sn | | Sn | 00 15 19.7 | -8.2 |
| | 1.8nm,0.3s,baz=334,slow=19,SNR=1.8 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **15.99** | **14** | Pn | | **Pn** | **00 17 27.2** | **+0.4** |
| | baz=303,slow=36,SNR=1.1 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.73** | **245** | T | | T | 00 44 37.3 | |
| | baz=66,slow=76,SNR=110 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.73** | **245** | T | | T | 00 44 32.1 | |
| | baz=66,slow=76,SNR=175 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **24.74** | **245** | T | | T | 00 44 33.3 | |
| | baz=66,slow=76,SNR=177 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.80** | **122** | P | | **P** | **00 21 55.1** | **0.0** |
| | 1.1nm,0.7s,baz=299,slow=9.3,SNR=6.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.14** | **348** | P | | **P** | **00 21 57.4** | **0.0** |
| | 0.4nm,0.4s,baz=166,slow=7.8,SNR=15 | | | | | | | |
| **SONM** | **Songino Array** | **45.89** | **11** | P | | **P** | **00 22 03.3** | **-0.2** |
| | 0.2nm,0.4s,baz=198,slow=9.9,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **46.16** | **127** | P | | **P** | **00 22 05.3** | **-0.6** |
| | 0.2nm,0.3s,baz=291,slow=8.4,SNR=5.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.61** | **352** | P | | **P** | **00 22 47.0** | **-0.2** |
| | 1.0nm,0.6s,baz=170,slow=6.5,SNR=5.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **56.11** | **132** | P | | **P** | **00 23 21.1** | **+0.6** |
| | 1.5nm,0.7s,baz=310,slow=7.9,SNR=4.4 | | | | | | | |

*SOME* ***22*** *00:38:08.2, 39.˚07N×72.˚18E, h10km*
*NNC* ***22*** *00:38:12.6±3.0, 38.˚94N×73.˚36E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=22.3km s-min=14.5km az=168.0*

**ISC 22 00:38:04.8±3.3, 39.˚1N±0.˚2×72.˚16E±0.˚05, h10km, n28, σ1§67/39, 5C-2D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **MRKS** | **Merke** | **3.71** | **12** | *e*P | | Pg | 00 39 20.1 | +4.3 |
| | 6.3nm,0.6s | | | | | | | |
| MRKS | | | | *e*S | | Sg | 00 40 11.6 | +7.7 |
| | 16nm,0.4s | | | | | | | |
| **MRKS** | **Merke** | **3.71** | **12** | Pg | | **Pg** | **00 39 13.6** | **-2.2** |
| | 1.5nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 00 40 03.0 | |
| | 16nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.94** | **26** | ⇑Pn | | **Pb** | **00 39 13.5** | **-0.8** |
| | 11nm,1.0s | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 00 40 13.2 | |
| | 10nm,0.8s | | | | | | | |
| **KK09** | **Karatay Array** | **4.19** | **343** | ⇑Pn | | **Pg** | **00 39 24.2** | **-0.8** |
| | 2.5nm,0.6s,baz=153,slow=13 | | | | | | | |
| KK09 | | | | ⇑Sn | | **Sg** | **00 40 21.5** | **+2.3** |
| | 9.8nm,0.7s,baz=146,slow=24 | | | | | | | |
| KK09 | | | | ⇑Lg | | Lg | 00 40 40.6 | |
| | 6.7nm,0.6s | | | | | | | |
| **BRLS** | **Boroldaу** | **4.28** | **337** | *e*P | | **Pg** | **00 39 25.5** | **-1.2** |
| | 1.5nm,0.3s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **00 40 21.5** | **-0.6** |
| | 5.2nm,0.4s | | | | | | | |
| **BRLS** | **Boroldaу** | **4.28** | **337** | Pg | | **Pb** | **00 39 20.7** | **+0.6** |
| | 1.5nm,0.3s | | | | | | | |
| BRLS | | | | Lg | | Lg | 00 40 15.2 | |
| | 5.2nm,0.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.60** | **33** | ⇓Pg | | **Pg** | **00 39 31.7** | **-1.2** |
| | 4.0nm,0.8s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 00 40 30.0 | |
| | 4.4nm,0.8s | | | | | | | |
| **SGDS** | **Sogindy** | **4.71** | **23** | *e*P | | **Pg** | **00 39 34.5** | **-0.5** |
| | 4.0nm,0.6s | | | | | | | |
| SGDS | | | | *e*S | | **Sg** | **00 40 36.6** | **+0.6** |
| | 6.0nm,0.7s | | | | | | | |
| **SGDS** | **Sogindy** | **4.71** | **23** | Pg | | **Pg** | **00 39 32.5** | **-2.5** |
| | 4.0nm,0.6s | | | | | | | |
| SGDS | | | | Lg | | Lg | 00 40 35.3 | |
| | 6.0nm,0.7s | | | | | | | |
| **DGS** | **Degeres** | **4.94** | **32** | *e*P | | **Pg** | **00 39 39.1** | **-0.3** |
| | 5.9nm,0.4s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **00 40 44.1** | **+0.8** |
| | 4.8nm,0.6s | | | | | | | |
| **DGS** | **Degeres** | **4.94** | **32** | Pg | | **Pg** | **00 39 36.7** | **-2.7** |
| | 5.9nm,0.4s | | | | | | | |
| DGS | | | | Lg | | Lg | 00 40 42.4 | |
| | 4.8nm,0.6

*TUL **22** 00:44:50.9±0.8,35°.722N×0°.009×97°.16W±0°.01,h5$^{km}_{\pm 4}$, ML2.5,mb_Lg1.8/3(NEIC),Error ellipse: s-maj=1.6km s-min=1.2km az=98.0*

**NEIC 22 00:44:51.1±0.9,35.73N±0°.02×97.16W±0°.01,h8$^{km}_{\pm 6}$, Error ellipse: s-maj=2.4km s-min=1.3km az=168.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.08** | **198** | Pg | Pg | 00 44 53.0 | -0.2 |
| OK005 | | | | Sg | Sg | 00 44 54.4 | -0.2 |
| **OKCFA** | **Oklahoma City** | **0.39** | **217** | | Pg | 00 44 58.6 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **215** | | Pg | 00 44 58.7 | -0.1 |
| **FNO** | **Franklin** | **0.51** | **203** | | Pg | 00 45 00.7 | -0.3 |
| **W35A** | **Tecumseh** | **0.62** | **158** | Pg | Pg | 00 45 02.9 | -0.2 |
| **TUL1** | **Leonard** | **1.13** | **80** | Pg | Pg | 00 45 12.3 | -0.5 |
| TUL1 | comp=Z,5.3nm,1.1s | | | IAmb_Lg | | 00 45 26.9 | |
| **X34A** | **Smith Ranch, M** | **1.25** | **206** | Pg | Pn | 00 45 14.4 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.30** | **24** | Pn | Pn | 00 45 14.9 | -0.6 |
| **U32A** | **Winter Ranch,** | **1.63** | **294** | Pn | Pn | 00 45 20.4 | +0.3 |
| U32A | comp=Z,5.3nm,0.9s | | | IAmb_Lg | | 00 45 42.2 | |
| **WMOK** | **Wichita Mounta** | **1.65** | **234** | Pn | Pn | 00 45 19.7 | -0.7 |
| **X37A** | **Clayton** | **1.86** | **127** | | Pn | 00 45 23.5 | +0.3 |
| **U38A** | **Gravette** | **2.36** | **72** | | Pn | 00 45 30.9 | +0.7 |
| **X40A** | **Basin Creek Fa** | **3.76** | **108** | IAmb_Lg | | 00 46 50.3 | |
| | comp=Z,3.2nm,1.3s | | | | | | |

*IDC **22** 01:03:47.2±1.9,39°.61N×68°.33E,h0$^{km}$, mb3.8/4, mb1 3.8/10,mb1mx3.5/50,mbtmp3.7/10,ML3.3/6,Error ellipse: s-maj=25.8km s-min=13.3km az=179.0*

*NNC **22** 01:03:49.7±1.6,39°.80N×68°.27E,h0$^{km}$,mb4.0,mpv3.7, Error ellipse: s-maj=14.3km s-min=7.5km az=13.0*

*ISU **22** 01:03:53,40°.60N×67°.50E,h30$^{km}$*

*SOME **22** 01:04:02.7,40°.22N×69°.48E,h15$^{km}$*

**ISC 22 01:03:51.9±1.3,39°.93N±0°.05×68°.29E±0°.04,h13$^{km}_{\pm 9}$, n37,σ2°16/56,mb3.9/4,7C-9D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZI** | **Dzhizak** | **0.41** | **298** | *i* P | **Pn** | **01 04 02.0** | **-1.6** |
| DZI | | | | *i* S | **Sb** | **01 04 10.0** | **+2.7** |
| **AGL** | **Agalyk** | **1.16** | **250** | *e*P | **Pn** | **01 04 15.0** | **+1.0** |
| AGL | | | | *e*S | **Sn** | **01 04 32.0** | **+2.2** |
| **YNGY** | **Yangiyul** | **1.31** | **25** | *e*P | **Pb** | **01 04 18.0** | **+1.6** |
| YNGY | | | | *e*S | **Sn** | **01 04 38.0** | **+4.6** |
| **KTAB** | **Kitab** | **1.35** | **234** | *e*P | **Pb** | **01 04 17.0** | **0.0** |
| KTAB | | | | *e*S | **Sn** | **01 04 37.0** | **+2.8** |
| **KUMR** | **Kumaryk** | **1.49** | **31** | *e*P | **Pg** | **01 04 20.0** | **-0.4** |
| KUMR | | | | *e*S | **Sg** | **01 04 43.0** | **+3.3** |
| **PKMR** | **Pachkamar** | **2.02** | **228** | *e*P | **Pb** | **01 04 29.0** | **+0.5** |
| PKMR | | | | *e*S | **Sg** | **01 04 57.0** | **+0.1** |
| **CHMG** | **Chimgan** | **2.08** | **38** | *e*P | **Pb** | **01 04 28.0** | **-1.6** |
| CHMG | | | | *e*S | **Sb** | **01 04 56.0** | **+0.6** |
| **CHRV** | **Charvak** | **2.13** | **36** | *i* P | **Pb** | **01 04 29.0** | **-1.3** |
| CHRV | | | | *e*S | **Sb** | **01 04 57.0** | **+0.4** |
| **CHM** | **Chimkent** | **2.59** | **22** | *e*P | **Pg** | **01 04 42.0** | **+0.6** |
| CHM | 5.0nm,0.4s | | | *e*S | **Sb** | **01 05 08.6** | **-1.3** |
| | 160nm,0.3s | | | | | | |
| **BRLS** | **Borolday** | **3.31** | **20** | *e*P | **Pb** | **01 04 48.0** | **-2.5** |
| BRLS | 5.1nm,0.3s | | | *e*S | **Sn** | **01 05 18.6** | **-4.1** |
| | 65nm,0.2s | | | | | | |
| **KK09** | **Karatay Array** | **3.60** | **27** | ⇑Pn | **Pn** | **01 04 48.6** | **+1.2** |
| KK09 | 3.2nm,0.3s,baz=209,slow=12 | | | ⇑Pg | **Pg** | **01 04 59.1** | **-1.7** |
| | 29nm,0.6s,baz=208,slow=16 | | | | | | |
| KK09 | | | | ⇓Lg | Lg | 01 05 46.9 | |
| | 41nm,0.6s,baz=208,slow=27 | | | | | | |
| **DZA** | **Taraz** | **3.74** | **37** | *e*P | **Pb** | **01 04 57.7** | **-0.1** |
| DZA | 54nm,0.1s | | | *e*S | **Sn** | **01 05 35.9** | **+2.6** |
| | 290nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **4.64** | **60** | P | **Pn** | **01 05 02.2** | **+0.1** |
| | SNR=64 | | | | | | |
| **MRKS** | **Merke** | **4.66** | **51** | *e*P | **Pb** | **01 05 11.5** | **-2.0** |
| MRKS | 8.8nm,0.3s | | | *e*S | **Sn** | **01 05 59.2** | **+3.2** |
| | 21nm,0.5s | | | | | | |
| **EKS2** | **Erkin-Say** | **4.95** | **55** | P | **Pn** | **01 05 07.1** | **+1.0** |
| | SNR=7.0 | | | | | | |
| **UCH** | **Uchtor** | **5.23** | **62** | P | **Pn** | **01 05 10.4** | **+0.2** |
| | SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **5.40** | **58** | Pn | **Pn** | **01 05 12.8** | **+0.5** |
| AAK | 2.1nm,0.3s,baz=229,slow=7.1,SNR=16 | | | Sn | **Sn** | **01 06 16.5** | **+2.1** |
| | 1.9nm,0.3s,baz=196,slow=22,SNR=6.2 | | | | | | |
| **AAK** | **Ala-Archa** | **5.40** | **58** | P | **Pn** | **01 05 13.2** | **+1.0** |
| | SNR=6.3 | | | | | | |
| **AAK** | **Ala-Archa** | **5.40** | **58** | ⇑Pn | **Pn** | **01 05 13.1** | **+0.8** |
| | 5.7nm,0.6s | | | | | | |
| AAK | | | | ⇓Sn | **Sn** | **01 06 16.4** | **+2.1** |
| | 5.1nm,0.4s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 01 06 45.1 | |
| | 16nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **5.71** | **59** | P | **Pn** | **01 05 17.5** | **+1.0** |
| | SNR=18 | | | | | | |
| **USP** | **Ospenovka** | **5.72** | **52** | P | **Pn** | **01 05 16.6** | **-0.1** |
| | SNR=10.0 | | | | | | |
| **CHMS** | **Chumysh** | **5.74** | **56** | P | **Pn** | **01 05 17.7** | **+0.9** |
| | SNR=5.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.25** | **59** | ⇑Pn | **Pn** | **01 05 24.0** | **-0.1** |
| | 1.4nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 01 07 12.8 | |
| | 12nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **7.32** | **61** | Pn | **Pn** | **01 05 38.5** | **-0.1** |
| | 3.3nm,0.7s | | | | | | |
| MDOK | | | | Lg | Lg | 01 07 47.8 | |
| | 9.2nm,0.7s | | | | | | |
| **OTUK** | **Ortayu** | **8.81** | **18** | ⇑Pn | **Pn** | **01 05 59.7** | **+0.8** |
| | 1.4nm,0.3s | | | | | | |
| OTUK | | | | ⇑Sn | **Sn** | **01 07 42.7** | **+4.7** |
| | 3.9nm,0.5s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 01 08 33.5 | |
| | 8.4nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **9.05** | **64** | ⇓Pg | Pg | 01 06 37.6 | |
| | 2.6nm,1.1s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 01 08 41.0 | |
| | 4.7nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **11.06** | **330** | Pn | **Pn** | **01 06 28.9** | **-0.7** |
| | 1.1nm,0.4s,baz=163,slow=11,SNR=86 | | | | | | |
| AB31 | | | | ⇓Sn | **Sn** | **01 08 34.9** | **+1.8** |
| | 0.7nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.27** | **51** | Pn | **Pn** | **01 06 45.2** | **-1.1** |
| | 0.2nm,0.3s,baz=240,slow=15,SNR=6.0 | | | | | | |
| MKAR | | | | Lg | Lg | 01 10 16.1 | |
| | 0.1nm,0.3s,baz=258,slow=26,SNR=2.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **12.75** | **329** | Pn | **Pn** | **01 06 52.5** | **-0.3** |
| | 0.2nm,0.3s,baz=137,slow=18,SNR=2.6 | | | | | | |
| AKTO | | | | Sn | **Sn** | **01 09 11.0** | **-3.6** |
| | 0.2nm,0.3s,baz=63,slow=22,SNR=2.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **12.75** | **329** | ⇓Pn | **Pn** | **01 06 55.2** | **+2.4** |
| | 1.6nm,0.6s | | | | | | |
| AKTO | | | | ⇓Sn | **Sn** | **01 09 19.9** | **+5.3** |
| | 1.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.88** | **31** | Pn | **Pn** | **01 06 52.9** | **-1.7** |
| | 0.1nm,0.3s,baz=221,slow=13,SNR=4.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **13.18** | **6** | Pn | **Pn** | **01 06 57.2** | **-1.5** |
| | 0.2nm,0.3s,baz=200,slow=19,SNR=2.8 | | | | | | |
| BVAR | | | | Sn | **Sn** | **01 09 19.6** | **-5.5** |
| | 0.4nm,0.3s,baz=288,slow=31,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.94** | **33** | P | **Pn** | **01 07 59.2** | **-1.6** |
| | 0.3nm,0.3s,baz=224,slow=12,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **33.46** | **324** | P | **P** | **01 10 30.2** | **-0.1** |
| | 2.7nm,1.0s,baz=118,slow=10,SNR=5.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **37.16** | **337** | P | **P** | **01 11 00.3** | **-1.9** |
| | 6.0nm,1.1s,baz=108,slow=2.7,SNR=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **40.37** | **321** | P | **P** | **01 11 28.6** | **-0.6** |
| | 0.2nm,0.4s,baz=107,slow=7.9,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.90** | **1** | P | **P** | **01 15 48.2** | **-0.8** |
| | 0.5nm,0.7s,baz=352,slow=5.8,SNR=10.0 | | | | | | |

*NNC **22** 01:15:03.2±8.1,37°.75N×71°.26E,h0$^{km}$,mb4.2,mpv4.0, Error ellipse: s-maj=63.7km s-min=40.7km az=172.0*

*IDC **22** 01:15:07.6±6.7,37°.59N×71°.89E,h160$^{km}_{\pm 45}$,mb3.3/5, mb1 3.4/9,mb1mx3.1/39,mbtmp3.8/9,Error ellipse: s-maj=57.9km s-min=24.9km az=6.0*

**ISC 22 01:15:03.0±1.0,37°.29N±0°.08×71°.88E±0°.09,h150$^{km}$,n31, σ2°07/37,mb3.4/5,6C-3D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.04** | **16** | P | **Pn** | **01 16 17.7** | **+0.5** |
| | SNR=111 | | | | | | |
| **UCH** | **Uchtor** | **5.34** | **22** | P | **Pn** | **01 16 21.7** | **+0.5** |
| | SNR=44 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.56** | **15** | P | **Pn** | **01 16 24.7** | **+0.7** |
| | SNR=25 | | | | | | |
| **AAK** | **Ala-Archa** | **5.71** | **20** | P | **Pn** | **01 16 26.9** | **+0.9** |
| | 6.4nm,0.3s,baz=188,slow=6.2,SNR=144 | | | | | | |
| AAK | | | | S | **Sn** | **01 17 29.4** | **-1.3** |
| | 2.4nm,0.3s,baz=331,slow=22,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **5.71** | **20** | P | **Pn** | **01 16 27.0** | **+1.0** |
| | SNR=44 | | | | | | |
| **AAK** | **Ala-Archa** | **5.71** | **20** | ⇑P | **Pn** | **01 16 26.6** | **+0.7** |
| | 11nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 17 29.2** | **-1.6** |
| | 23nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **5.86** | **23** | P | **Pn** | **01 16 28.9** | **+1.0** |
| | SNR=10 | | | | | | |
| **KK09** | **Karatay Array** | **5.92** | **350** | ⇑P | **Pn** | **01 16 27.3** | **-1.3** |
| | 8.2nm,0.6s,baz=179,slow=13 | | | | | | |
| KK09 | | | | ⇑S | **Sn** | **01 17 31.1** | **-4.6** |
| | 50nm,0.6s,baz=183,slow=24 | | | | | | |
| **ULHL** | **Ulahol** | **5.98** | **33** | P | **Pn** | **01 16 29.9** | **+0.3** |
| | SNR=9.3 | | | | | | |
| **CHMS** | **Chumysh** | **6.12** | **20** | P | **Pn** | **01 16 31.6** | **+0.4** |
| | SNR=17 | | | | | | |
| **USP** | **Ospenovka** | **6.30** | **18** | P | **Pn** | **01 16 33.8** | **+0.1** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.31** | **26** | P | **Pn** | **01 16 34.8** | **+0.9** |
| | SNR=19 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.31** | **26** | ⇓P | **Pn** | **01 16 34.3** | **+0.3** |
| | 9.5nm,0.6s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **01 17 45.5** | **+0.5** |
| | 6.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.24** | **36** | P | **Pn** | **01 17 52.0** | **-0.3** |
| | 0.0nm,0.3s,baz=221,slow=13,SNR=5.6 | | | | | | |
| **PYUN** | **Piuthan** | **13.08** | **131** | *e*P | **Pn** | **01 18 00.5** | **-3.0** |
| | 11nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **13.38** | **128** | *e*P | **Pn** | **01 18 04.3** | **-3.0** |
| | 2.1nm,0.2s | | | | | | |
| **KOLN** | **Koldanda** | **13.69** | **130** | *e*P | **Pn** | **01 18 08.4** | **-2.8** |
| | 2.7nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.16** | **18** | P | **P** | **01 18 19.8** | **+0.2** |
| | 0.1nm,0.3s,baz=203,slow=11,SNR=6.6 | | | | | | |
| **GKN** | **Gorkha** | **14.17** | **127** | *e*P | **Pn** | **01 18 14.4** | **-2.8** |
| | 8.0nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.77** | **328** | ⇑P | **Pn** | **01 18 24.2** | **-0.1** |
| | 0.5nm,0.3s,baz=134,slow=14,SNR=59 | | | | | | |
| AB31 | | | | S | Sn | 01 21 00.7 | -7.4 |
| | 2.2nm,0.6s,baz=153,slow=22,SNR=7.8 | | | | | | |
| **GUN** | **Gumba** | **15.04** | **124** | *e*P | **Pn** | **01 18 25.2** | **-3.1** |
| | 6.9nm,0.3s | | | | | | |
| **JIRN** | **Jiri** | **15.41** | **124** | *e*P | **Pn** | **01 18 30.6** | **-2.3** |
| | 14nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **16.16** | **125** | *e*P | **Pn** | **01 18 39.1** | **-2.8** |
| | 0.9nm,0.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.48** | **327** | P | **Pn** | **01 18 47.2** | **+1.9** |
| | 0.3nm,0.3s,baz=143,slow=5.6,SNR=7.8 | | | | | | |
| AKTO | | | | S | **S** | **01 21 44.6** | **-3.6** |
| | 0.2nm,0.3s,baz=251,slow=16,SNR=8.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.48** | **327** | ⇓P | **Pn** | **01 18 46.7** | **+1.3** |
| | 5.0nm,1.0s | | | | | | |
| AKTO | | | | ⇑S | **S** | **01 21 43.8** | **-4.4** |
| | 6.6nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.91** | **24** | P | **P** | **01 19 13.2** | **+1.3** |
| | 0.6nm,0.3s,baz=215,slow=9.6,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **27.31** | **56** | P | **P** | **01 20 36.1** | **+2.4** |
| | 0.3nm,0.7s,baz=261,slow=9.6,SNR=2.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **33.01** | **308** | P | **P** | **01 21 25.3** | **+1.7** |
| | 0.4nm,0.5s,baz=80,slow=6.6,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **37.23** | **325** | P | **P** | **01 22 01.3** | **+1.7** |
| | 2.2nm,0.9s,baz=193,slow=16,SNR=1.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.69** | **337** | P | **P** | **01 22 30.2** | **+1.9** |
| | 7.8nm,1.1s,baz=39,slow=6.2,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.43** | **3** | P | **P** | **01 26 58.8** | **+1.3** |
| | 0.2nm,0.4s,baz=353,slow=5.1,SNR=4.3 | | | | | | |

**GUC 22 01:31:47.6±0.7,29.71S×71°.90W,h46$^{km}_{\pm 8}$,ML3.9, 3C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.61** | **110** | ⇓*i*P | Pn | 01 32 00.7 | +0.7 |
| CO05 | | | | *e*S | Sn | 01 32 10.4 | +1.5 |
| CO05 | | | | IAML | | 01 32 12.1 | |
| | comp=E,5μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **1.06** | **116** | ⇓*i*P | Pn | 01 32 08.3 | +2.0 |
| GO04 | | | | *e*S | Sn | 01 32 23.9 | +3.9 |
| GO04 | | | | IAML | | 01 32 26.4 | |
| | comp=N,9μm,0.5s | | | | | | |
| **LCO** | **Las Campanas** | **1.25** | **57** | *e*P | Pn | 01 32 10.6 | +1.6 |
| LCO | | | | *e*S | Sn | 01 32 28.9 | +4.1 |
| **CO03** | **El Pedregal** | **1.54** | **137** | ⇑*i*P | Pn | 01 32 15.3 | +2.6 |
| CO03 | | | | *e*S | Sn | 01 32 35.3 | +3.8 |
| CO03 | | | | IAML | | 01 32 40.3 | |
| | comp=E,1μm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.66** | **26** | ⇑*i*P | Pn | 01 32 15.0 | +0.7 |
| **CO02** | **Combarbal** | **1.68** | **153** | ⇑*i*P | Pn | 01 32 17.3 | +2.7 |
| CO02 | | | | *e*S | Sn | 01 32 39.1 | +4.0 |
| CO02 | | | | IAML | | 01 32 46.5 | |
| | comp=N,3μm,0.3s | | | | | | |
| **VA06** | **Catapilco** | **2.89** | **170** | *e*P | Pn | 01 32 32.8 | +1.7 |
| **VA03** | **San Esteban** | **3.26** | **160** | *e*P | Pn | 01 32 39.8 | +3.5 |
| VA03 | | | | *e*S | Sn | 01 33 18.0 | +4.1 |
| VA03 | | | | IAML | | 01 33 36.0 | |
| | comp=E,249nm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **3.34** | **167** | *e*P | Pn | 01 32 38.0 | +0.4 |
| ROCH | | | | IAML | | 01 33 42.6 | |
| | comp=E,191nm,0.5s | | | | | | |
| **AC02** | **Maricunga** | **3.76** | **41** | *e*P | Pn | 01 32 46.5 | +2.9 |
| **MT09** | **Talagante** | **4.13** | **169** | *e*P | Pn | 01 32 50.6 | +2.3 |

*GCG **22** 01:40:48.2±0.3,14°.38N×91°.22W,h34$^{km}_{\pm 4}$,MD4.3*

**MEX 22 01:40:15.0±0.7,14°.95N×93°.61W,h97$^{km}_{\pm 23}$,MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.84** | **27** | *e*P | Pn | 01 40 32.2 | -1.4 |
| PCIG | | | | *i* S | Sn | 01 40 45.8 | -1.5 |
| **THIG** | | **1.30** | **92** | *e*P | Pn | 01 40 37.2 | -1.5 |
| THIG | | | | *e*S | Sn | 01 40 54.6 | -2.0 |
| **CARR** | **Arriaga** | **1.32** | **347** | *e*P | Pn | 01 40 37.1 | -1.9 |
| CARR | | | | *i* S | Sn | 01 40 56.0 | -1.0 |
| **PATR** | **El Naranjo** | **1.34** | **83** | *e*P | Pn | 01 40 38.1 | -1.3 |
| PATR | | | | *e*S | Sn | 01 40 56.0 | -1.8 |
| **PAVE** | **Pavencul** | **1.41** | **80** | *i* P | Pn | 01 40 39.4 | -0.8 |
| PAVE | | | | *e*S | Sn | 01 40 57.5 | -1.8 |
| **CHUJ** | **Union Juarez** | **1.46** | **84** | *e*P | Pn | 01 40 39.8 | -1.1 |
| CHUJ | | | | *e*S | Sn | 01 41 01.3 | +0.9 |
| **NILT** | **Santiago Nilte** | **1.87** | **329** | *e*P | Pn | 01 40 44.5 | -1.3 |
| NILT | | | | *i* S | Sn | 01 41 07.8 | -1.5 |
| **TGIG** | | **1.88** | **14** | *e*P | Pn | 01 40 48.1 | +2.2 |
| TGIG | | | | *i* S | Sn | 01 41 13.1 | +3.7 |
| **TGBT** | **Tuxtla Gutierr** | **1.88** | **15** | *i* P | Pn | 01 40 48.9 | +2.9 |
| TGBT | | | | *i* S | Sn | 01 41 13.5 | +4.0 |
| **CCIG** | **Comitan** | **1.94** | **47** | *e*P | Pn | 01 40 50.8 | +3.9 |
| CCIG | | | | *e*S | Sn | 01 41 15.4 | +4.2 |
| **CMIG** | **Matias Romero** | **2.45** | **330** | *e*P | Pn | 01 40 52.5 | -0.9 |
| CMIG | | | | *e*S | Sn | 01 41 18.8 | -4.0 |
| **HUIG** | **Huatulco** | **2.54** | **289** | *e*P | Pn | 01 40 49.5 | -5.0 |
| HUIG | | | | *e*S | Sn | 01 41 15.6 | -9.3 |
| **FUG** | **Fuego 3** | **2.73** | **100** | *e*P | Pn | 01 40 57.5 | +0.3 |
| **PCG** | **Pacaya** | **2.96** | **100** | *e*P | Pn | 01 41 01.0 | +0.5 |
| **NBG** | **Las Nubes** | **3.18** | **96** | *e*P | Pn | 01 41 04.9 | +1.5 |
| **NEUV** | **Arroyo Zacate** | **3.46** | **323** | *e*P | Pn | 01 41 06.2 | -0.7 |
| NEUV | | | | *e*S | Sn | 01 41 45.6 | -1.3 |
| **PEIG** | **Puerto Escondi** | **3.56** | **287** | *e*P | Pn | 01 41 03.9 | -4.4 |
| PEIG | | | | *e* | | 01 41 38.9 | |
| **VHO** | **Vista Hermosa** | **3.67** | **305** | *e*P | Pn | 01 41 09.6 | -0.2 |
| VHO | | | | *i* S | Sn | 01 41 46.6 | -5.7 |
| **MRL** | **Marmol** | **3.80** | **88** | *e*P | Pn | 01 41 15.4 | +3.8 |
| **JAUV** | **Jalcomulco** | **5.34** | **326** | *e*P | Pn | 01 41 31.7 | -0.7 |
| JAUV | | | | *e*S | Sn | 01 42 31.5 | -1.3 |

**IDC 22 01:49:26.9±8.0,48°.80N×150°.76E,h102$^{km}_{\pm 52}$,mb3.4/5, mb1 3.5/6,mb1mx3.1/45,mbtmp3.7/6,Error ellipse: s-maj=98.2km s-min=30.5km az=4.0,Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.15** | **43** | P | Pn | 01 50 55.0 | -0.1 |
| | 0.2nm,0.3s,baz=193,slow=11,SNR=2.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.78** | **150** | T | T | 02 26 27.5 | |
| | baz=340,slow=76,SNR=114 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.79** | **150** | T | T | 02 26 25.3 | |
| | baz=340,slow=76,SNR=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.80** | **150** | T | T | 02 26 18.8 | |
| | baz=340,slow=76,SNR=57 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.86** | **151** | T | T | 02 27 50.4 | |
| | baz=340,slow=76,SNR=79 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.87** | **151** | T | T | 02 27 50.0 | |
| | baz=340,slow=76,SNR=82 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.88** | **151** | T | T | 02 27 50.8 | |
| | baz=340,slow=76,SNR=85 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.62** | **295** | P | P | 01 57 28.9 | +0.1 |
| | 0.3nm,0.6s,baz=70,slow=7.5,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **61.50** | **333** | P | P | 01 59 32.8 | +0.5 |
| | 1.3nm,0.9s,baz=47,slow=8.4,SNR=7.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.76** | **340** | P | P | 02 00 00.4 | 0.0 |
| | 0.5nm,0.7s,baz=30,slow=6.6,SNR=1.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.96** | **325** | P | P | 02 00 20.0 | -0.6 |
| | 0.7nm,0.3s,baz=36,slow=6.3,SNR=7.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **77.84** | **59** | P | P | 02 01 13.3 | +0.1 |
| | 0.3nm,0.5s,baz=294,slow=4.5,SNR=5.8 | | | | | | |

*RSNC **22** 01:52:07.8±1.0,5°.27N×73°.74W,h150$^{km}_{\pm 4}$,ML3.1, Mw3.6*

**ISC 22 01:52:04.4±1.3,5°.29N±0°.03×73°.72W±0°.03,h174$^{km}_{\pm 8}$, n31,σ1°61/59,6C-3D,Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.51** | **316** | ⇓*e*P | **Pn** | **01 52 29.1** | **+0.5** |
| SPBC | | | | *e*S | **Sn** | **01 52 45.1** | **-2.2** |
| SPBC | | | | *i* | | 01 52 47.6 | |
| | comp=Z,401nm,0.1s | | | | | | |
| **CHIC** | **Chingaza** | **0.65** | **181** | ⇓*e*P | **Pn** | **01 52 30.1** | **+0.3** |
| CHIC | | | | *e*S | **Sn** | **01 52 46.9** | **-2.5** |
| CHIC | | | | *i* | | 01 52 49.6 | |
| | comp=Z,124nm,0.6s | | | | | | |
| **ROSC** | **El Rosal** | **0.75** | **233** | ⇓*e*P | **Pn** | **01 52 31.8** | **+1.5** |
| ROSC | | | | *e*S | **Sn** | **01 52 49.8** | **-0.3** |
| ROSC | | | | *i* | | 01 52 52.8 | |
| | comp=Z,375nm,0.4s | | | | | | |
| **RUSC** | **La Rusia** | **0.87** | **46** | ⇓*i*P | **Pn** | **01 52 32.4** | **+1.2** |
| RUSC | | | | *e*S | **Sn** | **01 52 51.2** | **-0.6** |
| RUSC | | | | *i* | | 01 52 53.0 | |
| | comp=Z,94nm,0.4s | | | | | | |
| **NORC** | **Norcasia** | **1.18** | **283** | ⇑*e*P | **Pn** | **01 52 33.6** | **+0.6** |
| NORC | | | | *e*S | **Sn** | **01 52 53.8** | **-1.2** |
| NORC | | | | *i* | | 01 52 55.1 | |
| | comp=Z,229nm,0.1s | | | | | | |
| **BARC** | **Barichara** | **1.40** | **22** | *e*P | **Pn** | **01 52 36.2** | **+1.0** |
| BARC | | | | *i* | | 01 53 02.4 | |
| | comp=Z,100nm,0.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.44** | **329** | ⇑*i*P | **Pn** | **01 52 35.7** | **+0.3** |
| PTBC | | | | *e*S | **Sn** | **01 52 57.8** | **-1.6** |
| PTBC | | | | *i* | | 01 53 04.2 | |
| | comp=Z,92nm,0.4s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **1.64** | **268** | ⇑*e*P | **Pn** | **01 52 38.8** | **+1.0** |
| GUY2C | | | | *e*S | **Sn** | **01 53 04.3** | **+0.8** |
| GUY2C | | | | *i* | | 01 53 07.6 | |
| | comp=Z,51nm,0.3s | | | | | | |
| **BRRC** | **Barranca, Sant** | **1.81** | **0** | *e*P | **Pn** | **01 52 40.9** | **+1.9** |
| BRRC | | | | *e*S | **Sn** | **01 53 06.2** | **+0.2** |
| BRRC | | | | *i* | | 01 53 13.7 | |
| | comp=Z,66nm,0.2s | | | | | | |
| **ANIL** | **Santa Ana** | **1.86** | **245** | *e*P | **Pn** | **01 52 40.9** | **+1.1** |
| ANIL | | | | *e*S | **Sn** | **01 53 06.2** | **-1.0** |
| ANIL | | | | *i* | | 01 53 08.3 | |
| | comp=Z,154nm,0.4s | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **1.91** | **124** | *e*P | **Pn** | **01 52 41.4** | **+1.2** |
| PTGC | | | | *e*S | **Sn** | **01 53 06.4** | **-1.4** |
| PTGC | | | | *i* | | 01 53 09.3 | |
| | comp=Z,152nm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.01** | **297** | ⇑*e*P | **Pn** | **01 52 43.0** | **+1.4** |
| HELC | | | | *e*S | **Sn** | **01 53 09.9** | **-0.5** |
| HELC | | | | *i* | | 01 53 11.9 | |
| | comp=Z,76nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **2.05** | **228** | ⇑*e*P | **Pn** | **01 52 42.8** | **+1.1** |
| ORTC | | | | *e*S | **Sn** | **01 53 09.4** | **-1.2** |
| ORTC | | | | *i* | | 01 53 12.8 | |
| | comp=Z,114nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **2.23** | **59** | *e*P | **Pn** | **01 52 46.0** | **+2.3** |
| TAMC | | | | *e*S | **Sn** | **01 53 14.0** | **-0.2** |
| TAMC | | | | *i* | | 01 53 16.4 | |
| | comp=Z,64nm,0.3s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **2.27** | **26** | *e*P | **Pn** | **01 52 46.5** | **+1.8** |
| PAMC | | | | *e*S | **Sn** | **01 53 16.6** | **+0.7** |
| PAMC | | | | *i* | | 01 53 18.9 | |
| | comp=Z,34nm,0.3s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.35** | **284** | *e*P | **Pn** | **01 52 46.9** | **+1.7** |
| CBOC | | | | *e*S | **Sn** | **01 53 16.8** | **-0.2** |
| **ZARC** | **Zaragoza, Cauc** | **2.47** | **333** | *e*P | **Pn** | **01 52 46.7** | **+0.3** |
| ZARC | | | | *e*S | **Sn** | **01 53 17.6** | **-1.5** |
| ZARC | | | | *i* | | 01 53 24.7 | |
| | comp=Z,90nm,0.3s | | | | | | |
| **PLMC** | **San Jos del P** | **2.58** | **262** | *e*P | **Pn** | **01 52 50.0** | **+2.2** |
| PLMC | | | | *e*S | **Sn** | **01 53 21

*IDC* ***22*** *02:30:44.5±0.7,69.22N×144.41W,h0km,mb3.9/13, mb1 4.1/17,mb1mx3.9/50,mbtmp3.9/17,ML3.9/4,MS3.4/8, Ms1 3.4/8,ms1mx2.9/96,Error ellipse: s-maj=16.5km s-min=11.6km az=42.0*

*NEIC* ***22*** *02:30:44,69.26N×144.70W,h13km,Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr=0.28; Mθθ=0.77; Mφφ=-0.49; Mrθ=0.26; Mrφ=-1.38; Mθφ=0.58; Fault plane solution: M0=1.66000×10^15 NP1:φ=260.00000°, δ=71.00000°,λ=-164.00000°. NP2:φ=165.00000°, δ=75.00000°,λ=-20.00000°. Principal axes: T 1.6636, Plg3.0000°, Azm213.0000°; N -0.0009, Plg65.0000°, Azm310.0000°; P -1.6627, Plg25.0000°, Azm122.0000°;*

**ISC 22 02:30:43.9±0.5,69°13N±0'.04×144°68W±0'.03,h10km, n176,σ1§12/199,mb4.1/17,MS3.4/7,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BMAR** | **Burnt Mountain** | **1.71** | **179** | Pn | **Pn** | **02 31 13.5** | **-0.3** |
| **BM03** | **Burnt Mountain** | **1.72** | **179** | | **Pn** | **02 31 13.8** | **-0.2** |
| BM03 | | | | | **Sn** | **02 31 36.5** | **+0.5** |
| **PS01** | **TAPS Pump Stn** | **1.78** | **311** | | **Pn** | **02 31 14.3** | **-0.4** |
| PS01 | | | | | **Sg** | **02 31 39.3** | **-1.7** |
| **TOLK** | **Toolik Lake Re** | **1.84** | **257** | Pn | **Pn** | **02 31 15.4** | **-0.1** |
| TOLK | | | | | **Sb** | **02 31 40.6** | **-0.1** |
| TOLK | comp=E,2μm,0.8s | | | IAML | | 02 31 49.0 | |
| TOLK | comp=N,3μm,0.8s | | | IAML | | 02 31 51.5 | |
| **TOLK** | **Toolik Lake Re** baz=72,SNR=788 | **1.84** | **257** | P | **Pn** | **02 31 15.5** | **-0.1** |
| TOLK | baz=72 | | | Sb | **Sg** | **02 31 41.7** | **-1.3** |
| **FYU** | **Fort Yukon** | **2.59** | **185** | | **Pn** | **02 31 25.7** | **-0.1** |
| FYU | | | | | **Sn** | **02 31 56.4** | **-0.8** |
| FYU | comp=E,2μm,0.8s | | | IAML | | 02 32 06.9 | |
| **COLD** | **Coldfoot** | **2.81** | **230** | Pn | **Pn** | **02 31 29.3** | **+0.4** |
| **COLD** | **Coldfoot** baz=45,SNR=247 | **2.81** | **230** | P | **Pn** | **02 31 29.0** | **+0.1** |
| COLD | baz=45 | | | Sb | **Sg** | **02 32 11.7** | **-2.5** |
| **PS05** | **TAPS Pump Stn5** | **3.24** | **227** | | **Pn** | **02 31 35.5** | **+0.7** |
| **H24K** | **Noodor Dome** | **3.53** | **202** | | **Pn** | **02 31 37.9** | **-0.9** |
| **H24K** | **Noodor Dome** baz=20 | **3.53** | **202** | P | **Pn** | **02 31 38.0** | **-0.7** |
| H24K | baz=20 | | | S | **Sn** | **02 32 20.4** | **-0.2** |
| **PRP** | **Porcupine Dome** | **3.65** | **186** | Pn | **Pn** | **02 31 40.2** | **-0.2** |
| PRP | | | | | **Sn** | **02 32 22.7** | **-0.8** |
| PRP | comp=N,398nm,0.6s | | | IAML | | 02 32 39.4 | |
| **PRP** | **Porcupine Dome** baz=5.9,SNR=28 | **3.65** | **186** | P | **Pn** | **02 31 40.4** | **0.0** |
| PRP | baz=5.9 | | | S | **Sn** | **02 32 23.7** | **+0.1** |
| **PS06** | **TAPS Pump Stn6** | **3.82** | **213** | | **Pn** | **02 31 42.9** | **+0.2** |
| **INK** | **Inuvik** comp=N,3.2nm,0.3s,baz=280,slow=15,SNR=126 | **4.15** | **96** | Pn | **Pn** | **02 31 47.4** | **+0.2** |
| INK | comp=N,11nm,0.3s,baz=244,slow=14,SNR=7.1 | | | Sn | **Sn** | **02 32 35.6** | **0.0** |
| INK | comp=N,12nm,0.3s,baz=22,slow=9.8,SNR=9.8 | | | Lg | Lg | 02 32 52.0 | |
| **INK** | **Inuvik** | **4.15** | **96** | Pn | **Pn** | **02 31 47.1** | **0.0** |
| **INK** | **Inuvik** baz=287,SNR=18 | **4.15** | **96** | P | **Pn** | **02 31 47.1** | **0.0** |
| INK | baz=287 | | | S | **Sn** | **02 32 34.9** | **-0.7** |
| **POKR** | **Poker Plat Res** | **4.17** | **196** | Pn | **Pn** | **02 31 48.5** | **+0.9** |
| POKR | comp=E,358nm,1.0s | | | IAML | | 02 33 07.6 | |
| **POKR** | **Poker Plat Res** baz=15,SNR=31 | **4.17** | **196** | P | **Pn** | **02 31 47.4** | **-0.2** |
| POKR | baz=15 | | | S | **Sn** | **02 32 36.5** | **+0.1** |
| **I23K** | **Minto, Yukon-K** | **4.40** | **207** | | **Pn** | **02 31 49.4** | **-1.3** |
| I23K | comp=N,180nm,1.4s | | | IAML | | 02 33 09.6 | |
| I23K | comp=E,226nm,1.7s | | | IAML | | 02 33 22.4 | |
| **I23K** | **Minto, Yukon-K** baz=23 | **4.40** | **207** | P | **Pn** | **02 31 50.0** | **-0.6** |
| I23K | baz=23 | | | S | **Sn** | **02 32 42.0** | **+0.2** |
| **MDM** | **Murphy Dome** | **4.42** | **200** | Pn | **Pn** | **02 31 50.4** | **-0.6** |
| MDM | comp=E,246nm,0.8s | | | IAML | | 02 33 06.5 | |
| MDM | comp=N,192nm,0.9s | | | IAML | | 02 33 20.6 | |
| **COLA** | **College** | **4.46** | **198** | Pn | **Pn** | **02 31 51.9** | **+0.5** |
| **TCOL** | **CIGO, UAF Yank** | **4.46** | **198** | | **Pn** | **02 31 51.7** | **+0.3** |
| **TCOL** | **CIGO, UAF Yank** baz=16,SNR=16 | **4.46** | **198** | P | **Pn** | **02 31 50.9** | **-0.6** |
| TCOL | baz=16 | | | S | **Sn** | **02 32 44.0** | **+0.7** |
| **IL31** | | **4.47** | **192** | | **Pn** | **02 31 51.8** | **+0.2** |
| **ILAR** | **Eielson Array** comp=N,4.0nm,0.3s,baz=1.8,slow=9.8,SNR=116 | **4.47** | **192** | Pn | **Pn** | **02 31 51.5** | **-0.1** |
| ILAR | comp=N,14nm,0.3s,baz=7.5,slow=28,SNR=7.0 | | | Sn | **Sn** | **02 32 44.4** | **+0.8** |
| ILAR | comp=N,24nm,0.3s,baz=6.5,slow=29,SNR=7.4 | | | Lg | Lg | 02 32 59.8 | |
| **I29M** | **Ogilvie Camp,** | **4.52** | **144** | | **Pn** | **02 31 51.6** | **-0.7** |
| I29M | comp=N,182nm,0.5s | | | IAML | | 02 32 49.5 | |
| I29M | comp=E,195nm,1.1s | | | IAML | | 02 33 10.8 | |
| **I29M** | **Ogilvie Camp,** baz=331,SNR=30 | **4.52** | **144** | P | **Pn** | **02 31 51.8** | **-0.6** |
| I29M | baz=331 | | | S | **Sn** | **02 32 44.4** | **-0.6** |
| **J25K** | **Salcha River,** | **4.55** | **184** | Pn | **Pn** | **02 31 53.1** | **+0.3** |
| J25K | comp=E,274nm,0.9s | | | IAML | | 02 33 10.8 | |
| J25K | comp=N,174nm,0.8s | | | IAML | | 02 33 19.7 | |
| **J25K** | **Salcha River,** baz=4.0,SNR=16 | **4.55** | **184** | P | **Pn** | **02 31 52.3** | **-0.5** |
| **EGAK** | **Eagle** | **4.59** | **161** | Pn | **Pn** | **02 31 52.7** | **-0.5** |
| EGAK | comp=N,208nm,1.6s | | | IAML | | 02 33 20.6 | |
| EGAK | comp=N,165nm,1.6s | | | IAML | | 02 33 27.4 | |
| **EGAK** | **Eagle** baz=345,SNR=17 | **4.59** | **161** | P | **Pn** | **02 31 52.5** | **-0.7** |
| EGAK | baz=345 | | | S | **Sn** | **02 32 45.8** | **-0.6** |
| **A21K** | **Barrow** | **4.61** | **304** | | **Pn** | **02 31 53.0** | **-0.5** |
| **A21K** | **Barrow** baz=112,SNR=35 | **4.61** | **304** | P | **Pn** | **02 31 52.8** | **-0.7** |
| A21K | baz=112 | | | S | **Sn** | **02 32 45.7** | **-1.2** |
| **CCB** | **Clear Creek Bu** | **4.67** | **197** | Pn | **Pn** | **02 31 54.2** | **-0.1** |
| CCB | comp=E,159nm,1.1s | | | IAML | | 02 33 19.4 | |
| **J26L** | **Joseph Creek** baz=356 | **4.67** | **174** | S | **Sn** | **02 32 48.8** | **+0.1** |
| **H21K** | **Melozitna Rive** | **4.69** | **226** | | **Pn** | **02 31 54.1** | **-0.5** |
| H21K | comp=N,189nm,1.0s | | | IAML | | 02 33 23.6 | |
| H21K | comp=E,191nm,0.9s | | | IAML | | 02 33 28.1 | |
| **H21K** | **Melozitna Rive** baz=39,SNR=24 | **4.69** | **226** | P | **Pn** | **02 31 54.3** | **-0.3** |
| H21K | baz=39 | | | S | **Sn** | **02 32 49.3** | **+0.2** |
| **IM03** | | **4.70** | **232** | | **Pn** | **02 31 54.0** | **-0.7** |
| **IMAR** | **Indian Mountai** | **4.70** | **232** | Pn | **Pn** | **02 31 54.2** | **-0.5** |
| **MLY** | **Manley** baz=28 | **4.75** | **213** | P | **Pn** | **02 31 55.3** | **-0.2** |
| MLY | baz=28 | | | S | **Sn** | **02 32 50.3** | **-0.3** |
| **HDA** | **Harding Lake** | **4.83** | **192** | Pn | **Pn** | **02 31 55.2** | **-1.4** |
| HDA | comp=N,232nm,1.0s | | | IAML | | 02 33 30.9 | |
| **HDA** | **Harding Lake** baz=10 | **4.83** | **192** | P | **Pn** | **02 31 56.0** | **-0.5** |
| HDA | baz=10 | | | S | **Sn** | **02 32 51.9** | **-0.6** |
| HDA | baz=10 | | | S | **Sn** | **02 32 51.9** | **-0.6** |
| **WRH** | **Wood River Hil** | **4.87** | **198** | Pn | **Pn** | **02 31 57.0** | **-0.1** |
| WRH | comp=E,159nm,1.4s | | | IAML | | 02 33 19.4 | |
| **NEA2** | **Nenana** | **4.88** | **203** | Pn | **Pn** | **02 31 57.4** | **+0.1** |
| **NEA2** | **Nenana** | **4.88** | **203** | P | **Pn** | **02 31 56.7** | **-0.5** |
| NEA2 | baz=20,SNR=5.7 | | | S | **Sn** | **02 32 52.2** | **-1.4** |
| **I21K** | **Tanana** baz=20 | **4.88** | **219** | | **Pn** | **02 31 56.4** | **-0.9** |
| I21K | comp=E,244nm,1.0s | | | IAML | | 02 33 23.3 | |
| I21K | comp=N,226nm,1.5s | | | IAML | | 02 33 33.4 | |
| **I21K** | **Tanana** baz=33 | **4.88** | **219** | P | **Pn** | **02 31 56.7** | **-0.5** |
| I21K | baz=33 | | | S | **Sn** | **02 32 52.9** | **-0.9** |
| **SCRK** | **Sand Creek** | **5.19** | **177** | Pn | **Pn** | **02 32 02.2** | **+0.6** |
| SCRK | comp=E,192nm,0.8s | | | IAML | | 02 33 32.3 | |
| **SCRK** | **Sand Creek** baz=358,SNR=28 | **5.19** | **177** | P | **Pn** | **02 32 01.5** | **-0.1** |
| SCRK | baz=358 | | | S | **Sn** | **02 33 01.6** | **+0.2** |
| **BWN** | **Browne** | **5.33** | **203** | Pn | **Pn** | **02 32 03.3** | **-0.2** |
| **J29M** | **Klondike Camp** baz=335,SNR=22 | **5.35** | **148** | P | **Pn** | **02 32 03.6** | **-0.1** |
| J29M | baz=335 | | | S | **Sn** | **02 33 05.0** | **-0.3** |
| **RIDG** | **Independent Ri** | **5.42** | **181** | Pn | **Pn** | **02 32 05.8** | **+1.1** |
| **RIDG** | **Independent Ri** baz=1.4,SNR=16 | **5.42** | **181** | P | **Pn** | **02 32 04.2** | **-0.4** |
| **DAWY** | **Dawson** | **5.51** | **155** | Pn | **Pn** | **02 32 05.6** | **-0.3** |
| **DAWY** | **Dawson** baz=341,SNR=23 | **5.51** | **155** | P | **Pn** | **02 32 05.7** | **-0.1** |
| DAWY | baz=341 | | | S | **Sn** | **02 33 08.4** | **-0.8** |
| **DOT** | **Dot Lake** | **5.51** | **177** | Pn | **Pn** | **02 32 06.7** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **5.64** | **209** | Pn | **Pn** | **02 32 07.5** | **-0.2** |
| **BPAW** | **Bear Paw Mtn.** baz=24 | **5.64** | **209** | P | **Pn** | **02 32 07.3** | **-0.4** |
| BPAW | baz=24 | | | S | **Sn** | **02 33 11.2** | **-1.3** |
| **MCK** | **McKinley** | **5.69** | **199** | Pn | **Pn** | **02 32 08.7** | **+0.4** |
| **MCK** | **McKinley** baz=16,SNR=16 | **5.69** | **199** | P | **Pn** | **02 32 08.0** | **-0.3** |
| MCK | baz=16 | | | S | **Sn** | **02 33 12.3** | **-1.3** |
| **PS10** | **TAPS Pump St10** | **5.75** | **185** | | **Pn** | **02 32 09.6** | **+0.3** |
| **RND** | **Reindeer** | **5.99** | **198** | Pn | **Pn** | **02 32 12.7** | **+0.1** |
| **CHUM** | **Lake Minchumin** baz=27,SNR=22 | **6.09** | **214** | P | **Pn** | **02 32 13.9** | **+0.1** |
| CHUM | baz=27 | | | S | **Sn** | **02 33 22.1** | **-1.4** |
| **TRF** | **Thorofare Moun** | **6.14** | **204** | Pn | **Pn** | **02 32 14.6** | **0.0** |
| **KTH** | **Kantishna Hill** | **6.14** | **207** | Pn | **Pn** | **02 32 14.5** | **-0.1** |
| **L26K** | **Log Cabin Wild** | **6.16** | **174** | Pn | **Pn** | **02 32 14.9** | **+0.1** |
| **L26K** | **Log Cabin Wild** baz=356,SNR=42 | **6.16** | **174** | P | **Pn** | **02 32 14.8** | **0.0** |
| **DHY** | **Denali Highway** | **6.18** | **191** | Pn | **Pn** | **02 32 15.8** | **+0.6** |
| **DHY** | **Denali Highway** baz=9.6 | **6.18** | **191** | P | **Pn** | **02 32 14.9** | **-0.4** |
| **PAX** | **Paxson** | **6.20** | **183** | Pn | **Pn** | **02 32 16.0** | **+0.6** |
| **PAX** | **Paxson** baz=3.3,SNR=15 | **6.20** | **183** | P | **Pn** | **02 32 15.3** | **-0.1** |
| **BC03** | | **6.21** | **168** | | **Pn** | **02 32 15.2** | **-0.2** |
| **BCAR** | **Beaver Creek A** | **6.21** | **168** | Pn | **Pn** | **02 32 16.5** | **+1.0** |
| **L27K** | **Beaver Creek,** baz=351 | **6.21** | **168** | P | **Pn** | **02 32 14.9** | **-0.6** |
| **J20K** | **Nowinta River** | **6.23** | **222** | | **Pn** | **02 32 14.6** | **-1.3** |
| **J20K** | **Nowinta River** baz=33 | **6.23** | **222** | P | **Pn** | **02 32 15.0** | **-0.8** |
| **CAST** | **Castle Rocks** | **6.46** | **211** | Pn | **Pn** | **02 32 18.8** | **-0.2** |
| **CAST** | **Castle Rocks** baz=25,SNR=18 | **6.46** | **211** | P | **Pn** | **02 32 18.4** | **-0.6** |
| **MAYO** | **Mayo, Yukon** baz=332 | **6.58** | **143** | P | **Pn** | **02 32 20.1** | **-0.5** |
| **WAT6** | **Susitna Watana** baz=10.0 | **6.70** | **192** | P | **Pn** | **02 32 21.9** | **-0.5** |
| **RDOG** | **Red Dog Mine** | **6.75** | **269** | Pn | **Pn** | **02 32 21.8** | **-1.2** |
| **RDOG** | **Red Dog Mine** baz=72,SNR=24 | **6.75** | **269** | P | **Pn** | **02 32 21.7** | **-1.2** |
| **HARP** | **HAARP** baz=2.1 | **6.77** | **182** | P | **Pn** | **02 32 23.2** | **+0.1** |
| **M26K** | **Nabesna, AK** baz=356 | **6.80** | **173** | P | **Pn** | **02 32 23.8** | **+0.2** |
| **M27K** | **Edge Creek, AK** baz=352 | **6.90** | **169** | P | **Pn** | **02 32 25.2** | **+0.1** |
| **K20K** | **Telida** baz=29 | **6.92** | **218** | P | **Pn** | **02 32 24.9** | **-0.4** |
| **BVCY** | **Beaver Creek** | **6.93** | **165** | | **Pn** | **02 32 25.9** | **+0.6** |
| **BVCY** | **Beaver Creek** baz=349 | **6.93** | **165** | P | **Pn** | **02 32 25.1** | **-0.3** |
| **PPLA** | **Purkeypile** | **6.96** | **210** | Pn | **Pn** | **02 32 25.6** | **-0.3** |
| **PPLA** | **Purkeypile** baz=23 | **6.96** | **210** | P | **Pn** | **02 32 25.1** | **-0.9** |
| **A36M** | **Sachs Harbour** | **7.07** | **57** | | **Pn** | **02 32 25.4** | **-1.8** |
| **A36M** | **Sachs Harbour** baz=255,SNR=110 | **7.07** | **57** | P | **Pn** | **02 32 25.2** | **-2.0** |
| **CUT** | **Chulitna** | **7.13** | **201** | Pn | **Pn** | **02 32 29.3** | **+1.2** |
| **C36M** | **Paulatuk** | **7.32** | **79** | | **Pn** | **02 32 28.4** | **-2.2** |
| **C36M** | **Paulatuk** baz=278,SNR=20 | **7.32** | **79** | P | **Pn** | **02 32 28.2** | **-2.3** |
| **M30M** | **Minto, Yukon** | **7.33** | **150** | Pn | **Pn** | **02 32 30.0** | **-0.9** |
| **M30M** | **Minto, Yukon** baz=338,SNR=6.9 | **7.33** | **150** | P | **Pn** | **02 32 30.2** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **7.41** | **190** | Pn | **Pn** | **02 32 33.5** | **+1.4** |
| **SCM** | **Sheep Creek Mo** baz=7.9 | **7.41** | **190** | P | **Pn** | **02 32 30.8** | **-1.3** |
| **SML** | **Sawmill** | **7.51** | **193** | Pn | **Pn** | **02 32 34.9** | **+1.5** |
| **SML** | **Sawmill** baz=11 | **7.51** | **193** | P | **Pn** | **02 32 32.9** | **-0.5** |
| **YUK2** | **White River** | **7.55** | **166** | | **Pn** | **02 32 34.7** | **+0.8** |
| **N25K** | **Chitina, Valde** baz=0.3 | **7.56** | **180** | P | **Pn** | **02 32 35.9** | **+1.8** |
| **YUK3** | **Moose Creek** | **7.59** | **165** | | **Pn** | **02 32 34.8** | **+0.2** |
| **YUK3** | **Moose Creek** baz=349 | **7.59** | **165** | P | **Pn** | **02 32 34.5** | **-0.2** |
| **L20K** | **Farewell, AK** baz=26 | **7.67** | **214** | P | **Pn** | **02 32 35.1** | **-0.4** |
| **TTA** | **Tatalina** | **7.74** | **222** | Pn | **Pn** | **02 32 35.8** | **-0.7** |
| **TTA** | **Tatalina** baz=32 | **7.74** | **222** | P | **Pn** | **02 32 36.0** | **-0.5** |
| **M22K** | **Willow** baz=15 | **7.75** | **200** | P | **Pn** | **02 32 36.1** | **-0.4** |
| **PMR** | **Palmer** baz=12 | **7.79** | **196** | P | **Pn** | **02 32 38.7** | **+1.5** |
| **KNK** | **Knik Glacier** baz=10 | **7.91** | **193** | P | **Pn** | **02 32 40.3** | **+1.4** |
| **L19K** | **White Mountain** | **8.13** | **216** | Pn | **Pn** | **02 32 41.4** | **-0.5** |
| **L19K** | **White Mountain** baz=27 | **8.13** | **216** | P | **Pn** | **02 32 40.7** | **-1.2** |
| **M31M** | **Drury Creek, Y** | **8.14** | **144** | Pn | **Pn** | **02 32 40.2** | **-1.7** |
| **M31M** | **Drury Creek, Y** baz=334 | **8.14** | **144** | P | **Pn** | **02 32 41.0** | **-1.0** |
| **BMRM** | **Bremner River** baz=0.3 | **8.20** | **180** | P | **Pn** | **02 32 44.2** | **+1.4** |
| **BARN** | **Barnard Glacie** | **8.21** | **170** | Pn | **Pn** | **02 32 44.2** | **+1.2** |
| **YUK4** | **Talbot Arm** baz=345 | **8.21** | **159** | P | **Pn** | **02 32 42.3** | **-0.8** |
| **M19K** | **Big River Lodg** baz=25 | **8.29** | **214** | P | **Pn** | **02 32 44.2** | **+0.1** |
| **FARO** | **Faro, Yukon** baz=332 | **8.34** | **141** | P | **Pn** | **02 32 44.0** | **-0.8** |
| **MMPY** | **Sheldon Lake,** baz=326,SNR=12 | **8.52** | **134** | P | **Pn** | **02 32 46.9** | **-0.2** |
| **ISLE** | **Juniper Island** | **8.62** | **172** | Pn | **Pn** | **02 32 50.9** | **+2.2** |
| **YUK6** | **Outpost Mounta** baz=345 | **8.64** | **159** | P | **Pn** | **02 32 49.2** | **+0.1** |
| **HYT** | **Haines Junctio** | **8.87** | **157** | Pn | **Pn** | **02 32 52.2** | **+0.2** |
| **HYT** | **Haines Junctio** baz=344 | **8.87** | **157** | P | **Pn** | **02 32 52.1** | **0.0** |
| **YAH** | **Yahtse** | **8.89** | **171** | Pn | **Pn** | **02 32 54.5** | **+2.0** |
| **SVW2** | **Sparrevohn** | **9.27** | **215** | Pn | **Pn** | **02 32 56.9** | **-0.4** |
| **N19K** | **Bonanza Creek** baz=22 | **9.31** | **211** | P | **Pn** | **02 32 58.3** | **+0.2** |
| **ANM** | **Nome** baz=52 | **9.32** | **251** | P | **Pn** | **02 32 57.1** | **-0.9** |
| **TNA** | **Tin City** | **9.62** | **259** | Pn | **Pn** | **02 33 01.7** | **-0.5** |
| **P33M** | **Teslin, Yukon** | **10.27** | **145** | Pn | **Pn** | **02 33 10.7** | **-0.5** |
| **WRGLY** | **Wrigley** baz=314 | **10.38** | **114** | P | **Pn** | **02 33 11.2** | **-1.4** |
| **SKAG** | **Skagway** | **10.51** | **153** | Pn | **Pn** | **02 33 14.9** | **+0.6** |
| **BESE** | **Bessie Mountai** | **11.42** | **153** | Pn | **Pn** | **02 33 28.0** | **+1.1** |
| **JIS** | **Juneau Island** | **11.79** | **152** | Pn | **Pn** | **02 33 33.0** | **+1.2** |
| **DLBC** | **Dease Lake** comp=E,0.4nm,0.3s,baz=332,slow=11,SNR=8.1 | **12.48** | **142** | Pn | **Pn** | **02 33 41.5** | **+0.1** |
| DLBC | comp=E,219nm,20.2s,baz=317,slow=35 | | | LR | LR | 02 38 05.1 | |
| **DLBC** | **Dease Lake** | **12.48** | **142** | Pn | **Pn** | **02 33 41.6** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **13.87** | **104** | Pn | **Pn** | **02 33 56.4** | **-3.9** |
| **YKA** | **Yellowknife Ar** comp=E,1.0nm,0.3s,baz=308,slow=13,SNR=40 | **13.87** | **104** | Pn | **Pn** | **02 33 56.5** | **-3.8** |
| **RES** | **Resolute Bay** comp=E,0.9nm,0.3s,baz=251,slow=7.1,SNR=12 | **15.95** | **48** | Pn | **Pn** | **02 34 23.4** | **-4.5** |
| **RES** | **Resolute Bay** | **15.95** | **48** | Pn | **Pn** | **02 34 24.5** | **-3.4** |
| RES | comp=E,8.0nm,0.9s | | | IAmb | IAmb | 02 34 48.0 | |
| **BILL** | **Bilibino** | **17.57** | **290** | | **Pn** | **02 34 47.6** | **-0.8** |
| **EUNU** | **Eureka** | **17.79** | **29** | P | **P** | **02 34 51.8** | **-0.2** |
| **EDM** | **Edmonton** | **21.56** | **122** | P | **P** | **02 35 33.7** | **+0.5** |
| EDM | comp=Z,17nm,1.3s | | | IAmb | IAmb | 02 35 52.7 | |
| **NEW** | **Newport** comp=Z,142nm,19.8s,baz=334,slow=38 | **24.93** | **133** | LR | LR | 02 46 32.6 | |
| **SHEM** | **Shemya Is, Ala** comp=Z,41nm,18.6s,baz=104,slow=36 | **25.18** | **250** | LR | LR | 02 46 08.1 | |
| **SEY** | **Seymchan** comp=Z,2.2nm,0.5s,baz=80,slow=6.2,SNR=9.8 | **25.21** | **287** | P | **P** | **02 36 10.0** | **+0.8** |
| **MA2** | **Magadan** comp=Z,84nm,18.2s,baz=71,slow=38 | **28.12** | **283** | LR | LR | 02 48 26.8 | |
| **FRB** | **Frobisher Bay** comp=Z,1.8nm,0.7s,baz=314,slow=6.5,SNR=4.7 | **29.03** | **63** | P | **P** | **02 36 44.4** | **+1.0** |
| **BCYI** | **Bear Canyon** | **29.57** | **131** | | **P** | **02 36 48.6** | **-0.1** |
| **YBH** | **Yreka Blue Hor** comp=Z,86nm,18.7s,baz=346,slow=34 | **29.79** | **146** | LR | LR | 02 47 54.1 | |
| **FLWY** | **Flagg Ranch** comp=Z,10nm,1.5s | **30.53** | **128** | P | **P** | **02 36 55.9** | **-1.3** |
| FLWY | | | | IAmb | IAmb | 02 36 56.4 | |
| **PETK** | **Petropavlovsk-** comp=Z,29nm,18.1s,baz=59,slow=39 | **30.62** | **268** | LR | LR | 02 50 42.8 | |
| **PDAR** | **Pinedale Array** comp=Z,0.3nm,0.6s,baz=316,slow=4.1,SNR=3.9 | **32.06** | **127** | P | **P** | **02 37 12.4** | **+1.6** |
| **PDAR** | **Pinedale Array** comp=Z,1.1nm,0.7s,baz=331,slow=9.5,SNR=11 | **32.06** | **127** | P | **P** | **02 37 11.5** | **+0.7** |
| **EYMN** | **Ely** | **33.33** | **102** | P | **P** | **02 37 21.4** | **-0.2** |
| **NVAR** | **Mina Array Bea** comp=Z,1.1nm,0.7s,baz=331,slow=9.5,SNR=11 | **33.90** | **141** | P | **P** | **02 37 29.7** | **+2.9** |
| **SCHQ** | **Schefferville** comp=Z,3.9nm,0.8s,baz=322,slow=7.9,SNR=6.2 | **36.38** | **72** | P | **P** | **02 37 48.4** | **+0.7** |
| **SCHQ** | **Schefferville** | **36.38** | **72** | P | **P** | **02 37 47.1** | **-0.6** |
| SCHQ | comp=Z,4.9nm,0.8s | | | IAmb | IAmb | 02 37 51.1 | |
| **PFO** | **Pinyon Flats O** comp=Z,80nm,18.3s,baz=348,slow=39 | **38.93** | **141** | LR | LR | 02 55 56.6 | |
| **ARCES** | **ARCESS Array B** comp=Z,5.3nm,1.0s,baz=3.3,slow=6.3,SNR=5.0 | **41.43** | **5** | P | **P** | **02 38 30.9** | **+1.1** |
| **OXF** | **Oxford** | **45.96** | **109** | P | **P** | **02 39 06.9** | **+0.3** |
| **TXAR** | **Lajitas Array** comp=Z,0.3nm,0.8s,baz=224,slow=5.0,SNR=2.1 | **46.28** | **128** | P | **P** | **02 39 12.3** | **+3.0** |
| **LPIG** | **La Paz** comp=Z,50nm,19.1s,baz=26,slow=38 | **49.50** | **137** | LR | LR | 03 02 27.1 | |
| **FINES** | **FINESS Array B** comp=Z,2.4nm,0.6s,baz=350,slow=8.1,SNR=18 | **49.55** | **6** | P | **P** | **02 39 33.5** | **-0.6** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.0nm,0.5s,baz=18,slow=7.1,SNR=6.0 | **52.01** | **325** | P | **P** | **02 39 56.0** | **+3.2** |
| **SONM** | **Songino Array** comp=Z,0.4nm,0.7s,baz=46,slow=6.9,SNR=4.1 | **52.30** | **306** | P | **P** | **02 39 59.0** | **+3.8** |
| **HHC** | **Hu-ho-hao-te** | **57.07** | **299** | *eP* | **P** | **02 40 28.9** | **-1.0** |
| HHC | comp=Z,7.0nm,1.0s | | | pmax | pmax | | |
| HHC | comp=Z,240nm,5.3s | | | pmax | pmax | | |
| **MKAR** | **Makanchi Array** comp=Z,0.8nm,0.6s,baz=41,slow=6.8,SNR=11 | **59.31** | **324** | P | **P** | **02 40 48.2** | **+2.8** |
| **MKAR** | **Makanchi Array** | **59.31** | **324** | P | **P** | **02 40 44.8** | **-0.6** |
| **AKASG** | **Malin Array Be** comp=Z,1.1nm,0.5s,baz=358,slow=7.0,SNR=12 | **60.40** | **4** | P | **P** | **02 40 54.9** | **+2.2** |
| **WMQ** | **Urumqi** | **60.93** | **319** | *eP* | **P** | **02 40 56.5** | **-0.1** |
| **ESDC** | **Sonseca Array** comp=Z,0.4nm,0.9s,baz=334,slow=5.3,SNR=1.8 | **67.69** | **32** | P | **P** | **02 41 41.7** | **+0.8** |
| **PZH** | **PanZhiHua** | **73.39** | **301** | P | **P** | **02 42 13.8** | **-2.1** |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | pmax | | |
| PZH | comp=Z,100nm,5.0s | | | pmax | pmax | | |

*IDC* ***22*** *02:33:14.5±2.1,52°.94N×171°.33W,h0km,mb3.5/6, mb1 3.9/8,mb1mx3.6/56,mbtmp3.7/8,ML3.6/2,Error ellipse: s-maj=112.6km s-min=18.4km az=11.0*

*AEIC* ***22*** *02:33:15±1.8,51°.8N±0°.2×172°.0W±0°.1,h86km±9km,Error ellipse: s-maj=31.2km s-min=6.1km az=167.0*

*NEIC* ***22*** *02:33:16.8±1.8,51°.7N±0°.2×171°.89W±0°.09,h35km±16km, ML3.1(AEIC),Error ellipse: s-maj=23.9km s-min=4.4km az=163.0*

**ISC 22 02:33:16.4±1.1,51°.6N±0°.2×171°.86W±0°.06,h35km,n28, σ1§45/31,mb3.6/6,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOFP** | **Korovin Flat P** | **1.56** | **298** | | **Pn** | **02 33 41.5** | **-0.2** |
| **ATKA** | **Atka Island** | **1.58** | **295** | | **Pn** | **02 33 41.0** | **-0.9** |
| ATKA | | | | | **Sn** | **02 34 00.5** | **-0.6** |
| **KOKL** | **Mount Kliuchef** | **1.64** | **299** | | **Pn** | **02 33 42.3** | **-0.5** |
| **NIKH** | **Nikolski High** | **2.33** | **51** | Pn | **Pn** | **02 33 50.8** | **-1.4** |
| **GSMY** | **Great Sitkin M** | **2.65** | **282** | | **Pn** | **02 33 55.9** | **-0.7** |
| **GSTR** | **Great Sitkin T** | **2.66** | **283** | Pn | **Pn** | **02 33 55.5** | **-1.3** |
| **GSTD** | **Great Sitkin T** | **2.70** | **282** | | **Pn** | **02 33 57.0** | **-0.5** |
| GSTD | | | | | **Sn** | **02 34 29.3** | **+0.3** |
| **GSCK** | **Great Sitkin C** | **2.71** | **281** | | **Pn** | **02 33 56.8** | **-0.6** |
| **ADK** | **Adak** | **3.02** | **278** | | **Pn** | **02 34 00.9** | **-0.7** |
| ADK | | | | Sn | **Sn** | **02 34 35.0** | **-1.5** |
| **KIWB** | **Kanaga Island** | **3.30** | **277** | | **Pn** | **02 34 05.5** | **-0.1** |
| **KIKV** | **Kanaga Island** | **3.31** | **278** | | **Pn** | **02 34 05.9** | **+0.1** |
| **TAPA** | **Tanaga Point A** | **3.71** | **276** | | **Pn** | **02 34 11.2** | **0.0** |
| **TAFP** | **Tanaga Falls P** | **3.82** | **277** | | **Pn** | **02 34 12.7** | **0.0** |
| **TASE** | **Tanaga Southea** | **3.85** | **276** | | **Pn** | **02 34 13.3** | **+0.1** |
| **UNV** | **Unalaska Valle** | **3.98** | **53** | Pn | **Pn** | **02 34 15.1** | **+0.2** |
| **SDPT** | **Sand Point** | **7.78** | **56** | | **Pn** | **02 35 09.7** | **+2.7** |
| **CNBA** | **Chernabura Isl** | **8.06** | **61** | Pn | **Pn** | **02 35 09.5** | **-1.4** |
| **SHEM** | **Shemya Is, Ala** 3.7nm,0.3s,baz=108,slow=5.6,SNR=6.3 | **8.71** | **283** | Pn | **Pn** | **02 35 23.9** | **+4.1** |
| **SMY** | **Shemya** | **8.71** | **283** | Pn | **Pn** | **02 35 22.6** | **+2.8** |
| **RSO** | **Redoubt South** | **13.87** | **43** | Pn | **Pn** | **02 36 31.3** | **+0.8** |
| **HOM** | **Homer** | **13.96** | **47** | P | **P** | **02 36 40.7** | **+1.6** |
| **PETK** | **Petropavlovsk-** 0.2nm,0.3s,baz=56,slow=16,SNR=2.0 | **18.60** | **287** | P | **Pn** | **02 37 32.6** | **+1.7** |
| **MA2** | **Magadan** 1.6nm,0.4s,baz=151,slow=19,SNR=2.5 | **22.34** | **306** | P | **P** | **02 38 08.2** | **-2.6** |
| **NVAR** | **Mina Array Bea** 0.2nm,0.7s,baz=286,slow=6.5,SNR=3.1 | **39.21** | **88** | P | **P** | **02 40 41.4** | **+0.1** |
| **PDAR** | **Pinedale Array** 0.4nm,0.6s,baz=306,slow=6.1,SNR=2.8 | **42.08** | **77** | P | **P** | **02 41 03.8** | **-1.2** |
| **SONM** | **Songino Array** 0.3nm,0.6s,baz=52,slow=6.5,SNR=3.0 | **50.38** | **300** | P | **P** | **02 42 09.9** | **-0.1** |
| **TXAR** | **Lajitas Array** 0.6nm,0.9s,baz=306,slow=4.5,SNR

*IDC **22** 03:04:12.9±0.5,59°.89N×152°.11E,h0km,mb3.9/20, mb1 4.2/25,mb1mx4.1/53,mbtmp4.0/25,ML3.5/4,MS3.6/15, Ms1 3.6/15,ms1mx3.2/91,Error ellipse: s-maj=16.3km s-min=6.8km az=147.0*

*NERS **22** 03:04:12.2±0.0,59°.96N×152°.20E,h3km*

*MOS **22** 03:04:12.8±1.1,59°.92N×152°.26E,h11km,mb4.5/14,Error ellipse: s-maj=10.9km s-min=6.0km az=87.1*

*MOS Felt (II) at Magadan.*

*NEIC **22** 03:04:14.3±2.7,59°.87N±0°.07×152°.08E±0°.09,h10km±1km, mb4.6/50,Error ellipse: s-maj=11.9km s-min=6.0km az=156.0*

**ISC 22 03:04:14.6±0.3,59°.93N±0°.04×152°.16E±0°.03,h10km,n153,** σ1§43/164,**mb4.4/55,MS3.7/12,9C-8D,Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GADL** | **Gadlja** | **0.50** | **239** | *i*P | | Pg | 03 04 16.4 | -7.9 |
| GADL | | | | Pgmax | | | 03 04 16.9 | |
| | 4μm,0.3s | | | | | | | |
| GADL | | | | *e*S | | **Sg** | **03 04 23.9** | **-7.0** |
| GADL | | | | Sgmax | | | 03 04 24.3 | |
| | 25μm,0.3s | | | | | | | |
| GADL | | | | Sgmax | | | 03 04 24.3 | |
| | 48μm,0.4s | | | | | | | |
| **MGD** | **Magadan 1** | **0.73** | **280** | *e*P | | **Pg** | **03 04 25.4** | **-3.2** |
| MGD | | | | *e* | | | 03 04 35.6 | |
| MGD | | | | pmax | pmax | | | |
| | comp=Z,80nm,0.2s | | | | | | | |
| MGD | | | | smax | smax | | | |
| | comp=N,11μm,0.4s | | | | | | | |
| MGD | | | | smax | smax | | | |
| | comp=E,8μm,0.3s | | | | | | | |
| **MGD** | **Magadan 1** | **0.73** | **280** | *e*Pg | | **Pg** | **03 04 25.5** | **-3.2** |
| MGD | | | | Pgmax | | | 03 04 28.3 | |
| | comp=E,80nm,0.2s | | | | | | | |
| MGD | | | | *e*Sg | | **Sg** | **03 04 35.5** | **-2.6** |
| MGD | | | | Sgmax | | | 03 04 36.5 | |
| | comp=E,11μm,0.4s | | | | | | | |
| MGD | | | | Sgmax | | | 03 04 36.5 | |
| | comp=E,8μm,0.3s | | | | | | | |
| **NMA2** | **New Magadan St** | **0.79** | **242** | *e*Pg | | **Pg** | **03 04 27.8** | **-1.9** |
| NMA2 | | | | Pgmax | | | 03 04 29.4 | |
| | comp=E,11μm,0.3s | | | | | | | |
| NMA2 | | | | *e*Sg | | **Sg** | **03 04 38.3** | **-1.7** |
| NMA2 | | | | Sgmax | | | 03 04 45.1 | |
| | comp=E,4μm,0.5s | | | | | | | |
| NMA2 | | | | Sgmax | | | 03 04 45.1 | |
| | comp=E,23μm,0.5s | | | | | | | |
| **MA2** | **Magadan** | **0.79** | **244** | Pg | | **Pg** | **03 04 27.2** | **-2.6** |
| | comp=E,208nm,0.3s,baz=64,slow=14,SNR=883 | | | | | | | |
| MA2 | | | | Lg | | Lg | 03 04 38.0 | |
| | comp=E,703nm,0.3s,baz=328,slow=11,SNR=28 | | | | | | | |
| MA2 | | | | LR | | LR | 03 04 43.6 | |
| | comp=E,577nm,18.5s,baz=328,slow=41 | | | | | | | |
| **MA2** | **Magadan** | **0.79** | **244** | *d i*P | | **Pg** | **03 04 27.2** | **-2.6** |
| MA2 | | | | *e* | | | 03 04 38.1 | |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,1μm,0.5s | | | | | | | |
| MA2 | | | | smax | smax | | | |
| | comp=N,4μm,0.6s | | | | | | | |
| MA2 | | | | smax | smax | | | |
| | comp=E,4μm,0.5s | | | | | | | |
| **MA2** | **Magadan** | **0.79** | **244** | | | **Pg** | **03 04 27.1** | **-2.7** |
| MA2 | | | | Sg | | **Sg** | **03 04 37.5** | **-2.6** |
| **MA2** | **Magadan** | **0.79** | **244** | *i*Pg | | **Pg** | **03 04 27.2** | **-2.6** |
| MA2 | | | | Pgmax | | | 03 04 30.8 | |
| | comp=E,1μm,0.5s | | | | | | | |
| MA2 | | | | *e*Sg | | **Sg** | **03 04 38.1** | **-2.0** |
| MA2 | | | | Sgmax | | | 03 04 38.6 | |
| | comp=E,4μm,0.6s | | | | | | | |
| MA2 | | | | Sgmax | | | 03 04 38.6 | |
| | comp=E,4μm,0.5s | | | | | | | |
| **TLAR** | **Talaya** | **1.21** | **5** | *e*P | | **Pn** | **03 04 35.2** | **-2.3** |
| TLAR | | | | *e* | | | 03 04 53.6 | |
| TLAR | | | | pmax | pmax | | | |
| | comp=Z,3μm,0.4s | | | | | | | |
| TLAR | | | | smax | smax | | | |
| | comp=E,22μm,0.4s | | | | | | | |
| **TLAR** | **Talaya** | **1.21** | **5** | *e*Pg | | **Pn** | **03 04 35.3** | **-2.3** |
| TLAR | | | | *e* | | | 03 04 37.0 | |
| TLAR | | | | Pgmax | | | 03 04 39.0 | |
| | comp=E,3μm,0.4s | | | | | | | |
| TLAR | | | | *e*Sg | | **Sb** | **03 04 51.4** | **-1.8** |
| TLAR | | | | Sgmax | | | 03 04 57.1 | |
| | comp=E,10μm,0.4s | | | | | | | |
| TLAR | | | | Sgmax | | | 03 04 57.1 | |
| | comp=E,22μm,0.4s | | | | | | | |
| **OCHR** | **Omchak** | **2.73** | **311** | *e*P | | **Pn** | **03 04 58.1** | **-0.4** |
| OCHR | | | | *e*Pg | | **Pb** | **03 05 03.0** | **-0.5** |
| OCHR | | | | Pgmax | | | 03 05 10.3 | |
| | comp=E,310nm,0.3s | | | | | | | |
| OCHR | | | | *e*S | | **Sn** | **03 05 33.4** | **+1.8** |
| OCHR | | | | *e*Sg | | **Sb** | **03 05 38.1** | **+1.1** |
| OCHR | | | | Sgmax | | | 03 05 44.3 | |
| | comp=E,2μm,0.6s | | | | | | | |
| OCHR | | | | Sgmax | | | 03 05 44.3 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **SEY** | **Seymchan** | **3.02** | **2** | Pn | | **Pn** | **03 05 01.7** | **-0.6** |
| | comp=E,47nm,0.3s,baz=179,slow=12,SNR=342 | | | | | | | |
| SEY | | | | Lg | | Lg | 03 05 44.6 | |
| | comp=E,185nm,0.3s,baz=46,slow=23,SNR=15 | | | | | | | |
| **SEY** | **Seymchan** | **3.02** | **2** | *e*P | | **Pn** | **03 05 01.7** | **-0.6** |
| SEY | | | | *e* | | | 03 05 47.0 | |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,170nm,0.2s | | | | | | | |
| SEY | | | | smax | smax | | | |
| | comp=E,740nm,0.2s | | | | | | | |
| SEY | | | | smax | smax | | | |
| | comp=N,1μm,0.3s | | | | | | | |
| **SEY** | **Seymchan** | **3.02** | **2** | *e*P | | **Pn** | **03 05 01.7** | **-0.6** |
| SEY | | | | *e* | | | 03 05 03.4 | |
| SEY | | | | *e*Pg | | **Pb** | **03 05 07.1** | **-1.2** |
| SEY | | | | Pgmax | | | 03 05 13.6 | |
| | comp=N,170nm,0.2s | | | | | | | |
| SEY | | | | *e*Sg | | **Sb** | **03 05 46.8** | **+1.7** |
| SEY | | | | Sgmax | | | 03 05 52.0 | |
| | comp=N,1μm,0.3s | | | | | | | |
| SEY | | | | Sgmax | | | 03 05 52.0 | |
| | comp=N,740nm,0.2s | | | | | | | |
| **OMS** | **Omsukchan** | **3.13** | **32** | *e*P | | **Pn** | **03 05 02.3** | **-1.6** |
| OMS | | | | *e* | | | 03 05 50.2 | |
| OMS | | | | pmax | pmax | | | |
| | comp=Z,490nm,0.3s | | | | | | | |
| OMS | | | | smax | smax | | | |
| | comp=E,500nm,0.8s | | | | | | | |
| OMS | | | | smax | smax | | | |
| | comp=N,320nm,0.5s | | | | | | | |
| **OMS** | **Omsukchan** | **3.13** | **32** | | | **Pn** | **03 05 02.3** | **-1.6** |
| **OMS** | **Omsukchan** | **3.13** | **32** | *e*P | | **Pn** | **03 05 02.3** | **-1.6** |
| OMS | | | | *e*Pg | | **Pb** | **03 05 08.6** | **-1.6** |
| OMS | | | | Pgmax | | | 03 05 13.4 | |
| | comp=N,490nm,0.3s | | | | | | | |
| OMS | | | | *e*Sg | | **Sb** | **03 05 49.1** | **+0.7** |
| OMS | | | | Sgmax | | | 03 05 56.3 | |
| | comp=N,320nm,0.5s | | | | | | | |
| OMS | | | | Sgmax | | | 03 05 56.3 | |
| | comp=N,500nm,0.8s | | | | | | | |
| **SUUS** | **Susuman** | **3.44** | **328** | *e*P | | **Pn** | **03 05 07.5** | **-0.8** |
| SUUS | | | | *e* | | | 03 05 59.8 | |
| SUUS | | | | pmax | pmax | | | |
| | comp=Z,380nm,0.5s | | | | | | | |
| SUUS | | | | smax | smax | | | |
| | comp=N,1μm,0.5s | | | | | | | |
| **SUUS** | **Susuman** | **3.44** | **328** | | | **Pn** | **03 05 07.5** | **-0.8** |
| **SUUS** | **Susuman** | **3.44** | **328** | *e*P | | **Pn** | **03 05 07.5** | **-0.8** |
| SUUS | | | | *e*Pg | | **Pb** | **03 05 16.0** | **+0.4** |
| SUUS | | | | Pgmax | | | 03 05 17.9 | |
| | comp=N,380nm,0.5s | | | | | | | |
| SUUS | | | | *e*Sg | | **Sb** | **03 05 59.8** | **+2.3** |
| SUUS | | | | Sgmax | | | 03 06 09.8 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **7.49** | **153** | P | | **Pn** | **03 06 02.1** | **-1.6** |
| **PEA0B** | **Petropavlovsk-** | **7.49** | **153** | Pn | | **Pn** | **03 06 02.1** | **-1.6** |
| **PETK** | **Petropavlovsk-** | **7.49** | **153** | Pn | | **Pn** | **03 06 01.4** | **-2.3** |
| | comp=N,2.5nm,0.3s,baz=333,slow=11,SNR=35 | | | | | | | |
| PETK | | | | LR | | LR | 03 09 22.0 | |
| | comp=N,394nm,20.2s,baz=352,slow=41 | | | | | | | |
| **PET** | **Petropavlovsk** | **7.80** | **150** | *e*P | | **Pn** | **03 06 10.5** | **+2.6** |
| PET | | | | *e*S | | **Sn** | **03 07 39.6** | **+3.5** |
| PET | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.0s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| **BILL** | **Bilibino** | **10.20** | **31** | *e*P | | **Pn** | **03 06 42.0** | **+1.2** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,120nm,11.0s | | | | | | | |
| **BILL** | **Bilibino** | **10.20** | **31** | Pn | | **Pn** | **03 06 41.2** | **+0.5** |
| **YAK** | **Yakutsk** | **11.10** | **291** | *e*P | | **Pn** | **03 06 53.6** | **+0.5** |
| **ZEA** | **Zeya** | **14.92** | **256** | *e*P | | **Pn** | **03 07 46.4** | **+1.2** |
| ZEA | | | | pmax | pmax | | | |
| | comp=E,20nm,1.3s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.5s | | | | | | | |
| **TIXI** | **Tiksi** | **14.99** | **331** | Pn | | **Pn** | **03 07 46.3** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=91,slow=24,SNR=14 | | | | | | | |
| TIXI | | | | LR | | LR | 03 13 57.0 | |
| | comp=Z,281nm,18.2s,baz=173,slow=39 | | | | | | | |
| **TIXI** | **Tiksi** | **14.99** | **331** | *e*P | | **Pn** | **03 07 47.1** | **+1.0** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **TIXI** | **Tiksi** | **14.99** | **331** | Pn | | **Pn** | **03 07 46.4** | **+0.2** |
| **KLR** | **Kul'dur** | **15.89** | **237** | Pn | | **Pn** | **03 07 59.0** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=37,slow=13,SNR=9.0 | | | | | | | |
| KLR | | | | LR | | LR | 03 13 48.0 | |
| | comp=Z,94nm,20.3s,baz=356,slow=36 | | | | | | | |
| **KLR** | **Kul'dur** | **15.89** | **237** | *e*P | | **Pn** | **03 08 00.0** | **+2.0** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **TNA** | **Tin City** | **18.86** | **56** | P | | **P** | **03 08 34.4** | **+0.1** |
| **BOD** | **Bodaibo** | **19.66** | **281** | *e*P | | **P** | **03 08 43.6** | **+0.4** |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.8s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **19.91** | **227** | *d i*P | | **Pn** | **03 08 47.9** | **+0.2** |
| **USA0B** | **Ussuriysk Arra** | **19.91** | **227** | P | | **P** | **03 08 45.7** | **-0.3** |
| USA0B | | | | IAmb | IAmb | | 03 08 49.5 | |
| | comp=Z,42nm,1.2s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.91** | **227** | P | | **P** | **03 08 46.0** | **0.0** |
| | baz=33,slow=11,SNR=19 | | | | | | | |
| USRK | | | | LR | | LR | 03 16 27.2 | |
| | comp=Z,62nm,20.1s,baz=160,slow=37 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.91** | **227** | P | | **P** | **03 08 45.5** | **-0.6** |
| **ANM** | **Nome** | **20.00** | **58** | P | | **P** | **03 08 47.1** | **+0.2** |
| ANM | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **ANM** | **Nome** | **20.00** | **58** | P | | **P** | **03 08 47.1** | **+0.2** |
| **BNX** | **BinXian** | **20.45** | **237** | *i*P | | **P** | **03 08 52.5** | **+0.6** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,45nm,1.3s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,310nm,3.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **20.47** | **232** | P | | **P** | **03 08 50.7** | **-1.5** |
| MDJ | | | | IAmb | IAmb | | 03 08 55.4 | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **MDJ** | **Mudanjiang** | **20.47** | **232** | P | | **P** | **03 08 53.3** | **+1.1** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.3s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,200nm,3.7s | | | | | | | |
| **HIA** | **Hailar** | **21.37** | **255** | *de*P | | **P** | **03 09 02.4** | **+0.5** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **HIA** | **Hailar** | **21.37** | **255** | P | | **P** | **03 09 01.6** | **-0.2** |
| **CN2** | **Changchun** | **22.84** | **237** | *e*P | | **P** | **03 09 17.3** | **-0.2** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **A21K** | **Barrow** | **23.15** | **40** | P | | **P** | **03 09 18.8** | **-1.7** |
| A21K | | | | IAmb | IAmb | | 03 09 29.0 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **IMAR** | **Indian Mountai** | **24.61** | **53** | P | | **P** | **03 09 33.0** | **-1.5** |
| **J20K** | **Nowinta River** | **24.87** | **57** | P | | **P** | **03 09 36.5** | **-0.4** |
| **MJA0** | **Matsu Arr-Jizo** | **25.07** | **207** | *e*P | | **P** | **03 09 39.3** | **+0.4** |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.07** | **207** | P | | **P** | **03 09 38.0** | **-1.0** |
| | comp=Z,3.2nm,0.8s,baz=5.0,slow=9.0,SNR=5.6 | | | | | | | |
| MJAR | | | | LR | | LR | 03 19 07.4 | |
| | comp=Z,57nm,18.7s,baz=138,slow=36 | | | | | | | |
| **L19K** | **White Mountain** | **25.15** | **62** | P | | **P** | **03 09 37.4** | **-2.1** |
| **XLT** | **XiLinHaoTe** | **26.98** | **250** | *e*P | | **P** | **03 09 57.3** | **+1.1** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,180nm,5.6s | | | | | | | |
| **KSRS** | **Korea Array** | **27.30** | **225** | P | | **P** | **03 09 59.0** | **-0.1** |
| | comp=Z,2.7nm,0.8s,baz=32,slow=7.8,SNR=7.9 | | | | | | | |
| KSRS | | | | LR | | LR | 03 20 42.8 | |
| | comp=Z,71nm,18.6s,baz=60,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **27.30** | **225** | *e*P | | **P** | **03 09 59.6** | **+0.5** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **27.70** | **54** | P | | **P** | **03 10 01.7** | **-0.7** |
| | comp=Z,4.2nm,0.8s,baz=279,slow=8.9,SNR=11 | | | | | | | |
| **NRIK** | **Noril'sk** | **27.83** | **317** | LR | | LR | 03 21 51.5 | |
| | comp=Z,213nm,19.6s,baz=121,slow=38 | | | | | | | |
| **JHS** | **Saijyo** | **27.86** | **215** | P | | **P** | **03 10 02.2** | **-1.9** |
| **ULN** | **Ulaanbaatar** | **28.59** | **265** | *i*P | | **P** | **03 10 12.5** | **+1.8** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | |
| **ZAK** | **Zakamensk** | **28.87** | **273** | *e*P | | **P** | **03 10 14.4** | **+1.3** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **RIDG** | **Independent Ri** | **28.90** | **55** | P | | **P** | **03 10 13.8** | **+0.6** |
| RIDG | | | | IAmb | IAmb | | 03 10 36.9 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **28.94** | **266** | P | | **P** | **03 10 12.7** | **-1.1** |
| | comp=Z,1.0nm,0.8s,baz=48,slow=10,SNR=7.6 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **03 13 22.1** | **-0.2** |
| | comp=Z,0.8nm,0.8s,baz=313,slow=1.9,SNR=5.2 | | | | | | | |
| SONM | | | | LR | | LR | 03 22 27.0 | |
| | comp=Z,120nm,20.4s,baz=98,slow=38 | | | | | | | |
| **INK** | **Inuvik** | **31.50** | **43** | LR | | LR | 03 24 01.6 | |
| | comp=Z,174nm,20.7s,baz=5.0,slow=38 | | | | | | | |
| **A36M** | **Sachs Harbour** | **32.73** | **35** | P | | **P** | **03 10 46.1** | **-0.6** |
| A36M | | | | IAmb | IAmb | | 03 10 49.0 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.76** | **291** | P | | **P** | **03 11 13.5** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=47,slow=8.5,SNR=2.3 | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **37.19** | **284** | *e*P | | **P** | **03 11 28.0** | **+2.3** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **GTA** | **Gaotai** | **38.31** | **262** | *e*P | | **P** | **03 11 36.3** | **+1.1** |
| GTA | | | | pP | sP | | 03 11 40.8 | +1.0 |
| GTA | | | | sP | pP | | 03 11 43.9 | +5.4 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **RES** | **Resolute Bay** | **38.67** | **23** | P | | **P** | **03 11 37.0** | **-0.7** |
| | comp=Z,1.7nm,0.7s,baz=312,slow=14,SNR=7.0 | | | | | | | |
| **RES** | **Resolute Bay** | **38.67** | **23** | P | | **P** | **03 11 37.2** | **-0.4** |
| RES | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **RES** | **Resolute Bay** | **38.67** | **23** | P | | **P** | **03 11 37.2** | **-0.4** |
| RES | | | | IAmb | IAmb | | 03 11 38.6 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **LZH** | **Lanzhou** | **38.93** | **254** | *e*P | | **P** | **03 11 42.1** | **+1.6** |
| LZH | | | | pP | sP | | 03 11 46.3 | +1.3 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **40.75** | **291** | *e*P | | **P** | **03 11 55.0** | **-0.2** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.7s | | | | | | | |
| **KURK** | **Kurchatov** | **40.75** | **291** | P | | **P** | **03 11 55.5** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **41.24** | **45** | P | | **P** | **03 11 57.9** | **-1.2** |
| | comp=Z,0.7nm,0.8s,baz=306,slow=8.1,SNR=9.3 | | | | | | | |
| YKA | | | | PcP | | **PcP** | **03 13 58.4** | **+0.7** |
| | comp=Z,0.3nm,0.6s,baz=327,slow=4.0,SNR=4.8 | | | | | | | |
| **MK31** | **Makanchi Array** | **41.69** | **284** | *de*P | | **P** | **03 12 03.4** | **+0.4** |
| **MK31** | **Makanchi Array** | **41.69** | **284** | P | | **P** | **03 12 03.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **41.69** | **284** | P | | **P** | **03 12 03.5** | **+0.5** |
| | comp=Z,0.8nm,0.5s,baz=46,slow=7.7,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.69** | **284** | P | | **P** | **03 12 03.0** | **-0.1** |
| **MAKZ** | **Makanchi** | **41.83** | **284** | P | | **P** | **03 12 04.5** | **+0.3** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **MAKZ** | **Makanchi** | **41.83** | **284** | P | | **P** | **03 12 04.5** | **+0.3** |
| **BRVK** | **Borovoye** | **42.97** | **299** | *i*P | | **P** | **03 12 15.3** | **+2.0** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **GOMU** | **GeErMu** | **43.30** | **263** | P | | **P** | **03 12 16.8** | **+0.1** |
| GOMU | | | | pP | sP | | 03 12 28.0 | +6.7 |
| GOMU | | | | sP | pP | | 03 12 33.9 | +14 |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,130nm,4.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **45.33** | **337** | LR | | LR | 03 37 57.1 | |
| | comp=Z,101nm,18.5s,baz=18,slow=45 | | | | | | | |
| **ARU** | **Arti** | **45.51** | **309** | LR | | LR | 03 33 05.9 | |
| | comp=Z,168nm,20.5s,baz=46,slow=38 | | | | | | | |
| **ARU** | **Arti** | **45.51** | **309** | P | | **P** | **03 12 33.7** | **+0.1** |
| ARU | | | | IAmb | IAmb | | 03 12 36.6 | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **KIRV** | **Kirov** | **47.33** | **316** | LR | | LR | 03 33 40.5 | |
| | comp=Z,96nm,18.5s,baz=19,slow=37 | | | | | | | |
| **SUMG** | **Summit** | **47.57** | **4** | P | | **P** | **03 12 50.9** | **+0.9** |
| SUMG | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **SUMG** | **Summit** | **47.57** | **4** | P | | **P** | **03 12 50.9** | **+0.9** |
| SUMG | | | | IAmb | IAmb | | 03 12 52.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **48.51** | **286** | *i*P | | **P** | **03 12 58.8** | **+1.3** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **50.07** | **289** | P | | **P** | **03 13 09.7** | **+0.5** |
| **KKAR** | **Karatay Array** | **50.07** | **289** | P | | **P** | **03 13 09.7** | **+0.5** |
| **ABKAR** | **Akbulak array** | **50.22** | **302** | P | | **P** | **03 13 11.6** | **+1.4** |
| **FFC** | **Flin Flon** | **51.40** | **46** | P | | **P** | **03 13 18.8** | **-0.2** |
| FFC | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | |
| **FFC** | **Flin Flon** | **51.40** | **46** | P | | **P** | **03 13 18.8** | **-0.2** |
| FFC | | | | IAmb | IAmb | | 03 13 21.6 | |
| | comp=Z,9.9nm,1.4s | | | | | | | |
| **FIA1** | **FINESS Array S** | **52.03** | **330** | P | | **P** | **03 13 24.4** | **+0.7** |
| FIA1 | | | | IAmb | IAmb | | 03 13 25.5 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **52.04** | **330** | P | | **P** | **03 13 23.8** | **+0.2** |
| | comp=Z,3.2nm,0.9s,baz=169,slow=14,SNR=7.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **52.04** | **330** | *i* P | | **P** | **03 13 23.7** | **+0.1** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **52.04** | **330** | P | | **P** | **03 13 24.5** | **+0.9** |
| **YBH** | **Yreka Blue Hor** | **52.77** | **69** | LR | | LR | 03 36 04.0 | |
| | comp=Z,34nm,19.8s,baz=346,slow=36 | | | | | | | |
| **FRB** | **Frobisher Bay** | **52.84** | **21** | P | | **P** | **03 13 29.0** | **-0.6** |
| | comp=Z,3.2nm,0.6s,baz=333,slow=8.9,SNR=15 | | | | | | | |
| **GAR** | **Garm** | **53.33** | **286** | P | | **P** | **03 13 34.6** | **+0.8** |
| GAR | | | | IAmb | IAmb | | 03 13 36.8 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **HRY** | **Holter Researc** | **53.80** | **58** | P | | **P** | **03 13 37.9** | **+0.8** |
| **CHGR** | **Chuyangaron** | **54.16** | **287** | P | | **P** | **03 13 40.5** | **+0.7** |
| **CHGR** | **Chuyangaron** | **54.16** | **287** | P | | **P** | **03 13 40.5** | **+0.7** |
| **OBN** | **Obninsk** | **54.40** | **320** | *e*P | | **P** | **03 13 42.8** | **+1.7** |
| OBN | | | | S | | **S** | **03 21 15.0** | **-3.9** |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,144nm,18.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **55.64** | **338** | P | | **P** | **03 13 50.3** | **+0.2** |
| | comp=Z,1.3nm,1.0s,baz=35,slow=7.4,SNR=2.0 | | | | | | | |
| **YHH** | **Holmes Hill** | **55.74** | **59** | P | | **P** | **03 13 51.6** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **56.08** | **246** | P | | **P** | **03 13 54.4** | **+0.7** |
| | comp=Z,1.0nm,0.3s,baz=24,slow=8.9,SNR=1.4 | | | | | | | |
| **NIL** | **Nilore** | **56.13** | **280** | P | | **P** | **03 13 53.9** | **-0.1** |
| NIL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **NIL** | **Nilore** | **56.13** | **280** | P | | **P** | **03 13 53.9** | **-0.1** |
| NIL | | | | IAmb | IAmb | | 03 14 02.7 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **RLMT** | **Red Lodge** | **56.15** | **57** | P | | **P** | **03 13 54.6** | **+0.4** |
| **KVN** | **Kaiserville** | **57.05** | **68** | P | | **P** | **03 14 00.9** | **+0.3** |
| KVN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **KVN** | **Kaiserville** | **57.05** | **68** | P | | **P** | **03 14 00.9** | **+0.3** |
| KVN | | | | IAmb | IAmb | | 03 14 06.5 | |
| | comp=Z,5.4nm,1.4s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **57.22** | **45** | P | | **P** | **03 14 00.9** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=332,slow=6.6,SNR=3.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **57.45** | **69** | P | | **P** | **03 14 04.0** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=313,slow=7.3,SNR=5.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **57.45** | **69** | P | | **P** | **03 14 03.7** | **+0.1** |
| **MDND** | **Maddock** | **57.83** | **49** | P | | **P** | **03 14 05.4** | **-0.4** |
| **PDAR** | **Pinedale Array** | **57.92** | **59** | P | | **P** | **03 14 06.8** | **0.0** |
| | comp=Z,1.0nm,0.7s,baz=358,slow=4.5,SNR=8.2 | | | | | | | |
| PDAR | | | | LR | | LR | 03 40 06.3 | |
| | comp=Z,52nm,19.4s,baz=346,slow=37 | | | | | | | |
| **PDAR** | **Pinedale Array** | **57.92** | **59** | P | | **P** | **03 14 06.9** | **+0.1** |
| **NLU** | **North Lily Min** | **59.09** | **63** | P | | **P** | **03 14 15.4** | **+0.5** |
| NLU | | | | IAmb | IAmb | | 03 14 19.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **60.48** | **322** | P | | **P** | **03 14 24.7** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=31,slow=8.2,SNR=4.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **60.48** | **322** | *e*P | | **P** | **03 14 27.5** | **+3.4** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **SUSD** | **Miller** | **60.91** | **51** | P | | **P** | **03 14 26.3** | **-0.9** |
| **KBZ** | **Khabaz** | **61.66** | **309** | LR | | LR | 03 44 13.9 | |
| | comp=Z,116nm,19.2s,baz=22,slow=39 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **62.42** | **50** | P | | **P** | **03 14 35.7** | **-1.6** |
| ECSD | | | | IAmb | IAmb | | 03 14 39.1 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **SPMN** | **Marine on St.** | **62.57** | **46** | P | | **P** | **03 14 36.9** | **-1.4** |
| **N35A** | **Tabor** | **65.24** | **51** | P | | **P** | **03 14 54.3** | **-1.6** |
| **R32A** | **Long Quarter,** | **66.10** | **54** | P | | **P** | **03 14 59.6** | **-2.0** |
| **KSU1** | **Kansas State U** | **66.37** | **52** | P | | **P** | **03 15 01.6** | **-1.7** |
| KSU1 | | | | IAmb | IAmb | | 03 15 02.7 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **67.78** | **49** | P | | **P** | **03 15 10.0** | **-2.2** |
| **BRTR** | **Keskin Array B** | **68.62** | **313** | P | | **P** | **03 15 18.6** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=66,slow=3.7,SNR=4.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.62** | **313** | *e*P | | **P** | **03 15 19.1** | **+1.5** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.62** | **313** | P | | **P** | **03 15 18.3** | **+0.7** |
| **BATG** | **Bathurst New B** | **68.69** | **27** | P | | **P** | **03 15 17.9** | **+0.2** |
| **WHAR** | **Wooly Hollow** | **71.39** | **51** | P | | **P** | **03 15 32.4** | **-2.1** |
| **W41B** | **Gary Mavity, V** | **71.50** | **51** | P | | **P** | **03 15 34.2** | **-0.9** |
| W41B | | | | IAmb | IAmb | | 03 15 36.7 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **SSPA** | **Standing Stone** | **71.

*Coast of S. Island, N.Z.*
*WEL **22** 03:09:56.0±0.5,42°S±4'×17°4E±', h8km±3km,M5.0/24, ML5.2/24,MLv5.0/24,Error ellipse: s-maj=0.0km s-min=0.0km az=150.0*
*NEIC **22** 03:09:56.0±2.0,41°92S±0°.01×174°.21E±0°.03,h9km±3km, mb4.7/24,Mwr4.7/33,ML5.0(WEL),Error ellipse: s-maj=3.0km s-min=1.8km az=106.0*
*NEIC **22** 03:09:56.6,41°.90S×174°.22E,h5km,Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr1.36; Mθθ0.00; Mϕϕ-1.36; Mrθ0.53; Mθϕ-0.30; Mrϕ0.07; Fault plane solution: M₀1.49000×10¹⁶ NP1:ϕs30.14000°, δ51.75000°,λ114.23000°. NP2:ϕs174.12000°,δ44.27000°, λ62.50000°. Principal axes: T 1.5414, Plg71.0000°, Azm2.0000°; N -0.1081, Plg19.0000°, Azm195.0000°; P -1.4333, Plg4.0000°, Azm103.0000°;*

**ISC 22 03:09:55.5±1.0,41°.90S±0°.03×174°.30E±0°.03,h9km±6km, n272,σ1s32/258,mb4.7/19,MS4.3/26,1D,Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMWZ** | **Cape Campbell** | **0.17** | **338** | | **Pg** | **03 09 58.9** | **-0.3** |
| CMWZ | | | | Sg | **Sg** | **03 10 02.4** | **+0.8** |
| **CMWZ** | **Cape Campbell** | **0.17** | **338** | P | **Pg** | **03 09 58.8** | **-0.3** |
| CMWZ | | | | S | **Sg** | **03 10 02.4** | **+0.8** |
| **BSWZ** | **Blackbirch Sta** | **0.37** | **301** | Pg | **Pg** | **03 10 02.1** | **-0.7** |
| **BSWZ** | **Blackbirch Sta** | **0.37** | **301** | P | **Pg** | **03 10 02.4** | **-0.4** |
| **TUWZ** | **Tuamarina** | **0.54** | **331** | | **Pg** | **03 10 06.1** | **+0.1** |
| TUWZ | | | | | **Sb** | **03 10 15.2** | **+0.1** |
| **TUWZ** | **Tuamarina** | **0.54** | **331** | P | **Pg** | **03 10 06.2** | **+0.1** |
| TUWZ | | | | S | **Sb** | **03 10 15.0** | **-0.1** |
| **BHW** | **Baring Head** | **0.66** | **41** | | **Pb** | **03 10 09.8** | **+0.7** |
| **BHW** | **Baring Head** | **0.66** | **41** | P | **Pb** | **03 10 10.0** | **+0.8** |
| BHW | | | | S | **Sn** | **03 10 23.5** | **+2.1** |
| **SNZO** | **South Karori** | **0.67** | **27** | | **Pb** | **03 10 09.8** | **+0.4** |
| **SNZO** | **South Karori** | **0.67** | **27** | P | **Pn** | **03 10 10.3** | **-0.8** |
| **TCW** | **Tory Channel** | **0.69** | **359** | P | **Pg** | **03 10 09.1** | **+0.2** |
| **WEL** | **Wellington** | **0.71** | **30** | P | **Pn** | **03 10 10.9** | **-0.9** |
| WEL | | | | S | **Sn** | **03 10 25.6** | **+2.8** |
| **KHZ** | **Kahutara** | **0.76** | **228** | Pg | **Pb** | **03 10 10.8** | **-0.1** |
| **KHZ** | **Kahutara** | **0.76** | **228** | P | **Pn** | **03 10 11.6** | **-0.9** |
| KHZ | | | | S | **Sn** | **03 10 24.7** | **+0.7** |
| **KHZ** | **Kahutara** | **0.76** | **228** | P | **Pn** | **03 10 12.0** | **-0.4** |
| **PLWZ** | **Palliser** | **0.79** | **65** | | **Pn** | **03 10 12.9** | **+0.1** |
| **PLWZ** | **Palliser** | **0.79** | **65** | P | **Pn** | **03 10 13.0** | **+0.1** |
| **MSWZ** | **Moikau Station** | **0.86** | **56** | | **Pn** | **03 10 14.0** | **+0.1** |
| **MSWZ** | **Moikau Station** | **0.86** | **56** | P | **Pn** | **03 10 14.2** | **+0.3** |
| **NNZ** | **Nelson** | **0.97** | **315** | | **Pb** | **03 10 13.5** | **-1.0** |
| **NNZ** | **Nelson** | **0.97** | **315** | P | **Pb** | **03 10 13.6** | **-1.0** |
| **CAW** | **Cannon Point** | **0.98** | **36** | P | **Pn** | **03 10 15.5** | **0.0** |
| **PAWZ** | **Paruwai Farm** | **0.99** | **59** | P | **Pn** | **03 10 15.7** | **0.0** |
| **THZ** | **Tophouse** | **1.05** | **277** | P | **Pb** | **03 10 15.5** | **-0.4** |
| **DUWZ** | **D'Urville Isla** | **1.14** | **345** | P | **Pb** | **03 10 16.8** | **-0.6** |
| **KIW** | **Kapiti Island** | **1.14** | **24** | P | **Pg** | **03 10 17.9** | **+0.5** |
| **TRWZ** | **Traveller** | **1.16** | **65** | P | **Pb** | **03 10 17.8** | **+0.1** |
| **MTW** | **Mount Morrison** | **1.17** | **51** | P | **Pb** | **03 10 18.1** | **+0.2** |
| **MRNZ** | **Matariki Terra** | **1.26** | **293** | P | **Pb** | **03 10 19.2** | **-0.2** |
| **OGWZ** | **Otaki Gorge** | **1.27** | **31** | P | **Pb** | **03 10 19.9** | **+0.3** |
| **HOWZ** | **Holdsworth Sta** | **1.36** | **43** | P | **Pn** | **03 10 20.8** | **+0.1** |
| **GVZ** | **Greta Valley S** | **1.42** | **221** | P | **Pb** | **03 10 21.6** | **-0.5** |
| **TMWZ** | **Te Maipa** | **1.44** | **57** | P | **Pn** | **03 10 21.5** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **1.57** | **38** | P | **Pn** | **03 10 23.8** | **+0.2** |
| **TIWZ** | **Tintock** | **1.64** | **47** | P | **Pn** | **03 10 24.4** | **-0.2** |
| **QRZ** | **Quartz Range** | **1.71** | **308** | | **Pn** | **03 10 25.2** | **-0.3** |
| **QRZ** | **Quartz Range** | **1.71** | **308** | P | **Pb** | **03 10 26.5** | **-0.6** |
| **QRZ** | **Quartz Range** | **1.71** | **308** | P | **Pb** | **03 10 27.2** | **-0.0** |
| **CPWZ** | **Castlepoint** | **1.74** | **56** | P | **Pn** | **03 10 25.9** | **0.0** |
| **AMCZ** | **Amberley** | **1.76** | **223** | P | **Pg** | **03 10 31.8** | **+2.5** |
| **PRWZ** | **Pori Road** | **1.85** | **44** | P | **Pn** | **03 10 27.2** | **-0.1** |
| **OHWZ** | **Ohakea** | **1.86** | **25** | P | **Pb** | **03 10 29.5** | **-0.3** |
| **DSZ** | **Denniston Nort** | **1.87** | **274** | P | **Pb** | **03 10 28.8** | **-1.1** |
| **POWZ** | **Post Office Ro** | **1.88** | **37** | P | **Pn** | **03 10 27.9** | **+0.2** |
| **BFZ** | **Birch Farm** | **1.91** | **51** | P | **Pn** | **03 10 27.4** | **-0.8** |
| **BFZ** | **Birch Farm** | **1.91** | **51** | P | **Pn** | **03 10 27.9** | **-0.3** |
| **OKCZ** | **Okains Bay** | **2.03** | **206** | P | **Pn** | **03 10 29.3** | **-0.6** |
| **DVHZ** | **Dannevirke** | **2.14** | **42** | P | **Pn** | **03 10 30.7** | **-0.7** |
| **MQZ** | **McQueen's Vall** | **2.17** | **213** | Pn | **Pn** | **03 10 30.4** | **-1.4** |
| **ANWZ** | **Angora Road** | **2.19** | **49** | P | **Pn** | **03 10 31.6** | **-0.5** |
| **WAZ** | **Wanganui** | **2.21** | **14** | P | **Pb** | **03 10 35.1** | **-0.5** |
| **AKCZ** | **Akaroa Harbour** | **2.22** | **207** | P | **Pn** | **03 10 31.9** | **-0.6** |
| **TSZ** | **Takapari Road** | **2.23** | **35** | P | **Pn** | **03 10 32.6** | **-0.1** |
| **INZ** | **Inchbonnie** | **2.27** | **248** | P | **Pn** | **03 10 33.5** | **+0.3** |
| **PRHZ** | **Porangahau** | **2.41** | **48** | P | **Pn** | **03 10 34.6** | **-0.5** |
| **RACZ** | **Rakaia** | **2.42** | **220** | P | **Pn** | **03 10 34.7** | **-0.5** |
| **LREZ** | **Lake Rotokare** | **2.44** | **2** | P | **Pb** | **03 10 38.9** | **-0.7** |
| **WPHZ** | **Waipukurau** | **2.45** | **42** | P | **Pn** | **03 10 35.2** | **-0.5** |
| **PNHZ** | **Pukenui** | **2.46** | **37** | P | **Pn** | **03 10 35.5** | **-0.3** |
| **NMEZ** | **Namu Road** | **2.51** | **353** | P | **Pb** | **03 10 40.2** | **-0.5** |
| **PREZ** | **Palmer Road** | **2.56** | **358** | P | **Pb** | **03 10 40.8** | **-0.9** |
| **MHCZ** | **Mount Hutt** | **2.59** | **230** | P | **Pn** | **03 10 36.8** | **-0.8** |
| **KHEZ** | **Kahui Hut** | **2.62** | **355** | P | **Pb** | **03 10 41.2** | **-1.4** |
| **NEZ** | **North Egmont** | **2.64** | **357** | P | **Pb** | **03 10 42.1** | **-0.8** |
| **NBEZ** | **Newall Road No** | **2.65** | **353** | P | **Pb** | **03 10 42.0** | **-1.2** |
| **MTVZ** | **Mangateitei** | **2.67** | **20** | P | **Pn** | **03 10 40.8** | **+2.1** |
| **DREZ** | **Durham Road** | **2.71** | **358** | P | **Pb** | **03 10 42.9** | **-1.3** |
| **PKE** | **Pukeiti** | **2.72** | **355** | P | **Pb** | **03 10 42.1** | **-2.2** |
| **WACZ** | **Wakanui South** | **2.72** | **221** | P | **Pn** | **03 10 38.9** | **-0.5** |
| **MOVZ** | **Moawhango** | **2.73** | **24** | P | **Pn** | **03 10 40.4** | **+0.9** |
| **PKVZ** | **Pokaka** | **2.73** | **17** | P | **Pn** | **03 10 41.3** | **+1.7** |
| **KRHZ** | **Kereru** | **2.75** | **36** | P | **Pn** | **03 10 41.3** | **-0.6** |
| **WNVZ** | **Wahianoa** | **2.76** | **21** | P | **Pn** | **03 10 41.3** | **+1.2** |
| **BHHZ** | **Black Hill Sta** | **2.76** | **30** | P | **Pn** | **03 10 40.4** | **+0.4** |
| **TRVZ** | **Turoa** | **2.77** | **20** | P | **Pn** | **03 10 41.8** | **+1.5** |
| **DRZ** | **Dome Shelter** | **2.80** | **21** | P | **Pn** | **03 10 43.0** | **+2.2** |
| **WHVZ** | **Whangaehu Hut** | **2.80** | **21** | P | **Pn** | **03 10 42.1** | **+1.5** |
| **VRZ** | **Vera Road** | **2.80** | **7** | P | **Pn** | **03 10 42.8** | **+2.3** |
| **FWVZ** | **Far West T-bar** | **2.81** | **20** | P | **Pn** | **03 10 42.5** | **+1.6** |
| **TUVZ** | **Tukino** | **2.83** | **22** | P | **Pn** | **03 10 42.3** | **+1.2** |
| **KAHZ** | **Kahuranaki** | **2.88** | **44** | P | **Pn** | **03 10 40.3** | **-1.2** |
| **WVZ** | **Waitaha Valley** | **2.88** | **245** | P | **Pn** | **03 10 42.4** | **+0.8** |
| **NGZ** | **Ngauruhoe** | **2.90** | **20** | P | **Pn** | **03 10 43.5** | **+1.4** |
| **SNVZ** | **South Ngauruho** | **2.90** | **21** | P | **Pn** | **03 10 43.3** | **+1.2** |
| **OTVZ** | **Oturere** | **2.93** | **21** | P | **Pn** | **03 10 43.6** | **+1.2** |
| **NNVZ** | **North Ngauruho** | **2.95** | **20** | P | **Pn** | **03 10 44.1** | **+1.4** |
| **WTVZ** | **West Tongariro** | **2.96** | **20** | P | **Pn** | **03 10 44.2** | **+1.5** |
| **KWHZ** | **Kaweka Forest** | **2.96** | **34** | P | **Pn** | **03 10 42.4** | **-0.3** |
| **TWVZ** | **Taurewa** | **2.96** | **17** | P | **Pn** | **03 10 44.2** | **+1.4** |
| **ETVZ** | **East Tongariro** | **2.97** | **22** | P | **Pn** | **03 10 44.2** | **+1.3** |
| **TMVZ** | **Te Maari** | **2.98** | **22** | P | **Pn** | **03 10 44.5** | **+1.4** |
| **KRVZ** | **Karewarewa** | **2.99** | **20** | P | **Pn** | **03 10 44.9** | **+1.7** |
| **NTVZ** | **North Tongarir** | **2.99** | **21** | P | **Pn** | **03 10 44.3** | **+1.0** |
| **RPZ** | **Rata Peaks** | **3.00** | **232** | Pn | **Pn** | **03 10 42.8** | **-0.3** |
| | 76nm,0.3s,baz=76,slow=1.3,SNR=118 | | | | | | |
| RPZ | | | | Sn | **Sn** | **03 11 19.1** | **-0.1** |
| | 136nm,0.3s,baz=171,slow=20,SNR=17 | | | | | | |
| RPZ | | | | LR | LR | 03 11 56.7 | |
| | comp=Z,833nm,20.5s,baz=30,slow=39 | | | | | | |
| **RPZ** | **Rata Peaks** | **3.00** | **232** | P | **Pn** | **03 10 42.9** | **-0.3** |
| **RPZ** | **Rata Peaks** | **3.00** | **232** | P | **Pn** | **03 10 43.3** | **+0.1** |
| **ARCZ** | **Arundel** | **3.07** | **227** | P | **Pn** | **03 10 43.6** | **-0.6** |
| **CKHZ** | **Cape Kidnapper** | **3.08** | **44** | P | **Pn** | **03 10 44.4** | **-0.1** |
| **KATZ** | **Kakaramea** | **3.11** | **20** | P | **Pn** | **03 10 46.8** | **+1.9** |
| **RITZ** | **Rihia Road** | **3.16** | **23** | P | **Pn** | **03 10 47.5** | **+2.0** |
| **BKZ** | **Black Stump Fm** | **3.21** | **32** | P | **Pn** | **03 10 45.6** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **3.21** | **32** | P | **Pn** | **03 10 45.5** | **-0.6** |
| **GCSZ** | **Gaunt Creek Bo** | **3.25** | **243** | P | **Pn** | **03 10 47.7** | **+1.0** |
| **ARHZ** | **Aropaoanui** | **3.34** | **39** | P | **Pn** | **03 10 47.7** | **-0.2** |
| **NMHZ** | **Naumai** | **3.39** | **35** | P | **Pn** | **03 10 48.2** | **-0.5** |
| **HIZ** | **Hauiti** | **3.41** | **7** | | **Pn** | **03 10 50.6** | **+1.7** |
| **HIZ** | **Hauiti** | **3.41** | **7** | P | **Pn** | **03 10 51.0** | **+2.1** |
| **HIZ** | **Hauiti** | **3.41** | **7** | P | **Pn** | **03 10 50.1** | **+1.2** |
| **TMZ** | **Timaru** | **3.46** | **223** | P | **Pn** | **03 10 49.0** | **-0.5** |
| **MRHZ** | **Matea Rd** | **3.47** | **29** | P | **Pn** | **03 10 49.3** | **-0.4** |
| **WHTZ** | **Whakaora** | **3.48** | **22** | P | **Pb** | **03 10 57.2** | **-0.1** |
| **MTHZ** | **Maungataniwha** | **3.62** | **33** | P | **Pn** | **03 10 50.8** | **-0.9** |
| **RAHZ** | **Arahi** | **3.67** | **36** | P | **Pn** | **03 10 51.4** | **-1.0** |
| **WPRZ** | **Whakapapatarin** | **3.67** | **24** | P | **Pb** | **03 10 59.8** | **-0.7** |
| **FOZ** | **Fox Glacier** | **3.68** | **242** | P | **Pn** | **03 10 53.8** | **+1.2** |
| **ALRZ** | **Allen Road** | **3.69** | **26** | P | **Pn** | **03 10 53.0** | **+0.3** |
| **TLZ** | **Tolley Road** | **3.69** | **15** | P | **Pn** | **03 10 55.5** | **+2.7** |
| **PRRZ** | **Plateau Road** | **3.76** | **26** | P | **Pn** | **03 10 54.1** | **+0.4** |
| **GRRZ** | **Galatos Road** | **3.81** | **22** | P | **Pn** | **03 10 55.0** | **+0.6** |
| **HRRZ** | **Handcock Road** | **3.83** | **24** | P | **Pn** | **03 10 55.4** | **+0.8** |
| **KNZ** | **Kokohu** | **3.86** | **43** | P | **Pn** | **03 10 54.1** | **-0.9** |
| **RTZ** | **Ruatahuna** | **3.87** | **33** | P | **Pn** | **03 10 54.6** | **-0.7** |
| **HSRZ** | **Hossack Road** | **3.89** | **23** | P | **Pb** | **03 11 02.2** | **-2.0** |
| **MHGZ** | **Mahia Peninsul** | **3.89** | **46** | P | **Pn** | **03 10 54.2** | **-1.3** |
| **SNGZ** | **Shannon Statio** | **3.89** | **38** | P | **Pn** | **03 10 54.8** | **-0.7** |
| **LBZ** | **Lake Benmore** | **3.90** | **229** | Pn | **Pn** | **03 10 55.2** | **-0.4** |
| **LBZ** | **Lake Benmore** | **3.90** | **229** | P | **Pn** | **03 10 55.5** | **-0.1** |
| **RRRZ** | **Republican Roa** | **3.95** | **26** | P | **Pb** | **03 11 03.1** | **-2.1** |
| **HLRZ** | **Highlands Stat** | **3.97** | **24** | P | **Pb** | **03 11 01.3** | **-4.4** |
| **TARZ** | **Mount Tarawera** | **4.04** | **26** | P | **Pn** | **03 10 57.2** | **-0.4** |
| **PRGZ** | **Paritu Road** | **4.04** | **44** | P | **Pn** | **03 10 55.9** | **-1.7** |
| **ODZ** | **Otahua Downs** | **4.11** | **219** | Pn | **Pn** | **03 10 58.0** | **-0.5** |
| **ODZ** | **Otahua Downs** | **4.11** | **219** | P | **Pn** | **03 10 57.7** | **-0.8** |
| **ODZ** | **Otahua Downs** | **4.11** | **219** | P | **Pn** | **03 10 57.7** | **-0.8** |
| **RIGZ** | **Rimuhau** | **4.15** | **41** | P | **Pn** | **03 10 58.8** | **-0.3** |
| **RAGZ** | **Rawiri** | **4.16** | **36** | P | **Pn** | **03 10 57.4** | **-1.8** |
| **URZ** | **Urewera** | **4.23** | **32** | Pn | **Pn** | **03 10 57.4** | **-2.7** |
| | 12nm,0.3s,baz=230,slow=6.2,SNR=35 | | | | | | |
| URZ | | | | Sn | **Sn** | **03 11 48.2** | **-1.4** |
| | 12nm,0.3s,baz=204,slow=18,SNR=1.6 | | | | | | |
| **URZ** | **Urewera** | **4.23** | **32** | Pn | **Pn** | **03 10 58.7** | **-1.4** |
| **URZ** | **Urewera** | **4.23** | **32** | P | **Pn** | **03 10 59.1** | **-1.0** |
| **URZ** | **Urewera** | **4.23** | **32** | P | **Pn** | **03 10 59.7** | **-0.4** |
| **TOZ** | **Tahuroa Road** | **4.27** | **13** | P | **Pn** | **03 11 02.5** | **+1.8** |
| **TKGZ** | **Te Karaka** | **4.40** | **39** | P | **Pn** | **03 11 01.0** | **-1.5** |
| **OPRZ** | **Ohinepanea** | **4.41** | **24** | P | **Pn** | **03 11 02.9** | **+0.3** |
| **TGRZ** | **Tauranga** | **4.43** | **21** | P | **Pb** | **03 11 09.2** | **-4.4** |
| **JCZ** | **Jackson Bay** | **4.59** | **240** | P | **Pn** | **03 11 05.3** | **+0.1** |
| **TWGZ** | **Tauwhareparae** | **4.67** | **38** | P | **Pn** | **03 11 04.5** | **-1.8** |
| **RUGZ** | **Raukumara Rang** | **4.71** | **35** | P | **Pn** | **03 11 05.5** | **-1.4** |
| **HHSZ** | **Highcliff Hill** | **4.79** | **213** | P | **Pn** | **03 11 07.4** | **-0.5** |
| **WKZ** | **Wanaka** | **4.83** | **231** | Pn | **Pn** | **03 11 08.3** | **-0.1** |
| **WKZ** | **Wanaka** | **4.83** | **231** | P | **Pn** | **03 11 08.6** | **+0.2** |
| **AWAZ** | **Awhitu Peninsu** | **4.84** | **3** | P | **Pn** | **03 11 11.2** | **+2.7** |
| **MYRZ** | **Mayor Island** | **4.86** | **19** | P | **Pn** | **03 11 13.9** | **+5.1** |
| **EAZ** | **Earnscleugh** | **4.92** | **226** | P | **Pn** | **03 11 11.0** | **+1.4** |
| **HAZ** | **Te Kaha** | **4.94** | **34** | P | **Pn** | **03 11 09.6** | **-0.2** |
| **PKGZ** | **Pakihiroa** | **4.95** | **37** | P | **Pn** | **03 11 08.5** | **-1.6** |
| **ETAZ** | **East Tamaki Re** | **4.97** | **6** | P | **Pn** | **03 11 13.3** | **+3.1** |
| **WTAZ** | **Waiatarua** | **4.97** | **3** | P | **Pn** | **03 11 14.2** | **+3.8** |
| **WIAZ** | **Waiheke Island** | **5.14** | **8** | P | **Pn** | **03 11 14.5** | **+1.8** |
| **MBAZ** | **Motutapu North** | **5.15** | **5** | P | **Pn** | **03 11 15.7** | **+3.0** |
| **TUZ** | **Tuapeka** | **5.27** | **218** | P | **Pn** | **03 11 14.2** | **-0.1** |
| **KUZ** | **Kuaotunu** | **5.27** | **13** | P | **Pn** | **03 11 16.4** | **+2.0** |
| **ABAZ** | **Army Bay** | **5.31** | **5** | P | **Pn** | **03 11 18.5** | **+3.5** |
| **MXZ** | **Matakaoa Point** | **5.32** | **37** | P | **Pn** | **03 11 13.5** | **-1.7** |
| **MLZ** | **Mavora Lakes** | **5.66** | **230** | Pn | **Pn** | **03 11 19.4** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **5.66** | **230** | P | **Pn** | **03 11 19.6** | **-0.3** |
| **GRZ** | **Great Barrier** | **5.72** | **9** | P | **Pn** | **03 11 26.3** | **+5.8** |
| **SYZ** | **Scrubby Hill** | **5.93** | **217** | P | **Pn** | **03 11 23.7** | **+0.3** |
| **WCZ** | **Waipu Caves** | **5.96** | **0** | P | **Pn** | **03 11 27.6** | **+3.8** |
| **WHZ** | **Wether Hill Ro** | **6.08** | **227** | Pn | **Pn** | **03 11 26.1** | **+0.5** |
| **WHZ** | **Wether Hill Ro** | **6.08** | **227** | P | **Pn** | **03 11 26.7** | **+1.2** |
| **DCZ** | **Deep Cove** | **6.28** | **233** | Pn | **Pn** | **03 11 26.2** | **-2.1** |
| **APZ** | **The Paps** | **6.69** | **220** | P | **Pn** | **03 11 34.0** | **+0.2** |
| **OUZ** | **Omahuta** | **6.70** | **355** | Pn | **Pn** | **03 11 36.0** | **+2.0** |
| **OUZ** | **Omahuta** | **6.70** | **355** | P | **Pn** | **03 11 37.1** | **+3.1** |
| **OUZ** | **Omahuta** | **6.70** | **355** | P | **Pn** | **03 11 35.9** | **+1.9** |
| **CTZ** | **Chatham Island** | **6.93** | **108** | P | **Pn** | **03 11 37.1** | **0.0** |
| **PYZ** | **Puysegur Point** | **6.95** | **230** | Pn | **Pn** | **03 11 36.6** | **-0.8** |
| **CAN** | **Canberra** | **20.79** | **280** | P | Pn | 03 14 38.2 | -1.2 |
| **DZM** | **Mont Dzumac** | **20.85** | **339** | *e*P | Pn | 03 14 39.6 | -0.5 |
| | 85nm,1.1s | | | | | | |
| DZM | | | | *e*S | **S** | **03 18 29.7** | **-0.6** |
| | 171nm,24.4s | | | | | | |
| DZM | | | | *e*LR | LR | 03 19 42.7 | |
| | comp=Z,605nm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.85** | **339** | P | Pn | 03 14 38.9 | -1.3 |
| DZM | | | | IAmb | IAmb | 03 14 41.3 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **MSVF** | **Nonsavu** | **24.30** | **9** | LR | LR | 03 24 12.1 | |
| | comp=Z,234nm,18.6s,baz=188,slow=36 | | | | | | |
| **EIDS** | **Eidsvold** | **25.29** | **303** | P | **P** | **03 15 22.9** | **+0.7** |
| EIDS | | | | IAmb | IAmb | 03 15 31.9 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **27.86** | **280** | P | **P** | **03 15 45.8** | **+0.4** |
| | comp=Z,2.5nm,0.8s,baz=114,slow=14,SNR=7.3 | | | | | | |
| STKA | | | | LR | LR | 03 25 48.6 | |
| | comp=Z,586nm,19.7s,baz=132,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **27.86** | **280** | P | **P** | **03 15 47.1** | **+1.6** |
| | baz=28,SNR=4.2 | | | | | | |
| **STKA** | **Stephens Creek** | **27.86** | **280** | P | **P** | **03 15 45.1** | **-0.3** |
| **RAR** | **Rarotonga** | **30.03** | **55** | LR | LR | 03 26 42.3 | |
| | comp=Z,342nm,20.6s,baz=226,slow=34 | | | | | | |
| **BBOO** | **Buckleboo** | **31.50** | **274** | P | **P** | **03 16 17.6** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 03 16 42.3 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **32.17** | **304** | LR | LR | 03 27 50.1 | |
| | comp=Z,504nm,21.8s,baz=106,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **32.17** | **304** | P | **P** | **03 16 24.8** | **+1.1** |
| | baz=32 | | | | | | |
| **HNR** | **Honiara** | **34.73** | **335** | LR | LR | 03 29 47.9 | |
| | comp=Z,224nm,18.2s,baz=153,slow=35 | | | | | | |
| **AS31** | **Alice Springs** | **38.11** | **286** | P | **P** | **03 17 14.2** | **-0.6** |
| **ASAR** | **Alice Springs** | **38.11** | **286** | P | **P** | **03 17 13.4** | **-1.4** |
| | comp=Z,8.6nm,1.0s,baz=129,slow=6.7,SNR=30 | | | | | | |
| ASAR | | | | PcP | **PcP** | | |
| | comp=Z,1.0nm,0.6s,baz=126,slow=3.9,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 03 33 01.7 | |
| | comp=Z,694nm,18.1s,baz=128,slow=37 | | | | | | |
| **FORT** | **Forrest** | **38.45** | **271** | P | **P** | **03 17 16.9** | **-0.6** |
| FORT | | | | IAmb | IAmb | 03 17 29.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **COEN** | **Coen** | **38.75** | **307** | P | **P** | **03 17 19.4** | **-0.8** |
| **PPT2** | **Papeete2** | **39.20** | **63** | eLR | LR | 03 27 58.8 | |
| | comp=Z,524nm,24.0s,baz=214 | | | | | | |
| **PPT** | **Papete** | **39.21** | **63** | LR | LR | 03 31 35.5 | |
| | comp=Z,400nm,18.7s,baz=224,slow=33 | | | | | | |
| **WR0** | **Warramunga Arr** | **40.04** | **291** | P | **P** | **03 17 29.4** | **-1.7** |
| **WB2** | **Warramunga Arr** | **40.18** | **291** | P | **P** | **03 17 30.5** | **-1.7** |
| WB2 | | | | IAmb | IAmb | 03 17 36.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **40.19** | **291** | P | **P** | **03 17 30.7** | **-1.6** |
| WRAB | | | | IAmb | IAmb | 03 17 36.3 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.19** | **291** | P | **P** | **03 17 30.8** | **-1.4** |
| | comp=Z,3.9nm,0.6s,baz=126,slow=8.2,SNR=44 | | | | | | |
| WRA | | | | PcP | **PcP** | | |
| | comp=Z,1.3nm,0.7s,baz=123,slow=3.3,SNR=5.3 | | | | | | |
| WRA | | | | LR | LR | 03 33 39.5 | |
| | comp=Z,514nm,19.7s,baz=122,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.19** | **291** | P | **P** | **03 17 30.9** | **-1.4** |
| **PMG** | **Port Moresby** | **40.22** | **316** | LR | LR | 03 31 53.2 | |
| | comp=Z,229nm,21.6s,baz=166,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **40.22** | **316** | P | **P** | **03 17 33.3** | **+0.8** |
| **WB0** | **Warramunga Arr** | **40.27** | **291** | P | **P** | **03 17 31.7** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 03 17 36.9 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **41.37** | **279** | P | **P** | **03 17 40.4** | **-1.6** |
| | baz=42,SNR=18 | | | | | | |
| **KNRA** | **Kununurra** | **46.97** | **290** | P | **P** | **03 18 27.6** | **+0.7** |
| KNRA | | | | IAmb | IAmb | 03 18 37.4 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **47.31** | **295** | P | **P** | **03 18 28.6** | **-1.0** |
| | baz=48,SNR=6.0 | | | | | | |
| **MTN** | **Manton Dam** | **47.31** | **295** | P | **P** | **03 18 28.8** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **47.59** | **285** | LR | LR | 03 39 03.1 | |
| | comp=Z,332nm,18.2s,baz=111,slow=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **47.59** | **285** | P | **P** | **03 18 30.2** | **-1.5** |
| | baz=48,SNR=19 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **47.59** | **285** | P | **P** | **03 18 29.6** | **-2.1** |
| FITZ | | | | IAmb | IAmb | 03 18 33.3 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **47.67** | **270** | P | **P** | **03 18 30.8** | **-1.6** |
| | baz=48,SNR=5.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **48.22** | **180** | P | **P** | **03 18 39.6** | **+3.3** |
| | comp=Z,38nm,1.0s,baz=18,slow=4.2,SNR=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **48.22** | **180** | P | **P** | **03 18 38.5** | **+2.2** |
| **MORW** | **Morawa** | **48.28** | **266** | P | **P** | **03 18 35.8** | **-1.2** |
| **PTCN** | **Pitcairn Islan** | **48.49** | **88** | P | **P** | **03 18 38.1** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **49.67** | **277** | P | **P** | **03 18 45.9** | **-1.8** |
| PSA00 | | | | IAmb | IAmb | 03 18 46.8 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **51.81** | **64** | *e*S | S | 03 26 16.2 | -10 |
| | comp=Z,56nm,25.0s | | | | | | |
| TAOE | | | | *e*LR | LR | 03 33 39.9 | |
| | comp=Z,437nm,21.7s,baz=226 | | | | | | |
| **FAKI** | **Fak Fak** | **54.04** | **304** | P | **P** | **03 19 19.1** | **-1.3** |
| **BATI** | **Baumata** | **54.32** | **290** | LR | LR | 03 41 25.1 | |
| | comp=Z,315nm,21.9s,baz=176,slow=35 | | | | | | |
| **SIJI** | **Sorong** | **56.25** | **305** | LR | LR | 03 45 03.7 | |
| | comp=Z,176nm,18.1s,baz=192,slow=38 | | | | | | |
| **BELA** | **Belgrano 2** | **59.19** | **173** | P | **P** | **03 19 57.4** | **+1.2** |
| BELA | | | | IAmb | IAmb | 03 19 59.2 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **59.33** | **205** | LR | LR | 03 43 53.4 | |
| | comp=Z,126nm,19.3s,baz=281,slow=34 | | | | | | |
| **RPN** | **Rapa Nui** | **62.70** | **103** | LR | LR | 03 42 44.2 | |
| | comp=Z,223nm,18.7s,baz=239,slow=31 | | | | | | |
| **PMSA** | **Palmer Station** | **64.32** | **156** | LR | LR | 03 43 35.6 | |
| | comp=Z,297nm,18.9s,baz=270,slow=31 | | | | | | |
| **SYO** | **Syowa Base** | **64.44** | **196** | ‖*e*sP | sP | 03 20 36.8 | +1.2 |
| **DAV** | **Davao City (W)** | **65.96** | **305** | LR | LR | 03 48 50.1 | |
| | comp=Z,101nm,21.7s,baz=342,slow=36 | | | | | | |
| **SNAA** | **Sanae** | **66.71** | **181** | P | **P** | **03 20 47.2** | **+0.8** |
| **SNAA** | **Sanae** | **66.71** | **181** | LR | LR | 03 48 41.4 | |
| | comp=Z,220nm,18.9s,baz=109,slow=35 | | | | | | |
| **SNAA** | **Sanae** | **66.71** | **181** | P | **P** | **03 20 47.9** | **+1.5** |
| SNAA | | | | IAmb | IAmb | 03 20 51.0 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **67.13** | **179** | P | **P** | **03 20 49.9** | **+0.9** |
| **VNA2** | **Neumayer--Watz** | **67.47** | **179** | P | **P** | **03 20 51.5** | **+0.4** |
| | baz=173,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **67.74** | **179** | P | **P** | **03 20 54.2** | **+1.4** |
| **PLCA** | **Paso Flores** | **78.96** | **136** | LR | LR | 03 48 38.4 | |
| | comp=Z,154nm,19.9s,baz=204,slow=29 | | | | | | |
| **PSI** | **Prapat** | **81.03** | **282** | LR | LR | 03 59 15.2 | |
| | comp=Z,280nm,19.4s,baz=118,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **84.76** | **332** | LR | LR | 03 55 47.8 | |
| | comp=Z,38nm,20.5s,baz=157,slow=33 | | | | | | |
| **NJ2** | **Nanjing** | **89.53** | **316** | *e*P | **P** | **03 22 53.9** | **+0.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **89.60** | **325** | P | **P** | **03 22 53.8** | **+0.6** |
| | comp=Z,3.0nm,0.7s,baz=145,slow=5.5,SNR=11 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.46** | **65** | Pg | **Pb** | **03 46 12.8** | **+0.6** |
| EALB | | | | Sg | **Sn** | **03 46 20.9** | **-1.5** |
| **PALE** | **Palemas** | **0.62** | **211** | P | **Pg** | **03 46 13.3** | **-1.3** |
| **EMEL** | **Melilla** | **0.66** | **133** | Pg | **Pg** | **03 46 14.5** | **-0.8** |
| EMEL | | | | Sg | **Sg** | **03 46 23.2** | **-0.8** |
| **ELGU** | **Los Guajares,** | **1.12** | **357** | Pn | **Pb** | **03 46 22.5** | **-1.0** |
| ELGU | | | | Sn | **Sn** | **03 46 39.5** | **+0.6** |
| ELGU | | | | *i* Vmb_Lg | | 03 46 43.0 | |
| **EMAL** | **Malaga-Limoner** | **1.24** | **325** | P | **Pn** | **03 46 24.3** | **-0.9** |
| EMAL | | | | S | **Sb** | **03 46 40.5** | **-0.8** |
| **AKLM** | **AKL** | **1.26** | **192** | P | **Pn** | **03 46 24.0** | **-1.7** |
| **EMIJ** | **Mijas** | **1.28** | **310** | Pn | **Pn** | **03 46 24.2** | **-1.7** |
| EMIJ | | | | Sn | **Sb** | **03 46 40.7** | **-2.0** |
| EMIJ | | | | *i* Vmb_Lg | | 03 46 42.5 | |
| **TAF** | **Taforalt** | **1.31** | **135** | P | **Pn** | **03 46 24.8** | **-1.5** |
| **EGOR** | **Sierra Gorda,** | **1.43** | **342** | Pn | **Pn** | **03 46 28.2** | **+0.1** |
| EGOR | | | | Sn | **Sn** | **03 46 45.7** | **-1.0** |
| EGOR | | | | Sg | **Sg** | **03 46 49.7** | **+1.1** |
| EGOR | | | | *i* Vmb_Lg | | 03 46 52.4 | |
| **EQUE** | **Quentar** | **1.46** | **3** | Pn | **Pb** | **03 46 28.9** | **-0.4** |
| EQUE | | | | Sn | **Sg** | **03 46 48.7** | **-0.7** |
| EQUE | | | | *i* Vmb_Lg | | 03 46 54.5 | |
| **CEU** | **Ceuta** | **1.49** | **276** | P | **Pn** | **03 46 24.0** | **-4.7** |
| **SMIR** | **Smir Dam** | **1.49** | **268** | S | **Sn** | **03 46 46.0** | **-2.1** |
| **CHEFC** | **Chefchaouen** | **1.60** | **247** | P | **Pn** | **03 46 29.0** | **-1.3** |
| **JBK** | **JBK** | **1.62** | **150** | P | **Pn** | **03 46 28.4** | **-2.4** |
| **ENIJ** | **Nijar** | **1.63** | **41** | Pn | **Pn** | **03 46 29.6** | **-1.1** |
| ENIJ | | | | Sn | **Sn** | **03 46 50.0** | **-1.4** |
| ENIJ | | | | *i* Vmb_Lg | | 03 47 01.7 | |
| **EJIF** | **Jimena Fronter** | **1.71** | **295** | Pn | **Pn** | **03 46 30.3** | **-1.4** |
| **LIJA** | **Lijar** | **1.89** | **308** | P | **Pb** | **03 46 36.9** | **+0.1** |
| LIJA | | | | S | **Sb** | **03 47 00.1** | **-0.2** |
| **CPS** | **Cap Spartel** | **1.92** | **272** | P | **Pb** | **03 46 37.0** | **-0.2** |
| **CNIL** | **Conil** | **2.12** | **288** | P | **Pb** | **03 46 40.2** | **-0.4** |
| CNIL | | | | S | **Sn** | **03 47 03.2** | **-0.4** |
| **SFS** | **San Fernando** | **2.27** | **289** | P | **Pn** | **03 46 40.3** | **+0.9** |
| SFS | | | | S | **Sg** | **03 47 15.6** | **+0.2** |
| **SFS** | **San Fernando** | **2.27** | **289** | P | **Pn** | **03 46 40.5** | **+1.1** |
| **SFS** | **San Fernando** | **2.27** | **289** | Pn | **Pn** | **03 46 40.5** | **+1.1** |
| **SFS** | **San Fernando** | **2.27** | **289** | P | **Pn** | **03 46 40.8** | **+1.4** |
| **OTSS** | **Djebel Tessala** | **2.29** | **101** | P | **Pn** | **03 46 40.0** | **+0.1** |
| **LCRM** | **LCR** | **2.33** | **208** | P | **Pn** | **03 46 39.0** | **-1.4** |
| **TLOR** | **Lorca, Murcia** | **2.42** | **38** | Pn | **Pn** | **03 46 41.5** | **0.0** |
| TLOR | | | | Sn | **Sn** | **03 47 11.5** | **+0.6** |
| **USTO** | **Oran** | **2.44** | **90** | P | **Pn** | **03 46 43.0** | **+1.3** |
| **IFR** | **Ifrane** | **2.58** | **211** | P | **Pn** | **03 46 42.4** | **-1.5** |
| IFR | | | | S | **Sn** | **03 47 12.6** | **-2.5** |
| **EZAR** | **Zarzadilla de** | **2.59** | **34** | Pn | **Pn** | **03 46 44.0** | **0.0** |
| EZAR | | | | Sn | **Sn** | **03 47 16.4** | **+1.1** |
| **CART** | **Cartagena** | **2.75** | **47** | P | **Pn** | **03 46 44.0** | **-2.0** |
| CART | | | | S | **Sn** | **03 47 14.8** | **-4.1** |
| **CART** | **Cartagena** | **2.75** | **47** | Pn | **Pn** | **03 46 44.1** | **-1.9** |
| **CART** | **Cartagena** | **2.75** | **47** | P | **Pn** | **03 46 46.2** | **+0.2** |
| **ECAB** | **El Cabril** | **2.76** | **328** | Pn | **Pn** | **03 46 47.2** | **+0.9** |
| ECAB | | | | Sn | **Sn** | **03 47 20.3** | **+0.9** |
| ECAB | | | | *i* Vmb_Lg | | 03 47 31.5 | |
| **ODJA** | **Bouhanifia** | **2.80** | **98** | P | **Pn** | **03 46 46.0** | **-0.8** |
| **ARNO** | **Arenosillo** | **2.90** | **299** | P | **Pn** | **03 46 48.5** | **+0.4** |
| ARNO | | | | S | **Sn** | **03 47 23.6** | **+0.9** |
| **CZD** | **Col de Zad** | **2.98** | **205** | P | **Pn** | **03 46 48.6** | **-0.8** |
| **MDT** | **Midelt** | **3.06** | **197** | Pn | **Pn** | **03 46 49.1** | **-1.3** |
| | 35nm,0.3s,baz=225,slow=7.8,SNR=717 | | | | | | |
| MDT | | | | Pg | **Pb** | **03 46 58.4** | **+1.7** |
| | 192nm,0.3s,baz=86,slow=20,SNR=47 | | | | | | |
| MDT | | | | Sn | **Sn** | **03 47 25.2** | **-1.6** |
| | 202nm,0.3s,baz=49,slow=22,SNR=5.6 | | | | | | |
| MDT | | | | Lg | Lg | 03 47 35.8 | |
| | 470nm,0.3s,baz=329,slow=13,SNR=12 | | | | | | |
| MDT | | | | LR | LR | 03 48 20.0 | |
| | comp=Z,15µm,19.7s,baz=28,slow=47 | | | | | | |
| **MDT** | **Midelt** | **3.06** | **197** | P | **Pn** | **03 46 49.0** | **-1.3** |
| **OJBR** | **Djebel Berber** | **3.17** | **92** | P | **Pn** | **03 46 52.0** | **+0.1** |
| **ETOB** | **Tobarra** | **3.30** | **28** | Pn | **Pn** | **03 46 54.9** | **+1.2** |
| ETOB | | | | Sn | **Sn** | **03 47 34.0** | **+1.3** |
| ETOB | | | | *i* Vmb_Lg | | 03 47 37.3 | |
| **OKGL** | **Djebel Kef Gue** | **3.41** | **84** | P | **Pn** | **03 46 55.0** | **-0.2** |
| **EGRO** | **El Granado** | **3.63** | **301** | Pn | **Pn** | **03 46 57.9** | **-0.3** |
| EGRO | | | | Sn | **Sn** | **03 47 38.9** | **-1.9** |
| EGRO | | | | *i* Vmb_Lg | | 03 47 42.0 | |
| **PVAQ** | **Vaqueiros** | **3.74** | **297** ⇑ | *eP* | **Pn** | **03 46 59.0** | **-0.7** |
| PVAQ | | | | *eS* | **Sn** | **03 47 41.8** | **-1.7** |
| PVAQ | | | | A | A | 03 47 44.3 | |
| | 2µm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **297** | | **Pn** | **03 46 58.8** | **-0.9** |
| **PVAQ** | **Vaqueiros** | **3.74** | **297** | P | **Pn** | **03 46 58.8** | **-0.9** |
| **AFON** | **Font Roja** | **3.77** | **39** | Pn | **Pn** | **03 47 01.4** | **+1.2** |
| AFON | | | | Sn | **Sn** | **03 47 45.9** | **+1.5** |
| AFON | | | | *i* Vmb_Lg | | 03 47 48.3 | |
| **EANR** | **'Ain N'Sour** | **3.78** | **86** | P | **Pn** | **03 46 59.0** | **-1.3** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **294** ⇑ | *eP* | **Pn** | **03 47 00.1** | **-0.9** |
| PBDV | | | | *eS* | **Sn** | **03 47 43.6** | **-2.2** |
| PBDV | | | | A | A | 03 47 49.5 | |
| | 1µm,0.7s | | | | | | |
| **PAB** | **San Pablo** | **3.84** | **351** | P | **Pn** | **03 47 01.7** | **+0.5** |
| **PAB** | **San Pablo** | **3.84** | **351** | Pn | **Pn** | **03 47 01.7** | **+0.5** |
| **PAB** | **San Pablo** | **3.84** | **351** | Pn | **Pn** | **03 47 02.0** | **+0.9** |
| PAB | | | | Sn | **Sn** | **03 47 45.8** | **-0.3** |
| PAB | | | | *i* Vmb_Lg | | 03 47 50.3 | |
| **PAB** | **San Pablo** | **3.84** | **351** | P | **Pn** | **03 47 02.0** | **+0.9** |
| **ESDC** | **Sonseca Array** | **3.93** | **355** | Pn | **Pn** | **03 47 03.5** | **+1.2** |
| | 46nm,0.3s,baz=175,slow=12,SNR=2525 | | | | | | |
| ESDC | | | | Sn | **Sn** | **03 47 48.8** | **+0.5** |
| | 34nm,0.3s,baz=176,slow=22,SNR=6.5 | | | | | | |
| ESDC | | | | Lg | Lg | 03 48 04.0 | |
| | 62nm,0.3s,baz=188,slow=33,SNR=5.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **3.93** | **355** | Pn | **Pn** | **03 47 03.4** | **+1.0** |
| **ESDC** | **Sonseca Array** | **3.93** | **355** | Pn | **Pn** | **03 47 03.7** | **+1.3** |
| ESDC | | | | Sn | **Sn** | **03 47 50.0** | **+1.7** |
| ESDC | | | | *i* Vmb_Lg | | 03 47 51.7 | |
| **ESBB** | **Sonseca Array** | **3.93** | **355** | | **Pn** | **03 47 03.4** | **+1.0** |
| **ETRT** | **Tiaret** | **3.97** | **94** | P | **Pn** | **03 46 58.6** | **-4.3** |
| **ECHA** | **Ech Chlef** | **4.01** | **83** | P | **Pn** | **03 47 01.2** | **-2.1** |
| **AVE** | **Averroes** | **4.02** | **234** | P | **Pn** | **03 47 01.8** | **-1.7** |
| AVE | | | | S | **Sn** | **03 47 49.1** | **-1.3** |
| **AVE** | **Averroes** | **4.02** | **234** | P | **Pn** | **03 47 01.8** | **-1.7** |
| **PCVE** | **Castro Verde** | **4.07** | **299** ⇑ | *eP* | **Pn** | **03 47 03.6** | **-0.6** |
| PCVE | | | | *eS* | **Sn** | **03 47 50.4** | **-1.2** |
| PCVE | | | | A | A | 03 47 53.0 | |
| | 2µm,0.5s | | | | | | |
| **FIGM** | **Figuig** | **4.08** | **152** | P | **Pn** | **03 47 04.0** | **-0.5** |
| **EBAD** | **Badajoz** | **4.08** | **318** | Pn | **Pn** | **03 47 04.7** | **+0.3** |
| EBAD | | | | Sn | **Sn** | **03 47 51.3** | **-0.6** |
| EBAD | | | | *i* Vmb_Lg | | 03 47 54.3 | |
| **PBEJ** | **Beja** | **4.14** | **305** | *eP* | **Pn** | **03 47 04.8** | **-0.4** |
| PBEJ | | | | *eS* | **Sn** | **03 47 52.0** | **-1.4** |
| PBEJ | | | | A | A | 03 47 57.8 | |
| | 769nm,0.6s | | | | | | |
| **EBNR** | **Beni Rached** | **4.15** | **81** | P | **Pn** | **03 47 05.0** | **-0.4** |
| **GOLM** | **Goulmima** | **4.20** | **197** | P | **Pn** | **03 47 06.0** | **-0.2** |
| **MESJ** | **Messejana** | **4.29** | **300** | *eP* | **Pn** | **03 47 06.7** | **-0.6** |
| MESJ | | | | *eS* | **Sn** | **03 47 54.2** | **-2.8** |
| MESJ | | | | IAML | | 03 47 59.2 | |
| | comp=N,2µm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **300** ⇑ | *eP* | **Pn** | **03 47 06.7** | **-0.6** |
| MESJ | | | | *eS* | **Sn** | **03 47 56.0** | **-1.1** |
| MESJ | | | | A | A | 03 47 59.8 | |
| | comp=N,2µm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **300** | *eP* | **Pn** | **03 47 06.6** | **-0.6** |
| MESJ | | | | *eS* | **Sn** | **03 47 54.2** | **-2.8** |
| **ECHE** | **Chera** | **4.35** | **27** | Pn | **Pn** | **03 47 09.5** | **+1.5** |
| ECHE | | | | Sn | **Sn** | **03 48 00.3** | **+1.8** |
| ECHE | | | | *i* Vmb_Lg | | 03 48 44.5 | |
| **MORF** | **Marmelete** | **4.39** | **292** | *eP* | **Pn** | **03 47 07.6** | **-1.1** |
| MORF | | | | *eS* | **Sn** | **03 47 56.1** | **-3.6** |
| MORF | | | | IAML | | 03 48 01.0 | |
| | comp=N,1µm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.39** | **292** | *eP* | **Pn** | **03 47 07.5** | **-1.2** |
| MORF | | | | *eS* | **Sn** | **03 47 57.2** | **-2.5** |
| MORF | | | | A | A | 03 48 04.7 | |
| | comp=N,618nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.39** | **292** | *eP* | **Pn** | **03 47 07.6** | **-1.1** |
| MORF | | | | *eS* | **Sn** | **03 47 56.1** | **-3.6** |
| **PFVI** | **Vila Bisbo** | **4.47** | **290** | *eP* | **Pn** | **03 47 08.7** | **-1.1** |
| PFVI | | | | *eS* | **Sn** | **03 47 58.7** | **-2.9** |
| PFVI | | | | A | A | 03 48 12.3 | |
| | comp=N,653nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.47** | **290** | Pn | **Pn** | **03 47 08.9** | **-0.8** |
| **PFVI** | **Vila Bisbo** | **4.47** | **290** | P | **Pn** | **03 47 08.6** | **-1.2** |
| **PESTR** | **Estremoz** | **4.48** | **315** | *eP* | **Pn** | **03 47 10.0** | **+0.1** |
| PESTR | | | | *eS* | **Sn** | **03 48 00.9** | **-0.8** |
| PESTR | | | | A | A | 03 48 39.4 | |
| | comp=N,647nm,0.7s | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **315** | Pn | **Pn** | **03 47 09.6** | **-0.3** |
| **PESTR** | **Estremoz** | **4.48** | **315** | P | **Pn** | **03 47 09.9** | **+0.1** |
| **EVO** | **Evora** | **4.52** | **309** | P | **Pn** | **03 47 10.5** | **+0.1** |
| EVO | | | | S | **Sn** | **03 48 01.0** | **-1.7** |
| **EVO** | **Evora** | **4.52** | **309** | *eP* | **Pn** | **03 47 10.6** | **+0.2** |
| EVO | | | | *eS* | **Sn** | **03 48 01.7** | **-1.0** |
| EVO | | | | A | A | 03 48 02.9 | |
| | comp=N,859nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.53** | **295** | *eP* | **Pn** | **03 47 10.1** | **-0.4** |
| PTEO | | | | *eS* | **Sn** | **03 48 00.7** | **-2.3** |
| PTEO | | | | A | A | 03 48 11.3 | |
| | comp=N,2µm,0.6s | | | | | | |
| **UCM** | **Universidad Co** | **4.56** | **3** | P | **Pn** | **03 47 12.8** | **+1.8** |
| UCM | | | | S | **Sn** | **03 47 59.3** | **-4.3** |
| **PNCL** | **Nicolau / Gran** | **4.63** | **302** | *eP* | **Pn** | **03 47 11.6** | **-0.4** |
| PNCL | | | | *eS* | **Sn** | **03 48 03.9** | **-1.6** |
| PNCL | | | | A | A | 03 48 07.2 | |
| | comp=N,585nm,0.6s | | | | | | |
| **EPLA** | **Plasencia** | **4.75** | **336** | Pn | **Pn** | **03 47 14.7** | **+1.1** |
| EPLA | | | | Sn | **Sn** | **03 48 08.6** | **+0.2** |
| EPLA | | | | *i* Vmb_Lg | | 03 48 39.0 | |
| **PMRV** | **Marv??o** | **4.78** | **321** ⇓ | *eP* | **Pn** | **03 47 14.7** | **+0.8** |
| PMRV | | | | *eS* | **Sn** | **03 48 09.8** | **+0.8** |
| PMRV | | | | A | A | 03 48 24.2 | |
| | comp=N,833nm,0.6s | | | | | | |
| **GUD** | **Guadarrama** | **4.91** | **355** | Pn | **Pn** | **03 47 17.0** | **+1.2** |
| GUD | | | | Sn | **Sn** | **03 48 12.1** | **-0.4** |
| GUD | | | | *i* Vmb_Lg | | 03 48 44.5 | |
| **PMTG** | **Montargil** | **4.98** | **313** ⇑ | *eP* | **Pn** | **03 47 16.8** | **0.0** |
| PMTG | | | | *eS* | **Sn** | **03 48 12.4** | **-1.7** |
| PMTG | | | | A | A | 03 48 48.3 | |
| | comp=N,554nm,0.8s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.13** | **324** ⇓ | *eP* | **Pn** | **03 47 19.8** | **+1.0** |
| PCBR | | | | *eS* | **Sn** | **03 48 16.6** | **-1.2** |
| PCBR | | | | A | A | 03 48 20.0 | |
| | comp=N,790nm,0.7s | | | | | | |
| **PACT** | **Alcochete** | **5.18** | **307** ⇓ | *eP* | **Pn** | **03 47 20.1** | **+0.7** |
| PACT | | | | *eS* | **Sn** | **03 48 17.9** | **-1.1** |
| PACT | | | | A | A | 03 48 55.9 | |
| | comp=N,939nm,0.7s | | | | | | |
| **ETOR** | **Torete** | **5.20** | **13** | Pn | **Pn** | **03 47 21.8** | **+2.0** |
| ETOR | | | | Sn | **Sn** | **03 48 23.2** | **+3.7** |
| ETOR | | | | Sg | **Sg** | **03 48 45.4** | **-3.8** |
| ETOR | | | | *i* Vmb_Lg | | 03 48 51.0 | |
| **TZRR** | **Tazzarine** | **5.23** | **199** | P | **Pn** | **03 47 20.0** | **-0.3** |
| **ECOL** | **Islas Columbre** | **5.33** | **38** | Pn | **Pn** | **03 47 22.6** | **+1.2** |
| ECOL | | | | Sn | **Sn** | **03 48 24.9** | **+2.4** |
| ECOL | | | | Sg | **Sb** | **03 48 43.5** | **+4.5** |
| **LIS** | **Lisbon** | **5.36** | **305** | *eP* | **Pn** | **03 47 21.7** | **-0.3** |
| LIS | | | | *eS* | **Sn** | **03 48 19.4** | **-4.0** |
| LIS | | | | IAML | | 03 48 25.2 | |
| | comp=N,2µm,0.4s | | | | | | |
| **LIS** | **Lisbon** | **5.36** | **305** ⇓ | *eP* | **Pn** | **03 47 22.4** | **+0.5** |
| LIS | | | | *eS* | **Sn** | **03 48 21.3** | **-2.1** |
| LIS | | | | A | A | 03 49 00.3 | |
| | comp=N,794nm,0.8s | | | | | | |
| **LIS** | **Lisbon** | **5.36** | **305** | *eP* | **Pn** | **03 47 21.6** | **-0.3** |
| LIS | | | | *eS* | **Sn** | **03 48 19.4** | **-4.0** |
| **PMST** | **Lisbon--Monsan** | **5.39** | **305** | *eP* | **Pn** | **03 47 22.5** | **+0.1** |
| PMST | | | | *eS* | **Sn** | **03 48 22.1** | **-2.2** |
| PMST | | | | A | A | 03 48 38.1 | |
| | comp=N,799nm,0.7s | | | | | | |
| **OUZM** | **OUZ** | **5.53** | **210** | P | **Pn** | **03 47 24.3** | **-0.1** |
| **PMAFR** | **Mafra** | **5.58** | **307** ⇓ | *iP* | **Pn** | **03 47 25.1** | **+0.2** |
| PMAFR | | | | *eS* | **Sn** | **03 48 26.2** | **-2.6** |
| PMAFR | | | | A | A | 03 48 30.3 | |
| | comp=N,1µm,0.6s | | | | | | |
| **PSBE** | **So Bento** | **5.61** | **314** ⇓ | *eP* | **Pn** | **03 47 25.9** | **+0.5** |
| PSBE | | | | *eS* | **Sn** | **03 48 28.5** | **-1.1** |
| PSBE | | | | A | A | 03 49 01.6 | |
| | comp=N,649nm,0.6s | | | | | | |
| **MTE** | **Manteigas** | **5.61** | **327** | *eP* | **Pn** | **03 47 26.3** | **+0.9** |
| MTE | | | | *eS* | **Sn** | **03 48 28.1** | **-1.6** |
| MTE | | | | A | A | 03 49 04.6 | |
| | comp=N,1µm,0.7s | | | | | | |
| **MTE** | **Manteigas** | **5.61** | **327** | Pn | **Pn** | **03 47 25.6** | **+0.1** |
| **OUK** | **Oukaimeden** | **5.79** | **220** | P | **Pn** | **03 47 27.0** | **-1.2** |
| **PCAS** | **Casmilo, Conde** | **5.81** | **319** ⇓ | *eP* | **Pn** | **03 47 28.6** | **+0.5** |
| PCAS | | | | *eS* | **Sn** | **03 48 31.8** | **-2.7** |
| PCAS | | | | A | A | 03 49 10.8 | |
| | comp=N,975nm,0.7s | | | | | | |
| **ZGR** | **Zagora** | **5.88** | **198** | P | **Pn** | **03 47 28.1** | **-1.0** |
| **COI** | **Coimbra** | **5.88** | **321** ⇓ | *eP* | **Pn** | **03 47 29.6** | **+0.6** |
| COI | | | | *eS* | **Sn** | **03 48 33.6** | **-2.6** |
| COI | | | | A | A | 03 49 15.7 | |
| | comp=N,697nm,0.8s | | | | | | |
| **COI** | **Coimbra** | **5.88** | **321** | P | **Pn** | **03 47 29.0** | **0.0** |
| **COI** | **Coimbra** | **5.88** | **321** | Pn | **Pn** | **03 47 29.0** | **0.0** |
| **PVIS** | **Viseu** | **6.02** | **327** | *eP* | **Pn** | **03 47 31.8** | **+0.7** |
| PVIS | | | | *eS* | **Sn** | **03 48 37.5** | **-2.3** |
| PVIS | | | | A | A | 03 48 42.9 | |
| | comp=N,610nm,0.7s | | | | | | |
| **MVO** | **Moncorvo** | **6.06** | **334** ⇓ | *eP* | **Pn** | **03 47 32.6** | **+1.0** |
| MVO | | | | *eS* | **Sn** | **03 48 40.3** | **-0.4** |
| MVO | | | | A | A | 03 49 26.4 | |
| | comp=N,773nm,0.7s | | | | | | |
| **PVRL** | **Vila Real** | **6.41** | **331** | *eP* | **Pn** | **03 47 37.4** | **+1.0** |
| PVRL | | | | *eS* | **Sn** | **03 48 47.0** | **-2.4** |
| PVRL | | | | A | A | 03 48 51.2 | |
| | comp=N,568nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.53** | **331** | *eP* | **Pn** | **03 47 39.1** | **+1.1** |
| POLO | | | | *eS* | **Sn** | **03 48 49.6** | **-2.7** |
| POLO | | | | A | A | 03 49 37.9 | |
| | comp=N,239nm,0.7s | | | | | | |
| **PBRG** | **Braganca** | **6.54** | **339** | *eP* | **Pn** | **03 47 39.4** | **+1.2** |
| PBRG | | | | *eS* | **Sn** | **03 48 52.7** | **+0.2** |
| PBRG | | | | A | A | 03 49 30.6 | |
| | comp=N,402nm,0.7s | | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.61** | **220** | P | **Pn** | **03 47 37.0** | **-2.3** |
| **EPOB** | **Poblet** | **6.67** | **32** | Pn | **Pn** | **03 47 41.9** | **+2.0** |
| EPOB | | | | *i* Vmb_Lg | | 03 50 11.1 | |
| **PTO** | **Porto** | **6.68** | **325** | *eP* | **Pn** | **03 47 41.0** | **+0.9** |
| PTO | | | | *eS* | **Sn** | **03 48 51.6** | **-4.4** |
| PTO | | | | A | A | 03 48 57.1 | |
| | comp=N,460nm,0.8s | | | | | | |
| **PCAB** | **Cabril** | **6.90** | **331** | *eP* | **Pn** | **03 47 44.1** | **+0.9** |
| PCAB | | | | *eS* | **Sn** | **03 48 58.5** | **-3.0** |
| PCAB | | | | A | A | 03 49 55.8 | |
| | comp=N,556nm,0.7s | | | | | | |
| **ELOB** | **Lobios** | **7.05** | **331** | Pn | **Pn** | **03 47 46.5** | **+1.3** |
| ELOB | | | | Sn | **Sn** | **03 49 02.5** | **-2.6** |
| ELOB | | | | *i* Vmb_Lg | | 03 49 55.2 | |
| **EARA** | **Aranguren** | **7.18** | **12** | Pn | **Pn** | **03 47 49.5** | **+2.6** |
| EARA | | | | Sn | **Sn** | **03 49 08.0** | **-0.2** |
| EARA | | | | *i* Vmb_Lg | | 03 50 01.4 | |
| **PGAV** | **Gavieira, Arco** | **7.22** | **331** | *eP* | **Pn** | **03 47 48.7** | **+1.2** |
| PGAV | | | | *eS* | **Sn** | **03 49 07.0** | **-2.3** |
| PGAV | | | | A | A | 03 49 12.7 | |
| | comp=N,380nm,0.8s | | | | | | |
| **SET** | **Setif** | **7.27** | **84** | P | Pn | 03 47 56.0 | +7.8 |
| **EMIR** | **Miracle** | **7.32** | **31** | Pn | **Pn** | **03 47 52.4** | **+3.5** |
| EMIR | | | | *i* Vmb_Lg | | 03 50 30.8 | |
| **EORO** | **Oroz-Betelu** | **7.34** | **13** | Pn | **Pn** | **03 47 51.5** | **+2.3** |
| EORO | | | | *i* Vmb_Lg | | 03 50 04.5 | |
| **MAHO** | **Mahon** | **7.44** | **54** | P | **Pn** | **03 47 51.3** | **+0.8** |
| MAHO | | | | S | **Sn** | **03 49 13.2** | **-1.3** |
| **ELAN** | **Lanestosa** | **7.47** | **1** | Pn | **Pn** | **03 47 53.0** | **+2.0** |
| ELAN | | | | *i* Vmb_Lg | | 03 50 22.4 | |
| **ECHI** | **Chisagues Biel** | **7.49** | **22** | Pn | **Pn** | **03 47 52.0** | **+0.7** |
| **ETSF** | **Etsaut** | **7.50** | **17** | *eP* | **Pn** | **03 47 53.5** | **+2.1** |
| ETSF | | | | *eSn* | **Sn** | **03 49 13.8** | **-2.5** |
| ETSF | | | | *eSg* | **Sg** | **03 50 01.6** | **-1.6** |
| | comp=N,5µm,2.0s | | | | | | |
| **EZAM** | **Zamans** | **7.54** | **329** | Pn | **Pn** | **03 47 53.8** | **+1.9** |
| EZAM | | | | Sn | **Sn** | **03 49 14.4** | **-2.8** |
| EZAM | | | | Sg | **Sg** | **03 49 58.4** | **-6.0** |
| EZAM | | | | *i* Vmb_Lg | | 03 50 24.9 | |
| **SJPF** | **Ste Jean** | **7.57** | **13** | *ePn* | **Pn** | **03 47 54.0** | **+1.7** |
| SJPF | | | | *eSn* | **Sn** | **03 49 14.1** | **-3.7** |
| | comp=N,8µm,1.9s | | | | | | |
| SJPF | | | | *eSg* | **Sg** | **03 50 01.4** | **-3.8** |
| | comp=N,8µm,1.9s | | | | | | |
| **EALK** | **Alkurruntz** | **7.62** | **11** | Pn | **Pn** | **03 47 55.4** | **+2.3** |
| EALK | | | | *i* Vmb_Lg | | 03 50 27.3 | |
| **EARI** | **Arriondas** | **7.65** | **351** | Pn | **Pn** | **03 47 54.2** | **+0.8** |
| EARI | | | | Sn | **Sn** | **03 49 17.7** | **-2.1** |
| EARI | | | | *i* Vmb_Lg | | 03 50 24.8 | |
| **DFRA** | **Djebel Bou Aff** | **7.67** | **81** | P | **Pn** | **03 47 53.9** | **+0.2** |
| **EPF** | **Esparros** | **7.87** | **21** | *ePn* | **Pn** | **03 47 56.8** | **+0.4** |
| EPF | | | | *eSg* | **Sg** | **03 50 11.3** | **-3.5** |
| | comp=N,1µm,1.5s | | | | | | |
| **CASM** | **Ain Smara** | **8.15** | **83** | P | **Pn** | **03 48 04.0** | **+3.7** |
| **CKFL** | **Kef-Lekhel** | **8.34** | **83** | P | **Pn** | **03 48 03.5** | **+0.6** |
| **MTLF** | **Montolieu** | **8.79** | **29** | *ePn* | **Pn** | **03 48 10.9** | **+1.9** |
| MTLF | | | | *eSg* | **Sg** | **03 50 39.4** | **-4.9** |
| | comp=N,728nm,1.3s | | | | | | |
| **CMAH** | **Djebel Manchou** | **8.91** | **81** | P | **Pn** | **03 48 09.9** | **-0.8** |
| **LFF** | **La Frestale** | **9.74** | **18** | *ePn* | **Pn** | **03 48 23.1** | **+1.1** |
| LFF | | | | *eSg* | Sg | 03 51 08.2 | |
| | comp=N,1µm,1.6s | | | | | | |
| **LASF** | **Ste Croix** | **10.07** | **32** | *ePn* | **Pn** | **03 48 26.1** | **-0.4** |
| LASF | | | | *eSg* | Sg | 03 51 19.3 | |
| | comp=N,960nm,1.8s | | | | | | |
| **CAF** | **Calviac** | **10.11** | **23** | *ePn* | **Pn** | **03 48 25.8** | **-1.4** |
| CAF | | | | *eSg* | | 03 51 24.8 | |
| | comp=N,2µm,2.1s | | | | | | |
| **RJF** | **Les Rejaudoux** | **10.29** | **20** | *ePn* | **Pn** | **03 48 26.0** | **-3.5** |
| RJF | | | | *eSn* | **Sn** | **03 50 20.0** | **-4.6** |
| RJF | | | | *eSg* | | 03 51 28.1 | |
| | comp=N,1µm,1.7s | | | | | | |
| **KEST** | **Kesra** | **10.48** | **86** | Pn | **Pn** | **03 48 32.2** | **-0.1** |
| | comp=N,0.8nm,0.3s,baz=234,slow=0.5,SNR=32 | | | | | | |
| **KEST** | **Latera** | **10.48** | **86** | Pn | **Pn** | **03 48 30.9** | **-1.3** |
| **SMRF** | **Simiane la Rot** | **10.79** | **38** | *ePn* | **Pn** | **03 48 39.2** | **+2.7** |
| SMRF | | | | *eSg* | | 03 51 42.1 | |
| | comp=N,809nm,2.1s | | | | | | |
| **LMR** | **La Mourre** | **10.84** | **43** | *ePn* | **Pn** | **03 48 35.7** | **-1.4** |
| LMR | | | | *eSn* | **Sn** | **03 50 31.1** | **-7.0** |
| | comp=N,97nm,1.2s | | | | | | |
| **PMPST** | **Porto Santo, M** | **10.89** | **260** | *eP* | **Pn** | **03 48 35.5** | **-2.3** |
| PMPST | | | | *eS* | Sn | 03 50 26.7 | -13 |
| PMPST | | | | A | A | 03 50 31.7 | |
| | comp=N,68nm,0.5s | | | | | | |
| **PMPS** | **Porto Santo** | **10.90** | **259** | *eP* | **Pn** | **03 48 34.8** | **-3.1** |
| PMPS | | | | *eS* | Sn | 03 50 27.9 | -12 |
| PMPS | | | | A | A | 03 50 33.6 | |
| | comp=N,61nm,0.8s | | | | | | |
| **VSL** | **Villasalto** | **10.91** | **66** | Pn | **Pn** | **03 48 37.6** | **-0.4** |
| **VIVF** | **Saint-Julien-l** | **11.04** | **32** | *ePn* | **Pn** | **03 48 43.3** | **+3.4** |
| VIVF | | | | *eSg* | | 03 51 50.0 | |
| | comp=N,803nm,1.9s | | | | | | |
| **FRF** | **La Foret Royal** | **11.06** | **42** | *ePn* | **Pn** | **03 48 38.5** | **-1.6** |
| FRF | | | | *eSg* | | 03 51 50.8 | |
| | comp=N,732nm,2.5s | | | | | | |
| **MFF** | **Saint Martin d** | **11.14** | **12** | *ePn* | **Pn** | **03 48 40.8** | **-0.3** |
| **TCF** | **Toulx Ste Croi** | **11.39** | **21** | *ePn* | **Pn** | **03 48 43.6** | **-1.0** |
| TCF | | | | *eSg* | | 03 52 07.8 | |
| | comp=N,378nm,1.5s | | | | | | |
| **FUL** | **Funchal** | **11.47** | **258** | *eP* | **Pn** | **03 48 43.0** | **-2.8** |
| FUL | | | | *eS* | Sn | 03 50 38.4 | -15 |
| FUL | | | | A | A | 03 50 49.1 | |
| | comp=N,53nm,0.5s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **11.64** | **35** | *ePn* | **Pn** | **03 48 49.2** | **+1.2** |
| ORIF | | | | *eSn* | **Sn** | **03 50 51.1** | **-6.6** |
| | comp=N,414nm,1.8s | | | | | | |
| ORIF | | | | *eSg* | | 03 52 09.7 | |
| | comp=N,414nm,1.8s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **11.66** | **259** | *eP* | **Pn** | **03 48 45.8** | **-2.7** |
| PMOZ | | | | *eS* | Sn | 03 50 44.4 | -14 |
| PMOZ | | | | A | A | 03 50 59.1 | |
| | comp=N,176nm,0.5s | | | | | | |
| **SBF** | **Sospel** | **11.70** | **43** | *ePn* | **Pn** | **03 48 51.2** | **+2.4** |
| **BGF** | **Bois d'Agland** | **11.82** | **22** | *ePn* | **Pn** | **03 48 50.3** | **-0.1** |
| **PGF** | **Pioggiola** | **11.87** | **51** | *ePn* | **Pn** | **03 48 53.3** | **+2.1** |
| PGF | | | | *eSn* | **Sn** | **03 50 55.8** | **-7.6** |
| | comp=N,57nm,1.0s | | | | | | |
| **MBDF** | **Montbardon** | **11.93** | **38** | *ePn* | **Pn** | **03 48 55.5** | **+3.4** |
| MBDF | | | | *eSg* | | 03 52 16.7 | |
| | comp=N,321nm,2.0s | | | | | | |
| **BNI** | **Bardonecchia** | **12.12** | **37** | P | **Pn** | **03 48 55.9** | **+1.2** |
| **BNI** | **Bardonecchia** | **12.12** | **37** | | **Pn** | **03 48 55.9** | **+1.2** |
| **QU

**BAIF Baives 15.38 19** *e*Pn **Pn 03 49 37.1 -1.7**
BAIF *e*Sg 03 54 05.2
comp=N,946nm,2.4s

**CTI Castel Tesino 15.40 43** P **Pn 03 49 39.5 +0.3**
CTI pmax pmax
comp=Z,86nm,1.3s

**CTI Castel Tesino 15.40 43 Pn 03 49 39.5 +0.3**
**DOU Dourbes 15.51 20** *d*P **Pn 03 49 40.8 +0.2**
comp=Z,43nm,1.0s

**FETA Feichten 15.52 39** *e*P **Pn 03 49 42.6 +1.8**
comp=Z,95nm,1.0s,SNR=52

**GIVF Givet 15.58 20** *e*Pn **Pn 03 49 40.6 -0.9**
GIVF *e*Sg 03 54 15.8
comp=Z,353nm,1.6s

**WLF Walferdange 15.61 24** P **Pn 03 49 42.4 +0.6**
WLF pmax pmax
comp=Z,136nm,1.0s

**WLF Walferdange 15.61 24 Pn 03 49 42.4 +0.6**
**WLF Walferdange 15.61 24** *e*P **P 03 49 46.3 +0.3**
comp=Z,144nm,1.1s,baz=219,slow=11

**WLF Walferdange 15.61 24** *d*P **P 03 49 45.7 -0.3**
comp=Z,81nm,0.9s

**UBR Ueberruh 15.66 36** *e*P **Pn 03 49 43.9 +1.4**
comp=Z,164nm,1.2s,baz=219,slow=11

**CEL Celeste 15.73 75** Pn **Pn 03 49 44.5 +0.9**
**BMRD Maredsous 15.75 20** *d*P **Pn 03 49 44.0 +0.4**
comp=Z,54nm,1.0s

**RCHB Rochefort 15.75 21** *d*P **P 03 49 46.4 -1.1**
comp=Z,97nm,0.9s

**RETA Reutte 15.84 38** *e*P **Pn 03 49 46.6 +1.6**
comp=Z,88nm,1.0s,SNR=42

**BGES Gesves 15.91 21** *d*P **Pn 03 49 46.2 +0.4**
comp=Z,36nm,1.0s

**MOTA Moosalm 15.92 39** *e*P **Pn 03 49 46.9 +0.9**
comp=Z,68nm,1.1s,SNR=21

**BCLA Clavier 16.00 21** *d*P **P 03 49 49.2 -1.2**
comp=Z,56nm,1.2s

BCLA *d*x x 03 50 13.3

**STU Stuttgart 16.04 32** P **Pn 03 49 48.1 +0.7**
STU pmax pmax
comp=Z,48nm,1.0s

**STU Stuttgart 16.04 32 Pn 03 49 48.1 +0.7**
**STU Stuttgart 16.04 32** *e*P **Pn 03 49 49.0 +1.6**
comp=Z,1µm,2.5s,baz=219,slow=11

**UCC Uccle 16.09 18** P **P 03 49 50.2 -1.1**
UCC pmax pmax
comp=Z,26nm,1.0s

**UCC Uccle 16.09 18** P **P 03 49 50.2 -1.1**
**UCC Uccle 16.09 18** *d*P **P 03 49 50.5 -0.8**
comp=Z,17nm,1.0s

**STAL STALIGIAL 16.12 44 Pn 03 49 48.2 -0.2**
**WTTA Wattenberg 16.14 40** *e*P **Pn 03 49 50.3 +1.3**
comp=Z,159nm,1.2s,SNR=61

**BHOU Houvegnez 16.16 22** *d*P **P 03 49 51.3 -0.8**
**WATA Walderalm 16.16 40** *e*P **Pn 03 49 49.9 +0.9**
comp=Z,158nm,1.1s,SNR=50

**SGRT San Giovanni R 16.19 62 Pn 03 49 49.2 -0.2**
**BSTI Sart Tilman 16.23 21** *d*P **Pn 03 49 50.5 +0.7**
**ABTA Abfaltersbach 16.29 43** *e*P **P 03 49 53.6 -0.1**
comp=Z,99nm,1.0s,SNR=42

**MEM Membach 16.38 22** *d*P **P 03 49 54.0 -0.6**
comp=Z,35nm,1.0s

**BTNL Ternell 16.40 22** *d*P **Pn 03 49 52.0 0.0**
comp=Z,23nm,0.0s

**TRI Trieste 16.43 47** P **Pn 03 49 50.7 -1.8**
TRI pmax pmax
comp=Z,44nm,1.2s

**TRI Trieste 16.43 47 Pn 03 49 50.7 -1.8**
**TIP Timpagrande 16.48 72 Pn 03 49 54.1 +0.9**
TIP IAmb IAmb 03 50 02.2
comp=Z,486nm,1.9s

**SKDS Skadanscina 16.50 48**⇑*i*P **Pn 03 49 52.7 -0.7**
**FUR Furstenfeldbru 16.56 37** *e*P **P 03 49 57.2 +0.6**
comp=Z,243nm,1.2s,baz=219,slow=11

**NVLJ Novalja 16.58 52** P **Pn 03 49 51.8 -2.5**
**RABC Rab 16.60 52** P **Pn 03 49 54.2 -0.4**
**AHRW Bad Neuenahr-A 16.66 24** *e*P **P 03 49 57.1 -0.6**
comp=Z,372nm,2.2s,baz=219,slow=11

**VOJS Vojsko 16.67 47** *e*Pn **Pn 03 49 55.8 +0.2**
**RIY Rijeka 16.68 50**⇑*i*P **Pn 03 49 55.2 -0.4**
**RIY Rijeka 16.68 50** P **Pn 03 49 54.6 -1.0**
**ZIRJ Zirje 16.72 56** P **Pn 03 49 55.4 -0.7**
**A250A Rusevo Krmpots 16.84 51** P **Pn 03 49 57.0 -0.6**
**MORI Morici 16.84 55** P **Pn 03 49 56.4 -1.3**
**CEY Cerknica 16.85 48**⇑*i*P **Pn 03 49 57.5 -0.3**
**MYKA Terra Mystica 16.85 45** *e*P **P 03 50 01.5 +1.6**
comp=Z,33nm,1.0s,SNR=16

**TNS Taunus Mts 16.89 27** *e*P **P 03 50 00.5 +0.3**
comp=Z,115nm,1.6s,baz=219,slow=11

**GORS Gorjuse 16.89 46** *e*Pn **P 03 50 01.6 +1.3**
**CRNS Crni Vrh 16.92 47** *e*Pn **Pn 03 49 59.2 +0.5**
CRNS *e* 03 50 02.1

**RJOB Jochberg 17.05 40** *e*P **Pn 03 49 60.0 -0.4**
comp=Z,30nm,0.9s,baz=219,slow=11

**LJU Ljubljana 17.06 47**⇑*i*P **Pn 03 50 01.1 +0.7**
**LJU Ljubljana 17.06 47** *i* Pn **Pn 03 50 01.3 +0.8**
LJU *e* 03 50 04.0
comp=Z,702nm,18.7s

**HVAR Hvar 17.11 58** P **Pn 03 50 00.1 -0.9**
**UDBI Udbina 17.14 53** P **P 03 50 03.7 +0.6**
**PLIT Plitvice 17.20 52** P **Pn 03 50 02.5 +0.3**
**LSTV Lastovo 17.29 60** P **Pn 03 50 03.0 -0.2**
**OBKA Obir 17.32 46** *e*P **P 03 50 07.3 +2.2**
comp=Z,22nm,0.8s,SNR=22

**KIJV Kijevo 17.36 56** P **P 03 50 05.2 -0.3**
**BUG Bochum--Univer 17.50 23** *e*P **P 03 50 09.9 +3.0**
comp=Z,122nm,1.2s,baz=219,slow=11

**CRES Cresnjev 17.52 49**⇑*i*P **Pn 03 50 06.2 +0.1**
**MAKA Makarska 17.54 58** P **P 03 50 08.0 +0.6**
**GRFO Grafenberg 17.61 33** P **P 03 50 08.7 +0.5**
GRFO pmax pmax
comp=Z,127nm,1.2s

**GRFO Grafenberg 17.61 33** P **P 03 50 08.7 +0.5**
**GRA1 Grafenberg Arr 17.61 33** P **P 03 50 08.4 +0.2**
**GRF Grafenberg Arr 17.61 33** P **P 03 50 08.4 +0.2**
GRF pmax pmax
comp=Z,134nm,1.2s

**GRF Grafenberg Arr 17.61 33** *e*P **P 03 50 09.8 +1.5**
comp=Z,148nm,1.2s,baz=219,slow=11

GRF *e*L L 03 56 21.9

**RICI Ricice 17.68 58** P **Pn 03 50 06.5 -1.7**
**SOKA Soboth 17.69 46** *e*P **P 03 50 10.1 +0.9**
comp=Z,64nm,1.1s,SNR=40

**A251A Rujevac 17.72 52** P **P 03 50 09.7 +0.4**
**ZAG Zagreb 17.85 50** *e*P **P 03 50 15.9 +5.1**
**STON Ston 17.89 60** *e*P **Pn 03 50 09.4 -1.3**
**STON Ston 17.89 60** P **Pn 03 50 08.7 -2.0**
**MOA Molln 17.91 42** *e*P **Pn 03 50 10.9 -0.1**
comp=Z,17nm,1.1s

**PRIJ Prijedor 17.94 53** *e*P **P 03 50 13.1 +1.2**
**MGRS Mrkonjic Grad 17.97 55** *e*P **P 03 50 14.3 +2.1**
**WET Wettzell 18.00 37** *e*P **P 03 50 12.9 +0.4**
comp=Z,52nm,1.2s,baz=219,slow=11

**LOBO Lobor 18.05 49** P **Pn 03 50 11.9 -0.8**
**MRAK Mrakovica 18.08 53**⇑*i*P **Pn 03 50 13.1 0.0**
**ROTZ Rotzenmuhle 18.11 34** *e*P **P 03 50 15.3 +1.5**
comp=Z,22nm,1.2s,baz=219,slow=11

**BLY Banja Luka 18.16 54**⇑*i*P **P 03 50 14.9 +0.6**
**GEC2 GERESS Array S 18.22 39** P **Pn 03 50 13.7 -1.1**
**GEC2 GERESS Array S 18.22 39** *e*P **P 03 50 15.2 +0.1**
comp=Z,124nm,1.6s,baz=219,slow=11

**GERES GERESS Array B 18.22 39** P **Pn 03 50 14.6 -0.3**
comp=Z,0.4nm,0.3s,baz=229,slow=12,SNR=25

GERES PcP **PcP 03 54 46.8 -0.4**
comp=Z,0.2nm,0.3s,baz=186,slow=2.7,SNR=6.9

GERES LR LR 03 57 22.3
comp=Z,667nm,19.2s,baz=254,slow=37

**MANZ Manzenberg 18.22 34** *e*P **P 03 50 16.7 +1.7**
comp=Z,17nm,1.1s,baz=219,slow=11

**ARSA Arzberg 18.28 45** *e*P **P 03 50 15.9 +0.3**
comp=Z,13nm,0.8s,SNR=16

**TREB Trebinje 18.31 61** *e*P **P 03 50 16.2 +0.3**
**HCY Herceg Novi 18.34 62** *e*P **P 03 50 17.0 +0.7**
**HCY Herceg Novi 18.34 62**⇑*i*P **P 03 50 16.7 +0.4**
**KHC Kasperske Hory 18.34 38** *e*P **Pn 03 50 16.2 -0.1**
KHC MLR MLR
comp=Z,5µm,9.4s

**KHC Kasperske Hory 18.34 38** *e*P **Pn 03 50 16.2 -0.1**
KHC *e*x x 03 52 15.5
KHC *e*x x 03 52 19.5
KHC *e*x x 03 52 36.0
KHC AMS AMS 03 58 10.0
comp=Z,5µm,9.4s

**IBBN Ibbenburen 18.40 22** *e*P **Pn 03 50 19.2 +2.3**
comp=Z,1µm,2.9s,baz=219,slow=11

**MOX Moxa 18.49 32** *e*P **Pn 03 50 19.2 +1.2**
comp=Z,74nm,1.2s,baz=219,slow=11

MOX *e*L L 04 00 09.0
comp=Z,622nm,20.0s

**BRY Bratogost 18.49 61** *e*P **P 03 50 18.0 -0.1**
**BRY Bratogost 18.49 61**⇓*i*P **Pn 03 50 18.2 0.0**
**CKRC Cesky Krumlov 18.52 40** *e*P **P 03 50 18.1 -0.1**
CKRC AMS AMS 03 59 00.0
comp=Z,2µm,9.7s

**GTTG Gottingen 18.52 27** *e*P **Pn 03 50 20.6 +2.2**
comp=Z,60nm,1.2s,baz=219,slow=11

**NKC Novy Kostel 18.55 34** *e*P **Pn 03 50 21.1 +2.3**
NKC MLR MLR
comp=Z,5µm,9.3s

**NKC Novy Kostel 18.55 34** *e*P **Pn 03 50 21.1 +2.3**
NKC AMS AMS 03 58 10.0
comp=Z,5µm,9.3s

**WERN Wernitzgruen 18.56 34** *e*P **Pn 03 50 19.9 +1.0**
comp=Z,210nm,1.8s,baz=219,slow=11

**BUM Brajici-Budva 18.59 63**⇑*i*P **Pn 03 50 19.9 +0.5**
**PLN Plauen 18.60 33** *e*P **Pn 03 50 20.6 +1.1**
comp=Z,90nm,1.3s,baz=219,slow=11

**BEHE Becsehely 18.63 49** *e*P **Pn 03 50 21.2 +1.4**
**BEHE Becsehely 18.63 49** P **Pn 03 50 21.6 +1.8**
**WERD Werda 18.64 33** *e*P **Pn 03 50 21.0 +1.1**
comp=Z,294nm,2.3s,baz=219,slow=11

**CEME Cevo 18.67 62**⇑*i*P **Pn 03 50 20.6 +0.3**
**TANN Tannenbergstha 18.69 33** *e*P **Pn 03 50 21.1 +0.6**
comp=Z,83nm,1.2s,baz=219,slow=11

**VLO Vlora 18.72 69** P **Pn 03 50 21.5 +0.7**
VLO pmax pmax
comp=Z,958nm,1.5s

**VLO Vlora 18.72 69** P **Pn 03 50 21.5 +0.7**
**NKME Niksic 18.75 61**⇓*i*P **P 03 50 20.9 +0.1**
**DOB Doboj 18.76 55** *e*P **Pn 03 50 25.9 +4.6**
**GDLE Glaisdale, N Y 18.77 5** *e*P **Pn 03 50 23.8 +2.5**
GDLE IAmb IAmb 03 50 27.8
comp=Z,146nm,1.0s

**ULC Ulcinj 18.78 64**⇓*i*P **Pn 03 50 21.7 +0.1**
**DRME Dracevica, Mon 18.78 63**⇑*i*P **Pn 03 50 21.8 +0.2**
**DRME Dracevica, Mon 18.78 63**⇑*i*P **Pn 03 50 21.8 +0.2**
**UPM Unac-Piva 18.83 60** *e*P **Pn 03 50 23.1 +0.7**
**UPM Unac-Piva 18.83 60**⇓*i*P **Pn 03 50 23.3 +0.9**
**CONA Conrad Observa 18.84 44** *e*P **P 03 50 21.7 -0.1**
comp=Z,22nm,0.9s,SNR=12

**A252A Venje 18.86 53** P **P 03 50 22.2 +0.2**
**PDG Podgorica 18.89 62**⇑P **Pn 03 50 22.8 0.0**
**PDG Podgorica 18.89 62**⇑*i*P **P 03 50 22.5 +0.2**
**TTG Podgorica 18.89 62**⇑*i*P **P 03 50 22.4 +0.2**
**CLZ Clausthal 18.91 27** *e*P **Pn 03 50 24.5 +1.4**
baz=219,slow=11

**SOP Sopron 19.10 45** P **Pn 03 50 26.1 +0.6**
**EDMD Edmundbyers 19.11 3** *e*P **Pn 03 50 27.2 +1.6**
EDMD IAmb IAmb 03 50 30.5
comp=Z,101nm,0.8s

**TIR Tirane 19.12 66** IAmb IAmb 03 51 00.1
comp=Z,533nm,1.7s

**KOME Kolasin 19.17 61**⇑*i*P **P 03 50 24.9 -0.6**
**PLE Pljevlja 19.20 60**⇓*i*P **P 03 50 26.2 +0.3**
**ASSE Asse, Remlinge 19.25 27** *e*P **Pn 03 50 29.1 +1.9**
comp=Z,361nm,2.3s,baz=219,slow=11

**RUDO Rudo 19.27 59** *e*P **P 03 50 26.2 -0.3**
**RETH Rethem/Aller, 19.29 24** *e*P **Pn 03 50 29.8 +2.2**
baz=219,slow=11

**KOVH Kovagotottos 19.29 51** P **Pn 03 50 28.0 +0.3**
**NRDL Niedersach Rie 19.34 26** *e*P **Pn 03 50 30.3 +2.1**
comp=Z,440nm,2.3s,baz=219,slow=11

**BBLS Lazići 19.36 58**⇑*i*P **P 03 50 27.7 +0.1**
**NEWG New Galloway 19.38 359** *e*P **Pn 03 50 29.6 +1.0**
NEWG IAmb IAmb 03 50 34.1
comp=Z,126nm,1.2s

**PRU Pruhonice 19.38 37** *e*P **Pn 03 50 28.5 -0.2**
PRU MLR MLR
comp=Z,3µm,8.8s

**PRU Pruhonice 19.38 37** *e*P **Pn 03 50 28.5 -0.2**
PRU AMS AMS 03 58 40.0
comp=Z,3µm,8.8s

**CLGH Cloghs, Cushen 19.41 356** *e*P **Pn 03 50 30.7 +1.6**
CLGH IAmb IAmb 03 50 36.4
comp=Z,127nm,1.2s

**EGYH Egyhazaskeszo 19.42 47** P **Pn 03 50 30.9 +1.6**
**TREC Trest 19.42 40** *e*P **Pn 03 50 29.5 +0.2**
TREC MLR MLR
comp=Z,3µm,9.1s

**TREC Trest 19.42 40** *e*P **Pn 03 50 29.5 +0.2**
TREC AMS AMS 03 59 00.0
comp=Z,3µm,9.1s

**MPLH Magyarpolny 19.43 48** P **Pn 03 50 30.0 +0.6**
**PVY Plav 19.43 62**⇑*i*P **Pn 03 50 30.3 +0.7**
**IVA Berane 19.45 61**⇓*i*P **Pn 03 50 29.5 -0.2**
**FBE Freiberg 19.45 34** *e*P **Pn 03 50 29.9 +0.3**
comp=Z,124nm,1.1s,baz=219,slow=11

**CLL Collm 19.57 32**⇑*i*P **Pn 03 50 31.8 +0.8**
comp=Z,149nm,1.0s

CLL *e*Pmax 03 50 35.0
CLL *e*x x 03 50 52.0
CLL *e*S **Sn 03 54 14.0 +3.7**
CLL *e*PcP **PcP 03 54 50.0 +0.7**
CLL Lmax 03 59 00.0
**CLL Collm 19.57 32** *e*P **Pn 03 50 31.3 +0.3**
comp=Z,148nm,1.0s,baz=219,slow=11

**ESK Eskdalemuir 19.57 1** *e*P **Pn 03 50 32.1 +1.2**
ESK IAmb IAmb 03 50 35.6
comp=Z,67nm,0.9s

**ESK Eskdalemuir 19.57 1** P **Pn 03 50 31.5 +0.5**
ESK pmax pmax
comp=Z,60nm,0.8s

**ESK Eskdalemuir 19.57 1** P **Pn 03 50 31.5 +0.5**
**EKA Eskdalemuir Ar 19.59 1** P **Pn 03 50 32.4 +1.2**
baz=175,slow=11,SNR=38

EKA LR LR 03 58 22.4
comp=Z,2µm,19.3s,baz=192,slow=38

**FLTG Flechtingen 19.62 28** *e*P **Pn 03 50 32.5 +0.9**
comp=Z,89nm,1.5s,baz=219,slow=11

**BRG Berggiesshubel 19.68 34**⇑*i*P **Pn 03 50 33.0 +0.6**
BRG Amp 03 50 36.0
comp=Z,135nm,1.3s

BRG Amp 03 50 48.1
comp=Z,43nm,1.1s

BRG PP **PnPn 03 50 55.2 +9.2**
**BRG Berggiesshubel 19.68 34** S **Sn 03 54 17.0 +3.9**
BRG ⇑PP 03 54 49.4
BRG Amp 03 54 51.0
comp=Z,11nm,1.1s

BRG Amp 03 59 13.0
comp=N,3.9nm,11.7s

BRG Amp 03 59 16.0
comp=Z,2.9nm,11.2s

BRG Amp 03 59 18.0
comp=E,2.4nm,11.7s

**BRG Berggiesshubel 19.68 34**⇑*i*P **Pn 03 50 32.9 +0.6**
BRG *e*S **Sn 03 54 17.0 +3.9**
BRG pmax pmax
comp=Z,135nm,1.3s

BRG pmax pmax
comp=Z,43nm,1.1s

BRG MLR MLR
comp=N,4µm,11.7s

BRG MLR MLR
comp=Z,3µm,11.2s

BRG MLR MLR
comp=E,2µm,11.7s

**BRG Berggiesshubel 19.68 34** *e*P **Pn 03 50 32.6 +0.2**
comp=E,435nm,2.3s,baz=219,slow=11

**ZST Bratislava 19.68 44** *e*P **Pn 03 50 32.9 +0.5**
**ZST Bratislava 19.68 44** *e*P **Pn 03 50 32.9 +0.5**
**MORH Mrgy, Hungar 19.68 51**⇑*i*P **Pn 03 50 32.0 -0.4**
**MORH Mrgy, Hungar 19.68 51** P **P 03 50 31.6 +0.6**
**PVCC Panska Ves 19.74 36** AMS AMS 03 59 10.0
comp=E,3µm,12.0s

**KRUC Moravsky 19.77 42** *e*P **Pn 03 50 32.8 -0.6**
KRUC *e* 03 57 13.6
**OHR Ohrid 19.78 67** *i* P **Pn 03 50 33.6 -0.1**
**DIVS Divibare 19.84 58**⇑*i*P **P 03 50 32.9 +0.1**
**MODS Modra-Piesok 19.88 44** *e*P **Pn 03 50 38.0 +3.3**
**MODS Modra-Piesok 19.88 44** *e*P **Pn 03 50 38.0 +3.3**
**CSKK Cskako 19.95 48** P **Pn 03 50 36.1 +0.6**
**VRAC Vranov 20.01 41**⇓P Pn 03 50 35.5 -0.9
**VRAC Vranov 20.01 41** P Pn 03 50 35.8 -0.5
comp=E,33nm,0.7s,baz=241,slow=12,SNR=38

VRAC PcP **PcP 03 54 50.4 +0.3**
comp=E,4.0nm,0.9s,baz=353,slow=0.6,SNR=3.2

**VRAC Vranov 20.01 41** *e*P **P 03 50 34.9 +0.3**
VRAC *e* 03 57 25.3

**SMOL Smolenice 20.04 44** *e*P Pn 03 50 36.7 +0.1
SMOL pmax pmax
comp=Z,42nm,1.0s

**SMOL Smolenice 20.04 44** *e*P Pn 03 50 36.7 +0.1
**FRGS Fruska Gora 20.05 55**⇓P **P 03 50 35.3 +0.3**
**FRGS Fruska Gora 20.05 55**⇑*i*P **P 03 50 34.6 -0.4**
**SRO Srobarova 20.19 47** *e*P Pn 03 50 38.7 +0.3
SRO pmax pmax
comp=Z,90nm,1.0s

**SRO Srobarova 20.19 47** *e*P Pn 03 50 38.7 +0.3
**JAVC Velka Javorina 20.36 43** *e*P Pn 03 50 39.6 -0.8
**SKO Skopje 20.39 65** *i* P **P 03 50 39.5 +0.8**
**UPC Upice 20.43 38** *e*P Pn 03 50 40.6 -0.7
UPC MLR MLR
comp=Z,2µm,9.4s

**UPC Upice 20.43 38** *e*P Pn 03 50 40.6 -0.7
UPC AMS AMS 03 59 10.0
comp=Z,2µm,9.4s

**BUD Budapest 20.47 48** P Pn 03 50 40.7 -0.9
**DPC Dobruska-Polom 20.49 38** *e*P **P 03 50 40.9 +1.1**
DPC MLR MLR
comp=Z,3µm,9.0s

**DPC Dobruska-Polom 20.49 38** *e*P **P 03 50 40.9 +1.1**
DPC AMS AMS 04 00 30.0
comp=Z,3µm,9.0s

**CHVC Chvalec 20.51 38** *e*P Pn 03 50 41.6 -0.5
CHVC AMS AMS 03 58 40.0
comp=Z,2µm,9.2s

**ITM Ithomi 20.52 78** IAmb IAmb 03 50 54.7
comp=Z,488nm,1.6s

**KRLC Kraliky 20.56 40** *e*P Pn 03 50 42.5 -0.3
KRLC MLR MLR
comp=Z,2µm,10.0s

**KRLC Kraliky 20.56 40** *e*P Pn 03 50 42.5 -0.3
KRLC AMS AMS 04 00 10.0
comp=Z,2µm,10.0s

**OSTC Ostas 20.57 38** AMS AMS 03 58 50.0
comp=Z,2µm,10.0s

**BSEG Bad Segeberg 20.60 24** *e*P Pn 03 50 43.3 +0.1
comp=Z,351nm,1.3s,baz=219,slow=11

**KOLL Kolacno 20.62 45** *e*P **P 03 50 42.2 +1.0**
**RUE Ruedersdorf 20.75 31** *e*P Pn 03 50 45.0 +0.1
**RUE Ruedersdorf 20.75 31** *e*P Pn 03 50 44.8 -0.1
comp=Z,589nm,1.1s,baz=219,slow=11

**KSP Ksiaz 20.78 37** *e*P Pn 03 50 44.5 -0.9
**MORC Moravsky Berou 20.79 41**⇑P **P 03 50 44.0 +0.9**
**MORC Moravsky Berou 20.79 41** IAmb IAmb 03 50 49.3
comp=Z,299nm,1.8s

**MORC Moravsky Berou 20.79 41** *e*P **P 03 50 43.9 +0.9**
MORC *e* 03 57 53.2
**AGG Agios Georgios 20.80 73** P **P 03 50 43.2 0.0**
AGG pmax pmax
comp=Z,257nm,1.3s

**AGG Agios Georgios 20.80 73** P **P 03 50 43.2 0.0**
AGG IAmb IAmb 03 50 48.6
comp=Z,257nm,1.3s

**VYHS Vyhne 20.83 45** *e*P **P 03 50 44.2 +0.8**
VYHS pmax pmax
comp=Z,59nm,1.0s

**VYHS Vyhne 20.83 45** *e*P **P 03 50 44.1 +0.7**
**STIP Stip 20.90 66** *i* P Pn 03 50 46.0 -0.8
**LIT Litokhoron 20.96 70** IAmb IAmb 03 50 48.8
comp=Z,202nm,1.4s

**VAY Valandovo 21.14 67** *i* P **P 03 50 46.8 +0.1**
**BSZH Besenyszg 21.15 50**⇑P **P 03 50 48.5 +1.7**
**BSZH Besenyszg 21.15 50** P **P 03 50 50.7 +3.9**
**OKC Ostrava-Krasne 21.15 42** AMS AMS 04 00 10.0
comp=Z,4µm,10.3s

**KOWA Kowa 21.17 181** P **P 03 50 44.9 -2.4**
**DRUM Mains of Drumt 21.18 2** *e*P **P 03 50 48.8 +1.7**
DRUM IAmb IAmb 03 50 55.7
comp=Z,241nm,0.9s

**PSZ Piszkesteto 21.19 48**⇓P **P 03 50 48.8 +1.5**
**PSZ Piszkesteto 21.19 48** P **P 03 50 47.3 0.0**
PSZ pmax pmax
comp=Z,68nm,1.1s

**PSZ Piszkesteto 21.19 48** P **P 03 50 47.3 0.0**
**PSZ Piszkesteto 21.19 48** P **P 03 50 48.6 +1.2**
**MDVR Moldovita 21.21 57**⇑P **P 03 50 48.0 +0.4**
**IZAB Izabela 21.38 46** *e*P **P 03 50 50.7 +1.4**
**BZS Buzias 21.40 55**⇑P **P 03 50 50.2 +0.7**
**KKB Krupnik 21.59 66** *e*P **P 03 50 51.0 -0.6**
**HERR Herculane 21.72 57**⇓P **P 03 50 53.6 +0.6**
**KECS Kecovo 21.79 47** *e*P **P 03 50 55.5 +1.7**
**KECS Kecovo 21.79 47** *e*P **P 03 50 55.5 +1.7**
**VTS Vitosha 21.81 64**⇓P **P 03 50 54.1 -0.1**
**VTS Vitosha 21.81 64** P **P 03 50 52.6 -1.6**
VTS pmax pmax
comp=Z,34nm,0.9s

**VTS Vitosha 21.81 64** P **P 03 50 52.6 -1.6**
**VTS Vitosha 21.81 64** *e*P **P 03 50 53.0 -1.2**
**MMB Musomiste 22.03 66** *e*P **P 03 50 55.0 -1.4**
**GZR Gura Zlata 22.11 56**⇑P **P 03 50 57.4 +0.1**
**NIE Niedzica 22.12 45** *e*P **P 03 50 59.4 +2.0**
**RGN Rugen 22.14 27** P **P 03 50 58.7 +1.3**
RGN IAmb IAmb 03 51 02.6
comp=Z,162nm,0.9s

**RGN Rugen 22.14 27** *e*P **P 03 50 58.4 +1.0**
comp=Z,216nm,0.9s,baz=219,slow=11

**LTVH Ltavrtes, Hu 22.20 51** P **P 03 50 59.9 +1.7**
**OJC Ojcow 22.25 42** *e*P **P 03 50 59.1 +0.4**
**DEV Deva 22.34 55**⇓P **P 03 51 00.4 +0.8**
**LLD Lille Linde 22.38 24** *i* P **P 03 51 00.6 +0.7**
LLD IAmb IAmb 03 51 02.0
comp=Z,58nm,0.7s

**MUD Monsted U'grnd 22.44 19** *i* P **P 03 51 01.4 +0.9**
MUD IAmb IAmb 03 51 03.7
comp=Z,45nm,0.7s

**DRGR 22.50 53**⇓P **P 03 51 02.4 +0.9**
**LEWI Lewis, Hebride 22.51 355** *e*P **P 03 51 03.3 +1.9**
LEWI IAmb IAmb 03 51 06.8
comp=Z,337nm,1.5s

**CRVS Cervenica-Dubn 22.56 47** *e*P **P 03 51 03.5 +1.5**
CRVS pmax pmax
comp=Z,1µm,2.4s

**CRVS Cervenica-Dubn 22.56 47** *e*P **P 03 51 03.5 +1.5**
**COP Copenhagen 22.74 24** *i* P **P 03 51 04.8 +1.0**
COP IAmb IAmb 03 51 06.5
comp=Z,716nm,0.8s

**MESR Meseseni 22.78 52**⇓P **P 03 51 05.4 +1.1**
**LOT Lotru 22.80 56**⇑P **P 03 51 04.9 +0.3**
**GKP Gorka Klasztor 22.80 33** *e*P **P 03 51 05.3 +0.8**
**GKP Gorka Klasztor 22.80 33** *e*P **P 03 51 06.5 +2.0**
**TRPA Tarpa 22.89 49**⇑P **P 03 51 05.6 +0.1**
**TRPA Tarpa 22.89 49** P **P 03 51 05.5 +0.1**
TRPA PP **pP 03 51 09.3 -0.1**
**UZH Uzhgorod 22.94 48**⇓*i*P **P 03 51 04.2 -1.8**
UZH *i* 03 51 06.5
UZH *i* 03 51 50.4
UZH *e*S **S 03 55 07.2 -8.3**
UZH *i* SS **SnSn 03 55 57.1 +10**
UZH MLR MLR
comp=N,200nm,10.0s

UZH MLR MLR
comp=E,180nm,10.0s

UZH MLR MLR
comp=Z,180nm,10.0s

**TORD Torodi Ar. Bea 23.00 167** P **P 03 51 06.2 -0.6**
comp=Z,39nm,0.8s,baz=345,slow=9.4,SNR=129

**CJR Cluj-Napoca 23.05 53**⇑P **P 03 51 08.3 +1.0**
**IDI Anoyia 23.12 83**⇓P **P 03 51 08.5 +0.4**
**IDI Anoyia 23.12 83** P **P 03 51 08.8 +0.7**
comp=Z,51nm,0.8s,baz=260,slow=8.9,SNR=16

**IDI Anoyia 23.12 83** P **P 03 51 07.8 -0.3**
**BSD Bornholm Skovb 23.17 28** *i* P **P 03 51 08.0 -0.2**
BSD IAmb IAmb 03 51 09.8
comp=Z,17nm,0.9s

**KDZ Kurdzhali 23.30 67** *e*P **P 03 51 06.0 -3.7**
**BMR Baia Mare 23.31 51**⇓P **P 03 51 10.9 +1.1**
**ARR Arges 23.36 57**⇓P **P 03 51 11.3 +0.9**
**HUMR Humele 23.41 59**⇑P **P 03 51 11.8 +1.0**
**COPA Copaceanca 23.50 60**⇓P **P 03 51 12.6 +1.0**
**KWP Kalwaria Pacla 23.61 46** *e*P **P 03 51 13.3 +0.5**
**BEL Belsk 23.65 40** *e*P **P 03 51 13.6 +0.5**
**ARCR ARCALIA 23.66 53**⇑P **P 03 51 13.8 +0.5**
**VOIR 23.66 57**⇓P **P 03 51 14.3 +0.9**
**SNART Snartemo 23.70 14** *i* P **P 03 51 12.0 -1.5**
**SNART Snartemo 23.70 14** *e*P **P 03 51 14.5 +1.0**
**DEL Delary 23.85 24** *i* P **P 03 51 16.0 +1.0**
**DEL Delary 23.85 24** *e*P **P 03 51 16.7 +1.8**
**SZH Strazhica 23.86 63** *e*P **P 03 51 14.0 -1.3**
**HOMB Homborsund 23.91 16** *e*P **P 03 51 16.2 +0.7**
**DOPR Dopca 24.03 56**⇑P **P 03 51 17.2 +0.4**

**KMY Karmoy 24.17 11** *e*P **P 03 51 19.5 +1.6**
**MLR Muntele Rosu 24.29 57** ⇓P **P 03 51 20.4 +1.0**
**MLR Muntele Rosu 24.29 57** P **P 03 51 20.0 +0.7**
comp=Z,134nm,1.2s,baz=218,slow=4.0,SNR=78
MLR LR LR 04 01 29.4
comp=Z,697nm,18.5s,baz=260,slow=38
**MLR Muntele Rosu 24.29 57** IAmb IAmb 03 51 24.2
comp=Z,175nm,1.2s
**OZUR 24.33 56** ⇑P **P 03 51 20.4 +0.9**
**BUR08 Bucovina Ar. S 24.39 52** P **P 03 51 20.4 +0.2**
BUR08 IAmb IAmb 03 51 48.0
comp=Z,256nm,1.5s
**BURAR Bucovina Array 24.39 52** ⇑P **P 03 51 20.7 +0.5**
**MBO M'Bour 24.44 213** P **P 03 51 20.7 0.0**
MBO IAmb IAmb 03 51 21.8
comp=Z,131nm,0.9s
**LVV L'vov 24.47 46** *e*P **P 03 51 20.4 -0.4**
LVV *e* 03 52 02.0
LVV *e*S **S 03 55 36.1 -4.3**
LVV MLR MLR
comp=Z,400nm,15.0s
**NEHR Nehoiu 24.52 58** ⇑P **P 03 51 22.2 +0.9**
**COVR Voineasa-Covas 24.55 57** ⇓P **P 03 51 22.5 +0.9**
**BLS5 Blasjo 24.57 12** *e*P **P 03 51 22.2 +0.6**
**ISR Istrita 24.62 58** ⇓P **P 03 51 22.8 +0.6**
**PLOR Plostina 24.85 57** ⇓P **P 03 51 24.6 +0.2**
**KARP Karpathos 24.91 81** P **P 03 51 24.7 -0.2**
**VRI Vrincioaia 24.91 57** ⇑P **P 03 51 25.1 +0.3**
**PRD Provadia 24.92 63** *e*P **P 03 51 24.0 -0.9**
**KLNR Kaliningrad 25.01 34***ce*P **P 03 51 25.3 -0.2**
KLNR pmax pmax
comp=Z,78nm,1.0s
**TESR Tescani 25.01 55** ⇓P **P 03 51 26.4 +0.7**
**ODD1 Odda 25.06 12** *e*P **P 03 51 27.4 +1.3**
**ODBI Odobesti 25.11 57** ⇑P **P 03 51 27.1 +0.5**
**BER Bergen 25.31 10** *e*P **P 03 51 29.4 +1.2**
**ICOR Ion Corvin 25.33 61** ⇑P **P 03 51 29.1 +0.5**
**ASK Askoy 25.38 10** *e*P **P 03 51 30.3 +1.4**
**KONO Kongsberg 25.40 16***de*P **P 03 51 30.5 +1.4**
KONO pmax pmax
comp=Z,54nm,1.3s
**KONO Kongsberg 25.40 16** P **P 03 51 29.0 0.0**
KONO IAmb IAmb 03 51 33.8
comp=Z,200nm,1.8s
**KONO Kongsberg 25.40 16** *e*P **P 03 51 29.6 +0.5**
**GHRR 25.42 57** ⇑P **P 03 51 29.7 +0.4**
**SCTR Scanteiesti 25.74 58** ⇑P **P 03 51 32.1 -0.2**
**CFR Carcaliu 25.74 59** ⇑P **P 03 51 33.1 +0.8**
**VASR Vaslui 25.81 55** ⇓P **P 03 51 33.1 +0.2**
**TIRR Tirgusor 25.82 61** ⇓P **P 03 51 32.7 -0.2**
**TPGR Topolog 25.88 60** ⇑P **P 03 51 32.9 -0.8**
**OSL Oslo 25.91 16** *e*P **P 03 51 34.7 +1.0**
**SUW Suwalki 26.06 37** *e*P **P 03 51 34.2 -0.9**
**SUW Suwalki 26.06 37** *e*P **P 03 51 34.2 -0.9**
**SKAR Skarslia 26.08 13** *e*P **P 03 51 36.9 +1.6**
**HYA Hoyanger 26.18 11** *e*P **P 03 51 37.8 +1.7**
**MILM Milestii Mici 26.55 55** ⇑P **P 03 51 38.4 -1.3**
**SORM Soroca 26.56 52** ⇑P **P 03 51 38.2 -1.5**
**NC602 NORSAR Array S 26.81 16** ⇑*i*P **P 03 51 42.6 +0.8**
**HFS Hagfors 26.82 19** P **P 03 51 42.6 +0.7**
comp=Z,64nm,0.9s,baz=208,slow=11,SNR=44
HFS PcP **PcP 03 55 03.5 -0.7**
comp=Z,12nm,0.8s,baz=188,slow=4.5,SNR=10
HFS LR LR 04 02 46.2
comp=Z,1μm,19.9s,baz=213,slow=37
**NBO00 NORSAR Array S 26.90 15** P **P 03 51 43.6 +0.9**
NBO00 IAmb IAmb 03 51 44.9
comp=Z,132nm,1.0s
**ELL Elmali 26.93 78** P **P 03 51 42.8 -0.5**
ELL pmax pmax
comp=Z,190nm,1.0s
**ELL Elmali 26.93 78** P **P 03 51 42.8 -0.5**
**NB2 NORSAR Subarra 27.01 16** P **P 03 51 44.2 +0.6**
comp=Z,86nm,1.1s,baz=207,slow=9.3
**NB2 NORSAR Subarra 27.01 16** P **P 03 51 44.2 +0.6**
baz=207,slow=9.3
**NOA NORSAR Array B 27.01 16** P **P 03 51 44.3 +0.6**
comp=Z,37nm,0.9s,baz=207,slow=9.0,SNR=38
NOA PcP **PcP 03 55 04.8 +0.1**
comp=Z,8.3nm,0.9s,baz=211,slow=2.6,SNR=8.4
NOA LR LR 04 04 09.6
comp=Z,3μm,18.3s,baz=210,slow=40
**NB201 NORSAR Array S 27.03 16** P **P 03 51 44.8 +0.9**
NB201 IAmb IAmb 03 51 46.1
comp=Z,95nm,1.0s
**NC204 NORSAR Array S 27.12 15** IAmb IAmb 03 51 49.0
comp=Z,172nm,1.2s
**NC405 NORSAR Array S 27.18 16** IAmb IAmb 03 51 46.7
comp=Z,158nm,1.2s
**AKN Aaknes 27.27 11** *e*P **P 03 51 48.2 +2.2**
**ISP Isparta 27.28 75**⇓*e*P **P 03 51 49.5 +3.1**
ISP pmax pmax
comp=Z,45nm,2.0s
**PABE Paberze 27.28 35** P **P 03 51 44.1 -1.9**
PABE IAmb IAmb 03 51 50.3
comp=Z,58nm,0.8s
**PABE Paberze 27.28 35** *e*P **P 03 51 45.4 -0.7**
**DOMB Dombas 27.49 13** *e*P **P 03 51 49.0 +1.1**
**UPP Uppsala 27.75 23** *e*P **P 03 51 50.0 -0.3**
**AKASG Malin Array Be 27.89 47** P **P 03 51 49.3 -2.3**
comp=Z,6.7nm,0.8s,baz=246,slow=10,SNR=15
AKASG PcP **PcP 03 55 06.2 -0.8**
comp=Z,1.2nm,0.5s,baz=269,slow=2.7,SNR=5.7
AKASG LR LR 04 03 04.4
comp=Z,423nm,18.0s,baz=274,slow=37
**AKBB Malin Array Si 27.89 47***de*P **P 03 51 49.6 -2.0**
**IIGN Isparta 27.27 37** *e*P **P 03 51 55.9 +0.9**
**NACGM Naroch 28.32 38** *i*P **P 03 51 59.9 +4.5**
**IDID Didziasalis 28.50 37** *e*P **P 03 51 57.9 +0.8**
**MNK Minsk 28.68 39** *i*P P 03 51 53.8 -4.8
MNK *i*S **S 03 56 41.0 -5.9**
MNK pmax pmax
comp=Z,21nm,0.9s
MNK pmax pmax
comp=N,29nm,1.4s
MNK pmax pmax
comp=E,8.0nm,1.4s
MNK MLR MLR
comp=Z,271nm,13.0s
MNK MLR MLR
comp=N,463nm,21.0s
MNK MLR MLR
comp=E,32nm,13.0s
**MNK Minsk 28.68 39** *i*P **P 03 51 53.8 -4.8**
comp=E,8.0nm,1.4s
MNK *i*P **P 03 51 53.8 -4.8**
comp=N,29nm,1.4s
MNK *i*P **P 03 51 53.8 -4.8**
comp=Z,21nm,0.8s,baz=62
MNK *i*PP **PnPn 03 52 43.5 -5.4**
MNK *i*S **S 03 56 41.0 -5.9**
MNK *i*SS **SnSn 03 58 03.6 -3.7**
MNK *i*LQ LQ 04 01 05.3
MNK *i*LR LR 04 02 37.8
MNK *i*LRM MLR 04 04 27.1
comp=E,32nm,13.1s
MNK *i*LRM MLR 04 04 27.1
comp=N,463nm,21.1s
MNK *i*LRM MLR 04 04 27.1
comp=Z,271nm,13.0s
**TBLU Trondheim 28.82 13** *e*P **P 03 52 03.1 +3.3**
**DBIC Dimbokro 28.97 183** P **P 03 52 00.7 -0.7**
comp=Z,44nm,0.8s,baz=17,slow=8.9,SNR=50
DBIC LR LR 04 04 14.4
comp=Z,3μm,19.1s,baz=12,slow=38
**DBIC Dimbokro 28.97 183** P **P 03 52 00.5 -0.9**
DBIC IAmb IAmb 03 52 01.9
comp=Z,57nm,0.8s
**TIC Toumodi 29.00 183** *e*P **P 03 52 00.9 -0.9**
**MTSE Matsula 29.17 29** *e*P **P 03 52 02.5 -0.4**
**KIC Kosan Boka 29.27 182** *e*P **P 03 52 03.4 -0.8**
comp=Z,92nm,0.8s
**LIC Lamto 29.42 183** *e*P **P 03 52 04.5 -1.0**
comp=Z,250nm,1.1s
**BR131 Keskin Array S 29.54 71**⇓*e*P **P 03 52 06.8 +0.2**
**BRTR Keskin Array B 29.54 71** P **P 03 52 06.0 -0.6**
comp=Z,1.1nm,0.6s,baz=283,slow=6.2,SNR=7.6
BRTR PcP **PcP 03 55 11.4 -0.1**
comp=Z,1.8nm,0.8s,baz=187,slow=3.2,SNR=4.8
**VSU Vasula 30.23 32***de*P **P 03 52 11.9 -0.3**
VSU pmax pmax
comp=Z,73nm,0.9s
**VSU Vasula 30.23 32** *e*P **P 03 52 12.2 0.0**
**NSS Namsos 30.30 13**⇑*i*P **P 03 52 14.7 +1.9**

**BORG Borgarnes 30.94 345** P **P 03 52 18.7 +0.2**
comp=Z,25nm,1.0s,baz=104,slow=3.0,SNR=2.7
BORG LR LR 04 03 29.1
comp=Z,2μm,21.8s,baz=169,slow=34
**FINES FINESS Array B 31.80 27** P **P 03 52 25.9 -0.2**
comp=Z,4.1nm,0.4s,baz=221,slow=7.2,SNR=16
FINES PcP **PcP 03 55 16.5 -0.4**
comp=Z,19nm,0.8s,baz=267,slow=1.6,SNR=18
FINES LR LR 04 04 59.3
comp=Z,603nm,18.4s,baz=225,slow=36
**FINES FINESS Array B 31.80 27** P **P 03 52 25.8 -0.4**
**FIA1 FINESS Array S 31.80 27** IAmb IAmb 03 52 56.8
comp=Z,74nm,1.4s
**MMAI Mount Meron Ar 32.12 83** LR LR 04 07 04.7
comp=Z,138nm,21.3s,baz=60,slow=39
**STOK Stokkvaagen 32.12 12** *e*P **P 03 52 29.6 +0.8**
**ANN Anapa 32.26 61** *e*P **P 03 52 27.3 -3.0**
ANN *e*S **S 03 57 41.5 -1.6**
ANN pmax pmax
comp=Z,58nm,1.2s
ANN MLR MLR
comp=Z,364nm,8.0s
**KONS Konsvik 32.29 12** *e*P **P 03 52 31.4 +1.1**
**EIL Elat 32.80 90** LR LR 04 07 52.6
comp=Z,247nm,19.4s,baz=294,slow=40
**FAUS Fauske 33.47 13** *e*P **P 03 52 41.9 +1.2**
**OBN Obninsk 33.54 42**⇓*i*P **P 03 52 40.6 -0.8**
OBN *i* *PP **pP 03 52 42.2 -3.4**
OBN *i* *SP **sP 03 52 45.2 -2.1**
OBN PPP PPP 03 54 01.0
OBN 03 55 21.6
OBN *i*S **S 03 58 00.4 -2.4**
OBN SS **SnSn 04 00 09.0 +3.6**
OBN pmax pmax
comp=Z,55nm,1.7s
OBN MLR MLR
comp=Z,408nm,13.0s
**OBN Obninsk 33.54 42** P **P 03 52 40.0 -1.4**
**LOF Lofoten 33.84 11** *e*P **P 03 52 45.9 +2.1**
**SOC Sochi 33.90 63** *e*P **P 03 52 43.5 -1.2**
SOC *e*PPP PPP 03 54 05.5
SOC *e*S **S 03 58 09.2 +0.6**
SOC *e*SS **SnSn 04 00 11.5 -2.9**
SOC pmax pmax
comp=Z,28nm,0.7s
SOC MLR MLR
comp=Z,109nm,14.0s
**STEI Steigen 33.95 13** *e*P **P 03 52 47.0 +2.2**
**VSR Storozhevoye 34.09 50** *e*P **P 03 52 45.4 -0.9**
VSR pmax pmax
comp=Z,20nm,0.8s
**GUZR Guzeripl' 34.18 63***de*P **P 03 52 47.8 +0.6**
GUZR pmax pmax
comp=Z,65nm,0.8s
**VORR Voronezh 34.20 49** *e*P **P 03 52 47.4 +0.2**
VORR pmax pmax
comp=Z,39nm,1.6s
**LPSR Galich'ya Gora 34.22 47** *e*P **P 03 52 46.4 -0.9**
LPSR pmax pmax
comp=Z,30nm,0.8s
**RPOR Krasnaya Polya 34.29 63**⇑*e*P **P 03 52 48.7 +0.5**
RPOR pmax pmax
comp=Z,7.0nm,0.9s
**MOS Moscow 34.31 41** *e*P **P 03 52 46.5 -1.6**
MOS *e* 03 54 02.6
MOS *e* 03 55 23.2
MOS *e*S **S 03 58 08.7 -6.0**
MOS pmax pmax
comp=Z,76nm,1.5s
MOS MLR MLR
comp=Z,400nm,10.0s
MOS MLR MLR
comp=E,400nm,11.0s
**ARXR Arkhyz 35.03 63***de*P **P 03 52 56.6 +1.9**
ARXR pmax pmax
comp=Z,19nm,0.7s
**JMIC Jan Mayen 35.40 357** LR LR 04 07 24.2
comp=Z,896nm,19.4s,baz=266,slow=36
**VRH Novokhopyorsk 35.68 50** *e*P **P 03 52 58.6 -1.3**
VRH pmax pmax
comp=Z,30nm,0.7s
**SHA1 Shidzhatmaz 36.02 63***ce*P **P 03 53 03.8 +0.5**
**KIV Kislovodsk 36.03 62** *e*P **P 03 53 04.2 +1.0**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,116nm,16.0s
**KIV Kislovodsk 36.03 62** P **P 03 53 04.0 +0.8**
KIV P **P 03 53 04.0 +0.8**
KIV P **P 03 53 04.0 +0.8**
**TRO Tromso 36.10 13** *e*P **P 03 53 04.7 +1.4**
**NEY Neytrino 36.10 64**⇓*e*P **P 03 53 05.5 +1.6**
NEY pmax pmax
comp=Z,4.0nm,1.0s
**SCO Scoresbysund 36.17 350** P **P 03 53 04.7 +0.8**
SCO pmax pmax
comp=Z,62nm,1.0s
**SCO Scoresbysund 36.17 350** P **P 03 53 04.7 +0.8**
SCO IAmb IAmb 03 53 11.4
comp=Z,62nm,1.0s
**KBZ Khabaz 36.20 63** P **P 03 53 05.4 +0.9**
comp=Z,6.5nm,0.9s,baz=278,slow=7.5,SNR=9.0
**KBZ Khabaz 36.20 63***ce*P **P 03 53 05.3 +0.8**
KBZ pmax pmax
comp=Z,12nm,1.1s
**GOF Gofitskoye 36.24 61**⇑*i*P **P 03 53 05.3 +0.4**
GOF pmax pmax
comp=Z,166nm,1.8s
**JETT Jettan, Norway 36.32 14** *e*P **P 03 53 07.2 +1.9**
**PYA1 Pyatigorsk 36.32 62**⇑*e*P **P 03 53 06.9 +1.3**
**ISOG Isortoq, Green 36.41 336** *i*P **P 03 53 06.7 +0.6**
ISOG IAmb IAmb 03 53 09.1
comp=Z,22nm,0.7s
**KTK1 Kautokeino 36.47 16** *e*P **P 03 53 06.3 -0.2**
**KARS Kars 36.63 68** P **P 03 53 08.1 -0.3**
KARS pmax pmax
comp=Z,215nm,1.4s
**KARS Kars 36.63 68** P **P 03 53 08.1 -0.3**
**NRS Narsarsuaq 36.64 327** *i*P **P 03 53 08.7 +0.7**
NRS IAmb IAmb 03 53 10.5
comp=Z,22nm,1.0s
**ONI Oni 36.69 65** P **P 03 53 08.9 +0.1**
ONI pmax pmax
comp=Z,20nm,1.0s
**ONI Oni 36.69 65** P **P 03 53 08.9 +0.1**
**NCK Nalchik 36.72 63**⇓*i*P **P 03 53 10.7 +1.7**
NCK pmax pmax
comp=Z,20nm,0.9s
**AKH Akhalkalaki 36.84 67** ⇓P **P 03 53 09.9 -0.4**
**ZEI Tsey 37.00 64** *e*P **P 03 53 12.7 +1.1**
ZEI pmax pmax
comp=Z,26nm,1.8s
**KLMR Klimovskoe 37.05 34** *e*P **P 03 53 09.7 -1.8**
KLMR *e* 03 55 30.2
KLMR pmax pmax
comp=Z,57nm,1.2s
**KLMR Klimovskoe 37.05 34** *e*P **P 03 53 09.8 -1.8**
KLMR AMP 03 53 14.4
comp=Z,57nm,1.2s
KLMR *e*PcP **PcP 03 55 30.2 -1.7**
KLMR LQ LQ 04 04 56.4
KLMR LQ LQ 04 04 56.4
KLMR LR LR 04 06 34.2
**ARA0 ARCESS Array S 37.38 16** *e*P **P 03 53 15.8 +1.5**
**ARCES ARCESS Array B 37.38 16** P **P 03 53 16.0 +1.7**
comp=Z,9.4nm,0.7s,baz=208,slow=8.2,SNR=25
ARCES PcP **PcP 03 55 32.6 -0.3**
comp=Z,4.1nm,0.7s,baz=210,slow=1.6,SNR=8.6
ARCES LR LR 04 10 21.7
comp=Z,1μm,19.1s,baz=226,slow=39
**HAMF Hammerfest 37.86 14** *e*P **P 03 53 18.7 +0.4**
**IVI Ivigtut 37.89 326** P **P 03 53 18.9 +0.3**
**KEV Kevo 37.90 17** P **P 03 53 19.7 +1.1**
KEV pmax pmax
comp=Z,231nm,2.0s
**KEV Kevo 37.90 17** P **P 03 53 19.7 +1.1**
KEV IAmb IAmb 03 53 22.5
comp=Z,231nm,2.0s
**GNI Garni 37.96 68**⇓*e*P **P 03 53 20.4 +0.7**
GNI pmax pmax
comp=Z,32nm,1.7s
**GNI Garni 37.96 68** P **P 03 53 19.8 +0.1**
**GNI Garni 37.96 68** P **P 03 53 20.7 +1.0**
**GNI Garni 37.96 68** P **P 03 53 19.8 +0.1**

**DVE Vedeno 38.61 64***de*P **P 03 53 24.9 -0.2**
DVE pmax pmax
comp=Z,21nm,1.0s
**LVZ Lovozero 38.71 22**⇓*e*P **P 03 53 26.4 +0.9**
LVZ pmax pmax
comp=Z,49nm,0.8s
**LVZ Lovozero 38.71 22** P **P 03 53 26.4 +0.9**
**DY2G Dye2 39.41 335** *i*P **P 03 53 31.5 -0.1**
DY2G IAmb IAmb 03 53 34.7
comp=Z,12nm,0.6s
**DBG Daneborg 39.48 353** *i*P **P 03 53 33.9 +2.0**
DBG IAmb IAmb 03 53 37.8
comp=Z,8.7nm,0.6s
**MAK Makhachkala 39.62 64** *e*P P 03 53 26.1 -7.2
MAK pmax pmax
comp=Z,238nm,1.1s
MAK MLR MLR
comp=Z,168nm,12.0s
**PRGR Permogore 40.09 34** *e*P **P 03 53 35.3 -1.8**
PRGR *e* 03 55 40.5
PRGR pmax pmax
comp=Z,159nm,1.8s
**NUUK Nuuk 40.50 330** *i*P **P 03 53 40.1 -0.3**
NUUK IAmb IAmb 03 53 45.1
comp=Z,26nm,0.8s
**SUMG Summit 40.92 345** P **P 03 53 45.4 +1.1**
SUMG pmax pmax
comp=Z,38nm,0.9s
**SUMG Summit 40.92 345** *i*P **P 03 53 45.8 +1.5**
SUMG IAmb IAmb 03 53 49.9
comp=Z,24nm,0.8s
**SUMG Summit 40.92 345** P **P 03 53 45.4 +1.1**
**DRLN Deer Lake 41.15 306** P **P 03 53 46.2 +0.2**
DRLN IAmb IAmb 03 53 50.0
comp=Z,93nm,1.3s
**SFJD Kangerlussuaq 41.19 334** P **P 03 53 46.6 +0.6**
comp=Z,14nm,0.9s,baz=88,slow=7.8,SNR=4.0
SFJD LR LR 04 07 55.8
comp=Z,769nm,21.4s,baz=120,slow=32
**SFJD Kangerlussuaq 41.19 334** *i*P **P 03 53 46.9 +0.9**
SFJD IAmb IAmb 03 53 47.6
comp=Z,5.6nm,0.7s
**KIRV Kirov 41.23 39** P **P 03 53 45.6 -0.8**
comp=Z,18nm,0.6s,baz=274,slow=4.2,SNR=9.2
KIRV PcP **PcP 03 55 45.1 0.0**
comp=Z,26nm,0.7s,baz=107,slow=2.5,SNR=5.6
KIRV LR LR 04 11 54.9
comp=Z,385nm,18.8s,baz=259,slow=38
**KIRV Kirov 41.23 39***c i*P **P 03 53 45.4 -1.0**
**SPA0 Spitsbergen Ar 43.38 6** *e*P **P 03 54 07.6 +3.8**
**SPITS Spitsbergen Ar 43.38 6** P **P 03 54 05.6 +1.8**
comp=Z,23nm,0.9s,baz=173,slow=7.6,SNR=13
SPITS LR LR 04 12 35.0
comp=Z,597nm,19.9s,baz=96,slow=37
**KBS Kingsbay 43.76 4**⇓*e*P **P 03 54 09.7 +2.9**
KBS pmax pmax
comp=Z,35nm,0.8s
**RAYN Ar Rayn 43.93 92** P **P 03 54 10.0 +1.0**
RAYN pmax pmax
comp=Z,12nm,0.9s
**RAYN Ar Rayn 43.93 92** P **P 03 54 10.0 +1.0**
**RAYN Ar Rayn 43.93 92** P **P 03 54 10.3 +1.3**
**RAYN Ar Rayn 43.93 92** *i*P **P 03 54 10.3 +1.3**
SNR=8.8
**GBN Guysborough 44.21 301** P **P 03 54 11.5 +0.6**
GBN IAmb IAmb 03 54 13.2
comp=Z,130nm,1.4s
**ARU Arti 45.97 43** LR LR 04 14 20.3
comp=Z,186nm,19.0s,baz=272,slow=37
**ARU Arti 45.97 43***c i*P **P 03 54 24.3 -0.4**
ARU 03 56 01.3
ARU 03 56 11.8
ARU S **S 04 01 08.8 -0.1**
ARU SS **SS 04 04 31.4 -1.9**
ARU pmax pmax
comp=Z,34nm,0.7s
ARU MLR MLR
comp=Z,524nm,16.0s
**ARU Arti 45.97 43** P **P 03 54 23.9 -0.8**
ARU IAmb IAmb 03 56 02.6
comp=Z,39nm,0.8s
**AKTO Aktyubinsk 45.98 51** LR LR 04 14 08.5
comp=Z,160nm,21.9s,baz=309,slow=37
**AKTO Aktyubinsk 45.98 51** P **P 03 54 24.8 -0.1**
**NOR Nord 46.23 357** *i*P **P 03 54 26.6 +0.2**
**LMN Caledonia Moun 46.42 302** IAmb IAmb 03 54 32.2
comp=Z,55nm,0.9s
**NEEM North Greenlan 46.55 347** *i*P **P 03 54 29.5 +0.2**
NEEM IAmb IAmb 03 54 32.1
comp=Z,54nm,0.8s
**SCHQ Schefferville 46.69 315** P **P 03 54 31.0 +0.6**
comp=Z,7.7nm,0.6s,baz=76,slow=5.3,SNR=41
SCHQ LR LR 04 10 07.9
comp=Z,448nm,21.6s,baz=84,slow=31
**SCHQ Schefferville 46.69 315** IAmb IAmb 03 54 31.9
comp=Z,44nm,1.4s
**BATG Bathurst New B 47.03 304** P **P 03 54 33.4 +0.2**
BATG IAmb IAmb 03 54 34.6
comp=Z,60nm,1.2s
**SVE Sverdlovsk 47.11 42** *e*P **P 03 54 33.1 -0.5**
SVE pmax pmax
comp=Z,51nm,1.5s
**AB31 Akbulak array 47.37 53** *i*P **P 03 54 36.0 +0.2**
**ABKAR Akbulak array 47.37 53** P **P 03 54 36.2 +0.5**
**FRB Frobisher Bay 47.63 327** P **P 03 54 37.2 -0.4**
comp=Z,9.1nm,0.9s,baz=97,slow=8.6,SNR=15
FRB LR LR 04 11 03.9
comp=Z,1μm,21.2s,baz=94,slow=32
**LODK Lodwar 48.21 123** P **P 03 54 43.3 +0.5**
LODK IAmb IAmb 03 54 45.8
comp=Z,39nm,1.0s
**LODK Lodwar 48.21 123** P **P 03 54 44.8 +1.9**
SNR=20
**MBAR Mbarara 48.24 131** LR LR 04 15 32.3
comp=Z,859nm,18.5s,baz=312,slow=37
**MBAR Mbarara 48.24 131***c i*P **P 03 54 44.7 +1.6**
**MBAR Mbarara 48.24 131** P **P 03 54 43.4 +0.3**
MBAR IAmb IAmb 03 54 46.2
comp=Z,35nm,1.1s
**MBAR Mbarara 48.24 131** P **P 03 54 45.0 +1.9**
**ATD Arta Tunnel 48.29 108** LR LR 04 18 02.0
comp=Z,446nm,20.3s,baz=308,slow=40
**G65A Princeton 48.45 302** IAmb IAmb 03 54 48.2
comp=Z,46nm,0.8s
**GEYT Alibeck 48.60 68** P **P 03 54 47.2 +1.7**
comp=Z,2.9nm,0.5s,baz=254,slow=5.2,SNR=5.3
**D62A Allapoint, All 49.07 305** IAmb IAmb 03 54 50.5
comp=Z,41nm,1.1s
**PKME Peaks-Kenny Pk 49.62 302** P **P 03 54 53.8 +0.6**
baz=77
**TULEG Thule 49.82 344** *i*P **P 03 54 54.2 -0.1**
TULEG IAmb IAmb 03 54 57.2
comp=Z,11nm,0.9s
**TULEG Thule 49.82 344** P **P 03 54 54.8 +0.5**
**MZR Muzera 50.66 88** P **P 03 55 02.3 +0.9**
SNR=19
**MZR Muzera 50.66 88** *i*P **P 03 55 02.4 +1.0**
SNR=13
**H62A Milan 51.08 302** IAmb IAmb 03 55 06.0
comp=Z,50nm,1.2s
**AJN Ajban 51.16 86** *i*P **P 03 55 04.5 -0.6**
SNR=5.8
**NBCL Cascavel-CE 51.39 227** *e*P **P 03 55 08.1 +1.2**
**ASUD Al Ashush, Dub 51.41 85** P **P 03 55 08.0 +1.0**
SNR=11
ASUD P **P 03 55 08.0 +1.0**
SNR=11
**ASUD Al Ashush, Dub 51.41 85** *i*P **P 03 55 08.3 +1.2**
SNR=8.3
**SHME Shamm 51.44 83** P **P 03 55 06.5 -0.7**
**NBPV Pedro Velho 51.47 222** *e*P **P 03 55 09.2 +1.7**
**NAZ Nazwa, Dubai 51.52 85** P **P 03 55 09.0 +1.2**
SNR=8.4
**M65A Busby, Falmout 51.54 298** P **P 03 55 08.3 +0.6**
baz=73
**FAQ Al Faqa, Dubai 51.57 85** P **P 03 55 09.0 +0.8**
SNR=11
**FAQ Al Faqa, Dubai 51.57 85** *i*P **P 03 55 08.0 -0.2**
SNR=8.9
**BANOM Banah 51.62 83** P **P 03 55 09.3 +0.7**
**BANOM Banah 51.62 83** P **P 03 55 08.2 -0.4**
**BCX Boston College 51.69 299** IAmb IAmb 03 55 10.8
comp=Z,90nm,1.4s
**LBNH Lisbon 51.70 302** P **P 03 55 09.9 +1.0**
baz=74,SNR=7.2
**FFD Franklin Falls 51.72 301** IAmb IAmb 03 55 11.4

comp=Z,51nm,1.2s
**NBMO Morrinhos-CE 51.72 229** *e*P **P** 03 55 10.0 +0.7
**MASF Masafi 51.75 84** P **P** 03 55 10.1 +0.5
SNR=6.5
**MSFE Esma-Masafi 51.76 84** *i* P **P** 03 55 09.7 +0.1
SNR=5.6
**WES Weston 51.78 299** IAmb IAmb 03 55 11.6
comp=Z,55nm,1.2s
**HRV Adam Dziewonsk 51.92 299** P **P** 03 55 11.1 +0.6
baz=73
**HATD Hatta, Dubai 51.97 85** P **P** 03 55 12.0 +0.7
SNR=15
**HATD Hatta, Dubai 51.97 85** *i* P **P** 03 55 11.2 -0.1
SNR=9.5
**ASHO Ashiyiah 51.98 85** P **P** 03 55 11.3 0.0
SNR=13
**ASHO Ashiyiah 51.98 85** *i* P **P** 03 55 11.0 -0.3
SNR=13
**UOSS Minazif 51.98 85** P **P** 03 55 10.4 -0.8
UOSS IAmb IAmb 03 55 25.9
comp=Z,73nm,1.6s
**UOSS Minazif 51.98 85** P **P** 03 55 12.1 +0.9
**UOSS Minazif 51.98 85** *i* P **P** 03 55 10.8 -0.4
SNR=6.7
**ALNE Al Ain 52.02 86** P **P** 03 55 12.7 +1.2
SNR=22
**ALNE Al Ain 52.02 86** *i* P **P** 03 55 12.1 +0.6
SNR=11
**M63A Gales Ferry 52.59 298** IAmb IAmb 03 55 20.4
comp=Z,53nm,0.8s
**KMBO Kilima Mbogo 52.82 125** P **P** 03 55 20.0 +2.2
comp=Z,16nm,1.0s,baz=317,slow=7.7,SNR=30
KMBO LR LR 04 19 60.0
comp=Z,1μm,19.5s,baz=304,slow=39
**KMBO Kilima Mbogo 52.82 125** *ce*P **P** 03 55 20.3 +2.5
**KMBO Kilima Mbogo 52.82 125** P **P** 03 55 18.7 +0.8
**KMBO Kilima Mbogo 52.82 125** *i* P **P** 03 55 20.1 +2.3
SNR=20
**ARQ Araqi 52.97 86** P **P** 03 55 20.0 +1.3
SNR=19
**BRVK Borovoye 53.09 46** *ce*P **P** 03 55 19.5 +0.3
BRVK pmax pmax
comp=Z,62nm,1.5s
**BRVK Borovoye 53.09 46** P **P** 03 55 19.4 +0.3
BRVK IAmb IAmb 03 55 26.1
comp=Z,152nm,1.9s
**BRVK Borovoye 53.09 46** P **P** 03 55 19.9 +0.8
**NBLV Livramento - P 53.15 223** *e*P **P** 03 55 21.5 +1.5
**ACCN Adirondack Com 53.15 301** IAmb IAmb 03 55 21.5
comp=Z,74nm,1.8s
**NBPB Pedra_Branca-C 53.21 227** *e*P **P** 03 55 21.2 +0.8
**YLE Yale 53.26 298** IAmb IAmb 03 55 25.7
comp=Z,70nm,1.0s
**ABTO Aybut 53.32 94** P **P** 03 55 22.4 +1.1
SNR=6.6
ABTO P **P** 03 55 22.4 +1.1
SNR=6.6
**DOK Doka 53.34 93** P **P** 03 55 22.1 +0.8
SNR=8.2
**NCB Newcomb 53.36 302** P **P** 03 55 21.9 +0.7
**WHFO Wadi Hawf 53.41 94** P **P** 03 55 23.0 +1.0
SNR=7.4
**LONY Lake Ozonia 53.42 303** P **P** 03 55 22.2 +0.5
baz=73
**NBPS Pedro II - PI 53.43 230** *e*P **P** 03 55 22.9 +0.8
**HOQ Hoqain 53.50 85** P **P** 03 55 24.0 +1.5
SNR=9.3
**KSCT Kent School, K 53.52 299** IAmb IAmb 03 55 27.7
comp=Z,47nm,1.2s
**BSY Bisya 53.80 86** P **P** 03 55 26.0 +1.2
SNR=15
**EUNU Eureka 53.82 348** P **P** 03 55 26.1 +2.0
**RBK Rabkut 53.98 94** P **P** 03 55 27.5 +1.4
SNR=6.4
**ROSB Rosrio 54.00 233** *e*P **P** 03 55 26.7 +0.5
**PAL Palisades 54.05 298** P **P** 03 55 26.4 +0.1
baz=71
**CPNY Central Park 54.16 298** P **P** 03 55 27.5 +0.4
CPNY IAmb IAmb 03 55 31.7
comp=Z,54nm,1.1s
**BIDO Bidbid 54.19 85** P **P** 03 55 28.0 +0.5
SNR=11
**NBMA Muriti-CE 54.19 225** *e*P **P** 03 55 28.7 +1.1
**TRNY Table Rock, Ra 54.23 299** IAmb IAmb 03 55 32.8
comp=Z,48nm,1.0s
**KIBK Kibwezi 54.25 125** P **P** 03 55 29.4 +1.2
**KIBK Kibwezi 54.25 125** P **P** 03 55 30.4 +2.3
SNR=5.8
**SMDO Samad 54.34 86** P **P** 03 55 30.0 +1.1
SNR=17
**MDP Montagnes des 54.41 248** P **P** 03 55 30.3 +1.1
comp=Z,32nm,0.6s,baz=53,slow=6.7,SNR=21
MDP LR LR 04 14 56.5
comp=Z,584nm,20.7s,baz=32,slow=32
**DMTO DMTO 54.47 93** P **P** 03 55 30.3 +0.6
**ODNJ Ogdensburg 54.52 299** IAmb IAmb 03 55 34.3
comp=Z,30nm,0.9s
**BRNJ Basking Ridge 54.63 298** IAmb IAmb 03 55 35.4
comp=Z,34nm,0.9s
**JMDO Jabal Madar 54.72 86** P **P** 03 55 32.0 +0.6
SNR=19
**NBAN Anadia - AL 54.72 221** *e*P **P** 03 55 32.4 +1.1
**WSAR Wadi Sarin 54.73 85** LR LR 04 22 34.4
comp=Z,135nm,20.2s,baz=283,slow=40
**BINY Binghamton 55.14 300** IAmb IAmb 03 55 39.8
comp=Z,37nm,0.9s
**BINY Binghamton 55.14 300** P **P** 03 55 35.4 +1.2
baz=71,SNR=8.8
**KSPA Keystone Colle 55.19 299** IAmb IAmb 03 55 39.7
comp=Z,31nm,1.0s
**MHTO MHTO 55.27 88** P **P** 03 55 36.1 +0.7
SNR=34
**BRZS Berezniki 55.30 50** *e*P **P** 03 55 34.4 -0.8
BRZS pmax pmax
comp=Z,60nm,0.9s
**BRZS Berezniki 55.30 50** *e*P **P** 03 55 34.5 -0.8
comp=Z,60nm,0.9s,baz=50
**WBK Wadi Bani Khal 55.30 86** P **P** 03 55 37.0 +1.3
SNR=16
**BIM Bigot 55.40 263** P **P** 03 55 37.3 +0.9
**N59A State Game Lan 55.41 299** IAmb IAmb 03 55 41.4
comp=Z,72nm,1.6s
**N59A State Game Lan 55.41 299** P **P** 03 55 36.8 +0.6
baz=70
**DQM DQM 55.45 89** P **P** 03 55 37.0 +0.2
SNR=6.4
**DELO Deloro Mine 55.52 303** IAmb IAmb 03 55 41.5
comp=Z,30nm,1.0s
**BRLS Borolday 55.52 58** *e*P **P** 03 55 35.1 -1.9
**BRLS Borolday 55.52 58** *e*P **P** 03 55 35.2 -1.9
baz=59
**OTUK Ortayu 55.58 52** P **P** 03 55 37.8 +0.5
**JLN Jalan Bani Buh 55.88 86** P **P** 03 55 40.1 +0.3
SNR=14
**N58A Sunbury 56.11 299** IAmb IAmb 03 55 46.6
comp=Z,47nm,1.1s
**MVL Millersville 56.14 298** IAmb IAmb 03 55 47.1
comp=Z,39nm,0.9s
**M57A Sunshine Farm, 56.23 300** IAmb IAmb 03 55 47.3
comp=Z,53nm,1.1s
**RES Resolute Bay 56.24 341** P **P** 03 55 43.1 +1.5
comp=Z,36nm,0.9s,baz=65,slow=4.1,SNR=80
RES LR LR 04 18 02.0
comp=Z,324nm,20.8s,baz=93,slow=34
**RES Resolute Bay 56.24 341** IAmb IAmb 03 55 44.1
comp=Z,44nm,0.9s
**L56A Greenwood 56.26 301** IAmb IAmb 03 55 47.2
comp=Z,37nm,1.1s
**TMAB Tom-Au,PA,Br 56.27 237** *e*P **P** 03 55 43.3 +0.7
**PAGS Pennsylvania G 56.33 298** IAmb IAmb 03 55 47.5
comp=Z,50nm,1.1s
**SADO Sadowa 56.47 304** LR LR 04 17 11.8
comp=Z,742nm,21.5s,baz=78,slow=33
**SADO Sadowa 56.47 304** IAmb IAmb 03 55 48.2
comp=Z,36nm,1.1s
**DZA Taraz 56.60 58** *e*P **P** 03 55 43.7 -1.0
**DZA Taraz 56.60 58** *e*P **P** 03 55 43.7 -1.0
baz=58
**NBLA Lagarto - SE 56.63 221** *e*P **P** 03 55 45.3 +0.2
**SSPA Standing Stone 57.02 299** P **P** 03 55 47.7 +0.1
SSPA IAmb IAmb 03 55 52.6
comp=Z,47nm,1.1s
**SSPA Standing Stone 57.02 299** P **P** 03 55 48.5 +0.9
baz=69
**MTP Monte Pirata 57.13 269** P **P** 03 55 48.9 +0.1
MTP IAmb IAmb 03 55 51.2
comp=Z,40nm,1.0s

**M55A Ridgway 57.34 300** IAmb IAmb 03 55 55.0
comp=Z,74nm,1.3s
**NRIK Noril'sk 57.44 25** P **P** 03 55 51.7 +1.5
comp=Z,14nm,0.9s,baz=280,slow=5.1,SNR=20
NRIK LR LR 04 21 57.8
comp=Z,876nm,20.5s,baz=302,slow=38
**NRIK Noril'sk 57.44 25** *c* *i*P **P** 03 55 51.4 +1.2
NRIK pmax pmax
comp=Z,41nm,1.3s
**NRIK Noril'sk 57.44 25** P **P** 03 55 51.2 +1.0
**T60A Surry 57.47 295** IAmb IAmb 03 55 56.5
comp=Z,36nm,0.8s
**CBN Corbin Frederi 57.54 296** IAmb IAmb 03 55 56.2
comp=Z,42nm,1.1s
**CBN Corbin Frederi 57.54 296** P **P** 03 55 51.9 +0.6
baz=68
**PDPR Patillas Dam, 57.55 270** P **P** 03 55 52.8 +1.1
PDPR IAmb IAmb 03 55 56.9
comp=Z,60nm,1.1s
**SJG San Juan 57.61 270** LR LR 04 15 35.6
comp=Z,208nm,21.6s,baz=75,slow=31
**O56A Blue Knob Stat 57.63 299** P **P** 03 55 53.2 +1.1
baz=68,SNR=7.5
**MCPB Macapa, AP 57.64 242** *e*P **P** 03 55 52.8 +0.5
**BTLS Baital 57.72 55** *e*P **P** 03 55 51.5 -1.0
BTLS pmax pmax
comp=Z,35nm,1.4s
**BTLS Baital 57.72 55** *e*P **P** 03 55 51.5 -1.0
comp=Z,35nm,1.4s,baz=55
**NBPN Ponto Novo - B 57.84 224** *e*P **P** 03 55 54.2 +0.6
**M54A Oil Creek Stat 57.95 301** IAmb IAmb 03 55 59.1
comp=Z,82nm,1.6s
**M54A Oil Creek Stat 57.95 301** P **P** 03 55 55.3 +1.0
baz=69,SNR=7.3
**ERPA Erie 57.96 301** IAmb IAmb 03 55 57.9
comp=Z,41nm,1.1s
**ERPA Erie 57.96 301** P **P** 03 55 54.8 +0.5
baz=69
**AOPR Arecibo Observ 57.98 270** P **P** 03 55 55.3 +0.6
**R58B Mineral 58.00 296** P **P** 03 55 55.4 +0.8
R58B IAmb IAmb 03 55 59.6
comp=Z,39nm,1.1s
**ICMP Isla Caja de M 58.03 270** P **P** 03 55 55.0 0.0
ICMP IAmb IAmb 03 55 58.6
comp=Z,57nm,1.0s
**KBL Kabul 58.05 68** P **P** 03 55 54.0 -1.3
KBL pmax pmax
comp=Z,7.0nm,0.7s
**KBL Kabul 58.05 68** P **P** 03 55 54.0 -1.3
**KBL Kabul 58.05 68** P **P** 03 55 55.0 -0.3
SNR=5.0
**JSRW J. Sargeant Re 58.10 296** P **P** 03 55 56.0 +0.7
**T59A Double "B" Far 58.14 295** P **P** 03 55 56.1 +0.5
**TSUM Tsumeb 58.20 156** LR LR 04 21 54.2
comp=Z,977nm,19.2s,baz=334,slow=37
**TSUM Tsumeb 58.20 156** P **P** 03 55 56.1 -0.2
**ALLY Alegheny Colle 58.24 301** IAmb IAmb 03 56 00.9
comp=Z,32nm,1.0s
**EKS2 Erkin-Say 58.37 58** P **P** 03 55 58.5 +1.2
SNR=33
**N54A Moraine State 58.38 300** P **P** 03 55 57.9 +0.6
N54A IAmb IAmb 03 56 07.9
comp=Z,63nm,1.6s
**N54A Moraine State 58.38 300** P **P** 03 55 57.5 +0.3
baz=68
**MLPR Magueyes Islan 58.41 270** P **P** 03 55 57.8 +0.1
**CRPR Cabo Rojo, PR 58.44 270** P **P** 03 55 58.9 +1.0
**AML Almayashu 58.51 58** P **P** 03 55 59.8 +1.1
SNR=15
**AML Almayashu 58.51 58** P **P** 03 55 59.1 +0.5
**AML Almayashu 58.51 58** *i* P **P** 03 55 59.2 +0.5
SNR=16
**Q56A Snyder Ridge, 58.53 298** P **P** 03 55 59.1 +0.8
Q56A IAmb IAmb 03 56 02.3
comp=Z,24nm,0.9s
**U59A Littleton 58.56 294** P **P** 03 55 59.6 +1.1
U59A IAmb IAmb 03 56 03.6
comp=Z,39nm,1.1s
**USP Ospenovka 58.65 57** P **P** 03 55 59.2 +0.1
SNR=7.6
**SGDS Sogindy 58.67 57** *e*P **P** 03 55 59.2 -0.1
**M53A WI Miller and 58.69 301** P **P** 03 56 00.3 +1.0
M53A IAmb IAmb 03 56 03.5
comp=Z,43nm,1.2s
**M53A WI Miller and 58.69 301** P **P** 03 56 00.1 +0.7
baz=68
**KURK Kurchatov 58.70 47** P **P** 03 55 59.4 +0.1
**KURK Kurchatov 58.70 47** P **P** 03 55 58.8 -0.5
**KURK Kurchatov 58.70 47** P **P** 03 55 59.8 +0.4
**MCWV Mont Chateau 58.77 299** IAmb IAmb 03 56 03.9
comp=Z,27nm,1.0s
**MCWV Mont Chateau 58.77 299** P **P** 03 56 00.8 +0.9
baz=68,SNR=8.0
**S57A Dark Hollow, R 58.86 296** P **P** 03 56 01.7 +1.0
S57A IAmb IAmb 03 56 05.6
comp=Z,33nm,1.1s
**AAK Ala-Archa 58.87 57** LR LR 04 24 23.7
comp=Z,323nm,19.4s,baz=324,slow=39
**AAK Ala-Archa 58.87 57** P **P** 03 56 01.9 +1.0
SNR=20
**AAK Ala-Archa 58.87 57** *c* *i*P **P** 03 56 01.5 +0.6
AAK pmax pmax
comp=Z,22nm,1.0s
**AAK Ala-Archa 58.87 57** P **P** 03 56 01.8 +1.0
**AAK Ala-Archa 58.87 57** P **P** 03 56 02.1 +1.3
**AAK Ala-Archa 58.87 57** *i* P **P** 03 56 01.2 +0.3
SNR=28
**CHMS Chumysh 58.92 57** P **P** 03 56 01.7 +0.7
SNR=19
**LSZ Lusaka 58.98 144** LR LR 04 22 11.8
comp=Z,647nm,18.4s,baz=336,slow=37
**N53A Lisbon 59.04 300** IAmb IAmb 03 56 14.6
comp=Z,48nm,1.4s
**UCH Uchtor 59.04 58** P **P** 03 56 03.5 +1.1
SNR=29
**CNNC Cliffs of the 59.08 293** P **P** 03 56 03.2 +1.0
CNNC IAmb IAmb 03 56 07.0
comp=Z,38nm,0.9s
**CNNC Cliffs of the 59.08 293** P **P** 03 56 03.1 +0.9
baz=66
**M52A Chesterland 59.12 301** IAmb IAmb 03 56 12.7
comp=Z,46nm,1.2s
**E46A Sault Ste Mari 59.33 307** IAmb IAmb 03 56 07.1
comp=Z,30nm,1.0s
**T57A Hurt 59.38 296** IAmb IAmb 03 56 09.5
comp=Z,62nm,1.2s
**R55A Marlinton 59.50 297** P **P** 03 56 05.8 +0.7
R55A IAmb IAmb 03 56 15.9
comp=Z,41nm,1.4s
**O53A New Philadelph 59.51 300** IAmb IAmb 03 56 09.5
comp=Z,26nm,1.0s
**O53A New Philadelph 59.51 300** P **P** 03 56 06.2 +1.1
baz=67,SNR=8.5
**TKM2 Tokmak 2 59.52 57** P **P** 03 56 05.7 +0.3
SNR=13
**TKM2 Tokmak 2 59.52 57** P **P** 03 56 05.2 -0.2
**K50A Casco 59.53 303** IAmb IAmb 03 56 08.7
comp=Z,59nm,1.2s
**KUU Kurty 59.66 56** *e*P **P** 03 56 04.8 -1.3
KUU pmax pmax
comp=Z,59nm,1.1s
**KUU Kurty 59.66 56** *e*P **P** 03 56 04.9 -1.3
comp=Z,59nm,1.1s,baz=56
**Q54A Coxs Mills 59.74 298** IAmb IAmb 03 56 10.7
comp=Z,37nm,1.1s
**SEM Semipalatinsk 59.78 47** *e*P **P** 03 56 05.7 -1.4
SEM pmax pmax
comp=Z,35nm,0.8s
**SEM Semipalatinsk 59.78 47** *e*P **P** 03 56 05.7 -1.4
comp=Z,35nm,0.8s,baz=48
**GDU01 Guandu, BA 59.85 221** *e*P **P** 03 56 07.7 +0.1
**P53A Whipple 59.94 299** IAmb IAmb 03 56 11.9
comp=Z,60nm,1.4s
**O52A Adamsville 60.01 300** P **P** 03 56 09.6 +1.1
O52A IAmb IAmb 03 56 12.8
comp=Z,44nm,1.1s
**N51A Ashland 60.07 301** IAmb IAmb 03 56 12.5
comp=Z,41nm,0.8s
**GLMI Grayling 60.10 306** P **P** 03 56 09.2 +0.1
GLMI IAmb IAmb 03 56 12.5
comp=Z,30nm,0.8s
**GLMI Grayling 60.10 306** P **P** 03 56 09.9 +0.8
baz=68
**CHKK Chushkaly 60.11 55** *e*P **P** 03 56 08.8 -0.4
baz=56
**BLA Blacksburg 60.15 296** P **P** 03 56 10.6 +1.0

BLA pmax pmax
comp=Z,39nm,1.2s
**BLA Blacksburg 60.15 296** P **P** 03 56 10.6 +1.0
BLA IAmb IAmb 03 56 14.4
comp=Z,39nm,1.2s
**BLA Blacksburg 60.15 296** P **P** 03 56 10.6 +1.0
baz=66
**PRPB Parauapebas 60.20 236** *e*P **P** 03 56 10.6 +0.5
**ULHL Ulahol 60.22 57** P **P** 03 56 11.1 +0.9
SNR=12
**MALB Monte Alegre 60.26 243** *e*P **P** 03 56 11.2 +0.6
**AAA Alma-Ata 60.31 56** *e*P **P** 03 56 10.7 +0.1
**AAA Alma-Ata 60.31 56** *e*P **P** 03 56 10.8 +0.1
baz=56
**Y59A Loris 60.34 292** P **P** 03 56 12.0 +1.2
**M50A Fremont 60.34 302** P **P** 03 56 11.7 +0.8
M50A IAmb IAmb 03 56 14.5
comp=Z,24nm,0.9s
**TNSS Tian-Shan 60.39 56** *e*P **P** 03 56 11.2 -0.4
baz=56
**P52A Corning 60.41 299** P **P** 03 56 12.2 +1.0
baz=66,SNR=23
**MDOK Medeo 60.41 56** *e*P **P** 03 56 10.3 -1.2
**MDOK Medeo 60.41 56** *e*P **P** 03 56 10.3 -1.2
baz=56
**AAM Ann Arbor 60.42 303** P **P** 03 56 11.6 +0.3
AAM pmax pmax
comp=Z,32nm,1.2s
**AAM Ann Arbor 60.42 303** P **P** 03 56 11.6 +0.3
AAM IAmb IAmb 03 56 17.2
comp=Z,32nm,1.2s
**AAM Ann Arbor 60.42 303** P **P** 03 56 11.9 +0.6
baz=67
**X58A Rowland 60.45 293** IAmb IAmb 03 56 16.9
comp=Z,46nm,1.2s
**U56A King 60.48 295** IAmb IAmb 03 56 16.9
comp=Z,38nm,1.4s
**ARXS Arharly 60.53 55** *e*P **P** 03 56 12.3 +0.1
**S54A Dingess, Beckl 60.56 297** IAmb IAmb 03 56 16.7
comp=Z,54nm,1.4s
**W57A Gilead 60.69 294** IAmb IAmb 03 56 18.1
comp=Z,28nm,1.1s
**G45A Suttons Bay 60.70 306** P **P** 03 56 13.5 +0.3
**SMTB Santa Maria do 60.74 232** *e*P **P** 03 56 14.9 +1.1
**ACSO Alum Creek Sta 60.77 300** P **P** 03 56 14.8 +1.1
baz=66,SNR=20
**Q52A Bidwell 60.77 299** IAmb IAmb 03 56 17.8
comp=Z,63nm,1.2s
**NBIT Itapeh - BA 60.78 220** *e*P **P** 03 56 15.8 +1.8
**R53A Hurricane 60.80 298** IAmb IAmb 03 56 17.6
comp=Z,29nm,0.9s
**E43A Lone Tree Farm 61.06 308** IAmb IAmb 03 56 19.9
comp=Z,28nm,0.8s
**L48A N Adams 61.09 303** P **P** 03 56 16.0 +0.1
**KSH Kashi 61.11 60** P **P** 03 56 17.0 +0.7
KSH sP sP 03 56 22.6 +0.5
KSH PP **PP** 03 58 31.3 +0.7
KSH S **S** 04 04 30.4 -4.7
KSH pmax pmax
comp=Z,62nm,1.2s
KSH pmax pmax
comp=Z,370nm,3.3s
KSH LR LR
comp=Z,310nm,14.9s
KSH LR LR
comp=Z,310nm,12.6s
KSH LR LR
comp=Z,400nm,10.5s
**P51A Williamsport 61.12 300** IAmb IAmb 03 56 19.8
comp=Z,37nm,0.8s
**ZAA0 Zalesovo Array 61.13 42** P **P** 03 56 15.7 -0.2
**ZALV Zalesovo Beam 61.13 42** P **P** 03 56 16.0 +0.1
comp=Z,16nm,0.7s,baz=294,slow=6.9,SNR=54
ZALV LR LR 04 25 03.5
comp=Z,308nm,18.2s,baz=302,slow=38
**ZALV Zalesovo Beam 61.13 42** P **P** 03 56 16.0 +0.1
**CMC01 Camacan, BA 61.19 220** *e*P **P** 03 56 17.8 +1.1
**BIRD Birdtown, Kers 61.25 294** IAmb IAmb 03 56 21.9
comp=Z,29nm,1.2s
**V55A Taylorsville 61.30 295** IAmb IAmb 03 56 22.4
comp=Z,43nm,1.4s
**N49A Columbus Grove 61.33 302** IAmb IAmb 03 56 20.7
comp=Z,43nm,1.1s
**ZHN Zhinishke 61.34 56** *e*P **P** 03 56 16.9 -0.8
**ZHN Zhinishke 61.34 56** *e*P **P** 03 56 17.0 -0.8
baz=56
**SATY Saty 61.37 56** *e*P **P** 03 56 16.8 -1.1
**SATY Saty 61.37 56** *e*P **P** 03 56 16.9 -1.1
baz=56
**KPKS Kokpek 61.39 55** *e*P **P** 03 56 16.8 -1.2
KPKS pmax pmax
comp=Z,43nm,1.5s
**KPKS Kokpek 61.39 55** *e*P **P** 03 56 16.9 -1.2
comp=Z,42nm,1.5s,baz=55
**U54A Nelsons Funny 61.46 296** IAmb IAmb 03 56 22.5
comp=Z,48nm,1.2s
**Y57A Sumter 61.47 293** P **P** 03 56 19.5 +1.0
Y57A IAmb IAmb 03 56 23.5
comp=Z,25nm,1.1s
**I45A Fountain 61.47 305** P **P** 03 56 17.8 -0.7
I45A IAmb IAmb 03 56 34.5
comp=Z,34nm,0.9s
**NIL Nilore 61.59 67** P **P** 03 56 19.5 0.0
NIL pmax pmax
comp=Z,60nm,1.1s
**NIL Nilore 61.59 67** P **P** 03 56 19.5 0.0
**NIL Nilore 61.59 67** P **P** 03 56 20.2 +0.8
**KMSC Kings Mountain 61.68 295** IAmb IAmb 03 56 24.3
comp=Z,24nm,1.1s
**KMSC Kings Mountain 61.68 295** P **P** 03 56 20.8 +0.8
baz=64,SNR=7.8
**NHSC New Hope 61.70 292** P **P** 03 56 21.4 +1.2
**NHSC New Hope 61.70 292** P **P** 03 56 20.9 +0.7
baz=64
**UZB Uzynbulak 61.75 55** *e*P **P** 03 56 18.7 -1.8
UZB pmax pmax
comp=Z,37nm,1.5s
**UZB Uzynbulak 61.75 55** *e*P **P** 03 56 18.8 -1.8
comp=Z,37nm,1.5s,baz=56
**D41A Chassel 61.79 309** IAmb IAmb 03 56 25.2
comp=Z,44nm,1.1s
**SDBA SAO DESIDERIO 61.82 227** *e*P **P** 03 56 21.5 +0.4
**PDGK Podgornoye 61.99 55** P **P** 03 56 22.0 -0.1
**F42A Maple Grove Fa 62.03 308** IAmb IAmb 03 56 28.0
comp=Z,43nm,1.3s
**BOAV Boa Vista 62.16 251** *e*P **P** 03 56 24.1 +0.7
**PAULI Pauline 62.18 294** IAmb IAmb 03 56 28.3
comp=Z,33nm,1.3s
**MAKZ Makanchi 62.20 51** P **P** 03 56 23.3 -0.1
MAKZ pmax pmax
comp=Z,123nm,1.0s
**MAKZ Makanchi 62.20 51** P **P** 03 56 23.3 -0.1
**P49A Miami Univ. Ec 62.27 300** IAmb IAmb 03 56 28.0
comp=Z,19nm,0.8s
**P49A Miami Univ. Ec 62.27 300** P **P** 03 56 23.8 -0.1
baz=65
**S51A Beattyville 62.27 298** IAmb IAmb 03 56 28.8
comp=Z,21nm,1.0s
**O48B Farmland 62.27 301** P **P** 03 56 24.2 +0.3
baz=65,SNR=10
**GUA01 Guaratinga, BA 62.36 220** *e*P **P** 03 56 25.2 +0.6
**N47A Urbana 62.39 302** IAmb IAmb 03 56 27.6
comp=Z,41nm,0.9s
**MK31 Makanchi Array 62.41 51** P **P** 03 56 24.8 +0.1
**MKAR Makanchi Array 62.41 51** P **P** 03 56 25.1 +0.4
comp=Z,90nm,0.8s,baz=287,slow=5.6,SNR=707
MKAR LR LR 04 24 24.9
comp=Z,228nm,18.1s,baz=309,slow=37
**MKAR Makanchi Array 62.41 51** P **P** 03 56 25.3 +0.6
**R50A Paris 62.52 299** IAmb IAmb 03 56 30.2
comp=Z,20nm,0.8s
**COWI Conover 62.53 309** IAmb IAmb 03 56 29.9
comp=Z,24nm,0.9s
**V53A Saluda 62.55 296** IAmb IAmb 03 56 30.7
comp=Z,41nm,1.6s
**TZTN Tazewell 62.70 297** IAmb IAmb 03 56 30.9
comp=Z,32nm,1.2s
**TZTN Tazewell 62.70 297** P **P** 03 56 27.7 +0.8
baz=64
**HODGE Hodges 62.77 294** IAmb IAmb 03 56 33.0
comp=Z,80nm,1.9s
**P48A Milroy 62.80 300** IAmb IAmb 03 56 31.2
comp=Z,30nm,0.8s
**V52A Sevierville 63.05 296** P **P** 03 56 28.6 -0.5
V52A IAmb IAmb 03 57 12.7
comp=Z,27nm,1.4s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ITTB | Itaituba | | 63.05 242 | *eP* | P | 03 56 29.5 | +0.2 | | |
| R49A | Shelbyville | | 63.12 299 | P | P | 03 56 30.2 | +0.6 | | |
| R49A | | | | IAmb | IAmb | 03 56 34.1 | | | |
| | comp=Z,34nm,0.8s | | | | | | | | |
| EYMN | Ely | | 63.25 311 | IAmb | IAmb | 03 56 34.3 | | | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| EYMN | Ely | | 63.25 311 | P | P | 03 56 30.6 | +0.3 | | |
| | baz=66,SNR=7.3 | | | | | | | | |
| TKL | Tuckaleechee C | | 63.26 296 | LR | LR | 04 22 56.9 | | | |
| | comp=Z,436nm,18.5s,baz=73,slow=35 | | | | | | | | |
| TKL | Tuckaleechee C | | 63.26 296 | IAmb | IAmb | 03 56 44.9 | | | |
| | comp=Z,92nm,1.9s | | | | | | | | |
| I42A | Draeger Farm, | | 63.30 306 | IAmb | IAmb | 03 56 35.1 | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| L44A | Lake County Fo | | 63.35 304 | P | P | 03 56 31.4 | +0.4 | | |
| | baz=65 | | | | | | | | |
| G40A | Rib Lake | | 63.55 308 | IAmb | IAmb | 03 56 34.1 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| SFIN | Lafayette | | 63.57 302 | P | P | 03 56 32.5 | +0.1 | | |
| | baz=64,SNR=5.6 | | | | | | | | |
| JANB | Januaria | | 63.57 225 | *eP* | P | 03 56 33.0 | +0.2 | | |
| NAN01 | Guarapari, ES | | 63.58 219 | *eP* | P | 03 56 33.5 | +0.9 | | |
| V51A | Loudon | | 63.61 296 | IAmb | IAmb | 03 56 36.5 | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| W52A | Murphy | | 63.62 296 | IAmb | IAmb | 03 56 34.5 | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| PEXB | Peixe | | 63.66 230 | *eP* | P | 03 56 34.1 | +0.8 | | |
| BLO | Bloomington | | 63.69 301 | IAmb | IAmb | 03 56 37.5 | | | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| PTGA | Pitinga | | 63.74 248 | LR | LR | 04 21 02.1 | | | |
| | comp=Z,248nm,19.8s,baz=46,slow=33 | | | | | | | | |
| ZSN | Zaisan | | 63.74 49 | *eP* | P | 03 56 32.6 | -0.9 | | |
| ZSN | | | | pmax | pmax | | | | |
| | comp=Z,58nm,1.0s | | | | | | | | |
| ZSN | Zaisan | | 63.74 49 | *eP* | P | 03 56 32.7 | -0.9 | | |
| | comp=Z,58nm,1.0s,baz=49 | | | | | | | | |
| CPCT | Cooper Cave | | 63.89 296 | IAmb | IAmb | 03 56 36.4 | | | |
| | comp=Z,32nm,1.3s | | | | | | | | |
| WCI | Wyandotte Cave | | 63.94 300 | P | P | 03 56 34.9 | -0.1 | | |
| WCI | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| WCI | Wyandotte Cave | | 63.94 300 | P | P | 03 56 34.9 | -0.1 | | |
| WCI | | | | IAmb | IAmb | 03 56 39.2 | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| WCI | Wyandotte Cave | | 63.94 300 | P | P | 03 56 35.3 | +0.3 | | |
| | baz=64 | | | | | | | | |
| P46A | Rosedale | | 63.97 301 | IAmb | IAmb | 03 56 38.9 | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| THN | Thein Dam | | 63.98 68 | *eP* | P | 03 56 35.2 | -0.1 | | |
| GOGA | Godfrey | | 64.03 294 | P | P | 03 56 36.7 | +1.0 | | |
| | baz=63 | | | | | | | | |
| Y52A | Lilburn | | 64.27 294 | IAmb | IAmb | 03 56 42.3 | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| DGZ | Jazzator, Alta | | 64.32 46 | *c iP* | P | 03 56 38.3 | +0.8 | | |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,55nm,1.0s | | | | | | | | |
| U49A | Red Boiling Sp | | 64.33 298 | IAmb | IAmb | 03 56 42.1 | | | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| I40A | Norwalk | | 64.41 307 | IAmb | IAmb | 03 56 39.6 | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| B35A | Bob, Littlefor | | 64.42 312 | IAmb | IAmb | 03 56 41.8 | | | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| KRAR | Krasnoyarsk | | 64.52 38 | *eP* | P | 03 56 38.3 | -0.2 | | |
| X51A | Calhoun | | 64.54 295 | IAmb | IAmb | 03 56 40.5 | | | |
| | comp=Z,36nm,1.3s | | | | | | | | |
| W50A | Signal Mountai | | 64.58 296 | IAmb | IAmb | 03 56 42.7 | | | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| JFWS | Jewell Farm | | 64.59 306 | P | P | 03 56 39.3 | +0.1 | | |
| | baz=64 | | | | | | | | |
| O44A | Mansfield | | 64.61 302 | IAmb | IAmb | 03 56 43.3 | | | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| NPGB | Novo Progresso | | 64.64 240 | *eP* | P | 03 56 39.9 | 0.0 | | |
| SJMB | Sao Joao De Ma | | 64.84 220 | *eP* | P | 03 56 41.3 | +0.3 | | |
| ULM | Lac du Bonnet | | 64.86 315 | P | P | 03 56 41.1 | +0.2 | | |
| | comp=Z,20nm,0.9s,baz=61,slow=6.1,SNR=16 | | | | | | | | |
| ULM | | | | LR | LR | 04 21 59.4 | | | |
| | comp=Z,385nm,20.4s,baz=65,slow=33 | | | | | | | | |
| ULM | Lac du Bonnet | | 64.86 315 | IAmb | IAmb | 03 56 44.5 | | | |
| | comp=Z,47nm,1.1s | | | | | | | | |
| CLTN | Cedars of Leba | | 64.92 297 | IAmb | IAmb | 03 56 42.6 | | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| RIB01 | Linhares ES | | 64.94 219 | *eP* | P | 03 56 42.1 | +0.5 | | |
| DWPF | Disney Wildern | | 64.95 288 | P | P | 03 56 42.2 | +0.5 | | |
| DWPF | Disney Wildern | | 64.95 288 | P | P | 03 56 42.9 | +1.1 | | |
| | baz=61 | | | | | | | | |
| HDIL | Hopedale | | 65.00 303 | IAmb | IAmb | 03 56 45.7 | | | |
| | comp=Z,27nm,0.8s | | | | | | | | |
| HDIL | Hopedale | | 65.00 303 | P | P | 03 56 41.7 | -0.2 | | |
| | baz=63,SNR=5.5 | | | | | | | | |
| USIN | University of | | 65.03 300 | IAmb | IAmb | 03 56 43.2 | | | |
| | comp=Z,60nm,1.3s | | | | | | | | |
| SWET | Sewanee | | 65.03 296 | IAmb | IAmb | 03 56 46.3 | | | |
| | comp=Z,69nm,1.6s | | | | | | | | |
| TIGA | Tifton | | 65.03 292 | P | P | 03 56 43.6 | +1.4 | | |
| | baz=62,SNR=6.1 | | | | | | | | |
| T47A | Sharon Grove | | 65.07 299 | P | P | 03 56 42.0 | -0.4 | | |
| T47A | | | | IAmb | IAmb | 03 56 46.5 | | | |
| | comp=Z,39nm,0.8s | | | | | | | | |
| FPAL | Fort Paine | | 65.10 296 | IAmb | IAmb | 03 56 45.9 | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| A36M | Sachs Harbour | | 65.18 343 | P | P | 03 56 44.0 | +1.6 | | |
| | baz=50,SNR=86 | | | | | | | | |
| SPMN | Marine on St. | | 65.23 309 | IAmb | IAmb | 03 56 47.1 | | | |
| | comp=Z,46nm,1.2s | | | | | | | | |
| SPMN | Marine on St. | | 65.23 309 | P | P | 03 56 43.4 | +0.1 | | |
| | baz=64,SNR=11 | | | | | | | | |
| 152A | Waverly Hall | | 65.31 293 | IAmb | IAmb | 03 56 49.2 | | | |
| | comp=Z,61nm,1.3s | | | | | | | | |
| Z51A | Franklin | | 65.34 294 | IAmb | IAmb | 03 56 49.3 | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| F36A | Milaca | | 65.40 310 | IAmb | IAmb | 03 56 45.7 | | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| V48A | Smith Brothers | | 65.43 297 | IAmb | IAmb | 03 56 48.9 | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| SNDB | Serra Nova Dou | | 65.46 233 | *eP* | P | 03 56 46.2 | +1.1 | | |
| Q44A | Meyer Farm, Va | | 65.55 301 | IAmb | IAmb | 03 56 48.9 | | | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| P43A | Skaggs, Pawnee | | 65.56 302 | IAmb | IAmb | 03 56 49.2 | | | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| L40A | Anamosa | | 65.62 305 | IAmb | IAmb | 03 56 48.3 | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| SMLA | Simla | | 65.68 68 | *eP* | P | 03 56 45.4 | -1.0 | | |
| SMLA | | | | IAmb | IAmb | 03 56 47.9 | | | |
| | comp=Z,38nm,0.6s | | | | | | | | |
| AGMN | Agassiz Nation | | 65.73 313 | IAmb | IAmb | 03 56 47.9 | | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| AGMN | Agassiz Nation | | 65.73 313 | P | P | 03 56 46.5 | 0.0 | | |
| | baz=63,SNR=13 | | | | | | | | |
| DIAM | Diamantina, MG | | 65.83 222 | *eP* | P | 03 56 48.5 | +0.9 | | |
| MACA | Manacapuru-AM | | 65.87 247 | *eP* | P | 03 56 48.5 | +0.7 | | |
| WVT | Waverly | | 65.98 298 | P | P | 03 56 46.9 | -1.4 | | |
| WVT | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| WVT | Waverly | | 65.98 298 | P | P | 03 56 46.9 | -1.4 | | |
| WVT | Waverly | | 65.98 298 | P | P | 03 56 47.7 | -0.6 | | |
| | baz=62 | | | | | | | | |
| N41A | Harden Midland | | 65.99 304 | IAmb | IAmb | 03 56 49.1 | | | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| Y49A | Blount Mountai | | 66.01 295 | IAmb | IAmb | 03 56 53.0 | | | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| FFC | Flin Flon | | 66.13 321 | P | P | 03 56 48.6 | -0.4 | | |
| FFC | | | | pmax | pmax | | | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| FFC | Flin Flon | | 66.13 321 | P | P | 03 56 48.6 | -0.4 | | |
| FFC | | | | IAmb | IAmb | 03 56 50.7 | | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| X48A | Hartselle | | 66.19 296 | IAmb | IAmb | 03 56 53.9 | | | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| ALF01 | Guarapari-ES | | 66.20 218 | *eP* | P | 03 56 50.8 | +1.0 | | |
| BDFB | Brasilia | | 66.21 228 | P | P | 03 56 50.5 | +0.5 | | |
| | comp=Z,35nm,0.9s,baz=35,slow=7.6,SNR=40 | | | | | | | | |
| BDFB | | | | LR | LR | 04 21 44.1 | | | |
| | comp=Z,155nm,21.0s,baz=96,slow=32 | | | | | | | | |
| BDFB | Brasilia | | 66.21 228 | P | P | 03 56 50.1 | +0.1 | | |
| 553A | Crawfordville | | 66.26 291 | P | P | 03 56 51.4 | +1.2 | | |
| S44A | Carbondale | | 66.27 300 | IAmb | IAmb | 03 56 53.2 | | | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| SDV | Santo Domingo | | 66.28 264 | LR | LR | 04 22 02.6 | | | |
| | comp=Z,103nm,20.7s,baz=70,slow=33 | | | | | | | | |
| SDV | Santo Domingo | | 66.28 264 | P | P | 03 56 50.5 | -0.3 | | |
| SDV | | | | IAmb | IAmb | 03 56 55.6 | | | |
| | comp=Z,50nm,1.1s | | | | | | | | |
| SDV | Santo Domingo | | 66.28 264 | *eP* | P | 03 56 46.6 | -4.2 | | |
| SDV | Santo Domingo | | 66.28 264 | *eP* | P | 03 56 51.9 | +1.2 | | |
| K38A | Parkersburg | | 66.38 306 | IAmb | IAmb | 03 56 52.6 | | | |
| | comp=Z,40nm,1.0s | | | | | | | | |
| LBTB | Lobatse | | 66.42 151 | LR | LR | 04 26 40.6 | | | |
| | comp=Z,2µm,20.7s,baz=336,slow=37 | | | | | | | | |
| LBTB | Lobatse | | 66.42 151 | P | P | 03 56 50.3 | -0.9 | | |
| LBTB | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| LBTB | Lobatse | | 66.42 151 | P | P | 03 56 50.3 | -0.9 | | |
| LBTB | | | | IAmb | IAmb | 03 56 52.5 | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| SLM | Saint Louis | | 66.52 302 | IAmb | IAmb | 03 56 52.6 | | | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| C36M | Paulatuk | | 66.59 341 | P | P | 03 56 52.1 | +0.5 | | |
| | baz=50,SNR=15 | | | | | | | | |
| KUDL | Kundal | | 66.59 71 | *eP* | P | 03 56 51.6 | -0.8 | | |
| 250A | Grady | | 66.79 293 | P | P | 03 56 53.9 | +0.4 | | |
| LRAL | Lakeview Retre | | 66.83 295 | IAmb | IAmb | 03 56 58.0 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| LRAL | Lakeview Retre | | 66.83 295 | P | P | 03 56 54.1 | +0.3 | | |
| | baz=61,SNR=13 | | | | | | | | |
| SCIA | State Center | | 67.01 306 | IAmb | IAmb | 03 56 58.2 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| SCIA | State Center | | 67.01 306 | P | P | 03 56 54.5 | -0.3 | | |
| | baz=62 | | | | | | | | |
| F33A | 5 Mile Ranch, | | 67.13 311 | IAmb | IAmb | 03 56 56.4 | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| WMQ | Urumqi | | 67.13 52 | *i P* | P | 03 56 56.9 | +1.2 | | |
| WMQ | | | | pP | pP | 03 56 59.8 | -0.2 | | |
| WMQ | | | | PP | PP | 03 59 24.3 | +1.1 | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,100nm,1.1s | | | | | | | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,310nm,5.1s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,1µm,11.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,870nm,11.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,250nm,16.9s | | | | | | | | |
| P40A | Paris | | 67.34 303 | IAmb | IAmb | 03 57 00.3 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| CCM | Cadral Cave | | 67.49 301 | P | P | 03 56 56.8 | -1.1 | | |
| CCM | Cathedral Cave | | 67.49 301 | P | P | 03 56 56.8 | -1.1 | | |
| CCM | | | | IAmb | IAmb | 03 57 01.7 | | | |
| | comp=Z,32nm,0.8s | | | | | | | | |
| CCM | Cathedral Cave | | 67.49 301 | P | P | 03 56 57.3 | -0.6 | | |
| | baz=62 | | | | | | | | |
| PBMO | Poplar Bluff | | 67.53 300 | IAmb | IAmb | 03 57 01.1 | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| CLDB | Colider | | 67.66 237 | *eP* | P | 03 56 59.7 | +0.5 | | |
| CAM01 | Campos-RJ | | 67.69 218 | *eP* | P | 03 56 59.7 | +0.5 | | |
| YKA | Yellowknife Ar | | 67.70 332 | P | P | 03 56 59.3 | +0.5 | | |
| | comp=Z,60nm,0.7s,baz=59,slow=6.4,SNR=639 | | | | | | | | |
| YKA | | | | LR | LR | 04 23 20.0 | | | |
| | comp=Z,999nm,21.1s,baz=66,slow=33 | | | | | | | | |
| BRAL | Brewton | | 67.76 293 | P | P | 03 56 60.0 | +0.3 | | |
| | baz=61 | | | | | | | | |
| TIXI | Tiksi | | 67.79 15 | LR | LR | 04 31 37.8 | | | |
| | comp=Z,653nm,19.5s,baz=357,slow=40 | | | | | | | | |
| TIXI | Tiksi | | 67.79 15 | *eP* | P | 03 56 59.7 | +0.5 | | |
| TIXI | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.7s | | | | | | | | |
| TIXI | Tiksi | | 67.79 15 | P | P | 03 56 59.2 | 0.0 | | |
| OXF | Oxford | | 67.88 297 | P | P | 03 56 59.4 | -1.0 | | |
| | baz=61,SNR=19 | | | | | | | | |
| R40A | Maddies Statio | | 68.09 302 | IAmb | IAmb | 03 57 05.8 | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| IPMB | Ipameri, GO | | 68.15 226 | *eP* | P | 03 57 02.2 | 0.0 | | |
| MDND | Maddock | | 68.15 314 | P | P | 03 57 01.9 | -0.1 | | |
| | baz=60,SNR=7.3 | | | | | | | | |
| DUB01 | Friburgo-RJ | | 68.26 219 | *eP* | P | 03 57 03.4 | +0.5 | | |
| P38A | Dawn | | 68.31 304 | P | P | 03 57 02.5 | -0.5 | | |
| P38A | | | | IAmb | IAmb | 03 57 06.7 | | | |
| | comp=Z,46nm,1.2s | | | | | | | | |
| ECSD | EROS Data Cent | | 68.34 309 | P | P | 03 57 03.2 | +0.1 | | |
| | baz=61,SNR=20 | | | | | | | | |
| LCAR | Lake Charles | | 68.38 299 | IAmb | IAmb | 03 57 06.6 | | | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| ARAG | Araguaiana, MT | | 68.59 231 | *eP* | P | 03 57 06.1 | +1.2 | | |
| BSCB | Bom Sucesso | | 68.63 221 | *eP* | P | 03 57 05.7 | +0.5 | | |
| MGMO | Mountain Grove | | 68.64 301 | P | P | 03 57 04.9 | -0.3 | | |
| MGMO | | | | IAmb | IAmb | 03 57 05.7 | | | |
| | comp=Z,31nm,0.7s | | | | | | | | |
| PDRB | Porto dos Gac | | 68.82 237 | *eP* | P | 03 57 07.0 | +0.5 | | |
| PAMC | Pamplona, Tolo | | 68.84 264 | *eP* | P | 03 57 02.4 | -4.9 | | |
| VAS01 | Vassouras-RJ | | 68.97 220 | *eP* | P | 03 57 08.1 | +0.9 | | |
| S39A | Bolivar | | 69.11 302 | IAmb | IAmb | 03 57 11.8 | | | |
| | comp=Z,42nm,0.8s | | | | | | | | |
| FCAR | Ozark Folk Cen | | 69.15 300 | IAmb | IAmb | 03 57 11.8 | | | |
| | comp=Z,48nm,1.0s | | | | | | | | |
| SJCC | San Jacinto, C | | 69.40 267 | P | P | 03 57 11.0 | +0.8 | | |
| U40A | Yellville | | 69.44 300 | IAmb | IAmb | 03 57 11.2 | | | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| U40A | Yellville | | 69.44 300 | P | P | 03 57 10.2 | 0.0 | | |
| | baz=60,SNR=30 | | | | | | | | |
| 346A | Big Creek Wild | | 69.45 294 | P | P | 03 57 09.8 | -0.5 | | |
| SUSD | Miller | | 69.45 310 | P | P | 03 57 09.9 | -0.2 | | |
| | baz=60,SNR=9.3 | | | | | | | | |
| BOSA | Boshof | | 69.54 153 | P | P | 03 57 10.6 | -0.2 | | |
| | comp=Z,14nm,0.8s,baz=344,slow=5.5,SNR=24 | | | | | | | | |
| BOSA | | | | LR | LR | 04 28 31.5 | | | |
| | comp=Z,774nm,18.6s,baz=340,slow=37 | | | | | | | | |
| WHAR | Wooly Hollow | | 69.56 299 | IAmb | IAmb | 03 57 14.3 | | | |
| | comp=Z,44nm,1.0s | | | | | | | | |
| KNGR | Kungurtug, Tuv | | 69.59 42 | *eP* | P | 03 57 12.5 | +1.6 | | |
| W41B | Gary Mavity, V | | 69.59 299 | IAmb | IAmb | 03 57 12.0 | | | |
| | comp=Z,41nm,1.1s | | | | | | | | |
| W41B | Gary Mavity, V | | 69.59 299 | P | P | 03 57 10.6 | -0.5 | | |
| | baz=60,SNR=18 | | | | | | | | |
| MAN01 | Angra dos Reis | | 69.73 220 | *eP* | P | 03 57 13.2 | +1.2 | | |
| INK | Inuvik | | 69.78 342 | P | P | 03 57 11.7 | +0.1 | | |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,37nm,1.2s | | | | | | | | |
| INK | Inuvik | | 69.78 342 | P | P | 03 57 11.7 | +0.1 | | |
| INK | | | | IAmb | IAmb | 03 57 13.4 | | | |
| | comp=Z,37nm,1.2s | | | | | | | | |
| INK | Inuvik | | 69.78 342 | P | P | 03 57 11.9 | +0.2 | | |
| | baz=42,SNR=18 | | | | | | | | |
| BHPL | Bhopal | | 69.78 75 | *eP* | P | 03 57 11.6 | -0.9 | | |
| BHPL | | | | IAmb | IAmb | 03 57 13.0 | | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| VBMS | Vicksburg | | 69.81 296 | IAmb | IAmb | 03 57 16.4 | | | |
| | comp=Z,54nm,1.2s | | | | | | | | |
| VBMS | Vicksburg | | 69.81 296 | P | P | 03 57 12.6 | +0.1 | | |
| | baz=60 | | | | | | | | |
| CCAR | Cane Creek | | 69.88 298 | IAmb | IAmb | 03 57 16.4 | | | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| RUSC | La Rusia | | 69.99 263 | *eP* | P | 03 57 10.2 | -4.2 | | |
| K31A | O'Neill | | 70.25 309 | IAmb | IAmb | 03 57 18.4 | | | |
| | comp=Z,41nm,0.8s | | | | | | | | |
| SBV | Sambava | | 70.33 124 | P | P | 03 57 18.9 | +3.2 | | |
| X40A | Basin Creek Fa | | 70.35 299 | P | P | 03 57 15.3 | -0.5 | | |
| | baz=60,SNR=43 | | | | | | | | |
| MOTC | Monteria, Cord | | 70.42 267 | P | P | 03 57 17.5 | +1.0 | | |
| MOTC | | | | IAmb | IAmb | 03 57 19.4 | | | |
| | comp=Z,67nm,1.2s | | | | | | | | |
| WRGLY | Wrigley | | 70.43 335 | P | P | 03 57 16.7 | +1.0 | | |
| | baz=48,SNR=29 | | | | | | | | |
| BGNE | Belgrade | | 70.48 307 | P | P | 03 57 16.3 | -0.2 | | |
| | baz=59,SNR=29 | | | | | | | | |
| DGMT | Dagmar | | 70.48 316 | P | P | 03 57 17.3 | +0.9 | | |
| | baz=58,SNR=16 | | | | | | | | |
| ZARC | Zaragoza, Cauc | | 70.50 265 | *eP* | P | 03 57 11.4 | -5.5 | | |
| KSU1 | Kansas State U | | 70.64 305 | P | P | 03 57 17.1 | -0.3 | | |
| | baz=59,SNR=11 | | | | | | | | |
| W39A | Magazine | | 70.67 300 | P | P | 03 57 17.6 | 0.0 | | |
| | baz=59,SNR=23 | | | | | | | | |
| PTBC | PUERTO BERRIO, | | 70.72 264 | *eP* | P | 03 57 14.7 | -3.6 | | |
| ITRB | Iturama | | 70.76 227 | *eP* | P | 03 57 19.0 | +0.7 | | |
| MIAR | Mount Ida | | 70.85 299 | P | P | 03 57 18.9 | +0.1 | | |
| | baz=59 | | | | | | | | |
| MOY | Mondy | | 70.86 40 | *eP* | P | 03 57 20.2 | +1.5 | | |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,81nm,2.2s | | | | | | | | |
| UREC | San Jos de Ur | | 70.90 266 | *eP* | P | 03 57 16.8 | -2.6 | | |
| Z41A | Richland Creek | | 70.95 298 | P | P | 03 57 19.1 | -0.3 | | |
| Z41A | Richland Creek | | 70.95 298 | P | P | 03 57 19.8 | +0.3 | | |
| | baz=59,SNR=14 | | | | | | | | |
| WLAR | White Oak Lake | | 70.96 298 | IAmb | IAmb | 03 57 23.2 | | | |
| | comp=Z,46nm,1.1s | | | | | | | | |
| PARB | Paraibuna | | 70.98 221 | *eP* | P | 03 57 20.9 | +1.2 | | |
| SALV | Santo Antonio | | 71.22 233 | *eP* | P | 03 57 21.5 | +0.3 | | |
| CHIC | Chingaza | | 71.25 262 | *eP* | P | 03 57 14.9 | -7.1 | | |
| RCLB | Rio Claro- Sao | | 71.28 223 | *eP* | P | 03 57 22.6 | +1.2 | | |
| VAO | Valinhos | | 71.43 222 | *eP* | P | 03 57 23.5 | +1.1 | | |
| SUR | Sutherland | | 71.52 158 | LR | LR | 04 30 47.1 | | | |
| | comp=Z,565nm,19.7s,baz=348,slow=38 | | | | | | | | |
| A21K | Barrow | | 71.52 351 | IAmb | IAmb | 03 57 27.3 | | | |
| | comp=Z,66nm,1.6s | | | | | | | | |
| A21K | Barrow | | 71.52 351 | P | P | 03 57 23.5 | +1.4 | | |
| | baz=23,SNR=7.5 | | | | | | | | |
| PYUN | Piuthan | | 71.58 68 | *eP* | P | 03 57 23.7 | +0.1 | | |
| | comp=Z,170nm,0.8s | | | | | | | | |
| ROSC | El Rosal | | 71.60 263 | P | P | 03 57 25.0 | +0.9 | | |
| | comp=Z,8.0nm,0.5s,baz=109,slow=3.2,SNR=10 | | | | | | | | |
| ROSC | | | | LR | LR | 04 25 12.7 | | | |
| | comp=Z,216nm,20.9s,baz=48,slow=33 | | | | | | | | |
| ROSC | El Rosal | | 71.60 263 | IAmb | IAmb | 03 57 25.6 | | | |
| | comp=Z,56nm,1.4s | | | | | | | | |
| TUL1 | Leonard | | 71.71 301 | IAmb | IAmb | 03 57 27.6 | | | |
| | comp=Z,72nm,1.2s | | | | | | | | |
| TUL1 | Leonard | | 71.71 301 | P | P | 03 57 23.7 | -0.3 | | |
| | baz=59,SNR=16 | | | | | | | | |
| HELC | Santa Helena | | 71.79 264 | *eP* | P | 03 57 25.1 | -0.1 | | |
| KLRI | Killari | | 71.83 81 | *eP* | P | 03 57 24.0 | -1.1 | | |
| PP1B | Ponte de Pedra | | 71.94 232 | *eP* | P | 03 57 26.2 | +0.7 | | |
| DANN | Dangsing | | 72.03 68 | *eP* | P | 03 57 26.2 | -0.2 | | |
| | comp=Z,230nm,0.9s | | | | | | | | |
| VILB | Vilhena | | 72.16 239 | *eP* | P | 03 57 28.2 | +1.3 | | |
| IRK | Irkutsk | | 72.20 38 | *eP* | P | 03 57 23.5 | -3.2 | | |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,87nm,3.7s | | | | | | | | |
| KOLN | Koldanda | | 72.21 68 | *eP* | P | 03 57 26.8 | -0.6 | | |
| GUY2C | Guyana, Caldas | | 72.22 264 | *eP* | P | 03 57 26.9 | -0.9 | | |
| CBOC | Ciudad Bolivar | | 72.37 264 | *eP* | P | 03 57 30.5 | +2.0 | | |
| LAO | LASA Array | | 72.60 315 | IAmb | IAmb | 03 57 31.4 | | | |
| | comp=Z,56nm,0.9s | | | | | | | | |
| LAO | LASA Array | | 72.60 315 | P | P | 03 57 30.1 | +0.9 | | |
| | baz=56,SNR=24 | | | | | | | | |
| PET01 | Itanhaem-SP | | 72.64 221 | *eP* | P | 03 57 30.4 | +0.9 | | |
| RSSD | Black Hills | | 72.73 312 | P | P | 03 57 30.3 | +0.1 | | |
| RSSD | | | | pmax | pmax | | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| RSSD | Black Hills | | 72.73 312 | P | P | 03 57 30.3 | +0.1 | | |
| RSSD | | | | IAmb | IAmb | 03 57 32.1 | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| RSSD | Black Hills | | 72.73 312 | P | P | 03 57 30.7 | +0.5 | | |
| | baz=57 | | | | | | | | |
| PCMB | Pacaembu | | 72.76 226 | *eP* | P | 03 57 31.8 | +1.5 | | |
| SRSP | Sriramsagar | | 72.77 79 | *eP* | P | 03 57 29.2 | -1.4 | | |
| ZAK | Zakamensk | | 72.78 40 | *eP* | P | 03 57 31.5 | +1.2 | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.5s | | | | | | | | |
| CBKS | Cedar Bluff | | 72.87 306 | P | P | 03 57 31.3 | +0.4 | | |
| | baz=58,SNR=22 | | | | | | | | |
| GKN | Gorkha | | 72.87 68 | *eP* | P | 03 57 30.8 | -0.5 | | |
| | comp=Z,43nm,0.6s | | | | | | | | |
| TOLK | Toolik Lake Re | | 72.90 348 | P | P | 03 57 31.7 | +1.1 | | |
| TOLK | | | | IAmb | IAmb | 03 57 54.6 | | | |
| | comp=Z,80nm,1.6s | | | | | | | | |
| TOLK | Toolik Lake Re | | 72.90 348 | P | P | 03 57 32.0 | +1.4 | | |
| | baz=28,SNR=14 | | | | | | | | |
| NATX | Nacogdoches | | 73.07 297 | P | P | 03 57 31.7 | -0.5 | | |
| NATX | | | | IAmb | IAmb | 03 57 36.3 | | | |
| | comp=Z,72nm,1.4s | | | | | | | | |
| NATX | Nacogdoches | | 73.07 297 | P | P | 03 57 32.4 | +0.2 | | |
| | baz=58 | | | | | | | | |
| BOD | Bodaibo | | 73.14 30 | *eP* | P | 03 57 31.0 | -1.1 | | |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.8s | | | | | | | | |
| FRTB | Fartura | | 73.14 224 | *eP* | P | 03 57 33.8 | +1.3 | | |
| PLMC | San Jos del P | | 73.15 264 | *eP* | P | 03 57 24.2 | -8.7 | | |
| PTLB | Pontes e Lacer | | 73.18 236 | *eP* | P | 03 57 34.0 | +1.1 | | |
| OGNE | Ogallala | | 73.22 309 | P | P | 03 57 33.3 | +0.3 | | |
| | baz=57,SNR=14 | | | | | | | | |
| I29M | Ogilvie Camp, | | 73.26 342 | IAmb | IAmb | 03 57 35.1 | | | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| I29M | Ogilvie Camp, | | 73.26 342 | P | P | 03 57 33.5 | +0.8 | | |
| | baz=37,SNR=25 | | | | | | | | |
| MMPY | Sheldon Lake, | | 73.40 338 | P | P | 03 57 35.5 | +1.9 | | |
| | baz=42,SNR=15 | | | | | | | | |
| DMN | Daman | | 73.43 68 | *eP* | P | 03 57 34.7 | 0.0 | | |
| KKN | Kakani | | 73.47 68 | *eP* | P | 03 57 34.6 | -0.3 | | |
| | comp=Z,27nm,0.5s | | | | | | | | |
| TBTG | Tabatinga, AM | | 73.55 252 | *eP* | P | 03 57 30.2 | -5.0 | | |
| TBTG | Tabatinga, AM | | 73.55 252 | *eP* | P | 03 57 36.2 | +1.0 | | |
| RPR | Rampur | | 73.57 78 | *eP* | P | 03 57 35.0 | -0.3 | | |
| PKIN | Phulchoki | | 73.67 68 | *eP* | P | 03 57 35.5 | -0.6 | | |
| PKI | Pulchoki | | 73.68 68 | *eP* | P | 03 57 35.7 | -0.6 | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| YOTC | Yotoco, Valle | | 73.73 263 | *eP* | P | 03 57 35.6 | -0.9 | | |
| HYBB | Hyderabad (bro | | 73.75 80 | *eP* | P | 03 57 35.1 | -1.3 | | |
| HYB | Hyderabad | | 73.75 80 | *eP* | P | 03 57 35.6 | -0.8 | | |
| HYB | | | | IAmb | IAmb | 03 57 36.1 | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| EGMT | Eagleton | | 73.82 318 | IAmb | IAmb | 03 57 38.5 | | | |
| | comp=Z,74nm,1.1s | | | | | | | | |
| EGMT | Eagleton | | 73.82 318 | P | P | 03 57 37.2 | +0.8 | | |
| | baz=54,SNR=24 | | | | | | | | |
| X34A | Smith Ranch, M | | 73.82 301 | P | P | 03 57 36.7 | +0.1 | | |
| GUN | Gumba | | 73.86 67 | *eP* | P | 03 57 37.0 | -0.3 | | |
| FYU | Fort Yukon | | 73.87 345 | IAmb | IAmb | 03 57 39.7 | | | |
| | comp=Z,68nm,1.2s | | | | | | | | |
| J29M | Klondike Camp | | 73.97 341 | P | P | 03 57 37.8 | +0.8 | | |
| | baz=37 | | | | | | | | |
| MAYO | Mayo, Yukon | | 74.02 340 | P | P | 03 57 38.1 | +0.9 | | |
| | baz=39,SNR=5.2 | | | | | | | | |
| URV | Uravakonda | | 74.06 83 | *eP* | P | 03 57 37.2 | -1.0 | | |
| CUPL | Choutuppal | | 74.11 80 | *eP* | P | 03 57 37.1 | -1.4 | | |
| JIRN | Jiri | | 74.22 67 | *e

comp=Z,46nm,0.8s
**YAK Yakutsk 75.50 21** LR LR 04 35 37.7
comp=Z,605nm,19.5s,baz=320,slow=39
**YAK Yakutsk 75.50 21** *e*P **P** **03 57 45.5 -0.3**
YAK pmax pmax
comp=Z,24nm,0.6s
YAK pmax pmax
comp=N,4.0nm,0.9s
YAK pmax pmax
comp=E,2.0nm,1.0s
**YAK Yakutsk 75.50 21** P **P** **03 57 45.7 -0.1**
YAK IAmb IAmb 03 57 47.0
comp=Z,37nm,0.7s
**TAPN Taplejung 75.53 67** *e*P **P** **03 57 46.3 -0.6**
**ESPN Las Esperanzas 75.53 275** IAmb IAmb 03 57 48.6
comp=Z,48nm,0.9s
**ODAN Odare 75.55 67** *e*P **P** **03 57 46.8 -0.2**
**J25K Salcha River, 75.57 344** P **P** **03 57 46.9 +0.7**
baz=31,SNR=6.5
**POKR Poker Plat Res 75.58 345** IAmb IAmb 03 57 49.0
comp=Z,58nm,1.2s
**POKR Poker Plat Res 75.58 345** P **P** **03 57 47.5 +1.2**
baz=30,SNR=14
**BBAC Balboa, Cauca 75.61 262** *e*P **P** **03 57 46.1 -1.3**
**PTGB Pitanga 75.63 225** *e*P **P** **03 57 48.6 +1.5**
**N23A Red Feather La 75.70 310** IAmb IAmb 03 57 53.3
comp=Z,67nm,1.4s
**N23A Red Feather La 75.70 310** P **P** **03 57 48.7 +1.0**
baz=55,SNR=18
**435B Jarrell 75.70 298** IAmb IAmb 03 57 48.9
comp=Z,60nm,1.1s
**435B Jarrell 75.70 298** P **P** **03 57 47.6 +0.1**
baz=57
**P33M Teslin, Yukon 75.71 336** IAmb IAmb 03 57 49.7
comp=Z,49nm,1.1s
**P33M Teslin, Yukon 75.71 336** P **P** **03 57 48.4 +1.2**
baz=40,SNR=12
**GOMU GeErMu 75.74 56** P **P** **03 57 49.1 +1.0**
GOMU pP PcP 03 58 00.3 -0.5
GOMU PP **PP** **04 00 38.5 +1.0**
GOMU S **S** **04 07 28.5 -1.3**
GOMU sS sS 04 07 40.6 +3.4
GOMU SS **SS** **04 12 19.5 -1.2**
GOMU pmax pmax
comp=Z,8.0nm,1.2s
GOMU pmax pmax
comp=Z,190nm,4.8s
GOMU LR LR
comp=Z,180nm,12.7s
GOMU LR LR
comp=Z,210nm,13.3s
GOMU LR LR
comp=Z,160nm,14.3s
**ADKI Addanki 75.74 81** *e*P **P** **03 57 47.2 -0.7**
**ILAR Eielson Array 75.77 345** P **P** **03 57 48.1 +0.9**
comp=Z,4.9nm,0.8s,baz=16,slow=4.6,SNR=50
ILAR PP **PP** **04 00 34.3 -2.2**
comp=Z,1.7nm,0.9s,baz=22,slow=7.4,SNR=4.1
ILAR LR LR 04 32 57.6
comp=Z,194nm,20.6s,baz=34,slow=37
**MYLAV Mylavaram 75.78 80** *e*P **P** **03 57 47.8 -0.3**
**SCRK Sand Creek 75.80 343** IAmb IAmb 03 57 50.7
comp=Z,34nm,1.0s
**SCRK Sand Creek 75.80 343** P **P** **03 57 48.8 +1.2**
baz=32,SNR=18
**COLA College 75.88 345**‖ *e*P **P** **03 57 47.7 -0.2**
COLA pmax pmax
comp=Z,85nm,5.0s
**COLA College 75.88 345** P **P** **03 57 49.5 +1.6**
**COLA College 75.88 345** P **P** **03 57 49.1 +1.2**
baz=29
**TCOL CIGO, UAF Yank 75.88 345** P **P** **03 57 49.2 +1.3**
baz=29
**SONM Songino Array 75.94 41** P **P** **03 57 49.4 +0.7**
comp=Z,8.2nm,0.8s,baz=290,slow=6.1,SNR=78
SONM LR LR 04 32 24.9
comp=Z,471nm,21.5s,baz=326,slow=37
**I23K Minto, Yukon-K 75.95 346** P **P** **03 57 49.3 +1.1**
baz=28
**YMP Mirror Lake Pl 75.98 315** P **P** **03 57 49.5 +0.3**
YMP IAmb IAmb 03 57 51.3
comp=Z,30nm,1.0s
**L27K Beaver Creek, 76.04 342** P **P** **03 57 49.6 +0.7**
L27K IAmb IAmb 03 57 55.9
comp=Z,90nm,2.0s
**L27K Beaver Creek, 76.04 342** P **P** **03 57 49.2 +0.3**
baz=34
**BOK Bokaro 76.07 71** *e*P **P** **03 57 48.1 -1.6**
BOK IAmb IAmb 03 57 50.7
comp=Z,12nm,0.9s
**DOT Dot Lake 76.09 343** IAmb IAmb 03 57 52.2
comp=Z,36nm,1.0s
**DLBC Dease Lake 76.09 334** LR LR 04 28 16.5
comp=Z,579nm,21.8s,baz=26,slow=33
**DLBC Dease Lake 76.09 334** IAmb IAmb 03 57 52.2
comp=Z,36nm,0.8s
**HDA Harding Lake 76.09 345** IAmb IAmb 03 57 51.5
comp=Z,64nm,1.2s
**HDA Harding Lake 76.09 345** P **P** **03 57 50.2 +1.0**
baz=30
**ISCO Idaho Springs 76.12 309** IAmb IAmb 03 57 55.7
comp=Z,65nm,1.4s
**ISCO Idaho Springs 76.12 309** P **P** **03 57 51.0 +0.8**
baz=55,SNR=26
**BRU2 Volcan 76.13 271** P **P** **03 57 50.6 +0.2**
**H21K Melozitna Rive 76.14 347** P **P** **03 57 50.9 +1.5**
H21K IAmb IAmb 03 57 54.9
comp=Z,51nm,1.4s
**H21K Melozitna Rive 76.14 347** P **P** **03 57 50.6 +1.2**
baz=25
**GCUF Volcan Galeras 76.16 261** *e*P **P** **03 57 49.9 -1.0**
**ABTX Abilene, Hawle 76.16 300** IAmb IAmb 03 57 51.6
comp=Z,57nm,1.2s
**ABTX Abilene, Hawle 76.16 300** P **P** **03 57 50.4 +0.2**
baz=56,SNR=13
**RIDG Independent Ri 76.20 343** IAmb IAmb 03 57 53.2
comp=Z,68nm,1.1s
**RIDG Independent Ri 76.20 343** P **P** **03 57 51.3 +1.5**
baz=32,SNR=11
**LKWY Lake 76.22 315** IAmb IAmb 03 57 57.2
comp=Z,55nm,1.8s
**BILL Bilibino 76.24 4***d i*P **P** **03 57 50.0 +0.1**
BILL *e**PP **pP** **03 57 54.1 -0.2**
BILL *i* *SP **sP** **03 57 56.4 +0.5**
BILL *e* 04 07 49.5
BILL pmax pmax
comp=Z,23nm,1.7s
BILL MLR MLR
comp=Z,213nm,17.0s
**BILL Bilibino 76.24 4** P **P** **03 57 49.4 -0.5**
BILL IAmb IAmb 03 57 57.3
comp=Z,78nm,2.0s
**ULN Ulaanbaatar 76.27 40***c i*P **P** **03 57 51.3 +0.6**
ULN pmax pmax
comp=Z,50nm,1.7s
**ULN Ulaanbaatar 76.27 40** P **P** **03 57 50.6 -0.1**
ULN IAmb IAmb 03 57 55.4
comp=Z,29nm,1.1s
**YNR Norris Junctio 76.29 315** IAmb IAmb 03 58 06.1
comp=Z,39nm,1.4s
**BOZ Bozeman (W) 76.30 317** IAmb IAmb 03 57 53.2
comp=Z,37nm,1.1s
**BOZ Bozeman (W) 76.30 317** P **P** **03 57 51.8 +1.0**
baz=53,SNR=40
**PVM Polavaram 76.30 79** *e*P **P** **03 57 51.0 -0.1**
**CVTR Volcan Turrial 76.31 273** IAmb IAmb 03 59 57.7
comp=Z,36nm,0.8s
**Q24A Divide 76.31 308** P **P** **03 57 51.8 +0.6**
baz=55,SNR=7.3
**AMTX Amarillo 76.32 303** P **P** **03 57 51.4 +0.4**
baz=56
**MLY Manley 76.32 346** P **P** **03 57 51.5 +0.9**
baz=27
**BVCY Beaver Creek 76.32 341** P **P** **03 57 52.1 +1.5**
baz=34,SNR=7.0
**ACON Acoyapa 76.36 275** P **P** **03 57 51.8 +0.3**
**NEA2 Nenana 76.38 345** P **P** **03 57 51.6 +0.8**
baz=28
**JTMT Jette 76.42 320** IAmb IAmb 03 57 52.9
comp=Z,29nm,1.1s
**H17A Grant Village 76.42 315** P **P** **03 57 53.1 +1.4**
baz=53,SNR=16
**I21K Tanana 76.42 347** P **P** **03 57 51.1 +0.1**
baz=26
**SRBA San Rafael, Bu 76.42 272** IAmb IAmb 03 57 57.4
comp=Z,83nm,1.9s
**COVE Coope Vega, Sa 76.44 274** P **P** **03 57 52.2 +0.3**

**L26K Log Cabin Wild 76.45 342** IAmb IAmb 03 57 54.5
comp=Z,40nm,1.1s
**L26K Log Cabin Wild 76.45 342** P **P** **03 57 52.5 +1.3**
baz=33,SNR=13
**YUK4 Talbot Arm 76.59 340** P **P** **03 57 52.5 +0.2**
baz=36
**PEZE Perez Zeledon, 76.60 272** P **P** **03 57 53.2 +0.3**
PEZE IAmb IAmb 03 57 57.5
comp=Z,84nm,1.6s
**M27K Edge Creek, AK 76.64 341** P **P** **03 57 53.5 +1.0**
baz=34
**RAGD RAYAGADA 76.66 76** *e*P **P** **03 57 52.8 -0.3**
**HYT Haines Junctio 76.68 339** P **P** **03 57 53.5 +0.8**
baz=37
**SKHT Srikalahasti 76.70 83** *e*P **P** **03 57 53.1 -0.3**
**CMBC Cumbal 76.71 261** *e*P **P** **03 57 55.3 +1.3**
**YUK3 Moose Creek 76.74 341** P **P** **03 57 54.0 +0.8**
baz=35
**BW06 Boulder Array 76.80 313** P **P** **03 57 53.4 -0.5**
BW06 IAmb IAmb 03 57 54.8
comp=Z,33nm,1.1s
**BW06 Boulder Array 76.80 313** P **P** **03 57 53.7 -0.2**
baz=53,SNR=36
**PD31 Pinedale Array 76.80 313** IAmb IAmb 03 57 54.9
comp=Z,29nm,1.1s
**PDAR Pinedale Array 76.80 313** P **P** **03 57 53.5 -0.3**
comp=Z,19nm,0.9s,baz=64,slow=6.5,SNR=112
PDAR LR LR 04 30 18.9
comp=Z,311nm,18.6s,baz=60,slow=35
**MSO Missoula 76.81 319** IAmb IAmb 03 57 57.7
comp=Z,41nm,1.3s
**MSO Missoula 76.81 319** P **P** **03 57 53.8 +0.1**
baz=52,SNR=14
**YUK6 Outpost Mounta 76.83 339** P **P** **03 57 55.2 +1.5**
baz=36
**RIOS Rincon, Osa 76.85 271** P **P** **03 57 55.2 +1.0**
**T25A Trinidad 76.87 306** P **P** **03 57 55.1 +0.7**
baz=55,SNR=6.9
**M26K Nabesna, AK 76.89 342** P **P** **03 57 55.4 +1.6**
baz=33
**LOHW Long Hollow 76.91 315** P **P** **03 57 54.5 +0.1**
**PAX Paxson 77.01 343** P **P** **03 57 55.4 +1.0**
baz=31
**TER01 Tubaro-SC 77.02 220** *e*P **P** **03 57 55.9 +1.1**
**SNOW Snow King Moun 77.09 314** IAmb IAmb 03 58 00.3
comp=Z,76nm,1.9s
**SKAG Skagway 77.10 337** P **P** **03 57 55.6 +0.7**
baz=38
**MCK McKinley 77.11 345** IAmb IAmb 03 58 18.6
comp=Z,43nm,1.4s
**MCK McKinley 77.11 345** P **P** **03 57 55.7 +0.7**
baz=28
**JTS Las Juntas de 77.12 273** LR LR 04 27 36.9
comp=Z,103nm,20.4s,baz=152,slow=32
**GTA Gaotai 77.16 51**⇑ P **P** **03 57 56.5 +0.7**
GTA pP pP 03 58 00.3 +0.1
GTA sP sP 03 58 03.9 +2.1
GTA pmax pmax
comp=Z,34nm,1.0s
GTA pmax pmax
comp=Z,220nm,5.6s
GTA LR LR
comp=Z,300nm,13.1s
GTA LR LR
comp=Z,200nm,15.9s
GTA LR LR
comp=Z,170nm,11.6s
**TPAW Teton Pass 77.18 315** IAmb IAmb 03 57 59.7
comp=Z,42nm,1.6s
**REDW Red Top Meadow 77.20 314** IAmb IAmb 03 58 00.6
comp=Z,35nm,1.2s
**BPAW Bear Paw Mtn. 77.20 346** P **P** **03 57 55.6 +0.2**
baz=27
**SDCO Great Sand Dun 77.23 307** P **P** **03 57 56.4 -0.1**
**SDCO Great Sand Dun 77.23 307** P **P** **03 57 56.7 +0.3**
baz=55,SNR=23
**PETF Flores 77.40 282** IAmb IAmb 03 57 57.9
comp=Z,43nm,0.9s
**HARP HAARP 77.42 343** P **P** **03 57 58.0 +1.3**
baz=31
**JCT Junction City 77.46 298** IAmb IAmb 03 58 01.8
comp=Z,57nm,0.9s
**JCT Junction City 77.46 298** P **P** **03 57 57.8 +0.2**
baz=56,SNR=13
**CHLP Challavanipeta 77.54 76** *e*P **P** **03 57 57.9 -0.2**
**NEW Newport 77.56 321** LR LR 04 28 21.5
comp=Z,680nm,21.6s,baz=38,slow=33
**NEW Newport 77.56 321** P **P** **03 57 58.0 +0.2**
baz=50,SNR=17
**O20A White River Ci 77.57 311** P **P** **03 57 58.3 +0.1**
baz=54,SNR=6.6
**MSTX Muleshoe 77.58 303** IAmb IAmb 03 58 03.6
comp=Z,51nm,1.4s
**MSTX Muleshoe 77.58 303** P **P** **03 57 58.4 +0.2**
baz=55,SNR=8.8
**ITAB Concordia 77.62 223** *e*P **P** **03 57 59.1 +0.9**
**OTAV Otavalo 77.63 261** P **P** **03 57 59.7 +0.5**
OTAV pmax pmax
comp=Z,62nm,1.0s
**OTAV Otavalo 77.63 261** P **P** **03 57 59.7 +0.5**
**OTAV Otavalo 77.63 261** *e*P **P** **03 58 00.5 +1.3**
**BESE Bessie Mountai 77.63 336** IAmb IAmb 03 58 02.2
comp=Z,31nm,0.9s
**TRF Thorofare Moun 77.65 345** P **P** **03 57 58.4 +0.3**
baz=27
**CHUM Lake Minchumin 77.66 346** P **P** **03 57 58.3 +0.3**
baz=26,SNR=7.3
**KTH Kantishna Hill 77.68 346** IAmb IAmb 03 58 03.0
comp=Z,37nm,1.0s
**AHID Auburn Hatcher 77.71 314** IAmb IAmb 03 58 04.2
comp=Z,79nm,1.7s
**JIS Juneau Island 77.71 336** IAmb IAmb 03 58 03.8
comp=Z,33nm,1.0s
**J20K Nowinta River 77.73 347** P **P** **03 57 59.1 +0.8**
baz=24
**WAT6 Susitna Watana 77.87 344** P **P** **03 58 00.4 +1.0**
baz=29,SNR=7.2
**M24K Tolsona, Glenn 77.92 343** P **P** **03 58 00.2 +0.7**
baz=30
**CZSB Cruzeiro do Su 77.93 251** *e*P **P** **03 58 00.5 +0.2**
**N25K Chitina, Valde 77.97 342** IAmb IAmb 03 59 38.7
comp=Z,80nm,1.6s
**N25K Chitina, Valde 77.97 342** P **P** **03 58 00.4 +0.5**
baz=32
**VRDI Verde Repeater 78.00 341** IAmb IAmb 03 58 04.0
comp=Z,24nm,0.9s
**CAST Castle Rocks 78.03 346** P **P** **03 58 00.7 +0.6**
baz=26
**S22A 4UR Ranch, Cre 78.09 308** P **P** **03 58 02.2 +0.9**
baz=54,SNR=17
**RDMU Red Mountain 78.12 312** IAmb IAmb 03 58 03.1
comp=Z,64nm,1.1s
**PNL Peninsula 78.17 339** P **P** **03 58 01.7 +0.8**
baz=35
**ISLE Juniper Island 78.23 341** IAmb IAmb 03 58 06.5
comp=Z,59nm,1.0s
**TNA Tin City 78.29 353** P **P** **03 58 01.4 0.0**
TNA IAmb IAmb 03 58 03.4
comp=Z,50nm,1.6s
**TNA Tin City 78.29 353** P **P** **03 58 02.0 +0.6**
baz=13
**LLLB Lillooet 78.33 325** IAmb IAmb 03 58 06.8
comp=Z,103nm,1.9s
**833A Chaparral WMA, 78.38 296** P **P** **03 58 02.9 +0.3**
833A IAmb IAmb 03 58 08.2
comp=Z,47nm,1.1s
**833A Chaparral WMA, 78.38 296** P **P** **03 58 03.5 +0.9**
baz=56,SNR=9.6
**KLU Klutina 78.39 343** P **P** **03 58 02.8 +0.6**
baz=30
**SCM Sheep Creek Mo 78.43 343** IAmb IAmb 03 58 05.1
comp=Z,66nm,1.1s
**SCM Sheep Creek Mo 78.43 343** P **P** **03 58 03.1 +0.8**
baz=29
**WRAK Wrangell Islan 78.44 334** P **P** **03 58 03.4 +1.0**
baz=40
**K20K Telida 78.47 347** IAmb IAmb 03 58 07.0
comp=Z,37nm,1.0s
**K20K Telida 78.47 347** P **P** **03 58 03.3 +0.8**
baz=24,SNR=13
**BMRM Bremner River 78.51 342** P **P** **03 58 04.2 +1.4**
baz=31,SNR=8.5
**PPLA Purkeypile 78.53 346** IAmb IAmb 03 58 25.4
comp=Z,38nm,1.2s
**PPLA Purkeypile 78.53 346** P **P** **03 58 02.9 -0.1**
baz=26
**CUT Chulitna 78.58 345** P **P** **03 58 03.8 +0.8**

baz=27
**B08A Colville Reser 78.62 322** P **P** **03 58 03.7 +0.1**
B08A IAmb IAmb 03 58 05.4
comp=Z,56nm,1.2s
**SML Sawmill 78.68 344** P **P** **03 58 04.2 +0.4**
baz=28
**PV07 Paradox Valley 78.83 309** P **P** **03 58 05.5 +0.2**
**APG El Apazote 78.94 281** LR LR 04 28 29.0
comp=Z,100nm,20.4s,baz=60,slow=32
**SIT Sitka 78.99 335** P **P** **03 58 06.5 +1.1**
baz=38
**ANM Nome 79.00 352** P **P** **03 58 05.4 +0.1**
baz=15,SNR=7.1
**PMR Palmer 79.05 344** P **P** **03 58 05.9 +0.2**
baz=28
**PV23 Carpenter Ridg 79.05 310** IAmb IAmb 03 58 08.3
comp=Z,53nm,1.2s
**KNK Knik Glacier 79.06 344** P **P** **03 58 06.6 +0.8**
baz=28
**PV11 David Mesa, Pa 79.06 309** P **P** **03 58 06.2 -0.3**
PV11 IAmb IAmb 03 58 08.3
comp=Z,80nm,1.3s
**F10A Beach Ranch, E 79.11 319** IAmb IAmb 03 58 10.4
comp=Z,41nm,1.3s
**P18A Preston Nutter 79.11 311** IAmb IAmb 03 58 13.1
comp=Z,59nm,1.4s
**HLID Hailey 79.12 316** P **P** **03 58 07.9 +1.2**
baz=51,SNR=25
**M22K Willow 79.13 345** P **P** **03 58 07.0 +0.9**
baz=27
**GUWA GUWAHATI 79.13 66** *e*P **P** **03 58 06.2 -0.6**
GUWA IAmb IAmb 03 58 08.0
comp=Z,43nm,0.9s
**EYAK Cordova Ski Ar 79.16 342** P **P** **03 58 07.2 +0.9**
baz=30
**GLI Glacier Island 79.21 343** P **P** **03 58 07.3 +0.7**
baz=29
**TTA Tatalina 79.21 348** P **P** **03 58 06.9 +0.3**
baz=22,SNR=5.2
**E09A Wood Farm, Sta 79.23 320** IAmb IAmb 03 58 10.8
comp=Z,58nm,1.6s
**MVCO Mesa Verde 79.47 308** P **P** **03 58 09.2 +0.4**
**MVCO Mesa Verde 79.47 308** P **P** **03 58 09.5 +0.7**
baz=53,SNR=10.0
**ANMO Albuquerque 79.49 305** LR LR 04 32 11.8
comp=Z,494nm,19.3s,baz=55,slow=35
**ANMO Albuquerque 79.49 305**‖ *e*P **P** **03 58 10.3 +1.4**
ANMO pmax pmax
comp=Z,15nm,1.7s
**ANMO Albuquerque 79.49 305** P **P** **03 58 09.0 +0.1**
**ANMO Albuquerque 79.49 305** P **P** **03 58 09.6 +0.8**
baz=54
**PWL Port Wells 79.52 343** P **P** **03 58 08.8 +0.5**
baz=28
**CCIG Comitan 79.56 283** IAmb IAmb 03 58 10.5
comp=Z,27nm,0.8s
**SRU San Rafael Swe 79.59 311** IAmb IAmb 03 58 13.4
comp=Z,140nm,2.0s
**SHL Shillong 79.62 66** *e*P **P** **03 58 09.4 -0.3**
SHL IAmb IAmb 03 58 11.4
comp=Z,39nm,0.5s
**SHL Shillong 79.62 66** P **P** **03 58 09.3 -0.4**
SNR=28
**RC01 Rabbit Creek A 79.63 344** P **P** **03 58 09.8 +0.9**
baz=27
**L19K White Mountain 79.69 347** P **P** **03 58 09.7 +0.5**
baz=23
**SEY Seymchan 79.78 11** LR LR 04 38 54.0
comp=Z,258nm,19.1s,baz=358,slow=40
**SEY Seymchan 79.78 11**‖ *e*P **P** **03 58 10.2 +0.6**
**M19K Big River Lodg 79.86 346** P **P** **03 58 10.6 +0.5**
baz=24
**TMUT Trail Mountain 79.90 311** P **P** **03 58 10.9 -0.3**
**CPUP Villa Florida 79.94 227** P **P** **03 58 11.0 +0.1**
comp=Z,55nm,1.0s,baz=37,slow=5.0,SNR=78
CPUP LR LR 04 33 47.6
comp=Z,288nm,18.2s,baz=48,slow=36
**CPUP Villa Florida 79.94 227** P **P** **03 58 11.0 +0.1**
**CPUP Villa Florida 79.94 227** IAmb IAmb 03 58 12.1
comp=Z,92nm,1.1s
**CPUP Villa Florida 79.94 227** *e*P **P** **03 58 11.3 +0.3**
**BBB Bella Bella 79.97 329** LR LR 04 30 19.2
comp=Z,316nm,20.4s,baz=31,slow=33
**LPAZ La Paz 80.03 242** P **P** **03 58 11.9 -0.4**
comp=Z,14nm,1.0s,baz=43,slow=4.4,SNR=31
LPAZ LR LR 04 30 19.0
comp=Z,169nm,21.5s,baz=54,slow=33
**LPAZ La Paz 80.03 242** P **P** **03 58 12.0 -0.4**
**LPAZ La Paz 80.03 242** *e*P **P** **03 58 12.3 -0.1**
**Q16A Castle Valley 80.11 311** P **P** **03 58 12.5 +0.3**
Q16A IAmb IAmb 03 58 17.2
comp=Z,92nm,1.9s
**LENM Lemitar 80.30 305** P **P** **03 58 14.0 +0.8**
**DUG Dugway, Tooele 80.31 313** P **P** **03 58 13.3 +0.2**
baz=51,SNR=15
**GAMB Gambell 80.36 355** P **P** **03 58 13.6 +0.9**
baz=9.7
**SEW Seward 80.45 343** P **P** **03 58 14.1 +0.9**
baz=28
**F07A Phinny Hill Vi 80.57 321** IAmb IAmb 03 58 18.9
comp=Z,60nm,1.8s
**MNTX Cornudas Mount 80.68 302** P **P** **03 58 16.8 +1.7**
baz=54,SNR=6.7
**CPSB Cacapava Do Su 80.80 222** *e*P **P** **03 58 16.4 +0.9**
**TXAR Lajitas Array 80.87 299** P **P** **03 58 17.0 +0.7**
comp=Z,2.5nm,0.7s,baz=65,slow=5.9,SNR=22
TXAR LR LR 04 33 36.5
comp=Z,427nm,19.4s,baz=45,slow=35
**TXAR Lajitas Array 80.87 299** P **P** **03 58 16.6 +0.3**
**TXAR Lajitas Array 80.87 299** P **P** **03 58 16.6 +0.3**
**N19K Bonanza Creek 80.88 346** P **P** **03 58 16.1 +0.4**
baz=24
**D03D Eldon 81.03 323** P **P** **03 58 17.6 +1.0**
baz=46,SNR=6.8
**BRSE Bradley Lake S 81.06 344** P **P** **03 58 17.0 +0.3**
baz=26
**TCRU Three Creeks R 81.08 311** IAmb IAmb 03 58 19.5
comp=Z,42nm,1.3s
**D04E Lakebay 81.12 323** P **P** **03 58 18.3 +1.1**
baz=46
**PALK Pallekele 81.14 87** LR LR 04 35 40.9
comp=Z,82nm,21.2s,baz=40,slow=37
**PALK Pallekele 81.14 87** P **P** **03 58 18.2 +0.4**
**O20K Slope Mountain 81.17 345** P **P** **03 58 17.7 +0.4**
baz=25
**ZEA Zeya 81.25 27** *e*P **P** **03 58 18.4 +0.7**
ZEA pmax pmax
comp=Z,10.0nm,1.2s
ZEA MLR MLR
comp=N,400nm,20.0s
ZEA MLR MLR
comp=Z,300nm,20.0s
**CMIG Matias Romero 81.27 285** LR LR 04 29 17.7
comp=Z,86nm,21.7s,baz=63,slow=32
**MTPU Mount Pierson 81.28 311** IAmb IAmb 03 58 23.4
comp=Z,58nm,1.4s
**F05D White Salmon 81.36 321** P **P** **03 58 18.6 +0.2**
baz=46
**ELK Elko 81.39 314** LR LR 04 32 40.3
comp=Z,362nm,19.5s,baz=44,slow=34
**O19K Port Alsworth 81.42 346** P **P** **03 58 18.4 -0.1**
baz=24
**E04D Cinebar 81.45 322** IAmb IAmb 03 58 42.5
comp=Z,32nm,1.1s
**E04D Cinebar 81.45 322** P **P** **03 58 19.2 +0.3**
baz=46
**W18A Petrified Fore 81.54 307** P **P** **03 58 20.2 +0.4**
baz=52
**I07A Izee 81.57 319** P **P** **03 58 19.5 -0.2**
**IMP Imphal 81.57 66** *e*P **P** **03 58 20.5 +0.5**
IMP IAmb IAmb 03 58 22.5
comp=Z,40nm,0.9s
**LZH Lanzhou 81.71 51** *e*P **P** **03 58 21.9 +1.2**
LZH pP pP 03 58 24.9 -0.2
LZH sP sP 03 58 27.9 +1.2
LZH pmax pmax
comp=Z,77nm,1.0s
LZH pmax pmax
comp=Z,310nm,6.0s
LZH LR LR
comp=Z,420nm,16.8s
LZH LR LR
comp=Z,380nm,15.2s
LZH LR LR
comp=Z,460nm,17.9s
**G05D Wamic, OR 81.73 321** P **P** **03 58 20.0 -0.4**
baz=46

| | | | | | | |
|---|---|---|---|---|---|---|
| PKCU | **Pink Cliffs** | **81.73** | **310** | IAmb | IAmb | 03 58 25.2 |
| | comp=Z,52nm,1.3s | | | | | |
| O18K | **Koktuh Hills** | **81.91** | **346** | P | **P** | **03 58 21.4 +0.3** |
| | baz=23 | | | | | |
| PLTB | **Pedras Altas** | **81.94** | **221** | IAmb | IAmb | 03 58 23.7 |
| | comp=Z,67nm,1.2s | | | | | |
| PLTB | **Pedras Altas** | **81.94** | **221** | *e*P | **P** | **03 58 22.6 +1.0** |
| ATAH | **Atahualpa** | **82.00** | **255** | LR | LR | 04 33 28.3 |
| | comp=Z,147nm,19.3s,baz=59,slow=35 | | | | | |
| F04D | **Rainier, OR** | **82.00** | **322** | P | **P** | **03 58 22.8 +1.0** |
| | baz=46 | | | | | |
| ITQB | **Itaqui** | **82.02** | **225** | *e*P | **P** | **03 58 22.6 +0.6** |
| SZCU | **Shurtz Canyon** | **82.11** | **311** | IAmb | IAmb | 03 58 27.4 |
| | comp=Z,42nm,1.4s | | | | | |
| WVOR | **Wild Horse Val** | **82.20** | **317** | IAmb | IAmb | 03 58 28.1 |
| | comp=Z,39nm,1.3s | | | | | |
| WUAZ | **Wupatki** | **82.34** | **308** | P | **P** | **03 58 24.8 +0.7** |
| | baz=51,SNR=7.9 | | | | | |
| I05D | **Terrebonne, OR** | **82.36** | **320** | P | **P** | **03 58 24.6 +0.8** |
| | baz=46 | | | | | |
| PB16 | **IPOC Station P** | **82.36** | **241** | P | **P** | **03 58 24.5 -0.2** |
| Q19K | **Cape Douglas,** | **82.44** | **345** | P | **P** | **03 58 24.1 +0.2** |
| | baz=24 | | | | | |
| MA2 | **Magadan** | **82.67** | **13** | LR | LR | 04 42 37.6 |
| | comp=Z,437nm,18.0s,baz=330,slow=41 | | | | | |
| MA2 | **Magadan** | **82.67** | **13** | *de*P | **P** | **03 58 26.0 +0.9** |
| MA2 | | | | pmax | pmax | |
| | comp=Z,35nm,1.7s | | | | | |
| MA2 | **Magadan** | **82.67** | **13** | P | **P** | **03 58 25.5 +0.4** |
| BMN | **Battle Mountai** | **82.74** | **315** | IAmb | IAmb | 03 58 30.8 |
| | comp=Z,54nm,1.9s | | | | | |
| G03D | **McMinnville, O** | **82.74** | **322** | P | **P** | **03 58 26.6 +0.9** |
| | baz=45 | | | | | |
| GO01 | **Chusmiza** | **83.02** | **240** | IAmb | IAmb | 03 58 31.5 |
| | comp=Z,31nm,0.9s | | | | | |
| J05D | **Fort Rock, OR** | **83.03** | **319** | P | **P** | **03 58 28.8 +1.3** |
| | baz=46,SNR=9.0 | | | | | |
| PB12 | **IPOC Station P** | **83.13** | **241** | P | **P** | **03 58 27.1 -1.0** |
| PB12 | | | | IAmb | IAmb | 03 58 28.6 |
| | comp=Z,60nm,1.3s | | | | | |
| R11A | **Troy Canyon, C** | **83.14** | **313** | P | **P** | **03 58 29.1 +0.9** |
| | baz=49,SNR=23 | | | | | |
| K05A | **Summer Lake** | **83.23** | **319** | IAmb | IAmb | 03 58 44.8 |
| | comp=Z,46nm,1.3s | | | | | |
| KDAK | **Kodiak Island** | **83.25** | **344** | LR | LR | 04 37 14.3 |
| | comp=Z,323nm,19.6s,baz=46,slow=37 | | | | | |
| KDAK | **Kodiak Island** | **83.25** | **344** | P | **P** | **03 58 29.0 +0.9** |
| KDAK | | | | pmax | pmax | |
| | comp=Z,64nm,1.0s | | | | | |
| KDAK | **Kodiak Island** | **83.25** | **344** | P | **P** | **03 58 29.0 +0.9** |
| KDAK | **Kodiak Island** | **83.25** | **344** | P | **P** | **03 58 29.0 +0.9** |
| | baz=25 | | | | | |
| HHC | **Hu-ho-hao-te** | **83.27** | **44** | *e*P | **P** | **03 58 29.9 +1.2** |
| HHC | | | | pmax | pmax | |
| | comp=Z,23nm,1.1s | | | | | |
| HHC | | | | pmax | pmax | |
| | comp=Z,190nm,6.3s | | | | | |
| HHC | | | | LR | LR | |
| | comp=Z,510nm,12.8s | | | | | |
| HHC | | | | LR | LR | |
| | comp=Z,760nm,17.9s | | | | | |
| HHC | | | | LR | LR | |
| | comp=Z,900nm,12.8s | | | | | |
| I04A | **Tendick Farm,** | **83.29** | **320** | P | **P** | **03 58 28.9 +0.2** |
| | baz=46 | | | | | |
| PB08 | **IPOC Station P** | **83.31** | **239** | IAmb | IAmb | 03 58 35.3 |
| | comp=Z,27nm,0.9s | | | | | |
| PRN | **Pahroc Range** | **83.43** | **312** | P | **P** | **03 58 30.7 +1.0** |
| PRN | | | | IAmb | IAmb | 03 58 34.8 |
| | comp=Z,42nm,1.4s | | | | | |
| MOD | **Modoc Plateau** | **83.47** | **318** | IAmb | IAmb | 03 58 35.7 |
| | comp=Z,40nm,1.6s | | | | | |
| J04D | **Umpqua Nationa** | **83.52** | **320** | IAmb | IAmb | 04 01 14.6 |
| | comp=Z,65nm,1.6s | | | | | |
| J04D | **Umpqua Nationa** | **83.52** | **320** | P | **P** | **03 58 30.7 +0.6** |
| | baz=46 | | | | | |
| XLT | **XiLinHaoTe** | **83.61** | **39** | *e*P | **P** | **03 58 31.0 +0.6** |
| XLT | | | | pP | sP | 03 58 36.0 -0.4 |
| XLT | | | | sP | pP | 03 58 37.4 +2.6 |
| XLT | | | | S | **S** | **04 08 47.5 -4.7** |
| XLT | | | | sS | sS | 04 09 01.4 +1.6 |
| XLT | | | | pmax | pmax | |
| | comp=Z,29nm,1.0s | | | | | |
| XLT | | | | pmax | pmax | |
| | comp=Z,240nm,3.6s | | | | | |
| XLT | | | | LR | LR | |
| | comp=Z,570nm,16.8s | | | | | |
| XLT | | | | LR | LR | |
| | comp=Z,270nm,12.5s | | | | | |
| S11A | **Rachel** | **83.70** | **312** | IAmb | IAmb | 03 58 36.2 |
| | comp=Z,61nm,1.4s | | | | | |
| NNA | **Nana** | **83.76** | **251** | *ce*P | **P** | **03 58 32.9 +1.5** |
| NNA | | | | pmax | pmax | |
| | comp=Z,166nm,1.0s | | | | | |
| NNA | **Nana** | **83.76** | **251** | P | **P** | **03 58 32.1 +0.7** |
| K04D | **Chiloquin, OR** | **83.76** | **319** | P | **P** | **03 58 31.6 +0.4** |
| | baz=46 | | | | | |
| I02E | **Swisshome, OR** | **83.81** | **321** | P | **P** | **03 58 32.5 +1.2** |
| | baz=45 | | | | | |
| I03D | **Drain, OR** | **83.85** | **321** | P | **P** | **03 58 32.4 +1.0** |
| | baz=45 | | | | | |
| ZAIG | **Zacatecas** | **83.91** | **294** | IAmb | IAmb | 03 58 39.1 |
| | comp=Z,55nm,1.5s | | | | | |
| TUC | **Tucson** | **83.96** | **306** | P | **P** | **03 58 33.0 +0.6** |
| TUC | | | | pmax | pmax | |
| | comp=Z,90nm,1.5s | | | | | |
| TUC | **Tucson** | **83.96** | **306** | P | **P** | **03 58 33.0 +0.6** |
| TUC | **Tucson** | **83.96** | **306** | P | **P** | **03 58 33.6 +1.2** |
| | baz=51 | | | | | |
| SHPR | **Sheep Range** | **84.08** | **311** | IAmb | IAmb | 03 58 39.0 |
| | comp=Z,25nm,1.3s | | | | | |
| PB01 | **IPOC Station P** | **84.14** | **239** | IAmb | IAmb | 03 58 33.7 |
| | comp=Z,32nm,1.2s | | | | | |
| KVN | **Kaiserville** | **84.16** | **315** | IAmb | IAmb | 03 58 38.7 |
| | comp=Z,48nm,1.8s | | | | | |
| W13A | **Hualapai Mount** | **84.20** | **309** | IAmb | IAmb | 03 58 38.9 |
| | comp=Z,46nm,1.8s | | | | | |
| L04D | **Klamath Falls** | **84.34** | **319** | IAmb | IAmb | 03 58 36.9 |
| | comp=Z,29nm,1.1s | | | | | |
| L04D | **Klamath Falls** | **84.34** | **319** | P | **P** | **03 58 34.5 +0.3** |
| | baz=46 | | | | | |
| Y14A | **Wickenburg** | **84.38** | **308** | IAmb | IAmb | 03 58 40.4 |
| | comp=Z,28nm,1.2s | | | | | |
| M04C | **Macdoel** | **84.39** | **319** | P | **P** | **03 58 35.1 +0.7** |
| | baz=46,SNR=8.2 | | | | | |
| PAHR | **Pah Rah Range** | **84.45** | **316** | P | **P** | **03 58 35.6 +0.7** |
| PAHR | | | | IAmb | IAmb | 03 58 57.8 |
| | comp=Z,39nm,1.6s | | | | | |
| TPNV | **Topopah Spring** | **84.45** | **312** | P | **P** | **03 58 35.5 +0.6** |
| | baz=49 | | | | | |
| J01E | **Myrtle Point** | **84.53** | **321** | P | **P** | **03 58 35.7 +0.8** |
| | baz=45 | | | | | |
| NVAR | **Mina Array Bea** | **84.69** | **314** | P | **P** | **03 58 36.6 +0.5** |
| | comp=Z,1.8nm,0.7s,baz=50,slow=5.4,SNR=16 | | | | | |
| NVAR | | | | PP | **PP** | **04 01 54.7 +3.3** |
| | comp=Z,1.9nm,1.1s,baz=74,slow=6.3,SNR=4.4 | | | | | |
| NVAR | | | | LR | LR | 04 35 10.4 |
| | comp=Z,240nm,18.1s,baz=16,slow=35 | | | | | |
| K02D | **Willamette Mer** | **84.72** | **320** | P | **P** | **03 58 36.9 +0.8** |
| | baz=45 | | | | | |
| LVC | **Limon Verde** | **84.78** | **238** | LR | LR | 04 34 54.1 |
| | comp=Z,112nm,20.7s,baz=44,slow=35 | | | | | |
| LVC | **Limon Verde** | **84.78** | **238** | P | **P** | **03 58 36.5 -0.3** |
| LVC | | | | pmax | pmax | |
| | comp=Z,49nm,1.1s | | | | | |
| LVC | **Limon Verde** | **84.78** | **238** | P | **P** | **03 58 36.5 -0.3** |
| LVC | **Limon Verde** | **84.78** | **238** | *e*P | **P** | **03 58 37.2 +0.4** |
| YERR | **Yerington** | **84.86** | **315** | IAmb | IAmb | 03 58 42.8 |
| | comp=Z,66nm,1.6s | | | | | |
| PDMCI | **Parker Dam,Lak** | **84.87** | **309** | P | **P** | **03 58 37.4 +0.6** |
| | baz=50,SNR=6.1 | | | | | |
| CD2 | **Chengdu** | **84.87** | **55** | *e*P | **P** | **03 58 36.0 -1.0** |
| YBH | **Yreka Blue Hor** | **84.89** | **319** | LR | LR | 04 33 45.6 |
| | comp=Z,116nm,18.8s,baz=24,slow=34 | | | | | |
| BEKR | **Beckworth** | **84.90** | **316** | IAmb | IAmb | 03 58 42.8 |
| | comp=Z,45nm,1.9s | | | | | |
| LHV | **Little Huntoon** | **84.93** | **314** | IAmb | IAmb | 03 58 43.3 |
| | comp=Z,64nm,2.0s | | | | | |
| PNTR | **Pine Nut** | **85.00** | **315** | P | **P** | **03 58 37.8 +0.1** |
| PNTR | | | | IAmb | IAmb | 03 58 53.8 |
| | comp=Z,27nm,0.8s | | | | | |
| L02E | **Cave Junction** | **85.06** | **320** | P | **P** | **03 58 38.3 +0.6** |
| | baz=45 | | | | | |
| GRAC | **Grapevine Rang** | **85.09** | **313** | P | **P** | **03 58 38.8 +0.8** |
| | baz=48,SNR=8.6 | | | | | |
| MPK | **Martis Peak** | **85.10** | **316** | IAmb | IAmb | 03 58 44.2 |
| | comp=Z,42nm,1.2s | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| FURC | **Furnace Creek,** | **85.14** | **312** | P | **P** | **03 58 39.5 +1.4** |
| | baz=48,SNR=6.0 | | | | | |
| M02C | **Callahan** | **85.21** | **319** | P | **P** | **03 58 38.7 +0.2** |
| | baz=45 | | | | | |
| GWY | **Greenwater Val** | **85.21** | **312** | IAmb | IAmb | 03 58 45.1 |
| | comp=Z,50nm,1.3s | | | | | |
| TUQ | **Turquoise Moun** | **85.25** | **311** | P | **P** | **03 58 40.0 +1.1** |
| | baz=49,SNR=9.5 | | | | | |
| PB06 | **IPOC Station P** | **85.30** | **238** | IAmb | IAmb | 03 58 40.2 |
| | comp=Z,39nm,1.0s | | | | | |
| RUBR | **Rubicon Trail** | **85.34** | **316** | IAmb | IAmb | 03 58 45.4 |
| | comp=Z,43nm,1.1s | | | | | |
| EMB | **Emerald Bay** | **85.36** | **316** | P | **P** | **03 58 39.2 -0.3** |
| EMB | | | | IAmb | IAmb | 03 58 44.5 |
| | comp=Z,27nm,1.2s | | | | | |
| N02D | **Trinity Center** | **85.42** | **318** | P | **P** | **03 58 39.7 +0.2** |
| | baz=45 | | | | | |
| QSM | **Queen of Sheba** | **85.48** | **312** | IAmb | IAmb | 03 58 45.4 |
| | comp=Z,50nm,1.6s | | | | | |
| GMRC | **Granite Mounta** | **85.51** | **310** | P | **P** | **03 58 40.9 +0.7** |
| | baz=49,SNR=8.3 | | | | | |
| 214A | **Organ Pipe Nat** | **85.51** | **306** | P | **P** | **03 58 40.7 +0.6** |
| | baz=50,SNR=7.4 | | | | | |
| MLAC | **Mammoth, Mammo** | **85.54** | **314** | P | **P** | **03 58 41.2 +0.8** |
| | baz=47 | | | | | |
| TIN | **Tinemaha, Big** | **85.57** | **313** | P | **P** | **03 58 41.4 +1.0** |
| | baz=48 | | | | | |
| IRM | **Iron Mountain** | **85.60** | **309** | P | **P** | **03 58 41.5 +1.0** |
| | baz=49,SNR=9.9 | | | | | |
| 113A | **Mohawk Valley,** | **85.61** | **308** | P | **P** | **03 58 41.6 +1.0** |
| 113A | | | | IAmb | IAmb | 03 58 46.5 |
| | comp=Z,59nm,1.8s | | | | | |
| MPMC | **Manual Prospec** | **85.79** | **312** | P | **P** | **03 58 42.6 +1.0** |
| | baz=48,SNR=8.7 | | | | | |
| GSC | **Goldstone, Bar** | **85.88** | **311** | IAmb | IAmb | 03 58 47.1 |
| | comp=Z,43nm,1.8s | | | | | |
| GSC | **Goldstone, Bar** | **85.88** | **311** | P | **P** | **03 58 43.3 +1.4** |
| | baz=48 | | | | | |
| TIY | **Taiyuan** | **85.89** | **46** | ⇑P | **P** | **03 58 42.4 +0.5** |
| TIY | | | | pmax | pmax | |
| | comp=Z,220nm,3.7s | | | | | |
| TIY | | | | LR | LR | |
| | comp=Z,230nm,11.0s | | | | | |
| TIY | | | | LR | LR | |
| | comp=Z,240nm,12.0s | | | | | |
| TIY | | | | LR | LR | |
| | comp=Z,200nm,20.6s | | | | | |
| CWC | **Cottonwood Cre** | **85.89** | **313** | P | **P** | **03 58 43.2 +1.1** |
| | baz=48 | | | | | |
| O02D | **Mt. Diablo Mer** | **86.02** | **318** | P | **P** | **03 58 43.1 +0.5** |
| | baz=45 | | | | | |
| BC3 | **Big Chuckawall** | **86.12** | **309** | P | **P** | **03 58 43.9 +0.7** |
| | baz=49 | | | | | |
| PZH | **PanZhiHua** | **86.22** | **60** | P | **P** | **03 58 44.3 +0.5** |
| PZH | | | | pmax | pmax | |
| | comp=Z,60nm,1.0s | | | | | |
| PZH | | | | pmax | pmax | |
| | comp=Z,250nm,5.0s | | | | | |
| XAN | **Xi'an** | **86.22** | **50** | P | **P** | **03 58 44.0 +0.4** |
| XAN | | | | pmax | pmax | |
| | comp=Z,65nm,1.3s | | | | | |
| LRMC | **Laurel Mtn Rad** | **86.29** | **312** | P | **P** | **03 58 45.1 +1.1** |
| | baz=48 | | | | | |
| BJI | **Beijing** | **86.38** | **42** | P | **P** | **03 58 44.9 +0.7** |
| BJI | | | | pP | **sP** | **03 58 49.8 -0.4** |
| BJI | | | | pmax | pmax | |
| | comp=Z,38nm,1.0s | | | | | |
| BJI | | | | LR | LR | |
| | comp=Z,600nm,16.9s | | | | | |
| BJI | | | | LR | LR | |
| | comp=Z,450nm,17.4s | | | | | |
| BJI | | | | LR | LR | |
| | comp=Z,370nm,19.6s | | | | | |
| KLR | **Kul'dur** | **86.55** | **28** | P | **P** | **03 58 44.8 -0.1** |
| | comp=Z,3.8nm,0.8s | | | | | |
| KLR | | | | LR | LR | 04 42 11.9 |
| | comp=Z,161nm,18.7s,baz=340,slow=39 | | | | | |
| KLR | **Kul'dur** | **86.55** | **28** | ⇓*e*P | **P** | **03 58 44.9 0.0** |
| KLR | | | | pmax | pmax | |
| | comp=Z,21nm,1.9s | | | | | |
| ISA | **Isabella, Lake** | **86.65** | **312** | P | **P** | **03 58 46.1 +0.3** |
| | baz=48 | | | | | |
| SPIA | **Saint Paul Isl** | **86.75** | **353** | P | **P** | **03 58 46.8 +1.1** |
| | baz=11 | | | | | |
| PFO | **Pinyon Flats O** | **86.78** | **310** | LR | LR | 04 36 43.9 |
| | comp=Z,166nm,18.5s,baz=32,slow=35 | | | | | |
| TPFO | **Pinon Flats** | **86.78** | **310** | P | **P** | **03 58 47.1 +0.6** |
| | baz=48 | | | | | |
| SWSC | **Sam W. Stewart** | **86.80** | **309** | P | **P** | **03 58 47.6 +1.2** |
| | baz=49 | | | | | |
| EDW2 | **Edwards Air Fo** | **86.88** | **311** | P | **P** | **03 58 48.0 +1.2** |
| | baz=48 | | | | | |
| GRNR | **Gornyy** | **86.91** | **24** | ⇑*i*P | **P** | **03 58 46.1 -0.6** |
| GRNR | | | | pmax | pmax | |
| | comp=Z,3.0nm,1.1s | | | | | |
| SDPT | **Sand Point** | **87.13** | **347** | P | **P** | **03 58 47.7 +0.1** |
| | baz=19 | | | | | |
| MONP2 | **Monument Peak** | **87.23** | **309** | P | **P** | **03 58 49.9 +1.1** |
| | baz=48 | | | | | |
| MURC | **Murrieta** | **87.25** | **310** | P | **P** | **03 58 49.7 +1.1** |
| | baz=48 | | | | | |
| HNS | **HongShan** | **87.41** | **45** | ⇑P | **P** | **03 58 50.3 +1.0** |
| HNS | | | | S | **S** | **04 09 29.8 +0.2** |
| HNS | | | | pmax | pmax | |
| | comp=Z,59nm,1.0s | | | | | |
| HNS | | | | LR | LR | |
| | comp=Z,170nm,13.0s | | | | | |
| HNS | | | | LR | LR | |
| | comp=Z,610nm,13.0s | | | | | |
| HNS | | | | LR | LR | |
| | comp=Z,340nm,13.0s | | | | | |
| DGPR | **DIGLIPUR** | **87.57** | **76** | *e*P | **P** | **03 58 51.1 +0.7** |
| DGPR | | | | IAmb | IAmb | 03 58 51.8 |
| | comp=Z,29nm,0.9s | | | | | |
| BNX | **BinXian** | **87.60** | **32** | ⇑P | **P** | **03 58 50.3 +0.2** |
| BNX | | | | pmax | pmax | |
| | comp=Z,29nm,1.0s | | | | | |
| BNX | | | | pmax | pmax | |
| | comp=Z,520nm,3.6s | | | | | |
| AC02 | **Maricunga** | **87.75** | **235** | IAmb | IAmb | 03 58 54.0 |
| | comp=Z,48nm,1.4s | | | | | |
| KMI | **Kunming** | **87.78** | **61** | ⇓P | **P** | **03 58 52.3 +0.7** |
| KMI | | | | pP | pP | 03 58 55.6 -0.4 |
| KMI | | | | sP | sP | 03 58 56.8 -0.7 |
| KMI | | | | pmax | pmax | |
| | comp=Z,16nm,1.2s | | | | | |
| LYN | **LuoYang** | **88.06** | **48** | ⇑P | **P** | **03 58 53.4 +1.0** |
| LYN | | | | S | **S** | **04 09 40.5 +4.6** |
| LYN | | | | pmax | pmax | |
| | comp=Z,50nm,1.0s | | | | | |
| LYN | | | | pmax | pmax | |
| | comp=Z,180nm,5.5s | | | | | |
| LYN | | | | LR | LR | |
| | comp=Z,450nm,13.9s | | | | | |
| LYN | | | | LR | LR | |
| | comp=Z,370nm,13.3s | | | | | |
| SBC | **Santa Barbara** | **88.22** | **312** | P | **P** | **03 58 54.7 +1.5** |
| | baz=47 | | | | | |
| CN2 | **Changchun** | **88.25** | **34** | *e*P | **P** | **03 58 53.0 -0.2** |
| CN2 | | | | pmax | pmax | |
| | comp=Z,20nm,0.6s | | | | | |
| CN2 | | | | pmax | pmax | |
| | comp=Z,200nm,3.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,500nm,11.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,500nm,11.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,700nm,12.0s | | | | | |
| LPIG | **La Paz** | **88.75** | **299** | LR | LR | 04 38 35.8 |
| | comp=Z,454nm,19.0s,baz=40,slow=36 | | | | | |
| CHTO | **Chiang Mai** | **88.86** | **68** | P | **P** | **03 58 56.1 -0.4** |
| CHTO | | | | pmax | pmax | |
| | comp=Z,20nm,1.1s | | | | | |
| CHTO | **Chiang Mai** | **88.86** | **68** | P | **P** | **03 58 56.1 -0.4** |
| CHTO | | | | IAmb | IAmb | 03 58 57.9 |
| | comp=Z,20nm,1.1s | | | | | |
| CHTO | **Chiang Mai** | **88.86** | **68** | P | **P** | **03 58 57.4 +0.9** |
| GO03 | **Copiap** | **88.99** | **235** | IAmb | IAmb | 03 58 58.8 |
| | comp=Z,22nm,1.1s | | | | | |
| CMAR | **Chiang Mai Arr** | **89.08** | **68** | P | **P** | **03 58 58.0 +0.4** |
| | comp=Z,8.0nm,0.8s,baz=302,slow=6.0,SNR=47 | | | | | |
| CMAR | | | | LR | LR | 04 44 53.2 |
| | comp=Z,36nm,19.6s,baz=305,slow=40 | | | | | |
| CMAR | **Chiang Mai Arr** | **89.08** | **68** | P | **P** | **03 58 58.0 +0.4** |
| GYA | **Guiyang** | **89.67** | **57** | ⇓*i*P | **P** | **03 59 00.8 +0.5** |
| GYA | | | | pmax | pmax | |
| | comp=Z,21nm,1.0s | | | | | |
| PETK | **Petropavlovsk-** | **90.02** | **11** | LR | LR | 04 44 23.3 |
| | comp=Z,314nm,20.9s,baz=332,slow=39 | | | | | |
| ZON | **Zonda** | **90.62** | **231** | IAmb | IAmb | 03 59 08.3 |
| | comp=Z,20nm,1.1s | | | | | |
| USRK | **Ussuriysk Ar.** | **90.77** | **30** | P | **P** | **03 59 05.4 +0.4** |
| | comp=Z,0.8nm,0.5s,baz=304,slow=0.7,SNR=4.3 | | | | | |
| USRK | | | | LR | LR | 04 43 15.1 |
| | comp=Z,207nm,18.1s,baz=330,slow=38 | | | | | |
| SHEM | **Shemya Is, Ala** | **91.86** | **1** | LR | LR | 04 41 02.2 |
| | comp=Z,127nm,20.0s,baz=342,slow=36 | | | | | |
| YSS | **Yuzh-Sakhalins** | **92.28** | **22** | *e*P | **P** | **03 59 11.9 0.0** |
| YSS | | | | MLR | MLR | |
| | comp=Z,900nm,16.0s | | | | | |
| LMEL | **Las Melosas** | **93.11** | **230** | IAmb | IAmb | 03 59 20.3 |
| | comp=Z,16nm,0.9s | | | | | |
| BO04 | **La Punta** | **93.45** | **230** | IAmb | IAmb | 03 59 18.5 |
| | comp=Z,31nm,1.1s | | | | | |
| NJ2 | **Nanjing** | **93.61** | **46** | *e*P | **P** | **03 59 18.4 +0.1** |
| NJ2 | | | | S | **S** | **04 10 21.6 -5.2** |
| NJ2 | | | | pmax | pmax | |
| | comp=Z,21nm,0.7s | | | | | |
| KSAR | **Wonju Array Be** | **94.38** | **37** | P | **P** | **03 59 20.9 -0.9** |
| KSAR | **Wonju Array Be** | **94.38** | **37** | P | **P** | **03 59 20.9 -0.9** |
| KSRS | **Korea Array** | **94.39** | **37** | P | **P** | **03 59 21.3 -0.5** |
| | comp=Z,6.6nm,0.9s,baz=328,slow=4.0,SNR=21 | | | | | |
| KSRS | | | | LR | LR | 04 47 10.8 |
| | comp=Z,267nm,19.4s,baz=335,slow=39 | | | | | |
| ASAJ | **Asahikawa** | **94.76** | **24** | LR | LR | 04 48 29.9 |
| | comp=Z,455nm,19.2s,baz=205,slow=40 | | | | | |
| QIZ | **Qiongzhong** | **96.72** | **61** | P | **P** | **03 59 33.6 +0.8** |
| QIZ | | | | S | **S** | **04 10 48.3 -5.9** |
| QIZ | | | | LR | LR | |
| | comp=Z,250nm,22.6s | | | | | |
| QIZ | | | | LR | LR | |
| | comp=Z,280nm,21.6s | | | | | |
| QIZ | | | | LR | LR | |
| | comp=Z,190nm,18.6s | | | | | |
| PLCA | **Paso Flores** | **97.85** | **225** | P | Pdif | 03 59 38.0 +0.6 |
| | comp=Z,6.1nm,1.0s,baz=36,slow=4.3,SNR=14 | | | | | |
| PLCA | | | | LR | LR | 04 43 22.2 |
| | comp=Z,165nm,19.1s,baz=71,slow=35 | | | | | |
| PLCA | **Paso Flores** | **97.85** | **225** | *e*P | Pdif | 03 59 38.6 +1.2 |
| PSI | **Prapat** | **98.47** | **80** | LR | LR | 04 50 37.9 |
| | comp=Z,65nm,18.9s,baz=306,slow=39 | | | | | |
| MJAR | **Matsushiro Arr** | **99.77** | **30** | LR | LR | 04 48 57.6 |
| | comp=Z,169nm,18.3s,baz=354,slow=38 | | | | | |
| SYO | **Syowa Base** | **109.19** | **165** | ⇓*e*Pdif | **Pdif** | **04 00 25.4 -1.6** |
| FITZ | **Fitzroy Crossi** | **131.95** | **82** | PKP | **PKPdf** | **04 05 14.6 -1.1** |
| | comp=Z,2.2nm,0.7s,baz=328,slow=3.5,SNR=5.4 | | | | | |
| FITZ | **Fitzroy Crossi** | **131.95** | **82** | | **PKPdf** | **04 05 15.1 -0.6** |
| TAOE | **Nuku Hiva Isla** | **132.30** | **293** | *e*LR | LR | 04 47 30.5 |
| | comp=Z,264nm,25.6s | | | | | |
| WRA | **Warramunga Arr** | **139.90** | **78** | PKhKP | PKPpre | 04 05 19.9 |
| | comp=Z,0.9nm,0.6s,baz=312,slow=2.7,SNR=7.6 | | | | | |
| WRA | | | | PP | **PP** | **04 08 24.7 -2.4** |
| | comp=Z,1.7nm,0.9s,baz=317,slow=6.7,SNR=5.6 | | | | | |
| WRA | **Warramunga Arr** | **139.90** | **78** | PKHKP | PKPpre | 04 05 21.4 |
| WRA | **Warramunga Arr** | **139.90** | **78** | | PKPpre | 04 05 21.4 |
| AS31 | **Alice Springs** | **141.41** | **84** | | PKPpre | 04 05 26.0 |
| ASAR | **Alice Springs** | **141.41** | **84** | PKhKP | PKPpre | 04 05 25.7 |
| | comp=Z,3.5nm,0.8s,baz=306,slow=3.0,SNR=29 | | | | | |
| ASAR | | | | PP | **PP** | **04 08 35.4 -1.0** |
| | comp=Z,1.8nm,0.8s,baz=310,slow=6.3,SNR=8.4 | | | | | |
| PMG | **Port Moresby** | **142.60** | **53** | PKhKP | PKPpre | 04 05 30.7 |
| | comp=Z,5.6nm,0.3s,baz=132,slow=3.9,SNR=4.5 | | | | | |
| PPT2 | **Papeete2** | **144.90** | **292** | *e*LR | LR | 04 53 06.5 |
| | comp=Z,257nm,24.0s | | | | | |
| BBOO | **Buckleboo** | **146.66** | **97** | | **PKPdf** | **04 05 42.9 +0.8** |
| CTA | **Charters Tower** | **149.25** | **68** | PKPbc | **PKPbc** | **04 05 50.4 -0.6** |
| | comp=Z,15nm,0.8s,baz=293,slow=4.6,SNR=10 | | | | | |
| STKA | **Stephens Creek** | **150.87** | **93** | PKPbc | **PKPbc** | **04 05 54.1 -0.5** |
| | comp=Z,42nm,0.9s,baz=321,slow=3.3,SNR=80 | | | | | |
| STKA | **Stephens Creek** | **150.87** | **93** | PKIKP | **PKPbc** | **04 05 53.5 -1.1** |
| STKA | **Stephens Creek** | **150.87** | **93** | | **PKPbc** | **04 05 53.5 -1.1** |
| TOO | **Toolangi** | **155.15** | **103** | PKIKP | PKPdf | 04 06 03.3 +8.3 |
| TOO | **Toolangi** | **155.15** | **103** | PKPbc | PKPdf | 04 06 03.3 +8.3 |
| TOO | | | | | **PKPab** | **04 06 20.5 +0.7** |
| CAN | **Canberra** | **157.68** | **97** | PKP2 | **PKPab** | **04 06 29.8 -1.0** |
| CAN | **Canberra** | **157.68** | **97** | PKPab | **PKPbb** | **04 06 29.8 -1.0** |
| DZM | **Mont Dzumac** | **163.81** | **35** | *e*LR | LR | 05 02 01.5 |
| | comp=Z,396nm,25.4s | | | | | |

*CNRM* ***22*** *03:52:08.4,35˚.64N×3˚.38W,h162km,ml3.6*
**ISC 22 03:52:11.7±1.1,35˚.64N±0˚.06×3˚.47W±0˚.08,h10km,n26,**
**σ1s29/26,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | **Palemas** | **0.57** | **223** | P | **Pn** | 03 52 32.9 | +7.0 |
| AKLM | **AKL** | **1.17** | **196** | P | **Pb** | **03 52 34.0** | **-0.1** |
| TAF | **Taforalt** | **1.19** | **133** | P | **Pn** | **03 52 34.2** | **-0.3** |
| EMAL | **Malaga-Limoner** | **1.36** | **325** | P | **Pn** | **03 52 34.2** | **-2.6** |
| EMAL | | | | S | **Sb** | **03 52 52.7** | **-2.1** |
| JBK | **JBK** | **1.50** | **150** | P | **Pg** | **03 52 40.7** | **+0.2** |
| CHEFC | **Chefchaouen** | **1.62** | **251** | P | **Pn** | **03 52 40.9** | **+0.5** |
| PVAQ | **Vaqueiros** | **3.85** | **298** | *e*Pn | **Pn** | **03 53 11.4** | **+0.4** |
| PBDV | **Barranco-do-Ve** | **3.94** | **295** | *e*Pn | **Pn** | **03 53 12.6** | **+0.4** |
| PCVE | **Castro Verde** | **4.18** | **300** | *e*Pn | **Pn** | **03 53 15.7** | **+0.2** |
| MESJ | **Messejana** | **4.40** | **301** | *e*Pn | **Pn** | **03 53 18.9** | **+0.3** |
| MORF | **Marmelete** | **4.50** | **293** | *e*Pn | **Pn** | **03 53 20.3** | **+0.4** |
| PFVI | **Vila Bisbo** | **4.57** | **291** | *e*Pn | **Pn** | **03 53 21.0** | **+0.1** |
| PESTR | **Estremoz** | **4.60** | **316** | *e*Pn | **Pn** | **03 53 22.1** | **+0.7** |
| EVO | **Evora** | **4.64** | **310** | *e*Pn | **Pn** | **03 53 22.0** | **+0.1** |
| PNCL | **Nicolau / Gran** | **4.75** | **303** | *e*Pn | **Pn** | **03 53 23.8** | **+0.5** |
| PMRV | **Marv??o** | **4.90** | **322** | *e*Pn | **Pn** | **03 53 26.8** | **+1.3** |
| PMTG | **Montargil** | **5.11** | **313** | *e*Pn | **Pn** | **03 53 29.4** | **+1.2** |
| PCBR | **Castelo Branco** | **5.26** | **324** | *e*Pn | **Pn** | **03 53 32.1** | **+1.7** |
| PACT | **Alcochete** | **5.30** | **308** | *e*Pn | **Pn** | **03 53 32.3** | **+1.4** |
| PSBE | **So Bento** | **5.73** | **314** | *e*Pn | **Pn** | **03 53 38.3** | **+1.4** |
| MTE | **Manteigas** | **5.74** | **327** | *e*Pn | **Pn** | **03 53 38.8** | **+1.8** |
| PVIS | **Viseu** | **6.15** | **327** | *e*Pn | **Pn** | **03 53 44.3** | **+1.7** |
| MVO | **Moncorvo** | **6.18** | **334** | *e*Pn | **Pn** | **03 53 43.0** | **-0.1** |
| PVRL | **Vila Real** | **6.54** | **331** | *e*Pn | **Pn** | **03 53 49.8** | **+1.8** |
| POLO | **Lamas de Olo** | **6.65** | **331** | *e*Pn | **Pn** | **03 53 50.9** | **+1.3** |
| PBRG | **Braganca** | **6.67** | **338** | *e*Pn | **Pn** | **03 53 51.7** | **+2.0** |

*SFS* ***22*** *03:52:14.0,37˚.70N×3˚.52W,ML2.0,ALBORAN SUR*
*CNRM* ***22*** *03:52:42.6,35˚.70N×3˚.49W,h19km,ml3.6*
*MDD* ***22*** *03:52:43.2±0.5,35˚.68N×3˚.62W,h5km±3km,mb_Lg3.3/5,*
*Error ellipse: s-maj=3.4km s-min=2.6km az=0.0*
*INMG* ***22*** *03:52:44.0±1.4,35˚.66N×3˚.59W,h16km±6km,ML2.8,Error*
*ellipse: s-maj=4.2km s-min=3.7km az=30.0*
**ISC 22 03:52:43.5±1.2,35˚.66N±0˚.03×3˚.61W±0˚.03,h25km±13km,**
**n58,σ1s33/89,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | **Palemas** | **0.52** | **212** | P | **Pb** | **03 52 54.3** | **+0.2** |
| PALE | | | | S | **Sn** | **03 53 03.5** | **+0.1** |
| EALB | **Alboran** | **0.54** | **59** | Pg | **Pb** | **03 52 53.9** | **-0.4** |
| EALB | | | | Sg | **Sb** | **03 53 02

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MD31** | **MD31** | **2.95** | **199** | P | | **Pn** | **03 53 29.4** | **+0.7** |
| **EGRO** | **El Granado** | **3.64** | **302** | Sn | | **Sn** | **03 54 19.9** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.74** | **299** | *e*Pn | | **Pn** | **03 53 40.3** | **+0.8** |
| PVAQ | | | | *e*Sn | | **Sn** | **03 54 22.4** | **-0.3** |
| PVAQ | | | | A | A | | 03 54 25.1 | |
| | 12nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **299** | P | | **Pn** | **03 53 39.9** | **+0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **296** | *e*Pn | | **Pn** | **03 53 41.4** | **+0.6** |
| PBDV | | | | *e*Sn | | **Sn** | **03 54 25.2** | **+0.3** |
| PBDV | | | | A | A | | 03 54 29.5 | |
| | 14nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.01** | **356** | Pn | | **Pn** | **03 53 44.9** | **+1.5** |
| **FIGM** | **Figuig** | **4.03** | **150** | P | | **Pn** | **03 53 41.6** | **-2.0** |
| **PCVE** | **Castro Verde** | **4.07** | **300** | *e*Pn | | **Pn** | **03 53 44.6** | **+0.5** |
| PCVE | | | | *e*Sn | | **Sn** | **03 54 30.9** | **0.0** |
| PCVE | | | | A | A | | 03 54 36.2 | |
| | 12nm,0.6s | | | | | | | |
| **GOLM** | **Goulmima** | **4.11** | **196** | P | | **Pn** | **03 53 46.0** | **+1.3** |
| **EBAD** | **Badajoz** | **4.11** | **320** | Pn | | **Pn** | **03 53 45.4** | **+0.7** |
| EBAD | | | | Sn | | **Sn** | **03 54 30.6** | **-1.4** |
| EBAD | | | | *i* Vmb_Lg | | | 03 54 33.6 | |
| **PBEJ** | **Beja** | **4.15** | **306** | *e*Pn | | **Pn** | **03 53 46.2** | **+1.0** |
| PBEJ | | | | *e*Sn | | **Sn** | **03 54 31.9** | **-1.0** |
| PBEJ | | | | A | A | | 03 54 36.1 | |
| | 7.8nm,0.7s | | | | | | | |
| **MESJ** | **Messejana** | **4.29** | **302** | *e*Pn | | **Pn** | **03 53 47.5** | **+0.3** |
| MESJ | | | | *e*Sn | | **Sn** | **03 54 36.8** | **+0.4** |
| MESJ | | | | A | A | | 03 54 38.0 | |
| | 11nm,0.6s | | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **293** | *e*Pn | | **Pn** | **03 53 50.4** | **+2.0** |
| MORF | | | | *e*Sn | | **Sn** | **03 54 38.4** | **-0.3** |
| MORF | | | | A | A | | 03 54 51.8 | |
| | 8.7nm,0.4s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **291** | *e*Pn | | **Pn** | **03 53 52.2** | **+2.8** |
| PFVI | | | | *e*Sn | | **Sn** | **03 54 39.8** | **-0.7** |
| PFVI | | | | A | A | | 03 54 48.9 | |
| | 12nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **291** | P | | **Pn** | **03 53 50.8** | **+1.4** |
| **PESTR** | **Estremoz** | **4.51** | **316** | *e*Pn | | **Pn** | **03 53 51.7** | **+1.6** |
| PESTR | | | | *e*Sn | | **Sn** | **03 54 41.4** | **-0.3** |
| PESTR | | | | A | A | | 03 54 54.3 | |
| | 6.8nm,0.7s | | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **316** | P | | **Pn** | **03 53 49.9** | **-0.2** |
| **PTEO** | **Sao Teotonio** | **4.53** | **296** | *e*Pn | | **Pn** | **03 53 52.1** | **+1.8** |
| PTEO | | | | *e*Sn | | **Sn** | **03 54 41.9** | **-0.2** |
| PTEO | | | | A | A | | 03 54 47.0 | |
| | 13nm,0.5s | | | | | | | |
| **EVO** | **Evora** | **4.54** | **310** | *e*Pn | | **Pn** | **03 53 51.8** | **+1.3** |
| EVO | | | | *e*Sn | | **Sn** | **03 54 41.7** | **-0.8** |
| EVO | | | | A | A | | 03 54 43.7 | |
| | 8.5nm,0.3s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.64** | **303** | *e*Pn | | **Pn** | **03 53 52.9** | **+1.0** |
| PNCL | | | | *e*Sn | | **Sn** | **03 54 44.4** | **-0.6** |
| PNCL | | | | A | A | | 03 54 47.4 | |
| | 15nm,0.7s | | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **322** | *e*Pn | | **Pn** | **03 53 56.2** | **+1.9** |
| PMRV | | | | *e*Sn | | **Sn** | **03 54 49.1** | **-0.1** |
| PMRV | | | | A | A | | 03 55 04.1 | |
| | 5.5nm,0.9s | | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **314** | *e*Pn | | **Pn** | **03 53 59.1** | **+2.1** |
| PMTG | | | | *e*Sn | | **Sn** | **03 54 53.6** | **-0.4** |
| PMTG | | | | A | A | | 03 55 03.3 | |
| | 5.3nm,0.8s | | | | | | | |
| **TZRR** | **Tazzarine** | **5.14** | **199** | P | | **Pn** | **03 53 59.6** | **+0.7** |
| **PCBR** | **Castelo Branco** | **5.18** | **325** | *e*Pn | | **Pn** | **03 54 01.6** | **+2.3** |
| PCBR | | | | *e*Sn | | **Sn** | **03 54 57.5** | **-0.6** |
| PCBR | | | | A | A | | 03 54 59.4 | |
| | 6.4nm,0.5s | | | | | | | |
| **PACT** | **Alcochete** | **5.20** | **308** | *e*Pn | | **Pn** | **03 54 01.2** | **+1.7** |
| PACT | | | | *e*Sn | | **Sn** | **03 54 57.7** | **-0.9** |
| PACT | | | | A | A | | 03 55 03.9 | |
| | 22nm,0.7s | | | | | | | |
| **PMST** | **Lisbon--Monsan** | **5.41** | **306** | *e*Pn | | **Pn** | **03 54 04.1** | **+1.7** |
| **OUZM** | **OUZ** | **5.43** | **210** | P | | **Pn** | **03 54 04.2** | **+1.3** |
| **PMAFR** | **Mafra** | **5.59** | **308** | *e*Pn | | **Pn** | **03 54 06.6** | **+1.6** |
| PMAFR | | | | *e*Sn | | **Sn** | **03 55 07.1** | **-1.3** |
| PMAFR | | | | A | A | | 03 55 11.1 | |
| | 14nm,0.3s | | | | | | | |
| **PSBE** | **So Bento** | **5.63** | **315** | *e*Pn | | **Pn** | **03 54 07.3** | **+1.7** |
| PSBE | | | | *e*Sn | | **Sn** | **03 55 08.9** | **-0.6** |
| PSBE | | | | A | A | | 03 55 09.6 | |
| | 5.1nm,0.8s | | | | | | | |
| **MTE** | **Manteigas** | **5.66** | **328** | *e*Pn | | **Pn** | **03 54 08.2** | **+2.2** |
| **OUK** | **Oukaimeden** | **5.70** | **220** | P | | **Pn** | **03 54 06.3** | **-0.5** |
| **PVIS** | **Viseu** | **6.07** | **327** | *e*Pn | | **Pn** | **03 54 13.3** | **+1.7** |
| PVIS | | | | *e*Sn | | **Sn** | **03 55 18.3** | **-1.9** |
| PVIS | | | | A | A | | 03 55 23.7 | |
| | 5.1nm,0.5s | | | | | | | |
| **MVO** | **Moncorvo** | **6.11** | **335** | *e*Pn | | **Pn** | **03 54 14.0** | **+1.8** |
| MVO | | | | *e*Sn | | **Sn** | **03 55 20.5** | **-0.9** |
| MVO | | | | A | A | | 03 55 33.4 | |
| | 4.9nm,0.9s | | | | | | | |
| **PVRL** | **Vila Real** | **6.46** | **331** | *e*Pn | | **Pn** | **03 54 18.6** | **+1.6** |
| PVRL | | | | *e*Sn | | **Sn** | **03 55 28.8** | **-1.1** |
| PVRL | | | | A | A | | 03 55 34.9 | |
| | 5.7nm,0.1s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.58** | **331** | *e*Pn | | **Pn** | **03 54 20.4** | **+1.8** |
| POLO | | | | *e*Sn | | **Sn** | **03 55 30.8** | **-2.0** |
| POLO | | | | A | A | | 03 55 34.0 | |
| | 1.9nm,0.6s | | | | | | | |
| **PBRG** | **Braganca** | **6.60** | **339** | *e*Pn | | **Pn** | **03 54 20.9** | **+2.0** |
| **PCAB** | **Cabril** | **6.96** | **332** | *e*Pn | | **Pn** | **03 54 25.4** | **+1.7** |
| **PGAV** | **Gavieira, Arco** | **7.27** | **331** | *e*Pn | | **Pn** | **03 54 30.2** | **+2.1** |

*IDC* ***22*** *04:14:27.6±0.5,35°.70N×3°.65W, h0km, mb4.0/20, mb1 4.2/25,mb1mx4.1/44, mbtmp4.0/25,ML4.2/4, MS3.7/11, Ms1 3.8/11,ms1mx3.3/95,Error ellipse: s-maj=17.0km s-min=10.1km az=106.0*

*MED_RC* ***22*** *04:14:29.0±0.7,35°.71N×3°.58W,h10km,MW4.3/10, Moment Tensor Solution.Mantle waves: s10,c13; Duration: 1s1 Moment tensor: Scale 10^15Nm; Mrr3.67±.27; Mθθ-2.73±.23; Mϕϕ-0.94±.40; Mrθ-1.48±1.06; Mθϕ-1.35±.18; Mϕr1.10±.77; Best double couple: Ms3.95000×10^15 NP1:ϕs262.00000°,δs55.00000°, λ114.00000°. NP2:ϕs44.00000°,δ42.00000°,λ60.00000°. Principal axes: T 4.3600, Plg69.0000°, Azm226.0000°; N -0.8100, Plg19.0000°, Azm68.0000°; P -3.5500, Plg7.0000°, Azm335.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*

*IGIL* ***22*** *04:14:29.0,35°.58N×3°.54W, h5km, ML3.9*

*CRAAG* ***22*** *04:14:30.9,35°.70N×3°.58W, Mb4.6*

*LDG* ***22*** *04:14:30.3,35°.44N×3°.45W, h30km*

*NEIC* ***22*** *04:14:30.1±1.4,35°.74N±0°.08×3°.52W±0°.07, h10km±1km, mb4.6/39,Error ellipse: s-maj=14.2km s-min=9.3km az=168.0*

*INMG* ***22*** *04:14:30.0±1.3,35°.63N×3°.64W, h7km±6km, ML3.8, Error ellipse: s-maj=4.6km s-min=3.0km az=145.0*

*SFS* ***22*** *04:14:31.0,35°.67N×3°.67W, ML4.4, ALBORAN SUR*

*CNRM* ***22*** *04:14:33.3,36°.05N±2°.87W, h40km, ml4.7*

**ISC 22 04:14:30.0±1.3, 35.71N±0°.03×3°.55W±0°.03, h15km±8km, n202, σ1♀72/253, mb4.5/37, MS3.8/9, 5C-6D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.59** | **213** | P | **Pg** | **04 14 41.4** | **-0.2** |
| PALE | | | | S | **Sb** | **04 14 49.9** | **-0.2** |
| **AKLM** | **AKL** | **1.23** | **192** | P | **Pb** | **04 14 52.1** | **-0.7** |
| AKLM | | | | S | **Sb** | **04 15 07.8** | **-0.7** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **326** | P | **Pn** | **04 14 51.8** | **-1.4** |
| EMAL | | | | S | **Sb** | **04 15 08.7** | **-1.1** |
| **TAF** | **Taforalt** | **1.29** | **134** | P | **Pg** | **04 14 55.0** | **+0.2** |
| TAF | | | | S | **Sb** | **04 15 08.6** | **-1.7** |
| **CEU** | **Ceuta** | **1.50** | **278** | P | **Pn** | **04 14 52.2** | **-4.1** |
| CEU | | | | S | **Sn** | **04 15 10.9** | **-4.7** |
| **CHEFC** | **Chefchaouen** | **1.58** | **248** | P | **Pn** | **04 14 57.1** | **-0.5** |
| CHEFC | | | | S | Sg | 04 15 29.2 | +8.2 |
| **JBK** | **JBK** | **1.59** | **149** | P | **Pn** | **04 14 56.5** | **-1.3** |
| JBK | | | | S | **Sb** | **04 15 19.8** | **+0.6** |
| **CPS** | **Cap Spartel** | **1.92** | **273** | P | **Pg** | **04 15 06.0** | **-0.9** |
| **SICH** | **Sidi Chahed** | **2.17** | **223** | P | **Pn** | **04 15 06.3** | **+0.8** |
| SICH | | | | S | Sn | 04 15 15.0 | -17 |
| **SFS** | **San Fernando** | **2.28** | **290** | P | **Pn** | **04 15 08.6** | **+1.5** |
| SFS | | | | S | **Sg** | **04 15 42.0** | **-1.3** |
| **SFS** | **San Fernando** | **2.28** | **290** | Pn | **Pn** | **04 15 07.8** | **+0.7** |
| **LCRM** | **LCR** | **2.29** | **209** | P | **Pn** | **04 15 07.0** | **-0.3** |
| LCRM | | | | S | **Sn** | **04 15 34.0** | **-1.4** |
| **IFR** | **Ifrane** | **2.55** | **211** | P | **Pn** | **04 15 10.4** | **-0.5** |
| IFR | | | | S | **Sn** | **04 15 40.7** | **-1.1** |
| **CART** | **Cartagena** | **2.77** | **47** | P | **Pn** | **04 15 13.2** | **-0.6** |
| CART | | | | S | **Sn** | **04 15 43.7** | **-3.4** |
| **CART** | **Cartagena** | **2.77** | **47** | Pn | **Pn** | **04 15 13.1** | **-0.8** |
| **CART** | **Cartagena** | **2.77** | **47** | P | **Pn** | **04 15 12.6** | **-1.3** |
| CART | | | | S | **Sn** | **04 15 43.1** | **-4.0** |
| **ARNO** | **Arenosillo** | **2.92** | **299** | P | **Pn** | **04 15 16.5** | **+0.7** |
| ARNO | | | | S | **Sn** | **04 15 51.7** | **+1.0** |
| **CZD** | **Col de Zad** | **2.94** | **205** | P | **Pg** | **04 15 26.0** | **-0.5** |
| **MD31** | **MD31** | **3.01** | **200** | P | **Pn** | **04 15 17.2** | **0.0** |
| **MDT** | **Midelt** | **3.02** | **197** | Pn | **Pn** | **04 15 17.1** | **-0.2** |
| | 9.1nm,0.3s,baz=162,slow=8.4,SNR=45 | | | | | | |
| MDT | | | | Sn | **Sn** | **04 15 54.3** | **+1.0** |
| | 22nm,0.3s,baz=234,slow=20,SNR=5.8 | | | | | | |
| MDT | | | | Lg | Lg | 04 16 01.8 | |
| | 21nm,0.3s,baz=70,slow=20,SNR=4.4 | | | | | | |
| MDT | | | | LR | LR | 04 16 46.4 | |
| | comp=Z,701nm,18.7s,baz=39,slow=47 | | | | | | |
| **MDT** | **Midelt** | **3.02** | **197** | P | **Pg** | **04 15 26.2** | **-1.6** |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | ⇑*e*Pn | **Pn** | **04 15 26.8** | **-0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **04 16 09.2** | **-2.2** |
| PVAQ | | | | A | A | 04 16 11.2 | |
| | 179nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | Pn | **Pn** | **04 15 26.2** | **-1.2** |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | P | **Pn** | **04 15 26.8** | **-0.6** |
| PVAQ | | | | S | **Sn** | **04 16 09.6** | **-1.8** |
| **PBDV** | **Barranco-do-Ve** | **3.85** | **295** | ⇑*e*Pn | **Pn** | **04 15 28.1** | **-0.6** |
| PBDV | | | | *e*Sn | **Sn** | **04 16 11.3** | **-2.4** |
| PBDV | | | | A | A | 04 16 13.6 | |
| | 194nm,0.3s | | | | | | |
| **PAB** | **San Pablo** | **3.88** | **351** | Pn | **Pn** | **04 15 29.9** | **+0.7** |
| **PAB** | **San Pablo** | **3.88** | **351** | P | **Pn** | **04 15 30.6** | **+1.4** |
| **ETRT** | **Tiaret** | **3.96** | **93** | P | Pn | 04 15 20.6 | -10 |
| **ESDC** | **Sonseca Array** | **3.97** | **355** | Pn | **Pn** | **04 15 31.1** | **+0.7** |
| | 7.5nm,0.3s,baz=175,slow=12,SNR=294 | | | | | | |
| ESDC | | | | Sn | **Sn** | **04 16 15.3** | **-1.4** |
| | 7.4nm,0.3s,baz=166,slow=20,SNR=6.3 | | | | | | |
| ESDC | | | | Lg | Lg | 04 16 33.2 | |
| | 12nm,0.3s,baz=174,slow=28,SNR=7.1 | | | | | | |
| ESDC | | | | LR | LR | 04 17 26.7 | |
| | comp=Z,579nm,18.8s,baz=232,slow=45 | | | | | | |
| **ESDC** | **Sonseca Array** | **3.97** | **355** | Pn | **Pn** | **04 15 30.1** | **-0.2** |
| **ESBB** | **Sonseca Array** | **3.97** | **355** | Pn | **Pn** | **04 15 31.0** | **+0.6** |
| **AVE** | **Averroes** | **4.00** | **234** | P | **Pn** | **04 15 30.3** | **-0.4** |
| AVE | | | | S | **Sn** | **04 16 16.3** | **-1.1** |
| **AVE** | **Averroes** | **4.00** | **234** | P | **Pn** | **04 15 30.6** | **-0.2** |
| **FIGM** | **Figuig** | **4.04** | **151** | P | **Pn** | **04 15 33.0** | **+1.5** |
| **PCVE** | **Castro Verde** | **4.09** | **299** | ⇑*e*Pn | **Pn** | **04 15 31.4** | **-0.6** |
| PCVE | | | | *e*Sn | **Sn** | **04 16 17.3** | **-2.3** |
| PCVE | | | | A | A | 04 16 20.7 | |
| | 201nm,0.4s | | | | | | |
| **GOLM** | **Goulmima** | **4.17** | **197** | P | **Pn** | **04 15 36.0** | **+2.8** |
| **PBEJ** | **Beja** | **4.17** | **305** | *e*Pn | **Pn** | **04 15 32.7** | **-0.3** |
| PBEJ | | | | *e*Sn | **Sn** | **04 16 19.6** | **-1.8** |
| PBEJ | | | | A | A | 04 16 22.5 | |
| | 83nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **301** | *e*P | **Pn** | **04 15 34.4** | **-0.6** |
| MESJ | | | | *e*S | **Sn** | **04 16 22.0** | **-3.0** |
| MESJ | | | | IAML | | 04 16 27.5 | |
| | comp=N,183nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **301** | *e*Pn | **Pn** | **04 15 34.5** | **-0.5** |
| MESJ | | | | *e*Sn | **Sn** | **04 16 23.1** | **-2.0** |
| MESJ | | | | A | A | 04 16 27.7 | |
| | comp=N,186nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.41** | **293** | *e*P | **Pn** | **04 15 35.4** | **-1.0** |
| MORF | | | | *e*S | **Sn** | **04 16 23.8** | **-3.8** |
| MORF | | | | IAML | | 04 16 30.3 | |
| | comp=N,286nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **4.41** | **293** | *e*Pn | **Pn** | **04 15 35.4** | **-1.0** |
| MORF | | | | *e*Sn | **Sn** | **04 16 25.8** | **-1.8** |
| MORF | | | | A | A | 04 16 32.0 | |
| | comp=N,122nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.49** | **290** | *e*Pn | **Pn** | **04 15 37.0** | **-0.4** |
| PFVI | | | | *e*Sn | **Sn** | **04 16 26.1** | **-3.3** |
| PFVI | | | | A | A | 04 16 38.2 | |
| | comp=N,79nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.49** | **290** | Pn | **Pn** | **04 15 37.3** | **-0.2** |
| **PFVI** | **Vila Bisbo** | **4.49** | **290** | P | **Pn** | **04 15 37.1** | **-0.4** |
| **PESTR** | **Estremoz** | **4.51** | **316** | *e*Pn | **Pn** | **04 15 37.9** | **+0.2** |
| PESTR | | | | *e*Sn | **Sn** | **04 16 28.5** | **-1.4** |
| PESTR | | | | A | A | 04 16 50.6 | |
| | comp=N,73nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **316** | Pn | **Pn** | **04 15 37.8** | **0.0** |
| **PESTR** | **Estremoz** | **4.51** | **316** | P | **Pn** | **04 15 38.2** | **+0.5** |
| **EVO** | **Evora** | **4.55** | **310** | P | **Pn** | **04 15 38.3** | **0.0** |
| EVO | | | | S | **Sn** | **04 16 27.8** | **-3.0** |
| **EVO** | **Evora** | **4.55** | **310** | *e*Pn | **Pn** | **04 15 38.2** | **0.0** |
| EVO | | | | *e*Sn | **Sn** | **04 16 28.4** | **-2.4** |
| EVO | | | | A | A | 04 16 35.0 | |
| | comp=N,128nm,0.6s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.55** | **295** | *e*Pn | **Pn** | **04 15 38.2** | **-0.1** |
| PTEO | | | | *e*Sn | **Sn** | **04 16 28.6** | **-2.3** |
| PTEO | | | | A | A | 04 16 34.0 | |
| | comp=N,192nm,0.8s | | | | | | |
| **UCM** | **Universidad Co** | **4.60** | **3** | P | **Pn** | **04 15 40.4** | **+1.5** |
| UCM | | | | S | **Sn** | **04 16 30.1** | **-2.0** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **302** | *e*Pn | **Pn** | **04 15 39.4** | **-0.3** |
| PNCL | | | | *e*Sn | **Sn** | **04 16 31.6** | **-1.9** |
| PNCL | | | | A | A | 04 16 33.9 | |
| | comp=N,96nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **322** | *e*Pn | **Pn** | **04 15 42.6** | **+0.8** |
| PMRV | | | | *e*Sn | **Sn** | **04 16 36.3** | **-1.0** |
| PMRV | | | | A | A | 04 16 54.4 | |
| | comp=N,74nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **313** | ⇓*e*Pn | **Pn** | **04 15 44.6** | **0.0** |
| PMTG | | | | *e*Sn | **Sn** | **04 16 40.4** | **-1.9** |
| PMTG | | | | A | A | 04 16 43.1 | |
| | comp=N,53nm,0.3s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.17** | **324** | *e*Pn | **Pn** | **04 15 47.7** | **+0.9** |
| PCBR | | | | *e*Sn | **Sn** | **04 16 44.7** | **-1.4** |
| PCBR | | | | A | A | 04 16 47.3 | |
| | comp=N,62nm,0.4s | | | | | | |
| **TZRR** | **Tazzarine** | **5.20** | **200** | P | **Pn** | **04 15 48.0** | **+0.7** |
| **PACT** | **Alcochete** | **5.21** | **307** | *e*Pn | **Pn** | **04 15 47.8** | **+0.5** |
| PACT | | | | *e*Sn | **Sn** | **04 16 45.5** | **-1.6** |
| PACT | | | | A | A | 04 17 13.0 | |
| | comp=N,104nm,0.6s | | | | | | |
| **LIS** | **Lisbon** | **5.38** | **306** | ⇓*e*Pn | **Pn** | **04 15 50.2** | **+0.5** |
| LIS | | | | *e*Sn | **Sn** | **04 16 49.6** | **-1.9** |
| LIS | | | | A | A | 04 16 58.7 | |
| | comp=N,100nm,0.9s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **5.42** | **306** | ⇓*e*Pn | **Pn** | **04 15 50.6** | **+0.4** |
| PMST | | | | *e*Sn | **Sn** | **04 16 50.1** | **-2.2** |
| PMST | | | | A | A | 04 16 58.7 | |
| | comp=N,68nm,0.5s | | | | | | |
| **OUZM** | **OUZ** | **5.49** | **210** | P | **Pn** | **04 15 52.0** | **+0.6** |
| **PMAFR** | **Mafra** | **5.60** | **307** | ⇓*e*Pn | **Pn** | **04 15 52.9** | **+0.1** |
| PMAFR | | | | *e*Sn | **Sn** | **04 16 53.9** | **-3.0** |
| PMAFR | | | | A | A | 04 16 58.2 | |
| | comp=N,122nm,0.3s | | | | | | |
| **PSBE** | **So Bento** | **5.64** | **314** | *e*Pn | **Pn** | **04 15 53.8** | **+0.5** |
| PSBE | | | | *e*Sn | **Sn** | **04 16 55.7** | **-2.1** |
| PSBE | | | | A | A | 04 17 10.4 | |
| | comp=N,56nm,0.4s | | | | | | |
| **MTE** | **Manteigas** | **5.64** | **327** | *e*Pn | **Pn** | **04 15 54.4** | **+1.0** |
| MTE | | | | *e*Sn | **Sn** | **04 16 56.7** | **-1.3** |
| MTE | | | | A | A | 04 17 31.1 | |
| | comp=N,110nm,0.5s | | | | | | |
| **MTE** | **Manteigas** | **5.64** | **327** | Pn | **Pn** | **04 15 53.3** | **-0.1** |
| **OUK** | **Oukaimeden** | **5.76** | **220** | P | **Pn** | **04 15 55.0** | **-0.3** |
| **PCAS** | **Casmilo, Conde** | **5.84** | **319** | ⇓*e*Pn | **Pn** | **04 15 56.8** | **+0.8** |
| PCAS | | | | *e*Sn | **Sn** | **04 16 59.9** | **-2.9** |
| PCAS | | | | A | A | 04 17 40.9 | |
| | comp=N,56nm,0.7s | | | | | | |
| **ZGR** | **Zagora** | **5.84** | **198** | P | **Pn** | **04 15 56.3** | **+0.1** |
| **COI** | **Coimbra** | **5.91** | **321** | *e*Pn | **Pn** | **04 15 58.0** | **+1.0** |
| COI | | | | *e*Sn | **Sn** | **04 17 03.2** | **-1.2** |
| COI | | | | A | A | 04 17 27.4 | |
| | comp=N,98nm,0.7s | | | | | | |
| **COI** | **Coimbra** | **5.91** | **321** | Pn | **Pn** | **04 15 57.3** | **+0.3** |
| **PVIS** | **Viseu** | **6.06** | **327** | *e*Pn | **Pn** | **04 15 59.7** | **+0.7** |
| PVIS | | | | *e*Sn | **Sn** | **04 17 05.3** | **-2.8** |
| PVIS | | | | A | A | 04 17 09.8 | |
| | comp=N,75nm,1.1s | | | | | | |
| **MVO** | **Moncorvo** | **6.09** | **334** | *e*Pn | **Pn** | **04 16 00.4** | **+0.9** |
| MVO | | | | *e*Sn | **Sn** | **04 17 05.6** | **-3.4** |
| MVO | | | | A | A | 04 17 46.2 | |
| | comp=N,68nm,0.6s | | | | | | |
| **PVRL** | **Vila Real** | **6.45** | **331** | *e*Pn | **Pn** | **04 16 05.2** | **+0.8** |
| PVRL | | | | *e*Sn | **Sn** | **04 17 14.6** | **-3.1** |
| PVRL | | | | A | A | 04 17 18.6 | |
| | comp=N,64nm,0.3s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.56** | **331** | *e*Pn | **Pn** | **04 16 06.9** | **+0.9** |
| POLO | | | | *e*Sn | **Sn** | **04 17 17.6** | **-3.0** |
| POLO | | | | A | A | 04 17 31.6 | |
| | comp=N,14nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **6.58** | **339** | *e*Pn | **Pn** | **04 16 06.8** | **+0.6** |
| PBRG | | | | *e*Sn | **Sn** | **04 17 18.2** | **-2.7** |
| **TTIG** | **Tnine Tigouga,** | **6.58** | **220** | P | **Pn** | **04 16 04.5** | **-1.9** |
| **PTO** | **Porto** | **6.72** | **325** | *e*Pn | **Pn** | **04 16 08.8** | **+0.8** |
| PTO | | | | *e*Sn | **Sn** | **04 17 21.2** | **-3.1** |
| PTO | | | | A | A | 04 17 27.8 | |
| | comp=N,46nm,0.5s | | | | | | |
| **PCAB** | **Cabril** | **6.94** | **331** | *e*Pn | **Pn** | **04 16 12.4** | **+1.3** |
| PCAB | | | | *e*Sn | **Sn** | **04 17 27.5** | **-2.3** |
| PCAB | | | | A | A | 04 17 32.4 | |
| | comp=N,47nm,0.7s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.25** | **331** | *e*Pn | **Pn** | **04 16 16.7** | **+1.2** |
| PGAV | | | | *e*Sn | **Sn** | **04 17 35.5** | **-2.1** |
| PGAV | | | | A | A | 04 17 40.4 | |
| | comp=N,51nm,0.7s | | | | | | |
| **ETSF** | **Etsaut** | **7.54** | **17** | *e*Pn | **Pn** | **04 16 20.9** | **+1.5** |
| ETSF | | | | *e*Sn | **Sn** | **04 17 42.6** | **-2.1** |
| | comp=N,300nm,2.0s | | | | | | |
| **SJPF** | **Ste Jean** | **7.61** | **13** | *e*Pn | **Pn** | **04 16 21.9** | **+1.6** |
| SJPF | | | | *e*Sn | **Sn** | **04 17 41.6** | **-4.6** |
| | comp=N,274nm,1.7s | | | | | | |
| **EPF** | **Esparros** | **7.90** | **21** | *e*Pn | **Pn** | **04 16 24.6** | **+0.2** |
| EPF | | | | *e*Sn | **Sn** | **04 17 48.7** | **-4.9** |
| | comp=N,13nm,0.6s | | | | | | |
| **MTLF** | **Montolieu** | **8.82** | **29** | *e*Pn | **Pn** | **04 16 38.2** | **+1.3** |
| MTLF | | | | *e*Sg | **Sn** | **04 18 10.6** | **-5.5** |
| | comp=N,79nm,1.6s | | | | | | |
| **LFF** | **La Frestale** | **9.78** | **18** | *e*Pn | **Pn** | **04 16 48.2** | **-1.8** |
| LFF | | | | *e*Sn | **Sn** | **04 18 34.0** | **-5.6** |
| | comp=N,4.5nm,0.6s | | | | | | |
| **CAF** | **Calviac** | **10.15** | **23** | *e*Pn | **Pn** | **04 16 54.4** | **-0.7** |
| CAF | | | | *e*Sn | **Sn** | **04 18 41.7** | **-7.0** |
| **RJF** | **Les Rejaudoux** | **10.33** | **20** | *e*Pn | **Pn** | **04 16 56.5** | **-1.0** |
| RJF | | | | *e*Sn | Sn | 04 18 42.7 | -10 |
| | comp=N,4.5nm,0.5s | | | | | | |
| **KEST** | **Kesra** | **10.48** | **86** | Pn | **Pn** | **04 16 59.2** | **-0.6** |
| | comp=N,0.1nm,0.3s,baz=117,slow=12,SNR=2.2 | | | | | | |
| KEST | | | | Sn | **Sn** | **04 18 54.6** | **-2.4** |
| | comp=N,0.1nm,0.3s,baz=42,slow=14,SNR=0.6 | | | | | | |
| **KEST** | **Kesra** | **10.48** | **86** | Pn | **Pn** | **04 16 59.9** | **+0.1** |
| **VSL** | **Villasalto** | **10.93** | **66** | Pn | **Pn** | **04 17 05.5** | **-0.2** |
| **MFF** | **Saint Martin d** | **11.18** | **12** | *e*Pn | **Pn** | **04 17 10.0** | **+0.8** |
| MFF | | | | *e*Sn | Sn | 04 19 06.1 | -7.7 |
| **PMOZ** | **Porto Moniz, M** | **11.66** | **260** | Pn | **Pn** | **04 17 16.7** | **+0.9** |
| **BGF** | **Bois d'Agland** | **11.85** | **22** | *e*Pn | **Pn** | **04 17 17.9** | **-0.5** |
| **PGF** | **Pioggiola** | **11.89** | **51** | *e*Pn | **Pn** | **04 17 22.1** | **+3.1** |
| PGF | | | | *e*Sn | **Sn** | **04 19 24.4** | **-7.0** |
| **QUIF** | **Quistinic** | **12.20** | **1** | *e*Pn | **Pn** | **04 17 23.4** | **+0.3** |
| **SMF** | **Signal de Mont** | **12.25** | **25** | *e*Pn | **Pn** | **04 17 23.0** | **-0.9** |
| **SGMF** | **Saint Gilles** | **12.56** | **3** | *e*Pn | **Pn** | **04 17 28.7** | **+0.7** |
| **ROSF** | **Rostrenen** | **12.62** | **1** | *e*Pn | **Pn** | **04 17 29.0** | **+0.2** |
| **CABF** | **La Chapelle** | **13.07** | **31** | *e*Pn | **Pn** | **04 17 35.7** | **+0.5** |
| **LDF** | **La Druitiere** | **13.12** | **10** | *e*Pn | **Pn** | **04 17 35.9** | **+0.2** |
| **ZCCA** | **Zocca** | **14.06** | **48** | Pn | **Pn** | **04 17 50.5** | **+1.9** |
| **AQU** | **L'Aquila** | **14.74** | **58** | P | **P** | **04 18 03.7** | **-0.2** |
| **DAVA** | **Damuels** | **15.30** | **37** | *e*P | **Pn** | **04 18 08.9** | **+3.4** |
| | comp=N,4.0nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **15.54** | **39** | *e*P | **P** | **04 18 14.2** | **+1.3** |
| | comp=N,5.1nm,0.7s | | | | | | |
| **RETA** | **Reutte** | **15.87** | **38** | *e*P | **P** | **04 18 17.6** | **+1.1** |
| | comp=N,3.6nm,0.8s | | | | | | |
| **MOTA** | **Moosalm** | **15.95** | **39** | *e*P | **P** | **04 18 21.4** | **+3.9** |
| | comp=N,8.1nm,1.7s | | | | | | |
| **WTTA** | **Wattenberg** | **16.17** | **40** | *e*P | **P** | **04 18 20.5** | **+0.5** |
| | comp=N,6.6nm,1.0s | | | | | | |
| **WATA** | **Walderalm** | **16.19** | **40** | *e*P | **Pn** | **04 18 18.9** | **+1.9** |
| | comp=N,5.6nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **16.32** | **43** | *e*P | **P** | **04 18 23.5** | **+2.0** |
| | comp=N,9.1nm,1.2s | | | | | | |
| **SOKA** | **Soboth** | **17.72** | **46** | *e*P | **P** | **04 18 40.0** | **+3.0** |
| | comp=N,4.4nm,1.4s | | | | | | |
| **GEC2** | **GERESS Array S** | **18.25** | **39** | P | **P** | **04 18 44.3** | **+1.5** |
| **GERES** | **GERESS Array B** | **18.25** | **39** | P | **Pn** | **04 18 43.1** | **+0.5** |
| | comp=N,0.2nm,0.3s,baz=224,slow=11,SNR=4.8 | | | | | | |
| **KHC** | **Kasperske Hory** | **18.37** | **38** | *e*P | **Pn** | **04 18 46.0** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TSUM** | **Tsumeb** | **58.17** | **156** | LR | LR | 04 47 59.6 | | |
| | comp=Z,104nm,19.6s,baz=102,slow=35 | | | | | | | |
| **KURK** | **Kurchatov** | **58.73** | **47** | P | **P** | **04 24 27.3** | **+0.3** | |
| KURK | | | | IAmb | IAmb | 04 24 28.3 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **LSZ** | **Lusaka** | **58.95** | **144** | LR | LR | 04 53 56.8 | | |
| | comp=Z,93nm,18.1s,baz=253,slow=40 | | | | | | | |
| **KSH** | **Kashi** | **61.13** | **60** | P | **P** | **04 24 44.8** | **+0.9** | |
| **ZAA0** | **Zalesovo Array** | **61.15** | **42** | P | **P** | **04 24 43.2** | **-0.4** | |
| ZAA0 | | | | IAmb | IAmb | 04 24 47.2 | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.15** | **42** | P | **P** | **04 24 44.2** | **+0.6** | |
| | comp=Z,1.7nm,0.6s,baz=296,slow=8.3,SNR=8.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.15** | **42** | P | **P** | **04 24 42.2** | **-1.4** | |
| **MAKZ** | **Makanchi** | **62.23** | **51** | P | **P** | **04 24 51.5** | **+0.5** | |
| MAKZ | | | | IAmb | IAmb | 04 24 51.9 | | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.43** | **51** | P | **P** | **04 24 52.5** | **+0.1** | |
| MK31 | | | | IAmb | IAmb | 04 24 53.7 | | |
| | comp=Z,3.7nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.43** | **51** | P | **P** | **04 24 53.0** | **+0.7** | |
| | comp=Z,4.0nm,0.6s,baz=287,slow=5.9,SNR=58 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.43** | **51** | P | **P** | **04 24 52.4** | **+0.1** | |
| **A36M** | **Sachs Harbour** | **65.22** | **343** | P | **P** | **04 25 11.4** | **+1.2** | |
| **BDFB** | **Brasilia** | **66.18** | **228** | P | **P** | **04 25 18.0** | **+0.7** | |
| | comp=Z,1.8nm,0.8s,baz=35,slow=12,SNR=3.9 | | | | | | | |
| **WMQ** | **Urumqi** | **67.16** | **52** | *e*P | **P** | **04 25 25.9** | **+2.6** | |
| **CCM** | **Cathedral Cave** | **67.51** | **301** | P | **P** | **04 25 25.3** | **-0.2** | |
| CCM | | | | IAmb | IAmb | 04 25 28.8 | | |
| | comp=Z,3.5nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.73** | **332** | P | **P** | **04 25 27.0** | **+0.5** | |
| | comp=Z,3.7nm,0.5s,baz=60,slow=6.4,SNR=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.73** | **332** | P | **P** | **04 25 26.6** | **+0.1** | |
| **ECSD** | **EROS Data Cent** | **68.36** | **309** | P | **P** | **04 25 31.3** | **+0.4** | |
| ECSD | | | | IAmb | IAmb | 04 25 34.9 | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **S39A** | **Bolivar** | **69.13** | **302** | P | **P** | **04 25 36.6** | **+0.9** | |
| **U40A** | **Yellville** | **69.46** | **300** | P | **P** | **04 25 38.6** | **+0.9** | |
| U40A | | | | IAmb | IAmb | 04 25 38.7 | | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **69.82** | **342** | P | **P** | **04 25 38.6** | **-0.7** | |
| **X40A** | **Basin Creek Fa** | **70.37** | **299** | P | **P** | **04 25 43.0** | **-0.4** | |
| X40A | | | | IAmb | IAmb | 04 25 47.4 | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **X37A** | **Clayton** | **72.12** | **300** | P | **P** | **04 25 54.8** | **+0.9** | |
| **EDM** | **Edmonton** | **72.63** | **324** | P | **P** | **04 25 57.4** | **+0.7** | |
| EDM | | | | IAmb | IAmb | 04 25 57.8 | | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **72.94** | **348** | P | **P** | **04 26 00.2** | **+1.9** | |
| TOLK | | | | IAmb | IAmb | 04 26 15.1 | | |
| | comp=Z,8.1nm,1.4s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **73.03** | **345** | P | **P** | **04 26 01.6** | **+2.7** | |
| **M31M** | **Drury Creek, Y** | **74.71** | **338** | P | **P** | **04 26 11.3** | **+2.5** | |
| M31M | | | | IAmb | IAmb | 04 26 17.3 | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **P33M** | **Teslin, Yukon** | **75.74** | **336** | P | **P** | **04 26 16.6** | **+1.8** | |
| P33M | | | | IAmb | IAmb | 04 26 40.9 | | |
| | comp=Z,9.7nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **75.80** | **345** | P | **P** | **04 26 13.2** | **-1.8** | |
| | comp=Z,0.3nm,0.6s,baz=11,slow=4.9,SNR=1.5 | | | | | | | |
| **SONM** | **Songino Array** | **75.97** | **41** | P | **P** | **04 26 17.2** | **+0.8** | |
| | comp=Z,0.3nm,0.5s,baz=304,slow=7.8,SNR=1.7 | | | | | | | |
| **SONM** | **Songino Array** | **75.97** | **41** | P | **P** | **04 26 16.4** | **0.0** | |
| **PDAR** | **Pinedale Array** | **76.83** | **313** | P | **P** | **04 26 20.4** | **-1.1** | |
| | comp=Z,1.1nm,0.8s,baz=62,slow=6.9,SNR=9.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.83** | **313** | P | **P** | **04 26 21.3** | **-0.2** | |
| **OTAV** | **Otavalo** | **77.62** | **261** | P | **P** | **04 26 27.2** | **+0.5** | |
| **S22A** | **4UR Ranch, Cre** | **78.11** | **308** | P | **P** | **04 26 29.7** | **+0.8** | |
| **PV17** | **East Wray Mesa** | **79.15** | **309** | P | **P** | **04 26 35.2** | **+0.8** | |
| PV17 | | | | IAmb | IAmb | 04 26 38.2 | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **BMO** | **Blue Mountains** | **79.91** | **319** | P | **P** | **04 26 39.4** | **+1.0** | |
| **CPUP** | **Villa Florida** | **79.91** | **227** | P | **P** | **04 26 38.2** | **-0.1** | |
| | comp=Z,3.2nm,1.0s,baz=342,slow=3.9,SNR=4.0 | | | | | | | |
| **CPUP** | **Villa Florida** | **79.91** | **227** | P | **P** | **04 26 39.6** | **+1.3** | |
| CPUP | | | | IAmb | IAmb | 04 26 40.4 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **MTPU** | **Mount Pierson** | **81.30** | **311** | P | **P** | **04 26 47.7** | **+1.5** | |
| **HHC** | **Hu-ho-hao-te** | **83.30** | **44** | *e*P | **P** | **04 26 55.8** | **-0.6** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,190nm,6.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.72** | **314** | P | **P** | **04 27 03.2** | **-0.6** | |
| | comp=Z,0.2nm,0.6s,baz=54,slow=4.6,SNR=1.8 | | | | | | | |
| **PZH** | **PanZhiHua** | **86.24** | **60** | P | **P** | **04 27 11.4** | **0.0** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,180nm,5.7s | | | | | | | |
| **NJ2** | **Nanjing** | **93.64** | **46** | *e*P | **P** | **04 27 45.3** | **-0.6** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **150.87** | **93** | PKPbc | **PKPbc** | **04 34 21.6** | **-0.5** | |
| | comp=Z,1.9nm,0.6s,baz=329,slow=2.8,SNR=5.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **150.87** | **93** | | **PKPbc** | **04 34 22.1** | **0.0** | |

**TAP 22 04:19:50.1, 23.03°N × 120.87°E, h10 km, ML2.5, 4C, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.17** | **328** | P | Pg | 04 19 54.5 | +0.7 |
| | baz=330 | | | | | | |
| STYH | | | | S | Sg | 04 19 57.0 | +0.7 |
| | baz=330 | | | | | | |
| **ELDTW** | **Lidau** | **0.21** | **39⇑** | *i*P | Pg | 04 19 55.3 | +0.8 |
| | baz=41 | | | | | | |
| ELDTW | | | | *i* S | Sg | 04 19 58.1 | +0.6 |
| | baz=41 | | | | | | |
| **SLGT** | **Liugui** | **0.21** | **261** | P | Pg | 04 19 54.2 | -0.4 |
| | baz=260 | | | | | | |
| **LONT** | **Longtian** | **0.27** | **117** | *i* P | Pb | 04 19 56.9 | -0.2 |
| | baz=116 | | | | | | |
| **SGST** | **Jiashian** | **0.27** | **282** | *i* P | Pg | 04 19 55.9 | +0.3 |
| | baz=281 | | | | | | |
| **TWG** | **Pinlang** | **0.28** | **138** | *i* P | Pb | 04 19 57.4 | +0.1 |
| | baz=137 | | | | | | |
| TWG | | | | *i* S | Sb | 04 20 01.6 | -0.4 |
| | baz=137 | | | | | | |
| **TWGBT** | **Beinan** | **0.28** | **137** | P | Pb | 04 19 57.3 | 0.0 |
| | baz=137 | | | | | | |
| TWGBT | | | | S | Sb | 04 20 01.6 | -0.6 |
| | baz=137 | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **312** | *i* P | Pb | 04 19 57.9 | -0.1 |
| | baz=313 | | | | | | |
| **ECS** | **Chishang** | **0.33** | **78** | *e*P | Pb | 04 19 58.2 | +0.1 |
| | baz=78 | | | | | | |
| ECS | | | | S | Sb | 04 20 03.1 | -0.3 |
| | baz=78 | | | | | | |
| **TPUB** | **Ta-pu** | **0.35** | **321** | P | Pb | 04 19 58.5 | 0.0 |
| | baz=320 | | | | | | |
| **CHN1** | **Nanshi** | **0.35** | **296** | *i* P | Pb | 04 19 59.4 | +0.8 |
| | baz=296 | | | | | | |
| CHN1 | | | | *i* S | Sb | 04 20 05.0 | +0.7 |
| | baz=296 | | | | | | |
| **SSD** | **Sandimen** | **0.36** | **219⇑** | *i* P | Pb | 04 19 57.9 | -0.7 |
| | baz=217 | | | | | | |
| SSD | | | | *i* S | Sb | 04 20 03.7 | -0.6 |
| | baz=217 | | | | | | |
| **TTN** | **Taitung** | **0.37** | **137** | *e*P | Pb | 04 19 58.7 | -0.2 |
| | baz=136 | | | | | | |
| TTN | | | | S | Sb | 04 20 04.4 | -0.3 |
| | baz=136 | | | | | | |
| **TSMG** | **Majia** | **0.38** | **213** | *e*P | Pb | 04 19 58.4 | -0.7 |
| | baz=213 | | | | | | |
| TSMG | | | | S | Sb | 04 20 04.2 | -0.9 |
| | baz=213 | | | | | | |
| **SNST** | **Tainan City** | **0.40** | **299** | *e*P | Pb | 04 19 59.1 | -0.2 |
| | baz=298 | | | | | | |
| SNST | | | | *e*S | Sb | 04 20 05.5 | +0.1 |
| | baz=298 | | | | | | |
| **EDH** | **Donghe** | **0.40** | **98** | P | Pb | 04 19 59.8 | +0.4 |
| | baz=97 | | | | | | |
| **FULB** | **Fuli** | **0.42** | **66** | *i* P | Pb | 04 20 00.2 | +0.4 |
| | baz=66 | | | | | | |
| FULB | | | | S | Sb | 04 20 06.1 | -0.1 |
| | baz=66 | | | | | | |
| **TWK** | **Hsinying** | **0.43** | **304** | *i* P | Pb | 04 20 00.7 | +0.8 |
| | baz=304 | | | | | | |
| TWK | | | | *e*S | Sb | 04 20 06.4 | 0.0 |
| | baz=304 | | | | | | |
| **CHKT** | **Chengkung** | **0.46** | **81** | P | Pb | 04 20 01.0 | +0.7 |
| | baz=81 | | | | | | |
| CHKT | | | | S | Sb | 04 20 07.9 | +0.6 |
| | baz=81 | | | | | | |
| **TWM1** | **Shoushan** | **0.46** | **244** | *e*P | Pb | 04 20 00.1 | -0.3 |
| | baz=243 | | | | | | |
| TWM1 | | | | *e*S | Sb | 04 20 07.3 | -0.1 |
| | baz=243 | | | | | | |
| **YUS** | **Yu-Shan** | **0.47** | **9** | *i* P | Pb | 04 20 00.1 | -0.7 |
| | baz=9.0 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.47** | **208⇑** | P | Pb | 04 20 00.0 | -0.5 |
| | baz=208 | | | | | | |
| MASBT | | | | S | Sg | 04 20 05.8 | +0.4 |
| | baz=208 | | | | | | |
| **CHN3** | **Shinhua** | **0.47** | **276** | *e*P | Pb | 04 20 00.3 | -0.2 |
| | baz=275 | | | | | | |
| CHN3 | | | | S | Sb | 04 20 07.5 | -0.1 |
| | baz=275 | | | | | | |
| **SHHT** | **Tainan City** | **0.48** | **269** | *e*P | Pb | 04 20 01.0 | +0.2 |
| | baz=269 | | | | | | |
| **ALS** | **Alishan** | **0.48** | **353⇑** | *i* P | Pb | 04 20 00.6 | -0.4 |
| | baz=353 | | | | | | |
| ALS | | | | S | Sb | 04 20 08.3 | 0.0 |
| | baz=353 | | | | | | |
| **TWF1** | **Yuli** | **0.51** | **50** | P | Pb | 04 20 01.1 | -0.1 |
| | baz=51 | | | | | | |
| **EYUL** | **Yuli** | **0.52** | **52** | *e*P | Pb | 04 20 01.0 | -0.4 |
| | baz=52 | | | | | | |
| EYUL | | | | *e*S | Sb | 04 20 08.5 | -0.5 |
| | baz=52 | | | | | | |
| **YULB** | **Yu-li** | **0.53** | **47** | P | Pb | 04 20 01.1 | -0.5 |
| | baz=47 | | | | | | |
| YULB | | | | S | Sb | 04 20 09.5 | +0.1 |
| | baz=47 | | | | | | |
| **SSHA** | **Shanhua** | **0.55** | **282** | *e*P | Pb | 04 20 01.5 | -0.4 |
| | baz=281 | | | | | | |
| SSHA | | | | *e*S | Sb | 04 20 10.6 | +0.7 |
| | baz=281 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.57** | **241** | *e*P | Pg | 04 20 01.6 | +0.5 |
| | baz=241 | | | | | | |
| SNJT | | | | *e*S | Sb | 04 20 10.9 | +0.6 |
| | baz=241 | | | | | | |
| **CHN5** | **Tsauling** | **0.59** | **343** | P | Pb | 04 20 02.8 | 0.0 |
| | baz=342 | | | | | | |
| CHN5 | | | | S | Sb | 04 20 11.6 | +0.3 |
| | baz=342 | | | | | | |
| **SSPT** | **Xinbi** | **0.61** | **208** | *i* P | Pb | 04 20 03.5 | +0.6 |
| | baz=207 | | | | | | |
| SSPT | | | | S | Sb | 04 20 12.5 | +0.9 |
| | baz=207 | | | | | | |
| **EHY** | **Hungye** | **0.63** | **41** | *i* P | Pb | 04 20 03.0 | -0.3 |
| | baz=41 | | | | | | |
| EHY | | | | S | Sb | 04 20 12.4 | +0.2 |
| | baz=41 | | | | | | |
| **EAST** | **Anshuo** | **0.64** | **182** | P | Pb | 04 20 03.8 | +0.3 |
| | baz=181 | | | | | | |
| EAST | | | | S | Sb | 04 20 13.1 | +0.6 |
| | baz=181 | | | | | | |
| **SCLT** | **Jiali** | **0.64** | **283** | *e*S | Sb | 04 20 13.2 | +0.7 |
| | baz=283 | | | | | | |
| **LDUT** | **Ludao** | **0.65** | **123** | *e*P | Pg | 04 20 02.8 | 0.0 |
| | baz=122 | | | | | | |
| LDUT | | | | *e*S | Sb | 04 20 13.0 | +0.2 |
| | baz=122 | | | | | | |
| **WSSB** | **Gushan** | **0.68** | **236** | P | Pb | 04 20 03.8 | -0.4 |
| | baz=235 | | | | | | |
| WSSB | | | | *e*S | Sb | 04 20 14.5 | +0.8 |
| | baz=235 | | | | | | |
| **TAWH** | **Dawu Township** | **0.68** | **179** | *e*P | Pb | 04 20 04.9 | +0.7 |
| | baz=178 | | | | | | |
| TAWH | | | | S | Sb | 04 20 14.5 | +0.7 |
| | baz=178 | | | | | | |
| **HGSD** | **Ruisui** | **0.69** | **47** | P | Pb | 04 20 04.8 | +0.6 |
| | baz=47 | | | | | | |
| HGSD | | | | *e*S | Sb | 04 20 14.2 | +0.4 |
| | baz=47 | | | | | | |
| **SCZT** | **Fangliau** | **0.69** | **200** | *i* P | Pb | 04 20 04.5 | +0.2 |
| | baz=199 | | | | | | |
| SCZT | | | | S | Sb | 04 20 14.6 | +0.6 |
| | baz=199 | | | | | | |
| **SSLB** | **Suanglung** | **0.76** | **6** | P | Pg | 04 20 05.1 | +0.3 |
| | baz=5.0 | | | | | | |
| SSLB | | | | S | Sb | 04 20 17.0 | +1.0 |
| | baz=5.0 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.77** | **310** | *e*P | Pb | 04 20 05.8 | +0.2 |
| | baz=309 | | | | | | |
| WSL | | | | *e*S | Sb | 04 20 16.9 | +0.7 |
| | baz=309 | | | | | | |
| **WTK** | **Tuku** | **0.79** | **326** | *e*P | Pg | 04 20 05.0 | -0.4 |
| | baz=325 | | | | | | |
| WTK | | | | *e*S | Sb | 04 20 17.5 | +0.6 |
| | baz=325 | | | | | | |
| **SLIU** | **Shizi** | **0.81** | **185** | *e*P | Pb | 04 20 06.5 | +0.1 |
| | baz=184 | | | | | | |
| SLIU | | | | *e*S | Sb | 04 20 17.3 | 0.0 |
| | baz=184 | | | | | | |
| **WLCH** | **Liuqiu** | **0.81** | **214** | *e*P | Pb | 04 20 06.3 | 0.0 |
| | baz=214 | | | | | | |
| WLCH | | | | *e*S | Sb | 04 20 17.8 | +0.4 |
| | baz=214 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.85** | **2** | P | Pb | 04 20 07.1 | -0.1 |
| | baz=2.0 | | | | | | |
| SMLT | | | | *e*S | Sb | 04 20 19.8 | +1.1 |
| | baz=2.0 | | | | | | |
| **WSF** | **Szhu** | **0.85** | **316** | *e*P | Pb | 04 20 07.0 | -0.1 |
| | baz=315 | | | | | | |
| WSF | | | | *e*S | Sb | 04 20 18.8 | +0.2 |
| | baz=315 | | | | | | |
| **TYC** | **Yuchr** | **0.87** | **359** | P | Pn | 04 20 08.0 | -0.5 |
| | baz=359 | | | | | | |
| TYC | | | | S | Sb | 04 20 19.7 | +0.5 |
| | baz=359 | | | | | | |
| **ESL** | **Shilin** | **0.94** | **33** | P | Pn | 04 20 09.2 | -0.2 |
| | baz=33 | | | | | | |
| ESL | | | | *e*S | Sn | 04 20 22.1 | -0.8 |
| | baz=33 | | | | | | |
| **WUSB** | **Renai** | **0.99** | **13** | *e*P | Pg | 04 20 08.5 | -0.6 |
| | baz=13 | | | | | | |
| WUSB | | | | *e*S | Sb | 04 20 23.4 | +0.8 |
| | baz=13 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.03** | **2** | *e*P | Pn | 04 20 10.4 | -0.3 |
| | baz=1.0 | | | | | | |
| WCS | | | | *e*S | Sn | 04 20 24.8 | -0.3 |
| | baz=1.0 | | | | | | |
| **CHGB** | **Renai** | **1.06** | **15** | *e*P | Pb | 04 20 11.0 | +0.1 |
| | baz=15 | | | | | | |
| **TWK1** | **Hengchun** | **1.08** | **183** | *e*P | Pg | 04 20 10.8 | -0.1 |
| | baz=182 | | | | | | |
| TWK1 | | | | *e*S | Sn | 04 20 26.5 | 0.0 |
| | baz=182 | | | | | | |
| **TWKBT** | **Hengchun** | **1.08** | **183** | *e*S | Sb | 04 20 25.8 | +0.6 |
| | baz=182 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.12** | **179** | *e*S | Sn | 04 20 27.7 | +0.2 |
| | baz=180 | | | | | | |
| **WDGT** | **Dungji** | **1.14** | **282** | *e*P | Pb | 04 20 12.0 | 0.0 |
| | baz=281 | | | | | | |
| WDGT | | | | *e*S | Sn | 04 20 28.2 | +0.3 |
| | baz=281 | | | | | | |
| **HWA** | **Hwalien** | **1.16** | **35** | *e*P | Pb | 04 20 12.1 | -0.2 |
| | baz=35 | | | | | | |
| HWA | | | | *e*S | Sn | 04 20 28.8 | +0.4 |
| | baz=35 | | | | | | |
| **LAY** | **Lan-yu** | **1.17** | **147** | *e*S | Sn | 04 20 29.2 | +0.6 |
| | baz=147 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.17** | **18** | *e*P | Pn | 04 20 13.8 | +0.8 |
| | baz=18 | | | | | | |
| WHF | | | | *e*S | Sn | 04 20 29.0 | -0.3 |
| | baz=18 | | | | | | |
| **WHP** | **Taichung City** | **1.25** | **3** | *e*P | Pn | 04 20 13.3 | -0.4 |
| | baz=3.0 | | | | | | |
| WHP | | | | *e*S | Sn | 04 20 30.9 | +0.2 |
| | baz=3.0 | | | | | | |
| **TWT** | **Tachien** | **1.25** | **13** | *e*P | Pn | 04 20 13.4 | -0.5 |
| | baz=12 | | | | | | |
| TWT | | | | *e*S | Sb | 04 20 30.2 | 0.0 |
| | baz=12 | | | | | | |
| **FUSS** | **Fushou** | **1.26** | **16** | *e*P | Pn | 04 20 14.2 | 0.0 |
| | baz=15 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.30** | **25** | *e*P | Pg | 04 20 15.3 | +0.1 |
| | baz=25 | | | | | | |
| ETLH | | | | *e*S | Sg | 04 20 32.3 | +0.3 |
| | baz=25 | | | | | | |
| **NACB** | **Ninganchiao** | **1.32** | **30** | *e*P | Pn | 04 20 14.5 | -0.2 |
| | baz=30 | | | | | | |
| NACB | | | | *e*S | Sg | 04 20 32.8 | +0.2 |
| | baz=30 | | | | | | |
| **VCHM** | **Qimei** | **1.34** | **278** | *e*P | Pn | 04 20 14.5 | -0.5 |
| | baz=277 | | | | | | |
| VCHM | | | | *e*S | Sg | 04 20 33.5 | +0.2 |
| | baz=277 | | | | | | |
| **LATG** | **Datong** | **1.62** | **22** | *e*P | Pb | 04 20 19.6 | -0.6 |
| | baz=21 | | | | | | |
| LATG | | | | *e*S | Sn | 04 20 40.1 | +0.2 |
| | baz=21 | | | | | | |

**TAP 22 04:19:55.3, 23.00°N × 120.85°E, h4 km, ML2.4, 1C, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYH** | **Taoyuan** | **0.18** | **339** | P | Pg | 04 20 00.2 | +1.5 |
| | baz=341 | | | | | | |
| STYH | | | | S | Sg | 04 20 03.0 | +1.8 |
| | baz=341 | | | | | | |
| **SLGT** | **Liugui** | **0.18** | **267** | P | Pg | 04 19 60.0 | +1.1 |
| | baz=266 | | | | | | |
| SLGT | | | | S | Sg | 04 20 03.0 | +1.7 |
| | baz=266 | | | | | | |
| **ELDTW** | **Lidau** | **0.24** | **41⇑** | *i*P | Pg | 04 20 01.1 | +1.1 |
| | baz=42 | | | | | | |
| ELDTW | | | | *e*S | Sg | 04 20 03.9 | +0.7 |
| | baz=42 | | | | | | |
| **SGST** | **Jiashian** | **0.25** | **288** | P | Pg | 04 20 00.2 | 0.0 |
| | baz=287 | | | | | | |
| SGST | | | | *i* S | Sg | 04 20 05.1 | +1.6 |
| | baz=287 | | | | | | |
| **SGST** | **Jiashian** | **0.25** | **288** | *i* S | Pg | 04 20 00.2 | 0.0 |
| | baz=281 | | | | | | |
| **TWG** | **Pinlang** | **0.28** | **131** | *i* P | Pb | 04 20 02.2 | -0.6 |
| | baz=130 | | | | | | |
| TWG | | | | S | Sb | 04 20 07.3 | -0.6 |
| | baz=130 | | | | | | |
| **LONT** | **Longtian** | **0.28** | **110** | P | Pg | 04 20 01.4 | +0.7 |
| | baz=110 | | | | | | |
| LONT | | | | *i* S | Sb | 04 20 07.2 | -0.8 |
| | baz=110 | | | | | | |
| **LONT** | **Longtian** | **0.28** | **110** | S | Pg | 04 20 01.2 | +0.5 |
| | baz=116 | | | | | | |
| **TWGBT** | **Beinan** | **0.28** | **131** | P | Pb | 04 20 02.2 | -0.8 |
| | baz=130 | | | | | | |
| TWGBT | | | | S | Sb | 04 20 07.5 | -0.6 |
| | baz=130 | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **319** | *i* P | Pb | 04 20 02.9 | -0.7 |
| | baz=319 | | | | | | |
| WTP | | | | *i* S | Sb | 04 20 08.3 | -0.9 |
| | baz=319 | | | | | | |
| **WTP** | **Ta-pu** | **0.32** | **319** | *i* S | Pg | 04 20 03.0 | +1.5 |
| | baz=313 | | | | | | |
| **SSD** | **Sandimen** | **0.32** | **217** | *i* P | Pg | 04 20 02.2 | +0.7 |
| | baz=216 | | | | | | |
| SSD | | | | *i* S | Sb | 04 20 08.2 | -1.0 |
| | baz=216 | | | | | | |
| **CHN1** | **Nanshi** | **0.34** | **302** | *e*P | Pb | 04 20 03.4 | -0.6 |
| | baz=301 | | | | | | |
| CHN1 | | | | S | Sb | 04 20 09.1 | -0.7 |
| | baz=301 | | | | | | |
| **SCST** | **Cishan** | **0.34** | **250** | *e*S | Sb | 04 20 09.2 | -0.6 |
| | baz=249 | | | | | | |
| **TSMG** | **Majia** | **0.35** | **212** | P | Pb | 04 20 03.1 | -1.0 |
| | baz=211 | | | | | | |
| TSMG | | | | S | Sb | 04 20 08.9 | -1.0 |
| | baz=211 | | | | | | |
| **TPUB** | **Ta-pu** | **0.36** | **326** | P | Pb | 04 20 04.2 | 0.0 |
| | baz=326 | | | | | | |
| TPUB | | | | S | Sb | 04 20 09.6 | -0.6 |
| | baz=326 | | | | | | |
| **TPUB** | **Ta-pu** | **0.36** | **326** | S | Pb | 04 20 03.9 | -0.3 |
| | baz=320 | | | | | | |
| **TTN** | **Taitung** | **0.37** | **132** | *e*P | Pb | 04 20 03.8 | -0.7 |
| | baz=131 | | | | | | |
| TTN | | | | S | Sb | 04 20 10.4 | -0.3 |
| | baz=131 | | | | | | |
| **SNST** | **Tainan City** | **0.39** | **304** | *e*P | Pb | 04 20 04.2 | -0.5 |
| | baz=303 | | | | | | |
| SNST | | | | *e*S | Sb | 04 20 10.5 | -0.5 |
| | baz=303 | | | | | | |
| **TWK** | **Hsinying** | **0.42** | **309** | *e*P | Pb | 04 20 04.5 | -0.8 |
| | baz=309 | | | | | | |
| TWK | | | | *e*S | Sb | 04 20 13.4 | +1.4 |
| | baz=309 | | | | | | |
| **EDH** | **Donghe** | **0.42** | **94** | *e*P | Pb | 04 20 04.9 | -0.4 |
| | baz=94 | | | | | | |
| EDH | | | | *e*S | Sb | 04 20 11.7 | -0.4 |
| | baz=94 | | | | | | |
| **EDH** | **Donghe** | **0.42** | **94** | S | Pg | 04 20 04.8 | +1.4 |
| | baz=97 | | | | | | |
| **TWM1** | **Shoushan** | **0.43** | **245** | *e*P | Pb | 04 20 04.7 | -0.7 |
| | baz=244 | | | | | | |
| TWM1 | | | | *e*S | Sb | 04 20 12.2 | -0.1 |
| | baz=244 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.44** | **207** | P | Pb | 04 20 05.0 | -0.6 |
| | baz=206 | | | | | | |
| MASBT | | | | *e*S | Sb | 04 20 11.7 | -0.8 |
| | baz=206 | | | | | | |
| **CHN3** | **Shinhua** | **0.45** | **279** | *e*P | Pb | 04 20 05.3 | -0.4 |
| | baz=279 | | | | | | |
| CHN3 | | | | *e*S | Sb | 04 20 12.6 | -0.2 |
| | baz=279 | | | | | | |
| **FULB** | **Fuli** | **0.46** | **65** | *i* P | Pb | 04 20 05.5 | -0.4 |
| | baz=64 | | | | | | |
| FULB | | | | *i* S | Sb | 04 20 12.8 | -0.3 |
| | baz=64 | | | | | | |
| **SHHT** | **Tainan City** | **0.46** | **272** | *e*P | Pb | 04 20 05.9 | 0.0 |
| | baz=272 | | | | | | |
| SHHT | | | | *e*S | Sb | 04 20 13.1 | 0.0 |
| | baz=272 | | | | | | |
| **CHKT** | **Chengkung** | **0.49** | **79** | P | Pb | 04 20 06.5 | 0.0 |
| | baz=79 | | | | | | |
| CHKT | | | | S | Sb | 04 20 14.5 | +0.5 |
| | baz=79 | | | | | | |
| **YUS** | **Yu-Shan** | **0.49** | **11** | *i* P | Pg | 04 20 05.6 | +0.8 |
| | baz=12 | | | | | | |
| YUS | | | | *e*S | Sb | 04 20 13.5 | -1.1 |
| | baz=12 | | | | | | |
| **YUS** | **Yu-Shan** | **0.49** | **11** | *i* S | Pg | 04 20 06.0 | +1.2 |
| | baz=9.0 | | | | | | |
| **ALS** | **Alishan** | **0.51** | **356** | *i* P | Pb | 04 20 06.6 | -0.4 |
| | baz=356 | | | | | | |
| ALS | | | | S | Sb | 04 20 14.8 | 0.0 |
| | baz=356 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.53** | **242** | *e*S | Sb | 04 20 15.6 | +0.4 |
| | baz=242 | | | | | | |
| **EYUL** | **Yuli** | **0.55** | **52** | *e*P | Pb | 04 20 06.9 | -0.7 |
| | baz=51 | | | | | | |
| EYUL | | | | *e*S | Sb | 04 20 16.5 | +0.6 |
| | baz=51 | | | | | | |
| **YULB** | **Yu-li** | **0.57** | **47** | P | Pg | 04 20 06.8 | +0.6 |
| | baz=47 | | | | | | |
| YULB | | | | S | Sb | 04 20 15.8 | -0.5 |
| | baz=47 | | | | | | |
| **SSPT** | **Xinbi** | **0.58** | **206** | P | Pb | 04 20 08.9 | +1.0 |
| | baz=206 | | | | | | |
| **CHN5** | **Tsauling** | **0.61** | **345** | *e*P | Pb | 04 20 08.0 | -0.6 |
| | baz=345 | | | | | | |
| CHN5 | | | | S | Sb | 04 20 18.6 | +1.0 |
| | baz=345 | | | | | | |
| **EAST** | **Anshuo** | **0.62** | **180** | P | Pb | 04 20 09.5 | +0.9 |
| | baz=178 | | | | | | |
| EAST | | | | *e*S | Sb | 04 20 18.7 | +0.9 |
| | baz=178 | | | | | | |
| **CHY** | **Chiayi** | **0.63** | **322** | *e*P | Pb | 04 20 08.7 | -0.1 |
| | baz=322 | | | | | | |
| CHY | | | | *e*S | Sb | 04 20 18.7 | +0.7 |
| | baz=322 | | | | | | |
| **ICHU** | **Yijhu** | **0.63** | **304** | *e*P | Pb | 04 20 09.2 | +0.4 |
| | baz=304 | | | | | | |
| ICHU | | | | *e*S | Sb | 04 20 19.0 | +0.9 |
| | baz=304 | | | | | | |
| **TAW** | **Tawu** | **0.65** | **176** | *e*P | Pb | 04 20 09.0 | -0.1 |
| | baz=175 | | | | | | |
| **WSSB** | **Gushan** | **0.65** | **236** | *e*P | Pb | 04 20 09.1 | -0.1 |
| | baz=236 | | | | | | |
| WSSB | | | | *e*S | Sb | 04 20 19.4 | +0.8 |
| | baz=236 | | | | | | |
| **KAU** | **Kaohsiung** | **0.66** | **229** | *e*S | Sb | 04 20 19.5 | +0.6 |
| | baz=228 | | | | | | |
| **SCZT** | **Fangliau** | **0.66** | **198** | P | Pb | 04 20 09.2 | -0.2 |
| | baz=197 | | | | | | |
| SCZT | | | | S | Sb | 04 20 19.1 | +0.1 |
| | baz=197 | | | | | | |
| **TAWH** | **Dawu Township** | **0.66** | **177** | *e*P | Pb | 04 20 09.8 | +0.4 |
| | baz=176 | | | | | | |
| TAWH | | | | *e*S | Sb | 04 20 20.2 | +1.2 |
| | baz=176 | | | | | | |
| **LDUT** | **Ludao** | **0.66** | **120** | *e*P | Pb | 04 20 09.6 | +0.2 |
| | baz=119 | | | | | | |
| LDUT | | | | *e*S | Sb | 04 20 20.1 | +1.1 |
| | baz=119 | | | | | | |
| **EHY** | **Hungye** | **0.67** | **41** | P | Pb | 04 20 08.8 | -0.7 |
| | baz=41 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EHY | | | | S | Sb | 04 20 19.3 | +0.2 | | |
| | baz=41 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.72** | **48** | P | Pn | 04 20 11.4 | -0.9 | | |
| | baz=47 | | | | | | | | |
| HGSD | | | | S | Sb | 04 20 21.6 | +1.0 | | |
| | baz=47 | | | | | | | | |
| **WDLH** | **Douliu** | **0.74** | **338** | *e*S | Sb | 04 20 21.0 | -0.1 | | |
| | baz=357 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.77** | **312** | *e*P | Pb | 04 20 11.1 | -0.1 | | |
| | baz=312 | | | | | | | | |
| WSL | | | | *e*S | Sn | 04 20 23.6 | -1.3 | | |
| | baz=312 | | | | | | | | |
| **WLCH** | **Liuqiu** | **0.78** | **214** | *e*P | Pb | 04 20 11.6 | +0.2 | | |
| | baz=213 | | | | | | | | |
| **SLIU** | **Shizi** | **0.79** | **183** | *e*P | Pb | 04 20 11.6 | +0.1 | | |
| | baz=183 | | | | | | | | |
| SLIU | | | | *e*S | Sb | 04 20 23.6 | +1.1 | | |
| | baz=183 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.79** | **7** | *e*P | Pb | 04 20 11.6 | 0.0 | | |
| | baz=7.0 | | | | | | | | |
| **WTK** | **Tuku** | **0.80** | **328** | *e*P | Pb | 04 20 12.1 | +0.3 | | |
| | baz=328 | | | | | | | | |
| **TYC** | **Yuchr** | **0.90** | **1** | *e*P | Pb | 04 20 13.3 | -0.1 | | |
| | baz=1.0 | | | | | | | | |
| **ESL** | **Shilin** | **0.97** | **34** | *e*P | Pb | 04 20 15.0 | +0.3 | | |
| | baz=34 | | | | | | | | |
| **WUSB** | **Renai** | **1.01** | **14** | *e*P | Pb | 04 20 15.5 | 0.0 | | |
| | baz=14 | | | | | | | | |
| **CHGB** | **Renai** | **1.09** | **16** | *e*P | Pg | 04 20 16.3 | 0.0 | | |
| | baz=16 | | | | | | | | |
| CHGB | | | | *e*S | Sn | 04 20 32.7 | -0.6 | | |
| | baz=16 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.10** | **346** | *e*S | Sn | 04 20 33.4 | +0.2 | | |
| | baz=346 | | | | | | | | |
| **WDGT** | **Dungji** | **1.12** | **283** | *e*P | Pn | 04 20 17.6 | -0.1 | | |
| | baz=283 | | | | | | | | |
| WDGT | | | | *e*S | Sn | 04 20 33.9 | +0.3 | | |
| | baz=283 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.16** | **146** | *e*P | Pn | 04 20 18.6 | +0.2 | | |
| | baz=145 | | | | | | | | |
| LAY | | | | *e*S | Sn | 04 20 35.4 | +0.7 | | |
| | baz=145 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **19** | *e*P | Pb | 04 20 18.9 | 0.0 | | |
| | baz=19 | | | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **4** | *e*P | Pn | 04 20 21.5 | +1.6 | | |
| | baz=4.0 | | | | | | | | |
| **TWD** | **Chiawan** | **1.27** | **33** | *e*P | Pn | 04 20 20.6 | +0.7 | | |
| | baz=33 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.28** | **294** | *e*P | Pg | 04 20 19.5 | -0.3 | | |
| | baz=293 | | | | | | | | |
| PHUB | | | | *e*S | Sn | 04 20 38.7 | +1.2 | | |
| | baz=293 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.35** | **30** | *e*P | Pg | 04 20 21.9 | +0.7 | | |
| | baz=30 | | | | | | | | |
| **NNSB** | **Datong** | **1.50** | **19** | *e*S | Sn | 04 20 43.1 | -0.2 | | |
| | baz=19 | | | | | | | | |
| **LATG** | **Datong** | **1.65** | **22** | *e*P | Pb | 04 20 25.7 | -0.6 | | |
| | baz=22 | | | | | | | | |
| LATG | | | | *e*S | Sb | 04 20 47.7 | +0.2 | | |
| | baz=22 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.73** | **16** | *e*P | Pn | 04 20 26.4 | +0.1 | | |
| | baz=16 | | | | | | | | |
| YHNB | | | | *e*S | Sb | 04 20 49.6 | -0.1 | | |
| | baz=16 | | | | | | | | |
| **NSK** | **Sanguang** | **1.73** | **16** | *e*S | Sb | 04 20 49.7 | -0.1 | | |
| | baz=16 | | | | | | | | |

*IDC **22** 04:21:38.4±1.5,35.°78N×3.°50W, h0km, mb3.2/2, mb1 3.2/4, mb1mx3.0/38, mbtmp2.9/4, ML2.4/2, Error ellipse: s-maj=35.5km s-min=14.9km az=99.0*
*INMG **22** 04:21:40.1±1.5,35.°74N×3.°59W, h2km±6km, ML2.5, Error ellipse: s-maj=7.3km s-min=2.7km az=74.0*
*CNRM **22** 04:21:40.1,35.°77N×3.°49W, h16km, ml2.7*
*SFS **22** 04:21:41.0,35.°77N×3.°66W, ML3.0, ALBORAN SUR*
**ISC 22 04:21:39.6±0.9, 35.73N±0.03×3.65W±0.05, h10km, n35,**
**σ1§45/61, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.56** | **204** | P | **Pb** | **04 21 53.0** | **+1.3** |
| PALE | | | | S | **Sb** | **04 22 01.0** | **+1.2** |
| **EMAL** | **Malaga-Limoner** | **1.20** | **329** | P | **Pb** | **04 21 59.8** | **-2.7** |
| EMAL | | | | S | **Sb** | **04 22 18.8** | **+0.7** |
| **AKLM** | **AKL** | **1.23** | **188** | P | **Pb** | **04 22 03.0** | **-0.1** |
| **CEU** | **Ceuta** | **1.41** | **277** | P | **Pn** | **04 22 02.8** | **-2.5** |
| CEU | | | | S | **Sb** | **04 22 21.0** | **-3.0** |
| **CHEFC** | **Chefchaouen** | **1.51** | **246** | P | **Pg** | **04 22 08.0** | **-0.7** |
| **JBK** | **JBK** | **1.66** | **147** | P | **Pn** | **04 22 08.0** | **-1.0** |
| **IFR** | **Ifrane** | **2.52** | **209** | P | **Pn** | **04 22 20.8** | **-0.1** |
| IFR | | | | S | **Sn** | **04 22 50.9** | **-0.8** |
| **MDT** | **Midelt** | **3.02** | **195** | Pn | **Pn** | **04 22 27.5** | **-0.1** |
| | 0.4nm,0.3s,baz=110,slow=12,SNR=2.4 | | | | | | |
| MDT | | | | Sn | **Sn** | **04 23 03.6** | **-0.2** |
| | 1.6nm,0.3s,baz=28,slow=10.0,SNR=3.0 | | | | | | |
| MDT | | | | Lg | Lg | 04 23 17.3 | |
| | 1.5nm,0.3s,baz=247,slow=22,SNR=6.8 | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.67** | **298** | *e*Pn | **Pn** | **04 22 37.6** | **+1.1** |
| PVAQ | | | | *e*Sn | **Sn** | **04 23 19.7** | **-0.1** |
| PVAQ | | | | A | A | 04 23 22.1 | |
| | 8.1nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.67** | **298** | P | **Pn** | **04 22 37.7** | **+1.3** |
| **PBDV** | **Barranco-do-Ve** | **3.76** | **295** | *e*Pn | **Pn** | **04 22 38.9** | **+1.2** |
| PBDV | | | | *e*Sn | **Sn** | **04 23 21.5** | **-0.6** |
| PBDV | | | | A | A | 04 23 29.0 | |
| | 9.0nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **3.94** | **357** | Pn | **Pn** | **04 22 40.0** | **-0.2** |
| | 0.2nm,0.3s,baz=178,slow=13,SNR=2.1 | | | | | | |
| ESDC | | | | Sn | **Sn** | **04 23 26.3** | **-0.3** |
| | 0.3nm,0.3s,baz=170,slow=22,SNR=4.6 | | | | | | |
| ESDC | | | | Lg | Lg | 04 23 41.6 | |
| | 0.5nm,0.3s,baz=175,slow=29,SNR=6.6 | | | | | | |
| **PCVE** | **Castro Verde** | **4.00** | **300** | *e*Pn | **Pn** | **04 22 42.4** | **+1.4** |
| PCVE | | | | *e*Sn | **Sn** | **04 23 28.3** | **+0.3** |
| PCVE | | | | A | A | 04 23 30.6 | |
| | 7.6nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.22** | **301** | *e*Pn | **Pn** | **04 22 45.6** | **+1.5** |
| MESJ | | | | *e*Sn | **Sn** | **04 23 33.5** | **0.0** |
| MESJ | | | | A | A | 04 23 37.5 | |
| | 6.4nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.32** | **293** | *e*Pn | **Pn** | **04 22 47.1** | **+1.7** |
| MORF | | | | *e*Sn | **Sn** | **04 23 35.6** | **-0.3** |
| MORF | | | | A | A | 04 23 37.9 | |
| | 4.5nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.40** | **290** | *e*Pn | **Pn** | **04 22 48.6** | **+2.1** |
| PFVI | | | | *e*Sn | **Sn** | **04 23 37.4** | **-0.3** |
| PFVI | | | | A | A | 04 23 40.2 | |
| | 7.2nm,0.7s | | | | | | |
| **PESTR** | **Estremoz** | **4.43** | **316** | *e*Pn | **Pn** | **04 22 47.8** | **+0.9** |
| PESTR | | | | *e*Sn | **Sn** | **04 23 38.4** | **-0.2** |
| PESTR | | | | A | A | 04 23 40.8 | |
| | 4.4nm,0.5s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.46** | **295** | *e*Pn | **Pn** | **04 22 49.7** | **+2.4** |
| PTEO | | | | *e*Sn | **Sn** | **04 23 39.5** | **+0.2** |
| PTEO | | | | A | A | 04 23 48.9 | |
| | 7.9nm,0.6s | | | | | | |
| **EVO** | **Evora** | **4.46** | **310** | P | **Pn** | **04 22 48.4** | **+1.0** |
| EVO | | | | S | **Sn** | **04 23 39.3** | **0.0** |
| **EVO** | **Evora** | **4.46** | **310** | *e*Pn | **Pn** | **04 22 48.9** | **+1.5** |
| EVO | | | | *e*Sn | **Sn** | **04 23 39.0** | **-0.4** |
| EVO | | | | A | A | 04 23 40.0 | |
| | 6.2nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.57** | **303** | *e*Pn | **Pn** | **04 22 50.1** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **04 23 41.7** | **-0.3** |
| PNCL | | | | A | A | 04 23 45.0 | |
| | 4.8nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.73** | **322** | *e*Pn | **Pn** | **04 22 53.3** | **+2.2** |
| PMRV | | | | *e*Sn | **Sn** | **04 23 46.4** | **+0.3** |
| PMRV | | | | A | A | 04 24 01.3 | |
| | 3.6nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **4.93** | **314** | *e*Pn | **Pn** | **04 22 55.5** | **+1.7** |
| PMTG | | | | *e*Sn | **Sn** | **04 23 51.2** | **+0.3** |
| PMTG | | | | A | A | 04 23 51.9 | |
| | 3.4nm,0.7s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.10** | **325** | *e*Pn | **Pn** | **04 22 58.2** | **+2.2** |
| PCBR | | | | *e*Sn | **Sn** | **04 23 54.7** | **-0.2** |
| PCBR | | | | A | A | 04 23 56.5 | |
| | 4.1nm,0.4s | | | | | | |
| **PACT** | **Alcochete** | **5.12** | **308** | *e*Pn | **Pn** | **04 22 57.9** | **+1.5** |
| PACT | | | | *e*Sn | **Sn** | **04 23 55.7** | **+0.1** |
| **PSBE** | **So Bento** | **5.56** | **314** | *e*Pn | **Pn** | **04 23 04.5** | **+2.1** |
| PSBE | | | | *e*Sn | **Sn** | **04 24 06.8** | **+0.4** |
| **MTE** | **Manteigas** | **5.58** | **328** | *e*Pn | **Pn** | **04 23 05.2** | **+2.5** |
| **PCAS** | **Casmilo, Conde** | **5.77** | **320** | *e*Pn | **Pn** | **04 23 07.7** | **+2.4** |
| PCAS | | | | *e*Sn | **Sn** | **04 24 11.2** | **-0.3** |
| PCAS | | | | A | A | 04 24 11.2 | |
| | 2.7nm,0.4s | | | | | | |
| **PVIS** | **Viseu** | **5.99** | **327** | *e*Pn | **Pn** | **04 23 11.2** | **+2.8** |
| **MVO** | **Moncorvo** | **6.03** | **335** | *e*Pn | **Pn** | **04 23 11.2** | **+2.2** |
| MVO | | | | *e*Sn | **Sn** | **04 24 16.7** | **-1.5** |
| MVO | | | | A | A | 04 24 21.8 | |
| | 3.1nm,0.5s | | | | | | |
| **PVRL** | **Vila Real** | **6.38** | **331** | *e*Pn | **Pn** | **04 23 16.1** | **+2.3** |
| PVRL | | | | *e*Sn | **Sn** | **04 24 25.7** | **-1.0** |
| PVRL | | | | A | A | 04 24 32.1 | |
| | 3.9nm,0.5s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.50** | **331** | *e*Pn | **Pn** | **04 23 17.7** | **+2.3** |
| POLO | | | | *e*Sn | **Sn** | **04 24 28.6** | **-1.0** |
| POLO | | | | A | A | 04 24 38.4 | |
| | 1.3nm,0.7s | | | | | | |
| **PBRG** | **Braganca** | **6.52** | **339** | *e*Pn | **Pn** | **04 23 17.8** | **+2.1** |
| **MKAR** | **Makanchi Array** | **62.48** | **51** | P | **P** | **04 32 03.0** | **-0.2** |
| | 0.2nm,0.6s,baz=310,slow=5.4,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.67** | **332** | P | **P** | **04 32 37.2** | **+0.6** |
| | 0.1nm,0.5s,baz=61,slow=6.2,SNR=2.5 | | | | | | |

*IGIL **22** 04:42:54.0,35.°41N×3.°71W, h1km, ML2.4*
*INMG **22** 04:42:55.7±1.5,35.°60N×3.°55W, h25km±13km, ML2.4, Error ellipse: s-maj=5.9km s-min=4.9km az=137.0*
*SFS **22** 04:42:56.0,35.°70N×3.°67W, ML3.0, ALBORAN SUR*
*CNRM **22** 04:42:59.3,35.°33N×3.°63W, h30km, ml2.5*
**ISC 22 04:42:54.3±1.1, 35.69N±0.04×3.61W±0.06, h14km, n28,**
**σ1§26/45, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.54** | **210** | P | **Pb** | **04 43 06.4** | **+0.9** |
| **AKLM** | **AKL** | **1.19** | **190** | P | **Pb** | **04 43 17.0** | **+0.3** |
| **EMAL** | **Malaga-Limoner** | **1.26** | **329** | P | **Pn** | **04 43 16.8** | **-0.7** |
| EMAL | | | | S | **Sg** | **04 43 34.5** | **-0.5** |
| **TAF** | **Taforalt** | **1.31** | **131** | P | **Pb** | **04 43 19.0** | **+0.2** |
| **CEU** | **Ceuta** | **1.45** | **279** | P | **Pn** | **04 43 18.4** | **-1.6** |
| CEU | | | | S | **Sn** | **04 43 35.7** | **-3.1** |
| **CHEFC** | **Chefchaouen** | **1.52** | **248** | P | **Pb** | **04 43 23.0** | **+0.6** |
| **JBK** | **JBK** | **1.60** | **147** | P | **Pn** | **04 43 21.3** | **-1.0** |
| **LCRM** | **LCR** | **2.24** | **208** | P | **Pn** | **04 43 32.0** | **+0.8** |
| **IFR** | **Ifrane** | **2.50** | **210** | P | **Pn** | **04 43 34.9** | **+0.2** |
| IFR | | | | S | **Sn** | **04 44 05.7** | **+0.7** |
| **MDT** | **Midelt** | **2.98** | **196** | P | **Pn** | **04 43 41.8** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.72** | **299** | *e*Pn | **Pn** | **04 43 51.9** | **+0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **04 44 33.7** | **-1.3** |
| PVAQ | | | | A | A | 04 44 39.1 | |
| | 7.0nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **299** | P | **Pn** | **04 43 51.8** | **+0.5** |
| **PBDV** | **Barranco-do-Ve** | **3.81** | **295** | *e*Pn | **Pn** | **04 43 53.2** | **+0.6** |
| PBDV | | | | *e*Sn | **Sn** | **04 44 35.8** | **-1.4** |
| PBDV | | | | A | A | 04 44 41.3 | |
| | 7.1nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **4.05** | **300** | *e*Pn | **Pn** | **04 43 56.5** | **+0.6** |
| PCVE | | | | *e*Sn | **Sn** | **04 44 42.1** | **-1.1** |
| PCVE | | | | A | A | 04 44 45.0 | |
| | 7.1nm,0.8s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **302** | *e*P | **Pn** | **04 43 59.5** | **+0.6** |
| MESJ | | | | *e*S | **Sn** | **04 44 47.1** | **-1.6** |
| MESJ | | | | IAML | | 04 44 52.7 | |
| | comp=N,6.6nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **302** | *e*Pn | **Pn** | **04 43 59.9** | **+0.9** |
| MESJ | | | | *e*Sn | **Sn** | **04 44 47.1** | **-1.6** |
| MESJ | | | | A | A | 04 44 52.4 | |
| | comp=N,8.3nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **293** | *e*S | **Sn** | **04 44 48.4** | **-2.6** |
| MORF | | | | IAML | | 04 44 53.4 | |
| | comp=N,9.5nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.37** | **293** | *e*Pn | **Pn** | **04 44 01.8** | **+1.5** |
| MORF | | | | *e*Sn | **Sn** | **04 44 50.5** | **-0.5** |
| MORF | | | | A | A | 04 44 57.3 | |
| | comp=N,3.9nm,0.4s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.45** | **290** | *e*Pn | **Pn** | **04 44 02.4** | **+1.1** |
| PFVI | | | | *e*Sn | **Sn** | **04 44 51.1** | **-1.7** |
| PFVI | | | | A | A | 04 44 54.6 | |
| | comp=N,7.0nm,0.9s | | | | | | |
| **PESTR** | **Estremoz** | **4.49** | **316** | *e*Sn | **Sn** | **04 44 53.1** | **-0.8** |
| **PTEO** | **Sao Teotonio** | **4.51** | **296** | *e*Pn | **Pn** | **04 44 03.9** | **+1.7** |
| PTEO | | | | *e*Sn | **Sn** | **04 44 53.5** | **-0.9** |
| PTEO | | | | A | A | 04 44 58.0 | |
| | comp=N,6.5nm,0.8s | | | | | | |
| **EVO** | **Evora** | **4.52** | **310** | P | **Pn** | **04 44 03.5** | **+1.3** |
| EVO | | | | S | **Sn** | **04 44 53.8** | **-0.8** |
| **EVO** | **Evora** | **4.52** | **310** | *e*Pn | **Pn** | **04 44 03.6** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **04 44 53.9** | **-0.8** |
| EVO | | | | A | A | 04 44 54.8 | |
| | comp=N,5.3nm,1.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.62** | **303** | *e*Pn | **Pn** | **04 44 04.6** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **04 44 56.1** | **-1.1** |
| PNCL | | | | A | A | 04 44 58.8 | |
| | comp=N,3.5nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **4.79** | **322** | *e*Pn | **Pn** | **04 44 07.5** | **+1.4** |
| PMRV | | | | *e*Sn | **Sn** | **04 45 01.0** | **-0.4** |
| PMRV | | | | A | A | 04 45 07.2 | |
| | comp=N,1.9nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.99** | **314** | *e*Pn | **Pn** | **04 44 10.3** | **+1.6** |
| PMTG | | | | *e*Sn | **Sn** | **04 45 05.7** | **-0.5** |
| PMTG | | | | A | A | 04 45 08.2 | |
| | comp=N,2.8nm,1.0s | | | | | | |
| **PACT** | **Alcochete** | **5.18** | **308** | *e*Pn | **Pn** | **04 44 13.1** | **+1.8** |
| PACT | | | | *e*Sn | **Sn** | **04 45 12.0** | **+1.2** |
| **PSBE** | **So Bento** | **5.62** | **314** | *e*Pn | **Pn** | **04 44 19.3** | **+1.9** |

**IDC 22 04:50:40.9±6.5, 22.°18S×179.°88E, h0km, mb3.9/2, mb1 4.1/2, mb1mx3.7/24, mbtmp3.9/2, Error ellipse: s-maj=276.6km s-min=72.5km az=150.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.23** | **259** | P | P | 04 58 35.1 | -1.0 |
| | 0.3nm,0.3s,baz=93,slow=8.5,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.44** | **264** | P | P | 04 58 38.3 | +0.5 |
| | 0.9nm,0.3s,baz=100,slow=8.5,SNR=47 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.43** | **309** | PKPbc | PKPdf | 05 10 23.5 | +0.5 |
| | 0.3nm,0.5s,baz=65,slow=2.5,SNR=1.7 | | | | | | |

*VAO **22** 05:00:52.5±1.5, 9.°14S×76.°91W, h10km, mb4.2*
*IDC **22** 05:01:29.2±0.9, 8.°59S×74.°22W, h160km±8km, mb3.2/5, mb1 3.6/10, mb1mx3.4/30, mbtmp3.8/10, Error ellipse: s-maj=24.2km s-min=13.5km az=36.0*
*NEIC **22** 05:01:29.9±2.6, 8.°64S±0.°03×74.°24W±0.°07, h160km±9km, mb4.0/12, Error ellipse: s-maj=10.8km s-min=3.9km az=96.0*
**ISC 22 05:01:29.2±0.5, 8.65S±0.06×74.23W±0.06, h158km, n42,**
**σ1§28/47, mb3.5/7, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NNA** | **Nana** | **4.20** | **218** | P | **Pn** | **05 02 33.9** | **+1.6** |
| | 2.1nm,0.3s,baz=129,slow=5.7,SNR=12 | | | | | | |
| NNA | | | | S | **Sn** | **05 03 19.5** | **-2.0** |
| | 13nm,0.3s,baz=224,slow=14,SNR=8.8 | | | | | | |
| **NNA** | **Nana** | **4.20** | **218** | | **Pn** | **05 02 33.6** | **+1.3** |
| **ATAH** | **Atahualpa** | **4.39** | **290** | P | **Pn** | **05 02 34.8** | **-0.4** |
| | 37nm,0.3s,baz=212,slow=6.8,SNR=241 | | | | | | |
| ATAH | | | | S | **Sn** | **05 03 25.1** | **-1.5** |
| | 8.7nm,0.3s,baz=349,slow=11,SNR=2.3 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **6.17** | **44** | *e*P | **Pn** | **05 02 57.2** | **-1.2** |
| **LPAZ** | **La Paz** | **9.65** | **142** | P | **Pn** | **05 03 45.5** | **+0.4** |
| | 0.5nm,0.3s,baz=329,slow=4.7,SNR=9.9 | | | | | | |
| **LPAZ** | **La Paz** | **9.65** | **142** | | **Pn** | **05 03 45.8** | **+0.7** |
| **OTAV** | **Otavalo** | **9.78** | **334** | Pn | **Pn** | **05 03 48.1** | **+1.4** |
| **PB11** | **IPOC Station P** | **11.90** | **159** | Pn | **Pn** | **05 04 13.6** | **-0.6** |
| **PB08** | **IPOC Station P** | **12.44** | **157** | Pn | **Pn** | **05 04 22.6** | **+1.3** |
| **PB02** | **IPOC Station P** | **13.27** | **162** | Pn | **Pn** | **05 04 31.8** | **0.0** |
| **PB07** | **IPOC Station P** | **13.66** | **163** | Pn | **Pn** | **05 04 37.4** | **+0.7** |
| **VILB** | **Vilhena** | **14.43** | **108** | *e*P | **Pn** | **05 04 47.0** | **+0.6** |
| **MACA** | **Manacapuru-AM** | **14.53** | **69** | *e*P | **P** | **05 04 52.2** | **+2.4** |
| **SIV** | **San Ignacio** | **14.78** | **121** | P | **Pn** | **05 04 50.4** | **-0.2** |
| | 1.5nm,0.3s,baz=305,slow=12,SNR=43 | | | | | | |
| SIV | | | | S | **S** | **05 07 39.1** | **-1.9** |
| | 0.2nm,0.3s,baz=27,slow=17,SNR=2.2 | | | | | | |
| **LVC** | **Limon Verde** | **14.79** | **160** | P | **Pn** | **05 04 51.0** | **-0.1** |
| | 0.2nm,0.3s,baz=28,slow=15,SNR=1.4 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **16.05** | **358** | | **Pn** | **05 05 05.5** | **-0.8** |
| ZARC | | | | IAmb | IAmb | 05 05 23.9 | |
| | comp=Z,4.7nm,1.3s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **16.23** | **116** | *e*P | **P** | **05 05 09.4** | **+0.8** |
| **OCAC** | **Ocana** | **16.80** | **3** | P | **P** | **05 05 13.0** | **-2.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SDV** | **Santo Domingo** | **17.79** | **12** | P | **Pn** | **05 05 26.8** | **-0.5** |
| SDV | | | | IAmb | IAmb | 05 05 36.9 | |
| | comp=Z,9.3nm,1.5s | | | | | | |
| **SJCC** | **San Jacinto, C** | **18.45** | **357** | P | **P** | **05 05 33.4** | **+0.4** |
| SJCC | | | | IAmb | IAmb | 05 05 34.3 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **SALV** | **Santo Antonio** | **19.48** | **113** | *e*P | **P** | **05 05 44.5** | **+0.3** |
| **AQDB** | **Aquidauana** | **21.42** | **125** | *e*P | **P** | **05 06 03.1** | **-1.8** |
| **SNDB** | **Serra Nova Dou** | **22.80** | **100** | *e*P | **P** | **05 06 19.7** | **+1.0** |
| **ARAG** | **Araguaiana, MT** | **23.00** | **110** | *e*P | **P** | **05 06 20.4** | **0.0** |
| **MCPG** | **Macapa, AP** | **23.57** | **71** | *e*P | **P** | **05 06 26.9** | **+1.1** |
| **PEXB** | **Peixe** | **25.73** | **100** | *e*P | **P** | **05 06 47.1** | **+1.8** |
| **SMTB** | **Santa Maria do** | **26.33** | **93** | *e*P | **P** | **05 06 52.2** | **+1.5** |
| **PTGB** | **Pitanga** | **26.50** | **130** | *e*P | **P** | **05 06 47.6** | **-4.6** |
| **ITQB** | **Itaqui** | **26.64** | **144** | P | **P** | **05 06 54.0** | **+0.7** |
| **ITAB** | **Concordia** | **27.91** | **134** | P | **P** | **05 07 04.3** | **-0.3** |
| **PLTB** | **Pedras Altas** | **29.94** | **143** | P | **P** | **05 07 22.4** | **-0.3** |
| PLTB | | | | IAmb | IAmb | 05 07 28.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **NBPN** | **Ponto Novo - B** | **33.60** | **97** | *e*P | **P** | **05 07 55.3** | **+0.4** |
| **TXAR** | **Lajitas Array** | **47.23** | **324** | P | **P** | **05 09 47.0** | **+0.5** |
| | comp=Z,0.5nm,0.4s,baz=150,slow=8.6,SNR=12 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **47.23** | **324** | P | **P** | **05 09 47.4** | **+0.8** |
| TX31 | | | | IAmb | IAmb | 05 09 57.1 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **TX32** | **Lajitas Array** | **47.23** | **324** | P | **P** | **05 09 47.2** | **+0.6** |
| **O56A** | **Blue Knob Stat** | **48.84** | **356** | P | **P** | **05 09 59.5** | **+0.8** |
| **PDAR** | **Pinedale Array** | **60.46** | **331** | P | **P** | **05 11 21.9** | **-0.7** |
| | comp=Z,0.4nm,0.6s,baz=118,slow=10,SNR=5.2 | | | | | | |
| PDAR | | | | pP | **pP** | **05 11 59.6** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=104,slow=7.5,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.26** | **322** | P | **P** | **05 11 35.7** | **+1.0** |
| | comp=Z,0.3nm,0.7s,baz=152,slow=4.1,SNR=2.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.44** | **342** | P | **P** | **05 13 05.7** | **-1.0** |
| | comp=Z,0.5nm,0.5s,baz=142,slow=5.9,SNR=18 | | | | | | |
| YKA | | | | pP | **pP** | **05 13 45.7** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=140,slow=6.2,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.44** | **75** | P | **P** | **05 13 12.0** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=267,slow=4.5,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.44** | **75** | IAmb | IAmb | 05 13 18.1 | |
| | comp=Z,0.7nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **140.02** | **224** | PKP | **PKPdf** | **05 20 39.2** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=123,slow=2.1,SNR=2.2 | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **05 21 21.9** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=123,slow=1.9,SNR=2.4 | | | | | | |

*IDC **22** 05:09:01.2±0.6, 16.°11N×119.°65E, h0km, mb4.1/15, mb1 4.2/17, mb1mx4.0/47, mbtmp4.1/17, ML4.3/1, MS3.5/3, Ms1 3.5/3, ms1mx2.7/83, Error ellipse: s-maj=27.3km s-min=12.8km az=71.0*
*NEIC **22** 05:09:07.7±1.9, 16.°07N±0.°07×119.°66E±0.°10, h37km±6km, mb4.4/27, Error ellipse: s-maj=14.4km s-min=9.1km az=60.0*
*MAN **22** 05:09:09.6, 16.°12N×119.°81E, h6km, mb4.7, ML3.6, MS3.4*
**ISC 22 05:09:08.0±0.5, 16.13N±0.05×119.65E±0.08, h43km, n60,**
**σ1§83/62, mb4.3/31, MS3.2/3, 1C-3D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIPP** | **Brgy, Tapao** | **1.94** | **23** | ⇓*i*P | **Pn** | **05 09 42.5** | **+4.0** |
| SIPP | | | | *i* S | **Sn** | **05 10 08.3** | **+6.6** |
| **APYP** | **Conner** | **2.30** | **41** | ⇑*e*P | **Pn** | **05 09 44.8** | **+1.4** |
| APYP | | | | *e*S | **Sn** | **05 10 04.2** | **-6.2** |
| **TGY** | **Tagaytay City** | **2.37** | **148** | Pn | **Pn** | **05 09 43.1** | **-1.3** |
| | 69nm,0.3s,baz=327,slow=15,SNR=2.0 | | | | | | |
| TGY | | | | Sn | **Sn** | **05 10 17.1** | **+4.9** |
| | 112nm,0.3s,baz=84,slow=23,SNR=3.6 | | | | | | |
| **TGY** | **Tagaytay City** | **2.37** | **148** | ⇓*e*P | Pn | 05 09 53.0 | +8.6 |
| **CVP** | **Callao Caves** | **2.60** | **53** | *e*P | **Pn** | **05 09 49.8** | **+2.3** |
| **LQP** | **Lukban** | **2.71** | **137** | ⇓*e*P | Pn | 05 09 52.9 | +3.6 |
| LQP | | | | *e*S | **Sn** | **05 10 22.1** | **+1.1** |
| **TWG** | **Pinlang** | **6.79** | **11** | Pn | **Pn** | **05 10 45.1** | **0.0** |
| **TPUB** | **Ta-pu** | **7.19** | **7** | Pn | **Pn** | **05 10 50.9** | **+0.2** |
| **YULB** | **Yu-li** | **7.39** | **12** | Pn | **Pn** | **05 10 51.9** | **-1.4** |
| **SSLB** | **Suanglung** | **7.72** | **9** | Pn | **Pn** | **05 10 58.2** | **+0.4** |
| **NACB** | **Ninganchiao** | **8.21** | **13** | Pn | **Pn** | **05 11 05.2** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **19.91** | **280** | P | **P** | **05 13 35.1** | **-1.0** |
| | baz=95,slow=8.9,SNR=1.2 | | | | | | |
| **KSRS** | **Korea Array** | **22.47** | **17** | P | **P** | **05 14 02.1** | **-1.4** |
| | 2.2nm,0.8s,baz=203,slow=11,SNR=7.6 | | | | | | |
| KSRS | | | | LR | LR | 05 23 46.4 | |
| | comp=Z,66nm,18.5s,baz=140,slow=39 | | | | | | |
| **LZH** | **Lanzhou** | **24.36** | **328** | *e*P | **P** | **05 14 23.8** | **+1.6** |
| LZH | | | | sP | sP | 05 14 41.9 | +3.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **28.95** | **327** | *e*P | **P** | **05 15 04.8** | **+1.3** |
| GTA | | | | pP | pP | 05 15 11.5 | -3.1 |
| GTA | | | | p

comp=Z,2.3nm,0.7s,baz=87,slow=6.4,SNR=5.5
**ILAR Eielson Array 77.02 26** P **P** 05 20 55.4 **-0.8**
comp=Z,0.5nm,0.7s,baz=261,slow=4.5,SNR=7.4
**FINES FINESS Array B 77.68 331** P **P** 05 20 59.5 **-0.4**
comp=Z,3.3nm,0.8s,baz=40,slow=5.2,SNR=15
**AKASG Malin Array Be 77.96 319** P **P** 05 21 00.5 **-1.2**
comp=Z,1.5nm,0.7s,baz=67,slow=5.2,SNR=6.3
**BUR08 Bucovina Ar. S 81.20 317** P **P** 05 21 19.8 **+0.3**
BUR08 IAmb IAmb 05 21 20.3
comp=Z,2.9nm,0.7s
**A36M Sachs Harbour 82.21 17** P **P** 05 21 24.3 **+0.1**
A36M IAmb IAmb 05 21 34.9
comp=Z,4.5nm,0.8s
**NOA NORSAR Array B 84.65 332** P **P** 05 21 36.1 **-0.9**
comp=Z,0.8nm,0.6s,baz=69,slow=4.6,SNR=3.5
**GERES GERESS Array B 88.12 321** LR LR 06 04 52.8
comp=Z,48nm,19.2s,baz=132,slow=38
**YKA Yellowknife Ar 90.92 22** P **P** 05 22 07.5 **+0.5**
comp=Z,1.2nm,0.9s,baz=312,slow=4.4,SNR=19
**TXAR Lajitas Array 118.43 43** PKP **PKiKP** 05 27 51.4 **-0.3**
comp=Z,0.2nm,0.7s,baz=299,slow=1.9,SNR=2.1
**TXAR Lajitas Array 118.43 43** **PKPdf** 05 27 50.3 **-1.4**
**PLCA Paso Flores 153.94 162** PKPab **PKPab** 05 29 14.3 **-2.0**
comp=Z,1.4nm,0.9s,baz=130,slow=1.2,SNR=3.2

**IDC 22 05:11:28.8±7.3, 19°.34S×177°.10W, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.5/21, mbtmp3.6/2, Error ellipse: s-maj=314.1km s-min=114.2km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.61** | **261** | P | P | 05 19 51.8 | +0.6 |
| | 0.5nm,1.0s,baz=96,slow=7.6,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **45.62** | **256** | P | P | 05 19 50.4 | -0.9 |
| | 0.5nm,0.5s,baz=94,slow=8.1,SNR=7.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.40** | **332** | PKP | PKPdf | 05 31 02.8 | -0.6 |
| | 0.3nm,0.3s,baz=46,slow=4.0,SNR=4.4 | | | | | | |

**NEIC 22 05:17:10.4±0.5, 36°.00N±0°.01×97°.12W±0°.01, h6km±5km, mb_Lg2.2/9, Error ellipse: s-maj=2.3km s-min=1.3km az=149.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK001** | **Jones High Sch** | **0.46** | **198** | Pg | Pg | 05 17 18.8 | -0.3 |
| **OKCFA** | **Oklahoma City** | **0.64** | **205** | | Pg | 05 17 22.2 | -0.4 |
| OKCFA | | | | Sg | Sg | 05 17 31.2 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.64** | **204** | Pg | Pg | 05 17 22.2 | -0.6 |
| **FNO** | **Franklin** | **0.77** | **198** | Pg | Pg | 05 17 24.4 | -0.8 |
| **W35A** | **Tecumseh** | **0.86** | **167** | Pg | Pg | 05 17 26.5 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.04** | **28** | | Pg | 05 17 29.4 | -1.0 |
| **TUL1** | **Leonard** | **1.08** | **94** | | Pg | 05 17 29.7 | -1.4 |
| **X34A** | **Smith Ranch, M** | **1.51** | **203** | | Pn | 05 17 37.8 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.57** | **285** | | Pn | 05 17 37.1 | -1.8 |
| U32A | | | | Pn | Pb | 05 17 38.4 | -1.5 |
| U32A | | | | IAmb_Lg | | 05 18 02.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.00** | **134** | Pn | Pn | 05 17 44.8 | 0.0 |
| X37A | | | | IAmb_Lg | | 05 18 15.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **2.59** | **83** | Pn | Pn | 05 17 50.5 | -2.4 |
| **R32A** | **Long Quarter,** | **2.74** | **333** | IAmb_Lg | | 05 18 43.4 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.24** | **116** | Pn | Pn | 05 18 02.0 | +0.2 |
| **U40A** | **Yellville** | **3.47** | **83** | Pn | Pn | 05 18 02.9 | -2.1 |
| **X40A** | **Basin Creek Fa** | **3.81** | **112** | Pn | Pn | 05 18 09.4 | -0.3 |
| **AMTX** | **Amarillo** | **3.89** | **255** | IAmb_Lg | | 05 19 12.5 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **3.99** | **99** | Pn | Pn | 05 18 11.1 | -1.1 |
| **W41B** | **Gary Mavity, V** | **4.05** | **100** | Pn | Pn | 05 18 12.1 | -0.9 |
| **FCAR** | **Ozark Folk Cen** | **4.05** | **90** | Pn | Pn | 05 18 13.8 | +0.8 |

**IDC 22 05:22:42.8±3.4, 5°.72S×151°.95E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.4/41, mbtmp3.5/3, Error ellipse: s-maj=106.2km s-min=18.7km az=110.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **1.41** | **3** | Pn | Pb | 05 23 11.0 | +1.1 |
| KRVT | | | | Sn | Sn | 05 23 28.8 | -0.2 |
| **WRA** | **Warramunga Arr** | **22.20** | **229** | P | P | 05 27 41.6 | +0.6 |
| | 0.5nm,0.6s,baz=53,slow=9.7,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **24.90** | **222** | P | P | 05 28 08.9 | +1.2 |
| | 0.5nm,0.7s,baz=61,slow=8.6,SNR=4.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.48** | **242** | P | P | 05 28 39.2 | -0.7 |
| | 1.0nm,0.6s,baz=56,slow=12,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.77** | **286** | PKPbc | PKPbc | 05 42 34.3 | -1.6 |
| | 0.8nm,0.7s,baz=103,slow=2.3,SNR=6.8 | | | | | | |

*TEH 22 05:30:39.6, 29°.77N×52°.26E, h8km, ML3.5*
*SGS 22 05:30:40.5, 29°.92N×52°.23E, h4km, Ml3.1*
**ISC 22 05:30:40.8±0.9, 29°.74N±0°.04×52°.23E±0°.03, h10km, n41, σ0°82/42, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHI** | **Shiraz** | **0.27** | **112** | *e*Pg | **Pg** | 05 30 45.1 | **-1.2** |
| SHI | | | | *e*Sg | **Sg** | 05 30 49.7 | **-0.2** |
| **KAZ1** | **Kazerun** | **0.53** | **257** | *e*Pg | **Pg** | 05 30 50.5 | **-0.5** |
| KAZ1 | | | | *e*Sg | **Sg** | 05 30 59.1 | **+1.1** |
| KAZ1 | | | | *e* | | 05 31 03.0 | |
| | comp=Z,93μm,0.2s | | | | | | |
| **AHBU** | **AHRAM** | **1.20** | **223** | *e*Pg | **Pg** | 05 31 04.0 | **+0.2** |
| **KLNJ** | **Kolanjah** | **1.38** | **337** | *e* | | 05 31 31.0 | |
| | comp=Z,13μm,0.6s | | | | | | |
| KLNJ | | | | *e*Pg | **Pn** | 05 31 05.7 | **-0.7** |
| **QIR1** | **Qir** | **1.45** | **150** | *e*Pg | **Pn** | 05 31 07.5 | **+0.4** |
| **GHIR** | **Ghir-Karzin** | **1.59** | **155** | *e*Pg | **Pb** | 05 31 10.5 | **+0.1** |
| **JHRM** | **Jahrom** | **1.71** | **136** | *e*Pg | **Pb** | 05 31 12.7 | **+0.4** |
| JHRM | | | | *e* | | 05 31 42.9 | |
| | comp=Z,7μm,0.4s | | | | | | |
| **ABEH** | **Behbahan** | **1.91** | **297** | *e*Pn | **Pb** | 05 31 15.2 | **-0.6** |
| **IRAM** | **Rameshen** | **2.06** | **4** | *e*Pn | **Pn** | 05 31 16.4 | **+0.6** |
| IRAM | | | | *e* | | 05 31 53.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **IBRJ** | **Brojen** | **2.31** | **339** | *e*Pn | **Pn** | 05 31 20.0 | **+0.8** |
| IBRJ | | | | *e* | | 05 32 03.7 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **ISAD** | **Sadrabad** | **2.50** | **30** | *e*Pn | **Pn** | 05 31 22.8 | **+1.0** |
| ISAD | | | | *e* | | 05 31 30.0 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IMEH** | **Mehriz** | **2.63** | **51** | *e*Pn | **Pn** | 05 31 24.6 | **+1.0** |
| IMEH | | | | *e* | | 05 32 08.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **IGAR** | **Gharneh** | **2.66** | **357** | *e*Pn | **Pn** | 05 31 24.6 | **+0.7** |
| **SHK1** | **Shahrekord** | **2.83** | **336** | *e*Pn | **Pn** | 05 31 26.5 | **+0.3** |
| SHK1 | | | | *e* | | 05 32 24.7 | |
| | comp=Z,1μm,0.9s | | | | | | |
| **NASN** | **Na'in** | **3.09** | **9** | *e*Pn | **Pn** | 05 31 30.4 | **+0.5** |
| **ICHK** | **Chekchek** | **3.12** | **36** | *e*Pn | **Pn** | 05 31 30.9 | **+0.7** |
| **IZEF** | **Zefreh** | **3.15** | **2** | *e*Pn | **Pn** | 05 31 31.1 | **+0.4** |
| **IPIR** | **Pirpir** | **3.15** | **339** | *e*Pn | **Pn** | 05 31 31.3 | **+0.6** |
| **YZKH** | **Yazd** | **3.33** | **37** | *e*Pn | **Pn** | 05 31 34.2 | **+1.2** |
| **IKLH** | **Kolahrood** | **3.61** | **351** | *e*Pn | **Pn** | 05 31 37.8 | **+0.8** |
| **ANAR** | **Anarak** | **3.67** | **20** | *e*Pn | **Pn** | 05 31 38.1 | **+0.4** |
| **KHGB** | **Koh Gabri** | **3.74** | **79** | *e* | | 05 32 45.3 | |
| | comp=Z,589nm,0.6s | | | | | | |
| **NGRK** | **Negar Kerman** | **3.92** | **90** | *e*Pn | **Pn** | 05 31 41.6 | **+0.2** |
| NGRK | | | | *e* | | 05 32 51.4 | |
| | comp=Z,623nm,0.7s | | | | | | |
| **KRBR** | **Kerman** | **3.94** | **85** | *e*Pn | **Pn** | 05 31 42.4 | **+0.8** |
| **TVBK** | **TV Kerman** | **3.94** | **85** | *e*Pn | **Pn** | 05 31 42.5 | **+0.8** |
| **QAMS** | **Qamsar** | **4.05** | **350** | *e*Pn | **Pn** | 05 31 43.6 | **+0.6** |
| QAMS | | | | *e* | | 05 32 34.6 | |
| | comp=Z,688nm,0.4s | | | | | | |
| **KRSH** | **Karshahi** | **4.22** | **359** | *e*Pn | **Pn** | 05 31 45.4 | **+0.1** |
| **KHMZ** | **Khomeyn** | **4.43** | **335** | *e*Pn | **Pn** | 05 31 49.3 | **+1.0** |
| **ISFB** | **Sefidab** | **4.60** | **0** | *e*Pn | **Pn** | 05 31 51.0 | **+0.6** |
| **GHVR** | **GHOM** | **4.79** | **351** | *e*Pn | **Pn** | 05 31 54.7 | **+1.6** |
| **SMAN** | **Sihmah** | **5.12** | **227** | P | **Pn** | 05 31 58.2 | **+0.7** |
| **SMAN** | **Sihmah** | **5.12** | **227** | S | **Sn** | 05 32 55.2 | **-1.5** |
| **ASAO** | **Ashtian** | **5.14** | **339** | *e*Pn | **Pn** | 05 31 59.5 | **+1.4** |
| **IVRN** | **Varamin** | **5.26** | **355** | *e*Pn | **Pn** | 05 31 59.0 | **-0.5** |
| **TNSJ** | **Nastanj** | **5.62** | **40** | *e*Pn | **Pn** | 05 32 05.3 | **+0.8** |
| **TKDS** | **Koohdasht(Taba** | **5.68** | **46** | *e*Pn | **Pn** | 05 32 05.6 | **+0.2** |
| **TABS** | **Tabas** | **5.70** | **46** | *e*Pn | **Pn** | 05 32 06.5 | **+0.8** |
| **NHRD** | **Haradh** | **5.76** | **211** | S | **Sn** | 05 33 11.7 | **-0.8** |
| **NHRD** | **Haradh** | **5.76** | **211** | P | **Pn** | 05 32 07.0 | **+0.6** |
| **DAMV** | **Damavand** | **5.88** | **358** | *e*Pn | **Pn** | 05 32 08.9 | **+0.7** |
| **SHRO** | **Shahrood** | **7.00** | **26** | *e*Pn | **Pn** | 05 32 24.8 | **+1.4** |

*SNET 22 05:33:05.8±0.8, 12°.23N×88°.89W, h16km±3km, ML3.9*
*UCR 22 05:33:06.0±0.9, 12°.23N×88°.87W, h20km±3km, ML3.8, mb4.5(NEIC)*
*INET 22 05:33:07.2±1.0, 12°.26N×88°.86W, h15km, MW3.8*
*NEIC 22 05:33:10.6±1.9, 12°.51N±0°.07×88°.66W±0°.07, h35km±2km, mb4.5/69, Md4.0(SNET), Error ellipse: s-maj=15.2km s-min=8.3km az=222.0*
*IDC 22 05:33:11.1±2.0, 12°.71N×88°.48W, h44km±18km, mb3.8/10, mb1 4.0/14, mb1mx3.7/45, mbtmp4.0/14, ML3.0/4, MS3.3/7, Ms1 3.3/7, ms1mx2.9/68, Error ellipse: s-maj=33.4km s-min=14.6km az=48.0*
*GCG 22 05:33:12.4±0.3, 12°.45N×88°.99W, h50km, MD4.4*
**ISC 22 05:33:10.4±1.3, 12°.38N±0°.06×88°.84W±0°.05, h49km±11km, n175, σ1°48/195, mb4.4/32, MS3.3/6, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COEB** | **Comit de Eme** | **1.16** | **15** | *e*P | **Pn** | 05 33 29.0 | **-1.4** |
| COEB | | | | *e*S | **Sn** | 05 33 48.0 | **+2.9** |
| **COEB** | **Comit de Eme** | **1.16** | **15** | *e*P | **Pn** | 05 33 28.9 | **-1.4** |
| **COEB** | **Comit de Eme** | **1.16** | **15** | *e*P | **Pn** | 05 33 29.0 | **-1.4** |
| COEB | | | | *e*S | **Sn** | 05 33 48.0 | **+2.9** |
| **TECO** | **Alcaldia de Te** | **1.16** | **3** | *e*P | **Pn** | 05 33 28.7 | **-1.6** |
| TECO | | | | *e*S | **Sn** | 05 33 46.6 | **+1.6** |
| **TECO** | **Alcaldia de Te** | **1.16** | **3** | *e*P | **Pn** | 05 33 28.7 | **-1.6** |
| TECO | | | | *e*S | **Sn** | 05 33 46.6 | **+1.6** |
| **LCY** | **Lacayo** | **1.17** | **27** | *e*P | **Pn** | 05 33 29.5 | **-1.0** |
| **LCY** | **Lacayo** | **1.17** | **27** | *e*P | **Pn** | 05 33 29.5 | **-1.0** |
| **VSM** | **San Miguel** | **1.18** | **28** | *e*P | **Pn** | 05 33 29.9 | **-1.0** |
| **VSM** | **San Miguel** | **1.18** | **28** | *e*P | **Pn** | 05 33 29.9 | **-1.0** |
| **PACA** | **Pacayal** | **1.20** | **25** | *e*P | **Pn** | 05 33 30.2 | **-0.8** |
| **PACA** | **Pacayal** | **1.20** | **25** | *e*P | **Pn** | 05 33 30.2 | **-0.8** |
| **LALI** | **Alcalda de L** | **1.20** | **337** | *e*P | **Pn** | 05 33 28.7 | **-2.1** |
| **LALI** | **Alcalda de L** | **1.20** | **337** | *e*P | **Pn** | 05 33 28.7 | **-2.1** |
| **SNVI** | **San Vicente** | **1.23** | **360** | *e*P | **Pn** | 05 33 30.4 | **-1.0** |
| **SNVI** | **San Vicente** | **1.23** | **360** | *e*P | **Pn** | 05 33 30.4 | **-1.0** |
| **COEG** | **Centro de Oper** | **1.24** | **358** | *e*P | **Pn** | 05 33 29.7 | **-1.8** |
| **COEG** | **Centro de Oper** | **1.24** | **358** | *e*P | **Pn** | 05 33 29.7 | **-1.8** |
| **SJTE** | **Alcalda de S** | **1.24** | **352** | *e*P | **Pn** | 05 33 29.8 | **-1.7** |
| **SJTE** | **Alcalda de S** | **1.24** | **352** | *e*P | **Pn** | 05 33 29.8 | **-1.7** |
| **LFRS** | **El Faro** | **1.26** | **350** | *e*P | **Pn** | 05 33 30.1 | **-1.7** |
| **LFRS** | **El Faro** | **1.26** | **350** | *e*P | **Pn** | 05 33 30.1 | **-1.7** |
| **PQSS** | **Presa 15 de Se** | **1.27** | **12** | *e*P | **Pn** | 05 33 30.6 | **-1.2** |
| **PQSS** | **Presa 15 de Se** | **1.27** | **12** | *e*P | **Pn** | 05 33 30.6 | **-1.2** |
| **SCLA** | **Alcaldia de Sa** | **1.32** | **5** | *e*P | **Pn** | 05 33 31.6 | **-1.0** |
| **SCLA** | **Alcaldia de Sa** | **1.32** | **5** | *e*P | **Pn** | 05 33 31.6 | **-1.0** |
| **PAVA** | **Las Pavas** | **1.33** | **356** | *e*P | **Pn** | 05 33 31.3 | **-1.5** |
| PAVA | | | | *e*S | **Sn** | 05 33 52.1 | **+2.6** |
| **PAVA** | **Las Pavas** | **1.33** | **356** | *e*P | **Pn** | 05 33 31.3 | **-1.5** |
| **PAVA** | **Las Pavas** | **1.33** | **356** | *e*P | **Pn** | 05 33 31.3 | **-1.5** |
| PAVA | | | | *e*S | **Sn** | 05 33 52.1 | **+2.6** |
| **SNET** | **Serv Nac Est T** | **1.36** | **344** | Pn | **Pn** | 05 33 31.5 | **-1.6** |
| **SNET** | **Serv Nac Est T** | **1.36** | **344** | *e*P | **Pn** | 05 33 31.8 | **-1.3** |
| SNET | | | | *e*S | **Sn** | 05 33 51.8 | **+1.7** |
| **SNET** | **Serv Nac Est T** | **1.36** | **344** | *e*P | **Pn** | 05 33 31.7 | **-1.4** |
| **SNET** | **Serv Nac Est T** | **1.36** | **344** | *e*P | **Pn** | 05 33 31.8 | **-1.3** |
| SNET | | | | *e*S | **Sn** | 05 33 51.8 | **+1.7** |
| **LBRS** | **Las Brisas** | **1.37** | **352** | *e*P | **Pn** | 05 33 32.2 | **-1.1** |
| **LBRS** | **Las Brisas** | **1.37** | **352** | *e*P | **Pn** | 05 33 32.2 | **-1.1** |
| **OPAM** | **Oficina de Pla** | **1.37** | **345** | *e*P | **Pn** | 05 33 32.3 | **-1.0** |
| **OPAM** | **Oficina de Pla** | **1.37** | **345** | *e*P | **Pn** | 05 33 32.3 | **-1.0** |
| **UEES** | **Universidad Ev** | **1.39** | **344** | *e*P | **Pn** | 05 33 32.1 | **-1.4** |
| **UEES** | **Universidad Ev** | **1.39** | **344** | *e*P | **Pn** | 05 33 32.1 | **-1.4** |
| **LFU** | **La Fuente** | **1.39** | **349** | *e*P | **Pn** | 05 33 32.3 | **-1.2** |
| **LFU** | **La Fuente** | **1.39** | **349** | *e*P | **Pn** | 05 33 32.3 | **-1.2** |
| **JAYA** | **Jayaque - finc** | **1.40** | **335** | *e*P | **Pn** | 05 33 32.1 | **-1.7** |
| JAYA | | | | *e*S | **Sn** | 05 33 51.9 | **+0.7** |
| **JAYA** | **Jayaque - finc** | **1.40** | **335** | *e*P | **Pn** | 05 33 32.1 | **-1.7** |
| JAYA | | | | *e*S | **Sn** | 05 33 51.9 | **+0.7** |
| **BOQS** | **Boqueron** | **1.42** | **342** | *e*P | **Pn** | 05 33 32.8 | **-1.3** |
| **BOQS** | **Boqueron** | **1.42** | **342** | *e*P | **Pn** | 05 33 32.8 | **-1.3** |
| **CEDA** | **San Andres** | **1.52** | **339** | *e*P | **Pn** | 05 33 33.8 | **-1.4** |
| CEDA | | | | *e*S | **Sn** | 05 33 55.4 | **+1.5** |
| CEDA | | | | IAML | | 05 34 04.2 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CEDA** | **San Andres** | **1.52** | **339** | *e*P | **Pn** | 05 33 33.8 | **-1.4** |
| CEDA | | | | *e*S | **Sn** | 05 33 55.4 | **+1.5** |
| CEDA | | | | IAML | | 05 34 04.2 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.64** | **332** | *e*P | **Pn** | 05 33 35.7 | **-1.3** |
| CEVE | | | | IAML | | 05 34 13.5 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.64** | **332** | *e*P | **Pn** | 05 33 35.7 | **-1.3** |
| CEVE | | | | IAML | | 05 34 13.5 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **SBLS** | **San Blas** | **1.64** | **332** | *e*P | **Pn** | 05 33 35.9 | **-1.3** |
| **SBLS** | **San Blas** | **1.64** | **332** | *e*P | **Pn** | 05 33 35.9 | **-1.3** |
| **SNJE** | **San Jose** | **1.66** | **333** | *e*P | **Pn** | 05 33 36.1 | **-1.2** |
| **SNJE** | **San Jose** | **1.66** | **333** | *e*P | **Pn** | 05 33 36.1 | **-1.2** |
| **TACO** | **Tacachico** | **1.66** | **342** | *e*P | **Pn** | 05 33 36.1 | **-1.1** |
| TACO | | | | *e*S | **Sn** | 05 33 59.3 | **+1.9** |
| **TACO** | **Tacachico** | **1.66** | **342** | *e*P | **Pn** | 05 33 36.1 | **-1.1** |
| TACO | | | | *e*S | **Sn** | 05 33 59.3 | **+1.9** |
| **RTR** | **El Retiro** | **1.71** | **333** | *e*P | **Pn** | 05 33 36.7 | **-1.2** |
| **RTR** | **El Retiro** | **1.71** | **333** | *e*P | **Pn** | 05 33 36.7 | **-1.2** |
| **NUBE** | **Las Nubes** | **1.77** | **329** | *e*P | **Pn** | 05 33 37.3 | **-1.5** |
| NUBE | | | | *e*S | **Sn** | 05 34 01.5 | **+1.2** |
| **NUBE** | **Las Nubes** | **1.77** | **329** | *e*P | **Pn** | 05 33 37.3 | **-1.5** |
| NUBE | | | | *e*S | **Sn** | 05 34 01.5 | **+1.2** |
| **CRIN** | **San Cristobal** | **1.77** | **79** | | **Pn** | 05 33 37.4 | **-1.4** |
| **SLOZ** | **Alcaldia de Sa** | **1.88** | **331** | *e*P | **Pn** | 05 33 39.3 | **-0.9** |
| SLOZ | | | | *e*S | **Sn** | 05 34 04.5 | **+1.7** |
| **MTO3** | **Montecristo** | **2.08** | **346** | Pn | **Pn** | 05 33 42.4 | **-0.6** |
| **MTO3** | **Montecristo** | **2.08** | **346** | *e*P | **Pn** | 05 33 42.5 | **-0.5** |
| MTO3 | | | | *e*S | **Sn** | 05 33 59.4 | **+2.8** |
| **MTO3** | **Montecristo** | **2.08** | **346** | *e*P | **Pn** | 05 33 42.4 | **-0.6** |
| **MTO3** | **Montecristo** | **2.08** | **346** | *e*P | **Pn** | 05 33 42.5 | **-0.5** |
| MTO3 | | | | *e*S | **Sn** | 05 34 10.6 | **+2.8** |
| **CNGN** | **Cerro Negro** | **2.09** | **86** | Pn | **Pn** | 05 33 39.6 | **-3.5** |
| **ESQI** | **Esquipulas** | **2.23** | **347** | | **Pn** | 05 33 44.5 | **-0.5** |
| **ESQI** | **Esquipulas** | **2.23** | **347** | *e*P | **Pn** | 05 33 44.5 | **-0.5** |
| ESQI | | | | *e*S | **Sn** | 05 34 13.2 | **+1.8** |
| **TGUH** | **Tegucigalpa,Un** | **2.26** | **42** | Pn | **Pn** | 05 33 44.8 | **-0.7** |
| **TGUH** | **Tegucigalpa,Un** | **2.26** | **42** | *e*P | **Pn** | 05 33 44.0 | **-1.5** |
| **TGUH** | **Tegucigalpa,Un** | **2.26** | **42** | *e*P | **Pn** | 05 33 45.0 | **-0.5** |
| **TGUH** | **Tegucigalpa,Un** | **2.26** | **42** | *e*P | **Pn** | 05 33 44.0 | **-1.5** |
| **PCG** | **Pacaya** | **2.64** | **320** | *e*P | **Pn** | 05 33 49.2 | **-1.6** |
| **NBG** | **Las Nubes** | **2.64** | **326** | *e*P | **Pn** | 05 33 50.3 | **-0.6** |
| **MRL** | **Marmol** | **2.81** | **343** | *e*P | **Pn** | 05 33 54.3 | **+1.2** |
| **FUG** | **Fuego 3** | **2.84** | **317** | *e*P | **Pn** | 05 33 53.8 | **+0.4** |
| FUG | | | | *e*S | **Sn** | 05 34 26.2 | **-0.3** |
| **MATN** | **Matagalpa** | **2.90** | **79** | Pn | **Pn** | 05 33 51.7 | **-2.5** |
| **APG** | **El Apazote** | **3.05** | **329** | P | **Pn** | 05 33 56.1 | **-0.3** |
| | comp=Z,0.9nm,0.3s,baz=138,slow=6.5,SNR=17 | | | | | | |
| APG | | | | S | **Sn** | 05 34 36.7 | **+4.8** |
| | comp=Z,3.8nm,0.3s,baz=210,slow=17,SNR=2.2 | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **3.10** | **88** | | **Pn** | 05 33 54.5 | **-2.4** |
| **HZTE** | **Horizontes, Gu** | **3.58** | **117** | | **Pn** | 05 34 02.3 | **-1.2** |
| **ACON** | **Acoyapa** | **3.60** | **96** | Pn | **Pn** | 05 34 00.9 | **-2.9** |
| **ORTG** | **Ortega, Santa** | **3.87** | **121** | | **Pn** | 05 34 06.1 | **-1.5** |
| **DUNO** | **Dulce Nombre,** | **4.00** | **124** | Pn | **Pn** | 05 34 07.7 | **-1.4** |
| **JTS** | **Las Juntas de** | **4.34** | **118** | P | **Pn** | 05 34 12.9 | **-0.9** |
| | comp=Z,3.1nm,0.3s,baz=111,slow=3.2,SNR=17 | | | | | | |
| JTS | | | | S | **Sn** | 05 34 57.8 | **-5.4** |
| | comp=Z,5.7nm,0.3s,baz=337,slow=17,SNR=7.7 | | | | | | |
| JTS | | | | LR | LR | 05 36 13.0 | |
| | comp=Z,125nm,20.2s,baz=8.0,slow=43 | | | | | | |
| **JTS** | **Las Juntas de** | **4.34** | **118** | | **Pn** | 05 34 14.1 | **+0.2** |
| **CCIG** | **Comitan** | **5.03** | **321** | Pn | **Pn** | 05 34 25.9 | **+2.4** |
| **HDC** | **Heredia** | **5.20** | **117** | Pn | **Pn** | 05 34 27.0 | **+1.1** |
| **CVTR** | **Volcan Turrial** | **5.50** | **115** | Pn | **Pn** | 05 34 30.6 | **+0.4** |
| **RIMA** | **Rio Macho** | **5.53** | **117** | | **Pn** | 05 34 29.7 | **-0.7** |
| **PEZE** | **Perez Zeledon,** | **5.88** | **120** | | **Pn** | 05 34 35.0 | **-0.1** |
| **SRBA** | **San Rafael, Bu** | **6.22** | **120** | | **Pn** | 05 34 39.7 | **-0.2** |
| **RIOS** | **Rincon, Osa** | **6.38** | **124** | Pn | **Pn** | 05 34 42.3 | **+0.4** |
| **CDITO** | **Canoas** | **6.98** | **122** | Pn | **Pn** | 05 34 50.8 | **+0.7** |
| **BRU2** | **Volcan** | **7.01** | **120** | Pn | **Pn** | 05 34 51.0 | **+0.2** |
| **CMIG** | **Matias Romero** | **7.50** | **309** | P | **Pn** | 05 34 57.7 | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=141,slow=7.7,SNR=16 | | | | | | |
| CMIG | | | | S | **Sn** | 05 36 15.7 | **-5.2** |
| | comp=Z,0.1nm,0.3s,baz=270,slow=21,SNR=1.5 | | | | | | |
| **SDV** | **Santo Domingo** | **18.22** | **99** | P | **P** | 05 37 18.8 | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=280,slow=11,SNR=2.4 | | | | | | |
| **833A** | **Chaparral WMA,** | **18.68** | **330** | P | **P** | 05 37 24.5 | **-0.1** |
| 833A | | | | IAmb | IAmb | 05 37 27.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **342A** | **Flagon Creek P** | **19.18** | **351** | Pn | **Pn** | 05 37 31.5 | **+0.2** |
| 342A | | | | IAmb | IAmb | 05 37 34.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **20.03** | **338** | P | **P** | 05 37 39.7 | **+0.4** |
| **JCT** | **Junction City** | **20.68** | **332** | P | **P** | 05 37 46.6 | **+0.2** |
| JCT | | | | IAmb | IAmb | 05 37 48.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **21.07** | **339** | P | **P** | 05 37 51.0 | **+0.4** |
| WHTX | | | | IAmb | IAmb | 05 37 52.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **HPIG** | | **21.43** | **315** | P | **P** | 05 37 56.6 | **+1.9** |
| **Y49A** | **Blount Mountai** | **21.50** | **6** | P | **P** | 05 37 55.7 | **+0.5** |
| **GOGA** | **Godfrey** | **21.51** | **12** | P | **P** | 05 37 53.9 | **-1.3** |
| **Z38A** | **Mt. Pleasant** | **21.54** | **346** | P | **P** | 05 37 57.5 | **+2.0** |
| Z38A | | | | IAmb | IAmb | 05 37 59.9 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **21.57** | **350** | P | **P** | 05 37 56.7 | **+0.8** |
| WLAR | | | | IAmb | IAmb | 05 38 00.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **CCAR** | **Cane Creek** | **21.61** | **353** | P | **P** | 05 37 58.0 | **+1.8** |
| CCAR | | | | IAmb | IAmb | 05 38 00.4 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **21.79** | **323** | P | **P** | 05 37 59.9 | **+1.4** |
| | comp=Z,7.2nm,0.7s,baz=148,slow=11,SNR=98 | | | | | | |
| TXAR | | | | PcP | **PcP** | 05 41 59.4 | **+2.0** |
| | comp=Z,0.2nm,0.7s,baz=150,slow=3.8,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **21.79** | **323** | P | **P** | 05 38 00.2 | **+1.8** |
| **TX31** | **Lajitas Ar. Si** | **21.80** | **323** | P | **P** | 05 38 00.1 | **+1.6** |
| **TX32** | **Lajitas Array** | **21.80** | **323** | P | **P** | 05 38 00.2 | **+1.8** |
| **ATAH** | **Atahualpa** | **21.99** | **151** | LR | LR | 05 44 49.1 | |
| | comp=Z,82nm,19.8s,baz=347,slow=32 | | | | | | |
| **X48A** | **Hartselle** | **22.04** | **4** | P | **P** | 05 38 00.8 | **-0.1** |
| **ABTX** | **Abilene, Hawle** | **22.46** | **336** | P | **P** | 05 38 05.2 | **-0.3** |
| **MIAR** | **Mount Ida** | **22.49** | **350** | P | **P** | 05 38 06.1 | **+0.3** |
| MIAR | | | | IAmb | IAmb | 05 38 08.7 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **22.90** | **346** | P | **P** | 05 38 12.2 | **+2.1** |
| X37A | | | | IAmb | IAmb | 05 38 17.5 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **22.91** | **353** | P | **P** | 05 38 11.1 | **+1.0** |
| W41B | | | | IAmb | IAmb | 05 38 19.9 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **WHAR** | **Wooly Hollow** | **23.03** | **353** | P | **P** | 05 38 12.1 | **+0.7** |
| **W39A** | **Magazine** | **23.16** | **350** | P | **P** | 05 38 13.4 | **+0.8** |
| W39A | | | | IAmb | IAmb | 05 38 15.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **PAULI** | **Pauline** | **23.24** | **15** | P | **P** | 05 38 12.1 | **-1.3** |
| **V48A** | **Smith Brothers** | **23.33** | **4** | P | **P** | 05 38 13.8 | **-0.5** |
| **X34A** | **Smith Ranch, M** | **23.59** | **341** | P | **P** | 05 38 16.6 | **-0.2** |
| X34A | | | | IAmb | IAmb | 05 38 26.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **23.60** | **353** | P | **P** | 05 38 16.8 | **-0.1** |
| FCAR | | | | IAmb

**RSNC 22 05:42:07.3±1.3, 6°58N×76°92W, h4km±8km, ML1.6, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOLC** | **Bahia Solano** | **0.60** | **234** | *eP* | Pg | 05 42 18.1 | -0.7 |
| SOLC | | | | *eS* | Sg | 05 42 26.6 | 0.0 |
| SOLC | | | | *i* | | 05 42 30.1 | |
| | comp=Z,40nm,0.2s | | | | | | |
| **PTAC** | **Punta Ardita,** | **1.05** | **303** | *eP* | Pg | 05 42 25.6 | -1.8 |
| PTAC | | | | *eS* | Sg | 05 42 39.2 | -1.8 |
| **CBOC** | **Ciudad Bolivar** | **1.15** | **128** | *eP* | Pg | 05 42 27.2 | -2.1 |
| CBOC | | | | *eS* | Sg | 05 42 42.7 | -1.6 |
| CBOC | | | | *i* | | 05 43 02.6 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **HELC** | **Santa Helena** | **1.43** | **105** | *eP* | Pn | 05 42 31.8 | -2.6 |
| HELC | | | | *eS* | Sg | 05 42 52.2 | -1.3 |
| HELC | | | | *i* | | 05 42 54.1 | |
| | comp=Z,4.4nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **1.80** | **50** | *eP* | Pn | 05 42 38.7 | -0.5 |
| **GUY2C** | **Guyana, Caldas** | **2.05** | **131** | *eP* | Pn | 05 42 42.6 | -0.4 |
| GUY2C | | | | *i* | | 05 42 57.6 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| GUY2C | | | | *eS* | Sn | 05 43 06.1 | -3.2 |

**RSNC 22 05:42:41.3±1.3, 6°73N×76°68W, h3km±7km, ML1.6, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOLC** | **Bahia Solano** | **0.88** | **235** | *eP* | Pg | 05 42 57.4 | -0.8 |
| SOLC | | | | *eS* | Sg | 05 43 09.4 | -0.2 |
| SOLC | | | | *i* | | 05 43 13.0 | |
| | comp=Z,13nm,0.2s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **1.09** | **142** | *eP* | Pg | 05 42 59.8 | -2.4 |
| CBOC | | | | *eS* | Sg | 05 43 15.2 | -1.1 |
| CBOC | | | | *i* | | 05 43 16.9 | |
| | comp=Z,16nm,0.4s | | | | | | |
| **PTAC** | **Punta Ardita,** | **1.19** | **290** | *eP* | Pg | 05 43 02.3 | -1.9 |
| PTAC | | | | *eS* | Sg | 05 43 17.5 | -2.2 |
| **HELC** | **Santa Helena** | **1.26** | **115** | *eP* | Pg | 05 43 03.9 | -1.7 |
| HELC | | | | *eS* | Sg | 05 43 20.8 | -1.1 |
| **UREC** | **San Jos de Ur** | **1.52** | **48** | *eP* | Pn | 05 43 08.0 | -1.4 |
| UREC | | | | *i* | | 05 43 31.1 | |
| | comp=Z,5.6nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **1.52** | **48** | *i* | Sg | 05 43 31.1 | +0.8 |
| | comp=Z,5.6nm,0.4s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **1.99** | **139** | *eS* | Sn | 05 43 41.6 | -0.2 |
| **PTBC** | **PUERTO BERRIO,** | **2.22** | **95** | *eS* | Sn | 05 43 46.6 | -0.3 |

*IDC 22 05:43:16.1±5.0, 51°43N×177°17W, h0km, mb3.2/3, mb1 3.6/4, mb1mx3.3/56, mbtmp3.3/4, ML3.4/1, Error ellipse: s-maj=105.5km s-min=38.3km az=15.0*
*AEIC 22 05:43:17.5±0.6, 51°22N±0°04×177°70W±0°06, h47km±9km, ML3.0/21, Error ellipse: s-maj=6.3km s-min=5.0km az=141.0*
*NEIC 22 05:43:18.8±1.1, 51°2N±0°2×177°63W±0°04, h35km±18km, Error ellipse: s-maj=23.4km s-min=3.3km az=177.0*
**ISC 22 05:43:17.4±1.5, 51°2N±0°1×177°66W±0°05, h32km, n28, σ0§84/25, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIMD** | **Kanaga Island** | **0.65** | **24** | | **Pn** | **05 43 30.5** | **+0.1** |
| KIMD | | | | | **Sn** | **05 43 40.3** | **+0.8** |
| **TAPA** | **Tanaga Point A** | **0.66** | **351** | | **Pn** | **05 43 30.6** | **0.0** |
| **TASE** | **Tanaga Southea** | **0.71** | **341** | | **Pn** | **05 43 31.6** | **+0.3** |
| **KIWB** | **Kanaga Island** | **0.76** | **25** | | **Pb** | **05 43 32.1** | **0.0** |
| **TAFP** | **Tanaga Falls P** | **0.76** | **345** | | **Pn** | **05 43 32.0** | **+0.1** |
| TAFP | | | | | **Sn** | **05 43 42.8** | **+0.5** |
| **KIKV** | **Kanaga Island** | **0.77** | **23** | | **Pb** | **05 43 32.4** | **0.0** |
| **KICM** | **Kanaga Island** | **0.81** | **21** | | **Pb** | **05 43 33.2** | **+0.2** |
| **GALAA** | **Gareloi Lava P** | **0.92** | **311** | | **Pn** | **05 43 34.1** | **0.0** |
| **GAEA** | **Gareloi East** | **0.92** | **313** | | **Pn** | **05 43 34.1** | **0.0** |
| **ADK** | **Adak** | **0.94** | **40** | | **Pn** | **05 43 34.2** | **-0.2** |
| ADK | | | | | **Sn** | **05 43 46.0** | **-0.7** |
| **GANO** | **Gareloi North** | **0.97** | **313** | | **Pn** | **05 43 34.5** | **-0.4** |
| **GSCK** | **Great Sitkin C** | **1.26** | **47** | | **Pb** | **05 43 39.4** | **-1.2** |
| **GSTD** | **Great Sitkin T** | **1.30** | **46** | | **Pb** | **05 43 39.9** | **-1.3** |
| **GSMY** | **Great Sitkin M** | **1.33** | **48** | | **Pb** | **05 43 40.3** | **-1.4** |
| **GSTR** | **Great Sitkin T** | **1.36** | **46** | | **Pn** | **05 43 40.6** | **+0.4** |
| **ATKA** | **Atka Island** | **2.39** | **63** | | **Pn** | **05 43 54.9** | **+0.6** |
| **KOKL** | **Mount Kliuchef** | **2.44** | **60** | | **Pn** | **05 43 56.6** | **+1.6** |
| **KOFP** | **Korovin Flat P** | **2.48** | **62** | | **Pn** | **05 43 56.8** | **+1.3** |
| **SEY** | **Seymchan** | **19.88** | **318** | P | **Pn** | **05 47 48.8** | **+1.4** |
| | 0.1nm,0.3s,baz=139,slow=8.7,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **20.96** | **38** | P | **P** | **05 47 55.9** | **-1.5** |
| | 0.2nm,0.4s,baz=228,slow=9.5,SNR=1.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.65** | **207** | T | T | 06 25 49.1 | |
| | baz=17 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.66** | **207** | T | T | 06 26 04.7 | |
| | baz=17 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.67** | **207** | T | T | 06 26 33.7 | |
| | baz=17 | | | | | | |
| **YKA** | **Yellowknife Ar** | **34.86** | **46** | P | **P** | **05 50 05.2** | **0.0** |
| | 0.2nm,0.6s,baz=286,slow=8.2,SNR=3.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.87** | **207** | T | T | 06 27 17.5 | |
| | baz=17,slow=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.89** | **207** | T | T | 06 27 18.6 | |
| | baz=17 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.89** | **207** | T | T | 06 27 24.1 | |
| | baz=17,slow=74 | | | | | | |
| **PDAR** | **Pinedale Array** | **45.69** | **73** | P | **P** | **05 51 35.5** | **+0.2** |
| | 0.5nm,0.7s,baz=326,slow=2.7,SNR=3.8 | | | | | | |

*NEIC 22 05:47:27.7±1.5, 5°6N±0°1×127°4E±0°1, h154km±10km, mb4.2/19, Error ellipse: s-maj=22.4km s-min=13.7km az=69.0*
*IDC 22 05:47:30.1±2.5, 5°49N×127°49E, h189km±26km, mb3.4/11, mb1 3.6/12, mb1mx3.4/55, mbtmp4.0/12, MS3.1/1, Ms1 3.0/1, ms1mx2.3/41, Error ellipse: s-maj=27.4km s-min=12.2km az=73.0*
*MAN 22 05:47:32.5, 5°90N×127°31E, h142km, mb4.9, ML3.8, MS3.8*
**ISC 22 05:47:26.8±0.5, 5°56N±0°06×127°51E±0°10, h150km, n39, σ1§72/41, mb4.0/20, 1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **2.44** | **308** | S | **Sn** | **05 48 45.3** | **+7.0** |
| | 56nm,0.3s,baz=20,slow=23,SNR=1.6 | | | | | | |
| **KCP** | **Kidapawan** | **2.81** | **301** | *eP* | **Pn** | **05 48 13.7** | **+1.9** |
| **BIPH** | **Bislig** | **2.84** | **336** | *eP* | **Pn** | **05 48 14.1** | **+1.9** |
| BIPH | | | | *i* S | **Sn** | **05 48 46.6** | **-0.7** |
| **TNTI** | **Ternate** | **4.76** | **182** | Pn | **Pn** | **05 48 37.5** | **+0.5** |
| **SIJI** | **Sorong** | **7.41** | **149** | P | **Pn** | **05 49 16.8** | **+4.5** |
| | 14nm,0.3s,baz=328,slow=15,SNR=14 | | | | | | |
| SIJI | | | | S | **Sn** | **05 50 36.5** | **+1.3** |
| | 7.7nm,0.3s,baz=237,slow=23,SNR=9.4 | | | | | | |
| **TOLI2** | **Tolitoli** | **8.04** | **237** | | **Pn** | **05 49 20.0** | **-0.8** |
| **FAKI** | **Fak Fak** | **9.66** | **151** | Pn | **Pn** | **05 49 44.8** | **+2.4** |
| **MTN** | **Manton Dam** | **18.64** | **169** | P | **Pn** | **05 51 34.7** | **-0.4** |
| MTN | | | | IAmb | IAmb | 05 51 50.8 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **21.14** | **177** | P | **P** | **05 52 01.3** | **+1.3** |
| KNRA | | | | IAmb | IAmb | 05 52 02.3 | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.58** | **184** | P | **P** | **05 52 23.8** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=11,slow=8.9,SNR=9.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.58** | **184** | P | **P** | **05 52 24.5** | **+0.5** |
| **COEN** | **Coen** | **24.85** | **141** | P | **P** | **05 52 35.0** | **-0.5** |
| COEN | | | | IAmb | IAmb | 05 52 43.6 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **26.06** | **165** | P | **P** | **05 52 46.4** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 05 52 52.1 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.22** | **165** | P | **P** | **05 52 47.4** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=347,slow=10,SNR=3.3 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 56 09.6** | **-1.3** |
| | comp=Z,0.2nm,0.5s,baz=343,slow=2.4,SNR=1.9 | | | | | | |
| **WB2** | **Warramunga Arr** | **26.22** | **165** | P | **P** | **05 52 49.1** | **+1.2** |
| WB2 | | | | IAmb | IAmb | 05 53 02.3 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **26.29** | **165** | P | **P** | **05 52 48.0** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 05 52 54.6 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **29.71** | **168** | P | **P** | **05 53 16.9** | **-2.0** |
| | comp=Z,0.2nm,0.3s,baz=336,slow=7.1,SNR=2.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 56 18.7** | **-0.8** |
| | comp=Z,0.4nm,0.3s,baz=0.8,slow=2.1,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.68** | **297** | P | **P** | **05 53 27.2** | **-0.3** |
| | comp=Z,0.9nm,0.3s,baz=116,slow=8.1,SNR=4.5 | | | | | | |
| **CHTO** | **Chiang Mai** | **30.81** | **298** | P | **P** | **05 53 28.0** | **-0.7** |
| **KSRS** | **Korea Array** | **31.75** | **1** | P | **P** | **05 53 37.8** | **+1.2** |
| | comp=Z,1.4nm,0.7s,baz=174,slow=8.7,SNR=5.3 | | | | | | |
| **BBOO** | **Buckleboo** | **39.02** | **169** | P | **P** | **05 54 40.0** | **+1.2** |
| BBOO | | | | IAmb | IAmb | 05 54 52.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **SHL** | **Shillong** | **39.46** | **304** | P | **P** | **05 54 41.3** | **-1.6** |
| **STKA** | **Stephens Creek** | **39.58** | **161** | P | **P** | **05 54 41.9** | **-1.6** |
| | comp=Z,0.9nm,0.4s,baz=352,slow=5.7,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 06 12 58.4 | |
| | comp=Z,24nm,20.1s,baz=202,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **39.58** | **161** | IAmb | IAmb | 05 54 46.0 | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **45.84** | **340** | P | **P** | **05 55 33.4** | **-0.5** |
| | comp=Z,1.0nm,0.5s,baz=153,slow=9.2,SNR=7.2 | | | | | | |
| **SONM** | **Songino Array** | **45.84** | **340** | IAmb | IAmb | 05 55 35.3 | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **53.45** | **22** | P | **P** | **05 56 31.0** | **-0.2** |
| | comp=Z,2.5nm,0.7s,baz=201,slow=7.7,SNR=1.8 | | | | | | |
| **MK31** | **Makanchi Array** | **56.52** | **324** | P | **P** | **05 56 53.5** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 05 56 53.9 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.52** | **324** | P | **P** | **05 56 53.4** | **-0.1** |
| | comp=Z,2.4nm,0.4s,baz=113,slow=7.6,SNR=78 | | | | | | |
| **MAKZ** | **Makanchi** | **56.71** | **324** | P | **P** | **05 56 54.8** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 05 56 55.5 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.33** | **332** | P | **P** | **05 57 11.3** | **-1.6** |
| | comp=Z,0.9nm,0.6s,baz=82,slow=12,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.33** | **332** | P | **P** | **05 57 11.5** | **-1.3** |
| **AAK** | **Ala-Archa** | **59.55** | **317** | P | **P** | **05 57 14.8** | **0.0** |
| AAK | | | | IAmb | IAmb | 05 57 33.6 | |
| | comp=Z,4.7nm,1.5s | | | | | | |
| **KURK** | **Kurchatov** | **60.64** | **327** | P | **P** | **05 57 22.1** | **+0.3** |
| **GAR** | **Garm** | **61.28** | **312** | P | **P** | **05 57 25.4** | **-1.1** |
| **KKAR** | **Karatay Array** | **62.45** | **316** | P | **P** | **05 57 33.4** | **-0.7** |
| **TIXI** | **Tiksi** | **66.01** | **0** | P | **P** | **05 57 57.0** | **+0.2** |
| **ABKAR** | **Akbulak array** | **71.24** | **320** | P | **P** | **05 58 28.8** | **-0.8** |
| **ILAR** | **Eielson Array** | **83.12** | **25** | P | **P** | **05 59 34.8** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=250,slow=5.7,SNR=12 | | | | | | |

*IDC 22 05:54:04.4±0.8, 4°82S×151°23E, h135km±10km, mb3.7/3, mb1 3.9/4, mb1mx3.3/48, mbtmp4.2/4, MS3.2/1, Ms1 3.2/1, ms1mx2.5/57, Error ellipse: s-maj=75.5km s-min=13.7km az=135.0*
*NEIC 22 05:54:04.6±1.3, 5°2S±0°1×151°8E±0°1, h144km±14km, mb4.3/9, Error ellipse: s-maj=21.4km s-min=18.4km az=147.0*
**ISC 22 05:54:04.3±0.8, 5°20S±0°10×151°8E±0°1, h150km, n20, σ1§25/24, mb4.2/7, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **0.92** | **16** | P | **Pn** | **05 54 28.1** | **-0.5** |
| KRVT | | | | S | **Sn** | **05 54 44.8** | **-2.2** |
| **RABL** | **Rabaul** | **1.08** | **22** | Pn | **Pn** | **05 54 29.3** | **-0.5** |
| RABL | | | | Sn | **Sn** | **05 54 48.0** | **-1.4** |
| **MANU** | **Manus Island** | **5.40** | **305** | Pn | **Pn** | **05 55 23.5** | **+0.5** |
| **PMG** | **Port Moresby** | **6.19** | **227** | P | **Pn** | **05 55 33.8** | **+0.1** |
| | 4.6nm,0.3s,baz=41,slow=8.6,SNR=12 | | | | | | |
| PMG | | | | S | **Sn** | **05 56 40.2** | **-3.4** |
| | 14nm,0.3s,baz=13,slow=23,SNR=17 | | | | | | |
| **PMG** | **Port Moresby** | **6.19** | **227** | | **Pn** | **05 55 34.6** | **+1.0** |
| **COEN** | **Coen** | **12.14** | **224** | Pn | **Pn** | **05 56 52.9** | **+0.3** |
| **CTA** | **Charters Tower** | **15.74** | **199** | LR | LR | 06 03 40.6 | |
| | comp=Z,73nm,18.6s,baz=208,slow=36 | | | | | | |
| **WB0** | **Warramunga Arr** | **22.27** | **228** | P | **P** | **05 58 49.8** | **+0.4** |
| **WR0** | **Warramunga Arr** | **22.28** | **227** | P | **P** | **05 58 49.3** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 05 58 52.9 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.41** | **228** | P | **P** | **05 58 51.0** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 05 58 53.7 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.41** | **228** | P | **P** | **05 58 51.0** | **+0.2** |
| | comp=Z,2.2nm,0.5s,baz=51,slow=10,SNR=22 | | | | | | |
| WRA | | | | ScP | **ScP** | **06 06 03.5** | **-0.5** |
| | comp=Z,0.5nm,0.8s,baz=56,slow=3.2,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.41** | **228** | P | **P** | **05 58 49.3** | **-1.5** |
| **OUENC** | **Ouen Island, N** | **22.48** | **141** | P | **P** | **05 58 50.8** | **-0.6** |
| **KNRA** | **Kununurra** | **24.87** | **244** | P | **P** | **05 59 14.0** | **+0.7** |
| **ASAR** | **Alice Springs** | **25.17** | **221** | P | **P** | **05 59 16.9** | **+0.9** |
| | comp=Z,1.7nm,0.6s,baz=51,slow=9.4,SNR=20 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 06 13.1** | **+1.7** |
| | comp=Z,0.4nm,0.7s,baz=44,slow=2.8,SNR=4.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.57** | **241** | P | **P** | **05 59 45.6** | **-0.8** |
| | comp=Z,1.9nm,0.4s,baz=51,slow=6.7,SNR=23 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.57** | **241** | P | **P** | **05 59 46.0** | **-0.4** |
| FITZ | | | | IAmb | IAmb | 06 00 03.9 | |
| | comp=Z,3.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **31.14** | **206** | P | **P** | **06 00 08.3** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 06 00 13.3 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.76** | **180** | P | **P** | **06 06 23.7** | **+2.1** |
| QSPA | | | | IAmb | IAmb | 06 06 39.0 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.45** | **287** | PKPbc | **PKPbc** | **06 13 37.3** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=98,slow=2.6,SNR=2.7 | | | | | | |

*IDC 22 06:08:32.6±1.4, 1°38S×120°61E, h0km, mb3.6/4, mb1 3.7/6, mb1mx3.4/58, mbtmp3.6/6, ML3.3/2, MS2.7/2, Ms1 2.7/2, ms1mx2.4/62, Error ellipse: s-maj=63.4km s-min=22.5km az=65.0*
*DJA 22 06:08:35.1±0.3, 2°S±3°×12°0E±°, h10km, M3.8/11, MLv3.8/11*
**ISC 22 06:08:34.5±0.9, 1°54S±0°05×120°09E±0°07, h10km, n17, σ1§44/20, mb3.6/4, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TTSI** | **Tana Toraja** | **1.52** | **190** | P | **Pn** | **06 09 01.3** | **-0.5** |
| TTSI | | | | S | **Sn** | **06 09 21.7** | **0.0** |
| **APSI** | **Ampana** | **1.68** | **68** | P | **Pn** | **06 09 03.6** | **-0.3** |
| APSI | | | | S | **Sb** | **06 09 26.8** | **+0.1** |
| **MPSI** | **Mapaga** | **1.87** | **354** | P | **Pn** | **06 09 06.9** | **+0.3** |
| **SPSI** | **Sidrap Palu** | **2.44** | **188** | P | **Pn** | **06 09 14.9** | **+0.6** |
| **MRSI** | **Marisa** | **2.73** | **43** | P | **Pn** | **06 09 19.0** | **+0.7** |
| MRSI | | | | S | **Sn** | **06 09 53.0** | **+1.6** |
| **LUWI** | **Luwuk** | **2.73** | **80** | P | **Pn** | **06 09 19.7** | **+1.3** |
| **BNSI** | **Bone** | **2.85** | **180** | P | **Pn** | **06 09 20.6** | **+0.6** |
| **KAPI** | **Kappang** | **3.47** | **186** | Pn | **Pn** | **06 09 30.5** | **+1.9** |
| | 5.3nm,0.3s,baz=290,slow=4.7,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **06 10 13.4** | **+3.5** |
| | 3.9nm,0.3s,baz=72,slow=20,SNR=1.9 | | | | | | |
| KAPI | | | | LR | LR | 06 11 02.9 | |
| | comp=Z,60nm,19.6s,baz=32,slow=40 | | | | | | |
| **GTOI** | **Gorontalo** | **3.63** | **54** | P | **Pn** | **06 09 31.7** | **+0.9** |
| **BKSI** | **Bulukumba** | **3.76** | **179** | P | **Pn** | **06 09 33.6** | **+1.0** |
| **KBKI** | **Kotabaru** | **4.29** | **246** | P | **Pn** | **06 09 40.4** | **+0.5** |
| **BATI** | **Baumata** | **9.32** | **158** | LR | LR | 06 14 09.9 | |
| | comp=Z,84nm,18.8s,baz=206,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.34** | **162** | P | **Pn** | **06 12 36.6** | **-0.2** |
| | 0.1nm,0.3s,baz=334,slow=13,SNR=1.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.00** | **144** | P | **P** | **06 13 37.4** | **-2.3** |
| | 1.8nm,0.8s,baz=324,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **25.75** | **150** | P | **P** | **06 14 03.6** | **-1.9** |
| | 0.5nm,0.7s,baz=324,slow=9.0,SNR=8.3 | | | | | | |
| **STKA** | **Stephens Creek** | **36.37** | **148** | P | **P** | **06 15 37.6** | **-1.4** |
| | 1.3nm,0.7s,baz=319,slow=8.2,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.44** | **330** | P | **P** | **06 18 31.2** | **+0.6** |
| | 0.4nm,0.6s,baz=134,slow=7.4,SNR=6.5 | | | | | | |

*SNET 22 06:14:03.8±0.8, 14°26N×88°83W, h7km±11km, ML2.5*
*INET 22 06:14:04.1±0.2, 14°24N×88°97W, h17km±2km, MW2.5*
**ISC 22 06:14:02.6±1.4, 14°35N±0°05×88°81W±0°04, h15km±11km, n16, σ0§32/27, Honduras**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MTO3** | **Montecristo** | **0.53** | **276** | *eP* | **Pg** | **06 14 13.3** | **0.0** |
| MTO3 | | | | *eS* | **Sg** | **06 14 20.7** | **+0.3** |
| **PAVA** | **Las Pavas** | **0.64** | **191** | *eP* | **Pg** | **06 14 15.2** | **-0.1** |
| **PAVA** | **Las Pavas** | **0.64** | **191** | *eP* | **Pg** | **06 14 15.0** | **-0.2** |
| PAVA | | | | *eS* | **Sg** | **06 14 23.9** | **+0.2** |
| PAVA | | | | IAML | | 06 14 25.1 | |
| | comp=Z,362nm,0.3s | | | | | | |
| **TACO** | **Tacachico** | **0.65** | **235** | *eP* | **Pg** | **06 14 14.9** | **-0.3** |
| **SCLA** | **Alcaldia de Sa** | **0.65** | **173** | *eP* | **Pg** | **06 14 15.2** | **-0.1** |
| SCLA | | | | *eS* | **Sg** | **06 14 24.4** | **+0.6** |
| **COEG** | **Centro de Oper** | **0.72** | **185** | *i* P | **Pg** | **06 14 16.6** | **-0.2** |
| COEG | | | | *eS* | **Sg** | **06 14 26.6** | **+0.3** |
| **SJTE** | **Alcalda de S** | **0.75** | **195** | *eP* | **Pg** | **06 14 16.9** | **-0.4** |
| SJTE | | | | *eS* | **Sg** | **06 14 27.4** | **+0.2** |
| **PQSS** | **Presa 15 de Se** | **0.76** | **161** | *eP* | **Pg** | **06 14 17.2** | **-0.2** |
| PQSS | | | | *eS* | **Sg** | **06 14 27.3** | **-0.1** |
| **CEDA** | **San Andres** | **0.78** | **226** | *eS* | **Sg** | **06 14 27.8** | **-0.3** |
| **COEB** | **Comit de Eme** | **0.89** | **162** | *eP* | **Pb** | **06 14 19.9** | **+0.1** |
| **COEB** | **Comit de Eme** | **0.89** | **162** | *eP* | **Pg** | **06 14 19.7** | **-0.2** |
| COEB | | | | *eS* | **Sb** | **06 14 31.8** | **+0.3** |
| **JAYA** | **Jayaque - finc** | **0.93** | **222** | *eP* | **Pg** | **06 14 19.8** | **-0.8** |
| JAYA | | | | *eS* | **Sg** | **06 14 32.8** | **0.0** |
| **CEVE** | **Cerro Verde** | **0.94** | **237** | *eP* | **Pb** | **06 14 21.1** | **+0.3** |
| CEVE | | | | *eS* | **Sn** | **06 14 34.7** | **-0.1** |
| CEVE | | | | IAML | | 06 14 38.6 | |
| | comp=Z,111nm,0.2s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **0.99** | **251** | *eP* | **Pb** | **06 14 21.7** | **+0.1** |
| SLOZ | | | | *eS* | **Sg** | **06 14 35.3** | **+0.4** |
| **NUBE** | **Las Nubes** | **1.04** | **245** | *eP* | **Pb** | **06 14 22.2** | **-0.2** |
| NUBE | | | | *eS* | **Sb** | **06 14 35.9** | **+0.1** |
| **TGUH** | **Tegucigalpa,Un** | **1.52** | **101** | *eP* | **Pg** | **06 14 31.4** | **-0.5** |

*IDC 22 06:17:37.1±1.8, 29°43S×69°66W, h0km, mb1 3.6/3, mb1mx3.4/26, mbtmp3.5/3, ML3.4/3, Error ellipse: s-maj=61.5km s-min=40.3km az=118.0*
*GUC 22 06:17:51.1±0.7, 28°82S×69°61W, h128km±9km, ML3.8*
**ISC 22 06:17:49.5±0.9, 28°80S±0°05×69°4W±0°1, h128km±13km, n14, σ1§48/23, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LCO** | **Las Campanas** | **1.20** | **260** | *eP* | **Pn** | **06 18 15.0** | **+0.4** |
| LCO | | | | *i* S | **Sn** | **06 18 33.1** | **-0.4** |
| **GO03** | **Copiap** | **1.43** | **327** | *eP* | **Pn** | **06 18 18.0** | **+1.2** |
| GO03 | | | | *i* S | **Sn** | **06 18 38.1** | **+0.5** |
| GO03 | | | | IAML | | 06 18 38.9 | |
| | comp=N,909nm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.63** | **291** | *i* S | **Sn** | **06 18 40.3** | **-1.1** |
| **GO04** | **Tololo Observa** | **1.86** | **222** | *eP* | **Pn** | **06 18 22.7** | **+0.8** |
| GO04 | | | | *i* S | **Sn** | **06 18 46.8** | **0.0** |
| GO04 | | | | IAML | | 06 18 52.5 | |
| | comp=N,2µm,0.4s | | | | | | |
| **CO05** | **La Serena** | **1.99** | **235** | *eP* | **Pn** | **06 18 23.4** | **+0.2** |
| CO05 | | | | *i* S | **Sn** | **06 18 47.5** | **-1.5** |
| CO05 | | | | IAML | | 06 18 49.7 | |
| | comp=N,633nm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **2.34** | **209** | *eP* | **Pn** | **06 18 28.8** | **+1.1** |
| CO03 | | | | *i* S | **Sn** | **06 18 57.6** | **+0.5** |
| CO03 | | | | IAML | | 06 19 01.4 | |
| | comp=E,421nm,0.2s | | | | | | |
| **CO06** | **Fray Jorge** | **2.73** | **226** | *eP* | **Pn** | **06 18 32.3** | **-0.2** |
| CO06 | | | | *i* S | **Sn** | **06 19 03.7** | **-1.9** |
| CO06 | | | | IAML | | 06 19 09.0 | |
| | comp=E,177nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **2.79** | **210** | *eP* | **Pn** | **06 18 34.2** | **+0.7** |
| CO02 | | | | *i* S | **Sn** | **06 19 07.4** | **+0.1** |
| CO02 | | | | IAML | | 06 19 09.8 | |
| | comp=N,500nm,0.2s | | | | | | |
| **VA03** | **San Esteban** | **4.08** | **194** | *eP* | **Pn** | **06 18 51.6** | **+1.2** |
| VA03 | | | | *i* S | **Sn** | **06 19 37.8** | **+0.1** |
| **LVC** | **Limon Verde** | **6.18** | **4** | Pn | **Pn** | **06 19 19.4** | **+0.6** |
| | comp=N,0.8nm,0.3s,baz=148,slow=3.6,SNR=20 | | | | | | |
| LVC | | | | Sn | **Sn** | **06 20 27.6** | **-0.8** |
| | comp=N,0.6nm,0.3s,baz=207,slow=23,SNR=1.5 | | | | | | |
| LVC | | | | Lg | Lg | 06 20 59.7 | |
| | comp=N,2.3nm,0.3s,baz=294,slow=22,SNR=7.2 | | | | | | |
| **CPUP** | **Villa Florida** | **10.95** | **80** | Pn | **Pn** | **06 20 21.0** | **-1.6** |
| | comp=N,0.1nm,0.3s,baz=64,slow=19,SNR=3.1 | | | | | | |
| **SIV** | **San Ignacio** | **14.86** | **33** | Pn | **P** | **06 21 17.1** | **+1.3** |
| | comp=N,0.1nm,0.3s,baz=247,slow=13,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **126.41** | **208** | PKP | **PKiKP** | **06 36 41.6** | **+3.2** |
| | comp=N,0.3nm,0.7s,baz=160,slow=1.5,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.51** | **43** | PKPbc | **PKPab** | **06 37 33.6** | **-3.6** |
| | comp=N,0.3nm,0.5s,baz=321,slow=1.6,SNR=6.3 | | | | | | |

*IGIL 22 06:28:49.8, 35°65N×3°60W, h13km*
*SFS 22 06:28:50.0, 35°76N×3°76W, ML2.5, ALBORAN SUR*
*INMG 22 06:28:51.3±1.6, 35°87N×3°59W, h15km±9km, ML2.0, Error ellipse: s-maj=14.4km s-min=5.9km az=26.0*
**ISC 22 06:28:46.3±2.4, 35°56N±0°07×3°6W±0°2, h14km, n10, σ1§79/17, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMAL** | **Malaga-Limoner** | **1.38** | **331** | P | **Pn** | **06 29 10.6** | **-0.5** |
| EMAL | | | | S | **Sn** | **06 29 27.2** | **-2.0** |
| **IFR** | **Ifrane** | **2.40** | **212** | P | **Pb** | **06 29 28.5** | **-0.8** |
| IFR | | | | S | **

comp=N,8.2nm,0.4s
**MORF Marmelete 4.38 293** *e*P **Pn** **06 35 43.4 -0.3**
MORF *e*S **Sn** **06 36 31.1 -2.7**
MORF IAML 06 36 39.6
comp=N,18nm,0.3s
**MORF Marmelete 4.38 293** *e*Pn **Pn** **06 35 43.4 -0.3**
MORF *e*Sn **Sn** **06 36 32.6 -1.2**
MORF A A 06 36 39.3
comp=N,6.8nm,0.6s
**PFVI Vila Bisbo 4.46 290** *e*Pn **Pn** **06 35 45.4 +0.7**
PFVI *e*Sn **Sn** **06 36 35.1 -0.5**
PFVI A A 06 36 36.5
comp=N,8.1nm,0.7s
**PFVI Vila Bisbo 4.46 290** P **Pn** **06 35 44.5 -0.2**
**PESTR Estremoz 4.49 316** *e*Pn **Pn** **06 35 47.0 +1.9**
PESTR *e*Sn **Sn** **06 36 36.0 -0.3**
PESTR A A 06 36 36.9
comp=N,4.0nm,0.3s
**PTEO Sao Teotonio 4.53 295** *e*Pn **Pn** **06 35 46.4 +0.9**
PTEO *e*Sn **Sn** **06 36 37.0 -0.1**
**EVO Evora 4.53 310** P **Pn** **06 35 45.7 +0.1**
EVO S **Sn** **06 36 35.6 -1.6**
**EVO Evora 4.53 310** *e*Pn **Pn** **06 35 46.1 +0.5**
EVO *e*Sn **Sn** **06 36 36.3 -0.9**
EVO A A 06 36 37.4
comp=N,6.1nm,0.4s
**PNCL Nicolau / Gran 4.63 303** *e*Pn **Pn** **06 35 47.2 +0.2**
PNCL *e*Sn **Sn** **06 36 39.1 -0.7**
PNCL A A 06 36 42.9
comp=N,6.7nm,0.3s
**PMRV Marv??o 4.79 322** *e*Pn **Pn** **06 35 50.5 +1.3**
PMRV *e*Sn **Sn** **06 36 43.4 -0.3**
**PMTG Montargil 4.99 314** *e*Pn **Pn** **06 35 52.5 +0.5**
PMTG *e*Sn **Sn** **06 36 48.6 -0.1**
PMTG A A 06 36 50.4
comp=N,3.5nm,0.4s
**PCBR Castelo Branco 5.15 324** *e*Pn **Pn** **06 35 55.9 +1.7**
PCBR *e*Sn **Sn** **06 36 52.4 -0.2**
**PACT Alcochete 5.19 308** *e*Pn **Pn** **06 35 55.7 +1.1**
PACT *e*Sn **Sn** **06 36 54.4 +1.0**
**OUZM OUZ 5.47 210** P **Pn** **06 35 59.8 +1.1**
**PMAFR Mafra 5.58 307** *e*Pn **Pn** **06 36 01.0 +0.9**
**PSBE So Bento 5.62 314** *e*Pn **Pn** **06 36 01.7 +1.1**
**OUK Oukaimeden 5.74 220** P **Pn** **06 36 02.4 -0.2**
**PVIS Viseu 6.04 327** *e*Pn **Pn** **06 36 08.0 +1.5**
PVIS *e*Sn **Sn** **06 36 37 14.4 -0.2**
**MVO Moncorvo 6.08 335** *e*Pn **Pn** **06 36 08.6 +1.6**
MVO *e*Sn **Sn** **06 36 37 15.4 -0.2**
**PVRL Vila Real 6.44 331** *e*Pn **Pn** **06 36 13.5 +1.7**
PVRL *e*Sn **Sn** **06 36 37 23.7 -0.6**
**POLO Lamas de Olo 6.55 331** *e*Pn **Pn** **06 36 14.7 +1.2**
**PBRG Braganca 6.57 339** *e*Pn **Pn** **06 36 15.0 +1.3**

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*SJA* ***22*** *06:36:57.4±0.6,30.˚40S×72.˚50W,h11km±4km, ML5.8, MW6.1*

*NEIC* ***22*** *06:36:59.4±2.8,30.˚42S±0.˚04×72.˚30W±0.˚05,h12km±1km, mb5.7/272,Ms_20 5.8/247,Mwb6.1/68,Mwr6.0/58,Mww6.0, Mwr6.1(GUC),Error ellipse: s-maj=7.9km s-min=6.6km az=228.0*

*IDC* ***22*** *06:37:01.9±0.3,30.˚48S×71.˚80W,h0km,mb5.0/28, mb1 5.0/34,mb1mx5.0/42,mbtmp5.0/34,ML4.7/6,MS5.6/49, Ms1 5.6/49,ms1mx5.6/55,Error ellipse: s-maj=14.2km s-min=9.5km az=85.0*

*GUC* ***22*** *06:37:01.6±0.5,30.˚49S×72.˚23W,h31km±3km,ML6.0*

*NEIC* ***22*** *06:37:02.7,30.˚47S×72.˚10W,h6km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr0.97; Mθθ0.01; Mθθ-0.97; Mrθ0.09; Mθϕ-0.02; Mϕr-1.43; Fault plane solution: M₀1.73000×10¹⁸ NP1:ϕs177.19000°, δ72.97000°,λ87.81000°. NP2:ϕs4.64000°,δ17.17000°, λ97.11000°. Principal axes: T 1.7298, Plg62.0000°, Azm84.0000°; N 0.0013, Plg2.0000°, Azm178.0000°; P -1.7311, Plg28.0000°, Azm269.0000°;*

*NEIC* ***22*** *06:37:02.7,30.˚47S×72.˚10W,h8km,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr0.23; Mθθ0.11; Mθθ-0.34; Mrθ0.00; Mθϕ0.01; Mϕr-1.05; Fault plane solution: M₀1.10000×10¹⁸ NP1:ϕs355.80000°, δ7.69000°,λ86.06000°. NP2:ϕs179.78000°,δ82.33000°, λ90.53000°. Principal axes: T 1.0379, Plg53.0000°, Azm90.0000°; N 0.1113, Plg1.0000°, Azm360.0000°; P -1.1492, Plg37.0000°, Azm269.0000°;*

*VAO* ***22*** *06:37:04.8±0.5,30.˚30S×71.˚78W,h10km,mb5.5*

*MOS* ***22*** *06:37:07.0±1.3,29.˚15S×72.˚51W,h26km,mb5.8/42, MS5.7/11,Error ellipse: s-maj=13.7km s-min=9.4km az=95.1*

*GCMT* ***22*** *06:37:08.4±0.1,30.˚56S×72.˚26W,h12km,MW6.0/158, Moment Tensor Solution. s158,c338; s158,c540; Duration: 2≥5 Moment tensor: Scale 10¹⁸Nm; Mrr0.97±.01; Mθθ0.02±.01; Mθϕ-0.99±.01; Mrθ0.01±.01; Mθθ0.01±.00; Mϕr-0.95±.03; Best double couple: M₀1.36800×10¹⁸ NP1:ϕs359.00000°,δ23.00000°, λ90.00000°. NP2:ϕs179.00000°,δ67.00000°,λ90.00000°. Principal axes: T 1.3570, Plg68.0000°, Azm90.0000°; N 0.0240, Plg0.0000°, Azm359.0000°; P -1.3800, Plg22.0000°, Azm269.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***22*** *06:37:10,30.˚46S×72.˚18W,h16km,Moment Tensor Solution. Duration: 14≥0 Moment tensor: Scale 10¹⁸Nm; Mrr1.00; Mθθ-0.02; Mθϕ-0.98; Mrθ0.10; Mθϕ0.10; Mϕr-0.83; Fault plane solution: M₀1.30000×10¹⁸ NP1: ϕs355.00000°,δ25.00000°,λ91.00000°. NP2: ϕs174.00000°,δ65.00000°,λ90.00000°. Principal axes: T 1.3056, Plg70.0000°, Azm83.0000°; N -0.0107, Plg0.0000°, Azm174.0000°; P -1.2949, Plg20.0000°, Azm264.0000°;*

**ISC 22 06:37:02.4±0.3,30.˚47S±0.˚02×71.˚96W±0.˚03,h9km±1km, h9km:pP-P,n1213,σ2s56/1181,mb5.6/186,MS5.8/177, 70C-66D,Fault plane solution: NP1:ϕs358.65851°, δ81.80659°,λ-68.55441°. NP2:ϕs108.59956°,δ22.88835°, λ-158.50485°. Principal axes:** T Plg33.4122°, Azm70.6163°; N Plg21.2160°, Azm175.4543°; P Plg48.7818°, Azm291.7593°**; Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.34** | **127** | | | | **Pb** | **06 37 12.0** | **+1.2** |
| **CO06** | **Fray Jorge** | **0.34** | **127** | ↓ | *i* | P | **Pb** | **06 37 12.0** | **+1.2** |
| CO06 | | | | | *i* | S | **Sb** | **06 37 18.4** | **+2.1** |
| **CO05** | **La Serena** | **0.83** | **49** | | | | **Pn** | **06 37 19.9** | **-0.3** |
| **CO05** | **La Serena** | **0.83** | **49** | ↓ | *i* | P | **Pn** | **06 37 19.9** | **-0.3** |
| CO05 | | | | | *e* | S | **Sn** | **06 37 33.7** | **+1.2** |
| CO05 | | | | | IAML | | | 06 37 41.2 | |
| | comp=E,362μm,0.5s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.04** | **74** | | | | **Pn** | **06 37 24.3** | **+0.8** |
| **GO04** | **Tololo Observa** | **1.04** | **74** | ↓ | *i* | P | **Pn** | **06 37 23.8** | **+0.4** |
| GO04 | | | | | *e* | S | **Sn** | **06 37 40.1** | **+1.9** |
| GO04 | | | | | IAML | | | 06 37 49.8 | |
| | comp=N,741μm,0.5s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.04** | **74** | *e* | P | | **Pn** | **06 37 24.9** | **+1.4** |
| GO04 | | | | | *e* | S | **Sn** | **06 37 46.4** | **+8.2** |
| **CO02** | **Combarbal** | **1.10** | **132** | Pn | | | **Pn** | **06 37 24.5** | **+0.4** |
| **CO02** | **Combarbal** | **1.10** | **132** | ↓ | *i* | P | **Pn** | **06 37 24.3** | **+0.2** |
| CO02 | | | | | *i* | S | **Sn** | **06 37 40.8** | **+1.2** |
| CO02 | | | | | IAML | | | 06 37 44.8 | |
| | comp=N,485μm,0.3s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.15** | **109** | Pn | | | **Pn** | **06 37 25.2** | **+0.4** |
| **CO03** | **El Pedregal** | **1.15** | **109** | ↓ | *i* | P | **Pn** | **06 37 25.4** | **+0.6** |
| CO03 | | | | | *e* | S | **Sn** | **06 37 43.6** | **+2.8** |
| **LCO** | **Las Campanas** | **1.82** | **37** | P | | | **Pn** | **06 37 34.5** | **+0.4** |
| **LCO** | **Las Campanas** | **1.82** | **37** | Pn | | | **Pn** | **06 37 34.5** | **+0.4** |
| **LCO** | **Las Campanas** | **1.82** | **37** | ↑ | P | | **Pn** | **06 37 34.3** | **+0.2** |
| **LCO** | **Las Campanas** | **1.82** | **37** | *e* | P | | **Pn** | **06 37 34.4** | **+0.4** |
| LCO | | | | | *e* | S | **Sn** | **06 37 50.1** | **+0.7** |
| **LCO** | **Las Campanas** | **1.82** | **37** | *e* | P | | **Pb** | **06 37 35.3** | **-0.7** |
| LCO | | | | | *e* | S | **Sg** | **06 38 01.3** | **+0.4** |
| **VA06** | **Catapilco** | **2.16** | **165** | Pn | | | **Pn** | **06 37 38.2** | **-0.4** |
| **VA06** | **Catapilco** | **2.16** | **165** | ↓ | *e* | P | **Pn** | **06 37 38.1** | **-0.4** |
| VA06 | | | | | *e* | S | **Sn** | **06 38 05.8** | **+0.3** |
| VA06 | | | | | IAML | | | 06 38 21.1 | |
| | comp=E,113μm,0.5s | | | | | | | | |
| **AROD** | **Rodeo** | **2.17** | **83** | *e* | P | | **Pg** | **06 37 43.2** | **-0.9** |
| **AC04** | **Llanos de Chal** | **2.38** | **19** | Pn | | | **Pn** | **06 37 40.8** | **-0.9** |
| **AC04** | **Llanos de Chal** | **2.38** | **19** | *e* | P | | **Pn** | **06 37 40.4** | **-1.3** |
| AC04 | | | | | *e* | S | **Sn** | **06 38 09.3** | **-1.7** |
| AC04 | | | | | IAML | | | 06 38 31.5 | |
| | comp=E,41μm,0.8s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.38** | **19** | *e* | P | | **Pn** | **06 37 40.6** | **-1.1** |
| AC04 | | | | | *e* | S | **Sg** | **06 38 18.9** | **-0.2** |
| **ACDV** | **Cuesta del Vie** | **2.47** | **84** | *e* | P | | **Pb** | **06 37 47.1** | **0.0** |
| ACDV | | | | | *e* | S | **Sg** | **06 38 23.4** | **+1.5** |
| ACDV | | | | | IAML | | | 06 38 47.5 | |
| | comp=Z,18μm,2.5s | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.50** | **93** | *e* | P | | **Pb** | **06 37 48.2** | **+0.5** |
| **VA01** | **Torpederas** | **2.56** | **174** | Pn | | | **Pn** | **06 37 42.8** | **-1.3** |
| **VA01** | **Torpederas** | **2.56** | **174** | ↓↓ | *e* | P | **Pn** | **06 37 42.9** | **-1.2** |
| VA01 | | | | | *e* | S | **Sn** | **06 38 12.7** | **-2.7** |
| **VA01** | **Torpederas** | **2.56** | **174** | *e* | P | | **Pn** | **06 37 43.3** | **-0.8** |
| VA01 | | | | | *e* | S | **Sn** | **06 38 15.2** | **-0.2** |
| **VA03** | **San Esteban** | **2.58** | **153** | Pn | | | **Pn** | **06 37 45.8** | **+1.3** |
| **VA03** | **San Esteban** | **2.58** | **153** | ↑ | *i* | P | **Pn** | **06 37 45.8** | **+1.3** |
| VA03 | | | | | *e* | S | **Sn** | **06 38 17.6** | **+1.5** |
| VA03 | | | | | IAML | | | 06 38 32.1 | |
| | comp=N,93μm,0.4s | | | | | | | | |
| **VA03** | **San Esteban** | **2.58** | **153** | *e* | P | | **Pn** | **06 37 46.0** | **+1.5** |
| VA03 | | | | | *e* | S | **Sg** | **06 38 25.6** | **+0.1** |
| VA03 | | | | | IAML | | | 06 38 34.4 | |
| | comp=Z,50μm,0.7s | | | | | | | | |
| **ROCH** | **El Roble** | **2.62** | **162** | ↓ | *e* | P | **Pn** | **06 37 45.3** | **+0.1** |
| ROCH | | | | | *e* | S | **Sn** | **06 38 17.7** | **+0.5** |
| ROCH | | | | | IAML | | | 06 38 34.0 | |
| | comp=N,74μm,0.5s | | | | | | | | |
| **ROC1** | **El Roble** | **2.63** | **162** | | | | **Pn** | **06 37 43.9** | **-1.4** |
| **ROC1** | **El Roble** | **2.63** | **162** | *e* | P | | **Pn** | **06 37 45.6** | **+0.4** |
| ROC1 | | | | | *e* | S | **Sb** | **06 38 23.1** | **+0.8** |
| **AUSP** | **Uspallata** | **2.81** | **129** | *e* | P | | **Pb** | **06 37 51.4** | **-1.5** |
| **MT02** | **Curacav** | **2.87** | **166** | | | | **Pn** | **06 37 48.1** | **-0.3** |
| **MT02** | **Curacav** | **2.87** | **166** | *e* | P | | **Pn** | **06 37 48.0** | **-0.3** |
| MT02 | | | | | *e* | S | **Sn** | **06 38 23.3** | **+0.3** |
| MT02 | | | | | IAML | | | 06 38 47.6 | |
| | comp=E,65μm,0.9s | | | | | | | | |
| **MT02** | **Curacav** | **2.87** | **166** | *e* | P | | **Pn** | **06 37 48.3** | **-0.1** |
| **PEL** | **Peldehue** | **2.88** | **158** | | | | **Pn** | **06 37 49.4** | **+0.8** |
| **PEL** | **Peldehue** | **2.88** | **158** | ↑ | P | | **Pn** | **06 37 49.5** | **+0.9** |
| **PEL** | **Peldehue** | **2.88** | **158** | ↑ | *i* | P | **Pn** | **06 37 49.5** | **+1.0** |
| PEL | | | | | *e* | S | **Sn** | **06 38 23.9** | **+0.6** |
| **PEL** | **Peldehue** | **2.88** | **158** | *e* | P | | **Pn** | **06 37 49.8** | **+1.2** |
| PEL | | | | | *e* | S | **Sg** | **06 38 39.0** | **+4.0** |
| **ZON** | **Zonda** | **3.01** | **112** | *e* | P | | **Pb** | **06 37 54.3** | **-1.9** |
| ZON | | | | | IAML | | | 06 38 50.9 | |
| | comp=Z,22μm,0.8s | | | | | | | | |
| **MT05** | **Renca** | **3.09** | **161** | ↑ | *e* | P | **Pn** | **06 37 52.2** | **+0.7** |
| MT05 | | | | | *e* | S | **Sn** | **06 38 29.1** | **+0.5** |
| MT05 | | | | | IAML | | | 06 38 50.2 | |
| | comp=E,74μm,0.4s | | | | | | | | |
| **MT05** | **Renca** | **3.09** | **161** | *e* | P | | **Pn** | **06 37 52.3** | **+0.8** |
| MT05 | | | | | IAML | | | 06 38 45.8 | |
| | comp=Z,36μm,1.1s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.19** | **175** | Pn | | | **Pn** | **06 37 51.4** | **-1.4** |
| **VA05** | **Santo Domingo** | **3.19** | **175** | *e* | P | | **Pn** | **06 37 51.5** | **-1.4** |
| VA05 | | | | | *e* | S | **Sn** | **06 38 28.7** | **-2.3** |
| VA05 | | | | | IAML | | | 06 38 56.1 | |
| | comp=N,33μm,0.5s | | | | | | | | |
| **GO03** | **Copiap** | **3.24** | **28** | Pn | | | **Pn** | **06 37 53.4** | **0.0** |
| **GO03** | **Copiap** | **3.24** | **28** | ↑ | P | | **Pn** | **06 37 53.1** | **-0.3** |
| **GO03** | **Copiap** | **3.24** | **28** | ↓ | *e* | P | **Pn** | **06 37 53.2** | **-0.3** |
| GO03 | | | | | *e* | S | **Sn** | **06 38 30.4** | **-1.7** |
| **GO03** | **Copiap** | **3.24** | **28** | *e* | P | | **Pn** | **06 37 53.6** | **+0.1** |
| **MT03** | **Universidad Ad** | **3.26** | **158** | Pn | | | **Pn** | **06 37 54.5** | **+0.7** |
| **MT03** | **Universidad Ad** | **3.26** | **158** | ↑ | P | | **Pn** | **06 37 54.8** | **+1.0** |
| MT03 | | | | | *e* | S | **Sn** | **06 38 33.9** | **+1.2** |
| MT03 | | | | | IAML | | | 06 38 54.6 | |
| | comp=N,36μm,0.5s | | | | | | | | |
| **MT03** | **Universidad Ad** | **3.26** | **158** | *e* | P | | **Pn** | **06 37 55.0** | **+1.2** |
| MT03 | | | | | *e* | S | **Sb** | **06 38 37.6** | **-2.7** |
| MT03 | | | | | IAML | | | 06 39 05.5 | |
| | comp=Z,18μm,0.7s | | | | | | | | |
| **MT09** | **Talagante** | **3.40** | **166** | Pn | | | **Pn** | **06 37 56.3** | **+0.5** |
| **MT09** | **Talagante** | **3.40** | **166** | ↑ | *i* | P | **Pn** | **06 37 56.2** | **+0.5** |
| MT09 | | | | | *i* | S | **Sn** | **06 38 35.7** | **-0.6** |
| MT09 | | | | | IAML | | | 06 39 01.1 | |
| | comp=E,28μm,0.5s | | | | | | | | |
| **MT01** | **Popeta** | **3.44** | **170** | Pn | | | **Pn** | **06 37 55.7** | **-0.5** |
| **MT01** | **Popeta** | **3.44** | **170** | *e* | P | | **Pn** | **06 37 55.5** | **-0.7** |
| MT01 | | | | | *e* | S | **Sn** | **06 38 34.0** | **-3.0** |
| MT01 | | | | | IAML | | | 06 39 00.5 | |
| | comp=E,16μm,0.5s | | | | | | | | |
| **MT01** | **Popeta** | **3.44** | **170** | *e* | P | | **Pn** | **06 37 56.2** | **0.0** |
| MT01 | | | | | *e* | S | **Sn** | **06 38 38.9** | **+1.8** |
| MT01 | | | | | IAML | | | 06 39 00.2 | |
| | comp=Z,10μm,0.6s | | | | | | | | |
| **LMEL** | **Las Melosas** | **3.68** | **157** | | | | **Pn** | **06 38 01.2** | **+1.5** |
| **BO04** | **La Punta** | **3.69** | **162** | | | | **Pn** | **06 38 00.3** | **+0.6** |
| **BO04** | **La Punta** | **3.69** | **162** | ↓ | *e* | P | **Pn** | **06 38 00.2** | **+0.4** |
| BO04 | | | | | *e* | S | **Sn** | **06 38 42.4** | **-0.9** |
| **BO01** | **Tunca** | **3.98** | **170** | Pn | | | **Pn** | **06 38 03.3** | **-0.4** |
| **AC02** | **Maricunga** | **4.39** | **35** | Pn | | | **Pn** | **06 38 10.4** | **+0.7** |
| **BO02** | **Sierra Bellavi** | **4.42** | **167** | Pn | | | **Pn** | **06 38 09.8** | **-0.1** |
| **GO05** | **Huala** | **4.53** | **180** | Pn | | | **Pn** | **06 38 09.4** | **-1.8** |
| **ML02** | **Panimavida** | **5.30** | **175** | | | | **Pn** | **06 38 20.8** | **-1.0** |
| **PB14** | **IPOC Station P** | **5.98** | **14** | | | | **Pn** | **06 38 28.8** | **-2.6** |
| **BI05** | **Punta Hualpn** | **6.35** | **189** | | | | **Pn** | **06 38 33.4** | **-2.8** |
| **H03N1** | **Juan Fernandez** | **6.61** | **242** | T | | | T | 06 45 42.8 | |
| | baz=71,slow=72 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.63** | **242** | T | | | T | 06 45 41.5 | |
| | baz=71,slow=72 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.63** | **241** | T | | | T | 06 45 41.6 | |
| | baz=71,slow=72 | | | | | | | | |
| **PB15** | **IPOC Station P** | **7.56** | **18** | Pn | | | **Pn** | **06 38 51.5** | **-1.6** |
| **PB06** | **IPOC Station P** | **8.02** | **16** | Pn | | | **Pn** | **06 38 56.2** | **-3.1** |
| **PB04** | **IPOC Station P** | **8.26** | **12** | Pn | | | **Pn** | **06 38 59.3** | **-3.3** |
| **LVC** | **Limon Verde** | **8.29** | **20** | Pn | | | **Pn** | **06 39 02.1** | **-1.0** |
| | comp=Z,2.8nm,0.3s,baz=201,slow=8.0,SNR=21 | | | | | | | | |
| LVC | | | | | | | Sn | | **Sn** |
| | | | | | | | | **06 40 36.4** | **-0.7** |
| | comp=Z,18nm,0.3s,baz=216,slow=6.0,SNR=3.1 | | | | | | | | |
| LVC | | | | | | | Lg | | Lg |
| | | | | | | | | 06 41 15.7 | |
| | comp=Z,38nm,0.3s,baz=234,slow=13,SNR=6.2 | | | | | | | | |
| **LVC** | **Limon Verde** | **8.29** | **20** | Pn | | | **Pn** | **06 39 00.6** | **-2.5** |
| **LVC** | **Limon Verde** | **8.29** | **20** | ↑ | P | | **Pn** | **06 39 00.6** | **-2.5** |
| **LVC** | **Limon Verde** | **8.29** | **20** | *e* | P | | **Pn** | **06 39 00.6** | **-2.5** |
| **LC01** | **Cunco** | **8.41** | **180** | | | | **Pn** | **06 39 02.2** | **-2.3** |
| **PB03** | **IPOC Station P** | **8.61** | **14** | Pn | | | **Pn** | **06 39 04.9** | **-2.5** |
| **PB07** | **IPOC Station P** | **8.90** | **13** | Pn | | | **Pn** | **06 39 07.3** | **-4.1** |
| **LR03** | **Panguipulli** | **9.15** | **182** | | | | **Pn** | **06 39 12.2** | **-2.3** |
| **PB02** | **IPOC Station P** | **9.30** | **12** | Pn | | | **Pn** | **06 39 12.7** | **-4.1** |
| **LR04** | **Corral** | **9.47** | **187** | Pn | | | **Pn** | **06 39 16.3** | **-2.6** |
| **PB01** | **IPOC Station P** | **9.64** | **14** | Pn | | | **Pn** | **06 39 20.1** | **-1.4** |
| **TA02** | **Huaiquique** | **10.29** | **10** | Pn | | | **Pn** | **06 39 26.1** | **-4.1** |
| **PLCA** | **Paso Flores** | **10.31** | **174** | Pn | | | **Pn** | **06 39 30.1** | **-0.4** |
| | comp=Z,4.1nm,0.3s,baz=337,slow=13,SNR=102 | | | | | | | | |
| PLCA | | | | | | | Sn | | **Sn** |
| | | | | | | | | **06 41 27.4** | **+1.1** |
| | comp=Z,0.5nm,0.3s,baz=295,slow=19,SNR=1.1 | | | | | | | | |
| PLCA | | | | | | | Lg | | Lg |
| | | | | | | | | 06 42 22.9 | |
| | comp=Z,1.0nm,0.3s,baz=270,slow=20,SNR=1.8 | | | | | | | | |
| PLCA | | | | | | | LR | | LR |
| | | | | | | | | 06 42 57.3 | |
| | comp=Z,16μm,18.9s,baz=352,slow=35 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.31** | **174** | | | | **Pn** | **06 39 30.3** | **-0.3** |
| **LL04** | **Puerto Octay** | **10.43** | **182** | | | | **Pn** | **06 39 29.5** | **-2.5** |
| **PB08** | **IPOC Station P** | **10.59** | **14** | Pn | | | **Pn** | **06 39 32.7** | **-2.1** |
| **LL03** | **Petrohue** | **10.65** | **182** | | | | **Pn** | **06 39 31.3** | **-3.9** |
| **PB11** | **IPOC Station P** | **10.86** | **12** | Pn | | | **Pn** | **06 39 36.1** | **-2.2** |
| **LL05** | **Los Muermos** | **10.98** | **186** | | | | **Pn** | **06 39 37.8** | **-1.9** |
| **GO01** | **Chusmiza** | **11.04** | **14** | Pn | | | Pn | 06 39 35.9 | -5.1 |
| **PB12** | **IPOC Station P** | **11.89** | **8** | Pn | | | Pn | 06 39 45.6 | -6.7 |
| **PB16** | **IPOC Station P** | **12.28** | **11** | Pn | | | **Pn** | **06 39 54.7** | **-3.4** |
| **GO07** | **Milladeo Hill,** | **12.70** | **186** | | | | **Pn** | **06 40 02.3** | **-0.9** |
| **LL02** | **Futaleuf** | **12.70** | **180** | | | | **Pn** | **06 40 00.8** | **-2.4** |
| **ITQB** | **Itaqui** | **13.30** | **90** | | | | **Pn** | **06 40 10.1** | **-1.4** |
| **ITQB** | **Itaqui** | **13.30** | **90** | *e* | P | | **Pn** | **06 40 10.8** | **-0.7** |
| **CPUP** | **Villa Florida** | **13.52** | **76** | Pn | | | **Pn** | **06 40 13.0** | **-1.4** |
| | comp=Z,0.7nm,0.3s,baz=246,slow=12,SNR=16 | | | | | | | | |
| CPUP | | | | | | | Sn | | **Sn** |
| | | | | | | | | **06 42 43.0** | **-1.8** |
| | comp=Z,2.3nm,0.3s,baz=189,slow=18,SNR=1.9 | | | | | | | | |
| CPUP | | | | | | | Lg | | Lg |
| | | | | | | | | 06 43 57.9 | |
| | comp=Z,4.3nm,0.3s,baz=340,slow=6.1,SNR=3.1 | | | | | | | | |
| CPUP | | | | | | | LR | | LR |
| | | | | | | | | 06 45 54.6 | |
| | comp=Z,79μm,18.8s,baz=257,slow=40 | | | | | | | | |
| **CPUP** | **Villa Florida** | **13.52** | **76** | | | | **Pn** | **06 40 12.4** | **-2.0** |
| **CPUP** | **Villa Florida** | **13.52** | **76** | ↑ | P | | **Pn** | **06 40 14.6** | **+0.2** |
| **LPAZ** | **La Paz** | **14.54** | **15** | Pn | | | **Pn** | **06 40 29.0** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=202,slow=6.4,SNR=26 | | | | | | | | |
| **LPAZ** | **La Paz** | **14.54** | **15** | P | | | **Pn** | **06 40 29.0** | **-0.1** |
| **LPAZ** | **La Paz** | **14.54** | **15** | Pn | | | **Pn** | **06 40 25.7** | **-3.3** |
| **LPAZ** | **La Paz** | **14.54** | **15** | ↓ | P | | **Pn** | **06 40 27.5** | **-1.6** |
| **LPAZ** | **La Paz** | **14.54** | **15** | *e* | P | | **Pn** | **06 40 28.3** | **-0.8** |
| **COYC** | **Coyhaique** | **15.08** | **180** | Pn | | | **Pn** | **06 40 30.9** | **-4.7** |
| COYC | | | | | IAmb | | IAmb | 06 40 54.3 | |
| | comp=Z,496nm,1.3s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.77** | **99** | Pn | | | **Pn** | **06 40 42.8** | **-2.0** |
| **PLTB** | **Pedras Altas** | **15.77** | **99** | *e* | P | | **Pn** | **06 40 43.8** | **-1.0** |
| **SIV** | **San Ignacio** | **17.52** | **37** | P | | | **Pn** | **06 41 07.1** | **0.0** |
| | comp=Z,8.8nm,0.3s,baz=216,slow=10,SNR=112 | | | | | | | | |
| SIV | | | | | | | LR | | LR |
| | | | | | | | | 06 49 03.0 | |
| | comp=Z,42μm,19.4s,baz=220,slow=41 | | | | | | | | |
| **ITAB** | **Concordia** | **17.66** | **84** | P | | | **Pn** | **06 41 07.8** | **-1.0** |
| **ITAB** | **Concordia** | **17.66** | **84** | *e* | P | | **Pn** | **06 41 09.1** | **+0.3** |
| **AQDB** | **Aquidauana** | **17.71** | **60** | P | | | **Pn** | **06 41 07.5** | **-1.9** |
| **AQDB** | **Aquidauana** | **17.71** | **60** | *e* | P | | **Pn** | **06 41 09.2** | **-0.2** |
| **GO08** | **Villa O'Higgin** | **17.98** | **181** | P | | | **Pn** | **06 41 09.5** | **-3.0** |
| **PTGB** | **Pitanga** | **18.53** | **77** | *e* | P | | **Pn** | **06 41 21.0** | **+1.4** |
| **NNA** | **Nana** | **18.94** | **345** | P | | | **Pn** | **06 41 25.3** | **+0.8** |
| | comp=Z,1.6nm,0.3s,baz=191,slow=13,SNR=3.4 | | | | | | | | |
| NNA | | | | | | | LR | | LR |
| | | | | | | | | 06 47 20.2 | |
| | comp=Z,6μm,18.4s,baz=160,slow=33 | | | | | | | | |
| **NNA** | **Nana** | **18.94** | **345** | P | | | **P** | **06 41 19.0** | **-4.9** |
| **NNA** | **Nana** | **18.94** | **345** | ↑ | P | | **Pn** | **06 41 30.3** | **+5.8** |
| **PTLB** | **Pontes e Lacer** | **19.02** | **41** | *e* | P | | **P** | **06 41 24.7** | **+0.1** |
| **TER01** | **Tubaro-SC** | **19.96** | **90** | *e* | P | | **P** | **06 41 35.8** | **+0.8** |
| **PP1B** | **Ponte de Pedra** | **20.15** | **54** | *e* | P | | **P** | **06 41 37.6** | **+0.5** |
| **VILB** | **Vilhena** | **20.54** | **34** | *e* | P | | **P** | **06 41 41.7** | **+0.4** |
| **PCMB** | **Pacaembu** | **20.56** | **69** | *e* | P | | **P** | **06 41 42.1** | **+0.6** |
| **SALV** | **Santo Antonio** | **20.79** | **49** | *e* | P | | **P** | **06 41 44.1** | **+0.1** |
| **TIJ01** | **Guaruva-PR** | **20.91** | **81** | *e* | P | | **P** | **06 41 44.5** | **-0.8** |
| **FRTB** | **Fartura** | **21.17** | **76** | *e* | P | | **P** | **06 41 48.6** | **+0.5** |
| **MG05** | **Puerto Natales** | **21.20** | **181** | P | | | **P** | **06 41 45.3** | **-2.8** |
| MG05 | | | | | IAmb | | IAmb | 06 42 20.4 | |
| | comp=Z,480nm,1.2s | | | | | | | | |
| **ETMB** | **Extrema** | **21.23** | **16** | *e* | P | | **P** | **06 41 50.0** | **+1.3** |
| **ITRB** | **Iturama** | **22.26** | **66** | *e* | P | | **P** | **06 41 59.6** | **-0.3** |
| **CZSB** | **Cruzeiro do Su** | **22.63** | **358** | *e* | P | | **P** | **06 42 04.4** | **+0.6** |
| **PET01** | **Itanhaem-SP** | **22.74** | **80** | *e* | P | | **P** | **06 42 06.5** | **+1.6** |
| **BB19B** | **Bebedouro** | **23.05** | **72** | *e* | P | | **P** | **06 42 07.3** | **-0.8** |
| **RCLB** | **Rio Claro- Sao** | **23.26** | **76** | *e* | P | | **P** | **06 42 12.2** | **+1.8** |
| **MG03** | **Isla Dawson** | **23.39** | **178** | P | | | **P** | **06 42 06.3** | **-5.0** |
| MG03 | | | | | IAmb | | IAmb | 06 42 25.9 | |
| | comp=Z,415nm,1.3s | | | | | | | | |
| **PDRB** | **Porto dos Gac** | **23.49** | **40** | *e* | P | | **P** | **06 42 10.9** | **-1.8** |
| **VAO** | **Valinhos** | **23.49** | **78** | *e* | P | | **P** | **06 42 13.8** | **+1.0** |
| **EFI** | **East Falkland** | **23.56** | **158** | *e* | P | | **P** | **06 42 14.4** | **+1.4** |
| EFI | | | | | pmax | | pmax | | |
| | comp=Z,259nm,1.3s | | | | | | | | |
| EFI | | | | | MLR | | MLR | | |
| | comp=Z,38μm,14.0s | | | | | | | | |
| **EFI** | **East Falkland** | **23.56** | **158** | P | | | **P** | **06 42 10.2** | **-2.8** |
| EFI | | | | | IAmb | | IAmb | 06 42 46.9 | |
| | comp=Z,209nm,0.9s | | | | | | | | |
| **EFI** | **East Falkland** | **23.56** | **158** | IAMs_20 | | | IAMs_20 | 06 51 45.9 | |
| | comp=Z,29μm,18.0s | | | | | | | | |
| **EFI** | **East Falkland** | **23.56** | **158** | ↓↓ | P | | **P** | **06 42 14.7** | **+1.8** |
| **ARAG** | **Araguaiana, MT** | **23.59** | **56** | *e* | P | | **P** | **06 42 11.9** | **-1.7** |
| **ATAH** | **Atahualpa** | **23.98** | **344** | P | | | **P** | **06 42 19.1** | **+1.3** |
| | comp=Z,8.1nm,0.8s,baz=146,slow=7.1,SNR=13 | | | | | | | | |
| ATAH | | | | | | | LR | | LR |
| | | | | | | | | 06 50 35.0 | |
| | comp=Z,7μm,18.3s,baz=195,slow=34 | | | | | | | | |
| **USHA** | **Ushuaia** | **24.48** | **175** | P | | | **P** | **06 42 22.4** | **+0.7** |
| | comp=Z,37nm,0.6s,baz=5.8,slow=8.8,SNR=29 | | | | | | | | |
| USHA | | | | | | | LR | | LR |
| | | | | | | | | 06 53 24.6 | |
| | comp=Z,29μm,18.4s,baz=358,slow=40 | | | | | | | | |
| **PARB** | **Paraibuna** | **24.50** | **80** | *e* | P | | **P** | **

**NBPS Pedro II - PI** 38.73 54 *e*P P 06 44 27.3 +0.1
**NBAN Anadia - AL** 39.13 66 *e*P P 06 44 29.0 -1.6
**SDV Santo Domingo** 39.15 2 P P 06 44 30.5 -0.3
comp=Z,156nm,0.8s,baz=222,slow=6.0,SNR=10
**SDV Santo Domingo** 39.15 2 P P 06 44 26.7 -4.0
**SDV Santo Domingo** 39.15 2 IAms_20 IAms_20 07 02 44.0
comp=Z,9µm,19.0s
**SDV Santo Domingo** 39.15 2 *e*P P 06 44 24.8 -6.0
**SDV Santo Domingo** 39.15 2 *e*P P 06 44 30.7 -0.1
**MOTC Monteria, Cord** 39.18 354 P P 06 44 26.6 -4.2
**NBPB Pedra_Branca-C** 39.26 57 *e*P P 06 44 31.9 +0.3
**LL1C La Loma 1 Cana** 39.81 358 *e*P P 06 44 34.4 -1.6
**MDP Montagnes des** 39.91 31 P P 06 44 36.3 -0.6
comp=Z,79nm,1.0s,baz=206,slow=8.0,SNR=8.7
MDP LR LR 07 03 01.8
comp=Z,28µm,18.3s,baz=201,slow=39
**LL6C La Loma 6 Bece** 39.99 358 *e*P P 06 44 37.1 -0.5
**NBLV Livramento - P** 40.06 62 *e*P P 06 44 38.1 -0.3
**CDITO Canoas** 40.21 343 P P 06 44 33.4 -5.9
CDITO IAmb IAmb 06 44 58.4
comp=Z,234nm,1.5s
**SJCC San Jacinto, C** 40.25 355 P P 06 44 35.4 -4.4
**SJCC San Jacinto, C** 40.25 355 *e*P P 06 44 35.3 -4.5
**BRU2 Volcan** 40.38 343 *e*P P 06 44 41.6 +0.7
**NBMO Morrinhos-CE** 40.48 54 *e*P P 06 44 42.6 +0.9
**NBRF Rio Formoso -** 40.63 66 *e*P P 06 44 44.0 +1.0
**SRBA San Rafael, Bu** 40.96 343 P P 06 44 42.7 -3.1
**PCRV Puerto La Cruz** 41.02 11 P P 06 44 46.2 +0.1
comp=Z,35nm,1.0s,baz=339,slow=4.0,SNR=4.9
PCRV LR LR 07 03 30.0
comp=Z,26µm,18.5s,slow=39
**BIRV Birongo** 41.07 9 P P 06 44 42.2 -4.3
**NBCL Cascavel-CE** 41.10 57 *e*P P 06 44 47.6 +0.8
**CRJC Cerrejon, Guaj** 41.26 359 *e*P P 06 44 43.3 -4.9
**SMRC Santa Marta, M** 41.45 357 *e*P P 06 44 42.4 -7.2
**RIMA Rio Macho** 41.61 342 P P 06 44 47.4 -3.8
**RCBR Riachuelo** 41.81 61 P P 06 44 48.1 -4.6
RCBR pmax pmax
comp=Z,148nm,1.2s
RCBR MLR MLR
comp=Z,13µm,22.0s
**RCBR Riachuelo** 41.81 61 P P 06 44 48.1 -4.6
RCBR IAmb IAmb 06 44 58.2
comp=Z,148nm,1.1s
**RCBR Riachuelo** 41.81 61 IAms_20 IAms_20 07 02 34.5
comp=Z,13µm,22.0s
**RCBR Riachuelo** 41.81 61 ⇑P P 06 44 54.7 +1.9
**RCBR Riachuelo** 41.81 61 *e*P P 06 44 54.2 +1.5
**CVTR Volcan Turrial** 41.82 342 P P 06 44 47.1 -6.0
**NBPV Pedro Velho** 41.90 63 *e*P P 06 44 54.2 +0.8
**URIC Uribia, Colomb** 41.92 360 P P 06 44 47.2 -6.3
**TRN Trinidad (W)** 42.12 16 *e*P P 06 45 02.3 +7.3
**DUNO Dulce Nombre,** 42.36 340 P P 06 44 52.3 -4.8
**JTS Las Juntas de** 42.41 341 P P 06 44 59.1 +1.6
comp=Z,11nm,0.8s,baz=249,slow=14,SNR=7.3
**JTS Las Juntas de** 42.41 341 ⇑*i*P P 06 44 57.8 +0.3
JTS pmax pmax
comp=Z,115nm,2.2s
JTS MLR MLR
comp=Z,4µm,18.0s
**JTS Las Juntas de** 42.41 341 P P 06 44 50.2 -7.3
**JTS Las Juntas de** 42.41 341 *e*P P 06 44 59.8 +2.3
**JTS Las Juntas de** 42.41 341 ⇓P P 06 45 01.9 +4.4
**HATO Hato, Curacao** 42.50 4 IAms_20 IAms_20 07 02 28.1
comp=Z,7µm,18.0s
**COVE Coope Vega, Sa** 42.66 342 P P 06 44 52.7 -6.8
COVE IAmb IAmb 06 45 11.8
comp=Z,142nm,1.0s
**TOSP Speyside** 42.95 17 P P 06 45 00.2 -1.7
**TOSP Speyside** 42.95 17 *e*P P 06 45 02.3 +0.5
**GRGR Grenville** 43.50 15 P P 06 45 04.5 -1.8
GRGR IAms_20 IAms_20 07 03 26.0
comp=Z,8µm,20.0s
**GRGR Grenville** 43.50 15 *e*P P 06 44 57.7 -8.6
**GCMP Grenada, Carri** 43.89 15 *e*P P 06 45 11.6 +2.2
**BOAB BOACO BROADBAN** 44.66 341 IAms_20 IAms_20 07 06 19.4
comp=Z,13µm,19.0s
**BOAB BOACO BROADBAN** 44.66 341 ⇓P P 06 45 20.6 +4.9
**SVB Belmont** 44.69 15 *e*P P 06 45 20.9 +5.1
**BBGH Gun Hill** 44.97 17 IAms_20 IAms_20 07 05 50.4
comp=Z,17µm,21.0s
**MCLT Moule a Chique** 45.18 15 P P 06 45 15.7 -4.0
**SLBI Saint Lucia, B** 45.48 15 *e*P P 06 45 25.6 +3.5
**MPOM Morne Pois Mar** 45.91 15 P P 06 45 19.0 -6.5
MPOM IAms_20 IAms_20 07 05 52.1
comp=Z,7µm,22.0s
**MPOM Morne Pois Mar** 45.91 15 *e*P P 06 45 20.9 -4.6
**BIM Bigot** 45.94 15 P P 06 45 21.2 -4.6
BIM IAms_20 IAms_20 07 05 43.7
comp=Z,7µm,20.0s
**BIM Bigot** 45.94 15 *e*P P 06 45 20.9 -4.8
**FDF Fort de France** 46.13 15 P P 06 45 22.3 -5.0
FDF pmax pmax
comp=Z,104nm,0.9s
FDF MLR MLR
comp=Z,12µm,20.0s
**FDF Fort de France** 46.13 15 P P 06 45 22.3 -5.0
FDF IAmb IAmb 06 45 33.2
comp=Z,104nm,0.9s
FDF IAms_20 IAms_20 07 05 50.8
comp=Z,11µm,20.0s
**FDF Fort de France** 46.13 15 ⇑P P 06 45 28.9 +1.7
**ILAM Ilet Lapin Mar** 46.23 15 *e*P P 06 45 34.9 +6.9
**SVN Savane Anatole** 46.23 15 IAms_20 IAms_20 07 05 53.4
comp=Z,11µm,19.0s
**TGUH Tegucigalpa,Un** 46.66 339 *e*P P 06 45 32.5 +0.9
**TGUH Tegucigalpa,Un** 46.66 339 ⇑P P 06 45 33.7 +2.2
**DLPL La Plaine** 46.69 14 *e*P P 06 45 16.3 -15
**TDBA Terre de Bas,** 47.11 14 IAms_20 IAms_20 07 06 43.7
comp=Z,7µm,19.0s
**MAGL Barre de l'ile** 47.28 14 IAms_20 IAms_20 07 06 36.1
comp=Z,8µm,19.0s
**MAGL Barre de l'ile** 47.28 14 *e*P P 06 45 38.0 +1.8
**CBE Ff, Capester** 47.33 14 IAms_20 IAms_20 07 06 50.3
comp=Z,7µm,20.0s
**CBE Ff, Capester** 47.33 14 *e*P P 06 45 42.5 +5.8
**MTO3 Montecristo** 47.65 337 P P 06 45 36.3 -3.1
**GDSD La Dsirade Is** 47.68 14 P P 06 45 37.2 -2.1
GDSD IAms_20 IAms_20 07 06 47.7
comp=Z,7µm,21.0s
**ABD La Joyeuse, An** 47.75 14 IAms_20 IAms_20 07 06 51.4
comp=Z,8µm,18.0s
**ABD La Joyeuse, An** 47.75 14 *e*P P 06 45 30.2 -10
**ANBD Bethesda, Anti** 48.25 13 *e*P P 06 45 39.0 -4.8
**ICMP Isla Caja de M** 48.36 7 P P 06 45 43.0 -1.6
**MLPR Magueyes Islan** 48.39 6 P P 06 45 41.7 -3.1
**CRPR Cabo Rojo, PR** 48.42 6 P P 06 45 39.6 -5.4
**SEUS St. Eustatius** 48.46 11 IAms_20 IAms_20 07 07 25.0
comp=Z,8µm,21.0s
**SEUS St. Eustatius** 48.46 11 *e*P P 06 45 44.2 -1.2
**OBIP Obispado Ponce** 48.50 7 P P 06 45 42.2 -3.5
**CELP Cerrillos** 48.54 7 P P 06 45 42.3 -3.7
**PDPR Patillas Dam,** 48.54 8 P P 06 45 43.9 -2.1
**APG El Apazote** 48.59 336 P P 06 45 48.4 +1.7
comp=Z,19nm,1.0s,baz=171,slow=9.7,SNR=10
APG LR LR 07 02 04.4
comp=Z,2µm,19.9s,baz=152,slow=31
**SJG San Juan** 48.62 7 P P 06 45 43.3 -3.3
SJG pmax pmax
comp=Z,150nm,1.0s
**SJG San Juan** 48.62 7 P P 06 45 43.3 -3.3
**SJG San Juan** 48.62 7 *e*P P 06 45 44.7 -1.9
**SJG San Juan** 48.62 7 ⇑P P 06 45 46.5 -0.1
**SDD Santo Domingo** 48.68 3 P P 06 45 42.6 -4.4
**HUMP Col San Antoni** 48.69 8 P P 06 45 42.9 -4.2
**GCPR Guaynabo City** 48.82 7 P P 06 45 43.5 -4.6
GCPR IAmb IAmb 06 45 51.6
comp=Z,88nm,0.9s
**ANWB Willy Bob** 48.85 13 P P 06 45 43.5 -4.9
ANWB IAms_20 IAms_20 07 06 50.6
comp=Z,7µm,21.0s
**ANWB Willy Bob** 48.85 13 *e*P P 06 45 48.8 +0.5
**SMRT St. Maarten** 48.99 11 IAms_20 IAms_20 07 07 41.1
comp=Z,10µm,21.0s
**SMRT St. Maarten** 48.99 11 *e*P P 06 45 48.8 -0.6
**SDDR Presa de Saban** 49.17 1 IAms_20 IAms_20 07 10 26.4
comp=Z,6µm,19.0s
**SDDR Presa de Saban** 49.17 1 *e*P P 06 45 47.4 -3.5
**SC01 Santiago de lo** 49.62 2 P P 06 45 50.4 -3.8
**PETF Flores** 50.17 337 P P 06 45 53.8 -4.6
PETF IAmb IAmb 06 46 09.1
comp=Z,136nm,1.4s
**GTBY Guantanamo Bay** 50.20 356 *e*P P 06 46 01.1 +2.5
**BELA Belgrano 2** 50.34 170 P P 06 45 58.1 -1.0

**PTCN Pitcairn Islan** 51.25 261 IAMs_20 IAMs_20 07 01 35.2
comp=Z,7µm,19.0s
**GRTK Grand Turk** 51.69 1 IAms_20 IAms_20 07 12 03.1
comp=Z,5µm,19.0s
**CMIG Matias Romero** 52.18 332 P P 06 46 15.7 +2.1
comp=Z,13nm,1.0s,baz=158,slow=4.9,SNR=12
CMIG LR LR 07 03 23.4
comp=Z,3µm,21.8s,baz=166,slow=30
**VNA3 Neumayer Olymp** 52.61 159 P P 06 46 16.6 +0.4
**VNA1 Neumayer--Stat** 52.90 158 P P 06 46 18.8 +0.5
**VNA2 Neumayer--Watz** 53.24 158 P P 06 46 21.2 +0.4
baz=288,slow=8.1
**SNAA Sanae** 54.83 159 P P 06 46 32.7 +0.1
**SNAA Sanae** 54.83 159 P P 06 46 32.9 +0.3
comp=Z,32nm,0.5s,baz=276,slow=7.3,SNR=258
SNAA LR LR 07 08 07.8
comp=Z,10µm,20.7s,baz=290,slow=34
**SNAA Sanae** 54.83 159 *e*P P 06 46 32.5 0.0
SNAA pmax pmax
comp=Z,95nm,1.3s
**SNAA Sanae** 54.83 159 P P 06 46 32.5 0.0
SNAA IAMs_20 IAMs_20 07 07 35.5
comp=Z,10µm,19.0s
**SNAA Sanae** 54.83 159 ⇑P P 06 46 32.8 +0.3
**UNM Universidad Na** 56.01 329 IAMs_20 IAMs_20 07 05 51.6
comp=Z,7µm,19.0s
**ASCN Ascension** 58.16 80 P P 06 46 51.9 -5.1
**DWPF Disney Wildern** 58.95 350 P P 06 47 02.8 +0.8
baz=171
DWPF S S 06 55 06.7 -1.7
baz=171
**NVL N'lazarevskaya** 59.54 158 ⇓*i*P P 06 47 15.4 +10
NVL pmax pmax
comp=Z,131nm,2.1s
NVL MLR MLR
comp=N,2µm,17.0s
NVL MLR MLR
comp=E,4µm,17.0s
NVL MLR MLR
comp=Z,4µm,17.0s
**QSPA South Pole Qui** 59.76 180 P P 06 47 08.0 +0.5
comp=Z,18nm,0.6s,baz=277,slow=0.5,SNR=141
QSPA LR LR 07 14 16.6
comp=Z,4µm,18.3s,baz=171,slow=37
**QSPA South Pole Qui** 59.76 180 P P 06 47 03.8 -3.7
QSPA IAmb IAmb 06 47 18.4
comp=Z,54nm,1.0s
**656A Willston** 60.35 349 P P 06 47 07.3 -4.4
**553A Crawfordville** 61.48 348 P P 06 47 14.1 -5.2
**456A Hilliard** 61.60 350 P P 06 47 14.3 -5.8
**SHEL Horse Pasture** 61.78 93 IAMs_20 IAMs_20 07 09 58.7
comp=Z,6µm,21.0s
**TIGA Tifton** 62.55 349 P P 06 47 19.8 -6.7
TIGA IAmb IAmb 06 47 40.0
comp=Z,88nm,1.2s
**TIGA Tifton** 62.55 349 P P 06 47 26.9 +0.3
baz=169
TIGA S S 06 55 51.4 -2.9
baz=169
**255A Hazlehurst** 62.85 350 P P 06 47 23.6 -4.9
**BBSR BB Station** 62.88 7 P P 06 47 25.1 -3.6
**BBSR BB Station** 62.88 7 ⇑P P 06 47 32.4 +3.7
**BRAL Brewton** 62.95 345 P P 06 47 23.8 -5.4
**BRAL Brewton** 62.95 345 P P 06 47 29.7 +0.5
baz=166
BRAL S S 06 56 00.0 +0.7
baz=166
**250A Grady** 63.57 346 P P 06 47 26.4 -6.9
**NHSC New Hope** 63.71 352 P P 06 47 30.3 -3.8
**NHSC New Hope** 63.71 352 P P 06 47 34.6 +0.5
baz=172
NHSC S S 06 56 11.9 +3.2
baz=172
**346A Big Creek Wild** 63.72 343 P P 06 47 28.2 -6.2
**833A Chaparral WMA,** 64.06 333 P P 06 47 30.2 -6.4
**833A Chaparral WMA,** 64.06 333 P P 06 47 36.6 -0.1
baz=154
833A S S 06 56 14.1 +0.8
baz=154
**GOGA Godfrey** 64.46 349 P P 06 47 34.0 -5.1
GOGA pmax pmax
comp=Z,47nm,1.3s
**GOGA Godfrey** 64.46 349 P P 06 47 34.0 -5.2
GOGA IAmb IAmb 06 47 52.4
comp=Z,47nm,1.2s
**GOGA Godfrey** 64.46 349 P P 06 47 39.4 +0.3
baz=169
GOGA S S 06 56 15.7 -2.4
baz=169
**342A Flagon Creek P** 64.47 341 P P 06 47 34.1 -5.2
**Y57A Sumter** 64.63 352 P P 06 47 34.2 -6.0
Y57A IAmb IAmb 06 47 53.9
comp=Z,48nm,1.1s
**Z51A Franklin** 64.66 348 P P 06 47 36.1 -4.4
Z51A IAmb IAmb 06 47 53.9
comp=Z,74nm,1.6s
**LRAL Lakeview Retre** 64.74 346 P P 06 47 41.0 0.0
baz=166
LRAL S S 06 56 19.7 -1.9
baz=166
**VBMS Vicksburg** 64.78 343 P P 06 47 42.2 +0.9
baz=162
VBMS S S 06 56 21.7 -0.3
baz=162
**146A Union** 64.82 344 P P 06 47 37.8 -3.7
**SACV Santiago Islan** 64.84 53 P P 06 47 36.1 -5.9
SACV IAMs_20 IAMs_20 07 15 45.5
comp=Z,7µm,19.0s
**JSC Jenkinsville** 65.00 352 P P 06 47 39.1 -3.5
JSC pmax pmax
comp=Z,104nm,1.6s
**JSC Jenkinsville** 65.00 352 P P 06 47 39.1 -3.5
JSC IAmb IAmb 06 49 58.3
comp=Z,104nm,1.6s
**Y52A Lilburn** 65.00 349 P P 06 47 37.8 -4.9
Y52A IAmb IAmb 06 47 56.7
comp=Z,71nm,1.2s
**SLBS Sierra La Lagu** 65.02 322 IAMs_20 IAMs_20 07 15 16.5
comp=Z,3µm,18.0s
**HODGE Hodges** 65.08 351 P P 06 47 38.3 -4.9
**Z47A Carrollton** 65.13 345 P P 06 47 39.3 -4.2
Z47A IAmb IAmb 06 47 53.1
comp=Z,42nm,0.9s
**BIRD Birdtown, Kers** 65.26 352 P P 06 47 39.3 -5.0
BIRD IAmb IAmb 06 47 58.0
comp=Z,72nm,1.4s
**Y49A Blount Mountai** 65.42 347 P P 06 47 41.2 -4.2
**NATX Nacogdoches** 65.53 339 P P 06 47 47.3 +1.1
baz=159
NATX S S 06 56 31.0 -0.3
baz=159
**LPIG La Paz** 65.55 321 LR LR 07 10 31.4
comp=Z,1µm,18.9s,baz=134,slow=31
**CNNC Cliffs of the** 65.60 355 P P 06 47 41.2 -5.2
CNNC IAmb IAmb 06 48 00.6
comp=Z,65nm,1.1s
**CNNC Cliffs of the** 65.60 355 P P 06 47 47.2 +0.8
baz=174
CNNC S S 06 56 32.1 +0.2
baz=174
**435B Jarrell** 65.61 336 P P 06 47 47.3 +0.6
baz=156
435B S S 06 56 31.7 -0.5
baz=156
**X51A Calhoun** 65.82 348 P P 06 47 43.2 -4.8
X51A IAmb IAmb 06 48 02.2
comp=Z,70nm,0.9s
**KMSC Kings Mountain** 65.86 352 P P 06 47 41.5 -6.7
KMSC IAmb IAmb 06 48 00.1
comp=Z,50nm,1.2s
**KMSC Kings Mountain** 65.86 352 P P 06 47 48.4 +0.2
baz=171
KMSC S S 06 56 34.9 -0.3
baz=171
**BG3 Lake Jocassee** 65.93 350 P P 06 47 44.8 -3.9
BG3 IAmb IAmb 06 48 02.5
comp=Z,65nm,1.3s
**X48A Hartselle** 66.12 346 P P 06 47 44.3 -5.7
X48A IAmb IAmb 06 48 00.1
comp=Z,62nm,1.1s
**JCT Junction City** 66.14 334 P P 06 47 45.6 -4.6
JCT pmax pmax
comp=Z,293nm,1.7s
**JCT Junction City** 66.14 334 P P 06 47 45.6 -4.6
**JCT Junction City** 66.14 334 ⇓P P 06 47 52.0 +1.8
**JCT Junction City** 66.14 334 P P 06 47 51.0 +0.7
baz=154
JCT S S 06 56 39.6 +0.7
baz=154
**W52A Murphy** 66.18 349 P P 06 47 45.0 -5.3
W52A IAmb IAmb 06 48 04.1
comp=Z,98nm,1.4s
**Z41A Richland Creek** 66.38 341 P P 06 47 45.2 -6.3
**Z41A Richland Creek** 66.38 341 P P 06 47 52.3 +0.8
baz=161
Z41A S S 06 56 43.2 +1.7
baz=161
**W50A Signal Mountai** 66.52 348 P P 06 47 48.1 -4.4
**V55A Taylorsville** 66.54 352 P P 06 47 50.9 -1.7
V55A IAmb IAmb 06 48 07.0
comp=Z,56nm,1.1s
**V53A Saluda** 66.58 350 P P 06 47 46.3 -6.6
V53A IAmb IAmb 06 48 06.4
comp=Z,97nm,1.4s
**CPCT Cooper Cave** 66.63 349 P P 06 47 48.2 -4.9
CPCT IAmb IAmb 06 48 06.8
comp=Z,66nm,1.2s
**SWET Sewanee** 66.65 348 P P 06 47 49.3 -4.0
**WHTX Lake Whitney,** 66.66 337 P P 06 47 54.1 +0.7
baz=156
WHTX S S 06 56 43.8 -1.3
baz=156
**U59A Littleton** 66.69 355 P P 06 47 48.5 -5.0
U59A IAmb IAmb 06 48 07.9
comp=Z,104nm,1.4s
**OXF Oxford** 66.70 344 P P 06 47 49.0 -4.6
OXF pmax pmax
comp=Z,109nm,1.0s
**OXF Oxford** 66.70 344 P P 06 47 49.0 -4.6
**OXF Oxford** 66.70 344 P P 06 47 53.5 0.0
baz=164,SNR=14
OXF S S 06 56 43.1 -2.3
baz=164
**TXAR Lajitas Array** 66.71 330 P P 06 47 55.7 +1.8
comp=Z,5.4nm,0.8s,baz=153,slow=8.8,SNR=51
TXAR LR LR 07 12 54.3
comp=Z,4µm,18.3s,baz=144,slow=32
TXAR PKP2ab 07 16 31.7
comp=Z,0.7nm,1.0s,baz=250,slow=1.8,SNR=4.6
**TXAR Lajitas Array** 66.71 330 P P 06 47 48.1 -5.8
**TX31 Lajitas Ar. Si** 66.71 330 P P 06 47 50.9 -3.0
**TX32 Lajitas Array** 66.71 330 P P 06 47 48.5 -5.4
TX32 IAmb IAmb 06 48 06.3
comp=Z,34nm,1.0s
**TKL Tuckaleechee C** 66.71 350 LR LR 07 19 35.2
comp=Z,1µm,19.3s,baz=159,slow=38
**TKL Tuckaleechee C** 66.71 350 P P 06 47 49.2 -4.5
TKL pmax pmax
comp=Z,99nm,1.3s
**TKL Tuckaleechee C** 66.71 350 P P 06 47 49.2 -4.5
TKL IAmb IAmb 06 48 07.0
comp=Z,99nm,1.3s
**TAOE Nuku Hiva Isla** 66.79 273 *e*S S 06 56 52.2 +4.5
comp=Z,12µm,26.5s
**TAOE Nuku Hiva Isla** 66.79 273 *e*LR LR 07 08 01.0
comp=Z,7µm,27.5s,baz=128
**V52A Sevierville** 66.86 350 P P 06 47 51.4 -3.2
**U56A King** 66.93 353 P P 06 47 52.6 -2.5
U56A IAmb IAmb 06 48 09.1
comp=Z,60nm,1.2s
**V51A Loudon** 66.94 349 P P 06 47 51.9 -3.2
V51A IAmb IAmb 06 48 08.6
comp=Z,53nm,1.1s
**W45A Hickory Valley** 67.26 345 P P 06 47 50.5 -6.6
**U54A Nelsons Funny** 67.28 351 P P 06 47 53.3 -4.1
U54A IAmb IAmb 06 48 11.4
comp=Z,63nm,0.9s
**T59A Double "B" Far** 67.29 355 P P 06 47 52.6 -4.7
T59A IAmb IAmb 06 48 11.6
comp=Z,83nm,1.1s
**V48A Smith Brothers** 67.33 347 P P 06 47 55.0 -2.6
V48A IAmb IAmb 06 48 12.0
comp=Z,103nm,1.4s
**T57A Hurt** 67.46 354 P P 06 47 54.5 -3.9
T57A IAmb IAmb 06 48 12.2
comp=Z,50nm,1.4s
**TZTN Tazewell** 67.54 350 P P 06 47 58.2 -0.8
TZTN IAmb IAmb 06 48 13.1
comp=Z,77nm,1.4s
**TZTN Tazewell** 67.54 350 P P 06 47 59.4 +0.4
baz=169
TZTN S S 06 56 53.8 -1.8
baz=169
**X40A Basin Creek Fa** 67.54 341 P P 06 47 55.5 -3.5
**X40A Basin Creek Fa** 67.54 341 P P 06 47 59.3 +0.3
baz=161
X40A S S 06 56 54.4 -1.2
baz=161
**VNDA Vanda** 67.57 191 P P 06 48 01.4 +2.7
comp=Z,3.4nm,0.8s,baz=105,slow=5.9,SNR=4.7
VNDA LR LR 07 12 10.4
comp=Z,3µm,21.4s,baz=138,slow=31
**VNDA Vanda** 67.57 191 P P 06 47 56.3 -2.4
VNDA IAmb IAmb 06 48 42.0
comp=Z,70nm,1.8s
**CLTN Cedars of Leba** 67.57 347 P P 06 47 53.7 -5.5
**BLA Blacksburg** 67.79 353 P P 06 48 01.1 +0.6
baz=172
BLA S S 06 56 57.3 -1.3
baz=172
**MIAR Mount Ida** 67.81 341 P P 06 47 55.3 -5.3
MIAR pmax pmax
comp=Z,32nm,1.0s
**MIAR Mount Ida** 67.81 341 P P 06 47 55.3 -5.3
**MIAR Mount Ida** 67.81 341 ⇑P P 06 48 03.9 +3.3
**MIAR Mount Ida** 67.81 341 P P 06 48 00.8 +0.2
baz=160
MIAR S S 06 56 56.7 -2.0
baz=160
**U49A Red Boiling Sp** 67.88 348 P P 06 47 56.3 -4.8
U49A IAmb IAmb 06 48 14.6
comp=Z,65nm,1.4s
**WVT Waverly** 67.91 346 P P 06 47 55.9 -5.3
WVT pmax pmax
comp=Z,108nm,1.3s
**WVT Waverly** 67.91 346 P P 06 47 55.9 -5.4
**WVT Waverly** 67.91 346 ⇑P P 06 48 01.2 0.0
**WVT Waverly** 67.91 346 P P 06 48 00.8 -0.4
baz=165
WVT S S 06 56 57.5 -2.4
baz=165
**ABTX Abilene, Hawle** 68.01 335 P P 06 47 59.8 -2.2
**ABTX Abilene, Hawle** 68.01 335 P P 06 48 02.5 +0.5
baz=155
ABTX S S 06 57 02.0 +0.6
baz=155
**W41B Gary Mavity, V** 68.03 342 P P 06 47 56.7 -5.3
**W41B Gary Mavity, V** 68.03 342 P P 06 48 02.2 +0.1
baz=161
W41B S S 06 57 00.5 -1.0
baz=161
**JSRW J. Sargeant Re** 68.03 355 P P 06 47 55.5 -6.4
**WHAR Wooly Hollow** 68.15 342 P P 06 47 58.1 -4.7
**T50A Nancy** 68.21 349 P P 06 48 00.9 -2.3
T50A IAmb IAmb 06 48 16.5
comp=Z,92nm,1.6s
**R58B Mineral** 68.30 355 P P 06 47 59.8 -3.9
R58B IAmb IAmb 06 48 18.3
comp=Z,83nm,1.2s
**UTMT University of** 68.33 345 P P 06 48 00.6 -3.3
**W39A Magazine** 68.47 341 P P 06 48 00.1 -4.7
**W39A Magazine** 68.47 341 P P 06 48 06.0 +1.2
baz=160,SNR=15
W39A S S 06 57 08.0 +1.4
baz=160
**S54A Dingess, Beckl** 68.47 352 P P 06 48 03.1 -1.7
S54A IAmb IAmb 06 48 18.2
comp=Z,64nm,1.3s
**CBN Corbin Frederi** 68.50 355 P P 06 48 05.0 +0.1
baz=175
CBN S S 06 57 09.3 +2.4
baz=175
**T47A Sharon Grove** 68.59 347 P P 06 47 59.4 -6.1
**LCAR Lake Charles** 68.60 343 P P 06 48 04.7 -0.9
LCAR IAmb IAmb 06 48 15.6
comp=Z,40nm,0.9s
**S51A Beattyville** 68.62 350 P P 06 48 00.2 -5.5
S51A IAmb IAmb 06 48 19.1
comp=Z,53nm,1.3s
**FCAR Ozark Folk Cen** 68.68 343 P P 06 47 59.1 -7.0
**R55A Marlinton** 68.82 353 P P 06 48 02.4 -4.6
R55A IAmb IAmb 06 48 40.0

comp=Z,128nm,1.6s
**R53A Hurricane 69.08 352** P P 06 48 03.5 -5.1
R53A IAmb IAmb 06 48 22.8
comp=Z,152nm,1.9s
**PBMO Poplar Bluff 69.10 344** P P 06 48 03.0 -5.7
PBMO IAmb IAmb 06 48 18.3
comp=Z,48nm,1.1s
**SYO Syowa Base 69.12 159**⇑*i* PcP **PcP 06 48 26.8 -5.6**
**X34A Smith Ranch, M 69.17 337** P **P 06 48 04.5 -4.7**
**MBO M'Bour 69.19 58** P **P 06 48 07.2 -2.5**
**U40A Yellville 69.31 342** P P 06 48 04.2 -5.8
U40A IAmb IAmb 06 48 20.3
comp=Z,55nm,1.1s
**U40A Yellville 69.31 342** P **P 06 48 09.5 -0.5**
U40A S **S 06 57 17.4 +0.8**
baz=161
**R50A Paris 69.36 350** P **P 06 48 07.0 -3.3**
R50A IAmb IAmb 06 48 23.7
comp=Z,111nm,1.9s
**Q56A Snyder Ridge, 69.48 354** P P 06 48 04.2 -6.8
Q56A IAmb IAmb 06 48 25.7
comp=Z,45nm,1.1s
**MNTX Cornudas Mount 69.49 330** IAMs_20 IAMs_20 07 14 13.7
comp=Z,4µm,19.0s
**MNTX Cornudas Mount 69.49 330** P **P 06 48 10.9 -0.4**
baz=150
MNTX S **S 06 57 18.9 -0.1**
baz=150
**R49A Shelbyville 69.51 349** P **P 06 48 07.3 -3.9**
R49A IAmb IAmb 06 48 24.4
comp=Z,77nm,1.4s
**HHAR Hobbs 69.53 341** P **P 06 48 08.5 -2.9**
HHAR IAmb IAmb 06 48 21.6
comp=Z,57nm,1.0s
**WMOK Wichita Mounta 69.61 337** P **P 06 48 12.3 +0.3**
baz=156
WMOK S **S 06 57 20.2 -0.1**
baz=156
**WCI Wyandotte Cave 69.64 348** P P 06 48 07.0 -5.0
WCI pmax pmax
comp=Z,38nm,1.1s
**WCI Wyandotte Cave 69.64 348** P P 06 48 07.0 -5.0
**WCI Wyandotte Cave 69.64 348** ⇑P P 06 48 18.0 +6.0
WCI ⇑P pwP 06 48 19.0 +1.1
**WCI Wyandotte Cave 69.64 348** P **P 06 48 13.3 +1.3**
baz=167
WCI S **S 06 57 17.0 -3.5**
baz=167
**USIN University of 69.64 347** P P 06 48 07.1 -4.9
**SDMD Soldier's Deli 69.67 356** P **P 06 48 07.5 -4.6**
**S44A Carbondale 69.71 345** P **P 06 48 08.7 -3.7**
S44A IAmb IAmb 06 48 23.2
comp=Z,40nm,0.8s
**TUL1 Leonard 69.73 340** P 06 48 07.6 -5.0
TUL1 IAmb IAmb 06 48 23.2
comp=Z,72nm,1.1s
**TUL1 Leonard 69.73 340** P **P 06 48 13.0 +0.4**
baz=158,SNR=11
**Q52A Bidwell 69.74 351** P **P 06 48 11.0 -1.6**
Q52A IAmb IAmb 06 48 26.1
comp=Z,53nm,1.1s
**MGMO Mountain Grove 69.91 343** P P 06 48 08.4 -5.3
**Q51A Peebles 69.95 351** IAmb IAmb 06 48 39.4
comp=Z,44nm,1.1s
**EPT El Paso 70.04 329** IAMs_20 IAMs_20 07 14 29.3
comp=Z,5µm,19.0s
**MCWV Mont Chateau 70.15 354** P **P 06 48 16.1 +1.0**
baz=173
MCWV S **S 06 57 26.6 +0.2**
baz=173
**P52A Corning 70.38 352** IAmb IAmb 06 48 28.8
comp=Z,62nm,1.1s
**P52A Corning 70.38 352** P **P 06 48 16.6 0.0**
baz=171
P52A S **S 06 57 26.1 -3.0**
baz=171
**MSTX Muleshoe 70.39 333** P **P 06 48 17.3 +0.4**
baz=152
MSTX S **S 06 57 29.0 -0.6**
baz=152
**CCM Cathedral Cave 70.51 344** P P 06 48 11.7 -5.7
CCM pmax pmax
comp=Z,56nm,1.0s
**CCM Cathedral Cave 70.51 344** P P 06 48 11.7 -5.7
CCM IAmb IAmb 06 48 27.8
comp=Z,56nm,1.0s
**CCM Cathedral Cave 70.51 344** ⇓P **P 06 48 17.6 +0.3**
CCM ⇑P **sP 06 48 19.4 -0.8**
CCM ⇑P **pP 06 48 20.6 +1.1**
CCM ⇑P **pwP 06 48 27.1 +3.9**
**CCM Cathedral Cave 70.51 344** P **P 06 48 17.7 +0.3**
baz=163
CCM S **S 06 57 30.8 +0.2**
baz=163
**BLO Bloomington 70.60 348** P **P 06 48 13.8 -4.1**
BLO pmax pmax
comp=Z,209nm,1.9s
**BLO Bloomington 70.60 348** P **P 06 48 13.8 -4.1**
**O56A Blue Knob Stat 70.64 355** P P 06 48 12.6 -5.6
O56A IAmb IAmb 06 48 33.4
comp=Z,71nm,1.4s
**O56A Blue Knob Stat 70.64 355** P **P 06 48 18.5 +0.3**
baz=174
O56A S **S 06 57 34.4 +2.2**
baz=174
**P49A Miami Univ. Ec 70.65 350** P P 06 48 12.7 -5.5
**P49A Miami Univ. Ec 70.65 350** P **P 06 48 18.1 -0.1**
baz=168
P49A S **S 06 57 30.3 -1.9**
baz=168
**P48A Milroy 70.69 349** P P 06 48 11.3 -7.2
P48A IAmb IAmb 06 48 31.3
comp=Z,106nm,1.3s
**AMTX Amarillo 70.78 334** P **P 06 48 18.9 -0.3**
baz=153
AMTX S **S 06 57 33.3 -0.8**
baz=153
**O52A Adamsville 70.82 352** P P 06 48 13.6 -5.6
**Q44A Meyer Farm, Va 70.82 346** P **P 06 48 15.0 -4.2**
Q44A IAmb IAmb 06 48 33.0
comp=Z,130nm,1.6s
**PPT2 Papeete2 70.85 260** *e*S **S 06 57 37.3 +1.6**
comp=Z,10µm,25.2s
**PPT2 Papeete2 70.85 260** *e*LR LR 07 09 52.9
comp=Z,11µm,24.5s,baz=116
**PPT Papeete 70.86 261** LR LR 07 11 19.4
comp=Z,3µm,19.3s,baz=117,slow=29
**T35A Sooner Cattle 70.87 339** P P 06 48 12.8 -6.8
T35A IAmb IAmb 06 48 31.4
comp=Z,68nm,1.3s
**O53A New Philadelph 70.88 353** P **P 06 48 19.6 +0.1**
baz=172
O53A S **S 06 57 32.1 -2.8**
baz=172
**SSPA Standing Stone 70.96 355** P **P 06 48 16.7 -3.3**
SSPA IAmb IAmb 06 48 32.6
comp=Z,70nm,1.3s
**SSPA Standing Stone 70.96 355** P **P 06 48 20.6 +0.6**
baz=175
SSPA S **S 06 57 36.7 +1.0**
baz=175
**319A Douglas 70.98 327** P P 06 48 15.2 -5.3
319A IAmb IAmb 06 48 31.9
comp=Z,53nm,1.0s
**R40A Maddies Statio 70.98 343** P **P 06 48 18.2 -2.0**
R40A IAmb IAmb 06 48 31.0
comp=Z,59nm,0.8s
**ACSO Alum Creek Sta 71.08 351** P **P 06 48 16.0 -4.8**
**ACSO Alum Creek Sta 71.08 351** P **P 06 48 20.9 +0.2**
baz=170
ACSO S **S 06 57 34.4 -2.8**
baz=170
**N58A Sunbury 71.09 356** P P 06 48 15.9 -4.9
N58A IAmb IAmb 06 48 44.2
comp=Z,65nm,1.2s
**N59A State Game Lan 71.11 357** P P 06 48 16.1 -4.9
**N59A State Game Lan 71.11 357** P **P 06 48 21.0 0.0**
baz=177
N59A S **S 06 57 40.7 +3.1**
baz=177
**PAL Palisades 71.14 358** P **P 06 48 21.6 +0.5**
baz=178
PAL S **S 06 57 40.5 +2.7**
baz=178
**P46A Rosedale 71.16 348** P **P 06 48 16.8 -4.4**
P46A IAmb IAmb 06 48 34.2
comp=Z,57nm,1.0s
**O49A Covington 71.23 350** P **P 06 48 19.8 -1.9**
O49A IAmb IAmb 06 48 35.7
comp=Z,129nm,1.6s
**ODNJ Ogdensburg 71.23 358** P P 06 48 16.1 -5.5
ODNJ IAmb IAmb 06 49 05.1
comp=Z,114nm,1.7s
**121A Cookes Peak, D 71.26 329** P **P 06 48 18.9 -3.4**
121A IAmb IAmb 06 48 33.8
comp=Z,78nm,1.1s
**121A Cookes Peak, D 71.26 329** P **P 06 48 21.2 -1.1**
baz=148
121A S **S 06 57 42.4 +2.4**
baz=148
**WSPT Westport, CT 71.29 359** IAMs_20 IAMs_20 07 20 39.0
comp=Z,3µm,19.0s
**N53A Lisbon 71.39 353** P P 06 48 15.2 -7.5
N53A IAmb IAmb 06 48 35.4
comp=Z,93nm,1.6s
**O48B Farmland 71.43 349** P **P 06 48 22.6 -0.2**
baz=168
O48B S **S 06 57 37.9 -3.2**
baz=168
**N54A Moraine State 71.46 354** P **P 06 48 23.4 +0.3**
baz=173
N54A S **S 06 57 41.2 -0.3**
baz=173
**M57A Sunshine Farm, 71.61 356** P P 06 48 18.5 -5.4
M57A IAmb IAmb 06 48 36.8
comp=Z,64nm,1.2s
**P43A Skaggs, Pawnee 71.64 346** P P 06 48 17.7 -6.4
P43A IAmb IAmb 06 48 37.5
comp=Z,86nm,1.1s
**M65A Busby, Falmout 71.68 1** IAMs_20 IAMs_20 07 25 54.6
comp=Z,3µm,19.0s
**M65A Busby, Falmout 71.68 1** P **P 06 48 23.9 -0.5**
baz=181
M65A S **S 06 57 45.6 +1.6**
baz=181
**M55A Ridgway 71.85 355** P **P 06 48 24.7 -0.7**
M55A IAmb IAmb 06 48 39.6
comp=Z,74nm,1.1s
**SFIN Lafayette 71.88 348** P **P 06 48 24.8 -0.7**
baz=166
SFIN S **S 06 57 40.6 -5.7**
baz=166
**O44A Mansfield 71.92 347** P **P 06 48 21.9 -3.9**
O44A IAmb IAmb 06 48 37.7
comp=Z,164nm,1.9s
**N49A Columbus Grove 71.93 350** P **P 06 48 21.8 -4.1**
**M54A Oil Creek Stat 71.97 354** P **P 06 48 26.1 0.0**
baz=173
M54A S **S 06 57 44.6 -2.8**
baz=173
**M53A WI Miller and 72.00 353** P P 06 48 20.8 -5.5
M53A IAmb IAmb 06 48 38.2
comp=Z,67nm,1.2s
M53A IAMs_20 IAMs_20 07 24 53.0
comp=Z,3µm,18.0s
**M53A WI Miller and 72.00 353** P **P 06 48 26.0 -0.3**
baz=172
M53A S **S 06 57 47.1 -0.7**
baz=172
**P40A Paris 72.11 344** P P 06 48 21.6 -5.4
P40A IAmb IAmb 06 48 38.0
comp=Z,76nm,0.9s
**N47A Urbana 72.12 349** P P 06 48 21.7 -5.3
N47A IAmb IAmb 06 48 39.9
comp=Z,72nm,1.1s
**BNM Barren Site 72.12 330** P P 06 48 20.7 -6.8
**Y22D IRIS PASSCAL I 72.19 330** IAMs_20 IAMs_20 07 16 29.1
comp=Z,5µm,18.0s
**Y22D IRIS PASSCAL I 72.19 330** P **P 06 48 27.7 -0.1**
baz=149
Y22D S **S 06 57 55.8 +5.3**
baz=149
**M50A Fremont 72.24 351** P P 06 48 21.2 -6.5
**BINY Binghamton 72.40 357** P **P 06 48 29.6 +0.9**
baz=176
BINY S **S 06 57 54.4 +2.0**
baz=176
**L56A Greenwood 72.43 356** P **P 06 48 25.3 -3.6**
L56A IAmb IAmb 06 48 42.1
comp=Z,81nm,1.1s
**BCX Boston College 72.45 1** IAMs_20 IAMs_20 07 26 11.8
comp=Z,3µm,19.0s
**HDIL Hopedale 72.47 346** P **P 06 48 24.5 -4.6**
HDIL IAmb IAmb 06 48 42.5
comp=Z,68nm,1.2s
**HDIL Hopedale 72.47 346** P **P 06 48 29.2 +0.1**
baz=164
HDIL S **S 06 57 49.0 -4.2**
baz=164
**TUC Tucson 72.47 326** P **P 06 48 25.0 -4.4**
TUC pmax pmax
comp=Z,32nm,1.3s
**TUC Tucson 72.47 326** P **P 06 48 25.0 -4.4**
**TUC Tucson 72.47 326** ⇓P **P 06 48 32.6 +3.1**
TUC ⇑P **pwP 06 48 38.3 +3.0**
TUC ⇑P **PcP 06 48 39.7 -7.5**
**TUC Tucson 72.47 326** P **P 06 48 29.6 +0.2**
baz=146
TUC S **S 06 57 54.4 +0.7**
baz=146
**WES Weston 72.50 0** IAMs_20 IAMs_20 07 26 14.0
comp=Z,4µm,18.0s
**L61B Northampton 72.56 359** S **S 06 57 58.0 +3.8**
baz=179
**ERPA Erie 72.61 354** P P 06 48 24.7 -5.2
ERPA IAmb IAmb 06 48 42.5
comp=Z,60nm,1.1s
**ERPA Erie 72.61 354** P **P 06 48 30.1 +0.2**
baz=173
ERPA S **S 06 57 54.0 -0.6**
baz=173
**HRV Adam Dziewonsk 72.61 0** IAMs_20 IAMs_20 07 26 18.2
comp=Z,3µm,18.0s
**HRV Adam Dziewonsk 72.61 0** P **P 06 48 30.4 +0.4**
baz=180
HRV S **S 06 57 59.4 +4.7**
baz=180
**ANMO Albuquerque 72.73 331** LR LR 07 16 13.4
comp=Z,4µm,20.1s,baz=144,slow=32
**ANMO Albuquerque 72.73 331** *i*P **P 06 48 32.0 +0.9**
ANMO pmax pmax
comp=Z,33nm,1.3s
ANMO MLR MLR
comp=Z,2µm,15.0s
**ANMO Albuquerque 72.73 331** P P 06 48 25.6 -5.5
**ANMO Albuquerque 72.73 331** IAMs_20 IAMs_20 07 16 01.7
comp=Z,4µm,20.0s
**ANMO Albuquerque 72.73 331** ⇑P **P 06 48 34.0 +2.9**
ANMO ⇓P **pwP 06 48 37.6 +0.6**
ANMO ⇓P **PcP 06 48 42.2 -6.2**
**ANMO Albuquerque 72.73 331** P **P 06 48 31.5 +0.4**
baz=149
ANMO S **S 06 57 56.9 0.0**
baz=149
**TRY Troy 72.86 359** P **P 06 48 26.7 -4.6**
TRY IAmb IAmb 06 48 50.0
comp=Z,65nm,1.2s
**KSU1 Kansas State U 72.92 340** P **P 06 48 28.0 -3.8**
**KSU1 Kansas State U 72.92 340** ⇑P **P 06 48 34.5 +2.6**
**KSU1 Kansas State U 72.92 340** P **P 06 48 32.1 +0.2**
baz=158
KSU1 S **S 06 57 56.4 -2.0**
baz=158
**R32A Long Quarter, 72.94 338** P P 06 48 26.2 -5.9
R32A IAmb IAmb 06 48 42.9
comp=Z,72nm,1.4s
**N41A Harden Midland 72.95 345** P P 06 48 26.4 -5.6
N41A IAmb IAmb 06 48 42.0
comp=Z,55nm,1.1s
**L48A N Adams 72.97 350** P **P 06 48 27.8 -4.2**
L48A IAmb IAmb 06 48 45.2
comp=Z,45nm,1.0s
**MMNY Mt. Morris Dam 73.05 355** P **P 06 48 28.0 -4.5**
MMNY IAmb IAmb 06 48 44.9
comp=Z,136nm,1.4s
**214A Organ Pipe Nat 73.18 324** P **P 06 48 34.4 +0.8**
baz=144
214A S **SKiKP 06 58 06.4 +0.4**
baz=144
**AAM Ann Arbor 73.21 351** IAMs_20 IAMs_20 07 22 54.6
comp=Z,3µm,20.0s
**AAM Ann Arbor 73.21 351** P **P 06 48 33.5 +0.1**
baz=170
AAM S **S 06 57 57.6 -3.9**
baz=170
**N38A Joes South For 73.59 343** P **P 06 48 34.0 -1.8**
N38A IAmb IAmb 06 48 46.5
comp=Z,77nm,0.9s
**LIC Lamto 73.62 72** *e*P **P 06 48 38.9 +2.3**
comp=Z,162nm,1.3s
**CBKS Cedar Bluff 73.63 338** P **P 06 48 33.0 -3.1**
CBKS pmax pmax
comp=Z,71nm,1.1s
**CBKS Cedar Bluff 73.63 338** P **P 06 48 33.0 -3.1**
CBKS IAmb IAmb 06 48 46.9
comp=Z,71nm,1.1s
**CBKS Cedar Bluff 73.63 338** ⇑P **P 06 48 38.1 +2.0**
CBKS ⇓P **pwP 06 48 45.0 +3.0**
**CBKS Cedar Bluff 73.63 338** P **P 06 48 36.5 +0.4**
baz=155,SNR=12
CBKS S **S 06 58 06.5 -0.1**
baz=155
**L44A Lake County Fo 73.77 348** P **P 06 48 36.7 0.0**
baz=166
L44A S **SKiKP 06 58 03.8 -2.7**
baz=166
**T25A Trinidad 73.81 333** P P 06 48 32.5 -4.9
T25A IAmb IAmb 06 48 48.9
comp=Z,78nm,1.2s
**T25A Trinidad 73.81 333** P **P 06 48 38.2 +0.8**
baz=151,SNR=13
T25A S **S 06 58 11.5 +2.5**
baz=151
**TIC Toumodi 73.86 72** *e*P **P 06 48 40.4 +2.4**
**KIC Kosan Boka 73.93 72** *e*P **P 06 48 38.4 0.0**
comp=Z,63nm,0.8s
**DBIC Dimbokro 74.01 72** P **P 06 48 39.0 +0.2**
comp=Z,46nm,1.0s,baz=240,slow=5.6,SNR=22
DBIC LR LR 07 18 54.1
comp=Z,17µm,19.4s,baz=232,slow=34
**DBIC Dimbokro 74.01 72** P **P 06 48 37.0 -1.8**
DBIC IAmb IAmb 06 48 43.0
comp=Z,85nm,1.1s
**N35A Tabor 74.28 342** P P 06 48 33.3 -6.5
N35A IAmb IAmb 06 48 50.3
comp=Z,71nm,0.9s
**W18A Petrified Fore 74.31 329** P **P 06 48 36.0 -4.3**
W18A IAmb IAmb 06 48 52.5
comp=Z,158nm,1.5s
**W18A Petrified Fore 74.31 329** P **P 06 48 39.5 -0.8**
baz=147,SNR=15
W18A S **S 06 58 17.3 +2.6**
baz=147
**L40A Anamosa 74.33 345** P **P 06 48 36.1 -3.9**
L40A IAmb IAmb 06 49 02.8
comp=Z,71nm,1.1s
**LBNH Lisbon 74.35 0** P **P 06 48 40.6 +0.5**
baz=180
LBNH S **S 06 58 19.7 +5.4**
baz=180
**SCIA State Center 74.64 344** P **P 06 48 42.4 +0.5**
baz=161
SCIA S **S 06 58 16.6 -1.0**
baz=161
**SDCO Great Sand Dun 74.76 333** P **P 06 48 38.9 -4.2**
**SDCO Great Sand Dun 74.76 333** P **P 06 48 42.9 -0.1**
baz=151,SNR=14
SDCO S **S 06 58 22.6 +2.9**
baz=151
**LONY Lake Ozonia 74.77 358** P **P 06 48 39.9 -2.6**
**LONY Lake Ozonia 74.77 358** P **P 06 48 43.5 +0.9**
baz=178
LONY S **S 06 58 20.6 +1.6**
baz=178
**KSCO Kaye Shedlock' 74.80 336** P **P 06 48 42.9 -0.1**
baz=153
KSCO S **S 06 58 21.8 +2.0**
baz=153
**Y14A Wickenburg 74.87 326** P **P 06 48 39.8 -3.7**
**JFWS Jewell Farm 74.93 346** P **P 06 48 40.1 -3.5**
JFWS pmax pmax
comp=Z,157nm,1.7s
**JFWS Jewell Farm 74.93 346** P **P 06 48 40.1 -3.5**
JFWS IAmb IAmb 06 48 55.3
comp=Z,157nm,1.7s
**JFWS Jewell Farm 74.93 346** P **P 06 48 44.0 +0.5**
baz=164
JFWS S **S 06 58 18.4 -2.5**
baz=164
**GLA Glamis 75.07 324** P **P 06 48 44.8 +0.2**
baz=143
GLA S **S 06 58 27.6 +4.6**
baz=143
**SADO Sadowa 75.16 355** LR LR 07 23 57.4
comp=Z,2µm,20.1s,baz=178,slow=37
**K38A Parkersburg 75.23 344** P P 06 48 39.8 -5.4
K38A IAmb IAmb 06 48 56.8
comp=Z,138nm,1.7s
**S22A 4UR Ranch, Cre 75.29 332** P **P 06 48 46.1 0.0**
baz=150,SNR=6.5
S22A S **S 06 58 27.9 +2.2**
baz=150
**WUAZ Wupatki 75.38 328** P **P 06 48 44.0 -2.5**
WUAZ IAmb IAmb 06 48 58.2
comp=Z,81nm,1.1s
**WUAZ Wupatki 75.38 328** P **P 06 48 47.6 +1.1**
baz=146,SNR=20
WUAZ S **S 06 58 29.8 +3.2**
baz=146
**PKME Peaks-Kenny Pk 75.41 2** P **P 06 48 47.7 +1.5**
baz=182
**IKP In-Ko-Pah, Jac 75.42 323** P **P 06 48 46.4 -0.3**
baz=142
IKP S **S 06 58 31.4 +4.4**
baz=142
**SWSC Sam W. Stewart 75.49 323** P **P 06 48 46.9 -0.1**
baz=142
SWSC S **S 06 58 33.7 +6.2**
baz=142
**BGNE Belgrade 75.50 340** P P 06 48 40.6 -6.3
BGNE IAmb IAmb 06 48 58.0
comp=Z,90nm,1.0s
**BGNE Belgrade 75.50 340** P **P 06 48 47.7 +0.8**
baz=157
BGNE S **S 06 58 24.5 -2.9**
baz=157
**L34A Svendsen Farm, 75.51 341** P P 06 48 39.5 -7.5
L34A IAmb IAmb 06 48 57.5
comp=Z,58nm,0.8s
**MVCO Mesa Verde 75.52 331** IAMs_20 IAMs_20 07 19 06.5
comp=Z,4µm,19.0s
**MVCO Mesa Verde 75.52 331** P **P 06 48 48.3 +0.9**
baz=148,SNR=13
MVCO S **S 06 58 30.0 +1.8**
baz=148
**I42A Draeger Farm, 75.61 347** P **P 06 48 43.6 -3.8**
I42A IAmb IAmb 06 49 00.1
comp=Z,189nm,1.9s
**Q24A Divide 75.68 334** P **P 06 48 49.6 +1.3**
baz=151,SNR=25
Q24A S **S 06 58 32.5 +2.4**
baz=151
**PDMCI Parker Dam,Lak 75.72 325** S **S 06 58 34.7 +4.7**
baz=143
**MONP2 Monument Peak 75.78 323** P **P 06 48 48.1 -0.8**
baz=142
MONP2 S **S 06 58 33.4 +2.3**
baz=142
**GLMI Grayling 75.82 351** IAMs_20 IAMs_20 07 25 02.6
comp=Z,3µm,19.0s
**GLMI Grayling 75.82 351** S **S 06 58 26.9 -3.8**
baz=169
**BC3 Big Chuckawall 75.87 324** P **P 06 48 51.0 +1.7**
baz=142,SNR=17
BC3 S **S 06 58 38.1 +6.2**
baz=142
**MATJ Matjiesfontein 75.91 120** *e*P **P 06 48 49.5 -0.3**
MATJ IAmb IAmb 06 48 53.0
comp=Z,102nm,1.0s
**CVNA Calvinia 76.11 118** *e*P **P 06 48 50.6 -0.3**
CVNA IAmb IAmb 06 49 04.8
comp=Z,52nm,1.0s
**IRM Iron Mountain 76.11 324** P **P 06 48 52.2 +1.7**
baz=143,SNR=7.4
IRM S **S 06 58 38.4 +3.9**
baz=143
**109C Camp Elliot, M 76.13 322** IAMs_20 IAMs_20 07 16 14.9
comp=Z,3µm,19.0s

**109C Camp Elliot, M 76.13 322** P **P** **06 48 51.7 +1.1**
baz=141
109C S **S** **06 58 37.3 +2.7**
baz=141
**OGNE Ogallala 76.31 337** P **P** **06 48 52.7 +1.1**
baz=154
OGNE S **S** **06 58 37.6 +1.2**
baz=154
**NEE2 Needles Airpor 76.33 325** S **S** **06 58 38.5 +1.8**
baz=143
**TPFO Pinon Flats 76.35 323** P **P** **06 48 52.9 +0.8**
baz=142
TPFO S **S** **06 58 41.2 +3.9**
baz=142
**PFO Pinyon Flats O 76.36 323** LR LR 07 15 58.4
comp=Z,2µm,19.7s,baz=138,slow=31
**PFO Pinyon Flats O 76.36 323** IAMs_20 IAMs_20 07 15 53.8
comp=Z,3µm,19.0s
**PFO Pinyon Flats O 76.36 323** P **P** **06 48 52.7 +0.6**
baz=142,SNR=12
PFO S **S** **06 58 40.5 +3.1**
baz=142
**BELC Belle Mtn. Jos 76.42 324** P **P** **06 48 53.6 +1.2**
baz=142
BELC S **S** **06 58 42.7 +4.7**
baz=142
**PV13 Radium Mtn., P 76.46 331** P P 06 48 47.0 -5.8
PV13 IAmb IAmb 06 49 04.0
comp=Z,42nm,1.0s
**SUR Sutherland 76.49 120** P **P** **06 48 54.6 +1.4**
comp=Z,34nm,0.9s,baz=248,slow=3.3,SNR=10.0
SUR LR LR 07 21 05.0
comp=Z,7µm,18.0s,baz=240,slow=35
**SUR Sutherland 76.49 120** IAMs_20 IAMs_20 07 20 37.6
comp=Z,7µm,19.0s
**MAW Mawson 76.54 164** LR LR 07 21 46.5
comp=Z,10µm,20.9s,baz=226,slow=35
**U15A North Rim 76.56 328** P **P** **06 48 49.3 -4.0**
**ISCO Idaho Springs 76.59 334** P P 06 48 47.9 -5.6
ISCO pmax pmax
comp=Z,28nm,1.0s
**ISCO Idaho Springs 76.59 334** P P 06 48 47.9 -5.6
**ISCO Idaho Springs 76.59 334** P **P** **06 48 54.5 +1.1**
baz=151,SNR=30
ISCO S **S** **06 58 42.1 +2.1**
baz=151
**PV07 Paradox Valley 76.62 331** P P 06 48 47.2 -6.4
**I37A Lemond, Waseca 76.68 344** P P 06 48 47.9 -5.6
**MURC Murrieta 76.73 322** P **P** **06 48 54.9 +0.8**
baz=141
MURC S **S** **06 58 44.4 +3.2**
baz=141
**K31A O'Neill 76.80 340** P P 06 48 48.2 -6.1
**GMRC Granite Mounta 76.87 324** P **P** **06 48 56.8 +1.8**
baz=142,SNR=12
GMRC S **S** **06 58 46.0 +3.1**
baz=142
**SCI2 San Clemente I 76.97 321** P **P** **06 48 56.6 +1.1**
baz=140
**BBRC Big Bear Solar 77.10 323** P **P** **06 48 57.8 +1.4**
baz=141
BBRC S **S** **06 58 49.5 +3.9**
baz=141
**ECSD EROS Data Cent 77.22 342** P **P** **06 48 53.9 -2.6**
ECSD IAmb IAmb 06 49 07.7
comp=Z,51nm,0.9s
**ECSD EROS Data Cent 77.22 342** P **P** **06 48 57.5 +0.9**
baz=158
ECSD S **S** **06 58 45.8 -0.2**
baz=158
**CIS Catalina Islan 77.23 322** P **P** **06 48 57.8 +0.9**
baz=140
**D62A Allapoint, All 77.23 2** P **P** **06 48 55.2 -1.4**
D62A IAmb IAmb 06 49 12.0
comp=Z,51nm,1.1s
**HEC Hector,Ludlow 77.24 324** P **P** **06 48 58.7 +1.7**
baz=142,SNR=16
HEC S **S** **06 58 48.8 +2.0**
baz=142
**KNB Kanab 77.28 328** P P 06 48 52.1 -5.2
KNB pmax pmax
comp=Z,95nm,1.2s
**KNB Kanab 77.28 328** P P 06 48 52.1 -5.2
KNB IAmb IAmb 06 49 09.1
comp=Z,95nm,1.2s
**E46A Sault Ste Mari 77.29 351** P **P** **06 48 53.2 -3.7**
E46A IAmb IAmb 06 49 09.2
comp=Z,58nm,1.1s
**FMP Fort Macarthur 77.40 322** P **P** **06 48 57.5 -0.3**
baz=140
FMP S **S** **06 58 54.1 +5.7**
baz=140
**LCMT Little Creek M 77.47 327** P P 06 48 51.4 -7.0
**TUQ Turquoise Moun 77.51 325** P **P** **06 49 00.4 +1.8**
baz=142,SNR=5.7
TUQ S **S** **06 58 54.5 +4.6**
baz=142
**GRAN Grantham 77.54 120** *e*P **P** **06 49 00.2 +1.2**
GRAN IAmb IAmb 06 49 08.1
comp=Z,19nm,0.6s
**RRX Edison Barstow 77.62 323** P **P** **06 48 59.9 +0.9**
baz=142
**N23A Red Feather La 77.66 334** P **P** **06 49 00.9 +1.5**
baz=151,SNR=21
N23A S **S** **06 58 54.5 +2.9**
baz=151
**SPMN Marine on St. 77.69 345** P **P** **06 48 55.1 -4.0**
**SPMN Marine on St. 77.69 345** P **P** **06 49 01.0 +1.8**
baz=162
SPMN S **S** **06 58 51.1 +0.1**
baz=162
**SNCC San Nicolas Is 77.71 321** S **S** **06 58 57.0 +5.1**
baz=140
**RAR Rarotonga 77.75 253** LR LR 07 14 43.5
comp=Z,3µm,18.4s,baz=156,slow=29
**DECC Green Verdugo 77.84 322** P **P** **06 49 00.6 +0.3**
baz=140
DECC S **S** **06 58 55.1 +1.9**
baz=140
**GSC Goldstone, Bar 77.85 324** P **P** **06 49 02.1 +1.7**
baz=142,SNR=6.8
GSC S **S** **06 58 55.6 +2.1**
baz=142
**AUGR Augrabies 77.89 116** *e*P **P** **06 49 03.4 +2.5**
**O20A White River Ci 77.90 332** P **P** **06 49 02.2 +1.5**
baz=149,SNR=20
O20A S **S** **06 58 57.6 +3.6**
baz=149
**CCUT Cedar City 77.97 327** P **P** **06 48 57.2 -3.9**
**SRU San Rafael Swe 77.98 330** P **P** **06 48 56.9 -4.3**
SRU pmax pmax
comp=Z,31nm,1.0s
**SRU San Rafael Swe 77.98 330** P **P** **06 48 56.9 -4.3**
**Q16A Castle Valley 78.10 330** P **P** **06 48 58.5 -3.4**
**EDW2 Edwards Air Fo 78.14 323** P **P** **06 49 03.1 +1.1**
baz=141
EDW2 S **S** **06 58 56.0 -0.5**
baz=141
**P18A Preston Nutter 78.30 331** P **P** **06 48 59.0 -4.0**
P18A IAmb IAmb 06 49 15.0
comp=Z,53nm,1.0s
**OSI Osito Audit: C 78.32 322** P **P** **06 49 04.2 +1.2**
baz=140
**KEIM Keimoes 78.32 116** *e*P **P** **06 49 03.8 +0.4**
KEIM IAmb IAmb 06 49 16.8
comp=Z,20nm,0.8s
**P17A Butcher Ranch, 78.38 330** P **P** **06 49 00.1 -3.2**
**QSM Queen of Sheba 78.40 324** P P 06 48 58.0 -5.4
**TMUT Trail Mountain 78.43 330** P **P** **06 48 59.1 -4.8**
**LRMC Laurel Mtn Rad 78.44 323** P **P** **06 49 04.9 +1.2**
baz=141,SNR=6.1
LRMC S **S** **06 59 03.0 +3.1**
baz=141
**F36A Milaca 78.45 345** P **P** **06 48 59.8 -3.6**
**SUSD Miller 78.52 341** P **P** **06 49 06.2 +2.3**
baz=157
SUSD S **S** **06 58 59.7 -0.4**
baz=157
**D41A Chassel 78.61 349** P P 06 48 59.0 -5.2
D41A IAmb IAmb 06 49 18.3
comp=Z,70nm,0.9s
**UPI Upington 78.71 116** *e*P **P** **06 49 06.6 +1.1**
UPI IAmb IAmb 06 49 20.0
comp=Z,110nm,1.8s
**SBC Santa Barbara 78.72 321** P **P** **06 49 05.5 +0.4**
baz=140
**ARVC Arvin 78.77 322** P **P** **06 49 05.7 +0.3**
baz=140
ARVC S **S** **06 59 07.3 +4.2**
baz=140
**MPMC Manual Prospec 78.79 324** S **S** **06 59 06.0 +2.3**
baz=141
**FURC Furnace Creek, 78.79 325** P **P** **06 49 06.7 +1.2**
baz=142,SNR=6.2
FURC S **S** **06 59 08.3 +5.0**
baz=142
**RDMU Red Mountain 78.81 332** P **P** **06 49 02.3 -3.5**
RDMU IAmb IAmb 06 49 16.7
comp=Z,60nm,1.1s
**RWWY Rawlins 78.83 334** P P 06 48 59.4 -6.5
RWWY IAmb IAmb 06 49 17.7
comp=Z,74nm,0.9s
**TPNV Topopah Spring 78.87 325** P **P** **06 49 07.4 +1.3**
baz=142,SNR=12
TPNV S **S** **06 59 06.5 +2.0**
baz=142
**ISA Isabella, Lake 78.99 323** P **P** **06 49 07.7 +1.0**
baz=140,SNR=15
ISA S **S** **06 59 08.6 +2.9**
baz=140
**F33A 5 Mile Ranch, 79.09 343** P **P** **06 49 03.8 -3.1**
**PKM Mcpherson Peak 79.11 322** P **P** **06 49 07.5 0.0**
baz=140
PKM S **S** **06 59 12.2 +5.0**
baz=140
**KOWA Kowa 79.13 66** P **P** **06 49 06.5 -1.4**
**NLU North Lily Min 79.35 330** P P 06 49 03.0 -5.7
**CWC Cottonwood Cre 79.39 324** P **P** **06 49 09.3 +0.4**
baz=141
CWC S **S** **06 59 13.0 +3.0**
baz=141
**K22A Casper 79.40 335** P P 06 49 04.1 -4.8
K22A IAmb IAmb 06 49 20.2
comp=Z,101nm,1.2s
**K22A Casper 79.40 335** P **P** **06 49 09.8 +0.9**
baz=150
K22A S **S** **06 59 10.8 +0.9**
baz=150
**VES Vestal, Richgr 79.45 323** P **P** **06 49 09.9 +0.9**
baz=140,SNR=14
VES S **S** **06 59 12.2 +1.9**
baz=140
**GRAC Grapevine Rang 79.46 325** P **P** **06 49 10.1 +0.9**
baz=142,SNR=11
**SMMC Simmler 79.53 322** P **P** **06 49 10.0 +0.4**
baz=139
SMMC S **S** **06 59 13.7 +2.4**
baz=139
**R11A Troy Canyon, C 79.65 327** P **P** **06 49 12.0 +1.6**
baz=143,SNR=6.7
R11A S **S** **06 59 14.1 +1.4**
baz=143
**RSSD Black Hills 79.81 337** P **P** **06 49 12.1 +0.9**
baz=152
RSSD S **S** **06 59 14.9 +0.6**
baz=152
**SOE Somerset East 79.86 122** *e*P **P** **06 49 13.2 +1.5**
SOE IAmb IAmb 06 49 25.2
comp=Z,63nm,0.9s
**DUG Dugway, Tooele 79.87 329** IAMs_20 IAMs_20 07 19 45.5
comp=Z,4µm,22.0s
**DUG Dugway, Tooele 79.87 329** P **P** **06 49 12.8 +1.3**
baz=145,SNR=15
DUG S **S** **06 59 18.0 +3.1**
baz=145
**TIN Tinemaha, Big 79.94 324** S **S** **06 59 18.6 +2.9**
baz=141
**EYMN Ely 80.00 347** P **P** **06 49 11.9 +0.1**
baz=163
EYMN S **S** **06 59 12.0 -3.7**
baz=163
**TSUM Tsumeb 80.12 106** LR LR 07 20 30.0
comp=Z,12µm,19.6s,baz=232,slow=33
**TSUM Tsumeb 80.12 106** *e*P **P** **06 49 14.8 +1.4**
**BGU Big Grassy Mou 80.56 330** P P 06 49 09.7 -5.5
**PD31 Pinedale Array 80.65 333** P **P** **06 49 11.5 -4.2**
**PDAR Pinedale Array 80.65 333** P **P** **06 49 16.6 +0.9**
comp=Z,2.5nm,0.6s,baz=129,slow=6.7,SNR=18
PDAR LR LR 07 21 55.0
comp=Z,2µm,19.7s,baz=148,slow=33
**PDAR Pinedale Array 80.65 333** P **P** **06 49 11.2 -4.5**
**BW06 Boulder Array 80.66 333** P **P** **06 49 12.2 -3.6**
BW06 IAMs_20 IAMs_20 07 21 42.6
comp=Z,3µm,19.0s
**BW06 Boulder Array 80.66 333** P **P** **06 49 16.0 +0.3**
baz=148
BW06 S **S** **06 59 24.6 +1.3**
baz=148
**MLAC Mammoth, Mammo 80.69 324** P **P** **06 49 15.8 -0.3**
baz=140
**B35A Bob, Littlefor 80.86 345** P **P** **06 49 12.9 -3.5**
**E28A Huff 80.97 340** P **P** **06 49 12.4 -4.7**
**NVAR Mina Array Bea 81.04 325** P **P** **06 49 19.8 +1.9**
comp=Z,3.8nm,0.7s,baz=150,slow=5.2,SNR=24
NVAR LR LR 07 18 49.1
comp=Z,1µm,21.7s,baz=137,slow=31
**NVAR Mina Array Bea 81.04 325** P P 06 49 10.8 -7.1
**AHID Auburn Hatcher 81.27 332** IAMs_20 IAMs_20 07 23 04.8
comp=Z,3µm,18.0s
**AGMN Agassiz Nation 81.28 344** P P 06 49 13.3 -5.3
AGMN IAmb IAmb 06 49 40.0
comp=Z,28nm,0.3s
**AGMN Agassiz Nation 81.28 344** P **P** **06 49 19.2 +0.5**
baz=159
AGMN S **S** **06 59 24.8 -4.3**
baz=159
**ELK Elko 81.40 328** LR LR 07 22 34.6
comp=Z,1µm,18.8s,baz=142,slow=34
**ELK Elko 81.40 328** IAMs_20 IAMs_20 07 23 44.9
comp=Z,2µm,18.0s
**BOSA Boshof 81.66 118** P **P** **06 49 22.6 +1.1**
comp=Z,14nm,0.9s,baz=246,slow=3.9,SNR=10
BOSA LR LR 07 21 11.0
comp=Z,6µm,20.4s,baz=244,slow=32
**BOSA Boshof 81.66 118** *e*P **P** **06 49 22.8 +1.2**
BOSA IAmb IAmb 06 49 34.3
comp=Z,28nm,0.8s
**BOSA Boshof 81.66 118** P **P** **06 49 17.1 -4.4**
**LOHW Long Hollow 81.78 333** P P 06 49 15.7 -6.0
LOHW IAMs_20 IAMs_20 07 22 08.3
comp=Z,3µm,20.0s
**CMB Columbia Colle 81.79 323** P P 06 49 15.3 -6.4
CMB pmax pmax
comp=Z,17nm,1.2s
**CMB Columbia Colle 81.79 323** P P 06 49 15.3 -6.4
**TPAW Teton Pass 81.81 332** P **P** **06 49 17.7 -4.3**
**MDND Maddock 81.82 342** P **P** **06 49 22.1 +0.5**
baz=156
MDND S **S** **06 59 34.3 -0.4**
baz=156
**YERR Yerington 81.93 325** P P 06 49 16.8 -5.8
**MOOW Moose Ponds 81.95 333** IAMs_20 IAMs_20 07 22 23.8
comp=Z,3µm,20.0s
**FLWY Flagg Ranch 82.21 333** P P 06 49 18.0 -6.0
FLWY IAMs_20 IAMs_20 07 22 33.8
comp=Z,3µm,20.0s
**H17A Grant Village 82.42 333** P **P** **06 49 25.5 +0.4**
baz=147
H17A S **S** **06 59 44.3 +2.8**
baz=147
**SWZ Schweizer 82.43 117** *e*P **P** **06 49 25.6 0.0**
SWZ IAmb IAmb 06 49 29.4
comp=Z,1µm,4.1s
**LKWY Lake 82.50 333** IAMs_20 IAMs_20 07 28 42.4
comp=Z,3µm,18.0s
**RLMT Red Lodge 82.54 334** P **P** **06 49 21.8 -3.9**
**RLMT Red Lodge 82.54 334** P **P** **06 49 26.2 +0.6**
baz=148
RLMT S **S** **06 59 41.6 -1.0**
baz=148
**MPK Martis Peak 82.56 324** P P 06 49 19.3 -6.7
MPK IAmb IAmb 06 49 38.8
comp=Z,53nm,1.3s
**LAO LASA Array 82.81 337** P **P** **06 49 27.3 +0.5**
baz=151
LAO S **S** **06 59 47.5 +2.6**
baz=151
**YMR Madison River 82.81 333** P P 06 49 21.6 -5.4
YMR IAmb IAmb 06 49 38.4
comp=Z,64nm,1.3s
**TORD Torodi Ar. Bea 82.95 70** P **P** **06 49 28.4 +0.3**
comp=Z,69nm,0.9s,baz=278,slow=4.8,SNR=75
**TORD Torodi Ar. Bea 82.95 70** P **P** **06 49 24.8 -3.4**
**ULM Lac du Bonnet 83.12 345** P **P** **06 49 28.5 +0.3**
comp=Z,7.1nm,0.8s,baz=156,slow=6.7,SNR=8.2
**ULM Lac du Bonnet 83.12 345** P **P** **06 49 24.3 -3.9**
ULM IAmb IAmb 06 49 41.4
comp=Z,64nm,1.4s
**HLID Hailey 83.31 330** IAMs_20 IAMs_20 07 21 48.5
comp=Z,3µm,22.0s
**HLID Hailey 83.31 330** P **P** **06 49 29.9 +0.3**
baz=144
HLID S **S** **06 59 55.9 +5.5**
baz=144
**CASY Casey 83.54 181** P **P** **06 49 26.2 -4.2**
CASY IAmb IAmb 06 49 42.6
comp=Z,73nm,1.2s
**CASY Casey 83.54 181** IAMs_20 IAMs_20 07 27 23.2
comp=Z,5µm,18.0s
**MCMT McKenzie Canyo 83.69 332** P P 06 49 26.7 -4.9
**DGMT Dagmar 83.72 339** P P 06 49 26.3 -5.1
DGMT IAmb IAmb 06 49 42.9
comp=Z,64nm,0.9s
**DGMT Dagmar 83.72 339** P **P** **06 49 32.2 +0.8**
baz=153
DGMT S **S** **06 59 54.5 +0.4**
baz=153
**LBTB Lobatse 83.73 115** LR LR 07 23 28.6
comp=Z,11µm,18.6s,baz=232,slow=33
**LBTB Lobatse 83.73 115** *e*P **P** **06 49 33.4 +1.1**
LBTB IAmb IAmb 06 49 45.6
comp=Z,148nm,1.8s
**LBTB Lobatse 83.73 115** P **P** **06 49 28.7 -3.6**
LBTB pmax pmax
comp=Z,35nm,1.0s
**LBTB Lobatse 83.73 115** P **P** **06 49 28.7 -3.6**
LBTB IAmb IAmb 06 49 47.5
comp=Z,35nm,0.9s
**SNKL Senekal, Frees 83.74 119** *e*P **P** **06 49 35.0 +2.5**
SNKL IAmb IAmb 06 49 47.5
comp=Z,192nm,1.4s
**MFID Camas Ranch 83.80 329** IAMs_20 IAMs_20 07 22 53.4
comp=Z,3µm,20.0s
**BOZ Bozeman (W) 83.84 333** IAMs_20 IAMs_20 07 23 16.9
comp=Z,2µm,18.0s
**BOZ Bozeman (W) 83.84 333** P **P** **06 49 32.7 +0.5**
baz=146
BOZ S **S** **06 59 55.7 +0.1**
baz=146
**DLMT Dillon 84.03 333** P P 06 49 27.8 -5.4
DLMT IAmb IAmb 06 49 44.8
comp=Z,42nm,1.3s
**PRYS Parys 84.12 118** *e*P **P** **06 49 35.0 +0.6**
**WVOR Wild Horse Val 84.30 327** P P 06 49 28.9 -5.7
WVOR pmax pmax
comp=Z,34nm,1.4s
**WVOR Wild Horse Val 84.30 327** P P 06 49 28.9 -5.7
WVOR IAMs_20 IAMs_20 07 23 36.5
comp=Z,3µm,18.0s
**KSR Koster 84.31 117** *e*P **P** **06 49 37.3 +1.9**
KSR IAmb IAmb 06 49 50.6
comp=Z,48nm,1.1s
**O02D Mt. Diablo Mer 84.63 323** IAMs_20 IAMs_20 07 20 23.0
comp=Z,2µm,21.0s
**O02D Mt. Diablo Mer 84.63 323** P **P** **06 49 35.9 -0.4**
baz=138
O02D S **S** **07 00 05.8 +2.2**
baz=138
**MOD Modoc Plateau 84.68 326** P P 06 49 31.5 -5.1
MOD IAmb IAmb 06 49 46.9
comp=Z,58nm,1.5s
**J08A Circle Bar Ran 84.94 328** P P 06 49 32.3 -5.5
J08A IAmb IAmb 06 49 49.5
comp=Z,65nm,1.1s
**SCHQ Schefferville 85.06 3** P **P** **06 49 38.3 +0.2**
comp=Z,3.3nm,0.8s,baz=193,slow=6.3,SNR=5.8
SCHQ LR LR 07 28 03.2
comp=Z,1µm,20.8s,baz=179,slow=36
**SCHQ Schefferville 85.06 3** P **P** **06 49 33.4 -4.7**
SCHQ IAmb IAmb 06 50 14.7
comp=Z,58nm,1.5s
**N02D Trinity Center 85.18 324** P **P** **06 49 38.9 -0.2**
baz=138
N02D S **S** **07 00 10.1 +1.0**
baz=138
**EGMT Eagleton 85.18 336** P **P** **06 49 39.6 +0.7**
baz=148
EGMT S **S** **07 00 08.9 +0.1**
baz=148
**PLID Pearl Lake 85.21 330** P P 06 49 33.8 -5.5
PLID IAmb IAmb 06 49 49.2
comp=Z,42nm,1.2s
PLID IAMs_20 IAMs_20 07 24 36.8
comp=Z,2µm,18.0s
**M04C Macdoel 85.34 325** P **P** **06 49 40.1 +0.2**
baz=139
**SLR Silverton 85.44 117** *e*P **P** **06 49 43.9 +2.9**
SLR IAmb IAmb 06 49 56.4
comp=Z,75nm,1.7s
**M02C Callahan 85.56 324** P **P** **06 49 41.5 +0.5**
baz=138
M02C S **S** **07 00 12.0 -0.9**
baz=138
**BMO Blue Mountains 85.59 330** P P 06 49 36.0 -5.0
BMO pmax pmax
comp=Z,26nm,1.4s
**BMO Blue Mountains 85.59 330** P P 06 49 36.0 -5.0
BMO IAMs_20 IAMs_20 07 24 37.8
comp=Z,3µm,18.0s
**NWCL Newcastle 85.62 120** *e*P **P** **06 49 42.9 +1.0**
NWCL IAmb IAmb 06 49 54.5
comp=Z,22nm,0.9s
**MXZ Matakaoa Point 85.72 229** IAMs_20 IAMs_20 07 20 09.6
comp=Z,4µm,18.0s
**YBH Yreka Blue Hor 85.74 324** LR LR 07 21 42.0
comp=Z,1µm,21.2s,baz=144,slow=31
**ODZ Otahua Downs 85.75 219** IAMs_20 IAMs_20 07 21 49.0
comp=Z,5µm,18.0s
**SNZO South Karori 85.75 224** IAMs_20 IAMs_20 07 22 35.1
comp=Z,3µm,19.0s
**MSO Missoula 85.76 333** IAMs_20 IAMs_20 07 25 53.7
comp=Z,3µm,18.0s
**MSO Missoula 85.76 333** P **P** **06 49 42.7 +0.8**
baz=145
MSO S **S** **07 00 16.5 +1.9**
baz=145
**L04D Klamath Falls 85.90 325** P **P** **06 49 43.6 +0.9**
baz=138
L04D S **S** **07 00 17.8 +1.5**
baz=138
**K04D Chiloquin, OR 85.93 326** S **S** **07 00 18.3 +1.8**
baz=139
**BKZ Black Stump Fm 85.94 226** IAMs_20 IAMs_20 07 18 26.1
comp=Z,5µm,20.0s
**URZ Urewera 86.08 227** P **P** **06 49 43.4 -0.4**
comp=Z,7.8nm,0.9s,baz=129,slow=8.4,SNR=1.2
URZ LR LR 07 20 41.7
comp=Z,3µm,19.2s,baz=151,slow=30
**URZ Urewera 86.08 227** P P 06 49 38.7 -5.1
URZ IAmb IAmb 06 50 25.5
comp=Z,85nm,1.7s
URZ IAMs_20 IAMs_20 07 20 12.0
comp=Z,3µm,19.0s
**J05D Fort Rock, OR 86.18 326** P **P** **06 49 46.2 +2.1**
baz=139
**RPZ Rata Peaks 86.37 220** P **P** **06 49 47.3 +2.2**
baz=160,slow=5.6
RPZ LR LR 07 20 08.8
comp=Z,5µm,19.9s,baz=128,slow=30
**RPZ Rata Peaks 86.37 220** P **P** **06 49 47.3 +2.2**
**RPZ Rata Peaks 86.37 220** IAmb IAmb 06 50 05.0
comp=Z,81nm,1.2s
RPZ IAMs_20 IAMs_20 07 19 49.2
comp=Z,6µm,21.0s
**LBZ Lake Benmore 86.42 219** IAMs_20 IAMs_20 07 20 59.9
comp=Z,5µm,20.0s
**PINE Pine Mountain 86.42 327** P P 06 49 39.9 -5.4
PINE IAmb IAmb 06 49 56.0
comp=Z,37nm,1.0s
**L02E Cave Junction 86.50 324** P **P** **06 49 48.1 +2.5**
baz=138
**J04D Umpqua Nationa 86.57 326** P **P** **06 49 48.2 +2.1**
baz=139
J04D S **S** **07 00 25.2 +2.3**
baz=139
**NNZ Nelson 86.60 223** IAMs_20 IAMs_20 07 19 13.5
comp=Z,3µm,19.0s
**JTMT Jette 86.65 333** P P 06 49 39.5 -6.7
**G08A Pilot Rock 86.66 329** P P 06 49 40.3 -6.0
**K02D Willamette Mer 86.93 325** P **P** **06 49 49.0 +1.3**
baz=137

K02D S **S** 07 00 28.8 +2.6
baz=137
**I05D Terrebonne, OR** 87.02 327 P **P** 06 49 50.2 +2.1
baz=139
I05D S **S** 07 00 31.5 +4.6
baz=139
**PYZ Puysegur Point** 87.11 216 IAMs_20 IAMs_20 07 25 50.0
comp=Z,4µm,18.0s
**I04A Tendick Farm,** 87.13 326 P **P** 06 49 50.1 +1.5
baz=138
**FOZ Fox Glacier** 87.18 220 IAMs_20 IAMs_20 07 23 54.8
comp=Z,5µm,18.0s
**POGA Pongola** 87.18 120 *e*P **P** 06 49 53.8 +4.4
POGA IAmb IAmb 06 50 04.7
comp=Z,71nm,1.6s
**DCZ Deep Cove** 87.33 217 IAMs_20 IAMs_20 07 20 29.0
comp=Z,5µm,20.0s
**HIZ Hauiti** 87.35 226 IAMs_20 IAMs_20 07 23 42.5
comp=Z,4µm,18.0s
**J01E Myrtle Point** 87.41 325 P **P** 06 49 50.8 +1.0
baz=137
J01E S **S** 07 00 33.7 +3.2
baz=137
**I03D Drain, OR** 87.51 325 P **P** 06 49 51.6 +1.2
baz=138
I03D S **S** 07 00 30.8 -0.6
baz=138
**G05D Wamic, OR** 87.69 328 P **P** 06 49 53.4 +2.2
baz=139
G05D S **S** 07 00 36.3 +3.0
baz=139
**HAWA Hanford** 87.77 329 IAMs_20 IAMs_20 07 25 07.4
comp=Z,3µm,21.0s
**H04D Lebanon** 87.83 326 P **P** 06 49 53.9 +2.0
baz=138
**RAO Raoul Island** 87.83 237 LR LR 07 20 00.1
comp=Z,2µm,21.9s,baz=128,slow=29
**AVE Averroes** 87.99 49 P **P** 06 49 50.4 -2.5
AVE S **SKSac** 07 00 25.1 +3.6
**I02E Swisshome, OR** 88.06 325 S **S** 07 00 37.2 +0.5
baz=137
**CNG Changalane** 88.12 119 *e*P **P** 06 49 54.3 +0.4
CNG IAmb IAmb 06 50 07.2
comp=Z,11nm,1.1s
**NEW Newport** 88.20 332 LR LR 07 26 39.9
comp=Z,3µm,18.0s,baz=135,slow=34
**NEW Newport** 88.20 332 IAMs_20 IAMs_20 07 26 29.2
comp=Z,3µm,18.0s
**NEW Newport** 88.20 332 P **P** 06 49 55.2 +1.6
baz=142
NEW S **S** 07 00 35.7 -2.3
baz=142
**F05D White Salmon** 88.25 328 S **S** 07 00 41.1 +2.6
baz=139
**MSNA Messina** 88.58 115 *e*P **P** 06 49 56.4 +0.2
MSNA IAmb IAmb 06 50 11.5
comp=Z,37nm,1.4s
**G03D McMinnville, O** 88.59 327 P **P** 06 49 56.9 +1.5
baz=138
G03D S **S** 07 00 43.1 +1.4
baz=138
**BLWY Bulawayo** 88.63 112 *e*P **P** 06 49 59.1 +2.5
BLWY IAmb IAmb 06 50 11.0
comp=Z,201nm,1.8s
**FFC Flin Flon** 88.70 343 P **P** 06 49 52.3 -3.4
FFC pmax pmax
comp=Z,18nm,1.3s
**FFC Flin Flon** 88.70 343 P **P** 06 49 52.3 -3.4
**MOPA Mopani** 89.02 117 *e*P **P** 06 50 01.5 +3.3
MOPA IAmb IAmb 06 50 14.4
comp=Z,2.7nm,1.5s
**F04D Rainier, OR** 89.11 327 S **S** 07 00 49.3 +2.7
baz=138
**B08A Colville Reser** 89.20 331 P P 06 49 53.2 -5.1
**E04D Cinebar** 89.26 328 P **P** 06 49 59.0 +0.5
baz=138
**PFVI Vila Bisbo** 89.51 45 *e*S S 07 00 41.0 -10
**C06D Leavenworth** 89.53 330 S **S** 07 00 49.8 -0.7
baz=140
**MDT Midelt** 89.55 51 LR LR 07 29 28.8
comp=Z,5µm,20.8s,baz=241,slow=35
**IFR Ifrane** 89.63 50 P **P** 06 50 01.4 +0.6
IFR S **SKSac** 07 00 37.1 +5.5
**MORF Marmelete** 89.72 45 *e*P **P** 06 50 02.1 +1.1
MORF *e*SKSac **SKSac** 07 00 32.5 +0.7
MORF IAMs_20 IAMs_20 07 31 41.1
comp=Z,8µm,19.6s
**MORF Marmelete** 89.72 45 *e*S SKSac 07 00 44.3 +13
**MORF Marmelete** 89.72 45 *e*P **P** 06 50 02.1 +1.1
MORF *e* 07 00 32.4
**D04E Lakebay** 89.81 328 P **P** 06 50 01.4 +0.3
baz=138
D04E S **S** 07 00 55.9 +2.9
baz=138
**PTEO Sao Teotonio** 89.83 45 *e*P **P** 06 50 03.0 +1.5
comp=Z,76nm,1.4s
**PBDV Barranco-do-Ve** 90.13 46 *e*P **P** 06 50 05.1 +2.2
comp=Z,66nm,1.3s
**PBDV Barranco-do-Ve** 90.13 46 *e*S **SKSac** 07 00 43.6 +10
**D03D Eldon** 90.22 328 P **P** 06 50 04.7 +1.6
baz=138
**PCVE Castro Verde** 90.31 45 *e*P **P** 06 50 07.5 +3.8
**PCVE Castro Verde** 90.31 45 *e*S **SKSac** 07 00 45.5 +10
**PNCL Nicolau / Gran** 90.31 45 *e*P **P** 06 50 07.4 +3.7
**PNCL Nicolau / Gran** 90.31 45 *e*S **SKSac** 07 00 40.6 +5.6
**LIS Lisbon** 90.32 44 *e*SKSac **SKSac** 07 00 35.9 +0.8
LIS IAMs_20 IAMs_20 07 31 33.0
comp=Z,6µm,19.8s
**B05A Bryant** 90.32 329 P **P** 06 50 05.0 +1.6
baz=139
B05A S **S** 07 00 56.4 -1.3
baz=139
**MESJ Messejana** 90.33 45 *e*P **P** 06 50 04.9 +1.1
MESJ *e*SKSac **SKSac** 07 00 36.0 +0.9
MESJ IAMs_20 IAMs_20 07 30 17.1
comp=E,6µm,19.9s
**MESJ Messejana** 90.33 45 *e*P **P** 06 50 04.9 +1.1
MESJ *e* 07 00 35.9
**PVAQ Vaqueiros** 90.36 46 *e*S SKSac 07 00 47.4 +12
**PVAQ Vaqueiros** 90.36 46 *e*LQ LQ 07 19 29.7
PVAQ *e*LR LR 07 23 28.5
comp=E,6µm,18.0s
**PMAFR Mafra** 90.39 44 *e*S SKSac 07 00 46.8 +11
**SFS San Fernando** 90.73 47 P **P** 06 50 04.1 -1.5
SFS S **SKSac** 07 00 46.0 +8.5
**EDM Edmonton** 90.78 337 P **P** 06 50 01.1 -4.5
EDM pmax pmax
comp=Z,19nm,1.2s
**EDM Edmonton** 90.78 337 P **P** 06 50 01.1 -4.5
**ARNO Arenosillo** 90.79 47 P **P** 06 50 05.9 0.0
ARNO S **SKSac** 07 00 46.3 +8.6
**LSZ Lusaka** 90.84 108 LR LR 07 28 05.4
comp=Z,10µm,18.8s,baz=240,slow=34
**LSZ Lusaka** 90.84 108 P P 06 50 01.7 -5.3
LSZ pmax pmax
comp=Z,43nm,1.6s
**LSZ Lusaka** 90.84 108 P P 06 50 01.7 -5.2
LSZ IAmb IAmb 06 50 13.2
comp=Z,43nm,1.6s
**EVO Evora** 90.89 45 P **P** 06 50 03.2 -3.2
EVO S **SKSac** 07 00 47.8 +9.4
**CEU Ceuta** 90.91 48 P **P** 06 50 06.0 -0.6
CEU S **SKSac** 07 00 43.1 +4.6
**PSBE So Bento** 91.04 44 *e*S **SKSac** 07 00 49.6 +10
**PMTG Montargil** 91.10 44 *e*P **P** 06 50 08.8 +1.5
comp=Z,41nm,1.4s
**PMTG Montargil** 91.10 44 *e*S **SKSac** 07 00 49.8 +10
**AFI Afiamalu** 91.29 253 LR LR 07 20 38.8
comp=Z,4µm,22.0s,baz=116,slow=29
**PESTR Estremoz** 91.36 45 *e*P **P** 06 50 11.1 +2.5
comp=Z,32nm,1.4s
**PESTR Estremoz** 91.36 45 *e*S **SKSac** 07 00 48.8 +7.8
**PESTR Estremoz** 91.36 45 P **P** 06 50 05.2 -3.4
**COI Coimbra** 91.71 43 *e*S **SKSac** 07 00 51.8 +8.9
**PMRV Marv??o** 91.83 44 *e*P **P** 06 50 13.3 +2.5
comp=Z,37nm,1.5s
**PMRV Marv??o** 91.83 44 *e*S **SKSac** 07 00 53.4 +10
**PMRV Marv??o** 91.83 44 *e*LR LR 07 23 36.7
comp=Z,6µm,18.0s
**PCBR Castelo Branco** 92.04 44 *e*P **P** 06 50 14.5 +2.8
**EMAL Malaga-Limoner** 92.04 48 P **P** 06 50 15.1 +3.3
EMAL S **SKSac** 07 00 51.5 +6.5
**MTE Manteigas** 92.35 44 *e*P **P** 06 50 15.9 +2.7
comp=Z,32nm,1.7s
**MTE Manteigas** 92.35 44 *e*S **SKSac** 07 00 57.0 +10
**MTE Manteigas** 92.35 44 *e*LQ LQ 07 20 02.3
MTE *e*LR LR 07 24 06.5
comp=Z,7µm,20.0s
**POLO Lamas de Olo** 92.81 43 *e*S SKSac 07 01 01.6 +12
**PGAV Gavieira, Arco** 92.91 42 *e*S **SKSac** 07 00 56.1 +6.3
**PGAV Gavieira, Arco** 92.91 42 *e*LQ LQ 07 20 09.3
PGAV *e*LR LR 07 24 12.3
comp=Z,7µm,18.0s
**MVO Moncorvo** 93.13 43 *e*P P 06 50 22.1 +5.3
**MVO Moncorvo** 93.13 43 *e*S **SKSac** 07 00 54.5 +3.5
**MVO Moncorvo** 93.13 43 *e*LQ LQ 07 20 06.5
MVO *e*LR LR 07 22 51.3
comp=Z,8µm,18.0s
**FRB Frobisher Bay** 93.93 2 P **P** 06 50 20.9 +1.2
comp=Z,1.0nm,0.8s,baz=146,slow=3.6,SNR=1.8
FRB LR LR 07 34 10.6
comp=Z,2µm,21.0s,baz=166,slow=36
**FRB Frobisher Bay** 93.93 2 P **P** 06 50 21.0 +1.2
**ESDC Sonseca Array** 94.08 46 P **P** 06 50 22.1 +0.9
comp=Z,3.8nm,1.1s,baz=243,slow=6.1,SNR=8.6
ESDC LR LR 07 32 45.2
comp=Z,6µm,18.1s,baz=229,slow=36
**CART Cartagena** 94.74 49 P **P** 06 50 26.3 +2.2
CART S **SKSac** 07 01 04.0 +4.3
**CART Cartagena** 94.74 49 IAMs_20 IAMs_20 07 34 26.1
comp=Z,3µm,20.0s
**UCM Universidad Co** 94.90 46 P **P** 06 50 27.5 +2.6
UCM S **SKSac** 07 01 05.8 +5.2
**BBB Bella Bella** 95.83 329 LR LR 07 28 34.0
comp=Z,685nm,21.5s,baz=124,slow=32
**MSVF Nonsavu** 97.39 245 LR LR 07 23 40.2
comp=Z,2µm,21.8s,baz=132,slow=29
**SFJD Kangerlussuaq** 98.50 8 LR LR 07 35 19.1
comp=Z,1µm,20.6s,baz=194,slow=36
**YKA Yellowknife Ar** 98.74 341 P **P** 06 50 41.1 -0.5
comp=Z,1.0nm,0.7s,baz=142,slow=4.4,SNR=17
**YKA Yellowknife Ar** 98.74 341 P P 06 50 35.9 -5.8
**ANGG Ammassalik, Gr** 99.38 14 IAMs_20 IAMs_20 07 33 47.9
comp=Z,3µm,22.0s
**MAHO Mahon** 99.45 49 P **Pdif** 06 50 40.7 -4.7
MAHO S **SKSac** 07 01 33.9 +10
**DZM Mont Dzumac** 103.37 234 *e*PP **PKiKP** 06 55 22.5 -0.2
comp=Z,194nm,26.9s
**DZM Mont Dzumac** 103.37 234 *e*PS PS 07 04 28.7 +0.5
comp=Z,1µm,26.2s
DZM *e*SS SS 07 10 04.2 +1.7
comp=Z,4µm,30.5s
**DZM Mont Dzumac** 103.37 234 *e*LQ LQ 07 20 38.5
comp=Z,4µm,34.6s
DZM *e*LR LR 07 25 00.4
comp=Z,7µm,24.6s
**CAN Canberra** 104.05 214 IAMs_20 IAMs_20 07 29 29.6
comp=Z,2µm,19.0s
**M31M Drury Creek, Y** 104.97 335 IAMs_20 IAMs_20 07 37 08.9
comp=Z,2µm,18.0s
**ECH Echery** 105.43 43 IAMs_20 IAMs_20 07 42 46.3
comp=Z,4µm,18.0s
**BFO Black Forest** 106.17 43 IAMs_20 IAMs_20 07 42 59.2
comp=Z,2µm,20.0s
**C36M Paulatuk** 106.47 343 IAMs_20 IAMs_20 07 42 42.4
comp=Z,2µm,21.0s
**STU Stuttgart** 106.89 43 IAMs_20 IAMs_20 07 43 09.9
comp=Z,3µm,19.0s
**I29M Ogilvie Camp,** 108.23 336 IAMs_20 IAMs_20 07 49 47.2
comp=Z,2µm,19.0s
**GRFO Grafenberg** 108.48 43 IAMs_20 IAMs_20 07 39 29.1
comp=Z,4µm,22.0s
**GRA1 Grafenberg Arr** 108.48 43 IAMs_20 IAMs_20 07 39 29.1
comp=Z,4µm,22.0s
**A36M Sachs Harbour** 108.60 345 IAMs_20 IAMs_20 07 41 25.7
comp=Z,3µm,22.0s
**GERES GERESS Array B** 109.61 44 PKiKP **PKiKP** 06 55 33.0 -0.4
comp=Z,2.6nm,0.8s,baz=129,slow=1.4,SNR=7.3
**KHC Kasperske Hory** 109.65 44 *e*PKP **PKiKP** 06 55 28.5 -4.8
**CLL Collm** 110.19 42 *e*Pdif **Pdif** 06 51 33.0 +0.1
CLL *es*Pdif **sPdif** 06 51 37.0 +1.3
CLL *i* PP **PP** 06 56 06.7 -2.1
comp=Z,73nm,2.3s
CLL *e*SKSac **SKSac** 07 02 13.0 +0.7
CLL *e*SKKSac **SKKSac** 07 03 18.0 +6.7
CLL *e*Sdif Sdif 07 03 54.0 +6.9
CLL *e*PS **PS** 07 05 37.0 -1.0
CLL *ex* x 07 06 14.0
CLL *e*PKKPab **PKKPab** 07 06 47.0 +2.5
CLL *e*(PPS) 07 06 49.0
CLL *ep*PKKPab 07 06 50.0
CLL *e*SKKPbc **SKKPbc** 07 10 18.0 -5.0
CLL *ep*SKKPbc 07 10 24.0
CLL *e*SS **SS** 07 11 36.0 +0.6
CLL *ex* x 07 12 06.0
CLL *e*SSS SSS 07 15 36.0
CLL *e*SSSS 07 19 30.0
CLL LmH 07 42 00.0
comp=N,2µm,19.3s
CLL LmH 07 42 00.0
comp=E,4µm,18.8s
CLL Lmax 07 44 00.0
CLL LmV 07 44 00.0
comp=Z,6µm,18.0s
**BRG Berggiesshubel** 110.56 42 *e*PKP **PKiKP** 06 55 35.1 +0.2
BRG Amp 06 55 40.3
comp=Z,4.8nm,1.0s
BRG *ex* x 06 56 09.8
BRG Amp 06 56 20.4
comp=Z,20nm,1.7s
**ILAR Eielson Array** 111.08 334 PP **PP** 06 56 18.4 +3.5
comp=Z,1.3nm,1.0s,baz=126,slow=3.1,SNR=4.7
**KRUC Moravsky** 111.33 45 *e*PP **PP** 06 56 13.2 -3.9
**VRAC Vranov** 111.54 45 *e*PP **PP** 06 56 15.3 -3.3
**RGN Rugen** 111.63 39 IAMs_20 IAMs_20 07 47 17.0
comp=Z,4µm,18.0s
**H24K Noodor Dome** 111.92 335 IAMs_20 IAMs_20 07 47 04.6
comp=Z,2µm,18.0s
**I23K Minto, Yukon-K** 112.19 334 IAMs_20 IAMs_20 07 41 48.6
comp=Z,2µm,19.0s
**VYHS Vyhne** 112.62 46 *e*PKIKP **PKiKP** 06 55 42.4 +3.4
**VYHS Vyhne** 112.62 46 *e* **PKiKP** 06 55 42.4 +3.4
**NOA NORSAR Array B** 113.00 32 PKiKP **PKiKP** 06 55 39.5 +0.2
comp=Z,1.3nm,0.8s,baz=249,slow=2.0,SNR=4.0
**BZS Buzias** 113.40 50 ⇑P **PKiKP** 06 55 40.6 +0.1
**BZS Buzias** 113.40 50 ⇑PKIKP **PKiKP** 06 55 40.6 +0.1
**HERR Herculane** 113.68 51 ⇑P **PKiKP** 06 55 41.6 +0.6
**H21K Melozitna Rive** 113.72 333 IAMs_20 IAMs_20 07 47 44.0
comp=Z,2µm,20.0s
**GZR Gura Zlata** 114.09 50 ⇓P **PKiKP** 06 55 45.3 +3.4
**GZR Gura Zlata** 114.09 50 ⇓PKIKP **PKiKP** 06 55 45.3 +3.4
**DRGR** 114.51 49 ⇑P **PKiKP** 06 55 43.2 +0.5
**DRGR** 114.51 49 ⇑PKIKP **PKiKP** 06 55 43.2 +0.5
**TRPA Tarpa** 114.83 47 ⇓P **PKiKP** 06 55 44.4 +1.3
**UZH Uzhgorod** 114.83 47 ⇓*i*PKIKP **PKiKP** 06 55 44.3 +1.2
UZH *i* 06 55 47.7
UZH *e* 06 55 53.1
UZH *e* 06 56 44.9
UZH *e* 07 02 58.7
UZH *e* 07 07 25.8
UZH MLR MLR
comp=N,400nm,20.0s
UZH MLR MLR
comp=E,600nm,20.0s
UZH MLR MLR
comp=Z,300nm,20.0s
**ARR Arges** 115.32 51 ⇑P **PKPdf** 06 55 44.1 -0.2
**VOIR** 115.62 51 ⇑P **PKPdf** 06 55 44.6 -0.3
**VOIR** 115.62 51 ⇑PKIKP **PKPdf** 06 55 44.6 -0.3
**DOPR Dopca** 116.01 50 ⇑P **PKiKP** 06 55 48.4 +2.8
**MLR Muntele Rosu** 116.24 51 ⇓P **PKiKP** 06 55 48.7 +2.5
**MLR Muntele Rosu** 116.24 51 PKiKP **PKiKP** 06 55 48.0 +1.9
comp=Z,8.5nm,1.0s,baz=156,slow=2.4,SNR=5.4
MLR PP **PP** 06 56 52.1 -0.1
comp=Z,27nm,1.2s,baz=270,slow=3.6,SNR=13
**MLR Muntele Rosu** 116.24 51 **PKPdf** 06 55 41.1 -5.1
**BURAR Bucovina Array** 116.39 49 ⇓P **PKiKP** 06 55 47.0 +0.7
**BURAR Bucovina Array** 116.39 49 ⇓PKIKP **PKiKP** 06 55 47.0 +0.7
**PLOR Plostina** 116.82 51 ⇑P **PKPdf** 06 55 45.9 -1.2
**PLOR Plostina** 116.82 51 ⇑PKIKP **PKPdf** 06 55 45.9 -1.2
**VRI Vrincioaia** 116.87 51 ⇑P **PKPdf** 06 55 43.1 -4.1
**VRI Vrincioaia** 116.87 51 ⇑PKIKP **PKPdf** 06 55 43.1 -4.1
**SUW Suwalki** 116.93 41 IAMs_20 IAMs_20 07 47 36.3
comp=Z,3µm,19.0s
**SUW Suwalki** 116.93 41 *e*P **PKiKP** 06 55 49.9 +2.9
**TESR Tescani** 117.01 50 ⇑P **PKiKP** 06 55 47.5 +0.1
**ISP Isparta** 117.12 60 IAMs_20 IAMs_20 07 50 05.4
comp=Z,3µm,20.0s
**HARR Harsova** 117.34 52 ⇑P **PKPdf** 06 55 47.6 -0.5
**HARR Harsova** 117.34 52 ⇑PKIKP **PKPdf** 06 55 47.6 -0.5
**TIRR Tirgusor** 117.61 53 ⇓P **PKiKP** 06 55 49.4 +0.8
**TIRR Tirgusor** 117.61 53 ⇓PKIKP **PKiKP** 06 55 49.4 +0.8
**CFR Carcaliu** 117.62 52 ⇓P **PKiKP** 06 55 48.8 +0.2
**CFR Carcaliu** 117.62 52 ⇓PKIKP **PKiKP** 06 55 48.8 +0.2
**PABE Paberze** 117.75 40 *e*P **PKiKP** 06 55 50.8 +2.3
**RDOG Red Dog Mine** 118.22 335 IAMs_20 IAMs_20 07 48 39.1
comp=Z,2µm,20.0s
**MTSE Matsula** 118.40 36 *e*P **PKiKP** 06 55 53.1 +3.4
**SORM Soroca** 118.56 49 ⇓P **PKPdf** 06 55 49.3 -1.0
**SORM Soroca** 118.56 49 ⇓PKIKP **PKPdf** 06 55 49.3 -1.0
**IIGN Ignalina** 118.97 40 *e*P **PKiKP** 06 55 53.7 +2.8
**NACGM Naroch** 119.19 41 *i* PKP **PKiKP** 06 55 54.1 +2.7
**AKASG Malin Array Be** 119.72 46 PKP **PKPdf** 06 55 51.8 -0.7
comp=Z,8.4nm,0.7s,baz=266,slow=2.5,SNR=21
**AKASG Malin Array Be** 119.72 46 PKPdf **PKPdf** 06 55 46.3 -6.2
**MNK Minsk** 119.73 41 *i* PKIKP **PKPdf** 06 55 49.2 -3.1
MNK *i* 06 57 12.6
MNK *i* PPP PPP 06 59 44.7
MNK *i* 07 03 01.2
MNK *i* PS PKKPdf 07 07 02.0 +26
MNK pmax pmax
comp=E,3.0nm,0.9s
MNK pmax pmax
comp=Z,33nm,0.9s
MNK pmax pmax
comp=N,37nm,1.1s
MNK MLR MLR
comp=E,464nm,20.0s
MNK MLR MLR
comp=Z,4µm,20.0s
**MNK Minsk** 119.73 41 *i* PKP **PKPdf** 06 55 49.2 -3.1
comp=E,3.0nm,0.9s
MNK *i* PKP **PKPdf** 06 55 49.2 -3.1
comp=N,37nm,1.1s
MNK *i* PKP **PKPdf** 06 55 49.2 -3.1
comp=Z,33nm,0.9s,baz=78
MNK *i* PP **PP** 06 57 12.6 -3.3
MNK *i* PPP PPP 06 59 44.7
MNK *i* SKS **SKSdf** 07 03 01.3 -3.0
MNK *i* PS **PS** 07 07 02.1 -2.9
MNK *i* SS SS 07 13 25.5 -15
MNK *i* SSS SSS 07 17 40.7
MNK *i* LQ LQ 07 38 10.5
MNK *i* LR LR 07 42 42.5
MNK *i* LRM MLR 07 46 50.0
comp=E,464nm,19.7s
MNK *i* LRM MLR 07 46 52.2
comp=Z,4µm,19.7s
MNK *i* LRM MLR 07 48 17.6
comp=N,3µm,19.2s
**VSU Vasula** 119.85 37 *i* PKIKP **PKPdf** 06 55 51.8 -0.7
**VSU Vasula** 119.85 37 *e*P **PKPdf** 06 55 51.8 -0.7
**BRTR Keskin Array B** 120.01 59 PKP **PKPdf** 06 55 52.6 -1.0
comp=N,4.0nm,0.8s,baz=149,slow=2.6,SNR=13
**FINES FINESS Array B** 120.03 33 PKP **PKPdf** 06 55 52.1 -0.6
comp=N,4.6nm,0.9s,baz=133,slow=12,SNR=3.6
**ASAR Alice Springs** 120.73 208 PKP **PKPdf** 06 55 54.2 -1.3
comp=N,0.7nm,0.6s,baz=136,slow=2.2,SNR=9.7
ASAR PKKPbc **PKKPbc** 07 05 59.6 +0.1
comp=N,1.6nm,0.8s,baz=338,slow=3.2,SNR=12
**ARCES ARCESS Array B** 120.78 24 PKP **PKiKP** 06 55 55.1 +1.0
comp=N,3.7nm,0.8s,baz=320,slow=3.2,SNR=4.8
**WRA Warramunga Arr** 123.86 210 PKP **PKPdf** 06 56 00.3 -1.3
comp=N,2.2nm,0.7s,baz=160,slow=1.7,SNR=19
WRA PKKPbc **PKKPbc** 07 05 47.6 +0.2
comp=N,1.4nm,0.9s,baz=345,slow=4.0,SNR=6.9
**WRAB Tennant Creek** 123.86 210 *i* PKIKP **PKiKP** 06 56 03.9 +2.1
**WRAB Tennant Creek** 123.86 210 IAMs_20 IAMs_20 07 43 29.1
comp=Z,3µm,20.0s
**LVZ Lovozero** 124.08 26*c* *i*PKIKP **PKiKP** 06 56 02.9 +2.2
LVZ pmax pmax
comp=Z,83nm,2.5s
**LVZ Lovozero** 124.08 26 IAMs_20 IAMs_20 07 46 38.8
comp=Z,3µm,19.0s
**OBN Obninsk** 124.79 42 ⇓*i*PKIKP **PKiKP** 06 56 03.7 +1.3
OBN *i* 06 56 11.9
OBN *e* 06 57 55.5
OBN PPP PPP 07 00 29.0
OBN *e* 07 03 11.5
OBN *e*PS **PS** 07 07 43.4 -6.5
OBN *e* 07 09 07.4
OBN *e*SS SS 07 14 43.3 -1.6
OBN pmax pmax
comp=Z,46nm,1.1s
**OBN Obninsk** 124.79 42 IAMs_20 IAMs_20 07 58 54.1
comp=Z,3µm,18.0s
**SOC Sochi** 125.33 56 *e*PKIKP **PKPdf** 06 56 01.1 -2.4
SOC *e*PPP PPP 07 00 35.2
SOC *e*PS **PS** 07 07 56.6 +1.4
SOC *e*SS SS 07 14 46.8 -5.7
SOC pmax pmax
comp=Z,19nm,0.9s
**PMG Port Moresby** 125.39 230 IAMs_20 IAMs_20 07 40 22.2
comp=Z,2µm,21.0s
**MOS Moscow** 125.43 41 *i* PKIKP **PKPdf** 06 56 03.4 +0.1
MOS *e* 06 57 56.3
MOS pmax pmax
comp=Z,56nm,1.3s
**H11S2 WAKE ISLAND Hyd** 125.82 272 T T 09 14 50.6
baz=115,slow=75,SNR=134
**H11S1 WAKE ISLAND Hyd** 125.83 272 T T 09 14 51.2
baz=115,slow=75,SNR=130
**H11S3 WAKE ISLAND Hyd** 125.83 272 T T 09 14 56.3
baz=115,slow=75,SNR=143
**LPSR Galich'ya Gora** 125.98 45 *i* PKIKP **PKiKP** 06 56 04.7 -0.1
LPSR pmax pmax
comp=Z,30nm,0.8s
**VSR Storozhevoye** 126.01 46 *i* PKIKP **PKiKP** 06 56 05.4 +0.5
VSR pmax pmax
comp=Z,30nm,1.1s
**VORD Divnogorie** 126.07 47 *e*PKIKP **PKPdf** 06 56 04.3 -0.3
VORD pmax pmax
comp=Z,20nm,1.0s
**VORR Voronezh** 126.08 46 *e*PKIKP **PKiKP** 06 56 05.2 +0.1
VORR pmax pmax
comp=Z,70nm,0.5s
**KLMR Klimovskoe** 126.49 35 *e*PKIKP **PKPdf** 06 56 05.1 0.0
KLMR *e* 06 57 59.2
KLMR *e*SS SS 07 15 04.0 -1.9
KLMR pmax pmax
comp=Z,57nm,1.1s
**KLMR Klimovskoe** 126.49 35 *e*PKPdf **PKPdf** 06 56 05.1 0.0
KLMR AMP 06 56 08.8
comp=Z,57nm,1.1s
KLMR *e*PP **PP** 06 57 59.2 -2.2
KLMR *e*PKKSbc PKKSbc 07 09 34.1 +3.9
KLMR *e*PKKSbc PKKSbc 07 09 34.1 +3.9
KLMR *e*SS **SS** 07 15 04.0 -1.9
KLMR *e*SS **SS** 07 15 04.0 -1.9
KLMR LQ LQ 07 43 12.8
KLMR LQ LQ 07 43 12.8
KLMR LR LR 07 49 21.2
KLMR AMP 07 55 21.7
comp=Z,4µm,19.8s
**KIV Kislovodsk** 127.51 56 *i* PKIKP **PKiKP** 06 56 09.7 +1.4
KIV *e* 06 58 09.9
KIV *e*PS PS 07 08 15.3 +0.8
KIV *e*SS SS 07 15 22.1 +2.0
KIV pmax pmax
comp=Z,20nm,1.1s
**KIV Kislovodsk** 127.51 56 PKiKP **PKiKP** 06 56 08.8 +0.4
**VRH Novokhopyorsk** 127.61 47 *i* PKIKP **PKiKP** 06 56 08.0 -0.1
VRH pmax pmax
comp=Z,40nm,1.2s
VRH MLR MLR
comp=Z,2µm,18.0s
**KBZ Khabaz** 127.63 56 PKP **PKiKP** 06 56 08.9 +0.5
comp=Z,11nm,1.0s,baz=258,slow=3.3,SNR=8.4
**KBZ Khabaz** 127.63 56*c* *i*PKIKP **PKiKP** 06 56 09.7 +1.3
**GOF Gofitskoye** 127.92 55⇑ *e*PKIKP **PKiKP** 06 56 11.7 +2.7
**ZEI Tsey** 128.22 57 *i* PKIKP **PKiKP** 06 56 11.6 +1.7
ZEI pmax pmax
comp=Z,9.0nm,1.2s
**GNI Garni** 128.41 61 *i* PKIKP **PKiKP** 06 56 11.5 +1.1
**GNI Garni** 128.41 61 IAMs_20 IAMs_20 08 01 15.6
comp=Z,2µm,19.0s
**DGAR Diego Garcia** 129.17 132 IAMs_20 IAMs_20 07 48 40.3
comp=Z,3µm,19.0s
**PRGR Permogore** 129.36 33 *e*PKIKP **PKiKP** 06 56 11.3 0.0
PRGR pmax pmax
comp=Z,79nm,0.9s
**GROC Groznyy** 129.65 57 *i* PKIKP **PKiKP** 06 56 13.1 +0.6
GROC *e* 06 58 26.2

GROC pmax pmax
comp=Z,15nm,0.4s
**BILL Bilibino 129.68 335** *d* iPKIKP **PKiKP 06 56 12.9 +1.1**
BILL *e* 06 56 18.6
BILL *e*SS SS 07 15 57.8 +13
BILL pmax pmax
comp=Z,9.0nm,1.4s
BILL MLR MLR
comp=Z,654nm,18.0s
**MAK Makhachkala 130.87 58** *i* P **Pdif 06 53 06.5 +1.5**
MAK *e* 07 03 19.6
MAK *e*SS SS 07 15 51.4 -10
MAK *e*SSS SSS 07 20 55.7
MAK pmax pmax
comp=Z,297nm,1.2s
**MZR Muzera 131.09 85** PKiKP **PKiKP 06 56 16.6 +0.6**
**KIRV Kirov 131.70 37** *c i* PKIKP **PKiKP 06 56 17.2 +1.1**
**NAZ Nazwa, Dubai 133.65 83** PKPdf **PKPdf 06 56 19.4 -0.5**
**ASHO Ashiyiah 133.89 84** PKiKP **PKPdf 06 56 20.9 +0.5**
**HATD Hatta, Dubai 134.00 84** PKiKP **PKiKP 06 56 21.6 -0.3**
**UOSS Minazif 134.10 84** *i* PKPdf **PKPdf 06 56 20.7 -0.1**
SNR=6.8
**SOHO SOHO 134.11 85** *i* PKPdf **PKPdf 06 56 20.7 0.0**
SNR=6.4
**MSFE Esma-Masafi 134.19 83** *i* PKPdf **PKPdf 06 56 21.3 +0.4**
SNR=6.4
**WSAR Wadi Sarin 135.61 87** PKP **PKiKP 06 56 25.4 +0.2**
comp=Z,4.7nm,0.7s,baz=156,slow=2.7,SNR=4.4
**WSAR Wadi Sarin 135.61 87** **PKiKP 06 56 25.4 +0.2**
**COCO West Island 136.24 164** IAMs_20 IAMs_20 07 49 55.3
comp=Z,3μm,20.0s
**ARU Arti 136.98 38** PKP **PKPdf 06 56 26.0 +0.9**
comp=Z,7.1nm,0.7s,baz=278,slow=4.7,SNR=10
**ARU Arti 136.98 38** *i* PKIKP **PKiKP 06 56 27.2 +0.3**
ARU 06 59 08.3
ARU PPP PPP 07 02 04.1
ARU SS SS 07 17 07.6 -6.4
ARU MLR MLR
comp=Z,4μm,20.0s
**ARU Arti 136.98 38** PKPdf **PKPdf 06 56 20.6 -4.5**
**SEY Seymchan 136.98 332** *i* PKIKP **PKiKP 06 56 26.1 -0.6**
**TIXI Tiksi 137.24 350** ⇓PKIKP **PKPdf 06 56 23.7 -1.4**
**TIXI Tiksi 137.24 350** PKPdf **PKPdf 06 56 20.5 -4.6**
**PETK Petropavlovsk- 137.69 317** PKP **PKPdf 06 56 27.4 +0.8**
comp=Z,4.5nm,0.7s,baz=156,slow=7.4,SNR=4.3
**AKTO Aktyubinsk 137.95 47** PKIKP **PKPdf 06 56 22.3 -4.8**
**SVE Sverdlovsk 137.96 37** *i* PKIKP **PKiKP 06 56 31.0 +2.1**
SVE pmax pmax
comp=Z,27nm,1.5s
SVE MLR MLR
comp=E,4μm,20.0s
SVE MLR MLR
comp=Z,5μm,20.0s
**MMRI Maumere 138.80 202** IAMs_20 IAMs_20 07 55 02.1
comp=Z,2μm,19.0s
**MA2 Magadan 139.21 328** *c* iPKIKP **PKiKP 06 56 30.9 -0.5**
MA2 pmax pmax
comp=Z,28nm,2.5s
**MA2 Magadan 139.21 328** IAMs_20 IAMs_20 08 02 03.5
comp=Z,1μm,21.0s
**NRIK Noril'sk 139.35 11** PKP **PKPdf 06 56 29.8 +0.6**
comp=Z,1.4nm,0.4s,baz=250,slow=2.0,SNR=4.8
**NRIK Noril'sk 139.35 11** PKPdf **PKPdf 06 56 24.4 -4.7**
**AB31 Akbulak array 139.37 48** *i* PKHKP PKPpre 06 56 23.0
**ABKAR Akbulak array 139.37 48** PKPdf **PKPdf 06 56 23.6 -6.2**
**FAKI Fak Fak 139.55 219** IAMs_20 IAMs_20 07 53 03.0
comp=Z,2μm,20.0s
**JAGI Jajag, Banyuwa 140.84 190** IAMs_20 IAMs_20 07 53 38.9
comp=Z,1μm,20.0s
**UGM Wanagama 141.77 184** IAMs_20 IAMs_20 07 56 38.8
comp=Z,2μm,21.0s
**KAPI Kappang 142.98 200** IAMs_20 IAMs_20 08 00 35.0
comp=Z,2μm,19.0s
**BRVK Borovoye 144.51 40** *i* PKIKP **PKPdf 06 56 38.7 -0.1**
**BRVK Borovoye 144.51 40** PKPdf **PKPab 06 56 35.0 -2.2**
**KOD Kodaikanal 145.16 119** *e*P **PKiKP 06 56 43.8 -1.6**
**YAK Yakutsk 145.42 342** *e*PKIKP **PKPbc 06 56 39.2 -0.8**
YAK *e* 07 00 00.1
YAK *e* 07 03 08.8
YAK pmax pmax
comp=Z,66nm,0.9s
YAK pmax pmax
comp=N,5.0nm,0.9s
YAK pmax pmax
comp=E,6.0nm,0.9s
YAK pmax pmax
comp=Z,285nm,2.7s
YAK pmax pmax
comp=N,157nm,2.8s
YAK pmax pmax
comp=E,64nm,2.3s
**YAK Yakutsk 145.42 342** IAMs_20 IAMs_20 07 58 36.4
comp=Z,1μm,20.0s
**PALK Pallekele 145.52 126** PKPbc **PKPab 06 56 43.4 +1.3**
comp=Z,7.2nm,0.8s,baz=334,slow=6.1,SNR=4.3
**PALK Pallekele 145.52 126** ⇓PKHKP PKPpre 06 56 43.8
**LUWI Luwuk 145.67 207** IAMs_20 IAMs_20 07 55 59.1
comp=Z,1μm,22.0s
**KAD Karad 146.52 105** *e*P **PKPab 06 56 46.1 +0.3**
**SALM Salem 146.60 118** *e*P **PKPbc 06 56 45.5 +0.5**
**PMBI Palembang 146.65 174** IAMs_20 IAMs_20 08 00 51.9
comp=Z,29nm,19.0s
**POO Poona 146.82 103** ⇑*e*P **PKPbc 06 56 46.2 +0.6**
POO IAmb IAmb 06 56 50.4
comp=Z,29nm,1.1s
**BRZS Berezniki 147.12 43** *e*PKIKP **PKPdf 06 56 43.7 +0.4**
**BRZS Berezniki 147.12 43** *e*PKP **PKPdf 06 56 43.8 +0.4**
baz=44
**BRLS Boroldaу 147.19 57** *e*PKIKP **PKPdf 06 56 43.7 0.0**
**BRLS Boroldaу 147.19 57** *e*PKP **PKPdf 06 56 43.8 0.0**
baz=57
BRLS *i* PKPbc **pPKPdf 06 56 45.7 -0.3**
baz=57
**NKL Nikolayevsk 147.21 323** *i* PKP2 **PKPbc 06 56 44.6 -1.0**
NKL *e* 07 00 15.1
**JASL Jaisalmer 147.32 87** *e*P **PKPbc 06 56 46.6 -0.2**
**OTUK Ortayu 147.55 47** PKIKP **PKPdf 06 56 45.5 +1.3**
**URV Uravakonda 147.81 112** *e*PKiKP **PKPdf 06 56 44.7 -0.9**
**UGL Uglegorsk 148.28 316** *e*PKHKP PKPpre 06 56 43.0
UGL pmax pmax
comp=Z,70nm,1.0s
**DZA Taraz 148.30 57** *e*PKIKP **PKPbc 06 56 48.4 -0.6**
**DZA Taraz 148.30 57** *e*PKPbc **PKPbc 06 56 48.5 -0.6**
baz=57
DZA *e*PKPab **sPKPbc 06 56 51.5 -0.4**
baz=57
**TOLI2 Tolitoli 148.40 205** **PKPdf 06 56 48.1 +1.5**
TOLI2 IAMs_20 IAMs_20 08 04 43.5
comp=Z,1μm,20.0s
**YSS Yuzh-Sakhalins 148.62 311** *i* PKP2 **PKPbc 06 56 49.7 +0.1**
YSS *e*PPP PPP 07 03 55.3
YSS *e*PPS PPS 07 13 05.8
YSS pmax pmax
comp=Z,30nm,0.7s
**YSS Yuzh-Sakhalins 148.62 311** IAMs_20 IAMs_20 08 17 44.2
comp=Z,2μm,20.0s
**KLRI Killari 148.90 106** *e*PKPab **PKPbc 06 56 49.4 -1.9**
**SKHT Srikalahasti 149.04 116** *e*PKiKP **PKPdf 06 56 46.8 -0.7**
**BKNI Bangkinang 149.29 166** IAMs_20 IAMs_20 08 00 20.9
comp=Z,2μm,20.0s
**GSI Gunungsitoli 149.34 159** PKPdf **PKPdf 06 56 43.2 -5.0**
GSI IAMs_20 IAMs_20 07 56 57.4
comp=Z,2μm,20.0s
**RCLA Racherla 149.45 113** *e*PKiKP **PKPdf 06 56 48.0 -0.2**
**BTLS Baital 149.69 52** *e*PKHKP PKPpre 06 56 48.4
**BTLS Baital 149.69 52** *e*PKP **PKPdf 06 56 48.4 +0.7**
baz=52
BTLS *e*PKPbc **PKiKP 06 56 53.3 -0.1**
baz=52
BTLS *e*PKPab **PKPab 06 56 57.6 0.0**
baz=52
**SRLM Srisailam 149.75 112** *e*PKiKP **PKPdf 06 56 50.3 +1.6**
**EKS2 Erkin-Say 150.11 56** P **PKiKP 06 56 54.6 +0.1**
SNR=46
**AML Almayashu 150.16 58** P **PKPab 06 56 57.9 -2.3**
SNR=42
**AML Almayashu 150.16 58** *i* PKPbc **PKPdf 06 56 51.4 +2.3**
SNR=42
**KURBB Kurchatov Arra 150.17 39** PKP **PKPdf 06 56 49.6 +1.4**
comp=Z,8.1nm,0.7s,baz=303,slow=3.2,SNR=39
KURBB PKPbc **PKiKP 06 56 53.9 -0.3**
comp=Z,52nm,0.8s,baz=308,slow=2.6,SNR=83
**KURBB Kurchatov Arra 150.17 39** PKHKP PKPpre 06 56 50.3
**KURK Kurchatov 150.17 39** PKHKP PKPpre 06 56 49.6
**KURK Kurchatov 150.17 39** PKPab **PKiKP 06 56 54.4 +0.2**

**HYB Hyderabad 150.18 109** *e*P **PKPbc 06 56 52.0 -2.4**
HYB IAmb IAmb 06 57 06.1
comp=Z,28nm,0.8s
**HYBB Hyderabad (bro 150.18 109** *e*PKPbc **PKPdf 06 56 48.8 -0.6**
**NJS Nagarjunasagar 150.34 111** *e*PKPab **PKiKP 06 56 56.1 +0.5**
**CUPL Choutuppal 150.42 110** *e*PKiKP **PKPdf 06 56 50.2 +0.5**
**NIL Nilore 150.43 75** PKIKP **PKiKP 06 56 55.4 +0.1**
**NIL Nilore 150.43 75** PKPab **PKiKP 06 56 55.4 +0.1**
**AJM Ajmer 150.43 89** ⇓*e*P **PKPdf 06 56 50.3 +0.8**
**ADKI Addanki 150.47 113** *e*PKPdf **PKPdf 06 56 43.3 -6.5**
ADKI *e*PKPbc **pPKPdf 06 56 49.7 -2.2**
ADKI *e*PKPab **PKiKP 06 56 56.0 +0.2**
**USP Ospenovka 150.48 55** P **PKiKP 06 56 55.4 +0.2**
SNR=25
**SGDS Sogindy 150.53 55** *e*PKP **PKPdf 06 56 49.0 -0.2**
baz=55
SGDS *e*PKPbc **PKiKP 06 56 55.1 -0.1**
baz=55
**AAK Ala-Archа 150.63 56** PKPbc **PKiKP 06 56 55.5 -0.2**
comp=Z,105nm,0.8s,baz=128,slow=3.9,SNR=63
**AAK Ala-Archа 150.63 56** P **PKiKP 06 56 56.1 +0.5**
SNR=33
**AAK Ala-Archа 150.63 56** PKIKP **PKPbc 06 56 52.8 -2.2**
**AAK Ala-Archа 150.63 56** PKPab **PKiKP 06 56 56.6 +1.0**
**AAK Ala-Archа 150.63 56** *i* PKPdf **PKPdf 06 56 51.2 +1.7**
SNR=64
**GRNR Gornyy 150.71 322** ⇓*i* PKP2 **PKPbc 06 56 54.6 -0.1**
GRNR pmax pmax
comp=Z,5.0nm,0.8s
**CHMS Chumysh 150.73 55** P **PKiKP 06 56 56.3 +0.6**
SNR=32
**UCH Uchtor 150.74 57** P **PKPdf 06 56 52.2 +2.1**
SNR=28
**SRSP Sriramsagar 150.76 106** *e*PKiKP **PKPdf 06 56 52.0 +1.8**
**KBK Karagaybulak 150.95 56** P **PKiKP 06 56 56.8 +0.5**
SNR=31
**RPSI Rantau Prapat 151.06 161** **PKPbc 06 56 56.7 +0.1**
**KSM Kuching 151.08 185** IAMs_20 IAMs_20 08 05 44.7
comp=Z,2μm,19.0s
**ZALV Zalesovo Beam 151.16 29** PKP **PKPdf 06 56 50.4 +0.7**
comp=Z,9.5nm,0.7s,baz=275,slow=3.2,SNR=26
ZALV PKPbc **PKiKP 06 56 56.5 +0.4**
comp=Z,178nm,0.7s,baz=329,slow=2.6,SNR=95
**PSI Prapat 151.16 161** PKPbc **PKPbc 06 56 56.7 -0.3**
**MYKOM Kota Tinggi 151.20 171** IAMs_20 IAMs_20 08 03 02.2
comp=Z,2μm,20.0s
**SEM Semipalatinsk 151.22 38** *e*PKIKP **PKPdf 06 56 50.6 +0.4**
**SEM Semipalatinsk 151.22 38** *e*PKP **PKPdf 06 56 50.7 +0.4**
baz=38
**TKM2 Tokmak 2 151.35 55** P **PKPbc 06 56 54.0 -2.7**
SNR=14
**TKM2 Tokmak 2 151.35 55** PKIKP **PKPdf 06 56 51.5 +0.8**
**VJD Vijayawada 151.39 113** *e*P **PKPdf 06 56 52.1 +1.0**
**MYLAV Mylavaram 151.50 112** *e*PKiKP **PKPdf 06 56 52.9 +1.6**
**RPR Rampur 151.51 107** *e*PKiKP **PKPdf 06 56 53.5 +2.2**
RPR *e*PKPab **sPKPbc 06 57 00.7 +0.3**
**KUU Kurty 151.60 53** *e*PKIKP **PKPdf 06 56 50.2 -0.5**
**KUU Kurty 151.60 53** *e*PKP **PKPdf 06 56 50.3 -0.5**
baz=53
**BHPL Bhopal 151.81 97** *e*P **PKPdf 06 56 54.3 +2.6**
**SBUM Sibu 151.85 189** IAMs_20 IAMs_20 07 59 04.6
comp=Z,972nm,22.0s
**ULHL Ulahol 151.98 56** P **PKPbc 06 56 55.3 -2.9**
SNR=7.8
**CHKK Chushkaly 152.06 53** *e*PKP **PKPdf 06 56 52.1 +0.6**
baz=53
**MDOK Medeo 152.31 54** *e*PKIKP **PKPdf 06 56 51.7 -0.3**
**MDOK Medeo 152.31 54** *e*PKP **PKPdf 06 56 51.8 -0.3**
baz=54
**KSH Kashi 152.34 62** PKPbc **PKPdf 06 56 51.8 -0.3**
KSH PP **PP 07 00 42.5 +0.9**
KSH SKS **SKSdf 07 03 54.8 -4.9**
KSH SKKS **SKKSac 07 07 32.4 +0.2**
KSH SS **SS 07 20 08.9 -2.6**
KSH AMB AMB
comp=Z,2μm,8.6s
KSH LR LR
comp=Z,2μm,21.6s
KSH LR LR
comp=Z,2μm,20.6s
KSH LR LR
comp=Z,3μm,22.1s
**BOD Bodaibo 152.34 353** *e*PKIKP **PKiKP 06 56 59.2 +0.8**
BOD pmax pmax
comp=Z,50nm,2.0s
**THN Thein Dam 152.41 77** ⇓*e*P **PKPdf 06 56 55.2 +2.9**
**KUDL Kundal 152.43 87** *e*P **PKPdf 06 56 54.5 +2.1**
**PVM Polavaram 152.57 113** *e*PKiKP **PKPdf 06 56 55.1 +2.2**
**LHMI Lhok Sumawe 152.80 155** IAMs_20 IAMs_20 08 02 40.0
comp=Z,2μm,18.0s
**ZEA Zeya 152.90 335** *e*PKIKP **PKPdf 06 56 52.7 +0.4**
**BHK Bhakra 152.90 80** *e*P **PKPdf 06 56 55.6 +2.5**
**NDI New Delhi 153.17 86** ⇓*e*P **PKPdf 06 56 53.3 -0.2**
**IPM Ipoh 153.31 164** IAMs_20 IAMs_20 08 10 22.8
comp=Z,2μm,20.0s
**KPKS Kokpek 153.35 53** *e*PKIKP **PKPdf 06 56 53.7 +0.3**
**KPKS Kokpek 153.35 53** *e*PKP **PKPdf 06 56 53.7 +0.3**
baz=53
**SMLA Simla 153.51 81** *e*P **PKPdf 06 56 55.0 +1.1**
SMLA IAmb IAmb 06 57 18.3
comp=Z,121nm,1.2s
**JHNI Jhansi 153.51 94** *e*P **PKPdf 06 56 53.1 -1.0**
**UZB Uzynbulak 153.68 53** *e*PKIKP **PKPdf 06 56 53.5 -0.5**
**UZB Uzynbulak 153.68 53** *e*PKP **PKPdf 06 56 53.6 -0.5**
baz=53
UZB *e*PKPbc **PKiKP 06 57 02.5 +0.6**
baz=53
**PDGK Podgornoye 153.94 53** PKIKP **PKPdf 06 56 55.2 +0.8**
**KLR Kul'dur 154.06 323** PKP **PKPdf 06 56 54.8 +0.6**
comp=Z,2.3nm,0.8s,baz=48,slow=2.1,SNR=8.4
KLR PKPbc **PKPbc 06 57 02.0 -0.2**
comp=Z,5.3nm,0.7s,baz=78,slow=4.5,SNR=10
**MAKZ Makanchi 154.08 44** ⇑PKIKP **PKPdf 06 56 54.8 +0.5**
**MJAR Matsushiro Arr 154.19 292** PKP **PKPdf 06 56 56.1 +1.3**
comp=Z,1.4nm,0.3s,baz=146,slow=0.7,SNR=5.9
MJAR PKPbc **pPKPbc 06 57 04.2 -0.9**
comp=Z,4.5nm,0.8s,baz=272,slow=1.2,SNR=9.1
MJAR PKPab **sPKPab 06 57 19.6 -0.1**
comp=Z,21nm,0.9s,baz=118,slow=1.9,SNR=15
**MJAR Matsushiro Arr 154.19 292** PKPbc **PKPdf 06 56 55.3 +0.5**
**MAJO Matsushiro 154.19 292** PKIKP **PKPdf 06 56 56.8 +2.0**
MAJO 06 57 12.6
**MAJO Matsushiro 154.19 292** PKPbc **PKPdf 06 56 56.8 +2.0**
MAJO **PKPab 06 57 12.6 -4.2**
**MAJO Matsushiro 154.19 292** IAMs_20 IAMs_20 07 58 10.4
comp=Z,1μm,21.0s
**MAT Matsushiro 154.19 292** *e*PKP **PKPbc 06 57 01.3 -1.7**
**MJB9 Matsu-Tunnel 154.20 292** **PKPdf 06 56 57.9 +3.1**
**MK31 Makanchi Array 154.27 43** PKIKP **PKPdf 06 56 49.8 -4.8**
MK31 06 56 57.7
**MK31 Makanchi Array 154.27 43** PKPdf **PKPdf 06 56 49.8 -4.8**
MK31 PKPbc **sPKPdf 06 56 57.7 +0.2**
**MKAR Makanchi Array 154.27 43** PKP **PKPdf 06 56 54.9 +0.3**
comp=Z,6.3nm,0.9s,baz=317,slow=1.5,SNR=27
MKAR PKPbc **pPKPbc 06 57 03.9 -1.1**
comp=Z,12nm,0.8s,baz=350,slow=1.1,SNR=27
**MKAR Makanchi Array 154.27 43** PKPdf **PKPdf 06 56 47.9 -6.7**
MKAR PKPbc **sPKPdf 06 56 57.6 +0.1**
**KKM Kota Kinabalu 154.52 199** IAMs_20 IAMs_20 08 14 33.8
comp=Z,1μm,20.0s
**CHLP Challavanipeta 155.19 113** *e*PKPdf **PKPdf 06 56 50.3 -6.3**
CHLP *e*PKPbc **sPKPdf 06 57 00.0 +0.5**
**ZSN Zaisan 155.40 40** *e*PKIKP **PKPdf 06 56 55.2 -0.8**
**ZSN Zaisan 155.40 40** *e*PKP **PKPdf 06 56 55.3 -0.8**
baz=40
**ALBI Allahabad 156.27 96** ⇑*e*P **PKPdf 06 56 59.8 +1.9**
**MDJ Mudanjiang 157.92 316** IAMs_20 IAMs_20 08 08 25.4
comp=Z,1μm,20.0s
**MDJ Mudanjiang 157.92 316** PKP **PKPdf 06 56 55.9 -3.5**
MDJ PP **PP 07 01 19.3 +7.2**
MDJ AMB AMB
comp=Z,390nm,6.3s
MDJ LR LR
comp=Z,920nm,15.8s
MDJ LR LR
comp=Z,2μm,16.4s
MDJ LR LR
comp=Z,5μm,17.7s
**IRK Irkutsk 158.07 6** *e*PKIKP **PKPdf 06 56 59.6 +0.2**
IRK *e* 07 01 12.7
IRK pmax pmax
comp=Z,72nm,2.7s
**MOY Mondy 158.19 12** *e*PKIKP **PKPdf 06 57 02.1 +2.4**
MOY pmax pmax
comp=Z,78nm,3.4s
**BNX BinXian 158.53 321** ⇓PKP **PKPdf 06 57 00.8 +0.7**
BNX PP **PP 07 01 14.0 -1.2**
BNX SKKS 07 08 09.4
BNX AMB AMB
comp=Z,510nm,4.9s
BNX LR LR
comp=Z,790nm,15.4s
BNX LR LR
comp=Z,2μm,15.8s
BNX LR LR
comp=Z,3μm,19.0s
**WMQ Urumqi 159.08 45** *e*PKP **PKPdf 06 57 00.6 -0.3**
WMQ PKPab **sPKPab 06 57 41.8 +1.3**
WMQ PP **PP 07 01 20.3 +1.8**
WMQ AMB AMB
comp=Z,1μm,8.3s
WMQ LR LR
comp=Z,3μm,20.3s
WMQ LR LR
comp=Z,2μm,18.3s
WMQ LR LR
comp=Z,2μm,18.3s
**BOK Bokaro 159.21 103** *e*P **PKPdf 06 57 00.1 -1.6**
**HIA Hailar 159.23 338** IAMs_20 IAMs_20 08 19 57.2
comp=Z,2μm,20.0s
**ZAK Zakamensk 159.79 9** *e*PKIKP **PKPdf 06 57 02.9 +1.3**
ZAK pmax pmax
comp=Z,9.0nm,1.6s
**CN2 Changchun 160.82 319** *e*PKP **PKPdf 06 57 02.8 0.0**
CN2 PP **PP 07 01 31.3 +3.5**
CN2 AMB AMB
comp=Z,600nm,9.0s
CN2 LR LR
comp=Z,2μm,18.0s
CN2 LR LR
comp=Z,2μm,18.0s
CN2 LR LR
comp=Z,2μm,19.0s
**KSRS Korea Array 162.11 298** PKP **PKPdf 06 57 05.7 +1.4**
comp=Z,0.6nm,0.4s,baz=97,slow=0.2,SNR=1.8
KSRS PKPab **sPKPab 06 57 53.9 0.0**
comp=Z,3.8nm,1.0s,baz=54,slow=5.9,SNR=6.7
**KSAR Wonju Array Be 162.15 298** PKIKP **PKPdf 06 56 58.3 -6.0**
**KSAR Wonju Array Be 162.15 298** PKPdf **PKPdf 06 56 58.3 -6.0**
**SONM Songino Array 162.61 4** PKP **PKPdf 06 57 04.9 +0.2**
comp=Z,2.2nm,0.9s,baz=220,slow=1.0,SNR=11
SONM PKPab **sPKPab 06 57 54.9 -0.8**
comp=Z,1.7nm,0.8s,baz=322,slow=2.2,SNR=4.0
SONM PP **PP 07 01 43.5 +6.9**
comp=Z,1.0nm,1.0s,baz=38,slow=2.6,SNR=2.3
**SNY Shenyang 163.12 316** ⇑PKP **PKPdf 06 57 05.4 +0.2**
SNY SKKS 07 08 31.8
SNY AMB AMB
comp=Z,560nm,6.4s
SNY LR LR
comp=Z,2μm,17.5s
SNY LR LR
comp=Z,2μm,18.7s
SNY LR LR
comp=Z,2μm,18.0s
**DHUB DHUBRI 163.49 101** *e*P **PKPdf 06 57 07.2 +1.2**
**BELO BELONIA 163.55 112** *e*P **PKPdf 06 57 07.9 +1.7**
**AGT Agartala 163.69 110** *e*P **PKPdf 06 57 07.9 +1.6**
**GUWA GUWAHATI 164.99 102** *e*P **PKPdf 06 57 07.9 +0.5**
**SILR SILCHAR 165.36 109** *e*P **PKPdf 06 57 11.8 +4.1**
**CMAR Chiang Mai Arr 165.46 143** PKP **PKPdf 06 57 08.6 +0.6**
comp=Z,1.6nm,0.4s,baz=229,slow=2.5,SNR=8.0
CMAR PKPab **PKPab 06 58 06.2 +0.2**
comp=Z,1.7nm,0.4s,baz=226,slow=4.7,SNR=6.5
**DL2 Dalian 166.02 311** PKP **PKPdf 06 57 09.4 +1.6**
DL2 PP **PP 07 01 58.8 +3.4**
DL2 SS SS 07 22 40.0 +4.7
DL2 AMB AMB
comp=Z,820nm,4.5s
DL2 LR LR
comp=Z,630nm,18.6s
DL2 LR LR
comp=Z,1μm,15.4s
DL2 LR LR
comp=Z,3μm,18.7s
**TEZP TEZPUR 166.06 102** *e*P **PKPdf 06 57 11.1 +2.8**
**IMP Imphal 166.31 111** *e*P **PKPdf 06 57 05.9 -2.7**
**KOHI KOHIMA 166.82 108** *e*P **PKPdf 06 57 10.5 +1.4**
**ITAN ITANAGAR 167.01 101** *e*P **PKPdf 06 57 07.9 -1.1**
**MOKO MOKOCHONG 167.40 106** *e*P **PKPdf 06 57 09.6 +0.1**
**GOMU GeErMu 167.55 59** PKP **PKPdf 06 57 11.4 +1.8**
GOMU PP **PP 07 02 00.5 -3.7**
GOMU AMB AMB
comp=Z,690nm,8.7s
GOMU LR LR
comp=Z,2μm,20.6s
GOMU LR LR
comp=Z,730nm,19.0s
GOMU LR LR
comp=Z,1μm,21.8s
**QIZ Qiongzhong 168.50 189** PKP **PKPdf 06 57 10.6 +0.4**
QIZ SS SS 07 23 00.5 +2.2
QIZ LR LR
comp=Z,1μm,16.2s
QIZ LR LR
comp=Z,1μm,18.6s
QIZ LR LR
comp=Z,2μm,18.1s
**SSE Sheshan 168.68 277** PKP **PKPdf 06 57 13.6 +3.6**
SSE SKKS 07 08 54.9
SSE AMB AMB
comp=Z,270nm,11.4s
SSE LR LR
comp=Z,850nm,19.0s
**GTA Gaotai 168.82 35** ⇓PKP **PKPdf 06 57 11.3 +1.3**
GTA PP **PP 07 02 13.8 +4.3**
GTA SKKS 07 08 58.5
GTA SS **SS 07 23 06.3 +3.3**
GTA AMB AMB
comp=Z,1μm,7.2s
GTA LR LR
comp=Z,1μm,21.1s
GTA LR LR
comp=Z,2μm,22.7s
GTA LR LR
comp=Z,3μm,24.3s
**LKP Lekhapani 168.87 103** *e*P **PKPdf 06 57 10.5 +0.2**
**QZH Quanzhou 169.16 242** *e*PKP **PKPdf 06 57 13.6 +3.1**
QZH PP **PP 07 02 17.8 +5.9**
QZH SKKS 07 09 03.3
QZH SS **SS 07 23 11.6 +3.9**
QZH LR LR
comp=Z,2μm,17.5s
QZH LR LR
comp=Z,740nm,17.1s
QZH LR LR
comp=Z,2μm,16.1s
**HHC Hu-ho-hao-te 169.25 346** *e*PKP **PKPdf 06 57 12.8 +2.6**
HHC PP **PP 07 02 10.3 -0.8**
HHC SS SS 07 23 04.8 -1.5
HHC AMB AMB
comp=Z,950nm,9.4s
HHC LR LR
comp=Z,2μm,19.4s
HHC LR LR
comp=Z,4μm,19.0s
HHC LR LR
comp=Z,7μm,20.1s
**TIA Tai'an 170.49 309** PKP **PKPdf 06 57 11.8 +0.8**
TIA LR LR
comp=Z,740nm,19.1s
TIA LR LR
comp=Z,1μm,19.6s
TIA LR LR
comp=Z,560nm,13.1s
**NJ2 Nanjing 170.61 282** *e*PKP **PKPdf 06 57 09.6 -1.5**
NJ2 pPKP **sPKPdf 06 57 18.3 +4.3**
NJ2 PKPab **sPKPab 06 58 34.8 +3.2**
NJ2 PP **PP 07 02 21.6 +2.0**
NJ2 SKKS 07 09 07.3
NJ2 AMB AMB
comp=Z,730nm,4.9s
NJ2 LR LR
comp=Z,1μm,17.1s
NJ2 LR LR
comp=Z,2μm,17.7s
NJ2 LR LR
comp=Z,3μm,20.6s
**HNS HongShan 171.15 323** ⇓PKP **PKPdf 06 57 12.0 +0.8**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HNS | | | | PKPab | **sPKPab** | **06 58 33.9** | **+0.3** | | |
| HNS | | | | PP | **PP** | **07 02 24.6** | **+3.6** | | |
| HNS | | | | SKKS | | 07 09 04.3 | | | |
| HNS | | | | SS | **SS** | **07 23 26.6** | **+0.8** | | |
| HNS | | | | AMB | AMB | | | | |
| | comp=Z,1μm,11.4s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,840nm,20.6s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,3μm,19.5s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,3μm,19.6s | | | | | | | | |
| **TIY** | **Taiyuan** | **171.91** | **334** | ⇑PKP | **PKPdf** | **06 57 10.0** | **-1.7** | | |
| TIY | | | | PP | **PP** | **07 02 28.8** | **+4.2** | | |
| TIY | | | | SKS | **SKSdf** | **07 04 10.3** | **-5.0** | | |
| TIY | | | | SKKS | **SKKSac** | **07 09 17.9** | **+5.8** | | |
| TIY | | | | SS | **SS** | **07 23 35.5** | **+2.6** | | |
| TIY | | | | AMB | AMB | | | | |
| | comp=Z,700nm,5.8s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,2μm,20.6s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,810nm,16.5s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,730nm,22.0s | | | | | | | | |
| **KMI** | **Kunming** | **172.90** | **137** | ⇑PKP | **PKPdf** | **06 57 13.3** | **+0.6** | | |
| KMI | | | | pPKP | sPKPdf | 06 57 16.5 | +0.9 | | |
| **PZH** | **PanZhiHua** | **173.19** | **124** | PKP | **PKPdf** | **06 57 12.6** | **-0.1** | | |
| PZH | | | | PKPab | **PKPab** | **06 58 40.3** | **-0.1** | | |
| PZH | | | | PP | **PP** | **07 02 30.6** | **-1.4** | | |
| PZH | | | | SKS | **SKSdf** | **07 04 17.8** | **+1.5** | | |
| PZH | | | | SKKS | **SKKSac** | **07 09 19.4** | **+0.2** | | |
| PZH | | | | SS | **SS** | **07 23 42.8** | **-4.6** | | |
| PZH | | | | AMB | AMB | | | | |
| | comp=Z,1μm,13.7s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,1μm,19.6s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,1μm,18.4s | | | | | | | | |
| **LZH** | **Lanzhou** | **173.38** | **31** | *e*PKP | **PKPdf** | **06 57 14.3** | **+1.8** | | |
| LZH | | | | PP | **PP** | **07 02 34.3** | **+2.2** | | |
| LZH | | | | SKKS | | 07 09 22.5 | | | |
| LZH | | | | SS | **SS** | **07 23 43.8** | **-4.0** | | |
| LZH | | | | AMB | AMB | | | | |
| | comp=Z,2μm,10.9s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,2μm,17.3s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,1μm,18.2s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,3μm,18.4s | | | | | | | | |
| **LYN** | **LuoYang** | **174.47** | **319** | ⇑PKP | **PKPdf** | **06 57 11.9** | **-0.8** | | |
| LYN | | | | SKKS | | 07 09 25.3 | | | |
| LYN | | | | SS | **SS** | **07 24 02.6** | **+4.0** | | |
| LYN | | | | AMB | AMB | | | | |
| | comp=Z,420nm,8.4s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,3μm,17.5s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,3μm,18.6s | | | | | | | | |
| **WHN** | **Wuhan** | **174.56** | **272** | ⇓PKP | **PKPdf** | **06 57 15.9** | **+3.1** | | |
| WHN | | | | SKKS | | 07 09 26.0 | | | |
| WHN | | | | SS | **SS** | **07 24 03.0** | **+1.6** | | |
| WHN | | | | AMB | AMB | | | | |
| | comp=Z,1μm,4.4s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,6μm,23.4s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,8μm,21.3s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,5μm,19.5s | | | | | | | | |
| **GYA** | **Guiyang** | **175.82** | **163** | ⇑*i*PKP | **PKPdf** | **06 57 14.3** | **+0.8** | | |
| GYA | | | | PKPab | **sPKPab** | **06 58 54.4** | **-0.2** | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,760nm,17.8s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,890nm,18.6s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,1μm,17.2s | | | | | | | | |
| **CD2** | **Chengdu** | **176.28** | **82** | PKP | **PKPdf** | **06 57 13.0** | **-0.4** | | |
| CD2 | | | | pPKP | sPKPdf | 06 57 16.4 | +0.1 | | |
| CD2 | | | | PP | **PP** | **07 02 47.1** | **-0.3** | | |
| CD2 | | | | SKKS | | 07 09 32.3 | | | |
| CD2 | | | | SS | **SS** | **07 24 17.5** | **-0.5** | | |
| CD2 | | | | AMB | AMB | | | | |
| | comp=Z,4μm,8.0s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,220nm,17.5s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,2μm,17.3s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,2μm,20.4s | | | | | | | | |
| **XAN** | **Xi'an** | **176.36** | **348** | PKP | **PKPdf** | **06 57 14.3** | **+1.0** | | |

**SNET 22 06:42:07.6±0.9, 12°99'N×90°22'W, h14km±4km, ML3.1, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAYA** | **Jayaque - finc** | **1.00** | **49** | *e*P | Pb | 06 42 26.0 | -0.7 |
| **NUBE** | **Las Nubes** | **1.00** | **25** | *e*P | Pb | 06 42 25.5 | -1.3 |
| NUBE | | | | *e*S | Sb | 06 42 39.8 | -0.1 |
| **LALI** | **Alcalda de L** | **1.00** | **61** | *e*S | Sb | 06 42 39.8 | 0.0 |
| **CEVE** | **Cerro Verde** | **1.01** | **35** | *e*P | Pb | 06 42 26.1 | -0.9 |
| CEVE | | | | *e*S | Sn | 06 42 41.8 | +0.1 |
| CEVE | | | | IAML | | 06 42 42.9 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **SBLS** | **San Blas** | **1.02** | **34** | *e*P | Pb | 06 42 26.5 | -0.7 |
| **SNJE** | **San Jose** | **1.05** | **34** | *e*P | Pb | 06 42 27.0 | -0.8 |
| **RTR** | **El Retiro** | **1.06** | **32** | *e*P | Pb | 06 42 27.0 | -0.8 |
| **SLOZ** | **Alcaldia de Sa** | **1.11** | **22** | *e*P | Pb | 06 42 27.3 | -1.3 |
| SLOZ | | | | *e*S | Sb | 06 42 42.4 | -0.6 |
| SLOZ | | | | IAML | | 06 42 46.6 | |
| | comp=Z,203nm,0.4s | | | | | | |
| **CEDA** | **San Andres** | **1.14** | **45** | *e*S | Sg | 06 42 44.1 | -0.2 |
| CEDA | | | | IAML | | 06 42 51.0 | |
| | comp=Z,307nm,0.3s | | | | | | |
| **BOQS** | **Boqueron** | **1.17** | **51** | *e*P | Pb | 06 42 28.7 | -1.1 |
| **SNET** | **Serv Nac Est T** | **1.18** | **54** | *e*S | Sb | 06 42 45.0 | -0.1 |
| **UEES** | **Universidad Ev** | **1.19** | **53** | *e*P | Pn | 06 42 29.2 | -0.8 |
| **OPAM** | **Oficina de Pla** | **1.22** | **54** | *e*P | Pn | 06 42 30.0 | -0.3 |
| OPAM | | | | *e*S | Sb | 06 42 46.3 | +0.1 |
| **TACO** | **Tacachico** | **1.28** | **41** | *e*P | Pn | 06 42 30.0 | -1.1 |
| TACO | | | | *e*S | Sb | 06 42 47.6 | -0.3 |
| **LFRS** | **El Faro** | **1.29** | **61** | *e*P | Pn | 06 42 30.5 | -0.8 |
| **SJTE** | **Alcalda de S** | **1.33** | **62** | *e*P | Pn | 06 42 31.0 | -0.9 |
| SJTE | | | | *e*S | Sb | 06 42 49.0 | -0.3 |
| **COEG** | **Centro de Oper** | **1.44** | **64** | *e*P | Pn | 06 42 32.8 | -0.6 |
| COEG | | | | *e*S | Sb | 06 42 52.5 | -0.1 |
| **SCLA** | **Alcaldia de Sa** | **1.61** | **64** | *e*P | Pn | 06 42 36.2 | +0.5 |
| **MTO3** | **Montecristo** | **1.63** | **31** | *e*P | Pn | 06 42 35.6 | -0.4 |
| MTO3 | | | | *e*S | Sb | 06 42 58.5 | +0.5 |
| **COEB** | **Comit de Eme** | **1.72** | **73** | *e*P | Pn | 06 42 37.1 | -0.1 |
| **PQSS** | **Presa 15 de Se** | **1.73** | **69** | *e*P | Pn | 06 42 37.0 | -0.2 |
| **ESQI** | **Esquipulas** | **1.77** | **29** | *e*P | Pn | 06 42 37.8 | -0.2 |

*IDC 22 06:43:00.7±0.7, 35°69'N×3°60'W, h0km, mb4.0/12, mb1 4.1/16, mb1mx3.9/55, mbtmp3.9/16, ML3.8/4, MS2.5/2, Ms1 2.6/2, ms1mx2.5/96, Error ellipse: s-maj=24.3km s-min=11.7km az=99.0*

*LDG 22 06:43:02.9±0.4, 35°55'N×3°50'W, h10km, Ml3.5/4, Error ellipse: s-maj=8.0km s-min=3.5km az=168.0*

*MDD 22 06:43:02.2±0.3, 35°66'N×3°61'W, h0km, mb_Lg3.9/19, Error ellipse: s-maj=2.8km s-min=2.1km az=173.0*

*SFS 22 06:43:03.0, 35°69'N×3°61'W, ML4.0, ALBORAN SUR*

*IGIL 22 06:43:03.5, 35°68'N×3°71'W, h0km, ML3.6*

*INMG 22 06:43:03.7±2.0, 35°57'N×3°61'W, h23km±17km, ML3.6, Error ellipse: s-maj=10.3km s-min=4.6km az=151.0*

*CNRM 22 06:43:05.9, 35°50'N×3°62'W, h0km, ml3.9*

**ISC 22 06:43:04.4±0.8, 35°72'N±0°02'×3°55'W±0°02, h31km±6km, n129, σ1979/195, mb3.9/12, 1C, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EALB** | **Alboran** | **0.47** | **62** | Pg | **Pb** | **06 43 13.0** | **-1.5** |
| EALB | | | | Sg | **Sb** | **06 43 20.6** | **-0.7** |
| **PALE** | **Palemas** | **0.59** | **212** | P | **Pb** | **06 43 14.2** | **-2.3** |
| PALE | | | | S | **Sb** | **06 43 22.7** | **-1.9** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **EMEL** | **Melilla** | **0.64** | **131** | Pg | **Pb** | **06 43 14.7** | **-2.5** | | |
| EMEL | | | | Sg | **Sb** | **06 43 23.4** | **-2.5** | | |
| **ELGU** | **Los Guajares,** | **1.15** | **357** | Pg | **Pn** | **06 43 23.1** | **-1.3** | | |
| ELGU | | | | Sg | **Sb** | **06 43 40.2** | **-0.2** | | |
| ELGU | | | | *i* Vmb_Lg | | 06 43 42.8 | | | |
| **AKLM** | **AKL** | **1.23** | **192** | P | **Pn** | **06 43 24.5** | **-1.1** | | |
| AKLM | | | | S | **Sb** | **06 43 42.3** | **-0.5** | | |
| **EMAL** | **Malaga-Limoner** | **1.26** | **326** | P | **Pn** | **06 43 24.6** | **-1.3** | | |
| EMAL | | | | S | **Sn** | **06 43 41.4** | **-0.3** | | |
| **TAF** | **Taforalt** | **1.30** | **134** | P | **Pb** | **06 43 29.0** | **+0.7** | | |
| TAF | | | | S | **Sn** | **06 43 40.4** | **-2.5** | | |
| **EMIJ** | **Mijas** | **1.30** | **311** | Pg | **Pn** | **06 43 24.7** | **-1.8** | | |
| EMIJ | | | | Sg | **Sn** | **06 43 40.8** | **-2.0** | | |
| EMIJ | | | | *i* Vmb_Lg | | 06 43 42.1 | | | |
| **EGOR** | **Sierra Gorda,** | **1.46** | **342** | Pn | **Pn** | **06 43 28.1** | **-0.7** | | |
| EGOR | | | | Sn | **Sb** | **06 43 48.9** | **-0.4** | | |
| EGOR | | | | *i* Vmb_Lg | | 06 43 54.8 | | | |
| **CEU** | **Ceuta** | **1.49** | **277** | P | **Pn** | **06 43 26.4** | **-2.7** | | |
| CEU | | | | S | **Sn** | **06 43 43.4** | **-4.0** | | |
| **CHEFC** | **Chefchaouen** | **1.58** | **248** | P | **Pb** | **06 43 33.0** | **-0.1** | | |
| CHEFC | | | | S | Sb | 06 44 07.0 | +14 | | |
| **JBK** | **JBK** | **1.60** | **149** | P | **Pb** | **06 43 33.0** | **-0.5** | | |
| JBK | | | | S | **Sb** | **06 43 53.5** | **+0.1** | | |
| **ENIJ** | **Nijar** | **1.65** | **41** | Pn | **Pn** | **06 43 30.2** | **-1.2** | | |
| ENIJ | | | | Pg | **Pb** | **06 43 35.6** | **+1.3** | | |
| ENIJ | | | | Sn | **Sn** | **06 43 50.2** | **-1.4** | | |
| ENIJ | | | | *i* Vmb_Lg | | 06 44 06.3 | | | |
| **EJIF** | **Jimena Fronter** | **1.72** | **296** | Pn | **Pn** | **06 43 31.4** | **-0.8** | | |
| **CPS** | **Cap Spartel** | **1.92** | **273** | P | **Pb** | **06 43 39.0** | **+0.2** | | |
| **SICH** | **Sidi Chahed** | **2.17** | **222** | P | Pb | 06 43 48.0 | +4.9 | | |
| SICH | | | | S | Pb | 06 43 48.0 | +4.9 | | |
| **SFS** | **San Fernando** | **2.27** | **290** | P | **Pb** | **06 43 41.8** | **+2.0** | | |
| SFS | | | | S | **Sb** | **06 44 12.8** | **+0.3** | | |
| **LCRM** | **LCR** | **2.30** | **208** | P | **Pn** | **06 43 40.0** | **-0.3** | | |
| LCRM | | | | S | **Sb** | **06 44 20.2** | **+6.9** | | |
| **IFR** | **Ifrane** | **2.55** | **211** | P | **Pn** | **06 43 43.0** | **-0.9** | | |
| IFR | | | | S | **Sn** | **06 44 13.2** | **-0.8** | | |
| **EZAR** | **Zarzadilla de** | **2.62** | **34** | Pn | **Pn** | **06 43 44.2** | **-0.5** | | |
| EZAR | | | | Sn | **Sn** | **06 44 18.8** | **+3.3** | | |
| **CART** | **Cartagena** | **2.77** | **47** | P | **Pn** | **06 43 45.8** | **-0.8** | | |
| CART | | | | S | **Sn** | **06 44 16.2** | **-2.9** | | |
| **CART** | **Cartagena** | **2.77** | **47** | P | **Pn** | **06 43 45.4** | **-1.3** | | |
| CART | | | | S | **Sn** | **06 44 17.3** | **-1.7** | | |
| **ECAB** | **El Cabril** | **2.79** | **328** | Pn | **Pn** | **06 43 48.7** | **+1.8** | | |
| ECAB | | | | Sn | **Sn** | **06 44 21.4** | **+1.9** | | |
| ECAB | | | | *i* Vmb_Lg | | 06 44 32.2 | | | |
| **ARNO** | **Arenosillo** | **2.91** | **299** | P | **Pn** | **06 43 49.3** | **+0.7** | | |
| ARNO | | | | S | **Sn** | **06 44 24.6** | **+2.1** | | |
| **CZD** | **Col de Zad** | **2.95** | **205** | P | **Pn** | **06 43 49.2** | **-0.2** | | |
| **MD31** | **MD31** | **3.02** | **200** | P | **Pn** | **06 43 49.5** | **-0.6** | | |
| **MDT** | **Midelt** | **3.03** | **197** | Pn | **Pn** | **06 43 49.6** | **-0.8** | | |
| | 4.6nm,0.3s,baz=225,slow=10,SNR=200 | | | | | | | | |
| MDT | | | | Sn | **Sn** | **06 44 26.4** | **+0.9** | | |
| | 10nm,0.3s,baz=67,slow=18,SNR=4.3 | | | | | | | | |
| MDT | | | | LR | LR | 06 44 31.7 | | | |
| | comp=Z,38nm,19.7s,baz=49,slow=30 | | | | | | | | |
| MDT | | | | Lg | Lg | 06 44 36.0 | | | |
| | 18nm,0.3s,baz=283,slow=15,SNR=8.1 | | | | | | | | |
| **MDT** | **Midelt** | **3.03** | **197** | P | **Pn** | **06 43 50.5** | **+0.2** | | |
| **ETOB** | **Tobarra** | **3.33** | **28** | Pn | **Pn** | **06 43 55.9** | **+1.5** | | |
| ETOB | | | | Sn | **Sn** | **06 44 35.9** | **+3.0** | | |
| ETOB | | | | *i* Vmb_Lg | | 06 45 05.3 | | | |
| **EGRO** | **El Granado** | **3.64** | **301** | Pn | **Pn** | **06 43 58.3** | **-0.4** | | |
| EGRO | | | | Sn | **Sn** | **06 44 39.6** | **-1.0** | | |
| EGRO | | | | *i* Vmb_Lg | | 06 44 43.0 | | | |
| **PBAR** | **Barrancos** | **3.72** | **312** | *e*Pn | **Pn** | **06 43 59.6** | **-0.1** | | |
| PBAR | | | | *e*Sn | **Sn** | **06 44 41.2** | **-1.2** | | |
| PBAR | | | | A | A | 06 44 43.6 | | | |
| | 87nm,0.8s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | ⇑*e*Pn | **Pn** | **06 43 59.6** | **-0.6** | | |
| PVAQ | | | | *e*Sn | **Sn** | **06 44 41.7** | **-1.6** | | |
| PVAQ | | | | A | A | 06 44 43.7 | | | |
| | 97nm,0.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | P | **Pn** | **06 44 00.5** | **+0.3** | | |
| PVAQ | | | | S | **Sn** | **06 44 47.4** | **+4.1** | | |
| **AFON** | **Font Roja** | **3.80** | **38** | Pn | **Pn** | **06 44 02.7** | **+1.8** | | |
| AFON | | | | Sn | **Sn** | **06 44 45.8** | **+1.2** | | |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **295** | *e*Pn | **Pn** | **06 44 01.0** | **-0.5** | | |
| PBDV | | | | *e*Sn | **Sn** | **06 44 43.8** | **-1.8** | | |
| PBDV | | | | A | A | 06 44 48.1 | | | |
| | 97nm,0.8s | | | | | | | | |
| **PAB** | **San Pablo** | **3.87** | **351** | Pn | **Pn** | **06 44 03.1** | **+1.2** | | |
| PAB | | | | Sn | **Sn** | **06 44 48.3** | **+2.0** | | |
| PAB | | | | *i* Vmb_Lg | | 06 45 23.3 | | | |
| **ESDC** | **Sonseca Array** | **3.96** | **355** | Pn | **Pn** | **06 44 03.9** | **+0.8** | | |
| | 3.0nm,0.3s,baz=180,slow=12,SNR=95 | | | | | | | | |
| ESDC | | | | Sn | **Sn** | **06 44 50.0** | **+1.4** | | |
| | 5.8nm,0.3s,baz=178,slow=22,SNR=11 | | | | | | | | |
| ESDC | | | | Lg | Lg | 06 45 06.2 | | | |
| | 7.2nm,0.3s,baz=175,slow=29,SNR=6.8 | | | | | | | | |
| ESDC | | | | LR | LR | 06 45 34.6 | | | |
| | comp=Z,157nm,21.0s,baz=230,slow=39 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **3.96** | **355** | Pn | **Pn** | **06 44 00.7** | **-2.4** | | |
| ESDC | | | | Sn | **Sn** | **06 44 50.1** | **+1.6** | | |
| ESDC | | | | *i* Vmb_Lg | | 06 45 08.8 | | | |
| **AVE** | **Averroes** | **4.00** | **234** | P | **Pn** | **06 44 02.7** | **-0.9** | | |
| AVE | | | | S | **Sn** | **06 44 49.7** | **+0.3** | | |
| **AVE** | **Averroes** | **4.00** | **234** | P | **Pn** | **06 44 04.5** | **+0.9** | | |
| **FIGM** | **Figuig** | **4.05** | **151** | P | **Pn** | **06 44 05.1** | **+0.7** | | |
| **PCVE** | **Castro Verde** | **4.08** | **299** | *e*Pn | **Pn** | **06 44 02.2** | **-0.5** | | |
| PCVE | | | | *e*Sn | **Sn** | **06 44 50.2** | **-1.2** | | |
| PCVE | | | | A | A | 06 44 52.3 | | | |
| | 114nm,0.4s | | | | | | | | |
| **EBAD** | **Badajoz** | **4.10** | **319** | Pn | **Pn** | **06 44 05.2** | **+0.2** | | |
| EBAD | | | | Sn | **Sn** | **06 44 52.3** | **+0.5** | | |
| EBAD | | | | *i* Vmb_Lg | | 06 44 53.5 | | | |
| **PBEJ** | **Beja** | **4.16** | **305** | *e*Pn | **Pn** | **06 44 05.5** | **-0.2** | | |
| PBEJ | | | | *e*Sn | **Sn** | **06 44 52.7** | **-0.5** | | |
| PBEJ | | | | A | A | 06 44 56.4 | | | |
| | 50nm,0.6s | | | | | | | | |
| **GOLM** | **Goulmima** | **4.17** | **197** | P | **Pn** | **06 44 06.1** | **0.0** | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*P | **Pn** | **06 44 07.2** | **-0.6** | | |
| MESJ | | | | *e*S | **Sn** | **06 44 53.6** | **-3.3** | | |
| MESJ | | | | IAML | | 06 44 59.3 | | | |
| | comp=N,120nm,0.5s | | | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*Pn | **Pn** | **06 44 07.4** | **-0.3** | | |
| MESJ | | | | *e*Sn | **Sn** | **06 44 56.6** | **-0.3** | | |
| MESJ | | | | A | A | 06 45 00.0 | | | |
| | comp=N,86nm,0.6s | | | | | | | | |
| **ECHE** | **Chera** | **4.37** | **27** | Pn | **Pn** | **06 44 10.1** | **+1.3** | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*P | **Pn** | **06 44 08.2** | **-1.0** | | |
| MORF | | | | *e*S | **Sn** | **06 44 55.4** | **-4.0** | | |
| MORF | | | | IAML | | 06 45 03.1 | | | |
| | comp=N,140nm,0.4s | | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*Pn | **Pn** | **06 44 08.5** | **-0.7** | | |
| MORF | | | | *e*Sn | **Sn** | **06 44 57.7** | **-1.7** | | |
| MORF | | | | A | A | 06 45 10.5 | | | |
| | comp=N,46nm,0.6s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | *e*Pn | **Pn** | **06 44 09.8** | **-0.4** | | |
| PFVI | | | | *e*Sn | **Sn** | **06 44 58.5** | **-2.8** | | |
| PFVI | | | | A | A | 06 45 08.6 | | | |
| | comp=N,71nm,0.4s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | P | **Pn** | **06 44 09.4** | **-0.8** | | |
| **PESTR** | **Estremoz** | **4.50** | **315** | *e*Pn | **Pn** | **06 44 10.8** | **+0.4** | | |
| PESTR | | | | *e*Sn | **Sn** | **06 45 00.9** | **-0.8** | | |
| PESTR | | | | A | A | 06 45 03.7 | | | |
| | comp=N,43nm,0.5s | | | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **315** | P | **Pn** | **06 44 10.4** | **0.0** | | |
| **EVO** | **Evora** | **4.54** | **310** | P | **Pn** | **06 44 10.9** | **-0.1** | | |
| EVO | | | | S | **Sn** | **06 45 00.8** | **-1.8** | | |
| **EVO** | **Evora** | **4.54** | **310** | *e*Pn | **Pn** | **06 44 11.1** | **+0.1** | | |
| EVO | | | | *e*Sn | **Sn** | **06 45 01.0** | **-1.6** | | |
| EVO | | | | A | A | 06 45 03.6 | | | |
| | comp=N,74nm,0.5s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.54** | **295** | *e*Pn | **Pn** | **06 44 11.2** | **+0.2** | | |
| PTEO | | | | *e*Sn | **Sn** | **06 45 02.2** | **-0.5** | | |
| PTEO | | | | A | A | 06 45 06.7 | | | |
| | comp=N,137nm,0.7s | | | | | | | | |
| **UCM** | **Universidad Co** | **4.59** | **3** | P | **Pn** | **06 44 13.4** | **+1.7** | | |
| UCM | | | | S | **Sn** | **06 45 03.3** | **-0.6** | | |
| **PNCL** | **Nicolau / Gran** | **4.65** | **302** | *e*Pn | **Pn** | **06 44 12.4** | **-0.1** | | |
| PNCL | | | | *e*Sn | **Sn** | **06 45 04.0** | **-1.4** | | |
| PNCL | | | | A | A | 06 45 05.4 | | | |
| | comp=N,61nm,0.3s | | | | | | | | |
| **EPLA** | **Plasencia** | **4.78** | **336** | Pn | **Pn** | **06 44 15.2** | **+0.9** | | |
| EPLA | | | | Sn | **Sn** | **06 45 10.5** | **+2.0** | | |
| EPLA | | | | *i* Vmb_Lg | | 06 45 36.5 | | | |
| **PMRV** | **Marv??o** | **4.80** | **322** | *e*Pn | **Pn** | **06 44 15.4** | **+0.9** | | |
| PMRV | | | | *e*Sn | **Sn** | **06 45 08.5** | **-0.6** | | |
| PMRV | | | | A | A | 06 45 25.4 | | | |
| | comp=N,40nm,0.5s | | | | | | | | |
| **GUD** | **Guadarrama** | **4.94** | **355** | Pn | **Pn** | **06 44 17.8** | **+1.2** | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GUD | | | | Sn | **Sn** | **06 45 12.7** | **0.0** | | |
| GUD | | | | *i* Vmb_Lg | | 06 45 52.7 | | | |
| **PMTG** | **Montargil** | **5.00** | **313** | *e*Pn | **Pn** | **06 44 17.3** | **0.0** | | |
| PMTG | | | | *e*Sn | **Sn** | **06 45 13.2** | **-0.9** | | |
| PMTG | | | | A | A | 06 45 14.5 | | | |
| | comp=N,46nm,0.6s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.16** | **324** | *e*Pn | **Pn** | **06 44 20.4** | **+1.0** | | |
| PCBR | | | | *e*Sn | **Sn** | **06 45 17.2** | **-0.7** | | |
| PCBR | | | | A | A | 06 45 18.7 | | | |
| | comp=N,52nm,0.5s | | | | | | | | |
| **PACT** | **Alcochete** | **5.20** | **307** | *e*Pn | **Pn** | **06 44 20.7** | **+0.7** | | |
| PACT | | | | *e*Sn | **Sn** | **06 45 18.3** | **-0.6** | | |
| PACT | | | | A | A | 06 45 19.7 | | | |
| | comp=N,48nm,0.7s | | | | | | | | |
| **TZRR** | **Tazzarine** | **5.20** | **200** | P | **Pn** | **06 44 23.0** | **+2.7** | | |
| **ETOR** | **Torete** | **5.22** | **13** | Pn | **Pn** | **06 44 22.1** | **+1.6** | | |
| ETOR | | | | Sn | **Sn** | **06 45 26.9** | **+7.2** | | |
| ETOR | | | | *i* Vmb_Lg | | 06 46 06.0 | | | |
| **ECOL** | **Islas Columbre** | **5.35** | **38** | Pn | **Pn** | **06 44 22.8** | **+0.7** | | |
| **LIS** | **Lisbon** | **5.38** | **305** | *e*Pn | **Pn** | **06 44 23.6** | **+1.1** | | |
| LIS | | | | *e*Sn | **Sn** | **06 45 23.2** | **-0.1** | | |
| **PMST** | **Lisbon--Monsan** | **5.41** | **305** | *e*Pn | **Pn** | **06 44 23.6** | **+0.7** | | |
| PMST | | | | *e*Sn | **Sn** | **06 45 22.6** | **-1.5** | | |
| PMST | | | | A | A | 06 45 37.7 | | | |
| | comp=N,53nm,0.6s | | | | | | | | |
| **OUZM** | **OUZ** | **5.50** | **210** | P | **Pn** | **06 44 24.4** | **+0.1** | | |
| **PMAFR** | **Mafra** | **5.59** | **307** | *e*Pn | **Pn** | **06 44 25.7** | **+0.2** | | |
| PMAFR | | | | *e*Sn | **Sn** | **06 45 26.6** | **-2.1** | | |
| PMAFR | | | | A | A | 06 45 29.4 | | | |
| | comp=N,70nm,0.6s | | | | | | | | |
| **PSBE** | **So Bento** | **5.63** | **314** | *e*Pn | **Pn** | **06 44 26.6** | **+0.6** | | |
| PSBE | | | | *e*Sn | **Sn** | **06 45 28.5** | **-1.0** | | |
| PSBE | | | | A | A | 06 45 44.6 | | | |
| | comp=N,37nm,0.4s | | | | | | | | |
| **MTE** | **Manteigas** | **5.63** | **327** | *e*Pn | **Pn** | **06 44 27.3** | **+1.2** | | |
| MTE | | | | *e*Sn | **Sn** | **06 45 28.5** | **-1.3** | | |
| MTE | | | | A | A | 06 46 04.1 | | | |
| | comp=N,104nm,0.6s | | | | | | | | |
| **OUK** | **Oukaimeden** | **5.77** | **220** | P | **Pn** | **06 44 27.0** | **-1.2** | | |
| **ZGR** | **Zagora** | **5.85** | **198** | P | **Pn** | **06 44 28.7** | **-0.4** | | |
| **COI** | **Coimbra** | **5.90** | **321** | *e*Pn | **Pn** | **06 44 30.6** | **+0.9** | | |
| COI | | | | *e*Sn | **Sn** | **06 45 35.9** | **-0.3** | | |
| COI | | | | A | A | 06 45 48.0 | | | |
| | comp=N,54nm,0.6s | | | | | | | | |
| **PVIS** | **Viseu** | **6.05** | **327** | *e*Pn | **Pn** | **06 44 32.2** | **+0.5** | | |
| PVIS | | | | *e*Sn | **Sn** | **06 45 38.0** | **-1.9** | | |
| PVIS | | | | A | A | 06 45 43.3 | | | |
| | comp=N,59nm,0.5s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.08** | **334** | *e*Pn | **Pn** | **06 44 33.2** | **+1.0** | | |
| MVO | | | | *e*Sn | **Sn** | **06 45 39.1** | **-1.7** | | |
| MVO | | | | A | A | 06 45 42.9 | | | |
| | comp=N,52nm,0.6s | | | | | | | | |
| **PVRL** | **Vila Real** | **6.44** | **331** | *e*Pn | **Pn** | **06 44 38.0** | **+0.9** | | |
| PVRL | | | | *e*Sn | **Sn** | **06 45 47.6** | **-1.9** | | |
| PVRL | | | | A | A | 06 45 51.1 | | | |
| | comp=N,48nm,0.8s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.55** | **331** | *e*Pn | **Pn** | **06 44 39.5** | **+0.8** | | |
| POLO | | | | *e*Sn | **Sn** | **06 45 49.7** | **-2.7** | | |
| POLO | | | | A | A | 06 45 56.1 | | | |
| | comp=N,16nm,0.6s | | | | | | | | |
| **PBRG** | **Braganca** | **6.57** | **339** | *e*Pn | **Pn** | **06 44 39.7** | **+0.8** | | |
| PBRG | | | | *e*Sn | **Sn** | **06 45 50.8** | **-1.9** | | |
| PBRG | | | | A | A | 06 45 55.1 | | | |
| | comp=N,20nm,0.5s | | | | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.59** | **220** | P | **Pn** | **06 44 37.0** | **-2.3** | | |
| **EPOB** | **Poblet** | **6.69** | **31** | Pn | **Pn** | **06 44 41.7** | **+1.1** | | |
| **PTO** | **Porto** | **6.71** | **325** | *e*Pn | **Pn** | **06 44 41.8** | **+1.1** | | |
| PTO | | | | *e*Sn | **Sn** | **06 45 53.4** | **-2.6** | | |
| **PCAB** | **Cabril** | **6.93** | **331** | *e*Pn | **Pn** | **06 44 44.5** | **+0.7** | | |
| PCAB | | | | *e*Sn | **Sn** | **06 45 59.0** | **-2.6** | | |
| PCAB | | | | A | A | 06 46 05.9 | | | |
| | comp=N,28nm,0.8s | | | | | | | | |
| **ELOB** | **Lobios** | **7.08** | **332** | Pn | **Pn** | **06 44 47.6** | **+1.7** | | |
| ELOB | | | | Sn | **Sn** | **06 46 03.2** | **-2.1** | | |
| ELOB | | | | *i* Vmb_Lg | | 06 47 36.9 | | | |
| **PGAV** | **Gavieira, Arco** | **7.24** | **331** | *e*Pn | **Pn** | **06 44 50.1** | **+1.9** | | |
| PGAV | | | | *e*Sn | **Sn** | **06 46 07.2** | **-2.2** | | |
| PGAV | | | | A | A | 06 46 13.2 | | | |
| | comp=N,41nm,0.8s | | | | | | | | |
| **EORO** | **Oroz-Betelu** | **7.37** | **13** | Pn | **Pn** | **06 44 52.5** | **+2.6** | | |
| EORO | | | | Sn | **Sn** | **06 46 12.6** | **+0.1** | | |
| EORO | | | | *i* Vmb_Lg | | 06 47 27.2 | | | |
| **ELAN** | **Lanestosa** | **7.50** | **1** | Pn | **Pn** | **06 44 54.1** | **+2.4** | | |
| ELAN | | | | *i* Vmb_Lg | | 06 46 48.1 | | | |
| **ETSF** | **Etsaut** | **7.53** | **17** | *e*Pn | **Pn** | **06 44 54.9** | **+2.7** | | |
| **ETSF** | **Etsaut** | **7.53** | **17** | *e*P | Pn | 06 44 57.8 | +5.6 | | |
| ETSF | | | | *e*Sn | **Sn** | **06 46 13.7** | **-2.8** | | |
| | comp=N,6.4nm,0.6s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OK005 | | | | | Sg | Sg | 06 57 02.7 | +0.4 | |
| **OK009** | **Oakdale Elemen** | **0.34** | **180** | | Pg | Pg | 06 56 58.2 | -0.1 | |
| OK009 | | | | | Sg | Sg | 06 57 03.3 | +0.5 | |
| **OK001** | **Jones High Sch** | **0.37** | **163** | | Pg | Pg | 06 56 58.9 | -0.1 | |
| OK001 | | | | | Sg | Sg | 06 57 04.3 | +0.4 | |
| **OKCFA** | **Oklahoma City** | **0.50** | **183** | | | Pg | 06 57 01.2 | -0.2 | |
| OKCFA | | | | | Sg | Sg | 06 57 08.3 | +0.3 | |
| **OKCSW** | **OKLAHOMA CITY** | **0.51** | **181** | | Pg | Pg | 06 57 01.4 | -0.2 | |
| OKCSW | | | | | Sg | Sg | 06 57 08.8 | +0.5 | |
| **FNO** | **Franklin** | **0.66** | **178** | | Pg | Pg | 06 57 04.1 | -0.4 | |
| FNO | | | | | Sg | Sg | 06 57 13.1 | +0.1 | |
| **W35A** | **Tecumseh** | **0.89** | **149** | | Pg | Pg | 06 57 07.8 | -0.9 | |
| W35A | | | | | Sg | Sg | 06 57 19.8 | -0.5 | |
| **T35A** | **Sooner Cattle** | **1.24** | **36** | | Pg | Pb | 06 57 14.7 | -0.7 | |
| **TUL1** | **Leonard** | **1.32** | **90** | | | Pb | 06 57 15.3 | -1.3 | |
| TUL1 | | | | | IAmb_Lg | | 06 57 34.7 | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **U32A** | **Winter Ranch,** | **1.36** | **290** | | Pn | Pn | 06 57 16.8 | -0.3 | |
| U32A | | | | | IAmb_Lg | | 06 57 34.3 | | |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.36** | **194** | | Pn | Pn | 06 57 17.1 | 0.0 | |
| **WMOK** | **Wichita Mounta** | **1.62** | **224** | | Pn | Pn | 06 57 20.9 | +0.1 | |
| **X37A** | **Clayton** | **2.14** | **128** | | Pn | Pn | 06 57 28.2 | +0.4 | |
| **Z35A** | **Perchaven, San** | **2.59** | **177** | | | Pn | 06 57 35.5 | +1.5 | |
| **R32A** | **Long Quarter,** | **2.70** | **338** | | | Pn | 06 57 36.2 | +0.6 | |
| R32A | | | | | IAmb_Lg | | 06 58 17.8 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **HHAR** | **Hobbs** | **2.84** | **82** | | | Pn | 06 57 37.7 | +0.1 | |
| **W39A** | **Magazine** | **3.06** | **103** | | | Pn | 06 57 40.8 | +0.4 | |
| W39A | | | | | IAmb_Lg | | 06 58 29.6 | | |
| | comp=Z,27nm,0.8s | | | | | | | | |
| **KSU1** | **Kansas State U** | **3.24** | **11** | Pn | Pn | | 06 57 43.2 | +0.2 | |
| KSU1 | | | | IAmb_Lg | | | 06 58 39.3 | | |
| | comp=Z,32nm,0.8s | | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.33** | **142** | Pn | Pn | | 06 57 45.0 | +0.8 | |
| Z38A | | | | IAmb_Lg | | | 06 58 34.5 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.43** | **328** | Pn | Pn | | 06 57 45.3 | -0.3 | |
| **MIAR** | **Mount Ida** | **3.44** | **112** | | Pn | | 06 57 45.7 | +0.1 | |
| MIAR | | | | IAmb_Lg | | | 06 58 49.1 | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **AMTX** | **Amarillo** | **3.63** | **255** | | Pn | | 06 57 49.7 | +1.3 | |
| AMTX | | | | IAmb_Lg | | | 06 58 56.1 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **U40A** | **Yellville** | **3.73** | **82** | | | Pn | 06 57 49.5 | -0.2 | |
| **S39A** | **Bolivar** | **3.74** | **61** | Pn | | Pn | 06 57 49.9 | +0.1 | |
| **ABTX** | **Abilene, Hawle** | **3.77** | **210** | Pn | Pn | | 06 57 50.4 | +0.1 | |
| ABTX | | | | IAmb_Lg | | | 06 58 50.3 | | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.02** | **109** | Pn | Pn | | 06 57 54.6 | +0.9 | |
| X40A | | | | IAmb_Lg | | | 06 59 06.5 | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **237A** | **Washetta, Mont** | **4.13** | **161** | Pn | Pn | | 06 57 56.1 | +0.9 | |
| 237A | | | | IAmb_Lg | | | 06 59 09.4 | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **WLAR** | **White Oak Lake** | **4.19** | **121** | Pn | Pn | | 06 57 56.3 | +0.3 | |
| WLAR | | | | IAmb_Lg | | | 06 59 06.8 | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.23** | **97** | | | Pn | 06 57 56.9 | +0.3 | |
| WHAR | | | | IAmb_Lg | | | 06 59 08.7 | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.29** | **98** | Pn | Pn | | 06 57 57.8 | +0.5 | |
| **FCAR** | **Ozark Folk Cen** | **4.30** | **89** | Pn | Pn | | 06 57 57.1 | -0.4 | |
| FCAR | | | | IAmb_Lg | | | 06 59 16.0 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.33** | **72** | IAmb_Lg | | | 06 59 18.8 | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **Z41A** | **Richland Creek** | **4.65** | **124** | Pn | Pn | | 06 58 00.0 | -2.2 | |
| Z41A | | | | IAmb_Lg | | | 06 59 25.8 | | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **R40A** | **Maddies Statio** | **4.75** | **59** | Pn | Pn | | 06 58 04.2 | +0.5 | |
| **MSTX** | **Muleshoe** | **4.80** | **248** | IAmb_Lg | | | 06 59 35.6 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **P38A** | **Dawn** | **4.81** | **39** | IAmb_Lg | | | 06 59 32.0 | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| **N35A** | **Tabor** | **5.13** | **15** | Pn | Pn | | 06 58 08.7 | -0.2 | |
| **KSCO** | **Kaye Shedlock'** | **5.16** | **308** | Pn | Pn | | 06 58 08.6 | -0.9 | |
| **BGNE** | **Belgrade** | **5.51** | **354** | IAmb_Lg | | | 06 59 57.1 | | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **T25A** | **Trinidad** | **5.76** | **284** | Pn | Pn | | 06 58 16.6 | -1.2 | |
| **JCT** | **Junction City** | **5.78** | **201** | Pn | Pn | | 06 58 16.6 | -1.3 | |
| **SDCO** | **Great Sand Dun** | **6.73** | **288** | Pn | Pn | | 06 58 32.9 | +1.7 | |

*IDC **22** 07:01:15.0±1.3,30°.32S×71°.85W,h0km,mb3.8/3,*
*mb1 3.9/6,mb1mx3.8/25,mbtmp3.8/6,ML3.9/3,Error*
*ellipse: s-maj=43.0km s-min=30.4km az=94.0*
*NEIC **22** 07:01:15.6±2.6,30°.46S±0°.02×72°.22W±0°.05,h10km±1km,*
*mb4.5/5,ML4.1(GUC),Error ellipse: s-maj=7.4km*
*s-min=3.0km az=267.0*
*GUC **22** 07:01:16.0±0.6,30°.44S×72°.18W,h40km±2km,ML4.1*
**ISC 22 07:01:13.7±1.3,30°.48S±0°.03×72°.22W±0°.06,h2km±7km,**
**n70,σ1°42/88,mb4.2/5,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.54** | **111** | | **Pb** | **07 01 26.6** | **+0.7** |
| CO06 | | | | Sg | **Sb** | **07 01 34.2** | **+0.2** |
| **CO06** | **Fray Jorge** | **0.54** | **111** | *eP* | **Pb** | **07 01 26.5** | **+0.7** |
| CO06 | | | | *i* S | **Sb** | **07 01 34.4** | **+0.4** |
| CO06 | | | | IAML | | 07 01 38.4 | |
| | comp=E,10μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **1.02** | **57** | | **Pg** | **07 01 33.8** | **+0.6** |
| CO05 | | | | Sg | **Sb** | **07 01 47.6** | **-0.2** |
| **CO05** | **La Serena** | **1.02** | **57** | *eP* | **Pg** | **07 01 33.8** | **+0.6** |
| CO05 | | | | *i* S | **Sb** | **07 01 46.6** | **-1.2** |
| CO05 | | | | IAML | | 07 01 50.5 | |
| | comp=E,8μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **1.26** | **76** | | **Pg** | **07 01 38.0** | **+0.1** |
| GO04 | | | | Sn | **Sn** | **07 01 55.7** | **-0.6** |
| **GO04** | **Tololo Observa** | **1.26** | **76** | *eP* | **Pg** | **07 01 37.9** | **0.0** |
| GO04 | | | | *i* S | **Sb** | **07 01 54.2** | **-1.0** |
| GO04 | | | | IAML | | 07 02 00.9 | |
| | comp=N,16μm,0.1s | | | | | | |
| **CO02** | **Combarbal** | **1.27** | **125** | Pn | **Pg** | **07 01 38.7** | **+0.7** |
| CO02 | | | | Sn | **Sn** | **07 01 56.1** | **-0.2** |
| **CO02** | **Combarbal** | **1.27** | **125** | *eP* | **Pg** | **07 01 38.7** | **+0.7** |
| CO02 | | | | *i* S | **Sb** | **07 01 55.3** | **0.0** |
| CO02 | | | | IAML | | 07 01 59.3 | |
| | comp=N,11μm,0.6s | | | | | | |
| **CO03** | **El Pedregal** | **1.36** | **106** | | **Pn** | **07 01 39.8** | **-0.1** |
| CO03 | | | | Sn | **Sn** | **07 01 58.0** | **-0.5** |
| **CO03** | **El Pedregal** | **1.36** | **106** | *eP* | **Pn** | **07 01 39.7** | **-0.1** |
| CO03 | | | | *i* S | **Sb** | **07 01 57.3** | **-0.6** |
| CO03 | | | | IAML | | 07 01 59.2 | |
| | comp=N,3μm,0.4s | | | | | | |
| **LCO** | **Las Campanas** | **1.97** | **42** | Pn | **Pn** | **07 01 48.1** | **-0.3** |
| LCO | | | | Sn | **Sn** | **07 02 13.8** | **0.0** |
| **LCO** | **Las Campanas** | **1.97** | **42** | *eP* | **Pn** | **07 01 48.1** | **-0.3** |
| LCO | | | | *i* S | **Sn** | **07 02 12.1** | **-1.7** |
| **VA06** | **Catapilco** | **2.22** | **159** | Pn | **Pn** | **07 01 52.4** | **+0.9** |
| **VA06** | **Catapilco** | **2.22** | **159** | *eP* | **Pn** | **07 01 52.3** | **+0.8** |
| VA06 | | | | *i* S | **Sn** | **07 02 19.6** | **+0.2** |
| VA06 | | | | IAML | | 07 02 35.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.48** | **24** | Pn | **Pn** | **07 01 54.1** | **-1.0** |
| **VA01** | **Torpederas** | **2.58** | **169** | | **Pn** | **07 01 56.9** | **+0.4** |
| **VA03** | **San Esteban** | **2.68** | **148** | | **Pn** | **07 01 59.9** | **+1.9** |
| **VA03** | **San Esteban** | **2.68** | **148** | *eP* | **Pn** | **07 01 60.0** | **+1.9** |
| VA03 | | | | *i* S | **Sn** | **07 02 31.4** | **+0.3** |
| VA03 | | | | IAML | | 07 02 48.9 | |
| | comp=N,1μm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **2.69** | **158** | *eP* | **Pb** | **07 01 59.0** | **-3.7** |
| ROCH | | | | *eP* | **Pn** | **07 01 58.0** | **-0.2** |
| ROCH | | | | *i* S | **Sn** | **07 02 28.8** | **-2.6** |
| ROCH | | | | *i* S | **Sb** | **07 02 31.6** | **-4.6** |
| ROCH | | | | IAML | | 07 02 42.7 | |
| | comp=E,604nm,0.5s | | | | | | |
| ROCH | | | | IAML | | 07 02 58.9 | |
| | comp=N,810nm,0.5s | | | | | | |
| **ROC1** | **El Roble** | **2.69** | **158** | | **Pn** | **07 01 57.9** | **-0.3** |
| **MT02** | **Curacav** | **2.92** | **162** | | **Pn** | **07 02 02.1** | **+0.9** |
| **MT02** | **Curacav** | **2.92** | **162** | *eP* | **Pn** | **07 02 01.5** | **+0.4** |
| MT02 | | | | *i* S | **Sn** | **07 02 35.2** | **-1.6** |
| **PEL** | **Peldehue** | **2.96** | **154** | | **Pn** | **07 02 03.3** | **+1.6** |
| **PEL** | **Peldehue** | **2.96** | **154** | *eP* | **Pn** | **07 02 03.0** | **+1.3** |
| PEL | | | | *i* S | **Sn** | **07 02 38.2** | **+0.4** |
| PEL | | | | IAML | | 07 02 54.8 | |
| | comp=N,436nm,0.3s | | | | | | |
| **MT05** | **Renca** | **3.16** | **157** | Pn | **Pn** | **07 02 05.8** | **+1.2** |
| **VA05** | **Santo Domingo** | **3.21** | **171** | | **Pn** | **07 02 04.8** | **-0.3** |
| **ZON** | **Zonda** | **3.22** | **110** | Pn | **Pb** | **07 02 08.9** | **-2.7** |
| **MT03** | **Universidad Ad** | **3.33** | **155** | Pn | **Pn** | **07 02 08.4** | **+1.5** |
| **GO03** | **Copiap** | **3.36** | **32** | Pn | **Pn** | **07 02 07.8** | **+0.5** |
| **MT09** | **Talagante** | **3.44** | **163** | | **Pn** | **07 02 09.9** | **+1.4** |
| **MT09** | **Talagante** | **3.44** | **163** | *eP* | **Pn** | **07 02 09.7** | **+1.1** |
| MT09 | | | | *i* S | **Sn** | **07 02 49.9** | **-0.2** |
| MT09 | | | | IAML | | 07 03 05.5 | |
| | comp=E,237nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **3.47** | **167** | | **Pn** | **07 02 09.8** | **+1.1** |
| **MT01** | **Popeta** | **3.47** | **167** | *eP* | **Pn** | **07 02 09.3** | **+0.6** |
| **BO04** | **La Punta** | **3.75** | **159** | | **Pn** | **07 02 13.0** | **+0.3** |
| **BO04** | **La Punta** | **3.75** | **159** | *eP* | **Pn** | **07 02 13.8** | **+1.1** |
| BO04 | | | | *i* S | **Sn** | **07 02 56.9** | **-0.5** |
| **LMEL** | **Las Melosas** | **3.77** | **154** | | **Pn** | **07 02 15.6** | **+2.6** |
| **BO01** | **Tunca** | **4.01** | **167** | | **Pn** | **07 02 17.5** | **+1.3** |
| **BO02** | **Sierra Bellavi** | **4.46** | **165** | | **Pn** | **07 02 24.8** | **+2.3** |
| **GO05** | **Huala** | **4.52** | **177** | Pn | **Pn** | **07 02 23.4** | **+0.2** |
| **AC02** | **Maricunga** | **4.53** | **37** | | **Pn** | **07 02 24.2** | **+0.3** |
| **ML02** | **Panimavida** | **5.31** | **173** | | **Pn** | **07 02 35.2** | **+1.2** |
| **H03N1** | **Juan Fernandez** | **6.41** | **241** | T | T | 07 09 58.2 | |
| | baz=71,slow=72 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.42** | **241** | T | T | 07 09 51.2 | |
| | baz=71,slow=72 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.42** | **241** | T | T | 07 09 50.3 | |
| | baz=71,slow=72 | | | | | | |
| **LVC** | **Limon Verde** | **8.38** | **21** | Pn | **Pn** | **07 03 12.8** | **-3.8** |
| | comp=E,0.9nm,0.3s,baz=174,slow=18,SNR=8.9 | | | | | | |
| LVC | | | | Lg | Lg | 07 05 23.4 | |
| | baz=41,slow=23,SNR=0.7 | | | | | | |
| **LC01** | **Cunco** | **8.40** | **178** | Pn | **Pn** | **07 03 15.7** | **-0.7** |
| **LR03** | **Panguipulli** | **9.13** | **181** | Pn | **Pn** | **07 03 27.7** | **+1.2** |
| **PLCA** | **Paso Flores** | **10.32** | **173** | Pn | **Pn** | **07 03 44.5** | **+1.7** |
| | comp=E,0.4nm,0.3s,baz=341,slow=12,SNR=20 | | | | | | |
| PLCA | | | | Sn | **Sn** | **07 05 40.6** | **+1.5** |
| | comp=E,0.1nm,0.3s,baz=37,slow=20,SNR=1.2 | | | | | | |
| **PLCA** | **Paso Flores** | **10.32** | **173** | | **Pn** | **07 03 43.5** | **+0.7** |
| **PB12** | **IPOC Station P** | **11.94** | **9** | Pn | **Pn** | **07 04 06.1** | **+1.0** |
| **PB16** | **IPOC Station P** | **12.34** | **12** | | **Pn** | **07 04 09.4** | **-1.7** |
| **CPUP** | **Villa Florida** | **13.74** | **76** | Pn | **Pn** | **07 04 30.1** | **+0.5** |
| | comp=E,0.1nm,0.3s,baz=233,slow=15,SNR=1.9 | | | | | | |
| CPUP | | | | Sn | Sn | 07 06 52.0 | -11 |
| | baz=324,slow=19,SNR=1.4 | | | | | | |
| CPUP | | | | Lg | Lg | 07 08 13.7 | |
| | comp=E,0.1nm,0.3s,baz=172,slow=14,SNR=3.4 | | | | | | |
| **CPUP** | **Villa Florida** | **13.74** | **76** | | **Pn** | **07 04 27.6** | **-1.9** |
| **LPAZ** | **La Paz** | **14.62** | **16** | Pn | **Pn** | **07 04 38.5** | **-3.7** |
| | comp=E,0.2nm,0.3s,baz=199,slow=9.5,SNR=2.8 | | | | | | |
| **LPAZ** | **La Paz** | **14.62** | **16** | | **Pn** | **07 04 39.9** | **-2.3** |
| **BDFB** | **Brasilia** | **26.64** | **62** | P | **P** | **07 06 52.6** | **-1.4** |
| | comp=E,2.8nm,0.8s,baz=229,slow=13,SNR=5.1 | | | | | | |
| **BDFB** | **Brasilia** | **26.64** | **62** | P | **P** | **07 06 53.9** | **-0.1** |
| **SNAA** | **Sanae** | **54.90** | **159** | P | **P** | **07 10 47.0** | **+1.6** |
| SNAA | | | | IAmb | IAmb | 07 11 12.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **59.74** | **180** | P | **P** | **07 11 21.7** | **+1.9** |
| **TXAR** | **Lajitas Array** | **66.61** | **330** | P | **P** | **07 12 07.4** | **+1.7** |
| | comp=Z,0.2nm,0.7s,baz=147,slow=8.4,SNR=2.0 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **66.61** | **330** | P | **P** | **07 12 07.6** | **+1.9** |
| TX31 | | | | IAmb | IAmb | 07 12 26.1 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.17** | **71** | P | **P** | **07 13 41.7** | **-0.1** |
| | comp=Z,1.0nm,0.7s,baz=247,slow=6.2,SNR=7.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.17** | **71** | P | **P** | **07 13 42.0** | **+0.3** |
| TORD | | | | IAmb | IAmb | 07 13 52.1 | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.59** | **272** | T | T | 09 39 08.0 | |
| | baz=115 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.61** | **272** | T | T | 09 39 03.6 | |
| | baz=115 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.61** | **272** | T | T | 09 39 03.1 | |
| | baz=115 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.28** | **29** | PKPbc | **PKiKP** | **07 21 09.4** | **+0.6** |
| | comp=Z,3.6nm,0.6s,baz=307,slow=3.4,SNR=16 | | | | | | |
| ZALV | | | | PKPab | **pPKPab** | **07 21 17.5** | **+1.8** |
| | comp=Z,10.0nm,0.7s,baz=302,slow=3.0,SNR=22 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.28** | **29** | | **PKPbc** | **07 21 08.9** | **+0.6** |
| **MKAR** | **Makanchi Array** | **154.44** | **43** | PKPbc | **PKPbc** | **07 21 15.9** | **+0.3** |
| | comp=Z,0.1nm,0.4s,baz=345,slow=1.9,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.44** | **43** | | **PKPbc** | **07 21 16.0** | **+0.3** |
| MKAR | | | | PKPab | **PKPab** | **07 21 30.0** | **0.0** |

*TAP **22** 07:01:36.7,24°.64N×122°.70E,h104km,ML2.9,C*
*JMA **22** 07:01:36.6±0.3,24°.49N×122°.70E,h104km±2km,M1.6*
**ISC 22 07:01:37.6±1.6,24°.55N±0°.05×122°.71E±0°.03,h96km±11km,**
**n58,σ0°55/101,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.24** | **113** | P | **Pn** | **07 01 51.6** | **+0.2** |
| JYNG | | | | *eS* | **Sn** | **07 02 02.5** | **+0.9** |
| **YOJ** | **Yonaguni jima** | **0.29** | **107** | *eP* | **Pn** | **07 01 52.0** | **+0.4** |
| | baz=125 | | | | | | |
| **EGS** | | **0.77** | **293** | *eP* | **Pn** | **07 01 56.7** | **+1.5** |
| | baz=278 | | | | | | |
| **TWC** | **Suao** | **0.78** | **275** | *i* P | **Pn** | **07 01 55.0** | **-0.4** |
| | baz=265 | | | | | | |
| TWC | | | | S | **Sn** | **07 02 08.0** | **-0.7** |
| | baz=265 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.80** | **305** | *eP* | **Pn** | **07 01 55.1** | **-0.5** |
| | baz=296 | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **263** | *eP* | **Pn** | **07 01 56.0** | **-0.1** |
| | baz=253 | | | | | | |
| EWUT | | | | *eS* | **Sn** | **07 02 10.8** | **+0.8** |
| | baz=253 | | | | | | |
| **NTC** | **Toucheng** | **0.86** | **291** | P | **Pn** | **07 01 56.1** | **0.0** |
| | baz=280 | | | | | | |
| NTC | | | | *i* S | **Sn** | **07 02 10.0** | **-0.1** |
| | baz=280 | | | | | | |
| **ENA** | **Nanau** | **0.89** | **263** | *eP* | **Pn** | **07 01 56.5** | **0.0** |
| | baz=251 | | | | | | |
| **NDS** | **Dongshan** | **0.91** | **276** | P | **Pn** | **07 01 56.5** | **-0.2** |
| | baz=269 | | | | | | |
| NDS | | | | *eS* | **Sn** | **07 02 10.4** | **-0.7** |
| | baz=269 | | | | | | |
| **TIPB** | **Shuangxi** | **0.91** | **298** | P | **Pn** | **07 01 56.3** | **-0.5** |
| | baz=289 | | | | | | |
| TIPB | | | | S | **Sn** | **07 02 09.8** | **-1.3** |
| | baz=289 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.93** | **306** | P | **Pn** | **07 01 56.7** | **-0.4** |
| | baz=294 | | | | | | |
| SXI1 | | | | *eS* | **Sn** | **07 02 12.3** | **+0.7** |
| | baz=294 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.95** | **102** | P | **Pn** | **07 01 56.3** | **-0.9** |
| IRIF | | | | S | **Sn** | **07 02 12.1** | **+0.2** |
| **TWE** | **Neicheng** | **0.96** | **281** | P | **Pn** | **07 01 57.1** | **-0.2** |
| | baz=271 | | | | | | |
| TWE | | | | *eS* | **Sn** | **07 02 11.5** | **-0.5** |
| | baz=271 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.99** | **302** | P | **Pn** | **07 01 57.6** | **-0.1** |
| | baz=292 | | | | | | |
| NWF | | | | S | **Sn** | **07 02 12.7** | **-0.1** |
| | baz=292 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.99** | **302** | P | **Pn** | **07 01 57.5** | **-0.1** |
| | baz=292 | | | | | | |
| WFSB | | | | S | **Sn** | **07 02 12.1** | **-0.5** |
| | baz=292 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.04** | **282** | P | **Pn** | **07 01 58.2** | **0.0** |
| | baz=283 | | | | | | |
| FUSB | | | | S | **Sn** | **07 02 13.2** | **-0.5** |
| | baz=283 | | | | | | |
| **ENTT** | **Nioudou** | **1.04** | **275** | *eP* | **Pn** | **07 01 58.3** | **+0.1** |
| | baz=266 | | | | | | |
| ENTT | | | | *eS* | **Sn** | **07 02 13.9** | **+0.2** |
| | baz=266 | | | | | | |
| **LATG** | **Datong** | **1.08** | **270** | P | **Pn** | **07 01 58.6** | **-0.1** |
| | baz=260 | | | | | | |
| LATG | | | | S | **Sn** | **07 02 15.1** | **+0.6** |
| | baz=260 | | | | | | |
| **NACB** | **Ninganchiao** | **1.08** | **250** | P | **Pn** | **07 01 58.1** | **-0.5** |
| | baz=239 | | | | | | |
| NACB | | | | *eS* | **Sn** | **07 02 14.4** | **0.0** |
| | baz=239 | | | | | | |
| **NDT** | **Datong Townshi** | **1.09** | **273** | *i* P | **Pn** | **07 01 59.1** | **+0.4** |
| | baz=266 | | | | | | |
| NDT | | | | *eS* | **Sn** | **07 02 15.3** | **+0.7** |
| | baz=266 | | | | | | |
| **TWA** | **Mucha** | **1.11** | **293** | *eP* | **Pn** | **07 01 58.0** | **-1.0** |
| | baz=280 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.11** | **116** | P | **Pn** | **07 01 58.4** | **-0.6** |
| HATJ | | | | *eS* | **Sn** | **07 02 16.1** | **+1.1** |
| **TWD** | **Chiawan** | **1.11** | **246** | *eP* | **Pn** | **07 01 58.8** | **-0.2** |
| | baz=241 | | | | | | |
| **NWLT** | **Wulai** | **1.12** | **282** | *eP* | **Pn** | **07 01 58.8** | **-0.3** |
| | baz=283 | | | | | | |
| NWLT | | | | *eS* | **Sn** | **07 02 14.9** | **-0.4** |
| | baz=283 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.17** | **253** | *eP* | **Pn** | **07 01 59.8** | **+0.1** |
| | baz=248 | | | | | | |
| ETLH | | | | *eS* | **Sn** | **07 02 16.2** | **-0.1** |
| | baz=248 | | | | | | |
| **NNSB** | **Datong** | **1.21** | **265** | P | **Pn** | **07 02 00.2** | **-0.1** |
| | baz=253 | | | | | | |
| NNSB | | | | S | **Sn** | **07 02 17.5** | **+0.1** |
| | baz=253 | | | | | | |
| **YHNB** | **Yeheng** | **1.22** | **276** | P | **Pn** | **07 02 00.5** | **+0.2** |
| | baz=264 | | | | | | |
| YHNB | | | | S | **Sn** | **07 02 17.4** | **0.0** |
| | baz=264 | | | | | | |
| **NNS** | **Nan Shan** | **1.22** | **265** | *eP* | **Pn** | **07 02 00.5** | **+0.2** |
| | baz=253 | | | | | | |
| NNS | | | | S | **Sn** | **07 02 17.0** | **-0.5** |
| | baz=253 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.23** | **104** | P | **Pn** | **07 02 00.8** | **+0.5** |
| JKRS | | | | S | **Sn** | **07 02 17.9** | **+0.5** |
| **NSK** | **Sanguang** | **1.23** | **276** | *i* P | **Pn** | **07 02 00.5** | **0.0** |
| | baz=264 | | | | | | |
| NSK | | | | *i* S | **Sn** | **07 02 17.3** | **-0.4** |
| | baz=264 | | | | | | |
| **ETM** | **Tongmen** | **1.25** | **243** | *eP* | **Pn** | **07 02 00.0** | **-0.6** |
| | baz=234 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.30** | **296** | P | **Pn** | **07 02 01.1** | **0.0** |
| | baz=285 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.32** | **98** | P | **Pn** | **07 02 01.3** | **-0.1** |
| JIJ | | | | S | **Sn** | **07 02 18.7** | **-0.7** |
| **FUSS** | **Fushou** | **1.37** | **258** | *i* P | **Pn** | **07 02 02.6** | **+0.3** |
| | baz=249 | | | | | | |
| FUSS | | | | S | **Sn** | **07 02 21.0** | **+0.2** |
| | baz=249 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.38** | **253** | *i* P | **Pn** | **07 02 02.4** | **-0.1** |
| | baz=248 | | | | | | |
| WHF | | | | *i* S | **Sn** | **07 02 21.3** | **0.0** |
| | baz=248 | | | | | | |
| **TDCB** | **Techi** | **1.44** | **259** | *eP* | **Pn** | **07 02 03.4** | **+0.3** |
| | baz=252 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.45** | **274** | P | **Pn** | **07 02 03.2** | **+0.2** |
| | baz=269 | | | | | | |
| NFF | | | | S | **Sn** | **07 02 22.2** | **-0.1** |
| | baz=269 | | | | | | |
| **CHGB** | **Renai** | **1.48** | **251** | P | **Pn** | **07 02 03.6** | **0.0** |
| | baz=240 | | | | | | |
| CHGB | | | | S | **Sn** | **07 02 23.3** | **0.0** |
| | baz=240 | | | | | | |
| **LIOB** | **Emei** | **1.54** | **274** | *i* P | **Pn** | **07 02 04.5** | **+0.3** |
| | baz=270 | | | | | | |
| LIOB | | | | *i* S | **Sn** | **07 02 24.1** | **-0.2** |
| | baz=270 | | | | | | |
| **WUSB** | **Renai** | **1.55** | **250** | P | **Pn** | **07 02 04.8** | **+0.4** |
| | baz=242 | | | | | | |
| **NSTT** | **Nanjuang** | **1.56** | **274** | *i* P | **Pn** | **07 02 04.1** | **-0.2** |
| | baz=269 | | | | | | |
| NSTT | | | | *i* S | **Sn** | **07 02 24.2** | **-0.4** |
| | baz=269 | | | | | | |
| **HGSD** | **Ruisui** | **1.57** | **228** | P | **Pn** | **07 02 04.6** | **0.0** |
| | baz=223 | | | | | | |
| HGSD | | | | *eS* | **Sn** | **07 02 24.5** | **-0.5** |
| | baz=223 | | | | | | |
| **WHP** | **Taichung City** | **1.63** | **261** | *eP* | **Pn** | **07 02 06.1** | **+0.8** |
| | baz=255 | | | | | | |
| WHP | | | | *i* S | **Sn** | **07 02 27.2** | **+0.8** |
| | baz=255 | | | | | | |
| **EHY** | **Hungye** | **1.64** | **231** | *i* P | **Pn** | **07 02 04.6** | **-0.8** |
| | baz=227 | | | | | | |
| EHY | | | | *eS* | **Sn** | **07 02 25.6** | **-0.8** |
| | baz=227 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.71** | **254** | *eP* | **Pn** | **07 02 07.0** | **+0.7** |
| | baz=255 | | | | | | |
| WCS | | | | *eS* | **Sn** | **07 02 28.9** | **+0.8** |
| | baz=255 | | | | | | |
| **YULB** | **Yu-li** | **1.73** | **229** | P | **Pn** | **07 02 06.0** | **-0.6** |
| | baz=232 | | | | | | |
| YULB | | | | S | **Sn** | **07 02 27.7** | **-0.8** |
| | baz=232 | | | | | | |
| **EYUL** | **Yuli** | **1.74** | **227** | *eP* | **Pn** | **07 02 06.8** | **+0.1** |
| | baz=220 | | | | | | |
| **TWF1** | **Yuli** | **1.75** | **228** | *eP* | **Pn** | **07 02 06.5** | **-0.4** |
| | baz=232 | | | | | | |
| **SSLB** | **Suanglung** | **1.77** | **245** | *eP* | **Pn** | **07 02 07.4** | **+0.3** |
| | baz=237 | | | | | | |
| SSLB | | | | *eS* | **Sn** | **07 02 29.9** | **+0.4** |
| | baz=237 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.78** | **249** | *i* P | **Pn** | **07 02 08.3** | **+1.0** |
| | baz=238 | | | | | | |
| SMLT | | | | S | **Sn** | **07 02 30.8** | **+1.0** |
| | baz=238 | | | | | | |
| **TYC** | **Yuchr** | **1.81** | **250** | P | **Pn** | **07 02 08.8** | **+1.3** |
| | baz=241 | | | | | | |
| **JTJ** | **Tarama** | **1.82** | **87** | P | **Pn** | **07 02 07.7** | **+0.1** |
| JTJ | | | | S | **Sn** | **07 02 30.1** | **-0.4** |
| **FULB** | **Fuli** | **1.86** | **224** | P | **Pn** | **07 02 08.1** | **-0.2** |
| | baz=214 | | | | | | |
| FULB | | | | S | **Sn** | **07 02 31.6** | **-0.1** |
| | baz=214 | | | | | | |
| **ALS** | **Alishan** | **2.02** | **240** | P | **Pn** | **07 02 10.8** | **+0.2** |
| | baz=236 | | | | | | |
| **EDH** | **Donghe** | **2.03** | **220** | *eP* | **Pn** | **07 02 11.1** | **+0.8** |
| | baz=216 | | | | | | |
| EDH | | | | S | **Sn** | **07 02 34.3** | **-1.0** |
| | baz=216 | | | | | | |
| **CHN5** | **Tsauling** | **2.08** | **243** | *eP* | **Pn** | **07 02 11.7** | **+0.6** |
| | baz=233 | | | | | | |
| CHN5 | | | | *eS* | **Sn** | **07 02 37.8** | **+1.0** |
| | baz=233 | | |

5.2nm,0.3s,baz=261,slow=9.0,SNR=8.4
**MDT Midelt 2.99 197** P **Pn 07 13 50.1 +0.5**
**PVAQ Vaqueiros 3.74 298** *e*Pn **Pn 07 13 59.6 -0.2**
PVAQ *e*Sn **Sn 07 14 42.4 -1.3**
PVAQ A A 07 14 44.4
22nm,0.6s
**PVAQ Vaqueiros 3.74 298** P **Pn 07 13 59.5 -0.3**
**PBDV Barranco-do-Ve 3.83 295** *e*Pn **Pn 07 14 00.9 -0.2**
PBDV *e*Sn **Sn 07 14 45.3 -0.6**
PBDV A A 07 14 48.0
18nm,0.7s
**ESDC Sonseca Array 3.99 356** Pn **Pn 07 14 04.2 +0.9**
1.4nm,0.3s,baz=177,slow=12,SNR=49
ESDC Sn **Sn 07 14 49.0 -1.0**
1.0nm,0.3s,baz=186,slow=23,SNR=4.6
ESDC Lg Lg 07 15 04.8
1.7nm,0.3s,baz=174,slow=29,SNR=5.7
**PCVE Castro Verde 4.07 300** *e*Pn **Pn 07 14 04.2 -0.2**
PCVE *e*Sn **Sn 07 14 51.3 -0.5**
PCVE A A 07 14 55.5
22nm,0.5s
**PBEJ Beja 4.15 305** *e*Pn **Pn 07 14 05.7 +0.2**
PBEJ *e*Sn **Sn 07 14 53.0 -0.8**
PBEJ A A 07 14 54.5
8.0nm,0.5s
**MESJ Messejana 4.29 301** *e*P **Pn 07 14 07.2 -0.3**
MESJ *e*S **Sn 07 14 53.9 -3.5**
MESJ IAML 07 14 57.8
comp=E,12nm,0.4s
**MESJ Messejana 4.29 301** *e*Pn **Pn 07 14 07.4 -0.1**
MESJ *e*Sn **Sn 07 14 55.8 -1.5**
MESJ A A 07 14 57.2
comp=E,17nm,0.4s
**MORF Marmelete 4.39 293** *e*P **Pn 07 14 08.3 -0.5**
MORF *e*S **Sn 07 14 55.5 -4.2**
MORF IAML 07 15 01.0
comp=N,24nm,0.2s
**MORF Marmelete 4.39 293** *e*Pn **Pn 07 14 08.3 -0.5**
MORF *e*Sn **Sn 07 14 58.9 -0.8**
MORF A A 07 15 08.5
comp=N,12nm,0.4s
**PFVI Vila Bisbo 4.47 290** *e*Pn **Pn 07 14 10.1 +0.3**
PFVI *e*Sn **Sn 07 15 00.3 -1.3**
PFVI A A 07 15 08.8
comp=N,15nm,0.4s
**PFVI Vila Bisbo 4.47 290** P **Pn 07 14 09.5 -0.3**
**PESTR Estremoz 4.50 316** *e*Pn **Pn 07 14 10.9 +0.6**
PESTR *e*Sn **Sn 07 15 01.0 -1.5**
PESTR A A 07 15 03.8
comp=N,9.9nm,0.6s
**PTEO Sao Teotonio 4.53 296** *e*Pn **Pn 07 14 11.7 +1.0**
PTEO *e*Sn **Sn 07 15 02.5 -0.6**
PTEO A A 07 15 06.8
comp=N,26nm,0.6s
**EVO Evora 4.54 310** P **Pn 07 14 10.9 +0.1**
EVO S **Sn 07 15 01.1 -2.2**
**EVO Evora 4.54 310** *e*Pn **Pn 07 14 11.1 +0.3**
EVO *e*Sn **Sn 07 15 01.3 -2.0**
EVO A A 07 15 03.7
comp=N,22nm,0.5s
**PNCL Nicolau / Gran 4.64 303** *e*Pn **Pn 07 14 12.3 +0.1**
PNCL *e*Sn **Sn 07 15 04.2 -1.7**
PNCL A A 07 15 06.9
comp=N,12nm,0.6s
**PMRV Marv??o 4.80 322** *e*Pn **Pn 07 14 15.2 +0.7**
PMRV *e*Sn **Sn 07 15 08.4 -1.5**
PMRV A A 07 15 21.9
comp=N,10nm,0.4s
**PMTG Montargil 5.00 314** *e*Pn **Pn 07 14 17.5 +0.3**
PMTG *e*Sn **Sn 07 15 12.8 -2.0**
PMTG A A 07 15 15.4
comp=N,10nm,0.4s
**PCBR Castelo Branco 5.16 325** *e*Pn **Pn 07 14 20.5 +1.1**
PCBR *e*Sn **Sn 07 15 16.3 -2.5**
PCBR A A 07 15 19.2
comp=N,14nm,0.4s
**PACT Alcochete 5.19 308** *e*Pn **Pn 07 14 20.5 +0.7**
PACT *e*Sn **Sn 07 15 18.8 -0.7**
**PMAFR Mafra 5.59 307** *e*Pn **Pn 07 14 25.9 +0.7**
PMAFR *e*Sn **Sn 07 15 27.1 -2.2**
PMAFR A A 07 15 42.2
comp=N,17nm,0.5s
**PSBE So Bento 5.63 314** *e*Pn **Pn 07 14 26.6 +0.8**
PSBE *e*Sn **Sn 07 15 28.7 -1.6**
PSBE A A 07 15 46.8
comp=N,14nm,0.5s
**MTE Manteigas 5.64 328** *e*Pn **Pn 07 14 27.6 +1.5**
MTE *e*Sn **Sn 07 15 29.1 -1.6**
MTE A A 07 16 04.1
comp=N,16nm,0.6s
**COI Coimbra 5.91 321** *e*Pn **Pn 07 14 30.6 +1.0**
**PVIS Viseu 6.06 327** *e*Pn **Pn 07 14 32.8 +1.1**
PVIS *e*Sn **Sn 07 15 38.2 -2.6**
PVIS A A 07 15 43.5
comp=N,10nm,0.2s
**MVO Moncorvo 6.10 335** *e*Pn **Pn 07 14 33.5 +1.2**
MVO *e*Sn **Sn 07 15 39.0 -2.9**
MVO A A 07 16 25.4
comp=N,11nm,0.6s
**PVRL Vila Real 6.45 331** *e*Pn **Pn 07 14 38.6 +1.5**
PVRL *e*Sn **Sn 07 15 47.8 -2.7**
PVRL A A 07 15 54.2
comp=N,9.4nm,0.5s
**POLO Lamas de Olo 6.56 331** *e*Pn **Pn 07 14 39.9 +1.2**
POLO *e*Sn **Sn 07 15 50.1 -3.3**
POLO A A 07 15 56.1
comp=N,3.1nm,0.5s
**PBRG Braganca 6.58 339** *e*Pn **Pn 07 14 39.6 +0.6**
**PTO Porto 6.71 326** *e*Pn **Pn 07 14 41.6 +0.9**
**PCAB Cabril 6.94 331** *e*Pn **Pn 07 14 45.5 +1.7**
**PGAV Gavieira, Arco 7.25 331** *e*Pn **Pn 07 14 49.6 +1.4**
**ETSF Etsaut 7.57 17** *e*Pn **Pn 07 14 55.0 +2.5**
**ETSF Etsaut 7.57 17** *e*P Pn 07 14 59.3 +6.8
ETSF *e*Sn **Sn 07 16 19.1 +0.9**
comp=N,0.6nm,0.3s
**SJPF Ste Jean 7.63 13** *e*Pn **Pn 07 14 55.5 +2.2**
**SJPF Ste Jean 7.63 13** *e*P Pn 07 14 59.2 +5.9
SJPF *e*Sn **Sn 07 16 21.1 +1.5**
comp=N,0.7nm,0.3s
**EPF Esparros 7.94 21** *e*Pn **Pn 07 14 58.7 +1.2**
**EPF Esparros 7.94 21** *e*P Pn 07 15 04.2 +6.7
EPF *e*Sn **Sn 07 16 29.3 +2.2**
comp=N,4.1nm,0.3s
**MTLF Montolieu 8.86 29** *e*Pn **Pn 07 15 09.5 -0.6**
**MTLF Montolieu 8.86 29** *e*P Pn 07 15 16.4 +6.3
MTLF *e*Sn **Sn 07 16 48.8 -0.9**
**LFF La Frestale 9.81 18** *e*Pn **Pn 07 15 23.3 +0.2**
**LFF La Frestale 9.81 18** *e*P **Pn 07 15 27.7 +4.6**
**SMRF Simiane la Rot 10.86 38** *e*Sn **Sn 07 17 36.7 -2.2**
comp=N,6.3nm,0.4s
**MKAR Makanchi Array 62.47 51** P **P 07 23 25.5 +0.1**
comp=N,0.5nm,0.7s,baz=285,slow=5.2,SNR=5.0
**YKA Yellowknife Ar 67.74 332** P **P 07 23 59.3 +0.1**
comp=N,0.7nm,0.6s,baz=59,slow=6.4,SNR=11

*IDC **22** 07:18:28.1±2.0,30.70S×71.97W,h0km,mb4.1/2, mb1 3.8/5,mb1mx3.6/34,mbtmp3.8/5,ML3.1/3,MS4.6/1, Ms1 4.6/1,ms1mx3.6/52,Error ellipse: s-maj=73.2km s-min=32.3km az=107.0*
*GUC **22** 07:18:30.3±0.6,30.53S×72.21W,h38km±2km,ML3.6*
**ISC 22 07:18:27.5±2.1,30.57S±0.04×72.24W±0.09,h3km±12km, n23,σ1°43/32,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.53** | **102** | *e*P | | **Pb** | **07 18 40.4** | **+0.9** |
| CO06 | | | | IAML | | | 07 18 52.5 | |
| comp=N,3μm,0.7s | | | | | | | | |
| **CO05** | **La Serena** | **1.08** | **54** | *e*P | | **Pg** | **07 18 49.1** | **+0.8** |
| CO05 | | | | *i* S | | **Sn** | **07 19 03.0** | **-2.0** |
| CO05 | | | | IAML | | | 07 19 06.5 | |
| comp=E,3μm,0.8s | | | | | | | | |
| **CO02** | **Combarbal** | **1.24** | **121** | *e*P | | **Pn** | **07 18 52.2** | **+0.3** |
| CO02 | | | | *i* S | | **Sn** | **07 19 08.3** | **-0.9** |
| CO02 | | | | IAML | | | 07 19 11.3 | |
| comp=N,7μm,0.4s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.31** | **73** | *e*P | | **Pn** | **07 18 52.9** | **0.0** |
| GO04 | | | | *i* S | | **Sn** | **07 19 09.9** | **-1.0** |
| **CO03** | **El Pedregal** | **1.36** | **102** | *e*P | | **Pg** | **07 18 54.1** | **+0.4** |
| CO03 | | | | *i* S | | **Sn** | **07 19 11.8** | **-0.5** |
| CO03 | | | | IAML | | | 07 19 19.8 | |
| comp=N,856nm,0.3s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LCO** | **Las Campanas** | **2.05** | **41** | *e*P | | **Pn** | **07 19 03.2** | **+0.1** |
| LCO | | | | *i* S | | **Sn** | **07 19 28.9** | **-0.5** |
| **VA06** | **Catapilco** | **2.15** | **158** | *e*P | | **Pn** | **07 19 05.7** | **+1.5** |
| VA06 | | | | *i* S | | **Sn** | **07 19 32.5** | **+1.1** |
| VA06 | | | | IAML | | | 07 19 42.9 | |
| comp=E,845nm,0.3s | | | | | | | | |
| **ROCH** | **El Roble** | **2.62** | **157** | *e*P | | **Pb** | **07 19 12.5** | **-2.7** |
| ROCH | | | | *e*P | | **Pn** | **07 19 11.3** | **+0.4** |
| ROCH | | | | *i* S | | **Sn** | **07 19 44.6** | **+1.3** |
| ROCH | | | | *i* S | | **Sb** | **07 19 44.7** | **-3.1** |
| ROCH | | | | IAML | | | 07 20 00.6 | |
| comp=E,307nm,0.2s | | | | | | | | |
| ROCH | | | | IAML | | | 07 20 04.2 | |
| comp=N,424nm,0.4s | | | | | | | | |
| **VA03** | **San Esteban** | **2.62** | **147** | *e*P | | **Pn** | **07 19 13.2** | **+2.4** |
| VA03 | | | | *i* S | | **Sn** | **07 19 44.2** | **+0.9** |
| VA03 | | | | IAML | | | 07 19 57.1 | |
| comp=N,463nm,0.5s | | | | | | | | |
| **MT02** | **Curacav** | **2.84** | **161** | *e*P | | **Pn** | **07 19 15.1** | **+1.3** |
| MT02 | | | | *i* S | | **Sn** | **07 19 50.1** | **+1.5** |
| MT02 | | | | IAML | | | 07 20 10.7 | |
| comp=E,108nm,0.6s | | | | | | | | |
| **PEL** | **Peldehue** | **2.89** | **153** | *e*P | | **Pn** | **07 19 16.2** | **+1.7** |
| PEL | | | | *i* S | | **Sn** | **07 19 50.8** | **+1.0** |
| PEL | | | | IAML | | | 07 20 05.2 | |
| comp=E,234nm,0.5s | | | | | | | | |
| **BO04** | **La Punta** | **3.68** | **158** | *e*P | | **Pn** | **07 19 27.5** | **+2.0** |
| BO04 | | | | *i* S | | **Sn** | **07 20 09.4** | **0.0** |
| **H03N1** | **Juan Fernandez** | **6.35** | **241** | T | | T | 07 27 11.2 | |
| baz=70,slow=72,SNR=107 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.37** | **242** | T | | T | 07 27 11.4 | |
| baz=70,slow=72,SNR=74 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.37** | **241** | T | | T | 07 27 13.7 | |
| baz=70,slow=72,SNR=138 | | | | | | | | |
| **LVC** | **Limon Verde** | **8.46** | **21** | Pn | | **Pn** | **07 20 32.3** | **+0.8** |
| comp=E,0.3nm,0.3s,baz=126,slow=8.7,SNR=2.1 | | | | | | | | |
| **PLCA** | **Paso Flores** | **10.24** | **173** | Pn | | **Pn** | **07 20 54.1** | **-1.3** |
| comp=E,0.0nm,0.3s,baz=0.0,slow=11,SNR=2.2 | | | | | | | | |
| **SIV** | **San Ignacio** | **17.75** | **38** | P | | **P** | **07 22 37.5** | **+0.8** |
| comp=E,0.2nm,0.3s,baz=205,slow=13,SNR=8.7 | | | | | | | | |
| **NNA** | **Nana** | **18.97** | **346** | LR | | LR | 07 27 50.6 | |
| comp=E,2μm,18.8s,baz=32,slow=29 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.70** | **62** | P | | **P** | **07 24 07.0** | **-1.3** |
| comp=E,1.2nm,0.5s,baz=221,slow=14,SNR=3.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.22** | **71** | P | | **P** | **07 30 56.9** | **+1.3** |
| comp=E,1.9nm,1.0s,baz=258,slow=4.0,SNR=3.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.36** | **29** | PKPbc | | **PKPbc** | **07 38 23.6** | **+1.4** |
| comp=E,1.5nm,0.5s,baz=308,slow=4.8,SNR=9.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **154.51** | **43** | PKPbc | | **PKPbc** | **07 38 28.7** | **-0.8** |
| comp=E,0.2nm,0.7s,baz=316,slow=4.0,SNR=2.6 | | | | | | | | |

*IDC **22** 08:01:23.6±3.0,5.50N×73.68W,h132km±17km,mb3.0/2, mb1 3.5/2,mb1mx3.1/22,mbtmp3.4/2,Error ellipse: s-maj=77.6km s-min=33.1km az=85.0*
*RSNC **22** 08:01:25.5±1.2,5.64N×73.97W,h109km±5km,ML3.4, Mw3.7*
**ISC 22 08:01:24.0±0.9,5.61N±0.03×73.95W±0.03,h121km±6km, n35,σ1°28/65,5C-3D,Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **SPBC** | **San Pablo de B** | **0.13** | **288** | ⇑*e*P | | **Pn** | **08 01 40.5** | **-0.2** |
| SPBC | | | | *e*S | | **Sn** | **08 01 51.7** | **-1.6** |
| SPBC | | | | *i* | | | 08 01 53.1 | |
| comp=Z,2μm,0.1s | | | | | | | | |
| **ROSC** | **El Rosal** | **0.85** | **206** | P | | **Pn** | **08 01 46.2** | **+1.0** |
| comp=Z,94nm,0.3s,baz=53,slow=15,SNR=259 | | | | | | | | |
| ROSC | | | | S | | **Sn** | **08 02 04.2** | **+3.1** |
| comp=Z,174nm,0.3s,baz=331,slow=19,SNR=11 | | | | | | | | |
| **ROSC** | **El Rosal** | **0.85** | **206** | *e*P | | **Pn** | **08 01 46.2** | **+1.0** |
| ROSC | | | | *e*S | | **Sn** | **08 02 02.7** | **+1.6** |
| ROSC | | | | *i* | | | 08 02 07.5 | |
| comp=Z,418nm,0.5s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.91** | **72** | ⇑*i*P | | **Pn** | **08 01 46.3** | **+0.6** |
| RUSC | | | | *e*S | | **Sn** | **08 02 01.9** | **-0.2** |
| RUSC | | | | *i* | | | 08 02 03.3 | |
| comp=Z,218nm,0.6s | | | | | | | | |
| **NORC** | **Norcasia** | **0.92** | **267** | *e*S | | **Sn** | **08 02 00.1** | **-1.4** |
| NORC | | | | *i* | | | 08 02 03.2 | |
| comp=Z,1μm,0.1s | | | | | | | | |
| **CHIC** | **Chingaza** | **1.00** | **167** | *e*P | | **Pn** | **08 01 46.8** | **+0.2** |
| CHIC | | | | *e*S | | **Sn** | **08 02 03.1** | **-0.5** |
| CHIC | | | | *i* | | | 08 02 10.7 | |
| comp=Z,222nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.05** | **331** | ⇓*i*P | | **Pn** | **08 01 45.7** | **-1.0** |
| PTBC | | | | *e*S | | **Sn** | **08 02 02.1** | **-1.7** |
| PTBC | | | | *i* | | | 08 02 03.5 | |
| comp=Z,667nm,0.2s | | | | | | | | |
| **BARC** | **Barichara** | **1.24** | **38** | ⇓*i*P | | **Pn** | **08 01 49.5** | **+0.7** |
| BARC | | | | *e*S | | **Sn** | **08 02 07.2** | **-0.4** |
| BARC | | | | *i* | | | 08 02 12.1 | |
| comp=Z,645nm,0.5s | | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **1.46** | **255** | *e*P | | **Pn** | **08 01 51.6** | **+0.1** |
| GUY2C | | | | *e*S | | **Sn** | **08 02 12.8** | **+0.4** |
| GUY2C | | | | *i* | | | 08 02 18.4 | |
| comp=Z,346nm,0.5s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **1.50** | **9** | *i* P | | **Pn** | **08 01 51.7** | **+0.1** |
| BRRC | | | | *e*S | | **Sn** | **08 02 12.6** | **+0.1** |
| BRRC | | | | *i* | | | 08 02 15.9 | |
| comp=Z,690nm,0.2s | | | | | | | | |
| **HELC** | **Santa Helena** | **1.67** | **290** | *e*P | | **Pn** | **08 01 53.6** | **-0.3** |
| HELC | | | | *e*S | | **Sn** | **08 02 16.0** | **-0.6** |
| HELC | | | | *i* | | | 08 02 20.1 | |
| comp=Z,262nm,0.5s | | | | | | | | |
| **ANIL** | **Santa Ana** | **1.83** | **232** | *e*P | | **Pn** | **08 01 56.4** | **+0.8** |
| ANIL | | | | *e*S | | **Sn** | **08 02 21.2** | **+1.4** |
| ANIL | | | | *i* | | | 08 02 22.6 | |
| comp=Z,434nm,0.2s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.07** | **277** | ⇓*i*P | | **Pn** | **08 01 58.9** | **+0.4** |
| CBOC | | | | *e*S | | **Sn** | **08 02 25.1** | **+0.2** |
| CBOC | | | | *i* | | | 08 02 28.4 | |
| comp=Z,78nm,0.2s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **2.07** | **334** | *e*P | | **Pn** | **08 01 57.4** | **-1.1** |
| ZARC | | | | *e*S | | **Sn** | **08 02 23.6** | **-1.2** |
| ZARC | | | | *i* | | | 08 02 29.5 | |
| comp=Z,488nm,0.3s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **2.12** | **36** | *e*P | | **Pn** | **08 02 00.1** | **+0.6** |
| PAMC | | | | *e*S | | **Sn** | **08 02 26.7** | **+0.2** |
| PAMC | | | | *i* | | | 08 02 37.2 | |
| comp=Z,173nm,0.2s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **2.13** | **217** | ⇑*e*P | | **Pn** | **08 01 59.3** | **+0.1** |
| ORTC | | | | *e*S | | **Sn** | **08 02 27.1** | **+1.0** |
| ORTC | | | | *i* | | | 08 02 30.3 | |
| comp=Z,328nm,0.2s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.29** | **128** | ⇑*e*P | | **Pn** | **08 02 01.5** | **+0.3** |
| PTGC | | | | *e*S | | **Sn** | **08 02 28.9** | **-0.7** |
| PTGC | | | | *i* | | | 08 02 31.4 | |
| comp=Z,260nm,0.2s | | | | | | | | |
| **PLMC** | **San Jos del P** | **2.43** | **253** | *e*P | | **Pn** | **08 02 04.0** | **+1.0** |
| PLMC | | | | *e*S | | **Sn** | **08 02 35.7** | **+2.8** |
| PLMC | | | | *i* | | | 08 02 37.3 | |
| comp=Z,64nm,0.4s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.64** | **324** | *e*P | | **Pn** | **08 02 04.0** | **-1.7** |
| UREC | | | | *e*S | | **Sn** | **08 02 34.7** | **-3.1** |
| UREC | | | | *i* | | | 08 02 44.4 | |
| comp=Z,180nm,0.3s | | | | | | | | |
| **OCAC** | **Ocana** | **2.68** | **13** | *e*P | | **Pn** | **08 02 06.7** | **+0.4** |
| OCAC | | | | *e*S | | **Sn** | **08 02 39.8** | **+0.8** |
| **BETC** | **Betania** | **3.27** | **207** | *e*P | | **Pn** | **08 02 12.4** | **-1.6** |
| BETC | | | | *e*S | | **Sn** | **08 02 50.3** | **-2.2** |
| BETC | | | | *i* | | | 08 02 55.4 | |
| comp=Z,94nm,0.8s | | | | | | | | |
| **GUVC** | **San Jose del G** | **3.32** | **157** | *e*P | | **Pn** | **08 02 14.7** | **+0.2** |
| GUVC | | | | *e*S | | **Sn** | **08 02 52.8** | **-0.9** |
| **MARP** | **Paez Belalcaza** | **3.40** | **216** | *e*P | | **Pn** | **08 02 15.8** | **-0.1** |
| MARP | | | | *e*S | | **Sn** | **08 02 54.7** | **-1.3** |
| MARP | | | | *i* | | | 08 03 01.1 | |
| comp=Z,26nm,0.2s | | | | | | | | |
| **MACC** | **Macarena, Meta** | **3.45** | **178** | *e*P | | **Pn** | **08 02 15.4** | **-0.8** |
| MACC | | | | *e*S | | **Sn** | **08 02 54.0** | **-2.6** |
| MACC | | | | *i* | | | 08 02 55.8 | |
| comp=Z,101nm,0.2s | | | | | | | | |
| **GARC** | **Garzon, Huila** | **3.73** | **204** | ⇑*e*P | | **Pn** | **08 02 19.6** | **-0.7** |
| GARC | | | | *e*S | | **Sn** | **08 03 02.0** | **-1.9** |
| GARC | | | | *i* | | | 08 03 05.2 | |
| comp=Z,230nm,0.2s | | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **3.92** | **6** | *e*P | | **Pn** | **08 02 24.1** | **+1.6** |
| LL1C | | | | *e*S | | **Sn** | **08 03 11.7** | **+3.7** |
| **PCON** | **Cinco Dias** | **4.08** | **217** | *e*P | | **Pn** | **08 02 26.0** | **+0.9** |
| PCON | | | | *e*S | | **Sn** | **08 03 13.5** | **+1.1** |
| **POPC** | **Popayan, Colom** | **4.09** | **222** | *e*P | | **Pn** | **08 02 25.9** | **+0.9** |
| POPC | | | | *e*S | | **Sn** | **08 03 12.8** | **+0.5** |
| **LL6C** | **La Loma 6 Bece** | **4.15** | **9** | *e*P | | **Pn** | **08 02 26.2** | **+0.6** |
| LL6C | | | | *e*S | | **Sn** | **08 03 13.2** | **-0.2** |
| LL6C | | | | *i* | | | 08 03 26.5 | |
| comp=Z,59nm,0.4s | | | | | | | | |
| **FLOC** | **Florencia** | **4.35** | **203** | *e*P | | **Pn** | **08 02 28.3** | **0.0** |
| FLOC | | | | *e*S | | **Sn** | **08 03 17.6** | **-0.6** |
| FLOC | | | | *i* | | | 08 03 19.5 | |
| comp=Z,38nm,0.4s | | | | | | | | |
| **SOTA** | **Rioblanco** | **4.36** | **218** | *e*P | | **Pn** | **08 02 30.3** | **+1.5** |
| SOTA | | | | *e*S | | **Sn** | **08 03 20.2** | **+1.1** |
| SOTA | | | | *i* | | | 08 03 24.6 | |
| comp=Z,18nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.67** | **314** | P | | **P** | **08 08 20.1** | **+0.8** |
| comp=Z,0.1nm,0.6s,baz=126,slow=9.0,SNR=2.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.11** | **340** | P | | **P** | **08 11 44.8** | **-0.2** |
| comp=Z,0.4nm,0.3s,baz=132,slow=6.8,SNR=15 | | | | | | | | |
| **ASAR** | **Alice Springs** | **147.74** | **233** | PKPbc | | **PKPdf** | **08 20 52.3** | **-0.2** |
| comp=Z,0.3nm,0.6s,baz=116,slow=4.2,SNR=4.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **149.03** | **240** | PKPbc | | **PKPbc** | **08 20 57.8** | **-1.0** |
| comp=Z,0.2nm,0.3s,baz=104,slow=3.2,SNR=12 | | | | | | | | |

**IDC 22 08:12:50.4±4.0,1.59S×146.12E,h0km,mb3.5/4, mb1 3.7/4,mb1mx3.5/43,mbtmp3.5/4,Error ellipse: s-maj=116.6km s-min=33.6km az=95.0,Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.58** | **211** | P | | P | 08 17 40.9 | -1.0 |
| 0.6nm,0.9s,baz=32,slow=11,SNR=6.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.94** | **207** | P | | P | 08 18 15.8 | +0.1 |
| 0.6nm,0.7s,baz=43,slow=6.6,SNR=12 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.95** | **230** | P | | P | 08 18 25.7 | +0.8 |
| 1.7nm,0.8s,baz=48,slow=12,SNR=2.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **73.56** | **320** | P | | P | 08 24 25.4 | -0.1 |
| 0.8nm,0.9s,baz=104,slow=6.1,SNR=3.5 | | | | | | | | |

*KRNET **22** 08:20:43.1±0.1,41.15N×69.61E,h18km,mb2.9*
*NNC **22** 08:20:47.5±5.6,41.17N×69.45E,h0km,mb3.5,mpv3.1, Error ellipse: s-maj=46.4km s-min=24.7km az=23.0*
**ISC 22 08:20:44.6±1.6,41.09N±0.05×69.65E±0.09,h10km,n11, σ1°29/19,14C-8D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **TRKS** | **Terek-Say** | **1.21** | **68** | ⇑*i*P | | **Pn** | **08 21 06.1** | **-1.6** |
| baz=75 | | | | | | | | |
| TRKS | | | | ⇑*i*S | | **Sb** | **08 21 22.7** | **-0.6** |
| baz=75 | | | | | | | | |
| **BTK** | **Batken** | **1.36** | **139** | ⇑*i*P | | **Pb** | **08 21 09.7** | **-0.5** |
| baz=39 | | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sg** | **08 21 29.2** | **+0.9** |
| baz=39 | | | | | | | | |
| **ARK** | **Arkit** | **1.88** | **67** | ⇑*e*P | | **Pb** | **08 21 18.0** | **-1.0** |
| baz=69 | | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sb** | **08 21 43.2** | **+0.6** |
| baz=69 | | | | | | | | |
| **KK09** | **Karatay Array** | **2.13** | **17** | ⇓Pn | | **Pg** | **08 21 24.9** | **-0.5** |
| 11nm,0.8s,baz=204,slow=15 | | | | | | | | |
| KK09 | | | | ⇓Lg | | Lg | 08 21 54.4 | |
| 13nm,0.5s,baz=205,slow=27 | | | | | | | | |
| **GAR** | **Garm** | **2.15** | **166** | ⇑*e*P | | **Pb** | **08 21 22.6** | **-1.0** |
| baz=66 | | | | | | | | |
| GAR | | | | ⇑*i*S | | **Sb** | **08 21 51.1** | **+0.8** |
| baz=66 | | | | | | | | |
| **DRK** | **Karamyk** | **2.30** | **134** | ⇑*i*P | | **Pb** | **08 21 24.6** | **-1.7** |
| baz=34 | | | | | | | | |
| DRK | | | | ⇑*i*S | | **Sb** | **08 21 55.1** | **+0.2** |
| baz=34 | | | | | | | | |
| **MNAS** | **Manas** | **2.55** | **56** | ⇑*e*P | | **Pn** | **08 21 27.4** | **+1.3** |
| baz=57 | | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sn** | **08 21 59.2** | **+1.9** |
| baz=57 | | | | | | | | |
| **ARLS** | **Aral** | **3.59** | **76** | ⇓*i*P | | **Pn** | **08 21 41.5** | **+1.0** |
| baz=77 | | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **08 22 25.0** | **+1.9** |
| baz=77 | | | | | | | | |
| **UCH** | **Uchtor** | **3.82** | **71** | ⇓*e*P | | **Pn** | **08 21 45.2** | **+1.4** |
| baz=72 | | | | | | | | |
| UCH | | | | ⇓*i*S | | **Sn** | **08 22 30.2** | **+1.2** |
| baz=72 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.94** | **65** | ⇓Pg | | **Pg** | **08 21 58.6** | **-1.4** |
| 1.4nm,0.4s | | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 08 22 54.5 | |
| 2.9nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.79** | **66** | ⇑Pg | | **Pg** | **08 22 15.1** | **-1.3** |
| 2.9nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 08 23 20.6 | |
| 6.4nm,0.8s | | | | | | | | |

*IDC **22** 08:20:41.1±1.6,81.89N×96.19E,h0km,mb3.5/4, mb1 3.8/7,mb1mx3.4/68,mbtmp3.7/7,ML3.7/3,Error ellipse: s-maj=37.8km s-min=29.2km az=109.0*
*IEPN **22** 08:20:45.0,81.85N×94.90E,h10km*
**ISC 22 08:20:44.5±0.8,81.84N±0.07×95.46E±0.06,h35km,n16, σ3°27/25,mb3.4/4,Severnaya Zemlya**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **ZFI** | **Zemlya Franca-** | **7.12** | **286** | *e*P | | **Pn** | **08 22 27.1** | **+1.1** |
| ZFI | | | | *e*S | | **Sn** | **08 23 43.0** | **-2.5** |
| 28nm,2.0s | | | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **7.12** | **286** | *e*P | | **Pn** | **08 22 27.1** | **+1.1** |
| ZFI2 | | | | *e*S | | **Sn** | **08 23 43.4** | **-2.0** |
| 28nm,1.8s | | | | | | | | |
| **TIXI** | **Tiksi** | **12.43** | **126** | Sn | | **Sn** | **08 25 49.7** | **-5.7** |
| 1.3nm,0.3s,baz=264,slow=23,SNR=11 | | | | | | | | |
| **TIXI** | **Tiksi** | **12.43** | **126** | P | | **Pn** | **08 23 38.7** | **+0.2** |
| TIXI | | | | *e*S | | **Sn** | **08 25 51.6** | **-3.8** |
| **NRIK** | **Noril'sk** | **12.70** | **193** | Pn | | **Pn** | **08 23 44.1** | **+1.9** |
| 0.8nm,0.3s,baz=27,slow=12,SNR=8.3 | | | | | | | | |
| NRIK | | | | Sn | | **Sn** | **08 25 58.9** | **-3.1** |
| 0.4nm,0.3s,baz=70,slow=19,SNR=1.9 | | | | | | | | |
| **KBS** | **Kingsbay** | **13.05** | **302** | *e*P | | **Pn** | **08 23 46.4** | **-0.6** |
| KBS | | | | *e*S | | **Sn** | **08 26 02.9** | **-7.6** |
| **SPA0** | **Spitsbergen Ar** | **13.09** | **297** | *e*P | | **Pn** | **08 23 47.2** | **-0.2** |
| SPA0 | | | | *e*S | | **Sn** | **08 26 06.3** | **-5.2** |
| **SPITS** | **Spitsbergen Ar** | **13.09** | **297** | Pn | | **Pn** | **08 23 47.3** | **-0.2** |
| baz=22,slow=9.8,SNR=14 | | | | | | | | |
| SPITS | | | | Sn | | **Sn** | **08 26 07.7** | **-3.7** |
| baz=51,slow=39,SNR=1.5 | | | | | | | | |
| **AMDE** | **Amderma** | **14.25** | **232** | *e*P | | **Pn** | **08 24 06.6** | **+3.2** |
| 2.7nm,0.9s | | | | | | | | |
| AMDE | | | | *e*S | | **Sn** | **08 26 35.3** | **-4.6** |
| **ARCES** | **ARCESS Array B** | **19.31** | **273** | P | | **Pn** | **08 25 09.5** | **+2.2** |
| baz=28,slow=10,SNR=6.3 | | | | | | | | |
| ARCES | | | | S | | **S** | **08 28 40.5** | **-1.8** |
| baz=39,slow=17,SNR=1.6 | | | | | | | | |
| **BILL** | **Bilibino** | **20.82** | **88** | *e*S | | **S** | **08 29 10.2** | **-2.1** |
| **ARU** | **Arti** | **27.57** | **226** | *e*S | | **S** | **08 31 05.2** | **-1.0** |
| **MKAR** | **Makanchi Array** | **35.44** | **196** | P | | **P** | **08 27 38.7** | **+1.9** |
| 0.3nm,0.7s,baz=1.1,slow=7.2,SNR=3.0 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **36.83** | **256** | P | | **P** | **08 27 50.8** | **+2.2** |
| 0.1nm,0.3s,baz=12,slow=10,SNR=1.6 | | | | | | | | |
| **TXA

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **32.89** | **125** | P | | **P** | **08 29 06.0** | **-2.0** |
| | 1.2nm,0.8s,baz=315,slow=11,SNR=2.0 | | | | | | | |
| **WB0** | **Warramunga Arr** | **40.99** | **121** | P | | **P** | **08 30 16.9** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 08 30 17.5 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.02** | **121** | P | | **P** | **08 30 16.2** | **-0.9** |
| | comp=Z,2.2nm,0.6s,baz=302,slow=8.9,SNR=18 | | | | | | | |
| **WB2** | **Warramunga Arr** | **41.03** | **121** | P | | **P** | **08 30 17.0** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 08 30 18.0 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **41.20** | **121** | P | | **P** | **08 30 18.4** | **-0.2** |
| WR0 | | | | IAmb | | IAmb | 08 30 19.2 | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.34** | **127** | P | | **P** | **08 30 27.4** | **-0.6** |
| | comp=Z,0.8nm,0.7s,baz=308,slow=8.1,SNR=13 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **08 32 20.9** | **0.0** |
| | comp=Z,0.2nm,0.7s,baz=308,slow=3.0,SNR=2.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.29** | **346** | P | | **P** | **08 31 16.6** | **+2.0** |
| | comp=Z,2.4nm,0.7s,baz=158,slow=8.3,SNR=30 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.29** | **346** | P | | **P** | **08 31 13.2** | **-1.4** |
| **KURBB** | **Kurchatov Array** | **52.79** | **345** | P | | **P** | **08 31 50.1** | **+1.7** |
| | comp=Z,0.5nm,0.6s,baz=166,slow=6.9,SNR=4.0 | | | | | | | |
| **KURK** | **Kurchatov** | **52.85** | **345** | P | | **P** | **08 31 47.1** | **-1.8** |
| KURK | | | | IAmb | | IAmb | 08 32 02.9 | |
| | comp=Z,2.9nm,1.2s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **54.57** | **351** | P | | **P** | **08 32 00.1** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **54.57** | **351** | P | | **P** | **08 32 03.1** | **+1.6** |
| | comp=Z,2.5nm,0.7s,baz=179,slow=6.7,SNR=12 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.57** | **351** | P | | **P** | **08 31 60.0** | **-1.5** |
| **ABKAR** | **Akbulak array** | **58.62** | **332** | P | | **P** | **08 32 30.9** | **+0.5** |

*IDC **22** 08:33:31.1±7.9, 31°.70S×179°.50E, h450km±99km, mb2.4/2, mb1 2.8/3, mb1mx2.7/31, mbtmp3.5/3, Error ellipse: s-maj=106.0km s-min=43.2km az=8.0*
*WEL **22** 08:33:36.6±0.8, 32°.S±11°×18°.0E±2°.9, h363km±17km, M4.2/10, mB4.6/7, MLv4.7/10, Mw(mB)3.8/7, Error ellipse: s-maj=0.0km s-min=0.0km az=110.2*

**ISC 22 08:33:29.5±1.1, 31°.59S±0°.09×179°.9E±0°.2, h450km, n24, σ2§45/43, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.01** | **40** | P | | **P** | **08 34 36.4** | **-0.2** |
| GLKZ | | | | S | | **S** | **08 35 30.9** | **-0.2** |
| **MXZ** | **Matakaoa Point** | **6.09** | **192** | P | | **P** | **08 35 06.5** | **+1.9** |
| MXZ | | | | S | | **S** | **08 36 20.2** | **-2.2** |
| **KUZ** | **Kuaotunu** | **6.18** | **213** | P | | **P** | **08 35 10.2** | **+4.7** |
| **WMGZ** | **Waiomatatini S** | **6.33** | **190** | P | | **P** | **08 35 09.9** | **+2.9** |
| WMGZ | | | | S | | **S** | **08 36 25.1** | **-1.7** |
| **HAZ** | **Te Kaha** | **6.38** | **195** | P | | **P** | **08 35 08.3** | **+0.7** |
| HAZ | | | | S | | **S** | **08 36 25.4** | **-2.5** |
| **PKGZ** | **Pakihiroa** | **6.45** | **193** | P | | **P** | **08 35 11.9** | **+3.6** |
| PKGZ | | | | S | | **S** | **08 36 28.9** | **-0.5** |
| **PUZ** | **Puketiti** | **6.60** | **191** | P | | **P** | **08 35 12.1** | **+2.3** |
| PUZ | | | | S | | **S** | **08 36 29.7** | **-2.3** |
| **RUGZ** | **Raukumara Rang** | **6.61** | **195** | P | | **P** | **08 35 11.9** | **+1.8** |
| RUGZ | | | | S | | **S** | **08 36 29.2** | **-3.2** |
| **TWGZ** | **Tauwhareparae** | **6.75** | **193** | P | | **P** | **08 35 14.3** | **+2.8** |
| TWGZ | | | | S | | **S** | **08 36 33.6** | **-1.4** |
| **MWZ** | **Matawai** | **6.99** | **195** | P | | **P** | **08 35 16.6** | **+2.6** |
| MWZ | | | | S | | **S** | **08 36 36.2** | **-3.6** |
| **CNGZ** | **Carnagh Statio** | **7.01** | **191** | P | | **P** | **08 35 17.0** | **+2.9** |
| **URZ** | **Urewera** | **7.03** | **198** | P | | **P** | **08 35 15.5** | **+1.2** |
| | 4.4nm,0.3s,baz=267,slow=3.7,SNR=73 | | | | | | | |
| URZ | | | | S | | **S** | **08 36 36.5** | **-3.6** |
| | 5.0nm,0.3s,baz=257,slow=23,SNR=16 | | | | | | | |
| **URZ** | **Urewera** | **7.03** | **198** | P | | **P** | **08 35 16.0** | **+1.7** |
| URZ | | | | S | | **S** | **08 36 36.6** | **-3.6** |
| **TKGZ** | **Te Karaka** | **7.03** | **193** | P | | **P** | **08 35 16.8** | **+2.5** |
| TKGZ | | | | S | | **S** | **08 36 37.4** | **-2.9** |
| **RAGZ** | **Rawiri** | **7.17** | **196** | P | | **P** | **08 35 18.4** | **+2.5** |
| RAGZ | | | | S | | **S** | **08 36 42.7** | **-0.6** |
| **RIGZ** | **Rimuhau** | **7.30** | **193** | P | | **P** | **08 35 19.2** | **+1.9** |
| RIGZ | | | | S | | **S** | **08 36 45.0** | **-0.7** |
| **MUGZ** | **Murupara** | **7.32** | **199** | P | | **P** | **08 35 20.5** | **+3.0** |
| MUGZ | | | | S | | **S** | **08 36 43.9** | **-2.2** |
| **SNGZ** | **Shannon Statio** | **7.46** | **195** | P | | **P** | **08 35 22.4** | **+3.3** |
| SNGZ | | | | S | | **S** | **08 36 47.9** | **-0.9** |
| **PRGZ** | **Paritu Road** | **7.49** | **192** | P | | **P** | **08 35 23.3** | **+4.0** |
| PRGZ | | | | S | | **S** | **08 36 49.3** | **-0.1** |
| **RAHZ** | **Arahi** | **7.65** | **196** | P | | **P** | **08 35 24.1** | **+3.1** |
| RAHZ | | | | S | | **S** | **08 36 53.6** | **+1.0** |
| **NMHZ** | **Naumai** | **7.89** | **198** | P | | **P** | **08 35 26.0** | **+2.3** |
| NMHZ | | | | S | | **S** | **08 36 55.8** | **-1.6** |
| **ASAR** | **Alice Springs** | **41.23** | **269** | P | | **P** | **08 40 33.4** | **-0.5** |
| | 0.2nm,0.8s,baz=109,slow=7.7,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.33** | **275** | P | | **P** | **08 40 41.6** | **-1.0** |
| | 0.2nm,0.4s,baz=111,slow=8.0,SNR=6.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.59** | **338** | PKPbc | | **PKPab** | **08 52 16.6** | **-0.7** |
| | 2.2nm,0.6s,baz=29,slow=3.2,SNR=8.8 | | | | | | | |

*IDC **22** 08:35:49.9±1.1, 35°.78N×3°.76W, h0km, mb3.7/3, mb1 3.7/5, mb1mx3.5/38, mbtmp3.6/5, ML3.2/2, Error ellipse: s-maj=32.6km s-min=13.2km az=94.0*
*IGIL **22** 08:35:50.4, 35°.50N×3°.57W, h12km, ML3.3*
*CNRM **22** 08:35:51.0, 35°.70N×3°.49W, h22km, ml3.6*
*LDG **22** 08:35:51.8±0.3, 35°.46N×3°.63W, h10km, mb_Lg3.4/16, Error ellipse: s-maj=6.2km s-min=2.2km az=170.0*
*MDD **22** 08:35:51.1±0.3, 35°.70N×3°.65W, h0km, mb_Lg3.4/16, Error ellipse: s-maj=2.8km s-min=2.0km az=170.0*
*SFS **22** 08:35:52.0, 35°.78N×3°.69W, ML3.5, ALBORAN SUR*
*INMG **22** 08:35:52.3±1.2, 35°.53N×3°.60W, h31km, ML3.1, Error ellipse: s-maj=4.1km s-min=2.8km az=6.0*

**ISC 22 08:35:52.4±1.1, 35°.67N±0°.02×3°.58W±0°.02, h23km±10km, n99, σ1§86/161, mb4.0/3, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **EALB** | **Alboran** | **0.52** | **58** | Pg | | **Pb** | **08 36 01.8** | **-1.1** |
| EALB | | | | Sg | | **Sb** | **08 36 10.0** | **-0.1** |
| EALB | | | | *i* Vmb_Lg | | | 08 36 11.6 | |
| **PALE** | **Palemas** | **0.54** | **213** | P | | **Pb** | **08 36 02.5** | **-0.7** |
| PALE | | | | S | | **Sb** | **08 36 11.2** | **+0.7** |
| **PALE** | **Palemas** | **0.54** | **213** | P | | **Pb** | **08 36 02.5** | **-0.7** |
| PALE | | | | S | | **Sb** | **08 36 10.6** | **+0.1** |
| **EMEL** | **Melilla** | **0.63** | **125** | Pg | | **Pb** | **08 36 03.5** | **-1.2** |
| EMEL | | | | Sg | | **Sb** | **08 36 12.7** | **-0.4** |
| **ELGU** | **Los Guajares,** | **1.20** | **358** | Pg | | **Pn** | **08 36 11.8** | **-2.1** |
| ELGU | | | | Sg | | **Sn** | **08 36 26.3** | **-3.2** |
| ELGU | | | | *i* Vmb_Lg | | | 08 36 30.7 | |
| **TAF** | **Taforalt** | **1.28** | **131** | P | | **Pn** | **08 36 13.7** | **-1.3** |
| **TAF** | **Taforalt** | **1.28** | **131** | P | | **Pn** | **08 36 13.6** | **-1.4** |
| TAF | | | | S | | **Sn** | **08 36 30.0** | **-1.4** |
| **EMAL** | **Malaga-Limoner** | **1.29** | **328** | P | | **Pn** | **08 36 12.8** | **-2.2** |
| EMAL | | | | S | | **Sn** | **08 36 29.1** | **-2.5** |
| **EMIJ** | **Mijas** | **1.31** | **313** | Pg | | **Pn** | **08 36 13.0** | **-2.5** |
| EMIJ | | | | Sg | | **Sn** | **08 36 29.3** | **-3.0** |
| EMIJ | | | | *i* Vmb_Lg | | | 08 36 30.3 | |
| **CEU** | **Ceuta** | **1.47** | **280** | P | | **Pn** | **08 36 14.9** | **-2.7** |
| CEU | | | | S | | **Sn** | **08 36 32.8** | **-3.3** |
| **EGOR** | **Sierra Gorda,** | **1.50** | **344** | Pn | | **Pn** | **08 36 16.5** | **-1.6** |
| EGOR | | | | Sn | | **Sb** | **08 36 38.6** | **+0.2** |
| EGOR | | | | *i* Vmb_Lg | | | 08 36 41.5 | |
| **CHEFC** | **Chefchaouen** | **1.54** | **249** | P | | **Pn** | **08 36 18.3** | **-0.3** |
| **CHEFC** | **Chefchaouen** | **1.54** | **249** | P | | **Pn** | **08 36 18.1** | **-0.5** |
| CHEFC | | | | S | | **Sn** | **08 36 37.6** | **-0.3** |
| **JBK** | **JBK** | **1.57** | **148** | P | | **Pn** | **08 36 17.7** | **-1.4** |
| **JBK** | **JBK** | **1.57** | **148** | P | | **Pn** | **08 36 17.6** | **-1.4** |
| JBK | | | | S | | **Sn** | **08 36 37.4** | **-1.4** |
| **ENIJ** | **Nijar** | **1.71** | **40** | Pn | | **Pn** | **08 36 19.3** | **-1.6** |
| ENIJ | | | | Sn | | **Sn** | **08 36 39.2** | **-2.8** |
| ENIJ | | | | *i* Vmb_Lg | | | 08 36 51.0 | |
| **EJIF** | **Jimena Fronter** | **1.72** | **298** | Pn | | **Pn** | **08 36 19.9** | **-1.0** |
| **SICH** | **Sidi Chahed** | **2.11** | **223** | P | | **Pn** | **08 36 27.8** | **+1.4** |
| SICH | | | | S | | **Sb** | **08 36 56.9** | **+1.1** |
| **LCRM** | **LCR** | **2.24** | **208** | P | | **Pn** | **08 36 28.0** | **-0.2** |
| LCRM | | | | S | | **Sn** | **08 36 56.7** | **+1.4** |
| **IFR** | **Ifrane** | **2.50** | **211** | P | | **Pn** | **08 36 31.4** | **-0.4** |
| IFR | | | | S | | **Sn** | **08 37 01.7** | **+0.1** |
| **EZAR** | **Zarzadilla de** | **2.67** | **34** | Pn | | **Pn** | **08 36 32.7** | **-1.5** |
| EZAR | | | | Sn | | **Sn** | **08 37 04.9** | **-1.1** |
| **ECAB** | **El Cabril** | **2.82** | **329** | Pn | | **Pn** | **08 36 36.1** | **0.0** |
| ECAB | | | | Sn | | **Sn** | **08 37 10.4** | **+1.0** |
| ECAB | | | | *i* Vmb_Lg | | | 08 37 21.2 | |
| **CART** | **Cartagena** | **2.83** | **47** | P | | **Pn** | **08 36 34.0** | **-2.2** |
| CART | | | | S | | **Sn** | **08 37 05.6** | **-3.9** |
| **CZD** | **Col de Zad** | **2.89** | **205** | P | | **Pn** | **08 36 38.0** | **+0.6** |
| **CZD** | **Col de Zad** | **2.89** | **205** | P | | **Pn** | **08 36 37.9** | **+0.6** |
| **ARNO** | **Arenosillo** | **2.92** | **300** | P | | Pb | 08 36 49.5 | +5.8 |
| ARNO | | | | S | | **Sn** | **08 37 12.7** | **+1.0** |
| **MD31** | **MD31** | **2.96** | **200** | P | | **Pn** | **08 36 38.5** | **+0.4** |
| **MDT** | **Midelt** | **2.97** | **197** | Pn | | **Pn** | **08 36 38.2** | **-0.1** |
| | 2.4nm,0.3s,baz=228,slow=9.6,SNR=29 | | | | | | | |
| MDT | | | | Sn | | **Sn** | **08 37 14.7** | **+1.5** |
| | 4.0nm,0.3s,baz=356,slow=20,SNR=4.3 | | | | | | | |
| MDT | | | | Lg | | Lg | 08 37 25.8 | |
| | 7.5nm,0.3s,baz=268,slow=10,SNR=10 | | | | | | | |
| **MDT** | **Midelt** | **2.97** | **197** | P | | **Pn** | **08 36 38.2** | **-0.1** |
| **MDT** | **Midelt** | **2.97** | **197** | P | | **Pn** | **08 36 38.2** | **-0.1** |
| **ETOB** | **Tobarra** | **3.39** | **28** | Pn | | **Pn** | **08 36 44.7** | **+0.7** |
| ETOB | | | | Sn | | **Sn** | **08 37 24.3** | **+0.8** |
| ETOB | | | | *i* Vmb_Lg | | | 08 37 25.7 | |
| **EGRO** | **El Granado** | **3.65** | **302** | Pn | | **Pn** | **08 36 46.7** | **-0.8** |
| EGRO | | | | Sn | | **Sn** | **08 37 28.0** | **-1.8** |
| EGRO | | | | *i* Vmb_Lg | | | 08 37 30.9 | |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | *e*Pn | | **Pn** | **08 36 48.0** | **-0.9** |
| PVAQ | | | | *e*Sn | | **Sn** | **08 37 30.0** | **-2.4** |
| PVAQ | | | | A | | A | 08 37 32.6 | |
| | 32nm,0.3s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | P | | **Pn** | **08 36 48.0** | **-0.9** |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | P | | **Pn** | **08 36 48.0** | **-0.9** |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **295** | *e*Pn | | **Pn** | **08 36 49.2** | **-1.0** |
| PBDV | | | | *e*Sn | | **Sn** | **08 37 32.0** | **-2.6** |
| PBDV | | | | A | | A | 08 37 33.8 | |
| | 33nm,0.9s | | | | | | | |
| **AFON** | **Font Roja** | **3.85** | **38** | Pn | | **Pn** | **08 36 51.0** | **+0.6** |
| AFON | | | | Sn | | **Sn** | **08 37 34.7** | **-0.3** |
| **PAB** | **San Pablo** | **3.92** | **351** | Pn | | **Pn** | **08 36 51.3** | **0.0** |
| PAB | | | | Sn | | **Sn** | **08 37 35.7** | **-0.9** |
| PAB | | | | *i* Vmb_Lg | | | 08 37 56.9 | |
| **ESDC** | **Sonseca Array** | **4.01** | **356** | Pn | | **Pn** | **08 36 52.5** | **0.0** |
| | 1.1nm,0.3s,baz=176,slow=12,SNR=16 | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **08 37 37.9** | **-1.0** |
| | 1.1nm,0.3s,baz=182,slow=19,SNR=5.5 | | | | | | | |
| ESDC | | | | Lg | | Lg | 08 37 53.9 | |
| | 2.5nm,0.3s,baz=179,slow=27,SNR=8.6 | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.01** | **356** | Pn | | **Pn** | **08 36 53.2** | **+0.7** |
| ESDC | | | | Sn | | **Sn** | **08 37 36.4** | **-2.5** |
| ESDC | | | | *i* Vmb_Lg | | | 08 37 40.0 | |
| ESDC | | | | Sg | | **Sb** | **08 37 54.3** | **+3.8** |
| **FIGM** | **Figuig** | **4.02** | **151** | P | | **Pn** | **08 36 53.0** | **+0.3** |
| **EBEN2** | **Beniarda presa** | **4.04** | **41** | Pn | | **Pn** | **08 36 52.6** | **-0.4** |
| EBEN2 | | | | Sn | | **Sn** | **08 37 35.6** | **-4.0** |
| **PCVE** | **Castro Verde** | **4.08** | **300** | *e*Pn | | **Pn** | **08 36 52.5** | **-1.0** |
| PCVE | | | | *e*Sn | | **Sn** | **08 37 38.1** | **-2.5** |
| PCVE | | | | A | | A | 08 37 41.0 | |
| | 42nm,0.8s | | | | | | | |
| **GOLM** | **Goulmima** | **4.12** | **196** | P | | **Pn** | **08 36 55.8** | **+1.8** |
| **EBAD** | **Badajoz** | **4.12** | **319** | Pn | | **Pn** | **08 36 53.5** | **-0.5** |
| EBAD | | | | Sn | | **Sn** | **08 37 40.1** | **-1.4** |
| EBAD | | | | *i* Vmb_Lg | | | 08 37 41.6 | |
| **PBEJ** | **Beja** | **4.16** | **306** | *e*Pn | | **Pn** | **08 36 54.2** | **-0.4** |
| PBEJ | | | | *e*Sn | | **Sn** | **08 37 41.3** | **-1.2** |
| PBEJ | | | | A | | A | 08 37 44.2 | |
| | 17nm,0.5s | | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **302** | *e*P | | **Pn** | **08 36 55.2** | **-1.4** |
| MESJ | | | | *e*S | | **Sn** | **08 37 42.6** | **-3.4** |
| MESJ | | | | IAML | | | 08 37 47.5 | |
| | comp=N,43nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **4.31** | **302** | *e*Pn | | **Pn** | **08 36 56.2** | **-0.3** |
| MESJ | | | | *e*Sn | | **Sn** | **08 37 44.5** | **-1.6** |
| MESJ | | | | A | | A | 08 37 48.4 | |
| | comp=N,34nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*P | | **Pn** | **08 36 56.3** | **-1.6** |
| MORF | | | | *e*S | | **Sn** | **08 37 44.3** | **-4.1** |
| MORF | | | | IAML | | | 08 37 52.1 | |
| | comp=N,57nm,0.5s | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*Pn | | **Pn** | **08 36 56.7** | **-1.1** |
| MORF | | | | *e*Sn | | **Sn** | **08 37 45.1** | **-3.3** |
| MORF | | | | A | | A | 08 37 53.1 | |
| | comp=N,23nm,0.3s | | | | | | | |
| **ECHE** | **Chera** | **4.43** | **27** | Pn | | **Pn** | **08 36 58.5** | **+0.2** |
| ECHE | | | | *i* Vmb_Lg | | | 08 38 33.2 | |
| **PFVI** | **Vila Bisbo** | **4.47** | **291** | *e*Pn | | **Pn** | **08 36 58.5** | **-0.3** |
| PFVI | | | | *e*Sn | | **Sn** | **08 37 46.8** | **-3.4** |
| PFVI | | | | A | | A | 08 37 59.0 | |
| | comp=N,23nm,0.6s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.47** | **291** | P | | **Pn** | **08 36 58.6** | **-0.3** |
| **PESTR** | **Estremoz** | **4.52** | **316** | *e*Pn | | **Pn** | **08 36 59.3** | **-0.2** |
| PESTR | | | | *e*Sn | | **Sn** | **08 37 49.1** | **-2.2** |
| PESTR | | | | A | | A | 08 37 51.6 | |
| | comp=N,18nm,0.5s | | | | | | | |
| **PESTR** | **Estremoz** | **4.52** | **316** | P | | **Pn** | **08 36 59.1** | **-0.3** |
| **PTEO** | **Sao Teotonio** | **4.54** | **296** | *e*Pn | | **Pn** | **08 36 59.6** | **-0.1** |
| PTEO | | | | *e*Sn | | **Sn** | **08 37 49.7** | **-2.1** |
| PTEO | | | | A | | A | 08 37 54.8 | |
| | comp=N,33nm,0.8s | | | | | | | |
| **EVO** | **Evora** | **4.55** | **310** | P | | **Pn** | **08 36 59.2** | **-0.7** |
| EVO | | | | S | | **Sn** | **08 37 50.0** | **-2.1** |
| **EVO** | **Evora** | **4.55** | **310** | *e*Pn | | **Pn** | **08 36 59.6** | **-0.3** |
| EVO | | | | *e*Sn | | **Sn** | **08 37 48.9** | **-3.2** |
| EVO | | | | A | | A | 08 37 51.7 | |
| | comp=N,26nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.66** | **303** | *e*Pn | | **Pn** | **08 37 00.6** | **-0.7** |
| PNCL | | | | *e*Sn | | **Sn** | **08 37 52.5** | **-2.1** |
| PNCL | | | | A | | A | 08 37 55.9 | |
| | comp=N,19nm,0.4s | | | | | | | |
| **EPLA** | **Plasencia** | **4.81** | **337** | Pn | | **Pn** | **08 37 05.2** | **+1.7** |
| **PMRV** | **Marv??o** | **4.82** | **322** | *e*Pn | | **Pn** | **08 37 03.8** | **+0.2** |
| PMRV | | | | *e*Sn | | **Sn** | **08 37 56.6** | **-2.2** |
| PMRV | | | | A | | A | 08 38 01.9 | |
| | comp=N,13nm,0.6s | | | | | | | |
| **GUD** | **Guadarrama** | **4.99** | **355** | Pn | | **Pn** | **08 37 06.0** | **0.0** |
| GUD | | | | Sn | | **Sn** | **08 38 01.5** | **-1.5** |
| GUD | | | | Sg | | **Sb** | **08 38 23.6** | **+4.9** |
| GUD | | | | *i* Vmb_Lg | | | 08 38 42.6 | |
| **PMTG** | **Montargil** | **5.02** | **314** | *e*Pn | | **Pn** | **08 37 06.2** | **-0.1** |
| PMTG | | | | *e*Sn | | **Sn** | **08 38 01.4** | **-2.2** |
| PMTG | | | | A | | A | 08 38 03.8 | |
| | comp=N,14nm,0.4s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.18** | **325** | *e*Pn | | **Pn** | **08 37 08.9** | **+0.3** |
| PCBR | | | | *e*Sn | | **Sn** | **08 38 05.0** | **-2.6** |
| PCBR | | | | A | | A | 08 38 07.8 | |
| | comp=N,19nm,0.4s | | | | | | | |
| **PACT** | **Alcochete** | **5.21** | **308** | *e*Pn | | **Pn** | **08 37 09.1** | **+0.2** |
| PACT | | | | *e*Sn | | **Sn** | **08 38 06.6** | **-1.6** |
| PACT | | | | A | | A | 08 38 08.9 | |
| | comp=N,27nm,0.6s | | | | | | | |
| **ETOR** | **Torete** | **5.28** | **13** | Pn | | **Pn** | **08 37 09.8** | **-0.2** |
| ETOR | | | | Sn | | **Sn** | **08 38 05.8** | **-4.4** |
| ETOR | | | | *i* Vmb_Lg | | | 08 38 56.3 | |
| **OUZM** | **OUZ** | **5.44** | **210** | P | | **Pn** | **08 37 13.0** | **+0.7** |
| **PMAFR** | **Mafra** | **5.60** | **308** | *e*Pn | | **Pn** | **08 37 14.4** | **0.0** |
| PMAFR | | | | *e*Sn | | **Sn** | **08 38 15.0** | **-3.0** |
| PMAFR | | | | A | | A | 08 38 18.6 | |
| | comp=N,25nm,0.4s | | | | | | | |
| **PSBE** | **So Bento** | **5.64** | **314** | *e*Pn | | **Pn** | **08 37 15.1** | **+0.1** |
| PSBE | | | | *e*Sn | | **Sn** | **08 38 16.0** | **-3.1** |
| **MTE** | **Manteigas** | **5.66** | **328** | *e*Pn | | **Pn** | **08 37 16.1** | **+0.8** |
| MTE | | | | *e*Sn | | **Sn** | **08 38 16.2** | **-3.4** |
| MTE | | | | A | | A | 08 38 54.2 | |
| | comp=N,18nm,0.6s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.71** | **220** | P | | **Pn** | **08 37 16.0** | **-0.2** |
| **PVIS** | **Viseu** | **6.08** | **327** | *e*Pn | | **Pn** | **08 37 21.7** | **+0.8** |
| PVIS | | | | *e*Sn | | **Sn** | **08 38 26.7** | **-3.0** |
| PVIS | | | | A | | A | 08 38 31.4 | |
| | comp=N,13nm,0.4s | | | | | | | |
| **MVO** | **Moncorvo** | **6.12** | **335** | *e*Pn | | **Pn** | **08 37 22.2** | **+0.7** |
| MVO | | | | *e*Sn | | **Sn** | **08 38 27.3** | **-3.5** |
| MVO | | | | A | | A | 08 39 10.1 | |
| | comp=N,15nm,0.6s | | | | | | | |
| **EAH** | **EAH** | **6.41** | **233** | P | | **Pn** | **08 37 24.5** | **-1.0** |
| **PVRL** | **Vila Real** | **6.47** | **331** | *e*Pn | | **Pn** | **08 37 27.0** | **+0.7** |
| PVRL | | | | *e*Sn | | **Sn** | **08 38 35.4** | **-4.0** |
| PVRL | | | | A | | A | 08 38 42.5 | |
| | comp=N,19nm,0.5s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.58** | **331** | *e*Pn | | **Pn** | **08 37 28.2** | **+0.3** |
| POLO | | | | *e*Sn | | **Sn** | **08 38 38.0** | **-4.3** |
| POLO | | | | A | | A | 08 38 48.5 | |
| | comp=N,5.6nm,0.6s | | | | | | | |
| **PBRG** | **Braganca** | **6.61** | **339** | *e*Pn | | **Pn** | **08 37 29.3** | **+1.1** |
| PBRG | | | | *e*Sn | | **Sn** | **08 38 40.2** | **-2.6** |
| **PCAB** | **Cabril** | **6.96** | **331** | *e*Pn | | **Pn** | **08 37 33.9** | **+0.9** |
| PCAB | | | | *e*Sn | | **Sn** | **08 38 48.4** | **-3.1** |
| PCAB | | | | A | | A | 08 38 52.1 | |
| | comp=N,8.5nm,0.5s | | | | | | | |
| **ELOB** | **Lobios** | **7.11** | **332** | Pn | | **Pn** | **08 37 36.0** | **+0.9** |
| ELOB | | | | Sn | | **Sn** | **08 38 51.4** | **-3.8** |
| **PGAV** | **Gavieira, Arco** | **7.27** | **331** | *e*Pn | | **Pn** | **08 37 37.8** | **+0.4** |
| PGAV | | | | *e*Sn | | **Sn** | **08 38 56.2** | **-3.1** |
| PGAV | | | | A | | A | 08 39 09.8 | |
| | comp=N,8.8nm,0.7s | | | | | | | |
| **EORO** | **Oroz-Betelu** | **7.43** | **13** | Pn | | **Pn** | **08 37 41.1** | **+1.7** |
| **ELAN** | **Lanestosa** | **7.55** | **1** | Pn | | **Pn** | **08 37 42.8** | **+1.6** |
| **ETSF** | **Etsaut** | **7.59** | **17** | *e*Pn | | **Pn** | **08 37 43.4** | **+1.7** |
| **ETSF** | **Etsaut** | **7.59** | **17** | *e*P | | Pn | 08 37 47.6 | +5.9 |
| ETSF | | | | *e*Sn | | **Sn** | **08 39 08.3** | **+1.3** |
| | comp=N,1.2nm,0.3s | | | | | | | |
| **SJPF** | **Ste Jean** | **7.66** | **13** | *e*Pn | | **Pn** | **08 37 43.5** | **+1.0** |
| **SJPF** | **Ste Jean** | **7.66** | **13** | *e*P | | Pn | 08 37 49.2 | +6.7 |
| SJPF | | | | *e*Sn | | **Sn** | **08 39 07.0** | **-1.5** |
| **EALK** | **Alkurruntz** | **7.71** | **11** | Pn | | **Pn** | **08 37 44.3** | **+1.0** |
| **EPF** | **Esparros** | **7.96** | **21** | *e*Pn | | **Pn** | **08 37 47.4** | **+0.7** |
| **EPF** | **Esparros** | **7.96** | **21** | *e*P | | Pn | 08 37 52.6 | +5.9 |
| EPF | | | | *e*Sn | | **Sn** | **08 39 18.5** | **+2.5** |
| | comp=N,1.4nm,0.4s | | | | | | | |
| **MTLF** | **Montolieu** | **8.88** | **29** | *e*Pn | | **Pn** | **08 38 00.4** | **+1.2** |
| **MTLF** | **Montolieu** | **8.88** | **29** | *e*P | | Pn | 08 38 05.1 | +5.9 |
| MTLF | | | | *e*Sn | | **Sn** | **08 39 37.4** | **-1.1** |
| | comp=N,1.9nm,0.4s | | | | | | | |
| **LASF** | **Ste Croix** | **10.15** | **32** | *e*Pn | | **Pn** | **08 38 19.6** | **+2.8** |
| **SMRF** | **Simiane la Rot** | **10.88** | **38** | *e*Pn | | **Pn** | **08 38 27.5** | **+0.8** |
| SMRF | | | | *e*Sn | | **Sn** | **08 40 24.7** | **-2.9** |
| **SBF** | **Sospel** | **11.78** | **43** | *e*Pn | | **Pn** | **08 38 39.8** | **+0.8** |
| **PGF** | **Pioggiola** | **11.94** | **51** | *e*Pn | | **Pn** | **08 38 41.3** | **0.0** |
| **CDF** | **Champ du Feu** | **15.05** | **29** | *e*Pn | | **P** | **08 39 28.2** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **22.92** | **167** | P | | **P** | **08 40 58.8** | **+3.9** |
| | comp=N,1.4nm,0.9s,baz=348,slow=10,SNR=6.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.48** | **51** | P | | **P** | **08 46 14.2** | **+0.2** |
| | comp=N,0.9nm,0.8s,baz=287,slow=5.8,SNR=9.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.76** | **332** | P | | **P** | **08 46 48.1** | **+0.3** |
| | comp=N,0.7nm,0.6s,baz=59,slow=6.4,SNR=13 | | | | | | | |

**IDC 22 08:36:17.6±14.0, 29°.14N×137°.05E, h247km±233km, mb2.8/3, mb1 3.1/4, mb1mx2.8/49, mbtmp3.4/4, ML2.9/1, Error ellipse: s-maj=311.1km s-min=27.2km az=64.0, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **7.45** | **7** | P | | Pn | 08 38 03.7 | -0.1 |
| | 0.2nm,0.3s,baz=170,slow=11,SNR=6.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.67** | **308** | P | | P | 08 44 13.7 | -0.2 |
| | 0.1nm,0.4s,baz=77,slow=9.0,SNR=2.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.87** | **183** | P | | P | 08 44 38.3 | -0.3 |
| | 0.3nm,0.2s,baz=1.4,slow=7.8,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **52.59** | **184** | P | | P | 08 45 06.5 | +0.2 |
| | 0.2nm,0.5s,baz=360,slow=6.3,SNR=5.4 | | | | | | | |

**NEIC 22 08:37:00.3±0.5, 36°.44N±0°.01×98°.78W±0°.01, h4km±3km, mb_Lg2.2/9, Error ellipse: s-maj=2.2km s-min=0.9km az=153.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.19** | **252** | Pg | | Pg | 08 37 04.0 | -0.1 |
| U32A | | | | Sg | | Sg | 08 37 07.2 | +0.6 |
| **FNO** | **Franklin** | **1.63** | **136** | | | Pn | 08 37 29.6 | -0.1 |
| FNO | | | | IAmb_Lg | | | 08 37 55.7 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **R32A** | **Long Quarter,** | **1.98** | **1** | | | Pn | 08 37 35.2 | +0.5 |
| **X34A** | **Smith Ranch, M** | **1.99** | **157** | Pn | | Pn | 08 37 35.4 | +0.7 |
| **TUL1** | **Leonard** | **2.47** | **101** | IAmb_Lg | | | 08 38 18.6 | |
| | comp=Z,6.4nm,0.8s | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TAF | | | | S | Sn | 08 58 02.1 | +0.6 |
| **JBK** | **JBK** | **1.62** | **153** | P | Pn | 08 57 48.4 | -0.2 |
| JBK | | | | S | Sn | 08 58 08.2 | -1.6 |
| **CZD** | **Col de Zad** | **3.03** | **206** | P | Pn | 08 58 09.0 | +0.8 |
| CZD | | | | S | Sn | 08 58 43.0 | -1.8 |
| **MD31** | **MD31** | **3.09** | **201** | P | Pn | 08 58 09.7 | +0.9 |
| MD31 | | | | S | Sn | 08 58 44.6 | -1.5 |
| **PVAQ** | **Vaqueiros** | **3.79** | **297** | *e*Pn | Sn | 08 58 18.9 | +0.6 |
| PVAQ | | | | *e*Sn | Sn | 08 59 01.1 | -1.9 |
| PVAQ | | | | A | A | 08 59 02.8 | |
| | 2.5nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.79** | **297** | P | Pn | 08 58 19.6 | +1.3 |
| PVAQ | | | | S | Sn | 08 59 00.7 | -2.3 |
| **PBDV** | **Barranco-do-Ve** | **3.88** | **293** | *e*Pn | Pn | 08 58 20.2 | +0.6 |
| **PCVE** | **Castro Verde** | **4.11** | **298** | *e*Sn | Sn | 08 59 10.0 | -1.1 |
| PCVE | | | | A | A | 08 59 16.8 | |
| | 4.7nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.33** | **300** | *e*Pn | Pn | 08 58 29.1 | +3.3 |
| **PNCL** | **Nicolau / Gran** | **4.68** | **301** | *e*Pn | Pn | 08 58 31.4 | +0.9 |
| PNCL | | | | *e*Sn | Sn | 08 59 23.8 | -1.1 |

*EAF* ***22*** *09:01:26.0±3.0, 1°.19N×30°.29E, h14km±23km, MD3.5*
**ECGS 22 09:02:10.0, 1°.2S±0°.4×29°.1E±0°.3, h34km±10km, ML2.1,**
**Error ellipse: s-maj=75.0km s-min=46.4km az=8.1,**
**smi:local/c1af04fe-b44a-43ed-bc5e-6ed427f4036e**
**Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX 14.1963 Y 49.6241 Z 25.7018 CovXX 966.48 XY 210.872 XZ -104.857 YY 2412.97 YZ -131.917 ZZ 100.559 EllAz1 66.4353 Dip1 83.3105 Len1 17.1274 Az2 278.679 Dip2 5.6652 Len2 57.7511 Len3 9.303705e+01, Lake Tanganyika region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TGO** | **Tongo** | **0.19** | **99** | *i* P | Pb | 09 02 16.6 | -0.3 |
| **BOBN** | **Bobandana** | **0.53** | **187** | *i* P | Pb | 09 02 21.0 | -0.3 |
| **SAHA** | **Sahara** | **0.60** | **129** | *i* P | Pn | 09 02 11.2 | -11 |
| **IDJ** | **Idjwi** | **0.88** | **161** | *i* P | Pn | 09 02 26.5 | +0.2 |
| **LWI** | **Lwiro** | **1.09** | **195** | *i* P | Pn | 09 02 29.8 | +0.6 |
| **BBAT** | **Babati** | **7.32** | **114** | *i* P | Pb | 09 04 23.6 | +7.1 |
| BBAT | | | | *i* S | Sn | 09 05 13.7 | -3.2 |
| **KOND** | **Kondoa** | **7.66** | **119** | *i* P | Pb | 09 04 30.0 | +7.8 |
| KOND | | | | *i* S | Sn | 09 05 24.9 | -0.3 |

**SSNC 22 09:18:19.3±2.4, 17°.61N×74°.60W, h25km±999km, MD3.1,**
**ML2.1, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTBY** | **Guantanamo Bay** | **2.35** | **348** | *e*P | Pn | 09 18 54.8 | -1.6 |
| GTBY | | | | *e*S | Sn | 09 19 20.1 | -4.4 |
| **GTBY** | **Guantanamo Bay** | **2.35** | **348** | *e*P | Pn | 09 18 54.6 | -1.7 |
| GTBY | | | | *e*S | Sn | 09 19 20.1 | -4.4 |
| **RCC** | **Rio Carpintero** | **2.59** | **336** | *e*P | Pn | 09 19 00.8 | +1.2 |
| RCC | | | | *e*S | Sn | 09 19 27.8 | -2.5 |
| RCC | | | | IAML | | 09 19 32.8 | |
| | comp=E,4.0nm,0.3s | | | | | | |
| RCC | | | | IAML | | 09 19 34.0 | |
| | comp=N,3.9nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.59** | **336** | *e*P | Pn | 09 18 58.3 | -1.3 |
| RCC | | | | *e*S | Sn | 09 19 28.5 | -1.8 |
| RCC | | | | IAML | | 09 19 32.8 | |
| | comp=E,4.0nm,0.3s | | | | | | |
| RCC | | | | IAML | | 09 19 34.0 | |
| | comp=N,3.9nm,0.1s | | | | | | |
| **LMGC** | **Las Mercedes** | **3.34** | **317** | *e*P | Pn | 09 19 08.6 | -1.3 |
| LMGC | | | | *e*S | Sn | 09 19 41.0 | -7.8 |
| LMGC | | | | IAML | | 09 19 46.9 | |
| | comp=N,5.1nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 09 19 47.0 | |
| | comp=E,5.0nm,0.1s | | | | | | |
| **LMGC** | **Las Mercedes** | **3.34** | **317** | *e*P | Pn | 09 19 09.1 | -0.9 |
| LMGC | | | | *e*S | Sn | 09 19 39.5 | -9.3 |
| LMGC | | | | IAML | | 09 19 46.9 | |
| | comp=N,5.1nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 09 19 47.0 | |
| | comp=E,5.0nm,0.1s | | | | | | |

*IDC* ***22*** *09:29:42.5±1.7, 17°.15S×178°.83W, h587km±17km, mb3.1/7, mb1 3.4/8, mb1mx3.2/27, mbtmp4.0/8, Error ellipse: s-maj=72.0km s-min=14.8km az=150.0*
**ISC 22 09:29:43.2±1.3, 17°.2S±0°.5×178°.8W±0°.3, h600km, n11,**
**σ0§81/14, mb3.5/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.02** | **259** | P | **P** | **09 31 01.0** | **-1.5** |
| | 6.2nm,0.3s,baz=125,slow=4.8,SNR=16 | | | | | | |
| **STKA** | **Stephens Creek** | **38.63** | **240** | P | **P** | **09 36 16.4** | **-0.4** |
| | 2.8nm,0.8s,baz=77,slow=7.1,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.37** | **259** | P | **P** | **09 37 02.0** | **0.0** |
| | 1.8nm,0.8s,baz=91,slow=6.8,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 38 32.9** | **+0.3** |
| | 0.3nm,0.7s,baz=76,slow=5.4,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.60** | **254** | P | **P** | **09 37 04.1** | **+0.3** |
| | 11nm,0.7s,baz=88,slow=8.2,SNR=225 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 38 33.5** | **+0.1** |
| | 0.6nm,0.5s,baz=98,slow=4.6,SNR=6.5 | | | | | | |
| ASAR | | | | S | **S** | **09 42 59.0** | **+1.5** |
| | 0.5nm,0.9s,baz=86,slow=15,SNR=3.1 | | | | | | |
| **ILAR** | **Eielson Array** | **85.26** | **13** | P | **P** | **09 41 17.1** | **0.0** |
| | 0.3nm,0.4s,baz=224,slow=5.6,SNR=7.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.95** | **58** | P | **P** | **09 41 22.4** | **+1.1** |
| | 0.6nm,0.8s,baz=215,slow=6.3,SNR=7.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.10** | **44** | P | **P** | **09 41 26.2** | **-0.4** |
| | 0.3nm,0.6s,baz=196,slow=1.7,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.83** | **25** | P | **P** | **09 41 56.6** | **-0.3** |
| | 0.3nm,0.8s,baz=238,slow=4.6,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **108.32** | **314** | PKiKP | **PKiKP** | **09 47 03.8** | **-0.5** |
| | 0.2nm,0.5s,baz=187,slow=1.2,SNR=5.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **143.97** | **315** | PKP | **PKPdf** | **09 48 12.1** | **+0.4** |
| | 1.3nm,0.8s,baz=45,slow=4.5,SNR=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **146.79** | **345** | PKPbc | **PKPbc** | **09 48 19.6** | **+0.6** |
| | 1.1nm,0.5s,baz=351,slow=5.0,SNR=4.2 | | | | | | |

*NEIC* ***22*** *09:39:10.0±1.7, 30°.60S±0°.05×71°.72W±0°.08, h11km±12km, Error ellipse: s-maj=9.6km s-min=7.1km az=100.0*
*GUC* ***22*** *09:39:10.7±0.8, 30°.64S×71°.59W, h29km±2km, ML4.0*
**ISC 22 09:39:11.5±1.1, 30°.63S±0°.03×71°.65W±0°.07, h29km±7km,**
**n38, σ1§11/50, 5C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.05** | **170** | ⇑*i*P | **Pb** | **09 39 16.4** | **0.0** |
| CO06 | | | | *e*S | **Sb** | **09 39 19.8** | **0.0** |
| CO06 | | | | IAML | | 09 39 20.4 | |
| | comp=E,76μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **0.79** | **27** | | **Pb** | **09 39 25.9** | **-0.8** |
| **CO05** | **La Serena** | **0.79** | **27** | ⇓*i*P | **Pb** | **09 39 25.7** | **-0.9** |
| CO05 | | | | *e*S | **Sb** | **09 39 37.1** | **+0.2** |
| **CO02** | **Combarbal** | **0.80** | **136** | | **Pb** | **09 39 26.1** | **-0.8** |
| **CO02** | **Combarbal** | **0.80** | **136** | ⇓*i*P | **Pb** | **09 39 26.1** | **-0.8** |
| CO02 | | | | *i* S | **Sb** | **09 39 37.3** | **-0.2** |
| CO02 | | | | IAML | | 09 39 38.0 | |
| | comp=N,16μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **0.85** | **105** | | **Pb** | **09 39 27.1** | **-0.7** |
| **CO03** | **El Pedregal** | **0.85** | **105** | ⇓*i*P | **Pb** | **09 39 27.1** | **-0.7** |
| CO03 | | | | *e*S | **Sn** | **09 39 38.6** | **-0.6** |
| **GO04** | **Tololo Observa** | **0.86** | **58** | | **Pb** | **09 39 27.4** | **-0.6** |
| **GO04** | **Tololo Observa** | **0.86** | **58** | ⇓*i*P | **Pb** | **09 39 27.4** | **-0.6** |
| GO04 | | | | *e*S | **Sn** | **09 39 40.0** | **+0.3** |
| GO04 | | | | IAML | | 09 39 43.5 | |
| | comp=N,11μm,0.5s | | | | | | |
| **LCO** | **Las Campanas** | **1.81** | **27** | | **Pn** | **09 39 41.4** | **+0.4** |
| **LCO** | **Las Campanas** | **1.81** | **27** | ⇑*i*P | **Pn** | **09 39 41.1** | **+0.2** |
| LCO | | | | *e*S | **Sn** | **09 40 04.3** | **+1.2** |
| **VA06** | **Catapilco** | **1.95** | **171** | | **Pn** | **09 39 42.7** | **0.0** |
| **VA06** | **Catapilco** | **1.95** | **171** | ⇑*i*P | **Pn** | **09 39 42.5** | **-0.2** |
| VA06 | | | | *e*S | **Sn** | **09 40 06.4** | **+0.1** |
| VA06 | | | | IAML | | 09 40 14.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **157** | | **Pn** | **09 39 49.1** | **+1.1** |
| **VA03** | **San Esteban** | **2.33** | **157** | *e*P | **Pn** | **09 39 49.2** | **+1.2** |
| VA03 | | | | *e*S | **Sb** | **09 40 19.4** | **-1.8** |
| VA03 | | | | IAML | | 09 40 25.9 | |
| | comp=E,731nm,0.2s | | | | | | |
| **VA01** | **Torpederas** | **2.39** | **180** | | **Pn** | **09 39 50.2** | **+1.5** |
| **ROCH** | **El Roble** | **2.40** | **167** | ⇑*e*P | **Pn** | **09 39 49.3** | **+0.2** |
| ROCH | | | | *e*S | **Sn** | **09 40 18.7** | **+1.0** |
| ROCH | | | | IAML | | 09 40 29.7 | |
| | comp=N,713nm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **2.40** | **167** | | **Pn** | **09 39 48.5** | **-0.7** |
| **AC04** | **Llanos de Chal** | **2.46** | **12** | | **Pn** | **09 39 49.3** | **-0.5** |
| **PEL** | **Peldehue** | **2.64** | **162** | | **Pn** | **09 39 53.0** | **+0.7** |
| **PEL** | **Peldehue** | **2.64** | **162** | ⇑*e*P | **Pn** | **09 39 53.0** | **+0.7** |
| PEL | | | | *e*S | **Sb** | **09 40 27.6** | **-2.6** |
| PEL | | | | IAML | | 09 40 37.1 | |
| | comp=N,386nm,0.5s | | | | | | |
| **MT02** | **Curacav** | **2.66** | **171** | | **Pn** | **09 39 53.9** | **+1.4** |
| **ZON** | **Zonda** | **2.71** | **111** | | **Pn** | **09 39 54.3** | **+1.2** |
| **MT05** | **Renca** | **2.86** | **165** | | **Pn** | **09 39 56.1** | **+0.7** |
| **MT05** | **Renca** | **2.86** | **165** | *e*P | **Pn** | **09 39 56.2** | **+0.8** |
| MT05 | | | | *i* S | **Sn** | **09 40 32.2** | **+3.4** |
| MT05 | | | | IAML | | 09 40 42.1 | |
| | comp=E,1μm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **3.02** | **162** | | **Pn** | **09 39 58.9** | **+1.4** |
| **VA05** | **Santo Domingo** | **3.02** | **180** | | **Pn** | **09 39 57.0** | **-0.4** |
| **MT09** | **Talagante** | **3.19** | **170** | | **Pn** | **09 40 00.4** | **+0.5** |
| **MT09** | **Talagante** | **3.19** | **170** | *e*P | **Pn** | **09 40 00.4** | **+0.5** |
| MT09 | | | | *i* S | **Sn** | **09 40 38.2** | **+1.2** |
| MT09 | | | | IAML | | 09 40 52.5 | |
| | comp=N,335nm,0.4s | | | | | | |
| **MT01** | **Popeta** | **3.25** | **174** | | **Pn** | **09 40 01.8** | **+1.3** |
| **GO03** | **Copiap** | **3.26** | **23** | | **Pn** | **09 40 01.5** | **+0.7** |
| **LMEL** | **Las Melosas** | **3.44** | **160** | | **Pn** | **09 40 04.9** | **+1.6** |
| **BO04** | **La Punta** | **3.47** | **166** | | **Pn** | **09 40 04.2** | **+0.6** |
| **BO01** | **Tunca** | **3.79** | **173** | Pn | **Pn** | **09 40 09.3** | **+1.3** |
| **BO02** | **Sierra Bellavi** | **4.22** | **170** | | **Pn** | **09 40 14.5** | **+0.6** |
| **AC02** | **Maricunga** | **4.38** | **31** | | **Pn** | **09 40 17.5** | **+1.0** |
| **GO05** | **Huala** | **4.38** | **183** | Pn | **Pn** | **09 40 14.2** | **-2.0** |
| **ML02** | **Panimavida** | **5.13** | **178** | | **Pn** | **09 40 27.3** | **+1.0** |

*IPEC* ***22*** *09:57:58.7±0.3, 51°.59N×16°.22E, h0km, ML2.2/3, Error ellipse: s-maj=2.1km s-min=1.2km az=35.0*
*PRU* ***22*** *09:57:59.8±0.0, 51°.55N×16°.08E, h0km*
*VIE* ***22*** *09:57:59.3±0.8, 51°.50N×16°.07E, h0km, mb2.4/3, ml2.5/3, Error ellipse: s-maj=9.2km s-min=4.0km az=62.0 80 km NW of Wroclaw Suspected Mining induced.*
**ISC 22 09:57:59.8±1.7, 51°.55N±0°.08×16°.02E±0°.05, h0km, n19,**
**σ1§24/40, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.73** | **166** | *i* Pg | **Pg** | **09 58 13.5** | **-0.2** |
| KSP | | | | *e*Sg | **Sg** | **09 58 23.3** | **+0.1** |
| **CHVC** | **Chvalec** | **0.96** | **179** | *e*PG | **Pg** | **09 58 18.3** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **09 58 31.6** | **+0.9** |
| | comp=Z,29nm,0.3s | | | | | | |
| **OSTC** | **Ostas** | **1.00** | **173** | *e*PG | **Pg** | **09 58 19.0** | **0.0** |
| OSTC | | | | *e*SG | **Sg** | **09 58 32.6** | **+0.6** |
| | comp=Z,61nm,1.0s | | | | | | |
| **UPC** | **Upice** | **1.04** | **180** | *e*PG | **Pg** | **09 58 19.6** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | **09 58 33.9** | **+0.6** |
| | comp=Z,44nm,0.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.22** | **171** | *e*PG | **Pg** | **09 58 22.3** | **-0.8** |
| DPC | | | | *e*SG | **Sg** | **09 58 38.1** | **-0.7** |
| | comp=Z,41nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.47** | **243** | Pg | **Pb** | **09 58 28.3** | **+0.3** |
| BRG | | | | Sg | **Sg** | **09 58 49.0** | **+1.9** |
| BRG | | | | Amp | | 09 58 50.5 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **KRLC** | **Kraliky** | **1.56** | **162** | *e*PG | **Pn** | **09 58 27.4** | **-1.3** |
| KRLC | | | | *e*SG | **Sn** | **09 58 48.9** | **-0.7** |
| | comp=Z,26nm,0.6s | | | | | | |
| **PRU** | **Pruhonice** | **1.82** | **212** | *e*PN | **Pn** | **09 58 31.8** | **-0.6** |
| PRU | | | | *e*PG | **Pb** | **09 58 34.1** | **+0.1** |
| PRU | | | | *e*SG | **Sb** | **09 58 59.0** | **+1.6** |
| | comp=Z,28nm,0.7s | | | | | | |
| **CLL** | **Collm** | **1.91** | **264** | *e*Pn | **Pn** | **09 58 33.0** | **-0.5** |
| CLL | | | | *i* Pg | **Pb** | **09 58 35.6** | **+0.2** |
| CLL | | | | *i* x | x | 09 58 39.2 | |
| CLL | | | | *e*Sg | **Sg** | **09 59 02.0** | **+1.1** |
| | comp=Z,17nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **2.02** | **151** | *e*Pn | **Pn** | **09 58 33.4** | **-1.7** |
| | baz=336 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **09 59 01.3** | **+0.1** |
| | comp=Z,16nm,0.6s,baz=336 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.02** | **151** | *e*PN | **Pn** | **09 58 33.5** | **-1.7** |
| MORC | | | | *e*SG | **Sn** | **09 59 01.4** | **+0.2** |
| **VRAC** | **Vranov** | **2.27** | **171** | *e*Pn | **Pn** | **09 58 38.0** | **-0.6** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **09 59 10.6** | **+0.2** |
| | comp=Z,12nm,0.5s,baz=354 | | | | | | |
| **KRUC** | **Moravsky** | **2.50** | **174** | *e*Pn | **Pn** | **09 58 41.3** | **-0.4** |
| | baz=358 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **09 59 18.2** | **+1.3** |
| | comp=Z,9.8nm,0.5s,baz=358 | | | | | | |
| **KHC** | **Kasperske Hory** | **2.88** | **214** | *e*PN | **Pn** | **09 58 46.6** | **-0.4** |
| KHC | | | | *e*PG | **Pb** | **09 58 53.1** | **+1.0** |
| KHC | | | | *e*SN | **Sn** | **09 59 18.5** | **-3.9** |
| KHC | | | | *e*SG | **Sg** | **09 59 32.6** | **+0.2** |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.95** | **203** | *e*PN | **Pn** | **09 58 47.3** | **-0.5** |
| CKRC | | | | *e*PG | **Pb** | **09 58 54.1** | **+0.9** |
| CKRC | | | | *e*SG | **Sg** | **09 59 33.6** | **-0.8** |
| | comp=Z,8.4nm,0.4s | | | | | | |
| **MODS** | **Modra-Piesok** | **3.28** | **165** | *e*PG | **Pg** | **09 59 04.8** | **+2.1** |
| MODS | | | | *e*SG | **Sg** | **09 59 48.0** | **+2.8** |
| **CONA** | **Conrad Observa** | **3.63** | **182** | *e*Pn | **Pn** | **09 58 56.4** | **-0.9** |
| | comp=Z,0.8nm,0.2s | | | | | | |
| **ARSA** | **Arzberg** | **4.32** | **185** | Pg | **Pg** | **09 59 20.4** | **-2.1** |
| | comp=Z,1.9nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.81** | **202** | *e*Pn | **Pn** | **09 59 13.4** | **-0.2** |
| | comp=Z,2.7nm,0.4s | | | | | | |

*IDC* ***22*** *10:01:22.5±1.8, 32°.88S×178°.32W, h0km, mb3.8/3, mb1 4.2/4, mb1mx3.8/28, mbtmp3.9/4, ML3.6/1, Error ellipse: s-maj=54.3km s-min=29.2km az=137.0*
*WEL* ***22*** *10:01:25.4±0.9, 33°.S±11°×17°.9W±2°.5, h119km±39km, M4.3/10, mB4.3/2, ML4.4/13, MLv4.3/10, Mw(mB)3.5/2, Error ellipse: s-maj=0.0km s-min=0.0km az=111.9*
**ISC 22 10:01:26.5±1.2, 32°.8S±0°.1×178°.4W±0°.2, h35km, n24,**
**σ1§33/42, mb3.8/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.53** | **7** | P | **Pn** | **10 02 18.5** | **-0.4** |
| GLKZ | | | | S | **Sn** | **10 02 57.2** | **-2.2** |
| **MXZ** | **Matakaoa Point** | **5.48** | **209** | S | **Sn** | **10 03 47.4** | **0.0** |
| **WMGZ** | **Waiomatatini S** | **5.66** | **207** | P | **Pn** | **10 02 48.4** | **+0.3** |
| WMGZ | | | | S | **Sn** | **10 03 53.3** | **+1.5** |
| **PKGZ** | **Pakihiroa** | **5.85** | **209** | P | **Pn** | **10 02 48.9** | **-1.8** |
| PKGZ | | | | S | **Sn** | **10 03 57.2** | **+0.6** |
| **HAZ** | **Te Kaha** | **5.86** | **211** | P | **Pn** | **10 02 50.2** | **-0.7** |
| HAZ | | | | S | **Sn** | **10 03 58.5** | **+1.7** |
| **PUZ** | **Puketiti** | **5.94** | **206** | P | **Pn** | **10 02 49.9** | **-2.0** |
| PUZ | | | | S | **Sn** | **10 03 58.7** | **-0.2** |
| **RUGZ** | **Raukumara Rang** | **6.08** | **211** | P | **Pn** | **10 02 53.3** | **-0.7** |
| RUGZ | | | | S | **Sn** | **10 04 02.9** | **+0.4** |
| **TWGZ** | **Tauwhareparae** | **6.14** | **208** | P | **Pn** | **10 02 53.9** | **-0.8** |
| TWGZ | | | | S | **Sn** | **10 04 05.1** | **+1.4** |
| **CNGZ** | **Carnagh Statio** | **6.33** | **205** | P | **Pn** | **10 02 55.2** | **-2.0** |
| CNGZ | | | | S | **Sn** | **10 04 10.2** | **+2.0** |
| **TKGZ** | **Te Karaka** | **6.42** | **207** | P | **Pn** | **10 02 58.4** | **0.0** |
| TKGZ | | | | S | **Sn** | **10 04 08.8** | **-1.7** |
| **MWZ** | **Matawai** | **6.46** | **210** | P | **Pn** | **10 02 57.4** | **-1.6** |
| MWZ | | | | S | **Sn** | **10 04 11.2** | **-0.3** |
| **URZ** | **Urewera** | **6.58** | **213** | Pn | **Pn** | **10 03 00.4** | **-0.2** |
| | 1.2nm,0.3s,baz=53,slow=15,SNR=10 | | | | | | |
| URZ | | | | Sn | **Sn** | **10 04 13.9** | **-0.5** |
| | 3.0nm,0.3s,baz=94,slow=22,SNR=10.0 | | | | | | |
| **URZ** | **Urewera** | **6.58** | **213** | P | **Pn** | **10 03 00.4** | **-0.2** |
| URZ | | | | S | **Sn** | **10 04 12.9** | **-1.5** |
| **RAGZ** | **Rawiri** | **6.64** | **210** | P | **Pn** | **10 03 01.4** | **-0.2** |
| **RIGZ** | **Rimuhau** | **6.68** | **207** | P | **Pn** | **10 03 01.4** | **-0.8** |
| RIGZ | | | | S | **Sn** | **10 04 15.6** | **-1.6** |
| **SNGZ** | **Shannon Statio** | **6.92** | **209** | P | **Pn** | **10 03 03.0** | **-2.4** |
| SNGZ | | | | S | **Sn** | **10 04 22.6** | **-0.2** |
| **MTHZ** | **Maungataniwha** | **7.19** | **211** | P | **Pn** | **10 03 09.3** | **+0.2** |
| MTHZ | | | | S | **Sn** | **10 04 29.0** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **7.60** | **212** | P | **Pn** | **10 03 13.5** | **-1.3** |
| BKZ | | | | S | **Sn** | **10 04 37.4** | **-2.2** |
| **KWHZ** | **Kaweka Forest** | **7.84** | **211** | P | **Pn** | **10 03 17.9** | **-0.2** |
| KWHZ | | | | S | **Sn** | **10 04 43.9** | **-1.7** |
| **OTVZ** | **Oturere** | **7.98** | **215** | P | **Pn** | **10 03 20.1** | **0.0** |
| OTVZ | | | | S | **Sn** | **10 04 47.3** | **-1.8** |
| **ASAR** | **Alice Springs** | **42.70** | **270** | P | **P** | **10 09 22.1** | **+1.9** |
| | 0.9nm,0.7s,baz=106,slow=7.8,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.90** | **275** | P | **P** | **10 09 31.4** | **+1.4** |
| | 1.3nm,0.6s,baz=116,slow=7.5,SNR=15 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.21** | **43** | P | **P** | **10 14 25.1** | **+1.6** |
| | 0.4nm,0.8s,baz=211,slow=4.9,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **147.25** | **338** | PKPbc | **PKiKP** | **10 21 06.5** | **-1.1** |
| | 1.2nm,0.6s,baz=49,slow=4.2,SNR=6.1 | | | | | | |

*IDC* ***22*** *10:13:58.5±1.2, 51°.76N×75°.83E, h0km, mb1 2.4/4, mb1mx2.4/55, mbtmp2.4/4, ML1.9/3, Error ellipse: s-maj=30.2km s-min=8.8km az=32.0*
**ISC 22 10:14:02.4±1.4, 51°.8N±0°.1×75°.9E±0°.1, h35km, n8, σ1§29/8,**
**3C-1D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURK** | **Kurchatov** | **2.02** | **122** | ⇓Pg | **Pn** | **10 14 32.4** | **-1.4** |
| | 3.2nm,1.1s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 15 01.0 | |
| | 12nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.02** | **125** | Pn | **Pn** | **10 14 34.7** | **+0.7** |
| | 0.2nm,0.3s,baz=303,slow=18,SNR=6.1 | | | | | | |
| KURBB | | | | Lg | Lg | 10 15 04.3 | |
| | 0.2nm,0.3s,baz=310,slow=34,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.02** | **125** | ⇑Pg | **Pn** | **10 14 35.0** | **+1.0** |
| | 3.7nm,1.0s,baz=305,slow=18 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 10 15 03.3 | |
| | 18nm,0.8s,baz=307,slow=30 | | | | | | |
| **BVAR** | **Borovoye Array** | **3.60** | **292** | Pn | **Pn** | **10 14 55.0** | **-0.8** |
| | 0.2nm,0.3s,baz=80,slow=16,SNR=4.2 | | | | | | |
| BVAR | | | | Sn | **Sn** | **10 15 36.8** | **-0.3** |
| | 0.4nm,0.3s,baz=114,slow=24,SNR=4.8 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.79** | **65** | *i* | | 10 48 50.0 | |
| | baz=248,slow=324,SNR=0.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.79** | **65** | Pn | **Pn** | **10 15 26.3** | **+0.6** |
| | baz=257,slow=13,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.52** | **138** | Pn | **Pn** | **10 15 34.1** | **-1.7** |
| | 0.0nm,0.3s,baz=318,slow=11,SNR=2.3 | | | | | | |
| MKAR | | | | Sn | **Sn** | **10 16 49.9** | **+1.0** |
| | 0.1nm,0.3s,baz=326,slow=24,SNR=3.3 | | | | | | |
| MKAR | | | | Lg | Lg | 10 17 22.0 | |
| | 0.1nm,0.3s,baz=320,slow=27,SNR=8.8 | | | | | | |
| **AAK** | **Ala-Archa** | **9.23** | **187** | Lg | Lg | 10 18 43.7 | |
| | 0.1nm,0.3s,baz=177,slow=22,SNR=1.5 | | | | | | |

*KRNET* ***22*** *10:16:56.8±0.1, 41°.16N×70°.12E, h13km, mb2.5*
**ISC 22 10:16:57.3±1.8, 41°.15N±0°.04×70°.16E±0°.09, h9km±17km,**
**n7, σ0§86/12, 10C-4D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRKS** | **Terek-Say** | **0.83** | **63** | ⇓*i*P | **Pg** | **10 17 13.0** | **-0.3** |
| | baz=68 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sb** | **10 17 24.8** | **-0.6** |
| | baz=68 | | | | | | |
| **BTK** | **Batken** | **1.20** | **155** | ⇑*i*P | **Pg** | **10 17 20.0** | **-0.4** |
| | baz=54 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **10 17 37.1** | **+1.1** |
| | baz=54 | | | | | | |
| **ARK** | **Arkit** | **1.50** | **64** | ⇑*i*P | **Pb** | **10 17 25.5** | **0.0** |
| | baz=64 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **10 17 46.1** | **+0.5** |
| | baz=64 | | | | | | |
| **KK09** | **Karatay Array** | **1.98** | **7** | ⇑Pg | **Pg** | **10 17 35.4** | **+0.1** |
| | 2.4nm,0.4s,baz=189,slow=15 | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 10 18 04.5 | |
| | 4.7nm,0.6s,baz=193,slow=29 | | | | | | |
| **GAR** | **Garm** | **2.15** | **177** | ⇑*i*P | **Pb** | **10 17 35.9** | **-0.7** |
| | baz=76 | | | | | | |
| GAR | | | | ⇑*i*S | **Sb** | **10 18 04.3** | **+0.8** |
| | baz=76 | | | | | | |
| **MNAS** | **Manas** | **2.20** | **52** | ⇑*i*P | **Pb** | **10 17 36.8** | **-0.6** |
| | baz=52 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **10 18 06.2** | **+1.3** |
| | baz=52 | | | | | | |
| **AAK** | **Ala-Archa** | **3.56** | **64** | ⇓Pg | **Pb** | **10 17 59.7** | **-0.8** |
| | 1.6nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 10 18 52.7 | |
| | 3.3nm,0.9s | | | | | | |

*NNC* ***22*** *10:23:26.7±0.4, 50°.05N×78°.86E, h0km, mb3.2, mpv2.7, Error ellipse: s-maj=7.0km s-min=1.8km az=71.0, Suspected Mining explosion.*
*IDC* ***22*** *10:23:27.9±1.0, 50°.06N×78°.75E, h0km, mb1 2.9/2, mb1mx2.8/44, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=12.8km s-min=6.1km az=65.0*
**ISC 22 10:23:26.8±1.0, 50°.13N±0°.05×78°.84E±0°.07, h0km, n17,**
**σ0§84/30, 14C-15D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.50** | **336** | ⇑P | **Pb** | **10 23 38.0** | **-0.4** |
| KUR07 | | | | ⇓S | **Sb** | **10 23 46.3** | **0.0** |
| **KUR14** | **Kurchatov Arra** | **0.51** | **342** | ⇓P | **Pb** | **10 23 38.4** | **-0.

*Error ellipse: s-maj=15.8km s-min=8.3km az=179.0*
**ISC 22 10:24:47.7±1.5, 39.70N±0.05×73.65E±0.03, h7km±12km, n49, σ1967/80, 23C-4D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** baz=28 | **1.06** | **321** | ⇑*iP* | **Pn** | **10 25 09.8** | **+0.7** |
| OHH | | | | ⇑*iS* | **Sn** | **10 25 27.8** | **+3.7** |
| **TSTA** | **Tashata** baz=28 | **1.26** | **315** | *eP* | **Pg** | **10 25 14.0** | **+2.1** |
| TSTA | | | | *eS* | **Sg** | **10 25 34.0** | **+5.7** |
| **DRK** | **Karamyk** baz=72 | **1.45** | **262** | ⇓*iP* | **Pn** | **10 25 13.0** | **-1.6** |
| DRK | | | | ⇓*iS* | **Sn** | **10 25 33.2** | **-0.8** |
| **FRG** | **Fergana** baz=72 | **1.59** | **296** | *eP* | **Pg** | **10 25 19.0** | **+0.8** |
| FRG | | | | *eS* | **Sg** | **10 25 41.0** | **+2.3** |
| **BTK** | **Batken** baz=87 | **2.21** | **280** | *eP* | **Pb** | **10 25 28.0** | **-0.1** |
| BTK | | | | *eS* | Sn | 10 25 41.0 | -11 |
| **BTK** | **Batken** baz=87 | **2.21** | **280** | ⇑*iP* | **Pb** | **10 25 26.5** | **-1.6** |
| BTK | | | | ⇑*iS* | **Sb** | **10 25 56.6** | **+0.9** |
| **ARLS** | **Aral** baz=11 | **2.22** | **13** | ⇑*iP* | **Pb** | **10 25 28.9** | **+0.6** |
| ARLS | | | | ⇑*iS* | **Sg** | **10 26 00.6** | **+1.5** |
| **ARK** | **Arkit** baz=11 | **2.46** | **329** | *eP* | **Pb** | **10 25 33.0** | **+0.7** |
| ARK | | | | *eS* | **Sg** | **10 26 07.0** | **+0.2** |
| **ARK** | **Arkit** baz=32 | **2.46** | **329** | ⇑*iP* | **Pb** | **10 25 32.3** | **0.0** |
| ARK | | | | ⇑*iS* | **Sg** | **10 26 06.3** | **-0.5** |
| **UCH** | **Uchtor** baz=13 | **2.61** | **14** | ⇑*iP* | **Pb** | **10 25 34.5** | **-0.6** |
| UCH | | | | ⇑*iS* | **Sg** | **10 26 10.5** | **-1.2** |
| **TRKS** | **Terek-Say** baz=17 | **2.65** | **315** | ⇑*eP* | **Pb** | **10 25 33.3** | **-2.3** |
| TRKS | | | | ⇑*iS* | **Sb** | **10 26 08.4** | **+0.1** |
| **GAR** | **Garm** baz=62 | **2.68** | **256** | ⇑*iP* | **Pn** | **10 25 31.4** | **+0.1** |
| GAR | | | | ⇑*iS* | **Sn** | **10 26 05.2** | **+1.1** |
| **MNAS** | **Manas** baz=44 | **2.92** | **343** | ⇑*iP* | **Pb** | **10 25 39.0** | **-1.2** |
| MNAS | | | | ⇑*eS* | **Sb** | **10 26 17.8** | **+1.7** |
| **AAK** | **Ala-Archa** 4.8nm,0.6s | **3.01** | **12** | ⇑Pg | **Pg** | **10 25 44.3** | **-1.1** |
| AAK | 12nm,0.8s | | | ⇓Lg | Lg | 10 26 26.3 | |
| **MRKS** | **Merke** 5.5nm,0.2s | **3.06** | **354** | *eP* | **Pg** | **10 25 45.3** | **-1.1** |
| MRKS | 7.7nm,0.5s | | | *eS* | **Sg** | **10 26 24.7** | **-1.4** |
| **MRKS** | **Merke** 5.5nm,0.2s | **3.06** | **354** | Pg | **Pg** | **10 25 44.8** | **-1.6** |
| MRKS | 7.7nm,0.5s | | | Lg | Lg | 10 26 24.7 | |
| **TKM2** | **Tokmak 2** 2.2nm,0.8s | **3.54** | **24** | ⇑Pg | **Pg** | **10 25 53.5** | **-2.1** |
| TKM2 | 5.5nm,0.8s | | | ⇑Lg | Lg | 10 26 43.4 | |
| **CHGR** | **Chuyangaron** baz=59 | **3.64** | **255** | ⇑*iP* | **Pn** | **10 25 44.8** | **+0.2** |
| CHGR | | | | ⇑*iS* | **Sn** | **10 26 28.2** | **+0.3** |
| **SGDS** | **Sogindy** 2.2nm,0.5s | **3.82** | **11** | *eP* | **Pg** | **10 26 00.7** | **-0.2** |
| SGDS | 3.3nm,0.5s | | | *eS* | **Sg** | **10 26 51.9** | **+1.4** |
| **DGS** | **Degeres** 5.0nm,0.4s | **3.88** | **24** | *eP* | **Pg** | **10 26 02.1** | **0.0** |
| DGS | 8.2nm,0.5s | | | *eS* | **Sg** | **10 26 54.3** | **+1.9** |
| **DGS** | **Degeres** 5.0nm,0.4s | **3.88** | **24** | Pg | **Pg** | **10 26 01.5** | **-0.7** |
| DGS | 8.2nm,0.5s | | | Lg | Lg | 10 26 53.3 | |
| **MTBS** | **Maitube** 5.1nm,0.6s | **4.01** | **30** | *eP* | **Pg** | **10 26 05.4** | **+0.8** |
| MTBS | 6.3nm,0.2s | | | *eS* | **Sg** | **10 26 60.0** | **+3.3** |
| **MTBS** | **Maitube** 5.1nm,0.6s | **4.01** | **30** | Pg | **Pg** | **10 26 03.4** | **-1.3** |
| MTBS | 6.3nm,0.2s | | | Lg | Lg | 10 26 56.6 | |
| **TNSS** | **Tian-Shan** 4.0nm,0.2s | **4.16** | **36** | *eP* | **Pg** | **10 26 07.0** | **-0.4** |
| TNSS | 6.0nm,0.6s | | | *eS* | **Sg** | **10 27 02.8** | **+1.5** |
| **TNSS** | **Tian-Shan** 4.0nm,0.2s | **4.16** | **36** | Pg | **Pg** | **10 26 07.0** | **-0.4** |
| TNSS | 6.0nm,0.6s | | | Lg | Lg | 10 27 02.8 | |
| **KK09** | **Karatay Array** 1.0nm,0.3s,baz=141,slow=16 | **4.16** | **326** | ⇓Pg | **Pg** | **10 26 06.3** | **-1.2** |
| KK09 | 1.6nm,0.5s | | | ⇑Sn | **Sb** | **10 26 48.9** | **-2.8** |
| KK09 | 2.7nm,0.6s,baz=137,slow=29 | | | ⇑Lg | Lg | 10 27 04.6 | |
| **KRBS** | **Karabastau** 2.7nm,0.2s | **4.27** | **20** | *eP* | **Pg** | **10 26 09.1** | **-0.5** |
| KRBS | 8.3nm,0.5s | | | *eS* | **Sg** | **10 27 06.4** | **+1.4** |
| **KRBS** | **Karabastau** 2.7nm,0.2s | **4.27** | **20** | Pg | **Pg** | **10 26 09.1** | **-0.5** |
| KRBS | 8.3nm,0.5s | | | Lg | Lg | 10 27 06.4 | |
| **MDOK** | **Medeo** 4.0nm,0.6s | **4.30** | **35** | *eP* | **Pg** | **10 26 09.3** | **-0.8** |
| MDOK | 8.8nm,0.6s | | | *eS* | **Sg** | **10 27 06.7** | **+0.8** |
| **MDOK** | **Medeo** 4.6nm,0.8s | **4.30** | **35** | Pg | **Pg** | **10 26 09.6** | **-0.6** |
| MDOK | 6.7nm,0.7s | | | Lg | Lg | 10 27 06.1 | |
| **MDOK** | **Medeo** 4.0nm,0.6s | **4.30** | **35** | Pg | **Pg** | **10 26 09.3** | **-0.8** |
| MDOK | 8.8nm,0.6s | | | Lg | Lg | 10 27 06.7 | |
| **KOTS** | **Kotyrbulak** 4.8nm,0.4s | **4.39** | **35** | *eP* | **Pg** | **10 26 10.4** | **-1.4** |
| KOTS | 28nm,0.3s | | | *eS* | **Sg** | **10 27 08.3** | **-0.2** |
| **KOTS** | **Kotyrbulak** 4.8nm,0.4s | **4.39** | **35** | Pg | **Pg** | **10 26 10.4** | **-1.4** |
| KOTS | 28nm,0.3s | | | Lg | Lg | 10 27 08.4 | |
| **BRLS** | **Boroldaу** 2.4nm,0.3s | **4.40** | **320** | *eP* | **Pg** | **10 26 08.9** | **-3.1** |
| BRLS | 6.2nm,0.5s | | | *eS* | **Sg** | **10 27 05.8** | **-3.1** |
| **KTBS** | **Karatobe** 2.1nm,0.3s | **4.61** | **28** | *eP* | **Pg** | **10 26 13.4** | **-2.6** |
| KTBS | 12nm,0.4s | | | *eS* | **Sg** | **10 27 13.7** | **-2.0** |
| **KUU** | **Kurty** 2.0nm,0.5s | **4.65** | **25** | *eP* | **Pg** | **10 26 15.2** | **-1.6** |
| KUU | 8.3nm,0.8s | | | *eS* | **Sg** | **10 27 17.1** | **+0.2** |
| **KUU** | **Kurty** 2.0nm,0.5s | **4.65** | **25** | Pg | **Pg** | **10 26 15.2** | **-1.6** |
| KUU | 8.3nm,0.8s | | | Lg | Lg | 10 27 17.1 | |
| **SATY** | **Saty** 3.9nm,0.3s | **4.91** | **45** | *eP* | **Pg** | **10 26 20.8** | **-0.9** |
| SATY | 6.2nm,0.6s | | | *eS* | **Sg** | **10 27 26.4** | **+1.2** |
| **SATY** | **Saty** 3.9nm,0.3s | **4.91** | **45** | Pg | **Pg** | **10 26 20.8** | **-0.9** |
| SATY | 6.2nm,0.6s | | | Lg | Lg | 10 27 26.4 | |
| **UZB** | **Uzynbulak** 7.2nm,0.4s | **5.31** | **48** | *eP* | **Pg** | **10 26 28.9** | **-0.5** |
| UZB | 4.1nm,0.6s | | | *eS* | **Sg** | **10 27 40.3** | **+2.2** |
| **UZB** | **Uzynbulak** 7.2nm,0.4s | **5.31** | **48** | Pg | **Pg** | **10 26 28.9** | **-0.5** |
| UZB | 4.1nm,0.6s | | | Lg | Lg | 10 27 40.3 | |
| **KPKS** | **Kokpek** 2.2nm,0.3s | **5.33** | **43** | *eP* | **Pg** | **10 26 27.6** | **-2.2** |
| KPKS | 7.2nm,0.7s | | | *eS* | **Sg** | **10 27 38.3** | **-0.6** |
| **BTLS** | **Baital** 3.3nm,1.0s | **5.35** | **3** | *eP* | **Pg** | **10 26 28.5** | **-1.6** |
| BTLS | 1.6nm,0.4s | | | *eS* | **Sg** | **10 27 39.8** | **+0.3** |
| **BTLS** | **Baital** 3.3nm,1.0s | **5.35** | **3** | Pg | **Pg** | **10 26 28.5** | **-1.6** |
| BTLS | 1.6nm,0.4s | | | Lg | Lg | 10 27 39.8 | |
| **ARXS** | **Arharly** 2.7nm,0.5s | **5.48** | **33** | *eP* | **Pg** | **10 26 30.9** | **-1.8** |
| ARXS | 7.5nm,0.7s | | | *eS* | **Sg** | **10 27 44.2** | **+0.5** |
| **ARXS** | **Arharly** 2.7nm,0.5s | **5.48** | **33** | Pg | **Pg** | **10 26 30.9** | **-1.8** |
| ARXS | 7.5nm,0.7s | | | Lg | Lg | 10 27 44.2 | |
| **BLB** | **Baldybastay** 8.8nm,0.5s | **5.68** | **38** | *eP* | **Pg** | **10 26 37.1** | **+0.6** |
| BLB | 3.0nm,0.4s | | | *eS* | **Sg** | **10 27 54.5** | **+4.3** |
| **BLB** | **Baldybastay** 8.8nm,0.5s | **5.68** | **38** | Pg | **Pg** | **10 26 37.1** | **+0.6** |
| BLB | 3.0nm,0.4s | | | Lg | Lg | 10 27 54.5 | |
| **PDGK** | **Podgornoye** 0.8nm,0.4s | **5.69** | **48** | Pg | **Pg** | **10 26 35.8** | **-0.9** |
| PDGK | 2.1nm,0.5s | | | Lg | Lg | 10 27 52.4 | |

**IDC 22 10:26:50.5±15.0, 8.80S×156.90E, h0km, mb3.8/3, mb1 4.0/3, mb1mx3.5/30, mbtmp3.8/3, MS3.1/4, Ms1 3.1/4, ms1mx2.7/60, Error ellipse: s-maj=252.3km s-min=96.0km az=43.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** comp=Z,87nm,18.9s,baz=270,slow=32 | **3.07** | **102** | LR | LR | 10 28 28.0 | |
| **CTA** | **Charters Tower** comp=Z,55nm,19.9s,baz=82,slow=33 | **15.23** | **221** | LR | LR | 10 35 12.5 | |
| **DZM** | **Mont Dzumac** comp=Z,148nm,18.4s,baz=212,slow=31 | **16.07** | **146** | LR | LR | 10 35 10.4 | |
| **WRA** | **Warramunga Arr** 1.3nm,0.9s,baz=66,slow=9.2,SNR=4.8 | **24.47** | **241** | P | P | 10 32 10.6 | -0.9 |
| **ASAR** | **Alice Springs** 1.3nm,0.9s,baz=67,slow=9.3,SNR=15 | **26.51** | **233** | P | P | 10 32 30.9 | +0.9 |
| **STKA** | **Stephens Creek** 2.0nm,0.7s,baz=34,slow=11,SNR=6.6 | **27.01** | **210** | P | P | 10 32 34.1 | -0.3 |
| STKA | comp=Z,61nm,18.2s,baz=46,slow=34 | | | LR | LR | 10 42 06.3 | |

*TUL **22** 10:29:20.3±0.5, 36.49N±0.02×98.73W±0.02, h8km±1km, ML2.6, mb_Lg2.5/9(NEIC), Error ellipse: s-maj=3.5km s-min=1.8km az=143.0*
**NEIC 22 10:29:20.9±0.2, 36.49N±0.02×98.73W±0.02, h6km±1km, Error ellipse: s-maj=3.1km s-min=1.4km az=152.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.24** | **244** | Pg | Pg | 10 29 25.5 | -0.1 |
| U32A | | | | Sg | Sg | 10 29 29.4 | +0.6 |
| **FNO** | **Franklin** | **1.63** | **138** | Pn | Pn | 10 29 50.0 | -0.2 |
| **X34A** | **Smith Ranch, M** | **2.02** | **158** | Pn | Pn | 10 29 56.3 | +0.8 |
| **AMTX** | **Amarillo** comp=Z,12nm,1.0s | **2.88** | **237** | IAmb_Lg | | 10 30 52.7 | |
| **U38A** | **Gravette** comp=Z,4.7nm,1.0s | **3.50** | **89** | IAmb_Lg | | 10 31 14.1 | |
| **S39A** | **Bolivar** comp=Z,4.8nm,0.7s | **4.49** | **73** | IAmb_Lg | | 10 31 44.7 | |
| **N35A** | **Tabor** comp=Z,15nm,1.2s | **4.99** | **28** | IAmb_Lg | | 10 32 01.2 | |
| **N41A** | **Harden Midland** comp=Z,13nm,1.1s | **7.47** | **53** | IAmb_Lg | | 10 33 12.9 | |

**NEIC 22 10:33:37.7±0.6, 36.494N±0.008×98.72W±0.01, h2km±5km, ML2.0/23, Error ellipse: s-maj=1.5km s-min=1.1km az=61.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.26** | **244** | Pg | Pg | 10 33 42.5 | -0.1 |
| U32A | | | | Sg | Sg | 10 33 46.6 | +0.7 |
| U32A | comp=E,256nm,0.1s | | | IAML | | 10 33 47.0 | |
| U32A | comp=N,216nm,0.1s | | | IAML | | 10 33 47.0 | |
| **T35A** | **Sooner Cattle** | **1.82** | **76** | | Pn | 10 34 10.0 | 0.0 |
| **R32A** | **Long Quarter,** | **1.93** | **0** | | Pn | 10 34 11.7 | +0.3 |

*IDC **22** 11:17:05.0±1.2, 23.11N×121.50E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.6/44, mbtmp3.7/7, MS3.0/2, Ms1 3.1/2, ms1mx2.5/86, Error ellipse: s-maj=40.3km s-min=24.4km az=65.0*
*NIED **22** 11:17:06.1, 23.02N×121.13E, h0km, MW3.9, Moment Tensor Solution. s2 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=6.54; $M_{\theta\theta}$3.41; $M_{\phi\phi}$3.13; $M_{r\theta}$2.60; $M_{\theta\phi}$-2.67; $M_{\phi r}$-0.35; Fault plane solution: $M_0$6.75000×$10^{14}$ NP1: $\phi_s$302.00000°, $\delta$56.00000°, $\lambda$-103.00000°. NP2: $\phi_s$143.00000°, $\delta$36.00000°, $\lambda$-72.00000°.*
*TAP **22** 11:17:06.7, 22.99N×120.94E, h8km, ML4.0, C*
*JMA **22** 11:17:06.0±0.5, 23.02N×121.13E, h0km, M3.6*
**ISC 22 11:17:07.4±0.8, 23.00N±0.01×120.99E±0.01, h11km±5km, n157, σ0.99/250, mb3.5/7, 33C-1D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LONT** | **Longtian** baz=116 | **0.16** | **126** | ⇑*iP* | **Pg** | **11 17 11.2** | **+0.2** |
| LONT | baz=116 | | | *i* S | **Sg** | **11 17 14.1** | **+0.5** |
| **ELDTW** | **Lidau** baz=27 | **0.19** | **9** | ⇑*iP* | **Pg** | **11 17 11.0** | **-0.6** |
| ELDTW | baz=27 | | | *i* S | **Sg** | **11 17 13.7** | **-0.7** |
| **TWG** | **Pinlang** baz=144 | **0.20** | **156** | P | **Pg** | **11 17 11.5** | **-0.1** |
| TWG | baz=144 | | | *i* S | **Sg** | **11 17 14.7** | **+0.2** |
| **TWGBT** | **Beinan** baz=144 | **0.20** | **155** | ⇓P | **Pg** | **11 17 11.5** | **-0.3** |
| TWGBT | baz=144 | | | *i* S | **Sg** | **11 17 14.7** | **0.0** |
| **STYH** | **Taoyuan** baz=319 | **0.26** | **311** | ⇑*iP* | **Pg** | **11 17 12.1** | **-0.6** |
| STYH | baz=319 | | | *i* S | **Sg** | **11 17 15.3** | **-0.9** |
| **TTN** | **Taitung** baz=141 | **0.29** | **149** | ⇑*iP* | **Pg** | **11 17 14.3** | **+1.1** |
| TTN | baz=141 | | | *e*S | **Sg** | **11 17 19.4** | **+2.2** |
| **EDH** | **Donghe** baz=89 | **0.29** | **96** | ⇑*iP* | **Pg** | **11 17 14.2** | **+0.8** |
| EDH | baz=89 | | | *i* S | **Sb** | **11 17 19.5** | **-0.2** |
| **SLGT** | **Liugui** baz=265 | **0.31** | **268** | ⇑P | **Pg** | **11 17 12.8** | **-0.9** |
| SLGT | baz=265 | | | *e*S | **Sg** | **11 17 16.4** | **-1.5** |
| **FULB** | **Fuli** baz=58 | **0.34** | **55** | ⇑*iP* | **Pg** | **11 17 15.0** | **+0.7** |
| FULB | baz=58 | | | S | **Sb** | **11 17 20.5** | **-0.7** |
| **CHKT** | **Chengkung** baz=66 | **0.36** | **74** | ⇑*iP* | **Pb** | **11 17 15.7** | **-0.2** |
| CHKT | baz=66 | | | S | **Sb** | **11 17 22.4** | **+0.8** |
| **SGST** | **Jiashian** baz=285 | **0.38** | **282** | ⇑*iP* | **Pg** | **11 17 13.6** | **-1.4** |
| SGST | baz=285 | | | *e*S | **Sg** | **11 17 20.6** | **+0.6** |
| **ECL** | **Taimali** baz=167 | **0.40** | **184** | ⇑*iP* | **Pg** | **11 17 14.7** | **-0.8** |
| ECL | baz=167 | | | *e*S | **Sg** | **11 17 19.4** | **-1.4** |
| **SSD** | **Sandimen** baz=225 | **0.41** | **232** | ⇑*iP* | **Pg** | **11 17 14.1** | **-1.5** |
| SSD | baz=225 | | | *i* S | **Sg** | **11 17 19.1** | **-2.0** |
| **WTP** | **Ta-pu** baz=310 | **0.42** | **305** | ⇑*iP* | **Pg** | **11 17 15.6** | **-0.1** |
| WTP | baz=310 | | | S | **Sg** | **11 17 21.7** | **+0.4** |
| **TSMG** | **Majia** baz=221 | **0.43** | **227** | ⇑*iP* | **Pg** | **11 17 14.6** | **-1.3** |
| TSMG | baz=221 | | | *e*S | **Sg** | **11 17 19.6** | **-2.0** |
| **TPUB** | **Ta-pu** baz=316 | **0.44** | **312** | ⇑*iP* | **Pg** | **11 17 16.1** | **-0.1** |
| TPUB | baz=316 | | | *i* S | **Sg** | **11 17 22.4** | **+0.4** |
| **CHN1** | **Nanshi** baz=300 | **0.46** | **293** | ⇑*iP* | **Pg** | **11 17 16.6** | **+0.1** |
| CHN1 | baz=300 | | | *e*S | **Sg** | **11 17 23.2** | **+0.7** |
| **EYUL** | **Yuli** baz=45 | **0.46** | **42** | ⇑*iP* | **Pg** | **11 17 16.4** | **-0.1** |
| EYUL | baz=45 | | | S | **Sg** | **11 17 22.4** | **-0.2** |
| **SCST** | **Cishan** baz=249 | **0.47** | **256** | P | **Pg** | **11 17 16.3** | **-0.3** |
| **YULB** | **Yu-li** baz=49 | **0.48** | **36** | ⇑*iP* | **Pg** | **11 17 16.4** | **-0.5** |
| YULB | baz=49 | | | S | **Sg** | **11 17 22.4** | **-1.0** |
| **YUS** | **Yu-Shan** baz=2.0 | **0.49** | **356** | ⇑*iP* | **Pg** | **11 17 16.4** | **-0.7** |
| YUS | baz=2.0 | | | S | **Sg** | **11 17 23.1** | **-0.5** |
| **SNST** | **Tainan City** baz=301 | **0.50** | **296** | ⇑*iP* | **Pg** | **11 17 17.6** | **+0.5** |
| SNST | baz=301 | | | *e*S | **Sb** | **11 17 25.1** | **-0.5** |
| **CHN4** | **Tsaushan** baz=327 | **0.50** | **314** | ⇑*iP* | **Pg** | **11 17 17.4** | **+0.2** |
| CHN4 | baz=327 | | | *e*S | **Sb** | **11 17 26.1** | **+0.5** |
| **MASBT** | **Mashibuluo** baz=214 | **0.51** | **220** | ⇑*iP* | **Pg** | **11 17 15.8** | **-1.5** |
| MASBT | baz=214 | | | *i* S | **Sg** | **11 17 22.7** | **-1.4** |
| **TWK** | **Hsinying** baz=303 | **0.53** | **300** | ⇑*iP* | **Pg** | **11 17 17.9** | **+0.1** |
| TWK | baz=303 | | | *e*S | **Sb** | **11 17 26.3** | **-0.2** |
| **ALS** | **Alishan** baz=347 | **0.53** | **342** | ⇑*iP* | **Pg** | **11 17 17.4** | **-0.6** |
| ALS | baz=347 | | | *e*S | **Sg** | **11 17 24.6** | **-0.4** |
| **SGLT** | **Jiouru** baz=234 | **0.53** | **239** | ⇑*iP* | **Pg** | **11 17 17.6** | **-0.2** |
| **TWM1** | **Shoushan** baz=244 | **0.55** | **251** | ⇑*iP* | **Pg** | **11 17 18.4** | **+0.3** |
| TWM1 | baz=244 | | | *e*S | **Sb** | **11 17 28.5** | **+1.5** |
| **LDUT** | **Ludao** baz=123 | **0.55** | **126** | *i* P | **Pg** | **11 17 18.4** | **+0.2** |
| LDUT | baz=123 | | | S | **Sg** | **11 17 27.3** | **+1.8** |
| **CHN3** | **Shinhua** baz=278 | **0.58** | **277** | *eP* | **Pb** | **11 17 20.3** | **+0.7** |
| CHN3 | baz=278 | | | *e*S | **Sn** | **11 17 30.5** | **-0.6** |
| **SHHT** | **Tainan City** baz=272 | **0.59** | **272** | ⇑*iP* | **Pb** | **11 17 20.7** | **+0.9** |
| SHHT | baz=272 | | | S | **Sn** | **11 17 31.3** | **-0.1** |
| **EHY** | **Hungye** baz=35 | **0.59** | **32** | ⇑*iP* | **Pg** | **11 17 18.3** | **-0.6** |
| EHY | baz=35 | | | *e*S | **Sg** | **11 17 25.9** | **-0.8** |
| **EAST** | **Anshuo** baz=187 | **0.63** | **192** | P | **Pg** | **11 17 18.9** | **-0.8** |
| EAST | baz=187 | | | *e*S | **Sg** | **11 17 27.0** | **-0.9** |
| **HGSD** | **Ruisui** baz=35 | **0.63** | **40** | ⇑*iP* | **Pg** | **11 17 19.8** | **+0.1** |
| HGSD | baz=35 | | | *e*S | **Sb** | **11 17 29.2** | **-0.2** |
| **SSPT** | **Xinbi** baz=207 | **0.64** | **217** | P | **Pg** | **11 17 19.3** | **-0.6** |
| SSPT | baz=207 | | | *e*S | **Sg** | **11 17 27.9** | **-0.5** |
| **TAW** | **Tawu** baz=183 | **0.65** | **187** | ⇑*iP* | **Pg** | **11 17 19.2** | **-0.8** |
| TAW | baz=183 | | | *e*S | **Sg** | **11 17 27.5** | **-1.0** |
| **SNJT** | **Kaohsiung City** baz=245 | **0.65** | **248** | P | **Pb** | **11 17 21.3** | **+0.5** |
| SNJT | baz=245 | | | *e*S | **Sn** | **11 17 34.3** | **+1.4** |
| **CHN5** | **Tsauling** baz=348 | **0.66** | **335** | ⇑*iP* | **Pg** | **11 17 20.0** | **-0.2** |
| CHN5 | baz=348 | | | *e*S | **Sb** | **11 17 29.9** | **-0.3** |
| **TAWH** | **Dawu Township** baz=184 | **0.67** | **188** | ⇑*iP* | **Pg** | **11 17 19.6** | **-0.8** |
| TAWH | baz=184 | | | *e*S | **Sg** | **11 17 27.9** | **-1.2** |
| **TAI1** | **Yung-k'ang** baz=274 | **0.70** | **273** | *eP* | **Pb** | **11 17 22.2** | **+0.6** |
| **CHN2** | **Minshiung** baz=321 | **0.71** | **318** | *eP* | **Pb** | **11 17 22.0** | **+0.2** |
| CHN2 | baz=321 | | | *e*S | **Sb** | **11 17 32.7** | **+1.1** |
| **SCZT** | **Fangliau** baz=198 | **0.71** | **208** | ⇑*iP* | **Pg** | **11 17 20.1** | **-1.2** |
| SCZT | baz=198 | | | *i* S | **Sg** | **11 17 29.1** | **-1.4** |
| **CHY** | **Chiayi** baz=317 | **0.71** | **314** | *eP* | **Pb** | **11 17 21.9** | **-0.1** |
| CHY | baz=317 | | | *e*S | **Sb** | **11 17 32.3** | **+0.5** |
| **ICHU** | **Yijhu** baz=300 | **0.74** | **299** | *eP* | **Pb** | **11 17 22.9** | **+0.5** |
| ICHU | baz=300 | | | *e*S | **Sb** | **11 17 33.5** | **+1.0** |
| **SCLT** | **Jiali** baz=299 | **0.75** | **283** | *eP* | **Pb** | **11 17 23.3** | **+0.8** |
| SCLT | baz=299 | | | *e*S | **Sn** | **11 17 35.9** | **+0.5** |
| **KAU** | **Kaohsiung** baz=231 | **0.76** | **235** | *eP* | **Pn** | **11 17 24.7** | **+0.6** |
| KAU | baz=231 | | | *e*S | **Sn** | **11 17 37.8** | **+2.1** |
| **SSLB** | **Suanglung** baz=357 | **0.78** | **358** | ⇑P | **Pg** | **11 17 21.3** | **-1.3** |
| SSLB | baz=357 | | | *e*S | **Sb** | **11 17 33.7** | **-0.1** |
| **CHN8** | **Yiju** baz=297 | **0.79** | **296** | *eP* | **Pb** | **11 17 23.5** | **+0.2** |
| CHN8 | baz=297 | | | *e*S | **Sn** | **11 17 36.0** | **-0.4** |
| **WDLH** | **Douliu** baz=332 | **0.80** | **329** | P | **Pb** | **11 17 23.4** | **0.0** |
| WDLH | baz=332 | | | *e*S | **Sn** | **11 17 35.7** | **-0.9** |
| **SLIU** | **Shizi** baz=184 | **0.80** | **192** | P | **Pg** | **11 17 21.9** | **-1.0** |
| SLIU | baz=184 | | | *e*S | **Sg** | **11 17 33.9** | **+0.5** |
| **WJS** | **Zhushan** baz=347 | **0.85** | **344** | *eP* | **Pb** | **11 17 24.2** | **0.0** |
| WJS | baz=347 | | | *e*S | **Sn** | **11 17 37.5** | **-0.4** |
| **WLCH** | **Liuqiu** baz=214 | **0.86** | **221** | *eP* | **Pn** | **11 17 26.6** | **+1.2** |
| **WSL** | **Shuilin Townsh** baz=308 | **0.87** | **307** | *eP* | **Pb** | **11 17 24.6** | **+0.1** |
| WSL | baz=308 | | | *e*S | **Sn** | **11 17 37.6** | **-0.7** |
| **WTK** | **Tuku** baz=324 | **0.88** | **321** | *eP* | **Pn** | **11 17 25.5** | **-0.2** |
| WTK | baz=324 | | | *e*S | **Sn** | **11 17 38.1** | **-0.4** |
| **SMLT** | **Sun Moon Lake** baz=8.0 | **0.88** | **355** | *eP* | **Pg** | **11 17 23.9** | **-0.5** |
| SMLT | baz=8.0 | | | *e*S | **Sn** | **11 17 39.5** | **+0.7** |
| **TYC** | **Yuchr** baz=6.0 | **0.91** | **353** | P | **Pb** | **11 17 24.6** | **-0.6** |
| TYC | baz=6.0 | | | *e*S | **Sn** | **11 17 39.5** | **+0.2** |
| **ESL** | **Shilin** baz=41 | **0.91** | **27** | *eP* | **Pg** | **11 17 23.9** | **-1.0** |
| **WNT** | **Mingjian** baz=347 | **0.92** | **342** | *i* P | **Pb** | **11 17 25.6** | **+0.2** |
| WNT | baz=347 | | | S | **Sn** | **11 17 39.8** | **+0.3** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **WSF** | **Szhu** | **0.94** | **312** | P | | **Pb** | **11 17 25.7** | **-0.1** |
| | baz=314 | | | | | | | |
| WSF | | | | *e*S | | **Sn** | **11 17 40.0** | **-0.2** |
| | baz=314 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.99** | **188** | *e*P | | **Pg** | **11 17 25.7** | **-0.7** |
| | baz=194 | | | | | | | |
| **WUSB** | **Renai** | **0.99** | **7** | *e*P | | **Pg** | **11 17 25.2** | **-1.3** |
| | baz=2.0 | | | | | | | |
| WUSB | | | | *e*S | | **Sb** | **11 17 40.4** | **+0.5** |
| | baz=2.0 | | | | | | | |
| **HEN** | **Hengchun** | **1.02** | **193** | *e*P | | **Pg** | **11 17 27.0** | **0.0** |
| | baz=198 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.05** | **356** | *e*P | | **Pg** | **11 17 27.0** | **-0.7** |
| | baz=7.0 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **11 17 43.4** | **+0.4** |
| | baz=7.0 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.05** | **328** | *e*P | | **Pb** | **11 17 27.8** | **0.0** |
| | baz=331 | | | | | | | |
| WRL | | | | *e*S | | **Sn** | **11 17 42.7** | **-0.3** |
| | baz=331 | | | | | | | |
| **CHGB** | **Renai** | **1.07** | **9** | *e*P | | **Pg** | **11 17 26.4** | **-1.6** |
| | baz=22 | | | | | | | |
| CHGB | | | | *e*S | | **Sb** | **11 17 42.2** | **0.0** |
| | baz=22 | | | | | | | |
| **TWK1** | **Hengchun** | **1.07** | **189** | *e*P | | **Pg** | **11 17 27.6** | **-0.4** |
| | baz=177 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.07** | **189** | P | | **Pg** | **11 17 27.6** | **-0.4** |
| | baz=186 | | | | | | | |
| TWKBT | | | | *e*S | | **Sg** | **11 17 43.5** | **+1.6** |
| | baz=186 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.07** | **323** | *e*P | | **Pb** | **11 17 28.2** | **+0.1** |
| | baz=325 | | | | | | | |
| WTCT | | | | *e*S | | **Sn** | **11 17 43.7** | **+0.3** |
| | baz=325 | | | | | | | |
| **LAY** | **Lan-yu** | **1.09** | **151** | *e*P | | **Pg** | **11 17 25.9** | **-2.6** |
| | baz=148 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.10** | **184** | *e*P | | **Pg** | **11 17 29.1** | **+0.6** |
| | baz=190 | | | | | | | |
| TSEB | | | | *e*S | | **Sg** | **11 17 43.3** | **+0.4** |
| | baz=190 | | | | | | | |
| **HWA** | **Hwalien** | **1.12** | **30** | *e*P | | **Pb** | **11 17 28.9** | **0.0** |
| | baz=34 | | | | | | | |
| HWA | | | | *e*S | | **Sb** | **11 17 43.4** | **-0.2** |
| | baz=34 | | | | | | | |
| **LYUB** | **Lan-yu** | **1.14** | **151** | *e*P | | Pg | 11 17 25.5 | -3.8 |
| | baz=148 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.14** | **340** | *e*P | | **Pn** | **11 17 30.5** | **+1.1** |
| | baz=343 | | | | | | | |
| WCHH | | | | *e*S | | **Sn** | **11 17 45.9** | **+0.8** |
| | baz=343 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.17** | **13** | P | | **Pg** | **11 17 29.1** | **-0.8** |
| | baz=23 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **11 17 47.8** | **+1.5** |
| | baz=23 | | | | | | | |
| **TCU** | **Taichung** | **1.18** | **346** | P | | **Pn** | **11 17 30.9** | **+1.1** |
| | baz=350 | | | | | | | |
| TCU | | | | *e*S | | **Sn** | **11 17 48.5** | **+2.6** |
| | baz=350 | | | | | | | |
| **TWD** | **Chiawan** | **1.21** | **27** | P | | **Pg** | **11 17 29.6** | **-1.1** |
| | baz=41 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **11 17 47.1** | **+0.3** |
| | baz=41 | | | | | | | |
| **WDGT** | **Dungji** | **1.25** | **282** | *e*P | | **Pg** | **11 17 29.7** | **-1.7** |
| | baz=281 | | | | | | | |
| WDGT | | | | *e*S | | **Sg** | **11 17 47.0** | **-0.6** |
| | baz=281 | | | | | | | |
| **TDCB** | **Techi** | **1.25** | **7** | *e*P | | **Pg** | **11 17 30.7** | **-0.9** |
| | baz=23 | | | | | | | |
| TDCB | | | | *e*S | | **Sn** | **11 17 48.9** | **+0.8** |
| | baz=23 | | | | | | | |
| **TWT** | **Tachien** | **1.26** | **8** | P | | **Pg** | **11 17 31.1** | **-0.6** |
| | baz=10.0 | | | | | | | |
| **FUSS** | **Fushou** | **1.26** | **11** | *e*P | | **Pg** | **11 17 30.0** | **-1.7** |
| | baz=26 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **11 17 51.6** | **+3.1** |
| | baz=26 | | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **358** | *e*P | | **Pn** | **11 17 31.9** | **+0.6** |
| | baz=2.0 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | **11 17 50.5** | **+2.1** |
| | baz=2.0 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.28** | **21** | *e*P | | **Pg** | **11 17 30.4** | **-1.7** |
| | baz=25 | | | | | | | |
| ETLH | | | | S | | **Sn** | **11 17 49.7** | **+0.9** |
| | baz=25 | | | | | | | |
| **ETL** | **Fush Village** | **1.29** | **27** | *e*P | | **Pg** | **11 17 31.4** | **-0.9** |
| | baz=43 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.29** | **25** | *i* P | | **Pg** | **11 17 31.3** | **-1.0** |
| | baz=29 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **11 17 48.9** | **0.0** |
| | baz=29 | | | | | | | |
| **WDJ** | **Dajia District** | **1.38** | **347** | P | | **Pg** | **11 17 33.9** | **0.0** |
| | baz=350 | | | | | | | |
| WDJ | | | | *e*S | | **Sn** | **11 17 54.4** | **+3.5** |
| | baz=350 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.40** | **292** | *e*P | | **Pn** | **11 17 31.6** | **-1.3** |
| | baz=292 | | | | | | | |
| PHUB | | | | *e*S | | **Sb** | **11 17 49.9** | **-1.5** |
| | baz=292 | | | | | | | |
| **NSY** | **Sanyi** | **1.42** | **352** | *i* P | | **Pg** | **11 17 35.0** | **+0.2** |
| | baz=356 | | | | | | | |
| NSY | | | | S | | **Sn** | **11 17 54.7** | **+2.6** |
| | baz=356 | | | | | | | |
| **PNG** | **Penghu** | **1.43** | **293** | *e*P | | **Pn** | **11 17 32.5** | **-0.8** |
| | baz=294 | | | | | | | |
| PNG | | | | *e*S | | **Sb** | **11 17 51.4** | **-1.0** |
| | baz=294 | | | | | | | |
| **VCHM** | **Qimei** | **1.45** | **278** | P | | **Pn** | **11 17 32.8** | **-0.9** |
| | baz=291 | | | | | | | |
| VCHM | | | | S | | **Sb** | **11 17 51.5** | **-1.4** |
| | baz=291 | | | | | | | |
| **NNSB** | **Datong** | **1.47** | **14** | *e*P | | **Pn** | **11 17 33.9** | **-0.1** |
| | baz=28 | | | | | | | |
| NNSB | | | | *e*S | | **Sg** | **11 17 55.3** | **+0.6** |
| | baz=28 | | | | | | | |
| **NNS** | **Nan Shan** | **1.48** | **14** | *e*P | | **Pg** | **11 17 35.1** | **-0.7** |
| | baz=27 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **11 17 53.6** | **+0.1** |
| | baz=27 | | | | | | | |
| **NMLH** | **Miaoli** | **1.54** | **353** | *e*P | | **Pb** | **11 17 36.1** | **0.0** |
| | baz=357 | | | | | | | |
| NMLH | | | | *e*S | | **Sg** | **11 17 56.2** | **-0.8** |
| | baz=357 | | | | | | | |
| **ENA** | **Nanau** | **1.58** | **26** | *e*P | | **Pn** | **11 17 34.1** | **-1.3** |
| | baz=30 | | | | | | | |
| ENA | | | | *e*S | | **Sg** | **11 17 58.5** | **+0.2** |
| | baz=30 | | | | | | | |
| **LATG** | **Datong** | **1.60** | **18** | *e*P | | **Pb** | **11 17 36.8** | **-0.4** |
| | baz=33 | | | | | | | |
| LATG | | | | *e*S | | **Sg** | **11 17 58.4** | **-0.7** |
| | baz=33 | | | | | | | |
| **EWUT** | **Wuta** | **1.61** | **27** | *e*P | | **Pn** | **11 17 35.6** | **-0.2** |
| | baz=31 | | | | | | | |
| EWUT | | | | *e*S | | **Sg** | **11 17 59.4** | **+0.1** |
| | baz=31 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.62** | **1** | *e*P | | **Pg** | **11 17 37.8** | **-0.8** |
| | baz=3.0 | | | | | | | |
| NSTT | | | | *e*S | | **Sg** | **11 17 59.9** | **+0.3** |
| | baz=3.0 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.63** | **4** | *e*P | | **Pg** | **11 17 38.0** | **-0.7** |
| | baz=349 | | | | | | | |
| NFF | | | | *e*S | | **Sg** | **11 18 00.4** | **+0.6** |
| | baz=349 | | | | | | | |
| **LIOB** | **Emei** | **1.64** | **1** | *e*P | | **Pb** | **11 17 37.8** | **+0.1** |
| | baz=3.0 | | | | | | | |
| LIOB | | | | *e*S | | **Sg** | **11 18 01.8** | **+1.7** |
| | baz=3.0 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.67** | **17** | *e*P | | **Pb** | **11 17 37.9** | **-0.3** |
| | baz=19 | | | | | | | |
| **YHNB** | **Yeheng** | **1.70** | **12** | *e*P | | **Pb** | **11 17 38.7** | **-0.1** |
| | baz=15 | | | | | | | |
| YHNB | | | | *e*S | | **Sg** | **11 18 01.6** | **-0.5** |
| | baz=15 | | | | | | | |
| **NSK** | **Sanguang** | **1.70** | **11** | *e*P | | **Pb** | **11 17 38.5** | **-0.3** |
| | baz=14 | | | | | | | |
| NSK | | | | *e*S | | **Sg** | **11 18 01.6** | **-0.6** |
| | baz=14 | | | | | | | |
| **ENTT** | **Nioudou** | **1.71** | **18** | *e*P | | **Pg** | **11 17 39.8** | **-0.6** |
| | baz=33 | | | | | | | |
| **NDS** | **Dongshan** | **1.76** | **22** | *e*P | | **Pb** | **11 17 38.9** | **-0.8** |
| | baz=40 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.78** | **360** | *e*P | | **Pn** | **11 17 38.8** | **+0.6** |
| | baz=346 | | | | | | | |
| **TWC** | **Suao** | **1.79** | **26** | *e*P | | **Pb** | **11 17 39.5** | **-0.7** |
| | baz=31 | | | | | | | |
| TWC | | | | *e*S | | **Sb** | **11 18 02.8** | **+0.1** |
| | baz=31 | | | | | | | |
| **HSN** | **Hsinchu** | **1.79** | **360** | *e*P | | **Pn** | **11 17 39.2** | **+0.9** |
| | baz=2.0 | | | | | | | |
| **TWE** | **Neicheng** | **1.82** | **20** | *e*P | | **Pb** | **11 17 40.0** | **-0.8** |
| | baz=35 | | | | | | | |
| **NWLT** | **Wulai** | **1.83** | **15** | *e*P | | **Pb** | **11 17 40.4** | **-0.6** |
| | baz=32 | | | | | | | |
| NWLT | | | | *e*S | | **Sg** | **11 18 06.6** | **+0.3** |
| | baz=32 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.83** | **17** | *e*P | | **Pb** | **11 17 41.5** | **+0.4** |
| | baz=34 | | | | | | | |
| FUSB | | | | *e*S | | **Sg** | **11 18 06.1** | **-0.4** |
| | baz=34 | | | | | | | |
| **NCUH** | **Zhongli** | **1.96** | **5** | *e*P | | **Pb** | **11 17 43.3** | **0.0** |
| | baz=6.0 | | | | | | | |
| **NTC** | **Toucheng** | **2.00** | **23** | *e*P | | **Pb** | **11 17 44.2** | **+0.4** |
| | baz=37 | | | | | | | |
| **NHDH** | **Xindian Distri** | **2.01** | **14** | *e*P | | **Pb** | **11 17 43.0** | **-1.1** |
| | baz=29 | | | | | | | |
| **EGS** | | **2.03** | **25** | *e*P | | **Pb** | **11 17 44.0** | **-0.3** |
| | baz=26 | | | | | | | |
| **TWA** | **Mucha** | **2.04** | **15** | *e*P | | **Pg** | **11 17 46.3** | **-0.4** |
| | baz=31 | | | | | | | |
| **TAP** | **Taipei** | **2.08** | **13** | *e*P | | **Pg** | **11 17 46.2** | **-1.2** |
| | baz=358 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.11** | **21** | *e*P | | **Pb** | **11 17 45.1** | **-0.6** |
| | baz=36 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.13** | **11** | *e*P | | **Pb** | **11 17 45.3** | **-0.7** |
| | baz=359 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.18** | **19** | *e*P | | **Pn** | **11 17 45.4** | **+1.6** |
| | baz=36 | | | | | | | |
| **NTST** | **Danshui** | **2.19** | **11** | *e*P | | **Pb** | **11 17 46.2** | **-1.0** |
| | baz=357 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.20** | **24** | *e*P | | **Pn** | **11 17 45.4** | **+1.5** |
| | baz=38 | | | | | | | |
| **ANP** | **Anpu** | **2.23** | **13** | *e*P | | **Pb** | **11 17 48.0** | **+0.1** |
| **SXI1** | **Grass Mountain** | **2.24** | **21** | *e*P | | **Pb** | **11 17 46.9** | **-1.0** |
| | baz=35 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.30** | **51** | P | | **Pn** | **11 17 45.0** | **-0.4** |
| JYNG | | | | *e*S | | **Sn** | **11 18 13.3** | **-0.5** |
| **TWY** | **Chenhua** | **2.33** | **14** | *e*P | | **Pn** | **11 17 46.8** | **+1.0** |
| | baz=31 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.36** | **52** | P | | **Pn** | **11 17 45.7** | **-0.4** |
| YOJ | | | | *e*S | | **Sn** | **11 18 15.1** | **0.0** |
| **YOJ** | **Yonaguni jima** | **2.36** | **52** | *e*P | | **Pn** | **11 17 46.0** | **-0.2** |
| | baz=53 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.65** | **320** | *e*P | | **Pn** | **11 17 49.5** | **-0.7** |
| | baz=326 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.79** | **302** | *e*P | | **Pn** | **11 17 51.1** | **-1.0** |
| | baz=306 | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.79** | **67** | P | | **Pn** | **11 17 51.5** | **-0.6** |
| HATJ | | | | *e*S | | **Sn** | **11 18 24.2** | **-1.6** |
| **IRIF** | **Iriomote-Funau** | **2.84** | **62** | P | | **Pn** | **11 17 52.4** | **-0.4** |
| IRIF | | | | S | | **Sn** | **11 18 26.6** | **-0.5** |
| **JKRS** | **Kuro-shima** | **3.03** | **65** | P | | **Pn** | **11 17 55.1** | **-0.3** |
| JKRS | | | | *e*S | | **Sn** | **11 18 31.1** | **-0.7** |
| **ZPLA** | **Ao Xicun** | **3.11** | **288** | *e*P | | **Pn** | **11 17 55.4** | **-1.1** |
| | baz=291 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.20** | **64** | P | | **Pn** | **11 17 56.8** | **-0.9** |
| JIJ | | | | *e*S | | **Sn** | **11 18 33.3** | **-2.5** |
| **MATB** | **Ma-tsu** | **3.27** | **343** | *e*P | | **Pn** | **11 17 58.1** | **-0.7** |
| | baz=350 | | | | | | | |
| **AXDP** | **Jialang** | **3.34** | **305** | *e*P | | **Pn** | **11 17 58.3** | **-1.4** |
| | baz=309 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.43** | **62** | P | | **Pn** | **11 17 59.9** | **-1.0** |
| JISG | | | | S | | **Sn** | **11 18 40.5** | **-1.1** |
| **MHZQ** | **Yeshan** | **3.56** | **330** | *e*P | | **Pn** | **11 18 03.7** | **+1.0** |
| | baz=338 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.70** | **343** | *e*P | | **Pn** | **11 18 05.5** | **+0.9** |
| | baz=349 | | | | | | | |
| **JTJ** | **Tarama** | **3.77** | **64** | P | | **Pn** | **11 18 05.0** | **-0.6** |
| JTJ | | | | S | | **Sn** | **11 18 49.1** | **-1.0** |
| **XPSS** | **Dashiqiu** | **3.98** | **350** | *e*P | | **Pn** | **11 18 07.8** | **-0.6** |
| | baz=356 | | | | | | | |
| **JIRB** | **Irabujima** | **4.24** | **64** | P | | **Pn** | **11 18 11.3** | **-0.7** |
| JIRB | | | | *e*S | | **Sn** | **11 19 00.9** | **-0.7** |
| **JIKM** | **Ikemajima** | **4.34** | **63** | P | | **Pn** | **11 18 12.5** | **-0.9** |
| **SXFK** | **Yanhouchang** | **4.55** | **319** | *e*P | | **Pn** | **11 18 15.1** | **-1.2** |
| | baz=327 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.10** | **44** | LR | | LR | 11 29 52.9 | |
| | comp=Z,53nm,19.9s,baz=186,slow=39 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.10** | **262** | P | | **P** | **11 21 56.6** | **+4.4** |
| | 0.8nm,0.3s,baz=61,slow=9.4,SNR=4.3 | | | | | | | |
| CMAR | | | | LR | | LR | 11 29 46.4 | |
| | comp=Z,29nm,20.5s,baz=75,slow=35 | | | | | | | |
| **SONM** | **Songino Array** | **27.39** | **338** | P | | **P** | **11 22 53.7** | **+0.7** |
| | 0.4nm,0.8s,baz=116,slow=6.7,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.06** | **317** | P | | **P** | **11 24 35.4** | **+0.9** |
| | 0.7nm,0.9s,baz=108,slow=10,SNR=5.7 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **11 26 44.2** | **-0.2** |
| | 0.2nm,0.6s,baz=22,slow=6.9,SNR=2.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.14** | **328** | P | | **P** | **11 24 51.5** | **-0.1** |
| | 0.5nm,0.3s,baz=112,slow=11,SNR=2.7 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.75** | **85** | T | | T | 12 10 20.5 | |
| | baz=282 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.75** | **85** | T | | T | 12 10 22.6 | |
| | baz=282 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.77** | **85** | T | | T | 12 10 19.8 | |
| | baz=282 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.84** | **87** | T | | T | 12 10 25.4 | |
| | baz=284 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.85** | **87** | T | | T | 12 10 30.8 | |
| | baz=284 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.86** | **87** | T | | T | 12 10 26.8 | |
| | baz=284 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.06** | **164** | P | | **P** | **11 25 46.1** | **-1.1** |
| | 0.4nm,0.6s,baz=338,slow=7.1,SNR=10 | | | | | | | |
| **KBZ** | **Khabaz** | **66.08** | **309** | P | | **P** | **11 27 56.0** | **+1.4** |
| | 2.0nm,0.4s,baz=246,slow=10.0,SNR=4.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.12** | **23** | P | | **P** | **11 29 36.0** | **-2.3** |
| | 0.1nm,0.4s,baz=309,slow=4.8,SNR=4.6 | | | | | | | |

**IDC 22 11:17:32.3±1.8,30.60S×178.37W,h196km±17km, mb2.8/2,mb1 3.1/3,mb1mx3.0/29,mbtmp3.5/3,MS3.0/1, Ms1 3.0/1,ms1mx2.7/5,Error ellipse: s-maj=54.4km s-min=20.6km az=114.0,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.40** | **16** | P | | P | Pn | 11 18 04.6 | -0.2 |
| | 42nm,0.3s,baz=210,slow=20,SNR=1.2 | | | | | | | | |
| **URZ** | **Urewera** | **8.50** | **205** | P | | P | Pn | 11 19 32.9 | +0.9 |
| | baz=90,slow=14,SNR=1.6 | | | | | | | | |
| URZ | | | | S | | S | Sn | 11 21 06.4 | -1.0 |
| | 0.3nm,0.3s,baz=323,slow=6.8,SNR=1.3 | | | | | | | | |
| **MSVF** | **Nonsavu** | **13.22** | **345** | LR | | LR | LR | 11 25 13.8 | |
| | comp=Z,66nm,19.2s,baz=64,slow=35 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.78** | **267** | P | | P | P | 11 25 10.9 | +0.1 |
| | 0.3nm,0.8s,baz=94,slow=7.5,SNR=1.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.78** | **273** | P | | P | P | 11 25 18.7 | -0.1 |
| | 0.2nm,0.3s,baz=110,slow=8.2,SNR=15 | | | | | | | | |
| **FINES** | **FINESS Array B** | **145.22** | **340** | PKPbc | | PKPdf | | 11 36 44.8 | -0.9 |
| | 0.5nm,0.3s,baz=37,slow=3.5,SNR=7.8 | | | | | | | | |

**IDC 22 11:33:12.8±2.5,0.79N×128.80E,h0km,mb3.3/3, mb1 3.6/3,mb1mx3.4/28,mbtmp3.4/3,Error ellipse: s-maj=173.7km s-min=27.8km az=68.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.31** | **166** | P | | P | P | 11 38 00.4 | -1.0 |
| | 0.5nm,0.8s,baz=346,slow=11,SNR=3.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **24.81** | **169** | P | | P | P | 11 38 37.4 | +0.5 |
| | 1.8nm,0.9s,baz=345,slow=9.9,SNR=17 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.13** | **325** | P | | P | P | 11 43 29.1 | -0.1 |
| | 0.2nm,0.6s,baz=122,slow=7.9,SNR=4.1 | | | | | | | | |

*RSNC **22** 11:42:40.1±1.2,6.82N×73.13W,h149km±4km, ML3.2, Mw3.6*
*IDC **22** 11:42:42.2±4.3,6.64N×73.41W,h179km±34km,mb2.6/2, mb1 3.1/2,mb1mx2.8/22,mbtmp3.1/2,Error ellipse: s-maj=90.2km s-min=43.1km az=84.0*
**ISC 22 11:42:38.9±0.9,6.84N±0.03×73.11W±0.04,h155km±6km, n35,σ1$38/64,4C-3D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.26** | **196** | *i* P | | | **Pn** | **11 43 00.4** | **+0.2** |
| BARC | | | | *e*S | | | **Sn** | **11 43 15.0** | **-1.4** |
| BARC | | | | *i* | | | | 11 43 17.4 | |
| | comp=Z,315nm,0.3s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.64** | **39** | *e*P | | | **Pn** | **11 43 03.3** | **+1.2** |
| PAMC | | | | *e*S | | | **Sn** | **11 43 19.9** | **+0.2** |
| PAMC | | | | *i* | | | | 11 43 22.2 | |
| | comp=Z,843nm,0.5s | | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.65** | **294** | *e*P | | | **Pn** | **11 43 02.3** | **+0.7** |
| BRRC | | | | *e*S | | | **Sn** | **11 43 19.2** | **+0.3** |
| BRRC | | | | *i* | | | | 11 43 25.8 | |
| | comp=Z,172nm,0.2s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **178** | *e*P | | | **Pn** | **11 43 04.4** | **+0.2** |
| RUSC | | | | *e*S | | | **Sn** | **11 43 22.5** | **-1.1** |
| RUSC | | | | *i* | | | | 11 43 25.6 | |
| | comp=Z,135nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **257** | *e*P | | | **Pn** | **11 43 07.1** | **-0.4** |
| PTBC | | | | *e*S | | | **Sn** | **11 43 27.5** | **-1.9** |
| PTBC | | | | *i* | | | | 11 43 31.3 | |
| | comp=Z,236nm,0.4s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **107** | *i* P | | | **Pn** | **11 43 08.8** | **+1.2** |
| TAMC | | | | *e*S | | | **Sn** | **11 43 29.9** | **+0.5** |
| TAMC | | | | *i* | | | | 11 43 30.7 | |
| | comp=Z,109nm,0.3s | | | | | | | | |
| **OCAC** | **Ocana** | **1.40** | **351** | *i* P | | | **Pn** | **11 43 08.7** | **+0.7** |
| OCAC | | | | *e*S | | | **Sn** | **11 43 30.3** | **-0.1** |
| **SPBC** | **San Pablo de B** | **1.52** | **219** | *e*P | | | **Pn** | **11 43 09.4** | **+0.3** |
| SPBC | | | | *e*S | | | **Sn** | **11 43 31.2** | **-1.1** |
| SPBC | | | | *i* | | | | 11 43 35.1 | |
| | comp=Z,288nm,0.2s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **291** | *e*P | | | **Pn** | **11 43 13.4** | **+0.8** |
| ZARC | | | | *e*S | | | **Sn** | **11 43 38.8** | **+0.3** |
| ZARC | | | | *i* | | | | 11 43 44.5 | |
| | comp=Z,234nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.16** | **234** | *e*P | | | **Pn** | **11 43 16.5** | **+0.2** |
| NORC | | | | *e*S | | | **Sn** | **11 43 44.1** | **-1.0** |
| NORC | | | | *i* | | | | 11 43 48.0 | |
| | comp=Z,107nm,0.2s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.28** | **196** | *i* P | | | **Pn** | **11 43 18.4** | **+0.4** |
| CHIC | | | | *e*S | | | **Sn** | **11 43 47.5** | **-0.8** |
| CHIC | | | | *i* | | | | 11 43 52.2 | |
| | comp=Z,73nm,0.4s | | | | | | | | |
| **ROSC** | **El Rosal** | **2.33** | **211** | P | | | **Pn** | **11 43 20.3** | **+1.8** |
| | comp=Z,42nm,0.3s,baz=81,slow=13,SNR=34 | | | | | | | | |
| ROSC | | | | S | | | **Sn** | **11 43 48.9** | **-0.2** |
| | comp=Z,44nm,0.3s,baz=46,slow=22,SNR=9.7 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.33** | **211** | *e*P | | | **Pn** | **11 43 20.3** | **+1.8** |
| ROSC | | | | *e*S | | | **Sn** | **11 43 49.1** | **0.0** |
| ROSC | | | | *i* | | | | 11 43 55.0 | |
| | comp=Z,135nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **255** | *e*P | | | **Pn** | **11 43 20.9** | **+0.5** |
| HELC | | | | *e*S | | | **Sn** | **11 43 51.6** | **-0.9** |
| HELC | | | | *i* | | | | 11 43 57.5 | |
| | comp=Z,92nm,0.3s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.57** | **291** | *e*P | | | **Pn** | **11 43 20.9** | **-0.1** |
| UREC | | | | *e*S | | | **Sn** | **11 43 50.6** | **-3.0** |
| UREC | | | | *i* | | | | 11 43 54.5 | |
| | comp=Z,138nm,0.4s | | | | | | | | |
| **SOCV** | **Socops** | **2.65** | **57** | *e*P | | | **Pn** | **11 43 22.4** | **+0.2** |
| SOCV | | | | *e*S | | | **Sn** | **11 43 53.9** | **-1.7** |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **234** | *e*P | | | **Pn** | **11 43 25.2** | **+1.3** |
| GUY2C | | | | *e*S | | | **Sn** | **11 43 59.3** | **+0.7** |
| GUY2C | | | | *i* | | | | 11 44 08.0 | |
| | comp=Z,105nm,0.6s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **160** | *e*P | | | **Pn** | **11 43 23.7** | **-0.3** |
| PTGC | | | | *e*S | | | **Sn** | **11 43 56.2** | **-2.7** |
| PTGC | | | | *i* | | | | 11 43 59.2 | |
| | comp=Z,148nm,0.3s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.88** | **357** | *e*P | | | **Pn** | **11 43 25.2** | **+0.3** |
| LL6C | | | | *e*S | | | **Sn** | **11 44 00.8** | **+0.1** |
| LL6C | | | | *i* | | | | 11 44 07.6 | |
| | comp=Z,32nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | *e*P | | | **Pn** | **11 43 28.6** | **+1.5** |
| **SDV** | **Santo Domingo** | **3.18** | **50** | *e*P | | | **Pn** | **11 43 30.2** | **+1.3** |
| SDV | | | | *e*S | | | **Sn** | **11 44 07.4** | **-0.4** |
| SDV | | | | *i* | | | | 11 44 09.7 | |
| | comp=Z,83nm,0.4s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.61** | **216** | *e*P | | | **Pn** | **11 43 34.7** | **+0.4** |
| ORTC | | | | *e*S | | | **Sn** | **11 44 16.6** | **-0.7** |
| ORTC | | | | *i* | | | | 11 44 23.4 | |
| | comp=Z,62nm,0.4s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.66** | **326** | *e*P | | | **Pn** | **11 43 34.9** | **0.0** |
| SJCC | | | | *e*S | | | **Sn** | **11 44 16.1** | **-2.4** |
| SJCC | | | | *i* | | | | 11 44 19.9 | |
| | comp=Z,81nm,0.5s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.70** | **239** | *e*P | | | **Pn** | **11 43 36.3** | **+0.8** |
| PLMC | | | | *e*S | | | **Sn** | **11 44 18.5** | **-0.9** |
| PLMC | | | | *i* | | | | 11 44 25.3 | |
| | comp=Z,54nm,0.3s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.16** | **3** | *e*P | | | **Pn** | **11 43 40.9** | **-0.5** |
| CRJC | | | | *e*S | | | **Sn** | **11 44 31.6** | **+1.5** |
| CRJC | | | | *i* | | | | 11 44 37.6 | |
| | comp=Z,35nm,0.2s | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.29** | **229** | *e*P | | | **Pn** | **11 43 43.2** | **-0.1** |
| YOTC | | | | *e*S | | | **Sn** | **11 44 37.8** | **+4.4** |
| YOTC | | | | *i* | | | | 11 44 40.8 | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.43** | **346** | *e*P | | | **Pn** | **11 43 45.0** | **0.0** |
| SMRC | | | | *e*S | | | **Sn** | **11 44 33.9** | **-2.5** |
| SMRC | | | | *i* | | | | 11 44 38.3 | |
| | comp=Z,14nm,0.2s | | | | | | | | |
| **PTAC** | **Punta Ardita,** | **4.67** | **274** | *e*P | | | **Pn** | **11 43 48.4** | **+0.3** |
| **MACC** | **Macarena, Meta** | **4.72** | **189** | *e*P | | | **Pn** | **11 43 47.8** | **-1.1** |
| MACC | | | | *e*S | | | **Sn** | **11 44 38.8** | **-4.6** |
| MACC | | | | *i* | | | | 11 44 49.8 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **URIC** | **Uribia, Colomb** | **4.95** | **13** | *e*P | | | **Pn** | **11 43 51.1** | **-0.7** |
| URIC | | | | *e*S | | | **Sn** | **11 44 48.3** | **-0.4** |
| **POPC** | **Popayan, Colom** | **5.56** | **220** | *e*P | | | **Pn** | **11 44 01.1** | **+1.0** |
| **BBAC** | **Balboa, Cauca** | **6.32** | **221** | *e*P | | | **Pn** | **11 44 11.6** | **+1.5** |
| BBAC | | | | *e*S | | | **Sn** | **11 45 20.9** | **-0.7** |
| **TXAR** | **Lajitas Array** | **36.46** | **312** | P | | | **P** | **11 49 29.7** | **+0.6** |
| | comp=Z,0.2nm,0.7s,baz=120,slow=8.9,SNR=2.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.25** | **340** | P | | | **P** | **11 52 51.5** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=133,slow=6.6,SNR=4.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.36** | **241** | PKPbc | | | **PK

| | | |

baz=241
WSSB eS Sn 11 55 41.5 +2.3
baz=241
**KAU Kaohsiung** 0.78 235 eP Pn 11 55 27.8 +0.3
baz=234
**WDLH Douliu** 0.79 328 eP Pb 11 55 26.6 +0.3
baz=331
WDLH eS Sn 11 55 38.7 -0.7
baz=331
**CHN8 Yiju** 0.80 294 eP Pb 11 55 26.2 -0.1
baz=298
CHN8 eS Sn 11 55 39.0 -0.5
baz=298
**SLIU Shizi** 0.82 193 ⇑P Pg 11 55 25.0 -1.4
baz=190
SLIU eS Sg 11 55 35.3 -1.8
baz=190
**WJS Zhushan** 0.84 343 eP Pb 11 55 27.4 +0.3
baz=346
WJS eS Sn 11 55 39.8 -0.8
baz=346
**TEGC Jichi Village** 0.85 36 eP Pn 11 55 28.2 -0.2
baz=38
TEGC eS Sn 11 55 39.9 -0.9
baz=38
**SMLT Sun Moon Lake** 0.86 354⇑ eP Pg 11 55 26.8 -0.4
baz=358
SMLT eS Sn 11 55 42.7 +1.3
baz=358
**WSL Shuilin Townsh** 0.87 305⇑ eP Pb 11 55 27.7 0.0
baz=308
WSL eS Sn 11 55 40.8 -0.6
baz=308
**WTK Tuku** 0.87 320 eP Pb 11 55 27.7 0.0
baz=323
WTK eS Sn 11 55 40.9 -0.5
baz=323
**WLCH Liuqiu** 0.88 221 eP Pn 11 55 29.5 +0.7
baz=219
WLCH eS Sn 11 55 46.7 +5.1
baz=219
**ESL Shilin** 0.89 27 eP Pg 11 55 26.8 -0.8
baz=29
ESL eS Sb 11 55 39.1 -0.6
baz=29
**TYC Yuchr** 0.89 351 eP Pb 11 55 27.6 -0.4
baz=355
TYC eS Sn 11 55 42.6 +0.7
baz=355
**TWP Hsiaoliuchiu** 0.89 221 eP Pn 11 55 29.5 +0.5
baz=220
TWP eS Sn 11 55 46.7 +4.8
baz=220
**WNT Mingjian** 0.90 341 eP Pb 11 55 28.2 0.0
baz=345
WNT eS Sn 11 55 41.9 -0.4
baz=345
**WNT1 Nantou City** 0.93 342 eP Pn 11 55 29.3 -0.3
baz=345
WNT1 eS Sn 11 55 43.2 +0.3
baz=345
**WSF Szhu** 0.94 311 eP Pg 11 55 28.5 -0.2
baz=314
WSF eS Sn 11 55 43.0 -0.2
baz=314
**WUSB Renai** 0.97 6⇑ eP Pg 11 55 28.1 -1.2
baz=9.0
WUSB eS Sn 11 55 44.1 -0.1
baz=9.0
**WPL Puli Township** 0.99 358 eP Pb 11 55 29.2 -0.5
WPL eS Sn 11 55 45.2 +0.9
**SMST Manzhou Townsh** 1.01 189 eP Pg 11 55 29.1 -0.8
baz=186
**TEYL Yanliau Villag** 1.01 33 eP Pn 11 55 30.7 +0.1
baz=34
**DPDB Guoxing** 1.01 356 eP Pn 11 55 30.5 -0.2
baz=359
DPDB eS Sn 11 55 45.6 +0.6
baz=359
**WYL Yuanlin Townsh** 1.01 338 eP Pn 11 55 30.4 -0.3
baz=341
WYL eS Sn 11 55 45.6 +0.7
baz=341
**WCS Beigang Elemen** 1.04 355 eP Pn 11 55 30.6 -0.4
baz=358
WCS eS Sn 11 55 46.3 +0.8
baz=358
**HEN Hengchun** 1.04 194 eP Pg 11 55 30.1 -0.4
baz=191
HEN eS Sn 11 55 47.6 +2.1
baz=191
**ETM Tongmen** 1.04 26 eP Pb 11 55 30.3 -0.3
baz=27
ETM eS Sb 11 55 43.5 -0.9
baz=27
**CHGB Renai** 1.05 9⇑ eP Pg 11 55 29.4 -1.3
baz=11
CHGB eS Sn 11 55 47.2 +1.0
baz=11
**WRL Guolierlin Hig** 1.05 327 eP Pb 11 55 30.7 0.0
baz=330
WRL eS Sn 11 55 45.4 -0.4
baz=330
**WWF Wufeng** 1.06 345 eP Pn 11 55 31.7 +0.4
baz=348
WWF eS Sn 11 55 47.2 +1.2
baz=348
**WTCT Ta-ch'eng** 1.07 322 eP Pb 11 55 31.0 0.0
baz=325
WTCT eS Sn 11 55 46.5 +0.3
baz=325
**SNW Nanwan** 1.08 192 eP Pn 11 55 33.5 +1.9
baz=190
**TWK1 Hengchun** 1.09 190 eP Pg 11 55 30.6 -0.8
baz=187
TWK1 eS Sn 11 55 49.8 +3.1
baz=187
**TWKBT Hengchun** 1.09 189 eP Pg 11 55 30.6 -0.9
baz=187
TWKBT eS Sn 11 55 49.0 +2.3
baz=187
**LAY Lan-yu** 1.10 152 eP Pg 11 55 29.3 -2.4
baz=149
**HWA Hwalien** 1.10 30 eP Pn 11 55 32.5 +0.6
baz=32
**TSEB Hengchuen, Pin** 1.12 185 eP Pn 11 55 33.3 +1.2
baz=185
TSEB eS Sn 11 55 50.7 +3.2
baz=185
**WCHH Zhanghua** 1.13 339 eP Pn 11 55 32.9 +0.6
baz=342
WCHH eS Sn 11 55 49.2 +1.4
baz=342
**WHF Hehuan Shan** 1.15 12 eP Pg 11 55 31.3 -1.4
baz=15
WHF eS Sn 11 55 48.3 -0.5
baz=15
**LYUB Lan-yu** 1.15 152 eP Pg 11 55 27.5 -5.1
baz=149
**TCU Taichung** 1.16 345 eP Pn 11 55 33.8 +1.1
baz=348
TCU eS Sn 11 55 50.4 +1.8
baz=348
**TWD Chiawan** 1.19 27 eP Pb 11 55 32.7 -0.4
baz=29
TWD eS Sn 11 55 49.0 -0.2
baz=29
**TDCB Techi** 1.24 7 eP Pg 11 55 33.5 -0.9
baz=9.0
TDCB eS Sn 11 55 52.2 +1.6
baz=9.0
**TWT Tachien** 1.24 7 eP Pg 11 55 33.6 -0.8
baz=9.0
TWT eS Sn 11 55 52.5 +1.7
baz=9.0
**FUSS Fushou** 1.24 10 eP Pg 11 55 32.9 -1.6
baz=12
FUSS eS Sn 11 55 51.6 +0.6
baz=12
**WHP Taichung City** 1.25 358 eP Pn 11 55 35.0 +0.9
baz=360
WHP eS Sn 11 55 52.7 +1.7
baz=360
**WDGT Dungji** 1.26 281 eP Pn 11 55 33.0 -1.0
baz=283
WDGT eS Sg 11 55 49.5 -1.5
baz=283
**ETLH Xiulin Townshi** 1.26 20 eP Pg 11 55 33.8 -1.0
baz=22
ETLH eS Sg 11 55 49.9 -1.4
baz=22
**ETL Fush Village** 1.27 27 eP Pg 11 55 31.9 -3.1
baz=28
ETL eS Sn 11 55 52.5 +1.2
baz=28
**NACB Ninganchiao** 1.27 25 eP Pn 11 55 34.4 +0.1
baz=27
NACB eS Sn 11 55 51.6 +0.3
baz=27
**TWQ1 Liyutan** 1.34 351 eP Pg 11 55 36.5 +0.2
baz=353
TWQ1 eS Sn 11 55 56.3 +3.3
baz=353
**WDJ Dajia District** 1.36 346 eP Pg 11 55 36.3 -0.4
baz=348
WDJ eS Sn 11 55 57.2 +3.7
baz=348
**PHUB P'eng-hu** 1.40 291 eP Pn 11 55 35.1 -0.9
baz=292
PHUB eS Sb 11 55 53.1 -1.6
baz=292
**NSY Sanyi** 1.41 351 eP Pg 11 55 38.2 +0.6
baz=353
NSY eS Sg 11 55 58.5 +2.7
baz=353
**PNG Penghu** 1.44 293 eP Pn 11 55 35.6 -0.9
baz=294
PNG eS Sb 11 55 54.2 -1.4
baz=294
**NNSB Datong** 1.45 14 eP Pn 11 55 36.3 -0.5
baz=16
NNSB eS Sg 11 55 56.3 -0.8
baz=16
**NNS Nan Shan** 1.46 13 eP Pb 11 55 37.2 -0.5
baz=15
**VCHM Qimei** 1.46 278 eP Pn 11 55 36.0 -0.8
baz=279
VCHM eS Sn 11 55 54.5 -1.4
baz=279
**NMLH Miaoli** 1.52 353 eP Pg 11 55 39.2 -0.6
baz=355
NMLH eS Sg 11 56 01.1 +1.5
baz=355
**LATG Datong** 1.58 18 eP Pb 11 55 39.8 -0.1
baz=19
LATG eS Sg 11 56 00.6 -1.0
baz=19
**EWUT Wuta** 1.59 26 eP Pg 11 55 39.9 -1.2
baz=28
EWUT eS Sg 11 56 01.2 -0.4
baz=28
**NSTT Nanjuang** 1.60 0 eP Pg 11 55 41.9 +0.5
baz=2.0
**NFF Wufeng Townshi** 1.61 4 eP Pg 11 55 41.1 -0.3
baz=5.0
NFF eS Sg 11 56 03.2 +0.8
baz=5.0
**LIOB Emei** 1.62 0 eP Pg 11 55 42.4 +0.8
baz=2.0
LIOB eS Sg 11 56 03.9 +1.2
baz=2.0
**NDT Datong Townshi** 1.64 16 eP Pg 11 55 41.5 -0.6
baz=18
**YHNB Yeheng** 1.68 12 eP Pg 11 55 41.9 -0.9
baz=13
YHNB eS Sg 11 56 04.6 0.0
baz=13
**NSK Sanguang** 1.68 11 eP Pg 11 55 41.8 -1.0
baz=13
**ENTT Nioudou** 1.69 18 eP Pg 11 55 42.3 -0.7
baz=19
**NDS Dongshan** 1.73 22 eP Pg 11 55 43.0 -0.9
baz=23
NDS eS Sg 11 56 05.1 -1.3
baz=23
**TWC Suao** 1.76 26 eP Pg 11 55 43.5 -0.9
baz=27
TWC eS Sg 11 56 06.3 -0.9
baz=27
**SBCB Hsinchu** 1.77 360 eP Pg 11 55 45.9 +1.5
baz=1.0
**TWE Neicheng** 1.80 20 eP Pg 11 55 44.3 -0.8
baz=21
TWE eS Sg 11 56 07.2 -1.3
baz=21
**NWLT Wulai** 1.81 15 eP Pg 11 55 44.6 -0.7
baz=16
**FUSB Fushanzhiwuyua** 1.81 17 eP Pg 11 55 44.5 -0.8
baz=18
FUSB eS Sg 11 56 08.4 -0.5
baz=18
**NTC Toucheng** 1.98 22 eP Pg 11 55 47.7 -0.8
baz=24
**NTY Taoyuan** 1.99 8 eP Pg 11 55 50.4 +1.6
baz=9.0
**NHDH Xindian Distri** 1.99 14 eP Pg 11 55 48.2 -0.6
baz=15
**TWA Muha** 2.02 15 eP Pg 11 55 49.3 0.0
baz=17
**TIPB Shuangxi** 2.08 21 eP Pb 11 55 48.1 -0.3
baz=22
TIPB eS Sg 11 56 16.2 -1.3
baz=22
**TWS1 Kuangyinshan** 2.11 10 eP Pg 11 55 51.3 +0.4
baz=12
**WFSB Wu-fen Shan** 2.16 19 eP Pb 11 55 49.0 -0.8
baz=20
**TWB1 Santiao Chiao** 2.18 24 eP Pg 11 55 51.4 -0.8
baz=26
**ANP Anpu** 2.21 12 eP Pg 11 55 52.4 -0.5
baz=14
ANP eS Sg 11 56 21.7 +0.1
baz=14
**SXI1 Grass Mountain** 2.21 21 eP Pb 11 55 50.5 -0.1
baz=22
**YM08 YM08** 2.23 14 eP Pg 11 55 52.0 -1.2
baz=15
**YOJ Yonaguni jima** 2.33 52 P Pn 11 55 49.3 +0.4
YOJ S Sn 11 56 17.1 -0.4
**PTMZ Houxiangcun** 2.65 320 eP Pn 11 55 53.0 -0.1
baz=321
**HATJ Hateruma jima** 2.77 68 P Pn 11 55 55.4 +0.5
HATJ eS Sn 11 56 27.7 -0.6
**IRIF Iriomote-Funau** 2.82 62 P Pn 11 55 56.7 +1.1
IRIF eS Sn 11 56 29.4 -0.2
**JKRS Kuro-shima** 3.01 66 P Pn 11 55 58.9 +0.7
JKRS eS Sn 11 56 34.1 -0.2
**JIJ Ishigaki jima** 3.18 64 P Pn 11 56 00.7 +0.3
JIJ eS Sn 11 56 36.3 -2.0
**JISG Ishigakijimahi** 3.41 62 P Pn 11 56 02.7 -0.9
JISG eS Sn 11 56 43.3 -0.8
**JTJ Tarama** 3.75 64 P Pn 11 56 09.4 +1.0
JTJ eS Sn 11 56 51.6 -1.0
**KSRS Korea Array** 15.57 21 Pn Pn 11 58 52.0 +2.0
0.2nm,0.3s,baz=205,slow=11,SNR=2.0
KSRS LR LR 12 05 25.5
comp=Z,47nm,19.6s,baz=170,slow=39
**JHJ Hachijo jima 2** 19.36 55 LR LR 12 04 59.1
comp=Z,24nm,21.7s,baz=180,slow=30
**MJAR Matsushiro Arr** 20.07 44 P P 11 59 44.6 +0.6
2.7nm,1.0s,baz=218,slow=7.1,SNR=2.7
MJAR LR LR 12 07 45.1
comp=Z,67nm,21.9s,baz=210,slow=38
**CMAR Chiang Mai Arr** 21.12 262 P P 11 59 56.8 +1.4
0.3nm,0.4s,baz=57,slow=9.8,SNR=4.2
CMAR LR LR 12 09 46.2
comp=Z,60nm,18.1s,baz=70,slow=41
**SONM Songino Array** 27.38 338 P P 12 00 57.5 +1.5
0.2nm,0.5s,baz=149,slow=6.7,SNR=2.6
**KLR Kul'dur** 27.50 15 LR LR 12 13 40.2
comp=Z,40nm,18.0s,baz=234,slow=40
**ASAJ Asahikawa** 27.54 35 LR LR 12 12 13.5
comp=Z,78nm,18.6s,baz=174,slow=37
**BATI Baumata** 33.12 175 LR LR 12 16 57.1
comp=Z,102nm,18.7s,baz=240,slow=40
**MKAR Makanchi Array** 39.06 317 P P 12 02 38.4 +1.0
0.9nm,0.9s,baz=123,slow=8.8,SNR=6.5
MKAR PcP PcP 12 04 47.5 +0.1
0.6nm,0.9s,baz=104,slow=5.1,SNR=3.8
**PETK Petropavlovsk-** 40.92 33 LR LR 12 19 17.5
comp=Z,44nm,21.4s,baz=220,slow=35
**FITZ Fitzroy Crossi** 41.12 173 P P 12 02 52.2 -2.5
1.2nm,0.7s,baz=101,slow=7.3,SNR=3.8
**ZALV Zalesovo Beam** 41.13 328 P P 12 02 55.1 +0.6
1.8nm,0.8s,baz=104,slow=6.1,SNR=7.3
**MA2 Magadan** 42.12 22 LR LR 12 21 01.6
comp=Z,26nm,19.0s,baz=30,slow=37
**WRA Warramunga Arr** 44.64 162 P P 12 03 21.1 -2.2
0.7nm,0.8s,baz=344,slow=8.9,SNR=5.4
**ASAR Alice Springs** 48.07 164 P P 12 03 48.9 -1.4
0.2nm,0.4s,baz=333,slow=6.6,SNR=6.9
**YKA Yellowknife Ar** 84.10 23 P P 12 07 40.8 -0.4
0.3nm,0.8s,baz=312,slow=5.1,SNR=2.8

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*IDC **22** 11:57:00.7±0.7, 28°.56S×12°.61W, h0km, mb4.3/12, mb1 4.4/12, mb1mx4.2/28, mbtmp4.3/12, MS4.0/14, Ms1 4.0/14, ms1mx3.6/61, Error ellipse: s-maj=26.5km s-min=18.3km az=135.0*
*NEIC **22** 11:57:03.0±1.6, 28°.6S±0°.1×12°.5W±0°.1, h9km±3km, mb4.9/32, Error ellipse: s-maj=19.6km s-min=16.2km az=122.0*
**ISC 22 11:57:02.5±0.4, 28°.59S±0°.10×12°.6W±0°.1, h10km, n80, σ0s74/62, mb4.8/27, MS4.0/14, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10S2** | **ASCENSION HYDR** | **19.62** | **354** | T | T | 12 21 41.1 | |
| | baz=174,slow=74,SNR=10 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **19.63** | **354** | T | T | 12 21 49.1 | |
| | baz=46,slow=74,SNR=18 | | | | | | |
| **SUR** | **Sutherland** | | **28.95 106** | LR | LR | 12 12 03.7 | |
| | comp=Z,335nm,19.0s,baz=244,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **29.04** | **78** | LR | LR | 12 12 06.0 | |
| | comp=Z,200nm,21.5s,baz=313,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **33.12** | **99** | LR | LR | 12 14 35.2 | |
| | comp=Z,313nm,20.2s,baz=249,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **34.16** | **93** | LR | LR | 12 15 10.3 | |
| | comp=Z,222nm,21.1s,baz=240,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **35.14** | **284** | P | P | **12 03 55.3** | **-1.3** |
| | 4.5nm,0.8s,baz=117,slow=6.8,SNR=5.8 | | | | | | |
| **BDFB** | **Brasilia** | **35.14** | **284** | P | P | **12 03 56.2** | **-0.4** |
| BDFB | | | | IAmb | IAmb | 12 04 01.7 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **LIC** | **Lamto** | **35.37** | **13** | eP | P | 12 04 03.0 | +4.6 |
| | comp=Z,38nm,1.0s | | | | | | |
| **KIC** | **Kosan Boka** | **35.55** | **13** | eP | P | 12 04 04.8 | +4.8 |
| | comp=Z,27nm,1.1s | | | | | | |
| **TIC** | **Toumodi** | **35.77** | **13** | eP | P | 12 04 06.5 | +4.6 |
| **DBIC** | **Dimbokro** | **35.83** | **13** | P | P | **12 04 01.1** | **-1.2** |
| | comp=Z,8.8nm,1.1s,baz=131,slow=3.8,SNR=3.8 | | | | | | |
| **DBIC** | **Dimbokro** | **35.83** | **13** | P | P | **12 04 01.5** | **-0.9** |
| DBIC | | | | IAmb | IAmb | 12 04 08.3 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **ITQB** | **Itaqui** | **38.33** | **257** | P | P | **12 04 23.8** | **+0.2** |
| ITQB | | | | IAmb | IAmb | 12 04 31.5 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **CPUP** | **Villa Florida** | **39.61** | **262** | LR | LR | 12 18 43.3 | |
| | comp=Z,322nm,18.9s,baz=102,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **39.87** | **79** | LR | LR | 12 19 34.8 | |
| | comp=Z,380nm,18.4s,baz=253,slow=34 | | | | | | |
| **AQDB** | **Aquidauana** | **39.89** | **272** | P | P | **12 04 37.1** | **+0.4** |
| **VNA2** | **Neumayer--Watz** | **42.48** | **177** | P | P | **12 04 57.3** | **-0.1** |
| | baz=335,slow=12 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **42.73** | **179** | P | P | **12 04 58.7** | **-0.7** |
| **SNAA** | **Sanae** | **43.46** | **176** | P | P | **12 05 04.6** | **-0.8** |
| | comp=Z,3.3nm,0.9s,baz=16,slow=14,SNR=3.7 | | | | | | |
| **SNAA** | **Sanae** | **43.46** | **176** | P | P | **12 05 04.9** | **-0.6** |
| **KOWA** | **Kowa** | **43.62** | **12** | P | P | **12 05 07.0** | **-0.2** |
| KOWA | | | | IAmb | IAmb | 12 05 13.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **43.72** | **20** | P | P | **12 05 06.5** | **-1.5** |
| | comp=Z,1nm,1.1s,baz=196,slow=5.1,SNR=17 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **43.72** | **20** | P | P | **12 05 07.8** | **-0.3** |
| **SIV** | **San Ignacio** | **46.31** | **275** | P | P | **12 05 29.1** | **+0.3** |
| | comp=Z,2.5nm,0.9s,baz=95,slow=8.3,SNR=5.2 | | | | | | |
| **USHA** | **Ushuaia** | **47.64** | **220** | LR | LR | 12 25 50.5 | |
| | comp=Z,149nm,18.3s,baz=60,slow=36 | | | | | | |
| **PLCA** | **Paso Flores** | **48.41** | **239** | P | P | **12 05 44.6** | **-0.4** |
| | comp=Z,3.3nm,0.9s,baz=102,slow=7.6,SNR=3.8 | | | | | | |
| PLCA | | | | LR | LR | 12 25 48.4 | |
| | comp=Z,108nm,18.9s,baz=132,slow=36 | | | | | | |
| **PLCA** | **Paso Flores** | **48.41** | **239** | P | P | **12 05 44.6** | **-0.4** |
| PLCA | | | | IAmb | IAmb | 12 05 51.4 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **BO01** | **Tunca** | **49.65** | **248** | P | P | **12 05 56.1** | **+1.6** |
| BO01 | | | | IAmb | IAmb | 12 05 59.9 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **AC02** | **Maricunga** | **49.70** | **258** | P | P | **12 05 56.1** | **+0.6** |
| AC02 | | | | IAmb | IAmb | 12 06 02.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **MBAR** | **Mbarara** | **49.84** | **64** | LR | LR | 12 25 52.9 | |
| | comp=Z,158nm,18.2s,baz=208,slow=35 | | | | | | |
| **BELA** | **Belgrano 2** | **50.39** | **186** | P | P | **12 05 59.9** | **+0.5** |
| BELA | | | | IAmb | IAmb | 12 06 00.8 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **PB03** | **IPOC Station P** | **51.70** | **263** | P | P | **12 06 09.9** | **-0.4** |
| PB03 | | | | IAmb | IAmb | 12 06 15.3 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **52.39** | **271** | P | P | **12 06 15.2** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=110,slow=8.3,SNR=4.1 | | | | | | |
| **LPAZ** | **La Paz** | **52.39** | **271** | P | P | **12 06 14.6** | **-1.3** |
| **KMBO** | **Kilima Mbogo** | **54.79** | **69** | LR | LR | 12 28 01.1 | |
| | comp=Z,181nm,19.2s,baz=276,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **61.64** | **180** | P | P | **12 07 20.7** | **+0.4** |
| **BIRV** | **Birongo** | **64.78** | **299** | P | P | **12 07 41.7** | **0.0** |
| **KEST** | **Kesra** | **67.23** | **19** | P | P | **12 07 57.8** | **+0.7** |
| | comp=Z,7.4nm,0.9s,baz=194,slow=8.0,SNR=5.0 | | | | | | |
| **KEST** | **Kesra** | **67.23** | **19** | P | P | **12 07 58.4** | **+1.4** |
| **SDV** | **Santo Domingo** | **67.26** | **295** | LR | LR | 12 34 35.5 | |
| | comp=Z,142nm,21.7s,baz=132,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **67.26** | **295** | P | P | **12 07 58.0** | **+0.2** |
| SDV | | | | IAmb | IAmb | 12 07 59.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **ESDC** | **Sonseca Array** | **68.38** | **7** | P | P | **12 08 04.0** | **-0.2** |
| | comp=Z,2.2nm,0.9s,baz=212,slow=8.6,SNR=4.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **68.38** | **7** | P | P | **12 08 04.0** | **-0.2** |
| **ESBB** | **Sonseca Array** | **68.38** | **7** | P | P | **12 08 04.2** | **0.0** |
| ESBB | | | | IAmb | IAmb | 12 08 15.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **MOTC** | **Monteria, Cord** | **71.27** | **291** | P | P | **12 08 22.6** | **+0.2** |
| **LIT** | **Litokhoron** | **75.71** | **27** | P | P | **12 08 48.0** | **0.0** |
| LIT | | | | IAmb | IAmb | 12 08 58.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **RAYN** | **Ar Rayn** | **76.23** | **53** | P | P | **12 08 51.8** | **+0.4** |
| RAYN | | | | IAmb | IAmb | 12 09 03.9 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **76.32** | **40** | LR | LR | 12 40 45.1 | |
| | comp=Z,50nm,19.6s,baz=37,slow=34 | | | | | | |
| **TEOL** | **Teolo** | **76.83** | **17** | P | P | **12 08 54.0** | **-0.3** |
| **DIVS** | **Divibare** | **78.23** | **23** | P | P | **12 09 02.7** | **+0.4** |
| DIVS | | | | IAmb | IAmb | 12 09 08.8 | |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **BFO** | **Black Forest** | **78.83** | **14** | P | P | **12 09 05.3** | **0.0** |
| BFO | | | | IAmb | IAmb | 12 09 06.1 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **80.42** | **34** | P | P | **12 09 13.7** | **-0.7** |
| | comp=Z,4.4nm,1.0s,baz=197,slow=4.5,SNR=6.0 | | | | | | |
| **ILGA** | **Ilgaz** | **81.48** | **34** | P | P | **12 09 20.4** | **+0.3** |
| **PSZ** | **Piszkesteto** | **81.55** | **21** | P | P | **12 09 20.7** | **+0.5** |
| PSZ | | | | IAmb | IAmb | 12 09 26.3 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **MLR** | **Muntele Rosu** | **81.62** | **26** | P | P | **12 09 20.4** | **-0.3** |
| **VRAC** | **Vranov** | **81.79** | **19** | LR | LR | 12 44 33.5 | |
| | comp=Z,93nm,18.6s,baz=228,slow=35 | | | | | | |
| **BURAR** | **Bucovina Array** | **83.12** | **25** | P | P | **12 09 28.4** | **0.0** |
| **APG** | **El Apazote** | **86.81** | **289** | LR | LR | 12 49 27.4 | |
| | comp=Z,67nm,18.1s,baz=90,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.16** | **25** | P | P | **12 09 48.7** | **+0.3** |
| | comp=Z,1.7nm,0.7s,baz=218,slow=4.9,SNR=9.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.16** | **25** | P | P | **12 09 48.2** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **91.39** | **11** | P | P | **12 10 09.3** | **+1.2** |
| | comp=Z,23nm,1.7s,baz=200,slow=5.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **91.39** | **11** | P | P | **12 10 09.3** | **+1.2** |
| | baz=200,slow=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **91.39** | **11** | P | P | **12 10 09.1** | **+1.0** |
| | comp=Z,3.2nm,1.2s,baz=200,slow=5.1,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **117.12** | **83** | PKP | **PKiKP** | **12 15 48.6** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=256,slow=2.6,SNR=1.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **117.12** | **83** | | **PKPdf** | **12 15 48.0** | **-0.4** |
| **ASAR** | **Alice Springs** | **118.83** | **145** | PKP | **PKiKP** | **12 15 51.8** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=167,slow=1.2,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **118.83** | **145** | | **PKPdf** | **12 15 51.4** | **-0.3** |
| **WRA** | **Warramunga Arr** | **122.12** | **143** | PKP | **PKPdf** | **12 15 57.5** | **-0.7** |
| | comp=Z,0.9nm,0.9s,baz=235,slow=2.3,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.12** | **143** | | **PKPdf** | **12 15 57.6** | **-0.6** |
| **SONM** | **Songino Array** | **129.69** | **50** | PKP | **PKPdf** | **12 16 11.2** | **-0.6** |
| | comp=Z,1.6nm,1.1s,baz=241,slow=1.5,SNR=7.8 | | | | | | |
| **SONM** | **Songino Array** | **129.69** | **50** | | **PKiKP** | **12 16 14.2** | **+1.6** |
| **L19K** | **White Mountain** | **138.31** | **334** | | **PKiKP** | **12 16 30.2** | **+0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSAR** | **Wonju Array Be** | **145.89** | **65** | | **PKPdf** | **12 16 41.1** | **-0.5** |
| **KSRS** | **Korea Array** | **145.92** | **65** | PKPbc | **PKPbc** | **12 16 42.3** | **0.0** |
| | comp=Z,14nm,1.1s,baz=276,slow=4.0,SNR=23 | | | | | | |
| **MDJ** | **Mudanjiang** | **146.02** | **52** | | **PKPdf** | **12 16 41.3** | **-0.3** |
| **MA2** | **Magadan** | **146.99** | **16** | | **PKPdf** | **12 16 43.2** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **147.78** | **51** | PKPbc | **PKPbc** | **12 16 46.8** | **-0.7** |
| | comp=Z,2.8nm,0.9s,baz=343,slow=4.0,SNR=5.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **147.78** | **51** | | **PKPdf** | **12 16 42.5** | **-2.0** |
| **MJAR** | **Matsushiro Arr** | **154.20** | **65** | PKPbc | **PKPbc** | **12 17 02.8** | **-0.1** |
| | comp=Z,4.5nm,1.0s,baz=300,slow=2.4,SNR=4.3 | | | | | | |

*CNRM* ***22*** *12:04:57.9, 35°.75N × 3°.53W, h20km, ml2.5*
*SFS* ***22*** *12:04:58.0, 35°.68N × 3°.65W, ML2.3, ALBORAN SUR*
**ISC 22 12:04:58.3**±1.9**, 35°.74N**±0°.05 × **3°.52W**±0°.04**, h19**km±5km**, n14, σ0°72/25, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.62** | **213** | P | **Pb** | **12 05 10.2** | **-0.3** |
| PALE | | | | S | **Sg** | **12 05 18.9** | **-0.1** |
| **GOG** | **Mont Gurugu** | **0.67** | **140** | P | **Pb** | **12 05 11.4** | **0.0** |
| GOG | | | | S | **Sb** | **12 05 19.8** | **-0.5** |
| **CHAS** | **Isla Isabel II** | **1.05** | **122** | P | **Pb** | **12 05 18.4** | **+0.6** |
| CHAS | | | | S | **Sb** | **12 05 32.3** | **+1.1** |
| **EMAL** | **Malaga-Limoner** | **1.26** | **324** | P | **Pn** | **12 05 20.7** | **-0.2** |
| EMAL | | | | S | **Sb** | **12 05 36.7** | **-0.5** |
| **TAF** | **Taforalt** | **1.29** | **135** | P | **Pn** | **12 05 21.2** | **-0.3** |
| TAF | | | | S | **Sg** | **12 05 40.1** | **-0.1** |
| **JBK** | **JBK** | **1.60** | **151** | P | **Pn** | **12 05 25.2** | **-0.6** |
| JBK | | | | S | **Sn** | **12 05 45.1** | **-1.1** |
| **CHEFC** | **Chefchaouen** | **1.62** | **248** | P | **Pn** | **12 05 26.0** | **+0.1** |
| CHEFC | | | | S | **Sn** | **12 05 45.7** | **-0.5** |
| **MD31** | **MD31** | **3.04** | **200** | P | **Pn** | **12 05 46.0** | **+0.5** |
| MD31 | | | | S | **Sn** | **12 06 22.4** | **+0.8** |
| **MDT** | **Midelt** | **3.06** | **197** | P | **Pn** | **12 05 46.2** | **+0.5** |
| MDT | | | | S | **Sn** | **12 06 22.1** | **+0.3** |
| **PVAQ** | **Vaqueiros** | **3.77** | **297** | *e*Pn | **Pn** | **12 05 56.0** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **12 06 38.8** | **-0.3** |
| PVAQ | | | | A | A | 12 06 45.9 | |
| | 2.5nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **297** | P | **Pn** | **12 05 54.4** | **-0.9** |
| PVAQ | | | | S | **Sn** | **12 06 38.3** | **-0.9** |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **294** | *e*Pn | **Pn** | **12 05 57.6** | **+0.9** |
| PBDV | | | | A | A | 12 06 53.6 | |
| | 2.7nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **300** | *e*Pn | **Pn** | **12 06 03.9** | **+1.0** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **302** | *e*Pn | **Pn** | **12 06 08.8** | **+1.2** |

*SSNC* ***22*** *12:15:47.8±2.4, 19°.84N × 73°.45W, h9km±16km, MD3.0, ML2.6, MW3.2*
*OSPL* ***22*** *12:15:49.9±1.1, 20°.01N × 73°.52W, h25km±10km, ML2.5*
**ISC 22 12:15:43.9**±1.4**, 19°.96N**±0°.09 × **73°.50W**±0°.05**, h5**km±11**km, n12, σ0°96/21, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MASC** | **Masc** | **0.72** | **287** | *e*P | **Pn** | **12 16 01.6** | **+0.9** |
| MASC | | | | *e*S | **Sn** | **12 16 12.0** | **-0.2** |
| MASC | | | | IAML | | 12 16 12.6 | |
| | comp=N,229nm,0.3s | | | | | | |
| MASC | | | | IAML | | 12 16 12.8 | |
| | comp=E,309nm,0.4s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.52** | **269** | *e*P | **Pg** | **12 16 13.6** | **+0.6** |
| GTBY | | | | *e*S | **Sb** | **12 16 32.0** | **-0.1** |
| **GTBY** | **Guantanamo Bay** | **1.52** | **269** | *i* P | **Pg** | **12 16 13.7** | **+0.7** |
| GTBY | | | | *e*S | **Sn** | **12 16 31.3** | **-0.6** |
| GTBY | | | | IAML | | 12 16 36.8 | |
| | comp=Z,86nm,0.9s | | | | | | |
| **MOAC** | **Moa** | **1.54** | **297** | *e*P | **Pg** | **12 16 13.7** | **+0.3** |
| MOAC | | | | *e*S | **Sg** | **12 16 33.2** | **-0.2** |
| MOAC | | | | IAML | | 12 16 34.1 | |
| | comp=E,39nm,0.2s | | | | | | |
| MOAC | | | | IAML | | 12 16 35.1 | |
| | comp=N,58nm,0.3s | | | | | | |
| **LGNH** | **Logne** | **1.67** | **149** | *e*S | **Sg** | **12 16 37.1** | **-0.5** |
| LGNH | | | | IAML | | 12 16 37.2 | |
| | comp=Z,23nm,0.2s | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.82** | **141** | *e*S | **Sb** | **12 16 40.8** | **-0.1** |
| PAPH | | | | IAML | | 12 16 53.3 | |
| | comp=Z,39nm,0.3s | | | | | | |
| **JAKH** | **Jacmel** | **1.95** | **151** | *e*S | **Sn** | **12 16 42.9** | **+0.4** |
| JAKH | | | | IAML | | 12 16 50.9 | |
| | comp=Z,24nm,0.5s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.07** | **271** | *e*P | **Pb** | **12 16 21.4** | **-0.5** |
| RCC | | | | *e*S | **Sb** | **12 16 46.9** | **-1.0** |
| RCC | | | | IAML | | 12 16 47.5 | |
| | comp=N,35nm,0.3s | | | | | | |
| RCC | | | | IAML | | 12 16 48.8 | |
| | comp=E,35nm,0.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.30** | **115** | *i* P | **Pb** | **12 16 24.9** | **-1.0** |
| SDDR | | | | *e*S | **Sn** | **12 16 51.7** | **+0.3** |
| SDDR | | | | IAML | | 12 17 04.5 | |
| | comp=Z,42nm,0.2s | | | | | | |
| **LONE2** | **Loma La Sidra** | **2.37** | **126** | *e*P | **Pb** | **12 16 27.3** | **+0.1** |
| LONE2 | | | | *e*SG | **Sg** | **12 16 58.6** | **-1.5** |
| LONE2 | | | | IAML | | 12 17 15.3 | |
| | comp=Z,43nm,8.3s | | | | | | |
| **HLGC** | **Holguin** | **2.57** | **292** | *e*P | **Pb** | **12 16 30.1** | **-0.5** |
| HLGC | | | | *e*S | **Sb** | **12 17 02.7** | **+0.1** |
| **LMGC** | **Las Mercedes** | **3.30** | **272** | *e*P | **Pn** | **12 16 38.1** | **+1.8** |
| LMGC | | | | *e*S | **Sn** | **12 17 13.7** | **-2.1** |
| LMGC | | | | IAML | | 12 17 14.1 | |
| | comp=E,6.3nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 12 17 14.2 | |
| | comp=N,17nm,0.1s | | | | | | |

*IDC* ***22*** *12:17:14.4±0.6, 4°.59N × 32°.44W, h0km, mb4.0/18, mb1 4.1/18, mb1mx4.0/38, mbtmp3.9/18, MS4.0/48, Ms1 4.0/48, ms1mx3.9/79, Error ellipse: s-maj=21.5km s-min=14.4km az=155.0*
*NEIC* ***22*** *12:17:16.5±1.3, 4°.62N±0°.09 × 32°.39W±0°.10, h10km±1km, mb4.7/26, Error ellipse: s-maj=22.0km s-min=7.2km az=133.0*
**ISC 22 12:17:16.3**±0.4**, 4°.69N**±0°.09 × **32°.41W**±0°.08**, h11**km**, n115, σ0°94/71, mb4.3/28, MS4.0/48, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SACV** | **Santiago Islan** | **13.40** | **40** | Pn | **Pn** | **12 20 26.7** | **+0.2** |
| **TMAB** | **Tom-Au,PA,Br** | **17.17** | **246** | *e*P | **Pn** | **12 21 14.8** | **-1.5** |
| **NBPN** | **Ponto Novo - B** | **17.27** | **207** | *e*P | **Pn** | **12 21 17.7** | **+0.1** |
| **MDP** | **Montagnes des** | **20.16** | **272** | LR | LR | 12 28 16.0 | |
| | comp=Z,319nm,19.9s,baz=89,slow=33 | | | | | | |
| **SMTB** | **Santa Maria do** | **20.25** | **228** | *e*P | **P** | **12 21 51.6** | **-0.2** |
| **MCPB** | **Macapa, AP** | **20.26** | **256** | *e*P | **P** | **12 21 52.2** | **+0.3** |
| **PRPB** | **Parauapebas** | **20.45** | **238** | *e*P | **P** | **12 21 53.3** | **-0.7** |
| **SDBA** | **SAO DESIDERIO** | **21.04** | **216** | *e*P | **P** | **12 21 59.2** | **-1.2** |
| **CMC01** | **Camacan, BA** | **21.12** | **199** | *e*P | **P** | **12 22 02.9** | **+1.6** |
| **H10N3** | **ASCENSION HYDR** | **21.77** | **125** | T | T | 12 44 37.8 | |
| | baz=304,slow=75,SNR=267 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.78** | **125** | T | T | 12 44 38.1 | |
| | baz=304,slow=75,SNR=268 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.79** | **125** | T | T | 12 44 39.3 | |
| | baz=304,slow=75,SNR=273 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.29** | **127** | T | T | 12 45 17.5 | |
| | baz=303,slow=74,SNR=184 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.30** | **127** | T | T | 12 45 18.8 | |
| | baz=277,slow=74,SNR=120 | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.36** | **199** | *e*P | **P** | **12 22 16.6** | **+2.0** |
| **MALB** | **Monte Alegre** | **22.78** | **254** | *e*P | **P** | **12 22 17.4** | **-1.7** |
| **PEXB** | **Peixe** | **22.98** | **223** | *e*P | **P** | **12 22 22.4** | **+1.3** |
| **ITTB** | **Itaituba** | **24.98** | **249** | *e*P | **P** | **12 22 41.2** | **+1.0** |
| **SNDB** | **Serra Nova Dou** | **25.03** | **228** | *e*P | **P** | **12 22 41.3** | **+0.6** |
| **BDFB** | **Brasilia** | **25.43** | **217** | P | **P** | **12 22 43.2** | **-1.2** |
| | 1.1nm,0.3s,baz=45,slow=12,SNR=1.6 | | | | | | |
| BDFB | | | | LR | LR | 12 31 42.8 | |
| | comp=Z,409nm,19.7s,baz=25,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **25.43** | **217** | P | **P** | **12 22 42.9** | **-1.5** |
| **NPGB** | **Novo Progresso** | **25.70** | **243** | *e*P | **P** | **12 22 47.1** | **+0.4** |
| **DBIC** | **Dimbokro** | **27.49** | **85** | P | **P** | **12 23 02.9** | **-0.1** |
| | 2.3nm,0.7s,baz=269,slow=11,SNR=3.5 | | | | | | |
| DBIC | | | | LR | LR | 12 31 41.8 | |
| | comp=Z,372nm,18.4s,baz=278,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **27.49** | **85** | P | **P** | **12 23 02.5** | **-0.5** |
| DBIC | | | | IAmb | IAmb | 12 23 11.7 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **ARAG** | **Araguaiana, MT** | **27.92** | **223** | *e*P | **P** | **12 23 08.2** | **+1.5** |
| **PTGA** | **Pitinga** | **28.05** | **260** | P | **P** | **12 23 08.2** | **+0.2** |
| | comp=Z,3.0nm,0.8s,baz=332,slow=22,SNR=1.9 | | | | | | |
| PTGA | | | | LR | LR | 12 33 09.6 | |
| | comp=Z,514nm,19.2s,baz=68,slow=34 | | | | | | |
| **BOAV** | **Boa Vista** | **28.15** | **266** | *e*P | **P** | **12 23 11.3** | **+2.4** |
| **H05S1** | **Guadeloupe/Mar** | **29.62** | **291** | T | T | 12 54 07.7 | |
| | SNR=65 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.39** | **295** | T | T | 12 55 03.2 | |
| | SNR=9.1 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **33.18** | **232** | *e*P | **P** | **12 23 54.2** | **+1.0** |
| **TORD** | **Torodi Ar. Bea** | **34.69** | **74** | P | **P** | **12 24 06.4** | **0.0** |
| | comp=Z,2.2nm,0.5s,baz=267,slow=8.1,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.69** | **74** | P | **P** | **12 24 06.6** | **+0.2** |
| **SIV** | **San Ignacio** | **35.02** | **233** | P | **P** | **12 24 08.5** | **-0.8** |
| | comp=Z,2.7nm,0.9s,baz=67,slow=10,SNR=5.6 | | | | | | |
| SIV | | | | LR | LR | 12 37 45.8 | |
| | comp=Z,685nm,19.5s,baz=94,slow=35 | | | | | | |
| **SJG** | **San Juan** | **35.58** | **295** | LR | LR | 12 36 02.3 | |
| | comp=Z,230nm,18.2s,baz=93,slow=32 | | | | | | |
| **ETMB** | **Extrema** | **36.63** | **247** | *e*P | **P** | **12 24 22.5** | **-0.6** |
| **MDT** | **Midelt** | **38.17** | **39** | LR | LR | 12 39 38.3 | |
| | comp=Z,311nm,18.1s,baz=238,slow=35 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **38.48** | **257** | *e*P | **P** | **12 24 39.1** | **+0.3** |
| **CPUP** | **Villa Florida** | **39.16** | **217** | P | **P** | **12 24 43.4** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=49,slow=10,SNR=2.0 | | | | | | |
| CPUP | | | | LR | LR | 12 40 19.4 | |
| | comp=Z,289nm,21.3s,baz=48,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **39.16** | **217** | P | **P** | **12 24 42.9** | **-1.3** |
| **CPUP** | **Villa Florida** | **39.16** | **217** | *e*P | **P** | **12 24 45.0** | **+0.7** |
| **LPAZ** | **La Paz** | **41.02** | **239** | P | **P** | **12 24 59.6** | **-1.0** |
| | comp=Z,1.6nm,0.8s,baz=49,slow=8.2,SNR=4.9 | | | | | | |
| LPAZ | | | | LR | LR | 12 41 11.8 | |
| | comp=Z,223nm,19.4s,baz=56,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **41.02** | **239** | P | **P** | **12 25 00.5** | **-0.1** |
| **ROSC** | **El Rosal** | **41.76** | **272** | P | **P** | **12 25 05.9** | **-0.6** |
| | comp=Z,6.6nm,0.3s,baz=136,slow=13,SNR=5.2 | | | | | | |
| ROSC | | | | LR | LR | 12 43 37.8 | |
| | comp=Z,349nm,18.1s,baz=91,slow=38 | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **42.29** | **276** | P | **P** | **12 25 11.8** | **+1.4** |
| **ESDC** | **Sonseca Array** | **43.28** | **32** | P | **P** | **12 25 18.9** | **+0.7** |
| | comp=Z,0.6nm,0.8s,baz=216,slow=6.3,SNR=2.9 | | | | | | |
| ESDC | | | | LR | LR | 12 41 56.0 | |
| | comp=Z,87nm,18.4s,baz=198,slow=34 | | | | | | |
| **LVC** | **Limon Verde** | **44.82** | **231** | LR | LR | 12 45 30.9 | |
| | comp=Z,172nm,18.4s,baz=54,slow=38 | | | | | | |
| **PB15** | **IPOC Station P** | **45.58** | **231** | P | **P** | **12 25 36.3** | **-0.6** |
| PB15 | | | | IAmb | IAmb | 12 25 36.7 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.59** | **157** | T | T | 13 14 18.0 | |
| | SNR=7.9 | | | | | | |
| **NNA** | **Nana** | **47.18** | **249** | LR | LR | 12 45 23.2 | |
| | comp=Z,253nm,18.6s,baz=96,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.37** | **256** | LR | LR | 12 46 05.3 | |
| | comp=Z,530nm,18.3s,baz=101,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.30** | **46** | LR | LR | 12 47 24.1 | |
| | comp=Z,366nm,19.1s,baz=266,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **54.62** | **117** | LR | LR | 12 46 18.2 | |
| | comp=Z,211nm,18.0s,baz=330,slow=32 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.70** | **20** | LR | LR | 12 48 49.6 | |
| | comp=Z,122nm,18.1s,baz=191,slow=34 | | | | | | |
| **SADO** | **Sadowa** | **57.07** | **322** | LR | LR | 12 48 32.6 | |
| | comp=Z,56nm,18.1s,baz=194,slow=33 | | | | | | |
| **PLCA** | **Paso Flores** | **57.12** | **214** | LR | LR | 12 51 24.9 | |
| | comp=Z,209nm,19.8s,baz=74,slow=36 | | | | | | |
| **SCHQ** | **Schefferville** | **57.19** | **337** | P | **P** | **12 27 02.4** | **-0.8** |
| | comp=Z,3.0nm,0.7s,baz=210,slow=3.8,SNR=6.7 | | | | | | |
| SCHQ | | | | LR | LR | 12 49 30.9 | |
| | comp=Z,42nm,18.4s,baz=162,slow=34 | | | | | | |
| **GEC2** | **GERESS Array S** | **58.84** | **34** | P | **P** | **12 27 15.2** | **+0.1** |
| GEC2 | | | | IAmb | IAmb | 12 27 21.0 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **GERES** | **GERESS Array B** | **58.84** | **34** | P | **P** | **12 27 14.9** | **-0.1** |
| **BORG** | **Borgarnes** | **60.47** | **5** | LR | LR | 12 47 43.9 | |
| | comp=Z,41nm,19.8s,baz=182,slow=30 | | | | | | |
| **IDI** | **Anoyia** | **60.84** | **52** | LR | LR | 12 55 30.3 | |
| | comp=Z,106nm,18.2s,baz=257,slow=38 | | | | | | |
| **143A** | **Socs Landing,** | **61.54** | **305** | P | **P** | **12 27 33.9** | **+0.2** |
| **PSZ** | **Piszkesteto** | **61.97** | **37** | P | **P** | **12 27 36.6** | **+0.2** |
| PSZ | | | | IAmb | IAmb | 12 27 41.3 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **SUR** | **Sutherland** | **62.51** | **130** | LR | LR | 12 48 22.1 | |
| | comp=Z,124nm,21.9s,baz=239,slow=30 | | | | | | |
| **LSZ** | **Lusaka** | **63.19** | **110** | LR | LR | 12 50 55.9 | |
| | comp=Z,99nm,19.2s,baz=242,slow=32 | | | | | | |
| **MBAR** | **Mbarara** | **63.30** | **93** | LR | LR | 12 52 45.1 | |
| | comp=Z,163nm,18.3s,baz=336,slow=34 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **63.47** | **352** | LR | LR | 12 49 29.0 | |
| | comp=Z,58nm,20.9s,baz=179,slow=30 | | | | | | |
| **LBTB** | **Lobatse** | **63.58** | **121** | LR | LR | 12 50 58.2 | |
| | comp=Z,145nm,19.0s,baz=241,slow=32 | | | | | | |
| **NATX** | **Nagodoches** | **64.04** | **303** | P | **P** | **12 27 50.9** | **+0.5** |
| **FRB** | **Frobisher Bay** | **64.49** | **343** | LR | LR | 12 55 01.0 | |
| | comp=Z,27nm,18.4s,baz=187,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **64.53** | **125** | P | **P** | **12 27 53.1** | **-0.8** |
| | comp=Z,5.4nm,1.0s,baz=317,slow=10,SNR=4.1 | | | | | | |
| BOSA | | | | LR | LR | 12 50 36.5 | |
| | comp=Z,123nm,19.6s,baz=232,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **64.53** | **125** | P | **P** | **12 27 53.4** | **-0.5** |
| **MLR** | **Muntele Rosu** | **64.82** | **41** | LR | LR | 12 54 06.9 | |
| | comp=Z,170nm,21.1s,baz=262,slow=34 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.82** | **41** | P | **P** | **12 27 56.3** | **+0.8** |
| **NOA** | **NORSAR Array B** | **65.04** | **22** | LR | LR | 12 54 07.0 | |
| | comp=Z,74nm,18.6s,baz=220,slow=34 | | | | | | |
| **EIL** | **Elat** | **68.05** | **60** | LR | LR | 12 59 14.3 | |
| | comp=Z,282nm,18.1s,baz=276,slow=37 | | | | | | |
| **JCT** | **Junction City** | **68.18** | **301** | P | **P** | **12 28 16.7** | **-0.4** |
| JCT | | | | IAmb | IAmb | 12 28 29.6 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **68.67** | **37** | P | **P** | **12 28 20.7** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=253,slow=6.0,SNR=7.3 | | | | | | |
| AKASG | | | | LR | LR | 12 58 52.9 | |
| | comp=Z,47nm,18.1s,baz=250,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.67** | **37** | P | **P** | **12 28 20.1** | **+0.4** |
| **BRTR** | **Keskin Array B** | **68.67** | **49** | P | **P** | **12 28 21.2** | **+1.1** |
| | comp=Z,0.7nm,0.5s,baz=235,slow=5.1,SNR=1.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **68.89** | **57** | LR | LR | 13 00 55.8 | |
| | comp=Z,58nm,18.3s,baz=44,slow=38 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **69.83** | **93** | LR | LR | 12 56 27.0 | |
| | comp=Z,157nm,19.3s,baz=88,slow=34 | | | | | | |
| **FINES** | **FINES Array B** | **71.25** | **26** | LR | LR | 12 58 25.0 | |
| | comp=Z,75nm,18.8s,baz=216,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.39** | **299** | P | **P** | **12 28 36.7** | **-0.3** |
| | comp=Z,0.3nm,0.9s,baz=116,slow=4.1,SNR=1.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.39** | **299** | P | **P** | **12 28 36.2** | **-0.8** |
| **OGNE** | **Ogallala** | **71.59** | **312** | P | **P** | **12 28 37.8** | **-0.2** |
| OGNE | | | | IAmb | IAmb | 12 28 57.0 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **PHWY** | **Pilot Hill** | **74.20** | **311** | P | **P** | **12 28 53.4** | **-0.3** |
| **ANMO** | **Albuquerque** | **74.26** | **305** | LR | LR | 12 57 40.1 | |
| | comp=Z,207nm,21.3s,baz=96,slow=33 | | | | | | |
| **ATD** | **Arta Tunnel** | **74.65** | **79** | LR | LR | 12 58 47.0 | |
| | comp=Z,89nm,21.8s,baz=48,slow=33 | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.80** | **18** | LR | LR | 12 58 55.0 | |
| | comp=Z,41nm,18.4s,baz=240,slow=33 | | | | | | |
| **319A** | **Douglas** | **76.37** | **301** | P | **P** | **12 29 06.0** | **-0.2** |
| 319A | | | | IAmb | IAmb | 12 29 15.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **PV13** | **Radium Mtn., P** | **76.44** | **308** | P | **P** | **12 29 06.0** | **-0.6** |
| PV13 | | | | IAmb | IAmb | 12 29 08.6 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **LPIG** | **La Paz** | **77.06** | **294** | LR | LR | 13 04 22.0 | |
| | comp=Z,32nm,18.1s,baz=114,slow=37 | | | | | | |
| **BW06** | **Boulder Array** | **77.40** | **313** | P | **P** | **12 29 10.8** | **-1.1** |
| BW06 | | | | IAmb | IAmb | 12 29 21.3 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **PD31** | **Pinedale Array** | **77.40** | **313** | P | **P** | **12 29 12.6** | **+0.6** |
| PD31 | | | | IAmb | IAmb | 12 29 21.3 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.40** | **313** | P | **P** | **12 29 12.0** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=104,slow=7.5,SNR=1.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.40** | **313** | P | **P** | **12 29 12.5** | **+0.6** |
| **SNAA** | **Sanae** | **78.62** | **171** | P | **P** | **12 29 18.5** | **+0.7** |
| SNAA | | | | IAmb | IAmb | 12 29 38.6 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **QLMT** | **Earthquake Lak** | **78.92** | **315** | P | **P** | **12 29 20.1** | **-0.2** |
| **RPN** | **Rapa Nui** | **80.55** | **242** | LR | LR | 13 01 10.4 | |
| | comp=Z,86nm,18.8s,baz=326,slow=33 | | | | | | |
| **KIRV** | **Kirov** | **81.76** | **32** | LR | LR | 13 03 56.2 | |
| | comp=Z,46nm,18.9s,baz=288,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.26** | **332** | P | **P** | **12 29 37.8** | **+0.3** |
| | comp=Z,0.2nm,0.7s,baz=105,slow=5.0,SNR=3.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.26** | **332** | P | **P** | **12 29 37.6** | **+0.1** |
| **PFO** | **Pinyon Flats O** | **82.48** | **303** | LR | LR | 13 04 11.5 | |
| | comp=Z,68nm,19.5s,baz=56,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.90** | **308** | P | **P** | **12 29 48.9** | **+2.0** |
| | comp=Z,0.1nm,0.3s,baz=46,slow=3.9,SNR=1.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.90** | **308** | P | **P** | **12 29 46.0** | **-0.9** |
| **ARU** | **Arti** | **86.67** | **34** | LR | LR | 13 06 00.9 | |
| | comp=Z,81nm,21.7s,baz=274,slow=34 | | | | | | |
| **AKTO** | **Aktyubinsk** | **86.70** | **40** | LR | LR | 13 10 06.3 | |
| | comp=Z,29nm,18.1s,baz=274,slow=36 | | | | | | |
| **GEYT** | **Alibeck** | **87.57** | **52** | LR | LR | 13 13 06.7 | |
| | comp=Z,41nm,18.7s,baz=321,slow=38 | | | | | | |
| **INK** | **Inuvik** | **89.78** | **339** | LR | LR | 13 07 51.7 | |
| | comp=Z,56nm,19.4s,baz=58,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **94.73** | **180** | P | **P** | **12 30 35.6** | **-2.0** |
| QSPA | | | | IAmb | IAmb | 12 30 39.2 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **95.95** | **337** | P | **P** | **12 30 43.0** | **-0.1** |
| | comp=Z,0.7nm,1.1s,baz=50,slow=2.8,SNR=1.9 | | | | | | |
| ILAR | | | | LR | LR | 13 12 31.2 | |
| | comp=Z,73nm,18.3s,baz=138,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.84** | **63** | PKP | **PKiKP** | **12 36 21.4** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=290,slow=2.7,SNR=1.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.84** | **63** | | **PKPdf** | **12 36 19.1** | **-2.0** |
| **ASAR** | **Alice Springs** | **156.97** | **146** | PKP | **PKPdf** | **12 37 12.9** | **-0.1** |
| | comp=Z,1.4nm,1.2s,baz=117,slow=1.0,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **160.09** | **141** | PKPab | **PKPab** | **12 37 55.7** | **-0.7** |
| | comp=Z,0.8nm,1.1s,baz=216,slow=4.1,SNR=2.5 | | | | | | |

**NEIC 22 12:18:47.5**±1.8**, 13°.4N**±0°.2 × **44°.5W**±0°.1**, h17**km±4km**, mb4.9/20, Error ellipse: s-maj=27.7km s-min=16.5km az=195.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SACV** | **Santiago Islan** | **20.35** | **83** | P | P | 12 23 23.9 | +0.5 |
| SACV | | | | IAmb | IAmb | 12 23 32.1 | |
| | comp=Z,69nm,1.1s | | | | | | |
| **ROSC** | **El Rosal** | **30.58** | **257** | P | P | 12 25 02.3 | +1.0 |
| ROSC | | | | IAmb | IAmb | 12 25 07.7 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.94** | **85** | P | P | 12 27 02.4 | +0.4 |
| **BGNE** | **Belgrade** | **54.17** | **312** | P | P | 12 28 10.9 | -1.3 |
| **Q24A** | **Divide** | **58.94** | **308** | P | P | 12 28 45.3 | -1.3 |
| Q24A | | | | IAmb | IAmb | 12 29 00.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **ISCO** | **Idaho Springs** | **59.42** | **308** | P | P | 12 28 50.0 | +0.1 |
| ISCO | | | | IAmb | IAmb | 12 29 02.9 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **ANMO** | **Albuquerque** | **59.53** | **303** | P | P | 12 28 50.5 | -0.1 |
| **N23A** | **Red Feather La** | **59.83** | **310** | P | P | 12 28 51.7 | -1.0 |
| **DGMT** | **Dagmar** | **60.11** | **319** | P | P | 12 28 53.5 | -0.6 |
| **FFC** | **Flin Flon** | **60.62** | **326** | P | P | 12 28 55.8 | -1.7 |
| FFC | | | | IAmb | IAmb | 12 29 03.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **X18A** | **Snowflake** | **62.38** | **302** | P | P | 12 29 09.7 | -0.3 |
| **LOHW** | **Long Hollow** | **63.62** | **312** | P | P | 12 29 17.5 | -0.6 |
| LOHW | | | | IAmb | IAmb | 12 29 25.4 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **YHH** | **Holmes Hill** | **63.94** | **313** | P | P | 12 29 19.6 | -0.7 |
| **YMR** | **Madison River** | **64.00** | **313** | P | P | 12 29 20.1 | -0.5 |
| YMR | | | | IAmb | IAmb | 12 29 28.0 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **CCUT** | **Cedar City** | **65.26** | **305** | P | P | 12 29 27.6 | -1.4 |
| CCUT | | | | IAmb | IAmb | 12 29 36.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **TPH** | **Tonopah** | **68.33** | **306** | P | P | 12 29 48.4 | -0.1 |
| **BMO** | **Blue Mountains** | **68.52** | **313** | P | P | 12 29 48.6 | -0.8 |
| BMO | | | | IAmb | IAmb | 12 29 51.8 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **F07A** | **Phinny Hill Vi** | **70.40** | **314** | P | P | 12 29 59.1 | -1.7 |
| **SNAA** | **Sanae** | **89.29** | **168** | P | P | 12 31 40.3 | -2.2 |
| SNAA | | | | IAmb | IAmb | 12 31 51.6 | |
| | comp=Z,5.1nm,1.2s | | | | | | |

*IDC* ***22*** *12:23:06.3±0.9, 5°.23S × 134°.24E, h0km, mb3.8/6, mb1 4.1/14, mb1mx3.9/33, mbtmp4.0/14, ML4.0/7, MS3.1/5, Ms1 3.0/5, ms1mx2.8/59, Error ellipse: s-maj=23.1km s-min=17.3km az=65.0*
*NEIC* ***22*** *12:23:10.9±2.7, 5°.11S±0°.07 × 134°.3E±0°.1, h29km±5km, mb4.2/12, Error ellipse: s-maj=18.3km s-min=9.6km az=79.0*
*DJA* ***22*** *12:23:11.9±0.2, 5°.5S±4° × 13°.4E±°, h140km±10km, M4.5/14, mB5.1/3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **27.47** | **166** | P | **P** | **12 28 54.1** | **0.0** |
| **BBOO** | **Buckleboo** | **27.56** | **177** | P | **P** | **12 28 56.1** | **+1.2** |
| BBOO | | | | IAmb | IAmb | 12 29 19.9 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.92** | **305** | P | **P** | **12 31 00.1** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=142,slow=6.5,SNR=1.6 | | | | | | |
| **SONM** | **Songino Array** | **58.16** | **338** | P | **P** | **12 33 02.3** | **+0.6** |
| | comp=Z,0.6nm,0.7s,baz=145,slow=8.0,SNR=2.6 | | | | | | |
| **CASY** | **Casey** | **63.20** | **190** | P | **P** | **12 33 35.4** | **-0.2** |
| **MK31** | **Makanchi Array** | **69.06** | **325** | P | **P** | **12 34 14.5** | **+0.9** |
| MK31 | | | | IAmb | IAmb | 12 34 24.9 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.06** | **325** | P | **P** | **12 34 15.2** | **+1.6** |
| | comp=Z,1.0nm,0.7s,baz=118,slow=7.7,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.06** | **325** | P | **P** | **12 34 15.0** | **+1.4** |
| **MAKZ** | **Makanchi** | **69.25** | **325** | P | **P** | **12 34 16.6** | **+1.8** |
| MAKZ | | | | IAmb | IAmb | 12 34 17.1 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.86** | **332** | P | **P** | **12 34 30.8** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=87,slow=4.9,SNR=4.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.86** | **332** | P | **P** | **12 34 30.6** | **+0.1** |
| **VNDA** | **Vanda** | **73.79** | **174** | P | **P** | **12 34 41.3** | **-0.3** |
| VNDA | | | | IAmb | IAmb | 12 34 46.6 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.70** | **321** | P | **P** | **12 35 37.5** | **+1.0** |
| **QSPA** | **South Pole Qui** | **84.80** | **180** | P | **P** | **12 35 41.6** | **-0.4** |
| **TTA** | **Tatalina** | **85.55** | **26** | P | **P** | **12 35 46.5** | **+0.8** |
| TTA | | | | IAmb | IAmb | 12 35 53.0 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **87.49** | **23** | P | **P** | **12 35 55.8** | **+0.8** |
| **ILAR** | **Eielson Array** | **89.94** | **25** | P | **P** | **12 36 06.7** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=266,slow=4.9,SNR=5.0 | | | | | | |
| **SNAA** | **Sanae** | **98.37** | **193** | P | **P** | **12 36 45.7** | **+0.4** |

*IDC **22** 12:43:54.1±4.1, 18°.90N×144°.60E, h199km±31km, mb2.9/5, mb1 3.2/6, mb1mx3.0/43, mbtmp3.6/6, Error ellipse: s-maj=161.8km s-min=20.3km az=81.0*

**ISC 22 12:43:53.2**±4.1, **19°.0N**±0°.2×**144°.8E**±1°.0, **h200**km, **n6,** σ0**878/7, mb3.1/5, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.34** | **180** | P | **Pn** | **12 45 12.5** | **+0.5** |
| | 4.4nm,0.3s,baz=198,slow=20,SNR=1.6 | | | | | | |
| GUMO | | | | S | **Sn** | **12 46 14.2** | **-0.1** |
| | 3.5nm,0.3s,baz=143,slow=8.3,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.01** | **195** | P | **P** | **12 51 08.4** | **-0.3** |
| | 0.6nm,0.5s,baz=6.4,slow=8.9,SNR=8.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.38** | **208** | P | **P** | **12 51 20.0** | **+0.1** |
| | 0.6nm,0.4s,baz=30,slow=10,SNR=8.4 | | | | | | |
| **SONM** | **Songino Array** | **42.43** | **322** | P | **P** | **12 51 27.6** | **-0.8** |
| | 0.2nm,0.5s,baz=134,slow=6.2,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **43.69** | **195** | P | **P** | **12 51 37.8** | **-0.7** |
| | 0.2nm,0.5s,baz=20,slow=7.6,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.70** | **314** | P | **P** | **12 53 23.8** | **+1.0** |
| | 0.3nm,0.8s,baz=83,slow=6.3,SNR=3.1 | | | | | | |

*IDC **22** 12:45:15.2±2.6, 21°.82S×69°.36W, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.6/21, mbtmp3.6/3, ML3.6/1, Error ellipse: s-maj=78.2km s-min=58.9km az=71.0*
*GUC **22** 12:45:18.3±0.6, 21°.11S×69°.88W, h13km±1km, ML3.6*

**ISC 22 12:45:17.2**±0.9, **21°.10S**±0°.02×**69°.85W**±0°.05, **h11**km±7km, **n21,** σ0**887/36, 2C-11D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB02** | **IPOC Station P** | **0.22** | **192** | ⇓*iP* | **Pg** | **12 45 22.7** | **+0.8** |
| PB02 | | | | *i* S | **Sg** | **12 45 26.2** | **+1.0** |
| PB02 | | | | IAML | | 12 45 26.5 | |
| | comp=E,41μm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **0.34** | **80** | ⇓*iP* | **Pb** | **12 45 25.4** | **0.0** |
| PB01 | | | | *i* S | **Sb** | **12 45 30.7** | **-0.2** |
| PB01 | | | | IAML | | 12 45 30.9 | |
| | comp=N,27μm,0.1s | | | | | | |
| **PATCX** | **Punta Patache** | **0.40** | **314** | ⇓*iP* | **Pg** | **12 45 25.3** | **0.0** |
| PATCX | | | | *i* S | **Sg** | **12 45 30.6** | **+0.1** |
| PATCX | | | | IAML | | 12 45 31.3 | |
| | comp=N,7μm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **0.62** | **330** | ⇓*iP* | **Pg** | **12 45 28.9** | **-0.4** |
| TA01 | | | | *i* S | **Sg** | **12 45 36.9** | **-0.5** |
| TA01 | | | | IAML | | 12 45 37.7 | |
| | comp=E,4μm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **0.62** | **183** | ⇓*iP* | **Pg** | **12 45 29.3** | **-0.1** |
| PB07 | | | | *i* S | **Sg** | **12 45 37.5** | **-0.1** |
| PB07 | | | | IAML | | 12 45 38.5 | |
| | comp=E,5μm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **0.82** | **357** | ⇓*iP* | **Pg** | **12 45 32.7** | **-0.4** |
| HMBC | | | | *i* S | **Sg** | **12 45 43.5** | **-0.4** |
| HMBC | | | | IAML | | 12 45 44.6 | |
| | comp=N,3μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **0.87** | **342** | *eP* | **Pg** | **12 45 33.2** | **-0.8** |
| TA02 | | | | *i* S | **Sg** | **12 45 44.9** | **-0.6** |
| TA02 | | | | IAML | | 12 45 45.5 | |
| | comp=N,18μm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **0.89** | **141** | ⇓*iP* | **Pb** | **12 45 34.8** | **0.0** |
| PB09 | | | | *i* S | **Sb** | **12 45 46.7** | **-0.1** |
| **PB03** | **IPOC Station P** | **0.94** | **175** | ⇓*iP* | **Pg** | **12 45 34.7** | **-0.8** |
| PB03 | | | | *i* S | **Sg** | **12 45 47.0** | **-0.9** |
| PB03 | | | | IAML | | 12 45 47.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| **PB08** | **IPOC Station P** | **1.16** | **34** | ⇓*iP* | **Pg** | **12 45 39.0** | **-0.5** |
| PB08 | | | | *i* S | **Sb** | **12 45 54.6** | **0.0** |
| PB08 | | | | IAML | | 12 45 55.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.26** | **193** | ⇓*iP* | **Pn** | **12 45 39.7** | **-1.2** |
| PB04 | | | | *i* S | **Sb** | **12 45 55.9** | **-1.5** |
| PB04 | | | | IAML | | 12 45 57.9 | |
| | comp=E,3μm,0.2s | | | | | | |
| **GO01** | **Chusmiza** | **1.55** | **23** | *eP* | **Pn** | **12 45 45.3** | **0.0** |
| GO01 | | | | *i* S | **Sn** | **12 46 05.7** | **+0.1** |
| **PB06** | **IPOC Station P** | **1.61** | **171** | ⇓*iP* | **Pn** | **12 45 45.6** | **-0.3** |
| PB06 | | | | *i* S | **Sn** | **12 46 06.8** | **0.0** |
| PB06 | | | | IAML | | 12 46 08.7 | |
| | comp=N,2μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **1.73** | **150** | ⇑*eP* | **Pb** | **12 45 49.0** | **-0.4** |
| LVC | | | | *i* S | **Sb** | **12 46 11.2** | **-0.1** |
| **PB15** | **IPOC Station P** | **2.12** | **171** | ⇑*eP* | **Pn** | **12 45 53.3** | **+0.4** |
| PB15 | | | | *i* S | **Sb** | **12 46 21.0** | **-1.3** |
| **PB10** | **IPOC Station P** | **2.49** | **195** | *eP* | **Pn** | **12 45 57.4** | **-0.3** |
| PB10 | | | | IAML | | 12 46 40.9 | |
| | comp=N,238nm,0.4s | | | | | | |
| **PB12** | **IPOC Station P** | **2.52** | **350** | *eP* | **Pn** | **12 45 57.9** | **-0.3** |
| PB12 | | | | *i* S | **Sn** | **12 46 29.2** | **+0.3** |
| PB12 | | | | IAML | | 12 46 38.1 | |
| | comp=E,346nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **5.06** | **19** | Pn | Pb | 12 46 40.9 | -5.3 |
| | comp=E,1.1nm,0.3s,baz=197,slow=8.5,SNR=18 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.05** | **71** | P | **P** | **12 57 15.0** | **-1.5** |
| | comp=E,0.3nm,0.6s,baz=252,slow=4.8,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.53** | **341** | P | **P** | **12 58 22.1** | **+3.3** |
| | comp=E,0.1nm,0.6s,baz=126,slow=5.6,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.82** | **35** | PKPbc | **PKPab** | **13 04 57.1** | **+0.1** |
| | comp=E,0.3nm,0.7s,baz=318,slow=3.8,SNR=3.9 | | | | | | |

*IDC **22** 13:01:58.8±0.9, 32°.95S×66°.62W, h0km, mb3.7/2, mb1 3.7/6, mb1mx3.6/31, mbtmp3.6/6, ML3.5/4, Error ellipse: s-maj=43.1km s-min=21.7km az=103.0*

**ISC 22 13:02:03.8**±0.9, **32°.8S**±0°.1×**66°.8W**±0°.3, **h35**km, **n11,** σ1**915/10, San Luis Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLCA** | **Paso Flores** | **8.47** | **200** | Pn | **Pn** | **13 04 03.6** | **-0.4** |
| | 0.1nm,0.3s,baz=319,slow=12,SNR=1.1 | | | | | | |
| PLCA | | | | Lg | Lg | 13 06 25.1 | |
| | 0.3nm,0.3s,baz=50,slow=10,SNR=3.0 | | | | | | |
| **LVC** | **Limon Verde** | **10.34** | **349** | Pn | **Pn** | **13 04 29.4** | **-0.7** |
| | 0.6nm,0.3s,baz=70,slow=14,SNR=1.5 | | | | | | |
| **CPUP** | **Villa Florida** | **10.44** | **54** | Lg | Lg | 13 07 38.5 | |
| | 0.5nm,0.3s,baz=248,slow=13,SNR=3.4 | | | | | | |
| **LPAZ** | **La Paz** | **16.50** | **355** | Pn | **P** | **13 05 54.7** | **-0.9** |
| | 0.1nm,0.3s,baz=147,slow=13,SNR=3.3 | | | | | | |
| **SIV** | **San Ignacio** | **17.52** | **18** | P | **Pn** | **13 06 05.1** | **-0.4** |
| | 0.2nm,0.3s,baz=223,slow=21,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.03** | **326** | P | **P** | **13 13 20.5** | **+2.2** |
| | 0.1nm,0.4s,baz=152,slow=5.8,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.66** | **67** | P | **P** | **13 14 08.6** | **+0.5** |
| | 1.5nm,0.7s,baz=204,slow=5.3,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **120.47** | **202** | PKP | **PKPdf** | **13 20 51.0** | **-1.2** |
| | 0.3nm,1.0s,baz=140,slow=1.9,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.80** | **204** | PKP | **PKPdf** | **13 20 57.6** | **-1.0** |
| | 0.3nm,0.6s,baz=161,slow=1.7,SNR=7.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.78** | **35** | PKPbc | **PKiKP** | **13 21 52.9** | **+0.4** |
| | 2.0nm,0.5s,baz=315,slow=2.7,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **152.63** | **50** | PKPbc | **PKiKP** | **13 21 57.1** | **+0.5** |
| | 0.3nm,0.5s,baz=242,slow=1.5,SNR=8.1 | | | | | | |

*PGC **22** 13:02:33.5±1.6, 50°.00N×130°.22W, h10km, MLSn3.2/27, Mw3.8/27, 213km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC **22** 13:02:35.9±1.5, 50°.13N×129°.95W, h0km, mb3.5/4, mb1 3.8/13, mb1mx3.6/62, mbtmp3.5/13, ML3.3/9, MS3.6/19, Ms1 3.6/19, ms1mx3.3/69, Error ellipse: s-maj=24.2km s-min=11.9km az=72.0*

**ISC 22 13:02:36.3**±0.9, **50°.10N**±0°.05×**129°.96W**±0°.06, **h12**km, **n81,** σ1**965/81, mb3.4/4, MS3.7/12, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOLB** | **Holberg** | **1.29** | **64** | Pn | **Pn** | **13 02 58.5** | **-1.7** |
| HOLB | | | | Sn | **Sb** | **13 03 14.7** | **-2.4** |
| **BPBC** | **Brooks Peninsu** | **1.41** | **87** | Pn | **Pn** | **13 02 59.3** | **-2.5** |
| **PACB** | **Port Alice, BC** | **1.62** | **77** | Pn | **Pn** | **13 03 02.6** | **-2.0** |
| PACB | | | | Sn | **Sn** | **13 03 23.7** | **-1.7** |
| **PHC** | **Port Hardy** | **1.73** | **68** | Pn | **Pn** | **13 03 04.8** | **-1.3** |
| PHC | | | | Sn | **Sn** | **13 03 26.5** | **-1.6** |
| **MAYB** | **Maynard** | **1.81** | **79** | Pn | **Pn** | **13 03 05.4** | **-2.0** |
| **EDB** | **Eliza Dome** | **1.84** | **96** | Pn | **Pn** | **13 03 05.4** | **-2.3** |
| EDB | | | | Sn | **Sn** | **13 03 28.3** | **-2.7** |
| **TLCB** | **Telegraph Cove** | **2.05** | **76** | Pn | **Pn** | **13 03 09.1** | **-1.5** |
| TLCB | | | | Sn | **Sn** | **13 03 35.5** | **-0.5** |
| **WOSB** | **Woss** | **2.18** | **87** | Pn | **Pn** | **13 03 10.9** | **-1.5** |
| **HG4B** | **Hotspring** | **2.34** | **341** | Pn | **Pn** | **13 03 11.2** | **-3.4** |
| **BBB** | **Bella Bella** | **2.39** | **28** | Pn | **Pn** | **13 03 14.7** | **-0.6** |
| | 24nm,0.3s,baz=223,slow=14,SNR=86 | | | | | | |
| BBB | | | | Sn | **Sn** | **13 03 43.4** | **-1.1** |
| | 42nm,0.3s,baz=323,slow=21,SNR=5.7 | | | | | | |
| **BBB** | **Bella Bella** | **2.39** | **28** | Pn | **Pn** | **13 03 14.6** | **-0.6** |
| BBB | | | | Sn | **Sn** | **13 03 42.1** | **-2.4** |
| **NCRB** | **Newcastle Ridg** | **2.52** | **81** | Pn | **Pn** | **13 03 16.2** | **-1.0** |
| **GDR** | **Gold River** | **2.56** | **96** | Pn | **Pn** | **13 03 15.5** | **-2.0** |
| **BNB** | **Barry Inlet** | **2.73** | **336** | Pn | **Pn** | **13 03 15.8** | **-4.1** |
| **SPLB** | **Strathcona Par** | **2.79** | **93** | Pn | **Pn** | **13 03 19.2** | **-1.5** |
| **CBB** | **Campbell River** | **2.96** | **89** | Pn | **Pn** | **13 03 22.1** | **-1.0** |
| CBB | | | | Sn | **Sn** | **13 03 56.8** | **-1.7** |
| **BUTB** | **Butedale** | **3.12** | **17** | Pn | **Pn** | **13 03 24.4** | **-0.9** |
| BUTB | | | | Sn | **Sn** | **13 04 01.5** | **-0.9** |
| **BNKB** | **Banks Island** | **3.24** | **1** | Pn | **Pn** | **13 03 24.7** | **-2.2** |
| BNKB | | | | Sn | **Sn** | **13 04 03.6** | **-1.9** |
| **MOBC** | **Moresby Island** | **3.30** | **338** | Pn | **Pn** | **13 03 25.0** | **-2.9** |
| **DIB** | **Dawson Inlet,** | **3.48** | **334** | Pn | **Pn** | **13 03 27.1** | **-3.1** |
| **H02S1** | **DAWSON INLET T** | **3.48** | **334** | Pn | **Pn** | **13 03 30.2** | **0.0** |
| **HWKB** | **Hawksbury Isla** | **3.54** | **8** | Pn | **Pn** | **13 03 29.7** | **-1.5** |
| HWKB | | | | Sn | **Sn** | **13 04 10.0** | **-3.0** |
| **TXB** | **Texada** | **3.59** | **94** | Pn | **Pn** | **13 03 31.8** | **0.0** |
| **GRNB** | **Grenville Isla** | **3.76** | **360** | Pn | **Pn** | **13 03 32.4** | **-1.7** |
| GRNB | | | | Sn | **Sn** | **13 04 16.5** | **-1.7** |
| **OCP** | **Olym-Cheeka Pk** | **3.93** | **115** | Pn | **Pn** | **13 03 35.0** | **-1.5** |
| **SHB** | **Sechelt** | **3.97** | **95** | Pn | **Pn** | **13 03 37.0** | **0.0** |
| SHB | | | | Sn | **Sn** | **13 04 22.6** | **-0.9** |
| **NLLB** | **Nanaimo Lost L** | **3.97** | **100** | Pn | **Pn** | **13 03 37.4** | **+0.4** |
| **CLRS** | **Cowichan Lake** | **4.01** | **106** | Pn | **Pn** | **13 03 37.9** | **+0.4** |
| **KITB** | **Kitimat** | **4.07** | **11** | Pn | **Pn** | **13 03 38.1** | **-0.2** |
| KITB | | | | Sn | **Sn** | **13 04 24.4** | **-1.4** |
| **RUPB** | **Prince Rupert** | **4.24** | **358** | Pn | **Pn** | **13 03 40.1** | **-0.6** |
| **BIB** | **Bowen Island** | **4.37** | **97** | Pn | **Pn** | **13 03 42.2** | **-0.2** |
| **OBC** | **Olympics--Boni** | **4.38** | **116** | Pn | **Pn** | **13 03 43.5** | **+0.9** |
| **WPB** | **Watts Point** | **4.39** | **93** | Pn | **Pn** | **13 03 43.3** | **+0.6** |
| **B010** | **North Saanich** | **4.49** | **106** | Pn | **Pn** | **13 03 44.1** | **0.0** |
| **PGC** | **Sidney** | **4.49** | **106** | Pn | **Pn** | **13 03 44.0** | **0.0** |
| PGC | | | | Sn | **Sn** | **13 04 34.0** | **-2.2** |
| **B011** | **North Saanich** | **4.49** | **106** | Pn | **Pn** | **13 03 44.2** | **+0.1** |
| **WSLR** | **Whistler** | **4.53** | **87** | Pn | **Pn** | **13 03 45.2** | **+0.5** |
| **UBRB** | **Upper Baezaeko** | **4.62** | **50** | Sn | **Sn** | **13 04 38.8** | **-0.7** |
| **SNB** | **Saturna Island** | **4.62** | **104** | Pn | **Pn** | **13 03 44.6** | **-1.4** |
| **OSD** | **Olympics--Snow** | **4.71** | **117** | Pn | **Pn** | **13 03 46.9** | **-0.4** |
| **HNBB** | **Haney** | **4.86** | **97** | Pn | **Pn** | **13 03 49.8** | **+0.6** |
| **LLLB** | **Lillooet** | **5.20** | **81** | Pn | **Pn** | **13 03 53.7** | **-0.1** |
| **VDB** | **Vedder Mountai** | **5.22** | **99** | Pn | **Pn** | **13 03 54.4** | **+0.2** |
| **A05A** | **Maple Falls** | **5.24** | **99** | Pn | **Pn** | **13 03 54.8** | **+0.4** |
| **MBW** | **Mount Baker** | **5.42** | **101** | Pn | **Pn** | **13 03 58.0** | **+0.9** |
| **FSJB** | **Fort St James** | **5.58** | **36** | Pn | **Pn** | **13 04 00.1** | **+0.9** |
| **FSB** | **Fort Saint Jam** | **5.58** | **36** | Pn | **Pn** | **13 04 00.2** | **+1.0** |
| **RPW** | **Rockport** | **5.77** | **103** | Pn | **Pn** | **13 04 03.3** | **+1.6** |
| **LTY** | **Liberty** | **6.77** | **111** | Pn | **Pn** | **13 04 17.1** | **+1.5** |
| **B08A** | **Colville Reser** | **7.17** | **100** | Pn | **Pn** | **13 04 22.1** | **+1.1** |
| **BMBC** | **Bull Mountain** | **7.59** | **35** | Pn | **Pn** | **13 04 28.6** | **+1.8** |
| **NBC4** | **NorthernBC 4** | **7.93** | **42** | Pn | **Pn** | **13 04 33.5** | **+2.1** |
| **DLBC** | **Dease Lake** | **8.36** | **360** | Pn | **Pn** | **13 04 38.2** | **+1.0** |
| | 0.2nm,0.3s,baz=187,slow=13,SNR=1.5 | | | | | | |
| DLBC | | | | LR | LR | 13 07 40.1 | |
| | comp=Z,201nm,20.9s,baz=224,slow=36 | | | | | | |
| **DLBC** | **Dease Lake** | **8.36** | **360** | Pn | **Pn** | **13 04 38.1** | **+0.8** |
| **NBC5** | **NorthernBC 5** | **8.59** | **27** | Pn | **Pn** | **13 04 41.8** | **+1.4** |
| **NEW** | **Newport** | **8.61** | **97** | Pn | **Pn** | **13 04 40.7** | **0.0** |
| | 0.4nm,0.3s,baz=308,slow=12,SNR=2.9 | | | | | | |
| NEW | | | | LR | LR | 13 08 00.1 | |
| | comp=Z,520nm,19.6s,baz=275,slow=38 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **9.77** | **146** | Pn | **Pn** | **13 05 00.8** | **+4.2** |
| | 0.1nm,0.3s,baz=315,slow=11,SNR=2.8 | | | | | | |
| YBH | | | | LR | LR | 13 08 17.8 | |
| | comp=Z,299nm,19.3s,baz=336,slow=35 | | | | | | |
| **NVAR** | **Mina Array Bea** | **14.32** | **140** | Pn | **P** | **13 06 05.0** | **-1.2** |
| | 0.1nm,0.3s,baz=322,slow=12,SNR=5.2 | | | | | | |
| NVAR | | | | LR | LR | 13 11 40.2 | |
| | comp=Z,128nm,19.0s,baz=24,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **15.01** | **28** | Pn | **Pn** | **13 06 06.6** | **-1.4** |
| | 0.1nm,0.3s,baz=219,slow=12,SNR=8.3 | | | | | | |
| **KDAK** | **Kodiak Island** | **15.33** | **309** | LR | LR | 13 10 25.2 | |
| | comp=Z,380nm,21.2s,baz=134,slow=31 | | | | | | |
| **PDAR** | **Pinedale Array** | **15.83** | **110** | Pn | **P** | **13 06 21.5** | **-1.4** |
| | 0.1nm,0.3s,baz=308,slow=12,SNR=11 | | | | | | |
| PDAR | | | | LR | LR | 13 12 45.1 | |
| | comp=Z,117nm,18.0s,baz=300,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **17.21** | **335** | Pn | **P** | **13 06 38.9** | **+1.1** |
| | 0.0nm,0.3s,baz=153,slow=14,SNR=4.9 | | | | | | |
| **INK** | **Inuvik** | **18.35** | **356** | P | **P** | **13 06 52.2** | **+1.9** |
| | 0.0nm,0.3s,baz=167,slow=9.7,SNR=5.2 | | | | | | |
| **PFO** | **Pinyon Flats O** | **19.25** | **144** | LR | LR | 13 13 28.2 | |
| | comp=Z,43nm,20.6s,baz=336,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.72** | **76** | P | **P** | **13 07 29.4** | **+2.2** |
| | 5.0nm,0.6s,baz=285,slow=12,SNR=11 | | | | | | |
| ULM | | | | LR | LR | 13 16 23.1 | |
| | comp=Z,291nm,19.0s,baz=290,slow=38 | | | | | | |
| **ANMO** | **Albuquerque** | **22.87** | **123** | P | **P** | **13 07 39.3** | **-0.4** |
| | 1.0nm,0.7s,baz=316,slow=12,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **28.71** | **126** | P | **P** | **13 08 35.6** | **+2.3** |
| | 0.1nm,0.7s,baz=360,slow=26,SNR=2.6 | | | | | | |
| TXAR | | | | LR | LR | 13 19 45.0 | |
| | comp=Z,68nm,21.7s,baz=328,slow=36 | | | | | | |
| **LPIG** | **La Paz** | **30.12** | **142** | LR | LR | 13 21 26.1 | |
| | comp=Z,63nm,18.7s,baz=338,slow=38 | | | | | | |
| **SADO** | **Sadowa** | **34.23** | **79** | LR | LR | 13 23 39.8 | |
| | comp=Z,262nm,19.4s,baz=326,slow=37 | | | | | | |
| **TKL** | **Tuckaleechee C** | **36.19** | **96** | LR | LR | 13 25 06.6 | |
| | comp=Z,174nm,18.8s,baz=328,slow=37 | | | | | | |
| **SCHQ** | **Schefferville** | **37.59** | **58** | LR | LR | 13 24 18.7 | |
| | comp=Z,156nm,21.8s,baz=318,slow=35 | | | | | | |
| **SEY** | **Seymchan** | **41.99** | **318** | LR | LR | 13 28 04.3 | |
| | comp=Z,76nm,18.3s,baz=358,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **43.27** | **303** | LR | LR | 13 26 26.4 | |
| | comp=Z,108nm,20.1s,baz=73,slow=33 | | | | | | |
| **MA2** | **Magadan** | **43.99** | **314** | LR | LR | 13 27 13.7 | |
| | comp=Z,72nm,18.3s,baz=48,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **57.94** | **263** | T | T | 14 15 00.3 | |
| | baz=42,slow=75,SNR=32 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **57.94** | **263** | T | T | 14 15 08.3 | |
| | baz=42,slow=75,SNR=48 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **57.96** | **263** | T | T | 14 15 02.4 | |
| | baz=42,slow=75,SNR=34 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **65.57** | **293** | LR | LR | 13 37 43.0 | |
| | comp=Z,27nm,21.7s,baz=326,slow=32 | | | | | | |
| **KIRV** | **Kirov** | **71.68** | **0** | LR | LR | 13 50 16.5 | |
| | comp=Z,26nm,19.0s,baz=321,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.28** | **339** | LR | LR | 13 52 15.4 | |
| | comp=Z,38nm,18.9s,baz=14,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **79.54** | **338** | P | **P** | **13 14 42.3** | **-0.4** |
| | 0.4nm,0.9s,baz=29,slow=6.2,SNR=2.3 | | | | | | |

*PGC **22** 13:08:44.0±3.0, 49°.96N×130°.25W, h10km, MLSn3.2/20, Mw3.8/20, 217km Wsw of Pt. Hardy, Bc Vancouver Island, Canada Region*

*IDC **22** 13:08:49.5±2.3, 50°.16N×129°.53W, h0km, mb3.5/2, mb1 3.6/9, mb1mx3.4/62, mbtmp3.3/9, ML3.2/7, Error ellipse: s-maj=35.6km s-min=12.9km az=73.0*

**ISC 22 13:08:46.5**±1.1, **50°.07N**±0°.06×**130°.03W**±0°.06, **h10**km, **n52,** σ2**503/61, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOLB** | **Holberg** | **1.34** | **64** | Pn | **Pn** | **13 09 09.3** | **-2.0** |
| HOLB | | | | Sn | **Sb** | **13 09 27.2** | **-1.7** |
| **BPBC** | **Brooks Peninsu** | **1.46** | **86** | Pn | **Pn** | **13 09 10.1** | **-2.7** |
| **PACB** | **Port Alice, BC** | **1.67** | **76** | Pn | **Pn** | **13 09 13.3** | **-2.4** |
| PACB | | | | Sn | **Sn** | **13 09 34.5** | **-2.7** |
| **PHC** | **Port Hardy** | **1.78** | **68** | Pn | **Pn** | **13 09 15.5** | **-1.8** |
| PHC | | | | Sn | **Sn** | **13 09 37.9** | **-2.0** |
| **MAYB** | **Maynard** | **1.86** | **79** | Pn | **Pn** | **13 09 16.2** | **-2.3** |
| **TLCB** | **Telegraph Cove** | **2.10** | **76** | Pn | **Pn** | **13 09 20.1** | **-1.6** |
| TLCB | | | | Sn | **Sn** | **13 09 46.8** | **-1.1** |
| **WOSB** | **Woss** | **2.23** | **86** | Pn | **Pn** | **13 09 21.8** | **-1.7** |
| **HG4B** | **Hotspring** | **2.34** | **342** | Pn | **Pn** | **13 09 21.1** | **-3.9** |
| HG4B | | | | Sn | **Sn** | **13 09 49.7** | **-4.2** |
| **BBB** | **Bella Bella** | **2.44** | **29** | Pn | **Pn** | **13 09 25.8** | **-0.5** |
| | 10nm,0.3s,baz=236,slow=6.5,SNR=60 | | | | | | |
| BBB | | | | Sn | **Sn** | **13 09 54.0** | **-2.1** |
| | 11nm,0.3s,baz=12,slow=23,SNR=7.2 | | | | | | |
| **BBB** | **Bella Bella** | **2.44** | **29** | Pn | **Pn** | **13 09 25.5** | **-0.7** |
| BBB | | | | Sn | **Sn** | **13 09 53.5** | **-2.6** |
| **NCRB** | **Newcastle Ridg** | **2.57** | **81** | Pn | **Pn** | **13 09 26.7** | **-1.5** |
| **GDR** | **Gold River** | **2.60** | **95** | Pn | **Pn** | **13 09 25.3** | **-3.2** |
| **BNB** | **Barry Inlet** | **2.73** | **337** | Pn | **Pn** | **13 09 27.0** | **-3.4** |
| **SPLB** | **Strathcona Par** | **2.83** | **92** | Pn | **Pn** | **13 09 30.1** | **-1.6** |
| **CBB** | **Campbell River** | **3.00** | **89** | Pn | **Pn** | **13 09 32.2** | **-1.9** |
| CBB | | | | Sn | **Sn** | **13 10 07.5** | **-2.6** |
| **BUTB** | **Butedale** | **3.15** | **17** | Pn | **Pn** | **13 09 35.1** | **-1.2** |
| BUTB | | | | Sn | **Sn** | **13 10 12.7** | **-1.2** |
| **BNKB** | **Banks Island** | **3.27** | **1** | Pn | **Pn** | **13 09 35.8** | **-1.9** |
| BNKB | | | | Sn | **Sn** | **13 10 13.8** | **-2.9** |
| **MOBC** | **Moresby Island** | **3.39** | **338** | Pn | **Pn** | **13 09 38.5** | **-2.6** |
| **DIB** | **Dawson Inlet,** | **3.49** | **335** | Pn | **Pn** | **13 09 38.5** | **-2.3** |
| **H02S1** | **DAWSON INLET T** | **3.49** | **335** | Pn | **Pn** | **13 09 39.4** | **-1.3** |
| **HWKB** | **Hawksbury Isla** | **3.58** | **8** | Pn | **Pn** | **13 09 40.6** | **-1.4** |
| HWKB | | | | Sn | **Sn** | **13 10 20.7** | **-3.6** |
| **TXB** | **Texada** | **3.63** | **94** | Pn | **Pn** | **13 09 41.8** | **-1.0** |
| **GRNB** | **Grenville Isla** | **3.78** | **1** | Pn | **Pn** | **13 09 43.1** | **-1.7** |
| GRNB | | | | Sn | **Sn** | **13 10 27.6** | **-1.7** |
| **SHB** | **Sechelt** | **4.01** | **94** | Pn | **Pn** | **13 09 47.6** | **-0.4** |
| **KITB** | **Kitimat** | **4.11** | **12** | Pn | **Pn** | **13 09 49.0** | **-0.2** |
| **RUBB** | **Prince Rupert** | **4.27** | **358** | Pn | **Pn** | **13 09 50.6** | **-0.8** |
| **OBC** | **Olympics--Boni** | **4.41** | **115** | Pn | **Pn** | **13 09 53.0** | **-0.5** |
| **WPB** | **Watts Point** | **4.43** | **93** | Pn | **Pn** | **13 09 53.7** | **+0.1** |
| **WSLR** | **Whistler** | **4.58** | **87** | Pn | **Pn** | **13 09 55.2** | **-0.5** |
| **SNB** | **Saturna Island** | **4.66** | **104** | Pn | **Pn** | **13 09 57.4** | **+0.6** |
| **UBRB** | **Upper Baezaeko** | **4.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| AOPR | | | | | | | Sb | 13 21 49.7 | -0.5 |
| **AOPR** | **Arecibo Observ** | **0.42** | **54** | ⇓ | *i* | P | **Pg** | **13 21 43.4** | **-0.4** |
| AOPR | | | | | | *e*S | **Sb** | **13 21 49.2** | **-1.0** |
| **IDE** | **Isla Desecheo** | **0.45** | **310** | ⇓ | *i* | P | **Pg** | **13 21 44.0** | **-0.3** |
| **IDE** | **Isla Desecheo** | **0.45** | **310** | | *e* | S | **Sg** | **13 21 50.1** | **-0.3** |
| **OBIP** | **Obispado Ponce** | **0.48** | **97** | ⇓ | *i* | P | **Pg** | **13 21 44.2** | **-0.7** |
| **OBIP** | **Obispado Ponce** | **0.48** | **97** | | *e* | S | **Sb** | **13 21 50.9** | **-1.1** |
| **OBIP** | **Obispado Ponce** | **0.48** | **97** | | | | **Pg** | **13 21 44.2** | **-0.7** |
| OBIP | | | | | | | **Sb** | **13 21 50.9** | **-1.1** |
| **OBIP** | **Obispado Ponce** | **0.48** | **97** | IAML | | | | 13 21 51.6 | |
| | comp=N,10μm,0.4s | | | | | | | | |
| **CELP** | **Cerrillos** | **0.50** | **93** | ⇓ | *e* | P | **Pb** | **13 21 45.4** | **-0.2** |
| **CELP** | **Cerrillos** | **0.50** | **93** | | *e* | S | **Sb** | **13 21 52.8** | **+0.1** |
| **CELP** | **Cerrillos** | **0.50** | **93** | | | | **Pb** | **13 21 45.4** | **-0.2** |
| CELP | | | | | | | **Sb** | **13 21 52.8** | **+0.1** |
| **CELP** | **Cerrillos** | **0.50** | **93** | IAML | | | | 13 21 53.2 | |
| | comp=E,10μm,0.2s | | | | | | | | |
| CELP | | | | IAML | | | | 13 21 53.3 | |
| | comp=N,14μm,0.4s | | | | | | | | |
| **ICMP** | **Isla Caja de M** | **0.59** | **111** | ⇑ | *i* | P | **Pb** | **13 21 47.6** | **+0.5** |
| **ICMP** | **Isla Caja de M** | **0.59** | **111** | | *e* | S | **Sn** | **13 21 56.1** | **-2.0** |
| **ICMP** | **Isla Caja de M** | **0.59** | **111** | | | | **Pb** | **13 21 47.6** | **+0.5** |
| ICMP | | | | | | | **Sn** | **13 21 56.1** | **-2.0** |
| **ICMP** | **Isla Caja de M** | **0.59** | **111** | IAML | | | | 13 21 57.5 | |
| | comp=E,8μm,0.6s | | | | | | | | |
| **EMPR** | **Esperanza - Ma** | **0.67** | **56** | ⇓ | *i* | P | **Pb** | **13 21 48.5** | **+0.1** |
| **EMPR** | **Esperanza - Ma** | **0.67** | **56** | | *e* | S | **Sn** | **13 21 58.2** | **-1.8** |
| **EMPR** | **Esperanza - Ma** | **0.67** | **56** | | | | **Pb** | **13 21 48.5** | **+0.1** |
| EMPR | | | | | | | **Sn** | **13 21 58.2** | **-1.8** |
| **SJG** | **San Juan** | **0.91** | **89** | Pg | | | **Pb** | **13 21 52.0** | **-0.6** |
| | comp=E,237nm,0.3s,baz=315,slow=21,SNR=104 | | | | | | | | |
| SJG | | | | Lg | | | Lg | 13 22 04.2 | |
| | comp=E,425nm,0.3s,baz=18,slow=19,SNR=14 | | | | | | | | |
| **SJG** | **San Juan** | **0.91** | **89** | | | | **Pb** | **13 21 51.8** | **-0.7** |
| SJG | | | | IAML | | | | 13 22 05.8 | |
| | comp=E,3μm,0.3s | | | | | | | | |
| SJG | | | | IAML | | | | 13 22 10.9 | |
| | comp=E,4μm,0.4s | | | | | | | | |
| **IGPR** | **InterUniversit** | **0.96** | **98** | ⇓ | *e* | P | **Pb** | **13 21 53.1** | **-0.3** |
| **IGPR** | **InterUniversit** | **0.96** | **98** | | *e* | S | **Sb** | **13 22 05.2** | **-0.7** |
| **GCPR** | **Guaynabo City** | **1.00** | **78** | ⇓ | *i* | P | **Pb** | **13 21 53.5** | **-0.5** |
| **GCPR** | **Guaynabo City** | **1.00** | **78** | | *e* | S | **Sg** | **13 22 06.7** | **-1.0** |
| **GCPR** | **Guaynabo City** | **1.00** | **78** | | | | **Pb** | **13 21 53.5** | **-0.5** |
| GCPR | | | | | | | **Sg** | **13 22 06.7** | **-1.0** |
| **GCPR** | **Guaynabo City** | **1.00** | **78** | IAML | | | | 13 22 11.5 | |
| | comp=N,3μm,0.3s | | | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.04** | **94** | ⇑ | *e* | P | **Pb** | **13 21 54.2** | **-0.5** |
| **PDPR** | **Patillas Dam,** | **1.04** | **94** | | *e* | S | **Sn** | **13 22 08.3** | **-0.8** |
| **PDPR** | **Patillas Dam,** | **1.04** | **94** | | | | **Pb** | **13 21 54.2** | **-0.5** |
| PDPR | | | | | | | **Sn** | **13 22 08.3** | **-0.8** |
| **PDPR** | **Patillas Dam,** | **1.04** | **94** | IAML | | | | 13 22 13.1 | |
| | comp=E,4μm,0.8s | | | | | | | | |
| **HUMP** | **Col San Antoni** | **1.20** | **88** | ⇑ | *e* | P | **Pn** | **13 21 56.6** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.20** | **88** | | *e* | S | **Sg** | **13 22 13.1** | **-0.9** |
| **HUMP** | **Col San Antoni** | **1.20** | **88** | | | | **Pn** | **13 21 56.6** | **-0.5** |
| HUMP | | | | | | | **Sg** | **13 22 13.1** | **-0.9** |
| **PCDR** | **Punta Cana, DR** | **1.28** | **289** | ⇑ | *e* | P | **Pn** | **13 21 57.6** | **-0.7** |
| **PCDR** | **Punta Cana, DR** | **1.28** | **289** | | *e* | S | **Sn** | **13 22 15.3** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **1.28** | **289** | | | | **Pn** | **13 21 57.6** | **-0.7** |
| PCDR | | | | | | | **Sn** | **13 22 15.3** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **1.28** | **289** | IAML | | | | 13 22 20.5 | |
| | comp=N,2μm,0.7s | | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.28** | **289** | *i* | P | | **Pn** | **13 21 57.6** | **-0.7** |
| PCDR | | | | | *e* | S | **Sn** | **13 22 14.9** | **-0.1** |
| PCDR | | | | IAML | | | | 13 22 20.4 | |
| | comp=Z,1μm,0.5s | | | | | | | | |
| **MTP** | **Monte Pirata** | **1.48** | **90** | ⇑ | *e* | P | **Pb** | **13 22 01.4** | **-0.9** |
| **MTP** | **Monte Pirata** | **1.48** | **90** | | *e* | S | **Sb** | **13 22 20.2** | **-0.6** |
| **MTP** | **Monte Pirata** | **1.48** | **90** | | | | **Pb** | **13 22 01.4** | **-0.9** |
| MTP | | | | | | | **Sb** | **13 22 20.2** | **-0.6** |
| **MTP** | **Monte Pirata** | **1.48** | **90** | IAML | | | | 13 22 24.5 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| MTP | | | | IAML | | | | 13 22 26.8 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **CUPR** | **Culebra, Puert** | **1.75** | **83** | ⇑ | *e* | P | **Pn** | **13 22 05.2** | **+0.5** |
| **CUPR** | **Culebra, Puert** | **1.75** | **83** | | | | **Pn** | **13 22 05.2** | **+0.5** |
| **STVI** | **Saint Thomas** | **2.06** | **83** | ⇑ | *e* | P | **Pn** | **13 22 10.2** | **+1.1** |
| **STVI** | **Saint Thomas** | **2.06** | **83** | | | | **Pn** | **13 22 10.2** | **+1.1** |
| **STVI** | **Saint Thomas** | **2.06** | **83** | IAML | | | | 13 22 42.2 | |
| | comp=N,743nm,0.3s | | | | | | | | |
| **TBVI** | **Tortola** | **2.39** | **82** | ⇑ | *e* | P | **Pn** | **13 22 14.6** | **+1.1** |
| **TBVI** | **Tortola** | **2.39** | **82** | | *e* | S | **Sn** | **13 22 43.5** | **+1.1** |
| **SMRT** | **St. Maarten** | **3.84** | **90** | Pn | | | **Pn** | **13 22 34.9** | **+1.4** |
| SMRT | | | | IAML | | | | 13 23 23.5 | |
| | comp=E,172nm,0.2s | | | | | | | | |
| SMRT | | | | IAML | | | | 13 23 26.1 | |
| | comp=N,211nm,0.2s | | | | | | | | |
| **SMRT** | **St. Maarten** | **3.84** | **90** | *e* | P | | **Pn** | **13 22 35.1** | **+1.5** |
| SMRT | | | | *e* | S | | **Sn** | **13 22 20.0** | **+1.7** |
| **SDDR** | **Presa de Saban** | **4.06** | **283** | | | | **Pn** | **13 22 38.1** | **+1.4** |
| SDDR | | | | IAML | | | | 13 23 40.5 | |
| | comp=N,163nm,0.8s | | | | | | | | |
| SDDR | | | | IAML | | | | 13 23 46.0 | |
| | comp=N,185nm,0.7s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **4.06** | **283** | *e* | P | | **Pb** | **13 22 42.6** | **-3.7** |
| **SDDR** | **Presa de Saban** | **4.06** | **283** | *e* | S | | **Sb** | **13 23 35.5** | **+0.3** |
| **GRTK** | **Grand Turk** | **5.09** | **313** | Pn | | | **Pn** | **13 22 51.7** | **+1.0** |
| **ANBD** | **Bethesda, Anti** | **5.20** | **101** | *e* | P | | **Pn** | **13 22 53.3** | **+1.0** |
| **ANBD** | **Bethesda, Anti** | **5.20** | **101** | *e* | S | | **Sn** | **13 23 55.8** | **+3.8** |
| **GDHS** | **Morne Mazeau,** | **5.42** | **109** | Pn | | | **Pn** | **13 22 56.2** | **+0.9** |
| **TBG** | **Guadaloupe-3** | **5.69** | **112** | *e* | P | | **Pn** | **13 22 59.9** | **+1.0** |
| **MAGL** | **Barre de l'ile** | **5.97** | **110** | Pn | | | **Pn** | **13 23 04.8** | **+1.9** |
| **MAGL** | **Barre de l'ile** | **5.97** | **110** | *e* | P | | **Pn** | **13 23 03.8** | **+1.0** |
| **DSLB** | **Salisbury** | **6.06** | **115** | *e* | P | | **Pn** | **13 23 04.9** | **+0.8** |
| **DSLB** | **Salisbury** | **6.06** | **115** | *e* | S | | **Sn** | **13 24 08.8** | **-4.2** |
| **FDF** | **Fort de France** | **6.62** | **119** | Pn | | | **Pn** | **13 23 11.6** | **-0.3** |
| **BIM** | **Bigot** | **6.80** | **121** | Pn | | | **Pn** | **13 23 14.0** | **-0.3** |
| **BIRV** | **Birongo** | **7.62** | **174** | Pn | | | **Pn** | **13 23 26.3** | **+0.8** |
| **MDP** | **Montagnes des** | **19.15** | **131** | LR | | | LR | 13 35 03.4 | |
| | comp=N,46nm,18.9s,baz=288,slow=42 | | | | | | | | |
| **SIV** | **San Ignacio** | **34.39** | **170** | LR | | | LR | 13 43 45.8 | |
| | comp=N,59nm,18.1s,baz=258,slow=38 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **35.15** | **295** | P | | | **P** | **13 28 32.7** | **+4.3** |
| | comp=N,0.4nm,0.7s,baz=104,slow=9.4,SNR=7.1 | | | | | | | | |
| **LVC** | **Limon Verde** | **40.50** | **183** | LR | | | LR | 13 49 58.0 | |
| | comp=N,75nm,18.0s,baz=210,slow=42 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **55.12** | **335** | P | | | **P** | **13 31 07.3** | **+1.1** |
| | comp=N,0.3nm,0.7s,baz=108,slow=7.1,SNR=2.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.12** | **83** | P | | | **P** | **13 32 19.6** | **-2.5** |
| | comp=N,0.4nm,0.6s,baz=301,slow=3.8,SNR=2.3 | | | | | | | | |

*MAN **22** 13:38:57.4, 13°.86N×120°.46E, h93km, mb5.3, ML4.2, MS4.4*
*MAN INTENSITY III - PUERTO GALERA, ORIENTAL MINDORO.*
*IDC **22** 13:38:58.1±0.6, 13°.82N×120°.71E, h104km±6km, mb3.3/8, mb1 3.4/8, mb1mx3.2/50, mbtmp3.6/8, Error ellipse: s-maj=27.1km s-min=11.3km az=81.0*
**ISC 22 13:38:57.9**±0.6, **13°.84N**±0°.05×**120°.55E**±0°.06, **h102**km±5km, **n34**, σ1**s29**/43, **mb4.2**/17, **4C-7D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.32** | **250** | ⇑ | *e*P | **Pn** | **13 39 12.7** | **0.0** |
| LUBP | | | | | *i* S | **Sn** | **13 39 23.1** | **-0.8** |
| **TGY** | **Tagaytay City** | **0.45** | **55** | P | | **Pn** | **13 39 14.3** | **+0.6** |
| | 833nm,0.3s,baz=252,slow=1.4,SNR=70 | | | | | | | |
| TGY | | | | S | | **Sn** | **13 39 27.0** | **+1.6** |
| | 3μm,0.3s,baz=10,slow=18,SNR=18 | | | | | | | |
| **TGY** | **Tagaytay City** | **0.45** | **55** | ⇓ | *e*P | **Pn** | **13 39 14.2** | **+0.6** |
| TGY | | | | | *e*S | **Sn** | **13 39 27.1** | **+1.7** |
| **PGP** | **Puerto Galera** | **0.52** | **131** | ⇓ | *e*P | **Pn** | **13 39 14.0** | **-0.1** |
| PGP | | | | | *e*S | **Sn** | **13 39 27.6** | **+1.5** |
| **LQP** | **Lukban** | **0.99** | **74** | ⇓ | *i*P | **Pn** | **13 39 19.5** | **+0.9** |
| LQP | | | | | *i* S | **Sn** | **13 39 27.8** | **-6.4** |
| **BOAC** | **Boac** | **1.31** | **107** | ⇓ | *i*P | **Pn** | **13 39 22.8** | **+0.8** |
| **SJMP** | **San Jose** | **1.48** | **158** | ⇓ | *i*P | **Pn** | **13 39 24.6** | **+0.6** |
| **PCPH** | **Palayan** | **1.79** | **17** | ⇑ | *e*P | **Pn** | **13 39 27.3** | **-0.6** |
| PCPH | | | | | *e*S | **Sn** | **13 39 51.9** | **+1.2** |
| **BUSP** | **Coron** | **1.86** | **191** | ⇑ | *e*P | **Pn** | **13 39 28.3** | **-0.5** |
| **SCZP** | **Santa Cruz** | **2.02** | **342** | ⇓ | *i*P | **Pn** | **13 39 30.3** | **-0.5** |
| **ENPP** | **El Nido** | **2.84** | **203** | ⇓ | *i*P | **Pn** | **13 39 41.4** | **-0.3** |
| **RCP** | **Roxas** | **3.12** | **136** | ⇑ | *e*P | **Pn** | **13 39 46.8** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **21.25** | **285** | P | | **P** | **13 43 38.0** | **+1.8** |
| | 2.2nm,0.8s,baz=90,slow=8.9,SNR=20 | | | | | | | |
| **BATI** | **Baumata** | **24.09** | **172** | P | | **P** | **13 44 04.4** | **+0.2** |
| | 9.9nm,0.4s,baz=30,slow=23,SNR=2.4 | | | | | | | |
| **TAPN** | **Taplejung** | **33.43** | **299** | *e*P | | **P** | **13 45 27.7** | **+0.1** |
| **ODAN** | **Odare** | **33.57** | **298** | *e*P | | **P** | **13 45 29.1** | **+0.4** |
| **RAMN** | **Ramite** | **34.27** | **298** | *e*P | | **P** | **13 45 35.7** | **+0.9** |
| | 4.7nm,0.6s | | | | | | | |
| **JIRN** | **Jiri** | **34.82** | **299** | *e*P | | **P** | **13 45 39.9** | **+0.2** |
| | 27nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **35.15** | **299** | *e*P | | **P** | **13 45 42.9** | **+0.4** |
| | 38nm,0.8s | | | | | | | |
| **PKI** | **Pulchoki** | **35.46** | **298** | *e*P | | **P** | **13 45 44.9** | **-0.2** |
| **PKIN** | **Phulchoki** | **35.47** | **298** | *e*P | | **P** | **13 45 44.9** | **-0.3** |
| | 1.9nm,0.2s | | | | | | | |
| **KKN** | **Kakani** | **35.63** | **299** | *e*P | | **P** | **13 45 46.4** | **-0.1** |
| | 1.7nm,0.2s | | | | | | | |
| **DMN** | **Daman** | **35.73** | **298** | *e*P | | **P** | **13 45 47.2** | **-0.2** |
| | 1.7nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **35.88** | **344** | P | | **P** | **13 45 48.4** | **+0.1** |
| | 2.1nm,0.5s,baz=165,slow=9.8,SNR=21 | | | | | | | |
| **WRA** | **Warramunga Arr** | **36.21** | **158** | P | | **P** | **13 45 50.4** | **-0.8** |
| | 0.3nm,0.6s,baz=339,slow=9.6,SNR=2.0 | | | | | | | |
| WRA | | | | pP | | **pP** | **13 46 13.6** | **-0.7** |
| | 1.0nm,0.8s,baz=332,slow=10.0,SNR=4.7 | | | | | | | |
| **GKN** | **Gorkha** | **36.23** | **299** | *e*P | | **P** | **13 45 51.0** | **-0.6** |
| | 2.0nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **37.06** | **298** | *e*P | | **P** | **13 45 58.7** | **+0.1** |
| | 1.1nm,0.2s | | | | | | | |
| **DANN** | **Dangsing** | **37.07** | **299** | *e*P | | **P** | **13 45 58.5** | **-0.3** |
| **PYUN** | **Piuthan** | **37.66** | **298** | *e*P | | **P** | **13 46 03.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **39.50** | **161** | P | | **P** | **13 46 18.3** | **-0.5** |
| | 0.2nm,0.4s,baz=335,slow=7.7,SNR=13 | | | | | | | |
| ASAR | | | | pP | | **pP** | **13 46 41.7** | **-0.7** |
| | 0.7nm,0.6s,baz=337,slow=6.8,SNR=6.8 | | | | | | | |
| ASAR | | | | sP | | **sP** | **13 46 53.8** | **-0.2** |
| | 0.8nm,0.7s,baz=338,slow=6.5,SNR=4.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.83** | **324** | P | | **P** | **13 47 10.5** | **+0.7** |
| | 0.4nm,0.5s,baz=129,slow=7.9,SNR=1.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.87** | **333** | P | | **P** | **13 47 33.5** | **+0.4** |
| | 0.4nm,0.4s,baz=105,slow=5.5,SNR=1.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.99** | **326** | P | | **P** | **13 47 42.6** | **+0.8** |
| | 0.5nm,0.6s,baz=133,slow=7.6,SNR=4.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.70** | **22** | P | | **P** | **13 51 57.5** | **-0.8** |
| | 0.1nm,0.4s,baz=312,slow=4.3,SNR=5.3 | | | | | | | |

*MOS **22** 13:38:59.2±0.9, 50°.27N×156°.03E, h122km, mb4.1/11, Error ellipse: s-maj=14.2km s-min=4.2km az=75.2*
*MOS Felt (II-III) at Severo-Kuril'sk.*
*KRSC **22** 13:39:00.7±1.7, 50°.18N×156°.93E, h100km±19km, ML4.6*
*NEIC **22** 13:39:03.0±1.4, 50°.5N±0°.1×156°.1E±0°.2, h129km±8km, mb4.2/43, Error ellipse: s-maj=18.6km s-min=12.9km az=134.0*
*IDC **22** 13:39:04.3±2.3, 50°.59N×155°.98E, h142km±20km, mb3.5/14, mb1 3.5/19, mb1mx3.4/55, mbtmp3.8/19, Error ellipse: s-maj=19.0km s-min=14.3km az=145.0*
**ISC 22 13:39:01.4**±0.8, **50°.36N**±0°.07×**156°.28E**±0°.07, **h124**km±6km, **n148**, σ1**s26**/151, **mb4.0**/37, **2D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.34** | **342** | ⇓ | *i*P | **Pn** | **13 39 19.0** | **+0.2** |
| SKR | | | | | *i* S | **Sn** | **13 39 31.5** | **-0.6** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,5μm,0.3s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=N,12μm,0.3s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=E,7μm,0.2s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **0.34** | **342** | | *e*P | **Pn** | **13 39 19.1** | **+0.2** |
| SKR | | | | | *e*S | **Sn** | **13 39 31.6** | **-0.6** |
| **PAU** | **Pauzhetka** | **1.16** | **17** | PN | | **Pn** | **13 39 25.8** | **+0.5** |
| PAU | | | | S | | **Sn** | **13 39 44.4** | **+0.9** |
| **PAU** | **Pauzhetka** | **1.16** | **17** | *e*P | | **Pn** | **13 39 25.8** | **+0.5** |
| PAU | | | | *e*S | | **Sn** | **13 39 44.4** | **+0.9** |
| **KDTR** | **Khodutka, Kamc** | **1.84** | **37** | PN | | **Pn** | **13 39 32.5** | **-0.5** |
| KDTR | | | | S | | **Sn** | **13 39 55.7** | **-1.5** |
| **KDTR** | **Khodutka, Kamc** | **1.84** | **37** | *e*P | | **Pn** | **13 39 32.5** | **-0.5** |
| KDTR | | | | *e*S | | **Sn** | **13 39 55.7** | **-1.5** |
| **MTVR** | **Mutnovka** | **2.44** | **28** | PN | | **Pn** | **13 39 41.4** | **+0.8** |
| MTVR | | | | S | | **Sn** | **13 40 11.2** | **+0.4** |
| **MTVR** | **Mutnovka** | **2.44** | **28** | *e*P | | **Pn** | **13 39 41.4** | **+0.8** |
| MTVR | | | | *e*S | | **Sn** | **13 40 11.2** | **+0.4** |
| **GRL** | **Gorelyy** | **2.47** | **26** | PN | | **Pn** | **13 39 42.1** | **+1.1** |
| **GRL** | **Gorelyy** | **2.47** | **26** | *e*P | | **Pn** | **13 39 42.1** | **+1.1** |
| **RUS** | **Russkaya** | **2.51** | **33** | PN | | **Pn** | **13 39 41.3** | **0.0** |
| **RUS** | **Russkaya** | **2.51** | **33** | *e*P | | **Pn** | **13 39 41.3** | **0.0** |
| **APC** | **Apacha** | **2.63** | **12** | PN | | **Pn** | **13 39 44.3** | **+1.4** |
| **APC** | **Apacha** | **2.63** | **12** | *e*P | | **Pn** | **13 39 44.3** | **+1.4** |
| **KRMR** | **Karymshinskiy** | **2.73** | **24** | PN | | **Pn** | **13 39 44.7** | **+0.5** |
| **KRMR** | **Karymshinskiy** | **2.73** | **24** | *e*P | | **Pn** | **13 39 44.7** | **+0.5** |
| **PEA0B** | **Petropavlovsk-** | **2.89** | **17** | PN | | **Pn** | **13 39 47.8** | **+1.5** |
| **PEA0B** | **Petropavlovsk-** | **2.89** | **17** | | | **Pn** | **13 39 47.8** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **2.89** | **17** | P | | **Pn** | **13 39 46.9** | **+0.5** |
| | comp=E,3.1nm,0.3s,baz=176,slow=12,SNR=77 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.89** | **17** | | | **Pn** | **13 39 46.7** | **+0.4** |
| **PET** | **Petropavlovsk** | **3.05** | **28** | *e*PN | | **Pn** | **13 39 48.8** | **+0.4** |
| PET | | | | *e*S | | **Sn** | **13 40 23.3** | **-1.3** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.4s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=N,138nm,0.6s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=E,85nm,0.6s | | | | | | | |
| **PET** | **Petropavlovsk** | **3.05** | **28** | | | **Pn** | **13 39 48.4** | **0.0** |
| **PET** | **Petropavlovsk** | **3.05** | **28** | *e*P | | **Pn** | **13 39 49.0** | **+0.6** |
| PET | | | | *e*S | | **Sn** | **13 40 24.2** | **-0.4** |
| **DALK** | **Dalny** | **3.09** | **29** | PN | | **Pn** | **13 39 49.7** | **+0.9** |
| **DALK** | **Dalny** | **3.09** | **29** | *e*P | | **Pn** | **13 39 49.7** | **+0.9** |
| **UGLR** | **Uglovaya** | **3.26** | **28** | PN | | **Pn** | **13 39 52.7** | **+1.4** |
| **UGLR** | **Uglovaya** | **3.26** | **28** | *e*P | | **Pn** | **13 39 52.7** | **+1.4** |
| **KOK** | **Koryaka** | **3.28** | **26** | PN | | **Pn** | **13 39 53.4** | **+1.9** |
| **KOK** | **Koryaka** | **3.28** | **26** | *e*P | | **Pn** | **13 39 53.4** | **+1.9** |
| **AVH** | **Avacha** | **3.29** | **27** | PN | | **Pn** | **13 39 53.6** | **+2.0** |
| **AVH** | **Avacha** | **3.29** | **27** | *e*P | | **Pn** | **13 39 53.6** | **+2.0** |
| **SMAR** | **Somma** | **3.30** | **27** | PN | | **Pn** | **13 39 53.3** | **+1.4** |
| **SMAR** | **Somma** | **3.30** | **27** | *e*P | | **Pn** | **13 39 53.3** | **+1.4** |
| **KRER** | **Koryakskii** | **3.33** | **26** | PN | | **Pn** | **13 39 53.8** | **+1.6** |
| **KRER** | **Koryakskii** | **3.33** | **26** | *e*P | | **Pn** | **13 39 53.8** | **+1.6** |
| **SDLR** | **Sedlovina** | **3.34** | **28** | PN | | **Pn** | **13 39 53.1** | **+0.8** |
| **SDLR** | **Sedlovina** | **3.34** | **28** | *e*P | | **Pn** | **13 39 53.1** | **+0.8** |
| **NLC** | **Nalytchevo** | **3.40** | **33** | PN | | **Pn** | **13 39 52.3** | **-0.6** |
| **NLC** | **Nalytchevo** | **3.40** | **33** | *e*P | | **Pn** | **13 39 52.3** | **-0.6** |
| **GNL** | **Ganaly** | **3.50** | **16** | PN | | **Pn** | **13 39 56.0** | **+1.7** |
| **GNL** | **Ganaly** | **3.50** | **16** | *e*P | | **Pn** | **13 39 56.0** | **+1.7** |
| **SPN** | **Mys Shipunski** | **3.60** | **39** | PN | | **Pn** | **13 39 55.2** | **-0.4** |
| SPN | | | | S | | **Sn** | **13 40 34.2** | **-3.3** |
| **SPN** | **Mys Shipunski** | **3.60** | **39** | *e*P | | **Pn** | **13 39 55.2** | **-0.4** |
| SPN | | | | *e*S | | **Sn** | **13 40 34.2** | **-3.3** |
| **MKZ** | **Mys Kozlova** | **5.37** | **36** | PN | | **Pn** | **13 40 18.1** | **-1.0** |
| **MKZ** | **Mys Kozlova** | **5.37** | **36** | *e*P | | **Pn** | **13 40 18.1** | **-1.0** |
| **TUMR** | **Tumrok** | **5.46** | **24** | PN | | **Pn** | **13 40 21.4** | **+0.8** |
| **TUMR** | **Tumrok** | **5.46** | **24** | *e*P | | **Pn** | **13 40 21.4** | **+0.8** |
| **BZGR** | **Bezymyannyi-Gr** | **6.19** | **24** | PN | | **Pn** | **13 40 32.1** | **+1.7** |
| **BZGR** | **Bezymyannyi-Gr** | **6.19** | **24** | *e*P | | **Pn** | **13 40 32.1** | **+1.7** |
| **LGNR** | **Loginova** | **6.32** | **23** | PN | | **Pn** | **13 40 33.9** | **+1.7** |
| **LGNR** | **Loginova** | **6.32** | **23** | *e*P | | **Pn** | **13 40 33.9** | **+1.7** |
| **CIRR** | **Tsirk** | **6.36** | **23** | PN | | **Pn** | **13 40 36.4** | **+3.7** |
| **CIRR** | **Tsirk** | **6.36** | **23** | *e*P | | **Pn** | **13 40 36.4** | **+3.7** |
| **KBTR** | **Krutoberegovo** | **7.05** | **31** | PN | | **Pn** | **13 40 42.1** | **+0.3** |
| **KBTR** | **Krutoberegovo** | **7.05** | **31** | *e*P | | **Pn** | **13 40 42.1** | **+0.3** |
| **YUK** | **Yuzh-Kuril'sk** | **9.50** | **232** | *i* | PN | **Pn** | **13 41 14.7** | **-0.2** |
| **MA2** | **Magadan** | **9.76** | **343** | P | | **Pn** | **13 41 18.4** | **0.0** |
| | comp=E,0.4nm,0.3s,baz=168,slow=7.5,SNR=10 | | | | | | | |
| **MA2** | **Magadan** | **9.76** | **343** | PN | | **Pn** | **13 41 18.9** | **+0.5** |
| **MA2** | **Magadan** | **9.76** | **343** | | | **Pn** | **13 41 18.9** | **+0.5** |
| **SEY** | **Seymchan** | **12.79** | **352** | P | | **Pn** | **13 41 58.4** | **0.0** |
| | comp=E,0.1nm,0.3s,baz=41,slow=24,SNR=2.6 | | | | | | | |
| **KLR** | **Kul'dur** | **15.87** | **275** | P | | **P** | **13 42 38.1** | **-0.7** |
| | comp=E,0.1nm,0.3s,baz=256,slow=16,SNR=2.8 | | | | | | | |
| **JYT** | **Yasato** | **18.29** | **226** | P | | **P** | **13 43 05.1** | **-0.4** |
| JYT | | | | IAmb | | IAmb | 13 43 32.0 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| **BILL** | **Bilibino** | **18.41** | **12** | ⇓ | *i*P | **P** | **13 43 07.1** | **+0.5** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **BILL** | **Bilibino** | **18.41** | **12** | P | | **P** | **13 43 06.2** | **-0.4** |
| **YAK** | **Yakutsk** | **18.69** | **319** | P | | **P** | **13 43 08.7** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=136,slow=2.0,SNR=2.4 | | | | | | | |
| **YAK** | **Yakutsk** | **18.69** | **319** | *i* | P | **P** | **13 43 08.3** | **-1.4** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **YAK** | **Yakutsk** | **18.69** | **319** | IAmb | | IAmb | 13 43 14.9 | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **JMN** | **Monobe** | **23.37** | **233** | P | | **P** | **13 43 56.2** | **-2.6** |
| JMN | | | | IAmb | | IAmb | 13 43 56.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ANM** | **Nome** | **24.55** | **40** | P | | **P** | **13 44 11.1** | **+1.9** |
| ANM | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | | |
| **ANM** | **Nome** | **24.55** | **40** | P | | **P** | **13 44 11.1** | **+1.9** |
| **TIXI** | **Tiksi** | **24.70** | **340** | P | | **P** | **13 44 09.0** | **-1.4** |
| | comp=Z,3.6nm,0.6s,baz=96,slow=21,SNR=23 | | | | | | | |
| **TIXI** | **Tiksi** | **24.70** | **340** | *i* | P | **P** | **13 44 08.9** | **-1.5** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **TIXI** | **Tiksi** | **24.70** | **340** | P | | **P** | **13 44 09.1** | **-1.3** |
| TIXI | | | | IAmb | | IAmb | 13 44 10.3 | |
| | comp=Z,4.8nm,0.5s | | | | | | | |
| **TTA** | **Tatalina** | **28.35** | **45** | P | | **P** | **13 44 44.3** | **+0.9** |
| TTA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **TTA** | **Tatalina** | **28.35** | **45** | P | | **P** | **13 44 44.3** | **+0.9** |
| TTA | | | | IAmb | | IAmb | 13 45 05.3 | |
| | comp=Z,7.5nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **29.28** | **43** | P | | **P** | **13 44 52.6** | **+1.2** |
| J20K | | | | IAmb | | IAmb | 13 45 19.8 | |
| | comp=Z,3.8nm,1.4s | | | | | | | |
| **IMAR** | **Indian Mountai** | **29.62** | **39** | P | | **P** | **13 44 54.8** | **+0.2** |
| **H21K** | **Melozitna Rive** | **29.98** | **40** | P | | **P** | **13 44 58.8** | **+1.1** |
| **BPAW** | **Bear Paw Mtn.** | **30.66** | **43** | P | | **P** | **13 45 04.1** | **+0.4** |
| BPAW | | | | IAmb | | IAmb | 13 45 32.1 | |
| | comp=Z,4.5nm,1.3s | | | | | | | |
| **COLD** | **Coldfoot** | **31.17** | **37** | P | | **P** | **13 45 09.0** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **31.57** | **35** | P | | **P** | **13 45 12.4** | **+0.7** |
| TOLK | | | | IAmb | | IAmb | 13 45 13.7 | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| **RND** | **Reindeer** | **31.61** | **45** | P | | **P** | **13 45 12.7** | **+0.6** |
| RND | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | | |
| **RND** | **Reindeer** | **31.61** | **45** | P | | **P** | **13 45 12.7** | **+0.6** |
| RND | | | | IAmb | | IAmb | 13 45 26.8 | |
| | comp=Z,7.1nm,1.4s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.70** | **161** | T | | T | 14 19 11.6 | |
| | baz=348,slow=76,SNR=4.5 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.72** | **161** | T | | T | 14 19 07.9 | |
| | baz=348,slow=76,SNR=7.3 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31

comp=Z,0.3nm,0.5s,baz=14,slow=5.1,SNR=13

*IDC **22** 13:39:03.2±0.7,44˚.67N×81˚.58E,h0km,mb3.8/9, mb1 3.9/15,mb1mx3.7/55,mbtmp3.7/15,ML3.4/6,Error ellipse: s-maj=13.0km s-min=9.8km az=107.0*

*BJI **22** 13:39:06.4±0.0,44˚.71N×81˚.55E,h22km,mb4.3/19, mB4.5/7,ML4.0/10*

*SOME **22** 13:39:06.4,44˚.65N×81˚.60E,h25km,MS3.3*

*NNC **22** 13:39:06.1±0.6,44˚.73N×81˚.45E,h0km,mb4.6,mpv4.3, Error ellipse: s-maj=8.2km s-min=3.0km az=130.0*

*MOS **22** 13:39:09.1±1.0,44˚.82N×81˚.34E,h56km,mb5.2/4,Error ellipse: s-maj=8.6km s-min=5.6km az=70.3*

*NEIC **22** 13:39:10.4±1.8,44˚.82N±0˚.08×81˚.4E±0˚.1,h44km±7km, mb4.5/26,Error ellipse: s-maj=12.6km s-min=9.3km az=133.0*

**ISC 22 13:39:06.0**±1.2,**44˚.78N**±0˚.03×**81˚.61E**±0˚.03,**h10**km±8km, **n171**,σ1§**47**/202,**mb4.3**/29,**18C-17D**,**Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DJR** | **Jarkent** | **1.37** | **252** | *e*P | **Pn** | **13 39 31.3** | **0.0** |
| | 460nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **13 39 49.0** | **-1.2** |
| | 1µm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **1.61** | **215** | *e*P | **Pn** | **13 39 34.0** | **-0.7** |
| | 203nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **13 39 54.2** | **-1.4** |
| | 1µm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **1.67** | **288** | *e*P | **Pg** | **13 39 37.2** | **-0.8** |
| | 168nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **13 39 59.3** | **-0.4** |
| | 2µm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **1.78** | **257** | *e*P | **Pb** | **13 39 38.7** | **-0.2** |
| | 407nm,0.1s | | | | | | |
| KNOS | | | | *e*S | **Sn** | **13 40 01.6** | **+1.7** |
| | 2µm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **2.04** | **7** | PN | **Pb** | **13 39 42.9** | **-0.4** |
| MAKZ | | | | | | 13 40 10.9 | |
| **MAKZ** | **Makanchi** | **2.04** | **7** | | **Pb** | **13 39 43.0** | **-0.2** |
| MAKZ | | | | Sn | **Sn** | **13 40 06.8** | **+0.7** |
| **MAKZ** | **Makanchi** | **2.04** | **7** | ⇓Pn | **Pb** | **13 39 43.1** | **-0.1** |
| | 123nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 13 40 10.9 | |
| | 285nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **2.07** | **13** | PN | **Pb** | **13 39 43.3** | **-0.4** |
| MK31 | | | | | | 13 40 12.3 | |
| **MK31** | **Makanchi Array** | **2.07** | **13** | | **Pb** | **13 39 43.4** | **-0.4** |
| **MK31** | **Makanchi Array** | **2.07** | **13** | Pn | **Pb** | **13 39 43.4** | **-0.4** |
| | 102nm,0.4s,baz=199,slow=14,SNR=5887 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 13 40 12.3 | |
| | 372nm,0.4s,baz=194,slow=30 | | | | | | |
| **MKAR** | **Makanchi Array** | **2.07** | **13** | Pn | **Pb** | **13 39 43.5** | **-0.2** |
| | 57nm,0.3s,baz=197,slow=15,SNR=1136 | | | | | | |
| MKAR | | | | Lg | Lg | 13 40 11.2 | |
| | 224nm,0.3s,baz=196,slow=31,SNR=65 | | | | | | |
| **PDGK** | **Podgornoye** | **2.10** | **227** | PN | **Pn** | **13 39 40.8** | **-0.6** |
| PDGK | | | | | | 13 40 08.8 | |
| **PDGK** | **Podgornoye** | **2.10** | **227** | ⇑Pn | **Pn** | **13 39 41.1** | **-0.3** |
| | 118nm,0.3s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 13 40 08.9 | |
| | 729nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **2.48** | **230** | ⇑*e*PN | **Pn** | **13 39 46.4** | **-0.2** |
| **UZB** | **Uzynbulak** | **2.48** | **230** | *e*P | **Pn** | **13 39 47.1** | **+0.5** |
| | 179nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sn** | **13 40 17.2** | **+0.2** |
| | 597nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **2.48** | **230** | ⇑*e*Pn | **Pn** | **13 39 46.5** | **-0.2** |
| | baz=225 | | | | | | |
| **UZB** | **Uzynbulak** | **2.48** | **230** | Pg | **Pb** | **13 39 49.1** | **-1.6** |
| | 45nm,0.1s | | | | | | |
| UZB | | | | Lg | Lg | 13 40 19.6 | |
| | 597nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.48** | **239** | *e*PN | **Pn** | **13 39 46.5** | **0.0** |
| **KPKS** | **Kokpek** | **2.48** | **239** | *e*P | **Pn** | **13 39 48.8** | **+2.2** |
| | 68nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sn** | **13 40 19.4** | **+2.4** |
| | 2µm,0.6s | | | | | | |
| **KPKS** | **Kokpek** | **2.48** | **239** | *e*Pn | **Pn** | **13 39 46.5** | **0.0** |
| | baz=235 | | | | | | |
| **ARXS** | **Arharly** | **2.76** | **259** | *e*PN | **Pn** | **13 39 51.1** | **+0.7** |
| **ARXS** | **Arharly** | **2.76** | **259** | *e*P | **Pb** | **13 39 55.2** | **-0.3** |
| | 40nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **13 40 30.4** | **+0.9** |
| | 971nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **2.76** | **259** | Pg | **Pb** | **13 39 55.2** | **-0.3** |
| | 40nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 13 40 30.4 | |
| | 971nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **2.79** | **244** | *e*P | **Pb** | **13 39 55.0** | **-1.0** |
| | 27nm,0.3s | | | | | | |
| KURS | | | | *e*S | **Sb** | **13 40 29.6** | **-0.6** |
| | 117nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **2.79** | **244** | Pg | **Pb** | **13 39 55.0** | **-1.0** |
| | 27nm,0.3s | | | | | | |
| KURS | | | | Lg | Lg | 13 40 29.6 | |
| | 117nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.80** | **236** | *e*PN | **Pn** | **13 39 50.9** | **-0.1** |
| **ZHN** | **Zhinishke** | **2.80** | **236** | *e*P | **Pb** | **13 39 54.9** | **-1.3** |
| | 152nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **13 40 29.5** | **-1.1** |
| | 903nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.80** | **236** | *e*P | **Pn** | **13 39 50.9** | **-0.1** |
| | baz=232 | | | | | | |
| ZHN | | | | *e*Pg | **Pb** | **13 39 55.2** | **-0.9** |
| | baz=232 | | | | | | |
| **ZHN** | **Zhinishke** | **2.80** | **236** | Pg | **Pb** | **13 39 54.9** | **-1.3** |
| | 152nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 13 40 29.5 | |
| | 903nm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.88** | **234** | *e*PN | **Pn** | **13 39 51.9** | **-0.2** |
| **SATY** | **Saty** | **2.88** | **234** | *e*P | **Pn** | **13 39 54.9** | **+2.8** |
| | 67nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sn** | **13 40 30.6** | **+3.7** |
| | 1µm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.88** | **234** | *e*Pn | **Pn** | **13 39 52.0** | **-0.2** |
| | baz=231 | | | | | | |
| **SATY** | **Saty** | **2.88** | **234** | Pg | **Pb** | **13 39 56.6** | **-1.0** |
| | 67nm,0.1s | | | | | | |
| SATY | | | | Lg | Lg | 13 40 32.5 | |
| | 1µm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **3.44** | **256** | *e*P | **Pb** | **13 40 06.9** | **-0.1** |
| | 26nm,0.3s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **13 40 50.2** | **+1.3** |
| | 511nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **3.44** | **256** | *e*Pg | **Pb** | **13 40 06.1** | **-0.9** |
| | baz=254 | | | | | | |
| **CHKK** | **Chushkaly** | **3.44** | **256** | Pg | **Pb** | **13 40 06.9** | **-0.1** |
| | 26nm,0.3s | | | | | | |
| CHKK | | | | Lg | Lg | 13 40 50.2 | |
| | 511nm,0.2s | | | | | | |
| **ZSN** | **Zaisan** | **3.50** | **39** | *e*PN | **Pg** | **13 40 13.4** | **+0.3** |
| **ZSN** | **Zaisan** | **3.50** | **39** | *e*P | **Pb** | **13 40 07.7** | **-0.4** |
| | 7.6nm,0.5s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **13 40 52.5** | **+1.8** |
| | 308nm,0.7s | | | | | | |
| **ZSN** | **Zaisan** | **3.50** | **39** | *e*Pg | **Pg** | **13 40 13.5** | **+0.3** |
| | baz=42 | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.59** | **246** | *e*P | **Pb** | **13 40 10.1** | **+0.4** |
| | 95nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **13 40 55.5** | **+2.1** |
| | 376nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.59** | **246** | Pg | **Pb** | **13 40 10.1** | **+0.4** |
| | 95nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 13 40 55.5 | |
| | 376nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.67** | **245** | *e*PN | **Pn** | **13 40 02.6** | **-0.3** |
| **MDOK** | **Medeo** | **3.67** | **245** | *e*P | **Pb** | **13 40 11.7** | **+0.7** |
| | 130nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **13 40 58.1** | **+2.6** |
| | 309nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **3.67** | **245** | *e*Pn | **Pn** | **13 40 02.6** | **-0.3** |
| | baz=243 | | | | | | |
| MDOK | | | | *e*Pg | **Pb** | **13 40 11.3** | **+0.3** |
| | baz=243 | | | | | | |
| **MDOK** | **Medeo** | **3.67** | **245** | ⇓Pn | **Pn** | **13 40 02.9** | **0.0** |
| | 6.2nm,0.8s | | | | | | |
| MDOK | | | | ⇓Pg | **Pb** | **13 40 13.1** | **+2.2** |
| | 87nm,0.5s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 13 41 00.2 | |
| | 256nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.67** | **245** | Pg | **Pb** | **13 40 11.7** | **+0.7** |
| | 130nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 13 40 58.2 | |
| | 309nm,0.8s | | | | | | |
| **KNDC** | **Almaty** | | **3.69** | **247** | PN | **Pb** | **13 40 13.6** | **+2.2** |
| **KNDC** | **Almaty** | | **3.69** | **247** | ⇓Pg | **Pb** | **13 40 13.8** | **+2.4** |
| | 52nm,0.3s | | | | | | | |
| KNDC | | | | | ⇓Lg | Lg | 13 41 02.6 | |
| | 501nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | | **3.69** | **255** | *e*P | **Pb** | **13 40 11.5** | **+0.1** |
| | 29nm,0.4s | | | | | | | |
| KTBS | | | | | *e*S | **Sb** | **13 40 57.8** | **+1.6** |
| | 473nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | | **3.69** | **255** | Pg | **Pb** | **13 40 11.5** | **+0.1** |
| | 29nm,0.4s | | | | | | | |
| KTBS | | | | | Lg | Lg | 13 40 57.8 | |
| | 473nm,0.5s | | | | | | | |
| **AAA** | **Alma-Ata** | | **3.73** | **247** | *e*PN | **Pb** | **13 40 12.9** | **+0.9** |
| **AAA** | **Alma-Ata** | | **3.73** | **247** | *e*Pg | **Pb** | **13 40 13.0** | **+0.9** |
| | baz=244 | | | | | | | |
| **TNSS** | **Tian-Shan** | | **3.79** | **244** | *e*P | **Pb** | **13 40 14.0** | **+0.8** |
| | 61nm,0.4s | | | | | | | |
| TNSS | | | | | *e*S | **Sb** | **13 41 02.6** | **+3.2** |
| | 130nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | | **3.79** | **244** | *e*Pg | **Pb** | **13 40 14.3** | **+1.1** |
| | baz=242 | | | | | | | |
| **TNSS** | **Tian-Shan** | | **3.79** | **244** | Pg | **Pb** | **13 40 14.0** | **+0.8** |
| | 61nm,0.4s | | | | | | | |
| TNSS | | | | | Lg | Lg | 13 41 02.6 | |
| | 130nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | | **3.88** | **259** | *e*PN | **Pb** | **13 40 14.3** | **-0.2** |
| **KUU** | **Kurty** | | **3.88** | **259** | *e*P | **Pb** | **13 40 14.5** | **0.0** |
| | 15nm,0.3s | | | | | | | |
| KUU | | | | | *e*S | **Sb** | **13 41 03.0** | **+1.4** |
| | 327nm,0.5s | | | | | | | |
| **KUU** | **Kurty** | | **3.88** | **259** | *e*Pg | **Pb** | **13 40 14.4** | **-0.2** |
| | baz=257 | | | | | | | |
| **KUU** | **Kurty** | | **3.88** | **259** | Pg | **Pb** | **13 40 14.5** | **0.0** |
| | 15nm,0.3s | | | | | | | |
| KUU | | | | | Lg | Lg | 13 41 03.0 | |
| | 327nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | | **4.08** | **248** | *e*P | **Pb** | **13 40 17.6** | **-0.4** |
| | 22nm,0.2s | | | | | | | |
| MTBS | | | | | *e*S | **Sb** | **13 41 08.3** | **+0.8** |
| | 467nm,0.4s | | | | | | | |
| **MTBS** | **Maitube** | | **4.08** | **248** | Pg | **Pb** | **13 40 17.6** | **-0.4** |
| | 22nm,0.2s | | | | | | | |
| MTBS | | | | | Lg | Lg | 13 41 08.3 | |
| | 467nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | | **4.40** | **258** | *e*P | **Pb** | **13 40 23.9** | **+0.5** |
| | 22nm,0.3s | | | | | | | |
| KRBS | | | | | *e*S | **Sb** | **13 41 19.2** | **+2.7** |
| | 123nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | | **4.40** | **258** | Pg | **Pb** | **13 40 23.9** | **+0.5** |
| | 22nm,0.3s | | | | | | | |
| KRBS | | | | | Lg | Lg | 13 41 19.2 | |
| | 123nm,0.3s | | | | | | | |
| **KST** | **Kastek** | | **4.43** | **249** | *e*P | **Pb** | **13 40 25.1** | **+1.1** |
| | 50nm,0.4s | | | | | | | |
| KST | | | | | *e*S | **Sb** | **13 41 21.2** | **+3.7** |
| | 122nm,0.4s | | | | | | | |
| **KST** | **Kastek** | | **4.43** | **249** | Pg | **Pb** | **13 40 25.1** | **+1.1** |
| | 50nm,0.4s | | | | | | | |
| KST | | | | | Lg | Lg | 13 41 21.2 | |
| | 122nm,0.4s | | | | | | | |
| **WMQ** | **Urumqi** | | **4.48** | **100** | *e*Pn | **Pn** | **13 40 16.4** | **+2.4** |
| WMQ | | | | | Sn | **Sn** | **13 41 08.9** | **+2.8** |
| WMQ | | | | | Sg | **Sg** | **13 41 28.9** | **-0.8** |
| WMQ | | | | | smax | smax | | |
| | comp=N,280nm,0.7s | | | | | | | |
| WMQ | | | | | smax | smax | | |
| | comp=E,220nm,1.1s | | | | | | | |
| **DGS** | **Degeres** | | **4.48** | **252** | *e*P | **Pb** | **13 40 25.8** | **+1.0** |
| | 20nm,0.3s | | | | | | | |
| DGS | | | | | *e*S | **Sb** | **13 41 22.6** | **+3.7** |
| | 141nm,0.4s | | | | | | | |
| **DGS** | **Degeres** | | **4.48** | **252** | Pg | **Pb** | **13 40 25.8** | **+1.0** |
| | 20nm,0.3s | | | | | | | |
| DGS | | | | | Lg | Lg | 13 41 22.5 | |
| | 141nm,0.4s | | | | | | | |
| **ULHL** | **Ulahol** | | **4.65** | **239** | P | **Pn** | **13 40 17.7** | **+1.2** |
| | SNR=8.9 | | | | | | | |
| **TKM2** | **Tokmak 2** | | **4.73** | **249** | P | **Pn** | **13 40 18.2** | **+0.7** |
| | SNR=7.3 | | | | | | | |
| **TKM2** | **Tokmak 2** | | **4.73** | **249** | PN | **Pn** | **13 40 17.5** | **0.0** |
| **TKM2** | **Tokmak 2** | | **4.73** | **249** | ⇓Pn | **Pn** | **13 40 17.6** | **0.0** |
| | 3.7nm,0.4s | | | | | | | |
| TKM2 | | | | | ⇓Pg | **Pb** | **13 40 31.5** | **+2.4** |
| | 24nm,0.5s | | | | | | | |
| TKM2 | | | | | ⇓Lg | Lg | 13 41 32.0 | |
| | 88nm,0.5s | | | | | | | |
| **SGDS** | **Sogindy** | | **5.19** | **258** | *e*Pg | **Pb** | **13 40 39.0** | **+2.0** |
| | baz=256 | | | | | | | |
| **CHMS** | **Chumysh** | | **5.26** | **253** | P | **Pn** | **13 40 25.1** | **+0.3** |
| | SNR=9.6 | | | | | | | |
| **KBK** | **Karagaybulak** | | **5.27** | **249** | P | **Pn** | **13 40 26.1** | **+1.1** |
| | SNR=14 | | | | | | | |
| **USP** | **Ospenovka** | | **5.34** | **256** | P | **Pn** | **13 40 26.7** | **+0.9** |
| | SNR=6.9 | | | | | | | |
| **BTLS** | **Baital** | | **5.38** | **275** | *e*P | **Pg** | **13 40 47.5** | **-1.4** |
| | 8.5nm,0.2s | | | | | | | |
| BTLS | | | | | *e*S | **Sg** | **13 42 00.9** | **+2.4** |
| | 47nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | | **5.58** | **250** | Pn | **Pn** | **13 40 29.8** | **+0.6** |
| | 0.5nm,0.3s,baz=88,slow=4.3,SNR=9.5 | | | | | | | |
| AAK | | | | | Lg | Lg | 13 41 59.1 | |
| | 9.0nm,0.3s,baz=319,slow=19,SNR=10 | | | | | | | |
| **AAK** | **Ala-Archa** | | **5.58** | **250** | PN | **Pn** | **13 40 29.7** | **+0.5** |
| **AAK** | **Ala-Archa** | | **5.58** | **250** | Pn | **Pn** | **13 40 29.4** | **+0.2** |
| **AAK** | **Ala-Archa** | | **5.58** | **250** | ⇓Pn | **Pn** | **13 40 30.0** | **+0.8** |
| | 3.8nm,0.4s | | | | | | | |
| AAK | | | | | ⇓Pg | **Pb** | **13 40 47.8** | **+4.2** |
| | 14nm,0.6s | | | | | | | |
| AAK | | | | | ⇓Lg | Lg | 13 42 00.2 | |
| | 88nm,0.7s | | | | | | | |
| **UCH** | **Uchtor** | | **5.75** | **246** | P | **Pg** | **13 40 55.1** | **-1.1** |
| | SNR=8.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **6.20** | **342** | Pn | **Pn** | **13 40 38.1** | **+0.6** |
| | 0.5nm,0.3s,baz=162,slow=13,SNR=29 | | | | | | | |
| KURBB | | | | | Sn | **Sn** | **13 41 46.8** | **-1.7** |
| | 0.9nm,0.3s,baz=53,slow=25,SNR=2.4 | | | | | | | |
| KURBB | | | | | Lg | Lg | 13 42 21.5 | |
| | 1.6nm,0.3s,baz=165,slow=30,SNR=4.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **6.20** | **342** | ⇓Pn | **Pn** | **13 40 38.2** | **+0.6** |
| | 22nm,0.4s | | | | | | | |
| KURBB | | | | | ⇓Lg | Lg | 13 42 26.7 | |
| | 264nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | | **6.27** | **342** | *ce*Pn | **Pn** | **13 40 39.3** | **+0.8** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | | **6.27** | **342** | Pn | **Pn** | **13 40 38.9** | **+0.4** |
| **KURK** | **Kurchatov** | | **6.27** | **342** | ⇑Pn | **Pn** | **13 40 39.3** | **+0.8** |
| | comp=Z,11nm,0.5s | | | | | | | |
| KURK | | | | | ⇑Lg | Lg | 13 42 27.3 | |
| | comp=Z,98nm,0.8s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | | **6.32** | **37** | *i* PN | **Pn** | **13 40 42.7** | **+3.3** |
| **AML** | **Almayashu** | | **6.34** | **248** | P | **Pn** | **13 40 41.6** | **+1.8** |
| | SNR=7.7 | | | | | | | |
| **KSH** | **Kashi** | | **6.72** | **220** | P | **Pb** | **13 40 58.8** | **-4.2** |
| KSH | | | | | S | **Sb** | **13 42 26.9** | **+3.5** |
| KSH | | | | | smax | smax | | |
| | comp=N,19nm,1.2s | | | | | | | |
| KSH | | | | | smax | smax | | |
| | comp=E,26nm,1.3s | | | | | | | |
| **OTUK** | **Ortayu** | | **7.27** | **302** | PN | **Pn** | **13 40 52.0** | **-0.3** |
| **OTUK** | **Ortayu** | | **7.27** | **302** | ⇑Pn | **Pn** | **13 40 52.0** | **-0.3** |
| | comp=E,4.5nm,0.5s | | | | | | | |
| OTUK | | | | | ⇑Lg | Lg | 13 42 56.9 | |
| | comp=E,114nm,1.0s | | | | | | | |
| **BRZS** | **Berezniki** | | **7.98** | **314** | *e*P | **Pn** | **13 41 01.7** | **-0.3** |
| **BRZS** | **Berezniki** | | **7.98** | **314** | *e*Pn | **Pn** | **13 41 01.8** | **-0.3** |
| | baz=315 | | | | | | | |
| **KK02** | **Karatay Array** | | **8.18** | **262** | ⇑Pn | **Pn** | **13 41 04.3** | **-0.5** |
| | comp=E,0.9nm,0.3s | | | | | | | |
| KK02 | | | | | ⇓Lg | Lg | 13 43 26.9 | |
| | comp=E,24nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | | **8.18** | **262** | P | **Pn** | **13 41 04.3** | **-0.5** |
| **KKAR** | **Karatay Array** | | **8.18** | **262** | Pn | **Pn** | **13 41 04.2** | **-0.5** |
| **BRLS** | **Borolday** | | **8.68** | **262** | *e*P | **Pn** | **13 41 13.0** | **+1.4** |
| **BRLS** | **Borolday** | | **8.68** | **262** | *e*Pn | **Pn** | **13 41 13.0** | **+1.4** |
| | baz=260 | | | | | | | |
| BRLS | | | | | *e*Pg | Pg | 13 41 45.2 | -6.9 |
| | baz=260 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | | **9.41** | **12** | | **Pn** | **13 41 21.7** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | | **9.41** | **12** | Pn | **Pn** | **13 41 22.1** | **+0.5** |
| | comp=E,0.7nm,0.3s,baz=189,slow=13,SNR=9.5 | | | | | | | |
| ZALV | | | | | Sn | **Sn** | **13 43 04.0** | **-3.4** |
| | comp=E,1.5nm,0.3s,baz=190,slow=26,SNR=5.1 | | | | | | | |
| ZALV | | | | | Lg | Lg | 13 44 04.0 | |
| | comp=E,0.9nm,0.3s,baz=192,slow=26,SNR=2.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **9.41** | **12** | Pn | **Pn** | **13 41 22.5** | **+0.9** |
| **BVAR** | **Borovoye Array** | | **11.06** | **322** | Pn | **Pn** | **13 41 44.4** | **+0.2** |
| | comp=E,0.4nm,0.3s,baz=339,slow=18,SNR=3.9 | | | | | | | |
| BVAR | | | | | Lg | Lg | 13 44 58.4 | |
| | comp=E,1.3nm,0.3s,baz=102,slow=33,SNR=5.8 | | | | | | | |
| **BRVK** | **Borovoye** | | **11.13** | **322** | *ce*P | **Pn** | **13 41 44.5** | **-0.5** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,16nm,2.5s | | | | | | | |
| **BRVK** | **Borovoye** | | **11.13** | **322** | | **Pn** | **13 41 44.5** | **-0.5** |
| **BRVK** | **Borovoye** | | **11.13** | **322** | ⇑Pn | **Pn** | **13 41 48.8** | **+3.7** |
| | comp=Z,2.3nm,0.4s | | | | | | | |
| BRVK | | | | | ⇑Lg | Lg | 13 45 01.2 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **GOMU** | **GeErMu** | | **13.20** | **126** | P | **Pn** | **13 42 11.1** | **-2.7** |
| GOMU | | | | | pP | P | 13 42 16.8 | -7.1 |
| GOMU | | | | | sP | | 13 42 22.3 | |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **GTA** | **Gaotai** | | **14.54** | **105** | ⇑P | **P** | **13 42 38.1** | **-0.4** |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | | **15.42** | **295** | Pn | **Pn** | **13 42 40.9** | **-2.6** |
| **ZAK** | **Zakamensk** | | **15.64** | **61** | *e*P | **P** | **13 42 51.0** | **+0.4** |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| **DANN** | **Dangsing** | | **16.49** | **173** | *e*P | **P** | **13 43 00.1** | **-0.3** |
| | comp=Z,17nm,0.4s | | | | | | | |
| **PYUN** | **Piuthan** | | **16.68** | **176** | *e*P | **P** | **13 43 01.8** | **-0.7** |
| | comp=Z,3.4nm,0.4s | | | | | | | |
| **AKTO** | **Aktyubinsk** | | **16.85** | **298** | Pn | **Pn** | **13 43 00.6** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=36,slow=8.7,SNR=1.5 | | | | | | | |
| AKTO | | | | | Sn | Sn | 13 45 59.2 | -10 |
| | comp=Z,0.1nm,0.3s,baz=254,slow=10,SNR=3.8 | | | | | | | |
| AKTO | | | | | Lg | Lg | 13 47 59.3 | |
| | comp=Z,0.0nm,0.3s,baz=54,slow=16,SNR=3.5 | | | | | | | |
| **KOLN** | **Koldanda** | | **17.05** | **174** | *e*P | **P** | **13 43 06.3** | **-0.2** |
| | comp=Z,5.1nm,0.4s | | | | | | | |
| **GUN** | **Gumba** | | **17.18** | **167** | *e*P | **P** | **13 43 08.1** | **0.0** |
| | comp=Z,7.5nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | | **17.38** | **71** | P | **P** | **13 43 09.4** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=275,slow=11,SNR=7.7 | | | | | | | |
| **SONM** | **Songino Array** | | **17.38** | **71** | | **P** | **13 43 10.0** | **0.0** |
| **PKI** | **Pulchoki** | | **17.44** | **169** | *e*P | **P** | **13 43 11.1** | **+0.1** |
| | comp=Z,4.3nm,0.4s | | | | | | | |
| **ULN** | **Ulaanbaatar** | | **17.82** | **71** | *ce*P | **P** | **13 43 17.0** | **+2.1** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | | |
| **ARU** | **Arti** | | **18.60** | **317** | *d i*P | **Pn** | **13 43 26.2** | **+2.8** |
| ARU | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | | **22.26** | **90** | *e*P | **P** | **13 44 06.4** | **+3.2** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **PZH** | **PanZhiHua** | | **24.39** | **132** | P | **P** | **13 44 28.4** | **+3.8** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **NRIK** | **Noril'sk** | | **24.81** | **5** | *ce*P | **P** | **13 44 32.6** | **+4.7** |
| NRIK | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **29.98** | **146** | P | **P** | **13 45 13.6** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=319,slow=8.7,SNR=4.4 | | | | | | | |
| **SIRT** | **Sirnak** | | **30.15** | **270** | P | **P** | **13 45 14.1** | **-2.1** |
| SIRT | | | | | IAmb | IAmb | 13 45 21.4 | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **NJ2** | **Nanjing** | | **31.55** | **101** | *e*P | **P** | **13 45 31.5** | **+3.0** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **TIXI** | **Tiksi** | | **35.02** | **24** | *ce*P | **P** | 13 46 04.7 | +6.5 |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.5s | | | | | | | |
| **FIA1** | **FINESS Array S** | | **35.97** | **318** | P | **P** | **13 46 06.2** | **-0.2** |
| FIA1 | | | | | IAmb | IAmb | 13 46 15.7 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **FINES** | **FINESS Array B** | | **35.97** | **318** | P | **P** | **13 46 06.2** | **-0.3** |
| **FINES** | **FINESS Array B** | | **35.97** | **318** | P | **P** | **13 46 06.2** | **-0.3** |
| **PALK** | **Pallekele** | | **37.37** | **181** | P | **P** | **13 46 19.2** | **+0.2** |
| PALK | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **PALK** | **Pallekele** | | **37.37** | **181** | P | **P** | **13 46 19.2** | **+0.2** |
| PALK | | | | | IAmb | IAmb | 13 46 20.3 | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **BORA** | **Eskisehir** | | **37.62** | **281** | P | **P** | **13 46 17.7** | **-3.2** |
| BORA | | | | | IAmb | IAmb | 13 46 22.9 | |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | | **43.15** | **318** | P | **P** | **13 47 05.9** | **-0.5** |
| | comp=Z,0.4nm,0.6s,baz=81,slow=8.1,SNR=1.8 | | | | | | | |
| **IDI** | **Anoyia** | | **43.66** | **278** | P | **P** | **13 47 09.9** | **-1.0** |
| IDI | | | | | IAmb | IAmb | 13 47 31.6 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | **48.45** | **51** | P | **P** | **13 47 49.4** | **+1.1** |
| PEA0B | | | | | pmax | pmax | | |
| | comp=Z,36nm,1.2s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | **48.45** | **51** | P | **P** | **13 47 49.4** | **+1.1** |
| **PETK** | **Petropavlovsk-** | | **48.45** | **51** | P | **P** | **13 47 48.2** | **-0.1** |
| | comp=Z,5.5nm,1.0s,baz=330,slow=5.6,SNR=3.6 | | | | | | | |
| **PETK** | **Petropavlovsk-** | | **48.45** | **51** | P | **P** | **13 47 49.3** | **+1.0** |
| **ESK** | **Eskdalemuir** | | **52.20** | **314** | P | **P** | **13 48 15.1** | **-1.6** |
| ESK | | | | | pmax | pmax | | |
| | comp=Z,55nm,1.5s | | | | | | | |
| **ESK** | **Eskdalemuir** | | **52.20** | **314** | P | **P** | **13 48 15.1** | **-1.6** |
| **UGM** | **Wanagama** | | **58.57** | **146** | P | **P** | **13 49 04.3** | **+1.4** |
| **ANM** | **Nome** | | **59.14** | **28** | P | **P** | **13 49 06.4** | **0.0** |
| ANM | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **ANM** | **Nome** | | **59.14** | **28** | P | **P** | **13 49 06.4** | **0.0** |
| **TOLK** | **Toolik Lake Re** | | **60.68** | **19** | P | **P** | **13 49 16.5** | **-0.4** |
| TOLK | | | | | IAmb | IAmb | 13 49 35.5 | |
| | comp=Z,2.1nm,1.2s | | | | | | | |
| **COLD** | **Coldfoot** | | **61.63** | **20** | P | **P** | **13 49 23.0** | **-0.3** |
| COLD | | | | | IAmb | IAmb | 13 49 31.0 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **IMAR** | **Indian Mountai** | | **61.65** | **22** | P | **P** | **13 49 22

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **VMUR** | **Van-Muradiye** | **0.45** | **306** | P | **Pb** | **13 46 45.3** | **-0.3** |
| VMUR | | | | S | **Sb** | **13 46 52.1** | **-0.5** |
| VMUR | | | | *i* AML | AML | 13 46 55.0 | |
| | comp=N,408nm,0.8s | | | | | | |
| VMUR | | | | *i* AML | AML | 13 46 59.0 | |
| | comp=E,417nm,0.3s | | | | | | |
| **VANB** | **Van** | **0.52** | **256** | PG | **Pg** | **13 46 45.7** | **+0.1** |
| **TVAN** | **Van** | **0.53** | **249** | P | **Pg** | **13 46 45.3** | **-0.4** |
| TVAN | | | | S | **Sb** | **13 46 55.7** | **+0.9** |
| TVAN | | | | *i* AML | AML | 13 47 02.0 | |
| | comp=E,304nm,0.5s | | | | | | |
| TVAN | | | | *i* AML | AML | 13 47 07.0 | |
| | comp=N,402nm,0.5s | | | | | | |
| **DYDN** | **Diyadin** | **0.86** | **342** | P | **Pg** | **13 46 50.3** | **-1.8** |
| DYDN | | | | S | **Sg** | **13 47 02.6** | **-0.8** |
| DYDN | | | | *i* AML | AML | 13 47 11.0 | |
| | comp=E,110nm,0.3s | | | | | | |
| DYDN | | | | *i* AML | AML | 13 47 12.0 | |
| | comp=N,127nm,0.3s | | | | | | |
| **GEVA** | **Gevas** | **0.87** | **242** | P | **Pg** | **13 46 51.1** | **-1.1** |
| GEVA | | | | S | **Sb** | **13 47 04.1** | **-0.5** |
| GEVA | | | | *i* AML | AML | 13 47 06.0 | |
| | comp=N,170nm,0.3s | | | | | | |
| GEVA | | | | *i* AML | AML | 13 47 10.0 | |
| | comp=E,86nm,0.5s | | | | | | |
| **AKDM** | **Akdamar-Van** | **0.92** | **245** | PG | **Pg** | **13 46 52.9** | **-0.2** |
| AKDM | | | | SG | **Sg** | **13 47 04.8** | **-0.2** |
| **ADCV** | **BITLIS_Adilcev** | **1.03** | **275** | P | **Pg** | **13 46 54.8** | **-0.5** |
| ADCV | | | | S | **Sn** | **13 47 12.4** | **+1.6** |
| ADCV | | | | *i* AML | AML | 13 47 16.0 | |
| | comp=N,112nm,0.4s | | | | | | |
| ADCV | | | | *i* AML | AML | 13 47 16.0 | |
| | comp=E,174nm,0.4s | | | | | | |
| **IGDI** | **IGDIR** | **1.15** | **2** | P | **Pn** | **13 46 57.5** | **-0.1** |
| IGDI | | | | S | **Sn** | **13 47 16.0** | **+2.5** |
| IGDI | | | | *i* AML | AML | 13 47 18.0 | |
| | comp=N,94nm,0.5s | | | | | | |
| IGDI | | | | *i* AML | AML | 13 47 21.0 | |
| | comp=E,87nm,0.9s | | | | | | |
| **YOVA** | **Hakkari_Yksek** | **1.15** | **170** | P | **Pg** | **13 46 55.4** | **-2.1** |
| YOVA | | | | S | **Sg** | **13 47 12.3** | **-0.1** |
| YOVA | | | | *i* AML | AML | 13 47 13.0 | |
| | comp=N,83nm,0.3s | | | | | | |
| YOVA | | | | *i* AML | AML | 13 47 18.0 | |
| | comp=E,72nm,0.8s | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **1.23** | **290** | PN | **Pb** | **13 46 58.3** | **-0.7** |
| MLAZ | | | | SN | **Sb** | **13 47 14.0** | **-1.0** |
| **KOTA** | **Agri, Merkez-K** | **1.26** | **329** | P | **Pg** | **13 46 59.2** | **-0.3** |
| KOTA | | | | S | **Sg** | **13 47 15.0** | **-0.9** |
| **CUKT** | **Cukurca** | **1.51** | **193** | PN | **Pg** | **13 47 04.6** | **+0.2** |
| **GNI** | **Garni** | **1.53** | **21** | PN | **Pg** | **13 47 04.9** | **+0.2** |
| GNI | | | | SN | **Sg** | **13 47 25.5** | **+1.0** |
| **GURO** | **Guroymak-BITLI** | **1.58** | **264** | PN | **Pn** | **13 47 03.8** | **+0.1** |
| **SIRT** | **Sirnak** | **1.75** | **226** | PN | **Pb** | **13 47 07.2** | **-0.6** |
| **KOPR** | **Koprukoy-ERZUR** | **2.12** | **308** | PN | **Pn** | **13 47 11.5** | **+0.4** |
| **BNGB** | **Bingl** | **2.64** | **277** | PN | **Pn** | **13 47 18.6** | **+0.4** |

*NOU **22** 13:59:50.9,20˝.15S×177˝.66W,h576km,mb4.7/39,Fiji Islands Region*

*NEIC **22** 13:59:50.6±2.0,20˝.23S±0˝.10×178˝.0W±0˝.1,h533km±6km, mb4.6/182,Error ellipse: s-maj=15.4km s-min=13.2km az=120.0*

*IDC **22** 13:59:52.8±0.6,20˝.17S×178˝.11W,h560km±6km,mb3.9/29, mb1 4.0/31,mb1mx4.0/43,mbtmp4.8/31,Error ellipse: s-maj=11.7km s-min=8.2km az=148.0*

*BGR **22** 14:00:03.7±0.0, 18˝.75S×178˝.04W,h33km*

**ISC 22 13:59:50.8±0.4,20˝.29S±0˝.05×177˝.96W±0˝.05, h545km±4km,h545km:pP-P,n569,σ1§21/594,mb4.5/128, 12C-15D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.55** | **303** | P | **P** | **P** | **14 01 18.1** | **+1.3** |
| | 57nm,0.3s,baz=146,slow=10,SNR=73 | | | | | | | |
| MSVF | | | | S | **S** | **S** | **14 02 28.9** | **+2.1** |
| | baz=307,slow=23,SNR=0.9 | | | | | | | |
| **MSVF** | **Nonsavu** | **4.55** | **303** | P | **P** | **P** | **14 01 17.4** | **+0.6** |
| **NIUE** | **Niue** | **7.66** | **82** | P | **P** | **P** | **14 01 45.2** | **+0.1** |
| **AFI** | **Afiamalu** | **8.67** | **44** | P | **P** | **P** | **14 01 52.4** | **-2.8** |
| | 18nm,0.3s,baz=189,slow=0.9,SNR=17 | | | | | | | |
| AFI | | | | S | **S** | **S** | **14 03 29.1** | **-8.2** |
| | 8.4nm,0.3s,baz=192,slow=19,SNR=7.5 | | | | | | | |
| **AFI** | **Afiamalu** | **8.67** | **44** | P | **P** | **P** | **14 01 51.8** | **-3.4** |
| **AFI** | **Afiamalu** | **8.67** | **44** | P | **P** | **P** | **14 01 52.5** | **-2.8** |
| **RAO** | **Raoul Island** | **8.93** | **180** | S | **S** | **S** | **14 03 40.9** | **-0.8** |
| | 88nm,0.3s,baz=248,slow=23,SNR=1.8 | | | | | | | |
| **GLKZ** | **Green Lake** | **8.94** | **180** | P | **P** | **P** | **14 01 57.1** | **-0.5** |
| GLKZ | | | | S | **S** | **S** | **14 03 37.4** | **-4.4** |
| **FUNA** | **Funafuti** | **12.01** | **346** | P | **P** | **P** | **14 02 28.2** | **-1.4** |
| **PINNC** | **Pines Island,** | **13.79** | **258** | P | **P** | **P** | **14 02 47.0** | **-0.8** |
| **DZM** | **Mont Dzumac** | **14.66** | **260** | P | **P** | **P** | **14 02 57.3** | **+0.3** |
| | 1.4nm,0.3s,baz=99,slow=18,SNR=12 | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.66** | **261** | P | **P** | **P** | **14 02 56.7** | **-0.3** |
| **SANVU** | **Saraoutou** | **14.92** | **286** | P | **P** | **P** | **14 02 58.8** | **-0.9** |
| **OUZ** | **Omahuta** | **16.64** | **205** | P | **P** | **P** | **14 03 17.1** | **+0.8** |
| **OUZ** | **Omahuta** | **16.64** | **205** | P | **P** | **P** | **14 03 17.7** | **+1.4** |
| **KUZ** | **Kuaotunu** | **17.31** | **197** | P | **P** | **P** | **14 03 24.4** | **+2.0** |
| **MXZ** | **Matakaoa Point** | **17.52** | **190** | P | **P** | **P** | **14 03 25.4** | **+1.1** |
| **MXZ** | **Matakaoa Point** | **17.52** | **190** | P | **P** | **P** | **14 03 25.3** | **+1.0** |
| **HAZ** | **Te Kaha** | **17.80** | **191** | P | **P** | **P** | **14 03 26.4** | **-0.4** |
| HAZ | | | | S | **S** | **S** | **14 06 17.3** | **-5.6** |
| **PKGZ** | **Pakihiroa** | **17.88** | **190** | P | **P** | **P** | **14 03 25.9** | **-1.7** |
| **RUGZ** | **Raukumara Rang** | **18.02** | **191** | P | **P** | **P** | **14 03 29.2** | **+0.1** |
| **PUZ** | **Puketiti** | **18.02** | **190** | P | **P** | **P** | **14 03 28.0** | **-1.0** |
| PUZ | | | | S | **S** | **S** | **14 06 24.4** | **-2.3** |
| **TGRZ** | **Tauranga** | **18.09** | **195** | P | **P** | **P** | **14 03 32.3** | **+2.7** |
| **OPRZ** | **Ohinepanea** | **18.13** | **194** | P | **P** | **P** | **14 03 31.1** | **+1.1** |
| **TWGZ** | **Tauwhareparae** | **18.17** | **190** | P | **P** | **P** | **14 03 32.1** | **+1.7** |
| TWGZ | | | | S | **S** | **S** | **14 06 25.4** | **-3.8** |
| **MWZ** | **Matawai** | **18.41** | **191** | P | **P** | **P** | **14 03 31.8** | **-0.7** |
| MWZ | | | | S | **S** | **S** | **14 06 26.0** | **-6.9** |
| **URZ** | **Urewera** | **18.41** | **192** | P | **P** | **P** | **14 03 30.7** | **-1.8** |
| | 9.0nm,0.3s,baz=288,slow=2.4,SNR=44 | | | | | | | |
| URZ | | | | S | **S** | **S** | **14 06 27.8** | **-5.1** |
| | 0.8nm,0.3s,baz=348,slow=17,SNR=3.0 | | | | | | | |
| **URZ** | **Urewera** | **18.41** | **192** | P | **P** | **P** | **14 03 30.8** | **-1.8** |
| **URZ** | **Urewera** | **18.41** | **192** | P | **P** | **P** | **14 03 31.5** | **-1.0** |
| URZ | | | | S | **S** | **S** | **14 06 27.0** | **-5.9** |
| **URZ** | **Urewera** | **18.41** | **192** | P | **P** | **P** | **14 03 31.9** | **-0.6** |
| **CNGZ** | **Carnagh Statio** | **18.44** | **190** | P | **P** | **P** | **14 03 34.6** | **+1.9** |
| **TKGZ** | **Te Karaka** | **18.45** | **190** | P | **P** | **P** | **14 03 33.9** | **+1.1** |
| **RRRZ** | **Republican Roa** | **18.62** | **194** | P | **P** | **P** | **14 03 35.6** | **+1.1** |
| **MUGZ** | **Murupara** | **18.69** | **193** | P | **P** | **P** | **14 03 34.9** | **-0.2** |
| **RIGZ** | **Rimuhau** | **18.73** | **190** | P | **P** | **P** | **14 03 35.6** | **+0.2** |
| RIGZ | | | | S | **S** | **S** | **14 06 34.7** | **-3.4** |
| **RTZ** | **Ruatahuna** | **18.78** | **192** | P | **P** | **P** | **14 03 36.0** | **0.0** |
| **TLZ** | **Tolley Road** | **18.84** | **196** | P | **P** | **P** | **14 03 39.0** | **+2.5** |
| **SNGZ** | **Shannon Statio** | **18.88** | **191** | P | **P** | **P** | **14 03 36.6** | **-0.1** |
| **PRGZ** | **Paritu Road** | **18.92** | **190** | P | **P** | **P** | **14 03 38.8** | **+1.7** |
| **MRHZ** | **Matea Rd** | **19.11** | **194** | P | **P** | **P** | **14 03 38.2** | **-0.7** |
| **HIZ** | **Hauiti** | **19.20** | **197** | P | **P** | **P** | **14 03 40.1** | **+0.4** |
| **HIZ** | **Hauiti** | **19.20** | **197** | P | **P** | **P** | **14 03 42.6** | **+3.0** |
| **HIZ** | **Hauiti** | **19.20** | **197** | P | **P** | **P** | **14 03 40.8** | **+1.1** |
| **NMHZ** | **Naumai** | **19.28** | **192** | P | **P** | **P** | **14 03 41.3** | **+0.8** |
| **RATZ** | **Rangitukua** | **19.29** | **195** | P | **P** | **P** | **14 03 41.1** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **19.41** | **193** | P | **P** | **P** | **14 03 39.8** | **-1.9** |
| BKZ | | | | IAmb | IAmb | IAmb | 14 03 45.6 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.41** | **193** | P | **P** | **P** | **14 03 40.3** | **-1.4** |
| BKZ | | | | S | **S** | **S** | **14 06 43.8** | **-5.4** |
| **TMVZ** | **Te Maari** | **19.55** | **195** | P | **P** | **P** | **14 03 43.2** | **+0.2** |
| **ETVZ** | **East Tongariro** | **19.56** | **195** | P | **P** | **P** | **14 03 43.4** | **+0.2** |
| **TWVZ** | **Taurewa** | **19.57** | **196** | P | **P** | **P** | **14 03 43.2** | **0.0** |
| **NNVZ** | **North Ngauruho** | **19.58** | **195** | P | **P** | **P** | **14 03 43.5** | **+0.1** |
| **OTVZ** | **Oturere** | **19.60** | **195** | P | **P** | **P** | **14 03 43.0** | **-0.5** |
| **NGZ** | **Ngauruhoe** | **19.63** | **195** | P | **P** | **P** | **14 03 43.8** | **+0.1** |
| **SNVZ** | **South Ngauruho** | **19.63** | **195** | P | **P** | **P** | **14 03 43.4** | **-0.4** |
| **MCHZ** | **McNeill Hill** | **19.64** | **192** | P | **P** | **P** | **14 03 43.8** | **+0.1** |
| **KWHZ** | **Kaweka Forest** | **19.68** | **193** | P | **P** | **P** | **14 03 43.5** | **-0.6** |
| **TUVZ** | **Tukino** | **19.70** | **195** | P | **P** | **P** | **14 03 43.7** | **-0.7** |
| **WNVZ** | **Wahianoa** | **19.77** | **195** | P | **P** | **P** | **14 03 44.7** | **-0.4** |
| **PKVZ** | **Pokaka** | **19.80** | **195** | P | **P** | **P** | **14 03 44.7** | **-0.6** |
| **MOVZ** | **Moawhango** | **19.81** | **195** | P | **P** | **P** | **14 03 44.7** | **-0.6** |
| **BHHZ** | **Black Hill Sta** | **19.82** | **194** | P | **P** | **P** | **14 03 44.3** | **-1.1** |
| **KRHZ** | **Kereru** | **19.90** | **193** | P | **P** | **P** | **14 03 45.7** | **-0.3** |
| **KAHZ** | **Kahuranaki** | **19.94** | **192** | P | **P** | **P** | **14 03 46.6** | **+0.1** |
| **PKE** | **Pukeiti** | **20.08** | **198** | P | **P** | **P** | **14 03 51.4** | **+3.7** |
| **PNHZ** | **Pukenui** | **20.20** | **193** | P | **P** | **P** | **14 03 48.6** | **-0.2** |
| **WAZ** | **Wanganui** | **20.33** | **196** | P | **P** | **P** | **14 03 49.8** | **-0.1** |
| **TSZ** | **Takapari Road** | **20.39** | **194** | P | **P** | **P** | **14 03 50.5** | **0.0** |
| **DVHZ** | **Dannevirke** | **20.57** | **193** | P | **P** | **P** | **14 03 51.9** | **-0.3** |
| **ANWZ** | **Angora Road** | **20.66** | **192** | P | **P** | **P** | **14 03 52.9** | **0.0** |
| **PRWZ** | **Pori Road** | **20.86** | **193** | P | **P** | **P** | **14 03 55.1** | **+0.4** |
| **BFZ** | **Birch Farm** | **20.92** | **192** | P | **P** | **P** | **14 03 53.5** | **-1.8** |
| **BFZ** | **Birch Farm** | **20.92** | **192** | P | **P** | **P** | **14 03 54.2** | **-1.1** |
| **MRZ** | **Mangatainoka R** | **21.05** | **194** | P | **P** | **P** | **14 03 54.4** | **-2.0** |
| **HOWZ** | **Holdsworth Sta** | **21.29** | **194** | P | **P** | **P** | **14 03 57.4** | **-1.2** |
| **OGWZ** | **Otaki Gorge** | **21.29** | **194** | P | **P** | **P** | **14 03 58.7** | **+0.1** |
| **KIW** | **Kapiti Island** | **21.39** | **195** | P | **P** | **P** | **14 03 58.7** | **-0.8** |
| **CAW** | **Cannon Point** | **21.59** | **194** | P | **P** | **P** | **14 04 00.4** | **-0.9** |
| **TRWZ** | **Traveller** | **21.73** | **193** | P | **P** | **P** | **14 04 03.4** | **+0.8** |
| **MSWZ** | **Moikau Station** | **21.84** | **194** | P | **P** | **P** | **14 04 02.6** | **-1.0** |
| **SNZO** | **South Karori** | **21.87** | **195** | | **P** | **P** | **14 04 02.7** | **-1.0** |
| **SNZO** | **South Karori** | **21.87** | **195** | P | **P** | **P** | **14 04 03.0** | **-0.7** |
| **BHW** | **Baring Head** | **21.92** | **195** | P | **P** | **P** | **14 04 03.2** | **-1.0** |
| **BHW** | **Baring Head** | **21.92** | **195** | P | **P** | **P** | **14 04 03.6** | **-0.6** |
| **PLWZ** | **Palliser** | **21.98** | **194** | P | **P** | **P** | **14 04 03.5** | **-1.4** |
| **PLWZ** | **Palliser** | **21.98** | **194** | P | **P** | **P** | **14 04 04.6** | **-0.3** |
| **QRZ** | **Quartz Range** | **22.02** | **200** | P | **P** | **P** | **14 04 04.9** | **-0.3** |
| **QRZ** | **Quartz Range** | **22.02** | **200** | P | **P** | **P** | **14 04 05.4** | **+0.2** |
| **NNZ** | **Nelson** | **22.13** | **198** | P | **P** | **P** | **14 04 05.7** | **-0.5** |
| **TUWZ** | **Tuamarina** | **22.17** | **196** | P | **P** | **P** | **14 04 04.7** | **-1.8** |
| **CMWZ** | **Cape Campbell** | **22.40** | **196** | P | **P** | **P** | **14 04 08.1** | **-0.5** |
| **BSWZ** | **Blackbirch Sta** | **22.46** | **196** | P | **P** | **P** | **14 04 08.9** | **-0.2** |
| **THZ** | **Tophouse** | **22.77** | **198** | P | **P** | **P** | **14 04 11.3** | **-0.6** |
| THZ | | | | IAmb | IAmb | IAmb | 14 04 23.6 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **KHZ** | **Kahutara** | **23.20** | **196** | P | **P** | **P** | **14 04 14.2** | **-1.4** |
| **KHZ** | **Kahutara** | **23.20** | **196** | P | **P** | **P** | **14 04 15.7** | **+0.1** |
| **RPZ** | **Rata Peaks** | **25.10** | **199** | P | **P** | **P** | **14 04 33.4** | **+0.8** |
| | comp=Z,9.1nm,0.6s,baz=329,slow=2.1,SNR=11 | | | | | | | |
| **RPZ** | **Rata Peaks** | **25.10** | **199** | P | **P** | **P** | **14 04 32.3** | **-0.3** |
| RPZ | | | | IAmb | IAmb | IAmb | 14 04 48.1 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **RPZ** | **Rata Peaks** | **25.10** | **199** | P | **P** | **P** | **14 04 33.5** | **+0.9** |
| **FOZ** | **Fox Glacier** | **25.34** | **201** | P | **P** | **P** | **14 04 33.8** | **-0.8** |
| **LBZ** | **Lake Benmore** | **25.98** | **200** | P | **P** | **P** | **14 04 39.1** | **-1.2** |
| **ODZ** | **Otahua Downs** | **26.43** | **198** | P | **P** | **P** | **14 04 44.3** | **0.0** |
| ODZ | | | | IAmb | IAmb | IAmb | 14 05 10.2 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **WKZ** | **Wanaka** | **26.75** | **201** | P | **P** | **P** | **14 04 47.3** | **+0.2** |
| WKZ | | | | IAmb | IAmb | IAmb | 14 05 10.7 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **27.53** | **202** | P | **P** | **P** | **14 04 54.1** | **+0.2** |
| MLZ | | | | IAmb | IAmb | IAmb | 14 04 58.4 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **DCZ** | **Deep Cove** | **27.96** | **203** | P | **P** | **P** | **14 04 57.6** | **+0.1** |
| **WHZ** | **Wether Hill Ro** | **28.05** | **201** | P | **P** | **P** | **14 04 58.2** | **-0.2** |
| **EIDS** | **Eidsvold** | **28.94** | **254** | P | **P** | **P** | **14 05 06.1** | **-0.4** |
| EIDS | | | | IAmb | IAmb | IAmb | 14 05 28.7 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **29.20** | **244** | P | **P** | **P** | **14 05 09.0** | **+0.3** |
| ARMA | | | | IAmb | IAmb | IAmb | 14 05 10.6 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **29.20** | **244** | P | **P** | **P** | **14 05 09.9** | **+1.1** |
| **RMQ** | **Roma** | **31.11** | **252** | P | **P** | **P** | **14 05 26.2** | **+1.0** |
| **CNB** | **Canberra Magne** | **32.38** | **236** | P | **P** | **P** | **14 05 37.0** | **+1.0** |
| **CAN** | **Canberra** | **32.66** | **236** | P | **P** | **P** | **14 05 38.7** | **+0.4** |
| CAN | | | | IAmb | IAmb | IAmb | 14 05 39.9 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **32.66** | **236** | P | **P** | **P** | **14 05 39.1** | **+0.8** |
| **CTA** | **Charters Tower** | **33.55** | **264** | P | **P** | **P** | **14 05 46.0** | **0.0** |
| | comp=Z,10nm,0.7s,baz=100,slow=11,SNR=15 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.42** | **244** | P | **P** | | **14 05 53.6** | **+0.5** |
| **QLP** | **Quilpie** | **35.16** | **252** | P | **P** | | **14 05 59.6** | **+0.2** |
| **PMG** | **Port Moresby** | **35.34** | **283** | P | **P** | | **14 06 00.6** | **-0.4** |
| | comp=Z,34nm,0.9s,baz=98,slow=5.3,SNR=20 | | | | | | | |
| **PMG** | **Port Moresby** | **35.34** | **283** | P | **P** | | **14 06 00.5** | **-0.5** |
| **PMG** | **Port Moresby** | **35.34** | **283** | P | **P** | | **14 06 00.5** | **-0.5** |
| | comp=Z,42nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **36.06** | **234** | P | **P** | | **14 06 06.8** | **+0.1** |
| TOO | | | | IAmb | IAmb | | 14 06 08.1 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **TOO** | **Toolangi** | **36.06** | **234** | P | **P** | | **14 06 07.3** | **+0.6** |
| **CORO** | **Coronation Par** | **36.29** | **227** | P | **P** | | **14 06 10.0** | **+1.6** |
| | comp=Z,28nm,1.0s | | | | | | | |
| **TAU** | **Tasmania Unive** | **36.80** | **224** | P | **P** | | **14 06 12.9** | **+0.2** |
| TAU | | | | IAmb | IAmb | | 14 06 13.7 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **BRAT** | **Ballarat** | **37.23** | **234** | P | **P** | | **14 06 17.4** | **+1.1** |
| | comp=Z,21nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **37.61** | **273** | P | **P** | | **14 06 18.8** | **-0.9** |
| COEN | | | | IAmb | IAmb | | 14 06 20.6 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.61** | **273** | P | **P** | | **14 06 19.7** | **0.0** |
| **STKA** | **Stephens Creek** | **37.92** | **244** | P | **P** | | **14 06 22.6** | **+0.6** |
| | comp=Z,23nm,1.0s,baz=90,slow=9.7,SNR=44 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.92** | **244** | P | **P** | | **14 06 22.2** | **+0.2** |
| **STKA** | **Stephens Creek** | **37.92** | **244** | P | **P** | | **14 06 22.8** | **+0.8** |
| **INKA** | **Innaminka** | **38.31** | **251** | P | **P** | | **14 06 26.4** | **+1.2** |
| **MANU** | **Manus Island** | **38.40** | **294** | P | **P** | | **14 06 26.0** | **-0.1** |
| **ARPS** | **Mount Arapiles** | **38.64** | **236** | P | **P** | | **14 06 28.5** | **+0.8** |
| **HTT** | **Hallett** | **40.36** | **242** | P | **P** | | **14 06 42.2** | **+0.5** |
| **LCRK** | **Leigh Creek** | **40.66** | **247** | P | **P** | | **14 06 44.6** | **+0.5** |
| **TWOA** | **Tennyson Woods** | **40.88** | **240** | P | **P** | | **14 06 45.9** | **+0.1** |
| **NAPP** | **Napperby** | **40.97** | **242** | P | **P** | | **14 06 47.6** | **+1.1** |
| **WHYH** | **Whyalla** | **41.43** | **243** | P | **P** | | **14 06 50.6** | **+0.4** |
| | comp=Z,38nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **42.68** | **243** | P | **P** | | **14 06 59.5** | **-0.5** |
| **BBOO** | **Buckleboo** | **42.68** | **243** | P | **P** | | **14 07 00.4** | **+0.4** |
| **OOD** | **Oodnadatta** | **42.79** | **251** | P | **P** | | **14 07 01.9** | **+1.0** |
| **JAY** | **Jayapura** | **44.02** | **288** | P | **P** | | **14 07 09.2** | **-1.4** |
| | comp=Z,67nm,0.9s,baz=157,slow=7.4,SNR=8.2 | | | | | | | |
| **JAY** | **Jayapura** | **44.02** | **288** | P | **P** | | **14 07 12.0** | **+1.3** |
| | comp=Z,47nm,0.9s | | | | | | | |
| **MULG** | **Mulgathing** | **44.24** | **247** | P | **P** | | **14 07 12.3** | **+0.1** |
| **WR0** | **Warramunga Arr** | **44.48** | **262** | P | **P** | | **14 07 12.9** | **-1.2** |
| **AS31** | **Alice Springs** | **44.61** | **257** | P | **P** | | **14 07 14.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.61** | **257** | P | **P** | | **14 07 14.8** | **-0.3** |
| | comp=Z,16nm,0.7s,baz=95,slow=7.8,SNR=242 | | | | | | | |
| ASAR | | | | S | **S** | | **14 13 09.3** | **-2.5** |
| | comp=Z,2.8nm,0.8s,baz=94,slow=16,SNR=14 | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.65** | **262** | P | **P** | | **14 07 14.6** | **-0.9** |
| WB0 | | | | IAmb | IAmb | | 14 07 15.2 | |
| | comp=Z,9.8nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.66** | **262** | P | **P** | | **14 07 14.4** | **-1.1** |
| WB2 | | | | IAmb | IAmb | | 14 07 15.4 | |
| | comp=Z,7.2nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.66** | **262** | P | **P** | | **14 07 14.6** | **-1.0** |
| **WRAB** | **Tennant Creek** | **44.66** | **262** | P | **P** | | **14 07 15.0** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.67** | **262** | P | **P** | | **14 07 14.9** | **-0.7** |
| | comp=Z,4.1nm,0.5s,baz=97,slow=8.5,SNR=12 | | | | | | | |
| WRA | | | | S | **S** | | **14 13 08.4** | **-4.4** |
| | comp=Z,1.9nm,1.0s,baz=89,slow=14,SNR=6.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.67** | **262** | P | **P** | | **14 07 14.8** | **-0.9** |
| **HMH** | **Humu'ula Sheep** | **45.35** | **30** | P | **P** | | **14 07 21.0** | **0.0** |
| **HPAH** | **Hawaii Prepara** | **45.61** | **30** | P | **P** | | **14 07 22.7** | **-0.1** |
| **MTN** | **Manton Dam** | **49.20** | **270** | P | **P** | | **14 07 48.7** | **-1.1** |
| MTN | | | | IAmb | IAmb | | 14 07 49.9 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **49.42** | **246** | P | **P** | | **14 07 50.6** | **-0.5** |
| **FORT** | **Forrest** | **49.42** | **246** | P | **P** | | **14 07 50.7** | **-0.5** |
| **WRKA** | **Warakurna** | **49.56** | **254** | P | **P** | | **14 07 52.2** | **-0.2** |
| **KNRA** | **Kununurra** | **50.71** | **266** | P | **P** | | **14 08 00.1** | **-0.7** |
| **FAKI** | **Fak Fak** | **51.49** | **283** | P | **P** | | **14 08 05.4** | **-1.2** |
| FAKI | | | | IAmb | IAmb | | 14 08 14.8 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.10** | **262** | P | **P** | | **14 08 17.5** | **-0.5** |
| | comp=Z,1.6nm,0.4s,baz=155,slow=3.7,SNR=15 | | | | | | | |
| FITZ | | | | S | **S** | | **14 15 08.4** | **+0.5** |
| | comp=Z,3.1nm,1.2s,baz=316,slow=14,SNR=3.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.10** | **262** | P | **P** | | **14 08 17.2** | **-0.8** |
| **SIJI** | **Sorong** | **53.22** | **285** | P | **P** | | **14 08 18.6** | **-0.3** |
| | comp=Z,43nm,0.8s,baz=42,slow=6.1,SNR=17 | | | | | | | |
| **SOEI** | **Soe** | **56.53** | **272** | P | **P** | | **14 08 42.6** | **+0.4** |
| SOEI | | | | IAmb | IAmb | | 14 08 44.2 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **BATI** | **Baumata** | **56.97** | **271** | P | **P** | | **14 08 46.3** | **+1.2** |
| | comp=Z,5.6nm,0.4s,baz=311,slow=11,SNR=1.7 | | | | | | | |
| **SANI** | **Sanana** | **57.58** | **281** | P | **P** | | **14 08 48.0** | **-1.3** |
| | comp=Z,26nm,1.2s | | | | | | | |
| **SANI** | **Sanana** | **57.58** | **281** | P | **P** | | **14 08 49.0** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **57.76** | **257** | P | **P** | | **14 08 49.5** | **-0.9** |
| **SBA** | **Scott Base** | **58.09** | **184** | P | **P** | | **14 08 53.6** | **+2.1** |
| **VNDA** | **Vanda** | **58.12** | **185** | P | **P** | | **14 08 53.9** | **+2.1** |
| | comp=Z,7.9nm,0.9s,baz=342,slow=8.4,SNR=8.9 | | | | | | | |
| **VNDA** | **Vanda** | **58.12** | **185** | P | **P** | | **14 08 54.2** | **+2.3** |
| VNDA | | | | IAmb | IAmb | | 14 08 55.2 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **MMRI** | **Maumere** | **58.79** | **272** | P | **P** | | **14 08 57.9** | **+0.5** |
| MMRI | | | | IAmb | IAmb | | 14 09 00.1 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **MORW** | **Morawa** | **59.95** | **248** | P | **P** | | **14 09 04.5** | **-0.4** |
| **CASY** | **Casey** | **64.17** | **205** | P | **P** | | **14 09 32.7** | **+1.0** |
| CASY | | | | IAmb | IAmb | | 14 09 32.9 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **69.78** | **180** | P | **P** | | **14 10 07.5** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **70.06** | **324** | P | **P** | | **14 10 07.5** | **-0.8** |
| | comp=Z,3.7nm,0.7s,baz=165,slow=5.7,SNR=9.9 | | | | | | | |
| **MAJO** | **Matsushiro** | **70.06** | **324** | P | **P** | | **14 10 08.0** | **-0.3** |
| MAJO | | | | IAmb | IAmb | | 14 10 08.5 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **MAT** | **Matsushiro** | **70.06** | **324** | P | **P** | | **14 10 07.2** | **-1.1** |
| **MJB9** | **Matsu-Tunnel** | **70.07** | **324** | P | **P** | | **14 10 08.0** | **-0.4** |
| MJB9 | | | | IAmb | IAmb | | 14 10 08.5 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **KIWB** | **Kanaga Island** | **71.83** | **1** | P | **P** | | **14 10 18.1** | **-0.1** |
| **ADK** | **Adak** | **71.87** | **1** | P | **P** | | **14 10 17.7** | **-0.8** |
| **JHS** | **Saijyo** | **71.97** | **319** | P | **P** | | **14 10 18.9** | **-0.6** |
| JHS | | | | IAmb | IAmb | | 14 10 20.7 | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **NIKH** | **Nikolski High** | **73.38** | **6** | P | **P** | | **14 10 25.5** | **-1.7** |
| | baz=189 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **73.56** | **332** | P | **P** | | **14 10 29.4** | **+1.0** |
| **ASAJ** | **Asahikawa** | **73.56** | **332** | P | **P** | | **14 10 29.2** | **+0.8** |
| | comp=Z,26nm,0.9s,baz=222,slow=9.5,SNR=8.7 | | | | | | | |
| **UNV** | **Unalaska Valle** | **74.48** | **7** | P | **P** | | **14 10 32.3** | **-1.1** |
| **UNV** | **Unalaska Valle** | **74.48** | **7** | P | **P** | | **14 10 32.1** | **-1.3** |
| | baz=191 | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **75.72** | **333** | P | **P** | | **14 10 40.7** | **+0.2** |
| YSS | | | | IAmb | IAmb | | 14 10 42.0 | |
| | comp=Z,32nm,0.9s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **76.08** | **345** | P | **P** | | **14 10 41.7** | **-0.6** |
| **PETK** | **Petropavlovsk-** | **76.08** | **345** | P | **P** | | **14 10 41.5** | **-0.8** |
| | comp=Z,1.5nm,0.8s,baz=153,slow=10.0,SNR=14 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.08** | **345** | P | **P** | | **14 10 41.7** | **-0.6** |
| **KSRS** | **Korea Array** | **76.75** | **319** | P | **P** | | **14 10 46.7** | **+0.3** |
| | comp=Z,1.5nm,0.7s,baz=140,slow=6.6,SNR=8.4 | | | |

baz=240
KVN Kaiserville 81.33 43 P P 14 11 11.4 +0.6
TPH Tonopah 81.34 44 P P 14 11 11.8 +0.8
TPNV Topopah Spring 81.36 46 P P 14 11 12.6 +1.5
baz=237
J04D Umpqua Nationa 81.38 38 P P 14 11 12.2 +1.1
J04D Umpqua Nationa 81.38 38 P P 14 11 12.1 +1.1
baz=232
PDMCI Parker Dam,Lak 81.40 49 P P 14 11 12.7 +1.6
baz=238,SNR=5.3
Q19K Cape Douglas, 81.43 12 P P 14 11 13.7 +3.0
baz=203
I04A Tendick Farm, 81.55 37 P P 14 11 12.9 +1.1
baz=231
MOD Modoc Plateau 81.63 40 P P 14 11 13.2 +0.8
MOD IAmb IAmb 14 11 14.5
comp=Z,14nm,0.9s
K05A Summer Lake 81.77 39 P P 14 11 14.0 +1.0
K05A IAmb IAmb 14 11 15.6
comp=Z,27nm,1.0s
H04D Lebanon 81.83 36 P P 14 11 14.6 +1.5
baz=231
J05D Fort Rock, OR 81.91 38 P P 14 11 15.3 +1.6
baz=232
G03D McMinnville, O 81.97 36 P P 14 11 15.1 +1.4
baz=231
W13A Hualapai Mount 81.99 48 P P 14 11 15.4 +1.0
CN2 Changchun 82.16 322 eP P 14 11 15.0 +0.3
CN2 pmax pmax
comp=Z,10.0nm,1.1s
H04A Detroit Lake 82.23 37 P P 14 11 15.8 +0.7
H04A IAmb IAmb 14 11 16.9
comp=Z,25nm,1.3s
BNX BinXian 82.28 325 ⇑P P 14 11 15.3 0.0
BNX pmax pmax
comp=Z,25nm,0.8s
BNX pmax pmax
comp=Z,470nm,4.4s
KLR Kul'dur 82.37 329 P P 14 11 15.9 +0.2
comp=Z,4.3nm,0.8s,baz=106,slow=4.6,SNR=12
PINE Pine Mountain 82.39 38 P P 14 11 17.0 +0.8
PINE IAmb IAmb 14 11 18.8
comp=Z,27nm,0.9s
PRN Pahroc Range 82.42 46 P P 14 11 17.4 +1.0
PRN IAmb IAmb 14 11 19.0
comp=Z,12nm,1.0s
O19K Port Alsworth 82.47 12 P P 14 11 15.2 -0.7
O19K Port Alsworth 82.47 12 P P 14 11 15.1 -0.7
baz=202
I05D Terrebonne, OR 82.50 37 P P 14 11 17.3 +0.7
baz=232
R11A Troy Canyon, C 82.57 45 P P 14 11 18.1 +0.9
baz=237
BMN Battle Mountai 82.67 42 P P 14 11 18.6 +0.9
BMN IAmb IAmb 14 11 19.8
comp=Z,17nm,1.0s
BRSE Bradley Lake S 82.79 14 P P 14 11 16.6 -0.9
baz=206
TUC Tucson 82.82 52 P P 14 11 19.7 +1.2
TUC Tucson 82.82 52 P P 14 11 20.6 +2.1
baz=241
WVOR Wild Horse Val 82.94 40 P P 14 11 19.9 +1.0
WVOR IAmb IAmb 14 11 21.2
comp=Z,16nm,1.1s
N19K Bonanza Creek 83.01 11 P P 14 11 17.8 -1.0
baz=202
G05D Wamic, OR 83.06 36 P P 14 11 20.1 +0.8
baz=232
E04D Cinebar 83.19 35 P P 14 11 20.9 +1.0
baz=231
X16A Lo Mia Camp, P 83.38 50 P P 14 11 22.6 +1.2
I07A Izee 83.40 38 P P 14 11 22.3 +1.2
I07A IAmb IAmb 14 11 23.4
comp=Z,11nm,0.9s
SEW Seward 83.40 14 P P 14 11 20.2 -0.4
baz=207
LCMT Little Creek M 83.43 47 P P 14 11 22.4 +0.9
319A Douglas 83.49 53 P P 14 11 23.3 +1.4
319A IAmb IAmb 14 11 25.1
comp=Z,17nm,1.1s
D03D Eldon 83.54 34 P P 14 11 22.0 +0.4
baz=231
J08A Circle Bar Ran 83.58 39 P P 14 11 22.9 +0.9
J08A IAmb IAmb 14 11 24.2
comp=Z,22nm,1.3s
MA2 Magadan 83.59 345 P P 14 11 20.2 -1.3
comp=Z,9.1nm,0.8s,baz=142,slow=3.9,SNR=26
MA2 Magadan 83.59 345 P P 14 11 20.7 -0.8
MA2 IAmb IAmb 14 11 21.7
comp=Z,14nm,0.9s
CCUT Cedar City 83.63 46 P P 14 11 24.1 +1.5
KNB Kanab 83.72 47 P P 14 11 24.3 +1.3
KNB IAmb IAmb 14 11 25.6
comp=Z,15nm,1.2s
U15A North Rim 83.79 48 P P 14 11 24.4 +0.9
U15A IAmb IAmb 14 11 26.2
comp=Z,11nm,1.0s
SPCR Spurr Chakacha 83.81 12 P P 14 11 22.0 -0.6
baz=204
SPU Mount Spurr 83.82 12 P P 14 11 21.6 -1.1
SZCU Shurtz Canyon 83.84 46 P P 14 11 24.8 +1.1
D05A Enumclaw 83.90 35 P P 14 11 24.6 +1.3
D05A IAmb IAmb 14 11 25.9
comp=Z,34nm,1.2s
GAMB Gambell 83.93 3 P P 14 11 23.6 +0.5
GAMB IAmb IAmb 14 11 24.5
comp=Z,20nm,0.8s
GAMB Gambell 83.93 3 P P 14 11 23.0 -0.1
baz=186
WUAZ Wupatki 83.97 49 P P 14 11 25.4 +1.2
WUAZ Wupatki 83.97 49 P P 14 11 24.3 +0.1
baz=240
M19K Big River Lodg 84.05 11 P P 14 11 23.0 -0.8
baz=202
ELK Elko 84.10 43 P P 14 11 25.6 +0.8
RC01 Rabbit Creek A 84.22 13 P P 14 11 23.8 -0.8
baz=206
L19K White Mountain 84.22 11 P P 14 11 24.7 0.0
L19K IAmb IAmb 14 11 25.8
comp=Z,26nm,1.2s
L19K White Mountain 84.22 11 P P 14 11 24.5 -0.1
baz=202,SNR=6.6
PWL Port Wells 84.33 14 P P 14 11 24.8 -0.4
baz=208
G08A Pilot Rock 84.42 37 P P 14 11 26.9 +0.8
G08A IAmb IAmb 14 11 28.3
comp=Z,12nm,1.0s
A04D Lummi Island 84.49 33 P P 14 11 26.9 +0.7
baz=231
L20K Farewell, AK 84.67 11 P P 14 11 26.7 -0.1
baz=203
E07A Sunnyside 84.67 36 P P 14 11 28.3 +1.0
E07A IAmb IAmb 14 11 29.5
comp=Z,19nm,1.3s
MTPU Mount Pierson 84.68 46 P P 14 11 29.4 +1.5
TTA Tatalina 84.73 10 P P 14 11 27.3 +0.1
TTA IAmb IAmb 14 11 28.4
comp=Z,17nm,1.1s
TTA Tatalina 84.73 10 P P 14 11 26.4 -0.8
baz=201,SNR=8.0
M22K Willow 84.74 13 P P 14 11 26.4 -0.7
baz=206
HAWA Hanford 84.75 36 P P 14 11 28.8 +1.2
HAWA IAmb IAmb 14 11 29.8
comp=Z,14nm,1.1s
KNK Knik Glacier 84.79 14 P P 14 11 26.5 -0.9
baz=208
PMR Palmer 84.80 13 P P 14 11 26.8 -0.6
baz=207
W18A Petrified Fore 84.94 50 P P 14 11 29.9 +0.9
W18A IAmb IAmb 14 11 31.5
comp=Z,13nm,1.4s
W18A Petrified Fore 84.94 50 P P 14 11 29.7 +0.7
baz=241
E08A Dider Farm, El 85.08 36 P P 14 11 30.1 +1.0
E08A IAmb IAmb 14 11 31.3
comp=Z,13nm,1.2s
BMO Blue Mountains 85.12 38 P P 14 11 29.8 +0.3
121A Cookes Peak, D 85.15 53 P P 14 11 30.8 +0.7
baz=242
MFID Camas Ranch 85.20 40 P P 14 11 30.5 +0.5
BMRM Bremner River 85.32 16 P P 14 11 30.0 0.0
baz=211
SCM Sheep Creek Mo 85.42 14 P P 14 11 30.7 +0.2
baz=209
HNS HongShan 85.43 313 ⇓P P 14 11 31.3 +0.2
HNS pmax pmax
comp=Z,10.0nm,1.1s
KLU Klutina 85.45 15 P P 14 11 30.9 +0.2
baz=210
K20K Telida 85.45 11 P P 14 11 30.5 -0.1
K20K IAmb IAmb 14 11 31.4
comp=Z,32nm,1.2s
K20K Telida 85.45 11 P P 14 11 30.1 -0.5
baz=202
D08A Wollman Farm, 85.49 36 P P 14 11 32.1 +1.0
D08A IAmb IAmb 14 11 33.4
comp=Z,26nm,1.3s
WRAK Wrangell Islan 85.51 23 P P 14 11 32.0 +1.0
baz=222
LYN LuoYang 85.65 309 ⇑P P 14 11 33.3 +1.1
LYN pmax pmax
comp=Z,10.0nm,0.6s
BJI Beijing 85.77 315 P P 14 11 32.6 0.0
BJI sP sP 14 14 14.6 -11
BJI pmax pmax
comp=Z,7.0nm,0.8s
F10A Beach Ranch, E 85.81 38 P P 14 11 33.1 +0.3
CAST Castle Rocks 85.86 11 P P 14 11 30.8 -1.8
CAST IAmb IAmb 14 11 32.0
comp=Z,18nm,1.0s
CAST Castle Rocks 85.86 11 P P 14 11 30.7 -1.8
baz=204,SNR=9.8
N25K Chitina, Valde 85.87 15 P P 14 11 32.5 -0.2
baz=211
TNA Tin City 85.92 4 P P 14 11 32.4 -0.3
TNA IAmb IAmb 14 11 33.5
comp=Z,8.0nm,0.9s
TNA Tin City 85.92 4 P P 14 11 31.8 -0.9
baz=189
M24K Tolsona, Glenn 85.92 14 P P 14 11 32.7 -0.2
baz=210
TMUT Trail Mountain 85.98 46 P P 14 11 35.1 +1.1
WAT6 Susitna Watana 85.98 14 P P 14 11 32.3 -1.0
baz=208,SNR=5.6
PLID Pearl Lake 86.02 39 P P 14 11 34.3 +0.2
PLID IAmb IAmb 14 11 35.1
comp=Z,11nm,1.2s
B08A Colville Reser 86.03 35 P P 14 11 33.8 +0.1
B08A IAmb IAmb 14 11 34.6
comp=Z,13nm,1.2s
HLID Hailey 86.14 41 P P 14 11 35.3 +0.8
HLID Hailey 86.14 41 P P 14 11 35.7 +1.1
baz=237,SNR=8.5
SEY Seymchan 86.18 347 P P 14 11 33.6 -0.4
comp=Z,19nm,0.8s,baz=149,slow=5.3,SNR=76
J20K Nowinta River 86.20 10 P P 14 11 33.1 -1.0
baz=202
TRF Thorofare Moun 86.23 12 P P 14 11 33.7 -0.8
TRF Thorofare Moun 86.23 12 P P 14 11 33.2 -1.3
baz=206,SNR=5.3
CHUM Lake Minchumin 86.25 11 P P 14 11 33.0 -1.3
baz=204,SNR=6.3
GCSA Galena City Sc 86.31 9 P P 14 11 34.3 -0.2
baz=200
SRU San Rafael Swe 86.35 46 P P 14 11 36.1 +0.4
RND Reindeer 86.48 13 P P 14 11 35.1 -0.5
DHY Denali Highway 86.50 13 P P 14 11 35.0 -0.8
baz=209
MNTX Cornudas Mount 86.59 55 P P 14 11 37.8 +1.0
MNTX Cornudas Mount 86.59 55 P P 14 11 38.0 +1.2
baz=244
BPAW Bear Paw Mtn. 86.69 12 P P 14 11 35.2 -1.3
baz=205
MCK McKinley 86.76 12 P P 14 11 35.9 -0.9
MCK McKinley 86.76 12 P P 14 11 36.1 -0.6
baz=207,SNR=8.6
PAX Paxson 86.84 14 P P 14 11 36.7 -0.5
baz=210
TX31 Lajitas Ar. Si 86.91 57 P P 14 11 38.6 +0.2
TX31 IAmb IAmb 14 11 41.3
comp=Z,18nm,1.1s
TX32 Lajitas Array 86.91 57 P P 14 11 38.8 +0.3
TXAR Lajitas Array 86.91 57 P P 14 11 39.9 +1.5
comp=Z,2.4nm,0.8s,baz=218,slow=7.1,SNR=21
TXAR pP pwP 14 13 41.7 +1.9
comp=Z,0.7nm,1.0s,baz=231,slow=5.7,SNR=3.1
M26K Nabesna, AK 86.94 16 P P 14 11 37.5 -0.3
baz=213
YUK6 Outpost Mounta 87.00 18 P P 14 11 38.6 +0.4
baz=217
YUK3 Moose Creek 87.09 17 P P 14 11 38.4 -0.2
baz=215,SNR=5.4
HYT Haines Junctio 87.16 19 P P 14 11 38.9 0.0
baz=218
NEW Newport 87.18 36 P P 14 11 39.1 -0.1
baz=235
M27K Edge Creek, AK 87.19 16 P P 14 11 39.3 +0.3
M27K Edge Creek, AK 87.19 16 P P 14 11 39.3 +0.3
baz=214,SNR=8.2
ANMO Albuquerque 87.24 51 P P 14 11 40.4 +0.4
ANMO Albuquerque 87.24 51 P P 14 11 40.6 +0.6
baz=243
YUK4 Talbot Arm 87.24 18 P P 14 11 39.4 +0.1
baz=217
L26K Log Cabin Wild 87.39 15 P P 14 11 39.9 +0.1
baz=212
I21K Tanana 87.49 11 P P 14 11 39.5 -0.6
baz=204,SNR=8.4
NEA2 Nenana 87.50 12 P P 14 11 39.2 -1.1
baz=207
BVCY Beaver Creek 87.51 16 P P 14 11 40.2 -0.2
baz=214,SNR=5.0
MLY Manley 87.58 11 P P 14 11 39.6 -1.0
baz=205
WRH Wood River Hil 87.59 12 P P 14 11 39.5 -1.1
RIDG Independent Ri 87.64 14 P P 14 11 40.6 -0.4
RIDG Independent Ri 87.64 14 P P 14 11 41.0 0.0
baz=211
DOT Dot Lake 87.75 14 P P 14 11 41.1 -0.4
DOT IAmb IAmb 14 11 42.2
comp=Z,17nm,1.1s
MCMT McKenzie Canyo 87.76 40 P P 14 11 42.0 -0.2
HDA Harding Lake 87.77 13 P P 14 11 40.6 -0.8
HDA IAmb IAmb 14 11 42.8
comp=Z,12nm,0.8s
HDA Harding Lake 87.77 13 P P 14 11 40.7 -0.8
baz=209
H21K Melozitna Rive 87.79 10 P P 14 11 40.8 -0.8
H21K IAmb IAmb 14 11 43.5
comp=Z,7.0nm,0.8s
H21K Melozitna Rive 87.79 10 P P 14 11 41.2 -0.4
baz=204
L27K Beaver Creek, 87.80 16 P P 14 11 41.4 -0.3
L27K Beaver Creek, 87.80 16 P P 14 11 42.0 +0.3
baz=214
CCB Clear Creek Bu 87.80 12 P P 14 11 40.2 -1.4
XLT XiLinHaoTe 87.81 319 eP P 14 11 42.4 +0.1
XLT pmax pmax
comp=Z,9.0nm,0.8s
XLT pmax pmax
comp=Z,120nm,3.5s
I23K Minto, Yukon-K 87.94 12 P P 14 11 40.8 -1.4
I23K IAmb IAmb 14 11 42.4
comp=Z,18nm,1.4s
I23K Minto, Yukon-K 87.94 12 P P 14 11 41.2 -1.1
baz=207,SNR=5.5
IMAR Indian Mountai 87.94 10 P P 14 11 41.5 -0.8
TCOL CIGO, UAF Yank 87.99 12 P P 14 11 41.2 -1.2
TCOL CIGO, UAF Yank 87.99 12 P P 14 11 41.5 -0.9
baz=208,SNR=11
COLA College 87.99 12 P P 14 11 41.2 -1.3
COLA College 87.99 12 P P 14 11 41.5 -0.9
baz=208
MDM Murphy Dome 87.99 12 P P 14 11 41.5 -1.1
XAN Xi'an 88.04 307 P P 14 11 43.8 +0.3
XAN pP PcP 14 11 50.3 +5.5
XAN pmax pmax
comp=Z,18nm,0.9s
SCRK Sand Creek 88.05 14 P P 14 11 42.5 -0.5
SCRK IAmb IAmb 14 11 44.0
comp=Z,15nm,1.3s
SCRK Sand Creek 88.05 14 P P 14 11 42.8 -0.1
baz=212
IL31 88.10 13 P P 14 11 41.5 -1.4
IL31 IAmb IAmb 14 11 43.2
comp=Z,15nm,1.1s
ILAR Eielson Array 88.10 13 P P 14 11 42.0 -1.1
comp=Z,8.1nm,0.9s,baz=225,slow=5.1,SNR=38
ILAR pP pwP 14 13 43.6 -1.3
comp=Z,5.1nm,1.0s,baz=227,slow=5.3,SNR=13
ILAR Eielson Array 88.10 13 P P 14 11 41.7 -1.3
P33M Teslin, Yukon 88.17 21 P P 14 11 44.1 +0.5
baz=222
MSO Missoula 88.18 38 P P 14 11 44.7 +0.8
baz=238
DLMT Dillon 88.20 40 P P 14 11 44.9 +0.8
DLMT IAmb IAmb 14 11 46.4
comp=Z,14nm,1.1s
SNAA Sanae 88.22 178 P P 14 11 43.5 -0.2
S22A 4UR Ranch, Cre 88.25 49 P P 14 11 45.4 +0.6
S22A 4UR Ranch, Cre 88.25 49 P P 14 11 45.3 +0.6
baz=243
TPAW Teton Pass 88.25 42 P P 14 11 44.5 -0.1
TPAW IAmb IAmb 14 11 45.8
comp=Z,7.0nm,1.1s
J25K Salcha River, 88.28 13 P P 14 11 43.4 -0.6
baz=210,SNR=7.1
POKR Poker Plat Res 88.29 12 P P 14 11 42.9 -1.1
POKR IAmb IAmb 14 11 43.9
comp=Z,9.3nm,0.8s
POKR Poker Plat Res 88.29 12 P P 14 11 43.4 -0.5
baz=208
VNA3 Neumayer Olymp 88.35 176 P P 14 11 44.3 -0.1
O20A White River Ci 88.38 46 P P 14 11 45.6 +0.4
baz=242
MOOW Moose Ponds 88.51 42 P P 14 11 45.8 0.0
LRM Limekiln Ridge 88.52 40 P P 14 11 46.0 +0.2
LOHW Long Hollow 88.53 42 P P 14 11 46.0 +0.2
J26L Joseph Creek 88.59 14 P P 14 11 45.4 0.0
baz=212
QLMT Earthquake Lak 88.63 41 P P 14 11 47.2 +0.9
FLWY Flagg Ranch 88.71 42 P P 14 11 47.9 +1.3
FLWY IAmb IAmb 14 11 49.7
comp=Z,15nm,1.1s
M30M Minto, Yukon 88.76 18 P P 14 11 46.5 +0.3
M30M Minto, Yukon 88.76 18 P P 14 11 46.0 -0.2
baz=218,SNR=9.9
BW06 Boulder Array 88.78 43 P P 14 11 46.6 -0.4
BW06 IAmb IAmb 14 11 48.5
comp=Z,7.9nm,1.1s
BW06 Boulder Array 88.78 43 P P 14 11 46.8 -0.2
baz=241,SNR=7.9
PD31 Pinedale Array 88.78 43 P P 14 11 46.6 -0.4
PD31 IAmb IAmb 14 11 48.5
comp=Z,7.0nm,1.1s
PDAR Pinedale Array 88.78 43 P P 14 11 48.0 +1.0
comp=Z,4.6nm,1.0s,baz=215,slow=3.7,SNR=23
PDAR Pinedale Array 88.78 43 P P 14 11 46.9 -0.1
VNA2 Neumayer--Watz 88.79 177 P P 14 11 46.6 +0.3
baz=183,slow=3.5
YMR Madison River 88.83 41 P P 14 11 47.8 +0.6
YMR IAmb IAmb 14 11 50.0
comp=Z,10nm,1.1s
H24K Noodor Dome 88.84 12 P P 14 11 45.5 -1.0
baz=208
BOZ Bozeman (W) 88.90 40 P P 14 11 48.2 +0.8
BOZ IAmb IAmb 14 11 50.2
comp=Z,12nm,1.1s
BOZ Bozeman (W) 88.90 40 P P 14 11 48.3 +0.8
baz=239,SNR=15
H17A Grant Village 88.94 41 P P 14 11 49.3 +1.5
baz=240
YHH Holmes Hill 88.97 41 P P 14 11 48.9 +1.0
YHH IAmb IAmb 14 11 51.5
comp=Z,7.3nm,1.2s
VNA1 Neumayer--Stat 89.02 177 P P 14 11 47.7 +0.3
PRP Porcupine Dome 89.03 13 P P 14 11 46.9 -0.7
baz=210
M31M Drury Creek, Y 89.17 19 P P 14 11 48.5 +0.4
baz=220
SDCO Great Sand Dun 89.19 49 P P 14 11 49.2 +0.1
baz=244
HHC Hu-ho-hao-te 89.23 314 eP P 14 11 49.8 +0.8
HHC pmax pmax
comp=Z,8.0nm,1.0s
HHC pmax pmax
comp=Z,170nm,4.9s
DAWY Dawson 89.24 16 P P 14 11 48.6 +0.2
DAWY IAmb IAmb 14 11 49.6
comp=Z,12nm,0.9s
DAWY Dawson 89.24 16 P P 14 11 48.5 0.0
baz=216,SNR=8.0
KMI Kunming 89.29 297 ⇑P P 14 11 51.4 +1.6
KMI pmax pmax
comp=Z,10.0nm,0.8s
EGAK Eagle 89.39 15 P P 14 11 49.0 0.0
EGAK Eagle 89.39 15 P P 14 11 48.7 -0.3
baz=214,SNR=8.5
PLCA Paso Flores 89.39 134 P P 14 11 51.2 +1.3
comp=Z,2.4nm,1.0s,baz=170,slow=3.6,SNR=3.3
FARO Faro, Yukon 89.51 19 P P 14 11 50.3 +0.6
baz=221
MSTX Muleshoe 89.55 53 P P 14 11 51.7 +1.0
baz=245
COLD Coldfoot 89.66 10 P P 14 11 50.3 +0.1
COLD IAmb IAmb 14 11 52.1
comp=Z,13nm,1.0s
COLD Coldfoot 89.66 10 P P 14 11 50.4 +0.1
baz=206
T25A Trinidad 89.70 50 P P 14 11 52.3 +0.9
baz=244
MAYO Mayo, Yukon 89.81 17 P P 14 11 51.8 +0.8
baz=219
833A Chaparral WMA, 89.92 60 P P 14 11 53.8 +1.5
baz=247
ISCO Idaho Springs 90.02 47 P P 14 11 52.9 0.0
baz=243
CMAR Chiang Mai Arr 90.08 290 P P 14 11 54.3 +1.0
comp=Z,5.2nm,0.9s,baz=121,slow=2.9,SNR=33
CMAR Chiang Mai Arr 90.08 290 P P 14 11 53.2 -0.2
RLMT Red Lodge 90.11 41 P P 14 11 53.9 +0.8
RLMT IAmb IAmb 14 11 56.0
comp=Z,8.1nm,1.2s
RLMT Red Lodge 90.11 41 P P 14 11 54.0 +0.8
baz=241,SNR=6.1
CHTO Chiang Mai 90.21 290 P P 14 11 54.1 +0.2
CHTO IAmb IAmb 14 11 55.6
comp=Z,6.2nm,0.8s
N23A Red Feather La 90.29 46 P P 14 11 54.6 +0.5
N23A IAmb IAmb 14 11 56.8
comp=Z,6.6nm,1.1s
N23A Red Feather La 90.29 46 P P 14 11 55.2 +1.1
baz=243
MMPY Shelton Lake, 90.45 20 P P 14 11 54.6 +0.5
baz=223
I29M Ogilvie Camp, 90.57 16 P P 14 11 54.3 -0.2
baz=217
PZH PanZhiHua 90.65 298 P P 14 11 55.4 -0.5
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,130nm,4.9s
K22A Casper 90.70 44 P P 14 11 55.9 +0.1
baz=243
BMAR Burnt Mountain 90.88 12 P P 14 11 56.4 +0.5
TOLK Toolik Lake Re 91.04 10 P P 14 11 56.6 -0.1
TOLK IAmb IAmb 14 11 57.6
comp=Z,6.5nm,1.1s
TOLK Toolik Lake Re 91.04 10 P P 14 11 56.1 -0.5
baz=206
EPYK Eagle Plains 91.77 15 P P 14 11 59.8 -0.3
EPYK IAmb IAmb 14 12 00.8
comp=Z,9.2nm,0.9s
EPYK Eagle Plains 91.77 15 P P 14 11 59.9 -0.1
baz=218,SNR=5.7
YAK Yakutsk 91.93 338 P P 14 11 59.9 -0.9
comp=Z,4.7nm,0.6s,baz=75,slow=0.7,SNR=6.8
YAK Yakutsk 91.93 338 IAmb IAmb 14 12 00.6
comp=Z,16nm,0.9s
LAO LASA Array 92.72 41 P P 14 12 05.6 +0.7
baz=243
RSSD Black Hills 92.97 44 P P 14 12 06.9 +0.5
baz=245
CBKS Cedar Bluff 93.75 50 P P 14 12 10.9 +1.1
baz=247
INK Inuvik 94.06 15 P P 14 12 09.9 -0.4
comp=Z,4.6nm,1.0s,baz=226,slow=3.1,SNR=11
INK Inuvik 94.06 15 P P 14 12 09.9 -0.4
INK Inuvik 94.06 15 P P 14 12 09.9 -0.4
baz=221
DGMT Dagmar 94.73 40 P P 14 12 15.1 +1.1
baz=245
SONM Songino Array 95.62 319 P P 14 12 18.6 +0.4
comp=Z,0.5nm,0.7s,baz=147,slow=5.2,SNR=3.1
SONM pP pwP 14 14 21.7 +1.5
comp=Z,0.7nm,0.9s,baz=125,slow=4.4,SNR=4.7
SONM Songino Array 95.62 319 P P 14 12 18.9 +0.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **96.30** | **25** | P | | **P** | 14 12 20.5 | -0.2 |
| | comp=Z,1.2nm,0.9s,baz=241,slow=4.4,SNR=12 | | | | | | | |
| YKA | | | | pP | | **pwP** | 14 14 22.9 | -0.3 |
| | comp=Z,0.1nm,0.3s,baz=251,slow=4.8,SNR=3.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.30** | **25** | P | | **P** | 14 12 20.2 | -0.4 |
| **C36M** | **Paulatuk** | **97.24** | **17** | P | | Pdif | 14 12 24.7 | +0.1 |
| | baz=230 | | | | | | | |
| **A36M** | **Sachs Harbour** | **98.66** | **14** | Pdif | | Pdif | 14 12 31.6 | +0.6 |
| A36M | | | | IAmb | | IAmb | 14 12 33.1 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.08** | **313** | PKiKP | | **PKiKP** | 14 17 21.6 | -0.9 |
| | comp=Z,0.4nm,0.6s,baz=240,slow=2.0,SNR=6.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.72** | **350** | PKP | | **PKPdf** | 14 17 54.8 | -0.9 |
| | comp=Z,2.9nm,0.9s,baz=120,slow=1.3,SNR=6.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **135.58** | **344** | PKP | | **PKPdf** | 14 18 09.7 | +0.9 |
| | comp=Z,1.2nm,0.6s,baz=45,slow=0.5,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.85** | **331** | PKhKP | | PKPpre | 14 18 18.4 | |
| | comp=Z,9.3nm,0.8s,baz=42,slow=4.7,SNR=48 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.85** | **331** | PKPpre | | PKPpre | 14 18 18.0 | |
| **SHEL** | **Horse Pasture** | **143.18** | **167** | | | PKPbc | 14 18 23.2 | +1.0 |
| **LODK** | **Lodwar** | **143.46** | **247** | | | PKPab | 14 18 23.4 | +0.4 |
| **SORM** | **Soroca** | **145.04** | **329** | ⇓P | | **PKPdf** | **14 18 26.0** | **-0.1** |
| **BNN** | **Bunyan** | **145.53** | **310** | PKPbc | | **PKPdf** | **14 18 28.7** | **+1.2** |
| **BSEG** | **Bad Segeberg** | **145.82** | **351** | *e*PKPbc | | **PKPbc** | **14 18 29.2** | **+0.3** |
| | baz=17,slow=2.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.73** | **313** | PKPbc | | **PKPbc** | **14 18 31.8** | **-0.4** |
| | comp=Z,3.8nm,0.9s,baz=145,slow=3.0,SNR=12 | | | | | | | |
| BRTR | | | | pPKPbc | | **pPKPdf** | **14 20 41.3** | **+4.1** |
| | comp=Z,1.6nm,0.8s,baz=151,slow=3.3,SNR=3.9 | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **146.88** | **331** | | | **PKPbc** | **14 18 32.9** | **+0.6** |
| **BURAR** | **Bucovina Array** | **146.90** | **331** | ⇓P | | **PKPbc** | **14 18 33.0** | **+0.6** |
| **BURAR** | **Bucovina Array** | **146.90** | **331** | | | **PKPbc** | **14 18 32.3** | **0.0** |
| **TESR** | **Tescani** | **147.00** | **328** | ⇓P | | **PKPbc** | **14 18 32.3** | **-0.2** |
| **CFR** | **Carcaliu** | **147.13** | **325** | ⇑P | | **PKPdf** | **14 18 31.4** | **+1.7** |
| **TPGR** | **Topolog** | **147.19** | **324** | ⇓P | | **PKPbc** | **14 18 32.8** | **-0.3** |
| **FLTG** | **Flechtingen** | **147.23** | **350** | *e*PKPbc | | **PKPbc** | **14 18 33.0** | **+0.1** |
| | baz=17,slow=2.6 | | | | | | | |
| **VRI** | **Vrincioaia** | **147.41** | **327** | ⇓P | | **PKPdf** | **14 18 32.8** | **+2.5** |
| **PLOR** | **Plostina** | **147.46** | **327** | ⇓P | | **PKPbc** | **14 18 33.8** | **0.0** |
| **CRVS** | **Cervenica-Dubn** | **147.48** | **336** | *e*PKP | | **PKPab** | **14 18 37.9** | **+0.3** |
| **ASSE** | **Asse, Remlinge** | **147.51** | **350** | *e*PKPbc | | **PKPbc** | **14 18 34.1** | **+0.5** |
| | baz=17,slow=2.6 | | | | | | | |
| **CLZ** | **Clausthal** | **147.84** | **350** | *e*PKPbc | | **PKPbc** | **14 18 34.9** | **+0.3** |
| | baz=17,slow=2.6 | | | | | | | |
| **CLL** | **Collm** | **147.87** | **347** | ⇓*i*PKPbc | | **PKPbc** | **14 18 34.3** | **-0.3** |
| | comp=Z,29nm,1.2s | | | | | | | |
| CLL | | | | *i* PKiKP | | **PKiKP** | **14 18 36.8** | **+0.8** |
| | comp=Z,13nm,1.0s | | | | | | | |
| CLL | | | | ⇑*i*PKPab | | **PKPab** | **14 18 38.5** | **-0.6** |
| | comp=Z,20nm,0.9s | | | | | | | |
| CLL | | | | *e*pPKPab | | **pPKPdf** | **14 20 38.0** | **-0.4** |
| **CLL** | **Collm** | **147.87** | **347** | | | **PKPbc** | **14 18 34.6** | **0.0** |
| **CLL** | **Collm** | **147.87** | **347** | *e*PKPbc | | **PKPbc** | **14 18 34.8** | **+0.2** |
| | baz=17,slow=2.6 | | | | | | | |
| **UPC** | **Upice** | **147.88** | **343** | ⇑*e*PKP | | **PKPbc** | **14 18 35.2** | **+0.5** |
| UPC | | | | *e*PKPAB | | **PKPab** | **14 18 39.7** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **147.94** | **343** | ⇑*e*PKP | | **PKPbc** | **14 18 35.2** | **+0.3** |
| DPC | | | | *e*PKPAB | | **PKPab** | **14 18 39.9** | **+0.4** |
| **DOPR** | **Dopca** | **148.01** | **329** | ⇓P | | **PKPbc** | **14 18 35.1** | **0.0** |
| **BRG** | **Berggiesshubel** | **148.06** | **346** | *e*PKP | | **PKPbc** | **14 18 35.1** | **0.0** |
| BRG | | | | Amp | | | 14 18 36.4 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| BRG | | | | *ex* | | x | 14 18 39.6 | |
| BRG | | | | Amp | | | 14 18 40.9 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.06** | **346** | *e*PKPbc | | **PKPbc** | **14 18 35.4** | **+0.3** |
| | baz=17,slow=2.6 | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.07** | **327** | ⇓P | | **PKPdf** | **14 18 34.1** | **+2.6** |
| **MLR** | **Muntele Rosu** | **148.07** | **327** | | | **PKPbc** | **14 18 35.1** | **-0.4** |
| **MORC** | **Moravsky Berou** | **148.09** | **341** | ⇓P | | **PKPbc** | **14 18 35.0** | **-0.3** |
| **MORC** | **Moravsky Berou** | **148.09** | **341** | | | **PKPbc** | **14 18 35.3** | **0.0** |
| **MORC** | **Moravsky Berou** | **148.09** | **341** | *e*PKP | | **PKPbc** | **14 18 35.5** | **+0.2** |
| **NEUB** | **Neuenburg** | **148.21** | **348** | *e*PKPbc | | **PKPbc** | **14 18 35.8** | **+0.4** |
| | baz=17,slow=2.6 | | | | | | | |
| **DRGR** | | **148.64** | **332** | ⇓P | | **PKPbc** | **14 18 37.0** | **+0.3** |
| **PRU** | **Pruhonice** | **148.74** | **344** | ⇑*e*PKP | | **PKPbc** | **14 18 37.3** | **+0.5** |
| PRU | | | | *e*PKPAB | | **PKPab** | **14 18 43.0** | **+0.3** |
| **KASTN** | **Kahler Asten** | **148.74** | **352** | *e*PKPbc | | **PKPbc** | **14 18 37.1** | **+0.3** |
| | baz=17,slow=2.6 | | | | | | | |
| **MOX** | **Moxa** | **148.77** | **348** | *e*PKPbc | | **PKPbc** | **14 18 37.2** | **+0.3** |
| | baz=17,slow=2.6 | | | | | | | |
| **VYHS** | **Vyhne** | **148.78** | **338** | *e*PKP | | **PKPbc** | **14 18 37.1** | **+0.1** |
| VYHS | | | | *e* | | | 14 18 43.5 | |
| **VRAC** | **Vranov** | **148.79** | **341** | *e*PKP | | **PKPbc** | **14 18 37.1** | **+0.1** |
| VRAC | | | | *e* | | | 14 18 43.3 | |
| **ARR** | **Arges** | **148.81** | **328** | ⇓P | | **PKPbc** | **14 18 37.8** | **+0.6** |
| **BORA** | **Eskisehir** | **148.81** | **315** | | | **PKPbc** | **14 18 37.0** | **-0.4** |
| **JAVC** | **Velka Javorina** | **148.85** | **340** | *e*PKP | | **PKPbc** | **14 18 38.5** | **+1.3** |
| **PSZ** | **Piszkesteto** | **148.88** | **336** | | | **PKPbc** | **14 18 37.2** | **-0.1** |
| **WERN** | **Wernitzgruen** | **148.96** | **347** | *e*PKPbc | | **PKPbc** | **14 18 37.9** | **+0.5** |
| | baz=17,slow=2.6 | | | | | | | |
| **NKC** | **Novy Kostel** | **149.00** | **347** | ⇑*e*PKP | | **PKPbc** | **14 18 37.7** | **+0.2** |
| NKC | | | | *e*PKPAB | | **PKPab** | **14 18 43.6** | **-0.2** |
| **KRUC** | **Moravsky** | **149.07** | **342** | *e*PKP | | **PKPbc** | **14 18 37.6** | **0.0** |
| KRUC | | | | *e* | | | 14 18 44.1 | |
| **MANZ** | **Manzenberg** | **149.30** | **347** | *e*PKPbc | | **PKPbc** | **14 18 38.6** | **+0.4** |
| | baz=17,slow=2.6 | | | | | | | |
| **MODS** | **Modra-Piesok** | **149.41** | **340** | *e*PKP | | **PKiKP** | **14 18 42.6** | **+3.3** |
| MODS | | | | *e* | | | 14 18 50.2 | |
| **ROTZ** | **Rotzenmuhle** | **149.49** | **347** | *e*PKPbc | | **PKPbc** | **14 18 39.0** | **+0.4** |
| | baz=17,slow=2.6 | | | | | | | |
| **GZR** | **Gura Zlata** | **149.68** | **330** | ⇓P | | **PKPbc** | **14 18 38.4** | **-0.9** |
| **TNS** | **Taunus Mts** | **149.70** | **352** | *e*PKPbc | | **PKPbc** | **14 18 39.4** | **+0.2** |
| | baz=17,slow=2.6 | | | | | | | |
| **GRF** | **Grafenberg Arr** | **149.76** | **348** | *e*PKPbc | | **PKPbc** | **14 18 40.0** | **+0.7** |
| | baz=17,slow=2.6 | | | | | | | |
| **KHC** | **Kasperske Hory** | **149.77** | **345** | ⇑*e*PKP | | **PKPbc** | **14 18 39.9** | **+0.5** |
| KHC | | | | *e*PKPAB | | **PKPab** | **14 18 47.2** | **+0.1** |
| KHC | | | | x | | x | 14 20 52.0 | |
| **KHC** | **Kasperske Hory** | **149.77** | **345** | | | **PKPbc** | **14 18 39.2** | **-0.1** |
| KHC | | | | | | **PKPab** | **14 18 46.9** | **-0.2** |
| **CKRC** | **Cesky Krumlov** | **149.87** | **344** | ⇑*e*PKP | | **PKPbc** | **14 18 39.8** | **+0.2** |
| CKRC | | | | *e*PKPAB | | **PKPab** | **14 18 47.5** | **0.0** |
| **GEC2** | **GERESS Array S** | **150.01** | **345** | | | **PKPbc** | **14 18 39.9** | **-0.2** |
| **GEC2** | **GERESS Array S** | **150.01** | **345** | *e*PKPbc | | **PKPbc** | **14 18 40.0** | **0.0** |
| | baz=17,slow=2.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **150.01** | **345** | PKPbc | | **PKPbc** | **14 18 40.0** | **0.0** |
| | comp=Z,3.5nm,0.9s,baz=42,slow=4.3,SNR=9.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **150.01** | **345** | | | **PKPbc** | **14 18 39.6** | **-0.4** |
| **HERR** | **Herculane** | **150.23** | **330** | ⇓P | | **PKPbc** | **14 18 39.8** | **-0.7** |
| **MORH** | **Mrgy, Hungar** | **150.77** | **336** | ⇑P | | **PKPbc** | **14 18 40.6** | **-1.1** |
| **DIVS** | **Divibare** | **151.94** | **332** | | | **PKPab** | **14 18 55.5** | **-0.9** |
| **LIT** | **Litokhoron** | **153.61** | **323** | PKPab | | **PKPab** | **14 19 01.9** | **-1.7** |
| **NRCA** | **Norcia** | **155.67** | **340** | | | **PKPab** | **14 19 11.3** | **-1.0** |
| **ESDC** | **Sonseca Array** | **160.00** | **14** | PKPab | | **PKPab** | **14 19 31.1** | **-0.1** |
| | comp=Z,3.3nm,1.1s,baz=348,slow=4.5,SNR=8.1 | | | | | | | |
| **ESDC** | **Sonseca Array** | **160.00** | **14** | PKPab | | **PKPab** | **14 19 30.8** | **-0.5** |
| **DBIC** | **Dimbokro** | **164.90** | **153** | PKPab | | **PKPab** | **14 19 54.6** | **+1.4** |
| | comp=Z,3.8nm,0.7s,baz=230,slow=3.6,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.89** | **177** | PKP | | **PKPdf** | **14 18 58.2** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=263,slow=1.3,SNR=4.7 | | | | | | | |
| TORD | | | | PKPab | | **pPKPab** | **14 20 28.8** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=183,slow=4.3,SNR=10 | | | | | | | |
| TORD | | | | pPKPab | | **pPKPab** | **14 22 31.7** | **+3.4** |
| | comp=Z,1.7nm,1.1s,baz=183,slow=2.9,SNR=5.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.89** | **177** | | | **PKPdf** | **14 18 56.2** | **-2.2** |

*SFS **22** 14:04:38.0, 35°.62N×3°.70W, h2km, ML2.5, ALBORAN S.*
*CNRM **22** 14:04:40.7, 35°.65N×3°.53W, h26km, ml2.2*
**ISC 22 14:04:39.6±1.7, 35°.65N±0°.06×3°.61W±0°.06, h18km±8km, n8, σ0°.48/16, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.51** | **212** | P | **Pn** | **14 04 51.7** | **-0.3** |
| PALE | | | | S | **Sn** | **14 04 59.8** | **-0.5** |
| **GOG** | **Mont Gurugu** | **0.66** | **130** | P | **Pb** | **14 04 52.9** | **+0.4** |
| GOG | | | | S | **Sb** | **14 05 01.9** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.07** | **115** | P | **Pg** | **14 05 00.3** | **0.0** |
| CHAS | | | | S | **Sg** | **14 05 14.1** | **-0.3** |
| **TAF** | **Taforalt** | **1.28** | **130** | P | **Pn** | **14 05 02.7** | **0.0** |
| TAF | | | | S | **Sb** | **14 05 19.2** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.30** | **329** | P | **Pn** | **14 05 02.2** | **-0.7** |
| EMAL | | | | S | **Sb** | **14 05 19.9** | **+0.1** |
| **JBK** | **JBK** | **1.56** | **147** | P | **Pn** | **14 05 06.6** | **-0.1** |
| JBK | | | | S | **Sn** | **14 05 26.6** | **0.0** |
| **PVAQ** | **Vaqueiros** | **3.74** | **299** | *e*Pn | **Pn** | **14 05 37.3** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **14 06 19.6** | **-0.6** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **296** | *e*Pn | **Pn** | **14 05 38.4** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **14 06 22.0** | **-0.3** |

*IDC **22** 14:08:00.6±2.5, 17°.50S×167°.85E, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.8/41, mbtmp3.9/8, ML3.4/1, MS3.4/4, Ms1 3.4/4, ms1mx2.8/58, Error ellipse: s-maj=61.5km s-min=28.7km az=109.0*
*NOU **22** 14:08:03.5, 17°.61S×167°.81E, h2km, MLv4.6/14, Vanuatu Islands*
*NEIC **22** 14:08:03.6±1.8, 17°.52S±0°.06×167°.8E±0°.1, h17km±5km, mb4.5/14, Error ellipse: s-maj=15.4km s-min=9.0km az=91.0*
**ISC 22 14:08:04.0±0.6, 17°.55S±0°.06×167°.86E±0°.07, h27km, n40, σ1§16/39, mb4.3/14, MS3.4/4, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.36** | **119** | P | **Pb** | **14 08 11.7** | **-0.3** |
| **RTV** | **Rentapao** | **0.59** | **114** | P | **Pb** | **14 08 15.1** | **-0.7** |
| **SANVU** | **Saraoutou** | **2.18** | **343** | Pn | **Pn** | **14 08 38.1** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **4.51** | **228** | Pn | **Pn** | **14 09 09.8** | **-0.6** |
| **KOUNC** | **Koumac, New Ca** | **4.51** | **228** | P | **Pn** | **14 09 11.9** | **+1.4** |
| **YATNC** | **Mamie plateau,** | **4.58** | **191** | P | **Pn** | **14 09 13.3** | **+1.8** |
| **DZM** | **Mont Dzumac** | **4.69** | **196** | Pn | **Pn** | **14 09 13.3** | **+0.1** |
| | 1.8nm,0.3s,baz=66,slow=12,SNR=21 | | | | | | |
| DZM | | | | Sn | **Sn** | **14 10 03.1** | **-3.7** |
| | 3.6nm,0.3s,baz=148,slow=21,SNR=8.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **4.69** | **196** | | **Pn** | **14 09 12.3** | **-0.8** |
| **DZM** | **Mont Dzumac** | **4.69** | **196** | P | **Pn** | **14 09 13.9** | **+0.8** |
| **NOUC** | **Port Laguerre** | **4.76** | **198** | P | **Pn** | **14 09 15.2** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **4.92** | **195** | Pn | **Pn** | **14 09 16.8** | **+0.7** |
| **ONTNC** | **Ouen Toro** | **4.92** | **195** | P | **Pn** | **14 09 17.3** | **+1.2** |
| **OUENC** | **Ouen Island, N** | **4.94** | **191** | Pn | **Pn** | **14 09 17.7** | **+1.3** |
| **OUENC** | **Ouen Island, N** | **4.94** | **191** | P | **Pn** | **14 09 16.8** | **+0.4** |
| **PINNC** | **Pines Island,** | **5.05** | **184** | Pn | **Pn** | **14 09 18.8** | **+0.8** |
| **PINNC** | **Pines Island,** | **5.05** | **184** | P | **Pn** | **14 09 19.3** | **+1.3** |
| | 113nm,1.5s | | | | | | |
| **HNR** | **Honiara** | **11.14** | **315** | LR | LR | 14 13 55.7 | |
| | comp=Z,100nm,20.4s,baz=135,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **20.60** | **260** | LR | LR | 14 19 21.8 | |
| | comp=Z,111nm,18.2s,baz=86,slow=33 | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.82** | **162** | P | **P** | **14 13 05.4** | **+0.6** |
| BKZ | | | | IAmb | IAmb | 14 13 05.9 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **COEN** | **Coen** | **24.02** | **275** | P | **P** | **14 13 16.1** | **-0.7** |
| **STKA** | **Stephens Creek** | **27.70** | **234** | P | **P** | **14 13 51.7** | **+1.6** |
| | comp=Z,1.1nm,0.6s,baz=48,slow=14,SNR=2.4 | | | | | | |
| **TOO** | **Toolangi** | **28.00** | **220** | P | **P** | **14 13 50.4** | **-2.2** |
| TOO | | | | IAmb | IAmb | 14 14 14.8 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **31.61** | **260** | P | **P** | **14 14 25.0** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 14 14 33.6 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.75** | **261** | P | **P** | **14 14 26.5** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 14 14 32.2 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.80** | **260** | P | **P** | **14 14 26.3** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=85,slow=8.5,SNR=5.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 17 17.4** | **0.0** |
| | comp=Z,0.4nm,1.0s,baz=82,slow=0.9,SNR=1.1 | | | | | | |
| WRA | | | | LR | LR | 14 25 34.2 | |
| | comp=Z,65nm,19.5s,baz=120,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **32.30** | **253** | P | **P** | **14 14 30.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **32.30** | **253** | P | **P** | **14 14 31.5** | **+0.5** |
| | comp=Z,1.8nm,0.5s,baz=80,slow=8.6,SNR=51 | | | | | | |
| **ASAR** | **Alice Springs** | **32.30** | **253** | P | **P** | **14 14 31.2** | **+0.3** |
| **KNRA** | **Kununurra** | **37.47** | **267** | P | **P** | **14 15 16.1** | **+0.6** |
| KNRA | | | | IAmb | IAmb | 14 15 16.7 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **38.42** | **242** | P | **P** | **14 15 22.9** | **-0.5** |
| FORT | | | | IAmb | IAmb | 14 15 43.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.13** | **263** | P | **P** | **14 15 38.5** | **+0.7** |
| | comp=Z,4.5nm,0.7s,baz=108,slow=6.3,SNR=12 | | | | | | |
| FITZ | | | | LR | LR | 14 31 47.5 | |
| | comp=Z,65nm,18.5s,baz=196,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.13** | **263** | P | **P** | **14 15 38.8** | **+0.9** |
| FITZ | | | | IAmb | IAmb | 14 15 39.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **40.53** | **97** | P | **P** | **14 15 42.1** | **+0.9** |
| **MORW** | **Morawa** | **48.61** | **247** | P | **P** | **14 16 45.5** | **-0.2** |
| **SDHHI** | **Sand Hill** | **51.55** | **46** | P | **P** | **14 17 06.5** | **-1.6** |
| **MJAR** | **Matsushiro Arr** | **60.65** | **333** | P | **P** | **14 18 12.5** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=144,slow=8.6,SNR=2.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.50** | **180** | P | **P** | **14 19 28.5** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 14 19 42.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.61** | **294** | P | **P** | **14 19 54.3** | **+1.6** |
| | comp=Z,0.2nm,0.5s,baz=84,slow=2.8,SNR=1.0 | | | | | | |
| **SONM** | **Songino Array** | **85.09** | **324** | P | **P** | **14 20 38.9** | **+1.4** |
| | comp=Z,0.4nm,0.4s,baz=127,slow=3.9,SNR=4.6 | | | | | | |
| **PMSA** | **Palmer Station** | **88.94** | **160** | LR | LR | 14 59 00.5 | |
| | comp=Z,357nm,18.8s,baz=106,slow=34 | | | | | | |

*IDC **22** 14:11:32.9±4.4, 6°.91N×73°.31W, h168km±31km, mb2.7/2, mb1 3.3/3, mb1mx2.9/29, mbtmp3.4/3, Error ellipse: s-maj=86.9km s-min=33.5km az=85.0*
*RSNC **22** 14:11:20.0±1.1, 6°.83N×73°.15W, h156km±4km, ML3.5, Mw3.7*
**ISC 22 14:11:30.8±0.9, 6°.84N±0°.03×73°.11W±0°.03, h164km±6km, n40, σ1§68/74, 5C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.26** | **197** | ⇑*i*P | **Pn** | **14 11 53.0** | **-0.2** |
| BARC | | | | *e*S | **Sn** | **14 12 08.7** | **-1.7** |
| BARC | | | | *i* | | 14 12 09.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.64** | **39** | ⇓*i*P | **Pn** | **14 11 55.9** | **+0.8** |
| PAMC | | | | *e*S | **Sn** | **14 12 13.2** | **-0.4** |
| PAMC | | | | *i* | | 14 12 15.3 | |
| | comp=Z,366nm,0.5s | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.66** | **294** | ⇑*e*P | **Pn** | **14 11 54.9** | **+0.4** |
| BRRC | | | | *e*S | **Sn** | **14 12 12.3** | **-0.4** |
| BRRC | | | | *i* | | 14 12 13.1 | |
| | comp=Z,369nm,0.4s | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **179** | ⇑*i*P | **Pn** | **14 11 56.9** | **-0.1** |
| RUSC | | | | *e*S | **Sn** | **14 12 16.0** | **-1.2** |
| RUSC | | | | *i* | | 14 12 17.4 | |
| | comp=Z,468nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.37** | **107** | ⇓*i*P | **Pn** | **14 12 01.3** | **+1.1** |
| TAMC | | | | *i* | | 14 12 22.2 | |
| | comp=Z,128nm,0.4s | | | | | | |
| TAMC | | | | *e*S | **Sn** | **14 12 23.3** | **+0.5** |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **258** | ⇑*e*P | **Pn** | **14 11 59.4** | **-0.8** |
| PTBC | | | | *e*S | **Sn** | **14 12 21.1** | **-1.7** |
| PTBC | | | | *i* | | 14 12 28.2 | |
| | comp=Z,433nm,0.4s | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **351** | *e*P | **Pn** | **14 12 01.4** | **+0.8** |
| OCAC | | | | *e*S | **Sn** | **14 12 23.4** | **-0.4** |
| OCAC | | | | *i* | | 14 12 27.8 | |
| | comp=Z,692nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.52** | **219** | *e*P | **Pn** | **14 12 01.7** | **0.0** |
| SPBC | | | | *e*S | **Sn** | **14 12 24.3** | **-1.3** |
| SPBC | | | | *i* | | 14 12 26.7 | |
| | comp=Z,774nm,0.2s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.86** | **291** | *e*P | **Pn** | **14 12 05.3** | **+0.2** |
| ZARC | | | | *e*S | **Sn** | **14 12 30.8** | **-0.9** |
| ZARC | | | | *i* | | 14 12 41.5 | |
| | comp=Z,254nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.16** | **234** | *e*P | **Pn** | **14 12 08.7** | **0.0** |
| NORC | | | | *e*S | **Sn** | **14 12 37.5** | **-0.5** |
| NORC | | | | *i* | | 14 12 42.7 | |
| | comp=Z,235nm,0.2s | | | | | | |
| **CHIC** | **Chingaza** | **2.28** | **196** | ⇑*e*P | **Pn** | **14 12 10.8** | **+0.3** |
| CHIC | | | | *e*S | **Sn** | **14 12 40.3** | **-0.8** |
| CHIC | | | | *i* | | 14 12 45.4 | |
| | comp=Z,110nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **211** | P | **Pn** | **14 12 12.8** | **+1.8** |
| | comp=Z,73nm,0.3s,baz=53,slow=20,SNR=40 | | | | | | |
| ROSC | | | | S | **Sn** | **14 12 44.3** | **+2.3** |
| | comp=Z,114nm,0.3s,baz=61,slow=19,SNR=12 | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **211** | *e*P | **Pn** | **14 12 12.5** | **+1.6** |
| ROSC | | | | *e*S | **Sn** | **14 12 44.3** | **+2.3** |
| ROSC | | | | *i* | | 14 12 48.4 | |
| | comp=Z,289nm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.49** | **255** | *e*P | **Pn** | **14 12 14.4** | **+1.5** |
| HELC | | | | *e*S | **Sn** | **14 12 43.1** | **-2.3** |
| HELC | | | | *i* | | 14 12 52.2 | |
| | comp=Z,151nm,0.2s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.57** | **291** | *e*P | **Pn** | **14 12 12.6** | **-0.9** |
| UREC | | | | *e*S | **Sn** | **14 12 42.6** | **-4.0** |
| UREC | | | | *i* | | 14 12 57.8 | |
| | comp=Z,125nm,0.2s | | | | | | |
| **SOCV** | **Socops** | **2.65** | **57** | *e*P | **Pn** | **14 12 14.7** | **+0.2** |
| SOCV | | | | *e*S | **Sn** | **14 12 46.6** | **-1.8** |
| **LL1C** | **La Loma 1 Cana** | **2.72** | **351** | *e*P | **Pn** | **14 12 18.4** | **+3.1** |
| LL1C | | | | *e*S | **Sn** | **14 12 53.0** | **+3.1** |
| LL1C | | | | *i* | | 14 13 05.7 | |
| | comp=Z,501nm,0.5s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.76** | **235** | *e*P | **Pn** | **14 12 17.2** | **+0.9** |
| GUY2C | | | | *e*S | **Sn** | **14 12 53.5** | **+2.1** |
| GUY2C | | | | *i* | | 14 12 58.0 | |
| | comp=Z,163nm,0.3s | | | | | | |
| **VILC** | **Villavicencio,** | **2.77** | **192** | *e*P | **Pn** | **14 12 15.9** | **-0.2** |
| VILC | | | | *e*S | **Sn** | **14 12 51.0** | **-0.2** |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **160** | *e*P | **Pn** | **14 12 15.8** | **-0.4** |
| PTGC | | | | *e*S | **Sn** | **14 12 49.0** | **-2.5** |
| PTGC | | | | *i* | | 14 12 52.3 | |
| | comp=Z,106nm,0.2s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.88** | **357** | *e*P | **Pn** | **14 12 17.4** | **+0.1** |
| LL6C | | | | *e*S | **Sn** | **14 12 51.8** | **-1.7** |
| LL6C | | | | *i* | | 14 13 00.1 | |
| | comp=Z,47nm,0.3s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **252** | *e*P | **Pn** | **14 12 20.8** | **+1.4** |
| CBOC | | | | *e*S | **Sn** | **14 12 56.8** | **-0.4** |
| CBOC | | | | *i* | | 14 13 10.6 | |
| | comp=Z,47nm,0.4s | | | | | | |
| **DBBC** | **Dabeiba** | **3.09** | **273** | ⇓*e*P | **Pn** | **14 12 20.4** | **+0.5** |
| DBBC | | | | *e*S | **Sn** | **14 12 57.2** | **-0.8** |
| **SDV** | **Santo Domingo** | **3.18** | **50** | *e*P | **Pn** | **14 12 22.5** | **+1.3** |
| SDV | | | | *e*S | **Sn** | **14 12 59.7** | **-0.7** |
| SDV | | | | *i* | | 14 13 01.9 | |
| | comp=Z,46nm,0.5s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.19** | **307** | *e*P | **Pn** | **14 12 20.1** | **-0.9** |
| MOTC | | | | *e*S | **Sn** | **14 12 58.9** | **-1.2** |
| MOTC | | | | *i* | | 14 13 03.3 | |
| | comp=Z,48nm,0.3s | | | | | | |
| **ANIL** | **Santa Ana** | **3.27** | **225** | *e*P | **Pn** | **14 12 24.1** | **+1.7** |
| ANIL | | | | *e*S | **Sn** | **14 13 05.4** | **+3.0** |
| ANIL | | | | *i* | | 14 13 09.3 | |
| | comp=Z,324nm,0.4s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.61** | **216** | *e*P | **Pn** | **14 12 27.0** | **+0.5** |
| ORTC | | | | *e*S | **Sn** | **14 13 09.8** | **0.0** |
| ORTC | | | | *i* | | 14 13 16.4 | |
| | comp=Z,105nm,0.5s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | *e*P | **Pn** | **14 12 26.2** | **-1.0** |
| SJCC | | | | *e*S | **Sn** | **14 13 08.4** | **-2.7** |
| SJCC | | | | *i* | | 14 13 12.7 | |
| | comp=Z,34nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.70** | **239** | *e*P | **Pn** | **14 12 28.5** | **+0.9** |
| PLMC | | | | *e*S | **Sn** | **14 13 08.3** | **-3.6** |
| PLMC | | | | *i* | | 14 13 15.4 | |
| | comp=Z,56nm,0.3s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.16** | **3** | *e*P | **Pn** | **14 12 33.2** | **-0.4** |
| CRJC | | | | *e*S | **Sn** | **14 13 21.6** | **-1.0** |
| CRJC | | | | *i* | | 14 13 25.4 | |
| | comp=Z,59nm,0.4s | | | | | | |
| **GUVC** | **San Jose del G** | **4.29** | **174** | *e*P | **Pn** | **14 12 35.0** | **-0.2** |
| GUVC | | | | *e*S | **Sn** | **14 13 21.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LBTB | | | | *e*S | Sn | 14 39 39.9 | -2.4 | |
| **LBTB** | **Lobatse** | **3.16** | **308** | *e*P | Pn | 14 39 03.9 | -0.5 | |
| LBTB | | | | *e*S | Sn | 14 39 39.9 | -2.4 | |
| **BOSA** | **Boshof** | **3.19** | **239** | *e*P | Pn | 14 39 05.2 | +0.4 | |
| BOSA | | | | *e*S | Sn | 14 39 40.5 | -2.5 | |
| **BOSA** | **Boshof** | **3.19** | **239** | *e*P | Pn | 14 39 05.2 | +0.4 | |
| BOSA | | | | *e*S | Sn | 14 39 40.5 | -2.5 | |
| **CNG** | **Changalane** | **3.49** | **80** | *e*P | Pn | 14 39 08.4 | -0.4 | |
| CNG | | | | *e*S | Sn | 14 39 47.2 | -3.0 | |
| **CNG** | **Changalane** | **3.49** | **80** | *e*P | Pn | 14 39 08.4 | -0.4 | |
| CNG | | | | *e*S | Sn | 14 39 47.2 | -3.0 | |
| **MOPA** | **Mopani** | **4.41** | **39** | *e*P | Pn | 14 39 19.7 | -1.7 | |
| MOPA | | | | *e*S | Sn | 14 40 07.4 | -5.5 | |
| **MOPA** | **Mopani** | **4.41** | **39** | *e*P | Pn | 14 39 19.7 | -1.7 | |
| MOPA | | | | *e*S | Sn | 14 40 07.4 | -5.5 | |

**IDC 22** 14:42:39.1±3.8, **22°69N×11°78W, h0**km, **mb3.4**/1, **mb1 3.5**/3, **mb1mx3.3**/30, **mbtmp3.6**/3, **ML3.4**/2, **Error ellipse: s-maj=124.9km s-min=44.4km az=78.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **15.94** | **124** | Pn | Pn | 14 46 25.7 | +0.7 |
| | 0.1nm,0.3s,baz=314,slow=12,SNR=3.8 | | | | | | |
| **DBIC** | **Dimbokro** | **17.27** | **156** | P | Pn | 14 46 41.1 | -0.7 |
| | 0.2nm,0.3s,baz=344,slow=14,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.49** | **45** | P | P | 14 54 31.0 | -0.1 |
| | 0.2nm,0.5s,baz=282,slow=7.1,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **148.48** | **99** | PKPbc | PKPbc | 15 02 28.2 | -0.4 |
| | 0.3nm,0.7s,baz=285,slow=2.6,SNR=6.1 | | | | | | |

**DJA 22** 14:44:44.8±0.9, **8°S**±5°×**11°8E**±°, **h10**km±9km, **M3.9**/10, **mb4.3**/2, **MLv3.7**/10, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **0.72** | **174** | P | Pb | 14 44 59.1 | -0.3 |
| **WBSI** | **Waikabubak, Su** | **2.26** | **132** | P | Pn | 14 45 23.0 | +0.7 |
| **IGBI** | **Denpasar** | **2.62** | **254** | P | Pn | 14 45 27.7 | +0.5 |
| **BSSI** | **Bau Bau, Buton** | **3.39** | **55** | P | Pn | 14 45 37.4 | -0.4 |
| **JAGI** | **Jajag, Banyuwa** | **3.53** | **264** | P | Pn | 14 45 39.2 | -0.5 |
| **BKSI** | **Bulukumba** | **3.67** | **41** | P | Pn | 14 45 41.4 | -0.2 |
| **GMJI** | **Gumukmas** | **4.22** | **267** | P | Pn | 14 45 49.4 | +0.2 |
| **BNSI** | **Bone** | **4.39** | **33** | P | Pn | 14 45 52.6 | +1.0 |
| **MMRI** | **Maumere** | **4.52** | **97** | P | Pn | 14 45 52.8 | -0.6 |
| **SPSI** | **Sidrap Palu** | **4.60** | **27** | P | Pn | 14 45 54.4 | -0.1 |
| **GRJI** | **Gresik** | **5.31** | **283** | P | Pn | 14 46 04.5 | +0.3 |
| | 57nm,0.7s | | | | | | |
| **TTSI** | **Tana Toraja** | **5.46** | **23** | P | Pn | 14 46 06.0 | -0.2 |

*ISK **22** 14:45:42.9, 39°45N×26°36E, h17km, ML2.5/16*
*DDA **22** 14:45:43.2±0.0, 39°42N×26°38E, h7km±1km, ML2.4*
**ISC 22** 14:45:43.4±0.9, **39°45N**±0°03×**26°38E**±0°03, **h14**km±7km, **n25**, σ0**s49**/36, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GPNR** | **Gulpinar-Canak** | **0.19** | **273** | PG | **Pg** | **14 45 47.6** | **-0.1** |
| GPNR | | | | SG | **Sg** | **14 45 51.0** | **+0.3** |
| **KOCA** | **Canakkale, Ayv** | **0.20** | **286** | P | **Pg** | **14 45 47.8** | **-0.1** |
| KOCA | | | | *i* AML | AML | 14 45 51.0 | |
| | comp=N,2μm,0.3s | | | | | | |
| KOCA | | | | S | **Sg** | **14 45 51.2** | **+0.3** |
| **BAYC** | **CANAKKALE_Bayr** | **0.32** | **24** | P | **Pg** | **14 45 49.9** | **-0.1** |
| BAYC | | | | S | **Sg** | **14 45 55.1** | **+0.7** |
| **EZN** | **Ezine** | **0.38** | **354** | PG | **Pg** | **14 45 51.1** | **+0.1** |
| EZN | | | | SG | **Sb** | **14 45 57.1** | **-0.6** |
| **BOZC** | **Bozcaada** | **0.47** | **327** | PG | **Pg** | **14 45 52.8** | **+0.1** |
| BOZC | | | | SG | **Sb** | **14 45 59.5** | **-0.7** |
| **BUHA** | **Balikesir, Bur** | **0.54** | **84** | P | **Pg** | **14 45 53.9** | **-0.2** |
| BUHA | | | | S | **Sb** | **14 46 01.9** | **-0.4** |
| **DKL** | **Dikili** | **0.55** | **132** | PG | **Pb** | **14 45 54.5** | **-0.3** |
| **CAND** | **Candarli** | **0.59** | **146** | PG | **Pb** | **14 45 55.5** | **0.0** |
| **ECEA** | **Canakkale, Ece** | **0.62** | **345** | P | **Pb** | **14 45 55.7** | **-0.3** |
| ECEA | | | | S | **Sb** | **14 46 04.9** | **+0.4** |
| ECEA | | | | *i* AML | AML | 14 46 05.0 | |
| | comp=N,158nm,0.3s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.72** | **131** | P | **Pb** | **14 45 57.3** | **-0.4** |
| ZEDA | | | | S | **Sb** | **14 46 07.2** | **-0.3** |
| **FOCM** | **Foa** | **0.78** | **159** | PG | **Pb** | **14 45 59.1** | **+0.4** |
| **GADA** | **Gvkgeada** | **0.83** | **334** | PG | **Pb** | **14 45 59.4** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.95** | **4** | PG | **Pb** | **14 46 01.5** | **-0.3** |
| **STEP** | **BALIKESIR_Sava** | **1.04** | **93** | P | **Pb** | **14 46 02.7** | **-0.4** |
| STEP | | | | S | **Sn** | **14 46 18.4** | **+0.5** |
| **URLA** | **Izmir** | **1.10** | **171** | PN | **Pn** | **14 46 04.1** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **1.17** | **59** | PN | **Pn** | **14 46 05.2** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **1.18** | **36** | PN | **Pn** | **14 46 05.0** | **-0.5** |
| **KNL** | **Balıkesir** | **1.21** | **47** | P | **Pg** | **14 46 06.6** | **0.0** |
| KNL | | | | S | **Sn** | **14 46 23.6** | **+1.6** |
| KNL | | | | *i* AML | AML | 14 46 26.0 | |
| | comp=N,55nm,0.6s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **1.21** | **175** | P | **Pn** | **14 46 05.3** | **-0.6** |
| ZEYE | | | | S | **Sn** | **14 46 22.9** | **+0.9** |
| **ERIK** | **Erikli-Kesan** | **1.23** | **5** | PN | **Pn** | **14 46 05.6** | **-0.5** |
| **ENEZ** | **Enez** | **1.30** | **352** | PN | **Pn** | **14 46 06.6** | **-0.5** |
| **RKY** | **Sarkoy-Tekirda** | **1.38** | **26** | PN | **Pn** | **14 46 08.3** | **0.0** |
| **MAR6** | **Marsite Statio** | **1.43** | **28** | PN | **Pn** | **14 46 08.5** | **-0.4** |
| **MAR3** | **Marsite Statio** | **1.47** | **28** | PN | **Pn** | **14 46 09.2** | **-0.3** |
| **RDO** | **Rodhopi** | **1.82** | **339** | PN | **Pn** | **14 46 14.0** | **-0.2** |

*SFS **22** 14:48:19.0, 35°69N×3°64W, ML2.8, ALBORAN S.*
*CNRM **22** 14:48:20.1, 35°72N×3°55W, h22km, ml2.7*
**ISC 22** 14:48:19.4±2.1, **35°76N**±0°05×**3°54W**±0°04, **h15**km±15km, **n13**, σ1**s10**/24, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.63** | **211** | P | **Pb** | **14 48 31.8** | **-0.4** |
| PALE | | | | S | **Sb** | **14 48 41.0** | **+0.3** |
| **GOG** | **Mont Gurugu** | **0.69** | **140** | P | **Pg** | **14 48 33.1** | **-0.1** |
| GOG | | | | S | **Sg** | **14 48 41.8** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **1.07** | **122** | P | **Pn** | **14 48 40.3** | **+0.5** |
| CHAS | | | | S | **Sb** | **14 48 54.5** | **+1.1** |
| **EMAL** | **Malaga-Limoner** | **1.23** | **325** | P | **Pn** | **14 48 41.6** | **-0.5** |
| EMAL | | | | S | **Sn** | **14 48 57.4** | **-1.0** |
| **TAF** | **Taforalt** | **1.32** | **135** | P | **Pn** | **14 48 43.0** | **-0.3** |
| TAF | | | | S | **Sn** | **14 49 03.1** | **+2.5** |
| **JBK** | **JBK** | **1.63** | **150** | P | **Pn** | **14 48 46.8** | **-0.9** |
| JBK | | | | S | **Sn** | **14 49 05.9** | **-2.6** |
| **MD31** | **MD31** | **3.06** | **200** | P | **Pn** | **14 49 08.1** | **+0.9** |
| MD31 | | | | S | **Sn** | **14 49 42.9** | **-0.7** |
| **MDT** | **Midelt** | **3.07** | **197** | P | **Pn** | **14 49 06.9** | **-0.5** |
| MDT | | | | S | **Sn** | **14 49 43.3** | **-0.5** |
| **ZHG** | **ZHG** | **3.45** | **229** | P | **Pn** | **14 49 14.0** | **+1.4** |
| **PVAQ** | **Vaqueiros** | **3.74** | **297** | *e*Pn | **Pn** | **14 49 17.3** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **14 49 59.5** | **-0.9** |
| PVAQ | | | | A | A | 14 50 08.7 | |
| | 3.8nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **297** | P | **Pn** | **14 49 17.0** | **+0.4** |
| PVAQ | | | | S | **Sn** | **14 49 60.0** | **-0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **294** | *e*Pn | **Pn** | **14 49 19.2** | **+1.3** |
| PBDV | | | | *e*Sn | **Sn** | **14 50 02.9** | **+0.1** |
| **PCVE** | **Castro Verde** | **4.07** | **299** | *e*Sn | **Sn** | **14 50 08.0** | **-0.5** |
| PCVE | | | | A | A | 14 50 15.1 | |
| | 5.4nm,0.6s | | | | | | |

*IDC **22** 14:57:56.3±1.2, 35°76N×3°78W, h0km, mb3.5/3, mb1 3.5/5, mb1mx3.3/50, mbtmp3.3/5, ML2.9/2, MS2.6/1, Ms1 2.7/1, ms1mx2.3/68, Error ellipse: s-maj=36.4km s-min=17.1km az=88.0*
*SFS **22** 14:57:58.0, 35°60N×3°60W, h10km, ML3.4, ALBORAN SUR*
*INMG **22** 14:57:58.5±1.6, 35°64N×3°63W, h12km±8km, ML3.0, Error ellipse: s-maj=5.2km s-min=4.9km az=110.0*
*CNRM **22** 14:57:58.5, 35°64N×3°64W, h26km, ml3.3*
*IGIL **22** 14:57:59.3, 35°70N×3°73W, h4km, ML3.2*
**ISC 22** 14:57:56.4±1.2, **35°71N**±0°02×**3°59W**±0°03, **h6**km±9km, **n53**, σ1**s57**/85, **mb3.9**/3, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.57** | **210** | P | Pn | 14 58 18.0 | +7.0 |
| **PALE** | **Palemas** | **0.57** | **210** | P | **Pb** | **14 58 08.8** | **+0.1** |
| PALE | | | | S | **Sg** | **14 58 15.6** | **+0.8** |
| **GOG** | **Mont Gurugu** | **0.69** | **135** | P | **Pn** | **14 58 14.2** | **+1.6** |
| **GOG** | **Mont Gurugu** | **0.69** | **135** | P | **Pb** | **14 58 10.7** | **0.0** |
| GOG | | | | S | **Sb** | **14 58 20.1** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.08** | **119** | P | **Pg** | **14 58 16.2** | **-0.9** |
| CHAS | | | | S | **Sb** | **14 58 31.0** | **-0.8** |
| **EMAL** | **Malaga-Limoner** | **1.25** | **327** | P | **Pg** | **14 58 19.5** | **-0.9** |
| EMAL | | | | S | **Sg** | **14 58 35.2** | **-1.5** |
| **TAF** | **Taforalt** | **1.31** | **133** | P | **Pg** | **14 58 20.5** | **-1.0** |
| TAF | | | | S | **Sb** | **14 58 38.6** | **+0.1** |
| **CHEFC** | **Chefchaouen** | **1.55** | **248** | P | **Pn** | **14 58 25.0** | **+0.4** |
| **CHEFC** | **Chefchaouen** | **1.55** | **248** | P | **Pn** | **14 58 24.7** | **+0.1** |
| CHEFC | | | | S | **Sn** | **14 58 41.8** | **-3.3** |
| **JBK** | **JBK** | **1.61** | **148** | P | **Pn** | **14 58 24.3** | **-1.2** |
| **JBK** | **JBK** | **1.61** | **148** | P | **Pn** | **14 58 24.5** | **-0.9** |
| JBK | | | | S | **Sn** | **14 58 44.0** | **-2.6** |
| **LIJA** | **Lijar** | **1.89** | **310** | P | **Pg** | **14 58 32.0** | **-0.7** |
| LIJA | | | | S | **Sg** | **14 58 58.0** | **+0.8** |
| **LCRM** | **LCR** | **2.27** | **208** | P | **Pg** | **14 58 40.0** | **+0.1** |
| **LCRM** | **LCR** | **2.27** | **208** | P | **Pn** | **14 58 35.6** | **+1.1** |
| LCRM | | | | S | **Sn** | **14 59 02.7** | **-0.3** |
| **IFR** | **Ifrane** | **2.53** | **211** | P | **Pn** | **14 58 38.2** | **0.0** |
| IFR | | | | S | **Sn** | **14 59 07.7** | **-1.6** |
| **CZD** | **Col de Zad** | **2.93** | **205** | P | **Pn** | **14 58 43.9** | **+0.2** |
| CZD | | | | S | **Sn** | **14 59 17.8** | **-1.6** |
| **MD31** | **MD31** | **3.00** | **199** | P | **Pn** | **14 58 45.1** | **+0.6** |
| MD31 | | | | S | **Sn** | **14 59 19.3** | **-1.4** |
| **MDT** | **Midelt** | **3.01** | **197** | Pn | **Pn** | **14 58 45.3** | **+0.7** |
| | 0.9nm,0.3s,baz=342,slow=10,SNR=15 | | | | | | |
| MDT | | | | Sn | **Sn** | **14 59 20.3** | **-0.7** |
| | 4.4nm,0.3s,baz=224,slow=19,SNR=8.8 | | | | | | |
| **MDT** | **Midelt** | **3.01** | **197** | P | **Pn** | **14 58 46.4** | **+1.7** |
| MDT | | | | S | **Sn** | **14 59 20.3** | **-0.7** |
| **ZHG** | **ZHG** | **3.38** | **229** | P | **Pn** | **14 58 51.0** | **+1.2** |
| **ZHG** | **ZHG** | **3.38** | **229** | P | **Pn** | **14 58 49.6** | **-0.1** |
| ZHG | | | | S | **Sn** | **14 59 28.7** | **-1.5** |
| **PVAQ** | **Vaqueiros** | **3.73** | **298** | *e*Pn | **Pn** | **14 58 55.1** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **14 59 36.2** | **-2.5** |
| PVAQ | | | | A | A | 14 59 45.0 | |
| | 23nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.73** | **298** | P | **Pn** | **14 58 54.0** | **-0.4** |
| PVAQ | | | | S | **Sn** | **14 59 36.6** | **-2.1** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **295** | *e*Pn | **Pn** | **14 58 56.7** | **+1.0** |
| PBDV | | | | *e*Sn | **Sn** | **14 59 38.9** | **-2.1** |
| PBDV | | | | A | A | 14 59 43.1 | |
| | 21nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **3.97** | **356** | Pn | **Pn** | **14 58 59.2** | **+1.4** |
| | 0.6nm,0.3s,baz=179,slow=12,SNR=17 | | | | | | |
| ESDC | | | | Sn | **Sn** | **14 59 45.0** | **+0.3** |
| | 0.5nm,0.3s,baz=182,slow=14,SNR=1.4 | | | | | | |
| ESDC | | | | Lg | Lg | 15 00 01.3 | |
| | 1.2nm,0.3s,baz=181,slow=27,SNR=7.0 | | | | | | |
| ESDC | | | | LR | LR | 15 00 47.5 | |
| | comp=Z,83nm,20.8s,baz=233,slow=44 | | | | | | |
| **PCVE** | **Castro Verde** | **4.06** | **300** | *e*Pn | **Pn** | **14 58 59.2** | **+0.2** |
| PCVE | | | | *e*Sn | **Sn** | **14 59 45.0** | **-1.8** |
| PCVE | | | | A | A | 14 59 48.1 | |
| | 28nm,0.7s | | | | | | |
| **PBEJ** | **Beja** | **4.14** | **305** | *e*Pn | **Pn** | **14 59 02.3** | **+2.2** |
| PBEJ | | | | *e*Sn | **Sn** | **14 59 47.4** | **-1.4** |
| PBEJ | | | | A | A | 14 59 57.5 | |
| | 12nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.28** | **301** | *e*P | **Pn** | **14 59 02.1** | **+0.1** |
| **MESJ** | **Messejana** | **4.28** | **301** | *e*Pn | **Pn** | **14 59 02.2** | **+0.1** |
| MESJ | | | | *e*Sn | **Sn** | **14 59 50.2** | **-2.1** |
| MESJ | | | | A | A | 14 59 54.1 | |
| | 22nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **293** | *e*P | **Pn** | **14 59 03.3** | **-0.1** |
| MORF | | | | *e*S | **Sn** | **14 59 50.1** | **-4.7** |
| MORF | | | | IAML | | 14 59 58.6 | |
| | comp=N,44nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **293** | *e*Pn | **Pn** | **14 59 04.1** | **+0.7** |
| MORF | | | | *e*Sn | **Sn** | **14 59 53.1** | **-1.7** |
| MORF | | | | A | A | 14 59 59.4 | |
| | comp=N,15nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **290** | *e*Pn | **Pn** | **14 59 06.5** | **+2.0** |
| PFVI | | | | *e*Sn | **Sn** | **14 59 55.0** | **-1.6** |
| PFVI | | | | A | A | 15 00 03.1 | |
| | comp=N,17nm,0.6s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **290** | P | **Pn** | **14 59 05.4** | **+0.9** |
| PFVI | | | | S | **Sn** | **14 59 55.9** | **-0.7** |
| **PESTR** | **Estremoz** | **4.49** | **316** | *e*Sn | **Sn** | **14 59 55.8** | **-1.6** |
| PESTR | | | | A | A | 14 59 59.4 | |
| | comp=N,13nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.49** | **316** | P | **Pn** | **14 59 05.7** | **+0.8** |
| **EVO** | **Evora** | **4.52** | **310** | *e*Sn | **Sn** | **14 59 57.5** | **-0.7** |
| EVO | | | | A | A | 14 59 59.5 | |
| | comp=N,21nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.63** | **303** | *e*Pn | **Pn** | **14 59 07.7** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **14 59 58.9** | **-1.9** |
| PNCL | | | | A | A | 15 00 06.8 | |
| | comp=N,12nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **4.79** | **322** | *e*Pn | **Pn** | **14 59 11.2** | **+2.2** |
| PMRV | | | | *e*Sn | **Sn** | **15 00 03.4** | **-1.4** |
| PMRV | | | | A | A | 15 00 18.7 | |
| | comp=N,17nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.99** | **314** | *e*Pn | **Pn** | **14 59 13.3** | **+1.5** |
| PMTG | | | | *e*Sn | **Sn** | **15 00 08.6** | **-1.1** |
| PMTG | | | | A | A | 15 00 23.3 | |
| | comp=N,12nm,0.4s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.15** | **324** | *e*Pn | **Pn** | **14 59 15.6** | **+1.7** |
| PCBR | | | | *e*Sn | **Sn** | **15 00 12.9** | **-0.7** |
| PCBR | | | | A | A | 15 00 13.8 | |
| | comp=N,12nm,0.5s | | | | | | |
| **PACT** | **Alcochete** | **5.18** | **308** | *e*Pn | **Pn** | **14 59 16.1** | **+1.7** |
| PACT | | | | *e*Sn | **Sn** | **15 00 13.6** | **-0.8** |
| **OUZM** | **OUZ** | **5.47** | **210** | P | **Pn** | **14 59 19.3** | **+0.8** |
| **PMAFR** | **Mafra** | **5.58** | **307** | *e*Pn | **Pn** | **14 59 21.2** | **+1.4** |
| **PSBE** | **So Bento** | **5.61** | **314** | *e*Pn | **Pn** | **14 59 22.1** | **+1.7** |
| **MTE** | **Manteigas** | **5.63** | **327** | *e*Sn | **Sn** | **15 00 24.1** | **-1.5** |
| MTE | | | | A | A | 15 00 39.8 | |
| | comp=N,14nm,0.5s | | | | | | |
| **PVIS** | **Viseu** | **6.04** | **327** | *e*Sn | **Sn** | **15 00 33.6** | **-2.1** |
| PVIS | | | | A | A | 15 00 36.6 | |
| | comp=N,16nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **6.08** | **335** | *e*Sn | **Sn** | **15 00 34.2** | **-2.5** |
| MVO | | | | A | A | 15 00 38.8 | |
| | comp=N,8.4nm,0.7s | | | | | | |
| **PVRL** | **Vila Real** | **6.43** | **331** | *e*Pn | **Pn** | **14 59 33.7** | **+2.1** |
| PVRL | | | | *e*Sn | **Sn** | **15 00 42.9** | **-2.4** |
| PVRL | | | | A | A | 15 00 49.5 | |
| | comp=N,16nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.55** | **331** | *e*Pn | **Pn** | **14 59 35.0** | **+1.7** |
| POLO | | | | *e*Sn | **Sn** | **15 00 44.7** | **-3.5** |
| POLO | | | | A | A | 15 00 48.8 | |
| | comp=N,4.7nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **6.57** | **339** | *e*Pn | **Pn** | **14 59 36.2** | **+2.7** |
| **TORD** | **Torodi Ar. Bea** | **22.96** | **167** | P | **P** | **15 03 04.4** | **+2.8** |
| | comp=N,0.4nm,0.6s,baz=351,slow=12,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.46** | **51** | P | **P** | **15 08 20.7** | **+0.4** |
| | comp=N,0.7nm,0.8s,baz=287,slow=6.0,SNR=7.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.72** | **332** | P | **P** | **15 08 54.5** | **+0.3** |
| | comp=N,0.5nm,0.6s,baz=60,slow=6.3,SNR=8.6 | | | | | | |

*IDC **22** 15:17:37.1±0.9, 36°47N×98°74W, h0km, mb3.2/2, mb1 3.7/7, mb1mx3.5/40, mbtmp3.5/7, ML3.4/5, Error ellipse: s-maj=12.2km s-min=9.5km az=121.0*
*ANF **22** 15:17:38.0±0.3, 36°48N×98°74W, h5km, ML4.6/16, Error ellipse: s-maj=3.4km s-min=2.7km az=48.0*
*NEIC **22** 15:17:38.8±0.9, 36°48N±0°04×98°72W±0°05, h10km±4km, Error ellipse: s-maj=6.6km s-min=5.3km az=126.0*
*TUL **22** 15:17:38.4±1.3, 36°46N±0°04×98°78W±0°05, h8km±4km, ML3.8, mb_Lg3.7/95(NEIC), Mwr3.4/9(SLM), Error ellipse: s-maj=6.4km s-min=5.3km az=134.0*
*NEIC **22** 15:17:38.4, 36°47N×98°70W, h6km, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.04; $M_{\theta\theta}$=1.40; $M_{\phi\phi}$=-1.36; $M_{r\theta}$=-0.11; $M_{r\phi}$=-0.26; $M_{\theta\phi}$=0.25; Fault plane solution: $M_0$=1.43000×$10^{14}$ NP1:$\phi_s$320.00000°, $\delta$80.00000°, $\lambda$-5.00000°. NP2:$\phi_s$51.00000°, $\delta$85.00000°, $\lambda$-170.00000°. Principal axes: T 1.4316, Plg4.0000°, Azm185.0000°; N 0.0006, Plg79.0000°, Azm77.0000°; P -1.4322, Plg11.0000°, Azm276.0000°;*
**ISC 22** 15:17:38.3±0.6, **36°49N**±0°04×**98°72W**±0°04, **h10**km, **n130**, σ1**s13**/125, **Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.25** | **245** | Pg | **Pg** | **15 17 42.8** | **-0.8** |
| **OKCFA** | **Oklahoma City** | **1.48** | **136** | | **Pn** | **15 18 05.1** | **+0.1** |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **136** | | **Pn** | **15 18 05.7** | **+0.5** |
| **FNO** | **Franklin** | **1.63** | **139** | | **Pn** | **15 18 07.6** | **+0.6** |
| **WMOK** | **Wichita Mounta** | **1.75** | **182** | | **Pn** | **15 18 08.2** | **-0.4** |
| **WMOK** | **Wichita Mounta** | **1.75** | **182** | P | **Pn** | **15 18 08.4** | **-0.3** |
| | baz=0.1,SNR=58 | | | | | | |
| WMOK | | | | S | **Sb** | **15 18 31.9** | **-0.6** |
| | baz=0.1 | | | | | | |
| **T35A** | **Sooner Cattle** | **1.82** | **76** | Pn | **Pn** | **15 18 11.1** | **+1.4** |
| **R32A** | **Long Quarter,** | **1.93** | **0** | Pn | **Pn** | **15 18 12.5** | **+1.2** |
| **W35A** | **Tecumseh** | **2.00** | **131** | Pn | **Pn** | **15 18 13.1** | **+0.9** |
| **X34A** | **Smith Ranch, M** | **2.01** | **159** | Pn | **Pn** | **15 18 13.8** | **+1.5** |
| X34A | | | | lAmb_Lg | | 15 18 46.4 | |
| | comp=Z,452nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.43** | **103** | Pn | **Pn** | **15 18 18.6** | **+0.4** |
| TUL1 | | | | lAmb_Lg | | 15 18 55.0 | |
| | comp=Z,208nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.43** | **103** | P | **Pn** | **15 18 19.2** | **+1.0** |
| | baz=284 | | | | | | |
| TUL1 | | | | S | **Sn** | **15 18 49.9** | **+2.0** |
| | baz=284 | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.46** | **341** | Pn | **Pn** | **15 18 19.5** | **+0.9** |
| **CBKS** | **Cedar Bluff** | **2.46** | **341** | P | **Pn** | **15 18 19.8** | **+1.2** |
| | baz=162 | | | | | | |
| CBKS | | | | Sb | **Sb** | **15 18 54.6** | **+1.5** |
| | baz=162 | | | | | | |
| **AMTX** | **Amarillo** | **2.90** | **237** | Pn | **Pn** | **15 18 25.4** | **+0.8** |
| AMTX | | | | lAmb_Lg | | 15 19 09.5 | |
| | comp=Z,365nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.90** | **237** | P | **Pn** | **15 18 25.9** | **+1.3** |
| | baz=56 | | | | | | |
| AMTX | | | | Sb | **Sb** | **15 19 06.4** | **+0.8** |
| | baz=56 | | | | | | |
| **KSU1** | **Kansas State U** | **3.10** | **32** | Pn | **Pn** | **15 18 27.4** | **+0.1** |
| **KSU1** | **Kansas State U** | **3.10** | **32** | P | **Pn** | **15 18 29.3** | **+2.0** |
| | baz=214,SNR=12 | | | | | | |
| **X37A** | **Clayton** | **3.32** | **124** | | **Pn** | **15 18 30.9** | **+0.6** |
| **Z35A** | **Perchaven, San** | **3.37** | **159** | | **Pn** | **15 18 32.0** | **+1.0** |
| **HHAR** | **Hobbs** | **3.86** | **92** | | **Pn** | **15 18 38.4** | **+0.6** |
| **ABTX** | **Abilene, Hawle** | **3.93** | **192** | Pn | **Pn** | **15 18 38.6** | **0.0** |
| **ABTX** | **Abilene, Hawle** | **3.93** | **192** | P | **Pn** | **15 18 38.7** | **0.0** |
| | baz=10,SNR=25 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **310** | Pn | **Pn** | **15 18 40.4** | **+0.7** |
| KSCO | | | | lAmb_Lg | | 15 19 53.3 | |
| | comp=Z,155nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **310** | P | **Pn** | **15 18 40.5** | **+0.7** |
| | baz=129 | | | | | | |
| **MSTX** | **Muleshoe** | **4.16** | **234** | Pn | **Pn** | **15 18 42.6** | **+0.5** |
| MSTX | | | | lAmb_Lg | | 15 19 54.1 | |
| | comp=Z,211nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **4.16** | **234** | P | **Pn** | **15 18 42.8** | **+0.7** |
| | baz=52 | | | | | | |
| MSTX | | | | Sb | **Sb** | **15 19 45.4** | **+3.3** |
| | baz=52 | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | | **Pn** | **15 18 43.4** | **+0.9** |
| W39A | | | | lAmb_Lg | | 15 20 01.4 | |
| | comp=Z,146nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **4.21** | **106** | P | **Pn** | **15 18 43.4** | **+0.9** |
| | baz=289 | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.36** | **13** | Pn | **Pn** | **15 18 45.0** | **+0.4** |
| N33A | | | | lAmb_Lg | | 15 20 10.2 | |
| | comp=Z,163nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.45** | **135** | Pn | **Pn** | **15 18 46.3** | **+0.5** |
| Z38A | | | | lAmb_Lg | | 15 20 00.7 | |
| | comp=Z,161nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.48** | **73** | | **Pn** | **15 18 46.4** | **+0.1** |
| S39A | | | | lAmb_Lg | | 15 20 03.0 | |
| | comp=Z,142nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.60** | **167** | Pn | **Pn** | **15 18 48.0** | **0.0** |
| **WHTX** | **Lake Whitney,** | **4.60** | **167** | P | **Pn** | **15 18 48.2** | **+0.3** |
| | baz=347 | | | | | | |
| WHTX | | | | Sb | **Sb** | **15 19 59.1** | **+4.4** |
| | baz=347 | | | | | | |
| **T25A** | **Trinidad** | **4.62** | **280** | Pn | **Pn** | **15 18 48.3** | **-0.1** |
| T25A | | | | lAmb_Lg | | 15 20 08.9 | |
| | comp=Z,160nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **4.62** | **280** | P | **Pn** | **15 18 48.7** | **+0.3** |
| | baz=97,SNR=9.4 | | | | | | |
| T25A | | | | S | **Sn** | **15 19 41.3** | **-0.8** |
| | baz=97 | | | | | | |
| **MIAR** | **Mount Ida** | **4.62** | **113** | | **Pn** | **15 18 49.2** | **+1.0** |
| **MIAR** | **Mount Ida** | **4.62** | **113** | P | **Pn** | **15 18 48.8** | **+0.7** |
| | baz=296 | | | | | | |
| MIAR | | | | S | **Sn** | **15 19 43.1** | **+1.3** |
| | baz=296 | | | | | | |
| **U40A** | **Yellville** | **4.73** | **90** | Pn | **Pn** | **15 18 50.4** | **+0.7** |
| U40A | | | | lAmb_Lg | | 15 20 19.7 | |
| | comp=Z,209nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.73** | **90** | P | **Pn** | **15 18 50.9** | **+1.2** |
| | baz=273,SNR=28 | | | | | | |
| **BGNE** | **Belgrade** | **4.94** | **5** | Pn | **Pn** | **15 18 53.0** | **+0.5** |
| BGNE | | | | lAmb_Lg | | 15 20 25.8 | |
| | comp=Z,140nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.94** | **5** | P | **Pn** | **15 18 53.3** | **+0.8** |
| | baz=186 | | | | | | |
| BGNE | | | | S | **Sn** | **15 19 50.0** | **+0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANMO** | **Albuquerque** | **6.48** | **259** | Pn | **Pn** | **15 19 15.1** | **+1.1** |
| | comp=Z,0.3nm,0.3s,baz=86,slow=12,SNR=2.9 | | | | | | |
| ANMO | | | | Pg | **Pb** | **15 19 33.4** | **+2.1** |
| | comp=Z,1.4nm,0.3s,baz=77,slow=18,SNR=10 | | | | | | |
| ANMO | | | | Lg | Lg | 15 20 56.7 | |
| | comp=Z,2.8nm,0.3s,baz=79,slow=5.8,SNR=2.7 | | | | | | |
| **ANMO** | **Albuquerque** | **6.48** | **259** | Pn | **Pn** | **15 19 14.8** | **+0.8** |
| **ANMO** | **Albuquerque** | **6.48** | **259** | P | **Pn** | **15 19 14.7** | **+0.8** |
| | baz=74 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.61** | **283** | Pn | **Pn** | **15 19 15.8** | **+0.1** |
| **PBMO** | **Poplar Bluff** | **6.67** | **85** | IAmb_Lg | | 15 21 21.6 | |
| | comp=Z,87nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.78** | **75** | IAmb_Lg | | 15 21 18.7 | |
| | comp=Z,105nm,0.8s | | | | | | |
| **BNM** | **Barren Site** | **6.88** | **253** | Pn | **Pn** | **15 19 19.6** | **+0.2** |
| **SCIA** | **State Center** | **6.89** | **37** | IAmb_Lg | | 15 21 32.5 | |
| | comp=Z,124nm,0.7s | | | | | | |
| **143A** | **Socs Landing,** | **7.11** | **120** | IAmb_Lg | | 15 21 44.0 | |
| | comp=Z,93nm,1.2s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.12** | **314** | Pn | **Pn** | **15 19 22.7** | **-0.2** |
| PHWY | | | | IAmb_Lg | | 15 21 24.5 | |
| | comp=Z,75nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **7.16** | **310** | | **Pn** | **15 19 24.3** | **+0.9** |
| N23A | | | | IAmb_Lg | | 15 21 29.7 | |
| | comp=Z,105nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.16** | **310** | P | **Pn** | **15 19 24.5** | **+1.1** |
| | baz=126 | | | | | | |
| **PVMO** | **Portageville** | **7.27** | **88** | Pn | **Pn** | **15 19 24.7** | **+0.1** |
| PVMO | | | | IAmb_Lg | | 15 21 43.0 | |
| | comp=Z,129nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.30** | **231** | Pn | **Pn** | **15 19 25.0** | **-0.1** |
| MNTX | | | | IAmb_Lg | | 15 21 38.0 | |
| | comp=Z,66nm,1.0s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.30** | **231** | P | **Pn** | **15 19 25.4** | **+0.3** |
| | baz=47 | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.42** | **12** | Pn | **Pn** | **15 19 25.8** | **-0.8** |
| **ECSD** | **EROS Data Cent** | **7.42** | **12** | P | **Pn** | **15 19 26.0** | **-0.5** |
| | baz=194,SNR=10.0 | | | | | | |
| **LNXT** | **Lenox** | **7.46** | **90** | IAmb_Lg | | 15 21 57.8 | |
| | comp=Z,124nm,0.8s | | | | | | |
| **735A** | **Kenedy** | **7.65** | **174** | IAmb_Lg | | 15 21 52.6 | |
| | comp=Z,60nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **7.66** | **78** | IAmb_Lg | | 15 21 59.4 | |
| | comp=Z,94nm,0.7s | | | | | | |
| **OXF** | **Oxford** | **7.84** | **102** | Pn | **Pn** | **15 19 32.4** | **0.0** |
| OXF | | | | IAmb_Lg | | 15 22 05.6 | |
| | comp=Z,56nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **7.84** | **102** | P | **Pn** | **15 19 33.1** | **+0.7** |
| | baz=287 | | | | | | |
| **W45A** | **Hickory Valley** | **7.85** | **97** | IAmb_Lg | | 15 21 45.9 | |
| | comp=Z,74nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.91** | **64** | Pn | **Pn** | **15 19 33.5** | **+0.2** |
| **SUSD** | **Miller** | **7.95** | **359** | Pn | **Pn** | **15 19 34.2** | **+0.3** |
| SUSD | | | | IAmb_Lg | | 15 21 52.3 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **SUSD** | **Miller** | **7.95** | **359** | P | **Pn** | **15 19 34.9** | **+0.9** |
| | baz=179 | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.95** | **107** | IAmb_Lg | | 15 22 07.9 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **L40A** | **Anamoosa** | **8.05** | **44** | Pn | **Pn** | **15 19 35.4** | **+0.2** |
| **833A** | **Chaparral WMA,** | **8.16** | **184** | Pn | **Pn** | **15 19 37.3** | **+0.5** |
| **TX31** | **Lajitas Ar. Si** | **8.26** | **212** | | **Pn** | **15 19 37.6** | **-0.7** |
| **TXAR** | **Lajitas Array** | **8.26** | **212** | Pn | **Pn** | **15 19 36.8** | **-1.4** |
| | comp=Z,1.0nm,0.3s,baz=28,slow=11,SNR=45 | | | | | | |
| TXAR | | | | Sn | **Sn** | **15 21 06.9** | **-4.7** |
| | comp=Z,0.7nm,0.3s,baz=32,slow=17,SNR=2.0 | | | | | | |
| TXAR | | | | Lg | Lg | 15 21 52.5 | |
| | comp=Z,2.2nm,0.3s,baz=27,slow=20,SNR=1.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **8.26** | **212** | Pn | **Pn** | **15 19 37.4** | **-0.8** |
| **TX32** | **Lajitas Array** | **8.26** | **212** | Pn | **Pn** | **15 19 37.4** | **-0.8** |
| **HDIL** | **Hopedale** | **8.43** | **58** | Pn | **Pn** | **15 19 39.3** | **-1.1** |
| **HDIL** | **Hopedale** | **8.43** | **58** | P | **Pn** | **15 19 40.9** | **+0.5** |
| | baz=244 | | | | | | |
| **121A** | **Cookes Peak, D** | **8.46** | **245** | IAmb_Lg | | 15 22 25.8 | |
| | comp=Z,46nm,1.2s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.54** | **27** | IAmb_Lg | | 15 22 27.8 | |
| | comp=Z,51nm,0.8s | | | | | | |
| **K22A** | **Casper** | **8.61** | **318** | IAmb_Lg | | 15 22 21.1 | |
| | comp=Z,73nm,0.9s | | | | | | |
| **K22A** | **Casper** | **8.61** | **318** | P | **Pn** | **15 19 43.0** | **-0.2** |
| | baz=134 | | | | | | |
| **RSSD** | **Black Hills** | **8.64** | **334** | IAmb_Lg | | 15 22 18.3 | |
| | comp=Z,76nm,1.1s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.15** | **43** | IAmb_Lg | | 15 22 55.1 | |
| | comp=Z,58nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.15** | **43** | P | **Pn** | **15 19 51.1** | **+0.8** |
| | baz=228 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.52** | **10** | | **Pn** | **15 19 55.0** | **-0.5** |
| **I40A** | **Norwalk** | **9.64** | **37** | IAmb_Lg | | 15 22 48.7 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **F36A** | **Milaca** | **10.15** | **21** | Pn | **Pn** | **15 20 04.3** | **+0.3** |
| **LRAL** | **Lakeview Retre** | **10.23** | **106** | Pn | **Pn** | **15 20 06.0** | **+0.8** |
| **PDAR** | **Pinedale Array** | **10.45** | **310** | Pn | **Pn** | **15 20 08.5** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=118,slow=15,SNR=4.1 | | | | | | |
| PDAR | | | | Pg | | 15 20 51.6 | |
| | comp=Z,0.4nm,0.3s,baz=119,slow=17,SNR=7.2 | | | | | | |
| PDAR | | | | Lg | Lg | 15 23 03.3 | |
| | comp=Z,0.8nm,0.3s,baz=127,slow=22,SNR=2.5 | | | | | | |
| **I42A** | **Draeger Farm,** | **10.53** | **42** | Pn | **Pn** | **15 20 09.3** | **+0.1** |
| **CPCT** | **Cooper Cave** | **11.55** | **91** | Pn | **Pn** | **15 20 23.8** | **+0.6** |
| **TKL** | **Tuckaleechee C** | **12.12** | **89** | Pn | **Pn** | **15 20 29.3** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=234,slow=9.2,SNR=1.7 | | | | | | |
| TKL | | | | Sn | **Sn** | **15 22 44.2** | **-2.0** |
| | comp=Z,0.5nm,0.3s,baz=110,slow=6.9,SNR=2.1 | | | | | | |
| TKL | | | | Lg | Lg | 15 23 51.4 | |
| | comp=Z,0.7nm,0.3s,baz=214,slow=18,SNR=2.3 | | | | | | |
| **S51A** | **Beattyville** | **12.14** | **80** | Pn | **Pn** | **15 20 32.4** | **+1.1** |
| **DGMT** | **Dagmar** | **12.64** | **343** | Pn | **Pn** | **15 20 35.9** | **-2.2** |
| **ULM** | **Lac du Bonnet** | **13.91** | **8** | Pn | **Pn** | **15 20 51.7** | **-3.7** |
| | comp=Z,0.4nm,0.3s,baz=197,slow=7.0,SNR=1.7 | | | | | | |
| ULM | | | | Sn | Sn | 15 23 18.2 | -12 |
| | comp=Z,0.4nm,0.3s,baz=211,slow=14,SNR=1.7 | | | | | | |
| ULM | | | | Lg | Lg | 15 24 50.0 | |
| | comp=Z,0.3nm,0.3s,baz=269,slow=20,SNR=3.1 | | | | | | |
| **SADO** | **Sadowa** | **16.98** | **55** | Lg | Lg | 15 26 24.0 | |
| | comp=Z,0.2nm,0.3s,baz=258,slow=19,SNR=1.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.84** | **344** | P | **P** | **15 23 28.0** | **+0.4** |
| | comp=Z,0.2nm,0.6s,baz=140,slow=8.8,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **40.07** | **330** | P | **P** | **15 25 14.0** | **+0.6** |
| | comp=Z,0.3nm,0.8s,baz=92,slow=8.1,SNR=2.5 | | | | | | |

*IDC **22** 15:53:45.9±3.1, 18°.03S×178°.25W, h570km±22km, mb2.9/4, mb1 3.3/5, mb1mx2.9/47, mbtmp3.9/5, Error ellipse: s-maj=107.0km s-min=23.7km az=149.0*
*NEIC **22** 15:53:45.3±1.9, 18°.2S±0°.2×178°.1W±0°.1, h565km±8km, mb4.3/15, Error ellipse: s-maj=30.8km s-min=12.2km az=147.0*

**ISC 22 15:53:44.1±0.7, 18°.3S±0°.2×178°.1W±0°.1, h550km, n28, σ1°48/30, mb4.3/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.73** | **278** | P | **P** | **15 55 06.6** | **+2.5** |
| | 13nm,0.3s,baz=120,slow=5.4,SNR=20 | | | | | | |
| **MSVF** | **Nonsavu** | **3.73** | **278** | P | **P** | **15 55 06.3** | **+2.3** |
| **AFI** | **Afiamalu** | **7.44** | **55** | P | **P** | **15 55 37.6** | **+1.1** |
| **BBOO** | **Buckleboo** | **43.52** | **241** | P | **P** | **16 00 59.8** | **+0.4** |
| BBOO | | | | IAmb | IAmb | 16 01 07.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **16 01 08.6** | **-1.4** |
| WB0 | | | | IAmb | IAmb | 16 01 30.0 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.87** | **260** | P | **P** | **16 01 08.9** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 16 01 30.4 | |
| | comp=Z,8.1nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.88** | **260** | P | **P** | **16 01 08.8** | **-1.3** |
| WRAB | | | | IAmb | IAmb | 16 01 27.9 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **16 01 09.0** | **-1.2** |
| | comp=Z,0.3nm,0.5s,baz=96,slow=6.9,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 02 39.9** | **-0.1** |
| | comp=Z,0.1nm,0.7s,baz=102,slow=2.9,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **16 01 08.8** | **-1.4** |
| **AS31** | **Alice Springs** | **45.00** | **255** | P | **P** | **16 01 10.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.01** | **255** | P | **P** | **16 01 10.7** | **-0.4** |
| | comp=Z,5.8nm,0.6s,baz=88,slow=8.4,SNR=212 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 02 40.5** | **+0.1** |
| | comp=Z,0.2nm,0.9s,baz=90,slow=4.7,SNR=0.8 | | | | | | |
| **ASAR** | **Alice Springs** | **45.01** | **255** | P | **P** | **16 01 10.3** | **-0.8** |
| **FORT** | **Forrest** | **50.15** | **245** | P | **P** | **16 01 49.4** | **0.0** |
| FORT | | | | IAmb | IAmb | 16 02 05.3 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **50.77** | **264** | P | **P** | **16 01 53.8** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 16 02 20.6 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.29** | **261** | P | **P** | **16 02 11.7** | **-0.6** |
| **MORW** | **Morawa** | **60.63** | **246** | P | **P** | **16 02 59.6** | **-2.8** |
| MORW | | | | IAmb | IAmb | 16 03 26.5 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.39** | **323** | P | **P** | **16 03 53.1** | **+2.0** |
| MJAR | | | | IAmb | IAmb | 16 03 54.2 | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **68.39** | **323** | P | **P** | **16 03 53.2** | **+2.1** |
| **MJB9** | **Matsu-Tunnel** | **68.39** | **323** | P | **P** | **16 03 53.2** | **+2.0** |
| **PEA0B** | **Petropavlovsk-** | **74.11** | **345** | P | **P** | **16 04 23.6** | **-0.6** |
| **PETK** | **Petropavlovsk-** | **74.11** | **345** | P | **P** | **16 04 23.6** | **-0.6** |
| **SAO** | **San Andreas Ge** | **76.46** | **44** | P | **P** | **16 04 36.5** | **-1.2** |
| SAO | | | | IAmb | IAmb | 16 04 59.9 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **BELA** | **Belgrano 2** | **81.77** | **173** | P | **P** | **16 05 07.6** | **+2.5** |
| **TXAR** | **Lajitas Array** | **85.92** | **57** | P | **P** | **16 05 25.8** | **-0.8** |
| | comp=Z,0.4nm,0.9s,baz=211,slow=3.2,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **86.17** | **13** | P | **P** | **16 05 25.3** | **-1.4** |
| | comp=Z,0.3nm,0.7s,baz=226,slow=5.4,SNR=4.7 | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.94** | **12** | P | **P** | **16 05 40.0** | **+0.2** |
| **CLL** | **Collm** | **145.88** | **348** | *e*PKPbc | **PKPdf** | **16 12 18.0** | **-2.3** |
| **GERES** | **GERESS Array B** | **148.04** | **345** | PKPbc | **PKPbc** | **16 12 27.8** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=20,slow=3.1,SNR=2.2 | | | | | | |

**IDC 22 16:01:26.4±2.3, 3°.17S×128°.59E, h0km, mb3.1/2, mb1 3.4/3, mb1mx3.2/35, mbtmp3.1/3, ML3.1/1, Error ellipse: s-maj=151.7km s-min=29.3km az=68.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.59** | **162** | P | Pn | 16 05 33.6 | +0.5 |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **21.01** | **166** | P | P | 16 06 11.0 | -0.8 |
| | 0.4nm,0.4s,baz=345,slow=11,SNR=27 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.28** | **327** | P | P | 16 12 04.0 | +0.4 |
| | 0.2nm,0.8s,baz=108,slow=7.7,SNR=2.0 | | | | | | |

*AZER **22** 16:11:57.2±0.4, 42°.78N×46°.58E, h52km±30km, Error ellipse: s-maj=11.0km s-min=5.0km az=4.0*
*NORS **22** 16:11:58.6±0.0, 42°.70N×46°.69E, h78km±2km, MPVA3.7*
*MOS **22** 16:11:59.2±0.0, 42°.70N×46°.67E, h74km±1km, MPVA3.7*
*DRS **22** 16:11:59.5±0.0, 42°.57N×47°.24E, h2km*

**ISC 22 16:12:00.2±1.3, 42°.67N±0°.04×46°.63E±0°.03, h74km±7km, n37, σ1°97/69, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UNCR** | **Uncukul** | **0.13** | **71** | *i* Pg | **Pn** | **16 12 10.6** | **-0.5** |
| UNCR | | | | *e*Sg | **Sn** | **16 12 19.2** | **+0.1** |
| **XNZR** | **Khunzakh** | **0.14** | **156** | *i* Pg | **Pn** | **16 12 11.1** | **-0.2** |
| XNZR | | | | *e*Sg | **Sn** | **16 12 20.2** | **+0.9** |
| **KRNR** | **Karanay** | **0.26** | **53** | *i* Pg | **Pn** | **16 12 10.8** | **-0.9** |
| KRNR | | | | *e*Sg | **Sn** | **16 12 19.5** | **-0.6** |
| **ARKR** | **Arakani** | **0.28** | **104** | *i* Pg | **Pn** | **16 12 11.2** | **-0.5** |
| ARKR | | | | *e*Sg | **Sn** | **16 12 20.6** | **+0.4** |
| **DBC** | **Dubki** | **0.38** | **23** | *e*Pg | **Pn** | **16 12 11.5** | **-0.9** |
| DBC | | | | *e*Sg | **Sn** | **16 12 21.1** | **-0.4** |
| **BUJR** | **Buynaksk** | **0.39** | **66** | *e*Pg | **Pn** | **16 12 11.9** | **-0.5** |
| BUJR | | | | *e*Sg | **Sn** | **16 12 21.4** | **0.0** |
| **DLMR** | **Dylym** | **0.40** | **0** | *e*Pg | **Pn** | **16 12 12.0** | **-0.6** |
| DLMR | | | | *e*Sg | **Sn** | **16 12 21.9** | **+0.3** |
| **DVE** | **Vedeno** | **0.47** | **308** | *e*Pg | **Pn** | **16 12 13.2** | **+0.1** |
| DVE | | | | *e*Sg | **Sn** | **16 12 23.9** | **+1.2** |
| **KMKR** | **Kumukh** | **0.64** | **147** | *e*Pg | **Pn** | **16 12 15.2** | **+0.2** |
| KMKR | | | | *e*Sg | **Sn** | **16 12 26.9** | **+0.9** |
| **KANR** | **Karaman** | **0.82** | **50** | *e*Pg | **Pn** | **16 12 16.9** | **+0.2** |
| KANR | | | | *e*Sg | **Sn** | **16 12 29.9** | **+1.0** |
| **URKR** | **Urkarakh** | **0.90** | **124** | *e*Pg | **Pn** | **16 12 17.6** | **-0.3** |
| URKR | | | | *e*Sg | **Sn** | **16 12 31.3** | **+0.4** |
| **ZKTA** | **Zakatala** | **1.03** | **180** | P | **Pn** | **16 12 19.1** | **-0.2** |
| | SNR=4.1 | | | | | | |
| ZKTA | | | | S | **Sn** | **16 12 35.1** | **+1.5** |
| **AKT** | **Akhty** | **1.45** | **145** | *e*Pg | **Pn** | **16 12 24.8** | **+0.1** |
| AKT | | | | *e*Sg | **Sn** | **16 12 44.2** | **+1.0** |
| **SEKA** | **Sheki** | **1.52** | **164** | P | **Pn** | **16 12 25.1** | **-0.5** |
| | SNR=11 | | | | | | |
| SEKA | | | | S | **Sn** | **16 12 45.3** | **+0.4** |
| **KSMR** | **Kasumkent** | **1.54** | **133** | *e*Pg | **Pn** | **16 12 26.3** | **+0.4** |
| KSMR | | | | *e*Sg | **Sn** | **16 12 47.5** | **+2.2** |
| **QSAR** | **Qusar** | **1.68** | **133** | P | **Pn** | **16 12 26.3** | **-1.4** |
| | SNR=17 | | | | | | |
| QSAR | | | | S | **Sn** | **16 12 50.3** | **+1.9** |
| **LACR** | **Lac** | **1.72** | **276** | *e*Pg | **Pn** | **16 12 28.4** | **0.0** |
| LACR | | | | *e*Sg | **Sn** | **16 12 51.1** | **+1.4** |
| **QZX** | **Qazax, Azerbai** | **1.86** | **211** | P | **Pn** | **16 12 29.9** | **-0.3** |
| QZX | | | | S | **Sn** | **16 12 53.6** | **+0.7** |
| **QUBA** | **Quba, Azerbaij** | **1.91** | **133** | P | **Pn** | **16 12 29.5** | **-1.3** |
| QUBA | | | | S | **Sn** | **16 12 54.8** | **+0.7** |
| **KORR** | **Kora** | **1.93** | **283** | *e*Pg | **Pn** | **16 12 31.6** | **+0.6** |
| KORR | | | | *e*Sg | **Sn** | **16 12 56.6** | **+2.2** |
| **MNGR** | **Mingechevir, A** | **1.93** | **170** | P | **Pn** | **16 12 31.0** | **+0.1** |
| MNGR | | | | S | **Sn** | **16 12 56.6** | **+2.3** |
| **QBL** | **Gabala** | **1.95** | **152** | P | **Pn** | **16 12 31.4** | **+0.2** |
| QBL | | | | S | **Sn** | **16 12 58.0** | **+3.1** |
| **PRTR** | **Priterechnaya** | **2.03** | **303** | *e*Pg | **Pn** | **16 12 33.4** | **+1.2** |
| PRTR | | | | *e*Sg | **Sn** | **16 12 58.1** | **+1.4** |
| **GANJ** | **Ganja** | **2.04** | **187** | P | **Pn** | **16 12 31.6** | **-0.9** |
| GANJ | | | | S | **Sn** | **16 12 56.2** | **-0.8** |
| **GDB** | **GEDABAY** | **2.06** | **199** | P | **Pn** | **16 12 32.0** | **-0.9** |
| | SNR=32 | | | | | | |
| GDB | | | | S | **Sn** | **16 12 56.7** | **-1.0** |
| **IML** | **Ismayilli** | **2.21** | **148** | P | **Pn** | **16 12 34.3** | **-0.5** |
| **DIGR** | **Digorskoe uzhe** | **2.25** | **277** | *e*Pn | **Pn** | **16 12 35.3** | **-0.3** |
| DIGR | | | | *e*Sn | **Sn** | **16 13 01.8** | **-0.7** |
| **SIZA** | **Siyzn** | **2.33** | **132** | S | **Sn** | **16 13 04.6** | **+0.5** |
| **PQL** | **Pirkuli** | **2.39** | **141** | P | **Pn** | **16 12 37.1** | **-0.2** |
| PQL | | | | S | **Sn** | **16 13 06.7** | **+1.1** |
| **ZRD** | **Zardab** | **2.52** | **161** | P | **Pn** | **16 12 38.6** | **-0.3** |
| | SNR=20 | | | | | | |
| ZRD | | | | S | **Sn** | **16 13 09.1** | **+0.5** |
| **AGDM** | **Agdam** | **2.59** | **172** | P | **Pn** | **16 12 39.1** | **-0.7** |
| AGDM | | | | S | **Sn** | **16 13 11.3** | **+1.0** |
| **NEY** | **Neytrino** | **2.92** | **283** | *e*Pn | **Pn** | **16 12 44.4** | **-0.2** |
| NEY | | | | *e*Sn | **Sn** | **16 13 18.9** | **+0.2** |
| **SHA1** | **Shidzhatmaz** | **3.09** | **292** | *e*Pn | **Pn** | **16 12 45.8** | **-1.2** |
| SHA1 | | | | *e*Sn | **Sn** | **16 13 20.9** | **-2.0** |
| **GLBA** | **Ciilabad** | **3.68** | **158** | P | **Pn** | **16 12 53.8** | **-0.8** |
| | SNR=5.0 | | | | | | |
| **YRD** | **Yardimli** | **3.95** | **161** | P | **Pn** | **16 12 57.2** | **-1.3** |
| | SNR=7.3 | | | | | | |
| YRD | | | | S | **Sn** | **16 13 41.1** | **-2.6** |
| **LRK** | **Lerik** | **4.23** | **162** | P | **Pn** | **16 13 01.4** | **-1.0** |
| | SNR=6.2 | | | | | | |
| **ASTR** | **Astara** | **4.42** | **157** | P | **Pn** | **16 13 03.8** | **-1.1** |

*TUL **22** 16:17:49.9±0.8, 36°.34N±0°.02×96°.99W±0°.01, h4km±7km, ML3.0, mb_Lg2.6/35(NEIC), Error ellipse: s-maj=2.2km s-min=1.3km az=187.0*

**NEIC 22 16:17:49.8±1.0, 36°.34N±0°.02×96°.99W±0°.04, h15km±3km, Error ellipse: s-maj=4.7km s-min=3.3km az=76.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **0.69** | **34** | Pg | Pg | 16 18 03.4 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.00** | **202** | | Pb | 16 18 08.5 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.00** | **201** | Pg | Pb | 16 18 08.9 | +0.1 |
| **TUL1** | **Leonard** | **1.06** | **113** | Pg | Pb | 16 18 09.8 | -0.1 |
| **FNO** | **Franklin** | **1.13** | **197** | Pg | Pb | 16 18 10.6 | -0.5 |
| **W35A** | **Tecumseh** | **1.19** | **175** | | Pn | 16 18 11.5 | -0.4 |
| **U32A** | **Winter Ranch,** | **1.62** | **272** | IAmb_Lg | | 16 18 42.4 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.17** | **223** | Pn | Pn | 16 18 26.7 | +1.3 |
| WMOK | | | | IAmb_Lg | | 16 18 58.9 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **2.19** | **142** | IAmb_Lg | | 16 19 00.8 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **2.49** | **327** | IAmb_Lg | | 16 19 14.8 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.49** | **151** | IAmb_Lg | | 16 19 45.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.87** | **117** | IAmb_Lg | | 16 19 59.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **3.88** | **77** | IAmb_Lg | | 16 19 57.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **3.96** | **104** | Pn | Pn | 16 18 49.3 | -0.7 |
| **FCAR** | **Ozark Folk Cen** | **3.96** | **95** | Pn | Pn | 16 18 50.3 | +0.2 |
| **W41B** | **Gary Mavity, V** | **4.03** | **105** | Pn | Pn | 16 18 50.1 | -0.8 |
| W41B | | | | IAmb_Lg | | 16 19 58.6 | |
| **AMTX** | **Amarillo** | **4.09** | **251** | IAmb_Lg | | 16 20 09.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.24** | **61** | IAmb_Lg | | 16 20 03.8 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **4.27** | **39** | IAmb_Lg | | 16 20 06.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **4.64** | **13** | IAmb_Lg | | 16 20 18.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **4.90** | **68** | IAmb_Lg | | 16 20 34.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.14** | **350** | IAmb_Lg | | 16 20 47.7 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.30** | **83** | IAmb_Lg | | 16 20 39.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.33** | **32** | IAmb_Lg | | 16 20 48.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.49** | **71** | IAmb_Lg | | 16 20 49.0 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **SCIA** | **State Center** | **6.29** | **27** | IAmb_Lg | | 16 21 27.0 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **6.98** | **294** | IAmb_Lg | | 16 21 37.7 | |
| | comp=Z,5.4nm,0.8s | | | | | | |

**IDC 22 16:22:57.3±5.1, 5.79S×148°.13E, h0km, mb2.9/2, mb1 3.1/3, mb1mx3.0/40, mbtmp2.9/3, ML2.9/1, Error ellipse: s-maj=150.3km s-min=37.6km az=103.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.44** | **222** | P | P | 16 27 24.7 | -0.8 |
| | 0.0nm,0.3s,baz=47,slow=10,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **22.44** | **216** | P | P | 16 27 58.2 | +0.2 |
| | 0.1nm,0.3s,baz=50,slow=8.7,SNR=7.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.06** | **320** | P | P | 16 34 58.3 | +0.3 |
| | 0.1nm,0.6s,baz=94,slow=6.1,SNR=1.6 | | | | | | |

*NEIC **22** 16:24:17.7±1.5, 20°.3S±0°.1×177°.96W±0°.04, h528km±7km, mb4.2/44, Error ellipse: s-maj=17.2km s-min=5.4km az=188.0*
*IDC **22** 16:24:18.6±2.7, 20°.31S×178°.01W, h538km±23km, mb3.3/11, mb1 3.5/12, mb1mx3.3/34, mbtmp4.1/12, Error ellipse: s-maj=47.8km s-min=16.4km az=143.0*

**ISC 22 16:24:18.1±0.5, 20°.34S±0°.10×178°.03W±0°.09, h534km, n75, σ1°91/77, mb4.2/33, 1C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.53** | **304** | P | **P** | **16 25 43.8** | **+0.7** |
| | 11nm,0.3s,baz=166,slow=6.8,SNR=7.9 | | | | | | |
| **MSVF** | **Nonsavu** | **4.53** | **304** | P | **P** | **16 25 43.4** | **+0.2** |
| **NIUE** | **Niue** | **7.73** | **82** | P | **P** | **16 26 13.9** | **+1.2** |
| **AFI** | **Afiamalu** | **8.75** | **44** | S | S | 16 27 55.6 | -10 |
| | 1.1nm,0.3s,baz=249,slow=17,SNR=1.2 | | | | | | |
| **AFI** | **Afiamalu** | **8.75** | **44** | P | **P** | **16 26 21.1** | **-2.0** |
| **URZ** | **Urewera** | **18.35** | **192** | P | **P** | **16 27 54.1** | **-5.6** |
| | 0.5nm,0.3s,baz=5.2,slow=11,SNR=1.7 | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.35** | **193** | P | **P** | **16 28 07.6** | **-1.3** |
| **NNZ** | **Nelson** | **22.06** | **197** | P | **P** | **16 28 33.1** | **-0.2** |
| **THZ** | **Tophouse** | **22.70** | **198** | P | **P** | **16 28 38.7** | **-0.4** |
| **WHZ** | **Wether Hill Ro** | **27.98** | **201** | P | **P** | **16 29 25.9** | **+0.2** |
| **EIDS** | **Eidsvold** | **28.87** | **254** | P | **P** | **16 29 34.1** | **+0.4** |
| **ARMA** | **Armidale** | **29.12** | **244** | P | **P** | **16 29 36.9** | **+0.9** |
| **PMG** | **Port Moresby** | **35.28** | **283** | P | **P** | **16 30 28.8** | **+0.3** |
| PMG | | | | IAmb | IAmb | 16 30 29.6 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.55** | **273** | P | **P** | **16 30 47.7** | **+0.5** |
| COEN | | | | IAmb | IAmb | 16 30 50.7 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **37.84** | **244** | P | **P** | **16 30 50.1** | **+0.8** |
| | comp=Z,0.6nm,0.4s,baz=68,slow=10,SNR=3.7 | | | | | | |
| **BBOO** | **Buckleboo** | **42.60** | **243** | P | **P** | **16 31 27.2** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.41** | **262** | P | **P** | **16 31 41.0** | **-0.7** |
| **AS31** | **Alice Springs** | **44.53** | **257** | P | **P** | **16 31 42.6** | **0.0** |
| **ASAR** | **Alice Springs** | **44.53** | **257** | P | **P** | **16 31 42.8** | **+0.2** |
| | comp=Z,5.2nm,0.7s,baz=97,sl

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| J25K | | | | | | IAmb | IAmb | 16 36 13.6 | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | | |
| **M30M** | **Minto, Yukon** | **88.82** | **18** | | | **P** | | **16 36 15.6** | **+0.9** | |
| M30M | | | | | | IAmb | IAmb | 16 36 16.7 | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.86** | **43** | P | | **P** | | **16 36 16.2** | **+0.5** | |
| | comp=Z,0.4nm,0.5s,baz=245,slow=3.7,SNR=4.7 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.86** | **43** | | | **P** | | **16 36 16.5** | **+0.8** | |
| **DAWY** | **Dawson** | **89.31** | **16** | P | | **P** | | **16 36 17.8** | **+0.8** | |
| **COLD** | **Coldfoot** | **89.72** | **10** | P | | **P** | | **16 36 19.8** | **+1.0** | |
| COLD | | | | | | IAmb | IAmb | 16 36 24.6 | | |
| | comp=Z,3.4nm,1.4s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.04** | **290** | P | | **P** | | **16 36 22.4** | **+1.0** | |
| | comp=Z,0.9nm,0.8s,baz=120,slow=2.9,SNR=9.0 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.76** | **350** | PKP | | **PKPdf** | | **16 42 23.1** | **-0.9** | |
| | comp=Z,2.9nm,0.9s,baz=66,slow=1.5,SNR=3.5 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **135.61** | **344** | PKP | | **PKPdf** | | **16 42 37.1** | **-0.1** | |
| | comp=Z,1.2nm,0.7s,baz=44,slow=6.8,SNR=2.1 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.86** | **331** | PKP | | **PKPdf** | | **16 42 47.6** | **-3.0** | |
| | comp=Z,1.4nm,0.6s,baz=43,slow=4.5,SNR=28 | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **142.86** | **331** | PKPpre | PKPpre | | | 16 42 47.4 | | |
| **BRTR** | **Keskin Array B** | **146.71** | **312** | PKPbc | | **PKPbc** | | **16 43 00.7** | **+0.2** | |
| | comp=Z,1.4nm,0.6s,baz=151,slow=3.8,SNR=4.9 | | | | | | | | | |
| **CLL** | **Collm** | **147.90** | **347** | *i* PKPbc | | **PKPbc** | | **16 43 03.6** | **+0.6** | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| CLL | | | | *e*PKPab | | **PKPab** | | **16 43 08.0** | **+0.5** | |
| **KHC** | **Kasperske Hory** | **149.80** | **345**⃠ | *e*PKP | | **PKiKP** | | **16 43 08.5** | **0.0** | |
| **GERES** | **GERESS Array B** | **150.04** | **344** | PKPbc | | **PKPbc** | | **16 43 07.5** | **-1.0** | |
| | comp=Z,0.4nm,0.6s,baz=328,slow=4.7,SNR=4.8 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **150.04** | **344** | PKPdf | | **PKPdf** | | **16 43 02.0** | **-0.8** | |
| GERES | | | | | | **PKPbc** | | **16 43 08.4** | **-0.1** | |

*HYB* ***22*** *16:41:43.5±0.4, 19°.75N×84°.21E, h1km×43km, ML3.1*
**ISC 22 16:41:42.6±1.2, 19.76N±0.06×84.07E±0.08, h10km, n26, σ1§94/35, Southern India**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHLP** | **Challavanipeta** | **1.24** | **181** | *e*P | **Pn** | **16 42 05.5** | **-0.5** |
| CHLP | | | | *e*S | **Sb** | **16 42 20.7** | **-1.5** |
| CHLP | | | | IAML | | 16 42 26.3 | |
| | comp=N,512nm,0.1s | | | | | | |
| **PVM** | **Polavaram** | **3.41** | **223** | *e*P | **Pn** | **16 42 38.5** | **+2.7** |
| PVM | | | | *e*S | **Sn** | **16 43 17.9** | **+1.6** |
| **MYLAV** | **Mylavaram** | **4.43** | **228** | *e*P | **Pn** | **16 42 53.3** | **+3.4** |
| MYLAV | | | | *e*S | **Sn** | **16 43 42.2** | **+0.7** |
| **RPR** | **Rampur** | **4.60** | **260** | *e*P | **Pn** | **16 42 55.2** | **+3.0** |
| RPR | | | | *e*S | **Sn** | **16 43 46.3** | **+0.6** |
| **CUPL** | **Choutuppal** | **5.47** | **244** | *e*P | **Pn** | **16 43 06.0** | **+1.8** |
| CUPL | | | | *e*S | **Sn** | **16 44 05.8** | **-1.3** |
| **SRSP** | **Sriramsagar** | **5.47** | **262** | *e*P | **Pn** | **16 43 06.6** | **+2.4** |
| SRSP | | | | *e*S | **Sn** | **16 44 05.8** | **-1.5** |
| **ADKI** | **Addanki** | **5.51** | **226** | *e*S | **Sn** | **16 44 06.4** | **-1.9** |
| **NJS** | **Nagarjunasagar** | **5.54** | **236** | *e*P | **Pn** | **16 43 06.8** | **+1.7** |
| NJS | | | | *e*S | **Sn** | **16 44 07.6** | **-1.3** |
| **HYBB** | **Hyderabad (bro** | **5.73** | **247** | *e*P | **Pn** | **16 43 10.3** | **+2.5** |
| HYBB | | | | *e*S | **Sn** | **16 44 11.6** | **-2.0** |
| **SRLM** | **Srisailam** | **6.13** | **234** | *e*P | **Pn** | **16 43 16.1** | **+2.9** |
| **RCLA** | **Racherla** | **6.49** | **230** | *e*P | **Pn** | **16 43 19.6** | **+1.5** |
| RCLA | | | | *e*S | **Sn** | **16 44 28.4** | **-3.9** |
| **KLRI** | **Killari** | **7.27** | **258** | *e*P | **Pn** | **16 43 30.3** | **+1.3** |
| KLRI | | | | *e*S | **Sn** | **16 44 47.5** | **-4.3** |
| **SKHT** | **Srikalahasti** | **7.29** | **216** | *e*P | **Pn** | **16 43 30.8** | **+1.6** |
| **RAMN** | **Ramite** | **7.53** | **17** | *e*P | **Pn** | **16 43 33.4** | **+0.7** |
| **DMN** | **Daman** | **7.88** | **7** | *e*P | **Pn** | **16 43 37.5** | **0.0** |
| **PKI** | **Pulchoki** | **7.88** | **9** | *e*P | **Pn** | **16 43 36.6** | **-0.9** |
| **PKIN** | **Phulchoki** | **7.88** | **9** | *e*P | **Pn** | **16 43 36.6** | **-0.9** |
| **KOLN** | **Koldanda** | **7.99** | **357** | *e*P | **Pn** | **16 43 38.7** | **-0.3** |
| **URV** | **Uravakonda** | **8.07** | **235** | *e*S | Sn | 16 45 04.5 | -6.9 |
| **KKN** | **Kakani** | **8.07** | **8** | *e*P | **Pn** | **16 43 39.9** | **-0.3** |
| **JIRN** | **Jiri** | **8.11** | **13** | *e*P | **Pn** | **16 43 39.3** | **-1.4** |
| **GKN** | **Gorkha** | **8.23** | **3** | *e*P | **Pn** | **16 43 41.6** | **-0.6** |
| **TAPN** | **Taplejung** | **8.26** | **23** | *e*P | **Pn** | **16 43 42.5** | **-0.3** |
| **GUN** | **Gumba** | **8.29** | **11** | *e*P | **Pn** | **16 43 42.3** | **-0.9** |
| **PYUN** | **Piuthan** | **8.37** | **353** | *e*P | **Pn** | **16 43 44.2** | **0.0** |
| **DANN** | **Dangsing** | **8.56** | **358** | *e*P | **Pn** | **16 43 45.7** | **-1.2** |

*IDC* ***22*** *16:47:44.2±0.7, 30°.62N×132°.84E, h0km, mb3.8/11, mb1 4.0/15, mb1mx3.7/49, mbtmp3.8/15, ML3.2/4, MS3.6/1, Ms1 3.6/1, ms1mx2.4/92, Error ellipse: s-maj=25.5km s-min=14.6km az=86.0*
*NEIC* ***22*** *16:47:46.6±1.5, 30°.61N±0°.02×132°.80E±0°.09, h10km±1km, mb4.3/20, Error ellipse: s-maj=12.6km s-min=3.3km az=80.0*
*JMA* ***22*** *16:47:47.5±0.1, 30°.59N×132°.75E, h82km, M3.4*
**ISC 22 16:47:46.6±3.9, 30.59N±0.05×132.86E±0.05, h15km±28km, n67, σ1§89/73, mb4.2/18, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTN** | **Tanegashima 3** | **1.62** | **273** | P | **Pn** | **16 48 13.3** | **-1.4** |
| JTN | | | | *e*S | **Sn** | **16 48 32.9** | **-2.5** |
| **JNAR** | **Kushima--Naru** | **1.65** | **305** | P | **Pn** | **16 48 14.3** | **-0.8** |
| JNAR | | | | *e*S | **Sn** | **16 48 34.2** | **-1.9** |
| **JNKG** | **Nichinankitago** | **1.66** | **310** | P | **Pn** | **16 48 14.6** | **-0.6** |
| JNKG | | | | *e*S | **Sn** | **16 48 34.3** | **-2.0** |
| **JMTN** | **Minamitane** | **1.70** | **264** | P | **Pn** | **16 48 15.0** | **-0.8** |
| JMTN | | | | *e*S | **Sn** | **16 48 35.2** | **-2.2** |
| **JTSR** | **Tashiro 2** | **1.76** | **289** | P | **Pn** | **16 48 15.5** | **-1.2** |
| JTSR | | | | *e*S | **Sn** | **16 48 37.2** | **-1.7** |
| **JTZ** | **Takazaki** | **2.00** | **311** | P | **Pn** | **16 48 19.0** | **-0.9** |
| JTZ | | | | *e*S | **Sn** | **16 48 42.1** | **-2.7** |
| **JSU** | **Suzuyama** | **2.26** | **294** | | **Pn** | **16 48 22.5** | **-0.9** |
| **JTO** | **Tosashimizu** | **2.26** | **359** | P | **Pn** | **16 48 21.6** | **-1.9** |
| JTO | | | | *e*S | **Sn** | **16 48 45.0** | **-6.2** |
| **JSJ** | **Shimokoshiki** | **2.91** | **293** | P | **Pn** | **16 48 30.7** | **-1.7** |
| JSJ | | | | *e*S | **Sn** | **16 49 03.9** | **-3.2** |
| **JNA** | **Nagahama** | **2.98** | **354** | P | **Pn** | **16 48 32.4** | **-0.9** |
| JNA | | | | *e*S | **Sn** | **16 49 03.8** | **-5.0** |
| **JNU** | **Nakatsue** | **3.04** | **327** | Pn | **Pn** | **16 48 34.8** | **+0.6** |
| | baz=180,slow=12 | | | | | | |
| JNU | | | | Sn | **Sn** | **16 49 09.4** | **-0.8** |
| | baz=240,slow=20 | | | | | | |
| **JNU** | **Nakatsue** | **3.04** | **327** | | **Pn** | **16 48 34.1** | **-0.1** |
| **JMN** | **Monobe** | **3.24** | **15** | P | **Pn** | **16 48 36.3** | **-0.8** |
| **JMN** | **Monobe** | **3.24** | **15** | | **Pn** | **16 48 36.0** | **-1.0** |
| **JAI** | **Aioi** | **3.46** | **22** | P | **Pn** | **16 48 39.2** | **-0.8** |
| JAI | | | | *e*S | **Sn** | **16 49 14.5** | **-6.3** |
| **JHS** | **Saijyo** | **4.40** | **3** | | **Pn** | **16 48 52.3** | **-0.6** |
| **JTU** | **Tsushima** | **4.89** | **324** | Pn | **Pn** | **16 48 59.2** | **-0.5** |
| **JMZ** | **Minamidaito 2** | **4.97** | **197** | Pn | **Pn** | **16 49 00.7** | **-0.1** |
| **JOW** | **Kunigami** | **5.50** | **228** | Pn | **Pn** | **16 49 08.0** | **0.0** |
| | 4.7nm,0.3s,baz=116,slow=27,SNR=6.4 | | | | | | |
| JOW | | | | Sn | **Sn** | **16 50 03.7** | **-7.3** |
| | 1.1nm,0.3s,baz=102,slow=28,SNR=1.0 | | | | | | |
| **JOW** | **Kunigami** | **5.50** | **228** | | **Pn** | **16 49 07.7** | **-0.4** |
| **INU** | **Inuyama** | **5.89** | **35** | Pn | **Pn** | **16 49 12.0** | **-1.4** |
| **MAJO** | **Matsushiro** | **7.42** | **36** | | **Pn** | **16 49 35.3** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **7.42** | **36** | Pn | **Pn** | **16 49 35.6** | **+1.2** |
| | 0.1nm,0.3s,baz=238,slow=14,SNR=11 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.42** | **36** | | **Pn** | **16 49 35.8** | **+1.3** |
| **MJB9** | **Matsu-Tunnel** | **7.42** | **35** | | **Pn** | **16 49 35.6** | **+1.1** |
| **KSRS** | **Korea Array** | **7.98** | **330** | Pn | **Pn** | **16 49 41.3** | **-0.7** |
| | 0.1nm,0.3s,baz=148,slow=14,SNR=1.8 | | | | | | |
| **INCN** | **Inchon** | **8.60** | **325** | Pn | **Pn** | **16 49 51.3** | **+0.7** |
| **ERM** | **Erimo** | **14.09** | **33** | Pn | **Pn** | **16 51 06.5** | **+0.9** |
| **KLR** | **Kul'dur** | **18.64** | **358** | P | **P** | **16 52 03.7** | **+0.1** |
| | 0.1nm,0.3s,baz=166,slow=10,SNR=4.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.53** | **101** | T | T | 17 28 33.1 | |
| | baz=296,slow=74,SNR=5.8 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.54** | **101** | T | T | 17 28 33.1 | |
| | baz=296 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.55** | **101** | T | T | 17 28 37.2 | |
| | baz=296,slow=74,SNR=5.2 | | | | | | |
| **BILL** | **Bilibino** | **42.27** | **18** | P | **P** | **16 55 40.5** | **+1.4** |
| **KURK** | **Kurchatov** | **44.66** | **313** | P | **P** | **16 55 58.7** | **+0.1** |
| **KNRA** | **Kununurra** | **46.17** | **185** | P | **P** | **16 56 11.8** | **+0.9** |
| **WB0** | **Warramunga Arr** | **50.09** | **178** | P | **P** | **16 56 41.4** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 16 56 42.6 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **50.26** | **178** | P | **P** | **16 56 42.9** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 16 56 55.2 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.26** | **178** | P | **P** | **16 56 42.6** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=354,slow=8.2,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.26** | **178** | IAmb | IAmb | 16 56 47.1 | |
| | comp=Z,0.3nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **50.29** | **178** | P | **P** | **16 56 43.3** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 16 57 10.5 | |
| | comp=Z,3.9nm,1.1s | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **53.96** | **179** | P | | **P** | | **16 57 10.5** | **+0.6** | |
| **ASAR** | **Alice Springs** | **53.96** | **179** | P | | **P** | | **16 57 10.7** | **+0.8** | |
| | comp=Z,0.5nm,0.6s,baz=11,slow=13,SNR=21 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **16 58 14.8** | **-0.4** | |
| | comp=Z,0.3nm,1.0s,baz=350,slow=4.7,SNR=2.0 | | | | | | | | | |
| **IMAR** | **Indian Mountai** | **55.74** | **28** | P | | **P** | | **16 57 23.6** | **+1.2** | |
| **ARU** | **Arti** | **56.59** | **320** | LR | | LR | | 17 23 44.1 | | |
| | comp=Z,54nm,19.2s,baz=31,slow=38 | | | | | | | | | |
| **MLY** | **Manley** | **57.01** | **29** | P | | **P** | | **16 57 33.0** | **+1.5** | |
| MLY | | | | IAmb | | IAmb | | 16 58 00.6 | | |
| | comp=Z,3.8nm,1.5s | | | | | | | | | |
| **RND** | **Reindeer** | **57.93** | **31** | P | | **P** | | **16 57 38.6** | **+0.6** | |
| **MDM** | **Murphy Dome** | **58.07** | **29** | P | | **P** | | **16 57 40.3** | **+1.3** | |
| MDM | | | | IAmb | | IAmb | | 16 57 41.4 | | |
| | comp=Z,8.8nm,1.3s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **58.66** | **30** | P | | **P** | | **16 57 41.7** | **-1.4** | |
| | comp=Z,0.3nm,0.6s,baz=288,slow=6.5,SNR=2.8 | | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **59.32** | **26** | P | | **P** | | **16 57 49.7** | **+2.0** | |
| **BCAR** | **Beaver Creek A** | **61.14** | **31** | P | | **P** | | **16 58 01.8** | **+1.6** | |
| **STKA** | **Stephens Creek** | **62.68** | **172** | P | | **P** | | **16 58 10.2** | **-0.5** | |
| | comp=Z,1.5nm,0.7s,baz=340,slow=14,SNR=4.5 | | | | | | | | | |
| **STKA** | **Stephens Creek** | **62.68** | **172** | IAmb | | IAmb | | 16 58 32.6 | | |
| | comp=Z,2.0nm,1.4s | | | | | | | | | |
| **INK** | **Inuvik** | **63.26** | **25** | P | | **P** | | **16 58 14.8** | **+0.6** | |
| | comp=Z,0.7nm,0.6s,baz=265,slow=7.7,SNR=2.6 | | | | | | | | | |
| **INK** | **Inuvik** | **63.26** | **25** | P | | **P** | | **16 58 14.8** | **+0.6** | |
| INK | | | | IAmb | | IAmb | | 16 58 15.2 | | |
| | comp=Z,6.6nm,1.4s | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **64.79** | **20** | P | | **P** | | **16 58 25.4** | **+1.2** | |
| **C36M** | **Paulatuk** | **66.16** | **22** | P | | **P** | | **16 58 33.5** | **+0.5** | |
| **KBZ** | **Khabaz** | **69.56** | **309** | P | | **P** | | **16 58 55.5** | **+0.5** | |
| | comp=Z,1.9nm,0.8s,baz=79,slow=5.2,SNR=3.0 | | | | | | | | | |
| **RES** | **Resolute Bay** | **70.48** | **12** | P | | **P** | | **16 59 00.4** | **+0.4** | |
| RES | | | | IAmb | | IAmb | | 16 59 03.5 | | |
| | comp=Z,4.1nm,1.4s | | | | | | | | | |
| **FIA1** | **FINESS Array S** | **71.07** | **331** | P | | **P** | | **16 59 03.4** | **-0.4** | |
| **FINES** | **FINESS Array B** | **71.07** | **331** | P | | **P** | | **16 59 03.4** | **-0.4** | |
| | comp=Z,0.9nm,0.5s,baz=79,slow=10,SNR=9.0 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.84** | **27** | P | | **P** | | **16 59 13.9** | **-0.6** | |
| | comp=Z,0.2nm,0.5s,baz=299,slow=5.7,SNR=6.1 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.84** | **320** | P | | **P** | | **16 59 25.7** | **-0.7** | |
| | comp=Z,0.8nm,0.5s,baz=53,slow=6.2,SNR=6.8 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.84** | **320** | IAmb | | IAmb | | 16 59 30.9 | | |
| | comp=Z,2.7nm,1.4s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **77.16** | **335** | P | | **P** | | **16 59 39.3** | **-0.3** | |
| | comp=Z,0.9nm,0.8s,baz=72,slow=4.7,SNR=2.3 | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **78.69** | **319** | P | | **P** | | **16 59 48.3** | **-0.1** | |
| **KVN** | **Kaiserville** | **84.34** | **48** | P | | **P** | | **17 00 18.9** | **+0.4** | |
| KVN | | | | IAmb | | IAmb | | 17 00 20.4 | | |
| | comp=Z,1.8nm,0.9s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.56** | **48** | P | | **P** | | **17 00 20.4** | **+0.6** | |
| | comp=Z,0.2nm,0.3s,baz=298,slow=5.9,SNR=3.7 | | | | | | | | | |

**NNC 22 17:01:40.0±12.0, 37°.52N×79°.07E, h0km, mb3.6, mpv3.4, 1C-3D, Error ellipse: s-maj=89.8km s-min=68.1km az=10.0, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **5.81** | **3** | ⇓Pg | Pb | 17 03 25.1 | +2.8 |
| | 1.5nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 17 04 42.2 | |
| | 5.2nm,0.9s | | | | | | |
| **MDOK** | **Medeo** | **5.84** | **345** | Pg | Pb | 17 03 25.1 | +2.2 |
| | 2.5nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 17 04 44.7 | |
| | 9.7nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **6.20** | **327** | Pg | Pb | 17 03 31.2 | +2.3 |
| | 2.3nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 17 04 54.0 | |
| | 5.1nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **9.57** | **13** | Pn | Pn | 17 04 01.4 | +2.4 |
| | 0.1nm,0.3s,baz=193,slow=15,SNR=16 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 17 05 51.0 | +3.8 |
| | 0.4nm,0.6s,baz=189,slow=26 | | | | | | |

*IDC* ***22*** *17:07:04.2±0.8, 53°.01N×168°.86E, h0km, mb3.7/10, mb1 4.0/12, mb1mx3.6/58, mbtmp3.8/12, ML3.4/2, Error ellipse: s-maj=29.3km s-min=16.2km az=164.0*
*MOS* ***22*** *17:07:06.5±1.2, 52°.83N×168°.93E, h31km, mb4.5/5, Error ellipse: s-maj=8.6km s-min=5.8km az=129.8*
*NEIC* ***22*** *17:07:06.5±1.5, 52°.9N±0°.1×169°.0E±0°.1, h15km±5km, mb4.4/38, Error ellipse: s-maj=20.3km s-min=8.8km az=190.0*
*KRSC* ***22*** *17:07:08.5±2.6, 52°.99N×168°.49E, h41km±46km, ML4.2*
**ISC 22 17:07:05.2±0.7, 52.84N±0.08×168.89E±0.04, h10km, n119, σ1§80/127, mb4.3/32, 1C, South of Aleutian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **2.93** | **325** | P | **Pn** | **17 07 51.0** | **-0.8** |
| BKI | | | | S | **Sn** | **17 08 23.6** | **-3.4** |
| **BKI** | **Bering** | **2.93** | **325** | *e*P | **Pn** | **17 07 51.0** | **-0.8** |
| BKI | | | | *e*S | **Sn** | **17 08 23.6** | **-3.4** |
| **SHEM** | **Shemya Is, Ala** | **3.16** | **90** | Pn | **Pn** | **17 07 54.6** | **-0.4** |
| | 9.6nm,0.3s,baz=60,slow=3.2,SNR=5.9 | | | | | | |
| SHEM | | | | Sn | **Sn** | **17 08 29.5** | **-3.3** |
| | 20nm,0.3s,baz=227,slow=15,SNR=7.2 | | | | | | |
| **SMY** | **Shemya** | **3.16** | **90** | P | **Pn** | **17 07 54.4** | **-0.6** |
| **SMY** | **Shemya** | **3.16** | **90** | Pn | **Pn** | **17 07 54.4** | **-0.6** |
| **MKZ** | **Mys Kozlova** | **4.59** | **295** | P | **Pn** | **17 08 14.7** | **+0.1** |
| MKZ | | | | S | **Sn** | **17 09 03.5** | **-4.4** |
| **MKZ** | **Mys Kozlova** | **4.59** | **295** | *e*P | **Pn** | **17 08 14.7** | **+0.1** |
| MKZ | | | | *e*S | **Sn** | **17 09 03.5** | **-4.4** |
| **KBTR** | **Krutoberegovo** | **4.89** | **316** | P | **Pn** | **17 08 18.3** | **-0.4** |
| **KBTR** | **Krutoberegovo** | **4.89** | **316** | *e*P | **Pn** | **17 08 18.3** | **-0.4** |
| **KBG** | **Krutoberegovo** | **4.97** | **316** | *e*S | **Sn** | **17 09 14.7** | **-2.5** |
| **TUMD** | **Tumrok D** | **5.54** | **299** | *e*P | **Pn** | **17 08 28.5** | **+0.9** |
| **ZLN** | **Zelenaya** | **5.69** | **307** | P | **Pn** | **17 08 32.2** | **+2.4** |
| **ZLN** | **Zelenaya** | **5.69** | **307** | *e*P | **Pn** | **17 08 32.2** | **+2.4** |
| **TUMR** | **Tumrok** | **5.70** | **299** | P | **Pn** | **17 08 28.5** | **-1.5** |
| **TUMR** | **Tumrok** | **5.70** | **299** | *e*P | **Pn** | **17 08 31.7** | **+1.7** |
| **BZGR** | **Bezymyannyi-Gr** | **5.71** | **306** | P | **Pn** | **17 08 32.2** | **+2.2** |
| **BZGR** | **Bezymyannyi-Gr** | **5.71** | **306** | *e*P | **Pn** | **17 08 32.2** | **+2.2** |
| **LGNR** | **Loginova** | **5.78** | **307** | P | **Pn** | **17 08 33.1** | **+1.9** |
| **LGNR** | **Loginova** | **5.78** | **307** | *e*P | **Pn** | **17 08 33.1** | **+1.9** |
| **BDR** | **Baidarnaya** | **5.81** | **313** | P | **Pn** | **17 08 32.2** | **+4.7** |
| **BDR** | **Baidarnaya** | **5.81** | **313** | *e*P | **Pn** | **17 08 36.2** | **+4.7** |
| **BZWR** | **Bezymyannyi-We** | **5.82** | **306** | P | **Pn** | **17 08 33.7** | **+2.1** |
| **BZWR** | **Bezymyannyi-We** | **5.82** | **306** | *e*P | **Pn** | **17 08 33.7** | **+2.1** |
| **KMNR** | **Kamenistaya** | **5.85** | **303** | P | **Pn** | **17 08 33.4** | **+1.4** |
| **KMNR** | **Kamenistaya** | **5.85** | **303** | *e*P | **Pn** | **17 08 33.4** | **+1.4** |
| **KRSR** | **Krestovskiy** | **5.91** | **308** | P | **Pn** | **17 08 34.1** | **+1.3** |
| KRSR | | | | S | **Sn** | **17 09 39.5** | **-1.1** |
| **KRSR** | **Krestovskiy** | **5.91** | **308** | *e*P | **Pn** | **17 08 34.1** | **+1.3** |
| KRSR | | | | *e*S | **Sn** | **17 09 39.5** | **-1.1** |
| **KLY** | **Klyuchi** | **5.92** | **309** | P | **Pn** | **17 08 32.8** | **-0.1** |
| **KLY** | **Klyuchi** | **5.92** | **309** | *e*P | **Pn** | **17 08 32.8** | **-0.1** |
| **KPT** | **Kopyto** | **5.95** | **305** | P | **Pn** | **17 08 35.5** | **+2.1** |
| **KPT** | **Kopyto** | **5.95** | **305** | *e*P | **Pn** | **17 08 35.5** | **+2.1** |
| **SDLR** | **Sedlovina** | **6.05** | **278** | P | **Pn** | **17 08 36.3** | **+1.5** |
| **SDLR** | **Sedlovina** | **6.05** | **278** | *e*P | **Pn** | **17 08 36.3** | **+1.5** |
| **UGLR** | **Uglovaya** | **6.09** | **277** | P | **Pn** | **17 08 36.6** | **+1.3** |
| **UGLR** | **Uglovaya** | **6.09** | **277** | *e*P | **Pn** | **17 08 36.6** | **+1.3** |
| **SMAR** | **Somma** | **6.10** | **278** | P | **Pn** | **17 08 37.0** | **+1.4** |
| **SMAR** | **Somma** | **6.10** | **278** | *e*P | **Pn** | **17 08 37.0** | **+1.4** |
| **KRER** | **Koryakskii** | **6.13** | **278** | P | **Pn** | **17 08 38.8** | **+2.8** |
| **KRER** | **Koryakskii** | **6.13** | **278** | *e*P | **Pn** | **17 08 38.8** | **+2.8** |
| **DALK** | **Dalny** | **6.13** | **276** | P | **Pn** | **17 08 37.0** | **+1.2** |
| **DALK** | **Dalny** | **6.13** | **276** | *e*P | **Pn** | **17 08 37.0** | **+1.2** |
| **AVH** | **Avacha** | **6.14** | **278** | P | **Pn** | **17 08 37.6** | **+1.7** |
| **AVH** | **Avacha** | **6.14** | **278** | *e*P | **Pn** | **17 08 37.6** | **+1.7** |
| **PET** | **Petropavlovsk** | **6.20** | **276** | *e*P | **Pn** | **17 08 37.8** | **+1.1** |
| PET | | | | *e*S | **Sn** | **17 09 44.0** | **-3.4** |
| PET | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,13nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,27nm,0.6s | | | | | | |
| **PET** | **Petropavlovsk** | **6.20** | **276** | Pn | **Pn** | **17 08 37.3** | **+0.7** |
| **PET** | **Petropavlovsk** | **6.20** | **276** | *e*P | **Pn** | **17 08 37.7** | **+1.1** |
| **KOK** | **Koryaka** | **6.20** | **278** | P | **Pn** | **17 08 38.1** | **+1.3** |
| **KOK** | **Koryaka** | **6.20** | **278** | *e*P | **Pn** | **17 08 38.1** | **+1.3** |
| **MTVR** | **Mutnovka** | **6.53** | **271** | P | **Pn** | **17 08 42.8** | **+1.5** |
| MTVR | | | | S | **Sn** | **17 09 51.4** | **-4.4** |
| **MTVR** | **Mutnovka** | **6.53** | **271** | *e*P | **Pn** | **17 08 42.8** | **+1.5** |
| MTVR | | | | *e*S | **Sn** | **17 09 51.4** | **-4.4** |
| **GRL** | **Gorelyy** | **6.58** | **272** | P | **Pn** | **17 08 45.5** | **+3.4** |
| **GRL** | **Gorelyy** | **6.58** | **272** | *e*P | **Pn** | **17 08 45.5** | **+3.4** |
| **GNL** | **Ganaly** | **6.63** | **282** | P | **Pn** | **17 08 45.5** | **+2.8** |
| **GNL** | **Ganaly** | **6.63** | **282** | *e*P | **Pn** | **17 08 45.5** | **+2.8** |
| **PEA0B** | **Petropavlovsk-** | **6.77** | **277** | P | **Pn** | **17 08 46.5** | **+2.0** |
| **PEA0B** | **Petropavlovsk-** | **6.77** | **277** | Pn | **Pn** | **17 08 46.5** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **6.77** | **277** | Pn | **Pn** | **17 08 46.0** | **+1.5** |
| | comp=E,1.6nm,0.3s,baz=101,slow=18,SNR=52 | | | | | | |
| PETK | | | | Sn | **Sn** | **17 09 55.9** | **-5.7** |
| | baz=65,slow=21,SNR=1.0 | | | | | | |
| **TILK** | **Tilichiki** | **7.78** | **350** | P | **Pn** | **17 09 01.1** | **+2.9** |
| **TILK** | **Tilichiki** | **7.78** | **350** | *e*P | **Pn** | **17 09 01.1** | **+2.9** |
| **KMSK** | **Kamenskaya** | **9.76** | **353** | P | **Pn** | **17 09 27.6** | **+2.2** |
| **KMSK** | **Kamenskaya** | **9.76** | **353** | *e*P | **Pn** | **17 09 27.6** | **+2.2** |
| **BILL** | **Bilibino** | **15.30** | **356**⃠ | *e*P | **Pn** | **17 10 44.3** | **+3.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,19nm,3.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,52nm,18.0s | | | | | | |
| **ANM** | **Nome** | **17.63** | **38** | P | **P** | **17 11 11.4** | **-0.2** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **ANM** | **Nome** | **17.63** | **38** | | **P** | **17 11 11.4** | **-0.2** |
| **TTA** | **Tatalina** | **20.94** | **47** | P | **P** | **17 11 46.8** | **-1.1** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **TTA** | **Tatalina** | **20.94** | **47** | | **P** | **17 11 46.8** | **-1.1** |
| **N19K** | **Bonanza Creek** | **21.32** | **54** | P | **P** | **17 11 52.4** | **+0.4** |
| **L19K** | **White Mountain** | **21.32** | **50** | P | **P** | **17 11 52.4** | **+0.5** |
| L19K | | | | IAmb | IAmb | 17 11 54.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **OHAK** | **Old Harbor** | **21.91** | **63** | P | **P** | **17 11 57.0** | **-1.3** |
| **J20K** | **Nowinta River** | **22.03** | **45** | P | **P** | **17 11 58.7** | **-0.8** |
| **KDAK** | **Kodiak Island** | **22.25** | **62** | P | **P** | **17 12 00.5** | **-1.4** |
| | comp=Z,9.5nm,0.7s,baz=269,slow=8.1,SNR=10 | | | | | | |
| **IMAR** | **Indian Mountai** | **22.68** | **40** | P | **P** | **17 12 05.6** | **-0.8** |
| **H21K** | **Melozitna Rive** | **22.96** | **41** | P | **P** | **17 12 09.4** | **+0.1** |
| H21K | | | | IAmb | IAmb | 17 12 10.9 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **BRLK** | **Bradley Lake** | **23.06** | **57** | P | **P** | **17 12 10.9** | **+0.4** |
| BRLK | | | | IAmb | IAmb | 17 12 26.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KTH** | **Kantishna Hill** | **23.32** | **47** | P | **P** | **17 12 13.1** | **0.0** |
| KTH | | | | IAmb | IAmb | 17 12 16.5 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **BWN** | **Browne** | **24.04** | **46** | P | **P** | **17 12 21.1** | **+1.0** |
| **GHO** | **Glory Hole Cre** | **24.06** | **52**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MAKZ | | | | ⇑Sn | | Sg | 17 17 27.9 | +4.3 |
| | 2.3nm,0.8s | | | | | | | |
| MAKZ | | | | ⇓Lg | | Lg | 17 17 42.9 | |
| | 3.2nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **4.18** | **289** | ⇓Lg | | Lg | 17 18 32.6 | |
| | 2.9nm,0.5s | | | | | | | |
| KURBB | **Kurchatov Arra** | **4.22** | **287** | ⇑Pn | | Pg | 17 17 02.0 | +5.4 |
| | 1.0nm,0.5s | | | | | | | |
| KURBB | | | | ⇑Sn | | Sg | 17 18 08.8 | +18 |
| | 1.6nm,0.6s | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | 17 18 33.9 | |
| | 12nm,0.7s | | | | | | | |

*NEIC* ***22*** *17:15:44.1±1.2,5.°1S±0.°1×151.°1E±0.°1, h72*$_{km}$*±11*$_{km}$*, mb4.1/12, Error ellipse: s-maj=26.9km s-min=10.0km az=138.0*

*IDC* ***22*** *17:15:47.1±7.8,5.°03S×150.°95E, h104*$_{km}$*±53*$_{km}$*, mb3.4/3, mb1 3.6/4, mb1mx3.1/42, mbtmp3.8/4, Error ellipse: s-maj=97.9km s-min=53.8km az=124.0*

**ISC 22 17:15:45.4**±1.0,**5.°2S**±0.°2×**151.°3E**±0.°2,**h100**$_{km}$**,n21,** σ1**§51/23, mb3.9/9, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.35** | **41** | | **Pn** | **17 16 07.8** | **-2.0** |
| **PMG** | **Port Moresby** | **5.83** | **224** | P | **Pn** | **17 17 11.0** | **+1.6** |
| | 3.3nm,0.3s,baz=36,slow=6.6,SNR=14 | | | | | | |
| PMG | | | | S | **Sn** | 17 18 14.2 | **-0.8** |
| | 4.9nm,0.3s,baz=135,slow=21,SNR=18 | | | | | | |
| **PMG** | **Port Moresby** | **5.83** | **224** | | **Pn** | **17 17 07.4** | **-2.0** |
| PMG | | | | | **Sn** | **17 18 10.9** | **-4.1** |
| **MTN** | **Manton Dam** | **21.28** | **248** | P | **P** | **17 20 22.5** | **-1.4** |
| MTN | | | | IAmb | IAmb | 17 20 29.2 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.90** | **227** | P | **P** | **17 20 28.9** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 17 20 38.4 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.91** | **227** | P | **P** | **17 20 29.4** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 17 20 35.1 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.03** | **227** | P | **P** | **17 20 31.7** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 17 20 57.0 | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.04** | **227** | P | **P** | **17 20 32.4** | **+0.4** |
| **WRA** | **Warramunga Arr** | **22.05** | **227** | P | **P** | **17 20 32.3** | **+0.2** |
| | comp=Z,1.1nm,0.7s,baz=51,slow=10.0,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.05** | **227** | P | **P** | **17 20 30.6** | **-1.5** |
| **KNRA** | **Kununurra** | **24.43** | **243** | P | **P** | **17 20 56.3** | **+1.4** |
| **AS31** | **Alice Springs** | **24.83** | **221** | P | **P** | **17 20 59.6** | **+1.0** |
| **ASAR** | **Alice Springs** | **24.84** | **221** | P | **P** | **17 20 59.2** | **+0.7** |
| | comp=Z,1.0nm,0.6s,baz=54,slow=9.0,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **24.84** | **221** | P | **P** | **17 20 59.1** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **28.13** | **241** | P | **P** | **17 21 28.9** | **+0.6** |
| | comp=Z,1.4nm,0.5s,baz=46,slow=8.2,SNR=19 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.13** | **241** | P | **P** | **17 21 29.1** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **43.30** | **345** | P | **P** | **17 23 37.2** | **-0.2** |
| MJAR | | | | IAmb | IAmb | 17 23 51.1 | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **MAJO** | **Matsushiro** | **43.31** | **345** | P | **P** | **17 23 37.3** | **0.0** |
| **MJB9** | **Matsu-Tunnel** | **43.31** | **345** | P | **P** | **17 23 37.3** | **-0.1** |
| MJB9 | | | | IAmb | IAmb | 17 23 40.6 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **KHLH** | **Kahului Airpor** | **57.49** | **61** | P | **P** | **17 25 25.9** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **148.99** | **287** | PKPbc | **PKPbc** | **17 35 21.4** | **-1.4** |
| | comp=Z,0.7nm,0.9s,baz=65,slow=3.8,SNR=3.2 | | | | | | |

*IDC* ***22*** *17:28:51.6±2.4,32.°39N×134.°69E, h0*$_{km}$*, mb3.2/2, mb1 3.6/3, mb1mx3.2/38, mbtmp3.3/3, ML2.8/1, Error ellipse: s-maj=90.4km s-min=26.8km az=114.0*

*JMA* ***22*** *17:29:14.5±0.4, 34.°37N×136.°96E, h356*$_{km}$*±4*$_{km}$*, M2.4*

**ISC 22 17:29:14.2**±1.1,**34.°3N**±0.°1×**137.°03E**±0.°07,**h350**$_{km}$**,n18,** σ1**§06/21, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIE** | **Ise** | **0.28** | **286** | P | **Pn** | **17 29 59.2** | **+1.1** |
| **JAA** | **Atsumi** | **0.33** | **16** | P | **Pn** | **17 29 59.4** | **+1.3** |
| **TK02** | **Tokai 2** | **0.70** | **121** | P | **Pn** | **17 30 00.3** | **+1.6** |
| **JWY** | **Kouya** | **1.20** | **266** | P | **Pn** | **17 30 01.7** | **+0.8** |
| **JTNC** | **Tanabenakahech** | **1.28** | **248** | P | **Pn** | **17 30 01.8** | **+0.5** |
| JTNC | | | | *e*S | **S** | **17 30 38.2** | **-0.8** |
| **JWT** | **Wachi** | **1.65** | **306** | P | **Pn** | **17 30 04.0** | **+0.8** |
| JWT | | | | *e*S | **S** | **17 30 41.2** | **-1.4** |
| **JOD2** | **Odawara 2** | **1.94** | **60** | P | **Pn** | **17 30 06.5** | **+1.4** |
| **JAI** | **Aioi** | **2.21** | **257** | P | **Pn** | **17 30 07.4** | **+0.4** |
| **JRY** | **Ryogami san** | **2.29** | **41** | P | **Pn** | **17 30 09.2** | **+1.6** |
| **MAT** | **Matsushiro** | **2.42** | **23** | P | **Pn** | **17 30 09.7** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **2.42** | **23** | Pn | **Pn** | **17 30 09.6** | **+1.0** |
| | 0.4nm,0.3s,baz=211,slow=9.0,SNR=23 | | | | | | |
| MJAR | | | | Sn | S | 17 31 07.3 | +15 |
| | baz=218,slow=33,SNR=1.4 | | | | | | |
| **JHJ2** | **Mitsune** | **2.61** | **117** | P | **Pn** | **17 30 11.4** | **+1.1** |
| **JMN** | **Monobe** | **2.68** | **258** | P | **Pn** | **17 30 11.3** | **+0.4** |
| **JAG** | **Ashikaga** | **2.89** | **43** | P | **Pn** | **17 30 12.4** | **-0.1** |
| **BSO1** | **Boso 1** | **3.28** | **83** | P | **Pn** | **17 30 15.0** | **-0.5** |
| BSO1 | | | | *e*S | **S** | **17 31 03.5** | **-1.4** |
| **JHS** | **Saijyo** | **3.30** | **283** | P | **Pn** | **17 30 17.1** | **+0.7** |
| **WRA** | **Warramunga Arr** | **34.02** | **183** | P | **P** | **17 38 03.4** | **-0.2** |
| | 0.6nm,1.0s,baz=0.3,slow=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **57.74** | **183** | P | **P** | **17 38 29.6** | **-0.1** |
| | 0.1nm,0.7s,baz=355,slow=5.3,SNR=5.9 | | | | | | |

*IDC* ***22*** *17:51:59.2±0.8,0.°50N×125.°01E, h0*$_{km}$*, mb3.7/9, mb1 3.8/11, mb1mx3.6/45, mbtmp3.7/11, ML3.5/2, MS2.6/2, Ms1 2.6/2, ms1mx2.4/72, Error ellipse: s-maj=33.4km s-min=14.8km az=71.0*

*DJA* ***22*** *17:52:05.9±0.9, 1.°N±3.°×12.°5E±.°, h23*$_{km}$*±8*$_{km}$*, M4.4/14, mb4.5/6, mB5.0/1, MLv4.3/14, Mw(mB)4.3/1*

**ISC 22 17:52:06.4**±0.6,**0.°48N**±0.°07×**125.°32E**±0.°05,**h50**$_{km}$**,n35,** σ1**§72/38, mb3.8/9, 1D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **1.34** | **274** | P | **Pn** | **17 52 27.6** | **-1.2** |
| KMSI | | | | S | **Sn** | **17 52 44.0** | **-1.6** |
| **TNTI** | **Ternate** | **2.07** | **82** | P | **Pn** | **17 52 39.7** | **+1.0** |
| TNTI | | | | S | **Sn** | **17 53 06.5** | **+3.2** |
| **TNTI** | **Ternate** | **2.07** | **82** | P | **Pn** | **17 52 41.0** | **+2.3** |
| **GTOI** | **Gorontalo** | **2.31** | **274** | P | **Pn** | **17 52 44.9** | **+2.8** |
| GTOI | | | | S | **Sn** | **17 53 13.5** | **+4.1** |
| **SANI** | **Sanana** | **2.60** | **165** | P | **Pn** | **17 52 44.5** | **-1.5** |
| **SANI** | **Sanana** | **2.60** | **165** | P | **Pn** | **17 52 44.9** | **-1.1** |
| **LUWI** | **Luwuk** | **2.96** | **239** | P | **Pn** | **17 52 51.6** | **+0.6** |
| **LUWI** | **Luwuk** | **2.96** | **239** | P | **Pn** | **17 52 52.5** | **+1.5** |
| **MRSI** | **Marisa** | **3.38** | **270** | P | **Pn** | **17 52 55.7** | **-1.0** |
| **APSI** | **Ampana** | **3.92** | **249** | P | **Pn** | **17 53 06.1** | **+1.9** |
| **MPSI** | **Mapaga** | **5.42** | **269** | P | **Pn** | **17 53 25.0** | **+0.2** |
| | 0.1nm32nm,0.7s | | | | | | |
| **SIJI** | **Sorong** | **6.09** | **103** | Pn | **Pn** | **17 53 35.9** | **+1.8** |
| | 1.3nm,0.3s,baz=341,slow=18,SNR=6.6 | | | | | | |
| SIJI | | | | LR | LR | 17 56 11.8 | |
| | comp=Z,31nm,21.6s,baz=260,slow=40 | | | | | | |
| **KCP** | **Kidapawan** | **6.49** | **358** | ⇓*i*P | **Pn** | **17 53 42.5** | **+3.0** |
| **TTSI** | **Tana Toraja** | **6.52** | **237** | P | **Pn** | **17 53 41.0** | **+1.2** |
| | 0.3nm1μm54nm,0.5s | | | | | | |
| **SPSI** | **Sidrap Palu** | **7.09** | **231** | P | **Pn** | **17 53 49.1** | **+1.4** |
| | 0.2nm39nm,0.5s | | | | | | |
| **BNSI** | **Bone** | **7.12** | **227** | P | **Pn** | **17 53 48.6** | **+0.6** |
| | 0.1nm18nm,0.6s | | | | | | |
| **BKSI** | **Bulukumba** | **7.76** | **222** | P | **Pn** | **17 53 57.6** | **+0.8** |
| **KAPI** | **Kappang** | **7.79** | **225** | P | **Pn** | **17 53 58.9** | **+1.6** |
| **BATI** | **Baumata** | **10.74** | **189** | LR | LR | 18 00 26.6 | |
| | comp=Z,54nm,18.7s,baz=185,slow=47 | | | | | | |
| **MTN** | **Manton Dam** | **14.44** | **157** | P | **Pn** | **17 55 27.2** | **-0.9** |
| **KSM** | **Kuching** | **15.04** | **274** | P | **P** | **17 55 41.1** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **18.47** | **179** | P | **P** | **17 56 17.6** | **-0.6** |
| | 0.1nm,0.3s,baz=15,slow=11,SNR=1.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.47** | **179** | P | **P** | **17 56 18.0** | **-0.2** |
| **WRAB** | **Tennant Creek** | **22.13** | **157** | P | **P** | **17 56 59.9** | **+1.9** |
| **WRA** | **Warramunga Arr** | **22.14** | **157** | P | **P** | **17 56 57.0** | **-1.1** |
| | 0.5nm,0.3s,baz=336,slow=11,SNR=23 | | | | | | |
| **QIS** | **Mount Isa** | **25.15** | **147** | P | **P** | **17 57 28.8** | **+1.6** |
| **ASAR** | **Alice Springs** | **25.41** | **161** | P | **P** | **17 57 29.9** | **+0.4** |
| | 0.8nm,0.7s,baz=340,slow=7.3,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 01 01.4** | **+0.4** |
| | 0.3nm,0.4s,baz=356,slow=2.2,SNR=6.9 | | | | | | |
| **WRKA** | **Warakurna** | **25.53** | **174** | P | **P** | **17 57 32.1** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **31.46** | **306** | P | **P** | **17 58 20.7** | **-2.8** |
| | 0.2nm,0.5s,baz=133,slow=7.5,SNR=2.6 | | | | | | |
| **STKA** | **Stephens Creek** | **35.68** | **156** | P | **P** | **17 59 00.7** | **+0.7** |
| | 0.4nm,0.3s,baz=326,slow=7.3,SNR=2.1 | | | | | | |
| **KSRS** | **Korea Array** | **36.87** | **3** | P | **P** | **17 59 09.2** | **-0.8** |
| | 0.6nm,0.6s,baz=184,slow=10,SNR=2.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.82** | **17** | P | **P** | **17 59 17.4** | **-0.8** |
| | 2.4nm,0.8s,baz=199,slow=8.3,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.45** | **327** | P | **P** | **18 02 02.8** | **-1.4** |
| | 0.4nm,0.4s,baz=124,slow=7.4,SNR=18 | | | | | | |
| **MA2** | **Magadan** | **62.18** | **14** | P | **P** | **18 02 22.8** | **+0.4** |
| | 2.2nm,0.6s,baz=181,slow=6.4,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.86** | **334** | P | **P** | **18 02 24.9** | **-2.2** |
| | 0.5nm,0.6s,baz=159,slow=8.5,SNR=2.3 | | | | | | |

*AEIC* ***22*** *18:07:55.1±1.6,54.°87N±0.°07×159.°52W±0.°08, h19*$_{km}$*±7*$_{km}$*, ML3.2/30, ML3.7/16(NEIC), Error ellipse: s-maj=10.5km s-min=5.5km az=154.0*

*NEIC* ***22*** *18:07:55.0±1.9,54.°89N±0.°05×159.°50W±0.°07, h24*$_{km}$*±10*$_{km}$*, Error ellipse: s-maj=7.7km s-min=6.2km az=185.0*

**ISC 22 18:07:54.9**±0.9,**54.°87N**±0.°07×**159.°48W**±0.°05,**h24**$_{km}$**±7**$_{km}$**, n70,** σ0**§83/73, South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHNA** | **Chernabura Isl** | **0.08** | **236** | P | **Pb** | **18 07 58.9** | **-0.3** |
| | baz=44 | | | | | | |
| CHNA | | | | S | **Sb** | **18 08 02.3** | **+0.1** |
| | baz=44 | | | | | | |
| **CNBA** | **Chernabura Isl** | **0.08** | **229** | | **Pb** | **18 07 59.0** | **-0.4** |
| **CNBA** | **Chernabura Isl** | **0.08** | **229** | | **Sb** | **18 08 02.3** | **+0.1** |
| **SDPT** | **Sand Point** | **0.74** | **310** | | **Sb** | **18 08 18.5** | **-0.4** |
| **SDPT** | **Sand Point** | **0.74** | **310** | | **Pb** | **18 08 08.0** | **-1.2** |
| **SDPT** | **Sand Point** | **0.74** | **310** | IAML | | 18 08 19.3 | |
| | comp=E,616nm,1.0s | | | | | | |
| SDPT | | | | IAML | | 18 08 19.4 | |
| | comp=N,721nm,0.5s | | | | | | |
| **SDPT** | **Sand Point** | **0.74** | **310** | P | **Pb** | **18 08 08.1** | **-1.1** |
| | baz=131 | | | | | | |
| SDPT | | | | S | **Sb** | **18 08 18.5** | **-0.4** |
| | baz=131 | | | | | | |
| **VNSG** | **Veniaminof 6** | **1.27** | **10** | | **Pn** | **18 08 16.9** | **-0.3** |
| VNSG | | | | | **Sn** | **18 08 34.4** | **+0.8** |
| **PVV** | **Pavlof Volcano** | **1.42** | **292** | | **Pn** | **18 08 18.2** | **-0.9** |
| **PS4A** | **Pavlof South-4** | **1.44** | **290** | | **Pn** | **18 08 18.6** | **-1.0** |
| **HAG** | **Hague Volcano** | **1.46** | **289** | | **Pn** | **18 08 19.1** | **-0.7** |
| **CHGN** | **Chignik** | **1.55** | **23** | | **Pn** | **18 08 20.9** | **-0.1** |
| **CHGN** | **Chignik** | **1.55** | **23** | P | **Pn** | **18 08 21.1** | **+0.1** |
| | baz=204 | | | | | | |
| **BALA** | **Baldy Mountain** | **1.93** | **281** | | **Pn** | **18 08 25.8** | **-0.4** |
| **ANPB** | **Aniakchak Plen** | **2.05** | **19** | | **Pn** | **18 08 28.0** | **+0.1** |
| **FALS** | **False Pass** | **2.27** | **271** | | **Sn** | **18 08 59.0** | **+0.9** |
| **FALS** | **False Pass** | **2.27** | **271** | | **Pn** | **18 08 30.5** | **-0.4** |
| **FALS** | **False Pass** | **2.27** | **271** | P | **Pn** | **18 08 30.7** | **-0.2** |
| | baz=88 | | | | | | |
| FALS | | | | S | **Sn** | **18 08 59.0** | **+0.9** |
| | baz=88 | | | | | | |
| **ISLZ** | **Isanotski Laza** | **2.45** | **268** | | **Pn** | **18 08 32.8** | **-0.6** |
| ISLZ | | | | | **Sn** | **18 09 01.7** | **-1.0** |
| **SSLN** | **Shishaldin Nor** | **2.61** | **270** | | **Pn** | **18 08 36.1** | **+0.5** |
| **SSLS** | **Shishaldin Sou** | **2.62** | **268** | | **Pn** | **18 08 35.6** | **-0.1** |
| **WESE** | **West Dahl East** | **2.99** | **264** | | **Pn** | **18 08 41.4** | **+0.5** |
| **WECS** | **Westdahl Cape** | **3.09** | **266** | | **Pn** | **18 08 42.4** | **+0.1** |
| **PLK1** | **Peulik 1** | **3.34** | **27** | | **Pn** | **18 08 46.2** | **+0.6** |
| **SII** | **Sitkinak Islan** | **3.44** | **58** | | **Pn** | **18 08 44.3** | **-2.7** |
| SII | | | | IAML | | 18 10 36.1 | |
| | comp=E,182nm,4.3s | | | | | | |
| **SII** | **Sitkinak Islan** | **3.44** | **58** | P | **Pn** | **18 08 46.2** | **-0.7** |
| | baz=243 | | | | | | |
| **AKSA** | **Akutan Strait** | **3.70** | **261** | | **Pn** | **18 08 50.7** | **+0.2** |
| **AKUT** | **Akutan** | **3.74** | **261** | Pn | **Pn** | **18 08 52.1** | **+1.1** |
| AKUT | | | | IAML | | 18 09 54.6 | |
| | comp=E,113nm,4.9s | | | | | | |
| AKUT | | | | IAML | | 18 11 17.8 | |
| | comp=N,141nm,4.5s | | | | | | |
| **KABU** | **Katmai Buttres** | **4.12** | **33** | | **Pn** | **18 08 57.2** | **+0.9** |
| **OHAK** | **Old Harbor** | **4.20** | **53** | | **Pn** | **18 08 56.0** | **-1.3** |
| OHAK | | | | IAML | | 18 10 10.5 | |
| | comp=N,116nm,4.8s | | | | | | |
| OHAK | | | | IAML | | 18 10 28.7 | |
| | comp=E,92nm,4.9s | | | | | | |
| **OHAK** | **Old Harbor** | **4.20** | **53** | P | **Pn** | **18 08 56.2** | **-1.1** |
| | baz=239 | | | | | | |
| **UNV** | **Unalaska Valle** | **4.24** | **259** | | **Pn** | **18 08 56.4** | **-1.4** |
| **UNV** | **Unalaska Valle** | **4.24** | **259** | P | **Pn** | **18 08 56.6** | **-1.3** |
| | baz=73 | | | | | | |
| **MSW** | **Makushin Switc** | **4.37** | **260** | | **Pn** | **18 08 59.0** | **-0.8** |
| **KDAK** | **Kodiak Island** | **4.82** | **50** | | **Pn** | **18 09 04.0** | **-1.8** |
| **KDAK** | **Kodiak Island** | **4.82** | **50** | IAML | | 18 10 27.1 | |
| | comp=E,84nm,4.8s | | | | | | |
| **P18K** | **Big Mountain,** | **5.09** | **25** | Pn | **Pn** | **18 09 10.6** | **+1.0** |
| P18K | | | | IAML | | 18 10 05.2 | |
| | comp=E,43nm,5.0s | | | | | | |
| P18K | | | | IAML | | 18 12 34.9 | |
| | comp=N,37nm,4.2s | | | | | | |
| **Q19K** | **Cape Douglas,** | **5.17** | **36** | | **Pn** | **18 09 11.2** | **+0.5** |
| **Q19K** | **Cape Douglas,** | **5.17** | **36** | P | **Pn** | **18 09 11.2** | **+0.5** |
| | baz=221 | | | | | | |
| **O18K** | **Koktuh Hills** | **5.50** | **23** | | **Pn** | **18 09 16.5** | **+1.2** |
| **O18K** | **Koktuh Hills** | **5.50** | **23** | P | **Pn** | **18 09 15.8** | **+0.6** |
| | baz=207 | | | | | | |
| **N19K** | **Bonanza Creek** | **6.52** | **22** | Pn | **Pn** | **18 09 28.5** | **-0.8** |
| **SVW2** | **Sparrevohn** | **6.58** | **17** | Pn | **Pn** | **18 09 29.0** | **-0.9** |
| **BRLK** | **Bradley Lake** | **6.76** | **40** | Pn | **Pn** | **18 09 30.9** | **-1.6** |
| **M19K** | **Big River Lodg** | **7.54** | **19** | Pn | **Pn** | **18 09 43.6** | **+0.4** |
| **L19K** | **White Mountain** | **7.72** | **16** | Pn | **Pn** | **18 09 45.6** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **8.10** | **36** | Pn | **Pn** | **18 09 50.8** | **0.0** |
| **TTA** | **Tatalina** | **8.28** | **11** | Pn | **Pn** | **18 09 53.1** | **-0.2** |
| **PWL** | **Port Wells** | **8.44** | **40** | Pn | **Pn** | **18 09 55.5** | **0.0** |
| **GHO** | **Glory Hole Cre** | **8.86** | **34** | Pn | **Pn** | **18 10 01.3** | **0.0** |
| **K20K** | **Telida** | **8.95** | **16** | Pn | **Pn** | **18 10 02.9** | **+0.4** |
| **FID** | **Port Fidalgo** | **9.09** | **44** | Pn | **Pn** | **18 10 03.2** | **-1.2** |
| **SCM** | **Sheep Creek Mo** | **9.45** | **37** | Pn | **Pn** | **18 10 08.8** | **-0.5** |
| **J20K** | **Nowinta River** | **9.71** | **14** | Pn | **Pn** | **18 10 13.7** | **+0.7** |
| **KLU** | **Klutina** | **9.75** | **42** | Pn | **Pn** | **18 10 12.6** | **-0.9** |
| **HMT** | **Hamilton** | **9.82** | **50** | Pn | **Pn** | **18 10 14.2** | **-0.3** |
| **M24K** | **Tolsona, Glenn** | **10.04** | **38** | Pn | **Pn** | **18 10 17.0** | **-0.5** |
| **ANM** | **Nome** | **10.16** | **345** | Pn | **Pn** | **18 10 19.8** | **+0.7** |
| **N25K** | **Chitina, Valde** | **10.33** | **43** | Pn | **Pn** | **18 10 20.4** | **-1.1** |
| **WAX** | **Waxell Ridge** | **10.50** | **51** | Pn | **Pn** | **18 10 23.6** | **-0.2** |
| **GLB** | **Gilahina Butte** | **10.56** | **45** | Pn | **Pn** | **18 10 23.7** | **-0.9** |
| **VRDI** | **Verde Repeater** | **10.60** | **47** | Pn | **Pn** | **18 10 25.4** | **+0.2** |
| **ISLE** | **Juniper Island** | **10.79** | **51** | Pn | **Pn** | **18 10 28.0** | **+0.1** |
| **TABL** | **Table Mountain** | **11.27** | **53** | Pn | **Pn** | **18 10 34.9** | **+0.4** |
| **H21K** | **Melozitna Rive** | **11.30** | **14** | Pn | **Pn** | **18 10 35.1** | **+0.4** |
| **M26K** | **Nabesna, AK** | **11.40** | **42** | Pn | **Pn** | **18 10 35.8** | **-0.3** |
| **IMAR** | **Indian Mountai** | **11.49** | **12** | Pn | **Pn** | **18 10 37.6** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **12.24** | **41** | Pn | **Pn** | **18 10 46.2** | **-1.3** |
| **I29M** | **Ogilvie Camp,** | **14.80** | **36** | P | **P** | **18 11 29.0** | **+0.9** |
| **EPYK** | **Eagle Plains** | **15.92** | **35** | P | **P** | **18 11 41.0** | **+0.5** |

*IDC* ***22*** *18:18:44.1±1.8,30.°72S×71.°85W, h0*$_{km}$*, mb4.0/2, mb1 3.8/5, mb1mx3.6/37, mbtmp3.8/5, ML3.6/3, MS2.8/1, Ms1 2.8/1, ms1mx2.5/52, Error ellipse: s-maj=89.1km s-min=27.1km az=97.0*

*GUC* ***22*** *18:18:46.4±0.5,30.°55S×72.°11W, h18*$_{km}$*±16*$_{km}$*, ML3.6*

**ISC 22 18:18:47.1**±1.8,**30.°56S**±0.°05×**72.°07W**±0.°10,**h26**$_{km}$**±12**$_{km}$**, n19,** σ1**§27/21, 1D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.39** | **107** | ⇓*i*P | **Pb** | **18 18 55.3** | **-0.3** |
| CO06 | | | | *i* S | **Sn** | **18 19 01.6** | **-2.1** |
| CO06 | | | | IAML | | 18 19 02.7 | |
| | comp=N,4μm,0.3s | | | | | | |
| **CO05** | **La Serena** | **0.96** | **49** | *e*P | **Pb** | **18 19 03.8** | **-1.3** |
| CO05 | | | | *i* S | **Sn** | **18 19 17.7** | **0.0** |
| CO05 | | | | IAML | | 18 19 20.3 | |
| | comp=E,5μm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **1.12** | **125** | *e*P | **Pb** | **18 19 07.3** | **-0.7** |
| CO02 | | | | *i* S | **Sn** | **18 19 22.8** | **+0.9** |
| CO02 | | | | IAML | | 18 19 28.4 | |
| | comp=N,4μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **1.16** | **71** | *e*P | **Pn** | **18 19 07.7** | **-0.3** |
| GO04 | | | | *i* S | **Sn** | **18 19 24.4** | **+1.3** |
| **CO03** | **El Pedregal** | **1.22** | **104** | *e*P | **Pb** | **18 19 08.8** | **-0.8** |
| CO03 | | | | *i* S | **Sb** | **18 19 25.6** | **+0.5** |
| CO03 | | | | IAML | | 18 19 32.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.95** | **38** | *e*P | **Pn** | **18 19 18.0** | **-0.8** |
| **VA06** | **Catapilco** | **2.10** | **162** | *e*P | **Pn** | **18 19 20.9** | **+0.3** |
| VA06 | | | | *i* S | **Sb** | **18 19 53.1** | **+2.9** |
| **H03N1** | **Juan Fernandez** | **6.48** | **242** | T | T | 18 27 27.9 | |
| | baz=71,slow=72,SNR=560 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.50** | **242** | T | T | 18 27 23.9 | |
| | baz=71,slow=72,SNR=633 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.50** | **242** | T | T | 18 27 22.9 | |
| | baz=71,slow=72,SNR=735 | | | | | | |
| **LVC** | **Limon Verde** | **8.41** | **20** | Pn | **Pn** | **18 20 49.5** | **+1.9** |
| | comp=N,0.2nm,0.3s,baz=246,slow=4.6,SNR=1.9 | | | | | | |
| LVC | | | | Lg | Lg | 18 22 57.6 | |
| | comp=N,0.9nm,0.3s,baz=269,slow=14,SNR=5.4 | | | | | | |
| **PLCA** | **Paso Flores** | **10.23** | **173** | Pn | **Pn** | **18 21 10.8** | **-1.5** |
| | comp=N,0.2nm,0.3s,baz=347,slow=19,SNR=3.7 | | | | | | |
| **CPUP** | **Villa Florida** | **13.63** | **76** | LR | LR | 18 27 19.8 | |
| | comp=N,44nm,20.9s,baz=209,slow=38 | | | | | | |
| **SIV** | **San Ignacio** | **17.65** | **37** | P | **Pn** | **18 22 52.0** | **+0.6** |
| | comp=N,0.3nm,0.3s,baz=215,slow=9.6,SNR=5.7 | | | | | | |
| **SNAA** | **Sanae** | **54.78** | **159** | P | **P** | **18 28 13.7** | **-0.6** |
| | comp=N,2.2nm,0.8s,baz=275,slow=12,SNR=2.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.07** | **70** | P | **P** | **18 31 11.1** | **+0.2** |
| | comp=N,0.7nm,0.6s,baz=243,slow=6.5,SNR=5.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.31** | **39** | PKPbc | **PKiKP** | **18 38 36.8** | **+0.4** |
| | comp=N,0.8nm,0.8s,baz=302,slow=3.4,SNR=8.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.28** | **29** | PKPbc | **PKiKP** | **18 38 38.9** | **+0.6** |
| | comp=N,2.6nm,0.6s,baz=306,slow=3.6,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.41** | **43** | PKPbc | **PKiKP** | **18 38 46.0** | **+1.0** |
| | comp=N,0.1nm,0.4s,baz=304,slow=3.3,SNR=3.9 | | | | | | |

*BJI* ***22*** *18:20:50.8±0.0, 7.°00N×92.°14E, h13*$_{km}$*, mb4.5/50, mB4.9/23, Ms4.4/7, Ms7 4.1/5*

*IDC* ***22*** *18:20:51.1±0.6, 7.°09N×92.°04E, h0*$_{km}$*, mb4.3/22, mb1 4.4/25, mb1mx4.2/44, mbtmp4.3/25, ML5.1/2, MS3.5/10, Ms1 3.5/10, ms1mx3.1/87, Error ellipse: s-maj=24.3km s-min=12.1km az=47.0*

*NEIC* ***22*** *18:20:53.2±1.1, 7.°12N±0.°09×92.°12E±0.°08, h10*$_{km}$*±1*$_{km}$*, mb4.6/44, Error ellipse: s-maj=16.0km s-min=11.9km az=220.0*

*DJA* ***22*** *18:21:01.5±1.0, 8.°N±3.°×9.°2E±.°, h32*$_{km}$*±9*$_{km}$*, M4.9/16, mB5.2/4, mb4.7/16, MLv5.2/1, Mw(mB)4.5/4*

*NDI* ***22*** *18:21:07.0±3.3, 8.°32N×91.°78E, h10*$_{km}$*, mb5.0*

**ISC 22 18:20:52.6**±0.5,**7.°11N**±0.°06×**92.°11E**±0.°06,**h10**$_{km}$**,n185,** σ1**§44/170, mb4.6/67, MS3.5**/10,**13C-6D, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBA** | **Port Blair** | **4.56** | **8** | | **Pn** | **18 22 01.3** | **-0.4** |
| **LHMI** | **Lhok Sumawe** | **5.16** | **111** | Pn | **Pn** | **18 22 10.3** | **+0.3** |
| **SRIT** | **Nakonsritamara** | **7.57** | **78** | Pn | **Pn** | **18 22 42.6** | **-0.5** |
| **GSI** | **Gunungsitoli** | **7.94** | **136** | Pn | **Pn** | **18 22 46.0** | **-2.2** |
| **PSI** | **Prapat** | **8.03** | **122** | Pn | **Pn** | **18 22 50.8** | **+1.3** |
| | 0.5nm,0.3s,baz=348,slow=11,SNR=5.5 | | | | | | |
| PSI | | | | Sn | **Sn** | **18 24 17.8** | **-2.6** |
| | 1.5nm,0.3s,baz=72,slow=19,SNR=2.2 | | | | | | |
| **RPSI** | **Rantau Prapat** | **8.08** | **123** | | **Pn** | **18 22 50.8** | **+0.7** |
| RPSI | | | | | **Sn** | **18 24 17.8** | **-3.9** |
| **KULM** | **Kulim** | **8.68** | **102** | Pn | **Pn** | **18 22 57.0** | **-1.4** |
| **IPM** | **Ipoh** | **9.25** | **106** | Pn | **Pn** | **18 23 06.3** | **+0.1** |
| **PALK** | **Pallekele** | **11.32** | **272** | Pn | **Pn** | **18 23 35.0** | **+0.4** |
| | 16nm,0.3s,baz=192,slow=12,SNR=46 | | | | | | |
| PALK | | | | Sn | Sn | 18 25 30.2 | -11 |
| | 34nm,0.3s,baz=121,slow=20,SNR=19 | | | | | | |
| **PALK** | **Pallekele** | **11.32** | **272** | Pn | **Pn** | **18 23 35

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,18nm,0.3s | | | | | | | | |
| **GKN** | **Gorkha** | | **21.95** | **342** | *e*P | | **P** | **18 25 48.3** | **+1.5** |
| | comp=Z,67nm,0.3s | | | | | | | | |
| **KOLN** | **Koldanda** | | **22.07** | **340** | *e*P | | **P** | **18 25 49.9** | **+1.8** |
| **DANN** | **Dangsing** | | **22.55** | **341** | *e*P | | **P** | **18 25 54.7** | **+1.3** |
| | comp=Z,42nm,0.3s | | | | | | | | |
| **PYUN** | **Piuthan** | | **22.59** | **339** | *e*P | | **P** | **18 25 55.2** | **+1.5** |
| | comp=Z,16nm,0.3s | | | | | | | | |
| **GYA** | **Guiyang** | | **23.71** | **34** | ⇑*i*P | | **P** | **18 26 05.8** | **+0.8** |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| **H08S3** | **Diego Garcia H** | | **24.44** | **234** | T | | T | 18 52 26.5 | |
| | baz=52,slow=75,SNR=287 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | | **24.45** | **234** | T | | T | 18 52 50.8 | |
| | baz=52,slow=75,SNR=231 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | | **24.46** | **234** | T | | T | 18 52 28.9 | |
| | baz=52,slow=75,SNR=213 | | | | | | | | |
| **ENH** | **Enshi** | | **28.23** | **33** | P | | P | **18 26 45.4** | **-0.6** |
| **GOMU** | **GeErMu** | | **29.06** | **5** | P | | P | **18 26 55.3** | **+1.7** |
| GOMU | | | | | pP | pwP | | 18 26 58.8 | -2.0 |
| GOMU | | | | | sP | sP | | 18 27 01.5 | +5.4 |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,110nm,5.0s | | | | | | | | |
| **KAPI** | **Kappang** | | **30.10** | **113** | LR | | LR | 18 40 47.1 | |
| | comp=Z,59nm,18.5s,baz=322,slow=40 | | | | | | | | |
| **LZH** | **Lanzhou** | | **30.78** | **19** | *e*P | | **P** | **18 27 08.8** | **+0.2** |
| LZH | | | | | pP | sP | | 18 27 12.1 | +0.9 |
| LZH | | | | | sP | pwP | | 18 27 14.8 | -1.0 |
| LZH | | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **NIL** | **Nilore** | | **31.66** | **329** | P | | **P** | **18 27 16.7** | **+0.5** |
| **GTA** | **Gaotai** | | **32.90** | **11** | ⇓P | | **P** | **18 27 28.3** | **+1.1** |
| GTA | | | | | pP | pwP | | 18 27 36.0 | +1.6 |
| GTA | | | | | sP | sP | | 18 27 39.6 | +10 |
| GTA | | | | | ScS | ScS | | 18 37 54.8 | -1.4 |
| GTA | | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **LYN** | **LuoYang** | | **33.13** | **32** | ⇑P | | **P** | **18 27 30.1** | **+1.0** |
| LYN | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **DAV** | **Davao City (W)** | | **33.21** | **88** | LR | | LR | 18 42 29.4 | |
| | comp=Z,38nm,18.7s,baz=172,slow=39 | | | | | | | | |
| **NJ2** | **Nanjing** | | **35.16** | **42** | *e*P | | **P** | **18 27 47.3** | **+0.5** |
| NJ2 | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| **KSH** | **Kashi** | | **35.38** | **338** | P | | **P** | **18 27 48.8** | **+0.1** |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **BATI** | **Baumata** | | **35.82** | **118** | P | | **P** | **18 27 52.6** | **-0.1** |
| | comp=Z,4.1nm,0.5s,baz=355,slow=11,SNR=1.6 | | | | | | | | |
| **SOEI** | **Soe** | | **36.15** | **117** | P | | P | 18 28 05.3 | +10 |
| | comp=Z,26nm,1.1s | | | | | | | | |
| **WMQ** | **Urumqi** | | **36.77** | **355** | *e*P | | **P** | **18 28 01.1** | **+0.6** |
| WMQ | | | | | pP | pwP | | 18 28 07.3 | -0.5 |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **GAR** | **Garm** | | **37.33** | **332** | P | | **P** | **18 28 05.5** | **+0.1** |
| GAR | | | | | IAmb | IAmb | | 18 28 06.3 | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | | **37.82** | **24** | *e*P | | **P** | **18 28 10.0** | **+0.5** |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,96nm,5.9s | | | | | | | | |
| **UCH** | **Uchtor** | | **38.28** | **339** | P | | **P** | **18 28 15.5** | **+1.7** |
| | SNR=13 | | | | | | | | |
| **AML** | **Almayashu** | | **38.50** | **338** | P | | **P** | **18 28 17.4** | **+1.8** |
| | SNR=35 | | | | | | | | |
| **KBK** | **Karagaybulak** | | **38.51** | **340** | P | | **P** | **18 28 17.4** | **+2.0** |
| | SNR=16 | | | | | | | | |
| **TKM2** | **Tokmak 2** | | **38.52** | **340** | P | | **P** | **18 28 16.7** | **+1.2** |
| | SNR=6.6 | | | | | | | | |
| **AAK** | **Ala-Archa** | | **38.65** | **339** | LR | | LR | 18 47 19.7 | |
| | comp=Z,57nm,18.8s,baz=155,slow=41 | | | | | | | | |
| **AAK** | **Ala-Archa** | | **38.65** | **339** | P | | **P** | **18 28 18.4** | **+1.9** |
| | SNR=10 | | | | | | | | |
| **AAK** | **Ala-Archa** | | **38.65** | **339** | P | | **P** | **18 28 17.9** | **+1.4** |
| AAK | | | | | IAmb | IAmb | | 18 28 19.5 | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| **EKS2** | **Erkin-Say** | | **38.93** | **338** | P | | **P** | **18 28 20.8** | **+2.0** |
| | SNR=14 | | | | | | | | |
| **USP** | **Ospenovka** | | **39.20** | **340** | P | | **P** | **18 28 22.4** | **+1.4** |
| | SNR=16 | | | | | | | | |
| **MK31** | **Makanchi Array** | | **40.43** | **350** | P | | **P** | **18 28 30.9** | **-0.2** |
| MK31 | | | | | IAmb | IAmb | | 18 28 32.4 | |
| | comp=Z,7.3nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **40.43** | **350** | P | | **P** | **18 28 31.6** | **+0.5** |
| | comp=Z,8.9nm,0.5s,baz=168,slow=9.0,SNR=252 | | | | | | | | |
| MKAR | | | | | LR | | LR | 18 49 36.8 | |
| | comp=Z,57nm,18.2s,baz=201,slow=43 | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **40.43** | **350** | P | | **P** | **18 28 31.2** | **0.0** |
| **MAKZ** | **Makanchi** | | **40.50** | **349** | P | | **P** | **18 28 31.9** | **+0.2** |
| MAKZ | | | | | IAmb | IAmb | | 18 28 32.9 | |
| | comp=Z,8.2nm,0.6s | | | | | | | | |
| **KKAR** | **Karatay Array** | | **40.58** | **336** | P | | **P** | **18 28 32.9** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | | **41.51** | **128** | P | | **P** | **18 28 40.9** | **+0.5** |
| | comp=Z,1.7nm,1.0s,baz=308,slow=8.6,SNR=2.2 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | **41.51** | **128** | P | | **P** | **18 28 39.7** | **-0.7** |
| FITZ | | | | | IAmb | IAmb | | 18 28 52.5 | |
| | comp=Z,5.8nm,0.7s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | | **42.23** | **26** | *e*P | | **P** | **18 28 46.8** | **+0.8** |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,190nm,5.6s | | | | | | | | |
| **SONM** | **Songino Array** | | **42.37** | **14** | P | | **P** | **18 28 47.9** | **+0.7** |
| | comp=Z,5.9nm,0.7s,baz=196,slow=8.6,SNR=59 | | | | | | | | |
| SONM | | | | | PcP | | **PcP** | **18 30 40.8** | **+0.2** |
| | comp=Z,1.0nm,0.7s,baz=197,slow=4.5,SNR=3.9 | | | | | | | | |
| **SONM** | **Songino Array** | | **42.37** | **14** | P | | **P** | **18 28 46.8** | **-0.4** |
| **ULN** | **Ulaanbaatar** | | **42.56** | **15** | P | | **P** | **18 28 48.9** | **+0.1** |
| **GEYT** | **Alibeck** | | **43.45** | **320** | P | | **P** | **18 28 57.2** | **+1.2** |
| | comp=Z,12nm,0.7s,baz=125,slow=9.3,SNR=16 | | | | | | | | |
| **GEYT** | **Alibeck** | | **43.45** | **320** | P | | **P** | **18 28 58.0** | **+2.0** |
| GEYT | | | | | IAmb | IAmb | | 18 28 59.0 | |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | | **43.45** | **320** | P | | **P** | **18 28 57.2** | **+1.1** |
| **KURBB** | **Kurchatov Arra** | | **44.82** | **348** | PcP | | **PcP** | **18 30 48.8** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=165,slow=2.8,SNR=4.4 | | | | | | | | |
| KURBB | | | | | LR | | LR | 18 50 53.3 | |
| | comp=Z,72nm,19.0s,baz=166,slow=40 | | | | | | | | |
| **KURK** | **Kurchatov** | | **44.89** | **348** | P | | **P** | **18 29 06.8** | **-0.5** |
| **CN2** | **Changchun** | | **46.75** | **33** | *e*P | | **P** | **18 29 22.1** | **0.0** |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | | **47.07** | **354** | P | | **P** | **18 29 24.3** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | | **47.07** | **354** | P | | **P** | **18 29 24.9** | **+0.5** |
| | comp=Z,4.2nm,0.4s,baz=170,slow=8.2,SNR=42 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **47.07** | **354** | P | | **P** | **18 29 24.2** | **-0.3** |
| **BRVK** | **Borovoye** | | **49.15** | **343** | P | | **P** | **18 29 40.0** | **-0.5** |
| BRVK | | | | | IAmb | IAmb | | 18 29 41.6 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| **WB0** | **Warramunga Arr** | | **49.45** | **123** | P | | **P** | **18 29 41.8** | **-1.6** |
| WB0 | | | | | IAmb | IAmb | | 18 30 01.6 | |
| | comp=Z,5.2nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **49.49** | **124** | P | | **P** | **18 29 43.9** | **+0.2** |
| | comp=Z,0.9nm,0.8s,baz=306,slow=8.5,SNR=12 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **18 31 05.6** | **-0.1** |
| | comp=Z,0.8nm,0.5s,baz=308,slow=2.9,SNR=4.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **49.49** | **124** | P | | **P** | **18 29 42.8** | **-0.9** |
| **WB2** | **Warramunga Arr** | | **49.50** | **124** | P | | **P** | **18 29 43.0** | **-0.7** |
| WB2 | | | | | IAmb | IAmb | | 18 29 57.2 | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **WR0** | **Warramunga Arr** | | **49.66** | **124** | P | | **P** | **18 29 44.1** | **-0.9** |
| WR0 | | | | | IAmb | IAmb | | 18 29 57.2 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **ABKAR** | **Akbulak array** | | **49.96** | **333** | P | | **P** | **18 29 46.5** | **-0.3** |
| **ABKAR** | **Akbulak array** | | **49.96** | **333** | P | | **P** | **18 29 46.4** | **-0.4** |
| ABKAR | | | | | IAmb | IAmb | | 18 29 48.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | | **50.71** | **37** | P | | **P** | **18 29 52.5** | **-0.1** |
| **ASAR** | **Alice Springs** | | **51.00** | **128** | P | | **P** | **18 29 55.7** | **+0.6** |
| | comp=Z,0.9nm,0.7s,baz=305,slow=7.2,SNR=10 | | | | | | | | |
| **ASAR** | **Alice Springs** | | **51.00** | **128** | P | | **P** | **18 29 55.6** | **+0.4** |
| **AS31** | **Alice Springs** | | **51.00** | **128** | P | | **P** | **18 29 55.0** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | | **51.16** | **48** | P | | **P** | **18 29 57.6** | **+1.4** |
| | comp=Z,0.5nm,0.3s,baz=205,slow=6.2,SNR=2.0 | | | | | | | | |
| **ARU** | **Arti** | | **55.82** | **338** | P | | **P** | **18 30 29.3** | **-0.7** |
| ARU | | | | | IAmb | IAmb | | 18 30 31.1 | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **KBZ** | **Khabaz** | | **56.31** | **319** | P | | **P** | **18 30 32.4** | **-1.2** |
| | comp=Z,3.1nm,0.9s,baz=113,slow=7.0,SNR=6.0 | | | | | | | | |
| **STKA** | **Stephens Creek** | | **61.06** | **132** | P | | **P** | **18 31 07.2** | **+0.3** |
| | comp=Z,3.1nm,1.0s,baz=341,slow=14,SNR=4.1 | | | | | | | | |
| STKA | | | | | LR | | LR | 19 00 08.1 | |
| | comp=Z,47nm,19.3s,baz=214,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | | **61.06** | **132** | P | | **P** | **18 31 06.5** | **-0.5** |
| **YAK** | **Yakutsk** | | **61.36** | **19** | P | | **P** | **18 31 08.3** | **-0.2** |
| | comp=Z,2.1nm,0.4s,baz=248,slow=3.7 | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **61.41** | **312** | P | | **P** | **18 31 09.1** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=126,slow=6.3,SNR=2.4 | | | | | | | | |
| **MBAR** | **Mbarara** | | | **61.69** | **265** | LR | | LR | 18 55 18.3 |
| | comp=Z,73nm,18.6s,baz=114,slow=34 | | | | | | | | |
| **NRIK** | **Noril'sk** | | | **62.22** | **358** | P | | **P** | **18 31 14.3** | **+0.2** |
| | comp=Z,2.0nm,0.4s,baz=172,slow=7.1,SNR=2.9 | | | | | | | | |
| **LSZ** | **Lusaka** | | | **67.12** | **250** | LR | | LR | 18 57 03.5 |
| | comp=Z,56nm,18.0s,baz=151,slow=32 | | | | | | | | |
| **SORM** | **Soroca** | | | **67.34** | **319** | ⇑P | | **P** | **18 31 47.2** | **-0.7** |
| **AKASG** | **Malin Array Be** | | | **67.51** | **322** | P | | **P** | **18 31 47.8** | **-1.1** |
| | comp=Z,1.2nm,0.7s,baz=86,slow=5.0,SNR=6.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | | | **67.51** | **322** | P | | **P** | **18 31 47.3** | **-1.6** |
| **VRI** | **Vrincioaia** | | | **67.86** | **317** | ⇑P | | **P** | **18 31 52.4** | **+1.1** |
| **PLOR** | **Plostina** | | | **67.91** | **317** | ⇑P | | **P** | **18 31 52.8** | **+1.2** |
| **TESR** | **Tescani** | | | **68.06** | **317** | ⇑P | | **P** | **18 31 52.8** | **+0.3** |
| **MLR** | **Muntele Rosu** | | | **68.31** | **316** | ⇑P | | **P** | **18 31 55.1** | **+0.8** |
| **MLR** | **Muntele Rosu** | | | **68.31** | **316** | P | | **P** | **18 31 53.8** | **-0.5** |
| **TIXI** | **Tiksi** | | | **68.38** | **12** | P | | **P** | **18 31 53.8** | **-0.2** |
| | comp=Z,19nm,0.7s,baz=268,slow=22,SNR=106 | | | | | | | | |
| **TIXI** | **Tiksi** | | | **68.38** | **12** | P | | **P** | **18 31 53.3** | **-0.7** |
| **VOIR** | | | | **68.92** | **316** | ⇑P | | **P** | **18 31 58.0** | **-0.1** |
| **BURAR** | **Bucovina Array** | | | **69.26** | **318** | ⇓P | | **P** | **18 32 00.8** | **+0.6** |
| **BURAR** | **Bucovina Array** | | | **69.26** | **318** | P | | **P** | **18 31 59.2** | **-1.0** |
| **BUR08** | **Bucovina Ar. S** | | | **69.28** | **318** | P | | **P** | **18 32 00.3** | **+0.1** |
| BUR08 | | | | | | IAmb | | IAmb | 18 32 02.4 |
| | comp=Z,3.2nm,1.0s | | | | | | | | |
| **VTS** | **Vitosha** | | | **69.70** | **313** | ⇑P | | **P** | **18 32 02.9** | **-0.1** |
| **VTS** | **Vitosha** | | | **69.70** | **313** | P | | **P** | **18 32 02.9** | **-0.1** |
| VTS | | | | | | IAmb | | IAmb | 18 32 04.1 |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **LIT** | **Litokhoron** | | | **69.88** | **310** | P | | **P** | **18 32 03.5** | **-0.5** |
| **ITM** | **Ithomi** | | | **69.96** | **307** | P | | **P** | **18 32 04.2** | **-0.3** |
| **NACGM** | **Naroch** | | | **70.14** | **326** | *i* P | | P | 18 31 54.5 | -11 |
| **HERR** | **Herculane** | | | **70.65** | **315** | ⇑P | | **P** | **18 32 09.2** | **+0.6** |
| **DRGR** | | | | **70.77** | **317** | ⇓P | | **P** | **18 32 09.9** | **+0.5** |
| **TRPA** | **Tarpa** | | | **71.13** | **318** | ⇓P | | **P** | **18 32 11.9** | **+0.4** |
| **CRVS** | **Cervenica-Dubn** | | | **71.98** | **319** | *e*P | | **P** | **18 32 18.6** | **+2.0** |
| **FINES** | **FINESS Array B** | | | **72.45** | **333** | P | | **P** | **18 32 18.6** | **-0.4** |
| | comp=Z,3.0nm,0.6s,baz=97,slow=6.1,SNR=19 | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | | | **73.46** | **316** | ⇓P | | **P** | **18 32 24.9** | **-0.5** |
| **TIP** | **Timpagrande** | | | **74.19** | **309** | P | | **P** | **18 32 30.2** | **+0.3** |
| **MORC** | **Moravsky Berou** | | | **74.64** | **320** | ⇓P | | **P** | **18 32 33.1** | **+0.8** |
| **MODS** | **Modra-Piesok** | | | **74.64** | **318** | *e*P | | **P** | **18 32 36.0** | **+3.7** |
| **ARCES** | **ARCESS Array B** | | | **75.30** | **341** | P | | **P** | **18 32 35.7** | **0.0** |
| | comp=Z,1.2nm,0.5s,baz=98,slow=4.7,SNR=10 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | | **75.30** | **341** | P | | **P** | **18 32 35.6** | **-0.1** |
| **GEC2** | **GERESS Array S** | | | **77.05** | **318** | P | | **P** | **18 32 46.4** | **+0.2** |
| GEC2 | | | | | | IAmb | | IAmb | 18 32 47.5 |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **GERES** | **GERESS Array B** | | | **77.05** | **318** | P | | **P** | **18 32 46.6** | **+0.5** |
| | comp=Z,2.2nm,0.6s,baz=77,slow=5.9,SNR=16 | | | | | | | | |
| **KHC** | **Kasperske Hory** | | | **77.15** | **319** | *e*P | | **P** | **18 32 46.5** | **-0.2** |
| **STAL** | **STALIGIAL** | | | **77.57** | **316** | P | | **P** | **18 32 49.0** | **-0.1** |
| STAL | | | | | | IAmb | | IAmb | 18 32 49.5 |
| | comp=Z,5.3nm,0.7s | | | | | | | | |
| **CTI** | **Castel Tesino** | | | **78.30** | **315** | P | | **P** | **18 32 53.5** | **+0.3** |
| CTI | | | | | | IAmb | | IAmb | 18 32 54.0 |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **WTTA** | **Wattenberg** | | | **78.35** | **317** | *i* P | | **P** | **18 32 53.6** | **0.0** |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| **WATA** | **Walderalm** | | | **78.39** | **317** | *i* P | | **P** | **18 32 53.5** | **-0.2** |
| | comp=Z,3.3nm,0.5s | | | | | | | | |
| **MOTA** | **Moosalm** | | | **78.72** | **317** | *i* P | | **P** | **18 32 55.4** | **-0.1** |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| **RETA** | **Reute** | | | **78.95** | **317** | *i* P | | **P** | **18 32 57.0** | **+0.2** |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **FETA** | **Feichten** | | | **78.96** | **316** | *i* P | | **P** | **18 32 57.3** | **+0.4** |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | | | **79.40** | **331** | P | | **P** | **18 32 57.9** | **-1.0** |
| | comp=Z,1.2nm,0.6s,baz=94,slow=5.1 | | | | | | | | |
| **NOA** | **NORSAR Array B** | | | **79.40** | **331** | P | | **P** | **18 32 58.2** | **-0.7** |
| | comp=Z,2.4nm,0.9s,baz=95,slow=5.6,SNR=4.2 | | | | | | | | |
| **DAVA** | **Damuels** | | | | **79.55** | **317** | *e*P | | **P** | **18 33 00.7** | **+0.6** |
| | comp=Z,5.5nm,0.8s | | | | | | | | |
| **MSSA** | **Maissana** | | | **79.78** | **314** | P | | **P** | **18 33 01.2** | **-0.1** |
| **TUE** | **Stuetta** | | | **79.90** | **316** | P | | **P** | **18 33 02.1** | **-0.1** |
| TUE | | | | | | IAmb | | IAmb | 18 33 06.4 |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **GAMB** | **Gambell** | | | **86.41** | **26** | P | | **P** | **18 33 35.6** | **+0.5** |
| **TNA** | **Tin City** | | | **87.69** | **24** | P | | **P** | **18 33 41.5** | **+0.2** |
| TNA | | | | | | IAmb | | IAmb | 18 33 42.0 |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| **ANM** | **Nome** | | | **88.97** | **25** | P | | **P** | **18 33 48.2** | **+0.8** |
| ANM | | | | | | IAmb | | IAmb | 18 33 49.3 |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| **ESDC** | **Sonseca Array** | | | **90.16** | **310** | P | | **P** | **18 33 54.3** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=64,slow=5.9,SNR=3.1 | | | | | | | | |
| **ILAR** | **Eielson Array** | | | **96.20** | **22** | P | | **P** | **18 34 20.1** | **-0.7** |
| | comp=Z,0.4nm,0.7s,baz=289,slow=4.0,SNR=5.0 | | | | | | | | |
| **PDAR** | **Pinedale Array** | | | **126.58** | **20** | PKP | | **PKPdf** | **18 39 56.9** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=330,slow=1.3,SNR=3.1 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | | | **126.59** | **30** | PKP | | **PKiKP** | **18 39 57.7** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=298,slow=3.2,SNR=5.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | | | **140.71** | **22** | PKP | | **PKiKP** | **18 40 25.3** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=332,slow=0.8,SNR=5.5 | | | | | | | | |

**NNC 22 18:36:54.5±10.0, 37.00N×70.57E, h0km, mb3.7, mpv3.4, 3C-5D, Error ellipse: s-maj=82.2km s-min=59.3km az=171.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK07** | **Karatay Array** | **6.08** | **360** | ⇓P | Pn | 18 38 28.3 | +2.5 |
| | 3.4nm,0.4s,baz=182,slow=13 | | | | | | |
| KK07 | | | | ⇓S | Sn | 18 39 39.6 | +3.6 |
| | 2.8nm,0.6s,baz=188,slow=25 | | | | | | |
| **AAK** | **Ala-Archa** | **6.39** | **27** | ⇑P | Pn | 18 38 31.2 | +1.1 |
| | 1.4nm,0.6s | | | | | | |
| AAK | | | | ⇑S | Sn | 18 39 43.8 | 0.0 |
| | 6.1nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.06** | **32** | ⇓P | Pn | 18 38 37.4 | -2.0 |
| | 0.9nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | Sn | 18 39 58.5 | -1.9 |
| | 2.8nm,1.0s | | | | | | |
| **AB31** | **Akbulak array** | **14.48** | **331** | ⇑P | Pn | 18 40 20.0 | -0.7 |
| | 0.3nm,0.3s,baz=145,slow=12,SNR=26 | | | | | | |
| AB31 | | | | ⇓S | Sn | 18 43 01.0 | -0.9 |
| | 0.3nm,0.5s,baz=161,slow=23,SNR=6.1 | | | | | | |

*SFS 22 18:40:06.0, 35.60N×3.70W, h25km, ML2.7, ALBORAN SUR*

*CNRM 22 18:40:08.8, 35.60N×3.59W, h44km, ml2.5*

**ISC 22 18:40:05.1±2.1, 35.65N±0.05×3.57W±0.05, h3km±15km, n10, σ1s36/20, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.53** | **215** | P | **Pn** | **18 40 19.3** | **-0.2** |
| PALE | | | | S | **Sn** | **18 40 28.3** | **-0.6** |
| **GOG** | **Mont Gurugu** | **0.63** | **132** | P | **Pn** | **18 40 20.9** | **-0.1** |
| GOG | | | | S | **Sb** | **18 40 28.9** | **+0.7** |
| **CHAS** | **Isla Isabel II** | **1.04** | **116** | P | **Pn** | **18 40 27.6** | **+1.1** |
| CHAS | | | | S | **Sn** | **18 40 41.8** | **+0.2** |
| **TAF** | **Taforalt** | **1.26** | **131** | P | **Pn** | **18 40 30.5** | **+0.8** |
| TAF | | | | S | **Sb** | **18 40 46.4** | **+0.2** |
| **EMAL** | **Malaga-Limoner** | **1.31** | **328** | P | **Pn** | **18 40 31.6** | **+1.3** |
| EMAL | | | | S | **Sb** | **18 40 45.9** | **-1.6** |
| **JBK** | **JBK** | **1.55** | **148** | P | **Pg** | **18 40 34.2** | **-0.6** |
| JBK | | | | S | **Sn** | **18 40 52.8** | **-1.7** |
| **ZHG** | **ZHG** | **3.36** | **230** | P | **Pn** | **18 41 00.2** | **+1.7** |
| ZHG | | | | S | **Sn** | **18 41 39.5** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **3.77** | **299** | *e*Pn | **Pn** | **18 41 05.4** | **+1.3** |
| PVAQ | | | | *e*Sn | **Sn** | **18 41 47.2** | **-1.7** |
| PVAQ | | | | A | A | 18 41 49.7 | |
| | 2.6nm,0.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **299** | P | **Pn** | **18 41 05.5** | **+1.4** |
| PVAQ | | | | S | **Sn** | **18 41 47.5** | **-1.5** |
| **PNCL** | **Nicolau / Gran** | **4.67** | **303** | *e*Pn | **Pn** | **18 41 18.8** | **+2.3** |
| PNCL | | | | *e*Sn | **Sn** | **18 42 09.9** | **-1.3** |
| PNCL | | | | A | A | 18 42 17.6 | |
| | 1.6nm,0.7s | | | | | | |

*MOS 22 18:41:04.6±1.1, 42.99N×145.72E, h48km, mb4.5/11, Error ellipse: s-maj=8.0km s-min=5.4km az=96.8*

*NEIC 22 18:41:05.5±2.1, 43.04N±0.06×145.8E±0.1, h35km±6km, mb4.4/62, Error ellipse: s-maj=11.4km s-min=8.8km az=105.0*

*NIED 22 18:41:06.1, 43.07N×145.66E, h47km, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr4.17; Mθθ-1.68; Mφφ-2.49; Mrθ-0.64; Mrφ-3.17; Mθφ2.41; Fault plane solution: M₀5.43000×10¹⁵ NP1:φs18.00000°, δ58.00000°, λ,60.00000°. NP2:φs245.00000°, δ42.00000°, λ,129.00000°.*

*SKHL 22 18:41:06.1±0.4, 43.10N×145.70E, h55km±4km, mb5.5/9*

*JMA 22 18:41:06.1±0.1, 43.07N×145.66E, h47km±1km, M4.6*

*JMA Felt III J1.*

*IDC 22 18:41:07.7±1.8, 43.06N×145.65E, h55km±15km, mb3.9/30, mb1 4.1/36, mb1mx3.9/65, mbtmp4.2/36, ML3.6/4, MS3.6/29, Ms1 3.6/29, ms1mx3.3/94, Error ellipse: s-maj=12.0km s-min=9.6km az=123.0*

**ISC 22 18:41:06.1±0.7, 43.06N±0.04×145.70E±0.04, h43km±6km, n258, σ1s07/265, mb4.4/81, MS3.7/23, 18C-16D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEM2** | **Nemuro 2** | **0.31** | **5** | ⇑P | **Pn** | **18 41 14.8** | **0.0** |
| NEM2 | | | | *e*S | **Sn** | **18 41 20.8** | **0.0** |
| **NMR** | **Nemuro--Hokkai** | **0.31** | **3** | ⇑*i*PN | **Pn** | **18 41 14.8** | **0.0** |
| NMR | | | | *e*S | **Sn** | **18 41 20.0** | **-0.9** |
| **NMR** | **Nemuro--Hokkai** | **0.31** | **3** | *i* P | **Pn** | **18 41 14.9** | **+0.1** |
| NMR | | | | AMB | AMB | 18 41 15.4 | |
| | 9μm,0.5s | | | | | | |
| NMR | | | | *i* S | **Sn** | **18 41 21.0** | **+0.1** |
| NMR | | | | A | A | 18 41 21.8 | |
| | 66μm,0.4s | | | | | | |
| NMR | | | | A | A | 18 41 21.8 | |
| | 53μm,0.4s | | | | | | |
| **JKHN** | **Kushirohamanak** | **0.40** | **274** | ⇓P | **Pn** | **18 41 15.8** | **+0.1** |
| JKHN | | | | *e*S | **Sn** | **18 41 22.3** | **-0.2** |
| **AKK** | **Akkeshi** | **0.63** | **267** | *i* P | **Pn** | **18 41 18.5** | **-0.2** |
| AKK | | | | AMB | AMB | 18 41 19.0 | |
| | 2μm,0.2s | | | | | | |
| AKK | | | | *i* S | **Sn** | **18 41 27.6** | **-0.1** |
| AKK | | | | A | A | 18 41 27.9 | |
| | 16μm,0.3s | | | | | | |
| AKK | | | | A | A | 18 41 27.9 | |
| | 17μm,0.3s | | | | | | |
| **GLVR** | **Golovnino** | **0.70** | **349** | *d* iPN | **Pn** | **18 41 19.5** | **-0.1** |
| GLVR | | | | *i* S | **Sn** | **18 41 29.3** | **+0.1** |
| GLVR | | | | pmax | pmax | | |
| | comp=N,2μm,0.1s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=E,3μm,0.1s | | | | | | |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,8μm,0.1s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,36μm,0.3s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,46μm,0.3s | | | | | | |
| **GLVR** | **Golovnino** | **0.70** | **349** | *i* P | **Pn** | **18 41 19.5** | **-0.1** |
| GLVR | | | | AMB | AMB | 18 41 20.1 | |
| | comp=E,8μm,0.3s | | | | | | |
| GLVR | | | | *i* S | **Sn** | **18 41 29.3** | **+0.1** |
| GLVR | | | | A | A | 18 41 29.9 | |
| | comp=E,36μm,0.4s | | | | | | |
| GLVR | | | | A | A | 18 41 29.9 | |
| | comp=E,46μm,0.4s | | | | | | |
| **JAK** | **Akkeshi** | **0.74** | **266** | ⇓P | **Pn** | **18 41 19.8** | **-0.4** |
| JAK | | | | *e*S | **Sn** | **18 41 30.0** | **-0.3** |
| **JNSB** | **Nemuroshibetsu** | **0.88** | **325** | ⇓P | **Pn** | **18 41 21.8** | **-0.3** |
| JNSB | | | | *e*S | **Sn** | **18 41 33.3** | **-0.4** |
| **JNK** | **Nakash** | **0.89** | **307** | ⇓P | **Pn** | **18 41 21.7** | **-0.6** |
| JNK | | | | *e*S | **Sn** | **18 41 32.7** | **-1.3** |
| **JRA** | **Rausu** | **0.98** | **335** | ⇓P | **Pn** | **18 41 23.2** | **-0.2** |
| JRA | | | | *e*S | **Sn** | **18 41 35.7** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **0.99** | **7** | *e*PN | **Pn** | **18 41 23.0** | **-0.5** |
| YUK | | | | *e*S | **Sn** | **18 41 35.6** | **-0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=E,845nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z

YSS eS Sn 18 43 01.3 +0.5
YSS pmax pmax
comp=Z,40nm,0.7s
YSS smax smax
comp=E,60nm,0.8s
YSS MLR MLR
comp=Z,800nm,16.0s
**YSS Yuzh-Sakhalins 4.42 333 Pn 18 42 10.0 -0.6**
**YSS Yuzh-Sakhalins 4.42 333** *i* P **Pn 18 42 11.6 +1.0**
YSS AMB AMB 18 42 15.1
comp=Z,40nm,0.7s
YSS eS Sn 18 43 00.8 0.0
YSS A A 18 43 08.8
comp=Z,10.0nm,0.6s
YSS A A 18 43 08.8
comp=Z,60nm,0.6s
**JMM Marumori 6.39 217 Pn 18 42 35.9 -1.8**
**UGL Uglegorsk 6.53 338** *e*PN **Pn 18 42 41.7 +2.1**
UGL pmax pmax
comp=E,90nm,0.7s
UGL pmax pmax
comp=N,40nm,1.0s
UGL pmax pmax
comp=Z,70nm,0.8s
**UGL Uglegorsk 6.53 338** *e*P **Pn 18 42 41.1 +1.5**
UGL AMB AMB 18 42 43.2
comp=Z,30nm,0.7s
UGL eS Sn 18 43 51.4 -1.3
UGL A A 18 43 57.2
comp=Z,20nm,0.6s
UGL A A 18 43 57.2
comp=Z,10.0nm,0.6s
**TEY Ternei 6.85 290** *e*P **Pn 18 42 46.5 +2.6**
TEY AMB AMB 18 42 50.5
comp=Z,10.0nm,0.6s
**JSD Sado 7.56 231** Pn **Pn 18 42 52.5 -1.3**
**JYT Yasato 8.03 214** Pn **Pn 18 42 57.5 -2.8**
**TYV Tymovskoe 8.08 346** *e*PN **Pn 18 43 01.6 +0.8**
TYV pmax pmax
comp=Z,400nm,4.8s
TYV pmax pmax
comp=Z,11nm,0.8s
**TYV Tymovskoe 8.08 346** *e*P **Pn 18 43 01.9 +1.1**
TYV AMB AMB 18 43 05.5
comp=Z,400nm,4.8s
TYV AMB AMB 18 43 05.7
comp=Z,10.0nm,0.8s
TYV eS Sn 18 44 29.3 -1.5
TYV A A 18 44 34.1
comp=Z,10.0nm,0.7s
TYV A A 18 44 34.1
comp=Z,10.0nm,0.7s
**MJB9 Matsu-Tunnel 8.69 224 Pn 18 43 08.3 -1.0**
**MAJO Matsushiro 8.69 224**⇑ *i*PN **Pn 18 43 08.6 -0.7**
**MAJO Matsushiro 8.69 224** Pn **Pn 18 43 08.4 -0.8**
**MAT Matsushiro 8.69 224** P **Pn 18 43 08.4 -0.9**
MAT eS Sn 18 44 45.9 0.0
**MJAR Matsushiro Arr 8.69 224** P **Pn 18 43 08.9 -0.4**
comp=Z,0.4nm,0.3s,baz=28,slow=13,SNR=41
MJAR S Sn 18 44 46.3 +0.4
comp=Z,0.1nm,0.3s,baz=95,slow=17,SNR=1.3
**MJAR Matsushiro Arr 8.69 224** Pn **Pn 18 43 08.6 -0.6**
**JGF Kuroka 9.86 224 Pn 18 43 24.8 -0.4**
**GRTR Gornotajezhnoj 9.89 278** *e*P **Pn 18 43 27.6 +2.0**
GRTR AMB AMB 18 43 30.2
comp=Z,10.0nm,0.7s
**GRNR Gornyy 9.99 324** *e*P **Pn 18 43 28.9 +2.0**
GRNR AMB AMB 18 43 32.8
comp=Z,10.0nm,0.9s
**USRK Ussuriysk Ar. 10.01 281** P **Pn 18 43 28.0 +0.7**
baz=84,slow=14,SNR=6.2
USRK LR LR 18 47 21.0
comp=Z,198nm,18.5s,baz=117,slow=37
**USRK Ussuriysk Ar. 10.01 281** PN **Pn 18 43 28.0 +0.7**
**USA0B Ussuriysk Arra 10.01 281** *i* PN **Pn 18 43 30.4 +3.1**
**INU Inuyama 10.22 224** Pn **Pn 18 43 29.2 -1.0**
**SKR Severo-Kuril's 10.43 39** *e*P **Pn 18 43 33.9 +0.9**
SKR AMB AMB 18 43 38.5
comp=Z,40nm,0.8s
**NKL Nikolayevsk 10.64 343** *e*P **Pn 18 43 37.7 +1.9**
NKL AMB AMB 18 43 38.8
comp=Z,10.0nm,0.7s
**OKH Okha 10.66 351** *e*P **Pn 18 43 36.9 +0.8**
OKH AMB AMB 18 43 39.6
comp=Z,40nm,0.5s
**JHJ Hachijo jima 2 10.96 207** S Sn 18 45 30.2 -11
comp=Z,22nm,0.3s,baz=234,slow=23,SNR=7.4
JHJ LR LR 18 48 09.3
comp=Z,113nm,19.3s,baz=94,slow=38
**KLR Kul'dur 11.47 307** P **Pn 18 43 51.1 +3.9**
comp=Z,0.1nm,0.3s,baz=114,slow=15,SNR=14
KLR LR LR 18 48 35.4
comp=Z,170nm,21.1s,baz=132,slow=39
**KLR Kul'dur 11.47 307***ce*PN **Pn 18 43 51.1 +3.9**
KLR pmax pmax
comp=Z,18nm,1.4s
**KLR Kul'dur 11.47 307** *e*P **Pn 18 43 49.0 +1.8**
KLR AMB AMB 18 43 52.2
comp=Z,20nm,0.7s
**PETK Petropavlovsk- 12.85 34** P **Pn 18 44 08.3 +2.4**
comp=Z,0.3nm,0.3s,baz=217,slow=12,SNR=2.1
PETK LR LR 18 49 49.3
comp=Z,145nm,20.1s,baz=213,slow=41
**BNX BinXian 13.36 288**⇓P **Pn 18 44 14.0 +1.0**
BNX pmax pmax
comp=Z,41nm,1.0s
BNX pmax pmax
comp=Z,280nm,4.7s
**KSRS Korea Array 14.68 254** P **Pn 18 44 31.4 +0.6**
comp=Z,0.1nm,0.3s,baz=62,slow=13,SNR=4.1
KSRS LR LR 18 50 12.5
comp=Z,52nm,18.9s,baz=60,slow=37
**CN2 Changchun 14.74 280** *e*P **Pn 18 44 32.5 +0.9**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**ZEA Zeya 16.21 318** *e*P **P 18 44 52.2 -1.0**
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=E,10.0nm,0.8s
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**ZEA Zeya 16.21 318** *e*P **Pn 18 44 48.2 -2.4**
ZEA AMB AMB 18 45 05.4
comp=Z,10.0nm,0.8s
**KROS Kirovskiy 16.74 319** *e*P **Pn 18 44 55.2 -2.1**
KROS AMB AMB 18 44 55.9
comp=Z,10.0nm,0.8s
**MA2 Magadan 16.83 9** P **P 18 45 00.1 +0.1**
comp=Z,0.5nm,0.3s,baz=180,slow=8.8,SNR=8.1
MA2 LR LR 18 51 04.2
comp=Z,95nm,19.0s,baz=157,slow=35
**SEY Seymchan 20.29 9** P **P 18 45 36.9 -1.0**
comp=Z,1.0nm,0.4s,baz=199,slow=11,SNR=15
**SEY Seymchan 20.29 9** *i* P **P 18 45 35.4 -2.5**
**SHEM Shemya Is, Ala 21.23 53** LR LR 18 53 34.9
comp=Z,44nm,20.5s,baz=152,slow=35
**YAK Yakutsk 21.24 339** P **P 18 45 47.0 -1.2**
comp=Z,2.4nm,0.5s,baz=108,slow=3.2,SNR=5.8
YAK LR LR 18 53 59.0
comp=Z,110nm,20.3s,baz=100,slow=36
**YAK Yakutsk 21.24 339** *e*P **P 18 45 52.2 +4.0**
YAK *e* 18 46 14.5
YAK *e* 18 49 53.0
YAK eSS Sn 18 50 17.7 +27
YAK eSSS SSS 18 50 31.4
YAK *e* 18 57 06.2
YAK pmax pmax
comp=Z,9.0nm,1.0s
YAK pmax pmax
comp=N,3.0nm,1.1s
YAK pmax pmax
comp=E,3.0nm,1.4s
YAK pmax pmax
comp=Z,140nm,3.0s
YAK pmax pmax
comp=N,65nm,3.4s
YAK pmax pmax
comp=E,36nm,2.8s
**YAK Yakutsk 21.24 339 P 18 45 46.8 -1.3**
YAK IAmb IAmb 18 46 07.9
comp=Z,20nm,1.0s
**XLT XiLinHaoTe 21.46 282** *e*P **P 18 45 49.9 -0.9**
XLT pmax pmax
comp=Z,6.0nm,0.8s
XLT pmax pmax
comp=Z,130nm,3.9s
**JOW Kunigami 21.52 227** P **P 18 45 52.3 +0.9**
comp=Z,50nm,0.9s,baz=2.2,slow=2.4,SNR=7.5
**JOW Kunigami 21.52 227** IAmb IAmb 18 45 53.6
comp=Z,70nm,1.0s
**BJT Baijiatuau 22.26 272** P **P 18 45 57.8 -1.6**
BJT pmax pmax
comp=Z,9.0nm,0.8s
**BJT Baijiatuau 22.26 272** P **P 18 45 57.8 -1.6**
BJT IAmb IAmb 18 45 58.7
comp=Z,9.0nm,0.8s
**TIA Tai'an 22.98 262**⇑P **P 18 46 05.4 -1.5**
TIA pmax pmax
comp=Z,32nm,0.9s
**HNS HongShan 24.25 267**⇓P **P 18 46 18.3 -0.6**
HNS pmax pmax
comp=Z,9.0nm,0.9s
**HHC Hu-ho-hao-te 25.39 277** *e*P **P 18 46 29.3 -0.1**
HHC pmax pmax
comp=Z,12nm,1.0s
HHC pmax pmax
comp=Z,180nm,5.6s
**LYN LuoYang 27.12 263**⇑P **P 18 46 45.0 +0.1**
LYN sP sP 18 47 03.3 +1.7
LYN pmax pmax
comp=Z,10.0nm,0.9s
**ULN Ulaanbaatar 27.33 294***ce*P **P 18 46 45.2 -1.7**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 27.33 294** P **P 18 46 46.2 -0.7**
**ULN Ulaanbaatar 27.33 294** *e*P **P 18 46 46.2 -0.7**
**SONM Songino Array 27.77 294** P **P 18 46 50.8 -0.1**
comp=Z,3.2nm,0.5s,baz=87,slow=8.3,SNR=20
SONM LR LR 18 58 51.3
comp=Z,180nm,19.5s,baz=100,slow=38
**SONM Songino Array 27.77 294** P **P 18 46 48.5 -2.4**
**WHN Wuhan 27.87 254**⇓P **P 18 46 52.5 +0.8**
**H11N2 WAKE ISLAND Hy 29.30 136** T T 19 18 02.4
baz=328,slow=76,SNR=1844
**H11N1 WAKE ISLAND Hy 29.31 136** T T 19 17 59.3
baz=328,slow=76,SNR=1550
**H11N3 WAKE ISLAND Hy 29.32 136** T T 19 18 05.5
baz=328,slow=76,SNR=1738
**ZAK Zakamensk 29.66 299** *e*P **P 18 47 06.8 -0.8**
ZAK pmax pmax
comp=Z,7.0nm,1.5s
**XAN Xi'an 29.94 265** P **P 18 47 10.3 +0.1**
XAN pP pP 18 47 15.1 -6.7
XAN sP sP 18 47 20.0 -6.9
XAN pmax pmax
comp=Z,11nm,1.1s
**H11S1 WAKE ISLAND Hy 30.23 138** T T 19 19 10.8
baz=329,slow=76,SNR=4559
**H11S3 WAKE ISLAND Hy 30.24 138** T T 19 19 10.9
baz=329,slow=76,SNR=2854
**H11S2 WAKE ISLAND Hy 30.25 138** T T 19 19 11.9
baz=329,slow=76,SNR=3400
**ENH Enshi 31.48 258** P **P 18 47 22.7 -1.1**
ENH IAmb IAmb 18 47 24.5
comp=Z,9.0nm,0.8s
**PZH PanZhiHua 39.22 260** P **P 18 48 30.3 -0.1**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,110nm,4.3s
**GOMU GeErMu 39.29 278** P **P 18 48 30.8 -0.3**
GOMU pP pP 18 48 37.4 -5.5
GOMU sP sP 18 48 40.3 -7.7
GOMU pmax pmax
comp=Z,12nm,0.8s
GOMU pmax pmax
comp=Z,64nm,4.2s
**KMI Kunming 39.34 257**⇑P **P 18 48 31.8 +0.3**
KMI pP pP 18 48 43.0 -0.3
KMI sP sP 18 48 48.4 0.0
KMI pmax pmax
comp=Z,15nm,0.9s
**NRIK Noril'sk 39.35 332** LR LR 19 04 43.2
comp=Z,82nm,19.2s,baz=118,slow=36
**IMAR Indian Mountai 39.81 34** P **P 18 48 34.8 +0.1**
**DGZ Jazzator, Alta 39.86 300** *i* P **P 18 48 36.7 +1.2**
DGZ pmax pmax
comp=Z,3.0nm,1.1s
**H21K Melozitna Rive 40.17 34** P **P 18 48 38.1 +0.3**
H21K IAmb IAmb 18 49 02.6
comp=Z,13nm,1.5s
**CAST Castle Rocks 40.42 38** P **P 18 48 40.7 +0.9**
CAST IAmb IAmb 18 48 44.2
comp=Z,5.3nm,0.9s
**KDAK Kodiak Island 40.49 47** P **P 18 48 40.8 +0.4**
comp=Z,4.6nm,0.6s,baz=333,slow=9.0,SNR=1.1
**ZAA0 Zalesovo Array 40.58 307** P **P 18 48 40.1 -1.0**
**ZALV Zalesovo Beam 40.58 307** P **P 18 48 40.7 -0.4**
comp=Z,1.7nm,0.7s,baz=90,slow=8.9,SNR=8.8
ZALV PcP **PcP 18 50 42.9 +0.3**
comp=Z,4.0nm,0.5s,baz=90,slow=3.1,SNR=16
ZALV LR LR 19 06 25.2
comp=Z,80nm,20.6s,baz=80,slow=37
**ZALV Zalesovo Beam 40.58 307 P 18 48 39.7 -1.5**
ZALV **PcP 18 50 42.4 -0.1**
**COLD Coldfoot 41.30 32** P **P 18 48 47.7 +0.8**
**WMQ Urumqi 41.37 292** *e*P **P 18 48 46.6 -1.3**
WMQ pP pP 18 48 59.9 +0.1
WMQ sP sP 18 49 06.4 +1.5
WMQ pmax pmax
comp=Z,9.0nm,1.1s
**TOLK Toolik Lake Re 41.62 30** P **P 18 48 49.8 +0.2**
**MDM Murphy Dome 42.09 35** P **P 18 48 54.1 +0.6**
**WRH Wood River Hil 42.16 36** P **P 18 48 54.7 +0.7**
WRH IAmb IAmb 18 49 06.9
comp=Z,11nm,1.4s
**CCB Clear Creek Bu 42.28 36** P **P 18 48 55.4 +0.5**
**HDA Harding Lake 42.66 36** P **P 18 48 58.2 +0.1**
**IL31 42.67 36** P **P 18 48 58.7 +0.6**
IL31 IAmb IAmb 18 49 17.2
comp=Z,6.8nm,1.1s
**ILAR Eielson Array 42.67 36** P **P 18 48 58.6 +0.5**
comp=Z,1.2nm,0.7s,baz=260,slow=5.2,SNR=22
**FYU Fort Yukon 43.26 33** P **P 18 49 04.3 +1.4**
**BMAR Burnt Mountain 43.48 32** P **P 18 49 06.0 +1.3**
**RIDG Independent Ri 43.64 37** P **P 18 49 06.5 +0.5**
**MK31 Makanchi Array 43.97 298** *i* P **P 18 49 08.3 -0.6**
**MK31 Makanchi Array 43.97 298** P **P 18 49 08.6 -0.3**
MK31 IAmb IAmb 18 49 12.5
comp=Z,4.4nm,0.8s
**MKAR Makanchi Array 43.97 298** P **P 18 49 08.7 -0.3**
comp=Z,4.4nm,0.7s,baz=80,slow=8.7,SNR=54
MKAR PcP **PcP 18 50 54.0 -0.1**
comp=Z,0.7nm,0.5s,baz=57,slow=4.1,SNR=3.2
MKAR LR LR 19 08 33.9
comp=Z,71nm,21.4s,baz=66,slow=38
**SCRK Sand Creek 43.99 37** P **P 18 49 09.2 +0.2**
SCRK IAmb IAmb 18 49 28.0
comp=Z,7.1nm,1.2s
**DOT Dot Lake 44.00 37** P **P 18 49 08.9 +0.1**
DOT IAmb IAmb 18 49 24.9
comp=Z,4.1nm,0.8s
**MAKZ Makanchi 44.17 298** P **P 18 49 10.3 -0.2**
MAKZ pmax pmax
comp=Z,5.0nm,0.8s
**MAKZ Makanchi 44.17 298** P **P 18 49 10.3 -0.2**
MAKZ IAmb IAmb 18 49 13.8
comp=Z,5.1nm,0.8s
**L26K Log Cabin Wild 44.40 38** P **P 18 49 13.5 +1.4**
L26K IAmb IAmb 18 49 25.7
comp=Z,14nm,1.2s
**VRDI Verde Repeater 44.63 41** P **P 18 49 14.9 +0.8**
**KURK Kurchatov 45.05 304***ce*P **P 18 49 16.9 -0.5**
KURK pmax pmax
comp=Z,6.0nm,0.7s
**KURK Kurchatov 45.05 304** P **P 18 49 16.7 -0.6**
KURK IAmb IAmb 18 49 19.8
comp=Z,5.6nm,0.8s
**KURK Kurchatov 45.05 304** *e*P **P 18 49 16.9 -0.5**
**BCAR Beaver Creek A 45.09 38** P **P 18 49 18.9 +1.3**
**EGAK Eagle 45.11 35** P **P 18 49 18.1 +0.4**
EGAK IAmb IAmb 18 49 21.9
comp=Z,3.8nm,1.1s
**KURBB Kurchatov Arra 45.13 304** P **P 18 49 17.6 -0.4**
comp=Z,4.7nm,0.7s,baz=72,slow=8.7,SNR=25
KURBB PcP **PcP 18 50 57.8 0.0**
comp=Z,1.5nm,0.7s,baz=81,slow=3.6,SNR=5.0
**DAWY Dawson 45.98 36** P **P 18 49 25.6 +0.9**
**CHTO Chiang Mai 46.08 253** P **P 18 49 26.3 +0.4**
CHTO pmax pmax
comp=Z,5.0nm,0.9s
**CHTO Chiang Mai 46.08 253** P **P 18 49 26.3 +0.4**
CHTO IAmb IAmb 18 49 44.8
comp=Z,5.4nm,0.8s
**I29M Ogilvie Camp, 46.21 34** P **P 18 49 27.6 +1.2**
I29M IAmb IAmb 18 49 40.9
comp=Z,6.3nm,0.9s
**CMAR Chiang Mai Arr 46.32 253** P **P 18 49 28.6 +0.8**
comp=Z,1.9nm,0.8s,baz=44,slow=7.5,SNR=18
CMAR LR LR 19 08 56.9
comp=Z,48nm,20.4s,baz=25,slow=36
**EPYK Eagle Plains 46.68 33** P **P 18 49 31.1 +1.0**
EPYK IAmb IAmb 18 49 49.0
comp=Z,7.1nm,0.9s
**M30M Minto, Yukon 47.44 38** P **P 18 49 37.5 +1.4**
**INK Inuvik 47.53 30** P **P 18 49 37.2 +0.6**
comp=Z,2.4nm,0.6s,baz=313,slow=6.1,SNR=20
INK LR LR 19 11 03.4
comp=Z,73nm,18.5s,baz=336,slow=38
**INK Inuvik 47.53 30** P **P 18 49 37.2 +0.6**
INK IAmb IAmb 18 50 01.8
comp=Z,2.7nm,0.8s
**HYT Haines Junctio 47.54 40** P **P 18 49 37.8 +0.8**
**M31M Drury Creek, Y 48.62 38** P **P 18 49 46.6 +1.4**
M31M IAmb IAmb 18 49 47.3
comp=Z,5.6nm,0.9s
**TAPN Taplejung 48.97 271** *e*P **P 18 49 49.5 +0.8**
**BVAR Borovoye Array 49.13 309** P **P 18 49 49.5 +0.3**
comp=Z,0.8nm,0.4s,baz=58,slow=14,SNR=11
**BRVK Borovoye 49.18 309** *i* P **P 18 49 50.7 +1.2**
BRVK pmax pmax
comp=Z,2.0nm,1.0s
**BRVK Borovoye 49.18 309** *e*P **P 18 49 50.7 +1.2**
**ODAN Odare 49.48 271** *e*P **P 18 49 52.8 +0.3**
comp=Z,1.2nm,0.3s
**JIRN Jiri 49.91 272** *e*P **P 18 49 56.2 +0.3**
comp=Z,1.6nm,0.2s
**GUN Gumba 50.00 273** *e*P **P 18 49 56.7 +0.1**
comp=Z,23nm,0.8s
**RAMN Ramite 50.01 271** *e*P **P 18 49 56.4 -0.2**
comp=Z,1.2nm,0.3s
**KKN Kakani 50.51 273** *e*P **P 18 50 00.3 +0.1**
**AAK Ala-Archa 50.70 295** LR LR 19 13 42.8
comp=Z,52nm,18.8s,baz=98,slow=39
**GKN Gorkha 50.86 274** *e*P **P 18 50 02.8 0.0**
comp=Z,1.8nm,0.3s
**KSH Kashi 51.13 291** P **P 18 50 08.5 +3.8**
KSH pmax pmax
comp=Z,3.0nm,1.1s
**DANN Dangsing 51.30 275** *e*P **P 18 50 07.0 +0.7**
comp=Z,67nm,0.8s
**KOLN Koldanda 51.74 274** *e*P **P 18 50 10.0 +0.5**
comp=Z,3.3nm,0.3s
**PYUN Piuthan 52.01 275** *e*P **P 18 50 11.4 -0.1**
**KKAR Karatay Array 53.10 298** P **P 18 50 18.7 -0.5**
**KKAR Karatay Array 53.10 298** P **P 18 50 18.7 -0.5**
**ARU Arti 54.13 317** LR LR 19 16 50.7
comp=Z,79nm,18.9s,baz=68,slow=40
**GAR Garm 55.22 293** P **P 18 50 34.5 -0.2**
**RES Resolute Bay 55.93 16** P **P 18 50 38.9 -0.2**
RES pmax pmax
comp=Z,6.0nm,0.7s
**RES Resolute Bay 55.93 16** P **P 18 50 38.9 -0.2**
**CHGR Chuyangaron 56.17 294** P **P 18 50 41.2 -0.4**
**AB31 Akbulak array 56.67 309** *e*P **P 18 50 44.1 -0.7**
**ABKAR Akbulak array 56.67 309** P **P 18 50 44.6 -0.2**
ABKAR IAmb IAmb 18 51 01.9
comp=Z,2.7nm,0.7s
**ABKAR Akbulak array 56.67 309** P **P 18 50 44.4 -0.4**
**YKA Yellowknife Ar 56.96 33** P **P 18 50 47.1 +0.4**
comp=Z,1.3nm,0.8s,baz=302,slow=6.7,SNR=20
**YKA Yellowknife Ar 56.96 33** P **P 18 50 45.6 -1.0**
**AKTO Aktyubinsk 57.19 311** LR LR 19 15 47.9
comp=Z,52nm,19.0s,baz=54,slow=36
**MTN Manton Dam 57.20 197** P **P 18 50 48.6 -0.2**
**KIRV Kirov 57.49 322***ce*P **P 18 50 49.4 -1.0**
**PSI Prapat 57.70 239** P **P 18 50 52.8 +0.2**
comp=Z,6.8nm,0.9s,baz=39,slow=5.0,SNR=5.8
**RPSI Rantau Prapat 57.78 239** P **P 18 50 52.8 -0.2**
**ARCES ARCESS Array B 59.53 339** P **P 18 51 05.6 +1.1**
comp=Z,3.0nm,1.0s,baz=46,slow=5.2,SNR=1.7
**ARCES ARCESS Array B 59.53 339** IAmb IAmb 18 51 35.1
comp=Z,7.2nm,1.1s
**KNRA Kununurra 60.48 199 P 18 51 11.9 +0.3**
**WB0 Warramunga Arr 63.37 192** P **P 18 51 30.5 -0.5**
WB0 IAmb IAmb 18 51 33.6
comp=Z,3.4nm,0.9s
**WR0 Warramunga Arr 63.54 192** P **P 18 51 31.5 -0.6**
WR0 IAmb IAmb 18 51 37.1
comp=Z,3.5nm,0.9s
**WB2 Warramunga Arr 63.55 192** P **P 18 51 32.1 0.0**
WB2 IAmb IAmb 18 51 35.1
comp=Z,5.8nm,1.1s
**WRA Warramunga Arr 63.55 192** P **P 18 51 31.8 -0.4**
comp=Z,1.6nm,0.9s,baz=13,slow=7.2,SNR=14
**WRA Warramunga Arr 63.55 192** *i* P **P 18 51 30.1 -2.0**
WRA pmax pmax
comp=Z,2.0nm,0.9s
**WRA Warramunga Arr 63.55 192** P **P 18 51 31.6 -0.5**
**NEW Newport 63.58 48** LR LR 19 21 13.4
comp=Z,40nm,18.0s,baz=320,slow=38
**FITZ Fitzroy Crossi 63.59 201** P **P 18 51 32.3 -0.1**
comp=Z,0.8nm,0.8s,baz=0.9,slow=6.4,SNR=5.0
**FITZ Fitzroy Crossi 63.59 201** P **P 18 51 31.6 -0.8**
FITZ IAmb IAmb 18 51 33.4
comp=Z,3.6nm,1.0s
**GEYT Alibeck 63.84 298** LR LR 19 21 32.8
comp=Z,117nm,18.7s,baz=18,slow=38
**SUMG Summit 64.63 1** P **P 18 51 39.0 -0.2**
SUMG pmax pmax
comp=Z,7.0nm,0.9s
**SUMG Summit 64.63 1** P **P 18 51 39.0 -0.2**
**FINES FINESS Array B 65.01 333** P **P 18 51 40.9 -0.3**
comp=Z,3.6nm,0.6s,baz=37,slow=8.0,SNR=18
**FINES FINESS Array B 65.01 333** *i* P **P 18 51 43.2 +2.0**
FINES pmax pmax
comp=Z,4.0nm,0.6s
**FINES FINESS Array B 65.01 333** P **P 18 51 40.2 -1.0**
**OBN Obninsk 65.25 323** LR LR 19 22 13.6
comp=Z,27nm,20.3s,baz=226,slow=38
**FCC Fort Churchill 67.15 29** P **P 18 51 54.6 -0.4**
FCC pmax pmax
comp=Z,4.0nm,1.4s
**FCC Fort Churchill 67.15 29** P **P 18 51 54.6 -0.4**
FCC IAmb IAmb 18 52 06.1
comp=Z,3.5nm,1.4s
**ASAR Alice Springs 67.27 192** P **P 18 51 56.5 +0.4**
comp=Z,1.7nm,0.7s,baz=10,slow=5.2,SNR=33
**NVAR Mina Array Bea 68.84 57** P **P 18 52 07.3 +1.0**
comp=Z,1.6nm,0.7s,baz=291,slow=6.4,SNR=14
**NVAR Mina Array Bea 68.84 57** P **P 18 52 06.9 +0.6**
**KIV Kislovodsk 69.43 311**⇑P **P 18 52 11.0 +1.3**
**KIV Kislovodsk 69.43 311** *e*P **P 18 52 10.6 +0.9**
KIV pmax pmax
comp=Z,12nm,1.0s
KIV MLR MLR
comp=Z,58nm,17.0s
**KIV Kislovodsk 69.43 311** P **P 18 52 10.9 +1.2**
**KIV Kislovodsk 69.43 311** *e*P **P 18 52 10.6 +0.9**
**KBZ Khabaz 69.46 311** P **P 18 52 10.1 +0.4**
comp=Z,4.9nm,0.8s,baz=52,slow=6.2,SNR=14
KBZ LR LR 19 23 57.0
comp=Z,50nm,18.8s,baz=48,slow=37
**KBZ Khabaz 69.46 311***ce*P **P 18 52 09.7 0.0**
KBZ pmax pmax
comp=Z,6.0nm,0.9s
**KBZ Khabaz 69.46 311** *e*P **P 18 52 09.7 0.0**
**SFJD Kangerlussuaq 69.57 7** LR LR 19 21 57.7
comp=Z,46nm,21.1s,baz=279,slow=35
**NC405 NORSAR Array S 69.67 338** P **P 18 52 10.3 -0.5**
**NC204 NORSAR Array S 69.79 339** P **P 18 52 10.4 -1.2**
**NB201 NORSAR Array S 69.83 338** P **P 18 52 10.7 -1.1**
**NB2 NORSAR Subarra 69.86 338** P **P 18 52 11.7 -0.3**
comp=Z,2.4nm,0.8s,baz=33,slow=6.5
**NOA NORSAR Array B 69.86 338** P **P 18 52 11.7 -0.3**
comp=Z,2.5nm,0.7s,baz=35,slow=6.1,SNR=10
NOA LR LR 19 27 19.6
comp=Z,55nm,18.1s,baz=285,slow=40
**PD31 Pinedale Array 71.16 49** P **P 18 52 20.6 +0.1**
**PDAR Pinedale Array 71.16 49** P **P 18 52 20.8 +0.3**
comp=Z,0.9nm,0.6s,baz=278,slow=2.0,SNR=10
**PDAR Pinedale Array 71.16 49 P 18 52 19.2 -1.3**
**AKASG Malin Array Be 71.51 323** P **P 18 52 21.4 -0.7**
comp=Z,1.1nm,0.3s,baz=40,slow=6.0,SNR=20
AKASG LR LR 19 26 23.8
comp=Z,116nm,19.1s,baz=18,slow=38

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AKASG** | **Malin Array Be** | **71.51** | **323** | *i* P | | **P** | **18 52 21.6** | **-0.5** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **71.51** | **323** | P | | **P** | **18 52 21.6** | **-0.5** |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **71.51** | **323** | P | | P | **18 52 21.6** | **-0.5** |
| AKBB | | | | IAmb | | IAmb | 18 52 22.2 | | |
| | comp=Z,5.5nm,0.9s | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **73.36** | **307** | P | | **P** | **18 52 33.6** | **0.0** |
| GURO | | | | IAmb | | IAmb | 18 52 35.4 | | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **SORM** | **Soroca** | **73.77** | **322** | ⇑P | | **P** | **18 52 34.8** | **-0.8** |
| **STKA** | **Stephens Creek** | **74.66** | **184** | P | | **P** | **18 52 42.8** | **+2.0** |
| | comp=Z,1.0nm,0.8s,baz=78,slow=9.3,SNR=3.1 | | | | | | | | |
| STKA | | | | LR | | LR | 19 29 09.4 | | |
| | comp=Z,24nm,18.1s,baz=201,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | **74.66** | **184** | P | | **P** | **18 52 41.6** | **+0.8** |
| STKA | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,1.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **74.66** | **184** | P | | **P** | **18 52 41.6** | **+0.8** |
| **BUR08** | **Bucovina Ar. S** | **75.55** | **323** | P | | **P** | **18 52 45.9** | **-0.1** |
| BUR08 | | | | IAmb | | IAmb | 18 52 50.6 | | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **75.56** | **323** | ⇓P | | **P** | **18 52 45.9** | **-0.2** |
| **BURAR** | **Bucovina Array** | **75.56** | **323** | P | | **P** | **18 52 45.5** | **-0.7** |
| BURAR | | | | IAmb | | IAmb | 18 52 47.2 | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **75.65** | **56** | P | | **P** | **18 52 46.3** | **-0.6** |
| **TRPA** | **Tarpa** | **76.32** | **325** | ⇑P | | **P** | **18 52 50.4** | **+0.1** |
| **MORC** | **Moravsky Berou** | **77.04** | **328** | ⇓P | | P | 18 53 02.3 | +7.9 |
| **BRTR** | **Keskin Array B** | **77.25** | **313** | P | | **P** | **18 52 56.0** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=225,slow=3.9,SNR=3.6 | | | | | | | | |
| **VOIR** | | **77.29** | **322** | ⇑P | | **P** | **18 52 56.3** | **+0.4** |
| **CLL** | **Collm** | **77.44** | **332** | *e*P | | **P** | **18 52 57.0** | **+0.5** |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| CLL | | | | *e*pP | | **PcP** | **18 53 08.0** | **+1.2** |
| **VRAC** | **Vranov** | **77.78** | **329** | LR | | LR | 19 29 20.0 | | |
| | comp=Z,112nm,19.1s,baz=24,slow=37 | | | | | | | | |
| **SCHQ** | **Schefferville** | **78.62** | **19** | P | | **P** | **18 53 03.4** | **+0.3** |
| | comp=Z,2.3nm,0.7s,baz=328,slow=6.6,SNR=4.1 | | | | | | | | |
| **SCHQ** | **Schefferville** | **78.62** | **19** | IAmb | | IAmb | 18 53 24.5 | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **GERES** | **GERESS Array B** | **79.24** | **330** | P | | **P** | **18 53 07.9** | **+1.2** |
| | comp=Z,0.7nm,0.7s,baz=15,slow=4.1,SNR=2.4 | | | | | | | | |
| GERES | | | | LR | | LR | 19 31 28.5 | | |
| | comp=Z,124nm,18.0s,baz=55,slow=38 | | | | | | | | |
| **VTS** | **Vitosha** | **80.30** | **321** | ⇑P | | **P** | **18 53 13.1** | **+0.5** |
| **MMAI** | **Mount Meron Ar** | **81.07** | **307** | P | | **P** | **18 53 17.6** | **+0.8** |
| | comp=Z,5.1nm,0.7s,baz=64,slow=11,SNR=3.2 | | | | | | | | |
| **PDG** | **Podgorica** | **82.25** | **323** | ⇓P | | **P** | **18 53 20.0** | **-2.7** |
| **TX31** | **Lajitas Ar. Si** | **83.91** | **55** | P | | **P** | **18 53 31.6** | **-0.1** |
| **TX32** | **Lajitas Array** | **83.91** | **55** | P | | **P** | **18 53 31.8** | **+0.1** |
| TX32 | | | | IAmb | | IAmb | 18 53 45.2 | | |
| | comp=Z,4.4nm,1.2s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.91** | **55** | P | | **P** | **18 53 32.5** | **+0.8** |
| | comp=Z,1.1nm,0.7s,baz=292,slow=3.9,SNR=17 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **89.60** | **38** | LR | | LR | 19 35 48.2 | | |
| | comp=Z,37nm,18.6s,baz=330,slow=37 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **144.02** | **90** | T | | T | 21 41 48.3 | | |
| | baz=301,slow=77,SNR=13 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **144.03** | **90** | T | | T | 21 41 32.0 | | |
| | baz=301,slow=77,SNR=12 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **144.04** | **90** | T | | T | 21 41 50.4 | | |
| | baz=301,slow=77,SNR=12 | | | | | | | | |
| **SIV** | **San Ignacio** | **144.65** | **48** | PKP | | **PKPab** | **19 00 37.3** | **+0.3** |
| | comp=Z,2.2nm,0.6s,baz=310,slow=3.8,SNR=13 | | | | | | | | |
| **SNAA** | **Sanae** | **147.47** | **198** | PKPdf | | **PKPbc** | **19 00 44.0** | **-0.1** |
| **VNA2** | **Neumayer--Watz** | **149.02** | **197** | PKPdf | | **PKPbc** | **19 00 48.4** | **+0.3** |
| | baz=108,slow=2.0 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **149.23** | **195** | PKPdf | | **PKPbc** | **19 00 48.5** | **-0.2** |
| **VNA1** | **Neumayer--Stat** | **149.41** | **197** | PKPdf | | **PKPbc** | **19 00 49.4** | **+0.3** |
| **PLCA** | **Paso Flores** | **153.04** | **98** | PKPbc | | **PKiKP** | **19 00 59.4** | **+0.7** |
| | comp=Z,2.9nm,1.1s,baz=305,slow=3.8,SNR=3.2 | | | | | | | | |

*NEIC **22** 18:46:57.0±1.8,30°.37S±0°.05×72°.1W±0°.1,h17km±4km, mb3.7/2, ML4.0(GUC), Error ellipse: s-maj=13.3km s-min=6.9km az=90.0*
*GUC **22** 18:46:57.5±0.5,30°.41S×72°.06W,h36km±2km, ML4.0*
*IDC **22** 18:47:10.8±2.8,31°.01S×70°.07W,h105km±24km, mb3.0/2, mb1 3.5/6, mb1mx3.4/27, mbtmp3.7/6, MS3.1/1, Ms1 3.2/1, ms1mx2.8/10, Error ellipse: s-maj=52.3km s-min=21.5km az=94.0*

**ISC 22 18:46:54.7±2.5,30°.37S±0°.04×72°.08W±0°.08,h7km±16km, n61,σ1§47/59,1C-5D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.49** | **128** | | **Pb** | **18 47 06.5** | **+0.8** |
| **CO06** | **Fray Jorge** | **0.49** | **128** | ⇓*i* P | **Pb** | **18 47 06.6** | **+0.8** |
| CO06 | | | | *i* S | **Sb** | **18 47 12.7** | **-0.5** |
| CO06 | | | | IAML | | 18 47 16.4 | |
| | comp=N,10μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **0.86** | **59** | | **Pb** | **18 47 13.1** | **+1.2** |
| **CO05** | **La Serena** | **0.86** | **59** | ⇓*i* P | **Pn** | **18 47 13.3** | **0.0** |
| CO05 | | | | IAML | | 18 47 26.4 | |
| | comp=E,5μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **1.13** | **80** | | **Pb** | **18 47 17.4** | **+0.6** |
| **GO04** | **Tololo Observa** | **1.13** | **80** | ⇓*i* P | **Pb** | **18 47 17.4** | **+0.6** |
| GO04 | | | | *i* S | **Sn** | **18 47 32.8** | **-0.4** |
| GO04 | | | | IAML | | 18 47 37.7 | |
| | comp=N,13μm,0.5s | | | | | | |
| **CO02** | **Combarbal** | **1.25** | **132** | | **Pb** | **18 47 19.0** | **+0.3** |
| **CO02** | **Combarbal** | **1.25** | **132** | ⇓*i* P | **Pb** | **18 47 19.0** | **+0.3** |
| CO02 | | | | *i* S | **Sg** | **18 47 33.4** | **-1.5** |
| CO02 | | | | IAML | | 18 47 40.0 | |
| | comp=N,7μm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **1.29** | **112** | | **Pn** | **18 47 19.4** | **+0.1** |
| **CO03** | **El Pedregal** | **1.29** | **112** | ⇓*i* P | **Pn** | **18 47 19.4** | **+0.1** |
| CO03 | | | | *i* S | **Sb** | **18 47 36.0** | **-0.2** |
| CO03 | | | | IAML | | 18 47 39.0 | |
| | comp=N,2μm,0.1s | | | | | | |
| **LCO** | **Las Campanas** | **1.81** | **42** | | **Pn** | **18 47 28.1** | **+1.5** |
| **LCO** | **Las Campanas** | **1.81** | **42** | ⇑*e*P | **Pn** | **18 47 28.3** | **+1.6** |
| LCO | | | | *e*S | **Sb** | **18 47 52.1** | **+0.7** |
| **VA06** | **Catapilco** | **2.29** | **163** | | **Pn** | **18 47 33.7** | **+0.8** |
| **VA06** | **Catapilco** | **2.29** | **163** | *e*P | **Pn** | **18 47 34.0** | **+1.1** |
| VA06 | | | | IAML | | 18 48 11.8 | |
| | comp=E,1μm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.33** | **22** | | **Pn** | **18 47 34.2** | **+0.7** |
| **AC04** | **Llanos de Chal** | **2.33** | **22** | *e*P | **Pn** | **18 47 34.4** | **+0.8** |
| AC04 | | | | IAML | | 18 48 23.6 | |
| | comp=E,322nm,0.4s | | | | | | |
| **VA01** | **Torpederas** | **2.67** | **172** | | **Pn** | **18 47 39.3** | **+1.1** |
| **VA03** | **San Esteban** | **2.72** | **152** | | **Pn** | **18 47 39.9** | **+0.9** |
| **VA03** | **San Esteban** | **2.72** | **152** | *e*P | **Pn** | **18 47 41.6** | **+2.6** |
| VA03 | | | | *e*S | **Sn** | **18 48 13.7** | **+1.4** |
| VA03 | | | | IAML | | 18 48 23.5 | |
| | comp=E,965nm,0.3s | | | | | | |
| **ROCH** | **El Roble** | **2.75** | **161** | *e*P | **Pn** | **18 47 40.7** | **+1.2** |
| ROCH | | | | *e*S | **Sn** | **18 48 12.7** | **-0.5** |
| ROCH | | | | IAML | | 18 48 23.3 | |
| | comp=N,644nm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **2.75** | **161** | | **Pn** | **18 47 39.5** | **-0.1** |
| **MT02** | **Curacav** | **2.99** | **165** | | **Pn** | **18 47 44.1** | **+1.5** |
| **MT02** | **Curacav** | **2.99** | **165** | *e*P | **Pn** | **18 47 43.9** | **+1.3** |
| **PEL** | **Peldehue** | **3.01** | **157** | | **Pn** | **18 47 44.5** | **+1.6** |
| **PEL** | **Peldehue** | **3.01** | **157** | *e*P | **Pn** | **18 47 46.0** | **+3.1** |
| PEL | | | | *e*S | **Sn** | **18 48 19.6** | **+0.3** |
| PEL | | | | IAML | | 18 48 36.9 | |
| | comp=E,303nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.21** | **31** | | **Pn** | **18 47 47.1** | **+1.5** |
| **GO03** | **Copiap** | **3.21** | **31** | *e*P | **Pn** | **18 47 47.1** | **+1.5** |
| GO03 | | | | IAML | | 18 48 49.2 | |
| | comp=E,299nm,0.5s | | | | | | |
| **MT05** | **Renca** | **3.22** | **160** | IAML | | 18 48 44.6 | |
| | comp=E,819nm,0.6s | | | | | | |
| **VA05** | **Santo Domingo** | **3.30** | **173** | IAML | | 18 49 02.4 | |
| | comp=E,312nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **3.39** | **157** | IAML | | 18 48 47.9 | |
| | comp=E,480nm,0.8s | | | | | | |
| **MT09** | **Talagante** | **3.52** | **165** | | **Pn** | **18 47 51.7** | **+1.7** |
| **MT09** | **Talagante** | **3.52** | **165** | *e*P | **Pn** | **18 47 51.5** | **+1.4** |
| MT09 | | | | IAML | | 18 48 56.0 | |
| | comp=N,274nm,0.7s | | | | | | |
| **MT01** | **Popeta** | **3.56** | **169** | | **Pn** | **18 47 51.1** | **+0.8** |
| **MT01** | **Popeta** | **3.56** | **169** | *e*P | **Pn** | **18 47 51.5** | **+1.2** |
| MT01 | | | | IAML | | 18 48 58.5 | |
| | comp=N,144nm,0.6s | | | | | | |
| **LMEL** | **Las Melosas** | **3.82** | **156** | | **Pn** | **18 47 55.3** | **+1.2** |
| **BO04** | **La Punta** | **3.82** | **161** | Pn | **Pn** | **18 47 55.4** | **+1.3** |
| **BO01** | **Tunca** | **4.10** | **168** | | **Pn** | **18 47 58.8** | **+0.9** |
| **AC02** | **Maricunga** | **4.38** | **37** | | **Pn** | **18 48 05.0** | **+2.9** |
| **BO02** | **Sierra Bellavi** | **4.54** | **166** | Pn | **Pn** | **18 48 05.5** | **+1.5** |
| **GO05** | **Huala** | **4.63** | **178** | Pn | **Pn** | **18 48 05.1** | **0.0** |
| **H03N1** | **Juan Fernandez** | **6.56** | **240** | T | T | 18 55 32.8 | |
| | baz=70,slow=72,SNR=811 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.58** | **241** | T | T | 18 55 35.9 | |
| | baz=70,slow=72,SNR=845 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.58** | **240** | T | T | 18 55 34.7 | |
| | baz=70,slow=72,SNR=913 | | | | | | |
| **PB15** | **IPOC Station P** | **7.50** | **19** | Pn | **Pn** | **18 48 43.1** | **-1.8** |
| **PB06** | **IPOC Station P** | **7.96** | **17** | Pn | **Pn** | **18 48 48.1** | **-2.9** |
| **LVC** | **Limon Verde** | **8.23** | **21** | P | Pb | 18 49 10.4 | -7.5 |
| | comp=N,0.8nm,0.3s,baz=188,slow=10,SNR=3.5 | | | | | | |
| LVC | | | | S | Sb | 18 50 44.6 | -12 |
| | comp=N,0.9nm,0.3s,baz=270,slow=20,SNR=2.3 | | | | | | |
| **LVC** | **Limon Verde** | **8.23** | **21** | Pn | **Pn** | **18 48 53.4** | **-1.6** |
| **LC01** | **Cunco** | **8.51** | **179** | Pn | **Pn** | **18 48 58.5** | **+0.1** |
| **PB03** | **IPOC Station P** | **8.55** | **15** | Pn | **Pn** | **18 48 58.6** | **-0.5** |
| **PB07** | **IPOC Station P** | **8.83** | **13** | Pn | **Pn** | **18 49 03.4** | **+0.3** |
| **PB09** | **IPOC Station P** | **8.91** | **17** | Pn | **Pn** | **18 49 01.8** | **-2.3** |
| **PLCA** | **Paso Flores** | **10.41** | **174** | P | **Pn** | **18 49 27.5** | **+2.9** |
| | comp=N,0.2nm,0.3s,baz=334,slow=13,SNR=5.4 | | | | | | |
| **CPUP** | **Villa Florida** | **13.60** | **76** | LR | LR | 18 55 48.7 | |
| | comp=N,100nm,19.9s,baz=226,slow=43 | | | | | | |
| **LPAZ** | **La Paz** | **14.48** | **15** | P | P | 18 50 34.8 | +7.1 |
| | comp=N,0.2nm,0.3s,baz=185,slow=12,SNR=8.6 | | | | | | |
| **LPAZ** | **La Paz** | **14.48** | **15** | Pn | **Pn** | **18 50 19.7** | **-1.1** |
| **SIV** | **San Ignacio** | **17.51** | **38** | P | **P** | **18 51 02.6** | **+1.9** |
| | comp=N,0.5nm,0.3s,baz=212,slow=12,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.57** | **330** | P | P | 18 57 58.8 | +13 |
| | comp=N,0.2nm,0.6s,baz=144,slow=6.7,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.02** | **70** | P | **P** | **18 59 17.6** | **-3.7** |
| | comp=N,0.2nm,0.6s,baz=268,slow=6.2,SNR=1.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.12** | **29** | PKPbc | **PKiKP** | **19 06 50.1** | **+1.3** |
| | comp=N,2.2nm,0.6s,baz=304,slow=3.1,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.28** | **43** | PKPbc | **PKiKP** | **19 06 56.8** | **+1.2** |
| | comp=N,0.5nm,1.0s,baz=323,slow=0.7,SNR=4.2 | | | | | | |
| **PZH** | **PanZhiHua** | **173.34** | **124** | PKP | **PKPdf** | **19 07 05.6** | **+0.1** |

*SKHL **22** 19:05:36.2±0.4,46°.80N×141°.70E,h10km±5km, mb4.6/3*
*JMA **22** 19:05:36.1±0.5,46°.83N×141°.62E,h15km,M2.5*

**ISC 22 19:05:35.4±1.9,46°.78N±0°.08×141°.6E±0°.1,h9km,n6, σ0§23/10,Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KHLM** | **Kholmsk** | **0.39** | **46** | *i* Pg | **Pb** | **19 05 44.5** | **0.0** |
| KHLM | | | | *e*Sg | **Sb** | **19 05 50.5** | **-0.2** |
| **YSS** | **Yuzh-Sakhalins** | **0.79** | **77** | *e*Pg | **Pg** | **19 05 50.5** | **0.0** |
| YSS | | | | AMB | AMB | 19 05 51.1 | |
| | 12nm,0.2s | | | | | | |
| YSS | | | | *e*Sg | **Sg** | **19 06 00.5** | **-0.2** |
| YSS | | | | A | A | 19 06 02.3 | |
| | 230nm,0.3s | | | | | | |
| YSS | | | | A | A | 19 06 02.3 | |
| | 200nm,0.3s | | | | | | |
| **JRBN** | **Rebuntou** | **1.42** | **197** | P | **Pb** | **19 06 01.8** | **-0.1** |
| JRBN | | | | *e*S | **Sg** | **19 06 20.6** | **-0.3** |
| **JWK2** | **Keihoku** | **1.48** | **173** | P | **Pb** | **19 06 02.9** | **-0.1** |
| JWK2 | | | | *e*S | **Sb** | **19 06 21.8** | **0.0** |
| **JRR** | **Rishiri** | **1.66** | **188** | P | **Pb** | **19 06 06.0** | **-0.1** |
| **JSE** | **Soyaes** | **1.94** | **160** | P | **Pn** | **19 06 08.9** | **+0.4** |

**IDC 22 19:16:43.3±2.8,7°.07S×129°.77E,h136km±38km,mb3.0/1, mb1 2.9/5,mb1mx2.7/33,mbtmp3.3/5,Error ellipse: s-maj=67.3km s-min=21.0km az=90.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.34** | **14** | P | Pn | 19 18 14.8 | +0.3 |
| | 0.2nm,0.3s,baz=226,slow=22,SNR=8.1 | | | | | | |
| SIJI | | | | S | Sn | 19 19 18.0 | -7.8 |
| | 0.6nm,0.3s,baz=161,slow=22,SNR=7.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.68** | **200** | P | Pn | 19 19 25.5 | -0.2 |
| | 0.1nm,0.3s,baz=35,slow=13,SNR=10 | | | | | | |
| FITZ | | | | S | Sn | 19 21 27.6 | -7.0 |
| | 0.2nm,0.3s,baz=174,slow=22,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.54** | **161** | P | Pn | 19 19 48.5 | -1.5 |
| | 0.2nm,0.3s,baz=345,slow=13,SNR=13 | | | | | | |
| WRA | | | | S | Sn | 19 22 13.5 | -6.2 |
| | 0.5nm,0.3s,baz=329,slow=25,SNR=8.9 | | | | | | |
| **ASAR** | **Alice Springs** | **16.97** | **167** | P | Pn | 19 20 34.2 | +1.5 |
| | 0.1nm,0.3s,baz=345,slow=9.0,SNR=14 | | | | | | |
| ASAR | | | | S | Sn | 19 23 37.5 | -4.7 |
| | 0.1nm,0.3s,baz=332,slow=13,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.16** | **327** | P | P | 19 27 28.6 | -0.1 |
| | 0.3nm,0.6s,baz=119,slow=9.2,SNR=4.7 | | | | | | |

*IDC **22** 19:18:35.0±1.3,35°.67N×3°.55W,h0km, mb3.1/3, mb1 3.2/5, mb1mx3.1/39, mbtmp3.0/5, ML2.9/2, Error ellipse: s-maj=44.6km s-min=19.4km az=94.0*
*SFS **22** 19:18:36.0,35°.60N×3°.60W, ML3.2, ALBORAN SUR*
*CNRM **22** 19:18:36.9,35°.70N×3°.58W, h30km, ml3.1*
*IGIL **22** 19:18:36.6,35°.66N×3°.63W, h0km, ML2.8*
*INMG **22** 19:18:37.4±1.1,35°.64N×3°.63W, h13km±9km, ML2.8, Error ellipse: s-maj=5.4km s-min=3.6km az=123.0*

**ISC 22 19:18:38.1±1.2,35°.68N±0°.03×3°.56W±0°.03,h25km±11km, n63,σ1§85/105,mb3.2/3,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.56** | **214** | P | **Pb** | **19 18 48.0** | **-1.3** |
| **PALE** | **Palemas** | **0.56** | **214** | P | **Pb** | **19 18 48.0** | **-1.3** |
| PALE | | | | S | **Sb** | **19 18 56.6** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.65** | **135** | P | **Pb** | **19 18 50.0** | **-0.9** |
| **GOG** | **Mont Gurugu** | **0.65** | **135** | P | **Pb** | **19 18 49.6** | **-1.3** |
| GOG | | | | S | **Sb** | **19 18 59.1** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.05** | **118** | P | **Pn** | **19 18 55.0** | **-2.2** |
| CHAS | | | | S | **Sn** | **19 19 11.1** | **0.0** |
| **TAF** | **Taforalt** | **1.27** | **132** | P | **Pn** | **19 18 59.2** | **-1.3** |
| **TAF** | **Taforalt** | **1.27** | **132** | P | **Pn** | **19 18 59.4** | **-1.1** |
| TAF | | | | S | **Sn** | **19 19 15.6** | **-1.2** |
| **EMAL** | **Malaga-Limoner** | **1.29** | **327** | P | **Pn** | **19 18 58.6** | **-2.0** |
| EMAL | | | | S | **Sn** | **19 19 14.3** | **-2.7** |
| **SMIR** | **Smir Dam** | **1.48** | **271** | S | **Sn** | **19 19 21.3** | **-0.5** |
| **CEU** | **Ceuta** | **1.49** | **279** | P | **Pn** | **19 18 59.2** | **-4.1** |
| CEU | | | | S | **Sn** | **19 19 17.3** | **-4.6** |
| **CHEFC** | **Chefchaouen** | **1.56** | **249** | P | **Pn** | **19 19 04.0** | **-0.4** |
| **CHEFC** | **Chefchaouen** | **1.56** | **249** | P | **Pn** | **19 19 04.0** | **-0.4** |
| CHEFC | | | | S | **Sn** | **19 19 20.9** | **-3.0** |
| **JBK** | **JBK** | **1.57** | **148** | P | **Pn** | **19 19 03.2** | **-1.4** |
| **JBK** | **JBK** | **1.57** | **148** | P | **Pn** | **19 19 03.2** | **-1.4** |
| **JBK** | **JBK** | **1.57** | **148** | P | **Pn** | **19 19 03.3** | **-1.4** |
| JBK | | | | S | **Sn** | **19 19 22.1** | **-2.2** |
| **LIJA** | **Lijar** | **1.93** | **310** | P | **Pn** | **19 19 10.2** | **+0.8** |
| LIJA | | | | S | **Sb** | **19 19 42.0** | **+5.7** |
| **SICH** | **Sidi Chahed** | **2.14** | **223** | P | **Pb** | **19 19 18.0** | **+1.8** |
| **SICH** | **Sidi Chahed** | **2.14** | **223** | P | **Pn** | **19 19 10.5** | **-1.7** |
| SICH | | | | S | **Sn** | **19 19 35.9** | **-2.1** |
| **LCRM** | **LCR** | **2.26** | **209** | P | **Pb** | **19 19 21.0** | **+2.7** |
| **IFR** | **Ifrane** | **2.52** | **211** | P | **Pn** | **19 19 16.8** | **-0.8** |
| IFR | | | | S | **Sn** | **19 19 45.5** | **-2.1** |
| **MD31** | **MD31** | **2.98** | **200** | P | **Pn** | **19 19 24.7** | **+0.8** |
| MD31 | | | | S | **Sn** | **19 20 00.2** | **+1.3** |
| **MDT** | **Midelt** | **2.99** | **197** | Pn | **Pn** | **19 19 23.8** | **-0.3** |
| | 0.5nm,0.3s,baz=196,slow=11,SNR=23 | | | | | | |
| MDT | | | | Sn | **Sn** | **19 19 59.7** | **+0.6** |
| | 1.6nm,0.3s,baz=330,slow=3.0,SNR=4.8 | | | | | | |
| **MDT** | **Midelt** | **2.99** | **197** | P | **Pn** | **19 19 23.8** | **-0.3** |
| **MDT** | **Midelt** | **2.99** | **197** | P | **Pn** | **19 19 23.8** | **-0.3** |
| MDT | | | | S | **Sn** | **19 20 00.2** | **+1.0** |
| **ZHG** | **ZHG** | **3.38** | **230** | P | **Pn** | **19 19 31.0** | **+1.5** |
| **ZHG** | **ZHG** | **3.38** | **230** | P | **Pn** | **19 19 28.4** | **-1.1** |
| ZHG | | | | S | **Sn** | **19 20 10.6** | **+1.8** |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | *e*Pn | **Pn** | **19 19 33.6** | **-1.0** |
| PVAQ | | | | *e*Sn | **Sn** | **19 20 15.9** | **-2.2** |
| PVAQ | | | | A | A | 19 20 24.7 | |
| | 14nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | P | **Pn** | **19 19 33.4** | **-1.2** |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | P | **Pn** | **19 19 33.4** | **-1.2** |
| PVAQ | | | | S | **Sn** | **19 20 15.7** | **-2.4** |
| **PBDV** | **Barranco-do-Ve** | **3.85** | **295** | *e*Pn | **Pn** | **19 19 34.7** | **-1.2** |
| PBDV | | | | *e*Sn | **Sn** | **19 20 17.9** | **-2.5** |
| PBDV | | | | A | A | 19 20 23.4 | |
| | 11nm,0.5s | | | | | | |
| **PAB** | **San Pablo** | **3.91** | **351** | P | **Pn** | **19 19 37.2** | **+0.5** |
| **PAB** | **San Pablo** | **3.91** | **351** | P | **Pn** | **19 19 37.2** | **+0.5** |
| **ESDC** | **Sonseca Array** | **4.00** | **356** | Pn | **Pn** | **19 19 38.1** | **+0.2** |
| | 0.6nm,0.3s,baz=177,slow=13,SNR=15 | | | | | | |
| ESDC | | | | Sn | **Sn** | **19 20 26.1** | **+2.1** |
| | 0.4nm,0.3s,baz=171,slow=17,SNR=2.2 | | | | | | |
| **PCVE** | **Castro Verde** | **4.09** | **300** | *e*Pn | **Pn** | **19 19 38.3** | **-0.8** |
| PCVE | | | | *e*Sn | **Sn** | **19 20 24.5** | **-1.8** |
| PCVE | | | | A | A | 19 20 27.0 | |
| | 23nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*P | **Pn** | **19 19 41.1** | **-1.1** |
| MESJ | | | | *e*S | **Sn** | **19 20 28.1** | **-3.7** |
| MESJ | | | | IAML | | 19 20 33.2 | |
| | comp=N,19nm,0.7s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*Pn | **Pn** | **19 19 41.3** | **-0.9** |
| MESJ | | | | *e*Sn | **Sn** | **19 20 29.8** | **-2.0** |
| MESJ | | | | A | A | 19 20 33.8 | |
| | comp=N,12nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.41** | **293** | *e*P | **Pn** | **19 19 42.1** | **-1.4** |
| MORF | | | | *e*S | **Sn** | **19 20 30.2** | **-4.0** |
| MORF | | | | IAML | | 19 20 33.6 | |
| | comp=N,16nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.41** | **293** | *e*Pn | **Pn** | **19 19 42.6** | **-1.0** |
| MORF | | | | *e*Sn | **Sn** | **19 20 31.2** | **-3.0** |
| MORF | | | | A | A | 19 20 38.9 | |
| | comp=N,11nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.49** | **290** | *e*Pn | **Pn** | **19 19 45.2** | **+0.6** |
| PFVI | | | | *e*Sn | **Sn** | **19 20 33.6** | **-2.4** |
| PFVI | | | | A | A | 19 20 39.9 | |
| | comp=N,8.0nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.49** | **290** | P | **Pn** | **19 19 45.1** | **+0.5** |
| PFVI | | | | S | **Sn** | **19 20 32.4** | **-3.6** |
| **PESTR** | **Estremoz** | **4.52** | **316** | *e*Pn | **Pn** | **19 19 44.4** | **-0.6** |
| PESTR | | | | *e*Sn | **Sn** | **19 20 34.9** | **-1.9** |
| **PESTR** | **Estremoz** | **4.52** | **316** | P | **Pn** | **19 19 44.4** | **-0.6** |
| **PESTR** | **Estremoz** | **4.52** | **316** | P | **Pn** | **19 19 43.9** | **-1.1** |
| PESTR | | | | S | **Sn** | **19 20 33.1** | **-3.7** |
| **EVO** | **Evora** | **4.56** | **310** | *e*Pn | **Pn** | **19 19 46.8** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **19 20 36.7** | **-1.0** |
| EVO | | | | A | A | 19 20 40.2 | |
| | comp=N,12nm,0.3s | | | | | | |
| **UCM** | **Universidad Co** | **4.63** | **3** | P | **Pn** | **19 19 47.5** | **+1.0** |
| UCM | | | | S | **Sn** | **19 20 38.2** | **-1.2** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **303** | *e*Pn | **Pn** | **19 19 46.4** | **-0.6** |
| PNCL | | | | *e*Sn | **Sn** | **19 20 38.3** | **-2.0** |
| PNCL | | | | A | A | 19 20 43.8 | |
| | comp=N,6.7nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.82** | **322** | *e*Pn | **Pn** | **19 19 49.2** | **0.0** |
| PMRV | | | | *e*Sn | **Sn** | **19 20 42.6** | **-1.7** |
| PMRV | | | | A | A | 19 21 09.3 | |
| | comp=N,6.4nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **5.02** | **314** | *e*Pn | **Pn** | **19 19 51.6** | **-0.3** |
| PMTG | | | | *e*Sn | **Sn** | **19 20 47.5** | **-1.7** |
| PMTG | | | | A | A | 19 20 49.9 | |
| | comp=N,5.1nm,0.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.18** | **324** | *e*Pn | **Pn** | **19 19 54.4** | **+0.3** |
| PCBR | | | | *e*Sn | **Sn** | **19 20 50.2** | **-2.9** |
| PCBR | | | | A | A | 19 20 52.8 | |
| | comp=N,7.0nm,0.4s | | | | | | |
| **PACT** | **Alcochete** | **5.21** | **308** | *e*Pn | **Pn** | **19 19 54.4** | **-0.1** |
| PACT | | | | *e*Sn | **Sn** | **19 20 52.9** | **-1.0** |
| PACT | | | | A | A | 19 21 00.4 | |
| | comp=N,29nm,0.8s | | | | | | |
| **PMAFR** | **Mafra** | **5.61** | **307** | *e*Pn | **Pn** | **19 20 00.2** | **+0.2** |
| PMAFR | | | | *e*Sn | **Sn** | **19 21 02.2** | **-1.5** |
| **PSAE** | **So Bento** | **5.65** | **314** | *e*Pn | **Pn** | **19 20 00.7** | **+0.2** |
| **MTE** | **Manteigas** | **5.66** | **327** | *e*Pn | **Pn** | **19 20 01.0** | **+0.2** |
| MTE | | | | *e*Sn | **Sn** | **19 21 02.9** | **-2.1** |
| **PCAS** | **Casmilo, Conde** | **5.86** | **320** | *e*Pn | **Pn** | **19 20 03.3** | **-0.1** |
| PCAS | | | | *e*Sn | **Sn** | **19 21 07.6** | **-2.1** |
| PCAS | | | | A | A | 19 21 08.9 | |
| | comp=N,5.8nm,0.4s | | | | | | |
| **PVIS** | **Viseu** | **6.08** | **327** | *e*Pn | **Pn** | **19 20 05.7** | **-0.7** |
| PVIS | | | | *e*Sn | **Sn** | **19 21 11.6** | **-3.6** |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CEU** | **Ceuta** | **1.48** | **278** | P | **Pn** | **19 33 45.8** | **-2.9** |
| CEU | | | | S | **Sn** | **19 34 01.9** | **-6.1** |
| **CHEFC** | **Chefchaouen** | **1.57** | **248** | P | **Pb** | **19 33 50.8** | **-0.3** |
| CHEFC | | | | S | **Sn** | **19 34 10.3** | **0.0** |
| **JBK** | **JBK** | **1.59** | **149** | P | **Pn** | **19 33 49.5** | **-0.8** |
| **JBK** | **JBK** | **1.59** | **149** | P | **Pn** | **19 33 49.1** | **-1.2** |
| JBK | | | | S | **Sn** | **19 34 08.2** | **-2.8** |
| **LIJA** | **Lijar** | **1.91** | **309** | P | **Pg** | **19 33 58.0** | **-0.6** |
| **LCRM** | **LCR** | **2.28** | **208** | P | **Pg** | **19 34 06.0** | **+0.3** |
| **IFR** | **Ifrane** | **2.54** | **211** | P | **Pn** | **19 34 03.1** | **-0.2** |
| IFR | | | | S | **Sn** | **19 34 32.2** | **-2.1** |
| **MD31** | **MD31** | **3.00** | **200** | P | **Pn** | **19 34 11.0** | **+1.4** |
| MD31 | | | | S | **Sn** | **19 34 45.8** | **+0.2** |
| **MDT** | **Midelt** | **3.01** | **197** | Pn | **Pn** | **19 34 10.1** | **+0.4** |
| | 0.6nm,0.3s,baz=157,slow=13,SNR=1.5 | | | | | | |
| MDT | | | | Sn | **Sn** | **19 34 46.1** | **+0.2** |
| | 2.4nm,0.3s,baz=228,slow=12,SNR=2.2 | | | | | | |
| MDT | | | | Lg | Lg | 19 34 54.9 | |
| | 4.4nm,0.3s,baz=268,slow=12,SNR=3.8 | | | | | | |
| **MDT** | **Midelt** | **3.01** | **197** | P | **Pn** | **19 34 09.6** | **-0.2** |
| MDT | | | | S | **Sn** | **19 34 47.8** | **+1.9** |
| **ZHG** | **ZHG** | **3.40** | **229** | P | **Pn** | **19 34 15.1** | **0.0** |
| ZHG | | | | S | **Sn** | **19 34 58.1** | **+2.7** |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | *e*Pn | **Pn** | **19 34 20.0** | **+0.2** |
| PVAQ | | | | *e*Sn | **Sn** | **19 35 02.1** | **-1.8** |
| PVAQ | | | | A | A | 19 35 13.6 | |
| | 11nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | P | **Pn** | **19 34 20.5** | **+0.7** |
| PVAQ | | | | S | **Sn** | **19 35 02.2** | **-1.8** |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **295** | *e*Pn | **Pn** | **19 34 21.2** | **+0.1** |
| PBDV | | | | *e*Sn | **Sn** | **19 35 05.3** | **-1.0** |
| PBDV | | | | A | A | 19 35 06.3 | |
| | 14nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **3.98** | **356** | Pn | **Pn** | **19 34 24.2** | **+1.3** |
| | 0.7nm,0.3s,baz=178,slow=13,SNR=10.0 | | | | | | |
| ESDC | | | | Sn | **Sn** | **19 35 10.7** | **+1.0** |
| | 0.9nm,0.3s,baz=174,slow=22,SNR=6.8 | | | | | | |
| ESDC | | | | Lg | Lg | 19 35 25.8 | |
| | 1.5nm,0.3s,baz=176,slow=28,SNR=6.8 | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **299** | *e*Pn | **Pn** | **19 34 24.6** | **+0.2** |
| PCVE | | | | *e*Sn | **Sn** | **19 35 11.3** | **-0.8** |
| PCVE | | | | A | A | 19 35 14.0 | |
| | 12nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **4.16** | **305** | *e*Pn | **Pn** | **19 34 25.9** | **+0.5** |
| PBEJ | | | | *e*Sn | **Sn** | **19 35 12.7** | **-1.3** |
| PBEJ | | | | A | A | 19 35 28.1 | |
| | 8.5nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*P | **Pn** | **19 34 27.6** | **+0.2** |
| MESJ | | | | *e*S | **Sn** | **19 35 13.9** | **-3.8** |
| MESJ | | | | IAML | | 19 35 17.8 | |
| | comp=E,13nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*Pn | **Pn** | **19 34 27.7** | **+0.3** |
| MESJ | | | | *e*Sn | **Sn** | **19 35 15.6** | **-2.0** |
| MESJ | | | | A | A | 19 35 24.7 | |
| | comp=E,14nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*P | **Pn** | **19 34 28.7** | **-0.1** |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*Pn | **Pn** | **19 34 29.2** | **+0.4** |
| MORF | | | | *e*Sn | **Sn** | **19 35 18.5** | **-1.6** |
| MORF | | | | A | A | 19 35 28.8 | |
| | comp=E,8.4nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | *e*Sn | **Sn** | **19 35 20.8** | **-1.1** |
| PFVI | | | | A | A | 19 35 34.6 | |
| | comp=E,12nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | P | **Pn** | **19 34 30.1** | **+0.3** |
| **PESTR** | **Estremoz** | **4.50** | **316** | *e*Pn | **Pn** | **19 34 31.6** | **+1.4** |
| PESTR | | | | *e*Sn | **Sn** | **19 35 21.5** | **-1.1** |
| PESTR | | | | A | A | 19 35 23.9 | |
| | comp=E,9.4nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.50** | **316** | P | **Pn** | **19 34 31.4** | **+1.3** |
| **EVO** | **Evora** | **4.54** | **310** | *e*Pn | **Pn** | **19 34 33.7** | **+3.0** |
| EVO | | | | *e*Sn | **Sn** | **19 35 23.4** | **-0.1** |
| EVO | | | | A | A | 19 35 25.3 | |
| | comp=E,24nm,0.4s | | | | | | |
| **UCM** | **Universidad Co** | **4.60** | **3** | P | **Pn** | **19 34 32.9** | **+1.3** |
| UCM | | | | S | **Sn** | **19 35 25.1** | **0.0** |
| **PNCL** | **Nicolau / Gran** | **4.65** | **303** | *e*Pn | **Pn** | **19 34 32.9** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **19 35 24.7** | **-1.4** |
| PNCL | | | | A | A | 19 35 26.2 | |
| | comp=E,9.7nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.80** | **322** | *e*Pn | **Pn** | **19 34 36.1** | **+1.8** |
| PMRV | | | | *e*Sn | **Sn** | **19 35 28.5** | **-1.5** |
| PMRV | | | | A | A | 19 35 31.3 | |
| | comp=E,6.3nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **314** | *e*Pn | **Pn** | **19 34 38.3** | **+1.2** |
| PMTG | | | | *e*Sn | **Sn** | **19 35 34.0** | **-0.9** |
| PMTG | | | | A | A | 19 36 05.1 | |
| | comp=E,8.9nm,0.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.16** | **324** | *e*Pn | **Pn** | **19 34 40.4** | **+1.2** |
| PCBR | | | | *e*Sn | **Sn** | **19 35 37.3** | **-1.5** |
| PCBR | | | | A | A | 19 35 39.5 | |
| | comp=E,11nm,0.4s | | | | | | |
| **PACT** | **Alcochete** | **5.20** | **308** | *e*Pn | **Pn** | **19 34 41.2** | **+1.5** |
| PACT | | | | A | A | 19 35 39.1 | |
| | comp=E,18nm,0.5s | | | | | | |
| PACT | | | | *e*Sn | **Sn** | **19 35 39.2** | **-0.5** |
| **OUZM** | **OUZ** | **5.48** | **210** | P | **Pn** | **19 34 43.7** | **0.0** |
| **PMAFR** | **Mafra** | **5.59** | **307** | *e*Pn | **Pn** | **19 34 46.3** | **+1.1** |
| PMAFR | | | | *e*Sn | **Sn** | **19 35 47.8** | **-1.7** |
| PMAFR | | | | A | A | 19 35 50.6 | |
| | comp=E,19nm,0.4s | | | | | | |
| **PSBE** | **So Bento** | **5.63** | **314** | *e*Pn | **Pn** | **19 34 48.0** | **+2.3** |
| PSBE | | | | *e*Sn | **Sn** | **19 35 48.7** | **-1.7** |
| **MTE** | **Manteigas** | **5.64** | **327** | *e*Pn | **Pn** | **19 34 48.0** | **+2.1** |
| MTE | | | | *e*Sn | **Sn** | **19 35 49.5** | **-1.2** |
| MTE | | | | A | A | 19 35 51.5 | |
| | comp=E,9.0nm,0.6s | | | | | | |
| **OUK** | **Oukaimeden** | **5.75** | **220** | P | **Pn** | **19 34 49.2** | **+1.6** |
| **PCAS** | **Casmilo, Conde** | **5.84** | **320** | *e*Pn | **Pn** | **19 34 50.2** | **+1.7** |
| PCAS | | | | *e*Sn | **Sn** | **19 35 53.0** | **-2.5** |
| PCAS | | | | A | A | 19 35 55.8 | |
| | comp=E,8.7nm,0.4s | | | | | | |
| **PVIS** | **Viseu** | **6.05** | **327** | *e*Pn | **Pn** | **19 34 53.4** | **+1.9** |
| PVIS | | | | *e*Sn | **Sn** | **19 35 59.0** | **-1.9** |
| PVIS | | | | A | A | 19 36 02.7 | |
| | comp=E,8.9nm,0.3s | | | | | | |
| **MVO** | **Moncorvo** | **6.09** | **335** | *e*Pn | **Pn** | **19 34 53.8** | **+1.7** |
| MVO | | | | *e*Sn | **Sn** | **19 35 59.9** | **-1.9** |
| MVO | | | | A | A | 19 36 03.6 | |
| | comp=E,6.8nm,0.6s | | | | | | |
| **PVRL** | **Vila Real** | **6.44** | **331** | *e*Sn | **Sn** | **19 36 08.2** | **-2.3** |
| PVRL | | | | A | A | 19 36 12.4 | |
| | comp=E,12nm,0.2s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.56** | **331** | *e*Pn | **Pn** | **19 35 00.8** | **+2.3** |
| POLO | | | | *e*Sn | **Sn** | **19 36 11.2** | **-2.2** |
| POLO | | | | A | A | 19 36 14.5 | |
| | comp=E,2.9nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **6.58** | **339** | *e*Pn | **Pn** | **19 35 00.4** | **+1.7** |
| PBRG | | | | *e*Sn | **Sn** | **19 36 12.7** | **-1.0** |
| PBRG | | | | A | A | 19 36 16.8 | |
| | comp=E,4.5nm,0.6s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.25** | **331** | *e*Pn | **Pn** | **19 35 10.1** | **+2.1** |
| PGAV | | | | *e*Sn | **Sn** | **19 36 29.5** | **-0.9** |
| PGAV | | | | A | A | 19 36 41.5 | |
| | comp=E,5.1nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.72** | **48** | P | **P** | **19 43 19.9** | **+0.3** |
| | comp=E,0.4nm,0.8s,baz=296,slow=7.9,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.45** | **51** | P | **P** | **19 43 46.1** | **+0.9** |
| | comp=E,0.4nm,0.6s,baz=302,slow=5.7,SNR=4.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.73** | **332** | P | **P** | **19 44 20.3** | **+1.1** |
| | comp=E,0.3nm,0.5s,baz=55,slow=6.6,SNR=4.5 | | | | | | |

*NEIC **22** 19:39:44.4±2.2,5.°1S±0.°2×104.°5E±0.°2, h139km±8km, mb4.1/18, Error ellipse: s-maj=33.8km s-min=10.5km az=52.0*
*DJA **22** 19:39:48.9±0.3,5.°5S±5.°×10.°5E±.°, h180km±3km, M4.0/20, mb4.0/6, mB4.9/1, MLv4.0/20, Mw(mB)4.2/1*
*IDC **22** 19:39:49.4±3.1,4.°95S×104.°63E, h182km±19km, mb3.4/8, mb1 3.6/10, mb1mx3.2/53, mbtmp4.0/10, Error ellipse: s-maj=72.3km s-min=11.7km az=53.0*

**ISC 22 19:39:48.6**±0.7,**5.°22S**±0.°07×**104.°54E**±0.°07,**h187**km±5km, **n71**,σ1ᵎ**38**/**77**,**mb3.9**/16,**Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KASI** | **Kota Agung** | **0.30** | **188** | P | **Pn** | **19 40 15.0** | **+1.5** |
| KASI | | | | S | **Sn** | **19 40 33.9** | **+1.1** |
| **KLI** | **Kotabumi** | **0.48** | **41** | P | **Pn** | **19 40 14.7** | **+0.7** |
| KLI | | | | S | **Sn** | **19 40 32.6** | **-1.1** |
| **LWLI** | **Liwa** | **0.52** | **293** | P | **Pn** | **19 40 17.0** | **+2.6** |
| **KLSI** | | **0.56** | **20** | P | **Pn** | **19 40 14.8** | **+0.4** |
| **BLSI** | **Bandar Lampung** | **0.71** | **102** | P | **Pn** | **19 40 15.7** | **+0.5** |
| BLSI | | | | S | **Sn** | **19 40 34.3** | **-1.3** |
| **MDSI** | **Maura Dua** | **0.82** | **334** | P | **Pn** | **19 40 16.6** | **+0.8** |
| MDSI | | | | S | **Sn** | **19 40 37.5** | **+0.7** |
| **LHSI** | **Lahat** | **1.72** | **324** | P | **Pn** | **19 40 23.0** | **-0.2** |
| **CGJI** | **Cibinong** | **1.79** | **140** | P | **Pn** | **19 40 24.4** | **+0.4** |
| CGJI | | | | S | **Sn** | **19 40 50.8** | **-0.7** |
| **TNG** | **Tangerang** | **2.30** | **114** | P | **Pn** | **19 40 28.8** | **-0.5** |
| **DBJI** | **Dramaga** | **2.56** | **121** | P | **Pn** | **19 40 31.8** | **-0.6** |
| **CBJI** | **Citeko** | **2.59** | **117** | P | **Pn** | **19 40 34.6** | **+2.0** |
| **SKJI** | **Sukabumi** | **2.67** | **132** | P | **Pn** | **19 40 33.0** | **-0.7** |
| **MASI** | **Maura Aman, Be** | **3.09** | **312** | P | **Pn** | **19 40 38.9** | **+0.2** |
| **CNJI** | **Cibinong** | **3.30** | **129** | P | **Pn** | **19 40 40.6** | **-0.6** |
| **LEM** | **Lembang** | **3.45** | **118** | P | **Pn** | **19 40 44.8** | **+1.6** |
| | 5.5nm,0.3s,baz=19,slow=11,SNR=7.0 | | | | | | |
| LEM | | | | S | **Sn** | **19 41 28.8** | **+2.9** |
| | 4.4nm,0.3s,baz=108,slow=20,SNR=1.6 | | | | | | |
| **LEM** | **Lembang** | **3.45** | **118** | P | **Pn** | **19 40 42.8** | **-0.4** |
| **JCJI** | **Jatiwangi** | **3.92** | **109** | P | **Pn** | **19 40 49.1** | **+0.2** |
| **KRJI** | **Kerinci** | **4.37** | **315** | P | **Pn** | **19 40 56.2** | **+1.4** |
| **CMJI** | **Cimerak** | **4.64** | **123** | P | **Pn** | **19 40 57.4** | **-0.7** |
| **KPJI** | **Karang Pucung** | **4.84** | **116** | P | **Pn** | **19 40 59.7** | **-0.9** |
| **XMI** | **Christmas Isla** | **5.32** | **168** | P | **Pn** | **19 41 06.0** | **-0.8** |
| **XMIS** | **Christmas Isla** | **5.34** | **168** | Pn | **Pn** | **19 41 06.9** | **-0.2** |
| XMIS | | | | Sn | **Sn** | **19 42 05.4** | **-3.6** |
| **XMIS** | **Christmas Isla** | **5.34** | **168** | P | **Pn** | **19 41 07.3** | **+0.2** |
| **PPI** | **Padang Panjang** | **6.29** | **319** | P | Pn | 19 41 28.0 | +8.5 |
| **UGM** | **Wanagama** | **6.51** | **115** | Pn | **Pn** | **19 41 21.9** | **-0.5** |
| **UGM** | **Wanagama** | **6.51** | **115** | P | **Pn** | **19 41 22.7** | **+0.2** |
| | 0.3nm33nm,1.6s | | | | | | |
| **UGM** | **Wanagama** | **6.51** | **115** | P | **Pn** | **19 41 22.5** | **0.0** |
| **PCJI** | **Pacitan** | **7.22** | **114** | P | **Pn** | **19 41 31.0** | **-0.7** |
| | 0.2nm20nm,1.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **7.73** | **111** | P | **Pn** | **19 41 38.0** | **-0.4** |
| | 0.2nm15nm,0.9s | | | | | | |
| **MNSI** | **Mandailing Nat** | **7.77** | **320** | P | **Pn** | **19 41 38.0** | **-0.8** |
| **GSI** | **Gunungsitoli** | **9.51** | **313** | Pn | **Pn** | **19 42 01.1** | **-0.7** |
| **GSI** | **Gunungsitoli** | **9.51** | **313** | P | **Pn** | **19 42 01.1** | **-0.7** |
| | 20nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **10.07** | **109** | | **Pn** | **19 42 05.8** | **-3.2** |
| **JAGI** | **Jajag, Banyuwa** | **10.07** | **109** | P | **Pn** | **19 42 09.0** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **10.07** | **109** | P | **Pn** | **19 42 09.2** | **+0.1** |
| **PLAI** | **Plampang** | **13.61** | **106** | P | **P** | **19 42 56.7** | **-0.4** |
| **KAPI** | **Kappang** | **15.15** | **90** | P | **P** | **19 43 14.4** | **+0.3** |
| **TOLI2** | **Tolitoli** | **17.40** | **69** | P | **P** | **19 43 38.3** | **-0.6** |
| TOLI2 | | | | IAmb | IAmb | 19 43 48.4 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **19.58** | **106** | P | **P** | **19 44 03.3** | **+0.7** |
| | comp=Z,3.8nm,0.3s,baz=286,slow=1.6,SNR=6.2 | | | | | | |
| **SOEI** | **Soe** | **20.07** | **104** | P | **P** | **19 44 07.1** | **-0.8** |
| SOEI | | | | IAmb | IAmb | 19 44 26.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **20.07** | **104** | P | **P** | **19 44 09.5** | **+1.6** |
| | comp=Z,13nm,1.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.26** | **124** | P | **P** | **19 44 49.8** | **+1.1** |
| | comp=Z,1.0nm,0.5s,baz=329,slow=7.9,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.26** | **124** | IAmb | IAmb | 19 45 01.0 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.26** | **124** | P | **P** | **19 44 49.8** | **+1.1** |
| **KNRA** | **Kununurra** | **25.95** | **115** | P | **P** | **19 45 04.5** | **+0.5** |
| **KNRA** | **Kununurra** | **25.95** | **115** | P | **P** | **19 45 05.8** | **+1.8** |
| **MTN** | **Manton Dam** | **27.31** | **108** | P | **P** | **19 45 14.7** | **-1.5** |
| **WB0** | **Warramunga Arr** | **32.45** | **119** | P | **P** | **19 45 59.4** | **-2.1** |
| WB0 | | | | IAmb | IAmb | 19 46 19.6 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.47** | **119** | P | **P** | **19 46 02.8** | **+1.1** |
| | comp=Z,0.4nm,0.4s,baz=289,slow=10.0,SNR=18 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 48 46.4** | **+2.1** |
| | comp=Z,0.2nm,0.4s,baz=312,slow=1.9,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.47** | **119** | P | **P** | **19 45 59.5** | **-2.2** |
| **WRAB** | **Tennant Creek** | **32.47** | **119** | P | **P** | **19 46 02.7** | **+1.0** |
| | comp=Z,2.9nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.48** | **119** | P | **P** | **19 45 59.5** | **-2.3** |
| WB2 | | | | IAmb | IAmb | 19 46 04.2 | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.65** | **119** | P | **P** | **19 45 60.0** | **-3.2** |
| WR0 | | | | IAmb | IAmb | 19 46 14.9 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **33.70** | **126** | P | **P** | **19 46 14.2** | **+1.8** |
| AS31 | | | | IAmb | IAmb | 19 46 18.0 | |
| | comp=Z,2.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **33.70** | **126** | P | **P** | **19 46 14.3** | **+1.9** |
| | comp=Z,2.6nm,0.4s,baz=296,slow=8.1,SNR=36 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 52 17.4** | **+2.4** |
| | comp=Z,0.5nm,0.8s,baz=294,slow=3.3,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **33.70** | **126** | P | **P** | **19 46 14.1** | **+1.7** |
| **COEN** | **Coen** | **39.02** | **106** | P | **P** | **19 46 57.0** | **-0.4** |
| COEN | | | | IAmb | IAmb | 19 47 15.7 | |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **40.21** | **137** | P | **P** | **19 47 07.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **43.64** | **132** | P | **P** | **19 47 37.5** | **+2.7** |
| | comp=Z,3.6nm,0.6s,baz=308,slow=8.2,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **43.64** | **132** | IAmb | IAmb | 19 47 38.1 | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **INU** | **Inuyama** | **50.60** | **35** | P | **P** | **19 48 28.5** | **-0.1** |
| **SONM** | **Songino Array** | **52.86** | **2** | P | **P** | **19 48 45.3** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=183,slow=9.6,SNR=5.1 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 49 52.2** | **+0.4** |
| | comp=Z,0.2nm,0.4s,baz=151,slow=4.3,SNR=4.6 | | | | | | |
| **MK31** | **Makanchi Array** | **55.42** | **342** | P | **P** | **19 49 03.1** | **-0.5** |
| **MKAR** | **Makanchi Array** | **55.42** | **342** | P | **P** | **19 49 03.1** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=153,slow=9.0,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.97** | **341** | P | **P** | **19 49 34.1** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=155,slow=7.6,SNR=4.5 | | | | | | |
| **KURK** | **Kurchatov** | **60.03** | **341** | P | **P** | **19 49 34.1** | **-1.4** |
| **KURK** | **Kurchatov** | **60.03** | **341** | IAmb | IAmb | 19 49 46.9 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **61.24** | **347** | P | **P** | **19 49 42.1** | **-1.5** |
| ZAA0 | | | | IAmb | IAmb | 19 49 42.6 | |
| | comp=Z,3.1nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.24** | **347** | P | **P** | **19 49 43.0** | **-0.7** |
| | comp=Z,0.9nm,0.3s,baz=156,slow=5.9,SNR=9.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.24** | **347** | P | **P** | **19 49 42.6** | **-1.1** |
| **ABKAR** | **Akbulak array** | **66.65** | **330** | P | **P** | **19 50 18.0** | **-1.1** |

*CNRM **22** 19:44:42.3, 35.°69N×3.°58W, h27km, ml2.6*
*INMG **22** 19:44:43.2±1.1, 35.°69N×3.°59W, h13km, ML2.1, Error ellipse: s-maj=4.8km s-min=2.7km az=52.0*
*SFS **22** 19:44:43.0, 35.°60N×3.°59W, h34km, ML2.7, ALBORAN SUR*

**ISC 22 19:44:42.4**±1.4,**35.°70N**±0.°04×**3.°58W**±0.°04,**h23**km±15km, **n17**,σ1ᵎ**36**/**31**,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.56** | **212** | P | **Pb** | **19 44 53.6** | **0.0** |
| PALE | | | | S | **Sn** | **19 45 02.9** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.67** | **135** | P | **Pb** | **19 44 54.9** | **-0.6** |
| GOG | | | | S | **Sb** | **19 45 03.4** | **-1.0** |
| **CHAS** | **Isla Isabel II** | **1.07** | **118** | P | **Pn** | **19 45 02.0** | **+0.1** |
| CHAS | | | | S | **Sn** | **19 45 15.8** | **-0.2** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **327** | P | **Pn** | **19 45 04.5** | **-0.2** |
| EMAL | | | | S | **Sn** | **19 45 21.1** | **+0.1** |
| **TAF** | **Taforalt** | **1.30** | **132** | P | **Pn** | **19 45 04.9** | **-0.2** |
| TAF | | | | S | **Sb** | **19 45 23.7** | **+1.3** |
| **CEU** | **Ceuta** | **1.47** | **278** | P | **Pn** | **19 45 05.5** | **-2.0** |
| CEU | | | | S | **Sn** | **19 45 21.6** | **-4.5** |
| **JBK** | **JBK** | **1.59** | **148** | P | **Pn** | **19 45 08.5** | **-0.8** |
| JBK | | | | S | **Sn** | **19 45 27.6** | **-1.8** |
| **IFR** | **Ifrane** | **2.52** | **211** | P | **Pn** | **19 45 22.7** | **+0.6** |
| IFR | | | | S | **Sn** | **19 45 52.3** | **+0.1** |
| **MD31** | **MD31** | **2.99** | **199** | P | **Pn** | **19 45 29.6** | **+1.2** |
| MD31 | | | | S | **Sn** | **19 46 04.0** | **+0.5** |
| **MDT** | **Midelt** | **3.00** | **197** | P | **Pn** | **19 45 29.6** | **+1.0** |
| MDT | | | | S | **Sn** | **19 46 05.8** | **+1.9** |
| **ZHG** | **ZHG** | **3.38** | **229** | P | **Pn** | **19 45 33.5** | **-0.4** |
| ZHG | | | | S | **Sn** | **19 46 13.8** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.74** | **298** | *e*Pn | **Pn** | **19 45 39.5** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **19 46 22.2** | **+0.1** |
| PVAQ | | | | A | A | 19 46 27.6 | |
| | 2.7nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.74** | **298** | P | **Pn** | **19 45 39.1** | **+0.4** |
| PVAQ | | | | S | **Sn** | **19 46 22.0** | **-0.1** |
| **PBDV** | **Barranco-do-Ve** | **3.83** | **295** | *e*Pn | **Pn** | **19 45 40.7** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **19 46 23.6** | **-0.8** |
| PBDV | | | | A | A | 19 46 25.7 | |
| | 2.3nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **301** | *e*Pn | **Pn** | **19 45 47.6** | **+1.3** |
| **PNCL** | **Nicolau / Gran** | **4.64** | **303** | *e*Pn | **Pn** | **19 45 52.0** | **+0.9** |
| **PMRV** | **Marv??o** | **4.80** | **322** | *e*Pn | **Pn** | **19 45 55.9** | **+2.6** |

*IDC **22** 20:13:44.8±1.7,30.°64N×133.°05E, h0km, mb3.2/2, mb1 3.5/4, mb1mx3.2/52, mbtmp3.3/4, ML2.9/2, Error ellipse: s-maj=55.9km s-min=27.8km az=83.0*
*JMA **22** 20:13:47.1±0.2,30.°60N×132.°81E, h61km, M3.1*

**ISC 22 20:13:48.2**±1.2,**30.°67N**±0.°07×**132.°87E**±0.°06,**h35**km,**n14**, σ1ᵎ**45**/**25**,**Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNAR** | **Kushima--Naru** | **1.61** | **302** | P | **Pn** | **20 14 14.2** | **+0.1** |
| JNAR | | | | *e*S | **Sn** | **20 14 33.6** | **-0.1** |
| **JNKG** | **Nichinankitago** | **1.62** | **308** | P | **Pn** | **20 14 14.4** | **+0.2** |
| JNKG | | | | *e*S | **Sn** | **20 14 34.3** | **+0.5** |
| **JTN** | **Tanegashima 3** | **1.63** | **270** | P | **Pn** | **20 14 13.1** | **-1.2** |
| JTN | | | | *e*S | **Sn** | **20 14 32.6** | **-1.4** |
| **JMTN** | **Minamitane** | **1.72** | **261** | P | **Pn** | **20 14 14.7** | **-0.9** |
| JMTN | | | | *e*S | **Sn** | **20 14 35.1** | **-1.2** |
| **JTSR** | **Tashiro 2** | **1.74** | **287** | P | **Pn** | **20 14 15.2** | **-0.8** |
| JTSR | | | | *e*S | **Sn** | **20 14 36.6** | **-0.4** |
| **JTZ** | **Takazaki** | **1.96** | **309** | P | **Pn** | **20 14 18.9** | **0.0** |
| JTZ | | | | *e*S | **Sn** | **20 14 42.6** | **+0.4** |
| **JTO** | **Tosashimizu** | **2.19** | **359** | P | **Pn** | **20 14 21.5** | **-0.5** |
| JTO | | | | *e*S | **Sn** | **20 14 45.3** | **-2.6** |
| **JSJ** | **Shimokoshiki** | **2.88** | **291** | P | **Pn** | **20 14 30.3** | **-1.3** |
| JSJ | | | | *e*S | **Sn** | **20 15 02.5** | **-2.5** |
| **JNA** | **Nagahama** | **2.90** | **354** | P | **Pn** | **20 14 32.3** | **+0.5** |
| JNA | | | | *e*S | **Sn** | **20 15 03.5** | **-2.0** |
| **JNU** | **Nakatsue** | **2.97** | **326** | Pn | **Pn** | **20 14 34.6** | **+1.7** |
| | 3.9nm,0.3s,baz=159,slow=1.3,SNR=10 | | | | | | |
| JNU | | | | Sn | **Sn** | **20 15 08.3** | **+1.0** |
| | 5.6nm,0.3s,baz=216,slow=22,SNR=12 | | | | | | |
| **JAI** | **Aioi** | **3.39** | **23** | P | **Pn** | **20 14 39.0** | **+0.4** |
| JAI | | | | *e*S | **Sn** | **20 15 14.3** | **-3.3** |
| **MJAR** | **Matsushiro Arr** | **7.36** | **36** | Pn | **Pn** | **20 15 33.0** | **-0.1** |
| | 0.1nm,0.3s,baz=212,slow=13,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.34** | **178** | P | **P** | **20 22 42.7** | **+1.0** |
| | 0.2nm,0.6s,baz=358,slow=8.0,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **54.03** | **179** | P | **P** | **20 23 11.2** | **+2.1** |
| | 0.2nm,0.5s,baz=10,slow=13,SNR=4.2 | | | | | | |

*JMA **22** 20:20:00.2±0.1,23.°82N×121.°69E, h1km, M3.4*
*TAP **22** 20:20:01.5,23.°89N×121.°65E, h4km, ML4.0, C*
*IDC **22** 20:20:16.6±5.5,23.°92N×121.°49E, h140km±53km, mb3.3/11, mb1 3.5/12, mb1mx3.3/36, mbtmp3.7/12, Error ellipse: s-maj=24.8km s-min=17.0km az=80.0*

**ISC 22 20:20:01.6**±0.9,**23.°88N**±0.°01×**121.°69E**±0.°02,**h6**km±5km, **n140**,σ1ᵎ**01**/**226**,**mb3.7**/**11**,**18C-11D**,**Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEYL** | **Yanliau Villag** | **0.09** | **259** | ⇓*i*P | **Pg** | **20 20 03.1** | **-0.5** |
| | baz=292 | | | | | | |
| TEYL | | | | *i* S | **Sg** | **20 20 04.6** | **-0.4** |
| | baz=292 | | | | | | |
| **HWA** | **Hwalien** | **0.12** | **320** | ⇓*i*P | **Pg** | **20 20 04.3** | **+0.1** |
| | baz=339 | | | | | | |
| HWA | | | | *i* S | **Sg** | **20 20 06.8** | **+0.8** |
| | baz=339 | | | | | | |
| **ETM** | **Tongmen** | **0.20** | **294** | *i* P | **Pg** | **20 20 05.3** | **-0.3** |
| | baz=300 | | | | | | |
| ETM | | | | S | **Sg** | **20 20 08.3** | **0.0** |
| | baz=300 | | | | | | |
| **TWD** | **Chiawan** | **0.21** | **336** | ⇓*i*P | **Pg** | **20 20 06.1** | **+0.2** |
| | baz=347 | | | | | | |
| TWD | | | | *i* S | **Sg** | **20 20 09.7** | **+0.9** |
| | baz=347 | | | | | | |
| **TEGC** | **Jichi Village** | **0.22** | **218** | P | **Pg** | **20 20 07.1** | **+1.1** |
| | baz=209 | | | | | | |
| TEGC | | | | S | **Sg** | **20 20 11.6** | **+2.6** |
| | baz=209 | | | | | | |
| **ESL** | **Shilin** | **0.24** | **254** | ⇑*i*P | **Pg** | **20 20 06.0** | **-0.5** |
| | baz=256 | | | | | | |
| ESL | | | | *i* S | **Sg** | **20 20 09.5** | **-0.2** |
| | baz=256 | | | | | | |
| **ETL** | **Fush Village** | **0.28** | **347** | P | **Pg

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=349 | | | | | | | |
| NDT | | | | *e*S | | **Sb** | **20 20 27.9** | **+0.8** |
| | baz=349 | | | | | | | |
| **TWC** | **Suao** | **0.74** | **11** | ⇑*i*P | | **Pg** | **20 20 16.8** | **+1.0** |
| | baz=1.0 | | | | | | | |
| TWC | | | | *i* S | | **Sn** | **20 20 28.7** | **-1.3** |
| | baz=1.0 | | | | | | | |
| **NDS** | **Dongshan** | **0.75** | **2** | *e*P | | **Pg** | **20 20 16.6** | **+0.5** |
| | baz=354 | | | | | | | |
| NDS | | | | *e*S | | **Sb** | **20 20 28.2** | **+0.8** |
| | baz=354 | | | | | | | |
| **ENTT** | **Nioudou** | **0.76** | **352** | ⇑*i*P | | **Pg** | **20 20 16.9** | **+0.6** |
| | baz=354 | | | | | | | |
| ENTT | | | | S | | **Sb** | **20 20 28.8** | **+0.9** |
| | baz=354 | | | | | | | |
| **TYC** | **Yuchr** | **0.76** | **272** | ⇑*i*P | | **Pg** | **20 20 16.1** | **-0.2** |
| | baz=284 | | | | | | | |
| TYC | | | | S | | **Sg** | **20 20 25.9** | **-0.3** |
| | baz=284 | | | | | | | |
| **FULB** | **Fuli** | **0.77** | **208** | *e*P | | **Pg** | **20 20 17.9** | **+1.3** |
| | baz=228 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.78** | **240** | *i* P | | **Pg** | **20 20 17.5** | **+0.8** |
| | baz=250 | | | | | | | |
| **WHP** | **Taichung City** | **0.79** | **300** | P | | **Pg** | **20 20 17.0** | **+0.2** |
| | baz=292 | | | | | | | |
| WHP | | | | *e*S | | **Sb** | **20 20 28.4** | **-0.2** |
| | baz=292 | | | | | | | |
| **YHNB** | **Yeheng** | **0.83** | **340** | P | | **Pg** | **20 20 18.2** | **+0.6** |
| | baz=342 | | | | | | | |
| YHNB | | | | *e*S | | **Sb** | **20 20 30.2** | **+0.2** |
| | baz=342 | | | | | | | |
| **TWE** | **Neicheng** | **0.83** | **359** | ⇑*i*P | | **Pg** | **20 20 18.4** | **+0.7** |
| | baz=1.0 | | | | | | | |
| TWE | | | | S | | **Sb** | **20 20 30.4** | **+0.5** |
| | baz=1.0 | | | | | | | |
| **CHKT** | **Chengkung** | **0.84** | **201** | P | | **Pg** | **20 20 18.2** | **+0.5** |
| | baz=198 | | | | | | | |
| CHKT | | | | S | | **Sb** | **20 20 31.5** | **+1.5** |
| | baz=198 | | | | | | | |
| **NSK** | **Sanguang** | **0.84** | **339** | ⇑*i*P | | **Pg** | **20 20 18.3** | **+0.4** |
| | baz=342 | | | | | | | |
| NSK | | | | *i* S | | **Sb** | **20 20 30.5** | **+0.2** |
| | baz=342 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.88** | **354** | ⇑P | | **Pg** | **20 20 19.2** | **+0.7** |
| | baz=355 | | | | | | | |
| FUSB | | | | *e*S | | **Sb** | **20 20 31.0** | **-0.3** |
| | baz=355 | | | | | | | |
| **ILA** | **Ilan** | **0.88** | **3** | *e*P | | **Pb** | **20 20 19.7** | **+0.4** |
| | baz=354 | | | | | | | |
| ILA | | | | *e*S | | **Sn** | **20 20 32.8** | **-0.8** |
| | baz=354 | | | | | | | |
| **WJS** | **Zhushan** | **0.88** | **266** | *e*P | | **Pb** | **20 20 19.6** | **+0.2** |
| | baz=275 | | | | | | | |
| WJS | | | | *e*S | | **Sn** | **20 20 32.6** | **-1.1** |
| | baz=275 | | | | | | | |
| **ALS** | **Alishan** | **0.89** | **246** | ⇑*i*P | | **Pg** | **20 20 19.0** | **+0.2** |
| | baz=245 | | | | | | | |
| ALS | | | | S | | **Sb** | **20 20 31.9** | **0.0** |
| | baz=245 | | | | | | | |
| **ECS** | **Chishang** | **0.90** | **209** | *e*P | | **Pn** | **20 20 21.6** | **+0.9** |
| | baz=229 | | | | | | | |
| **NWLT** | **Wulai** | **0.91** | **349** | P | | **Pg** | **20 20 19.5** | **+0.4** |
| | baz=350 | | | | | | | |
| NWLT | | | | S | | **Sb** | **20 20 32.7** | **+0.6** |
| | baz=350 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.91** | **325** | *e*P | | **Pg** | **20 20 19.4** | **+0.3** |
| | baz=327 | | | | | | | |
| NFF | | | | *e*S | | **Sb** | **20 20 31.9** | **-0.3** |
| | baz=327 | | | | | | | |
| **WWF** | **Wufeng** | **0.92** | **280** | P | | **Pn** | **20 20 21.0** | **-0.1** |
| | baz=289 | | | | | | | |
| **WNT** | **Mingjian** | **0.92** | **270** | ⇑*i*P | | **Pb** | **20 20 20.3** | **+0.3** |
| | baz=271 | | | | | | | |
| WNT | | | | S | | **Sn** | **20 20 34.2** | **-0.4** |
| | baz=271 | | | | | | | |
| **WNT1** | **Nantou City** | **0.93** | **272** | P | | **Pn** | **20 20 21.0** | **-0.2** |
| | baz=273 | | | | | | | |
| WNT1 | | | | *e*S | | **Sn** | **20 20 35.2** | **+0.5** |
| | baz=273 | | | | | | | |
| **ELDTW** | **Lidau** | **0.93** | **222** | ⇓*i*P | | **Pg** | **20 20 18.8** | **-0.6** |
| | baz=220 | | | | | | | |
| ELDTW | | | | *e*S | | **Sg** | **20 20 32.3** | **+0.8** |
| | baz=220 | | | | | | | |
| **TWQ1** | **Liyutan** | **0.96** | **299** | ⇓P | | **Pb** | **20 20 20.9** | **+0.3** |
| | baz=301 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sn** | **20 20 36.1** | **+0.6** |
| | baz=301 | | | | | | | |
| **TCU** | **Taichung** | **0.96** | **286** | *e*P | | **Pn** | **20 20 21.4** | **-0.2** |
| | baz=288 | | | | | | | |
| TCU | | | | *e*S | | **Sn** | **20 20 36.0** | **+0.4** |
| | baz=288 | | | | | | | |
| **CHN5** | **Tsauling** | **0.97** | **253** | ⇑*i*P | | **Pg** | **20 20 20.8** | **+0.5** |
| | baz=240 | | | | | | | |
| CHN5 | | | | S | | **Sn** | **20 20 35.9** | **0.0** |
| | baz=240 | | | | | | | |
| **EDH** | **Donghe** | **0.97** | **201** | *e*P | | **Pb** | **20 20 20.3** | **-0.6** |
| | baz=199 | | | | | | | |
| EDH | | | | *e*S | | **Sn** | **20 20 35.5** | **-0.4** |
| | baz=199 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.97** | **320** | ⇑P | | **Pb** | **20 20 20.9** | **0.0** |
| | baz=322 | | | | | | | |
| NSTT | | | | *e*S | | **Sb** | **20 20 33.9** | **-0.1** |
| | baz=322 | | | | | | | |
| **NTC** | **Toucheng** | **0.97** | **8** | *e*P | | **Pb** | **20 20 21.1** | **+0.2** |
| | baz=357 | | | | | | | |
| NTC | | | | *e*S | | **Sn** | **20 20 35.5** | **-0.5** |
| | baz=357 | | | | | | | |
| **LIOB** | **Emei** | **0.98** | **321** | P | | **Pg** | **20 20 21.3** | **+0.9** |
| | baz=323 | | | | | | | |
| LIOB | | | | *e*S | | **Sb** | **20 20 34.2** | **+0.1** |
| | baz=323 | | | | | | | |
| **NSY** | **Sanyi** | **1.00** | **302** | ⇓P | | **Pn** | **20 20 22.5** | **+0.3** |
| | baz=304 | | | | | | | |
| NSY | | | | *e*S | | **Sn** | **20 20 37.0** | **+0.4** |
| | baz=304 | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.02** | **275** | *e*P | | **Pn** | **20 20 22.4** | **0.0** |
| | baz=276 | | | | | | | |
| WYL | | | | *e*S | | **Sn** | **20 20 38.1** | **+1.1** |
| | baz=276 | | | | | | | |
| **NMLH** | **Miaoli** | **1.05** | **309** | *e*P | | **Pn** | **20 20 22.9** | **+0.1** |
| | baz=322 | | | | | | | |
| NMLH | | | | *e*S | | **Sn** | **20 20 38.0** | **+0.3** |
| | baz=322 | | | | | | | |
| **WGK** | **Gukeng** | **1.05** | **259** | *i* P | | **Pn** | **20 20 22.9** | **0.0** |
| | baz=261 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.05** | **281** | *e*P | | **Pn** | **20 20 22.7** | **-0.2** |
| | baz=282 | | | | | | | |
| WCHH | | | | *e*S | | **Sn** | **20 20 38.0** | **+0.1** |
| | baz=282 | | | | | | | |
| **WDJ** | **Dajia District** | **1.06** | **296** | *e*P | | **Pn** | **20 20 23.5** | **+0.5** |
| | baz=298 | | | | | | | |
| WDJ | | | | *e*S | | **Sn** | **20 20 39.6** | **+1.4** |
| | baz=298 | | | | | | | |
| **WDLH** | **Douliu** | **1.07** | **260** | *e*P | | **Pb** | **20 20 22.8** | **+0.3** |
| | baz=261 | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | **20 20 38.6** | **+0.3** |
| | baz=261 | | | | | | | |
| **HSN1** | **Hsinchu** | **1.08** | **326** | *e*P | | **Pn** | **20 20 24.4** | **+1.1** |
| | baz=325 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.08** | **352** | *e*P | | **Pn** | **20 20 23.6** | **+0.3** |
| | baz=343 | | | | | | | |
| NHDH | | | | *e*S | | **Sn** | **20 20 39.4** | **+0.7** |
| | baz=343 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.09** | **7** | *e*P | | **Pn** | **20 20 23.6** | **+0.1** |
| | baz=357 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **20 20 38.4** | **-0.4** |
| | baz=357 | | | | | | | |
| **TWA** | **Mucha** | **1.10** | **355** | ⇓P | | **Pn** | **20 20 23.6** | **+0.1** |
| | baz=345 | | | | | | | |
| TWA | | | | *e*S | | **Sb** | **20 20 36.7** | **-0.8** |
| | baz=345 | | | | | | | |
| **STYH** | **Taoyuan** | **1.10** | **230** | *e*P | | **Pb** | **20 20 22.9** | **-0.1** |
| | baz=238 | | | | | | | |
| STYH | | | | *e*S | | **Sb** | **20 20 37.8** | **+0.2** |
| | baz=238 | | | | | | | |
| **LONT** | **Longtian** | **1.10** | **208** | *e*P | | **Pb** | **20 20 20.9** | **-2.1** |
| | baz=210 | | | | | | | |
| **HSN** | **Hsinchu** | **1.13** | **324** | *e*P | | **Pg** | **20 20 24.2** | **+0.9** |
| | baz=328 | | | | | | | |
| HSN | | | | *e*S | | **Sn** | **20 20 41.6** | **+1.9** |
| | baz=328 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.13** | **239** | *e*P | | **Pg** | **20 20 24.4** | **+1.0** |
| | baz=239 | | | | | | | |
| TPUB | | | | *e*S | | **Sn** | **20 20 39.6** | **-0.3** |
| | baz=239 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.14** | **242** | *e*P | | **Pb** | **20 20 23.7** | **0.0** |
| | baz=243 | | | | | | | |
| CHN4 | | | | *e*S | | **Sn** | **20 20 41.4** | **+1.4** |
| | baz=243 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.15** | **14** | *e*P | | **Pg** | **20 20 24.7** | **+0.9** |
| | baz=4.0 | | | | | | | |
| TWB1 | | | | *e*S | | **Sn** | **20 20 42.3** | **+2.0** |
| | baz=4.0 | | | | | | | |
| **TAP** | **Taipei** | **1.16** | **352** | *e*P | | **Pg** | **20 20 25.4** | **+1.4** |
| | baz=353 | | | | | | | |
| TAP | | | | *e*S | | **Sn** | **20 20 41.4** | **+0.8** |
| | baz=353 | | | | | | | |
| **CHN2** | **Minshiung** | **1.17** | **253** | *e*P | | **Pg** | **20 20 25.5** | **+1.4** |
| | baz=254 | | | | | | | |
| CHN2 | | | | *e*S | | **Sn** | **20 20 42.3** | **+1.7** |
| | baz=254 | | | | | | | |
| **NCUH** | **Zhongli** | **1.17** | **337** | *e*P | | **Pg** | **20 20 25.4** | **+1.2** |
| | baz=335 | | | | | | | |
| **NCU** | **National Centr** | **1.17** | **337** | *e*P | | **Pb** | **20 20 23.1** | **-1.2** |
| | baz=348 | | | | | | | |
| NCU | | | | *e*S | | **Sn** | **20 20 43.1** | **+2.3** |
| | baz=348 | | | | | | | |
| **WTP** | **Ta-pu** | **1.17** | **237** | ⇓P | | **Pb** | **20 20 24.2** | **-0.2** |
| | baz=246 | | | | | | | |
| WTP | | | | *e*S | | **Sn** | **20 20 41.5** | **+0.5** |
| | baz=246 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.19** | **4** | *e*P | | **Pg** | **20 20 25.7** | **+1.3** |
| | baz=353 | | | | | | | |
| NWF | | | | *e*S | | **Sn** | **20 20 41.5** | **+0.2** |
| | baz=353 | | | | | | | |
| **TWGBT** | **Beinan** | **1.20** | **208** | *e*P | | **Pn** | **20 20 23.8** | **-1.2** |
| | baz=210 | | | | | | | |
| **TWG** | **Pinlang** | **1.20** | **208** | *e*P | | **Pn** | **20 20 23.2** | **-1.7** |
| | baz=210 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.20** | **271** | *e*P | | **Pn** | **20 20 24.6** | **-0.3** |
| | baz=274 | | | | | | | |
| **WTK** | **Tuku** | **1.21** | **261** | *e*P | | **Pg** | **20 20 25.5** | **+0.7** |
| | baz=262 | | | | | | | |
| WTK | | | | *e*S | | **Sn** | **20 20 43.5** | **+1.8** |
| | baz=262 | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.22** | **8** | *e*P | | **Pg** | **20 20 25.9** | **+0.9** |
| | baz=346 | | | | | | | |
| **CHY** | **Chiayi** | **1.22** | **252** | *e*P | | **Pg** | **20 20 25.7** | **+0.6** |
| | baz=252 | | | | | | | |
| CHY | | | | *e*S | | **Sg** | **20 20 43.1** | **+2.2** |
| | baz=252 | | | | | | | |
| **LDUT** | **Ludao** | **1.22** | **190** | *e*P | | **Pn** | **20 20 22.5** | **-2.7** |
| | baz=191 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.24** | **348** | P | | **Pg** | **20 20 26.4** | **+1.1** |
| | baz=349 | | | | | | | |
| TWS1 | | | | S | | **Sg** | **20 20 45.2** | **+3.7** |
| | baz=349 | | | | | | | |
| **YM01** | **YM01** | **1.26** | **355** | *e*P | | **Pg** | **20 20 26.4** | **+0.6** |
| | baz=355 | | | | | | | |
| YM01 | | | | *e*S | | **Sg** | **20 20 45.0** | **+2.7** |
| | baz=355 | | | | | | | |
| **TWK** | **Hsinying** | **1.26** | **241** | *e*P | | **Pn** | **20 20 25.6** | **-0.2** |
| | baz=241 | | | | | | | |
| TWK | | | | *e*S | | **Sg** | **20 20 44.1** | **+1.9** |
| | baz=241 | | | | | | | |
| **CHN1** | **Nanshi** | **1.27** | **237** | ⇓P | | **Pn** | **20 20 26.0** | **0.0** |
| | baz=237 | | | | | | | |
| CHN1 | | | | *e*S | | **Sg** | **20 20 45.0** | **+2.4** |
| | baz=237 | | | | | | | |
| **SNST** | **Tainan City** | **1.28** | **239** | *e*P | | **Pb** | **20 20 26.4** | **+0.3** |
| | baz=239 | | | | | | | |
| SNST | | | | *e*S | | **Sg** | **20 20 44.7** | **+2.0** |
| | baz=239 | | | | | | | |
| **SGST** | **Jiashian** | **1.29** | **232** | P | | **Pn** | **20 20 25.9** | **-0.3** |
| | baz=244 | | | | | | | |
| SGST | | | | S | | **Sg** | **20 20 45.0** | **+1.8** |
| | baz=244 | | | | | | | |
| **NTST** | **Danshui** | **1.29** | **350** | *e*P | | **Pg** | **20 20 27.1** | **+0.6** |
| | baz=347 | | | | | | | |
| **SLGT** | **Liugui** | **1.30** | **227** | *e*P | | **Pn** | **20 20 25.6** | **-0.8** |
| | baz=229 | | | | | | | |
| **ANP** | **Anpu** | **1.31** | **353** | *e*P | | **Pb** | **20 20 26.9** | **+0.3** |
| | baz=351 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.34** | **64** | P | | **Pn** | **20 20 26.1** | **-0.7** |
| YOJ | | | | *e*S | | **Sn** | **20 20 43.9** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **1.34** | **64** | *e*P | | **Pn** | **20 20 26.7** | **-0.1** |
| | baz=64 | | | | | | | |
| **WSF** | **Szhu** | **1.37** | **260** | *e*P | | **Pn** | **20 20 27.2** | **0.0** |
| | baz=261 | | | | | | | |
| WSF | | | | *e*S | | **Sg** | **20 20 48.5** | **+2.9** |
| | baz=261 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.39** | **255** | *e*P | | **Pb** | **20 20 27.9** | **0.0** |
| | baz=256 | | | | | | | |
| WSL | | | | *e*S | | **Sg** | **20 20 48.0** | **+1.8** |
| | baz=256 | | | | | | | |
| **TWY** | **Chenhua** | **1.39** | **357** | *e*P | | **Pg** | **20 20 29.6** | **+1.3** |
| | baz=355 | | | | | | | |
| **ICHU** | **Yijhu** | **1.39** | **248** | *e*P | | **Pb** | **20 20 28.4** | **+0.3** |
| | baz=250 | | | | | | | |
| **ECL** | **Taimali** | **1.45** | **208** | *e*P | | **Pn** | **20 20 27.8** | **-0.5** |
| | baz=210 | | | | | | | |
| **CHN3** | **Shinhua** | **1.46** | **237** | *e*P | | **Pg** | **20 20 31.1** | **+1.4** |
| | baz=239 | | | | | | | |
| **CHN8** | **Yiju** | **1.46** | **249** | *e*P | | **Pb** | **20 20 29.1** | **0.0** |
| | baz=249 | | | | | | | |
| CHN8 | | | | *e*S | | **Sg** | **20 20 50.3** | **+1.8** |
| | baz=249 | | | | | | | |
| **SSD** | **Sandimen** | **1.49** | **221** | P | | **Pn** | **20 20 29.6** | **+0.7** |
| | baz=208 | | | | | | | |
| SSD | | | | *e*S | | **Sg** | **20 20 51.1** | **+1.4** |
| | baz=208 | | | | | | | |
| **SHHT** | **Tainan City** | **1.50** | **235** | *e*P | | **Pn** | **20 20 29.6** | **+0.5** |
| | baz=237 | | | | | | | |
| **TSMG** | **Majia** | **1.52** | **220** | *e*P | | **Pn** | **20 20 29.7** | **+0.4** |
| | baz=210 | | | | | | | |
| **TWM1** | **Shoushan** | **1.57** | **228** | *e*P | | **Pg** | **20 20 32.8** | **+1.0** |
| | baz=229 | | | | | | | |
| **SGLT** | **Jiouru** | **1.59** | **224** | *e*P | | **Pb** | **20 20 32.4** | **+0.9** |
| | baz=209 | | | | | | | |
| SGLT | | | | *e*S | | **Sg** | **20 20 57.1** | **+4.1** |
| | baz=209 | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.60** | **218** | *e*P | | **Pn** | **20 20 30.5** | **+0.1** |
| | baz=208 | | | | | | | |
| **EAST** | **Anshuo** | **1.68** | **208** | *e*P | | **Pn** | **20 20 31.4** | **-0.2** |
| | baz=210 | | | | | | | |
| **SCZT** | **Fangliau** | **1.80** | **213** | *e*P | | **Pb** | **20 20 34.9** | **0.0** |
| | baz=201 | | | | | | | |
| **SLIU** | **Shizi** | **1.85** | **206** | *e*P | | **Pb** | **20 20 36.1** | **+0.2** |
| | baz=209 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.92** | **76** | *e*S | | **Sn** | **20 20 59.1** | **-0.1** |
| **PHUB** | **P'eng-hu** | **1.98** | **260** | *e*P | | **Pn** | **20 20 35.1** | **-0.5** |
| | baz=262 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.15** | **80** | P | | **Pn** | **20 20 38.3** | **+0.3** |
| JKRS | | | | *e*S | | **Sn** | **20 21 06.4** | **+1.5** |
| **JIJ** | **Ishigaki jima** | **2.29** | **77** | P | | **Pn** | **20 20 39.3** | **-0.6** |
| JIJ | | | | *e*S | | **Sn** | **20 21 08.2** | **-0.3** |
| **JISG** | **Ishigakijimahi** | **2.49** | **73** | P | | **Pn** | **20 20 42.3** | **-0.4** |
| JISG | | | | *e*S | | **Sn** | **20 21 11.8** | **-1.6** |
| **KNMB** | **Chin-men Tao** | **3.07** | **282** | *e*P | | **Pn** | **20 20 49.8** | **-0.9** |
| | baz=285 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.18** | **327** | *e*P | | **Pn** | **20 20 52.5** | **+0.4** |
| | baz=312 | | | | | | | |
| **AXDP** | **Jialang** | **3.54** | **287** | *e*P | | **Pn** | **20 20 57.2** | **+0.1** |
| | baz=290 | | | | | | | |
| **KSRS** | **Korea Array** | **14.54** | **20** | P | | **P** | **20 23 34.9** | **+0.2** |
| | 0.2nm,0.3s,baz=200,slow=12,SNR=9.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.88** | **260** | P | | **P** | **20 24 57.4** | **+2.1** |
| | 0.9nm,0.9s,baz=66,slow=7.8,SNR=4.3 | | | | | | | |
| **KLR** | **Kul'dur** | **26.51** | **15** | P | | **P** | **20 25 41.1** | **+1.4** |
| | 1.0nm,0.7s,baz=214,slow=7.3,SNR=3.7 | | | | | | | |
| **SONM** | **Songino Array** | **26.82** | **337** | P | | **P** | **20 25 43.1** | **+0.4** |
| | 1.3nm,0.8s,baz=152,slow=9.8,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.87** | **316** | P | | **P** | **20 27 27.7** | **-0.1** |
| | 1.5nm,0.8s,baz=112,slow=10,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.75** | **327** | P | | **P** | **20 27 41.6** | **-1.6** |
| | 1.7nm,0.8s,baz=120,slow=8.8,SNR=6.8 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.16** | **88** | T | | T | 21 12 55.6 | |
| | baz=282,slow=75,SNR=31 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.17** | **88** | T | | T | 21 12 55.5 | |
| | baz=282,slow=75,SNR=18 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.18** | **88** | T | | T | 21 12 56.1 | |
| | baz=282,slow=75,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.27** | **163** | P | | **P** | **20 28 21.7** | **+1.5** |
| | 0.6nm,0.8s,baz=346,slow=8.6,SNR=4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.73** | **165** | P | | **P** | **20 28 46.3** | **-0.9** |
| | 0.4nm,0.8s,baz=336,slow=7.4,SNR=2.7 | | | | | | | |
| **ILAR** | **Eielson Array** | **69.27** | **27** | P | | **P** | **20 31 09.3** | **0.0** |
| | 0.2nm,0.6s,baz=292,slow=7.7,SNR=4.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **71.94** | **330** | P | | **P** | **20 31 21.9** | **-3.7** |
| | 1.1nm,0.8s,baz=55,slow=5.3,SNR=1.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.06** | **23** | P | | **P** | **20 32 26.9** | **-0.9** |
| | 0.9nm,0.6s,baz=314,slow=4.8,SNR=23 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **96.33** | **43** | P | | **P** | **20 33 30.4** | **-1.4** |
| | 0.2nm,0.5s,baz=282,slow=4.2,SNR=2.2 | | | | | | | |

*INMG* ***22*** *20:24:18.3±1.3,35°.61N×3°.79W,h0km,ML2.2, Error ellipse: s-maj=4.6km s-min=2.7km az=43.0*
*CNRM* ***22*** *20:24:18.6,35°.60N×3°.71W,h24km,ml2.8*
*SFS* ***22*** *20:24:18.0,35°.60N×3°.81W,ML2.8, ALBORAN SUR*
**ISC 22 20:24:17.3±1.1,35°.63N±0°.03×3°.69W±0°.03,h16km±9km, n30,σ1°62/53,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.46** | **207** | P | **Pg** | **20 24 26.4** | **-0.2** |
| PALE | | | | S | **Sg** | **20 24 32.3** | **-0.5** |
| **PALE** | **Palemas** | **0.46** | **207** | P | **Pb** | **20 24 27.0** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.69** | **126** | P | **Pn** | **20 24 32.3** | **-0.2** |
| GOG | | | | S | **Sn** | **20 24 42.1** | **-0.8** |
| **GOG** | **Mont Gurugu** | **0.69** | **126** | P | **Pn** | **20 24 32.2** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.12** | **113** | P | **Pg** | **20 24 38.8** | **-0.1** |
| CHAS | | | | S | **Sg** | **20 24 53.5** | **0.0** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **332** | P | **Pb** | **20 24 40.9** | **-0.1** |
| EMAL | | | | S | **Sb** | **20 24 57.1** | **-0.1** |
| **TAF** | **Taforalt** | **1.32** | **128** | P | **Pg** | **20 24 42.4** | **-0.4** |
| TAF | | | | S | **Sb** | **20 24 58.9** | **+0.6** |
| **TAF** | **Taforalt** | **1.32** | **128** | P | **Pb** | **20 24 42.0** | **+0.3** |
| **CEU** | **Ceuta** | **1.40** | **282** | P | **Pn** | **20 24 42.2** | **+0.2** |
| CEU | | | | S | **Sn** | **20 24 55.2** | **-5.0** |
| **CHEFC** | **Chefchaouen** | **1.45** | **249** | P | **Pb** | **20 24 43.5** | **-0.4** |
| CHEFC | | | | S | **Sb** | **20 25 02.6** | **+0.5** |
| **JBK** | **JBK** | **1.58** | **144** | P | **Pn** | **20 24 45.2** | **+0.4** |
| JBK | | | | S | **Sn** | **20 25 04.0** | **-1.0** |
| **JBK** | **JBK** | **1.58** | **144** | P | **Pb** | **20 24 46.0** | **-0.3** |
| **IFR** | **Ifrane** | **2.42** | **210** | P | **Pn** | **20 24 57.6** | **+1.3** |
| IFR | | | | S | **Pn** | **20 25 00.3** | **+4.0** |
| **CZD** | **Col de Zad** | **2.82** | **204** | P | **Pn** | **20 25 03.4** | **+1.5** |
| CZD | | | | S | **Sn** | **20 25 36.6** | **+0.8** |
| **MD31** | **MD31** | **2.89** | **198** | P | **Pn** | **20 25 04.3** | **+1.5** |
| MD31 | | | | S | **Sn** | **20 25 37.1** | **-0.1** |
| **MDT** | **Midelt** | **2.91** | **195** | P | **Pn** | **20 25 04.8** | **+1.9** |
| MDT | | | | S | **Sn** | **20 25 35.5** | **-2.2** |
| **MDT** | **Midelt** | **2.91** | **195** | P | **Pn** | **20 25 04.7** | **+1.7** |
| **ZHG** | **ZHG** | **3.27** | **229** | P | **Pn** | **20 25 08.5** | **+0.6** |
| ZHG | | | | S | **Sb** | **20 25 51.8** | **-2.8** |
| **PVAQ** | **Vaqueiros** | **3.70** | **300** | *e*Pn | **Pn** | **20 25 15.1** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **20 25 56.1** | **-0.9** |
| PVAQ | | | | A | A | 20 25 57.9 | |
| | 3.9nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **300** | P | **Pn** | **20 25 14.4** | **+0.7** |
| PVAQ | | | | S | **Sn** | **20 25 54.6** | **-2.4** |
| **PBDV** | **Barranco-do-Ve** | **3.78** | **296** | *e*Pn | **Pn** | **20 25 15.6** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **20 25 58.7** | **-0.4** |
| PBDV | | | | A | A | 20 26 05.8 | |
| | 2.8nm,0.3s | | | | | | |
| **FIGM** | **Figuig** | **4.03** | **149** | P | **Pn** | **20 25 19.0** | **+0.7** |
| FIGM | | | | S | **Sn** | **20 26 04.7** | **-0.6** |
| **PCVE** | **Castro Verde** | **4.03** | **301** | *e*Pn | **Pn** | **20 25 19.4** | **+1.1** |
| PCVE | | | | *e*Sn | **Sn** | **20 26 04.4** | **-0.8** |
| PCVE | | | | A | A | 20 26 11.8 | |
| | 2.4nm,0.8s | | | | | | |
| **MESJ** | **Messejana** | **4.26** | **303** | *e*Pn | **Pn** | **20 25 23.1** | **+1.7** |
| MESJ | | | | *e*Sn | **Sn** | **20 26 10.6** | **-0.2** |
| MESJ | | | | A | A | 20 26 14.4 | |
| | 3.4nm,0.2s | | | | | | |
| **PESTR** | **Estremoz** | **4.49** | **317** | P | **Pn** | **20 25 29.0** | **+4.4** |
| PESTR | | | | S | **Sn** | **20 26 15.3** | **-1.2** |
| **PNCL** | **Nicolau / Gran** | **4.61** | **304** | *e*Pn | **Pn** | **20 25 27.5** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **20 26 19.0** | **-0.4** |
| PNCL | | | | A | A | 20 26 19.3 | |
| | 2.2nm,1.0s | | | | | | |
| **PMRV** | **Marv??o** | **4.80** | **323** | *e*Pn | **Pn** | **20 25 31.0** | **+2.1** |
| PMRV | | | | A | A | 20 26 56.4 | |
| | 4.0nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.99** | **315** | *e*Pn | **Pn** | **20 25 33.5** | **+2.1** |
| PMTG | | | | *e*Sn | **Sn** | **20 26 28.1** | **-0.6** |
| PMTG | | | | A | A | 20 27 03.1 | |
| | 2.6nm,0.7s | | | | | | |
| **OUZM** | **OUZ** | **5.36** | **210** | P | **Pn** | **20 25 39.4** | **+2.6** |
| **OUK** | **Oukaimeden** | **5.63** | **220** | P | **Pn** | **20 25 41.1** | **+0.5** |
| OUK | | | | S | **Sn** | **20 26 47.0** | **+2.0** |

*VAO* ***22*** *20:29:35.1±0.4, 15°.94S×71°.94W,h18km,mb4.6*
*ARE* ***22*** *20:29:35±1.8, 15°.71S±0°.04×71°.80W±0°.03,h6km±3km, ML4.4,mb4.8/77(NEIC),Error ellipse: s-maj=5.8km s-min=3.2km az=153.0*
*NEIC* ***22*** *20:29:36.6±2.0, 15°.73S±0°.06×71°.81W±0°.06,h15km±3km, Error ellipse: s-maj=10.1km s-min=5.9km az=225.0*
*GCMT* ***22*** *20:29:41.0±0.4, 15°.73S±0°.03×71°.67W±0°.05,h23km±1km, MW4.8/70,Moment Tensor Solution. s15,c17; s70,c83; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=1.89±.23; Mθθ2.19±.13; Mϕϕ-0.29±.15; Mrθ0.07±.18; Mrϕ0.57±.11; Mθϕ-0.20±.33; Best double couple: M₀2.11600×10¹⁶ NP1:φs70.00000°,δ45.00000°,λ-101.00000°. NP2: φs266.00000°,δ46.00000°,λ-79.00000°. Principal axes: T 2.3130, Plg0.0000°, Azm348.0000°; N -0.3930, Plg8.0000°, Azm78.0000°; P -1.9190, Plg82.0000°, Azm255.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*IDC* ***22*** *20:29:47.0±2.5, 15°.36S×71°.30W,h90km±19km,mb3.9/15, mb1 4.0/19,mb1mx4.0/37,mbtmp4.2/19,MS3.7/37, Ms1 3.7/37,ms1mx3.6/65 Error ellipse: s-maj=30.4km s-min=13.4km az=32.0*
**ISC 22 20:29:35.3±0.3,15°.77S±0°.04×71°.78W±0°.05,h10km,n214, σ1°51/196,mb4.7/46,MS3.8/30,4C,Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AP01** | **Chacalluta** | **2.93** | **152** | Pn | **Pn** | **20 30 23.7** | **+1.7** |
| **AP01** | **Chacalluta** | **2.93** | **152** | *e*P | **Pb** | **20 30 26.2** | **-1.5** |
| AP01 | | | | *i* S | **Sb** | **20 31 03.7** | **+0.1** |
| **PB12** | **IPOC Station P** | **3.15** | **154** | | **Pn** | **20 30 26.8** | **+1.6** |
| PB12 | | | | Sn | **Sn** | **20 31 05.7** | **+2.8** |
| **PB12** | **IPOC Station P** | **3.15** | **154** | ⇑*i*P | **Pn** | **20 30 28.4** | **+3.3** |
| PB12 | | | | *i* S | **Sb** | **20 31 08.8** | **-1.3** |
| PB12 | | | | IAML | | 20 31 17.5 | |
| | comp=E,2μm,0.5s | | | | | | |
| **PB16** | **IPOC Station P** | **3.35** | **140** | Pn | **Pn** | **20 30 29.0** | **+0.6** |
| PB16 | | | | | **Pb** | **20 30 33.1** | **-2.1** |
| PB16 | | | | Sn | **Sn** | **20 31 08.7** | **+0.2** |
| **PB16** | **IPOC Station P** | **3.35** | **140** | ⇑*i*P | **Pb

comp=E,72nm,21.9s,baz=278,slow=38
**ATAH Atahualpa 10.75 322** P Pn 20 32 19.4 +10
comp=E,0.3nm,0.3s,baz=321,slow=7.4,SNR=3.8
ATAH LR LR 20 36 38.5
comp=E,2µm,20.7s,baz=167,slow=38
**AC02 Maricunga 11.29 168** Pn **Pn 20 32 17.2 0.0**
**VILB Vilhena 11.56 77** *eP* **Pn 20 32 21.4 +0.8**
**GO03 Copiap 11.86 173** **Pn 20 32 23.8 -0.8**
**PTLB Pontes e Lacer 12.19 90** *eP* **Pn 20 32 29.6 +0.5**
**GO04 Tololo Observa 14.37 177** **Pn 20 32 59.7 +0.7**
**CO03 El Pedregal 15.04 176** **Pn 20 33 10.0 +2.0**
CO03 IAmb IAmb 20 33 26.1
comp=Z,55nm,1.0s
**CO02 Combarbal 15.38 177** Pn **Pn 20 33 13.9 +1.3**
CO02 IAmb IAmb 20 33 41.1
comp=Z,33nm,1.1s
**SALV Santo Antonio 15.48 93** *eP* **Pn 20 33 14.2 +0.3**
**ZON Zonda 15.96 170** **P 20 33 24.2 +0.5**
**AQDB Aquidauana 15.98 109** Pn **Pn 20 33 20.1 -0.3**
**AQDB Aquidauana 15.98 109** *eP* **Pn 20 33 21.9 +1.5**
**CLDB Colider 16.29 75** *eP* **Pn 20 33 25.9 +1.5**
**PP1B Ponte de Pedra 16.29 99** *eP* **Pn 20 33 25.4 +1.0**
**MACA Manacapuru-AM 16.62 42** *eP* **P 20 33 30.3 -0.8**
**VA03 San Esteban 16.96 176** Pn **Pn 20 33 32.1 -0.8**
**CPUP Villa Florida 17.08 130** LR LR 20 41 56.2
comp=Z,56nm,19.0s,baz=316,slow=43
**OTAV Otavalo 17.21 337** Pn **Pn 20 33 35.4 -1.1**
**OTAV Otavalo 17.21 337** *eP* **Pn 20 33 36.6 +0.1**
**MT09 Talagante 17.95 178** P **P 20 33 46.7 +1.0**
**MT01 Popeta 18.02 179** P **Pn 20 33 46.1 +0.1**
**LMEL Las Melosas 18.06 176** P **P 20 33 47.1 +0.1**
**BO04 La Punta 18.17 177** P **P 20 33 49.1 +0.9**
**NPGB Novo Progresso 18.27 64** *eP* **P 20 33 50.1 +0.7**
**SOTA Rioblanco 18.42 345** *eP* **P 20 33 55.6 +4.2**
**BBAC Balboa, Cauca 18.48 343** *eP* **Pn 20 33 54.8 +2.8**
**PCON Cinco Dias 18.55 345** *eP* **Pn 20 33 57.0 +3.9**
**BO01 Tunca 18.56 178** P **Pn 20 33 54.1 +1.6**
**H03N1 Juan Fernandez 18.74 199** T T 20 52 03.6
baz=25,slow=73,SNR=263
**H03N2 Juan Fernandez 18.75 199** T T 20 52 03.4
baz=25,slow=73,SNR=223
**H03N3 Juan Fernandez 18.76 199** T T 20 52 02.5
baz=25,slow=73,SNR=238
**MARP Paez Belalcaza 18.95 347** *eP* **Pn 20 34 01.6 +3.9**
**PTGA Pitinga 18.95 39** P **P 20 33 54.5 -2.3**
comp=Z,0.2nm,0.3s,baz=334,slow=23,SNR=2.0
PTGA LR LR 20 41 11.7
comp=Z,280nm,18.4s,baz=221,slow=37
**BO02 Sierra Bellavi 18.97 177** P **Pn 20 33 58.0 +0.4**
**ARAG Araguaiana, MT 19.22 93** *eP* **P 20 33 59.7 -0.1**
**ITTB Itaituba 19.42 56** *eP* **Pn 20 34 03.1 0.0**
**ITQB Itaqui 19.64 137** **P 20 34 05.0 +0.7**
ITQB IAmb IAmb 20 34 12.5
comp=Z,43nm,0.9s
**ML02 Panimavida 19.92 179** P **Pn 20 34 09.6 +0.7**
ML02 IAmb IAmb 20 34 27.4
comp=Z,41nm,0.9s
**SNDB Serra Nova Dou 20.24 82** *eP* **P 20 34 11.6 +0.7**
**ROSC El Rosal 20.63 353** P **P 20 34 16.1 +0.6**
comp=Z,6.9nm,0.5s,baz=204,slow=23,SNR=1.4
**ROSC El Rosal 20.63 353** IAmb IAmb 20 34 29.7
comp=Z,15nm,0.5s
**GUY2C Guyana, Caldas 21.16 350** *eP* **P 20 34 24.2 +2.9**
**NORC Norcasia 21.41 352** *eP* **P 20 34 25.4 +1.8**
**ITAB Concordia 21.52 125** **P 20 34 24.6 0.0**
ITAB IAmb IAmb 20 34 32.7
comp=Z,41nm,1.3s
**ITAB Concordia 21.52 125** *eP* **P 20 34 24.6 0.0**
**RUSC La Rusia 21.56 356** *eP* **P 20 34 25.4 -0.2**
**CBOC Ciudad Bolivar 21.90 349** *eP* **P 20 34 30.9 +1.9**
**MALB Monte Alegre 22.12 53** *eP* **P 20 34 33.5 +2.3**
**CPSB Cacapava Do Su 22.24 134** *eP* **P 20 34 32.9 +0.5**
**PTBC PUERTO BERRIO, 22.32 352** *eP* **P 20 34 30.4 -3.0**
**IPMB Ipameri, GO 22.66 99** *eP* **P 20 34 35.0 -2.0**
**BDFB Brasilia 22.88 93** P **P 20 34 37.9 -1.5**
comp=Z,4.3nm,0.7s,baz=254,slow=9.9,SNR=5.9
BDFB LR LR 20 44 14.0
comp=Z,239nm,19.0s,baz=357,slow=39
**BDFB Brasilia 22.88 93** **P 20 34 38.2 -1.2**
**PLTB Pedras Altas 22.97 137** P **P 20 34 42.3 +2.2**
PLTB IAmb IAmb 20 34 51.8
comp=Z,36nm,1.4s
**PLTB Pedras Altas 22.97 137** *eP* **P 20 34 39.2 -0.9**
**LC01 Cunco 23.04 180** P **P 20 34 41.4 +0.6**
LC01 IAmb IAmb 20 34 52.0
comp=Z,62nm,1.4s
**DBBC Dabeiba 23.06 349** *eP* **P 20 34 43.7 +2.5**
**PEXB Peixe 23.07 84** *eP* **P 20 34 40.8 -0.5**
**ZARC Zaragoza, Cauc 23.31 352** P **P 20 34 43.9 +0.3**
**ZARC Zaragoza, Cauc 23.31 352** *eP* **P 20 34 43.1 -0.6**
**PRPB Paraupebas 23.55 69** *eP* **P 20 34 46.3 +0.1**
**SOCV Socops 23.91 2** *eP* **P 20 34 49.4 -0.2**
**VAO Valinhos 24.46 111** *eP* **P 20 34 54.0 -0.8**
**SDV Santo Domingo 24.52 3** P **P 20 34 54.6 -0.8**
comp=Z,14nm,0.9s,baz=290,slow=2.8,SNR=9.5
**SDV Santo Domingo 24.52 3** **P 20 34 55.2 -0.2**
SDV IAmb IAmb 20 35 04.8
comp=Z,22nm,1.0s
**SDV Santo Domingo 24.52 3** *eP* **P 20 34 56.1 +0.7**
**SDV Santo Domingo 24.52 3** *eP* **P 20 34 55.2 -0.2**
**SMTB Santa Maria do 24.59 77** *eP* **P 20 34 57.2 +1.2**
**MCPB Macapa, AP 24.77 54** *eP* **P 20 34 58.4 +1.0**
**PLCA Paso Flores 24.90 178** P **P 20 34 59.9 +1.4**
comp=Z,16nm,1.1s,baz=357,slow=11,SNR=9.8
PLCA PcP **PcP 20 38 36.0 +1.8**
comp=Z,3.5nm,1.2s,baz=316,slow=4.6,SNR=3.8
PLCA LR LR 20 45 28.0
comp=Z,36nm,20.3s,baz=358,slow=37
**PLCA Paso Flores 24.90 178** **P 20 34 59.6 +1.1**
PLCA IAmb IAmb 20 35 07.8
comp=Z,26nm,1.1s
**PLCA Paso Flores 24.90 178** *eP* **P 20 34 53.7 -4.8**
**LL04 Puerto Octay 25.06 181** P **P 20 35 01.0 +1.1**
LL04 IAmb IAmb 20 35 11.6
comp=Z,40nm,1.2s
**PARB Paraibuna 25.75 111** *eP* **P 20 35 07.1 +0.8**
**SDBA SAO DESIDERIO 26.27 86** *eP* **P 20 35 10.3 -0.9**
**JANB Januaria 26.48 92** *eP* **P 20 35 11.7 -1.5**
**TMAB Tom-Au,PA,Br 26.86 63** *eP* **P 20 35 18.1 +1.7**
**DIAM Diamantina, MG 26.98 99** *eP* **P 20 35 17.1 -0.6**
**MDP Montagnes des 28.09 44** LR LR 20 46 11.5
comp=Z,218nm,20.8s,baz=244,slow=36
**JTS Las Juntas de 28.99 332** LR LR 20 48 01.2
comp=Z,232nm,18.6s,baz=160,slow=38
**GUA01 Guaratinga, BA 30.70 96** *eP* **P 20 35 49.0 -1.7**
**NBPN Ponto Novo - B 31.10 85** *eP* **P 20 35 52.9 -1.3**
**GDU01 Guandu, BA 31.20 91** *eP* **P 20 35 53.5 -1.5**
**APG El Apazote 35.72 328** P **P 20 36 35.2 +0.6**
comp=Z,2.3nm,0.8s,baz=254,slow=23,SNR=2.2
APG LR LR 20 51 39.5
comp=Z,81nm,18.0s,baz=73,slow=37
**RPN Rapa Nui 36.60 246** LR LR 20 48 03.0
comp=Z,103nm,18.7s,baz=122,slow=30
**CMIG Matias Romero 39.81 324** **P 20 37 11.2 +2.2**
comp=Z,2.9nm,0.9s,baz=145,slow=10,SNR=3.6
CMIG LR LR 20 51 07.5
comp=Z,54nm,19.4s,baz=176,slow=32
**PMSA Palmer Station 49.24 176** LR LR 20 58 25.4
comp=Z,149nm,18.7s,baz=146,slow=35
**152A Waverly Hall 49.73 346** P **P 20 38 27.5 -0.3**
**Y49A Blount Mountai 51.28 344** P **P 20 38 38.8 -0.8**
Y49A IAmb IAmb 20 38 50.7
comp=Z,16nm,0.8s
**X48A Hartselle 52.01 344** P **P 20 38 43.8 -1.2**
X48A IAmb IAmb 20 38 45.2
comp=Z,11nm,0.8s
**TKL Tuckaleechee C 52.39 348** LR LR 21 01 18.8
comp=Z,73nm,21.7s,baz=170,slow=36
**MIAR Mount Ida 54.16 338** P **P 20 39 00.4 -0.4**
MIAR IAmb IAmb 20 39 06.1
comp=Z,11nm,0.8s
**TXAR Lajitas Array 54.39 325** P **P 20 39 03.9 +1.1**
comp=Z,3.1nm,0.8s,baz=125,slow=7.9,SNR=24
TXAR LR LR 21 00 15.4
comp=Z,57nm,20.4s,baz=150,slow=34
**LPIG La Paz 54.64 316** LR LR 20 57 59.2
comp=Z,74nm,19.7s,baz=166,slow=31
**LCAR Lake Charles 54.72 341** P **P 20 39 04.8 -0.1**
LCAR IAmb IAmb 20 39 09.2
comp=Z,7.4nm,1.1s
**W39A Magazine 54.82 338** P **P 20 39 06.5 +0.9**
W39A IAmb IAmb 20 39 11.4
comp=Z,11nm,0.9s
**X37A Clayton 54.88 336** **P 20 39 06.7 +0.7**
X37A IAmb IAmb 20 39 12.0
comp=Z,12nm,1.0s
**ABTX Abilene, Hawle 55.01 331** P **P 20 39 08.0 +0.9**
**U40A Yellville 55.54 339** P **P 20 39 11.1 +0.3**
U40A IAmb IAmb 20 39 15.5
comp=Z,5.4nm,0.9s
**S44A Carbondale 55.66 343** P **P 20 39 10.5 -1.2**
**P53A Whipple 55.69 351** P **P 20 39 11.7 -0.2**
**HHAR Hobbs 55.85 338** P **P 20 39 12.9 -0.1**
**X34A Smith Ranch, M 55.88 334** **P 20 39 13.9 +0.5**
**MGMO Mountain Grove 56.07 340** P **P 20 39 14.5 -0.1**
MGMO IAmb IAmb 20 39 19.4
comp=Z,6.5nm,0.9s
**FVM French Village 56.26 342** P **P 20 39 15.9 -0.1**
FVM IAmb IAmb 20 39 24.2
comp=Z,8.1nm,0.8s
**FNO Franklin 56.27 335** P **P 20 39 16.5 +0.4**
**WMOK Wichita Mounta 56.40 333** P **P 20 39 16.9 -0.1**
**S39A Bolivar 56.90 340** **P 20 39 19.5 -1.1**
S39A IAmb IAmb 20 39 25.1
comp=Z,6.1nm,0.8s
**R40A Maddies Statio 57.11 341** P **P 20 39 21.4 -0.6**
**MNTX Cornudas Mount 57.16 326** **P 20 39 21.6 -0.9**
MNTX IAmb IAmb 20 39 28.1
comp=Z,7.5nm,1.0s
**MSTX Muleshoe 57.60 330** **P 20 39 25.0 -0.7**
MSTX IAmb IAmb 20 39 31.5
comp=Z,16nm,1.1s
**U32A Winter Ranch, 57.89 334** P **P 20 39 27.3 -0.3**
**SADO Sadowa 60.62 354** LR LR 21 09 49.6
comp=Z,56nm,18.1s,baz=186,slow=40
**SDCO Great Sand Dun 61.95 330** P **P 20 39 56.9 +1.1**
**Q24A Divide 62.76 331** P **P 20 40 01.3 +0.1**
Q24A IAmb IAmb 20 40 07.7
comp=Z,5.4nm,0.8s
**ECSD EROS Data Cent 63.42 340** **P 20 40 05.3 +0.1**
**F36A Milaca 64.42 343** **P 20 40 11.4 -0.2**
F36A IAmb IAmb 20 40 16.4
comp=Z,6.5nm,0.8s
**KNB Kanab 65.21 325** P **P 20 40 18.0 +0.8**
KNB IAmb IAmb 20 40 24.8
comp=Z,8.2nm,1.0s
**CCUT Cedar City 65.89 325** P **P 20 40 19.6 -2.1**
CCUT IAmb IAmb 20 40 29.6
comp=Z,4.0nm,0.9s
**P17A Butcher Ranch, 65.89 328** P **P 20 40 20.9 -0.7**
P17A IAmb IAmb 20 40 27.8
comp=Z,6.9nm,0.9s
**MSU Marysvale 65.93 326** P **P 20 40 19.1 -2.9**
**B35A Bob, Littlefor 66.77 344** **P 20 40 26.9 +0.1**
B35A IAmb IAmb 20 40 31.8
comp=Z,12nm,1.2s
**GWY Greenwater Val 66.85 322** P **P 20 40 26.7 -1.1**
**JLU Jordanelle 67.09 328** P **P 20 40 28.6 -0.8**
JLU IAmb IAmb 20 40 35.8
comp=Z,6.5nm,1.0s
**TPNV Topopah Spring 67.12 322** P **P 20 40 29.2 -0.3**
TPNV IAmb IAmb 20 40 36.8
comp=Z,3.6nm,0.9s
**AGMN Agassiz Nation 67.30 343** P **P 20 40 30.1 -0.1**
AGMN IAmb IAmb 20 40 35.5
comp=Z,7.3nm,0.8s
**DUG Dugway, Tooele 67.50 327** **P 20 40 31.6 -0.2**
DUG IAmb IAmb 20 40 38.6
comp=Z,6.3nm,0.9s
**R11A Troy Canyon, C 67.70 324** P **P 20 40 32.0 -1.2**
R11A IAmb IAmb 20 40 40.8
comp=Z,4.3nm,0.9s
**PDAR Pinedale Array 67.81 331** P **P 20 40 34.1 +0.3**
comp=Z,0.8nm,0.9s,baz=165,slow=3.7,SNR=4.4
PDAR LR LR 21 13 19.5
comp=Z,68nm,18.6s,baz=124,slow=39
**PDAR Pinedale Array 67.81 331** P **P 20 40 33.2 -0.6**
**ULM Lac du Bonnet 69.07 344** P **P 20 40 41.0 -0.2**
comp=Z,4.7nm,0.8s,baz=167,slow=6.3,SNR=5.2
ULM LR LR 21 13 39.4
comp=Z,59nm,18.1s,baz=124,slow=38
**ULM Lac du Bonnet 69.07 344** **P 20 40 41.4 +0.1**
ULM IAmb IAmb 20 40 46.2
comp=Z,4.7nm,0.8s
**ELK Elko 69.18 326** P **P 20 40 44.8 +2.3**
comp=Z,1.3nm,0.8s,baz=122,slow=8.4,SNR=2.6
ELK LR LR 21 09 43.0
comp=Z,79nm,21.8s,baz=158,slow=35
**NVAR Mina Array Bea 69.32 322** P **P 20 40 45.0 +1.7**
comp=Z,1.1nm,0.8s,baz=122,slow=5.3,SNR=4.2
NVAR LR LR 21 09 58.1
comp=Z,55nm,18.6s,baz=200,slow=35
**DBIC Dimbokro 69.90 77** P **P 20 40 45.5 -1.7**
comp=Z,6.5nm,0.8s,baz=273,slow=7.8,SNR=8.6
DBIC LR LR 21 09 14.3
comp=Z,58nm,21.0s,baz=246,slow=34
**DBIC Dimbokro 69.90 77** IAmb IAmb 20 40 46.1
comp=Z,7.5nm,0.8s
**YHH Holmes Hill 69.96 331** P **P 20 40 46.7 -0.5**
**SCHQ Schefferville 70.44 3** LR LR 21 13 40.5
comp=Z,49nm,19.5s,baz=146,slow=38
**ORV Oroville 71.94 322** P **P 20 40 58.4 -0.6**
ORV IAmb IAmb 20 41 06.3
comp=Z,5.3nm,0.9s
**YBH Yreka Blue Hor 74.03 323** LR LR 21 12 32.4
comp=Z,52nm,20.2s,baz=150,slow=35
**NEW Newport 75.45 331** LR LR 21 20 19.3
comp=Z,49nm,20.6s,baz=144,slow=40
**B08A Colville Reser 76.57 330** P **P 20 41 24.2 -1.7**
**TORD Torodi Ar. Bea 78.13 73** P **P 20 41 32.9 -2.4**
comp=Z,4.5nm,0.7s,baz=258,slow=5.5,SNR=30
**TORD Torodi Ar. Bea 78.13 73** P **P 20 41 33.2 -2.0**
TORD IAmb IAmb 20 41 34.9
comp=Z,3.8nm,0.8s
**FRB Frobisher Bay 79.30 1** LR LR 21 18 42.6
comp=Z,68nm,19.1s,baz=201,slow=37
**ESDC Sonseca Array 83.75 46** P **P 20 42 03.5 -1.4**
comp=Z,0.6nm,0.8s,baz=258,slow=5.9,SNR=5.3
ESDC LR LR 21 13 53.5
comp=Z,53nm,20.1s,baz=241,slow=32
**ESDC Sonseca Array 83.75 46** P **P 20 42 05.3 +0.4**
**SFJD Kangerlussuaq 84.00 8** LR LR 21 20 27.3
comp=Z,27nm,19.8s,baz=214,slow=36
**DY2G Dye2 84.18 10** *iP* **P 20 42 06.4 -0.2**
**YKA Yellowknife Ar 84.91 342** P **P 20 42 10.6 +0.5**
comp=Z,5.4nm,0.9s,baz=135,slow=4.8,SNR=38
YKA LR LR 21 23 02.7
comp=Z,57nm,18.6s,baz=280,slow=38
**ICESG Greenland Ices 87.67 11** *iP* **P 20 42 23.4 -0.7**
ICESG IAmb IAmb 20 42 24.5
comp=Z,7.5nm,0.8s
**BORG Borgarnes 88.91 19** LR LR 21 19 46.6
comp=Z,33nm,20.5s,baz=233,slow=34
**SUMG Summit 90.87 10** *iP* **P 20 42 40.1 +1.1**
SUMG IAmb IAmb 20 42 44.7
comp=Z,6.3nm,0.9s
**SUMG Summit 90.87 10** P **P 20 42 39.9 +0.8**
**RES Resolute Bay 91.43 354** LR LR 21 24 47.2
comp=Z,61nm,20.5s,baz=94,slow=36
**NEEM North Greenlan 93.81 4** *iP* **P 20 42 54.2 +1.8**
NEEM IAmb IAmb 20 43 00.5
comp=Z,5.5nm,0.9s
**INK Inuvik 94.66 341** LR LR 21 28 44.9
comp=Z,55nm,20.9s,baz=100,slow=38
**ILAR Eielson Array 97.93 335** P **P 20 43 09.7 -1.3**
comp=Z,0.3nm,0.7s,baz=145,slow=3.3,SNR=2.7
**ILAR Eielson Array 97.93 335** P **P 20 43 10.5 -0.6**
**KDAK Kodiak Island 98.37 328** LR LR 21 28 00.3
comp=Z,33nm,21.4s,baz=113,slow=36
**GERES GERESS Array B 98.78 42** LR LR 21 22 19.8
comp=Z,24nm,19.6s,baz=276,slow=32
**CLL Collm 98.93 39** *eP* Pdif 20 43 17.0 +1.1
**NOA NORSAR Array B 100.30 29** LR LR 21 24 45.8
comp=Z,41nm,20.6s,baz=280,slow=33
**STKA Stephens Creek 122.83 214** PKP **PKiKP 20 48 33.6 +1.1**
comp=Z,1.9nm,0.8s,baz=219,slow=5.0,SNR=4.6
**ASAR Alice Springs 133.46 213** PKP **PKiKP 20 48 53.9 -0.1**
comp=Z,0.9nm,0.7s,baz=132,slow=2.0,SNR=11
**ASAR Alice Springs 133.46 213** **PKPdf 20 48 51.6 -1.2**
**WRA Warramunga Arr 136.20 217** PKP **PKPdf 20 48 58.4 +0.4**
comp=Z,3.4nm,1.0s,baz=144,slow=1.8,SNR=16
**WRA Warramunga Arr 136.20 217** **PKPdf 20 48 56.3 -1.7**
**ZALV Zalesovo Beam 137.74 20** PKhKP PKPpre 20 48 55.5
comp=Z,0.6nm,0.6s,baz=300,slow=2.5,SNR=2.7
**ZALV Zalesovo Beam 137.74 20** **PKPdf 20 48 57.5 -2.2**
**MKAR Makanchi Array 142.29 29** PKhKP PKPpre 20 49 04.1
comp=Z,0.8nm,0.8s,baz=336,slow=2.7,SNR=7.2
**USRK Ussuriysk Ar. 145.23 329** PKPbc **PKPdf 20 49 14.2 +0.7**
comp=Z,6.3nm,0.9s,baz=0.0,slow=0.1,SNR=3.1
**MJAR Matsushiro Arr 146.27 314** PKPbc **PKPab 20 49 17.6 +0.2**
comp=Z,11nm,0.9s,baz=62,slow=1.3,SNR=17
**MAT Matsushiro 146.27 314** PKP **PKPdf 20 49 14.8 -0.7**
**SONM Songino Array 147.99 2** PKP **PKPdf 20 49 16.4 -1.7**
comp=Z,0.4nm,0.7s,baz=288,slow=3.2,SNR=38
SONM PKPbc **pPKPdf 20 49 22.3 -0.9**
comp=Z,4.7nm,0.7s,baz=331,slow=2.0,SNR=32
**SONM Songino Array 147.99 2** **PKPbc 20 49 20.2 -1.1**
SONM PKPab **pPKPdf 20 49 22.8 -0.5**
**XLT XiLinHaoTe 151.17 348** *e*PKPbc **PKiKP 20 49 30.6 +0.9**
**KSRS Korea Array 152.24 325** PKPbc **PKPbc 20 49 31.8 +0.1**
comp=Z,4.3nm,0.8s,baz=21,slow=1.9,SNR=13
**PZH PanZhiHua 167.73 28** PKP **PKPdf 20 49 42.0 -0.8**
**CMAR Chiang Mai Arr 170.74 72** PKP **PKPdf 20 49 45.4 +0.7**
comp=Z,0.5nm,1.0s,baz=225,slow=0.8,SNR=1.5
CMAR PKPab **PKPab 20 51 03.1 +0.4**
comp=Z,0.6nm,0.3s,baz=344,slow=3.0,SNR=5.8

**MAN 22 21:01:17.9, 13.62N×121.03E, h34km, mb3.8, ML2.6, MS2.1, 1D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.14** | **213** | *ieP* | | Pb | 21 01 25.3 | +1.1 |
| PGP | | | | *eS* | | Sb | 21 01 30.1 | +1.7 |

*CNRM **22** 21:02:30.9, 35.63N×3.56W, h33km, ml2.1*
*SFS **22** 21:02:31.0, 35.68N×3.53W, h22km, ML2.7, ALBORAN S.*
**ISC 22 21:02:29.6±1.2, 35.71N±0.05×3.55W±0.05, h27km±14km, n8, σ19 37/16, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.59** | **213** | P | | **Pb** | **21 02 41.3** | **-0.1** |
| PALE | | | | S | | **Sn** | **21 02 50.7** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.67** | **137** | P | | **Pb** | **21 02 42.7** | **0.0** |
| GOG | | | | S | | **Sb** | **21 02 50.7** | **-1.0** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **326** | P | | **Pb** | **21 02 52.7** | **-0.2** |
| EMAL | | | | S | | **Sb** | **21 03 09.0** | **+0.3** |
| **TAF** | **Taforalt** | **1.29** | **134** | P | | **Pn** | **21 02 52.4** | **+0.4** |
| TAF | | | | S | | **Sn** | **21 03 08.0** | **-0.4** |
| **CHEFC** | **Chefchaouen** | **1.58** | **248** | P | | **Pn** | **21 02 56.7** | **+0.7** |
| CHEFC | | | | S | | **Sn** | **21 03 12.8** | **-2.8** |
| **JBK** | **JBK** | **1.59** | **149** | P | | **Pn** | **21 02 56.5** | **+0.2** |
| JBK | | | | S | | **Sn** | **21 03 15.7** | **-0.3** |
| **MD31** | **MD31** | **3.01** | **200** | P | | **Pn** | **21 03 18.1** | **+2.5** |
| MD31 | | | | S | | **Sn** | **21 03 49.4** | **-1.4** |
| **MDT** | **Midelt** | **3.02** | **197** | P | | **Pn** | **21 03 17.6** | **+1.8** |
| MDT | | | | S | | **Sn** | **21 03 50.1** | **-1.0** |

*IDC **22** 21:03:44.5±1.5, 36.98N×129.37E, h0km, mb3.3/3, mb1 3.5/5, mb1mx3.2/52, mbtmp3.4/5, ML2.6/2, MS2.8/2, Ms1 2.8/2, ms1mx2.5/37, Error ellipse: s-maj=20.7km s-min=16.5km az=8.0*
**ISC 22 21:03:45.6±1.2, 37.0N±0.1×129.3E±0.1, h10km, n7, σ18 49/5, South Korea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **1.18** | **295** | Pg | | **Pn** | **21 04 07.0** | **-1.2** |
| | 14nm,0.3s,baz=113,slow=18,SNR=111 | | | | | | | |
| KSRS | | | | Lg | | Lg | 21 04 25.9 | |
| | 55nm,0.3s,baz=108,slow=26,SNR=6.8 | | | | | | | |
| **JNU** | **Nakatsue** | **4.06** | **161** | Pn | | **Pn** | **21 04 47.1** | **-0.8** |
| | 0.7nm,0.3s,baz=193,slow=6.4,SNR=1.9 | | | | | | | |
| JNU | | | | Lg | | Lg | 21 05 58.1 | |
| | 0.6nm,0.3s,baz=160,slow=13,SNR=4.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.19** | **91** | LR | | LR | 21 07 52.5 | |
| | comp=Z,48nm,20.5s,baz=306,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.51** | **15** | Pn | | **Pn** | **21 05 34.9** | **-0.4** |
| | baz=196,slow=14,SNR=3.8 | | | | | | | |
| USRK | | | | LR | | LR | 21 08 13.3 | |
| | comp=Z,95nm,20.7s,baz=329,slow=36 | | | | | | | |
| **SONM** | **Songino Array** | **20.01** | **310** | P | | Pn | 21 08 21.0 | +0.8 |
| | 1.2nm,0.8s,baz=118,slow=11,SNR=8.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **35.85** | **301** | P | | **P** | **21 10 47.0** | **+1.5** |
| | 0.1nm,0.9s,baz=89,slow=6.4,SNR=4.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **68.49** | **27** | P | | **P** | **21 14 47.9** | **+0.2** |
| | 0.3nm,0.8s,baz=304,slow=7.3,SNR=5.4 | | | | | | | |

*IDC **22** 21:10:33.2±2.2, 6.86S×129.93E, h118km±19km, mb3.5/5, mb1 3.8/8, mb1mx3.4/32, mbtmp4.1/8, Error ellipse: s-maj=32.7km s-min=18.1km az=77.0*
*DJA **22** 21:10:33.3±0.2, 7.5S±3.3×13.0E±°, h139km±5km, M4.5/13, mB5.2/7, mb4.4/13, MLv4.5/9, Mw(mB)4.6/7*
**ISC 22 21:10:34.1±0.6, 7.06S±0.06×129.94E±0.06, h150km, n30, σ25 23/34, mb3.9/5, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.63** | **124** | P | | **Pn** | **21 11 05.3** | **+0.2** |
| SAUI | | | | S | | **Sn** | **21 11 26.6** | **-2.2** |
| **SAUI** | **Saumlaki** | **1.63** | **124** | P | | **Pn** | **21 11 05.4** | **+0.3** |
| **AAI** | **Ambon** | **3.78** | **332** | P | | **Pn** | **21 11 29.2** | **-2.3** |
| **MSAI** | **Masohi** | **3.83** | **345** | P | | **Pn** | **21 11 30.5** | **-1.7** |
| **DRS** | **Darwin Rock St** | **5.42** | **170** | P | | **Pn** | **21 11 54.1** | **+1.0** |
| **MTN** | **Manton Dam** | **5.87** | **169** | P | | **Pn** | **21 12 00.7** | **+1.6** |
| **KDU** | **Kakadu** | **6.12** | **156** | P | | **Pn** | **21 12 02.9** | **+0.4** |
| **SOEI** | **Soe** | **6.22** | **244** | P | | **Pn** | **21 12 04.6** | **+0.7** |
| | 0.6nm55nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | **6.22** | **244** | P | | **Pn** | **21 12 04.9** | **+1.0** |
| **SIJI** | **Sorong** | **6.29** | **12** | P | | **Pn** | **21 12 00.6** | **-4.2** |
| | 6.5nm,0.3s,baz=207,slow=23,SNR=43 | | | | | | | |
| SIJI | | | | S | | Sn | 21 13 03.5 | -12 |
| | 13nm,0.3s,baz=278,slow=24,SNR=16 | | | | | | | |
| **SANI** | **Sanana** | **6.35** | **321** | P | | **Pn** | **21 12 04.9** | **-0.6** |
| | 0.1nm26nm,0.9s | | | | | | | |
| **SANI** | **Sanana** | **6.35** | **321** | P | | **Pn** | **21 12 05.4** | **-0.1** |
| **BATI** | **Baumata** | **6.95** | **243** | P | | **Pn** | **21 12 13.9** | **+0.2** |
| | 20nm,0.3s,baz=96,slow=2.3,SNR=27 | | | | | | | |
| BATI | | | | S | | **Sn** | **21 13 28.4** | **-3.2** |
| | 25nm,0.3s,baz=277,slow=23,SNR=11 | | | | | | | |
| **BATI** | **Baumata** | **6.95** | **243** | P | | **Pn** | **21 12 13.8** | **+0.2** |
| **TNTI** | **Ternate** | **8.19** | **342** | P | | **Pn** | **21 12 29.1** | **-1.1** |
| **KNRA** | **Kununurra** | **8.64** | **188** | P | | **Pn** | **21 12 36.3** | **+0.2** |
| **BASI** | **Baing, Sumba** | **9.78** | **251** | P | | **Pn** | **21 12 50.1** | **-1.1** |
| | 44nm,0.9s | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **10.75** | **255** | P | | **Pn** | **21 13 04.4** | **+0.2** |
| | 571nm35nm,0.9s | | | | | | | |
| **GENI** | **Genyem** | **11.11** | **67** | P | | **Pn** | **21 13 07.8** | **-1.1** |
| | 4µm34nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.75** | **201** | P | | **Pn** | **21 13 14.9** | **-2.2** |
| | 1.4nm,0.3s,baz=33,slow=11,SNR=64 | | | | | | | |
| FITZ | | | | S | | Sn | 21 15 16.1 | -11 |
| | 3.9nm,0.3s,baz=351,slow=6.2,SNR=12 | | | | | | | |
| **PLAI** | **Plampang** | **12.18** | **261** | P | | **Pn** | **21 13 21.2** | **-1.6** |
| | 14nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.50** | **162** | P | | **Pn** | **21 13 38.5** | **-1.2** |
| | 5.5nm,0.3s,baz=346,slow=13,SNR=101 | | | | | | | |
| WRA | | | | S | | Sn | 21 15 59.3 | -10 |
| | 3.9nm,0.3s,baz=335,slow=23,SNR=6.3 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.71** | **264** | P | | **P** | **21 14 08.2** | **-0.1** |
| | 9.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **16.94** | **167** | P | | **Pn** | **21 14 24.2** | **+1.8** |
| | 3.0nm,0.3s,baz=345,slow=9.9,SNR=91 | | | | | | | |
| ASAR | | | | S | | **S** | **21 17 25.0** | **-5.9** |
| | 0.9nm,0.3s,baz=329,slow=13,SNR=5.1 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **21 22 26.4** | **+5.4** |
| | 0.1nm,0.3s,baz=20,slow=3.0,SNR=2.4 | | | | | | | |
| **TNG** | **Tangerang** | **23.16** | **271** | P | | **P** | **21 15 28.1** | **+0.6** |
| **STKA** | **Stephens Creek** | **26.98** | **158** | P | | **P** | **21 16 06.2** | **+4.3** |
| | 1.3nm,0.3s,baz=320,slow=8.7,SNR=4.8 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.73** | **310** | P | | **P** | **21 17 53.0** | **+0.7** |
| | 0.6nm,0.6s,baz=135,slow=7.4,SNR=7.9 | | | | | | | |
| **SONM** | **Songino Array** | **58.48** | **342** | P | | **P** | **21 20 16.5** | **+1.9** |
| | 0.2nm,0.5s,baz=160,slow=6.4,SNR=4.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.25** | **327** | P | | **P** | **21 21 20.6** | **+1.9** |
| | 1.4nm,0.6s,baz=116,slow=7.5,SNR=27 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.61** | **334** | P | | **P** | **21 21 39.8** | **+0.7** |
| | 0.7nm,0.3s,baz=132,slow=6.0,SNR=4.8 | | | | | | | |

*IDC **22** 21:15:07.9±0.8, 52.82S×25.96E, h0km, mb4.1/8, mb1 4.2/8, mb1mx3.9/26, mbtmp4.2/8, MS3.9/23, Ms1 3.9/23, ms1mx3.7/51, Error ellipse: s-maj=37.9km s-min=17.7km az=84.0*
*NEIC **22** 21:15:09.0±1.8, 52.9S±0.1×25.6E±0.3, h10km±1km, mb4.5/14, Error ellipse: s-maj=27.4km s-min=20.0km az=252.0*
*GCMT **22** 21:15:11.0±0.5

*MW4.9/65,Moment Tensor Solution. s17,c19; s65,c81; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.36±.15; $M_{\theta\theta}$1.40±.13; $M_{\phi\phi}$-1.04±.13; $M_{r\theta}$1.03±.32; $M_{\theta\phi}$1.95±.11; $M_{\phi r}$0.28±.32; Best double couple: $M_o$2.49000×$10^{16}$ NP1:$\phi_s$14.00000°,δ71.00000°,λ173.00000°. NP2: $\phi_s$107.00000°,δ84.00000°,λ20.00000°. Principal axes: T 2.8200, Plg18.0000°, Azm332.0000°; N -0.6600, Plg70.0000°, Azm123.0000°; P -2.1610, Plg9.0000°, Azm239.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 22 21:15:08.9**±0.7,**52.9S**±0.1×**25.7E**±0.2,**h10**km,**n47,** σ1**9**01/28,**mb4.4**/10,**MS3.9**/23,**South of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUR** | **Sutherland** | **20.79** | **348** | P | **P** | **21 19 51.5** | **+1.2** |
| | 16nm,0.8s,baz=159,slow=8.8,SNR=7.0 | | | | | | |
| SUR | | | | LR | LR | 21 25 57.4 | |
| | comp=Z,487nm,21.0s,baz=162,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **20.79** | **348** | | **P** | **21 19 50.7** | **+0.4** |
| SUR | | | | IAmb | IAmb | 21 19 53.4 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **22.63** | **203** | P | **P** | **21 20 12.5** | **+3.0** |
| | comp=Z,12nm,1.2s,baz=16,slow=21,SNR=4.0 | | | | | | |
| **SNAA** | **Sanae** | **22.63** | **203** | P | **P** | **21 20 10.1** | **+0.6** |
| SNAA | | | | IAmb | IAmb | 21 20 14.5 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **MAW** | **Mawson** | **23.11** | **144** | LR | LR | 21 26 59.0 | |
| | comp=Z,394nm,21.2s,baz=128,slow=31 | | | | | | |
| **MAW** | **Mawson** | **23.11** | **144** | P | **P** | **21 20 14.1** | **-0.4** |
| MAW | | | | IAmb | IAmb | 21 20 41.7 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **BOSA** | **Boshof** | **24.25** | **359** | P | **P** | **21 20 26.1** | **+0.1** |
| | comp=Z,7.2nm,0.8s,baz=184,slow=11,SNR=14 | | | | | | |
| BOSA | | | | LR | LR | 21 28 17.2 | |
| | comp=Z,260nm,19.7s,baz=178,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **24.25** | **359** | P | **P** | **21 20 26.1** | **+0.1** |
| BOSA | | | | IAmb | IAmb | 21 20 29.9 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **27.83** | **360** | P | **P** | **21 20 57.9** | **-0.5** |
| | comp=Z,3.4nm,0.9s,baz=309,slow=8.2,SNR=3.5 | | | | | | |
| LBTB | | | | LR | LR | 21 30 04.5 | |
| | comp=Z,224nm,21.0s,baz=175,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **27.83** | **360** | P | **P** | **21 20 59.6** | **+1.3** |
| **MATP** | **Matopo** | **32.47** | **5** | LR | LR | 21 32 43.7 | |
| | comp=Z,87nm,21.5s,baz=175,slow=33 | | | | | | |
| **TSUM** | **Tsumeb** | **34.20** | **346** | LR | LR | 21 33 54.6 | |
| | comp=Z,167nm,20.1s,baz=152,slow=33 | | | | | | |
| **HOPE** | **Hope Point** | **35.88** | **242** | P | **P** | **21 22 06.9** | **-1.7** |
| **QSPA** | **South Pole Qui** | **37.34** | **180** | P | **P** | **21 22 21.4** | **+0.3** |
| | comp=Z,3.5nm,0.7s,baz=248,slow=2.9,SNR=14 | | | | | | |
| QSPA | | | | LR | LR | 21 38 34.7 | |
| | comp=Z,193nm,18.5s,baz=270,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **37.34** | **180** | P | **P** | **21 22 21.3** | **+0.1** |
| QSPA | | | | IAmb | IAmb | 21 22 32.3 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **LSZ** | **Lusaka** | **37.57** | **4** | LR | LR | 21 36 02.1 | |
| | comp=Z,160nm,21.6s,baz=180,slow=33 | | | | | | |
| **PMSA** | **Palmer Station** | **43.95** | **218** | LR | LR | 21 39 10.4 | |
| | comp=Z,205nm,18.3s,baz=120,slow=33 | | | | | | |
| **VNDA** | **Vanda** | **47.05** | **168** | LR | LR | 21 42 36.4 | |
| | comp=Z,209nm,19.0s,baz=234,slow=35 | | | | | | |
| **VNDA** | **Vanda** | **47.05** | **168** | P | **P** | **21 23 40.5** | **+0.6** |
| **SBA** | **Scott Base** | **47.35** | **170** | P | **P** | **21 23 41.2** | **-1.0** |
| **USHA** | **Ushuaia** | **51.42** | **228** | LR | LR | 21 40 23.2 | |
| | comp=Z,115nm,22.0s,baz=121,slow=29 | | | | | | |
| **MBAR** | **Mbarara** | **52.27** | **6** | LR | LR | 21 45 43.0 | |
| | comp=Z,139nm,18.2s,baz=163,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **64.74** | **326** | LR | LR | 21 47 32.9 | |
| | comp=Z,95nm,19.2s,baz=162,slow=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.93** | **335** | P | **P** | **21 26 13.7** | **-0.2** |
| | comp=Z,1.0nm,1.0s,baz=178,slow=6.8,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.93** | **335** | P | **P** | **21 26 13.8** | **-0.1** |
| TORD | | | | IAmb | IAmb | 21 26 22.5 | |
| | comp=Z,2.8nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **79.27** | **155** | LR | LR | 22 02 33.2 | |
| | comp=Z,68nm,18.2s,baz=204,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **81.73** | **118** | P | **P** | **21 27 28.5** | **+0.8** |
| | comp=Z,0.7nm,0.7s,baz=208,slow=5.1,SNR=7.8 | | | | | | |
| **ASAR** | **Alice Springs** | **81.73** | **118** | P | **P** | **21 27 27.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **84.99** | **117** | P | **P** | **21 27 43.6** | **-0.9** |
| | comp=Z,0.6nm,0.8s,baz=212,slow=3.9,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **84.99** | **117** | P | **P** | **21 27 43.5** | **-0.9** |
| **WB2** | **Warramunga Arr** | **84.99** | **117** | P | **P** | **21 27 42.9** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 21 27 57.9 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **85.08** | **117** | P | **P** | **21 27 45.5** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 21 28 07.9 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **85.16** | **116** | P | **P** | **21 27 45.0** | **-0.4** |
| **URZ** | **Urewera** | **85.90** | **158** | LR | LR | 22 03 26.8 | |
| | comp=Z,99nm,21.0s,baz=201,slow=34 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **85.96** | **8** | LR | LR | 22 06 44.4 | |
| | comp=Z,36nm,18.2s,baz=22,slow=36 | | | | | | |
| **MDP** | **Montagnes des** | **87.03** | **282** | LR | LR | 22 01 20.2 | |
| | comp=Z,85nm,18.4s,baz=226,slow=32 | | | | | | |
| **MDT** | **Midelt** | **89.33** | **335** | LR | LR | 22 06 45.4 | |
| | comp=Z,44nm,18.3s,baz=149,slow=35 | | | | | | |
| **KEST** | **Kesra** | **89.39** | **347** | LR | LR | 22 08 42.3 | |
| | comp=Z,70nm,20.5s,baz=230,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **92.76** | **255** | LR | LR | 22 07 28.1 | |
| | comp=Z,40nm,21.4s,baz=95,slow=34 | | | | | | |
| **GNI** | **Garni** | **94.12** | **15** | LR | LR | 22 14 26.3 | |
| | comp=Z,38nm,18.0s,baz=213,slow=38 | | | | | | |
| **ESDC** | **Sonseca Array** | **95.70** | **337** | LR | LR | 22 11 22.9 | |
| | comp=Z,40nm,18.0s,baz=152,slow=35 | | | | | | |
| **KBZ** | **Khabaz** | **97.37** | **12** | LR | LR | 22 12 07.1 | |
| | comp=Z,27nm,20.3s,baz=198,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **148.77** | **269** | PKPbc | **PKPbc** | **21 34 55.8** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=146,slow=2.0,SNR=3.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **148.77** | **269** | | **PKPdf** | **21 34 51.0** | **-1.2** |
| **MA2** | **Magadan** | **149.54** | **55** | PKPbc | **PKiKP** | **21 34 57.9** | **-0.2** |
| | comp=Z,0.9nm,0.3s,baz=223,slow=7.9,SNR=2.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **151.33** | **254** | PKPbc | **PKiKP** | **21 35 03.5** | **+0.6** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=3.6,SNR=3.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **157.07** | **310** | PKPab | **PKPab** | **21 35 34.9** | **+1.0** |
| | comp=Z,0.1nm,0.4s,baz=79,slow=4.4,SNR=2.6 | | | | | | |

*SFS **22** 21:34:43.0,35.59N×3.64W,ML2.8,ALBORAN SUR*
*INMG **22** 21:34:44.4±1.1,35.65N×3.67W,h0km,ML2.2,Error ellipse: s-maj=3.2km s-min=2.8km az=14.0*
*CNRM **22** 21:34:45.9,35.58N×3.49W,h34km,ml2.6*

**ISC 22 21:34:44.7**±1.1,**35.68N**±0.04×**3.49W**±0.03,**h30**km±11km, **n27,**σ1**9**28/48,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.59** | **219** | P | **Pb** | **21 34 56.0** | **-0.5** |
| **PALE** | **Palemas** | **0.59** | **219** | P | **Pb** | **21 34 56.0** | **-0.5** |
| PALE | | | | S | **Sb** | **21 35 04.7** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.61** | **138** | P | **Pb** | **21 34 57.0** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.61** | **138** | P | **Pn** | **21 34 57.4** | **0.0** |
| GOG | | | | S | **Sb** | **21 35 05.0** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **0.99** | **119** | P | **Pn** | **21 35 02.8** | **+0.1** |
| CHAS | | | | S | **Sb** | **21 35 17.2** | **+1.1** |
| **TAF** | **Taforalt** | **1.23** | **134** | P | **Pb** | **21 35 07.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.23** | **134** | P | **Pb** | **21 35 07.0** | **-0.4** |
| TAF | | | | S | **Sn** | **21 35 18.6** | **-3.1** |
| **EMAL** | **Malaga-Limoner** | **1.32** | **325** | P | **Pn** | **21 35 06.7** | **-0.5** |
| EMAL | | | | S | **Sn** | **21 35 23.8** | **0.0** |
| **JBK** | **JBK** | **1.54** | **150** | P | **Pn** | **21 35 11.0** | **+0.7** |
| **JBK** | **JBK** | **1.54** | **150** | P | **Pn** | **21 35 10.2** | **-0.1** |
| JBK | | | | S | **Sn** | **21 35 29.0** | **-0.3** |
| **CEU** | **Ceuta** | **1.55** | **279** | P | **Pn** | **21 35 09.1** | **-1.1** |
| CEU | | | | S | **Sn** | **21 35 25.2** | **-4.0** |
| **CHEFC** | **Chefchaouen** | **1.61** | **250** | P | **Pn** | **21 35 11.5** | **+0.3** |
| CHEFC | | | | S | **Sn** | **21 35 31.1** | **0.0** |
| **IFR** | **Ifrane** | **2.54** | **213** | P | **Pn** | **21 35 24.8** | **+0.7** |
| IFR | | | | S | **Sn** | **21 35 54.1** | **0.0** |
| **MD31** | **MD31** | **2.99** | **201** | P | **Pn** | **21 35 31.4** | **+1.2** |
| MD31 | | | | S | **Sn** | **21 36 05.7** | **+0.5** |
| **MDT** | **Midelt** | **3.00** | **198** | P | **Pn** | **21 35 31.2** | **+0.9** |
| **MDT** | **Midelt** | **3.00** | **198** | P | **Pn** | **21 35 31.2** | **+0.9** |
| MDT | | | | S | **Sn** | **21 36 05.7** | **+0.3** |
| **ZHG** | **ZHG** | **3.42** | **230** | P | **Pn** | **21 35 36.6** | **+0.5** |
| ZHG | | | | S | **Sn** | **21 36 15.6** | **-0.1** |
| **PVAQ** | **Vaqueiros** | **3.81** | **298** | *e*Pn | **Pn** | **21 35 41.4** | **0.0** |
| PVAQ | | | | *e*Sn | **Sn** | **21 36 23.5** | **-1.8** |
| PVAQ | | | | A | A | 21 36 29.8 | |
| | 3.9nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.81** | **298** | P | **Pn** | **21 35 41.6** | **+0.2** |
| PVAQ | | | | S | **Sn** | **21 36 29.2** | **+3.9** |
| **PBDV** | **Barranco-do-Ve** | **3.91** | **295** | *e*Pn | **Pn** | **21 35 42.7** | **0.0** |
| PBDV | | | | *e*Sn | **Sn** | **21 36 25.9** | **-1.7** |
| PBDV | | | | A | A | 21 36 31.0 | |
| | 3.6nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **4.14** | **299** | *e*Pn | **Pn** | **21 35 46.0** | **0.0** |
| PCVE | | | | *e*Sn | **Sn** | **21 36 33.0** | **-0.4** |
| PCVE | | | | A | A | 21 36 34.8 | |
| | 4.9nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.37** | **301** | *e*Pn | **Pn** | **21 35 49.5** | **+0.5** |
| MESJ | | | | *e*Sn | **Sn** | **21 36 38.2** | **-0.7** |
| MESJ | | | | A | A | 21 36 40.8 | |
| | 3.4nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **4.56** | **315** | *e*Sn | **Sn** | **21 36 43.2** | **-0.6** |
| **EVO** | **Evora** | **4.60** | **310** | *e*Pn | **Pn** | **21 35 55.4** | **+3.2** |
| EVO | | | | *e*Sn | **Sn** | **21 36 45.4** | **+0.7** |
| EVO | | | | A | A | 21 36 52.0 | |
| | 2.9nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.71** | **303** | *e*Pn | **Pn** | **21 35 54.0** | **+0.3** |
| PNCL | | | | *e*Sn | **Sn** | **21 36 46.4** | **-1.0** |
| PNCL | | | | A | A | 21 36 48.4 | |
| | 2.5nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **4.86** | **322** | *e*Pn | **Pn** | **21 35 57.3** | **+1.5** |
| PMRV | | | | *e*Sn | **Sn** | **21 36 51.1** | **0.0** |
| PMRV | | | | A | A | 21 36 58.9 | |
| | 1.6nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **5.07** | **313** | *e*Pn | **Pn** | **21 35 59.9** | **+1.3** |
| PMTG | | | | *e*Sn | **Sn** | **21 36 55.5** | **-0.7** |
| PMTG | | | | A | A | 21 37 12.9 | |
| | 1.9nm,1.0s | | | | | | |

**IDC 22 21:38:47.7**±2.0,**28.55N**×**84.03E**,**h0**km,**mb3.4**/4, **mb1 3.5**/5,**mb1mx3.2**/58,**mbtmp3.4**/5,**ML3.1**/1,**MS3.6**/11, **Ms1 3.6**/11,**ms1mx3.2**/62,**Error ellipse: s-maj=63.8km s-min=29.3km az=65.0**,**Nepal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **16.03** | **334** | LR | LR | 21 49 37.5 | |
| | comp=Z,304nm,18.7s,baz=120,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.96** | **123** | LR | LR | 21 50 18.7 | |
| | comp=Z,37nm,19.6s,baz=80,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **18.26** | **356** | P | P | 21 43 03.2 | +0.4 |
| | 0.1nm,0.3s,baz=179,slow=12,SNR=2.5 | | | | | | |
| **GEYT** | **Alibeck** | **23.54** | **300** | LR | LR | 21 54 44.0 | |
| | comp=Z,96nm,18.2s,baz=140,slow=41 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.38** | **1** | P | P | 21 44 16.5 | +0.1 |
| | 0.7nm,0.5s,baz=177,slow=7.5,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **25.91** | **36** | P | P | 21 44 21.5 | -0.1 |
| | 0.1nm,0.5s,baz=232,slow=9.6,SNR=1.4 | | | | | | |
| **PSI** | **Prapat** | **29.28** | **148** | LR | LR | 21 57 34.9 | |
| | comp=Z,95nm,19.8s,baz=217,slow=38 | | | | | | |
| **AKTO** | **Aktyubinsk** | **29.41** | **325** | LR | LR | 21 58 15.3 | |
| | comp=Z,165nm,20.4s,baz=134,slow=40 | | | | | | |
| **ARU** | **Arti** | **33.22** | **334** | LR | LR | 21 59 52.3 | |
| | comp=Z,83nm,19.9s,baz=120,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **37.59** | **65** | LR | LR | 22 02 55.3 | |
| | comp=Z,32nm,21.9s,baz=265,slow=38 | | | | | | |
| **KIRV** | **Kirov** | **38.34** | **331** | LR | LR | 22 03 35.1 | |
| | comp=Z,134nm,21.2s,baz=16,slow=39 | | | | | | |
| **FINES** | **FINESS Array B** | **50.11** | **328** | P | P | 21 47 43.9 | -0.4 |
| | 0.6nm,0.6s,baz=108,slow=8.9,SNR=1.3 | | | | | | |
| FINES | | | | LR | LR | 22 10 38.9 | |
| | comp=Z,164nm,18.5s,baz=172,slow=38 | | | | | | |
| **HFS** | **Hagfors** | **55.95** | **325** | LR | LR | 22 13 39.6 | |
| | comp=Z,173nm,20.0s,baz=132,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **57.19** | **326** | LR | LR | 22 14 27.2 | |
| | comp=Z,60nm,19.4s,baz=165,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.45** | **129** | P | P | 21 49 51.9 | 0.0 |
| | 0.3nm,0.6s,baz=324,slow=6.4,SNR=4.8 | | | | | | |

*IDC **22** 21:42:01.5±2.5,10.28S×153.00E,h0km,mb3.4/4, mb1 3.6/5,mb1mx3.5/33,mbtmp3.5/5,ML1.7/1,MS3.0/3, Ms1 3.0/3,ms1mx2.6/34,Error ellipse: s-maj=56.8km s-min=30.7km az=126.0*

**ISC 22 21:42:06.5**±1.8,**10.4S**±0.2×**153.0E**±0.2,**h35**km,**n7,** σ0**9**99/6,**mb3.6**/3,**D'Entrecasteaux Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.83** | **279** | Pn | **Pn** | **21 43 29.7** | **-0.9** |
| | 1.4nm,0.3s,baz=166,slow=19,SNR=1.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **21 44 37.1** | **+0.9** |
| | 0.8nm,0.3s,baz=326,slow=18,SNR=1.2 | | | | | | |
| PMG | | | | LR | LR | 21 45 47.4 | |
| | comp=Z,70nm,21.5s,baz=212,slow=39 | | | | | | |
| **CTA** | **Charters Tower** | **11.62** | **213** | LR | LR | 21 49 04.8 | |
| | comp=Z,64nm,18.3s,baz=68,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.33** | **240** | P | **P** | **21 46 39.3** | **-0.6** |
| | 0.7nm,0.9s,baz=63,slow=10,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **22.48** | **232** | P | **P** | **21 47 03.8** | **+0.7** |
| | 0.5nm,0.6s,baz=60,slow=9.3,SNR=7.8 | | | | | | |
| **STKA** | **Stephens Creek** | **23.84** | **205** | LR | LR | 21 55 20.1 | |
| | comp=Z,98nm,19.0s,baz=136,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **71.16** | **329** | P | **P** | **21 53 21.5** | **-0.3** |
| | 1.3nm,0.8s,baz=136,slow=5.3,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **84.66** | **319** | P | **P** | **21 54 37.4** | **+0.7** |
| | 0.4nm,0.9s,baz=100,slow=6.7,SNR=3.0 | | | | | | |

*NIC **22** 21:51:45.8±0.0,35.65N×29.40E,h10km±2km,MI3.6/5*
*ISK **22** 21:51:45.1,35.60N×29.39E,h10km,ML3.4/20*
*ATH **22** 21:51:47.9,35.80N×29.37E,h30km±3km,ML3.3/1,Error ellipse: s-maj=6.1km s-min=1.1km az=332.0*
*DDA **22** 21:51:47.3±0.0,35.73N×29.51E,h45km,ML3.4*
*THE **22** 21:51:48.5,35.74N×29.50E,h22km±2km,ML3.2/4,Error ellipse: s-maj=4.4km s-min=1.0km az=111.0*

**ISC 22 21:51:46.7**±1.3,**35.71N**±0.03×**29.46E**±0.02,**h18**km±8km, **n89,**σ1**9**61/127,**Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.45** | **13** | P | **Pb** | **21 51 56.7** | **+0.6** |
| KSL | | | | S | **Sb** | **21 52 04.0** | **+1.4** |
| | 6μm,0.6s | | | | | | |
| **KSL** | **Kastellorizon** | **0.45** | **13** | P | **Pb** | **21 51 56.7** | **+0.6** |
| KSL | | | | S | **Sb** | **21 52 03.8** | **+1.2** |
| KSL | | | | AML | AML | 21 52 05.4 | |
| | comp=E,15019μm,0.9s | | | | | | |
| KSL | | | | AML | AML | 21 52 06.7 | |
| | comp=N,7793μm,0.4s | | | | | | |
| **KSL** | **Kastellorizon** | **0.45** | **13** | P | **Pb** | **21 51 56.3** | **+0.1** |
| KSL | | | | S | **Sn** | **21 52 04.6** | **-1.3** |
| KSL | | | | AMI | | 21 52 05.0 | |
| | comp=N,16nm,0.9s | | | | | | |
| KSL | | | | AMI | | 21 52 05.0 | |
| | comp=N,16nm,0.9s | | | | | | |
| KSL | | | | AMI | | 21 52 07.7 | |
| | comp=N,8.6nm,0.8s | | | | | | |
| KSL | | | | AMI | | 21 52 07.7 | |
| | comp=N,8.6nm,0.8s | | | | | | |
| **AKAS** | **Kas** | **0.54** | **13** | PG | **Pb** | **21 51 58.2** | **+0.5** |
| AKAS | | | | SG | **Sn** | **21 52 07.8** | **-0.5** |
| **AKAS** | **Kas** | **0.54** | **13** | P | **Pb** | **21 51 58.8** | **+1.2** |
| AKAS | | | | S | **Sn** | **21 52 07.6** | **-0.7** |
| AKAS | | | | *i* AML | AML | 21 52 08.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| AKAS | | | | *i* AML | AML | 21 52 08.0 | |
| | comp=N,5μm,1.0s | | | | | | |
| **DEMR** | **Demre-Antalya** | **0.64** | **34** | PG | **Pb** | **21 51 59.9** | **+0.6** |
| **AKUM** | **Antalya-Kumluc** | **0.94** | **49** | P | **Pb** | **21 52 05.2** | **+0.6** |
| AKUM | | | | S | **Sg** | **21 52 17.9** | **+0.5** |
| **FETY** | **Fethiye** | **0.97** | **342** | P | **Pg** | **21 52 05.3** | **-0.3** |
| FETY | | | | S | **Sb** | **21 52 17.6** | **0.0** |
| **FETY** | **Fethiye** | **0.97** | **342** | PG | **Pn** | **21 52 05.9** | **+0.4** |
| **FETY** | **Fethiye** | **0.97** | **342** | P | **Pn** | **21 52 05.7** | **+0.2** |
| FETY | | | | S | **Sb** | **21 52 17.6** | **0.0** |
| FETY | | | | *i* AML | AML | 21 52 20.0 | |
| | comp=N,705nm,0.4s | | | | | | |
| FETY | | | | *i* AML | AML | 21 52 20.0 | |
| | comp=N,932nm,0.3s | | | | | | |
| **ELL** | **Elmali** | **1.10** | **19** | PN | **Pn** | **21 52 08.3** | **+1.0** |
| **ELL** | **Elmali** | **1.10** | **19** | P | **Pb** | **21 52 07.2** | **0.0** |
| ELL | | | | S | **Sn** | **21 52 24.6** | **+2.5** |
| **ARG** | **Arkhangelos** | **1.19** | **295** | P | **Pb** | **21 52 08.6** | **-0.2** |
| ARG | | | | S | **Sb** | **21 52 24.1** | **+0.2** |
| | comp=N,542nm,0.8s | | | | | | |
| **ARG** | **Arkhangelos** | **1.19** | **295** | P | **Pb** | **21 52 08.7** | **-0.2** |
| **ARG** | **Arkhangelos** | **1.19** | **295** | PN | **Pb** | **21 52 08.4** | **-0.4** |
| **ARG** | **Arkhangelos** | **1.19** | **295** | P | **Pb** | **21 52 07.7** | **-1.1** |
| ARG | | | | S | **Sn** | **21 52 26.7** | **+2.4** |
| **CAME** | **Cameli-Denizli** | **1.24** | **354** | PN | **Pg** | **21 52 10.4** | **-0.2** |
| **KEMT** | **Kemer-ANTALYA** | **1.26** | **45** | PN | **Pb** | **21 52 10.9** | **+1.0** |
| **DALY** | **Dalyan (Mula)** | **1.28** | **330** | PN | **Pb** | **21 52 10.6** | **+0.3** |
| **CAEL** | **Denizli, Camel** | **1.42** | **355** | P | **Pn** | **21 52 11.4** | **-0.3** |
| CAEL | | | | S | **Sg** | **21 52 33.2** | **+0.7** |
| CAEL | | | | *i* AML | AML | 21 52 46.0 | |
| | comp=N,800nm,0.9s | | | | | | |
| CAEL | | | | *i* AML | AML | 21 52 56.0 | |
| | comp=N,500nm,0.8s | | | | | | |
| CAEL | | | | *i* AML | AML | 21 52 56.0 | |
| | comp=N,586nm,0.7s | | | | | | |
| **KORT** | **Korkueli** | **1.48** | **29** | PN | **Pb** | **21 52 14.1** | **+0.4** |
| **KORT** | **Korkueli** | **1.48** | **29** | P | **Pn** | **21 52 13.0** | **+0.5** |
| KORT | | | | S | **Sn** | **21 52 31.9** | **+0.4** |
| **GOLH** | **Golhisar** | **1.53** | **3** | P | **Pb** | **21 52 14.6** | **0.0** |
| GOLH | | | | S | **Sg** | **21 52 34.6** | **-1.4** |
| GOLH | | | | *i* AML | AML | 21 52 43.0 | |
| | comp=N,422nm,0.9s | | | | | | |
| GOLH | | | | *i* AML | AML | 21 52 45.0 | |
| | comp=N,528nm,0.9s | | | | | | |
| **ANTB** | **Antalya** | **1.53** | **39** | PN | **Pb** | **21 52 14.9** | **+0.4** |
| **YER** | **Yerkesik** | **1.71** | **327** | P | **Pb** | **21 52 17.2** | **-0.4** |
| **YER** | **Yerkesik** | **1.71** | **327** | PN | **Pn** | **21 52 16.6** | **+0.9** |
| **MULA** | **Mugla, Merkez-** | **1.79** | **330** | P | **Pg** | **21 52 21.1** | **-0.1** |
| MULA | | | | S | **Sn** | **21 52 39.2** | **-0.1** |
| **TAVA** | **DENIZLI_Tavas** | **1.81** | **346** | P | **Pb** | **21 52 18.9** | **-0.5** |
| TAVA | | | | S | **Sn** | **21 52 39.9** | **+0.3** |
| **BUCA** | **Burdur, Bucak-** | **1.84** | **28** | P | **Pg** | **21 52 21.4** | **-0.7** |
| BUCA | | | | S | **Sb** | **21 52 43.1** | **+0.5** |
| **KARP** | **Karpathos** | **1.88** | **266** | P | **Pn** | **21 52 19.6** | **+1.6** |
| KARP | | | | S | **Sn** | **21 52 42.2** | **+0.9** |
| | comp=N,475nm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **1.88** | **266** | P | **Pn** | **21 52 19.6** | **+1.6** |
| **KARP** | **Karpathos** | **1.88** | **266** | PN | **Pn** | **21 52 17.3** | **-0.7** |
| **KARP** | **Karpathos** | **1.88** | **266** | S | **Sn** | **21 52 41.7** | **+0.4** |
| **BCK** | **Bucak** | **1.97** | **27** | PN | **Pn** | **21 52 21.1** | **+1.8** |
| **BRDR** | **BURDUR-Merkez** | **2.04** | **14** | P | **Pn** | **21 52 21.6** | **+1.3** |
| BRDR | | | | S | **Sn** | **21 52 46.0** | **+0.7** |
| **NIS1** | **Nisyros Isl.** | **2.05** | **296** | P | **Pn** | **21 52 20.4** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **2.05** | **296** | P | **Pn** | **21 52 21.0** | **+0.7** |
| **MLSB** | **Milas** | **2.08** | **320** | PN | **Pn** | **21 52 21.8** | **+1.0** |
| **SUTC** | **Sutluce-Ispart** | **2.15** | **35** | PN | **Pn** | **21 52 23.8** | **+1.9** |
| **BODT** | **Bodrum** | **2.20** | **309** | P | **Pn** | **21 52 22.6** | **+0.2** |
| BODT | | | | S | **Sn** | **21 52 46.8** | **-2.3** |
| **BODT** | **Bodrum** | **2.20** | **309** | PN | **Pn** | **21 52 22.5** | **+0.2** |
| **BASM** | **Basmaki-Afyon** | **2.26** | **12** | PN | **Pn** | **21 52 24.9** | **+1.7** |
| **ISP** | **Isparta** | **2.27** | **22** | P | **Pn** | **21 52 24.9** | **+1.4** |
| **ISP** | **Isparta** | **2.27** | **22** | PN | **Pn** | **21 52 25.4** | **+1.9** |
| **GAZI** | **Gazipasa** | **2.38** | **76** | PN | **Pn** | **21 52 26.6** | **+1.8** |
| **GAZI** | **Gazipasa** | **2.38** | **76** | P | **Pn** | **21 52 24.6** | **-0.2** |
| GAZI | | | | S | **Sn** | **21 52 50.3** | **-3.2** |
| GAZI | | | | *i* AML | AML | 21 52 53.0 | |
| | comp=N,169nm,0.7s | | | | | | |
| **AKMS** | **Akamas** | **2.45** | **106** | P | **Pn** | **21 52 26.4** | **+0.6** |
| AKMS | | | | AMI | | 21 52 54.0 | |
| | comp=N,0.8nm,0.5s | | | | | | |
| AKMS | | | | AMI | | 21 52 54.1 | |
| | comp=N,0.6nm,0.6s | | | | | | |
| **DDIM** | **Aydin, Didim** | **2.50** | **315** | P | **Pb** | **21 52 30.1** | **-0.9** |
| DDIM | | | | S | **Sb** | **21 53 01.7** | **+0.3** |
| **BAGO** | **Egridir - ISPA** | **2.51** | **25** | P | **Pn** | **21 52 29.1** | **+2.4** |
| BAGO | | | | S | **Sn** | **21 52 56.9** | **-0.2** |
| **SEDI** | **Konya, Seydise** | **2.54** | **46** | P | **Pn** | **21 52 29.5** | **+2.4** |
| SEDI | | | | S | **Sn** | **21 52 57.9** | **+0.2** |
| SEDI | | | | *i* AML | AML | 21 53 02.0 | |
| | comp=N,169nm,0.4s | | | | | | |
| **SEYD** | **Seydisehir-KON** | **2.56** | **48** | PN | **Pn** | **21 52 29.3** | **+1.9** |
| **KZIL** | **AFYON_Kizioren** | **2.60** | **12** | P | **Pn** | **21 52 28.4** | **+0.4** |
| KZIL | | | | S | **Sn** | **21 52 55.6** | **-3.6** |
| **ALFC** | **Alefka** | **2.62** | **101** | P | **Pn** | **21 52 28.7** | **+0.5** |
| ALFC | | | | AMI | | 21 52 59.1 | |
| | comp=N,0.6nm,0.5s | | | | | | |
| ALFC | | | | AMI | | 21 52 59.6 | |
| | comp=N,0.6nm,0.6s | | | | | | |
| **PASA** | **Karahalli, USA** | **2.63** | **0** | P | **Pn** | **21 52 30.0** | **+1.6** |
| PASA | | | | S | **Sn** | **21 52 58.5** | **-1.5** |
| **OSC1** | **CSNet OBS 1** | **2.67** | **145** | S | **Sn** | **21 53 01.6** | **+1.0** |
| **GCAM** | **G?zelcami?** | **2.67** | **319** | PN | **Pn** | **21 52 30.0** | **+1.1** |
| **GCAM** | **G?zelcami?** | **2.67** | **319** | P | **Pn** | **21 52 28.9** | **0.0** |
| GCAM | | | | S | **Sn** | **21 52 56.3** | **-4.5** |
| **NATA** | **Nata** | **2.71** | **109** | P | **Pn** | **21 52 30.4** | **+1.0** |
| **HDMB** | **Hadim** | **2.75** | **62** | PN | **Pn** | **21 52 31.9** | **+1.8** |
| **LEF** | **Lefka** | **2.86** | **101** | P | **Pn** | **21 52 31.2** | **-0.3** |
| LEF | | | | S | **Sn** | **21 53 00.3** | **-5.3** |
| **KULA** | **Kula-Manisa**

**ISC 22 21:53:51.2±2.5, 31°70S±0°02′×72°24W±0°04, h5km±15km, n128, σ1§56/165, mb4.7/10, 7C-3D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **1.15** | **27** | | **Pn** | **21 54 12.9** | **-1.0** |
| CO06 | | | | | **Sb** | **21 54 26.8** | **-1.8** |
| **CO06** | **Fray Jorge** | **1.15** | **27** | ⇑*iP* | **Pn** | **21 54 12.9** | **-1.0** |
| CO06 | | | | *i* S | **Sb** | **21 54 27.4** | **-1.2** |
| **CO02** | **Combarbal** | **1.17** | **65** | Pg | **Pn** | **21 54 12.3** | **-2.0** |
| CO02 | | | | | **Sb** | **21 54 26.0** | **-3.4** |
| **CO02** | **Combarbal** | **1.17** | **65** | ⇓*iP* | **Pn** | **21 54 12.3** | **-2.0** |
| CO02 | | | | *i* S | **Sb** | **21 54 26.1** | **-3.4** |
| CO02 | | | | IAML | | 21 54 27.3 | |
| | comp=N,15μm,0.2s | | | | | | |
| **VA06** | **Catapilco** | **1.18** | **137** | | **Pn** | **21 54 13.7** | **-0.6** |
| VA06 | | | | | **Sb** | **21 54 28.6** | **-1.0** |
| **VA06** | **Catapilco** | **1.18** | **137** | ⇓*iP* | **Pn** | **21 54 13.7** | **-0.6** |
| VA06 | | | | *i* S | **Sb** | **21 54 28.2** | **-1.3** |
| VA06 | | | | IAML | | 21 54 30.4 | |
| | comp=E,14μm,0.6s | | | | | | |
| **VA01** | **Torpederas** | **1.41** | **159** | Pn | **Pn** | **21 54 17.7** | **+0.1** |
| VA01 | | | | Sn | **Sn** | **21 54 34.2** | **-2.3** |
| **VA01** | **Torpederas** | **1.41** | **159** | *eP* | **Pn** | **21 54 17.9** | **+0.4** |
| **CO03** | **El Pedregal** | **1.58** | **58** | | **Pn** | **21 54 19.2** | **-0.8** |
| CO03 | | | | Sn | **Sn** | **21 54 37.9** | **-2.9** |
| **CO03** | **El Pedregal** | **1.58** | **58** | ⇓*iP* | **Pn** | **21 54 19.1** | **-0.8** |
| CO03 | | | | *i* S | **Sn** | **21 54 37.3** | **-3.5** |
| CO03 | | | | IAML | | 21 54 44.4 | |
| | comp=N,6μm,0.4s | | | | | | |
| **ROCH** | **El Roble** | **1.64** | **141** | ⇑*iP* | **Pn** | **21 54 21.0** | **+0.1** |
| ROCH | | | | *i* S | **Sn** | **21 54 41.7** | **-0.8** |
| ROCH | | | | IAML | | 21 54 44.4 | |
| | comp=N,11μm,0.3s | | | | | | |
| **ROC1** | **El Roble** | **1.64** | **141** | | **Pn** | **21 54 19.8** | **-1.2** |
| **ROC1** | **El Roble** | **1.64** | **141** | *eP* | **Pn** | **21 54 19.6** | **-1.4** |
| ROC1 | | | | *eS* | **Sn** | **21 54 41.1** | **-1.5** |
| **VA03** | **San Esteban** | **1.78** | **127** | | **Pn** | **21 54 22.9** | **+0.1** |
| **VA03** | **San Esteban** | **1.78** | **127** | ⇑*iP* | **Pn** | **21 54 22.8** | **+0.1** |
| VA03 | | | | *i* S | **Sn** | **21 54 44.1** | **-1.7** |
| VA03 | | | | IAML | | 21 54 52.5 | |
| | comp=E,9μm,0.5s | | | | | | |
| **MT02** | **Curacav** | **1.81** | **149** | | **Pn** | **21 54 23.4** | **+0.3** |
| **MT02** | **Curacav** | **1.81** | **149** | *eP* | **Pn** | **21 54 23.4** | **+0.3** |
| MT02 | | | | *eS* | **Sn** | **21 54 43.3** | **-3.2** |
| **PEL** | **Peldehue** | **1.95** | **138** | Pn | **Pn** | **21 54 25.3** | **+0.3** |
| **PEL** | **Peldehue** | **1.95** | **138** | ⇑*eP* | **Pn** | **21 54 25.3** | **+0.3** |
| PEL | | | | *eS* | **Sn** | **21 54 47.6** | **-2.3** |
| PEL | | | | IAML | | 21 54 55.7 | |
| | comp=E,4μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.95** | **138** | *eP* | **Pn** | **21 54 25.5** | **+0.5** |
| PEL | | | | *eS* | **Sn** | **21 54 46.9** | **-3.0** |
| PEL | | | | *eS* | **Sb** | **21 54 52.2** | **+0.3** |
| **GO04** | **Tololo Observa** | **1.96** | **40** | | **Pn** | **21 54 24.9** | **-0.4** |
| **GO04** | **Tololo Observa** | **1.96** | **40** | ⇑*iP* | **Pn** | **21 54 24.7** | **-0.7** |
| **GO04** | **Tololo Observa** | **1.96** | **40** | *eP* | **Pn** | **21 54 25.3** | **0.0** |
| GO04 | | | | *eS* | **Sb** | **21 54 52.4** | **+0.1** |
| **CO05** | **La Serena** | **1.97** | **26** | Pn | **Pn** | **21 54 25.1** | **-0.1** |
| **CO05** | **La Serena** | **1.97** | **26** | *eP* | **Pn** | **21 54 24.7** | **-0.5** |
| CO05 | | | | *eS* | **Sn** | **21 54 49.3** | **-1.1** |
| CO05 | | | | IAML | | 21 55 02.3 | |
| | comp=N,3μm,0.6s | | | | | | |
| **VA05** | **Santo Domingo** | **2.02** | **165** | Pn | **Pn** | **21 54 26.5** | **+0.5** |
| **VA05** | **Santo Domingo** | **2.02** | **165** | IAML | | 21 55 07.0 | |
| | comp=E,6μm,0.5s | | | | | | |
| **MT05** | **Renca** | **2.11** | **143** | Pn | **Pn** | **21 54 27.8** | **+0.6** |
| **MT05** | **Renca** | **2.11** | **143** | *eP* | **Pn** | **21 54 28.3** | **+1.0** |
| MT05 | | | | *eS* | **Sn** | **21 54 53.2** | **-0.7** |
| MT05 | | | | IAML | | 21 55 03.2 | |
| | comp=E,7μm,0.3s | | | | | | |
| **MT03** | **Universidad Ad** | **2.31** | **141** | | **Pn** | **21 54 30.7** | **+0.7** |
| **MT03** | **Universidad Ad** | **2.31** | **141** | ⇑*iP* | **Pn** | **21 54 30.7** | **+0.7** |
| MT03 | | | | *i* S | **Sn** | **21 54 57.8** | **-1.1** |
| MT03 | | | | IAML | | 21 55 06.9 | |
| | comp=E,6μm,0.6s | | | | | | |
| **MT01** | **Popeta** | **2.31** | **159** | | **Pn** | **21 54 30.7** | **+0.7** |
| **MT01** | **Popeta** | **2.31** | **159** | *eP* | **Pn** | **21 54 30.7** | **+0.7** |
| MT01 | | | | *eS* | **Sn** | **21 54 55.9** | **-2.9** |
| MT01 | | | | IAML | | 21 55 12.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **MT09** | **Talagante** | **2.33** | **153** | Pn | **Pn** | **21 54 31.2** | **+0.9** |
| **MT09** | **Talagante** | **2.33** | **153** | ⇑*iP* | **Pn** | **21 54 31.6** | **+1.3** |
| MT09 | | | | IAML | | 21 55 12.2 | |
| | comp=E,2μm,0.1s | | | | | | |
| **AUSP** | **Uspallata** | **2.48** | **103** | *eP* | **Pn** | **21 54 34.7** | **+2.2** |
| AUSP | | | | *eS* | **Sb** | **21 55 07.4** | **0.0** |
| **BO04** | **La Punta** | **2.67** | **149** | Pn | **Pn** | **21 54 35.9** | **+1.1** |
| **BO04** | **La Punta** | **2.67** | **149** | *eP* | **Pn** | **21 54 36.0** | **+1.1** |
| BO04 | | | | IAML | | 21 55 16.7 | |
| | comp=E,1μm,0.2s | | | | | | |
| **LMEL** | **Las Melosas** | **2.75** | **142** | | **Pn** | **21 54 37.2** | **+1.1** |
| **LMEL** | **Las Melosas** | **2.75** | **142** | IAML | | 21 55 21.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| **BO03** | **Pichilemu** | **2.80** | **175** | *eP* | **Pn** | **21 54 37.3** | **+0.7** |
| **AROD** | **Rodeo** | **2.83** | **58** | *eP* | **Pn** | **21 54 39.4** | **+2.1** |
| AROD | | | | *eS* | **Sb** | **21 55 16.6** | **-0.8** |
| **BO01** | **Tunca** | **2.86** | **160** | | **Pn** | **21 54 38.3** | **+0.9** |
| **BO01** | **Tunca** | **2.86** | **160** | *eP* | **Pn** | **21 54 38.3** | **+0.9** |
| BO01 | | | | *eS* | **Sn** | **21 55 10.6** | **-1.6** |
| **ACCO** | **Cerro Coronel** | **2.94** | **69** | *eP* | **Pn** | **21 54 41.4** | **+2.5** |
| ACCO | | | | *eS* | **Sb** | **21 55 20.1** | **+0.6** |
| **LCO** | **Las Campanas** | **2.99** | **27** | Pn | **Pn** | **21 54 38.9** | **-0.6** |
| **LCO** | **Las Campanas** | **2.99** | **27** | *eP* | **Pn** | **21 54 38.8** | **-0.7** |
| LCO | | | | *eS* | **Sn** | **21 55 15.9** | **+0.1** |
| **ASAL** | **Salagasta** | **3.02** | **108** | *eP* | **Pn** | **21 54 43.1** | **+3.3** |
| ASAL | | | | *eS* | **Sb** | **21 55 21.9** | **-0.9** |
| **ARCO** | **CERRO ARCO** | **3.03** | **113** | *eP* | **Pn** | **21 54 43.1** | **+3.2** |
| ARCO | | | | *eS* | **Sn** | **21 55 19.4** | **+2.8** |
| **ZON** | **Zonda** | **3.04** | **88** | *eP* | **Pn** | **21 54 42.6** | **+2.5** |
| ZON | | | | *eS* | **Sb** | **21 55 21.5** | **-1.8** |
| **ACDV** | **Cuesta del Vie** | **3.08** | **61** | *eP* | Pn | 21 54 27.9 | -13 |
| ACDV | | | | *eS* | **Sb** | **21 55 25.0** | **+0.4** |
| **RTCV** | **Cerro Valdivia** | **3.16** | **94** | *eP* | **Pn** | **21 54 44.4** | **+2.8** |
| **AAGR** | **Agrelo** | **3.20** | **116** | *eP* | **Pn** | **21 54 45.7** | **+3.4** |
| **RTLL** | **Cerro Villicun** | **3.24** | **84** | *eP* | **Pn** | **21 54 44.9** | **+2.2** |
| RTLL | | | | *eS* | **Sb** | **21 55 29.4** | **+0.5** |
| **GO05** | **Huala** | **3.31** | **176** | Pn | **Pn** | **21 54 43.9** | **+0.2** |
| **GO05** | **Huala** | **3.31** | **176** | *eP* | **Pn** | **21 54 44.1** | **+0.4** |
| **GO05** | **Huala** | **3.31** | **176** | *eP* | **Pn** | **21 54 44.1** | **+0.4** |
| GO05 | | | | *eS* | **Sn** | **21 55 21.1** | **-2.4** |
| **BO02** | **Sierra Bellavi** | **3.32** | **159** | Pn | **Pn** | **21 54 45.0** | **+1.1** |
| **BO02** | **Sierra Bellavi** | **3.32** | **159** | *eP* | **Pn** | **21 54 44.9** | **+1.1** |
| BO02 | | | | IAML | | 21 55 40.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **AVIZ** | **Vizcacheras** | **3.61** | **120** | *eP* | **Pn** | **21 54 50.6** | **+2.8** |
| AVIZ | | | | *eS* | **Sg** | **21 55 46.9** | **-0.2** |
| **AC04** | **Llanos de Chal** | **3.63** | **17** | Pn | **Pn** | **21 54 48.3** | **+0.3** |
| **AC04** | **Llanos de Chal** | **3.63** | **17** | IAML | | 21 55 59.0 | |
| | comp=E,419nm,0.6s | | | | | | |
| **ML02** | **Panimavida** | **4.11** | **171** | Pn | **Pn** | **21 54 55.5** | **+0.9** |
| **RFA** | **San Rafael** | **4.40** | **135** | *eP* | **Pn** | **21 55 00.7** | **+1.9** |
| RFA | | | | *eS* | **Sb** | **21 56 04.4** | **+1.9** |
| **GO03** | **Copiap** | **4.45** | **24** | Pn | **Pn** | **21 54 59.5** | **+0.1** |
| **GO03** | **Copiap** | **4.45** | **24** | *eP* | **Pn** | **21 55 00.0** | **+0.6** |
| GO03 | | | | *eP* | **Pn** | **21 55 00.7** | **+1.3** |
| GO03 | | | | *eS* | **Sn** | **21 55 53.9** | **+2.4** |
| **VCA** | **Vinchina** | **4.57** | **51** | *eP* | **Pn** | **21 55 03.7** | **+2.6** |
| VCA | | | | *eP* | **Pn** | **21 55 04.4** | **+3.2** |
| VCA | | | | *eS* | **Sn** | **21 55 57.9** | **+3.1** |
| VCA | | | | IAML | | 21 56 27.8 | |
| | comp=Z,788nm,0.8s | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **5.07** | **77** | *eP* | **Pn** | **21 55 10.3** | **+2.3** |
| APLL | | | | *eS* | **Sn** | **21 56 06.9** | **0.0** |
| **ACLC** | **CERRO LA CRUZ** | **5.09** | **65** | *eP* | **Pn** | **21 55 09.2** | **+0.8** |
| ACLC | | | | *eS* | **Sn** | **21 56 06.9** | **-0.7** |
| ACLC | | | | *eS* | **Sb** | **21 56 20.2** | **-2.3** |
| ACLC | | | | IAML | | 21 56 20.4 | |
| | comp=Z,570nm,0.9s | | | | | | |
| **BI05** | **Punta Hualpn** | **5.10** | **189** | Pn | **Pn** | **21 55 07.7** | **-0.5** |
| **AC02** | **Maricunga** | **5.56** | **30** | Pn | **Pn** | **21 55 14.4** | **-0.6** |
| **MRA** | **San Martin** | **5.58** | **99** | *eP* | **Pn** | **21 55 15.9** | **+0.9** |
| MRA | | | | *eS* | **Sn** | **21 56 18.9** | **-0.7** |
| MRA | | | | IAML | | 21 56 57.6 | |
| | comp=Z,548nm,0.7s | | | | | | |
| **TCA** | **Tanti** | **6.54** | **89** | *eP* | **Pn** | **21 55 27.9** | **-0.2** |
| TCA | | | | *eS* | **Sn** | **21 56 41.4** | **-1.7** |
| TCA | | | | *eS* | **Sn** | **21 56 44.4** | **+1.3** |
| **LC01** | **Cunco** | **7.19** | **178** | Pn | **Pn** | **21 55 37.1** | **+0.1** |
| **FSA** | **Cafayete** | **7.82** | **46** | *eP* | **Pn** | **21 55 48.2** | **+2.5** |
| **LR04** | **Corral** | **8.22** | **186** | Pn | **Pn** | **21 55 53.1** | **+2.1** |
| **PLCA** | **Paso Flores** | **9.12** | **172** | Pn | **Pn** | **21 56 05.6** | **+2.1** |
| | comp=Z,0.6nm,0.3s,baz=330,slow=12,SNR=14 | | | | | | |
| PLCA | | | | Lg | Lg | 21 58 34.0 | |
| | comp=Z,0.1nm,0.3s,baz=330,slow=13,SNR=1.0 | | | | | | |
| PLCA | | | | LR | LR | 21 59 47.5 | |
| | comp=Z,304nm,21.9s,baz=344,slow=39 | | | | | | |
| **PLCA** | **Paso Flores** | **9.12** | **172** | Pn | **Pn** | **21 56 05.2** | **+1.7** |
| **LL04** | **Puerto Octay** | **9.19** | **181** | Pn | **Pn** | **21 56 05.7** | **+1.2** |
| **LVC** | **Limon Verde** | **9.53** | **19** | Pn | **Pn** | **21 56 07.8** | **-1.5** |
| | comp=Z,0.3nm,0.3s,baz=245,slow=5.1,SNR=2.0 | | | | | | |
| LVC | | | | LR | LR | 21 59 32.8 | |
| | comp=Z,180nm,21.3s,baz=198,slow=36 | | | | | | |
| **LVC** | **Limon Verde** | **9.53** | **19** | | **Pn** | **21 56 07.6** | **-1.8** |
| **CPUP** | **Villa Florida** | **14.10** | **71** | Pn | **Pn** | **21 57 10.3** | **-1.3** |
| | comp=Z,0.4nm,0.3s,baz=36,slow=20,SNR=1.9 | | | | | | |
| CPUP | | | | Sn | **Sn** | **21 59 42.1** | **-6.3** |
| | comp=Z,0.1nm,0.3s,baz=175,slow=13,SNR=3.1 | | | | | | |
| CPUP | | | | LR | LR | 22 02 57.4 | |
| | comp=Z,282nm,18.2s,baz=254,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **14.10** | **71** | | **Pn** | **21 57 10.1** | **-1.5** |
| **LPAZ** | **La Paz** | **15.79** | **15** | Pn | **Pn** | **21 57 34.9** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=194,slow=4.5,SNR=7.0 | | | | | | |
| **LPAZ** | **La Paz** | **15.79** | **15** | | **Pn** | **21 57 35.0** | **0.0** |
| **ITAB** | **Concordia** | **18.06** | **81** | | **Pn** | **21 58 03.5** | **+0.6** |
| **SIV** | **San Ignacio** | **18.66** | **36** | P | **P** | **21 58 08.7** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=223,slow=10,SNR=8.9 | | | | | | |
| SIV | | | | LR | LR | 22 06 29.8 | |
| | comp=Z,127nm,18.7s,baz=154,slow=41 | | | | | | |
| **BDFB** | **Brasilia** | **27.25** | **60** | P | **P** | **21 59 34.8** | **-1.8** |
| | comp=Z,6.9nm,0.8s,baz=232,slow=9.2,SNR=8.6 | | | | | | |
| **BDFB** | **Brasilia** | **27.25** | **60** | P | **P** | **21 59 34.3** | **-2.2** |
| BDFB | | | | IAmb | IAmb | 21 59 36.7 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **PTGA** | **Pitinga** | **32.92** | **23** | LR | LR | 22 13 54.7 | |
| | comp=Z,73nm,19.7s,baz=196,slow=37 | | | | | | |
| **CELP** | **Cerrillos** | **49.79** | **7** | P | **P** | **22 02 45.0** | **+0.1** |
| **VNA3** | **Neumayer Olymp** | **51.55** | **158** | P | **P** | **22 02 58.8** | **+1.1** |
| **VNA2** | **Neumayer--Watz** | **52.20** | **158** | P | **P** | **22 03 03.2** | **+0.7** |
| | baz=286,slow=9.5 | | | | | | |
| **SNAA** | **Sanae** | **53.78** | **158** | P | **P** | **22 03 15.0** | **+0.8** |
| **SNAA** | **Sanae** | **53.78** | **158** | P | **P** | **22 03 15.6** | **+1.3** |
| **TXAR** | **Lajitas Array** | **67.65** | **331** | P | **P** | **22 04 50.4** | **+1.1** |
| | comp=Z,0.2nm,0.6s,baz=128,slow=8.1,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.65** | **331** | P | **P** | **22 04 49.9** | **+0.6** |
| **LIC** | **Lamto** | **74.22** | **72** | *eP* | **P** | **22 05 28.9** | **-0.6** |
| | comp=Z,41nm,1.5s | | | | | | |
| **TIC** | **Toumodi** | **74.47** | **72** | *eP* | **P** | **22 05 30.5** | **-0.5** |
| **KIC** | **Kosan Boka** | **74.53** | **72** | *eP* | **P** | **22 05 30.8** | **-0.5** |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **74.62** | **72** | P | **P** | **22 05 31.1** | **-0.7** |
| | comp=Z,7.7nm,0.8s,baz=233,slow=5.6,SNR=8.9 | | | | | | |
| **DBIC** | **Dimbokro** | **74.62** | **72** | P | **P** | **22 05 30.9** | **-0.9** |
| DBIC | | | | IAmb | IAmb | 22 05 32.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **KOWA** | **Kowa** | **79.85** | **66** | P | **P** | **22 06 01.0** | **-0.2** |
| KOWA | | | | IAmb | IAmb | 22 06 01.5 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **TSUM** | **Tsumeb** | **80.01** | **106** | LR | LR | 22 36 16.0 | |
| | comp=Z,82nm,21.8s,baz=155,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **81.30** | **118** | P | **P** | **22 06 08.7** | **-0.3** |
| | comp=Z,3.5nm,0.8s,baz=316,slow=7.4,SNR=6.0 | | | | | | |
| **BOSA** | **Boshof** | **81.30** | **118** | P | **P** | **22 06 09.0** | **0.0** |
| BOSA | | | | IAmb | IAmb | 22 06 35.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **81.64** | **333** | P | **P** | **22 06 12.2** | **+1.9** |
| | comp=Z,0.1nm,0.4s,baz=140,slow=5.7,SNR=1.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.90** | **325** | P | **P** | **22 06 13.8** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=161,slow=6.7,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.90** | **325** | P | **P** | **22 06 12.5** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **83.59** | **70** | P | **P** | **22 06 20.4** | **-0.5** |
| | comp=Z,5.0nm,0.7s,baz=263,slow=4.9,SNR=27 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.59** | **70** | P | **P** | **22 06 20.1** | **-0.8** |
| TORD | | | | IAmb | IAmb | 22 06 21.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.83** | **341** | P | **Pdif** | **22 07 36.1** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=146,slow=4.2,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.67** | **210** | PKP | **PKiKP** | **22 12 49.2** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=150,slow=1.6,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.67** | **210** | | **PKPdf** | **22 12 47.5** | **-1.2** |
| **ABKAR** | **Akbulak array** | **140.36** | **50** | PKPdf | **PKPdf** | **22 13 21.4** | **+0.4** |
| **BRVK** | **Borovoye** | **145.61** | **41** | | **PKPab** | **22 13 31.6** | **+1.0** |
| **TOLI2** | **Tolitoli** | **147.18** | **205** | PKPbc | **PKPbc** | **22 13 36.9** | **+0.7** |
| **CHGR** | **Chuyangaron** | **147.87** | **67** | PKPbc | **PKiKP** | **22 13 39.3** | **-0.1** |
| **KKAR** | **Karatay Array** | **148.54** | **58** | PKPbc | **PKPbc** | **22 13 39.3** | **+0.3** |
| **GAR** | **Garm** | **148.77** | **66** | PKPbc | **PKPbc** | **22 13 40.5** | **+0.7** |
| **AAK** | **Ala-Archa** | **151.50** | **58** | PKPbc | **PKiKP** | **22 13 47.5** | **+0.6** |
| **ZAA0** | **Zalesovo Array** | **152.35** | **30** | PKPbc | **PKiKP** | **22 13 48.5** | **+0.5** |
| **ZALV** | **Zalesovo Beam** | **152.35** | **30** | PKPbc | **PKiKP** | **22 13 48.3** | **+0.3** |
| | comp=Z,5.2nm,0.7s,baz=300,slow=3.2,SNR=27 | | | | | | |
| **KULM** | **Kulim** | **152.90** | **164** | PKPbc | **PKiKP** | **22 13 50.5** | **+0.1** |
| **MKAR** | **Makanchi Array** | **155.32** | **45** | PKPbc | PKPdf | 22 13 54.7 | +9.3 |
| | comp=Z,0.3nm,0.7s,baz=5.8,slow=2.7,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **155.32** | **45** | | PKPdf | 22 13 54.2 | +8.8 |
| **SONM** | **Songino Array** | **163.85** | **3** | PKPab | **PKPab** | **22 14 48.3** | **+0.7** |
| | comp=Z,0.5nm,0.9s,baz=322,slow=2.3,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **163.85** | **3** | PKPdf | **PKPdf** | **22 13 56.0** | **+0.8** |

*DDA **22** 22:18:08.1±0.0, 37°.46N×26°.95E, h12km±1km, ML2.7*
*ISK **22** 22:18:08.1, 37°.46N×27°.00E, h2km, ML2.7/11*

**ISC 22 22:18:08.5±1.0, 37°47′N±0°02′×26°97′E±0°03, h14km±7km, n28, σ0§67/50, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DDIM** | **Aydin, Didim** | **0.21** | **93** | P | **Pg** | **22 18 13.4** | **+0.2** |
| DDIM | | | | S | **Sg** | **22 18 16.9** | **+0.5** |
| **GCAM** | **G?zelcaml?** | **0.31** | **41** | PG | **Pb** | **22 18 15.3** | **-0.6** |
| GCAM | | | | SG | **Sb** | **22 18 20.8** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.31** | **41** | P | **Pg** | **22 18 15.2** | **+0.2** |
| GCAM | | | | S | **Sb** | **22 18 20.6** | **-0.2** |
| GCAM | | | | *i* AML | AML | 22 18 21.0 | |
| | comp=Z,868nm,0.5s | | | | | | |
| GCAM | | | | *i* AML | AML | 22 18 21.0 | |
| | comp=N,2μm,0.1s | | | | | | |
| GCAM | | | | *i* AML | AML | 22 18 21.0 | |
| | comp=E,2μm,0.1s | | | | | | |
| **YKAV** | **Yalikavak-Bodr** | **0.42** | **144** | PG | **Pg** | **22 18 16.8** | **-0.1** |
| YKAV | | | | SG | **Sg** | **22 18 22.6** | **+0.1** |
| **BODT** | **Bodrum** | **0.48** | **146** | PG | **Pg** | **22 18 16.9** | **-0.1** |
| BODT | | | | SG | **Sb** | **22 18 25.6** | **-0.2** |
| **DGB** | **zmir** | **0.59** | **353** | P | **Pg** | **22 18 19.7** | **-0.4** |
| DGB | | | | S | **Sb** | **22 18 29.8** | **+0.9** |
| **GMLD** | **Gumuldur** | **0.61** | **356** | PG | **Pb** | **22 18 20.9** | **-0.1** |
| GMLD | | | | SG | **Sb** | **22 18 30.4** | **+1.0** |
| **MLSB** | **Milas** | **0.66** | **105** | PG | **Pg** | **22 18 20.8** | **-0.6** |
| MLSB | | | | SG | **Sb** | **22 18 30.9** | **0.0** |
| **KOSK** | **Kos Island** | **0.71** | **180** | PG | **Pb** | **22 18 22.7** | **0.0** |
| KOSK | | | | SG | **Sb** | **22 18 33.3** | **+0.9** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.86** | **334** | P | **Pg** | **22 18 24.6** | **-0.5** |
| ZEYE | | | | S | **Sb** | **22 18 36.6** | **+0.1** |
| ZEYE | | | | *i* AML | AML | 22 18 40.0 | |
| | comp=N,189nm,0.4s | | | | | | |
| **URLA** | **Izmir** | **0.94** | **342** | PG | **Pb** | **22 18 27.3** | **+0.7** |
| URLA | | | | SG | **Sn** | **22 18 41.0** | **+0.3** |
| **URLA** | **Izmir** | **0.94** | **342** | P | **Pg** | **22 18 26.3** | **-0.4** |
| URLA | | | | S | **Sb** | **22 18 39.9** | **+0.9** |
| **MULA** | **Mugla, Merkez-** | **1.09** | **101** | P | **Pb** | **22 18 29.6** | **+0.3** |
| MULA | | | | S | **Sn** | **22 18 44.6** | **+0.1** |
| **YER** | **Yerkesik** | **1.09** | **107** | PG | **Pn** | **22 18 29.8** | **+0.3** |
| YER | | | | SG | **Sn** | **22 18 45.3** | **+0.8** |
| **TURN** | **Turunc** | **1.23** | **124** | PN | **Pg** | **22 18 32.0** | **-0.1** |
| TURN | | | | SN | **Sn** | **22 18 49.5** | **+1.9** |
| **TURN** | **Turunc** | **1.23** | **124** | P | **Pb** | **22 18 31.0** | **-0.4** |
| TURN | | | | S | **Sg** | **22 18 46.7** | **-1.4** |
| **DALY** | **Dalyan (Mula)** | **1.49** | **115** | PN | **Pg** | **22 18 36.7** | **-0.4** |
| **ZEDA** | **zmir-Bergama** | **1.50** | **3** | P | **Pn** | **22 18 33.8** | **-1.2** |
| ZEDA | | | | S | **Sb** | **22 18 55.9** | **+0.9** |
| **TAVA** | **DENIZLI_Tavas** | **1.54** | **89** | P | **Pb** | **22 18 37.1** | **+0.2** |
| TAVA | | | | S | **Sb** | **22 18 56.9** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.55** | **143** | PN | **Pg** | **22 18 37.5** | **-0.8** |
| **AKHS** | **Akhisar** | **1.56** | **25** | P | **Pg** | **22 18 39.0** | **+0.5** |
| AKHS | | | | S | **Sn** | **22 18 58.7** | **-0.1** |
| **DKL** | **Dikili** | **1.60** | **358** | PN | **Pg** | **22 18 38.7** | **-0.6** |
| **KULA** | **Kula-Manisa** | **1.69** | **51** | PN | **Pb** | **22 18 40.0** | **+0.5** |
| **AYVA** | **Ayvalik** | **1.85** | **353** | S | **Sg** | **22 19 08.2** | **+0.1** |
| **STEP** | **BALIKESIR_Sava** | **2.00** | **17** | P | **Pb** | **22 18 45.6** | **+1.0** |
| STEP | | | | S | **Sg** | **22 19 12.0** | **-0.7** |
| **BUHA** | **Balikesir, Bur** | **2.03** | **2** | P | **Pb** | **22 18 45.3** | **+0.1** |
| BUHA | | | | S | **Sg** | **22 19 12.6** | **-1.2** |
| **USAK** | **Uak-Merkez** | **2.04** | **52** | P | **Pg** | **22 18 47.0** | **-0.6** |
| USAK | | | | S | **Sg** | **22 19 13.3** | **-0.8** |
| USAK | | | | *i* AML | AML | 22 20 05.0 | |
| | comp=N,43nm,3.6s | | | | | | |
| USAK | | | | *i* AML | AML | 22 20 05.0 | |
| | comp=E,70nm,2.4s | | | | | | |
| **DEMI** | **Demirci** | **2.09** | **41** | P | **Pg** | **22 18 48.5** | **0.0** |

*JMA **22** 22:19:11.1±0.1, 41°.47N×142°.65E, h32km±3km, M3.2*
*IDC **22** 22:19:12.8±2.0, 42°.43N×142°.31E, h0km, mb3.5/7, mb1 3.7/8, mb1mx3.5/53, mbtmp3.5/8, ML2.4/1, MS3.2/2, Ms1 3.2/2, ms1mx2.5/76, Error ellipse: s-maj=45.9km s-min=25.6km az=146.0*

**ISC 22 22:19:08.2±1.4, 41°50N±0°04′×142°65E±0°04, h10km±9km, n35, σ0§90/36, mb3.5/7, 2C, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JEM** | **Erimo** | **0.64** | **36** | P | **Pn** | **22 19 23.8** | **+0.4** |
| JEM | | | | *eS* | **Sn** | **22 19 33.3** | **-0.4** |
| **JNBK** | **Urakawa-nobuka** | **0.78** | **6** | ⇑P | **Pn** | **22 19 26.1** | **+0.7** |
| JNBK | | | | *eS* | **Sn** | **22 19 37.7** | **+0.5** |
| **JSHD** | **Hidakashinhida** | **0.92** | **352** | ⇑P | **Pn** | **22 19 28.7** | **+1.4** |
| **JTHR** | **Tokachihiroo** | **0.93** | **31** | P | **Pn** | **22 19 28.3** | **+0.9** |
| JTHR | | | | *eS* | **Sn** | **22 19 41.2** | **+0.4** |
| **JAHD** | **Aomorihigashid** | **1.01** | **257** | P | **Pn** | **22 19 29.0** | **+0.5** |
| JAHD | | | | *eS* | **Sb** | **22 19 42.1** | **+0.8** |
| **JARK** | **Aomorirokkasho** | **1.08** | **243** | P | **Pn** | **22 19 30.4** | **+0.9** |
| **JOT** | **Ohata** | **1.21** | **265** | P | **Pn** | **22 19 31.8** | **+0.6** |
| **JCH** | **Churui** | **1.23** | **25** | P | **Pn** | **22 19 33.1** | **+1.5** |
| **JIAM** | **Iburiatsuma** | **1.25** | **334** | P | **Pn** | **22 19 34.0** | **+2.2** |
| **JKB** | **Kayabe** | **1.27** | **288** | P | **Pn** | **22 19 32.7** | **+0.6** |
| JKB | | | | *eS* | **Sn** | **22 19 48.7** | **-0.5** |
| **JBT2** | **Biratori 2** | **1.30** | **351** | P | **Pg** | **22 19 34.2** | **+1.1** |
| **JTM** | **Tenmabayashi** | **1.39** | **240** | P | **Pb** | **22 19 35.0** | **+0.7** |
| JTM | | | | *eS* | **Sg** | **22 19 53.4** | **+0.5** |
| **JANG** | **Nango** | **1.41** | **218** | P | **Pn** | **22 19 34.6** | **+0.5** |
| **JNB** | **Noboribetsu** | **1.54** | **309** | P | **Pb** | **22 19 36.3** | **-0.6** |
| JNB | | | | *eS* | **Sb** | **22 19 55.6** | **-0.9** |
| **JEW** | **Eniwo** | **1.61** | **327** | P | **Pg** | **22 19 38.5** | **-0.6** |
| JEW | | | | *eS* | **Sg** | **22 19 59.6** | **-0.4** |
| **JOB** | **Onbets** | **1.66** | **32** | P | **Pg** | **22 19 39.7** | **-0.3** |
| **JFR** | **Furan** | **1.66** | **359** | P | **Pg** | **22 19 39.5** | **-0.7** |
| **JSR** | **Shiriuchi** | **1.68** | **272** | *eS* | **Sb** | **22 20 00.3** | **0.0** |
| **JYM2** | **Yakumo 2** | **1.81** | **291** | P | **Pb** | **22 19 41.5** | **0.0** |
| JYM2 | | | | *eS* | **Sb** | **22 20 03.9** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **6.04** | **216** | Pn | **Pb** | **22 20 52.9** | **-0.7** |
| | 0.1nm,0.3s,baz=78,slow=12,SNR=1.9 | | | | | | |
| **KLR** | **Kul'dur** | **10.88** | **319** | LR | LR | 22 25 48.4 | |
| | comp=Z,33nm,20.9s,baz=194,slow=39 | | | | | | |
| **SEY** | **Seymchan** | **22.23** | **12** | P | **P** | **22 24 02.5** | **-2.3** |
| | 0.7nm,0.6s,baz=180,slow=19,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **26.37** | **296** | P | **P** | **22 24 45.3** | **+0.6** |
| | 0.2nm,0.4s,ba

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| O20K | | | | | | Sn | 22 22 05.6 | +0.2 | |
| **O20K** | **Slope Mountain** | **2.03** | **41** | P | | Pn | 22 21 39.4 | +0.7 | |
| | baz=222 | | | | | | | | |
| O20K | | | | S | | Sn | 22 22 05.9 | +0.5 | |
| | baz=222 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **2.11** | **163** | | | Pn | 22 21 38.9 | -0.7 | |
| SII | | | | | | Sn | 22 22 04.8 | -2.1 | |
| SII | | | | IAML | | | 22 22 06.0 | | |
| | comp=N,2μm,0.6s | | | | | | | | |
| **HOM** | **Homer** | **2.16** | **58** | Pn | | Pn | 22 21 41.3 | +1.1 | |
| HOM | | | | Sn | | Sn | 22 22 07.8 | -0.3 | |
| **HOM** | **Homer** | **2.16** | **58** | S | | Sn | 22 22 08.2 | +0.1 | |
| | baz=240 | | | | | | | | |
| **ANNW** | **Aniakchak Nort** | **2.26** | **226** | | | Pn | 22 21 41.8 | +0.3 | |
| **N19K** | **Bonanza Creek** | **2.28** | **10** | Pn | | Pn | 22 21 42.3 | +0.6 | |
| **N19K** | **Bonanza Creek** | **2.28** | **10** | P | | Pn | 22 21 42.2 | +0.5 | |
| | baz=190 | | | | | | | | |
| N19K | | | | S | | Sn | 22 22 11.3 | +0.5 | |
| | baz=190 | | | | | | | | |
| **RDWB** | **Redoubt West** | **2.28** | **32** | | | Pn | 22 21 42.0 | +0.2 | |
| RDWB | | | | | | Sn | 22 22 10.8 | -0.2 | |
| **RSO** | **Redoubt South** | **2.29** | **33** | Pn | | Pn | 22 21 42.4 | +0.4 | |
| **RDJH** | **Redoubt Jeurge** | **2.38** | **31** | | | Pn | 22 21 43.3 | +0.3 | |
| **ANPB** | **Aniakchak Plen** | **2.40** | **224** | | | Pn | 22 21 42.8 | -0.4 | |
| **DFR** | **Drift River** | **2.41** | **32** | | | Pn | 22 21 43.7 | +0.3 | |
| **RDT** | **Redoubt** | **2.48** | **35** | | | Pn | 22 21 44.5 | +0.4 | |
| **SVW2** | **Sparrevohn** | **2.53** | **357** | | | Pn | 22 21 45.0 | +0.2 | |
| **BRLK** | **Bradley Lake** | **2.55** | **60** | Pn | | Pn | 22 21 46.3 | +1.2 | |
| BRLK | | | | IAML | | | 22 22 19.4 | | |
| | comp=E,386nm,0.3s | | | | | | | | |
| BRLK | | | | IAML | | | 22 22 20.4 | | |
| | comp=N,334nm,0.1s | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **2.61** | **61** | | | Pn | 22 21 45.7 | -0.1 | |
| BRSE | | | | | | Sn | 22 22 16.2 | -1.8 | |
| **BRSE** | **Bradley Lake S** | **2.61** | **61** | P | | Pn | 22 21 46.2 | +0.4 | |
| | baz=244 | | | | | | | | |
| BRSE | | | | S | | Sn | 22 22 16.2 | -1.8 | |
| | baz=244 | | | | | | | | |
| **CHGN** | **Chignik** | **2.84** | **218** | | | Pn | 22 21 47.9 | -0.8 | |
| **CHGN** | **Chignik** | **2.84** | **218** | P | | Pn | 22 21 47.9 | -0.8 | |
| | baz=36,SNR=8.4 | | | | | | | | |
| **SPWE** | **Spurr West** | **3.03** | **26** | | | Pn | 22 21 52.3 | +1.1 | |
| **CAPN** | **Captain Cook N** | **3.03** | **42** | Pn | | Pn | 22 21 53.0 | +1.9 | |
| CAPN | | | | IAML | | | 22 22 33.3 | | |
| | comp=N,579nm,0.6s | | | | | | | | |
| CAPN | | | | IAML | | | 22 22 34.0 | | |
| | comp=E,648nm,0.5s | | | | | | | | |
| **CAPN** | **Captain Cook N** | **3.03** | **42** | P | | Pn | 22 21 51.6 | +0.5 | |
| | baz=225 | | | | | | | | |
| CAPN | | | | S | | Sn | 22 22 28.4 | +0.9 | |
| | baz=225 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **3.05** | **29** | | | Pn | 22 21 52.1 | +0.7 | |
| **SPCR** | **Spurr Chakacha** | **3.05** | **29** | P | | Pn | 22 21 51.9 | +0.5 | |
| | baz=211,SNR=16 | | | | | | | | |
| SPCR | | | | S | | Sn | 22 22 28.3 | +0.1 | |
| | baz=211 | | | | | | | | |
| **SPBG** | **Spurr Blockage** | **3.06** | **27** | | | Pn | 22 21 52.8 | +1.2 | |
| **SPU** | **Mount Spurr** | **3.08** | **30** | | | Pn | 22 21 48.6 | -3.1 | |
| **SPCG** | **Spurr Capps Gl** | **3.18** | **30** | | | Pn | 22 21 53.8 | +0.6 | |
| **VNSG** | **Veniaminof 6** | **3.21** | **222** | | | Pn | 22 21 53.1 | -0.4 | |
| **SLKM** | **Skilak Lake** | **3.22** | **51** | | | Pn | 22 21 53.5 | -0.1 | |
| **SEW** | **Seward** | **3.35** | **60** | Pn | | Pn | 22 21 56.0 | +0.8 | |
| **SEW** | **Seward** | **3.35** | **60** | P | | Pn | 22 21 55.9 | +0.7 | |
| | baz=245 | | | | | | | | |
| SEW | | | | S | | Sn | 22 22 32.3 | -2.7 | |
| | baz=245 | | | | | | | | |
| **M19K** | **Big River Lodg** | **3.37** | **7** | Pn | | Pn | 22 21 56.2 | +0.7 | |
| **STLK** | **Strandline Lak** | **3.40** | **29** | | | Pn | 22 21 56.8 | +0.9 | |
| **O22K** | **Cooper Landing** | **3.41** | **54** | Pn | | Pn | 22 21 56.8 | +0.8 | |
| **O22K** | **Cooper Landing** | **3.41** | **54** | P | | Pn | 22 21 56.4 | +0.4 | |
| | baz=238 | | | | | | | | |
| **L19K** | **White Mountain** | **3.62** | **3** | Pn | | Pn | 22 21 59.5 | +0.7 | |
| **L19K** | **White Mountain** | **3.62** | **3** | P | | Pn | 22 21 59.4 | +0.6 | |
| | baz=184,SNR=28 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **3.76** | **46** | | | Pn | 22 22 00.6 | 0.0 | |
| RC01 | | | | IAML | | | 22 22 43.4 | | |
| | comp=E,310nm,0.4s | | | | | | | | |
| RC01 | | | | IAML | | | 22 22 44.6 | | |
| | comp=N,294nm,0.4s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **3.76** | **46** | P | | Pn | 22 22 00.5 | 0.0 | |
| | baz=230 | | | | | | | | |
| RC01 | | | | S | | Sn | 22 22 42.3 | -2.3 | |
| | baz=230 | | | | | | | | |
| **L20K** | **Farewell, AK** | **3.98** | **9** | | | Pn | 22 22 04.3 | +0.8 | |
| **L20K** | **Farewell, AK** | **3.98** | **9** | P | | Pn | 22 22 04.4 | +1.0 | |
| | baz=191 | | | | | | | | |
| **M22K** | **Willow** | **4.10** | **37** | Pn | | Pn | 22 22 04.7 | -0.2 | |
| **M22K** | **Willow** | **4.10** | **37** | P | | Pn | 22 22 04.9 | 0.0 | |
| | baz=221,SNR=5.0 | | | | | | | | |
| **PWL** | **Port Wells** | **4.19** | **54** | | | Pn | 22 22 05.8 | -0.5 | |
| **PWL** | **Port Wells** | **4.19** | **54** | P | | Pn | 22 22 05.8 | -0.5 | |
| | baz=240 | | | | | | | | |
| PWL | | | | S | | Sn | 22 22 51.4 | -3.4 | |
| | baz=240 | | | | | | | | |
| **SDPT** | **Sand Point** | **4.31** | **224** | Pn | | Pn | 22 22 07.1 | -0.8 | |
| SDPT | | | | IAML | | | 22 22 45.6 | | |
| | comp=E,79nm,4.2s | | | | | | | | |
| SDPT | | | | IAML | | | 22 23 02.1 | | |
| | comp=N,93nm,4.1s | | | | | | | | |
| **SDPT** | **Sand Point** | **4.31** | **224** | P | | Pn | 22 22 06.7 | -1.1 | |
| | baz=40 | | | | | | | | |
| **PMR** | **Palmer** | **4.31** | **43** | | | Pn | 22 22 06.8 | -1.0 | |
| PMR | | | | IAML | | | 22 22 56.1 | | |
| | comp=E,106nm,0.3s | | | | | | | | |
| PMR | | | | IAML | | | 22 22 56.2 | | |
| | comp=N,89nm,0.4s | | | | | | | | |
| **PMR** | **Palmer** | **4.31** | **43** | P | | Pn | 22 22 06.7 | -1.1 | |
| | baz=228 | | | | | | | | |
| **TT01** | **Tatalina** | **4.36** | **355** | | | Pn | 22 22 09.1 | +0.6 | |
| **TTA** | **Tatalina** | **4.38** | **356** | | | Pn | 22 22 09.3 | +0.4 | |
| **TTA** | **Tatalina** | **4.38** | **356** | P | | Pn | 22 22 08.7 | -0.2 | |
| | baz=175,SNR=8.5 | | | | | | | | |
| **CHNA** | **Chernabura Isl** | **4.44** | **214** | P | | Pn | 22 22 07.6 | -2.0 | |
| | baz=31 | | | | | | | | |
| **KNK** | **Knik Glacier** | **4.45** | **47** | Pn | | Pn | 22 22 08.9 | -0.8 | |
| KNK | | | | IAML | | | 22 22 58.7 | | |
| | comp=E,159nm,0.8s | | | | | | | | |
| KNK | | | | IAML | | | 22 23 00.2 | | |
| | comp=N,173nm,0.4s | | | | | | | | |
| **KNK** | **Knik Glacier** | **4.45** | **47** | P | | Pn | 22 22 08.7 | -1.0 | |
| | baz=233,SNR=9.6 | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **4.45** | **214** | Pn | | Pn | 22 22 07.9 | -1.9 | |
| CNBA | | | | IAML | | | 22 23 00.0 | | |
| | comp=N,71nm,1.2s | | | | | | | | |
| CNBA | | | | IAML | | | 22 23 07.2 | | |
| | comp=E,64nm,0.7s | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **4.51** | **42** | | | Pn | 22 22 09.5 | -1.0 | |
| GHO | | | | IAML | | | 22 23 01.4 | | |
| | comp=N,147nm,0.4s | | | | | | | | |
| GHO | | | | IAML | | | 22 23 01.8 | | |
| | comp=E,148nm,0.6s | | | | | | | | |
| **CUT** | **Chulitna** | **4.57** | **31** | Pn | | Pn | 22 22 11.3 | +0.1 | |
| CUT | | | | IAML | | | 22 23 03.6 | | |
| | comp=E,207nm,0.3s | | | | | | | | |
| CUT | | | | IAML | | | 22 23 04.5 | | |
| | comp=N,184nm,0.5s | | | | | | | | |
| **CUT** | **Chulitna** | **4.57** | **31** | P | | Pn | 22 22 11.2 | 0.0 | |
| | baz=215,SNR=12 | | | | | | | | |
| CUT | | | | S | | Sn | 22 23 01.3 | -2.3 | |
| | baz=215 | | | | | | | | |
| **PPLA** | **Purkeypile** | **4.59** | **18** | Pn | | Pn | 22 22 13.7 | +2.0 | |
| **PPLA** | **Purkeypile** | **4.59** | **18** | P | | Pn | 22 22 13.6 | +2.0 | |
| | baz=200,SNR=18 | | | | | | | | |
| **Q23K** | **Middleton Isla** | **4.69** | **76** | Pn | | Pn | 22 22 12.7 | -0.1 | |
| **MID** | **Middleton Isla** | **4.70** | **76** | Pn | | Pn | 22 22 12.7 | -0.2 | |
| **GLI** | **Glacier Island** | **4.74** | **57** | Pn | | Pn | 22 22 13.1 | -0.4 | |
| **GLI** | **Glacier Island** | **4.74** | **57** | P | | Pn | 22 22 12.6 | -1.0 | |
| | baz=244 | | | | | | | | |
| **SML** | **Sawmill** | **4.74** | **44** | | | Pn | 22 22 12.4 | -1.2 | |
| SML | | | | IAML | | | 22 23 14.6 | | |
| | comp=E,86nm,1.4s | | | | | | | | |
| SML | | | | IAML | | | 22 23 16.7 | | |
| | comp=N,88nm,0.6s | | | | | | | | |
| **SML** | **Sawmill** | **4.74** | **44** | P | | Pn | 22 22 12.3 | -1.3 | |
| | baz=230 | | | | | | | | |
| **K20K** | **Telida** | **4.83** | **6** | | | Pn | 22 22 15.3 | +0.6 | |
| K20K | | | | IAML | | | 22 23 13.4 | | |
| | comp=E,22nm,1.4s | | | | | | | | |
| **PS4A** | **Pavlof South-4** | **4.84** | **231** | | | Pn | 22 22 15.5 | +0.6 | |
| **FID** | **Port Fidalgo** | **4.96** | **60** | Pn | | Pn | 22 22 15.5 | -1.0 | |
| **JPK** | **Jack Peak** | **5.03** | **57** | | | Pn | 22 22 17.4 | -0.1 | |
| **CAST** | **Castle Rocks** | **5.10** | **16** | Pn | | Pn | 22 22 18.8 | +0.5 | |
| CAST | | | | IAML | | | 22 23 05.9 | | |
| | comp=N,19nm,5.0s | | | | | | | | |
| CAST | | | | IAML | | | 22 23 43.7 | | |
| | comp=E,22nm,3.9s | | | | | | | | |
| **CAST** | **Castle Rocks** | **5.10** | **16** | P | | Pn | 22 22 18.8 | +0.5 | |
| | baz=199,SNR=70 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **5.13** | **47** | Pn | | Pn | 22 22 18.1 | -0.8 | |
| SCM | | | | IAML | | | 22 23 21.1 | | |
| | comp=E,125nm,0.5s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **5.13** | **47** | P | | Pn | 22 22 18.0 | -0.8 | |
| | baz=234,SNR=8.3 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **5.23** | **64** | Pn | | Pn | 22 22 20.1 | 0.0 | |
| **EYAK** | **Cordova Ski Ar** | **5.23** | **64** | P | | Pn | 22 22 19.9 | -0.1 | |
| | baz=252 | | | | | | | | |
| **KTH** | **Kantishna Hill** | **5.42** | **21** | Pn | | Pn | 22 22 23.0 | +0.3 | |
| **DIV** | **Divide** | **5.43** | **58** | | | Pn | 22 22 22.9 | +0.2 | |
| **TRF** | **Thorofare Moun** | **5.46** | **24** | | | Pn | 22 22 23.3 | +0.1 | |
| **TRF** | **Thorofare Moun** | **5.46** | **24** | P | | Pn | 22 22 23.1 | -0.1 | |
| | baz=208,SNR=15 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **5.47** | **40** | | | Pn | 22 22 21.9 | -1.4 | |
| **WAT6** | **Susitna Watana** | **5.47** | **40** | P | | Pn | 22 22 22.0 | -1.4 | |
| | baz=226,SNR=10 | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **5.51** | **14** | | | Pn | 22 22 24.6 | +0.8 | |
| **CHUM** | **Lake Minchumin** | **5.51** | **14** | P | | Pn | 22 22 24.2 | +0.4 | |
| | baz=196,SNR=12 | | | | | | | | |
| **KLU** | **Klutina** | **5.52** | **54** | | | Pn | 22 22 23.7 | -0.3 | |
| **KLU** | **Klutina** | **5.52** | **54** | P | | Pn | 22 22 23.5 | -0.5 | |
| | baz=242,SNR=35 | | | | | | | | |
| **J20K** | **Nowinta River** | **5.65** | **5** | | | Pn | 22 22 26.2 | +0.6 | |
| **J20K** | **Nowinta River** | **5.65** | **5** | P | | Pn | 22 22 25.9 | +0.4 | |
| | baz=186 | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **5.70** | **67** | Pn | | Pn | 22 22 25.6 | -0.7 | |
| **KAIM** | **Kayak Island** | **5.73** | **72** | Pn | | Pn | 22 22 27.6 | +0.9 | |
| **KAIM** | **Kayak Island** | **5.73** | **72** | P | | Pn | 22 22 27.9 | +1.1 | |
| | baz=261 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **5.74** | **48** | | | Pn | 22 22 26.5 | -0.4 | |
| **M24K** | **Tolsona, Glenn** | **5.74** | **48** | P | | Pn | 22 22 26.4 | -0.4 | |
| | baz=236,SNR=12 | | | | | | | | |
| **RND** | **Reindeer** | **5.76** | **30** | | | Pn | 22 22 26.5 | -0.7 | |
| **FALS** | **False Pass** | **5.83** | **234** | | | Pn | 22 22 28.1 | 0.0 | |
| **FALS** | **False Pass** | **5.83** | **234** | P | | Pn | 22 22 27.7 | -0.4 | |
| | baz=47 | | | | | | | | |
| **HMT** | **Hamilton** | **5.89** | **68** | Pn | | Pn | 22 22 29.3 | +0.5 | |
| **BPAW** | **Bear Paw Mtn.** | **5.91** | **19** | | | Pn | 22 22 28.9 | -0.3 | |
| **BPAW** | **Bear Paw Mtn.** | **5.91** | **19** | P | | Pn | 22 22 28.6 | -0.5 | |
| | baz=202,SNR=36 | | | | | | | | |
| **DHY** | **Denali Highway** | **5.94** | **37** | | | Pn | 22 22 28.6 | -1.0 | |
| **DHY** | **Denali Highway** | **5.94** | **37** | P | | Pn | 22 22 28.3 | -1.3 | |
| | baz=224,SNR=12 | | | | | | | | |
| **MCK** | **McKinley** | **6.01** | **28** | Pn | | Pn | 22 22 30.5 | 0.0 | |
| **MCK** | **McKinley** | **6.01** | **28** | P | | Pn | 22 22 30.0 | -0.5 | |
| | baz=213,SNR=23 | | | | | | | | |
| **ISLZ** | **Isanotski Laza** | **6.04** | **234** | | | Pn | 22 22 30.8 | -0.2 | |
| **SUCK** | **Suckling Hills** | **6.07** | **71** | Pn | | Pn | 22 22 31.9 | +0.5 | |
| **N25K** | **Chitina, Valde** | **6.14** | **56** | Pn | | Pn | 22 22 32.8 | +0.4 | |
| **N25K** | **Chitina, Valde** | **6.14** | **56** | P | | Pn | 22 22 32.3 | 0.0 | |
| | baz=245,SNR=21 | | | | | | | | |
| **BERG** | **Berg Lake** | **6.17** | **68** | | | Pn | 22 22 32.9 | +0.3 | |
| **GCSA** | **Galena City Sc** | **6.24** | **354** | | | Pn | 22 22 34.1 | +0.6 | |
| **GCSA** | **Galena City Sc** | **6.24** | **354** | P | | Pn | 22 22 33.4 | -0.1 | |
| | baz=172,SNR=9.5 | | | | | | | | |
| **BWN** | **Browne** | **6.27** | **24** | Pn | | Pn | 22 22 33.6 | -0.3 | |
| **HARP** | **HAARP** | **6.30** | **48** | | | Pn | 22 22 34.0 | -0.3 | |
| **HARP** | **HAARP** | **6.30** | **48** | P | | Pn | 22 22 33.9 | -0.3 | |
| | baz=237,SNR=12 | | | | | | | | |
| **GLB** | **Gilahina Butte** | **6.42** | **59** | Pn | | Pn | 22 22 36.3 | +0.2 | |
| **VRDI** | **Verde Repeater** | **6.51** | **61** | | | Pn | 22 22 37.6 | +0.2 | |
| **PAX** | **Paxson** | **6.51** | **43** | Pn | | Pn | 22 22 36.6 | -0.7 | |
| **PAX** | **Paxson** | **6.51** | **43** | P | | Pn | 22 22 36.4 | -0.9 | |
| | baz=232,SNR=44 | | | | | | | | |
| **WAX** | **Wakell Ridge** | **6.59** | **68** | Pn | | Pn | 22 22 38.9 | +0.5 | |
| **PS10** | **TAPS Pump St10** | **6.70** | **40** | | | Pn | 22 22 40.0 | +0.2 | |
| **NEA2** | **Nenana** | **6.72** | **23** | Pn | | Pn | 22 22 38.8 | -1.2 | |
| **NEA2** | **Nenana** | **6.72** | **23** | P | | Pn | 22 22 38.6 | -1.4 | |
| | baz=209,SNR=64 | | | | | | | | |
| **I21K** | **Tanana** | **6.81** | **12** | Pn | | Pn | 22 22 41.3 | +0.2 | |
| **MLY** | **Manley** | **6.82** | **16** | | | Pn | 22 22 40.6 | -0.8 | |
| **WRH** | **Wood River Hil** | **6.84** | **27** | Pn | | Pn | 22 22 40.3 | -1.2 | |
| **ISLE** | **Juniper Island** | **6.87** | **67** | | | Pn | 22 22 42.1 | 0.0 | |
| **KIAG** | **Kiagna River** | **6.94** | **65** | | | Pn | 22 22 43.4 | +0.3 | |
| **BALM** | **Baldy** | **6.97** | **64** | | | Pn | 22 22 43.6 | +0.1 | |
| **BAGL** | **Bagley Icefiel** | **6.97** | **68** | | | Pn | 22 22 44.4 | +1.1 | |
| **MESA** | **MESA** | **6.99** | **71** | | | Pn | 22 22 43.9 | +0.1 | |
| **MESA** | **MESA** | **6.99** | **71** | P | | Pn | 22 22 43.8 | -0.1 | |
| | baz=262 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **7.05** | **27** | Pn | | Pn | 22 22 43.0 | -1.4 | |
| **HDA** | **Harding Lake** | **7.07** | **31** | | | Pn | 22 22 43.5 | -1.3 | |
| **HDA** | **Harding Lake** | **7.07** | **31** | P | | Pn | 22 22 43.4 | -1.3 | |
| | baz=218 | | | | | | | | |
| **YAH** | **Yahtse** | **7.12** | **70** | | | Pn | 22 22 46.7 | +1.1 | |
| **MENT** | **Mentasta** | **7.15** | **47** | | | Pn | 22 22 45.7 | 0.0 | |
| **I23K** | **Minto, Yukon-K** | **7.16** | **20** | Pn | | Pn | 22 22 44.9 | -0.9 | |
| **I23K** | **Minto, Yukon-K** | **7.16** | **20** | P | | Pn | 22 22 44.4 | -1.4 | |
| | baz=206,SNR=29 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **7.17** | **52** | Pn | | Pn | 22 22 46.9 | +0.8 | |
| **M26K** | **Nabesna, AK** | **7.17** | **52** | P | | Pn | 22 22 46.7 | +0.6 | |
| | baz=243 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **7.20** | **8** | | | Pn | 22 22 47.1 | +0.7 | |
| **H21K** | **Melozitna Rive** | **7.20** | **8** | P | | Pn | 22 22 47.0 | +0.6 | |
| | baz=190 | | | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **7.21** | **30** | | | Pn | 22 22 45.1 | -1.5 | |
| **MDM** | **Murphy Dome** | **7.22** | **25** | Pn | | Pn | 22 22 45.4 | -1.3 | |
| **RIDG** | **Independent Ri** | **7.22** | **40** | Pn | | Pn | 22 22 46.2 | -0.6 | |
| **RIDG** | **Independent Ri** | **7.22** | **40** | P | | Pn | 22 22 45.9 | -0.8 | |
| | baz=229,SNR=17 | | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **7.23** | **26** | Pn | | Pn | 22 22 45.8 | -0.9 | |
| **TCOL** | **CIGO, UAF Yank** | **7.23** | **26** | P | | Pn | 22 22 45.5 | -1.2 | |
| | baz=212,SNR=9.5 | | | | | | | | |
| **COLA** | **College** | **7.23** | **26** | | | Pn | 22 22 45.8 | -1.0 | |
| **COLA** | **College** | **7.23** | **26** | P | | Pn | 22 22 45.6 | -1.2 | |
| | baz=212 | | | | | | | | |
| **BARN** | **Barnard Glacie** | **7.30** | **64** | Pn | | Pn | 22 22 49.0 | +1.0 | |
| **AKUT** | **Akutan** | **7.33** | **237** | Pn | | Pn | 22 22 48.5 | +0.2 | |
| **L26K** | **Log Cabin Wild** | **7.34** | **48** | Pn | | Pn | 22 22 48.5 | +0.2 | |
| **L26K** | **Log Cabin Wild** | **7.34** | **48** | P | | Pn | 22 22 47.8 | -0.5 | |
| | baz=238,SNR=8.1 | | | | | | | | |
| **IL31** | | **7.38** | **29** | | | Pn | 22 22 47.4 | -1.3 | |
| **ILAR** | **Eielson Array** | **7.38** | **29** | P | | Pn | 22 22 47.1 | -1.7 | |
| | comp=E,11nm,0.3s,baz=216,slow=13,SNR=656 | | | | | | | | |
| ILAR | | | | S | | Sn | 22 24 05.2 | -5.8 | |
| | comp=E,2.7nm,0.3s,baz=214,slow=21,SNR=4.4 | | | | | | | | |
| **ILAR** | **Eielson Array** | **7.38** | **29** | Pn | | Pn | 22 22 47.3 | -1.5 | |
| **TABL** | **Table Mountain** | **7.43** | **69** | | | Pn | 22 22 50.7 | +1.1 | |
| **DOT** | **Dot Lake** | **7.43** | **42** | Pn | | Pn | 22 22 49.0 | -0.6 | |
| **IM03** | | **7.47** | **5** | | | Pn | 22 22 50.2 | +0.3 | |
| **IMAR** | **Indian Mountai** | **7.47** | **5** | Pn | | Pn | 22 22 50.5 | +0.5 | |
| **POKR** | **Poker Plat Res** | **7.53** | **26** | | | Pn | 22 22 50.0 | -0.8 | |
| **POKR** | **Poker Plat Res** | **7.53** | **26** | P | | Pn | 22 22 49.5 | -1.4 | |
| | baz=213,SNR=41 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **7.62** | **55** | Pn | | Pn | 22 22 52.5 | +0.3 | |
| **M27K** | **Edge Creek, AK** | **7.62** | **55** | P | | Pn | 22 22 52.3 | 0.0 | |
| | baz=246 | | | | | | | | |
| **SCRK** | **Sand Creek** | **7.67** | **40** | | | Pn | 22 22 51.3 | -1.5 | |
| **SCRK** | **Sand Creek** | **7.67** | **40** | P | | Pn | 22 22 51.0 | -1.8 | |
| | baz=230,SNR=13 | | | | | | | | |
| **J25K** | **Salcha River,** | **7.67** | **34** | Pn | | Pn | 22 22 51.5 | -1.3 | |
| **J25K** | **Salcha River,** | **7.67** | **34** | P | | Pn | 22 22 51.3 | -1.5 | |
| | baz=222,SNR=31 | | | | | | | | |
| **ANM** | **Nome** | **7.69** | **326** | Pn | | Pn | 22 22 54.9 | +1.9 | |
| **PCA** | **Pinnacle** | **7.83** | **72** | Pn | | Pn | 22 22 56.2 | +1.3 | |
| **UNV** | **Unalaska Valle** | **7.85** | **238** | Pn | | Pn | 22 22 54.0 | -1.2 | |
| **UNV** | **Unalaska Valle** | **7.85** | **238** | P | | Pn | 22 22 53.6 | -1.5 | |
| | baz=48 | | | | | | | | |
| **YUK2** | **White River** | **7.88** | **60** | | | Pn | 22 22 56.6 | +1.0 | |
| **L27K** | **Beaver Creek,** | **7.96** | **50** | | | Pn | 22 22 56.9 | +0.3 | |
| **L27K** | **Beaver Creek,** | **7.96** | **50** | P | | Pn | 22 22 56.4 | -0.1 | |
| | baz=241,SNR=24 | | | | | | | | |
| **BC03** | | **7.97** | **50** | | | Pn | 22 22 56.3 | -0.4 | |
| **BCAR** | **Beaver Creek A** | **7.97** | **50** | Pn | | Pn | 22 22 57.5 | +0.7 | |
| **YUK3** | **Moose Creek** | **8.05** | **60** | | | Pn | 22 22 58.9 | +0.9 | |
| **YUK3** | **Moose Creek** | **8.05** | **60** | P | | Pn | 22 22 58.6 | +0.6 | |
| | baz=253,SNR=7.3 | | | | | | | | |
| **H24K** | **Noodor Dome** | **8.06** | **22** | | | Pn | 22 22 55.8 | -2.2 | |
| **H24K** | **Noodor Dome** | **8.06** | **22** | P | | Pn | 22 22 55.8 | -2.2 | |
| | baz=209 | | | | | | | | |
| **BVCY** | **Beaver Creek** | **8.08** | **55** | P | | Pn | 22 22 58.8 | +0.5 | |
| | baz=248 | | | | | | | | |
| **BCPM** | **Bancas Point** | **8.13** | **74** | Pn | | Pn | 22 22 59.7 | +0.9 | |
| **J26L** | **Joseph Creek** | **8.15** | **38** | P | | Pn | 22 22 57.6 | -1.6 | |
| | baz=228 | | | | | | | | |
| **PNL** | **Peninsula** | **8.24** | **76** | | | Pn | 22 23 01.3 | +0.9 | |
| **PNL** | **Peninsula** | **8.24** | **76** | P | | Pn | 22 23 01.3 | +0.9 | |
| | baz=269 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **8.32** | **29** | Pn | | Pn | 22 22 59.6 | -2.0 | |
| **YUK4** | **Talbot Arm** | **8.79** | **65** | P | | Pn | 22 23 09.1 | +1.3 | |
| | baz=258 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **8.85** | **67** | P | | Pn | 22 23 10.1 | +1.3 | |
| | baz=262 | | | | | | | | |
| **COLD** | **Coldfoot** | **8.98** | **13** | Pn | | Pn | 22 23 09.1 | -1.1 | |
| **COLD** | **Coldfoot** | **8.98** | **13** | P | | Pn | 22 23 08.5 | -1.8 | |
| | baz=197,SNR=9.0 | | | | | | | | |
| **EGAK** | **Eagle** | **9.13** | **41** | | | Pn | 22 23 10.9 | -1.3 | |
| **HYT** | **Haines Junctio** | **9.26** | **68** | Pn | | Pn | 22 23 15.4 | +1.3 | |
| **DAWY** | **Dawson** | **9.39** | **47** | | | Pn | 22 23 15.7 | -0.2 | |
| **DAWY** | **Dawson** | **9.39** | **47** | P | | Pn | 22 23 16.0 | +0.2 | |
| | baz=241,SNR=21 | | | | | | | | |
| **GAMB** | **Gambell** | **9.48** | **310** | Pn | | Pn | 22 23 18.2 | +1.4 | |
| **M30M** | **Minto, Yukon** | **9.92** | **58** | Pn | | Pn | 22 23 22.4 | -0.5 | |
| **M30M** | **Minto, Yukon** | **9.92** | **58** | P | | Pn | 22 23 22.3 | -0.5 | |
| | baz=254 | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **10.11** | **24** | Pn | | Pn | 22 23 22.3 | -3.0 | |
| **SKAG** | **Skagway** | **10.32** | **77** | Pn | | Pn | 22 23 32.4 | +4.3 | |
| **TOLK** | **Toolik Lake Re** | **10.41** | **12** | Pn | | Pn | 22 23 28.0 | -1.4 | |
| **TOLK** | **Toolik Lake Re** | **10.41** | **12** | P | | Pn | 22 23 27.9 | -1.4 | |
| | baz=197 | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **10.46** | **42** | Pn | | Pn | 22 23 29.1 | -0.9 | |
| **BESE** | **Bessie Mountai** | **10.66** | **81** | Pn | | Pn | 22 23 35.2 | +2.5 | |
| **SIT** | **Sitka** | **10.74** | **90** | Pn | | Pn | 22 23 33.5 | -0.2 | |
| **M31M** | **Drury Creek, Y** | **10.93** | **62** | Pn | | Pn | 22 23 36.7 | +0.4 | |
| **JIS** | **Juneau Island** | **10.95** | **83** | Pn | | Pn | 22 23 40.2 | +3.7 | |
| **P33M** | **Teslin, Yukon** | **11.55** | **72** | Pn | | Pn | 22 23 46.5 | +2.1 | |
| **EPYK** | **Eagle Plains** | **11.56** | **40** | | | Pn | 22 23 44.6 | +0.1 | |
| **EPYK** | **Eagle Plains** | **11.56** | **40** | P | | Pn | 22 23 43.5 | -1.0 | |
| | baz=236,SNR=11 | | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **12.44** | **61** | P | | Pn | 22 23 57.9 | +1.9 | |
| | baz=262,SNR=5.6 | | | | | | | | |
| **CRAG** | **Craig** | **12.44** | **95** | Pn | | Pn | 22 23 55.7 | -0.4 | |
| **DLBC** | **Dease Lake** | **13.18** | **80** | P | | P | 22 24 09.7 | -0.8 | |
| | comp=E,2.4nm,0.3s,baz=258,slow=7.9,SNR=26 | | | | | | | | |
| DLBC | | | | S | | Sn | 22 26 28.8 | -2.1 | |
| | comp=E,0.1nm,0.3s,baz=170,slow=22,SNR=1.7 | | | | | | | | |
| **DLBC** | **Dease Lake** | **13.18** | **80** | | | P | 22 24 09.5 | -1.0 | |
| **INK** | **Inuvik** | **13.68** | **36** | P | | Pn | 22 24 10.8 | -1.0 | |
| | comp=E,1.1nm,0.3s,baz=225,slow=13,SNR=21 | | | | | | | | |
| **INK** | **Inuvik** | **13.68** | **36** | Pn | | Pn | 22 24 10.9 | -0.9 | |
| **INK** | **Inuvik** | **13.68** | **36** | P | | Pn | 22 24 10.5 | -1.3 | |
| | baz=235,SNR=6.2 | | | | | | | | |
| **MOBC** | **Moresby Island** | **14.13** | **103** | P | | P | 22 24 22.0 | +0.9 | |
| **C36M** | **Paulatuk** | **17.19** | **38** | P | | P | 22 24 53.4 | -1.2 | |
| C36M | | | | IAmb | | IAmb | 22 24 54.3 | | |
| | comp=E,8.5nm,0.6s | | | | | | | | |
| **C36M** | **Paulatuk** | **17.19** | **38** | P | | P | 22 24 52.8 | -1.8 | |
| | baz=247,SNR=9.4 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **18.08** | **30** | P | | P | 22 25 03.0 | -1.4 | |
| A36M | | | | IAmb | | IAmb | 22 25 05.0 | | |
| | comp=Z,7.2nm,0.6s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **18.08** | **30** | P | | P | 22 25 02.7 | -1.6 | |
| | baz=238,SNR=6.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.13** | **62** | P | | P | 22 25 27.9 | +1.2 | |
| | comp=Z,6.5nm,0.5s,baz=274,slow=9.8,SNR=86 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.13** | **62** | P | | P | 22 25 27.7 | +1.0 | |
| **PETK** | **Petropavlovsk-** | **26.51** | **279** | P | | P | 22 26 27.7 | -0.5 | |
| | comp=Z,1.4nm,0.7s,baz=91,slow=13,SNR=1.2 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **26.51** | **279** | P | | P | 22 26 30.0 | +1.9 | |
| **BMO** | **Blue Mountains** | **26.81** | **104** | P | | P | 22 26 32.7 | +1.7 | |
| **EGMT** | **Eagleton** | **28.63** | **91** | P | | P | 22 26 49.3 | +2.2 | |
| **EYMN** | **Ely** | **38.17** | **77** | P | | P | 22 28 11.2 | +1.7 | |
| EYMN | | | | IAmb | | IAmb | 22 28 20.3 | | |
| | com

comp=N,361μm,0.3s
FNA AML AML 22 24 01.9
comp=E,514μm,0.3s
**FNA Florina 1.09 122** P **Pb** **22 23 42.5 -1.6**
baz=122
FNA S **Sb** **22 23 58.7 +0.1**
baz=122
**SKO Skopje 1.14 57** *i* Pg **Pn** **22 23 45.0 -0.2**
SKO *i* Sg **Sn** **22 24 01.1 0.0**
SKO *eL*g Lg 22 24 03.5
comp=N,8.3nm,0.4s
**NEST Nestorio 1.17 144** P **Pb** **22 23 44.6 -0.8**
**PDG Podgorica 1.26 328** ⇑P **Pb** **22 23 46.6 -0.3**
PDG ⇑S **Sn** **22 24 03.0 -0.9**
**PDG Podgorica 1.26 328** *i* Pn **Pb** **22 23 46.5 -0.4**
PDG *i* Sn **Sn** **22 24 07.4 +3.5**
**SRN Sarande 1.49 184** P **Pg** **22 23 51.9 +0.5**
baz=184
SRN S **Sg** **22 24 12.3 +1.6**
baz=184
**BEY Berane 1.52 353** *i* Pn **Pg** **22 23 53.5 +1.4**
**STIP Stip 1.56 77** *i* Pn **Pg** **22 23 54.6 +1.7**
STIP *i* Sn **Sg** **22 24 15.7 +2.5**
STIP *eL*g Lg 22 24 20.0
comp=N,2.8nm,0.3s
**KEK Kerkira 1.67 189** P **Pn** **22 23 52.7 +0.2**
**SCTE Santa Cesarea 1.82 225** P **Pb** **22 23 55.9 -0.5**
**VAY Valandovo 1.82 91** *i* Pn **Pb** **22 23 56.4 -0.1**
VAY *i* Sn **Sg** **22 24 22.3 +0.7**
VAY *eL*g Lg 22 24 24.4
comp=N,11nm,0.5s
**IGT Igoumenitsa 1.83 176** P **Pn** **22 23 55.5 +0.8**
**SJES Sjenica 1.90 356** *e*Pn **Pb** **22 23 58.0 +0.1**
SJES *e*Sn **Sb** **22 24 21.1 -0.8**
**DBRK Dubrovnik 1.98 312** *e*Pn **Pn** **22 23 57.6 +0.8**
DBRK Sn **Sb** **22 24 24.3 +0.2**
**SELS Selova 1.99 21** *e*Pn **Pn** **22 23 57.2 +0.3**
SELS *e*Sn **Sb** **22 24 23.2 -1.2**
**BOSS Bosilegrad 2.08 56** *e*Pn **Pb** **22 23 59.3 -1.5**
BOSS *e*Sn **Sb** **22 24 25.2 -1.6**
**KNT Kendrikon 2.08 95** P **Pn** **22 23 58.3 +0.1**
**IVAS Ivanjica 2.21 0** *e*Pn **Pn** **22 24 00.5 +0.5**
IVAS *e*Sn **Sb** **22 24 30.7 -0.1**
**STON Ston 2.36 310** *i* Pn **Pn** **22 24 02.1 +0.1**
STON Sn **Sn** **22 24 32.1 +0.9**
**BBLS Lazići 2.56 348** *e*Pn **Pn** **22 24 06.4 +1.6**
BBLS *e*Sn **Sb** **22 24 38.8 -2.0**
**VTS Vitosha 2.62 60** ⇑P **Pn** **22 24 06.0 +0.3**
VTS ⇑S **Sn** **22 24 37.9 +0.1**
**ZAPS Zavoj 2.65 43** *e*Pn **Pn** **22 24 07.7 +1.7**
ZAPS *e*Sn **Sn** **22 24 38.8 +0.4**
**DIVS Divibare 2.74 358** *e*Pn **Pn** **22 24 08.5 +1.3**
DIVS *e*Sn **Sb** **22 24 43.1 -2.8**
**LSTV Lastovo 2.80 301** *e*Pn **Pn** **22 24 07.3 -0.7**
LSTV Sn **Sn** **22 24 39.5 -2.5**
**MAKA Makarska 3.01 311** *e*Pn **Pn** **22 24 09.7 -1.2**
MAKA Sn **Sn** **22 24 46.6 -0.6**
**RICI Ricice 3.08 315** *e*Pn **Pn** **22 24 12.6 +0.6**
RICI Sn **Sn** **22 24 50.7 +1.7**
**MDVR Moldovita 3.60 18** ⇑P **Pn** **22 24 18.7 -0.4**
**KIJV Kijevo 3.82 315** *e*Pn **Pn** **22 24 23.0 +1.0**
**HERR Herculane 3.89 25** ⇑P **Pn** **22 24 23.2 +0.2**
**BZS Buzias 4.38 14** ⇑P **Pn** **22 24 29.3 -0.5**
**GZR Gura Zlata 4.46 25** ⇓P **Pn** **22 24 31.1 +0.2**

*IDC* ***22*** *22:26:00.2±0.8,24˚.51S×179˚.87E,h498km±7km, mb3.9/22, mb1 4.1/25,mb1mx4.0/39,mbtmp4.8/25,Error ellipse: s-maj=10.6km s-min=9.7km az=153.0*

*NEIC* ***22*** *22:26:00.4±2.2,24˚.6S±0˚.1×179˚.9W±0˚.1,h498km±5km, mb4.5/113,Error ellipse: s-maj=16.4km s-min=13.6km az=122.0*

*NOU* ***22*** *22:26:04.8,24˚.49S×179˚.89E,h553km, mb4.9/44,South of Fiji Islands*

**ISC 22 22:26:00.0±0.3,24˚.53S±0˚.05×179˚.96W±0˚.05,h500km, n441,σ1$22/419,mb4.6/95,18C-40D,Fault plane solution: NP1:ϕ1283.14752°,δ48.39066°,λ-74.26318°. NP2:ϕ180.15416°,δ43.97319°,λ-106.98168°. Principal axes:** T Plg2.2538°, Azm2.0821°; N Plg11.7000°, Azm92.5491°; P Plg78.0788°, Azm261.3380°; **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **5.05** | **159** | P | | **P** | **22 27 29.6** | **+2.2** |
| | 120nm,0.3s,baz=61,slow=19,SNR=2.5 | | | | | | | |
| RAO | | | | S | | **S** | **22 28 38.6** | **-0.1** |
| | 154nm,0.3s,baz=315,slow=22,SNR=4.1 | | | | | | | |
| **RAO** | **Raoul Island** | **5.05** | **159** | | | **P** | **22 27 27.4** | **+0.1** |
| **MSVF** | **Nonsavu** | **7.01** | **344** | P | | **P** | **22 27 47.3** | **+0.7** |
| | 6.6nm,0.3s,baz=158,slow=7.4,SNR=6.3 | | | | | | | |
| **MSVF** | **Nonsavu** | **7.01** | **344** | P | | **P** | **22 27 47.7** | **+1.1** |
| **NIUE** | **Niue** | **10.78** | **62** | P | | **P** | **22 28 29.9** | **+4.2** |
| | baz=11,SNR=3.1 | | | | | | | |
| NIUE | | | | S | | **S** | **22 30 24.6** | **-1.0** |
| | baz=11 | | | | | | | |
| **PINNC** | **Pines Island,** | **11.71** | **277** | P | | **P** | **22 28 38.1** | **+2.6** |
| **OUZ** | **Omahuta** | **12.03** | **206** | P | | **P** | **22 28 41.5** | **+2.8** |
| **OUZ** | **Omahuta** | **12.03** | **206** | P | | **P** | **22 28 40.5** | **+1.7** |
| **OUENC** | **Ouen Island, N** | **12.30** | **277** | P | | **P** | **22 28 43.2** | **+1.4** |
| **ONTNC** | **Ouen Toro** | **12.67** | **277** | P | | **P** | **22 28 48.5** | **+2.7** |
| **DZM** | **Mont Dzumac** | **12.73** | **278** | P | | **P** | **22 28 48.6** | **+2.0** |
| | 3.8nm,0.3s,baz=88,slow=16,SNR=32 | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.73** | **278** | *e*P | | **P** | **22 28 48.0** | **+1.4** |
| | 146nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.73** | **278** | P | | **P** | **22 28 49.0** | **+2.4** |
| **NOUC** | **Port Laguerre** | **12.85** | **278** | P | | **P** | **22 28 50.1** | **+2.4** |
| **AFI** | **Afiamalu** | **13.08** | **38** | P | | **P** | **22 28 46.7** | **-3.6** |
| | 2.6nm,0.3s,baz=54,slow=15,SNR=4.7 | | | | | | | |
| AFI | | | | S | | **S** | **22 31 03.9** | **-6.7** |
| | 1.8nm,0.3s,baz=212,slow=22,SNR=2.4 | | | | | | | |
| **AFI** | **Afiamalu** | **13.08** | **38** | P | | P | 22 28 46.2 | -4.1 |
| **AFI** | **Afiamalu** | **13.08** | **38** | P | | P | 22 28 55.7 | +5.4 |
| **URZ** | **Urewera** | **13.92** | **190** | P | | **P** | **22 28 57.8** | **-0.8** |
| | 6.0nm,0.3s,baz=2.6,slow=2.7,SNR=23 | | | | | | | |
| URZ | | | | S | | **S** | **22 31 23.8** | **-2.1** |
| | 4.5nm,0.3s,baz=164,slow=20,SNR=4.7 | | | | | | | |
| **MTHZ** | **Maungataniwha** | **14.54** | **190** | P | | **P** | **22 29 03.7** | **-1.6** |
| MTHZ | | | | S | | **S** | **22 31 34.4** | **-3.7** |
| **RAHZ** | **Arahi** | **14.56** | **189** | P | | **P** | **22 29 03.2** | **-2.3** |
| RAHZ | | | | S | | **S** | **22 31 39.2** | **+0.7** |
| **HIZ** | **Hauiti** | **14.62** | **196** | P | | P | 22 29 09.9 | +3.8 |
| **NMHZ** | **Naumai** | **14.78** | **190** | P | | **P** | **22 29 05.3** | **-2.6** |
| **BKZ** | **Black Stump Fm** | **14.90** | **191** | P | | **P** | **22 29 08.6** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **14.90** | **191** | P | | **P** | **22 29 07.5** | **-1.6** |
| BKZ | | | | S | | **S** | **22 31 41.7** | **-3.3** |
| **OTVZ** | **Oturere** | **15.05** | **193** | P | | **P** | **22 29 09.4** | **-1.4** |
| OTVZ | | | | S | | **S** | **22 31 46.3** | **-1.9** |
| **MCHZ** | **McNeill Hill** | **15.14** | **190** | P | | **P** | **22 29 07.5** | **-4.0** |
| MCHZ | | | | S | | **S** | **22 31 46.1** | **-3.4** |
| **KWHZ** | **Kaweka Forest** | **15.16** | **191** | P | | **P** | **22 29 10.1** | **-1.8** |
| KWHZ | | | | P | | **S** | **22 31 47.8** | **-2.3** |
| **WNVZ** | **Wahianoa** | **15.23** | **193** | P | | **P** | **22 29 10.1** | **-2.5** |
| **BHHZ** | **Black Hill Sta** | **15.29** | **192** | P | | **P** | **22 29 10.5** | **-2.6** |
| BHHZ | | | | S | | **S** | **22 31 49.2** | **-3.4** |
| **CKHZ** | **Cape Kidnapper** | **15.29** | **189** | P | | **P** | **22 29 13.5** | **+0.4** |
| **KRHZ** | **Kereru** | **15.39** | **191** | P | | **P** | **22 29 11.5** | **-2.6** |
| **PNHZ** | **Pukenui** | **15.68** | **191** | P | | **P** | **22 29 14.5** | **-2.6** |
| **TSZ** | **Takapari Road** | **15.86** | **192** | P | | **P** | **22 29 16.4** | **-2.7** |
| **PRHZ** | **Porangahau** | **15.95** | **190** | P | | **P** | **22 29 18.1** | **-1.9** |
| **PRWZ** | **Pori Road** | **16.34** | **191** | P | | **P** | **22 29 22.7** | **-1.4** |
| **BFZ** | **Birch Farm** | **16.42** | **190** | P | | **P** | **22 29 21.3** | **-3.6** |
| **MRZ** | **Mangatainoka R** | **16.52** | **192** | P | | **P** | **22 29 23.3** | **-2.6** |
| **OGWZ** | **Otaki Gorge** | **16.75** | **193** | P | | **P** | **22 29 26.8** | **-1.5** |
| **HOWZ** | **Holdsworth Sta** | **16.76** | **192** | P | | **P** | **22 29 26.4** | **-2.0** |
| **DUWZ** | **D'Urville Isla** | **17.02** | **196** | P | | **P** | **22 29 30.5** | **-0.6** |
| **MSWZ** | **Moikau Station** | **17.31** | **192** | P | | **P** | **22 29 32.0** | **-1.9** |
| **SNZO** | **South Karori** | **17.32** | **194** | P | | **P** | **22 29 32.7** | **-1.2** |
| **TCW** | **Tory Channel** | **17.32** | **195** | P | | **P** | **22 29 32.7** | **-1.2** |
| **QRZ** | **Quartz Range** | **17.43** | **199** | P | | **P** | **22 29 34.7** | **-0.3** |
| **QRZ** | **Quartz Range** | **17.43** | **199** | P | | **P** | **22 29 35.8** | **+0.9** |
| **NNZ** | **Nelson** | **17.55** | **197** | P | | **P** | **22 29 36.8** | **+0.7** |
| **TUWZ** | **Tuamarina** | **17.61** | **195** | P | | **P** | **22 29 35.8** | **-0.8** |
| **THZ** | **Tophouse** | **18.18** | **197** | P | | **P** | **22 29 40.6** | **-1.4** |
| **KHZ** | **Kahutara** | **18.64** | **195** | P | | **P** | **22 29 44.8** | **-1.2** |
| **KHZ** | **Kahutara** | **18.64** | **195** | P | | **P** | **22 29 44.5** | **-1.5** |
| **RPZ** | **Rata Peaks** | **20.51** | **199** | P | | **P** | **22 30 02.2** | **-0.9** |
| | 12nm,0.5s,baz=12,slow=5.3,SNR=14 | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.51** | **199** | P | | **P** | **22 30 02.0** | **-1.1** |
| RPZ | | | | IAmb | | IAmb | 22 30 15.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **25.84** | **251** | P | | **P** | **22 30 52.7** | **+1.5** |
| | baz=26,SNR=12 | | | | | | | |
| **ARMA** | **Armidale** | **25.84** | **251** | P | | **P** | **22 30 52.2** | **+1.0** |
| ARMA | | | | IAmb | | IAmb | 22 30 53.4 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **25.84** | **251** | P | | **P** | **22 30 52.6** | **+1.5** |
| **EIDS** | **Eidsvold** | **26.25** | **262** | P | | **P** | **22 30 55.2** | **+0.6** |
| | baz=26,SNR=6.4 | | | | | | | |
| **EIDS** | **Eidsvold** | **26.25** | **262** | P | | **P** | **22 30 55.0** | **+0.3** |
| **EIDS** | **Eidsvold** | **26.25** | **262** | P | | **P** | **22 30 55.3** | **+0.6** |
| **MGCD** | **Mangrove Creek** | **26.71** | **244** | P | | **P** | **22 30 60.0** | **+1.4** |
| | baz=27,SNR=13 | | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.71** | **244** | P | | **P** | **22 31 00.3** | **+1.7** |
| **RMQ** | **Roma** | **28.27** | **259** | P | | **P** | **22 31 13.8** | **+1.4** |
| | baz=28,SNR=16 | | | | | | | |
| **RMQ** | **Roma** | **28.27** | **259** | P | | **P** | **22 31 14.0** | **+1.6** |
| **CNB** | **Canberra Magne** | **28.58** | **241** | P | | **P** | **22 31 16.2** | **+1.1** |
| | baz=29,SNR=14 | | | | | | | |
| **CAN** | **Canberra** | **28.87** | **241** | P | | **P** | **22 31 18.7** | **+1.1** |
| CAN | | | | IAmb | | IAmb | 22 31 19.1 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **MILA** | **Mila** | **29.19** | **237** | P | | **P** | **22 31 21.5** | **+1.1** |
| | baz=29,SNR=5.4 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.02** | **249** | P | | **P** | **22 31 36.7** | **+0.4** |
| | baz=31,SNR=51 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.02** | **249** | P | | **P** | **22 31 36.8** | **+0.5** |
| **CTA** | **Charters Tower** | **31.52** | **271** | P | | **P** | **22 31 41.1** | **+0.4** |
| | baz=32 | | | | | | | |
| **CTA** | **Charters Tower** | **31.52** | **271** | P | | **P** | **22 31 41.4** | **+0.7** |
| **CORO** | **Coronation Par** | **32.10** | **230** | P | | **P** | **22 31 47.1** | **+1.8** |
| | comp=Z,42nm,0.7s | | | | | | | |
| **TOO** | **Toolangi** | **32.15** | **238** | P | | **P** | **22 31 46.6** | **+0.8** |
| | baz=32,SNR=9.4 | | | | | | | |
| **TOO** | **Toolangi** | **32.15** | **238** | P | | **P** | **22 31 46.2** | **+0.3** |
| TOO | | | | IAmb | | IAmb | 22 31 47.3 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **TOO** | **Toolangi** | **32.15** | **238** | P | | **P** | **22 31 46.8** | **+1.0** |
| **QLP** | **Quilpie** | **32.31** | **259** | P | | **P** | **22 31 47.5** | **+0.2** |
| | baz=32,SNR=8.4 | | | | | | | |
| **QLP** | **Quilpie** | **32.31** | **259** | P | | **P** | **22 31 47.8** | **+0.5** |
| **MOO** | **Moorlands** | **32.44** | **228** | P | | **P** | **22 31 49.4** | **+1.2** |
| | baz=33,SNR=3.4 | | | | | | | |
| **TAU** | **Tasmania Unive** | **32.54** | **228** | P | | **P** | **22 31 49.9** | **+0.8** |
| TAU | | | | IAmb | | IAmb | 22 31 50.5 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **MTSU** | **Mount Surprise** | **33.81** | **274** | P | | **P** | **22 32 00.7** | **+0.5** |
| | baz=34,SNR=65 | | | | | | | |
| **MTSU** | **Mount Surprise** | **33.81** | **274** | P | | **P** | **22 32 01.0** | **+0.8** |
| **XMAS** | **Kiritimati** | **34.28** | **43** | P | | **P** | **22 32 05.0** | **+0.9** |
| **STKA** | **Stephens Creek** | **34.53** | **249** | P | | **P** | **22 32 06.2** | **+0.1** |
| | comp=Z,26nm,0.6s,baz=94,slow=11,SNR=59 | | | | | | | |
| STKA | | | | ScP | | **ScP** | **22 37 26.1** | **+1.5** |
| | comp=Z,4.0nm,0.8s,baz=53,slow=2.3,SNR=5.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.53** | **249** | P | | **P** | **22 32 06.5** | **+0.5** |
| | baz=35,SNR=45 | | | | | | | |
| **STKA** | **Stephens Creek** | **34.53** | **249** | P | | **P** | **22 32 06.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **34.53** | **249** | P | | **P** | **22 32 06.5** | **+0.5** |
| **PMG** | **Port Moresby** | **34.74** | **290** | P | | **P** | **22 32 07.5** | **-0.5** |
| | comp=Z,30nm,0.6s,baz=107,slow=4.4,SNR=12 | | | | | | | |
| **PMG** | **Port Moresby** | **34.74** | **290** | P | | **P** | **22 32 08.3** | **+0.3** |
| **PMG** | **Port Moresby** | **34.74** | **290** | P | | **P** | **22 32 07.9** | **-0.1** |
| | comp=Z,42nm,1.1s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.84** | **240** | P | | **P** | **22 32 08.9** | **+0.3** |
| | baz=35,SNR=19 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.84** | **240** | P | | **P** | **22 32 08.9** | **+0.3** |
| **INKA** | **Innaminka** | **35.33** | **256** | P | | **P** | **22 32 13.8** | **+1.1** |
| **COEN** | **Coen** | **36.26** | **280** | P | | **P** | **22 32 21.0** | **+0.3** |
| COEN | | | | IAmb | | IAmb | 22 32 23.2 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **COEN** | **Coen** | **36.26** | **280** | P | | **P** | **22 32 21.0** | **+0.3** |
| **HTT** | **Hallett** | **36.85** | **246** | P | | **P** | **22 32 25.4** | **-0.1** |
| | baz=37,SNR=28 | | | | | | | |
| **HTT** | **Hallett** | **36.85** | **246** | P | | **P** | **22 32 25.4** | **-0.1** |
| **TWOA** | **Tennyson Woods** | **37.25** | **244** | P | | **P** | **22 32 28.5** | **-0.1** |
| | comp=Z,31nm,0.8s | | | | | | | |
| **LCRK** | **Leigh Creek** | **37.41** | **251** | P | | **P** | **22 32 30.1** | **+0.1** |
| **QIS** | **Mount Isa** | **37.46** | **268** | P | | **P** | **22 32 30.0** | **-0.5** |
| | baz=38,SNR=6.0 | | | | | | | |
| **QIS** | **Mount Isa** | **37.46** | **268** | P | | **P** | **22 32 30.5** | **-0.1** |
| **NAPP** | **Napperby** | **37.49** | **247** | P | | **P** | **22 32 30.9** | **+0.3** |
| **WHYH** | **Whyalla** | **37.97** | **247** | P | | **P** | **22 32 34.7** | **+0.2** |
| **BBOO** | **Buckleboo** | **39.24** | **248** | P | | **P** | **22 32 44.2** | **-0.7** |
| | baz=39,SNR=62 | | | | | | | |
| **BBOO** | **Buckleboo** | **39.24** | **248** | P | | **P** | **22 32 44.2** | **-0.7** |
| **BBOO** | **Buckleboo** | **39.24** | **248** | P | | **P** | **22 32 44.1** | **-0.7** |
| **OOD** | **Oodnadatta** | **39.79** | **255** | P | | **P** | **22 32 50.1** | **+0.8** |
| **MULG** | **Mulgathing** | **41.01** | **251** | P | | **P** | **22 32 58.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **41.98** | **261** | P | | **P** | **22 33 05.3** | **-1.6** |
| | comp=Z,13nm,0.5s,baz=93,slow=6.3,SNR=38 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **22 37 54.9** | **+1.5** |
| | comp=Z,1.6nm,0.8s,baz=115,slow=4.5,SNR=8.6 | | | | | | | |
| ASAR | | | | S | | **S** | **22 38 48.0** | **-1.2** |
| | comp=Z,0.4nm,0.5s,baz=95,slow=16,SNR=3.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **41.98** | **261** | P | | **P** | **22 33 06.7** | **-0.2** |
| **ASPA** | **Alice Springs** | **41.98** | **261** | P | | **P** | **22 33 06.6** | **-0.4** |
| | baz=42 | | | | | | | |
| **WR0** | **Warramunga Arr** | **42.22** | **267** | P | | **P** | **22 33 08.0** | **-0.9** |
| **WC3** | **Warramunga Arr** | **42.37** | **267** | P | | **P** | **22 33 09.1** | **-1.0** |
| | baz=42 | | | | | | | |
| **WRAB** | **Tennant Creek** | **42.40** | **267** | P | | **P** | **22 33 09.3** | **-0.9** |
| **WRAB** | **Tennant Creek** | **42.40** | **267** | P | | **P** | **22 33 09.7** | **-0.6** |
| **WB0** | **Warramunga Arr** | **42.40** | **267** | P | | **P** | **22 33 09.4** | **-0.9** |
| **WRA** | **Warramunga Arr** | **42.41** | **267** | P | | **P** | **22 33 09.2** | **-1.1** |
| | comp=Z,32nm,0.5s,baz=104,slow=7.9,SNR=319 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **22 37 57.4** | **+2.2** |
| | comp=Z,13nm,0.9s,baz=101,slow=4.1,SNR=33 | | | | | | | |
| WRA | | | | S | | **S** | **22 38 51.4** | **-4.0** |
| | comp=Z,1.5nm,0.9s,baz=111,slow=14,SNR=4.1 | | | | | | | |
| **FORT** | **Forrest** | **46.13** | **250** | P | | **P** | **22 33 37.9** | **-1.1** |
| | baz=46,SNR=78 | | | | | | | |
| **FORT** | **Forrest** | **46.13** | **250** | P | | **P** | **22 33 38.0** | **-1.1** |
| **FORT** | **Forrest** | **46.13** | **250** | P | | **P** | **22 33 38.2** | **-0.8** |
| **KDU** | **Kakadu** | **46.39** | **276** | P | | **P** | **22 33 40.1** | **-1.0** |
| | baz=46,SNR=18 | | | | | | | |
| **KDU** | **Kakadu** | **46.39** | **276** | P | | **P** | **22 33 40.1** | **-1.0** |
| **WRKA** | **Warakurna** | **46.74** | **258** | P | | **P** | **22 33 43.1** | **-0.7** |
| | baz=47,SNR=76 | | | | | | | |
| **WRKA** | **Warakurna** | **46.74** | **258** | P | | **P** | **22 33 43.3** | **-0.5** |
| **MTN** | **Manton Dam** | **47.54** | **275** | P | | **P** | **22 33 48.7** | **-1.2** |
| | baz=48,SNR=5.1 | | | | | | | |
| **MTN** | **Manton Dam** | **47.54** | **275** | P | | **P** | **22 33 49.0** | **-0.9** |
| MTN | | | | IAmb | | IAmb | 22 33 49.3 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **DRS** | **Darwin Rock St** | **47.91** | **275** | P | | **P** | **22 33 51.8** | **-0.8** |
| **KNRA** | **Kununurra** | **48.73** | **270** | P | | **P** | **22 33 58.4** | **-0.3** |
| | baz=49,SNR=66 | | | | | | | |
| **KNRA** | **Kununurra** | **48.73** | **270** | P | | **P** | **22 33 58.5** | **-0.3** |
| **KNRA** | **Kununurra** | **48.73** | **270** | P | | **P** | **22 33 58.7** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **50.82** | **266** | P | | **P** | **22 34 13.4** | **-0.7** |
| | baz=51,SNR=44 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.82** | **266** | P | | **P** | **22 34 13.4** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **50.82** | **266** | P | | **P** | **22 34 13.8** | **-0.4** |
| **VNDA** | **Vanda** | **53.76** | **185** | P | | **P** | **22 34 35.6** | **+1.2** |
| | comp=Z,2.8nm,0.8s,baz=13,slow=9.0,SNR=6.0 | | | | | | | |
| **VNDA** | **Vanda** | **53.76** | **185** | P | | **P** | **22 34 35.9** | **+1.5** |
| **KLBR** | **Kellerberrin** | **54.78** | **248** | P | | **P** | **22 34 41.5** | **-0.9** |
| | baz=55,SNR=19 | | | | | | | |
| **KLBR** | **Kellerberrin** | **54.78** | **248** | P | | **P** | **22 34 41.7** | **-0.7** |
| **SOEI** | **Soe** | **54.94** | **275** | P | | **P** | **22 34 44.6** | **+0.8** |
| **SOEI** | **Soe** | **54.94** | **275** | P | | **P** | **22 34 43.5** | **-0.3** |
| | comp=Z,57nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **54.94** | **275** | P | | **P** | **22 34 43.6** | **-0.3** |
| **MEEK** | **Meekatharra** | **54.97** | **254** | P | | **P** | **22 34 42.4** | **-1.4** |
| | baz=55,SNR=12 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **55.09** | **260** | P | | **P** | **22 34 43.0** | **-1.6** |
| **BATI** | **Baumata** | **55.31** | **275** | P | | **P** | **22 34 45.3** | **-1.0** |
| | comp=Z,29nm,0.6s | | | | | | | |
| **BLDU** | **Ballidu** | **55.83** | **249** | P | | **P** | **22 34 48.8** | **-0.9** |
| | baz=56,SNR=25 | | | | | | | |
| **MUN** | **Mundaring** | **56.02** | **247** | P | | **P** | **22 34 50.4** | **-0.6** |
| | baz=56,SNR=4.3 | | | | | | | |
| **MORW** | **Morawa** | **56.70** | **250** | P | | **P** | **22 34 54.8** | **-0.9** |
| | baz=57,SNR=10 | | | | | | | |
| **MORW** | **Morawa** | **56.70** | **250** | IAmb | | IAmb | 22 34 55.7 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **SANI** | **Sanana** | **56.70** | **285** | P | | **P** | **22 34 55.5** | **-0.4** |
| | comp=Z,21nm,0.6s | | | | | | | |
| **SANI** | **Sanana** | **56.70** | **285** | P | | **P** | **22 34 55.5** | **-0.4** |
| | comp=Z,21nm,0.7s | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **59.41** | **273** | P | | **P** | **22 35 12.7** | **-1.7** |
| | comp=Z,45nm,1.1s | | | | | | | |
| **CASY** | **Casey** | **59.57** | **206** | P | | **P** | **22 35 13.9** | **-0.6** |
| CASY | | | | IAmb | | IAmb | 22 35 14.9 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **BKSI** | **Bulukumba** | **60.49** | **278** | P | | **P** | **22 35 21.0** | **-0.5** |
| | comp=Z,35nm,0.8s | | | | | | | |
| **PLAI** | **Plampang** | **61.19** | **273** | P | | **P** | **22 35 25.5** | **-0.6** |
| | comp=Z,933nmcomp=Z,93nm,0.8s | | | | | | | |
| **PLAI** | **Plampang** | **61.19** | **273** | P | | **P** | **22 35 25.6** | **-0.6** |
| **TOLI2** | **Tolitoli** | **62.77** | **285** | P | | **P** | **22 35 35.1** | **-1.3** |
| TOLI2 | | | | IAmb | | IAmb | 22 35 37.6 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **TOLI2** | **Tolitoli** | **62.77** | **285** | P | | **P** | **22 35 35.5** | **-1.0** |
| **MPSI** | **Mapaga** | **63.19** | **284** | P | | **P** | **22 35 38.5** | **-0.7** |
| | comp=Z,21nm,0.9s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **64.63** | **272** | P | | **P** | **22 35 47.4** | **-1.0** |
| | comp=Z,29nm,1.1s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **64.63** | **272** | P | | **P** | **22 35 47.4** | **-1.0** |
| | comp=Z,30nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **65.56** | **180** | P | | **P** | **22 35 54.6** | **+1.1** |
| | comp=Z,12nm,0.7s,baz=45,slow=2.6,SNR=59 | | | | | | | |
| **QSPA** | **South Pole Qui** | **65.56** | **180** | P | | **P** | **22 35 54.8** | **+1.3** |
| QSPA | | | | IAmb | | IAmb | 22 35 55.7 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **PCJI** | **Pacitan** | **67.45** | **271** | P | | **P** | **22 36 04.7** | **-1.2** |
| | comp=Z,66nm,0.9s | | | | | | | |
| **UGM** | **Wanagama** | **68.15** | **271** | P | | **P** | **22 36 09.6** | **-0.7** |
| UGM | | | | IAmb | | IAmb | 22 36 24.2 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.12** | **287** | P | | **P** | **22 36 15.8** | **-0.4** |
| KKM | | | | IAmb | | IAmb | 22 36 16.3 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **STKI** | **Sintang** | **70.59** | **279** | P | | **P** | **22 36 23.3** | **-1.6** |
| | comp=Z,2μmcomp=Z,27nm,1.1s | | | | | | | |
| **LEM** | **Lembang** | **71.23** | **271** | P | | **P** | **22 36 27.8** | **-1.1** |
| | comp=Z,39nm,0.6s,baz=105,slow=9.0,SNR=8.2 | | | | | | | |
| **XMIS** | **Christmas Isla** | **71.60** | **267** | P | | **P** | **22 36 30.7** | **-0.2** |
| **DBJI** | **Dramaga** | **72.12** | **271** | P | | **P** | **22 36 32.5** | **-1.5** |
| **KSM** | **Kuching** | **72.25** | **280** | P | | **P** | **22 36 34.8** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **72.44** | **326** | P | | **P** | **22 36 34.2** | **-1.0** |
| | comp=Z,1.9nm,0.4s,baz=157,slow=5.0,SNR=5.7 | | | | | | | |
| **CGJI** | **Cibinong** | **73.06** | **270** | P | | **P** | **22 36 37.9** | **-1.4** |
| | comp=Z,45nm,0.8s | | | | | | | |
| **KASI** | **Kota Agung** | **74.59** | **271** | P | | **P** | **22 36 46.6** | **-1.4** |
| | comp=Z,44nm,0.8s | | | | | | | |
| **LWLI** | **Liwa** | **75.19** | **271** | P | | **P** | **22 36 50.1** | **-1.5** |
| | comp=Z,47nm,0.7s | | | | | | | |
| **MDSI** | **Maura Dua** | **75.30** | **272** | P | | **P** | **22 36 50.3** | **-1.7** |
| | comp=Z,20nm,0.9s | | | | | | | |
| **BELA** | **Belgrano 2** | **75.81** | **173** | P | | **P** | **22 36 53.9** | **+0.1** |
| **ADK** | **Adak** | **76.13** | **2** | P | | **P** | **22 36 55.8** | **+0.1** |
| **KSI** | **Kapahiang** | **77.08** | **272** | P | | **P** | **22 37 01.0** | **-0.9** |
| | comp=Z,20μmcomp=Z,87nm,0.7s | | | | | | | |
| **MASI** | **Maura Aman, Be** | **77.61** | **272** | P | | **P** | **22 37 04.2** | **-0.6** |
| | comp=Z,91nm,0.8s | | | | | | | |
| **NIKH** | **Nikolski High** | **77.77** | **7** | P | | **P** | **22 37 04.3** | **-0.3** |
| **NIKH** | **Nikolski High** | **77.77** | **7** | P | | **P** | **22 37 04.3** | **-0.3** |
| | baz=190 | | | | | | | |
| **DLV** | **T Lat** | **78.63** | **289** | P | | **P** | **22 37 11.4** | **+1.0** |
| DLV | | | | IAmb | | IAmb | 22 37 11.4 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **78.75** | **320** | P | | **P** | **22 37 11.0** | **+0.7** |
| | comp=Z,1.6nm,0.6s,baz=133,slow=6.8,SNR=6.0 | | | | | | | |
| **UNV** | **Unalaska Valle** | **78.91** | **8** | P | | **P** | **22 37 10.1** | **-0.6** |
| **PEA0B** | **Petropavlovsk-** | **79.72** | **347** | P | | **P** | **22 37 15.8** | **+0.8** |
| PEA0B | | | | IAmb | | IAmb | 22 37 41.3 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.72** | **347** | P | | **P** | **22 37 15.3** | **+0.2** |
| | comp=Z,4.1nm,0.7s,baz=115,slow=7.5,SNR=9.8 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.72** | **347** | P | | **P** | **22 37 15.6** | **+0.5** |
| **NJ2** | **Nanjing** | **81.10** | **311** | *e*P | | **P** | **22 37 24.0** | **+1.2** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.31** | **327** | P | | **P** | **22 37 24.3** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=122,slow=3.1,SNR=6.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** |

comp=Z,9.6nm,1.0s
BEKR Beckworth 84.77 42 P P 22 37 41.5 +0.2
J01E Myrtle Point 84.78 38 P P 22 37 42.4 +1.4
baz=229
IRM Iron Mountain 84.80 49 P P 22 37 42.9 +1.5
baz=236
GMRC Granite Mounta 84.80 48 P P 22 37 42.6 +1.1
baz=235
GRAC Grapevine Rang 84.93 46 P P 22 37 43.1 +1.1
baz=234
FURC Furnace Creek, 84.95 46 P P 22 37 43.3 +1.3
baz=234
HUMO Hull Mountain 84.96 38 IAmb IAmb 22 37 45.4
comp=Z,10nm,1.1s
113A Mohawk Valley, 84.98 51 IAmb IAmb 22 37 44.9
comp=Z,13nm,1.1s
M04C Macdoel 85.08 40 P P 22 37 44.0 +1.2
baz=231
L04D Klamath Falls 85.09 39 P P 22 37 43.9 +1.2
baz=230
NVAR Mina Array Bea 85.17 44 P P 22 37 43.9 +0.6
comp=Z,2.8nm,0.7s,baz=224,slow=8.7,SNR=15
214A Organ Pipe Nat 85.22 52 IAmb IAmb 22 37 45.6
comp=Z,8.1nm,0.8s
214A Organ Pipe Nat 85.22 52 P P 22 37 45.2 +1.7
baz=237
I03D Drain, OR 85.45 37 P P 22 37 45.3 +1.1
baz=230
PDMCI Parker Dam,Lak 85.57 49 P P 22 37 46.6 +1.5
baz=236
TPNV Topopah Spring 85.63 46 P P 22 37 46.6 +1.1
baz=235
K04D Chiloquin, OR 85.66 39 P P 22 37 46.5 +1.0
baz=231
KVN Kaiserville 85.67 44 IAmb IAmb 22 37 47.2
comp=Z,6.0nm,0.7s
J04D Umpqua Nationa 85.85 38 P P 22 37 47.0 +0.5
J04D Umpqua Nationa 85.85 38 P P 22 37 47.8 +1.3
baz=230,SNR=5.1
I04A Tendick Farm, 86.03 38 P P 22 37 47.7 +0.6
baz=230
MOD Modoc Plateau 86.05 40 IAmb IAmb 22 37 49.5
comp=Z,4.8nm,0.7s
J05D Fort Rock, OR 86.37 39 P P 22 37 50.2 +1.3
baz=231,SNR=8.9
O18K Koktuh Hills 86.50 12 P P 22 37 48.8 -0.1
baz=202
PRN Pahroc Range 86.68 46 IAmb IAmb 22 37 52.9
comp=Z,6.3nm,0.8s
ENH Enshi 86.83 305 IAmb IAmb 22 37 52.8
comp=Z,9.4nm,1.0s
R11A Troy Canyon, C 86.87 45 P P 22 37 51.9 +0.5
baz=235
TUC Tucson 86.87 52 P P 22 37 52.6 +1.2
TUC IAmb IAmb 22 37 54.5
comp=Z,16nm,0.9s
TUC Tucson 86.87 52 P P 22 37 53.3 +1.9
baz=238
I05D Terrebonne, OR 86.97 38 P P 22 37 52.6 +1.0
baz=231
O19K Port Alsworth 86.98 12 P P 22 37 50.8 -0.4
baz=203
BMN Battle Mountai 87.03 43 IAmb IAmb 22 37 53.4
comp=Z,5.6nm,0.7s
O20K Slope Mountain 87.23 13 P P 22 37 53.0 +0.6
baz=205
BRSE Bradley Lake S 87.33 14 P P 22 37 52.8 0.0
baz=206
X16A Lo Mia Camp, P 87.51 50 IAmb IAmb 22 37 57.2
comp=Z,8.0nm,1.0s
G05D Wamic, OR 87.55 37 P P 22 37 55.3 +1.0
baz=231
LCMT Little Creek M 87.66 47 IAmb IAmb 22 37 57.3
comp=Z,8.2nm,1.1s
E04D Cinebar 87.71 36 P P 22 37 56.1 +1.2
baz=230
PLCA Paso Flores 87.80 134 P P 22 37 57.1 +1.3
comp=Z,1.4nm,0.7s,baz=249,slow=5.6,SNR=4.9
I07A Izee 87.85 39 P P 22 37 56.2 +0.4
CCUT Cedar City 87.88 47 IAmb IAmb 22 37 58.7
comp=Z,5.9nm,0.9s
F05D White Salmon 87.88 37 P P 22 37 56.8 +1.0
baz=231
KNB Kanab 87.95 48 IAmb IAmb 22 38 02.7
comp=Z,7.7nm,1.1s
U15A North Rim 87.99 48 IAmb IAmb 22 38 00.0
comp=Z,6.3nm,0.9s
D04E Lakebay 88.00 35 P P 22 37 57.8 +1.6
baz=230
D03D Eldon 88.07 35 P P 22 37 57.9 +1.3
baz=230
WUAZ Wupatki 88.13 49 P P 22 37 58.1 +0.7
baz=238
GAMB Gambell 88.25 4 P P 22 37 57.5 +0.5
baz=187
ELK Elko 88.44 43 P P 22 37 58.6 -0.2
L19K White Mountain 88.72 11 P P 22 37 58.8 -0.5
L19K White Mountain 88.72 11 P P 22 37 59.7 +0.4
baz=203
G08A Pilot Rock 88.89 38 IAmb IAmb 22 38 03.2
comp=Z,8.0nm,0.9s
MTPU Mount Pierson 88.93 47 IAmb IAmb 22 38 04.1
comp=Z,9.0nm,0.8s
A04D Lummi Island 89.03 34 P P 22 38 02.2 +1.2
baz=230
B05A Bryant 89.05 34 P P 22 38 02.4 +1.3
baz=230
W18A Petrified Fore 89.07 50 P P 22 38 02.8 +1.0
baz=239
121A Cookes Peak, D 89.16 54 IAmb IAmb 22 38 06.4
comp=Z,8.7nm,0.9s
121A Cookes Peak, D 89.16 54 P P 22 38 01.4 -0.8
baz=240
TTA Tatalina 89.21 11 P P 22 38 02.1 +0.5
baz=202
KNK Knik Glacier 89.34 15 P P 22 38 01.8 -0.4
baz=208
SIT Sitka 89.52 23 P P 22 38 03.5 +0.5
baz=220
DUG Dugway, Tooele 89.68 45 P P 22 38 04.4 0.0
baz=237
SML Sawmill 89.71 14 P P 22 38 04.4 +0.4
baz=208
CMAR Chiang Mai Arr 89.78 290 P P 22 38 06.8 +1.6
comp=Z,4.8nm,0.9s,baz=141,slow=3.3,SNR=30
CMAR Chiang Mai Arr 89.78 290 P P 22 38 05.5 +0.3
PPLA Purkeypile 89.88 12 P P 22 38 04.8 0.0
baz=205
CHTO Chiang Mai 89.93 291 P P 22 38 06.3 +0.4
CHTO IAmb IAmb 22 38 08.0
comp=Z,7.8nm,0.9s
MESA MESA 89.93 18 P P 22 38 05.3 +0.1
baz=214
SCM Sheep Creek Mo 89.97 15 P P 22 38 05.5 +0.4
baz=209
KLU Klutina 90.00 16 P P 22 38 05.5 +0.1
baz=210
TNA Tin City 90.27 5 IAmb IAmb 22 38 07.4
comp=Z,5.1nm,0.8s
TNA Tin City 90.27 5 P P 22 38 06.4 0.0
baz=191
F10A Beach Ranch, E 90.28 38 IAmb IAmb 22 38 08.1
comp=Z,5.3nm,0.8s
CAST Castle Rocks 90.37 12 P P 22 38 05.8 -1.2
baz=205
N25K Chitina, Valde 90.43 16 P P 22 38 07.7 +0.4
baz=212
WAT6 Susitna Watana 90.53 14 P P 22 38 07.5 -0.3
baz=209
HLID Hailey 90.54 41 P P 22 38 08.9 +0.5
HLID Hailey 90.54 41 P P 22 38 08.8 +0.4
baz=236
MNTX Cornudas Mount 90.54 55 IAmb IAmb 22 38 10.6
comp=Z,4.3nm,0.8s
MNTX Cornudas Mount 90.54 55 P P 22 38 09.3 +0.8
baz=241
HVU Hansel Valley 90.56 44 IAmb IAmb 22 38 10.3
comp=Z,8.1nm,0.7s
J20K Nowinta River 90.69 11 P P 22 38 07.9 -0.4
baz=203
TX32 Lajitas Array 90.73 58 IAmb IAmb 22 38 11.8
comp=Z,6.8nm,0.9s
TXAR Lajitas Array 90.73 58 P P 22 38 11.0 +1.5
comp=Z,5.9nm,0.8s,baz=214,slow=6.4,SNR=60
TXAR Lajitas Array 90.73 58 P 22 38 10.5 +1.0
TRF Thorofare Moun 90.75 13 P P 22 38 08.1 -0.8
baz=207
HHC Hu-ho-hao-te 90.89 315 eP P 22 38 11.3 +1.3
HHC pmax pmax
comp=Z,8.0nm,0.9s
HHC pmax pmax
comp=Z,210nm,4.6s
PZH PanZhiHua 91.02 299 P P 22 38 10.8 -0.1
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,170nm,5.9s
P18A Preston Nutter 91.05 46 IAmb IAmb 22 38 12.8
comp=Z,4.8nm,0.9s
HWUT Hardware Ranch 91.23 44 IAmb IAmb 22 38 13.0
comp=Z,4.5nm,0.7s
PV23 Carpenter Ridg 91.27 48 IAmb IAmb 22 38 16.1
comp=Z,5.6nm,0.7s
MCK McKinley 91.28 13 P P 22 38 11.1 0.0
baz=208
ANMO Albuquerque 91.31 52 P P 22 38 11.4 -0.8
ANMO Albuquerque 91.31 52 P P 22 38 12.8 +0.6
baz=241
YUK6 Outpost Mounta 91.59 19 P P 22 38 13.4 +0.6
baz=217
YUK3 Moose Creek 91.67 18 P P 22 38 13.4 +0.2
baz=215
BVCY Beaver Creek 92.08 17 P P 22 38 15.2 +0.3
baz=215
RIDG Independent Ri 92.19 15 P P 22 38 15.4 +0.1
baz=212
HDA Harding Lake 92.30 14 P P 22 38 15.4 -0.3
baz=210
S22A 4UR Ranch, Cre 92.41 49 IAmb IAmb 22 38 19.4
comp=Z,7.0nm,1.1s
S22A 4UR Ranch, Cre 92.41 49 P P 22 38 17.7 +0.4
baz=241
I23K Minto, Yukon-K 92.45 12 P P 22 38 16.8 +0.3
baz=208
SCRK Sand Creek 92.60 15 P P 22 38 17.1 -0.3
baz=212
CMIG Matias Romero 92.62 73 P P 22 38 18.9 +0.6
comp=Z,1.6nm,0.6s,baz=234,slow=5.7,SNR=2.4
ILAR Eielson Array 92.63 14 P P 22 38 16.2 -1.0
comp=Z,0.7nm,0.6s,baz=223,slow=5.4,SNR=12
O20A White River Ci 92.64 47 P P 22 38 18.8 +0.6
baz=240
J25K Salcha River, 92.82 14 P P 22 38 18.0 -0.2
baz=211
SMCO Snowmass 93.01 48 IAmb IAmb 22 38 23.1
comp=Z,4.2nm,0.8s
BW06 Boulder Array 93.11 44 P P 22 38 20.2 -0.1
baz=239
PDAR Pinedale Array 93.11 44 P P 22 38 20.4 +0.1
comp=Z,1.9nm,0.7s,baz=213,slow=3.3,SNR=14
J26L Joseph Creek 93.14 15 P P 22 38 19.9 +0.1
baz=213
BOZ Bozeman (W) 93.31 41 P P 22 38 21.7 +0.6
baz=238
H17A Grant Village 93.32 42 P P 22 38 22.8 +1.5
baz=238
SDCO Great Sand Dun 93.33 50 P P 22 38 21.8 +0.2
baz=241
M30M Minto, Yukon 93.34 18 P P 22 38 21.0 +0.3
baz=218
DAWY Dawson 93.81 17 P P 22 38 22.7 -0.1
baz=216
EGAK Eagle 93.95 16 P P 22 38 23.1 -0.2
baz=215
COLD Coldfoot 94.15 11 P P 22 38 24.0 -0.2
baz=207
Q24A Divide 94.16 49 P P 22 38 25.8 +0.5
baz=242
ISCO Idaho Springs 94.23 48 P P 22 38 26.1 +0.4
baz=241
N23A Red Feather La 94.53 47 P P 22 38 26.7 -0.2
baz=241
MMPY Sheldon Lake, 95.05 20 P P 22 38 29.1 +0.6
baz=223
I29M Ogilvie Camp, 95.13 16 P P 22 38 28.5 -0.2
baz=217
EPYK Eagle Plains 96.33 16 P P 22 38 33.7 -0.4
baz=219
YKA Yellowknife Ar 100.91 25 P Pdif 22 38 54.7 +0.1
comp=Z,0.2nm,0.4s,baz=239,slow=4.4,SNR=1.8
HDIL Hopedale 105.99 52 P PKiKP 22 43 24.8 -2.0
baz=251
EYMN Ely 106.81 45 P PKiKP 22 43 28.7 +0.6
baz=252
GOGA Godfrey 108.20 61 P PKiKP 22 43 28.5 -2.7
baz=252
KMSC Kings Mountain 110.39 60 P PKiKP 22 43 35.9 +0.7
baz=254
MKAR Makanchi Array 112.60 312 PKiKP PKiKP 22 43 38.0 -1.1
comp=Z,0.3nm,0.5s,baz=93,slow=0.8,SNR=6.8
MKAR SKP 22 46 26.2
comp=Z,0.5nm,0.7s,baz=80,slow=2.5,SNR=5.0
MKAR PKKP PKKPab 22 54 39.1 +1.0
comp=Z,0.2nm,0.6s,baz=268,slow=5.0,SNR=3.3
MKAR Makanchi Array 112.60 312 PKiKP 22 43 37.5 -1.6
KURBB Kurchatov Arra 115.72 316 PKP PKPdf 22 43 43.8 -1.1
comp=Z,0.7nm,0.7s,baz=89,slow=1.7,SNR=6.4
KURBB SKP 22 46 32.1
comp=Z,0.3nm,0.5s,baz=116,slow=2.4,SNR=5.2
BIRV Birongo 115.75 90 PKPdf PKPdf 22 43 45.5 -0.6
NCB Newcomb 117.64 52 PKPdf 22 43 47.9 -1.0
GAR Garm 119.89 302 PKPdf 22 43 53.1 -0.3
I63A Otisfield 120.26 52 PKPdf 22 43 53.5 -0.4
KKAR Karatay Array 120.27 307 PKPdf 22 43 53.6 -0.3
LMQ La Malbaie 120.73 48 PKPdf 22 43 53.4 -1.3
BRVK Borovoye 121.00 318 PKiKP 22 43 55.2 0.0
F63A Nahmakanta, Br 121.45 50 PKPdf 22 43 55.5 -0.7
D62A Allapoint, All 121.57 49 PKPdf 22 43 55.4 -0.9
F64A Sherman 121.98 50 PKPdf 22 43 55.8 -1.3
ARU Arti 127.41 323 PKPdf 22 44 07.0 -0.1
GEYT Alibeck 129.31 300 SKPbc SKPbc 22 46 47.0 +0.9
comp=Z,3.4nm,0.9s,baz=33,slow=14,SNR=4.0
ARCES ARCESS Array B 132.51 348 PKhKP PKPpre 22 44 07.5
comp=Z,2.1nm,0.9s,baz=43,slow=2.3,SNR=4.8
ARCES PKP PKPdf 22 44 15.4 -1.1
comp=Z,3.4nm,0.9s,baz=62,slow=1.8,SNR=12
ARCES SKPbc SKPbc 22 46 56.5 0.0
comp=Z,3.0nm,0.6s,baz=28,slow=3.2,SNR=18
KMBO Kilima Mbogo 135.82 240 SKPbc SKPbc 22 47 10.6 +1.3
comp=Z,0.8nm,0.3s,baz=169,slow=4.0,SNR=5.5
FINES FINESS Array B 139.05 341 PKhKP PKPpre 22 44 19.2
comp=Z,1.8nm,0.8s,baz=57,slow=1.8,SNR=13
FINES PKP PKiKP 22 44 30.2 -1.0
comp=Z,1.2nm,0.6s,baz=67,slow=2.2,SNR=6.0
FINES SKPbc SKPbc 22 47 16.3 -0.3
comp=Z,5.5nm,0.6s,baz=46,slow=3.4,SNR=18
NC300 NORSAR Array S 142.46 351 PKPpre 22 44 31.6
NB201 NORSAR Array S 142.68 351 PKPpre PKPpre 22 44 31.5
NB2 NORSAR Subarra 142.70 351 PKP PKPdf 22 44 31.7 -3.8
comp=Z,1.2nm,0.6s,baz=21,slow=2.6
NOA NORSAR Array B 142.70 351 PKhKP PKPpre 22 44 31.9
comp=Z,0.5nm,0.7s,baz=33,slow=2.5,SNR=6.0
NC602 NORSAR Array S 142.95 351 PKPpre PKPpre 22 44 32.3
MARD Mardin 143.07 300 PKPbc 22 44 35.2 +0.3
KONO Kongsberg 144.27 352 PKPbc 22 44 37.2 -0.5
PABE Paberze 144.41 337 PKPbc 22 44 38.2 0.0
AKASG Malin Array Be 145.52 327 PKPbc PKPdf 22 44 40.9 +0.3
comp=Z,2.2nm,0.4s,baz=44,slow=3.9,SNR=16
AKASG SKPbc SKPbc 22 47 30.9 -1.9
comp=Z,0.5nm,0.5s,baz=51,slow=2.5,SNR=2.2
AKASG Malin Array Be 145.52 327 PKPdf PKPdf 22 44 41.0 +0.5
AKBB Malin Array Si 145.52 327 PKPdf PKPdf 22 44 40.8 +0.2
BNN Bunyan 146.59 304 PKPbc PKPbc 22 44 45.7 +0.2
KAC Achnashellach 146.83 5 eP PKPbc 22 44 45.0 -0.3
MCD Coleburn Disti 146.89 3 eP PKPbc 22 44 44.8 -0.6
KPL Plockton 146.96 6 eP PKPbc 22 44 45.1 -0.5
SORM Soroca 147.53 324 ⇑P PKPbc 22 44 46.8 -0.6
DRUM Mains of Drumt 147.59 3 eP PKPbc 22 44 46.3 -1.0
BR131 Keskin Array S 147.98 306 PKPbc PKPbc 22 44 48.0 -1.0
BRTR Keskin Array B 147.98 306 PKPbc PKPbc 22 44 48.6 -0.5
comp=Z,3.0nm,0.8s,baz=104,slow=2.5,SNR=7.3
BRTR Keskin Array B 147.98 306 PKPbc PKPbc 22 44 48.5 -0.6
LAWE Loch Awe, Argy 148.05 6 eP PKPbc 22 44 48.1 -0.4
ANTO Ankara 148.55 307 PKPbc PKPbc 22 44 50.8 +0.4
EBL Broad Law 148.71 3 eP PKPbc 22 44 49.9 -0.3
TLCR 148.92 319 ⇑P PKPbc 22 44 51.3 +0.3
ESK Eskdalemuir 149.15 4 PKPbc PKPbc 22 44 50.3 -1.0
TPGR Topolog 149.33 318 ⇓P PKPab 22 44 59.4 +0.6
CSS Mathiatis 149.41 298 PKPbc PKPbc 22 44 52.1 -0.5
BUR08 Bucovina Ar. S 149.50 326 PKPbc PKiKP 22 44 53.1 -0.2
BURAR Bucovina Array 149.51 325 ⇑P PKiKP 22 44 53.7 +0.4
BURAR Bucovina Array 149.51 325 PKPbc PKPbc 22 44 53.0 +0.5
EDMD Edmundbyers 149.70 2 eP PKPbc 22 44 51.9 -0.7
OJC Ojcow 150.12 334 ePKPbc PKPbc 22 44 53.8 0.0
BORA Eskisehir 150.24 308 PKPbc PKPbc 22 44 54.0 -0.5
CRVS Cervenica-Dubn 150.42 331 ePKP PKiKP 22 44 56.1 +1.1
MLR Muntele Rosu 150.43 321 ⇓P PKPbc 22 44 54.5 -0.3
MLR Muntele Rosu 150.43 321 PKPbc PKPbc 22 44 54.3 -0.5
DOPR Dopca 150.45 323 ⇑P PKiKP 22 44 55.1 -0.1
TRPA Tarpa 150.49 329 ⇑P PKPbc 22 44 54.5 -0.1
SECR 150.62 321 ⇓P PKPbc 22 44 55.4 +0.3
KSP Ksiaz 150.88 339 ePKPbc PKiKP 22 44 55.9 0.0
VOIR 150.97 322 ⇑P PKPbc 22 44 55.9 0.0
OSTC Ostas 151.15 338 ePKP PKiKP 22 44 56.6 +0.1
ARR Arges 151.24 322 ⇓P PKiKP 22 44 57.1 +0.2
UPC Upice 151.26 339 ePKP PKiKP 22 44 56.7 0.0
DPC Dobruska-Polom 151.29 338 ePKP PKiKP 22 44 56.9 +0.1
DRGR 151.33 326 ⇑P PKPbc 22 44 56.5 -0.2
CLL Collm 151.46 343 i PKPbc PKPbc 22 44 56.3 -0.5
comp=Z,8.0nm,0.7s
CLL i PKPab PKPab 22 45 07.1 -0.3
CLL ePKPbc pPKPab 22 46 59.0 -0.7
CLL ePKPab pPKPbc 22 47 05.0 +11
CLL eSKPdf SKPdf 22 47 38.0 +2.1
CLL Collm 151.46 343 PKPbc 22 44 56.6 -0.1
HUMR Humele 151.55 321 ⇑P PKPbc 22 44 56.5 -0.7
BRG Berggiesshubel 151.59 341 ePKP PKPbc 22 44 57.1 0.0
BRG Amp 22 44 58.5
comp=Z,5.7nm,0.5s
ELL Elmali 151.68 303 PKPbc PKiKP 22 44 58.4 +0.2
GZR Gura Zlata 152.23 324 ⇑P PKPbc 22 44 57.9 -0.9
BZS Tuzlas 152.59 326 ⇓P PKPbc 22 44 59.3 -0.4
HERR Herculane 152.76 324 ⇓P PKPbc 22 44 59.6 -0.2
VTS Vitosha 153.70 319 ⇑P PKPab 22 45 18.6 +1.1
VTS Vitosha 153.70 319 PKPab PKPab 22 45 18.6 +1.1
ESDC Sonseca Array 164.52 12 PKPab PKPab 22 46 03.5 -1.0
comp=Z,0.3nm,0.7s,baz=338,slow=2.8,SNR=7.3
ESDC Sonseca Array 164.52 12 PKPab 22 46 04.3 -0.1
TORD Torodi Ar. Bea 168.57 188 PKPab PKPab 22 46 22.7 0.0
comp=Z,1.3nm,0.7s,baz=185,slow=3.6,SNR=8.1

**IDC 22 22:36:59.0±7.8, 18°.51S×178°.04W, h650km±85km, mb3.0/4, mb1 3.3/4, mb1mx2.9/36, mbtmp4.0/4 Error ellipse: s-maj=172.1km s-min=41.8km az=156.0, Fiji Islands region**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
WRA Warramunga Arr 44.88 260 P P 22 44 18.6 0.0
1.9nm,0.4s,baz=97,slow=7.2,SNR=52
WRA PcP PcP 22 45 45.8 +0.2
0.2nm,0.3s,baz=93,slow=3.5,SNR=2.8
ASAR Alice Springs 44.97 255 P P 22 44 19.4 +0.1
2.7nm,0.5s,baz=90,slow=7.9,SNR=28
ASAR PcP PcP 22 45 45.8 -0.2
0.5nm,0.5s,baz=102,slow=3.9,SNR=5.2
FITZ Fitzroy Crossi 53.28 261 P P 22 45 20.0 0.0
0.5nm,0.3s,baz=113,slow=7.6,SNR=2.1
TXAR Lajitas Array 86.02 57 P P 22 48 33.4 +0.3
0.1nm,0.5s,baz=232,slow=4.4,SNR=2.5
ARCES ARCESS Array B 126.97 350 PKP PKPdf 22 54 49.7 -0.5
0.5nm,0.4s,baz=69,slow=0.9,SNR=6.4

*IDC 22 22:44:28.6±1.8, 25°.86N×128°.20E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.2/31, mbtmp3.2/3, Error ellipse: s-maj=55.3km s-min=19.4km az=92.0*
*JMA 22 22:44:29.6±0.3, 25°.90N×128°.59E, h38km, M2.8*
**ISC 22 22:44:28.3±2.0, 26°.00N±0°.06×128°.62E±0°.04, h8km±14km, n15, σ0s85/21, mb3.2/3, Ryukyu Islands**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
JNTH Nagotoyohara 0.74 314 P Pn 22 44 44.0 -1.1
JJT3 Tamagusuku3 0.77 281 P Pb 22 44 44.1 +0.2
JJT3 eS Sb 22 44 54.6 +0.1
JOW Kunigami 0.88 340 Pg Pn 22 44 47.2 +0.2
106nm,0.3s,baz=166,slow=27,SNR=256
JOW Lg Lg 22 44 54.8
101nm,0.3s,baz=144,slow=21,SNR=13
JOW Kunigami 0.88 340 P Pn 22 44 47.2 +0.2
JYRO Yoronjima 1.03 352 P Pn 22 44 49.5 +0.4
JIH Iheya 1.19 331 P Pn 22 44 51.7 +0.5
JIH eS Sn 22 45 07.8 +0.3
JOKE Okinoerabujima 1.36 358 P Pg 22 44 54.5 +0.1
JOKE eS Sn 22 45 12.1 +0.4
JAGN Aguni-jima 1.37 296 P Pn 22 44 53.3 -0.4
JKE Kume jima 2 1.68 282 P Pn 22 44 56.6 -1.4
JTK Tokunoshima 1.80 9 P Pb 22 45 01.0 -0.6
JTK S Sb 22 45 23.0 -1.3
JMZ Minamidaito 2 2.35 94 P Pn 22 45 07.5 +0.3
JMZ S Sn 22 45 34.9 -1.3
JKDJ Kitadaitoujima 2.41 91 P Pn 22 45 08.5 +0.5
JKDJ eS Sn 22 45 36.5 -1.2
SONM Songino Array 27.93 327 P P 22 50 20.5 +1.3
0.3nm,0.6s,baz=125,slow=7.6,SNR=2.2
MKAR Makanchi Array 41.95 312 P P 22 52 19.1 -0.5
0.1nm,0.4s,baz=104,slow=9.0,SNR=5.7
WRA Warramunga Arr 46.01 173 P P 22 52 53.2 +0.8
0.2nm,0.6s,baz=354,slow=8.2,SNR=1.7

*IDC 22 22:58:50.3±1.2, 36°.12N×0°.22E, h0km, mb3.5/3, mb1 3.8/6, mb1mx3.5/38, mbtmp3.7/6, ML3.8/3, Error ellipse: s-maj=24.2km s-min=22.7km az=33.0*
*CRAAG 22 22:58:52.8, 35°.88N×0°.39E, Ml3.7*
*LDG 22 22:58:53.2±0.2, 35°.94N×0°.34E, h2km, Ml2.8/5, Error ellipse: s-maj=5.5km s-min=3.4km az=158.0*
*INMG 22 22:58:53.1±0.9, 35°.84N×0°.27E, h31km, ML2.7, Error ellipse: s-maj=5.6km s-min=3.8km az=122.0*
*CNRM 22 22:58:54.6, 36°.03N×0°.19E, h30km, ml3.5*
*IGIL 22 22:58:56.4, 35°.99N×0°.11W, h0km*
**ISC 22 22:58:51.7±0.6, 36°.05N±0°.04×0°.32E±0°.03, h10km, n82, σ2s08/99, mb3.7/3, Northern Algeria**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
OKGL Djebel Kef Gue 0.26 91 P Pb 22 58 59.0 +0.5
OJBR Djebel Berber 0.46 178 P Pg 22 59 00.0 -0.7
EANR 'Ain N'Sour 0.64 98 P Pb 22 59 06.0 +1.0
USTO Oran 0.77 247 P Pn 22 59 08.0 -0.6
ODJA Bouhanifia 0.81 208 P Pb 22 59 08.0 +0.1
ECHA Ech Chlef 0.85 83 P Pb 22 59 10.0 +1.4
EBNR Beni Rached 1.01 76 P Pg 22 59 11.9 +0.8
ETRT Tiaret 1.03 129 P Pg 22 59 11.0 -0.5
OTSS Djebel Tessala 1.19 230 P Pn 22 59 16.6 +2.2
CART Cartagena 1.87 326 P Pn 22 59 23.1 -0.7
CART S Sn 22 59 43.2 -4.2
CART Cartagena 1.87 326 P Pn 22 59 23.2 -0.6
CART Cartagena 1.87 326 P Pn 22 59 22.9 -0.8
CHAS Isla Isabel II 2.40 250 P Pg 22 59 41.6 +3.9
TAF Taforalt 2.55 242 P Pn 22 59 33.0 -0.1
TAF Taforalt 2.55 242 P Pn 22 59 32.2 -1.0
TAF S Sn 23 00 02.8 -1.5
GOG Mont Gurugu 2.82 254 P Pn 22 59 34.6 -2.4
GOG S Sn 23 00 08.5 -2.6
JBK JBK 2.92 235 P Pn 22 59 39.0 +0.6
JBK JBK 2.92 235 P Pn 22 59 37.9 -0.4
JBK S Sn 23 00 15.1 +1.6
PALE Palemas 3.57 258 P Pn 22 59 46.3 -0.8
PALE S Sn 23 00 26.5 -2.8
EMAL Malaga-Limoner 3.90 282 P Pn 22 59 50.6 -1.0
EMAL S Sg 23 00 59.7 +2.9
FIGM Figuig 4.12 199 P Pn 22 59 55.0 +0.3
FIGM Figuig 4.12 199 P Pn 22 59 55.0 +0.3
FIGM S Sb 23 00 49.3 -4.8
LIJA Lijar 4.69 282 P Pn 23 00 03.0 +0.4
ESDC Sonseca Array 4.96 318 Pn Pn 23 00 06.3 0.0
2.3nm,0.3s,baz=140,slow=13,SNR=91
ESDC Sn Sn 23 01 00.0 -3.8
0.6nm,0.3s,baz=133,slow=22,SNR=1.7
ESDC Lg Lg 23 01 15.5
1.1nm,0.3s,baz=353,slow=13,SNR=3.3
PAB San Pablo 5.09 315 P Pn 23 00 09.5 +1.4
PAB San Pablo 5.09 315 P Pn 23 00 09.5 +1.4
UCM Universidad Co 5.10 328 P Pn 23 00 10.4 +2.2
UCM S Sn 23 01 14.9 +7.8
IFR Ifrane 5.14 242 P Pn 23 00 08.7 -0.2
MDT Midelt 5.19 233 Pn Pn 23 00 09.3 -0.2
1.8nm,0.3s,baz=0.1,slow=13,SNR=37
MDT Midelt 5.19 233 P Pn 23 00 09.4 -0.2
MDT Midelt 5.19 233 P Pn 23 00 09.4 -0.2
MDT S Sn 23 01 11.3 +1.7
MD31 MD31 5.26 234 P Pn 23 00 10.0 -0.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MD31 | | | | S | | Sn | 23 01 11.6 | +0.4 |
| **PVAQ** | **Vaqueiros** | **6.60** | **284** | *e*Pn | | **Pn** | **23 00 27.5** | **-1.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **23 01 39.1** | **-4.9** |
| PVAQ | | | | A | | A | 23 01 53.2 | |
| | 3.0nm,1.0s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **6.60** | **284** | P | | **Pn** | **23 00 27.4** | **-1.3** |
| **PBDV** | **Barranco-do-Ve** | **6.74** | **283** | *e*Pn | | **Pn** | **23 00 30.8** | **+0.1** |
| **PBEJ** | **Beja** | **6.84** | **289** | *e*Pn | | **Pn** | **23 00 31.5** | **-0.6** |
| **ETSF** | **Etsaut** | **6.88** | **355** | *e*P | | Pn | 23 00 39.5 | +6.9 |
| ETSF | | | | *e*Sn | | **Sn** | **23 01 48.5** | **-2.5** |
| | 2.3nm,0.5s | | | | | | | |
| **PCVE** | **Castro Verde** | **6.89** | **286** | *e*Pn | | **Pn** | **23 00 32.0** | **-0.7** |
| **PESTR** | **Estremoz** | **6.89** | **296** | *e*Pn | | **Pn** | **23 00 32.5** | **-0.3** |
| **PESTR** | **Estremoz** | **6.89** | **296** | P | | **Pn** | **23 00 33.1** | **+0.3** |
| **PESTR** | **Estremoz** | **6.89** | **296** | P | | **Pn** | **23 00 33.1** | **+0.3** |
| PESTR | | | | S | | **Sn** | **23 01 47.9** | **-3.4** |
| **EPF** | **Esparros** | **6.98** | **0** | *e*Pn | | **Pn** | **23 00 35.8** | **+1.8** |
| **EPF** | **Esparros** | **6.98** | **0** | *e*P | | Pn | 23 00 40.4 | +6.4 |
| **PMRV** | **Marv??o** | **6.98** | **301** | *e*Pn | | **Pn** | **23 00 34.5** | **+0.5** |
| PMRV | | | | *e*Sn | | **Sn** | **23 01 48.4** | **-5.1** |
| PMRV | | | | A | | A | 23 02 31.1 | |
| | 4.2nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **7.07** | **287** | *e*P | | **Pn** | **23 00 34.1** | **-1.1** |
| **MESJ** | **Messejana** | **7.07** | **287** | *e*Pn | | **Pn** | **23 00 34.4** | **-0.8** |
| **EVO** | **Evora** | **7.09** | **293** | *e*Pn | | **Pn** | **23 00 37.1** | **+1.6** |
| **SJPF** | **Ste Jean** | **7.16** | **351** | *e*Pn | | **Pn** | **23 00 37.1** | **+0.7** |
| **SJPF** | **Ste Jean** | **7.16** | **351** | *e*P | | Pn | 23 00 43.9 | +7.5 |
| **PCBR** | **Castelo Branco** | **7.23** | **304** | *e*Pn | | **Pn** | **23 00 37.7** | **+0.3** |
| PCBR | | | | *e*Sn | | **Sn** | **23 01 55.2** | **-4.4** |
| PCBR | | | | A | | A | 23 02 16.6 | |
| | 3.7nm,0.6s | | | | | | | |
| **MORF** | **Marmelete** | **7.32** | **283** | *e*Pn | | **Pn** | **23 00 38.0** | **-0.7** |
| **KEST** | **Kesra** | **7.33** | **90** | Pn | | **Pn** | **23 00 40.5** | **+1.6** |
| | 2.1nm,0.3s,baz=233,slow=10,SNR=32 | | | | | | | |
| KEST | | | | Sn | | **Sn** | **23 02 06.0** | **+3.8** |
| | 0.3nm,0.3s,baz=83,slow=22,SNR=1.9 | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **7.37** | **289** | *e*Pn | | **Pn** | **23 00 38.6** | **-0.7** |
| **PMTG** | **Montargil** | **7.43** | **297** | *e*Pn | | **Pn** | **23 00 40.0** | **-0.1** |
| PMTG | | | | *e*Sn | | **Sn** | **23 02 00.2** | **-4.2** |
| PMTG | | | | A | | A | 23 02 10.1 | |
| | 3.0nm,1.0s | | | | | | | |
| **MTLF** | **Montolieu** | **7.43** | **11** | *e*Pn | | **Pn** | **23 00 41.3** | **+1.1** |
| MTLF | | | | *e*Sn | | **Sn** | **23 02 01.8** | **-2.7** |
| | 0.2nm,0.2s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **7.44** | **281** | *e*Pn | | **Pn** | **23 00 39.8** | **-0.5** |
| **MVO** | **Moncorvo** | **7.70** | **314** | *e*Pn | | **Pn** | **23 00 45.5** | **+1.6** |
| **PACT** | **Alcochete** | **7.78** | **293** | *e*Pn | | **Pn** | **23 00 44.7** | **-0.2** |
| **PBRG** | **Braganca** | **7.96** | **318** | *e*Pn | | **Pn** | **23 00 49.1** | **+1.7** |
| **PVIS** | **Viseu** | **7.96** | **308** | *e*Pn | | **Pn** | **23 00 48.7** | **+1.2** |
| **PSBE** | **So Bento** | **8.01** | **298** | *e*Pn | | **Pn** | **23 00 48.4** | **+0.3** |
| **PCAS** | **Casmilo, Conde** | **8.03** | **303** | *e*Pn | | **Pn** | **23 00 48.9** | **+0.6** |
| **PMAFR** | **Mafra** | **8.17** | **294** | *e*Pn | | **Pn** | **23 00 50.4** | **+0.1** |
| **LASF** | **Ste Croix** | **8.47** | **18** | *e*Pn | | **Pn** | **23 00 54.7** | **+0.3** |
| **LMR** | **La Mourre** | **8.70** | **31** | *e*Pn | | **Pn** | **23 00 58.5** | **+0.9** |
| **LFF** | **La Frestale** | **8.89** | **2** | *e*Pn | | **Pn** | **23 01 01.7** | **+1.5** |
| **PGAV** | **Gavieira, Arco** | **8.92** | **314** | *e*Pn | | **Pn** | **23 01 02.8** | **+2.1** |
| **FRF** | **La Foret Royal** | **8.94** | **31** | *e*Pn | | **Pn** | **23 01 01.5** | **+0.6** |
| FRF | | | | *e*Sn | | **Sn** | **23 02 37.4** | **-4.3** |
| | 0.1nm,0.2s | | | | | | | |
| **CAF** | **Calviac** | **8.97** | **8** | *e*Pn | | **Pn** | **23 01 03.4** | **+2.1** |
| **CAF** | **Calviac** | **8.97** | **8** | *e*P | | Pn | 23 01 08.6 | +7.3 |
| CAF | | | | *e*Sn | | **Sn** | **23 02 38.9** | **-3.5** |
| | 1.1nm,0.3s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **9.29** | **5** | *e*Pn | | **Pn** | **23 01 06.9** | **+1.2** |
| **PGF** | **Pioggiola** | **9.35** | **43** | *e*Pn | | **Pn** | **23 01 07.3** | **+0.8** |
| **VIVF** | **Saint-Julien-l** | **9.40** | **19** | *e*Pn | | **Pn** | **23 01 08.5** | **+1.3** |
| VIVF | | | | *e*Sn | | **Sn** | **23 02 48.7** | **-4.3** |
| | 0.8nm,0.3s | | | | | | | |
| **SBF** | **Sospel** | **9.53** | **33** | *e*Pn | | **Pn** | **23 01 10.3** | **+1.4** |
| **MFF** | **Saint Martin d** | **10.55** | **358** | *e*Pn | | **Pn** | **23 01 24.4** | **+1.5** |
| **LPG** | **La Plagne** | **10.62** | **25** | *e*P | | Pn | 23 01 31.4 | +7.2 |
| **QUIF** | **Quistinic** | **12.14** | **349** | *e*Pn | | **Pn** | **23 01 45.8** | **+1.2** |
| **LDF** | **La Druitiere** | **12.54** | **359** | *e*Pn | | **Pn** | **23 01 50.4** | **+0.2** |
| **FLN** | **La Foliniere** | **12.72** | **358** | *e*Pn | | **Pn** | **23 01 52.2** | **-0.4** |
| | baz=174 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.83** | **177** | P | | **P** | **23 03 55.6** | **+0.6** |
| | 3.3nm,0.9s,baz=358,slow=9.9,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.77** | **52** | P | | **P** | **23 08 57.0** | **+0.2** |
| | 0.5nm,0.8s,baz=289,slow=7.1,SNR=4.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **68.88** | **333** | P | | **P** | **23 09 55.4** | **-0.8** |
| | 0.1nm,0.4s,baz=57,slow=6.7,SNR=2.6 | | | | | | | |

*IDC **22** 23:18:41.2±2.4, 19°.80S×176°.71W, h445km±38km, mb3.4/4, mb1 3.5/6, mb1mx3.2/26, mbtmp4.3/6, Error ellipse: s-maj=37.4km s-min=30.5km az=126.0*
*NEIC **22** 23:18:43.8±1.1, 19°.6S±0°.1×176°.7W±0°.2, h478km±10km, mb4.1/19, Error ellipse: s-maj=23.9km s-min=16.8km az=134.0*
**ISC 22 23:18:41.5**±0.7, **19°.7S**±0°.1×**176°.7W**±0°.1, **h450**km, **n30**, σ1**°25**/32, **mb4.0**/14, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.42** | **40** | P | **P** | **23 20 32.0** | **+1.2** |
| | 15nm,0.3s,baz=16,slow=21,SNR=4.1 | | | | | | |
| **AFI** | **Afiamalu** | **7.42** | **40** | P | **P** | **23 20 32.7** | **+1.8** |
| **SANVU** | **Saraoutou** | **15.90** | **283** | P | **P** | **23 22 02.6** | **+0.3** |
| **URZ** | **Urewera** | **19.29** | **195** | P | **P** | **23 22 34.2** | **-2.1** |
| | 1.0nm,0.3s,baz=294,slow=3.4,SNR=2.4 | | | | | | |
| **BKZ** | **Black Stump Fm** | **20.30** | **195** | P | **P** | **23 22 42.9** | **-2.7** |
| BKZ | | | | IAmb | IAmb | 23 22 59.5 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **QRZ** | **Quartz Range** | **23.01** | **201** | P | **P** | **23 23 12.1** | **+2.0** |
| **THZ** | **Tophouse** | **23.73** | **200** | P | **P** | **23 23 17.4** | **+0.8** |
| THZ | | | | IAmb | IAmb | 23 23 18.8 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **KHZ** | **Kahutara** | **24.14** | **198** | P | **P** | **23 23 22.5** | **+2.4** |
| **FOZ** | **Fox Glacier** | **26.35** | **202** | P | **P** | **23 23 41.5** | **+1.8** |
| FOZ | | | | IAmb | IAmb | 23 23 56.5 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **34.79** | **263** | P | **P** | **23 24 52.0** | **-1.1** |
| | comp=Z,3.5nm,0.5s,baz=97,slow=9.9,SNR=5.3 | | | | | | |
| **COEN** | **Coen** | **38.76** | **272** | P | **P** | **23 25 24.5** | **-1.5** |
| COEN | | | | IAmb | IAmb | 23 25 35.4 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **39.25** | **243** | P | **P** | **23 25 30.9** | **+1.1** |
| | comp=Z,0.6nm,0.4s,baz=72,slow=9.6,SNR=3.9 | | | | | | |
| **STKA** | **Stephens Creek** | **39.25** | **243** | P | **P** | **23 25 30.1** | **+0.2** |
| **BBOO** | **Buckleboo** | **44.01** | **243** | P | **P** | **23 26 07.5** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 23 26 19.1 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.73** | **261** | P | **P** | **23 26 21.0** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 23 26 23.9 | |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **45.90** | **256** | P | **P** | **23 26 23.3** | **+0.8** |
| AS31 | | | | IAmb | IAmb | 23 26 23.9 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.90** | **256** | P | **P** | **23 26 22.9** | **+0.4** |
| | comp=Z,7.9nm,0.6s,baz=86,slow=8.5,SNR=91 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 27 50.5** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=103,slow=4.2,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **45.90** | **256** | P | **P** | **23 26 22.5** | **0.0** |
| **WB0** | **Warramunga Arr** | **45.90** | **261** | P | **P** | **23 26 22.4** | **-0.2** |
| **WB2** | **Warramunga Arr** | **45.91** | **261** | P | **P** | **23 26 22.5** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 23 26 24.9 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.92** | **261** | P | **P** | **23 26 21.9** | **-0.9** |
| | comp=Z,1.4nm,0.8s,baz=97,slow=7.4,SNR=43 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 27 50.6** | **-0.3** |
| | comp=Z,0.2nm,0.4s,baz=103,slow=2.8,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.92** | **261** | P | **P** | **23 26 22.2** | **-0.6** |
| **FORT** | **Forrest** | **50.74** | **246** | P | **P** | **23 27 01.1** | **+2.4** |
| FORT | | | | IAmb | IAmb | 23 27 09.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **51.93** | **265** | P | **P** | **23 27 07.1** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 23 27 07.6 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.35** | **261** | P | **P** | **23 27 24.6** | **-0.2** |
| **QSPA** | **South Pole Qui** | **70.40** | **180** | P | **P** | **23 29 08.5** | **-0.4** |
| **BRLK** | **Bradley Lake** | **81.90** | **13** | P | **P** | **23 30 11.9** | **-0.5** |
| BRLK | | | | IAmb | IAmb | 23 30 25.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **HOLB** | **Holberg** | **82.00** | **29** | P | **P** | **23 30 13.1** | **0.0** |
| **CCUT** | **Cedar City** | **82.36** | **46** | P | **P** | **23 30 14.2** | **-1.3** |
| **D05A** | **Enumclaw** | **82.72** | **34** | P | **P** | **23 30 16.2** | **-0.7** |

**IDC 22 23:28:37.9**±7.5, **7°.10S**×**131°.76E**, **h432**km±111km, **mb2.3**/1, **mb1 2.5**/3, **mb1mx2.4**/20, **mbtmp3.3**/3, **Error ellipse: s-maj=216.1km s-min=47.7km az=78.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.02** | **169** | P | P | 23 31 26.3 | -1.7 |
| | 0.2nm,0.3s,baz=350,slow=11,SNR=17 | | | | | | |
| WRA | | | | S | S | 23 33 48.0 | -0.7 |
| | 0.8nm,0.3s,baz=332,slow=22,SNR=9.1 | | | | | | |
| **ASAR** | **Alice Springs** | **16.61** | **173** | P | P | 23 32 08.1 | +1.5 |
| | 0.2nm,0.3s,baz=347,slow=13,SNR=13 | | | | | | |
| ASAR | | | | S | | 23 35 00.8 | +1.6 |
| | 0.1nm,0.3s,baz=318,slow=18,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.27** | **326** | P | P | 23 39 00.3 | 0.0 |
| | 0.1nm,0.4s,baz=126,slow=7.3,SNR=1.6 | | | | | | |

*CNRM **22** 23:47:49.2, 35°.63N×3°.73W, h20km, ml2.2*
*SFS **22** 23:47:50.0, 35°.60N×3°.78W, h2km, ML2.6, ALBOARN S.*
*INMG **22** 23:47:51.5±1.3, 35°.60N×3°.72W, h13km±6km, ML1.9, Error ellipse: s-maj=3.6km s-min=3.3km az=91.0*
**ISC 22 23:47:49.5**±1.3, **35°.60N**±0°.04×**3°.72W**±0°.04, **h16**km±9km, **n18**, σ1**°08**/33, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.42** | **205** | P | **Pg** | **23 47 57.6** | **-0.5** |
| PALE | | | | S | **Sg** | **23 48 03.9** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.70** | **123** | P | **Pg** | **23 48 03.9** | **+0.6** |
| GOG | | | | S | **Sb** | **23 48 13.9** | **+1.0** |
| **EMAL** | **Malaga-Limoner** | **1.29** | **334** | P | **Pn** | **23 48 12.5** | **-0.4** |
| EMAL | | | | S | **Sb** | **23 48 28.7** | **-1.0** |
| **TAF** | **Taforalt** | **1.33** | **126** | P | **Pn** | **23 48 13.3** | **-0.1** |
| TAF | | | | S | **Sb** | **23 48 30.1** | **-0.7** |
| **CHEFC** | **Chefchaouen** | **1.41** | **250** | P | **Pn** | **23 48 14.4** | **-0.2** |
| CHEFC | | | | S | **Sn** | **23 48 33.8** | **+0.8** |
| **JBK** | **JBK** | **1.58** | **143** | P | **Pn** | **23 48 16.5** | **-0.5** |
| JBK | | | | S | **Sn** | **23 48 35.9** | **-1.3** |
| **IFR** | **Ifrane** | **2.38** | **210** | P | **Pb** | **23 48 31.7** | **-0.4** |
| IFR | | | | S | **Sn** | **23 48 55.6** | **-1.4** |
| **MD31** | **MD31** | **2.86** | **198** | P | **Pn** | **23 48 35.4** | **+0.8** |
| MD31 | | | | S | **Sn** | **23 49 08.4** | **-0.3** |
| **MDT** | **Midelt** | **2.88** | **195** | P | **Pn** | **23 48 35.9** | **+1.1** |
| MDT | | | | S | **Sn** | **23 49 11.0** | **+1.9** |
| **PVAQ** | **Vaqueiros** | **3.69** | **300** | *e*Pn | **Pn** | **23 48 47.4** | **+1.6** |
| PVAQ | | | | *e*Sn | **Sn** | **23 49 28.4** | **-0.5** |
| PVAQ | | | | A | A | 23 49 35.1 | |
| | 1.7nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.69** | **300** | P | **Pn** | **23 48 45.3** | **-0.5** |
| PVAQ | | | | S | **Sn** | **23 49 26.2** | **-2.7** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **297** | *e*Pn | **Pn** | **23 48 47.3** | **+0.3** |
| PBDV | | | | *e*Sn | **Sn** | **23 49 31.0** | **0.0** |
| PBDV | | | | A | A | 23 49 35.7 | |
| | 2.4nm,1.0s | | | | | | |
| **PCVE** | **Castro Verde** | **4.02** | **302** | *e*Sn | **Sn** | **23 49 37.6** | **+0.4** |
| PCVE | | | | A | A | 23 49 43.7 | |
| | 1.3nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **303** | *e*Pn | **Pn** | **23 48 55.1** | **+1.6** |
| MESJ | | | | *e*Sn | **Sn** | **23 49 42.7** | **-0.1** |
| MESJ | | | | A | A | 23 49 48.5 | |
| | 2.0nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.49** | **318** | *e*Sn | **Sn** | **23 49 48.8** | **+0.1** |
| **PNCL** | **Nicolau / Gran** | **4.60** | **304** | *e*Pn | **Pn** | **23 48 59.6** | **+1.3** |
| PNCL | | | | *e*Sn | **Sn** | **23 49 50.8** | **-0.6** |
| **PMRV** | **Marv??o** | **4.81** | **324** | *e*Pn | **Pn** | **23 49 02.7** | **+1.5** |
| **PMTG** | **Montargil** | **4.99** | **315** | *e*Pn | **Pn** | **23 49 05.1** | **+1.5** |
| PMTG | | | | *e*Sn | **Sn** | **23 50 00.3** | **-0.6** |

*SFS **22** 23:55:06.0, 35°.64N×3°.72W, ML2.4, ALBORAN S.*
*CNRM **22** 23:55:08.1, 35°.71N×3°.54W, h28km, ml2.5*
**ISC 22 23:55:07.1**±1.7, **35.72N**±0°.05×**3°.53W**±0°.05, **h17**km±12km, **n10**, σ1**°56**/18, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.61** | **214** | P | **Pg** | **23 55 18.9** | **-0.3** |
| PALE | | | | S | **Sb** | **23 55 28.9** | **+1.2** |
| **GOG** | **Mont Gurugu** | **0.66** | **139** | P | **Pb** | **23 55 21.0** | **+0.7** |
| GOG | | | | S | **Sb** | **23 55 30.9** | **+1.7** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **325** | P | **Pn** | **23 55 30.5** | **+0.4** |
| EMAL | | | | S | **Sb** | **23 55 46.9** | **+0.2** |
| **TAF** | **Taforalt** | **1.28** | **135** | P | **Pn** | **23 55 30.4** | **0.0** |
| TAF | | | | S | **Sb** | **23 55 47.7** | **+0.5** |
| **JBK** | **JBK** | **1.59** | **150** | P | **Pn** | **23 55 34.1** | **-0.7** |
| JBK | | | | S | **Sn** | **23 55 54.0** | **-1.1** |
| **MD31** | **MD31** | **3.03** | **200** | P | **Pn** | **23 55 52.4** | **-2.0** |
| MD31 | | | | S | **Sn** | **23 56 32.8** | **+2.5** |
| **MDT** | **Midelt** | **3.04** | **197** | P | **Pn** | **23 55 56.1** | **+1.5** |
| MDT | | | | S | **Sn** | **23 56 28.1** | **-2.5** |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Sn | **Sn** | **23 56 47.9** | **-0.5** |
| PVAQ | | | | A | A | 23 56 51.1 | |
| | 1.4nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | **23 56 06.1** | **+1.6** |
| PVAQ | | | | S | **Sn** | **23 56 46.9** | **-1.5** |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **294** | *e*Sn | **Sn** | **23 56 48.9** | **-1.9** |

*IDC **23** 00:06:20.7±2.5, 36°.35S×177°.89E, h184km±19km, mb4.2/8, mb1 4.3/8, mb1mx4.1/22, mbtmp4.7/8, MS3.0/2, Ms1 3.0/2, ms1mx2.7/52, Error ellipse: s-maj=32.3km s-min=16.2km az=46.0*
*WEL **23** 00:06:24.5±0.9, 37°.S±6°×17°.8E±°, h198km±5km, M4.5/59, ML4.9/43, MLv4.5/59, Error ellipse: s-maj=0.0km s-min=0.0km az=55.2*
*NEIC **23** 00:06:24.2±3.0, 36°.88S±0°.08×177°.4E±0°.1, h200km±6km, mb4.4/23, Error ellipse: s-maj=16.5km s-min=8.9km az=62.0*
*NOU **23** 00:06:25.0, 36°.99S×177°.12E, h220km, MLv5.1/8, Off E. Coast of N. Island, N.Z.*
**ISC 23 00:06:24.8**±0.7, **36°.92S**±0°.06×**177°.43E**±0°.06, **h213**km±5km, **n204**, σ1**°69**/229, **mb4.4**/21, **Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WHRZ** | **Whale Island** | **1.00** | **201** | P | **Pn** | **00 06 55.3** | **-0.5** |
| WHRZ | | | | S | **S** | **00 07 18.4** | **-1.8** |
| **MYRZ** | **Mayor Island** | **1.02** | **249** | P | **Pn** | **00 06 55.1** | **-0.9** |
| **PKGZ** | **Pakihiroa** | **1.10** | **152** | P | **Pn** | **00 06 54.7** | **-1.8** |
| PKGZ | | | | S | **S** | **00 07 17.3** | **-4.0** |
| **EDRZ** | **Edgecumbe** | **1.31** | **205** | P | **Pn** | **00 06 58.3** | **+0.3** |
| EDRZ | | | | S | **S** | **00 07 24.4** | **+0.4** |
| **URZ** | **Urewera** | **1.36** | **191** | P | **Pn** | **00 06 57.4** | **-1.0** |
| | baz=0.9,slow=3.4 | | | | | | |
| URZ | | | | S | **S** | **00 07 18.9** | **-5.7** |
| | 605nm,0.3s,baz=20,slow=2.4,SNR=6.9 | | | | | | |
| URZ | | | | LR | LR | 00 07 46.3 | |
| | comp=Z,386nm,21.1s,baz=23,slow=43 | | | | | | |
| **KUZ** | **Kuaotunu** | **1.38** | **277** | P | **Pn** | **00 06 56.7** | **-1.9** |
| **MKRZ** | **Makatiti** | **1.44** | **212** | P | **Pn** | **00 07 00.3** | **+1.1** |
| **KMRZ** | **Kaimai** | **1.50** | **232** | P | **Pn** | **00 06 59.9** | **+0.2** |
| **TARZ** | **Mount Tarawera** | **1.51** | **209** | P | **Pn** | **00 07 00.4** | **+0.7** |
| **TKGZ** | **Te Karaka** | **1.56** | **168** | P | **Pn** | **00 06 59.4** | **-0.6** |
| TKGZ | | | | S | **S** | **00 07 25.2** | **-2.3** |
| **RAGZ** | **Rawiri** | **1.57** | **180** | P | **Pn** | **00 07 00.0** | **-0.3** |
| RAGZ | | | | S | **S** | **00 07 27.5** | **-0.4** |
| **RRRZ** | **Republican Roa** | **1.59** | **207** | P | **Pn** | **00 07 00.7** | **+0.3** |
| **MUGZ** | **Murupara** | **1.64** | **198** | P | **Pn** | **00 07 00.6** | **-0.2** |
| MUGZ | | | | S | **S** | **00 07 27.7** | **-1.1** |
| **HSRZ** | **Hossack Road** | **1.68** | **214** | P | **Pn** | **00 07 02.3** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **1.74** | **242** | P | **Pn** | **00 07 02.1** | **+0.5** |
| **GRRZ** | **Galatos Road** | **1.77** | **216** | P | **Pn** | **00 07 03.0** | **+1.0** |
| **PRRZ** | **Plateau Road** | **1.78** | **207** | P | **Pn** | **00 07 02.4** | **+0.4** |
| PRRZ | | | | S | **S** | **00 07 30.2** | **-0.8** |
| **WIAZ** | **Waiheke Island** | **1.85** | **273** | P | **Pn** | **00 07 01.8** | **-0.9** |
| **ALRZ** | **Allen Road** | **1.85** | **207** | P | **Pn** | **00 07 03.3** | **+0.5** |
| ALRZ | | | | S | **S** | **00 07 32.6** | **+0.3** |
| **WPRZ** | **Whakapapatarin** | **1.89** | **212** | P | **Pn** | **00 07 04.0** | **+0.9** |
| **MTHZ** | **Maungataniwha** | **1.99** | **193** | P | **Pn** | **00 07 03.7** | **-0.4** |
| **RAHZ** | **Arahi** | **2.01** | **188** | P | **Pn** | **00 07 04.3** | **-0.1** |
| **KUTZ** | **Kaahu Road** | **2.02** | **219** | P | **Pn** | **00 07 05.7** | **+1.3** |
| **MBAZ** | **Motutapu North** | **2.04** | **273** | P | **Pn** | **00 07 04.0** | **-0.5** |
| **TLZ** | **Tolley Road** | **2.06** | **226** | P | **Pn** | **00 07 06.1** | **+1.2** |
| **MRHZ** | **Matea Rd** | **2.07** | **202** | P | **Pn** | **00 07 04.8** | **-0.2** |
| **WHTZ** | **Whakaora** | **2.10** | **213** | P | **Pn** | **00 07 06.7** | **+1.4** |
| **KNZ** | **Kokohu** | **2.11** | **175** | P | **Pn** | **00 07 04.6** | **-0.6** |
| **ABAZ** | **Army Bay** | **2.11** | **278** | P | **Pn** | **00 07 04.7** | **-0.7** |
| **EPAZ** | **Eden Park BICE** | **2.15** | **270** | P | **Pn** | **00 07 05.9** | **+0.2** |
| **WHHZ** | **Waihua** | **2.16** | **184** | P | **Pn** | **00 07 08.4** | **+2.6** |
| **HBAZ** | **Herne Bay Bore** | **2.17** | **271** | P | **Pn** | **00 07 05.9** | **+0.1** |
| **NMHZ** | **Naumai** | **2.23** | **193** | P | **Pn** | **00 07 07.1** | **+0.4** |
| **HATZ** | **Hinemaiaia** | **2.24** | **208** | P | **Pn** | **00 07 07.0** | **+0.3** |
| **WATZ** | **Wairara** | **2.24** | **216** | P | **Pn** | **00 07 07.8** | **+1.1** |
| **WTAZ** | **Waiatarua** | **2.29** | **269** | P | **Pn** | **00 07 05.7** | **-1.5** |
| **RATZ** | **Rangitukua** | **2.35** | **213** | P | **Pn** | **00 07 08.4** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **2.36** | **198** | Pn | **Pn** | **00 07 07.3** | **-0.7** |
| BKZ | | | | Sn | **S** | **00 07 35.9** | **-5.7** |
| **BKZ** | **Black Stump Fm** | **2.36** | **198** | P | **Pn** | **00 07 07.6** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **2.36** | **198** | P | **Pn** | **00 07 07.5** | **-0.5** |
| **ARHZ** | **Aropaoanui** | **2.37** | **188** | P | **Pn** | **00 07 08.1** | **+0.1** |
| **RITZ** | **Rihia Road** | **2.40** | **211** | P | **Pn** | **00 07 09.3** | **+0.9** |
| **KATZ** | **Kakaramea** | **2.47** | **213** | P | **Pn** | **00 07 09.9** | **+0.7** |
| **NTVZ** | **North Tongarir** | **2.58** | **212** | P | **Pn** | **00 07 11.2** | **+0.8** |
| **TMVZ** | **Te Maari** | **2.58** | **211** | P | **Pn** | **00 07 10.9** | **+0.5** |
| **MCHZ** | **McNeill Hill** | **2.59** | **193** | P | **Pn** | **00 07 10.5** | **+0.2** |
| **HIZ** | **Hauiti** | **2.59** | **231** | Pn | **Pn** | **00 07 10.3** | **-0.1** |
| **HIZ** | **Hauiti** | **2.59** | **231** | P | **Pn** | **00 07 12.2** | **+1.8** |
| **KRVZ** | **Karewarewa** | **2.59** | **212** | P | **Pn** | **00 07 11.3** | **+0.7** |
| **ETVZ** | **East Tongariro** | **2.60** | **211** | P | **Pn** | **00 07 11.0** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **2.62** | **197** | P | **Pn** | **00 07 10.7** | **-0.2** |
| **WTVZ** | **West Tongariro** | **2.63** | **213** | P | **Pn** | **00 07 11.5** | **+0.5** |
| **NNVZ** | **North Ngauruho** | **2.63** | **212** | P | **Pn** | **00 07 11.6** | **+0.6** |
| **OTVZ** | **Oturere** | **2.64** | **211** | P | **Pn** | **00 07 11.5** | **+0.4** |
| **TWVZ** | **Taurewa** | **2.66** | **216** | P | **Pn** | **00 07 10.8** | **-0.5** |
| **SNVZ** | **South Ngauruho** | **2.67** | **211** | P | **Pn** | **00 07 12.0** | **+0.6** |
| **WCZ** | **Waipu Caves** | **2.67** | **291** | P | **Pn** | **00 07 09.6** | **-1.8** |
| **NGZ** | **Ngauruhoe** | **2.68** | **212** | P | **Pn** | **00 07 12.1** | **+0.6** |
| **TUVZ** | **Tukino** | **2.73** | **210** | P | **Pn** | **00 07 12.5** | **+0.3** |
| **CKHZ** | **Cape Kidnapper** | **2.75** | **186** | P | **Pn** | **00 07 11.8** | **-0.4** |
| **FWVZ** | **Far West T-bar** | **2.76** | **212** | P | **Pn** | **00 07 12.7** | **+0.2** |
| **WHVZ** | **Whangaehu Hut** | **2.77** | **211** | P | **Pn** | **00 07 13.0** | **+0.3** |
| **DRZ** | **Dome Shelter** | **2.78** | **211** | P | **Pn** | **00 07 13.3** | **+0.5** |
| **BHHZ** | **Black Hill Sta** | **2.78** | **202** | P | **Pn** | **00 07 12.3** | **-0.3** |
| **TRVZ** | **Turoa** | **2.80** | **211** | P | **Pn** | **00 07 13.0** | **+0.3** |
| **WNVZ** | **Wahianoa** | **2.81** | **210** | P | **Pn** | **00 07 13.2** | **+0.2** |
| **MOVZ** | **Moawhango** | **2.81** | **208** | P | **Pn** | **00 07 12.7** | **-0.3** |
| **KRHZ** | **Kereru** | **2.85** | **197** | P | **Pn** | **00 07 12.8** | **-0.5** |
| **PKVZ** | **Pokaka** | **2.88** | **214** | P | **Pn** | **00 07 14.2** | **+0.5** |
| **KAHZ** | **Kahuranaki** | **2.91** | **188** | P | **Pn** | **00 07 13.8** | **-0.2** |
| **MTVZ** | **Mangateitei** | **2.91** | **212** | P | **Pn** | **00 07 14.3** | **+0.3** |
| **VRZ** | **Vera Road** | **3.05** | **223** | P | **Pn** | **00 07 16.7** | **+1.1** |
| **PNHZ** | **Pukenui** | **3.14** | **198** | P | **Pn** | **00 07 16.2** | **-0.5** |
| **TSZ** | **Takapari Road** | **3.34** | **200** | P | **Pn** | **00 07 18.3** | **-0.8** |
| **PRHZ** | **Porangahau** | **3.40** | **190** | P | **Pn** | **00 07 19.0** | **-0.7** |
| **WAZ** | **Wanganui** | **3.42** | **213** | P | **Pn** | **00 07 20.1** | **+0.1** |
| **DVHZ** | **Dannevirke** | **3.52** | **196** | P | **Pn** | **00 07 20.3** | **-0.9** |
| **OUZ** | **Omahuta** | **3.54** | **297** | Pn | **Pn** | **00 07 18.7** | **-2.7** |
| **OUZ** | **Omahuta** | **3.54** | **297** | P | **Pn** | **00 07 19.6** | **-1.8** |
| **OUZ** | **Omahuta** | **3.54** | **297** | P | **Pn** | **00 07 19.9** | **-1.5** |
| **ANWZ** | **Angora Road** | **3.62** | **192** | P | **Pn** | **00 07 21.8** | **-0.4** |
| **POWZ** | **Post Office Ro** | **3.71** | **200** | P | **Pn** | **00 07 22.9** | **-0.5** |
| **P

comp=Z,19nm,0.7s,baz=119,slow=8.1,SNR=184
ASAR PcP **PcP** **00 15 37.0 -1.2**
comp=Z,0.3nm,0.3s,baz=119,slow=5.4,SNR=5.1
ASAR S **S** **00 19 23.4 +2.1**
comp=Z,1.5nm,1.2s,baz=119,slow=14,SNR=4.8
**ASAR Alice Springs 39.51 277** P **P** **00 13 35.6 +0.6**
**WR0 Warramunga Arr 40.95 282** P **P** **00 13 47.1 +0.3**
WR0 IAmb IAmb 00 13 48.1
comp=Z,12nm,0.9s
**FORT Forrest 41.09 264** P **P** **00 13 48.8 +1.0**
**WB2 Warramunga Arr 41.11 282** P **P** **00 13 48.4 +0.3**
**WRAB Tennant Creek 41.11 282** P **P** **00 13 48.6 +0.5**
WRAB IAmb IAmb 00 13 49.3
comp=Z,16nm,0.7s
**WRA Warramunga Arr 41.12 282** P **P** **00 13 48.5 +0.3**
comp=Z,10nm,0.7s,baz=120,slow=7.8,SNR=153
WRA PcP **PcP** **00 15 42.8 -0.6**
comp=Z,1.8nm,0.7s,baz=123,slow=3.1,SNR=6.2
**WRA Warramunga Arr 41.12 282** P **P** **00 13 48.1 -0.2**
WRA PcP **PcP** **00 15 43.1 -0.4**
**WB0 Warramunga Arr 41.17 282** P **P** **00 13 48.9 +0.2**
WB0 IAmb IAmb 00 13 49.8
comp=Z,17nm,0.7s
**CASY Casey 47.61 210** P **P** **00 14 39.6 +0.7**
CASY IAmb IAmb 00 14 42.5
comp=Z,23nm,1.1s
**KNRA Kununurra 47.90 283** P **P** **00 14 42.1 +0.3**
**FITZ Fitzroy Crossi 48.99 278** **P** **00 14 50.6 +0.5**
FITZ IAmb IAmb 00 14 51.5
comp=Z,12nm,1.1s
**MORW Morawa 51.31 260** P **P** **00 15 08.0 +0.6**
MORW IAmb IAmb 00 15 08.3
comp=Z,7.4nm,0.8s
**PSA00 Pilbara Seismi 51.79 270** **P** **00 15 10.0 -1.0**
**PSA00 Pilbara Seismi 51.79 270** P **P** **00 15 10.8 -0.3**
PSA00 IAmb IAmb 00 15 22.2
comp=Z,7.3nm,0.9s
**QSPA South Pole Qui 53.21 180** P **P** **00 15 25.0 +4.0**
comp=Z,17nm,0.7s,baz=307,slow=0.2,SNR=71
**QSPA South Pole Qui 53.21 180** P **P** **00 15 25.0 +4.0**
**FAKI Fak Fak 53.53 298** P **P** **00 15 23.4 -0.4**
FAKI IAmb IAmb 00 15 30.9
comp=Z,7.5nm,0.8s
**GIRL Giralia 55.75 266** P **P** **00 15 40.5 +0.8**
**BELA Belgrano 2 63.83 173** P **P** **00 16 36.0 +2.1**
BELA IAmb IAmb 00 16 36.9
comp=Z,9.7nm,0.9s
**SNAA Sanae 71.71 180** P **P** **00 17 23.8 +0.7**
**SNAA Sanae 71.71 180** P **P** **00 17 25.1 +2.0**
SNAA IAmb IAmb 00 17 26.1
comp=Z,10nm,1.1s
**VNA3 Neumayer Olymp 72.02 178** P **P** **00 17 26.6 +1.7**
**VNA2 Neumayer--Watz 72.41 178** P **P** **00 17 29.2 +2.0**
baz=174,slow=4.6
**H03N3 Juan Fernandez 80.21 124** T T 01 45 33.9
baz=234,slow=72,SNR=22
**H03N2 Juan Fernandez 80.21 124** T T 01 45 30.5
baz=234,slow=72,SNR=23
**H03N1 Juan Fernandez 80.22 124** T T 01 45 32.4
baz=234,slow=72,SNR=24
**KSRS Korea Array 87.02 323** P **P** **00 18 45.2 -0.6**
comp=Z,2.7nm,0.9s,baz=140,slow=6.5,SNR=5.4
**PETK Petropavlovsk- 91.28 348** P **P** **00 19 03.7 -1.7**
comp=Z,3.8nm,1.0s,baz=115,slow=5.9,SNR=5.1
**PETK Petropavlovsk- 91.28 348** P **P** **00 19 01.5 -4.0**
**CMAR Chiang Mai Arr 92.08 291** P **P** **00 19 10.7 +0.6**
comp=Z,1.8nm,0.5s,baz=153,slow=3.6,SNR=13
**MKAR Makanchi Array 118.94 309** PKP **PKPdf** **00 24 45.2 -2.3**
comp=Z,0.7nm,0.8s,baz=100,slow=0.5,SNR=7.1
**ARCES ARCESS Array B 143.96 344** PKP PKPab 00 25 30.2 -1.4
comp=Z,3.1nm,0.6s,baz=50,slow=3.5,SNR=20
**FINES FINESS Array B 149.59 333** PKPbc **PKPbc** **00 25 46.0 -2.1**
comp=Z,3.5nm,0.6s,baz=34,slow=4.4,SNR=32
**DBIC Dimbokro 149.82 175** PKPbc **PKPbc** **00 25 50.2 +0.1**
comp=Z,7.3nm,0.7s,baz=198,slow=3.1,SNR=8.2
**DBIC Dimbokro 149.82 175** PKPab **PKPab** **00 25 57.5 +1.4**
**BRTR Keskin Array B 151.57 287** PKPbc **PKPbc** **00 25 52.5 -1.1**
comp=Z,3.6nm,0.9s,baz=148,slow=3.8,SNR=9.6
**AKASG Malin Array Be 153.48 311** PKPbc **PKPbc** **00 25 55.1 -2.1**
comp=Z,0.9nm,0.5s,baz=62,slow=2.7,SNR=5.0
**TORD Torodi Ar. Bea 156.02 190** PKP **PKPdf** **00 25 52.8 -1.2**
comp=Z,1.3nm,1.1s,baz=338,slow=1.6,SNR=4.7
TORD PKPbc PKPbc 00 26 05.9
comp=Z,1.1nm,0.4s,baz=158,slow=3.0,SNR=19
TORD PKPab **PKPab** **00 26 23.1 +0.8**
comp=Z,6.1nm,0.6s,baz=171,slow=4.0,SNR=44
**TORD Torodi Ar. Bea 156.02 190** **PKPdf** **00 25 53.4 -0.7**
TORD PKPab **PKPab** **00 26 22.8 +0.5**

*CNRM **23** 00:16:00.8, 35˚.72N×3˚.52W, h24km, ml3.1*
*SFS **23** 00:16:02.0, 35˚.64N×3˚.55W, ML2.8, ALBORAN SUR*
*INMG **23** 00:16:02.2±1.5, 35˚.64N×3˚.61W, h15km±4km, ML2.5, Error ellipse: s-maj=4.9km s-min=3.8km az=155.0*
*IGIL **23** 00:16:02.2, 35˚.65N×3˚.55W, h19km*
**ISC 23 00:16:01.2±1.3, 35˚.72N±0˚.03×3˚.52W±0˚.03, h23km±14km, n41, σ1°31/73, 1D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.61** | **214** | P | **Pb** | **00 16 13.0** | **-0.3** |
| **PALE** | **Palemas** | **0.61** | **214** | P | **Pb** | **00 16 13.0** | **-0.3** |
| PALE | | | | S | **Sb** | **00 16 22.2** | **+0.8** |
| **GOG** | **Mont Gurugu** | **0.66** | **139** | P | **Pb** | **00 16 13.3** | **-0.8** |
| GOG | | | | S | **Sb** | **00 16 21.7** | **-1.3** |
| **CHAS** | **Isla Isabel II** | **1.04** | **121** | P | **Pn** | **00 16 19.4** | **-1.0** |
| CHAS | | | | S | **Sn** | **00 16 34.9** | **+0.7** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **325** | P | **Pn** | **00 16 23.3** | **-0.2** |
| EMAL | | | | S | **Sb** | **00 16 40.8** | **+0.5** |
| **TAF** | **Taforalt** | **1.28** | **135** | P | **Pn** | **00 16 23.5** | **-0.3** |
| **TAF** | **Taforalt** | **1.28** | **135** | P | **Pn** | **00 16 23.5** | **-0.3** |
| TAF | | | | S | **Sb** | **00 16 43.2** | **+2.4** |
| **CEU** | **Ceuta** | **1.51** | **277** | P | **Pn** | **00 16 24.3** | **-2.6** |
| CEU | | | | S | **Sn** | **00 16 42.8** | **-3.1** |
| **JBK** | **JBK** | **1.59** | **150** | P | **Pn** | **00 16 27.4** | **-0.8** |
| **JBK** | **JBK** | **1.59** | **150** | P | **Pn** | **00 16 27.1** | **-1.1** |
| JBK | | | | S | **Sn** | **00 16 47.0** | **-1.2** |
| **CHEFC** | **Chefchaouen** | **1.61** | **248** | P | **Pn** | **00 16 29.0** | **+0.7** |
| **CHEFC** | **Chefchaouen** | **1.61** | **248** | P | **Pn** | **00 16 28.6** | **+0.3** |
| CHEFC | | | | S | **Sb** | **00 16 49.5** | **-0.6** |
| **SICH** | **Sidi Chahed** | **2.19** | **223** | P | **Pn** | **00 16 36.9** | **+0.7** |
| SICH | | | | S | **Sn** | **00 17 03.9** | **+1.3** |
| **IFR** | **Ifrane** | **2.57** | **211** | P | **Pn** | **00 16 41.4** | **-0.2** |
| IFR | | | | S | **Sn** | **00 17 11.4** | **-0.8** |
| **CZD** | **Col de Zad** | **2.96** | **205** | P | **Pn** | **00 16 47.5** | **+0.4** |
| CZD | | | | S | **Sn** | **00 17 23.2** | **+1.0** |
| **MD31** | **MD31** | **3.03** | **200** | P | **Pn** | **00 16 48.4** | **+0.6** |
| MD31 | | | | S | **Sn** | **00 17 24.0** | **+0.6** |
| **MDT** | **Midelt** | **3.04** | **197** | P | **Pn** | **00 16 48.3** | **+0.3** |
| **MDT** | **Midelt** | **3.04** | **197** | P | **Pn** | **00 16 48.3** | **+0.3** |
| MDT | | | | S | **Sn** | **00 17 23.7** | **0.0** |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Pn | **Pn** | **00 16 58.5** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **00 17 40.5** | **-1.1** |
| PVAQ | | | | A | A | 00 17 42.9 | |
| | 6.2nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | **00 16 58.1** | **+0.2** |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | **00 16 58.1** | **+0.2** |
| PVAQ | | | | S | **Sn** | **00 17 40.7** | **-0.9** |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **294** | ⇓*e*Pn | **Pn** | **00 16 59.5** | **+0.2** |
| PBDV | | | | *e*Sn | **Sn** | **00 17 43.1** | **-0.8** |
| PBDV | | | | A | A | 00 17 48.2 | |
| | 6.9nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **4.10** | **299** | *e*Pn | **Pn** | **00 17 03.0** | **+0.5** |
| PCVE | | | | *e*Sn | **Sn** | **00 17 48.9** | **-0.8** |
| PCVE | | | | A | A | 00 17 51.0 | |
| | 8.5nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*P | **Pn** | **00 17 05.6** | **+0.1** |
| **MESJ** | **Messejana** | **4.32** | **301** | *e*Pn | **Pn** | **00 17 06.2** | **+0.7** |
| MESJ | | | | *e*Sn | **Sn** | **00 17 54.5** | **-0.7** |
| MESJ | | | | A | A | 00 18 06.1 | |
| | 5.0nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.42** | **292** | *e*Pn | **Pn** | **00 17 08.6** | **+1.6** |
| MORF | | | | *e*Sn | **Sn** | **00 17 56.9** | **-0.9** |
| MORF | | | | A | A | 00 18 00.2 | |
| | 4.7nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.50** | **290** | *e*Pn | **Pn** | **00 17 09.6** | **+1.6** |
| PFVI | | | | *e*Sn | **Sn** | **00 17 58.6** | **-1.1** |
| PFVI | | | | A | A | 00 18 05.4 | |
| | 7.6nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.50** | **290** | P | **Pn** | **00 17 09.4** | **+1.4** |
| PFVI | | | | S | **Sn** | **00 17 57.4** | **-2.3** |
| **PESTR** | **Estremoz** | **4.51** | **315** | *e*Pn | **Pn** | **00 17 09.5** | **+1.3** |
| PESTR | | | | *e*Sn | **Sn** | **00 17 59.8** | **-0.1** |
| PESTR | | | | A | A | 00 18 02.4 | |
| | 3.5nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **315** | P | **Pn** | **00 17 09.4** | **+1.2** |
| PESTR | | | | S | **Sn** | **00 17 59.4** | **-0.6** |
| **EVO** | **Evora** | **4.55** | **309** | *e*Pn | **Pn** | **00 17 11.9** | **+3.2** |
| EVO | | | | *e*Sn | **Sn** | **00 18 02.1** | **+1.2** |
| EVO | | | | A | A | 00 18 04.4 | |
| | 7.9nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.56** | **295** | *e*Pn | **Pn** | **00 17 10.3** | **+1.5** |
| PTEO | | | | *e*Sn | **Sn** | **00 17 58.9** | **-2.2** |
| PTEO | | | | A | A | 00 18 05.4 | |
| | 9.1nm,0.7s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.67** | **302** | *e*Pn | **Pn** | **00 17 10.8** | **+0.6** |
| PNCL | | | | *e*Sn | **Sn** | **00 18 02.8** | **-0.9** |
| PNCL | | | | A | A | 00 18 05.6 | |
| | 4.5nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **321** | *e*Pn | **Pn** | **00 17 13.9** | **+1.7** |
| PMRV | | | | *e*Sn | **Sn** | **00 18 07.2** | **0.0** |
| PMRV | | | | A | A | 00 18 30.1 | |
| | 4.1nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **5.02** | **313** | *e*Pn | **Pn** | **00 17 16.9** | **+1.8** |
| PMTG | | | | *e*Sn | **Sn** | **00 18 12.1** | **-0.2** |
| PMTG | | | | A | A | 00 18 14.0 | |
| | 3.6nm,0.6s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.17** | **324** | *e*Pn | **Pn** | **00 17 19.1** | **+2.0** |
| PCBR | | | | *e*Sn | **Sn** | **00 18 14.8** | **-1.2** |
| PCBR | | | | A | A | 00 18 17.5 | |
| | 3.4nm,0.4s | | | | | | |
| **OUZM** | **OUZ** | **5.51** | **210** | P | **Pn** | **00 17 22.9** | **+0.8** |
| OUZM | | | | S | **Sn** | **00 18 27.2** | **+2.4** |
| **OUK** | **Oukaimeden** | **5.78** | **220** | P | **Pn** | **00 17 22.9** | **-3.1** |
| OUK | | | | S | **Sn** | **00 18 32.7** | **+0.9** |
| **PCAS** | **Casmilo, Conde** | **5.84** | **319** | *e*Sn | **Sn** | **00 18 31.1** | **-1.6** |
| PCAS | | | | A | A | 00 18 32.5 | |
| | 3.4nm,0.4s | | | | | | |
| **MVO** | **Moncorvo** | **6.09** | **334** | *e*Pn | **Pn** | **00 17 32.0** | **+2.1** |
| MVO | | | | *e*Sn | **Sn** | **00 18 37.7** | **-1.1** |
| MVO | | | | A | A | 00 18 42.4 | |
| | 3.0nm,1.0s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.56** | **331** | *e*Pn | **Pn** | **00 17 38.0** | **+1.7** |

*NDI **23** 00:33:30.8±4.0, 32˚.5N×95˚.31E, h10km, ML4.6, mb5.1(NEIC)*
*BJI **23** 00:33:35.4±0.0, 31˚.90N×95˚.03E, h9km, mb4.6/53, mB4.9/34, ML4.4/10, Ms4.7/66, Ms7 4.6/60*
*IDC **23** 00:33:35.1±0.5, 31˚.98N×95˚.05E, h0km, mb4.6/36, mb1 4.7/40, mb1mx4.6/57, mbtmp4.6/40, ML4.2/4, MS4.0/62, Ms1 4.0/62, ms1mx3.9/90, Error ellipse: s-maj=12.7km s-min=10.3km az=31.0*
*GCMT **23** 00:33:37.2±0.2, 31˚.86N±0˚.02×95˚.11E±0˚.02, h21km, MW4.9/86, Moment Tensor Solution. s34,c37; s86,c135; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~2.14±.16; Mθθ~0.06±.09; Mϕϕ2.20±.10; Mrθ~0.65±.21; Mϕr~1.27±.07; Mϕr~0.29±.17; Best double couple: Mo2.57800×10^16 NP1:ϕs188.00000°, δ41.00000°, λ-114.00000°. NP2: ϕs39.00000°, δ53.00000°, λ-71.00000°. Principal axes: T 2.8280, Plg6.0000°, Azm115.0000°; N -0.4990, Plg15.0000°, Azm207.0000°; P -2.3290, Plg73.0000°, Azm4.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **23** 00:33:38.2±1.7, 32˚.06N±0˚.08×95˚.05E±0˚.09, h10km±1km, mb5.1/236 Error ellipse: s-maj=13.2km s-min=12.7km az=129.0*
*MOS **23** 00:33:38.3±1.1, 32˚.01N×95˚.05E, h30km, mb5.3/70, MS4.2/9, Error ellipse: s-maj=5.9km s-min=3.3km az=120.1*
**ISC 23 00:33:38.8±0.4, 32˚.01N±0˚.03×95˚.02E±0˚.03, h18km±1km, h18km:pP-P, n790, σ2s00/807, mb5.1/225, MS4.1/72, 43C-31D, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GOMU** | **GeErMu** | **4.18** | **358** | ⇓*i*Pn | **Pn** | **00 34 44.3** | **+2.4** |
| GOMU | | | | smax | smax | | |
| | comp=N,220nm,1.5s | | | | | | |
| GOMU | | | | smax | smax | | |
| | comp=E,220nm,1.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=N,6μm,5.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,4μm,5.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,8μm,7.8s | | | | | | |
| **ITAN** | **ITANAGAR** | **4.98** | **193** | *e*P | **Pn** | **00 34 52.8** | **+0.2** |
| ITAN | | | | *e*S | **Sn** | **00 35 56.0** | **+6.2** |
| ITAN | | | | IAML | | 00 36 12.7 | |
| | comp=N,842nm,0.5s | | | | | | |
| **MOKO** | **MOKOCHONG** | **5.69** | **185** | *e*P | **Pn** | **00 35 01.1** | **-1.4** |
| MOKO | | | | *e*S | **Sn** | **00 36 13.4** | **+6.0** |
| MOKO | | | | IAML | | 00 36 37.9 | |
| | comp=N,493nm,0.9s | | | | | | |
| **KOHI** | **KOHIMA** | **6.32** | **188** | *e*P | **Pn** | **00 35 11.0** | **-0.2** |
| KOHI | | | | *e*S | **Sn** | **00 36 27.0** | **+4.0** |
| **GUWA** | **GUWAHATI** | **6.49** | **208** | *e*P | **Pn** | **00 35 11.7** | **-1.6** |
| GUWA | | | | *e*S | **Sn** | **00 36 27.7** | **+0.8** |
| **SHL** | **Shillong** | **6.99** | **204** | P | **Pn** | **00 35 18.8** | **-1.6** |
| **SHL** | **Shillong** | **6.99** | **204** | Pn | **Pn** | **00 35 18.8** | **-1.6** |
| **SHL** | **Shillong** | **6.99** | **204** | P | **Pn** | **00 35 19.1** | **-1.3** |
| | SNR=25 | | | | | | |
| **GTK** | **Tadong** | **7.29** | **232** | *e*P | **Pn** | **00 35 26.8** | **+2.3** |
| GTK | | | | *e*S | **Sn** | **00 36 43.7** | **-3.1** |
| **CD2** | **Chengdu** | **7.54** | **96** | Pn | **Pn** | **00 35 29.0** | **+1.1** |
| CD2 | | | | Sn | **Sn** | **00 36 51.8** | **-1.1** |
| CD2 | | | | Sg | Sg | 00 37 35.8 | |
| CD2 | | | | smax | smax | | |
| | comp=N,90nm,1.6s | | | | | | |
| CD2 | | | | smax | smax | | |
| | comp=N,230nm,1.7s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,6μm,8.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,8μm,8.2s | | | | | | |
| **TURI** | **Tura** | **7.64** | **214** | *e*P | **Pn** | **00 35 27.8** | **-1.4** |
| TURI | | | | *e*S | **Sn** | **00 36 58.6** | **+3.3** |
| TURI | | | | IAML | | 00 37 03.3 | |
| | comp=E,1μm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **7.88** | **236** | *e*P | **Pn** | **00 35 33.1** | **+0.4** |
| | comp=E,18nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **8.03** | **131** | P | **Pn** | **00 35 33.6** | **-1.1** |
| PZH | | | | sP | sPn | 00 35 37.6 | -6.0 |
| PZH | | | | S | **Sn** | **00 37 04.9** | **-0.3** |
| PZH | | | | SS | **SnSn** | **00 37 18.9** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=E,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=E,260nm,5.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,5μm,9.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,5μm,10.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,5μm,10.8s | | | | | | |
| **GTA** | **Gaotai** | **8.35** | **26** | ⇓P | **Pn** | **00 35 39.8** | **+0.9** |
| GTA | | | | pP | Pb | 00 35 44.0 | -19 |
| GTA | | | | sP | | 00 35 46.8 | |
| GTA | | | | S | **Sn** | **00 37 15.3** | **+2.6** |
| GTA | | | | pmax | pmax | | |
| | comp=E,120nm,5.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,1μm,10.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,2μm,11.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,1μm,11.6s | | | | | | |
| **LZH** | **Lanzhou** | **8.37** | **59** | P | **Pn** | **00 35 40.8** | **+1.5** |
| LZH | | | | S | **Sn** | **00 37 15.6** | **+2.2** |
| LZH | | | | smax | smax | | |
| | comp=E,86nm,1.7s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=E,100nm,1.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,6μm,9.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,3μm,8.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,5μm,8.1s | | | | | | |
| **ODAN** | **Odare** | **8.40** | **234** | *e*P | **Pn** | **00 35 40.0** | **+0.1** |
| | comp=E,34nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **8.81** | **243** | *e*P | **Pn** | **00 35 45.8** | **+0.2** |
| | comp=E,9.4nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **8.90** | **238** | *e*P | **Pn** | **00 35 46.5** | **-0.3** |
| | comp=E,7.3nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **8.92** | **245** | *e*P | **Pn** | **00 35 47.3** | **+0.2** |
| | comp=E,35nm,0.3s | | | | | | |
| **BELO** | **BELONIA** | **9.29** | **201** | ⇑*e*P | **Pn** | **00 35 50.7** | **-1.0** |
| **KKN** | **Kakani** | **9.44** | **246** | *e*P | **Pn** | **00 35 53.0** | **-1.1** |
| | comp=E,13nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **9.45** | **245** | *e*P | **Pn** | **00 35 53.6** | **-0.7** |
| | comp=E,34nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **9.46** | **245** | *e*P | **Pn** | **00 35 53.8** | **-0.6** |
| | comp=E,42nm,0.4s | | | | | | |
| **KMI** | **Kunming** | **9.65** | **133** | ⇑P | **Pn** | **00 35 56.8** | **-0.1** |
| KMI | | | | pP | | 00 35 58.6 | |
| KMI | | | | S | **Sn** | **00 37 45.0** | **0.0** |
| KMI | | | | SS | **SnSn** | **00 37 57.5** | **+0.8** |
| KMI | | | | pmax | pmax | | |
| | comp=E,17nm,0.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,4μm,6.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,4μm,7.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,5μm,10.8s | | | | | | |
| **DMN** | **Daman** | **9.67** | **246** | *e*P | **Pn** | **00 35 56.5** | **-0.7** |
| **GKN** | **Gorkha** | **9.85** | **249** | *e*P | **Pn** | **00 35 58.0** | **-1.6** |
| | comp=E,20nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **10.41** | **252** | *e*P | **Pn** | **00 36 05.1** | **-2.3** |
| | comp=E,26nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **10.78** | **250** | *e*P | **Pn** | **00 36 09.4** | **-3.0** |
| | comp=E,9.5nm,0.3s | | | | | | |
| **PYUN** | **Piuthan** | **11.13** | **253** | *e*P | **Pn** | **00 36 14.1** | **-3.1** |
| | comp=E,102nm,0.7s | | | | | | |
| **GYA** | **Guiyang** | **11.57** | **116** | ⇑*i*P | **Pn** | **00 36 26.0** | **+2.8** |
| GYA | | | | S | **Sn** | **00 38 39.9** | **+7.9** |
| GYA | | | | pmax | pmax | | |
| | comp=E,60nm,0.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,780nm,5.5s | | | | | | |
| **XAN** | **Xi'an** | **11.84** | **76** | P | **Pn** | **00 36 26.0** | **-0.7** |
| XAN | | | | S | **Sn** | **00 38 33.4** | **-5.0** |
| XAN | | | | pmax | pmax | | |
| | comp=E,11nm,0.7s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=E,240nm,5.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,2μm,6.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,4μm,10.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,5μm,11.7s | | | | | | |
| **ENH** | **Enshi** | **12.51** | **94** | Pn | **Pn** | **00 36 33.1** | **-2.8** |
| **LGTI** | **Lohaghat** | **12.97** | **262** | *e*P | **Pn** | **00 36 41.2** | **-0.9** |
| **WMQ** | **Urumqi** | **13.12** | **336** | *e*P | **Pn** | **00 36 46.8** | **+2.5** |
| WMQ | | | | pP | P | 00 36 49.5 | -4.8 |
| WMQ | | | | PP | **PnPn** | **00 36 59.4** | **+7.2** |
| WMQ | | | | pmax | pmax | | |
| | comp=E,38nm,1.1s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=E,380nm,4.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,2μm,10.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,2μm,10.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,1μm,13.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **13.61** | **164** | P | **Pn** | **00 36 51.9** | **+0.9** |
| **CHTO** | **Chiang Mai** | **13.61** | **164** | Pn | **Pn** | **00 36 51.9** | **+0.9** |
| **CHTO** | **Chiang Mai** | **13.61** | **164** | P | **Pn** | **00 36 53.6** | **+2.6** |
| **CMAR** | **Chiang Mai Arr** | **13.95** | **164** | Pn | **Pn** | **00 36 54.7** | **-0.9** |
| | comp=E,1.0nm,0.3s,baz=339,slow=12,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 00 42 46.2 | |
| | comp=E,851nm,20.2s,baz=345,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.95** | **164** | Pn | **Pn** | **00 36 56.2** | **+0.5** |
| **BTO** | **Baotou** | **14.81** | **50** | *e*P | **Pn** | **00 37 03.8** | **-3.5** |
| BTO | | | | S | **Sn** | **00 39 48.8** | **-2.1** |
| BTO | | | | LR | LR | | |
| | comp=E,5μm,14.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,4μm,13.1s | | | | | | |
| **TIY** | **Taiyuan** | **15.38** | **64** | ⇓P | **P** | **00 37 20.5** | **+1.1** |
| TIY | | | | PP | **sP** | **00 37 32.0** | **+3.0** |
| TIY | | | | S | **S** | **00 40 13.5** | **-7.3** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| TIY | | | | pmax | pmax | | |
| | comp=Z,160nm,3.9s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=N,3μm,14.8s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=E,1μm,15.5s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,2μm,15.5s | | | | | | |
| **BHK** | **Bhakra** | **15.85** | **273** | *e*P | **Pn** | **00 37 17.4** | **-3.6** |
| **JHNI** | **Jhansi** | **15.85** | **250** | *e*P | **Pn** | **00 37 19.9** | **-1.2** |
| **HHC** | **Hu-ho-hao-te** | **15.95** | **52** | *e*P | **Pn** | **00 37 21.8** | **-0.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,6.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,2μm,9.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,2μm,9.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,2μm,10.5s | | | | | | |
| **KUDL** | **Kundal** | **16.50** | **261** | *e*P | **Pn** | **00 37 26.3** | **-2.9** |
| **WHN** | **Wuhan** | **16.59** | **90** | ⇑P | **Pn** | **00 37 27.9** | **-2.5** |
| WHN | | | | S | **S** | **00 40 43.3** | **-2.2** |
| WHN | | | | LR | LR | | |
| | comp=Z,4μm,5.6s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,5μm,9.2s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,7μm,8.4s | | | | | | |
| **PDGK** | **Podgornoye** | **16.67** | **317** | P | **Pn** | **00 37 28.7** | **-2.8** |
| **CHLP** | **Challavanipeta** | **16.69** | **219** | *e*P | **Pn** | **00 37 27.8** | **-4.0** |
| **TARG** | **Taragay, Kyrgy** | **16.82** | **310** | P | **Pn** | **00 37 34.4** | **+0.7** |
| **UZB** | **Uzynbulak** | **16.83** | **316** | *e*P | **Pn** | **00 37 33.9** | **+0.3** |
| **UZB** | **Uzynbulak** | **16.83** | **316** | *e*P | **Pn** | **00 37 33.9** | **+0.3** |
| | baz=316 | | | | | | |
| **HNS** | **HongShan** | **17.05** | **66** | ⇓P | **Pn** | **00 37 33.8** | **-2.3** |
| HNS | | | | PP | **sP** | **00 37 50.6** | **+3.2** |
| HNS | | | | S | **Sn** | **00 40 42.5** | **-2.6** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2μm,10.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,3μm,11.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,3μm,11.5s | | | | | | |
| **SATY** | **Saty** | **17.15** | **315** | *e*P | **Pn** | **00 37 37.3** | **-0.2** |
| **SATY** | **Saty** | **17.15** | **315** | *e*P | **Pn** | **00 37 37.3** | **-0.2** |
| | baz=314 | | | | | | |
| **KSH** | **Kashi** | **17.16** | **301** | P | **P** | **00 37 41.1** | **+1.8** |
| KSH | | | | PP | **sP** | **00 37 55.3** | **+6.4** |
| KSH | | | | S | **Sn** | **00 40 49.9** | **+1.8** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | |
| KSH | | | | pmax | pmax | | |
| | comp=Z,410nm,7.6s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,610nm,14.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,1μm,12.4s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,2μm,16.0s | | | | | | |
| **ZHN** | **Zhinishke** | **17.20** | **315** | *e*P | **Pn** | **00 37 37.6** | **-0.5** |
| **ZHN** | **Zhinishke** | **17.20** | **315** | *e*P | **Pn** | **00 37 37.6** | **-0.5** |
| | baz=315 | | | | | | |
| **KPKS** | **Kokpek** | **17.22** | **316** | *e*P | **Pn** | **00 37 38.3** | **-0.1** |
| **KPKS** | **Kokpek** | **17.22** | **316** | *e*P | **Pn** | **00 37 38.3** | **-0.1** |
| | baz=316 | | | | | | |
| **ZSN** | **Zaisan** | **17.26** | **336** | *e*P | **Pn** | **00 37 38.6** | **-0.1** |
| **ZSN** | **Zaisan** | **17.26** | **336** | *e*P | **Pn** | **00 37 38.7** | **-0.1** |
| | baz=336 | | | | | | |
| **MK31** | **Makanchi Array** | **17.70** | **330** | P | **Pn** | **00 37 43.9** | **-0.4** |
| **MK31** | **Makanchi Array** | **17.70** | **330** | P | **Pn** | **00 37 43.6** | **-0.7** |
| **MKAR** | **Makanchi

**MKAR Makanchi Array 17.70 330** P **Pn 00 37 44.5 +0.2**
**MAKZ Makanchi 17.85 330** P **Pn 00 37 45.7 -0.4**
**MAKZ Makanchi 17.85 330** P **Pn 00 37 45.6 -0.4**
**SONM Songino Array 18.02 25** P **P 00 37 49.1 +0.5**
comp=Z,0.5nm,0.3s,baz=210,slow=12,SNR=19
SONM LR LR 00 45 56.1
comp=Z,162nm,18.9s,baz=193,slow=41
**SONM Songino Array 18.02 25** P **Pn 00 37 48.2 -0.1**
**MDOK Medeo 18.04 313** *e*P **Pn 00 37 48.7 +0.1**
**MDOK Medeo 18.04 313** *e*P **Pn 00 37 48.7 +0.1**
baz=313
**ULHL Ulahol 18.09 310** P **P 00 37 54.0 +4.3**
SNR=12
**AAA Alma-Ata 18.14 313** *e*P **Pn 00 37 49.5 -0.3**
**AAA Alma-Ata 18.14 313** *e*P **Pn 00 37 49.5 -0.3**
baz=313
**ARXS Arharly 18.16 317** *e*P **P 00 37 50.5 +0.3**
**ULN Ulaanbaatar 18.29 27** *ce*P **Pn 00 37 50.8 -0.8**
ULN pmax pmax
comp=Z,12nm,1.3s
**ULN Ulaanbaatar 18.29 27** P **Pn 00 37 51.3 -0.3**
**NIL Nilore 18.37 281** P **P 00 37 52.0 -0.6**
NIL pmax pmax
comp=Z,110nm,0.9s
**NIL Nilore 18.37 281** P **P 00 37 52.0 -0.6**
NIL IAmb IAmb 00 37 56.9
comp=Z,110nm,0.8s
**NIL Nilore 18.37 281** P **P 00 37 51.5 -1.0**
**CHKK Chushkaly 18.45 315** *e*P **P 00 37 52.0 -1.3**
baz=315
**DGZ Jazzator, Alta 18.56 344** *i* P **Pn 00 37 55.0 +0.1**
DGZ pmax pmax
comp=Z,55nm,1.3s
**QIZ Qiongzhong 18.57 131** P **P 00 37 52.1 -2.7**
QIZ S **Sn 00 41 22.0 -0.4**
QIZ pmax pmax
comp=Z,18nm,2.3s
QIZ pmax pmax
comp=Z,400nm,4.0s
QIZ LR LR
comp=Z,2μm,16.2s
QIZ LR LR
comp=Z,1μm,16.2s
QIZ LR LR
comp=Z,2μm,17.6s
**AJM Ajmer 18.61 258** *e*P **P 00 37 54.3 -0.9**
**TIA Tai'an 18.76 71** ⇑P **P 00 37 56.9 +0.1**
TIA S **Sn 00 41 25.3 -1.5**
TIA pmax pmax
comp=Z,18nm,1.1s
TIA LR LR
comp=Z,1μm,14.0s
TIA LR LR
comp=Z,1μm,13.3s
TIA LR LR
comp=Z,2μm,11.2s
**TKM2 Tokmak 2 18.83 311** P **Pn 00 37 59.9 +1.6**
SNR=12
**TKM2 Tokmak 2 18.83 311** P **P 00 37 57.8 0.0**
**BJT Baijiatuan 18.85 59** P **P 00 37 57.7 0.0**
BJT pmax pmax
comp=Z,17nm,1.0s
**BJT Baijiatuan 18.85 59** **P 00 37 57.7 0.0**
**BJI Beijing 18.86 59** P **Pn 00 37 59.0 +0.6**
BJI sP **pP 00 38 03.8 -0.6**
BJI PP **PnPn 00 38 13.1 +2.4**
BJI S **S 00 41 33.9 +2.4**
BJI pmax pmax
comp=Z,12nm,1.5s
BJI pmax pmax
comp=Z,190nm,3.7s
BJI LR LR
comp=Z,2μm,10.9s
BJI LR LR
comp=Z,1μm,10.8s
BJI LR LR
comp=Z,1μm,11.3s
**KUU Kurty 18.86 314** *e*P **P 00 37 57.6 -0.3**
KUU pmax pmax
comp=Z,125nm,1.1s
**KUU Kurty 18.86 314** *e*P **P 00 37 57.7 -0.3**
comp=Z,125nm,1.1s,baz=314
**PVM Polavaram 19.06 223** *e*P **P 00 37 56.6 -3.6**
**KBK Karagaybulak 19.13 309** P **Pn 00 38 08.8 +6.9**
SNR=30
**UBPT Khong Chiam 19.19 148** P **P 00 37 59.6 -2.0**
**UCH Uchtor 19.23 308** P **Pn 00 38 03.2 -0.1**
SNR=42
**RPR Rampur 19.29 231** *e*P **P 00 38 00.3 -2.4**
**ZAK Zakamensk 19.35 16** *e*P **P 00 38 02.7 -0.6**
ZAK pmax pmax
comp=Z,36nm,1.3s
**CHMS Chumysh 19.42 310** P **Pn 00 38 04.7 -0.4**
SNR=16
**AAK Ala-Archa 19.42 309** P **Pn 00 38 05.0 -0.3**
comp=Z,0.5nm,0.3s,baz=121,slow=13,SNR=24
AAK LR LR 00 46 26.8
comp=Z,698nm,18.3s,baz=116,slow=40
**AAK Ala-Archa 19.42 309** P **Pn 00 38 05.3 -0.1**
SNR=24
**AAK Ala-Archa 19.42 309** **P 00 38 04.3 +0.1**
**AAK Ala-Archa 19.42 309** P **Pn 00 38 06.0 +0.7**
AAK S **S 00 41 43.3 +0.2**
**AAK Ala-Archa 19.42 309** *i* P **Pn 00 38 05.6 +0.3**
SNR=40
**USP Ospenovka 19.70 311** P **P 00 38 07.7 +0.6**
SNR=23
**SGDS Sogindy 19.71 311** *e*P **Pn 00 38 08.0 -0.7**
**SGDS Sogindy 19.71 311** *e*P **P 00 38 06.8 -0.4**
baz=311
**AML Almayashu 19.74 307** P **Pn 00 38 11.1 +1.7**
SNR=43
**AML Almayashu 19.74 307** P **Pn 00 38 09.2 -0.2**
**AML Almayashu 19.74 307** *i* P **Pn 00 38 10.5 +1.0**
SNR=23
**SRSP Sriramsagar 19.88 233** *e*P **P 00 38 05.1 -4.0**
**EKS2 Erkin-Say 19.91 308** P **P 00 38 10.2 +0.7**
SNR=42
**MYLAV Mylavaram 20.03 224** *e*P **P 00 38 07.9 -2.9**
**MOY Mondy 20.12 11** *e*P **P 00 38 11.7 0.0**
MOY pmax pmax
comp=Z,51nm,1.7s
**NJ2 Nanjing 20.20 84** ⇓ *i* P Pn 00 38 14.3 -0.2
NJ2 pP pP 00 38 17.0 -2.1
NJ2 sP sP 00 38 19.5 -2.7
NJ2 pmax pmax
comp=Z,20nm,0.9s
NJ2 LR LR
comp=Z,1μm,8.2s
NJ2 LR LR
comp=Z,2μm,8.3s
NJ2 LR LR
comp=Z,1μm,7.9s
**XLT XiLinHaoTe 20.34 48** *e*P **P 00 38 12.3 -1.8**
XLT pP Pn 00 38 17.3 +1.1
XLT sP pP 00 38 19.9 -0.8
XLT PP **PnPn 00 38 34.1 +3.0**
XLT S **S 00 42 01.3 -0.1**
XLT sS sS 00 42 10.4 -1.3
XLT PcP **PcP 00 42 26.5 -0.3**
XLT pmax pmax
comp=Z,27nm,1.0s
XLT pmax pmax
comp=Z,220nm,4.7s
XLT LR LR
comp=Z,140nm,14.3s
XLT LR LR
comp=Z,780nm,9.7s
XLT LR LR
comp=Z,990nm,11.8s
**PBA Port Blair 20.37 186** P **P 00 38 14.6 +0.1**
PBA IAmb IAmb 00 38 27.0
comp=Z,101nm,0.8s
**CUPL Choutuppal 20.67 229** *e*P **P 00 38 15.5 -2.3**
**HYBB Hyderabad (bro 20.82 230** *e*P **P 00 38 16.9 -2.4**
**BTLS Baital 20.87 315** *e*P **P 00 38 19.2 -0.4**
BTLS pmax pmax
comp=Z,57nm,1.1s
**BTLS Baital 20.87 315** *e*P **P 00 38 19.3 -0.4**
comp=Z,57nm,1.1s,baz=314
**NJS Nagarjunasagar 20.98 227** *e*P **P 00 38 18.6 -2.5**
**ADKI Addanki 21.14 224** *e*P **P 00 38 19.9 -2.9**
**GAR Garm 21.25 296** P **P 00 38 22.8 -1.2**
**IRK Irkutsk 21.31 16** *e*P **P 00 38 25.3 +0.9**
IRK pmax pmax
comp=Z,88nm,1.6s
**SEM Semipalatinsk 21.41 333** *e*P **P 00 38 24.8 -0.8**
SEM pmax pmax
comp=Z,53nm,1.2s
**SEM Semipalatinsk 21.41 333** *e*P **P 00 38 24.8 -0.8**
comp=Z,52nm,1.2s,baz=333
**SRLM Srisailam 21.59 227** *e*P **P 00 38 24.8 -2.9**
**DZA Taraz 21.65 307** *e*P **P 00 38 28.4 +0.3**
**DZA Taraz 21.65 307** *e*P **P 00 38 28.5 +0.3**
baz=307
**KLRI Killari 21.67 235** *e*P **P 00 38 26.4 -2.1**
**KBL Kabul 21.85 284** P **P 00 38 29.8 -0.8**
KBL pmax pmax
comp=Z,321nm,1.1s
**KBL Kabul 21.85 284** P **P 00 38 29.8 -0.8**
**KBL Kabul 21.85 284** P **P 00 38 29.5 -1.1**
SNR=188
KBL S **S 00 42 27.7 -3.9**
**RCLA Racherla 22.04 225** *e*P **P 00 38 29.0 -3.5**
**KURBB Kurchatov Arra 22.25 331** P **P 00 38 32.9 -1.5**
comp=Z,44nm,1.1s,baz=139,slow=10,SNR=73
KURBB ScP **ScP 00 46 07.4 +0.7**
comp=Z,0.2nm,0.8s,baz=113,slow=2.1,SNR=2.0
KURBB LR LR 00 48 09.4
comp=Z,465nm,21.3s,baz=116,slow=39
**KURBB Kurchatov Arra 22.25 331** P **P 00 38 32.6 -1.9**
**KURK Kurchatov 22.29 332** *ce*P **P 00 38 33.3 -1.6**
KURK pmax pmax
comp=Z,193nm,1.7s
**KURK Kurchatov 22.29 332** P **P 00 38 33.7 -1.1**
KURK IAmb IAmb 00 38 39.4
comp=Z,133nm,1.1s
**KURK Kurchatov 22.29 332** **ScP 00 46 07.4 +0.6**
**KURK Kurchatov 22.29 332** P **P 00 38 33.3 -1.6**
KURK S **S 00 42 38.9 -0.2**
**SSE Sheshan 22.30 85** P **P 00 38 34.3 -0.9**
SSE S **S 00 42 40.8 +1.1**
SSE pmax pmax
comp=Z,6.0nm,0.6s
SSE pmax pmax
comp=Z,220nm,3.8s
SSE LR LR
comp=Z,590nm,15.9s
SSE LR LR
comp=Z,700nm,14.1s
**TAS Tashkent 22.57 302** P **P 00 38 37.5 -0.5**
TAS pmax pmax
comp=Z,150nm,0.9s
**TAS Tashkent 22.57 302** P **P 00 38 37.5 -0.5**
**DL2 Dalian 22.69 65** P **P 00 38 42.5 +3.3**
DL2 S **S 00 42 52.3 +5.6**
DL2 pmax pmax
comp=Z,48nm,0.9s
DL2 LR LR
comp=Z,1μm,15.6s
DL2 LR LR
comp=Z,430nm,15.1s
DL2 LR LR
comp=Z,1μm,13.1s
**BRLS Borolday 22.72 306** *e*P **P 00 38 39.0 -0.6**
**BRLS Borolday 22.72 306** *e*P **P 00 38 39.0 -0.6**
baz=305
**SKHT Srikalahasti 22.97 221** *e*P **P 00 38 39.0 -3.4**
**ZAA0 Zalesovo Array 23.11 345** IAmb IAmb 00 38 48.5
comp=Z,61nm,1.2s
**ZALV Zalesovo Beam 23.11 345** P **P 00 38 42.1 -1.4**
comp=Z,7.2nm,0.9s,baz=152,slow=6.6,SNR=35
ZALV LR LR 00 48 52.7
comp=Z,251nm,18.8s,baz=164,slow=40
**URV Uravakonda 23.48 228** *e*P **P 00 38 46.0 -1.5**
**OTUK Ortayu 23.61 320** P **P 00 38 48.1 -0.5**
**SRIT Nakonsritamara 23.69 169** P **P 00 38 49.5 0.0**
SRIT IAmb IAmb 00 38 53.3
comp=Z,53nm,1.2s
**BRZS Berezniki 24.48 324** *e*P **P 00 38 56.8 +0.1**
**BRZS Berezniki 24.48 324** *e*P **P 00 38 56.9 +0.2**
baz=324
**NACB Ninganchiao 24.66 102** P **P 00 38 57.1 -1.5**
**SNY Shenyang 24.74 59** ⇑P **P 00 38 59.8 +0.7**
SNY S **S 00 43 20.4 +0.1**
SNY pmax pmax
comp=Z,36nm,1.6s
SNY pmax pmax
comp=Z,400nm,3.5s
SNY LR LR
comp=Z,630nm,13.5s
SNY LR LR
comp=Z,600nm,13.9s
SNY LR LR
comp=Z,720nm,14.4s
**HIA Hailar 25.30 40** P **P 00 39 03.1 -1.0**
HIA pmax pmax
comp=Z,40nm,1.2s
**HIA Hailar 25.30 40** P **P 00 39 03.1 -1.0**
HIA IAmb IAmb 00 39 09.6
comp=Z,40nm,1.2s
**INCN Inchon 26.46 69** P **P 00 39 14.7 -0.1**
INCN pmax pmax
comp=Z,60nm,1.2s
**INCN Inchon 26.46 69** P **P 00 39 14.7 -0.1**
INCN IAmb IAmb 00 39 20.9
comp=Z,60nm,1.1s
**CN2 Changchun 26.58 55** *e*P **P 00 39 13.4 -2.4**
CN2 sP pP 00 39 20.4 -2.5
CN2 S **S 00 43 42.8 -6.7**
CN2 pmax pmax
comp=Z,40nm,1.2s
CN2 LR LR
comp=Z,1μm,16.0s
CN2 LR LR
comp=Z,520nm,16.0s
CN2 LR LR
comp=Z,720nm,17.0s
**LHMI Lhok Sumawe 26.71 176** P **P 00 39 18.4 +1.3**
**TJN Taejon 27.03 72** P **P 00 39 17.1 -2.8**
TJN pmax pmax
comp=Z,169nm,1.3s
**TJN Taejon 27.03 72** P **P 00 39 17.1 -2.8**
**KULM Kulim 27.10 168** P **P 00 39 18.6 -2.0**
**KS19 Wonju Array Si 27.45 69** P **P 00 39 21.4 -2.2**
KS19 IAmb IAmb 00 39 46.1
comp=Z,40nm,1.4s
**KSAR Wonju Array Be 27.46 69** P **P 00 39 21.8 -1.9**
**KSAR Wonju Array Be 27.46 69** P **P 00 39 21.8 -1.9**
**HRA Herat 27.47 284** P **P 00 39 23.6 -0.5**
**KSRS Korea Array 27.49 69** P **P 00 39 20.9 -3.1**
comp=Z,6.3nm,1.0s,baz=252,slow=8.4,SNR=13
KSRS LR LR 00 51 20.4
comp=Z,583nm,20.6s,baz=260,slow=39
**BVAR Borovoye Array 27.52 327** P **P 00 39 22.2 -1.9**
comp=Z,14nm,0.8s,baz=96,slow=16,SNR=20
**BRVK Borovoye 27.59 327** *ce*P **P 00 39 23.8 -0.9**
BRVK pmax pmax
comp=Z,35nm,0.8s
**BRVK Borovoye 27.59 327** P **P 00 39 24.4 -0.3**
BRVK IAmb IAmb 00 39 29.4
comp=Z,33nm,0.8s
**BRVK Borovoye 27.59 327** P **P 00 39 27.9 +3.2**
**PALK Pallekele 28.00 212** LR LR 00 51 21.3
comp=Z,153nm,21.1s,baz=121,slow=38
**BNX BinXian 28.48 52** ⇑P **P 00 39 35.0 +2.3**
BNX pmax pmax
comp=Z,28nm,0.9s
BNX pmax pmax
comp=Z,430nm,6.3s
**BOD Bodaibo 28.89 21** *e*P **P 00 39 33.7 -2.5**
BOD pmax pmax
comp=Z,15nm,2.1s
**PSI Prapat 29.29 172** P **P 00 39 41.2 +0.9**
comp=Z,4.3nm,0.3s,baz=225,slow=5.5,SNR=4.4
PSI LR LR 00 54 03.9
comp=Z,156nm,18.1s,baz=335,slow=42
**JOW Kunigami 29.35 91** LR LR 00 52 27.2
comp=Z,670nm,19.0s,baz=315,slow=39
**MDJ Mudanjiang 29.67 55** P **P 00 39 46.3 +2.9**
MDJ pmax pmax
comp=Z,9.0nm,0.7s
MDJ pmax pmax
comp=Z,240nm,3.5s
MDJ LR LR
comp=Z,720nm,8.8s
MDJ LR LR
comp=Z,700nm,14.5s
MDJ LR LR
comp=Z,880nm,14.9s
**JNU Nakatsue 30.15 78** P **P 00 39 47.7 -0.1**
**GSI Gunungsitoli 30.64 175** P **P 00 39 52.3 +0.2**
**GEYT Alibeck 30.67 291** P **P 00 39 53.3 +0.9**
comp=Z,16nm,0.9s,baz=218,slow=13,SNR=18
GEYT LR LR 00 54 41.5
comp=Z,644nm,20.3s,baz=86,slow=41
**GEYT Alibeck 30.67 291** P **P 00 39 52.9 +0.6**
GEYT IAmb IAmb 00 39 58.1
comp=Z,28nm,1.0s
**GYA0 ALIBECK ARRAY 30.67 291** P **P 00 39 52.8 +0.5**
**GYA0B ALIBECK ARRAY 30.67 291** P **P 00 39 52.8 +0.5**
GYA0B IAmb IAmb 00 39 58.1
comp=Z,32nm,0.9s
**USRK Ussuriysk Ar. 31.27 56** LR LR 00 52 40.2
comp=Z,184nm,21.8s,baz=250,slow=37
**ABKAR Akbulak array 31.35 314** IAmb IAmb 00 40 03.0
comp=Z,23nm,1.1s
**ZEA Zeya 31.65 37** *e*P **P 00 40 01.3 +0.6**
ZEA pmax pmax
comp=N,10.0nm,1.3s
ZEA pmax pmax
comp=E,10.0nm,1.1s
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**BKNI Bangkinang 32.02 169** P **P 00 40 05.3 +1.0**
**KLR Kul'dur 32.36 47** P **P 00 40 07.3 +0.4**
comp=Z,8.0nm,0.8s,baz=268,slow=9.8,SNR=25
KLR LR LR 00 54 43.5
comp=Z,449nm,18.0s,baz=244,slow=39
**KLR Kul'dur 32.36 47** *ce*P **P 00 40 05.2 -1.8**
KLR pmax pmax
comp=Z,17nm,1.0s
**KKM Kota Kinabalu 32.55 138** P **P 00 40 09.1 0.0**
KKM IAmb IAmb 00 40 12.1
comp=Z,28nm,1.0s
**AKTO Aktyubinsk 32.92 315** LR LR 00 55 04.8
comp=Z,537nm,19.0s,baz=112,slow=39
**JLN Jalan Bani Buh 33.07 262** P **P 00 40 13.5 +0.1**
JLN P **P 00 40 13.5 +0.1**
JLN P **pP 00 40 18.0 -2.7**
SNR=6.2
JLN P **pP 00 40 18.0 -2.7**
SNR=6.2
**WBK Wadi Bani Khal 33.25 263** P **P 00 40 14.9 -0.1**
WBK P **P 00 40 14.9 -0.1**
**WSAR Wadi Sarin 33.28 264** LR LR 00 54 54.6
comp=Z,259nm,20.1s,baz=104,slow=38
**SBUM Sibu 33.57 148** P **P 00 40 17.0 -0.8**
**BIDO Bidbid 33.60 265** P **P 00 40 17.2 -0.8**
**SMDO Samad 33.84 264** P **P 00 40 19.9 -0.5**
SNR=8.1
SMDO P **P 00 40 19.9 -0.5**
SNR=8.1
**JMDO Jabal Madar 34.08 263** P **P 00 40 25.4 +3.1**
JMDO P **P 00 40 25.4 +3.1**
**HOQ Hoqain 34.26 265** P **P 00 40 27.1 +3.2**
SNR=5.2
HOQ P **P 00 40 27.1 +3.2**
SNR=5.2
**BANOM Banah 34.29 270** P **P 00 40 24.8 +0.7**
**SVE Sverdlovsk 34.30 327** *e*P **P 00 40 24.0 +0.2**
SVE pmax pmax
comp=Z,80nm,1.3s
SVE MLR MLR
comp=Z,404nm,12.0s
**SHME Shamm 34.38 270** P **P 00 40 28.9 +4.0**
**MYLDM Lahad Datu 34.58 136** P **P 00 40 26.4 -0.2**
MYLDM IAmb IAmb 00 40 30.7
comp=Z,51nm,1.3s
**MASF Masafi 34.59 269** P **P 00 40 31.5 +4.8**
MASF P **P 00 40 31.5 +4.8**
**MSFE Esma-Masafi 34.60 269** P **P 00 40 27.8 +1.0**
**BSY Bisya 34.69 264** P **P 00 40 30.7 +3.1**
SNR=7.0
BSY P **P 00 40 30.7 +3.1**
SNR=7.0
**UOSS Minazif 34.70 268** P **P 00 40 28.1 +0.4**
**UOSS Minazif 34.70 268** P **P 00 40 31.7 +4.0**
UOSS P **P 00 40 31.7 +4.0**
**UOSS Minazif 34.70 268** P **P 00 40 30.5 +2.8**
**MHTO MHTO 34.78 261** P **P 00 40 30.9 +2.6**
SNR=7.4
MHTO P **P 00 40 30.9 +2.6**
SNR=7.4
**HATD Hatta, Dubai 34.81 268** P **P 00 40 32.7 +4.1**
HATD P **P 00 40 32.7 +4.1**
**ASHO Ashiyiah 34.92 268** P **P 00 40 33.1 +3.5**
SNR=10
**ASHO Ashiyiah 34.92 268** *i* P **P 00 40 31.4 +1.8**
SNR=13
**ARQ Araqi 35.03 266** P **P 00 40 34.1 +3.5**
SNR=5.4
ARQ P **P 00 40 34.1 +3.5**
SNR=5.4
**ARU Arti 35.09 325** LR LR 00 55 34.4
comp=Z,274nm,21.3s,baz=127,slow=38
**ARU Arti 35.09 325** *ce*P **P 00 40 29.3 -1.4**
ARU pmax pmax
comp=Z,71nm,1.3s
**ARU Arti 35.09 325** P **P 00 40 30.1 -0.5**
**ALNE Al Ain 35.41 267** P **P 00 40 37.7 +3.9**
**ASUD Al Ashush, Dub 35.56 268** P **P 00 40 39.0 +3.9**
**MJAR Matsushiro Arr 35.75 71** P **P 00 40 36.6 0.0**
comp=Z,2.6nm,0.6s,baz=279,slow=9.7,SNR=5.1
MJAR PcP **PcP 00 43 04.8 +0.4**
comp=Z,1.2nm,0.5s,baz=274,slow=3.5,SNR=4.1
MJAR LR LR 00 55 17.3
comp=Z,184nm,21.1s,baz=279,slow=36
**AJN Ajban 35.87 268** P **P 00 40 41.0 +3.3**
**KSI Kapahiang 36.19 167** P **P 00 40 42.2 +1.7**
**UMZA Um Al Zommool 36.42 265** P **P 00 40 45.1 +2.6**
UMZA P **P 00 40 45.1 +2.6**
**MDSI Maura Dua 37.33 165** P **P 00 40 50.8 +0.7**
comp=Z,5.1nm,0.8s
**YAK Yakutsk 37.37 26** P **P 00 40 50.6 +0.6**
comp=Z,7.1nm,0.6s,baz=56,slow=2.6,SNR=7.5
YAK LR LR 00 57 13.9
comp=Z,236nm,20.1s,baz=263,slow=38
**YAK Yakutsk 37.37 26** *e*P **P 00 40 49.0 -1.0**
YAK *e**PP **sP 00 41 01.3 +1.2**
YAK *e* 00 42 17.2
YAK *e* 00 43 03.8
YAK *e*S **S 00 46 33.3 -3.6**
YAK *e**SS **sS 00 46 48.4 -0.3**
YAK *e*SS **SnSn 00 49 14.4 +0.7**
YAK pmax pmax
comp=Z,19nm,0.8s
YAK pmax pmax
comp=N,9.0nm,0.9s
YAK pmax pmax
comp=E,13nm,1.0s
YAK pmax pmax
comp=Z,89nm,3.0s
YAK pmax pmax
comp=N,42nm,3.5s
YAK pmax pmax
comp=E,82nm,3.1s
YAK smax smax
comp=E,71nm,2.8s
YAK smax smax
comp=N,54nm,2.8s
YAK MLR MLR
comp=Z,220nm,14.0s
YAK MLR MLR
comp=N,158nm,17.0s
YAK MLR MLR
comp=E,186nm,17.0s
**YAK Yakutsk 37.37 26** P **P 00 40 49.3 -0.7**
YAK IAmb IAmb 00 40 52.8
comp=Z,27nm,0.9s
**JHJ Hachijo jima 2 37.52 76** LR LR 00 57 05.7
comp=Z,264nm,19.8s,baz=14,slow=38
**NRIK Noril'sk 37.61 356** P **P 00 40 51.6 -0.4**
comp=Z,6.0nm,0.5s,baz=154,slow=5.1,SNR=12
NRIK LR LR 00 55 59.0
comp=Z,162nm,18.3s,baz=178,slow=36
**NRIK Noril'sk 37.61 356** *i* P **P 00 40 51.7 -0.3**
NRIK pmax pmax
comp=Z,40nm,1.3s
**NRIK Noril'sk 37.61 356** P **P 00 40 51.6 -0.4**
NRIK IAmb IAmb 00 40 56.6
comp=Z,44nm,1.3s
**KAAM Kaadhehdhoo 37.63 218** P **P 00 40 52.7 0.0**
KAAM IAmb IAmb 00 40 56.4
comp=Z,57nm,1.1s
**KLSI 37.65 164** P **P 00 40 53.7 +0.8**
comp=Z,10nm,1.0s

**JMM Marumori 37.68 68** P **P** **00 40 52.0 -0.9**
JMM IAmb IAmb 00 40 53.3
comp=Z,68nm,1.5s
**MZR Muzera 37.74 267** P **P** **00 40 56.6 +3.0**
**LKRN Lenkeran, Azer 37.98 293** P **P** **00 40 59.9 +4.4**
**SHAO Shalim 38.10 258** P **P** **00 41 00.0 +3.2**
**MAK Makhachkala 38.79 300** *eP* P 00 40 57.1 -5.2
MAK *eS* S 00 46 49.9 -9.0
MAK *eSS* **SnSn** **00 49 44.5 -4.0**
MAK pmax pmax
comp=Z,98nm,1.1s
MAK MLR MLR
comp=Z,139nm,11.0s
**ASAJ Asahikawa 38.85 58** P **P** **00 41 03.0 +0.2**
comp=Z,14nm,0.7s,baz=259,slow=11,SNR=7.8
ASAJ LR LR 00 56 42.4
comp=Z,142nm,19.6s,baz=286,slow=36
**JKA Kamikawa-asahi 38.85 58** P **P** **00 41 04.0 +1.2**
JKA IAmb IAmb 00 41 05.6
comp=Z,31nm,1.0s
**BKB Balikpapan 39.05 144** P **P** **00 41 04.3 -0.3**
**SEKA Sheki 39.05 297** P P 00 41 09.9 +5.3
**YSS Yuzh-Sakhalins 39.13 53** *i* P **P** **00 41 04.9 -0.1**
YSS pmax pmax
comp=Z,72nm,1.6s
**YSS Yuzh-Sakhalins 39.13 53** P **P** **00 41 05.9 +0.9**
YSS IAmb IAmb 00 41 08.4
comp=Z,52nm,1.2s
**MNGR Mingechevir, A 39.16 297** P P 00 41 10.9 +5.5
**TOLI2 Tolitoli 39.18 137** P **P** **00 41 05.9 +0.1**
TOLI2 **S** **00 47 04.2 -1.0**
**ERM Erimo 39.26 61** P **P** **00 41 05.6 -0.6**
ERM pmax pmax
comp=Z,32nm,1.2s
**ERM Erimo 39.26 61** P **P** **00 41 05.6 -0.6**
**TYV Tymovskoe 39.57 47** *eP* **P** **00 41 11.0 +2.4**
TYV pmax pmax
comp=Z,11nm,1.5s
TYV pmax pmax
comp=Z,400nm,5.6s
**GANJ Ganja 39.74 297** P **P** **00 41 11.9 +1.6**
**GROC Groznyy 40.05 301** *eP* **P** **00 41 12.7 0.0**
GROC *e* 00 42 46.2
GROC *e* 00 43 21.4
GROC pmax pmax
comp=Z,45nm,1.1s
**LEM Lembang 40.45 161** LR LR 00 58 59.8
comp=Z,243nm,18.9s,baz=312,slow=38
**KIRV Kirov 40.48 325** LR LR 00 58 40.3
comp=Z,296nm,19.1s,baz=111,slow=37
**KIRV Kirov 40.48 325** *ceP* **P** **00 41 15.3 -0.8**
**NAX Nakhchivan 40.49 294** P **P** **00 41 21.2 +4.6**
**GNI Garni 40.98 296** P **P** **00 41 21.2 +0.4**
comp=Z,10nm,1.3s,baz=355,slow=3.3,SNR=5.3
GNI LR LR 01 01 59.6
comp=Z,131nm,18.3s,baz=97,slow=42
**GNI Garni 40.98 296** *i* P **P** **00 41 20.4 -0.3**
GNI pmax pmax
comp=Z,23nm,0.9s
**GNI Garni 40.98 296** P **P** **00 41 21.1 +0.4**
**GNI Garni 40.98 296** P **P** **00 41 22.2 +1.4**
**KPJI Karang Pucung 41.32 159** P **P** **00 41 25.9 +2.5**
comp=Z,46nm,1.1s
**APSI Ampana 41.32 137** P **P** **00 41 25.9 +2.4**
comp=Z,752nmcomp=Z,27nm,1.1s
**ZEI Tsey 41.45 300** *eP* **P** **00 41 28.0 +3.4**
ZEI pmax pmax
comp=Z,16nm,1.4s
**KMSI Cibinong 41.54 133** P **P** **00 41 27.4 +2.1**
comp=Z,154nm,0.8s
**NCK Nalchik 41.64 301** *i* P **P** **00 41 26.4 +0.4**
NCK pmax pmax
comp=Z,25nm,1.3s
**ONI Oni 41.78 300** IAmb IAmb 00 41 33.4
comp=Z,63nm,1.2s
**AKH Akhalkalaki 41.83 298** ⇑P P 00 41 33.0 +5.3
**GOF Gofitskoye 42.01 303** ⇑*eP* **P** **00 41 29.0 +0.1**
GOF pmax pmax
comp=Z,95nm,1.1s
**TTSI Tana Toraja 42.07 141** P **P** **00 41 32.2 +2.5**
comp=Z,42nm,1.0s
**KBZ Khabaz 42.14 301** P **P** **00 41 29.7 -0.3**
comp=Z,2.7nm,1.0s,baz=104,slow=6.7,SNR=7.7
KBZ LR LR 01 01 12.1
comp=Z,167nm,20.5s,baz=75,slow=39
**KBZ Khabaz 42.14 301** *i* P **P** **00 41 30.2 +0.2**
KBZ pmax pmax
comp=Z,10.0nm,1.2s
**KARS Kars 42.20 297** P **P** **00 41 31.8 +1.0**
KARS pmax pmax
comp=Z,102nm,1.1s
**KARS Kars 42.20 297** P **P** **00 41 31.8 +1.0**
**KIV Kislovodsk 42.29 302** ⇑P **P** **00 41 33.7 +2.4**
**KIV Kislovodsk 42.29 302** *eP* **P** **00 41 31.5 +0.2**
KIV pmax pmax
comp=Z,21nm,1.0s
KIV MLR MLR
comp=Z,158nm,16.0s
**KIV Kislovodsk 42.29 302** P **P** **00 41 32.0 +0.7**
KIV IAmb IAmb 00 41 37.2
comp=Z,47nm,1.4s
**KIV Kislovodsk 42.29 302** *i* P **P** **00 41 32.6 +1.3**
SNR=6.7
**GEVA Gevas 42.48 293** P **P** **00 41 32.9 -0.2**
**SOCY Socotra 42.51 252** P **P** **00 41 31.0 -2.4**
SOCY IAmb IAmb 00 41 34.8
comp=Z,53nm,0.9s
**CHVG Ch'k'valeri 42.79 300** ⇑P **P** **00 41 40.1 +4.8**
**CHVG Ch'k'valeri 42.79 300** ⇑P P 00 41 40.1 +4.8
**SPSI Sidrap Palu 42.82 142** P **P** **00 41 38.0 +2.2**
comp=Z,1umcomp=Z,40nm,1.5s
**VRH Novokhopyorsk 43.16 312** *eP* **P** **00 41 41.1 +3.0**
VRH pmax pmax
comp=Z,40nm,0.8s
**GURO Guroymak-BITLI 43.25 294** P **P** **00 41 39.3 +0.1**
**PRGR Permogore 43.32 328** *eP* **P** **00 41 38.9 -0.4**
PRGR pmax pmax
comp=Z,92nm,1.3s
**TNTI Ternate 43.55 129** P **P** **00 41 41.4 -0.3**
**TNTI Ternate 43.55 129** P **P** **00 41 43.5 +1.8**
comp=Z,69nm,1.0s
**TIXI Tiksi 43.62 15** P **P** **00 41 40.4 -1.2**
comp=Z,3.8nm,0.5s,baz=268,slow=22,SNR=15
TIXI LR LR 01 03 05.7
comp=Z,109nm,19.3s,baz=184,slow=41
**TIXI Tiksi 43.62 15** *ceP* **P** **00 41 40.0 -1.6**
TIXI pmax pmax
comp=Z,7.0nm,1.1s
**TIXI Tiksi 43.62 15** P **P** **00 41 40.1 -1.6**
**KAPI Kappang 43.70 143** LR LR 01 01 11.4
comp=Z,88nm,20.4s,baz=345,slow=38
**KAPI Kappang 43.70 143** P **P** **00 41 42.9 0.0**
KAPI pmax pmax
comp=Z,17nm,1.0s
**KAPI Kappang 43.70 143** P **P** **00 41 42.9 0.0**
**GMJI Gumukmas 43.76 153** P **P** **00 41 45.2 +1.9**
comp=Z,23nm,1.4s
**JAGI Jajag, Banyuwa 44.21 152** IAmb IAmb 00 41 48.9
comp=Z,33nm,1.0s
**JAGI Jajag, Banyuwa 44.21 152** P **P** **00 41 48.0 +1.1**
comp=Z,31nm,0.9s
**RAYN Ar Rayn 44.31 272** ⇑P **P** **00 41 48.8 +1.0**
**RAYN Ar Rayn 44.31 272** P **P** **00 41 49.3 +1.4**
**MARD Mardin 44.42 292** P **P** **00 41 48.9 +0.2**
MARD IAmb IAmb 00 41 53.1
comp=Z,18nm,0.7s
**SOC Sochi 44.46 301** *eP* **P** **00 41 46.3 -2.4**
SOC *e* 00 43 29.0
SOC *ePPP* PPP 00 44 07.8
SOC *eS* **S** **00 48 22.3 -0.5**
SOC *eSS* **SS** **00 51 41.9 -0.1**
SOC *eSSS* SSS 00 52 23.7
SOC pmax pmax
comp=Z,32nm,1.4s
SOC MLR MLR
comp=Z,163nm,17.0s
**VORD Divnogorie 44.67 312** *eP* **P** **00 41 52.1 +1.8**
VORD pmax pmax
comp=Z,20nm,0.8s
**VSR Storozhevoye 44.76 312** *eP* **P** **00 41 52.8 +1.8**
VSR pmax pmax
comp=Z,40nm,1.1s
**VORR Voronezh 44.76 313** *eP* **P** **00 41 53.7 +2.7**
VORR pmax pmax
comp=Z,40nm,0.6s

**LPSR Galich'ya Gora 45.00 314** *eP* **P** **00 41 55.6 +2.7**
LPSR pmax pmax
comp=Z,70nm,0.8s
**MA2 Magadan 45.77 36** P **P** **00 41 57.8 -1.1**
comp=Z,7.0nm,1.0s,baz=229,slow=6.5,SNR=7.2
MA2 LR LR 01 02 25.6
comp=Z,104nm,19.6s,baz=288,slow=38
**KLMR Klimovskoe 45.93 326** *eP* **P** **00 41 57.4 -2.7**
KLMR *e* 00 43 35.0
KLMR *e* 00 43 47.0
KLMR pmax pmax
comp=Z,74nm,1.2s
**KLMR Klimovskoe 45.93 326** *eP* **P** **00 41 57.5 -2.7**
KLMR AMP 00 42 04.5
comp=Z,74nm,1.2s
KLMR *ePcP* **PcP** **00 43 35.0 -1.8**
KLMR *ePP* **PP** **00 43 47.0 -0.7**
KLMR LQ LQ 00 57 27.5
KLMR LQ LQ 00 57 27.5
KLMR LR LR 01 00 25.9
**ANN Anapa 46.00 303** *eP* **P** **00 41 58.4 -2.5**
ANN *eS* **S** **00 48 44.0 -1.1**
ANN pmax pmax
comp=Z,73nm,1.0s
**MOS Moscow 46.06 319** *eP* **P** **00 41 59.4 -1.8**
MOS *e* 00 43 50.4
MOS pmax pmax
comp=Z,80nm,0.8s
MOS MLR MLR
comp=E,300nm,15.0s
MOS MLR MLR
comp=Z,400nm,15.0s
**OBN Obninsk 46.60 318** ⇑P **P** **00 42 08.8 +3.4**
**OBN Obninsk 46.60 318** LR LR 01 03 19.0
comp=Z,51nm,18.6s,baz=242,slow=38
**OBN Obninsk 46.60 318** ⇓*eP* **P** **00 42 05.1 -0.3**
OBN *e* 00 43 42.4
OBN *e* 00 43 55.8
OBN pmax pmax
comp=Z,34nm,1.1s
OBN MLR MLR
comp=Z,218nm,15.0s
**OBN Obninsk 46.60 318** P **P** **00 42 05.6 +0.2**
**TOKA Tokat 47.24 297** P **P** **00 42 11.3 +0.5**
TOKA IAmb IAmb 00 42 15.7
comp=Z,17nm,1.2s
**SEY Seymchan 47.26 32** P **P** **00 42 09.7 -0.8**
comp=Z,3.9nm,0.8s,baz=272,slow=9.0,SNR=6.1
**SEY Seymchan 47.26 32** *i* P **P** **00 42 09.5 -1.0**
**WBSI Waikabubak, Su 47.52 147** P **P** **00 42 13.1 0.0**
comp=Z,933nmcomp=Z,58nm,0.9s
**BNN Bunyan 47.97 295** P **P** **00 42 17.3 +0.7**
**PETK Petropavlovsk- 49.01 45** P **P** **00 42 22.8 -1.4**
comp=Z,3.7nm,0.8s,baz=260,slow=8.3,SNR=3.8
PETK LR LR 01 05 34.7
comp=Z,188nm,19.5s,baz=267,slow=39
**BRTR Keskin Array B 49.49 297** P **P** **00 42 26.3 -2.0**
comp=Z,0.7nm,0.6s,baz=96,slow=7.4,SNR=1.9
BRTR PP **PP** **00 44 28.6 +6.2**
comp=Z,3.8nm,0.9s,baz=108,slow=7.9,SNR=6.2
**BRTR Keskin Array B 49.49 297** *ceP* **P** **00 42 31.3 +3.0**
BRTR pmax pmax
comp=Z,4.0nm,0.9s
**BRTR Keskin Array B 49.49 297** P **P** **00 42 29.8 +1.6**
**LVZ Lovozero 49.67 334** ⇑P **P** **00 42 31.6 +2.6**
**LVZ Lovozero 49.67 334** P **P** **00 42 30.8 +1.8**
**MMAI Mount Meron Ar 49.68 288** LR LR 01 07 30.2
comp=Z,112nm,21.2s,baz=244,slow=41
**GHAJ Ghor Haditha 50.04 286** P **P** **00 42 32.5 +0.2**
GHAJ IAmb IAmb 00 42 39.7
comp=Z,54nm,1.4s
**SOEI Soe 50.07 141** P **P** **00 42 33.5 +0.7**
**SOEI Soe 50.07 141** P **P** **00 42 33.6 +0.8**
comp=Z,960nmcomp=Z,82nm,0.9s
**ANTO Ankara 50.10 297** P **P** **00 42 32.5 -0.3**
ANTO pmax pmax
comp=Z,58nm,1.4s
**ANTO Ankara 50.10 297** P **P** **00 42 32.5 -0.3**
**BR231 Keskin MP Arra 50.12 297** P **P** **00 42 32.5 -0.6**
**BATI Baumata 50.13 142** LR LR 01 04 52.5
comp=Z,149nm,20.8s,baz=306,slow=38
**CSS Mathiatis 50.82 291** **P** **00 42 39.4 +1.1**
CSS IAmb IAmb 00 43 05.8
comp=Z,35nm,1.4s
**EIL Elat 51.05 284** LR LR 01 08 47.7
comp=Z,238nm,18.3s,baz=68,slow=41
**AKASG Malin Array Be 51.05 312** P **P** **00 42 38.0 -1.7**
comp=Z,11nm,0.6s,baz=73,slow=6.9,SNR=20
AKASG LR LR 01 08 23.8
comp=Z,405nm,19.2s,baz=72,slow=41
**AKASG Malin Array Be 51.05 312** IAmb IAmb 00 42 43.4
comp=Z,30nm,0.8s
**AKBB Malin Array Si 51.05 312** *ceP* **P** **00 42 39.5 -0.2**
**AKBB Malin Array Si 51.05 312** IAmb IAmb 00 42 43.4
comp=Z,24nm,0.8s
**PURM Purcari 51.09 306** ⇑P **P** **00 42 40.4 +0.3**
**MDUB Mudurnu 51.17 298** P **P** **00 42 40.6 -0.4**
**MNK Minsk 51.61 317** *i* P **P** **00 42 42.1 -1.7**
MNK *i* 00 44 38.0
MNK *i* S **S** **00 50 04.1 +0.3**
MNK *i* SS **SS** **00 53 41.4 +1.8**
MNK *i* SSS SSS 00 55 17.2
MNK pmax pmax
comp=N,9.0nm,0.8s
MNK pmax pmax
comp=Z,51nm,0.8s
MNK pmax pmax
comp=E,11nm,1.5s
MNK MLR MLR
comp=E,27nm,13.0s
MNK MLR MLR
comp=Z,239nm,14.0s
MNK MLR MLR
comp=N,116nm,12.0s
**MNK Minsk 51.61 317** *i* P **P** **00 42 42.2 -1.7**
comp=E,11nm,1.5s
MNK *i* P **P** **00 42 42.2 -1.7**
comp=N,9.0nm,0.8s
MNK *i* P **P** **00 42 42.2 -1.7**
comp=Z,51nm,0.8s,baz=87
MNK *i* PP **PP** **00 44 38.1 -3.1**
MNK *i* PPP PPP 00 45 36.8
MNK *i* S **S** **00 50 04.1 +0.4**
MNK *i* SS **SS** **00 53 41.4 +1.8**
MNK *i* SSS SSS 00 55 17.3
MNK *i* LQ LQ 01 00 55.9
MNK *i* LR LR 01 04 53.5
MNK *i* LRM MLR 01 07 10.8
comp=E,27nm,13.1s
MNK *i* LRM MLR 01 07 13.4
comp=Z,239nm,14.1s
MNK *i* LRM MLR 01 07 25.6
comp=N,116nm,11.8s
**KIS Kishinev 51.74 307** *eP* **P** **00 42 48.0 +3.0**
KIS LRM MLR 01 07 40.0
comp=N,400nm,16.0s
**KIS Kishinev 51.74 307** *eP* **P** **00 42 48.0 +3.0**
KIS MLR MLR
comp=Z,400nm,16.0s
**MILM Milestii Mici 51.76 307** ⇑P **P** **00 42 43.2 -1.9**
**MILM Milestii Mici 51.76 307** ⇑P **P** **00 42 43.2 -1.9**
**BORA Eskisehir 51.86 298** P **P** **00 42 44.4 -1.6**
**VSU Vasula 52.12 322** *i* P **P** **00 42 51.2 +3.6**
**NACGM Naroch 52.23 317** *i* P **P** **00 42 52.1 +3.7**
**IDID Didziasalis 52.23 318** *eP* **P** **00 42 52.4 +4.0**
**ISP Isparta 52.28 295** P **P** **00 42 49.1 -0.2**
ISP pmax pmax
comp=Z,22nm,0.9s
**ISP Isparta 52.28 295** P **P** **00 42 49.1 -0.2**
ISP IAmb IAmb 00 42 52.9
comp=Z,22nm,0.9s
**VLDR Vladesti 52.42 306** ⇓P **P** **00 42 53.1 +3.1**
**TIRR Tirgusor 52.43 304** P **P** **00 42 51.6 +1.5**
TIRR pmax pmax
comp=Z,29nm,1.1s
**TIRR Tirgusor 52.43 304** P **P** **00 42 51.5 +1.5**
TIRR IAmb IAmb 00 42 55.0
comp=Z,29nm,1.1s
**FIA1 FINESS Array S 52.46 326** IAmb IAmb 00 42 55.0
comp=Z,36nm,1.4s
**FINES FINESS Array B 52.46 326** P **P** **00 42 49.2 -0.9**
comp=Z,14nm,1.0s,baz=100,slow=8.3,SNR=13
FINES LR LR 01 07 25.8
comp=Z,202nm,18.5s,baz=86,slow=39
**CFR Carcaliu 52.50 305** ⇑P **P** **00 42 50.9 +0.3**

**CFR Carcaliu 52.50 305** ⇑P **P** **00 42 50.9 +0.3**
**IIGN Ignalina 52.52 318** *eP* **P** **00 42 53.1 +2.5**
**SAUI Saumlaki 52.73 133** P **P** **00 42 52.6 0.0**
**KEV Kevo 52.75 336** P **P** **00 42 53.7 +1.6**
KEV pmax pmax
comp=Z,34nm,0.9s
**KEV Kevo 52.75 336** P **P** **00 42 53.6 +1.6**
KEV IAmb IAmb 00 42 56.7
comp=Z,34nm,0.9s
**ELL Elmali 53.03 294** P **P** **00 42 56.0 +1.2**
ELL pmax pmax
comp=Z,93nm,1.2s
**ELL Elmali 53.03 294** P **P** **00 42 56.0 +1.2**
**PANC Panciu 53.06 306** ⇓P **P** **00 42 58.0 +3.2**
**ARA0 ARCESS Array S 53.24 336** *eP* **P** **00 42 57.9 +2.1**
**ARCES ARCESS Array B 53.24 336** P **P** **00 42 54.5 -1.3**
comp=Z,12nm,0.7s,baz=87,slow=6.3,SNR=20
ARCES LR LR 01 08 20.0
comp=Z,242nm,19.9s,baz=97,slow=39
**ARCES ARCESS Array B 53.24 336** P **P** **00 42 57.9 +2.1**
ARCES pmax pmax
comp=Z,62nm,1.4s
**ARCES ARCESS Array B 53.24 336** P **P** **00 42 57.9 +2.1**
**TESR Tescani 53.29 307** ⇓P **P** **00 42 56.5 0.0**
**VRI Vrincioaia 53.35 306** ⇓P **P** **00 42 57.6 +0.7**
**VRI Vrincioaia 53.35 306** ⇓P **P** **00 42 57.6 +0.7**
**PLOR Plostina 53.41 306** ⇑P **P** **00 42 58.6 +1.2**
**PLOR Plostina 53.41 306** ⇑P **P** **00 42 58.6 +1.2**
**BISRR Bisoca 53.42 306** ⇓P **P** **00 43 02.3 +4.7**
**MTSE Matsula 53.64 322** *eP* **P** **00 43 00.1 +1.4**
**COVR Voineasa-Covas 53.71 306** ⇑P **P** **00 42 60.0 +0.3**
**NEHR Nehoiu 53.73 306** ⇓P **P** **00 43 00.3 +0.6**
**BILL Bilibino 53.73 26** ⇓P **P** **00 42 59.7 +0.3**
**BILL Bilibino 53.73 26** P **P** **00 42 59.4 0.0**
BILL IAmb IAmb 00 43 02.8
comp=Z,26nm,1.3s
**PABE Paberze 53.79 318** *eP* **P** **00 43 02.8 +2.9**
**OZUR 53.95 306** ⇓P **P** **00 43 01.1 -0.3**
**MLR Muntele Rosu 53.96 306** ⇓P **P** **00 43 01.8 +0.2**
**MLR Muntele Rosu 53.96 306** LR LR 01 10 03.3
comp=Z,243nm,18.9s,baz=72,slow=40
**MLR Muntele Rosu 53.96 306** ⇓P **P** **00 43 01.8 +0.2**
**HAMF Hammerfest 53.98 337** *eP* **P** **00 43 04.9 +3.7**
**KTK1 Kautokeino 54.00 335** *eP* **P** **00 43 03.0 +1.7**
**BURAR Bucovina Array 54.06 308** ⇑P **P** **00 43 01.1 -1.2**
**BURAR Bucovina Array 54.06 308** ⇑P **P** **00 43 01.1 -1.2**
**BURAR Bucovina Array 54.06 308** P **P** **00 43 03.0 +0.8**
**JMB Yambol 54.14 302** P **P** **00 43 06.4 +3.7**
**DOPR Dopca 54.25 306** ⇓P **P** **00 43 07.0 +3.5**
**SUW Suwalki 54.40 316** *eP* **P** **00 43 07.3 +2.9**
**SUW Suwalki 54.40 316** P **P** **00 43 06.0 +1.6**
SUW pmax pmax
comp=Z,110nm,0.9s
**SUW Suwalki 54.40 316** P **P** **00 43 06.0 +1.6**
**SUW Suwalki 54.40 316** *eP* **P** **00 43 07.4 +2.9**
**SZH Strazhica 54.42 303** P **P** **00 43 07.5 +2.7**
**LVV L'vov 54.47 311** *eP* **P** **00 43 07.7 +2.7**
**VOIR 54.59 306** ⇓P **P** **00 43 06.8 +0.7**
**VOIR 54.59 306** ⇓P **P** **00 43 06.8 +0.7**
**ARR Arges 54.89 306** ⇑P **P** **00 43 07.6 -0.6**
**JETT Jettan, Norway 55.03 336** *eP* **P** **00 43 10.2 +1.3**
**KDZ Kurdzhali 55.17 301** P **P** **00 43 13.9 +3.6**
**BMR Baia Mare 55.20 309** ⇓P **P** **00 43 14.0 +3.7**
**BMR Baia Mare 55.20 309** ⇓P **P** **00 43 14.0 +3.7**
**CJR Cluj-Napoca 55.32 308** ⇑P **P** **00 43 13.1 +1.8**
**CJR Cluj-Napoca 55.32 308** ⇑P **P** **00 43 13.1 +1.8**
**KWP Kalwaria Pacla 55.35 311** *eP* **P** **00 43 15.1 +3.7**
**LOT Lotru 55.47 306** ⇓P **P** **00 43 15.8 +3.3**
**TRO Tromso 55.55 336** *eP* **P** **00 43 15.5 +3.0**
**RZN Rozhen 55.67 301** P **P** **00 43 15.9 +1.8**
**TRPA Tarpa 55.74 309** ⇓P **P** **00 43 17.4 +3.2**
**TRPA Tarpa 55.74 309** P **P** **00 43 17.8 +3.7**
**UZH Uzhgorod 55.80 310** *eP* **P** **00 43 14.0 -0.6**
UZH *e* 00 43 23.8
**DRGR 55.90 308** ⇓P **P** **00 43 15.2 -0.3**
**DRGR 55.90 308** ⇓P **P** **00 43 15.2 -0.3**
**MPEP Malo Peshtene 55.96 304** P **P** **00 43 19.5 +3.6**
**BEL Belsk 56.16 314** *eP* **P** **00 43 20.4 +3.2**
**GZR Gura Zlata 56.16 306** ⇓P **P** **00 43 21.1 +3.7**
**GZR Gura Zlata 56.16 306** ⇓P **P** **00 43 21.1 +3.7**
**CRVS Cervenica-Dubn 56.29 310** *eP* **P** **00 43 22.5 +4.3**
**MMB Musomiste 56.41 301** P **P** **00 43 20.1 +0.9**
**VTS Vitosha 56.50 303** ⇓P **P** **00 43 19.5 -0.5**
**VTS Vitosha 56.50 303** ⇓P **P** **00 43 19.5 -0.5**
**VTS Vitosha 56.50 303** IAmb IAmb 00 43 24.6
comp=Z,30nm,1.4s
**VTS Vitosha 56.50 303** P **P** **00 43 19.1 -0.9**
**SPA0 Spitsbergen Ar 56.59 346** *eP* **P** **00 43 23.4 +3.5**
**SPITS Spitsbergen Ar 56.59 346** LR LR 01 11 21.2
comp=Z,144nm,19.6s,baz=206,slow=40
**UPP Uppsala 56.70 324** *eP* **P** **00 43 24.1 +3.2**
**HSPB Hornsund (broa 56.71 345** *eP* **P** **00 43 25.4 +4.7**
**HSPB Hornsund (broa 56.71 345** *eP* **P** **00 43 21.9 +1.3**
**BZS Buzias 56.90 307** ⇑P **P** **00 43 24.1 +1.5**
**BZS Buzias 56.90 307** ⇑P **P** **00 43 24.1 +1.5**
**NIE Niedzica 56.93 311** *eP* **P** **00 43 27.4 +4.6**
**STEI Steigen 56.95 334** *eP* **P** **00 43 25.5 +3.0**
**FAUS Fauske 56.97 333** *eP* **P** **00 43 25.5 +2.9**
**OJC Ojcow 57.08 312** *eP* **P** **00 43 26.8 +3.1**
**OJC Ojcow 57.08 312** IAmb IAmb 00 43 28.7
comp=Z,22nm,0.8s
**AMBH Ambrzfalva 57.33 308** P P 00 43 30.9 +5.4
**IDI Anoyia 57.35 294** ⇓P **P** **00 43 27.9 +2.0**
**IDI Anoyia 57.35 294** LR LR 01 12 40.0
comp=Z,59nm,19.4s,baz=92,slow=41
**KNRA Kununurra 57.40 141** P **P** **00 43 26.6 +0.4**
KNRA IAmb IAmb 00 43 28.5
comp=Z,25nm,1.0s
**BSZH Besenyszg 57.42 309** P P 00 43 31.3 +5.1
**MOR8 Moi Rana 57.42 332** *eP* **P** **00 43 27.8 +1.9**
**KBS Kingsbay 57.49 347** P **P** **00 43 26.9 +0.7**
KBS pmax pmax
comp=Z,79nm,1.5s
**KBS Kingsbay 57.49 347** P **P** **00 43 26.9 +0.7**
**PSZ Piszkesteto 57.52 310** P **P** **00 43 26.9 -0.1**
PSZ pmax pmax
comp=Z,16nm,1.1s
**PSZ Piszkesteto 57.52 310** P **P** **00 43 26.9 -0.1**
PSZ IAmb IAmb 00 43 31.4
comp=Z,16nm,1.1s
**PSZ Piszkesteto 57.52 310** P **P** **00 43 31.0 +4.1**
**LOF Lofoten 57.57 334** *eP* **P** **00 43 29.1 +2.2**
**FITZ Fitzroy Crossi 57.83 145** LR LR 01 11 11.4
comp=Z,75nm,19.7s,baz=306,slow=39
**FITZ Fitzroy Crossi 57.83 145** P **P** **00 43 29.0 -0.3**
**VYHS Vyhne 58.07 310** *eP* **P** **00 43 34.2 +3.4**
**AGG Agios Georgios 58.15 299** IAmb IAmb 00 43 35.6
comp=Z,21nm,1.2s
**BUD Budapest 58.19 309** P **P** **00 43 35.8 +4.2**
**FRGS Fruska Gora 58.25 306** ⇑P **P** **00 43 30.1 -2.0**
**KOLL Kolacno 58.33 311** *eP* **P** **00 43 36.3 +3.7**
**FNA Florina 58.34 301** P **P** **00 43 30.7 -2.1**
FNA pmax pmax
comp=Z,13nm,1.5s
**FNA Florina 58.34 301** P **P** **00 43 30.7 -2.1**
**PSA00 Pilbara Seismi 58.34 153** P **P** **00 43 33.4 +0.6**
**DIVS Divibare 58.40 305** IAmb IAmb 00 43 37.9
comp=Z,21nm,1.2s
**SRO2 Moca 58.54 310** *eP* **P** **00 43 36.9 +2.9**
**SRO Srobarova 58.58 310** *eP* **P** **00 43 38.4 +4.1**
**MORC Moravsky Berou 58.60 312** IAmb IAmb 00 43 38.9
comp=Z,19nm,1.0s
**MORC Moravsky Berou 58.60 312** *eP* **P** **00 43 33.3 -1.2**
MORC *e* 00 43 37.8
**HFS Hagfors 58.61 325** LR LR 01 11 45.4
comp=Z,163nm,18.6s,baz=75,slow=39
**NSS Namsos 58.66 330** *eP* **P** **00 43 36.8 +2.2**
**CSKK Cskako 58.73 309** P **P** **00 43 39.2 +3.8**
**JAVC Velka Javorina 58.74 311** *eP* **P** **00 43 35.6 +0.1**
JAVC *e* 00 43 40.1
**KBN Korca 58.81 301** P **P** **00 43 34.5 -1.7**
KBN pmax pmax
comp=Z,30nm,1.3s
**KBN Korca 58.81 301** P **P** **00 43 34.5 -1.7**
KBN IAmb IAmb 00 43 39.4
comp=Z,30nm,1.3s
**SMOL Smolenice 58.98 311** *eP* **P** **00 43 40.9 +3.8**
**KRLC Kraliky 59.00 313** *eP* **P** **00 43 40.6 +3.3**
**KRLC Kraliky 59.00 313** *eP* **P** **00 43 40.6 +3.3**
**MODS Modra-Piesok 59.11 311** *eP* P 00 43 45.4 +7.4
**KSP Ksiaz 59.12 314** *eP* **P** **00 43 41.5 +3.5**
**KOVH Kovagotottos 59.16 308** P **P** **00 43 41.1 +2.7**

**DPC Dobruska-Polom 59.22 313** *e*P P **00 43 38.5 -0.3**
**DPC Dobruska-Polom 59.22 313** *e*P P **00 43 38.5 -0.3**
DPC *e*pP **pP** **00 43 42.6 -3.7**
**OSTC Ostas 59.24 313** *e*P P **00 43 40.9 +2.0**
**MPLH Magyarpolny 59.25 309** P P **00 43 39.6 +0.7**
**ZST Bratislava 59.27 310** *e*P P **00 43 42.7 +3.6**
**VRAC Vranov 59.31 312** ⇑P P **00 43 43.0 +3.6**
**VRAC Vranov 59.31 312** LR LR 01 13 48.2
comp=Z,266nm,19.3s,baz=91,slow=41
**VRAC Vranov 59.31 312** ⇑P P **00 43 43.0 +3.6**
**VRAC Vranov 59.31 312** *e*P P **00 43 38.9 -0.5**
VRAC *e* 00 43 43.2
**EGYH Egyhazaskeszo 59.32 310** P P **00 43 43.7 +4.2**
**CHVC Chvalec 59.33 313** *e*P P **00 43 38.5 -1.0**
**UPC Upice 59.38 313** *e*P P **00 43 43.4 +3.6**
**UPC Upice 59.38 313** *e*P P **00 43 43.4 +3.6**
**NC405 NORSAR Array S 59.39 326** P P **00 43 40.3 +0.6**
**PDG Podgorica 59.39 304** P P **00 43 40.5 +0.5**
**KRUC Moravsky 59.50 312** *e*P P **00 43 40.1 -0.6**
KRUC *e* 00 43 44.1
**NC303 NORSAR Array S 59.53 326** P P **00 43 41.8 +1.1**
NC303 IAmb IAmb 00 43 44.7
comp=Z,24nm,1.1s
**NC602 NORSAR Array S 59.55 326** P P **00 43 41.7 +0.9**
NC602 IAmb IAmb 00 43 57.6
comp=Z,19nm,1.1s
**TBLU Trondheim 59.63 329** *e*P P **00 43 42.5 +1.1**
**NB2 NORSAR Subarra 59.64 326** P P **00 43 43.9 +2.4**
comp=Z,28nm,1.1s,baz=79,slow=6.9
**NB2 NORSAR Subarra 59.64 326** P P **00 43 43.9 +2.4**
baz=79,slow=6.9
**NOA NORSAR Array B 59.64 326** P P **00 43 40.8 -0.7**
comp=Z,12nm,0.9s,baz=78,slow=6.9,SNR=20
NOA LR LR 01 10 36.3
comp=Z,135nm,18.6s,baz=85,slow=37
**SOP Sopron 59.76 310** P P **00 43 43.2 +0.8**
**NC204 NORSAR Array S 59.80 326** P P **00 43 44.3 +1.7**
**TREC Trest 60.01 312** *e*P P **00 43 48.1 +3.9**
**TREC Trest 60.01 312** *e*P P **00 43 48.1 +3.9**
**CONA Conrad Observa 60.14 310** *e*P P **00 43 44.5 -0.7**
comp=Z,9.3nm,1.5s,SNR=8.0
CONA *i*P **pP** **00 43 49.0 -3.8**
comp=Z,26nm,0.9s
**PVCC Panska Ves 60.26 314** *e*P P **00 43 49.6 +3.7**
**PVCC Panska Ves 60.26 314** *e*P P **00 43 49.6 +3.7**
**PRU Pruhonice 60.42 313** *e*P P **00 43 50.3 +3.3**
**PRU Pruhonice 60.42 313** *e*P P **00 43 50.3 +3.3**
**DOMB Dombas 60.43 327** *e*P P **00 43 48.4 +1.5**
**ARSA Arzberg 60.55 310** *i*P P **00 43 48.1 +0.2**
comp=Z,12nm,1.3s
ARSA *i*P **pP** **00 43 51.3 -4.2**
comp=Z,12nm,1.3s
**BRG Berggiesshubel 60.55 314** *e*P P **00 43 51.3 +3.4**
BRG Amp 00 43 52.8
comp=Z,22nm,1.1s
**BRG Berggiesshubel 60.55 314** *e*P P **00 43 51.2 +3.4**
BRG pmax pmax
comp=Z,22nm,1.1s
**CKRC Cesky Krumlov 60.89 312** *e*P P **00 43 49.0 -1.2**
CKRC *ex* x 00 43 53.8
**MOL Molde 60.99 328** *e*P P **00 43 54.0 +3.3**
**CLL Collm 61.01 315** P P **00 43 51.5 +0.6**
CLL pmax pmax
comp=Z,12nm,1.0s
**CLL Collm 61.01 315** *i*P P **00 43 53.9 +3.0**
comp=Z,14nm,1.0s
CLL *i*pP **pP** **00 43 56.8 -1.7**
CLL LmV 01 14 00.0
comp=Z,200nm,19.7s
**CLL Collm 61.01 315** P P **00 43 51.5 +0.6**
CLL IAmb IAmb 00 43 55.0
comp=Z,12nm,1.0s
**SOKA Soboth 61.04 309** P P **00 43 50.3 -1.0**
comp=Z,22nm,1.3s,SNR=5.2
SOKA *i*P **pP** **00 43 54.8 -4.1**
comp=Z,25nm,1.5s
**SKAR Skarslia 61.11 326** *e*P P **00 43 53.4 +1.9**
**MOA Molln 61.20 311** *e*P P **00 43 51.4 -0.9**
comp=Z,5.7nm,0.8s
MOA *i*P **pP** **00 43 55.8 -4.1**
comp=Z,6.7nm,0.8s
**KHC Kasperske Hory 61.26 312** *e*P P **00 43 52.5 -0.3**
**KHC Kasperske Hory 61.26 312** *e*P P **00 43 52.5 -0.3**
KHC *e*pP **pP** **00 43 55.9 -4.4**
**KHC Kasperske Hory 61.26 312** P P **00 43 54.8 +2.0**
**GEC2 GERESS Array S 61.27 312** P P **00 43 52.7 -0.2**
GEC2 IAmb IAmb 00 43 57.3
comp=Z,22nm,1.2s
**GERES GERESS Array B 61.27 312** P P **00 43 51.6 -1.3**
comp=Z,2.5nm,0.7s,baz=38,slow=5.0,SNR=18
GERES LR LR 01 15 42.6
comp=Z,311nm,18.1s,baz=83,slow=41
**OBKA Obir 61.41 309** *e*P P **00 43 52.3 -1.6**
comp=Z,7.7nm,1.1s
OBKA *i*P **pP** **00 43 57.3 -4.1**
comp=Z,9.8nm,1.4s
**NOR Nord 61.60 351** *i*P P **00 43 52.9 -1.6**
NOR IAmb IAmb 00 43 58.0
comp=Z,4.7nm,0.9s
**NKC Novy Kostel 61.65 314** *e*P P **00 43 58.5 +3.1**
**NKC Novy Kostel 61.65 314** *e*P P **00 43 58.5 +3.1**
**KBA Koelnbreinsper 62.02 310** *e*P P **00 43 57.8 -0.3**
comp=Z,10nm,1.1s
KBA *i*P **pP** **00 44 01.1 -4.6**
comp=Z,5.9nm,0.9s
**TIP Timpagrande 62.21 301** P P **00 43 59.4 0.0**
TIP IAmb IAmb 00 44 03.5
comp=Z,24nm,1.4s
**GRA1 Grafenberg Arr 62.57 313** P P **00 44 01.2 -0.3**
GRA1 IAmb IAmb 00 44 06.2
comp=Z,18nm,0.8s
**GRF Grafenberg Arr 62.57 313** P P **00 44 01.2 -0.3**
GRF pmax pmax
comp=Z,18nm,0.8s
**GRFO Grafenberg 62.57 313** P P **00 44 01.6 +0.1**
GRFO pmax pmax
comp=Z,17nm,0.8s
**GRFO Grafenberg 62.57 313** P P **00 44 01.6 +0.1**
GRFO IAmb IAmb 00 44 06.2
comp=Z,17nm,0.8s
**LODK Lodwar 62.64 256** P P **00 44 01.3 -1.3**
**ABTA Abfaltersbach 62.67 310** *e*P P **00 44 01.4 -0.9**
comp=Z,9.7nm,1.3s
ABTA *i*P **pP** **00 44 04.6 -5.3**
comp=Z,9.7nm,1.3s
**STAL STALIGIAL 62.69 309** P P **00 44 02.3 -0.1**
STAL IAmb IAmb 00 44 05.9
comp=Z,20nm,1.1s
**WTTA Wattenberg 63.07 311** *i*P P **00 44 04.1 -1.0**
comp=Z,3.8nm,0.9s
WTTA *i*P **pP** **00 44 08.0 -4.7**
comp=Z,8.9nm,0.8s
**WATA Walderalm 63.09 311** *i*P P **00 44 04.7 -0.4**
comp=Z,7.1nm,1.3s
WATA *i*P **pP** **00 44 07.8 -4.9**
comp=Z,19nm,1.4s
**CEL Celeste 63.16 300** P P **00 44 06.0 +0.3**
**GAMB Gambell 63.19 30** P P **00 44 06.2 +0.9**
**GAMB Gambell 63.19 30** P P **00 44 05.1 -0.3**
baz=288
**MOTA Moosalm 63.39 311** *i*P P **00 44 06.0 -1.2**
comp=Z,8.1nm,1.6s
MOTA *i*P **pP** **00 44 10.0 -4.7**
comp=Z,15nm,1.0s
**CTI Castel Tesino 63.46 309** P P **00 44 07.7 +0.1**
CTI pmax pmax
comp=Z,10.0nm,1.1s
**CTI Castel Tesino 63.46 309** P P **00 44 07.7 +0.1**
**AQU L'Aquila 63.52 305** P P **00 44 08.5 +0.5**
AQU pmax pmax
comp=Z,53nm,1.3s
**AQU L'Aquila 63.52 305** P P **00 44 08.5 +0.5**
**NRCA Norcia 63.56 306** P P **00 44 08.9 +0.6**
NRCA IAmb IAmb 00 44 11.7
comp=Z,13nm,0.9s
**RETA Reutte 63.56 311** *e*P P **00 44 07.3 -0.9**
comp=Z,2.8nm,1.1s,SNR=5.9
RETA *i*P **pP** **00 44 11.4 -4.4**
comp=Z,14nm,1.1s
**TEOL Teolo 63.68 309** P P **00 44 08.1 -0.8**
**KMBO Kilima Mbogo 63.73 251** P P **00 44 08.7 -1.3**
comp=Z,11nm,1.0s,baz=5.9,slow=8.5,SNR=4.8
**KMBO Kilima Mbogo 63.73 251** P P **00 44 08.6 -1.3**
KMBO IAmb IAmb 00 44 13.9
comp=Z,13nm,0.9s
**KMBO Kilima Mbogo 63.73 251** *i*P P **00 44 12.9 +3.0**
SNR=7.9
**FETA Feichten 63.73 311** *e*P P **00 44 08.5 -1.0**
comp=Z,17nm,1.0s,SNR=6.7
FETA *i*P **pP** **00 44 12.4 -4.7**
comp=Z,17nm,1.0s
**MURB Monte Urbino 63.81 306** P P **00 44 09.9 -0.1**
**KIBK Kibwezi 63.82 249** P P **00 44 11.4 +1.0**
**WB0 Warramunga Arr 63.82 138** P P **00 44 10.7 +0.6**
**WRAB Tennant Creek 63.93 138** P P **00 44 11.5 +0.7**
WRAB pmax pmax
comp=Z,31nm,0.9s
**WRAB Tennant Creek 63.93 138** P P **00 44 11.5 +0.7**
**WRA Warramunga Arr 63.93 138** P P **00 44 09.2 -1.6**
comp=Z,24nm,0.8s,baz=332,slow=7.5,SNR=69
WRA LR LR 01 14 47.1
comp=Z,45nm,18.5s,baz=302,slow=39
**WRA Warramunga Arr 63.93 138** P P **00 44 11.2 +0.4**
WRA pmax pmax
comp=Z,1.0nm,1.0s
**WRA Warramunga Arr 63.93 138** P P **00 44 11.2 +0.4**
**WB2 Warramunga Arr 63.94 138** P P **00 44 11.9 +1.0**
**WR0 Warramunga Arr 64.06 138** P P **00 44 12.6 +0.9**
WR0 IAmb IAmb 00 44 13.9
comp=Z,18nm,1.0s
**STU Stuttgart 64.12 313** P P **00 44 13.2 +1.4**
STU pmax pmax
comp=Z,46nm,1.5s
**STU Stuttgart 64.12 313** P P **00 44 13.2 +1.4**
**TNA Tin City 64.13 27** P P **00 44 12.2 +0.6**
TNA IAmb IAmb 00 44 14.8
comp=Z,21nm,1.4s
**TNA Tin City 64.13 27** P P **00 44 11.5 -0.1**
baz=290
**DAVA Damuels 64.19 311** *i*P P **00 44 11.4 -1.1**
comp=Z,2.3nm,0.7s
DAVA *i*P **pP** **00 44 15.3 -4.8**
comp=Z,8.8nm,1.0s
**ZCCA Zocca 64.49 308** P P **00 44 16.0 +1.6**
**VAE Valguarnera 64.54 300** LR LR 01 16 15.9
comp=Z,104nm,18.4s,baz=21,slow=40
**OSSC Osservatorio P 64.60 307** P P **00 44 15.3 +0.3**
OSSC IAmb IAmb 00 44 17.8
comp=Z,16nm,1.0s
**PMG Port Moresby 64.61 120** P P **00 44 16.6 +1.2**
PMG pmax pmax
comp=Z,16nm,0.5s
**PMG Port Moresby 64.61 120** P P **00 44 16.6 +1.2**
**BFO Black Forest 64.81 313** P P **00 44 16.2 -0.2**
BFO pmax pmax
comp=Z,25nm,1.3s
**BFO Black Forest 64.81 313** P P **00 44 16.2 -0.2**
BFO IAmb IAmb 00 44 20.3
comp=Z,25nm,1.3s
**TUE Stuetta 64.81 310** IAmb IAmb 00 44 30.5
comp=Z,12nm,0.9s
**RER Riviere de l'E 64.88 221** P P **00 44 17.8 +0.7**
**COEN Coen 64.92 127** P P **00 44 18.1 +0.7**
COEN IAmb IAmb 00 44 22.1
comp=Z,23nm,1.3s
**VLC Villacollemand 64.95 308** P P **00 44 18.4 +1.1**
**RDOG Red Dog Mine 65.03 24** P P **00 44 17.9 +0.5**
**ANM Nome 65.50 28** P P **00 44 20.5 0.0**
baz=293
**ECH Echery 65.58 313** P P **00 44 22.8 +1.4**
ECH pmax pmax
comp=Z,11nm,1.1s
**ECH Echery 65.58 313** P P **00 44 22.8 +1.4**
ECH IAmb IAmb 00 44 25.8
comp=Z,11nm,1.1s
**A21K Barrow 65.59 20** P P **00 44 21.3 +0.3**
**A21K Barrow 65.59 20** P P **00 44 21.2 +0.3**
baz=298
**WLF Walferdange 65.68 315** P P **00 44 22.9 +1.0**
WLF pmax pmax
comp=Z,51nm,1.2s
**WLF Walferdange 65.68 315** P P **00 44 22.9 +1.0**
**SENIN Lac Senin/Sane 66.17 311** P P **00 44 26.0 +0.5**
SENIN IAmb IAmb 00 44 30.5
comp=Z,9.2nm,0.9s
**UCC Uccle 66.33 316** P P **00 44 26.0 -0.1**
UCC pmax pmax
comp=Z,3.0nm,1.0s
**UCC Uccle 66.33 316** P P **00 44 26.0 -0.1**
**AS31 Alice Springs 66.69 141** P P **00 44 28.5 -0.2**
**ASAR Alice Springs 66.69 141** P P **00 44 27.1 -1.5**
comp=Z,18nm,0.8s,baz=328,slow=6.4,SNR=64
**ASAR Alice Springs 66.69 141** P P **00 44 29.4 +0.8**
**EUNU Eureka 68.17 0** P P **00 44 38.2 +0.8**
EUNU IAmb IAmb 00 44 49.0
comp=Z,18nm,1.2s
**ABPO Ambohimpanom 68.34 229** P P **00 44 39.6 +0.2**
ABPO pmax pmax
comp=Z,8.0nm,1.1s
**ABPO Ambohimpanom 68.34 229** P P **00 44 39.5 +0.2**
**SCO Scoresbysund 68.45 341** P P **00 44 39.9 +0.8**
SCO pmax pmax
comp=Z,20nm,1.3s
**SCO Scoresbysund 68.45 341** P P **00 44 39.9 +0.8**
SCO IAmb IAmb 00 44 44.0
comp=Z,20nm,1.3s
**EKA Eskdalemuir Ar 68.66 323** LR LR 01 18 23.9
comp=Z,270nm,18.8s,baz=63,slow=39
**ESK Eskdalemuir 68.69 323** P P **00 44 40.8 -0.1**
ESK pmax pmax
comp=Z,14nm,1.2s
**ESK Eskdalemuir 68.69 323** P P **00 44 40.8 -0.1**
ESK IAmb IAmb 00 44 58.8
comp=Z,14nm,1.2s
**GCSA Galena City Sc 68.69 26** P P **00 44 40.7 0.0**
baz=300
**MBAR Mbarara 68.71 255** LR LR 01 15 25.9
comp=Z,75nm,18.9s,baz=57,slow=36
**MBAR Mbarara 68.71 255** P P **00 44 40.7 -1.2**
MBAR pmax pmax
comp=Z,12nm,0.9s
**MBAR Mbarara 68.71 255** P P **00 44 40.7 -1.2**
MBAR IAmb IAmb 00 44 45.8
comp=Z,12nm,0.9s
**NEEM North Greenlan 68.87 352** *i*P P **00 44 41.2 -0.9**
NEEM IAmb IAmb 00 44 46.1
comp=Z,30nm,0.5s
**KEST Kesra 68.97 300** P P **00 44 44.6 +1.5**
comp=Z,8.4nm,0.9s,baz=324,slow=5.9,SNR=8.1
KEST LR LR 01 20 09.9
comp=Z,109nm,18.9s,baz=268,slow=40
**KEST Kesra 68.97 300** IAmb IAmb 00 44 47.2
comp=Z,20nm,1.1s
**TOLK Toolik Lake Re 69.06 21** P P **00 44 42.5 -0.5**
**TOLK Toolik Lake Re 69.06 21** IAmb IAmb 00 44 46.6
comp=Z,17nm,0.9s
**TOLK Toolik Lake Re 69.06 21** P P **00 44 42.6 -0.5**
baz=305
**IMAR Indian Mountai 69.18 24** P P **00 44 43.0 -0.8**
**UNV Unalaska Valle 69.46 39** P P **00 44 46.2 +0.5**
baz=296
**COLD Coldfoot 69.67 22** P P **00 44 47.0 +0.2**
**COLD Coldfoot 69.67 22** P P **00 44 46.9 0.0**
baz=305
**H21K Melozitna Rive 69.68 24** IAmb IAmb 00 44 51.2
comp=Z,15nm,1.1s
**H21K Melozitna Rive 69.68 24** P P **00 44 46.5 -0.4**
baz=303
**FORT Forrest 69.86 150** P P **00 44 49.2 +0.9**
FORT IAmb IAmb 00 44 52.3
comp=Z,27nm,1.1s
**TTA Tatalina 69.95 27** P P **00 44 49.5 +0.8**
TTA pmax pmax
comp=Z,21nm,1.5s
**TTA Tatalina 69.95 27** P P **00 44 49.5 +0.8**
TTA IAmb IAmb 00 44 52.2
comp=Z,21nm,1.5s
**TTA Tatalina 69.95 27** P P **00 44 48.5 -0.2**
baz=301
**J20K Nowinta River 70.00 26** IAmb IAmb 00 44 52.7
comp=Z,13nm,0.8s
**J20K Nowinta River 70.00 26** P P **00 44 48.0 -0.9**
baz=302,SNR=6.2
**I21K Tanana 70.23 24** P P **00 44 50.2 -0.1**
I21K IAmb IAmb 00 44 54.0
comp=Z,18nm,1.2s
**I21K Tanana 70.23 24** P P **00 44 49.4 -0.9**
baz=304
**K20K Telida 70.47 27** IAmb IAmb 00 45 03.0
comp=Z,29nm,1.5s
**K20K Telida 70.47 27** P P **00 44 51.6 -0.2**
baz=303
**VOI Vohitsoka 70.74 227** P P **00 44 55.5 +1.4**
VOI IAmb IAmb 00 45 00.8
comp=Z,25nm,1.2s
**MLY Manley 70.75 24** P P **00 44 53.4 -0.2**
MLY IAmb IAmb 00 44 57.0
comp=Z,18nm,1.1s
**MLY Manley 70.75 24** P P **00 44 53.1 -0.4**
baz=305
**L19K White Mountain 70.80 28** IAmb IAmb 00 44 57.6
comp=Z,23nm,1.1s
**L19K White Mountain 70.80 28** P P **00 44 53.1 -0.8**
baz=302,SNR=5.8
**CHUM Lake Minchumin 70.84 26** P P **00 44 52.8 -1.2**
baz=304
**SUMG Summit 70.92 347** P P **00 44 53.5 -1.3**
SUMG pmax pmax
comp=Z,20nm,1.0s
**SUMG Summit 70.92 347** *i*P P **00 44 52.2 -2.6**
SUMG IAmb IAmb 00 44 57.5
comp=Z,5.7nm,1.0s
**SUMG Summit 70.92 347** P P **00 44 53.5 -1.3**
SUMG IAmb IAmb 00 44 58.6
comp=Z,20nm,1.0s
**L20K Farewell, AK 71.03 27** P P **00 44 55.1 -0.1**
baz=303
**M19K Big River Lodg 71.14 28** P P **00 44 57.4 +1.5**
M19K IAmb IAmb 00 45 00.6
comp=Z,19nm,1.4s
**M19K Big River Lodg 71.14 28** P P **00 44 55.7 -0.2**
baz=303
**I23K Minto, Yukon-K 71.16 24** P P **00 44 56.3 +0.4**
I23K IAmb IAmb 00 44 59.5
comp=Z,19nm,1.4s
**I23K Minto, Yukon-K 71.16 24** P P **00 44 55.7 -0.2**
baz=306
**CAST Castle Rocks 71.19 26** IAmb IAmb 00 44 59.9
comp=Z,33nm,1.3s
**CAST Castle Rocks 71.19 26** P P **00 44 55.2 -0.9**
baz=304,SNR=5.7
**BPAW Bear Paw Mtn. 71.20 25** IAmb IAmb 00 44 59.6
comp=Z,26nm,1.2s
**BPAW Bear Paw Mtn. 71.20 25** P P **00 44 55.0 -1.3**
baz=305,SNR=7.6
**TULEG Thule 71.23 356** *i*P P **00 44 54.8 -1.4**
TULEG IAmb IAmb 00 44 59.7
comp=Z,10.0nm,0.8s
**TULEG Thule 71.23 356** P P **00 44 55.3 -0.9**
TULEG IAmb IAmb 00 44 59.9
comp=Z,22nm,1.0s
**H24K Noodor Dome 71.25 23** P P **00 44 55.7 -0.8**
baz=307
**CTA Charters Tower 71.34 129** LR LR 01 17 01.2
comp=Z,51nm,21.4s,baz=262,slow=36
**PPLA Purkeypile 71.44 26** P P **00 44 57.0 -0.8**
baz=304
**NEA2 Nenana 71.59 24** IAmb IAmb 00 45 01.7
comp=Z,26nm,1.1s
**NEA2 Nenana 71.59 24** P P **00 44 57.5 -1.0**
baz=306,SNR=6.7
**BORG Borgarnes 71.65 336** LR LR 01 18 15.1
comp=Z,58nm,20.2s,baz=43,slow=37
**MDM Murphy Dome 71.66 24** IAmb IAmb 00 45 02.4
comp=Z,30nm,1.3s
**BWN Browne 71.70 25** P P **00 44 59.3 +0.1**
**POKR Poker Plat Res 71.83 23** P P **00 44 59.8 -0.3**
POKR IAmb IAmb 00 45 03.5
comp=Z,15nm,0.9s
**POKR Poker Plat Res 71.83 23** P P **00 44 59.4 -0.6**
baz=308
**TCOL CIGO, UAF Yank 71.84 24** P P **00 44 59.6 -0.3**
TCOL IAmb IAmb 00 45 03.1
comp=Z,21nm,0.9s
**TCOL CIGO, UAF Yank 71.84 24** P P **00 44 59.9 -0.1**
baz=307
**COLA College 71.84 24** P P **00 44 59.6 -0.4**
COLA pmax pmax
comp=Z,17nm,0.8s
**COLA College 71.84 24** P P **00 44 59.6 -0.4**
COLA IAmb IAmb 00 45 03.1
comp=Z,17nm,0.8s
**COLA College 71.84 24** P P **00 44 59.8 -0.2**
baz=307
**SDPT Sand Point 71.85 36** P P **00 45 00.2 0.0**
baz=300
**O18K Koktuh Hills 71.92 30** P P **00 45 01.7 +1.1**
O18K IAmb IAmb 00 45 27.4
comp=Z,42nm,1.5s
**CCB Clear Creek Bu 71.99 24** P P **00 45 01.6 +0.6**
**MCK McKinley 72.15 25** P P **00 45 02.7 +0.7**
MCK pmax pmax
comp=Z,13nm,1.0s
**MCK McKinley 72.15 25** P P **00 45 02.6 +0.7**
MCK IAmb IAmb 00 45 05.1
comp=Z,13nm,1.0s
**MCK McKinley 72.15 25** P P **00 45 01.5 -0.5**
baz=307
**P18K Big Mountain, 72.16 30** P P **00 45 03.3 +1.2**
P18K IAmb IAmb 00 45 08.1
comp=Z,20nm,1.3s
**P18K Big Mountain, 72.16 30** P P **00 45 01.7 -0.4**
baz=303
**PRP Porcupine Dome 72.21 22** P P **00 45 02.2 -0.3**
PRP IAmb IAmb 00 45 06.1
comp=Z,17nm,1.0s
**PRP Porcupine Dome 72.21 22** P P **00 45 02.0 -0.4**
baz=309
**ILAR Eielson Array 72.23 23** P P **00 45 01.1 -1.3**
comp=Z,7.5nm,1.0s,baz=297,slow=5.1,SNR=29
**RND Reindeer 72.38 25** P P **00 45 03.0 -0.4**
RND pmax pmax
comp=Z,23nm,1.4s
**RND Reindeer 72.38 25** P P **00 45 03.0 -0.4**
RND IAmb IAmb 00 45 06.5
comp=Z,22nm,1.4s
**HDA Harding Lake 72.43 24** P P **00 45 01.4 -2.2**
**HDA Harding Lake 72.43 24** P P **00 45 02.7 -0.9**
baz=308
**CUT Chulitna 72.45 26** P P **00 45 03.1 -0.6**
baz=306
**A36M Sachs Harbour 72.56 12** IAmb IAmb 00 45 07.5
comp=Z,22nm,0.8s
**A36M Sachs Harbour 72.56 12** P P **00 45 02.7 -1.5**
baz=325,SNR=28
**J25K Salcha River, 72.84 23** P P **00 45 04.7 -1.3**
baz=309
**M22K Willow 72.89 27** P P **00 45 05.8 -0.5**
baz=306
**WAT6 Susitna Watana 73.28 25** P P **00 45 07.5 -1.4**
baz=308
**PMR Palmer 73.37 27** P P **00 45 10.4 +1.3**
PMR pmax pmax
comp=Z,23nm,1.0s
**PMR Palmer 73.37 27** P P **00 45 10.4 +1.3**
PMR IAmb IAmb 00 45 11.9
comp=Z,23nm,1.0s
**PMR Palmer 73.37 27** P P **00 45 08.2 -1.0**
baz=307
**RES Resolute Bay 73.37 3** P P **00 45 09.1 +0.2**
comp=Z,5.7nm,1.2s,baz=4.2,slow=6.4,SNR=5.0
**RC01 Rabbit Creek A 73.44 27** P P **00 45 10.2 +0.5**
**J26L Joseph Creek 73.51 23** P P **00 45 09.0 -1.0**
baz=311,SNR=5.9
**HOM Homer 73.52 29** P P **00 45 10.5 +0.4**
**SML Sawmill 73.54 26** P P **00 45 10.6 +0.3**
**SML Sawmill 73.54 26** P P **00 45 09.5 -0.8**
baz=308
**RIDG Independent Ri 73.57 24** IAmb IAmb 00 45 12.8
comp=Z,32nm,1.2s
**RIDG Independent Ri 73.57 24** P P **00 45 09.2 -1.2**
baz=310,SNR=5.2
**UPNV Upernavik 73.62 351** *i*P P **00 45 11.1 +0.6**
UPNV IAmb IAmb 00 45 14.0
comp=Z,10nm,0.7s
**INK Inuvik 73.70 17** P P **00 45 11.2 +0.3**
comp=Z,7.9nm,0.9s,baz=331,slow=7.4,SNR=16
**INK Inuvik 73.70 17** P P **00 45 10.3 -0.7**
baz=318,SNR=5.8
**SCRK Sand Creek 73.71 23** IAmb IAmb 00 45 14.1
comp=Z,22nm,1.0s
**SCRK Sand Creek 73.71 23** P P **00 45 09.7 -1.7**
baz=311,SNR=7.7
**KNK Knik Glacier 73.73 27** P P **00 45 12.2 +0.8**
KNK IAmb IAmb 00 45 16.8
comp=Z,24nm,0.9s
**PAX Paxson 73.85 24** P P **00 45 13.4 +1.3**
PAX pmax pmax

comp=Z,14nm,1.2s
**PAX Paxson 73.85 24 P P 00 45 13.4 +1.3**
**PAX Paxson 73.85 24 P P 00 45 11.9 -0.2**
baz=310
**ICESG Greenland Ices 73.86 345** *i* P **P 00 45 11.7 -0.7**
ICESG IAmb IAmb 00 45 15.6
comp=Z,16nm,0.9s
**DOT Dot Lake 73.90 23 P P 00 45 12.2 -0.2**
**EGAK Eagle 74.09 22** IAmb IAmb 00 45 17.1
comp=Z,32nm,1.5s
**EGAK Eagle 74.09 22 P P 00 45 13.1 -0.2**
baz=313
**M24K Tolsona, Glenn 74.15 25 P P 00 45 13.9 +0.1**
**M24K Tolsona, Glenn 74.15 25 P P 00 45 13.1 -0.8**
baz=309
**KDAK Kodiak Island 74.21 31 P P 00 45 14.4 +0.3**
comp=Z,13nm,0.8s,baz=310,slow=5.6,SNR=5.0
KDAK LR LR 01 16 32.7
comp=Z,28nm,21.9s,baz=288,slow=35
**KDAK Kodiak Island 74.21 31** IAmb IAmb 00 45 17.3
comp=Z,64nm,1.4s
**EPYK Eagle Plains 74.29 19 P P 00 45 14.3 -0.3**
baz=316
**HARP HAARP 74.33 25 P P 00 45 14.8 0.0**
baz=310
**I29M Ogilvie Camp, 74.56 20 P P 00 45 16.8 +0.7**
**KLU Klutina 74.64 26 P P 00 45 17.2 +0.4**
KLU IAmb IAmb 00 45 20.2
comp=Z,20nm,0.9s
**KLU Klutina 74.64 26 P P 00 45 16.5 -0.2**
baz=310
**C36M Paulatuk 74.97 13** IAmb IAmb 00 45 21.0
comp=Z,21nm,1.2s
**C36M Paulatuk 74.97 13 P P 00 45 16.6 -1.7**
baz=326,SNR=11
**L27K Beaver Creek, 75.04 23** IAmb IAmb 00 45 23.6
comp=Z,34nm,1.4s
**L27K Beaver Creek, 75.04 23 P P 00 45 18.7 -0.3**
baz=313
**N25K Chitina, Valde 75.05 25 P P 00 45 19.7 +0.6**
N25K IAmb IAmb 00 45 23.4
comp=Z,37nm,1.4s
**N25K Chitina, Valde 75.05 25 P P 00 45 17.9 -1.2**
baz=311
**M26K Nabesna, AK 75.09 24 P P 00 45 19.9 +0.6**
M26K IAmb IAmb 00 45 30.7
comp=Z,24nm,1.4s
**M26K Nabesna, AK 75.09 24 P P 00 45 18.3 -1.0**
baz=312
**DAWY Dawson 75.14 22 P P 00 45 19.4 -0.2**
**DAWY Dawson 75.14 22 P P 00 45 18.4 -1.1**
baz=314
**BBOO Buckleboo 75.22 145 P P 00 45 21.0 +0.7**
BBOO IAmb IAmb 00 45 23.6
comp=Z,21nm,1.0s
**M27K Edge Creek, AK 75.50 24 P P 00 45 21.9 +0.1**
M27K IAmb IAmb 00 45 25.9
comp=Z,26nm,1.2s
**M27K Edge Creek, AK 75.50 24 P P 00 45 20.8 -1.0**
baz=313
**YUK3 Moose Creek 76.39 24 P P 00 45 27.0 0.0**
baz=314
**BARN Barnard Glacie 76.47 25 P P 00 45 27.9 +0.6**
BARN IAmb IAmb 00 45 33.1
comp=Z,17nm,1.1s
**ESBB Sonseca Array 76.52 308 P P 00 45 28.2 +0.3**
**ESDC Sonseca Array 76.52 308 P P 00 45 28.1 +0.1**
comp=Z,3.1nm,0.8s,baz=43,slow=5.4,SNR=16
ESDC LR LR 01 25 59.6
comp=Z,110nm,19.5s,baz=56,slow=41
**PAB San Pablo 76.84 308 P P 00 45 29.1 -0.7**
PAB pmax pmax
comp=Z,4.0nm,1.1s
**PAB San Pablo 76.84 308 P P 00 45 29.1 -0.7**
**MESA MESA 76.97 25 P P 00 45 30.1 -0.1**
baz=313
**YUK4 Talbot Arm 77.31 23 P P 00 45 31.5 -0.6**
baz=316
**STKA Stephens Creek 77.31 141 P P 00 45 31.2 -0.9**
comp=Z,10nm,0.9s,baz=334,slow=6.6,SNR=20
STKA LR LR 01 21 58.9
comp=Z,51nm,21.6s,baz=323,slow=38
**STKA Stephens Creek 77.31 141 P P 00 45 33.3 +1.1**
**DY2G Dye2 77.46 345** *i* P **P 00 45 32.9 0.0**
DY2G IAmb IAmb 00 45 37.0
comp=Z,6.0nm,0.8s
**YUK6 Outpost Mounta 77.70 24 P P 00 45 34.1 -0.2**
baz=316
**SFJD Kangerlussuaq 77.91 347** LR LR 01 25 24.9
comp=Z,80nm,18.1s,baz=1.5,slow=40
**SFJD Kangerlussuaq 77.91 347** *i* P **P 00 45 36.0 +0.9**
SFJD IAmb IAmb 00 45 37.6
comp=Z,6.3nm,0.9s
**M31M Drury Creek, Y 78.06 21** IAmb IAmb 00 45 40.3
comp=Z,13nm,1.1s
**M31M Drury Creek, Y 78.06 21 P P 00 45 36.1 0.0**
baz=319
**HYT Haines Junctio 78.07 23 P P 00 45 37.4 +1.1**
HYT IAmb IAmb 00 45 40.1
comp=Z,12nm,1.0s
**HYT Haines Junctio 78.07 23 P P 00 45 36.2 -0.1**
baz=316
**PNL Peninsula 78.25 25 P P 00 45 36.9 -0.2**
baz=315
**FARO Faro, Yukon 78.36 21 P P 00 45 37.3 -0.5**
baz=320
**MTE Manteigas 78.50 310 P P 00 45 39.5 +0.6**
MTE IAmb IAmb 00 45 43.8
comp=Z,27nm,1.2s
**MMPY Sheldon Lake, 78.68 20 P P 00 45 39.2 -0.3**
baz=321
**LSZ Lusaka 79.37 245** LR LR 01 20 09.6
comp=Z,82nm,18.5s,baz=103,slow=35
**LSZ Lusaka 79.37 245 P P 00 45 42.2 -1.9**
LSZ pmax pmax
comp=Z,8.0nm,1.4s
**LSZ Lusaka 79.37 245 P P 00 45 42.2 -1.9**
**SKAG Skagway 79.82 24 P P 00 45 45.3 -0.3**
**SKAG Skagway 79.82 24 P P 00 45 45.5 -0.2**
baz=318
**P33M Teslin, Yukon 80.07 22 P P 00 45 46.9 -0.3**
**P33M Teslin, Yukon 80.07 22 P P 00 45 46.9 -0.3**
baz=320
**MDT Midelt 80.51 303** LR LR 01 30 56.3
comp=Z,79nm,18.3s,baz=55,slow=43
**ARMA Armidale 82.06 133 P P 00 45 59.3 +1.2**
ARMA IAmb IAmb 00 46 01.9
comp=Z,18nm,1.1s
**DLBC Dease Lake 82.36 22 P P 00 45 59.0 -0.3**
comp=Z,8.7nm,1.1s,baz=318,slow=21,SNR=7.2
**DLBC Dease Lake 82.36 22 P P 00 46 00.0 +0.7**
DLBC IAmb IAmb 00 46 03.8
comp=Z,14nm,1.1s
**YKA Yellowknife Ar 82.86 13 P P 00 46 00.1 -1.7**
comp=Z,6.6nm,1.0s,baz=330,slow=4.6,SNR=22
**FRB Frobisher Bay 83.68 353** LR LR 01 27 07.5
comp=Z,78nm,19.1s,baz=327,slow=38
**TOO Toolangi 83.72 142 P P 00 46 07.1 +0.6**
TOO pmax pmax
comp=Z,13nm,1.1s
**TOO Toolangi 83.72 142 P P 00 46 07.1 +0.6**
TOO IAmb IAmb 00 46 09.6
comp=Z,13nm,1.1s
**TORD Torodi Ar. Bea 85.92 283 P P 00 46 17.0 -1.2**
comp=Z,12nm,0.8s,baz=46,slow=4.4,SNR=12
**TORD Torodi Ar. Bea 85.92 283** IAmb IAmb 00 46 22.2
comp=Z,13nm,0.9s
**LBTB Lobatse 87.19 238** LR LR 01 25 32.0
comp=Z,45nm,18.1s,baz=135,slow=36
**FCC Fort Churchill 89.25 5 P P 00 46 34.0 +0.7**
FCC pmax pmax
comp=Z,13nm,1.3s
**FCC Fort Churchill 89.25 5 P P 00 46 34.0 +0.7**
FCC IAmb IAmb 00 46 36.0
comp=Z,13nm,1.2s
**TSUM Tsumeb 89.88 247** LR LR 01 26 43.8
comp=Z,68nm,20.4s,baz=86,slow=36
**KOWA Kowa 89.89 287 P P 00 46 37.0 -0.2**
KOWA IAmb IAmb 00 46 41.2
comp=Z,13nm,0.8s
**LLLB Lillooet 91.50 23 P P 00 46 44.7 +0.6**
**EDM Edmonton 91.60 17 P P 00 46 44.3 -0.2**
EDM pmax pmax
comp=Z,13nm,1.0s
**EDM Edmonton 91.60 17 P P 00 46 44.3 -0.2**
EDM IAmb IAmb 00 46 47.7
comp=Z,13nm,1.0s
**FFC Flin Flon 92.38 10 P P 00 46 46.3 -1.7**
FFC pmax pmax
comp=Z,10.0nm,1.1s
**FFC Flin Flon 92.38 10 P P 00 46 46.3 -1.7**
FFC IAmb IAmb 00 46 50.4
comp=Z,10.0nm,1.1s
**DBIC Dimbokro 94.81 281** LR LR 01 35 01.8
comp=Z,84nm,18.6s,baz=66,slow=39
**SUR Sutherland 94.91 235** LR LR 01 26 29.2
comp=Z,104nm,20.3s,baz=108,slow=33
**SYO Syowa Base 108.57 198** *e*Pdiff **Pdif 00 48 02.6 +2.6**
**OTAV Otavalo 147.34 348** PKP2 **PKPbc 00 53 22.4 -0.1**
**OTAV Otavalo 147.34 348 PKPbc 00 53 22.4 -0.1**

**ATH 23 00:40:45.9, 40.07N × 23.33E, h13 km ± 1 km, ML1.3/6, Error ellipse: s-maj=2.0km s-min=0.7km az=226.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAIG** | **Paliouri** | **0.30** | **117** | P | Pg | 00 40 51.7 | -0.5 |
| PAIG | | | | S | Sg | 00 40 56.6 | +0.2 |
| PAIG | | | | AML | AML | 00 40 57.1 | |
| | comp=N,156μm,0.4s | | | | | | |
| PAIG | | | | AML | AML | 00 40 57.2 | |
| | comp=E,161μm,0.3s | | | | | | |
| **PLG** | **Polygyros** | **0.32** | **16** | P | Pg | 00 40 52.3 | -0.2 |
| PLG | | | | S | Sg | 00 40 57.1 | +0.1 |
| PLG | | | | AML | AML | 00 40 57.3 | |
| | comp=E,86μm,0.2s | | | | | | |
| PLG | | | | AML | AML | 00 40 59.0 | |
| | comp=N,40μm,0.2s | | | | | | |
| **THE** | **Thessaloniki** | **0.63** | **334** | P | Pg | 00 40 57.8 | -0.5 |
| THE | | | | S | Sg | 00 41 06.9 | +0.3 |
| **LIT** | **Litokhoron** | **0.64** | **273** | P | Pg | 00 40 57.9 | -0.5 |
| **XOR** | **Xorichti** | **0.71** | **188** | P | Pg | 00 40 59.4 | -0.2 |
| XOR | | | | S | Sg | 00 41 09.3 | +0.3 |
| **SOH** | **Sokhos** | **0.76** | **2** | P | Pg | 00 41 00.3 | -0.3 |
| SOH | | | | S | Sg | 00 41 10.6 | 0.0 |
| SOH | | | | AML | AML | 00 41 13.6 | |
| | comp=E,81μm,0.3s | | | | | | |
| SOH | | | | AML | AML | 00 41 13.9 | |
| | comp=N,58μm,0.3s | | | | | | |
| **NEO** | **Neokhori** | **0.76** | **186** | P | Pg | 00 41 00.7 | 0.0 |
| NEO | | | | S | Sg | 00 41 10.6 | -0.1 |
| NEO | | | | AML | AML | 00 41 12.8 | |
| | comp=N,74μm,0.3s | | | | | | |
| NEO | | | | AML | AML | 00 41 13.3 | |
| | comp=E,52μm,0.2s | | | | | | |
| **KOKK** | **Kokkinochori,** | **0.91** | **34** | P | Pg | 00 41 02.9 | -0.6 |
| KOKK | | | | AML | AML | 00 41 20.4 | |
| | comp=N,27μm,0.3s | | | | | | |
| KOKK | | | | AML | AML | 00 41 20.7 | |
| | comp=E,19μm,0.2s | | | | | | |
| **SRS** | **Serrai** | **1.07** | **11** | P | Pb | 00 41 05.4 | -0.9 |
| SRS | | | | S | Sb | 00 41 19.9 | -0.2 |
| **KNT** | **Kendrikon** | **1.14** | **344** | P | Pb | 00 41 07.0 | -0.5 |
| **THAS** | **Thassos island** | **1.19** | **63** | P | Pn | 00 41 08.1 | -0.2 |
| THAS | | | | S | Sb | 00 41 23.5 | -0.2 |
| THAS | | | | AML | AML | 00 41 24.9 | |
| | comp=N,32μm,0.3s | | | | | | |
| THAS | | | | AML | AML | 00 41 25.0 | |
| | comp=E,22μm,0.4s | | | | | | |

**ATH 23 00:40:56.1, 38.65N × 20.59E, h10 km ± 2 km, ML1.3/1, Error ellipse: s-maj=2.6km s-min=0.7km az=93.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRAG** | **Dragano-Lefkad** | **0.04** | **341** | P | Pg | 00 40 57.8 | -0.1 |
| DRAG | | | | S | Sg | 00 40 58.9 | -0.4 |
| **EVGI** | **Lefkada island** | **0.06** | **120** | P | Pg | 00 40 58.1 | 0.0 |
| EVGI | | | | S | Sg | 00 40 59.9 | +0.3 |
| **NYDR** | **Nydri-Lefkada** | **0.11** | **54** | P | Pg | 00 40 58.6 | -0.1 |
| NYDR | | | | S | Sg | 00 41 00.3 | -0.2 |
| **TSLK** | **Tsoukalades, L** | **0.18** | **17** | P | Pg | 00 40 60.0 | +0.1 |
| TSLK | | | | S | Sg | 00 41 02.6 | 0.0 |
| **DMLN** | **Damoulianata-K** | **0.45** | **202** | P | Pg | 00 41 04.5 | -0.3 |
| DMLN | | | | S | Sg | 00 41 10.9 | +0.3 |
| **VLS** | **Valsamata** | **0.47** | **180** | P | Pg | 00 41 04.8 | -0.4 |
| VLS | | | | S | Sg | 00 41 11.9 | +0.4 |
| VLS | | | | AML | AML | 00 41 13.4 | |
| | comp=E,97μm,0.1s | | | | | | |
| VLS | | | | AML | AML | 00 41 13.7 | |
| | comp=N,109μm,0.2s | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.48** | **203** | P | Pg | 00 41 04.9 | -0.6 |
| KEF3 | | | | S | Sg | 00 41 11.6 | -0.2 |
| **PSDA** | **Pessada-Kefalo** | **0.54** | **180** | P | Pg | 00 41 06.0 | -0.5 |
| PSDA | | | | S | Sg | 00 41 13.5 | 0.0 |
| **IGT** | **Igoumenitsa** | **0.90** | **347** | P | Pg | 00 41 13.3 | -0.1 |

*TUL **23** 00:48:45.7±0.7, 35.67N±0.02×97.40W±0.02, h6 km±5 km, ML3.2, mb_Lg2.8/56(NEIC), Error ellipse: s-maj=2.5km s-min=2.1km az=160.0*

**NEIC 23 00:48:46.3±0.7, 35.66N±0.02×97.39W±0.02, h7 km±4 km, Error ellipse: s-maj=2.3km s-min=2.2km az=124.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.09** | **196** | | Pg | 00 48 48.0 | -0.3 |
| OK009 | | | | Sg | Sg | 00 48 49.8 | 0.0 |
| **OK001** | **Jones High Sch** | **0.13** | **140** | Pg | Pg | 00 48 49.0 | -0.2 |
| OK001 | | | | Sg | Sg | 00 48 51.3 | +0.3 |
| **OK005** | **Luther M Schoo** | **0.17** | **93** | Pg | Pg | 00 48 49.5 | -0.1 |
| OK005 | | | | Sg | Sg | 00 48 52.5 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.25** | **191** | | Pg | 00 48 51.0 | -0.3 |
| OKCFA | | | | Sg | Sg | 00 48 55.0 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.26** | **188** | Pg | Pg | 00 48 51.1 | -0.3 |
| OKCSW | | | | Sg | Sg | 00 48 55.2 | +0.3 |
| **FNO** | **Franklin** | **0.41** | **181** | Pg | Pg | 00 48 53.8 | -0.4 |
| FNO | | | | Sg | Sg | 00 48 59.9 | +0.4 |
| **W35A** | **Tecumseh** | **0.66** | **140** | Pg | Pg | 00 48 58.4 | -0.6 |
| W35A | | | | Sg | Sg | 00 49 07.5 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.12** | **199** | Pg | Pg | 00 49 07.2 | -0.6 |
| **TUL1** | **Leonard** | **1.32** | **79** | | Pn | 00 49 09.4 | -1.8 |
| **T35A** | **Sooner Cattle** | **1.44** | **29** | | Pn | 00 49 11.9 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | | Pn | 00 49 11.9 | -1.2 |
| **U32A** | **Winter Ranch,** | **1.49** | **299** | | Pn | 00 49 12.5 | -1.0 |
| **X37A** | **Clayton** | **1.97** | **122** | Pn | Pn | 00 49 19.5 | -0.7 |
| X37A | | | | IAmb_Lg | | 00 49 51.0 | |
| | comp=Z,50nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **2.87** | **77** | Pn | Pn | 00 49 32.5 | +0.1 |
| **R32A** | **Long Quarter,** | **2.95** | **339** | Pn | Pn | 00 49 33.1 | -0.5 |
| **W39A** | **Magazine** | **2.98** | **98** | IAmb_Lg | | 00 50 25.5 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.32** | **109** | Pn | Pn | 00 49 39.6 | +0.9 |
| MIAR | | | | IAmb_Lg | | 00 50 37.3 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.49** | **10** | Pn | Pn | 00 49 40.9 | -0.1 |
| KSU1 | | | | IAmb_Lg | | 00 50 42.9 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.59** | **259** | Pn | Pn | 00 49 42.6 | +0.1 |
| **CBKS** | **Cedar Bluff** | **3.66** | **330** | Pn | Pn | 00 49 42.4 | -0.9 |
| CBKS | | | | IAmb_Lg | | 00 50 45.7 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.66** | **181** | Pg | Pb | 00 49 53.0 | +1.6 |
| **U40A** | **Yellville** | **3.75** | **78** | Pn | Pn | 00 49 44.2 | -0.4 |
| U40A | | | | IAmb_Lg | | 00 50 53.1 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **3.88** | **160** | Pn | Pn | 00 49 45.4 | -1.1 |
| 237A | | | | IAmb_Lg | | 00 50 56.5 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.92** | **106** | Pn | Pn | 00 49 47.6 | +0.7 |
| **WLAR** | **White Oak Lake** | **4.04** | **118** | IAmb_Lg | | 00 51 06.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.18** | **94** | Pn | Pn | 00 49 50.3 | -0.2 |
| WHAR | | | | IAmb_Lg | | 00 50 59.5 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.23** | **95** | Pn | Pn | 00 49 51.3 | +0.1 |
| W41B | | | | IAmb_Lg | | 00 51 02.1 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **85** | Pn | Pn | 00 49 51.6 | -0.4 |
| FCAR | | | | IAmb_Lg | | 00 51 07.6 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | Pn | Pn | 00 49 51.7 | -1.7 |
| **Z41A** | **Richland Creek** | **4.49** | **121** | IAmb_Lg | | 00 51 18.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.74** | **251** | Pn | Pn | 00 49 57.2 | -1.1 |
| **R40A** | **Maddies Statio** | **4.87** | **56** | Pn | Pn | 00 49 59.2 | -0.7 |
| **P38A** | **Dawn** | **5.00** | **37** | IAmb_Lg | | 00 51 34.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **N33A** | **J Bar K, Exete** | **5.07** | **360** | IAmb_Lg | | 00 51 33.6 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.08** | **84** | IAmb_Lg | | 00 51 31.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.34** | **310** | Pn | Pn | 00 50 07.2 | +0.5 |
| KSCO | | | | IAmb_Lg | | 00 51 39.2 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **N35A** | **Tabor** | **5.37** | **14** | Pn | Pn | 00 50 06.1 | -0.8 |
| **CCM** | **Cathedral Cave** | **5.48** | **62** | IAmb_Lg | | 00 51 42.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.74** | **46** | Pn | Pn | 00 50 13.3 | +1.5 |
| **PBMO** | **Poplar Bluff** | **5.74** | **77** | IAmb_Lg | | 00 51 54.2 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.77** | **354** | IAmb_Lg | | 00 51 59.8 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **FVM** | **French Village** | **6.05** | **65** | Pn | Pn | 00 50 17.0 | +0.8 |
| **W45A** | **Hickory Valley** | **6.72** | **92** | IAmb_Lg | | 00 52 28.6 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.84** | **290** | Pn | Pn | 00 50 28.0 | +0.7 |
| SDCO | | | | IAmb_Lg | | 00 52 25.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **S44A** | **Carbondale** | **6.85** | **70** | IAmb_Lg | | 00 52 20.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **K31A** | **O'Neill** | **7.03** | **352** | IAmb_Lg | | 00 52 36.9 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **SCIA** | **State Center** | **7.04** | **26** | IAmb_Lg | | 00 52 48.4 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **833A** | **Chaparral WMA,** | **7.51** | **194** | IAmb_Lg | | 00 52 48.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **ISCO** | **Idaho Springs** | **7.71** | **305** | Pn | Pn | 00 50 38.3 | -1.0 |
| **HDIL** | **Hopedale** | **8.04** | **50** | Pn | Pn | 00 50 44.2 | +0.7 |
| **ECSD** | **EROS Data Cent** | **8.08** | **4** | Pn | Pn | 00 50 41.3 | -2.8 |
| **TX32** | **Lajitas Array** | **8.24** | **222** | Pn | Pn | 00 50 46.1 | -0.2 |
| **N23A** | **Red Feather La** | **8.51** | **310** | IAmb_Lg | | 00 53 30.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.74** | **41** | Pn | Pn | 00 50 53.1 | +0.1 |
| **K22A** | **Casper** | **9.94** | **317** | IAmb_Lg | | 00 54 15.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | |

*NEIC **23** 01:03:13.9±1.0, 36.27N±0.02×118.02W±0.03, h2 km±7 km, Error ellipse: s-maj=3.0km s-min=2.9km az=71.0*
*PAS **23** 01:03:13.9±1.0, 36.27N±0.03×118.02W±0.04, h-0 km±7 km, ML3.0/171, ML2.9/76(NEIC), Error ellipse: s-maj=5.6km s-min=2.6km az=58.0*
*ANF **23** 01:03:13.5±0.1, 36.27N×118.03W, h8 km±1 km, ML3.0/21, ML3.0/21, Error ellipse: s-maj=0.9km s-min=0.9km az=151.0*

**ISC 23 01:03:13.7±1.0, 36.27N±0.02×118.03W±0.02, h7 km±9 km, n63, σ0.72/79, Central California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CWC** | **Cottonwood Cre** | **0.18** | **346** | P | **Pg** | **01 03 17.5** | **0.0** |
| | baz=164 | | | | | | |
| CWC | | | | S | **Sg** | **01 03 20.1** | **0.0** |
| | baz=164 | | | | | | |
| **MPMC** | **Manual Prospec** | **0.48** | **115** | P | **Pg** | **01 03 23.2** | **+0.2** |
| | baz=297,SNR=462 | | | | | | |
| MPMC | | | | S | **Sg** | **01 03 29.8** | **+0.4** |
| | baz=297 | | | | | | |
| **ISA** | **Isabella, Lake** | **0.70** | **211** | Pg | **Pg** | **01 03 27.3** | **+0.1** |
| ISA | | | | IAML | | 01 03 38.6 | |
| | comp=E,460nm,0.2s | | | | | | |
| ISA | | | | IAML | | 01 03 38.7 | |
| | comp=N,447nm,0.5s | | | | | | |
| **ISA** | **Isabella, Lake** | **0.70** | **211** | P | **Pg** | **01 03 27.5** | **+0.3** |
| | baz=31,SNR=90 | | | | | | |
| ISA | | | | S | **Sb** | **01 03 37.1** | **-1.0** |
| | baz=31 | | | | | | |
| **TIN** | **Tinemaha, Big** | **0.81** | **348** | P | **Pg** | **01 03 29.3** | **+0.1** |
| | baz=168,SNR=6.4 | | | | | | |
| TIN | | | | S | **Sb** | **01 03 40.5** | **-0.7** |
| | baz=168 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **0.83** | **160** | P | **Pg** | **01 03 29.8** | **+0.1** |
| | baz=341,SNR=64 | | | | | | |
| LRMC | | | | S | **Sb** | **01 03 41.3** | **-0.7** |
| | baz=341 | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.90** | **36** | | **Pg** | **01 03 31.0** | **-0.1** |
| GRAC | | | | IAML | | 01 03 48.2 | |
| | comp=N,551nm,0.3s | | | | | | |
| **GRAC** | **Grapevine Rang** | **0.90** | **36** | P | **Pg** | **01 03 31.0** | **-0.1** |
| | baz=216,SNR=23 | | | | | | |
| GRAC | | | | S | **Sb** | **01 03 43.3** | **-0.7** |
| | baz=216 | | | | | | |
| **HELL** | **Mitchell Peak,** | **0.90** | **298** | | **Pg** | **01 03 30.9** | **-0.1** |
| HELL | | | | | **Sg** | **01 03 42.7** | **-0.1** |
| **VES** | **Vestal, Richgr** | **0.96** | **244** | P | **Pb** | **01 03 32.5** | **-0.1** |
| | baz=63,SNR=73 | | | | | | |
| VES | | | | S | **Sb** | **01 03 45.1** | **-0.2** |
| | baz=63 | | | | | | |
| **FURC** | **Furnace Creek,** | **0.96** | **78** | P | **Pb** | **01 03 32.3** | **-0.3** |
| | baz=258,SNR=86 | | | | | | |
| FURC | | | | S | **Sb** | **01 03 45.3** | **-0.2** |
| | baz=258 | | | | | | |
| **QSM** | **Queen of Sheba** | **0.98** | **107** | Pg | **Pg** | **01 03 32.6** | **0.0** |
| QSM | | | | IAML | | 01 03 46.0 | |
| | comp=E,588nm,0.5s | | | | | | |
| QSM | | | | IAML | | 01 03 49.1 | |
| | comp=N,466nm,0.8s | | | | | | |
| **LCH** | **Last Change Ra** | **1.01** | **18** | | **Pg** | **01 03 32.3** | **-0.9** |
| LCH | | | | IAML | | 01 03 47.7 | |
| | comp=N,207nm,0.2s | | | | | | |
| LCH | | | | IAML | | 01 03 48.4 | |
| | comp=E,342nm,0.3s | | | | | | |
| **VOG** | **Valley Oaks Go** | **1.10** | **273** | P | **Pn** | **01 03 34.9** | **-0.5** |
| | baz=92,SNR=5.5 | | | | | | |
| VOG | | | | S | **Sb** | **01 03 49.7** | **+0.2** |
| | baz=92 | | | | | | |
| **GWY** | **Greenwater Val** | **1.10** | **94** | Pg | **Pb** | **01 03 34.8** | **-0.3** |
| GWY | | | | IAML | | 01 03 52.4 | |
| | comp=E,478nm,0.4s | | | | | | |
| GWY | | | | IAML | | 01 03 55.2 | |
| | comp=N,219nm,0.3s | | | | | | |
| **CCAC** | **Calif City Air** | **1.11** | **180** | | **Pg** | **01 03 34.8** | **-0.2** |
| CCAC | | | | IAML | | 01 03 51.9 | |
| | comp=N,186nm,0.3s | | | | | | |
| CCAC | | | | IAML | | 01 03 55.6 | |
| | comp=E,249nm,0.5s | | | | | | |
| **MTUM** | **Tungsten Hills** | **1.17** | **339** | | **Pg** | **01 03 35.9** | **-0.2** |
| **ARVC** | **Arvin** | **1.31** | **210** | P | **Pg** | **01 03 38.7** | **-0.1** |
| | baz=30,SNR=31 | | | | | | |
| ARVC | | | | S | **Sn** | **01 03 56.5** | **+0.4** |
| | baz=30 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **1.38** | **179** | Pb | **Pb** | **01 03 39.6** | **-0.3** |
| | baz=359,SNR=30 | | | | | | |
| EDW2 | | | | S | **Sg** | **01 03 57.8** | **-0.3** |
| | baz=359 | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.38** | **134** | | **Pn** | **01 03 39.4** | **-0.1** |
| GSC | | | | IAML | | 01 04 00.7 | |
| | comp=N,128nm,0.4s | | | | | | |
| GSC | | | | IAML | | 01 04 05.8 | |
| | comp=E,130nm,0.9s | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.38** | **134** | P | **Pn** | **01 03 39.3** | **-0.1** |
| | baz=315,SNR=72 | | | | | | |
| GSC | | | | S | **Sg** | **01 03 58.3** | **+0.2** |
| | baz=315 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **1.51** | **335** | Pb | **Pb** | **01 03 41.9** | **-0.2** |
| | baz=154,SNR=21 | | | | | | |
| MLAC | | | | Sg | **Sg** | **01 04 04.0** | **+1.8** |
| | baz=154 | | | | | | |
| **TPNV** | **Topopah Spring** | **1.58** | **64** | | **Pb** | **01 03 42.6** | **-0.8** |
| **TPNV** | **Topopah Spring** | **1.58** | **64** | Pb | **Pb** | **01 03 42.6** | **-0.8** |
| | baz=245,SNR=51 | | | | | | |
| TPNV | | | | S | **Sb** | **01 04 03.8** | **+0.1** |
| | baz=245 | | | | | | |
| **RRX** | **Edison Barstow** | **1.62** | **148** | Sg | **Sg** | **01 04 07.4** | **+1.7** |
| | baz=330 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **1.74** | **221** | | **Pb** | **01 03 45.6** | **-0.3** |
| **OSI** | **Osito Audit: C** | **1.74** | **199** | Pb | **Pb** | **01 03 45.8** | **-0.2** |
| | baz=19,SNR=6.8 | | | | | | |
| **SMMC** | **Simmler** | **1.86** | **240** | Pb | **Pb** | **01 03 47.7** | **-0.3** |
| | baz=59,SNR=19 | | | | | | |
| SMMC | | | | Sb | **Sg** | **01 04 12.8** | **-0.6** |
| | baz=59 | | | | | | |
| **PAGB** | **Antelope Grade** | **1.88** | **254** | Pn | **Pb** | **01 03 47.6** | **-0.7** |
| PAGB | | | | IAML | | 01 04 22.5 | |
| | comp=N,157nm,0.5s | | | | | | |
| **TRAM** | **Private Proper** | **1.91** | **253** | | **Pb** | **01 03 48.7** | **-0.2** |
| **TPH** | **Tonopah** | **1.92** | **19** | | **Pn** | **01 03 47.5** | **+0.5** |
| **HEC** | **Hector,Ludlow** | **1.99** | **136** | P | **Pn** | **01 03 47.6** | **-0.1** |
| | baz=317,SNR=20 | | | | | | |
| **PKM** | **Mcpherson Peak** | **2.00** | **227** | Pb | **Pb** | **01 03 50.2** | **-0.3** |
| | baz=46 | | | | | | |
| PKM | | | | Sb | **Sg** | **01 04 17.2** | **-0.8** |
| | baz=46 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LHV** | **Little Huntoon** | **2.02** | **349** | Pn | **Pn** | **01 03 48.8** | **+0.7** |
| LHV | | | | IAML | | 01 04 24.9 | |
| | comp=E,69nm,0.7s | | | | | | |
| **PASC** | **Pasadena Art C** | **2.09** | **184** | Pn | **Pn** | **01 03 49.6** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **2.17** | **354** | Pn | **Pn** | **01 03 51.2** | **+0.8** |
| **PMPB** | **Monarch Peak** | **2.24** | **270** | Pn | **Pn** | **01 03 52.2** | **+0.9** |
| **S11A** | **Rachel** | **2.29** | **52** | Pn | **Pn** | **01 03 52.2** | **+0.3** |
| S11A | | | | IAML | | 01 04 27.5 | |
| | comp=N,102nm,0.8s | | | | | | |
| S11A | | | | IAML | | 01 04 37.0 | |
| | comp=E,98nm,0.7s | | | | | | |
| **SHPR** | **Sheep Range** | **2.33** | **83** | Pn | **Pn** | **01 03 52.8** | **+0.3** |
| **RAMR** | **Ramage Ranch** | **2.39** | **256** | | **Pb** | **01 03 55.3** | **-1.7** |
| **RYN** | **Ryan** | **2.39** | **351** | | **Pn** | **01 03 53.9** | **+0.5** |
| **GMRC** | **Granite Mounta** | **2.43** | **127** | P | **Pn** | **01 03 53.2** | **-0.7** |
| | baz=308,SNR=8.3 | | | | | | |
| **BBGB** | **Big Mountain B** | **2.45** | **278** | | **Pn** | **01 03 54.9** | **+0.8** |
| **CMB** | **Columbia Colle** | **2.58** | **314** | | **Pb** | **01 03 59.0** | **-1.3** |
| **CMB** | **Columbia Colle** | **2.58** | **314** | IAML | | 01 04 37.6 | |
| | comp=N,86nm,0.7s | | | | | | |
| CMB | | | | IAML | | 01 04 40.5 | |
| | comp=E,73nm,0.5s | | | | | | |
| **PRN** | **Pahroc Range** | **2.65** | **64** | Pn | **Pn** | **01 03 57.3** | **+0.4** |
| PRN | | | | IAML | | 01 04 46.8 | |
| | comp=N,53nm,0.6s | | | | | | |
| PRN | | | | IAML | | 01 04 48.1 | |
| | comp=E,59nm,0.9s | | | | | | |
| **ELS** | **Elsinore Mount** | **2.66** | **169** | Pn | **Pn** | **01 03 58.2** | **+1.2** |
| **PAPM** | **Alder Peak** | **2.72** | **264** | | **Pn** | **01 04 00.1** | **+2.2** |
| **BELC** | **Belle Mtn. Jos** | **2.81** | **143** | P | **Pn** | **01 03 59.2** | **+0.1** |
| | baz=324 | | | | | | |
| **YERR** | **Yerington** | **2.88** | **341** | | **Pn** | **01 04 01.0** | **+0.8** |
| YERR | | | | IAML | | 01 05 26.6 | |
| | comp=E,27nm,0.7s | | | | | | |
| **PFO** | **Pinyon Flats O** | **2.94** | **154** | Pn | **Pn** | **01 04 01.4** | **+0.5** |
| **PFO** | **Pinyon Flats O** | **2.94** | **154** | P | **Pn** | **01 04 01.1** | **+0.2** |
| | baz=335 | | | | | | |
| **TPFO** | **Pinon Flats** | **2.95** | **154** | P | **Pn** | **01 04 01.2** | **+0.2** |
| | baz=335 | | | | | | |
| **PNTR** | **Pine Nut** | **3.08** | **337** | Pn | **Pn** | **01 04 03.6** | **+0.6** |
| PNTR | | | | IAML | | 01 05 01.0 | |
| | comp=E,24nm,1.4s | | | | | | |
| PNTR | | | | IAML | | 01 05 16.0 | |
| | comp=N,23nm,0.9s | | | | | | |
| **EMB** | **Emerald Bay** | **3.17** | **329** | Pn | **Pn** | **01 04 05.2** | **+1.1** |
| **RUBR** | **Rubicon Trail** | **3.25** | **329** | Pn | **Pn** | **01 04 06.1** | **+0.8** |
| **VCNR** | **Virginia City** | **3.29** | **337** | Pn | **Pn** | **01 04 06.5** | **+0.7** |
| VCNR | | | | IAML | | 01 05 03.5 | |
| | comp=E,28nm,0.5s | | | | | | |
| VCNR | | | | IAML | | 01 05 08.5 | |
| | comp=N,20nm,3.1s | | | | | | |
| **MPK** | **Martis Peak** | **3.42** | **333** | Pn | **Pn** | **01 04 06.3** | **-1.3** |
| **LCMT** | **Little Creek M** | **3.92** | **78** | Pn | **Pn** | **01 04 15.3** | **+0.9** |
| **CCUT** | **Cedar City** | **3.95** | **70** | Pn | **Pn** | **01 04 16.0** | **+1.1** |
| **PSUT** | **Pine Spring** | **4.02** | **54** | Pn | **Pn** | **01 04 15.7** | **-0.2** |
| PSUT | | | | IAML | | 01 05 23.7 | |
| | comp=N,19nm,1.6s | | | | | | |
| PSUT | | | | IAML | | 01 05 24.1 | |
| | comp=E,20nm,0.7s | | | | | | |
| **BEKR** | **Beckworth** | **4.04** | **334** | Pn | **Pn** | **01 04 17.4** | **+1.4** |
| BEKR | | | | IAML | | 01 05 29.8 | |
| | comp=N,14nm,0.6s | | | | | | |
| **ELK** | **Elko** | **4.98** | **25** | Pn | **Pn** | **01 04 30.0** | **+0.9** |
| ELK | | | | IAML | | 01 05 58.3 | |
| | comp=N,5.3nm,0.7s | | | | | | |

*MOS **23** 01:04:07.0±1.4,44°.28N×147°.73E,h111km,mb4.3/1,Error ellipse: s-maj=19.4km s-min=14.6km az=135.2*
*SKHL **23** 01:04:08.9±0.3,44°.40N×147°.60E,h102km±2km,mb5.0/6,msha5.6/5*
*JMA **23** 01:04:09.2±0.3,44°.02N×147°.80E,h80km,M4.0*
*IDC **23** 01:04:13.0±3.9,44°.71N×147°.37E,h121km±34km,mb3.2/6,mb1 3.3/8,mb1mx3.0/47,mbtmp3.5/8,Error ellipse: s-maj=83.6km s-min=28.9km az=162.0*

**ISC 23 01:04:07.0**±1.1,**44°.17N**±0°.07×**147°.86E**±0°.09,**h96**km±7km,
**n38,**σ1$**42/54,mb3.4/6,1C-2D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.80** | **249** | *d* | *i*PN | **Pn** | **01 04 25.5** | **+0.6** |
| SHO | | | | | *e*S | **Sn** | **01 04 37.4** | **-1.0** |
| SHO | | | | | pmax | pmax | | |
| | comp=E,145nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,53nm,0.2s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=N,50nm,0.3s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,2μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **0.80** | **249** | *i* | P | **Pn** | **01 04 25.6** | **+0.6** |
| SHO | | | | | AMB | AMB | 01 04 26.2 | |
| | comp=E,150nm,0.2s | | | | | | | |
| SHO | | | | *i* | S | **Sn** | **01 04 37.9** | **-0.5** |
| SHO | | | | | A | A | 01 04 38.3 | |
| | comp=E,1μm,0.4s | | | | | | | |
| SHO | | | | | A | A | 01 04 38.3 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.07** | **0** | *e* | PN | Pn | 01 04 28.4 | +0.6 |
| KUR | | | | *i* | S | **Sn** | **01 04 42.8** | **-0.7** |
| KUR | | | | | pmax | pmax | | |
| | comp=E,161nm,0.3s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,93nm,0.2s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.07** | **0** | *e* | P | Pn | 01 04 28.2 | +0.4 |
| KUR | | | | | AMB | AMB | 01 04 29.0 | |
| | comp=N,160nm,0.2s | | | | | | | |
| KUR | | | | | *e*S | **Sn** | **01 04 42.8** | **-0.7** |
| KUR | | | | | A | A | 01 04 43.3 | |
| | comp=N,2μm,0.4s | | | | | | | |
| KUR | | | | | A | A | 01 04 43.3 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.45** | **266** | ⇑ | *i*PN | **Pn** | **01 04 32.9** | **+0.6** |
| YUK | | | | | *e*S | **Sn** | **01 04 50.4** | **-1.0** |
| YUK | | | | | pmax | pmax | | |
| | comp=E,186nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=E,570nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=N,122nm,0.1s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,883nm,0.1s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,939nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.45** | **266** | *i* | P | **Pn** | **01 04 32.7** | **+0.4** |
| YUK | | | | | AMB | AMB | 01 04 33.7 | |
| | comp=E,570nm,0.2s | | | | | | | |
| YUK | | | | | *e*S | **Sn** | **01 04 50.0** | **-1.4** |
| YUK | | | | | A | A | 01 04 52.7 | |
| | comp=E,880nm,0.4s | | | | | | | |
| YUK | | | | | A | A | 01 04 52.7 | |
| | comp=E,940nm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **1.73** | **243** | | P | **Pn** | **01 04 36.5** | **+0.6** |
| NEM2 | | | | | *e*S | **Sn** | **01 04 56.9** | **-0.9** |
| **NMR** | **Nemuro--Hokkai** | **1.74** | **243** | *e* | PN | **Pn** | **01 04 36.4** | **+0.4** |
| NMR | | | | | *e*S | **Sn** | **01 04 56.1** | **-1.9** |
| **NMR** | **Nemuro--Hokkai** | **1.74** | **243** | *e* | P | **Pn** | **01 04 36.6** | **+0.6** |
| NMR | | | | | AMB | AMB | 01 04 36.9 | |
| | comp=E,300nm,0.3s | | | | | | | |
| NMR | | | | | *e*S | **Sn** | **01 04 57.5** | **-0.5** |
| NMR | | | | | A | A | 01 04 57.9 | |
| | comp=E,140nm,0.2s | | | | | | | |
| NMR | | | | | A | A | 01 04 57.9 | |
| | comp=E,310nm,0.2s | | | | | | | |
| **GLVR** | **Golovnino** | **1.74** | **257** | ⇓ | *i*PN | **Pn** | **01 04 37.1** | **+1.1** |
| GLVR | | | | | *e*S | **Sn** | **01 04 57.6** | **-0.5** |
| GLVR | | | | | pmax | pmax | | |
| | comp=E,67nm,0.1s | | | | | | | |
| GLVR | | | | | pmax | pmax | | |
| | comp=Z,312nm,0.1s | | | | | | | |
| GLVR | | | | | smax | smax | | |
| | comp=E,414nm,0.1s | | | | | | | |
| GLVR | | | | | smax | smax | | |
| | comp=N,1μm,0.3s | | | | | | | |
| **GLVR** | **Golovnino** | **1.74** | **257** | *i* | P | **Pn** | **01 04 37.1** | **+1.1** |
| GLVR | | | | | AMB | AMB | 01 04 38.1 | |
| | comp=N,310nm,0.3s | | | | | | | |
| GLVR | | | | | *e*S | **Sn** | **01 04 57.6** | **-0.5** |
| GLVR | | | | | A | A | 01 05 00.1 | |
| | comp=N,1μm,0.3s | | | | | | | |
| GLVR | | | | | A | A | 01 05 00.1 | |
| | comp=N,410nm,0.3s | | | | | | | |
| **RUSJ** | **Misakicho** | **1.88** | **269** | *e* | PN | **Pn** | **01 04 39.6** | **+1.8** |
| RUSJ | | | | | *e*S | **Sn** | **01 05 03.2** | **+1.9** |
| **JRA** | **Rausu** | **1.99** | **264** | | P | **Pn** | **01 04 40.4** | **+1.2** |
| JRA | | | | | *e*S | **Sn** | **01 05 04.2** | **+0.5** |
| **JNSB** | **Nemuroshibetsu** | **2.10** | **260** | | P | **Pn** | **01 04 42.2** | **+1.6** |
| JNSB | | | | | *e*S | **Sn** | **01 05 06.9** | **+0.6** |
| **JKHN** | **Kushirohamanak** | **2.24** | **242** | | P | **Pn** | **01 04 43.4** | **+0.9** |
| JKHN | | | | | *e*S | **Sn** | **01 05 08.7** | **-0.9** |
| **JNK** | **Nakash** | **2.34** | **257** | | P | **Pn** | **01 04 44.9** | **+1.0** |
| JNK | | | | | *e*S | **Sn** | **01 05 12.2** | **+0.1** |
| **AKK** | **Akkeshi** | **2.47** | **243** | *e* | P | **Pn** | **01 04 46.4** | **+0.8** |
| AKK | | | | | AMB | AMB | 01 04 47.8 | |
| | comp=N,60nm,0.3s | | | | | | | |
| **JAK** | **Akkeshi** | **2.58** | **244** | | P | **Pn** | **01 04 47.7** | **+0.7** |
| JAK | | | | | *e*S | **Sn** | **01 05 16.0** | **-1.6** |
| **JTKR** | **Abashiri--Toko** | **2.85** | **267** | | P | **Pn** | **01 04 52.0** | **+1.4** |
| **JAR** | **Ashorobuto** | **3.09** | **255** | | P | **Pn** | **01 04 55.6** | **+1.8** |
| JAR | | | | | *e*S | **Sn** | **01 05 30.7** | **+0.8** |
| **JCH** | **Churui** | **3.63** | **246** | | P | **Pn** | **01 05 02.1** | **+1.1** |
| **JKK2** | **Kamakawa 2** | **3.70** | **267** | | P | **Pn** | **01 05 04.2** | **+2.2** |
| **JKA** | **Kamikawa-asahi** | **3.79** | **271** | *e* | P | **Pn** | **01 05 05.1** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.79** | **271** | | P | **Pn** | **01 05 05.0** | **+1.9** |
| | comp=N,4.1nm,0.3s,baz=63,slow=22,SNR=10 | | | | | | | |
| **JSE** | **Soyaes** | **3.85** | **284** | | P | **Pn** | **01 05 05.2** | **+1.2** |
| **JNBK** | **Urakawa-nobuka** | **4.18** | **245** | | P | **Pn** | **01 05 09.0** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **4.54** | **310** | *e* | P | **Pn** | **01 05 11.4** | **-1.9** |
| YSS | | | | | AMB | AMB | 01 05 14.9 | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| **JKB** | **Kayabe** | **5.50** | **248** | *e* | S | **Sn** | **01 06 25.3** | **-2.9** |
| **JOT** | **Ohata** | **5.73** | **243** | *e* | S | **Sn** | **01 06 29.8** | **-4.1** |
| **SEY** | **Seymchan** | **18.98** | **6** | P | | **Pn** | **01 08 20.1** | **-2.2** |
| | comp=N,0.2nm,0.3s,baz=213,slow=9.7,SNR=5.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.85** | **37** | P | | **P** | **01 11 40.8** | **+1.9** |
| | comp=N,0.4nm,0.8s,baz=281,slow=6.3,SNR=2.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.85** | **297** | P | | **P** | **01 12 12.0** | **+0.5** |
| | comp=N,0.2nm,0.7s,baz=72,slow=6.3,SNR=2.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.85** | **297** | P | | **P** | **01 12 12.0** | **+0.5** |
| **MKAR** | **Makanchi Array** | **44.85** | **297** | *e* | P | **P** | **01 12 12.0** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **55.17** | **34** | P | | **P** | **01 13 30.6** | **+1.5** |
| | comp=N,0.1nm,0.5s,baz=298,slow=6.7,SNR=3.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.03** | **340** | P | | **P** | **01 13 54.8** | **-1.5** |
| | comp=N,1.4nm,0.7s,baz=38,slow=3.1,SNR=6.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.74** | **333** | P | | **P** | **01 14 32.9** | **-1.7** |
| | comp=N,0.7nm,0.5s,baz=30,slow=8.8,SNR=7.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.40** | **339** | P | | **P** | **01 15 03.5** | **-0.7** |
| | comp=N,0.5nm,0.5s,baz=31,slow=6.6,SNR=4.5 | | | | | | | |

*NEIC **23** 01:27:27.8±1.5,10°.91S±0°.09×164°.0E±0°.1,h44km±5km,mb4.4/14,Error ellipse: s-maj=17.7km s-min=10.2km az=51.0*
*IDC **23** 01:27:28.8±3.3,11°.02S×164°.00E,h56km±26km,mb3.9/7,mb1 4.2/10,mb1mx3.9/40,mbtmp4.3/10,ML4.6/3,MS3.3/3,Ms1 3.3/3,ms1mx2.8/63,Error ellipse: s-maj=27.0km s-min=17.2km az=56.0*

**ISC 23 01:27:25.5**±0.8,**10°.88S**±0°.08×**164°.08E**±0°.09,**h29**km,**n36,**
σ1$**16/35,mb4.3/14,Santa Cruz Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.31** | **289** | P | | **Pn** | **01 28 29.6** | **+0.4** |
| | 116nm,0.3s,baz=154,slow=5.7,SNR=16 | | | | | | | |
| HNR | | | | | S | **Sn** | **01 29 21.6** | **+3.1** |
| | 86nm,0.3s,baz=31,slow=22,SNR=7.2 | | | | | | | |
| **HNR** | **Honiara** | **4.31** | **289** | | | **Pn** | **01 28 29.6** | **+0.4** |
| HNR | | | | | | **Sn** | **01 29 19.2** | **+0.6** |
| **SANVU** | **Saraoutou** | **5.46** | **146** | | | **Pn** | **01 28 46.3** | **+1.3** |
| **KOUNC** | **Koumac, New Ca** | **9.62** | **179** | Pn | | **Pn** | **01 29 43.9** | **+1.8** |
| **DZM** | **Mont Dzumac** | **11.36** | **169** | P | | **Pn** | **01 30 07.2** | **+1.2** |
| | 1.5nm,0.3s,baz=314,slow=16,SNR=12 | | | | | | | |
| DZM | | | | | S | **Sn** | **01 32 12.4** | **+0.4** |
| | 0.7nm,0.3s,baz=303,slow=23,SNR=1.8 | | | | | | | |
| DZM | | | | | LR | LR | 01 33 37.8 | |
| | comp=Z,174nm,18.8s,baz=136,slow=33 | | | | | | | |
| **DZM** | **Mont Dzumac** | **11.36** | **169** | | | **Pn** | **01 30 06.2** | **+0.2** |
| DZM | | | | | | **Sn** | **01 32 12.2** | **+0.2** |
| **PMG** | **Port Moresby** | **16.72** | **274** | LR | | LR | 01 37 21.6 | |
| | comp=Z,138nm,18.9s,baz=90,slow=36 | | | | | | | |
| **PATS** | **Pohnpei** | **18.51** | **342** | P | | **P** | **01 31 39.0** | **-0.7** |
| **CTA** | **Charters Tower** | **19.45** | **240** | P | | **Pn** | **01 31 51.2** | **-0.1** |
| | 1.1nm,0.3s,baz=70,slow=11,SNR=16 | | | | | | | |
| CTA | | | | | LR | LR | 01 37 36.1 | |
| | comp=Z,56nm,21.2s,baz=76,slow=31 | | | | | | | |
| **COEN** | **Coen** | **20.64** | **259** | P | | Pn | 01 32 03.7 | -1.7 |
| **H11S2** | **WAKE ISLAND Hy** | **29.30** | **5** | T | | T | 02 03 54.6 | |
| | baz=184,slow=76,SNR=5.0 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.30** | **5** | T | | T | 02 03 54.8 | |
| | baz=184,slow=76,SNR=4.2 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.32** | **5** | T | | T | 02 03 54.6 | |
| | baz=184,slow=76,SNR=3.6 | | | | | | | |
| **WR0** | **Warramunga Arr** | **29.82** | **249** | P | | **P** | **01 33 29.3** | **-1.1** |
| **WB0** | **Warramunga Arr** | **29.92** | **249** | P | | **P** | **01 33 30.6** | **-0.6** |
| WB0 | | | | | IAmb | IAmb | 01 33 31.1 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **29.99** | **249** | P | | **P** | **01 33 30.3** | **-1.6** |
| WRAB | | | | | IAmb | IAmb | 01 33 35.4 | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **30.00** | **249** | P | | **P** | **01 33 30.6** | **-1.3** |
| WB2 | | | | | IAmb | IAmb | 01 33 32.9 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **30.01** | **249** | P | | **P** | **01 33 31.1** | **-0.9** |
| | comp=Z,2.4nm,0.5s,baz=79,slow=9.0,SNR=67 | | | | | | | |
| **WRA** | **Warramunga Arr** | **30.01** | **249** | P | | **P** | **01 33 30.2** | **-1.8** |
| **AS31** | **Alice Springs** | **31.41** | **242** | P | | **P** | **01 33 43.5** | **-0.9** |
| AS31 | | | | | IAmb | IAmb | 01 33 43.7 | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **31.41** | **242** | P | | **P** | **01 33 43.2** | **-1.1** |
| | comp=Z,1.5nm,0.4s,baz=62,slow=10,SNR=38 | | | | | | | |
| **KNRA** | **Kununurra** | **34.67** | **258** | P | | **P** | **01 34 12.0** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **37.84** | **255** | P | | **P** | **01 34 38.6** | **-1.3** |
| | comp=Z,2.2nm,0.5s,baz=52,slow=10,SNR=18 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **37.84** | **255** | P | | **P** | **01 34 38.5** | **-1.5** |
| **FORT** | **Forrest** | **38.80** | **234** | P | | **P** | **01 34 47.4** | **-0.6** |
| FORT | | | | | IAmb | IAmb | 01 34 56.2 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **43.64** | **250** | P | | **P** | **01 35 27.2** | **-0.6** |
| PSA00 | | | | | IAmb | IAmb | 01 35 33.5 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| **MORW** | **Morawa** | **48.27** | **241** | P | | **P** | **01 36 01.9** | **-2.3** |
| **CMAR** | **Chiang Mai Arr** | **70.55** | **294** | P | | **P** | **01 38 39.5** | **+1.1** |
| | comp=Z,0.8nm,0.3s,baz=120,slow=4.2,SNR=4.3 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.55** | **294** | P | | **P** | **01 38 38.3** | **0.0** |
| **SONM** | **Songino Array** | **77.57** | **324** | P | | **P** | **01 39 19.6** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=152,slow=5.9,SNR=6.1 | | | | | | | |
| **SONM** | **Songino Array** | **77.57** | **324** | P | | **P** | **01 39 18.5** | **-0.5** |
| SONM | | | | | IAmb | IAmb | 01 39 29.6 | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.89** | **19** | P | | **P** | **01 39 53.0** | **+0.8** |
| | comp=Z,0.5nm,1.0s,baz=201,slow=4.7,SNR=1.5 | | | | | | | |
| **MK31** | **Makanchi Array** | **92.28** | **317** | P | | **P** | **01 40 33.0** | **0.0** |
| MK31 | | | | | IAmb | IAmb | 01 40 38.9 | |
| | comp=Z,2.8nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **92.28** | **317** | P | | **P** | **01 40 33.2** | **+0.2** |
| | comp=Z,1.1nm,0.7s,baz=96,slow=6.3,SNR=15 | | | | | | | |
| **MKAR** | **Makanchi Array** | **92.28** | **317** | P | | **P** | **01 40 33.0** | **0.0** |
| **ARCES** | **ARCESS Array B** | **115.76** | **345** | PKP | | **PKiKP** | **01 46 04.1** | **-0.6** |
| | comp=Z,1.8nm,0.8s,baz=17,slow=1.3,SNR=3.7 | | | | | | | |

*IDC **23** 01:34:44.5±1.5,4°.30S×129°.91E,h121km±15km,mb3.8/9,mb1 4.2/14,mb1mx4.0/31,mbtmp4.4/14,Error ellipse: s-maj=23.7km s-min=10.9km az=95.0*
*NEIC **23** 01:34:44.6±1.9,4°.36S±0°.07×129°.8E±0°.1,h130km±6km,mb4.4/12,Error ellipse: s-maj=15.3km s-min=9.5km az=103.0*
*DJA **23** 01:34:45.2±0.2,4°.S±3°×13°0E±°,h154km±4km,M4.6/10,mB4.9/1,mb4.5/10,MLv4.6/9,Mw(mB)4.2/1*

**ISC 23 01:34:45.1**±0.8,**4°.39S**±0°.04×**129°.86E**±0°.06,**h135**km±8km,
**n70,**σ1$**87/75,mb4.2/14,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **0.14** | **160** | P | | **Pn** | **01 35 06.7** | **+3.3** |
| **MSAI** | **Masohi** | **1.39** | **318** | P | | **Pn** | **01 35 13.2** | **+0.8** |
| **AAI** | **Ambon** | **1.80** | **293** | P | | **Pn** | **01 35 18.1** | **+1.1** |
| **FAKI** | **Fak Fak** | **2.80** | **59** | | | **Pn** | **01 35 30.2** | **+0.9** |
| FAKI | | | | | | **Sn** | **01 36 02.2** | **-1.2** |
| **FAKI** | **Fak Fak** | **2.80** | **59** | P | | **Pn** | **01 35 30.8** | **+1.5** |
| **FAKI** | **Fak Fak** | **2.80** | **59** | P | | **Pn** | **01 35 31.0** | **+1.7** |
| **SIJI** | **Sorong** | **3.77** | **22** | P | | **Pn** | **01 35 41.2** | **-0.8** |
| | 99nm,0.3s,baz=242,slow=23,SNR=97 | | | | | | | |
| SIJI | | | | | S | **Sn** | **01 36 22.2** | **-3.9** |
| | 86nm,0.3s,baz=90,slow=23,SNR=28 | | | | | | | |
| **SAUI** | **Saumlaki** | **3.84** | **158** | Pn | | **Pn** | **01 35 44.3** | **+1.3** |
| SAUI | | | | | | **Sn** | **01 36 27.2** | **-0.6** |
| **SAUI** | **Saumlaki** | **3.84** | **158** | P | | **Pn** | **01 35 44.2** | **+1.3** |
| **SANI** | **Sanana** | **4.51** | **301** | P | | **Pn** | **01 35 51.8** | **0.0** |
| **SANI** | **Sanana** | **4.51** | **301** | P | | **Pn** | **01 35 52.2** | **+0.4** |
| **SOEI** | **Soe** | **7.69** | **226** | | | **Pn** | **01 36 34.9** | **+0.3** |
| **SOEI** | **Soe** | **7.69** | **226** | P | | **Pn** | **01 36 35.3** | **+0.7** |
| | 0.3nm62nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **7.69** | **226** | P | | **Pn** | **01 36 36.0** | **+1.4** |
| **DRS** | **Darwin Rock St** | **8.05** | **173** | P | | **Pn** | **01 36 41.3** | **+2.0** |
| **BATI** | **Baumata** | **8.43** | **226** | P | | **Pn** | **01 36 45.9** | **+1.5** |
| | 16nm,0.3s,baz=157,slow=1.4,SNR=12 | | | | | | | |
| **BATI** | **Baumata** | **8.43** | **226** | P | | **Pn** | **01 36 45.2** | **+0.8** |
| | 59nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **8.49** | **172** | Pn | | **Pn** | **01 36 44.6** | **-0.6** |
| **MTN** | **Manton Dam** | **8.49** | **172** | P | | **Pn** | **01 36 46.5** | **+1.3** |
| **KNRA** | **Kununurra** | **11.27** | **185** | Pn | | **Pn** | **01 37 21.0** | **-1.3** |
| **KNRA** | **Kununurra** | **11.27** | **185** | P | | **Pn** | **01 37 21.5** | **-0.8** |
| **PLAI** | **Plampang** | **12.78** | **249** | P | | **Pn** | **01 37 42.1** | **0.0** |
| | 34nm,1.0s | | | | | | | |
| **PLAI** | **Plampang** | **12.78** | **249** | P | | **Pn** | **01 37 43.6** | **+1.5** |
| **FITZ** | **Fitzroy Crossi** | **14.23** | **197** | P | | **Pn** | **01 38 00.1** | **-0.6** |
| | 0.4nm,0.3s,baz=24,slow=12,SNR=14 | | | | | | | |
| FITZ | | | | | S | Sn | 01 40 30.6 | -7.6 |
| | 0.7nm,0.3s,baz=123,slow=15,SNR=3.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.23** | **197** | Pn | | **Pn** | **01 37 58.1** | **-2.6** |
| **FITZ** | **Fitzroy Crossi** | **14.23** | **197** | P | | **Pn** | **01 38 00.6** | **-0.1** |
| **WB0** | **Warramunga Arr** | **15.91** | **164** | | | **Pn** | **01 38 21.0** | **-0.6** |
| WB0 | | | | | IAmb | IAmb | 01 38 25.8 | |
| | comp=Z,34nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **16.06** | **165** | P | | **Pn** | **01 38 23.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **16.06** | **165** | P | | **Pn** | **01 38 23.1** | **-0.4** |
| | comp=Z,3.1nm,0.3s,baz=345,slow=13,SNR=60 | | | | | | | |
| WRA | | | | | S | **Sn** | **01 41 11.8** | **-10** |
| | comp=Z,1.4nm,0.3s,baz=346,slow=20,SNR=8.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.06** | **165** | Pn | | **Pn** | **01 38 21.0** | **-2.5** |
| **WB2** | **Warramunga Arr** | **16.07** | **165** | Pn | | **Pn** | **01 38 22.4** | **-1.2** |
| WB2 | | | | | IAmb | IAmb | 01 38 27.5 | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **16.13** | **164** | | | **Pn** | **01 38 24.0** | **-0.3** |
| WR0 | | | | | IAmb | IAmb | 01 38 28.2 | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **COEN** | **Coen** | **16.21** | **127** | P | | **P** | **01 38 28.0** | **+2.1** |
| **QIS** | **Mount Isa** | **18.66** | **150** | P | | **Pn** | **01 38 55.3** | **+0.6** |
| **AS31** | **Alice Springs** | **19.56** | **169** | | | **P** | **01 39 02.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **19.56** | **169** | P | | **P** | **01 39 04.0** | **+1.5** |
| | comp=Z,9.0nm,0.3s,baz=350,slow=11,SNR=830 | | | | | | | |
| ASAR | | | | | S | **S** | **01 42 32.5** | **-3.7** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=20,SNR=7.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **19.56** | **169** | | | **P** | **01 39 02.2** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **19.65** | **209** | P | | **P** | **01 39 03.6** | **+0.1** |
| **WRKA** | **Warakurna** | **20.58** | **184** | P | | **P** | **01 39 14.8** | **+1.2** |
| **OOD** | **Oodnadatta** | **23.33** | **167** | P | | **P** | **01 39 48.1** | **+2.1** |
| **MEEK** | **Meekatharra** | **24.60** | **205** | P | | **P** | **01 39 52.1** | **-0.8** |
| **MULG** | **Mulgathing** | **26.06** | **172** | P | | **P** | **01 40 07.3** | **+1.3** |
| **FORT** | **Forrest** | **26.30** | **183** | P | | **P** | **01 40 08.7** | **+0.5** |
| **LCRK** | **Leigh Creek** | **27.09** | **164** | P | | **P** | **01 40 17.5** | **+2.2** |
| **BBOO** | **Buckleboo** | **28.86** | **169** | P | | **P** | **01 40 32.3** | **+1.3** |
| **KLBR** | **Kellerberrin** | **29.35** | **201** | P | | **P** | **01 40 35.7** | **+0.3** |
| **STKA** | **Stephens Creek** | **29.48** | **159** | P | | **P** | **01 40 38.1** | **+1.7** |
| | comp=Z,1.8nm,0.4s,baz=348,slow=8.8,SNR=7.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.48** | **159** | P | | **P** | **01 40 38.2** | **+1.7** |
| **CMSA** | **Cobar Meteorol** | **30.83** | **153** | P | | **P** | **01 40 50.7** | **+2.2** |
| **RKGY** | **Rocky Gully** | **32.36** | **200** | P | | **P** | **01 41 03.2** | **+1.4** |
| **ARMA** | **Armidale** | **33.05** | **144** | P | | **P** | **01 41 10.3** | **+2.3** |
| **ARPS** | **Mount Arapiles** | **34.05** | **163** | P | | **P** | **01 41 18.6** | **+2.1** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.00** | **308** | P | | **P** | **01 41 50.7** | **+0.4** |
| | comp=Z,1.4nm,0.4s,baz=129,slow=6.9,SNR=4.9 | | | | | | | |
| **PZH** | **PanZhiHua** | **41.03** | **320** | P | | **P** | **01 42 15.8** | **+0.2** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,80nm,5.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.46** | **10** | P | | **P** | **01 42 18.1** | **-0.7** |
| | comp=Z,1.9nm,0.5s,baz=190,slow=9.7,SNR=5.7 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.46** | **10** | P | | **P** | **01 42 18.0** | **-0.7** |
| **KSRS** | **Korea Array** | **41.67** | **358** | P

| | | | | | | |
|---|---|---|---|---|---|---|
| **JACO** | **JACO, Garabito** | **1.84** | **297** | *eP* | **Pn** | **01 44 07.3 +0.6** |
| **JTS** | **Las Juntas de** | **2.42** | **307** | *eP* | **Pn** | **01 44 16.4 +1.8** |
| **JTS** | **Las Juntas de** | **2.42** | **307** | *eS* | **Sn** | **01 44 45.7 +2.6** |

**NNC 23 01:46:04.3±9.2, 36°.92N×70°.00E, h0km, mb3.5, mpv3.1, 1C-5D, Error ellipse: s-maj=74.7km s-min=69.9km az=42.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK09** | **Karatay Array** | **6.21** | **3** | ⇓P | Pn | 01 47 38.7 | +1.4 |
| KK09 | 0.4nm,0.5s,baz=184,slow=13 | | | ⇑S | Sn | 01 48 51.0 | +2.0 |
| **AAK** | 1.1nm,0.7s,baz=189,slow=24 **Ala-Archa** | **6.68** | **30** | ⇓P | Pn | 01 47 43.9 | +0.1 |
| AAK | 0.4nm,0.3s | | | ⇓S | Sn | 01 49 00.5 | -0.3 |
| **TKM2** | 3.8nm,0.7s **Tokmak 2** | **7.38** | **34** | ⇓P | Pn | 01 47 52.3 | -1.2 |
| TKM2 | 1.8nm,0.5s | | | ⇓S | Sn | 01 49 07.1 | -11 |
| | 0.6nm,0.6s | | | | | | |

*TUL **23** 02:06:55.8±1.1, 35°.66N±0°.02×97°.40W±0°.05, h7km±6km, ML3.0, mb_Lg2.6/48(NEIC), Error ellipse: s-maj=5.7km s-min=1.6km az=115.0*

**NEIC 23 02:06:55.9±0.9, 35°.68N±0°.03×97°.43W±0°.03, h9km±6km, Error ellipse: s-maj=5.4km s-min=1.3km az=210.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **179** | | Pg | 02 06 58.1 | -0.3 |
| OK009 | | | | Sg | Sg | 02 06 59.9 | -0.2 |
| **OK001** | **Jones High Sch** | **0.17** | **138** | Pg | Pg | 02 06 59.0 | -0.3 |
| OK001 | | | | Sg | Sg | 02 07 01.5 | -0.3 |
| **OK005** | **Luther M Schoo** | **0.19** | **99** | Pg | Pg | 02 06 59.6 | -0.2 |
| OK005 | | | | Sg | Sg | 02 07 02.5 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.27** | **184** | | Pg | 02 07 01.0 | -0.3 |
| OKCFA | | | | Sg | Sg | 02 07 05.0 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **182** | Pg | Pg | 02 07 01.3 | -0.2 |
| OKCSW | | | | Sg | Sg | 02 07 05.3 | +0.2 |
| **FNO** | **Franklin** | **0.43** | **177** | Pg | Pg | 02 07 03.9 | -0.2 |
| **W35A** | **Tecumseh** | **0.70** | **139** | Pg | Pg | 02 07 08.5 | -0.7 |
| **X34A** | **Smith Ranch, M** | **1.13** | **197** | Pg | Pg | 02 07 17.0 | -0.6 |
| **TUL1** | **Leonard** | **1.35** | **80** | | Pn | 02 07 19.5 | -1.4 |
| **T35A** | **Sooner Cattle** | **1.43** | **31** | | Pn | 02 07 22.0 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.45** | **299** | Pn | Pn | 02 07 22.6 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.46** | **230** | | Pn | 02 07 22.2 | -0.2 |
| **X37A** | **Clayton** | **2.01** | **122** | | Pn | 02 07 29.5 | -0.4 |
| X37A | comp=Z,26nm,0.8s | | | lAmb_Lg | | 02 08 01.0 | |
| **HHAR** | **Hobbs** | **2.89** | **77** | | Pn | 02 07 41.9 | -0.2 |
| **R32A** | **Long Quarter,** | **2.92** | **340** | Pn | Pn | 02 07 42.9 | +0.4 |
| **W39A** | **Magazine** | **3.01** | **98** | Pn | Pn | 02 07 44.9 | +1.2 |
| W39A | comp=Z,21nm,0.8s | | | lAmb_Lg | | 02 08 37.7 | |
| **Z38A** | **Mt. Pleasant** | **3.15** | **139** | Pn | Pn | 02 07 45.5 | -0.1 |
| **MIAR** | **Mount Ida** | **3.35** | **109** | Pn | Pn | 02 07 49.2 | +0.8 |
| MIAR | comp=Z,14nm,0.8s | | | lAmb_Lg | | 02 08 49.6 | |
| **KSU1** | **Kansas State U** | **3.47** | **11** | lAmb_Lg | | 02 08 53.3 | |
| **ABTX** | comp=Z,19nm,0.7s **Abilene, Hawle** | **3.56** | **212** | Pn | Pn | 02 07 51.5 | +0.2 |
| ABTX | comp=Z,11nm,0.8s | | | lAmb_Lg | | 02 08 54.8 | |
| **AMTX** | **Amarillo** | **3.57** | **258** | Pn | Pn | 02 07 52.2 | +0.7 |
| **CBKS** | **Cedar Bluff** | **3.63** | **330** | Pn | Pn | 02 07 53.1 | +0.8 |
| CBKS | comp=Z,14nm,0.7s | | | lAmb_Lg | | 02 08 60.0 | |
| **U40A** | **Yellville** | **3.77** | **78** | Pn | Pn | 02 07 55.0 | +0.9 |
| U40A | comp=Z,15nm,0.9s | | | lAmb_Lg | | 02 09 03.3 | |
| **S39A** | **Bolivar** | **3.86** | **58** | Pn | Pn | 02 07 56.4 | +1.0 |
| S39A | comp=Z,11nm,0.8s | | | lAmb_Lg | | 02 09 01.5 | |
| **X40A** | **Basin Creek Fa** | **3.95** | **106** | Pn | Pn | 02 07 56.5 | -0.1 |
| **WLAR** | **White Oak Lake** | **4.07** | **118** | lAmb_Lg | | 02 09 07.5 | |
| **WHAR** | comp=Z,11nm,0.8s **Wooly Hollow** | **4.21** | **94** | Pn | Pn | 02 08 00.2 | 0.0 |
| WHAR | comp=Z,17nm,1.0s | | | lAmb_Lg | | 02 09 17.2 | |
| **W41B** | **Gary Mavity, V** | **4.26** | **95** | lAmb_Lg | | 02 09 12.2 | |
| **FCAR** | comp=Z,16nm,0.8s **Ozark Folk Cen** | **4.32** | **86** | Pn | Pn | 02 08 01.3 | -0.4 |
| FCAR | comp=Z,13nm,0.8s | | | lAmb_Lg | | 02 09 14.0 | |
| **MGMO** | **Mountain Grove** | **4.41** | **69** | lAmb_Lg | | 02 09 13.3 | |
| **MSTX** | comp=Z,7.5nm,0.8s **Muleshoe** | **4.72** | **250** | Pn | Pn | 02 08 07.2 | -0.2 |
| **R40A** | **Maddies Statio** | **4.88** | **56** | lAmb_Lg | | 02 09 41.0 | |
| **P38A** | comp=Z,8.0nm,0.7s **Dawn** | **5.00** | **37** | Pn | Pn | 02 08 12.1 | +1.0 |
| P38A | comp=Z,7.5nm,0.8s | | | lAmb_Lg | | 02 09 41.1 | |
| **KSCO** | **Kaye Shedlock'** | **5.31** | **310** | lAmb_Lg | | 02 09 46.6 | |
| **JCT** | comp=Z,11nm,0.9s **Junction City** | **5.56** | **202** | lAmb_Lg | | 02 09 56.3 | |
| **BGNE** | comp=Z,18nm,0.8s **Belgrade** | **5.74** | **355** | lAmb_Lg | | 02 10 11.2 | |
| **PBMO** | comp=Z,18nm,0.8s **Poplar Bluff** | **5.76** | **77** | lAmb_Lg | | 02 09 58.8 | |
| **SDCO** | comp=Z,20nm,0.8s **Great Sand Dun** | **6.80** | **290** | lAmb_Lg | | 02 10 35.3 | |
| **JFWS** | comp=Z,6.0nm,1.1s **Jewell Farm** | **9.11** | **35** | lAmb_Lg | | 02 11 52.9 | |
| | comp=Z,7.3nm,0.8s | | | | | | |

*NNC **23** 02:26:15.0±0.2, 43°.34N×77°.95E, h0km, mb3.3, mpv3.6, Error ellipse: s-maj=2.4km s-min=1.2km az=178.0*
*KRNET **23** 02:26:15.3±0.1, 43°.33N×77°.96E, h18km, mb3.4*
*SOME **23** 02:26:16.0, 43°.30N×77°.88E, h10km*

**ISC 23 02:26:15.7±0.9, 43°.33N±0°.02×77°.95E±0°.01, h9km±8km, n83, σ0°75/144, 45C-27D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURS** | **Kuram** | **0.23** | **45** | ⇓*e*P | **Pg** | **02 26 20.5** | **+0.1** |
| KURS | 84nm,0.1s | | | *e*S | **Sg** | **02 26 23.7** | **+0.2** |
| **KURS** | 336nm,0.1s **Kuram** | **0.23** | **45** | P | **Pg** | **02 26 20.5** | **+0.1** |
| KURS | 84nm,0.1s | | | S | **Sg** | **02 26 23.6** | **+0.1** |
| **KURS** | 336nm,0.1s **Kuram** | **0.23** | **45** | ⇓*e*P | **Pg** | **02 26 20.5** | **+0.1** |
| KURS | baz=45 | | | ⇓*e*S | **Sg** | **02 26 23.8** | **+0.2** |
| **ZHN** | baz=45 **Zhinishke** | **0.39** | **114** | ⇑*e*P | **Pg** | **02 26 23.3** | **-0.1** |
| ZHN | 329nm,0.1s | | | *e*S | **Sg** | **02 26 28.5** | **0.0** |
| **ZHN** | 891nm,0.1s **Zhinishke** | **0.39** | **114** | P | **Pg** | **02 26 23.3** | **-0.1** |
| ZHN | 329nm,0.1s | | | S | **Sg** | **02 26 28.5** | **0.0** |
| **ZHN** | 891nm,0.1s **Zhinishke** | **0.39** | **114** | ⇑*e*P | **Pg** | **02 26 23.3** | **-0.1** |
| ZHN | baz=15 | | | ⇑*e*S | **Sg** | **02 26 28.5** | **0.0** |
| **SATY** | baz=15 **Saty** | **0.43** | **128** | P | **Pg** | **02 26 24.1** | **+0.1** |
| SATY | 139nm,0.1s | | | S | **Sg** | **02 26 30.1** | **+0.3** |
| **KPKS** | 1μm,0.1s **Kokpek** | **0.56** | **75** | ⇑*e*P | **Pg** | **02 26 26.3** | **-0.2** |
| KPKS | 144nm,0.1s | | | *e*S | **Sg** | **02 26 33.4** | **-0.4** |
| **KPKS** | 423nm,0.1s **Kokpek** | **0.56** | **75** | ⇑*e*P | **Pg** | **02 26 26.3** | **-0.2** |
| KPKS | baz=76 | | | ⇑*e*S | **Sg** | **02 26 33.4** | **-0.4** |
| **ANVS** | baz=76 **Anan'yevo** | **0.58** | **201** | ⇓*i*P | **Pg** | **02 26 26.8** | **-0.1** |
| ANVS | baz=1.0 | | | ⇓*i*S | **Sg** | **02 26 34.7** | **+0.2** |
| **MDOK** | baz=1.0 **Medeo** | **0.68** | **256** | ⇓*e*P | **Pg** | **02 26 28.7** | **0.0** |
| MDOK | 13nm,0.2s | | | *e*S | **Sg** | **02 26 37.6** | **+0.1** |
| **MDOK** | 75nm,0.2s **Medeo** | **0.68** | **256** | ⇑P | **Pg** | **02 26 28.8** | **+0.1** |
| MDOK | 8.8nm,0.5s | | | ⇓S | **Sg** | **02 26 37.8** | **+0.3** |
| **MDOK** | 43nm,0.5s **Medeo** | **0.68** | **256** | Pg | **Pg** | **02 26 28.7** | **0.0** |
| MDOK | 13nm,0.2s | | | Lg | Lg | 02 26 37.6 | |
| **MDOK** | 75nm,0.2s **Medeo** | **0.68** | **256** | ⇓*e*P | **Pg** | **02 26 28.7** | **0.0** |
| MDOK | baz=56 | | | ⇓*e*S | **Sg** | **02 26 37.7** | **+0.1** |
| **AAA** | baz=56 **Alma-Ata** | **0.76** | **262** | *e*P | **Pb** | **02 26 30.9** | **-0.2** |
| AAA | 61nm,0.1s | | | *e*S | **Sb** | **02 26 41.4** | **-0.3** |
| **AAA** | 210nm,0.1s **Alma-Ata** | **0.76** | **262** | P | **Pb** | **02 26 30.9** | **-0.2** |
| AAA | 61nm,0.1s | | | S | **Sb** | **02 26 41.4** | **-0.3** |
| **TNSS** | 210nm,0.1s **Tian-Shan** | **0.79** | **249** | ⇓*e*P | **Pg** | **02 26 30.6** | **-0.2** |
| TNSS | 17nm,0.1s | | | *e*S | **Sg** | **02 26 41.2** | **+0.1** |
| **TNSS** | 87nm,0.2s **Tian-Shan** | **0.79** | **249** | P | **Pg** | **02 26 30.6** | **-0.2** |
| TNSS | 17nm,0.1s | | | S | **Sg** | **02 26 41.2** | **+0.1** |
| **TNSS** | 87nm,0.2s **Tian-Shan** | **0.79** | **249** | ⇓*e*P | **Pg** | **02 26 30.6** | **-0.2** |
| TNSS | baz=49 | | | ⇓*e*S | **Sg** | **02 26 41.1** | **+0.1** |
| **UZB** | baz=49 **Uzynbulak** | **0.81** | **102** | ⇑*e*P | **Pg** | **02 26 30.7** | **-0.5** |
| UZB | 83nm,0.1s | | | *e*S | **Sg** | **02 26 40.9** | **-0.8** |
| **UZB** | 136nm,0.1s **Uzynbulak** | **0.81** | **102** | P | **Pg** | **02 26 30.7** | **-0.5** |
| UZB | 83nm,0.1s | | | S | **Sg** | **02 26 40.9** | **-0.8** |
| **UZB** | 136nm,0.1s **Uzynbulak** | **0.81** | **102** | ⇑*e*P | **Pg** | **02 26 30.7** | **-0.5** |
| UZB | baz=3.0 | | | ⇑*e*S | **Sg** | **02 26 40.9** | **-0.8** |
| **CHKK** | baz=3.0 **Chushkaly** | **0.87** | **308** | ⇑*e*P | **Pg** | **02 26 32.0** | **-0.4** |
| CHKK | 22nm,0.2s | | | *e*S | **Sg** | **02 26 43.1** | **-0.7** |
| **CHKK** | 238nm,0.2s **Chushkaly** | **0.87** | **308** | P | **Pg** | **02 26 32.0** | **-0.4** |
| CHKK | 22nm,0.2s | | | S | **Sg** | **02 26 43.1** | **-0.7** |
| **CHKK** | 238nm,0.2s **Chushkaly** | **0.87** | **308** | ⇑*e*P | **Pg** | **02 26 32.0** | **-0.4** |
| CHKK | baz=7.0 | | | ⇑*e*S | **Sg** | **02 26 43.1** | **-0.7** |
| **ARXS** | baz=7.0 **Arharly** | **0.89** | **355** | ⇑*e*P | **Pg** | **02 26 32.4** | **-0.4** |
| ARXS | 50nm,0.2s | | | *e*S | **Sg** | **02 26 43.8** | **-0.6** |
| **ARXS** | 186nm,0.2s **Arharly** | **0.89** | **355** | P | **Pg** | **02 26 32.4** | **-0.4** |
| ARXS | 50nm,0.2s | | | S | **Sg** | **02 26 43.8** | **-0.6** |
| **PRZ** | 186nm,0.2s **Przheval'sk** | **0.91** | **158** | ⇓*i*P | **Pg** | **02 26 32.3** | **-0.8** |
| PRZ | baz=58 | | | ⇓*i*S | **Sg** | **02 26 43.8** | **-1.1** |
| **KTBS** | baz=58 **Karatobe** | **1.00** | **293** | ⇑*e*P | **Pg** | **02 26 34.4** | **-0.4** |
| KTBS | 31nm,0.3s | | | *e*S | **Sg** | **02 26 47.6** | **-0.1** |
| **KTBS** | 148nm,0.1s **Karatobe** | **1.00** | **293** | P | **Pg** | **02 26 34.4** | **-0.4** |
| KTBS | 31nm,0.3s | | | S | **Sg** | **02 26 47.6** | **-0.1** |
| **KTBS** | 148nm,0.1s **Karatobe** | **1.00** | **293** | ⇑*e*P | **Pg** | **02 26 34.4** | **-0.4** |
| KTBS | baz=93 | | | ⇑*e*S | **Sg** | **02 26 47.6** | **-0.1** |
| **IZV** | baz=93 **Izvestkoviy** | **1.02** | **254** | ⇑*e*P | **Pg** | **02 26 34.7** | **-0.5** |
| IZV | 18nm,0.1s | | | *e*S | **Sg** | **02 26 47.9** | **-0.5** |
| **IZV** | 163nm,0.2s **Izvestkoviy** | **1.02** | **254** | P | **Pg** | **02 26 34.7** | **-0.5** |
| IZV | 18nm,0.1s | | | S | **Sg** | **02 26 47.9** | **-0.5** |
| **IZV** | 163nm,0.2s **Izvestkoviy** | **1.02** | **254** | ⇑*e*P | **Pg** | **02 26 34.7** | **-0.5** |
| IZV | baz=54 | | | ⇑*e*S | **Sg** | **02 26 47.9** | **-0.5** |
| **MTBS** | baz=54 **Maitube** | **1.12** | **260** | ⇑*e*P | **Pg** | **02 26 36.9** | **-0.3** |
| MTBS | 36nm,0.1s | | | *e*S | **Sg** | **02 26 51.5** | **-0.4** |
| **MTBS** | 60nm,0.2s **Maitube** | **1.12** | **260** | P | **Pg** | **02 26 36.9** | **-0.3** |
| MTBS | 36nm,0.1s | | | S | **Sg** | **02 26 51.5** | **-0.4** |
| **MTBS** | 60nm,0.2s **Maitube** | **1.12** | **260** | ⇑*e*P | **Pg** | **02 26 36.9** | **-0.3** |
| MTBS | baz=60 | | | ⇑*e*S | **Sg** | **02 26 51.5** | **-0.4** |
| **PDGK** | baz=60 **Podgornoye** | **1.13** | **89** | P | **Pg** | **02 26 36.2** | **-1.1** |
| PDGK | | | | S | **Sg** | **02 26 50.3** | **-1.6** |
| **PDGK** | **Podgornoye** | **1.13** | **89** | ⇓P | **Pg** | **02 26 36.1** | **-1.3** |
| PDGK | 6.6nm,0.3s | | | ⇓S | **Sg** | **02 26 51.0** | **-1.0** |
| **KUU** | 33nm,0.4s **Kurty** | **1.30** | **296** | *e*P | **Pn** | **02 26 39.5** | **-0.5** |
| KUU | 22nm,0.1s | | | *e*S | **Sb** | **02 26 56.1** | **-0.9** |
| **KUU** | 118nm,0.3s **Kurty** | **1.30** | **296** | P | **Pn** | **02 26 39.4** | **-0.6** |
| KUU | 22nm,0.1s | | | S | **Sb** | **02 26 56.1** | **-0.9** |
| **KUU** | 118nm,0.3s **Kurty** | **1.30** | **296** | *e*P | **Pn** | **02 26 39.5** | **-0.6** |
| KUU | baz=96 | | | *e*S | **Sb** | **02 26 56.1** | **-0.9** |
| **KDJ** | baz=96 **Kajisay** | **1.32** | **206** | ⇓*i*P | **Pn** | **02 26 39.8** | **-0.7** |
| KDJ | baz=5.0 | | | ⇓*i*S | **Sb** | **02 26 57.5** | **-0.4** |
| **DGS** | baz=5.0 **Degeres** | **1.59** | **268** | *e*P | **Pb** | **02 26 44.8** | **-0.5** |
| DGS | 30nm,0.2s | | | *e*S | **Sb** | **02 27 05.6** | **+0.1** |
| **DGS** | 115nm,0.3s **Degeres** | **1.59** | **268** | P | **Pb** | **02 26 44.8** | **-0.5** |
| DGS | 30nm,0.2s | | | S | **Sb** | **02 27 05.5** | **-0.1** |
| **DGS** | 115nm,0.3s **Degeres** | **1.59** | **268** | *e*P | **Pb** | **02 26 44.8** | **-0.5** |
| DGS | baz=67 | | | *e*S | **Sb** | **02 27 05.6** | **+0.1** |
| **TARG** | baz=67 **Taragay, Kyrgy** | **1.60** | **184** | ⇑*e*P | **Pb** | **02 26 45.2** | **-0.4** |
| TARG | baz=84 | | | ⇑*i*S | **Sg** | **02 27 06.7** | **-0.4** |
| **ULHL** | baz=84 **Ulahol** | **1.66** | **230** | P | **Pb** | **02 26 46.5** | **0.0** |
| ULHL | SNR=30 **Ulahol** | **1.66** | **230** | ⇑*i*P | **Pn** | **02 26 45.4** | **+0.3** |
| ULHL | baz=30 | | | ⇑*i*S | **Sb** | **02 27 07.1** | **-0.4** |
| **DJR** | baz=30 **Jarkent** | **1.67** | **52** | *e*P | **Pb** | **02 26 46.5** | **-0.2** |
| DJR | 22nm,0.1s | | | *e*S | **Sb** | **02 27 08.0** | **+0.1** |
| **DJR** | 162nm,0.4s **Jarkent** | **1.67** | **52** | P | **Pb** | **02 26 46.5** | **-0.2** |
| DJR | 22nm,0.1s | | | S | **Sb** | **02 27 08.0** | **+0.1** |
| **KRBS** | 162nm,0.4s **Karabastau** | **1.69** | **283** | *e*P | **Pb** | **02 26 46.4** | **-0.6** |
| KRBS | 17nm,0.2s | | | *e*S | **Sb** | **02 27 08.7** | **+0.2** |
| **KRBS** | 90nm,0.2s **Karabastau** | **1.69** | **283** | P | **Pb** | **02 26 46.4** | **-0.6** |
| KRBS | 17nm,0.2s | | | S | **Sn** | **02 27 07.8** | **+0.5** |
| **KRBS** | 90nm,0.2s **Karabastau** | **1.69** | **283** | *e*P | **Pb** | **02 26 46.4** | **-0.6** |
| KRBS | baz=83 | | | *e*S | **Sb** | **02 27 08.7** | **+0.2** |
| **BOOM** | baz=83 **Boomskoye usch** | **1.69** | **241** | ⇓*i*P | **Pn** | **02 26 46.3** | **+0.7** |
| BOOM | baz=41 | | | ⇓*i*S | **Sg** | **02 27 09.3** | **-0.8** |
| **TKM2** | baz=41 **Tokmak 2** | **1.77** | **258** | P | **Pb** | **02 26 48.1** | **-0.3** |
| **TKM2** | SNR=23 **Tokmak 2** | **1.77** | **258** | ⇓Pg | **Pb** | **02 26 47.9** | **-0.5** |
| TKM2 | 2.1nm,0.2s | | | ⇑Lg | Lg | 02 27 11.9 | |
| **TKM2** | 26nm,0.5s **Tokmak 2** | **1.77** | **258** | ⇑*e*P | **Pn** | **02 26 47.3** | **+0.6** |
| TKM2 | baz=57 | | | ⇑*i*S | **Sb** | **02 27 10.8** | **+0.1** |
| **KAPS** | baz=57 **Kapalarasan** | **2.21** | **27** | *e*P | **Pb** | **02 26 55.3** | **-0.4** |
| KAPS | 20nm,0.4s | | | *e*S | **Sb** | **02 27 23.2** | **-0.1** |
| **KAPS** | 41nm,0.2s **Kapalarasan** | **2.21** | **27** | Pg | **Pb** | **02 26 55.3** | **-0.4** |
| KAPS | 20nm,0.4s | | | Lg | Lg | 02 27 23.2 | |
| **KBK** | 41nm,0.2s **Karagaybulak** | **2.30** | **254** | P | **Pb** | **02 26 57.6** | **+0.1** |
| **KBK** | SNR=18 **Karagaybulak** | **2.30** | **254** | ⇑*i*P | **Pn** | **02 26 55.0** | **+1.1** |
| KBK | baz=54 | | | ⇑*i*S | **Sn** | **02 27 23.6** | **+1.1** |
| **CHMS** | baz=54 **Chumysh** | **2.36** | **263** | P | **Pb** | **02 26 58.3** | **-0.1** |
| **CHMS** | SNR=6.8 **Chumysh** | **2.36** | **263** | ⇑*e*P | **Pn** | **02 26 55.6** | **+0.9** |
| CHMS | baz=63 | | | ⇑*i*S | **Sn** | **02 27 24.8** | **+1.0** |
| **SGDS** | baz=63 **Sogindy** | **2.42** | **274** | *e*P | **Pb** | **02 26 59.1** | **-0.3** |
| SGDS | 3.3nm,0.2s | | | *e*S | **Sb** | **02 27 30.0** | **+0.6** |
| **SGDS** | 22nm,0.2s **Sogindy** | **2.42** | **274** | Pg | **Pb** | **02 26 59.6** | **+0.2** |
| SGDS | 3.3nm,0.2s | | | Lg | Lg | 02 27 30.4 | |
| **USP** | 22nm,0.2s **Ospenovka** | **2.52** | **270** | P | **Pb** | **02 27 00.3** | **-0.7** |
| **USP** | SNR=15 **Ospenovka** | **2.52** | **270** | ⇑*e*P | **Pn** | **02 26 57.8** | **+1.0** |
| USP | baz=70 | | | ⇑*i*S | **Sn** | **02 27 28.6** | **+0.9** |
| **AAK** | baz=70 **Ala-Archa** | **2.62** | **256** | P | **Pb** | **02 27 02.6** | **-0.4** |
| **AAK** | SNR=6.2 **Ala-Archa** | **2.62** | **256** | ⇑Pg | **Pb** | **02 27 02.4** | **-0.5** |
| AAK | 1.1nm,0.3s | | | ⇓Lg | Lg | 02 27 38.8 | |
| **AAK** | 16nm,0.6s **Ala-Archa** | **2.62** | **256** | ⇑*i*P | **Pn** | **02 26 59.6** | **+1.2** |
| AAK | baz=56 | | | ⇑*i*S | **Sn** | **02 27 31.5** | **+1.0** |
| **UCH** | baz=56 **Uchtor** | **2.75** | **248** | P | **Pb** | **02 27 05.8** | **+0.4** |
| **UCH** | SNR=17 **Uchtor** | **2.75** | **248** | ⇓*i*P | **Pn** | **02 27 01.4** | **+0.9** |
| UCH | baz=48 | | | ⇓*i*S | **Sn** | **02 27 34.7** | **+0.6** |
| **EKS2** | baz=48 **Erkin-Say** | **3.13** | **259** | ⇑*e*P | **Pn** | **02 27 06.4** | **+1.1** |
| EKS2 | baz=59 | | | ⇑*i*S | **Sn** | **02 27 43.4** | **+0.5** |
| **BTLS** | baz=59 **Baital** | **3.29** | **303** | *e*P | **Pb** | **02 27 14.2** | **0.0** |
| BTLS | 2.3nm,0.3s | | | *e*S | **Sb** | **02 27 56.1** | **+1.8** |
| **BTLS** | 6.1nm,0.2s **Baital** | **3.29** | **303** | Pg | **Pb** | **02 27 15.1** | **+0.9** |
| BTLS | 2.3nm,0.3s | | | Lg | Lg | 02 27 56.6 | |
| **MRKS** | 6.1nm,0.2s **Merke** | **3.51** | **262** | *e*P | **Pb** | **02 27 19.1** | **+1.1** |
| MRKS | 2.8nm,0.3s | | | *e*S | **Sb** | **02 28 03.9** | **+3.1** |
| **MRKS** | 10nm,0.4s **Merke** | **3.51** | **262** | Pg | **Pb** | **02 27 19.1** | **+1.1** |
| MRKS | 3.2nm,0.3s | | | Lg | Lg | 02 28 03.9 | |
| **MK31** | 43nm,0.6s **Makanchi Array** | **4.64** | **40** | ⇓Pn | **Pn** | **02 27 27.7** | **+1.8** |
| MK31 | 0.1nm,0.2s,baz=220,slow=13,SNR=5.6 | | | ⇑Lg | Lg | 02 28 40.4 | |
| **KK08** | 0.9nm,0.3s,baz=214,slow=28,SNR=4.0 **Karatay Array** | **5.46** | **270** | ⇓Pg | **Pg** | **02 27 55.7** | **-4.4** |
| KK08 | 0.7nm,0.5s | | | ⇑Lg | Lg | 02 29 04.4 | |
| **OTUK** | 0.6nm,0.3s **Ortayu** | **6.29** | **323** | ⇓Lg | Lg | 02 29 29.5 | |
| **KURBB** | 4.9nm,0.8s **Kurchatov Arra** | **7.31** | **3** | ⇑Lg | Lg | 02 30 05.2 | |
| **KURK** | 1.8nm,0.6s **Kurchatov** | **7.41** | **3** | ⇑Lg | Lg | 02 30 05.8 | |
| | 1.5nm,0.7s | | | | | | |

*IDC **23** 02:35:14.7±1.9, 35°.88N×97°.50W, h0km, mb4.1/1, mb1 3.8/3, mb1mx3.4/34, mbtmp3.5/3, ML3.9/2, Error ellipse: s-maj=33.4km s-min=17.3km az=113.0*
*NEIC **23** 02:35:15.6±1.3, 35°.687N±0°.004×97°.42W±0°.02, h7km±6km, Error ellipse: s-maj=2.8km s-min=0.6km az=93.0*
*TUL **23** 02:35:15.5±1.4, 35°.67N±0°.02×97°.40W±0°.04, h7km±6km, ML3.6, mb_Lg3.4/107(NEIC), Error ellipse: s-maj=5.5km s-min=1.9km az=123.0*

**ISC 23 02:35:15.5±1.1, 35°.68N±0°.05×97°.42W±0°.05, h9km±9km, n92, σ0°89/77, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | | | | **Pg** | **02 35 17.9** | **-0.1** |
| **OK001** | **Jones High Sch** | **0.16** | **137** | Pg | **Pg** | **02 35 18.7** | **-0.2** |
| OK001 | | | | Sg | **Sg** | **02 35 21.2** | **-0.1** |
| **OK005** | **Luther M Schoo** | **0.19** | **97** | | **Pg** | **02 35 19.2** | **-0.2** |
| **OKCFA** | **Oklahoma City** | **0.26** | **185** | | **Pg** | **02 35 20.8** | **0.0** |
| OKCFA | | | | Sg | **Sg** | **02 35 24.7** | **+0.3** |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **183** | Pg | **Pg** | **02 35 20.9** | **-0.1** |
| OKCSW | | | | Sg | **Sg** | **02 35 25.1** | **+0.4** |
| **FNO** | **Franklin** | **0.42** | **178** | Pg | **Pg** | **02 35 23.6** | **-0.2** |
| FNO | | | | Sg | **Sg** | **02 35 29.6** | **+0.3** |
| **W35A** | **Tecumseh** | **0.69** | **139** | Pg | **Pg** | **02 35 28.2** | **-0.6** |
| **X34A** | **Smith Ranch, M** | **1.13** | **197** | Pg | **Pg** | **02 35 36.9** | **-0.3** |
| **TUL1** | **Leonard** | **1.34** | **80** | | **Pn** | **02 35 39.1** | **-1.4** |
| TUL1 | comp=Z,353nm,1.1s | | | lAmb_Lg | | 02 36 00.1 | |
| **T35A** | **Sooner Cattle** | **1.44** | **31** | | **Pn** | **02 35 41.6** | **-0.1** |
| **WMOK** | **Wichita Mounta** | **1.46** | **230** | | **Pn** | **02 35 41.7** | **-0.3** |
| **U32A** | **Winter Ranch,** | **1.46** | **299** | Pn | **Pn** | **02 35 42.3** | **+0.3** |
| **X37A** | **Clayton** | **2.00** | **122** | | **Pn** | **02 35 49.8** | **+0.3** |
| X37A | comp=Z,164nm,0.9s | | | lAmb_Lg | | 02 36 21.4 | |
| **Z35A** | **Perchaven, San** | **2.35** | **177** | Pn | **Pn** | **02 35 55.2** | **+0.9** |
| **HHAR** | **Hobbs** | **2.89** | **77** | Pn | **Pn** | **02 36 02.4** | **+0.7** |
| HHAR | comp=Z,105nm,0.7s | | | lAmb_Lg | | 02 36 52.2 | |
| **R32A** | **Long Quarter,** | **2.93** | **340** | Pn | **Pn** | **02 36 03.5** | **+1.3** |
| **W39A** | **Magazine** | **3.01** | **98** | Pn | **Pn** | **02 36 03.4** | **+0.1** |
| W39A | comp=Z,134nm,0.8s | | | lAmb_Lg | | 02 36 57.5 | |
| **Z38A** | **Mt. Pleasant** | **3.14** | **139** | Pn | **Pn** | **02 36 05.1** | **-0.1** |
| Z38A | comp=Z,82nm,1.0s | | | lAmb_Lg | | 02 37 01.2 | |
| **MIAR** | **Mount Ida** | **3.35** | **109** | Pn | **Pn** | **02 36 08.8** | **+0.7** |
| **KSU1** | **Kansas State U** | **3.48** | **10** | Pn | **Pn** | **02 36 10.1** | **+0.3** |
| KSU1 | comp=Z,162nm,0.8s | | | lAmb_Lg | | 02 37 12.7 | |
| **ABTX** | **Abilene, Hawle** | **3.56** | **212** | Pn | **Pn** | **02 36 11.3** | **+0.3** |
| ABTX | comp=Z,73nm,0.8s | | | lAmb_Lg | | 02 37 11.9 | |
| **AMTX** | **Amarillo** | **3.57** | **258** | Pn | **Pn** | **02 36 12.2** | **+1.0** |
| **CBKS** | **Cedar Bluff** | **3.63** | **330** | Pn | **Pn** | **02 36 12.8** | **+0.8** |
| CBKS | comp=Z,85nm,0.8s | | | lAmb_Lg | | 02 37 13.5 | |
| **WHTX** | **Lake Whitney,** | **3.68** | **180** | Pn | **Pn** | **02 36 13.9** | **+1.4** |
| **U40A** | **Yellville** | **3.77** | **78** | Pn | **Pn** | **02 36 14.1** | **+0.4** |
| U40A | comp=Z,89nm,0.7s | | | lAmb_Lg | | 02 37 23.5 | |
| **S39A** | **Bolivar** | **3.86** | **57** | Pn | **Pn** | **02 36 15.9** | **+0.8** |
| S39A | comp=Z,82nm,0.9s | | | lAmb_Lg | | 02 37 15.7 | |
| **Z37A** | **Washetta, Mont** | **3.91** | **159** | Pn | **Pn** | **02 36 15.4** | **-0.3** |
| Z37A | comp=Z,67nm,0.8s | | | lAmb_Lg | | 02 37 28.4 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **X40A** | **Basin Creek Fa** | **3.94** | **106** | Pn | **Pn** | **02 36 17.2** | **+1.0** |
| **WLAR** | **White Oak Lake** | **4.07** | **118** | Pn | **Pn** | **02 36 18.0** | **+0.1** |
| WLAR | | | | lAmb_Lg | | 02 37 33.1 | |
| | comp=Z,80nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.21** | **94** | | **Pn** | **02 36 20.0** | **+0.2** |
| WHAR | | | | lAmb_Lg | | 02 37 37.0 | |
| | comp=Z,79nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.25** | **95** | Pn | **Pn** | **02 36 20.6** | **+0.1** |
| W41B | | | | lAmb_Lg | | 02 37 39.2 | |
| | comp=Z,143nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.31** | **86** | Pn | **Pn** | **02 36 22.1** | **+0.8** |
| FCAR | | | | lAmb_Lg | | 02 37 37.5 | |
| | comp=Z,70nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.41** | **69** | Pn | **Pn** | **02 36 24.4** | **+1.8** |
| **MSTX** | **Muleshoe** | **4.72** | **250** | | **Pn** | **02 36 27.3** | **+0.3** |
| **R40A** | **Maddies Statio** | **4.88** | **56** | Pn | **Pn** | **02 36 29.7** | **+0.7** |
| **CCAR** | **Cane Creek** | **4.97** | **109** | lAmb_Lg | | 02 37 59.6 | |
| | comp=Z,88nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.00** | **37** | Pn | **Pn** | **02 36 33.0** | **+2.2** |
| **N33A** | **J Bar K, Exete** | **5.05** | **360** | lAmb_Lg | | 02 38 10.2 | |
| | comp=Z,82nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.10** | **84** | lAmb_Lg | | 02 37 58.8 | |
| | comp=Z,58nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.32** | **310** | Pn | **Pn** | **02 36 36.9** | **+1.7** |
| KSCO | | | | lAmb_Lg | | 02 38 09.6 | |
| | comp=Z,71nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.49** | **63** | Pn | **Pn** | **02 36 38.6** | **+1.1** |
| CCM | | | | lAmb_Lg | | 02 38 12.5 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.56** | **202** | Pn | **Pn** | **02 36 38.5** | **+0.1** |
| **P40A** | **Paris** | **5.74** | **46** | Pn | **Pn** | **02 36 42.9** | **+2.0** |
| **BGNE** | **Belgrade** | **5.75** | **355** | Pn | **Pn** | **02 36 41.8** | **+0.8** |
| BGNE | | | | lAmb_Lg | | 02 38 23.7 | |
| | comp=Z,84nm,0.7s | | | | | | |
| **143A** | **Socs Landing,** | **5.80** | **119** | lAmb_Lg | | 02 38 35.3 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.82** | **287** | Pn | **Pn** | **02 36 43.0** | **+0.8** |
| **FVM** | **French Village** | **6.06** | **66** | Pn | **Pn** | **02 36 46.1** | **+0.8** |
| FVM | | | | lAmb_Lg | | 02 38 29.4 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **6.08** | **32** | Pn | **Pn** | **02 36 45.2** | **-0.3** |
| **OGNE** | **Ogallala** | **6.38** | **327** | | **Pn** | **02 36 50.3** | **+0.5** |
| OGNE | | | | lAmb_Lg | | 02 38 45.4 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **HALT** | **Halls** | **6.57** | **86** | lAmb_Lg | | 02 38 51.1 | |
| | comp=Z,85nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **6.67** | **98** | Pn | **Pn** | **02 36 53.8** | **+0.1** |
| OXF | | | | lAmb_Lg | | 02 39 03.6 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **Y45A** | **Yeager Farm, C** | **6.73** | **103** | lAmb_Lg | | 02 39 01.0 | |
| | comp=Z,45nm,0.9s | | | | | | |
| **W45A** | **Hickory Valley** | **6.75** | **92** | lAmb_Lg | | 02 39 04.2 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.81** | **290** | Pn | **Pn** | **02 36 57.5** | **+1.7** |
| **735A** | **Kenedy** | **6.81** | **183** | lAmb_Lg | | 02 39 07.8 | |
| | comp=Z,57nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **6.86** | **71** | Pn | **Pn** | **02 36 58.1** | **+1.8** |
| S44A | | | | lAmb_Lg | | 02 38 57.1 | |
| | comp=Z,67nm,0.9s | | | | | | |
| **Q24A** | **Divide** | **6.97** | **300** | Pn | **Pn** | **02 36 59.1** | **+1.0** |
| Q24A | | | | lAmb_Lg | | 02 39 09.1 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **K31A** | **O'Neill** | **7.01** | **352** | Pn | **Pn** | **02 36 58.0** | **-0.3** |
| K31A | | | | lAmb_Lg | | 02 39 12.9 | |
| | comp=Z,80nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **7.03** | **27** | Pn | **Pn** | **02 36 58.8** | **+0.2** |
| SCIA | | | | lAmb_Lg | | 02 39 07.8 | |
| | comp=Z,66nm,0.8s | | | | | | |
| **T45A** | **Paducah** | **7.21** | **77** | lAmb_Lg | | 02 39 15.3 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.41** | **55** | lAmb_Lg | | 02 39 10.7 | |
| | comp=Z,70nm,0.8s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.43** | **62** | Pn | **Pn** | **02 37 06.6** | **+2.5** |
| Q44A | | | | lAmb_Lg | | 02 39 25.2 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **833A** | **Chaparral WMA,** | **7.52** | **193** | lAmb_Lg | | 02 39 22.2 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **146A** | **Union** | **7.57** | **111** | lAmb_Lg | | 02 39 22.0 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **PLAL** | **Pickwick Lake** | **7.67** | **92** | lAmb_Lg | | 02 39 26.4 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **ISCO** | **Idaho Springs** | **7.68** | **305** | | **Pn** | **02 37 08.6** | **+0.7** |
| **MNTX** | **Cornudas Mount** | **7.73** | **241** | | **Pn** | **02 37 08.5** | **+0.2** |
| **Y22D** | **IRIS PASSCAL I** | **7.97** | **261** | lAmb_Lg | | 02 39 47.9 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **8.00** | **35** | Pn | **Pn** | **02 37 11.4** | **-0.4** |
| L40A | | | | lAmb_Lg | | 02 39 36.5 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **HDIL** | **Hopedale** | **8.04** | **50** | Pn | **Pn** | **02 37 12.8** | **+0.3** |
| **ECSD** | **EROS Data Cent** | **8.07** | **4** | Pn | **Pn** | **02 37 11.7** | **-1.1** |
| ECSD | | | | lAmb_Lg | | 02 39 35.0 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **Z47A** | **Carrollton** | **8.11** | **105** | lAmb_Lg | | 02 39 53.2 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **USIN** | **University of** | **8.15** | **71** | lAmb_Lg | | 02 39 34.6 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **8.23** | **222** | Pn | **Pn** | **02 37 14.7** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=45,slow=11,SNR=6.2 | | | | | | |
| TXAR | | | | Pg | Pb | 02 37 44.3 | +6.0 |
| | comp=Z,1.4nm,0.3s,baz=45,slow=18,SNR=7.0 | | | | | | |
| TXAR | | | | Lg | Lg | 02 39 36.7 | |
| | comp=Z,1.6nm,0.3s,baz=49,slow=29,SNR=7.0 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **8.23** | **222** | Pn | **Pn** | **02 37 14.6** | **-0.6** |
| **TX32** | **Lajitas Array** | **8.23** | **222** | Pn | **Pn** | **02 37 14.4** | **-0.8** |
| **O44A** | **Mansfield** | **8.37** | **55** | lAmb_Lg | | 02 39 42.7 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **8.44** | **314** | Pn | **Pn** | **02 37 16.4** | **-1.8** |
| **N23A** | **Red Feather La** | **8.48** | **310** | Pn | **Pn** | **02 37 19.5** | **+0.7** |
| N23A | | | | lAmb_Lg | | 02 39 57.7 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.74** | **41** | Pn | **Pn** | **02 37 22.7** | **+0.6** |
| **SUSD** | **Miller** | **8.83** | **353** | lAmb_Lg | | 02 40 03.9 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.11** | **35** | Pn | **Pn** | **02 37 26.1** | **-1.1** |
| JFWS | | | | lAmb_Lg | | 02 40 28.6 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **BLO** | **Bloomington** | **9.34** | **65** | Pn | **Pn** | **02 37 31.4** | **+1.1** |
| **I40A** | **Norwalk** | **9.73** | **30** | lAmb_Lg | | 02 40 30.8 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **9.84** | **331** | Pn | **Pn** | **02 37 37.2** | **-0.1** |
| **K22A** | **Casper** | **9.91** | **317** | Pn | **Pn** | **02 37 39.0** | **+0.7** |
| K22A | | | | lAmb_Lg | | 02 40 51.0 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **K43A** | **Burlington** | **9.94** | **42** | Pn | **Pn** | **02 37 38.8** | **+0.2** |
| K43A | | | | lAmb_Lg | | 02 40 46.9 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **F36A** | **Milaca** | **10.59** | **15** | Pn | **Pn** | **02 37 47.5** | **+0.1** |
| **G40A** | **Rib Lake** | **11.04** | **28** | Pn | **Pn** | **02 37 52.4** | **-1.1** |
| **H43A** | **Windswept, Lux** | **11.47** | **37** | Pn | **Pn** | **02 37 59.0** | **-0.4** |
| **PDAR** | **Pinedale Array** | **11.77** | **311** | Pn | **Pn** | **02 38 03.0** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=14,SNR=4.8 | | | | | | |
| PDAR | | | | Lg | Lg | 02 41 24.7 | |
| | comp=Z,0.2nm,0.3s,baz=116,slow=30,SNR=7.1 | | | | | | |
| **SCHQ** | **Schefferville** | **28.47** | **38** | P | **P** | **02 41 10.9** | **+0.3** |
| | comp=Z,1.8nm,0.8s,baz=233,slow=14,SNR=1.6 | | | | | | |

*SOME **23** 02:45:52.6, 45˚.73N×85˚.00E, h15km*
*NNC **23** 02:45:54.9±1.1, 45˚.70N×84˚.87E, h0km, mb3.7, mpv3.5, Error ellipse: s-maj=9.2km s-min=4.1km az=115.0*
*ASRS **23** 02:46:04.4±0.7, 46˚N±4˚×8˚.5E±˚, h5km, MLh3.5/7, Error ellipse: s-maj=11.7km s-min=6.8km az=112.3, confirmed*
**ISC 23 02:45:55.2**±1.2, **45.79N**±0˚.05×**85.13E**±0˚.06, **h10**km, **n32,**
σ**2**°**24**/54, **7C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZSN** | **Zaisan** | **1.67** | **354** | *e*P | **Pb** | **02 46 26.1** | **0.0** |
| | 15nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sg** | **02 46 50.0** | **+0.9** |
| | 60nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **1.67** | **354** | P | **Pb** | **02 46 26.1** | **0.0** |
| | 15nm,0.2s | | | | | | |
| ZSN | | | | S | **Sg** | **02 46 50.2** | **+1.1** |
| | 60nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **2.21** | **298** | ⇑Pn | **Pn** | **02 46 31.9** | **0.0** |
| | 4.1nm,0.4s,baz=118,slow=15,SNR=219 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 02 47 02.1 | |
| | 16nm,0.3s,baz=107,slow=29,SNR=43 | | | | | | |
| **MAKZ** | **Makanchi** | **2.41** | **296** | ⇑Pn | **Pn** | **02 46 35.1** | **+0.4** |
| | 4.3nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 02 47 08.4 | |
| | 14nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **4.05** | **251** | *e*P | **Pb** | **02 47 05.5** | **-1.1** |
| | 3.5nm,0.4s | | | | | | |
| DJR | | | | *e*S | **Sb** | **02 47 57.0** | **+1.3** |
| | 16nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **4.05** | **251** | Pg | **Pb** | **02 47 05.6** | **-1.1** |
| | 3.5nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 02 47 57.0 | |
| | 16nm,0.6s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.08** | **265** | *e*P | **Pb** | **02 47 05.9** | **-1.3** |
| | 1.4nm,0.1s | | | | | | |
| KAPS | | | | *e*S | **Sb** | **02 47 57.5** | **+0.9** |
| | 12nm,0.5s | | | | | | |
| **KAPS** | **Kapalarasan** | **4.08** | **265** | Pg | **Pb** | **02 47 07.4** | **+0.2** |
| | 1.4nm,0.1s | | | | | | |
| KAPS | | | | Lg | Lg | 02 48 00.2 | |
| | 12nm,0.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **4.21** | **21** | Pn | **Pn** | **02 47 02.9** | **+3.3** |
| DGZ | | | | Pg | **Pg** | **02 47 14.7** | **-1.2** |
| DGZ | | | | S | **Sn** | **02 47 48.3** | **-0.7** |
| DGZ | | | | Sg | **Sg** | **02 48 07.0** | **-3.5** |
| **PDGK** | **Podgornoye** | **4.72** | **241** | Pg | **Pb** | **02 47 16.9** | **-1.1** |
| | 0.7nm,0.2s | | | | | | |
| PDGK | | | | Lg | Lg | 02 48 16.3 | |
| | 10nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **4.72** | **241** | ⇑Pg | **Pb** | **02 47 16.9** | **-1.1** |
| | 1.0nm,0.4s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 02 48 15.3 | |
| | 23nm,0.7s | | | | | | |
| **CHBI** | **Chibit, Altay** | **4.80** | **19** | Pn | Pn | 02 47 11.6 | +3.9 |
| CHBI | | | | Pg | **Pg** | **02 47 27.8** | **+0.6** |
| CHBI | | | | Sg | **Sg** | **02 48 28.5** | **-0.9** |
| **CUR** | **Chagan-Uzun** | **4.83** | **25** | Pn | Pn | 02 47 11.8 | +3.7 |
| CUR | | | | Pg | **Pg** | **02 47 27.3** | **-0.4** |
| CUR | | | | S | **Sn** | **02 48 02.9** | **-1.2** |
| CUR | | | | Sg | **Sg** | **02 48 29.0** | **-1.2** |
| **AKAR** | **Aktash** | **4.83** | **19** | Pn | Pn | 02 47 12.1 | +4.0 |
| AKAR | | | | Pg | **Pg** | **02 47 27.3** | **-0.5** |
| AKAR | | | | S | **Sn** | **02 48 02.7** | **-1.5** |
| AKAR | | | | Sg | **Sg** | **02 48 28.0** | **-2.4** |
| **UZB** | **Uzynbulak** | **5.10** | **241** | *e*P | **Pb** | **02 47 22.5** | **-2.1** |
| | 4.7nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **02 48 26.1** | **+0.1** |
| | 8.7nm,0.7s | | | | | | |
| **UZB** | **Uzynbulak** | **5.10** | **241** | Pg | **Pb** | **02 47 24.6** | **-0.1** |
| | 4.7nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 02 48 30.2 | |
| | 8.7nm,0.7s | | | | | | |
| **KPKS** | **Kokpek** | **5.15** | **246** | *e*P | **Pb** | **02 47 24.2** | **-1.1** |
| | 5.4nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **02 48 28.3** | **+1.0** |
| | 30nm,0.4s | | | | | | |
| **UKR** | **Ust'-Kan** | **5.16** | **358** | Pn | **Pn** | **02 47 14.9** | **+2.3** |
| UKR | | | | Pg | **Pg** | **02 47 31.9** | **-2.1** |
| UKR | | | | S | **Sn** | **02 48 08.7** | **-3.5** |
| UKR | | | | Sg | **Sg** | **02 48 36.8** | **-4.0** |
| **ULGR** | **Ulagan, Altay** | **5.20** | **20** | Pg | **Pg** | **02 47 33.6** | **-1.2** |
| ULGR | | | | Sg | **Sg** | **02 48 42.0** | **0.0** |
| **ARXS** | **Arharly** | **5.41** | **256** | *e*P | **Pb** | **02 47 30.8** | **+1.0** |
| | 1.7nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **02 48 40.6** | **+5.8** |
| | 12nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **5.41** | **256** | Pg | **Pb** | **02 47 30.8** | **+1.0** |
| | 1.7nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 02 48 40.6 | |
| | 12nm,0.7s | | | | | | |
| **ZHN** | **Zhinishke** | **5.46** | **244** | *e*P | **Pb** | **02 47 30.4** | **-0.3** |
| | 3.8nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **02 48 40.1** | **+4.0** |
| | 11nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **5.46** | **244** | Pg | **Pb** | **02 47 30.4** | **-0.3** |
| | 3.8nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 02 48 40.1 | |
| | 11nm,0.4s | | | | | | |
| **SEM** | **Semipalatinsk** | **5.66** | **327** | *e*P | **Pb** | **02 47 37.5** | **+3.3** |
| | 3.3nm,0.1s | | | | | | |
| SEM | | | | *e*S | **Sg** | **02 48 51.9** | **-4.9** |
| | 6.0nm,0.1s | | | | | | |
| **SEM** | **Semipalatinsk** | **5.66** | **327** | Pg | **Pb** | **02 47 37.5** | **+3.3** |
| | 3.3nm,0.1s | | | | | | |
| SEM | | | | Lg | Lg | 02 48 51.9 | |
| | 6.0nm,0.1s | | | | | | |
| **ARTR** | **Artybash** | **6.18** | **13** | Sg | **Sg** | **02 49 10.3** | **-3.3** |
| **MDOK** | **Medeo** | **6.34** | **248** | ⇑Lg | Lg | 02 49 09.7 | |
| | 6.4nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **6.36** | **254** | *e*P | **Pb** | **02 47 47.0** | **+1.0** |
| | 0.8nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **02 49 07.6** | **+5.5** |
| | 7.7nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **6.36** | **254** | Pg | **Pb** | **02 47 47.0** | **+1.0** |
| | 0.8nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 02 49 07.6 | |
| | 7.7nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.54** | **320** | ⇑Lg | Lg | 02 49 19.1 | |
| | 17nm,0.6s | | | | | | |
| **TASR** | **Tashtagol** | **7.21** | **13** | Pg | **Pg** | **02 48 12.2** | **-0.9** |
| TASR | | | | Sg | **Sg** | **02 49 43.0** | **-3.5** |
| **ELT** | **Eltsovka** | **7.52** | **5** | Pg | **Pg** | **02 48 17.4** | **-1.6** |
| ELT | | | | Sg | **Sg** | **02 49 54.3** | **-2.0** |

*IDC **23** 02:47:23.5±6.3, 20˚.28S×178˚.38W, h608km±75km, mb2.9/7, mb1 3.3/7, mb1mx3.1/21, mbtmp3.9/7, Error ellipse: s-maj=90.4km s-min=28.0km az=153.0*
**ISC 23 02:47:22.7**±1.5, **20.2S**×**178.4W**±0.4, **h600**km, **n9,**
σ**0**°**85**/10, **mb3.5/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **37.56** | **244** | P | **P** | **02 53 47.7** | **0.0** |
| | 1.6nm,0.9s,baz=83,slow=15,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **44.21** | **257** | P | **P** | **02 54 40.8** | **+0.5** |
| | 2.9nm,0.8s,baz=97,slow=7.3,SNR=34 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 56 11.8** | **+0.2** |
| | 0.4nm,0.5s,baz=99,slow=3.6,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.26** | **262** | P | **P** | **02 54 40.8** | **0.0** |
| | 1.1nm,0.4s,baz=98,slow=7.7,SNR=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.09** | **44** | P | **P** | **02 58 37.0** | **+0.2** |
| | 0.4nm,0.6s,baz=240,slow=7.2,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.23** | **57** | P | **P** | **02 59 07.2** | **+0.3** |
| | 0.5nm,0.8s,baz=205,slow=5.5,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **88.13** | **13** | P | **P** | **02 59 10.6** | **+0.4** |
| | 0.3nm,0.4s,baz=215,slow=5.3,SNR=6.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **89.02** | **43** | P | **P** | **02 59 15.1** | **-0.1** |
| | 0.3nm,0.6s,baz=0,slow=0.6,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.59** | **331** | PKP | **PKPdf** | **03 05 46.1** | **-2.1** |
| | 1.4nm,0.5s,baz=44,slow=4.4,SNR=13 | | | | | | |
| **GERES** | **GERESS Array B** | **149.83** | **344** | PKPbc | **PKiKP** | **03 06 06.8** | **+0.1** |
| | 0.3nm,0.3s,baz=22,slow=3.2,SNR=2.6 | | | | | | |

*IDC **23** 03:00:46.3±0.9, 27˚.35N×86˚.91E, h0km, mb3.7/11, mb1 3.8/13, mb1mx3.7/38, mbtmp3.7/13, ML3.9/1, Error ellipse: s-maj=32.2km s-min=18.7km az=58.0*
*DMN **23** 03:00:48.3±0.1, 27˚.47N×87˚.15E, h2km, Ml4.5/8, Error ellipse: s-maj=2.5km s-min=1.0km az=24.0*
**ISC 23 03:00:48.3**±1.1, **27.47N**±0.05×**87.14E**±0.03, **h10**km±8km,
**n26,** σ**0**°**97**/39, **mb3.6**/11, **Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAPN** | **Taplejung** | **0.52** | **103** | *e*Pg | **Pg** | **03 00 58.6** | **+0.1** |
| TAPN | | | | *e*Sg | **Sg** | **03 01 04.8** | **-0.7** |
| **ODAN** | **Odare** | **0.65** | **160** | *e*Pg | **Pg** | **03 01 00.9** | **0.0** |
| ODAN | | | | *e*Sg | **Sg** | **03 01 08.9** | **-0.6** |
| **RAMN** | **Ramite** | **0.71** | **223** | *e*Pg | **Pg** | **03 01 01.8** | **-0.2** |
| RAMN | | | | *e*Sg | **Sg** | **03 01 11.4** | **+0.1** |
| **JIRN** | **Jiri** | **0.86** | **283** | *e*Pg | **Pg** | **03 01 05.1** | **+0.1** |
| JIRN | | | | *e*Sg | **Sg** | **03 01 16.1** | **-0.3** |
| | 2μm,0.3s | | | | | | |
| **GUN** | **Gumba** | **1.20** | **292** | *e*Pg | **Pb** | **03 01 11.5** | **+0.1** |
| GUN | | | | *e*Sg | **Sg** | **03 01 27.7** | **+0.6** |
| | 563nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **1.54** | **274** | *e*Pg | **Pb** | **03 01 17.5** | **+0.3** |
| PKI | | | | *e*Sg | **Sg** | **03 01 38.0** | **+0.1** |
| | 678nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **1.55** | **274** | *e*Pg | **Pb** | **03 01 17.6** | **+0.3** |
| PKIN | | | | *e*Sg | **Sg** | **03 01 38.2** | **-0.1** |
| | 1μm,0.2s | | | | | | |
| **KKN** | **Kakani** | **1.68** | **281** | *e*Pg | **Pb** | **03 01 19.9** | **+0.4** |
| KKN | | | | *e*Sg | **Sg** | **03 01 42.2** | **-0.2** |
| | 466nm,0.2s | | | | | | |
| **DMN** | **Daman** | **1.81** | **275** | *e*Pg | **Pb** | **03 01 22.1** | **+0.3** |
| DMN | | | | *e*Sg | **Sg** | **03 01 46.2** | **-0.4** |
| | 674nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **2.28** | **284** | *e*Pg | **Pb** | **03 01 29.0** | **-0.7** |
| GKN | | | | *e*Sg | **Sb** | **03 01 59.7** | **+1.6** |
| | 563nm,0.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DANN** | **Dangsing** | **3.12** | **287** | *e*Pn | **Pn** | **03 01 39.0** | **+1.2** |
| DANN | | | | *e*Sg | **Sg** | **03 02 26.6** | **-1.9** |
| **KOLN** | **Koldanda** | **3.15** | **276** | *e*Pn | **Pn** | **03 01 39.9** | **+1.6** |
| KOLN | | | | *e*Sg | **Sg** | **03 02 27.7** | **-2.0** |
| | 275nm,0.2s | | | | | | |
| **PYUN** | **Piuthan** | **3.73** | **281** | *e*Pn | **Pn** | **03 01 47.4** | **+1.2** |
| PYUN | | | | *e*Sg | **Sg** | **03 02 46.0** | **-2.2** |
| **AAK** | **Ala-Archa** | **18.30** | **329** | P | **P** | **03 05 03.0** | **+0.4** |
| | baz=191,slow=9.0,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.66** | **350** | P | **Pn** | **03 05 18.9** | **+0.1** |
| | 0.4nm,0.3s,baz=174,slow=11,SNR=21 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.03** | **346** | P | **P** | **03 06 04.0** | **+0.7** |
| | 0.8nm,0.7s,baz=171,slow=10,SNR=7.3 | | | | | | |
| **SONM** | **Songino Array** | **25.28** | **31** | P | **P** | **03 06 16.4** | **+1.4** |
| | 1.4nm,0.6s,baz=219,slow=9.8,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.51** | **357** | P | **P** | **03 06 26.4** | **+0.6** |
| | 0.6nm,0.6s,baz=185,slow=8.9,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **52.48** | **328** | P | **P** | **03 10 01.1** | **0.0** |
| | 1.2nm,0.8s,baz=104,slow=8.0,SNR=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **59.60** | **327** | P | **P** | **03 10 50.6** | **-1.6** |
| | 0.8nm,0.9s,baz=90,slow=6.7,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.65** | **131** | P | **P** | **03 11 33.5** | **+0.5** |
| | 0.8nm,0.7s,baz=324,slow=6.6,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **67.98** | **134** | P | **P** | **03 11 48.3** | **+0.4** |
| | 0.1nm,0.3s,baz=315,slow=5.8,SNR=4.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **73.82** | **307** | P | **P** | **03 12 21.7** | **-1.7** |
| | 0.5nm,0.7s,baz=61,slow=4.7,SNR=4.9 | | | | | | |
| **ILAR** | **Eielson Array** | **79.00** | **21** | P | **P** | **03 12 52.1** | **-0.1** |
| | 0.3nm,0.6s,baz=307,slow=4.2,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.07** | **280** | P | **P** | **03 12 58.0** | **-0.9** |
| | 0.7nm,0.9s,baz=87,slow=4.5,SNR=2.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.67** | **10** | P | **P** | **03 13 41.1** | **-0.5** |
| | 0.2nm,0.5s,baz=337,slow=4.3,SNR=3.9 | | | | | | |

*EAF **23** 03:04:08.4±5.0, 0˚.43N×29˚.78E, h6km±33km, MD3.6*
*ECGS **23** 03:04:23.0, 0˚.6S±0˚.2×29˚.7E±0˚.2, h40km±9km, ML2.6, Error ellipse: s-maj=41.3km s-min=22.2km az=22.3, smi:local/08ab9c49-885a-4a2c-94fd-e3c6572c1830 Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX 123.556 Y 206.36 Z 25.0516 CovXX 289.968 XY 185.371 XZ -21.3611 YY 666.796 YZ -23.6365 ZZ 90.7444 EllAz1 84.244 Dip1 84.4316 Len1 17.6691 Az2 292.546 Dip2 4.90622 Len2 27.5487 Len3 5.125009e+01*
**ISC 23 03:04:11.2**±1.2, **0.05N**±0˚.04×**30˚.06E**±0˚.06, **h10**km, **n16,**
σ**0**°**67**/17, **Uganda**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KIL** | **Kilembe** | **0.15** | **342** | *e*P | **Pg** | **03 04 14.6** | **-0.1** |
| KIL | | | | *e*S | **Sg** | **03 04 17.4** | **+0.2** |
| **MBAR** | **Mbarara** | **0.94** | **134** | *i* P | Pn | 03 04 41.7 | +11 |
| **MBAR** | **Mbarara** | **0.94** | **134** | *e*P | **Pg** | **03 04 29.1** | **-0.3** |
| MBAR | | | | *e*S | **Sg** | **03 04 41.8** | **+0.1** |
| **TGO** | **Tongo** | **1.48** | **212** | *i* P | Pn | **03 04 37.8** | **-0.3** |
| **RGB** | **Rumangabo** | **1.55** | **206** | *i* P | **Pg** | **03 04 40.6** | **-0.4** |
| **RGB** | **Rumangabo** | **1.55** | **206** | *i* S | **Sg** | **03 05 02.9** | **+1.7** |
| **KTSH** | **Kitshanga** | **1.63** | **218** | *i* P | Pn | **03 04 40.0** | **-0.2** |
| **SAHA** | **Sahara** | **1.68** | **198** | *i* P | Pn | **03 04 40.7** | **-0.3** |
| **BUTK** | **Butaka** | **1.72** | **203** | *i* P | Pn | **03 04 41.6** | **+0.2** |
| **BUTK** | **Butaka** | **1.72** | **203** | *i* S | Sb | **03 05 04.4** | **-0.4** |
| **GOM** | **Goma** | **1.91** | **206** | *i* S | **Sg** | **03 05 12.3** | **-0.5** |
| **GOM** | **Goma** | **1.91** | **206** | *i* P | Pn | **03 04 44.6** | **+0.6** |
| **BOBN** | **Bobandana** | **2.04** | **211** | *i* P | Pn | **03 04 44.9** | **-0.9** |
| **IDJ** | **Idjwi** | **2.33** | **205** | *i* P | Pn | **03 04 49.8** | **0.0** |
| **LWI** | **Lwiro** | **2.60** | **209** | *i* P | Pn | **03 04 53.7** | **+0.2** |
| **BUJA** | **Bujumbura/Buru** | **3.49** | **191** | *i* P | Pn | **03 05 06.8** | **+1.1** |

*EAF **23** 03:05:35.7±1.5, 28˚.14S×26˚.89E, h24km±17km, MD3.7*
*PRE **23** 03:05:36.5±0.8, 27˚.78S×26˚.67E, h2km, ML2.5*
**ISC 23 03:05:32.3**±1.1, **28.03S**±0˚.05×**26.94E**±0˚.04, **h7**km, **n13,**
σ**2**°**36**/26, **2D, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRYS** | **Parys** | **1.16** | **19** | *e*P | **Pn** | **03 05 56.8** | **+1.8** |
| PRYS | | | | *e*S | **Sn** | **03 06 11.7** | **+0.4** |
| PRYS | | | | IAML | | 03 06 15.5 | |
| | comp=Z,158nm,0.3s | | | | | | |
| **BOSA** | **Boshof** | **1.60** | **248** | *i* P | **Pb** | **03 06 01.1** | **-1.1** |
| BOSA | | | | *i* S | **Sn** | **03 06 20.5** | **-1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PFO** | **Pinyon Flats O** | **1.09** | **190** | Pg | | **Pg** | **03 07 05.2** | **-0.8** |
| PFO | | | | IAML | | | 03 07 23.6 | |
| | 858nm,0.4s | | | | | | | |
| PFO | | | | IAML | | | 03 07 24.9 | |
| | 383nm,0.7s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.09** | **190** | P | | **Pg** | **03 07 05.3** | **-0.7** |
| | baz=9.6,SNR=231 | | | | | | | |
| PFO | | | | S | | **Sg** | **03 07 20.4** | **+0.2** |
| | baz=9.6 | | | | | | | |
| **BC3** | **Big Chuckawall** | **1.21** | **148** | P | | **Pg** | **03 07 07.8** | **-0.5** |
| | baz=328,SNR=78 | | | | | | | |
| BC3 | | | | S | | **Sb** | **03 07 24.9** | **+0.7** |
| | baz=328 | | | | | | | |
| **NEE2** | **Needles Airpor** | **1.32** | **86** | Pb | | **Pn** | **03 07 09.8** | **-0.1** |
| | baz=267,SNR=36 | | | | | | | |
| NEE2 | | | | S | | **Sb** | **03 07 27.7** | **+0.4** |
| | baz=267 | | | | | | | |
| **MURC** | **Murrieta** | **1.35** | **217** | Pb | | **Pn** | **03 07 09.9** | **-0.4** |
| | baz=36,SNR=60 | | | | | | | |
| **QSM** | **Queen of Sheba** | **1.38** | **338** | | | **Pn** | **03 07 09.5** | **-1.2** |
| QSM | | | | IAML | | | 03 07 30.5 | |
| | comp=E,437nm,0.3s | | | | | | | |
| QSM | | | | IAML | | | 03 07 33.2 | |
| | comp=N,634nm,0.4s | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.43** | **304** | P | | **Pn** | **03 07 10.4** | **-1.1** |
| | baz=123,SNR=98 | | | | | | | |
| LRMC | | | | Sg | | **Sg** | **03 07 31.6** | **+0.5** |
| | baz=123 | | | | | | | |
| **ELS** | **Elsinore Mount** | **1.44** | **224** | | | **Pn** | **03 07 11.0** | **-0.5** |
| **EDW2** | **Edwards Air Fo** | **1.47** | **278** | P | | **Pn** | **03 07 10.7** | **-1.3** |
| | baz=97,SNR=45 | | | | | | | |
| **GWY** | **Greenwater Val** | **1.54** | **346** | | | **Pn** | **03 07 11.5** | **-1.5** |
| **CCAC** | **Calif City Air** | **1.54** | **288** | | | **Pn** | **03 07 11.7** | **-1.3** |
| CCAC | | | | IAML | | | 03 07 35.6 | |
| | comp=E,506nm,0.5s | | | | | | | |
| CCAC | | | | IAML | | | 03 07 41.6 | |
| | comp=N,562nm,0.9s | | | | | | | |
| **BLYC** | **Blythe** | **1.69** | **123** | Pn | | **Pn** | **03 07 13.6** | **-1.4** |
| **PASC** | **Pasadena Art C** | **1.70** | **253** | | | **Pn** | **03 07 15.0** | **-0.1** |
| PASC | | | | IAML | | | 03 07 40.6 | |
| | comp=E,224nm,0.4s | | | | | | | |
| PASC | | | | IAML | | | 03 07 40.8 | |
| | comp=N,294nm,1.0s | | | | | | | |
| **MPMC** | **Manual Prospec** | **1.71** | **323** | P | | **Pn** | **03 07 14.3** | **-1.1** |
| | baz=143,SNR=93 | | | | | | | |
| **DECC** | **Green Verdugo** | **1.80** | **257** | Sg | | **Sg** | **03 07 43.8** | **+1.0** |
| | baz=75 | | | | | | | |
| **MONP2** | **Monument Peak** | **1.80** | **185** | P | | **Pn** | **03 07 15.8** | **-0.8** |
| | baz=4.8 | | | | | | | |
| **FURC** | **Furnace Creek,** | **1.85** | **344** | Sb | | **Sg** | **03 07 43.7** | **-0.8** |
| | baz=164 | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.94** | **203** | Pn | | **Pn** | **03 07 19.0** | **+0.7** |
| 109C | | | | IAML | | | 03 07 46.4 | |
| | comp=N,181nm,0.2s | | | | | | | |
| 109C | | | | IAML | | | 03 07 52.5 | |
| | comp=E,184nm,0.8s | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.94** | **203** | Pb | | **Pb** | **03 07 20.1** | **-0.5** |
| | baz=22,SNR=7.7 | | | | | | | |
| 109C | | | | Sb | | **Sb** | **03 07 45.7** | **+0.7** |
| | baz=22 | | | | | | | |
| **W13A** | **Hualapai Mount** | **1.96** | **77** | | | **Pn** | **03 07 17.9** | **-1.0** |
| W13A | | | | IAML | | | 03 07 48.6 | |
| | comp=N,176nm,1.1s | | | | | | | |
| W13A | | | | IAML | | | 03 07 56.5 | |
| | comp=E,151nm,0.6s | | | | | | | |
| **GLA** | **Glamis** | **2.00** | **144** | | | **Pn** | **03 07 18.0** | **-1.3** |
| **GLA** | **Glamis** | **2.00** | **144** | P | | **Pn** | **03 07 18.1** | **-1.1** |
| | baz=325,SNR=36 | | | | | | | |
| GLA | | | | Sb | | **Sg** | **03 07 48.8** | **-0.6** |
| | baz=325 | | | | | | | |
| **SHPR** | **Sheep Range** | **2.01** | **25** | | | **Pn** | **03 07 18.8** | **-0.7** |
| **IKP** | **In-Ko-Pah, Jac** | **2.03** | **177** | P | | **Pn** | **03 07 18.9** | **-0.9** |
| | baz=357,SNR=9.1 | | | | | | | |
| **BAR** | **Barrett** | **2.04** | **191** | Pn | | **Pn** | **03 07 20.2** | **+0.5** |
| BAR | | | | IAML | | | 03 07 52.5 | |
| | comp=E,221nm,0.9s | | | | | | | |
| BAR | | | | IAML | | | 03 07 53.0 | |
| | comp=N,119nm,0.6s | | | | | | | |
| **YUH** | **Yuha Desert** | **2.05** | **173** | | | **Pn** | **03 07 20.3** | **+0.5** |
| **OSI** | **Osito Audit: C** | **2.06** | **269** | Pb | | **Pb** | **03 07 22.2** | **-0.6** |
| | baz=87,SNR=9.9 | | | | | | | |
| **RMX** | **La Rumorosa** | **2.08** | **177** | Pn | | **Pn** | **03 07 21.5** | **+1.1** |
| **ISA** | **Isabella, Lake** | **2.08** | **298** | | | **Pn** | **03 07 19.2** | **-1.2** |
| ISA | | | | IAML | | | 03 07 53.3 | |
| | comp=N,110nm,0.7s | | | | | | | |
| **ISA** | **Isabella, Lake** | **2.08** | **298** | Pg | | **Pb** | **03 07 23.6** | **+0.4** |
| | baz=117,SNR=62 | | | | | | | |
| **ARVC** | **Arvin** | **2.19** | **282** | Pg | | **Pb** | **03 07 25.5** | **+0.6** |
| | baz=101,SNR=19 | | | | | | | |
| **CIS** | **Catalina Islan** | **2.23** | **235** | Pb | | **Pb** | **03 07 25.0** | **-0.6** |
| | baz=54 | | | | | | | |
| CIS | | | | Sb | | **Sb** | **03 07 54.0** | **+0.7** |
| | baz=54 | | | | | | | |
| **TPNV** | **Topopah Spring** | **2.26** | **359** | | | **Pn** | **03 07 23.1** | **+0.2** |
| **TPNV** | **Topopah Spring** | **2.26** | **359** | Pg | | **Pg** | **03 07 27.5** | **-0.8** |
| | baz=180 | | | | | | | |
| **CWC** | **Cottonwood Cre** | **2.31** | **320** | Pb | | **Pb** | **03 07 27.0** | **-0.2** |
| | baz=139 | | | | | | | |
| **CBX** | **Cerro Bola** | **2.40** | **189** | | | **Pn** | **03 07 24.9** | **+0.1** |
| CBX | | | | IAML | | | 03 08 04.2 | |
| | comp=N,80nm,0.7s | | | | | | | |
| CBX | | | | IAML | | | 03 08 04.8 | |
| | comp=E,146nm,1.0s | | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.48** | **338** | Pn | | **Pn** | **03 07 26.0** | **+0.1** |
| GRAC | | | | IAML | | | 03 08 07.0 | |
| | comp=N,196nm,1.0s | | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.64** | **276** | Pn | | **Pn** | **03 07 28.9** | **+0.9** |
| BCW | | | | IAML | | | 03 08 18.4 | |
| | comp=E,160nm,0.8s | | | | | | | |
| **Y14A** | **Wickenburg** | **2.77** | **105** | | | **Pn** | **03 07 28.8** | **-1.0** |
| Y14A | | | | IAML | | | 03 08 21.0 | |
| | comp=E,134nm,0.6s | | | | | | | |
| **LCH** | **Last Change Ra** | **2.79** | **336** | | | **Pn** | **03 07 29.9** | **-0.3** |
| LCH | | | | IAML | | | 03 08 18.8 | |
| | comp=E,55nm,0.9s | | | | | | | |
| **113A** | **Mohawk Valley,** | **2.80** | **132** | | | **Pn** | **03 07 30.8** | **+0.6** |
| 113A | | | | IAML | | | 03 08 16.4 | |
| | comp=N,104nm,0.7s | | | | | | | |
| 113A | | | | IAML | | | 03 08 22.3 | |
| | comp=E,60nm,0.7s | | | | | | | |
| **PRN** | **Pahroc Range** | **2.88** | **19** | | | **Pn** | **03 07 31.5** | **+0.1** |
| PRN | | | | IAML | | | 03 08 29.1 | |
| | comp=E,111nm,0.9s | | | | | | | |
| PRN | | | | IAML | | | 03 08 31.2 | |
| | comp=N,88nm,0.9s | | | | | | | |
| **S11A** | **Rachel** | **2.98** | **7** | Pn | | **Pn** | **03 07 32.9** | **+0.1** |
| **SMMC** | **Simmler** | **3.16** | **282** | Pb | | **Pb** | **03 07 41.4** | **-0.1** |
| | baz=100,SNR=7.7 | | | | | | | |
| **LCMT** | **Little Creek M** | **3.35** | **45** | | | **Pn** | **03 07 38.0** | **+0.1** |
| **PAGB** | **Antelope Grade** | **3.46** | **289** | Pn | | **Pn** | **03 07 39.2** | **0.0** |
| PAGB | | | | IAML | | | 03 08 45.8 | |
| | comp=E,54nm,3.3s | | | | | | | |
| PAGB | | | | IAML | | | 03 08 53.9 | |
| | comp=N,46nm,2.7s | | | | | | | |
| **KNB** | **Kanab** | **3.61** | **49** | Pn | | **Pn** | **03 07 41.7** | **+0.2** |
| KNB | | | | IAML | | | 03 08 45.6 | |
| | comp=N,48nm,1.1s | | | | | | | |
| KNB | | | | IAML | | | 03 08 54.8 | |
| | comp=E,36nm,1.0s | | | | | | | |
| **U15A** | **North Rim** | **3.65** | **60** | | | **Pn** | **03 07 42.2** | **+0.1** |
| U15A | | | | IAML | | | 03 08 50.2 | |
| | comp=E,56nm,1.1s | | | | | | | |
| U15A | | | | IAML | | | 03 08 51.1 | |
| | comp=N,69nm,0.8s | | | | | | | |
| **CCUT** | **Cedar City** | **3.68** | **38** | Pn | | **Pn** | **03 07 42.5** | **+0.1** |
| **R11A** | **Troy Canyon, C** | **3.69** | **8** | | | **Pn** | **03 07 42.2** | **-0.4** |
| **SZCU** | **Shurtz Canyon** | **3.85** | **40** | Pn | | **Pn** | **03 07 45.0** | **+0.2** |
| **214A** | **Organ Pipe Nat** | **3.95** | **133** | P | | **Pn** | **03 07 44.6** | **-1.3** |
| | baz=315 | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **3.96** | **93** | | | **Pn** | **03 07 46.0** | **-0.2** |
| X16A | | | | IAML | | | 03 09 02.1 | |
| | comp=E,40nm,0.9s | | | | | | | |
| X16A | | | | IAML | | | 03 09 07.1 | |
| | comp=N,42nm,1.2s | | | | | | | |
| **LHV** | **Little Huntoon** | **4.00** | **333** | | | **Pn** | **03 07 47.2** | **+0.6** |
| LHV | | | | IAML | | | 03 09 02.5 | |
| | comp=N,38nm,1.7s | | | | | | | |
| LHV | | | | IAML | | | 03 09 05.6 | |
| | comp=E,35nm,4.9s | | | | | | | |
| **NV11** | **Mina Array Sit** | **4.05** | **338** | Pn | | **Pn** | **03 07 48.3** | **+0.8** |
| **WUAZ** | **Wupatki** | **4.06** | **77** | Pn | | **Pn** | **03 07 48.9** | **+1.2** |
| **NVAR** | **Mina Array Bea** | **4.09** | **336** | Pn | | **Pn** | **03 07 49.3** | **+1.1** |
| **PSUT** | **Pine Spring** | **4.29** | **26** | Pn | | **Pn** | **03 07 51.3** | **+0.5** |
| PSUT | | | | IAML | | | 03 09 12.6 | |
| | comp=N,25nm,1.3s | | | | | | | |
| PSUT | | | | IAML | | | 03 09 15.2 | |
| | comp=E,22nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **4.61** | **341** | Pn | | **Pn** | **03 07 55.6** | **+0.4** |
| **TUC** | **Tucson** | **5.12** | **116** | P | | **Pn** | **03 08 01.1** | **-1.1** |
| | baz=299 | | | | | | | |
| **PNTR** | **Pine Nut** | **5.16** | **329** | Pn | | **Pn** | **03 08 02.9** | **0.0** |
| **W18A** | **Petrified Fore** | **5.35** | **84** | Pn | | **Pn** | **03 08 05.3** | **-0.1** |

**IDC 23 03:13:18.7±999.0, 22°70N×66°01E, h0km, Error ellipse: s-maj=2175.0km s-min=408.7km az=34.0, Off coast of Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **34.29** | **20** | *i* | | 06 41 20.0 | |
| | baz=211,slow=331,SNR=0.5 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **40.76** | **42** | *i* | | 07 24 30.0 | |
| | baz=246,slow=337,SNR=1.4 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **57.52** | **51** | *i* | | 09 05 10.0 | |
| | baz=271,slow=340,SNR=2.1 | | | | | | |

*ANF **23** 03:19:52.2±0.1,34.°69N×116.°24W,h12km±1km,ML4.4/35, ML4.4/35,Error ellipse: s-maj=1.0km s-min=0.8km az=54.0*

*IDC **23** 03:19:52.2±0.6,34.°65N×116.°18W,h0km,mb3.7/3, mb1 3.9/8,mb1mx3.7/45,mbtmp3.6/8,ML3.4/4,MS3.4/19, Ms1 3.4/19,ms1mx3.1/86,Error ellipse: s-maj=11.1km s-min=5.8km az=89.0*

*NEIC **23** 03:19:52.5±1.2,34.°67N±0.°04×116.°26W±0.°04,h3km±7km, Error ellipse: s-maj=5.5km s-min=4.6km az=221.0*

*PAS **23** 03:19:52.9±1.1,34.°69N±0.°03×116.°24W±0.°05,h2km±6km, Mwr4.1/6,mb4.1/7(NEIC),ML4.1/112(NEIC),Error ellipse: s-maj=5.9km s-min=3.6km az=112.0*

*NEIC **23** 03:19:52.9,34.°69N×116.°24W,h5km,Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=1.51; $M_{\theta\theta}$0.59; $M_{\phi\phi}$0.92; $M_{r\theta}$-0.40; $M_{\theta\phi}$1.12; $M_{r\phi}$0.25; Fault plane solution: $M_0$1.78000×$10^{15}$ NP1:$\phi_s$202.00000°, δ47.00000°,λ-117.00000°. NP2:$\phi_s$59.00000°,δ49.00000°, λ-64.00000°. Principal axes: T 1.8889, Plg1.0000°, Azm131.0000°; N -0.2092, Plg20.0000°, Azm221.0000°; P -1.6797, Plg70.0000°, Azm38.0000°:*

**ISC 23 03:19:52.8±1.1,34.°67N±0.°02×116.°24W±0.°02,h4km±8km, n149,σ0.°96/160,mb3.9/5,MS3.4/11,Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HEC** | **Hector,Ludlow** | **0.17** | **333** | P | **Pg** | **03 19 56.0** | **-0.3** |
| | baz=151,SNR=1000 | | | | | | |
| HEC | | | | S | **Sg** | **03 19 58.6** | **0.0** |
| | baz=151 | | | | | | |
| **GMRC** | **Granite Mounta** | **0.49** | **77** | P | **Pg** | **03 20 02.2** | **0.0** |
| | baz=260,SNR=1000 | | | | | | |
| GMRC | | | | S | **Sg** | **03 20 08.9** | **+0.3** |
| | baz=260 | | | | | | |
| **RRX** | **Edison Barstow** | **0.66** | **288** | P | **Pg** | **03 20 05.3** | **-0.1** |
| | baz=106,SNR=239 | | | | | | |
| RRX | | | | S | **Sg** | **03 20 14.2** | **+0.3** |
| | baz=106 | | | | | | |
| **BBRC** | **Big Bear Solar** | **0.70** | **234** | P | **Pg** | **03 20 06.3** | **+0.1** |
| | baz=52,SNR=1000 | | | | | | |
| BBRC | | | | S | **Sg** | **03 20 16.1** | **+0.8** |
| | baz=52 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **0.70** | **163** | P | **Pg** | **03 20 06.5** | **+0.3** |
| | baz=344,SNR=1000 | | | | | | |
| BELC | | | | S | **Sg** | **03 20 16.2** | **+0.9** |
| | baz=344 | | | | | | |
| **GSC** | **Goldstone, Bar** | **0.78** | **323** | | **Pg** | **03 20 07.5** | **-0.3** |
| GSC | | | | Sg | **Sg** | **03 20 17.5** | **-0.5** |
| GSC | | | | IAML | | 03 20 21.4 | |
| | comp=N,13μm,0.8s | | | | | | |
| **GSC** | **Goldstone, Bar** | **0.78** | **323** | P | **Pg** | **03 20 07.5** | **-0.3** |
| | baz=143,SNR=1000 | | | | | | |
| GSC | | | | S | **Sg** | **03 20 18.1** | **+0.1** |
| | baz=143 | | | | | | |
| **TUQ** | **Turquoise Moun** | **0.80** | **19** | P | **Pg** | **03 20 07.7** | **-0.5** |
| | baz=200,SNR=601 | | | | | | |
| TUQ | | | | S | **Sg** | **03 20 18.6** | **-0.1** |
| | baz=200 | | | | | | |
| **IRM** | **Iron Mountain** | **1.04** | **119** | P | **Pg** | **03 20 12.2** | **-0.5** |
| | baz=301,SNR=1000 | | | | | | |
| IRM | | | | S | **Sg** | **03 20 26.6** | **+0.3** |
| | baz=301 | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.07** | **190** | Pg | **Pg** | **03 20 13.1** | **-0.4** |
| | comp=N,302nm,0.3s,baz=9.0,slow=14,SNR=1256 | | | | | | |
| PFO | | | | Lg | Lg | 03 20 27.6 | |
| | comp=N,757nm,0.3s,baz=136,slow=19,SNR=37 | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.07** | **190** | | **Pg** | **03 20 13.1** | **-0.4** |
| PFO | | | | IAML | | 03 20 31.3 | |
| | comp=N,5μm,0.5s | | | | | | |
| PFO | | | | IAML | | 03 20 31.6 | |
| | comp=N,3μm,0.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.07** | **190** | P | **Pg** | **03 20 13.1** | **-0.4** |
| | baz=9.3,SNR=987 | | | | | | |
| PFO | | | | S | **Sg** | **03 20 27.4** | **+0.1** |
| | baz=9.3 | | | | | | |
| **RSBC** | **Riverside Bore** | **1.14** | **233** | | **Pb** | **03 20 14.2** | **-1.0** |
| **BC3** | **Big Chuckawall** | **1.21** | **147** | P | **Pb** | **03 20 14.9** | **-1.4** |
| | baz=328,SNR=771 | | | | | | |
| BC3 | | | | S | **Sg** | **03 20 32.1** | **+0.5** |
| | baz=328 | | | | | | |
| **MURC** | **Murrieta** | **1.33** | **217** | Pb | **Pn** | **03 20 17.5** | **-0.8** |
| | baz=36,SNR=372 | | | | | | |
| MURC | | | | S | **Sb** | **03 20 35.5** | **-0.4** |
| | baz=36 | | | | | | |
| **NEE2** | **Needles Airpor** | **1.34** | **86** | P | **Pn** | **03 20 16.2** | **-2.1** |
| | baz=267,SNR=218 | | | | | | |
| NEE2 | | | | S | **Sb** | **03 20 35.6** | **-0.4** |
| | baz=267 | | | | | | |
| **QSM** | **Queen of Sheba** | **1.39** | **338** | | **Pn** | **03 20 17.2** | **-1.8** |
| QSM | | | | IAML | | 03 20 41.1 | |
| | comp=N,4μm,0.9s | | | | | | |
| QSM | | | | IAML | | 03 20 42.8 | |
| | comp=E,4μm,0.9s | | | | | | |
| **ELS** | **Elsinore Mount** | **1.42** | **224** | | **Pn** | **03 20 18.9** | **-0.6** |
| **LRMC** | **Laurel Mtn Rad** | **1.43** | **305** | P | **Pn** | **03 20 18.2** | **-1.5** |
| | baz=123,SNR=858 | | | | | | |
| LRMC | | | | S | **Sn** | **03 20 37.1** | **-2.0** |
| | baz=123 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **1.46** | **279** | P | **Pn** | **03 20 18.0** | **-2.0** |
| | baz=97,SNR=382 | | | | | | |
| EDW2 | | | | S | **Sn** | **03 20 38.4** | **-1.3** |
| | baz=97 | | | | | | |
| **CCAC** | **Calif City Air** | **1.54** | **289** | | **Pn** | **03 20 19.3** | **-1.8** |
| CCAC | | | | IAML | | 03 20 52.2 | |
| | comp=E,4μm,1.0s | | | | | | |
| **GWY** | **Greenwater Val** | **1.55** | **347** | | **Pn** | **03 20 19.4** | **-2.0** |
| **PASC** | **Pasadena Art C** | **1.69** | **253** | | **Pn** | **03 20 22.0** | **-1.1** |
| PASC | | | | IAML | | 03 20 49.9 | |
| | comp=E,1μm,0.5s | | | | | | |
| **BLYC** | **Blythe** | **1.69** | **122** | Pn | **Pn** | **03 20 21.1** | **-2.1** |
| BLYC | | | | IAML | | 03 20 49.3 | |
| | comp=E,3μm,0.6s | | | | | | |
| BLYC | | | | IAML | | 03 20 50.4 | |
| | comp=N,4μm,0.6s | | | | | | |
| **MPMC** | **Manual Prospec** | **1.72** | **324** | P | **Pn** | **03 20 22.0** | **-1.7** |
| | baz=143,SNR=1000 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **1.76** | **168** | P | **Pn** | **03 20 22.3** | **-1.9** |
| | baz=348,SNR=60 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **1.77** | **101** | P | **Pn** | **03 20 22.6** | **-1.7** |
| | baz=283 | | | | | | |
| **DECC** | **Green Verdugo** | **1.78** | **257** | Pb | **Pb** | **03 20 25.5** | **-0.6** |
| **MONP2** | **Monument Peak** | **1.78** | **185** | P | **Pn** | **03 20 23.5** | **-1.1** |
| | baz=4.7,SNR=117 | | | | | | |
| MONP2 | | | | S | **Sn** | **03 20 47.0** | **-0.9** |
| | baz=4.7 | | | | | | |
| **FURC** | **Furnace Creek,** | **1.86** | **344** | Pb | **Pn** | **03 20 25.9** | **+0.4** |
| | baz=164 | | | | | | |
| FURC | | | | Sb | **Sb** | **03 20 51.4** | **+0.4** |
| | baz=164 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.92** | **202** | Pn | **Pn** | **03 20 26.4** | **+0.1** |
| 109C | | | | IAML | | 03 20 56.3 | |
| | comp=E,1μm,1.1s | | | | | | |
| **109C** | **Camp Elliot, M** | **1.92** | **202** | Pb | **Pb** | **03 20 27.4** | **-1.0** |
| | baz=21 | | | | | | |
| 109C | | | | Sb | **Sb** | **03 20 52.5** | **-0.2** |
| | baz=21 | | | | | | |
| **FMP** | **Fort Macarthur** | **1.96** | **241** | Pg | **Pb** | **03 20 29.5** | **+0.5** |
| | baz=59 | | | | | | |
| FMP | | | | Sb | **Sb** | **03 20 54.3** | **+0.5** |
| | baz=59 | | | | | | |
| **W13A** | **Hualapai Mount** | **1.98** | **77** | Pn | **Pn** | **03 20 25.9** | **-1.5** |
| W13A | | | | IAML | | 03 20 56.6 | |
| | comp=N,2μm,1.1s | | | | | | |
| W13A | | | | IAML | | 03 21 01.2 | |
| | comp=E,2μm,0.8s | | | | | | |
| **GLA** | **Glamis** | **2.00** | **144** | | **Pn** | **03 20 25.4** | **-2.0** |
| **GLA** | **Glamis** | **2.00** | **144** | P | **Pn** | **03 20 25.4** | **-2.0** |
| | baz=325,SNR=298 | | | | | | |
| GLA | | | | Sb | **Sb** | **03 20 56.1** | **+1.1** |
| | baz=325 | | | | | | |
| **BAR** | **Barrett** | **2.02** | **190** | | **Pn** | **03 20 26.9** | **-0.8** |
| BAR | | | | IAML | | 03 21 00.4 | |
| | comp=E,1μm,1.2s | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **2.02** | **177** | P | **Pn** | **03 20 26.6** | **-1.2** |
| | baz=357,SNR=81 | | | | | | |
| IKP | | | | Sb | **Sb** | **03 20 56.8** | **+1.1** |
| | baz=357 | | | | | | |
| **SHPR** | **Sheep Range** | **2.03** | **25** | | **Pn** | **03 20 26.7** | **-1.3** |
| SHPR | | | | IAML | | 03 21 01.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **YUH** | **Yuha Desert** | **2.04** | **173** | | **Pn** | **03 20 26.4** | **-1.5** |
| **OSI** | **Osito Audit: C** | **2.05** | **269** | P | **Pn** | **03 20 26.5** | **-1.6** |
| | baz=87 | | | | | | |
| **RMX** | **La Rumorosa** | **2.07** | **176** | | **Pn** | **03 20 28.1** | **-0.4** |
| **ISA** | **Isabella, Lake** | **2.08** | **299** | Pn | **Pn** | **03 20 26.8** | **-1.8** |
| **ISA** | **Isabella, Lake** | **2.08** | **299** | P | **Pn** | **03 20 27.0** | **-1.6** |
| | baz=117,SNR=661 | | | | | | |
| ISA | | | | Sb | **Sb** | **03 20 57.6** | **+0.1** |
| | baz=117 | | | | | | |
| **TKX** | **Tecate** | **2.12** | **188** | Pn | **Pn** | **03 20 29.4** | **+0.2** |
| TKX | | | | IAML | | 03 21 00.4 | |
| | comp=E,2μm,0.6s | | | | | | |
| **ARVC** | **Arvin** | **2.18** | **283** | P | **Pn** | **03 20 28.7** | **-1.2** |
| | baz=101 | | | | | | |
| **CIS** | **Catalina Islan** | **2.21** | **236** | Pg | **Pb** | **03 20 34.2** | **+0.9** |
| | baz=54 | | | | | | |
| CIS | | | | Sb | **Sb** | **03 21 01.3** | **+0.2** |
| | baz=54 | | | | | | |
| **TJX** | **Tijuana** | **2.26** | **198** | Pn | **Pn** | **03 20 31.5** | **+0.4** |
| **TPNV** | **Topopah Spring** | **2.27** | **360** | | **Pn** | **03 20 30.3** | **-1.0** |
| TPNV | | | | IAML | | 03 21 08.5 | |
| | comp=E,865nm,0.9s | | | | | | |
| TPNV | | | | IAML | | 03 21 10.6 | |
| | comp=E,815nm,0.8s | | | | | | |
| **TPNV** | **Topopah Spring** | **2.27** | **360** | P | **Pn** | **03 20 30.1** | **-1.2** |
| | baz=180,SNR=40 | | | | | | |
| TPNV | | | | Sb | **Sb** | **03 21 03.6** | **+0.6** |
| | baz=180 | | | | | | |
| **CBX** | **Cerro Bola** | **2.38** | **189** | | **Pn** | **03 20 32.5** | **-0.3** |
| CBX | | | | IAML | | 03 21 12.1 | |
| | comp=N,798nm,0.7s | | | | | | |
| CBX | | | | IAML | | 03 21 16.4 | |
| | comp=E,1μm,0.9s | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.49** | **339** | | **Pn** | **03 20 33.4** | **-0.9** |
| GRAC | | | | IAML | | 03 21 14.5 | |
| | comp=N,2μm,0.9s | | | | | | |
| **VES** | **Vestal, Richgr** | **2.60** | **297** | P | **Pn** | **03 20 34.6** | **-1.1** |
| | baz=116,SNR=23 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.63** | **277** | | **Pn** | **03 20 34.2** | **-2.0** |
| BCW | | | | IAML | | 03 21 25.6 | |
| | comp=E,1μm,1.1s | | | | | | |
| BCW | | | | IAML | | 03 21 29.1 | |
| | comp=N,1μm,1.6s | | | | | | |
| **Y14A** | **Wickenburg** | **2.77** | **104** | | **Pn** | **03 20 36.7** | **-1.4** |
| Y14A | | | | IAML | | 03 21 24.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| **LCH** | **Last Change Ra** | **2.80** | **336** | | **Pn** | **03 20 37.9** | **-0.7** |
| **113A** | **Mohawk Valley,** | **2.80** | **132** | Pn | **Pn** | **03 20 36.2** | **-2.3** |
| 113A | | | | IAML | | 03 21 24.4 | |
| | comp=N,619nm,0.6s | | | | | | |
| 113A | | | | IAML | | 03 21 31.7 | |
| | comp=E,504nm,1.1s | | | | | | |
| **CCX** | **Cicese** | **2.82** | **187** | Pn | **Pn** | **03 20 39.1** | **+0.4** |
| CCX | | | | IAML | | 03 21 29.0 | |
| | comp=E,641nm,1.1s | | | | | | |
| CCX | | | | IAML | | 03 21 33.1 | |
| | comp=N,412nm,1.2s | | | | | | |
| **PRN** | **Pahroc Range** | **2.89** | **19** | Pn | **Pn** | **03 20 39.4** | **-0.5** |
| PRN | | | | IAML | | 03 21 39.2 | |
| | comp=N,987nm,0.9s | | | | | | |
| **S11A** | **Rachel** | **2.99** | **7** | | **Pn** | **03 20 41.1** | **-0.1** |
| **VOG** | **Valley Oaks Go** | **3.05** | **304** | P | **Pn** | **03 20 40.9** | **-0.9** |
| | baz=122 | | | | | | |
| **SNCC** | **San Nicolas Is** | **3.08** | **243** | Pn | **Pn** | **03 20 42.1** | **-0.2** |
| SNCC | | | | IAML | | 03 21 35.4 | |
| | comp=E,316nm,1.0s | | | | | | |
| SNCC | | | | IAML | | 03 21 35.8 | |
| | comp=N,319nm,1.1s | | | | | | |
| **LCMT** | **Little Creek M** | **3.37** | **45** | | **Pn** | **03 20 45.9** | **-0.6** |
| **PAGB** | **Antelope Grade** | **3.45** | **289** | Pn | **Pn** | **03 20 47.4** | **0.0** |
| PAGB | | | | IAML | | 03 21 56.4 | |
| | comp=E,349nm,1.7s | | | | | | |
| PAGB | | | | IAML | | 03 22 10.7 | |
| | comp=N,348nm,1.2s | | | | | | |
| **TPH** | **Tonopah** | **3.49** | **347** | Pn | **Pn** | **03 20 47.7** | **-0.3** |
| **KNB** | **Kanab** | **3.63** | **49** | Pn | **Pn** | **03 20 49.6** | **-0.4** |
| KNB | | | | IAML | | 03 21 55.7 | |
| | comp=N,357nm,0.8s | | | | | | |
| KNB | | | | IAML | | 03 21 56.8 | |
| | comp=E,421nm,1.4s | | | | | | |
| **U15A** | **North Rim** | **3.66** | **60** | | **Pn** | **03 20 50.2** | **-0.4** |
| U15A | | | | IAML | | 03 21 53.2 | |
| | comp=E,636nm,0.8s | | | | | | |
| **CCUT** | **Cedar City** | **3.70** | **38** | Pn | **Pn** | **03 20 50.8** | **-0.2** |
| **R11A** | **Troy Canyon, C** | **3.71** | **8** | | **Pn** | **03 20 50.7** | **-0.3** |
| **R11A** | **Troy Canyon, C** | **3.71** | **8** | P | **Pn** | **03 20 50.5** | **-0.6** |
| | baz=188 | | | | | | |
| **SFX** | **San Felipe** | **3.81** | **162** | Pn | **Pn** | **03 20 52.5** | **+0.2** |
| **SZCU** | **Shurtz Canyon** | **3.87** | **40** | | **Pn** | **03 20 53.0** | **-0.4** |
| SZCU | | | | IAML | | 03 22 17.4 | |
| | comp=E,175nm,0.9s | | | | | | |
| **214A** | **Organ Pipe Nat** | **3.95** | **132** | Pn | **Pn** | **03 20 51.9** | **-2.3** |
| 214A | | | | IAML | | 03 22 06.3 | |
| | comp=N,338nm,0.9s | | | | | | |
| 214A | | | | IAML | | 03 22 07.4 | |
| | comp=E,372nm,1.0s | | | | | | |
| **214A** | **Organ Pipe Nat** | **3.95** | **132** | P | **Pn** | **03 20 51.9** | **-2.3** |
| | baz=315,SNR=14 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **3.97** | **92** | | **Pn** | **03 20 53.8** | **-0.8** |
| X16A | | | | IAML | | 03 22 10.1 | |
| | comp=E,388nm,0.9s | | | | | | |
| X16A | | | | IAML | | 03 22 13.3 | |
| | comp=N,450nm,1.1s | | | | | | |
| **LHV** | **Little Huntoon** | **4.01** | **334** | | **Pn** | **03 20 55.4** | **+0.3** |
| LHV | | | | IAML | | 03 22 04.3 | |
| | comp=E,328nm,2.0s | | | | | | |
| LHV | | | | IAML | | 03 22 06.7 | |
| | comp=N,380nm,1.7s | | | | | | |
| **PMPB** | **Monarch Peak** | **4.03** | **294** | Pn | **Pn** | **03 20 55.2** | **-0.2** |
| PMPB | | | | IAML | | 03 22 23.9 | |
| | comp=N,393nm,2.1s | | | | | | |
| PMPB | | | | IAML | | 03 22 28.0 | |
| | comp=E,412nm,1.3s | | | | | | |
| **NV11** | **Mina Array Sit** | **4.06** | **338** | | **Pn** | **03 20 55.4** | **-0.5** |
| NV11 | | | | IAML | | 03 22 05.9 | |
| | comp=E,174nm,1.5s | | | | | | |
| **WUAZ** | **Wupatki** | **4.08** | **77** | Pn | **Pn** | **03 20 55.8** | **-0.4** |
| **WUAZ** | **Wupatki** | **4.08** | **77** | P | **Pn** | **03 20 55.7** | **-0.4** |
| | baz=260,SNR=18 | | | | | | |
| **NVAR** | **Mina Array Bea** | **4.10** | **337** | Pn | **Pn** | **03 20 56.4** | **-0.2** |
| | comp=E,1.3nm,0.3s,baz=162,slow=15,SNR=18 | | | | | | |
| NVAR | | | | Pg | **Pb** | **03 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TUC** | **Tucson** | **5.13** | **116** | | | **Pn** | **03 21 09.0** | **-1.5** |
| TUC | | | | IAML | | | 03 22 41.0 | |
| | comp=N,149nm,1.4s | | | | | | | |
| TUC | | | | IAML | | | 03 22 41.8 | |
| | comp=N,148nm,1.1s | | | | | | | |
| **TUC** | **Tucson** | **5.13** | **116** | P | | **Pn** | **03 21 09.1** | **-1.4** |
| | baz=299 | | | | | | | |
| **X18A** | **Snowflake** | **5.19** | **90** | | | **Pn** | **03 21 11.3** | **-0.1** |
| **W18A** | **Petrified Fore** | **5.36** | **83** | | | **Pn** | **03 21 13.9** | **0.0** |
| **ELK** | **Elko** | **6.11** | **7** | Pn | | **Pn** | **03 21 23.4** | **-0.7** |
| | comp=N,0.3nm,0.3s,baz=198,slow=13,SNR=12 | | | | | | | |
| ELK | | | | Pg | Pg | | 03 21 45.4 | -4.6 |
| | comp=N,0.5nm,0.3s,baz=199,slow=17,SNR=7.3 | | | | | | | |
| ELK | | | | Lg | Lg | | 03 23 03.0 | |
| | comp=N,2.8nm,0.3s,baz=282,slow=19,SNR=10 | | | | | | | |
| ELK | | | | LR | LR | | 03 23 59.3 | |
| | comp=N,113nm,19.6s,baz=204,slow=40 | | | | | | | |
| **319A** | **Douglas** | **6.70** | **117** | Pn | | **Pn** | **03 21 31.3** | **-0.9** |
| **BGU** | **Big Grassy Mou** | **6.74** | **21** | Pn | | **Pn** | **03 21 31.8** | **-0.9** |
| **MVCO** | **Mesa Verde** | **6.77** | **66** | Pn | | **Pn** | **03 21 33.0** | **-0.2** |
| **PV10** | **Paradox Valley** | **6.87** | **55** | | | **Pn** | **03 21 34.0** | **-0.6** |
| **PV13** | **Radium Mtn., P** | **6.92** | **58** | | | **Pn** | **03 21 35.4** | **+0.1** |
| **PV23** | **Carpenter Ridg** | **6.93** | **55** | | | **Pn** | **03 21 34.8** | **-0.6** |
| **PV11** | **David Mesa, Pa** | **6.95** | **56** | | | **Pn** | **03 21 35.3** | **-0.4** |
| **PV07** | **Paradox Valley** | **7.17** | **56** | Pn | | **Pn** | **03 21 38.4** | **-0.3** |
| **PV15** | **Paradox Valley** | **7.24** | **57** | | | **Pn** | **03 21 39.3** | **-0.4** |
| **121A** | **Cookes Peak, D** | **7.37** | **104** | Pn | | **Pn** | **03 21 41.5** | **+0.1** |
| **121A** | **Cookes Peak, D** | **7.37** | **104** | P | | **Pn** | **03 21 41.2** | **-0.1** |
| | baz=289,SNR=12 | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.73** | **92** | Pn | | **Pn** | **03 21 46.7** | **+0.4** |
| **ANMO** | **Albuquerque** | **8.05** | **85** | Pn | | **Pn** | **03 21 51.4** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=271,slow=12,SNR=3.9 | | | | | | | |
| ANMO | | | | Pg | | Pb | 03 22 19.2 | +6.3 |
| | comp=N,0.5nm,0.3s,baz=270,slow=14,SNR=15 | | | | | | | |
| ANMO | | | | Lg | Lg | | 03 24 03.0 | |
| | comp=N,0.7nm,0.3s,baz=150,slow=14,SNR=7.6 | | | | | | | |
| ANMO | | | | LR | LR | | 03 25 13.0 | |
| | comp=N,186nm,20.2s,baz=272,slow=40 | | | | | | | |
| **SMCO** | **Snowmass** | **8.67** | **56** | Pn | | **Pn** | **03 21 59.0** | **-0.4** |
| **YBH** | **Yreka Blue Hor** | **8.69** | **326** | LR | LR | | 03 25 28.1 | |
| | comp=N,312nm,20.9s,baz=140,slow=38 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **9.57** | **105** | Pn | | **Pn** | **03 22 11.5** | **+0.1** |
| **MNTX** | **Cornudas Mount** | **9.57** | **105** | P | | **Pn** | **03 22 11.4** | **0.0** |
| | baz=291,SNR=7.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **9.62** | **31** | Pn | | **Pn** | **03 22 14.6** | **+2.4** |
| | comp=N,0.2nm,0.3s,baz=200,slow=13,SNR=16 | | | | | | | |
| **PDAR** | **Pinedale Array** | **9.62** | **31** | | | **Pn** | **03 22 12.5** | **+0.3** |
| **H17A** | **Grant Village** | **10.64** | **23** | | | **Pn** | **03 22 25.1** | **-1.2** |
| **K22A** | **Casper** | **11.00** | **41** | Pn | | **Pn** | **03 22 31.0** | **-0.1** |
| **LPIG** | **La Paz** | **11.73** | **152** | LR | LR | | 03 25 58.8 | |
| | comp=N,57nm,19.6s,baz=332,slow=31 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **11.92** | **113** | | | **Pn** | **03 22 44.3** | **+0.6** |
| **TX32** | **Lajitas Array** | **11.92** | **113** | | | **Pn** | **03 22 44.2** | **+0.5** |
| **TXAR** | **Lajitas Array** | **11.92** | **113** | Pn | | **Pn** | **03 22 44.9** | **+1.2** |
| | comp=N,1.5nm,0.3s,baz=291,slow=12,SNR=96 | | | | | | | |
| TXAR | | | | Lg | Lg | | 03 26 09.1 | |
| | comp=N,0.2nm,0.3s,baz=285,slow=29,SNR=13 | | | | | | | |
| TXAR | | | | LR | LR | | 03 27 33.0 | |
| | comp=N,110nm,19.4s,baz=288,slow=39 | | | | | | | |
| **TXAR** | **Lajitas Array** | **11.92** | **113** | | | **Pn** | **03 22 43.3** | **-0.4** |
| **NEW** | **Newport** | **13.60** | **357** | LR | LR | | 03 28 39.3 | |
| | comp=N,74nm,18.8s,baz=186,slow=39 | | | | | | | |
| **MIAR** | **Mount Ida** | **18.65** | **84** | | | **P** | **03 24 11.2** | **-0.5** |
| **EDM** | **Edmonton** | **18.66** | **5** | P | | **Pn** | **03 24 11.5** | **-0.4** |
| EDM | | | | IAmb | | IAmb | 03 24 18.0 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **BBB** | **Bella Bella** | **19.47** | **338** | LR | LR | | 03 32 01.2 | |
| | comp=Z,256nm,21.6s,baz=156,slow=37 | | | | | | | |
| **AGMN** | **Agassiz Nation** | **20.37** | **42** | P | | **P** | **03 24 30.2** | **-0.1** |
| AGMN | | | | IAmb | | IAmb | 03 24 32.2 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.52** | **38** | P | | **P** | **03 24 43.2** | **+0.4** |
| | comp=Z,11nm,1.0s,baz=234,slow=10,SNR=8.3 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.52** | **38** | P | | **P** | **03 24 42.7** | **-0.1** |
| ULM | | | | IAmb | | IAmb | 03 24 43.9 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **B35A** | **Bob, Littlefor** | **21.60** | **44** | P | | **P** | **03 24 43.8** | **+0.1** |
| B35A | | | | IAmb | | IAmb | 03 24 45.0 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **E38A** | **The Farm, Brul** | **22.10** | **50** | P | | **P** | **03 24 49.1** | **0.0** |
| E38A | | | | IAmb | | IAmb | 03 25 01.5 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **COWI** | **Conover** | **23.47** | **53** | P | | **P** | **03 25 03.9** | **+0.5** |
| **DLBC** | **Dease Lake** | **25.49** | **343** | LR | LR | | 03 35 42.8 | |
| | comp=Z,139nm,20.3s,baz=173,slow=37 | | | | | | | |
| **CMIG** | **Matias Romero** | **25.90** | **127** | LR | | LR | 03 36 16.2 | |
| | comp=Z,74nm,21.1s,baz=305,slow=38 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **26.50** | **78** | LR | LR | | 03 36 06.5 | |
| | comp=Z,67nm,20.1s,baz=340,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.86** | **2** | P | | **P** | **03 25 43.2** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=182,slow=8.5,SNR=9.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.86** | **2** | P | | **P** | **03 25 42.9** | **-0.3** |
| **APG** | **El Apazote** | **30.36** | **124** | LR | LR | | 03 39 23.8 | |
| | comp=Z,49nm,18.4s,baz=304,slow=39 | | | | | | | |
| **KDAK** | **Kodiak Island** | **33.51** | **325** | LR | LR | | 03 37 38.8 | |
| | comp=Z,69nm,18.1s,baz=135,slow=32 | | | | | | | |
| **INK** | **Inuvik** | **35.08** | **349** | LR | LR | | 03 42 38.8 | |
| | comp=Z,131nm,21.1s,baz=86,slow=39 | | | | | | | |
| **ILAR** | **Eielson Array** | **35.36** | **338** | P | | **P** | **03 26 50.6** | **+1.5** |
| | comp=Z,0.7nm,0.8s,baz=155,slow=6.1,SNR=5.0 | | | | | | | |
| ILAR | | | | LR | LR | | 03 41 23.4 | |
| | comp=Z,91nm,19.2s,baz=252,slow=36 | | | | | | | |
| **JTS** | **Las Juntas de** | **37.47** | **123** | LR | LR | | 03 42 50.4 | |
| | comp=Z,36nm,18.9s,baz=38,slow=37 | | | | | | | |
| **SDV** | **Santo Domingo** | **48.95** | **111** | LR | LR | | 03 52 13.1 | |
| | comp=Z,36nm,18.5s,baz=122,slow=40 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **51.41** | **313** | LR | LR | | 03 48 50.5 | |
| | comp=Z,162nm,18.6s,baz=76,slow=34 | | | | | | | |
| **NNA** | **Nana** | **59.58** | **134** | LR | LR | | 03 52 25.2 | |
| | comp=Z,35nm,18.2s,baz=180,slow=33 | | | | | | | |
| **WRA** | **Warramunga Arr** | **116.73** | **263** | PKP | | **PKiKP** | **03 38 40.1** | **+1.2** |
| | comp=Z,0.6nm,1.0s,baz=72,slow=2.7,SNR=2.2 | | | | | | | |

*NOU **23** 03:38:48.0,40˚.24S×173˚.42E,h227km,MLv3.8/8,Cook Strait, New Zealand*
*WEL **23** 03:38:51.4±0.7,40˚S±3˚×17˚4E±˚,h194km±4km,M3.3/39, ML3.4/8,MLv3.3/39,Error ellipse: s-maj=0.0km s-min=0.0km az=99.2*

**ISC 23 03:38:47.2±1.7,40˚28S±0˚.05×173˚42E±0˚.05,h225km±9km, n127,σ1§27/142,Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUWZ** | **D'Urville Isla** | **0.64** | **144** | P | **Pn** | **03 39 19.0** | **+1.3** |
| DUWZ | | | | S | **S** | **03 39 40.1** | **-1.6** |
| **QRZ** | **Quartz Range** | **0.87** | **231** | P | **Pn** | **03 39 20.1** | **+1.4** |
| QRZ | | | | S | **S** | **03 39 42.0** | **-1.4** |
| **QRZ** | **Quartz Range** | **0.87** | **231** | P | **Pn** | **03 39 20.1** | **+1.4** |
| **NNZ** | **Nelson** | **0.93** | **182** | P | **Pn** | **03 39 20.3** | **+1.3** |
| NNZ | | | | S | **S** | **03 39 42.7** | **-1.4** |
| **NMEZ** | **Namu Road** | **0.94** | **22** | P | **Pn** | **03 39 20.5** | **+1.3** |
| NMEZ | | | | S | **S** | **03 39 43.8** | **-0.2** |
| **NBEZ** | **Newall Road No** | **1.07** | **19** | P | **Pn** | **03 39 21.4** | **+1.4** |
| **KHEZ** | **Kahui Hut** | **1.09** | **25** | P | **Pn** | **03 39 21.6** | **+1.3** |
| **PREZ** | **Palmer Road** | **1.10** | **32** | P | **Pn** | **03 39 21.5** | **+1.2** |
| PREZ | | | | S | **S** | **03 39 45.3** | **-0.7** |
| **LREZ** | **Lake Rotokare** | **1.12** | **43** | P | **Pn** | **03 39 21.5** | **+1.3** |
| LREZ | | | | S | **S** | **03 39 45.5** | **-0.6** |
| **TCW** | **Tory Channel** | **1.13** | **145** | P | **Pn** | **03 39 21.9** | **+1.7** |
| TCW | | | | S | **S** | **03 39 44.5** | **-1.7** |
| **NEZ** | **North Egmont** | **1.14** | **28** | P | **Pn** | **03 39 21.7** | **+1.1** |
| NEZ | | | | S | **S** | **03 39 44.8** | **-1.7** |
| **PKE** | **Pukeiti** | **1.17** | **22** | P | **Pn** | **03 39 22.1** | **+1.3** |
| PKE | | | | S | **S** | **03 39 45.6** | **-1.3** |
| **TUWZ** | **Tuamarina** | **1.21** | **161** | P | **Pn** | **03 39 22.3** | **+1.5** |
| TUWZ | | | | S | **S** | **03 39 45.9** | **-1.4** |
| **MRNZ** | **Matariki Terra** | **1.22** | **204** | P | **Pn** | **03 39 22.2** | **+1.3** |
| **DREZ** | **Durham Road** | **1.25** | **29** | P | **Pn** | **03 39 22.6** | **+1.4** |
| **KIW** | **Kapiti Island** | **1.27** | **117** | P | **Pn** | **03 39 22.6** | **+1.3** |
| KIW | | | | S | **S** | **03 39 45.7** | **-2.3** |
| **WAZ** | **Wanganui** | **1.31** | **67** | P | **Pn** | **03 39 23.6** | **+1.9** |
| WAZ | | | | S | **S** | **03 39 48.1** | **-0.5** |
| **SNZO** | **South Karori** | **1.42** | **137** | P | **Pn** | **03 39 23.8** | **+1.5** |
| **WEL** | **Wellington** | **1.43** | **135** | P | **Pn** | **03 39 22.9** | **+0.4** |
| **OGWZ** | **Otaki Gorge** | **1.44** | **112** | P | **Pn** | **03 39 24.0** | **+1.5** |
| OGWZ | | | | S | **S** | **03 39 48.2** | **-2.0** |
| **OHWZ** | **Ohakea** | **1.46** | **88** | P | **Pn** | **03 39 24.4** | **+1.7** |
| OHWZ | | | | S | **S** | **03 39 49.4** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **1.47** | **166** | P | **Pn** | **03 39 24.3** | **+1.5** |
| BSWZ | | | | S | **S** | **03 39 49.2** | **-1.5** |
| **CAW** | **Cannon Point** | **1.50** | **124** | P | **Pn** | **03 39 24.4** | **+1.3** |
| **THZ** | **Tophouse** | **1.53** | **195** | P | **Pn** | **03 39 24.8** | **+1.5** |
| **VRZ** | **Vera Road** | **1.55** | **42** | P | **Pn** | **03 39 24.4** | **+0.8** |
| **BHW** | **Baring Head** | **1.57** | **136** | P | **Pn** | **03 39 24.7** | **+1.1** |
| **CMWZ** | **Cape Campbell** | **1.58** | **158** | P | **Pn** | **03 39 25.5** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **1.69** | **104** | P | **Pn** | **03 39 25.9** | **+1.2** |
| **HOWZ** | **Holdsworth Sta** | **1.71** | **112** | P | **Pn** | **03 39 26.0** | **+1.2** |
| **PKVZ** | **Pokaka** | **1.79** | **57** | P | **Pn** | **03 39 26.6** | **+1.0** |
| **MSWZ** | **Moikau Station** | **1.79** | **130** | P | **Pn** | **03 39 26.8** | **+1.2** |
| **POWZ** | **Post Office Ro** | **1.80** | **94** | P | **Pn** | **03 39 27.2** | **+1.6** |
| **MTW** | **Mount Morrison** | **1.81** | **120** | P | **Pn** | **03 39 26.9** | **+1.1** |
| **MTVZ** | **Mangateitei** | **1.82** | **61** | P | **Pn** | **03 39 27.0** | **+1.1** |
| **PAWZ** | **Paruwai Farm** | **1.88** | **126** | P | **Pn** | **03 39 27.5** | **+1.1** |
| **PLWZ** | **Palliser** | **1.89** | **133** | P | **Pn** | **03 39 27.6** | **+1.1** |
| **DSZ** | **Denniston Nort** | **1.90** | **219** | P | **Pn** | **03 39 28.1** | **+1.5** |
| **TRVZ** | **Turoa** | **1.91** | **60** | P | **Pn** | **03 39 27.9** | **+0.8** |
| **WNVZ** | **Wahianoa** | **1.93** | **61** | P | **Pn** | **03 39 28.1** | **+0.9** |
| **DRZ** | **Dome Shelter** | **1.94** | **59** | P | **Pn** | **03 39 28.7** | **+1.3** |
| **FWVZ** | **Far West T-bar** | **1.94** | **59** | P | **Pn** | **03 39 28.2** | **+0.9** |
| **TIWZ** | **Tintock** | **1.94** | **105** | P | **Pn** | **03 39 28.6** | **+1.6** |
| **TSZ** | **Takapari Road** | **1.96** | **84** | P | **Pn** | **03 39 28.3** | **+1.1** |
| **PRWZ** | **Pori Road** | **1.97** | **99** | P | **Pn** | **03 39 28.9** | **+1.7** |
| **TWVZ** | **Taurewa** | **1.98** | **53** | P | **Pn** | **03 39 28.1** | **+0.6** |
| **MOVZ** | **Moawhango** | **2.00** | **65** | P | **Pn** | **03 39 28.3** | **+0.6** |
| **TUVZ** | **Tukino** | **2.00** | **60** | P | **Pn** | **03 39 28.8** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **2.02** | **57** | P | **Pn** | **03 39 28.8** | **+0.9** |
| **SNVZ** | **South Ngauruho** | **2.04** | **58** | P | **Pn** | **03 39 29.2** | **+1.1** |
| **WTVZ** | **West Tongariro** | **2.04** | **56** | P | **Pn** | **03 39 29.0** | **+0.9** |
| **NNVZ** | **North Ngauruho** | **2.05** | **57** | P | **Pn** | **03 39 29.1** | **+0.9** |
| **TRWZ** | **Traveller** | **2.05** | **124** | P | **Pn** | **03 39 29.4** | **+1.4** |
| **TMWZ** | **Te Maipa** | **2.05** | **114** | P | **Pn** | **03 39 29.4** | **+1.3** |
| **OTVZ** | **Oturere** | **2.06** | **58** | P | **Pn** | **03 39 29.4** | **+1.1** |
| **KRVZ** | **Karewarewa** | **2.09** | **56** | P | **Pn** | **03 39 29.5** | **+0.9** |
| **HIZ** | **Hauiti** | **2.09** | **33** | P | **Pn** | **03 39 29.2** | **+0.7** |
| **HIZ** | **Hauiti** | **2.09** | **33** | P | **Pn** | **03 39 29.4** | **+0.9** |
| **DVHZ** | **Danevirke** | **2.10** | **91** | P | **Pn** | **03 39 29.7** | **+1.2** |
| **ETVZ** | **East Tongariro** | **2.11** | **58** | P | **Pn** | **03 39 29.9** | **+1.1** |
| **TMVZ** | **Te Maari** | **2.12** | **57** | P | **Pn** | **03 39 30.1** | **+1.2** |
| **KHZ** | **Kahutara** | **2.13** | **178** | P | **Pn** | **03 39 29.8** | **+1.1** |
| **KHZ** | **Kahutara** | **2.13** | **178** | P | **Pn** | **03 39 29.9** | **+1.1** |
| **PNHZ** | **Pukenui** | **2.17** | **81** | P | **Pn** | **03 39 30.4** | **+1.2** |
| **BHHZ** | **Black Hill Sta** | **2.19** | **70** | P | **Pn** | **03 39 30.0** | **+0.6** |
| **KATZ** | **Kakaramea** | **2.19** | **54** | P | **Pn** | **03 39 30.7** | **+1.1** |
| **BFZ** | **Birch Farm** | **2.19** | **101** | P | **Pn** | **03 39 30.7** | **+1.3** |
| **BFZ** | **Birch Farm** | **2.19** | **101** | P | **Pn** | **03 39 30.9** | **+1.5** |
| **CPWZ** | **Castlepoint** | **2.21** | **107** | P | **Pn** | **03 39 31.6** | **+2.1** |
| **RATZ** | **Rangitukua** | **2.31** | **53** | P | **Pn** | **03 39 32.1** | **+1.4** |
| **ANWZ** | **Angora Road** | **2.34** | **95** | P | **Pn** | **03 39 32.6** | **+1.6** |
| **KRHZ** | **Kereru** | **2.36** | **75** | P | **Pn** | **03 39 32.3** | **+1.1** |
| **WATZ** | **Wairara** | **2.38** | **49** | P | **Pn** | **03 39 32.7** | **+1.2** |
| **PRHZ** | **Porangahau** | **2.46** | **91** | P | **Pn** | **03 39 33.9** | **+1.7** |
| **KWHZ** | **Kaweka Forest** | **2.47** | **71** | P | **Pn** | **03 39 33.6** | **+1.2** |
| **TLZ** | **Tolley Road** | **2.55** | **41** | P | **Pn** | **03 39 33.7** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **2.62** | **66** | P | **Pn** | **03 39 34.8** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **2.62** | **66** | P | **Pn** | **03 39 34.9** | **+0.9** |
| **LTZ** | **Lake Taylor** | **2.64** | **199** | P | **Pn** | **03 39 35.3** | **+1.2** |
| **PXZ** | **Pawanui** | **2.65** | **86** | P | **Pn** | **03 39 35.9** | **+1.7** |
| **MCHZ** | **McNeill Hill** | **2.66** | **73** | P | **Pn** | **03 39 36.0** | **+1.7** |
| **GVZ** | **Greta Valley S** | **2.70** | **186** | P | **Pn** | **03 39 35.6** | **+0.9** |
| **KAHZ** | **Kahuranaki** | **2.70** | **81** | P | **Pn** | **03 39 36.6** | **+1.8** |
| **MRHZ** | **Matea Rd** | **2.73** | **59** | P | **Pn** | **03 39 35.6** | **+0.4** |
| **INZ** | **Inchbonnie** | **2.85** | **211** | P | **Pn** | **03 39 37.7** | **+1.3** |
| **NMHZ** | **Naumai** | **2.87** | **67** | P | **Pn** | **03 39 38.5** | **+1.8** |
| **CKHZ** | **Cape Kidnapper** | **2.88** | **79** | P | **Pn** | **03 39 38.8** | **+2.0** |
| **ARHZ** | **Aropaoanui** | **2.94** | **71** | P | **Pn** | **03 39 38.8** | **+1.3** |
| **AMCZ** | **Amberley** | **2.95** | **191** | P | **Pn** | **03 39 38.5** | **+1.0** |
| **MTHZ** | **Maungataniwha** | **3.01** | **63** | P | **Pn** | **03 39 39.0** | **+0.8** |
| **RAHZ** | **Arahi** | **3.15** | **65** | P | **Pn** | **03 39 41.1** | **+1.3** |
| **MUGZ** | **Murupara** | **3.16** | **56** | P | **Pn** | **03 39 40.2** | **+0.2** |
| **WHHZ** | **Waihua** | **3.16** | **69** | P | **Pn** | **03 39 44.2** | **+4.0** |
| **RTZ** | **Ruatahuna** | **3.22** | **60** | P | **Pn** | **03 39 41.0** | **+0.2** |
| **SNGZ** | **Shannon Statio** | **3.38** | **65** | P | **Pn** | **03 39 43.7** | **+1.1** |
| **WVZ** | **Waitaha Valley** | **3.44** | **215** | P | **Pn** | **03 39 44.1** | **+1.1** |
| **OKCZ** | **Okains Bay** | **3.45** | **184** | P | **Pn** | **03 39 43.7** | **+0.4** |
| **URZ** | **Urewera** | **3.51** | **56** | P | **Pn** | **03 39 43.8** | **-0.1** |
| **URZ** | **Urewera** | **3.51** | **56** | P | **Pn** | **03 39 44.1** | **+0.1** |
| **KNZ** | **Kokohu** | **3.52** | **70** | P | **Pn** | **03 39 45.1** | **+1.0** |
| **MHCZ** | **Mount Hutt** | **3.53** | **202** | P | **Pn** | **03 39 45.0** | **+0.8** |
| **RACZ** | **Rakaia** | **3.57** | **195** | P | **Pn** | **03 39 45.8** | **+1.2** |
| **RAGZ** | **Rawiri** | **3.58** | **61** | P | **Pn** | **03 39 45.5** | **+0.6** |
| **AKCZ** | **Akaroa Harbour** | **3.60** | **186** | P | **Pn** | **03 39 45.5** | **+0.5** |
| **MHGZ** | **Mahia Peninsul** | **3.64** | **73** | P | **Pn** | **03 39 47.2** | **+1.6** |
| **PRGZ** | **Paritu Road** | **3.71** | **70** | P | **Pn** | **03 39 47.6** | **+1.2** |
| **RIGZ** | **Rimuhau** | **3.71** | **66** | P | **Pn** | **03 39 47.5** | **+1.1** |
| **MWZ** | **Matawai** | **3.74** | **60** | P | **Pn** | **03 39 47.3** | **+0.6** |
| **GCSZ** | **Gaunt Creek Bo** | **3.81** | **216** | P | **Pn** | **03 39 48.6** | **+1.1** |
| **WACZ** | **Wakanui South** | **3.84** | **197** | P | **Pn** | **03 39 49.4** | **+1.6** |
| **RPZ** | **Rata Peaks** | **3.85** | **206** | P | **Pn** | **03 39 49.1** | **+1.1** |
| **TKGZ** | **Te Karaka** | **3.90** | **63** | P | **Pn** | **03 39 49.5** | **+0.9** |
| **KUZ** | **Kuaotunu** | **3.97** | **28** | P | **Pn** | **03 39 50.7** | **+1.2** |
| **ARCZ** | **Arundel** | **4.02** | **204** | P | **Pn** | **03 39 50.9** | **+0.8** |
| **RUGZ** | **Raukumara Rang** | **4.04** | **56** | P | **Pn** | **03 39 49.9** | **-0.6** |
| **TWGZ** | **Tauwhareparae** | **4.12** | **61** | P | **Pn** | **03 39 52.1** | **+0.8** |
| **CNGZ** | **Carnagh Statio** | **4.12** | **66** | P | **Pn** | **03 39 52.6** | **+1.3** |
| **FOZ** | **Fox Glacier** | **4.21** | **218** | P | **Pn** | **03 39 53.0** | **+0.6** |
| **HAZ** | **Te Kaha** | **4.23** | **55** | P | **Pn** | **03 39 51.9** | **-0.8** |
| **PKGZ** | **Pakihiroa** | **4.34** | **58** | P | **Pn** | **03 39 54.2** | **+0.1** |
| **PUZ** | **Puketiti** | **4.36** | **61** | P | **Pn** | **03 39 54.5** | **+0.2** |
| **TMZ** | **Timaru** | **4.47** | **203** | P | **Pn** | **03 39 56.8** | **+1.3** |
| **WMGZ** | **Waiomatatini S** | **4.60** | **59** | P | **Pn** | **03 39 57.2** | **-0.1** |
| **LBZ** | **Lake Benmore** | **4.75** | **209** | P | **Pn** | **03 39 59.8** | **+0.9** |
| **JCZ** | **Jackson Bay** | **5.12** | **221** | P | **Pn** | **03 40 04.5** | **+0.8** |
| **ODZ** | **Otahua Downs** | **5.18** | **202** | P | **Pn** | **03 40 05.9** | **+1.6** |
| **ODZ** | **Otahua Downs** | **5.18** | **202** | P | **Pn** | **03 40 05.9** | **+1.6** |
| **WKZ** | **Wanaka** | **5.58** | **214** | P | **Pn** | **03 40 09.8** | **+0.4** |

*IDC **23** 03:49:46.7±2.1,8˚.85S×130˚.57E,h0km,mb3.4/1, mb1 3.8/3,mb1mx3.6/20,mbtmp3.6/3,ML3.5/2,Error ellipse: s-maj=91.8km s-min=26.4km az=70.0*

**ISC 23 03:49:46.6±0.9,8˚.64S±0˚.07×130˚.68E±0˚.09,h10km±n10, σ2§25/12,Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **0.90** | **43** | P | **Pb** | **03 50 03.7** | **-0.6** |
| **KDU** | **Kakadu** | **4.39** | **156** | P | **Pn** | **03 50 56.8** | **+3.4** |
| **FAKI** | **Fak Fak** | **5.89** | **15** | P | **Pn** | **03 51 13.2** | **-0.9** |
| **SOEI** | **Soe** | **6.42** | **260** | P | **Pn** | **03 51 20.0** | **-1.5** |
| | 25nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **7.24** | **195** | P | **Pn** | **03 51 35.8** | **+3.2** |
| **FITZ** | **Fitzroy Crossi** | **10.60** | **207** | P | **Pn** | **03 52 21.1** | **+2.4** |
| **WRA** | **Warramunga Arr** | **11.78** | **163** | Pn | **Pn** | **03 52 34.5** | **-0.4** |
| | 0.3nm,0.3s,baz=346,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | **Sn** | **03 54 44.5** | **-2.2** |
| | 0.6nm,0.3s,baz=339,slow=23,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **15.26** | **169** | Pn | **Pn** | **03 53 21.1** | **-1.3** |
| | 0.3nm,0.3s,baz=345,slow=9.8,SNR=16 | | | | | | |
| ASAR | | | | Sn | **Sn** | **03 56 10.2** | **-1.4** |
| | 0.2nm,0.3s,baz=357,slow=27,SNR=8.4 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.34** | **269** | P | **Pn** | **03 53 35.6** | **-0.8** |
| | 7.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.95** | **327** | P | **P** | **04 01 00.7** | **+2.4** |
| | 0.2nm,0.6s,baz=127,slow=6.4,SNR=4.1 | | | | | | |

*IDC **23** 04:14:50.3±3.5,26˚.5S×140˚.05E,h0km,mb1 3.0/3, mb1mx3.0/16,mbtmp2.8/3,ML2.7/3,Error ellipse: s-maj=63.3km s-min=18.7km az=61.0*

**ISC 23 04:14:52.3±2.0,26˚.5S±0˚.1×140˚.2E±0˚.2,h50km,n3, σ1§39/6,South Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **5.51** | **168** | Pn | **Pn** | **04 16 12.3** | **+0.5** |
| | 0.2nm,0.3s,baz=341,slow=18,SNR=1.8 | | | | | | |
| STKA | | | | Sn | **Sn** | **04 17 12.8** | **-1.2** |
| | 0.3nm,0.3s,baz=48,slow=11,SNR=3.5 | | | | | | |
| STKA | | | | Lg | Lg | 04 17 47.6 | |
| | 0.2nm,0.3s,baz=226,slow=18,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **6.36** | **295** | Pn | **Pn** | **04 16 24.3** | **+0.7** |
| | 0.2nm,0.3s,baz=120,slow=14,SNR=10.0 | | | | | | |
| ASAR | | | | Sn | **Sn** | **04 17 34.8** | **-0.2** |
| | 0.1nm,0.3s,baz=115,slow=23,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **8.45** | **319** | Pn | **Pn** | **04 16 53.0** | **+0.7** |
| | 0.1nm,0.3s,baz=141,slow=12,SNR=6.3 | | | | | | |
| WRA | | | | Sn | **Sn** | **04 18 24.5** | **-1.8** |
| | 0.1nm,0.3s,baz=149,slow=26,SNR=1.3 | | | | | | |
| WRA | | | | Lg | Lg | 04 19 19.7 | |
| | 0.1nm,0.3s,baz=144,slow=26,SNR=1.8 | | | | | | |

*VIE **23** 04:22:54.1±0.6,50˚.22N×19˚.01E,h0km,mb2.4/3,ml2.3/2, Error ellipse: s-maj=10.4km s-min=3.6km az=159.0 4 km SE of Katowice Suspected Mining induced.*
*PRU **23** 04:22:54.6±0.0,50˚.23N×18˚.96E,h0km*
*IPEC **23** 04:22:55.0±0.1,50˚.18N±19˚.01E,h1km±1km,ML2.7/3, Error ellipse: s-maj=2.3km s-min=0.8km az=169.0*

**ISC 23 04:22:54.6±0.8,50˚.18N±0˚.04×18˚.99E±0˚.02,h0km,n35, σ0§65/59,5C-4D,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.52** | **85** | *e*Pg | **Pg** | **04 23 03.8** | **-0.8** |
| OJC | | | | *e*Sg | **Sg** | **04 23 11.1** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **0.64** | **238** | *e*PG | **Pg** | **04 23 06.3** | **-0.6** |
| OKC | | | | *e*SG | **Sg** | **04 23 15.5** | **+0.3** |
| | comp=Z,24nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.02** | **247** | ⇓P | **Pb** | **04 23 15.4** | **+0.2** |
| MORC | | | | ⇓S | **Sb** | **04 23 29.3** | **+0.3** |
| **MORC** | **Moravsky Berou** | **1.02** | **247** | *e*Pg | **Pb** | **04 23 15.0** | **-0.1** |
| | baz=67 | | | | | | |
| MORC | | | | *e*Sg | **Sg** | **04 23 27.8** | **+0.5** |
| | 144nm,0.8s,baz=67 | | | | | | |
| **MORC** | **Moravsky Berou** | **1.02** | **247** | *e*PG | **Pb** | **04 23 15.1** | **-0.1** |
| MORC | | | | *e*SG | **Sg** | **04 23 27.9** | **+0.6** |
| **NIE** | **Niedzica** | **1.14** | **131** | *e*Pg | **Pn** | **04 23 18.3** | **+0.5** |
| NIE | | | | *e*Sg | **Sn** | **04 23 34.9** | **+0.8** |
| **LOSC** | **Losov** | **1.19** | **243** | *e*Pg | **Pb** | **04 23 17.8** | **-0.2** |
| | baz=62 | | | | | | |
| **LIPC** | **Lipinka** | **1.30** | **256** | *e*Pg | **Pn** | **04 23 20.2** | **+0.2** |
| | baz=74 | | | | | | |
| **LUKC** | **Luka** | **1.41** | **249** | *e*Pg | **Pg** | **04 23 21.5** | **0.0** |
| | baz=68 | | | | | | |
| **KRLC** | **Kraliky** | **1.43** | **267** | *e*PG | **Pn** | **04 23 20.8** | **-1.0** |
| KRLC | | | | *e*SG | **Sb** | **04 23 40.6** | **-0.2** |
| | comp=Z,85nm,1.3s | | | | | | |
| **VYHS** | **Vyhne** | **1.69** | **184** | *e*PN | **Pn** | **04 23 25.6** | **+0.2** |
| VYHS | | | | *e*SN | **Sb** | **04 23 48.7** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **1.72** | **277** | *e*PG | **Pn** | **04 23 25.6** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **04 23 49.5** | **-0.4** |
| | comp=Z,31nm,0.8s | | | | | | |
| **

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RIZ** | **Raoul Island** | **6.06** | **189** | S | **Sn** | **05 33 44.7** | **+5.1** |
| **MSVF** | **Nonsavu** | **7.30** | **318** | P | **Pn** | **05 32 47.5** | **-0.4** |
| | 5.2nm,0.3s,baz=136,slow=17,SNR=14 | | | | | | |
| **NIUE** | **Niue** | **7.65** | **58** | Pn | **Pn** | **05 32 51.2** | **-1.3** |
| **NIUE** | **Niue** | **7.65** | **58** | P | **Pn** | **05 32 51.5** | **-1.0** |
| **OUENC** | **Ouen Island, N** | **15.10** | **270** | | **Pn** | **05 34 29.2** | **-0.2** |
| OUENC | | | | IAmb | IAmb | 05 34 40.2 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **HAZ** | **Te Kaha** | **15.19** | **197** | P | **Pn** | **05 34 28.9** | **-1.5** |
| HAZ | | | | S | Sn | 05 37 07.7 | -12 |
| **PKGZ** | **Pakihiroa** | **15.24** | **196** | P | **Pn** | **05 34 29.9** | **-1.2** |
| PKGZ | | | | S | Sn | 05 37 04.8 | -16 |
| **RUGZ** | **Raukumara Rang** | **15.41** | **197** | P | **Pn** | **05 34 32.5** | **-0.9** |
| RUGZ | | | | S | Sn | 05 37 09.1 | -16 |
| **DZM** | **Mont Dzumac** | **15.50** | **271** | P | **P** | **05 34 37.1** | **+1.4** |
| | comp=Z,0.8nm,0.3s,baz=79,slow=19,SNR=8.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.50** | **271** | IAmb | IAmb | 05 34 41.1 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **TWGZ** | **Tauwhareparae** | **15.54** | **195** | P | **P** | **05 34 36.2** | **+0.3** |
| TWGZ | | | | S | Sn | 05 37 14.9 | -13 |
| **CNGZ** | **Carnagh Statio** | **15.77** | **195** | P | **Pn** | **05 34 34.0** | **-3.6** |
| CNGZ | | | | S | Sn | 05 37 16.5 | -17 |
| **MWZ** | **Matawai** | **15.80** | **197** | P | **P** | **05 34 39.6** | **+0.8** |
| MWZ | | | | S | Sn | 05 37 17.9 | -16 |
| **URZ** | **Urewera** | **15.84** | **198** | P | **Pn** | **05 34 38.5** | **+0.1** |
| | comp=Z,5.3nm,0.3s,baz=263,slow=3.0,SNR=23 | | | | | | |
| URZ | | | | S | Sn | 05 37 21.8 | -13 |
| | comp=Z,1.7nm,0.3s,baz=95,slow=21,SNR=8.0 | | | | | | |
| **URZ** | **Urewera** | **15.84** | **198** | | **Pn** | **05 34 38.6** | **+0.2** |
| **URZ** | **Urewera** | **15.84** | **198** | P | **Pn** | **05 34 36.9** | **-1.5** |
| URZ | | | | S | Sn | 05 37 20.8 | -14 |
| **URZ** | **Urewera** | **15.84** | **198** | P | **Pn** | **05 34 38.7** | **+0.2** |
| **MUGZ** | **Murupara** | **16.14** | **198** | P | **P** | **05 34 43.6** | **+1.0** |
| MUGZ | | | | S | **S** | **05 37 32.9** | **-8.7** |
| **RTZ** | **Ruatahuna** | **16.21** | **198** | P | **P** | **05 34 43.3** | **-0.1** |
| RTZ | | | | S | S | 05 37 28.0 | -15 |
| **MTHZ** | **Maungataniwha** | **16.47** | **198** | P | **P** | **05 34 47.8** | **+1.6** |
| MTHZ | | | | S | S | 05 37 35.5 | -14 |
| **NMHZ** | **Naumai** | **16.71** | **198** | P | **P** | **05 34 47.9** | **-0.9** |
| NMHZ | | | | S | S | 05 37 41.1 | -14 |
| **HIZ** | **Hauiti** | **16.80** | **203** | P | **Pn** | **05 34 51.2** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **16.86** | **198** | P | **P** | **05 34 48.7** | **-1.9** |
| BKZ | | | | S | S | 05 37 44.9 | -14 |
| **BKZ** | **Black Stump Fm** | **16.86** | **198** | P | **P** | **05 34 48.6** | **-1.9** |
| **SANVU** | **Saraoutou** | **16.95** | **294** | P | **Pn** | **05 34 51.6** | **-0.5** |
| **SANVU** | **Saraoutou** | **16.95** | **294** | P | **Pn** | **05 34 57.0** | **+4.9** |
| **MCHZ** | **McNeill Hill** | **17.06** | **197** | P | **Pn** | **05 34 53.6** | **+0.3** |
| MCHZ | | | | S | S | 05 37 49.3 | -13 |
| **BHHZ** | **Black Hill Sta** | **17.29** | **199** | P | **Pn** | **05 34 56.0** | **-0.1** |
| BHHZ | | | | S | S | 05 37 56.0 | -12 |
| **KAHZ** | **Kahuranaki** | **17.34** | **197** | P | **P** | **05 34 55.9** | **+0.1** |
| KAHZ | | | | S | S | 05 37 55.5 | -13 |
| **PRHZ** | **Porangahau** | **17.85** | **197** | P | **P** | **05 35 01.6** | **+0.3** |
| PRHZ | | | | S | S | 05 38 04.6 | -14 |
| **BFZ** | **Birch Farm** | **18.34** | **197** | P | **P** | **05 35 06.6** | **0.0** |
| BFZ | | | | IAmb | IAmb | 05 35 34.2 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **BFZ** | **Birch Farm** | **18.34** | **197** | P | **P** | **05 35 06.5** | **-0.2** |
| BFZ | | | | S | S | 05 38 13.7 | -15 |
| **QRZ** | **Quartz Range** | **19.69** | **205** | P | **P** | **05 35 22.5** | **+1.2** |
| QRZ | | | | IAmb | IAmb | 05 35 45.5 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **QRZ** | **Quartz Range** | **19.69** | **205** | P | **Pn** | **05 35 22.8** | **-1.5** |
| **KHZ** | **Kahutara** | **20.74** | **201** | P | **P** | **05 35 31.0** | **-1.4** |
| KHZ | | | | IAmb | IAmb | 05 35 33.3 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **KHZ** | **Kahutara** | **20.74** | **201** | P | **P** | **05 35 32.7** | **+0.3** |
| **RPZ** | **Rata Peaks** | **22.74** | **203** | P | **P** | **05 35 52.1** | **-0.8** |
| | comp=Z,3.4nm,0.4s,baz=353,slow=10,SNR=5.1 | | | | | | |
| **RPZ** | **Rata Peaks** | **22.74** | **203** | IAmb | IAmb | 05 36 00.8 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **22.74** | **203** | P | **P** | **05 35 54.3** | **+1.3** |
| **PPT** | **Papeete** | **26.12** | **83** | LR | LR | 05 44 54.0 | |
| | comp=Z,34nm,18.7s,baz=232,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **34.41** | **268** | P | **P** | **05 37 37.8** | **+0.8** |
| | comp=Z,43nm,0.5s,baz=94,slow=9.8,SNR=73 | | | | | | |
| **PMG** | **Port Moresby** | **37.09** | **286** | P | **P** | **05 37 59.5** | **-0.3** |
| | comp=Z,64nm,0.9s,baz=108,slow=5.8,SNR=14 | | | | | | |
| **STKA** | **Stephens Creek** | **37.68** | **248** | P | **P** | **05 38 04.5** | **-0.1** |
| | comp=Z,1.8nm,0.5s,baz=91,slow=11,SNR=9.1 | | | | | | |
| STKA | | | | PcP | **PcP** | **05 40 19.1** | **+0.3** |
| | comp=Z,0.8nm,0.4s,baz=15,slow=6.7,SNR=3.4 | | | | | | |
| **COEN** | **Coen** | **38.92** | **277** | P | **P** | **05 38 14.5** | **-0.7** |
| COEN | | | | IAmb | IAmb | 05 38 16.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **42.39** | **246** | P | **P** | **05 38 41.6** | **-1.8** |
| BBOO | | | | IAmb | IAmb | 05 38 44.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **45.03** | **259** | P | **P** | **05 39 04.1** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.03** | **259** | P | **P** | **05 39 04.0** | **-0.8** |
| | comp=Z,8.6nm,0.8s,baz=92,slow=8.1,SNR=69 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 40 43.5** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=112,slow=4.1,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **45.03** | **259** | P | **P** | **05 39 03.8** | **-0.9** |
| **WR0** | **Warramunga Arr** | **45.19** | **264** | P | **P** | **05 39 04.7** | **-1.3** |
| WR0 | | | | IAmb | IAmb | 05 39 06.9 | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.36** | **264** | P | **P** | **05 39 06.2** | **-1.2** |
| **WB0** | **Warramunga Arr** | **45.37** | **265** | P | **P** | **05 39 06.3** | **-1.0** |
| **WRAB** | **Tennant Creek** | **45.37** | **264** | P | **P** | **05 39 06.3** | **-1.0** |
| **WRA** | **Warramunga Arr** | **45.38** | **264** | P | **P** | **05 39 06.0** | **-1.4** |
| | comp=Z,16nm,0.6s,baz=103,slow=8.2,SNR=136 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.38** | **264** | P | **P** | **05 39 06.2** | **-1.2** |
| **FORT** | **Forrest** | **49.28** | **249** | P | **P** | **05 39 36.4** | **-1.1** |
| FORT | | | | IAmb | IAmb | 05 39 39.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **51.62** | **268** | P | **P** | **05 39 54.4** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **53.80** | **264** | P | **P** | **05 40 10.4** | **-0.9** |
| | comp=Z,11nm,0.7s,baz=93,slow=6.3,SNR=46 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.80** | **264** | P | **P** | **05 40 09.9** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **58.16** | **258** | P | **P** | **05 40 41.0** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 05 40 43.2 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.84** | **180** | P | **P** | **05 41 42.6** | **+3.4** |
| QSPA | | | | IAmb | IAmb | 05 41 43.5 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **BELA** | **Belgrano 2** | **76.70** | **172** | P | **P** | **05 42 39.8** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **79.20** | **345** | P | **P** | **05 42 51.5** | **-0.2** |
| | comp=Z,3.4nm,1.0s,baz=158,slow=5.9,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.27** | **43** | P | **P** | **05 43 08.8** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=219,slow=7.0,SNR=2.6 | | | | | | |
| **H03N2** | **Juan Fernandez** | **83.69** | **124** | T | T | 07 15 10.4 | |
| | baz=250,slow=72,SNR=6.0 | | | | | | |
| **H03N3** | **Juan Fernandez** | **83.69** | **124** | T | T | 07 15 22.5 | |
| | baz=250,slow=72,SNR=7.4 | | | | | | |
| **H03N1** | **Juan Fernandez** | **83.71** | **124** | T | T | 07 15 16.7 | |
| | baz=250,slow=72,SNR=4.2 | | | | | | |
| **GAMB** | **Gambell** | **86.82** | **2** | P | **P** | **05 43 31.1** | **+0.5** |
| GAMB | | | | IAmb | IAmb | 05 43 32.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.62** | **57** | P | **P** | **05 43 34.9** | **-0.6** |
| | comp=Z,0.4nm,0.8s,baz=210,slow=6.6,SNR=4.3 | | | | | | |
| **RND** | **Reindeer** | **89.13** | **12** | P | **P** | **05 43 42.3** | **+0.6** |
| RND | | | | IAmb | IAmb | 05 43 43.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **89.29** | **346** | P | **P** | **05 43 41.4** | **-0.9** |
| | comp=Z,1.4nm,0.5s,baz=137,slow=5.2,SNR=9.8 | | | | | | |
| **ILAR** | **Eielson Array** | **90.74** | **12** | P | **P** | **05 43 49.0** | **0.0** |
| | comp=Z,1.1nm,0.9s,baz=222,slow=5.3,SNR=9.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.06** | **289** | P | **P** | **05 43 57.4** | **+1.1** |
| | comp=Z,3.7nm,0.3s,baz=120,slow=2.8,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.54** | **25** | P | **P** | **05 44 24.1** | **-0.6** |
| | comp=Z,0.1nm,0.6s,baz=241,slow=4.6,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **113.31** | **320** | PKiKP | **PKiKP** | **05 49 22.8** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=30,slow=27,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **113.87** | **312** | PKiKP | **PKiKP** | **05 49 24.1** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=285,slow=0.4,SNR=6.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.81** | **350** | PKP | **PKPdf** | **05 49 58.6** | **+0.3** |
| | comp=Z,1.9nm,0.6s,baz=25,slow=2.6,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **138.71** | **344** | PKP | **PKPdf** | **05 50 12.2** | **+0.9** |
| | comp=Z,1.2nm,0.6s,baz=107,slow=2.0,SNR=5.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.82** | **354** | PKP | **PKPdf** | **05 50 11.6** | **-5.5** |
| | comp=Z,3.2nm,1.4s,baz=16,slow=3.2 | | | | | | |
| **HFS** | **Hagfors** | **142.41** | **351** | PKhKP | PKPpre | 05 50 13.1 | |
| | comp=Z,5.1nm,0.8s,baz=75,slow=1.7,SNR=10.0 | | | | | | |
| **SUW** | **Suwalki** | **145.79** | **339** | *e*PKPbc | **PKPbc** | **05 50 25.2** | **+0.3** |
| **AKASG** | **Malin Array Be** | **145.94** | **330** | PKPbc | **PKPdf** | **05 50 24.5** | **0.0** |
| | comp=Z,8.1nm,0.5s,baz=43,slow=4.2,SNR=30 | | | | | | |
| **SORM** | **Soroca** | **148.11** | **327** | ⇓P | **PKPbc** | **05 50 31.4** | **-0.1** |
| **ASF** | **Jabal al Asfar** | **148.96** | **294** | PKPbc | **PKPbc** | **05 50 34.4** | **-0.1** |
| | comp=Z,4.5nm,0.6s,baz=66,slow=12,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.47** | **310** | PKPbc | **PKPbc** | **05 50 35.4** | **-0.1** |
| | comp=Z,2.3nm,0.5s,baz=149,slow=4.0,SNR=6.7 | | | | | | |
| **BURAR** | **Bucovina Array** | **149.98** | **330** | ⇓P | **PKiKP** | **05 50 37.9** | **+0.6** |
| **MMAI** | **Mount Meron Ar** | **150.07** | **296** | PKPbc | **PKiKP** | **05 50 37.7** | **-0.2** |
| | comp=Z,5.2nm,0.5s,baz=57,slow=9.1,SNR=6.2 | | | | | | |
| **CFR** | **Carcaliu** | **150.14** | **323** | ⇓P | **PKPbc** | **05 50 36.9** | **+0.2** |
| **TPGR** | **Topolog** | **150.19** | **322** | ⇓P | **PKiKP** | **05 50 38.0** | **+0.3** |
| **VRI** | **Vrincioaia** | **150.45** | **326** | ⇑P | **PKPbc** | **05 50 37.9** | **+0.4** |
| **PLOR** | **Plostina** | **150.50** | **326** | ⇑P | **PKiKP** | **05 50 38.9** | **+0.5** |
| **HARR** | **Harsova** | **150.56** | **323** | ⇓P | **PKPbc** | **05 50 38.2** | **+0.4** |
| **KSP** | **Ksiaz** | **150.63** | **343** | *e*PKPbc | **PKiKP** | **05 50 38.9** | **+0.5** |
| **TRPA** | **Tarpa** | **150.78** | **333** | ⇓P | **PKPbc** | **05 50 38.2** | **0.0** |
| **OZUR** | | **150.78** | **327** | ⇑P | **PKPbc** | **05 50 38.8** | **+0.4** |
| **OSTC** | **Ostas** | **150.91** | **343** | *e*PKP | **PKiKP** | **05 50 39.2** | **+0.2** |
| **CHVC** | **Chvalec** | **150.92** | **343** | ⇑*e*PKP | **PKPbc** | **05 50 38.9** | **+0.4** |
| **CLL** | **Collm** | **150.97** | **347** | *i* PKPbc | **PKPbc** | **05 50 38.8** | **+0.3** |
| | comp=Z,11nm,0.8s | | | | | | |
| CLL | | | | *i* x | x | 05 50 43.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| CLL | | | | *i* PKPab | **PKPab** | **05 50 46.0** | **-0.4** |
| | comp=Z,4.0nm,0.8s | | | | | | |
| CLL | | | | *e*PKPbc | **pPKPbc** | **05 51 19.0** | **+1.8** |
| CLL | | | | *e*PKPab | **pPKPab** | **05 51 25.0** | **+1.0** |
| **UPC** | **Upice** | **151.01** | **343** | *e*PKP | **PKiKP** | **05 50 39.4** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **151.06** | **342** | *e*PKP | **PKiKP** | **05 50 39.9** | **+0.5** |
| **DOPR** | **Dopca** | **151.07** | **327** | ⇑P | **PKiKP** | **05 50 40.2** | **+0.7** |
| **MLR** | **Muntele Rosu** | **151.11** | **326** | ⇑P | **PKPbc** | **05 50 39.5** | **+0.3** |
| **MLR** | **Muntele Rosu** | **151.11** | **326** | PKPbc | **PKiKP** | **05 50 39.9** | **+0.1** |
| | comp=Z,5.3nm,0.7s,baz=354,slow=3.9,SNR=8.9 | | | | | | |
| **MLR** | **Muntele Rosu** | **151.11** | **326** | | **PKPbc** | **05 50 39.3** | **0.0** |
| **BRG** | **Berggiesshubel** | **151.18** | **346** | *i* PKP | **PKiKP** | **05 50 39.8** | **+0.2** |
| BRG | | | | Amp | | 05 50 41.7 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| BRG | | | | *ex* | x | 05 50 47.0 | |
| BRG | | | | Amp | | 05 50 48.2 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **KRLC** | **Kraliky** | **151.18** | **342** | ⇑*e*PKP | **PKiKP** | **05 50 40.0** | **+0.4** |
| **PVCC** | **Panska Ves** | **151.36** | **345** | ⇑*e*PKP | **PKiKP** | **05 50 40.3** | **+0.4** |
| **VOIR** | | **151.61** | **327** | ⇓P | **PKiKP** | **05 50 42.4** | **+1.7** |
| **PRU** | **Pruhonice** | **151.86** | **344** | ⇑*e*PKP | **PKPbc** | **05 50 40.1** | **-0.5** |
| **GZR** | **Gura Zlata** | **152.75** | **329** | ⇑P | **PKiKP** | **05 50 43.3** | **+0.2** |
| **KHC** | **Kasperske Hory** | **152.89** | **345** | ⇑*e*PKP | **PKPbc** | **05 50 43.2** | **+0.2** |
| KHC | | | | *ex* | x | 05 50 48.3 | |
| **CKRC** | **Cesky Krumlov** | **153.00** | **344** | ⇑*e*PKP | **PKiKP** | **05 50 48.7** | **+5.3** |
| **BZS** | **Buzias** | **153.12** | **331** | ⇑P | **PKPbc** | **05 50 43.4** | **-0.2** |
| **GERES** | **GERESS Array B** | **153.13** | **345** | PKPbc | **PKPbc** | **05 50 43.0** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=62,slow=3.2,SNR=6.5 | | | | | | |
| **HERR** | **Herculane** | **153.31** | **329** | ⇑P | **PKiKP** | **05 50 45.2** | **+1.0** |

*IDC **23** 05:44:03.7±1.1, 35°.55S×104°.61W, h0km, mb4.2/5, mb1 4.5/5, mb1mx4.0/24, mbtmp4.2/5, MS3.7/14, Ms1 3.7/14, ms1mx3.4/53, Error ellipse: s-maj=120.0km s-min=28.8km az=88.0*

**ISC 23 05:44:05.5±1.0, 35°.5S±0°.2×104°.6W±0°.9, h10km, n24, σ0s73/7, mb4.2/5, MS3.8/16, Southeast of Easter Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RPN** | **Rapa Nui** | **9.31** | **333** | LR | LR | 05 48 58.8 | |
| | comp=Z,158nm,18.6s,baz=164,slow=32 | | | | | | |
| **PLCA** | **Paso Flores** | **27.16** | **111** | LR | LR | 05 57 05.9 | |
| | comp=Z,69nm,19.1s,baz=216,slow=29 | | | | | | |
| **LVC** | **Limon Verde** | **33.54** | **77** | LR | LR | 06 00 43.4 | |
| | comp=Z,208nm,19.6s,baz=240,slow=30 | | | | | | |
| **NNA** | **Nana** | **34.33** | **54** | LR | LR | 06 01 28.9 | |
| | comp=Z,181nm,19.1s,baz=219,slow=30 | | | | | | |
| **ATAH** | **Atahualpa** | **37.09** | **47** | LR | LR | 06 02 29.6 | |
| | comp=Z,122nm,20.1s,baz=224,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **37.69** | **69** | LR | LR | 06 03 42.5 | |
| | comp=Z,41nm,18.2s,baz=227,slow=31 | | | | | | |
| **TBI** | **Tubuai** | **40.61** | **275** | *e*LR | LR | 06 02 51.8 | |
| | comp=Z,193nm,27.8s | | | | | | |
| **CPUP** | **Villa Florida** | **41.23** | **91** | LR | LR | 06 05 42.7 | |
| | comp=Z,127nm,21.4s,baz=218,slow=32 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **41.92** | **301** | *e*LR | LR | 06 03 33.1 | |
| | comp=Z,128nm,26.4s | | | | | | |
| **SIV** | **San Ignacio** | **43.33** | **75** | LR | LR | 06 06 33.5 | |
| | comp=Z,113nm,21.1s,baz=262,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **43.62** | **282** | *e*LR | LR | 06 04 11.3 | |
| | comp=Z,207nm,26.0s | | | | | | |
| **PPT** | **Papeete** | **43.63** | **282** | LR | LR | 06 05 42.6 | |
| | comp=Z,122nm,20.4s,baz=132,slow=30 | | | | | | |
| **JTS** | **Las Juntas de** | **49.21** | **26** | LR | LR | 06 08 30.7 | |
| | comp=Z,71nm,18.3s,baz=218,slow=30 | | | | | | |
| **PTGA** | **Pitinga** | **53.99** | **60** | LR | LR | 06 13 09.2 | |
| | comp=Z,125nm,19.7s,baz=214,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **54.67** | **180** | P | **P** | **05 53 34.7** | **+0.3** |
| | 2.5nm,0.9s,baz=108,slow=2.0,SNR=3.9 | | | | | | |
| **RPZ** | **Rata Peaks** | **62.84** | **234** | LR | LR | 06 15 15.6 | |
| | comp=Z,82nm,19.9s,baz=136,slow=30 | | | | | | |
| **MDP** | **Montagnes des** | **63.27** | **61** | LR | LR | 06 18 31.6 | |
| | comp=Z,62nm,22.0s,baz=250,slow=33 | | | | | | |
| **AFI** | **Afiamalu** | **63.57** | **271** | LR | LR | 06 14 00.2 | |
| | comp=Z,45nm,21.1s,baz=116,slow=28 | | | | | | |
| **TXAR** | **Lajitas Array** | **64.53** | **1** | P | **P** | **05 54 42.5** | **0.0** |
| | 1.3nm,0.8s,baz=184,slow=9.0,SNR=15 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.68** | **349** | P | **P** | **05 55 46.0** | **+0.7** |
| | 1.3nm,0.8s,baz=174,slow=8.8,SNR=10 | | | | | | |
| **PDAR** | **Pinedale Array** | **78.06** | **356** | P | **P** | **05 56 04.5** | **+0.2** |
| | 1.8nm,0.6s,baz=154,slow=7.7,SNR=15 | | | | | | |
| **ULM** | **Lac du Bonnet** | **85.76** | **6** | P | **P** | **05 56 44.4** | **+0.1** |
| | 2.0nm,0.6s,baz=173,slow=5.2,SNR=3.4 | | | | | | |
| **KBZ** | **Khabaz** | **153.78** | **62** | PKPbc | **PKPbc** | **06 04 04.1** | **-0.3** |
| | 1.1nm,0.2s,baz=124,slow=4.7,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **153.99** | **308** | PKPbc | **PKPbc** | **06 04 03.9** | **-1.2** |
| | 1.8nm,0.8s,baz=108,slow=3.2,SNR=12 | | | | | | |

*NNC **23** 05:57:28.6±6.3, 47°.78N×86°.59E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=47.0km s-min=36.2km az=70.0*
*SOME **23** 05:57:31.5, 47°.73N×86°.03E, h5km*
*ASRS **23** 05:57:37.1±0.7, 49°.N±4°.×8°.6E±°, h10km, MLh3.5/9, Error ellipse: s-maj=8.3km s-min=6.4km az=151.1, confirmed*

**ISC 23 05:57:33.9±0.9, 48°.12N±0°.04×85°.93E±0°.06, h10km, n19, σ2s25/36, 5C-3D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **0.98** | **227** | ⇑*e*P | **Pg** | **05 57 50.9** | **-1.9** |
| | 117nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sg** | **05 58 05.7** | **+0.1** |
| | 276nm,0.3s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **1.86** | **32** | Pg | **Pn** | **05 58 06.7** | **+0.7** |
| DGZ | | | | Sg | **Sn** | **05 58 30.7** | **+1.0** |
| **CHBI** | **Chibit, Altay** | **2.42** | **25** | Pg | **Pn** | **05 58 15.1** | **+1.5** |
| CHBI | | | | Sg | **Sb** | **05 58 48.9** | **+1.3** |
| **AKAR** | **Aktash** | **2.46** | **26** | Pn | **Pn** | **05 58 14.4** | **+0.2** |
| AKAR | | | | Pg | **Pb** | **05 58 17.5** | **-0.8** |
| AKAR | | | | Sg | **Sb** | **05 58 49.3** | **+0.6** |
| **CUR** | **Chagan-Uzun** | **2.54** | **38** | Pn | **Pn** | **05 58 14.6** | **-0.7** |
| CUR | | | | Sg | **Sb** | **05 58 53.1** | **+2.2** |
| **MK31** | **Makanchi Array** | **2.81** | **243** | ⇓Pn | **Pn** | **05 58 17.8** | **-1.0** |
| | 2.2nm,0.3s,baz=74,slow=17,SNR=493 | | | | | | |
| MK31 | | | | ⇓Pg | **Pg** | **05 58 27.7** | **+0.1** |
| | 2.1nm,0.2s,baz=78,slow=15,SNR=7.6 | | | | | | |
| MK31 | | | | Lg | Lg | 05 59 05.6 | |
| | 5.1nm,0.3s,baz=81,slow=36,SNR=4.0 | | | | | | |
| **ULGR** | **Ulagan, Altay** | **2.83** | **27** | Pn | **Pn** | **05 58 20.4** | **+1.1** |
| ULGR | | | | Pg | **Pb** | **05 58 26.2** | **+1.6** |
| ULGR | | | | Sg | **Sb** | **05 59 01.6** | **+2.2** |
| **UKR** | **Ust'-Kan** | **2.92** | **345** | Pg | **Pn** | **05 58 22.1** | **+1.7** |
| UKR | | | | Sg | **Sb** | **05 58 59.9** | **-1.9** |
| **MAKZ** | **Makanchi** | **2.99** | **245** | ⇑Pg | **Pg** | **05 58 29.7** | **-1.4** |
| | 10nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 05 59 13.5 | |
| | 14nm,0.3s | | | | | | |
| **ARTR** | **Artybash** | **3.78** | **13** | Pn | **Pn** | **05 58 33.2** | **+1.0** |
| ARTR | | | | Pg | **Pg** | **05 58 44.3** | **-2.0** |
| ARTR | | | | Sg | **Sg** | **05 59 32.7** | **-2.5** |
| **SEM** | **Semipalatinsk** | **4.37** | **304** | *e*P | **Pg** | **05 58 56.3** | **-1.2** |
| | 3.0nm,0.1s | | | | | | |
| SEM | | | | *e*S | **Sg** | **05 59 58.0** | **+4.0** |
| | 34nm,0.3s | | | | | | |
| **TASR** | **Tashtagol** | **4.81** | **14** | Pn | **Pn** | **05 58 45.1** | **-1.3** |
| TASR | | | | Pg | **Pb** | **05 59 01.5** | **+3.4** |
| TASR | | | | Sg | **Sg** | **06 00 03.2** | **-5.0** |
| **ELT** | **Eltsovka** | **5.15** | **2** | Pn | **Pn** | **05 58 51.2** | **+0.3** |
| ELT | | | | Pg | **Pb** | **05 59 04.6** | **+0.7** |
| ELT | | | | S | **Sn** | **05 59 50.6** | **+0.2** |
| ELT | | | | Sg | **Sg** | **06 00 16.2** | **-2.8** |
| **KAPS** | **Kapalarasan** | **5.34** | **240** | *e*P | **Pb** | **05 59 09.4** | **+2.1** |
| | 8.6nm,0.6s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **06 00 20.2** | **-5.0** |
| | 13nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **5.43** | **301** | ⇑Lg | Lg | 06 00 33.0 | |
| | 29nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.44** | **300** | ⇑Lg | Lg | 06 00 35.1 | |
| | 62nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **5.70** | **231** | *e*P | **Pb** | **05 59 17.6** | **+4.1** |
| | 1.4nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **06 00 34.0** | **-2.8** |
| | 6.0nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **6.58** | **226** | ⇓Lg | Lg | 06 00 59.3 | |
| | 16nm,0.8s | | | | | | |
| **SATY** | **Saty** | **7.31** | **229** | *e*P | **Pb** | **05 59 43.1** | **+2.2** |
| | 1.3nm,0.2s | | | | | | |
| SATY | | | | *e*S | Sg | 06 01 18.6 | -10 |
| | 5.3nm,0.4s | | | | | | |

*TUL **23** 06:03:26.7±0.7, 36°.757N±0°.010×98°.07W±0°.02, h6km±5km, ML2.8, mb_Lg2.3/10(NEIC), Error ellipse: s-maj=2.0km s-min=1.4km az=102.0*

**NEIC 23 06:03:26.6±0.8, 36°.75N±0°.01×98°.08W±0°.04, h15km±3km, Error ellipse: s-maj=4.4km s-min=1.1km az=106.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.83** | **243** | Pg | Pg | 06 03 42.9 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.27** | **82** | Pn | Pb | 06 03 50.1 | -0.1 |
| **FNO** | **Franklin** | **1.59** | **159** | Pn | Pb | 06 03 56.0 | +0.3 |
| **R32A** | **Long Quarter,** | **1.74** | **344** | | Pb | 06 03 58.2 | 0.0 |
| **W35A** | **Tecumseh** | **1.88** | **148** | | Pb | 06 04 00.1 | -0.5 |
| **TUL1** | **Leonard** | **2.03** | **114** | | Pb | 06 04 02.1 | -1.2 |
| **WMOK** | **Wichita Mounta** | **2.09** | **196** | Pn | Pb | 06 04 03.5 | -0.8 |
| WMOK | | | | IAmb_Lg | | 06 04 37.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KSU1** | **Kansas State U** | **2.62** | **26** | IAmb_Lg | | 06 04 55.0 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.47** | **238** | IAmb_Lg | | 06 05 24.1 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **4.73** | **235** | IAmb_Lg | | 06 06 01.4 | |
| | comp=Z,9.1nm,1.3s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.99** | **107** | IAmb_Lg | | 06 06 11.5 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.00** | **282** | IAmb_Lg | | 06 06 49.5 | |
| | comp=Z,3.0nm,1.0s | | | | | | |

*CNRM **23** 06:24:53.3, 35°.46N×3°.79W, h26km, ml2.7*
*SFS **23** 06:24:54.0, 35°.39N×3°.68W, ML2.8, ALBORAN SUR*
*INMG **23** 06:24:54.1±1.8, 35°.39N×3°.75W, h19km±9km, ML2.2, Error ellipse: s-maj=6.7km s-min=5.4km az=17.0*

**ISC 23 06:24:52.7±1.1, 35°.46N±0°.03×3°.71W±0°.03, h17km±8km, n23, σ1s50/43, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.31** | **218** | P | **Pg** | **06 24 59.1** | **-0.2** |
| PALE | | | | S | **Sg** | **06 25 03.3** | **-0.6** |
| **AKLM** | **AKL** | **0.96** | **188** | P | **Pn** | **06 25 11.9** | **+0.5** |
| AKLM | | | | S | **Sg** | **06 25 23.6** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **1.08** | **105

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CNBA** | **Chernabura Isl** | **1.60** | **112** | | | **Pn** | **06 50 44.3** | **-1.1** |
| **WESE** | **West Dahl East** | **1.70** | **236** | | | **Pn** | **06 50 46.3** | **-0.2** |
| **WECS** | **Westdahl Cape** | **1.76** | **240** | | | **Pn** | **06 50 47.0** | **-0.1** |
| **CHGN** | **Chignik** | **2.28** | **66** | | | **Pn** | **06 50 53.2** | **+0.1** |
| **CHGN** | **Chignik** | **2.28** | **66** | | IAML | | 06 51 24.5 | |
| | comp=N,127nm,0.5s | | | | | | | |
| CHGN | | | | | IAML | | 06 51 24.7 | |
| | comp=E,198nm,0.4s | | | | | | | |
| **CHGN** | **Chignik** | **2.28** | **66** | P | | **Pn** | **06 50 53.2** | **+0.1** |
| | baz=245 | | | | | | | |
| **AKSA** | **Akutan Strait** | **2.43** | **239** | | | **Pn** | **06 50 55.0** | **+0.1** |
| **AKUT** | **Akutan** | **2.47** | **239** | Pn | | **Pn** | **06 50 55.0** | **-0.3** |
| AKUT | | | | | IAML | | 06 51 47.5 | |
| | comp=E,94nm,4.1s | | | | | | | |
| **AKMO** | **Akutan Morgan** | **2.61** | **240** | | | **Pn** | **06 50 57.0** | **-0.1** |
| **UNV** | **Unalaska Valle** | **2.99** | **239** | | | **Pn** | **06 51 01.1** | **-0.7** |
| **UNV** | **Unalaska Valle** | **2.99** | **239** | P | | **Pn** | **06 51 01.0** | **-0.7** |
| | baz=59 | | | | | | | |
| **MTBL** | **Makushin Table** | **3.01** | **243** | | | **Pn** | **06 51 02.3** | **+0.2** |
| **MSW** | **Makushin Switc** | **3.09** | **242** | | | **Pn** | **06 51 02.4** | **-0.6** |
| **MREP** | **Makushin Rep't** | **3.12** | **240** | | | **Pn** | **06 51 03.3** | **-0.3** |
| **CHIR** | **Chirikof Islan** | **3.73** | **81** | | | **Pn** | **06 51 10.6** | **-0.6** |
| **CHIR** | **Chirikof Islan** | **3.73** | **81** | | IAML | | 06 52 36.1 | |
| | comp=E,186nm,4.9s | | | | | | | |
| CHIR | | | | | IAML | | 06 53 07.0 | |
| | comp=N,198nm,2.7s | | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.73** | **81** | P | | **Pn** | **06 51 10.6** | **-0.6** |
| | baz=264 | | | | | | | |
| **OKFG** | **Magazine Ridge** | **3.93** | **241** | | | **Pn** | **06 51 13.3** | **-0.5** |
| **SII** | **Sitkinak Islan** | **4.62** | **73** | | | **Pn** | **06 51 22.4** | **-0.4** |
| **SII** | **Sitkinak Islan** | **4.62** | **73** | P | | **Pn** | **06 51 22.4** | **-0.4** |
| | baz=257 | | | | | | | |
| **NIKH** | **Nikolski High** | **4.64** | **241** | | | **Pn** | **06 51 22.5** | **-0.7** |
| **NIKH** | **Nikolski High** | **4.64** | **241** | P | | **Pn** | **06 51 22.5** | **-0.7** |
| | baz=57 | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **4.83** | **294** | Pn | | **Pn** | **06 51 25.7** | **+0.2** |
| **OHAK** | **Old Harbor** | **5.25** | **66** | Pn | | **Pn** | **06 51 29.9** | **-1.2** |
| OHAK | | | | | IAML | | 06 52 21.4 | |
| | comp=E,56nm,4.7s | | | | | | | |
| **P18K** | **Big Mountain,** | **5.45** | **41** | Pn | | **Pn** | **06 51 34.1** | **+0.2** |
| **KDAK** | **Kodiak Island** | **5.79** | **62** | P | | **Pn** | **06 51 36.1** | **-2.1** |
| | comp=E,2.4nm,0.3s,baz=242,slow=6.4,SNR=104 | | | | | | | |
| KDAK | | | | | S | | **06 52 37.9** | **-5.8** |
| | comp=E,1.6nm,0.3s,baz=299,slow=23,SNR=12 | | | | | | | |
| **KDAK** | **Kodiak Island** | **5.79** | **62** | Pn | | **Pn** | **06 51 37.1** | **-1.2** |
| **O18K** | **Koktuh Hills** | **5.79** | **37** | Pn | | **Pn** | **06 51 39.7** | **+1.4** |
| **Q19K** | **Cape Douglas,** | **5.80** | **49** | Pn | | **Pn** | **06 51 39.5** | **+1.1** |
| **N19K** | **Bonanza Creek** | **6.75** | **34** | Pn | | **Pn** | **06 51 52.0** | **+0.9** |
| **BRLK** | **Bradley Lake** | **7.45** | **50** | Pn | | **Pn** | **06 51 58.6** | **-1.7** |
| **M19K** | **Big River Lodg** | **7.64** | **29** | Pn | | **Pn** | **06 52 03.6** | **+0.8** |
| **L19K** | **White Mountain** | **7.75** | **26** | Pn | | **Pn** | **06 52 04.3** | **0.0** |
| **SEW** | **Seward** | **8.24** | **50** | Pn | | **Pn** | **06 52 10.0** | **-0.8** |
| **K20K** | **Telida** | **8.94** | **24** | Pn | | **Pn** | **06 52 21.0** | **+0.8** |
| **PWL** | **Port Wells** | **9.10** | **48** | Pn | | **Pn** | **06 52 20.8** | **-1.4** |
| **ANM** | **Nome** | **9.29** | **351** | Pn | | **Pn** | **06 52 25.1** | **+0.2** |
| **ADK** | **Adak** | **9.33** | **254** | Pn | | **Pn** | **06 52 24.4** | **-1.0** |
| **KNK** | **Knik Glacier** | **9.34** | **45** | Pn | | **Pn** | **06 52 25.2** | **-0.4** |
| **GHO** | **Glory Hole Cre** | **9.37** | **42** | Pn | | **Pn** | **06 52 25.7** | **-0.2** |
| **SML** | **Sawmill** | **9.62** | **43** | Pn | | **Pn** | **06 52 27.6** | **-1.6** |
| **J20K** | **Nowinta River** | **9.64** | **21** | Pn | | **Pn** | **06 52 29.9** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **10.03** | **44** | Pn | | **Pn** | **06 52 31.2** | **-3.4** |
| **EYAK** | **Cordova Ski Ar** | **10.09** | **53** | Pn | | **Pn** | **06 52 33.1** | **-2.2** |
| **HMT** | **Hamilton** | **10.70** | **55** | Pn | | **Pn** | **06 52 42.5** | **-1.0** |
| **ILAR** | **Eielson Array** | **12.03** | **33** | P | | **Pn** | **06 52 57.8** | **-2.9** |
| | comp=E,0.1nm,0.3s,baz=213,slow=13,SNR=1.6 | | | | | | | |
| **SEY** | **Seymchan** | **24.00** | **307** | P | | **P** | **06 55 12.4** | **-2.0** |
| | comp=E,1.3nm,0.6s,baz=180,slow=24,SNR=6.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **24.99** | **54** | P | | **P** | **06 55 25.9** | **+2.4** |
| | comp=E,0.3nm,0.5s,baz=275,slow=9.8,SNR=9.9 | | | | | | | |
| YKA | | | | | sP | | **pP 06 55 58.3** | **+3.0** |
| | comp=E,0.8nm,0.9s,baz=279,slow=9.8,SNR=5.4 | | | | | | | |
| **PDAR** | **Pinedale Array** | **35.83** | **88** | P | | **P** | **06 57 01.6** | **+2.5** |
| | comp=E,0.3nm,0.6s,baz=327,slow=5.2,SNR=4.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **48.66** | **97** | P | | **P** | **06 58 45.1** | **+2.3** |
| | comp=E,0.5nm,0.8s,baz=298,slow=5.3,SNR=6.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.92** | **320** | P | | **P** | **06 59 49.2** | **-0.8** |
| | comp=E,0.2nm,0.3s,baz=39,slow=7.4,SNR=1.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.64** | **317** | P | | **P** | **07 00 34.3** | **-1.0** |
| | comp=E,0.2nm,0.4s,baz=45,slow=4.7,SNR=2.8 | | | | | | | |

*NNC* ***23*** *07:16:43.0±0.5, 50.°01N×78.°69E, h0km, mb3.8, mpv2.9, Error ellipse: s-maj=4.6km s-min=2.5km az=63.0, Suspected Mining explosion.*

*IDC* ***23*** *07:16:47.9±3.7, 50.°01N×79.°34E, h0km, mb1 3.0/2, mb1mx2.9/30, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=47.9km s-min=17.5km az=94.0*

**ISC 23 07:16:44.2±1.0, 50.°09N±0.°05×78.°80E±0.°05, h0km, n23, σ1°06/30, 20C-6D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.53** | **340** | **⇑P** | | **Pg** | **07 16 54.4** | **+0.1** |
| KUR07 | | | | ⇑S | | **Sb** | **07 17 03.7** | **-0.7** |
| **KUR14** | **Kurchatov Arra** | **0.54** | **346** | **⇑P** | | **Pg** | **07 16 54.7** | **+0.2** |
| KUR14 | | | | ⇑S | | **Sb** | **07 17 03.3** | **-1.6** |
| **KUR06** | **Kurchatov Arra** | **0.54** | **341** | **⇓P** | | **Pg** | **07 16 54.8** | **+0.2** |
| KUR06 | | | | ⇓S | | **Sb** | **07 17 04.1** | **-0.8** |
| **KUR15** | **Kurchatov Arra** | **0.55** | **344** | **⇑P** | | **Pg** | **07 16 54.8** | **+0.1** |
| KUR15 | | | | ⇑S | | **Sb** | **07 17 03.9** | **-1.3** |
| **KURBB** | **Kurchatov Arra** | **0.56** | **342** | **⇑P** | | **Pg** | **07 16 55.2** | **+0.3** |
| | 7.0nm,0.2s | | | | | | | |
| KURBB | | | | ⇓S | | **Sb** | **07 17 04.0** | **-1.4** |
| | 82nm,0.6s | | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.57** | **341** | **⇑P** | | **Pg** | **07 16 55.2** | **+0.1** |
| KUR16 | | | | ⇑S | | **Sb** | **07 17 04.3** | **-1.4** |
| **KUR05** | **Kurchatov Arra** | **0.58** | **343** | **⇑P** | | **Pg** | **07 16 55.3** | **+0.1** |
| KUR05 | | | | ⇑S | | **Sb** | **07 17 04.4** | **-1.6** |
| **KUR17** | **Kurchatov Arra** | **0.58** | **339** | **⇑P** | | **Pg** | **07 16 55.6** | **+0.3** |
| KUR17 | | | | ⇓S | | **Sb** | **07 17 05.1** | **-1.0** |
| **KUR04** | **Kurchatov Arra** | **0.60** | **344** | **⇑P** | | **Pg** | **07 16 55.9** | **+0.3** |
| KUR04 | | | | ⇓S | | **Sb** | **07 17 04.8** | **-1.7** |
| **KURK** | **Kurchatov** | **0.64** | **350** | **⇑P** | | **Pg** | **07 16 56.4** | **+0.1** |
| | 7.1nm,0.4s | | | | | | | |
| KURK | | | | ⇑S | | **Sb** | **07 17 06.5** | **-1.2** |
| | 19nm,0.7s | | | | | | | |
| **SEM** | **Semipalatinsk** | **0.99** | **71** | P | | **Pg** | **07 17 03.1** | **0.0** |
| | 7.3nm,0.2s | | | | | | | |
| SEM | | | | S | | **Sn** | **07 17 19.1** | **-1.2** |
| | 20nm,0.1s | | | | | | | |
| **MAKZ** | **Makanchi** | **3.91** | **146** | ⇑Lg | | Lg | 07 18 43.0 | |
| | 2.6nm,0.4s | | | | | | | |
| **BRZS** | **Berezniki** | **3.94** | **271** | Pg | | **Pb** | **07 17 54.8** | **+0.2** |
| | 2.5nm,0.4s | | | | | | | |
| BRZS | | | | Lg | | Lg | 07 18 48.1 | |
| | 3.8nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.04** | **143** | ⇑Pn | | **Pn** | **07 17 47.3** | **+0.1** |
| | 0.1nm,0.1s,baz=279,slow=6.8,SNR=38 | | | | | | | |
| MK31 | | | | ⇑Pg | | **Pb** | **07 17 57.4** | **+1.3** |
| | 0.1nm,0.1s,baz=328,slow=15,SNR=8.4 | | | | | | | |
| MK31 | | | | Lg | | Lg | 07 18 48.6 | |
| | 1.7nm,0.5s,baz=329,slow=24,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.04** | **143** | Pn | | **Pn** | **07 17 47.4** | **+0.1** |
| | 0.4nm,0.3s,baz=326,slow=10,SNR=57 | | | | | | | |
| MKAR | | | | Pg | | **Pb** | **07 17 54.4** | **-1.7** |
| | 0.7nm,0.3s,baz=332,slow=15,SNR=17 | | | | | | | |
| MKAR | | | | Lg | | Lg | 07 18 47.2 | |
| | 1.5nm,0.3s,baz=330,slow=26,SNR=14 | | | | | | | |
| **OTUK** | **Ortayu** | **4.62** | **249** | ⇓Lg | | Lg | 07 19 06.3 | |
| | 3.2nm,0.5s | | | | | | | |
| **ZSN** | **Zaisan** | **4.80** | **121** | Pg | | **Pb** | **07 18 10.1** | **+0.8** |
| | 2.2nm,0.2s | | | | | | | |
| **KAPS** | **Kapalarasan** | **4.82** | **175** | Lg | | Lg | 07 19 12.0 | |
| **ZALV** | **Zalesovo Beam** | **5.36** | **42** | Pn | | **Pn** | **07 18 07.8** | **+2.4** |
| | 0.9nm,0.3s,baz=229,slow=16,SNR=14 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 19 31.9 | |
| | 0.3nm,0.3s,baz=224,slow=24,SNR=2.3 | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.36** | **42** | *i* | | | 07 49 20.0 | |
| | baz=220,slow=314,SNR=3.0 | | | | | | | |
| **BTLS** | **Baital** | **5.99** | **214** | Pg | | **Pb** | **07 18 30.1** | **+0.8** |
| | 0.4nm,0.1s | | | | | | | |
| BTLS | | | | Lg | | Lg | 07 19 47.9 | |
| | 1.1nm,0.2s | | | | | | | |
| **PDGK** | **Podgornoye** | **6.78** | **176** | ⇑Lg | | Lg | 07 20 13.3 | |
| | 1.3nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.50** | **198** | ⇑Lg | | Lg | 07 20 32.8 | |
| | 0.7nm,0.5s | | | | | | | |

*TUL* ***23*** *07:45:13.7±1.1, 36.°29N±0.°01×97.°836W±0.°006, h7km±6km, ML2.8, mb_Lg2.6/18(NEIC), Error ellipse: s-maj=1.7km s-min=0.4km az=159.0*

**NEIC 23 07:45:13.8±0.9, 36.°29N±0.°01×97.°84W±0.°01, h2km±6km,**

**Error ellipse: s-maj=1.9km s-min=1.5km az=222.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.93** | **160** | | | **Pg** | 07 45 31.2 | -0.3 |
| OKCFA | | | | | Sg | Sg | 07 45 43.2 | -0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.94** | **160** | | Pg | Pg | 07 45 31.4 | -0.3 |
| OKCSW | | | | | Sg | Sg | 07 45 44.4 | +0.4 |
| **U32A** | **Winter Ranch,** | **0.94** | **276** | | | Pg | 07 45 30.4 | -1.4 |
| U32A | | | | | Sg | Sg | 07 45 44.2 | +0.1 |
| **FNO** | **Franklin** | **1.09** | **161** | | | Pg | 07 45 34.1 | -0.5 |
| FNO | | | | | Sg | Sg | 07 45 49.1 | +0.4 |
| **T35A** | **Sooner Cattle** | **1.24** | **59** | | | Pg | 07 45 36.9 | -0.6 |
| T35A | | | | | Sg | Sg | 07 45 53.9 | +0.3 |
| **W35A** | **Tecumseh** | **1.38** | **145** | Pn | | Pn | 07 45 38.9 | -1.1 |
| **X34A** | **Smith Ranch, M** | **1.68** | **180** | | | Pb | 07 45 44.9 | -0.5 |
| **TUL1** | **Leonard** | **1.70** | **102** | Pn | | Pn | 07 45 44.2 | -0.2 |
| TUL1 | | | | IAmb_Lg | | | 07 46 08.8 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.73** | **207** | | | Pn | 07 45 44.8 | 0.0 |
| **R32A** | **Long Quarter,** | **2.24** | **342** | Pn | | Pn | 07 45 51.8 | -0.2 |
| **X37A** | **Clayton** | **2.63** | **129** | | | Pn | 07 45 57.2 | 0.0 |
| **CBKS** | **Cedar Bluff** | **2.94** | **330** | Pn | | Pn | 07 46 00.9 | -0.6 |
| **KSU1** | **Kansas State U** | **2.97** | **19** | | | Pn | 07 46 02.8 | +0.9 |
| **Z35A** | **Perchaven, San** | **2.99** | **171** | Pn | | Pn | 07 46 02.3 | +0.2 |
| **HHAR** | **Hobbs** | **3.15** | **89** | | | Pn | 07 46 06.1 | +1.7 |
| **AMTX** | **Amarillo** | **3.43** | **247** | | | Pn | 07 46 08.2 | -0.1 |
| **W39A** | **Magazine** | **3.47** | **107** | IAmb_Lg | | | 07 47 06.3 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **3.88** | **67** | | | Pn | 07 46 14.9 | +0.5 |
| **MIAR** | **Mount Ida** | **3.89** | **115** | | | Pn | 07 46 13.9 | -0.7 |
| **ABTX** | **Abilene, Hawle** | **3.95** | **203** | Pn | | Pn | 07 46 15.6 | +0.2 |
| **U40A** | **Yellville** | **4.03** | **88** | | | Pn | 07 46 16.2 | -0.2 |
| U40A | | | | IAmb_Lg | | | 07 47 21.4 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.47** | **112** | Pn | | Pn | 07 46 22.7 | +0.2 |
| X40A | | | | IAmb_Lg | | | 07 47 36.1 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.56** | **77** | Pn | | Pn | 07 46 22.5 | -1.2 |
| **WHAR** | **Wooly Hollow** | **4.62** | **101** | Pn | | Pn | 07 46 24.4 | -0.2 |
| **FCAR** | **Ozark Folk Cen** | **4.64** | **93** | Pn | | Pn | 07 46 25.4 | +0.5 |
| **MSTX** | **Muleshoe** | **4.66** | **242** | | | Pn | 07 46 27.0 | +1.7 |
| **KSCO** | **Kaye Shedlock'** | **4.67** | **307** | IAmb_Lg | | | 07 47 41.5 | |
| | comp=Z,8.8nm,0.7s | | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.68** | **102** | Pn | | Pn | 07 46 27.6 | +2.2 |
| **P38A** | **Dawn** | **4.76** | **44** | Pn | | Pn | 07 46 26.1 | -0.5 |
| **R40A** | **Maddies Statio** | **4.87** | **64** | Pn | | Pn | 07 46 30.1 | +2.1 |
| **N35A** | **Tabor** | **4.88** | **20** | Pn | | Pn | 07 46 28.4 | +0.3 |
| **BGNE** | **Belgrade** | **5.12** | **357** | IAmb_Lg | | | 07 48 04.1 | |
| | comp=Z,9.6nm,0.7s | | | | | | | |
| **T25A** | **Trinidad** | **5.35** | **281** | Pn | | Pn | 07 46 33.5 | -1.2 |
| **LCAR** | **Lake Charles** | **5.41** | **90** | Pn | | Pn | 07 46 34.9 | -0.6 |
| **CCM** | **Cathedral Cave** | **5.55** | **70** | Pn | | Pn | 07 46 36.0 | -1.4 |
| **P40A** | **Paris** | **5.61** | **53** | Pn | | Pn | 07 46 37.4 | -0.7 |
| P40A | | | | IAmb_Lg | | | 07 48 10.9 | |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| **OGNE** | **Ogallala** | **5.69** | **326** | Pn | | Pn | 07 46 39.6 | +0.2 |
| **N38A** | **Joes South For** | **5.77** | **37** | Pn | | Pn | 07 46 40.5 | +0.2 |
| N38A | | | | IAmb_Lg | | | 07 48 29.2 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.99** | **83** | Pn | | Pn | 07 46 43.6 | +0.3 |
| **JCT** | **Junction City** | **6.02** | **196** | Pn | | Pn | 07 46 44.1 | +0.2 |
| **FVM** | **French Village** | **6.16** | **72** | Pn | | Pn | 07 46 45.8 | +0.1 |
| **SDCO** | **Great Sand Dun** | **6.30** | **286** | Pn | | Pn | 07 46 47.3 | -0.7 |
| **K31A** | **O'Neill** | **6.37** | **354** | IAmb_Lg | | | 07 48 46.3 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **Q24A** | **Divide** | **6.39** | **297** | Pn | | Pn | 07 46 51.3 | +2.1 |
| **N23A** | **Red Feather La** | **7.84** | **308** | IAmb_Lg | | | 07 49 25.5 | |
| | comp=Z,5.8nm,0.9s | | | | | | | |

**UPA 23 08:24:54.0±0.6, 9.°19N×78.°89W, h47km±4km, MW3.9, 1C, Panama**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHPO** | **Chepo, Panama** | **0.23** | **264** | *eP* | | Pn | 08 25 01.4 | -0.7 |
| CHPO | | | | *eS* | | Sn | 08 25 08.3 | +0.3 |
| **FLAM** | **Flamenco Islan** | **0.70** | **247** | *eP* | | Pn | 08 25 07.6 | 0.0 |
| FLAM | | | | *eS* | | Sn | 08 25 17.4 | -0.1 |
| **GAMB1** | **Gamboa** | **0.82** | **265** | ⇑*iP* | | Pn | 08 25 09.2 | 0.0 |
| GAMB1 | | | | *eS* | | Sn | 08 25 20.2 | 0.0 |
| **CHOR3** | **La Chorrera** | **0.92** | **251** | *eP* | | Pn | 08 25 10.5 | 0.0 |
| CHOR3 | | | | *eS* | | Sn | 08 25 22.5 | -0.1 |
| **ZANG** | **Zanguenga, Cho** | **1.00** | **256** | *eP* | | Pn | 08 25 11.4 | -0.3 |
| ZANG | | | | *eS* | | Sn | 08 25 24.8 | +0.2 |
| **AZU** | **Azuero** | **1.96** | **225** | *eP* | | Pn | 08 25 24.6 | -0.2 |
| AZU | | | | *eS* | | Sn | 08 25 47.9 | -0.2 |

*NIED* ***23*** *08:26:27.7, 24.°02N×122.°35E, h25km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15 Nm; Mrr2.06; Mθθ-2.62; Mφφ0.56; Mrθ3.21; Mθφ0.14; Mrφ2.06; Fault plane solution: Mo4.50000×10^15 NP1:φs64.00000°, δ76.00000°, λ72.00000°. NP2:φs298.00000°, δ23.00000°, λ142.00000°.*

*BJI* ***23*** *08:26:27.5±0.0, 24.°05N×122.°39E, h23km, mb4.4/45, mB4.6/27, ML4.2/7, Ms4.1/28, Ms7 4.0/31*

*TAP* ***23*** *08:26:27.5, 24.°01N×122.°36E, h25km, ML4.8, D*

*NEIC* ***23*** *08:26:27.8±1.7, 23.°98N±0.°05×122.°42E±0.°05, h30km±5km, mb4.7/57, ML4.8(TAP), Error ellipse: s-maj=8.0km s-min=5.7km az=151.0*

*JMA* ***23*** *08:26:27.7±0.2, 24.°02N×122.°35E, h25km±4km, M4.5*

*IDC* ***23*** *08:26:30.1±3.0, 24.°18N×122.°51E, h59km±28km, mb3.9/21, mb1 4.1/23, mb1mx4.0/37, mbtmp4.2/23, ML3.8/2, MS3.6/24, Ms1 3.7/24, ms1mx3.3/89, Error ellipse: s-maj=18.0km s-min=12.9km az=71.0*

**ISC 23 08:26:26.9±0.9, 23.°95N±0.°02×122.°42E±0.°02, h31km±6km, n318, σ1°35/439, mb4.6/51, MS3.6/25, 42C-13D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.69** | **43** | P | | **Pn** | **08 26 41.0** | **+0.4** |
| JYNG | | | | S | | **Sn** | **08 26 49.4** | **-0.8** |
| **EHP** | **Heping Village** | **0.72** | **300** | *eP* | | **Pb** | **08 26 40.1** | **-1.0** |
| | baz=308 | | | | | | | |
| EHP | | | | *eS* | | **Sn** | **08 26 50.7** | **-0.3** |
| | baz=308 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.74** | **46** | P | | **Pn** | **08 26 41.8** | **+0.6** |
| YOJ | | | | S | | **Sn** | **08 26 51.2** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.74** | **46** | | | **Pn** | **08 26 41.8** | **+0.6** |
| **YOJ** | **Yonaguni jima** | **0.74** | **46** | ⇓*iP* | | **Pn** | **08 26 41.9** | **+0.6** |
| | baz=61 | | | | | | | |
| YOJ | | | | *i* S | | **Sn** | **08 26 50.9** | **-0.5** |
| | baz=61 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.74** | **46** | P | | **Pn** | **08 26 42.2** | **+1.0** |
| **HWA** | **Hwalien** | **0.75** | **272** | P | | **Pn** | **08 26 41.0** | **-0.4** |
| | baz=254 | | | | | | | |
| HWA | | | | S | | **Sb** | **08 26 50.8** | **-0.6** |
| | baz=254 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.76** | **264** | P | | **Pn** | **08 26 41.2** | **-0.2** |
| | baz=250 | | | | | | | |
| TEYL | | | | S | | **Sn** | **08 26 51.9** | **0.0** |
| | baz=250 | | | | | | | |
| **ETL** | **Fush Village** | **0.76** | **286** | P | | **Pb** | **08 26 40.8** | **-0.9** |
| | baz=267 | | | | | | | |
| ETL | | | | *eS* | | **Sb** | **08 26 50.5** | **-1.4** |
| | baz=267 | | | | | | | |
| **TWD** | **Chiawan** | **0.77** | **280** | ⇑*iP* | | **Pb** | **08 26 40.7** | **-1.1** |
| | baz=275 | | | | | | | |
| TWD | | | | *i* S | | **Sb** | **08 26 50.7** | **-1.3** |
| | baz=275 | | | | | | | |
| **EWUT** | **Wuta** | **0.77** | **310** | ⇑*iP* | | **Pb** | **08 26 40.8** | **-1.1** |
| | baz=308 | | | | | | | |
| EWUT | | | | S | | **Sb** | **08 26 51.1** | **-0.9** |
| | baz=308 | | | | | | | |
| **ENA** | **Nanau** | **0.79** | **308** | ⇓*iP* | | **Pb** | **08 26 40.9** | **-1.3** |
| | baz=314 | | | | | | | |
| ENA | | | | S | | **Sb** | **08 26 50.9** | **-1.6** |
| | baz=314 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.79** | **287** | Pn | | **Pb** | **08 26 40.8** | **-1.4** |
| **NACB** | **Ninganchiao** | **0.79** | **287** | ⇑*iP* | | **Pb** | **08 26 41.1** | **-1.1** |
| | baz=268 | | | | | | | |
| NACB | | | | *eS* | | **Sb** | **08 26 51.3** | **-1.3** |
| | baz=268 | | | | | | | |
| **TWC** | **Suao** | **0.84** | **322** | ⇓*iP* | | **Pb** | **08 26 41.6** | **-1.5** |
| | baz=321 | | | | | | | |
| TWC | | | | *i* S | | **Sb** | **08 26 51.4** | **-2.7** |
| | baz=321 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.84** | **254** | *eP* | | **Pn** | **08 26 42.5** | **-0.2** |
| | baz=248 | | | | | | | |
| TEGC | | | | *eS* | | **Sb** | **08 26 53.2** | **-0.9** |
| | baz=248 | | | | | | | |
| **ETM** | **Tongmen** | **0.85** | **271** | ⇑*iP* | | **Pb** | **08 26 42.0** | **-1.3** |
| | baz=256 | | | | | | | |
| ETM | | | | S | | **Sb** | **08 26 52.6** | **-1.8** |
| | baz=256 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.90** | **287** | ⇑*iP* | | **Pb** | **08 26 42.9** | **-1.2** |
| | baz=272 | | | | | | | |
| ETLH | | | | *i* S | | **Sb** | **08 26 54.6** | **-1.2** |
| | baz=272 | | | | | | | |
| **ESL** | **Shilin** | **0.92** | **262** | ⇑P | | **Pb** | **08 26 42.7** | **-1.6** |
| | baz=247 | | | | | | | |
| ESL | | | | S | | **Sb** | **08 26 54.4** | **-1.8** |
| | baz=247 | | | | | | | |
| **NDS** | **Dongshan** | **0.94** | **317** | ⇑*iP* | | **Pn** | **08 26 43.9** | **-0.1** |
| | baz=315 | | | | | | | |
| NDS | | | | S | | **Sn** | **08 26 56.4** | **0.0** |
| | baz=315 | | | | | | | |
| **LATG** | **Datong** | **1.01** | **306** | ⇑*iP* | | **Pb** | **08 26 45.0** | **-0.9** |
| | baz=303 | | | | | | | |
| LATG | | | | S | | **Sn** | **08 26 58.5** | **+0.4** |
| | baz=303 | | | | | | | |
| **ILA** | **Ilan** | **1.02** | **323** | ⇓*iP* | | **Pb** | **08 26 45.4** | **-0.7** |
| | baz=322 | | | | | | | |
| ILA | | | | S | | **Sn** | **08 26 59.8** | **+1.4** |
| | baz=322 | | | | | | | |
| **HGSD** | **Ruisui** | **1.02** | **244** | P | | **Pn** | **08 26 44.7** | **-0.4** |
| | baz=239 | | | | | | | |
| HGSD | | | | *eS* | | **Sb** | **08 26 56.9** | **-2.3** |
| | baz=239 | | | | | | | |
| **TWE** | **Neicheng** | **1.03** | **318** | ⇓*iP* | | **Pb** | **08 26 45.4** | **-0.9** |
| | baz=325 | | | | | | | |
| TWE | | | | S | | **Sn** | **08 26 59.2** | **+0.5** |
| | baz=325 | | | | | | | |
| **ENTT** | **Nioudou** | **1.04** | **312** | ⇑*iP* | | **Pb** | **08 26 45.6** | **-0.8** |
| | baz=310 | | | | | | | |
| ENTT | | | | S | | **Sn** | **08 26 58.7** | **-0.2** |
| | baz=310 | | | | | | | |
| **NTC** | **Toucheng** | **1.05** | **329** | P | | **Pb** | **08 26 46.0** | **-0.6** |
| | baz=328 | | | | | | | |
| NTC | | | | S | | **Sn** | **08 26 59.4** | **+0.3** |
| | baz=328 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.06** | **308** | ⇑*iP* | | **Pb** | **08 26 45.9** | **-0.8** |
| | baz=306 | | | | | | | |
| NDT | | | | S | | **Sb** | **08 26 58.9** | **-1.3** |
| | baz=306 | | | | | | | |
| **NNSB** | **Datong** | **1.06** | **297** | ⇑*iP* | | **Pb** | **08 26 45.8** | **-1.1** |
| | baz=282 | | | | | | | |
| NNSB | | | | S | | **Sb** | **08 26 59.1** | **-1.4** |
| | baz=282 | | | | | | | |
| **NNS** | **Nan Shan** | **1.08** | **297** | ⇑*iP* | | **Pb** | **08 26 45.9** | **-1.2** |
| | baz=282 | | | | | | | |
| NNS | | | | *i* S | | **Sn** | **08 26 59.8** | **-0.1** |
| | baz=282 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.08** | **281** | ⇑*iP* | | **Pn** | **08 26 45.7** | **-0.5** |
| | baz=265 | | | | | | | |
| WHF | | | | *i* S | | **Sb** | **08 26 59.3** | **-2.0** |
| | baz=265 | | | | | | | |
| **ECBN** | **Changbin** | **1.09** | **235** | P | | **Pb** | **08 26 46.2** | **-1.0** |
| | baz=231 | | | | | | | |
| ECBN | | | | S | | **Sb** | **08 26 59.5** | **-1.6** |
| | baz=231 | | | | | | | |
| **EHY** | **Hungye** | **1.10** | **247** | ⇑*iP* | | **Pn** | **08 26 45.9** | **-0.3** |
| | baz=231 | | | | | | | |
| EHY | | | | *i* S | | **Sb** | **08 26 59.4** | **-2.0** |
| | baz=231 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.11** | **317** | ⇑*iP* | | **Pb** | **08 26 47.0** | **-0.6** |
| | baz=315 | | | | | | | |
| FUSB | | | | *i* S | | **Sn** | **08 27 00.6** | **-0.1** |
| | baz=315 | | | | | | | |
| **FUSS** | **Fushou** | **1.12** | **286** | ⇑*iP* | | **Pb** | **08 26 46.6** | **-1.3** |
| | baz=282 | | | | | | | |
| FUSS | | | | S | | **Sn** | **08 27 01.4** | **+0.2** |
| | baz=282 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.13** | **340** | ⇓*iP* | | **Pb** | **08 26 46.9** | **-1.0** |
| | baz=326 | | | | | | | |
| TWB1 | | | | S | | **Sb** | **08 27 00.7** | **-1.5** |
| | baz=326 | | | | | | | |
| **CHGB** | **Renai** | **1.15** | **276** | ⇑*iP* | | **Pn** | **08 26 47.0** | **-0.1** |
| | baz=261 | | | | | | | |
| CHGB | | | | S | | **Sb** | **08 27 01.2** | **-1.9** |
| | baz=261 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.16** | **332** | P | | **Pb** | **08 26 47.4** | **-1.0** |
| | baz=331 | | | | | | | |
| TIPB | | | | S | | **Sb** | **08 27 01.8** | **-1.2** |
| | baz=331 | | | | | | | |
| **YULB** | **Yu-li** | **1.17** | **242** | Pn | | **Pn** | **08 26 47.1** | **0.0** |
| **YULB** | **Yu-li** | **1.17** | **242** | P | | **Pn** | **08 26 47.3** | **+0.1** |
| | baz=254 | | | | | | | |
| YULB | | | | S | | **Sn** | **08 27 01.0** | **-1.1** |
| | baz=254 | | | | | | | |
| **EYUL** | **Yuli** | **1.18** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=332 | | | | | | | | |
| **NHY** | **Taipei** | **1.34** | **325** | *e*P | | **Pb** | **08 26 51.7** | **+0.3** |
| | baz=339 | | | | | | | | |
| **WPL** | **Puli Township** | **1.34** | **273** | *e*P | | **Pb** | **08 26 50.1** | **-1.4** |
| | baz=270 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.35** | **264** | | | **Pn** | **08 26 49.8** | **0.0** |
| **SSLB** | **Suanglung** | **1.35** | **264** | *e*P | | **Pn** | **08 26 49.8** | **0.0** |
| | baz=260 | | | | | | | | |
| SSLB | | | | *e*S | | **Sn** | **08 27 07.2** | **+0.6** |
| | baz=260 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.35** | **264** | P | | **Pb** | **08 26 50.3** | **-1.4** |
| **TAP** | **Taipei** | **1.37** | **323** | P | | **Pb** | **08 26 51.2** | **-0.8** |
| | baz=321 | | | | | | | | |
| TAP | | | | S | | **Sb** | **08 27 09.5** | **+0.3** |
| | baz=321 | | | | | | | | |
| **DPDB** | **Guoxing** | **1.37** | **274** | P | | **Pb** | **08 26 50.6** | **-1.4** |
| | baz=271 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.37** | **300** | ⇑P | | **Pb** | **08 26 50.8** | **-1.3** |
| | baz=297 | | | | | | | | |
| NFF | | | | S | | **Sb** | **08 27 08.6** | **-0.7** |
| | baz=297 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.39** | **275** | *e*P | | **Pn** | **08 26 48.6** | **-1.6** |
| | baz=264 | | | | | | | | |
| WCS | | | | *e*S | | **Sb** | **08 27 09.9** | **+0.3** |
| | baz=264 | | | | | | | | |
| **WHP** | **Taichung City** | **1.39** | **284** | ⇑P | | **Pb** | **08 26 51.1** | **-1.3** |
| | baz=270 | | | | | | | | |
| WHP | | | | *e*S | | **Sb** | **08 27 09.3** | **-0.5** |
| | baz=270 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.40** | **268** | ⇑*i*P | | **Pb** | **08 26 50.8** | **-1.6** |
| | baz=255 | | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | **08 27 08.1** | **+0.3** |
| | baz=255 | | | | | | | | |
| **EDH** | **Donghe** | **1.41** | **227** | *e*P | | **Pn** | **08 26 50.4** | **-0.1** |
| | baz=215 | | | | | | | | |
| EDH | | | | S | | **Sn** | **08 27 06.6** | **-1.4** |
| | baz=215 | | | | | | | | |
| **YM01** | **YM01** | **1.42** | **327** | *e*P | | **Pb** | **08 26 51.5** | **-1.4** |
| | baz=340 | | | | | | | | |
| YM01 | | | | *e*S | | **Sb** | **08 27 11.1** | **+0.3** |
| | baz=340 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.42** | **252** | P | | **Pb** | **08 26 51.6** | **-1.6** |
| | baz=248 | | | | | | | | |
| YUS | | | | S | | **Sn** | **08 27 08.2** | **-0.8** |
| | baz=248 | | | | | | | | |
| **NJD** | **Zhudong** | **1.45** | **303** | *e*P | | **Pb** | **08 26 53.3** | **0.0** |
| | baz=301 | | | | | | | | |
| **LIOB** | **Emei** | **1.46** | **299** | ⇑P | | **Pb** | **08 26 52.7** | **-0.8** |
| | baz=296 | | | | | | | | |
| LIOB | | | | S | | **Sb** | **08 27 10.4** | **-1.3** |
| | baz=296 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.47** | **298** | ⇑*i*P | | **Pb** | **08 26 52.7** | **-0.9** |
| | baz=283 | | | | | | | | |
| NSTT | | | | S | | **Sb** | **08 27 10.5** | **-1.4** |
| | baz=283 | | | | | | | | |
| **NTY** | **Taoyuan** | **1.47** | **316** | *i* P | | **Pb** | **08 26 52.6** | **-0.9** |
| | baz=315 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.47** | **322** | ⇓P | | **Pb** | **08 26 52.4** | **-1.3** |
| | baz=331 | | | | | | | | |
| TWS1 | | | | *e*S | | **Sb** | **08 27 11.2** | **-0.7** |
| | baz=331 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.48** | **78** | P | | **Pb** | **08 26 54.4** | **+0.6** |
| JKRS | | | | S | | **Sb** | **08 27 13.6** | **+1.4** |
| **ANP** | **Anpu** | **1.48** | **326** | *e*P | | **Pb** | **08 26 52.6** | **-1.3** |
| | baz=325 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.50** | **240** | P | | **Pb** | **08 26 52.8** | **-1.4** |
| | baz=237 | | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | **08 27 08.9** | **-1.3** |
| | baz=237 | | | | | | | | |
| **NTST** | **Danshui** | **1.50** | **324** | *e*P | | **Pb** | **08 26 53.0** | **-1.2** |
| | baz=338 | | | | | | | | |
| NTST | | | | *e*S | | **Sb** | **08 27 13.4** | **+0.5** |
| | baz=338 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.52** | **312** | *e*P | | **Pb** | **08 26 53.6** | **-0.9** |
| | baz=309 | | | | | | | | |
| NCUH | | | | *e*S | | **Sb** | **08 27 13.7** | **+0.3** |
| | baz=309 | | | | | | | | |
| **TWY** | **Chenhua** | **1.52** | **331** | ⇓P | | **Pb** | **08 26 54.0** | **-0.5** |
| | baz=329 | | | | | | | | |
| TWY | | | | *e*S | | **Sb** | **08 27 13.1** | **-0.4** |
| | baz=329 | | | | | | | | |
| **HSN1** | **Hsinchu** | **1.52** | **303** | *i* P | | **Pb** | **08 26 53.8** | **-0.8** |
| | baz=301 | | | | | | | | |
| **LDUT** | **Ludao** | **1.54** | **215** | *e*P | | **Pn** | **08 26 52.1** | **-0.1** |
| | baz=213 | | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **08 27 09.1** | **-2.1** |
| | baz=213 | | | | | | | | |
| **ALS** | **Alishan** | **1.55** | **254** | ⇑*i*P | | **Pb** | **08 26 53.6** | **-1.5** |
| | baz=251 | | | | | | | | |
| ALS | | | | S | | **Sn** | **08 27 12.5** | **+0.7** |
| | baz=251 | | | | | | | | |
| **WJS** | **Zhushan** | **1.56** | **266** | *e*P | | **Pb** | **08 26 55.0** | **-0.1** |
| | baz=263 | | | | | | | | |
| WJS | | | | *e*S | | **Sb** | **08 27 13.9** | **-0.6** |
| | baz=263 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.56** | **303** | *e*P | | **Pb** | **08 26 53.6** | **-1.6** |
| | baz=301 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.56** | **285** | ⇑*i*P | | **Pb** | **08 26 54.4** | **-0.8** |
| | baz=282 | | | | | | | | |
| TWQ1 | | | | S | | **Sb** | **08 27 14.4** | **-0.1** |
| | baz=282 | | | | | | | | |
| **HSN** | **Hsinchu** | **1.57** | **303** | *e*P | | **Pb** | **08 26 53.9** | **-1.6** |
| | baz=301 | | | | | | | | |
| HSN | | | | *e*S | | **Sb** | **08 27 13.7** | **-1.3** |
| | baz=301 | | | | | | | | |
| **LONT** | **Longtian** | **1.58** | **229** | *e*P | | **Pn** | **08 26 53.0** | **+0.3** |
| | baz=239 | | | | | | | | |
| LONT | | | | *e*S | | **Sn** | **08 27 12.2** | **+0.1** |
| | baz=239 | | | | | | | | |
| **NSY** | **Sanyi** | **1.59** | **287** | ⇑P | | **Pb** | **08 26 54.9** | **-0.8** |
| | baz=284 | | | | | | | | |
| NSY | | | | S | | **Sb** | **08 27 14.7** | **-0.7** |
| | baz=284 | | | | | | | | |
| **WNT** | **Mingjian** | **1.59** | **268** | *e*P | | **Pb** | **08 26 54.9** | **-0.8** |
| | baz=265 | | | | | | | | |
| WNT | | | | S | | **Sb** | **08 27 14.4** | **-1.1** |
| | baz=265 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.60** | **292** | *e*P | | **Pb** | **08 26 54.9** | **-1.0** |
| | baz=288 | | | | | | | | |
| NMLH | | | | *e*S | | **Sb** | **08 27 15.2** | **-0.5** |
| | baz=288 | | | | | | | | |
| **TCU** | **Taichung** | **1.61** | **277** | P | | **Pb** | **08 26 55.2** | **-0.8** |
| | baz=274 | | | | | | | | |
| TCU | | | | S | | **Sb** | **08 27 15.3** | **-0.7** |
| | baz=274 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.62** | **75** | P | | **Pb** | **08 26 55.3** | **-1.0** |
| JIJ | | | | *e*S | | **Sb** | **08 27 15.6** | **-0.8** |
| **CHN5** | **Tsauling** | **1.64** | **258** | ⇑P | | **Pb** | **08 26 55.1** | **-1.4** |
| | baz=244 | | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **08 27 15.6** | **-1.2** |
| | baz=244 | | | | | | | | |
| **NHW** | **Xinwu Township** | **1.64** | **310** | *i* P | | **Pb** | **08 26 55.0** | **-1.5** |
| | baz=308 | | | | | | | | |
| **TTN** | **Taitung** | **1.67** | **225** | *e*S | | **Sn** | **08 27 13.9** | **-0.4** |
| | baz=223 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.67** | **228** | *e*P | | **Pn** | **08 26 54.0** | **-0.1** |
| | baz=237 | | | | | | | | |
| **TWG** | **Pinlang** | **1.67** | **228** | Pn | | **Pn** | **08 26 53.9** | **-0.2** |
| **TWG** | **Pinlang** | **1.67** | **228** | *e*P | | **Pn** | **08 26 54.0** | **0.0** |
| | baz=238 | | | | | | | | |
| TWG | | | | *e*S | | **Sn** | **08 27 14.2** | **-0.3** |
| | baz=238 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.68** | **284** | *e*P | | **Pb** | **08 26 55.5** | **-1.7** |
| | baz=281 | | | | | | | | |
| WDJ | | | | *e*S | | **Sb** | **08 27 16.4** | **-1.5** |
| | baz=281 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.70** | **243** | *e*P | | **Pb** | **08 26 55.7** | **-1.8** |
| | baz=231 | | | | | | | | |
| STYH | | | | *e*S | | **Sn** | **08 27 16.2** | **+1.1** |
| | baz=231 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.71** | **349** | *e*P | | **Pn** | **08 26 54.7** | **+0.2** |
| | baz=349 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.71** | **275** | *e*P | | **Pb** | **08 26 56.4** | **-1.3** |
| | baz=271 | | | | | | | | |
| WCHH | | | | *e*S | | **Sb** | **08 27 17.7** | **-1.1** |
| | baz=271 | | | | | | | | |
| **STYT** | **Tauyuan** | **1.72** | **243** | *i* P | | **Pb** | **08 26 56.1** | **-1.8** |
| | baz=231 | | | | | | | | |
| STYT | | | | *e*S | | **Sb** | **08 27 17.3** | **-1.8** |
| | baz=231 | | | | | | | | |
| **WGK** | **Gukeng** | **1.72** | **262** | *e*P | | **Pb** | **08 26 58.7** | **+0.7** |
| | baz=259 | | | | | | | | |
| WGK | | | | *e*S | | **Sb** | **08 27 18.5** | **-0.7** |
| | baz=259 | | | | | | | | |
| **WDLH** | **Douliu** | **1.75** | **262** | *e*P | | **Pb** | **08 26 57.1** | **-1.2** |
| | baz=259 | | | | | | | | |
| WDLH | | | | *e*S | | **Sb** | **08 27 19.0** | **-0.8** |
| | baz=259 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.77** | **249** | | | **Pb** | **08 26 56.7** | **-2.0** |
| **TPUB** | **Ta-pu** | **1.77** | **249** | *e*P | | **Pb** | **08 26 57.1** | **-1.6** |
| | baz=246 | | | | | | | | |
| TPUB | | | | *e*S | | **Sb** | **08 27 19.2** | **-1.3** |
| | baz=246 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.77** | **249** | P | | **Pb** | **08 26 58.0** | **-0.7** |
| **CHN4** | **Tsaushan** | **1.78** | **251** | ⇑P | | **Pb** | **08 26 57.3** | **-1.6** |
| | baz=248 | | | | | | | | |
| CHN4 | | | | S | | **Sb** | **08 27 20.4** | **-0.5** |
| | baz=248 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.80** | **248** | *e*P | | **Pb** | **08 26 58.0** | **-1.3** |
| | baz=245 | | | | | | | | |
| WTP | | | | *e*S | | **Sb** | **08 27 20.1** | **-1.4** |
| | baz=245 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.84** | **69** | P | | **Pb** | **08 26 57.9** | **-2.0** |
| JISG | | | | S | | **Sb** | **08 27 21.1** | **-1.4** |
| **WRL** | **Guolierlin Hig** | **1.87** | **269** | *e*P | | **Pb** | **08 26 58.6** | **-1.9** |
| | baz=266 | | | | | | | | |
| WRL | | | | *e*S | | **Sb** | **08 27 21.9** | **-1.7** |
| | baz=266 | | | | | | | | |
| **WTK** | **Tuku** | **1.88** | **263** | *e*P | | **Pb** | **08 26 59.6** | **-1.0** |
| | baz=260 | | | | | | | | |
| WTK | | | | *e*S | | **Sb** | **08 27 22.9** | **-0.9** |
| | baz=260 | | | | | | | | |
| **CHY** | **Chiayi** | **1.89** | **257** | *e*P | | **Pb** | **08 26 59.4** | **-1.3** |
| | baz=254 | | | | | | | | |
| CHY | | | | *e*S | | **Sb** | **08 27 22.6** | **-1.3** |
| | baz=254 | | | | | | | | |
| **SGST** | **Jiashian** | **1.90** | **243** | *e*P | | **Pb** | **08 26 59.0** | **-1.9** |
| | baz=232 | | | | | | | | |
| SGST | | | | *e*S | | **Sb** | **08 27 22.8** | **-1.4** |
| | baz=232 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.90** | **247** | ⇓*i*P | | **Pb** | **08 26 59.5** | **-1.4** |
| | baz=244 | | | | | | | | |
| CHN1 | | | | S | | **Sb** | **08 27 23.7** | **-0.5** |
| | baz=244 | | | | | | | | |
| **TWK** | **Hsinying** | **1.90** | **249** | ⇑*i*P | | **Pb** | **08 26 59.6** | **-1.4** |
| | baz=247 | | | | | | | | |
| TWK | | | | S | | **Sb** | **08 27 23.9** | **-0.4** |
| | baz=247 | | | | | | | | |
| **ECL** | **Taimali** | **1.91** | **225** | *e*P | | **Pn** | **08 26 57.2** | **0.0** |
| | baz=224 | | | | | | | | |
| ECL | | | | *e*S | | **Sn** | **08 27 18.8** | **-1.4** |
| | baz=224 | | | | | | | | |
| **SNST** | **Tainan City** | **1.91** | **248** | *e*P | | **Pb** | **08 27 00.5** | **-0.6** |
| | baz=246 | | | | | | | | |
| SNST | | | | *e*S | | **Sb** | **08 27 24.0** | **-0.6** |
| | baz=246 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.96** | **268** | *e*P | | **Pb** | **08 26 59.9** | **-2.1** |
| | baz=278 | | | | | | | | |
| WTCT | | | | S | | **Sb** | **08 27 24.7** | **-1.4** |
| | baz=278 | | | | | | | | |
| **SSD** | **Sandimen** | **2.04** | **234** | *e*P | | **Pb** | **08 27 01.2** | **-2.0** |
| | baz=226 | | | | | | | | |
| SSD | | | | *e*S | | **Sb** | **08 27 27.4** | **-0.8** |
| | baz=226 | | | | | | | | |
| **WSF** | **Szhu** | **2.04** | **262** | *e*P | | **Pb** | **08 27 01.7** | **-1.6** |
| | baz=259 | | | | | | | | |
| WSF | | | | *e*S | | **Sb** | **08 27 26.9** | **-1.4** |
| | baz=259 | | | | | | | | |
| **TSMG** | **Majia** | **2.05** | **233** | *e*P | | **Pb** | **08 27 01.5** | **-2.0** |
| | baz=226 | | | | | | | | |
| TSMG | | | | *e*S | | **Sb** | **08 27 26.8** | **-1.8** |
| | baz=226 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.05** | **254** | *e*P | | **Pb** | **08 27 01.1** | **-2.4** |
| | baz=251 | | | | | | | | |
| ICHU | | | | *e*S | | **Sb** | **08 27 26.1** | **-2.5** |
| | baz=251 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.06** | **259** | *e*P | | **Pb** | **08 27 01.3** | **-2.3** |
| | baz=256 | | | | | | | | |
| WSL | | | | *e*S | | **Sb** | **08 27 26.2** | **-2.6** |
| | baz=256 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.06** | **203** | *e*P | | **Pn** | **08 27 00.1** | **+0.7** |
| | baz=211 | | | | | | | | |
| LAY | | | | *e*S | | **Sn** | **08 27 21.9** | **-2.2** |
| | baz=211 | | | | | | | | |
| **CHN3** | **Shinhua** | **2.08** | **246** | *e*S | | **Sb** | **08 27 30.2** | **+0.8** |
| | baz=244 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.08** | **202** | *e*P | | **Pn** | **08 26 59.6** | **-0.1** |
| | baz=201 | | | | | | | | |
| **CHN8** | **Yiju** | **2.12** | **254** | *e*S | | **Sb** | **08 27 28.4** | **-2.1** |
| | baz=251 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.12** | **231** | *e*P | | **Pn** | **08 27 01.3** | **+1.2** |
| | baz=224 | | | | | | | | |
| MASBT | | | | *e*S | | **Sb** | **08 27 28.7** | **-1.8** |
| | baz=224 | | | | | | | | |
| **SHHT** | **Tainan City** | **2.12** | **245** | *e*P | | **Pb** | **08 27 04.4** | **-0.2** |
| | baz=243 | | | | | | | | |
| SHHT | | | | *e*S | | **Sb** | **08 27 31.1** | **+0.6** |
| | baz=243 | | | | | | | | |
| **EAST** | **Anshuo** | **2.13** | **223** | *e*P | | **Pn** | **08 27 00.9** | **+0.5** |
| | baz=222 | | | | | | | | |
| **TAWH** | **Dawu Township** | **2.13** | **222** | *e*P | | **Pn** | **08 27 00.9** | **+0.5** |
| | baz=230 | | | | | | | | |
| **TWM1** | **Shoushan** | **2.15** | **239** | *e*P | | **Pb** | **08 27 05.3** | **+0.1** |
| | baz=236 | | | | | | | | |
| TWM1 | | | | *e*S | | **Sb** | **08 27 32.8** | **+1.2** |
| | baz=236 | | | | | | | | |
| **JTJ** | **Tarama** | **2.19** | **71** | P | | **Pb** | **08 27 04.5** | **-1.4** |
| JTJ | | | | S | | **Sb** | **08 27 31.0** | **-1.6** |
| **SLIU** | **Shizi** | **2.28** | **221** | *e*P | | **Pn** | **08 27 04.0** | **+1.6** |
| | baz=221 | | | | | | | | |
| SLIU | | | | *e*S | | **Sb** | **08 27 32.7** | **-2.5** |
| | baz=221 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.28** | **227** | *e*P | | **Pb** | **08 27 06.1** | **-1.4** |
| | baz=219 | | | | | | | | |
| SCZT | | | | *e*S | | **Sb** | **08 27 32.9** | **-2.4** |
| | baz=219 | | | | | | | | |
| **WLCH** | **Liuqiu** | **2.46** | **230** | *e*P | | **Pb** | **08 27 09.7** | **-0.9** |
| | baz=244 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **2.48** | **215** | *e*P | | **Pn** | **08 27 06.0** | **+0.9** |
| | baz=215 | | | | | | | | |
| **HEN** | **Hengchun** | **2.48** | **219** | *e*P | | **Pn** | **08 27 07.2** | **+2.1** |
| | baz=219 | | | | | | | | |
| HEN | | | | *e*S | | **Sn** | **08 27 36.1** | **+1.8** |
| | baz=219 | | | | | | | | |
| **TWKBT** | **Hengchun** | **2.49** | **217** | *e*P | | **Pn** | **08 27 06.6** | **+1.3** |
| | baz=217 | | | | | | | | |
| TWKBT | | | | *e*S | | **Sn** | **08 27 35.7** | **+1.1** |
| | baz=217 | | | | | | | | |
| **TWK1** | **Hengchun** | **2.49** | **217** | P | | **Pn** | **08 27 06.9** | **+1.6** |
| | baz=217 | | | | | | | | |
| TWK1 | | | | *e*S | | **Sn** | **08 27 35.6** | **+0.9** |
| | baz=217 | | | | | | | | |
| **WDGT** | **Dungji** | **2.63** | **255** | *e*P | | **Pn** | **08 27 08.0** | **+0.8** |
| | baz=242 | | | | | | | | |
| WDGT | | | | *e*S | | **Sn** | **08 27 38.7** | **+0.7** |
| | baz=242 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.65** | **261** | *e*P | | **Pn** | **08 27 08.1** | **+0.6** |
| | baz=259 | | | | | | | | |
| PHUB | | | | *e*S | | **Sn** | **08 27 39.4** | **+0.9** |
| | baz=259 | | | | | | | | |
| **PNG** | **Penghu** | **2.66** | **262** | P | | **Pn** | **08 27 09.0** | **+1.4** |
| | baz=260 | | | | | | | | |
| PNG | | | | S | | **Sn** | **08 27 39.4** | **+0.7** |
| | baz=260 | | | | | | | | |
| **JIRB** | **Irabujima** | **2.66** | **70** | P | | **Pb** | **08 27 10.8** | **-3.0** |
| JIRB | | | | *e*S | | **Sb** | **08 27 42.7** | **-3.3** |
| **JIKM** | **Ikemajima** | **2.75** | **69** | P | | **Pb** | **08 27 12.5** | **-2.9** |
| JIKM | | | | *e*S | | **Sb** | **08 27 46.1** | **-2.6** |
| **JMJ** | **Miyako jima 2** | **2.76** | **71** | P | | **Pb** | **08 27 12.3** | **-3.2** |
| **JMJ2** | **Miyako jima3** | **2.76** | **73** | P | | **Pb** | **08 27 12.6** | **-3.1** |
| JMJ2 | | | | *e*S | | **Sb** | **08 27 44.9** | **-4.2** |
| **JOGS** | **Gusukube** | **2.84** | **73** | P | | **Pb** | **08 27 14.5** | **-2.4** |
| JOGS | | | | *e*S | | **Sb** | **08 27 48.0** | **-3.2** |
| **VCHM** | **Qimei** | **2.84** | **256** | *e*P | | **Pn** | **08 27 11.7** | **+1.5** |
| | baz=254 | | | | | | | | |
| **MSUT** | **Lienchiang** | **3.17** | **315** | *e*P | | **Pn** | **08 27 14.7** | **0.0** |
| | baz=312 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.20** | **291** | *e*P | | **Pn** | **08 27 14.9** | **-0.1** |
| | baz=288 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.54** | **318** | *e*P | | **Pn** | **08 27 19.3** | **-0.5** |
| | baz=315 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.59** | **326** | *e*P | | **Pn** | **08 27 20.4** | **-0.1** |
| | baz=333 | | | | | | | | |
| **QZH** | **Quanzhou** | **3.63** | **287** | ⇑*i*Pn | | **Pn** | **08 27 20.9** | **-0.1** |
| QZH | | | | Sn | | **Sn** | **08 28 00.3** | **-2.5** |
| QZH | | | | smax | smax | | | |
| | comp=N,330nm,0.3s | | | | | | | |
| QZH | | | | smax | smax | | | |
| | comp=E,320nm,0.4s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=Z,1μm,10.0s | | | | | | | |
| **KNM** | **Kinmen** | **3.67** | **278** | *e*P | | **Pn** | **08 27 23.3** | **+1.7** |
| | baz=274 | | | | | | | | |
| KNM | | | | *e*S | | **Sn** | **08 28 04.4** | **+0.5** |
| | baz=274 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.72** | **279** | Pn | | **Pn** | **08 27 21.5** | **-0.7** |
| **KNMB** | **Chin-men Tao** | **3.72** | **279** | *e*P | | **Pn** | **08 27 21.9** | **-0.4** |
| | baz=277 | | | | | | | | |
| **MHZQ** | **Yeshan** | **3.75** | **306** | *e*P | | **Pn** | **08 27 21.8** | **-0.8** |
| | baz=303 | | | | | | | | |
| **AXDP** | **Jialang** | **4.17** | **284** | *e*P | | **Pn** | **08 27 28.5** | **+0.2** |
| | baz=282 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.28** | **271** | *e*P | | **Pn** | **08 27 30.3** | **+0.4** |
| | baz=267 | | | | | | | | |
| ZPLA | | | | *e*S | | **Sn** | **08 28 16.4** | **-2.2** |
| | baz=267 | | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.97** | **300** | *e*P | | **Pn** | **08 27 39.1** | **-0.3** |
| | baz=298 | | | | | | | | |
| **JOW** | **Kunigami** | **6.02** | **60** | P | | **Pn** | **08 27 54.1** | **+0.2** |
| | 4.8nm,0.3s,baz=146,slow=15,SNR=8.9 | | | | | | | | |
| **JOW** | **Kunigami** | **6.02** | **60** | P | | **Pn** | **08 27 54.5** | **+0.6** |
| **SSE** | **Sheshan** | **7.21** | **352** | Pn | | Pn | 08 28 15.5 | +5.4 |
| SSE | | | | Sn | | Sb | 08 29 46.0 | -11 |
| SSE | | | | smax | smax | | | |
| | comp=N,25nm,1.2s | | | | | | | |
| SSE | | | | smax | smax | | | |
| | comp=E,43nm,0.8s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=N,480nm,10.0s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=E,260nm,9.1s | | | | | | | |
| **NJ2** | **Nanjing** | **8.67** | **339** | *e*P | | **Pn** | **08 28 31.3** | **+1.1** |
| NJ2 | | | | S | | **Sn** | **08 30 06.0** | **-0.8** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=E,19nm,0.6s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=E,270nm,4.1s | | | | | | | |
| NJ2 | | | | smax | smax | | | |
| | comp=E,53nm,0.8s | | | | | | | |
| NJ2 | | | | smax | smax | | | |
| | comp=E,80nm,1.3s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,980nm,9.4s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,640nm,7.4s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,2μm,12.1s | | | | | | | |
| **CNSH** | **ChangSha** | **9.52** | **298** | ⇓P | | Pn | 08 28 34.3 | -7.5 |
| CNSH | | | | S | | Sn | 08 30 13.6 | -14 |
| CNSH | | | | smax | smax | | | |
| | comp=N,140nm,0.9s | | | | | | | |
| CNSH | | | | smax | smax | | | |
| | comp=E,160nm,1.0s | | | | | | | |
| **WHN** | **Wuhan** | **9.73** | **314** | ⇑P | | **Pn** | **08 28 44.0** | **-0.8** |
| WHN | | | | S | | **Sn** | **08 30 31.4** | **-1.6** |
| WHN | | | | LR | LR | | | |
| | comp=E,1μm,5.8s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=E,1μm,3.4s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=E,2μm,13.6s | | | | | | | |
| **QIZ** | **Qiongzhong** | **12.69** | **250** | P | | **Pn** | **08 29 25.6** | **+0.3** |
| QIZ | | | | S | | **Sn** | **08 31 51.9** | **+6.3** |
| QIZ | | | | LR | LR | | | |
| | comp=E,330nm,19.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=E,200nm,18.6s | | | | | | | |
| **KSRS** | **Korea Array** | **14.27** | **18** | P | | **Pn** | **08 29 47.1** | **+0.4** |
| | comp=E,0.5nm,0.3s,baz=203,slow=14,SNR=6.6 | | | | | | | | |
| KSRS | | | | LR | LR | | 08 35 57.5 | |
| | comp=E,206nm,18.7s,baz=195,slow=40 | | | | | | | | |
| **GYA** | **Guiyang** | **14.48** | **283** | ⇓P | | **Pn** | **08 29 52.0** | **+2.1** |
| GYA | | | | pmax | pmax | | | |
| | comp=E,16nm,0.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=E,640nm,18.0s | | | | | | | |
| **HNS** | **HongShan** | **14.95** | **336** | *e*P | | **P** | **08 29 59.3** | **-1.9** |
| HNS | | | | S | | **Sn** | **08 32 45.9** | **+5.3** |
| HNS | | | | LR | LR | | | |
| | comp=E,730nm,14.1s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,510nm,11.4s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,800nm,13.0s | | | | | | | |
| **XAN** | **Xi'an** | **15.50** | **313** | P | | **P** | **08 30 09.6** | **+2.2** |
| XAN | | | | pP | | sP | 08 30 14.5 | -3.8 |
| XAN | | | | pmax | pmax | | | |
| | comp=E,19nm,0.8s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,280nm,7.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,420nm,8.6s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,580nm,13.1s | | | | | | | |
| **DAV** | **Davao City (W)** | **17.05** | **169** | LR | | LR | 08 36 50.6 | |
| | comp=E,142nm,21.0s,baz=316,slow=36 | | | | | | | | |
| **KMI** | **Kunming** | **17.95** | **278** | ⇑P | | **P** | **08 30 40.0** | **+5.2** |
| KMI | | | | pmax | pmax | | | |
| | comp=E,10.0nm,1.3s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=E,200nm,13.9s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=E,400nm,17.2s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=E,410nm,16.7s | | | | | | | |
| **CD2** | **Chengdu** | **17.95** | **297** | P | | **P** | **08 30 35.1** | **+0.5** |
| CD2 | | | | S | | **Sn** | **08 33 55.3** | **+1.7** |
| CD2 | | | | pmax | pmax | | | |
| | comp=E,20nm,0.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=E,370nm,10.8s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=E,540nm,11.2s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.50** | **44** | LR | | LR | 08 38 22.8 | |
| | comp=E,48nm,18.5s,baz=196,slow=39 | | | | | | | | |
| **PZH** | **PanZhiHua** | **18.88** | **282** | P | | **Pn** | **08 30 47.8** | **+2.1** |
| PZH | | | | S | | **Sn** | **08 34 14.8** | **-1.5** |
| PZH | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=E,140nm,6.5s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,490nm,14.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,490nm,14.3s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,490nm,14.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.16** | **334** | *e*P | | **Pn** | **08 30 50.0** | **+1.1** |
| HHC | | | | pmax | pmax | | | |
| | comp=E,11nm,1.3s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=E,260nm,6.6s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,560nm,11.7s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,340nm,11.4s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,680nm,12.7s | | | | | | | |
| **LZH** | **Lanzhou** | **20.09** | **311** | ⇑P | | Pn | 08 31 00.5 | +0.5 |
| LZH | | | | pP | | pP | 08 31 03.8 | -1.7 |
| LZH | | | | PP | | **PnPn** | **08 31 18.5** | **+3.7** |
| LZH | | | | pmax | pmax | | | |
| | comp=E,16nm,1.6s | | | | | | | |
| LZH | | | | pmax | pmax | | | |
| | comp=E,150nm,5.5s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,210nm,13.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,430nm,13.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,580nm,13.9s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.57** | **347** | *e*P | | **P** | **08 31 03.0** | **-0.2** |
| XLT | | | | pP | | pP | 08 31 09.4 | -1.4 |
| XLT | | | | S | | **S** | **08 34 51.8** | **+0.1** |
| XLT | | | | sS | | pS | 08 35 03.1 | -3.5 |
| XLT | | | | pmax | pmax | | | |
| | comp=E,6.0nm,1.0s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=E,150nm,4.6s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=E,38nm,13.5s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=E,320nm,12.2s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=E,470nm,14.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.67** | **19** | P | | **P** | **08 31 11.7** | **-3.2** |
| | comp=E,5.5nm,0.7s,baz=205,slow=12,SNR=7.2 | | | | | | | | |
| USRK | | | | LR | LR | | 08 40 27.9 | |
| | comp=E,146nm,18.6s,baz

CMAR LR LR 08 41 13.0
comp=E,72nm,18.8s,baz=70,slow=39
**CMAR Chiang Mai Arr 22.55 260** P **P** **08 31 24.7 +0.1**
**GUMO Guam 23.58 112** LR LR 08 42 07.3
comp=E,69nm,18.1s,baz=225,slow=40
**GTA Gaotai 24.56 314** ⇑P **P** **08 31 46.3 +2.2**
GTA pP sP 08 31 53.3 -2.3
GTA sP pwP 08 31 56.8 +0.4
GTA pmax pmax
comp=E,8.0nm,0.8s
GTA pmax pmax
comp=E,140nm,5.2s
GTA LR LR
comp=E,100nm,12.0s
GTA LR LR
comp=E,310nm,14.3s
GTA LR LR
comp=E,230nm,13.9s
**ASAJ Asahikawa 26.03 34** P **P** **08 31 55.2 -2.0**
comp=E,2.7nm,0.4s,baz=235,slow=10,SNR=5.1
ASAJ LR LR 08 41 39.3
comp=E,104nm,20.8s,baz=248,slow=35
**KLR Kulʲdur 26.28 14** P **P** **08 31 57.8 -1.6**
comp=E,0.6nm,0.4s,baz=48,slow=14,SNR=2.4
KLR LR LR 08 42 54.3
comp=E,182nm,19.4s,baz=202,slow=38
**GOMU GeErMu 26.73 304** P **P** **08 32 05.4 +1.3**
GOMU pP sP 08 32 11.8 -3.9
GOMU sP pwP 08 32 16.4 0.0
GOMU S S **08 36 36.8 -1.3**
GOMU pmax pmax
comp=E,2.0nm,0.7s
GOMU pmax pmax
comp=E,40nm,4.3s
**ULN Ulaanbaatar 26.82 337** P **P** **08 32 04.2 -0.3**
ULN IAmb IAmb 08 32 05.3
comp=Z,13nm,1.1s
**SONM Songino Array 27.04 336** P **P** **08 32 05.9 -0.5**
comp=Z,15nm,0.8s,baz=147,slow=9.8,SNR=83
SONM LR LR 08 43 35.1
comp=Z,144nm,21.9s,baz=148,slow=38
**SONM Songino Array 27.04 336** P **P** **08 32 05.9 -0.5**
SONM IAmb IAmb 08 32 07.2
comp=Z,17nm,0.8s
**KAPI Kappang 28.90 186** LR LR 08 44 45.5
comp=Z,34nm,19.4s,baz=7.5,slow=38
**JAY Jayapura 31.75 143** LR LR 08 45 14.2
comp=Z,107nm,18.4s,baz=0.5,slow=35
**WMQ Urumqi 34.64 313** *eP* **P** **08 33 16.1 +2.7**
**ZSN Zaisan 37.94 318** *eP* **P** **08 33 41.6 +0.1**
baz=318
**YAK Yakutsk 38.39 6** LR LR 08 51 39.6
comp=Z,129nm,18.1s,baz=262,slow=40
**MK31 Makanchi Array 39.30 316** P **P** **08 33 53.4 +0.4**
MK31 IAmb IAmb 08 33 54.3
comp=Z,5.6nm,0.7s
**MKAR Makanchi Array 39.30 316** P **P** **08 33 52.9 -0.1**
comp=Z,4.9nm,0.4s,baz=100,slow=9.5,SNR=78
MKAR PcP **PcP** **08 36 01.6 +0.3**
comp=Z,0.7nm,0.6s,baz=90,slow=4.4,SNR=3.6
MKAR LR LR 08 51 35.7
comp=Z,141nm,18.2s,baz=78,slow=38
**MKAR Makanchi Array 39.30 316** P **P** **08 33 53.1 +0.2**
**PETK Petropavlovsk- 39.44 33** LR LR 08 50 59.8
comp=Z,80nm,19.1s,baz=223,slow=38
**MAKZ Makanchi 39.50 316** P **P** **08 33 55.2 +0.6**
MAKZ IAmb IAmb 08 33 56.1
comp=Z,9.9nm,0.6s
**KNRA Kununurra 39.87 170** P **P** **08 33 59.1 +1.2**
KNRA IAmb IAmb 08 34 00.2
comp=Z,16nm,1.1s
**UZB Uzynbulak 40.40 309** *eP* **P** **08 34 02.5 +0.2**
baz=309
**KPKS Kokpek 40.72 309** *eP* **P** **08 34 05.1 +0.3**
baz=309
**SATY Saty 40.82 309** *eP* **P** **08 34 06.1 +0.3**
baz=309
**ZHN Zhinishke 40.82 309** *eP* **P** **08 34 05.7 0.0**
baz=309
**TARG Taragay, Kyrgy 40.97 307** P **P** **08 34 09.4 +2.1**
**PMG Port Moresby 41.03 141** LR LR 08 47 53.4
comp=Z,45nm,20.9s,baz=247,slow=31
**ZAA0 Zalesovo Array 41.06 327** P **P** **08 34 06.6 -0.8**
ZAA0 IAmb IAmb 08 34 07.4
comp=Z,14nm,0.8s
**ZALV Zalesovo Beam 41.06 327** P **P** **08 34 06.6 -0.8**
comp=Z,14nm,0.6s,baz=111,slow=8.0,SNR=52
ZALV PcP **PcP** **08 36 05.4 -1.3**
comp=Z,0.7nm,0.4s,baz=106,slow=4.7,SNR=3.1
ZALV LR LR 08 51 25.8
comp=Z,57nm,21.5s,baz=122,slow=37
**H11N1 WAKE ISLAND Hy 41.37 87** T T 09 19 49.8
baz=283
**H11N2 WAKE ISLAND Hy 41.37 87** T T 09 19 47.6
baz=283
**H11N3 WAKE ISLAND Hy 41.38 87** T T 09 19 47.6
baz=283
**H11S3 WAKE ISLAND Hy 41.49 89** T T 09 19 57.8
baz=284
**H11S1 WAKE ISLAND Hy 41.50 89** T T 09 19 57.8
baz=284
**H11S2 WAKE ISLAND Hy 41.51 89** T T 09 20 01.5
baz=284
**MDOK Medeo 41.81 309** *eP* **P** **08 34 14.1 +0.2**
baz=308
**TNSS Tian-Shan 41.85 308** *eP* **P** **08 34 14.8 +0.3**
baz=308
**SEM Semipalatinsk 41.92 320** *eP* **P** **08 34 13.9 -1.0**
baz=320
**KSH Kashi 41.98 303** P P 08 34 20.3 +5.0
KSH sP pwP 08 34 32.0 +4.2
KSH pmax pmax
comp=Z,5.0nm,1.1s
**CHKK Chushkaly 42.00 310** *eP* **P** **08 34 15.7 +0.3**
baz=310
**ULHL Ulahol 42.21 307** P **P** **08 34 19.0 +1.7**
SNR=5.5
**KUU Kurty 42.47 310** *eP* **P** **08 34 19.2 +0.1**
comp=Z,6.0nm,0.6s,baz=309
**COEN Coen 42.79 150** P **P** **08 34 22.4 +0.5**
**TKM2 Tokmak 2 42.80 308** P **P** **08 34 23.9 +1.8**
SNR=11
**KURK Kurchatov 43.00 320** P **P** **08 34 23.3 0.0**
**KBK Karagaybulak 43.22 307** P **P** **08 34 27.1 +1.7**
SNR=7.2
**PALK Pallekele 43.26 254** LR LR 08 54 36.9
comp=Z,60nm,18.2s,baz=185,slow=39
**UCH Uchtor 43.47 307** P **P** **08 34 29.9 +2.1**
SNR=14
**AAK Ala-Archa 43.55 307** LR LR 08 55 34.7
comp=Z,128nm,18.5s,baz=96,slow=40
**AAK Ala-Archa 43.55 307** P **P** **08 34 28.7 +0.6**
**SGDS Sogindy 43.59 309** *eP* **P** **08 34 27.9 -0.4**
baz=308
**AML Almayashu 44.05 306** P **P** **08 34 34.5 +2.1**
SNR=8.8
**BTLS Baital 44.32 311** *eP* **P** **08 34 34.1 +0.1**
baz=310
**WB0 Warramunga Arr 44.99 164** P **P** **08 34 40.7 +1.1**
**WRA Warramunga Arr 45.14 164** P **P** **08 34 42.0 +1.2**
comp=Z,3.0nm,0.8s,baz=347,slow=9.0,SNR=17
**WRA Warramunga Arr 45.14 164** P **P** **08 34 41.1 +0.4**
**WB2 Warramunga Arr 45.15 164** P **P** **08 34 41.3 +0.5**
WB2 IAmb IAmb 08 34 54.3
comp=Z,6.3nm,0.8s
**WR0 Warramunga Arr 45.21 164** P **P** **08 34 42.7 +1.4**
WR0 IAmb IAmb 08 34 44.7
comp=Z,6.6nm,0.8s
**GAR Garm 46.30 302** P **P** **08 34 51.5 +1.6**
**BRZS Berezniki 46.38 317** *eP* **P** **08 34 50.3 +0.1**
baz=317
**KKAR Karatay Array 46.51 307** P **P** **08 34 53.1 +1.6**
**BRLS Boroldaу 47.00 307** *eP* **P** **08 34 56.4 +1.1**
baz=307
**CHGR Chuyangaron 47.19 301** P **P** **08 34 57.6 +0.7**
CHGR IAmb IAmb 08 35 04.1
comp=Z,9.2nm,0.9s
**KBL Kabul 47.29 296** P **P** **08 34 59.4 +1.5**
KBL IAmb IAmb 08 35 00.3
comp=Z,7.3nm,0.6s
**TIXI Tiksi 47.87 3** P **P** **08 35 01.1 -0.4**
TIXI IAmb IAmb 08 35 01.7
comp=Z,3.3nm,0.5s
**AS31 Alice Springs 48.62 166** P **P** **08 35 11.1 +3.1**
**ASAR Alice Springs 48.62 166** P **P** **08 35 09.8 +1.9**
comp=Z,0.9nm,0.6s,baz=352,slow=14,SNR=15
**ASAR Alice Springs 48.62 166** P **P** **08 35 09.4 +1.4**

**BRVK Borovoye 48.65 321** P **P** **08 35 08.3 +0.5**
BRVK IAmb IAmb 08 35 08.8
comp=Z,9.9nm,0.9s
**NRIK Noril'sk 49.93 345** P **P** **08 35 15.3 -2.0**
comp=Z,0.8nm,0.3s,baz=124,slow=4.8,SNR=6.2
NRIK LR LR 08 58 22.5
comp=Z,133nm,19.2s,baz=132,slow=38
**NRIK Noril'sk 49.93 345** P **P** **08 35 17.2 -0.1**
NRIK IAmb IAmb 08 35 29.1
comp=Z,9.1nm,0.8s
**MORW Morawa 53.07 187** P **P** **08 35 40.6 -0.7**
MORW IAmb IAmb 08 35 44.6
comp=Z,18nm,1.3s
**ABKAR Akbulak array 54.42 314** P **P** **08 35 51.5 +0.4**
**ABKAR Akbulak array 54.42 314** P **P** **08 35 51.4 +0.4**
ABKAR IAmb IAmb 08 35 52.7
comp=Z,11nm,0.8s
**GEYT Alibeck 55.89 301** LR LR 09 02 29.3
comp=Z,53nm,20.2s,baz=87,slow=39
**GEYT Alibeck 55.89 301** P **P** **08 36 01.8 -0.1**
GEYT IAmb IAmb 08 36 04.9
comp=Z,9.6nm,1.2s
**GYA0B ALIBECK ARRAY 55.89 301** P **P** **08 36 02.5 +0.5**
GYA0B IAmb IAmb 08 36 04.3
comp=Z,7.1nm,0.8s
**ARU Arti 55.98 323** P **P** **08 36 02.0 -0.2**
ARU IAmb IAmb 08 36 02.1
comp=Z,5.1nm,0.5s
**BBOO Buckleboo 57.92 166** P **P** **08 36 17.7 +1.6**
BBOO IAmb IAmb 08 36 30.5
comp=Z,9.5nm,1.1s
**STKA Stephens Creek 58.46 161** P **P** **08 36 21.9 +2.0**
comp=Z,1.7nm,0.8s,baz=339,slow=6.9,SNR=4.9
**STKA Stephens Creek 58.46 161** P **P** **08 36 20.4 +0.5**
**KIRV Kirov 61.06 325** LR LR 09 04 06.5
comp=Z,110nm,18.6s,baz=93,slow=37
**TTA Tatalina 65.15 30** P **P** **08 37 05.4 +0.7**
TTA IAmb IAmb 08 37 30.2
comp=Z,4.8nm,1.3s
**L19K White Mountain 65.74 31** P **P** **08 37 09.9 +1.4**
L19K IAmb IAmb 08 37 15.6
comp=Z,6.5nm,1.1s
**J20K Nowinta River 65.88 28** P **P** **08 37 09.9 +0.6**
J20K IAmb IAmb 08 37 22.9
comp=Z,9.5nm,1.5s
**IMAR Indian Mountai 65.89 26** P **P** **08 37 10.4 +1.0**
**K20K Telida 65.99 29** P **P** **08 37 11.5 +1.4**
K20K IAmb IAmb 08 37 34.5
comp=Z,4.4nm,1.2s
**H21K Melozitna Rive 66.30 27** P **P** **08 37 13.1 +1.0**
**ONI Oni 66.33 308** P **P** **08 37 14.2 +1.5**
**KBZ Khabaz 66.51 309** P **P** **08 37 13.0 -0.7**
comp=Z,3.6nm,0.6s,baz=96,slow=4.0,SNR=10
**KIV Kisvodsk 66.61 309** P **P** **08 37 15.2 +0.6**
**PPLA Purkeypile 66.89 30** P **P** **08 37 16.4 +0.4**
PPLA IAmb IAmb 08 37 28.5
comp=Z,12nm,1.3s
**ILAR Eielson Array 68.90 27** P **P** **08 37 27.1 -1.3**
comp=Z,0.2nm,0.5s,baz=278,slow=6.1,SNR=1.7
**BMAR Burnt Mountain 69.28 24** P **P** **08 37 32.2 +1.4**
**MARD Mardin 69.53 303** P **P** **08 37 33.5 +0.4**
**SPB2 Spitsbergen Ar 69.95 348** P **P** **08 37 34.4 -0.3**
**ARCES ARCESS Array B 70.18 338** P **P** **08 37 35.1 -1.1**
comp=Z,3.2nm,0.7s,baz=73,slow=8.1,SNR=4.7
**ARCES ARCESS Array B 70.18 338** P **P** **08 37 36.9 +0.6**
**EGAK Eagle 71.28 27** P **P** **08 37 44.1 +1.0**
**BCAR Beaver Creek A 71.50 29** P **P** **08 37 45.6 +1.1**
**FIA1 FINESS Array S 72.22 330** P **P** **08 37 48.8 +0.1**
**FINES FINESS Array B 72.22 330** P **P** **08 37 48.1 -0.6**
comp=Z,2.1nm,0.6s,baz=59,slow=5.9,SNR=11
FINES LR LR 09 13 05.7
comp=Z,134nm,18.5s,baz=86,slow=39
**FINES FINESS Array B 72.22 330** P **P** **08 37 48.6 -0.1**
**DAWY Dawson 72.23 27** P **P** **08 37 49.3 +0.5**
**EPYK Eagle Plains 72.55 25** P **P** **08 37 50.8 +0.1**
EPYK IAmb IAmb 08 38 08.3
comp=Z,9.1nm,1.5s
**INK Inuvik 73.02 22** P **P** **08 37 52.7 -0.6**
**MNK Minsk 73.40 323** *i* P **P** **08 37 53.5 -2.3**
comp=E,3.0nm,0.9s
MNK *i* P **P** **08 37 53.5 -2.3**
comp=N,31nm,0.9s
MNK *i* P **P** **08 37 53.5 -2.3**
comp=Z,9.0nm,0.6s,baz=72
MNK *i* PP **PP** **08 40 36.0 -3.2**
MNK *i* PPP PPP 08 42 21.3
MNK *i* S **S** **08 47 20.7 -2.1**
MNK *i* SS **SS** **08 52 03.9 -0.9**
MNK *i* SSS SSS 08 55 25.4
MNK *i* LQ LQ 09 05 15.7
MNK *i* LR LR 09 09 35.5
MNK *i* LRM MLR 09 11 16.0
comp=N,362nm,22.9s
MNK *i* LRM MLR 09 11 18.5
comp=E,9.0nm,8.3s
MNK *i* LRM MLR 09 11 38.9
comp=Z,57nm,10.2s
**AKASG Malin Array Be 73.80 319** P **P** **08 37 56.0 -2.2**
comp=Z,1.1nm,0.6s,baz=59,slow=6.0,SNR=9.0
**BRTR Keskin Array B 74.22 307** P **P** **08 38 01.1 0.0**
comp=Z,5.9nm,0.8s,baz=116,slow=5.7,SNR=18
**BRTR Keskin Array B 74.22 307** P **P** **08 38 01.8 +0.7**
**ANTO Ankara 74.80 307** P **P** **08 38 05.2 +0.8**
**C36M Paulatuk 75.65 20** P **P** **08 38 08.2 -0.4**
C36M IAmb IAmb 08 38 13.2
comp=Z,13nm,1.4s
**HFS Hagfors 78.32 331** LR LR 09 16 45.4
comp=Z,239nm,19.3s,baz=63,slow=39
**NC405 NORSAR Array S 78.71 332** P **P** **08 38 25.4 -0.6**
**NB2 NORSAR Subarra 78.96 322** P **P** **08 38 26.7 -0.7**
comp=Z,1.1nm,0.7s,baz=60,slow=5.3
**NOA NORSAR Array B 78.96 332** P **P** **08 38 26.8 -0.7**
comp=Z,1.0nm,0.6s,baz=63,slow=5.1,SNR=4.8
NOA LR LR 09 17 01.3
comp=Z,89nm,18.2s,baz=210,slow=38
**YKA Yellowknife Ar 82.74 23** P **P** **08 38 46.8 -0.7**
comp=Z,0.9nm,0.6s,baz=310,slow=4.9,SNR=23
**YKA Yellowknife Ar 82.74 23** P **P** **08 38 46.5 -0.9**
**SUMG Summit 82.85 354** P **P** **08 38 48.6 +0.2**
SUMG IAmb IAmb 08 39 01.7
comp=Z,7.6nm,1.3s
**ITM Ithomi 83.70 308** P **P** **08 38 51.9 -1.1**
ITM IAmb IAmb 08 39 18.4
comp=Z,9.3nm,1.0s
**GERES GERESS Array B 83.74 321** P **P** **08 38 51.9 -1.2**
comp=Z,1.2nm,0.6s,baz=42,slow=3.1,SNR=6.1
**B08A Colville Reser 89.31 36** P **P** **08 39 20.9 +0.6**
**D08A Wollman Farm, 90.31 37** P **P** **08 39 25.5 +0.6**
**NEW Newport 90.55 35** P **P** **08 39 27.3 +1.3**
**NVAR Mina Array Bea 95.83 44** P **P** **08 39 49.4 -1.4**
comp=Z,0.6nm,0.7s,baz=294,slow=4.8,SNR=7.0
**ROSC EI Rosal 147.06 32** PKPbc **PKPdf** **08 46 04.9 -1.1**
comp=Z,3.5nm,0.3s,baz=38,slow=19,SNR=1.3

*IDC **23** 08:40:34.2±0.6, 7.27S×121.42E, h568km±6km, mb3.3/8, mb1 3.5/13, mb1mx3.1/46, mbtmp4.3/13, Error ellipse: s-maj=32.7km s-min=8.0km az=55.0*
*NEIC **23** 08:40:34.9±1.0, 7.3S±0.1°×121.2E±0.1°, h566km±8km, mb4.3/20, Error ellipse: s-maj=20.4km s-min=12.7km az=56.0*
*DJA **23** 08:40:35.7±0.5, 8°S±4°×12°1E±°, h547km±5km, M4.2/16, mb4.5/4, mB4.7/3, MLv4.0/16, Mw(mB)3.9/3*
**ISC 23 08:40:34.2**±0.5, **7.39S**±0.06×**121.25E**±0.07, **h563**km±6km, **n93**, σ1§**11**/106, **mb4.2**/16, **Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BSSI** | **Bau Bau, Buton** | **1.46** | **329** | P | **P** | **08 41 43.9** | **+0.8** |
| BSSI | | | | S | **S** | **08 42 39.0** | **0.0** |
| **MMRI** | **Maumere** | **1.57** | **142** | P | **P** | **08 41 41.4** | **-2.1** |
| MMRI | | | | S | **S** | **08 42 37.3** | **-2.5** |
| **BKSI** | **Bulukumba** | **2.34** | **331** | P | **P** | **08 41 47.5** | **+0.7** |
| BKSI | | | | S | **S** | **08 42 46.5** | **+0.8** |
| **KAPI** | **Kappang** | **2.79** | **328** | P | **P** | **08 41 50.8** | **+1.7** |
| KAPI | 11nm,0.3s,baz=167,slow=4.3,SNR=40 | | | S | **S** | **08 42 50.0** | **-0.1** |
| | baz=292,slow=21,SNR=1.8 | | | | | | |
| **KAPI** | **Kappang** | **2.79** | **328** | P | **P** | **08 41 50.7** | **+1.5** |
| **BASI** | **Baing, Sumba** | **2.89** | **193** | P | **P** | **08 41 50.6** | **+1.0** |
| BASI | | | | S | **S** | **08 42 51.3** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **2.90** | **219** | P | **P** | **08 41 49.9** | **+0.1** |
| WBSI | | | | S | **S** | **08 42 49.4** | **-1.9** |
| **BNSI** | **Bone** | **3.18** | **339** | P | **P** | **08 41 53.0** | **+1.5** |
| **BATI** | **Baumata** | **3.67** | **140** | P | **P** | **08 41 56.0** | **+1.3** |
| | 29nm,0.3s,baz=54,slow=0.9,SNR=31 | | | | | | |
| BATI | | | | S | **S** | **08 43 00.2** | **-0.1** |
| | 28nm,0.3s,baz=8.9,slow=21,SNR=4.9 | | | | | | |
| **BATI** | **Baumata** | **3.67** | **140** | P | **P** | **08 41 56.0** | **+1.3** |
| BATI | | | | S | **S** | **08 42 59.9** | **-0.4** |
| **SPSI** | **Sidrap Palu** | **3.71** | **336** | P | **P** | **08 41 56.2** | **+1.2** |
| **PLAI** | **Plampang** | **3.73** | **247** | P | **P** | **08 41 54.9** | **-0.2** |
| PLAI | | | | S | **S** | **08 42 58.8** | **-2.1** |
| **PLAI** | **Plampang** | **3.73** | **247** | P | **P** | **08 41 55.1** | **0.0** |
| **SOEI** | **Soe** | **3.79** | **128** | P | **P** | **08 41 57.2** | **+1.6** |
| **SOEI** | **Soe** | **3.79** | **128** | P | **P** | **08 41 56.1** | **+0.4** |
| SOEI | | | | S | **S** | **08 43 02.5** | **+0.4** |
| **TTSI** | **Tana Toraja** | **4.55** | **342** | P | **P** | **08 42 02.1** | **+0.8** |
| **IGBI** | **Denpasar** | **6.21** | **256** | P | **P** | **08 42 14.9** | **-0.5** |
| | 0.5nm98nm,0.5s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.12** | **261** | P | **P** | **08 42 23.0** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **7.12** | **261** | P | **P** | **08 42 22.5** | **-1.3** |
| | 0.2nm52nm,0.6s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.12** | **261** | P | **P** | **08 42 22.8** | **-1.0** |
| **GMJI** | **Gumukmas** | **7.79** | **263** | P | **P** | **08 42 29.6** | **-0.7** |
| **TOLI2** | **Tolitoli** | **8.46** | **357** | P | **P** | **08 42 36.6** | **-0.4** |
| **TOLI2** | **Tolitoli** | **8.46** | **357** | P | **P** | **08 42 36.5** | **-0.4** |
| **DRS** | **Darwin Rock St** | **10.74** | **119** | P | **P** | **08 43 00.9** | **+1.0** |
| **KNRA** | **Kununurra** | **11.04** | **139** | P | **P** | **08 43 03.7** | **+0.8** |
| **KNRA** | **Kununurra** | **11.04** | **139** | P | **P** | **08 43 03.8** | **+0.9** |
| **MTN** | **Manton Dam** | **11.13** | **120** | P | **P** | **08 43 04.4** | **+0.6** |
| **MTN** | **Manton Dam** | **11.13** | **120** | P | **P** | **08 43 04.3** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **11.47** | **159** | P | **P** | **08 43 07.4** | **+0.1** |
| | 1.3nm,0.3s,baz=358,slow=6.6,SNR=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.47** | **159** | P | **P** | **08 43 07.7** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **11.47** | **159** | P | **P** | **08 43 07.8** | **+0.5** |
| **FAKI** | **Fak Fak** | **11.82** | **68** | P | **P** | **08 43 09.9** | **-1.1** |
| **SIJI** | **Sorong** | **11.90** | **57** | P | **P** | **08 43 10.4** | **-1.5** |
| | 1.1nm,0.3s,baz=154,slow=23,SNR=2.1 | | | | | | |
| **MYLDM** | **Lahad Datu** | **12.79** | **348** | P | **P** | **08 43 20.9** | **-0.1** |
| **KSM** | **Kuching** | **14.03** | **308** | P | **P** | **08 43 33.9** | **+0.1** |
| **KSM** | **Kuching** | **14.03** | **308** | P | **P** | **08 43 34.1** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **14.16** | **185** | | **P** | **08 43 35.5** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **14.16** | **185** | | **P** | **08 43 34.4** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **14.16** | **185** | P | **P** | **08 43 35.4** | **+0.5** |
| **KKM** | **Kota Kinabalu** | **14.26** | **339** | P | **P** | **08 43 34.3** | **-1.9** |
| **KKM** | **Kota Kinabalu** | **14.26** | **339** | P | **P** | **08 43 34.9** | **-1.3** |
| **GIRL** | **Giralia** | **16.60** | **203** | P | **P** | **08 44 00.2** | **+1.5** |
| **GIRL** | **Giralia** | **16.60** | **203** | P | **P** | **08 44 00.5** | **+1.8** |
| **WB0** | **Warramunga Arr** | **17.71** | **135** | P | **P** | **08 44 09.8** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 08 44 11.0 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.79** | **136** | P | **P** | **08 44 09.4** | **-0.2** |
| | comp=Z,1.1nm,0.3s,baz=315,slow=11,SNR=50 | | | | | | |
| WRA | | | | S | **S** | **08 47 02.6** | **-2.4** |
| | comp=Z,0.1nm,0.3s,baz=315,slow=17,SNR=7.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 48 14.6** | **-0.9** |
| | comp=Z,0.0nm,0.3s,baz=305,slow=1.8,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.79** | **136** | P | **P** | **08 44 10.7** | **+1.0** |
| **WRAB** | **Tennant Creek** | **17.80** | **136** | P | **P** | **08 44 10.8** | **+1.1** |
| **WRAB** | **Tennant Creek** | **17.80** | **136** | P | **P** | **08 44 10.7** | **+1.1** |
| **WB2** | **Warramunga Arr** | **17.80** | **136** | P | **P** | **08 44 10.6** | **+0.9** |
| **WR0** | **Warramunga Arr** | **17.95** | **135** | P | **P** | **08 44 12.0** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 08 44 13.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WRKA** | **Warakurna** | **18.79** | **160** | P | **P** | **08 44 19.9** | **+1.2** |
| **AS31** | **Alice Springs** | **20.23** | **144** | P | **P** | **08 44 32.7** | **+0.9** |
| **ASAR** | **Alice Springs** | **20.23** | **144** | P | **P** | **08 44 32.5** | **+0.7** |
| | comp=Z,1.6nm,0.3s,baz=321,slow=8.5,SNR=70 | | | | | | |
| ASAR | | | | S | **S** | **08 47 43.2** | **-0.8** |
| | comp=Z,1.2nm,0.7s,baz=340,slow=24,SNR=8.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 48 19.2** | **-0.7** |
| | comp=Z,0.8nm,0.4s,baz=338,slow=1.3,SNR=9.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 51 00.7** | **-2.8** |
| | comp=Z,0.4nm,0.6s,baz=333,slow=2.5,SNR=4.5 | | | | | | |
| **QIS** | **Mount Isa** | **22.07** | **128** | P | **P** | **08 44 48.7** | **+0.4** |
| **COEN** | **Coen** | **22.50** | **109** | P | **P** | **08 44 51.9** | **-0.3** |
| COEN | | | | IAmb | IAmb | 08 45 03.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **BLDU** | **Ballidu** | **23.49** | **190** | P | **P** | **08 45 01.3** | **+0.5** |
| **FORT** | **Forrest** | **24.12** | **166** | P | **P** | **08 45 07.2** | **+0.8** |
| **FORT** | **Forrest** | **24.12** | **166** | P | **P** | **08 45 07.7** | **+1.3** |
| **OOD** | **Oodnadatta** | **24.47** | **148** | P | **P** | **08 45 10.5** | **+1.0** |
| **MULG** | **Mulgathing** | **25.75** | **154** | P | **P** | **08 45 21.7** | **+0.9** |
| **LCRK** | **Leigh Creek** | **27.91** | **147** | P | **P** | **08 45 40.9** | **+1.1** |
| **BBOO** | **Buckleboo** | **28.79** | **153** | | **P** | **08 45 48.0** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 08 46 07.4 | |
| | comp=Z,9.1nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **28.79** | **153** | P | **P** | **08 45 48.0** | **+0.6** |
| **QLP** | **Quilpie** | **29.01** | **134** | P | **P** | **08 45 49.8** | **+0.4** |
| **HTT** | **Hallett** | **30.64** | **150** | P | **P** | **08 46 04.9** | **+1.5** |
| **STKA** | **Stephens Creek** | **30.87** | **145** | P | **P** | **08 46 06.1** | **+0.7** |
| | comp=Z,3.6nm,0.4s,baz=327,slow=8.9,SNR=26 | | | | | | |
| **STKA** | **Stephens Creek** | **30.87** | **145** | P | **P** | **08 46 06.5** | **+1.2** |
| **STKA** | **Stephens Creek** | **30.87** | **145** | P | **P** | **08 46 06.7** | **+1.4** |
| **CMSA** | **Cobar Meteorol** | **33.12** | **140** | P | **P** | **08 46 26.3** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **33.83** | **320** | P | **P** | **08 46 30.6** | **0.0** |
| | comp=Z,2.0nm,0.3s,baz=142,slow=6.9,SNR=13 | | | | | | |
| CMAR | | | | ScP | **ScP** | **08 51 43.7** | **-1.1** |
| | comp=Z,1.0nm,0.3s,baz=153,slow=2.5,SNR=5.9 | | | | | | |
| **CHTO** | **Chiang Mai** | **34.09** | **320** | P | **P** | **08 46 31.9** | **-0.9** |
| CHTO | | | | IAmb | IAmb | 08 46 33.2 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **37.23** | **147** | P | **P** | **08 46 59.8** | **+1.3** |
| TOO | | | | IAmb | IAmb | 08 47 02.3 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **PZH** | **PanZhiHua** | **38.65** | **331** | P | **P** | **08 47 13.5** | **+3.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,6.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.83** | **350** | *eP* | P | 08 48 34.3 | +5.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,260nm,6.9s | | | | | | |
| **XLT** | **XiLinHaoTe** | **51.27** | **355** | *eP* | P | 08 48 51.3 | +4.8 |
| XLT | | | | pP | pP | 08 50 34.5 | +2.4 |
| XLT | | | | sP | sP | 08 51 26.1 | -7.4 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,250nm,5.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **56.48** | **138** | P | **P** | **08 49 23.4** | **+0.2** |
| | comp=Z,9.7nm,0.7s,baz=328,slow=5.2,SNR=7.7 | | | | | | |
| **RPZ** | **Rata Peaks** | **56.48** | **138** | P | **P** | **08 49 24.1** | **+0.9** |
| RPZ | | | | IAmb | IAmb | 08 49 24.5 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **348** | P | **P** | **08 49 22.8** | **-0.8** |
| | comp=Z,0.4nm,0.4s,baz=152,slow=6.5,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **348** | P | **P** | **08 49 23.8** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **58.67** | **132** | P | **P** | **08 49 38.8** | **+0.6** |
| BKZ | | | | IAmb | IAmb | 08 50 07.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **58.87** | **130** | P | **P** | **08 49 39.1** | **-0.4** |
| | comp=Z,5.2nm,0.7s,baz=331,slow=2.6,SNR=5.2 | | | | | | |
| **URZ** | **Urewera** | **58.87** | **130** | P | **P** | **08 49 39.8** | **+0.3** |
| URZ | | | | IAmb | IAmb | 08 49 46.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WMQ** | **Urumqi** | **59.33** | **332** | *eP* | **P** | **08 49 44.8** | **+2.2** |
| **MK31** | **Makanchi Array** | **64.09** | **331** | P | **P** | **08 50 13.0** | **-0.4** |
| **MKAR** | **Makanchi Array** | **64.09** | **331** | P | **P** | **08 50 12.6** | **-0.8** |
| | comp=Z,0.9nm,0.6s,baz=143,slow=6.9,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.09** | **331** | P | **P** | **08 50 13.0** | **-0.4** |
| **VNDA** | **Vanda** | **73.23** | **171** | P | **P** | **08 51 08.6** | **+0.7** |
| VNDA | | | | IAmb | IAmb | 08 51 11.6 | |
| | comp=Z,7.7nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.59** | **180** | P | **P** | **08 51 58.5** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=35,slow=0.6,SNR=8.2 | | | | | | |
| **SNAA** | **Sanae** | **93.13** | **195** | | **P** | **08 52 48.7** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **118.28** | **50** | PKP | **PKPdf** | **08 58 17.0** | **-1.5** |
| | comp=Z,0.1nm,0.4s,baz=277,slow=3.5,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.36** | **281** | PKP | **PKPdf** | **08 58 22.0** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=118,slow=2.2,SNR=2.3 | | | | | | |
| **TKL** | **Tuckaleechee C** | **143.71** | **36** | PKP | PKPbc | 08 59 03.3 | -1.7 |
| | comp=Z,4.1nm,0.6s,baz=301,slow=5.9,SNR=2.0 | | | | | | |
| **CPUP** | **Villa Florida** | **146.45** | **182** | PKPbc | **PKPbc** | **08 59 12.9** | **-0.5** |
| | comp=Z,1.9nm,0.7s,baz=126,slow=1.8,SNR=3.6 | | | | | | |

*NNC **23** 08:43:01.4±9.3, 36.76N×68.80E, h0km, mb3.9, mpv3.7, Error ellipse: s-maj=89.2km s-min=58.5km az=154.0*
**ISC 23 08:43:01.1**±3.5, **36.5N**±0.2×**68.6E**±0.1, **h35**km, **n11**, σ2§**54**/14, **4C-3D**, **Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time

0.4nm,0.2s,baz=182,slow=12
KK08 ⇓Sn **Sn** **08 45 53.7 +0.2**
2.4nm,0.4s,baz=180,slow=21
**AML** **Almayashu** **6.88 34** P **Pn** **08 44 41.6 +1.9**
SNR=28
**UCH** **Uchtor** **7.33 37** P **Pn** **08 44 47.9 +1.8**
SNR=16
**AAK** **Ala-Archa** **7.64 35** P **Pn** **08 44 52.0 +2.0**
SNR=7.0
**AAK** **Ala-Archa** **7.64 35** ⇑Pn **Pn** **08 44 52.0 +2.0**
8.1nm,0.6s
AAK ⇓Sn **Sn** **08 46 17.1 +1.7**
3.7nm,0.6s
**KBK** **Karagaybulak** **7.87 37** P **Pn** **08 44 56.2 +3.1**
SNR=8.7
**CHMS** **Chumysh** **8.04 34** P **Pn** **08 44 57.0 +1.6**
SNR=9.0
**ULHL** **Ulahol** **8.25 44** P **Pn** **08 45 00.2 +1.8**
SNR=5.6
**TKM2** **Tokmak 2** **8.38 38** ⇑Pn **Pn** **08 44 59.1 -1.1**
1.9nm,0.5s
TKM2 ⇑Sn **Sn** **08 46 29.0 -4.7**
2.2nm,0.5s
**AB31** **Akbulak array** **14.22 336** P **Pn** **08 46 17.8 -2.1**
1.2nm,0.4s,baz=155,slow=12,SNR=75
**AKTO** **Aktyubinsk** **15.88 335** ⇓P **Pn** **08 46 40.6 -1.2**
0.5nm,0.5s

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*IDC **23** 08:44:32.6±0.9, 35°.79N×97°.53W, h0km, mb3.3/2, mb1 3.7/7, mb1mx3.5/49, mbtmp3.4/7, ML3.4/5, MS3.1/5, Ms1 3.1/5, ms1mx2.8/33, Error ellipse: s-maj=12.2km s-min=9.3km az=145.0*

*TUL **23** 08:44:33.5±1.3, 35°.66N±0°.01×97°.41W±0°.02, h7km±4km, ML4.0, mb_Lg3.9/130(NEIC), Mwr3.7/57(NEIC), Error ellipse: s-maj=2.2km s-min=2.0km az=123.0*

*NEIC **23** 08:44:33.6±1.2, 35°.69N±0°.01×97°.42W±0°.02, h4km±6km, Error ellipse: s-maj=2.1km s-min=2.0km az=102.0*

*NEIC **23** 08:44:33.8, 35°.68N×97°.42W, h5km, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr-0.57; Mθθ3.96; Mϕϕ-3.39; Mrθ-0.07; Mrϕ2.43; Mθr-0.64; Fault plane solution: M₀4.48000×10¹⁴ NP1:φs297.95000°, δ81.48000°, λ-4.59000°. NP2:φs28.63000°, δ85.46000°, λ-171.45000°. Principal axes: T 4.7000, Plg3.0000°, Azm163.0000°; N -0.4816, Plg80.0000°, Azm56.0000°; P -4.2184, Plg9.0000°, Azm254.0000°;*

*ANF **23** 08:44:34.7±0.7, 35°.68N×97°.41W, h18km±5km, ML4.9/15 Error ellipse: s-maj=1.9km s-min=1.7km az=28.0*

**ISC 23 08:44:33.4±0.9, 35°.70N±0°.03×97°.43W±0°.03, h9km±6km, n150, σ1§05/159, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.12** | **178** | Pg | **Pg** | **08 44 35.7** | **-0.5** |
| OK009 | | | | Sg | **Sg** | **08 44 37.7** | **-0.4** |
| **OK001** | **Jones High Sch** | **0.18** | **140** | Pg | **Pg** | **08 44 36.8** | **-0.4** |
| OK001 | | | | Sg | **Sg** | **08 44 38.9** | **-0.8** |
| **OK005** | **Luther M Schoo** | **0.20** | **102** | | **Pg** | **08 44 37.4** | **-0.1** |
| OK005 | | | | Sg | **Sg** | **08 44 40.4** | **0.0** |
| **OKCFA** | **Oklahoma City** | **0.28** | **184** | Pg | **Pg** | **08 44 38.9** | **-0.3** |
| OKCFA | | | | Sg | **Sg** | **08 44 42.2** | **-0.7** |
| **OKCSW** | **OKLAHOMA CITY** | **0.29** | **182** | Pg | **Pg** | **08 44 38.9** | **-0.4** |
| OKCSW | | | | Sg | **Sg** | **08 44 43.3** | **+0.1** |
| **FNO** | **Franklin** | **0.44** | **177** | Pg | **Pg** | **08 44 41.7** | **-0.3** |
| FNO | | | | Sg | **Sg** | **08 44 47.2** | **-0.6** |
| **W35A** | **Tecumseh** | **0.71** | **140** | Pg | **Pg** | **08 44 46.4** | **-0.7** |
| W35A | | | | Sg | **Sg** | **08 44 55.8** | **-0.5** |
| **X34A** | **Smith Ranch, M** | **1.14** | **197** | Pg | **Pg** | **08 44 54.9** | **-0.5** |
| X34A | comp=Z,421nm,0.9s | | | IAmb_Lg | | 08 45 10.2 | |
| X34A | | | | Sg | **Sb** | **08 45 10.9** | **+0.6** |
| **TUL1** | **Leonard** | **1.35** | **80** | | **Pn** | **08 44 57.2** | **-1.2** |
| TUL1 | comp=Z,442nm,0.7s | | | IAmb_Lg | | 08 45 18.2 | |
| **TUL1** | **Leonard** | **1.35** | **80** | P | **Pn** | **08 44 57.2** | **-1.2** |
| TUL1 | baz=260,SNR=764 | | | S | **Sg** | **08 45 16.6** | **-0.2** |
| **T35A** | **Sooner Cattle** | **1.42** | **31** | | **Pn** | **08 44 59.6** | **+0.2** |
| **U32A** | **Winter Ranch,** | **1.45** | **299** | | **Pn** | **08 45 00.4** | **+0.6** |
| **WMOK** | **Wichita Mounta** | **1.47** | **230** | | **Pn** | **08 44 59.9** | **-0.2** |
| **WMOK** | **Wichita Mounta** | **1.47** | **230** | P | **Pn** | **08 44 59.8** | **-0.2** |
| WMOK | baz=50,SNR=718 | | | S | **Sn** | **08 45 19.7** | **+0.3** |
| **X37A** | **Clayton** | **2.02** | **123** | | **Pn** | **08 45 08.3** | **+0.7** |
| X37A | comp=Z,903nm,0.9s | | | IAmb_Lg | | 08 45 40.4 | |
| **Z35A** | **Perchaven, San** | **2.37** | **176** | | **Pn** | **08 45 13.3** | **+0.9** |
| Z35A | comp=Z,323nm,1.0s | | | IAmb_Lg | | 08 45 47.6 | |
| **HHAR** | **Hobbs** | **2.89** | **77** | | **Pn** | **08 45 20.0** | **+0.4** |
| HHAR | comp=Z,379nm,0.8s | | | IAmb_Lg | | 08 46 11.1 | |
| **R32A** | **Long Quarter,** | **2.91** | **340** | | **Pn** | **08 45 21.8** | **+1.9** |
| **W39A** | **Magazine** | **3.02** | **98** | | **Pn** | **08 45 22.0** | **+0.7** |
| W39A | comp=Z,617nm,0.9s | | | IAmb_Lg | | 08 46 14.3 | |
| **W39A** | **Magazine** | **3.02** | **98** | P | **Pn** | **08 45 21.5** | **+0.1** |
| W39A | baz=280,SNR=19 | | | S | **Sn** | **08 45 57.6** | **0.0** |
| **Z38A** | **Mt. Pleasant** | **3.16** | **140** | | **Pn** | **08 45 24.3** | **+1.0** |
| Z38A | comp=Z,402nm,0.8s | | | IAmb_Lg | | 08 46 18.4 | |
| **MIAR** | **Mount Ida** | **3.36** | **109** | | **Pn** | **08 45 27.8** | **+1.7** |
| **MIAR** | **Mount Ida** | **3.36** | **109** | P | **Pn** | **08 45 26.7** | **+0.6** |
| MIAR | baz=291,SNR=20 | | | S | **Sn** | **08 46 06.8** | **+0.8** |
| **KSU1** | **Kansas State U** | **3.46** | **11** | | **Pn** | **08 45 28.5** | **+1.0** |
| KSU1 | comp=Z,409nm,0.8s | | | IAmb_Lg | | 08 46 31.4 | |
| **KSU1** | **Kansas State U** | **3.46** | **11** | P | **Pn** | **08 45 28.4** | **+1.0** |
| KSU1 | baz=191,SNR=33 | | | S | **Sn** | **08 46 09.8** | **+1.3** |
| **AMTX** | **Amarillo** | **3.57** | **258** | Pn | **Pn** | **08 45 30.9** | **+1.8** |
| AMTX | comp=Z,197nm,0.8s | | | IAmb_Lg | | 08 46 32.5 | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | | **Pn** | **08 45 30.4** | **+1.4** |
| ABTX | comp=Z,473nm,1.1s | | | IAmb_Lg | | 08 46 32.5 | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | P | **Pn** | **08 45 29.6** | **+0.5** |
| ABTX | baz=31 | | | S | **Sn** | **08 46 12.1** | **+0.7** |
| **CBKS** | **Cedar Bluff** | **3.62** | **330** | | **Pn** | **08 45 31.1** | **+1.5** |
| CBKS | comp=Z,341nm,0.9s | | | IAmb_Lg | | 08 46 36.7 | |
| **CBKS** | **Cedar Bluff** | **3.62** | **330** | P | **Pn** | **08 45 30.7** | **+1.0** |
| CBKS | baz=149,SNR=17 | | | S | **Sn** | **08 46 13.8** | **+1.3** |
| **WHTX** | **Lake Whitney,** | **3.70** | **180** | | **Pn** | **08 45 31.8** | **+1.1** |
| WHTX | comp=Z,187nm,1.1s | | | IAmb_Lg | | 08 46 38.9 | |
| **WHTX** | **Lake Whitney,** | **3.70** | **180** | P | **Pn** | **08 45 31.0** | **+0.3** |
| WHTX | baz=0.7 | | | Sb | **Sb** | **08 46 26.5** | **+2.7** |
| **U40A** | **Yellville** | **3.77** | **79** | | **Pn** | **08 45 32.3** | **+0.6** |
| U40A | comp=Z,423nm,0.7s | | | IAmb_Lg | | 08 46 38.2 | |
| **U40A** | **Yellville** | **3.77** | **79** | P | **Pn** | **08 45 31.7** | **0.0** |
| U40A | baz=261,SNR=50 | | | Sb | **Sb** | **08 46 28.4** | **+2.7** |
| **S39A** | **Bolivar** | **3.85** | **58** | | **Pn** | **08 45 33.4** | **+0.5** |
| S39A | comp=Z,256nm,1.0s | | | IAmb_Lg | | 08 46 34.3 | |
| **237A** | **Washetta, Mont** | **3.92** | **159** | | **Pn** | **08 45 33.8** | **-0.1** |
| 237A | comp=Z,186nm,0.8s | | | IAmb_Lg | | 08 46 46.1 | |
| **X40A** | **Basin Creek Fa** | **3.96** | **106** | | **Pn** | **08 45 35.1** | **+0.8** |
| **X40A** | **Basin Creek Fa** | **3.96** | **106** | P | **Pn** | **08 45 34.8** | **+0.6** |
| **WLAR** | **White Oak Lake** | **4.08** | **118** | | **Pn** | **08 45 36.5** | **+0.6** |
| WLAR | comp=Z,315nm,0.9s | | | IAmb_Lg | | 08 46 50.3 | |
| **WHAR** | **Wooly Hollow** | **4.21** | **94** | | **Pn** | **08 45 38.1** | **+0.3** |
| WHAR | comp=Z,287nm,0.9s | | | IAmb_Lg | | 08 46 50.3 | |
| **W41B** | **Gary Mavity, V** | **4.26** | **96** | | **Pn** | **08 45 38.7** | **+0.2** |
| W41B | comp=Z,331nm,0.9s | | | IAmb_Lg | | 08 46 52.1 | |
| **W41B** | **Gary Mavity, V** | **4.26** | **96** | P | **Pn** | **08 45 38.4** | **0.0** |
| W41B | baz=278 | | | S | **Sn** | **08 46 28.4** | **+0.2** |
| **FCAR** | **Ozark Folk Cen** | **4.32** | **86** | | **Pn** | **08 45 39.8** | **+0.6** |
| FCAR | comp=Z,268nm,0.7s | | | IAmb_Lg | | 08 46 51.0 | |
| **MGMO** | **Mountain Grove** | **4.41** | **69** | | **Pn** | **08 45 43.2** | **+2.7** |
| MGMO | comp=Z,226nm,1.0s | | | IAmb_Lg | | 08 46 53.8 | |
| **Z41A** | **Richland Creek** | **4.53** | **121** | | **Pn** | **08 45 42.8** | **+0.7** |
| Z41A | comp=Z,230nm,0.8s | | | IAmb_Lg | | 08 47 08.7 | |
| **Z41A** | **Richland Creek** | **4.53** | **121** | S | **Sn** | **08 46 32.9** | **-2.0** |
| **NATX** | **Nacogdoches** | **4.55** | **149** | | **Pn** | **08 45 43.0** | **+0.5** |
| NATX | comp=Z,105nm,0.9s | | | IAmb_Lg | | 08 47 03.5 | |
| **MSTX** | **Muleshoe** | **4.72** | **250** | Pn | **Pn** | **08 45 45.8** | **+0.8** |
| **MSTX** | **Muleshoe** | **4.72** | **250** | P | **Pn** | **08 45 45.6** | **+0.7** |
| **R40A** | **Maddies Statio** | **4.87** | **56** | | **Pn** | **08 45 48.6** | **+1.7** |
| R40A | comp=Z,218nm,0.8s | | | IAmb_Lg | | 08 47 08.0 | |
| **435B** | **Jarrell** | **4.90** | **182** | | **Pn** | **08 45 48.2** | **+0.9** |
| 435B | comp=Z,299nm,0.7s | | | IAmb_Lg | | 08 47 14.9 | |
| **435B** | **Jarrell** | **4.90** | **182** | P | **Pn** | **08 45 47.6** | **+0.3** |
| 435B | baz=1.7 | | | Sb | **Sb** | **08 47 02.4** | **+3.9** |
| **CCAR** | **Cane Creek** | **4.98** | **109** | Pn | **Pn** | **08 45 49.4** | **+1.1** |
| CCAR | comp=Z,332nm,0.8s | | | IAmb_Lg | | 08 47 19.8 | |
| **P38A** | **Dawn** | **4.99** | **37** | | **Pn** | **08 45 49.1** | **+0.6** |
| P38A | comp=Z,151nm,0.7s | | | IAmb_Lg | | 08 47 24.1 | |
| **N33A** | **J Bar K, Exete** | **5.03** | **360** | | **Pn** | **08 45 49.6** | **+0.5** |
| N33A | comp=Z,276nm,0.8s | | | IAmb_Lg | | 08 47 24.5 | |
| **LCAR** | **Lake Charles** | **5.11** | **84** | | **Pn** | **08 45 49.4** | **-0.6** |
| LCAR | comp=Z,250nm,1.2s | | | IAmb_Lg | | 08 47 20.5 | |
| **KSCO** | **Kaye Shedlock'** | **5.30** | **310** | Pn | **Pn** | **08 45 55.0** | **+2.1** |
| KSCO | comp=Z,221nm,0.8s | | | IAmb_Lg | | 08 47 27.8 | |
| **KSCO** | **Kaye Shedlock'** | **5.30** | **310** | S | **Sn** | **08 46 53.4** | **-0.7** |
| **N35A** | **Tabor** | **5.34** | **15** | Pn | **Pn** | **08 45 53.9** | **+0.6** |
| **CCM** | **Cathedral Cave** | **5.49** | **63** | IAmb_Lg | | 08 47 32.0 | |
| **JCT** | **Junction City** | **5.57** | **202** | P | **Pn** | **08 45 57.0** | **+0.4** |
| JCT | baz=20 | | | S | **Sn** | **08 47 00.9** | **+0.2** |
| **BGNE** | **Belgrade** | **5.73** | **355** | | **Pn** | **08 45 58.5** | **-0.1** |
| **BGNE** | **Belgrade** | **5.73** | **355** | P | **Pn** | **08 45 59.0** | **+0.3** |
| BGNE | baz=174 | | | S | **Sn** | **08 47 04.5** | **-0.1** |
| **T25A** | **Trinidad** | **5.81** | **286** | Pn | **Pn** | **08 46 01.1** | **+1.1** |
| **T25A** | **Trinidad** | **5.81** | **286** | P | **Pn** | **08 46 00.3** | **+0.3** |
| **143A** | **Socs Landing,** | **5.82** | **119** | Pn | **Pn** | **08 46 01.9** | **+2.1** |
| 143A | comp=Z,206nm,0.9s | | | IAmb_Lg | | 08 47 53.4 | |
| **GNAR** | **Gosnell** | **6.03** | **85** | | **Pn** | **08 46 02.4** | **-0.2** |
| **FVM** | **French Village** | **6.06** | **66** | | **Pn** | **08 46 03.7** | **+0.5** |
| FVM | comp=Z,244nm,0.9s | | | IAmb_Lg | | 08 47 48.0 | |
| **N38A** | **Joes South For** | **6.06** | **32** | | **Pn** | **08 46 03.2** | **0.0** |
| **PARMO** | **Parma** | **6.28** | **79** | | **Pn** | **08 46 07.0** | **+0.7** |
| PARMO | comp=Z,254nm,0.8s | | | IAmb_Lg | | 08 47 59.2 | |
| **PVMO** | **Portageville** | **6.30** | **81** | IAmb_Lg | | 08 48 09.5 | |
| **L34A** | **Svendsen Farm,** | **6.31** | **7** | Pn | **Pn** | **08 46 07.5** | **+0.8** |
| **OGNE** | **Ogallala** | **6.37** | **327** | Pn | **Pn** | **08 46 08.8** | **+1.3** |
| OGNE | comp=Z,191nm,0.8s | | | IAmb_Lg | | 08 48 12.0 | |
| **OGNE** | **Ogallala** | **6.37** | **327** | P | **Pn** | **08 46 08.5** | **+1.0** |
| **SLM** | **Saint Louis** | **6.45** | **61** | | **Pn** | **08 46 09.1** | **+0.6** |
| SLM | comp=Z,119nm,0.8s | | | IAmb_Lg | | 08 47 57.7 | |
| **LNXT** | **Lenox** | **6.45** | **84** | | **Pn** | **08 46 08.7** | **+0.1** |
| **HALT** | **Halls** | **6.58** | **86** | | **Pn** | **08 46 10.5** | **+0.3** |
| HALT | comp=Z,241nm,0.8s | | | IAmb_Lg | | 08 48 14.5 | |
| **OXF** | **Oxford** | **6.68** | **98** | Pn | **Pn** | **08 46 11.2** | **-0.5** |
| OXF | comp=Z,149nm,0.8s | | | IAmb_Lg | | 08 48 16.6 | |
| **OXF** | **Oxford** | **6.68** | **98** | P | **Pn** | **08 46 10.9** | **-0.8** |
| **Y45A** | **Yeager Farm, C** | **6.74** | **103** | | **Pn** | **08 46 12.1** | **-0.4** |
| Y45A | comp=Z,183nm,0.9s | | | IAmb_Lg | | 08 48 20.8 | |
| **W45A** | **Hickory Valley** | **6.75** | **92** | Pn | **Pn** | **08 46 13.1** | **+0.4** |
| W45A | comp=Z,183nm,0.8s | | | IAmb_Lg | | 08 48 12.5 | |
| **SDCO** | **Great Sand Dun** | **6.80** | **290** | Pn | **Pn** | **08 46 15.3** | **+1.7** |
| SDCO | comp=Z,66nm,0.9s | | | IAmb_Lg | | 08 48 24.3 | |
| **SDCO** | **Great Sand Dun** | **6.80** | **290** | P | **Pn** | **08 46 14.3** | **+0.7** |
| **735A** | **Kenedy** | **6.83** | **183** | IAmb_Lg | | 08 48 26.3 | |
| **S44A** | **Carbondale** | **6.86** | **71** | Pn | **Pn** | **08 46 15.4** | **+1.2** |
| **Q24A** | **Divide** | **6.96** | **300** | Pn | **Pn** | **08 46 17.5** | **+1.7** |
| Q24A | comp=Z,98nm,0.8s | | | IAmb_Lg | | 08 48 26.7 | |
| **Q24A** | **Divide** | **6.96** | **300** | P | **Pn** | **08 46 16.2** | **+0.4** |
| **K31A** | **O'Neill** | **6.99** | **352** | Pn | **Pn** | **08 46 17.8** | **+1.8** |
| **SCIA** | **State Center** | **7.02** | **27** | Pn | **Pn** | **08 46 16.7** | **+0.4** |
| SCIA | comp=Z,196nm,0.8s | | | IAmb_Lg | | 08 48 36.5 | |
| **SCIA** | **State Center** | **7.02** | **27** | P | **Pn** | **08 46 17.0** | **+0.6** |
| **N41A** | **Harden Midland** | **7.20** | **44** | | **Pn** | **08 46 19.6** | **+0.9** |
| **ANMO** | **Albuquerque** | **7.42** | **267** | Pn | **Pn** | **08 46 22.0** | **0.0** |
| ANMO | comp=Z,0.1nm,0.3s,baz=80,slow=12,SNR=2.6 | | | Pg | **Pb** | **08 46 44.8** | **+2.4** |
| ANMO | comp=Z,0.5nm,0.3s,baz=88,slow=15,SNR=9.0 | | | Lg | Lg | 08 48 24.6 | |
| ANMO | comp=Z,0.8nm,0.3s,baz=34,slow=18,SNR=2.1 | | | LR | LR | 08 49 34.4 | |
| **ANMO** | **Albuquerque** | **7.42** | **267** | | **Pn** | **08 46 21.7** | **-0.4** |
| **833A** | **Chaparral WMA,** | **7.54** | **193** | IAmb_Lg | | 08 48 48.8 | |
| 833A | comp=Z,89nm,0.8s | | | | | | |
| **833A** | **Chaparral WMA,** | **7.54** | **193** | P | **Pn** | **08 46 24.2** | **+0.7** |
| **146A** | **Union** | **7.58** | **111** | | **Pn** | **08 46 24.8** | **+0.7** |
| 146A | comp=Z,72nm,0.8s | | | IAmb_Lg | | 08 48 53.6 | |
| **ISCO** | **Idaho Springs** | **7.67** | **305** | | **Pn** | **08 46 26.4** | **+0.9** |
| ISCO | comp=Z,64nm,0.9s | | | IAmb_Lg | | 08 48 54.9 | |
| **ISCO** | **Idaho Springs** | **7.67** | **305** | P | **Pn** | **08 46 25.7** | **+0.2** |
| **PLAL** | **Pickwick Lake** | **7.68** | **93** | IAmb_Lg | | 08 48 39.4 | |
| **BNM** | **Barren Site** | **7.71** | **261** | | **Pn** | **08 46 26.9** | **+0.8** |
| **MNTX** | **Cornudas Mount** | **7.74** | **241** | Pn | **Pn** | **08 46 26.6** | **+0.4** |
| MNTX | comp=Z,94nm,0.8s | | | IAmb_Lg | | 08 48 48.0 | |
| **MNTX** | **Cornudas Mount** | **7.74** | **241** | P | **Pn** | **08 46 26.4** | **+0.2** |
| **WVT** | **Waverly** | **7.80** | **84** | Pn | **Pn** | **08 46 27.2** | **+0.1** |
| WVT | comp=Z,58nm,0.7s | | | IAmb_Lg | | 08 48 53.9 | |
| **K38A** | **Parkersburg** | **7.82** | **26** | | **Pn** | **08 46 27.0** | **-0.4** |
| **Y22D** | **IRIS PASSCAL I** | **7.97** | **261** | IAmb_Lg | | 08 48 56.7 | |
| **L40A** | **Anamosa** | **7.99** | **35** | Pn | **Pn** | **08 46 29.3** | **-0.3** |
| L40A | comp=Z,161nm,0.8s | | | IAmb_Lg | | 08 48 56.3 | |
| **OLIL** | **Olney** | **8.04** | **65** | IAmb_Lg | | 08 48 53.1 | |
| **HDIL** | **Hopedale** | **8.04** | **50** | | **Pn** | **08 46 30.5** | **+0.2** |
| **HDIL** | **Hopedale** | **8.04** | **50** | P | **Pn** | **08 46 30.1** | **-0.2** |
| | baz=235 | | | | | | |
| **ECSD** | **EROS Data Cent** | **8.05** | **4** | Pn | **Pn** | **08 46 28.6** | **-1.9** |
| **ECSD** | **EROS Data Cent** | **8.05** | **4** | P | **Pn** | **08 46 29.4** | **-1.1** |
| | baz=185,SNR=20 | | | | | | |
| **Z47A** | **Carrollton** | **8.12** | **105** | IAmb_Lg | | 08 49 02.7 | |
| | comp=Z,58nm,0.8s | | | | | | |
| **USIN** | **University of** | **8.15** | **71** | IAmb_Lg | | 08 49 03.5 | |
| | comp=Z,135nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **8.24** | **221** | Pn | **Pn** | **08 46 32.5** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=46,slow=9.9,SNR=15 | | | | | | |
| TXAR | | | | Sn | **Sn** | **08 48 04.0** | **-2.7** |
| | comp=Z,1.8nm,0.3s,baz=50,slow=15,SNR=1.9 | | | | | | |
| TXAR | | | | Lg | Lg | 08 48 48.6 | |
| | comp=Z,2.5nm,0.3s,baz=49,slow=18,SNR=3.9 | | | | | | |
| TXAR | | | | LR | LR | 08 50 10.0 | |
| | comp=Z,58nm,21.8s,baz=26,slow=41 | | | | | | |
| **TXAR** | **Lajitas Array** | **8.24** | **221** | | | **08 46 32.4** | **-0.9** |
| **TX31** | **Lajitas Ar. Si** | **8.25** | **221** | | **Pn** | **08 46 32.6** | **-0.7** |
| **TX32** | **Lajitas Array** | **8.25** | **221** | Pn | **Pn** | **08 46 32.9** | **-0.4** |
| **PHWY** | **Pilot Hill** | **8.42** | **314** | | **Pn** | **08 46 36.6** | **+0.7** |
| PHWY | comp=Z,75nm,0.8s | | | IAmb_Lg | | 08 49 12.2 | |
| **N23A** | **Red Feather La** | **8.47** | **310** | Pn | **Pn** | **08 46 38.4** | **+1.9** |
| **N23A** | **Red Feather La** | **8.47** | **310** | P | **Pn** | **08 46 36.3** | **-0.2** |
| | baz=125,SNR=7.8 | | | | | | |
| **L42A** | **Oliver, Polo** | **8.73** | **42** | | **Pn** | **08 46 40.0** | **+0.1** |
| **SUSD** | **Miller** | **8.81** | **353** | IAmb_Lg | | 08 49 24.7 | |
| | comp=Z,156nm,1.2s | | | | | | |
| **LRAL** | **Lakeview Retre** | **9.02** | **104** | P | **Pn** | **08 46 43.4** | **-0.4** |
| | baz=290 | | | | | | |
| **MVCO** | **Mesa Verde** | **9.05** | **283** | P | **Pn** | **08 46 43.8** | **-0.6** |
| | baz=96 | | | | | | |
| **JFWS** | **Jewell Farm** | **9.10** | **35** | | **Pn** | **08 46 44.5** | **-0.4** |
| JFWS | comp=Z,160nm,0.8s | | | IAmb_Lg | | 08 49 36.8 | |
| **JFWS** | **Jewell Farm** | **9.10** | **35** | P | **Pn** | **08 46 44.7** | **-0.2** |
| | baz=220 | | | | | | |
| **BLO** | **Bloomington** | **9.34** | **65** | | **Pn** | **08 46 48.8** | **+0.6** |
| **RWWY** | **Rawlins** | **9.71** | **311** | IAmb_Lg | | 08 50 02.5 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **I40A** | **Norwalk** | **9.71** | **31** | Pn | **Pn** | **08 46 52.3** | **-1.0** |
| I40A | comp=Z,96nm,0.8s | | | IAmb_Lg | | 08 49 54.8 | |
| **RSSD** | **Black Hills** | **9.82** | **331** | Pn | **Pn** | **08 46 55.1** | **+0.2** |
| **RSSD** | **Black Hills** | **9.82** | **331** | P | **Pn** | **08 46 55.3** | **+0.3** |
| | baz=147 | | | | | | |
| **K22A** | **Casper** | **9.90** | **317** | Pn | **Pn** | **08 46 57.4** | **+1.4** |
| K22A | comp=Z,84nm,1.1s | | | IAmb_Lg | | 08 50 08.7 | |
| **SPMN** | **Marine on St.** | **10.14** | **19** | | **Pn** | **08 46 58.8** | **-0.4** |
| **F33A** | **5 Mile Ranch,** | **10.17** | **4** | Pn | **Pn** | **08 46 57.5** | **-2.1** |
| **F36A** | **Milaca** | **10.57** | **15** | | **Pn** | **08 47 04.7** | **-0.3** |
| **TKL** | **Tuckaleechee C** | **11.11** | **86** | Pn | **Pn** | **08 47 11.5** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=274,slow=16,SNR=1.7 | | | | | | |
| TKL | | | | Sn | **Sn** | **08 49 16.2** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=120,slow=7.1,SNR=1.8 | | | | | | |
| TKL | | | | Lg | Lg | 08 50 19.2 | |
| | comp=Z,1.7nm,0.3s,baz=158,slow=20,SNR=7.4 | | | | | | |
| TKL | | | | LR | LR | 08 51 30.4 | |
| | comp=Z,81nm,20.7s,baz=328,slow=37 | | | | | | |
| **PD31** | **Pinedale Array** | **11.75** | **311** | | **Pn** | **08 47 22.1** | **+0.7** |
| **PDAR** | **Pinedale Array** | **11.75** | **311** | Pn | **Pn** | **08 47 21.1** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=124,slow=14,SNR=9.0 | | | | | | |
| PDAR | | | | Lg | Lg | 08 50 32.7 | |
| | comp=Z,0.3nm,0.3s,baz=120,slow=32,SNR=2.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **11.75** | **311** | | | **08 47 21.4** | **0.0** |
| **COWI** | **Conover** | **12.13** | **29** | | **Pn** | **08 47 24.5** | **-1.9** |
| **B35A** | **Bob, Littlefor** | **12.95** | **11** | | **Pn** | **08 47 34.5** | **-3.0** |
| **GLMI** | **Grayling** | **13.36** | **43** | | **Pn** | **08 47 41.0** | **-2.2** |
| **O53A** | **New Philadelph** | **13.57** | **66** | Pn | **Pn** | **08 47 47.3** | **+1.2** |
| **DGMT** | **Dagmar** | **13.71** | **341** | Pn | **Pn** | **08 47 48.6** | **+0.7** |
| **ULM** | **Lac du Bonnet** | **14.59** | **4** | Pn | Pn | 08 47 54.3 | -5.6 |
| | comp=Z,0.5nm,0.3s,baz=178,slow=12,SNR=3.0 | | | | | | |
| ULM | | | | Sn | Sn | 08 50 29.3 | -12 |
| | comp=Z,0.4nm,0.3s,baz=85,slow=19,SNR=1.6 | | | | | | |
| ULM | | | | Lg | Lg | 08 52 04.6 | |
| | comp=Z,0.2nm,0.3s,baz=270,slow=19,SNR=1.4 | | | | | | |
| **SADO** | **Sadowa** | **16.62** | **51** | Lg | Lg | 08 53 07.0 | |
| | comp=Z,0.8nm,0.3s,baz=157,slow=5.0,SNR=3.3 | | | | | | |
| **JTS** | **Las Juntas de** | **27.72** | **153** | LR | LR | 09 03 03.0 | |
| | comp=Z,49nm,18.9s,baz=360,slow=40 | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.89** | **344** | P | **P** | **08 50 31.8** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=147,slow=8.1,SNR=3.1 | | | | | | |
| **INK** | **Inuvik** | **38.39** | **339** | LR | LR | 09 08 00.7 | |
| | comp=Z,96nm,19.5s,baz=30,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **41.27** | **330** | P | **P** | **08 52 17.6** | **-1.0** |
| | comp=Z,0.5nm,1.0s,baz=94,slow=9.1,SNR=4.6 | | | | | | |

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*LDG **23** 08:45:56.7±0.2, 35°.28N×3°.48W, h6km, Md3.9/2, Ml4.3/10, Error ellipse: s-maj=6.0km s-min=4.0km az=179.0*

*IDC **23** 08:45:58.2±0.4, 35°.63N×3°.57W, h0km, mb4.4/33, mb1 4.5/38, mb1mx4.4/55, mbtmp4.4/38, ML4.2/5, MS3.7/35, Ms1 3.7/35, ms1mx3.4/91, Error ellipse: s-maj=12.5km s-min=9.0km az=103.0*

*SFS **23** 08:46:00.0, 35°.60N×3°.60W, ML4.3, ALBORAN SUR*

*MDD **23** 08:46:00.3±0.4, 35°.68N×3°.61W, h0km±2km, mb_Lg4.2/29, Error ellipse: s-maj=2.5km s-min=1.9km az=177.0*

*MED_RC **23** 08:46:00.0±0.4, 35°.66N×3°.62W, h10km, MW4.4/10, Moment Tensor Solution. Mantle waves: s10,c19; Duration: 1§0 Moment tensor: Scale 10¹⁵Nm; Mrr4.59±.32; Mθθ-3.95±.17; Mϕϕ-0.64±.35; Mrθ1.03±.69; Mθϕ-1.80±.18; Mϕr2.27±.77; Best double couple: M₀5.28000×10¹⁵ NP1:φs49.00000°, δ58.00000°, λ71.00000°. NP2:φs262.00000°, δ36.00000°, λ118.00000°. Principal axes: T 5.4500, Plg70.0000°, Azm276.0000°; N -0.3400, Plg16.0000°, Azm59.0000°; P -5.1200, Plg11.0000°, Azm153.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*

*CRAAG **23** 08:46:00.5, 35°.66N×3°.62W, Mb4.6*

*CNRM **23** 08:46:00.3, 35°.71N×3°.50W, h24km, ml4.7*

*IGIL **23** 08:46:00.7, 35°.67N×3°.62W, h0km, ML4.4*

*NEIC **23** 08:46:01.0±1.5, 35°.69N±0°.08×3°.63W±0°.07, h10km±1km, mb4.8/116, Error ellipse: s-maj=13.1km s-min=9.4km az=173.0*

*INMG **23** 08:46:01.2±1.4, 35°.65N×3°.63W, h11km±4km, MD4.1, ML4.2, Error ellipse: s-maj=2.7km s-min=2.5km az=27.0*

*STR **23** 08:46:21.8±0.4, 38°.N±8°×±°, h10km, mb5.1/7*

**ISC 23 08:46:01.2±1.0, 35°.66N±0°.02×3°.57W±0°.02, h17km±6km, n435, σ1§56/500, mb4.7/90, MS3.8/32, 26C-6D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.52** | **58** | Pg | **Pb** | **08 46 11.5** | **-0.4** |
| EALB | | | | Sg | **Sb** | **08 46 19.6** | **+0.5** |
| EALB | | | | *i* Vmb_Lg | | 08 46 20.2 | |
| **PALE** | **Palemas** | **0.54** | **214** | P | **Pg** | **08 46 11.7** | **-0.2** |
| **PALE** | **Palemas** | **0.54** | **214** | P | **Pb** | **08 46 12.2** | **-0.1** |
| PALE | | | | S | **Sb** | **08 46 20.0** | **+0.3** |
| **EMEL** | **Melilla** | **0.62** | **126** | Pg | **Pg** | **08 46 13.0** | **-0.5** |
| EMEL | | | | Sg | **Sg** | **08 46 21.5** | **-0.2** |
| **CHAS** | **Isla Isabel II** | **1.05** | **117** | P | **Pb** | **08 46 18.9** | **-2.0** |
| CHAS | | | | S | **Sb** | **08 46 33.6** | **-0.8** |
| **ELGU** | **Los Guajares,** | **1.20** | **358** | Pg | **Pn** | **08 46 21.3** | **-2.1** |
| ELGU | | | | Sg | **Sn** | **08 46 39.2** | **-0.2** |
| ELGU | | | | *i* Vmb_Lg | | 08 46 41.0 | |
| **TAF** | **Taforalt** | **1.27** | **132** | P | **Pn** | **08 46 24.0** | **-0.4** |
| **TAF** | **Taforalt** | **1.27** | **132** | P | **Pn** | **08 46 23.2** | **-1.1** |
| TAF | | | | S | **Sb** | **08 46 38.9** | **-2.0** |
| **EMAL** | **Malaga-Limoner** | **1.30** | **328** | P | **Pn** | **08 46 22.8** | **-1.9** |
| E

**ENIJ Nijar** 1.71 40 Pn **Pn** **08 46 27.9 -2.4**
ENIJ Sn **Sn** **08 46 48.9 -2.9**
ENIJ Sg **Sb** **08 46 53.9 +0.5**
ENIJ *i* Vmb_Lg 08 47 02.3
**EJIF Jimena Fronter** 1.73 298 Pn **Pn** **08 46 29.9 -0.7**
**CPS Cap Spartel** 1.91 274 P **Pb** **08 46 35.0 -0.6**
**CPS Cap Spartel** 1.91 274 P **Pb** **08 46 35.0 -0.6**
**LIJA Lijar** 1.93 310 P **Pb** **08 46 35.3 -0.8**
LIJA S **Sb** **08 47 01.0 +1.1**
**SICH Sidi Chahed** 2.12 223 P **Pb** **08 46 37.7 -1.5**
SICH S **Sb** **08 47 05.5 +0.3**
**CNIL Conil** 2.13 290 P **Pb** **08 46 38.0 -1.5**
CNIL S **Sg** **08 47 09.9 0.0**
**LCRM LCR** 2.24 209 P **Pn** **08 46 38.0 +0.2**
**LCRM LCR** 2.24 209 P **Pn** **08 46 38.0 +0.2**
LCRM S **Sn** **08 47 06.7 +1.6**
**SFS San Fernando** 2.28 291 P **Pn** **08 46 38.9 +0.8**
SFS S **Sg** **08 47 12.2 -2.4**
**SFS San Fernando** 2.28 291 **Pn** **08 46 39.6 +1.4**
**OTSS Djebel Tessala** 2.30 99 P **Pn** **08 46 37.3 -1.2**
**USTO Oran** 2.46 88 P Pn 08 46 30.0 -11
**IFR Ifrane** 2.50 211 P **Pn** **08 46 40.8 -0.5**
IFR S **Sn** **08 47 10.7 -0.8**
**TLOR Lorca, Murcia** 2.50 37 Pn **Pn** **08 46 40.3 -0.9**
TLOR Sn **Sn** **08 47 10.4 -0.9**
**EZAR Zarzadilla de** 2.67 34 Pn **Pn** **08 46 42.6 -1.0**
EZAR Sn **Sn** **08 47 14.6 -1.1**
**ODJA Bouhanifia** 2.81 96 P **Pn** **08 46 43.8 -1.7**
**CART Cartagena** 2.82 46 P **Pn** **08 46 42.8 -2.7**
CART S **Sn** **08 47 14.9 -4.3**
**CART Cartagena** 2.82 46 Pn **Pn** **08 46 44.6 -0.9**
**CART Cartagena** 2.82 46 P **Pn** **08 46 45.4 -0.2**
**CART Cartagena** 2.82 46 P **Pn** **08 46 45.4 -0.2**
CART S **Sn** **08 47 15.3 -3.9**
**ECAB El Cabril** 2.83 329 Pn **Pn** **08 46 46.2 +0.5**
ECAB Sn **Sn** **08 47 19.9 +0.5**
ECAB Sg **Sb** **08 47 27.3 +1.6**
ECAB *i* Vmb_Lg 08 47 30.4
**CZD Col de Zad** 2.89 205 P **Pn** **08 46 47.1 +0.2**
**CZD Col de Zad** 2.89 205 P **Pn** **08 46 47.1 +0.2**
**ARNO Arenosillo** 2.93 300 P **Pn** **08 46 47.2 +0.2**
ARNO S **Sn** **08 47 21.9 +0.2**
**MD31 MD31** 2.96 200 P **Pn** **08 46 47.8 +0.2**
**MDT Midelt** 2.97 197 Pn **Pn** **08 46 47.5 -0.2**
11nm,0.3s,baz=331,slow=5.2,SNR=102
MDT Sn **Sn** **08 47 21.8 -1.3**
40nm,0.3s,baz=94,slow=23,SNR=6.6
MDT Lg Lg 08 47 30.8
29nm,0.3s,baz=315,slow=6.7,SNR=4.2
**MDT Midelt** 2.97 197 P **Pb** **08 46 54.5 +0.7**
**MDT Midelt** 2.97 197 P **Pn** **08 46 47.5 -0.2**
**OJBR Djebel Berber** 3.19 90 P **Pn** **08 46 47.0 -3.8**
**ETRV Los Montesinos** 3.26 43 Pn **Pn** **08 46 53.6 +2.0**
ETRV Sn **Sn** **08 47 27.1 -2.8**
ETRV *i* Vmb_Lg 08 48 08.6
**ZHG ZHG** 3.36 230 P **Pn** **08 46 53.3 +0.1**
**ZHG ZHG** 3.36 230 P **Pn** **08 46 53.3 +0.1**
**ETOB Tobarra** 3.39 28 Pn **Pn** **08 46 54.1 +0.7**
ETOB Sn **Sn** **08 47 32.6 -0.6**
ETOB *i* Vmb_Lg 08 48 11.4
**OKGL Djebel Kef Gue** 3.44 83 P **Pn** **08 46 53.9 -0.3**
**OJGS Djebel Guires** 3.52 91 P **Pn** **08 46 55.4 0.0**
**EGRO El Granado** 3.66 302 Pn **Pn** **08 46 55.6 -1.5**
EGRO Sn **Sn** **08 47 37.0 -2.9**
EGRO *i* Vmb_Lg 08 47 44.4
**PVAQ Vaqueiros** 3.76 299⇑ *e*Pn **Pn** **08 46 57.5 -1.1**
PVAQ *e*Sn **Sn** **08 47 39.6 -2.9**
PVAQ A A 08 47 42.8
321nm,0.6s
**PVAQ Vaqueiros** 3.76 299 Pn **Pn** **08 46 57.4 -1.2**
**PVAQ Vaqueiros** 3.76 299 P **Pn** **08 47 01.3 +2.7**
**PVAQ Vaqueiros** 3.76 299 P **Pn** **08 46 57.4 -1.2**
PVAQ S **Sn** **08 47 44.0 +1.6**
**EANR 'Ain N'Sour** 3.81 84 P **Pn** **08 46 58.1 -1.1**
**AFON Font Roja** 3.85 38 Pn **Pn** **08 46 59.7 -0.1**
AFON Sn **Sn** **08 47 44.6 -0.2**
AFON *i* Vmb_Lg 08 48 10.4
**PBDV Barranco-do-Ve** 3.85 295⇑ *e*Pn **Pn** **08 46 58.8 -1.0**
PBDV *e*Sn **Sn** **08 47 42.4 -2.3**
PBDV A A 08 47 46.5
353nm,0.7s
**PAB San Pablo** 3.92 351 P **Pn** **08 47 01.8 +0.9**
**PAB San Pablo** 3.92 351 Pn **Pn** **08 47 01.3 +0.4**
**PAB San Pablo** 3.92 351 Pn **Pn** **08 47 01.0 +0.1**
PAB Sn **Sn** **08 47 44.7 -1.8**
PAB *i* Vmb_Lg 08 48 24.9
**PAB San Pablo** 3.92 351 P **Pn** **08 47 01.3 +0.4**
**AVE Averroes** 3.96 234 P **Pn** **08 47 00.2 -1.0**
AVE S **Sn** **08 47 45.2 -2.0**
**AVE Averroes** 3.96 234 P **Pn** **08 47 00.5 -0.7**
**AVE Averroes** 3.96 234 P **Pn** **08 47 00.5 -0.7**
**FIGM Figuig** 4.01 151 P **Pg** **08 47 19.0 +0.9**
**FIGM Figuig** 4.01 151 P **Pn** **08 47 02.0 -0.1**
**ESDC Sonseca Array** 4.02 356 Pn **Pn** **08 47 02.3 +0.2**
6.8nm,0.3s,baz=172,slow=13,SNR=14
ESDC Sn **Sn** **08 47 46.5 -2.3**
9.8nm,0.3s,baz=183,slow=20,SNR=6.9
ESDC Lg Lg 08 48 05.8
16nm,0.3s,baz=177,slow=26,SNR=8.4
ESDC LR LR 08 48 14.4
comp=Z,293nm,21.3s,baz=224,slow=34
**ESDC Sonseca Array** 4.02 356 Pn **Pn** **08 47 01.2 -0.8**
ESDC Sn **Sn** **08 47 46.2 -2.0**
ESDC *i* Vmb_Lg 08 48 25.2
**ESBB Sonseca Array** 4.02 356 Pn **Pn** **08 47 02.8 +0.7**
**EBEN2 Beniarda presa** 4.04 41 Pn **Pn** **08 47 02.5 +0.1**
EBEN2 Sn **Sn** **08 47 46.9 -2.4**
EBEN2 *i* Vmb_Lg 08 48 34.0
**PCVE Castro Verde** 4.09 300⇑ *e*Pn **Pn** **08 47 02.1 -1.0**
PCVE *e*Sn **Sn** **08 47 48.2 -2.5**
PCVE A A 08 47 51.3
504nm,0.5s
**EBAD Badajoz** 4.13 319 Pn **Pn** **08 47 02.8 -0.8**
EBAD Sn **Sn** **08 47 49.2 -2.3**
EBAD *i* Vmb_Lg 08 47 51.5
**PBEJ Beja** 4.17 306 *e*Pn **Pn** **08 47 03.6 -0.6**
PBEJ *e*Sn **Sn** **08 47 50.3 -2.3**
PBEJ A A 08 47 54.1
218nm,0.5s
**MORF Marmelete** 4.41 293 *e*P **Pn** **08 47 06.2 -1.3**
MORF *e*S **Sn** **08 47 54.3 -4.2**
MORF IAML 08 48 02.0
comp=N,523nm,0.6s
**MORF Marmelete** 4.41 293 *e*Pn **Pn** **08 47 06.3 -1.2**
MORF *e*Sn **Sn** **08 47 55.6 -2.9**
MORF A A 08 48 08.7
comp=N,221nm,0.7s
**ECHE Chera** 4.43 27 Pn **Pn** **08 47 07.6 -0.1**
ECHE *i* Vmb_Lg 08 48 43.0
**PFVI Vila Bisbo** 4.49 291⇓ *e*Pn **Pn** **08 47 08.0 -0.5**
PFVI *e*Sn **Sn** **08 47 57.9 -2.4**
PFVI A A 08 48 06.1
comp=N,234nm,0.6s
**PFVI Vila Bisbo** 4.49 291 Pn **Pn** **08 47 07.2 -1.3**
**PFVI Vila Bisbo** 4.49 291 P **Pn** **08 47 09.5 +1.0**
**PFVI Vila Bisbo** 4.49 291 P **Pn** **08 47 08.0 -0.5**
**PESTR Estremoz** 4.53 316⇓ *e*Pn **Pn** **08 47 08.9 -0.2**
PESTR *e*Sn **Sn** **08 47 59.1 -2.3**
PESTR A A 08 48 04.3
comp=N,186nm,0.5s
**PESTR Estremoz** 4.53 316 Pn **Pn** **08 47 08.7 -0.4**
**PESTR Estremoz** 4.53 316 P **Pn** **08 47 08.7 -0.4**
**PESTR Estremoz** 4.53 316 P **Pn** **08 47 08.7 -0.4**
**PTEO Sao Teotonio** 4.55 296⇓ *e*Pn **Pn** **08 47 08.6 -0.8**
PTEO *e*Sn **Sn** **08 47 59.3 -2.6**
PTEO A A 08 48 09.6
comp=N,467nm,0.5s
**EVO Evora** 4.56 310 P **Pn** **08 47 10.9 +1.4**
EVO S **Sn** **08 48 01.8 -0.3**
**EVO Evora** 4.56 310 *e*Pn **Pn** **08 47 11.2 +1.7**
EVO *e*Sn **Sn** **08 48 00.5 -1.6**
EVO A A 08 48 03.7
comp=N,224nm,0.5s
**UCM Universidad Co** 4.64 3 P **Pn** **08 47 11.3 +0.6**
UCM S **Sn** **08 47 57.2 -7.0**
**PNCL Nicolau / Gran** 4.67 303⇑ *e*Pn **Pn** **08 47 10.1 -0.8**
PNCL *e*Sn **Sn** **08 48 02.6 -2.1**
PNCL A A 08 48 11.2
comp=N,135nm,0.8s
**EPLA Plasencia** 4.82 336 Pn **Pn** **08 47 11.5 -1.6**
EPLA Sn **Sn** **08 48 07.3 -1.3**
EPLA *i* Vmb_Lg 08 48 43.8
**PMRV Marv??o** 4.83 322 *e*Pn **Pn** **08 47 13.2 0.0**
PMRV *e*Sn **Sn** **08 48 06.2 -2.6**
PMRV A A 08 48 22.0
comp=N,206nm,0.8s
**GUD Guadarrama** 4.99 355 Pn **Pn** **08 47 15.8 +0.2**
GUD Sn **Sn** **08 48 12.1 -0.9**
GUD Sg **Sb** **08 48 32.4 +4.3**
GUD *i* Vmb_Lg 08 49 06.6
**PMTG Montargil** 5.03 314 *e*Pn **Pn** **08 47 15.3 -0.6**
PMTG *e*Sn **Sn** **08 48 10.8 -2.9**
PMTG A A 08 48 12.6
comp=N,160nm,0.5s
**TZRR Tazzarine** 5.14 200 P **Pn** **08 47 21.0 +3.3**
**TZRR Tazzarine** 5.14 200 P **Pn** **08 47 18.1 +0.4**
**PCBR Castelo Branco** 5.19 325 *e*Pn **Pn** **08 47 18.4 +0.2**
PCBR *e*Sn **Sn** **08 48 15.4 -2.3**
PCBR A A 08 48 17.8
comp=N,194nm,0.5s
**PACT Alcochete** 5.22 308⇓ *e*Pn **Pn** **08 47 18.7 +0.2**
PACT *e*Sn **Sn** **08 48 16.2 -2.1**
PACT A A 08 49 01.3
comp=N,228nm,0.7s
**ETOR Torete** 5.28 13 Pn **Pn** **08 47 19.5 -0.1**
ETOR *i* Vmb_Lg 08 49 14.7
**LIS Lisbon** 5.40 306 *e*P **Pn** **08 47 19.7 -1.3**
LIS *e*S **Sn** **08 48 17.4 -5.3**
LIS IAML 08 48 23.4
comp=N,574nm,0.5s
**ECOL Islas Columbre** 5.41 37 Pn **Pn** **08 47 20.8 -0.3**
ECOL Sn **Sn** **08 48 19.0 -3.9**
**PMST Lisbon--Monsan** 5.43 306⇓ *e*Pn **Pn** **08 47 21.4 0.0**
PMST *e*Sn **Sn** **08 48 20.9 -2.6**
PMST A A 08 48 29.6
comp=N,142nm,0.6s
**OUZM OUZ** 5.44 210 P **Pn** **08 47 26.0 +4.2**
**OUZM OUZ** 5.44 210 P **Pn** **08 47 22.1 +0.3**
**PMAFR Mafra** 5.61 308 *e*Pn **Pn** **08 47 23.4 -0.6**
PMAFR *e*Sn **Sn** **08 48 24.6 -3.5**
PMAFR A A 08 48 28.8
comp=N,254nm,0.4s
**PSBE So Bento** 5.66 314 *e*Pn **Pn** **08 47 24.6 0.0**
PSBE *e*Sn **Sn** **08 48 25.9 -3.3**
PSBE A A 08 49 15.9
comp=N,149nm,0.6s
**MTE Manteigas** 5.67 328 *e*Pn **Pn** **08 47 25.4 +0.5**
MTE *e*Sn **Sn** **08 48 26.8 -2.9**
MTE A A 08 49 02.9
comp=N,282nm,0.6s
**MTE Manteigas** 5.67 328 Pn **Pn** **08 47 25.4 +0.5**
**OUK Oukaimeden** 5.71 220 P **Pn** **08 47 24.8 -0.9**
**ZGR Zagora** 5.79 198 P **Pn** **08 47 27.0 +0.5**
**PCAS Casmilo, Conde** 5.86 320 *e*Pn **Pn** **08 47 27.4 0.0**
PCAS *e*Sn **Sn** **08 48 30.1 -4.2**
PCAS A A 08 49 09.1
comp=N,239nm,0.6s
**COI Coimbra** 5.93 321 *e*Pn **Pn** **08 47 28.5 +0.1**
COI *e*Sn **Sn** **08 48 32.8 -3.2**
**COI Coimbra** 5.93 321 Pn **Pn** **08 47 28.7 +0.4**
**PVIS Viseu** 6.08 327 *e*Pn **Pn** **08 47 30.9 +0.4**
PVIS *e*Sn **Sn** **08 48 35.5 -4.3**
PVIS A A 08 48 39.8
comp=N,170nm,0.7s
**MVO Moncorvo** 6.13 335 *e*Pn **Pn** **08 47 31.4 +0.3**
MVO *e*Sn **Sn** **08 48 37.4 -3.4**
MVO A A 08 48 52.0
comp=N,213nm,0.6s
**EAH EAH** 6.42 233 P **Pn** **08 47 34.2 -0.8**
**PVRL Vila Real** 6.48 331 *e*Pn **Pn** **08 47 36.3 +0.4**
PVRL *e*Sn **Sn** **08 48 45.1 -4.3**
PVRL A A 08 48 52.5
comp=N,254nm,0.6s
**TTIG Tnine Tigouga,** 6.54 220 P **Pn** **08 47 36.0 -0.8**
**POLO Lamas de Olo** 6.59 331 *e*Pn **Pn** **08 47 37.8 +0.3**
POLO *e*Sn **Sn** **08 48 47.7 -4.6**
POLO A A 08 49 36.9
comp=N,63nm,0.7s
**PBRG Braganca** 6.61 339 *e*Pn **Pn** **08 47 38.0 +0.3**
PBRG *e*Sn **Sn** **08 48 51.0 -1.8**
PBRG A A 08 49 36.1
comp=N,97nm,0.7s
**PTO Porto** 6.74 326 *e*Pn **Pn** **08 47 39.6 +0.1**
PTO *e*Sn **Sn** **08 48 50.8 -5.1**
**EPOB Poblet** 6.75 31 Pn **Pn** **08 47 39.9 +0.3**
EPOB *i* Vmb_Lg 08 50 08.8
**PCAB Cabril** 6.97 331 *e*Pn **Pn** **08 47 42.9 +0.3**
PCAB *e*Sn **Sn** **08 48 57.4 -4.1**
PCAB A A 08 49 49.0
comp=N,160nm,0.6s
**ELOB Lobios** 7.12 332 Pn **Pn** **08 47 44.8 +0.1**
ELOB Sn **Sn** **08 49 00.0 -5.2**
ELOB *i* Vmb_Lg 08 49 51.0
**PGAV Gavieira, Arco** 7.28 331 *e*Pn **Pn** **08 47 47.4 +0.4**
PGAV *e*Sn **Sn** **08 49 05.4 -3.9**
PGAV A A 08 49 19.9
comp=N,136nm,0.7s
**EORO Oroz-Betelu** 7.43 13 Pn **Pn** **08 47 49.6 +0.7**
EORO *i* Vmb_Lg 08 50 01.7
**ECHI Chisagues Biel** 7.58 22 Pn **Pn** **08 47 51.7 +0.7**
ECHI *i* Vmb_Lg 08 50 15.3
**ETSF Etsaut** 7.59 17 *e*Pn **Pn** **08 47 52.2 +1.0**
**ETSF Etsaut** 7.59 17 *e*P **Pn** **08 47 55.6 +4.4**
ETSF *e*Sn **Sn** **08 49 17.5 +0.6**
comp=N,61nm,0.8s
ETSF *e*Sg 08 50 04.2
comp=N,173nm,1.3s
**EZAM Zamans** 7.61 330 Pn **Pn** **08 47 51.7 +0.3**
EZAM Sn Sn 08 48 59.5 -18
EZAM *i* Vmb_Lg 08 50 00.9
**SJPF Ste Jean** 7.66 13 *e*Pn **Pn** **08 47 53.2 +1.2**
**SJPF Ste Jean** 7.66 13 *e*P **Pn** **08 47 56.3 +4.3**
SJPF *e*Sn **Sn** **08 49 18.7 +0.3**
comp=N,55nm,0.7s
SJPF *e*Sg 08 50 07.1
comp=N,326nm,1.3s
**EALK Alkurruntz** 7.71 11 Pn **Pn** **08 47 53.5 +0.6**
**EARI Arriondas** 7.73 351 Pn **Pn** **08 47 53.6 +0.5**
EARI Sn **Sn** **08 49 16.3 -4.0**
EARI *i* Vmb_Lg 08 50 44.5
**EPF Esparros** 7.96 21 *e*Pn **Pn** **08 47 56.9 +0.7**
**EPF Esparros** 7.96 21 *e*P **Pn** **08 48 00.8 +4.6**
EPF *e*Sn **Sn** **08 49 25.9 +0.1**
comp=N,30nm,0.6s
EPF *e*Sg 08 50 15.7
comp=N,48nm,0.7s
**MTLF Montolieu** 8.87 28 *e*Pn **Pn** **08 48 06.7 -2.0**
**MTLF Montolieu** 8.87 28 *e*P **Pn** **08 48 12.9 +4.2**
**TANT Tantan** 9.72 224 P **Pn** **08 48 19.6 -0.8**
**LFF La Frestale** 9.83 18 *e*Pn **Pn** **08 48 20.6 -1.2**
**LFF La Frestale** 9.83 18 *e*P **Pn** **08 48 25.9 +4.1**
**LASF Ste Croix** 10.15 32 *e*Pn **Pn** **08 48 25.2 -1.1**
**LASF Ste Croix** 10.15 32 *e*P **Pn** **08 48 29.4 +3.1**
**CAF Calviac** 10.20 23 *e*Pn **Pn** **08 48 28.1 +1.2**
CAF *e*Sn **Sn** **08 50 21.3 +0.4**
comp=N,1.2nm,0.2s
**RJF Les Rejaudoux** 10.38 20 *e*Pn **Pn** **08 48 30.0 +0.7**
**KEST Kesra** 10.51 86 Pn **Pn** **08 48 29.9 -1.3**
comp=N,0.6nm,0.3s,baz=264,slow=10,SNR=5.0
KEST Sn **Sn** **08 50 27.2 -1.4**
comp=N,0.2nm,0.3s,baz=274,slow=14,SNR=1.4
KEST LR LR 08 53 16.0
comp=N,114nm,21.8s,baz=212,slow=42
**KEST Kesra** 10.51 86 Pn **Pn** **08 48 32.1 +1.0**
**VSL Villasalto** 10.96 66 Pn **Pn** **08 48 37.5 +0.2**
**MFF Saint Martin d** 11.23 12 *e*Pn **Pn** **08 48 41.0 +0.1**
**TCF Toulx Ste Croi** 11.47 21 *e*Pn **Pn** **08 48 45.2 +0.9**
**PMOZ Porto Moniz, M** 11.63 260 Pn **Pn** **08 48 45.6 -0.9**
**BGF Bois d'Agland** 11.90 22 *e*Pn **Pn** **08 48 51.2 +1.0**
**PGF Pioggiola** 11.93 51 *e*Pn **Pn** **08 48 52.6 +1.9**
PGF *e*Sn **Sn** **08 51 03.4 -0.1**
comp=N,18nm,0.8s
**QUIF Quistinic** 12.25 1 *e*Pn **Pn** **08 48 54.9 +0.1**
**QUIF Quistinic** 12.25 1 *e*P **Pn** **08 48 59.4 +4.6**
QUIF *e*Sn **Sn** **08 51 06.4 -4.5**
comp=N,3.5nm,0.3s
**SMF Signal de Mont** 12.30 25 *e*Pn **Pn** **08 48 56.4 +0.8**
**SGMF Saint Gilles** 12.60 3 *e*Pn **Pn** **08 48 59.6 -0.1**
SGMF *e*Sn **Sn** **08 51 15.3 -4.3**
**ROSF Rostrenen** 12.67 1 *e*Pn **Pn** **08 48 59.2 -1.4**
**ROSF Rostrenen** 12.67 1 *e*P Pn 08 49 05.5 +4.9
ROSF *e*Sn **Sn** **08 51 15.9 -5.3**
comp=N,11nm,0.6s
**GRR Gorron** 12.87 8 *e*Pn **Pn** **08 49 04.0 +0.6**
**LDF La Druitiere** 13.17 10 *e*Pn **Pn** **08 49 08.1 +0.7**
**VLC Villacollemand** 13.65 47 Pn **Pn** **08 49 16.2 +2.1**
**RAFF Raffo Rosso** 14.52 79 **Pn** **08 49 27.3 +1.3**
**TUE Stuetta** 14.52 38 **Pn** **08 49 24.9 -1.2**
**DAVA Damuels** 15.35 37 *e*P **P** **08 49 42.1 +0.2**
comp=N,22nm,1.1s
**FETA Feichten** 15.59 39 *e*P **P** **08 49 45.2 +0.6**
comp=N,25nm,0.9s
**WLF Walferdange** 15.69 24 **Pn** **08 49 42.8 +1.3**
**RETA Reutte** 15.92 38 *e*P **P** **08 49 48.4 +0.3**
comp=N,14nm,0.9s
**MOTA Moosalm** 16.00 39 *e*P **P** **08 49 49.5 +0.5**
comp=N,11nm,0.9s
**WTTA Wattenberg** 16.22 40 *e*P **P** **08 49 51.0 -0.6**
comp=N,29nm,1.3s
**WATA Walderalm** 16.24 39 *i* P **P** **08 49 52.0 +0.3**
comp=N,23nm,1.1s
**ABTA Abfaltersbach** 16.37 43 *i* P **P** **08 49 54.2 +1.1**
comp=N,18nm,1.1s
**MYKA Terra Mystica** 16.93 44 *e*P **P** **08 50 00.3 +1.0**
comp=N,4.1nm,0.6s
**KBA Koelnbreinsper** 17.02 43 *e*P **P** **08 50 00.2 -0.3**
comp=N,8.7nm,1.1s
**OBKA Obir** 17.39 46 *e*P **P** **08 50 04.7 +0.3**
comp=N,6.9nm,0.8s
**GRFO Grafenberg** 17.70 33 P **Pn** **08 50 07.0 +0.2**
**GRA1 Grafenberg Arr** 17.70 33 P **P** **08 50 07.6 -0.1**
**SOKA Soboth** 17.77 46 *e*P **P** **08 50 11.4 +2.8**
comp=N,11nm,1.1s
**GEC2 GERESS Array S** 18.30 39 **Pn** **08 50 13.8 -0.6**
**GERES GERESS Array B** 18.30 39 P **Pn** **08 50 13.1 -1.3**
comp=N,0.2nm,0.3s,baz=229,slow=12,SNR=8.4
**GERES GERESS Array B** 18.30 39 P **Pn** **08 50 13.2 -1.2**
**ARSA Arzberg** 18.35 45 *e*P **P** **08 50 17.1 +2.2**
comp=N,3.8nm,0.8s
**KHC Kasperske Hory** 18.42 38 *e*P **P** **08 50 15.1 -0.6**
**KHC Kasperske Hory** 18.42 38 **Pn** **08 50 16.7 +0.9**
**CKRC Cesky Krumlov** 18.59 40 *e*P **P** **08 50 16.8 -0.8**
**NKC Novy Kostel** 18.64 34 *e*P **Pn** **08 50 19.4 +1.1**
**VLO Vlora** 18.77 68 P **Pn** **08 50 21.1 +1.2**
**CONA Conrad Observa** 18.91 44 *i* P **Pn** **08 50 22.7 +1.0**
comp=N,5.2nm,1.1s
**PDG Podgorica** 18.94 62 ⇑P **Pn** **08 50 21.9 -0.1**
**PDG Podgorica** 18.94 62 P **P** **08 50 21.2 -0.2**
**PRU Pruhonice** 19.46 37 *e*P **P** **08 50 27.2 +0.2**
**CLL Collm** 19.65 32 *i* P **P** **08 50 29.6 +0.5**
comp=Z,29nm,1.0s
CLL *e*PPP PPP 08 50 52.0
**CLL Collm** 19.65 32 P **Pn** **08 50 30.6 +0.1**
**EKA Eskdalemuir Ar** 19.67 1 P **P** **08 50 29.8 +0.5**
baz=179,slow=11,SNR=33
EKA LR LR 08 57 34.0
comp=Z,207nm,19.0s,baz=198,slow=35
**BRG Berggiesshubel** 19.77 34 *e*P **Pn** **08 50 31.4 -0.5**
BRG Amp 08 50 34.2
comp=Z,24nm,1.5s
**OHR Ohrid** 19.84 67 *i* P **Pn** **08 50 32.6 -0.3**
**KRUC Moravsky** 19.84 41 *e*P **Pn** **08 50 32.1 -0.7**
**DIVS Divibare** 19.90 58 P **P** **08 50 32.5 +0.6**
**VRAC Vranov** 20.09 41 ⇑P **P** **08 50 33.7 -0.2**
**VRAC Vranov** 20.09 41 P **P** **08 50 33.5 -0.5**
comp=Z,3.7nm,0.5s,baz=241,slow=11,SNR=5.5
VRAC LR LR 08 58 56.3
comp=Z,35nm,20.4s,baz=268,slow=39
**VRAC Vranov** 20.09 41 *e*P **P** **08 50 34.1 +0.2**
**SMOL Smolenice** 20.11 44 *e*P Pn 08 50 35.1 -0.9
**FNA Florina** 20.23 68 P **P** **08 50 35.9 +0.3**
**SRO Srobarova** 20.27 46 *e*P Pn 08 50 37.4 -0.4
**JAVC Velka Javorina** 20.43 43 *e*P **P** **08 50 38.1 +0.4**
**SKO Skopje** 20.44 65 *e*P **P** **08 50 38.1 +0.3**
**UPC Upice** 20.51 38 *e*P **P** **08 50 39.0 +0.5**
**ITM Ithomi** 20.56 78 P **P** **08 50 39.7 +0.5**
**DPC Dobruska-Polom** 20.57 38 *e*P **P** **08 50 39.3 +0.1**
**KRLC Kraliky** 20.64 39 *e*P **P** **08 50 40.8 +0.9**
**OSTC Ostas** 20.65 38 *e*P Pn 08 50 42.1 -0.2
**AGG Agios Georgios** 20.84 73 Pn 08 50 45.1 +0.4
AGG IAmb IAmb 08 50 47.0
comp=Z,32nm,1.1s
**KSP Ksiaz** 20.86 37 *e*P **P** **08 50 43.1 +0.8**
**MORC Moravsky Berou** 20.87 41 ⇑P **P** **08 50 42.5 +0.1**
**MORC Moravsky Berou** 20.87 41 P **P** **08 50 42.3 -0.1**
**MORC Moravsky Berou** 20.87 41 *e*P **P** **08 50 41.9 -0.5**
**VYHS Vyhne** 20.91 45 *e*P **P** **08 50 43.2 +0.4**
**STIP Stip** 20.95 66 *i* P Pn 08 50 44.7 -1.2
**LIT Litokhoron** 21.01 70 P **P** **08 50 44.8 +0.7**
**KOWA Kowa** 21.08 181 P **P** **08 50 46.2 +1.4**
**VAY Valandovo** 21.19 67 *e*P **P** **08 50 46.0 +0.2**
**PSZ Piszkesteto** 21.26 48 ⇑P **P** **08 50 47.7 +1.1**
**PSZ Piszkesteto** 21.26 48 P **P** **08 50 47.2 +0.5**
**BZS Buzias** 21.46 55 ⇑P **P** **08 50 48.8 0.0**
**HERR Herculane** 21.79 57 ⇑P **P** **08 50 52.1 -0.2**
**VTS Vitosha** 21.86 63 ⇑P **P** **08 50 52.2 -1.1**
**VTS Vitosha** 21.86 63 P **P** **08 50 53.9 +0.6**
**GZR Gura Zlata** 22.17 56 ⇑P **P** **08 50 56.2 -0.3**
**NIE Niedzica** 22.20 44 *e*P **P** **08 50 58.5 +1.8**
**DRGR** 22.57 52 ⇑P **P** **08 51 01.0 +0.2**
**CRVS Cervenica-Dubn** 22.63 47 *e*P **P** **08 51 02.9 +1.6**
**TORD Torodi Ar. Bea** 22.92 167 P **P** **08 51 04.4 -0.1**
comp=Z,20nm,1.1s,baz=344,slow=10,SNR=21
**TORD Torodi Ar. Bea** 22.92 167 P **P** **08 51 06.4 +1.9**
TORD IAmb IAmb 08 51 13.6
comp=Z,52nm,1.0s
**TRPA Tarpa** 22.96 49 ⇑P **P** **08 51 04.3 -0.4**
**IDI Anoyia** 23.15 83 ⇑P **P** **08 51 09.5 +2.6**
**IDI Anoyia** 23.15 83 P **P** **08 51 06.3 -0.6**
comp=Z,16nm,0.9s,baz=323,slow=14,SNR=5.9
**IDI Anoyia** 23.15 83 P **P** **08 51 07.0 +0.1**
IDI IAmb IAmb 08 51 14.0
comp=Z,30nm,1.0s
**ARR Arges** 23.43 57 ⇑P **P** **08 51 09.6 0.0**
**SANT Santorini** 23.46 80 P **P** **08 51 10.6 +0.7**
SANT IAmb IAmb 08 51 31.3
comp=Z,38nm,1.1s
**KWP Kalwaria Pacla** 23.69 46 P **P** **08 51 12.2 +0.2**
**VOIR** 23.73 57 ⇑P **P** **08 51 14.2 +1.7**
**MLR Muntele Rosu** 24.35 57 ⇑P **P** **08 51 19.7 +1.2**
**MLR Muntele Rosu** 24.35 57 P **P** **08 51 16.9 -1.5**
comp=Z,14nm,0.9s,baz=222,slow=3.9
**MLR Muntele Rosu** 24.35 57 P **P** **08 51 19.3 +0.9**
MLR IAmb IAmb 08 51 23.2
comp=Z,19nm,0.9s
**OZUR** 24.39 56 ⇑P **P** **08 51 19.2 +0.5**
**BUR08 Bucovina Ar. S** 24.46 52 P **P** **08 51 19.4 +0.1**
BUR08 IAmb IAmb 08 51 45.4
comp=Z,22nm,1.4s
**BURAR Bucovina Array** 24.46 52 ⇑P **P** **08 51 20.1 +0.7**
**BURAR Bucovina Array** 24.46 52 P **P** **08 51 19.6 +0.3**
**COVR Voineasa-Covas** 24.61 56 ⇑P **P** **08 51 22.1 +1.5**
**PLOR Plostina** 24.92 57 ⇑P **P** **08 51 26.5 +3.0**
**VRI Vrincioaia** 24.97 57 ⇑P **P** **08 51 24.3 +0.4**
**CFR Carcaliu** 25.80 59 ⇑P **P** **08 51 31.4 +0.1**
**HFS Hagfors** 26.91 19 P **P** **08 51 40.1 -1.2**
comp=Z,10.0nm,0.8s,baz=206,slow=9.9,SNR=12
HFS PcP **PcP** **08 55 01.9 -1.0**
comp=Z,2.3nm,0.7s,baz=148,slow=8.7,SNR=5.0
HFS LR LR 09 04 34.5
comp=Z,188nm,19.1s,baz=226,slow=41
**NB2 NORSAR Subarra** 27.09 16 P **P** **08 51 42.8 -0.2**
comp=Z,25nm,1.2s,baz=209,slow=8.6
**NOA NORSAR Array B** 27.09 16 P **P** **08 51 42.6 -0.3**
comp=Z,6.6nm,0.8s,baz=204,slow=8.8,SNR=8.0
NOA PcP **PcP** **08 55 03.4 0.0**
comp=Z,0.8nm,0.8s,baz=172,slow=3.4,SNR=3.8
NOA LR LR 09 03 04.5
comp=Z,151nm,20.4s,baz=205,slow=38
**NACGM Naroch** 28.40 38 *i* P **P** **08 51 56.5 +1.9**
**DBIC Dimbokro** 28.88 183 P **P** **08 51 57.7 -1.5**
comp=Z,6.5nm,0.8s,baz=16,slow=11,SNR=8.1
DBIC LR LR 09 04 12.5
comp=Z,162nm,19.6s,baz=17,slow=38
**DBIC Dimbokro** 28.88 183 P **P** **08 51 59.6 +0.4**
DBIC IAmb IAmb 08 52 00.2
comp=Z,11nm,0.9s
**TIC Toumodi** 28.91 183 *e*P **P** **08 51 59.0 -0.5**
**KIC Kosan Boka** 29.18 182 *e*P **P** **08 52 01.4 -0.5**
comp=Z,9.8nm,0.7s
**LIC Lamto** 29.33 183 *e*P **P** **08 52 02.1 -1.1**
comp=Z,43nm,1.3s
**BORG Borgarnes** 31.02 345 LR LR 09 03 27.6
comp=Z,110nm,21.6s,baz=164,slow=34
**FINES FINESS Array B** 31.89 27 P **P** **08 52 24.4 -0.9**
comp=Z,1.3nm,0.4s,baz=231,slow=7.1,SNR=12
FINES PcP **PcP** **08 55 15.2 -0.3**

comp=Z,2.9nm,0.6s,baz=246,slow=1.9,SNR=9.4
**FINES FINESS Array B 31.89 27** P **P 08 52 24.9 -0.4**
**ONI Oni 36.74 65** P **P 08 53 08.6 +0.8**
**KLMR Klimovskoe 37.13 34** *eP* **P 08 53 08.6 -2.1**
KLMR AMP 08 53 15.7
comp=Z,18nm,1.3s
KLMR *e*PcP **PcP 08 55 29.2 -1.5**
**ARCES ARCESS Array B 37.47 16** P **P 08 53 13.8 +0.2**
comp=Z,3.2nm,0.8s,baz=188,slow=5.5,SNR=10.0
ARCES PcP **PcP 08 55 30.5 -1.1**
comp=Z,1.4nm,0.6s,baz=215,slow=3.0,SNR=5.7
**ARCES ARCESS Array B 37.47 16** P **P 08 53 14.6 +1.0**
ARCES IAmb IAmb 08 53 42.7
comp=Z,19nm,1.2s
**SUMG Summit 41.00 345** P **P 08 53 44.3 +0.9**
**ARU Arti 46.05 43** LR LR 09 14 52.9
comp=Z,143nm,18.4s,baz=170,slow=38
**ARU Arti 46.05 43** P **P 08 54 23.2 -0.6**
ARU IAmb IAmb 08 54 23.6
comp=Z,7.9nm,0.7s
**SCHQ Schefferville 46.73 315** P **P 08 54 29.4 +0.1**
comp=Z,2.2nm,0.4s,baz=83,slow=5.3,SNR=18
**SCHQ Schefferville 46.73 315** P **P 08 54 29.0 -0.3**
**BATG Bathurst New B 47.06 304** P **P 08 54 33.1 +1.1**
BATG IAmb IAmb 08 54 38.4
comp=Z,12nm,1.1s
**ABKAR Akbulak array 47.43 53** P **P 08 54 34.8 0.0**
**ABKAR Akbulak array 47.43 53** P **P 08 54 35.1 +0.3**
ABKAR IAmb IAmb 08 54 36.0
comp=Z,11nm,0.8s
**FRB Frobisher Bay 47.70 327** P **P 08 54 35.3 -1.3**
comp=Z,1.9nm,0.9s,baz=71,slow=4.8,SNR=3.1
FRB LR LR 09 11 02.4
comp=Z,75nm,21.5s,baz=40,slow=32
**MBAR Mbarara 48.20 131** LR LR 09 14 05.2
comp=Z,108nm,20.1s,baz=298,slow=35
**ATD Arta Tunnel 48.28 108** LR LR 09 15 14.6
comp=Z,58nm,18.2s,baz=67,slow=36
**G65A Princeton 48.48 302** P **P 08 54 43.4 +0.5**
**D62A Allapoint, All 49.10 305** P **P 08 54 48.4 +0.7**
D62A IAmb IAmb 08 54 48.8
comp=Z,13nm,1.1s
**QUA2 Belchertown 52.57 299** P **P 08 55 14.9 +1.1**
**KMBO Kilima Mbogo 52.79 125** P **P 08 55 17.3 +1.2**
comp=Z,1.1nm,0.3s,baz=304,slow=11,SNR=3.7
**KMBO Kilima Mbogo 52.79 125** P **P 08 55 16.7 +0.6**
**BRVK Borovoye 53.17 46** P **P 08 55 19.8 +1.6**
**BRVK Borovoye 53.17 46** P **P 08 55 18.7 +0.5**
**EUNU Eureka 53.90 348** P **P 08 55 24.8 +1.6**
**BRZS Berezniki 55.37 50** *eP* **P 08 55 34.0 -0.3**
comp=Z,14nm,0.9s,baz=50
**BRLS Borolday 55.59 58** *eP* **P 08 55 35.1 -0.8**
baz=59
**KKAR Karatay Array 56.03 58** P **P 08 55 38.8 -0.3**
**RES Resolute Bay 56.32 341** P **P 08 55 41.8 +1.2**
comp=Z,6.8nm,0.9s,baz=74,slow=3.8,SNR=21
**RES Resolute Bay 56.32 341** P **P 08 55 41.2 +0.6**
RES IAmb IAmb 08 55 42.4
comp=Z,9.4nm,0.9s
**SADO Sadowa 56.50 304** P **P 08 55 42.8 +0.4**
comp=Z,6.8nm,0.7s,baz=94,slow=9.7,SNR=2.4
SADO LR LR 09 17 20.4
comp=Z,44nm,22.0s,baz=31,slow=33
**CHGR Chuyangaron 56.61 64** P **P 08 55 43.4 0.0**
**DZA Taraz 56.67 58** *eP* **P 08 55 43.4 -0.3**
baz=58
**GAR Garm 57.32 63** P **P 08 55 48.9 +0.4**
**NRIK Noril'sk 57.52 25** P **P 08 55 49.2 0.0**
comp=Z,1.0nm,0.4s,baz=288,slow=2.0,SNR=3.4
**NRIK Noril'sk 57.52 25** P **P 08 55 49.5 +0.3**
**BTLS Baital 57.78 55** *eP* **P 08 55 51.7 +0.2**
baz=55
**TSUM Tsumeb 58.13 156** LR LR 09 22 40.3
comp=Z,109nm,18.1s,baz=333,slow=38
**SGDS Sogindy 58.73 57** *eP* **P 08 55 57.8 -0.4**
baz=56
**KURK Kurchatov 58.77 47** P **P 08 55 58.3 0.0**
**KURK Kurchatov 58.77 47** P **P 08 55 58.6 +0.3**
**AAK Ala-Archa 58.94 57** P **P 08 56 00.7 +0.9**
**AAK Ala-Archa 58.94 57** P **P 08 55 59.4 -0.4**
AAK IAmb IAmb 08 56 06.0
comp=Z,7.1nm,1.1s
**KUU Kurty 59.72 56** *eP* **P 08 56 05.3 +0.2**
comp=Z,12nm,1.0s,baz=56
**SEM Semipalatinsk 59.86 47** *eP* **P 08 56 06.2 +0.1**
comp=Z,5.7nm,1.1s,baz=47
**TNSS Tian-Shan 60.46 56** *eP* **P 08 56 10.3 -0.2**
baz=56
**MDOK Medeo 60.48 56** *eP* **P 08 56 10.3 -0.1**
baz=56
**FCC Fort Churchill 60.56 323** P **P 08 56 11.2 +0.8**
FCC IAmb IAmb 08 56 12.9
comp=Z,12nm,1.3s
**PCRV Puerto La Cruz 60.68 261** LR LR 09 19 06.2
comp=Z,444nm,20.5s,slow=33
**KSH Kashi 61.17 60** P **P 08 56 16.0 +0.9**
KSH pmax pmax
comp=Z,12nm,1.3s
**ZAA0 Zalesovo Array 61.20 42** P **P 08 56 14.3 -0.6**
ZAA0 IAmb IAmb 08 56 16.1
comp=Z,3.4nm,0.7s
**ZALV Zalesovo Beam 61.20 42** P **P 08 56 14.4 -0.5**
comp=Z,3.7nm,0.7s,baz=294,slow=7.1,SNR=17
**ZALV Zalesovo Beam 61.20 42** P **P 08 56 14.6 -0.3**
**SATY Saty 61.43 56** *eP* **P 08 56 16.6 -0.3**
baz=56
**KPKS Kokpek 61.46 55** *eP* **P 08 56 16.7 -0.3**
comp=Z,2.7nm,0.6s,baz=55
**TARG Taragay, Kyrgy 61.56 57** P **P 08 56 18.6 +0.5**
TARG IAmb IAmb 08 56 21.6
comp=Z,9.5nm,1.0s
**UZB Uzynbulak 61.81 55** *eP* **P 08 56 18.7 -0.8**
baz=55
**MAKZ Makanchi 62.27 51** P **P 08 56 22.3 0.0**
**MAKZ Makanchi 62.27 51** P **P 08 56 22.1 -0.2**
**MK31 Makanchi Array 62.48 51** P **P 08 56 23.8 +0.1**
**MKAR Makanchi Array 62.48 51** P **P 08 56 23.7 0.0**
comp=Z,19nm,0.8s,baz=286,slow=5.8,SNR=183
**MKAR Makanchi Array 62.48 51** P **P 08 56 23.4 -0.2**
**TKL Tuckaleechee C 63.28 296** LR LR 09 22 45.9
comp=Z,27nm,19.0s,baz=7.0,slow=35
**ZSN Zaisan 63.81 49** *eP* **P 08 56 32.2 -0.3**
comp=Z,6.5nm,0.7s,baz=49
**W50A Signal Mountai 64.60 296** P **P 08 56 38.3 +0.4**
W50A IAmb IAmb 08 56 39.4
comp=Z,8.9nm,0.7s
**A36M Sachs Harbour 65.25 343** P **P 08 56 42.4 +1.0**
**BDFB Brasilia 66.14 228** P **P 08 56 48.1 +0.1**
comp=Z,3.2nm,0.5s,baz=43,slow=6.6,SNR=5.0
**SDV Santo Domingo 66.25 264** P **P 08 56 48.1 -1.0**
SDV IAmb IAmb 08 56 51.5
comp=Z,20nm,1.5s
**LBTB Lobatse 66.36 151** LR LR 09 24 53.1
comp=Z,115nm,18.6s,baz=338,slow=35
**C36M Paulatuk 66.67 341** P **P 08 56 50.5 -0.1**
C36M IAmb IAmb 08 56 51.6
comp=Z,4.7nm,0.8s
**WMQ Urumqi 67.20 52** *eP* **P 08 56 55.4 +0.8**
WMQ pP pP 08 56 57.6 -2.1
WMQ sP sP 08 57 04.1 +2.5
WMQ pmax pmax
comp=Z,23nm,0.9s
**YKA Yellowknife Ar 67.77 332** P **P 08 56 57.8 +0.1**
comp=Z,12nm,0.6s,baz=60,slow=6.4,SNR=198
**YKA Yellowknife Ar 67.77 332** P **P 08 56 57.3 -0.4**
**TIXI Tiksi 67.88 15** LR LR 09 32 46.2
comp=Z,57nm,18.4s,baz=352,slow=41
**BOSA Boshof 69.47 153** P **P 08 57 07.8 -1.0**
comp=Z,3.6nm,1.0s,baz=351,slow=8.0,SNR=4.3
BOSA LR LR 09 29 07.0
comp=Z,146nm,18.9s,baz=16,slow=37
**BOSA Boshof 69.47 153** P **P 08 57 09.0 +0.2**
BOSA IAmb IAmb 08 57 10.1
comp=Z,4.8nm,1.1s
**E28A Huff 69.48 313** P **P 08 57 08.8 +0.1**
**INK Inuvik 69.85 342** P **P 08 57 10.4 -0.2**
comp=Z,3.8nm,1.0s,baz=31,slow=10,SNR=9.2
**INK Inuvik 69.85 342** P **P 08 57 10.7 +0.2**
INK IAmb IAmb 08 57 11.7
comp=Z,5.1nm,1.1s
**ZARC Zaragoza, Cauc 70.47 265** P **P 08 57 16.9 +1.7**
ZARC IAmb IAmb 08 57 17.5
comp=Z,9.3nm,1.0s
**SUR Sutherland 71.45 158** LR LR 09 30 20.9
comp=Z,34nm,20.9s,baz=6.0,slow=37
**T35A Sooner Cattle 71.72 303** P **P 08 57 22.8 +0.2**
**R32A Long Quarter, 72.43 305** P **P 08 57 26.7 -0.1**
**EDM Edmonton 72.66 324** P **P 08 57 28.2 +0.3**
**CBKS Cedar Bluff 72.90 306** P **P 08 57 29.5 -0.1**
**I29M Ogilvie Camp, 73.34 342** P **P 08 57 32.3 +0.6**
I29M IAmb IAmb 08 57 33.4
comp=Z,9.2nm,0.9s
**EGMT Eagleton 73.87 318** P **P 08 57 35.7 +0.5**
EGMT IAmb IAmb 08 57 37.4
comp=Z,15nm,1.1s
**Z35A Perchaven, San 74.12 300** P **P 08 57 36.9 +0.1**
**AQDB Aquidauana 74.52 230** P **P 08 57 39.7 +0.5**
AQDB IAmb IAmb 08 57 41.1
comp=Z,6.6nm,0.9s
**DAWY Dawson 74.66 341** P **P 08 57 40.2 +0.8**
DAWY IAmb IAmb 08 57 41.6
comp=Z,5.1nm,0.8s
**M31M Drury Creek, Y 74.74 338** P **P 08 57 41.6 +1.6**
M31M IAmb IAmb 08 57 42.4
comp=Z,5.3nm,0.8s
**WALA Waterton Lakes 75.46 320** P **P 08 57 44.5 0.0**
WALA IAmb IAmb 08 57 45.5
comp=Z,8.5nm,0.8s
**YAK Yakutsk 75.59 21** LR LR 09 35 14.2
comp=Z,40nm,20.3s,baz=82,slow=39
**P33M Teslin, Yukon 75.78 336** P **P 08 57 46.6 +0.5**
P33M IAmb IAmb 08 57 48.0
comp=Z,12nm,1.1s
**GOMU GeErMu 75.80 56** P **P 08 57 49.0 +2.0**
GOMU pP sP 08 57 54.3 +0.2
GOMU sP PcP 08 57 56.3 -3.3
GOMU pmax pmax
comp=Z,3.0nm,1.4s
GOMU pmax pmax
comp=Z,96nm,6.1s
**ILAR Eielson Array 75.84 345** P **P 08 57 47.1 +0.9**
comp=Z,0.8nm,0.6s,baz=15,slow=4.7,SNR=17
**SONM Songino Array 76.02 41** P **P 08 57 47.7 0.0**
comp=Z,1.9nm,0.9s,baz=295,slow=6.3,SNR=14
SONM LR LR 09 31 56.8
comp=Z,32nm,19.6s,baz=225,slow=36
**SONM Songino Array 76.02 41** P **P 08 57 48.2 +0.5**
**RWWY Rawlins 76.07 311** P **P 08 57 48.2 -0.1**
**DLBC Dease Lake 76.16 334** P **P 08 57 48.8 +0.6**
comp=Z,8.5nm,0.8s,baz=46,slow=3.5,SNR=18
DLBC LR LR 09 31 40.2
comp=Z,80nm,18.4s,baz=80,slow=36
**DLBC Dease Lake 76.16 334** P **P 08 57 49.1 +0.8**
DLBC IAmb IAmb 08 57 50.4
comp=Z,8.5nm,0.8s
**DOT Dot Lake 76.17 343** P **P 08 57 48.9 +0.8**
DOT IAmb IAmb 08 57 50.5
comp=Z,6.3nm,0.9s
**HDA Harding Lake 76.17 345** P **P 08 57 48.5 +0.4**
HDA IAmb IAmb 08 57 50.4
comp=Z,12nm,1.2s
**BOZ Bozeman (W) 76.34 317** P **P 08 57 49.6 0.0**
BOZ IAmb IAmb 08 57 51.4
comp=Z,4.8nm,0.9s
**JTMT Jette 76.47 320** P **P 08 57 50.1 -0.1**
**BOAB BOACO BROADBAN 76.48 276** P **P 08 57 51.2 +0.6**
**PEZE Perez Zeledon, 76.58 272** P **P 08 57 50.9 -0.4**
**HYT Haines Junctio 76.75 339** P **P 08 57 53.2 +1.6**
HYT IAmb IAmb 08 57 57.7
comp=Z,5.3nm,0.9s
**BW06 Boulder Array 76.85 313** P **P 08 57 52.5 -0.1**
BW06 IAmb IAmb 08 57 53.1
comp=Z,6.3nm,1.1s
**PD31 Pinedale Array 76.85 313** P **P 08 57 51.7 -0.9**
PD31 IAmb IAmb 08 57 53.1
comp=Z,5.6nm,1.1s
**PDAR Pinedale Array 76.85 313** P **P 08 57 51.8 -0.9**
comp=Z,4.0nm,0.9s,baz=62,slow=6.8,SNR=17
**PDAR Pinedale Array 76.85 313** P **P 08 57 52.3 -0.3**
**MOOW Moose Ponds 76.95 315** P **P 08 57 53.2 0.0**
**DLMT Dillon 77.03 317** P **P 08 57 54.8 +1.3**
DLMT IAmb IAmb 08 57 59.0
comp=Z,13nm,1.2s
**GTA Gaotai 77.23 51** ⇓P **P 08 57 55.5 +0.8**
GTA pP pP 08 57 59.6 -0.3
GTA sP sP 08 58 02.8 +1.0
GTA pmax pmax
comp=Z,8.0nm,0.8s
**OTAV Otavalo 77.60 261** P **P 08 57 58.7 +1.3**
OTAV IAmb IAmb 08 57 59.9
comp=Z,11nm,0.9s
**NEW Newport 77.62 321** P **P 08 57 55.2 -1.3**
comp=Z,2.2nm,0.8s,baz=299,slow=4.0,SNR=4.5
NEW LR LR 09 28 31.2
comp=Z,56nm,19.3s,baz=26,slow=33
**NEW Newport 77.62 321** P **P 08 57 55.5 -1.1**
**RDMU Red Mountain 78.17 312** P **P 08 57 60.0 0.0**
RDMU IAmb IAmb 08 58 01.4
comp=Z,9.8nm,0.9s
**ESQI Esquipulas 78.28 280** P **P 08 58 02.1 +1.3**
**MTO3 Montecristo 78.38 279** P **P 08 58 02.1 +0.5**
MTO3 IAmb IAmb 08 58 03.3
comp=Z,14nm,1.0s
**K20K Telida 78.55 347** P **P 08 58 01.9 +0.4**
K20K IAmb IAmb 08 58 02.7
comp=Z,5.7nm,0.9s
**B08A Colville Reser 78.67 322** P **P 08 58 02.7 +0.3**
B08A IAmb IAmb 08 58 03.8
comp=Z,9.7nm,1.2s
**HWUT Hardware Ranch 78.74 313** P **P 08 58 02.4 -0.7**
HWUT IAmb IAmb 08 58 04.2
comp=Z,13nm,1.4s
**F10A Beach Ranch, E 79.16 319** P **P 08 58 04.7 -0.5**
F10A IAmb IAmb 08 58 06.4
comp=Z,10nm,1.4s
**HLID Hailey 79.17 316** P **P 08 58 05.6 +0.2**
**ANMO Albuquerque 79.53 305** LR LR 09 32 27.1
comp=Z,40nm,18.1s,baz=1.0,slow=35
**SHL Shillong 79.67 66** P **P 08 58 07.9 -0.6**
**CPUP Villa Florida 79.86 227** P **P 08 58 08.2 -0.8**
comp=Z,8.2nm,0.9s,baz=49,slow=6.6,SNR=12
**CPUP Villa Florida 79.86 227** P **P 08 58 08.4 -0.7**
CPUP IAmb IAmb 08 58 10.4
comp=Z,18nm,1.2s
**BMO Blue Mountains 79.93 319** P **P 08 58 09.1 -0.3**
**LPAZ La Paz 79.97 242** P **P 08 58 08.9 -1.7**
comp=Z,1.8nm,0.7s,baz=45,slow=4.3
**TXAR Lajitas Array 80.89 299** P **P 08 58 15.2 +0.3**
comp=Z,0.9nm,0.6s,baz=73,slow=6.7,SNR=2.6
TXAR LR LR 09 33 35.0
comp=Z,42nm,18.7s,baz=33,slow=35
**MTPU Mount Pierson 81.32 311** P **P 08 58 17.2 -0.1**
MTPU IAmb IAmb 08 58 21.5
comp=Z,8.9nm,1.2s
**ELK Elko 81.43 314** P **P 08 58 16.2 -1.6**
comp=Z,2.6nm,1.0s,baz=2.4,slow=7.7,SNR=6.0
**ELK Elko 81.43 314** P **P 08 58 18.9 +1.1**
**LZH Lanzhou 81.78 51** ⇑P **P 08 58 15.1 -4.5**
LZH pP pP 08 58 21.4 -3.4
LZH sP PcP 08 58 25.3 0.0
LZH pmax pmax
comp=Z,17nm,1.5s
**PB16 IPOC Station P 82.31 241** P **P 08 58 23.4 +0.5**
PB16 IAmb IAmb 08 58 27.3
comp=Z,12nm,1.1s
**MA2 Magadan 82.76 13** LR LR 09 42 16.1
comp=Z,48nm,18.4s,baz=113,slow=41
**GO01 Chusmiza 82.96 240** P **P 08 58 26.0 -0.2**
GO01 IAmb IAmb 08 58 30.2
comp=Z,6.3nm,0.8s
**KDAK Kodiak Island 83.33 344** LR LR 09 37 13.4
comp=Z,46nm,20.0s,baz=35,slow=37
**HHC Hu-ho-hao-te 83.35 44** *eP* **P 08 58 27.9 +0.3**
HHC pmax pmax
comp=Z,9.0nm,1.0s
HHC pmax pmax
comp=Z,180nm,6.9s
**XLT XiLinHaoTe 83.69 39** *eP* **P 08 58 29.3 0.0**
XLT pP PcP 08 58 33.1 -0.3
XLT sP sP 08 58 36.1 -0.3
XLT pmax pmax
comp=Z,5.0nm,0.9s
XLT pmax pmax
comp=Z,200nm,5.0s
**TUC Tucson 83.99 306** P **P 08 58 33.1 +2.1**
**PB09 IPOC Station P 84.41 238** P **P 08 58 33.9 +0.7**
PB09 IAmb IAmb 08 58 34.9
comp=Z,8.8nm,0.8s
**Y14A Wickenburg 84.42 308** P **P 08 58 34.9 +1.8**
Y14A IAmb IAmb 08 58 36.0
comp=Z,5.0nm,1.0s
**NVAR Mina Array Bea 84.74 314** P **P 08 58 34.5 -0.4**
comp=Z,0.3nm,0.5s,baz=56,slow=4.8,SNR=5.0
**NVAR Mina Array Bea 84.74 314** P **P 08 58 35.4 +0.5**
**PNTR Pine Nut 85.04 315** P **P 08 58 38.2 +1.8**
PNTR IAmb IAmb 08 58 42.6
comp=Z,5.8nm,0.7s
**GWY Greenwater Val 85.25 312** P **P 08 58 39.2 +1.8**
GWY IAmb IAmb 08 58 43.1
comp=Z,3.8nm,0.9s
**PZH PanZhiHua 86.28 60** P **P 08 58 42.8 +0.2**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,140nm,6.5s
**XAN Xi'an 86.29 50** P **P 08 58 42.9 +0.5**
XAN pP sP 08 58 49.0 -0.6
XAN sP pP 08 58 52.6 +4.9
XAN pmax pmax
comp=Z,10.0nm,0.4s
**KLR Kul'dur 86.63 27** LR LR 09 40 43.4
comp=Z,26nm,18.8s,baz=16,slow=38
**PFO Pinyon Flats O 86.82 310** LR LR 09 36 49.6
comp=Z,35nm,18.4s,baz=327,slow=35
**HNS HongShan 87.49 45** ⇑P **P 08 58 48.8 +0.7**
HNS pmax pmax
comp=Z,12nm,0.9s
**LPIG La Paz 88.77 299** LR LR 09 38 35.2
comp=Z,42nm,18.3s,baz=30,slow=36
**CMAR Chiang Mai Arr 89.13 68** P **P 08 58 56.1 -0.2**
comp=Z,3.2nm,0.3s,baz=300,slow=6.0,SNR=12
**PETK Petropavlovsk- 90.11 11** LR LR 09 45 58.9
comp=Z,33nm,18.9s,baz=59,slow=40
**USRK Ussuriysk Ar. 90.85 30** LR LR 09 46 39.3
comp=Z,30nm,20.4s,baz=175,slow=40
**NJ2 Nanjing 93.68 46** *eP* **P 08 59 17.0 -0.1**
NJ2 pmax pmax
comp=Z,15nm,0.6s
**ASAJ Asahikawa 94.85 24** LR LR 09 48 36.0
comp=Z,42nm,19.1s,baz=170,slow=40
**PLCA Paso Flores 97.78 225** P Pdif 08 59 36.2 +0.7
comp=Z,1.0nm,0.7s,baz=31,slow=3.2,SNR=5.3
**MJAR Matsushiro Arr 99.85 30** PP **PP 09 03 49.1 +0.3**
comp=Z,0.8nm,0.4s,baz=14,slow=16,SNR=1.5
MJAR LR LR 09 47 43.0
comp=Z,42nm,18.1s,baz=24,slow=37
**WRA Warramunga Arr 139.93 78** PKhKP PKPpre 09 05 24.4
comp=Z,0.6nm,0.8s,baz=326,slow=2.0,SNR=4.6
**WRA Warramunga Arr 139.93 78 PKPdf 09 05 28.9 -0.2**
**ASAR Alice Springs 141.44 84** PKhKP PKPpre 09 05 24.2
comp=Z,0.6nm,0.6s,baz=299,slow=2.7,SNR=11
**ASAR Alice Springs 141.44 84 PKPdf 09 05 30.4 -1.3**
**STKA Stephens Creek 150.89 93** PKPbc **PKPbc 09 05 52.1 -0.9**
comp=Z,7.3nm,0.8s,baz=334,slow=4.0,SNR=20
**STKA Stephens Creek 150.89 93** PKPdf **PKPdf 09 05 44.9 -2.5**
STKA **PKPbc 09 05 53.0 0.0**
STKA PKPab **PKPab 09 06 01.0 +0.5**

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*IDC* ***23*** *08:50:05.8±2.3, 23.98N×122.53E, h0km, mb3.6/4, mb1 3.7/4, mb1mx3.2/47, mbtmp3.6/4, Error ellipse: s-maj=179.1km s-min=28.3km az=66.0*
*JMA* ***23*** *08:50:11.3±0.1, 24.00N×122.36E, h16km±2km, M3.3*
*TAP* ***23*** *08:50:11.3, 24.02N×122.37E, h23km, ML3.6, D*
**ISC 23 08:50:09.2±1.0, 23.96N±0.02×122.40E±0.01, h18km±7km, n91, o0*80/161, mb3.4/4, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.69** | **300** | *eP* | | **Pn** | **08 50 24.6** | **+0.3** |
| | baz=297 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.70** | **45** | P | | **Pn** | **08 50 24.6** | **+0.3** |
| JYNG | | | | *eS* | | **Sb** | **08 50 33.5** | **+1.2** |
| **HWA** | **Hwalien** | **0.73** | **272** | P | | **Pn** | **08 50 25.4** | **+0.7** |
| HWA | baz=253 | | | S | | **Sn** | **08 50 35.1** | **-0.2** |
| | baz=253 | | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **286** | P | | **Pn** | **08 50 25.4** | **+0.5** |
| ETL | baz=267 | | | S | | **Sn** | **08 50 35.7** | **+0.1** |
| | baz=267 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.74** | **263** | P | | **Pn** | **08 50 25.3** | **+0.5** |
| TEYL | baz=248 | | | *e*S | | **Sn** | **08 50 36.7** | **+1.1** |
| | baz=248 | | | | | | | |
| **TWD** | **Chiawan** | **0.74** | **280** | P | | **Pb** | **08 50 24.3** | **+0.7** |
| TWD | baz=275 | | | S | | **Sb** | **08 50 34.7** | **+1.2** |
| | baz=275 | | | | | | | |
| **EWUT** | **Wuta** | **0.74** | **311** | P | | **Pn** | **08 50 24.7** | **-0.2** |
| EWUT | baz=308 | | | S | | **Sn** | **08 50 35.3** | **-0.5** |
| | baz=308 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.75** | **48** | P | | **Pn** | **08 50 25.6** | **+0.6** |
| YOJ | | | | S | | **Sb** | **08 50 34.8** | **+1.0** |
| **YOJ** | **Yonaguni jima** | **0.75** | **48** | P | | **Pn** | **08 50 25.7** | **+0.7** |
| | baz=62 | | | | | | | |
| YOJ | | | | *e*S | | **Sb** | **08 50 35.2** | **+1.5** |
| | baz=62 | | | | | | | |
| **ENA** | **Nanau** | **0.76** | **308** | *i* P | | **Pn** | **08 50 24.8** | **-0.3** |
| | baz=315 | | | | | | | |
| ENA | | | | S | | **Sb** | **08 50 34.7** | **+0.7** |
| | baz=315 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.77** | **286** | P | | **Pn** | **08 50 25.0** | **-0.2** |
| | baz=267 | | | | | | | |
| NACB | | | | S | | **Sn** | **08 50 35.6** | **-0.7** |
| | baz=267 | | | | | | | |
| **TWC** | **Suao** | **0.82** | **322** | *i* P | | **Pb** | **08 50 25.5** | **+0.5** |
| | baz=320 | | | | | | | |
| TWC | | | | *e*S | | **Sg** | **08 50 35.0** | **-1.1** |
| | baz=320 | | | | | | | |
| **ETM** | **Tongmen** | **0.83** | **271** | S | | **Sb** | **08 50 37.2** | **+1.2** |
| | baz=256 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.87** | **287** | *i* P | | **Pn** | **08 50 26.9** | **+0.1** |
| | baz=270 | | | | | | | |
| ETLH | | | | S | | **Sb** | **08 50 38.3** | **+0.9** |
| | baz=270 | | | | | | | |
| **ESL** | **Shilin** | **0.90** | **261** | P | | **Pn** | **08 50 27.3** | **+0.3** |
| | baz=247 | | | | | | | |
| ESL | | | | *i* S | | **Sb** | **08 50 38.5** | **+0.5** |
| | baz=247 | | | | | | | |
| **NDS** | **Dongshan** | **0.92** | **317** | P | | **Pn** | **08 50 27.4** | **+0.1** |
| | baz=320 | | | | | | | |
| NDS | | | | S | | **Sn** | **08 50 39.9** | **-0.2** |
| | baz=320 | | | | | | | |
| **EGS** | | **0.98** | **334** | P | | **Pn** | **08 50 28.9** | **+0.8** |
| | baz=323 | | | | | | | |
| EGS | | | | S | | **Sn** | **08 50 41.7** | **+0.1** |
| | baz=323 | | | | | | | |
| **LATG** | **Datong** | **0.98** | **306** | *i* P | | **Pn** | **08 50 28.7** | **+0.4** |
| | baz=303 | | | | | | | |
| **ILA** | **Ilan** | **1.00** | **324** | P | | **Pn** | **08 50 28.9** | **+0.5** |
| | baz=321 | | | | | | | |
| ILA | | | | S | | **Sn** | **08 50 42.1** | **0.0** |
| | baz=321 | | | | | | | |
| **HGSD** | **Ruisui** | **1.01** | **243** | *e*P | | **Pn** | **08 50 30.0** | **+1.5** |
| | baz=239 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **08 50 43.6** | **+1.3** |
| | baz=239 | | | | | | | |
| **TWE** | **Neicheng** | **1.01** | **319** | *i* P | | **Pn** | **08 50 29.5** | **+0.9** |
| | baz=317 | | | | | | | |
| TWE | | | | *e*S | | **Sn** | **08 50 43.5** | **+1.2** |
| | baz=317 | | | | | | | |
| **ENTT** | **Nioudou** | **1.02** | **312** | *i* P | | **Pn** | **08 50 29.8** | **+1.1** |
| | baz=309 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.03** | **309** | *i* P | | **Pn** | **08 50 29.8** | **+1.0** |
| | baz=317 | | | | | | | |
| NDT | | | | S | | **Sn** | **08 50 42.8** | **-0.1** |
| | baz=317 | | | | | | | |
| **NTC** | **Toucheng** | **1.03** | **330** | P | | **Pn** | **08 50 30.5** | **+1.7** |
| | baz=327 | | | | | | | |
| NTC | | | | S | | **Sn** | **08 50 42.7** | **-0.2** |
| | baz=327 | | | | | | | |
| **NNSB** | **Datong** | **1.04** | **297** | *i* P | | **Pn** | **08 50 29.8** | **+0.7** |
| | baz=281 | | | | | | | |
| NNSB | | | | S | | **Sn** | **08 50 43.2** | **-0.1** |
| | baz=281 | | | | | | | |
| **NNS** | **Nan Shan** | **1.05** | **297** | *i* P | | **Pn** | **08 50 30.0** | **+0.7** |
| | baz=281 | | | | | | | |
| NNS | | | | *i* S | | **Sn** | **08 50 43.7** | **+0.1** |
| | baz=281 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.05** | **280** | *i* P | | **Pn** | **08 50 29.8** | **+0.2** |
| | baz=263 | | | | | | | |
| WHF | | | | S | | **Sb** | **08 50 43.1** | **+0.2** |
| | baz=263 | | | | | | | |
| **ECBN** | **Changbin** | **1.08** | **234** | P | | **Pg** | **08 50 30.8** | **+0.7** |
| | baz=231 | | | | | | | |
| ECBN | | | | S | | **Sb** | **08 50 44.3** | **+1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=231 | | | | | | |
| **EHY** | **Hungye** | **1.08 246** | P | | **Pb** | **08 50 30.2** | **+0.7** |
| | baz=242 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.09 317** | P | | **Pn** | **08 50 30.7** | **+1.0** |
| | baz=314 | | | | | | |
| FUSB | | | S | | **Sn** | **08 50 44.6** | **+0.2** |
| | baz=314 | | | | | | |
| **FUSS** | **Fushou** | **1.09 286** | *i* P | | **Pn** | **08 50 31.0** | **+1.1** |
| | baz=271 | | | | | | |
| FUSS | | | S | | **Sn** | **08 50 45.6** | **+0.8** |
| | baz=271 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.11 340** | *e*P | | **Pn** | **08 50 30.8** | **+0.8** |
| | baz=325 | | | | | | |
| TWB1 | | | S | | **Sn** | **08 50 45.3** | **+0.4** |
| | baz=325 | | | | | | |
| **CHGB** | **Renai** | **1.12 275** | *e*P | | **Pn** | **08 50 31.1** | **+0.8** |
| | baz=259 | | | | | | |
| CHGB | | | *e*S | | **Sn** | **08 50 46.0** | **+0.5** |
| | baz=259 | | | | | | |
| **TIPB** | **Shuangxi** | **1.14 333** | *i* P | | **Pg** | **08 50 31.5** | **+0.2** |
| | baz=330 | | | | | | |
| TIPB | | | *i* S | | **Sn** | **08 50 45.9** | **+0.3** |
| | baz=330 | | | | | | |
| **NWLT** | **Wulai** | **1.15 315** | *i* P | | **Pg** | **08 50 31.9** | **+0.3** |
| | baz=312 | | | | | | |
| NWLT | | | S | | **Sn** | **08 50 47.0** | **+1.0** |
| | baz=312 | | | | | | |
| **TWT** | **Tachien** | **1.16 285** | S | | **Sn** | **08 50 47.4** | **+1.2** |
| | baz=271 | | | | | | |
| **YULB** | **Yu-li** | **1.16 241** | P | | **Pb** | **08 50 31.2** | **+0.5** |
| | baz=238 | | | | | | |
| YULB | | | S | | **Sb** | **08 50 46.0** | **+0.6** |
| | baz=238 | | | | | | |
| **EYUL** | **Yuli** | **1.16 239** | *i* P | | **Pb** | **08 50 31.6** | **+0.7** |
| | baz=236 | | | | | | |
| EYUL | | | *i* S | | **Sb** | **08 50 46.3** | **+0.7** |
| | baz=236 | | | | | | |
| **VWDT** | **VWDT** | **1.17 260** | *e*P | | **Pg** | **08 50 31.6** | **-0.3** |
| | baz=257 | | | | | | |
| VWDT | | | S | | **Sb** | **08 50 46.4** | **+0.6** |
| | baz=257 | | | | | | |
| **TDCB** | **Techi** | **1.17 285** | P | | **Pg** | **08 50 32.1** | **+0.2** |
| | baz=271 | | | | | | |
| TDCB | | | S | | **Sn** | **08 50 47.3** | **+0.8** |
| | baz=271 | | | | | | |
| **YHNB** | **Yeheng** | **1.17 307** | P | | **Pg** | **08 50 31.6** | **-0.4** |
| | baz=304 | | | | | | |
| YHNB | | | S | | **Sn** | **08 50 46.6** | **+0.2** |
| | baz=304 | | | | | | |
| **WUSB** | **Renai** | **1.17 272** | P | | **Pn** | **08 50 31.5** | **+0.6** |
| | baz=268 | | | | | | |
| WUSB | | | S | | **Sn** | **08 50 47.1** | **+0.6** |
| | baz=268 | | | | | | |
| **TWF1** | **Yuli** | **1.18 239** | *i* P | | **Pn** | **08 50 31.6** | **+0.7** |
| | baz=237 | | | | | | |
| TWF1 | | | S | | **Sb** | **08 50 46.4** | **+0.4** |
| | baz=237 | | | | | | |
| **NSK** | **Sanguang** | **1.19 307** | *i* P | | **Pg** | **08 50 32.1** | **-0.2** |
| | baz=304 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.23 337** | P | | **Pg** | **08 50 32.3** | **-0.7** |
| | baz=334 | | | | | | |
| SXI1 | | | *e*S | | **Sn** | **08 50 50.0** | **+2.2** |
| | baz=334 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.24 333** | *i* P | | **Pg** | **08 50 32.5** | **-0.8** |
| | baz=331 | | | | | | |
| NWF | | | S | | **Sn** | **08 50 49.4** | **+1.1** |
| | baz=331 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.24 333** | P | | **Pg** | **08 50 32.7** | **-0.5** |
| | baz=330 | | | | | | |
| WFSB | | | S | | **Sg** | **08 50 49.4** | **-0.1** |
| | baz=330 | | | | | | |
| **TWA** | **Mucha** | **1.26 324** | *e*P | | **Pg** | **08 50 34.4** | **+0.8** |
| | baz=321 | | | | | | |
| **FULB** | **Fuli** | **1.26 233** | P | | **Pn** | **08 50 32.5** | **+0.4** |
| | baz=231 | | | | | | |
| FULB | | | *e*S | | **Sb** | **08 50 48.8** | **+0.2** |
| | baz=231 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.27 73** | P | | **Pg** | **08 50 34.9** | **+1.1** |
| IRIF | | | *e*S | | **Sg** | **08 50 51.7** | **+1.2** |
| **NHDH** | **Xindian Distri** | **1.28 322** | *i* P | | **Pg** | **08 50 34.1** | **+0.2** |
| | baz=318 | | | | | | |
| NHDH | | | S | | **Sg** | **08 50 50.6** | **0.0** |
| | baz=318 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.29 85** | P | | **Pg** | **08 50 35.0** | **+0.8** |
| HATJ | | | *e*S | | **Sg** | **08 50 52.3** | **+1.3** |
| **TATO** | **Taipei** | **1.31 321** | P | | **Pg** | **08 50 34.4** | **-0.2** |
| | baz=317 | | | | | | |
| TATO | | | *e*S | | **Sg** | **08 50 53.5** | **+1.8** |
| | baz=317 | | | | | | |
| **SSLB** | **Suanglung** | **1.33 263** | P | | **Pb** | **08 50 34.0** | **+0.3** |
| | baz=250 | | | | | | |
| SSLB | | | *e*S | | **Sb** | **08 50 50.8** | **+0.2** |
| | baz=250 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.35 300** | P | | **Pg** | **08 50 34.5** | **-0.7** |
| | baz=296 | | | | | | |
| NFF | | | S | | **Sn** | **08 50 51.2** | **+0.4** |
| | baz=296 | | | | | | |
| **DPDB** | **Guoxing** | **1.35 273** | *i* P | | **Pb** | **08 50 34.5** | **+0.5** |
| | baz=270 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.36 274** | P | | **Pb** | **08 50 34.7** | **+0.5** |
| | baz=263 | | | | | | |
| WCS | | | S | | **Sn** | **08 50 52.0** | **+0.9** |
| | baz=263 | | | | | | |
| **WHP** | **Taichung City** | **1.36 284** | P | | **Pb** | **08 50 34.5** | **+0.1** |
| | baz=269 | | | | | | |
| WHP | | | *e*S | | **Sg** | **08 50 54.9** | **+1.5** |
| | baz=269 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.37 267** | *i* P | | **Pb** | **08 50 34.9** | **+0.4** |
| | baz=254 | | | | | | |
| SMLT | | | S | | **Sn** | **08 50 52.3** | **+0.8** |
| | baz=254 | | | | | | |
| **YM01** | **YM01** | **1.40 328** | P | | **Pg** | **08 50 35.3** | **-1.0** |
| | baz=324 | | | | | | |
| YM01 | | | *e*S | | **Sb** | **08 50 52.4** | **-0.2** |
| | baz=324 | | | | | | |
| **EDH** | **Donghe** | **1.40 226** | P | | **Pn** | **08 50 34.5** | **+0.5** |
| | baz=224 | | | | | | |
| EDH | | | *e*S | | **Sn** | **08 50 50.6** | **-1.5** |
| | baz=224 | | | | | | |
| **YUS** | **Yu-Shan** | **1.41 251** | P | | **Pg** | **08 50 36.2** | **-0.2** |
| | baz=248 | | | | | | |
| YUS | | | S | | **Sn** | **08 50 52.9** | **+0.1** |
| | baz=248 | | | | | | |
| **YM08** | **YM08** | **1.43 329** | P | | **Pb** | **08 50 35.4** | **0.0** |
| | baz=326 | | | | | | |
| **LIOB** | **Emei** | **1.44 299** | P | | **Pg** | **08 50 36.6** | **-0.3** |
| | baz=296 | | | | | | |
| **NSTT** | **Nanjuang** | **1.44 298** | *i* P | | **Pg** | **08 50 36.8** | **-0.3** |
| | baz=295 | | | | | | |
| NSTT | | | S | | **Sg** | **08 50 55.0** | **-0.8** |
| | baz=295 | | | | | | |
| **NTST** | **Danshui** | **1.48 324** | P | | **Pg** | **08 50 37.1** | **-0.7** |
| | baz=337 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.50 79** | P | | **Pg** | **08 50 38.2** | **+0.1** |
| JKRS | | | S | | **Sg** | **08 50 57.9** | **+0.2** |
| **ALS** | **Alishan** | **1.53 253** | P | | **Pb** | **08 50 37.2** | **0.0** |
| | baz=251 | | | | | | |
| ALS | | | S | | **Sn** | **08 50 56.0** | **+0.5** |
| | baz=251 | | | | | | |
| **SBCB** | **Hsinchu** | **1.53 303** | P | | **Pg** | **08 50 38.0** | **-0.7** |
| | baz=299 | | | | | | |
| **WJS** | **Zhushan** | **1.54 265** | P | | **Pg** | **08 50 39.0** | **+0.2** |
| | baz=262 | | | | | | |
| WJS | | | *e*S | | **Sb** | **08 50 57.5** | **+1.2** |
| | baz=262 | | | | | | |
| **LDUT** | **Ludao** | **1.54 214** | P | | **Pn** | **08 50 35.9** | **+0.1** |
| | baz=212 | | | | | | |
| LDUT | | | *e*S | | **Sn** | **08 50 53.1** | **-2.3** |
| | baz=212 | | | | | | |
| **WWF** | **Wufeng** | **1.56 273** | P | | **Pg** | **08 50 39.0** | **-0.3** |
| | baz=270 | | | | | | |
| WWF | | | S | | **Sg** | **08 50 59.6** | **+0.1** |
| | baz=270 | | | | | | |
| **NSY** | **Sanyi** | **1.56 287** | P | | **Pg** | **08 50 38.8** | **-0.6** |
| | baz=284 | | | | | | |
| **NMLH** | **Miaoli** | **1.58 292** | *e*P | | **Pb** | **08 50 38.0** | **0.0** |
| | baz=288 | | | | | | |
| NMLH | | | *e*S | | **Sn** | **08 50 56.9** | **+0.6** |
| | baz=288 | | | | | | |
| **TCU** | **Taichung** | **1.58 277** | *e*P | | **Pb** | **08 50 38.7** | **+0.7** |
| | baz=274 | | | | | | |
| TCU | | | S | | **Sg** | **08 51 00.1** | **-0.4** |
| | baz=274 | | | | | | |
| **CHN5** | **Tsauling** | **1.62 257** | P | | **Pg** | **08 50 39.7** | **-0.6** |
| | baz=244 | | | | | | |
| CHN5 | | | S | | **Sb** | **08 50 59.9** | **+1.1** |
| | baz=244 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.64 75** | P | | **Pb** | **08 50 40.1** | **+1.0** |
| JIJ | | | S | | **Sb** | **08 51 01.2** | **+1.7** |
| **TWGBT** | **Beinan** | **1.66 227** | S | | **Sn** | **08 50 59.1** | **+0.6** |
| | baz=238 | | | | | | |
| **TWG** | **Pinlang** | **1.66 227** | S | | **Sn** | **08 50 59.1** | **+0.6** |
| | baz=238 | | | | | | |
| **STYH** | **Taoyuan** | **1.68 243** | P | | **Pb** | **08 50 39.6** | **-0.1** |
| | baz=231 | | | | | | |
| STYH | | | S | | **Sn** | **08 51 00.1** | **+1.1** |
| | baz=231 | | | | | | |
| **WCHH** | **Zhanghua** | **1.69 274** | P | | **Pb** | **08 50 40.6** | **+0.8** |
| | baz=271 | | | | | | |
| WCHH | | | S | | **Sg** | **08 51 02.3** | **-1.4** |
| | baz=271 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.85 70** | P | | **Pb** | **08 50 43.0** | **+0.4** |
| JISG | | | *e*S | | **Sb** | **08 51 05.3** | **-0.2** |
| **TWK** | **Hsinying** | **1.88 249** | *e*P | | **Pg** | **08 50 45.3** | **-0.2** |
| | baz=247 | | | | | | |
| TWK | | | *e*S | | **Sb** | **08 51 08.0** | **+1.6** |
| | baz=247 | | | | | | |
| **LYUB** | **Lan-yu** | **2.09 201** | P | | **Pn** | **08 50 43.3** | **-0.1** |
| | baz=199 | | | | | | |
| **JTJ** | **Tarama** | **2.21 72** | P | | **Pb** | **08 50 48.7** | **0.0** |
| JTJ | | | *e*S | | **Sb** | **08 51 15.8** | **0.0** |
| **JIRB** | **Irabujima** | **2.67 71** | P | | **Pb** | **08 50 55.4** | **-1.2** |
| JIRB | | | *e*S | | **Sb** | **08 51 27.6** | **-1.5** |
| **JMJ2** | **Miyako jima3** | **2.78 73** | P | | **Pb** | **08 50 57.1** | **-1.4** |
| JMJ2 | | | *e*S | | **Sb** | **08 51 30.9** | **-1.4** |
| **SONM** | **Songino Array** | **27.02 336** | P | | **P** | **08 55 50.2** | **-0.3** |
| | 0.8nm,0.8s,baz=150,slow=10,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.27 316** | P | | **P** | **08 57 37.1** | **+0.2** |
| | 0.6nm,0.7s,baz=111,slow=9.8,SNR=1.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.04 327** | P | | **P** | **08 57 50.4** | **-1.0** |
| | 0.8nm,0.5s,baz=114,slow=6.5,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.16 164** | P | | **P** | **08 58 24.2** | **-1.0** |
| | 0.3nm,0.9s,baz=345,slow=8.6,SNR=1.4 | | | | | | |

*TUL* ***23*** *08:51:58.9±1.2,35°.66N±0°.01×97°.39W±0°.02, h6km±1km, ML3.0, mb_Lg2.9/66(NEIC), Error ellipse: s-maj=2.2km s-min=1.7km az=83.0*

**NEIC 23 08:51:59.1±1.1,35°.68N±0°.01×97°.39W±0°.02, h7km±4km, Error ellipse: s-maj=2.5km s-min=1.9km az=98.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **195** | Pg | Pg | 08 52 01.1 | -0.2 |
| OK009 | | | | Sg | Sg | 08 52 02.8 | -0.1 |
| **OK001** | **Jones High Sch** | **0.14** | **145** | Pg | Pg | 08 52 02.1 | 0.0 |
| OK001 | | | | Sg | Sg | 08 52 04.1 | -0.1 |
| **OK005** | **Luther M Schoo** | **0.17** | **98** | | Pg | 08 52 02.6 | +0.2 |
| OK005 | | | | Sg | Sg | 08 52 05.1 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.27** | **190** | | Pg | 08 52 04.1 | -0.3 |
| OKCFA | | | | Sg | Sg | 08 52 07.8 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **188** | Pg | Pg | 08 52 04.3 | -0.2 |
| OKCSW | | | | Sg | Sg | 08 52 07.9 | -0.3 |
| **FNO** | **Franklin** | **0.42** | **181** | Pg | Pg | 08 52 07.0 | -0.2 |
| FNO | | | | Sg | Sg | 08 52 12.3 | -0.4 |
| **W35A** | **Tecumseh** | **0.67** | **141** | Pg | Pg | 08 52 11.4 | -0.6 |
| W35A | | | | Sg | Sg | 08 52 19.8 | -1.0 |
| **X34A** | **Smith Ranch, M** | **1.13** | **199** | Pg | Pg | 08 52 20.1 | -0.7 |
| X34A | | | | Sg | Sb | 08 52 36.1 | +0.1 |
| **TUL1** | **Leonard** | **1.32** | **79** | Pn | Pn | 08 52 22.7 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pn | 08 52 24.9 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.48** | **231** | Pn | Pn | 08 52 25.2 | -0.8 |
| **U32A** | **Winter Ranch,** | **1.48** | **299** | Pn | Pn | 08 52 25.8 | -0.4 |
| **X37A** | **Clayton** | **1.98** | **123** | Pn | Pn | 08 52 33.5 | +0.5 |
| X37A | | | | IAmb_Lg | | 08 53 06.5 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.34** | **177** | Pn | Pn | 08 52 38.2 | +0.2 |
| **HHAR** | **Hobbs** | **2.86** | **77** | Pn | Pn | 08 52 46.5 | +1.3 |
| **R32A** | **Long Quarter,** | **2.94** | **339** | Pn | Pn | 08 52 47.2 | +1.0 |
| **W39A** | **Magazine** | **2.98** | **98** | Pn | Pn | 08 52 45.9 | -0.9 |
| W39A | | | | IAmb_Lg | | 08 53 35.7 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.13** | **140** | Pn | Pn | 08 52 49.2 | +0.5 |
| **MIAR** | **Mount Ida** | **3.33** | **109** | Pn | Pn | 08 52 51.6 | +0.1 |
| MIAR | | | | IAmb_Lg | | 08 53 49.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.47** | **10** | Pn | Pn | 08 52 53.5 | 0.0 |
| KSU1 | | | | IAmb_Lg | | 08 53 54.6 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | | Pn | 08 52 55.3 | +0.4 |
| ABTX | | | | IAmb_Lg | | 08 53 56.2 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.60** | **259** | Pn | Pn | 08 52 56.2 | +0.9 |
| **CBKS** | **Cedar Bluff** | **3.65** | **330** | Pn | Pn | 08 52 56.1 | +0.1 |
| CBKS | | | | IAmb_Lg | | 08 53 59.3 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.68** | **181** | Pn | Pn | 08 52 56.7 | +0.4 |
| WHTX | | | | IAmb_Lg | | 08 54 04.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **U40A** | **Yellville** | **3.74** | **78** | Pn | Pn | 08 52 57.9 | +0.7 |
| **S39A** | **Bolivar** | **3.84** | **57** | Pn | Pn | 08 52 58.2 | -0.3 |
| S39A | | | | IAmb_Lg | | 08 54 03.2 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **3.90** | **160** | Pn | Pn | 08 52 58.0 | -1.3 |
| **X40A** | **Basin Creek Fa** | **3.92** | **106** | Pn | Pn | 08 52 59.2 | -0.5 |
| **WLAR** | **White Oak Lake** | **4.05** | **118** | IAmb_Lg | | 08 54 10.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.18** | **94** | Pn | Pn | 08 53 03.3 | 0.0 |
| WHAR | | | | IAmb_Lg | | 08 54 21.1 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.23** | **95** | Pn | Pn | 08 53 04.1 | +0.2 |
| W41B | | | | IAmb_Lg | | 08 54 22.0 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **86** | Pn | Pn | 08 53 05.0 | +0.2 |
| FCAR | | | | IAmb_Lg | | 08 54 25.0 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | Pn | Pn | 08 53 06.0 | -0.2 |
| MGMO | | | | IAmb_Lg | | 08 54 27.9 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.49** | **121** | IAmb_Lg | | 08 54 29.9 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **MSTX** | **Muleshoe** | **4.74** | **250** | IAmb_Lg | | 08 54 39.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.86** | **56** | Pn | Pn | 08 53 13.6 | +1.0 |
| R40A | | | | IAmb_Lg | | 08 54 40.7 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.99** | **37** | IAmb_Lg | | 08 54 49.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **N33A** | **J Bar K, Exete** | **5.05** | **359** | IAmb_Lg | | 08 54 52.0 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **LCAR** | **Lake Charles** | **5.08** | **84** | Pn | Pn | 08 53 16.1 | +0.5 |
| LCAR | | | | IAmb_Lg | | 08 54 49.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.47** | **62** | Pn | Pn | 08 53 20.6 | -0.3 |
| CCM | | | | IAmb_Lg | | 08 55 07.1 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **5.56** | **202** | Pn | Pn | 08 53 21.0 | -1.4 |
| JCT | | | | IAmb_Lg | | 08 55 05.7 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **P40A** | **Paris** | **5.72** | **46** | Pn | Pn | 08 53 24.6 | +0.2 |
| P40A | | | | IAmb_Lg | | 08 55 11.4 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.84** | **286** | Pn | Pn | 08 53 26.1 | -0.2 |
| T25A | | | | IAmb_Lg | | 08 55 18.9 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **342A** | **Flagon Creek P** | **6.03** | **134** | Pn | Pn | 08 53 28.0 | -0.6 |
| **FVM** | **French Village** | **6.04** | **66** | Pn | Pn | 08 53 29.5 | +0.7 |
| FVM | | | | IAmb_Lg | | 08 55 16.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **6.06** | **31** | Pn | Pn | 08 53 28.2 | -0.9 |
| **L34A** | **Svendsen Farm,** | **6.33** | **7** | Pn | Pn | 08 53 32.3 | -0.5 |
| **OGNE** | **Ogallala** | **6.40** | **327** | Pn | Pn | 08 53 34.8 | +0.9 |
| OGNE | | | | IAmb_Lg | | 08 55 35.6 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **LNXT** | **Lenox** | **6.43** | **84** | Pn | Pn | 08 53 32.9 | -1.3 |
| **SLM** | **Saint Louis** | **6.43** | **61** | IAmb_Lg | | 08 55 24.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.83** | **290** | Pn | Pn | 08 53 39.3 | -0.7 |
| **SCIA** | **State Center** | **7.02** | **26** | IAmb_Lg | | 08 55 59.5 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **T45A** | **Paducah** | **7.18** | **77** | Pn | Pn | 08 53 44.5 | 0.0 |
| T45A | | | | IAmb_Lg | | 08 55 45.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **N41A** | **Harden Midland** | **7.19** | **44** | IAmb_Lg | | 08 55 54.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.39** | **55** | Pn | Pn | 08 53 47.7 | +0.4 |
| P43A | | | | IAmb_Lg | | 08 56 04.2 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.41** | **62** | IAmb_Lg | | 08 56 12.9 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **7.45** | **267** | Pn | Pn | 08 53 47.0 | -1.3 |
| **833A** | **Chaparral WMA,** | **7.53** | **194** | IAmb_Lg | | 08 56 13.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.75** | **241** | IAmb_Lg | | 08 56 15.4 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **8.07** | **4** | Pn | Pn | 08 53 56.6 | 0.0 |
| **TX32** | **Lajitas Array** | **8.25** | **222** | Pn | Pn | 08 53 59.1 | -0.1 |

*IDC* ***23*** *08:55:05.3±1.2,35°.68N×3°.79W, h0km, mb3.2/3, mb1 3.3/5, mb1mx3.2/44, mbtmp3.1/5, ML2.8/2, MS3.2/1, Ms1 3.2/1, ms1mx2.4/34, Error ellipse: s-maj=34.9km s-min=13.2km az=96.0*

*MDD* ***23*** *08:55:07.6±0.5,35°.68N×3°.62W, h2km±3km, mb_Lg3.0/11, Error ellipse: s-maj=2.6km s-min=3.8km az=48.0*

*INMG* ***23*** *08:55:08.1±1.2,35°.62N×3°.63W, h12km±6km, ML2.7, Error ellipse: s-maj=3.7km s-min=3.4km az=92.0*

*SFS* ***23*** *08:55:09.0,35°.64N×3°.54W, ML2.8, ALBORAN SUR*

*CNRM* ***23*** *08:55:10.2,35°.46N×3°.51W, h30km, ml3.0*

**ISC 23 08:55:05.5±1.2,35°.65N±0°.02×3°.60W±0°.02, h5km±9km, n49, σ1s53/79, mb3.6/3, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.52** | **213** | P | **Pn** | **08 55 18.4** | **-1.0** |
| PALE | | | | S | **Sn** | **08 55 28.0** | **-0.7** |
| **EALB** | **Alboran** | **0.54** | **58** | Pg | **Pn** | **08 55 18.7** | **-1.2** |
| EALB | | | | Sg | **Sb** | **08 55 26.8** | **+1.3** |
| EALB | | | | *i* Vmb_Lg | | 08 55 29.3 | |
| **EMEL** | **Melilla** | **0.63** | **124** | Pg | **Pb** | **08 55 19.8** | **+0.8** |
| EMEL | | | | Sg | **Sb** | **08 55 28.5** | **+0.4** |
| **CHAS** | **Isla Isabel II** | **1.06** | **116** | P | **Pg** | **08 55 25.6** | **-0.3** |
| CHAS | | | | S | **Sg** | **08 55 39.3** | **-0.3** |
| **ELGU** | **Los Guajares,** | **1.21** | **359** | Pn | **Pg** | **08 55 28.3** | **-0.5** |
| ELGU | | | | Pg | **Pn** | **08 55 30.0** | **+0.8** |
| ELGU | | | | Sg | **Sn** | **08 55 45.9** | **-0.1** |
| ELGU | | | | *i* Vmb_Lg | | 08 55 47.2 | |
| **TAF** | **Taforalt** | **1.28** | **130** | P | **Pn** | **08 55 29.5** | **-0.6** |
| TAF | | | | S | **Sg** | **08 55 44.2** | **-2.4** |
| **EMAL** | **Malaga-Limoner** | **1.30** | **329** | P | **Pn** | **08 55 29.0** | **-1.2** |
| EMAL | | | | S | **Sb** | **08 55 45.4** | **-1.9** |
| **EMIJ** | **Mijas** | **1.32** | **314** | Pn | **Pn** | **08 55 29.6** | **-0.9** |
| EMIJ | | | | Sn | **Sb** | **08 55 45.8** | **-2.1** |
| EMIJ | | | | Sg | **Sg** | **08 55 46.0** | **-1.8** |
| EMIJ | | | | *i* Vmb_Lg | | 08 55 47.2 | |
| **SMIR** | **Smir Dam** | **1.45** | **272** | S | **Sg** | **08 55 55.3** | **+3.1** |
| **EGOR** | **Sierra Gorda,** | **1.51** | **344** | Pg | **Pg** | **08 55 34.6** | **0.0** |
| EGOR | | | | Sg | **Sg** | **08 55 56.2** | **+2.1** |
| EGOR | | | | *i* Vmb_Lg | | 08 55 58.0 | |
| **CHEFC** | **Chefchaouen** | **1.52** | **250** | P | **Pb** | **08 55 34.2** | **0.0** |
| **EQUE** | **Quentar** | **1.56** | **5** | Pn | **Pb** | **08 55 35.0** | **+0.2** |
| EQUE | | | | Sn | **Sb** | **08 55 54.9** | **0.0** |
| **JBK** | **JBK** | **1.56** | **147** | P | **Pn** | **08 55 33.7** | **-0.4** |
| JBK | | | | S | **Sn** | **08 55 50.5** | **-4.3** |
| **EJIF** | **Jimena Fronter** | **1.71** | **298** | Pn | **Pb** | **08 55 37.3** | **-0.2** |
| **ENIJ** | **Nijar** | **1.73** | **40** | Pg | **Pg** | **08 55 38.9** | **+0.2** |
| ENIJ | | | | Sn | **Sn** | **08 55 57.0** | **-1.7** |
| ENIJ | | | | *i* Vmb_Lg | | 08 56 05.8 | |
| **LCRM** | **LCR** | **2.22** | **208** | P | **Pb** | **08 55 46.0** | **-0.2** |
| **IFR** | **Ifrane** | **2.48** | **211** | P | **Pn** | **08 55 47.3** | **+0.7** |
| IFR | | | | S | **Sn** | **08 56 17.2** | **-0.1** |
| **EZAR** | **Zarzadilla de** | **2.69** | **34** | Pn | **Pn** | **08 55 50.7** | **+1.1** |
| **ECAB** | **El Cabril** | **2.83** | **329** | Pn | **Pn** | **08 55 53.3** | **+2.0** |
| ECAB | | | | Pg | **Pb** | **08 55 57.0** | **+0.6** |
| ECAB | | | | Sn | **Sn** | **08 56 25.4** | **-0.3** |
| ECAB | | | | Sg | **Sg** | **08 56 34.2** | **-2.1** |
| ECAB | | | | *i* Vmb_Lg | | 08 56 36.9 | |
| **CZD** | **Col de Zad** | **2.87** | **205** | P | **Pn** | **08 55 54.0** | **+1.8** |
| **MD31** | **MD31** | **2.94** | **199** | P | **Pn** | **08 55 55.0** | **+2.1** |
| MD31 | | | | S | **Sn** | **08 56 25.5** | **-3.1** |
| **MDT** | **Midelt** | **2.95** | **197** | Pn | **Pn** | **08 55 53.7** | **+0.7** |
| | 0.7nm,0.3s,baz=221,slow=11,SNR=22 | | | | | | |
| MDT | | | | Sn | **Sn** | **08 56 29.5** | **+0.6** |
| | 2.2nm,0.3s,baz=139,slow=20,SNR=4.5 | | | | | | |
| MDT | | | | Lg | Lg | 08 56 39.2 | |
| | 2.0nm,0.3s,baz=31,slow=18,SNR=2.8 | | | | | | |
| **MDT** | **Midelt** | **2.95** | **197** | P | **Pn** | **08 55 54.2** | **+1.1** |
| **ZHG** | **ZHG** | **3.34** | **230** | P | **Pn** | **08 55 59.2** | **+0.8** |
| **ETOB** | **Tobarra** | **3.41** | **28** | Pn | **Pn** | **08 56 02.0** | **+2.7** |
| ETOB | | | | *i* Vmb_Lg | | 08 56 29.7 | |
| **EGRO** | **El Granado** | **3.65** | **302** | Pn | **Pn** | **08 56 03.0** | **+0.5** |
| EGRO | | | | Sn | **Sn** | **08 56 44.4** | **-1.5** |
| EGRO | | | | *i* Vmb_Lg | | 08 56 47.4 | |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | *e*Pn | **Pn** | **08 56 04.4** | **+0.4** |
| PVAQ | | | | *e*Sn | **Sn** | **08 56 47.0** | **-1.5** |
| PVAQ | | | | A | A | 08 56 49.2 | |
| | 11nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **296** | *e*Pn | **Pn** | **08 56 05.8** | **+0.6** |
| PBDV | | | | *e*Sn | **Sn** | **08 56 49.3** | **-1.4** |
| PBDV | | | | A | A | 08 57 05.1 | |
| | 9.6nm,0.7s | | | | | | |
| **PAB** | **San Pablo** | **3.93** | **352** | Pn | **Pn** | **08 56 08.6** | **+2.1** |
| PAB | | | | Sg | **Sg** | **08 57 08.6** | **-3.2** |
| PAB | | | | *i* Vmb_Lg | | 08 57 19.2 | |
| **ESDC** | **Sonseca Array** | **4.03** | **356** | Pn | **Pn** | **08 56 09.0** | **+1.2** |
| | 0.4nm,0.3s,baz=176,slow=12,SNR=6.7 | | | | | | |
| ESDC | | | | Sn | **Sn** | **08 56 54.7** | **-0.7** |
| | 0.2nm,0.3s,baz=182,slow=25,SNR=2.5 | | | | | | |
| ESDC | | | | Lg | Lg | 08 57 12.9 | |
| | 0.6nm,0.3s,baz=178,slow=29,SNR=5.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.03** | **356** | Pn | **Pn** | **08 56 09.5** | **+1.7** |
| ESDC | | | | *i* Vmb_Lg | | 08 56 54.3 | |
| **PCVE** | **Castro Verde** | **4.08** | **300** | *e*Pn | **Pn** | **08 56 08.8** | **+0.3** |
| PCVE | | | | *e*Sn | **Sn** | **08 56 55.1** | **-1.6** |
| PCVE | | | | A | A | 08 56 57.7 | |
| | 14nm,0.3s | | | | | | |
| **EBAD** | **Badajoz** | **4.13** | **320** | Pn | **Pn** | **08 56 10.0** | **+0.8** |
| EBAD | | | | Sn | **Sn** | **08 56 56.6** | **-1.2** |
| EBAD | | | | *i* Vmb_Lg | | 08 56 58.9 | |
| **PBEJ** | **Beja** | **4.16** | **306** | *e*Sn | **Sn** | **08 56 57.0** | **-1.7** |
| PBEJ | | | | A | A | 08 57 03.7 | |
| | 8.0nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.39** | **294** | *e*Sn | **Sn** | **08 57 03.3** | **-1.1** |
| MORF | | | | A | A | 08 57 16.7 | |
| | 5.9nm,0.4s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.47** | **291

σ1§24/33, mb4.4/12, MS3.3/3, Vanuatu Islands

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SANVU | Saraoutou | 0.95 | 218 | Pg | Pn | 09 05 12.7 | -2.4 |
| SANVU | Saraoutou | 0.95 | 218 | P | Pn | 09 05 12.7 | -2.4 |
| KOUNC | Koumac, New Ca | 6.72 | 209 | Pn | Pn | 09 06 34.3 | -0.2 |
| KOUNC | Koumac, New Ca | 6.72 | 209 | P | Pn | 09 06 36.3 | +1.8 |
| YATNC | Mamie plateau, | 7.38 | 187 | P | Pn | 09 06 43.2 | -0.3 |
| DZM | Mont Dzumac | 7.45 | 190 | Pn | Pn | 09 06 44.7 | +0.1 |
| | 2.9nm,0.3s,baz=357,slow=19,SNR=18 | | | | | | |
| DZM | | | | Sn | Sn | 09 08 05.6 | -2.4 |
| | 0.4nm,0.3s,baz=122,slow=24,SNR=1.4 | | | | | | |
| DZM | Mont Dzumac | 7.45 | 190 | | Pn | 09 06 43.4 | -1.2 |
| DZM | Mont Dzumac | 7.45 | 190 | P | Pn | 09 06 44.9 | +0.3 |
| NOUC | Port Laguerre | 7.51 | 191 | P | Pn | 09 06 46.7 | +1.4 |
| ONTNC | Ouen Toro | 7.68 | 189 | P | Pn | 09 06 49.4 | +1.7 |
| OUENC | Ouen Island, N | 7.74 | 187 | P | Pn | 09 06 49.9 | +1.4 |
| BKZ | Black Stump Fm | 25.55 | 164 | P | P | 09 10 24.1 | +0.3 |
| STKA | Stephens Creek | 29.41 | 230 | P | P | 09 11 00.2 | +1.7 |
| | 9.0nm,0.6s,baz=36,slow=7.9,SNR=37 | | | | | | |
| STKA | Stephens Creek | 29.41 | 230 | P | P | 09 11 00.3 | +1.7 |
| STKA | | | | IAmb | IAmb | 09 11 01.0 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 32.15 | 256 | P | P | 09 11 23.6 | +0.7 |
| WR0 | | | | IAmb | IAmb | 09 11 37.3 | |
| | comp=Z,11nm,1.5s | | | | | | |
| WB0 | Warramunga Arr | 32.28 | 256 | P | P | 09 11 23.8 | -0.2 |
| WB0 | | | | IAmb | IAmb | 09 11 35.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 32.33 | 256 | P | P | 09 11 23.3 | -1.1 |
| WB2 | | | | IAmb | IAmb | 09 11 49.0 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| WRA | Warramunga Arr | 32.34 | 256 | P | P | 09 11 23.1 | -1.4 |
| | comp=Z,0.9nm,0.8s,baz=87,slow=8.4,SNR=7.2 | | | | | | |
| WRA | Warramunga Arr | 32.34 | 256 | IAmb | IAmb | 09 11 27.6 | |
| | comp=Z,0.1nm,1.1s | | | | | | |
| AS31 | Alice Springs | 33.17 | 249 | P | P | 09 11 31.9 | +0.1 |
| ASAR | Alice Springs | 33.17 | 249 | P | P | 09 11 31.6 | -0.2 |
| | comp=Z,2.8nm,0.6s,baz=79,slow=8.9,SNR=47 | | | | | | |
| ASAR | | | | PcP | PcP | 09 14 13.9 | -0.4 |
| | comp=Z,0.4nm,0.7s,baz=104,slow=1.6,SNR=4.7 | | | | | | |
| ASAR | Alice Springs | 33.17 | 249 | P | P | 09 11 32.0 | +0.2 |
| BBOO | Buckleboo | 34.01 | 232 | P | P | 09 11 40.0 | +1.0 |
| KNRA | Kununurra | 37.66 | 263 | P | P | 09 12 10.9 | +0.5 |
| SIJI | Sorong | 38.63 | 288 | LR | LR | 09 30 12.1 | |
| | comp=Z,40nm,18.6s,baz=184,slow=39 | | | | | | |
| FORT | Forrest | 39.76 | 239 | P | P | 09 12 28.5 | +0.6 |
| FORT | | | | IAmb | IAmb | 09 12 33.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| FITZ | Fitzroy Crossi | 40.53 | 259 | LR | LR | 09 29 17.2 | |
| | comp=Z,51nm,18.1s,baz=170,slow=36 | | | | | | |
| FITZ | Fitzroy Crossi | 40.53 | 259 | P | P | 09 12 35.2 | +0.8 |
| KAPI | Kappang | 48.22 | 276 | LR | LR | 09 33 42.6 | |
| | comp=Z,20nm,18.1s,baz=210,slow=36 | | | | | | |
| CMAR | Chiang Mai Arr | 75.41 | 294 | P | P | 09 16 39.8 | +0.7 |
| | comp=Z,1.1nm,0.3s,baz=127,slow=5.8,SNR=4.6 | | | | | | |
| SONM | Songino Array | 82.78 | 323 | P | P | 09 17 18.9 | +0.1 |
| | comp=Z,0.6nm,0.7s,baz=136,slow=6.3,SNR=4.0 | | | | | | |
| SONM | Songino Array | 82.78 | 323 | IAmb | IAmb | 09 17 23.5 | |
| | comp=Z,2.4nm,1.2s | | | | | | |
| ILAR | Eielson Array | 86.33 | 18 | P | P | 09 17 35.6 | -0.6 |
| | comp=Z,0.5nm,0.7s,baz=231,slow=5.7,SNR=2.8 | | | | | | |
| NVAR | Mina Array Bea | 86.85 | 49 | P | P | 09 17 37.9 | -1.8 |
| | comp=Z,0.3nm,0.8s,baz=252,slow=4.5,SNR=2.2 | | | | | | |
| MKAR | Makanchi Array | 97.54 | 316 | P | P | 09 18 28.7 | -0.1 |
| | comp=Z,1.2nm,0.8s,baz=98,slow=6.2,SNR=14 | | | | | | |
| TORD | Torodi Ar. Bea | 166.43 | 265 | PKPab | PKPab | 09 26 03.2 | +0.5 |
| | comp=Z,0.5nm,0.8s,baz=110,slow=3.4,SNR=3.7 | | | | | | |

*TUL* ***23*** *09:09:26.4±1.5, 36°.29N×97°.84W×0°.02, h7km±5km, ML2.6, mb_Lg2.4/13(NEIC), Error ellipse: s-maj=1.9km s-min=1.4km az=59.0*

**NEIC 23 09:09:26.2±0.8, 36°.281N×0°.008×97°.83W×0°.01, h10km±4km, Error ellipse: s-maj=2.0km s-min=0.5km az=58.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKCFA | Oklahoma City | 0.92 | 160 | | Pg | 09 09 43.6 | -0.3 |
| OKCSW | OKLAHOMA CITY | 0.93 | 160 | Pg | Pg | 09 09 43.4 | -0.7 |
| U32A | Winter Ranch, | 0.95 | 276 | Pg | Pg | 09 09 43.8 | -0.7 |
| FNO | Franklin | 1.08 | 161 | Pg | Pb | 09 09 46.5 | -0.4 |
| T35A | Sooner Cattle | 1.23 | 59 | | Pn | 09 09 49.2 | -0.3 |
| W35A | Tecumseh | 1.37 | 145 | | Pn | 09 09 51.2 | -0.1 |
| X34A | Smith Ranch, M | 1.68 | 180 | | Pn | 09 09 55.3 | -0.3 |
| X34A | | | | IAmb_Lg | | 09 10 20.6 | |
| | comp=Z,12nm,1.0s | | | | | | |
| TUL1 | Leonard | 1.69 | 102 | Pn | Pn | 09 09 55.7 | -0.1 |
| TUL1 | | | | IAmb_Lg | | 09 10 24.1 | |
| | comp=Z,27nm,1.1s | | | | | | |
| WMOK | Wichita Mounta | 1.73 | 207 | Pn | Pn | 09 09 56.2 | -0.1 |
| R32A | Long Quarter, | 2.25 | 342 | Pn | Pn | 09 10 03.5 | -0.1 |
| X37A | Clayton | 2.62 | 129 | IAmb_Lg | | 09 10 54.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| CBKS | Cedar Bluff | 2.95 | 330 | Pn | Pn | 09 10 14.0 | +0.9 |
| HHAR | Hobbs | 3.14 | 89 | Pn | Pn | 09 10 16.4 | +0.7 |
| U40A | Yellville | 4.02 | 87 | IAmb_Lg | | 09 11 37.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| T25A | Trinidad | 5.36 | 281 | IAmb_Lg | | 09 12 30.5 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| CCM | Cathedral Cave | 5.55 | 69 | IAmb_Lg | | 09 12 24.4 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| JCT | Junction City | 6.02 | 196 | IAmb_Lg | | 09 12 44.5 | |
| | comp=Z,5.2nm,0.8s | | | | | | |

*IDC* ***23*** *09:17:10.2±5.0, 6°.23S×148°.48E, h63km±46km, mb3.5/5, mb1 3.8/7, mb1mx3.5/37, mbtmp3.8/7, ML3.9/1, MS3.4/3, Ms1 3.4/3, ms1mx2.7/41, Error ellipse: s-maj=53.5km s-min=31.2km az=120.0*

**ISC 23 09:17:10.2±1.4, 6°.2S±0°.1×148°.5E±0°.4, h65km, n10, σ0§56/9, mb3.7/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.42 | 203 | P | Pn | 09 18 00.5 | -0.6 |
| | 11nm,0.3s,baz=52,slow=6.5,SNR=16 | | | | | | |
| PMG | | | | S | Sn | 09 18 41.3 | +0.8 |
| | 11nm,0.3s,baz=167,slow=18,SNR=11 | | | | | | |
| PMG | | | | LR | LR | 09 19 36.8 | |
| | comp=Z,310nm,18.3s,baz=58,slow=43 | | | | | | |
| WRA | Warramunga Arr | 19.36 | 224 | P | P | 09 21 31.0 | +0.2 |
| | 0.4nm,0.3s,baz=51,slow=11,SNR=26 | | | | | | |
| ASAR | Alice Springs | 22.30 | 217 | P | P | 09 22 02.1 | -0.3 |
| | 2.9nm,0.7s,baz=48,slow=9.6,SNR=39 | | | | | | |
| DZM | Mont Dzumac | 23.43 | 134 | LR | LR | 09 29 25.2 | |
| | comp=Z,55nm,18.3s,baz=200,slow=31 | | | | | | |
| FITZ | Fitzroy Crossi | 25.22 | 240 | P | P | 09 22 30.4 | +0.3 |
| | 4.1nm,0.7s,baz=86,slow=7.4,SNR=9.7 | | | | | | |
| STKA | Stephens Creek | 26.32 | 193 | P | P | 09 22 39.8 | -0.2 |
| | 2.1nm,0.8s,baz=12,slow=6.2,SNR=5.3 | | | | | | |
| JHJ | Hachijo jima 2 | 39.99 | 349 | LR | LR | 09 38 27.4 | |
| | comp=Z,94nm,19.9s,baz=60,slow=32 | | | | | | |
| MKAR | Makanchi Array | 78.62 | 320 | P | P | 09 29 05.0 | -0.1 |
| | 0.2nm,0.8s,baz=111,slow=3.2,SNR=2.2 | | | | | | |
| ILAR | Eielson Array | 85.11 | 23 | P | P | 09 29 39.4 | +0.6 |
| | 0.3nm,0.6s,baz=248,slow=5.3,SNR=5.8 | | | | | | |
| TORD | Torodi Ar. Bea | 146.58 | 284 | PKPbc | PKPbc | 09 36 45.0 | -0.5 |
| | 0.5nm,0.8s,baz=61,slow=3.8,SNR=3.0 | | | | | | |

*MOS* ***23*** *09:17:45.2±1.1, 42°.00N×142°.51E, h74km, mb4.3/2, Error ellipse: s-maj=14.1km s-min=8.1km az=74.7*

*NEIC* ***23*** *09:17:46.4±2.8, 42°.01N×0°.06×142°.58E±0°.08, h68km±3km, mb4.2/15, Error ellipse: s-maj=9.0km s-min=7.8km az=122.0*

*SKHL* ***23*** *09:17:47.1±0.1, 42°.00N×142°.70E, h86km±5km, mb5.0/3, msha5.8/2*

*IDC* ***23*** *09:17:47.8±1.7, 42°.09N×142°.42E, h82km±13km, mb3.5/18, mb1 3.6/20, mb1mx3.5/51, mbtmp3.8/20, Error ellipse: s-maj=18.8km s-min=12.7km az=108.0*

*NIED* ***23*** *09:17:47.5, 42°.06N×142°.61E, h59km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr3.83; Mθθ-1.29; Mφφ-2.53; Mrθ1.07; Mθφ-0.90; Mφr2.65; Fault plane solution: M₀4.45000×10¹⁴ NP1:φ=24.00000°, δ65.00000°, λ88.00000°. NP2:φ=209.00000°, δ25.00000°, λ95.00000°.*

*JMA* ***23*** *09:17:47.4±0.2, 42°.06N×142°.61E, h59km±2km, M3.6*

*JMA Felt I J1.*

**ISC 23 09:17:46.1±0.7, 42°.00N±0°.04×142°.60E±0°.03, h67km±5km, n89, σ1§28/97, mb3.9/26, 6C-9D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JNBK | Urakawa-nobuka | 0.30 | 21 | ⇑P | Pn | 09 17 57.0 | +0.1 |
| JNBK | | | | eS | Sn | 09 18 04.6 | -0.2 |
| ERM | Erimo | 0.41 | 87 | P | Pn | 09 17 58.6 | +0.9 |
| ERM | Erimo | 0.41 | 87 | | Pn | 09 17 58.6 | +0.9 |
| JEM | Erimo | 0.41 | 87 | ⇑P | Pn | 09 17 58.6 | +0.9 |
| JEM | | | | eS | Sn | 09 18 06.6 | +0.3 |
| JSHD | Hidakashinhida | 0.42 | 346 | ⇑P | Pn | 09 17 58.2 | +0.3 |
| JTHR | Tokachihiroo | 0.59 | 60 | ⇑P | Pn | 09 18 00.2 | +0.7 |
| JTHR | | | | eS | Sn | 09 18 10.0 | +0.6 |
| JBT2 | Biratori 2 | 0.80 | 347 | ⇓P | Pn | 09 18 02.0 | +0.1 |
| JBT2 | | | | eS | Sn | 09 18 13.5 | -0.1 |
| JIAM | Iburiatsuma | 0.81 | 321 | ⇓P | Pn | 09 18 03.0 | +1.1 |
| JCH | Churui | 0.83 | 42 | ⇑P | Pn | 09 18 02.8 | +0.5 |
| JCH | | | | eS | Sn | 09 18 14.5 | +0.2 |
| JFR | Furan | 1.17 | 360 | ⇓P | Pn | 09 18 06.7 | +0.2 |
| JKB | Kayabe | 1.18 | 265 | ⇓P | Pn | 09 18 07.2 | +0.6 |
| JKB | | | | eS | Sn | 09 18 22.1 | +0.1 |
| JEW | Eniwo | 1.20 | 315 | ⇓P | Pn | 09 18 07.6 | +0.6 |
| JEW | Eniwo | 1.20 | 315 | | Pn | 09 18 07.7 | +0.8 |
| JNB | Noboribetsu | 1.25 | 293 | ⇓P | Pn | 09 18 07.5 | -0.2 |
| JNB | | | | eS | Sn | 09 18 22.8 | -1.0 |
| JOB | Onbets | 1.28 | 45 | ⇑P | Pn | 09 18 09.7 | +1.7 |
| JOB | | | | eS | Sn | 09 18 26.2 | +1.7 |
| JOT | Ohata | 1.32 | 243 | ⇓P | Pn | 09 18 09.5 | +1.0 |
| JAB | Ashibetsu | 1.53 | 350 | ⇓P | Pn | 09 18 12.1 | +0.8 |
| JISS | Ishikarishitsu | 1.55 | 326 | P | Pn | 09 18 12.0 | +0.5 |
| JAR | Ashorobuto | 1.56 | 33 | eS | Sn | 09 18 31.1 | +0.1 |
| JTM | Tenmabayashi | 1.67 | 224 | | Pn | 09 18 15.3 | +2.1 |
| AKK | Akkeshi | 1.94 | 58 | eP | Pn | 09 18 17.4 | +0.6 |
| AKK | | | | eS | Sn | 09 18 40.1 | -0.1 |
| JKA | Kamikawa-asahi | 2.12 | 360 | | Pn | 09 18 20.8 | +1.6 |
| JKA | Kamikawa-asahi | 2.12 | 360 | eP | Pn | 09 18 20.3 | +1.1 |
| ASAJ | Asahikawa | 2.12 | 360 | P | Pn | 09 18 20.3 | +1.1 |
| ASAJ | 39nm,0.3s,baz=210,slow=11,SNR=155 | | | S | Sn | 09 18 45.5 | +1.0 |
| | 15nm,0.3s,baz=173,slow=31,SNR=9.1 | | | | | | |
| NMR | Nemuro--Hokkai | 2.68 | 58 | eP | Pn | 09 18 27.1 | +0.3 |
| NMR | | | | eS | Sn | 09 18 56.2 | -1.9 |
| NMR | Nemuro--Hokkai | 2.68 | 58 | eP | Pn | 09 18 27.1 | +0.3 |
| NMR | | | | eS | Sn | 09 18 57.0 | -1.1 |
| RUSJ | Misakicho | 2.86 | 42 | eP | Pn | 09 18 32.0 | +2.7 |
| RUSJ | | | | eS | Sn | 09 19 06.5 | +3.9 |
| YUK | Yuzh-Kuril'sk | 3.14 | 48 | eP | Pn | 09 18 35.7 | +2.6 |
| YUK | | | | eS | Sn | 09 19 09.8 | +0.5 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,117nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,49nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,30nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,122nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,251nm,0.1s | | | | | | |
| YUK | Yuzh-Kuril'sk | 3.14 | 48 | eP | Pn | 09 18 34.6 | +1.5 |
| YUK | | | | AMB | AMB | 09 18 36.4 | |
| | comp=N,50nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 09 18 36.4 | |
| | comp=N,120nm,0.3s | | | | | | |
| YUK | | | | eS | Sn | 09 19 09.3 | 0.0 |
| YUK | | | | A | A | 09 19 13.7 | |
| | comp=N,250nm,0.3s | | | | | | |
| YUK | | | | A | A | 09 19 13.7 | |
| | comp=N,120nm,0.3s | | | | | | |
| SHO | Shikotan | 3.62 | 57 | d iP | Pn | 09 18 40.3 | +0.6 |
| SHO | | | | i S | Sn | 09 19 19.9 | -1.3 |
| SHO | | | | pmax | pmax | | |
| | comp=Z,69nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,26nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,17nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,530nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,153nm,0.3s | | | | | | |
| SHO | Shikotan | 3.62 | 57 | i P | Pn | 09 18 40.3 | +0.6 |
| SHO | | | | AMB | AMB | 09 18 40.8 | |
| | comp=E,30nm,0.2s | | | | | | |
| SHO | | | | AMB | AMB | 09 18 40.8 | |
| | comp=E,20nm,0.2s | | | | | | |
| SHO | | | | AMB | AMB | 09 18 40.8 | |
| | comp=E,70nm,0.2s | | | | | | |
| SHO | | | | i S | Sn | 09 19 19.9 | -1.3 |
| SHO | | | | A | A | 09 19 21.1 | |
| | comp=E,530nm,0.3s | | | | | | |
| SHO | | | | A | A | 09 19 21.1 | |
| | comp=E,150nm,0.3s | | | | | | |
| JMM | Marumori | 4.35 | 199 | Pn | Pn | 09 18 49.6 | -0.1 |
| YSS | Yuzh-Sakhalins | 4.96 | 1 | eP | Pn | 09 18 59.3 | +1.4 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.96 | 1 | eP | Pn | 09 18 59.8 | +1.9 |
| YSS | | | | AMB | AMB | 09 19 01.5 | |
| | comp=Z,20nm,0.8s | | | | | | |
| JSD | Sado | 5.17 | 222 | Pn | Pn | 09 19 03.6 | +2.7 |
| TEY | Ternei | 5.32 | 307 | eP | Pn | 09 19 06.6 | +3.8 |
| MJAR | Matsushiro Arr | 6.43 | 213 | P | Pn | 09 19 19.6 | +1.5 |
| | comp=Z,0.1nm,0.3s,baz=22,slow=14,SNR=1.7 | | | | | | |
| MJAR | Matsushiro Arr | 6.43 | 213 | | Pn | 09 19 17.2 | -0.8 |
| JWT | Wachi | 8.76 | 222 | Pn | Pn | 09 19 48.8 | -1.1 |
| SEY | Seymchan | 21.75 | 12 | P | P | 09 22 30.7 | -1.0 |
| | comp=Z,0.5nm,0.4s,baz=205,slow=10,SNR=5.0 | | | | | | |
| SONM | Songino Array | 26.13 | 295 | P | P | 09 23 11.7 | -2.2 |
| | comp=Z,0.4nm,0.5s,baz=128,slow=2.4,SNR=3.7 | | | | | | |
| SONM | Songino Array | 26.13 | 295 | IAmb | IAmb | 09 23 12.4 | |
| | comp=Z,2.6nm,1.4s | | | | | | |
| GUMO | Guam | 28.37 | 175 | P | P | 09 23 34.3 | +0.4 |
| | comp=Z,34nm,0.3s,baz=93,slow=17,SNR=1.7 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.26 | 130 | T | T | 09 55 27.0 | |
| | baz=323,slow=75,SNR=27 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.27 | 130 | T | T | 09 55 27.8 | |
| | baz=323,slow=75,SNR=36 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.28 | 130 | T | T | 09 55 29.5 | |
| | baz=323,slow=75,SNR=31 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.13 | 131 | T | T | 09 56 34.8 | |
| | baz=325,slow=76,SNR=35 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.13 | 131 | T | T | 09 56 27.6 | |
| | baz=325,slow=76,SNR=41 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.14 | 131 | T | T | 09 56 21.3 | |
| | baz=325,slow=76,SNR=33 | | | | | | |
| ZAA0 | Zalesovo Array | 39.41 | 308 | P | P | 09 25 08.7 | -0.4 |
| ZAA0 | | | | IAmb | IAmb | 09 25 11.1 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 39.41 | 308 | P | P | 09 25 08.2 | -0.9 |
| | comp=Z,1.8nm,0.6s,baz=85,slow=9.1,SNR=8.7 | | | | | | |
| ZALV | Zalesovo Beam | 39.41 | 308 | P | P | 09 25 08.6 | -0.5 |
| ZALV | Zalesovo Beam | 39.41 | 308 | P | P | 09 25 08.6 | -0.5 |
| CHGN | Chignik | 39.87 | 48 | P | P | 09 25 13.8 | +1.0 |
| IMAR | Indian Mountai | 41.96 | 33 | P | P | 09 25 30.4 | +0.5 |
| MK31 | Makanchi Array | 42.44 | 298 | P | P | 09 25 33.2 | -1.0 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| MK31 | Makanchi Array | 42.44 | 298 | P | P | 09 25 33.2 | -1.0 |
| MK31 | | | | IAmb | IAmb | 09 25 36.6 | |
| | comp=Z,2.9nm,1.3s | | | | | | |
| MKAR | Makanchi Array | 42.44 | 298 | P | P | 09 25 33.3 | -0.8 |
| | comp=Z,1.2nm,0.9s,baz=82,slow=8.5,SNR=9.2 | | | | | | |
| KURK | Kurchatov | 43.75 | 304 | P | P | 09 25 46.2 | +1.7 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KURK | Kurchatov | 43.75 | 304 | P | P | 09 25 46.2 | +1.7 |
| KURK | | | | IAmb | IAmb | 09 25 46.3 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| KURK | Kurchatov | 43.75 | 304 | eP | P | 09 25 46.2 | +1.7 |
| ILAR | Eielson Array | 44.86 | 35 | P | P | 09 25 52.8 | -0.5 |
| | comp=Z,0.3nm,0.7s,baz=265,slow=5.4,SNR=4.6 | | | | | | |
| SCRK | Sand Creek | 46.20 | 36 | P | P | 09 26 05.4 | +1.4 |
| SCRK | | | | IAmb | IAmb | 09 26 33.1 | |
| | comp=Z,5.5nm,1.3s | | | | | | |
| L27K | Beaver Creek, | 47.31 | 37 | P | P | 09 26 14.9 | +2.3 |
| L27K | | | | IAmb | IAmb | 09 26 17.8 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| INK | Inuvik | 49.58 | 29 | P | P | 09 26 30.1 | +0.3 |
| | comp=Z,0.5nm,0.4s,baz=306,slow=12,SNR=7.6 | | | | | | |
| KKAR | Karatay Array | 51.56 | 297 | P | P | 09 26 44.8 | -0.4 |
| KKAR | Karatay Array | 51.56 | 297 | P | P | 09 26 44.8 | -0.4 |
| ABKAR | Akbulak array | 55.53 | 308 | P | P | 09 27 15.0 | +0.9 |
| ABKAR | | | | IAmb | IAmb | 09 27 20.0 | |
| | comp=Z,1.5nm,1.2s | | | | | | |
| SPITS | Spitsbergen Ar | 55.84 | 348 | P | P | 09 27 15.5 | -0.5 |
| | comp=Z,2.1nm,0.7s,baz=38,slow=7.3,SNR=0.8 | | | | | | |
| RES | Resolute Bay | 57.57 | 15 | P | P | 09 27 28.3 | +0.1 |
| | comp=Z,1.0nm,0.5s,baz=309,slow=7.2,SNR=8.0 | | | | | | |
| RES | Resolute Bay | 57.57 | 15 | IAmb | IAmb | 09 27 29.4 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| YKA | Yellowknife Ar | 59.08 | 32 | P | P | 09 27 39.3 | +0.3 |
| | comp=Z,0.1nm,0.5s,baz=305,slow=7.2,SNR=3.3 | | | | | | |
| WB0 | Warramunga Arr | 61.92 | 189 | P | P | 09 27 59.6 | +0.9 |
| WB2 | Warramunga Arr | 62.10 | 189 | P | P | 09 27 59.9 | 0.0 |
| WRA | Warramunga Arr | 62.10 | 189 | P | P | 09 28 01.0 | +1.1 |
| | comp=Z,0.7nm,0.7s,baz=7.4,slow=7.1,SNR=7.3 | | | | | | |
| WRA | Warramunga Arr | 62.10 | 189 | P | P | 09 28 01.0 | +1.1 |
| GEYT | Alibeck | 62.31 | 297 | P | P | 09 28 00.5 | -0.8 |
| | comp=Z,2.0nm,0.5s,baz=57,slow=7.5,SNR=1.9 | | | | | | |
| FINES | FINESS Array B | 64.87 | 332 | P | P | 09 28 17.1 | -0.7 |
| | comp=Z,1.8nm,0.7s,baz=53,slow=7.4,SNR=8.0 | | | | | | |
| FINES | FINESS Array B | 64.87 | 332 | P | P | 09 28 18.4 | +0.7 |
| FINES | FINESS Array B | 64.87 | 332 | P | P | 09 28 18.4 | +0.7 |
| NOA | NORSAR Array B | 69.97 | 337 | P | P | 09 28 48.4 | -1.6 |
| | comp=Z,0.8nm,0.6s,baz=37,slow=6.3,SNR=3.6 | | | | | | |
| AKASG | Malin Array Be | 70.95 | 322 | P | P | 09 28 54.0 | -2.1 |
| | comp=Z,0.5nm,0.4s,baz=45,slow=5.9,SNR=4.2 | | | | | | |
| AKASG | Malin Array Be | 70.95 | 322 | P | P | 09 28 54.0 | -2.1 |
| PDAR | Pinedale Array | 73.57 | 47 | P | P | 09 29 11.8 | -0.4 |
| | comp=Z,0.2nm,0.6s,baz=316,slow=3.8,SNR=2.2 | | | | | | |
| EKA | Eskdalemuir Ar | 78.76 | 341 | P | P | 09 29 41.7 | +0.6 |
| | comp=Z,0.9nm,0.6s,baz=16,slow=8.1,SNR=1.8 | | | | | | |
| SDCO | Great Sand Dun | 79.28 | 48 | P | P | 09 29 43.0 | -1.7 |
| SDCO | | | | IAmb | IAmb | 09 29 44.6 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| SCHQ | Schefferville | 80.32 | 17 | P | P | 09 29 47.9 | -1.7 |
| | comp=Z,3.2nm,0.8s,baz=32,slow=5.1,SNR=3.9 | | | | | | |
| SCHQ | Schefferville | 80.32 | 17 | IAmb | IAmb | 09 29 54.2 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 86.39 | 53 | P | P | 09 30 22.6 | +1.3 |
| | comp=Z,0.3nm,0.6s,baz=289,slow=2.8,SNR=3.9 | | | | | | |

*CNRM* ***23*** *09:21:40.9, 35°.55N×3°.47W, h20km, ml2.6*

**ISC 23 09:21:40.0±1.4, 35°.71N±0°.05×3°.57W±0°.07, h35km, n7, σ1§14/12, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PALE | Palemas | 0.58 | 212 | P | Pn | 09 21 50.3 | -1.5 |
| PALE | | | | S | Sn | 09 21 59.0 | -1.0 |
| EMAL | Malaga-Limoner | 1.26 | 327 | P | Pn | 09 21 59.9 | -1.1 |
| EMAL | | | | S | Sn | 09 22 18.6 | +1.8 |
| TAF | Taforalt | 1.30 | 133 | P | Pn | 09 22 01.7 | 0.0 |
| TAF | | | | S | Sn | 09 22 17.1 | -0.8 |
| JBK | JBK | 1.60 | 149 | P | Pn | 09 22 06.3 | +0.4 |
| JBK | | | | S | Sn | 09 22 25.0 | -0.4 |
| CZD | Col de Zad | 2.94 | 205 | P | Pn | 09 22 25.4 | +1.0 |
| MD31 | MD31 | 3.00 | 200 | P | Pn | 09 22 25.6 | +0.5 |
| MD31 | | | | S | Sn | 09 23 00.2 | +0.2 |
| MDT | Midelt | 3.01 | 197 | P | Pn | 09 22 26.7 | +1.4 |

**IDC 23 09:27:13.2±9.3, 18°.62S×179°.12E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.4/21, mbtmp3.5/3, MS3.3/1, Ms1 3.3/1, ms1mx2.5/37, Error ellipse: s-maj=417.8km s-min=39.9km az=144.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 19.64 | 185 | LR | LR | 09 37 29.7 | |
| | comp=Z,80nm,19.7s,baz=235,slow=31 | | | | | | |
| WRA | Warramunga Arr | 42.19 | 261 | P | P | 09 35 08.0 | -0.2 |
| | 0.2nm,0.5s,baz=95,slow=7.0,SNR=1.7 | | | | | | |
| ASAR | Alice Springs | 42.33 | 255 | P | P | 09 35 09.2 | -0.1 |
| | 0.4nm,0.4s,baz=90,slow=7.9,SNR=8.5 | | | | | | |
| ILAR | Eielson Array | 87.13 | 14 | P | P | 09 40 00.6 | 0.0 |
| | 0.9nm,1.1s,baz=230,slow=5.6,SNR=4.2 | | | | | | |

*TUL* ***23*** *09:37:38.2±1.1, 35°.67N±0°.01×97°.40W±0°.02, h7km±4km, ML3.0, mb_Lg2.8/57(NEIC), Error ellipse: s-maj=2.3km s-min=1.6km az=103.0*

**NEIC 23 09:37:38.5±1.1, 35°.685N±0°.007×97°.42W±0°.02, h9km±4km, Error ellipse: s-maj=2.3km s-min=0.7km az=109.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK009 | Oakdale Elemen | 0.10 | 183 | Pg | Pg | 09 37 40.5 | -0.5 |
| OK009 | | | | Sg | Sg | 09 37 42.2 | -0.5 |
| OK001 | Jones High Sch | 0.16 | 140 | Pg | Pg | 09 37 41.5 | -0.4 |
| OK001 | | | | Sg | Sg | 09 37 44.0 | -0.2 |
| OK005 | Luther M Schoo | 0.18 | 99 | Pg | Pg | 09 37 42.1 | -0.2 |
| OK005 | | | | Sg | Sg | 09 37 45.1 | +0.2 |
| OKCFA | Oklahoma City | 0.27 | 186 | | Pg | 09 37 43.5 | -0.4 |
| OKCFA | | | | Sg | Sg | 09 37 47.6 | +0.1 |
| OKCSW | OKLAHOMA CITY | 0.28 | 184 | Pg | Pg | 09 37 43.7 | -0.4 |
| OKCSW | | | | Sg | Sg | 09 37 47.8 | 0.0 |
| FNO | Franklin | 0.43 | 178 | Pg | Pg | 09 37 46.3 | -0.5 |
| FNO | | | | Sg | Sg | 09 37 52.6 | +0.2 |
| W35A | Tecumseh | 0.69 | 140 | Pg | Pg | 09 37 51.0 | -0.8 |
| W35A | | | | Sg | Sg | 09 38 00.4 | -0.4 |
| X34A | Smith Ranch, M | 1.13 | 198 | Pn | Pg | 09 37 59.6 | -0.7 |
| X34A | | | | Sg | Sb | 09 38 15.4 | +0.2 |
| TUL1 | Leonard | 1.34 | 80 | Pn | Pn | 09 38 02.1 | -1.3 |
| T35A | Sooner Cattle | 1.43 | 30 | Pn | Pn | 09 38 04.4 | -0.3 |
| U32A | Winter Ranch, | 1.46 | 299 | | Pn | 09 38 05.3 | +0.3 |
| WMOK | Wichita Mounta | 1.46 | 230 | Pn | Pn | 09 38 04.8 | -0.4 |
| X37A | Clayton | 2.00 | 123 | Pn | Pn | 09 38 12.8 | +0.4 |
| HHAR | Hobbs | 2.88 | 77 | Pn | Pn | 09 38 24.2 | -0.4 |
| W39A | Magazine | 3.00 | 98 | Pn | Pn | 09 38 26.7 | +0.4 |
| W39A | | | | IAmb_Lg | | 09 39 19.0 | |
| | comp=Z,26nm,0.7s | | | | | | |
| Z38A | Mt. Pleasant | 3.14 | 140 | IA

| | | | | | | |
|---|---|---|---|---|---|---|
| **K31A** | **O'Neill** | **7.01** | **352** | IAmb_Lg | | 09 41 39.9 |
| | comp=Z,14nm,0.7s | | | | | |
| **SCIA** | **State Center** | **7.02** | **27** | IAmb_Lg | | 09 41 27.1 |
| | comp=Z,13nm,0.8s | | | | | |
| **WVT** | **Waverly** | **7.79** | **84** | IAmb_Lg | | 09 41 55.7 |
| | comp=Z,6.3nm,1.1s | | | | | |
| **PHWY** | **Pilot Hill** | **8.44** | **314** | IAmb_Lg | | 09 42 22.3 |
| | comp=Z,5.5nm,0.8s | | | | | |
| **JFWS** | **Jewell Farm** | **9.11** | **35** | IAmb_Lg | | 09 42 34.4 |
| | comp=Z,9.5nm,0.8s | | | | | |

*PRE **23** 09:50:49.2±1.2,26˚.35S×27˚.62E, h2km, ML2.1*
*EAF **23** 09:50:57.4±0.9,26˚.47S×27˚.25E, h10km, MD3.5*
*BUL **23** 09:50:57.4±0.9,26˚.47S×27˚.25E, h10km, MD3.6*
**ISC 23 09:50:49.7**±1.3,**26˚34S**±0˚.04×**27˚54E**±0˚.03,**h4**km±12km, **n10**,σ1§**08**/20,**South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HRAO** | **HartRAO** | **0.47** | **16** | *e*P | **Pg** | **09 50 59.0** | **+0.4** |
| HRAO | | | | *e*S | **Sg** | **09 51 03.9** | **-0.9** |
| HRAO | | | | IAML | | 09 51 06.8 | |
| | comp=Z,59nm,0.2s | | | | | | |
| **PRYS** | **Parys** | **0.61** | **195** | *e*P | **Pg** | **09 51 01.6** | **+0.3** |
| PRYS | | | | *e*S | **Sg** | **09 51 09.0** | **-0.2** |
| PRYS | | | | IAML | | 09 51 11.9 | |
| | comp=Z,37nm,0.3s | | | | | | |
| **SNKL** | **Senekal, Frees** | **1.94** | **174** | *e*P | **Pn** | **09 51 23.9** | **+0.2** |
| SNKL | | | | *e*S | **Sn** | **09 51 48.9** | **+0.3** |
| SNKL | | | | IAML | | 09 51 52.7 | |
| | comp=Z,73nm,0.3s | | | | | | |
| **SWZ** | **Schweizer** | **2.15** | **246** | *e*P | **Pb** | **09 51 27.8** | **-1.4** |
| SWZ | | | | *e*S | **Sb** | **09 51 55.8** | **-0.5** |
| SWZ | | | | IAML | | 09 51 59.9 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **LBTB** | **Lobatse** | **2.19** | **307** | *e*P | **Pg** | **09 51 31.8** | **+0.1** |
| LBTB | | | | *i* S | **Sb** | **09 51 57.6** | **0.0** |
| **LBTB** | **Lobatse** | **2.19** | **307** | *e*P | **Pg** | **09 51 31.8** | **+0.1** |
| LBTB | | | | *i* S | **Sb** | **09 51 57.6** | **0.0** |
| **BOSA** | **Boshof** | **3.04** | **221** | *e*P | **Pn** | **09 51 41.0** | **+2.3** |
| BOSA | | | | *e*S | **Sn** | **09 52 14.5** | **-1.2** |
| **BOSA** | **Boshof** | **3.04** | **221** | *e*P | **Pn** | **09 51 41.0** | **+2.3** |
| BOSA | | | | *e*S | **Sn** | **09 52 14.5** | **-1.2** |
| **CNG** | **Changalane** | **4.17** | **90** | *e*P | **Pb** | **09 52 03.7** | **0.0** |
| CNG | | | | *e*S | **Sb** | **09 52 53.5** | **-1.0** |
| **CNG** | **Changalane** | **4.17** | **90** | *e*P | **Pb** | **09 52 03.7** | **0.0** |
| CNG | | | | *e*S | **Sb** | **09 52 53.5** | **-1.0** |

*GUC **23** 09:50:56.8±0.6,30˚.66S×71˚.44W, h49km±1km, ML4.0*
*NEIC **23** 09:50:57.1±2.4,30˚.66S±0˚.05×71˚.4W±0˚.1, h55km±16km, Error ellipse: s-maj=15.6km s-min=6.9km az=85.0*
**ISC 23 09:50:57.0**±1.6,**30˚66S**±0˚.03×**71˚40W**±0˚.04,**h30**km±16km, **n49**,σ0§**98**/64,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.20** | **267** | | **Pn** | **09 51 04.3** | **+0.4** |
| **CO06** | **Fray Jorge** | **0.20** | **267** | *e*P | **Pn** | **09 51 04.3** | **+0.4** |
| CO06 | | | | *i* S | **Sn** | **09 51 09.7** | **+1.4** |
| **CO03** | **El Pedregal** | **0.64** | **106** | | **Pn** | **09 51 10.2** | **+0.2** |
| **CO03** | **El Pedregal** | **0.64** | **106** | *e*P | **Pn** | **09 51 10.5** | **+0.5** |
| CO03 | | | | *i* S | **Sn** | **09 51 20.3** | **+1.1** |
| CO03 | | | | IAML | | 09 51 20.6 | |
| | comp=E,14μm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **0.64** | **147** | | **Pn** | **09 51 10.1** | **0.0** |
| **CO02** | **Combarbal** | **0.64** | **147** | *e*P | **Pn** | **09 51 10.2** | **0.0** |
| CO02 | | | | *i* S | **Sn** | **09 51 19.6** | **+0.3** |
| CO02 | | | | IAML | | 09 51 21.3 | |
| | comp=E,19μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **0.71** | **47** | | **Pb** | **09 51 11.6** | **+0.4** |
| **GO04** | **Tololo Observa** | **0.71** | **47** | *e*P | **Pb** | **09 51 11.5** | **+0.4** |
| GO04 | | | | *i* S | **Sn** | **09 51 22.3** | **+1.0** |
| GO04 | | | | IAML | | 09 51 27.1 | |
| | comp=N,6μm,0.5s | | | | | | |
| **CO05** | **La Serena** | **0.76** | **11** | | **Pn** | **09 51 11.5** | **-0.1** |
| **CO05** | **La Serena** | **0.76** | **11** | *e*P | **Pn** | **09 51 11.5** | **-0.1** |
| CO05 | | | | *i* S | **Sn** | **09 51 22.4** | **+0.5** |
| **LCO** | **Las Campanas** | **1.76** | **20** | Pn | **Pn** | **09 51 26.0** | **+0.4** |
| **LCO** | **Las Campanas** | **1.76** | **20** | *e*P | **Pn** | **09 51 26.1** | **+0.4** |
| LCO | | | | *i* S | **Sn** | **09 51 48.3** | **+1.3** |
| **VA06** | **Catapilco** | **1.89** | **177** | | **Pn** | **09 51 27.6** | **+0.4** |
| **VA06** | **Catapilco** | **1.89** | **177** | *e*P | **Pn** | **09 51 27.6** | **+0.4** |
| VA06 | | | | *i* S | **Sn** | **09 51 50.9** | **+0.9** |
| VA06 | | | | IAML | | 09 51 58.4 | |
| | comp=N,1μm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **2.22** | **161** | | **Pn** | **09 51 32.6** | **+0.9** |
| **VA03** | **San Esteban** | **2.22** | **161** | *e*P | **Pn** | **09 51 33.1** | **+1.3** |
| VA03 | | | | *i* S | **Sn** | **09 51 59.9** | **+1.8** |
| VA03 | | | | IAML | | 09 52 08.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **ROCH** | **El Roble** | **2.33** | **172** | *e*P | **Pn** | **09 51 32.7** | **-0.7** |
| ROCH | | | | *i* S | **Sn** | **09 52 02.4** | **+1.3** |
| ROCH | | | | IAML | | 09 52 06.8 | |
| | comp=N,741nm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **2.33** | **172** | | **Pn** | **09 51 32.7** | **-0.8** |
| **VA01** | **Torpederas** | **2.36** | **185** | Pn | **Pn** | **09 51 33.1** | **-0.5** |
| **VA01** | **Torpederas** | **2.36** | **185** | *e*P | **Pn** | **09 51 34.3** | **+0.6** |
| **AC04** | **Llanos de Chal** | **2.47** | **7** | Pn | **Pn** | **09 51 34.6** | **-0.6** |
| **AC04** | **Llanos de Chal** | **2.47** | **7** | *e*P | **Pn** | **09 51 35.5** | **+0.3** |
| AC04 | | | | *i* S | **Sn** | **09 52 05.4** | **+1.2** |
| **PEL** | **Peldehue** | **2.55** | **166** | Pn | **Pn** | **09 51 34.3** | **-2.0** |
| **MT02** | **Curacav** | **2.60** | **175** | | **Pn** | **09 51 36.1** | **-0.8** |
| **MT02** | **Curacav** | **2.60** | **175** | *e*P | **Pn** | **09 51 37.5** | **+0.6** |
| MT02 | | | | *i* S | **Sn** | **09 52 08.6** | **+1.1** |
| MT02 | | | | IAML | | 09 52 14.6 | |
| | comp=E,350nm,0.2s | | | | | | |
| **MT05** | **Renca** | **2.78** | **168** | Pn | **Pn** | **09 51 39.3** | **-0.1** |
| **MT03** | **Universidad Ad** | **2.92** | **165** | | **Pn** | **09 51 40.2** | **-1.2** |
| **VA05** | **Santo Domingo** | **2.99** | **183** | *e*P | **Pn** | **09 51 42.8** | **+0.5** |
| **MT09** | **Talagante** | **3.12** | **174** | | **Pn** | **09 51 44.8** | **+0.5** |
| **MT09** | **Talagante** | **3.12** | **174** | *e*P | **Pn** | **09 51 45.0** | **+0.7** |
| MT09 | | | | *i* S | **Sn** | **09 52 21.2** | **+0.6** |
| MT09 | | | | IAML | | 09 52 31.9 | |
| | comp=N,456nm,0.2s | | | | | | |
| **MT01** | **Popeta** | **3.19** | **178** | | **Pn** | **09 51 45.8** | **+0.7** |
| **MT01** | **Popeta** | **3.19** | **178** | *e*P | **Pn** | **09 51 45.4** | **+0.2** |
| MT01 | | | | *i* S | **Sn** | **09 52 22.6** | **+0.4** |
| MT01 | | | | IAML | | 09 52 35.9 | |
| | comp=E,324nm,0.2s | | | | | | |
| **GO03** | **Copiap** | **3.23** | **19** | Pn | **Pn** | **09 51 46.1** | **+0.5** |
| **LMEL** | **Las Melosas** | **3.33** | **163** | | **Pn** | **09 51 45.7** | **-1.5** |
| **LMEL** | **Las Melosas** | **3.33** | **163** | *i* S | **Sn** | **09 52 26.9** | **+1.0** |
| **BO04** | **La Punta** | **3.38** | **169** | Pn | **Pn** | **09 51 47.3** | **-0.4** |
| **BO04** | **La Punta** | **3.38** | **169** | *e*P | **Pn** | **09 51 48.8** | **+1.0** |
| BO04 | | | | *i* S | **Sn** | **09 52 27.0** | **+0.1** |
| BO04 | | | | IAML | | 09 52 45.6 | |
| | comp=N,331nm,0.2s | | | | | | |
| **BO01** | **Tunca** | **3.73** | **176** | | **Pn** | **09 51 54.1** | **+1.6** |
| **BO01** | **Tunca** | **3.73** | **176** | *e*P | **Pn** | **09 51 52.6** | **+0.2** |
| BO01 | | | | *i* S | **Sn** | **09 52 35.5** | **+0.2** |
| **BO02** | **Sierra Bellavi** | **4.15** | **173** | | **Pn** | **09 51 58.8** | **+0.4** |
| **AC02** | **Maricunga** | **4.30** | **28** | Pn | **Pn** | **09 52 01.6** | **+0.8** |
| **GO05** | **Huala** | **4.36** | **186** | Pn | **Pn** | **09 52 00.1** | **-1.1** |
| **GO05** | **Huala** | **4.36** | **186** | *e*P | **Pn** | **09 51 59.8** | **-1.4** |
| **PB14** | **IPOC Station P** | **6.08** | **9** | Pn | **Pn** | **09 52 23.8** | **-1.3** |
| **PB06** | **IPOC Station P** | **8.09** | **12** | Pn | **Pn** | **09 52 50.5** | **-2.1** |
| **LC01** | **Cunco** | **8.22** | **183** | Pn | **Pn** | **09 52 52.6** | **-1.6** |
| **LVC** | **Limon Verde** | **8.32** | **16** | Pn | **Pn** | **09 52 53.1** | **-2.8** |
| **PB04** | **IPOC Station P** | **8.37** | **8** | Pn | **Pn** | **09 52 55.6** | **-0.8** |
| **PB08** | **IPOC Station P** | **10.67** | **11** | Pn | **Pn** | **09 53 28.1** | **-0.1** |

*DDA **23** 10:02:42.3±0.0,41˚.48N×44˚.03E, h7km±5km, ML2.2*
*TIF **23** 10:02:42.7,41˚.39N×44˚.03E, h15km*
*NORS **23** 10:02:45.7±0.0,41˚.55N×44˚.06E, h1km, MPVA3.2*
**ISC 23 10:02:43.5**±0.9,**41˚42N**±0˚.02×**44˚04E**±0˚.02,**h10**km±6km, **n29**,σ1§**26**/58,**Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRLG** | **Trialeti** | **0.13** | **20** | P | **Pg** | **10 02 47.0** | **+0.2** |
| TRLG | | | | S | **Sg** | **10 02 49.4** | **+0.4** |
| **DMNI** | **Dmanisi** | **0.14** | **129** | P | **Pg** | **10 02 47.0** | **+0.1** |
| DMNI | | | | S | **Sg** | **10 02 49.3** | **+0.1** |
| **BRNG** | **Burnasheti** | **0.26** | **322** | P | **Pb** | **10 02 49.6** | **-0.8** |
| BRNG | | | | S | **Sb** | **10 02 54.0** | **-1.0** |
| **KZRT** | **Kazreti** | **0.27** | **97** | P | **Pb** | **10 02 49.3** | **-1.2** |
| KZRT | | | | S | **Sg** | **10 02 53.2** | **+0.5** |
| **KZRT** | **Kazreti** | **0.27** | **97** | P | **Pb** | **10 02 49.2** | **-1.2** |
| KZRT | | | | S | **Sg** | **10 02 53.2** | **+0.5** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **BGD** | **Bogdanovka** | **0.37** | **245** | P | **Pg** | **10 02 50.7** | **-0.1** |
| BGD | | | | S | **Sg** | **10 02 55.9** | **+0.2** |
| **AKH** | **Akhalkalaki** | **0.41** | **269** | P | **Pg** | **10 02 51.5** | **-0.2** |
| AKH | | | | S | **Sg** | **10 02 57.2** | **0.0** |
| **BTNK** | **Botanikuri** | **0.63** | **65** | P | **Pg** | **10 02 53.4** | **-2.3** |
| BTNK | | | | S | **Sg** | **10 03 02.5** | **-1.4** |
| **BTNK** | **Botanikuri** | **0.63** | **65** | P | **Pg** | **10 02 53.3** | **-2.3** |
| BTNK | | | | S | **Sg** | **10 03 02.3** | **-1.6** |
| BTNK | | | | *i* AML | AML | 10 03 03.0 | |
| | comp=E,354nm,0.1s | | | | | | |
| **EAK** | **Akyaka** | **0.80** | **204** | P | **Pg** | **10 02 58.0** | **-1.0** |
| EAK | | | | S | **Sg** | **10 03 09.2** | **-0.3** |
| EAK | | | | *i* AML | AML | 10 03 21.0 | |
| | comp=E,65nm,0.6s | | | | | | |
| **ABS** | **Abastumani** | **0.98** | **290** | P | **Pg** | **10 03 01.9** | **-0.5** |
| ABS | | | | S | **Sb** | **10 03 15.8** | **+0.1** |
| **DIGO** | **Kars** | **1.12** | **207** | P | **Pb** | **10 03 04.2** | **-0.9** |
| DIGO | | | | S | **Sb** | **10 03 19.1** | **-0.8** |
| DIGO | | | | *i* AML | AML | 10 03 23.0 | |
| | comp=E,54nm,0.4s | | | | | | |
| **TKB** | **Tkibuli** | **1.22** | **320** | P | **Pg** | **10 03 06.6** | **-0.3** |
| TKB | | | | S | **Sn** | **10 03 23.2** | **+0.1** |
| **ONI** | **Oni** | **1.25** | **340** | P | **Pg** | **10 03 07.0** | **-0.6** |
| ONI | | | | S | **Sn** | **10 03 24.1** | **+0.1** |
| **ONI** | **Oni** | **1.25** | **340** | *e*Pg | **Pg** | **10 03 07.4** | **-0.1** |
| ONI | | | | *e*Sg | **Sn** | **10 03 24.4** | **+0.4** |
| **PNSH** | **Pansheti** | **1.29** | **19** | P | **Pg** | **10 03 08.1** | **-0.1** |
| PNSH | | | | S | **Sn** | **10 03 26.4** | **+1.3** |
| **ZEI** | **Tsey** | **1.37** | **356** | *e*Pg | **Pg** | **10 03 10.3** | **+0.4** |
| ZEI | | | | *e*Sg | **Sg** | **10 03 28.7** | **+1.0** |
| **LACR** | **Lac** | **1.42** | **8** | *i* Pg | **Pg** | **10 03 10.6** | **-0.2** |
| LACR | | | | *e*Sg | **Sg** | **10 03 30.2** | **+1.0** |
| **DIGR** | **Digorskoe uzhe** | **1.52** | **347** | *e*Pg | **Pg** | **10 03 12.7** | **0.0** |
| DIGR | | | | *e*Sg | **Sg** | **10 03 34.2** | **+1.8** |
| **DDFL** | **Dedoflistskaro** | **1.56** | **88** | P | **Pg** | **10 03 14.1** | **+0.7** |
| DDFL | | | | S | **Sg** | **10 03 40.4** | **+6.7** |
| **DDFL** | **Dedoflistskaro** | **1.56** | **88** | P | **Pg** | **10 03 13.2** | **-0.2** |
| DDFL | | | | S | **Sg** | **10 03 34.4** | **+0.7** |
| DDFL | | | | *i* AML | AML | 10 03 41.0 | |
| | comp=E,48nm,0.3s | | | | | | |
| **DAGI** | **Agillar** | **1.64** | **259** | P | **Pn** | **10 03 13.2** | **+0.8** |
| DAGI | | | | S | **Sb** | **10 03 36.0** | **+1.4** |
| **LGD** | **Lagodekhi** | **1.70** | **75** | P | **Pg** | **10 03 15.2** | **-0.9** |
| LGD | | | | S | **Sg** | **10 03 39.1** | **+1.0** |
| **BATM** | **Batumi** | **1.77** | **277** | P | **Pb** | **10 03 15.6** | **-0.5** |
| BATM | | | | S | **Sb** | **10 03 38.4** | **+0.1** |
| **DBOC** | **Borcka** | **1.79** | **268** | P | **Pb** | **10 03 15.9** | **-0.5** |
| DBOC | | | | S | **Sb** | **10 03 38.7** | **-0.1** |
| **DDEM** | **Demirkent** | **1.81** | **254** | P | **Pb** | **10 03 16.0** | **-0.7** |
| DDEM | | | | S | **Sb** | **10 03 39.8** | **+0.4** |
| DDEM | | | | *i* AML | AML | 10 03 47.0 | |
| | comp=N,27nm,0.4s | | | | | | |
| **DBAD** | **Bademkaya** | **1.82** | **258** | P | **Pb** | **10 03 16.4** | **-0.5** |
| DBAD | | | | S | **Sb** | **10 03 40.2** | **+0.5** |
| **NEY** | **Neytrino** | **2.08** | **332** | *e*Pg | **Pg** | **10 03 22.4** | **-0.9** |
| NEY | | | | *e*Sg | **Sg** | **10 03 49.5** | **-0.7** |
| **SHA1** | **Shidzhatmaz** | **2.53** | **337** | *e*Pn | **Pg** | **10 03 30.7** | **-1.4** |
| SHA1 | | | | *e*Sn | **Sg** | **10 04 04.0** | **-0.9** |

*NNC **23** 10:05:08.7±4.2,35˚.08N×68˚.53E, h0km, mb4.3, mpv4.2, Error ellipse: s-maj=42.1km s-min=26.4km az=151.0*
*IDC **23** 10:05:33.9±1.1,37˚.07N×68˚.98E, h0km, mb3.8/14, mb1 3.9/20, mb1mx3.7/62, mbtmp3.9/20, ML3.7/6, Error ellipse: s-maj=20.2km s-min=14.0km az=154.0*
**ISC 23 10:05:35.0**±0.9,**37˚07N**±0˚.10×**68˚90E**±0˚.07,**h10**km,**n33**, σ2§**14**/38,**mb3.9**/11,**5C-2D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK08** | **Karatay Array** | **6.15** | **11** | ⇓P | **Pn** | **10 07 06.7** | **+0.8** |
| | 1.5nm,0.2s,baz=182,slow=11 | | | | | | |
| KK08 | | | | ⇑S | **Sb** | **10 08 42.3** | **+6.5** |
| | 26nm,0.7s,baz=189,slow=26 | | | | | | |
| **AML** | **Almayashu** | **6.27** | **35** | P | **Pn** | **10 07 10.4** | **+2.6** |
| | SNR=19 | | | | | | |
| **UCH** | **Uchtor** | **6.73** | **38** | P | **Pn** | **10 07 14.9** | **+0.6** |
| | SNR=21 | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **36** | Pn | **Pn** | **10 07 19.6** | **+1.4** |
| | 8.0nm,0.3s,baz=210,slow=6.0,SNR=100 | | | | | | |
| AAK | | | | Sn | **Sn** | **10 08 38.8** | **+0.6** |
| | 0.4nm,0.3s,baz=123,slow=11,SNR=1.5 | | | | | | |
| AAK | | | | Lg | Lg | 10 09 10.0 | |
| | 0.5nm,0.3s,baz=330,slow=18,SNR=1.7 | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **36** | P | **Pn** | **10 07 19.7** | **+1.6** |
| | SNR=29 | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **36** | ⇑P | **Pn** | **10 07 19.5** | **+1.4** |
| | 11nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sb** | **10 09 00.5** | **-0.8** |
| | 6.6nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **7.26** | **38** | P | **Pn** | **10 07 22.7** | **+1.4** |
| | SNR=24 | | | | | | |
| **CHMS** | **Chmnysh** | **7.43** | **35** | P | **Pn** | **10 07 24.1** | **+0.6** |
| | SNR=5.8 | | | | | | |
| **USP** | **Ospenovka** | **7.53** | **33** | P | **Pn** | **10 07 25.5** | **+0.6** |
| | SNR=9.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.78** | **39** | P | **Pn** | **10 07 28.9** | **+0.4** |
| | SNR=17 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.78** | **39** | ⇑P | **Pn** | **10 07 28.7** | **+0.2** |
| | 6.4nm,0.4s | | | | | | |
| TKM2 | | | | ⇓S | **Sb** | **10 09 17.8** | **-5.1** |
| | 6.9nm,0.9s | | | | | | |
| **GEYT** | **Alibeck** | **8.61** | **279** | Pn | **Pn** | **10 07 39.2** | **-0.5** |
| | 0.7nm,0.3s,baz=274,slow=24,SNR=2.1 | | | | | | |
| GEYT | | | | Sn | **Sn** | **10 09 13.1** | **-3.8** |
| | 1.2nm,0.3s,baz=50,slow=33,SNR=1.7 | | | | | | |
| GEYT | | | | Lg | Lg | 10 10 10.2 | |
| | baz=74,slow=41,SNR=1.3 | | | | | | |
| **AB31** | **Akbulak array** | **13.81** | **335** | P | **Pn** | **10 08 47.0** | **-3.6** |
| | 1.1nm,0.5s,baz=154,slow=12,SNR=46 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.90** | **41** | Pn | **Pn** | **10 08 50.5** | **-1.6** |
| | 0.2nm,0.3s,baz=230,slow=15,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.21** | **24** | Pn | **Pn** | **10 09 06.7** | **-3.0** |
| | 0.1nm,0.3s,baz=214,slow=12,SNR=3.3 | | | | | | |
| KURBB | | | | Lg | Lg | 10 13 35.9 | |
| | 0.0nm,0.3s,baz=211,slow=28,SNR=2.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.48** | **333** | Pn | **Pn** | **10 09 10.8** | **-2.4** |
| | 0.3nm,0.3s,baz=203,slow=7.4,SNR=5.3 | | | | | | |
| AKTO | | | | Sn | Sn | 10 11 51.5 | -13 |
| | 0.1nm,0.3s,baz=128,slow=13,SNR=1.9 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.48** | **333** | ⇑P | **Pn** | **10 09 10.4** | **-2.9** |
| | 2.8nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.99** | **3** | Pn | **Pn** | **10 09 16.9** | **-3.0** |
| | 1.1nm,0.3s,baz=95,slow=12,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.15** | **28** | P | **P** | **10 10 07.5** | **-1.7** |
| | 2.6nm,0.3s,baz=215,slow=10,SNR=19 | | | | | | |
| **ARU** | **Arti** | **20.58** | **344** | P | **P** | **10 10 13.9** | **+0.1** |
| | 1.5nm,0.2s,baz=119,slow=21,SNR=3.1 | | | | | | |
| **KBZ** | **Khabaz** | **20.84** | **297** | P | **P** | **10 10 18.0** | **+1.3** |
| | 1.5nm,0.7s,baz=133,slow=7.2,SNR=5.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **31.27** | **309** | P | **P** | **10 11 56.0** | **+1.2** |
| | 0.6nm,0.5s,baz=86,slow=6.9,SNR=1.7 | | | | | | |
| **NRIK** | **Noril'sk** | **33.89** | **12** | P | **P** | **10 12 17.9** | **+0.4** |
| | 1.0nm,0.4s,baz=190,slow=5.5,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **36.07** | **326** | P | **P** | **10 12 36.8** | **+0.4** |
| | 1.4nm,0.7s,baz=113,slow=14,SNR=1.9 | | | | | | |
| **HFS** | **Hagfors** | **41.58** | **322** | P | **P** | **10 13 23.1** | **+0.5** |
| | 1.5nm,0.5s,baz=98,slow=10,SNR=1.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **42.91** | **323** | P | **P** | **10 13 33.6** | **+0.1** |
| | comp=Z,0.7nm,0.5s,baz=98,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **42.91** | **323** | P | **P** | **10 13 33.4** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=8.1,SNR=2.0 | | | | | | |
| **TIXI** | **Tiksi** | **45.89** | **22** | P | **P** | **10 13 56.9** | **-0.2** |
| | comp=Z,1.0nm,0.3s,baz=92,slow=21,SNR=7.5 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.56** | **347** | P | **P** | **10 14 03.4** | **+1.1** |
| | comp=Z,6.1nm,0.8s,baz=128,slow=11,SNR=9.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.05** | **267** | P | **P** | **10 16 11.0** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=62,slow=5.7,SNR=2.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.74** | **2** | P | **P** | **10 17 48.2** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=352,slow=5.6,SNR=8.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.73** | **121** | P | **P** | **10 18 04.8** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=330,slow=4.6,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **85.97** | **124** | P | **P** | **10 18 16.5** | **+0.9** |
| | comp=Z,0.3nm,0.8s,baz=311,slow=4.5,SNR=2.8 | | | | | | |

*IDC **23** 10:05:44.8±1.8,31˚.13N×130˚.24E, h159km±18km, mb3.4/8, mb1 3.5/11, mb1mx3.2/67, mbtmp3.8/11, Error ellipse: s-maj=31.8km s-min=20.2km az=71.0*
*NEIC **23** 10:05:44.7±2.2,31˚.1N±0˚.1×130˚.2E±0˚.1, h146km±6km, mb4.2/5, Error ellipse: s-maj=17.5km s-min=12.6km az=221.0*

*NIED **23** 10:05:44.4,31˚.01N×130˚.39E, h148km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$2.84; $M_{\theta\theta}$-2.69; $M_{\phi\phi}$-0.15; $M_{r\theta}$-0.20; $M_{r\phi}$-4.76; $M_{\theta\phi}$5.73; Fault plane solution: $M_0$7.94000×$10^{14}$ NP1:$\phi_s$14.00000°, δ76.00000°, λ51.00000°. NP2:$\phi_s$268.00000°, δ41.00000°, λ159.00000°.*
*JMA **23** 10:05:44.4±0.1,31˚.01N×130˚.38E, h148km±1km, M3.5*
**ISC 23 10:05:43.8**±0.7,**31˚01N**±0˚.05×**130˚28E**±0˚.06,**h150**km±5km, **n35**,σ1§**20**/46,**mb3.8**/9,**Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSU** | **Suzuyama** | **0.51** | **17** | P | **Pn** | **10 06 05.7** | **+0.5** |
| JSU | | | | S | **Sn** | **10 06 22.1** | **+0.5** |
| **JSU** | **Suzuyama** | **0.51** | **17** | | **Pn** | **10 06 05.8** | **+0.5** |
| **JKC** | **Kuchinoerabu** | **0.56** | **188** | P | **Pn** | **10 06 05.9** | **+0.5** |
| JKC | | | | S | **Sn** | **10 06 22.4** | **+0.6** |
| **JTSR** | **Tashiro 2** | **0.57** | **74** | P | **Pn** | **10 06 05.4** | **-0.1** |
| JTSR | | | | S | **Sn** | **10 06 21.2** | **-0.8** |
| **JTN** | **Tanegashima 3** | **0.70** | **121** | P | **Pn** | **10 06 06.4** | **+0.1** |
| JTN | | | | S | **Sn** | **10 06 23.2** | **-0.2** |
| **JYAK** | **Yakushimahirau** | **0.80** | **166** | P | **Pn** | **10 06 07.1** | **+0.1** |
| JYAK | | | | S | **Sn** | **10 06 24.1** | **-0.5** |
| **JMTN** | **Minamitane** | **0.81** | **139** | P | **Pn** | **10 06 07.2** | **+0.1** |
| JMTN | | | | S | **Sn** | **10 06 24.6** | **-0.2** |
| **JSJ** | **Shimokoshiki** | **0.82** | **324** | P | **Pn** | **10 06 07.5** | **+0.4** |
| JSJ | | | | S | **Sn** | **10 06 25.6** | **+0.6** |
| **JTZ** | **Takazaki** | **1.12** | **38** | P | **Pn** | **10 06 09.8** | **+0.2** |
| JTZ | | | | S | **Sn** | **10 06 28.7** | **-0.7** |
| **JNN** | **Nakanoshima** | **1.22** | **197** | P | **Pn** | **10 06 11.2** | **+0.6** |
| JNN | | | | eS | **Sn** | **10 06 31.6** | **+0.6** |
| **JIU3** | **Izumi3** | **1.60** | **16** | P | **Pn** | **10 06 15.0** | **+0.7** |
| JIU3 | | | | S | **Sn** | **10 06 38.2** | **+0.3** |
| **JNU** | **Nakatsue** | **2.16** | **13** | P | **Pn** | **10 06 21.1** | **+0.3** |
| | 7.4nm,0.3s,baz=170,slow=6.1,SNR=241 | | | | | | |
| JNU | | | | S | **Sn** | **10 06 49.4** | **0.0** |
| | 10nm,0.3s,baz=240,slow=22,SNR=9.1 | | | | | | |
| **JTU** | **Tsushima** | **3.58** | **348** | Pn | **Pn** | **10 06 39.3** | **+0.8** |
| **JMN** | **Monobe** | **4.07** | **47** | | **Pn** | **10 06 44.6** | **-0.4** |
| **JHS** | **Saijyo** | **4.63** | **30** | Pn | **Pn** | **10 06 52.2** | **-0.1** |
| **KSRS** | **Korea Array** | **6.71** | **344** | P | **Pn** | **10 07 21.4** | **+1.4** |
| | 0.5nm,0.3s,baz=168,slow=13,SNR=9.3 | | | | | | |
| **INU** | **Inuyama** | **7.11** | **51** | Pn | **Pn** | **10 07 26.7** | **+1.5** |
| **JGF** | **Kuroka** | **7.48** | **50** | Pn | **Pn** | **10 07 31.4** | **+1.2** |
| **JHJ2** | **Mitsune** | **8.36** | **73** | Pn | **Pn** | **10 07 46.0** | **+4.2** |
| **MAJO** | **Matsushiro** | **8.59** | **48** | Pn | **Pn** | **10 07 47.5** | **+2.5** |
| **MJB9** | **Matsu-Tunnel** | **8.59** | **48** | Pn | **Pn** | **10 07 47.0** | **+1.9** |
| **MJAR** | **Matsushiro Arr** | **8.60** | **48** | P | **Pn** | **10 07 47.6** | **+2.6** |
| | 0.2nm,0.3s,baz=242,slow=14,SNR=7.0 | | | | | | |
| MJAR | | | | S | **Sn** | **10 09 17.8** | **-2.8** |
| | 0.1nm,0.3s,baz=171,slow=16,SNR=5.0 | | | | | | |
| **ENH** | **Enshi** | **17.91** | **273** | P | **Pn** | **10 09 44.0** | **+0.4** |
| ENH | | | | IAmb | IAmb | 10 09 45.1 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **24.80** | **319** | P | **P** | **10 10 51.5** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=144,slow=7.9,SNR=5.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.98** | **254** | P | **P** | **10 11 47.0** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=59,slow=8.7,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.89** | **307** | P | **P** | **10 13 02.4** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=88,slow=10.0,SNR=2.4 | | | | | | |
| **BRVK** | **Borovoye** | **48.10** | **315** | P | **P** | **10 14 08.4** | **+0.3** |
| BRVK | | | | IAmb | IAmb | 10 14 29.5 | |
| | comp=Z,8.5nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **54.48** | **176** | P | **P** | **10 14 56.7** | **+0.8** |
| | comp=Z,0.2nm,0.6s,baz=6.9,slow=14,SNR=5.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **54.79** | **311** | P | **P** | **10 14 59.0** | **+1.1** |
| **KBZ** | **Khabaz** | **67.57** | **308** | P | **P** | **10 16 24.4** | **+0.4** |
| | comp=Z,2.4nm,0.8s,baz=62,slow=4.5,SNR

CART S Sn 10 13 48.6 -2.6
**CART Cartagena 2.82 46** Pn Pn 10 13 17.0 -0.6
**CART Cartagena 2.82 46** P Pn 10 13 17.6 0.0
CART S Sn 10 13 48.3 -2.9
**ECAB El Cabril 2.82 329** Pn Pn 10 13 17.3 -0.4
ECAB Sn Sn 10 13 51.3 -0.1
ECAB Sb Sb 10 13 59.2 +1.6
ECAB *i* Vmb_Lg 10 14 03.0
**CZD Col de Zad 2.90 205** P Pn 10 13 19.0 +0.1
**CZD Col de Zad 2.90 205** P Pn 10 13 19.0 +0.1
**ARNO Arenosillo 2.92 300** P Pn 10 13 21.6 +2.6
ARNO S Sn 10 13 53.9 +0.2
**MD31 MD31 2.96 200** P Pn 10 13 19.3 -0.3
**MDT Midelt 2.97 197** Pn Pn 10 13 19.4 -0.4
14nm,0.3s,baz=154,slow=6.7,SNR=82
MDT Sn Sn 10 13 55.1 0.0
32nm,0.3s,baz=2.4,slow=20,SNR=5.8
MDT Lg Lg 10 14 03.7
34nm,0.3s,baz=40,slow=15,SNR=5.1
**MDT Midelt 2.97 197** P Pn 10 13 19.4 -0.4
**ZHG ZHG 3.37 230** P Pn 10 13 25.1 -0.1
**ZHG ZHG 3.37 230** P Pn 10 13 24.1 -1.0
**ETOB Tobarra 3.38 28** Pn Pn 10 13 26.4 +1.0
ETOB Sn Sn 10 14 07.6 +2.3
ETOB *i* Vmb_Lg 10 14 37.5
**EGRO El Granado 3.66 302** Pn Pn 10 13 28.1 -1.0
EGRO Sn Sn 10 14 09.7 -2.2
**PVAQ Vaqueiros 3.76 299** *e*Pn Sn 10 13 29.4 -1.1
PVAQ *e*Sn Sn 10 14 12.4 -2.1
PVAQ A A 10 14 17.4
203nm,0.4s
**PVAQ Vaqueiros 3.76 299** Pn Pn 10 13 28.5 -2.0
**PVAQ Vaqueiros 3.76 299** P Pn 10 13 29.5 -1.1
PVAQ S Sn 10 14 15.9 +1.4
**AFON Font Roja 3.85 38** Pn Pn 10 13 32.9 +1.1
AFON *i* Vmb_Lg 10 15 03.8
**PBDV Barranco-do-Ve 3.85 295**‖ *e*Pn Pn 10 13 30.8 -1.0
PBDV *e*Sn Sn 10 14 14.9 -1.8
PBDV A A 10 14 25.8
142nm,0.5s
**PAB San Pablo 3.92 351** Pn Pn 10 13 32.8 0.0
**PAB San Pablo 3.92 351** Pn Pn 10 13 33.1 +0.3
PAB Sn Sn 10 14 19.9 +1.3
PAB Sg Sg 10 14 36.6 -2.4
PAB *i* Vmb_Lg 10 14 53.3
**PAB San Pablo 3.92 351** P Pn 10 13 33.4 +0.6
**AVE Averroes 3.96 234** S Sn 10 14 17.9 -1.4
**AVE Averroes 3.96 234** P Pn 10 13 32.5 -0.7
**ESDC Sonseca Array 4.01 356** Pn Pn 10 13 34.7 +0.7
7.0nm,0.3s,baz=177,slow=12,SNR=79
ESDC Lg Lg 10 14 37.1
12nm,0.3s,baz=174,slow=28,SNR=2.3
ESDC LR LR 10 15 32.4
comp=Z,461nm,20.8s,baz=228,slow=45
**ESDC Sonseca Array 4.01 356** Pn Pn 10 13 34.6 +0.6
ESDC Pg Pb 10 13 44.0 +0.4
ESDC Sn Sn 10 14 21.1 +0.4
ESDC Sg Sb 10 14 35.6 +3.8
ESDC *i* Vmb_Lg 10 14 53.1
**ESBB Sonseca Array 4.01 356** Pn Pn 10 13 34.8 +0.7
**FIGM Figuig 4.01 151** P Pn 10 13 35.0 +0.8
**EBEN2 Beniarda presa 4.04 41** Pn Pn 10 13 34.9 +0.5
EBEN2 Sn Sn 10 14 21.6 +0.3
EBEN2 *i* Vmb_Lg 10 14 54.9
**PCVE Castro Verde 4.09 300** *e*Pn Pn 10 13 34.0 -1.1
PCVE *e*Sn Sn 10 14 20.8 -1.8
PCVE A A 10 14 22.6
130nm,0.4s
**GOLM Goulmima 4.12 197** P Pg 10 13 55.0 +2.9
**GOLM Goulmima 4.12 197** P Pg 10 13 55.0 +2.9
**EBAD Badajoz 4.13 319** Pn Pn 10 13 34.9 -0.7
EBAD Sn Sn 10 14 21.8 -1.8
**PBEJ Beja 4.17 306** *e*Pn Pn 10 13 35.4 -0.8
PBEJ *e*Sn Sn 10 14 22.1 -2.5
PBEJ A A 10 14 28.9
114nm,0.4s
**MORF Marmelete 4.41 293** *e*P Pn 10 13 38.1 -1.3
MORF *e*S Sn 10 14 26.2 -4.2
MORF IAML 10 14 33.9
comp=N,232nm,0.5s
**MORF Marmelete 4.41 293** *e*Pn Pn 10 13 38.2 -1.3
MORF *e*Sn Sn 10 14 28.1 -2.4
MORF A A 10 14 35.0
comp=N,111nm,0.3s
**ECHE Chera 4.43 27** Pn Pn 10 13 40.1 +0.4
ECHE *i* Vmb_Lg 10 15 12.4
**PFVI Vila Bisbo 4.48 291** *e*Pn Pn 10 13 40.2 -0.2
PFVI *e*Sn Sn 10 14 30.4 -1.9
PFVI A A 10 14 39.7
comp=N,102nm,0.8s
**PFVI Vila Bisbo 4.48 291** Pn 10 13 39.5 -0.9
**PFVI Vila Bisbo 4.48 291** P Pn 10 13 40.2 -0.2
**PFVI Vila Bisbo 4.48 291** P Pn 10 13 42.3 +1.8
**PESTR Estremoz 4.52 316** *e*Pn Pn 10 13 40.6 -0.5
PESTR *e*Sn Sn 10 14 31.3 -2.0
PESTR A A 10 15 00.0
comp=N,84nm,0.6s
**PESTR Estremoz 4.52 316** Pn Pn 10 13 40.5 -0.5
**PESTR Estremoz 4.52 316** P Pn 10 13 40.5 -0.5
**PESTR Estremoz 4.52 316** P Pn 10 13 42.3 +1.3
**PTEO Sao Teotonio 4.55 296** *e*Pn Pn 10 13 40.6 -0.7
PTEO *e*Sn Sn 10 14 32.5 -1.4
PTEO A A 10 14 36.7
comp=N,149nm,0.6s
**EVO Evora 4.56 310** P Pn 10 13 42.9 +1.4
EVO S Sn 10 14 32.7 -1.4
**EVO Evora 4.56 310** *e*Pn Pn 10 13 43.0 +1.5
EVO *e*Sn Sn 10 14 31.7 -2.4
EVO A A 10 14 39.9
comp=N,110nm,0.5s
**UCM Universidad Co 4.64 3** P Pn 10 13 44.2 +1.5
UCM S Sn 10 14 30.3 -5.9
**PNCL Nicolau / Gran 4.66 303** *e*Pn Pn 10 13 42.0 -0.9
PNCL *e*Sn Sn 10 14 34.6 -2.1
PNCL A A 10 14 38.1
comp=N,82nm,0.4s
**EPLA Plasencia 4.82 336** Pn Pn 10 13 45.0 -0.1
EPLA Sn Sn 10 14 39.7 -0.9
EPLA *i* Vmb_Lg 10 15 16.1
**PMRV Marv??o 4.83 322** *e*Pn Pn 10 13 45.4 +0.2
PMRV *e*Sn Sn 10 14 38.9 -1.9
PMRV A A 10 15 16.2
comp=N,96nm,0.5s
**GUD Guadarrama 4.99 355** Pn Pn 10 13 47.4 -0.1
GUD Sn Sn 10 14 43.3 -1.7
GUD *i* Vmb_Lg 10 15 38.6
**PMTG Montargil 5.03 314** *e*Pn Pn 10 13 47.1 -0.8
PMTG *e*Sn Sn 10 14 43.0 -2.7
PMTG A A 10 15 17.4
comp=N,89nm,0.4s
**TZRR Tazzarine 5.15 200** P Pn 10 13 50.0 +0.3
**TZRR Tazzarine 5.15 200** P Pn 10 13 50.0 +0.3
**PCBR Castelo Branco 5.19 325**‖ *e*Pn Pn 10 13 50.5 +0.4
PCBR *e*Sn Sn 10 14 47.3 -2.4
PCBR A A 10 14 49.6
comp=N,104nm,0.5s
**PACT Alcochete 5.21 308**‖ *e*Pn Pn 10 13 50.7 +0.2
PACT *e*Sn Sn 10 14 48.3 -2.0
**ETOR Torete 5.28 13** Pn Pn 10 13 52.9 +1.4
ETOR Sn Sn 10 14 53.6 +1.5
ETOR Sg Sb 10 15 12.9 +4.6
ETOR *i* Vmb_Lg 10 15 36.9
**LIS Lisbon 5.39 306** *e*P Pn 10 13 51.7 -1.2
**LIS Lisbon 5.39 306** *e*Pn Pn 10 13 53.3 +0.4
LIS *e*Sn Sn 10 14 54.0 -0.7
**ECOL Islas Columbre 5.40 37** Pn Pn 10 13 52.6 -0.5
**PMST Lisbon--Monsan 5.42 306** *e*Pn Pn 10 13 53.3 -0.1
PMST *e*Sn Sn 10 14 53.2 -2.3
PMST A A 10 15 11.6
comp=N,85nm,0.5s
**OUZM OUZ 5.44 210** P Pn 10 13 54.0 +0.2
**PMAFR Mafra 5.61 307** *e*Pn Pn 10 13 55.6 -0.4
PMAFR *e*Sn Sn 10 14 56.3 -3.8
PMAFR A A 10 14 58.4
comp=N,147nm,0.6s
**PSBE So Bento 5.65 314**‖ *e*Pn Pn 10 13 56.6 +0.1
PSBE *e*Sn Sn 10 14 58.9 -2.2
PSBE A A 10 15 59.2
comp=N,87nm,0.6s
**MTE Manteigas 5.67 328** *e*Pn Pn 10 13 57.0 +0.2
MTE *e*Sn Sn 10 14 58.8 -2.8
MTE A A 10 15 07.7
comp=N,118nm,0.5s
**MTE Manteigas 5.67 328** Pn Pn 10 13 56.6 -0.3
**OUK Oukaimeden 5.71 220** P Pn 10 13 58.0 +0.2
**ZGR Zagora 5.79 198** P Pn 10 13 58.9 +0.3
**PCAS Casmilo, Conde 5.86 320**‖ *e*Pn Pn 10 13 59.4 0.0
PCAS *e*Sn Sn 10 15 02.0 -4.2
PCAS A A 10 15 56.2
comp=N,93nm,0.8s
**COI Coimbra 5.93 321** *e*Pn Pn 10 14 00.7 +0.4
COI *e*Sn Sn 10 15 05.4 -2.5
**COI Coimbra 5.93 321** P Pn 10 14 00.6 +0.3
**PVIS Viseu 6.08 327** *e*Pn Pn 10 14 02.8 +0.3
PVIS *e*Sn Sn 10 15 08.7 -3.0
PVIS A A 10 15 19.0
comp=N,75nm,0.5s
**MVO Moncorvo 6.12 335**‖ *e*Pn Pn 10 14 03.4 +0.4
MVO *e*Sn Sn 10 15 10.1 -2.7
MVO A A 10 15 56.5
comp=N,98nm,0.7s
**EAH EAH 6.42 233** P Pn 10 14 06.0 -1.0
**PVRL Vila Real 6.47 331** *e*Pn Pn 10 14 08.1 +0.3
PVRL *e*Sn Sn 10 15 17.0 -4.4
PVRL A A 10 15 24.1
comp=N,94nm,0.5s
**TTIG Tnine Tigouga, 6.54 220** P Pn 10 14 05.6 -3.2
**POLO Lamas de Olo 6.59 331** *e*Pn Pn 10 14 09.7 +0.2
POLO *e*Sn Sn 10 15 19.7 -4.6
POLO A A 10 16 07.8
comp=N,42nm,0.6s
**PBRG Braganca 6.61 339** *e*Pn Pn 10 14 09.7 0.0
PBRG *e*Sn Sn 10 15 23.7 -1.0
PBRG A A 10 16 27.7
comp=N,41nm,0.7s
**PTO Porto 6.74 326** *e*Pn Pn 10 14 11.6 +0.2
PTO *e*Sn Sn 10 15 22.9 -4.9
**EPOB Poblet 6.75 31** Pn Pn 10 14 11.9 +0.3
EPOB *i* Vmb_Lg 10 18 03.1
**PCAB Cabril 6.97 331** *e*Pn Pn 10 14 14.9 +0.3
PCAB *e*Sn Sn 10 15 30.6 -2.9
PCAB A A 10 16 20.4
comp=N,74nm,0.5s
**ELOB Lobios 7.11 332** Pn Pn 10 14 17.2 +0.5
ELOB Sn Sn 10 15 33.7 -3.5
ELOB *i* Vmb_Lg 10 16 26.9
**PGAV Gavieira, Arco 7.28 331** *e*Pn Pn 10 14 19.5 +0.6
PGAV *e*Sn Sn 10 15 38.8 -2.5
PGAV A A 10 16 29.2
comp=N,45nm,0.7s
**EORO Oroz-Betelu 7.42 13** Pn Pn 10 14 21.9 +1.0
EORO *i* Vmb_Lg 10 16 34.5
**ELAN Lanestosa 7.55 1** Pn Pn 10 14 23.8 +1.1
ELAN Sn Sn 10 15 44.6 -3.4
ELAN *i* Vmb_Lg 10 16 57.1
**ETSF Etsaut 7.59 17** *e*Pn Pn 10 14 24.5 +1.3
**ETSF Etsaut 7.59 17** *e*P Pn 10 14 29.5 +6.3
ETSF *e*Sn Sn 10 15 49.6 +0.7
comp=N,9.5nm,0.4s
**EZAM Zamans 7.60 330** Pn Pn 10 14 24.3 +1.0
EZAM *i* Vmb_Lg 10 14 33.2
EZAM Sn Sn 10 15 44.7 -4.5
**SJPF Ste Jean 7.66 13** *e*Pn Pn 10 14 25.1 +1.1
**SJPF Ste Jean 7.66 13** *e*P Pn 10 14 29.5 +5.5
SJPF *e*Sn Sn 10 15 50.7 +0.3
comp=N,70nm,0.9s
**EALK Alkurruntz 7.71 11** Pn Pn 10 14 26.5 +1.7
**EARI Arriondas 7.73 351** Pn Pn 10 14 25.9 +0.8
EARI Sn Sn 10 15 49.6 -2.7
EARI *i* Vmb_Lg 10 17 02.0
**EPF Esparros 7.95 21** *e*Pn Pn 10 14 29.3 +1.1
**EPF Esparros 7.95 21** *e*P Pn 10 14 32.3 +4.1
**MTLF Montolieu 8.87 29** *e*Pn Pn 10 14 41.1 +0.4
**MTLF Montolieu 8.87 29** *e*P Pn 10 14 46.4 +5.7
**TANT Tantan 9.73 224** P Pn 10 14 51.2 -1.3
**LFF La Frestale 9.83 18** *e*Pn Pn 10 14 54.0 +0.2
**LFF La Frestale 9.83 18** *e*P Pn 10 14 59.5 +5.7
**CAF Calviac 10.20 23** *e*Pn Pn 10 14 58.3 -0.6
**CAF Calviac 10.20 23** *e*P Pn 10 15 04.2 +5.3
CAF *e*Sn Sn 10 16 48.9 -4.0
comp=N,1.3nm,0.2s
**RJF Les Rejaudoux 10.37 20** *e*Sn Sn 10 16 52.7 -4.5
comp=N,1.1nm,0.1s
**KEST Kesra 10.51 86** Pn Pn 10 15 03.4 +0.1
comp=N,0.3nm,0.3s,baz=256,slow=19,SNR=2.1
KEST LR LR 10 19 05.1
comp=N,194nm,21.1s,baz=200,slow=38
**VSL Villasalto 10.96 66** Pn Pn 10 15 09.8 +0.4
**MFF Saint Martin d 11.22 12** *e*Pn Pn 10 15 12.9 0.0
**MFF Saint Martin d 11.22 12** *e*P Pn 10 15 18.8 +5.9
**PGF Pioggiola 11.93 51** *e*Pn Pn 10 15 24.4 +1.7
**QUIF Quistinic 12.24 1** *e*Pn Pn 10 15 27.0 +0.2
**SGMF Saint Gilles 12.60 3** *e*Pn Pn 10 15 31.8 +0.1
**VAE Valguarnera 14.57 78** LR LR 10 21 25.8
comp=N,270nm,18.6s,baz=276,slow=37
**DAVA Damuels 15.35 37** *e*P P 10 16 14.4 +0.5
comp=N,15nm,1.2s
**FETA Feichten 15.59 39** *e*P P 10 16 17.5 +0.9
comp=N,9.3nm,0.9s
**RETA Reutte 15.92 38** *e*P P 10 16 21.3 +1.2
comp=N,8.5nm,1.1s
**MOTA Moosalm 16.00 39** *e*P P 10 16 22.3 +1.2
comp=N,9.7nm,1.6s
**WTTA Wattenberg 16.22 40** *e*P P 10 16 24.7 +1.1
comp=N,9.1nm,0.8s
**WATA Walderalm 16.23 39** *e*P P 10 16 24.5 +0.8
comp=N,13nm,1.1s
**ABTA Abfaltersbach 16.37 43** *e*P P 10 16 26.1 +0.9
comp=N,10.0nm,1.2s
**MYKA Terra Mystica 16.93 44** *e*P P 10 16 31.3 -0.1
comp=N,5.7nm,0.9s
**OBKA Obir 17.39 46** *e*P P 10 16 37.5 +1.1
comp=N,12nm,1.8s
**SOKA Soboth 17.76 46** P P 10 16 43.4 +2.8
comp=N,5.0nm,0.9s
**SCTE Santa Cesarea 17.94 69** Pn Pn 10 16 40.7 -1.2
SCTE IAmb IAmb 10 16 45.3
comp=Z,28nm,0.9s
**GERES GERESS Array B 18.30 39** P P 10 16 47.3 +0.8
comp=Z,0.1nm,0.3s,baz=225,slow=9.6,SNR=3.7
GERES LR LR 10 23 37.2
comp=Z,227nm,19.7s,baz=273,slow=36
**GERES GERESS Array B 18.30 39** Pn 10 16 46.3 -0.1
**KHC Kasperske Hory 18.42 38** *e*P Pn 10 16 49.8 +2.0
**KHC Kasperske Hory 18.42 38** P 10 16 46.4 -1.3
**CKRC Cesky Krumlov 18.59 40** *e*P Pn 10 16 50.8 +0.9
**CLL Collm 19.65 32** *i* P Pn 10 17 02.4 -0.1
comp=Z,14nm,1.1s
CLL *e*sP **sP** 10 17 07.0 -0.4
CLL *e*PPP PPP 10 17 25.0
**CLL Collm 19.65 32** P P 10 17 01.8 +0.7
**EKA Eskdalemuir Ar 19.67 1** P P 10 17 00.2 -1.1
baz=177,slow=11,SNR=2.7
EKA LR LR 10 25 00.3
comp=Z,158nm,18.3s,baz=180,slow=38
**BRG Berggiesshubel 19.76 34** *e*P Pn 10 17 05.5 +1.6
BRG Amp 10 17 07.7
comp=Z,15nm,1.4s
**DIVS Divibare 19.90 58** P P 10 17 03.6 -0.4
**VRAC Vranov 20.09 41** P P 10 17 05.2 -0.7
comp=Z,2.2nm,0.4s,baz=241,slow=10,SNR=2.1
VRAC LR LR 10 24 06.8
comp=Z,98nm,19.9s,baz=248,slow=35
**ITM Ithomi 20.56 78** P P 10 17 11.5 +0.4
ITM IAmb IAmb 10 17 25.7
comp=Z,37nm,1.3s
**DPC Dobruska-Polom 20.57 38** *e*P P 10 17 12.0 +0.8
**KRLC Kraliky 20.64 39** *e*P P 10 17 12.7 +0.7
**AGG Agios Georgios 20.84 73** P 10 17 14.8 +0.6
**MORC Moravsky Berou 20.86 41** P Pn 10 17 16.0 -0.9
**LIT Litokhoron 21.01 70** P P 10 17 14.8 -1.3
**KOWA Kowa 21.09 181** P P 10 17 16.9 -0.1
**TORD Torodi Ar. Bea 22.92 167** P P 10 17 36.9 +0.3
comp=Z,1.8nm,0.7s,baz=340,slow=11,SNR=9.9
**TORD Torodi Ar. Bea 22.92 167** P P 10 17 36.6 0.0
TORD IAmb IAmb 10 17 45.5
comp=Z,33nm,1.0s
**IDI Anoyia 23.15 83** P P 10 17 37.9 -1.0
comp=Z,4.1nm,0.6s,baz=282,slow=15,SNR=2.2
IDI LR LR 10 28 38.2
comp=Z,54nm,19.2s,baz=282,slow=42
**IDI Anoyia 23.15 83** P P 10 17 39.0 +0.1
**MLR Muntele Rosu 24.35 57** P P 10 17 51.8 +1.3
comp=Z,4.1nm,0.7s,baz=236,slow=7.3,SNR=7.2
MLR LR LR 10 27 37.2
comp=Z,146nm,18.6s,baz=256,slow=37
**MLR Muntele Rosu 24.35 57** P P 10 17 48.8 -1.7
MLR IAmb IAmb 10 18 16.3
comp=Z,12nm,1.0s
**BUR08 Bucovina Ar. S 24.45 52** P P 10 17 52.0 +0.7
**BURAR Bucovina Array 24.46 52** P P 10 17 52.0 +0.6
**HFS Hagfors 26.91 19** P P 10 18 12.6 -0.6
comp=Z,1.9nm,0.6s,baz=193,slow=10,SNR=6.6
HFS LR LR 10 29 24.4
comp=Z,155nm,18.2s,baz=216,slow=38
**NOA NORSAR Array B 27.09 16** P P 10 18 15.2 +0.2
comp=Z,1.4nm,0.9s,baz=202,slow=9.1,SNR=2.8
NOA LR LR 10 30 41.3
comp=Z,160nm,18.2s,baz=205,slow=40
**AKASG Malin Array Be 27.96 47** P P 10 18 19.4 -3.4
comp=Z,0.2nm,0.3s,baz=245,slow=9.8,SNR=1.7
AKASG LR LR 10 28 32.1
comp=Z,30nm,21.2s,baz=260,slow=34
**DBIC Dimbokro 28.88 183** P P 10 18 30.7 -0.6
comp=Z,3.6nm,0.8s,baz=27,slow=16,SNR=5.0
DBIC LR LR 10 29 34.2
comp=Z,93nm,19.1s,baz=12,slow=36
**TIC Toumodi 28.91 183** *e*PKIKP P 10 18 32.0 +0.4
**KIC Kosan Boka 29.19 182** *e*PKIKP P 10 18 32.5 -1.5
comp=Z,38nm,1.6s
**LIC Lamto 29.33 183** *e*PKIKP P 10 18 32.5 -2.8
comp=Z,21nm,1.1s
**BRTR Keskin Array B 29.58 71** LR LR 10 31 31.8
comp=Z,54nm,19.7s,baz=293,slow=38
**BORG Borgarnes 31.02 345** LR LR 10 30 20.6
comp=Z,91nm,20.3s,baz=167,slow=34
**FINES FINESS Array B 31.88 27** P P 10 18 55.9 -1.5
comp=Z,0.8nm,0.5s,baz=230,slow=11,SNR=3.4
FINES PcP **PcP** 10 21 47.0 -0.6
comp=Z,0.8nm,0.6s,baz=245,slow=2.9,SNR=4.3
FINES LR LR 10 30 58.7
comp=Z,56nm,18.9s,baz=156,slow=35
**FINES FINESS Array B 31.88 27** P P 10 18 56.4 -1.0
**FIA1 FINESS Array S 31.89 27** P P 10 18 54.8 -2.6
**OBN Obninsk 33.62 42** LR LR 10 32 46.4
comp=Z,18nm,18.5s,baz=352,slow=36
**NRS Narsarsuaq 36.70 327** P P 10 19 39.4 +0.4
**ARCES ARCESS Array B 37.47 16** P P 10 19 46.8 +1.2
comp=Z,5.6nm,0.9s,baz=206,slow=8.0,SNR=5.1
ARCES LR LR 10 36 53.3
comp=Z,148nm,18.3s,baz=168,slow=39
**ARCES ARCESS Array B 37.47 16** P P 10 19 46.8 +1.2
**SFJD Kangerlussuaq 41.25 334** LR LR 10 34 24.7
comp=Z,82nm,19.5s,baz=138,slow=32
**ARU Arti 46.04 43** P P 10 20 54.9 -0.9
comp=Z,1.1nm,0.4s,baz=287,slow=14,SNR=5.7
**ARU Arti 46.04 43** P P 10 20 55.2 -0.6
ARU IAmb IAmb 10 21 08.6
comp=Z,4.6nm,0.8s
**SCHQ Schefferville 46.73 315** P P 10 21 01.6 +0.3
SCHQ IAmb IAmb 10 21 24.3
comp=Z,8.1nm,1.1s
**ABKAR Akbulak array 47.43 53** P P 10 21 07.4 +0.6
ABKAR IAmb IAmb 10 21 08.0
comp=Z,3.5nm,0.8s
**FRB Frobisher Bay 47.69 327** LR LR 10 37 34.5
comp=Z,101nm,20.5s,baz=358,slow=32
**ATD Arta Tunnel 48.28 108** LR LR 10 44 33.0
comp=Z,26nm,21.9s,baz=50,slow=40
**G65A Princeton 48.47 302** P P 10 21 15.7 +0.8
**EUNU Eureka 53.89 348** P P 10 21 55.8 +0.6
EUNU IAmb IAmb 10 21 58.1
comp=Z,8.5nm,0.9s
**MDP Montagnes des 54.36 248** LR LR 10 41 45.9
comp=Z,51nm,18.2s,baz=290,slow=32
**KKAR Karatay Array 56.03 58** P P 10 22 10.4 -0.8
**RES Resolute Bay 56.32 341** P P 10 22 13.2 +0.5
comp=Z,1.9nm,1.0s,baz=80,slow=7.6,SNR=5.8
**SADO Sadowa 56.50 304** LR LR 10 44 03.8
comp=Z,57nm,19.0s,baz=7.5,slow=34
**GAR Garm 57.32 63** P P 10 22 20.7 +0.2
GAR IAmb IAmb 10 22 39.0
comp=Z,7.9nm,0.8s
**SJG San Juan 57.59 270** LR LR 10 46 08.6
comp=Z,17nm,18.5s,baz=51,slow=35
**TSUM Tsumeb 58.14 156** LR LR 10 46 00.2
comp=Z,89nm,19.2s,baz=146,slow=35
**KURK Kurchatov 58.77 47** P P 10 22 30.2 -0.1
KURK IAmb IAmb 10 22 31.8
comp=Z,8.4nm,0.9s
**LSZ Lusaka 58.92 144** LR LR 10 49 41.1
comp=Z,146nm,19.3s,baz=176,slow=38
**L48A N Adams 61.12 303** P P 10 22 47.6 +1.0
**KSH Kashi 61.17 60** P P 10 22 48.3 +1.1
KSH PcP **PcP** 10 23 29.1 -0.8
KSH ScP **ScP** 10 27 32.9 +2.0
KSH pmax pmax
comp=Z,5.0nm,1.1s
**ZAA0 Zalesovo Array 61.20 42** P P 10 22 46.7 -0.3
**ZALV Zalesovo Beam 61.20 42** P P 10 22 46.3 -0.7
comp=Z,1.5nm,0.6s,baz=296,slow=7.0,SNR=7.0
ZALV LR LR 10 49 09.6
comp=Z,45nm,19.9s,baz=288,slow=36
**ZALV Zalesovo Beam 61.20 42** P P 10 22 46.8 -0.2
**TARG Taragay, Kyrgy 61.56 57** P P 10 22 51.4 +1.3
TARG IAmb IAmb 10 22 55.2
comp=Z,3.5nm,0.7s
**MAKZ Makanchi 62.27 51** P P 10 22 54.3 -0.1
**MK31 Makanchi Array 62.48 51** P P 10 22 55.6 -0.1
MK31 IAmb IAmb 10 22 56.6
comp=Z,4.2nm,0.9s
**MKAR Makanchi Array 62.48 51** P P 10 22 55.7 0.0
comp=Z,5.3nm,0.8s,baz=286,slow=6.1,SNR=54
**MKAR Makanchi Array 62.48 51** P P 10 22 55.6 -0.2
**PTGA Pitinga 63.69 248** LR LR 10 46 42.3
comp=Z,42nm,18.3s,baz=64,slow=32
**A36M Sachs Harbour 65.25 343** P P 10 23 14.5 +1.0
A36M IAmb IAmb 10 23 15.5
comp=Z,6.4nm,0.9s
**LBTB Lobatse 66.36 151** LR LR 10 51 33.6
comp=Z,99nm,19.0s,baz=7.5,slow=35
**WMQ Urumqi 67.20 52** *e*P P 10 23 27.8 +1.2
WMQ pP pP 10 23 30.8 -0.7
WMQ pmax pmax
comp=Z,15nm,0.9s
**YKA Yellowknife Ar 67.76 332** P P 10 23 29.9 +0.2
comp=Z,4.1nm,0.6s,baz=59,slow=6.4,SNR=47
YKA LR LR 10 50 02.1
comp=Z,84nm,20.3s,baz=314,slow=33
**TIXI Tiksi 67.88 15** LR LR 10 58 41.6
comp=Z,51nm,18.4s,baz=352,slow=41
**MGMO Mountain Grove 68.66 301** P P 10 23 36.0 +0.2
MGMO IAmb IAmb 10 23 38.9
comp=Z,3.1nm,0.7s
**S39A Bolivar 69.13 302** P P 10 23 38.1 -0.6
S39A IAmb IAmb 10 23 42.1
comp=Z,4.6nm,0.8s
**FCAR Ozark Folk Cen 69.17 300** P P 10 23 38.5 -0.5
FCAR IAmb IAmb 10 23 42.0
comp=Z,5.2nm,1.0s
**U40A Yellville 69.46 300** P P 10 23 40.8 0.0
U40A IAmb IAmb 10 23 48.4
comp=Z,6.7nm,1.0s
**BOSA Boshof 69.47 153** LR LR 10 55 26.3
comp=Z,111nm,20.1s,baz=4.0,slow=37
**W41B Gary Mavity, V 69.61 299** P P 10 23 41.8 0.0
W41B IAmb IAmb 10 23 48.6
comp=Z,9.9nm,1.3s
**INK Inuvik 69.85 342** P P 10 23 44.0 +1.5
comp=Z,1.7nm,1.0s,baz=24,slow=3.2,SNR=4.7
**HHAR Hobbs 70.26 301** P P 10 23 46.0 +0.3
HHAR IAmb IAmb 10 23 52.2
comp=Z,4.8nm,0.8s
**X40A Basin Creek Fa 70.38 299** P P 10 23 46.3 -0.1
X40A IAmb IAmb 10 23 53.2
comp=Z,12nm,1.4s
**ZARC Zaragoza, Cauc 70.47 265** P P 10 23 48.1 +0.8
ZARC IAmb IAmb 10 23 50.7
comp=Z,9.2nm,1.3s
**MIAR Mount Ida 70.88 299** P P 10 23 49.2 -0.3
MIAR IAmb IAmb 10 23 57.3
comp=Z,9.0nm,1.1s
**SUR Sutherland 71.45 158** LR LR 10 55 34.3
comp=Z,46nm,18.9s,baz=20,slow=36
**T35A Sooner Cattle 71.72 303** P P 10 23 55.1 +0.6
**R32A Long Quarter, 72.42 305** P P 10 23 59.5 +0.7
**Z38A Mt. Pleasant 72.54 299** P P 10 23 59.4 -0.1
**CBKS Cedar Bluff 72.90 306** P P 10 24 01.4 -0.3
**I29M Ogilvie Camp, 73.33 342** P P 10 24 04.5 +0.8
I29M IAmb IAmb 10 24 05.4
comp=Z,8.6nm,1.1s
**YAK Yakutsk 75.59 21** LR LR 11 02 29.5

comp=Z,40nm,18.0s,baz=74,slow=40
**ILAR Eielson Array 75.84 345** P **P** 10 24 17.9 -0.3
comp=Z,0.3nm,0.6s,baz=13,slow=5.5,SNR=2.1
**SONM Songino Array 76.02 41** P **P** 10 24 20.0 +0.3
comp=Z,0.7nm,0.9s,baz=299,slow=8.0,SNR=4.5
**SONM Songino Array 76.02 41** IAmb IAmb 10 24 23.7
comp=Z,3.6nm,1.4s
**PDAR Pinedale Array 76.84 313** P **P** 10 24 24.0 -0.7
comp=Z,1.1nm,0.9s,baz=57,slow=7.3,SNR=7.0
**JCT Junction City 77.48 298** P **P** 10 24 28.5 +0.3
JCT IAmb IAmb 10 24 32.0
comp=Z,4.2nm,0.9s
**NEW Newport 77.61 321** LR LR 10 55 13.7
comp=Z,64nm,19.7s,baz=28,slow=33
**CPUP Villa Florida 79.87 227** P **P** 10 24 38.9 -2.2
comp=Z,3.9nm,0.9s,baz=55,slow=6.5,SNR=4.8
**CPUP Villa Florida 79.87 227** P **P** 10 24 40.6 -0.5
CPUP IAmb IAmb 10 24 42.3
comp=Z,14nm,1.3s
**TXAR Lajitas Array 80.89 299** P **P** 10 24 47.2 +0.2
comp=Z,0.4nm,0.9s,baz=65,slow=6.5,SNR=2.7
TXAR LR LR 11 00 36.5
comp=Z,40nm,18.2s,baz=29,slow=36
**LZH Lanzhou 81.78 51** ⇓P **P** 10 24 51.8 +0.2
LZH sP PcP 10 24 57.4 +0.1
LZH pmax pmax
comp=Z,9.0nm,1.5s
**PB16 IPOC Station P 82.31 241** P **P** 10 24 55.4 +0.4
PB16 IAmb IAmb 10 24 59.7
comp=Z,6.8nm,1.0s
**MA2 Magadan 82.75 13** LR LR 11 09 51.2
comp=Z,24nm,18.7s,baz=95,slow=42
**HHC Hu-ho-hao-te 83.35 44** *eP* **P** 10 24 59.3 -0.3
HHC pmax pmax
comp=Z,10.0nm,0.9s
HHC pmax pmax
comp=Z,110nm,6.8s
**XLT XiLinHaoTe 83.69 39** *eP* **P** 10 25 01.4 +0.1
XLT pP pP 10 25 06.3 0.0
XLT sP sP 10 25 10.1 +2.0
XLT pmax pmax
comp=Z,3.0nm,1.2s
XLT pmax pmax
comp=Z,200nm,4.5s
**NVAR Mina Array Bea 84.73 314** P **P** 10 25 08.5 +1.6
comp=Z,0.2nm,0.6s,baz=55,slow=6.7,SNR=2.7
**PZH PanZhiHua 86.28 60** P **P** 10 25 14.9 +0.2
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,120nm,5.8s
**KLR Kul'dur 86.63 27** LR LR 11 08 14.4
comp=Z,37nm,19.6s,baz=36,slow=39
**LPIG La Paz 88.77 299** LR LR 11 04 46.5
comp=Z,45nm,18.5s,baz=354,slow=35
**CMAR Chiang Mai Arr 89.13 68** P **P** 10 25 28.9 +0.6
comp=Z,0.4nm,0.3s,baz=298,slow=6.0,SNR=4.4
**NJ2 Nanjing 93.68 46** *eP* **P** 10 25 48.6 -0.6
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**ASAJ Asahikawa 94.85 24** LR LR 11 14 23.6
comp=Z,21nm,19.0s,baz=172,slow=39
**MJAR Matsushiro Arr 99.85 30** LR LR 11 14 52.7
comp=Z,26nm,19.2s,baz=342,slow=38
**ASAR Alice Springs 141.44 84** PKhKP PKPpre 10 31 56.4
comp=Z,0.2nm,0.5s,baz=301,slow=2.9,SNR=4.4
**STKA Stephens Creek 150.89 93** PKPbc **PKPbc** 10 32 24.6 -0.6
comp=Z,4.7nm,1.0s,baz=262,slow=4.0,SNR=7.2

*IDC **23** 10:29:09.6±1.8,33°.03S×71°.26W,h0km,mb3.5/2, mb1 3.7/5,mb1mx3.5/29,mbtmp3.5/5,ML3.7/3,Error ellipse: s-maj=49.3km s-min=32.9km az=88.0*
*SJA **23** 10:29:14.0±0.8,33°.21S×71°.45W,h47km±4km,ML4.0, MW3.8*
*NEIC **23** 10:29:15.6±0.7,33°.20S±0°.02×71°.39W±0°.04,h48km±5km, mb4.4/4,ML4.1(GUC),Error ellipse: s-maj=4.4km s-min=3.5km az=77.0*
*GUC **23** 10:29:15.1±0.7,33°.21S×71°.39W,h56km±2km,ML4.0*
**ISC 23 10:29:14.4±0.8,33°21S±0°.02×71°44W±0°.03,h42km±5km, n101,σi9°95/139,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MT02** | **Curacav** | **0.26** | **100** | | **Pn** | **10 29 23.8** | **+1.3** |
| MT02 | | | | Sn | **Sn** | **10 29 29.6** | **+1.6** |
| **MT02** | **Curacav** | **0.26** | **100** | *eP* | **Pn** | **10 29 23.9** | **+1.5** |
| MT02 | | | | *i* S | **Sn** | **10 29 29.7** | **+1.6** |
| MT02 | | | | IAML | | 10 29 29.8 | |
| | comp=E,18μm,0.1s | | | | | | |
| **MT02** | **Curacav** | **0.26** | **100** | *eP* | **Pn** | **10 29 23.0** | **+0.5** |
| MT02 | | | | *eP* | | 10 29 23.6 | |
| MT02 | | | | *eS* | **Sn** | **10 29 29.8** | **+1.7** |
| MT02 | | | | IAML | | 10 29 29.8 | |
| | comp=Z,6μm,0.1s | | | | | | |
| **VA01** | **Torpederas** | **0.26** | **317** | | **Pn** | **10 29 24.2** | **+1.8** |
| VA01 | | | | Sn | **Sn** | **10 29 30.8** | **+2.7** |
| **VA01** | **Torpederas** | **0.26** | **317** | *eP* | **Pn** | **10 29 24.3** | **+1.8** |
| VA01 | | | | *i* S | **Sn** | **10 29 30.8** | **+2.7** |
| VA01 | | | | IAML | | 10 29 31.8 | |
| | comp=N,32μm,0.1s | | | | | | |
| **VA01** | **Torpederas** | **0.26** | **317** | *eP* | **Pn** | **10 29 24.0** | **+1.5** |
| **ROC1** | **El Roble** | **0.43** | **56** | Pn | **Pn** | **10 29 24.4** | **-0.2** |
| ROC1 | | | | Sn | **Sn** | **10 29 31.8** | **0.0** |
| **ROC1** | **El Roble** | **0.43** | **56** | *eP* | **Pn** | **10 29 24.0** | **-0.6** |
| ROC1 | | | | *eP* | | 10 29 24.1 | |
| **ROCH** | **El Roble** | **0.43** | **56** | *eP* | | 10 29 25.9 | |
| ROCH | | | | *eP* | **Pn** | **10 29 24.4** | **-0.3** |
| ROCH | | | | *i* S | **Sn** | **10 29 32.0** | **+0.2** |
| ROCH | | | | IAML | | 10 29 33.1 | |
| | comp=E,15μm,0.4s | | | | | | |
| ROCH | | | | *i* S | | 10 29 33.5 | |
| ROCH | | | | IAML | | 10 29 35.8 | |
| | comp=N,17μm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **0.47** | **198** | | **Pn** | **10 29 26.6** | **+1.7** |
| VA05 | | | | Sn | **Sn** | **10 29 35.1** | **+3.0** |
| **VA05** | **Santo Domingo** | **0.47** | **198** | *eP* | **Pn** | **10 29 26.6** | **+1.7** |
| VA05 | | | | *i* S | **Sn** | **10 29 35.2** | **+3.0** |
| VA05 | | | | IAML | | 10 29 37.4 | |
| | comp=E,18μm,0.2s | | | | | | |
| **MT05** | **Renca** | **0.61** | **107** | | **Pn** | **10 29 27.7** | **+0.9** |
| MT05 | | | | Sn | **Sn** | **10 29 36.7** | **+1.0** |
| **MT05** | **Renca** | **0.61** | **107** | *eP* | **Pn** | **10 29 27.7** | **+0.9** |
| MT05 | | | | *i* S | **Sn** | **10 29 37.3** | **+1.7** |
| MT05 | | | | IAML | | 10 29 40.6 | |
| | comp=E,10μm,0.3s | | | | | | |
| **MT05** | **Renca** | **0.61** | **107** | *eP* | **Pn** | **10 29 27.7** | **+0.9** |
| MT05 | | | | *eS* | **Sn** | **10 29 38.1** | **+2.5** |
| MT05 | | | | IAML | | 10 29 41.0 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **0.64** | **84** | | **Pn** | **10 29 27.8** | **+0.6** |
| PEL | | | | Sn | **Sn** | **10 29 37.0** | **+0.9** |
| **PEL** | **Peldehue** | **0.64** | **84** | *eP* | **Pn** | **10 29 27.5** | **+0.4** |
| PEL | | | | *i* S | **Sn** | **10 29 37.5** | **+1.3** |
| PEL | | | | IAML | | 10 29 38.8 | |
| | comp=E,9μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **0.64** | **84** | *eP* | **Pn** | **10 29 27.7** | **+0.6** |
| PEL | | | | *eP* | | 10 29 28.0 | |
| PEL | | | | *eS* | **Sn** | **10 29 38.2** | **+2.1** |
| **VA06** | **Catapilco** | **0.66** | **10** | | **Pn** | **10 29 28.4** | **+1.0** |
| VA06 | | | | Sn | **Sn** | **10 29 38.1** | **+1.4** |
| **VA06** | **Catapilco** | **0.66** | **10** | *eP* | **Pn** | **10 29 28.5** | **+1.0** |
| VA06 | | | | *i* S | **Sn** | **10 29 38.3** | **+1.6** |
| VA06 | | | | IAML | | 10 29 40.1 | |
| | comp=E,9μm,0.2s | | | | | | |
| **MT01** | **Popeta** | **0.67** | **167** | | **Pn** | **10 29 28.8** | **+1.3** |
| MT01 | | | | Sn | **Sn** | **10 29 38.4** | **+1.5** |
| **MT01** | **Popeta** | **0.67** | **167** | *eP* | **Pn** | **10 29 28.8** | **+1.3** |
| MT01 | | | | *i* S | **Sn** | **10 29 38.3** | **+1.4** |
| MT01 | | | | IAML | | 10 29 39.5 | |
| | comp=E,9μm,0.2s | | | | | | |
| **MT01** | **Popeta** | **0.67** | **167** | *eP* | **Pn** | **10 29 28.0** | **+0.5** |
| MT01 | | | | *eP* | | 10 29 28.6 | |
| MT01 | | | | *eS* | **Sn** | **10 29 38.5** | **+1.6** |
| MT01 | | | | IAML | | 10 29 39.2 | |
| | comp=Z,5μm,0.1s | | | | | | |
| **MT09** | **Talagante** | **0.68** | **146** | | **Pn** | **10 29 28.9** | **+1.1** |
| MT09 | | | | Sn | **Sn** | **10 29 38.5** | **+1.2** |
| **MT09** | **Talagante** | **0.68** | **146** | *eP* | **Pn** | **10 29 28.8** | **+1.1** |
| MT09 | | | | *i* S | **Sn** | **10 29 38.7** | **+1.4** |
| MT09 | | | | IAML | | 10 29 39.6 | |
| | comp=N,8μm,0.1s | | | | | | |
| **MT03** | **Universidad Ad** | **0.82** | **110** | | **Pn** | **10 29 30.6** | **+0.8** |
| MT03 | | | | Sn | **Sn** | **10 29 41.9** | **+1.0** |
| **MT03** | **Universidad Ad** | **0.82** | **110** | *eP* | **Pn** | **10 29 30.6** | **+0.8** |
| MT03 | | | | *i* S | **Sn** | **10 29 41.8** | **+1.0** |
| MT03 | | | | IAML | | 10 29 42.5 | |
| | comp=E,17μm,0.2s | | | | | | |
| **MT03** | **Universidad Ad** | **0.82** | **110** | *eP* | Pn | 10 29 17.7 | -12 |
| MT03 | | | | *eS* | Sn | 10 29 30.4 | -10 |
| MT03 | | | | *eP* | Sn | 10 29 30.4 | -10 |
| MT03 | | | | IAML | | 10 29 30.8 | |
| | comp=Z,11μm,0.1s | | | | | | |
| MT03 | | | | *eS* | | 10 29 42.5 | |
| **VA03** | **San Esteban** | **0.87** | **59** | | **Pn** | **10 29 31.2** | **+0.8** |
| VA03 | | | | Sn | **Sn** | **10 29 42.9** | **+1.0** |
| **VA03** | **San Esteban** | **0.87** | **59** | *eP* | **Pn** | **10 29 31.2** | **+0.8** |
| VA03 | | | | *i* S | **Sn** | **10 29 42.9** | **+1.0** |
| VA03 | | | | IAML | | 10 29 44.2 | |
| | comp=E,16μm,0.1s | | | | | | |
| **VA03** | **San Esteban** | **0.87** | **59** | *eP* | **Pn** | **10 29 31.2** | **+0.8** |
| VA03 | | | | *eS* | **Sn** | **10 29 43.8** | **+1.9** |
| VA03 | | | | IAML | | 10 29 44.6 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **BO04** | **La Punta** | **1.04** | **138** | | **Pn** | **10 29 33.5** | **+0.9** |
| BO04 | | | | Sn | **Sn** | **10 29 47.1** | **+1.1** |
| **BO04** | **La Punta** | **1.04** | **138** | *eP* | **Pn** | **10 29 33.5** | **+0.9** |
| BO04 | | | | *i* S | **Sn** | **10 29 47.2** | **+1.3** |
| BO04 | | | | IAML | | 10 29 49.1 | |
| | comp=N,3μm,0.1s | | | | | | |
| **LMEL** | **Las Melosas** | **1.21** | **122** | Pn | **Pn** | **10 29 36.0** | **+1.0** |
| LMEL | | | | Sn | **Sn** | **10 29 51.5** | **+1.2** |
| **LMEL** | **Las Melosas** | **1.21** | **122** | *eP* | **Pn** | **10 29 36.0** | **+1.0** |
| LMEL | | | | *i* S | **Sn** | **10 29 51.5** | **+1.2** |
| LMEL | | | | IAML | | 10 29 52.8 | |
| | comp=N,9μm,0.2s | | | | | | |
| **BO01** | **Tunca** | **1.21** | **166** | | **Pn** | **10 29 36.1** | **+1.1** |
| BO01 | | | | Sn | **Sn** | **10 29 51.6** | **+1.4** |
| **BO01** | **Tunca** | **1.21** | **166** | *eP* | **Pn** | **10 29 36.0** | **+1.1** |
| BO01 | | | | *i* S | **Sn** | **10 29 51.3** | **+1.1** |
| **BO01** | **Tunca** | **1.21** | **166** | *eP* | **Pn** | **10 29 36.0** | **+1.1** |
| BO01 | | | | *eS* | **Sn** | **10 29 52.4** | **+2.2** |
| **BO03** | **Pichilemu** | **1.35** | **199** | *eP* | **Pn** | **10 29 37.6** | **+0.8** |
| BO03 | | | | *i* S | **Sn** | **10 29 54.8** | **+1.2** |
| **BO02** | **Sierra Bellavi** | **1.67** | **161** | | **Pn** | **10 29 42.5** | **+1.3** |
| BO02 | | | | Sn | **Sn** | **10 30 03.5** | **+2.0** |
| **BO02** | **Sierra Bellavi** | **1.67** | **161** | *eP* | **Pn** | **10 29 42.5** | **+1.3** |
| BO02 | | | | *i* S | **Sn** | **10 30 03.5** | **+2.0** |
| BO02 | | | | IAML | | 10 30 07.9 | |
| | comp=E,2μm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **1.67** | **161** | *eP* | **Pn** | **10 29 42.5** | **+1.3** |
| BO02 | | | | *eP* | | 10 29 42.6 | |
| BO02 | | | | *eS* | **Sn** | **10 30 06.1** | **+4.7** |
| BO02 | | | | IAML | | 10 30 10.7 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **GO05** | **Huala** | **1.84** | **193** | Pn | **Pn** | **10 29 44.1** | **+0.6** |
| **GO05** | **Huala** | **1.84** | **193** | *eP* | **Pn** | **10 29 44.4** | **+0.9** |
| GO05 | | | | *i* S | **Sn** | **10 30 07.6** | **+2.0** |
| **GO05** | **Huala** | **1.84** | **193** | *eP* | **Pn** | **10 29 44.0** | **+0.4** |
| GO05 | | | | *eS* | **Sn** | **10 30 11.2** | **+5.6** |
| **AUSP** | **Uspallata** | **1.99** | **61** | *eP* | **Pn** | **10 29 49.0** | **+3.1** |
| AUSP | | | | *eS* | **Sn** | **10 30 15.9** | **+6.2** |
| **CO02** | **Combarbal** | **2.04** | **11** | Pn | **Pn** | **10 29 47.6** | **+1.2** |
| **CO02** | **Combarbal** | **2.04** | **11** | *eP* | **Pn** | **10 29 47.6** | **+1.2** |
| CO02 | | | | *i* S | **Sn** | **10 30 12.7** | **+2.0** |
| CO02 | | | | IAML | | 10 30 19.8 | |
| | comp=N,5μm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **2.04** | **11** | *eP* | **Pn** | **10 29 47.6** | **+1.2** |
| CO02 | | | | *eS* | **Sn** | **10 30 13.6** | **+3.0** |
| CO02 | | | | IAML | | 10 30 17.9 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.14** | **81** | *eP* | **Pn** | **10 29 51.0** | **+3.2** |
| **AAGR** | **Agrelo** | **2.19** | **87** | *eP* | **Pn** | **10 29 52.0** | **+3.5** |
| **ASAL** | **Salagasta** | **2.28** | **75** | *eP* | **Pn** | **10 29 53.0** | **+3.4** |
| ASAL | | | | *eS* | **Sn** | **10 30 19.1** | **+2.6** |
| **CO03** | **El Pedregal** | **2.45** | **15** | Pn | **Pn** | **10 29 53.8** | **+1.7** |
| **CO03** | **El Pedregal** | **2.45** | **15** | *eP* | **Pn** | **10 29 53.4** | **+1.4** |
| CO03 | | | | *i* S | **Sn** | **10 30 22.2** | **+1.4** |
| CO03 | | | | IAML | | 10 30 31.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **2.45** | **15** | *eP* | **Pn** | **10 29 53.8** | **+1.7** |
| CO03 | | | | *eS* | **Sn** | **10 30 23.0** | **+2.2** |
| CO03 | | | | IAML | | 10 30 27.9 | |
| | comp=Z,494nm,0.4s | | | | | | |
| **CO06** | **Fray Jorge** | **2.54** | **356** | Pn | **Pn** | **10 29 53.4** | **+0.2** |
| **ML02** | **Panimavida** | **2.54** | **180** | *i* S | **Sn** | **10 30 24.9** | **+1.9** |
| ML02 | | | | IAML | | 10 30 40.5 | |
| | comp=E,985nm,0.5s | | | | | | |
| **RFA** | **San Rafael** | **2.92** | **123** | *eP* | **Pn** | **10 30 01.0** | **+2.6** |
| **GO04** | **Tololo Observa** | **3.08** | **10** | Pn | **Pn** | **10 30 02.6** | **+1.7** |
| **GO04** | **Tololo Observa** | **3.08** | **10** | *eP* | **Pn** | **10 30 02.0** | **+1.2** |
| GO04 | | | | *i* S | **Sn** | **10 30 37.9** | **+1.4** |
| **GO04** | **Tololo Observa** | **3.08** | **10** | *eP* | **Pn** | **10 30 02.3** | **+1.5** |
| GO04 | | | | *eS* | **Sn** | **10 30 38.8** | **+2.2** |
| **RTLL** | **Cerro Villicun** | **3.13** | **54** | *eP* | **Pn** | **10 30 04.2** | **+2.8** |
| RTLL | | | | *eS* | Sn | 10 30 48.0 | +10 |
| **CO05** | **La Serena** | **3.29** | **3** | Pn | **Pn** | **10 30 05.0** | **+1.6** |
| **CO05** | **La Serena** | **3.29** | **3** | *i* S | **Sn** | **10 30 42.3** | **+1.0** |
| CO05 | | | | IAML | | 10 30 58.4 | |
| | comp=N,500nm,0.2s | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.31** | **38** | *eP* | **Pn** | **10 30 07.0** | **+3.0** |
| ACCO | | | | *eS* | **Sn** | **10 30 46.6** | **+4.4** |
| **AROD** | **Rodeo** | **3.47** | **29** | *eP* | **Pn** | **10 30 09.0** | **+2.8** |
| AROD | | | | *eS* | Sn | 10 31 01.6 | +15 |
| **AVFE** | **Valle Fertil** | **4.24** | **54** | *eP* | **Pn** | **10 30 18.6** | **+2.1** |
| AVFE | | | | *eP* | | 10 30 19.0 | |
| AVFE | | | | *eS* | **Sn** | **10 31 05.1** | **+0.3** |
| **LCO** | **Las Campanas** | **4.24** | **9** | Pn | **Pn** | **10 30 17.3** | **+0.6** |
| **LCO** | **Las Campanas** | **4.24** | **9** | *eP* | **Pn** | **10 30 17.2** | **+0.4** |
| LCO | | | | *i* S | **Sn** | **10 31 04.7** | **-0.4** |
| **LCO** | **Las Campanas** | **4.24** | **9** | *eP* | **Pn** | **10 30 17.0** | **+0.3** |
| **ACHE** | **Chepes** | **4.54** | **64** | *eP* | **Pn** | **10 30 23.0** | **+2.3** |
| ACHE | | | | *eS* | **Sn** | **10 31 18.4** | **+6.2** |
| **MRA** | **San Martin** | **4.88** | **82** | *eP* | **Pn** | **10 30 26.7** | **+1.3** |
| **AC04** | **Llanos de Chal** | **5.00** | **4** | Pn | **Pn** | **10 30 25.9** | **-0.1** |
| **AC04** | **Llanos de Chal** | **5.00** | **4** | *eP* | **Pn** | **10 30 27.3** | **+0.3** |
| AC04 | | | | *eS* | Sn | 10 31 34.6 | +11 |
| AC04 | | | | IAML | | 10 31 45.4 | |
| | comp=Z,99nm,0.7s | | | | | | |
| **VCA** | **Vinchina** | **5.25** | **33** | *eP* | **Pn** | **10 30 33.0** | **+2.4** |
| **ACLC** | **CERRO LA CRUZ** | **5.38** | **47** | *eS* | **Sn** | **10 31 38.1** | **+4.9** |
| ACLC | | | | IAML | | 10 31 50.8 | |
| | comp=Z,46nm,0.4s | | | | | | |
| **LC01** | **Cunco** | **5.68** | **183** | Pn | **Pn** | **10 30 37.3** | **+1.0** |
| **GO03** | **Copiap** | **5.70** | **11** | Pn | **Pn** | **10 30 36.9** | **+0.3** |
| **GO03** | **Copiap** | **5.70** | **11** | *eP* | **Pn** | **10 30 37.3** | **+0.7** |
| **TCA** | **Tanti** | **6.09** | **74** | *eP* | **Pn** | **10 30 42.6** | **+0.6** |
| **H03N1** | **Juan Fernandez** | **6.26** | **266** | T | T | 10 37 40.8 | |
| | baz=87,slow=73,SNR=154 | | | | | | |
| **H03S1** | **Juan Fernandez** | **6.27** | **262** | T | T | 10 36 57.2 | |
| | baz=91,SNR=413 | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.27** | **262** | T | T | 10 36 58.6 | |
| | baz=91,SNR=486 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.27** | **266** | T | T | 10 37 38.1 | |
| | baz=87,slow=73,SNR=203 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.28** | **266** | T | T | 10 37 39.4 | |
| | baz=87,slow=73,SNR=144 | | | | | | |
| **H03S2** | **Juan Fernandez** | **6.29** | **262** | T | T | 10 36 58.8 | |
| | baz=91,SNR=578 | | | | | | |
| **AC02** | **Maricunga** | **6.66** | **18** | Pn | **Pn** | **10 30 51.0** | **+0.7** |
| **AC02** | **Maricunga** | **6.66** | **18** | *eS* | Sn | 10 32 18.6 | +13 |
| **PLCA** | **Paso Flores** | **7.54** | **175** | Pn | **Pn** | **10 31 04.3** | **+2.5** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=13,SNR=9.2 | | | | | | |
| **LVC** | **Limon Verde** | **10.80** | **13** | Pn | **Pn** | **10 31 43.9** | **-2.9** |
| | comp=Z,0.7nm,0.3s,baz=223,slow=19,SNR=2.5 | | | | | | |
| **CPUP** | **Villa Florida** | **14.04** | **64** | Pn | **Pn** | **10 32 28.2** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=203,slow=15,SNR=1.6 | | | | | | |
| **GO08** | **Villa O'Higgin** | **15.26** | **183** | Pn | **Pn** | **10 32 45.1** | **-1.7** |
| GO08 | | | | IAmb | IAmb | 10 33 08.2 | |
| | comp=Z,33nm,1.5s | | | | | | |
| **MG05** | **Puerto Natales** | **18.47** | **182** | P | **P** | **10 33 25.3** | **-1.2** |
| MG05 | | | | IAmb | IAmb | 10 33 38.0 | |
| | comp=Z,53nm,1.4s | | | | | | |
| **MG01** | **Puerto William** | **21.88** | **174** | P | **P** | **10 34 01.5** | **-2.0** |
| **TXAR** | **Lajitas Array** | **69.30** | **330** | P | **P** | **10 40 18.5** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=146,slow=8.7,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.47** | **70** | P | **P** | **10 41 37.4** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=229,slow=3.2,SNR=2.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.28** | **269** | T | T | 13 07 08.7 | |
| | baz=118,slow=75,SNR=23 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.30** | **269** | T | T | 13 07 07.4 | |
| | baz=118,slow=75,SNR=34 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.30** | **269** | T | T | 13 07 08.1 | |
| | baz=118,slow=75,SNR=22 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.68** | **271** | T | T | 13 07 55.7 | |
| | baz=107,slow=74 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.69** | **271** | T | T | 13 07 54.5 | |
| | baz=107 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.69** | **271** | T | T | 13 07 56.5 | |
| | baz=107,slow=74 | | | | | | |

*IDC **23** 10:47:38.7±0.7,43°.27N×41°.49E,h0km,mb3.4/6, mb1 3.5/8,mb1mx3.4/33,mbtmp3.4/8,ML4.1/3,Error ellipse: s-maj=13.0km s-min=7.3km az=172.0*
*ISK **23** 10:47:39.1,43°.61N×41°.21E,h66km,ML3.8/6*
*MOS **23** 10:47:40.3±0.0,43°.38N×41°.50E,h1km,MPVA4.5*
*NEIC **23** 10:47:41.4±1.6,43°.50N±0°.08×41°.44E±0°.06,h10km±1km, mb4.0/3,Error ellipse: s-maj=14.0km s-min=7.2km az=169.0*
*AZER **23** 10:47:41.5±4.3,43°.57N×40°.51E,h46km±999km,Error ellipse: s-maj=198.8km s-min=94.9km az=302.0*
*NORS **23** 10:47:43.8±0.0,43°.56N×41°.61E,h1km,MPVA4.3*
**ISC 23 10:47:40.7±0.9,43°39N±0°.02×41°46E±0°.01,h8km±6km, n139,σi9°46/205,mb3.7/7,13C-12D,Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DOMR** | **Dombai** | **0.16** | **128** | *i* Pg | **Pg** | **10 47 43.0** | **-1.0** |
| DOMR | | | | *i* Sg | **Sg** | **10 47 44.7** | **-1.7** |
| **ARXR** | **Arkhyz** | **0.22** | **323** | ⇓*i* PG | **Pg** | **10 47 45.8** | **+0.6** |
| ARXR | | | | *i* S | **Sg** | **10 47 49.7** | **+1.5** |
| **ARXR** | **Arkhyz** | **0.22** | **323** | *i* Pg | **Pg** | **10 47 45.8** | **+0.6** |
| ARXR | | | | *i* Sg | **Sg** | **10 47 49.5** | **+1.3** |
| **CHVG** | **Ch'k'valeri** | **0.81** | **145** | PG | **Pg** | **10 47 55.3** | **-1.1** |
| **AHMR** | **Akhmetovskaya** | **0.82** | **339** | ⇑*i* PG | **Pb** | **10 47 56.7** | **-0.7** |
| AHMR | | | | *i* S | **Sb** | **10 48 09.0** | **+0.3** |
| **AHMR** | **Akhmetovskaya** | **0.82** | **339** | *i* Pg | **Pb** | **10 47 56.6** | **-0.7** |
| AHMR | | | | *i* Sg | **Sb** | **10 48 08.8** | **+0.1** |
| **RPOR** | **Krasnaya Polya** | **0.92** | **290** | *i* PG | **Pg** | **10 47 57.6** | **-0.8** |
| RPOR | | | | *eS* | **Sn** | **10 48 13.1** | **-0.4** |
| **RPOR** | **Krasnaya Polya** | **0.92** | **290** | *i* Pg | **Pg** | **10 47 57.6** | **-0.8** |
| RPOR | | | | *eSg* | **Sb** | **10 48 12.0** | **+0.6** |
| **NEY** | **Neytrino** | **0.94** | **98** | *ePG* | **Pg** | **10 47 57.0** | **-1.7** |
| **NEY** | **Neytrino** | **0.94** | **98** | *i* Pg | **Pg** | **10 47 56.9** | **-1.8** |
| NEY | | | | *i* Sg | **Sg** | **10 48 07.8** | **-3.1** |
| **SHA1** | **Shidzhatmaz** | **0.94** | **68** | ⇓*i* PG | **Pg** | **10 47 58.1** | **-0.8** |
| SHA1 | | | | *i* S | **Sg** | **10 48 10.3** | **-0.8** |
| **SHA1** | **Shidzhatmaz** | **0.94** | **68** | *i* Pg | **Pg** | **10 47 58.0** | **-0.8** |
| SHA1 | | | | *i* Sg | **Sg** | **10 48 10.1** | **-0.9** |
| **VSLR** | **Vesyoloye** | **1.04** | **275** | *ePG* | **Pg** | **10 47 59.7** | **-1.0** |
| VSLR | | | | *eS* | **Sn** | **10 48 16.0** | **-0.4** |
| **VSLR** | **Vesyoloye** | **1.04** | **275** | *ePg* | **Pg** | **10 47 59.7** | **-1.0** |
| VSLR | | | | *eSg* | **Sn** | **10 48 16.0** | **-0.4** |
| **KIV** | **Kislovodsk** | **1.06** | **57** | ⇓*i* PG | **Pg** | **10 48 00.4** | **-0.6** |
| KIV | | | | *i* S | **Sg** | **10 48 14.2** | **-0.6** |
| **KIV** | **Kislovodsk** | **1.06** | **57** | PN | **Pg** | **10 48 00.1** | **-0.9** |
| KIV | | | | SN | **Sb** | **10 48 14.7** | **-0.7** |
| **KIV** | **Kislovodsk** | **1.06** | **57** | | **Pg** | **10 48 00.3** | **-0.8** |
| **KIV** | **Kislovodsk** | **1.06** | **57** | *i* Pg | **Pg** | **10 48 00.5** | **-0.6** |
| KIV | | | | *i* Sg | **Sg** | **10 48 14.2** | **-0.6** |
| **KBZ** | **Khabaz** | **1.10** | **72** | Pg | **Pg** | **10 48 00.6** | **-1.3** |
| | 69nm,0.3s,baz=221,slow=11,SNR=337 | | | | | | |
| KBZ | | | | Lg | Lg | 10 48 15.1 | |
| | 89nm,0.3s,baz=65,slow=13,SNR=27 | | | | | | |
| **KBZ** | **Khabaz** | **1.10** | **72** | *i* Pg | **Pg** | **10 48 00.6** | **-1.3** |
| KBZ | | | | *eSg* | **Sg** | **10 48 14.6** | **-1.5** |
| **GUZR** | **Guzeripl'** | **1.15** | **303** | *i* PG | **Pg** | **10 48 01.4** | **-1.3** |
| GUZR | | | | *i* S | **Sg** | **10 48 16.6** | **-1.0** |
| **GUZR** | **Guzeripl'** | **1.15** | **303** | *i* Pg | **Pg** | **10 48 01.4** | **-1.3** |
| GUZR | | | | *eSg* | **Sg** | **10 48 17.3** | **-0.3** |
| **BEYR** | **Belyy Ugol+** | **1.17** | **57** | ⇑*i* PG | **Pg** | **10 48 02.5** | **-0.6** |
| BEYR | | | | *i* S | **Sb** | **10 48 17.9** | **-0.6** |
| **BEYR** | **Belyy Ugol+** | **1.17** | **57** | *i* Pg | **Pg** | **10 48 02.3** | **-0.8** |
| BEYR | | | | *eSg* | **Sb** | **10 48 17.8** | **-0.8** |
| **SOC** | **Sochi** | **1.28** | **279** | *ePG* | **Pn** | **10 48 03.9** | **-1.1** |
| SOC | | | | *e* | | 10 48 20.7 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,224nm,0.5s | | | | | | |
| SOC | | | | smax | smax | | |
| | comp=E,512nm,0.4s | | | | | | |
| **SOC** | **Sochi** | **1.28** | **279** | *i* Pg | **Pn** | **10 48 05.0** | **0.0** |
| SOC | | | | *eSg* | **Sn** | **10 48 22.4** | **+0.1** |
| **LABN** | **Labinsk** | **1.36** | **337** | *i* PG | **Pg** | **10 48 07.3** | **+0.5** |
| LABN | | | | *i* S | **Sg** | **10 48 27.3** | **+2.8** |
| **LABN** | **Labinsk** | **1.36** | **337** | *i* Pg | **Pg** | **10 48 07.3** | **+0.5** |
| LABN | | | | *i* Sg | **Sg** | **10 48 27.3** | **+2.8** |
| **PYA1** | **Pyatigorsk** | **1.37** | **60** | ⇑*i* PG | **Pn** | **10 48 05.9** | **-0.3** |
| PYA1 | | | | *i* S | **Sn** | **10 48 23.8** | **-0.7** |
| **PYA1** | **Pyatigorsk** | **1.37** | **60** | *ePg* | **Pn** | **10 48 05.9** | **-0.3** |
| PYA1 | | | | *eSg* | **Sn** | **10 48 23.6** | **-0.6** |
| **TKB** | **Tkibuli** | **1.53** | **132** | PG | **Pn** | **10 48 08.8** | **+0.3** |
| **NCK** | **Nalchik** | **1.56** | **85** | *ePN* | **Pg** | **10 48 11.6** | **+0.9** |
| NCK | | | | *eS* | **Sg** | **10 48 32.3** | **+1.4** |
| **NCK** | **Nalchik** | **1.56** | **85** | *ePg* | **Pg** | **10 48 11.7** | **+0.9** |
| NCK | | | | *eSg* | **Sg** | **10 48 31.4** | **+0.5** |
| **LZRR** | **Lazarevskoye** | **1.60** | **291** | *i* PG | **Pg** | **10 48 11.4** | **-0.1** |
| LZRR | | | | *i* S | **Sg** | **10 48 34.6** | **+2.4** |
| **LZRR** | **Lazarevskoye** | **1.60** | **291** | *i* Pg | **Pg** | **10 48 11.4** | **-0.1** |
| LZRR | | | | *i* Sg | **Sg** | **10 48 34.6** | **+2.4** |
| **DIGR** | **Digorskoe uzhe** | **1.63** |

| | | | | | | |
|---|---|---|---|---|---|---|
| AKH | | | SN | Sn | 10 48 54.7 | +2.4 |
| **BGD** | **Bogdanovka** | **2.65 142** | PN | Pn | 10 48 25.6 | +1.6 |
| **TRLG** | **Trialeti** | **2.69 132** | PN | Pn | 10 48 26.8 | +2.3 |
| **GL1R** | **Gelendzhik** | **2.71 297**⇓ | *e*PN | Pb | 10 48 27.0 | -2.4 |
| **GL1R** | **Gelendzhik** | **2.71 297** | *e*Pn | Pn | 10 48 25.4 | +0.9 |
| GL1R | | | *e*Sn | Sn | 10 48 59.9 | +2.4 |
| **KTUT** | **Trabzon** | **2.71 208** | PN | Pn | 10 48 23.6 | -1.0 |
| **SPGR** | **Shapsug** | **2.79 300** | *e*Pn | Pb | 10 48 28.5 | -2.3 |
| SPGR | | | *e*Sn | Sb | 10 49 03.9 | -1.2 |
| **KARS** | **Kars** | **3.01 156** | PN | Pn | 10 48 31.0 | +2.1 |
| **KARS** | **Kars** | **3.01 156** | PN | Pn | 10 48 30.1 | +1.2 |
| KARS | | | SN | Sn | 10 49 07.7 | +2.4 |
| **KARS** | **Kars** | **3.01 156** | Pn | Pn | 10 48 31.0 | +2.1 |
| **BAYT** | **Aydıntepe-Bayb** | **3.15 199** | PN | Pn | 10 48 30.4 | -0.4 |
| **GROC** | **Groznyy** | **3.17 92** | *e*PN | Pn | 10 48 30.4 | -0.6 |
| **ANN** | **Anapa** | **3.22 297** | *e*PN | Pn | 10 48 34.7 | +3.0 |
| ANN | | | *e* | | 10 49 13.4 | |
| **ANN** | **Anapa** | **3.22 297** | *e*Pn | Pn | 10 48 34.7 | +3.0 |
| ANN | | | *i* Sn | Sb | 10 49 15.9 | -1.7 |
| **DVE** | **Vedeno** | **3.44 96** | *e*Pn | Pn | 10 48 34.1 | -0.7 |
| DVE | | | *e*Sn | Sn | 10 49 13.9 | -1.9 |
| **QZX** | **Qazax, Azerbai** | **3.73 127** | P | Pb | 10 48 48.0 | +1.2 |
| QZX | | | S | Sg | 10 49 36.4 | -3.9 |
| **GNI** | **Garni** | **4.06 142** | Pg | Pb | 10 48 50.9 | -1.7 |
| | comp=Z,0.5nm,0.3s,baz=339,slow=8.6,SNR=1.7 | | | | | |
| GNI | | | Lg | Lg | 10 49 46.3 | |
| | comp=Z,1.0nm,0.3s,baz=190,slow=16,SNR=1.2 | | | | | |
| **GNI** | **Garni** | **4.06 142**⇓ | *e*PN | Pb | 10 48 51.0 | -1.7 |
| **GNI** | **Garni** | **4.06 142** | PN | Pn | 10 48 45.0 | +1.6 |
| **GNI** | **Garni** | **4.06 142** | Pn | Pn | 10 48 44.7 | +1.3 |
| **GDB** | **GEDABAY** | **4.16 128** | P | Pb | 10 48 53.8 | -0.6 |
| GDB | | | S | Sb | 10 49 47.8 | +2.9 |
| **ZKTA** | **Zakatala** | **4.20 113** | S | Sb | 10 49 49.7 | +3.9 |
| **RSDY** | **Resadiye-TOKAT** | **4.29 227** | PN | Pn | 10 48 44.7 | -1.7 |
| **GANJ** | **Ganja** | **4.54 125** | S | Sb | 10 49 58.9 | +3.2 |
| **SNOP** | **Sinop** | **4.80 256** | Pn | Pn | 10 48 53.7 | +0.3 |
| **SUDU** | **Sudak** | **4.88 290** | *e*PN | Pn | 10 48 54.9 | +0.5 |
| SUDU | | | *e*S | Sn | 10 49 51.3 | +0.2 |
| **SUDU** | **Sudak** | **4.88 290** | *e*Pn | Pn | 10 48 54.9 | +0.5 |
| SUDU | | | *e*Sn | Sn | 10 49 51.3 | +0.2 |
| **ALU** | **Alushta** | **5.25 287** | *e*PN | Pn | 10 49 01.6 | +2.2 |
| ALU | | | *e*S | Sn | 10 50 01.4 | +1.3 |
| **ALU** | **Alushta** | **5.25 287** | *e*Pn | Pn | 10 49 01.6 | +2.2 |
| ALU | | | *e*Sn | Sn | 10 50 01.4 | +1.3 |
| **YAL** | **Yalta** | **5.39 284** | *e*PN | Pn | 10 49 01.5 | +0.2 |
| YAL | | | *e*S | Sn | 10 50 03.2 | -0.3 |
| **YAL** | **Yalta** | **5.39 284** | *e*Pn | Pn | 10 49 01.5 | +0.2 |
| YAL | | | *e*Sn | Sn | 10 50 03.2 | -0.3 |
| **BZK** | **Bozkurt** | **5.68 258** | Pn | Pn | 10 49 06.1 | +0.8 |
| **SEV** | **Sevastopol'** | **5.74 284**⇑ | *i*P | Pn | 10 49 06.5 | +0.3 |
| SEV | | | *e*S | Sn | 10 50 11.8 | -0.4 |
| **SEV** | **Sevastopol'** | **5.74 284** | *e*Pn | Pn | 10 49 06.5 | +0.3 |
| SEV | | | *e*Sn | Sn | 10 50 10.7 | -1.5 |
| **BR131** | **Keskin Array S** | **6.91 241** | *d i*P | Pn | 10 49 25.0 | +2.5 |
| **BR131** | **Keskin Array S** | **6.91 241** | Pn | Pn | 10 49 22.3 | -0.2 |
| **BRTR** | **Keskin Array B** | **6.91 241** | P | Pn | 10 49 22.2 | -0.2 |
| | comp=Z,0.5nm,0.3s,baz=49,slow=10,SNR=6.9 | | | | | |
| **BRTR** | **Keskin Array B** | **6.91 241** | *i* P | Pn | 10 49 23.3 | +0.8 |
| BRTR | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | |
| **TLCR** | | **9.24 286** | ⇑P | Pn | 10 49 54.2 | -0.1 |
| **TLCR** | | **9.24 286** | ⇑P | Pn | 10 49 54.2 | -0.1 |
| **TIRR** | **Tirgusor** | **9.47 281** | ⇓P | Pn | 10 49 55.4 | -2.0 |
| **TIRR** | **Tirgusor** | **9.47 281** | P | Pn | 10 49 55.5 | -2.0 |
| **TIRR** | **Tirgusor** | **9.47 281** | | Pn | 10 49 55.5 | -2.0 |
| **TPGR** | **Topolog** | **9.49 283** | ⇑P | Pn | 10 49 56.1 | -1.7 |
| **AKASG** | **Malin Array Be** | **11.09 316** | Pn | Pn | 10 50 18.1 | -1.5 |
| | comp=Z,1.0nm,0.3s,baz=118,slow=12,SNR=5.7 | | | | | |
| AKASG | | | Sn | Sn | 10 52 24.7 | +1.1 |
| | comp=Z,0.6nm,0.3s,baz=124,slow=24,SNR=4.5 | | | | | |
| **AKASG** | **Malin Array Be** | **11.09 316** | *i* P | Pn | 10 50 19.7 | +0.2 |
| **MLR** | **Muntele Rosu** | **11.29 286** | ⇑P | Pn | 10 50 21.4 | -1.1 |
| **MLR** | **Muntele Rosu** | **11.29 286** | Pn | Pn | 10 50 22.3 | -0.1 |
| | comp=Z,0.6nm,0.3s,baz=91,slow=2.2,SNR=7.7 | | | | | |
| MLR | | | Sn | Sn | 10 52 26.4 | -2.4 |
| | comp=Z,0.3nm,0.3s,baz=152,slow=14,SNR=2.0 | | | | | |
| **MLR** | **Muntele Rosu** | **11.29 286** | Pn | Pn | 10 50 22.0 | -0.4 |
| **VOIR** | | **11.91 286** | ⇑P | Pn | 10 50 20.3 | -11 |
| **BURAR** | **Bucovina Array** | **12.15 296** | ⇓P | Pn | 10 50 30.9 | -3.3 |
| **BURAR** | **Bucovina Array** | **12.15 296** | ⇓P | Pn | 10 50 30.9 | -3.3 |
| **BUR08** | **Bucovina Ar. S** | **12.17 296** | Pn | Pn | 10 50 31.4 | -3.1 |
| **AKTO** | **Aktyubinsk** | **13.32 52** | Pn | Pn | 10 50 49.1 | -0.9 |
| | comp=Z,0.2nm,0.3s,baz=241,slow=11,SNR=2.8 | | | | | |
| AKTO | | | Sn | Sn | 10 53 10.2 | -8.0 |
| | comp=Z,0.1nm,0.3s,baz=75,slow=17,SNR=1.2 | | | | | |
| **ABKAR** | **Akbulak array** | **14.04 59** | Pn | Pn | 10 51 01.3 | +1.4 |
| **ARU** | **Arti** | **17.01 34**⇑ | *e*P | Pn | 10 51 39.1 | +0.2 |
| ARU | | | pmax | pmax | | |
| | comp=Z,13nm,1.8s | | | | | |
| **KLMR** | **Klimovskoe** | **17.53 357** | *e*P | P | 10 51 48.7 | +2.3 |
| KLMR | | | pmax | pmax | | |
| | comp=Z,13nm,1.4s | | | | | |
| **KLMR** | **Klimovskoe** | **17.53 357** | *e*Pn | P | 10 51 48.7 | +2.3 |
| KLMR | | | AMP | | 10 51 52.3 | |
| | comp=Z,13nm,1.4s | | | | | |
| **FIA1** | **FINESS Array S** | **20.27 338** | P | P | 10 52 15.8 | -0.7 |
| FIA1 | | | IAmb | IAmb | 10 52 35.6 | |
| | comp=Z,19nm,1.3s | | | | | |
| **FINES** | **FINESS Array B** | **20.27 338** | P | P | 10 52 16.9 | +0.4 |
| | comp=Z,3.6nm,0.9s,baz=154,slow=17,SNR=4.4 | | | | | |
| **KKAR** | **Karatay Array** | **21.13 81** | P | P | 10 52 26.1 | +0.2 |
| **KKAR** | **Karatay Array** | **21.13 81** | P | P | 10 52 26.1 | +0.2 |
| **BRVK** | **Borovoye** | **21.37 53**⇓ | *e*P | P | 10 52 31.8 | +3.4 |
| BRVK | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | |
| **BVAR** | **Borovoye Array** | **21.42 53** | P | P | 10 52 29.1 | +0.1 |
| | comp=Z,0.3nm,0.4s,baz=251,slow=9.0,SNR=2.0 | | | | | |
| **KURBB** | **Kurchatov Arra** | **26.08 61** | P | P | 10 53 15.7 | +1.0 |
| | comp=Z,1.0nm,0.3s,baz=278,slow=9.3,SNR=10 | | | | | |
| **KURK** | **Kurchatov** | **26.14 61** | P | P | 10 53 15.7 | +0.5 |
| **KURK** | **Kurchatov** | **26.14 61** | P | P | 10 53 15.7 | +0.5 |
| **KURK** | **Kurchatov** | **26.14 61** | IAmb | IAmb | 10 53 30.1 | |
| | comp=Z,4.1nm,1.2s | | | | | |
| **MKAR** | **Makanchi Array** | **28.80 69** | P | P | 10 53 39.9 | +0.8 |
| | comp=Z,0.3nm,0.8s,baz=268,slow=3.8,SNR=3.2 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.52 241** | P | P | 10 56 00.6 | -0.4 |
| | comp=Z,0.4nm,0.8s,baz=37,slow=9.2,SNR=2.4 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.52 241** | IAmb | IAmb | 10 56 09.6 | |
| | comp=Z,0.9nm,1.0s | | | | | |
| **YKA** | **Yellowknife Ar** | **72.73 349** | P | P | 10 59 10.1 | +1.2 |
| | comp=Z,0.7nm,1.0s,baz=18,slow=6.0,SNR=5.1 | | | | | |

**WEL 23 11:28:56.6**±0.9,**34°S**±10°×**17°9W**±1°9,**h33**km,**M4.1**/12, **mB4.7**/7,**ML4.5**/18,**MLv4.2**/12,**Mw(mB)3.9**/7,**Error ellipse: s-maj=0.0km s-min=0.0km az=115.2,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **4.39 205** | | P | Pn | 11 30 02.0 | +1.0 |
| MXZ | | | | S | Sn | 11 30 51.6 | +0.6 |
| **WMGZ** | **Waiomatatini S** | **4.59 202** | | P | Pn | 11 30 04.9 | +1.2 |
| WMGZ | | | | S | Sn | 11 30 59.1 | +3.2 |
| **HAZ** | **Te Kaha** | **4.76 208** | | P | Pn | 11 30 05.8 | -0.2 |
| HAZ | | | | S | Sn | 11 31 04.2 | +4.2 |
| **PKGZ** | **Pakihiroa** | **4.77 205** | | P | Pn | 11 30 05.9 | -0.3 |
| PKGZ | | | | S | Sn | 11 31 03.0 | +2.7 |
| **PUZ** | **Puketiti** | **4.87 203** | | P | Pn | 11 30 07.1 | -0.5 |
| PUZ | | | | S | Sn | 11 31 04.6 | +1.8 |
| **RUGZ** | **Raukumara Rang** | **4.98 208** | | P | Pn | 11 30 08.8 | -0.5 |
| RUGZ | | | | S | Sn | 11 31 09.2 | +3.4 |
| **TWGZ** | **Tauwhareparae** | **5.06 204** | | P | Pn | 11 30 11.0 | +0.8 |
| TWGZ | | | | S | Sn | 11 31 08.9 | +1.4 |
| **KUZ** | **Kuaotunu** | **5.11 231** | | P | Pn | 11 30 12.7 | +1.9 |
| **CNGZ** | **Carnagh Statio** | **5.26 201** | | P | Pn | 11 30 11.0 | -2.0 |
| **TKGZ** | **Te Karaka** | **5.34 204** | | P | Pn | 11 30 14.5 | +0.6 |
| TKGZ | | | | S | Sn | 11 31 14.4 | 0.0 |
| **MWZ** | **Matawai** | **5.36 207** | | P | Pn | 11 30 14.3 | -0.1 |
| MWZ | | | | S | Sn | 11 31 17.2 | +2.2 |
| **URZ** | **Urewera** | **5.47 210** | | P | Pn | 11 30 15.7 | 0.0 |
| URZ | | | | S | Sn | 11 31 16.2 | -1.3 |
| **RIGZ** | **Rimuhau** | **5.61 204** | | P | Pn | 11 30 18.1 | +0.3 |
| RIGZ | | | | S | Sn | 11 31 22.7 | +1.6 |
| **PRGZ** | **Paritu Road** | **5.77 202** | | P | Pn | 11 30 19.1 | -0.8 |
| PRGZ | | | | S | Sn | 11 31 25.5 | +0.6 |
| **MUGZ** | **Murupara** | **5.79 212** | | P | Pn | 11 30 20.9 | +0.6 |
| MUGZ | | | | S | Sn | 11 31 24.9 | -0.7 |
| **RTZ** | **Ruatahuna** | **5.82 209** | | P | Pn | 11 30 20.4 | -0.3 |
| **SNGZ** | **Shannon Statio** | **5.83 206** | | P | Pn | 11 30 21.4 | +0.7 |
| SNGZ | | | | S | Sn | 11 31 28.4 | +2.1 |
| **MTHZ** | **Maungataniwha** | **6.08 209** | | P | Pn | 11 30 24.8 | +0.6 |
| MTHZ | | | | S | Sn | 11 31 33.1 | +0.4 |
| **NMHZ** | **Naumai** | **6.30 208** | | P | Pn | 11 30 27.3 | -0.1 |
| NMHZ | | | | S | Sn | 11 31 38.2 | 0.0 |
| **ARHZ** | **Aropaoanui** | **6.38 206** | | P | Pn | 11 30 27.5 | -0.7 |
| ARHZ | | | | S | Sn | 11 31 38.7 | -1.1 |
| **BKZ** | **Black Stump Fm** | **6.49 210** | | P | Pn | 11 30 28.8 | -1.0 |
| BKZ | | | | S | Sn | 11 31 42.1 | -0.7 |
| **KWHZ** | **Kaweka Forest** | **6.74 209** | | P | Pn | 11 30 31.6 | -1.6 |
| KWHZ | | | | S | Sn | 11 31 48.2 | -0.7 |
| **KAHZ** | **Kahuranaki** | **6.89 205** | | P | Pn | 11 30 34.0 | -1.3 |
| KAHZ | | | | S | Sn | 11 31 49.0 | -3.6 |
| **BHHZ** | **Black Hill Sta** | **6.94 211** | | P | Pn | 11 30 38.0 | +1.9 |
| BHHZ | | | | S | Sn | 11 31 53.5 | -0.4 |

*UCC* ***23*** *11:44:38.1*±*0.9, 51°.59N*×*7°.00E, h10km*±*2km, ML2.5, ML2.5/10*
*BUG* ***23*** *11:44:38.3*±*0.0, 51°.60N*×*6°.82E, h2km, MD2.9/11, ML3.1/6*
*BNS* ***23*** *11:44:39.6*±*0.3, 51°.56N*×*6°.80E, h1km, ML2.4*
*BGR* ***23*** *11:44:39.1*±*0.5, 51°.59N*×*6°.77E, h1km, ML2.6/3, Error ellipse: s-maj=8.9km s-min=4.4km az=126.0*
*LDG* ***23*** *11:44:39.1*±*0.2, 51°.58N*×*6°.83E, h1km, Md3.0/1, Ml3.1/13, Error ellipse: s-maj=3.3km s-min=2.3km az=35.0, Suspected Mining induced.*
*PRU* ***23*** *11:44:39.4*±*0.0, 52°.34N*×*7°.51E, h2km*
**ISC 23 11:44:37.2**±0.8,**51°.58N**±0°.02×**6°.83E**±0°.02,**h0**km,**n74, s0**86/118,**23D,Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BZER** | **Hlnxe** | **0.05** | **29** | Pg | **Pg** | **11 44 38.9** | **+0.7** |
| BZER | | | | Sg | **Sg** | **11 44 40.1** | **+1.2** |
| **LAUG** | **Laupendahl** | **0.24** | **162** | *e*Pg | **Pb** | **11 44 43.9** | **+2.2** |
| **BAVN** | **Auguste-Victor** | **0.24** | **48** | Pg | **Pg** | **11 44 43.5** | **+1.6** |
| BAVN | | | | Sg | **Sg** | **11 44 44.2** | **-0.9** |
| **BULI** | **Ruhr-Universit** | **0.29** | **114** | Pg | **Pb** | **11 44 45.1** | **-0.3** |
| BULI | | | | Sg | **Sb** | **11 44 50.0** | **-0.8** |
| **BUG** | **Bochum--Univer** | **0.31** | **116** | Pg | **Pb** | **11 44 45.2** | **-0.4** |
| BUG | | | | Sg | **Sb** | **11 44 49.8** | **-1.3** |
| **BKLB** | **Ruhr-Universit** | **0.31** | **116** | Pg | **Pb** | **11 44 45.2** | **-0.4** |
| **BTEZ** | **Ruhr-Universit** | **0.31** | **114** | Pg | **Pb** | **11 44 45.3** | **-0.3** |
| **ENTS** | **Ennepetalsperr** | **0.49** | **132** | *e*Pg | **Pb** | **11 44 48.7** | **-0.1** |
| ENTS | | | | *e*Sg | **Sb** | **11 44 55.9** | **-0.7** |
| **HMES** | **Hamm, Michael-** | **0.57** | **81** | Pg | **Pb** | **11 44 49.9** | **-0.1** |
| HMES | | | | Sg | **Sb** | **11 44 58.2** | **-0.4** |
| **PLH** | **Pulheim** | **0.57** | **181** | *e*Pg | **Pb** | **11 44 50.0** | **-0.1** |
| PLH | | | | *e*Sg | **Sb** | **11 44 58.0** | **-0.8** |
| **BNS** | **Bensberg** | **0.65** | **160** | *e*Pg | **Pb** | **11 44 52.0** | **+0.6** |
| **HOBG** | **Hohbusch** | **0.67** | **152** | *e*Pg | **Pb** | **11 44 52.4** | **+0.6** |
| **SORT** | **Sorpetalsperre** | **0.75** | **107** | *e*Pg | **Pb** | **11 44 53.2** | **0.0** |
| SORT | | | | *e*Sg | **Sb** | **11 45 03.5** | **-0.4** |
| | 86nm,0.5s | | | | | | |
| **GSH** | **Grosshau** | **0.89** | **199** | *e*Pg | **Pb** | **11 44 55.8** | **+0.3** |
| GSH | | | | *e*Sg | **Sb** | **11 45 08.1** | **+0.2** |
| | 86nm,0.3s | | | | | | |
| **IBBN** | **Ibbenbueren** | **0.93** | **38** | Pg | **Pb** | **11 44 56.1** | **-0.2** |
| IBBN | | | | Sg | **Sn** | **11 45 10.6** | **-1.0** |
| **IBBE** | **Ibbenbueren Ea** | **0.94** | **39** | Pg | **Pb** | **11 44 56.4** | **0.0** |
| IBBE | | | | *e*Sg | **Sn** | **11 45 11.5** | **-0.4** |
| **STB** | **Steinbach** | **0.98** | **180** | *e*Sg | **Sb** | **11 45 10.8** | **+0.2** |
| | 93nm,0.3s | | | | | | |
| **KLL** | **Kalltalsperre** | **0.98** | **200** | *e*Pg | **Pb** | **11 44 57.6** | **+0.4** |
| **DREG** | **Dreilaegerbach** | **0.99** | **203** | *e*Pg | **Pb** | **11 44 57.5** | **+0.3** |
| **HGN** | **Heimansgroeve** | **0.99** | **215** | Pg | **Pb** | **11 44 57.7** | **+0.5** |
| HGN | | | | Sg | **Sn** | **11 45 12.9** | **-0.1** |
| **TDN** | **Todenfeld** | **1.00** | **176** | *e*Pg | **Pb** | **11 44 58.0** | **+0.5** |
| TDN | | | | *e*Sg | **Sb** | **11 45 11.9** | **+0.6** |
| | 111nm,0.4s | | | | | | |
| **AHRW** | **Bad Neuenahr-A** | **1.05** | **171** | Pg | **Pn** | **11 44 59.4** | **+0.3** |
| AHRW | | | | Sg | **Sn** | **11 45 15.3** | **+0.9** |
| **KASTN** | **Kahler Asten** | **1.06** | **110** | Pg | **Pn** | **11 44 59.1** | **-0.3** |
| KASTN | | | | Sg | **Sn** | **11 45 15.2** | **+0.3** |
| **BEBN** | **Eben Emael** | **1.06** | **223** | *dP* | **Pn** | **11 44 59.2** | **-0.2** |
| BEBN | | | | *dS* | **Sb** | **11 45 13.8** | **+0.9** |
| | comp=E,172nm,0.0s | | | | | | |
| **MEM** | **Membach** | **1.10** | **209** | *e*Pg | **Pb** | **11 44 59.4** | **+0.4** |
| MEM | | | | *e*Sg | **Sb** | **11 45 14.9** | **+1.0** |
| **MEM** | **Membach** | **1.10** | **209** | *dP* | **Pb** | **11 44 59.2** | **+0.2** |
| MEM | | | | *dS* | **Sb** | **11 45 14.8** | **+1.0** |
| | comp=E,131nm,0.0s | | | | | | |
| **OLFT** | **Oleftalsperre** | **1.11** | **194** | *e*Pg | **Pn** | **11 44 59.9** | **-0.2** |
| OLFT | | | | *e*Sg | **Sb** | **11 45 15.1** | **+0.7** |
| **BMOL** | **Mol** | **1.15** | **252** | *dP* | **Pn** | **11 45 00.9** | **+0.4** |
| BMOL | | | | *dS* | **Sn** | **11 45 19.1** | **+2.1** |
| | comp=E,39nm,0.0s | | | | | | |
| **BLCH** | **La Chartreuse** | **1.22** | **220** | *dP* | **Pn** | **11 45 01.3** | **-0.1** |
| BLCH | | | | *dS* | **Sn** | **11 45 18.7** | **+0.1** |
| | comp=E,61nm,0.0s | | | | | | |
| **BHE** | **Schloss Buerre** | **1.24** | **170** | *e*Pg | **Pn** | **11 45 02.3** | **+0.4** |
| BHE | | | | *e*Sg | **Sn** | **11 45 19.2** | **-0.1** |
| | comp=E,69nm,0.5s | | | | | | |
| **BSTI** | **Sart Tilman** | **1.27** | **219** | *dP* | **Pn** | **11 45 02.7** | **+0.5** |
| BSTI | | | | *dS* | **Sn** | **11 45 20.5** | **+0.5** |
| | comp=Z,17nm,0.0s | | | | | | |
| **KOE** | **Koeppel** | **1.28** | **153** | *e*Pg | **Pn** | **11 45 03.1** | **+0.7** |
| **HILG** | **Hillesheim** | **1.29** | **184** | *e*Pg | **Pn** | **11 45 03.1** | **+0.6** |
| HILG | | | | *e*Sg | **Sn** | **11 45 20.6** | **+0.2** |
| | comp=Z,138nm,0.5s | | | | | | |
| **BHOU** | **Houvegnez** | **1.33** | **203** | *dP* | **Pb** | **11 45 03.3** | **+0.3** |
| BHOU | | | | *dS* | **Sn** | **11 45 21.5** | **+0.1** |
| | comp=E,85nm,0.0s | | | | | | |
| **LOH** | **Wallersheim-Lo** | **1.41** | **188** | *e*Pg | **Pb** | **11 45 04.7** | **+0.3** |
| LOH | | | | *e*Sg | **Sb** | **11 45 23.2** | **+0.4** |
| | comp=E,102nm,0.4s | | | | | | |
| **BGG** | **Burgeitz** | **1.41** | **167** | *e*Pg | **Pb** | **11 45 04.9** | **+0.6** |
| **BGES** | **Gesves** | **1.62** | **223** | *dP* | **Pn** | **11 45 07.2** | **+0.1** |
| BGES | | | | *dS* | **Sg** | **11 45 30.8** | **+1.4** |
| | comp=N,44nm,0.0s | | | | | | |
| **TNS** | **Taunus Mts** | **1.70** | **142** | Pg | **Pg** | **11 45 10.7** | **+0.9** |
| **RCHB** | **Rochefort** | **1.75** | **216** | *dP* | **Pg** | **11 45 10.7** | **0.0** |
| RCHB | | | | *dS* | **Sb** | **11 45 33.0** | **+0.5** |
| | comp=N,27nm,0.0s | | | | | | |
| **BMRD** | **Maredsous** | **1.82** | **226** | *dP* | **Pn** | **11 45 10.2** | **+0.4** |
| BMRD | | | | *dS* | **Sn** | **11 45 34.2** | **+0.6** |
| | comp=E,26nm,0.0s | | | | | | |
| **SNF** | **Seneffe** | **1.93** | **237** | *dP* | **Pg** | **11 45 14.5** | **+0.3** |
| **GIVF** | **Givet** | **1.95** | **222** | *e*Pn | **Pn** | **11 45 12.0** | **+0.5** |
| **GIVF** | **Givet** | **1.95** | **222** | *e*Pg | **Pg** | **11 45 15.5** | **+1.0** |
| GIVF | | | | *e*Sg | **Sg** | **11 45 40.2** | **+0.5** |
| | comp=E,65nm,0.4s | | | | | | |
| **WLF** | **Walferdange** | **1.96** | **193** | *dP* | **Pg** | **11 45 15.4** | **+0.7** |
| WLF | | | | *dS* | **Sg** | **11 45 40.5** | **+0.3** |
| | comp=E,42nm,0.0s | | | | | | |
| **DOU** | **Dourbes** | **2.05** | **225** | *dP* | **Pn** | **11 45 12.9** | **0.0** |
| | comp=Z,43nm,0.0s | | | | | | |
| DOU | | | | *dS* | **Sb** | **11 45 41.8** | **+0.5** |
| **BAIF** | **Baives** | **2.25** | **229** | *e*Pn | **Pn** | **11 45 15.9** | **+0.2** |
| **BAIF** | **Baives** | **2.25** | **229** | *e*Pg | **Pg** | **11 45 21.1** | **+0.8** |
| BAIF | | | | *e*Sg | **Sg** | **11 45 49.1** | **-0.4** |
| | comp=Z,33nm,0.5s | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.11** | **194** | *e*Pn | **Pn** | **11 45 27.2** | **-0.3** |
| **PAGF** | **Fort de Pagny** | **3.11** | **194** | *e*Pg | **Pg** | **11 45 37.2** | **+0.5** |
| PAGF | | | | *e*Sg | **Sg** | **11 46 16.4** | **-0.6** |
| | comp=Z,27nm,0.6s,baz=17 | | | | | | |
| **SAVF** | **Savonnieres en** | **3.16** | **201** | *e*Pn | **Pn** | **11 45 28.0** | **-0.2** |
| | baz=15 | | | | | | |
| **SAVF** | **Savonnieres en** | **3.16** | **201** | *e*Pg | **Pg** | **11 45 37.6** | **-0.2** |
| | baz=12 | | | | | | |
| SAVF | | | | *e*Sg | **Sg** | **11 46 18.1** | **-0.6** |
| | comp=Z,20nm,0.5s | | | | | | |
| **CDF** | **Champ du Feu** | **3.18** | **175** | *e*Pn | **Pn** | **11 45 28.5** | **-0.1** |
| **CDF** | **Champ du Feu** | **3.18** | **175** | *e*Pg | **Pg** | **11 45 38.0** | **-0.1** |
| CDF | | | | *e*Sg | **Sg** | **11 46 19.1** | **-0.2** |
| | comp=Z,29nm,0.6s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.28** | **201** | *e*Pn | **Pn** | **11 45 29.7** | **-0.2** |
| | baz=18 | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.28** | **201** | *e*Pg | **Pg** | **11 45 39.2** | **-0.9** |
| | baz=22 | | | | | | |
| MEZF | | | | *e*Sg | **Sg** | **11 46 21.6** | **-1.0** |
| | comp=Z,11nm,0.4s,baz=19 | | | | | | |
| **SFTF** | **Sexfontaines** | **3.57** | **200** | *e*Pn | **Pn** | **11 45 33.8** | **0.0** |
| **SFTF** | **Sexfontaines** | **3.57** | **200** | *e*Pg | **Pg** | **11 45 45.8** | **+0.2** |
| | baz=18 | | | | | | |
| SFTF | | | | *e*Sg | **Sg** | **11 46 31.2** | **-0.6** |
| | comp=Z,7.8nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **3.59** | **185** | *e*Pn | **Pn** | **11 45 34.2** | **+0.1** |
| **HAU** | **Haudompre** | **3.59** | **185** | *e*Pg | **Pg** | **11 45 45.6** | **-0.3** |
| HAU | | | | *e*Sg | **Sg** | **11 46 31.6** | **-0.8** |
| | comp=Z,10nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **3.76** | **180** | *e*Pn | **Pn** | **11 45 36.2** | **-0.3** |
| **HINF** | **Hinteralfeld** | **3.76** | **180** | *e*Pg | **Pg** | **11 45 48.8** | **-0.5** |
| HINF | | | | *e*Sg | **Sg** | **11 46 37.2** | **-0.8** |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **LOR** | **Lormes** | **4.73** | **205** | *e*Pn | **Pn** | **11 45 49.6** | **-0.1** |
| | baz=30 | | | | | | |
| **LOR** | **Lormes** | **4.73** | **205** | *e*Pg | **Pg** | **11 46 06.0** | **-1.8** |
| | baz=34 | | | | | | |
| LOR | | | | *e*Sg | **Sg** | **11 47 07.3** | **-1.7** |
| | comp=Z,7.8nm,0.3s,baz=29 | | | | | | |
| **KHC** | **Kasperske Hory** | **4.96** | **117** | *e*PN | **Pn** | **11 45 55.3** | **+2.2** |
| KHC | | | | *e*SG | **Sg** | **11 47 19.3** | **+2.7** |
| **CABF** | **La Chapelle** | **4.99** | **186** | *e*Pn | **Pn** | **11 45 53.1** | **-0.4** |
| **SSF** | **Saint Saulge** | **5.01** | **207** | *e*Pn | **Pn** | **11 45 53.7** | **0.0** |
| SSF | | | | *e*Sg | **Sg** | **11 47 16.0** | **-2.2** |
| | comp=Z,16nm,0.5s | | | | | | |
| **AVF** | **Avril sur Loir** | **5.30** | **207** | *e*Pn | **Pn** | **11 45 57.4** | **-0.2** |
| **SMF** | **Signal de Mont** | **5.31** | **203** | *e*Pn | **Pn** | **11 45 57.5** | **-0.3** |
| **LDF** | **La Druitiere** | **5.38** | **239** | *e*Pn | **Pn** | **11 45 58.5** | **-0.2** |
| **FLN** | **La Foliniere** | **5.48** | **242** | *e*Pn | **Pn** | **11 45 59.8** | **-0.2** |
| | baz=65 | | | | | | |
| **BGF** | **Bois d'Agland** | **5.66** | **209** | *e*Pn | **Pn** | **11 46 01.1** | **-1.5** |
| **GRR** | **Gorron** | **5.89** | **240** | *e*Pn | **Pn** | **11 46 05.5** | **-0.3** |
| GRR | | | | *e*Sn | **Sn** | **11 47 09.8** | **-4.2** |
| | comp=Z,8.5nm,0.3s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **6.10** | **212** | *e*Pn | **Pn** | **11 46 08.2** | **-0.5** |
| **SGMF** | **Saint Gilles** | **6.91** | **245** | *e*Pn | **Pn** | **11 46 18.4** | **-1.3** |

*IDC* ***23*** *11:46:27.8*±*1.6, 44°.98N*×*142°.35E, h258km*±*68km, mb2.7/3, mb1 2.9/3, mb1mx2.6/43, mbtmp3.3/3, Error ellipse: s-maj=221.9km s-min=27.7km az=170.0*
*JMA* ***23*** *11:46:27.0*±*0.4, 44°.93N*×*142°.36E, h267km*±*3km, M2.8*
**ISC 23 11:46:27.4**±0.9,**44°.81N**±0°.09×**142°.40E**±0°.09,**h267**km±7km, **n22,s0**98/30,**mb2.9**/3,**Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSE** | **Soyaes** | **0.20** | **42** | P | **Pn** | **11 47 01.1** | **-0.5** |
| **JSS** | **Shosan** | **0.57** | **224** | P | **Pn** | **11 47 02.4** | **-0.1** |
| **JWK2** | **Keihoku** | **0.61** | **325** | P | **Pn** | **11 47 01.8** | **-0.7** |
| **ASAJ** | **Asahikawa** | **0.71** | **169** | P | **Pn** | **11 47 03.3** | **+0.3** |
| | 17nm,0.3s,baz=333,slow=3.6,SNR=93 | | | | | | |
| ASAJ | | | | S | **S** | **11 47 31.3** | **+0.2** |
| | baz=76,slow=29,SNR=1.9 | | | | | | |
| **ASAJ** | **Asahikawa** | **0.71** | **169** | P | **Pn** | **11 47 03.2** | **+0.2** |
| ASAJ | | | | *e*S | **S** | **11 47 31.4** | **+0.3** |
| **JYG** | **Yagishiri** | **0.80** | **241** | P | **Pn** | **11 47 03.2** | **-0.1** |
| **JRR** | **Rishiri** | **0.84** | **293** | P | **Pn** | **11 47 02.9** | **-0.5** |
| **JKK2** | **Kamakawa 2** | **0.97** | **165** | P | **Pn** | **11 47 04.7** | **+0.5** |
| JKK2 | | | | *e*S | **S** | **11 47 33.6** | **+0.4** |
| **JMP** | **Maruseppu** | **1.06** | **139** | P | **Pn** | **11 47 04.8** | **+0.2** |
| JMP | | | | *e*S | **S** | **11 47 34.4** | **+0.4** |
| **JHR** | **Hokuryu** | **1.18** | **205** | P | **Pn** | **11 47 05.7** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **1.37** | **127** | P | **Pn** | **11 47 06.9** | **+0.5** |
| JTKR | | | | *e*S | **S** | **11 47 37.7** | **+0.4** |
| **JAR** | **Ashorobuto** | **1.81** | **146** | P | **Pn** | **11 47 10.4** | **+0.7** |
| JAR | | | | *e*S | **S** | **11 47 44.6** | **+1.4** |
| **JEW** | **Eniwo** | **2.09** | **200** | P | **Pn** | **11 47 13.3** | **+1.2** |
| **JRA** | **Rausu** | **2.14** | **113** | P | **Pn** | **11 47 13.6** | **+1.1** |
| **JCH** | **Churui** | **2.31

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PCVE | | | | | A | A | 12 07 48.9 | | |
| | 3.4nm,0.3s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.53** | **291** | P | | **Pn** | **12 07 05.3** | **+2.2** |
| **PNCL** | **Nicolau / Gran** | **4.71** | **303** | *e*Pn | | **Pn** | **12 07 06.3** | **+0.7** |
| PNCL | | | | *e*Sn | | **Sn** | **12 07 57.4** | **-1.8** |
| PNCL | | | | A | | A | 12 08 00.0 | |
| | 2.5nm,0.8s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.88** | **322** | *e*Pn | | **Pn** | **12 07 09.6** | **+1.7** |
| **OUZM** | **OUZ** | **5.44** | **211** | P | | **Pn** | **12 07 16.9** | **+1.2** |

*SFS **23** 12:11:59.0, 35°.64N×3°.65W, ML2.8, ALBORAN SUR*
*INMG **23** 12:12:00.0±1.2, 35°.62N×3°.64W, h6km±9km, ML2.4, Error ellipse: s-maj=5.4km s-min=3.7km az=112.0*
*CNRM **23** 12:12:00.5, 35°.60N×3°.55W, h28km, ml2.9*
**ISC 23 12:11:59.9±1.2, 35°.66N±0°.04×3°.54W±0°.04, h26km±13km, n24, σ1s 03/38, Earle of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.55** | **217** | P | **Pb** | **12 12 10.7** | **-0.3** |
| PALE | | | | S | **Sb** | **12 12 18.2** | **-0.3** |
| **GOG** | **Mont Gurugu** | **0.62** | **134** | P | **Pb** | **12 12 12.2** | **0.0** |
| GOG | | | | S | **Sb** | **12 12 21.1** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.02** | **117** | P | **Pb** | **12 12 18.3** | **-0.6** |
| CHAS | | | | S | **Sb** | **12 12 31.9** | **0.0** |
| **TAF** | **Taforalt** | **1.25** | **132** | P | **Pn** | **12 12 22.1** | **+0.4** |
| **EMAL** | **Malaga-Limoner** | **1.31** | **327** | P | **Pn** | **12 12 21.6** | **-1.0** |
| EMAL | | | | S | **Sn** | **12 12 38.7** | **-0.6** |
| **JBK** | **JBK** | **1.54** | **149** | P | **Pn** | **12 12 25.8** | **-0.1** |
| JBK | | | | S | **Sn** | **12 12 43.9** | **-1.3** |
| **CHEFC** | **Chefchaouen** | **1.57** | **250** | P | **Pn** | **12 12 26.4** | **+0.2** |
| **IFR** | **Ifrane** | **2.51** | **212** | P | **Pn** | **12 12 39.7** | **+0.5** |
| IFR | | | | S | **Sn** | **12 13 09.5** | **+0.5** |
| **CZD** | **Col de Zad** | **2.90** | **206** | P | **Pn** | **12 12 45.1** | **+0.4** |
| CZD | | | | S | **Sn** | **12 13 19.3** | **+0.5** |
| **MD31** | **MD31** | **2.96** | **200** | P | **Pn** | **12 12 47.0** | **+1.6** |
| **MDT** | **Midelt** | **2.97** | **198** | P | **Pn** | **12 12 46.6** | **+1.1** |
| **PVAQ** | **Vaqueiros** | **3.79** | **299** | *e*Pn | **Pn** | **12 12 56.8** | **+0.2** |
| PVAQ | | | | *e*Sn | **Sn** | **12 13 38.5** | **-1.8** |
| PVAQ | | | | A | A | 12 13 48.5 | |
| | 6.5nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.79** | **299** | P | **Pn** | **12 12 56.3** | **-0.3** |
| **PBDV** | **Barranco-do-Ve** | **3.88** | **295** | *e*Pn | **Pn** | **12 12 58.1** | **+0.2** |
| PBDV | | | | *e*Sn | **Sn** | **12 13 41.8** | **-0.8** |
| PBDV | | | | A | A | 12 13 46.5 | |
| | 6.5nm,0.7s | | | | | | |
| **PCVE** | **Castro Verde** | **4.12** | **300** | *e*Pn | **Pn** | **12 13 01.8** | **+0.6** |
| PCVE | | | | *e*Sn | **Sn** | **12 13 47.9** | **-0.6** |
| PCVE | | | | A | A | 12 13 55.9 | |
| | 5.9nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.55** | **316** | *e*Sn | **Sn** | **12 13 58.9** | **-0.2** |
| **PESTR** | **Estremoz** | **4.55** | **316** | P | **Pn** | **12 13 08.6** | **+1.5** |
| **PTEO** | **Sao Teotonio** | **4.58** | **296** | *e*Pn | **Pn** | **12 13 09.3** | **+1.9** |
| **PNCL** | **Nicolau / Gran** | **4.69** | **303** | *e*Pn | **Pn** | **12 13 09.2** | **+0.2** |
| PNCL | | | | *e*Sn | **Sn** | **12 14 01.3** | **-1.2** |
| PNCL | | | | A | A | 12 14 29.9 | |
| | 6.9nm,0.6s | | | | | | |
| **PMRV** | **Marv??o** | **4.85** | **322** | *e*Pn | **Pn** | **12 13 12.8** | **+1.6** |
| PMRV | | | | *e*Sn | **Sn** | **12 14 06.7** | **+0.2** |
| PMRV | | | | A | A | 12 14 20.8 | |
| | 3.8nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **5.05** | **314** | *e*Pn | **Pn** | **12 13 14.9** | **+0.9** |
| PMTG | | | | *e*Sn | **Sn** | **12 14 11.4** | **-0.1** |
| **PCBR** | **Castelo Branco** | **5.21** | **324** | *e*Pn | **Pn** | **12 13 17.9** | **+1.8** |
| PCBR | | | | *e*Sn | **Sn** | **12 14 14.6** | **-0.8** |
| **OUZM** | **OUZ** | **5.45** | **211** | P | **Pn** | **12 13 17.9** | **-1.7** |
| **MVO** | **Moncorvo** | **6.14** | **335** | *e*Pn | **Pn** | **12 13 31.1** | **+2.1** |

**VIE 23 12:18:14.5±0.7, 47°.36N×11°.55E, h2km, ml0.3/3, Error ellipse: s-maj=7.2km s-min=1.3km az=25.0 9 km NNE of Hall in Tirol, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WATA** | **Walderalm** | **0.03** | **144** | *i* Pg | Pg | 12 18 15.4 | +0.2 |
| WATA | 4.8nm,0.1s | | | *i* Sg | Sg | 12 18 16.1 | +0.3 |
| | 16nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **149** | *i* Pg | Pg | 12 18 16.9 | +0.2 |
| WTTA | 1.1nm,0.1s | | | *i* Sg | Sg | 12 18 18.6 | +0.5 |
| | 2.7nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **0.30** | **268** | *e*Pg | Pg | 12 18 20.9 | +0.5 |
| MOTA | 0.2nm,0.1s | | | *i* Sg | Sg | 12 18 24.8 | +0.4 |
| | 0.5nm,0.1s | | | | | | |
| **FETA** | **Feichten** | **0.66** | **239** | *e*Pg | Pn | 12 18 30.9 | 0.0 |
| FETA | 0.2nm,0.1s | | | *i* Sg | Sb | 12 18 37.7 | -0.7 |
| | 0.4nm,0.1s | | | | | | |

*IDC **23** 12:40:45.5±0.9, 40°.20N×139°.09E, h0km, mb3.5/6, mb1 3.7/10, mb1mx3.5/64, mbtmp3.5/10, ML2.7/4, MS2.6/2, Ms1 2.6/2, ms1mx2.3/67, Error ellipse: s-maj=34.0km s-min=16.9km az=113.0*
*JMA **23** 12:40:47.7±0.1, 40°.29N×139°.04E, h34km±2km, M3.9*
*NIED **23** 12:40:47.8, 40°.29N×139°.04E, h34km, MW3.4, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.89; $M_{\theta\theta}$0.93; $M_{\phi\phi}$-1.82; $M_{r\theta}$0.28; $M_{\theta\phi}$-0.10; $M_{\phi r}$-0.27; Fault plane solution: $M_0$1.53000×$10^{14}$ NP1: $\phi_s$147.00000°, $\delta$65.00000°, $\lambda$38.00000°. NP2:$\phi_s$39.00000°, $\delta$56.00000°, $\lambda$150.00000°.*
**ISC 23 12:40:50.1±2.2, 40°.34N±0°.03×139°.09E±0°.04, h34km±6km, n26, σ1s 89/36, mb3.6/6, 4C-3D, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOG3** | **Oga3** | **0.42** | **181** | ⇓P | **Pn** | **12 41 01.1** | **+1.4** |
| JOG3 | | | | S | **Sn** | **12 41 10.6** | **+4.5** |
| **JIW** | **Iwasaki** | **0.74** | **70** | ⇑P | **Pn** | **12 41 02.5** | **-1.6** |
| JIW | | | | S | **Sn** | **12 41 12.8** | **-1.5** |
| **JNTW** | **Noshirotokiwa** | **0.82** | **94** | ⇓P | **Pn** | **12 41 03.7** | **-1.5** |
| JNTW | | | | S | **Sn** | **12 41 14.7** | **-1.4** |
| **JAH** | **Hinai** | **1.19** | **97** | ⇓P | **Pn** | **12 41 08.8** | **-1.5** |
| JAH | | | | *e*S | **Sn** | **12 41 23.4** | **-1.9** |
| **JOMM** | **Oshimamatsumae** | **1.37** | **30** | P | **Pn** | **12 41 11.6** | **-1.2** |
| JOMM | | | | *e*S | **Sn** | **12 41 28.9** | **-0.8** |
| **JRG** | **Rokugo** | **1.52** | **128** | P | **Pn** | **12 41 13.0** | **-1.8** |
| **JSR** | **Shiriuchi** | **1.56** | **40** | ⇑P | **Pn** | **12 41 14.8** | **-0.5** |
| JSR | | | | *e*S | **Sn** | **12 41 33.7** | **-0.6** |
| **JTM** | **Tenmabayashi** | **1.57** | **73** | P | **Pn** | **12 41 15.1** | **-0.4** |
| **JYK** | **Kaneyama** | **1.73** | **145** | ⇑P | **Pn** | **12 41 15.5** | **-2.1** |
| JYK | | | | *e*S | **Sn** | **12 41 36.6** | **-1.9** |
| **JOSM** | **Okushiri--Mats** | **1.77** | **9** | P | **Pn** | **12 41 16.3** | **-1.9** |
| JOSM | | | | S | **Sn** | **12 41 37.2** | **-2.2** |
| **JYA** | **Atsumi** | **1.81** | **164** | ⇑P | **Pn** | **12 41 16.7** | **-2.1** |
| JYA | | | | S | **Sn** | **12 41 38.2** | **-2.3** |
| **JOT** | **Ohata** | **1.81** | **54** | P | **Pn** | **12 41 18.6** | **-0.2** |
| **JANG** | **Nango** | **1.85** | **88** | P | **Pn** | **12 41 18.9** | **-0.5** |
| **JAW** | **Awa shima** | **1.89** | **176** | P | **Pn** | **12 41 17.4** | **-2.4** |
| **JOM** | **Ohasama** | **1.90** | **116** | P | **Pn** | **12 41 19.2** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **3.85** | **191** | Pn | **Pn** | **12 41 45.7** | **-1.2** |
| MJAR | 0.2nm,0.3s,baz=357,slow=20,SNR=13 | | | | Sn | **12 42 28.6** | **-2.4** |
| | 0.2nm,0.3s,baz=297,slow=9.5,SNR=4.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.58** | **33** | Pn | **Pn** | **12 41 59.7** | **+2.8** |
| | 0.4nm,0.3s,baz=172,slow=33,SNR=5.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **6.53** | **309** | Pn | **Pn** | **12 42 22.9** | **-0.6** |
| USRK | baz=114,slow=14,SNR=7.2 | | | | Sn | **12 43 33.0** | **-3.7** |
| | baz=150,slow=23,SNR=1.9 | | | | | | |
| USRK | | | | LR | LR | 12 44 47.5 | |
| | comp=Z,79nm,21.6s,baz=157,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **9.17** | **255** | Pn | **Pn** | **12 43 00.8** | **+0.9** |
| | 0.6nm,0.3s,baz=68,slow=14,SNR=4.4 | | | | | | |
| KSRS | | | | LR | LR | 12 46 22.3 | |
| | comp=Z,24nm,19.4s,baz=150,slow=37 | | | | | | |
| **MA2** | **Magadan** | **20.61** | **17** | P | Pn | 12 45 30.1 | +1.7 |
| | 1.4nm,0.5s,baz=181,slow=8.3,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **47.72** | **34** | P | **P** | **12 49 24.9** | **+1.8** |
| | 1.3nm,0.8s,baz=281,slow=9.6,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.13** | **185** | P | **P** | **12 50 53.1** | **-1.0** |
| | 0.3nm,0.4s,baz=4.5,slow=7.1,SNR=6.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **61.87** | **30** | P | **P** | **12 51 05.5** | **+0.1** |
| | 0.1nm,0.4s,baz=301,slow=7.1,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **63.86** | **185** | P | **P** | **12 51 19.1** | **+0.1** |
| | 0.2nm,0.8s,baz=359,slow=7.4,SNR=2.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.45** | **53** | P | **P** | **12 52 27.0** | **+2.0** |
| | 0.6nm,0.8s,baz=282,slow=5.5,SNR=4.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **76.63** | **45** | P | **P** | **12 52 38.2** | **+0.8** |
| | 0.3nm,0.5s,baz=264,slow=4.3,SNR=3.8 | | | | | | |

**IDC 23 13:00:58.1±2.7, 3°.80S×128°.38E, h0km, mb3.6/3, mb1 3.7/5, mb1mx3.3/34, mbtmp3.5/5, ML3.0/2, Error ellipse: s-maj=101.5km s-min=26.8km az=58.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **14.46** | **190** | Pn | Pn | 13 04 26.1 | +1.8 |
| | 0.0nm,0.3s,baz=225,slow=20,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.06** | **161** | P | Pn | 13 04 58.0 | -0.3 |
| | 0.1nm,0.3s,baz=342,slow=12,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **20.46** | **165** | P | P | 13 05 36.4 | -1.2 |
| | 0.2nm,0.3s,baz=344,slow=11,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **30.57** | **158** | P | P | 13 07 14.2 | +0.6 |
| | 0.9nm,0.5s,baz=308,slow=12,SNR=4.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.47** | **308** | P | P | 13 08 05.2 | -0.1 |
| | 0.4nm,0.3s,baz=116,slow=8.1,SNR=1.7 | | | | | | |

*TUL **23** 13:13:27.7±0.5, 35°.670N±0°.010×97°.39W±0°.01, h7km±3km, ML2.9, mb_Lg2.3/16(NEIC), Error ellipse: s-maj=1.5km s-min=1.1km az=146.0*
**NEIC 23 13:13:28.1±0.6, 35°.68N±0°.01×97°.40W±0°.01, h7km±2km, Error ellipse: s-maj=1.5km s-min=1.3km az=198.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **192** | Pg | Pg | 13 13 30.1 | -0.2 |
| OK009 | | | | Sg | Sg | 13 13 32.0 | +0.1 |
| **OK001** | **Jones High Sch** | **0.14** | **143** | Pg | Pg | 13 13 31.0 | -0.1 |
| OK001 | | | | Sg | Sg | 13 13 33.5 | +0.3 |
| **OK005** | **Luther M Schoo** | **0.17** | **97** | Pg | Pg | 13 13 31.5 | -0.1 |
| OK005 | | | | Sg | Sg | 13 13 34.3 | +0.4 |
| **OKCFA** | **Oklahoma City** | **0.26** | **190** | | Pg | 13 13 33.1 | -0.2 |
| OKCFA | | | | Sg | Sg | 13 13 37.2 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **187** | Pg | Pg | 13 13 33.2 | -0.3 |
| OKCSW | | | | Sg | Sg | 13 13 37.5 | +0.4 |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 13 13 35.9 | -0.3 |
| FNO | | | | Sg | Sg | 13 13 42.0 | +0.3 |
| **W35A** | **Tecumseh** | **0.68** | **141** | Pg | Pg | 13 13 40.4 | -0.7 |
| **X34A** | **Smith Ranch, M** | **1.13** | **199** | Pg | Pg | 13 13 49.3 | -0.5 |
| **TUL1** | **Leonard** | **1.33** | **79** | | Pn | 13 13 51.4 | -1.6 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | | Pn | 13 13 53.5 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | | Pn | 13 13 54.2 | -0.7 |
| **U32A** | **Winter Ranch,** | **1.48** | **299** | | Pn | 13 13 54.4 | -0.7 |
| **X37A** | **Clayton** | **1.98** | **123** | | Pn | 13 14 02.2 | +0.2 |
| X37A | | | | IAmb_Lg | | 13 14 34.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **W39A** | **Magazine** | **2.99** | **98** | IAmb_Lg | | 13 15 08.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **3.33** | **109** | Pn | Pn | 13 14 20.5 | 0.0 |
| **AMTX** | **Amarillo** | **3.59** | **259** | Pn | Pn | 13 14 22.9 | -1.3 |
| AMTX | | | | IAmb_Lg | | 13 15 25.9 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.65** | **330** | IAmb_Lg | | 13 15 27.7 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.75** | **78** | IAmb_Lg | | 13 15 35.6 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.24** | **95** | Pn | Pn | 13 14 33.1 | +0.1 |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **86** | IAmb_Lg | | 13 15 45.7 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | IAmb_Lg | | 13 15 47.4 | |
| | comp=Z,5.8nm,0.7s | | | | | | |

*TAP **23** 13:19:34.8, 24°.07N×122°.44E, h22km±1km, ML3.7, D*
*IDC **23** 13:19:35.2±1.8, 23°.09N×120°.66E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.3/49, mbtmp3.4/4, Error ellipse: s-maj=159.7km s-min=24.0km az=65.0*
*JMA **23** 13:19:35.1±0.2, 24°.04N×122°.43E, h20km±3km, M3.1*
**ISC 23 13:19:34.7±1.0, 24°.03N±0°.02×122°.42E±0°.02, h17km±7km, n139, σ0s 95/247, mb3.4/4, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.64** | **49** | P | **Pg** | **13 19 47.1** | **-0.2** |
| JYNG | | | | *e*S | **Sg** | **13 19 55.6** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.69** | **51** | P | **Pg** | **13 19 48.2** | **0.0** |
| YOJ | | | | S | **Sg** | **13 19 57.0** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.69** | **51** | *e*P | **Pg** | **13 19 48.2** | **0.0** |
| YOJ | baz=52 | | | S | **Sb** | **13 19 57.7** | **+0.2** |
| | baz=52 | | | | | | |
| **EWUT** | **Wuta** | **0.72** | **305** | *e*P | **Pg** | **13 19 48.6** | **-0.2** |
| EWUT | baz=301 | | | *e*S | **Sb** | **13 19 58.6** | **+0.4** |
| | baz=301 | | | | | | |
| **ENA** | **Nanau** | **0.73** | **303** | *e*P | **Pb** | **13 19 49.1** | **+0.1** |
| ENA | baz=299 | | | *e*S | **Sb** | **13 19 59.2** | **+0.5** |
| | baz=299 | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **280** | *e*P | **Pg** | **13 19 49.6** | **+0.5** |
| ETL | baz=276 | | | *e*S | **Sn** | **13 20 00.8** | **-0.5** |
| | baz=276 | | | | | | |
| **HWA** | **Hwalien** | **0.75** | **266** | *e*P | **Pn** | **13 19 50.4** | **-0.1** |
| HWA | baz=262 | | | *e*S | **Sn** | **13 20 01.4** | **+0.1** |
| | baz=262 | | | | | | |
| **TWD** | **Chiawan** | **0.75** | **274** | *e*P | **Pn** | **13 19 50.2** | **-0.4** |
| TWD | baz=270 | | | *e*S | **Sn** | **13 20 00.8** | **-0.8** |
| | baz=270 | | | | | | |
| **NACB** | **Ninganchiao** | **0.77** | **281** | *e*P | **Pb** | **13 19 49.7** | **+0.2** |
| NACB | baz=277 | | | *e*S | **Sg** | **13 20 01.1** | **+1.3** |
| | baz=277 | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.77** | **258** | *e*P | **Pn** | **13 19 50.9** | **+0.2** |
| TEYL | baz=257 | | | *e*S | **Sn** | **13 20 02.1** | **+0.2** |
| | baz=257 | | | | | | |
| **TWC** | **Suao** | **0.78** | **318** | *e*P | **Pb** | **13 19 49.2** | **-0.5** |
| TWC | baz=315 | | | *e*S | **Sb** | **13 19 58.7** | **-1.3** |
| | baz=315 | | | | | | |
| **ETM** | **Tongmen** | **0.85** | **266** | *e*P | **Pg** | **13 19 51.7** | **+0.5** |
| ETM | baz=263 | | | *e*S | **Sn** | **13 20 03.5** | **-0.5** |
| | baz=263 | | | | | | |
| **TEGC** | **Jichi Village** | **0.87** | **248** | *e*S | **Sn** | **13 20 04.6** | **+0.3** |
| | baz=246 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.87** | **282** | *e*P | **Pb** | **13 19 51.4** | **-0.1** |
| ETLH | baz=278 | | | *e*S | **Sg** | **13 20 03.8** | **+0.5** |
| | baz=278 | | | | | | |
| **NDS** | **Dongshan** | **0.88** | **313** | *e*P | **Pb** | **13 19 51.4** | **-0.1** |
| NDS | baz=310 | | | *e*S | **Sb** | **13 20 03.0** | **0.0** |
| | baz=310 | | | | | | |
| **ESL** | **Shilin** | **0.93** | **257** | *e*P | **Pb** | **13 19 51.5** | **-0.8** |
| ESL | baz=254 | | | *e*S | **Sb** | **13 20 04.4** | **+0.1** |
| | baz=254 | | | | | | |
| **LATG** | **Datong** | **0.96** | **302** | *e*P | **Pb** | **13 19 52.9** | **0.0** |
| LATG | baz=299 | | | *e*S | **Sb** | **13 20 05.4** | **0.0** |
| | baz=299 | | | | | | |
| **TWE** | **Neicheng** | **0.97** | **315** | *e*P | **Pb** | **13 19 53.1** | **+0.1** |
| TWE | baz=313 | | | *e*S | **Sb** | **13 20 05.2** | **-0.4** |
| | baz=313 | | | | | | |
| **NTC** | **Toucheng** | **0.98** | **327** | *e*P | **Pb** | **13 19 53.1** | **-0.1** |
| NTC | baz=324 | | | *e*S | **Sb** | **13 20 05.2** | **-0.7** |
| | baz=324 | | | | | | |
| **ENTT** | **Nioudou** | **0.99** | **308** | *e*P | **Pb** | **13 19 53.4** | **0.0** |
| ENTT | baz=305 | | | *e*S | **Sg** | **13 20 07.2** | **+0.4** |
| | baz=305 | | | | | | |
| **NDT** | **Datong Townshi** | **1.00** | **305** | *e*P | **Pb** | **13 19 53.6** | **-0.1** |
| NDT | baz=302 | | | *e*S | **Sb** | **13 20 06.3** | **-0.2** |
| | baz=302 | | | | | | |
| **NNSB** | **Datong** | **1.02** | **293** | *e*P | **Pb** | **13 19 53.8** | **-0.3** |
| NNSB | baz=290 | | | *e*S | **Sb** | **13 20 07.3** | **0.0** |
| | baz=290 | | | | | | |
| **NNS** | **Nan Shan** | **1.04** | **293** | *e*P | **Pb** | **13 19 54.0** | **-0.3** |
| NNS | baz=290 | | | *e*S | **Sb** | **13 20 08.0** | **+0.3** |
| | baz=290 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.05** | **338** | *e*P | **Pb** | **13 19 53.8** | **-0.6** |
| TWB1 | baz=336 | | | *e*S | **Sb** | **13 20 07.1** | **-0.8** |
| | baz=336 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.05** | **314** | *e*P | **Pb** | **13 19 54.6** | **+0.1** |
| FUSB | baz=311 | | | *e*S | **Sb** | **13 20 08.0** | **0.0** |
| | baz=311 | | | | | | |
| **HGSD** | **Ruisui** | **1.06** | **240** | P | **Pb** | **13 19 53.9** | **-0.7** |
| HGSD | baz=238 | | | *e*S | **Sb** | **13 20 07.8** | **-0.3** |
| | baz=238 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.06** | **276** | *e*P | **Pb** | **13 19 54.4** | **-0.5** |
| WHF | baz=273 | | | *e*S | **Sb** | **13 20 09.1** | **+0.5** |
| | baz=273 | | | | | | |
| **TIPB** | **Shuangxi** | **1.08** | **330** | *e*P | **Pb** | **13 19 54.1** | **-0.8** |
| TIPB | baz=328 | | | *e*S | **Sb** | **13 20 07.8** | **-1.0** |
| | baz=328 | | | | | | |
| **FUSS** | **Fushou** | **1.09** | **282** | *e*P | **Pb** | **13 19 55.1** | **-0.2** |
| FUSS | baz=279 | | | *e*S | **Sb** | **13 20 09.7** | **+0.3** |
| | baz=279 | | | | | | |
| **NWLT** | **Wulai** | **1.12** | **312** | *e*P | **Pb** | **13 19 55.7** | **+0.1** |
| NWLT | baz=309 | | | *e*S | **Sb** | **13 20 10.0** | **+0.2** |
| | baz=309 | | | | | | |
| **EHY** | **Hungye** | **1.13** | **243** | P | **Pn** | **13 19 55.4** | **-0.4** |
| EHY | baz=240 | | | *e*S | **Sb** | **13 20 09.8** | **-0.5** |
| | baz=240 | | | | | | |
| **ECBN** | **Changbin** | **1.14** | **231** | *e*P | **Pn** | **13 19 55.5** | **-0.3** |
| ECBN | baz=230 | | | *e*S | **Sb** | **13 20 09.9** | **-0.5** |
| | baz=230 | | | | | | |
| **CHGB** | **Renai** | **1.14** | **272** | *e*P | **Pn** | **13 19 55.7** | **-0.3** |
| CHGB | baz=269 | | | *e*S | **Sb** | **13 20 11.2** | **+0.6** |
| | baz=269 | | | | | | |
| **YHNB** | **Yeheng** | **1.15** | **304** | *e*P | **Pn** | **13 19 55.8** | **-0.2** |
| YHNB | baz=301 | | | *e*S | **Sb** | **13 20 10.2** | **-0.5** |
| | baz=301 | | | | | | |
| **TWT** | **Tachien** | **1.16** | **281** | *e*S | **Sn** | **13 20 12.0** | **+0.2** |
| | baz=278 | | | | | | |
| **NSK** | **Sanguang** | **1.16** | **304** | *e*P | **Pn** | **13 19 55.9** | **-0.3** |
| NSK | baz=301 | | | *e*S | **Sb** | **13 20 11.0** | **-0.2** |
| | baz=301 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.17** | **335** | *e*P | **Pn** | **13 19 55.5** | **-0.8** |
| SXI1 | baz=333 | | | *e*S | **Sb** | **13 20 10.3** | **-1.1** |
| | baz=333 | | | | | | |
| **TDCB** | **Techi** | **1.17** | **281** | *e*P | **Pb** | **13 19 56.8** | **+0.2** |
| TDCB | baz=278 | | | *e*S | **Sb** | **13 20 11.6** | **+0.1** |
| | baz=278 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.19** | **331** | *e*P | **Pn** | **13 19 56.1** | **-0.5** |
| NWF | baz=329 | | | *e*S | **Sb** | **13 20 12.0** | **0.0** |
| | baz=329 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.19** | **331** | *e*P | **Pn** | **13 19 55.6** | **-0.9** |
| WFSB | baz=329 | | | *e*S | **Sb** | **13 20 11.9** | **0.0** |
| | baz=329 | | | | | | |
| **WUSB** | **Renai** | **1.19** | **268** | P | **Pn** | **13 19 56.7** | **0.0** |
| WUSB | baz=266 | | | S | **Sb** | **13 20 12.2** | **+0.1** |
| | baz=266 | | | | | | |
| **VWDT** | **VWDT** | **1.20** | **257** | *e*P | **Pn** | **13 19 56.8** | **+0.1** |
| VWDT | baz=255 | | | *e*S | **Sb** | **13 20 12.6** | **+0.3** |
| | baz=255 | | | | | | |
| **YULB** | **Yu-li** | **1.21** | **239** | P | **Pn** | **13 19 56.1** | **-0.7** |
| YULB | baz=237 | | | *e*S | **Sb** | **13 20 11.6** | **-0.8** |
| | baz=237 | | | | | | |
| **TWA** | **Mucha** | **1.21** | **321** | *e*P | **Pn** | **13 19 56.8** | **-0.1** |
| TWA | baz=319 | | | *e*S | **Sn** | **13 20 13.3** | **+0.3** |
| | baz=319 | | | | | | |
| **EYUL** | **Yuli** | **1.22** | **236** | *e*P | **Pn** | **13 19 56.5** | **-0.4** |
| EYUL | baz=234 | | | *e*S | **Sb** | **13 20 12.2** | **-0.5** |
| | baz=234 | | | | | | |
| **TWF1** | **Yuli** | **1.23** | **237** | *e*P | **Pn** | **13 19 56.7** | **-0.4** |
| TWF1 | baz=235 | | | *e*S | **Sb** | **13 20 13.2** | **+0.1** |
| | baz=235 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.23** | **76** | P | **Pn** | **13 19 57.3** | **+0.1** |
| IRIF | | | | S | **Sn** | **13 20 13.4** | **0.0** |
| **NHDH** | **Xindian Distri** | **1.23** | **319** | *e*P | **Pb** | **13 19 57.6** | **+0.1** |
| NHDH | baz=316 | | | *e*S | **Sn** | **13 20 14.0** | **+0.6** |
| | baz=316 | | | | | | |
| **TNOU** | **National Taiwa** | **1.26** | **332** | *e*P | **Pg** | **13 19 58.8** | **-0.2** |
| TNOU | baz=330 | | | *e*S | **Sb** | **13 20 13.2** | **-0.8** |
| | baz=330 | | | | | | |
| **TATO** | **Taipei** | **1.27** | **318** | P | **Pb** | **13 19 58.1** | **0.0** |
| TATO | baz=316 | | | *e*S | **Sb** | **13 20 14.4** | **+0.2** |
| | baz=316 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.27** | **89** | P | **Pn** | **13 19 57.7** | **+0.1** |
| HATJ | | | | *e*S | **Sn** | **13 20 14.7** | **+0.5** |
| **NHY** | **Taipei** | **1.27** | **323** | *e*S | **Sg** | **13 20 15.8** | **0.0** |
| | baz=320 | | | | | | |
| **TAP** | **Taipei** | **1.30** | **321** | *e*S | **Sb** | **13 20 15.8** | **+0.6** |
| | baz=318 | | | | | | |
| **FULB** | **Fuli** | **1.32** | **231** | *e*P | **Pn** | **13 19 57.6** | **-0.9** |
| FULB | baz=230 | | | *e*S | **Sn** | **13 20 15.4** | **-0.3** |
| | baz=230 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.33** | **297** | *e*P | **Pn** | **13 19 58.9** | **+0.3** |
| NFF | baz=294 | | | *e*S | **Sb** | **13 20 16.4** | **+0.4** |
| | baz=294 | | | | | | |
| **WPL** | **Puli Township** | **1.34** | **270** | *e*P | **Pn** | **13 19 58.9** | **+0.3** |
| WPL | baz=267 | | | *e*S | **Sn** | **13 20 16.2** | **+0.2** |
| | baz=267 | | | | | | |
| **CHKT** | **Chengkung** | **1.34** | **226** | *e*S | **Sn** | **13 20 14.0** | **-2.0** |
| | baz=225 | | | | | | |
| **SSLB** | **Suanglung** | **1.36** | **260** | *e*P | **Pn** | **13 19 59.0** | **+0.1** |
| SSLB | baz=258 | | | *e*S | **Sn** | **13 20 16.5** | **-0.2** |
| | baz=258 | | | | | | |
| **DPDB** | **Guoxing** | **1.36** | **270** | *e*P | **Pn** | **13 19 59.3** | **+0.3** |
| | baz=268 | | | | | | |
| **WHP** | **Taichung City** | **1.37** | **281** | *e*P | **Pn** | **13 19 59.3** | **+0.2** |
| WHP | baz=278 | | | *e*S | **Sb** | **13 20 17.5** | **+0.4** |
| | baz=278 | | | | | | |
| **YM08** | **YM08** | **1.38** | **327** | *e*P | **Pn** | **13 19 59.0** | **-0.1** |
| | baz=325 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.38** | **271** | *e*P | **Pn** | **13 19 59.3** | **+0.1** |
| WCS | baz=269 | | | *e*S | **Sb** | **13 20 18.4** | **+1.0** |
| | baz=269 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.40** | **264** | *e*P | **Pn** | **13 19 59.7** | **+0.2** |
| SMLT | baz=262 | | | *e*S | **Sn** | **13 20 17.5** | **-0.1** |
| | baz=262 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.40** | **320** | *e*P | **Pn** | **13 20 00.0** | **+0.6** |
| TWS1 | baz=318 | | | *e*S | **Sb** | **13 20 18.8** | **+0.8** |
| | baz=318 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YUS** | **Yu-Shan** | **1.45** | **248** | *e*P | **Pn** | **13 20 00.8** | **+0.3** |
| | baz=246 | | | | | | | |
| YUS | | | | *e*S | **Sn** | **13 20 18.8** | **-0.6** |
| | baz=246 | | | | | | | |
| **NCUH** | **Zhongli** | **1.46** | **310** | *e*P | **Pn** | **13 20 00.2** | **-0.1** |
| | baz=308 | | | | | | | |
| NCUH | | | | *e*S | **Sn** | **13 20 19.5** | **+0.5** |
| | baz=308 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.47** | **82** | P | **Pb** | **13 20 01.4** | **-0.1** |
| JKRS | | | | S | **Sb** | **13 20 20.9** | **+1.0** |
| **EDH** | **Donghe** | **1.47** | **224** | *e*P | **Pn** | **13 19 59.3** | **-1.1** |
| | baz=223 | | | | | | | |
| **ELDTW** | **Lidau** | **1.54** | **237** | *e*P | **Pn** | **13 20 00.7** | **-0.7** |
| | baz=235 | | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **13 20 19.4** | **-1.6** |
| | baz=235 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.54** | **282** | *e*P | **Pb** | **13 20 02.8** | **+0.1** |
| | baz=280 | | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **13 20 22.8** | **+0.9** |
| | baz=280 | | | | | | | |
| **NSY** | **Sanyi** | **1.56** | **285** | *e*P | **Pb** | **13 20 02.7** | **-0.4** |
| | baz=282 | | | | | | | |
| NSY | | | | *e*S | **Sb** | **13 20 23.3** | **+0.7** |
| | baz=282 | | | | | | | |
| **WJS** | **Zhushan** | **1.56** | **263** | *e*P | **Pb** | **13 20 03.2** | **+0.1** |
| | baz=261 | | | | | | | |
| WJS | | | | *e*S | **Sg** | **13 20 24.2** | **-0.9** |
| | baz=261 | | | | | | | |
| **ALS** | **Alishan** | **1.57** | **251** | *e*P | **Pn** | **13 20 02.6** | **+0.6** |
| | baz=249 | | | | | | | |
| **NMLH** | **Miaoli** | **1.57** | **289** | *e*P | **Pn** | **13 20 02.3** | **+0.5** |
| | baz=287 | | | | | | | |
| NMLH | | | | *e*S | **Sn** | **13 20 22.4** | **+0.7** |
| | baz=287 | | | | | | | |
| **WWF** | **Wufeng** | **1.57** | **271** | *e*P | **Pb** | **13 20 02.8** | **-0.5** |
| | baz=269 | | | | | | | |
| WWF | | | | *e*S | **Sb** | **13 20 24.0** | **+1.1** |
| | baz=269 | | | | | | | |
| **WNT** | **Mingjian** | **1.59** | **265** | *e*P | **Pb** | **13 20 04.1** | **+0.4** |
| | baz=263 | | | | | | | |
| WNT | | | | *e*S | **Sb** | **13 20 23.8** | **+0.3** |
| | baz=263 | | | | | | | |
| **WNT1** | **Nantou City** | **1.60** | **266** | *e*S | **Sg** | **13 20 25.3** | **-0.8** |
| | baz=264 | | | | | | | |
| **TCU** | **Taichung** | **1.60** | **275** | *e*P | **Pb** | **13 20 03.4** | **-0.3** |
| | baz=272 | | | | | | | |
| TCU | | | | *e*S | **Sb** | **13 20 24.8** | **+1.1** |
| | baz=272 | | | | | | | |
| **LDUT** | **Ludao** | **1.61** | **213** | *e*P | **Pn** | **13 20 01.2** | **-1.1** |
| | baz=212 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.61** | **78** | P | **Pn** | **13 20 02.0** | **-0.3** |
| JIJ | | | | *e*S | **Sn** | **13 20 22.0** | **-0.7** |
| **LONT** | **Longtian** | **1.63** | **227** | *e*P | **Pn** | **13 20 02.0** | **-0.6** |
| | baz=226 | | | | | | | |
| LONT | | | | *e*S | **Sn** | **13 20 22.4** | **-0.8** |
| | baz=226 | | | | | | | |
| **CHN5** | **Tsauling** | **1.65** | **255** | *e*P | **Pn** | **13 20 04.0** | **+1.1** |
| | baz=253 | | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **13 20 26.2** | **+0.9** |
| | baz=253 | | | | | | | |
| **WDJ** | **Dajia District** | **1.66** | **281** | *e*S | **Sn** | **13 20 24.6** | **+0.8** |
| | baz=279 | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.68** | **268** | *e*S | **Sb** | **13 20 27.5** | **+1.4** |
| | baz=266 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.70** | **272** | *e*S | **Sb** | **13 20 27.2** | **+0.5** |
| | baz=270 | | | | | | | |
| **TWGBT** | **Beinan** | **1.72** | **226** | *e*P | **Pn** | **13 20 03.2** | **-0.7** |
| | baz=225 | | | | | | | |
| TWGBT | | | | *e*S | **Sn** | **13 20 23.8** | **-1.7** |
| | baz=225 | | | | | | | |
| **TWG** | **Pinlang** | **1.73** | **226** | *e*P | **Pn** | **13 20 03.4** | **-0.5** |
| | baz=225 | | | | | | | |
| TWG | | | | *e*S | **Sn** | **13 20 23.8** | **-1.8** |
| | baz=225 | | | | | | | |
| **STYH** | **Taoyuan** | **1.73** | **241** | *e*P | **Pn** | **13 20 04.5** | **+0.5** |
| | baz=239 | | | | | | | |
| STYH | | | | *e*S | **Sn** | **13 20 26.3** | **+0.6** |
| | baz=239 | | | | | | | |
| **WGK** | **Gukeng** | **1.73** | **259** | *e*P | **Pb** | **13 20 05.4** | **-0.7** |
| | baz=257 | | | | | | | |
| **STYT** | **Tauyuan** | **1.75** | **241** | *e*P | **Pn** | **13 20 04.9** | **+0.6** |
| | baz=239 | | | | | | | |
| STYT | | | | *e*S | **Sn** | **13 20 26.7** | **+0.4** |
| | baz=239 | | | | | | | |
| **WDLH** | **Douliu** | **1.75** | **259** | *e*P | **Pn** | **13 20 05.4** | **+1.1** |
| | baz=257 | | | | | | | |
| WDLH | | | | *e*S | **Sb** | **13 20 28.5** | **+0.3** |
| | baz=257 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.79** | **246** | *e*P | **Pn** | **13 20 06.1** | **+1.2** |
| | baz=245 | | | | | | | |
| TPUB | | | | *e*S | **Sb** | **13 20 29.7** | **+0.3** |
| | baz=245 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.81** | **72** | P | **Pn** | **13 20 04.7** | **-0.4** |
| JISG | | | | *e*S | **Sn** | **13 20 27.4** | **-0.3** |
| **WTP** | **Ta-pu** | **1.83** | **245** | *e*P | **Pn** | **13 20 06.6** | **+1.2** |
| | baz=243 | | | | | | | |
| WTP | | | | *e*S | **Sb** | **13 20 30.6** | **+0.2** |
| | baz=243 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.87** | **266** | *e*P | **Pn** | **13 20 07.0** | **+1.1** |
| | baz=264 | | | | | | | |
| WRL | | | | *e*S | **Sb** | **13 20 30.9** | **-0.7** |
| | baz=264 | | | | | | | |
| **WTK** | **Tuku** | **1.89** | **260** | *e*P | **Pb** | **13 20 08.0** | **-0.7** |
| | baz=258 | | | | | | | |
| WTK | | | | *e*S | **Sb** | **13 20 32.6** | **+0.5** |
| | baz=258 | | | | | | | |
| **CHY** | **Chiayi** | **1.90** | **254** | *e*P | **Pb** | **13 20 08.1** | **-0.8** |
| | baz=252 | | | | | | | |
| CHY | | | | *e*S | **Sb** | **13 20 31.9** | **-0.5** |
| | baz=252 | | | | | | | |
| **TWK** | **Hsinying** | **1.93** | **247** | *e*P | **Pb** | **13 20 08.6** | **-0.8** |
| | baz=245 | | | | | | | |
| TWK | | | | *e*S | **Sb** | **13 20 33.3** | **+0.1** |
| | baz=245 | | | | | | | |
| **CHN1** | **Nanshi** | **1.93** | **244** | *e*P | **Pb** | **13 20 08.4** | **-1.0** |
| | baz=243 | | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **13 20 32.9** | **-0.3** |
| | baz=243 | | | | | | | |
| **SGST** | **Jiashian** | **1.93** | **241** | *e*P | **Pn** | **13 20 08.1** | **+1.4** |
| | baz=239 | | | | | | | |
| SGST | | | | *e*S | **Sb** | **13 20 32.5** | **-0.7** |
| | baz=239 | | | | | | | |
| **WSF** | **Szhu** | **2.05** | **259** | *e*S | **Sb** | **13 20 35.7** | **-1.0** |
| | baz=257 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.07** | **256** | *e*P | **Pn** | **13 20 09.3** | **+0.6** |
| | baz=254 | | | | | | | |
| WSL | | | | *e*S | **Sb** | **13 20 36.2** | **-1.1** |
| | baz=254 | | | | | | | |
| **ICHU** | **Yijhu** | **2.07** | **252** | *e*P | **Pb** | **13 20 10.7** | **-1.2** |
| | baz=250 | | | | | | | |
| ICHU | | | | *e*S | **Sb** | **13 20 36.2** | **-1.0** |
| | baz=250 | | | | | | | |
| **SSD** | **Sandimen** | **2.08** | **232** | *e*P | **Pb** | **13 20 10.7** | **-1.3** |
| | baz=231 | | | | | | | |
| SSD | | | | *e*S | **Sn** | **13 20 36.1** | **+1.8** |
| | baz=231 | | | | | | | |
| **TSMG** | **Majia** | **2.10** | **231** | *e*P | **Pn** | **13 20 10.8** | **+1.7** |
| | baz=230 | | | | | | | |
| TSMG | | | | *e*S | **Sb** | **13 20 37.0** | **-1.1** |
| | baz=230 | | | | | | | |
| **SHHT** | **Tainan City** | **2.15** | **243** | *e*P | **Pn** | **13 20 11.5** | **+1.7** |
| | baz=241 | | | | | | | |
| **LYUB** | **Lan-yu** | **2.16** | **201** | *e*P | **Pn** | **13 20 08.5** | **-1.4** |
| | baz=200 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.17** | **230** | *e*P | **Pn** | **13 20 10.7** | **+0.7** |
| | baz=228 | | | | | | | |
| MASBT | | | | *e*S | **Sb** | **13 20 39.9** | **-0.2** |
| | baz=228 | | | | | | | |
| **JTJ** | **Tarama** | **2.17** | **73** | *e*S | **Sn** | **13 20 38.1** | **+1.6** |
| **EAST** | **Anshuo** | **2.19** | **222** | *e*P | **Pn** | **13 20 09.8** | **-0.5** |
| | baz=220 | | | | | | | |
| **TWM1** | **Shoushan** | **2.19** | **237** | *e*P | **Pb** | **13 20 12.7** | **-1.2** |
| | baz=236 | | | | | | | |
| **TAWH** | **Dawu Township** | **2.19** | **220** | *e*P | **Pn** | **13 20 12.1** | **+1.7** |
| | baz=219 | | | | | | | |
| TAWH | | | | *e*S | **Sn** | **13 20 36.4** | **-0.8** |
| | baz=219 | | | | | | | |
| **SSPT** | **Xinbi** | **2.29** | **228** | *e*P | **Pb** | **13 20 14.5** | **-1.1** |
| | baz=227 | | | | | | | |
| SSPT | | | | *e*S | **Sb** | **13 20 43.1** | **-0.6** |
| | baz=227 | | | | | | | |
| **SCZT** | **Fangliau** | **2.34** | **225** | *e*P | **Pn** | **13 20 13.7** | **+1.4** |
| | baz=224 | | | | | | | |
| SCZT | | | | *e*S | **Sb** | **13 20 43.6** | **-1.4** |
| | baz=224 | | | | | | | |
| **SLIU** | **Shizi** | **2.34** | **220** | *e*P | **Pn** | **13 20 11.9** | **-0.5** |
| | baz=219 | | | | | | | |
| **HEN** | **Hengchun** | **2.54** | **218** | *e*P | **Pn** | **13 20 17.0** | **+1.9** |
| | baz=217 | | | | | | | |
| HEN | | | | *e*S | **Sn** | **13 20 46.3** | **+0.6** |
| | baz=217 | | | | | | | |
| **TWKBT** | **Hengchun** | **2.55** | **216** | *e*P | **Pn** | **13 20 16.6** | **+1.3** |
| | baz=215 | | | | | | | |
| TWKBT | | | | *e*S | **Sn** | **13 20 46.6** | **+0.6** |
| | baz=215 | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.66** | **259** | *e*P | **Pn** | **13 20 17.7** | **+0.9** |
| | baz=257 | | | | | | | |
| PHUB | | | | *e*S | **Sn** | **13 20 48.6** | **0.0** |
| | baz=257 | | | | | | | |
| **VCHM** | **Qimei** | **2.86** | **254** | *e*S | **Sn** | **13 20 54.5** | **+0.9** |
| | baz=252 | | | | | | | |
| **MATB** | **Ma-tsu** | **3.08** | **314** | *e*S | **Sn** | **13 20 57.4** | **-1.6** |
| | baz=312 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.17** | **289** | *e*P | **Pn** | **13 20 23.1** | **-0.6** |
| | baz=287 | | | | | | | |
| PTMZ | | | | *e*S | **Sn** | **13 20 58.4** | **-2.8** |
| | baz=287 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.48** | **317** | *e*P | **Pn** | **13 20 27.1** | **-0.9** |
| | baz=315 | | | | | | | |
| LYJJ | | | | *e*S | **Sn** | **13 21 06.4** | **-2.4** |
| | baz=315 | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.52** | **326** | *e*P | **Pn** | **13 20 28.3** | **-0.3** |
| | baz=324 | | | | | | | |
| XPSS | | | | *e*S | **Sn** | **13 21 06.7** | **-3.2** |
| | baz=324 | | | | | | | |
| **KNM** | **Kinmen** | **3.66** | **277** | *e*P | **Pn** | **13 20 32.2** | **+1.7** |
| | baz=275 | | | | | | | |
| KNM | | | | *e*S | **Sn** | **13 21 14.7** | **+1.4** |
| | baz=275 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.70** | **305** | *e*P | **Pn** | **13 20 30.2** | **-0.9** |
| | baz=303 | | | | | | | |
| MHZQ | | | | *e*S | **Sn** | **13 21 12.2** | **-2.1** |
| | baz=303 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.70** | **278** | *e*P | **Pn** | **13 20 30.9** | **-0.2** |
| | baz=276 | | | | | | | |
| KNMB | | | | *e*S | **Sn** | **13 21 12.2** | **-2.2** |
| | baz=276 | | | | | | | |
| **AXDP** | **Jialang** | **4.14** | **283** | *e*P | **Pn** | **13 20 37.1** | **-0.1** |
| | baz=281 | | | | | | | |
| AXDP | | | | *e*S | **Sn** | **13 21 22.9** | **-2.3** |
| | baz=281 | | | | | | | |
| **DSXP** | **Dongshan** | **4.58** | **267** | *e*S | **Sn** | **13 21 33.9** | **-2.2** |
| | baz=265 | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.92** | **300** | *e*P | **Pn** | **13 20 47.2** | **-0.8** |
| | baz=298 | | | | | | | |
| SXFK | | | | *e*S | **Sn** | **13 21 41.2** | **-3.4** |
| | baz=298 | | | | | | | |
| **SONM** | **Songino Array** | **26.96** | **336** | P | **P** | **13 25 21.7** | **+6.3** |
| | 0.4nm,0.7s,baz=134,slow=8.3,SNR=2.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.23** | **316** | P | **P** | **13 27 00.5** | **-1.6** |
| | 0.3nm,0.5s,baz=106,slow=7.7,SNR=3.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.22** | **164** | P | **P** | **13 27 50.2** | **-1.0** |
| | 0.3nm,0.5s,baz=347,slow=9.0,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.71** | **166** | P | **P** | **13 28 18.4** | **+0.1** |
| | 0.3nm,0.6s,baz=344,slow=9.1,SNR=5.5 | | | | | | | |

*TUL **23** 14:16:19.1±1.2,35°.67N±0°.02×97°.39W±0°.02,h7$^{km}$±5$^{km}$, ML3.2,mb_Lg2.8/55(NEIC), Error ellipse: s-maj=3.1km s-min=1.5km az=135.0*

**NEIC 23 14:16:19.1±0.7,35°.69N±0°.02×97°.41W±0°.03,h9$^{km}$±5$^{km}$, Error ellipse: s-maj=3.3km s-min=2.7km az=95.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.11** | **184** | Pg | Pg | 14 16 21.5 | -0.1 |
| **OK001** | **Jones High Sch** | **0.16** | **141** | Pg | Pg | 14 16 22.4 | -0.1 |
| OK001 | | | | Sg | Sg | 14 16 24.8 | -0.1 |
| **OK005** | **Luther M Schoo** | **0.18** | **100** | Pg | Pg | 14 16 22.9 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.27** | **186** | | Pg | 14 16 24.5 | 0.0 |
| OKCFA | | | | Sg | Sg | 14 16 28.4 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **184** | | Pg | 14 16 24.6 | -0.1 |
| **FNO** | **Franklin** | **0.43** | **179** | | Pg | 14 16 27.3 | -0.1 |
| **W35A** | **Tecumseh** | **0.69** | **140** | | Pg | 14 16 31.8 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.14** | **198** | | Pb | 14 16 40.6 | -0.3 |
| **TUL1** | **Leonard** | **1.34** | **80** | Pn | Pn | 14 16 42.6 | -1.3 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pn | 14 16 45.0 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.46** | **299** | Pn | Pn | 14 16 45.9 | +0.2 |
| **WMOK** | **Wichita Mounta** | **1.47** | **230** | | Pn | 14 16 45.6 | -0.1 |
| **X37A** | **Clayton** | **2.00** | **123** | Pn | Pn | 14 16 53.0 | 0.0 |
| X37A | | | | IAmb_Lg | | 14 17 22.8 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.35** | **177** | Pn | Pn | 14 16 58.0 | +0.1 |
| **HHAR** | **Hobbs** | **2.88** | **77** | Pn | Pn | 14 17 04.9 | -0.2 |
| **W39A** | **Magazine** | **3.00** | **98** | Pn | Pn | 14 17 07.0 | +0.2 |
| **Z38A** | **Mt. Pleasant** | **3.15** | **140** | Pn | Pn | 14 17 09.0 | +0.3 |
| **MIAR** | **Mount Ida** | **3.35** | **109** | Pn | Pn | 14 17 12.0 | +0.5 |
| MIAR | | | | IAmb_Lg | | 14 18 10.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.63** | **330** | IAmb_Lg | | 14 18 19.1 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.69** | **181** | Pn | Pn | 14 17 16.5 | +0.3 |
| **U40A** | **Yellville** | **3.76** | **78** | IAmb_Lg | | 14 18 18.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.85** | **57** | Pn | Pn | 14 17 18.4 | -0.1 |
| S39A | | | | IAmb_Lg | | 14 18 30.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.94** | **106** | Pn | Pn | 14 17 19.9 | +0.2 |
| X40A | | | | IAmb_Lg | | 14 18 27.1 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.20** | **94** | Pn | Pn | 14 17 23.6 | +0.3 |
| WHAR | | | | IAmb_Lg | | 14 18 31.6 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.25** | **95** | Pn | Pn | 14 17 23.9 | 0.0 |
| W41B | | | | IAmb_Lg | | 14 18 36.7 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.30** | **86** | Pn | Pn | 14 17 24.8 | +0.1 |
| FCAR | | | | IAmb_Lg | | 14 18 36.8 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.40** | **69** | Pn | Pn | 14 17 25.9 | -0.1 |
| MGMO | | | | IAmb_Lg | | 14 18 45.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.73** | **250** | IAmb_Lg | | 14 18 53.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.87** | **56** | Pn | Pn | 14 17 32.4 | -0.1 |
| R40A | | | | IAmb_Lg | | 14 19 05.0 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **P38A** | **Dawn** | **4.99** | **37** | IAmb_Lg | | 14 19 00.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **LCAR** | **Lake Charles** | **5.10** | **84** | IAmb_Lg | | 14 19 01.8 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.32** | **310** | IAmb_Lg | | 14 19 12.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.48** | **63** | IAmb_Lg | | 14 19 19.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.57** | **202** | IAmb_Lg | | 14 19 26.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.73** | **46** | IAmb_Lg | | 14 19 22.7 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.83** | **286** | IAmb_Lg | | 14 19 30.8 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **FVM** | **French Village** | **6.05** | **66** | IAmb_Lg | | 14 19 36.5 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **N38A** | **Joes South For** | **6.07** | **32** | IAmb_Lg | | 14 19 38.7 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **L34A** | **Svendsen Farm,** | **6.32** | **7** | IAmb_Lg | | 14 19 46.2 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **6.38** | **327** | IAmb_Lg | | 14 19 50.0 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **7.99** | **35** | IAmb_Lg | | 14 20 42.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **OLIL** | **Olney** | **8.03** | **65** | IAmb_Lg | | 14 20 49.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **8.44** | **314** | IAmb_Lg | | 14 20 52.5 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.48** | **310** | IAmb_Lg | | 14 21 00.6 | |
| | comp=Z,9.0nm,0.8s | | | | | | |

*EAF **23** 14:17:10.1±2.4,24°.87S×27°.31E,h27$^{km}$±27$^{km}$,MD3.9*

**BUL 23 14:17:10.5±0.9,24°.87S×27°.35E,h34$^{km}$±10$^{km}$,MD4.2, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LBTB** | **Lobatse** | **1.60** | **265** | *i* P | Pn | 14 17 36.5 | 0.0 |
| LBTB | | | | *i* S | Sn | 14 17 55.5 | -0.5 |
| **LBTB** | **Lobatse** | **1.60** | **265** | *i* P | Pn | 14 17 36.5 | 0.0 |
| LBTB | | | | *i* S | Sn | 14 17 55.5 | -0.5 |
| **MSNA** | **Messina** | **3.51** | **45** | *e*P | Pn | 14 18 03.0 | +0.2 |
| MSNA | | | | *i* S | Sn | 14 18 40.1 | -3.1 |
| **MSNA** | **Messina** | **3.51** | **45** | *e*P | Pn | 14 18 03.0 | +0.2 |
| MSNA | | | | *i* S | Sn | 14 18 40.1 | -3.1 |
| **MOPA** | **Mopani** | **3.93** | **71** | *i* P | Pn | 14 18 10.4 | +1.9 |
| MOPA | | | | *e*S | Sn | 14 18 53.8 | +0.2 |
| **MOPA** | **Mopani** | **3.93** | **71** | *i* P | Pn | 14 18 10.4 | +1.9 |
| MOPA | | | | *e*S | Sn | 14 18 53.8 | +0.2 |
| **BOSA** | **Boshof** | **4.17** | **206** | *e*P | Pn | 14 18 10.9 | -0.9 |
| BOSA | | | | *e*S | Sn | 14 18 56.5 | -3.0 |
| **BOSA** | **Boshof** | **4.17** | **206** | *e*P | Pn | 14 18 10.9 | -0.9 |
| BOSA | | | | *e*S | Sn | 14 18 56.5 | -3.0 |
| **CNG** | **Changalane** | **4.59** | **109** | *i* P | Pn | 14 18 17.1 | -0.4 |
| **CNG** | **Changalane** | **4.59** | **109** | *i* P | Pn | 14 18 17.1 | -0.4 |

*IDC **23** 14:39:08.7±1.9,59°.79N×153°.23W,h96$^{km}$±30$^{km}$,mb3.4/2, mb1 3.4/7,mb1mx3.1/51,mbtmp3.6/7,Error ellipse: s-maj=33.2km s-min=16.7km az=114.0*

*NEIC **23** 14:39:09.5±1.1,59°.83N±0°.04×152°.97W±0°.05, h106$^{km}$±5$^{km}$,Error ellipse: s-maj=5.3km s-min=3.5km az=195.0*

*AEIC **23** 14:39:10±1.0,59°.83N±0°.03×152°.94W±0°.07,h104$^{km}$±4$^{km}$, ML3.0,ML3.3/106(NEIC),Error ellipse: s-maj=5.0km s-min=4.3km az=67.0*

**ISC 23 14:39:09.7±0.9,59°.84N±0°.04×152°.92W±0°.05, h108$^{km}$±7$^{km}$,n148,s0$^{s}$81/136,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **O20K** | **Slope Mountain** | **0.29** | **31** | | **Pn** | **14 39 24.9** | **-0.3** |
| **AUL** | **Augustine Lava** | **0.53** | **210** | | **Pn** | **14 39 26.3** | **-0.2** |
| AUL | | | | | **Sn** | **14 39 38.7** | **-0.4** |
| **AUQ** | **Augustine Qik'** | **0.55** | **208** | | **Pn** | **14 39 26.5** | **-0.2** |
| AUQ | | | | | **Sn** | **14 39 38.9** | **-0.5** |
| **RED** | **Redoubt Volcan** | **0.59** | **7** | | **Pn** | **14 39 26.6** | **-0.5** |
| **RSO** | **Redoubt South** | **0.63** | **8** | | **Pn** | **14 39 27.0** | **-0.6** |
| **RDWB** | **Redoubt West** | **0.66** | **4** | | **Pn** | **14 39 27.1** | **-0.6** |
| **HOM** | **Homer** | **0.67** | **105** | | **Pn** | **14 39 27.5** | **-0.1** |
| HOM | | | | | **Sn** | **14 39 41.5** | **+0.4** |
| **NCT** | **North Crescent** | **0.73** | **360** | | **Pn** | **14 39 27.8** | **-0.4** |
| **RDJH** | **Redoubt Jeurge** | **0.76** | **4** | | **Pn** | **14 39 28.1** | **-0.4** |
| **DFR** | **Drift River** | **0.77** | **9** | | **Pn** | **14 39 28.1** | **-0.4** |
| **RDT** | **Redoubt** | **0.78** | **19** | | **Pn** | **14 39 28.3** | **-0.3** |
| **O19K** | **Port Alsworth** | **0.79** | **298** | | **Pn** | **14 39 28.0** | **-0.5** |
| O19K | | | | | **Sn** | **14 39 42.1** | **-0.7** |
| **O19K** | **Port Alsworth** | **0.79** | **298** | IAML | | 14 39 42.6 | |
| | comp=E,2μm,0.4s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.98** | **202** | | **Pn** | **14 39 30.0** | **-0.5** |
| Q19K | | | | | **Sn** | **14 39 45.5** | **-0.8** |
| **Q19K** | **Cape Douglas,** | **0.98** | **202** | IAML | | 14 39 47.0 | |
| | comp=E,548nm,0.8s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.03** | **93** | | **Pn** | **14 39 30.6** | **-0.4** |
| **BRLK** | **Bradley Lake** | **1.03** | **93** | IAML | | 14 39 47.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| BRLK | | | | IAML | | 14 39 47.3 | |
| | comp=N,1μm,0.2s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.11** | **94** | | **Pn** | **14 39 31.5** | **-0.3** |
| **N19K** | **Bonanza Creek** | **1.25** | **322** | | **Pn** | **14 39 33.2** | **-0.3** |
| N19K | | | | | **Sn** | **14 39 50.7** | **-0.9** |
| **P18K** | **Big Mountain,** | **1.25** | **250** | | **Pn** | **14 39 32.7** | **-0.8** |
| **CAPN** | **Captain Cook N** | **1.28** | **43** | | **Pn** | **14 39 35.4** | **+1.7** |
| **CAPN** | **Captain Cook N** | **1.28** | **43** | IAML | | 14 39 58.8 | |
| | comp=N,640nm,1.0s | | | | | | |
| CAPN | | | | IAML | | 14 40 05.2 | |
| | comp=E,509nm,0.9s | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.41** | **14** | | **Pn** | **14 39 35.2** | **-0.1** |
| **SPU** | **Mount Spurr** | **1.42** | **17** | | **Pn** | **14 39 35.0** | **-0.4** |
| **SPBG** | **Spurr Blockage** | **1.45** | **11** | | **Pn** | **14 39 36.0** | **+0.2** |
| SPBG | | | | | **Sn** | **14 39 56.5** | **+0.7** |
| **SLKM** | **Skilak Lake** | **1.51** | **62** | | **Pn** | **14 39 36.2** | **-0.2** |
| **SPCG** | **Spurr Capps Gl** | **1.53** | **17** | | **Pn** | **14 39 36.8** | **+0.1** |
| **O22K** | **Cooper Landing** | **1.73** | **67** | | **Pn** | **14 39 39.0** | **0.0** |
| **O22K** | **Cooper Landing** | **1.73** | **67** | IAML | | 14 40 09.8 | |
| | comp=N,327nm,0.8s | | | | | | |
| O22K | | | | IAML | | 14 40 12.7 | |
| | comp=E,410nm,0.8s | | | | | | |
| **STLK** | **Strandline Lak** | **1.75** | **17** | | **Pn** | **14 39 39.8** | **+0.3** |
| **SEW** | **Seward** | **1.77** | **80** | | **Pn** | **14 39 39.2** | **-0.4** |
| SEW | | | | | **Sn** | **14 40 00.9** | **-1.4** |
| **SVW2** | **Sparrevohn** | **1.83** | **315** | | **Pn** | **14 39 39.8** | **-0.5** |
| **KABU** | **Katmai Buttres** | **1.99** | **219** | | **Pn** | **14 39 42.5** | **0.0** |
| **RC01** | **Rabbit Creek A** | **2.02** | **50** | | **Pn** | **14 39 42.7** | **0.0** |
| **RC01** | **Rabbit Creek A** | **2.02** | **50** | IAML | | 14 40 08.7 | |
| | comp=N,295nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 14 40 09.1 | |
| | comp=E,298nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.07** | **175** | P | **Pn** | **14 39 42.3** | **-1.1** |
| | comp=E,35nm,0.3s,baz=15,slow=11,SNR=42 | | | | | | |
| KDAK | | | | S | **Sn** | **14 40 07.0** | **-2.2** |
| | comp=E,14nm,0.3s,baz=343,slow=23,SNR=14 | | | | | | |
| **KDAK** | **Kodiak Island** | **2.07** | **175** | Pn | **Pn** | **14 39 42.0** | **-1.4** |
| KDAK | | | | IAML | | 14 40 09.2 | |
| | comp=E,120nm,0.6s | | | | | | |
| **M19K** | **Big River Lodg** | **2.19** | **342** | | **Pn** | **14 39 44.8** | **-0.2** |
| **M22K** | **Willow** | **2.36** | **34** | | **Pn** | **14 39 47.5** | **+0.4** |
| **PWL** | **Port Wells** | **2.50** | **64** | | **Pn** | **14 39 48.6** | **-0.3** |
| **PWL** | **Port Wells** | **2.50** | **64** | IAML | | 14 40 20.5 | |
| | comp=E,132nm,0.4s | | | | | | |
| **L19K** | **White Mountain** | **2.53** | **339** | | **Pn** | **14 39 49.2** | **-0.2** |
| **PMR** | **Palmer** | **2.56** | **45** | | **Pn** | **14 39 49.5** | **-0.2** |
| **OHAK** | **Old Harbor** | **2.63** | **184** | | **Pn** | **14 39 49.3** | **-1.4** |
| **OHAK** | **Old Harbor** | **2.63** | **184** | IAML | | 14 40 21.8 | |
| | comp=N,97nm,3.2s | | | | | | |
| OHAK | | | | IAML | | 14 40 32.9 | |
| | comp=E,104nm,5.0s | | | | | | |
| **KNK** | **Knik Glacier** | **2.71** | **52** | | **Pn** | **14 39 50.9** | **-0.8** |
| KNK | | | | | **Sn** | **14 40 22.3** | **-1.8** |
| **KNK** | **Knik Glacier** | **2.71** | **52** | IAML | | 14 40 23.6 | |
| | comp=E,110nm,0.4s | | | | | | |
| KNK | | | | IAML | | 14 40 24.4 | |
| | comp=N,151nm,0.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.76** | **44** | | **Pn** | **14 39 52.1** | **-0.4** |
| GHO | | | | IAML | | 14 40 26.1 | |
| | comp=N,100nm,0.6s | | | | | | |
| GHO | | | | IAML | | 14 40 26.2 | |
| | comp=E,100nm,0.4s | | | | | | |
| **CUT** | **Chulitna** | **2.88** | **25** | | **Pn** | **14 39 54.3** | **+0.3** |
| **CUT** | **Chulitna** | **2.88** | **25**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,37nm,0.3s | | | | | | | |
| DHY | | | | IAML | | 14 41 03.5 | | |
| | comp=E,36nm,0.5s | | | | | | | |
| **MCK** | **McKinley** | **4.34** | **24** | | **Pn** | **14 40 13.7** | **+0.2** | |
| **MCK** | **McKinley** | **4.34** | **24** | IAML | | 14 41 54.7 | | |
| | comp=N,21nm,4.1s | | | | | | | |
| MCK | | | | IAML | | 14 42 41.4 | | |
| | comp=E,20nm,4.1s | | | | | | | |
| **HMT** | **Hamilton** | **4.37** | **80** | Pn | **Pn** | **14 40 13.9** | **0.0** | |
| **BPAW** | **Bear Paw Mtn.** | **4.38** | **11** | | **Pn** | **14 40 13.4** | **-0.5** | |
| **BPAW** | **Bear Paw Mtn.** | **4.38** | **11** | IAML | | 14 41 06.1 | | |
| | comp=N,16nm,2.7s | | | | | | | |
| BPAW | | | | IAML | | 14 43 11.1 | | |
| | comp=E,18nm,4.3s | | | | | | | |
| **J20K** | **Nowinta River** | **4.39** | **353** | | **Pn** | **14 40 14.3** | **+0.2** | |
| **N25K** | **Chitina, Valde** | **4.46** | **63** | | **Pn** | **14 40 15.6** | **+0.5** | |
| **N25K** | **Chitina, Valde** | **4.46** | **63** | IAML | | 14 41 08.8 | | |
| | comp=E,23nm,1.1s | | | | | | | |
| N25K | | | | IAML | | 14 41 36.2 | | |
| | comp=N,29nm,4.3s | | | | | | | |
| **BWN** | **Browne** | **4.64** | **19** | | **Pn** | **14 40 17.8** | **+0.3** | |
| **BERG** | **Berg Lake** | **4.65** | **79** | Pn | **Pn** | **14 40 17.4** | **-0.2** | |
| **PAX** | **Paxson** | **4.76** | **46** | | **Pn** | **14 40 19.7** | **+0.4** | |
| **GLB** | **Gilahina Butte** | **4.76** | **66** | | **Pn** | **14 40 19.5** | **+0.3** | |
| **GLB** | **Gilahina Butte** | **4.76** | **66** | IAML | | 14 41 14.0 | | |
| | comp=E,26nm,0.5s | | | | | | | |
| **VRDI** | **Verde Repeater** | **4.88** | **69** | | **Pn** | **14 40 21.0** | **+0.1** | |
| **VRDI** | **Verde Repeater** | **4.88** | **69** | IAML | | 14 41 14.4 | | |
| | comp=E,26nm,3.9s | | | | | | | |
| VRDI | | | | IAML | | 14 42 30.1 | | |
| | comp=N,26nm,3.8s | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.07** | **79** | Pn | **Pn** | **14 40 23.1** | **-0.3** | |
| **SNH** | **Sunshine Point** | **5.07** | **82** | Pn | **Pn** | **14 40 23.9** | **+0.5** | |
| **NEA2** | **Nenana** | **5.10** | **19** | Pn | **Pn** | **14 40 23.3** | **-0.4** | |
| NEA2 | | | | IAML | | 14 41 10.7 | | |
| | comp=E,18nm,4.6s | | | | | | | |
| NEA2 | | | | IAML | | 14 43 07.3 | | |
| | comp=N,13nm,4.6s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.17** | **24** | | **Pn** | **14 40 24.1** | **-0.6** | |
| **WRH** | **Wood River Hil** | **5.17** | **24** | IAML | | 14 41 58.7 | | |
| | comp=N,17nm,4.9s | | | | | | | |
| WRH | | | | IAML | | 14 43 08.3 | | |
| | comp=E,16nm,4.2s | | | | | | | |
| **MLY** | **Manley** | **5.31** | **10** | | **Pn** | **14 40 26.1** | **-0.5** | |
| MLY | | | | IAML | | 14 41 37.9 | | |
| | comp=N,8.9nm,3.0s | | | | | | | |
| MLY | | | | IAML | | 14 43 57.4 | | |
| | comp=E,15nm,4.9s | | | | | | | |
| **ISLE** | **Juniper Island** | **5.33** | **77** | Pn | **Pn** | **14 40 26.6** | **-0.4** | |
| **KIAG** | **Kiagna River** | **5.35** | **74** | | **Pn** | **14 40 27.5** | **+0.2** | |
| **BALM** | **Baldy** | **5.38** | **73** | | **Pn** | **14 40 27.6** | **+0.1** | |
| **HDA** | **Harding Lake** | **5.38** | **29** | Pn | **Pn** | **14 40 26.7** | **-0.7** | |
| **I21K** | **Tanana** | **5.38** | **4** | | **Pn** | **14 40 27.1** | **-0.3** | |
| I21K | | | | IAML | | 14 41 59.5 | | |
| | comp=E,18nm,4.5s | | | | | | | |
| I21K | | | | IAML | | 14 42 26.1 | | |
| | comp=N,17nm,4.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.39** | **24** | | **Pn** | **14 40 26.8** | **-0.7** | |
| **CCB** | **Clear Creek Bu** | **5.39** | **24** | IAML | | 14 41 33.0 | | |
| | comp=N,17nm,4.8s | | | | | | | |
| CCB | | | | IAML | | 14 43 17.1 | | |
| | comp=E,12nm,4.8s | | | | | | | |
| **MENT** | **Mentasta** | **5.41** | **51** | Pn | **Pn** | **14 40 28.7** | **+0.9** | |
| **M26K** | **Nabesna, AK** | **5.46** | **58** | | **Pn** | **14 40 29.6** | **+1.0** | |
| **RIDG** | **Independent Ri** | **5.48** | **41** | | **Pn** | **14 40 29.4** | **+0.6** | |
| **MESA** | **MESA** | **5.52** | **82** | Pn | **Pn** | **14 40 29.8** | **+0.3** | |
| **TCOL** | **CIGO, UAF Yank** | **5.58** | **23** | | **Pn** | **14 40 29.8** | **-0.3** | |
| **COLA** | **College** | **5.58** | **23** | | **Pn** | **14 40 29.6** | **-0.5** | |
| **I23K** | **Minto, Yukon-K** | **5.58** | **16** | | **Pn** | **14 40 29.9** | **-0.2** | |
| **MDM** | **Murphy Dome** | **5.58** | **21** | | **Pn** | **14 40 29.7** | **-0.5** | |
| **YAH** | **Yahtse** | **5.62** | **80** | | **Pn** | **14 40 31.4** | **+0.5** | |
| **DOT** | **Dot Lake** | **5.68** | **44** | Pn | **Pn** | **14 40 32.2** | **+0.6** | |
| **IL31** | | **5.69** | **27** | | **Pn** | **14 40 30.8** | **-0.8** | |
| **ILAR** | **Eielson Array** | **5.69** | **27** | P | **Pn** | **14 40 30.9** | **-0.7** | |
| | comp=E,0.9nm,0.3s,baz=218,slow=13,SNR=43 | | | | | | | |
| ILAR | | | | S | **Sn** | **14 41 31.1** | **-4.6** | |
| | comp=E,1.7nm,0.3s,baz=198,slow=29,SNR=3.4 | | | | | | | |
| **BARN** | **Barnard Glacie** | **5.71** | **73** | | **Pn** | **14 40 32.5** | **+0.4** | |
| **H21K** | **Melozitna Rive** | **5.84** | **0** | | **Pn** | **14 40 33.7** | **-0.1** | |
| **POKR** | **Poker Plat Res** | **5.88** | **23** | Pn | **Pn** | **14 40 33.7** | **-0.5** | |
| **TABL** | **Table Mountain** | **5.92** | **79** | Pn | **Pn** | **14 40 35.3** | **+0.3** | |
| **SCRK** | **Sand Creek** | **5.92** | **42** | | **Pn** | **14 40 34.5** | **-0.4** | |
| **J25K** | **Salcha River,** | **5.95** | **33** | | **Pn** | **14 40 34.7** | **-0.5** | |
| **IM03** | | **6.18** | **357** | | **Pn** | **14 40 38.6** | **+0.4** | |
| **IMAR** | **Indian Mountai** | **6.18** | **357** | | **Pn** | **14 40 38.4** | **+0.1** | |
| **L27K** | **Beaver Creek,** | **6.22** | **54** | Pn | **Pn** | **14 40 39.5** | **+0.6** | |
| **BCAR** | **Beaver Creek A** | **6.24** | **54** | Pn | **Pn** | **14 40 39.7** | **+0.5** | |
| **PCA** | **Pinnacle** | **6.37** | **82** | Pn | **Pn** | **14 40 41.3** | **+0.4** | |
| **YUK3** | **Moose Creek** | **6.40** | **67** | | **Pn** | **14 40 42.2** | **+0.8** | |
| **H24K** | **Noodor Dome** | **6.45** | **19** | Pn | **Pn** | **14 40 41.3** | **-0.7** | |
| **PRP** | **Porcupine Dome** | **6.64** | **28** | Pn | **Pn** | **14 40 44.5** | **-0.1** | |
| **EGAK** | **Eagle** | **7.38** | **43** | Pn | **Pn** | **14 40 55.3** | **+0.7** | |
| **ANM** | **Nome** | **7.50** | **314** | Pn | **Pn** | **14 40 56.4** | **+0.2** | |
| **COLD** | **Coldfoot** | **7.52** | **8** | Pn | **Pn** | **14 40 56.4** | **0.0** | |
| **FYU** | **Fort Yukon** | **7.59** | **24** | Pn | **Pn** | **14 40 56.7** | **-0.6** | |
| **DAWY** | **Dawson** | **7.65** | **51** | Pn | **Pn** | **14 40 58.2** | **0.0** | |
| **HYT** | **Haines Junctio** | **7.72** | **76** | Pn | **Pn** | **14 40 58.8** | **-0.5** | |
| **M30M** | **Minto, Yukon** | **8.25** | **64** | Pn | **Pn** | **14 41 06.5** | **+0.1** | |
| **BMAR** | **Burnt Mountain** | **8.47** | **22** | Pn | **Pn** | **14 41 08.1** | **-1.2** | |
| **SKAG** | **Skagway** | **8.92** | **85** | Pn | **Pn** | **14 41 16.2** | **+0.9** | |
| **TNA** | **Tin City** | **8.95** | **316** | Pn | **Pn** | **14 41 16.6** | **+0.8** | |
| **TOLK** | **Toolik Lake Re** | **8.96** | **8** | Pn | **Pn** | **14 41 16.8** | **+0.9** | |
| **P33M** | **Teslin, Yukon** | **10.06** | **79** | Pn | **Pn** | **14 41 31.9** | **+0.9** | |
| **DLBC** | **Dease Lake** | **11.83** | **87** | P | **Pn** | **14 41 57.9** | **+3.2** | |
| | comp=E,0.2nm,0.3s,baz=285,slow=7.8,SNR=6.9 | | | | | | | |
| **INK** | **Inuvik** | **11.94** | **37** | P | **Pn** | **14 41 58.4** | **+2.4** | |
| | comp=E,0.0nm,0.3s,baz=246,slow=12,SNR=1.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.48** | **65** | P | **P** | **14 43 17.6** | **+0.8** | |
| | comp=E,0.2nm,0.3s,baz=277,slow=9.8,SNR=22 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.53** | **324** | P | **P** | **14 48 47.5** | **+0.4** | |
| | comp=E,0.7nm,0.4s,baz=36,slow=6.1,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.58** | **321** | P | **P** | **14 49 34.4** | **-0.5** | |
| | comp=E,0.3nm,0.8s,baz=46,slow=6.2,SNR=3.1 | | | | | | | |

*ISK **23** 14:39:56.6, 36°.11N×29°.86E, h16km, ML2.8/24*
*DDA **23** 14:39:56.6±0.0, 36°.15N×29°.90E, h42km±1km, ML2.4*
*GII **23** 14:40:02.0±0.0, 36°.52N×30°.82E, h20km*

**ISC 23 14:39:56.1**±1.4, **36°.11N**±0°.04×**29°.95E**±0°.02, **h14**km±10km, **n43**, σ1**8**/60, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKAS** | **Kas** | **0.31** | **294** | P | **Pb** | **14 40 04.9** | **+1.4** |
| **AKUM** | **Antalya-Kumluc** | **0.38** | **56** | P | **Pn** | **14 40 06.6** | **-0.7** |
| AKUM | | | | S | **Sn** | **14 40 13.9** | **-0.5** |
| AKUM | | | | *i* AML | AML | 14 40 16.0 | |
| | comp=N,239nm,0.4s | | | | | | |
| AKUM | | | | *i* AML | AML | 14 40 16.0 | |
| | comp=E,263nm,0.2s | | | | | | |
| **KEMT** | **Kemer-ANTALYA** | **0.70** | **44** | PG | **Pn** | **14 40 11.8** | **+0.2** |
| KEMT | | | | SG | **Sn** | **14 40 22.7** | **+0.6** |
| **FETY** | **Fethiye** | **0.88** | **307** | PG | **Pg** | **14 40 12.9** | **-0.2** |
| FETY | | | | SG | **Sb** | **14 40 24.8** | **+0.1** |
| **FETY** | **Fethiye** | **0.88** | **307** | P | **Pg** | **14 40 12.8** | **-0.3** |
| FETY | | | | S | **Sb** | **14 40 25.1** | **+0.4** |
| **KORT** | **Korkueli** | **0.95** | **20** | PG | **Pn** | **14 40 15.9** | **+0.7** |
| **KORT** | **Korkueli** | **0.95** | **20** | P | **Pb** | **14 40 14.3** | **-0.1** |
| KORT | | | | S | **Sn** | **14 40 28.0** | **-0.6** |
| KORT | | | | *i* AML | AML | 14 40 30.0 | |
| | comp=N,86nm,0.8s | | | | | | |
| KORT | | | | *i* AML | AML | 14 40 31.0 | |
| | comp=E,109nm,0.5s | | | | | | |
| **ANTB** | **Antalya** | **0.97** | **35** | PG | **Pn** | **14 40 16.6** | **+1.2** |
| ANTB | | | | SG | **Sn** | **14 40 31.0** | **+2.0** |
| **CAME** | **Cameli-Denizli** | **0.98** | **328** | PG | **Pn** | **14 40 14.9** | **-0.2** |
| CAME | | | | SG | **Sn** | **14 40 28.8** | **-0.7** |
| **CAEL** | **Denizli, Camel** | **1.13** | **334** | P | **Pn** | **14 40 17.7** | **0.0** |
| CAEL | | | | S | **Sn** | **14 40 32.9** | **-0.3** |
| CAEL | | | | *i* AML | AML | 14 40 34.0 | |
| | comp=N,113nm,0.6s | | | | | | |
| CAEL | | | | *i* AML | AML | 14 40 40.0 | |
| | comp=E,234nm,0.6s | | | | | | |
| **GOLH** | **Golhisar** | **1.17** | **345** | P | **Pg** | **14 40 18.5** | **-0.2** |
| GOLH | | | | S | **Sn** | **14 40 35.2** | **+1.2** |
| GOLH | | | | *i* AML | AML | 14 40 38.0 | |
| | comp=N,111nm,0.5s | | | | | | |
| GOLH | | | | *i* AML | AML | 14 40 40.0 | |
| | comp=E,73nm,0.4s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **1.26** | **305** | PN | **Pn** | **14 40 19.5** | **+0.2** |
| **BUCA** | **Burdur, Bucak-** | **1.31** | **22** | P | **Pg** | **14 40 20.8** | **-0.6** |
| BUCA | | | | S | **Sg** | **14 40 39.3** | **+0.8** |
| BUCA | | | | *i* AML | AML | 14 40 42.0 | |
| | comp=E,51nm,0.7s | | | | | | |
| **BCK** | **Bucak** | **1.45** | **21** | PN | **Pg** | **14 40 23.1** | **-0.8** |
| **ARG** | **Arkhangelos** | **1.48** | **275** | PN | **Pn** | **14 40 22.1** | **-0.2** |
| **TURN** | **Turunc** | **1.53** | **296** | PN | **Pn** | **14 40 23.0** | **0.0** |
| **TURN** | **Turunc** | **1.53** | **296** | P | **Pn** | **14 40 23.5** | **+0.5** |
| TURN | | | | *i* AML | AML | 14 40 47.0 | |
| | comp=Z,31nm,0.5s | | | | | | |
| TURN | | | | *i* AML | AML | 14 40 47.0 | |
| | comp=N,38nm,0.2s | | | | | | |
| TURN | | | | *i* AML | AML | 14 40 48.0 | |
| | comp=E,34nm,0.4s | | | | | | |
| **MRSB** | **Marmaris-Mugla** | **1.54** | **294** | PN | **Pn** | **14 40 23.3** | **+0.1** |
| **KEPZ** | **Antalya-Kepez** | **1.55** | **59** | P | **Pg** | **14 40 25.2** | **-0.7** |
| **TAVA** | **DENİZLİ_Tavas** | **1.59** | **329** | P | **Pb** | **14 40 25.1** | **-0.3** |
| TAVA | | | | S | **Sn** | **14 40 44.2** | **-0.2** |
| TAVA | | | | *i* AML | AML | 14 40 46.0 | |
| | comp=N,86nm,0.4s | | | | | | |
| TAVA | | | | *i* AML | AML | 14 40 46.0 | |
| | comp=E,68nm,0.7s | | | | | | |
| **SUTC** | **Sutluce-Ispart** | **1.60** | **31** | PN | **Pb** | **14 40 25.6** | **0.0** |
| **YER** | **Yerkesik** | **1.69** | **308** | PN | **Pn** | **14 40 24.4** | **+0.1** |
| YER | | | | SN | **Sn** | **14 40 46.2** | **-0.6** |
| **MULA** | **Mugla, Merkez-** | **1.74** | **312** | P | **Pb** | **14 40 27.6** | **-0.4** |
| MULA | | | | S | **Sn** | **14 40 48.2** | **+0.1** |
| MULA | | | | *i* AML | AML | 14 40 50.0 | |
| | comp=E,87nm,0.5s | | | | | | |
| MULA | | | | *i* AML | AML | 14 40 51.0 | |
| | comp=N,74nm,0.4s | | | | | | |
| **ISP** | **Isparta** | **1.77** | **15** | PN | **Pb** | **14 40 27.8** | **-0.7** |
| **GAZI** | **Gazipasa** | **1.92** | **85** | P | **Pn** | **14 40 29.2** | **+0.8** |
| GAZI | | | | *i* AML | AML | 14 40 53.0 | |
| | comp=N,47nm,0.2s | | | | | | |
| GAZI | | | | *i* AML | AML | 14 40 54.0 | |
| | comp=E,49nm,0.3s | | | | | | |
| **SEYD** | **Seydisehir-KON** | **1.99** | **49** | PN | **Pb** | **14 40 31.4** | **-0.9** |
| **BAGO** | **Egridir - ISPA** | **2.00** | **19** | S | **Sb** | **14 40 55.9** | **-1.1** |
| **MLSB** | **Milas** | **2.11** | **305** | PN | **Pn** | **14 40 31.8** | **+0.7** |
| **HDMB** | **Hadim** | **2.21** | **67** | PN | **Pb** | **14 40 34.8** | **-1.3** |
| **PASA** | **Karahalli, USA** | **2.27** | **351** | P | **Pn** | **14 40 32.6** | **-0.7** |
| PASA | | | | S | **Sn** | **14 41 00.1** | **-1.0** |
| **BODT** | **Bodrum** | **2.33** | **295** | PN | **Pn** | **14 40 33.4** | **-0.6** |
| **KARP** | **Karpathos** | **2.33** | **257** | PN | **Pn** | **14 40 34.5** | **+0.4** |
| **TEKE** | **Tekeli-Mersin** | **2.56** | **88** | PN | **Pn** | **14 40 39.4** | **+2.2** |
| **KULA** | **Kula-Manisa** | **2.61** | **337** | PN | **Pn** | **14 40 38.9** | **+0.9** |
| **BERE** | **Bereket-Mersin** | **2.66** | **84** | PN | **Pn** | **14 40 41.2** | **+2.5** |
| **KONT** | **Konya--Tatoy** | **2.66** | **46** | PN | **Pn** | **14 40 40.9** | **+2.3** |
| **GCAM** | **G?zelcaml?** | **2.70** | **307** | PN | **Pn** | **14 40 39.8** | **+0.7** |
| **TEVE** | **Tevekalti-Mers** | **2.84** | **82** | PN | **Pn** | **14 40 43.6** | **+2.4** |
| **LADK** | **Ladik-KONYA** | **2.84** | **42** | PN | **Pn** | **14 40 43.4** | **+2.2** |
| **ZKR** | **Zakros** | **3.20** | **253** | PN | **Pn** | **14 40 46.7** | **+0.7** |
| **GEM** | **Giv'at Ha'Em** | **5.52** | **120** | Pn | **Pn** | **14 41 19.4** | **+1.4** |
| GEM | | | | Sn | **Sn** | **14 42 17.2** | **-4.1** |
| **MMLI** | **Mount Malkishu** | **5.82** | **127** | Pn | **Pn** | **14 41 24.1** | **+2.0** |
| MMLI | | | | Sn | **Sn** | **14 42 27.4** | **-1.3** |
| **HMDT** | **Nahal Hemdat** | **6.01** | **128** | Pn | **Pn** | **14 41 26.0** | **+1.4** |
| HMDT | | | | Sn | **Sn** | **14 42 33.2** | **-0.1** |

*EAF **23** 14:44:52.1±4.0, 21°.91S×25°.51E, h36km±68km, MD3.7*

**BUL 23 14:44:50.9**±1.0, **22°.07S×25°.79E, h4**km±13km, **MD4.0, Botswana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATP** | **Matopo** | **3.01** | **58** | *e*P | Pn | 14 45 39.0 | -0.4 |
| MATP | | | | *i* S | Sn | 14 46 13.9 | -2.1 |
| **MATP** | **Matopo** | **3.01** | **58** | *e*P | Pn | 14 45 39.0 | -0.4 |
| MATP | | | | *i* S | Sn | 14 46 13.9 | -2.1 |
| **MSNA** | **Messina** | **3.93** | **95** | *i* S | Sn | 14 46 36.4 | -2.3 |
| **MSNA** | **Messina** | **3.93** | **95** | *i* S | Sn | 14 46 36.4 | -2.3 |
| **MOPA** | **Mopani** | **5.37** | **107** | *i* P | Pn | 14 46 15.3 | +3.4 |
| MOPA | | | | *i* S | Sn | 14 47 16.4 | +2.2 |
| **MOPA** | **Mopani** | **5.37** | **107** | *i* P | Pn | 14 46 15.3 | +3.4 |
| MOPA | | | | *i* S | Sn | 14 47 16.4 | +2.2 |
| **BOSA** | **Boshof** | **6.54** | **184** | *i* P | Pn | 14 46 26.4 | -1.5 |
| BOSA | | | | *i* S | Sn | 14 47 37.3 | -5.7 |
| **BOSA** | **Boshof** | **6.54** | **184** | *i* P | Pn | 14 46 26.4 | -1.5 |
| BOSA | | | | *i* S | Sn | 14 47 37.3 | -5.7 |
| **CNG** | **Changalane** | **7.20** | **127** | *e*P | Pn | 14 46 36.3 | -0.6 |
| CNG | | | | *i* S | Sn | 14 47 52.1 | -7.0 |
| **CNG** | **Changalane** | **7.20** | **127** | *e*P | Pn | 14 46 36.3 | -0.6 |
| CNG | | | | *i* S | Sn | 14 47 52.1 | -7.0 |

*IDC **23** 14:46:27.2±1.7, 4°.45N×125°.74E, h0km, mb3.5/5, mb1 3.7/5, mb1mx3.5/37, mbtmp3.6/5, MS2.4/1, Ms1 2.4/1, ms1mx2.1/52, Error ellipse: s-maj=111.6km s-min=24.2km az=67.0*
*MAN **23** 14:46:42.7, 4°.24N×125°.96E, h136km, mb4.3, ML3.2, MS2.9*

**ISC 23 14:46:43.9**±1.0, **4°.3N**±0°.1×**125°.8E**±0°.2, **h150**km, **n9,** σ0**°41**/9, **mb3.5**/5, **1C-2D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.93** | **334** | *e*P | **Pn** | **14 47 44.4** | **0.0** |
| GSPH | | | | *i* S | **Sn** | **14 47 44.5** | **-0.3** |
| **MATI** | **Mati** | **2.62** | **10** | *e*P | **Pn** | **14 47 26.5** | **-0.1** |
| **KCP** | **Kidapawan** | **2.74** | **345** | *i* P | **Pn** | **14 47 28.7** | **+0.6** |
| **SIJI** | **Sorong** | **7.53** | **133** | LR | LR | 14 51 20.6 | |
| | comp=Z,30nm,21.0s,baz=340,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.30** | **180** | P | **P** | **14 51 28.6** | **-0.5** |
| | 0.7nm,0.4s,baz=351,slow=12,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.55** | **161** | P | **P** | **14 51 58.7** | **-0.3** |
| | 0.6nm,0.3s,baz=339,slow=10,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **28.94** | **165** | P | **P** | **14 52 29.3** | **+0.1** |
| | 0.4nm,0.4s,baz=341,slow=7.2,SNR=35 | | | | | | |
| **STKA** | **Stephens Creek** | **39.03** | **158** | P | **P** | **14 53 56.5** | **+0.4** |
| | 0.6nm,0.4s,baz=331,slow=8.6,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.53** | **325** | P | **P** | **14 56 10.5** | **-0.1** |
| | 0.1nm,0.4s,baz=132,slow=8.3,SNR=5.3 | | | | | | |

*SFS **23** 14:48:01.0, 35°.66N×3°.71W, ML2.6, ALBORAN SUR*
*CNRM **23** 14:48:03.0, 35°.67N×3°.59W, h32km, ml2.5*

**ISC 23 14:48:02.5**±1.3, **35°.68N**±0°.04×**3°.58W**±0°.04, **h25**km±14km, **n15**, σ0**°99**/24, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.55** | **213** | P | **Pb** | **14 48 13.8** | **+0.3** |
| PALE | | | | S | **Sn** | **14 48 22.5** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.66** | **134** | P | **Pn** | **14 48 16.4** | **0.0** |
| GOG | | | | S | **Sb** | **14 48 25.0** | **+0.8** |
| **CHAS** | **Isla Isabel II** | **1.06** | **118** | P | **Pb** | **14 48 21.2** | **-1.0** |
| CHAS | | | | S | **Sn** | **14 48 37.6** | **+1.8** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **328** | P | **Pb** | **14 48 25.1** | **-0.8** |
| EMAL | | | | S | **Sb** | **14 48 42.0** | **+0.1** |
| **TAF** | **Taforalt** | **1.29** | **132** | P | **Pb** | **14 48 25.8** | **-0.2** |
| **JBK** | **JBK** | **1.58** | **148** | P | **Pn** | **14 48 29.2** | **0.0** |
| JBK | | | | S | **Sn** | **14 48 48.1** | **-0.8** |
| **CZD** | **Col de Zad** | **2.91** | **205** | P | **Pn** | **14 48 48.7** | **+1.2** |
| CZD | | | | S | **Sn** | **14 49 22.3** | **+0.5** |
| **MD31** | **MD31** | **2.97** | **200** | P | **Pn** | **14 48 46.3** | **-1.9** |
| MD31 | | | | S | **Sn** | **14 49 23.9** | **+0.8** |
| **MDT** | **Midelt** | **2.98** | **197** | P | **Pn** | **14 48 47.5** | **-0.9** |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | *e*Pn | **Pn** | **14 49 00.2** | **+1.4** |
| PVAQ | | | | *e*Sn | **Sn** | **14 49 41.6** | **-0.6** |
| PVAQ | | | | A | A | 14 49 44.4 | |
| | 2.8nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **298** | P | **Pn** | **14 49 00.1** | **+1.3** |
| PVAQ | | | | S | **Sn** | **14 49 41.2** | **-1.0** |
| **PBDV** | **Barranco-do-Ve** | **3.84** | **295** | *e*Sn | **Sn** | **14 49 44.3** | **-0.1** |
| PBDV | | | | A | A | 14 49 46.3 | |
| | 2.9nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **300** | *e*Sn | **Sn** | **14 49 50.9** | **+0.6** |
| PCVE | | | | A | A | 14 49 57.8 | |
| | 2.4nm,0.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.65** | **303** | *e*Sn | **Sn** | **14 50 03.5** | **-0.9** |
| PNCL | | | | A | A | 14 50 04.1 | |
| | 2.1nm,0.3s | | | | | | |
| **OUZM** | **OUZ** | **5.45** | **210** | P | **Pn** | **14 49 22.3** | **0.0** |

*IDC **23** 14:59:57.5±3.1, 27°.82S×177°.44W, h0km, mb3.4/2, mb1 3.7/2, mb1mx3.5/22, mbtmp3.4/2, Error ellipse: s-maj=68.8km s-min=34.5km az=85.0*

**ISC 23 15:00:07.6**±2.7, **29°.0S**±0°.2×**177°.1W**±0°.3, **h100**km, **n5,** σ0**°72**/6, **Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.77** | **250** | Pn | **Pn** | **15 00 25.3** | **-0.3** |
| | 2μm,0.3s,baz=71,slow=6.6,SNR=47 | | | | | | |
| RAO | | | | Sn | **Sn** | **15 00 39.8** | **+0.7** |
| | 2μm,0.3s,baz=102,slow=23,SNR=45 | | | | | | |
| **URZ** | **Urewera** | **10.43** | **206** | Sn | **Sn** | **15 04 28.7** | **-0.1** |
| | 0.5nm,0.3s,baz=225,slow=20,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **43.99** | **265** | P | **P** | **15 08 05.4** | **+0.1** |
| | 0.2nm,0.3s,baz=97,slow=7.4,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.86** | **270** | P | **P** | **15 08 11.4** | **-0.8** |
| | 0.5nm,0.6s,baz=106,slow=7.9,SNR=5.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.63** | **325** | PKPbc | **PKPbc** | **15 19 48.1** | **+0.6** |
| | 0.2nm,0.3s,baz=41,slow=2.6,SNR=1.7 | | | | | | |

*IGIL **23** 15:05:55.2, 37°.27N×15°.76W, h26km, ML3.3*
*CNRM **23** 15:05:55.5, 37°.51N×15°.33W, h0km, ml3.8*
*INMG **23** 15:05:56.9±1.8, 37°.30N×15°.84W, h10km, ML3.5, Error ellipse: s-maj=6.7km s-min=2.4km az=125.0*
*LDG **23** 15:05:59.0±0.4, 37°.58N×15°.48W, h30km, Ml3.9/5, Error ellipse: s-maj=9.1km s-min=7.8km az=48.0*

**ISC 23 15:05:51.8**±1.3, **37°.38N**±0°.07×**15°.8W**±0°.1, **h35**km, **n71,** σ2**°71**/100, **Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMPST** | **Porto Santo, M** | **4.31** | **187** | *e*Pn | **Pn** | **15 06 55.7** | **+0.8** |
| PMPST | | | | *e*Sn | **Sn** | **15 07 38.7** | **-5.3** |
| PMPST | | | | A | A | 15 07 43.2 | |
| | 72nm,0.2s | | | | | | |
| **PMPS** | **Porto Santo** | **4.33** | **186** | *e*Pn | **Pn** | **15 06 55.2** | **0.0** |
| PMPS | | | | *e*Sn | **Sn** | **15 07 39.1** | **-5.4** |
| PMPS | | | | A | A | 15 07 41.7 | |
| | 38nm,0.1s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **4.69** | **195** | *e*Pn | **Pn** | **15 07 00.9** | **+0.6** |
| PMOZ | | | | *e*Sn | **Sn** | **15 07 49.2** | **-4.3** |
| PMOZ | | | | A | A | 15 07 57.5 | |
| | 66nm,0.4s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **4.69** | **195** | P | **Pn** | **15 07 01.9** | **+1.7** |
| **FUL** | **Funchal** | **4.81** | **192** | *e*Pn | **Pn** | **15 07 01.8** | **+0.1** |
| FUL | | | | *e*Sn | **Sn** | **15 07 51.4** | **-4.8** |
| **PMAFR** | **Mafra** | **5.34** | **71** | *e*Pn | **Pn** | **15 07 12.0** | **+3.0** |
| PMAFR | | | | *e*Sn | **Sn** | **15 08 08.2** | **-1.0** |
| PMAFR | | | | A | A | 15 08 12.0 | |
| | 77nm,0.2s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **5.36** | **73** | *e*Pn | **Pn** | **15 07 12.1** | **+2.8** |
| PMST | | | | *e*Sn | **Sn** | **15 08 08.1** | **-1.6** |
| PMST | | | | A | A | 15 08 16.1 | |
| | 46nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.53** | **90** | *e*Pn | **Pn** | **15 07 14.2** | **+2.6** |
| PFVI | | | | *e*Sn | **Sn** | **15 08 11.9** | **-2.0** |
| PFVI | | | | A | A | 15 08 21.1 | |
| | 21nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.53** | **90** | P | **Pn** | **15 07 14.0** | **+2.4** |
| **PFVI** | **Vila Bisbo** | **5.53** | **90** | P | **Pn** | **15 07 14.0** | **+2.4** |
| **PTEO** | **Sao Teotonio** | **5.59** | **86** | *e*Pn | **Pn** | **15 07 14.8** | **+2.3** |
| PTEO | | | | *e*Sn | **Sn** | **15 08 13.4** | **-2.1** |
| PTEO | | | | A | A | 15 08 20.9 | |
| | 31nm,0.4s | | | | | | |
| **PACT** | **Alcochete** | **5.63** | **74** | *e*Pn | **Pn** | **15 07 16.0** | **+3.0** |
| PACT | | | | *e*Sn | **Sn** | **15 08 16.6** | **+0.2** |
| PACT | | | | A | A | 15 08 32.1 | |
| | 42nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **5.66** | **89** | *e*P | **Pn** | **15 07 15.9** | **+2.4** |
| MORF | | | | *e*S | **Sn** | **15 08 15.0** | **-2.2** |
| MORF | | | | IAML | | 15 08 18.4 | |
| | comp=E,38nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **5.66** | **89** | *e*Pn | **Pn** | **15 07 15.8** | **+2.4** |
| MORF | | | | *e*Sn | **Sn** | **15 08 15.2** | **-2.0** |
| MORF | | | | A | A | 15 08 20.1 | |
| | comp=E,38nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **5.77** | **80** | *e*Pn | **Pn** | **15 07 17.0** | **+2.1** |
| PNCL | | | | *e*Sn | **Sn** | **15 08 17.7** | **-2.2** |
| PNCL | | | | A | A | 15 08 23.5 | |
| | comp=E,22nm,0.1s | | | | | | |
| **PSBE** | **So Bento** | **5.86** | **67** | *e*Pn | **Pn** | **15 07 19.2** | **+3.0** |
| PSBE | | | | *e*Sn | **Sn** | **15 08 21.0** | **-1.2** |
| PSBE | | | | A | A | 15 08 30.6 | |
| | comp=E,25nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **6.14** | **85** | *e*Pn | **Pn** | **15 07 22.1** | **+2.1** |
| PCVE | | | | *e*Sn

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MD31** | **MD31** | **10.06** | **113** | P | **Pn** | **15 08 16.5** | **+2.6** |
| **MDT** | **Midelt** | **10.20** | **113** | P | **Pn** | **15 08 18.4** | **+2.6** |
| **ZGR** | **Zagora** | **11.11** | **128** | P | **Pn** | **15 08 32.4** | **+4.2** |
| **SJPF** | **Ste Jean** | **12.48** | **58** | *e*Pn | **Pn** | **15 08 48.4** | **+1.5** |
| **SJPF** | **Ste Jean** | **12.48** | **58** | *e*P | Pn | 15 08 53.2 | +6.3 |
| SJPF | | | | *e*Sn | Sn | 15 10 55.6 | -9.1 |
| | comp=E,2.0nm,0.3s | | | | | | |
| **ETSF** | **Etsaut** | **12.86** | **60** | *e*Pn | **Pn** | **15 08 53.4** | **+1.3** |
| **ETSF** | **Etsaut** | **12.86** | **60** | *e*P | P | 15 08 58.5 | -4.0 |
| ETSF | | | | *e*Sn | Sn | 15 11 04.1 | -10 |
| | comp=E,2.7nm,0.3s | | | | | | |
| **EPF** | **Esparros** | **13.53** | **60** | *e*Pn | **Pn** | **15 09 02.0** | **+0.8** |
| **EPF** | **Esparros** | **13.53** | **60** | *e*P | **Pn** | **15 09 05.4** | **+4.2** |
| EPF | | | | *e*Sn | Sn | 15 11 20.9 | -9.3 |
| | comp=E,1.1nm,0.2s | | | | | | |
| **QUIF** | **Quistinic** | **14.01** | **37** | *e*Pn | **Pn** | **15 09 08.8** | **+1.2** |
| QUIF | | | | *e*Sn | Sn | 15 11 30.3 | -11 |
| | comp=E,7.5nm,0.5s | | | | | | |
| **ROSF** | **Rostrenen** | **14.25** | **36** | *e*Pn | **Pn** | **15 09 12.2** | **+1.2** |
| **LFF** | **La Frestale** | **14.53** | **54** | *e*Pn | **Pn** | **15 09 15.3** | **+0.6** |
| **LFF** | **La Frestale** | **14.53** | **54** | *e*P | **P** | **15 09 19.0** | **-1.8** |
| **SGMF** | **Saint Gilles** | **14.54** | **37** | *e*Pn | **Pn** | **15 09 13.9** | **-0.9** |
| SGMF | | | | *e*Sn | Sn | 15 11 40.5 | -14 |
| **MFF** | **Saint Martin d** | **14.80** | **47** | *e*Pn | **Pn** | **15 09 19.1** | **+0.7** |
| **MFF** | **Saint Martin d** | **14.80** | **47** | *e*P | **P** | **15 09 23.5** | **-0.4** |
| **MTLF** | **Montolieu** | **14.93** | **61** | *e*Pn | **Pn** | **15 09 21.4** | **+1.2** |
| **MTLF** | **Montolieu** | **14.93** | **61** | *e*P | **P** | **15 09 25.7** | **+0.3** |
| **RJF** | **Les Rejaudoux** | **15.18** | **53** | *e*Pn | **Pn** | **15 09 24.8** | **+1.3** |
| **RJF** | **Les Rejaudoux** | **15.18** | **53** | *e*P | **P** | **15 09 28.8** | **+0.7** |
| **CAF** | **Calviac** | **15.38** | **55** | *e*Pn | **Pn** | **15 09 27.7** | **+1.6** |
| **CAF** | **Calviac** | **15.38** | **55** | *e*P | **P** | **15 09 31.3** | **+0.9** |
| **GRR** | **Gorron** | **15.47** | **40** | *e*Pn | **Pn** | **15 09 28.0** | **+0.8** |
| GRR | | | | *e*Sn | Sn | 15 12 05.5 | -12 |
| | comp=E,1.7nm,0.3s | | | | | | |
| **LDF** | **La Druitiere** | **15.98** | **41** | *e*Pn | **Pn** | **15 09 35.3** | **+1.5** |
| **LASF** | **Ste Croix** | **16.28** | **60** | *e*Pn | **Pn** | **15 09 39.4** | **+1.7** |

*VAO **23** 15:19:11.4±1.0,24.′04S×67.′07W,h202km,mb4.0*
*SJA **23** 15:19:11.0±0.6,24.′00S×66.′94W,h219km±4km,ML4.1, MW3.8*
*IDC **23** 15:19:12.2±1.3,23.′91S×66.′80W,h191km±14km,mb3.6/2, mb1 3.6/7,mb1mx3.3/40,mbtmp4.0/7,Error ellipse: s-maj=20.6km s-min=19.0km az=122.0*
*NEIC **23** 15:19:12.5±1.1,23.′98S±0.′08×66.′9W±0.′1,h196km±11km, mb4.2/4,Md4.0(SJA),Error ellipse: s-maj=15.9km s-min=11.0km az=101.0*
*GUC **23** 15:19:14.2±0.7,23.′87S×67.′27W,h233km±10km,ML4.4*

**ISC 23 15:19:11.7±0.6,24.′01S±0.′04×66.′93W±0.′05,h197km±7km, n120,σ1§44/150,7C,Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLA** | **San Lorenzo** | **1.48** | **119** | *e*P | **Pn** | **15 19 47.2** | **+2.0** |
| SLA | | | | *e*S | **S** | **15 20 08.3** | **-2.8** |
| SLA | | | | *e*S | | 15 20 14.0 | |
| SLA | | | | *e*S | | 15 20 14.1 | |
| **HJA** | **Humahuaca** | **1.60** | **60** | *e*P | **Pn** | **15 19 48.4** | **+1.8** |
| **FSA** | **Cafayete** | **2.26** | **158** | *e*P | Pn | 15 19 48.8 | -4.2 |
| FSA | | | | *e*P | | 15 19 54.3 | |
| FSA | | | | *e*S | | 15 20 41.7 | |
| **LVC** | **Limon Verde** | **2.29** | **307** | P | **Pn** | **15 19 55.0** | **+1.4** |
| | 43nm,0.3s,baz=140,slow=7.3,SNR=302 | | | | | | |
| LVC | | | | S | **S** | **15 20 26.6** | **+0.6** |
| | 44nm,0.3s,baz=4.2,slow=20,SNR=36 | | | | | | |
| **LVC** | **Limon Verde** | **2.29** | **307** | | **Pn** | **15 19 54.8** | **+1.2** |
| **LVC** | **Limon Verde** | **2.29** | **307** | *e*P | **Pn** | **15 19 54.9** | **+1.4** |
| LVC | | | | *i*S | **S** | **15 20 26.2** | **+0.2** |
| **LVC** | **Limon Verde** | **2.29** | **307** | *e*P | **Pn** | **15 19 55.1** | **+1.4** |
| LVC | | | | *e*S | **S** | **15 20 26.9** | **+0.9** |
| **PB15** | **IPOC Station P** | **2.47** | **288** | | **Pn** | **15 19 56.5** | **+1.2** |
| **PB15** | **IPOC Station P** | **2.47** | **288** | ⇑*i*P | **Pn** | **15 19 56.6** | **+1.4** |
| PB15 | | | | *i*S | **S** | **15 20 28.4** | **-0.7** |
| **PB15** | **IPOC Station P** | **2.47** | **288** | *e*P | **Pn** | **15 19 56.1** | **+0.8** |
| PB15 | | | | *e*S | **S** | **15 20 29.6** | **+0.5** |
| PB15 | | | | IAML | | 15 20 30.3 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **2.76** | **298** | | **Pn** | **15 19 59.5** | **+1.0** |
| **PB06** | **IPOC Station P** | **2.76** | **298** | ⇑*i*P | **Pn** | **15 19 59.7** | **+1.2** |
| PB06 | | | | *i*S | **S** | **15 20 34.1** | **-0.9** |
| PB06 | | | | IAML | | 15 20 36.0 | |
| | comp=N,822nm,0.5s | | | | | | |
| **PB06** | **IPOC Station P** | **2.76** | **298** | *e*P | **Pn** | **15 19 59.5** | **+1.0** |
| PB06 | | | | *e*S | **S** | **15 20 35.1** | **+0.1** |
| PB06 | | | | IAML | | 15 20 37.1 | |
| | comp=Z,331nm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **3.07** | **315** | | **Pn** | **15 20 03.5** | **+1.4** |
| **PB09** | **IPOC Station P** | **3.07** | **315** | ⇑*i*P | **Pn** | **15 20 03.7** | **+1.5** |
| PB09 | | | | *i*S | **S** | **15 20 41.3** | **-0.3** |
| PB09 | | | | IAML | | 15 20 43.0 | |
| | comp=N,294nm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **3.07** | **315** | *e*P | **Pn** | **15 20 03.6** | **+1.4** |
| PB09 | | | | *e*S | **S** | **15 20 41.9** | **+0.3** |
| PB09 | | | | IAML | | 15 20 42.5 | |
| | comp=Z,255nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **3.23** | **258** | | **Pn** | **15 20 04.6** | **+0.4** |
| **PB14** | **IPOC Station P** | **3.23** | **258** | *e*P | **Pn** | **15 20 05.1** | **+0.9** |
| PB14 | | | | *e*S | **S** | **15 20 45.2** | **0.0** |
| PB14 | | | | IAML | | 15 20 46.5 | |
| | comp=Z,131nm,0.2s | | | | | | |
| **PB03** | **IPOC Station P** | **3.25** | **306** | | **Pn** | **15 20 05.0** | **+0.6** |
| **PB03** | **IPOC Station P** | **3.25** | **306** | ⇑*i*P | **Pn** | **15 20 05.2** | **+0.7** |
| PB03 | | | | *i*S | **S** | **15 20 43.5** | **-2.1** |
| PB03 | | | | IAML | | 15 20 47.4 | |
| | comp=E,378nm,0.7s | | | | | | |
| **PB03** | **IPOC Station P** | **3.25** | **306** | *e*P | **Pn** | **15 20 05.1** | **+0.7** |
| PB03 | | | | *e*S | **S** | **15 20 44.4** | **-1.2** |
| PB03 | | | | IAML | | 15 20 47.6 | |
| | comp=Z,494nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **3.36** | **278** | | **Pn** | **15 20 06.1** | **+0.6** |
| **PB10** | **IPOC Station P** | **3.36** | **278** | ⇑*i*P | **Pn** | **15 20 06.3** | **+0.8** |
| PB10 | | | | *i*S | **S** | **15 20 46.1** | **-1.4** |
| PB10 | | | | IAML | | 15 20 49.5 | |
| | comp=N,166nm,0.3s | | | | | | |
| **PB10** | **IPOC Station P** | **3.36** | **278** | *e*P | **Pn** | **15 20 06.4** | **+0.8** |
| PB10 | | | | *e*S | **S** | **15 20 47.2** | **-0.4** |
| **PB04** | **IPOC Station P** | **3.40** | **299** | | **Pn** | **15 20 06.7** | **+0.5** |
| **PB04** | **IPOC Station P** | **3.40** | **299** | *e*P | **Pn** | **15 20 06.8** | **+0.6** |
| PB04 | | | | *e*P | | 15 20 07.1 | |
| PB04 | | | | *e*S | **S** | **15 20 47.2** | **-1.7** |
| PB04 | | | | *e*S | | 15 20 48.3 | |
| PB04 | | | | IAML | | 15 20 52.2 | |
| | comp=Z,308nm,0.8s | | | | | | |
| **AC02** | **Maricunga** | **3.45** | **215** | | **Pn** | **15 20 08.1** | **+1.1** |
| **AC02** | **Maricunga** | **3.45** | **215** | *e*P | **Pn** | **15 20 08.3** | **+1.3** |
| AC02 | | | | *e*S | **S** | **15 20 48.8** | **-1.6** |
| AC02 | | | | *e*S | | 15 20 55.1 | |
| **PB07** | **IPOC Station P** | **3.55** | **309** | | **Pn** | **15 20 08.0** | **0.0** |
| **PB07** | **IPOC Station P** | **3.55** | **309** | ⇑*i*P | **Pn** | **15 20 08.6** | **+0.5** |
| PB07 | | | | *i*S | **S** | **15 20 49.5** | **-2.6** |
| PB07 | | | | IAML | | 15 20 52.6 | |
| | comp=N,425nm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **3.55** | **309** | *e*P | **Pn** | **15 20 08.5** | **+0.5** |
| PB07 | | | | *e*S | **S** | **15 20 50.4** | **-1.7** |
| PB07 | | | | IAML | | 15 20 58.0 | |
| | comp=Z,244nm,0.5s | | | | | | |
| **PB01** | **IPOC Station P** | **3.79** | **321** | | **Pn** | **15 20 10.8** | **0.0** |
| **PB01** | **IPOC Station P** | **3.79** | **321** | ⇑*i*P | **Pn** | **15 20 11.1** | **+0.2** |
| PB01 | | | | *i*S | **S** | **15 20 55.0** | **-2.2** |
| PB01 | | | | IAML | | 15 20 58.2 | |
| | comp=E,278nm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **3.79** | **321** | *e*P | **Pn** | **15 20 11.2** | **+0.4** |
| PB01 | | | | *e*S | **S** | **15 20 55.7** | **-1.5** |
| PB01 | | | | IAML | | 15 21 02.7 | |
| | comp=Z,84nm,0.3s | | | | | | |
| **PB02** | **IPOC Station P** | **3.83** | **314** | | **Pn** | **15 20 11.3** | **-0.1** |
| **PB02** | **IPOC Station P** | **3.83** | **314** | *i*P | **Pn** | **15 20 11.6** | **+0.1** |
| PB02 | | | | *i*S | **S** | **15 20 55.2** | **-3.0** |
| PB02 | | | | IAML | | 15 20 58.4 | |
| | comp=N,327nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **3.83** | **314** | *e*P | **Pn** | **15 20 11.8** | **+0.4** |
| PB02 | | | | *e*S | **S** | **15 20 56.1** | **-2.2** |
| PB02 | | | | *e*S | | 15 20 56.5 | |
| PB02 | | | | IAML | | 15 21 02.7 | |
| | comp=Z,416nm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **4.36** | **316** | Pn | **Pn** | **15 20 17.6** | **-0.4** |
| **PATCX** | **Punta Patache** | **4.36** | **316** | *e*P | **Pn** | **15 20 17.8** | **-0.2** |
| PATCX | | | | *i*S | **S** | **15 21 06.4** | **-3.7** |
| PATCX | | | | IAML | | 15 21 13.6 | |
| | comp=N,258nm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **4.36** | **316** | *e*P | **Pn** | **15 20 18.2** | **+0.2** |
| PATCX | | | | *e*P | | 15 20 18.4 | |
| PATCX | | | | *e*P | | 15 20 18.6 | |
| PATCX | | | | IAML | | 15 21 11.6 | |
| | comp=Z,82nm,0.5s | | | | | | |
| **PB08** | **IPOC Station P** | **4.37** | **331** | | **Pn** | **15 20 18.7** | **+0.3** |
| **PB08** | **IPOC Station P** | **4.37** | **331** | *e*P | **Pn** | **15 20 19.7** | **+1.2** |
| PB08 | | | | *e*P | | 15 20 20.8 | |
| PB08 | | | | *e*S | **S** | **15 21 10.4** | **-0.4** |
| PB08 | | | | IAML | | 15 21 12.9 | |
| | comp=Z,84nm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **4.56** | **318** | Pn | **Pn** | **15 20 20.4** | **-0.1** |
| **TA01** | **Diego Aracena** | **4.56** | **318** | *e*P | **Pn** | **15 20 20.7** | **+0.2** |
| TA01 | | | | *e*P | | 15 20 21.0 | |
| TA01 | | | | *e*S | **S** | **15 21 08.3** | **-6.3** |
| TA01 | | | | *e*S | | 15 21 12.7 | |
| TA01 | | | | IAML | | 15 21 20.5 | |
| | comp=Z,70nm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **4.62** | **323** | *e*P | **Pn** | **15 20 20.4** | **-0.9** |
| **GO03** | **Copiap** | **4.65** | **219** | Pn | **Pn** | **15 20 20.8** | **-0.8** |
| **GO03** | **Copiap** | **4.65** | **219** | *e*P | **Pn** | **15 20 20.9** | **-0.8** |
| GO03 | | | | IAML | | 15 21 17.2 | |
| | comp=E,119nm,0.1s | | | | | | |
| **GO03** | **Copiap** | **4.65** | **219** | *e*P | **Pn** | **15 20 21.0** | **-0.6** |
| **GO01** | **Chusmiza** | **4.81** | **334** | | **Pn** | **15 20 24.1** | **+0.1** |
| **VCA** | **Vinchina** | **4.84** | **193** | *e*S | **S** | **15 21 18.3** | **-3.0** |
| **PB11** | **IPOC Station P** | **4.93** | **329** | Pn | **Pn** | **15 20 24.5** | **-0.8** |
| **AC04** | **Llanos de Chal** | **5.60** | **221** | Pn | **Pn** | **15 20 32.2** | **-1.5** |
| **LCO** | **Las Campanas** | **6.02** | **213** | *e*P | **Pn** | **15 20 37.7** | **-1.6** |
| **PB16** | **IPOC Station P** | **6.14** | **336** | Pn | **Pn** | **15 20 40.7** | **-0.6** |
| **PB12** | **IPOC Station P** | **6.24** | **329** | Pn | **Pn** | **15 20 41.0** | **-1.2** |
| **PB12** | **IPOC Station P** | **6.24** | **329** | *e*S | **S** | **15 21 49.2** | **-4.5** |
| **GO04** | **Tololo Observa** | **7.04** | **208** | Pn | **Pn** | **15 20 51.0** | **-1.6** |
| **RTLL** | **Cerro Villicun** | **7.42** | **190** | *e*P | **Pn** | **15 20 56.5** | **-0.8** |
| RTLL | | | | *e*P | **Pn** | **15 20 56.5** | **-0.8** |
| RTLL | | | | *e*P | **P** | **15 20 57.6** | **+0.3** |
| RTLL | | | | *e*P | **P** | **15 20 57.6** | **+0.3** |
| **CO03** | **El Pedregal** | **7.58** | **205** | Pn | **Pn** | **15 20 57.6** | **-1.9** |
| **TCA** | **Tanti** | **7.58** | **165** | *e*P | **Pn** | **15 20 59.9** | **+0.3** |
| TCA | | | | *e*S | **S** | **15 22 18.3** | **-7.1** |
| TCA | | | | *e*S | | 15 22 22.3 | |
| **LPAZ** | **La Paz** | **7.77** | **351** | P | **Pn** | **15 21 03.3** | **+0.8** |
| | comp=E,0.9nm,0.3s,baz=172,slow=10,SNR=13 | | | | | | |
| LPAZ | | | | S | **S** | **15 22 27.0** | **-3.6** |
| | comp=E,0.2nm,0.3s,baz=15,slow=17,SNR=2.1 | | | | | | |
| **LPAZ** | **La Paz** | **7.77** | **351** | Pn | **Pn** | **15 21 02.8** | **+0.2** |
| **LPAZ** | **La Paz** | **7.77** | **351** | *e*P | **Pn** | **15 21 03.0** | **+0.5** |
| **LPAZ** | **La Paz** | **7.77** | **351** | *e*P | **Pn** | **15 21 03.0** | **+0.5** |
| **CO02** | **Combarbal** | **8.02** | **206** | Pn | **Pn** | **15 21 03.9** | **-1.4** |
| **CPUP** | **Villa Florida** | **9.00** | **107** | P | **Pn** | **15 21 17.4** | **-0.5** |
| | comp=E,0.1nm,0.3s,baz=288,slow=10,SNR=4.3 | | | | | | |
| **VA03** | **San Esteban** | **9.29** | **199** | Pn | **Pn** | **15 21 22.3** | **+0.6** |
| **SIV** | **San Ignacio** | **9.69** | **36** | P | **Pn** | **15 21 26.0** | **-1.0** |
| | comp=E,3.1nm,0.3s,baz=218,slow=12,SNR=19 | | | | | | |
| **MT02** | **Curacav** | **9.93** | **201** | Pn | **Pn** | **15 21 29.8** | **-0.1** |
| **MT01** | **Popeta** | **10.52** | **200** | Pn | **Pn** | **15 21 36.7** | **-1.0** |
| **BO01** | **Tunca** | **10.96** | **198** | Pn | **Pn** | **15 21 42.2** | **-1.1** |
| **AQDB** | **Aquidauana** | **10.98** | **73** | *e*P | **Pn** | **15 21 45.5** | **+1.9** |
| **PTLB** | **Pontes e Lacer** | **11.24** | **42** | *e*P | **Pn** | **15 21 48.4** | **+1.4** |
| **VILB** | **Vilhena** | **12.71** | **31** | *e*P | **Pn** | **15 22 06.2** | **+0.5** |
| **PTGB** | **Pitanga** | **13.57** | **96** | *e*P | **P** | **15 22 18.9** | **-0.1** |
| **ITAB** | **Concordia** | **13.73** | **107** | *e*P | **Pn** | **15 22 19.8** | **+1.4** |
| **PLTB** | **Pedras Altas** | **14.08** | **126** | *e*P | **Pn** | **15 22 24.0** | **+1.3** |
| **ETMB** | **Extrema** | **14.13** | **3** | *e*P | **Pn** | **15 22 23.8** | **+0.4** |
| **PCMB** | **Pacaembu** | **14.64** | **84** | *e*P | **P** | **15 22 31.1** | **+0.2** |
| **PDRB** | **Porto dos Gac** | **15.68** | **40** | *e*P | **P** | **15 22 42.4** | **0.0** |
| **ITRB** | **Iturama** | **15.96** | **78** | *e*P | **Pn** | **15 22 46.4** | **+0.5** |
| **TIJ01** | **Guaruva-PR** | **16.35** | **98** | *e*P | **P** | **15 22 50.3** | **+0.5** |
| **ARAG** | **Araguaiana, MT** | **16.43** | **63** | *e*P | **Pn** | **15 22 52.7** | **+1.2** |
| **TER01** | **Tubaro-SC** | **16.58** | **110** | *e*P | **P** | **15 22 53.1** | **+0.8** |
| **CLDB** | **Colider** | **16.82** | **41** | *e*P | **P** | **15 22 55.1** | **+0.2** |
| **PLCA** | **Paso Flores** | **16.95** | **189** | P | **P** | **15 22 57.3** | **+1.1** |
| | comp=E,0.3nm,0.3s,baz=6.5,slow=11,SNR=6.0 | | | | | | |
| **PLCA** | **Paso Flores** | **16.95** | **189** | P | **P** | **15 22 57.1** | **+0.9** |
| PLCA | | | | IAmb | IAmb | 15 23 14.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **BB19B** | **Bebedouro** | **17.25** | **84** | *e*P | **Pn** | **15 23 02.0** | **+0.8** |
| **LL04** | **Puerto Octay** | **17.47** | **194** | P | **P** | **15 23 02.3** | **+0.6** |
| LL04 | | | | IAmb | IAmb | 15 23 02.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **17.90** | **89** | *e*P | **P** | **15 23 07.4** | **+0.7** |
| **PET01** | **Itanhaem-SP** | **17.94** | **95** | *e*P | **P** | **15 23 07.4** | **+0.3** |
| **VAO** | **Valinhos** | **18.34** | **91** | *e*P | **P** | **15 23 11.8** | **+0.3** |
| **IPMB** | **Ipameri, GO** | **18.47** | **75** | *e*P | **P** | **15 23 13.9** | **+1.0** |
| **SNDB** | **Serra Nova Dou** | **19.07** | **54** | *e*P | **P** | **15 23 19.5** | **+0.2** |
| **PARB** | **Paraibuna** | **19.53** | **92** | *e*P | **P** | **15 23 25.0** | **+0.6** |
| **BDFB** | **Brasilia** | **19.63** | **68** | P | **P** | **15 23 26.1** | **+0.5** |
| **NPGB** | **Novo Progresso** | **20.19** | **35** | *e*P | **P** | **15 23 33.4** | **+1.9** |
| **BSCB** | **Bom Sucesso** | **20.68** | **86** | *e*P | **P** | **15 23 38.1** | **+1.4** |
| **PEXB** | **Peixe** | **21.27** | **59** | *e*P | **P** | **15 23 42.2** | **-0.7** |
| **ITTB** | **Itaituba** | **22.31** | **31** | *e*P | **P** | **15 23 52.5** | **-0.6** |
| **DIAM** | **Diamantina, MG** | **22.41** | **80** | *e*P | **P** | **15 23 53.4** | **-0.9** |
| **JANB** | **Januaria** | **23.07** | **71** | *e*P | **P** | **15 23 59.9** | **-0.2** |
| **SMTB** | **Santa Maria do** | **23.84** | **54** | *e*P | **P** | **15 24 07.5** | **+0.4** |
| **SDBA** | **SAO DESIDERIO** | **23.85** | **65** | *e*P | **P** | **15 24 07.2** | **-0.1** |
| **PTGA** | **Pitinga** | **24.11** | **17** | P | **P** | **15 24 09.2** | **-0.2** |
| | comp=Z,2.6nm,0.4s,baz=196,slow=1.3,SNR=5.3 | | | | | | |
| **PRPB** | **Parauapebas** | **24.19** | **46** | *e*P | **P** | **15 24 10.1** | **-0.1** |
| **RIB01** | **Linhares ES** | **25.08** | **84** | *e*P | **P** | **15 24 18.3** | **0.0** |
| **GUA01** | **Guaratinga, BA** | **26.46** | **79** | *e*P | **P** | **15 24 30.8** | **+0.1** |
| **CMC01** | **Camacan, BA** | **27.16** | **77** | *e*P | **P** | **15 24 36.6** | **-0.3** |
| **NBIT** | **Itapeh - BA** | **27.41** | **76** | *e*P | **P** | **15 24 40.0** | **+0.9** |
| **GDU01** | **Guandu, BA** | **27.78** | **73** | *e*P | **P** | **15 24 41.7** | **-0.8** |
| **NBPN** | **Ponto Novo - B** | **28.60** | **67** | *e*P | **P** | **15 24 49.7** | **-0.1** |
| **QSPA** | **South Pole Qui** | **66.19** | **180** | P | **P** | **15 29 40.1** | **+2.1** |
| **TORD** | **Torodi Ar. Bea** | **76.51** | **69** | P | **P** | **15 30 40.3** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=258,slow=6.1,SNR=8.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.51** | **69** | P | **P** | **15 30 41.4** | **+1.0** |
| **ASAR** | **Alice Springs** | **128.47** | **205** | PKP | **PKiKP** | **15 37 56.9** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=134,slow=1.9,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.65** | **207** | PKP | **PKiKP** | **15 38 02.6** | **-0.2** |
| | comp=Z,0.2nm,0.5s,baz=152,slow=2.0,SNR=6.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **142.35** | **36** | PKP | **PKiKP** | **15 38 23.1** | **-0.5** |
| | comp=Z,0.3nm,1.0s,baz=29,slow=4.4,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.49** | **40** | PKPbc | **PKPab** | **15 38 30.9** | **0.0** |
| | comp=Z,0.2nm,0.6s,baz=319,slow=2.3,SNR=2.2 | | | | | | |
| **PZH** | **PanZhiHua** | **169.45** | **74** | PKP | **PKPdf** | **15 38 53.5** | **-2.5** |

*NNC **23** 15:25:34.0±6.9,36.′96N×71.′00E,h134km±119km,mb2.9, mpv3.6,Error ellipse: s-maj=59.0km s-min=47.2km az=8.0*

**ISC 23 15:25:32.9±3.8,36.′9N±0.′2×71.′1E±0.′2,h88km,n11, σ1§00/13,5C-3D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.65** | **20** | P | **Pn** | **15 26 55.0** | **+0.4** |
| | SNR=19 | | | | | | |
| **UCH** | **Uchtor** | **5.99** | **25** | P | **Pn** | **15 26 59.5** | **+0.1** |
| | SNR=7.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.17** | **19** | P | **Pn** | **15 27 02.2** | **+0.8** |
| | SNR=6.7 | | | | | | |
| **KK08** | **Karatay Array** | **6.26** | **356** | ⇓P | **Pn** | **15 27 03.2** | **+0.5** |
| | 1.8nm,0.3s,baz=178,slow=13 | | | | | | |
| KK08 | | | | ⇓S | **Sn** | **15 28 11.8** | **-0.9** |
| | 0.8nm,0.3s,baz=187,slow=23 | | | | | | |
| **AAK** | **Ala-Archa** | **6.35** | **24** | P | **Pn** | **15 27 04.6** | **+0.6** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.35** | **24** | ⇑P | **Pn** | **15 27 04.5** | **+0.4** |
| | 3.9nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **15 28 17.1** | **+1.9** |
| | 1.5nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **6.76** | **24** | P | **Pn** | **15 27 10.0** | **+0.6** |
| | SNR=6.9 | | | | | | |
| **USP** | **Ospenovka** | **6.93** | **21** | P | **Pn** | **15 27 12.1** | **+0.4** |
| | SNR=6.6 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.99** | **28** | ⇓P | **Pn** | **15 27 12.1** | **-0.7** |
| | 2.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **15 28 29.1** | **-1.7** |
| | 1.0nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **14.80** | **330** | ⇑P | Pn | 15 28 52.3 | -5.2 |
| | 0.2nm,0.4s,baz=262,slow=37,SNR=16 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.50** | **329** | ⇑P | **Pn** | **15 29 18.5** | **-0.4** |
| | 0.7nm,0.6s | | | | | | |

*IDC **23** 15:27:54.5±1.7,12.′42S×166.′31E,h0km,mb3.8/7, mb1 4.0/8,mb1mx3.8/42,mbtmp3.8/8,ML3.5/1,MS3.2/9, Ms1 3.2/9,ms1mx2.9/64,Error ellipse: s-maj=50.8km s-min=26.5km az=115.0*
*NEIC **23** 15:28:01.0±1.3,12.′60S±0.′08×166.′4E±0.′1,h46km±9km, mb4.3/8,Error ellipse: s-maj=16.6km s-min=11.1km az=68.0*

**ISC 23 15:28:02.0±0.9,12.′6S±0.′1×166.′3E±0.′1,h59km,n27, σ0§96/19,mb3.8/10,MS3.3/7,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **2.92** | **163** | Pn | **Pn** | **15 28 45.2** | **-0.8** |
| **HNR** | **Honiara** | **7.03** | **296** | LR | LR | 15 31 51.2 | |
| | comp=Z,37nm,18.4s,baz=158,slow=34 | | | | | | |
| **HNR** | **Honiara** | **7.03** | **296** | Pn | **Pn** | **15 29 42.2** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **8.12** | **194** | Pn | **Pn** | **15 29 56.9** | **-0.2** |
| **DZM** | **Mont Dzumac** | **9.39** | **179** | Pn | **Pn** | **15 30 16.2** | **+1.5** |
| | 0.4nm,0.3s,baz=264,slow=16,SNR=2.1 | | | | | | |
| DZM | | | | Sn | Sn | 15 32 09.6 | +11 |
| | 0.4nm,0.3s,baz=10,slow=16,SNR=1.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.39** | **179** | | **Pn** | **15 30 13.4** | **-1.2** |
| **ONTNC** | **Ouen Toro** | **9.62** | **179** | Pn | **Pn** | **15 30 18.7** | **+0.9** |
| **PMG** | **Port Moresby** | **19.09** | **278** | LR | LR | 15 38 56.7 | |
| | comp=Z,68nm,21.4s,baz=114,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **20.63** | **246** | LR | LR | 15 39 18.4 | |
| | comp=Z,88nm,21.0s,baz=77,slow=33 | | | | | | |
| **AFI** | **Afiamalu** | **21.34** | **96** | LR | LR | 15 39 46.3 | |
| | comp=Z,53nm,18.5s,baz=274,slow=33 | | | | | | |
| **BKZ** | **Black Stump Fm** | **27.92** | **163** | P | **P** | **15 33 46.9** | **+0.3** |
| BKZ | | | | IAmb | IAmb | 15 33 51.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **29.72** | **226** | P | **P** | **15 34 03.1** | **+0.4** |
| | comp=Z,0.7nm,0.3s,baz=12,slow=12,SNR=3.5 | | | | | | |
| STKA | | | | LR | LR | 15 45 37.5 | |
| | comp=Z,70nm,18.6s,baz=27,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **29.72** | **226** | IAmb | IAmb | 15 34 05.3 | |
| | comp=Z,0.7nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.52** | **252** | P | **P** | **15 34 18.0** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=84,slow=9.1,SNR=2.0 | | | | | | |
| WRA | | | | LR | LR | 15 45 54.1 | |
| | comp=Z,50nm,19.7s,baz=161,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **32.63** | **246** | P | **P** | **15 34 28.4** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=78,slow=8.8,SNR=8.2 | | | | | | |
| ASAR | | | | LR | LR | 15 46 47.2 | |
| | comp=Z,95nm,19.2s,baz=89,slow=35 | | | | | | |
| **BBOO** | **Buckleboo** | **34.20** | **229** | P | **P** | **15 34 42.0** | **0.0** |
| BBOO | | | | IAmb | IAmb | 15 35 07.1 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **34.32** | **266** | P | **P** | **15 34 41.3** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **39.55** | **257** | LR | LR | 15 50 45.4 | |
| | comp=Z,59nm,18.2s,baz=133,slow=35 | | | | | | |
| **PPT** | **Papeete** | **42.78** | **102** | LR | LR | 15 50 28.3 | |
| | comp=Z,42nm,21.1s,baz=249,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.27** | **294** | P | **P** | **15 39 29.2** | **+1.6** |
| | comp=Z,0.4nm,0.8s,baz=115,slow=6.1,SNR=4.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.38** | **180** | P | **P** | **15 39 50.4** | **-0.1** |
| **SONM** | **Songino Array** | **80.28** | **324** | P | **P** | **15 40 06.6** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=122,slow=5.7,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **80.28** | **324** | IAmb | IAmb | 15 40 15.2 | |
| | comp=Z,2.5nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **84.83** | **18** | P | **P** | **15 40 28.4** | **-1.3** |
| | comp=Z,0.1nm,0.5s,baz=322,slow=33,SNR=4.7 | | | | | | |
| **J25K** | **Salcha River,** | **85.19** | **19** | P | **P** | **15 40 32.0** | **+0.4** |
| J25K | | | | IAmb | IAmb | 15 40 48.9 | |
| | comp=Z,4.1nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **95.07** | **317** | P | **P** | **15 41 19.1** | **+0.6** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IPIR | | | | *e*Pn | | **Pn** | **15 39 08.9** | **+2.5** |
| **IPRN** | **Peran** | **3.35** | **325** | *e*Pn | | **Pn** | **15 39 08.4** | **+1.6** |
| IPRN | | | | *e* | | | 15 40 12.8 | |
| | comp=Z,2µm,0.7s | | | | | | | |
| **SHK1** | **Shahrekord** | **3.43** | **251** | *e*Pn | | **Pb** | **15 39 12.2** | **-3.0** |
| **ITEG** | **Tejag** | **3.44** | **99** | *e*Pn | | **Pn** | **15 39 10.1** | **+2.1** |
| ITEG | | | | *e* | | | 15 40 11.6 | |
| | comp=Z,3µm,0.4s | | | | | | | |
| **KHGB** | **Koh Gabri** | **3.46** | **154** | *e*Pn | | **Pb** | **15 39 11.8** | **-4.0** |
| KHGB | | | | *e* | | | 15 40 19.1 | |
| | comp=Z,3µm,0.7s | | | | | | | |
| **TEH** | **Tehran** | **3.54** | **310** | *e*Pn | | **Pn** | **15 39 10.7** | **+1.4** |
| **KLNJ** | **Kolanjah** | **3.63** | **228** | *e*Pn | | **Pb** | **15 39 14.8** | **-4.0** |
| **SBZV** | **Sabzevar** | **3.73** | **39** | *e*Pn | | **Pn** | **15 39 12.3** | **+0.2** |
| **IKOO** | **Kooshah** | **3.76** | **106** | *e*Pn | | **Pn** | **15 39 14.4** | **+1.8** |
| IKOO | | | | *e* | | | 15 40 22.1 | |
| | comp=Z,2µm,0.4s | | | | | | | |
| **IMND** | **Minoodasht** | **3.78** | **8** | *e*Pn | | **Pn** | **15 39 13.5** | **+0.9** |
| **CHTH** | **Charan** | **3.80** | **310** | *e*Pn | | **Pn** | **15 39 15.2** | **+2.1** |
| **TVBK** | **TV Kerman** | **3.92** | **153** | *e*Pn | | **Pb** | **15 39 19.4** | **-4.2** |
| **THKV** | **Tehran--Karaj** | **3.97** | **308** | *e*Pn | | **Pn** | **15 39 17.0** | **+1.7** |
| **KHMZ** | **Khomeyn** | **3.98** | **275** | *e*Pn | | **Pn** | **15 39 18.1** | **+2.7** |
| **BSRN** | **Basiran** | **4.02** | **111** | *e*Pn | | **Pn** | **15 39 17.9** | **+1.9** |
| **ASAO** | **Ashtian** | **4.03** | **286** | *e*Pn | | **Pn** | **15 39 19.1** | **+2.9** |
| **IMON** | **Monand** | **4.16** | **93** | *e*Pn | | **Pn** | **15 39 20.0** | **+2.0** |
| IMON | | | | *e* | | | 15 39 21.9 | |
| | comp=Z,2µm,0.2s | | | | | | | |
| **MRVT** | **Maraveh tapeh** | **4.29** | **15** | *e*Pn | | **Pn** | **15 39 21.2** | **+1.6** |
| **IRAZ** | **Razeghan** | **4.38** | **297** | *e*Pn | | **Pn** | **15 39 22.5** | **+1.4** |
| IRAZ | | | | *e* | | | 15 40 53.4 | |
| | comp=Z,1µm,0.7s | | | | | | | |
| **IDAH** | **Dahanechah** | **4.39** | **99** | *e*Pn | | **Pn** | **15 39 23.0** | **+1.8** |
| **QALM** | **Alamut, Qazvin** | **4.43** | **312** | *e*Pn | | **Pn** | **15 39 24.0** | **+2.2** |
| **ISFR** | **Sfrayin** | **4.44** | **36** | *e*Pn | | **Pn** | **15 39 23.0** | **+1.1** |
| ISFR | | | | *e* | | | 15 40 44.5 | |
| | comp=Z,2µm,0.7s | | | | | | | |
| **IAKL** | **Akhelmad** | **4.53** | **46** | *e*Pn | | **Pn** | **15 39 24.1** | **+1.0** |
| **IPAY** | **Payeh** | **4.58** | **49** | *e*Pn | | **Pn** | **15 39 24.7** | **+0.9** |
| **SHRT** | **Shahrakht** | **4.66** | **87** | *e*Pn | | **Pn** | **15 39 26.8** | **+2.1** |
| **BJRD** | **Bojnurd** | **4.72** | **27** | *e*Pn | | **Pn** | **15 39 28.4** | **+2.8** |
| **QABG** | **Abgarm-Qazvin** | **4.77** | **299** | *e*Pn | | **Pn** | **15 39 26.5** | **+0.1** |
| **AMIS** | **Naft Sefid** | **4.94** | **250** | *e*Pn | | **Pn** | **15 39 31.6** | **+3.1** |
| **TBJM** | **Torbat-e-JAM** | **4.96** | **68** | *e*Pn | | **Pn** | **15 39 30.3** | **+1.3** |
| **NHDN** | **Nehbandan** | **4.98** | **114** | *e*Pn | | **Pn** | **15 39 31.4** | **+2.2** |
| **IKRD** | **Kardeh** | **5.11** | **49** | *e*Pn | | **Pn** | **15 39 33.0** | **+2.0** |
| **GEYT** | **Alibeck** | **5.21** | **31** | Pn | | **Pn** | **15 39 34.1** | **+1.9** |
| | comp=Z,2.4nm,0.3s,baz=204,slow=14,SNR=11 | | | | | | | |
| GEYT | | | | Lg | | Lg | 15 40 53.3 | |
| | comp=Z,0.4nm,0.3s,baz=86,slow=40,SNR=2.5 | | | | | | | |
| **JRKH** | **Jarkhoshk** | **5.22** | **61** | *e*Pn | | **Pn** | **15 39 34.2** | **+1.7** |
| **IMYA** | **Miami** | **5.25** | **56** | *e*Pn | | **Pn** | **15 39 34.1** | **+1.2** |
| **GHIR** | **Ghir-Karzin** | **5.41** | **196** | *e*Pn | | **Pn** | **15 39 37.9** | **+2.8** |
| **ZNJK** | **Zanjan** | **5.86** | **304** | *e*Pn | | **Pn** | **15 39 43.3** | **+1.9** |
| **GENO** | **Geno** | **6.22** | **168** | *e*Pn | | **Pn** | **15 39 49.4** | **+3.2** |
| **AKTO** | **Aktyubinsk** | **17.09** | **7** | Pn | | **Pn** | **15 42 12.9** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=147,slow=9.8,SNR=2.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **22.51** | **25** | P | | **P** | **15 43 14.4** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=275,slow=8.5,SNR=5.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.43** | **38** | P | | **P** | **15 43 35.4** | **+2.5** |
| | comp=Z,0.3nm,0.8s,baz=240,slow=8.6,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **24.76** | **49** | P | | **P** | **15 43 37.4** | **+1.5** |
| | comp=Z,0.6nm,0.7s,baz=243,slow=8.6,SNR=5.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **52.14** | **260** | P | | **P** | **15 47 24.9** | **-0.2** |
| | comp=Z,0.2nm,0.5s,baz=45,slow=7.2,SNR=3.1 | | | | | | | |
| **YAK** | **Yakutsk** | **54.07** | **34** | LR | | LR | 16 11 38.9 | |
| | comp=Z,40nm,18.6s,baz=288,slow=37 | | | | | | | |

*TUL* ***23*** *15:45:44.9±1.1, 36.47N±0.03×98.75W±0.04, h7km±3km, ML2.8, mb_Lg2.7/28(NEIC), Error ellipse: s-maj=4.5km s-min=3.9km az=61.0*

**NEIC 23 15:45:45±1.0, 36°46N±0.03×98°71W±0.03, h10km±2km, Error ellipse: s-maj=4.8km s-min=2.5km az=47.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.25** | **251** | Pg | Pg | 15 45 49.6 | -0.5 |
| U32A | | | | Sg | Sg | 15 45 53.0 | -0.5 |
| **FNO** | **Franklin** | **1.60** | **138** | Pn | Pb | 15 46 14.6 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.72** | **182** | Pn | Pn | 15 46 15.1 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.82** | **75** | | Pn | 15 46 17.3 | +0.9 |
| **R32A** | **Long Quarter,** | **1.96** | **360** | | Pb | 15 46 19.8 | -1.0 |
| **W35A** | **Tecumseh** | **1.98** | **131** | Pn | Pn | 15 46 18.5 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.99** | **159** | IAmb_Lg | | 15 46 51.4 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.89** | **238** | Pn | Pn | 15 46 31.1 | 0.0 |
| AMTX | | | | IAmb_Lg | | 15 47 16.7 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.91** | **192** | IAmb_Lg | | 15 47 56.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.01** | **311** | IAmb_Lg | | 15 48 00.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.15** | **234** | IAmb_Lg | | 15 48 03.0 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.48** | **72** | IAmb_Lg | | 15 48 07.4 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **4.62** | **280** | IAmb_Lg | | 15 48 11.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.21** | **80** | IAmb_Lg | | 15 48 32.0 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.41** | **102** | IAmb_Lg | | 15 48 49.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.58** | **285** | IAmb_Lg | | 15 48 52.1 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.79** | **18** | IAmb_Lg | | 15 48 51.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **189** | IAmb_Lg | | 15 49 12.7 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.16** | **73** | IAmb_Lg | | 15 49 03.6 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **7.18** | **310** | IAmb_Lg | | 15 49 46.7 | |
| | comp=Z,9.7nm,0.8s | | | | | | |

*IDC* ***23*** *16:03:53.9±2.2, 43.37N×105.31W, h0km, mb1 3.6/3, mb1mx3.3/56, mbtmp3.4/3, ML3.5/3, Error ellipse: s-maj=46.0km s-min=9.2km az=154.0*

*NEIC* ***23*** *16:03:56.2±1.2, 43.72N±0.02×105.24W±0.06, h0km±2km, ML3.1/48, Error ellipse: s-maj=7.8km s-min=3.0km az=100.0*

**ISC 23 16:03:55.7±0.9, 43°69N±0.06×105°29W±0.06, h0km, n50, σ0s97/50, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.01** | **64** | Pg | **Pg** | **16 04 14.6** | **-0.5** |
| **K22A** | **Casper** | **1.37** | **221** | Pn | **Pg** | **16 04 20.6** | **-1.4** |
| K22A | | | | IAML | | 16 04 44.5 | |
| | comp=E,301nm,0.3s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.39** | **183** | | **Pn** | **16 04 36.2** | **-0.2** |
| **RWWY** | **Rawlins** | **2.45** | **216** | | **Pn** | **16 04 38.4** | **+1.2** |
| RWWY | | | | IAML | | 16 05 15.6 | |
| | comp=E,123nm,0.9s | | | | | | |
| RWWY | | | | IAML | | 16 05 16.2 | |
| | comp=E,96nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **2.83** | **190** | Pn | **Pn** | **16 04 43.3** | **+0.8** |
| N23A | | | | IAML | | 16 05 25.5 | |
| | comp=E,60nm,0.4s | | | | | | |
| N23A | | | | IAML | | 16 05 26.2 | |
| | comp=N,67nm,0.4s | | | | | | |
| **LAO** | **LASA Array** | **3.07** | **348** | Pn | **Pn** | **16 04 46.0** | **+0.4** |
| LAO | | | | IAML | | 16 05 33.0 | |
| | comp=N,66nm,0.3s | | | | | | |
| **RLMT** | **Red Lodge** | **3.19** | **298** | Pn | **Pn** | **16 04 47.7** | **+0.3** |
| RLMT | | | | IAML | | 16 05 35.7 | |
| | comp=N,38nm,0.3s | | | | | | |
| RLMT | | | | IAML | | 16 05 42.3 | |
| | comp=N,39nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **3.25** | **255** | | **Pn** | **16 04 48.5** | **+0.3** |
| **PDAR** | **Pinedale Array** | **3.25** | **255** | Pn | **Pn** | **16 04 48.5** | **+0.3** |
| | comp=N,4.5nm,0.3s,baz=81,slow=17,SNR=66 | | | | | | |
| PDAR | | | | Lg | Lg | 16 05 32.5 | |
| | comp=N,12nm,0.3s,baz=78,slow=34,SNR=13 | | | | | | |
| **BW06** | **Boulder Array** | **3.25** | **255** | | **Pn** | **16 04 48.5** | **+0.2** |
| BW06 | | | | IAML | | 16 05 35.7 | |
| | comp=N,39nm,0.3s | | | | | | |
| BW06 | | | | IAML | | 16 05 40.4 | |
| | comp=N,44nm,0.3s | | | | | | |
| **YMP** | **Mirror Lake PI** | **3.65** | **288** | | **Pn** | **16 04 54.3** | **+0.5** |
| **OGNE** | **Ogallala** | **3.65** | **137** | Pn | **Pn** | **16 04 53.9** | **+0.2** |
| **GCMT** | **Greycliff** | **3.76** | **306** | | **Pn** | **16 04 55.2** | **+0.1** |
| **LKWY** | **Lake** | **3.78** | **285** | | **Pn** | **16 04 56.2** | **+0.7** |
| LKWY | | | | IAML | | 16 05 26.3 | |
| | comp=N,25nm,1.1s | | | | | | |
| LKWY | | | | IAML | | 16 06 01.1 | |
| | comp=N,18nm,2.6s | | | | | | |
| **LOHW** | **Long Hollow** | **3.86** | **271** | | **Pn** | **16 04 57.7** | **+1.2** |
| **H17A** | **Grant Village** | **3.88** | **282** | | **Pn** | **16 04 57.6** | **+0.7** |
| H17A | | | | IAML | | 16 06 02.8 | |
| | comp=E,17nm,0.3s | | | | | | |
| **ISCO** | **Idaho Springs** | **3.89** | **184** | | **Pn** | **16 04 57.9** | **+0.8** |
| ISCO | | | | IAML | | 16 06 02.8 | |
| | comp=E,16nm,1.1s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.93** | **278** | | **Pn** | **16 04 57.8** | **+0.3** |
| FLWY | | | | IAML | | 16 06 06.7 | |
| | comp=E,33nm,1.2s | | | | | | |
| FLWY | | | | IAML | | 16 06 11.8 | |
| | comp=E,23nm,1.6s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.95** | **273** | Pn | **Pn** | **16 04 59.0** | **+1.2** |
| **REDW** | **Red Top Meadow** | **4.06** | **267** | Pn | **Pn** | **16 05 00.9** | **+1.7** |
| REDW | | | | IAML | | 16 06 11.6 | |
| | comp=E,29nm,1.1s | | | | | | |
| REDW | | | | IAML | | 16 06 12.7 | |
| | comp=E,28nm,1.4s | | | | | | |
| **TPAW** | **Teton Pass** | **4.12** | **269** | | **Pn** | **16 05 00.6** | **+0.4** |
| TPAW | | | | IAML | | 16 06 14.0 | |
| | comp=E,21nm,0.9s | | | | | | |
| TPAW | | | | IAML | | 16 06 27.2 | |
| | comp=E,16nm,1.3s | | | | | | |
| **YHH** | **Holmes Hill** | **4.14** | **287** | Pn | **Pn** | **16 05 01.0** | **+0.5** |
| **SMCO** | **Snowmass** | **4.68** | **196** | Pn | **Pn** | **16 05 09.0** | **+1.0** |
| SMCO | | | | IAML | | 16 06 28.5 | |
| | comp=E,13nm,0.3s | | | | | | |
| **Q24A** | **Divide** | **4.72** | **179** | Pn | **Pn** | **16 05 08.9** | **+0.5** |
| Q24A | | | | IAML | | 16 06 28.4 | |
| | comp=N,13nm,0.4s | | | | | | |
| **DGMT** | **Dagmar** | **4.84** | **9** | Pn | **Pn** | **16 05 11.1** | **+1.1** |
| **HWUT** | **Hardware Ranch** | **5.07** | **248** | | **Pn** | **16 05 13.1** | **-0.1** |
| HWUT | | | | IAML | | 16 06 41.8 | |
| | comp=N,13nm,1.1s | | | | | | |
| HWUT | | | | IAML | | 16 07 32.0 | |
| | comp=N,14nm,4.3s | | | | | | |
| **EGMT** | **Eagleton** | **5.34** | **326** | Pn | **Pn** | **16 05 16.3** | **-0.5** |
| **P18A** | **Preston Nutter** | **5.50** | **224** | | **Pn** | **16 05 19.9** | **+0.8** |
| **HRY** | **Holter Researc** | **5.52** | **305** | | **Pn** | **16 05 19.6** | **+0.3** |
| **LRM** | **Limekiln Ridge** | **5.53** | **295** | Pn | **Pn** | **16 05 19.7** | **+0.2** |
| **PV07** | **Paradox Valley** | **5.82** | **207** | Pn | **Pn** | **16 05 25.1** | **+1.6** |
| **HVU** | **Hansel Valley** | **5.83** | **253** | Pn | **Pn** | **16 05 24.3** | **+0.7** |
| **PV15** | **Paradox Valley** | **5.86** | **205** | Pn | **Pn** | **16 05 26.0** | **+1.9** |
| **P17A** | **Butcher Ranch,** | **5.87** | **226** | Pn | **Pn** | **16 05 26.1** | **+2.0** |
| **SDCO** | **Great Sand Dun** | **5.94** | **182** | Pn | **Pn** | **16 05 26.6** | **+1.4** |
| **PV11** | **David Mesa, Pa** | **6.03** | **208** | | **Pn** | **16 05 27.3** | **+1.0** |
| **SRU** | **San Rafael Swe** | **6.03** | **222** | | **Pn** | **16 05 26.1** | **-0.2** |
| **PV13** | **Radium Mtn., P** | **6.13** | **207** | | **Pn** | **16 05 28.6** | **+0.7** |
| **TMUT** | **Trail Mountain** | **6.24** | **227** | | **Pn** | **16 05 30.7** | **+1.4** |
| **ECSD** | **EROS Data Cent** | **6.29** | **87** | Pn | **Pn** | **16 05 30.0** | **+0.2** |
| **Q16A** | **Castle Valley** | **6.50** | **225** | Pn | **Pn** | **16 05 34.2** | **+1.3** |
| **T25A** | **Trinidad** | **6.58** | **174** | Pn | **Pn** | **16 05 34.3** | **+0.4** |
| **MSU** | **Marysvale** | **7.33** | **227** | Pn | **Pn** | **16 05 44.9** | **+0.6** |
| **JTMT** | **Jette** | **7.49** | **306** | Pn | **Pn** | **16 05 47.3** | **+1.0** |
| **MTPU** | **Mount Pierson** | **7.68** | **225** | Pn | **Pn** | **16 05 49.9** | **+0.7** |
| **U15A** | **North Rim** | **9.02** | **219** | Pn | **Pn** | **16 06 08.3** | **+0.9** |
| **ULM** | **Lac du Bonnet** | **9.19** | **41** | Pn | **Pn** | **16 06 08.2** | **-1.3** |
| | comp=N,1.7nm,0.3s,baz=228,slow=14,SNR=8.4 | | | | | | |
| ULM | | | | Lg | Lg | 16 08 45.5 | |
| | comp=N,0.3nm,0.3s,baz=320,slow=21,SNR=1.4 | | | | | | |
| **B35A** | **Bob, Littlefor** | **9.30** | **56** | Pn | **Pn** | **16 06 09.8** | **-1.2** |
| **EYMN** | **Ely** | **10.53** | **61** | Pn | **Pn** | **16 06 26.5** | **-1.3** |
| **YKA** | **Yellowknife Ar** | **19.61** | **347** | P | **Pn** | **16 08 28.4** | **+1.7** |
| | comp=N,0.1nm,0.3s,baz=161,slow=9.2,SNR=4.8 | | | | | | |

*SNET* ***23*** *16:09:27.2±0.8, 12.30N×88.48W, h22km±3km, ML4.0*
*UCR* ***23*** *16:09:27.2±0.9, 12.29N×88.46W, h24km±4km, ML3.9, mb4.6(NEIC)*
*INET* ***23*** *16:09:27.3±1.0, 12.28N×88.36W, h15km±61km, MW3.5*
*IDC* ***23*** *16:09:28.4±3.3, 12.67N×88.00W, h33km±27km, mb3.9/9, mb1 4.0/12, mb1mx3.8/45, mbtmp3.9/12, ML2.9/3, MS3.4/11, Ms1 3.4/11, ms1mx3.0/63, Error ellipse: s-maj=39.7km s-min=16.9km az=40.0*
*NEIC* ***23*** *16:09:28.5±1.9, 12.38N±0.07×88.25W±0.05, h35km±2km, mb4.6/50, Md4.1(SNET), Error ellipse: s-maj=13.9km s-min=4.7km az=208.0*

**ISC 23 16:09:28.1±1.3, 12°26N±0.06×88°36W±0.04, h50km±11km, n142, σ1s08/158, mb4.5/25, MS3.5/10, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JUCU** | **Jucuarɹn** | **1.00** | **6** | *e*P | **Pn** | **16 09 44.9** | **-1.1** |
| **JUCU** | **Jucuarɹn** | **1.00** | **6** | *e*P | **Pn** | **16 09 45.1** | **-0.9** |
| **JUCU** | **Jucuarɹn** | **1.00** | **6** | *e*P | **Pn** | **16 09 44.9** | **-1.1** |
| **LCY** | **Lacayo** | **1.16** | **3** | *e*P | **Pn** | **16 09 47.8** | **-0.4** |
| **LCY** | **Lacayo** | **1.16** | **3** | *e*P | **Pn** | **16 09 47.8** | **-0.4** |
| **VSM** | **San Miguel** | **1.17** | **4** | *e*P | **Pn** | **16 09 48.1** | **-0.3** |
| VSM | | | | *e*S | **Sn** | **16 10 04.7** | **+1.3** |
| **VSM** | **San Miguel** | **1.17** | **4** | *e*P | **Pn** | **16 09 48.1** | **-0.3** |
| VSM | | | | *e*S | **Sn** | **16 10 04.7** | **+1.3** |
| **PACA** | **Pacayal** | **1.21** | **2** | *e*P | **Pn** | **16 09 48.7** | **-0.1** |
| PACA | | | | *e*S | **Sn** | **16 10 04.9** | **+0.7** |
| **PACA** | **Pacayal** | **1.21** | **2** | *e*P | **Pn** | **16 09 49.0** | **+0.2** |
| **PACA** | **Pacayal** | **1.21** | **2** | *e*P | **Pn** | **16 09 48.7** | **-0.1** |
| PACA | | | | *e*S | **Sn** | **16 10 04.9** | **+0.7** |
| **COEB** | **Comit de Eme** | **1.25** | **352** | *e*P | **Pn** | **16 09 48.8** | **-0.6** |
| COEB | | | | *e*S | **Sn** | **16 10 04.9** | **-0.2** |
| COEB | | | | IAML | | 16 10 14.8 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **COEB** | **Comit de Eme** | **1.25** | **352** | *e*P | **Pn** | **16 09 49.1** | **-0.2** |
| **COEB** | **Comit de Eme** | **1.25** | **352** | *e*P | **Pn** | **16 09 48.8** | **-0.6** |
| COEB | | | | *e*S | **Sn** | **16 10 04.9** | **-0.2** |
| COEB | | | | IAML | | 16 10 14.8 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.34** | **342** | *e*P | **Pn** | **16 09 49.4** | **-1.1** |
| TECO | | | | *e*S | **Sn** | **16 10 06.8** | **-0.4** |
| **TECO** | **Alcaldia de Te** | **1.34** | **342** | *e*P | **Pn** | **16 09 49.4** | **-1.1** |
| TECO | | | | *e*S | **Sn** | **16 10 06.8** | **-0.4** |
| **CRIN** | **San Cristobal** | **1.35** | **71** | | **Pn** | **16 09 49.3** | **-1.4** |
| **CRIN** | **San Cristobal** | **1.35** | **71** | *e*P | **Pn** | **16 09 50.3** | **-0.4** |
| **PQSS** | **Presa 15 de Se** | **1.37** | **352** | *e*P | **Pn** | **16 09 50.8** | **-0.2** |
| PQSS | | | | *e*S | **Sn** | **16 10 07.8** | **-0.2** |
| **PQSS** | **Presa 15 de Se** | **1.37** | **352** | *e*P | **Pn** | **16 09 50.8** | **-0.2** |
| PQSS | | | | *e*S | **Sn** | **16 10 07.8** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.45** | **340** | *e*P | **Pn** | **16 09 51.0** | **-1.0** |
| COEG | | | | *e*S | **Sn** | **16 10 10.2** | **+0.3** |
| **COEG** | **Centro de Oper** | **1.45** | **340** | *e*P | **Pn** | **16 09 51.0** | **-1.0** |
| COEG | | | | *e*S | **Sn** | **16 10 10.2** | **+0.3** |
| **SCLA** | **Alcaldia de Sa** | **1.48** | **346** | *e*P | **Pn** | **16 09 52.1** | **-0.4** |
| SCLA | | | | *e*S | **Sn** | **16 10 11.9** | **+1.2** |
| **SCLA** | **Alcaldia de Sa** | **1.48** | **346** | *e*P | **Pn** | **16 09 52.1** | **-0.4** |
| SCLA | | | | *e*S | **Sn** | **16 10 11.9** | **+1.2** |
| **SJTE** | **Alcalda de S** | **1.49** | **335** | *e*P | **Pn** | **16 09 51.3** | **-1.3** |
| **SJTE** | **Alcalda de S** | **1.49** | **335** | *e*P | **Pn** | **16 09 51.3** | **-1.3** |
| **LFRS** | **El Faro** | **1.52** | **333** | *e*P | **Pn** | **16 09 51.8** | **-1.3** |
| **LFRS** | **El Faro** | **1.52** | **333** | *e*P | **Pn** | **16 09 51.8** | **-1.3** |
| **PAVA** | **Las Pavas** | **1.55** | **339** | *e*P | **Pn** | **16 09 52.7** | **-0.9** |
| PAVA | | | | IAML | | 16 10 19.1 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **PAVA** | **Las Pavas** | **1.55** | **339** | *e*P | **Pn** | **16 09 52.9** | **-0.6** |
| **PAVA** | **Las Pavas** | **1.55** | **339** | *e*P | **Pn** | **16 09 52.7** | **-0.9** |
| PAVA | | | | IAML | | 16 10 19.1 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.64** | **81** | Pn | **Pn** | **16 09 53.2** | **-1.5** |
| **CNGN** | **Cerro Negro** | **1.64** | **81** | *e*P | **Pn** | **16 09 55.9** | **+1.3** |
| **LFU** | **La Fuente** | **1.66** | **334** | *e*P | **Pn** | **16 09 54.1** | **-0.8** |
| **LFU** | **La Fuente** | **1.66** | **334** | *e*P | **Pn** | **16 09 54.1** | **-0.8** |
| **SNET** | **Serv Nac Est T** | **1.66** | **329** | Pn | **Pn** | **16 09 54.0** | **-0.9** |
| **BOQS** | **Boqueron** | **1.72** | **329** | *e*P | **Pn** | **16 09 55.3** | **-0.6** |
| BOQS | | | | *e*S | **Sn** | **16 10 16.8** | **-0.1** |
| **BOQS** | **Boqueron** | **1.72** | **329** | *e*P | **Pn** | **16 09 55.3** | **-0.6** |
| BOQS | | | | *e*S | **Sn** | **16 10 16.8** | **-0.1** |
| **JAYA** | **Jayaque - finc** | **1.75** | **323** | *e*P | **Pn** | **16 09 54.7** | **-1.5** |
| JAYA | | | | *e*S | **Sn** | **16 10 15.8** | **-1.6** |
| JAYA | | | | IAML | | 16 10 19.2 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.75** | **323** | *e*P | **Pn** | **16 09 54.7** | **-1.5** |
| JAYA | | | | *e*S | **Sn** | **16 10 15.8** | **-1.6** |
| JAYA | | | | IAML | | 16 10 19.2 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **TACO** | **Tacachico** | **1.96** | **330** | *e*P | **Pn** | **16 09 58.4** | **-0.6** |
| **TACO** | **Tacachico** | **1.96** | **330** | *e*P | **Pn** | **16 09 58.4** | **-0.6** |
| **CEVE** | **Cerro Verde** | **1.99** | **322** | *e*P | **Pn** | **16 09 58.8** | **-0.8** |
| CEVE | | | | IAML | | 16 10 34.5 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.99** | **322** | *e*P | **Pn** | **16 09 58.8** | **-0.8** |
| CEVE | | | | IAML | | 16 10 34.5 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **SBLS** | **San Blas** | **2.00** | **322** | *e*P | **Pn** | **16 09 59.0** | **-0.7** |
| **SBLS** | **San Blas** | **2.00** | **322** | *e*P | **Pn** | **16 09 59.0** | **-0.7** |
| **SNJE** | **San Jose** | **2.01** | **323** | *e*P | **Pn** | **16 09 58.7** | **-1.1** |
| **SNJE** | **San Jose** | **2.01** | **323** | *e*P | **Pn** | **16 09 58.7** | **-1.1** |
| **RTR** | **El Retiro** | **2.06** | **323** | *e*P | **Pn** | **16 09 59.7** | **-0.7** |
| **RTR** | **El Retiro** | **2.06** | **323** | *e*P | **Pn** | **16 09 59.7** | **-0.7** |
| **TGUH** | **Tegucigalpa,Un** | **2.08** | **30** | Pn | **Pn** | **16 09 58.7** | **-2.0** |
| **TGUH** | **Tegucigalpa,Un** | **2.08** | **30** | *e*P | **Pn** | **16 10 00.6** | **-0.1** |
| TGUH | | | | *e*S | **Sn** | **16 10 27.1** | **+1.6** |
| **TGUH** | **Tegucigalpa,Un** | **2.08** | **30** | *e*P | **Pn** | **16 10 00.6** | **-0.1** |
| TGUH | | | | *e*S | **Sn** | **16 10 27.1** | **+1.6** |
| **HUEN** | | **2.14** | **88** | *e*P | **Pn** | **16 10 00.9** | **-0.5** |
| **NUBE** | **Las Nubes** | **2.14** | **320** | *e*P | **Pn** | **16 10 00.5** | **-1.2** |
| **NUBE** | **Las Nubes** | **2.14** | **320** | *e*P | **Pn** | **16 10 00.5** | **-1.2** |
| **SLOZ** | **Alcaldia de Sa** | **2.24** | **322** | *e*P | **Pn** | **16 10 01.0** | **-1.8** |
| **MTO3** | **Montecristo** | **2.34** | **336** | Pn | **Pn** | **16 10 04.2** | **-0.1** |
| **MTO3** | **Montecristo** | **2.34** | **336** | *e*P | **Pn** | **16 10 04.3** | **-0.1** |
| **MTO3** | **Montecristo** | **2.34** | **336** | *e*P | **Pn** | **16 10 04.4** | **0.0** |
| **MTO3** | **Montecristo** | **2.34** | **336** | *e*P | **Pn** | **16 10 04.3** | **-0.1** |
| **MATN** | **Matagalpa** | **2.47** | **74** | Pn | **Pn** | **16 10 04.7** | **-1.3** |
| **MATN** | **Matagalpa** | **2.47** | **74** | *e*P | **Pn** | **16 10 06.7** | **+0.6** |
| **ESQI** | **Esquipulas** | **2.48** | **337** | Pn | **Pn** | **16 10 05.8** | **-0.4** |
| **ESQI** | **Esquipulas** | **2.48** | **337** | *e*P | **Pn** | **16 10 04.9** | **-1.3** |
| **BOAB** | **BOACO BROADBAN** | **2.64** | **86** | Pn | **Pn** | **16 10 07.1** | **-1.1** |
| **BOAB** | **BOACO BROADBAN** | **2.64** | **86** | *e*P | **Pn** | **16 10 07.8** | **-0.4** |
| **HZTE** | **Horizontes, Gu** | **3.11** | **119** | Pn | **Pn** | **16 10 13.9** | **-0.9** |
| **ACON** | **Acoyapa** | **3.13** | **95** | Pn | **Pn** | **16 10 13.1** | **-1.9** |
| **ACON** | **Acoyapa** | **3.13** | **95** | *e*P | **Pn** | **16 10 13.1** | **-1.9** |
| **ORTG** | **Ortega, Santa** | **3.41** | **123** | | **Pn** | **16 10 18.1** | **-0.9** |
| **APG** | **El Apazote** | **3.41** | **323** | Pn | **Pn** | **16 10 19.1** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=86,slow=19,SNR=4.5 | | | | | | |
| APG | | | | Lg | Lg | 16 11 12.4 | |
| | comp=Z,2.5nm,0.3s,baz=136,slow=16,SNR=4.4 | | | | | | |
| **JTS** | **Las Juntas de** | **3.87** | **120** | Pn | **Pn** | **16 10 26.2** | **+0.9** |
| | comp=Z,0.8nm,0.3s,baz=20,slow=15,SNR=3.0 | | | | | | |
| JTS | | | | Lg | Lg | 16 11 31.7 | |
| | comp=Z,1.9nm,0.3s,baz=0.0,slow=20,SNR=3.8 | | | | | | |
| JTS | | | | LR | LR | 16 11 54.6 | |
| | comp=Z,122nm,21.2s,baz=360,slow=38 | | | | | | |
| **JTS** | **Las Juntas de** | **3.87** | **120** | | **Pn** | **16 10 25.7** | **+0.4** |
| **ESPN** | **Las Esperanzas** | **3.97** | **90** | Pn | **Pn** | **16 10 26.2** | **-0.3** |
| **CAO2** | **Cobano, Puntar** | **4.09** | **128** | Pn | **Pn** | **16 10 29.4** | **+1.2** |
| **JACO** | **JACO, Garabito** | **4.46** | **125** | Pn | **Pn** | **16 10 33.3** | **+0.1** |
| **RIMA** | **Rio Macho** | **5.06** | **119** | | **Pn** | **16 10 41.6** | **-0.1** |
| **SRBA** | **San Rafael, Bu** | **5.76** | **121** | Pn | **Pn** | **16 10 50.5** | **-0.7** |
| **RIOS** | **Rincon, Osa** | **5.93** | **126** | Pn | **Pn** | **16 10 53.8** | **+0.3** |
| **CMIG** | **Matias Romero** | **7.93** | **308** | Pn | **Pn** | **16 11 21.6** | **+0.7** |
| | comp=Z,0.4nm,0.3s,baz=103,slow=12,SNR=3.8 | | | | | | |
| CMIG | | | | Sn | **Sn** | **16 12 52.7** | **+3.4** |
| | comp=Z,0.3nm,0.3s,baz=143,slow=20,SNR=1.

| | | | | | | |
|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **63.12** | **343** | IAmb | IAmb | 16 19 51.4 |
| | comp=Z,2.2nm,0.9s | | | | | |
| **ILAR** | **Eielson Array** | **65.84** | **336** | P | **P** | **16 20 08.4 +0.2** |
| | comp=Z,0.8nm,0.9s,baz=118,slow=5.0,SNR=5.8 | | | | | |
| **BMAR** | **Burnt Mountain** | **66.15** | **339** | P | **P** | **16 20 10.8 +0.6** |
| **EUNU** | **Eureka** | **67.82** | **0** | P | **P** | **16 20 20.5 -0.1** |
| **J20K** | **Nowinta River** | **68.58** | **335** | P | **P** | **16 20 27.4 +1.9** |
| J20K | | | | IAmb | IAmb | 16 20 37.0 |
| | comp=Z,4.1nm,1.4s | | | | | |
| **ESDC** | **Sonseca Array** | **78.01** | **52** | LR | LR | 16 50 30.7 |
| | comp=Z,19nm,19.9s,baz=195,slow=32 | | | | | |
| **YAK** | **Yakutsk** | **100.19** | **343** | LR | LR | 17 15 34.2 |
| | comp=Z,18nm,18.1s,baz=86,slow=40 | | | | | |
| **WRA** | **Warramunga Arr** | **138.36** | **254** | PKP | **PKiKP** | **16 28 50.7 -0.3** |
| | comp=Z,0.6nm,1.0s,baz=97,slow=3.2,SNR=2.5 | | | | | |
| **ASAR** | **Alice Springs** | **138.37** | **248** | PKP | **PKiKP** | **16 28 50.7 -0.3** |
| | comp=Z,0.8nm,1.1s,baz=96,slow=1.9,SNR=2.8 | | | | | |
| **PZH** | **PanZhiHua** | **140.24** | **346** | PKP | **PKPdf** | **16 28 51.8 -0.6** |
| **CMAR** | **Chiang Mai Arr** | **148.64** | **347** | PKPbc | **PKPbc** | **16 29 09.4 -1.3** |
| | comp=Z,0.6nm,0.3s,baz=338,slow=3.9,SNR=5.2 | | | | | |

*TUL **23** 16:17:09.2±1.3,35°.665N×0°.010×97°.39W±0°.01, h7km±3km, ML3.0, mb_Lg2.6/28(NEIC), Error ellipse: s-maj=1.6km s-min=1.3km az=53.0*

**NEIC 23 16:17:09.0±0.6, 35°.68N±0°.01×97°.40W±0°.02, h10km±3km, Error ellipse: s-maj=2.3km s-min=1.5km az=113.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.10** | **190** | Pg | Pg | 16 17 11.5 | -0.1 |
| OK009 | | | | Sg | Sg | 16 17 13.3 | -0.2 |
| **OK001** | **Jones High Sch** | **0.15** | **143** | Pg | Pg | 16 17 12.7 | -0.3 |
| OK001 | | | | Sg | Sg | 16 17 14.8 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.27** | **189** | | Pg | 16 17 14.5 | 0.0 |
| OKCFA | | | | Sg | Sg | 16 17 18.3 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **186** | Pg | Pg | 16 17 14.6 | 0.0 |
| OKCSW | | | | Sg | Sg | 16 17 18.6 | +0.3 |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 16 17 17.4 | 0.0 |
| FNO | | | | Sg | Sg | 16 17 23.4 | +0.4 |
| **W35A** | **Tecumseh** | **0.68** | **141** | Pg | Pg | 16 17 21.9 | -0.3 |
| W35A | | | | Sg | Sg | 16 17 30.9 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.14** | **198** | | Pb | 16 17 30.6 | -0.2 |
| **TUL1** | **Leonard** | **1.33** | **80** | | Pn | 16 17 32.8 | -0.9 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | Pn | Pn | 16 17 35.2 | +0.1 |
| **U32A** | **Winter Ranch,** | **1.47** | **299** | Pn | Pn | 16 17 36.0 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | | Pn | 16 17 35.4 | -0.3 |
| **X37A** | **Clayton** | **1.99** | **123** | Pn | Pn | 16 17 42.7 | -0.1 |
| X37A | | | | IAmb_Lg | | 16 18 14.5 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **2.99** | **98** | IAmb_Lg | | 16 18 51.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.47** | **10** | IAmb_Lg | | 16 19 06.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.84** | **57** | Pn | Pn | 16 18 08.4 | +0.1 |
| **W41B** | **Gary Mavity, V** | **4.24** | **95** | IAmb_Lg | | 16 19 28.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | IAmb_Lg | | 16 19 33.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **LCAR** | **Lake Charles** | **5.09** | **84** | IAmb_Lg | | 16 19 53.1 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **JCT** | **Junction City** | **5.57** | **202** | IAmb_Lg | | 16 20 15.8 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.73** | **46** | IAmb_Lg | | 16 20 13.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.74** | **77** | IAmb_Lg | | 16 20 12.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.84** | **286** | IAmb_Lg | | 16 20 15.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.49** | **310** | IAmb_Lg | | 16 21 51.2 | |
| | comp=Z,4.2nm,0.7s | | | | | | |

**PRU 23 16:40:37.0±0.0, 51°.48N×16°.13E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.65** | **171** | *e*Pg | Pg | 16 40 49.4 | +0.1 |
| KSP | | | | *e*Sg | Sg | 16 40 58.5 | +0.8 |
| **CHVC** | **Chvalec** | **0.89** | **183** | *e*PG | Pg | 16 40 54.1 | 0.0 |
| CHVC | | | | *e*SG | Sg | 16 41 06.0 | +0.3 |
| | comp=Z,8.8nm,0.3s | | | | | | |
| **OSTC** | **Ostas** | **0.93** | **177** | *e*PG | Pg | 16 40 54.8 | +0.1 |
| OSTC | | | | *e*SG | Sg | 16 41 06.8 | +0.1 |
| | comp=Z,12nm,0.2s | | | | | | |
| **UPC** | **Upice** | **0.98** | **184** | *e*PG | Pg | 16 40 55.6 | -0.1 |
| UPC | | | | *e*SG | Sg | 16 41 08.7 | +0.4 |
| | comp=Z,12nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.14** | **174** | *e*PG | Pg | 16 40 58.3 | -0.5 |
| DPC | | | | *e*SG | Sg | 16 41 13.5 | 0.0 |
| | comp=Z,6.0nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.37** | **227** | *e*PG | Pg | 16 41 03.1 | -0.2 |
| PVCC | | | | *e*SG | Sg | 16 41 21.2 | +0.2 |
| | comp=Z,27nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.47** | **163** | *e*PG | Pn | 16 41 04.2 | -0.5 |
| KRLC | | | | *e*SG | Sg | 16 41 23.3 | -0.8 |
| | comp=Z,9.6nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **247** | Pg | Pn | 16 41 05.2 | 0.0 |
| BRG | | | | Sg | Sg | 16 41 25.2 | -0.1 |
| BRG | | | | Amp | | 16 41 26.2 | |
| | comp=Z,13nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.80** | **215** | *e*SG | Sb | 16 41 34.3 | +0.3 |
| | comp=Z,9.5nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.93** | **152** | *e*PN | Pn | 16 41 09.9 | -1.2 |
| MORC | | | | *e*SG | Sb | 16 41 36.9 | -0.7 |
| **CLL** | **Collm** | **1.97** | **266** | *e*Pg | Pb | 16 41 13.0 | -0.7 |
| CLL | | | | *e*Sg | Sb | 16 41 39.0 | +0.3 |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.09** | **141** | *e*SG | Sg | 16 41 44.1 | +0.1 |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **2.19** | **172** | *e*PN | Pn | 16 41 15.2 | +0.5 |
| VRAC | | | | *e*SG | Sb | 16 41 45.7 | +0.4 |
| **KRUC** | **Moravsky** | **2.43** | **176** | *e*PG | Pb | 16 41 21.6 | +0.1 |
| KRUC | | | | *e*SG | Sg | 16 41 53.9 | -1.0 |
| **NKC** | **Novy Kostel** | **2.65** | **243** | *e*PG | Pb | 16 41 26.4 | +1.1 |
| NKC | | | | *e*SG | Sg | 16 42 02.0 | 0.0 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.87** | **216** | *e*PG | Pb | 16 41 28.5 | -0.5 |
| KHC | | | | *e*SG | Sg | 16 42 08.9 | -0.1 |
| **CKRC** | **Cesky Krumlov** | **2.91** | **204** | *e*SG | Sg | 16 42 09.2 | -1.2 |

**KRSZO 23 16:41:31.5±1.1, 47°.62N×18°.03E, h13km±11km, M2.0/5, Error ellipse: s-maj=6.5km s-min=5.5km az=105.0, Hungary**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRO** | **Srobarova** | **0.27** | **45** | Pg | Pg | 16 41 37.4 | +0.2 |
| **SRO** | **Srobarova** | **0.27** | **45** | *e*Pg | Pg | 16 41 37.4 | +0.3 |
| SRO | | | | *e*SG | Sb | 16 41 41.9 | -0.8 |
| **CSKK** | **Cskako** | **0.30** | **149** | Pg | Pg | 16 41 38.1 | +0.3 |
| CSKK | | | | Lg | Lg | 16 41 43.0 | |
| **CSKK** | **Cskako** | **0.30** | **149** | PG | Pg | 16 41 38.1 | +0.3 |
| CSKK | | | | LG | Lg | 16 41 43.0 | |
| **EGYH** | **Egyhazaskeszo** | **0.52** | **247** | Lg | Lg | 16 41 50.0 | |
| **MPLH** | **Magyarpolny** | **0.56** | **216** | Pg | Pb | 16 41 43.1 | -0.1 |
| MPLH | | | | Sn | Sb | 16 41 52.8 | +1.6 |
| **MPLH** | **Magyarpolny** | **0.56** | **216** | PG | Pb | 16 41 43.1 | -0.1 |
| MPLH | | | | LG | Lg | 16 41 52.8 | |
| **TIH** | **Tihany** | **0.73** | **187** | Sn | Sn | 16 41 57.5 | -1.0 |
| **TIH** | **Tihany** | **0.73** | **187** | LG | Lg | 16 41 57.5 | |
| **ZST** | **Bratislava** | **0.85** | **313** | Pn | Pb | 16 41 48.3 | +0.2 |
| ZST | | | | Lg | Lg | 16 42 00.0 | |
| **ZST** | **Bratislava** | **0.85** | **313** | *e*PG | Pb | 16 41 48.2 | +0.1 |
| ZST | | | | *e*SG | Sb | 16 41 59.6 | +0.2 |
| ZST | | | | eLG | Lg | 16 42 01.5 | |
| **KOLL** | **Kolacno** | **0.99** | **14** | *e*SG | Sb | 16 42 03.3 | -0.1 |
| **VYHS** | **Vyhne** | **1.02** | **32** | Pn | Pb | 16 41 50.5 | -0.6 |
| VYHS | | | | Sn | Sb | 16 42 04.0 | -0.5 |
| **VYHS** | **Vyhne** | **1.02** | **32** | *e*PG | Pb | 16 41 50.5 | -0.6 |
| VYHS | | | | *e*SG | Sb | 16 42 04.3 | -0.2 |
| VYHS | | | | eLG | Lg | 16 42 06.7 | |
| **PSZ** | **Piszkesteto** | **1.29** | **76** | Sn | Sg | 16 42 13.7 | +0.5 |
| **PSZ** | **Piszkesteto** | **1.29** | **76** | SN | Sg | 16 42 13.7 | +0.5 |
| **KOVH** | **Kovagotottos** | **1.54** | **178** | Lg | Lg | 16 42 22.7 | |
| **KOVH** | **Kovagotottos** | **1.54** | **178** | SN | Sg | 16 42 22.7 | +1.8 |

*IDC **23** 16:43:34.4±8.4, 14°.91S×167°.26E, h148km±81km, mb3.3/4, mb1 3.4/5, mb1mx3.2/29, mbtmp3.7/5, MS3.0/1, Ms1 3.0/1, ms1mx2.5/20, Error ellipse: s-maj=72.7km s-min=44.6km az=159.0*

*NOU **23** 16:43:34.3, 14°.71S×167°.20E, h105km, MLv4.7/9, Vanuatu Islands*

**ISC 23 16:43:33.5±1.6, 14°.8S±0°.1×167°.4E±0°.3, h150km, n12, σ1s79/12, mb3.5/4, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **0.67** | **195** | P | **Pn** | **16 43 53.3** | **-2.5** |
| **KOUNC** | **Koumac, New Ca** | **6.43** | **207** | P | **Pn** | **16 45 06.8** | **+0.8** |
| **DZM** | **Mont Dzumac** | **7.29** | **187** | P | **Pn** | **16 45 17.4** | **0.0** |
| | 1.7nm,0.3s,baz=344,slow=20,SNR=7.6 | | | | | | |
| DZM | | | | S | **Sn** | **16 46 36.1** | **-2.9** |
| | 1.0nm,0.3s,baz=41,slow=20,SNR=1.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **7.29** | **187** | P | **Pn** | **16 45 18.0** | **+0.6** |
| **NOUC** | **Port Laguerre** | **7.33** | **188** | P | **Pn** | **16 45 19.4** | **+1.4** |
| **ONTNC** | **Ouen Toro** | **7.52** | **187** | P | **Pn** | **16 45 23.2** | **+2.8** |
| **STKA** | **Stephens Creek** | **29.03** | **230** | P | **P** | **16 49 20.4** | **+0.9** |
| | 1.1nm,0.5s,baz=37,slow=10,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.92** | **256** | P | **P** | **16 49 44.1** | **-1.0** |
| | 0.4nm,1.0s,baz=81,slow=7.2,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **32.75** | **249** | P | **P** | **16 49 51.7** | **-0.7** |
| | 0.3nm,0.6s,baz=80,slow=8.8,SNR=7.5 | | | | | | |
| **KAPI** | **Kappang** | **47.83** | **277** | LR | LR | 17 12 05.2 | |
| | comp=Z,16nm,18.3s,baz=288,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.33** | **316** | P | **P** | **16 56 50.7** | **+1.0** |
| | 0.3nm,0.7s,baz=108,slow=4.7,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.35** | **345** | PKP | **PKPdf** | **17 02 06.9** | **+0.6** |
| | 4.7nm,0.9s,baz=20,slow=3.0,SNR=1.6 | | | | | | |

**NNC 23 17:04:19.0±11.0, 37°.29N×70°.40E, h0km, mb3.8, mpv3.5, 3C-3D, Error ellipse: s-maj=88.2km s-min=81.7km az=159.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.47** | **27** | P | Pn | 17 05 42.6 | +0.5 |
| | SNR=55 | | | | | | |
| **KK06** | **Karatay Array** | **5.80** | **1** | ⇓P | Pn | 17 05 47.9 | +1.5 |
| | 0.5nm,0.2s,baz=173,slow=12 | | | | | | |
| KK06 | | | | ⇓S | Sn | 17 06 53.0 | -0.7 |
| | 0.4nm,0.3s,baz=188,slow=26 | | | | | | |
| **UCH** | **Uchtor** | **5.87** | **31** | P | Pn | 17 05 47.6 | -0.1 |
| | SNR=19 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.96** | **25** | P | Pn | 17 05 50.1 | +1.4 |
| | SNR=8.0 | | | | | | |
| **AAK** | **Ala-Archa** | **6.20** | **29** | P | Pn | 17 05 53.0 | +1.0 |
| | SNR=5.2 | | | | | | |
| **AAK** | **Ala-Archa** | **6.20** | **29** | ⇓P | Pn | 17 05 51.7 | -0.3 |
| | 0.8nm,0.2s | | | | | | |
| AAK | | | | ⇑S | Sn | 17 07 07.3 | +3.7 |
| | 0.7nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.89** | **34** | P | Pn | 17 06 00.9 | -0.6 |
| | SNR=6.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.89** | **34** | ⇑P | Pn | 17 05 59.7 | -1.8 |
| | 4.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | Sn | 17 07 21.8 | +1.0 |
| | 0.3nm,0.3s | | | | | | |

*IDC **23** 17:17:19.4±1.5, 35°.63N×3°.60W, h0km, mb3.5/2, mb1 3.5/4, mb1mx3.3/39, mbtmp3.2/4, ML2.9/2, Error ellipse: s-maj=50.4km s-min=23.8km az=104.0*

*MDD **23** 17:17:20.8±0.3, 35°.65N×3°.68W, h0km, mb_Lg3.1/11, Error ellipse: s-maj=3.3km s-min=2.4km az=19.0*

*SFS **23** 17:17:21.0, 35°.65N×3°.68W, ML3.1, ALBORAN SUR*

*CNRM **23** 17:17:21.4, 35°.68N×3°.60W, h14km, ml3.3*

*INMG **23** 17:17:21.4±1.1, 35°.66N×3°.69W, h0km, ML2.7, Error ellipse: s-maj=3.0km s-min=2.4km az=17.0*

*IGIL **23** 17:17:23.1, 35°.69N×3°.81W, h0km, ML2.6*

**ISC 23 17:17:21.1±1.1, 35°.69N±0°.02×3°.62W±0°.02, h13km±8km, n59, σ1s20/101, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EALB** | **Alboran** | **0.54** | **62** | Pg | **Pg** | **17 17 32.1** | **+0.5** |
| EALB | | | | Sg | **Sb** | **17 17 40.4** | **+0.3** |
| EALB | | | | *i* Vmb_Lg | | 17 17 42.4 | |
| **PALE** | **Palemas** | **0.54** | **209** | P | **Pb** | **17 17 32.4** | **0.0** |
| PALE | | | | S | **Sb** | **17 17 41.0** | **+1.0** |
| **PALE** | **Palemas** | **0.54** | **209** | P | **Pb** | **17 17 32.5** | **+0.1** |
| PALE | | | | S | **Sb** | **17 17 39.5** | **-0.5** |
| **EMEL** | **Melilla** | **0.67** | **125** | Pg | **Pg** | **17 17 33.8** | **-0.2** |
| EMEL | | | | Sg | **Sg** | **17 17 42.4** | **-0.5** |
| **GOG** | **Mont Gurugu** | **0.69** | **132** | P | **Pg** | **17 17 34.2** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.69** | **132** | P | **Pg** | **17 17 34.1** | **-0.4** |
| GOG | | | | S | **Sg** | **17 17 43.6** | **-0.1** |
| **CHAS** | **Isla Isabel II** | **1.10** | **117** | P | **Pb** | **17 17 39.5** | **-2.4** |
| CHAS | | | | S | **Sb** | **17 17 55.3** | **-0.8** |
| **ELGU** | **Los Guajares,** | **1.18** | **360** | Pg | **Pb** | **17 17 41.9** | **-1.4** |
| ELGU | | | | Sg | **Sb** | **17 17 56.7** | **-1.7** |
| ELGU | | | | *i* Vmb_Lg | | 17 18 01.3 | |
| **EMAL** | **Malaga-Limoner** | **1.25** | **329** | P | **Pn** | **17 17 43.4** | **-0.9** |
| EMAL | | | | S | **Sb** | **17 17 59.6** | **-1.0** |
| **EMIJ** | **Mijas** | **1.28** | **313** | Pg | **Pn** | **17 17 43.2** | **-1.5** |
| EMIJ | | | | Sg | **Sb** | **17 17 59.6** | **-1.8** |
| EMIJ | | | | *i* Vmb_Lg | | 17 18 01.2 | |
| **TAF** | **Taforalt** | **1.32** | **131** | P | **Pn** | **17 17 44.0** | **-1.3** |
| **TAF** | **Taforalt** | **1.32** | **131** | P | **Pn** | **17 17 43.9** | **-1.3** |
| TAF | | | | S | **Sg** | **17 18 04.2** | **+0.6** |
| **SMIR** | **Smir Dam** | **1.43** | **270** | S | **Sg** | **17 18 09.4** | **+2.2** |
| **CEU** | **Ceuta** | **1.44** | **279** | P | **Pn** | **17 17 44.5** | **-2.3** |
| CEU | | | | S | **Sn** | **17 18 02.2** | **-3.4** |
| **EGOR** | **Sierra Gorda,** | **1.47** | **345** | Pn | **Pn** | **17 17 47.6** | **+0.1** |
| EGOR | | | | Sn | **Sg** | **17 18 08.6** | **+0.1** |
| EGOR | | | | *i* Vmb_Lg | | 17 18 12.0 | |
| **EQUE** | **Quentar** | **1.52** | **5** | Pn | **Pb** | **17 17 49.4** | **+0.2** |
| EQUE | | | | Sn | **Sn** | **17 18 07.9** | **+0.1** |
| EQUE | | | | *i* Vmb_Lg | | 17 18 23.6 | |
| **CHEFC** | **Chefchaouen** | **1.52** | **248** | P | **Pb** | **17 17 49.0** | **-0.2** |
| **CHEFC** | **Chefchaouen** | **1.52** | **248** | P | **Pb** | **17 17 48.6** | **-0.6** |
| CHEFC | | | | S | **Sb** | **17 18 07.9** | **-0.4** |
| **JBK** | **JBK** | **1.60** | **147** | P | **Pn** | **17 17 48.0** | **-1.4** |
| **EJIF** | **Jimena Fronter** | **1.68** | **297** | Pn | **Pn** | **17 17 50.4** | **+0.3** |
| **SICH** | **Sidi Chahed** | **2.11** | **222** | P | **Pb** | **17 17 58.8** | **-0.3** |
| SICH | | | | S | **Sn** | **17 18 23.4** | **+1.2** |
| **IFR** | **Ifrane** | **2.50** | **210** | P | **Pn** | **17 18 01.3** | **-0.3** |
| IFR | | | | S | **Sn** | **17 18 31.2** | **-0.8** |
| **EZAR** | **Zarzadilla de** | **2.67** | **35** | Pn | **Pn** | **17 18 03.4** | **-0.5** |
| EZAR | | | | Sn | **Sn** | **17 18 37.4** | **+1.1** |
| **ECAB** | **El Cabril** | **2.78** | **329** | Pn | **Pn** | **17 18 06.2** | **+0.8** |
| ECAB | | | | Sn | **Sn** | **17 18 39.6** | **+0.7** |
| ECAB | | | | *i* Vmb_Lg | | 17 18 50.9 | |
| **CZD** | **Col de Zad** | **2.90** | **204** | P | **Pn** | **17 18 09.1** | **+1.9** |
| **CZD** | **Col de Zad** | **2.90** | **204** | P | **Pn** | **17 18 07.9** | **+0.6** |
| CZD | | | | S | **Sn** | **17 18 42.4** | **+0.3** |
| **MD31** | **MD31** | **2.97** | **199** | P | **Pn** | **17 18 09.3** | **+1.3** |
| MD31 | | | | S | **Sn** | **17 18 44.5** | **+1.0** |
| **MDT** | **Midelt** | **2.98** | **196** | Pn | **Pn** | **17 18 07.7** | **-0.5** |
| | 0.6nm,0.3s,baz=28,slow=9.4,SNR=14 | | | | | | |
| MDT | | | | Sn | **Sn** | **17 18 43.9** | **0.0** |
| | 1.7nm,0.3s,baz=182,slow=20,SNR=2.1 | | | | | | |
| **MDT** | **Midelt** | **2.98** | **196** | P | **Pn** | **17 18 08.3** | **+0.1** |
| **MDT** | **Midelt** | **2.98** | **196** | P | **Pn** | **17 18 08.3** | **+0.1** |
| MDT | | | | S | **Sn** | **17 18 45.1** | **+1.2** |
| **ETOB** | **Tobarra** | **3.38** | **29** | Pn | **Pn** | **17 18 15.1** | **+1.4** |
| ETOB | | | | Sn | **Sn** | **17 18 55.7** | **+2.0** |
| ETOB | | | | *i* Vmb_Lg | | 17 19 05.1 | |
| **EGRO** | **El Granado** | **3.61** | **302** | Pn | **Pn** | **17 18 16.8** | **+0.1** |
| EGRO | | | | Sn | **Sn** | **17 18 57.9** | **-1.3** |
| EGRO | | | | *i* Vmb_Lg | | 17 19 03.8 | |
| **PVAQ** | **Vaqueiros** | **3.71** | **299** | *e*Pn | **Pn** | **17 18 18.2** | **0.0** |
| PVAQ | | | | *e*Sn | **Sn** | **17 19 00.3** | **-1.5** |
| PVAQ | | | | A | A | 17 19 05.3 | |
| | 11nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.71** | **299** | P | **Pn** | **17 18 18.8** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **3.71** | **299** | P | **Pn** | **17 18 18.1** | **0.0** |
| PVAQ | | | | S | **Sn** | **17 19 04.0** | **+2.2** |
| **PBDV** | **Barranco-do-Ve** | **3.80** | **295** | *e*Pn | **Pn** | **17 18 19.5** | **+0.1** |
| PBDV | | | | *e*Sn | **Sn** | **17 19 03.4** | **-0.6** |
| PBDV | | | | A | A | 17 19 06.9 | |
| | 12nm,0.7s | | | | | | |
| **PAB** | **San Pablo** | **3.89** | **352** | Pn | **Pn** | **17 18 22.1** | **+1.5** |
| PAB | | | | Sn | **Sn** | **17 19 07.3** | **+1.0** |
| PAB | | | | *i* Vmb_Lg | | 17 19 42.6 | |
| **PAB** | **San Pablo** | **3.89** | **352** | P | **Pn** | **17 18 22.0** | **+1.4** |
| **ESDC** | **Sonseca Array** | **3.99** | **356** | Pn | **Pn** | **17 18 23.2** | **+1.2** |
| | 0.6nm,0.3s,baz=178,slow=12,SNR=12 | | | | | | |
| ESDC | | | | Sn | **Sn** | **17 19 08.6** | **0.0** |
| | 0.5nm,0.3s,baz=176,slow=23,SNR=4.5 | | | | | | |
| ESDC | | | | Lg | Lg | 17 19 23.6 | |
| | 0.8nm,0.3s,baz=173,slow=29,SNR=4.9 | | | | | | |
| **PCVE** | **Castro Verde** | **4.05** | **300** | *e*Pn | **Pn** | **17 18 22.8** | **+0.1** |
| PCVE | | | | *e*Sn | **Sn** | **17 19 09.5** | **-0.4** |
| PCVE | | | | A | A | 17 19 11.7 | |
| | 14nm,0.4s | | | | | | |
| **FIGM** | **Figuig** | **4.05** | **150** | P | **Pn** | **17 18 23.2** | **+0.2** |
| FIGM | | | | S | **Sn** | **17 19 11.1** | **+0.8** |
| **EBAD** | **Badajoz** | **4.08** | **320** | Pn | **Pn** | **17 18 23.5** | **+0.3** |
| EBAD | | | | Sn | **Sn** | **17 19 09.3** | **-1.6** |
| EBAD | | | | *i* Vmb_Lg | | 17 19 13.7 | |
| **PBEJ** | **Beja** | **4.13** | **306** | *e*Sn | **Sn** | **17 19 11.3** | **-0.6** |
| **MORF** | **Marmelete** | **4.36** | **293** | *e*P | **Pn** | **17 18 26.7** | **-0.4** |
| MORF | | | | *e*S | **Sn** | **17 19 13.4** | **-4.4** |
| MORF | | | | IAML | | 17 19 16.9 | |
| | comp=N,13nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **4.36** | **293** | *e*Pn | **Pn** | **17 18 27.4** | **+0.3** |
| MORF | | | | *e*Sn | **Sn** | **17 19 17.0** | **-0.8** |
| MORF | | | | A | A | 17 19 28.0 | |
| | comp=N,8.6nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **316** | *e*Sn | **Sn** | **17 19 19.6** | **-1.1** |
| PESTR | | | | A | A | 17 19 26.0 | |
| | comp=N,6.8nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **4.48** | **316** | P | **Pn** | **17 18 29.4** | **+0.8** |
| PESTR | | | | S | **Sn** | **17 19 21.6** | **+0.9** |
| **PTEO** | **Sao Teotonio** | **4.50** | **296** | *e*Sn | **Sn** | **17 19 21.2** | **0.0** |
| PTEO | | | | A | A | 17 19 30.0 | |
| | comp=N,15nm,0.5s | | | | | | |
| **EVO** | **Evora** | **4.51** | **310** | P | **Pn** | **17 18 31.0** | **+1.9** |
| EVO | | | | S | **Sn** | **17 19 20.8** | **-0.7** |
| **EVO** | **Evora** | **4.51** | **310** | *e*Pn | **Pn** | **17 18 31.6** | **+2.5** |
| EVO | | | | *e*Sn | **Sn** | **17 19 21.2** | **-0.2** |
| EVO | | | | A | A | 17 19 24.3 | |
| | comp=N,9.5nm,0.5s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.62** | **303** | *e*Pn | **Pn** | **17 18 31.2** | **+0.7** |
| PNCL | | | | *e*Sn | **Sn** | **17 19 22.7** | **-1.3** |
| PNCL | | | | A | A | 17 19 31.2 | |
| | comp=N,5.1nm,0.4s | | | | | | |
| **PMTG** | **Montargil** | **4.98** | **314** | *e*Pn | **Pn** | **17 18 36.5** | **+1.0** |
| PMTG | | | | *e*Sn | **Sn** | **17 19 31.8** | **-1.2** |
| PMTG | | | | A | A | 17 20 03.7 | |
| | comp=N,6.1nm,0.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.15** | **325** | *e*Pn | **Pn** | **17 18 39.1** | **+1.3** |
| PCBR | | | | *e*Sn | **Sn** | **17 19 36.0** | **-1.1** |
| PCBR | | | | A | A | 17 19 38.1 | |
| | comp=N,5.8nm,0.5s | | | | | | |
| **OUZM** | **OUZ** | **5.44** | **210** | P | **Pn** | **17 18 43.1** | **+1.1** |
| **MTE** | **Manteigas** | **5.63** | **328** | *e*Pn | **Pn** | **17 18 45.8** | **+1.3** |
| MTE | | | | *e*Sn | **Sn** | **17 19 47.9** | **-1.2** |
| **MVO** | **Moncorvo** | **6.08** | **335** | *e*Pn | **Pn** | **17 18 52.5** | **+1.7** |
| MVO | | | | *e*Sn | **Sn** | **17 19 58.5** | **-1.8** |
| MVO | | | | A | A | 17 20 12.4 | |
| | comp=N,7.0nm,0.6s | | | | | | |
| **PBRG** | **Braganca** | **6.57** | **339** | *e*Pn | **Pn** | **17 18 58.5** | **+1.0** |
| **MKAR** | **Makanchi Array** | **62.49** | **51** | P | **P** | **17 27 44.5** | **+0.4** |
| | comp=N,0.5nm,0.8s,baz=292,slow=7.6,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.72** | **332** | P | **P** | **17 28 18.6** | **+0.7** |
| | comp=N,0.3nm,0.5s,baz=61,slow=6.4,SNR=4.0 | | | | | | |

*IDC **23** 17:33:12.1±2.4, 9°.44S×106°.76E, h0km, mb3.3/3, mb1 3.5/4, mb1mx3.1/33, mbtmp3.3/4, ML3.2/1, Error ellipse: s-maj=56.6km s-min=25.6km az=69.0*

*DJA **23** 17:33:14.7±1.4, 9°.5S±5°×10°.7E±°, h21km±16km, M3.6/12, MLv3.6/12*

**ISC 23 17:33:13.1±3.9, 9°.32S±0°.08×106°.67E±0°.06, h11km±25km, n15, σ1s85/22, mb3.2/3, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNJI** | **Cibinong** | **2.05** | **13** | P | **Pn** | **17 33 48.4** | **+0.9** |
| CNJI | | | | S | **Sb** | **17 34 15.3** | **-0.6** |
| **SKJI** | **Sukabumi** | **2.31** | **357** | P | **Pb** | **17 33 53.4** | **-1.3** |
| **CMJI** | **Cimerak** | **2.33** | **49** | P | **Pn** | **17 33 52.0** | **+0.6** |
| CMJI | | | | S | **Sn** | **17 34 18.5** | **-1.5** |
| **LEM** | **Lembang** | **2.65** | **21** | Pn | **Pn** | **17 33 58.2** | **+2.3** |
| | 4.3nm,0.3s,baz=139,slow=20,SNR=4.8 | | | | | | |
| LEM | | | | Sn | **Sb** | **17 34 32.9** | **-0.5** |
| | 7.6nm,0.3s,baz=334,slow=22,SNR=8.8 | | | | | | |
| **LEM** | **Lembang** | **2.65** | **21** | P | **Pn** | **17 33 57.7** | **+1.7** |
| LEM | | | | S | **Sn** | **17 34 30.1** | **+1.9** |
| **DBJI** | **Dramaga** | **2.75** | **2** | P | **Pn** | **17 33 58.1** | **+0.9** |
| **CGJI** | **Cibinong** | **2.86** | **340** | P | **Pn** | **17 34 00.0** | **+1.3** |
| CGJI | | | | S | **Sn** | **17 34 34.9** | **+1.7** |
| **KPJI** | **Karang Pucung** | **2.98** | **49** | P | **Pn** | **17 34 02.3** | **+1.9** |
| **YOGI** | **Yogyakarta** | **3.88** | **68** | P | **Pn** | **17 34 14.7** | **+1.9** |
| **UGM** | **Wanagama** | **4.06** | **70** | P | **Pn** | **17 34 16.4** | **+1.2** |
| **KASI** | **Kota Agung** | **4.35** | **330** |

VNDA LR LR 18 18 42.8
comp=Z,22µm,21.2s,baz=338,slow=38
**VNDA Vanda 15.48 166** P **Pn** **18 12 20.2 -4.9**
VNDA pmax pmax
comp=Z,593nm,0.7s
**VNDA Vanda 15.48 166** Pn **Pn** **18 12 20.2 -4.9**
VNDA IAmb IAmb 18 12 23.0
comp=Z,593nm,0.7s
**SBA Scott Base 16.34 164** P **Pn** **18 12 31.2 -4.8**
SBA pmax pmax
comp=Z,2µm,1.4s
**SBA Scott Base 16.34 164** P **Pn** **18 12 31.2 -4.8**
SBA IAmb IAmb 18 12 44.1
comp=Z,2µm,1.4s
**TAU Tasmania Unive 20.20 5** P **P** **18 13 20.0 -1.5**
TAU pmax pmax
comp=Z,897nm,1.7s
**TAU Tasmania Unive 20.20 5** P **P** **18 13 20.0 -1.5**
TAU IAmb IAmb 18 13 25.5
comp=Z,897nm,1.6s
**TAU Tasmania Unive 20.20 5** P **P** **18 13 22.7 +1.2**
**MOO Moorlands 20.66 4** P **P** **18 13 25.4 -1.2**
baz=21,SNR=17
**MOO Moorlands 20.66 4** P **P** **18 13 27.7 +1.1**
**PYZ Puysegur Point 20.82 46** P **P** **18 13 28.1 -0.2**
PYZ IAmb IAmb 18 13 31.7
comp=Z,662nm,1.7s
PYZ IAMs_20 IAMs_20 18 19 02.9
comp=Z,27µm,22.0s
**WHZ Wether Hill Ro 21.48 48** P **P** **18 13 36.4 +1.1**
WHZ IAmb IAmb 18 13 40.8
comp=Z,498nm,1.2s
**DCZ Deep Cove 21.59 46** P **P** **18 13 37.5 +1.0**
DCZ IAmb IAmb 18 13 45.9
comp=Z,612nm,1.7s
DCZ IAMs_20 IAMs_20 18 19 36.4
comp=Z,27µm,20.0s
**CORO Coronation Par 21.65 4** P **P** **18 13 38.1 +1.0**
comp=Z,132nm,1.2s
**MLZ Mavora Lakes 22.00 47** P **P** **18 13 41.0 0.0**
**GLAD Gladstone 22.15 6** P **P** **18 13 45.2 +2.7**
**WKZ Wanaka 22.77 48** P **P** **18 13 50.3 +1.1**
WKZ IAmb IAmb 18 14 43.7
comp=Z,941nm,1.9s
**ODZ Otahua Downs 23.15 51** P **P** **18 13 54.6 +1.5**
ODZ IAmb IAmb 18 13 57.3
comp=Z,489nm,1.5s
ODZ IAMs_20 IAMs_20 18 20 45.7
comp=Z,20µm,20.0s
**LBZ Lake Benmore 23.56 49** P **P** **18 13 57.8 +0.6**
LBZ IAMs_20 IAMs_20 18 20 45.6
comp=Z,16µm,18.0s
**FOZ Fox Glacier 24.19 48** P **P** **18 14 03.1 0.0**
FOZ IAMs_20 IAMs_20 18 21 09.1
comp=Z,18µm,21.0s
**RPZ Rata Peaks 24.45 50** P **P** **18 14 05.8 +0.3**
comp=Z,32nm,0.8s,baz=234,slow=4.1,SNR=10
RPZ LR LR 18 21 46.0
comp=Z,16µm,19.4s,baz=189,slow=32
**RPZ Rata Peaks 24.45 50** P **P** **18 14 06.2 +0.6**
RPZ IAMs_20 IAMs_20 18 21 34.1
comp=Z,17µm,19.0s
**GEXS Deakin Univers 24.87 358** P **P** **18 14 11.0 +1.7**
**MLBS Spotswood, Mel 25.23 359** P **P** **18 14 13.9 +1.3**
**TOO Toolangi 25.49 1** P **P** **18 14 16.2 +1.2**
baz=26,SNR=40
**TOO Toolangi 25.49 1** P **P** **18 14 15.7 +0.6**
TOO pmax pmax
comp=Z,100nm,1.0s
**TOO Toolangi 25.49 1** P **P** **18 14 15.7 +0.6**
**TOO Toolangi 25.49 1** P **P** **18 14 16.6 +1.5**
**BRAT Ballarat 25.52 358** P **P** **18 14 16.9 +1.6**
**LTZ Lake Taylor 25.70 51** P **P** **18 14 17.9 +1.1**
LTZ IAMs_20 IAMs_20 18 22 44.0
comp=Z,21µm,19.0s
**MILA Mila 26.12 7** P **P** **18 14 17.8 -3.0**
baz=26,SNR=6.1
**ARPS Mount Arapiles 26.37 354** P **P** **18 14 23.1 +0.1**
baz=26,SNR=62
**ARPS Mount Arapiles 26.37 354** P **P** **18 14 23.6 +0.6**
**KHZ Kahutara 26.47 52** P **P** **18 14 25.2 +1.5**
KHZ IAMs_20 IAMs_20 18 22 46.6
comp=Z,24µm,20.0s
**THZ Tophouse 26.82 51** P **P** **18 14 28.3 +1.3**
**QSPA South Pole Qui 27.05 180** P **P** **18 14 30.4 +1.2**
comp=Z,204nm,1.0s,baz=338,slow=1.5,SNR=360
QSPA PcP **PcP** **18 17 50.9 +1.3**
comp=Z,13nm,0.6s,baz=297,slow=2.3,SNR=1.0
QSPA S **S** **18 19 09.3 +3.3**
comp=Z,13nm,0.8s,baz=318,slow=12,SNR=1.1
QSPA LR LR 18 26 27.2
comp=Z,18µm,19.1s,baz=9.5,slow=39
**QSPA South Pole Qui 27.05 180** P **P** **18 14 30.3 +1.1**
**BSWZ Blackbirch Sta 27.20 52** P **P** **18 14 31.7 +1.3**
**CMWZ Cape Campbell 27.29 52** P **P** **18 14 31.8 +0.6**
**NNZ Nelson 27.46 51** P **P** **18 14 31.6 -1.2**
NNZ IAMs_20 IAMs_20 18 23 13.8
comp=Z,14µm,21.0s
**TUWZ Tuamarina 27.48 52** P **P** **18 14 32.9 0.0**
**QRZ Quartz Range 27.51 49** P **P** **18 14 33.6 +0.4**
QRZ IAMs_20 IAMs_20 18 23 10.7
comp=Z,22µm,21.0s
**PLWZ Palliser 27.83 54** P **P** **18 14 35.9 -0.2**
**BHW Baring Head 27.83 53** P **P** **18 14 33.6 -2.4**
**CAN Canberra 27.84 7** P **P** **18 14 36.4 +0.1**
CAN pmax pmax
comp=Z,84nm,0.9s
CAN MLR MLR
comp=Z,8µm,18.0s
**CAN Canberra 27.84 7** P **P** **18 14 36.4 +0.1**
**CAN Canberra 27.84 7** P **P** **18 14 37.3 +1.0**
**SNZO South Karori 27.86 53** P **P** **18 14 34.7 -1.5**
SNZO IAmb IAmb 18 15 23.0
comp=Z,589nm,1.9s
**CNB Canberra Magne 27.86 7** P **P** **18 14 37.7 +1.2**
baz=28,SNR=17
**CNB Canberra Magne 27.86 7** P **P** **18 14 37.6 +1.1**
**MSWZ Moikau Station 27.96 54** P **P** **18 14 37.6 +0.4**
**TWOA Tennyson Woods 28.32 349** P **P** **18 14 41.0 +0.5**
**BFZ Birch Farm 28.97 54** P **P** **18 14 47.0 +0.8**
BFZ IAMs_20 IAMs_20 18 23 51.3
comp=Z,17µm,20.0s
**BFZ Birch Farm 28.97 54** P **P** **18 14 48.1 +1.9**
**HTT Hallett 29.88 349** P **P** **18 14 54.4 -0.1**
baz=30,SNR=38
**HTT Hallett 29.88 349** P **P** **18 14 54.8 +0.4**
**NAPP Napperby 30.20 348** P **P** **18 14 57.7 +0.6**
**PTPS Port Pirie 30.22 348** P **P** **18 14 58.9 +1.6**
comp=Z,205nm,0.9s
**HIZ Hauiti 30.38 50** P **P** **18 14 56.6 -2.1**
HIZ IAMs_20 IAMs_20 18 24 39.6
comp=Z,20µm,22.0s
**BKZ Black Stump Fm 30.39 53** P **P** **18 14 58.5 -0.4**
BKZ **PcP** **18 17 58.4 +0.1**
**BKZ Black Stump Fm 30.39 53** P **P** **18 15 01.4 +2.5**
**WHYH Whyalla 30.40 347** P **P** **18 14 59.1 +0.2**
comp=Z,75nm,0.9s
**BBOO Buckleboo 30.79 345** P **P** **18 15 02.1 -0.2**
baz=31,SNR=81
**BBOO Buckleboo 30.79 345** P **P** **18 15 01.9 -0.4**
BBOO IAmb IAmb 18 15 03.9
comp=Z,237nm,0.9s
**BBOO Buckleboo 30.79 345** P **P** **18 15 03.1 +0.7**
**STKA Stephens Creek 31.25 354** P **P** **18 15 06.1 -0.4**
comp=Z,74nm,0.9s,baz=167,slow=8.6,SNR=113
STKA LR LR 18 25 28.4
comp=Z,16µm,18.8s,baz=172,slow=32
**STKA Stephens Creek 31.25 354** P **P** **18 15 07.2 +0.8**
baz=31,SNR=26
**STKA Stephens Creek 31.25 354** P **P** **18 15 06.7 +0.2**
**STKA Stephens Creek 31.25 354** P **P** **18 15 07.9 +1.4**
**URZ Urewera 31.42 53** P **P** **18 15 08.0 +0.1**
comp=Z,17nm,0.7s,baz=246,slow=5.4,SNR=9.5
URZ PcP **PcP** **18 18 00.4 -0.5**
comp=Z,16nm,0.7s,baz=204,slow=3.7,SNR=6.4
URZ LR LR 18 26 06.1
comp=Z,15µm,20.5s,baz=206,slow=33
**URZ Urewera 31.42 53** P **P** **18 15 07.7 -0.1**
URZ IAMs_20 IAMs_20 18 25 45.0
comp=Z,15µm,20.0s
**CMSA Cobar Meteorol 31.51 1** P **P** **18 15 09.1 +0.4**
baz=32,SNR=34
**CMSA Cobar Meteorol 31.51 1** P **P** **18 15 09.9 +1.2**
**MAW Mawson 32.27 225** LR LR 18 28 41.5
comp=Z,10µm,19.3s,baz=98,slow=37

**MXZ Matakaoa Point 32.47 54** P **P** **18 15 14.7 -2.4**
MXZ IAmb IAmb 18 15 37.8
comp=Z,168nm,1.6s
MXZ IAMs_20 IAMs_20 18 26 18.9
comp=Z,12µm,22.0s
**ARMA Armidale 32.89 10** P **P** **18 15 21.9 +0.9**
baz=33,SNR=17
**ARMA Armidale 32.89 10** P **P** **18 15 21.6 +0.6**
**ARMA Armidale 32.89 10** P **P** **18 15 22.3 +1.3**
**LCRK Leigh Creek 32.90 349** P **P** **18 15 21.2 +0.3**
**OUZ Omahuta 32.94 46** P **P** **18 15 22.1 +0.9**
OUZ IAMs_20 IAMs_20 18 26 36.2
comp=Z,10µm,18.0s
**MULG Mulgathing 33.54 342** P **P** **18 15 26.4 -0.1**
**FORT Forrest 34.08 333** P **P** **18 15 30.7 -0.5**
baz=34,SNR=50
**FORT Forrest 34.08 333** P **P** **18 15 29.5 -1.7**
FORT IAmb IAmb 18 15 32.5
comp=Z,129nm,0.8s
**FORT Forrest 34.08 333** P **P** **18 15 31.0 -0.2**
**INKA Innaminka 35.41 353** P **P** **18 15 44.1 +1.4**
**OOD Oodnadatta 35.78 346** P **P** **18 15 45.8 -0.1**
**KLBR Kellerberrin 35.97 318** P **P** **18 15 46.7 -0.7**
baz=36,SNR=43
**KLBR Kellerberrin 35.97 318** P **P** **18 15 46.8 -0.7**
**MUN Mundaring 36.09 316** P **P** **18 15 48.1 -0.4**
baz=36,SNR=18
**MUN Mundaring 36.09 316** P **P** **18 15 48.5 0.0**
**MTKN Mount Kenneth 36.27 315** P **P** **18 15 50.6 +0.6**
**QLP Quilpie 36.45 359** P **P** **18 15 52.7 +1.1**
baz=36,SNR=41
**QLP Quilpie 36.45 359** P **P** **18 15 53.0 +1.4**
**RMQ Roma 36.62 5** P **P** **18 15 53.9 +0.8**
baz=37,SNR=78
**RMQ Roma 36.62 5** P **P** **18 15 54.1 +1.0**
**BLDU Ballidu 37.20 317** P **P** **18 15 57.0 -0.9**
baz=37,SNR=90
**BLDU Ballidu 37.20 317** P **P** **18 15 57.6 -0.4**
**EIDS Eidsvold 37.86 9** P **P** **18 16 05.0 +1.4**
baz=38,SNR=24
**EIDS Eidsvold 37.86 9** P **P** **18 16 03.1 -0.5**
EIDS IAmb IAmb 18 16 05.8
comp=Z,217nm,1.1s
**EIDS Eidsvold 37.86 9** P **P** **18 16 05.0 +1.4**
**SYO Syowa Base 38.17 214** *i* P **P** **18 16 07.6 +1.8**
**MORW Morawa 38.84 317** P **P** **18 16 11.4 -0.5**
baz=39,SNR=42
**MORW Morawa 38.84 317** P **P** **18 16 10.4 -1.5**
MORW IAmb IAmb 18 16 13.3
comp=Z,189nm,1.0s
**MORW Morawa 38.84 317** P **P** **18 16 11.8 -0.1**
**BELA Belgrano 2 39.33 180** P **P** **18 16 16.3 +0.9**
**WRKA Warakurna 39.61 336** P **P** **18 16 17.2 -1.1**
baz=40,SNR=102
**WRKA Warakurna 39.61 336** P **P** **18 16 17.6 -0.8**
**RK1H Rockhampton Ha 39.79 8** P **P** **18 16 21.0 +1.2**
**ASAR Alice Springs 40.07 344** P **P** **18 16 21.2 -1.0**
comp=Z,97nm,0.7s,baz=166,slow=8.9,SNR=528
ASAR PP **PP** **18 17 51.9 -2.5**
comp=Z,3.4nm,0.7s,baz=165,slow=8.6,SNR=0.9
ASAR PcP **PcP** **18 18 25.5 -1.2**
comp=Z,9.6nm,0.8s,baz=170,slow=3.8,SNR=3.1
ASAR ScP **ScP** **18 22 15.2 +0.6**
comp=Z,0.4nm,0.6s,baz=188,slow=5.6,SNR=2.6
ASAR S **S** **18 22 25.1 -2.3**
comp=Z,4.3nm,1.1s,baz=165,slow=18,SNR=7.3
ASAR PKiKP **PKiKP** **18 25 36.3 -0.8**
comp=Z,0.3nm,0.6s,baz=138,slow=1.3,SNR=4.3
ASAR LR LR 18 30 13.1
comp=Z,10µm,19.8s,baz=170,slow=32
**ASAR Alice Springs 40.07 344** P **P** **18 16 21.0 -1.2**
**ASAR Alice Springs 40.07 344** **PcP** **18 18 25.5 -1.2**
**AS31 Alice Springs 40.07 344** P **P** **18 16 20.7 -1.5**
**MEEK Meekatharra 40.37 322** P **P** **18 16 23.7 -0.9**
baz=40,SNR=50
**MEEK Meekatharra 40.37 322** P **P** **18 16 24.0 -0.6**
**RAO Raoul Island 41.30 53** LR LR 18 32 15.0
comp=Z,11nm,18.1s,baz=189,slow=34
**PAF Port-aux-Franc 41.35 253** IAMs_20 IAMs_20 18 32 26.9
comp=Z,10µm,18.0s
**NVL N'lazarevskaya 42.60 201** *i* P P 18 16 52.0 +10
NVL *i* 18 18 29.5
NVL *i* PPP PPP 18 19 00.4
NVL *e*S **S** **18 23 10.2 +6.3**
NVL pmax pmax
comp=Z,74nm,1.0s
NVL MLR MLR
comp=N,11µm,20.0s
NVL MLR MLR
comp=E,18µm,20.0s
NVL MLR MLR
comp=Z,11µm,20.0s
**QIS Mount Isa 42.62 352** P **P** **18 16 42.4 -0.6**
baz=43,SNR=120
**QIS Mount Isa 42.62 352** P **P** **18 16 43.1 0.0**
**CTA Charters Tower 42.92 1** PcP **PcP** **18 18 35.6 -0.4**
comp=Z,8.1nm,0.7s,baz=128,slow=1.3,SNR=1.9
CTA LR LR 18 31 56.7
comp=Z,9µm,18.8s,baz=179,slow=32
**CTA Charters Tower 42.92 1** P **P** **18 16 46.9 +1.4**
**OUENC Ouen Island, N 43.15 30** P **P** **18 16 47.0 -0.4**
**ONTNC Ouen Toro 43.17 29** P **P** **18 16 45.9 -1.7**
**DZM Mont Dzumac 43.40 29** LR LR 18 31 24.1
comp=Z,7µm,18.5s,baz=203,slow=31
**DZM Mont Dzumac 43.40 29** *e*P **P** **18 16 50.0 +0.5**
comp=Z,187nm,1.0s
DZM *e*S **S** **18 23 17.4 +0.7**
comp=Z,2µm,25.5s
DZM *e*LQ LQ 18 27 01.7
comp=Z,32µm,29.8s
DZM *e*LR LR 18 28 54.2
comp=Z,12µm,29.4s
**DZM Mont Dzumac 43.40 29** P **P** **18 16 49.6 +0.1**
**DZM Mont Dzumac 43.40 29** P **P** **18 16 50.8 +1.3**
**WR0 Warramunga Arr 43.65 345** P **P** **18 16 49.6 -1.8**
WR0 IAmb IAmb 18 16 52.2
comp=Z,172nm,0.8s
**WRA Warramunga Arr 43.69 345** P **P** **18 16 50.2 -1.6**
comp=Z,176nm,0.7s,baz=170,slow=7.1,SNR=672
WRA PP **PP** **18 18 30.0 -3.4**
comp=Z,29nm,1.0s,baz=176,slow=10,SNR=9.3
WRA ScP **ScP** **18 22 29.3 +0.2**
comp=Z,2.3nm,1.1s,baz=173,slow=7.3,SNR=1.7
WRA S **S** **18 23 17.0 -3.9**
comp=Z,0.9nm,0.9s,baz=179,slow=6.2,SNR=4.6
WRA LR LR 18 32 27.0
comp=Z,7µm,19.4s,baz=163,slow=33
**WRAB Tennant Creek 43.70 345** *c i* P **P** **18 16 50.4 -1.4**
WRAB pmax pmax
comp=Z,308nm,0.7s
WRAB MLR MLR
comp=Z,3µm,14.0s
**WRAB Tennant Creek 43.70 345** P **P** **18 16 49.7 -2.1**
**WRAB Tennant Creek 43.70 345** IAMs_20 IAMs_20 18 31 57.3
comp=Z,8µm,20.0s
**WRAB Tennant Creek 43.70 345** P **P** **18 16 51.2 -0.6**
**SNAA Sanae 43.78 194** P **P** **18 16 53.1 +1.1**
**SNAA Sanae 43.78 194** LR LR 18 37 20.9
comp=Z,5µm,19.1s,baz=168,slow=39
**SNAA Sanae 43.78 194** *c i* P **P** **18 16 53.6 +1.6**
SNAA pmax pmax
comp=Z,183nm,1.4s
SNAA MLR MLR
comp=Z,6µm,15.0s
**SNAA Sanae 43.78 194** P **P** **18 16 52.2 +0.2**
SNAA IAmb IAmb 18 17 11.3
comp=Z,321nm,1.6s
SNAA IAMs_20 IAMs_20 18 37 10.6
comp=Z,6µm,19.0s
**WB0 Warramunga Arr 43.86 345** IAmb IAmb 18 16 53.6
comp=Z,230nm,0.8s
**KOUNC Koumac, New Ca 44.41 26** P **P** **18 16 58.8 +1.3**
**LIFNC LIFOU 44.83 30** P **P** **18 16 59.9 -0.9**
LIFNC IAMs_20 IAMs_20 18 30 44.7
comp=Z,6µm,19.0s
**LIFNC LIFOU 44.83 30** P **P** **18 17 02.5 +1.7**
comp=Z,457nm,0.6s
**PSA00 Pilbara Seismi 44.85 326** IAmb IAmb 18 17 02.0
comp=Z,136nm,0.9s
**PSA00 Pilbara Seismi 44.85 326** IAmb IAmb 18 17 01.9
comp=Z,93nm,1.1s
**PSA00 Pilbara Seismi 44.85 326** P **P** **18 17 00.5 -0.5**
**MTSU Mount Surprise 44.86 359** P **P** **18 17 02.1 +1.0**
baz=45,SNR=22
**MTSU Mount Surprise 44.86 359** P **P** **18 17 02.1 +1.0**
**VNA3 Neumayer Olymp 44.87 191** P **P** **18 17 01.6 +0.9**

**VNA2 Neumayer--Watz 44.97 192** P **P** **18 17 02.4 +1.0**
baz=163,slow=6.9
**VNA1 Neumayer--Stat 45.31 192** P **P** **18 17 05.1 +1.0**
**GIRL Giralia 45.41 318** P **P** **18 17 06.5 +1.0**
baz=46,SNR=6.4
**GIRL Giralia 45.41 318** P **P** **18 17 05.8 +0.3**
**GIRL Giralia 45.41 318** P **P** **18 17 06.5 +1.0**
**FITZ Fitzroy Crossi 46.88 334** P **P** **18 17 15.2 -1.9**
comp=Z,26nm,0.7s,baz=190,slow=7.2,SNR=105
FITZ PcP **PcP** **18 18 49.0 -0.6**
comp=Z,7.9nm,0.6s,baz=191,slow=5.8,SNR=1.9
FITZ LR LR 18 35 00.3
comp=Z,11µm,18.9s,baz=172,slow=34
**FITZ Fitzroy Crossi 46.88 334** P **P** **18 17 15.8 -1.2**
baz=47,SNR=43
**FITZ Fitzroy Crossi 46.88 334** P **P** **18 17 15.3 -1.7**
**FITZ Fitzroy Crossi 46.88 334** P **P** **18 17 16.4 -0.6**
**SMAI San Martin Ant 47.10 164** P **P** **18 17 20.3 +2.2**
**KNRA Kununurra 48.68 339** P **P** **18 17 30.2 -0.7**
baz=49,SNR=34
**KNRA Kununurra 48.68 339** P **P** **18 17 30.5 -0.5**
**COEN Coen 49.03 357** P **P** **18 17 34.0 +0.4**
COEN IAmb IAmb 18 17 35.5
comp=Z,155nm,1.4s
**COEN Coen 49.03 357** P **P** **18 17 34.1 +0.4**
**SANVU Saraoutou 49.98 28** IAmb IAmb 18 17 42.1
comp=Z,85nm,0.8s
**SANVU Saraoutou 49.98 28** P **P** **18 17 41.5 +0.6**
**MSVF Nonsavu 50.63 42** LR LR 18 35 37.8
comp=Z,8µm,19.5s,baz=213,slow=32
**PMSA Palmer Station 50.68 164** LR LR 18 39 33.7
comp=Z,5µm,18.6s,baz=201,slow=36
**PMSA Palmer Station 50.68 164** IAMs_20 IAMs_20 18 40 58.0
comp=Z,6µm,18.0s
**KDU Kakadu 51.08 344** P **P** **18 17 48.3 -0.9**
baz=51,SNR=47
**KDU Kakadu 51.08 344** P **P** **18 17 48.8 -0.4**
**MTN Manton Dam 51.10 342** P **P** **18 17 48.3 -1.0**
baz=51,SNR=39
**MTN Manton Dam 51.10 342** P **P** **18 17 48.4 -1.0**
MTN IAmb IAmb 18 17 50.3
comp=Z,239nm,1.1s
**MTN Manton Dam 51.10 342** P **P** **18 17 49.0 -0.4**
**DRS Darwin Rock St 51.54 342** P **P** **18 17 52.4 -0.3**
**ESPZ Base Esperanza 52.80 168** P **P** **18 18 01.1 -0.3**
ESPZ IAmb IAmb 18 18 05.3
comp=Z,267nm,1.2s
**PMG Port Moresby 53.55 2** P **P** **18 18 07.9 +0.3**
comp=Z,70nm,0.9s,baz=204,slow=4.2,SNR=22
PMG LR LR 18 38 15.7
comp=Z,4µm,19.6s,baz=183,slow=33
**PMG Port Moresby 53.55 2** *c i* P **P** **18 18 08.7 +1.1**
PMG pmax pmax
comp=Z,131nm,1.1s
PMG MLR MLR
comp=Z,3µm,14.0s
**PMG Port Moresby 53.55 2** P **P** **18 18 08.2 +0.7**
PMG IAmb IAmb 18 18 10.2
comp=Z,108nm,1.0s
**PMG Port Moresby 53.55 2** P **P** **18 18 09.1 +1.5**
**PMG Port Moresby 53.55 2** P **P** **18 18 09.2 +1.6**
**BATI Baumata 54.95 334** P **P** **18 18 17.9 +0.1**
comp=Z,68nm,0.8s,baz=172,slow=1.6,SNR=25
BATI LR LR 18 40 48.3
comp=Z,17µm,18.9s,baz=181,slow=35
**BATI Baumata 54.95 334** P **P** **18 18 19.0 +1.2**
comp=Z,1µmcomp=Z,941nmcomp=Z,72nm,1.1s
**SOEI Soe 55.27 335** P **P** **18 18 21.4 +1.1**
SOEI IAmb IAmb 18 18 23.1
comp=Z,194nm,1.3s
**SOEI Soe 55.27 335** P **P** **18 18 21.0 +0.7**
comp=Z,3µmcomp=Z,2µmcomp=Z,100nm,1.3s
**SOEI Soe 55.27 335** P **P** **18 18 21.4 +1.1**
**BASI Baing, Sumba 55.60 330** P **P** **18 18 23.2 +0.7**
comp=Z,1µmcomp=Z,2µmcomp=Z,120nm,1.3s
**RAR Rarotonga 55.68 68** LR LR 18 38 29.3
comp=Z,1µm,20.1s,baz=209,slow=32
**SAUI Saumlaki 55.86 343** IAmb IAmb 18 18 27.9
comp=Z,206nm,1.1s
**SAUI Saumlaki 55.86 343** P **P** **18 18 25.4 +1.1**
comp=Z,4µmcomp=Z,191nm,1.3s
**SAUI Saumlaki 55.86 343** P **P** **18 18 25.7 +1.4**
**WBSI Waikabak, Su 56.43 329** P **P** **18 18 28.1 -0.4**
comp=Z,1µmcomp=Z,97nm,1.2s
**MMRI Maumere 56.77 333** P **P** **18 18 30.1 -0.7**
MMRI IAmb IAmb 18 18 32.3
comp=Z,107nm,0.8s
MMRI IAMs_20 IAMs_20 18 39 59.2
comp=Z,6µm,21.0s
**MMRI Maumere 56.77 333** P **P** **18 18 30.2 -0.7**
comp=Z,2µmcomp=Z,162nm,1.8s
**AFI Afiamalu 57.58 52** LR LR 18 40 32.5
comp=Z,2µm,21.9s,baz=195,slow=33
**AFI Afiamalu 57.58 52** P **P** **18 18 36.8 +0.2**
AFI pmax pmax
comp=Z,297nm,1.7s
**AFI Afiamalu 57.58 52** P **P** **18 18 36.8 +0.2**
AFI IAmb IAmb 18 18 40.7
comp=Z,297nm,1.7s
**AFI Afiamalu 57.58 52** P **P** **18 18 39.4 +2.7**
comp=Z,107nm,2.2s
**PLAI Plampang 57.60 327** P **P** **18 18 35.7 -1.0**
comp=Z,1µmcomp=Z,58nm,1.4s
**PLAI Plampang 57.60 327** P **P** **18 18 37.8 +1.1**
**IGBI Denpasar 58.29 324** P **P** **18 18 41.5 0.0**
comp=Z,1µmcomp=Z,102nm,1.2s
**TBI Tubuai 58.31 79** *e*S **S** **18 26 44.1 +1.1**
comp=Z,1µm,31.5s
TBI *e*LQ LQ 18 33 19.3
comp=Z,3µm,25.0s
TBI *e*LR LR 18 35 31.9
comp=Z,7µm,29.8s,baz=203
**JAGI Jajag, Banyuwa 58.88 323** P **P** **18 18 44.9 -0.8**
comp=Z,989nmcomp=Z,46nm,1.1s
**JAGI Jajag, Banyuwa 58.88 323** P **P** **18 18 47.2 +1.5**
comp=Z,46nm,1.1s
**GMJI Gumukmas 59.27 323** P **P** **18 18 48.4 +0.1**
comp=Z,2µmcomp=Z,161nm,1.3s
**ABJI Asem Bagus 59.51 324** P **P** **18 18 51.2 +1.2**
comp=Z,2µmcomp=Z,143nm,1.3s
**BSSI Bau Bau, Buton 59.57 331** P **P** **18 18 50.4 0.0**
comp=Z,50nm,1.2s
**USHA Ushuaia 59.59 158** LR LR 18 41 10.5
comp=Z,10µm,20.9s,baz=202,slow=33
**MG01 Puerto William 59.62 159** P **P** **18 18 48.4 -1.9**
MG01 IAmb IAmb 18 18 53.7
comp=Z,121nm,1.1s
**BLJI Banyuglugur 59.73 323** P **P** **18 18 52.6 +1.1**
comp=Z,2µmcomp=Z,132nm,1.1s
**BBSI Bau Bau 59.76 334** P **P** **18 18 52.5 +0.7**
comp=Z,348nmcomp=Z,13nm,0.9s
**PWJI Pagerwojo 59.97 321** P **P** **18 18 52.8 -0.3**
comp=Z,906nmcomp=Z,67nm,1.3s
**PCJI Pacitan 59.98 320** P **P** **18 18 53.4 +0.1**
comp=Z,2µmcomp=Z,184nm,1.1s
**MG03 Isla Dawson 60.17 157** P **P** **18 18 54.6 +0.5**
**BKSI Bulukumba 60.44 331** P **P** **18 18 55.9 -0.5**
comp=Z,2µmcomp=Z,1µmcomp=Z,80nm,1.1s
**UGM Wanagama 60.44 320** IAMs_20 IAMs_20 18 40 27.8
comp=Z,5µm,22.0s
**UGM Wanagama 60.44 320** P **P** **18 18 57.6 +1.1**
comp=Z,2µmcomp=Z,127nm,1.4s
**UGM Wanagama 60.44 320** P **P** **18 18 58.1 +1.6**
**DSPA Despedida 60.46 158** P **P** **18 18 56.6 +0.5**
**JAY Jayapura 60.47 355** P **P** **18 18 56.3 -0.3**
comp=Z,20nm,0.9s,baz=162,slow=6.4,SNR=2.9
JAY LR LR 18 44 21.3
comp=Z,5µm,18.4s,baz=134,slow=35
**JAY Jayapura 60.47 355** P **P** **18 18 56.3 -0.3**
**AAI Ambon 60.53 340** P **P** **18 18 57.2 +0.2**
comp=Z,1µmcomp=Z,69nm,1.7s
**FAKI Fak Fak 60.74 345** P **P** **18 18 58.1 -0.3**
**FAKI Fak Fak 60.74 345** P **P** **18 18 59.5 +1.1**
comp=Z,2µmcomp=Z,161nm,1.3s
**FAKI Fak Fak 60.74 345** P **P** **18 18 59.0 +0.6**
**KAPI Kappang 60.82 331** P **P** **18 18 58.6 -0.4**
comp=Z,64nm,1.0s,baz=210,slow=6.8,SNR=16
KAPI LR LR 18 43 48.3
comp=Z,2µm,18.6s,baz=216,slow=35
**KAPI Kappang 60.82 331** P **P** **18 18 58.9 -0.1**
KAPI pmax pmax
comp=Z,144nm,1.1s
KAPI MLR MLR
comp=Z,3µm,18.0s
**KAPI Kappang 60.82 331** P **P** **18 18 58.9 -0.1**
KAPI IAmb IAmb 18 19 00.9

KAPI **Kappang** 60.82 331 IAMs_20 IAMs_20 18 43 47.5
comp=Z,144nm,1.1s
KAPI **Kappang** 60.82 331 P P 18 19 00.4 +1.4
comp=Z,3µm,18.0s
GRJI **Gresik** 60.83 322 P P 18 19 02.0 +3.0
comp=Z,1µmcomp=Z,100nm,1.4s
MG04 **Isla Riesco** 60.91 155 P P 18 18 58.3 -0.8
COCO **West Island** 61.11 303 P P 18 19 01.5 +0.5
CMJI **Cimerak** 61.19 317 P P 18 19 00.5 -1.0
comp=Z,868nmcomp=Z,31nm,1.1s
SMRI **Semarang** 61.29 320 P P 18 19 03.2 +1.0
comp=Z,4µmcomp=Z,196nm,1.9s
SMRI **Semarang** 61.29 320 P P 18 19 02.8 +0.6
BNSI **Bone** 61.34 331 P P 18 19 03.4 +0.9
comp=Z,1µmcomp=Z,79nm,1.7s
MG02 **Cerro Sombrero** 61.41 157 P P 18 19 01.1 -1.4
KPJI **Karang Pucung** 61.47 318 P P 18 19 04.1 +0.7
comp=Z,2µmcomp=Z,188nm,0.8s
SPSI **Sidrap Palu** 61.84 331 P P 18 19 06.6 +0.8
comp=Z,2µmcomp=Z,170nm,1.2s
MG05 **Puerto Natales** 61.85 154 P P 18 19 05.1 -0.4
CNJI **Cibinong** 62.05 316 P P 18 19 06.9 -0.4
comp=Z,1µmcomp=Z,3µmcomp=Z,220nm,1.1s
LEM **Lembang** 62.35 317 P P 18 19 09.5 0.0
comp=Z,155nm,1.0s,baz=164,slow=7.8,SNR=53
LEM LR LR 18 44 53.6
comp=Z,2µm,18.3s,baz=140,slow=35
LEM **Lembang** 62.35 317 P P 18 19 10.5 +1.0
comp=Z,1µmcomp=Z,3µmcomp=Z,177nm,1.5s
SANI **Sanana** 62.49 338 P P 18 19 09.1 -1.1
comp=Z,920nmcomp=Z,91nm,1.0s
SANI **Sanana** 62.49 338 P P 18 19 09.5 -0.7
SKJI **Sukabumi** 62.52 316 P P 18 19 11.6 +1.2
comp=Z,75nm,0.9s
TTSI **Tana Toraja** 62.72 331 P P 18 19 12.3 +0.6
comp=Z,2µmcomp=Z,73nm,1.7s
SIJI **Sorong** 62.88 344 P P 18 19 11.8 -1.0
comp=Z,41nm,1.1s,baz=149,slow=4.2,SNR=12
SIJI LR LR 18 45 22.5
comp=Z,2µm,21.1s,baz=144,slow=35
DBJI **Dramaga** 62.88 316 P P 18 19 14.0 +1.1
comp=Z,2µmcomp=Z,180nm,1.2s
HOPE **Hope Point** 63.02 179 P P 18 19 13.1 -0.2
HOPE pmax pmax
comp=Z,127nm,0.8s
HOPE MLR MLR
comp=Z,7µm,20.0s
HOPE **Hope Point** 63.02 179 P P 18 19 13.1 -0.2
CGJI **Cibinong** 63.16 315 P P 18 19 14.6 -0.1
comp=Z,2µmcomp=Z,128nm,1.2s
PPT2 **Papeete2** 63.30 76 *e*S S 18 27 46.8 -0.2
comp=Z,4µm,28.2s
PPT2 **Papeete2** 63.30 76 *e*LR LR 18 38 00.2
comp=Z,8µm,27.0s,baz=206
PPT **Papeete** 63.32 76 LR LR 18 40 12.6
comp=Z,2µm,21.2s,baz=204,slow=30
KBKI **Kotabaru** 63.32 327 P P 18 19 16.4 +0.6
comp=Z,1µmcomp=Z,91nm,1.3s
LUWI **Luwuk** 64.05 335 IAMs_20 IAMs_20 18 44 48.2
comp=Z,5µm,21.0s
LUWI **Luwuk** 64.05 335 P P 18 19 21.2 +0.6
comp=Z,2µmcomp=Z,131nm,1.2s
LUWI **Luwuk** 64.05 335 P P 18 19 21.9 +1.3
comp=Z,131nm,1.2s
EFI **East Falkland** 64.18 164⇑ *e*P P 18 19 22.1 +1.1
EFI pmax pmax
comp=Z,376nm,1.0s
EFI MLR MLR
comp=Z,3µm,16.0s
EFI **East Falkland** 64.18 164 P P 18 19 20.9 0.0
APSI **Ampana** 64.40 334 P P 18 19 23.4 +0.5
comp=Z,938nmcomp=Z,55nm,1.2s
BLSI **Bandar Lampung** 64.48 315 P P 18 19 24.2 +0.8
comp=Z,133nm,0.8s
KASI **Kota Agung** 64.58 314 P P 18 19 25.2 +1.2
comp=Z,2µmcomp=Z,137nm,1.3s
GO08 **Villa O'Higgin** 64.90 153 P P 18 19 25.8 0.0
TNTI **Ternate** 65.03 340 P P 18 19 26.0 -0.9
comp=Z,34nm,1.6s
PBKI **Pangkalan Bun** 65.07 323 P P 18 19 25.9 -1.3
comp=Z,1µmcomp=Z,105nm,1.1s
KLI **Kotabumi** 65.08 315 P P 18 19 28.5 +1.2
comp=Z,128nm,0.9s
LWLI **Liwa** 65.19 314 P P 18 19 29.1 +0.9
comp=Z,177nm,0.8s
KLSI 65.28 315 P P 18 19 29.5 +0.9
comp=Z,816nmcomp=Z,53nm,1.2s
KMSI **Cibinong** 65.40 337 P P 18 19 30.0 +0.6
comp=Z,66nm,0.8s
GTOI **Gorontalo** 65.64 336 P P 18 19 31.6 +0.7
comp=Z,524nmcomp=Z,38nm,1.0s
MDSI **Maura Dua** 65.65 314 P P 18 19 31.4 +0.4
comp=Z,696nmcomp=Z,39nm,1.3s
MRSI **Marisa** 65.70 334 P P 18 19 30.8 -0.5
comp=Z,906nmcomp=Z,60nm,1.4s
MTKI **Muara Teweh, K** 65.91 326 P P 18 19 33.7 +1.1
comp=Z,76nm,1.8s
MPSI **Mapaga** 65.98 332 P P 18 19 32.0 -1.1
comp=Z,2µmcomp=Z,129nm,1.1s
TOLI2 **Tolitoli** 66.55 333 P P 18 19 35.7 -1.0
TOLI2 **Tolitoli** 66.55 333 P P 18 19 36.8 +0.1
comp=Z,58nm,1.3s
PMBI **Palembang** 66.93 315 P P 18 19 38.9 -0.3
PMBI **Palembang** 66.93 315 P P 18 19 41.0 +1.8
comp=Z,3µmcomp=Z,130nm,0.5s
PMBI **Palembang** 66.93 315 P P 18 19 41.4 +2.2
comp=Z,274nm,1.2s
KSI **Kapahiang** 66.96 313 P P 18 19 40.6 +1.1
PPBI **Pangkal Pinang** 67.22 317 P P 18 19 41.2 +0.2
MASI **Maura Aman, Be** 67.56 313 P P 18 19 44.2 +1.0
comp=Z,3µmcomp=Z,198nm,1.2s
COYC **Coyhaique** 67.75 153 P P 18 19 44.2 +0.1
COYC **Coyhaique** 67.75 153 IAMs_20 IAMs_20 18 45 38.2
comp=Z,4µm,20.0s
STKI **Sintang** 67.77 323 P P 18 19 46.0 +1.5
comp=Z,1µmcomp=Z,61nm,1.4s
JMBI **JAMBI** 68.51 315 P P 18 19 50.4 +1.3
comp=Z,101nm,1.4s
KRJI **Kerinci** 68.80 312 P P 18 19 52.2 +1.1
comp=Z,5µmcomp=Z,411nm,1.2s
DSRI **Dabo** 69.29 316 P P 18 19 55.0 +1.0
comp=Z,612nmcomp=Z,40nm,1.7s
KSM **Kuching** 69.44 322 IAmb IAmb 18 19 57.1
comp=Z,93nm,1.1s
KSM IAMs_20 IAMs_20 18 47 23.4
comp=Z,4µm,20.0s
KSM **Kuching** 69.44 322 P P 18 19 56.2 +1.3
comp=Z,81nm,1.2s
PPI **Padang Panjang** 70.69 312 P P 18 20 03.1 +0.5
comp=Z,600nmcomp=Z,26nm,0.9s
MYLDM **Lahad Datu** 70.98 332 P P 18 20 05.4 +1.2
MYLDM IAmb IAmb 18 20 43.9
comp=Z,169nm,1.3s
MYLDM IAMs_20 IAMs_20 18 49 09.6
comp=Z,4µm,20.0s
RER **Riviere de l'E** 71.11 261 P P 18 20 05.2 -0.1
RER IAmb IAmb 18 20 08.0
comp=Z,124nm,1.2s
BKNI **Bangkinang** 71.20 313 IAmb IAmb 18 20 07.0
comp=Z,85nm,0.7s
BKNI **Bangkinang** 71.20 313 P P 18 20 06.4 +0.7
comp=Z,2µmcomp=Z,125nm,1.1s
BKNI **Bangkinang** 71.20 313 P P 18 20 07.3 +1.6
comp=Z,124nm,1.3s
DAV **Davao City (W)** 71.49 339 LR LR 18 51 25.5
comp=Z,2µm,20.2s,baz=166,slow=36
MYKOM **Kota Tinggi** 71.66 316 P P 18 20 08.5 +0.1
MYKOM IAmb IAmb 18 20 11.0
comp=Z,96nm,1.0s
LL03 **Petrohue** 71.92 151 P P 18 20 09.6 -0.2
LL04 **Puerto Octay** 72.14 151 P P 18 20 11.2 +0.1
LL04 IAmb IAmb 18 20 13.6
comp=Z,189nm,1.6s
MNSI **Mandailing Nat** 72.14 311 P P 18 20 11.1 -0.2
comp=Z,1µmcomp=Z,29nm,0.7s
KKM **Kota Kinabalu** 72.32 330 IAmb IAmb 18 20 13.9
comp=Z,103nm,1.3s
KKM IAMs_20 IAMs_20 18 53 13.3
comp=Z,3µm,19.0s
KKM **Kota Kinabalu** 72.32 330 P P 18 20 13.1 +0.6
PLCA **Paso Flores** 72.71 152 P P 18 20 14.9 +0.4
comp=Z,45nm,1.1s,baz=201,slow=4.9,SNR=38
PLCA LR LR 18 48 21.4
comp=Z,2µm,20.0s,baz=198,slow=33
PLCA **Paso Flores** 72.71 152 P P 18 20 15.0 +0.4
PLCA **Paso Flores** 72.71 152 IAmb IAmb 18 20 17.8
comp=Z,227nm,1.4s

VA02 **Isla de Pascua** 72.77 116 P P 18 20 15.1 +0.1
RPN **Rapa Nui** 72.84 116 LR LR 18 44 39.8
comp=Z,3µm,21.2s,baz=204,slow=30
SOE **Somerset East** 73.21 230 *e*P P 18 20 18.7 +1.0
SOE IAmb IAmb 18 20 20.6
comp=Z,81nm,0.9s
GSI **Gunungsitoli** 73.31 310 P P 18 20 18.6 +0.3
GSI IAmb IAmb 18 20 21.6
comp=Z,82nm,1.0s
GSI **Gunungsitoli** 73.31 310 P P 18 20 18.6 +0.3
comp=Z,2µmcomp=Z,92nm,1.4s
GSI **Gunungsitoli** 73.31 310 P P 18 20 20.1 +1.8
LR03 **Panguipulli** 73.37 151 P P 18 20 17.6 -0.8
LR03 IAmb IAmb 18 20 21.4
comp=Z,116nm,1.1s
ELIM **Elim** 73.44 225 *e*P P 18 20 20.1 +1.1
ELIM IAmb IAmb 18 20 39.1
comp=Z,193nm,2.0s
LC02 **Puerto Saavedr** 73.94 150 P P 18 20 21.7 -0.1
LC01 **Cunco** 74.18 151 IAmb IAmb 18 20 25.6
comp=Z,118nm,1.4s
PSI **Prapat** 74.23 311 P P 18 20 22.6 -1.3
comp=Z,10nm,0.7s,baz=224,slow=7.8,SNR=4.7
PSI LR LR 18 51 14.8
comp=Z,1µm,18.1s,baz=136,slow=34
MATJ **Matjiesfontein** 74.39 226 *e*P P 18 20 24.5 -0.1
MATJ IAmb IAmb 18 20 35.5
comp=Z,70nm,1.3s
VOI **Vohitsoka** 74.43 253 IAMs_20 IAMs_20 18 49 15.8
comp=Z,3µm,19.0s
GRAN **Grantham** 74.75 227 *e*P P 18 20 27.8 +1.1
GRAN IAmb IAmb 18 20 29.7
comp=Z,30nm,0.7s
TSI **Tuntungan** 75.01 311 P P 18 20 29.2 +1.0
comp=Z,74nm,0.5s
IPM **Ipoh** 75.10 314 P P 18 20 28.1 -0.7
IPM **Ipoh** 75.10 314 P P 18 20 29.7 +0.9
comp=Z,52nm,1.1s
SUR **Sutherland** 75.13 226 LR LR 18 50 18.6
comp=Z,5µm,20.0s,baz=158,slow=33
SUR **Sutherland** 75.13 226 P P 18 20 29.7 +0.6
SUR IAmb IAmb 18 20 42.0
comp=Z,127nm,1.2s
HVD **Gariep Dam** 75.15 231 *e*P P 18 20 29.8 +0.7
HVD IAmb IAmb 18 20 41.9
comp=Z,120nm,1.3s
TAOE **Nuku Hiva Isla** 75.22 80 *e*S S 18 30 07.6 -0.2
comp=Z,3µm,40.1s
TAOE **Nuku Hiva Isla** 75.22 80 *e*LR LR 18 43 18.0
comp=Z,4µm,29.4s,baz=214
KCSI **Kotacane, Aceh** 75.30 311 P P 18 20 30.4 +0.5
comp=Z,1µmcomp=Z,64nm,1.2s
H08S2 **Diego Garcia H** 75.39 282 T T 19 43 27.8
baz=153,slow=76,SNR=49
H08S1 **Diego Garcia H** 75.40 282 T T 19 43 28.1
baz=153,slow=76,SNR=65
H08S3 **Diego Garcia H** 75.41 282 T T 19 43 31.0
baz=153,slow=76,SNR=46
DGAR **Diego Garcia** 75.62 282 P P 18 20 31.2 -0.6
DGAR pmax pmax
comp=Z,287nm,1.8s
DGAR MLR MLR
comp=Z,4µm,20.0s
DGAR **Diego Garcia** 75.62 282 P P 18 20 31.2 -0.6
DGAR IAmb IAmb 18 20 42.8
comp=Z,287nm,1.8s
DGAR **Diego Garcia** 75.62 282 IAMs_20 IAMs_20 18 45 59.4
comp=Z,4µm,20.0s
POGA **Pongola** 75.81 237 *e*P P 18 20 33.9 +1.2
POGA IAmb IAmb 18 20 44.6
comp=Z,118nm,1.7s
KULM **Kulim** 75.98 314 IAmb IAmb 18 20 35.6
comp=Z,110nm,1.0s
KULM IAMs_20 IAMs_20 18 53 59.6
comp=Z,2µm,18.0s
NWCL **Newcastle** 76.14 236 *e*P P 18 20 35.6 +0.8
NWCL IAmb IAmb 18 20 36.9
comp=Z,38nm,0.7s
CVNA **Calvinia** 76.30 226 *e*P P 18 20 36.6 +1.0
CVNA IAmb IAmb 18 20 48.5
comp=Z,84nm,1.3s
GUMO **Guam** 76.38 360 LR LR 18 54 25.7
comp=Z,717nm,18.6s,baz=180,slow=36
SNKL **Senekal, Frees** 76.44 234 *e*P P 18 20 37.4 +0.8
SNKL IAmb IAmb 18 20 48.7
comp=Z,108nm,1.4s
CNG **Changalane** 76.57 238 *e*P P 18 20 37.9 +0.8
CNG IAmb IAmb 18 20 49.3
comp=Z,34nm,1.4s
CNG **Changalane** 76.57 238 *i*P P 18 20 37.2 +0.1
CNG **Changalane** 76.57 238 *i*P P 18 20 37.2 +0.1
ABPO **Ambohimpanom** 76.78 254 P P 18 20 37.2 -1.4
ABPO pmax pmax
comp=Z,55nm,1.4s
ABPO MLR MLR
comp=Z,3µm,20.0s
ABPO **Ambohimpanom** 76.78 254 P P 18 20 37.2 -1.4
ABPO **Ambohimpanom** 76.78 254 IAMs_20 IAMs_20 18 50 03.0
comp=Z,3µm,20.0s
BOSA **Boshof** 77.05 231 P P 18 20 40.5 +0.6
comp=Z,19nm,0.7s,baz=159,slow=5.6,SNR=67
BOSA LR LR 18 51 31.0
comp=Z,4µm,19.2s,baz=152,slow=33
BOSA **Boshof** 77.05 231 *e*P P 18 20 40.7 +0.8
BOSA IAmb IAmb 18 20 42.7
comp=Z,185nm,1.8s
BOSA **Boshof** 77.05 231 P P 18 20 39.4 -0.6
BOSA IAmb IAmb 18 20 52.3
comp=Z,111nm,1.4s
BOSA **Boshof** 77.05 231 *i*P P 18 20 40.2 +0.3
BOSA **Boshof** 77.05 231 *i*P P 18 20 40.2 +0.3
LHMI **Lhok Sumawe** 77.18 310 P P 18 20 41.6 +1.1
comp=Z,154nm,1.2s
OPO **Amohidratompo** 77.19 254 LR LR 18 50 33.1
comp=Z,2µm,19.1s,baz=4.0,slow=32
ML02 **Panimavida** 77.28 150 P P 18 20 41.4 +0.4
ML02 IAmb IAmb 18 20 43.3
comp=Z,184nm,1.4s
CRLN **Carolina, Mapu** 77.67 237 *e*P P 18 20 43.8 +0.3
PRYS **Parys** 77.82 234 *e*P P 18 20 44.8 +0.5
PRYS IAmb IAmb 18 20 45.8
comp=Z,31nm,0.8s
GO05 **Huala** 77.89 150 P P 18 20 44.5 +0.1
WDLM **Western Deep L** 78.25 234 *e*P P 18 20 47.7 +0.9
WDLM IAmb IAmb 18 20 48.6
comp=Z,31nm,0.7s
SWZ **Schweizer** 78.33 232 *e*P P 18 20 47.5 +0.4
SWZ IAmb IAmb 18 20 59.0
comp=Z,104nm,1.4s
BO02 **Sierra Bellavi** 78.36 150 P P 18 20 46.2 -0.9
BO02 IAmb IAmb 18 20 49.6
comp=Z,202nm,1.5s
KEIM **Keimoes** 78.45 228 *e*P P 18 20 48.9 +1.2
KEIM IAmb IAmb 18 21 00.2
comp=Z,105nm,1.4s
SLR **Silverton** 78.56 235 *e*P P 18 20 49.5 +1.1
SLR IAmb IAmb 18 21 03.1
comp=Z,74nm,1.4s
UPI **Upington** 78.67 228 *e*P P 18 20 51.1 +2.2
UPI IAmb IAmb 18 21 00.8
comp=Z,86nm,1.6s
BO01 **Tunca** 78.67 150 IAmb IAmb 18 20 50.9
comp=Z,187nm,1.4s
MT01 **Popeta** 79.14 150 P P 18 20 51.1 -0.3
BO04 **La Punta** 79.17 150 P P 18 20 51.8 +0.2
BO04 IAmb IAmb 18 20 53.9
comp=Z,286nm,1.7s
TGY **Tagaytay City** 79.17 336 LR LR 18 55 07.8
comp=Z,1µm,21.9s,baz=135,slow=35
MT09 **Talagante** 79.29 150 IAmb IAmb 18 20 54.4
comp=Z,279nm,1.6s
MOPA **Mopani** 79.37 239 *e*P P 18 20 54.0 +1.2
MOPA IAmb IAmb 18 20 55.3
comp=Z,32nm,0.8s
MOPA **Mopani** 79.37 239 *i*P P 18 20 50.8 -2.0
MOPA **Mopani** 79.37 239 *i*P P 18 20 50.8 -2.0
MT03 **Universidad Ad** 79.67 150 P P 18 20 54.3 0.0
MT03 IAmb IAmb 18 20 57.4
comp=Z,92nm,1.0s
MT05 **Renca** 79.71 150 P P 18 20 54.4 -0.1
MT02 **Curacav** 79.75 150 IAmb IAmb 18 20 56.9
comp=Z,209nm,1.6s
VA01 **Torpederas** 79.86 149 IAmb IAmb 18 20 57.3
comp=Z,277nm,1.6s
DLV **T Lat** 79.93 324 IAMs_20 IAMs_20 18 54 37.9
comp=Z,3µm,20.0s

DLV **T Lat** 79.93 324 P P 18 20 55.4 -0.5
PEL **Peldehue** 79.96 150 P P 18 20 56.1 +0.2
PEL pmax pmax
comp=Z,198nm,1.6s
PEL **Peldehue** 79.96 150 P P 18 20 56.1 +0.2
PEL IAmb IAmb 18 20 58.1
comp=Z,198nm,1.6s
LBTB **Lobatse** 80.20 233 LR LR 18 53 02.3
comp=Z,3µm,19.9s,baz=156,slow=33
LBTB **Lobatse** 80.20 233 *e*P P 18 20 57.7 +0.4
LBTB IAmb IAmb 18 21 12.5
comp=Z,47nm,1.2s
LBTB **Lobatse** 80.20 233 P P 18 20 56.6 -0.8
LBTB pmax pmax
comp=Z,71nm,1.5s
LBTB **Lobatse** 80.20 233 P P 18 20 56.6 -0.8
LBTB **Lobatse** 80.20 233 *i*P P 18 20 59.4 +2.1
LBTB **Lobatse** 80.20 233 *i*P P 18 20 59.4 +2.1
VA03 **San Esteban** 80.36 150 IAmb IAmb 18 21 00.3
comp=Z,155nm,1.3s
VA06 **Catapilco** 80.38 149 IAmb IAmb 18 20 59.9
comp=Z,215nm,1.6s
SBV **Sambava** 80.49 259 P P 18 21 08.8 +10
MSNA **Messina** 80.96 238 *e*P P 18 21 02.8 +1.4
MSNA IAmb IAmb 18 21 17.0
comp=Z,40nm,1.2s
MSNA **Messina** 80.96 238 *e*P P 18 21 02.7 +1.4
MSNA **Messina** 80.96 238 *e*P P 18 21 02.7 +1.4
CO02 **Combarbal** 81.75 149 IAmb IAmb 18 21 07.8
comp=Z,198nm,1.2s
ZON **Zonda** 81.95 151 P P 18 21 06.4 -0.1
ZON pmax pmax
comp=Z,145nm,1.6s
ZON **Zonda** 81.95 151 P P 18 21 06.3 -0.1
ZON IAmb IAmb 18 21 08.8
comp=Z,145nm,1.6s
CO03 **El Pedregal** 82.17 149 P P 18 21 07.4 -0.3
CO03 IAmb IAmb 18 21 09.9
comp=Z,160nm,1.4s
KAAM **Kaadhehdhoo** 82.42 286 IAMs_20 IAMs_20 18 55 14.8
comp=Z,2µm,19.0s
GO04 **Tololo Observa** 82.79 149 IAmb IAmb 18 21 13.5
comp=Z,89nm,1.2s
MATP **Matopo** 83.29 238 LR LR 18 52 54.7
comp=Z,2µm,21.3s,baz=156,slow=32
MATP **Matopo** 83.29 238 *i*P P 18 21 14.6 +0.9
MATP **Matopo** 83.29 238 *i*P P 18 21 14.6 +0.9
BLWY **Bulawayo** 83.51 238 *e*P P 18 21 16.2 +1.4
BLWY IAmb IAmb 18 21 17.0
comp=Z,124nm,1.2s
BLWY **Bulawayo** 83.51 238 *i*P P 18 21 16.9 +2.1
BLWY **Bulawayo** 83.51 238 *i*P P 18 21 16.9 +2.1
APLL **PUNTA DE LOS L** 83.52 153 *i*P P 18 21 15.6 +1.0
LCO **Las Campanas** 83.92 149 P P 18 21 17.7 +0.7
LCO pmax pmax
comp=Z,116nm,1.4s
LCO **Las Campanas** 83.92 149 P P 18 21 17.7 +0.7
LCO IAmb IAmb 18 21 19.1
comp=Z,116nm,1.4s
UBPT **Khong Chiam** 83.95 322 P P 18 21 16.9 +0.1
UBPT IAmb IAmb 18 21 19.3
comp=Z,84nm,1.2s
PLTB **Pedras Altas** 84.34 164 P P 18 21 19.1 +0.3
ACLC **CERRO LA CRUZ** 84.37 152 *i*P P 18 21 19.7 +0.5
AC04 **Llanos de Chal** 84.61 148 P P 18 21 19.0 -1.2
VCA **Vinchina** 84.76 151 *i*P P 18 21 22.3 +1.2
PALK **Pallekele** 85.24 296 P P 18 21 23.1 -0.3
baz=252,slow=12
PALK LR LR 18 51 36.5
comp=Z,3µm,20.3s,baz=258,slow=30
PALK **Pallekele** 85.24 296 P P 18 21 23.1 -0.3
GO03 **Copiap** 85.40 149 P P 18 21 23.9 -0.3
GO03 **Copiap** 85.40 149 *i*P P 18 21 25.2 +1.0
TINO **Tinogasta** 85.55 151 *i*P P 18 21 25.9 +0.9
AC06 **Mina Casimiro** 85.59 149 IAmb IAmb 18 21 27.7
comp=Z,102nm,1.6s
MSEY **Mahe Island** 85.73 268 IAMs_20 IAMs_20 18 50 54.7
comp=Z,3µm,20.0s
ITQB **Itaqui** 85.99 161 P P 18 21 27.4 +0.4
QIZ **Qiongzhong** 86.36 327 P P 18 21 29.9 +1.1
QIZ SKS **SKSac** 18 31 52.8 -1.2
QIZ S **ScS** 18 32 11.0 -0.9
QIZ pmax pmax
comp=Z,48nm,2.3s
QIZ LR LR
comp=Z,1µm,23.5s
QIZ LR LR
comp=Z,690nm,23.5s
QIZ LR LR
comp=Z,2µm,31.4s
AC02 **Maricunga** 86.38 150 IAmb IAmb 18 21 32.6
comp=Z,95nm,1.4s
FSA **Cafayete** 87.78 152 *i*P P 18 21 37.1 +1.0
HMDM **Hanimaadhoo** 87.95 289 IAMs_20 IAMs_20 18 51 48.6
comp=Z,2µm,21.0s
LSZ **Lusaka** 88.08 239 LR LR 18 56 27.0
comp=Z,5µm,20.9s,baz=160,slow=32
TPUB **Ta-pu** 88.21 338 P P 18 21 37.9 +0.3
TSUM **Tsumeb** 88.39 229 LR LR 18 56 38.5
comp=Z,5µm,21.8s,baz=150,slow=32
TSUM **Tsumeb** 88.39 229 *e*P P 18 21 39.0 0.0
TSUM **Tsumeb** 88.39 229 P P 18 21 38.1 -0.8
SSLB **Suanglung** 88.63 338 P P 18 21 39.2 -0.4
CMAR **Chiang Mai Arr** 88.89 317 P P 18 21 40.7 -0.3
comp=Z,12nm,1.1s,baz=191,slow=4.2,SNR=47
CMAR LR LR 18 59 02.3
comp=Z,1µm,21.5s,baz=160,slow=34
CMAR **Chiang Mai Arr** 88.89 317 *i*P P 18 21 41.4 +0.5
CMAR pmax pmax
comp=Z,13nm,1.0s
ITAB **Concordia** 88.99 165 P P 18 21 41.8 +0.2
ITAB IAmb IAmb 18 21 44.4
comp=Z,124nm,1.3s
CPUP **Villa Florida** 89.16 160 P P 18 21 42.2 -0.1
comp=Z,25nm,0.8s,baz=192,slow=4.4,SNR=43
CPUP LR LR 19 00 58.6
comp=Z,4µm,19.9s,baz=192,slow=35
CPUP **Villa Florida** 89.16 160 IAmb IAmb 18 21 45.0
comp=Z,60nm,1.1s
SLA **San Lorenzo** 89.22 152 *i*P P 18 21 44.3 +1.4
CHTO **Chiang Mai** 89.23 317 P P 18 21 42.5 0.0
CHTO pmax pmax
comp=Z,62nm,1.2s
CHTO MLR MLR
comp=Z,1µm,20.0s
CHTO **Chiang Mai** 89.23 317 P P 18 21 42.5 0.0
CHTO IAmb IAmb 18 21 45.1
comp=Z,62nm,1.2s
CHTO **Chiang Mai** 89.23 317 P P 18 21 43.9 +1.4
PB06 **IPOC Station P** 90.25 148 P P 18 21 47.7 0.0
PB06 IAmb IAmb 18 21 50.5
comp=Z,120nm,1.4s
PB04 **IPOC Station P** 90.47 148 IAmb IAmb 18 21 51.7
comp=Z,102nm,1.3s
LVC **Limon Verde** 90.50 149 P P 18 21 49.1 0.0
LVC pmax pmax
comp=Z,119nm,1.5s
LVC **Limon Verde** 90.50 149 P P 18 21 49.1 0.0
LVC IAmb IAmb 18 21 52.5
comp=Z,118nm,1.4s
JOW **Kunigami** 90.56 345 LR LR 18 59 48.1
comp=Z,552nm,21.4s,baz=128,slow=34
PB03 **IPOC Station P** 90.84 148 IAmb IAmb 18 24 46.9
comp=Z,40nm,0.7s
PB07 **IPOC Station P** 91.11 148 IAmb IAmb 18 21 54.8
comp=Z,108nm,1.3s
PB09 **IPOC Station P** 91.20 148 IAmb IAmb 18 21 55.9
comp=Z,142nm,1.6s
PB01 **IPOC Station P** 91.87 148 P P 18 21 53.6 -1.5
PB01 IAmb IAmb 18 22 56.7
comp=Z,40nm,0.5s
PB08 **IPOC Station P** 92.82 148 IAmb IAmb 18 24 11.6
comp=Z,23nm,0.7s
PB11 **IPOC Station P** 93.06 147 IAmb IAmb 18 22 03.9
comp=Z,44nm,0.9s
GO01 **Chusmiza** 93.26 148 P P 18 22 00.9 -1.2
GO01 IAmb IAmb 18 22 04.9
comp=Z,43nm,1.3s
RCLA **Racherla** 93.35 298 *e*P P 18 22 00.6 -1.1
MYLAV **Mylavaram** 93.85 300 *e*P P 18 22 04.9 +0.9
SRLM **Srisailam** 93.95 298 *e*P P 18 22 04.0 -0.5
KMI **Kunming** 94.06 322 ⇓P P 18 22 07.4 +2.4
KMI sP pwP 18 22 13.5 -1.0
KMI PP PP 18 25 49.6 -2.2
KMI S S 18 33 18.3 +3.6

KMI SS **SS** **18 39 40.6 +5.0**
KMI LR LR
comp=Z,1µm,23.1s
KMI LR LR
comp=Z,580nm,19.6s
KMI LR LR
comp=Z,2µm,20.2s
**CHLP Challavanipeta 94.12 304** *e*P **P** **18 22 05.9 +0.8**
**NJS Nagarjunasagar 94.20 299** *e*P **P** **18 22 05.0 -0.6**
**GYA Guiyang 94.28 326** ⇓*i*P **P** **18 22 07.6 +1.7**
GYA SKS **SKSac** **18 32 45.1 +5.2**
GYA S **ScS** **18 33 18.0 +0.3**
GYA SS **SS** **18 39 40.9 +2.3**
GYA pmax pmax
comp=Z,26nm,1.2s
GYA LR LR
comp=Z,3µm,24.2s
**PB16 IPOC Station P 94.47 147** IAmb IAmb 18 22 10.8
comp=Z,60nm,1.4s
**HYBB Hyderabad (bro 95.28 298** *e*P **P** **18 22 09.7 -0.9**
**PZH PanZhiHua 95.64 322** P P **18 22 13.0 +0.9**
PZH SKS **SKSac** **18 32 44.5 -2.7**
PZH S **S** **18 33 27.8 -0.5**
PZH SS **SS** **18 39 54.3 -3.7**
PZH pmax pmax
comp=Z,10.0nm,1.2s
PZH pmax pmax
comp=Z,180nm,4.9s
PZH LR LR
comp=Z,860nm,19.6s
PZH LR LR
comp=Z,790nm,20.4s
PZH LR LR
comp=Z,960nm,19.0s
**JHJ Hachijo jima 2 95.92 355** LR LR 19 01 55.4
comp=Z,1µm,21.3s,baz=214,slow=33
**WHN Wuhan 96.45 334** ⇓P **P** **18 22 15.4 -0.1**
WHN S **S** **18 33 32.6 -2.1**
WHN LR LR
comp=Z,6µm,26.9s
**KLRI Killari 96.66 297** *e*P **P** **18 22 16.7 -0.2**
**SRSP Sriramsagar 96.73 299** *e*P **P** **18 22 17.3 +0.2**
**LPAZ La Paz 96.77 148** P P **18 22 18.6 +0.3**
comp=Z,5.2nm,0.9s,baz=177,slow=2.8,SNR=18
LPAZ PP **PP** **18 26 14.1 +1.7**
comp=Z,1.5nm,0.8s,baz=176,slow=8.2,SNR=3.6
**LPAZ La Paz 96.77 148** P **P** **18 22 17.5 -0.8**
**KMBO Kilima Mbogo 97.06 253** P Pdif 18 22 19.6 +0.3
comp=Z,0.8nm,0.3s,baz=87,slow=1.9,SNR=4.0
KMBO LR LR 19 00 27.8
comp=Z,1µm,20.8s,baz=109,slow=32
**KMBO Kilima Mbogo 97.06 253** P Pdif 18 22 19.6 +0.3
**NJ2 Nanjing 97.07 338** *e*P Pdif 18 22 20.3 +1.9
NJ2 sP pwP 18 22 27.0 -0.7
NJ2 S **S** **18 33 42.0 +2.0**
NJ2 SS **SS** **18 40 22.1 +4.3**
NJ2 pmax pmax
comp=Z,16nm,0.5s
NJ2 pmax pmax
comp=Z,290nm,3.5s
NJ2 LR LR
comp=Z,690nm,21.8s
NJ2 LR LR
comp=Z,540nm,22.6s
NJ2 LR LR
comp=Z,1µm,20.0s
**ENH Enshi 97.24 329** P **P** **18 22 17.7 -1.5**
**SHL Shillong 97.81 313** P **P** **18 22 21.2 -0.8**
SHL pmax pmax
comp=Z,20nm,1.0s
**SHL Shillong 97.81 313** P **P** **18 22 21.2 -0.8**
SHL IAmb IAmb 18 22 23.7
comp=Z,20nm,1.0s
**NNA Nana 98.50 139** LR LR 18 56 40.9
comp=Z,699nm,21.2s,baz=170,slow=29
**SIV San Ignacio 98.61 155** LR LR 19 07 34.7
comp=Z,2µm,18.1s,baz=197,slow=36
**CD2 Chengdu 99.27 325** *e*P **Pdif** **18 22 30.0 +1.7**
CD2 SKS **SKSac** **18 33 06.3 +0.9**
CD2 S **ScS** **18 34 01.6 +2.6**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
CD2 LR LR
comp=Z,160nm,24.5s
CD2 LR LR
comp=Z,1µm,17.6s
CD2 LR LR
comp=Z,1µm,18.6s
**MJAR Matsushiro Arr 99.39 354** PP **PP** **18 26 32.9 +0.3**
comp=Z,11nm,1.2s,baz=184,slow=6.2,SNR=5.0
MJAR LR LR 19 04 42.1
comp=Z,643nm,18.9s,baz=152,slow=34
**MBAR Mbarara 100.33 248** IAMs_20 IAMs_20 19 03 36.8
comp=Z,2µm,20.0s
**LYN LuoYang 100.71 333** ⇑*i*P **Pdif** **18 22 45.0 +10**
**LYN LuoYang 100.71 333** SS SS 18 41 14.6 +5.8
LYN pmax pmax
comp=Z,10.0nm,1.3s
LYN LR LR
comp=N,730nm,24.0s
LYN LR LR
comp=Z,2µm,32.4s
**KSRS Korea Array 101.09 346** PP **PP** **18 26 44.1 -1.3**
comp=Z,4.4nm,1.0s,baz=163,slow=9.0,SNR=6.1
**LSA Lhasa 101.87 314** P **Pdif** **18 22 40.8 +0.4**
**LODK Lodwar 101.95 254** IAMs_20 IAMs_20 19 03 37.9
comp=Z,2µm,21.0s
**GOMU GeErMu 106.74 319** Pdif **Pdif** **18 23 04.3 +2.5**
GOMU PP **PP** **18 27 31.1 +3.1**
GOMU SS SS 18 42 37.9 +5.4
GOMU AMB AMB
comp=Z,95nm,5.7s
GOMU LR LR
comp=Z,540nm,20.2s
GOMU LR LR
comp=Z,560nm,21.3s
GOMU LR LR
comp=Z,890nm,21.9s
**CN2 Changchun 107.65 345** Pdif **Pdif** **18 23 04.5 -0.6**
CN2 PP **PP** **18 27 37.0 +2.9**
CN2 S **Sdif** **18 35 04.1 -3.9**
CN2 SS **SS** **18 42 44.9 +1.0**
CN2 AMB AMB
comp=Z,220nm,10.0s
CN2 LR LR
comp=Z,670nm,24.0s
CN2 LR LR
comp=Z,540nm,24.0s
CN2 LR LR
comp=Z,810nm,26.0s
**UGL Uglegorsk 111.79 358** *e*P **Pdif** **18 23 27.5 +4.1**
**NIL Nilore 111.89 301** IAMs_20 IAMs_20 19 05 21.2
comp=Z,2µm,22.0s
**KLR Kul'dur 112.42 351** PKiKP **PKiKP** **18 27 20.8 -0.9**
comp=Z,2.2nm,0.8s,baz=219,slow=2.2,SNR=7.1
KLR PP **PP** **18 28 08.8 +0.3**
comp=Z,2.5nm,0.9s,baz=97,slow=3.2,SNR=3.6
KLR PKKPbc **PKKPbc** **18 38 08.0 -2.5**
comp=Z,0.6nm,0.5s,baz=335,slow=14,SNR=1.9
**KLR Kul'dur 112.42 351** ⇑*i*PKiKP **PKiKP** **18 27 22.2 +0.6**
KLR MLR MLR
comp=Z,491nm,20.0s
**ULN Ulaanbaatar 114.61 333** ⇑*i*PKIKP PKPdf 18 27 26.0 -0.1
ULN MLR MLR
comp=Z,748nm,21.0s
**SONM Songino Array 114.72 332** PKP PKPdf 18 27 24.9 -1.4
comp=Z,0.7nm,0.7s,baz=140,slow=2.7,SNR=4.5
SONM PKKPbc **PKKPbc** **18 38 03.0 +0.1**
comp=Z,1.1nm,1.0s,baz=340,slow=2.1,SNR=6.4
**WMQ Urumqi 115.89 317** *e*PKP **PKiKP** **18 27 29.8 +1.2**
WMQ PP **PP** **18 28 36.1 +2.8**
WMQ LR LR
comp=Z,580nm,19.3s
WMQ LR LR
comp=Z,790nm,19.3s
WMQ LR LR
comp=Z,690nm,21.7s
**KSH Kashi 116.03 306** PKP **PKPdf** **18 27 28.8 -0.3**
KSH SS SS 18 44 33.1 -2.8
KSH LR LR
comp=Z,650nm,16.5s
KSH LR LR
comp=Z,600nm,17.9s
KSH LR LR
comp=Z,830nm,19.2s
**PETK Petropavlovsk- 116.22 8** PKP **PKPdf** **18 27 27.7 -1.1**
comp=Z,1.8nm,0.6s,baz=131,slow=4.0,SNR=7.5
PETK PKKPbc **PKKPbc** **18 37 57.3 -0.3**
comp=Z,2.7nm,0.9s,baz=23,slow=4.2,SNR=3.8
**HDC Heredia 116.52 123** IAMs_20 IAMs_20 19 07 33.0
comp=Z,1µm,20.0s
**GAR Garm 117.71 302** **PKPdf** **18 27 30.9 -1.5**
**ZAK Zakamensk 117.80 331** *e*PKiKP **PKiKP** **18 27 32.9 +0.8**
ZAK pmax pmax
comp=Z,7.0nm,1.6s
**SNET Serv Nac Est T 117.85 117** IAMs_20 IAMs_20 19 06 00.8
comp=Z,1µm,22.0s
**UZB Uzynbulak 118.14 311** *e*PKiKP **PKiKP** **18 27 34.2 +1.2**
**UZB Uzynbulak 118.14 311** *e*PKP **PKiKP** **18 27 34.3 +1.2**
baz=311
**SATY Saty 118.27 310** *e*PKiKP **PKiKP** **18 27 34.6 +1.3**
**SATY Saty 118.27 310** *e*PKP **PKiKP** **18 27 34.6 +1.3**
baz=310
**KPKS Kokpek 118.53 311** *e*PKiKP **PKiKP** **18 27 34.8 +1.1**
**KPKS Kokpek 118.53 311** *e*PKP **PKiKP** **18 27 34.8 +1.1**
baz=311
**TNSS Tian-Shan 118.76 309** *e*PKP **PKiKP** **18 27 35.5 +0.9**
baz=309
**AAK Ala-Arcka 119.30 307** PKKPbc PKKPbc 18 37 46.2 -0.2
comp=Z,1.0nm,0.6s,baz=304,slow=3.6,SNR=7.7
**AAK Ala-Arcka 119.30 307** ⇑*i*PKIKP **PKiKP** **18 27 36.3 +0.9**
AAK MLR MLR
comp=Z,722nm,18.0s
**KNGR Kungurtug, Tuv 119.36 327** ⇑*i*PKiKP **PKiKP** **18 27 36.0 +0.9**
**MOY Mondy 119.52 330** *e*PKiKP **PKiKP** **18 27 35.9 +0.5**
**DBIC Dimbokro 119.67 215** PKP **PKPdf** **18 27 36.0 -0.7**
comp=Z,2.3nm,0.6s,baz=210,slow=11,SNR=3.0
**DBIC Dimbokro 119.67 215** PKIKP **PKPdf** **18 27 36.0 -0.7**
**KUU Kurty 119.73 309** *e*PKiKP **PKiKP** **18 27 36.3 +0.4**
**KUU Kurty 119.73 309** *e*PKP **PKiKP** **18 27 36.4 +0.4**
baz=309
**SDV Santo Domingo 120.13 138** PKKPbc PKKPbc 18 37 43.9 +0.9
comp=Z,1.7nm,0.3s,baz=4.6,slow=8.4,SNR=3.6
**SDV Santo Domingo 120.13 138** IAMs_20 IAMs_20 19 13 08.5
comp=Z,2µm,19.0s
**MK31 Makanchi Array 120.26 315** *d i*PKiKP **PKPdf** **18 27 36.8 0.0**
**MK31 Makanchi Array 120.26 315** PKP **PKPdf** **18 27 35.5 -1.3**
**MKAR Makanchi Array 120.26 315** PKP **PKPdf** **18 27 35.9 -0.9**
comp=Z,0.8nm,0.5s,baz=222,slow=2.5,SNR=23
MKAR PKKPbc **PKKPab** **18 37 43.5 +0.4**
comp=Z,1.1nm,0.7s,baz=341,slow=3.8,SNR=13
**MAKZ Makanchi 120.37 315** ⇑PKIKP **PKPdf** **18 27 36.2 -0.8**
**MAKZ Makanchi 120.37 315** PKPdf **PKPdf** **18 27 35.6 -1.5**
**DZA Taraz 120.69 305** *e*PKiKP **PKiKP** **18 27 38.3 +0.5**
**DZA Taraz 120.69 305** *e*PKP **PKiKP** **18 27 38.4 +0.5**
baz=305
**DGZ Jazzator, Alta 121.26 320** ⇓*i*PKIKP **PKPdf** **18 27 38.6 -0.2**
DGZ MLR MLR
comp=Z,2µm,22.0s
**GEYT Alibeck 121.75 292** PKP **PKPdf** **18 27 40.3 +0.3**
comp=Z,3.5nm,0.6s,baz=54,slow=11,SNR=2.8
**FMP Fort Macarthur 122.34 79** P **PKPdf** **18 27 41.6 +0.4**
baz=212
**MA2 Magadan 122.36 3** PKP **PKPdf** **18 27 39.7 -0.6**
comp=Z,3.9nm,0.7s,baz=142,slow=3.7,SNR=18
**MA2 Magadan 122.36 3** **PKPdf** **18 27 39.7 -0.6**
**IKP In-Ko-Pah, Jac 122.43 81** P **PKiKP** **18 27 42.3 +0.6**
baz=212
**MONP2 Monument Peak 122.49 81** P **PKiKP** **18 27 42.4 +0.4**
baz=212
**PKM Mcpherson Peak 122.65 77** P **PKiKP** **18 27 42.7 +0.5**
baz=212
**SWSC Sam W. Stewart 122.81 81** P **PKiKP** **18 27 42.9 +0.5**
baz=212
**BOD Bodaibo 122.89 341** *e*PKIKP **PKPdf** **18 27 40.5 -0.9**
BOD pmax pmax
comp=Z,12nm,1.9s
**TPFO Pinon Flats 123.08 80** P **PKPdf** **18 27 43.1 +0.2**
baz=212
**PFO Pinyon Flats O 123.08 80** P **PKPdf** **18 27 42.7 -0.1**
baz=212
**GLA Glamis 123.34 82** P **PKPdf** **18 27 43.5 +0.3**
baz=212
**BBRC Big Bear Solar 123.42 79** P **PKPdf** **18 27 43.8 +0.2**
baz=213
**EDW2 Edwards Air Fo 123.46 78** P **PKiKP** **18 27 44.0 +0.3**
baz=213
**BELC Belle Mtn. Jos 123.61 80** P **PKiKP** **18 27 44.6 +0.5**
baz=213
**ISA Isabella, Lake 123.90 77** P **PKiKP** **18 27 45.1 +0.6**
baz=213,SNR=8.6
**TORD Torodi Ar. Bea 123.92 224** PKP **PKPdf** **18 27 43.9 -1.0**
comp=Z,2.1nm,0.5s,baz=142,slow=1.7,SNR=28
**TORD Torodi Ar. Bea 123.92 224** **PKPdf** **18 27 43.8 -1.0**
**LRMC Laurel Mtn Rad 124.10 78** P **PKiKP** **18 27 45.4 +0.4**
baz=213
**IRM Iron Mountain 124.13 81** P **PKiKP** **18 27 45.6 +0.6**
baz=213
**HEC Hector,Ludlow 124.16 79** P **PKiKP** **18 27 45.8 +0.7**
baz=213
**GSC Goldstone, Bar 124.34 79** P **PKiKP** **18 27 46.0 +0.6**
baz=213
**GMRC Granite Mounta 124.42 80** P **PKiKP** **18 27 46.2 +0.5**
baz=213,SNR=9.9
**TUC Tucson 124.55 86** PKIKP **PKPdf** **18 27 45.5 -0.1**
**TUC Tucson 124.55 86** PKPdf **PKPdf** **18 27 45.5 -0.1**
**TUC Tucson 124.55 86** P **PKiKP** **18 27 46.5 +0.5**
baz=212
**MPMC Manual Prospec 124.67 78** P **PKiKP** **18 27 46.5 +0.3**
baz=213
**PDMCI Parker Dam,Lak 124.70 82** P **PKiKP** **18 27 46.6 +0.5**
baz=213
**CWC Cottonwood Cre 124.72 77** P **PKiKP** **18 27 47.0 +0.7**
baz=213
**KURBB Kurchatov Arra 124.82 315** PKKPbc PKKPbc 18 37 26.2 +1.0
comp=Z,0.4nm,0.6s,baz=329,slow=4.3,SNR=6.4
KURBB PKKP 18 38 08.6
comp=Z,0.3nm,0.5s,baz=313,slow=2.3,SNR=5.8
**TUQ Turquoise Moun 124.85 79** P **PKiKP** **18 27 46.9 +0.4**
baz=213
**KURK Kurchatov 124.87 315** *ce*PKiKP **PKPdf** **18 27 45.5 0.0**
**KURK Kurchatov 124.87 315** PKPdf **PKPdf** **18 27 44.9 -0.6**
**TX32 Lajitas Array 125.28 94** **PKPdf** **18 27 46.1 -1.1**
**TXAR Lajitas Array 125.28 94** PKP **PKPdf** **18 27 45.9 -1.2**
comp=Z,1.5nm,0.7s,baz=200,slow=3.9,SNR=8.2
**YAK Yakutsk 125.29 351** PKP **PKPdf** **18 27 44.8 -1.1**
comp=Z,4.2nm,0.4s,baz=30,slow=1.3,SNR=11
**YAK Yakutsk 125.29 351** *e*PKIKP *e* **PKPdf** **18 27 44.6 -1.3**
YAK 18 29 34.7
YAK pmax pmax
comp=Z,15nm,0.9s
YAK pmax pmax
comp=N,2.0nm,0.9s
YAK pmax pmax
comp=E,1.0nm,0.9s
YAK pmax pmax
comp=Z,141nm,3.4s
YAK pmax pmax
comp=N,57nm,2.9s
YAK pmax pmax
comp=E,87nm,3.8s
**YAK Yakutsk 125.29 351** PKPdf **PKPdf** **18 27 44.3 -1.6**
**LCH Last Change Ra 125.57 77** **PKPdf** **18 27 47.1 -0.4**
**GRGR Grenville 125.72 147** IAMs_20 IAMs_20 19 24 34.9
comp=Z,1µm,19.0s
**O02D Mt. Diablo Mer 125.76 71** PKPdf **PKPdf** **18 27 47.4 -0.3**
**O02D Mt. Diablo Mer 125.76 71** P **PKiKP** **18 27 48.8 +0.7**
baz=214
**SEY Seymchan 125.77 4** ⇓*e*PKIKP **PKPdf** **18 27 47.0 +0.2**
**ZALV Zalesovo Beam 125.77 321** PKP **PKPdf** **18 27 46.0 -1.1**
comp=Z,0.7nm,0.4s,baz=170,slow=3.0,SNR=6.5
ZALV PP **PP** **18 29 43.9 +3.2**
comp=Z,2.1nm,0.9s,baz=195,slow=4.6,SNR=3.8
ZALV PKKP **PKKPdf** **18 38 06.2 +0.9**
comp=Z,0.8nm,0.6s,baz=316,slow=4.1,SNR=4.8
**ZALV Zalesovo Beam 125.77 321** PKIKP **PKPdf** **18 27 46.0 -1.1**
**X16A Lo Mia Camp, P 126.02 84** **PKPdf** **18 27 48.8 +0.2**
**121A Cookes Peak, D 126.10 88** P **PKPdf** **18 27 48.3 -0.4**
baz=212,SNR=12
**MPK Martis Peak 126.23 73** **PKPdf** **18 27 49.0 +0.1**
**GHAJ Ghor Haditha 126.23 269** IAMs_20 IAMs_20 19 13 44.0
comp=Z,1µm,20.0s
**BRZS Berezniki 126.24 310** *e*PKIKP **PKiKP** **18 27 49.2 +0.6**
**BRZS Berezniki 126.24 310** *e*PKP **PKiKP** **18 27 49.3 +0.6**
baz=311
**NVAR Mina Array Bea 126.27 75** PKP **PKiKP** **18 27 49.7 +0.4**
comp=Z,11nm,0.7s,baz=200,slow=4.8,SNR=80
**833A Chaparral WMA, 126.35 99** P **PKPdf** **18 27 49.0 -0.1**
baz=211
**N02D Trinity Center 126.45 70** PKPdf **PKPdf** **18 27 48.9 -0.1**
**N02D Trinity Center 126.45 70** P **PKiKP** **18 27 49.9 +0.5**
baz=214
**MNTX Cornudas Mount 126.50 91** IAMs_20 IAMs_20 19 11 20.1
comp=Z,1µm,21.0s
**MNTX Cornudas Mount 126.50 91** P **PKPdf** **18 27 49.5 +0.2**
baz=212
**M02C Callahan 126.73 70** P **PKiKP** **18 27 50.5 +0.5**
baz=215
**X18A Snowflake 126.79 85** **PKPdf** **18 27 48.7 -1.3**
**WUAZ Wupatki 126.96 83** IAMs_20 IAMs_20 19 11 51.7
comp=Z,1µm,20.0s
**WUAZ Wupatki 126.96 83** P **PKiKP** **18 27 51.1 +0.3**
baz=214
**L02E Cave Junction 127.04 69** P **PKiKP** **18 27 51.4 +0.9**
baz=215
**U15A North Rim 127.30 82** **PKPdf** **18 27 49.5 -1.5**
**R11A Troy Canyon, C 127.41 78** P **PKiKP** **18 27 52.1 +0.5**
baz=214,SNR=16
**K02D Willamette Mer 127.46 68** P **PKiKP** **18 27 51.9 +0.5**
baz=215
**M04C Macdoel 127.49 70** P **PKiKP** **18 27 52.2 +0.6**
baz=215
**L04D Klamath Falls 127.65 70** P **PKiKP** **18 27 51.9 0.0**
baz=215
**HUMO Hull Mountain 127.69 69** PKPdf **PKPdf** **18 27 51.2 0.0**
**J01E Myrtle Point 127.73 68** P **PKiKP** **18 27 52.3 +0.6**
baz=215
**Y22D IRIS PASSCAL I 127.79 88** IAMs_20 IAMs_20 19 12 30.4
comp=Z,964nm,19.0s
**JCT Junction City 128.00 97** PKIKP **PKPdf** **18 27 51.6 -0.7**
**JCT Junction City 128.00 97** PKPdf **PKPdf** **18 27 51.5 -0.7**
**JCT Junction City 128.00 97** P **PKPdf** **18 27 51.9 -0.3**
baz=212
**MOD Modoc Plateau 128.25 71** IAMs_20 IAMs_20 19 17 46.9
comp=Z,1µm,19.0s
**I03D Drain, OR 128.41 68** P **PKiKP** **18 27 53.6 +0.5**
baz=216
**J04D Umpqua Nationa 128.56 69** P **PKiKP** **18 27 53.9 +0.2**
baz=216
**ANMO Albuquerque 128.72 88** ⇑*e*PKIKP **PKPdf** **18 27 53.1 -0.6**
ANMO MLR MLR
comp=Z,693nm,16.0s
**ANMO Albuquerque 128.72 88** PKPdf **PKPdf** **18 27 52.9 -0.7**
**ANMO Albuquerque 128.72 88** IAMs_20 IAMs_20 19 24 58.2
comp=Z,968nm,18.0s
**ANMO Albuquerque 128.72 88** P **PKPdf** **18 27 53.8 +0.2**
baz=214
**I04A Tendick Farm, 128.88 68** P **PKPdf** **18 27 54.0 +0.5**
baz=216
**OHAK Old Harbor 128.95 38** P **PKiKP** **18 27 54.7 +0.9**
baz=211
**J05D Fort Rock, OR 128.97 70** P **PKiKP** **18 27 54.8 +0.3**
baz=216
**435B Jarrell 129.26 99** IAMs_20 IAMs_20 19 20 07.1
comp=Z,897nm,18.0s
**435B Jarrell 129.26 99** P **PKPdf** **18 27 55.1 +0.5**
baz=211
**H04D Lebanon 129.34 68** P **PKiKP** **18 27 55.3 +0.4**
baz=216
**GNI Garni 129.41 283** *d i*PKIKP **PKiKP** **18 27 56.4 +0.9**
**GNI Garni 129.41 283** IAMs_20 IAMs_20 19 19 38.5
comp=Z,1µm,20.0s
**MSTX Muleshoe 129.59 92** P **PKPdf** **18 27 55.3 +0.1**
baz=213
**BRVK Borovoye 129.63 311** *d i*PKIKP **PKPdf** **18 27 55.1 +0.6**
**BRVK Borovoye 129.63 311** PKPdf **PKPdf** **18 27 54.0 -0.5**
**BRVK Borovoye 129.63 311** IAMs_20 IAMs_20 19 19 18.1
comp=Z,1µm,22.0s
**MVCO Mesa Verde 129.66 84** PKPdf **PKPdf** **18 27 54.7 -0.7**
**MVCO Mesa Verde 129.66 84** P **PKPdf** **18 27 56.0 +0.5**
baz=214,SNR=19
**I05D Terrebonne, OR 129.78 69** P **PKiKP** **18 27 56.1 +0.1**
baz=216
**ABTX Abilene, Hawle 129.89 96** P **PKPdf** **18 27 55.9 +0.2**
baz=212
**TMUT Trail Mountain 130.15 81** **PKPdf** **18 27 56.6 +0.2**
**SJG San Juan 130.20 140** IAMs_20 IAMs_20 19 27 00.2
comp=Z,1µm,20.0s
**HUMP Col San Antoni 130.31 140** **PKPdf** **18 27 56.3 -0.6**
**CSS Mathiatis 130.32 269** IAMs_20 IAMs_20 19 17 52.1
comp=Z,1µm,21.0s
**WHTX Lake Whitney, 130.34 98** P **PKPdf** **18 27 56.6 +0.1**
baz=212
**PV10 Paradox Valley 130.38 83** PKPdf **PKPdf** **18 27 56.6 -0.1**
**GCPR Guaynabo City 130.40 140** **PKPdf** **18 27 56.0 -1.0**
**MAK Makhachkala 130.47 287** *i* P **Pdif** **18 24 52.5 +5.9**
MAK *i* 18 27 54.7
MAK pmax pmax
comp=Z,172nm,1.3s
**GAMB Gambell 130.51 24** **PKiKP** **18 27 56.7 +0.1**
**GAMB Gambell 130.51 24** P **PKiKP** **18 27 56.7 +0.1**
baz=204
**AMTX Amarillo 130.85 92** PKPdf **PKPdf** **18 27 57.4 -0.2**
**AMTX Amarillo 130.85 92** P **PKPdf** **18 27 58.0 +0.4**
baz=214
**S22A 4UR Ranch, Cre 130.86 85** P **PKPdf** **18 27 57.5 -0.3**
baz=215,SNR=11
**SMRT St. Maarten 131.01 143** IAMs_20 IAMs_20 19 26 42.6
comp=Z,1µm,21.0s
**E04D Cinebar 131.04 66** P **PKPdf** **18 27 58.1 +0.7**
baz=217
**GROC Groznyy 131.41 286** *i* PKIKP **PKiKP** **18 27 59.1 -0.1**
GROC pmax pmax
comp=Z,21nm,1.5s
**SDCO Great Sand Dun 131.47 87** P **PKPdf** **18 27 59.5 +0.6**
baz=215
**T25A Trinidad 131.47 88** P **PKPdf** **18 27 59.3 +0.5**
baz=215
**D03D Eldon 131.60 65** P **PKPdf** **18 27 58.9 +0.5**
baz=218
**BILL Bilibino 131.66 10** ⇑PKIKP **PKiKP** **18 27 59.0 +0.1**
**BILL Bilibino 131.66 10** PKPdf **PKPdf** **18 27 57.4 -0.5**
**BRSE Bradley Lake S 131.80 38** P **PKPdf** **18 27 59.2 +0.8**
baz=213
**HWUT Hardware Ranch 131.85 79** IAMs_20 IAMs_20 19 14 03.2
comp=Z,2µm,20.0s
**ZEI Tsey 131.91 284** *i* PKIKP **PKiKP** **18 28 01.7 +1.2**
ZEI pmax pmax
comp=Z,7.0nm,1.7s
**SMCO Snowmass 131.96 84** IAMs_20 IAMs_20 19 13 46.0
comp=Z,944nm,20.0s
**WMOK Wichita Mounta 132.05 95** P **PKPdf** **18 27 59.9 +0.1**
baz=213
**HLID Hailey 132.15 75** IAMs_20 IAMs_20 19 15 20.2
comp=Z,1µm,20.0s
**HLID Hailey 132.15 75** P **PKPdf** **18 28 00.6 +0.8**
baz=217
**LTY Liberty 132.39 67** **PKPdf** **18 28 00.3 +0.2**
**B05A Bryant 132.59 65** P **PKiKP** **18 28 01.4 +0.1**
baz=218
**NCK Nalchik 132.61 284** ⇓*i*PKIKP **PKiKP** **18 28 02.5 +0.9**
**Q24A Divide 132.62 86** P **PKPdf** **18 28 01.3 +0.2**
baz=216
**L19K White Mountain 132.76 34** P **PKiKP** **18 28 01.3 -0.1**
baz=213
**NEY Neytrino 132.80 283** ⇓*i*PKIKP **PKiKP** **18 28 04.4 +2.2**
**TNA Tin City 132.82 24** PKPdf **PKPdf** **18 27 59.9 -0.2**
**TNA Tin City 132.82 24** P **PKiKP** **18 28 01.0 -0.3**
baz=207,SNR=27
**ISCO Idaho Springs 133.08 85** P **PKPdf** **18 28 01.8 -0.1**
baz=216
**KBZ Khabaz 133.10 284** PKP **PKPdf** **18 28 01.3 0.0**
comp=Z,5.4nm,0.9s,baz=162,slow=2.8,SNR=15
**KBZ Khabaz 133.10 284** *de*PKIKP **PKiKP** **18 28 02.5 0.0**
KBZ MLR MLR
comp=Z,893nm,18.0s
**TTA Tatalina 133.11 32** P **PKiKP** **18 28 02.2 +0.1**
baz=212
**RC01 Rabbit Creek A 133.20 37** P **PKiKP** **18 28 02.0 -0.3**
baz=215
**L20K Farewell, AK 133.26 34** P **PKiKP** **18 28 02.1 -0.3**
baz=213
**KIV Kislovodsk 133.38 284** *i* PKIKP **PKPdf** **18 28 02.7 +0.7**
KIV *e* 18 30 28.2
KIV *e*SS SS 18 48 11.4 -2.8
KIV pmax pmax
comp=Z,11nm,1.0s
**KIV Kislovodsk 133.38 284** PKPdf **PKPdf** **18 28 01.2 -0.9**
**REDW Red Top Meadow 133.57 78** PKPpre 18 27 49.9
**KARP Karpathos 133.61 264** IAMs_20 IAMs_20 19 27 58.1
comp=Z,2µm,22.0s
**BW06 Boulder Array 133.68 79** IAMs_20 IAMs_20 19 15 34.5
comp=Z,1µm,21.0s
**BW06 Boulder Array 133.68 79** P **PKPdf** **18 28 02.9 +0.1**
baz=217
**PDAR Pinedale Array 133.68 79** PKhKP PKPpre 18 27 48.5
comp=Z,0.3nm,0.5s,baz=171,slow=3.9,SNR=3.9
PDAR PKP **PKPdf** **18 28 02.7 -0.1**
comp=Z,1.6nm,0.6s,baz=172,slow=3.1,SNR=14

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **133.68** | **79** | PKPpre | PKPpre | 18 27 47.7 | | | |
| PDAR | | | | PKPdf | **PKPdf** | **18 28 02.2** | **-0.7** | | |
| **GLI** | **Glacier Island** | **133.77** | **39** | P | **PKiKP** | **18 28 03.6** | **+0.2** | | |
| | baz=216 | | | | | | | | |
| **N23A** | **Red Feather La** | **133.81** | **84** | P | **PKPdf** | **18 28 03.6** | **+0.4** | | |
| | baz=217 | | | | | | | | |
| **KNK** | **Knik Glacier** | **133.82** | **38** | P | **PKiKP** | **18 28 04.0** | **+0.5** | | |
| | baz=215 | | | | | | | | |
| **DWPF** | **Disney Wildern** | **133.94** | **117** | IAMs_20 | IAMs_20 | 19 21 41.9 | | | |
| | comp=Z,949nm,18.0s | | | | | | | | |
| **K20K** | **Telida** | **133.95** | **33** | P | **PKiKP** | **18 28 03.5** | **-0.2** | | |
| | baz=214 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **134.07** | **273** | PKhKP | PKPpre | 18 27 55.6 | | | |
| | comp=Z,0.6nm,0.4s,baz=331,slow=5.1,SNR=1.9 | | | | | | | | |
| BRTR | | | | PKP | **PKPdf** | **18 28 04.4** | **+0.8** | | |
| | comp=Z,1.5nm,0.7s,baz=165,slow=5.1,SNR=5.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **134.07** | **273** | PKHKP | PKPpre | 18 27 47.7 | | | |
| BRTR | | | | | | 18 28 04.2 | | | |
| **BRTR** | **Keskin Array B** | **134.07** | **273** | | PKPdf | 18 27 55.6 | -8.0 | | |
| **BRTR** | **Keskin Array B** | **134.07** | **273** | PKPpre | PKPpre | 18 27 47.7 | | | |
| **BRTR** | **Keskin Array B** | **134.07** | **273** | | **PKPdf** | **18 28 04.2** | **+0.6** | | |
| **BR131** | **Keskin Array S** | **134.07** | **273** | *i* PKIKP | **PKPdf** | **18 28 03.1** | **-0.5** | | |
| **GOF** | **Gofitskoye** | **134.09** | **285** | ⇑*e*PKiKP | **PKPdf** | **18 28 03.0** | **-0.2** | | |
| **FLWY** | **Flagg Ranch** | **134.21** | **77** | PKPpre | PKPpre | 18 27 48.1 | | | |
| FLWY | | | | | **PKPdf** | **18 28 04.3** | **+0.5** | | |
| FLWY | | | | IAMs_20 | IAMs_20 | 19 16 07.5 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | |
| **TUL1** | **Leonard** | **134.38** | **97** | P | **PKPdf** | **18 28 04.4** | **+0.3** | | |
| | baz=214 | | | | | | | | |
| **SOC** | **Sochi** | **134.40** | **281** | *i* PKIKP | **PKiKP** | **18 28 08.6** | **+3.4** | | |
| SOC | | | | *e* | | 18 30 42.0 | | | |
| SOC | | | | *e*PPP | PPP | 18 33 29.6 | | | |
| SOC | | | | *e*PS | **PS** | **18 40 56.7** | **+0.5** | | |
| SOC | | | | *e*SS | SS | 18 48 21.3 | -5.1 | | |
| SOC | | | | *e*SSS | SSS | 18 53 27.2 | | | |
| SOC | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **IDI** | **Anoyia** | **134.42** | **262** | IAMs_20 | IAMs_20 | 19 40 25.6 | | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| **CAST** | **Castle Rocks** | **134.50** | **34** | P | **PKiKP** | **18 28 04.8** | **0.0** | | |
| | baz=215 | | | | | | | | |
| **YMR** | **Madison River** | **134.55** | **76** | | **PKPdf** | **18 28 03.2** | **-1.2** | | |
| **KLU** | **Klutina** | **134.60** | **39** | P | **PKPdf** | **18 28 04.3** | **+0.6** | | |
| | baz=217 | | | | | | | | |
| **J20K** | **Nowinta River** | **134.62** | **32** | P | **PKiKP** | **18 28 04.7** | **-0.3** | | |
| | baz=214 | | | | | | | | |
| **W39A** | **Magazine** | **134.69** | **99** | P | **PKPdf** | **18 28 04.7** | **0.0** | | |
| | baz=213 | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **134.83** | **34** | P | **PKiKP** | **18 28 05.2** | **-0.2** | | |
| | baz=215 | | | | | | | | |
| **TIXI** | **Tiksi** | **134.88** | **353** | *de*PKIKP | **PKPdf** | **18 28 04.2** | **+0.4** | | |
| **TIXI** | **Tiksi** | **134.88** | **353** | PKPpre | PKPpre | 18 27 47.1 | | | |
| TIXI | | | | PKPdf | **PKPdf** | **18 28 02.7** | **-1.1** | | |
| **MSO** | **Missoula** | **134.93** | **72** | IAMs_20 | IAMs_20 | 19 23 11.6 | | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| **MSO** | **Missoula** | **134.93** | **72** | P | **PKiKP** | **18 28 06.3** | **-0.1** | | |
| | baz=219 | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **134.96** | **91** | IAMs_20 | IAMs_20 | 19 17 01.3 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| **WAT6** | **Susitna Watana** | **134.97** | **37** | P | **PKiKP** | **18 28 06.0** | **0.0** | | |
| | baz=216 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **134.98** | **75** | P | **PKPdf** | **18 28 05.5** | **+0.4** | | |
| | baz=219 | | | | | | | | |
| **TRF** | **Thorofare Moun** | **134.99** | **35** | PKPdf | **PKPdf** | **18 28 04.2** | **-0.4** | | |
| **TRF** | **Thorofare Moun** | **134.99** | **35** | P | **PKiKP** | **18 28 06.3** | **+0.3** | | |
| | baz=216 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **135.03** | **38** | P | **PKiKP** | **18 28 06.0** | **0.0** | | |
| | baz=217 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **135.08** | **40** | P | **PKiKP** | **18 28 06.1** | **-0.1** | | |
| | baz=217 | | | | | | | | |
| **RND** | **Reindeer** | **135.34** | **36** | PKIKP | **PKPdf** | **18 28 04.4** | **-0.7** | | |
| **RND** | **Reindeer** | **135.34** | **36** | PKPdf | **PKPdf** | **18 28 04.4** | **-0.7** | | |
| **BPAW** | **Bear Paw Mtn.** | **135.34** | **34** | P | **PKiKP** | **18 28 06.6** | **+0.1** | | |
| | baz=216 | | | | | | | | |
| **W41B** | **Gary Mavity, V** | **135.36** | **101** | P | **PKPdf** | **18 28 06.2** | **+0.3** | | |
| | baz=213,SNR=10 | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **135.44** | **101** | PKPdf | **PKPdf** | **18 28 05.0** | **-1.0** | | |
| **HARP** | **HAARP** | **135.55** | **39** | P | **PKPdf** | **18 28 06.3** | **+0.9** | | |
| | baz=218 | | | | | | | | |
| **MCK** | **McKinley** | **135.58** | **35** | P | **PKPdf** | **18 28 06.3** | **+0.9** | | |
| | baz=216 | | | | | | | | |
| **OGNE** | **Ogallala** | **135.63** | **87** | P | **PKPdf** | **18 28 07.2** | **+0.8** | | |
| | baz=217 | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **135.87** | **108** | P | **PKPdf** | **18 28 07.0** | **0.0** | | |
| | baz=211 | | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **136.01** | **100** | | **PKPdf** | **18 28 05.7** | **-1.4** | | |
| **U40A** | **Yellville** | **136.07** | **99** | P | **PKPdf** | **18 28 06.5** | **-0.7** | | |
| | baz=214 | | | | | | | | |
| **MLY** | **Manley** | **136.16** | **33** | P | **PKiKP** | **18 28 07.9** | **-0.3** | | |
| | baz=216 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **136.16** | **32** | P | **PKPdf** | **18 28 07.5** | **+1.1** | | |
| | baz=216 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **136.17** | **40** | P | **PKPdf** | **18 28 07.5** | **+0.9** | | |
| | baz=219 | | | | | | | | |
| **NEA2** | **Nenana** | **136.24** | **35** | P | **PKiKP** | **18 28 08.3** | **0.0** | | |
| | baz=217 | | | | | | | | |
| **ANN** | **Anapa** | **136.38** | **281** | *i* P | **Pdif** | **18 25 13.4** | **+0.5** | | |
| ANN | | | | *e* | | 18 30 48.9 | | | |
| ANN | | | | *e* | | 18 35 22.9 | | | |
| ANN | | | | *e*SS | SS | 18 48 49.4 | -0.6 | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,76nm,1.3s | | | | | | | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,79nm,1.4s | | | | | | | | |
| **WRH** | **Wood River Hil** | **136.40** | **35** | | **PKPdf** | **18 28 05.8** | **-1.1** | | |
| **ARU** | **Arti** | **136.47** | **306** | *i* PKIKP | **PKPdf** | **18 28 08.4** | **+1.1** | | |
| ARU | | | | MLR | MLR | | | | |
| | comp=Z,768nm,18.0s | | | | | | | | |
| **ARU** | **Arti** | **136.47** | **306** | PKPdf | **PKPdf** | **18 28 07.0** | **-0.3** | | |
| **L26K** | **Log Cabin Wild** | **136.56** | **39** | P | **PKiKP** | **18 28 09.1** | **+0.1** | | |
| | baz=219 | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **136.61** | **34** | P | **PKiKP** | **18 28 09.1** | **+0.1** | | |
| | baz=217 | | | | | | | | |
| **KSU1** | **Kansas State U** | **136.62** | **93** | IAMs_20 | IAMs_20 | 19 17 07.0 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| **KSU1** | **Kansas State U** | **136.62** | **93** | P | **PKPdf** | **18 28 08.3** | **+0.1** | | |
| | baz=216 | | | | | | | | |
| **HDA** | **Harding Lake** | **136.65** | **36** | | **PKPdf** | **18 28 06.5** | **-0.8** | | |
| **HDA** | **Harding Lake** | **136.65** | **36** | P | **PKPdf** | **18 28 08.0** | **+0.6** | | |
| | baz=218 | | | | | | | | |
| **RIDG** | **Independent Ri** | **136.69** | **38** | P | **PKPdf** | **18 28 08.4** | **+0.8** | | |
| | baz=219 | | | | | | | | |
| **COLA** | **College** | **136.78** | **35** | ⇓*e*PKIKP | **PKPdf** | **18 28 06.9** | **-0.6** | | |
| COLA | | | | MLR | MLR | | | | |
| | comp=Z,539nm,17.0s | | | | | | | | |
| **BVCY** | **Beaver Creek** | **136.81** | **41** | P | **PKiKP** | **18 28 09.2** | **-0.4** | | |
| | baz=220 | | | | | | | | |
| **ILAR** | **Eielson Array** | **136.95** | **36** | PKhKP | PKPpre | 18 27 55.9 | | | |
| | comp=Z,1.1nm,0.8s,baz=244,slow=5.2,SNR=8.5 | | | | | | | | |
| ILAR | | | | PKP | **PKPdf** | **18 28 07.1** | **-0.8** | | |
| | comp=Z,2.7nm,0.7s,baz=282,slow=3.5,SNR=27 | | | | | | | | |
| **L27K** | **Beaver Creek,** | **137.03** | **40** | | **PKPdf** | **18 28 07.5** | **-0.6** | | |
| **L27K** | **Beaver Creek,** | **137.03** | **40** | P | **PKiKP** | **18 28 09.6** | **-0.4** | | |
| | baz=220 | | | | | | | | |
| **SCRK** | **Sand Creek** | **137.12** | **38** | P | **PKiKP** | **18 28 10.1** | **-0.1** | | |
| | baz=219 | | | | | | | | |
| **RSSD** | **Black Hills** | **137.23** | **82** | PKHKP | PKPpre | 18 27 55.1 | | | |
| RSSD | | | | | | 18 28 08.1 | | | |
| RSSD | | | | MLR | MLR | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | |
| **RSSD** | **Black Hills** | **137.23** | **82** | | PKPpre | 18 27 55.1 | | | |
| RSSD | | | | PKPdf | **PKPdf** | **18 28 08.1** | **-1.3** | | |
| **RSSD** | **Black Hills** | **137.23** | **82** | IAMs_20 | IAMs_20 | 19 19 14.4 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | |
| **RSSD** | **Black Hills** | **137.23** | **82** | P | **PKPdf** | **18 28 10.0** | **+0.6** | | |
| | baz=219 | | | | | | | | |
| **J25K** | **Salcha River,** | **137.23** | **36** | P | **PKiKP** | **18 28 10.1** | **-0.4** | | |
| | baz=219 | | | | | | | | |
| **J26L** | **Joseph Creek** | **137.64** | **37** | P | **PKiKP** | **18 28 10.9** | **-0.4** | | |
| | baz=220 | | | | | | | | |
| **EGMT** | **Eagleton** | **137.67** | **74** | IAMs_20 | IAMs_20 | 19 19 06.2 | | | |
| | comp=Z,911nm,20.0s | | | | | | | | |
| **WVT** | **Waverly** | **138.12** | **104** | PKIKP | **PKPdf** | **18 28 09.9** | **-1.1** | | |
| WVT | | | | MLR | MLR | | | | |
| | comp=Z,700nm,21.0s | | | | | | | | |
| **WVT** | **Waverly** | **138.12** | **104** | PKPdf | **PKPdf** | **18 28 09.8** | **-1.1** | | |
| **NRIK** | **Noril'sk** | **138.19** | **333** | PKhKP | PKPpre | 18 28 03.8 | | | |
| | comp=Z,3.7nm,0.8s,baz=104,slow=4.1,SNR=4.6 | | | | | | | | |
| **NRIK** | **Noril'sk** | **138.19** | **333** | ⇓*i* PKIKP | **PKPdf** | **18 28 10.7** | **+0.6** | | |
| **CCM** | **Cathedral Cave** | **138.20** | **99** | PKHKP | PKPpre | 18 27 58.5 | | | |
| CCM | | | | | | 18 28 09.4 | | | |
| CCM | | | | MLR | MLR | | | | |
| | comp=Z,800nm,22.0s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **138.20** | **99** | | PKPpre | 18 27 58.5 | | | |
| CCM | | | | PKPdf | **PKPdf** | **18 28 09.4** | **-1.7** | | |
| **FVM** | **French Village** | **138.51** | **100** | PKIKP | **PKPdf** | **18 28 10.4** | **-1.3** | | |
| **FVM** | **French Village** | **138.51** | **100** | | **PKPdf** | **18 28 10.4** | **-1.3** | | |
| **EGAK** | **Eagle** | **138.53** | **38** | | PKPpre | 18 28 01.4 | | | |
| **M31M** | **Drury Creek, Y** | **138.65** | **44** | P | **PKiKP** | **18 28 12.8** | **-0.5** | | |
| | baz=223 | | | | | | | | |
| **FYU** | **Fort Yukon** | **138.78** | **35** | IAMs_20 | IAMs_20 | 19 20 59.5 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **FARO** | **Faro, Yukon** | **139.00** | **45** | P | **PKiKP** | **18 28 14.1** | **+0.1** | | |
| | baz=223 | | | | | | | | |
| **P40A** | **Paris** | **139.04** | **97** | | PKPpre | 18 28 02.1 | | | |
| **TOLK** | **Toolik Lake Re** | **139.31** | **31** | P | **PKiKP** | **18 28 14.6** | **+0.1** | | |
| | baz=220 | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **139.33** | **290** | *e*PKIKP | **PKiKP** | **18 28 14.5** | **-0.5** | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **139.89** | **101** | | PKPpre | 18 28 04.5 | | | |
| **A21K** | **Barrow** | **139.92** | **25** | P | **PKiKP** | **18 28 15.2** | **-0.4** | | |
| | baz=217 | | | | | | | | |
| **VORD** | **Divnogorie** | **140.21** | **288** | *e*PKIKP | **PKPdf** | **18 28 14.3** | **0.0** | | |
| VORD | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **140.27** | **100** | | PKPpre | 18 28 05.0 | | | |
| P43A | | | | | **PKPdf** | **18 28 14.8** | **0.0** | | |
| **ECSD** | **EROS Data Cent** | **140.30** | **89** | IAMs_20 | IAMs_20 | 19 22 52.5 | | | |
| | comp=Z,997nm,20.0s | | | | | | | | |
| **SCIA** | **State Center** | **140.41** | **94** | IAMs_20 | IAMs_20 | 19 19 56.4 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| **VSR** | **Storozhevoye** | **140.44** | **288** | *e*PKIKP | **PKiKP** | **18 28 16.9** | **-0.4** | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **140.55** | **104** | PKHKP | PKPpre | 18 28 05.5 | | | |
| **WCI** | **Wyandotte Cave** | **140.55** | **104** | | PKPpre | 18 28 05.5 | | | |
| **VORR** | **Voronezh** | **140.76** | **289** | *e*PKIKP | **PKPdf** | **18 28 13.6** | **-1.7** | | |
| VORR | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.3s | | | | | | | | |
| **CFR** | **Carcaliu** | **140.87** | **273** | ⇑P | **PKPdf** | **18 28 12.4** | **-3.3** | | |
| **CFR** | **Carcaliu** | **140.87** | **273** | ⇑PKIKP | **PKPdf** | **18 28 12.4** | **-3.3** | | |
| **CEL** | **Celeste** | **140.90** | **255** | IAMs_20 | IAMs_20 | 19 26 29.9 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| **VTS** | **Vitosha** | **141.12** | **266** | ⇑P | **PKPdf** | **18 28 13.7** | **-2.7** | | |
| **VTS** | **Vitosha** | **141.12** | **266** | ⇑PKIKP | **PKPdf** | **18 28 13.7** | **-2.7** | | |
| **S51A** | **Beattyville** | **141.24** | **108** | | PKPpre | 18 28 08.6 | | | |
| **TIP** | **Timpagrande** | **141.28** | **257** | IAMs_20 | IAMs_20 | 19 33 35.9 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **KIRV** | **Kirov** | **141.45** | **303** | *de*PKIKP | **PKPdf** | **18 28 17.5** | **+1.2** | | |
| **LPSR** | **Galich'ya Gora** | **141.54** | **290** | *e*PKIKP | **PKPdf** | **18 28 14.7** | **-1.9** | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| **CNNC** | **Cliffs of the** | **141.62** | **116** | IAMs_20 | IAMs_20 | 19 42 58.4 | | | |
| | comp=Z,898nm,21.0s | | | | | | | | |
| **TIR** | **Tirane** | **141.64** | **262** | IAMs_20 | IAMs_20 | 19 33 22.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **SFIN** | **Lafayette** | **141.95** | **101** | | PKPpre | 18 28 10.6 | | | |
| **VRI** | **Vrincioaia** | **142.04** | **273** | ⇑P | **PKPdf** | **18 28 12.5** | **-5.3** | | |
| **VRI** | **Vrincioaia** | **142.04** | **273** | ⇑PKHKP | PKPpre | 18 28 12.5 | | | |
| **PLOR** | **Plostina** | **142.06** | **273** | ⇓P | **PKiKP** | **18 28 21.9** | **+1.1** | | |
| **PLOR** | **Plostina** | **142.06** | **273** | ⇓PKIKP | **PKiKP** | **18 28 21.9** | **+1.1** | | |
| **L42A** | **Oliver, Polo** | **142.10** | **97** | | PKPpre | 18 28 11.6 | | | |
| **ZGR** | **Zagora** | **142.11** | **224** | P | **PKPdf** | **18 28 15.0** | **-3.6** | | |
| **MLR** | **Muntele Rosu** | **142.11** | **272** | ⇓P | **PKPdf** | **18 28 17.9** | **-0.2** | | |
| **MLR** | **Muntele Rosu** | **142.11** | **272** | ⇓PKIKP | **PKPdf** | **18 28 17.9** | **-0.2** | | |
| **MLR** | **Muntele Rosu** | **142.11** | **272** | IAMs_20 | IAMs_20 | 19 37 41.3 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **142.25** | **111** | IAMs_20 | IAMs_20 | 19 34 34.3 | | | |
| | comp=Z,854nm,18.0s | | | | | | | | |
| **JFWS** | **Jewell Farm** | **142.56** | **96** | IAMs_20 | IAMs_20 | 19 20 14.1 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | |
| **ARR** | **Arges** | **142.61** | **270** | ⇓P | **PKPdf** | **18 28 19.6** | **+0.7** | | |
| **TZRR** | **Tazzarine** | **142.71** | **224** | P | **PKPdf** | **18 28 17.0** | **-2.7** | | |
| **PDG** | **Podgorica** | **142.78** | **262** | IAMs_20 | IAMs_20 | 19 32 16.7 | | | |
| | comp=Z,926nm,20.0s | | | | | | | | |
| **SORM** | **Soroca** | **143.00** | **277** | ⇓P | **PKPdf** | **18 28 18.5** | **-0.9** | | |
| **SORM** | **Soroca** | **143.00** | **277** | ⇓PKIKP | **PKPdf** | **18 28 18.5** | **-0.9** | | |
| **P51A** | **Williamsport** | **143.00** | **106** | | PKPpre | 18 28 14.7 | | | |
| **LOT** | **Lotru** | **143.07** | **270** | ⇓P | PKPbc | 18 28 16.6 | -0.2 | | |
| **OUZM** | **OUZ** | **143.20** | **222** | P | **PKPdf** | **18 28 20.0** | **-0.5** | | |
| **HERR** | **Herculane** | **143.25** | **268** | ⇑P | PKPab | 18 28 16.7 | +0.9 | | |
| **F36A** | **Milaca** | **143.34** | **90** | PKPdf | PKPab | 18 28 16.0 | -0.1 | | |
| **TTIG** | **Tnine Tigouga,** | **143.36** | **220** | P | **PKPdf** | **18 28 22.0** | **+1.1** | | |
| **BRY** | **Bratogost** | **143.47** | **262** | *e*P | PKPbc | 18 28 18.0 | 0.0 | | |
| **GZR** | **Gura Zlata** | **143.48** | **269** | ⇑P | PKPbc | 18 28 18.0 | +0.2 | | |
| **GZR** | **Gura Zlata** | **143.48** | **269** | ⇑PKHKP | PKPpre | 18 28 18.0 | | | |
| **MDVR** | **Moldovita** | **143.50** | **267** | ⇓P | PKPab | 18 28 17.2 | +0.3 | | |
| **ACSO** | **Alum Creek Sta** | **143.66** | **106** | IAMs_20 | IAMs_20 | 19 26 11.8 | | | |
| | comp=Z,869nm,21.0s | | | | | | | | |
| **RUDO** | **Rudo** | **143.66** | **264** | *e*P | PKPab | 18 28 17.4 | -0.1 | | |
| **DIVS** | **Divibare** | **143.75** | **265** | *e*P | PKPab | 18 28 18.3 | +0.4 | | |
| **OUK** | **Oukaimeden** | **143.81** | **221** | P | **PKPdf** | **18 28 23.0** | **+1.2** | | |
| **BBLS** | **Lazići** | **143.84** | **264** | *e*P | PKPab | 18 28 18.8 | +0.6 | | |
| **ARCR** | **ARCALIA** | **144.04** | **272** | ⇓P | PKPbc | 18 28 20.1 | +0.7 | | |
| **BURAR** | **Bucovina Array** | **144.04** | **273** | ⇓P | **PKPdf** | **18 28 21.3** | **-0.1** | | |
| **BUR08** | **Bucovina Ar. S** | **144.07** | **273** | PKPdf | **PKPab** | **18 28 17.7** | **-1.3** | | |
| **AGMN** | **Agassiz Nation** | **144.09** | **85** | IAMs_20 | IAMs_20 | 19 25 48.0 | | | |
| | comp=Z,976nm,20.0s | | | | | | | | |
| **BZS** | **Buzias** | **144.18** | **268** | ⇑P | **PKPab** | **18 28 19.5** | **+0.1** | | |
| **BZS** | **Buzias** | **144.18** | **268** | ⇑PKIKP | **PKPab** | **18 28 19.5** | **+0.1** | | |
| **MOS** | **Moscow** | **144.27** | **293** | *i* PKIKP | **PKPab** | **18 28 19.1** | **-0.2** | | |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,99nm,1.7s | | | | | | | | |
| **MDT** | **Midelt** | **144.27** | **227** | P | **PKPdf** | **18 28 22.6** | **+0.4** | | |
| **OBN** | **Obninsk** | **144.29** | **291** | ⇑P | **PKPdf** | **18 28 21.2** | **-0.2** | | |
| **OBN** | **Obninsk** | **144.29** | **291** | *de*PKIKP | PKPbc | 18 28 20.3 | +0.5 | | |
| OBN | | | | *e* | | 18 31 40.4 | | | |
| OBN | | | | *e*PPP | PPP | 18 34 52.4 | | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,130nm,1.6s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,520nm,21.0s | | | | | | | | |
| **OBN** | **Obninsk** | **144.29** | **291** | PKPdf | **PKPab** | **18 28 19.4** | **0.0** | | |
| **TEKS** | **Tekeris** | **144.31** | **265** | *e*P | **PKPab** | **18 28 19.0** | **-0.9** | | |
| **CBN** | **Corbin Frederi** | **144.37** | **114** | IAMs_20 | IAMs_20 | 19 38 06.3 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| **O53A** | **New Philadelph** | **144.44** | **108** | | **PKPab** | **18 28 19.9** | **-0.6** | | |
| **O53A** | **New Philadelph** | **144.44** | **108** | P | **PKPab** | **18 28 20.5** | **0.0** | | |
| | baz=214,SNR=30 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.46** | **280** | PKP | **PKPab** | **18 28 19.4** | **-0.9** | | |
| | comp=Z,14nm,0.6s,baz=122,slow=2.4,SNR=55 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **144.46** | **280** | ⇑*i* PKIKP | **PKPdf** | **18 28 22.8** | **+0.9** | | |
| AKBB | | | | MLR | MLR | | | | |
| | comp=Z,588nm,19.0s | | | | | | | | |
| **MCWV** | **Mont Chateau** | **144.54** | **110** | P | **PKPab** | **18 28 20.8** | **-0.1** | | |
| | baz=214,SNR=5.9 | | | | | | | | |
| **DRGR** | | **144.57** | **270** | ⇓P | **PKPab** | **18 28 21.2** | **+0.3** | | |
| **DRGR** | | **144.57** | **270** | ⇓PKIKP | **PKPab** | **18 28 21.2** | **+0.3** | | |
| **RICI** | **Ricice** | **144.57** | **261** | P | **PKPab** | **18 28 20.8** | **-0.1** | | |
| **CZD** | **Col de Zad** | **144.61** | **226** | P | **PKPdf** | **18 28 24.0** | **+0.8** | | |
| **HVAR** | **Hvar** | **144.63** | **260** | P | **PKPab** | **18 28 20.3** | **-0.8** | | |
| **FRGS** | **Fruska Gora** | **144.65** | **266** | ⇑P | **PKPab** | **18 28 20.3** | **-0.9** | | |
| **FRGS** | **Fruska Gora** | **144.65** | **266** | *e*P | **PKPab** | **18 28 19.9** | **-1.3** | | |
| **SIRR** | **Siria** | **144.65** | **269** | ⇑P | **PKPab** | **18 28 21.3** | **+0.2** | | |
| **VSL** | **Villasalto** | **144.75** | **249** | IAMs_20 | IAMs_20 | 19 31 20.8 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| **BMR** | **Baia Mare** | **144.86** | **272** | ⇑P | **PKPab** | **18 28 22.0** | **+0.2** | | |
| **BMR** | **Baia Mare** | **144.86** | **272** | ⇑PKIKP | **PKPab** | **18 28 22.0** | **+0.2** | | |
| **PRGR** | **Permogore** | **144.89** | **305** | *e*PKIKP | PKPbc | 18 28 22.0 | +0.5 | | |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,285nm,1.5s | | | | | | | | |
| **H43A** | **Windswept, Lux** | **144.89** | **97** | | **PKPab** | **18 28 20.7** | **-1.4** | | |
| **JBK** | **JBK** | **144.96** | **230** | P | **PKPdf** | **18 28 24.0** | **+0.4** | | |
| **SRHM** | **Skhour des Reh** | **145.00** | **222** | P | **PKPdf** | **18 28 25.0** | **+1.4** | | |
| **AAM** | **Ann Arbor** | **145.03** | **103** | P | **PKPbc** | **18 28 22.2** | **-0.4** | | |
| | baz=217 | | | | | | | | |
| **EANR** | **'Ain N'Sour** | **145.06** | **236** | P | **PKiKP** | **18 28 35.0** | **+7.6** | | |
| **LCRM** | **LCR** | **145.15** | **227** | P | **PKPdf** | **18 28 26.0** | **+2.1** | | |
| **KIJV** | **Kijevo** | **145.30** | **261** | P | **PKPbc** | **18 28 23.2** | **-0.2** | | |
| **MGRS** | **Mrkonjic Grad** | **145.31** | **262** | *e*P | **PKPbc** | **18 28 21.8** | **-1.7** | | |
| **AQU** | **L'Aquila** | **145.34** | **256** | IAMs_20 | IAMs_20 | 19 32 33.4 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| **AQU** | **L'Aquila** | **145.34** | **256** | *e*P | **PKPab** | **18 28 25.8** | **+2.0** | | |
| **LTVH** | **Ltavrtes, Hu** | **145.38** | **270** | ⇓P | **PKPab** | **18 28 24.5** | **+0.8** | | |
| **ULM** | **Lac du Bonnet** | **145.50** | **83** | PKP | **PKPdf** | **18 28 21.3** | **-2.4** | | |
| | comp=Z,23nm,0.6s,baz=225,slow=3.1,SNR=34 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **145.50** | **83** | PKP2 | **PKPdf** | **18 28 22.2** | **-1.5** | | |
| **ULM** | **Lac du Bonnet** | **145.50** | **83** | PKPdf | **PKPdf** | **18 28 22.2** | **-1.5** | | |
| **MORI** | **Morici** | **145.51** | **260** | P | **PKPdf** | **18 28 23.6** | **-0.3** | | |
| **ZHG** | **ZHG** | **145.51** | **224** | P | **PKPab** | **18 28 26.0** | **+1.2** | | |
| **COWI** | **Conover** | **145.52** | **93** | IAMs_20 | IAMs_20 | 19 24 03.6 | | | |
| | comp=Z,997nm,20.0s | | | | | | | | |
| **BLY** | **Banja Luka** | **145.53** | **263** | *e*P | **PKPdf** | **18 28 23.9** | **0.0** | | |
| **N54A** | **Moraine State** | **145.56** | **108** | P | **PKPdf** | **18 28 24.2** | **0.0** | | |
| | baz=215,SNR=20 | | | | | | | | |
| **O56A** | **Blue Knob Stat** | **145.60** | **111** | P | **PKPdf** | **18 28 24.6** | **+0.3** | | |
| | baz=214,SNR=36 | | | | | | | | |
| **AVE** | **Averroes** | **145.62** | **223** | P | **PKPab** | **18 28 26.1** | **+1.1** | | |
| **TRPA** | **Tarpa** | **145.64** | **272** | ⇓P | **PKPbc** | **18 28 24.5** | **+0.2** | | |
| **TRPA** | **Tarpa** | **145.64** | **272** | PKPDF | **PKPbc** | **18 28 24.4** | **+0.2** | | |
| **M53A** | **WI Miller and** | **145.65** | **107** | P | **PKPdf** | **18 28 23.9** | **-0.3** | | |
| | baz=215,SNR=8.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.68** | **54** | PKP | **PKPdf** | **18 28 21.2** | **-2.4** | | |
| | comp=Z,39nm,0.7s,baz=239,slow=2.7,SNR=258 | | | | | | | | |
| YKA | | | | PKPbc | **PKPbc** | **18 28 23.7** | **-0.3** | | |
| | comp=Z,40nm,0.7s,baz=233,slow=2.9,SNR=391 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.68** | **54** | PKPdf | **PKPdf** | **18 28 20.9** | **-2.7** | | |
| **SICH** | **Sidi Chahed** | **145.69** | **226** | P | **PKPab** | **18 28 27.0** | **+1.7** | | |
| **EYMN** | **Ely** | **145.82** | **89** | IAMs_20 | IAMs_20 | 19 30 09.7 | | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| **EYMN** | **Ely** | **145.82** | **89** | P | **PKPbc** | **18 28 25.0** | **0.0** | | |
| | baz=223 | | | | | | | | |
| **MRAK** | **Mrakovica** | **145.86** | **263** | *e*P | **PKPdf** | **18 28 25.1** | **+0.5** | | |
| **FFC** | **Flin Flon** | **145.86** | **72** | PKIKP | **PKPdf** | **18 28 21.8** | **-2.4** | | |
| FFC | | | | MLR | MLR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **145.86** | **72** | PKPdf | **PKPdf** | **18 28 21.8** | **-2.4** | | |
| FFC | | | | IAMs_20 | IAMs_20 | 19 28 21.8 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **145.99** | **266** | ⇓P | **PKPdf** | **18 28 24.9** | **+0.2** | | |
| **MORH** | **Mrgy, Hungar** | **145.99** | **266** | *e*P | **PKPdf** | **18 28 25.2** | **+0.6** | | |
| **MORH** | **Mrgy, Hungar** | **145.99** | **266** | PKPDF | **PKPdf** | **18 28 25.2** | **+0.6** | | |
| **UDBI** | **Udbina** | **146.00** | **261** | P | **PKPbc** | **18 28 25.7** | **+0.1** | | |
| **UZH** | **Uzhgorod** | **146.11** | **272** | *e*PKIKP | **PKPdf** | **18 28 23.0** | **-1.8** | | |
| UZH | | | | *e* | | 18 28 29.1 | | | |
| **KOVH** | **Kovagototos** | **146.14** | **265** | ⇑PKP | **PKPbc** | **18 28 26.0** | **0.0** | | |
| **M54A** | **Oil Creek Stat** | **146.15** | **108** | IAMs_20 | IAMs_20 | 19 32 02.6 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| **M54A** | **Oil Creek Stat** | **146.15** | **108** | P | **PKPdf** | **18 28 25.5** | **+0.3** | | |
| | baz=215,SNR=15 | | | | | | | | |
| **LV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JAVC** | **Velka Javorina** | **148.39 268** | *e*PKP | | **PKPbc** | **18 28 30.8** | **-1.4** |
| JAVC | | | *e* | | | 18 28 33.7 | |
| **OJC** | **Ojcow** | **148.39 272** | *e*PKP | | **PKPbc** | **18 28 32.0** | **-0.1** |
| **OJC** | **Ojcow** | **148.39 272** | PKHKP | | PKPpre | 18 28 27.3 | |
| OJC | | | | | | 18 28 32.2 | |
| **OJC** | **Ojcow** | **148.39 272** | PKPdf | | **PKPdf** | **18 28 27.3** | **-1.2** |
| OJC | | | | | **PKPbc** | **18 28 32.2** | **+0.2** |
| **NACGM** | **Naroch** | **148.40 284** | *i* PKP | | **PKPbc** | **18 28 32.7** | **+0.7** |
| **K57A** | **Scipio Center** | **148.50 110** | | | **PKPbc** | **18 28 31.9** | **-0.7** |
| **CONA** | **Conrad Observa** | **148.53 265** | *e*P | | **PKPdf** | **18 28 30.1** | **+1.1** |
| | comp=Z,22nm,1.7s,SNR=6.3 | | | | | | |
| **WSPT** | **Westport, CT** | **148.54 116** | IAMs_20 | | IAMs_20 | 19 43 54.7 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.56 262** | *e*P | | **PKPdf** | **18 28 29.8** | **+0.7** |
| | comp=Z,26nm,1.0s,SNR=8.7 | | | | | | |
| **IDID** | **Didziasalis** | **148.69 285** | *e*P | | **PKPbc** | **18 28 32.9** | **+0.2** |
| **IIGN** | **Ignalina** | **148.94 284** | *e*P | | **PKiKP** | **18 28 34.3** | **-0.3** |
| **CTI** | **Castel Tesino** | **149.02 259** | PKHKP | | PKPpre | 18 28 27.5 | |
| CTI | | | | | | 18 28 34.2 | |
| **CTI** | **Castel Tesino** | **149.02 259** | PKPdf | | **PKPdf** | **18 28 27.5** | **-2.4** |
| CTI | | | | | **PKPbc** | **18 28 34.2** | **+0.3** |
| **KBA** | **Koelnbreinsper** | **149.04 262** | *e*P | | **PKPbc** | **18 28 32.8** | **-1.3** |
| | comp=Z,7.9nm,0.6s,SNR=7.6 | | | | | | |
| **MORC** | **Moravsky Berou** | **149.10 269** | ⇑P | | **PKPbc** | **18 28 34.5** | **+0.5** |
| **MORC** | **Moravsky Berou** | **149.10 269** | ⇑PKP2 | | **PKPbc** | **18 28 34.5** | **+0.5** |
| **MORC** | **Moravsky Berou** | **149.10 269** | *e*PKP | | **PKPdf** | **18 28 30.8** | **+1.0** |
| MORC | | | *e* | | | 18 28 34.1 | |
| **KRUC** | **Moravsky** | **149.11 267** | *e*PKP | | **PKPdf** | **18 28 30.6** | **+0.8** |
| KRUC | | | *e* | | | 18 28 34.1 | |
| **ABTA** | **Abfaltersbach** | **149.16 261** | *e*P | | **PKPdf** | **18 28 32.1** | **+2.1** |
| | comp=Z,26nm,0.7s,SNR=9.6 | | | | | | |
| **MOA** | **Molln** | **149.20 264** | *e*P | | **PKPbc** | **18 28 33.9** | **-0.3** |
| | comp=Z,37nm,2.0s,SNR=7.4 | | | | | | |
| **VRAC** | **Vranov** | **149.20 268** | ⇓P | | **PKPbc** | **18 28 35.0** | **+0.8** |
| **VRAC** | **Vranov** | **149.20 268** | ⇓PKP2 | | **PKPbc** | **18 28 35.0** | **+0.8** |
| **VRAC** | **Vranov** | **149.20 268** | *e*PKP | | **PKPdf** | **18 28 30.7** | **+0.8** |
| VRAC | | | *e* | | | 18 28 34.2 | |
| **J57A** | **Williamstown** | **149.27 110** | | | **PKPdf** | **18 28 29.9** | **-0.7** |
| J57A | | | | | **PKPbc** | **18 28 34.3** | **-0.2** |
| **PBDV** | **Barranco-do-Ve** | **149.41 225** | *e*PKPbc | | **PKiKP** | **18 28 35.9** | **+0.8** |
| **SUW** | **Suwalki** | **149.43 280** | IAMs_20 | | IAMs_20 | 19 50 46.2 | |
| | comp=Z,998nm,21.0s | | | | | | |
| **PVAQ** | **Vaqueiros** | **149.49 226** | *e*PKPbc | | **PKiKP** | **18 28 36.3** | **0.0** |
| **PVAQ** | **Vaqueiros** | **149.49 226** | *e*LQ | | LQ | 19 10 42.6 | |
| PVAQ | | | *e*LR | | LR | 19 18 17.6 | |
| | comp=Z,2µm,18.0s | | | | | | |
| **PFVI** | **Vila Bisbo** | **149.59 224** | *e*PKPbc | | **PKiKP** | **18 28 36.7** | **+0.1** |
| **PFVI** | **Vila Bisbo** | **149.59 224** | | | **PKPbc** | **18 28 34.5** | **-1.0** |
| **KRLC** | **Kraliky** | **149.66 269** | *e*PKHKP | | PKPpre | 18 28 31.6 | |
| **KRLC** | **Kraliky** | **149.66 269** | *e*PKP | | **PKPdf** | **18 28 31.6** | **+0.9** |
| KRLC | | | *e*pPKP | | **PKPbc** | **18 28 35.6** | **+0.2** |
| **TREC** | **Trest** | **149.70 267** | *e*PKP2 | | **PKiKP** | **18 28 36.4** | **0.0** |
| **TREC** | **Trest** | **149.70 267** | *e*PKP | | **PKiKP** | **18 28 36.4** | **0.0** |
| **MORF** | **Marmelete** | **149.70 224** | *e*PKPdf | | **PKiKP** | **18 28 34.5** | **-1.4** |
| **TRY** | **Troy** | **149.70 114** | PKPdf | | **PKPdf** | **18 28 28.2** | **-2.6** |
| TRY | | | | | **pPKPdf** | **18 28 35.3** | **+0.1** |
| TRY | | | IAMs_20 | | IAMs_20 | 19 34 35.5 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **RJOB** | **Jochberg** | **149.78 262** | *e*PKPbc | | **PKPbc** | **18 28 35.9** | **+0.2** |
| | baz=136,slow=2.4 | | | | | | |
| **PCVE** | **Castro Verde** | **149.80 225** | *e*PKPbc | | **PKPbc** | **18 28 36.7** | **+0.7** |
| **PUL** | **Pulkovo** | **149.84 294** | ⇓*i*PKP2 | | **PKiKP** | **18 28 36.3** | **0.0** |
| **CKRC** | **Cesky Krumlov** | **149.89 265** | *e*PKP | | **PKPbc** | **18 28 35.4** | **-0.9** |
| CKRC | | | *ex* | | x | 18 28 44.4 | |
| **PTEO** | **Sao Teotonio** | **149.94 224** | *e*PKPdf | | **PKPdf** | **18 28 33.2** | **+1.7** |
| **WTTA** | **Wattenberg** | **149.95 260** | *e*P | | **PKPdf** | **18 28 31.7** | **+0.3** |
| | comp=Z,75nm,1.7s,SNR=7.1 | | | | | | |
| **WATA** | **Walderalm** | **150.03 260** | *e*P | | **PKPdf** | **18 28 32.2** | **+0.7** |
| | comp=Z,51nm,1.3s,SNR=7.2 | | | | | | |
| **PABE** | **Paberze** | **150.03 283** | *e*P | | **PKPdf** | **18 28 33.7** | **+2.7** |
| **DPC** | **Dobruska-Polom** | **150.07 269** | *e*PKIKP | | **PKPbc** | **18 28 35.4** | **-0.9** |
| **DPC** | **Dobruska-Polom** | **150.07 269** | *e*PKP | | **PKPbc** | **18 28 35.4** | **-0.9** |
| DPC | | | *ex* | | x | 18 28 50.3 | |
| **PBEJ** | **Beja** | **150.10 226** | *e*PKPbc | | **PKiKP** | **18 28 37.7** | **+0.1** |
| **FETA** | **Feichten** | **150.17 259** | *e*P | | **PKPdf** | **18 28 32.6** | **+0.8** |
| | comp=Z,43nm,1.2s,SNR=8.9 | | | | | | |
| **GEC2** | **GERESS Array S** | **150.18 265** | *e*PKPbc | | **PKPbc** | **18 28 36.7** | **0.0** |
| | baz=136,slow=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **150.18 265** | PKP | | **PKPdf** | **18 28 31.3** | **-0.3** |
| | comp=Z,2.3nm,0.8s,baz=211,slow=3.2,SNR=6.0 | | | | | | |
| GERES | | | PKPbc | | **pPKPdf** | **18 28 36.1** | **+0.2** |
| | comp=Z,11nm,0.8s,baz=180,slow=1.9,SNR=38 | | | | | | |
| **GERES** | **GERESS Array B** | **150.18 265** | PKIKP | | **PKPdf** | **18 28 30.5** | **-1.1** |
| GERES | | | | | | 18 28 35.8 | |
| **GERES** | **GERESS Array B** | **150.18 265** | | | **PKPdf** | **18 28 30.5** | **-1.1** |
| GERES | | | | | **pPKPdf** | **18 28 35.8** | **-0.1** |
| **ESDC** | **Sonseca Array** | **150.22 233** | PKP | | **PKPdf** | **18 28 32.5** | **+0.5** |
| | comp=Z,3.5nm,0.9s,baz=186,slow=0.8,SNR=21 | | | | | | |
| ESDC | | | PKPbc | | **PKPbc** | **18 28 37.5** | **+0.4** |
| | comp=Z,17nm,0.8s,baz=147,slow=2.1,SNR=42 | | | | | | |
| **MOTA** | **Moosalm** | **150.25 260** | *e*P | | **PKPdf** | **18 28 32.4** | **+0.6** |
| | comp=Z,19nm,0.7s,SNR=10 | | | | | | |
| **PAB** | **San Pablo** | **150.25 232** | ⇓PKIKP | | **PKiKP** | **18 28 38.4** | **+0.4** |
| **OSTC** | **Ostas** | **150.26 269** | *e*PKP | | **PKPbc** | **18 28 36.9** | **+0.2** |
| **UPC** | **Upice** | **150.32 269** | *e*PKIKP | | **PKPbc** | **18 28 36.7** | **-0.2** |
| **UPC** | **Upice** | **150.32 269** | *e*PKP | | **PKPbc** | **18 28 36.7** | **-0.2** |
| **CHVC** | **Chvalec** | **150.35 269** | *e*PKP | | **PKPbc** | **18 28 37.6** | **+0.6** |
| **WES** | **Weston** | **150.38 117** | IAMs_20 | | IAMs_20 | 19 40 24.2 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **HRV** | **Adam Dziewonsk** | **150.39 117** | PKIKP | | **PKPbc** | **18 28 37.2** | **-0.1** |
| HRV | | | MLR | | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **HRV** | **Adam Dziewonsk** | **150.39 117** | | | **PKPbc** | **18 28 37.2** | **-0.1** |
| **HRV** | **Adam Dziewonsk** | **150.39 117** | P | | **PKPbc** | **18 28 37.1** | **-0.2** |
| | baz=213 | | | | | | |
| **PNCL** | **Nicolau / Gran** | **150.39 225** | *e*PKPbc | | **PKiKP** | **18 28 38.3** | **+0.1** |
| **KSP** | **Ksiaz** | **150.42 270** | *e*PKP | | **PKiKP** | **18 28 37.8** | **-0.1** |
| **KHC** | **Kasperske Hory** | **150.45 265** | *e*PKIKP | | **PKPbc** | **18 28 36.1** | **-1.2** |
| KHC | | | *e* | | | 18 28 44.5 | |
| **KHC** | **Kasperske Hory** | **150.45 265** | *e*PKP | | **PKPbc** | **18 28 36.1** | **-1.2** |
| KHC | | | *e*pPKP | | **PKPab** | **18 28 44.5** | **+0.6** |
| KHC | | | *ex* | | x | 18 28 54.5 | |
| **RETA** | **Reutte** | **150.51 260** | *e*P | | **PKPdf** | **18 28 32.5** | **+0.3** |
| | comp=Z,38nm,1.1s,SNR=7.6 | | | | | | |
| **VSU** | **Vasula** | **150.61 290** | *e*P | | **PKPdf** | **18 28 34.5** | **+2.8** |
| **EVO** | **Evora** | **150.61 226** | *e*PKPbc | | **PKiKP** | **18 28 41.0** | **+2.4** |
| **PRU** | **Pruhonice** | **150.62 267** | *e*PKIKP | | **PKPdf** | **18 28 34.2** | **+2.1** |
| PRU | | | *e* | | | 18 28 45.2 | |
| **PRU** | **Pruhonice** | **150.62 267** | *e*PKP | | **PKPdf** | **18 28 34.2** | **+2.1** |
| PRU | | | *e*pPKP | | **PKPab** | **18 28 45.2** | **+0.6** |
| **DAVA** | **Damuels** | **150.75 259** | *e*P | | **PKPdf** | **18 28 33.5** | **+0.9** |
| | comp=Z,109nm,2.2s,SNR=9.5 | | | | | | |
| **PESTR** | **Estremoz** | **150.77 227** | *e*PKPbc | | **PKPdf** | **18 28 35.8** | **+3.0** |
| **WET** | **Wettzell** | **150.77 264** | *e*PKPbc | | **PKPbc** | **18 28 38.3** | **+0.3** |
| | baz=136,slow=2.4 | | | | | | |
| **FUR** | **Furstenfeldbru** | **150.78 261** | *e*PKPbc | | **PKiKP** | **18 28 38.9** | **+0.2** |
| | baz=136,slow=2.4 | | | | | | |
| **LONY** | **Lake Ozonia** | **150.85 110** | | | **PKPdf** | **18 28 31.2** | **-1.5** |
| LONY | | | PKPbc | | **pPKPdf** | **18 28 37.8** | **+0.8** |
| LONY | | | PKPab | | **PKPab** | **18 28 45.7** | **0.0** |
| LONY | | | IAMs_20 | | IAMs_20 | 19 48 11.0 | |
| | comp=Z,1µm,21.0s | | | | | | |
| **LONY** | **Lake Ozonia** | **150.85 110** | P | | **PKPbc** | **18 28 38.3** | **-0.1** |
| | baz=217 | | | | | | |
| **UBR** | **Ueberruh** | **150.94 259** | *e*PKPbc | | **PKPbc** | **18 28 39.1** | **+0.6** |
| | baz=136,slow=2.4 | | | | | | |
| **PVCC** | **Panska Ves** | **150.99 268** | *e*PKIKP | | **PKPbc** | **18 28 38.4** | **0.0** |
| **PVCC** | **Panska Ves** | **150.99 268** | *e*PKP | | **PKPbc** | **18 28 38.4** | **0.0** |
| **FFD** | **Franklin Falls** | **151.15 115** | IAMs_20 | | IAMs_20 | 19 38 06.6 | |
| | comp=Z,1µm,21.0s | | | | | | |
| **PMTG** | **Montargil** | **151.16 226** | *e*PKPbc | | **PKiKP** | **18 28 39.8** | **+0.1** |
| **PMRV** | **Marv??o** | **151.21 228** | *e*PKPbc | | **PKPbc** | **18 28 39.8** | **+0.5** |
| **PMRV** | **Marv??o** | **151.21 228** | *e*LR | | LR | 19 19 43.0 | |
| | comp=Z,2µm,22.0s | | | | | | |
| **PBUR** | **Paburge** | **151.26 282** | *e*P | | **PKPdf** | **18 28 33.4** | **+0.6** |
| **VT1** | **Waterbury** | **151.39 113** | IAMs_20 | | IAMs_20 | 19 38 50.0 | |
| | comp=Z,1µm,21.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **151.52 268** | *e*PKP | | **PKPdf** | **18 28 34.7** | **+1.3** |
| BRG | | | Amp | | | 18 28 36.4 | |
| | comp=Z,23nm,1.7s | | | | | | |
| BRG | | | *ex* | | x | 18 28 39.7 | |
| BRG | | | Amp | | | 18 28 42.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| BRG | | | *ex* | | x | 18 28 51.1 | |
| BRG | | | Amp | | | 18 28 59.0 | |
| | comp=Z,57nm,1.5s | | | | | | |
| BRG | | | *ex* | | x | 18 51 44.0 | |
| **BRG** | **Berggiesshubel** | **151.52 268** | *e*PKIKP | | **PKPdf** | **18 28 34.7** | **+1.3** |
| BRG | | | *e* | | | 18 28 39.6 | |
| BRG | | | *e* | | | 18 51 44.0 | |
| BRG | | | pmax | | pmax | | |
| | comp=Z,23nm,1.7s | | | | | | |
| BRG | | | pmax | | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| BRG | | | pmax | | pmax | | |
| | comp=Z,57nm,1.5s | | | | | | |
| BRG | | | pmax | | pmax | | |
| | comp=N,1µm,22.1s | | | | | | |
| BRG | | | MLR | | MLR | | |
| | comp=Z,1µm,20.9s | | | | | | |
| BRG | | | MLR | | MLR | | |
| | comp=E,940nm,18.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **151.52 268** | *e*PKPbc | | **PKiKP** | **18 28 40.2** | **+0.1** |
| | baz=136,slow=2.4 | | | | | | |
| BRG | | | *e*PKPab | | **PKPab** | **18 28 48.5** | **+0.2** |
| | baz=135,slow=3.4 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **151.53 264** | *e*PKPbc | | **PKPbc** | **18 28 40.2** | **+0.5** |
| | baz=136,slow=2.4 | | | | | | |
| **PCBR** | **Castelo Branco** | **151.61 228** | *e*PKPbc | | **PKiKP** | **18 28 40.8** | **+0.2** |
| **GKP** | **Gorka Klasztor** | **151.63 274** | *e*P | | **PKPbc** | **18 28 40.1** | **+0.3** |
| **LBNH** | **Lisbon** | **151.66 114** | P | | **PKPbc** | **18 28 40.6** | **+0.4** |
| | baz=215 | | | | | | |
| **MANZ** | **Manzenberg** | **151.73 265** | *e*PKPbc | | **PKiKP** | **18 28 40.8** | **+0.2** |
| | baz=136,slow=2.4 | | | | | | |
| MANZ | | | *e*PKPab | | **PKPab** | **18 28 49.0** | **-0.3** |
| | baz=135,slow=3.4 | | | | | | |
| **NKC** | **Novy Kostel** | **151.75 265** | *e*PKIKP | | **PKiKP** | **18 28 41.7** | **+1.1** |
| **NKC** | **Novy Kostel** | **151.75 265** | *e*PKP | | **PKiKP** | **18 28 41.7** | **+1.1** |
| NKC | | | *e*pPKP | | **PKPab** | **18 28 50.9** | **+1.6** |
| **FCC** | **Fort Churchill** | **151.77 71** | PKIKP | | **PKPdf** | **18 28 30.6** | **-2.9** |
| FCC | | | | | | 18 28 39.1 | |
| FCC | | | | | | 18 28 48.5 | |
| **FCC** | **Fort Churchill** | **151.77 71** | PKPdf | | **PKPdf** | **18 28 30.6** | **-2.9** |
| FCC | | | PKPbc | | **pPKPdf** | **18 28 39.1** | **+1.2** |
| FCC | | | PKPab | | **PKPab** | **18 28 48.5** | **-0.6** |
| **FBE** | **Freiberg** | **151.82 267** | *e*PKPbc | | **PKiKP** | **18 28 41.2** | **+0.5** |
| | baz=136,slow=2.4 | | | | | | |
| FBE | | | *e*PKPab | | **PKPab** | **18 28 49.4** | **-0.1** |
| | baz=135,slow=3.4 | | | | | | |
| **WERN** | **Wernitzgruen** | **151.82 265** | *e*PKPbc | | **PKiKP** | **18 28 41.4** | **+0.6** |
| | baz=136,slow=2.4 | | | | | | |
| WERN | | | *e*PKPab | | **PKPab** | **18 28 49.4** | **-0.2** |
| | baz=135,slow=3.4 | | | | | | |
| **TANN** | **Tannenbergstha** | **151.87 266** | *e*PKPbc | | **PKiKP** | **18 28 41.3** | **+0.4** |
| | baz=136,slow=2.4 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **151.92 263** | IAMs_20 | | IAMs_20 | 19 42 56.7 | |
| | comp=Z,1µm,19.0s | | | | | | |
| **GRF** | **Grafenberg Arr** | **151.92 263** | *e*PKPbc | | **PKiKP** | **18 28 41.4** | **+0.4** |
| | baz=136,slow=2.4 | | | | | | |
| GRF | | | *e*L | | L | 19 51 38.5 | |
| | comp=Z,1µm,21.8s | | | | | | |
| **WERD** | **Werda** | **151.96 266** | *e*PKPbc | | **PKiKP** | **18 28 41.3** | **+0.3** |
| | baz=136,slow=2.4 | | | | | | |
| **MTSE** | **Matsula** | **152.01 288** | *e*P | | **PKiKP** | **18 28 41.8** | **+1.0** |
| **MTE** | **Manteigas** | **152.13 229** | *e*PKPbc | | **PKiKP** | **18 28 42.6** | **+0.8** |
| **MTE** | **Manteigas** | **152.13 229** | *e*LQ | | LQ | 19 16 36.9 | |
| MTE | | | *e*LR | | LR | 19 20 32.7 | |
| | comp=Z,2µm,18.0s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **152.14 227** | *e*PKPbc | | **PKPbc** | **18 28 39.1** | **-2.3** |
| **STU** | **Stuttgart** | **152.16 260** | IAMs_20 | | IAMs_20 | 19 45 38.1 | |
| | comp=Z,1µm,19.0s | | | | | | |
| **LVZ** | **Lovozero** | **152.17 311** | PKIKP | | **PKPbc** | **18 28 40.3** | **-0.3** |
| **LVZ** | **Lovozero** | **152.17 311** | | | **PKPbc** | **18 28 40.3** | **-0.3** |
| **BFO** | **Black Forest** | **152.22 258** | PKIKP | | **PKPdf** | **18 28 32.8** | **-1.9** |
| BFO | | | | | | 18 28 40.6 | |
| BFO | | | MLR | | MLR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **BFO** | **Black Forest** | **152.22 258** | PKPdf | | **PKPdf** | **18 28 32.8** | **-1.9** |
| BFO | | | | | **sPKPdf** | **18 28 40.6** | **+0.2** |
| BFO | | | IAMs_20 | | IAMs_20 | 19 42 12.7 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **BFO** | **Black Forest** | **152.22 258** | *e*PKPbc | | **PKPbc** | **18 28 41.6** | **+0.2** |
| | baz=136,slow=2.4 | | | | | | |
| **CLL** | **Collm** | **152.25 268** | *e*PKPdf | | **PKPdf** | **18 28 35.0** | **+0.5** |
| CLL | | | *i* PKPbc | | **sPKPdf** | **18 28 41.1** | **+0.8** |
| | comp=Z,23nm,1.2s | | | | | | |
| CLL | | | *e*PKPab | | **PKPab** | **18 28 50.0** | **-1.3** |
| | comp=Z,16nm,0.8s | | | | | | |
| CLL | | | *i* sPKPab | | **sPKPab** | **18 28 58.3** | **+1.3** |
| | comp=Z,52nm,1.4s | | | | | | |
| CLL | | | *e*SKPdf | | **SKPdf** | **18 32 08.0** | **+1.3** |
| CLL | | | *e*PP | | PP | 18 32 36.0 | +12 |
| CLL | | | *e*PPP | | PPP | 18 35 48.0 | |
| CLL | | | *ex* | | x | 18 42 00.0 | |
| CLL | | | *ex* | | x | 18 45 42.0 | |
| CLL | | | *e*SS | | **SS** | **18 51 52.0** | **+0.1** |
| CLL | | | *e*PSPS | | | 18 53 12.0 | |
| CLL | | | *e*SSS | | SSS | 18 57 28.0 | |
| CLL | | | *ex* | | x | 18 58 54.0 | |
| CLL | | | *e*SSSS | | | 19 01 24.0 | |
| CLL | | | LmH | | | 19 44 00.0 | |
| | comp=N,1µm,20.3s | | | | | | |
| CLL | | | LmH | | | 19 44 00.0 | |
| | comp=E,400nm,22.0s | | | | | | |
| CLL | | | LmV | | | 19 44 00.0 | |
| | comp=Z,1µm,20.7s | | | | | | |
| **CLL** | **Collm** | **152.25 268** | IAMs_20 | | IAMs_20 | 19 44 34.4 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **MOX** | **Moxa** | **152.42 265** | *e*L | | L | 19 46 01.2 | |
| | comp=Z,885nm,21.3s | | | | | | |
| **FINES** | **FINESS Array B** | **152.51 295** | PKPbc | | **PKPbc** | **18 28 41.2** | **-0.3** |
| | comp=Z,8.2nm,0.7s,baz=81,slow=2.3,SNR=28 | | | | | | |
| FINES | | | PKPab | | **PKPab** | **18 28 50.9** | **-1.2** |
| | comp=Z,9.8nm,0.8s,baz=83,slow=2.3,SNR=5.9 | | | | | | |
| **FINES** | **FINESS Array B** | **152.51 295** | PKIKP | | **PKPbc** | **18 28 40.7** | **-0.8** |
| **FINES** | **FINESS Array B** | **152.51 295** | | | **PKPbc** | **18 28 40.7** | **-0.8** |
| **PVIS** | **Viseu** | **152.53 228** | *e*PKPdf | | **PKPbc** | **18 28 40.0** | **-2.4** |
| **PVIS** | **Viseu** | **152.53 228** | *e*PKPbc | | **PKiKP** | **18 28 43.2** | **+0.6** |
| **MVO** | **Moncorvo** | **152.63 230** | *e*PKPbc | | **PKiKP** | **18 28 43.9** | **+1.1** |
| **MVO** | **Moncorvo** | **152.63 230** | *e*LQ | | LQ | 19 16 00.9 | |
| MVO | | | *e*LR | | LR | 19 23 09.2 | |
| | comp=Z,2µm,18.0s | | | | | | |
| **ECH** | **Echery** | **152.66 257** | IAMs_20 | | IAMs_20 | 19 51 28.2 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **WVL** | **Waterville** | **152.87 116** | | | **PKPbc** | **18 28 40.8** | **-2.1** |
| **G62A** | **West of Eustis** | **153.04 115** | | | **PKPbc** | **18 28 42.9** | **-0.4** |
| **POLO** | **Lamas de Olo** | **153.09 229** | *e*PKPbc | | **PKiKP** | **18 28 44.6** | **+0.8** |
| **PBRG** | **Braganca** | **153.10 231** | *e*PKPdf | | **PKPdf** | **18 28 38.6** | **+2.4** |
| **PKME** | **Peaks-Kenny Pk** | **153.59 116** | P | | **PKPbc** | **18 28 44.3** | **-0.1** |
| | baz=215 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **153.77 229** | *e*PKPdf | | **PKPdf** | **18 28 39.8** | **+2.6** |
| **PGAV** | **Gavieira, Arco** | **153.77 229** | *e*LR | | LR | 19 20 56.8 | |
| | comp=Z,2µm,20.0s | | | | | | |
| **GGN** | **Saint George** | **154.45 120** | PKPdf | | **PKPdf** | **18 28 36.0** | **-1.9** |
| GGN | | | | | **PKPbc** | **18 28 45.6** | **-0.7** |
| **PQI** | **Presque Isle** | **155.25 116** | PKPdf | | **PKPdf** | **18 28 38.2** | **-0.7** |
| **HAL** | **Halifax** | **155.31 125** | PKIKP | | **PKPdf** | **18 28 37.8** | **-1.3** |
| HAL | | | | | | 18 29 04.4 | |
| **HAL** | **Halifax** | **155.31 125** | PKPdf | | **PKPdf** | **18 28 37.8** | **-1.3** |
| HAL | | | | | **PKPab** | **18 29 04.3** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **155.85 312** | PKPbc | | PKPdf | 18 28 48.4 | +9.3 |
| | comp=Z,9.2nm,1.0s,baz=18,slow=8.3,SNR=3.0 | | | | | | |
| ARCES | | | PKPab | | **PKPab** | **18 29 02.6** | **-3.6** |
| | comp=Z,17nm,1.1s,baz=44,slow=7.2,SNR=5.1 | | | | | | |
| **LMN** | **Caledonia Moun** | **155.86 121** | PKPdf | | **PKPdf** | **18 28 38.4** | **-1.5** |
| **GBN** | **Guysborough** | **156.73 127** | PKPdf | | **PKPdf** | **18 28 39.4** | **-1.6** |
| GBN | | | PKPab | | **PKPab** | **18 29 10.9** | **+0.4** |
| **NB2** | **NORSAR Subarra** | **158.67 286** | PKP | | **PKPab** | **18 29 17.6** | **-1.0** |
| | comp=Z,18nm,1.7s,baz=114,slow=4.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **158.67 286** | PKP | | **PKPab** | **18 29 17.6** | **-1.0** |
| | baz=114,slow=4.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **158.67 286** | PKP | | **PKPdf** | **18 28 40.2** | **-2.7** |
| | comp=Z,0.9nm,0.9s,baz=87,slow=8.5,SNR=1.7 | | | | | | |
| NOA | | | PKPab | | **PKPab** | **18 29 17.9** | **-0.8** |
| | comp=Z,0.4nm,0.6s,baz=113,slow=4.4,SNR=1.1 | | | | | | |
| **NOR** | **Nord** | **160.74 352** | *i* P | | **PKPab** | **18 29 25.9** | **-1.2** |
| **SCHQ** | **Schefferville** | **161.74 102** | PKP | | **PKPdf** | **18 28 44.0** | **-2.5** |
| | comp=Z,7.1nm,1.2s,baz=188,slow=3.4,SNR=5.6 | | | | | | |
| SCHQ | | | PKPab | | **PKPab** | **18 29 31.4** | **-0.7** |
| | comp=Z,22nm,0.7s,baz=239,slow=3.9,SNR=36 | | | | | | |
| **SCHQ** | **Schefferville** | **161.74 102** | PKPdf | | **PKPdf** | **18 28 44.6** | **-1.9** |
| SCHQ | | | PKPab | | **PKPab** | **18 29 30.8** | **-1.3** |
| **TULEG** | **Thule** | **162.52 26** | *i* P | | **PKPab** | **18 29 33.4** | **-1.5** |
| **TULEG** | **Thule** | **162.52 26** | PKPdf | | **PKPdf** | **18 28 45.0** | **-1.7** |
| TULEG | | | | | **PKPab** | **18 29 34.1** | **-0.9** |
| **NEEM** | **North Greenlan** | **164.63 13** | *i* P | | **PKPab** | **18 29 42.6** | **-2.0** |
| **DAG** | **Danmarks Havn** | **165.23 345** | *i* P | | **PKPab** | **18 29 45.3** | **-1.5** |
| **DBG** | **Daneborg** | **167.55 341** | *i* P | | **PKPab** | **18 29 56.9** | **-0.3** |
| **SUMG** | **Summit** | **170.32 6** | *i* P | | **PKPab** | **18 30 08.7** | **-1.2** |

*IDC **23** 18:35:25.6±1.0, 8°.10S×36°.53W, h0km, mb3.9/3, mb1 4.0/4, mb1mx3.6/45, mbtmp3.9/4, ML4.2/1 Error ellipse: s-maj=60.1km s-min=23.0km az=149.0*
*VAO **23** 18:35:26.8±0.3, 8°.33S×36°.16W, h0km, mbR3.8*
**ISC 23 18:35:27.1**±0.7, **8°.31S**±0°.07×**36°.14W**±0°.07, **h10**km, **n42**,
σ1§**10**/35, **mb3.6**/3, **Brazil**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBRF** | **Rio Formoso -** | **1.06** | **110** | *e*P | **Pg** | **18 35 47.4** | **-0.1** |
| **NBLV** | **Livramento - P** | **1.23** | **321** | *e*P | **Pn** | **18 35 50.3** | **0.0** |
| **NBAN** | **Anadia - AL** | **1.36** | **186** | *e*P | **Pg** | **18 35 53.0** | **-0.1** |
| **NBPV** | **Pedro Velho** | **2.06** | **24** | *e*P | **Pn** | **18 36 01.6** | **-0.1** |
| **NBMA** | **Muriti-CE** | **2.77** | **290** | *e*P | **Pn** | **18 36 12.8** | **+1.3** |
| **NBLA** | **Lagarto - SE** | **3.12** | **211** | *e*P | **Pn** | **18 36 17.9** | **+1.5** |
| **NBPB** | **Pedra_Branca-C** | **4.39** | **309** | *e*P | **Pn** | **18 36 34.6** | **+0.7** |
| **NBCL** | **Cascavel-CE** | **4.59** | **332** | *e*P | **Pn** | **18 36 37.6** | **+1.1** |
| **NBPN** | **Ponto Novo - B** | **4.73** | **238** | *e*P | **Pn** | **18 36 39.1** | **+0.5** |
| **NBMO** | **Morrinhos-CE** | **6.31** | **322** | *e*P | **Pn** | **18 37 01.2** | **+1.0** |
| **GDU01** | **Guandu, BA** | **6.35** | **212** | *e*P | **Pn** | **18 37 01.4** | **+0.6** |
| **NBPS** | **Pedro II - PI** | **6.56** | **306** | *e*P | **Pn** | **18 37 05.1** | **+1.4** |
| **NBIT** | **Itapeh - BA** | **7.33** | **206** | *e*P | **Pn** | **18 37 14.6** | **+0.4** |
| **CMC01** | **Camacan, BA** | **7.75** | **205** | *e*P | **Pn** | **18 37 20.9** | **+0.9** |
| **GUA01** | **Guaratinga, BA** | **8.97** | **203** | *e*P | **Pn** | **18 37 37.9** | **+1.1** |
| **SDBA** | **SAO DESIDERIO** | **9.54** | **244** | *e*P | **Pn** | **18 37 44.8** | **+0.2** |
| **ROSB** | **Rosrio** | **9.60** | **304** | *e*P | **Pn** | **18 37 46.0** | **+0.6** |
| **JANB** | **Januaria** | **10.44** | **229** | *e*P | **Pn** | **18 37 55.6** | **-1.4** |
| **SMTB** | **Santa Maria do** | **11.34** | **266** | *e*P | **Pn** | **18 38 10.0** | **+0.7** |
| **SJMB** | **Sao Joao De Ma** | **11.44** | **205** | *e*P | **Pn** | **18 38 10.6** | **0.0** |
| **RIB01** | **Linhares ES** | **11.69** | **200** | *e*P | **Pn** | **18 38 14.9** | **+0.8** |
| **DIAM** | **Diamantina, MG** | **12.34** | **216** | *e*P | **Pn** | **18 38 22.0** | **-1.0** |
| **PEXB** | **Peixe** | **12.55** | **252** | *e*P | **Pn** | **18 38 25.5** | **-0.4** |
| **BDFB** | **Brasilia** | **13.71** | **237** | Pn | **Pn** | **18 38 38.6** | **-3.2** |
| | 0.7nm,0.3s,baz=68,slow=15,SNR=5.3 | | | | | | |
| BDFB | | | | Sn | Sn | 18 41 02.0 | -12 |
| | 0.9nm,0.3s,baz=324,slow=24,SNR=2.8 | | | | | | |
| BDFB | | | | Lg | Lg | 18 42 30.5 | |
| | 1.9nm,0.3s,baz=141,slow=20,SNR=3.4 | | | | | | |
| **DUB01** | **Friburgo-RJ** | **14.95** | **203** | *e*P | **Pn** | **18 38 59.0** | **+0.4** |
| **BSCB** | **Bom Sucesso** | **15.12** | **213** | *e*P | **Pn** | **18 39 01.3** | **+0.3** |
| **IPMB** | **Ipameri, GO** | **15.18** | **230** | *e*P | **Pn** | **18 39 02.3** | **+0.5** |
| **SNDB** | **Serra Nova Dou** | **15.36** | **255** | *e*P | **Pn** | **18 39 04.6** | **+0.6** |
| **NPGB** | **Novo Progresso** | **19.09** | **272** | *e*P | **P** | **18 39 50.8** | **+0.6** |
| **H10S3** | **ASCENSION HYDR** | **21.24** | **93** | T | T | 19 01 00.5 | |
| | baz=306,slow=74,SNR=197 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **21.26** | **93** | T | T | 19 01 05.5 | |
| | baz=274,slow=74,SNR=60 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.43** | **90** | T | T | 19 01 12.0 | |
| | baz=269,slow=74,S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **148.88** | **244** | PKPbc | **PKPdf** | **19 06 42.8** | **-0.9** |
| | comp=Z,0.6nm,0.9s,baz=84,slow=2.9,SNR=2.1 | | | | | | |

*KRNET **23** 18:56:35.9±0.1, 40°.90N×71°.20E, h16km, mb3.1*
*SOME **23** 18:56:37.3, 40°.88N×71°.23E, h15km*
*NNC **23** 18:56:38.0±4.2, 40°.74N×71°.42E, h0km, mb3.4, mpv3.2,*
*Error ellipse: s-maj=32.2km s-min=14.4km az=11.0*

**ISC 23 18:56:34.9**±1.1, **40°.90N**±0°.02×**71°.26E**±0°.02, **h18**km±6km, **n35**, σ1°**32**/59, **16C-11D**, **Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRKS** | **Terek-Say** | **0.64** | **352** | ⇑*i*P | **Pb** | **18 56 47.0** | **-0.6** |
| | baz=58 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **18 56 54.8** | **-1.3** |
| | baz=58 | | | | | | |
| **BTK** | **Batken** | **0.91** | **202** | ⇑*i*P | **Pn** | **18 56 52.8** | **0.0** |
| | baz=99 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **18 57 05.0** | **-0.5** |
| | baz=99 | | | | | | |
| **ARK** | **Arkit** | **1.04** | **30** | ⇑*i*P | **Pg** | **18 56 56.0** | **+0.8** |
| | baz=32 | | | | | | |
| ARK | | | | ⇑*i*S | **Sn** | **18 57 10.7** | **+1.8** |
| | baz=32 | | | | | | |
| **OHH** | **Osh** | **1.22** | **107** | ⇓*i*P | **Pg** | **18 56 59.4** | **+0.9** |
| | baz=7.0 | | | | | | |
| OHH | | | | ⇓*i*S | **Sg** | **18 57 16.7** | **+2.3** |
| | baz=7.0 | | | | | | |
| **DRK** | **Karamyk** | **1.48** | **164** | ⇑*i*P | **Pg** | **18 57 03.5** | **+0.1** |
| | baz=61 | | | | | | |
| DRK | | | | ⇑*i*S | **Sg** | **18 57 23.5** | **+0.8** |
| | baz=61 | | | | | | |
| **TAS** | **Tashkent** | **1.54** | **287** | ⇓*i*P | **Pg** | **18 57 03.5** | **-1.1** |
| | baz=87 | | | | | | |
| TAS | | | | ⇓*i*S | **Sg** | **18 57 23.8** | **-0.9** |
| | baz=87 | | | | | | |
| **CHM** | **Chimkent** | **1.89** | **319** | *e*P | **Pg** | **18 57 11.9** | **+0.8** |
| | 62nm,0.4s | | | | | | |
| CHM | | | | *e*S | **Sg** | **18 57 37.1** | **+1.5** |
| | 481nm,0.3s | | | | | | |
| **DZA** | **Taraz** | **1.99** | **2** | *e*P | **Pg** | **18 57 14.0** | **+0.9** |
| | 35nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **18 57 40.3** | **+1.3** |
| | 214nm,0.4s | | | | | | |
| **DZA** | **Taraz** | **1.99** | **2** | Pg | **Pg** | **18 57 14.0** | **+0.9** |
| | 35nm,0.1s | | | | | | |
| DZA | | | | Lg | Lg | 18 57 40.6 | |
| | 214nm,0.4s | | | | | | |
| **GAR** | **Garm** | **2.03** | **201** | ⇑*i*P | **Pb** | **18 57 12.2** | **+0.9** |
| | baz=0.0 | | | | | | |
| GAR | | | | ⇑*i*S | **Sg** | **18 57 38.5** | **-1.8** |
| | baz=0.0 | | | | | | |
| **KK08** | **Karatay Array** | **2.28** | **346** | ⇓Pn | **Pg** | **18 57 16.5** | **-2.1** |
| | 7.1nm,0.5s,baz=156,slow=15 | | | | | | |
| KK08 | | | | ⇑Sn | **Sg** | **18 57 48.1** | **0.0** |
| | 16nm,0.4s,baz=171,slow=27 | | | | | | |
| **MRKS** | **Merke** | **2.36** | **38** | *e*P | **Pg** | **18 57 21.3** | **+1.1** |
| | 4.2nm,0.3s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **18 57 53.1** | **+2.3** |
| | 32nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **2.36** | **38** | Pg | **Pg** | **18 57 21.3** | **+1.1** |
| | 4.2nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 18 57 53.1 | |
| | 32nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **2.38** | **334** | Pg | **Pg** | **18 57 23.4** | **+2.9** |
| BRLS | | | | Lg | Lg | 18 57 56.2 | |
| **ARLS** | **Aral** | **2.50** | **66** | ⇑*i*P | **Pb** | **18 57 19.4** | **+0.1** |
| | baz=67 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **18 57 51.1** | **+1.3** |
| | baz=67 | | | | | | |
| **UCH** | **Uchtor** | **2.78** | **60** | ⇓*i*P | **Pb** | **18 57 23.6** | **-0.7** |
| | baz=61 | | | | | | |
| UCH | | | | ⇓*i*S | **Sb** | **18 57 58.5** | **+0.3** |
| | baz=61 | | | | | | |
| **AAK** | **Ala-Archa** | **2.98** | **53** | ⇓Pn | **Pb** | **18 57 28.0** | **+0.5** |
| | 1.2nm,0.3s | | | | | | |
| AAK | | | | ⇑Pg | Pg | 18 57 37.5 | +5.5 |
| | 3.9nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 18 58 11.2 | |
| | 13nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **2.98** | **53** | ⇓*e*P | **Pb** | **18 57 26.1** | **-1.4** |
| | baz=54 | | | | | | |
| AAK | | | | ⇓*i*S | **Sb** | **18 58 02.7** | **-0.9** |
| | baz=54 | | | | | | |
| **SGDS** | **Sogindy** | **3.58** | **43** | *e*P | **Pg** | **18 57 42.4** | **-0.9** |
| | 2.0nm,0.5s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **18 58 29.1** | **-0.6** |
| | 7.0nm,0.3s | | | | | | |
| **SGDS** | **Sogindy** | **3.58** | **43** | Pg | **Pg** | **18 57 42.4** | **-0.9** |
| | 2.0nm,0.5s | | | | | | |
| SGDS | | | | Lg | Lg | 18 58 29.1 | |
| | 7.0nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.82** | **57** | ⇓Pg | **Pg** | **18 57 46.9** | **-1.1** |
| | 1.3nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 18 58 35.5 | |
| | 4.7nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.09** | **54** | *e*P | **Pg** | **18 57 52.9** | **-0.4** |
| | 0.9nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **18 58 47.4** | **+1.0** |
| | 7.1nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.09** | **54** | Pg | **Pg** | **18 57 52.9** | **-0.4** |
| | 0.9nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 18 58 47.4 | |
| | 7.1nm,0.7s | | | | | | |
| **MTBS** | **Maitube** | **4.45** | **58** | *e*P | **Pg** | **18 57 58.6** | **-1.5** |
| | 0.3nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **18 58 56.8** | **-0.9** |
| | 3.6nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **4.62** | **25** | *e*P | **Pg** | **18 58 02.8** | **-0.5** |
| | 1.5nm,0.4s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **18 59 03.8** | **+0.8** |
| | 7.4nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **4.62** | **25** | Pg | **Pg** | **18 58 02.8** | **-0.5** |
| | 1.5nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 18 59 03.8 | |
| | 7.4nm,0.7s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.75** | **61** | *e*P | **Pg** | **18 58 05.1** | **-0.7** |
| | 1.3nm,0.6s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **18 59 07.9** | **+0.6** |
| | 1.7nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.75** | **61** | Pg | **Pg** | **18 58 05.1** | **-0.7** |
| | 1.3nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 18 59 07.9 | |
| | 1.7nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **4.81** | **50** | *e*P | **Pg** | **18 58 04.7** | **-2.2** |
| | 0.7nm,0.2s | | | | | | |
| KUU | | | | *e*S | **Sg** | **18 59 07.1** | **-2.0** |
| | 6.8nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **4.81** | **50** | Pg | **Pg** | **18 58 04.7** | **-2.2** |
| | 0.7nm,0.2s | | | | | | |
| KUU | | | | Lg | Lg | 18 59 07.1 | |
| | 6.8nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **4.87** | **60** | *e*P | **Pg** | **18 58 06.8** | **-1.3** |
| | 1.7nm,0.5s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **18 59 10.9** | **-0.3** |
| | 2.4nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.91** | **53** | *e*P | **Pg** | **18 58 06.4** | **-2.4** |
| | 0.7nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **18 59 10.1** | **-2.2** |
| | 9.8nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.94** | **60** | *e*P | **Pg** | **18 58 09.1** | **-0.4** |
| | 2.5nm,0.5s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **18 59 14.7** | **+1.2** |
| | 7.1nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **5.17** | **53** | *e*P | **Pg** | **18 58 12.1** | **-1.7** |
| | 0.7nm,0.1s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **18 59 19.8** | **-1.0** |
| | 2.8nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **5.17** | **53** | Pg | **Pg** | **18 58 12.1** | **-1.7** |
| | 0.7nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 18 59 19.8 | |
| | 2.8nm,0.2s | | | | | | |

*JMA **23** 19:02:15.2±0.1, 35°.87N×140°.89E, h19km±1km, M3.9*
*JMA Felt II J1.*
*IDC **23** 19:02:19.2±4.3, 34°.89N×139°.31E, h0km, mb3.5/5,*
*mb1 3.7/5, mb1mx3.4/33, mbtmp3.5/5, Error ellipse:*
*s-maj=168.0km s-min=22.0km az=68.0*

**ISC 23 19:02:11.8**±3.1, **35°.95N**±0°.06×**141°.1E**±0°.1, **h4**km±16km, **n13**, σ0°**69**/16, **mb3.5**/5, **1C-1D**, **Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOJ** | **Chosi** | **0.32** | **218** | P | **Pb** | **19 02 19.7** | **-0.3** |
| CHOJ | | | | S | **Sg** | **19 02 22.6** | **+0.5** |
| **JIHU** | **Itakohorinouch** | **0.47** | **272** | ⇑P | **Pb** | **19 02 22.4** | **-0.2** |
| **JHYU** | **Hitachinakayam** | **0.57** | **313** | ⇓P | **Pn** | **19 02 26.0** | **-0.7** |
| JHYU | | | | S | **Sb** | **19 02 33.3** | **+0.5** |
| **JYT** | **Yasato** | **0.78** | **291** | P | **Pb** | **19 02 27.9** | **-0.1** |
| JYT | | | | S | **Sg** | **19 02 36.6** | **-0.5** |
| **JHO** | **Hitachi** | **0.79** | **327** | P | **Pn** | **19 02 29.8** | **+0.1** |
| **BSO3** | **Boso 3** | **1.25** | **203** | P | **Pn** | **19 02 35.8** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **2.41** | **285** | Pn | **Pn** | **19 02 52.0** | **-0.1** |
| | 1.4nm,0.3s,baz=95,slow=9.6,SNR=68 | | | | | | |
| MJAR | | | | Sn | **Sn** | **19 03 21.8** | **-0.3** |
| | 2.1nm,0.3s,baz=186,slow=13,SNR=6 | | | | | | |
| **MAT** | **Matsushiro** | **2.41** | **285** | P | **Pn** | **19 02 52.2** | **+0.1** |
| MAT | | | | S | **Sn** | **19 03 22.0** | **-0.1** |
| **SONM** | **Songino Array** | **28.20** | **306** | P | P | 19 08 10.6 | +5.1 |
| | 0.1nm,0.5s,baz=107,slow=9.2,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.49** | **303** | P | **P** | **19 10 25.4** | **+1.2** |
| | 0.3nm,0.6s,baz=94,slow=6.7,SNR=2.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.47** | **309** | P | P | 19 10 44.1 | +4.3 |
| | 0.5nm,0.3s,baz=83,slow=8.1,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.96** | **188** | P | **P** | **19 11 51.5** | **+0.3** |
| | 0.8nm,0.9s,baz=0.4,slow=7.2,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **59.69** | **188** | P | **P** | **19 12 15.8** | **-1.6** |
| | 0.3nm,0.8s,baz=12,slow=9.5,SNR=3.3 | | | | | | |

**NEIC 23 19:31:01.4**±1.0, **35°.688N**±0°.010×**97°.408W**±0°.009, **h9**km±3km, **ML2.4**/46, **Error ellipse: s-maj=1.5km s-min=1.0km az=196.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.11** | **187** | Pg | Pg | 19 31 03.9 | -0.1 |
| OK009 | | | | Sg | Sg | 19 31 05.7 | -0.2 |
| **OK001** | **Jones High Sch** | **0.16** | **143** | Pg | Pg | 19 31 04.7 | -0.1 |
| OK001 | | | | Sg | Sg | 19 31 07.2 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.27** | **187** | Pg | Pg | 19 31 06.9 | 0.0 |
| OKCFA | | | | Sg | Sg | 19 31 11.0 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **185** | Pg | Pg | 19 31 07.1 | +0.1 |
| **FNO** | **Franklin** | **0.43** | **179** | | Pg | 19 31 09.7 | -0.1 |
| FNO | | | | Sg | Sg | 19 31 15.9 | +0.4 |
| FNO | | | | IAML | | 19 31 16.0 | |
| | comp=E,310nm,0.4s | | | | | | |
| **W35A** | **Tecumseh** | **0.69** | **141** | | Pg | 19 31 14.1 | -0.5 |
| W35A | | | | Sg | Sg | 19 31 23.5 | -0.2 |
| W35A | | | | IAML | | 19 31 23.6 | |
| | comp=E,119nm,0.3s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.14** | **198** | | Pb | 19 31 22.9 | -0.3 |
| **TUL1** | **Leonard** | **1.33** | **80** | Pn | Pn | 19 31 25.3 | -0.8 |
| TUL1 | | | | IAML | | 19 31 44.7 | |
| | comp=N,95nm,0.1s | | | | | | |
| TUL1 | | | | IAML | | 19 31 45.7 | |
| | comp=E,60nm,0.2s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.42** | **30** | Pn | Pn | 19 31 27.4 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.47** | **299** | Pn | Pn | 19 31 28.3 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.47** | **230** | Pn | Pn | 19 31 23.5 | -4.5 |
| **X37A** | **Clayton** | **2.00** | **123** | Pn | Pn | 19 31 35.6 | +0.3 |
| **HHAR** | **Hobbs** | **2.87** | **77** | Pn | Pn | 19 31 47.0 | -0.3 |

*IDC **23** 19:39:22.6±2.1, 0°.08N×123°.71E, h115km±20km, mb3.5/10,*
*mb1 3.7/13, mb1mx3.4/45, mbtmp3.9/13, Error ellipse:*
*s-maj=16.4km s-min=13.4km az=63.0*
*DJA **23** 19:39:25.8±0.3, 0°.5±3°×12°.4E±°, h81km±11km, M4.3/15,*
*mb4.4/8, mB4.8/4, MLv4.2/15, Mw(mB)4.1/4*

**ISC 23 19:39:22.4**±0.6, **0°.10N**±0°.05×**123°.89E**±0°.04, **h110**km, **n29**, σ2°**34**/44, **mb3.8**/10, **Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.48** | **11** | P | **Pn** | **19 39 43.3** | **+4.2** |
| **LUWI** | **Luwuk** | **1.59** | **225** | P | **Pn** | **19 39 54.0** | **+3.7** |
| LUWI | | | | S | **Sn** | **19 40 17.4** | **+5.9** |
| **MRSI** | **Marisa** | **1.98** | **281** | P | **Pn** | **19 39 54.5** | **-0.7** |
| MPSI | | | | S | **Sn** | **19 40 17.7** | **-2.5** |
| **APSI** | **Ampana** | **2.45** | **246** | P | **Pn** | **19 40 01.7** | **+0.5** |
| APSI | | | | S | **Sn** | **19 40 32.1** | **+1.1** |
| **SANI** | **Sanana** | **2.99** | **135** | P | **Pn** | **19 40 08.0** | **-0.3** |
| SANI | | | | S | **Sn** | **19 40 40.7** | **-3.0** |
| **TNTI** | **Ternate** | **3.54** | **79** | P | **Pn** | **19 40 18.3** | **+2.7** |
| TNTI | | | | S | **Sn** | **19 40 55.6** | **-1.2** |
| **MPSI** | **Mapaga** | **4.00** | **273** | P | **Pn** | **19 40 23.6** | **+1.9** |
| MPSI | | | | S | **Sn** | **19 41 11.9** | **+4.2** |
| **TTSI** | **Tana Toraja** | **5.13** | **232** | P | **Pn** | **19 40 36.9** | **-0.1** |
| | 0.5nm2µm143nm,0.8s | | | | | | |
| TTSI | | | | S | **Sn** | **19 41 31.7** | **-3.3** |
| | 0.5nm2µm143nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **5.71** | **131** | P | **Pn** | **19 40 47.9** | **+3.0** |
| | 0.4nm2µm97nm,0.5s | | | | | | |
| AAI | | | | S | **Sn** | **19 41 49.2** | **0.0** |
| | 0.4nm2µm97nm,0.5s | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.76** | **226** | P | **Pn** | **19 40 46.6** | **+1.0** |
| SPSI | | | | S | **Sn** | **19 41 47.9** | **-2.6** |
| **BNSI** | **Bone** | **5.85** | **220** | P | **Pn** | **19 40 48.8** | **+2.0** |
| | 0.1nm20nm,1.0s | | | | | | |
| BNSI | | | | S | **Sn** | **19 41 52.6** | **0.0** |
| | 0.1nm20nm,1.0s | | | | | | |
| **MSAI** | **Masohi** | **6.09** | **124** | P | **Pn** | **19 40 53.6** | **+3.6** |
| | 0.1nm427nm17nm,0.7s | | | | | | |
| MSAI | | | | S | Sn | 19 41 47.2 | -11 |
| | 0.1nm427nm17nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **6.55** | **219** | P | **Pn** | **19 40 53.7** | **-2.4** |
| | 0.4nm,0.3s,baz=128,slow=14,SNR=1.7 | | | | | | |
| KAPI | | | | S | **Sn** | **19 42 08.0** | **-1.4** |
| | 1.4nm,0.3s,baz=47,slow=23,SNR=2.0 | | | | | | |
| **BKSI** | **Bulukumba** | **6.57** | **215** | P | **Pn** | **19 40 57.3** | **+0.8** |
| | 0.1nm16nm,0.7s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **7.07** | **209** | P | **Pn** | **19 41 05.3** | **+2.0** |
| | 0.2nm20nm,1.0s | | | | | | |
| **SIJI** | **Sorong** | **7.44** | **97** | P | **Pn** | **19 41 10.7** | **+2.4** |
| | 5.7nm,0.3s,baz=287,slow=7.8,SNR=19 | | | | | | |
| SIJI | | | | S | **Sn** | **19 42 36.8** | **+5.6** |
| | 0.6nm,0.3s,baz=270,slow=20,SNR=1.3 | | | | | | |
| **FAKI** | **Fak Fak** | **8.88** | **110** | P | **Pn** | **19 41 28.9** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **18.16** | **175** | P | **P** | **19 43 26.2** | **-0.2** |
| | 0.3nm,0.3s,baz=8.5,slow=11,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.39** | **153** | P | **P** | **19 44 11.4** | **-0.5** |
| | 4.3nm,0.5s,baz=333,slow=10.0,SNR=32 | | | | | | |
| **ASAR** | **Alice Springs** | **25.55** | **158** | P | **P** | **19 44 41.6** | **+0.5** |
| | 0.9nm,0.4s,baz=334,slow=8.4,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 48 09.7** | **-0.2** |
| | 0.6nm,0.4s,baz=345,slow=2.1,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.55** | **308** | P | **P** | **19 45 25.8** | **0.0** |
| | 0.3nm,0.4s,baz=134,slow=6.4,SNR=2.0 | | | | | | |
| **STKA** | **Stephens Creek** | **35.94** | **154** | P | **P** | **19 46 13.1** | **+0.7** |
| | 2.0nm,0.4s,baz=335,slow=8.7,SNR=15 | | | | | | |
| STKA | | | | PcP | **PcP** | **19 48 37.0** | **-0.1** |
| | 0.4nm,0.5s,baz=298,slow=3.3,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **49.92** | **345** | P | **P** | **19 48 04.3** | **-0.7** |
| | 0.2nm,0.5s,baz=166,slow=7.7,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **328** | P | **P** | **19 49 09.8** | **-0.8** |
| | 0.7nm,0.5s,baz=123,slow=8.7,SNR=13 | | | | | | |
| MKAR | | | | PcP | **PcP** | **19 49 57.2** | **-1.2** |
| | 0.6nm,0.4s,baz=165,slow=3.2,SNR=9.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.60** | **335** | P | **P** | **19 49 32.9** | **-1.8** |
| | 0.2nm,0.4s,baz=145,slow=5.3,SNR=1.8 | | | | | | |
| **MA2** | **Magadan** | **62.91** | **15** | P | **P** | **19 49 37.8** | **+1.1** |
| | 0.9nm,0.3s,baz=221,slow=5.5,SNR=6.0 | | | | | | |
| **ILAR** | **Eielson Array** | **89.58** | **25** | P | **P** | **19 52 06.8** | **-0.6** |
| | 0.1nm,0.6s,baz=211,slow=6.9,SNR=1.2 | | | | | | |
| **FINES** | **FINESS Array B** | **93.66** | **332** | P | **P** | **19 52 24.0** | **-2.3** |
| | 3.1nm,1.0s,baz=38,slow=7.8,SNR=2.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.24** | **285** | PKP | **PKPdf** | **19 58 02.2** | **-1.3** |
| | 0.3nm,0.4s,baz=99,slow=1.8,SNR=2.7 | | | | | | |

**LDG 23 19:57:19.9**±0.1, **50°.16N**×**7°.88E**, **h10**km, **Ml1.8**/6, **Error ellipse: s-maj=1.0km s-min=0.9km az=13.0, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CDF** | **Champ du Feu** | **1.79** | **193** | *e*Pn | Pn | 19 57 49.1 | -1.8 |
| **CDF** | **Champ du Feu** | **1.79** | **193** | *e*Pg | Pb | 19 57 53.4 | +0.6 |
| CDF | | | | *e*Sg | Sb | 19 58 16.2 | +0.9 |
| | 0.4nm,0.1s | | | | | | |
| **PAGF** | **Fort de Pagny** | **2.13** | **222** | *e*P | Pn | 19 57 56.0 | +0.4 |
| **PAGF** | **Fort de Pagny** | **2.13** | **222** | *e*Pg | Pg | 19 57 59.7 | -1.0 |
| PAGF | | | | *e*Sn | Sn | 19 58 18.6 | -3.5 |
| | 0.2nm,0.2s | | | | | | |
| **BAIF** | **Baives** | **2.37** | **269** | *e*P | Pn | 19 57 59.3 | +0.6 |
| BAIF | | | | *e*Sg | Sg | 19 58 34.5 | -1.3 |
| | 0.8nm,0.2s | | | | | | |
| **SAVF** | **Savonnieres en** | **2.37** | **230** | *e*Sn | Sn | 19 58 24.1 | -3.8 |
| | 0.6nm,0.2s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **2.48** | **229** | *e*Pn | Pn | 19 57 58.4 | -1.9 |
| | baz=44 | | | | | | |
| MEZF | | | | *e*Sn | Sn | 19 58 27.1 | -3.6 |
| | 2.1nm,0.3s | | | | | | |
| **SFTF** | **Sexfontaines** | **2.70** | **225** | *e*Sn | Sn | 19 58 32.1 | -3.9 |
| | 0.8nm,0.3s,baz=47 | | | | | | |

**BER 23 19:57:36.9**±0.9, **59°.32N**×**5°.93E**, **h15**km±3km, **ML1.2,2C, Confirmed Earthquake, Southern Norway**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLS5** | **Blasjo** | **0.29** | **69** | ⇑*i*P | Pg | 19 57 42.3 | -0.7 |
| BLS5 | | | | *e*S | Sg | 19 57 46.3 | -0.9 |
| BLS5 | | | | IAML | | 19 57 46.4 | |
| | comp=Z,27nm,0.4s | | | | | | |
| **KMY** | **Karmoy** | **0.36** | **253** | *e*P | Pg | 19 57 43.9 | -0.5 |
| KMY | | | | *e*S | Sg | 19 57 48.9 | -0.5 |
| KMY | | | | IAML | | 19 57 49.0 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **ODD1** | **Odda** | **0.69** | **31** | ⇑*i*P | Pg | 19 57 49.2 | -1.2 |
| ODD1 | | | | *e*S | Sg | 19 57 58.2 | -1.4 |
| ODD1 | | | | IAML | | 19 57 58.5 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **SNART** | **Snartemo** | **1.19** | **145** | *e*P | Pn | 19 57 57.7 | -1.3 |
| SNART | | | | IAML | | 19 58 13.0 | |
| | comp=Z,19nm,0.2s | | | | | | |
| SNART | | | | *e*S | Sb | 19 58 13.0 | -1.3 |
| **ASK** | **Askoy** | **1.22** | **343** | *e*P | Pn | 19 57 58.4 | -1.0 |
| ASK | | | | *e*S | Sb | 19 58 13.1 | -2.1 |
| ASK | | | | IAML | | 19 58 26.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **SKAR** | **Skarslia** | **1.81** | **40** | *e*Pg | Pn | 19 58 08.4 | +0.8 |
| SKAR | | | | *e*Sg | Sb | 19 58 31.4 | -0.9 |
| SKAR | | | | IAML | | 19 58 31.9 | |
| | comp=Z,2.5nm,0.4s | | | | | | |

*MDD **23** 20:21:06.0±0.3, 35°.66N×3°.63W, h0km, mb_Lg3.3/17,*
*Error ellipse: s-maj=2.6km s-min=2.0km az=2.0*
*SFS **23** 20:21:05.0, 35°.65N×3°.65W, ML3.4, ALBORAN SUR*
*CNRM **23** 20:21:06.6, 35°.75N×3°.55W, h22km, ml3.4*
*INMG **23** 20:21:06.8±1.4, 35°.68N×3°.67W, h4km±4km, ML2.9, Error*
*ellipse: s-maj=3.6km s-min=3.0km az=152.0*
*IGIL **23** 20:21:07.3, 35°.65N×3°.73W, h0km, ML2.9*

**ISC 23 20:21:07.3**±1.1, **35°.68N**±0°.02×**3°.58W**±0°.02, **h25**km±12km, **n89**, σ1°**39**/156, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.51** | **59** | Pg | **Pb** | **20 21 17.2** | **-0.5** |
| EALB | | | | Sg | **Sb** | **20 21 25.3** | **+0.6** |
| EALB | | | | *i* Vmb_Lg | | 20 21 26.8 | |
| **PALE** | **Palemas** | **0.55** | **213** | P | **Pb** | **20 21 18.0** | **-0.4** |
| PALE | | | | S | **Sn** | **20 21 27.0** | **-1.0** |
| **PALE** | **Palemas** | **0.55** | **213** | P | **Pb** | **20 21 17.7** | **-0.6** |
| PALE | | | | S | **Sb** | **20 21 26.2** | **+0.4** |
| **EMEL** | **Melilla** | **0.63** | **127** | Pg | **Pb** | **20 21 18.9** | **-0.8** |
| EMEL | | | | Sg | **Sb** | **20 21 27.6** | **-0.5** |
| **GOG** | **Mont Gurugu** | **0.66** | **134** | P | **Pb** | **20 21 19.2** | **-1.0** |
| GOG | | | | S | **Sn** | **20 21 32.0** | **+1.3** |
| **GOG** | **Mont Gurugu** | **0.66** | **134** | P | **Pb** | **20 21 19.5** | **-0.7** |
| GOG | | | | S | **Sb** | **20 21 29.0** | **0.0** |
| **CHAS** | **Isla Isabel II** | **1.06** | **118** | P | **Pn** | **20 21 24.7** | **-1.8** |
| CHAS | | | | S | **Sn** | **20 21 40.8** | **+0.4** |
| **ELGU** | **Los Guajares,** | **1.19** | **358** | Pg | **Pn** | **20 21 27.3** | **-1.1** |
| ELGU | | | | Sg | **Sn** | **20 21 42.6** | **-1.2** |
| ELGU | | | | *i* Vmb_Lg | | 20 21 46.7 | |
| **EMAL** | **Malaga-Limoner** | **1.28** | **328** | P | **Pn** | **20 21 28.1** | **-1.5** |
| EMAL | | | | S | **Sn** | **20 21 44.6** | **-1.4** |
| **TAF** | **Taforalt** | **1.28** | **132** | P | **Pn** | **20 21 29.1** | **-0.7** |
| **TAF** | **Taforalt** | **1.28** | **132** | P | **Pn** | **20 21 29.4** | **-0.3** |
| TAF | | | | S | **Sb** | **20 21 48.6** | **+1.7** |
| **EMIJ** | **Mijas** | **1.31** | **313** | Pg | **Pn** | **20 21 28.5** | **-1.5** |
| EMIJ | | | | Sg | **Sn** | **20 21 45.0** | **-1.8** |
| EMIJ | | | | *i* Vmb_Lg | | 20 21 45.7 | |
| **SMIR** | **Smir Dam** | **1.47** | **271** | S | **Sb** | **20 21 55.0** | **+2.8** |
| **CEU** | **Ceuta** | **1.48** | **279** | P | **Pn** | **20 21 29.8** | **-2.5** |
| CEU | | | | S | **Sn** | **20 21 47.2** | **-3.6** |
| **EGOR** | **Sierra Gorda,** | **1.49** | **343** | Pn | **Pn** | **20 21 31.6** | **-1.1** |
| EGOR | | | | Sn | **Sn** | **20 21 52.0** | **+0.6** |
| EGOR | | | | *i* Vmb_Lg | | 20 22 01.5 | |
| **EQUE** | **Quentar** | **1.53** | **4** | Pn | **Pn** | **20 21 33.2** | **+0.1** |
| EQUE | | | | Sn | **Sn** | **20 21 52.7** | **+0.4** |
| EQUE | | | | *i* Vmb_Lg | | 20 22 04.8 | |
| **CHEFC** | **Chefchaouen** | **1.55** | **249** | P | **Pn** | **20 21 34.0** | **+0.6** |
| **CHEFC** | **Chefchaouen** | **1.55** | **249** | P | **Pn** | **20 21 33.7** | **+0.3** |
| CHEFC | | | | S | **Sb** | **20 21 55.3** | **+0.6** |
| **JBK** | **JBK** | **1.58** | **148** | P | **Pn** | **20 21 33.1** | **-0.8** |
| **ENIJ** | **Nijar** | **1.70** | **40** | Pn | **Pn** | **20 21 33.8** | **-1.6** |
| ENIJ | | | | Sn | **Sn** | **20 21 55.1** | **-1.3** |
| ENIJ | | | | *i* Vmb_Lg | | 20 22 08.4 | |
| **EJIF** | **Jimena Fronter** | **1.72** | **297** | Pn | **Pn** | **20 21 34.9** | **-0.7** |
| **CPS** | **Cap Spartel** | **1.90** | **274** | P | **Pb** | **20 21 43.0** | **+1.8** |
| CPS | | | | S | **Sn** | **20 22 02.7** | **+1.4** |
| **SICH** | **Sidi Chahed** | **2.13** | **223** | P | **Pb** | **20 21 45.5** | **+0.3** |
| SICH | | | | S | **Sb** | **20 22 09.1** | **-2.0** |
| **LCRM** | **LCR** | **2.25** | **208** | P | **Pb** | **20 21 49.0** | **+1.6** |
| **LCRM** | **LCR** | **2.25** | **208** | P | **Pb** | **20 21 46.2** | **-1.2** |
| LCRM | | | | S | **Sb** | **20 22 15.1** | **+0.2** |
| **IFR** | **Ifrane** | **2.51** | **211** | P | **Pn** | **20 21 46.9** | **+0.2** |
| IFR | | | | S | **Sn** | **20 22 15.7** | **-0.9** |
| **EZAR** | **Zarzadilla de** | **2.66** | **34** | Pn | **Pn** | **20 21 48.2** | **-0.5** |
| EZAR | | | | Sn | **Sn** | **20 22 20.4** | **+0.2** |
| **ECAB** | **El Cabril** | **2.81** | **329** | Pn | **Pn** | **20 21 51.0** | **+0.3** |
| ECAB | | | | Sn | **Sn** | **20 22 24.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PBEJ | | | | *e*Sn | | **Sn** | **20 22 56.5** | **-0.6** |
| PBEJ | | | | A | | A | 20 23 03.3 | |
| | 11nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*P | | **Pn** | **20 22 11.9** | **-0.7** |
| MORF | | | | *e*S | | **Sn** | **20 22 59.2** | **-3.8** |
| MORF | | | | IAML | | | 20 23 08.9 | |
| | comp=N,25nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.40** | **293** | *e*Pn | | **Pn** | **20 22 12.5** | **-0.1** |
| MORF | | | | *e*Sn | | **Sn** | **20 23 02.3** | **-0.7** |
| MORF | | | | A | | A | 20 23 11.6 | |
| | comp=N,13nm,0.3s | | | | | | | |
| **ECHE** | **Chera** | **4.42** | **27** | Pn | | **Pn** | **20 22 13.6** | **+0.8** |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | *e*Pn | | **Pn** | **20 22 15.0** | **+1.4** |
| PFVI | | | | *e*Sn | | **Sn** | **20 23 02.9** | **-1.9** |
| PFVI | | | | A | | A | 20 23 09.3 | |
| | comp=N,13nm,0.7s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **290** | P | | **Pn** | **20 22 13.3** | **-0.2** |
| PFVI | | | | S | | **Sn** | **20 23 02.4** | **-2.4** |
| **PESTR** | **Estremoz** | **4.51** | **316** | *e*Pn | | **Pn** | **20 22 14.5** | **+0.4** |
| PESTR | | | | *e*Sn | | **Sn** | **20 23 04.4** | **-1.4** |
| PESTR | | | | A | | A | 20 23 09.8 | |
| | comp=N,12nm,0.4s | | | | | | | |
| **PESTR** | **Estremoz** | **4.51** | **316** | P | | **Pn** | **20 22 14.9** | **+0.8** |
| **PESTR** | **Estremoz** | **4.51** | **316** | P | | **Pn** | **20 22 14.2** | **+0.1** |
| PESTR | | | | S | | **Sn** | **20 23 04.4** | **-1.4** |
| **PTEO** | **Sao Teotonio** | **4.54** | **296** | *e*Pn | | **Pn** | **20 22 15.1** | **+0.7** |
| PTEO | | | | *e*Sn | | **Sn** | **20 23 05.3** | **-1.1** |
| PTEO | | | | A | | A | 20 23 10.3 | |
| | comp=N,18nm,0.5s | | | | | | | |
| **EVO** | **Evora** | **4.55** | **310** | P | | **Pn** | **20 22 16.6** | **+2.1** |
| EVO | | | | S | | **Sn** | **20 23 06.3** | **-0.3** |
| **EVO** | **Evora** | **4.55** | **310** | *e*Pn | | **Pn** | **20 22 17.0** | **+2.5** |
| EVO | | | | *e*Sn | | **Sn** | **20 23 06.8** | **+0.2** |
| EVO | | | | A | | A | 20 23 08.7 | |
| | comp=N,18nm,0.4s | | | | | | | |
| **UCM** | **Universidad Co** | **4.63** | **3** | P | | **Pn** | **20 22 17.0** | **+1.4** |
| UCM | | | | S | | **Sn** | **20 23 11.7** | **+3.1** |
| **PNCL** | **Nicolau / Gran** | **4.65** | **303** | *e*Pn | | **Pn** | **20 22 15.9** | **-0.1** |
| PNCL | | | | *e*Sn | | **Sn** | **20 23 07.2** | **-2.0** |
| PNCL | | | | A | | A | 20 23 11.1 | |
| | comp=N,8.6nm,0.4s | | | | | | | |
| **EPLA** | **Plasencia** | **4.80** | **336** | Pn | | **Pn** | **20 22 18.6** | **+0.5** |
| EPLA | | | | Sn | | **Sn** | **20 23 13.0** | **0.0** |
| EPLA | | | | *i* Vmb_Lg | | | 20 23 48.9 | |
| **PMRV** | **Marv??o** | **4.81** | **322** | *e*Pn | | **Pn** | **20 22 19.0** | **+0.8** |
| PMRV | | | | *e*Sn | | **Sn** | **20 23 12.3** | **-0.9** |
| PMRV | | | | A | | A | 20 23 39.1 | |
| | comp=N,11nm,0.5s | | | | | | | |
| **GUD** | **Guadarrama** | **4.98** | **355** | Pn | | **Pn** | **20 22 21.2** | **+0.6** |
| GUD | | | | *i* Vmb_Lg | | | 20 24 01.3 | |
| **PMTG** | **Montargil** | **5.01** | **314** | *e*Pn | | **Pn** | **20 22 21.4** | **+0.4** |
| PMTG | | | | *e*Sn | | **Sn** | **20 23 16.7** | **-1.4** |
| PMTG | | | | A | | A | 20 23 19.2 | |
| | comp=N,8.8nm,0.4s | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.18** | **325** | *e*Pn | | **Pn** | **20 22 24.1** | **+0.9** |
| PCBR | | | | *e*Sn | | **Sn** | **20 23 21.1** | **-1.0** |
| PCBR | | | | A | | A | 20 23 22.6 | |
| | comp=N,10nm,0.4s | | | | | | | |
| **PACT** | **Alcochete** | **5.21** | **308** | *e*Pn | | **Pn** | **20 22 24.3** | **+0.7** |
| PACT | | | | *e*Sn | | **Sn** | **20 23 22.7** | **-0.1** |
| **ETOR** | **Torete** | **5.27** | **13** | Pn | | **Pn** | **20 22 25.8** | **+1.2** |
| ETOR | | | | Sn | | **Sn** | **20 23 24.5** | **0.0** |
| **ECOL** | **Islas Columbre** | **5.40** | **37** | Pn | | **Pn** | **20 22 26.2** | **+0.1** |
| **OUZM** | **OUZ** | **5.45** | **210** | P | | **Pn** | **20 22 28.4** | **+1.3** |
| **PMAFR** | **Mafra** | **5.60** | **307** | *e*Pn | | **Pn** | **20 22 29.7** | **+0.7** |
| PMAFR | | | | *e*Sn | | **Sn** | **20 23 31.8** | **-0.8** |
| **PSBE** | **So Bento** | **5.64** | **314** | *e*Pn | | **Pn** | **20 22 30.9** | **+1.3** |
| PSBE | | | | *e*Sn | | **Sn** | **20 23 32.7** | **-0.9** |
| **MTE** | **Manteigas** | **5.66** | **328** | *e*Pn | | **Pn** | **20 22 31.2** | **+1.4** |
| MTE | | | | *e*Sn | | **Sn** | **20 23 33.4** | **-0.6** |
| MTE | | | | A | | A | 20 24 06.9 | |
| | comp=N,11nm,0.7s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.72** | **220** | P | | **Pn** | **20 22 32.0** | **+1.0** |
| **PCAS** | **Casmilo, Conde** | **5.85** | **320** | *e*Pn | | **Pn** | **20 22 33.2** | **+0.8** |
| PCAS | | | | *e*Sn | | **Sn** | **20 23 35.9** | **-2.8** |
| PCAS | | | | A | | A | 20 23 38.9 | |
| | comp=N,9.5nm,0.3s | | | | | | | |
| **PVIS** | **Viseu** | **6.07** | **327** | *e*Pn | | **Pn** | **20 22 36.4** | **+0.9** |
| PVIS | | | | *e*Sn | | **Sn** | **20 23 42.7** | **-1.5** |
| PVIS | | | | A | | A | 20 23 45.3 | |
| | comp=N,8.7nm,0.6s | | | | | | | |
| **MVO** | **Moncorvo** | **6.11** | **335** | *e*Pn | | **Pn** | **20 22 37.3** | **+1.2** |
| MVO | | | | *e*Sn | | **Sn** | **20 23 43.8** | **-1.4** |
| MVO | | | | A | | A | 20 23 47.5 | |
| | comp=N,9.2nm,0.6s | | | | | | | |
| **EAH** | **EAH** | **6.42** | **233** | P | | **Pn** | **20 22 41.1** | **+0.8** |
| **PVRL** | **Vila Real** | **6.46** | **331** | *e*Pn | | **Pn** | **20 22 41.8** | **+0.9** |
| PVRL | | | | *e*Sn | | **Sn** | **20 23 51.6** | **-2.2** |
| PVRL | | | | A | | A | 20 23 54.8 | |
| | comp=N,10nm,0.3s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.58** | **331** | *e*Pn | | **Pn** | **20 22 43.4** | **+0.9** |
| POLO | | | | *e*Sn | | **Sn** | **20 23 53.7** | **-3.0** |
| POLO | | | | A | | A | 20 23 59.9 | |
| | comp=N,3.1nm,0.6s | | | | | | | |
| **PBRG** | **Braganca** | **6.60** | **339** | *e*Pn | | **Pn** | **20 22 43.9** | **+1.2** |
| **ELOB** | **Lobios** | **7.10** | **332** | Pn | | **Pn** | **20 22 50.2** | **+0.5** |
| ELOB | | | | Sn | | **Sn** | **20 24 05.3** | **-4.4** |
| **PGAV** | **Gavieira, Arco** | **7.27** | **331** | *e*Pn | | **Pn** | **20 22 53.4** | **+1.4** |
| PGAV | | | | *e*Sn | | **Sn** | **20 24 11.9** | **-1.8** |
| PGAV | | | | A | | A | 20 24 25.0 | |
| | comp=N,7.2nm,0.7s | | | | | | | |
| **ELAN** | **Lanestosa** | **7.54** | **1** | Pn | | **Pn** | **20 22 57.3** | **+1.6** |
| **EALK** | **Alkurruntz** | **7.70** | **11** | Pn | | **Pn** | **20 23 00.8** | **+2.9** |

**IDC 23 20:33:19.2±1.4, 1°.65N×126°.48E, h0km, mb3.5/4, mb1 3.7/5, mb1mx3.3/33, mbtmp3.5/5, ML3.3/1, Error ellipse: s-maj=110.1km s-min=19.8km az=71.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **19.64** | **182** | P | P | 20 37 50.2 | +0.6 |
| | 0.1nm,0.3s,baz=2.4,slow=10,SNR=1.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.80** | **161** | P | P | 20 38 22.7 | -1.1 |
| | 0.7nm,0.4s,baz=339,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **26.18** | **164** | P | P | 20 38 56.4 | +0.7 |
| | 0.6nm,0.6s,baz=344,slow=11,SNR=9.2 | | | | | | |
| **SONM** | **Songino Array** | **49.18** | **342** | P | P | 20 42 09.3 | +0.1 |
| | 0.2nm,0.5s,baz=143,slow=5.0,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.12** | **326** | P | P | 20 43 21.4 | -0.2 |
| | 0.2nm,0.4s,baz=122,slow=8.3,SNR=13 | | | | | | |

*JMA **23** 20:36:05.8±0.2, 35°.35N×138°.43E, h206km±2km, M3.2*
*IDC **23** 20:36:06.4±1.4, 35°.38N×138°.54E, h199km±9km, mb3.2/4, mb1 3.3/4, mb1mx2.9/33, mbtmp3.7/4, Error ellipse: s-maj=47.8km s-min=25.2km az=65.0*
**ISC 23 20:36:06.7±0.9, 35°.38N±0°.08×138°.39E±0°.08, h199km±6km, n19, σ0°.34/26, mb3.4/4, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYN** | **Shimob** | **0.18** | **47** | P | **Pn** | **20 36 32.9** | **0.0** |
| **JFNN** | **Fujinakano** | **0.31** | **127** | P | **Pn** | **20 36 33.3** | **+0.2** |
| **SHZ3** | **Shizuoka 3** | **0.34** | **205** | P | **Pn** | **20 36 33.5** | **+0.2** |
| SHZ3 | | | | *e*S | **S** | **20 36 54.3** | **+0.5** |
| **JNY** | **Yasuok** | **0.43** | **268** | P | **Pn** | **20 36 33.7** | **+0.2** |
| JNY | | | | *e*S | **S** | **20 36 54.5** | **+0.3** |
| **JOD2** | **Odawara 2** | **0.59** | **101** | P | **Pn** | **20 36 33.8** | **-0.3** |
| **HMMJ** | **Hamamatsu 2** | **0.75** | **226** | P | **Pn** | **20 36 34.5** | **-0.4** |
| **JRY** | **Ryogami san** | **0.76** | **33** | P | **Pn** | **20 36 35.3** | **+0.4** |
| **JHU** | **Hanno** | **0.87** | **57** | P | **Pn** | **20 36 35.5** | **0.0** |
| JHU | | | | S | **S** | **20 36 57.9** | **0.0** |
| **JAO** | **Obara** | **0.93** | **263** | P | **Pn** | **20 36 35.9** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **1.17** | **353** | P | **Pn** | **20 36 37.5** | **-0.1** |
| | 1.1nm,0.3s,baz=167,slow=13,SNR=36 | | | | | | |
| MJAR | | | | S | **S** | **20 37 01.6** | **-0.1** |
| | 0.3nm,0.3s,baz=125,slow=21,SNR=14 | | | | | | |
| **MAT** | **Matsushiro** | **1.17** | **353** | P | **Pn** | **20 36 37.8** | **+0.2** |
| MAT | | | | S | **S** | **20 37 01.3** | **-0.5** |
| **MAT** | **Matsushiro** | **1.17** | **353** | P | **Pn** | **20 36 37.7** | **+0.2** |
| MAT | | | | *e*S | **S** | **20 37 01.5** | **-0.3** |
| **JAG** | **Ashikaga** | **1.36** | **39** | P | **Pn** | **20 36 38.5** | **-0.5** |
| **JYTA** | **Yamagatataniai** | **1.36** | **280** | P | **Pn** | **20 36 38.9** | **-0.2** |
| JYTA | | | | *e*S | **S** | **20 37 03.5** | **-0.7** |
| **BSO4** | **Boso 4** | **1.65** | **103** | P | **Pn** | **20 36 41.4** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **41.26** | **314** | P | **P** | **20 43 32.5** | **+0.5** |
| | 0.6nm,0.4s,baz=114,slow=7.8,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.95** | **303** | P | **P** | **20 43 46.3** | **+0.4** |
| | 0.5nm,0.4s,baz=87,slow=8.9,SNR=9.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.15** | **185** | P | **P** | **20 45 18.2** | **-0.4** |
| | 0.1nm,0.3s,baz=0.9,slow=7.7,SNR=1.1 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **69.12** | **332** | P | | **P** | **20 46 50.9** | **0.0** |
| | 2.5nm,1.0s,baz=57,slow=7.0,SNR=5.9 | | | | | | | |

*TUL **23** 20:44:02.5±0.7, 35°.67N±0°.01×97°.39W±0°.02, h7km±3km, ML2.8, mb_Lg2.4/12(NEIC), Error ellipse: s-maj=2.2km s-min=1.7km az=115.0*
**NEIC 23 20:44:02.3±0.9, 35°.678N±0°.006×97°.40W±0°.02, h8km±2km, Error ellipse: s-maj=2.3km s-min=0.7km az=103.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **189** | Pg | Pg | 20 44 04.9 | +0.2 |
| OK009 | | | | Sg | Sg | 20 44 06.8 | +0.5 |
| **OK001** | **Jones High Sch** | **0.15** | **141** | Pg | Pg | 20 44 05.8 | +0.3 |
| OK001 | | | | Sg | Sg | 20 44 08.3 | +0.6 |
| **OK005** | **Luther M Schoo** | **0.17** | **97** | Pg | Pg | 20 44 06.3 | +0.4 |
| **OKCFA** | **Oklahoma City** | **0.27** | **188** | | Pg | 20 44 07.8 | +0.3 |
| OKCFA | | | | Sg | Sg | 20 44 12.1 | +0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **0.27** | **186** | Pg | Pg | 20 44 08.0 | +0.3 |
| OKCSW | | | | Sg | Sg | 20 44 12.3 | +0.9 |
| **FNO** | **Franklin** | **0.42** | **180** | Pg | Pg | 20 44 10.8 | +0.3 |
| FNO | | | | Sg | Sg | 20 44 16.8 | +0.8 |
| **W35A** | **Tecumseh** | **0.68** | **140** | Pg | Pg | 20 44 15.2 | -0.2 |
| W35A | | | | Sg | Sg | 20 44 24.5 | +0.3 |
| **X34A** | **Smith Ranch, M** | **1.13** | **198** | Pg | Pg | 20 44 23.9 | -0.1 |
| **TUL1** | **Leonard** | **1.33** | **79** | | Pn | 20 44 26.2 | -0.9 |
| **T35A** | **Sooner Cattle** | **1.43** | **30** | | Pn | 20 44 28.3 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | | Pn | 20 44 29.1 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.47** | **299** | | Pn | 20 44 29.2 | +0.1 |
| **X37A** | **Clayton** | **1.99** | **123** | Pn | Pn | 20 44 35.9 | -0.3 |
| **Z35A** | **Perchaven, San** | **2.34** | **177** | IAmb_Lg | | 20 45 22.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **2.56** | **72** | IAmb_Lg | | 20 45 24.1 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | Pn | Pn | 20 44 56.0 | -1.9 |
| **U40A** | **Yellville** | **3.75** | **78** | Pn | Pn | 20 45 00.2 | -0.2 |
| U40A | | | | IAmb_Lg | | 20 46 03.5 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.85** | **57** | IAmb_Lg | | 20 46 04.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.93** | **106** | Pn | Pn | 20 45 02.6 | -0.3 |
| **W41B** | **Gary Mavity, V** | **4.24** | **95** | Pn | Pn | 20 45 05.3 | -1.8 |
| **FCAR** | **Ozark Folk Cen** | **4.30** | **86** | Pn | Pn | 20 45 06.6 | -1.4 |
| **MGMO** | **Mountain Grove** | **4.40** | **69** | Pn | Pn | 20 45 08.6 | -0.7 |
| **R40A** | **Maddies Statio** | **4.87** | **56** | Pn | Pn | 20 45 14.2 | -1.5 |
| **CCM** | **Cathedral Cave** | **5.48** | **63** | Pn | Pn | 20 45 22.2 | -2.0 |
| **PBMO** | **Poplar Bluff** | **5.74** | **77** | Pn | Pn | 20 45 25.5 | -2.3 |

*CNRM **23** 20:45:06.8, 35°.55N×3°.84W, h13km, ml2.5*
*SFS **23** 20:45:06.0, 35°.49N×3°.82W, ML2.4, ALBORAN SUR*
**ISC 23 20:45:06.3±1.1, 35°.53N±0°.03×3°.82W±0°.04, h12km±9km, n15, σ1°.29/24, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.33** | **197** | P | **Pb** | **20 45 14.0** | **-0.1** |
| PALE | | | | S | **Sg** | **20 45 17.9** | **+0.5** |
| **GOG** | **Mont Gurugu** | **0.74** | **114** | P | **Pb** | **20 45 21.1** | **-0.1** |
| GOG | | | | S | **Sb** | **20 45 31.9** | **+0.5** |
| **CHAS** | **Isla Isabel II** | **1.19** | **107** | P | **Pn** | **20 45 27.4** | **-1.3** |
| CHAS | | | | S | **Sb** | **20 45 42.4** | **-1.7** |
| **EMAL** | **Malaga-Limoner** | **1.32** | **338** | P | **Pg** | **20 45 31.7** | **0.0** |
| EMAL | | | | S | **Sg** | **20 45 49.2** | **+0.4** |
| **TAF** | **Taforalt** | **1.36** | **121** | P | **Pg** | **20 45 32.7** | **+0.3** |
| TAF | | | | S | **Sg** | **20 45 50.5** | **+0.5** |
| **JBK** | **JBK** | **1.58** | **139** | P | **Pn** | **20 45 34.7** | **+0.4** |
| JBK | | | | S | **Sb** | **20 45 55.7** | **+0.2** |
| **IFR** | **Ifrane** | **2.28** | **209** | P | **Pg** | **20 45 49.4** | **-0.6** |
| IFR | | | | S | **Sn** | **20 46 11.2** | **-0.8** |
| **MD31** | **MD31** | **2.77** | **197** | P | **Pn** | **20 45 51.3** | **+0.8** |
| MD31 | | | | S | **Sn** | **20 46 25.1** | **+1.2** |
| **MDT** | **Midelt** | **2.79** | **194** | P | **Pn** | **20 45 52.4** | **+1.6** |
| MDT | | | | S | **Sn** | **20 46 26.1** | **+1.7** |
| **ZHG** | **ZHG** | **3.12** | **229** | P | **Pb** | **20 45 58.8** | **-3.0** |
| **PVAQ** | **Vaqueiros** | **3.65** | **302** | *e*Sn | **Sn** | **20 46 44.6** | **-1.0** |
| PVAQ | | | | A | A | 20 46 53.0 | |
| | 1.6nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.65** | **302** | P | **Pn** | **20 46 04.2** | **+1.6** |
| PVAQ | | | | S | **Sn** | **20 46 44.1** | **-1.5** |
| **PBAR** | **Barrancos** | **3.69** | **317** | *e*Sn | **Sn** | **20 46 47.5** | **+1.0** |
| PBAR | | | | A | A | 20 46 53.5 | |
| | 2.7nm,0.5s | | | | | | |
| **PBAR** | **Barrancos** | **3.69** | **317** | A | A | 20 46 53.5 | |
| | 1.4nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.57** | **306** | *e*Pn | **Pn** | **20 46 17.0** | **+1.8** |

*BJI **23** 20:47:31.1±0.0, 0°.82N×127°.53E, h5km, mb5.0/74, mB5.2/45, Ms4.7/42, Ms7 4.3/42*
*IDC **23** 20:47:32.5±0.4, 1°.01N×127°.37E, h0km, mb4.9/25, mb1 4.9/31, mb1mx4.9/33, mbtmp4.9/31, ML4.8/5, MS4.1/48, Ms1 4.1/48, ms1mx3.9/75, Error ellipse: s-maj=12.1km s-min=8.1km az=72.0*
*MOS **23** 20:47:32.6±1.3, 1°.02N×127°.38E, h10km, mb5.4/39, Error ellipse: s-maj=8.4km s-min=4.8km az=110.0*
*NEIC **23** 20:47:34.7±2.5, 1°.07N±0°.04×127°.43E±0°.05, h14km±3km, mb5.4/132, Error ellipse: s-maj=7.6km s-min=6.3km az=97.0*
*DJA **23** 20:47:35.9±0.3, 1°.1×12°.7E±°, h11km±2km, M5.1/76, mB5.6/51, mb5.3/76, MLv5.2/16, Mw(mB)5.1/51, MwMwp4.8/5, Mwp5.1/5*
*GCMT **23** 20:47:37.7±0.2, 1°.13N±0°.01×127°.46E±0°.01, h12km, MW5.1/113, Moment Tensor Solution. s33,c37; s113,c178; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-2.46±.12; Mθθ-3.15±.10; Mϕϕ5.61±.10; Mrθ-1.36±.36; Mθϕ1.19±.10; Mϕr-0.48±.31; Best double couple: M05.03700×10^16 NP1:ϕs148.00000°, δ62.00000°, λ-156.00000°. NP2:ϕs46.00000°, δ69.00000°, λ-31.00000°. Principal axes: T 5.8210, Plg5.0000°, Azm98.0000°; N -1.5690, Plg53.0000°, Azm194.0000°; P -4.2520, Plg36.0000°, Azm5.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*KLM **23** 20:47:37.1°.03N×127°.59E, h22km, mb5.3*
**ISC 23 20:47:34.7±0.7, 1°.02N±0°.03×127°.44E±0°.03, h12km±3km, n666, σ1°.87/690, mb5.3/191, MS4.2/66, 30C-23D, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.26** | **196** | Pg | **Pb** | **20 47 41.0** | **-0.3** |
| TNTI | | | | Sg | **Sb** | **20 47 46.2** | **+0.5** |
| **TNTI** | **Ternate** | **0.26** | **196** | P | **Pb** | **20 47 41.5** | **+0.2** |
| TNTI | | | | S | **Sb** | **20 47 46.0** | **+0.3** |
| **SGSI** | **Sangihe** | **3.26** | **324** | P | **Pn** | **20 48 28.0** | **+2.2** |
| SGSI | | | | S | **Sn** | **20 49 03.6** | **-1.0** |
| **SANI** | **Sanana** | **3.38** | **205** | P | **Pn** | **20 48 28.1** | **+0.8** |
| SANI | | | | S | **Sb** | **20 49 12.3** | **-3.3** |
| **SANI** | **Sanana** | **3.38** | **205** | P | **Pn** | **20 48 29.0** | **+1.7** |
| **KMSI** | **Cibinong** | **3.48** | **263** | P | **Pn** | **20 48 30.9** | **+2.1** |
| KMSI | | | | S | **Sn** | **20 49 10.0** | **0.0** |
| **SIJI** | **Sorong** | **4.26** | **116** | Pn | **Pn** | **20 48 41.2** | **+1.7** |
| | 15nm,0.3s,baz=328,slow=22,SNR=50 | | | | | | |
| SIJI | | | | Sn | **Sn** | **20 49 31.8** | **+2.5** |
| | 9.3nm,0.3s,baz=355,slow=20,SNR=1.1 | | | | | | |
| **GTOI** | **Gorontalo** | **4.44** | **265** | P | **Pn** | **20 48 45.4** | **+3.4** |
| GTOI | | | | S | **Sn** | **20 49 38.6** | **+4.9** |
| **MSAI** | **Masohi** | **4.58** | **161** | P | Pb | 20 48 50.2 | -4.9 |
| MSAI | | | | S | **Sn** | **20 49 43.2** | **+6.0** |
| **AAI** | **Ambon** | **4.74** | **171** | P | **Pn** | **20 48 49.7** | **+3.7** |
| AAI | | | | S | **Sn** | **20 49 43.0** | **+2.1** |
| **LUWI** | **Luwuk** | **5.09** | **246** | | **Pn** | **20 48 51.2** | **+0.3** |
| LUWI | | | | Sn | **Sn** | **20 49 49.9** | **+0.1** |
| **LUWI** | **Luwuk** | **5.09** | **246** | P | **Pn** | **20 48 52.3** | **+1.4** |
| | 7.7nm8μm796nm,0.8s | | | | | | |
| LUWI | | | | S | **Sn** | **20 49 42.5** | **-7.3** |
| | 7.7nm8μm796nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **5.09** | **246** | P | **Pn** | **20 48 55.7** | **+4.8** |
| **MRSI** | **Marisa** | **5.52** | **264** | P | **Pn** | **20 48 58.3** | **+1.5** |
| | 1.9nm5μm5μm511nm,0.6s | | | | | | |
| **GSPH** | **General Santos** | **5.61** | **334** | *i*P | **Pn** | **20 48 58.3** | **+0.1** |
| **MATI** | **Mati** | **6.00** | **349** | *i*P | **Pn** | **20 49 07.3** | **+3.9** |
| **APSI** | **Ampana** | **6.10** | **252** | P | **Pn** | **20 49 06.9** | **+2.2** |
| | 2.6nm3μm5μm544nm,0.9s | | | | | | |
| APSI | | | | S | **Sn** | **20 50 15.2** | **+0.7** |
| | 2.6nm3μm5μm544nm,0.9s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **6.20** | **129** | Pn | | **Pn** | **20 49 07.0** | **+0.9** |
| **FAKI** | **Fak Fak** | **6.20** | **129** | P | | **Pn** | **20 49 09.1** | **+3.0** |
| | 0.7nm6μm2μm206nm,0.9s | | | | | | | |
| **FAKI** | **Fak Fak** | **6.20** | **129** | P | | Pn | 20 49 11.9 | +5.8 |
| **DAV** | **Davao City (W)** | **6.29** | **343** | Pn | | **Pn** | **20 49 07.0** | **-0.4** |
| | 26nm,0.3s,baz=252,slow=22,SNR=1.3 | | | | | | | |
| DAV | | | | Sn | | **Sn** | **20 50 21.1** | **+1.8** |
| | 24nm,0.3s,baz=68,slow=22,SNR=1.1 | | | | | | | |
| **DAV** | **Davao City (W)** | **6.29** | **343** | P | | **Pn** | **20 49 07.2** | **-0.2** |
| **DAV** | **Davao City (W)** | **6.29** | **343** | P | | Pn | 20 49 14.0 | +6.6 |
| **KCP** | **Kidapawan** | **6.39** | **339** | *i*P | | **Pn** | **20 49 11.9** | **+3.1** |
| KCP | | | | *i* S | | **Sn** | **20 50 25.1** | **+3.1** |
| **TOLI2** | **Tolitoli** | **6.66** | **271** | Pn | | **Pn** | **20 49 12.5** | **+0.1** |
| **TOLI2** | **Tolitoli** | **6.66** | **271** | P | | **Pn** | **20 49 15.0** | **+2.6** |
| **CTBH** | **Cotabato--PC H** | **6.93** | **333** | *i*P | | **Pn** | **20 49 16.9** | **+0.7** |
| **MPSI** | **Mapaga** | **7.57** | **265** | P | | **Pn** | **20 49 27.3** | **+2.3** |
| | 0.6nm4μm3μm155nm,0.7s | | | | | | | |
| **BBSI** | **Bau Bau** | **8.09** | **217** | P | | **Pn** | **20 49 34.0** | **+1.9** |
| | 522nm58nm,1.1s | | | | | | | |
| **TTSI** | **Tana Toraja** | **8.62** | **242** | P | | **Pn** | **20 49 40.8** | **+1.4** |
| | 3μm286nm,1.0s | | | | | | | |
| **GLSP** | **General Luna,** | **8.80** | **352** | *i*P | | **Pn** | **20 49 43.9** | **+1.9** |
| **BNSI** | **Bone** | **9.09** | **234** | P | | **Pn** | **20 49 47.7** | **+1.9** |
| | 3μm306nm,0.7s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.12** | **237** | P | | **Pn** | **20 49 48.0** | **+1.7** |
| | 4μm397nm,0.6s | | | | | | | |
| **TBP** | **Tagbilaran** | **9.32** | **338** | *e*P | | **Pn** | **20 49 50.4** | **+1.4** |
| **I39PW** | **PALAU INFRASON** | **9.60** | **47** | *i* | | | 21 43 30.0 | |
| | baz=227,slow=314,SNR=5.2 | | | | | | | |
| **BKSI** | **Bulukumba** | **9.65** | **229** | P | | **Pn** | **20 49 56.2** | **+2.7** |
| | 3μm232nm,0.8s | | | | | | | |
| **SAUI** | **Saumlaki** | **9.74** | **157** | | | **Pn** | **20 49 55.6** | **+0.9** |
| **SAUI** | **Saumlaki** | **9.74** | **157** | P | | **Pn** | **20 49 59.4** | **+4.7** |
| **KAPI** | **Kappang** | **9.74** | **232** | Pn | | **Pn** | **20 49 55.2** | **+0.5** |
| | 22nm,0.3s,baz=106,slow=2.9,SNR=30 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **20 51 43.5** | **-0.7** |
| | 5.1nm,0.3s,baz=139,slow=19,SNR=1.9 | | | | | | | |
| KAPI | | | | LR | LR | | 20 54 45.7 | |
| | comp=Z,572nm,19.6s,baz=80,slow=45 | | | | | | | |
| **KAPI** | **Kappang** | **9.74** | **232** | Pn | | **Pn** | **20 49 56.4** | **+1.6** |
| **KAPI** | **Kappang** | **9.74** | **232** | P | | **Pn** | **20 49 58.5** | **+3.7** |
| **MYLDM** | **Lahad Datu** | **9.83** | **295** | Pn | | **Pn** | **20 49 57.2** | **+1.1** |
| **BSSI** | **Bau Bau, Buton** | **9.94** | **224** | P | | **Pn** | **20 49 59.3** | **+1.9** |
| | 1μm114nm,0.8s | | | | | | | |
| **MMRI** | **Maumere** | **10.90** | **208** | Pn | | **Pn** | **20 50 10.5** | **-0.2** |
| **SOEI** | **Soe** | **11.16** | **196** | | | **Pn** | **20 50 13.7** | **-0.6** |
| **SOEI** | **Soe** | **11.16** | **196** | P | | Pn | 20 50 23.1 | +8.8 |
| **SPMM** | **Sapulut** | **11.55** | **289** | P | | **Pn** | **20 50 23.0** | **+3.3** |
| **SMPI** | **Sarmi** | **11.66** | **105** | P | | **Pn** | **20 50 22.7** | **+1.6** |
| **BATI** | **Baumata** | **11.77** | **199** | Pn | | **Pn** | **20 50 27.2** | **+4.6** |
| | 2.2nm,0.3s,baz=6.6,slow=0.3,SNR=14 | | | | | | | |
| **BATI** | **Baumata** | **11.77** | **199** | P | | Pn | 20 50 29.2 | +6.6 |
| **KBKI** | **Kotabaru** | **12.05** | **249** | P | | **Pn** | **20 50 28.0** | **+1.5** |
| | 579nm74nm,1.0s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **12.26** | **294** | | | **Pn** | **20 50 27.4** | **-2.0** |
| **KKM** | **Kota Kinabalu** | **12.26** | **294** | P | | **Pn** | **20 50 33.3** | **+3.9** |
| **MTKI** | **Muara Teweh, K** | **12.69** | **261** | P | | **Pn** | **20 50 36.4** | **+1.2** |
| | 1μm47nm,0.8s | | | | | | | |
| **BASI** | **Baing, Sumba** | **13.09** | **211** | P | | **Pn** | **20 50 42.5** | **+1.9** |
| | 5μm163nm,1.5s | | | | | | | |
| **GENI** | **Genyem** | **13.22** | **106** | P | | **Pn** | **20 50 47.2** | **+4.7** |
| | 5μm357nm,1.4s | | | | | | | |
| **GENI** | **Genyem** | **13.22** | **106** | P | | **P** | **20 50 50.8** | **-1.6** |
| **WBSI** | **Waikabubak, Su** | **13.28** | **217** | P | | **Pn** | **20 50 45.0** | **+1.7** |
| | 2μm126nm,0.9s | | | | | | | |
| **JAY** | **Jayapura** | **13.72** | **105** | Pn | | **Pn** | **20 50 49.5** | **+0.2** |
| | 0.3nm,0.3s,baz=348,slow=13,SNR=2.6 | | | | | | | |
| JAY | | | | LR | LR | | 20 55 46.7 | |
| | comp=Z,2μm,19.9s,baz=299,slow=36 | | | | | | | |
| **PLAI** | **Plampang** | **13.72** | **224** | P | | **P** | **20 50 53.9** | **-4.1** |
| | 2μm146nm,1.1s | | | | | | | |
| **DRS** | **Darwin Rock St** | **13.80** | **166** | P | | **Pn** | **20 50 53.7** | **+3.4** |
| **MTN** | **Manton Dam** | **14.25** | **165** | P | | **Pn** | **20 50 55.9** | **-0.7** |
| | baz=14,SNR=7.6 | | | | | | | |
| **MTN** | **Manton Dam** | **14.25** | **165** | | | **P

**CBJI Citeko 21.84 250** P **P** **20 52 27.0 -0.3**
comp=Z,3µmcomp=Z,432nm,1.1s
**CNJI Cibinong 21.88 247** P **P** **20 52 28.5 +0.7**
comp=Z,5µmcomp=Z,705nm,1.1s
**WRAB Tennant Creek 21.90 162***d i*P **P** **20 52 29.3 +1.4**
WRAB pmax pmax
comp=Z,219nm,1.2s
**WRAB Tennant Creek 21.90 162** P **P** **20 52 27.6 -0.3**
WRAB IAmb IAmb 20 52 35.0
comp=Z,192nm,1.1s
**WRAB Tennant Creek 21.90 162** P **P** **20 52 30.1 +2.2**
**WRA Warramunga Arr 21.90 162** P **P** **20 52 28.0 0.0**
comp=Z,70nm,0.8s,baz=343,slow=11,SNR=71
WRA S **S** **20 56 28.9 -1.0**
comp=Z,0.7nm,0.6s,baz=334,slow=20,SNR=1.5
WRA ScP **ScP** **21 00 04.3 -0.4**
comp=Z,0.4nm,0.8s,baz=349,slow=6.4,SNR=4.7
**WRA Warramunga Arr 21.90 162** P **P** **20 52 27.3 -0.7**
**WB2 Warramunga Arr 21.91 162** P **P** **20 52 28.2 +0.2**
WB2 IAmb IAmb 20 52 35.1
comp=Z,192nm,1.1s
**DBJI Dramaga 21.98 250** P **P** **20 52 30.4 +1.6**
comp=Z,195nm,1.0s
**WR0 Warramunga Arr 21.98 162** P **P** **20 52 28.1 -0.7**
WR0 IAmb IAmb 20 52 35.9
comp=Z,136nm,1.1s
**PMG Port Moresby 22.20 118** P **P** **20 52 31.8 +0.6**
comp=Z,4.1nm,0.3s,baz=313,slow=10,SNR=2.2
PMG LR LR 21 03 30.0
comp=Z,2µm,19.2s,baz=308,slow=43
**PMG Port Moresby 22.20 118** P **P** **20 52 27.5 -3.8**
**PMG Port Moresby 22.20 118** P **P** **20 52 35.2 +3.9**
**SKJI Sukabumi 22.31 249** P **P** **20 52 33.2 +0.8**
comp=Z,1µmcomp=Z,171nm,0.8s
**TWG Pinlang 22.54 345** P **P** **20 52 30.3 -4.4**
**DSRI Dabo 22.91 266** P **P** **20 52 38.3 -0.5**
comp=Z,725nmcomp=Z,41nm,1.3s
**CGJI Cibinong 22.99 250** P **P** **20 52 37.9 -1.7**
comp=Z,5µmcomp=Z,558nm,1.1s
**PMBI Palembang 22.99 260** P **P** **20 52 36.8 -2.9**
PMBI IAmb IAmb 20 52 44.9
comp=Z,267nm,1.2s
**YULB Yu-li 23.02 345** P **P** **20 52 36.5 -3.4**
**TPUB Ta-pu 23.11 344** P **P** **20 52 37.4 -3.4**
TPUB IAmb IAmb 20 52 49.8
comp=Z,223nm,1.0s
**KLSI 23.39 256** P **P** **20 52 41.7 -1.9**
comp=Z,482nmcomp=Z,34nm,1.0s
**SSLB Suanglung 23.49 345** P **P** **20 52 41.8 -2.8**
SSLB IAmb IAmb 20 52 53.8
comp=Z,91nm,0.9s
**SSLB Suanglung 23.49 345** P **P** **20 52 45.2 +0.6**
**MYKOM Kota Tinggi 23.59 272** P **P** **20 52 43.7 -2.0**
MYKOM IAmb IAmb 20 52 48.1
comp=Z,187nm,1.6s
**MYKOM Kota Tinggi 23.59 272** P **P** **20 52 46.0 +0.3**
**PSA00 Pilbara Seismi 23.65 198** P **P** **20 52 43.3 -2.8**
**PSA00 Pilbara Seismi 23.65 198** P **P** **20 52 43.6 -2.5**
PSA00 IAmb IAmb 20 52 49.0
comp=Z,28nm,1.1s
**PSA00 Pilbara Seismi 23.65 198** P **P** **20 52 46.9 +0.8**
**YOJ Yonaguni jima 23.70 350** P **P** **20 52 44.0 -2.6**
YOJ pmax pmax
comp=Z,347nm,1.1s
**YOJ Yonaguni jima 23.70 350** P **P** **20 52 44.0 -2.6**
**NACB Ninganchiao 23.70 347** P **P** **20 52 44.7 -1.9**
NACB IAmb IAmb 20 52 53.4
comp=Z,182nm,1.6s
**KASI Kota Agung 23.82 254** P **P** **20 52 48.8 +1.0**
comp=Z,3µmcomp=Z,403nm,1.0s
**MDSI Maura Dua 23.87 257** P **P** **20 52 46.6 -1.8**
comp=Z,762nmcomp=Z,76nm,1.2s
**LWLI Liwa 24.11 255** P **P** **20 52 49.7 -1.1**
comp=Z,209nm,0.7s
**YHNB Yeheng 24.23 346** P **P** **20 52 50.0 -1.7**
YHNB IAmb IAmb 20 53 05.6
comp=Z,158nm,1.0s
**YHNB Yeheng 24.23 346** P **P** **20 52 54.5 +2.8**
**XMI Christmas Isla 24.45 242** P **P** **20 52 54.9 +1.1**
**XMIS Christmas Isla 24.50 242** P **P** **20 52 53.3 -1.0**
**XMIS Christmas Isla 24.50 242** P **P** **20 52 54.9 +0.7**
comp=Z,628nm,1.1s
**QIS Mount Isa 24.53 152** P **P** **20 52 56.1 +1.6**
baz=25,SNR=29
**QIS Mount Isa 24.53 152** P **P** **20 52 57.3 +2.9**
**QIZ Qiongzhong 24.86 317** P **P** **20 52 54.1 -3.3**
QIZ IAmb IAmb 20 52 58.2
comp=Z,59nm,1.0s
**QIZ Qiongzhong 24.86 317** P **P** **20 52 54.8 -2.6**
QIZ S **S** **20 57 17.4 -3.0**
QIZ pmax pmax
comp=Z,41nm,1.3s
QIZ LR LR
comp=Z,1µm,17.2s
QIZ LR LR
comp=Z,800nm,17.2s
QIZ LR LR
comp=Z,660nm,30.6s
**KNMB Chin-men Tao 24.90 340** P **P** **20 52 55.5 -2.2**
KNMB IAmb IAmb 20 53 30.9
comp=Z,146nm,1.2s
**JMZ Minamidaito 2 24.93 8** P **P** **20 52 57.6 -0.3**
**JRMM Jerantut 25.10 277** P **P** **20 53 00.0 +0.4**
**RABL Rabaul 25.24 102** P **P** **20 53 00.5 -0.5**
RABL IAmb IAmb 20 53 10.0
comp=Z,91nm,0.8s
**MTSU Mount Surprise 25.26 140** P **P** **20 53 04.8 +3.7**
**QZH Quanzhou 25.27 341** P **P** **20 53 01.8 +0.8**
QZH S **S** **20 57 27.0 +0.2**
QZH pmax pmax
comp=Z,42nm,0.7s
**AS31 Alice Springs 25.33 166** P **P** **20 53 00.1 -1.5**
**ASAR Alice Springs 25.33 166** P **P** **20 53 01.9 +0.3**
comp=Z,23nm,0.7s,baz=324,slow=5.4,SNR=68
ASAR PcP **PcP** **20 56 32.0 -2.5**
comp=Z,1.0nm,0.7s,baz=352,slow=4.7,SNR=2.5
ASAR S **S** **20 57 30.6 +2.8**
comp=Z,0.9nm,0.9s,baz=8.9,slow=33,SNR=3.5
ASAR ScP **ScP** **21 00 14.3 +0.4**
comp=Z,0.2nm,0.7s,baz=335,slow=20,SNR=2.9
**ASAR Alice Springs 25.33 166** P **P** **20 53 01.0 -0.7**
**MASI Maura Aman, Be 25.52 261** P **P** **20 53 05.0 +1.4**
comp=Z,3µmcomp=Z,405nm,1.1s
**JOW Kunigami 25.68 2** P **P** **20 53 04.8 +0.1**
comp=Z,56nm,0.9s,baz=233,slow=20,SNR=3.8
**JOW Kunigami 25.68 2** P **P** **20 53 04.4 -0.3**
JOW IAmb IAmb 20 53 11.8
comp=Z,110nm,0.9s
**JOW Kunigami 25.68 2** P **P** **20 53 08.9 +4.2**
**UBPT Khong Chiam 25.91 304** P **P** **20 53 05.1 -1.8**
UBPT IAmb IAmb 20 53 14.3
comp=Z,122nm,1.8s
**WRKA Warakurna 25.91 178** P **P** **20 53 09.0 +2.0**
baz=26,SNR=51
**WRKA Warakurna 25.91 178** P **P** **20 53 10.6 +3.6**
**KRJI Kerinci 26.15 263** P **P** **20 53 10.3 +1.0**
comp=Z,5µmcomp=Z,518nm,1.1s
**BKNI Bangkinang 26.41 269** P **P** **20 53 10.9 -0.6**
**BKNI Bangkinang 26.41 269** P **P** **20 53 14.5 +3.0**
comp=Z,188nm,1.4s
**IPM Ipoh 26.60 278** P **P** **20 53 11.7 -1.6**
IPM IAmb IAmb 20 53 17.1
comp=Z,52nm,0.9s
**IPM Ipoh 26.60 278** P **P** **20 53 13.0 -0.2**
**IPM Ipoh 26.60 278** P **P** **20 53 13.1 -0.2**
comp=Z,61nm,1.4s
**GIRL Giralia 26.81 208** P **P** **20 53 16.1 +1.1**
baz=27,SNR=4.2
**GIRL Giralia 26.81 208** P **P** **20 53 13.1 -1.9**
GIRL IAmb IAmb 20 53 22.8
comp=Z,162nm,0.9s
**KULM Kulim 27.07 280** P **P** **20 53 15.3 -2.2**
**KULM Kulim 27.07 280** P **P** **20 53 18.0 +0.5**
**MNSI Mandailing Nat 27.86 270** P **P** **20 53 25.0 +0.5**
comp=Z,43nm,1.4s
**CTA Charters Tower 27.93 140** P **P** **20 53 23.6 -1.6**
comp=Z,11nm,1.1s,baz=46,slow=3.3,SNR=2.5
CTA LR LR 21 07 34.0
comp=Z,789nm,19.3s,baz=323,slow=43
**PSI Prapat 28.55 274** P **P** **20 53 29.2 -1.7**
comp=Z,33nm,0.9s,baz=89,slow=4.3,SNR=26
PSI LR LR 21 06 59.6
comp=Z,420nm,19.6s,baz=107,slow=41
**SRIT Nakonsritamara 28.72 286** P **P** **20 53 29.9 -2.3**
**MEEK Meekatharra 28.78 197** P **P** **20 53 33.6 +0.9**
baz=29,SNR=13

**MEEK Meekatharra 28.78 197** P **P** **20 53 34.1 +1.4**
**OOD Oodnadatta 29.73 165** P **P** **20 53 44.8 +3.8**
**GSI Gunungsitoli 29.86 271** P **P** **20 53 39.5 -2.9**
GSI IAmb IAmb 20 53 47.1
comp=Z,79nm,1.4s
**GSI Gunungsitoli 29.86 271** P **P** **20 53 40.6 -1.8**
comp=Z,34nm,0.8s
**GSI Gunungsitoli 29.86 271** P **P** **20 53 40.9 -1.5**
**LHMI Lhok Sumawe 30.72 278** P **P** **20 53 47.5 -2.6**
LHMI IAmb IAmb 20 54 29.9
comp=Z,62nm,1.0s
**LHMI Lhok Sumawe 30.72 278** P **P** **20 53 49.9 -0.1**
**INKA Innaminka 31.32 157** P **P** **20 53 58.2 +3.1**
**PATS Pohnpei 31.33 79** P **P** **20 53 53.2 -2.1**
**FORT Forrest 31.63 179** P **P** **20 53 53.8 -3.9**
FORT IAmb IAmb 20 54 03.2
comp=Z,45nm,0.8s
**FORT Forrest 31.63 179** P **P** **20 53 59.8 +2.1**
**MULG Mulgathing 31.76 169** P **P** **20 54 00.5 +1.6**
**MORW Morawa 31.84 199** P **P** **20 54 01.3 +1.6**
baz=32,SNR=9.4
**MORW Morawa 31.84 199** P **P** **20 53 57.6 -2.1**
**QLP Quilpie 31.87 151** P **P** **20 54 05.1 +5.2**
**WHN Wuhan 31.88 338** ⇓P **P** **20 54 01.6 +1.6**
WHN pmax pmax
comp=Z,60nm,1.2s
**NJ2 Nanjing 31.91 346** ⇑P **P** **20 54 02.3 +2.1**
NJ2 pmax pmax
comp=Z,41nm,1.0s
**JNU Nakatsue 32.10 5** P **P** **20 54 00.4 -1.5**
JNU IAmb IAmb 20 54 07.4
comp=Z,38nm,1.0s
**JNU Nakatsue 32.10 5** P P 20 54 07.1 +5.2
**GYA Guiyang 32.24 323** ⇑P **P** **20 54 04.5 +1.2**
GYA pmax pmax
comp=Z,16nm,0.9s
**CM31 Chiang Mai Arr 32.90 304** P **P** **20 54 06.2 -2.9**
**CM31 Chiang Mai Arr 32.90 304** P **P** **20 54 09.1 0.0**
SNR=6.3
**CMAR Chiang Mai Arr 32.90 304** P **P** **20 54 07.5 -1.6**
comp=Z,8.1nm,1.0s,baz=126,slow=7.3,SNR=33
CMAR PcP **PcP** **20 56 55.0 +1.3**
comp=Z,0.4nm,0.6s,baz=105,slow=1.0,SNR=2.5
CMAR ScP **ScP** **21 00 38.2 +0.3**
comp=Z,0.5nm,0.6s,baz=177,slow=1.7,SNR=4.4
CMAR LR LR 21 09 23.4
comp=Z,140nm,18.6s,baz=115,slow=40
**CMAR Chiang Mai Arr 32.90 304** P **P** **20 54 06.2 -2.9**
**LCRK Leigh Creek 32.93 163** P **P** **20 54 10.3 +1.1**
**RK1H Rockhampton Ha 33.04 139** P **P** **20 54 13.9 +3.7**
**CHTO Chiang Mai 33.07 304** P **P** **20 54 08.2 -2.4**
CHTO pmax pmax
comp=Z,16nm,1.0s
**CHTO Chiang Mai 33.07 304** P **P** **20 54 08.2 -2.4**
**CHTO Chiang Mai 33.07 304** P **P** **20 54 10.4 -0.2**
**CHTO Chiang Mai 33.07 304** P **P** **20 54 10.2 -0.4**
**BLDU Baliidu 33.08 197** P **P** **20 54 12.1 +1.6**
baz=33,SNR=5.3
**JMN Monobe 33.09 10** P **P** **20 54 08.9 -1.8**
**COCO West Island 33.10 246** P **P** **20 54 08.6 -2.2**
COCO pmax pmax
comp=Z,110nm,0.8s
**COCO West Island 33.10 246** P **P** **20 54 08.6 -2.2**
**KLBR Kellerberrin 33.71 195** P **P** **20 54 16.6 +0.6**
baz=34,SNR=10
**KLBR Kellerberrin 33.71 195** P **P** **20 54 19.2 +3.2**
**ENH Enshi 33.72 331** P **P** **20 54 13.6 -2.6**
**KMI Kunming 33.81 317** ⇑P **P** **20 54 17.9 +0.7**
KMI pP sP 20 54 22.8 +0.6
KMI sP pP 20 54 25.8 +5.1
KMI S **S** **20 59 44.9 +3.5**
KMI SS **SnSn** **21 01 48.8 +2.4**
KMI pmax pmax
comp=Z,16nm,1.1s
KMI LR LR
comp=Z,810nm,20.3s
KMI LR LR
comp=Z,680nm,18.0s
KMI LR LR
comp=Z,350nm,19.5s
**HNR Honiara 34.00 109** LR LR 21 09 44.1
comp=Z,469nm,20.4s,baz=279,slow=39
**RMQ Roma 34.22 145** P **P** **20 54 22.8 +2.3**
**JHS Saijyo 34.22 8** P **P** **20 54 20.5 +0.1**
**MUN Mundaring 34.50 197** P **P** **20 54 24.2 +1.3**
baz=35,SNR=3.6
**BBOO Buckleboo 34.62 167** P **P** **20 54 24.2 +0.4**
baz=35,SNR=35
**BBOO Buckleboo 34.62 167** P **P** **20 54 20.8 -3.1**
**BBOO Buckleboo 34.62 167** P **P** **20 54 24.1 +0.2**
**EIDS Eidsvold 34.81 141** P **P** **20 54 26.2 +0.6**
baz=35,SNR=4.5
**EIDS Eidsvold 34.81 141** P **P** **20 54 23.2 -2.4**
**EIDS Eidsvold 34.81 141** P **P** **20 54 28.0 +2.4**
**TJN Taejon 35.18 360** P **P** **20 54 29.3 +0.6**
TJN pmax pmax
comp=Z,332nm,1.2s
**TJN Taejon 35.18 360** P **P** **20 54 29.3 +0.6**
**TJN Taejon 35.18 360** P P 20 54 34.4 +5.7
**WHYH Whyalla 35.20 165** P **P** **20 54 30.0 +1.2**
**INU Inuyama 35.30 14** P **P** **20 54 29.6 -0.1**
INU IAmb IAmb 20 54 38.6
comp=Z,65nm,1.0s
**INU Inuyama 35.30 14** P **P** **20 54 32.5 +2.8**
**STKA Stephens Creek 35.36 159** P **P** **20 54 30.6 +0.3**
comp=Z,12nm,0.7s,baz=329,slow=8.6,SNR=26
**STKA Stephens Creek 35.36 159** P **P** **20 54 31.3 +1.0**
baz=36,SNR=14
**STKA Stephens Creek 35.36 159** P **P** **20 54 30.1 -0.2**
STKA PP **PnPn** **20 55 46.3 -2.5**
**STKA Stephens Creek 35.36 159** P **P** **20 54 31.2 +0.9**
**PZH PanZhiHua 35.39 318** P **P** **20 54 30.3 -0.5**
PZH S **S** **21 00 10.3 +4.7**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,230nm,5.7s
PZH LR LR
comp=Z,2µm,22.6s
PZH LR LR
comp=Z,2µm,21.6s
PZH LR LR
comp=Z,1µm,24.4s
**NAPP Napperby 35.49 164** P **P** **20 54 33.1 +1.8**
**JGF Kuroka 35.62 14** P **P** **20 54 32.8 +0.3**
**HTT Hallett 35.93 164** P **P** **20 54 36.0 +0.8**
baz=36,SNR=7.1
**HTT Hallett 35.93 164** P **P** **20 54 37.8 +2.5**
**PBA Port Blair 36.01 288** P **P** **20 54 35.8 -0.3**
PBA IAmb IAmb 20 54 49.0
comp=Z,69nm,1.0s
**LYN LuoYang 36.17 339** ⇓*i*P **P** **20 54 39.0 +1.8**
LYN S **S** **21 00 20.1 +3.0**
LYN SS **SnSn** **21 02 46.1 +3.0**
LYN pmax pmax
comp=Z,20nm,1.1s
LYN pmax pmax
comp=Z,230nm,7.2s
LYN LR LR
comp=Z,310nm,24.1s
**KSAR Wonju Array Be 36.25 1** P **P** **20 54 36.6 -1.2**
**KSAR Wonju Array Be 36.25 1** P **P** **20 54 36.6 -1.2**
**KSRS Korea Array 36.26 1** P **P** **20 54 38.1 +0.2**
comp=Z,17nm,0.7s,baz=176,slow=9.1,SNR=38
**INCN Inchon 36.29 359** P **P** **20 54 36.8 -1.4**
INCN pmax pmax
comp=Z,87nm,1.5s
**INCN Inchon 36.29 359** P **P** **20 54 36.8 -1.4**
INCN IAmb IAmb 20 54 44.3
comp=Z,87nm,1.5s
**TIA Tai'an 36.30 346** ⇑P **P** **20 54 39.3 +1.0**
TIA pmax pmax
comp=Z,34nm,0.9s
**KS19 Wonju Array Si 36.31 1** P **P** **20 54 37.1 -1.2**
KS19 IAmb IAmb 20 54 45.6
comp=Z,50nm,1.1s
**CMSA Cobar Meteorol 36.72 153** P **P** **20 54 42.9 +0.9**
baz=37,SNR=6.1
**CMSA Cobar Meteorol 36.72 153** P **P** **20 54 44.3 +2.4**
**MAJO Matsushiro 36.73 15**⇓*e*P **P** **20 54 42.3 +0.3**
MAJO pmax pmax
comp=Z,47nm,0.9s
**MAJO Matsushiro 36.73 15** P **P** **20 54 40.8 -1.1**
MAJO IAmb IAmb 20 54 45.2
comp=Z,37nm,0.8s
**MAJO Matsushiro 36.73 15** P **P** **20 54 43.2 +1.2**
**MAT Matsushiro 36.73 15** P **P** **20 54 41.9 -0.1**
MAT *e*S **S** **21 00 27.0 +1.5**
**MJAR Matsushiro Arr 36.73 15** P **P** **20 54 41.1 -0.9**
comp=Z,28nm,0.8s,baz=186,slow=9.1,SNR=34
MJAR LR LR 21 08 58.4
comp=Z,352nm,18.7s,baz=188,slow=35
**MJAR Matsushiro Arr 36.73 15** P **P** **20 54 41.3 -0.7**
MJAR pmax pmax
comp=Z,39nm,1.0s
**MJAR Matsushiro Arr 36.73 15** P **P** **20 54 41.2 -0.7**
MJAR IAmb IAmb 20 54 47.5
comp=Z,39nm,1.0s
**MJB9 Matsu-Tunnel 36.73 15** P **P** **20 54 40.7 -1.3**
MJB9 IAmb IAmb 20 54 45.2
comp=Z,36nm,0.8s
**XAN Xi'an 37.14 334** P **P** **20 54 45.8 +0.2**
XAN pP sP 20 54 54.0 +3.4
XAN S **S** **21 00 25.8 -6.2**
XAN pmax pmax
comp=Z,31nm,1.0s
XAN LR LR
comp=Z,460nm,9.0s
XAN LR LR
comp=Z,510nm,18.2s
XAN LR LR
comp=Z,350nm,9.0s
**CD2 Chengdu 37.25 325** P **P** **20 54 46.8 +0.3**
CD2 S **S** **21 00 33.9 +0.2**
CD2 pmax pmax
comp=Z,20nm,0.6s
CD2 LR LR
comp=Z,530nm,10.3s
CD2 LR LR
comp=Z,300nm,10.3s
**TWOA Tennyson Woods 37.35 165** P **P** **20 54 49.0 +1.8**
**HNS HongShan 38.06 343** ⇑P **P** **20 54 54.8 +1.6**
HNS S **S** **21 00 46.3 +0.6**
HNS pmax pmax
comp=Z,78nm,1.1s
HNS LR LR
comp=Z,320nm,15.2s
HNS LR LR
comp=Z,320nm,16.3s
**DL2 Dalian 38.08 353** P **P** **20 54 55.3 +2.0**
DL2 S **S** **21 00 48.9 +2.9**
DL2 pmax pmax
comp=Z,31nm,1.0s
DL2 LR LR
comp=Z,340nm,19.9s
DL2 LR LR
comp=Z,830nm,19.0s
DL2 LR LR
comp=Z,430nm,13.5s
**JMM Marumori 38.67 17** P **P** **20 54 59.0 +0.6**
JMM IAmb IAmb 20 55 05.0
comp=Z,87nm,1.0s
**ARMA Armidale 38.84 146** P **P** **20 55 01.2 +1.2**
baz=39,SNR=14
**ARMA Armidale 38.84 146** P **P** **20 54 59.0 -1.0**
ARMA IAmb IAmb 20 55 07.9
comp=Z,171nm,1.6s
**ARMA Armidale 38.84 146** P **P** **20 55 03.4 +3.4**
**TIY Taiyuan 39.04 341** ⇓P **P** **20 55 03.5 +1.9**
TIY S **S** **21 00 58.0 -2.8**
TIY SS **SnSn** **21 03 46.3 -6.2**
TIY ScS **ScS** **21 05 09.9 -1.5**
TIY pmax pmax
comp=Z,54nm,1.0s
TIY pmax pmax
comp=Z,380nm,5.8s
TIY LR LR
comp=Z,290nm,10.3s
TIY LR LR
comp=Z,250nm,8.6s
TIY LR LR
comp=Z,190nm,17.2s
**ARPS Mount Arapiles 39.91 162** P **P** **20 55 10.3 +1.6**
baz=40,SNR=7.0
**ARPS Mount Arapiles 39.91 162** P **P** **20 55 10.6 +1.9**
comp=Z,49nm,0.9s
**BJT Baijiatuao 40.15 347** P **P** **20 55 10.0 -0.7**
BJT pmax pmax
comp=Z,37nm,0.9s
**BJT Baijiatuao 40.15 347** P **P** **20 55 09.9 -0.7**
**BJI Beijing 40.17 347** P **P** **20 55 11.5 +0.7**
BJI pmax pmax
comp=Z,42nm,0.9s
**SNY Shenyang 40.77 356** ⇓P **P** **20 55 16.1 +0.3**
SNY pmax pmax
comp=Z,8.0nm,0.8s
SNY pmax pmax
comp=Z,280nm,4.7s
SNY LR LR
comp=Z,340nm,6.2s
SNY LR LR
comp=Z,360nm,9.1s
SNY LR LR
comp=Z,470nm,16.3s
**LZH Lanzhou 41.19 331** ⇓P **P** **20 55 21.5 +2.0**
LZH pP sP 20 55 26.1 +1.5
LZH S **S** **21 01 36.8 +3.7**
LZH sS sS 21 01 42.8 +3.9
LZH pmax pmax
comp=Z,50nm,1.6s
LZH pmax pmax
comp=Z,180nm,5.4s
LZH LR LR
comp=Z,500nm,15.7s
LZH LR LR
comp=Z,470nm,15.2s
LZH LR LR
comp=Z,390nm,17.9s
**CAN Canberra 41.39 153** P **P** **20 55 19.4 -1.6**
CAN pmax pmax
comp=Z,29nm,1.0s
**CAN Canberra 41.39 153** P **P** **20 55 19.4 -1.6**
**CAN Canberra 41.39 153** P **P** **20 55 25.4 +4.4**
**MSHR Mys Shultsa 41.51 4**⇓*e*P **P** **20 55 23.0 +1.2**
MSHR pmax pmax
comp=Z,48nm,1.0s
**TOO Toolangi 41.88 158** P **P** **20 55 22.9 -2.1**
TOO pmax pmax
comp=Z,15nm,1.1s
**TOO Toolangi 41.88 158** P **P** **20 55 22.9 -2.1**
**SHL Shillong 42.07 308** P **P** **20 55 25.8 -1.2**
SHL pmax pmax
comp=Z,20nm,0.7s
**SHL Shillong 42.07 308** P **P** **20 55 25.8 -1.2**
**SHL Shillong 42.07 308** P **P** **20 55 26.3 -0.7**
SNR=9.3
**HHC Hu-ho-hao-te 42.18 342** *e*P **P** **20 55 29.4 +1.9**
HHC S **S** **21 01 48.0 +0.5**
HHC pmax pmax
comp=Z,69nm,1.2s
HHC LR LR
comp=Z,340nm,17.8s
HHC LR LR
comp=Z,240nm,17.8s
**SANVU Saraoutou 42.57 114** P **P** **20 55 28.6 -2.3**
SANVU IAmb IAmb 20 56 23.7
comp=Z,145nm,1.7s
**CN2 Changchun 42.63 358** *e*P P 20 55 24.5 -6.5
CN2 *e*PP **PP** **20 57 14.1 +4.1**
CN2 *e*S **S** **21 01 57.1 +3.2**
CN2 *e*SS **SS** **21 05 01.4 -2.9**
CN2 pmax pmax
comp=Z,250nm,7.0s
CN2 LR LR
comp=N,340nm,12.0s
CN2 LR LR
comp=E,280nm,12.0s
CN2 LR LR
comp=Z,250nm,14.0s
**USA0B Ussuriysk Arra 43.19 5**⇑*e*P **P** **20 55 36.8 +1.3**
**USA0B Ussuriysk Arra 43.19 5** P **P** **20 55 35.1 -0.4**
USA0B IAmb IAmb 20 55 41.6
comp=Z,55nm,1.0s
**USRK Ussuriysk Ar. 43.19 5** P **P** **20 55 34.2 -1.2**
comp=Z,4.7nm,0.7s,baz=142,slow=18,SNR=9.2
**USRK Ussuriysk Ar. 43.19 5** P **P** **20 55 33.7 -1.8**
**ERM Erimo 43.20 17** P **P** **20 55 34.6 -1.0**
ERM pmax pmax
comp=Z,235nm,1.5s
**ERM Erimo 43.20 17** P **P** **20 55 34.6 -1.0**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MDJ** | **Mudanjiang** | **43.45** | **2** | P | **P** | **20 55 36.7 -0.9** | TYV | | | pmax | pmax | |
| MDJ | | | | lAmb | lAmb | 20 55 45.1 | | comp=Z,500nm,4.9s | | | | |
| | comp=Z,67nm,1.2s | | | | | | **URV** | **Uravakonda** | **51.43 288** | *e*P | **P** | **20 56 39.5 -0.8** |
| **MDJ** | **Mudanjiang** | **43.45** | **2** | P | **P** | **20 55 38.6 +1.0** | **ZEA** | **Zeya** | **52.54 360** | *e*P | **P** | **20 56 48.0 +0.1** |
| MDJ | | | | pP | sP | 20 55 42.9 +0.2 | ZEA | | | *e* | | 20 56 57.2 |
| MDJ | | | | sP | pP | 20 55 44.8 +3.5 | ZEA | | | pmax | pmax | |
| MDJ | | | | pmax | pmax | | | comp=Z,10.0nm,0.8s | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | **KLRI** | **Killari** | **52.69 292** | *e*P | **P** | **20 56 48.8 -0.9** |
| MDJ | | | | pmax | pmax | | **MSVF** | **Nonsavu** | **53.18 113** | LR | LR | 21 19 51.8 |
| | comp=Z,200nm,3.6s | | | | | | | comp=Z,318nm,18.2s,baz=315,slow=36 | | | | |
| **MDJ** | **Mudanjiang** | **43.45** | **2** | P | **P** | **20 55 39.0 +1.4** | **ZAK** | **Zakamensk** | **53.30 341** | *e*P | **P** | **20 56 54.8 +1.1** |
| **XLT** | **XiLinHaoTe** | **43.88 348** | | *e*P | **P** | **20 55 41.8 +0.6** | ZAK | | | pmax | pmax | |
| XLT | | | | pP | sP | 20 55 46.4 +0.1 | | comp=Z,11nm,1.3s | | | | |
| XLT | | | | sP | pP | 20 55 48.6 +3.8 | **KAAM** | **Kaadhehdhoo** | **54.44 270** | P | **P** | **20 57 00.1 -2.5** |
| XLT | | | | pmax | pmax | | **KAAM** | **Kaadhehdhoo** | **54.44 270** | P | **P** | **20 57 02.9 +0.4** |
| | comp=Z,27nm,0.9s | | | | | | **IRK** | **Irkutsk** | **54.61 343** | *e*P | **P** | **20 57 05.4 +2.3** |
| XLT | | | | pmax | pmax | | IRK | | | pmax | pmax | |
| | comp=Z,270nm,5.1s | | | | | | | comp=Z,47nm,2.0s | | | | |
| **LHI** | **Lord Howe Isla** | **44.12 140** | | P | **P** | **20 55 40.8 -2.4** | **MOY** | **Mondy** | **55.16 340** | *e*P | **P** | **20 57 08.1 +0.9** |
| LHI | | | | lAmb | lAmb | 20 57 04.3 | MOY | | | pmax | pmax | |
| | comp=Z,111nm,1.1s | | | | | | | comp=Z,44nm,1.7s | | | | |
| **DZM** | **Mont Dzumac** | **44.43 123** | | LR | LR | 21 15 21.1 | **WMQ** | **Urumqi** | **55.34 326** | *e*P | **P** | **20 57 10.6 +2.0** |
| | comp=Z,302nm,18.3s,baz=237,slow=38 | | | | | | WMQ | | | sP | sP | 20 57 18.0 +4.2 |
| **DZM** | **Mont Dzumac** | **44.43 123** | | *e*S | **S** | **21 02 14.9 -6.1** | WMQ | | | PcP | **PcP** | **20 58 11.8 +2.6** |
| | comp=Z,239nm,25.6s | | | | | | WMQ | | | S | **S** | **21 04 56.0 +3.1** |
| DZM | | | | *e*LR | LR | 21 08 06.8 | WMQ | | | sS | sS | 21 05 02.4 +3.6 |
| | comp=Z,586nm,33.1s | | | | | | WMQ | | | pmax | pmax | |
| **DZM** | **Mont Dzumac** | **44.43 123** | | P | **P** | **20 55 43.5 -2.4** | | comp=Z,160nm,1.1s | | | | |
| DZM | | | | lAmb | lAmb | 20 55 45.8 | WMQ | | | pmax | pmax | |
| | comp=Z,143nm,1.8s | | | | | | | comp=Z,390nm,5.1s | | | | |
| **BNX** | **BinXian** | **44.53 360** | | ⇓P | **P** | **20 55 46.8 +0.5** | WMQ | | | LR | LR | |
| BNX | | | | pmax | pmax | | | comp=Z,540nm,20.7s | | | | |
| | comp=Z,34nm,1.0s | | | | | | WMQ | | | LR | LR | |
| BNX | | | | pmax | pmax | | | comp=Z,440nm,15.9s | | | | |
| | comp=Z,390nm,4.6s | | | | | | WMQ | | | LR | LR | |
| **LSA** | **Lhasa** | **44.77 313** | | P | **P** | **20 55 50.0 +0.9** | | comp=Z,150nm,20.7s | | | | |
| **OUENC** | **Ouen Island, N** | **44.91 124** | | P | **P** | **20 55 46.3 -3.4** | **H08S2** | **Diego Garcia H** | **55.47 260** | P | **P** | **20 57 10.6 +1.0** |
| OUENC | | | | lAmb | lAmb | 20 57 21.1 | | baz=48,slow=9.1,SNR=31 | | | | |
| | comp=Z,142nm,1.5s | | | | | | **H08S3** | **Diego Garcia H** | **55.47 260** | P | **P** | **20 57 10.9 +1.2** |
| **ASAJ** | **Asahikawa** | **44.98** | **15** | P | **P** | **20 55 46.8 -3.1** | | baz=48,slow=9.1,SNR=61 | | | | |
| ASAJ | | | | pmax | pmax | | **DGAR** | **Diego Garcia** | **55.48 260** | ⇑*e*P | **P** | **20 57 10.5 +0.5** |
| | comp=Z,43nm,1.1s | | | | | | DGAR | | | pmax | pmax | |
| **JKA** | **Kamikawa-asahi** | **44.98** | **15** | P | **P** | **20 55 46.8 -3.1** | | comp=Z,352nm,1.3s | | | | |
| JKA | | | | lAmb | lAmb | 20 56 14.9 | **DGAR** | **Diego Garcia** | **55.48 260** | P | **P** | **20 57 09.0 -1.0** |
| | comp=Z,43nm,1.1s | | | | | | **DGAR** | **Diego Garcia** | **55.48 260** | P | **P** | **20 57 11.7 +1.6** |
| **PINNC** | **Pines Island,** | **45.50 124** | | P | **P** | **20 55 50.9 -3.4** | **H08S1** | **Diego Garcia H** | **55.48 260** | P | **P** | **20 57 11.1 +1.3** |
| **GTA** | **Gaotai** | **45.78 330** | | ⇑P | **P** | **20 55 57.3 +0.8** | | baz=48,slow=9.1,SNR=22 | | | | |
| GTA | | | | pP | sP | 20 56 02.0 +0.4 | **KNGR** | **Kungurtug, Tuv** | **55.54 337** | ⇑*e*P | **P** | **20 57 10.8 +0.8** |
| GTA | | | | sP | pP | 20 56 04.4 +4.4 | **BOD** | **Bodaibo** | **57.63 352** | *e*P | **P** | **20 57 24.9 +0.3** |
| GTA | | | | pmax | pmax | | BOD | | | pmax | pmax | |
| | comp=Z,5.0nm,0.7s | | | | | | | comp=Z,29nm,1.3s | | | | |
| GTA | | | | pmax | pmax | | **PEA0B** | **Petropavlovsk-** | **57.67 21** | P | **P** | **20 57 23.8 -1.2** |
| | comp=Z,140nm,5.2s | | | | | | PEA0B | | | pmax | pmax | |
| GTA | | | | LR | LR | | | comp=Z,23nm,1.0s | | | | |
| | comp=Z,260nm,19.1s | | | | | | **PEA0B** | **Petropavlovsk-** | **57.67 21** | P | **P** | **20 57 23.8 -1.2** |
| GTA | | | | LR | LR | | PEA0B | | | lAmb | lAmb | 20 57 31.3 |
| | comp=Z,280nm,17.5s | | | | | | | comp=Z,23nm,0.9s | | | | |
| GTA | | | | LR | LR | | **PETK** | **Petropavlovsk-** | **57.67 21** | P | **P** | **20 57 25.7 +0.8** |
| | comp=Z,300nm,18.3s | | | | | | | comp=Z,13nm,0.8s,baz=210,slow=11,SNR=15 | | | | |
| **TAPN** | **Taplejung** | **46.21 308** | | *e*P | **P** | **20 56 00.5 +0.2** | **PETK** | **Petropavlovsk-** | **57.67 21** | P | **P** | **20 57 23.9 -1.1** |
| | comp=Z,10nm,0.6s | | | | | | **PET** | **Petropavlovsk** | **57.95 22** | P | **P** | **20 57 25.4 -1.5** |
| **ODAN** | **Odare** | **46.24 307** | | *e*P | **P** | **20 56 00.1 -0.3** | PET | | | lAmb | lAmb | 20 57 43.3 |
| | comp=Z,33nm,0.9s | | | | | | | comp=Z,50nm,1.4s | | | | |
| **GOMU** | **GeErMu** | **46.25 323** | | P | **P** | **20 56 00.9 +0.4** | **PYZ** | **Puysegur Point** | **58.30 149** | P | **P** | **20 57 27.7 -1.8** |
| GOMU | | | | pP | sP | 20 56 07.4 +1.8 | **QRZ** | **Quartz Range** | **58.39 141** | P | **P** | **20 57 28.4 -1.8** |
| GOMU | | | | sP | pP | 20 56 12.8 +8.7 | **LBZ** | **Lake Benmore** | **59.06 145** | P | **P** | **20 57 35.5 +0.7** |
| GOMU | | | | pmax | pmax | | **THZ** | **Tophouse** | **59.15 142** | P | **P** | **20 57 34.4 -1.1** |
| | comp=Z,5.0nm,1.3s | | | | | | THZ | | | lAmb | lAmb | 20 57 49.0 |
| GOMU | | | | pmax | pmax | | | comp=Z,77nm,1.9s | | | | |
| | comp=Z,100nm,5.2s | | | | | | **RPZ** | **Rata Peaks** | **59.16 144** | LR | LR | 21 22 45.0 |
| GOMU | | | | LR | LR | | | comp=Z,228nm,21.3s,baz=300,slow=36 | | | | |
| | comp=Z,120nm,11.5s | | | | | | **ZSN** | **Zaisan** | **59.16 328** | *e*P | **P** | **20 57 36.5 +1.0** |
| GOMU | | | | LR | LR | | | comp=Z,16nm,1.1s,baz=328 | | | | |
| | comp=Z,76nm,11.2s | | | | | | **DGZ** | **Jazzator, Alta** | **59.29 331** | *ce*P | **P** | **20 57 37.7 +1.2** |
| GOMU | | | | LR | LR | | DGZ | | | pmax | pmax | |
| | comp=Z,89nm,10.6s | | | | | | | comp=Z,48nm,1.1s | | | | |
| **RAMN** | **Ramite** | **46.91 307** | | *e*P | **P** | **20 56 05.4 -0.3** | **TUWZ** | **Tuamarina** | **59.61 141** | P | **P** | **20 57 38.4 -0.3** |
| | comp=Z,2.8nm,0.6s | | | | | | **ODZ** | **Otahua Downs** | **59.72 146** | P | **P** | **20 57 39.2 -0.2** |
| **PALK** | **Pallekele** | **47.00 279** | | LR | LR | 21 17 29.2 | ODZ | | | lAmb | lAmb | 20 59 38.1 |
| | comp=Z,151nm,21.6s,baz=208,slow=38 | | | | | | | comp=Z,58nm,1.6s | | | | |
| **PALK** | **Pallekele** | **47.00 279** | | P | **P** | **20 56 04.1 -2.3** | **BSWZ** | **Blackbirch Sta** | **59.73 141** | P | **P** | **20 57 39.5 +0.1** |
| PALK | | | | pmax | pmax | | **KHZ** | **Kahutara** | **59.90 142** | P | **P** | **20 57 42.7 +2.1** |
| | comp=Z,21nm,1.3s | | | | | | KHZ | | | lAmb | lAmb | 20 57 45.9 |
| **PALK** | **Pallekele** | **47.00 279** | | P | **P** | **20 56 04.1 -2.3** | | comp=Z,19nm,0.8s | | | | |
| **PALK** | **Pallekele** | **47.00 279** | | P | **P** | **20 56 05.6 -0.7** | **AIS** | **Amsterdam Isla** | **60.02 224** | P | **P** | **20 57 39.5 -2.1** |
| **JIRN** | **Jiri** | **47.55 308** | | *e*P | **P** | **20 56 11.0 +0.1** | **URZ** | **Urewera** | **60.10 136** | LR | LR | 21 24 01.7 |
| | comp=Z,57nm,0.2s | | | | | | | comp=Z,265nm,19.6s,baz=310,slow=36 | | | | |
| **YSS** | **Yuzh-Sakhalins** | **47.66** | **14** | *e*P | **P** | **20 56 10.6 -0.3** | **URZ** | **Urewera** | **60.10 136** | P | **P** | **20 57 40.6 -1.5** |
| YSS | | | | pmax | pmax | | URZ | | | lAmb | lAmb | 20 58 40.0 |
| | comp=Z,20nm,0.6s | | | | | | | comp=Z,89nm,1.9s | | | | |
| YSS | | | | MLR | MLR | | **BKZ** | **Black Stump Fm** | **60.12 137** | P | **P** | **20 57 40.9 -1.3** |
| | comp=Z,400nm,15.0s | | | | | | BKZ | | | lAmb | lAmb | 20 57 53.2 |
| **YSS** | **Yuzh-Sakhalins** | **47.66** | **14** | P | **P** | **20 56 08.5 -2.4** | | comp=Z,65nm,1.8s | | | | |
| YSS | | | | lAmb | lAmb | 20 56 20.1 | **NIL** | **Nilore** | **60.15 309** | P | **P** | **20 57 39.9 -2.7** |
| | comp=Z,20nm,0.9s | | | | | | NIL | | | pmax | pmax | |
| **PVM** | **Polavaram** | **47.84 292** | | *e*P | **P** | **20 56 11.2 -1.7** | | comp=Z,30nm,0.8s | | | | |
| **GUN** | **Gumba** | **47.91 308** | | *e*P | **P** | **20 56 13.3 -0.3** | **NIL** | **Nilore** | **60.15 309** | P | **P** | **20 57 39.9 -2.7** |
| | comp=Z,50nm,0.2s | | | | | | NIL | | | lAmb | lAmb | 20 57 44.7 |
| **PKI** | **Pulchoki** | **48.13 307** | | *e*P | **P** | **20 56 14.9 -0.4** | | comp=Z,30nm,0.8s | | | | |
| **PKIN** | **Phulchoki** | **48.14 307** | | *e*P | **P** | **20 56 14.9 -0.5** | **NIL** | **Nilore** | **60.15 309** | P | **P** | **20 57 44.0 +1.4** |
| | comp=Z,8.2nm,0.3s | | | | | | **UZB** | **Uzynbulak** | **60.15 321** | *e*P | **P** | **20 57 43.1 +0.5** |
| **KLR** | **Kul'dur** | **48.17** | **4** | LR | LR | 21 21 52.8 | | comp=Z,52nm,1.5s,baz=321 | | | | |
| | comp=Z,88nm,18.0s,baz=186,slow=43 | | | | | | **MK31** | **Makanchi Array** | **60.18 326** | *c*P | **P** | **20 57 43.5 +1.0** |
| **KLR** | **Kul'dur** | **48.17** | **4** | *de*P | **P** | **20 56 15.2 +0.4** | **MK31** | **Makanchi Array** | **60.18 326** | P | **P** | **20 57 41.2 -1.3** |
| KLR | | | | pmax | pmax | | MK31 | | | lAmb | lAmb | 20 57 46.0 |
| | comp=Z,26nm,1.0s | | | | | | | comp=Z,52nm,0.9s | | | | |
| **KKN** | **Kakani** | **48.33 307** | | *e*P | **P** | **20 56 16.2 -0.5** | **MKAR** | **Makanchi Array** | **60.18 326** | P | **P** | **20 57 43.2 +0.6** |
| | comp=Z,5.2nm,0.2s | | | | | | | comp=Z,32nm,0.7s,baz=122,slow=8.3,SNR=324 | | | | |
| **DMN** | **Daman** | **48.39 307** | | *e*P | **P** | **20 56 16.8 -0.4** | MKAR | | | LR | LR | 21 26 32.4 |
| | comp=Z,32nm,0.9s | | | | | | | comp=Z,181nm,18.5s,baz=104,slow=39 | | | | |
| **HIA** | **Hailar** | **48.52 353** | | P | **P** | **20 56 15.0 -2.6** | **MKAR** | **Makanchi Array** | **60.18 326** | P | **P** | **20 57 42.5 -0.1** |
| HIA | | | | pmax | pmax | | **TARG** | **Taragay, Kyrgy** | **60.23 319** | P | **P** | **20 57 43.3 -0.2** |
| | comp=Z,16nm,1.1s | | | | | | **MAKZ** | **Makanchi** | **60.36 326** | P | **P** | **20 57 43.5 -0.3** |
| **HIA** | **Hailar** | **48.52 353** | | P | **P** | **20 56 15.0 -2.6** | MAKZ | | | pmax | pmax | |
| **MYLAV** | **Mylavaram** | **48.64 291** | | *e*P | **P** | **20 56 19.4 +0.4** | | comp=Z,101nm,1.1s | | | | |
| **SKHT** | **Srikalahasti** | **48.87 287** | | *e*P | **P** | **20 56 20.2 -0.6** | **MAKZ** | **Makanchi** | **60.36 326** | P | **P** | **20 57 43.5 -0.3** |
| **GKN** | **Gorkha** | **48.93 307** | | *e*P | **P** | **20 56 20.7 -0.6** | **SATY** | **Saty** | **60.50 321** | *e*P | **P** | **20 57 45.8 +0.9** |
| **ADKI** | **Addanki** | **49.06 290** | | *e*P | **P** | **20 56 22.3 +0.1** | | comp=Z,48nm,1.1s,baz=320 | | | | |
| **UGL** | **Uglegorsk** | **49.50** | **13** | *e*P | **P** | **20 56 26.7 +1.7** | **KPKS** | **Kokpek** | **60.52 321** | *e*P | **P** | **20 57 45.9 +0.8** |
| UGL | | | | pmax | pmax | | | comp=Z,47nm,1.1s,baz=321 | | | | |
| | comp=Z,80nm,1.2s | | | | | | **ZHN** | **Zhinishke** | **60.53 321** | *e*P | **P** | **20 57 45.9 +0.7** |
| **KOLN** | **Koldanda** | **49.67 306** | | *e*P | **P** | **20 56 26.9 -0.1** | | comp=Z,18nm,1.3s,baz=321 | | | | |
| | comp=Z,15nm,0.5s | | | | | | **YAK** | **Yakutsk** | **60.88** | **1** LR | LR | 21 29 12.2 |
| **DANN** | **Dangsing** | **49.78 307** | | *e*P | **P** | **20 56 27.5 -0.5** | | comp=Z,81nm,18.4s,baz=187,slow=41 | | | | |
| | comp=Z,20nm,0.5s | | | | | | **YAK** | **Yakutsk** | **60.88** | **1** *e*P | **P** | **20 57 47.2 +0.2** |
| **NJS** | **Nagarjunasagar** | **49.83 291** | | *e*P | **P** | **20 56 28.5 +0.3** | YAK | | | *e**PP | **sP** | **20 57 54.8 +2.7** |
| **ULN** | **Ulaanbaatar** | **49.90 342** | | *de*P | **P** | **20 56 29.3 +1.0** | YAK | | | *e*S | **S** | **21 06 04.1 -0.3** |
| ULN | | | | pmax | pmax | | YAK | | | *e**SS | sS | 21 06 18.5 +7.9 |
| | comp=Z,42nm,1.0s | | | | | | YAK | | | pmax | pmax | |
| **ULN** | **Ulaanbaatar** | **49.90 342** | | P | **P** | **20 56 25.9 -2.4** | | comp=Z,46nm,0.8s | | | | |
| ULN | | | | | **pP** | **20 56 26.3 -5.7** | YAK | | | pmax | pmax | |
| ULN | | | | lAmb | lAmb | 20 56 32.0 | | comp=N,4.0nm,0.9s | | | | |
| | comp=Z,32nm,0.8s | | | | | | YAK | | | pmax | pmax | |
| **ULN** | **Ulaanbaatar** | **49.90 342** | | P | **P** | **20 56 29.8 +1.4** | | comp=Z,111nm,3.6s | | | | |
| **RCLA** | **Racherla** | **49.93 289** | | *e*P | **P** | **20 56 28.4 -0.5** | YAK | | | pmax | pmax | |
| **SONM** | **Songino Array** | **50.08 342** | | P | **P** | **20 56 29.6 -0.1** | | comp=N,64nm,3.5s | | | | |
| | comp=Z,21nm,0.8s,baz=158,slow=7.6,SNR=124 | | | | | | YAK | | | pmax | pmax | |
| SONM | | | | PcP | **PcP** | **20 57 48.8 -0.5** | | comp=E,73nm,3.5s | | | | |
| | comp=Z,2.5nm,0.9s,baz=140,slow=5.7,SNR=1.4 | | | | | | YAK | | | smax | smax | |
| SONM | | | | ScP | **ScP** | **21 01 45.1 -0.1** | | comp=N,76nm,2.7s | | | | |
| | comp=Z,0.7nm,0.9s,baz=96,slow=2.9,SNR=2.8 | | | | | | YAK | | | smax | smax | |
| SONM | | | | LR | LR | 21 17 49.5 | | comp=E,42nm,2.3s | | | | |
| | comp=Z,226nm,21.4s,baz=151,slow=36 | | | | | | **YAK** | **Yakutsk** | **60.88** | **1** P | **P** | **20 57 45.9 -1.1** |
| **SONM** | **Songino Array** | **50.08 342** | | P | **P** | **20 56 28.6 -1.0** | **MDOK** | **Medeo** | **61.41 320** | *e*P | **P** | **20 57 52.2 +1.0** |
| SONM | | | | lAmb | lAmb | 20 56 33.1 | | baz=320 | | | | |
| | comp=Z,21nm,0.8s | | | | | | **ULHL** | **Ulahol** | **61.51 319** | P | **P** | **20 57 53.6 +1.7** |
| **SRLM** | **Srisailam** | **50.12 290** | | *e*P | **P** | **20 56 30.0 -0.4** | | SNR=26 | | | | |
| **GRNR** | **Gornyy** | **50.15** | **7** | ⇓*i*P | **P** | **20 56 30.7 +0.7** | **AAA** | **Alma-Ata** | **61.52 320** | *e*P | **P** | **20 57 52.5 +0.7** |
| GRNR | | | | pmax | pmax | | | baz=320 | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | **CHKK** | **Chushkaly** | **61.79 321** | *e*P | **P** | **20 57 54.2 +0.7** |
| GRNR | | | | MLR | MLR | | | baz=321 | | | | |
| | comp=E,160nm,14.0s | | | | | | **AFI** | **Afiamalu** | **61.99 106** | LR | LR | 21 21 52.6 |
| GRNR | | | | MLR | MLR | | | comp=E,179nm,21.8s,baz=286,slow=33 | | | | |
| | comp=N,140nm,13.0s | | | | | | **KUU** | **Kurty** | **62.22 321** | *e*P | **P** | **20 57 57.3 +0.9** |
| GRNR | | | | MLR | MLR | | | baz=320 | | | | |
| | comp=Z,170nm,14.0s | | | | | | **TKM2** | **Tokmak 2** | **62.24 319** | P | **P** | **20 57 58.5 +1.7** |
| **PYUN** | **Piuthan** | **50.29 306** | | *e*P | **P** | **20 56 31.8 +0.1** | | SNR=44 | | | | |
| | comp=Z,18nm,0.5s | | | | | | **TKM2** | **Tokmak 2** | **62.24 319** | *i* P | **P** | **20 57 57.9 +1.1** |
| **CUPL** | **Choutuppal** | **50.36 292** | | *e*P | **P** | **20 56 32.2 +0.1** | TKM2 | | | pmax | pmax | |
| **RPR** | **Rampur** | **50.40 294** | | *e*P | **P** | **20 56 31.5 -0.9** | | comp=Z,69nm,1.2s | | | | |
| **HYBB** | **Hyderabad (bro** | **50.73 292** | | *e*P | **P** | **20 56 33.1 -1.9** | **KBK** | **Karagaybulak** | **62.55 319** | P | **P** | **20 58 00.7 +1.9** |
| **SRSP** | **Sriramsagar** | **51.28 294** | | *e*P | **P** | **20 56 38.5 -0.7** | | SNR=35 | | | | |
| **TYV** | **Tymovskoe** | **51.31** | **12** | *e*P | **P** | **20 56 42.0 +3.3** | **UCH** | **Uchtor** | **62.64 318** | P | **P** | **20 58 01.8 +2.0** |
| TYV | | | | pmax | pmax | | | SNR=83 | | | | |
| | comp=Z,13nm,0.8s | | | | | | **CHMS** | **Chumysh** | **62.83 319** | P | **P** | **20 58 01.8 +1.2** |
| | | | | | | | | SNR=26 | | | | |
| **AAK** | **Ala-Archa** | **62.84 319** | | LR | LR | 21 27 01.7 |
| | comp=Z,138nm,21.4s,baz=112,slow=38 | | | | | |
| **AAK** | **Ala-Archa** | **62.84 319** | | P | **P** | **20 58 02.1 +1.4** |
| | SNR=29 | | | | | |
| **AAK** | **Ala-Archa** | **62.84 319** | | *ce*P | **P** | **20 58 02.5 +1.7** |
| AAK | | | | pmax | pmax | |
| | comp=Z,58nm,1.7s | | | | | |
| **AAK** | **Ala-Archa** | **62.84 319** | | P | **P** | **20 58 00.8 0.0** |
| AAK | | | | lAmb | lAmb | 20 58 12.8 |
| | comp=Z,63nm,1.4s | | | | | |
| **AAK** | **Ala-Archa** | **62.84 319** | | P | **P** | **20 58 02.6 +1.7** |
| AAK | | | | P | **P** | **20 58 02.6 +1.7** |
| **AAK** | **Ala-Archa** | **62.84 319** | | *i* P | **P** | **20 58 02.4 +1.7** |
| | SNR=44 | | | | | |
| **SGDS** | **Sogindy** | **63.11 319** | | *e*P | **P** | **20 58 03.6 +1.1** |
| **SGDS** | **Sogindy** | **63.11 319** | | *e*P | **P** | **20 58 03.2 +0.7** |
| | comp=Z,13nm,1.2s,baz=319 | | | | | |
| **USP** | **Ospenovka** | **63.11 319** | | P | **P** | **20 58 03.9 +1.4** |
| | SNR=72 | | | | | |
| **AML** | **Almayashu** | **63.15 318** | | P | **P** | **20 58 05.1 +1.9** |
| | SNR=95 | | | | | |
| **AML** | **Almayashu** | **63.15 318** | | P | **P** | **20 58 05.2 +2.1** |
| **AML** | **Almayashu** | **63.15 318** | | *i* P | **P** | **20 58 05.0 +1.9** |
| | SNR=96 | | | | | |
| **ZAA0** | **Zalesovo Array** | **63.31 333** | | P | **P** | **20 58 02.8 -0.6** |
| ZAA0 | | | | lAmb | lAmb | 20 58 06.8 |
| | comp=Z,36nm,1.2s | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.31 333** | | P | **P** | **20 58 02.5 -1.0** |
| | comp=Z,13nm,1.0s,baz=92,slow=4.5,SNR=31 | | | | | |
| ZALV | | | | LR | LR | 21 28 01.5 |
| | comp=Z,97nm,20.0s,baz=136,slow=38 | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.31 333** | | *i* P | **P** | **20 58 03.2 -0.3** |
| ZALV | | | | pmax | pmax | |
| | comp=Z,13nm,1.0s | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.31 333** | | P | **P** | **20 58 02.1 -1.3** |
| **EKS2** | **Erkin-Say** | **63.32 318** | | P | **P** | **20 58 05.8 +1.8** |
| | SNR=68 | | | | | |
| **SEM** | **Semipalatinsk** | **63.36 328** | | *e*P | **P** | **20 58 04.6 +0.5** |
| | comp=Z,16nm,1.3s,baz=328 | | | | | |
| **KBL** | **Kabul** | **63.73 308** | | P | **P** | **20 58 05.3 -1.7** |
| KBL | | | | pmax | pmax | |
| | comp=Z,66nm,0.9s | | | | | |
| **KBL** | **Kabul** | **63.73 308** | | P | **P** | **20 58 05.3 -1.7** |
| **KBL** | **Kabul** | **63.73 308** | | P | **P** | **20 58 07.8 +0.9** |
| | SNR=34 | | | | | |
| **BTLS** | **Baital** | **64.20 321** | | *e*P | **P** | **20 58 10.4 +0.8** |
| | comp=Z,16nm,1.0s,baz=321 | | | | | |
| **GAR** | **Garm** | **64.28 313** | | P | **P** | **20 58 09.6 -0.7** |
| **KURK** | **Kurchatov** | **64.39 328** | | *de*P | **P** | **20 58 10.7 0.0** |
| KURK | | | | pmax | pmax | |
| | comp=Z,119nm,1.1s | | | | | |
| **KURK** | **Kurchatov** | **64.39 328** | | P | **P** | **20 58 10.3 -0.4** |
| **KURK** | **Kurchatov** | **64.39 328** | | P | **P** | **20 58 12.1 +1.4** |
| **SEY** | **Seymchan** | **64.50** | **12** | ⇓*e*P | **P** | **20 58 12.8 +1.7** |
| **NIUE** | **Niue** | **64.60 112** | | P | **P** | **20 58 10.8 -1.8** |
| **CHGR** | **Chuyangaron** | **65.00 313** | | P | **P** | **20 58 15.2 +0.1** |
| **DZA** | **Taraz** | **65.06 318** | | *e*P | **P** | **20 58 16.4 +1.1** |
| | baz=318 | | | | | |
| **KKAR** | **Karatay Array** | **65.69 318** | | P | **P** | **20 58 18.8 -0.5** |
| **KKAR** | **Karatay Array** | **65.69 318** | | P | **P** | **20 58 18.8 -0.5** |
| **TAS** | **Tashkent** | **65.85 315** | | P | **P** | **20 58 20.2 -0.2** |
| TAS | | | | pmax | pmax | |
| | comp=Z,81nm,1.1s | | | | | |
| **TAS** | **Tashkent** | **65.85 315** | | P | **P** | **20 58 20.2 -0.2** |
| **BRZS** | **Berezniki** | **67.30 325** | | *e*P | **P** | **20 58 30.2 +0.8** |
| | comp=Z,20nm,1.2s,baz=325 | | | | | |
| **HRA** | **Herat** | **69.09 307** | | P | **P** | **20 58 39.8 -1.5** |
| HRA | | | | lAmb | lAmb | 20 58 44.0 |
| | comp=Z,49nm,1.4s | | | | | |
| **JLN** | **Jalan Bani Buh** | **69.30 293** | | P | **P** | **20 58 43.3 +0.8** |
| JLN | | | | P | **P** | **20 58 43.3 +0.8** |
| **WBK** | **Wadi Bani Khal** | **69.77 294** | | P | **P** | **20 58 46.8 +1.3** |
| | SNR=12 | | | | | |
| WBK | | | | P | **P** | **20 58 46.8 +1.3** |
| | SNR=12 | | | | | |
| **BRVK** | **Borovoye** | **70.04 327** | | *ce*P | **P** | **20 58 46.8 +0.3** |
| BRVK | | | | pmax | pmax | |
| | comp=Z,60nm,1.7s | | | | | |
| **BRVK** | **Borovoye** | **70.04 327** | | P | **P** | **20 58 45.4 -1.1** |
| BRVK | | | | lAmb | lAmb | 20 58 50.4 |
| | comp=Z,28nm,0.9s | | | | | |
| **BRVK** | **Borovoye** | **70.04 327** | | P | **P** | **20 58 47.1 +0.7** |
| BRVK | | | | P | **P** | **20 58 47.1 +0.7** |
| **WSAR** | **Wadi Sarin** | **70.16 294** | | LR | LR | 21 29 40.4 |
| | comp=Z,80nm,21.9s,baz=114,slow=36 | | | | | |
| **WSAR** | **Wadi Sarin** | **70.16 294** | | P | **P** | **20 58 49.2 +1.4** |
| | SNR=14 | | | | | |
| **MHTO** | **MHTO** | **70.49 292** | | P | **P** | **20 58 51.2 +1.3** |
| | SNR=23 | | | | | |
| MHTO | | | | P | **P** | **20 58 51.2 +1.3** |
| | SNR=23 | | | | | |
| **TIXI** | **Tiksi** | **70.53** | **0** | LR | LR | 21 36 00.6 |
| | comp=Z,72nm,18.2s,baz=181,slow=41 | | | | | |
| **TIXI** | **Tiksi** | **70.53** | **0** | ⇓*e*P | **P** | **20 58 49.5 +0.4** |
| TIXI | | | | pmax | pmax | |
| | comp=Z,15nm,1.7s | | | | | |
| **TIXI** | **Tiksi** | **70.53** | **0** | P | **P** | **20 58 47.8 -1.3** |
| **JMDO** | **Jabal Madar** | **70.53 293** | | P | **P** | **20 58 51.4 +1.3** |
| | SNR=15 | | | | | |
| JMDO | | | | P | **P** | **20 58 51.4 +1.3** |
| | SNR=15 | | | | | |
| **BIDO** | **Bidbid** | **70.66 294** | | P | **P** | **20 58 52.3 +1.5** |
| | SNR=24 | | | | | |
| **SMDO** | **Samad** | **70.67 294** | | P | **P** | **20 58 52.1 +1.0** |
| | SNR=8.1 | | | | | |
| SMDO | | | | P | **P** | **20 58 52.1 +1.0** |
| | SNR=8.1 | | | | | |
| **BSY** | **Bisya** | **71.41 294** | | P | **P** | **20 58 56.9 +1.5** |
| | SNR=12 | | | | | |
| BSY | | | | P | **P** | **20 58 56.9 +1.5** |
| | SNR=12 | | | | | |
| **HOQ** | **Hoqain** | **71.41 294** | | P | **P** | **20 58 56.8 +1.4** |
| | SNR=12 | | | | | |
| **ARQ** | **Araqi** | **72.09 294** | | P | **P** | **20 59 01.2 +1.6** |
| | SNR=9.4 | | | | | |
| ARQ | | | | P | **P** | **20 59 01.2 +1.6** |
| | SNR=9.4 | | | | | |
| **MSEY** | **Mahe Island** | **72.11 265** | | P | **P** | **20 59 03.5 +3.6** |
| MSEY | | | | P | **P** | **20 59 03.5 +3.6** |
| **MSEY** | **Mahe Island** | **72.11 265** | | P | **P** | **20 59 01.4 +1.5** |
| **SHAO** | **Shalim** | **72.40 288** | | P | **P** | **20 59 03.2 +1.7** |
| **UOSS** | **Minazif** | **72.58 296** | | P | **P** | **20 59 02.0 -0.4** |
| UOSS | | | | lAmb | lAmb | 20 59 07.7 |
| | comp=Z,22nm,1.1s | | | | | |
| **UOSS** | **Minazif** | **72.58 296** | | P | **P** | **20 59 03.8 +1.4** |
| **UOSS** | **Minazif** | **72.58 296** | | *i* P | **P** | **20 59 03.2 +0.8** |
| | SNR=13 | | | | | |
| **BANOM** | **Banah** | **72.62 297** | | P | **P** | **20 59 04.4 +1.7** |
| | SNR=8.2 | | | | | |
| **BANOM** | **Banah** | **72.62 297** | | *i* P | **P** | **20 59 04.1 +1.5** |
| | SNR=9.2 | | | | | |
| **HATD** | **Hatta, Dubai** | **72.63 296** | | P | **P** | **20 59 03.4 +0.6** |
| | SNR=13 | | | | | |
| HATD | | | | P | **P** | **20 59 03.4 +0.6** |
| | SNR=13 | | | | | |
| **HATD** | **Hatta, Dubai** | **72.63 296** | | *i* P | **P** | **20 59 03.9 +1.2** |
| | SNR=12 | | | | | |
| **MSFE** | **Esma-Masafi** | **72.67 296** | | *i* P | **P** | **20 59 05.5 +2.5** |
| | SNR=9.7 | | | | | |
| **MASF** | **Masafi** | **72.67 296** | | P | **P** | **20 59 05.6 +2.6** |
| | SNR=13 | | | | | |
| **ASHO** | **Ashiyiah** | **72.68 295** | | P | **P** | **20 59 04.6 +1.6** |
| | SNR=10 | | | | | |
| **ASHO** | **Ashiyiah** | **72.68 295** | | *i* P | **P** | **20 59 04.2 +1.2** |
| | SNR=11 | | | | | |
| **SHME** | **Shamm** | **72.77 297** | | P | **P** | **20 59 05.0 +1.5** |
| | SNR=8.6 | | | | | |
| **SHME** | **Shamm** | **72.77 297** | | *i* P | **P** | **20 59 05.3 +1.8** |
| | SNR=11 | | | | | |
| **ALNE** | **Al Ain** | **72.88 295** | | P | **P** | **20 59 05.3 +1.0** |
| | SNR=39 | | | | | |
| **ALNE** | **Al Ain** | **72.88 295** | | *i* P | **P** | **20 59 05.5 +1.2** |
| | SNR=14 | | | | | |
| **DMTO** | **DMTO** | **73.02 288** | | P | **P** | **20 59 06.6 +1.5** |
| **NAZ** | **Nazwa, Dubai** | **73.07 296** | | P | **P** | **20 59 06.5 +1.1** |
| | SNR=7.9 | | | | | |
| **NAZ** | **Nazwa, Dubai** | **73.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NRIK** | **Noril'sk** | **73.21** | **346** | P | | **P** | **20 59 05.0** | **-0.3** |
| | comp=Z,111nm,0.8s,baz=135,slow=5.6,SNR=17 | | | | | | | |
| NRIK | | | | LR | | LR | 21 36 16.8 | |
| | comp=Z,101nm,18.4s,baz=144,slow=40 | | | | | | | |
| **NRIK** | **Noril'sk** | **73.21** | **346** | *de*P | | **P** | **20 59 05.2** | **-0.1** |
| NRIK | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **NRIK** | **Noril'sk** | **73.21** | **346** | P | | **P** | **20 59 04.7** | **-0.5** |
| **UMZA** | **Um Al Zommool** | **73.27** | **293** | P | | **P** | **20 59 07.9** | **+1.4** |
| **ASUD** | **Al Ashush, Dub** | **73.33** | **295** | P | | **P** | **20 59 09.1** | **+2.2** |
| | SNR=12 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **73.33** | **295** | *i* P | | **P** | **20 59 08.0** | **+1.1** |
| | SNR=16 | | | | | | | |
| **SOCY** | **Socotra** | **73.61** | **282** | P | | **P** | **20 59 07.6** | **-1.2** |
| **SOCY** | **Socotra** | **73.61** | **282** | P | | **P** | **20 59 10.1** | **+1.3** |
| | SNR=6.8 | | | | | | | |
| **AJN** | **Ajban** | **73.63** | **295** | P | | **P** | **20 59 10.1** | **+1.5** |
| | SNR=10 | | | | | | | |
| AJN | | | | P | | **P** | **20 59 10.1** | **+1.5** |
| | SNR=10 | | | | | | | |
| **AJN** | **Ajban** | **73.63** | **295** | *i* P | | **P** | **20 59 09.9** | **+1.3** |
| | SNR=7.8 | | | | | | | |
| **RBK** | **Rabkut** | **73.71** | **288** | P | | **P** | **20 59 10.9** | **+1.7** |
| | SNR=5.7 | | | | | | | |
| RBK | | | | P | | **P** | **20 59 10.9** | **+1.7** |
| | SNR=5.7 | | | | | | | |
| **DOK** | **Doka** | **73.86** | **289** | P | | **P** | **20 59 11.6** | **+1.5** |
| | SNR=13 | | | | | | | |
| DOK | | | | P | | **P** | **20 59 11.6** | **+1.5** |
| | SNR=13 | | | | | | | |
| **WHFO** | **Wadi Hawf** | **74.15** | **288** | P | | **P** | **20 59 13.1** | **+1.2** |
| | SNR=6.3 | | | | | | | |
| WHFO | | | | P | | **P** | **20 59 13.1** | **+1.2** |
| | SNR=6.3 | | | | | | | |
| **RAR** | **Rarotonga** | **74.36** | **112** | LR | | LR | 21 29 53.2 | |
| | comp=Z,46nm,20.6s,baz=290,slow=34 | | | | | | | |
| **ABTO** | **Aybut** | **74.56** | **288** | P | | **P** | **20 59 15.9** | **+1.6** |
| | SNR=7.4 | | | | | | | |
| **ABKAR** | **Akbulak array** | **74.69** | **321** | P | | **P** | **20 59 12.6** | **-1.7** |
| **ABKAR** | **Akbulak array** | **74.69** | **321** | P | | **P** | **20 59 12.2** | **-2.1** |
| ABKAR | | | | IAmb | | IAmb | 20 59 17.6 | |
| | comp=Z,47nm,1.6s | | | | | | | |
| **MZR** | **Muzera** | **74.84** | **293** | P | | **P** | **20 59 18.1** | **+2.4** |
| | SNR=6.3 | | | | | | | |
| **MZR** | **Muzera** | **74.84** | **293** | *i* P | | **P** | **20 59 17.7** | **+2.0** |
| | SNR=12 | | | | | | | |
| **GHWR** | **Ruwais** | **75.49** | **294** | P | | **P** | **20 59 21.8** | **+2.4** |
| **AKTO** | **Aktyubinsk** | **76.21** | **322** | LR | | LR | 21 35 20.0 | |
| | comp=Z,114nm,21.5s,baz=103,slow=38 | | | | | | | |
| **GAMB** | **Gambell** | **76.58** | **24** | P | | **P** | **20 59 24.8** | **0.0** |
| **GAMB** | **Gambell** | **76.58** | **24** | P | | **P** | **20 59 25.2** | **+0.4** |
| | baz=244 | | | | | | | |
| **SVE** | **Sverdlovsk** | **76.63** | **329** | *e*P | | **P** | **20 59 25.1** | **-0.1** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **TRNA** | **Turayna** | **77.07** | **295** | P | | **P** | **20 59 30.1** | **+1.8** |
| **SHMA** | **Al-Shehemyia** | **77.39** | **296** | P | | **P** | **20 59 32.5** | **+2.3** |
| **ARU** | **Arti** | **77.59** | **328** | ⇑*e*P | | **P** | **20 59 30.3** | **-0.4** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,32nm,2.2s | | | | | | | |
| **ARU** | **Arti** | **77.59** | **328** | P | | **P** | **20 59 28.5** | **-2.1** |
| **TNA** | **Tin City** | **78.80** | **23** | P | | **P** | **20 59 37.3** | **+0.1** |
| | baz=247 | | | | | | | |
| **ANM** | **Nome** | **79.44** | **24** | P | | **P** | **20 59 41.4** | **+0.7** |
| | baz=250 | | | | | | | |
| **LKRN** | **Lenkeran, Azer** | **80.51** | **309** | P | | **P** | **20 59 50.2** | **+3.1** |
| **VNDA** | **Vanda** | **80.67** | **173** | P | | **P** | **20 59 48.4** | **+1.2** |
| | comp=Z,2.8nm,0.7s,baz=307,slow=10,SNR=2.3 | | | | | | | |
| VNDA | | | | LR | | LR | 21 33 46.4 | |
| | comp=Z,156nm,21.7s,baz=317,slow=34 | | | | | | | |
| **VNDA** | **Vanda** | **80.67** | **173** | IAmb | | IAmb | 21 01 29.6 | |
| | comp=Z,62nm,1.8s | | | | | | | |
| **RDOG** | **Red Dog Mine** | **81.55** | **21** | P | | **P** | **20 59 53.3** | **+1.3** |
| | baz=251 | | | | | | | |
| **SEKA** | **Sheki** | **81.98** | **311** | P | | **P** | **20 59 58.1** | **+3.2** |
| **MNGR** | **Mingechevir, A** | **82.03** | **311** | P | | **P** | **20 59 58.2** | **+3.1** |
| **RAYN** | **Ar Rayn** | **82.20** | **293** | P | | **P** | **20 59 55.0** | **-1.4** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,39nm,1.2s | | | | | | | |
| **RAYN** | **Ar Rayn** | **82.20** | **293** | P | | **P** | **20 59 55.0** | **-1.4** |
| RAYN | | | | IAmb | | IAmb | 20 59 59.8 | |
| | comp=Z,39nm,1.1s | | | | | | | |
| **RAYN** | **Ar Rayn** | **82.20** | **293** | P | | **P** | **20 59 59.1** | **+2.7** |
| **RAYN** | **Ar Rayn** | **82.20** | **293** | *i* P | | **P** | **20 59 58.7** | **+2.2** |
| | SNR=25 | | | | | | | |
| **GANJ** | **Ganja** | **82.59** | **311** | P | | **P** | **21 00 00.9** | **+2.8** |
| **KIRV** | **Kirov** | **82.89** | **329** | LR | | LR | 21 40 35.9 | |
| | comp=Z,147nm,18.4s,baz=97,slow=38 | | | | | | | |
| **KIRV** | **Kirov** | **82.89** | **329** | *de*P | | **P** | **21 00 00.5** | **+1.3** |
| **BELG** | **Belogornoye** | **82.97** | **323** | LR | | LR | 21 39 47.0 | |
| | comp=Z,46nm,21.8s,baz=357,slow=38 | | | | | | | |
| **TTA** | **Tatalina** | **82.99** | **27** | P | | **P** | **20 59 59.7** | **0.0** |
| TTA | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **TTA** | **Tatalina** | **82.99** | **27** | P | | **P** | **20 59 59.7** | **0.0** |
| TTA | | | | IAmb | | IAmb | 21 00 06.2 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **TTA** | **Tatalina** | **82.99** | **27** | P | | **P** | **21 00 00.8** | **+1.0** |
| | baz=258 | | | | | | | |
| **GCSA** | **Galena City Sc** | **82.99** | **25** | P | | **P** | **21 00 01.4** | **+1.8** |
| | baz=258 | | | | | | | |
| **NAX** | **Nakhchivan** | **83.11** | **309** | P | | **P** | **21 00 04.8** | **+3.9** |
| **GROC** | **Groznyy** | **83.20** | **313** | *e*P | | **P** | **21 00 01.7** | **+0.5** |
| GROC | | | | *e* | | | 21 00 06.6 | |
| GROC | | | | *e*S | | **S** | **21 10 19.2** | **-2.3** |
| GROC | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **N19K** | **Bonanza Creek** | **83.30** | **29** | P | | **P** | **21 00 01.0** | **-0.4** |
| N19K | | | | IAmb | | IAmb | 21 00 08.3 | |
| | comp=Z,73nm,1.5s | | | | | | | |
| **N19K** | **Bonanza Creek** | **83.30** | **29** | P | | **P** | **21 00 02.4** | **+1.0** |
| | baz=260 | | | | | | | |
| **L19K** | **White Mountain** | **83.37** | **27** | P | | **P** | **21 00 02.1** | **+0.4** |
| | baz=260 | | | | | | | |
| **M19K** | **Big River Lodg** | **83.53** | **28** | P | | **P** | **21 00 03.6** | **+1.1** |
| | baz=260 | | | | | | | |
| **PPT** | **Papeete** | **83.62** | **108** | P | | **P** | **21 00 05.9** | **+2.1** |
| | comp=Z,29nm,0.9s,baz=253,slow=19,SNR=1.7 | | | | | | | |
| PPT | | | | LR | | LR | 21 33 17.9 | |
| | comp=Z,136nm,21.6s,baz=258,slow=33 | | | | | | | |
| **PPT2** | **Papeete2** | **83.62** | **108** | *e*LR | | LR | 21 26 29.0 | |
| | comp=Z,449nm,29.5s | | | | | | | |
| **GNI** | **Garni** | **83.75** | **310** | P | | **P** | **21 00 06.9** | **+2.6** |
| **KDAK** | **Kodiak Island** | **83.79** | **32** | LR | | LR | 21 32 15.3 | |
| | comp=Z,287nm,20.5s,baz=231,slow=32 | | | | | | | |
| **L20K** | **Farewell, AK** | **83.87** | **27** | P | | **P** | **21 00 03.6** | **-0.6** |
| | baz=260 | | | | | | | |
| **K20K** | **Telida** | **83.93** | **26** | P | | **P** | **21 00 04.1** | **-0.4** |
| | baz=260 | | | | | | | |
| **J20K** | **Nowinta River** | **84.04** | **26** | P | | **P** | **21 00 03.3** | **-1.7** |
| J20K | | | | IAmb | | IAmb | 21 00 13.8 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **84.04** | **26** | P | | **P** | **21 00 05.9** | **+0.9** |
| | baz=260 | | | | | | | |
| **TBI** | **Tubuai** | **84.06** | **113** | *e*LR | | LR | 21 26 32.5 | |
| | comp=Z,455nm,35.8s | | | | | | | |
| **IMAR** | **Indian Mountai** | **84.52** | **24** | P | | **P** | **21 00 05.7** | **-1.7** |
| **A21K** | **Barrow** | **84.55** | **18** | P | | **P** | **21 00 10.6** | **+3.2** |
| | baz=257 | | | | | | | |
| **ZEI** | **Tsey** | **84.56** | **313** | *e*P | | **P** | **21 00 11.4** | **+3.0** |
| ZEI | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **PPLA** | **Purkeypile** | **84.70** | **27** | P | | **P** | **21 00 10.4** | **+1.8** |
| | baz=262 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **84.79** | **26** | P | | **P** | **21 00 12.1** | **+3.3** |
| | baz=262 | | | | | | | |
| **CAST** | **Castle Rocks** | **84.83** | **26** | P | | **P** | **21 00 10.5** | **+1.5** |
| | baz=262 | | | | | | | |
| **NCK** | **Nalchik** | **84.83** | **313** | ⇑*e*P | | **P** | **21 00 11.7** | **+2.2** |
| NCK | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **H21K** | **Melozitna Rive** | **84.85** | **24** | P | | **P** | **21 00 11.0** | **+1.9** |
| | baz=261 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **84.99** | **30** | P | | **P** | **21 00 12.2** | **+2.2** |
| | baz=264 | | | | | | | |
| **I21K** | **Tanana** | **85.12** | **25** | P | | **P** | **21 00 11.1** | **+0.7** |
| | baz=262 | | | | | | | |
| **PRGR** | **Permogore** | **85.21** | **332** | *e*P | | **P** | **21 00 10.0** | **-0.9** |
| PRGR | | | | pmax | | pmax | | |
| | comp=Z,55nm,1.3s | | | | | | | |
| **GOF** | **Gofitskoye** | **85.31** | **315** | ⇑*e*P | | **P** | **21 00 14.0** | **+2.1** |
| **KBZ** | **Khabaz** | **85.35** | **314** | P | | **P** | **21 00 10.7** | **-1.3** |
| | comp=Z,2.1nm,0.9s,baz=139,slow=9.3,SNR=7.2 | | | | | | | |
| KBZ | | | | LR | | LR | 21 43 22.1 | |
| | comp=Z,52nm,19.9s,baz=72,slow=39 | | | | | | | |
| **KBZ** | **Khabaz** | **85.35** | **314** | ⇑*e*P | | **P** | **21 00 13.0** | **+1.0** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **85.40** | **26** | P | | **P** | **21 00 12.1** | **+0.2** |
| | baz=263 | | | | | | | |
| **NEY** | **Neytrino** | **85.45** | **313** | ⇓*e*P | | **P** | **21 00 12.9** | **+0.1** |
| NEY | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KIV** | **Kislovodsk** | **85.51** | **314** | ⇑P | | **P** | **21 00 16.8** | **+3.8** |
| **KIV** | **Kislovodsk** | **85.51** | **314** | *e*P | | **P** | **21 00 15.4** | **+2.4** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **85.51** | **314** | P | | **P** | **21 00 16.3** | **+3.3** |
| **KIV** | **Kislovodsk** | **85.51** | **314** | P | | **P** | **21 00 16.4** | **+3.4** |
| **M22K** | **Willow** | **85.52** | **28** | P | | **P** | **21 00 12.3** | **-0.2** |
| | baz=264 | | | | | | | |
| **TRF** | **Thorofare Moun** | **85.63** | **27** | P | | **P** | **21 00 15.5** | **+2.3** |
| | baz=264 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **85.64** | **29** | P | | **P** | **21 00 14.1** | **+1.0** |
| | baz=264 | | | | | | | |
| **PMR** | **Palmer** | **85.97** | **28** | P | | **P** | **21 00 14.5** | **-0.2** |
| | baz=265 | | | | | | | |
| **COLD** | **Coldfoot** | **86.10** | **23** | P | | **P** | **21 00 16.0** | **+0.7** |
| | baz=263 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **86.21** | **25** | P | | **P** | **21 00 15.7** | **-0.1** |
| | baz=264 | | | | | | | |
| **MCK** | **McKinley** | **86.26** | **26** | P | | **P** | **21 00 17.2** | **+1.0** |
| | baz=265 | | | | | | | |
| **KNK** | **Knik Glacier** | **86.28** | **29** | P | | **P** | **21 00 15.6** | **-0.7** |
| | baz=265 | | | | | | | |
| **SML** | **Sawmill** | **86.37** | **28** | P | | **P** | **21 00 17.9** | **+1.1** |
| | baz=265 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **86.50** | **21** | P | | **P** | **21 00 15.4** | **-1.9** |
| TOLK | | | | IAmb | | IAmb | 21 00 47.0 | |
| | comp=Z,24nm,1.5s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **86.50** | **21** | P | | **P** | **21 00 17.7** | **+0.4** |
| | baz=264 | | | | | | | |
| **VRH** | **Novokhopyorsk** | **86.52** | **321** | *e*P | | **P** | **21 00 18.3** | **+0.6** |
| VRH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **WAT6** | **Susitna Watana** | **86.71** | **28** | P | | **P** | **21 00 19.6** | **+1.0** |
| | baz=266 | | | | | | | |
| **ILAR** | **Eielson Array** | **87.23** | **25** | P | | **P** | **21 00 19.3** | **-1.6** |
| | comp=Z,0.2nm,0.6s,baz=266,slow=8.0,SNR=2.7 | | | | | | | |
| **SOC** | **Sochi** | **87.65** | **313** | *e*P | | **P** | **21 00 24.7** | **+1.4** |
| SOC | | | | *e* | | | 21 03 48.8 | |
| SOC | | | | *e*PPP | | PPP | 21 05 41.4 | |
| SOC | | | | *e*S | | **SKSac** | **21 10 52.8** | **+1.3** |
| SOC | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **PAX** | **Paxson** | **87.77** | **27** | P | | **P** | **21 00 23.4** | **-0.2** |
| | baz=268 | | | | | | | |
| **J25K** | **Salcha River,** | **87.88** | **26** | P | | **P** | **21 00 24.6** | **+0.5** |
| | baz=268 | | | | | | | |
| **VORD** | **Divnogorie** | **88.04** | **321** | *e*P | | **P** | **21 00 24.4** | **-0.6** |
| VORD | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **RIDG** | **Independent Ri** | **88.08** | **26** | P | | **P** | **21 00 25.3** | **+0.3** |
| | baz=268 | | | | | | | |
| **KLMR** | **Klimovskoe** | **88.10** | **331** | *e*P | | **P** | **21 00 23.2** | **-1.8** |
| KLMR | | | | *e* | | | 21 03 50.0 | |
| KLMR | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **KLMR** | **Klimovskoe** | **88.10** | **331** | *e*P | | **P** | **21 00 23.3** | **-1.8** |
| KLMR | | | | AMP | | | 21 00 32.8 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| KLMR | | | | *e*PP | | **PP** | **21 03 50.1** | **-1.6** |
| **VORR** | **Voronezh** | **88.11** | **321** | *e*P | | **P** | **21 00 25.5** | **+0.2** |
| VORR | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **VSR** | **Storozhevoye** | **88.13** | **321** | *e*P | | **P** | **21 00 25.4** | **0.0** |
| VSR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **88.29** | **322** | *e*P | | **P** | **21 00 27.2** | **+1.0** |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **J26L** | **Joseph Creek** | **88.65** | **26** | P | | **P** | **21 00 28.2** | **+0.4** |
| | baz=270 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **88.74** | **27** | P | | **P** | **21 00 29.2** | **+1.1** |
| | baz=270 | | | | | | | |
| **MOS** | **Moscow** | **89.06** | **326** | *e*P | | **P** | **21 00 33.4** | **+3.7** |
| **ANN** | **Anapa** | **89.29** | **315** | *e*P | | P | 21 00 26.0 | -5.1 |
| ANN | | | | *e*PP | | **PcP** | **21 00 31.5** | **-1.0** |
| ANN | | | | *e* | | | 21 04 02.7 | |
| ANN | | | | *e*S | | **SKSac** | **21 10 54.0** | **-7.2** |
| ANN | | | | pmax | | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | | |
| **KIBK** | **Kibwezi** | **89.43** | **268** | P | | **P** | **21 00 36.3** | **+3.8** |
| **L27K** | **Beaver Creek,** | **89.43** | **27** | P | | **P** | **21 00 31.9** | **+0.4** |
| | baz=271 | | | | | | | |
| **OBN** | **Obninsk** | **89.67** | **325** | LR | | LR | 21 45 09.6 | |
| | comp=Z,26nm,18.6s,baz=134,slow=39 | | | | | | | |
| **OBN** | **Obninsk** | **89.67** | **325** | ⇑*e*P | | **P** | **21 00 32.6** | **0.0** |
| OBN | | | | *e* | | | 21 03 59.0 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,88nm,17.0s | | | | | | | |
| **SYO** | **Syowa Base** | **90.17** | **201** | ⇓*i*sP | | sP | 21 00 43.4 | +3.5 |
| **KMBO** | **Kilima Mbogo** | **90.20** | **269** | P | | **P** | **21 00 36.5** | **+0.2** |
| | comp=Z,1.0nm,0.4s,baz=71,slow=4.5,SNR=7.5 | | | | | | | |
| KMBO | | | | LR | | LR | 21 37 03.9 | |
| | comp=Z,96nm,21.8s,baz=96,slow=33 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **90.20** | **269** | *i* P | | **P** | **21 00 38.0** | **+1.7** |
| KMBO | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **90.20** | **269** | P | | **P** | **21 00 34.6** | **-1.8** |
| **DAWY** | **Dawson** | **90.48** | **26** | P | | **P** | **21 00 35.1** | **-1.3** |
| **DAWY** | **Dawson** | **90.48** | **26** | P | | **P** | **21 00 37.1** | **+0.8** |
| | baz=273 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **90.86** | **25** | P | | **P** | **21 00 38.9** | **+0.9** |
| | baz=274 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **91.16** | **303** | LR | | LR | 21 46 12.1 | |
| | comp=Z,43nm,21.0s,baz=246,slow=39 | | | | | | | |
| **EIL** | **Elat** | **91.67** | **300** | LR | | LR | 21 45 59.5 | |
| | comp=Z,46nm,21.4s,baz=99,slow=38 | | | | | | | |
| **M30M** | **Minto, Yukon** | **91.77** | **27** | P | | **P** | **21 00 43.5** | **+1.2** |
| | baz=276 | | | | | | | |
| **BRTR** | **Keskin Array B** | **92.28** | **310** | P | | **P** | **21 00 45.6** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=90,slow=5.3,SNR=3.0 | | | | | | | |
| BRTR | | | | LR | | LR | 21 46 52.1 | |
| | comp=Z,41nm,20.2s,baz=86,slow=39 | | | | | | | |
| **INK** | **Inuvik** | **92.41** | **22** | P | | **P** | **21 00 46.0** | **+0.9** |
| | baz=279 | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **92.54** | **99** | *e*LR | | LR | 21 30 18.9 | |
| | comp=Z,221nm,22.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.22** | **340** | P | | **P** | **21 00 47.1** | **-1.7** |
| | comp=Z,8.5nm,0.8s,baz=64,slow=6.9,SNR=8.0 | | | | | | | |
| ARCES | | | | LR | | LR | 21 46 21.0 | |
| | comp=Z,104nm,19.3s,baz=82,slow=38 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.22** | **340** | P | | **P** | **21 00 47.7** | **-1.1** |
| ARCES | | | | pmax | | pmax | | |
| | comp=Z,132nm,1.9s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.22** | **340** | P | | **P** | **21 00 47.7** | **-1.1** |
| **A36M** | **Sachs Harbour** | **94.35** | **17** | P | | **P** | **21 00 55.4** | **+1.5** |
| | baz=287 | | | | | | | |
| **AKASG** | **Malin Array Be** | **94.43** | **321** | P | | **P** | **21 00 53.7** | **-1.0** |
| | comp=Z,0.4nm,0.5s,baz=74,slow=4.5,SNR=1.7 | | | | | | | |
| **AKBB** | **Malin Array Si** | **94.43** | **321** | ⇓*e*P | | **P** | **21 00 57.5** | **+2.8** |
| AKBB | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **FINES** | **FINESS Array B** | **94.54** | **332** | P | | **P** | **21 00 53.9** | **-1.1** |
| | comp=Z,1.4nm,0.7s,baz=352,slow=4.2,SNR=3.9 | | | | | | | |
| FINES | | | | LR | | LR | 21 45 52.0 | |
| | comp=Z,135nm,19.8s,baz=70,slow=37 | | | | | | | |
| **C36M** | **Paulatuk** | **95.51** | **20** | P | | **P** | **21 00 58.4** | **-0.8** |
| | baz=288 | | | | | | | |
| **DLBC** | **Dease Lake** | **95.69** | **31** | LR | | LR | 21 39 45.4 | |
| | comp=Z,80nm,21.0s,baz=279,slow=33 | | | | | | | |
| **NOR** | **Nord** | **95.83** | **355** | *i* P | | **P** | **21 00 60.0** | **-0.7** |
| NOR | | | | IAmb | | IAmb | 21 01 14.8 | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **TESR** | **Tescani** | **96.69** | **317** | ⇑P | | **P** | **21 01 08.6** | **+3.5** |
| **MBAR** | **Mbarara** | **96.71** | **270** | LR | | LR | 21 43 03.2 | |
| | comp=Z,86nm,20.6s,baz=46,slow=34 | | | | | | | |
| **VRI** | **Vrincioaia** | **96.73** | **316** | ⇓P | | **P** | **21 01 09.7** | **+4.3** |
| **PLOR** | **Plostina** | **96.79** | **316** | ⇑P | | **P** | **21 01 09.4** | **+3.7** |
| **MLR** | **Muntele Rosu** | **97.33** | **316** | ⇓P | | **P** | **21 01 07.5** | **-0.8** |
| **MLR** | **Muntele Rosu** | **97.33** | **316** | LR | | LR | 21 52 19.0 | |
| | comp=Z,72nm,19.7s,baz=65,slow=40 | | | | | | | |
| **BURAR** | **Bucovina Array** | **97.48** | **318** | ⇓P | | Pdif | 21 01 10.7 | +1.7 |
| **BBB** | **Bella Bella** | **98.03** | **37** | LR | | LR | 21 40 34.1 | |
| | comp=Z,97nm,18.9s,baz=274,slow=32 | | | | | | | |
| **MATP** | **Matopo** | **98.73** | **250** | LR | | LR | 21 40 23.3 | |
| | comp=Z,35nm,18.8s,baz=109,slow=32 | | | | | | | |
| **LSZ** | **Lusaka** | **99.19** | **255** | LR | | LR | 21 40 24.1 | |
| | comp=Z,172nm,21.9s,baz=113,slow=32 | | | | | | | |
| **IDI** | **Anoyia** | **99.64** | **306** | LR | | LR | 21 54 05.4 | |
| | comp=Z,43nm,19.8s,baz=82,slow=40 | | | | | | | |
| **DAG** | **Danmarks Havn** | **100.02** | **353** | *i* P | | **Pdif** | **21 01 17.6** | **-1.8** |
| DAG | | | | AMP | | | 21 01 19.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| DAG | | | | IAML | | | 21 01 19.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **101.51** | **334** | P | | **Pdif** | **21 01 25.2** | **-1.3** |
| | comp=Z,1.4nm,0.9s,baz=66,slow=4.5,SNR=2.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **101.65** | **25** | P | | **Pdif** | **21 01 26.4** | **-0.6** |
| | comp=Z,0.2nm,0.5s,baz=294,slow=4.4,SNR=2.1 | | | | | | | |
| **DBG** | **Daneborg** | **102.29** | **351** | *e*P | | **Pdif** | **21 01 29.1** | **-0.5** |
| **K02D** | **Willamette Mer** | **103.11** | **46** | P | | **Pdif** | **21 01 32.3** | **-1.7** |
| | baz=284 | | | | | | | |
| **BRG** | **Berggiesshubel** | **103.82** | **323** | *e*PKP | | **PKiKP** | **21 05 53.1** | **-1.7** |
| BRG | | | | Amp | | | 21 05 59.0 | |
| | comp=Z,8.4nm,1.3s | | | | | | | |
| **CLL** | **Collm** | **104.23** | **324** | *e*PP | | **PKiKP** | **21 05 55.0** | **-0.5** |
| CLL | | | | *e*PP | | | 21 06 00.0 | |
| **TORD** | **Torodi Ar. Bea** | **124.40** | **287** | PKP | | **PKPdf** | **21 06 34.9** | **+0.1** |
| | comp=Z,1.8nm,0.8s,baz=51,slow=1.6,SNR=7.1 | | | | | | | |
| TORD | | | | PP | | **PP** | **21 08 18.2** | **-2.5** |
| | comp=Z,1.8nm,1.0s,baz=62,slow=7.0,SNR=4.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.40** | **287** | | | **PKPdf** | **21 06 34.8** | **-0.1** |
| **PLCA** | **Paso Flores** | **137.24** | **160** | PKP | | **PKiKP** | **21 06 59.8** | **-0.7** |
| | comp=Z,1.5nm,0.7s,baz=310,slow=2.8,SNR=5.3 | | | | | | | |
| PLCA | | | | PKKP | | **PKKPdf** | **21 16 33.7** | **-0.9** |
| | comp=Z,2.3nm,0.9s,baz=213,slow=6.1,SNR=3.9 | | | | | | | |
| **TER01** | **Tubaro-SC** | **152.44** | **187** | *e*P | | **PKPdf** | **21 07 28.1** | **+3.2** |

*TUL* ***23*** *20:56:12.3±1.6, 35°.72N±0°.01×97°.16W±0°.01, h6km±5km, ML2.6, mb_Lg2.5/5(NEIC), Error ellipse: s-maj=1.6km s-min=1.3km az=139.0*

**NEIC 23 20:56:12.4±1.1, 35°.72N±0°.01×97°.17W±0°.01, h14km±3km, Error ellipse: s-maj=2.1km s-min=1.1km az=147.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.38** | **218** | Pg | Pg | 20 56 20.1 | 0.0 |
| OKCFA | | | | Sg | Sg | 20 56 25.7 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **0.38** | **216** | Pg | Pg | 20 56 19.8 | -0.3 |
| OKCSW | | | | Sg | Sg | 20 56 25.6 | +0.3 |
| **FNO** | **Franklin** | **0.50** | **203** | Pg | Pg | 20 56 21.8 | -0.4 |
| FNO | | | | Sg | Sg | 20 56 29.6 | -0.5 |
| **W35A** | **Tecumseh** | **0.61** | **157** | Pg | Pg | 20 56 23.8 | -0.6 |
| W35A | | | | Sg | Sg | 20 56 32.8 | +0.3 |
| **TUL1** | **Leonard** | **1.13** | **80** | Pg | Pb | 20 56 32.6 | -1.2 |
| TUL1 | | | | Sg | Sb | 20 56 48.6 | +0.2 |
| **X34A** | **Smith Ranch, M** | **1.24** | **206** | | Pn | 20 56 35.4 | +0.1 |
| X34A | | | | | Sg | 20 56 53.5 | +1.1 |
| **T35A** | **Sooner Cattle** | **1.31** | **24** | | Pn | 20 56 36.3 | 0.0 |
| **X37A** | **Clayton** | **1.85** | **127** | Pn | Pn | 20 56 44.5 | +0.7 |
| **U40A** | **Yellville** | **3.55** | **78** | Pn | Pn | 20 57 06.5 | -0.7 |
| **S39A** | **Bolivar** | **3.66** | **56** | Pn | Pn | 20 57 09.2 | +0.5 |
| **MGMO** | **Mountain Grove** | **4.20** | **69** | IAmb_Lg | | 20 58 32.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.85** | **35** | IAmb_Lg | | 20 58 47.7 | |
| | comp=Z,9.9nm,1.3s | | | | | | |

*IDC* ***23*** *21:01:09.6±0.8, 1°.00N×127°.41E, h0km, mb4.0/10, mb1 4.1/14, mb1mx4.0/36, mbtmp4.0/14, ML3.7/4, Error ellipse: s-maj=26.8km s-min=13.7km az=72.0*

*NEIC* ***23*** *21:01:11.9±1.4, 1°.02N±0°.04×127°.45E±0°.06, h10km±5km, mb4.5/27, Error ellipse: s-maj=9.7km s-min=4.7km az=108.0*

*DJA* ***23*** *21:01:12.9±0.8, 1°N±3°×12°7E±°, h16km±7km, M4.3/19, mb4.6/19, mB5.6/2, MLv4.2/8, Mw(mB)5.1/2*

**ISC 23 21:01:11.4±0.5, 1°.02N±0°.04×127°.48E±0°.05, h10km, n79, σ1s45/88, mb4.4/25, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.27** | **205** | Pg | **Pg** | **21 01 17.1** | **+0.2** |
| TNTI | | | | Sg | **Sg** | **21 01 21.6** | **+1.0** |
| **TNTI** | **Ternate** | **0.27** | **205** | P | **Pg** | **21 01 17.0** | **+0.1** |
| TNTI | | | | S | **Sg** | **21 01 21.4** | **+0.8** |
| **SANI** | **Sanana** | **3.40** | **206** | P | **Pn** | **21 02 07.5** | **+3.0** |
| SANI | | | | S | **Sn** | **21 02 45.2** | **+0.4** |
| **KMSI** | **Cibinong** | **3.53** | **263** | P | **Pn** | **21 02 06.4** | **+0.1** |
| KMSI | | | | S | **Sn** | **21 02 48.2** | **+0.1** |
| **SIJI** | **Sorong** | **4.22** | **116** | Pn | **Pn** | **21 02 17.5** | **+1.6** |
| | 2.3nm,0.3s,baz=319,slow=9.6,SNR=13 | | | | | | |
| SIJI | | | | Sn | **Sn** | **21 03 06.5** | **+1.1** |
| | 0.7nm,0.3s,baz=302,slow=19,SNR=1.5 | | | | | | |
| **GTOI** | **Gorontalo** | **4.49** | **265** | P | **Pn** | **21 02 22.5** | **+3.0** |
| GTOI | | | | S | **Sn** | **21 03 15.3** | **+3.5** |
| **AAI** | **Ambon** | **4.73** | **171** | P | **Pn** | **21 02 26.9** | **+4.1** |
| **LUWI** | **Luwuk** | **5.13** | **247** | | **Pn** | **21 02 29.0** | **+0.6** |
| **LUWI** | **Luwuk** | **5.13** | **247** | P | **Pn** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PSA00** | **Pilbara Seismi** | **23.66** | **198** | P | **P** | **21 06 20.6** | **-2.6** |
| PSA00 | | | | IAmb | IAmb | 21 06 21.3 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **KASI** | **Kota Agung** | **23.86** | **254** | P | **P** | **21 06 25.4** | **+0.2** |
| | comp=Z,22nm,0.5s | | | | | | |
| **MDSI** | **Maura Dua** | **23.92** | **257** | P | **P** | **21 06 24.5** | **-1.3** |
| | comp=Z,3.1nm,1.9s | | | | | | |
| **AS31** | **Alice Springs** | **25.32** | **166** | P | **P** | **21 06 37.7** | **-0.8** |
| **ASAR** | **Alice Springs** | **25.32** | **166** | P | **P** | **21 06 37.6** | **-0.9** |
| | comp=Z,5.0nm,0.7s,baz=345,slow=9.8,SNR=47 | | | | | | |
| **ASAR** | **Alice Springs** | **25.32** | **166** | P | **P** | **21 06 37.2** | **-1.3** |
| **UBPT** | **Khong Chiam** | **25.94** | **304** | P | **P** | **21 06 43.5** | **-0.6** |
| UBPT | | | | IAmb | IAmb | 21 06 51.3 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **31.86** | **199** | P | **P** | **21 07 36.2** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **32.93** | **303** | P | **P** | **21 07 44.2** | **-2.1** |
| | comp=Z,0.3nm,0.4s,baz=247,slow=40,SNR=1.4 | | | | | | |
| **BBOO** | **Buckleboo** | **34.61** | **167** | P | **P** | **21 07 59.7** | **-1.0** |
| BBOO | | | | IAmb | IAmb | 21 08 00.5 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.35** | **159** | P | **P** | **21 08 06.7** | **-0.4** |
| | comp=Z,1.4nm,0.8s,baz=314,slow=5.7,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **35.35** | **159** | P | **P** | **21 08 06.8** | **-0.4** |
| **KSRS** | **Korea Array** | **36.26** | **1** | P | **P** | **21 08 14.0** | **-0.8** |
| | comp=Z,1.0nm,0.6s,baz=170,slow=9.9,SNR=1.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.72** | **15** | P | **P** | **21 08 18.5** | **-0.3** |
| | comp=Z,2.2nm,0.6s,baz=193,slow=9.0,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **50.09** | **342** | P | **P** | **21 10 04.8** | **-1.9** |
| | comp=Z,0.5nm,0.6s,baz=162,slow=8.7,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **50.09** | **342** | P | **P** | **21 10 06.4** | **-0.3** |
| **MK31** | **Makanchi Array** | **60.20** | **326** | P | **P** | **21 11 19.3** | **-0.4** |
| MK31 | | | | IAmb | IAmb | 21 11 26.1 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.20** | **326** | P | **P** | **21 11 19.6** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=120,slow=8.8,SNR=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.20** | **326** | P | **P** | **21 11 19.5** | **-0.2** |
| **MAKZ** | **Makanchi** | **60.38** | **326** | P | **P** | **21 11 20.3** | **-0.6** |
| MAKZ | | | | IAmb | IAmb | 21 11 27.3 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **YAK** | **Yakutsk** | **60.88** | **1** | P | **P** | **21 11 24.6** | **+0.7** |
| **AAK** | **Ala-Archa** | **62.86** | **319** | P | **P** | **21 11 38.7** | **+0.8** |
| AAK | | | | IAmb | IAmb | 21 11 48.1 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **63.33** | **333** | P | **P** | **21 11 41.8** | **+1.2** |
| ZAA0 | | | | IAmb | IAmb | 21 11 51.1 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.33** | **333** | P | **P** | **21 11 41.0** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=107,slow=7.9,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.33** | **333** | P | **P** | **21 11 41.3** | **+0.8** |
| **KBL** | **Kabul** | **63.77** | **308** | P | **P** | **21 11 44.7** | **+0.6** |
| KBL | | | | IAmb | IAmb | 21 11 48.8 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **GAR** | **Garm** | **64.31** | **313** | P | **P** | **21 11 46.9** | **-0.6** |
| **KURK** | **Kurchatov** | **64.42** | **328** | P | **P** | **21 11 47.5** | **-0.3** |
| **KKAR** | **Karatay Array** | **65.72** | **318** | P | **P** | **21 11 56.1** | **-0.4** |
| **NRIK** | **Noril'sk** | **73.22** | **346** | P | **P** | **21 12 44.1** | **+1.9** |
| | comp=Z,1.7nm,0.5s,baz=117,slow=6.6,SNR=3.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **74.71** | **321** | P | **P** | **21 12 51.4** | **0.0** |
| **ABKAR** | **Akbulak array** | **74.71** | **321** | P | **P** | **21 12 50.5** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 21 12 59.6 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **ARU** | **Arti** | **77.61** | **328** | P | **P** | **21 13 08.0** | **+0.2** |
| ARU | | | | IAmb | IAmb | 21 13 26.5 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **84.50** | **24** | P | **P** | **21 13 45.6** | **+1.4** |

**NEIC 23 21:06:27.8**±0.7, **35°.67N**±0°.01×**97°.385W**±0°.007, **h8**km±2km, **mb_Lg2.4/7, Error ellipse: s-maj=1.6km s-min=0.6km az=162.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **199** | Pg | Pg | 21 06 29.5 | -0.6 |
| OK009 | | | | Sg | Sg | 21 06 31.3 | -0.4 |
| **OK005** | **Luther M Schoo** | **0.16** | **97** | Pg | Pg | 21 06 31.0 | -0.1 |
| OK005 | | | | Sg | Sg | 21 06 33.9 | +0.5 |
| **FNO** | **Franklin** | **0.41** | **182** | Pg | Pg | 21 06 35.3 | -0.6 |
| FNO | | | | Sg | Sg | 21 06 41.4 | 0.0 |
| **W35A** | **Tecumseh** | **0.67** | **141** | Pg | Pg | 21 06 39.9 | -0.8 |
| W35A | | | | Sg | Sg | 21 06 49.2 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.13** | **199** | Pg | Pg | 21 06 48.7 | -0.9 |
| X34A | | | | Sg | Sb | 21 07 04.5 | -0.1 |
| **TUL1** | **Leonard** | **1.32** | **79** | | Pn | 21 06 50.8 | -1.8 |
| **WMOK** | **Wichita Mounta** | **1.48** | **231** | | Pn | 21 06 53.7 | -1.1 |
| WMOK | | | | IAmb_Lg | | 21 07 16.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **U32A** | **Winter Ranch,** | **1.49** | **299** | | Pn | 21 06 54.2 | -0.8 |
| **X37A** | **Clayton** | **1.97** | **123** | Pn | Pn | 21 07 01.4 | -0.2 |

*MAN **23** 21:31:11.0, 2°.81N×123°.62E, h39km, mb4.8, ML3.7, MS3.7*
*DJA **23** 21:31:18.7±1.4, 4°N±7°×12°7E±°, h10km, M3.8/4, mb3.7/1, MLv3.8/4*
*IDC **23** 21:31:31.8±14.0, 3°.83N×126°.52E, h126km±144km, mb3.2/8, mb1 3.4/8, mb1mx3.0/47, mbtmp3.6/8, Error ellipse: s-maj=48.9km s-min=23.2km az=76.0*
**ISC 23 21:31:24.0**±0.8, **3°.93N**±0°.07×**126°.7E**±0°.1, **h45**km, **n14, σ1°33/14, mb3.6/9, 2C-1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.20** | **259** | P | **Pn** | **21 31 43.3** | **-1.0** |
| SGSI | | | | S | **Sn** | **21 32 01.2** | **+1.8** |
| **GSPH** | **General Santos** | **2.77** | **321** | *eP* | **Pn** | **21 32 05.8** | **-0.2** |
| **MATI** | **Mati** | **3.03** | **352** | *eP* | Pn | 21 32 23.6 | +14 |
| **KCP** | **Kidapawan** | **3.46** | **332** | *eP* | **Pn** | **21 32 17.6** | **+2.1** |
| KCP | | | | *i* S | Sn | 21 33 08.6 | +13 |
| **GTOI** | **Gorontalo** | **4.93** | **229** | P | **Pn** | **21 32 37.0** | **+1.4** |
| **FITZ** | **Fitzroy Crossi** | **21.91** | **183** | P | **P** | **21 36 14.6** | **+1.0** |
| | 0.9nm,0.5s,baz=20,slow=12,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.88** | **163** | P | **P** | **21 36 42.6** | **-0.1** |
| | 3.4nm,0.9s,baz=343,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **28.31** | **166** | P | **P** | **21 37 13.5** | **0.0** |
| | 0.2nm,0.5s,baz=348,slow=8.7,SNR=2.4 | | | | | | |
| **STKA** | **Stephens Creek** | **38.32** | **159** | P | **P** | **21 38 40.0** | **-0.5** |
| | 0.7nm,0.5s,baz=310,slow=9.2,SNR=3.9 | | | | | | |
| **ASAJ** | **Asahikawa** | **42.41** | **17** | P | **P** | **21 39 15.5** | **+1.3** |
| | 7.6nm,0.5s,baz=218,slow=9.0,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **47.11** | **341** | P | **P** | **21 39 51.3** | **-0.4** |
| | 0.3nm,0.6s,baz=151,slow=6.6,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.38** | **325** | P | **P** | **21 41 06.0** | **-1.9** |
| | 0.3nm,0.5s,baz=123,slow=8.8,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.56** | **327** | P | **P** | **21 41 35.8** | **-0.7** |
| | 1.1nm,0.7s,baz=125,slow=6.3,SNR=10 | | | | | | |
| **BVAR** | **Borovoye Array** | **67.14** | **327** | P | **P** | **21 42 11.9** | **-1.2** |
| | 0.2nm,0.3s,baz=104,slow=11,SNR=2.6 | | | | | | |

*ISK **23** 21:32:43.1, 37°.27N×26°.86E, h5km, ML3.4/31*
*ATH **23** 21:32:44.1, 37°.27N×26°.86E, h28km±1km, ML3.1/11, Error ellipse: s-maj=3.4km s-min=0.9km az=74.0*
*THE **23** 21:32:44.9, 37°.29N×26°.93E, h3km±1km, ML3.3/4, Error ellipse: s-maj=1.8km s-min=0.4km az=85.0*
*DDA **23** 21:32:44.2±0.0, 37°.27N×26°.86E, h7km±2km, MW3.5*
**ISC 23 21:32:44.6**±1.0, **37°.27N**±0°.02×**26°.87E**±0°.02, **h10**km±9km, **n95, σ0°82/121, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DIDI** | **Didim-Aydin** | **0.31** | **70** | PG | **Pg** | **21 32 50.7** | **-0.1** |
| DIDI | | | | SG | **Sb** | **21 32 56.1** | **-1.3** |
| **DDIM** | **Aydin, Didim** | **0.35** | **58** | P | **Pg** | **21 32 51.5** | **0.0** |
| DDIM | | | | S | **Sg** | **21 32 56.7** | **+0.6** |
| DDIM | | | | *i* AML | AML | 21 32 57.0 | |
| | comp=N,4μm,0.3s | | | | | | |
| DDIM | | | | *i* AML | AML | 21 32 57.0 | |
| | comp=E,7μm,0.2s | | | | | | |
| **YKAV** | **Yalikavak-Bodr** | **0.36** | **114** | PG | **Pg** | **21 32 51.6** | **-0.1** |
| YKAV | | | | SG | **Sb** | **21 32 57.7** | **-1.1** |
| **BODT** | **Bodrum** | **0.41** | **121** | P | **Pg** | **21 32 52.6** | **-0.1** |
| BODT | | | | S | **Sg** | **21 32 58.2** | **+0.2** |
| **BODT** | **Bodrum** | **0.41** | **121** | PG | **Pg** | **21 32 52.5** | **-0.1** |
| BODT | | | | SG | **Sg** | **21 32 58.8** | **+0.8** |
| **SMG** | **Samos** | **0.44** | **357** | P | **Pg** | **21 32 53.4** | **+0.3** |
| SMG | | | | S | **Sb** | **21 33 00.0** | **-1.0** |
| | 10μm,0.2s | | | | | | |
| **SMG** | **Samos** | **0.44** | **357** | P | **Pg** | **21 32 53.5** | **+0.3** |
| SMG | | | | S | **Sb** | **21 33 00.0** | **-1.0** |
| SMG | | | | AML | AML | 21 33 01.0 | |
| | comp=N,19258μm,0.3s | | | | | | |
| SMG | | | | AML | AML | 21 33 01.3 | |
| | comp=E,21164μm,0.3s | | | | | | |
| **GCAM** | **G?zelcaml?** | **0.52** | **34** | PG | **Pg** | **21 32 54.7** | **+0.1** |
| GCAM | | | | SG | **Sb** | **21 33 03.5** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **0.52** | **34** | P | **Pg** | **21 32 54.6** | **+0.1** |
| GCAM | | | | S | **Sb** | **21 33 02.4** | **-0.9** |
| GCAM | | | | *i* AML | AML | 21 33 04.0 | |
| | comp=E,5μm,0.2s | | | | | | |
| GCAM | | | | *i* AML | AML | 21 33 05.0 | |
| | comp=E,5μm,0.1s | | | | | | |
| **KOSK** | **Kos Island** | **0.53** | **170** | P | **Pg** | **21 32 55.1** | **+0.3** |
| KOSK | | | | S | **Sb** | **21 33 03.5** | **-0.1** |
| | comp=E,2μm,0.5s | | | | | | |
| **KOSK** | **Kos Island** | **0.53** | **170** | PG | **Pg** | **21 32 54.6** | **-0.2** |
| KOSK | | | | SG | **Sb** | **21 33 02.7** | **-0.9** |
| **NISR** | **Nisiros** | **0.69** | **162** | P | **Pb** | **21 32 58.5** | **-0.2** |
| **NISR** | **Nisiros** | **0.69** | **162** | P | **Pb** | **21 32 58.5** | **-0.2** |
| NISR | | | | S | **Sb** | **21 33 08.0** | **-0.3** |
| NISR | | | | AML | AML | 21 33 11.1 | |
| | comp=E,3253μm,0.7s | | | | | | |
| NISR | | | | AML | AML | 21 33 14.0 | |
| | comp=N,1689μm,0.3s | | | | | | |
| **NIS1** | **Nisyros Isl.** | **0.71** | **160** | P | **Pb** | **21 32 58.8** | **-0.3** |
| **NIS1** | **Nisyros Isl.** | **0.71** | **160** | P | **Pg** | **21 32 58.5** | **+0.2** |
| NIS1 | | | | AML | AML | 21 33 17.4 | |
| | comp=N,3662μm,0.5s | | | | | | |
| NIS1 | | | | AML | AML | 21 33 17.7 | |
| | comp=E,3902μm,0.4s | | | | | | |
| **MLSB** | **Milas** | **0.72** | **88** | PG | **Pg** | **21 32 58.3** | **-0.2** |
| MLSB | | | | SG | **Sb** | **21 33 09.7** | **+0.4** |
| **DGB** | **zmir** | **0.78** | **1** | P | **Pg** | **21 32 59.3** | **-0.3** |
| DGB | | | | S | **Sg** | **21 33 09.9** | **+0.1** |
| DGB | | | | *i* AML | AML | 21 33 13.0 | |
| | comp=E,587nm,0.4s | | | | | | |
| **GMLD** | **Gumuldur** | **0.80** | **3** | PG | **Pg** | **21 33 00.0** | **-0.1** |
| GMLD | | | | SG | **Sb** | **21 33 12.1** | **+0.5** |
| **ZEYE** | **Izmir, Urla-Ze** | **1.01** | **343** | P | **Pg** | **21 33 03.7** | **-0.3** |
| ZEYE | | | | S | **Sb** | **21 33 17.9** | **+0.4** |
| ZEYE | | | | *i* AML | AML | 21 33 20.0 | |
| | comp=E,838nm,0.3s | | | | | | |
| ZEYE | | | | *i* AML | AML | 21 33 21.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| **URLA** | **Izmir** | **1.11** | **349** | PN | **Pg** | **21 33 05.3** | **-0.6** |
| **URLA** | **Izmir** | **1.11** | **349** | P | **Pb** | **21 33 05.9** | **0.0** |
| URLA | | | | S | **Sn** | **21 33 22.2** | **+0.6** |
| URLA | | | | *i* AML | AML | 21 33 25.0 | |
| | comp=E,837nm,0.8s | | | | | | |
| URLA | | | | *i* AML | AML | 21 33 25.0 | |
| | comp=E,611nm,0.6s | | | | | | |
| **YER** | **Yerkesik** | **1.14** | **97** | P | **Pg** | **21 33 05.6** | **-0.8** |
| **YER** | **Yerkesik** | **1.14** | **97** | PN | **Pg** | **21 33 05.8** | **-0.6** |
| **MULA** | **Mugla, Merkez-** | **1.16** | **90** | P | **Pg** | **21 33 05.9** | **-0.9** |
| **MRSB** | **Marmaris-Mugla** | **1.20** | **117** | PN | **Pg** | **21 33 06.9** | **-0.7** |
| MRSB | | | | SN | **Sn** | **21 33 25.2** | **+1.4** |
| **TURN** | **Turunc** | **1.21** | **114** | PN | **Pb** | **21 33 07.1** | **-0.4** |
| TURN | | | | SN | **Sn** | **21 33 25.2** | **+1.3** |
| **TURN** | **Turunc** | **1.21** | **114** | P | **Pb** | **21 33 06.5** | **-1.0** |
| TURN | | | | S | **Sg** | **21 33 21.8** | **-1.6** |
| TURN | | | | *i* AML | AML | 21 33 25.0 | |
| | comp=E,491nm,0.6s | | | | | | |
| TURN | | | | *i* AML | AML | 21 33 27.0 | |
| | comp=E,427nm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **1.29** | **330** | P | **Pn** | **21 33 08.1** | **-0.6** |
| CHOS | | | | S | **Sn** | **21 33 26.8** | **+0.7** |
| | comp=E,655nm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **1.29** | **330** | P | **Pn** | **21 33 08.0** | **-0.7** |
| CHOS | | | | AML | AML | 21 33 31.4 | |
| | comp=E,1444μm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 21 33 33.1 | |
| | comp=N,1200μm,0.4s | | | | | | |
| **TNSA** | **Tinos** | **1.39** | **282** | P | **Pn** | **21 33 09.4** | **-0.6** |
| **CMBO** | **Columbo, Santo** | **1.42** | **236** | P | **Pb** | **21 33 11.0** | **-0.2** |
| CMBO | | | | S | **Sg** | **21 33 31.6** | **+1.4** |
| | comp=N,1μm,0.7s | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.42** | **236** | P | **Pn** | **21 33 10.1** | **-0.4** |
| CMBO | | | | AML | AML | 21 33 33.9 | |
| | comp=E,2077μm,0.8s | | | | | | |
| CMBO | | | | AML | AML | 21 33 34.5 | |
| | comp=N,3664μm,0.6s | | | | | | |
| **FOCM** | **Foa** | **1.44** | **356** | PN | **Pg** | **21 33 11.9** | **-0.4** |
| **ARG** | **Arkhangelos** | **1.46** | **136** | P | **Pn** | **21 33 10.6** | **-0.4** |
| **ARG** | **Arkhangelos** | **1.46** | **136** | P | **Pn** | **21 33 10.6** | **-0.4** |
| ARG | | | | AML | AML | 21 33 38.0 | |
| | comp=N,1199μm,0.6s | | | | | | |
| ARG | | | | AML | AML | 21 33 38.3 | |
| | comp=E,1124μm,0.7s | | | | | | |
| **ARG** | **Arkhangelos** | **1.46** | **136** | PN | **Pn** | **21 33 11.1** | **+0.1** |
| **DALY** | **Dalyan (Mula)** | **1.50** | **107** | PN | **Pg** | **21 33 12.8** | **-0.5** |
| **TAVA** | **DENIZLI_Tavas** | **1.64** | **83** | P | **Pn** | **21 33 13.8** | **+0.2** |
| TAVA | | | | S | **Sg** | **21 33 36.6** | **-0.7** |
| TAVA | | | | *i* AML | AML | 21 33 44.0 | |
| | comp=E,59nm,0.4s | | | | | | |
| **GOMA** | **Golmarmara-Man** | **1.66** | **30** | PN | **Pb** | **21 33 15.1** | **-0.1** |
| **ZEDA** | **zmir-Bergama** | **1.70** | **5** | P | **Pn** | **21 33 13.8** | **-0.5** |
| ZEDA | | | | S | **Sn** | **21 33 36.2** | **+0.1** |
| ZEDA | | | | *i* AML | AML | 21 33 45.0 | |
| | comp=E,122nm,0.4s | | | | | | |
| ZEDA | | | | *i* AML | AML | 21 33 46.0 | |
| | comp=E,136nm,0.6s | | | | | | |
| **KARP** | **Karpathos** | **1.74** | **172** | P | **Pn** | **21 33 14.0** | **-0.9** |
| **KARP** | **Karpathos** | **1.74** | **172** | P | **Pn** | **21 33 14.0** | **-0.9** |
| KARP | | | | AML | AML | 21 33 43.0 | |
| | comp=N,316μm,0.7s | | | | | | |
| KARP | | | | AML | AML | 21 33 46.9 | |
| | comp=E,300μm,0.6s | | | | | | |
| **KARP** | **Karpathos** | **1.74** | **172** | PN | **Pn** | **21 33 14.8** | **-0.1** |
| **AKS** | **Akhisar** | **1.77** | **25** | PN | **Pb** | **21 33 16.2** | **-0.9** |
| **DKL** | **Dikili** | **1.80** | **1** | PN | **Pn** | **21 33 16.3** | **+0.7** |
| **MANT** | **Manisa** | **1.81** | **47** | P | **Pn** | **21 33 16.8** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.88** | **48** | PN | **Pb** | **21 33 18.2** | **-0.9** |
| **FETY** | **Fethiye** | **1.88** | **109** | P | **Pb** | **21 33 18.8** | **-0.3** |
| **FETY** | **Fethiye** | **1.88** | **109** | PN | **Pn** | **21 33 17.9** | **+1.0** |
| **FETY** | **Fethiye** | **1.88** | **109** | P | **Pb** | **21 33 18.8** | **-0.3** |
| FETY | | | | S | **Sb** | **21 33 43.6** | **+0.9** |
| FETY | | | | *i* AML | AML | 21 33 46.0 | |
| | comp=E,137nm,0.8s | | | | | | |
| FETY | | | | *i* AML | AML | 21 33 53.0 | |
| | comp=E,99nm,0.6s | | | | | | |
| **CAEL** | **Denizli, Camel** | **1.96** | **94** | P | **Pg** | **21 33 21.3** | **-0.9** |
| **CAME** | **Cameli-Denizli** | **1.97** | **99** | PN | **Pn** | **21 33 18.9** | **+0.7** |
| **PRK** | **Paraskevi** | **2.03** | **347** | P | **Pn** | **21 33 19.4** | **+0.6** |
| PRK | | | | AML | AML | 21 33 54.1 | |
| | comp=E,850μm,0.6s | | | | | | |
| PRK | | | | AML | AML | 21 33 59.9 | |
| | comp=N,1096μm,0.9s | | | | | | |
| **AYVA** | **Ayvalik** | **2.04** | **356** | P | **Pb** | **21 33 21.2** | **-0.5** |
| **KARY** | **Karystos** | **2.08** | **292** | P | **Pn** | **21 33 19.7** | **+0.2** |
| **GOLH** | **Golhisar** | **2.15** | **90** | P | **Pb** | **21 33 22.1** | **-1.5** |
| **STEP** | **BALIKESIR_Sava** | **2.21** | **17** | P | **Pb** | **21 33 24.2** | **-0.4** |
| STEP | | | | S | **Sg** | **21 33 55.1** | **-0.3** |
| STEP | | | | *i* AML | AML | 21 34 01.0 | |
| | comp=N,233nm,1.4s | | | | | | |
| STEP | | | | *i* AML | AML | 21 34 05.0 | |
| | comp=N,262nm,0.9s | | | | | | |
| **ZKR** | **Zakros** | **2.22** | **194** | P | **Pn** | **21 33 21.0** | **-0.4** |
| ZKR | | | | AML | AML | 21 34 01.1 | |
| | comp=E,431μm,0.7s | | | | | | |
| ZKR | | | | AML | AML | 21 34 02.0 | |
| | comp=N,131μm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **2.22** | **194** | PN | **Pn** | **21 33 22.7** | **+1.3** |
| **USAK** | **Uak-Merkez** | **2.23** | **49** | P | **Pb** | **21 33 23.5** | **-1.4** |
| **BUHA** | **Balikesir, Bur** | **2.23** | **4** | P | **Pg** | **21 33 26.5** | **-0.8** |
| **NPS** | **Neapolis** | **2.25** | **207** | P | **Pn** | **21 33 21.1** | **-0.8** |
| NPS | | | | AML | AML | 21 34 01.6 | |
| | comp=E,379μm,0.4s | | | | | | |
| NPS | | | | AML | AML | 21 34 01.8 | |
| | comp=N,322μm,0.5s | | | | | | |
| **DEMI** | **Demirci** | **2.29** | **39** | P | **Pg** | **21 33 28.2** | **-0.3** |
| **KOCA** | **Canakkale, Ayv** | **2.30** | **346** | P | **Pn** | **21 33 23.0** | **+0.4** |
| **PASA** | **Karahalli, USA** | **2.33** | **62** | P | **Pn** | **21 33 22.4** | **-0.7** |
| **HRKL** | **Herakleio** | **2.42** | **217** | PN | **Pn** | **21 33 25.2** | **+1.0** |
| **AKAS** | **Kas** | **2.43** | **114** | PN | **Pn** | **21 33 25.8** | **+1.3** |
| **SIMA** | **Simav-Kutahya** | **2.46** | **42** | PN | **Pn** | **21 33 26.5** | **+1.7** |
| **ELL** | **Elmali** | **2.49** | **101** | PN | **Pn** | **21 33 26.7** | **+1.4** |
| **BALY** | **Balya** | **2.53** | **13** | P | **Pb** | **21 33 31.0** | **+0.8** |
| **IDI** | **Anoyia** | **2.54** | **220** | P | **Pn** | **21 33 25.1** | **-1.0** |
| IDI | | | | AML | AML | 21 33 55.6 | |
| | comp=E,197μm,0.4s | | | | | | |
| IDI | | | | AML | AML | 21 34 01.6 | |
| | comp=N,153μm,0.4s | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **2.57** | **80** | P | **Pn** | **21 33 27.4** | **+1.0** |
| **EZN** | **Ezine** | **2.58** | **351** | PN | **Pn** | **21 33 27.0** | **+0.5** |
| **BASM** | **Basmaki-Afyon** | **2.61** | **75** | PN | **Pn** | **21 33 28.7** | **+1.8** |
| **BOZC** | **Bozcaada** | **2.65** | **346** | PN | **Pn** | **21 33 28.2** | **+0.9** |
| **BOZC** | **Bozcaada** | **2.65** | **346** | P | **Pn** | **21 33 25.0** | **-2.3** |
| **DURS** | **Dursunbey** | **2.65** | **28** | P | **Pb** | **21 33 32.5** | **+0.4** |
| **GEDZ** | **Gediz** | **2.67** | **48** | PN | **Pn** | **21 33 29.6** | **+1.8** |
| **KZIL** | **AFYON_Kizioren** | **2.77** | **68** | P | **Pn** | **21 33 28.9** | **-0.3** |
| **KORT** | **Korkueli** | **2.79** | **95** | PN | **Pn** | **21 33 31.3** | **+1.8** |
| **LIA** | **Limnos Island** | **2.94** | **334** | P | **Pn** | **21 33 31.6** | **+0.3** |
| **AKUM** | **Antalya-Kumluc** | **2.94** | **108** | P | **Pn** | **21 33 32.0** | **+0.6** |
| **GOKA** | **anakkale-Gk** | **3.01** | **346** | P | **Pn** | **21 33 30.9** | **-1.4** |
| **GADA** | **Gvkgeada** | **3.01** | **346** | P | **Pn** | **21 33 32.3** | **-0.1** |
| **KNL** | **Balıkesir** | **3.04** | **10** | P | **Pg** | **21 33 40.7** | **-2.1** |
| **ANDZ** | **Kutahya, Merke** | **3.26** | **46** | P | **Pg** | **21 33 47.4** | **+0.3** |
| **SMTH** | **Samothraki Isl** | **3.36** | **342** | P | **Pn** | **21 33 36.9** | **-0.3** |
| **YYLC** | **Yaylacik** | **3.39** | **26** | P | **Pg** | **21 33 49.4** | **0.0** |
| **STBT** | **Saitabat** | **3.41** | **32** | P | **Pg** | **21 33 49.4** | **-0.6** |
| **ALN** | **Alexandroupoli** | **3.58** | **350** | P | **Pn** | **21 33 41.0** | **-0.5** |
| **KDZ** | **Kurdzhali** | **4.51** | **346** | *eP* | **Pn** | **21 33 53.2** | **+0.2** |
| **RZN** | **Rozhen** | **4.71** | **340** | *eP* | **Pn** | **21 33 56.6** | **+0.7** |
| **MMB** | **Musomiste** | **4.95** | **332** | *eP* | **Pn** | **21 33 59.5** | **+0.5** |
| **KKB** | **Krupnik** | **5.44** | **329** | *eP* | **Pn** | **21 34 06.9** | **+1.1** |
| **VTS** | **Vitosha** | **6.03** | **334** | *eP* | **Pn** | **21 34 15.3** | **+1.4** |

*BGR **23** 21:45:52.9±0.0, 16°.93S×178°.19W, h33km*
*NEIC **23** 21:46:50.0±2.1, 17°.7S±0°.1×178°.5W±0°.1, h560km±5km, mb4.6/66, Error ellipse: s-maj=18.1km s-min=14.5km az=150.0*
*IDC **23** 21:46:50.4±0.7, 17°.73S×178°.40W, h578km±8km, mb3.7/22, mb1 3.9/26, mb1mx3.8/37, mbtmp4.7/26, Error ellipse: s-maj=12.3km s-min=9.1km az=155.0*
**ISC 23 21:46:48.0**±0.3, **17°.60S**±0°.08×**178°.47W**±0°.06, **h547**km, **n284, σ1°90/285, mb4.5/59, 18C-21D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.32** | **267** | P | P | 21 48 10.8 | +5.9 |
| | 92nm,0.3s,baz=109,slow=3.7,SNR=247 | | | | | | |
| MSVF | | | | S | S | 21 49 17.3 | +10 |
| | baz=285,slow=23,SNR=6.7 | | | | | | |
| **MSVF** | **Nonsavu** | **3.32** | **267** | P | P | 21 48 10.6 | +5.6 |
| **AFI** | **Afiamalu** | **7.41** | **61** | P | **P** | **21 48 41.7** | **+1.7** |
| | 6.2nm,0.3s,baz=93,slow=7.9,SNR=6.8 | | | | | | |
| AFI | | | | S | **S** | **21 50 10.2** | **-1.5** |
| | 1.6nm,0.3s,baz=26,slow=16,SNR=2.6 | | | | | | |
| **AFI** | **Afiamalu** | **7.41** | **61** | P | **P** | **21 48 41.9** | **+1.9** |
| **OUENC** | **Ouen Island, N** | **14.61** | **248** | P | **P** | **21 49 54.3** | **+0.8** |
| **DZM** | **Mont Dzumac** | **14.88** | **250** | P | **P** | **21 49 56.6** | **+0.3** |
| | 1.9nm,0.3s,baz=83,slow=19,SNR=8.0 | | | | | | |
| **RAR** | **Rarotonga** | **18.00** | **105** | P | **P** | **21 50 25.7** | **-0.3** |
| | 1.3nm,0.3s,baz=211,slow=6.8,SNR=4.0 | | | | | | |
| **OUZ** | **Omahuta** | **18.92** | **200** | P | **P** | **21 50 37.4** | **+3.2** |
| **GRZ** | **Great Barrier** | **19.34** | **195** | P | **P** | **21 50 40.4** | **+2.4** |
| **WCZ** | **Waipu Caves** | **19.35** | **198** | P | **P** | **21 50 41.5** | **+3.3** |
| **KUZ** | **Kuaotunu** | **19.75** | **194** | P | **P** | **21 50 42.0** | **+0.3** |
| **WIAZ** | **Waiheke Island** | **19.94** | **195** | P | **P** | **21 50 46.1** | **+2.7** |
| **MXZ** | **Matakaoa Point** | **20.09** | **187** | P | **P** | **21 50 45.1** | **+0.3** |
| **WTAZ** | **Waiatarua** | **20.21** | **196** | P | **P** | **21 50 48.4** | **+2.4** |
| **AWAZ** | **Awhitu Peninsu** | **20.32** | **196** | P | **P** | **21 50 49.4** | **+2.5** |
| **WMGZ** | **Waiomatatini S** | **20.33** | **187** | P | **P** | **21 50 47.6** | **+0.6** |
| **HAZ** | **Te Kaha** | **20.35** | **189** | P | **P** | **21 50 46.5** | **-0.7** |
| **RUGZ** | **Raukumara Rang** | **20.57** | **189** | P | **P** | **21 50 49.6** | **+0.3** |
| **PUZ** | **Puketiti** | **20.60** | **187** | P | **P** | **21 50 50.1** | **+0.7** |
| **TWGZ** | **Tauwhareparae** | **20.73** | **188** | P | **P** | **21 50 51.8** | **+1.1** |
| **URZ** | **Urewera** | **20.94** | **190** | P | **P** | **21 50 50.8** | **-1.8** |
| | 20nm,0.5s,baz=8.6,slow=4.5,SNR=14 | | | | | | |
| **URZ** | **Urewera** | **20.94** | **190** | P | **P** | **21 50 50.8** | **-1.8** |
| **URZ** | **Urewera** | **20.94** | **190** | P | **P** | **21 50 51.2** | **-1.3** |
| **CNGZ** | **Carnagh Statio** | **21.01** | **187** | P | **P** | **21 50 55.0** | **+1.9** |
| **TKGZ** | **Te Karaka** | **21.01** | **188** | P | **P** | **21 50 51.1** | **-2.1** |
| **BKZ** | **Black Stump Fm** | **21.93** | **191** | P | **P** | **21 50 59.5** | **-2.0** |
| BKZ | | | | IAmb | IAmb | 21 51 00.6 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **BFZ** | **Birch Farm** | **23.45** | **190** | P | **P** | **21 51 13.6** | **-1.3** |
| **RPZ** | **Rata Peaks** | **27.50** | **197** | P | **P** | **21 51 49.6** | **-1.1** |
| | comp=Z,11nm,0.6s,baz=256,slow=3.1,SNR=8.7 | | | | | | |
| **RPZ** | **Rata Pea

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,26nm,1.1s | | | | | | | |
| **UGM** | **Wanagama** | **69.60** | **268** | P | **P** | **21 57 02.8** | **-0.3** |
| **JHS** | **Saijyo** | **69.63** | **319** | P | **P** | **21 57 03.5** | **+0.8** |
| **SSLB** | **Suanglung** | **72.02** | **303** | P | **P** | **21 57 16.1** | **-1.0** |
| **QSPA** | **South Pole Qui** | **72.45** | **180** | P | **P** | **21 57 20.0** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 21 57 21.0 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **72.59** | **277** | P | **P** | **21 57 20.8** | **+0.2** |
| KSM | | | | IAmb | IAmb | 21 57 21.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **LEM** | **Lembang** | **72.67** | **268** | P | **P** | **21 57 21.4** | **+0.2** |
| | comp=Z,37nm,0.6s,baz=154,slow=18,SNR=8.0 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.37** | **345** | P | **P** | **21 57 24.2** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **73.37** | **345** | P | **P** | **21 57 24.2** | **0.0** |
| | comp=Z,5.3nm,0.8s,baz=132,slow=7.4,SNR=6.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.37** | **345** | P | **P** | **21 57 24.8** | **+0.7** |
| **KSRS** | **Korea Array** | **74.44** | **318** | P | **P** | **21 57 29.9** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=124,slow=5.3,SNR=2.1 | | | | | | |
| **NJ2** | **Nanjing** | **77.70** | **309** | *e*P | **P** | **21 57 50.9** | **+2.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **77.90** | **325** | P | **P** | **21 57 50.6** | **+1.1** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,140nm,5.1s | | | | | | |
| **BEKR** | **Beckworth** | **78.70** | **42** | P | **P** | **21 57 55.2** | **+1.1** |
| **L04D** | **Klamath Falls** | **78.85** | **39** | P | **P** | **21 57 55.9** | **+1.1** |
| L04D | | | | IAmb | IAmb | 21 58 25.1 | |
| | comp=Z,30nm,1.7s | | | | | | |
| **LCH** | **Last Change Ra** | **79.05** | **45** | P | **P** | **21 57 57.0** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **79.24** | **44** | P | **P** | **21 57 57.0** | **0.0** |
| | comp=Z,1.1nm,0.7s,baz=225,slow=8.7,SNR=12 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.24** | **44** | P | **P** | **21 57 58.4** | **+1.3** |
| **O18K** | **Koktuh Hills** | **79.47** | **12** | P | **P** | **21 57 57.5** | **0.0** |
| **BNX** | **BinXian** | **79.81** | **325** | ⇑P | **P** | **21 58 00.0** | **+0.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,230nm,4.8s | | | | | | |
| **KLR** | **Kul'dur** | **79.82** | **329** | P | **P** | **21 57 59.8** | **+0.2** |
| | comp=Z,1.2nm,0.6s,baz=250,slow=3.4,SNR=4.9 | | | | | | |
| **K05A** | **Summer Lake** | **80.00** | **39** | P | **P** | **21 58 01.8** | **+0.9** |
| **PINE** | **Pine Mountain** | **80.58** | **38** | P | **P** | **21 58 04.6** | **+0.6** |
| **GAMB** | **Gambell** | **81.28** | **3** | P | **P** | **21 58 07.2** | **+0.5** |
| GAMB | | | | IAmb | IAmb | 21 58 07.9 | |
| | comp=Z,16nm,1.6s | | | | | | |
| **TTA** | **Tatalina** | **82.18** | **10** | P | **P** | **21 58 12.2** | **+0.6** |
| **IPM** | **Ipoh** | **82.33** | **277** | P | **P** | **21 58 13.7** | **+0.3** |
| IPM | | | | IAmb | IAmb | 21 58 14.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **U15A** | **North Rim** | **82.36** | **48** | P | **P** | **21 58 15.2** | **+1.9** |
| **BELA** | **Belgrano 2** | **82.47** | **173** | P | **P** | **21 58 12.9** | **0.0** |
| BELA | | | | IAmb | IAmb | 21 58 13.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **G08A** | **Pilot Rock** | **82.60** | **38** | P | **P** | **21 58 15.0** | **+0.9** |
| **BMRM** | **Bremner River** | **82.88** | **16** | P | **P** | **21 58 15.2** | **+0.2** |
| **KULM** | **Kulim** | **82.94** | **278** | P | **P** | **21 58 16.1** | **-0.2** |
| KULM | | | | IAmb | IAmb | 21 58 27.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **TNA** | **Tin City** | **83.29** | **4** | P | **P** | **21 58 17.3** | **+0.4** |
| **CAST** | **Castle Rocks** | **83.34** | **12** | P | **P** | **21 58 16.2** | **-1.1** |
| CAST | | | | IAmb | IAmb | 21 58 16.8 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.46** | **15** | P | **P** | **21 58 18.6** | **+0.7** |
| **PSI** | **Prapat** | **83.80** | **275** | P | **P** | **21 58 20.1** | **-0.7** |
| | comp=Z,8.7nm,0.7s,baz=62,slow=1.7,SNR=9.6 | | | | | | |
| **GSI** | **Gunungsitoli** | **84.63** | **273** | P | **P** | **21 58 25.5** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **84.76** | **16** | P | **P** | **21 58 24.7** | **+0.3** |
| M27K | | | | IAmb | IAmb | 21 58 55.7 | |
| | comp=Z,38nm,1.8s | | | | | | |
| **WRH** | **Wood River Hil** | **85.08** | **13** | P | **P** | **21 58 25.2** | **-0.5** |
| WRH | | | | IAmb | IAmb | 21 58 26.1 | |
| | comp=Z,9.3nm,1.3s | | | | | | |
| **RIDG** | **Independent Ri** | **85.17** | **14** | P | **P** | **21 58 26.4** | **0.0** |
| RIDG | | | | IAmb | IAmb | 21 58 37.2 | |
| | comp=Z,38nm,1.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **85.25** | **10** | P | **P** | **21 58 26.4** | **-0.2** |
| **BCAR** | **Beaver Creek A** | **85.37** | **16** | P | **P** | **21 58 27.6** | **+0.4** |
| **IMAR** | **Indian Mountai** | **85.39** | **10** | P | **P** | **21 58 26.8** | **-0.4** |
| **XLT** | **XiLinHaoTe** | **85.48** | **319** | *e*P | **P** | **21 58 29.1** | **+0.8** |
| XLT | | | | pP | pP | 22 00 24.9 | -1.8 |
| XLT | | | | sP | sP | 22 01 23.0 | +1.3 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,190nm,6.2s | | | | | | |
| **IL31** | | **85.60** | **13** | P | **P** | **21 58 27.6** | **-0.6** |
| IL31 | | | | IAmb | IAmb | 21 58 41.0 | |
| | comp=Z,18nm,1.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.60** | **13** | P | **P** | **21 58 27.6** | **-0.7** |
| | comp=Z,1.3nm,0.4s,baz=224,slow=5.3,SNR=33 | | | | | | |
| **ILAR** | **Eielson Array** | **85.60** | **13** | P | **P** | **21 58 27.8** | **-0.5** |
| **TX31** | **Lajitas Ar. Si** | **85.88** | **58** | P | **P** | **21 58 31.3** | **+0.8** |
| TX31 | | | | IAmb | IAmb | 21 58 41.9 | |
| | comp=Z,38nm,1.8s | | | | | | |
| **TX32** | **Lajitas Array** | **85.88** | **58** | P | **P** | **21 58 31.2** | **+0.7** |
| **TXAR** | **Lajitas Array** | **85.88** | **58** | P | **P** | **21 58 31.0** | **+0.5** |
| | comp=Z,0.8nm,0.7s,baz=193,slow=5.1,SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.88** | **58** | P | **P** | **21 58 31.3** | **+0.7** |
| **M30M** | **Minto, Yukon** | **86.36** | **18** | P | **P** | **21 58 32.0** | **+0.1** |
| **EGAK** | **Eagle** | **86.93** | **15** | P | **P** | **21 58 34.5** | **0.0** |
| EGAK | | | | IAmb | IAmb | 21 58 54.5 | |
| | comp=Z,26nm,1.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.02** | **314** | *e*P | **P** | **21 58 38.9** | **+3.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,330nm,7.2s | | | | | | |
| **BW06** | **Boulder Array** | **87.17** | **43** | P | **P** | **21 58 36.9** | **+0.4** |
| **PDAR** | **Pinedale Array** | **87.17** | **43** | P | **P** | **21 58 37.4** | **+0.8** |
| | comp=Z,0.9nm,0.5s,baz=210,slow=3.3,SNR=15 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.17** | **43** | P | **P** | **21 58 37.2** | **+0.7** |
| **BMAR** | **Burnt Mountain** | **88.37** | **12** | P | **P** | **21 58 41.9** | **+0.6** |
| **CM31** | **Chiang Mai Arr** | **88.73** | **290** | P | **P** | **21 58 44.6** | **+0.6** |
| CM31 | | | | IAmb | IAmb | 21 58 49.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.73** | **290** | P | **P** | **21 58 44.7** | **+0.6** |
| | comp=Z,1.6nm,0.3s,baz=107,slow=2.6,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.73** | **290** | P | **P** | **21 58 45.0** | **+0.9** |
| **CHTO** | **Chiang Mai** | **88.84** | **290** | P | **P** | **21 58 45.3** | **+0.8** |
| CHTO | | | | IAmb | IAmb | 21 58 45.8 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **88.96** | **298** | P | **P** | **21 58 46.3** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,8.0s | | | | | | |
| **LZH** | **Lanzhou** | **90.66** | **308** | ⇑P | **P** | **21 58 54.3** | **+1.5** |
| LZH | | | | pP | pP | 22 01 05.8 | +13 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **90.90** | **179** | P | **P** | **21 58 51.8** | **-1.4** |
| **VNA3** | **Neumayer Olymp** | **91.05** | **176** | P | **P** | **21 58 53.5** | **-0.3** |
| **VNA2** | **Neumayer--Watz** | **91.49** | **177** | P | **P** | **21 58 55.5** | **-0.3** |
| | baz=191,slow=4.3 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.72** | **177** | P | **P** | **21 58 56.8** | **0.0** |
| **SONM** | **Songino Array** | **93.28** | **319** | P | **P** | **21 59 04.8** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=122,slow=4.6,SNR=6.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.08** | **25** | P | **P** | **21 59 07.5** | **-0.1** |
| | comp=Z,0.8nm,0.7s,baz=244,slow=4.4,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **107.96** | **322** | PKiKP | **PKiKP** | **22 04 12.1** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=108,slow=2.2,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **108.88** | **314** | PKiKP | **PKiKP** | **22 04 14.2** | **-1.2** |
| | comp=Z,0.8nm,0.5s,baz=149,slow=0.5,SNR=22 | | | | | | |
| **KSH** | **Kashi** | **112.85** | **306** | PKP | **PKiKP** | **22 04 24.3** | **+1.0** |
| **ARU** | **Arti** | **122.56** | **326** | | **PKPdf** | **22 04 40.6** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **126.00** | **350** | PKP | **PKiKP** | **22 04 47.3** | **-0.6** |
| | comp=Z,5.0nm,0.8s,baz=48,slow=1.8,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.00** | **350** | | **PKPdf** | **22 04 47.1** | **-0.4** |
| **BOSA** | **Boshof** | **128.65** | **207** | PKP | **PKPdf** | **22 04 53.1** | **-0.9** |
| | comp=Z,2.0nm,1.0s,baz=217,slow=5.1,SNR=1.3 | | | | | | |
| **FINES** | **FINESS Array B** | **132.88** | **344** | PKP | **PKPdf** | **22 05 00.0** | **-0.7** |
| | comp=Z,2.6nm,0.9s,baz=64,slow=4.4,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **132.88** | **344** | | **PKPdf** | **22 04 60.0** | **-0.7** |
| **NOA** | **NORSAR Array B** | **136.06** | **353** | PKP | **PKPdf** | **22 05 06.0** | **-0.8** |
| | comp=Z,0.8nm,0.7s,baz=13,slow=3.6,SNR=1.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.26** | **332** | PKhKP | PKPpre | 22 05 07.1 | |
| AKASG | comp=Z,0.5nm,0.3s,baz=44,slow=4.3,SNR=5.4 | | | PKP | **PKPdf** | **22 05 13.3** | **-1.3** |
| | comp=Z,0.8nm,0.4s,baz=40,slow=2.8,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.26** | **332** | | **PKiKP** | **22 05 16.3** | **-1.1** |
| **SORM** | **Soroca** | **142.50** | **330** | ⇓P | **PKPdf** | **22 05 15.0** | **-3.7** |
| **BNN** | **Bunyan** | **143.41** | **312** | PKPdf | **PKPdf** | **22 05 19.6** | **-1.2** |
| **KWP** | **Kalwaria Pacla** | **143.77** | **337** | *e*PKP | **PKPdf** | **22 05 20.1** | **-0.9** |
| **KWP** | **Kalwaria Pacla** | **143.77** | **337** | | **PKPdf** | **22 05 20.0** | **-0.9** |
| **VASR** | **Vaslui** | **143.82** | **329** | ⇓P | **PKPdf** | **22 05 20.2** | **-0.9** |
| **RUE** | **Ruedersdorf** | **143.88** | **347** | *e*PKPbc | **PKPdf** | **22 05 20.1** | **-0.9** |
| | baz=16,slow=3.0 | | | | | | |
| **TLCR** | | **144.29** | **326** | ⇓P | **PKPab** | **22 05 21.8** | **-0.3** |
| **BUR08** | **Bucovina Ar. S** | **144.30** | **332** | PKPdf | **PKPab** | **22 05 22.2** | **0.0** |
| **OJC** | **Ojcow** | **144.31** | **340** | *e*PKP | **PKPab** | **22 05 21.6** | **-0.4** |
| **OJC** | **Ojcow** | **144.31** | **340** | PKPdf | **PKPdf** | **22 05 21.4** | **-0.5** |
| **BURAR** | **Bucovina Array** | **144.32** | **332** | ⇓P | **PKPab** | **22 05 22.2** | **0.0** |
| **BURAR** | **Bucovina Array** | **144.32** | **332** | PKPdf | **PKPab** | **22 05 21.9** | **-0.3** |
| **RETH** | **Rethem/Aller,** | **144.40** | **352** | *e*PKPbc | **PKPab** | **22 05 21.9** | **-0.3** |
| | baz=16,slow=3.0 | | | | | | |
| **GHRR** | | **144.41** | **329** | ⇓P | **PKPab** | **22 05 22.9** | **+0.3** |
| **TESR** | **Tescani** | **144.47** | **330** | ⇓P | **PKPab** | **22 05 22.2** | **-0.5** |
| **FLTG** | **Flechtingen** | **144.51** | **350** | *e*PKPbc | PKPbc | 22 05 21.8 | -0.4 |
| | baz=16,slow=3.0 | | | | | | |
| **BR131** | **Keskin Array S** | **144.53** | **315** | PKPdf | PKPbc | 22 05 22.4 | -0.5 |
| **BRTR** | **Keskin Array B** | **144.53** | **315** | PKP | PKPbc | 22 05 22.6 | -0.3 |
| | comp=Z,7.6nm,0.9s,baz=125,slow=4.1,SNR=28 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.53** | **315** | PKPdf | PKPbc | 22 05 22.4 | -0.4 |
| **SCHL** | **Schela** | **144.59** | **327** | ⇑P | **PKPab** | **22 05 24.0** | **+0.8** |
| **CFR** | **Carcaliu** | **144.65** | **327** | ⇑P | **PKPab** | **22 05 23.0** | **-0.4** |
| **TPGR** | **Topolog** | **144.72** | **326** | ⇑P | **PKPab** | **22 05 23.4** | **-0.4** |
| **ODBI** | **Odobesti** | **144.80** | **328** | ⇑P | **PKiKP** | **22 05 25.1** | **-1.7** |
| **KSP** | **Ksiaz** | **144.80** | **344** | *e*PKP | **PKPab** | **22 05 23.5** | **-0.3** |
| **NIE** | **Niedzica** | **144.82** | **339** | *e*PKP | **PKPab** | **22 05 24.6** | **+0.6** |
| **CRVS** | **Cervenica-Dubn** | **144.83** | **337** | *e*PKP | **PKPab** | **22 05 23.9** | **-0.2** |
| **VRI** | **Vrincioaia** | **144.89** | **329** | ⇓P | **PKPab** | **22 05 23.6** | **-0.8** |
| **PLOR** | **Plostina** | **144.94** | **329** | ⇑P | **PKPbc** | **22 05 23.7** | **0.0** |
| **TIRR** | **Tirgusor** | **144.98** | **326** | ⇓P | **PKPab** | **22 05 24.8** | **0.0** |
| **BMR** | **Baia Mare** | **145.02** | **334** | ⇓P | **PKPab** | **22 05 24.2** | **-0.6** |
| **TRPA** | **Tarpa** | **145.05** | **335** | ⇑P | **PKPbc** | **22 05 23.8** | **-0.1** |
| **OSTC** | **Ostas** | **145.08** | **344** | *e*PKP | **PKPab** | **22 05 24.6** | **-0.4** |
| **HARR** | **Harsova** | **145.09** | **326** | ⇑P | **PKPab** | **22 05 24.3** | **-0.9** |
| **CHVC** | **Chvalec** | **145.09** | **344** | *e*PKP | **PKPab** | **22 05 24.1** | **-1.0** |
| **ARCR** | **ARCALIA** | **145.10** | **332** | ⇑P | **PKPdf** | **22 05 22.5** | **-0.8** |
| **CLZ** | **Clausthal** | **145.12** | **350** | *e*PKPbc | **PKPab** | **22 05 24.3** | **-0.8** |
| | baz=16,slow=3.0 | | | | | | |
| **CLL** | **Collm** | **145.15** | **347** | ⇓ *i* PKPbc | **PKPbc** | **22 05 24.1** | **0.0** |
| | comp=Z,17nm,0.7s | | | | | | |
| **CLL** | **Collm** | **145.15** | **347** | PKPdf | **PKPbc** | **22 05 23.6** | **-0.6** |
| **CLL** | **Collm** | **145.15** | **347** | *e*PKPbc | **PKPbc** | **22 05 24.1** | **0.0** |
| | baz=16,slow=3.0 | | | | | | |
| **COVR** | **Voineasa-Covas** | **145.16** | **329** | ⇑P | **PKPbc** | **22 05 24.1** | **-0.3** |
| **OZUR** | | **145.18** | **330** | ⇓P | **PKPbc** | **22 05 24.1** | **-0.4** |
| **UPC** | **Upice** | **145.18** | **344** | *e*PKP | **PKPab** | **22 05 24.4** | **-1.0** |
| **DPC** | **Dobruska-Polom** | **145.24** | **343** | *e*PKP | **PKPab** | **22 05 24.7** | **-0.9** |
| **BRG** | **Berggiesshubel** | **145.35** | **346** | Amp | | 22 05 26.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **145.35** | **346** | *e*PKPbc | **PKPbc** | **22 05 24.8** | **0.0** |
| | baz=16,slow=3.0 | | | | | | |
| **BRG** | **Berggiesshubel** | **145.35** | **346** | *i* PKP | **PKPbc** | **22 05 24.8** | **0.0** |
| **KRLC** | **Kralice** | **145.36** | **343** | *e*PKP | **PKPbc** | **22 05 24.9** | **0.0** |
| **MORC** | **Moravsky Berou** | **145.40** | **342** | ⇑P | **PKPbc** | **22 05 24.8** | **-0.2** |
| **MORC** | **Moravsky Berou** | **145.40** | **342** | | **PKPbc** | **22 05 24.5** | **-0.5** |
| **MORC** | **Moravsky Berou** | **145.40** | **342** | *e*PKP | **PKPab** | **22 05 25.3** | **-1.0** |
| **FBE** | **Freiberg** | **145.44** | **347** | *e*PKPbc | **PKPab** | **22 05 25.5** | **-0.8** |
| | baz=16,slow=3.0 | | | | | | |
| **DOPR** | **Dopca** | **145.46** | **330** | ⇑P | **PKPab** | **22 05 25.8** | **-0.9** |
| **PVCC** | **Panska Ves** | **145.53** | **345** | *e*PKP | **PKPab** | **22 05 25.8** | **-0.9** |
| **KECS** | **Kecovo** | **145.54** | **338** | *e*PKP | **PKPab** | **22 05 26.7** | **-0.1** |
| **MLR** | **Muntele Rosu** | **145.54** | **329** | | **PKPbc** | **22 05 24.9** | **-0.8** |
| **CJR** | **Cluj-Napoca** | **145.72** | **333** | ⇑P | **PKPbc** | **22 05 25.9** | **-0.2** |
| **MDUB** | **Mudurnu** | **145.75** | **318** | | **PKPbc** | **22 05 26.3** | **-0.1** |
| **SECR** | | **145.81** | **328** | ⇓P | **PKPbc** | **22 05 26.3** | **0.0** |
| **LTVH** | **Ltavrtes, Hu** | **145.90** | **335** | ⇓P | **PKPbc** | **22 05 25.8** | **+0.4** |
| **PRU** | **Pruhonice** | **146.03** | **345** | *e*PKP | **PKPbc** | **22 05 26.6** | **-0.1** |
| **DRGR** | | **146.04** | **334** | ⇓P | **PKPbc** | **22 05 26.9** | **-0.1** |
| **VRAC** | **Vranov** | **146.10** | **342** | *e*PKP | **PKPbc** | **22 05 27.3** | **+0.3** |
| **TANN** | **Tannenbergstha** | **146.11** | **347** | *e*PKPbc | **PKPbc** | **22 05 27.2** | **+0.2** |
| | baz=16,slow=3.0 | | | | | | |
| **VYHS** | **Vyhne** | **146.11** | **339** | *e*PKP | **PKPbc** | **22 05 27.5** | **+0.5** |
| **JAVC** | **Velka Javorina** | **146.18** | **341** | *e*PKP | **PKPab** | **22 05 28.6** | **-0.8** |
| **PSZ** | **Piszkesteto** | **146.23** | **338** | | **PKPbc** | **22 05 27.4** | **-0.1** |
| **ARR** | **Arges** | **146.26** | **330** | ⇑P | **PKiKP** | **22 05 28.8** | **-1.1** |
| **NKC** | **Novy Kostel** | **146.28** | **347** | *e*PKP | **PKPbc** | **22 05 28.0** | **+0.5** |
| **KRUC** | **Moravsky** | **146.38** | **342** | *e*PKP | **PKPbc** | **22 05 27.7** | **0.0** |
| **BORA** | **Eskisehir** | **146.55** | **318** | | **PKPbc** | **22 05 27.9** | **-0.7** |
| **CSS** | **Mathiatis** | **146.85** | **308** | | **PKPbc** | **22 05 28.7** | **-0.8** |
| **MEM** | **Membach** | **146.88** | **355** | *d*PKP | **PKPbc** | **22 05 29.1** | **+0.1** |
| **BTNL** | **Ternell** | **146.89** | **355** | *d*PKP | **PKPbc** | **22 05 29.2** | **+0.2** |
| **BSTI** | **Sart Tilman** | **146.94** | **355** | *d*PKP | **PKPbc** | **22 05 28.9** | **-0.3** |
| **GRF** | **Grafenberg Arr** | **147.04** | **348** | *e*PKPbc | **PKPbc** | **22 05 29.8** | **+0.3** |
| | baz=16,slow=3.0 | | | | | | |
| **KHC** | **Kasperske Hory** | **147.07** | **345** | *e*PKP | **PKPbc** | **22 05 29.5** | **-0.1** |
| **KHC** | **Kasperske Hory** | **147.07** | **345** | | **PKPbc** | **22 05 29.5** | **-0.1** |
| **GZR** | **Gura Zlata** | **147.10** | **332** | ⇑P | **PKPbc** | **22 05 29.0** | **-0.9** |
| **CKRC** | **Cesky Krumlov** | **147.17** | **344** | *e*PKP | **PKPbc** | **22 05 30.0** | **+0.1** |
| **BMRD** | **Maredsous** | **147.27** | **356** | *d*PKP | **PKPbc** | **22 05 29.9** | **-0.2** |
| **GEC2** | **GERESS Array S** | **147.30** | **345** | | **PKPbc** | **22 05 30.1** | **-0.3** |
| **GEC2** | **GERESS Array S** | **147.30** | **345** | *e*PKPbc | **PKPbc** | **22 05 30.5** | **+0.1** |
| | baz=16,slow=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.30** | **345** | PKPbc | **PKPbc** | **22 05 30.4** | **+0.1** |
| | comp=Z,6.1nm,0.7s,baz=9.5,slow=4.1,SNR=26 | | | | | | |
| **GERES** | **GERESS Array B** | **147.30** | **345** | | **PKPbc** | **22 05 30.0** | **-0.3** |
| **BZS** | **Buzias** | **147.43** | **333** | ⇑P | **PKPbc** | **22 05 29.0** | **-1.6** |
| **DOU** | **Dourbes** | **147.49** | **356** | *d*PKP | **PKPbc** | **22 05 30.4** | **-0.3** |
| **CONA** | **Conrad Observa** | **147.56** | **342** | *e*P | **PKiKP** | **22 05 31.4** | **-1.2** |
| | comp=Z,4.8nm,0.4s,SNR=6.3 | | | | | | |
| **HERR** | **Herculane** | **147.66** | **332** | ⇑P | **PKPbc** | **22 05 31.0** | **-0.2** |
| **WLF** | **Walferdange** | **147.80** | **354** | | **PKPbc** | **22 05 31.0** | **-0.4** |
| **WLF** | **Walferdange** | **147.80** | **354** | *e*PKPbc | **PKiKP** | **22 05 32.3** | **-0.6** |
| | baz=16,slow=3.0 | | | | | | |
| **WLF** | **Walferdange** | **147.80** | **354** | *d*PKP | **PKiKP** | **22 05 31.9** | **-0.9** |
| **FRGS** | **Fruska Gora** | **148.56** | **335** | *e*P | **PKPbc** | **22 05 32.1** | **-1.4** |
| **BFO** | **Black Forest** | **148.85** | **351** | | **PKPbc** | **22 05 33.8** | **-0.3** |
| **SOKA** | **Soboth** | **148.93** | **342** | *i* P | **PKPbc** | **22 05 33.8** | **-0.6** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **PERS** | **Pernice** | **148.94** | **342** | *i* PKPbc | **PKPbc** | **22 05 33.8** | **-0.7** |
| **VTS** | **Vitosha** | **148.97** | **328** | ⇓P | **PKPbc** | **22 05 34.3** | **-0.5** |
| **VTS** | **Vitosha** | **148.97** | **328** | | **PKPbc** | **22 05 34.4** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **149.03** | **344** | *i* P | **PKPbc** | **22 05 34.1** | **-0.8** |
| | comp=Z,5.7nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **149.21** | **347** | *i* P | **PKPbc** | **22 05 34.7** | **-0.5** |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **149.24** | **348** | *e*P | **PKiKP** | **22 05 35.1** | **-0.9** |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **149.27** | **346** | *i* P | **PKiKP** | **22 05 35.3** | **-1.0** |
| | comp=Z,8.8nm,0.4s,SNR=5.2 | | | | | | |
| **MOTA** | **Moosalm** | **149.31** | **347** | *i* P | **PKPbc** | **22 05 35.1** | **-0.4** |
| | comp=Z,1.9nm,0.3s | | | | | | |
| **DIVS** | **Divibare** | **149.34** | **333** | | **PKiKP** | **22 05 35.6** | **-0.8** |
| **DIVS** | **Divibare** | **149.34** | **333** | *e*P | **PKPbc** | **22 05 35.0** | **-0.6** |
| **MYKA** | **Terra Mystica** | **149.37** | **344** | *i* P | **PKPbc** | **22 05 34.6** | **-0.9** |
| | comp=Z,6.2nm,0.4s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **149.55** | **342** | *i* PKPbc | **PKPbc** | **22 05 35.5** | **-0.4** |
| **ABTA** | **Abfaltersbach** | **149.55** | **345** | *e*P | **PKPbc** | **22 05 35.1** | **-0.8** |
| | comp=Z,7.3nm,0.5s,SNR=5.6 | | | | | | |
| **CRES** | **Cresnjev** | **149.56** | **341** | *e*P | **PKiKP** | **22 05 35.9** | **-0.8** |
| **LJU** | **Ljubljana** | **149.65** | **342** | *e*P | **PKiKP** | **22 05 36.0** | **-0.8** |
| **CRNS** | **Crni Vrh** | **149.69** | **342** | *i* PKPbc | **PKPbc** | **22 05 35.6** | **-0.7** |
| **FETA** | **Feichten** | **149.69** | **347** | *i* P | **PKiKP** | **22 05 36.4** | **-0.7** |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **BBLS** | **Lazići** | **149.78** | **334** | *e*P | **PKPbc** | **22 05 36.0** | **-0.6** |
| **MRAK** | **Mrakovica** | **149.79** | **338** | *e*P | **PKPbc** | **22 05 36.0** | **-0.6** |
| **A251A** | **Rujevac** | **149.91** | **339** | P | **PKiKP** | **22 05 36.7** | **-0.7** |
| **BLY** | **Banja Luka** | **149.91** | **337** | *e*P | **PKiKP** | **22 05 36.9** | **-0.5** |
| **STAL** | **STALIGIAL** | **149.95** | **344** | | **PKPbc** | **22 05 36.0** | **-0.9** |
| **CEY** | **Cerknica** | **149.96** | **342** | *e*P | **PKiKP** | **22 05 36.8** | **-0.7** |
| **RUDO** | **Rudo** | **150.00** | **334** | *e*P | **PKPbc** | **22 05 36.1** | **-0.9** |
| **MGRS** | **Mrkonjic Grad** | **150.24** | **337** | *e*P | **PKPdf** | **22 05 32.5** | **+0.7** |
| **SKDS** | **Skadanscina** | **150.25** | **342** | *e*P | **PKPbc** | **22 05 34.5** | **-3.1** |
| **CTI** | **Castel Tesino** | **150.41** | **346** | | **PKPbc** | **22 05 37.1** | **-0.9** |
| **TUE** | **Stuetta** | **150.49** | **349** | | **PKPbc** | **22 05 37.9** | **-0.4** |
| **UDBI** | **Udbina** | **150.61** | **339** | P | **PKPbc** | **22 05 37.8** | **-0.7** |
| **SMRN** | **Sveta Marina** | **150.67** | **342** | P | **PKPbc** | **22 05 37.9** | **-0.6** |
| **NVLJ** | **Novalja** | **150.87** | **340** | P | **PKPbc** | **22 05 38.2** | **-0.7** |
| **BRY** | **Bratogost** | **150.93** | **334** | *e*P | **PKPbc** | **22 05 37.7** | **-1.7** |
| **PDG** | **Podgorica** | **151.00** | **332** | *e*P | **PKPbc** | **22 05 38.4** | **-0.9** |
| **RICI** | **Ricice** | **151.00** | **336** | P | **PKPbc** | **22 05 38.3** | **-1.1** |
| **TREB** | **Trebinje** | **151.16** | **334** | *e*P | **PKPbc** | **22 05 38.6** | **-1.1** |
| **LIT** | **Litokhoron** | **151.16** | **325** | | **PKPbc** | **22 05 38.7** | **-1.1** |
| **MORI** | **Morici** | **151.21** | **338** | P | **PKPbc** | **22 05 39.0** | **-0.8** |
| **MAKA** | **Makarska** | **151.22** | **336** | P | **PKPbc** | **22 05 38.8** | **-1.0** |
| **DRME** | **Dracevica, Mon** | **151.23** | **332** | *e*P | **PKPbc** | **22 05 37.5** | **-2.4** |
| **FNA** | **Florina** | **151.26** | **328** | | **PKPbc** | **22 05 39.1** | **-1.0** |
| **ZIRJ** | **Zirje** | **151.42** | **338** | P | **PKPbc** | **22 05 38.8** | **-1.4** |
| **LSTV** | **Lastovo** | **151.71** | **336** | P | **PKPbc** | **22 05 39.8** | **-1.1** |
| **ESDC** | **Sonseca Array** | **157.49** | **11** | PKPab | **PKPab** | **22 06 16.6** | **-0.7** |
| | comp=Z,0.4nm,0.8s,baz=344,slow=4.1,SNR=1.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.57** | **182** | PKP | **PKPdf** | **22 05 55.1** | **-1.1** |
| | comp=Z,2.0nm,0.8s,baz=325,slow=1.5,SNR=11 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **22 07 37.6** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=178,slow=3.7,SNR=5.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.57** | **182** | | **PKPdf** | **22 05 54.6** | **-1.7** |

*TUL* ***23*** *21:51:28.1±1.4, 35°.664N±0°.010×97°.39W±0°.01, h7*km*±4*km*, ML2.8, mb_Lg2.3/14(NEIC), Error ellipse: s-maj=1.7km s-min=1.3km az=113.0*

**NEIC 23 21:51:28.2**±0.9, **35°.677N**±0°.009×**97°.396W**±0°.009, **h9**km±3km, **Error ellipse: s-maj=1.4km s-min=1.0km az=211.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **193** | Pg | Pg | 21 51 30.4 | -0.4 |
| OK009 | | | | Sg | Sg | 21 51 32.2 | -0.3 |
| **OK005** | **Luther M Schoo** | **0.17** | **98** | Pg | Pg | 21 51 31.9 | 0.0 |
| OK005 | | | | Sg | Sg | 21 51 34.8 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.27** | **190** | Pg | Pg | 21 

FITZ Sn **Sn** **22 15 06.9 -5.7**
0.2nm,0.3s,baz=181,slow=22,SNR=6.4
**WRA Warramunga Arr 17.48 127** P **Pn** **22 14 57.2 0.0**
0.1nm,0.3s,baz=302,slow=13,SNR=2.1
WRA S Sn 22 17 59.5 -12
0.1nm,0.3s,baz=301,slow=22,SNR=1.6
**ASAR Alice Springs 19.45 137** P **Pn** **22 15 21.3 +0.3**
0.1nm,0.3s,baz=322,slow=12,SNR=13
**SONM Songino Array 58.54 350** P **P** **22 20 48.6 +0.3**
0.2nm,0.7s,baz=158,slow=8.5,SNR=1.7
**MKAR Makanchi Array 65.40 333** P **P** **22 21 35.9 +1.6**
0.2nm,0.6s,baz=147,slow=7.9,SNR=2.2

*IDC **23** 22:28:23.5±1.2,28°.22N×51°.71E,h0km,mb3.8/12, mb1 3.9/14,mb1mx3.6/59,mbtmp3.8/14,ML3.9/1,Error ellipse: s-maj=28.8km s-min=19.4km az=166.0*
*TEH **23** 22:28:25.0,28°.14N×51°.75E,h18km,ML3.7*
*DSN **23** 22:28:27.5±2.2,28°.06N×51°.87E,h10km,ML3.3/11,Error ellipse: s-maj=33.2km s-min=8.7km az=1.0*
*OMAN **23** 22:28:29.4±0.1,28°.08N×51°.99E,h18km,mb5.2/10, ml3.5/12,ms2.5/1,Error ellipse: s-maj=1.6km s-min=0.7km az=1.0*

**ISC 23 22:28:27.0±0.5,28°.16N±0°.03×51°.76E±0°.04,h26km,n105, σ1♀43/131,mb3.8/12,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AHBU** | **AHRAM** | **0.81** | **330** | *e*Pg | **Pb** | **22 28 40.1** | **-2.4** |
| **GHIR** | **Ghir-Karzin** | **1.09** | **83** | *e*Pn | **Pb** | **22 28 47.2** | **-0.1** |
| **QIR1** | **Qir** | **1.18** | **74** | *e*Pg | **Pn** | **22 28 47.4** | **-0.5** |
| QIR1 | | | | *e*Sg | **Sb** | **22 29 04.9** | **+1.3** |
| QIR1 | | | | *e* | | 22 29 13.3 | |
| | comp=Z,39μm,0.5s | | | | | | |
| **KAZ1** | **Kazerun** | **1.46** | **356** | *e*Pg | **Pn** | **22 28 52.5** | **+0.7** |
| KAZ1 | | | | *e*Sg | **Sb** | **22 29 14.5** | **+2.7** |
| KAZ1 | | | | *e* | | 22 29 29.7 | |
| | comp=Z,12μm,0.8s | | | | | | |
| **LMD1** | **Lamerd** | **1.49** | **123** | *e*Pg | **Pb** | **22 28 53.3** | **-0.8** |
| LMD1 | | | | *e* | | 22 29 20.8 | |
| | comp=Z,11μm,0.6s | | | | | | |
| **SHI** | **Shiraz** | **1.61** | **24** | *e*Pg | **Pb** | **22 28 55.4** | **-0.9** |
| SHI | | | | *e* | | 22 29 20.0 | |
| | comp=Z,7μm,0.6s | | | | | | |
| **JHRM** | **Jahrom** | **1.64** | **78** | *e*Pn | **Pn** | **22 28 54.9** | **+0.6** |
| JHRM | | | | *e* | | 22 29 31.1 | |
| | comp=Z,21μm,0.5s | | | | | | |
| **LAR1** | **LAR** | **2.37** | **101** | *e*Pn | **Pn** | **22 29 05.2** | **+0.9** |
| LAR1 | | | | *e* | | 22 29 59.1 | |
| | comp=Z,9μm,0.6s | | | | | | |
| **SHMA** | **Al-Shehemyia** | **2.40** | **197** | P | **Pb** | **22 29 08.7** | **-0.9** |
| **SAKB** | **Bahrain** | **2.43** | **207** | P | **Pb** | **22 29 07.9** | **-2.2** |
| SAKB | | | | S | **Sb** | **22 29 45.6** | **+5.9** |
| **KHOR** | **Al-Khor Airpor** | **2.54** | **185** | P | **Pb** | **22 29 11.1** | **-0.8** |
| KHOR | | | | S | **Sb** | **22 29 46.6** | **+3.9** |
| **KLNJ** | **Kolanjah** | **2.84** | **357** | *e*Pn | **Pn** | **22 29 11.6** | **+0.6** |
| **TRNA** | **Turayna** | **3.45** | **188** | P | **Pn** | **22 29 22.0** | **+3.0** |
| TRNA | | | | S | **Sb** | **22 30 03.3** | **-5.6** |
| **IRAM** | **Ramesheh** | **3.67** | **8** | *e*Pn | **Pn** | **22 29 23.0** | **+0.6** |
| **GENO** | **Geno** | **3.98** | **100** | *e*Pn | **Pn** | **22 29 26.2** | **-0.4** |
| GENO | | | | *e* | | 22 30 48.5 | |
| | comp=Z,365nm,0.6s | | | | | | |
| **IMEH** | **Mehriz** | **4.06** | **37** | *e*Pn | **Pn** | **22 29 29.6** | **+1.9** |
| IMEH | | | | *e* | | 22 29 32.4 | |
| | comp=Z,894nm,0.4s | | | | | | |
| **AMIS** | **Naft Sefid** | **4.10** | **329** | *e*Pn | **Pn** | **22 29 28.8** | **+0.8** |
| **IGAR** | **Gharneh** | **4.23** | **3** | *e*Pn | **Pn** | **22 29 31.5** | **+1.4** |
| **GHWR** | **Ruwais** | **4.30** | **166** | P | **Pn** | **22 29 32.0** | **+1.2** |
| GHWR | | | | S | **Sn** | **22 30 21.1** | **+1.0** |
| **SHME** | **Shamm** | **4.44** | **117** | *e*Pn | **Pn** | **22 29 32.7** | **0.0** |
| **SHME** | **Shamm** | **4.44** | **117** | P | **Pn** | **22 29 33.5** | **+0.8** |
| | SNR=6.9 | | | | | | |
| SHME | | | | S | **Sn** | **22 30 23.5** | **0.0** |
| **SHME** | **Shamm** | **4.44** | **117** | *i* P | **Pn** | **22 29 32.9** | **+0.2** |
| | SNR=7.0 | | | | | | |
| **IPIR** | **Pirpir** | **4.57** | **351** | *e*Pn | **Pn** | **22 29 34.8** | **0.0** |
| **BANOM** | **Banah** | **4.62** | **118** | *e*Pn | **Pn** | **22 29 35.7** | **+0.4** |
| **BANOM** | **Banah** | **4.62** | **118** | P | **Pn** | **22 29 35.6** | **+0.3** |
| | SNR=10 | | | | | | |
| BANOM | | | | S | **Sn** | **22 30 27.3** | **-0.8** |
| **BANOM** | **Banah** | **4.62** | **118** | *i* P | **Pn** | **22 29 35.5** | **+0.3** |
| | SNR=40 | | | | | | |
| BANOM | | | | S | **Sn** | **22 30 27.1** | **-1.1** |
| **ICHK** | **Chekchek** | **4.67** | **29** | *e*Pn | **Pn** | **22 29 37.4** | **+1.3** |
| **KHGB** | **Koh Gabri** | **4.67** | **61** | *e*Pn | **Pn** | **22 29 36.9** | **+0.7** |
| KHGB | | | | *e* | | 22 30 38.9 | |
| | comp=Z,249nm,0.3s | | | | | | |
| **NASN** | **Na'in** | **4.71** | **11** | *e*Pn | **Pn** | **22 29 37.9** | **+1.2** |
| **NAZ** | **Nazwa, Dubai** | **4.71** | **131** | *e*Pn | **Pn** | **22 29 37.9** | **+1.4** |
| **NAZ** | **Nazwa, Dubai** | **4.71** | **131** | P | **Pn** | **22 29 38.1** | **+1.6** |
| | SNR=14 | | | | | | |
| NAZ | | | | S | **Sn** | **22 30 30.1** | **-0.2** |
| **NAZ** | **Nazwa, Dubai** | **4.71** | **131** | *i* P | **Pn** | **22 29 37.9** | **+1.4** |
| | SNR=14 | | | | | | |
| **KRBR** | **Kerman** | **4.74** | **66** | *e*Pn | **Pn** | **22 29 38.8** | **+1.7** |
| **IZEF** | **Zefreh** | **4.74** | **6** | *e*Pn | **Pn** | **22 29 38.0** | **+0.9** |
| **IBAF** | **Bafgh** | **4.75** | **43** | *e*Pn | **Pn** | **22 29 38.9** | **+1.7** |
| **ASUD** | **Al Ashush, Dub** | **4.76** | **137** | *e*Pn | **Pn** | **22 29 38.6** | **+1.5** |
| **ASUD** | **Al Ashush, Dub** | **4.76** | **137** | P | **Pn** | **22 29 38.7** | **+1.6** |
| | SNR=29 | | | | | | |
| ASUD | | | | S | **Sn** | **22 30 32.7** | **+1.2** |
| **ASUD** | **Al Ashush, Dub** | **4.76** | **137** | *i* P | **Pn** | **22 29 38.5** | **+1.3** |
| | SNR=29 | | | | | | |
| **MZWR** | **Madinat Zayed** | **4.78** | **156** | P | **Pn** | **22 29 39.2** | **+1.8** |
| **MASF** | **Masafi** | **4.82** | **124** | P | **Pn** | **22 29 38.8** | **+0.8** |
| | SNR=19 | | | | | | |
| MASF | | | | S | **Sn** | **22 30 33.0** | **0.0** |
| **MSFE** | **Esma-Masafi** | **4.82** | **124** | *e*Pn | **Pn** | **22 29 38.4** | **+0.3** |
| **MSFE** | **Esma-Masafi** | **4.82** | **124** | *i* P | **Pn** | **22 29 38.6** | **+0.5** |
| | SNR=19 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **4.84** | **134** | *e*Pn | **Pn** | **22 29 39.2** | **+1.0** |
| **FAQ** | **Al Faqa, Dubai** | **4.84** | **134** | P | **Pn** | **22 29 39.2** | **+1.0** |
| FAQ | | | | S | **Sn** | **22 30 33.5** | **+0.1** |
| **FAQ** | **Al Faqa, Dubai** | **4.84** | **134** | P | **Pn** | **22 29 39.2** | **+1.0** |
| **YZKH** | **Yazd** | **4.87** | **29** | *e*Pn | **Pn** | **22 29 40.1** | **+1.3** |
| **UOSS** | **Minazif** | **5.11** | **128** | *e*Pn | **Pn** | **22 29 42.2** | **+0.2** |
| **UOSS** | **Minazif** | **5.11** | **128** | P | **Pn** | **22 29 42.2** | **+0.2** |
| UOSS | | | | S | **Sn** | **22 30 40.1** | **0.0** |
| **UOSS** | **Minazif** | **5.11** | **128** | *i* P | **Pn** | **22 29 42.2** | **+0.2** |
| | SNR=15 | | | | | | |
| **HATD** | **Hatta, Dubai** | **5.14** | **129** | *e*Pn | **Pn** | **22 29 43.1** | **+0.7** |
| **HATD** | **Hatta, Dubai** | **5.14** | **129** | P | **Pn** | **22 29 43.4** | **+1.0** |
| | SNR=8.1 | | | | | | |
| HATD | | | | S | **Sn** | **22 30 41.4** | **+0.6** |
| **HATD** | **Hatta, Dubai** | **5.14** | **129** | *i* P | **Pn** | **22 29 43.1** | **+0.7** |
| | SNR=8.2 | | | | | | |
| **ASHO** | **Ashiyiah** | **5.18** | **131** | *e*Pn | **Pn** | **22 29 43.7** | **+0.7** |
| **ASHO** | **Ashiyiah** | **5.18** | **131** | P | **Pn** | **22 29 43.7** | **+0.7** |
| | SNR=30 | | | | | | |
| ASHO | | | | S | **Sn** | **22 30 42.3** | **+0.3** |
| **ASHO** | **Ashiyiah** | **5.18** | **131** | *i* P | **Pn** | **22 29 43.7** | **+0.7** |
| | SNR=30 | | | | | | |
| **ANAR** | **Anarak** | **5.29** | **18** | *e*Pn | **Pn** | **22 29 44.9** | **+0.4** |
| **CHMN** | **Cheshme madani** | **5.34** | **70** | *e*Pn | **Pn** | **22 29 46.6** | **+1.2** |
| **MZR** | **Muzera** | **5.37** | **163** | P | **Pn** | **22 29 48.2** | **+2.7** |
| | SNR=10 | | | | | | |
| MZR | | | | S | **Sn** | **22 30 47.4** | **+0.8** |
| **MZR** | **Muzera** | **5.37** | **163** | *i* P | **Pn** | **22 29 46.9** | **+1.4** |
| | SNR=10 | | | | | | |
| **ALNE** | **Al Ain** | **5.44** | **138** | *e*Pn | **Pn** | **22 29 47.4** | **+0.9** |
| **ALNE** | **Al Ain** | **5.44** | **138** | P | **Pn** | **22 29 48.8** | **+2.3** |
| | SNR=9.1 | | | | | | |
| ALNE | | | | S | **Sn** | **22 30 48.7** | **+0.4** |
| **ALNE** | **Al Ain** | **5.44** | **138** | *i* P | **Pn** | **22 29 47.4** | **+0.9** |
| | SNR=9.1 | | | | | | |
| **KHMZ** | **Khomeyn** | **5.77** | **345** | *e*Pn | **Pn** | **22 29 51.8** | **+0.6** |
| **KRSH** | **Karshahi** | **5.80** | **3** | *e*Pn | **Pn** | **22 29 51.7** | **+0.2** |
| **KBAM** | **BAM** | **5.96** | **79** | *e*Pn | **Pn** | **22 29 53.7** | **0.0** |
| KBAM | | | | *e* | | 22 29 59.1 | |
| | comp=Z,311nm,0.2s | | | | | | |
| **UMZA** | **Um Al Zommool** | **6.24** | **150** | S | **Sn** | **22 31 06.5** | **-1.4** |
| **IKFM** | **Kafar-mosalman** | **6.31** | **329** | *e*Pn | **Pn** | **22 30 00.2** | **+1.8** |
| **ARQ** | **Araqi** | **6.44** | **137** | P | **Pn** | **22 30 00.5** | **+0.2** |
| | SNR=20 | | | | | | |
| ARQ | | | | S | **Sn** | **22 31 10.4** | **-2.7** |
| **ASAO** | **Ashtian** | **6.54** | **347** | *e*Pn | **Pn** | **22 30 02.5** | **+0.8** |
| **IQOM** | **Qom** | **6.69** | **355** | *e*Pn | **Pn** | **22 30 04.4** | **+0.6** |
| **HOQ** | **Hoqain** | **6.77** | **131** | P | **Pn** | **22 30 05.2** | **+0.4** |
| | SNR=8.6 | | | | | | |
| HOQ | | | | S | **Sn** | **22 31 19.2** | **-1.8** |
| **HAGD** | **Aghdareh** | **7.00** | **342** | *e*Pn | **Pn** | **22 30 08.6** | **+0.4** |
| **TNSJ** | **Nastanj** | **7.12** | **35** | *e*Pn | **Pn** | **22 30 09.7** | **0.0** |
| **TABS** | **Tabas** | **7.15** | **39** | *e*Pn | **Pn** | **22 30 11.0** | **+1.0** |
| **RAYN** | **Ar Rayn** | **7.29** | **232** | P | **Pn** | **22 30 12.2** | **+0.3** |
| **RAYN** | **Ar Rayn** | **7.29** | **232** | *i* P | **Pn** | **22 30 12.0** | **+0.1** |
| | SNR=17 | | | | | | |
| **BSY** | **Bisya** | **7.30** | **136** | P | **Pn** | **22 30 12.2** | **+0.2** |
| | SNR=15 | | | | | | |
| BSY | | | | S | **Sn** | **22 31 31.1** | **-3.0** |
| **BIDO** | **Bidbid** | **7.37** | **127** | P | **Pn** | **22 30 13.0** | **0.0** |
| **BSRN** | **Basiran** | **7.42** | **58** | *e*Pn | **Pn** | **22 30 15.7** | **+1.9** |
| **IGHG** | **Ghaleghazi** | **7.58** | **325** | *e*Pn | **Pn** | **22 30 16.9** | **+0.8** |
| **SMDO** | **Samad** | **7.62** | **130** | P | **Pn** | **22 30 17.2** | **+0.6** |
| SMDO | | | | S | **Sn** | **22 31 41.4** | **-0.7** |
| **WSAR** | **Wadi Sarin** | **7.90** | **127** | Pn | **Pn** | **22 30 20.0** | **-0.3** |
| | comp=Z,1.7nm,0.3s,baz=306,slow=13,SNR=24 | | | | | | |
| WSAR | | | | S | **Sn** | **22 31 45.8** | **-3.1** |
| | comp=Z,0.6nm,0.3s,baz=18,slow=21,SNR=2.4 | | | | | | |
| **WSAR** | **Wadi Sarin** | **7.90** | **127** | P | **Pn** | **22 30 20.1** | **-0.2** |
| | SNR=6.5 | | | | | | |
| WSAR | | | | S | **Sn** | **22 31 45.9** | **-3.0** |
| **IDHR** | **Dehrash** | **7.97** | **326** | *e*Pn | **Pn** | **22 30 21.1** | **-0.3** |
| **JMDO** | **Jabal Madar** | **8.14** | **134** | P | **Pn** | **22 30 23.0** | **-0.6** |
| | SNR=6.3 | | | | | | |
| JMDO | | | | S | **Sn** | **22 31 50.9** | **-3.8** |
| **WBK** | **Wadi Bani Khal** | **8.55** | **129** | P | **Pn** | **22 30 28.8** | **-0.4** |
| | SNR=5.5 | | | | | | |
| WBK | | | | S | **Sn** | **22 32 03.7** | **-1.2** |
| **MHTO** | **MHTO** | **9.11** | **140** | P | **Pn** | **22 30 37.0** | **+0.2** |
| | SNR=34 | | | | | | |
| **JLN** | **Jalan Bani Buh** | **9.16** | **129** | P | **Pn** | **22 30 36.7** | **-0.8** |
| **DOK** | **Doka** | **9.75** | **167** | P | **Pn** | **22 30 46.0** | **+0.4** |
| **WHFO** | **Wadi Hawf** | **10.36** | **169** | P | **Pn** | **22 30 52.8** | **-1.3** |
| | SNR=20 | | | | | | |
| **DMTO** | **DMTO** | **10.80** | **164** | P | **Pn** | **22 30 59.1** | **-1.0** |
| | SNR=14 | | | | | | |
| **ABTO** | **Aybut** | **10.85** | **172** | P | **Pn** | **22 30 59.1** | **-1.7** |
| **BRTR** | **Keskin Array B** | **18.91** | **312** | P | **P** | **22 32 46.3** | **+0.4** |
| | baz=138,slow=14,SNR=1.3 | | | | | | |
| **AAK** | **Ala-Archa** | **23.40** | **46** | P | **P** | **22 33 34.9** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=107,slow=1.9,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **30.27** | **44** | P | **P** | **22 34 36.4** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=228,slow=7.5,SNR=7.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.30** | **34** | P | **P** | **22 35 19.5** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=251,slow=9.0,SNR=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **37.43** | **340** | P | **P** | **22 35 37.4** | **-0.4** |
| | comp=Z,0.5nm,0.4s,baz=132,slow=9.5,SNR=1.5 | | | | | | |
| **HFS** | **Hagfors** | **41.03** | **332** | P | **P** | **22 36 07.4** | **-0.4** |
| | comp=Z,1.0nm,0.4s,baz=133,slow=10,SNR=1.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **42.55** | **332** | P | **P** | **22 36 19.5** | **-0.8** |
| | comp=Z,0.4nm,0.5s,baz=121,slow=8.3,SNR=1.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **44.11** | **347** | P | **P** | **22 36 32.2** | **-0.5** |
| | comp=Z,11nm,1.2s,baz=153,slow=11,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **46.27** | **49** | P | **P** | **22 36 50.8** | **+0.3** |
| | comp=Z,0.3nm,0.8s,baz=278,slow=10.0,SNR=1.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.84** | **263** | P | **P** | **22 37 10.8** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=62,slow=8.3,SNR=6.1 | | | | | | |
| **DBIC** | **Dimbokro** | **57.54** | **259** | P | **P** | **22 38 15.2** | **+0.5** |
| | comp=Z,2.6nm,0.6s,baz=75,slow=7.1,SNR=5.0 | | | | | | |
| **SCHQ** | **Schefferville** | **82.04** | **329** | P | **P** | **22 40 44.7** | **-0.2** |
| | comp=Z,1.9nm,0.8s,baz=68,slow=5.4,SNR=2.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.00** | **354** | P | **P** | **22 41 19.6** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=1.4,slow=5.3,SNR=4.1 | | | | | | |

**IDC 23 22:34:27.5±2.3,7°.62S×130°.04E,h0km,mb3.1/1, mb1 3.5/4,mb1mx3.3/48,mbtmp3.3/4,ML3.2/3,MS2.9/1, Ms1 2.9/1,ms1mx2.3/18,Error ellipse: s-maj=68.2km s-min=26.6km az=80.0,Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **11.26** | **202** | Pn | **Pn** | 22 37 10.0 | +0.1 |
| | 0.2nm,0.3s,baz=22,slow=10,SNR=2.3 | | | | | | |
| FITZ | | | | Sn | **Sn** | 22 39 17.9 | +1.3 |
| | 0.2nm,0.3s,baz=219,slow=8.1,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.94** | **162** | Pn | **Pn** | 22 37 32.2 | -0.6 |
| | 0.1nm,0.3s,baz=343,slow=10,SNR=2.0 | | | | | | |
| WRA | | | | Sn | **Sn** | 22 40 00.5 | +2.8 |
| | 0.1nm,0.3s,baz=339,slow=22,SNR=1.7 | | | | | | |
| WRA | | | | LR | LR | 22 43 29.3 | |
| | comp=Z,53nm,19.9s,baz=76,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **16.38** | **167** | Pn | **Pn** | 22 38 18.9 | -0.2 |
| | 0.2nm,0.3s,baz=344,slow=9.3,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.77** | **327** | P | **P** | 22 45 33.5 | +0.1 |
| | 0.1nm,0.4s,baz=128,slow=5.9,SNR=1.8 | | | | | | |

*IDC **23** 22:39:59.7±3.1,15°.85S×173°.00W,h0km,mb3.7/4, mb1 4.1/5,mb1mx3.6/42,mbtmp3.8/5,ML4.4/1,MS3.7/14, Ms1 3.7/14,ms1mx3.2/68,Error ellipse: s-maj=145.7km s-min=23.3km az=141.0*
*NEIC **23** 22:40:07.2±1.7,14°.98S±0°.09×173°.4W±0°.1,h35km±2km, mb4.3/5,Error ellipse: s-maj=22.1km s-min=11.7km az=301.0*

**ISC 23 22:40:05.4±0.9,14°.9S±0°.1×173°.4W±0°.1,h30km,n26, σ1♀15/14,mb3.9/7,MS3.8/14,Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.84** | **58** | Pn | **Pb** | **22 40 38.1** | **-0.5** |
| | 108nm,0.3s,baz=134,slow=0.5,SNR=57 | | | | | | |
| AFI | | | | Sn | **Sn** | **22 40 57.3** | **-0.2** |
| | 156nm,0.3s,baz=15,slow=23,SNR=7.2 | | | | | | |
| **AFI** | **Afiamalu** | **1.84** | **58** | | **Pb** | **22 40 37.5** | **-1.1** |
| AFI | | | | Sn | **Sn** | **22 40 58.3** | **+0.8** |
| **NIUE** | **Niue** | **5.32** | **142** | Pn | **Pn** | **22 41 22.4** | **-0.5** |
| **DZM** | **Mont Dzumac** | **20.40** | **247** | LR | LR | 22 52 01.4 | |
| | comp=Z,53nm,18.9s,baz=221,slow=35 | | | | | | |
| **URZ** | **Urewera** | **24.75** | **198** | LR | LR | 22 53 33.6 | |
| | comp=Z,163nm,20.0s,baz=26,slow=34 | | | | | | |
| **RPZ** | **Rata Peaks** | **31.65** | **202** | LR | LR | 22 57 40.8 | |
| | comp=Z,162nm,18.5s,baz=34,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **44.30** | **239** | LR | LR | 23 04 42.0 | |
| | comp=Z,36nm,18.2s,baz=194,slow=34 | | | | | | |
| **BBOO** | **Buckleboo** | **49.08** | **239** | P | **P** | **22 48 50.4** | **+0.2** |
| **WB0** | **Warramunga Arr** | **49.93** | **257** | P | **P** | **22 48 57.0** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 22 49 13.0 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.97** | **256** | P | **P** | **22 48 55.6** | **-1.7** |
| | comp=Z,0.4nm,0.3s,baz=95,slow=6.1,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.97** | **256** | P | **P** | **22 48 54.7** | **-2.5** |
| **AS31** | **Alice Springs** | **50.28** | **252** | P | **P** | **22 48 58.9** | **-0.7** |
| AS31 | | | | IAmb | IAmb | 22 49 17.7 | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **50.28** | **252** | P | **P** | **22 48 59.7** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=85,slow=8.0,SNR=22 | | | | | | |
| ASAR | | | | LR | LR | 23 08 27.7 | |
| | comp=Z,64nm,21.1s,baz=110,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **50.28** | **252** | P | **P** | **22 48 59.5** | **-0.1** |
| **PFO** | **Pinyon Flats O** | **72.57** | **47** | LR | LR | 23 16 23.6 | |
| | comp=Z,83nm,20.3s,baz=232,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **72.77** | **59** | LR | LR | 23 15 56.9 | |
| | comp=Z,42nm,18.1s,baz=7.5,slow=30 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.19** | **37** | LR | LR | 23 15 34.2 | |
| | comp=Z,74nm,19.6s,baz=296,slow=29 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.95** | **42** | LR | LR | 23 17 49.0 | |
| | comp=Z,74nm,20.1s,baz=222,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **75.15** | **180** | P | **P** | **22 51 45.8** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 22 51 52.7 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **ELK** | **Elko** | **77.20** | **41** | LR | LR | 23 18 27.9 | |
| | comp=Z,60nm,20.6s,baz=292,slow=30 | | | | | | |
| **KLR** | **Kul'dur** | **80.10** | **327** | LR | LR | 23 25 30.1 | |
| | comp=Z,21nm,20.3s,baz=48,slow=34 | | | | | | |
| **NEW** | **Newport** | **80.29** | **34** | LR | LR | 23 20 18.1 | |
| | comp=Z,42nm,18.8s,baz=288,slow=30 | | | | | | |
| **ANMO** | **Albuquerque** | **80.47** | **50** | LR | LR | 23 19 06.7 | |
| | comp=Z,49nm,19.4s,baz=302,slow=29 | | | | | | |
| **PDAR** | **Pinedale Array** | **81.88** | **42** | P | **P** | **22 52 23.6** | **+1.2** |
| | comp=Z,0.7nm,1.1s,baz=201,slow=4.7,SNR=2.2 | | | | | | |
| **ILAR** | **Ilar Array** | **81.95** | **11** | P | P | 22 52 26.2 | +4.3 |
| | comp=Z,0.4nm,0.8s,baz=209,slow=5.2,SNR=1.9 | | | | | | |
| **ULM** | **Lac du Bonnet** | **93.53** | **39** | LR | LR | 23 29 40.1 | |
| | comp=Z,50nm,20.0s,baz=301,slow=32 | | | | | | |

*IDC **23** 22:45:47.8±2.5,5°.00N×76°.00W,h0km,mb3.6/2,mb1 3.9/2, mb1mx3.4/29,mbtmp3.6/2,Error ellipse: s-maj=182.2km s-min=35.0km az=80.0*
*RSNC **23** 22:45:55.3±0.9,5°.31N×78°.21W,h4km±4km,ML2.6*

**ISC 23 22:45:53.3±1.7,5°.24N±0°.03×78°.27W±0°.04,h8km±11km, n25,σ2♀18/42,3C,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PIZC** | **Pizarro, Choco** | **0.95** | **107** | *i*P | **Pg** | **22 46 11.5** | **-0.1** |
| PIZC | | | | *e*S | **Sg** | **22 46 23.1** | **-0.9** |
| PIZC | | | | *i* | | 22 46 25.1 | |
| | comp=Z,363nm,0.3s | | | | | | |
| **PTAC** | **Punta Ardita,** | **1.95** | **14** | *e*P | **Pn** | **22 46 24.2** | **-2.5** |
| PTAC | | | | *e*S | **Sn** | **22 46 46.8** | **-4.5** |
| PTAC | | | | *i* | | 22 46 52.9 | |
| | comp=Z,100nm,0.1s | | | | | | |
| **PLMC** | **San Jos del P** | **2.01** | **100** | *i*P | **Pn** | **22 46 26.5** | **-1.1** |
| PLMC | | | | *e*S | **Sn** | **22 46 49.8** | **-3.3** |
| PLMC | | | | *i* | | 22 46 52.9 | |
| | comp=Z,44nm,0.2s | | | | | | |
| **GR1C** | **Gorgona, Isla** | **2.23** | **177** | *e*P | **Pn** | **22 46 29.2** | **-1.3** |
| GR1C | | | | *e*S | **Sn** | **22 46 53.7** | **-4.6** |
| **YOTC** | **Yotoco, Valle** | **2.29** | **123** | *i*P | **Pn** | **22 46 30.6** | **-0.9** |
| YOTC | | | | *e*S | **Sn** | **22 46 57.4** | **-2.7** |
| **CBOC** | **Ciudad Bolivar** | **2.33** | **75** | *e*P | **Pn** | **22 46 31.0** | **-1.1** |
| CBOC | | | | *e*S | **Sn** | **22 46 56.9** | **-4.3** |
| CBOC | | | | *i* | | 22 46 58.8 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **DBBC** | **Dabeiba** | **2.71** | **49** | *e*P | **Pn** | **22 46 40.6** | **+3.4** |
| DBBC | | | | *e*S | **Sn** | **22 47 06.4** | **-3.8** |
| DBBC | | | | *i* | | 22 47 16.4 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.90** | **90** | *e*P | **Pn** | **22 46 41.0** | **+0.8** |
| GUY2C | | | | *e*S | **Sn** | **22 47 13.1** | **-2.4** |
| GUY2C | | | | *i* | | 22 47 16.6 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **ANIL** | **Santa Ana** | **2.96** | **105** | *e*P | **Pn** | **22 46 41.2** | **+0.4** |
| ANIL | | | | *e*S | **Sn** | **22 47 16.2** | **-0.5** |
| ANIL | | | | *i* | | 22 47 20.0 | |
| | comp=Z,36nm,0.4s | | | | | | |
| **POPC** | **Popayan, Colom** | **3.12** | **149** | *e*P | **Pn** | **22 46 42.6** | **-0.4** |
| POPC | | | | *e*S | **Sn** | **22 47 17.4** | **-3.3** |
| **AZU** | **Azuero** | **3.22** | **322** | *e*P | **Pn** | **22 46 44.0** | **-0.1** |
| AZU | | | | *e*S | **Sn** | **22 47 21.5** | **-1.2** |
| AZU | | | | *i* | | 22 47 25.6 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.30** | **114** | *e*P | **Pn** | **22 46 45.9** | **+0.6** |
| ORTC | | | | *e*S | **Sn** | **22 47 24.1** | **-0.6** |
| ORTC | | | | *i* | | 22 47 29.5 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **CACAO** | **El Cacao, Vera** | **3.31** | **309** | *e*P | **Pn** | **22 46 44.6** | **-0.9** |
| CACAO | | | | *e*S | **Sn** | **22 47 23.3** | **-1.7** |
| **MARP** | **Paez Belalcaza** | **3.32** | **136** | *e*P | **Pn** | **22 46 46.4** | **+0.5** |
| MARP | | | | *e*S | **Sn** | **22 47 26.9** | **+1.2** |
| **BBAC** | **Balboa, Cauca** | **3.36** | **162** | *e*P | **Pn** | **22 46 47.0** | **+0.7** |
| BBAC | | | | *e*S | Sn | 22 47 20.0 | -6.6 |
| BBAC | | | | *i* | | 22 47 32.8 | |
| | comp=Z,12nm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **3.40** | **84** | *e*P | **Pn** | **22 46 48.7** | **+2.0** |
| NORC | | | | *e*S | **Sn** | **22 47 23.6** | **-3.7** |
| NORC | | | | *i* | | 22 47 30.9 | |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **PCON** | **Cinco Dias** | **3.45** | **147** | *e*P | **Pn** | **22 46 49.2** | **+1.3** |
| PCON | | | | *e*S | **Sn** | **22 47 29.1** | **-0.1** |
| PCON | | | | *i* | | 22 47 33.8 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **SOTA** | **Rioblanco** | **3.51** | **152** | *e*P | **Pn** | **22 46 48.7** | **+0.1** |
| SOTA | | | | *e*S | **Sn** | **22 47 28.8** | **-1.8** |
| SOTA | | | | *i* | | 22 47 31.8 | |
| | comp=Z,17nm,0.5s | | | | | | |
| **UREC** | **San Jos de Ur** | **3.69** | **47** | *e*S | **Sn** | **22 47 34.0** | **-0.4** |
| **BCIP** | **Isla Barro Col** | **4.20** | **338** | *e*P | **Pn** | **22 46 58.2** | **+0.6** |
| BCIP | | | | *e*S | **Sn** | **22 47 47.0** | **+0.1** |
| BCIP | | | | *i* | | 22 47 50.5 | |
| | comp=Z,7.6nm,0.5s | | | | | | |
| **CHIC** | **Chingaza** | **4.57** | **97** | *e*P | **Pn** | **22 47 06.2** | **+3.1** |
| CHIC | | | | *e*S | Sn | 22 47 46.9 | -10 |
| **PLCA** | **Paso Flores** | **46.30** | **172** | P | P | 22 54 11.1 | -8.5 |
| | comp=Z,1.1nm,0.8s,baz=342,slow=9.6,SNR=1.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.07** | **342** | P | **P** | **22 56 22.9** | **+2.0** |
| | comp=Z,0.2nm,0.6s,baz=134,slow=6.6,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **144.01** | **236** | PKPbc | **PKPab** | **23 05 29.3** | **+1.5** |
| | comp=Z,0.4nm,0.5s,baz=118,slow=3.7,SNR=4.8 | | | | | | |
| **WRA

PQSS IAML 23 33 48.1
comp=Z,196nm,0.2s
**TECO Alcaldia de Te 0.60 280 ⇓ *i* P Pn 23 33 48.5 0.0**
**SCLA Alcaldia de Sa 0.60 296 ⇑ *e* P Pn 23 33 48.8 +0.3**
SCLA IAML 23 33 49.4
comp=Z,232nm,0.4s
**PAVA Las Pavas 0.79 291 *e* P Pn 23 33 49.9 +0.3**
**PAVA Las Pavas 0.79 291 ⇑ *i* P Pn 23 33 49.6 -0.1**
PAVA IAML 23 33 50.9
comp=Z,304nm,0.4s
**SJTE Alcalda de S 0.83 283 ⇑ *i* P Pn 23 33 49.6 -0.2**
**LFRS El Faro 0.88 282 *e* P Pn 23 33 50.0 -0.2**
**TGUH Tegucigalpa,Un 1.07 55 ⇓ *i* P Pn 23 33 52.1 +0.4**
**JAYA Jayaque - finc 1.26 280 ⇑ *e* P Pn 23 33 53.0 -0.2**
JAYA *e* S Sn 23 34 15.9 -0.3
JAYA IAML 23 34 18.7
comp=Z,410nm,0.2s
**TACO Tacachico 1.26 295 ⇑ *i* P Pn 23 33 53.2 +0.1**
TACO *e* S Sn 23 34 16.0 -0.1
**CRIN San Cristobal 1.32 123 *e* P Pn 23 33 54.3 +0.7**
CRIN *e* S Sn 23 34 17.9 +0.9
CRIN IAML 23 34 23.2
comp=E,434nm,0.2s
**SNJE San Jose 1.46 287 *e* P Pn 23 33 55.7 +0.6**
**CEVE Cerro Verde 1.46 286 *e* P Pn 23 33 55.5 +0.3**
**SBLS San Blas 1.46 286 *e* P Pn 23 33 55.5 +0.3**
**MTO3 Montecristo 1.50 310 *i* P Pn 23 33 56.3 +0.9**
**MTO3 Montecristo 1.50 310 ⇑ *i* P Pn 23 33 56.3 +0.9**
**RTR El Retiro 1.50 288 *e* P Pn 23 33 55.9 +0.5**
**NUBE Las Nubes 1.63 287 ⇑ *i* P Pn 23 33 56.9 +0.3**
NUBE IAML 23 33 57.7
comp=Z,86nm,0.5s
**BOAB BOACO BROADBAN 2.63 112 *e* P Pn 23 34 07.5 -0.1**
**SCHQ Schefferville 44.55 17 P P 23 41 15.0 -2.1**
comp=Z,2.6nm,1.0s,baz=225,slow=8.6,SNR=2.5
**YKA Yellowknife Ar 52.48 345 P P 23 42 18.1 +0.6**
comp=Z,0.2nm,0.6s,baz=152,slow=6.6,SNR=5.2
**WRA Warramunga Arr 138.85 255 PKP PKPdf 23 52 30.6 +1.5**
comp=Z,0.2nm,0.5s,baz=87,slow=2.7,SNR=5.1

**IDC 23 23:50:35.3±2.8, 0.64N×127.33E, h0km, mb3.0/3, mb1 3.3/3, mb1mx2.9/48, mbtmp3.1/3, Error ellipse: s-maj=257.6km s-min=28.3km az=66.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.58** | **162** | P | P | 23 55 25.9 | -0.9 |
| | 0.2nm,0.6s,baz=340,slow=10,SNR=0.9 | | | | | | |
| **ASAR** | **Alice Springs** | **24.99** | **166** | P | P | 23 56 01.5 | +0.6 |
| | 0.3nm,0.4s,baz=343,slow=9.3,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.43** | **326** | P | P | 00 00 46.6 | -0.1 |
| | 0.1nm,0.4s,baz=109,slow=8.5,SNR=4.2 | | | | | | |

*IDC **23** 23:53:27.6±1.1, 7.35S×107.48E, h0km, mb3.9/8, mb1 4.1/8, mb1mx3.7/44, mbtmp3.9/8, MS3.8/26, Ms1 3.8/26, ms1mx3.4/80, Error ellipse: s-maj=23.8km s-min=8.7km az=92.0*
*DJA **23** 23:53:31.2±0.2, 7.3S±3.3×107.8E±*, h10km, M4.3/21, mb4.7/3, mB5.0/2, MLv4.2/21, Mw(mB)4.2/2*
*NEIC **23** 23:53:31.3±1.6, 7.18S±0.04×107.56E±0.07, h13km±6km, mb4.3/10, Error ellipse: s-maj=9.9km s-min=4.7km az=110.0*

**ISC 23 23:53:30.2±1.2, 7.29S±0.05×107.72E±0.03, h10km±8km, n69, σ1$60/50, mb4.0/11, MS3.8/23, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **0.47** | **348** | Pg | Pg | **23 53 38.1** | **-1.4** |
| | 345nm,0.3s,baz=157,slow=14,SNR=116 | | | | | | |
| LEM | | | | Lg | Lg | 23 53 45.8 | |
| | 868nm,0.3s,baz=108,slow=20,SNR=23 | | | | | | |
| LEM | | | | LR | LR | 23 54 07.2 | |
| | comp=Z,5μm,19.1s,baz=120,slow=73 | | | | | | |
| **CNJI** | **Cibinong** | **0.58** | **268** | P | Pg | **23 53 41.5** | **-0.1** |
| CNJI | | | | S | Sg | **23 53 49.9** | **+0.6** |
| **CMJI** | **Cimerak** | **0.87** | **124** | P | Pg | **23 53 46.3** | **-0.8** |
| CMJI | | | | S | Sg | **23 53 58.5** | **0.0** |
| **SKJI** | **Sukabumi** | **1.19** | **284** | P | Pg | **23 53 52.2** | **-0.9** |
| SKJI | | | | S | Sb | **23 54 10.5** | **+2.1** |
| **KPJI** | **Karang Pucung** | **1.20** | **92** | P | Pg | **23 53 52.2** | **-1.2** |
| KPJI | | | | S | Sn | **23 54 10.1** | **+0.6** |
| **DBJI** | **Dramaga** | **1.21** | **307** | P | Pg | **23 53 51.9** | **-1.6** |
| DBJI | | | | S | Sg | **23 54 09.9** | **+0.7** |
| **TNG** | **Tangerang** | **1.54** | **316** | P | Pg | **23 54 00.9** | **+1.1** |
| TNG | | | | P | Pn | **23 53 58.3** | **+0.5** |
| **CGJI** | **Cibinong** | **2.12** | **288** | P | Pn | **23 54 07.4** | **+1.6** |
| **YOGI** | **Yogyakarta** | **2.61** | **102** | P | Pn | **23 54 13.5** | **+1.0** |
| **SMRI** | **Semarang** | **2.71** | **85** | | Pn | **23 54 15.1** | **+1.2** |
| **SMRI** | **Semarang** | **2.71** | **85** | P | Pn | **23 54 14.7** | **+0.8** |
| **UGM** | **Wanagama** | **2.85** | **103** | Pn | Pn | **23 54 16.8** | **+1.0** |
| **UGM** | **Wanagama** | **2.85** | **103** | P | Pn | **23 54 16.5** | **+0.7** |
| **BLSI** | **Bandar Lampung** | **3.11** | **308** | P | Pn | **23 54 21.1** | **+1.6** |
| **UWJI** | **Ujung Watu** | **3.32** | **75** | P | Pn | **23 54 24.4** | **+2.1** |
| **PCJI** | **Pacitan** | **3.54** | **105** | P | Pn | **23 54 25.9** | **+0.5** |
| **KASI** | **Kota Agung** | **3.65** | **299** | P | Pn | **23 54 29.4** | **+2.5** |
| **XMIS** | **Christmas Isla** | **3.77** | **213** | Pn | Pn | **23 54 26.9** | **-1.6** |
| **KLSI** | | **3.94** | **311** | P | Pn | **23 54 31.3** | **+0.5** |
| **LWLI** | **Liwa** | **4.28** | **302** | P | Pn | 23 54 41.2 | +5.5 |
| **MDSI** | **Maura Dua** | **4.49** | **308** | P | Pn | **23 54 41.6** | **+3.2** |
| **GMJI** | **Gumukmas** | **5.76** | **100** | P | Pn | **23 54 56.8** | **+1.0** |
| | 0.2nm893nm39nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **6.48** | **101** | | Pn | **23 55 07.5** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **6.48** | **101** | P | Pn | **23 55 07.3** | **+1.5** |
| | 0.3nm45nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **12.18** | **80** | LR | LR | 00 02 22.4 | |
| | comp=Z,259nm,18.0s,baz=267,slow=43 | | | | | | |
| **PSI** | **Prapat** | **13.32** | **318** | LR | LR | 00 02 32.9 | |
| | comp=Z,967nm,18.9s,baz=148,slow=42 | | | | | | |
| **BATI** | **Baumata** | **16.02** | **102** | LR | LR | 00 04 26.9 | |
| | comp=Z,235nm,21.9s,baz=344,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.50** | **123** | P | P | **23 58 07.8** | **-0.9** |
| | 9.2nm,0.8s,baz=311,slow=8.2,SNR=20 | | | | | | |
| FITZ | | | | LR | LR | 00 07 03.3 | |
| | comp=Z,142nm,18.8s,baz=309,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.50** | **123** | P | Pn | 23 58 10.4 | -0.4 |
| FITZ | | | | IAmb | IAmb | 23 58 15.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **22.22** | **114** | P | P | **23 58 29.6** | **+2.3** |
| KNRA | | | | IAmb | IAmb | 23 58 34.8 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **24.33** | **76** | LR | LR | 00 09 41.4 | |
| | comp=Z,60nm,20.0s,baz=206,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.01** | **341** | P | P | **23 59 09.9** | **-2.8** |
| | comp=Z,0.6nm,0.3s,baz=163,slow=9.4,SNR=0.6 | | | | | | |
| CMAR | | | | LR | LR | 00 11 43.5 | |
| | comp=Z,165nm,18.1s,baz=170,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.01** | **341** | P | P | **23 59 10.9** | **-1.7** |
| **WB0** | **Warramunga Arr** | **28.69** | **118** | P | P | **23 59 30.6** | **+2.8** |
| WB0 | | | | IAmb | IAmb | 23 59 45.0 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.71** | **119** | P | P | **23 59 26.9** | **-1.1** |
| | comp=Z,0.8nm,0.8s,baz=292,slow=10,SNR=3.4 | | | | | | |
| WRA | | | | LR | LR | 00 11 33.2 | |
| | comp=Z,72nm,19.9s,baz=284,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.71** | **119** | P | P | **23 59 30.3** | **+2.3** |
| **WB2** | **Warramunga Arr** | **28.72** | **119** | P | P | **23 59 29.2** | **+1.1** |
| WB2 | | | | IAmb | IAmb | 23 59 40.2 | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **28.89** | **119** | P | P | **23 59 31.2** | **+1.7** |
| WR0 | | | | IAmb | IAmb | 23 59 39.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **29.94** | **126** | P | P | **23 59 40.7** | **+1.8** |
| **ASAR** | **Alice Springs** | **29.94** | **126** | P | P | **23 59 39.7** | **+0.8** |
| ASAR | | | | LR | LR | 00 12 23.0 | |
| | comp=Z,1.7nm,0.9s,baz=306,slow=8.7,SNR=15 | | | | | | |
| | comp=Z,101nm,19.8s,baz=277,slow=38 | | | | | | |
| **PALK** | **Pallekele** | **30.58** | **298** | LR | LR | 00 10 29.5 | |
| | comp=Z,93nm,21.5s,baz=231,slow=34 | | | | | | |
| **H08S2** | **Diego Garcia H** | **34.92** | **267** | T | T | 00 36 10.1 | |
| | baz=92,slow=76 | | | | | | |
| **H08S3** | **Diego Garcia H** | **34.93** | **267** | T | T | 00 36 09.5 | |
| | baz=92,slow=76 | | | | | | |
| **H08S1** | **Diego Carcia H** | **34.94** | **267** | T | T | 00 36 08.3 | |
| | baz=92,slow=76 | | | | | | |
| **BBOO** | **Buckleboo** | **36.56** | **138** | P | P | **00 00 38.6** | **+2.2** |
| **PMG** | **Port Moresby** | **39.06** | **96** | LR | LR | 00 20 52.4 | |
| | comp=Z,76nm,18.8s,baz=240,slow=42 | | | | | | |
| **CTA** | **Charters Tower** | **39.43** | **113** | LR | LR | 00 19 06.2 | |
| | comp=Z,98nm,18.7s,baz=260,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **39.92** | **132** | P | P | **00 01 05.8** | **+1.1** |
| | comp=Z,8.0nm,0.7s,baz=307,slow=8.6,SNR=19 | | | | | | |
| STKA | | | | LR | LR | 00 19 13.5 | |
| | comp=Z,72nm,18.8s,baz=221,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **39.92** | **132** | P | P | **00 01 06.5** | **+1.7** |
| STKA | | | | IAmb | IAmb | 00 01 08.6 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **54.90** | **359** | P | P | **00 03 01.1** | **-0.1** |
| | comp=Z,0.2nm,0.5s,baz=182,slow=8.7,SNR=3.4 | | | | | | |
| SONM | | | | LR | LR | 00 30 06.9 | |
| | comp=Z,90nm,19.2s,baz=271,slow=40 | | | | | | |
| **WSAR** | **Wadi Sarin** | **56.76** | **304** | LR | LR | 00 26 23.2 | |
| | comp=Z,69nm,19.3s,baz=137,slow=35 | | | | | | |
| **AAK** | **Ala-Archa** | **58.18** | **332** | LR | LR | 00 31 47.9 | |
| | comp=Z,54nm,19.1s,baz=135,slow=40 | | | | | | |
| **DZM** | **Mont Dzumac** | **58.34** | **111** | LR | LR | 00 29 53.9 | |
| | comp=Z,66nm,18.3s,baz=32,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.40** | **340** | P | P | **00 03 23.5** | **-2.5** |
| | comp=Z,0.4nm,0.7s,baz=134,slow=7.0,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.40** | **340** | P | P | **00 03 24.5** | **-1.5** |
| **RPZ** | **Rata Peaks** | **65.82** | **135** | LR | LR | 00 31 33.7 | |
| | comp=Z,112nm,21.6s,baz=259,slow=35 | | | | | | |
| **URZ** | **Urewera** | **69.35** | **128** | LR | LR | 00 35 26.5 | |
| | comp=Z,93nm,20.0s,baz=236,slow=36 | | | | | | |
| **ABKAR** | **Akbulak array** | **70.03** | **329** | P | P | **00 04 40.1** | **-2.1** |
| **KMBO** | **Kilima Mbogo** | **70.48** | **271** | LR | LR | 00 29 37.8 | |
| | comp=Z,54nm,20.8s,baz=94,slow=31 | | | | | | |
| **MA2** | **Magadan** | **74.91** | **21** | LR | LR | 00 42 47.0 | |
| | comp=Z,46nm,18.1s,baz=89,slow=39 | | | | | | |
| **NRIK** | **Noril'sk** | **77.72** | **353** | LR | LR | 00 43 27.7 | |
| | comp=Z,104nm,18.5s,baz=43,slow=39 | | | | | | |
| **AFI** | **Afiamalu** | **79.10** | **103** | LR | LR | 00 39 52.1 | |
| | comp=Z,32nm,18.4s,baz=61,slow=35 | | | | | | |
| **TIXI** | **Tiksi** | **80.01** | **7** | LR | LR | 00 43 39.7 | |
| | comp=Z,104nm,18.1s,baz=3.0,slow=38 | | | | | | |
| **BR131** | **Keskin Array S** | **82.55** | **312** | P | P | **00 05 52.9** | **-1.0** |
| **BRTR** | **Keskin Array B** | **82.55** | **312** | P | P | **00 05 53.6** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=132,slow=8.7,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **82.55** | **312** | P | P | **00 05 52.8** | **-1.1** |
| **SUR** | **Sutherland** | **83.54** | **238** | LR | LR | 00 37 29.2 | |
| | comp=Z,39nm,18.6s,baz=150,slow=32 | | | | | | |
| **FINES** | **FINESS Array B** | **92.37** | **332** | LR | LR | 00 52 04.8 | |
| | comp=Z,151nm,20.4s,baz=318,slow=38 | | | | | | |
| **VRAC** | **Vranov** | **96.20** | **319** | LR | LR | 00 57 04.7 | |
| | comp=Z,117nm,18.9s,baz=324,slow=40 | | | | | | |

**IDC 23 23:54:08.6±5.1, 29.75S×178.45W, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.5/42, mbtmp3.7/3, Error ellipse: s-maj=180.8km s-min=15.5km az=146.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.68** | **43** | Pn | Pn | 23 54 25.3 | -0.1 |
| | 187nm,0.3s,baz=250,slow=23,SNR=3.2 | | | | | | |
| RAO | | | | Sn | Sn | 23 54 38.0 | +1.2 |
| | 330nm,0.3s,baz=198,slow=20,SNR=5.9 | | | | | | |
| **STKA** | **Stephens Creek** | **34.25** | **256** | P | P | 00 00 57.3 | +0.9 |
| | 1.0nm,0.6s,baz=98,slow=8.8,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **42.76** | **266** | P | P | 00 02 07.2 | -0.9 |
| | 0.2nm,0.3s,baz=109,slow=7.4,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.69** | **272** | P | P | 00 02 15.4 | -0.1 |
| | 0.5nm,0.4s,baz=110,slow=8.0,SNR=15 | | | | | | |

*IDC **24** 00:02:21.7±0.6, 35.51N×119.33W, h0km, mb4.1/20, mb1 4.3/28, mb1mx4.3/41, mbtmp4.2/28, ML4.4/8, MS4.0/52, Ms1 4.0/52, ms1mx3.9/81, Error ellipse: s-maj=10.5km s-min=6.9km az=62.0*
*ANF **24** 00:02:22.9±0.2, 35.54N×119.37W, h20km±2km, ML5.2/42, ML5.2/42, Error ellipse: s-maj=1.6km s-min=1.1km az=122.0*
*NEIC **24** 00:02:22.9±2.1, 35.53N±0.03×119.40W±0.02, h16km±3km, Error ellipse: s-maj=4.1km s-min=2.4km az=189.0*
*NCEDC **24** 00:02:23.6, 35.55N×119.37W, h22km*
*NEIC **24** 00:02:23.6, 35.55N×119.37W, h18km, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr=0.49; Mθθ=2.72; Mφφ 1.77; Mrθ=0.16; Mθφ -0.37; Mφr-0.05; Fault plane solution: M0 2.36000×10^16 NP1:φs220.29000°, δ86.03000°, λ-1.65000°. NP2:φs310.40000°, δ88.36000°, λ-176.02000°. Principal axes: T 2.2826, Plg2.0000°, Azm85.0000°; N -0.0014, Plg86.0000°, Azm333.0000°; P -2.2812, Plg4.0000°, Azm175.0000°;*
*NEIC **24** 00:02:23, 35.54N×119.37W, h18km, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr 0.21; Mθθ-2.61; Mφφ 2.39; Mrθ 1.00; Mθφ -0.31; Mφr-0.19; Fault plane solution: M0 2.53000×10^16 NP1:φs222.00000°, δ85.00000°, λ2.00000°. NP2:φs131.00000°, δ88.00000°, λ175.00000°. Principal axes: T 2.4433, Plg7.0000°, Azm85.0000°; N 0.4914, Plg71.0000°, Azm334.0000°; P -2.9347, Plg17.0000°, Azm177.0000°;*
*PAS **24** 00:02:23.2, 6, 35.54N±0.03×119.37W±0.03, h22km±4km, Mwr4.9/6, mb4.8/66(NEIC), ML4.9/78(NEIC), Mwr4.8/8(NCEDC), Mwr4.8/103(NEIC), Mww4.9(NEIC) Error ellipse: s-maj=4.4km s-min=2.8km az=165.0*
*NEIC **24** 00:02:23.6, 35.54N×119.37W, h18km, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr-0.12; Mθθ-1.59; Mφφ 1.71; Mrθ-0.12; Mθφ-0.32; Mφr-0.07; Fault plane solution: M0 1.69000×10^16 NP1:φs39.34000°, δ88.01000°, λ-4.55000°. NP2:φs129.50000°, δ85.45000°, λ-178.01000°. Principal axes: T 1.7427, Plg2.0000°, Azm84.0000°; N -0.1113, Plg85.0000°, Azm196.0000°; P -1.6314, Plg5.0000°, Azm354.0000°;*
*BJI **24** 00:02:24.0±0.0, 35.50N×119.40W, h22km, mb4.7/9, mB5.3/7*
*NEIC **24** 00:02:27, 35.54N×119.37W, h20km, Moment Tensor Solution. Duration: 8s0 Moment tensor: Scale 10^16 Nm; Mrr 0.43; Mθθ-2.63; Mφφ 2.20; Mrθ-0.20; Mθφ-0.13; Mφr-0.19; Fault plane solution: M0 2.46000×10^16 NP1: φs133.00000°, δ83.00000°, λ178.00000°. NP2: φs224.00000°, δ88.00000°, λ7.00000°. Principal axes: T 2.2191, Plg6.0000°, Azm89.0000°; N 0.4236, Plg83.0000°, Azm236.0000°; P -2.6428, Plg4.0000°, Azm358.0000°;*
*GCMT **24** 00:02:27.0±0.3, 35.55N±0.02×119.45W±0.02, h27km±1km, MW5.0/101, Moment Tensor Solution. s29,c34; s101,c138; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr 0.16±.14; Mθθ-3.37±.10; Mφφ 3.21±.11; Mrθ 0.05±.21; Mθφ-0.43±.10; Mφr-0.05±.20; Best double couple: M0 3.31900×10^16 NP1:φs221.00000°, δ89.00000°, λ0.00000°. NP2:φs131.00000°, δ90.00000°, λ179.00000°. Principal axes: T 3.2390, Plg1.0000°, Azm86.0000°; N 0.1570, Plg89.0000°, Azm302.0000°; P -3.3980, Plg1.0000°, Azm176.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 24 00:02:23.0±1.0, 35.50N±0.02×119.38W±0.02, h14km±6km, n349, σ1$62/334, mb4.7/55, MS4.1/45, 75C-63D, Fault plane solution: NP1:φs23.83547°, δ69.42414°, λ-16.28767°. NP2:φs119.69852°, δ74.77545°, λ-158.64000°. Principal axes:** T Plg3.6032°, Azm250.9862°; N Plg63.9790°, Azm153.5750°; P Plg25.7328°, Azm342.7254°; **Fault plane solution: NP1:φs224.73555°, δ76.96722°, λ-2.95057°. NP2:** φs315.40149°, δ87.12550°, λ-166.95052°. **Principal axes:** T Plg7.1229°, Azm89.3653°; N Plg76.6430°, Azm327.6101°; P Plg11.2400°, Azm180.7883°; **Central California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VES** | **Vestal, Richgr** | **0.41** | **35** | P | Pg | **00 02 31.5** | **+0.2** |
| | baz=218,SNR=1000 | | | | | | |
| VES | | | | S | Sg | **00 02 37.3** | **+0.5** |
| | baz=218 | | | | | | |
| **SMMC** | **Simmler** | **0.54** | **250** | P | Pb | **00 02 34.5** | **+0.2** |
| | baz=65,SNR=1000 | | | | | | |
| SMMC | | | | S | Sb | **00 02 42.6** | **+0.7** |
| | baz=65 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **0.56** | **183** | | Pb | **00 02 35.0** | **+0.3** |
| **ARVC** | **Arvin** | **0.58** | **130** | P | Pg | **00 02 35.0** | **+0.5** |
| | baz=314,SNR=1000 | | | | | | |
| ARVC | | | | S | Sn | **00 02 43.8** | **-2.4** |
| | baz=314 | | | | | | |
| **PKM** | **Mcpherson Peak** | **0.71** | **210** | P | Pg | **00 02 37.1** | **+0.2** |
| | baz=29,SNR=1000 | | | | | | |
| PKM | | | | S | Sn | **00 02 48.2** | **-1.4** |
| | baz=29 | | | | | | |
| **THIS** | **South End of C** | **0.73** | **288** | | Pb | **00 02 36.8** | **-0.7** |
| **PAGB** | **Antelope Grade** | **0.75** | **288** | | Pb | **00 02 36.8** | **-1.0** |
| PAGB | | | | Sg | Sb | **00 02 47.5** | **-0.3** |
| **TRAM** | **Private Proper** | **0.75** | **284** | | Pb | **00 02 37.2** | **-0.6** |
| **ISA** | **Isabella, Lake** | **0.75** | **78** | | Pb | **00 02 37.1** | **-0.8** |
| ISA | | | | Sg | Sb | **00 02 47.0** | **-1.0** |
| ISA | | | | IAML | | 00 02 49.4 | |
| | comp=N,47μm,0.5s | | | | | | |
| **ISA** | **Isabella, Lake** | **0.75** | **78** | P | Pb | **00 02 37.3** | **-0.6** |
| | baz=261,SNR=1000 | | | | | | |
| ISA | | | | S | Sb | **00 02 47.9** | **-0.2** |
| | baz=261 | | | | | | |
| **TSCN** | **Private Proper** | **0.79** | **273** | | Pb | **00 02 38.2** | **-0.3** |
| **VOG** | **Valley Oaks Go** | **0.82** | **360** | P | Pb | **00 02 37.7** | **-1.2** |
| | baz=179,SNR=1000 | | | | | | |
| VOG | | | | S | Sb | **00 02 48.8** | **-1.0** |
| | baz=179 | | | | | | |
| **TCHL** | **Shandon** | **0.85** | **283** | | Pb | **00 02 38.9** | **-0.7** |
| **OSI** | **Osito Audit: C** | **1.04** | **149** | P | Pn | **00 02 42.4** | **-0.7** |
| | baz=331,SNR=1000 | | | | | | |
| OSI | | | | S | Sg | **00 02 56.1** | **-0.4** |
| | baz=331 | | | | | | |
| **PKD** | **Bear Valley Ra** | **1.04** | **295** | | Pb | **00 02 40.7** | **-2.1** |
| PKD | | | | | Sb | **00 02 55.4** | **-1.0** |
| **SBC** | **Santa Barbara** | **1.09** | **195** | P | Pg | **00 02 44.1** | **0.0** |
| | baz=14,SNR=626 | | | | | | |
| SBC | | | | S | Sg | **00 03 00.1** | **+1.7** |
| | baz=14 | | | | | | |
| **PDRM** | **Domengine Ranc** | **1.16** | **316** | | Pn | **00 02 43.3** | **-1.4** |
| **CCAC** | **Calif City Air** | **1.17** | **107** | | Pb | **00 02 44.7** | **-0.3** |
| CCAC | | | | Sn | Sb | **00 02 59.5** | **-0.5** |
| CCAC | | | | IAML | | 00 03 17.0 | |
| | comp=E,38μm,1.1s | | | | | | |
| **PMLM** | **Mount Lospe** | **1.18** | **239** | | Pn | **00 02 44.5** | **-0.5** |
| **HELL** | **Mitchell Peak,** | **1.21** | **14** | | Pn | **00 02 43.7** | **-1.9** |
| HELL | | | | | Sb | **00 02 58.9** | **-2.3** |
| **RAMR** | **Ramage Ranch** | **1.22** | **277** | | Pn | **00 02 44.2** | **-1.5** |
| **EDW2** | **Edwards Air Fo** | **1.29** | **118** | P | Pn | **00 02 46.4** | **-0.3** |
| | baz=301,SNR=1000 | | | | | | |
| EDW2 | | | | S | Sg | **00 03 04.0** | **-0.7** |
| | baz=301 | | | | | | |
| **PMPB** | **Monarch Peak** | **1.36** | **302** | Pn | Pn | **00 02 45.2** | **-2.4** |
| **LRMC** | **Laurel Mtn Rad** | **1.38** | **90** | Pb | Pb | **00 02 48.2** | **-0.5** |
| | baz=273,SNR=1000 | | | | | | |
| LRMC | | | | S | Sb | **00 03 05.9** | **-0.4** |
| | baz=273 | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.41** | **48** | Pb | Pn | **00 02 48.3** | **-0.1** |
| | baz=230 | | | | | | |
| CWC | | | | S | Sn | **00 03 05.8** | **-1.0** |
| | baz=230 | | | | | | |
| **DECC** | **Green Verdugo** | **1.51** | **145** | P | Pb | **00 02 50.0** | **-0.9** |
| | baz=327,SNR=410 | | | | | | |
| DECC | | | | S | Sb | **00 03 09.9** | **0.0** |
| | baz=327 | | | | | | |
| **DJJ** | **Donna J Jenkin** | **1.59** | **151** | | Pn | **00 02 50.7** | **+0.1** |
| **MPMC** | **Manual Prospec** | **1.63** | **70** | Pb | Pn | **00 02 51.8** | **+0.3** |
| | baz=252,SNR=1000 | | | | | | |
| MPMC | | | | Sb | Sb | **00 03 14.0** | **+0.5** |
| | baz=252 | | | | | | |
| **GR2C** | **Griffith Obs.** | **1.64** | **147** | | Pn | **00 02 51.6** | **+0.2** |
| **PASC** | **Pasadena Art C** | **1.65** | **143** | | Pn | **00 02 51.7** | **+0.2** |
| PASC | | | | IAML | | 00 03 14.4 | |
| | comp=N,21μm,0.8s | | | | | | |
| **PAPM** | **Alder Peak** | **1.67** | **285** | | Pn | **00 02 49.7** | **-2.1** |
| **BBGB** | **Big Mountain B** | **1.72** | **309** | | Pn | **00 02 51.0** | **-1.7** |
| **TIN** | **Tinemaha, Big** | **1.80** | **31** | Pb | Pb | **00 02 55.0** | **-0.8** |
| | baz=212,SNR=1000 | | | | | | |
| TIN | | | | Sb | Sb | **00 03 18.3** | **-0.1** |
| | baz=212 | | | | | | |
| **KCC** | **Kaiser Creek** | **1.82** | **1** | | Pn | **00 02 53.6** | **-0.3** |
| **BSMM** | **Soledad Missio** | **1.88** | **298** | | Pn | **00 02 52.7** | **-2.1** |
| **BLRM** | **Lewis Ranch** | **1.93** | **308** | | Pn | **00 02 55.0** | **-0.3** |
| **BJCM** | **Johnson Can.** | **1.94** | **303** | | Pn | **00 02 53.5** | **-2.0** |
| **MTUM** | **Tungsten Hills** | **1.96** | **19** | | Pn | **00 02 57.2** | **+1.2** |
| **SCZ** | **Santa Cruz** | **1.97** | **304** | | Pn | **00 02 53.9** | **-2.0** |
| **HAST** | **Hastings Reser** | **1.97** | **297** | | Pn | **00 02 53.8** | **-2.2** |
| **FMP** | **Fort Macarthur** | **2.00** | **153** | P | Pn | **00 02 56.3** | **0.0** |
| | baz=335,SNR=77 | | | | | | |
| **RRX** | **Edison Barstow** | **2.05** | **107** | P | Pn | **00 02 56.9** | **-0.1** |
| | baz=290,SNR=306 | | | | | | |
| **QSM** | **Queen of Sheba** | **2.09** | **77** | | Pn | **00 02 57.6** | **-0.1** |
| QSM | | | | IAML | | 00 03 33.5 | |
| | comp=E,6μm,0.7s | | | | | | |
| QSM | | | | IAML | | 00 03 33.9 | |
| | comp=N,8μm,0.7s | | | | | | |
| **SAO** | **San Andreas Ge** | **2.10** | **307** | | Pn | **00 02 56.7** | **-0.9** |
| **MRDM** | **Red Cones** | **2.11** | **7** | | Pn | **00 02 58.6** | **+0.5** |
| **GSC** | **Goldstone, Bar** | **2.11** | **95** | | Pn | **00 02 57.9** | **-0.1** |
| GSC | | | | IAML | | 00 03 32.8 | |
| | comp=E,12μm,0.6s | | | | | | |
| GSC | | | | IAML | | 00 03 34.2 | |
| | comp=N,7μm,0.7s | | | | | | |
| **GSC** | **Goldstone, Bar** | **2.11** | **95** | P | Pn | **00 02 57.8** | **-0.1** |
| | baz=277,SNR=1000 | | | | | | |
| **HSFM** | **Saint Francis** | **2.16** | **308** | | Pn | **00 02 58.0** | **-0.6** |
| **MLAC** | **Mammoth, Mammo** | **2.17** | **11** | Pb | Pn | **00 03 00.1** | **+1.3** |
| | baz=192,SNR=1000 | | | | | | |
| MLAC | | | | Sb | Sb | **00 03 29.0** | **0.0** |
| | baz=192 | | | | | | |
| **MDRNC** | **Doe Ridge** | **2.17** | **11** | | Pn | **00 03 00.2** | **+1.3** |
| **GRAC** | **Grapevine Rang** | **2.20** | **47** | Pb | Pn | **00 03 00.5** | **+1.3** |
| | baz=229,SNR=714 | | | | | | |
| **HFEM** | **San Felipe** | **2.20** | **313** | | Pn | **00 02 57.7** | **-1.4** |
| **MDCM** | **Deadman Creek** | **2.22** | **7** | | Pn | **00 03 00.2** | **+0.6** |
| **LCH** | **Last Change Ra** | **2.22** | **38** | | Pn | **00 03 00.2** | **+0.6** |
| LCH | | | | IAML | | 00 03 37.9 | |
| | comp=E,12μm,0.7s | | | | | | |
| **CIS** | **Catalina Islan** | **2.24** | **159** | P | Pn | **00 02 59.1** | **-0.6** |
| | baz=340,SNR=212 | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.25** | **183** | | Pn | **00 02 59.0** | **-0.8** |
| **SNCC** | **San Nicolas Is** | **2.25** | **183** | P | Pn | **00 02 59.2** | **-0.6** |
| | baz=3.2,SNR=80 | | | | | | |
| **GWY** | **Greenwater Val** | **2.30** | **72** | | Pn | **00 03 00.6** | **-0.1** |
| GWY | | | | IAML | | 00 03 40.8 | |
| | comp=N,8μm,0.6s | | | | | | |
| GWY | | | | IAML | | 00 03 41.7 | |
| | comp=E,9μm,0.8s | | | | | | |
| **GHS** | **Gilroy Hot Spr** | **2.31** | **314** | | Pn | **00 02 59.0** | **-1.7** |
| **HCOM** | **Corn Cob Canyo** | **2.34** | **307** | | Pn | **00 02 59.8** | **-1.1** |
| **BBRC** | **Big Bear Solar** | **2.37** | **121** | P | Pn | **00 03 01.1** | **-0.5** |
| | baz=303,SNR=174 | | | | | | |
| BBRC | | | | S | Sn | **00 03 31.2** | **+0.6** |
| | baz=303 | | | | | | |
| **ELS** | **Elsinore Mount** | **2.45** | **138** | | Pn | **00 03 02.2** | **-0.4** |
| **HEC** | **Hector,Ludlow** | **2.58** | **104** | P | Pn | **00 03 04.2** | **-0.2** |
| | baz=287,SNR=532 | | | | | |

PFO S Sn 00 03 48.4 +0.9
baz=310
**TPFO Pinon Flats 3.07 127** P Pn 00 03 11.0 -0.2
baz=310,SNR=172
**GMRC Granite Mounta 3.13 102** P Pn 00 03 11.1 -0.9
baz=285,SNR=183
**BDM Black Diamond 3.16 321** Pn 00 03 11.7 -0.6
**BELC Belle Mtn. Jos 3.16 117** P Pn 00 03 11.7 -0.7
baz=300,SNR=366
**109C Camp Elliot, M 3.22 144** Pn Pn 00 03 12.4 -0.6
109C IAML 00 04 05.1
comp=E,2μm,1.0s
**109C Camp Elliot, M 3.22 144** P Pn 00 03 12.5 -0.5
baz=326,SNR=24
**BKS Berkeley--Byer 3.30 317** Pn 00 03 13.1 -1.1
**VAK Adit at Lawren 3.31 317** Pn 00 03 13.2 -1.1
**EMB Emerald Bay 3.51 351** Pn Pn 00 03 18.3 +0.9
**TJX Tijuana 3.56 146** Pn 00 03 18.1 +0.3
TJX IAML 00 04 23.9
comp=N,4μm,1.2s
**SHPR Sheep Range 3.56 72** Pn Pn 00 03 18.7 +0.7
**MONP2 Monument Peak 3.58 136** P Pn 00 03 18.7 +0.5
baz=318,SNR=227
**PNTR Pine Nut 3.58 357** Pn Pn 00 03 18.9 +0.5
**BAR Barrett 3.60 141** Pn 00 03 17.8 -0.6
BAR IAML 00 04 15.9
comp=E,1μm,1.3s
**TKX Tecate 3.72 141** Pn Pn 00 03 19.8 -0.2
**BC3 Big Chuckawall 3.73 119** P Pn 00 03 19.3 -0.9
baz=302,SNR=137
**IRM Iron Mountain 3.73 110** P Pn 00 03 19.4 -0.7
baz=293,SNR=50
**MPK Martis Peak 3.82 352** Pn Pn 00 03 22.4 +0.8
**MCCM Marconi Confer 3.85 314** Pn Pn 00 03 20.7 -1.1
MCCM IAML 00 04 29.8
comp=N,2μm,1.2s
MCCM IAML 00 04 40.9
comp=E,2μm,1.4s
**CBX Cerro Bola 3.90 144** Pn 00 03 22.5 -0.1
CBX IAML 00 04 29.7
comp=E,1μm,0.8s
**SWSC Sam W. Stewart 3.91 130** P Pn 00 03 21.9 -0.7
baz=312,SNR=21
**IKP In-Ko-Pah, Jac 3.93 135** P Pn 00 03 23.1 +0.2
baz=318,SNR=49
**NEE2 Needles Airpor 3.97 99** P Pn 00 03 22.8 -0.6
baz=283
**RMX La Rumorosa 3.98 136** Pn Pn 00 03 24.6 +0.9
RMX IAML 00 04 30.4
comp=E,1μm,1.0s
**YUH Yuha Desert 4.04 134** Pn Pn 00 03 24.5 +0.1
YUH IAML 00 04 32.3
comp=E,970nm,2.4s
**R11A Troy Canyon, C 4.16 46** P Pn 00 03 26.7 +0.5
baz=228,SNR=36
**GDXM Geysers 4.28 321** Pn Pn 00 03 26.9 -0.8
**BLYC Blythe 4.37 112** Pn Pn 00 03 28.2 -0.7
BLYC IAML 00 04 50.8
comp=N,1μm,1.4s
BLYC IAML 00 04 51.0
comp=E,1μm,0.9s
**ORV Oroville 4.38 338** Pn 00 03 29.6 +0.5
ORV IAML 00 04 43.1
comp=E,2μm,1.0s
ORV IAML 00 04 51.3
comp=N,1μm,1.1s
**PDMCI Parker Dam,Lak 4.47 104** P Pn 00 03 29.6 -0.6
baz=288,SNR=75
**GLA Glamis 4.49 122** Pn 00 03 29.9 -0.8
GLA IAML 00 04 54.6
comp=N,1μm,1.4s
GLA IAML 00 04 54.8
comp=E,2μm,1.6s
**GLA Glamis 4.49 122** P Pn 00 03 30.0 -0.7
baz=305,SNR=55
**W13A Hualapai Mount 4.51 94** Pn Pn 00 03 31.0 0.0
W13A IAML 00 04 56.7
comp=N,1μm,2.1s
**HOPS Hopland Field 4.56 321** Pn Pn 00 03 30.7 -0.9
HOPS IAML 00 05 01.0
comp=E,681nm,1.4s
HOPS IAML 00 05 28.5
comp=N,715nm,1.5s
**KCPM Cahto Peak 5.35 323** Pn Pn 00 03 42.5 +0.1
KCPM IAML 00 05 34.2
comp=E,574nm,1.8s
KCPM IAML 00 05 45.3
comp=N,592nm,1.2s
**O02D Mt. Diablo Mer 5.39 331** P Pn 00 03 42.5 -0.5
baz=149
**113A Mohawk Valley, 5.39 119** Pn Pn 00 03 41.4 -1.5
**Y14A Wickenburg 5.47 105** Pn 00 03 43.3 -0.9
**WDC Whiskeytown Da 5.65 335** Pn Pn 00 03 46.1 -0.4
**N02D Trinity Center 6.06 335** P Pn 00 03 52.5 +0.4
baz=153,SNR=16
**ELK Elko 6.17 31** Pn Pn 00 03 55.8 +2.0
comp=N,14nm,0.3s,baz=231,slow=11,SNR=246
ELK Lg Lg 00 05 32.5
comp=N,53nm,0.3s,baz=298,slow=18,SNR=14
ELK LR LR 00 06 46.5
comp=N,573nm,18.9s,baz=215,slow=43
**KMPM Mount Pierce 6.17 324** Pn Pn 00 03 54.2 +0.4
**TCRU Three Creeks R 6.35 59** Pn Pn 00 03 55.3 -1.1
**M02C Callahan 6.48 336** P Pn 00 03 58.8 +0.8
baz=154,SNR=35
**214A Organ Pipe Nat 6.51 121** Pn Pn 00 03 57.7 -0.7
**214A Organ Pipe Nat 6.51 121** P Pn 00 03 57.6 -0.8
baz=305
**WUAZ Wupatki 6.53 88** Pn Pn 00 03 59.4 +0.7
**WUAZ Wupatki 6.53 88** P Pn 00 03 59.8 +1.1
baz=273,SNR=26
**M04C Macdoel 6.56 344** P Pn 00 04 01.0 +1.9
baz=162,SNR=23
**X16A Lo Mia Camp, P 6.61 97** Pn Pn 00 03 59.3 -0.5
**YBH Yreka Blue Hor 6.74 338** Pn Pn 00 04 03.8 +2.1
comp=N,0.9nm,0.3s,baz=138,slow=7.4,SNR=43
YBH Sn Sn 00 05 25.1 +6.9
baz=148,slow=14,SNR=1.6
**DUG Dugway, Tooele 6.99 46** P Pn 00 04 07.2 +2.1
baz=230,SNR=28
**L04D Klamath Falls 7.08 342** Pn Pn 00 04 06.7 +0.4
**L04D Klamath Falls 7.08 342** P Pn 00 04 08.7 +2.4
baz=160,SNR=21
**K04D Chiloquin, OR 7.35 346** P Pn 00 04 12.3 +2.4
baz=165,SNR=8.3
**X18A Snowflake 7.79 94** Pn Pn 00 04 17.1 +1.0
**TUC Tucson 7.82 112** Pn Pn 00 04 14.7 -1.7
**TUC Tucson 7.82 112** P Pn 00 04 15.3 -1.1
baz=297
**W18A Petrified Fore 7.89 90** P Pn 00 04 19.9 +2.4
baz=276,SNR=12
**J05D Fort Rock, OR 7.90 350** P Pn 00 04 19.9 +2.3
baz=169,SNR=45
**K02D Willamette Mer 7.92 336** P Pn 00 04 20.7 +3.0
baz=154
**J04D Umpqua Nationa 8.01 346** P Pn 00 04 22.5 +3.4
baz=164,SNR=30
**J01E Myrtle Point 8.42 337** P Pn 00 04 27.9 +3.4
baz=154,SNR=9.2
**I04A Tendick Farm, 8.60 345** P Pn 00 04 30.7 +3.6
baz=163,SNR=28
**I03D Drain, OR 8.74 341** P Pn 00 04 33.0 +4.1
baz=158,SNR=29
**HLID Hailey 8.91 24** P Pn 00 04 35.5 +4.1
baz=207,SNR=36
**MVCO Mesa Verde 8.94 76** P Pn 00 04 34.8 +2.9
baz=263,SNR=18
**I05D Terrebonne, OR 8.95 351** P Pn 00 04 36.1 +4.2
baz=170,SNR=30
**I02E Swisshome, OR 9.25 340** P Pn 00 04 40.2 +4.3
baz=157,SNR=10
**H04D Lebanon 9.37 345** P Pn 00 04 41.6 +4.0
baz=163,SNR=8.3
**319A Douglas 9.38 113** Pn Pn 00 04 37.4 -0.5
**G05D Wamic, OR 9.84 352** P Pn 00 04 48.9 +4.9
baz=171,SNR=45
**O20A White River Ci 9.95 59** P Pn 00 04 50.8 +5.1
baz=246,SNR=19
**121A Cookes Peak, D 10.07 104** Pn Pn 00 04 47.6 +0.3
**121A Cookes Peak, D 10.07 104** P Pn 00 04 48.0 +0.7
baz=291,SNR=20
**G03D McMinnville, O 10.14 344** P Pn 00 04 50.7 +2.6
baz=162
**S22A 4UR Ranch, Cre 10.33 74** P Pn 00 04 54.4 +3.4
baz=262,SNR=11
**F05D White Salmon 10.49 352** P Pn 00 04 57.4 +4.5
baz=171,SNR=5.7
**BW06 Boulder Array 10.52 43** P Pn 00 04 57.1 +3.6
baz=230
**PDAR Pinedale Array 10.52 43** Pn Pn 00 04 57.6 +4.1
comp=N,0.3nm,0.3s,baz=230,slow=12,SNR=20
PDAR Lg Lg 00 07 50.2
comp=N,0.3nm,0.3s,baz=207,slow=16,SNR=1.0
PDAR LR LR 00 08 50.1
comp=N,478nm,18.7s,baz=238,slow=37
**PDAR Pinedale Array 10.52 43** Pn Pn 00 04 53.9 +0.4
**ANMO Albuquerque 10.59 89** Pn Pn 00 04 56.2 +1.8
comp=N,0.2nm,0.3s,baz=279,slow=12,SNR=24
ANMO Lg Lg 00 07 54.7
comp=N,0.1nm,0.3s,baz=168,slow=18,SNR=2.2
ANMO LR LR 00 09 33.3
comp=N,823nm,20.4s,baz=276,slow=41
**ANMO Albuquerque 10.59 89** P Pn 00 04 57.6 +3.2
baz=277
**E04D Cinebar 11.30 349** P Pn 00 05 06.7 +2.7
baz=167
**SDCO Great Sand Dun 11.37 75** P Pn 00 05 08.2 +2.9
baz=263,SNR=9.5
**BOZ Bozeman (W) 11.67 28** P Pn 00 05 14.0 +4.8
baz=213,SNR=55
**ISCO Idaho Springs 11.72 64** P Pn 00 05 13.0 +3.0
baz=253,SNR=9.8
**N23A Red Feather La 11.86 59** P Pn 00 05 15.8 +4.0
baz=247,SNR=16
**MSO Missoula 12.03 18** P Pn 00 05 17.9 +3.9
baz=202,SNR=19
**T25A Trinidad 12.18 78** P Pn 00 05 19.9 +3.6
baz=267,SNR=8.8
**K22A Casper 12.27 51** P Pn 00 05 21.5 +4.2
baz=239,SNR=20
**RLMT Red Lodge 12.31 36** P Pn 00 05 21.7 +3.7
baz=222
**D03D Eldon 12.34 348** P Pn 00 05 20.0 +1.9
baz=166
**NEW Newport 12.86 7** Pn Pn 00 05 29.0 +3.7
comp=N,1.3nm,0.3s,baz=184,slow=14,SNR=56
NEW Lg Lg 00 09 05.9
comp=N,0.1nm,0.3s,baz=252,slow=17,SNR=0.9
**NEW Newport 12.86 7** P Pn 00 05 28.8 +3.4
baz=188,SNR=58
**PGC Sidney 13.48 348** Pn Pn 00 05 33.1 -0.5
**MSTX Muleshoe 13.74 92** P P 00 05 41.7 -4.4
baz=281,SNR=8.5
**LPIG La Paz 13.81 143** LR LR 00 10 35.6
comp=N,807nm,18.8s,baz=334,slow=36
**WALA Waterton Lakes 14.13 15** Pn 00 05 45.9 +3.1
**EGMT Eagleton 14.41 27** P 00 05 50.1 -3.3
**EGMT Eagleton 14.41 27** P P 00 05 50.1 -3.3
baz=213,SNR=29
**AMTX Amarillo 14.49 87** P P 00 05 51.0 -3.3
**RSSD Black Hills 14.58 49** P Pn 00 05 50.7 +1.7
baz=239
**TX31 Lajitas Ar. Si 14.62 110** P P 00 05 53.3 -2.5
**TX32 Lajitas Array 14.62 110** P P 00 05 53.8 -2.1
**TXAR Lajitas Array 14.62 110** Pn Pn 00 05 51.2 +1.7
comp=N,0.6nm,0.3s,baz=289,slow=12,SNR=20
TXAR Sn Sn 00 08 32.4 +1.0
comp=N,0.2nm,0.3s,baz=296,slow=19,SNR=1.6
TXAR Lg Lg 00 10 00.9
baz=18,slow=21,SNR=1.5
TXAR LR LR 00 11 12.2
comp=N,256nm,18.6s,baz=294,slow=36
**TXAR Lajitas Array 14.62 110** P 00 05 54.4 -1.5
TXAR pP Pn 00 05 59.2 +10
**OGNE Ogallala 14.67 63** P P 00 05 54.0 -2.4
**OGNE Ogallala 14.67 63** P P 00 05 53.8 -2.5
baz=254,SNR=11
**LAO LASA Array 14.92 37** P P 00 05 56.5 -2.6
**LAO LASA Array 14.92 37** P Pn 00 05 55.8 +2.4
baz=226
**CBB Campbell River 15.16 345** P P 00 06 00.1 -1.5
CBB IAmb IAmb 00 06 24.5
comp=Z,54nm,1.1s
**LLLB Lillooet 15.21 354** P Pn 00 05 58.9 +1.7
**CBKS Cedar Bluff 16.00 72** P Pn 00 06 08.8 +1.2
CBKS IAmb IAmb 00 06 28.7
comp=Z,131nm,1.4s
**CBKS Cedar Bluff 16.00 72** P P 00 06 09.8 -1.3
baz=264,SNR=5.1
**U32A Winter Ranch, 16.53 81** P P 00 06 16.5 -0.4
U32A IAmb IAmb 00 06 27.8
comp=Z,137nm,1.4s
**ABTX Abilene, Hawle 16.60 94** P P 00 06 16.2 -1.6
ABTX IAmb IAmb 00 06 28.0
comp=Z,76nm,1.1s
**WMOK Wichita Mounta 16.87 87** P P 00 06 20.5 -0.3
baz=279,SNR=13
**DGMT Dagmar 17.14 36** P P 00 06 23.9 +0.3
baz=226,SNR=7.1
**JCT Junction City 17.16 101** P P 00 06 23.5 -0.5
baz=292,SNR=5.5
**BGNE Belgrade 17.62 64** P Pn 00 06 27.8 -0.2
**X34A Smith Ranch, M 17.66 87** P Pn 00 06 28.2 -0.4
X34A IAmb IAmb 00 06 47.6
comp=Z,107nm,1.4s
**BBB Bella Bella 17.80 342** P P 00 06 31.4 +0.6
comp=Z,0.4nm,0.3s,baz=353,slow=23,SNR=1.9
BBB LR LR 00 12 43.2
comp=Z,446nm,21.8s,baz=164,slow=35
**FNO Franklin 17.92 84** P 00 06 33.0 +0.7
**EDM Edmonton 18.22 12** P Pn 00 06 34.1 -1.2
EDM IAmb IAmb 00 06 49.4
comp=Z,64nm,0.9s
**833A Chaparral WMA, 18.40 107** P Pn 00 06 39.6 +2.0
baz=298,SNR=12
**KSU1 Kansas State U 18.45 72** P Pn 00 06 40.3 +2.0
baz=266,SNR=12
**TUL1 Leonard 19.15 82** P Pn 00 06 47.1 +0.3
baz=276,SNR=13
**MDND Maddock 19.18 44** P Pn 00 06 46.5 -0.4
**MDND Maddock 19.18 44** P Pn 00 06 46.6 -0.4
baz=237
**ECSD EROS Data Cent 19.32 58** P Pn 00 06 48.3 -0.5
**ECSD EROS Data Cent 19.32 58** P Pn 00 06 48.8 0.0
baz=253,SNR=26
**F33A 5 Mile Ranch, 20.26 52** P P 00 06 57.4 -0.5
**W39A Magazine 20.86 83** P Pn 00 07 06.0 -1.0
baz=278,SNR=15
**SCIA State Center 21.35 65** P P 00 07 10.9 +1.2
baz=261
**U40A Yellville 21.48 80** P P 00 07 11.8 +0.7
**U40A Yellville 21.48 80** P P 00 07 12.4 +1.3
baz=276,SNR=23
**AGMN Agassiz Nation 21.57 46** P P 00 07 10.7 -1.3
**AGMN Agassiz Nation 21.57 46** P P 00 07 11.7 -0.3
baz=242,SNR=13
**X40A Basin Creek Fa 21.75 85** P P 00 07 15.0 +0.9
baz=280,SNR=5.9
**F36A Milaca 22.08 54** P P 00 07 16.6 -0.9
F36A IAmb IAmb 00 07 38.5
comp=Z,30nm,0.9s
**W41B Gary Mavity, V 22.11 83** P P 00 07 19.2 +1.3
baz=279,SNR=17
**FCAR Ozark Folk Cen 22.11 81** P P 00 07 18.2 +0.3
FCAR IAmb IAmb 00 07 26.9
comp=Z,43nm,1.0s
**SPMN Marine on St. 22.37 56** P P 00 07 20.5 -0.1
**ULM Lac du Bonnet 22.54 42** P P 00 07 20.9 -1.5
comp=Z,12nm,0.7s,baz=235,slow=9.6,SNR=19
ULM LR LR 00 16 30.7
comp=Z,202nm,20.0s,baz=238,slow=38
**ULM Lac du Bonnet 22.54 42** P P 00 07 20.8 -1.5
ULM IAmb IAmb 00 07 37.0
comp=Z,22nm,0.8s
**CCM Cathedral Cave 22.64 75** P P 00 07 23.9 +0.3
baz=272
**FFC Flin Flon 22.69 27** P P 00 07 23.0 -0.9
FFC IAmb IAmb 00 07 36.1
comp=Z,33nm,1.0s
**L40A Anamosa 22.84 65** P P 00 07 25.6 -0.1
L40A IAmb IAmb 00 07 35.7
comp=Z,36nm,0.8s
**LCAR Lake Charles 22.87 80** P P 00 07 25.9 -0.1
LCAR IAmb IAmb 00 07 36.8
comp=Z,50nm,1.3s
**B35A Bob, Littlefor 22.88 48** P P 00 07 23.9 -2.0
**N41A Harden Midland 22.98 68** P P 00 07 27.7 +0.5
**PBMO Poplar Bluff 23.38 78** P P 00 07 30.9 -0.2
PBMO IAmb IAmb 00 07 40.8
comp=Z,24nm,0.9s
**I40A Norwalk 23.57 60** P P 00 07 32.7 -0.3
I40A IAmb IAmb 00 07 49.3
comp=Z,28nm,0.8s
**E38A The Farm, Brul 23.61 53** P P 00 07 32.5 -0.9
E38A IAmb IAmb 00 07 53.4
comp=Z,25nm,0.9s
**JFWS Jewell Farm 23.67 63** P P 00 07 32.7 -1.3
JFWS IAmb IAmb 00 07 54.0
comp=Z,21nm,0.8s
**JFWS Jewell Farm 23.67 63** P P 00 07 33.0 -1.0
baz=262,SNR=6.0
**DLBC Dease Lake 24.01 346** P P 00 07 38.4 +1.2
comp=Z,7.2nm,0.7s,baz=182,slow=12,SNR=13
DLBC LR LR 00 18 22.8
comp=Z,517nm,21.8s,baz=158,slow=40
**EYMN Ely 24.09 50** P P 00 07 36.4 -1.6
baz=249
**G40A Rib Lake 24.16 57** P P 00 07 37.6 -1.0
**S44A Carbondale 24.23 76** P P 00 07 39.8 +0.5
**Q44A Meyer Farm, Va 24.36 73** P P 00 07 39.9 -0.6
**OXF Oxford 24.53 84** P P 00 07 40.9 -1.1
baz=281,SNR=7.2
**W45A Hickory Valley 24.59 82** P P 00 07 43.0 +0.4
**COWI Conover 25.08 56** P P 00 07 47.6 +0.6
COWI IAmb IAmb 00 07 58.5
comp=Z,26nm,0.8s
**WVT Waverly 25.54 79** P P 00 07 51.2 0.0
baz=278
**H43A Windswept, Lux 25.69 60** P P 00 07 51.2 -1.3
H43A IAmb IAmb 00 08 04.0
comp=Z,20nm,0.8s
**T47A Sharon Grove 26.01 77** P P 00 07 55.8 +0.4
**P33M Teslin, Yukon 26.21 345** P P 00 07 57.9 +0.7
baz=155
**X48A Hartselle 26.45 83** P P 00 07 59.6 +0.1
X48A IAmb IAmb 00 08 10.4
comp=Z,14nm,0.7s
**LRAL Lakeview Retre 26.81 86** P P 00 08 02.7 0.0
LRAL IAmb IAmb 00 08 15.4
comp=Z,33nm,1.4s
**YKA Yellowknife Ar 27.18 5** P P 00 08 05.8 0.0
comp=Z,1.5nm,0.8s,baz=186,slow=8.7,SNR=16
TKL LR LR 00 20 29.4
comp=Z,205nm,18.7s,baz=332,slow=38
**YKA Yellowknife Ar 27.18 5** P P 00 08 05.0 -0.7
**V52A Sevierville 28.97 79** P P 00 08 21.8 -0.2
V52A IAmb IAmb 00 08 31.7
comp=Z,13nm,0.8s
**W50A Signal Mountai 27.71 81** P P 00 08 09.8 -1.1
**Z51A Franklin 28.22 84** P P 00 08 16.0 +0.6
**KMSC Kings Mountain 30.92 79** P P 00 08 38.9 -0.4
**CMIG Matias Romero 28.48 124** P P 00 08 19.6 +1.9
comp=Z,1.0nm,0.3s,baz=281,slow=9.9,SNR=2.6
CMIG LR LR 00 19 54.3
comp=Z,680nm,18.1s,baz=238,slow=37
**DAWY Dawson 31.09 343** P P 00 08 40.7 +0.2
DAWY IAmb IAmb 00 08 50.9
comp=Z,14nm,1.1s
**TKL Tuckaleechee C 28.86 79** P P 00 08 21.9 +0.9
comp=Z,4.0nm,0.8s,baz=192,slow=8.4,SNR=5.6
TKL LR LR 00 20 29.4
comp=Z,205nm,18.7s,baz=332,slow=38
**KDAK Kodiak Island 31.36 326** LR LR 00 19 14.1
comp=Z,521nm,18.2s,baz=172,slow=32
**I29M Ogilvie Camp, 31.96 345** P P 00 08 46.5 -1.5
**APG El Apazote 32.97 121** P P 00 08 59.9 +2.1
comp=Z,2.3nm,0.8s,baz=310,slow=19,SNR=3.0
APG LR LR 00 21 47.4
comp=Z,844nm,21.4s,baz=291,slow=35
**J25K Salcha River, 33.09 340** P P 00 08 57.5 -0.6
J25K IAmb IAmb 00 09 08.8
comp=Z,9.8nm,0.9s
**IL31 33.64 339** P P 00 09 03.5 +0.8
IL31 IAmb IAmb 00 09 11.4
comp=Z,18nm,1.3s
**ILAR Eielson Array 33.64 339** P P 00 09 04.3 +1.5
comp=Z,5.0nm,0.7s,baz=159,slow=8.2,SNR=55
**ILAR Eielson Array 33.64 339** P P 00 09 02.6 -0.2
**WRH Wood River Hil 33.78 338** P P 00 09 04.7 +0.6
WRH IAmb IAmb 00 09 14.9
comp=Z,18nm,1.0s
**INK Inuvik 33.81 351** P P 00 09 05.1 +0.9
comp=Z,2.5nm,0.6s,baz=155,slow=7.7,SNR=19
INK LR LR 00 23 02.7
comp=Z,477nm,19.2s,baz=161,slow=37
**INK Inuvik 33.81 351** P P 00 09 03.9 -0.3
INK IAmb IAmb 00 09 13.7
comp=Z,22nm,1.5s
**INK Inuvik 33.81 351** P P 00 09 04.7 +0.5
baz=159,SNR=7.1
**CCB Clear Creek Bu 33.82 338** P P 00 09 04.1 -0.2
CCB IAmb IAmb 00 09 14.8
comp=Z,12nm,1.2s
**I23K Minto, Yukon-K 34.65 338** P P 00 09 11.9 +0.4
I23K IAmb IAmb 00 09 20.4
comp=Z,15nm,1.1s
**MLY Manley 34.99 337** P P 00 09 14.7 +0.1
MLY IAmb IAmb 00 09 24.5
comp=Z,11nm,0.8s
**MLY Manley 34.99 337** P P 00 09 14.5 0.0
baz=132,SNR=7.6
**K20K Telida 35.06 333** P P 00 09 15.5 +0.3
**K20K Telida 35.06 333** P P 00 09 16.5 +1.3
baz=126,SNR=7.8
**I21K Tanana 35.49 337** P P 00 09 17.4 -1.3
**J20K Nowinta River 35.58 335** P P 00 09 20.1 +0.5
**H21K Melozitna Rive 36.06 337** P P 00 09 24.0 +0.3
H21K IAmb IAmb 00 09 34.0
comp=Z,16nm,0.8s
**IMAR Indian Mountai 36.57 337** P P 00 09 28.1 +0.1
**JTS Las Juntas de 40.10 120** LR LR 00 27 42.7
comp=Z,243nm,19.6s,baz=4.0,slow=38
**SCHQ Schefferville 40.65 45** P P 00 10 01.2 -1.3
comp=Z,3.1nm,0.8s,baz=274,slow=8.5,SNR=4.5
SCHQ LR LR 00 26 26.3
comp=Z,240nm,19.0s,baz=294,slow=36
**RDOG Red Dog Mine 40.70 337** P P 00 10 02.2 -0.4
**RES Resolute Bay 41.00 10** P P 00 10 05.2 +0.2
comp=Z,1.1nm,0.8s,baz=212,slow=11,SNR=3.5
**RES Resolute Bay 41.00 10** P P 00 10 03.4 -1.7
**FRB Frobisher Bay 41.67 31** LR LR 00 28 49.4
comp=Z,211nm,18.7s,baz=276,slow=38
**GAMB Gambell 42.31 329** P P 00 10 15.7 -0.1
**EUNU Eureka 46.50 7** P P 00 10 49.9 +0.6
EUNU IAmb IAmb 00 11 04.5
comp=Z,10nm,1.1s
**SHEM Shemya Is, Ala 48.96 312** LR LR 00 29 37.5
comp=Z,70nm,18.8s,baz=116,slow=33
**SJG San Juan 49.97 96** LR LR 00 37 26.6
comp=Z,123nm,18.4s,baz=270,slow=42
**NEEM North Greenlan 50.94 15** *i* P P 00 11 27.7 +3.9
NEEM IAmb IAmb 00 11 38.3
comp=Z,6.4nm,0.7s
**ROSC El Rosal 51.48 116** LR LR 00 35 51.0
comp=Z,112nm,19.1s,baz=328,slow=39
**SDV Santo Domingo 51.66 109** LR LR 00 34 35.0
comp=Z,181nm,21.6s,baz=301,slow=38
**ICESG Greenland Ices 53.71 26** *i* P P 00 11 49.8 +5.4
ICESG IAmb IAmb 00 12 05.5
comp=Z,5.6nm,0.8s
**SUMG Summit 53.84 22** *i* P P 00 11 50.1 +4.7
SUMG IAmb IAmb 00 12 24.6
comp=Z,3.8nm,0.7s
**DAG Danmarks Havn 58.15 15** *i* P P 00 12 16.0 +0.3
DAG IAmb IAmb 00 12 31.2
comp=Z,1.9nm,0.7s
**SEY Seymchan 58.29 327** P P 00 12 17.5 +0.6
comp=Z,5.7nm,0.2s,baz=76,slow=15,SNR=5.2
**PETK Petropavlovsk- 58.54 315** P P 00 12 18.5 -0.3
comp=Z,3.9nm,0.9s,baz=112,slow=11,SNR=3.6
**PETK Petropavlovsk- 58.54 315** P P 00 12 17.4 -1.4
**PPT Papeete 60.05 214** LR LR 00 31 44.4
comp=Z,56nm,21.9s,baz=20,slow=29
**MA2 Magadan 60.08 324** P P 00 12 24.5 -4.8
comp=Z,2.4nm,0.3s,baz=43,slow=13,SNR=5.4
**TIXI Tiksi 63.09 341** P P 00 12 48.6 -0.8
TIXI IAmb IAmb 00 12 57.5
comp=Z,8.4nm,1.2s
**JMIC Jan Mayen 63.20 20** LR LR 00 42 44.3
comp=Z,122nm,18.8s,baz=294,slow=38
**SPITS Spitsbergen Ar 63.56 9** LR LR 00 39 40.6
comp=Z,335nm,20.1s,baz=345,slow=35
**PTGA Pitinga 65.93 109** LR LR 00 43 42.5
comp=Z,141nm,21.6s,baz=302,slow=38
**MDP Montagnes des 68.16 100** LR LR 00 45 30.1
comp=Z,62nm,20.6s,baz=258,slow=38
**LPAZ La Paz 70.77 128** P P 00 13 37.5 -2.3
comp=Z,1.0nm,0.7s,baz=326,slow=6.5,SNR=2.3
**LPAZ La Paz 70.77 128** P P 00 13 36.7 -3.0
**ARCES ARCESS Array B 72.15 12** LR LR 00 49 13.3

comp=Z,171nm,18.1s,baz=328,slow=39
**PB01 IPOC Station P 73.46 132** P **P 00 13 55.6 +0.4**
**NRIK Noril'sk 73.60 350** P **P 00 13 57.4 +2.2**
comp=Z,1.6nm,0.5s,baz=24,slow=6.9,SNR=4.4
**NRIK Noril'sk 73.60 350** P **P 00 13 54.2 -1.0**
**KLR Kul'dur 74.72 320** LR LR 00 44 22.8
comp=Z,57nm,20.8s,baz=56,slow=34
**LVC Limon Verde 75.00 132** LR LR 00 41 26.8
comp=Z,50nm,20.9s,baz=311,slow=31
**SIV San Ignacio 75.28 122** LR LR 00 47 25.0
comp=Z,47nm,19.0s,baz=284,slow=36
**NOA NORSAR Array B 75.72 22** LR LR 00 47 53.3
comp=Z,137nm,18.5s,baz=320,slow=36
**HFS Hagfors 77.19 22** LR LR 00 49 45.7
comp=Z,170nm,18.2s,baz=308,slow=37
**MJAR Matsushiro Arr 78.38 307** P **P 00 14 25.9 +2.8**
comp=Z,1.1nm,0.4s,baz=49,slow=4.0,SNR=1.9
MJAR LR LR 00 43 02.5
comp=Z,55nm,21.3s,baz=58,slow=31
**BNX BinXian 79.20 319** ⇓P P 00 14 34.8 +7.4
BNX pmax pmax
comp=Z,18nm,0.9s
BNX pmax pmax
comp=Z,500nm,6.9s
**FINES FINESS Array B 79.39 16** P **P 00 14 29.0 +0.8**
comp=Z,4.5nm,1.0s,baz=354,slow=5.7,SNR=4.6
**FINES FINESS Array B 79.39 16** P **P 00 14 27.4 -0.8**
**KLMR Klimovskoe 82.44 10** P P 00 14 50.1 +5.7
KLMR AMP 00 15 07.3
comp=Z,14nm,1.3s
**KSRS Korea Array 84.29 312** P **P 00 14 57.6 +3.2**
comp=Z,1.2nm,0.7s,baz=48,slow=6.1,SNR=2.2
**ESDC Sonseca Array 84.41 44** P **P 00 14 57.7 +2.6**
ESDC LR LR 00 49 42.8
comp=Z,0.7nm,1.2s,baz=297,slow=4.9,SNR=1.7
ESDC LR LR 00 49 42.8
comp=Z,51nm,18.4s,baz=296,slow=34
**BDFB Brasilia 84.47 113** LR LR 00 58 34.1
comp=Z,82nm,18.8s,baz=328,slow=40
**KIRV Kirov 85.80 6** LR LR 00 57 44.0
comp=Z,94nm,18.7s,baz=344,slow=39
**GERES GERESS Array B 86.22 29** LR LR 00 53 45.7
comp=Z,158nm,19.4s,baz=296,slow=36
**OBN Obninsk 87.41 14** LR LR 00 55 23.4
comp=Z,33nm,18.1s,baz=352,slow=36
**SONM Songino Array 87.49 331** P **P 00 15 13.1 +2.8**
comp=Z,0.9nm,0.5s,baz=28,slow=4.3,SNR=4.7
SONM LR LR 00 54 13.5
comp=Z,115nm,19.3s,baz=40,slow=36
**HNR Honiara 87.92 257** LR LR 00 47 30.7
comp=Z,72nm,19.8s,baz=342,slow=31
**PLCA Paso Flores 88.14 145** P P 00 15 20.6 +7.4
PLCA LR LR 00 49 45.5
comp=Z,39nm,18.4s,baz=278,slow=32
**ARU Arti 88.41 1** LR LR 00 57 54.2
comp=Z,130nm,20.6s,baz=356,slow=38
**ZALV Zalesovo Beam 88.49 346** P **P 00 15 14.9 +0.2**
comp=Z,0.3nm,0.3s,baz=28,slow=6.5,SNR=1.9
ZALV LR LR 01 01 25.1
comp=Z,41nm,18.4s,baz=26,slow=40
**MDT Midelt 88.63 50** LR LR 00 53 03.4
comp=Z,58nm,18.3s,baz=316,slow=34
**AKASG Malin Array Be 89.81 19** P **P 00 15 20.1 -0.9**
comp=Z,0.1nm,0.2s,baz=332,slow=3.5,SNR=1.7
AKASG LR LR 00 57 14.8
comp=Z,117nm,18.6s,baz=350,slow=37
**HHC Hu-ho-hao-te 90.76 324** *e*P **P 00 15 27.5 +1.7**
HHC pmax pmax
comp=Z,8.0nm,1.1s
HHC pmax pmax
comp=Z,87nm,5.0s
**NJ2 Nanjing 93.41 314** *e*P **P 00 15 36.3 -1.7**
NJ2 pmax pmax
comp=Z,7.0nm,0.6s
**MLR Muntele Rosu 93.50 24** LR LR 01 00 36.2
comp=Z,208nm,18.5s,baz=334,slow=37
**AKTO Aktyubinsk 94.40 2** LR LR 01 03 56.0
comp=Z,103nm,18.3s,baz=3.7,slow=39
**VAE Valguarnera 95.67 35** LR LR 00 58 12.9
comp=Z,105nm,18.2s,baz=310,slow=35
**MKAR Makanchi Array 95.79 345** P **P 00 15 50.2 +1.5**
comp=Z,0.5nm,0.9s,baz=7.6,slow=2.5,SNR=3.6
MKAR LR LR 01 05 05.0
comp=Z,67nm,18.1s,baz=16,slow=39
**WMQ Urumqi 97.29 341** *e*P Pdif 00 15 56.6 +0.9
**PMG Port Moresby 98.19 264** LR LR 00 52 50.4
comp=Z,41nm,21.2s,baz=70,slow=31
**KBZ Khabaz 99.51 13** LR LR 01 04 39.9
comp=Z,68nm,18.2s,baz=337,slow=38
**JAY Jayapura 99.53 274** LR LR 00 53 53.3
comp=Z,37nm,20.0s,baz=16,slow=31
**WRA Warramunga Arr 114.28 262** PKP **PKiKP 00 21 02.8 +0.2**
comp=Z,0.4nm,0.7s,baz=54,slow=1.4,SNR=2.2
**ASAR Alice Springs 116.49 259** PKP **PKiKP 00 21 06.6 -0.2**
comp=Z,0.2nm,0.3s,baz=77,slow=2.3,SNR=1.8
**ASAR Alice Springs 116.49 259 PKPdf 00 21 04.6 -2.1**
**SUR Sutherland 146.98 96** PKPbc **PKPbc 00 22 04.1 -1.4**
**BOSA Boshof 149.37 87** PKPbc **PKPbc 00 22 11.1 -0.7**
comp=Z,1.8nm,0.9s,baz=263,slow=2.2,SNR=1.9
**BOSA Boshof 149.37 87** PKPbc **PKPdf 00 22 08.7 +1.3**

*KRNET **24** 00:03:20.1±0.1, 39.43N×77.74E, mb3.2*
*SOME **24** 00:03:21.8, 39.88N×77.25E, h10km*
**ISC 24 00:03:18.3**±2.1, **39.34N**±0.09×**77.70E**±0.06, **h17**km, **n40, σ2s54/62, 26C-6D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **2.38** | **2** | ⇑*e*P | **Pn** | | **00 03 56.8** | **-0.2** |
| TARG | baz=1.0 | | | ⇑*i*S | **Sn** | | **00 04 23.4** | **-2.6** |
| **KDJ** | **Kajisay** | **2.81** | **352** | ⇓*i*P | **Pn** | | **00 04 02.8** | **+0.1** |
| KDJ | baz=51 | | | ⇓*i*S | **Sn** | | **00 04 33.7** | **-2.5** |
| **ULHL** | **Ulahol** | **3.10** | **340** | P | **Pn** | | **00 04 08.8** | **+2.1** |
| **ULHL** | SNR=8.3 **Ulahol** | **3.10** | **340** | ⇑*e*P | **Pn** | | **00 04 06.9** | **+0.2** |
| ULHL | baz=38 | | | ⇑*i*S | **Sn** | | **00 04 41.1** | **-2.4** |
| **PRZ** | baz=38 **Przheval'sk** | **3.18** | **9** | ⇑*i*P | **Pn** | | **00 04 08.3** | **+0.5** |
| PRZ | baz=9.0 | | | ⇑*i*S | **Sn** | | **00 04 43.0** | **-2.4** |
| **BOOM** | baz=9.0 **Boomskoye usch** | **3.41** | **338** | ⇑*e*P | **Pn** | | **00 04 11.4** | **+0.5** |
| BOOM | baz=37 | | | ⇑*i*S | **Sn** | | **00 04 48.7** | **-2.4** |
| **ANVS** | baz=37 **Anan'yevo** | **3.44** | **360** | ⇑*i*P | **Pn** | | **00 04 11.4** | **+0.1** |
| ANVS | baz=59 | | | ⇑*i*S | **Sn** | | **00 04 48.7** | **-3.0** |
| **ARLS** | baz=59 **Aral** | **3.59** | **315** | ⇑*e*P | **Pn** | | **00 04 14.2** | **+0.8** |
| ARLS | baz=14 | | | ⇑*i*S | **Sn** | | **00 04 53.5** | **-2.0** |
| **TNSS** | baz=14 **Tian-Shan** | **3.73** | **352** | *e*P | Pn | | 00 04 20.1 | +4.6 |
| TNSS | 8.0nm,0.8s 12nm,1.7s | | | *e*S | **Sn** | | **00 05 02.1** | **+2.8** |
| **SATY** | **Saty** | **3.75** | **8** | *e*P | **Pb** | | **00 04 21.7** | **-2.5** |
| SATY | 7.5nm,0.7s 13nm,0.6s | | | *e*S | **Sb** | | **00 05 04.6** | **-4.8** |
| **UCH** | **Uchtor** | **3.76** | **321** | P | **Pn** | | **00 04 17.0** | **+1.1** |
| **UCH** | SNR=7.7 **Uchtor** | **3.76** | **321** | ⇑*e*P | **Pn** | | **00 04 16.7** | **+0.8** |
| UCH | baz=20 | | | ⇑*e*S | **Sn** | | **00 04 58.0** | **-2.0** |
| **MDOK** | baz=20 **Medeo** | **3.85** | **353** | *e*P | Pn | | 00 04 22.3 | +5.4 |
| MDOK | 5.1nm,0.8s 23nm,0.7s | | | *e*S | **Sn** | | **00 05 05.7** | **+3.9** |
| **MDOK** | **Medeo** | **3.85** | **353** | Pn | **Pn** | | **00 04 17.7** | **+0.9** |
| MDOK | 7.7nm,1.0s 25nm,0.7s | | | Lg | Lg | | 00 05 05.1 | |
| **ZHN** | **Zhinishke** | **3.86** | **8** | *e*P | **Pb** | | **00 04 24.4** | **-1.6** |
| ZHN | 2.9nm,0.2s 13nm,0.3s | | | *e*S | **Sb** | | **00 05 09.1** | **-3.4** |
| **MTBS** | **Maitube** | **3.90** | **346** | *e*P | Pn | | 00 04 21.8 | +4.2 |
| MTBS | 2.1nm,0.4s | | | *e*S | **Sn** | | **00 05 04.7** | **+1.7** |
| | 9.2nm,0.8s | | | | | | | |
| **KBK** | **Karagaybulak** | **3.91** | **329** | P | **Pn** | | **00 04 19.4** | **+1.6** |
| **KBK** | SNR=12 **Karagaybulak** | **3.91** | **329** | ⇑*i*P | **Pn** | | **00 04 18.5** | **+0.8** |
| KBK | baz=28 | | | ⇑*i*S | **Sn** | | **00 05 00.9** | **-2.4** |
| **TKM2** | baz=28 **Tokmak 2** | **3.91** | **337** | ⇑Pn | **Pn** | | **00 04 18.8** | **+1.1** |
| TKM2 | 1.1nm,0.3s 5.3nm,0.6s | | | ⇑Lg | Lg | | 00 05 06.5 | |
| **TKM2** | **Tokmak 2** | **3.91** | **337** | ⇑*i*P | **Pn** | | **00 04 18.5** | **+0.7** |
| TKM2 | baz=36 | | | ⇑*i*S | **Sn** | | **00 05 00.8** | **-2.6** |
| **KOTS** | baz=36 **Kotyrbulak** | **3.91** | **354** | *e*P | **Pb** | | **00 04 23.9** | **-3.1** |
| KOTS | 4.3nm,0.3s 54nm,0.7s | | | *e*S | **Sn** | | **00 05 08.1** | **+4.8** |
| **UZB** | **Uzynbulak** | **3.93** | **14** | *e*P | **Pb** | | **00 04 25.4** | **-1.8** |
| UZB | 7.6nm,0.4s 5.5nm,0.6s | | | *e*S | **Sb** | | **00 05 10.7** | **-3.8** |
| **AAK** | **Ala-Archa** | **4.08** | **325** | P | Pn | | 00 04 26.2 | +6.1 |
| **AAK** | SNR=6.0 **Ala-Archa** | **4.08** | **325** | ⇓Pn | **Pn** | | **00 04 21.0** | **+0.8** |
| AAK | 3.2nm,0.5s 23nm,1.1s | | | ⇓Lg | Lg | | 00 05 11.3 | |
| **AAK** | **Ala-Archa** | **4.08** | **325** | ⇑*i*P | **Pn** | | **00 04 21.0** | **+0.8** |
| AAK | baz=24 baz=24 | | | ⇑*i*S | **Sn** | | **00 05 05.1** | **-2.5** |
| **AML** | **Almayashu** | **4.12** | **314** | P | **Pn** | | **00 04 22.3** | **+1.4** |
| **DGS** | SNR=18 **Degees** | **4.16** | **340** | *e*P | Pb | | 00 04 27.5 | -3.5 |
| DGS | 5.4nm,0.6s 5.6nm,0.8s | | | *e*S | **Sn** | | **00 05 14.1** | **+4.8** |
| **KURS** | **Kuram** | **4.16** | **5** | *e*P | **Pb** | | **00 04 29.4** | **-1.6** |
| KURS | 8.7nm,0.9s 8.5nm,0.8s | | | *e*S | **Sb** | | **00 05 17.7** | **-3.2** |
| **KPKS** | **Kokpek** | **4.18** | **10** | *e*P | **Pb** | | **00 04 30.5** | **-1.0** |
| KPKS | 4.8nm,0.6s 10nm,0.6s | | | *e*S | **Sb** | | **00 05 19.8** | **-2.0** |
| **KTBS** | **Karatobe** | **4.43** | **350** | *e*P | **Pb** | | **00 04 32.6** | **-3.1** |
| KTBS | 1.9nm,0.5s 13nm,1.1s | | | *e*S | **Sb** | | **00 05 23.1** | **-5.7** |
| **EKS2** | **Erkin-Say** | **4.45** | **319** | P | **Pn** | | **00 04 26.9** | **+1.8** |
| **EKS2** | SNR=18 **Erkin-Say** | **4.45** | **319** | ⇑*e*P | **Pn** | | **00 04 26.1** | **+1.0** |
| EKS2 | baz=18 | | | ⇑*e*S | **Sn** | | **00 05 14.0** | **-2.5** |
| **CHKK** | **Chushkaly** | **4.54** | **354** | *e*P | **Pb** | | **00 04 35.2** | **-2.3** |
| CHKK | 2.1nm,0.5s 18nm,0.5s | | | *e*S | **Sb** | | **00 05 27.4** | **-4.5** |
| **USP** | **Ospenovka** | **4.60** | **329** | P | Sg | | 00 05 27.4 | -19 |
| **USP** | SNR=8.2 **Ospenovka** | **4.60** | **329** | ⇓*i*P | **Pn** | | **00 04 27.9** | **+0.8** |
| USP | baz=29 baz=29 | | | ⇓*i*S | **Sn** | | **00 05 16.9** | **-3.2** |
| **SGDS** | **Sogindy** | **4.71** | **332** | *e*P | Pb | | 00 04 36.6 | -3.8 |
| SGDS | 1.2nm,0.3s 4.4nm,0.6s | | | *e*S | Sn | | 00 05 30.2 | +7.4 |
| **BLB** | **Baldybastay** | **4.79** | **7** | *e*P | **Pb** | | **00 04 40.9** | **-0.9** |
| BLB | 5.7nm,0.7s 5.4nm,0.5s | | | *e*S | **Sb** | | **00 05 37.3** | **-1.8** |
| **MRKS** | **Merke** | **4.79** | **317** | *e*P | **Pb** | | **00 04 39.5** | **-2.4** |
| MRKS | 2.7nm,0.5s 4.7nm,0.5s | | | *e*S | **Sb** | | **00 05 35.0** | **-4.3** |
| **ARXS** | **Arharly** | **4.87** | **1** | *e*P | **Pb** | | **00 04 42.0** | **-1.1** |
| ARXS | 4.6nm,0.4s 7.4nm,0.4s | | | *e*S | **Sb** | | **00 05 39.4** | **-2.0** |
| **TRKS** | **Terek-Say** | **5.46** | **296** | ⇑*i*P | **Pn** | | **00 04 39.5** | **+0.5** |
| TRKS | baz=94 baz=94 | | | ⇑*i*S | **Sn** | | **00 05 37.9** | **-3.6** |

**EAF 24 00:12:23.6**±5.3, **3.65S×35.76E, h12**km±129km, **MD4.4, Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BBAT** | **Babati** | **0.55** | **180** | *i*P | Pg | | 00 12 34.9 | +0.4 |
| BBAT | | | | *i*S | Sg | | 00 12 42.1 | +0.3 |
| **KOND** | **Kondoa** | **1.25** | **179** | *i*P | Pn | | 00 12 45.6 | -1.5 |
| KOND | | | | *i*S | Sb | | 00 13 00.9 | -2.6 |
| **SINGT** | **Singida** | **1.54** | **221** | *i*P | Pn | | 00 12 50.6 | -0.5 |
| SINGT | | | | *i*S | Sn | | 00 13 09.5 | -1.6 |
| **MBAR** | **Mbarara** | **5.86** | **301** | *e*P | Pn | | 00 13 50.9 | +0.4 |
| MBAR | | | | *e*S | Sn | | 00 14 53.2 | -4.6 |

*IDC **24** 00:15:57.6±1.7, 43.65N×105.48W, h0km, mb1 3.6/4, mb1mx3.4/46, mbtmp3.3/4, ML3.0/3, Error ellipse: s-maj=43.4km s-min=9.1km az=149.0*
*NEIC **24** 00:15:58.8±1.5, 43.71N±0.05×105.28W±0.04, h0km±2km, ML3.1/54, Error ellipse: s-maj=9.2km s-min=4.2km az=339.0*
**ISC 24 00:15:58.0**±1.0, **43.70N**±0.06×**105.25W**±0.07, **h0**km, **n62, σ0s88/61, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.97** | **64** | | Pg | **Pb** | **00 16 17.8** | **-0.1** |
| **K22A** | **Casper** | **1.40** | **222** | | Pn | **Pn** | **00 16 23.5** | **-1.5** |
| K22A | comp=E,362nm,0.3s | | | | IAML | | 00 16 45.4 | |
| K22A | comp=N,419nm,0.3s | | | | IAML | | 00 16 47.9 | |
| **PHWY** | **Pilot Hill** | **2.40** | **184** | | | **Pn** | **00 16 39.4** | **+0.6** |
| PHWY | comp=N,83nm,0.3s | | | | IAML | | 00 17 13.9 | |
| **RWWY** | **Rawlins** | **2.47** | **216** | | Pn | **Pn** | **00 16 41.1** | **+1.4** |
| RWWY | comp=N,134nm,0.6s | | | | IAML | | 00 17 17.7 | |
| **N23A** | **Red Feather La** | **2.85** | **191** | | Pn | **Pn** | **00 16 46.3** | **+1.3** |
| N23A | comp=E,75nm,0.3s | | | | IAML | | 00 17 27.7 | |
| **LAO** | **LASA Array** | **3.07** | **347** | | Pn | **Pn** | **00 16 47.9** | **0.0** |
| **RLMT** | **Red Lodge** | **3.21** | **298** | | Pn | **Pn** | **00 16 50.5** | **+0.6** |
| RLMT | comp=E,37nm,0.6s | | | | IAML | | 00 17 46.8 | |
| RLMT | comp=E,35nm,0.4s | | | | IAML | | 00 17 48.2 | |
| **BW06** | **Boulder Array** | **3.29** | **255** | | Pn | **Pn** | **00 16 51.0** | **+0.1** |
| BW06 | comp=E,51nm,0.5s | | | | IAML | | 00 17 39.1 | |
| BW06 | comp=E,33nm,0.3s | | | | IAML | | 00 17 40.9 | |
| **PD31** | **Pinedale Array** | **3.29** | **255** | | Pn | **Pn** | **00 16 51.3** | **+0.4** |
| **PDAR** | **Pinedale Array** | **3.29** | **255** | | Pn | **Pn** | **00 16 51.2** | **+0.3** |
| PDAR | comp=E,5.8nm,0.3s,baz=75,slow=18,SNR=70 | | | | Lg | Lg | 00 17 34.8 | |
| **PDAR** | comp=E,9.9nm,0.3s,baz=74,slow=29,SNR=1.6 **Pinedale Array** | **3.29** | **255** | | Pn | **Pn** | **00 16 51.0** | **+0.1** |
| **OGNE** | **Ogallala** | **3.64** | **138** | | Pn | **Pn** | **00 16 56.7** | **+1.1** |
| **YMP** | **Mirror Lake PI** | **3.68** | **288** | | Pn | **Pn** | **00 16 57.5** | **+1.1** |
| YMP | comp=E,50nm,0.7s | | | | IAML | | 00 18 02.2 | |
| **GCMT** | **Greycliff** | **3.78** | **305** | | Pn | **Pn** | **00 16 58.4** | **+0.7** |
| **LKWY** | **Lake** | **3.81** | **285** | | Pn | **Pn** | **00 17 00.1** | **+2.0** |
| LKWY | comp=E,26nm,1.4s | | | | IAML | | 00 18 07.6 | |
| **LOHW** | **Long Hollow** | **3.89** | **271** | | Pn | **Pn** | **00 17 00.8** | **+1.6** |
| **ISCO** | **Idaho Springs** | **3.90** | **184** | | Pn | **Pn** | **00 17 00.3** | **+0.8** |
| **H17A** | **Grant Village** | **3.91** | **282** | | | **Pn** | **00 17 01.1** | **+1.6** |
| H17A | comp=E,20nm,0.7s | | | | IAML | | 00 18 04.1 | |
| **FLWY** | **Flagg Ranch** | **3.96** | **277** | | Pn | **Pn** | **00 16 59.9** | **-0.3** |
| FLWY | comp=E,24nm,2.2s | | | | IAML | | 00 18 09.0 | |
| FLWY | comp=E,23nm,0.8s | | | | IAML | | 00 18 11.1 | |
| **MOOW** | **Moose Ponds** | **3.99** | **273** | | Pn | **Pn** | **00 17 00.9** | **+0.3** |
| **REDW** | **Red Top Meadow** | **4.09** | **267** | | Pn | **Pn** | **00 17 02.9** | **+1.0** |
| REDW | comp=E,24nm,0.9s | | | | IAML | | 00 18 09.0 | |
| REDW | comp=E,32nm,0.7s | | | | IAML | | 00 18 16.9 | |
| **TPAW** | **Teton Pass** | **4.15** | **269** | | Pn | **Pn** | **00 17 02.7** | **-0.1** |
| TPAW | comp=E,20nm,1.8s | | | | IAML | | 00 18 15.9 | |
| TPAW | comp=E,16nm,0.8s | | | | IAML | | 00 18 21.3 | |
| **YHH** | **Holmes Hill** | **4.17** | **287** | | Pn | **Pn** | **00 17 02.7** | **-0.5** |
| **O20A** | **White River Ci** | **4.20** | **213** | | Pn | **Pn** | **00 17 03.5** | **0.0** |
| O20A | comp=E,31nm,1.3s | | | | IAML | | 00 18 19.0 | |
| O20A | comp=N,34nm,2.5s | | | | IAML | | 00 18 23.1 | |
| **YMR** | **Madison River** | **4.23** | **285** | | Pn | **Pn** | **00 17 03.2** | **-0.7** |
| YMR | comp=E,28nm,1.0s | | | | IAML | | 00 18 19.2 | |
| YMR | comp=N,27nm,0.9s | | | | IAML | | 00 18 19.2 | |
| **E28A** | **Huff** | **4.32** | **47** | | Pn | **Pn** | **00 17 05.7** | **+0.8** |
| **RDMU** | **Red Mountain** | **4.48** | **227** | | Pn | **Pn** | **00 17 07.4** | **0.0** |
| RDMU | comp=E,20nm,0.7s | | | | IAML | | 00 18 24.9 | |
| RDMU | comp=N,17nm,3.7s | | | | IAML | | 00 18 28.9 | |
| **DGMT** | **Dagmar** | **4.83** | **8** | | Pn | **Pn** | **00 17 13.4** | **+1.4** |
| **BOZ** | **Bozeman (W)** | **4.94** | **295** | | Pn | **Pn** | **00 17 12.6** | **-0.9** |
| BOZ | comp=N,12nm,3.5s | | | | IAML | | 00 18 35.8 | |
| BOZ | comp=N,12nm,3.9s | | | | IAML | | 00 18 41.2 | |
| **HWUT** | **Hardware Ranch** | **5.11** | **248** | | Pn | **Pn** | **00 17 15.2** | **-0.7** |
| HWUT | comp=N,13nm,0.6s | | | | IAML | | 00 18 40.2 | |
| HWUT | comp=N,17nm,0.6s | | | | IAML | | 00 18 46.4 | |
| **EGMT** | **Eagleton** | **5.35** | **326** | | Pn | **Pn** | **00 17 19.5** | **+0.3** |
| **P18A** | **Preston Nutter** | **5.53** | **224** | | Pn | **Pn** | **00 17 21.8** | **0.0** |
| **LRM** | **Limekiln Ridge** | **5.55** | **295** | | Pn | **Pn** | **00 17 21.4** | **-0.7** |
| **PV07** | **Paradox Valley** | **5.85** | **207** | | Pn | **Pn** | **00 17 26.7** | **+0.6** |
| **HVU** | **Hansel Valley** | **5.87** | **254** | | Pn | **Pn** | **00 17 26.2** | **-0.1** |
| **P17A** | **Butcher Ranch,** | **5.89** | **226** | | Pn | **Pn** | **00 17 26.4** | **-0.3** |
| **PV11** | **David Mesa, Pa** | **6.05** | **208** | | Pn | **Pn** | **00 17 28.4** | **-0.5** |
| **SRU** | **San Rafael Swe** | **6.06** | **223** | | Pn | **Pn** | **00 17 28.6** | **-0.4** |
| **PV13** | **Radium Mtn., P** | **6.16** | **207** | | Pn | **Pn** | **00 17 30.7** | **+0.3** |
| **ECSD** | **EROS Data Cent** | **6.26** | **87** | | Pn | **Pn** | **00 17 32.4** | **+0.9** |
| **TMUT** | **Trail Mountain** | **6.27** | **228** | | Pn | **Pn** | **00 17 31.9** | **-0.2** |
| **NLU** | **North Lily Min** | **6.32** | **236** | | Pn | **Pn** | **00 17 32.9** | **+0.3** |
| **BGU** | **Big Grassy Mou** | **6.40** | **247** | | Pn | **Pn** | **00 17 34.6** | **+1.0** |
| **DUG** | **Dugway, Tooele** | **6.64** | **241** | | Pn | **Pn** | **00 17 36.4** | **-0.5** |
| **HLID** | **Hailey** | **6.66** | **272** | | Pn | **Pn** | **00 17 39.7** | **+2.6** |
| **F33A** | **5 Mile Ranch,** | **6.72** | **68** | | Pn | **Pn** | **00 17 39.1** | **+1.2** |
| **MSO** | **Missoula** | **6.89** | **300** | | Pn | **Pn** | **00 17 40.6** | **+0.3** |
| **MSU** | **Marysvale** | **7.36** | **228** | | Pn | **Pn** | **00 17 48.0** | **+1.1** |
| **JTMT** | **Jette** | **7.51** | **306** | | Pn | **Pn** | **00 17 49.7** | **+0.8** |
| **MTPU** | **Mount Pierson** | **7.71** | **225** | | Pn | **Pn** | **00 17 51.8** | **-0.1** |
| **AGMN** | **Agassiz Nation** | **7.99** | **52** | | Pn | **Pn** | **00 17 55.0** | **-0.3** |
| **PKCU** | **Pink Cliffs** | **8.24** | **223** | | Pn | **Pn** | **00 17 60.0** | **+1.0** |
| **F36A** | **Milaca** | **8.62** | **71** | | Pn | **Pn** | **00 18 04.8** | **+0.9** |
| **CCUT** | **Cedar City** | **8.70** | **228** | | Pn | **Pn** | **00 18 06.7** | **+1.4** |
| **U15A** | **North Rim** | **9.04** | **219** | | Pn | **Pn** | **00 18 10.2** | **+0.2** |
| **I10CA** | **LAC DU BONNET** | **9.06** | **41** | *i* | | | 01 16 00.0 | |
| **ULM** | baz=223,slow=331,SNR=2.6 **Lac du Bonnet** | **9.16** | **41** | | Pn | **Pn** | **00 18 10.7** | **-0.6** |
| ULM | comp=N,2.2nm,0.3s,baz=233,slow=12,SNR=13 | | | | Lg | Lg | 00 20 44.3 | |
| **ULM** | comp=N,0.3nm,0.3s,baz=234,slow=19,SNR=2.9 **Lac du Bonnet** | **9.16** | **41** | | | **Pn** | **00 18 10.5** | **-0.8** |
| **B35A** | **Bob, Littlefor** | **9.27** | **56** | | Pn | **Pn** | **00 18 12.7** | **-0.1** |
| **EYMN** | **Ely** | **10.49** | **61** | | Pn | **Pn** | **00 18 29.1** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **11.17** | **246** | | Pn | **Pn** | **00 18 39.2** | **+0.1** |
| **YKA** | comp=N,0.1nm,0.3s,baz=65,slow=11,SNR=2.7 **Yellowknife Ar** | **19.61** | **347** | | P | **Pn** | **00 20 28.0** | **-0.8** |
| | comp=N,0.1nm,0.3s,baz=158,slow=12,SNR=2.7 | | | | | | | |

*IDC **24** 00:20:33.5±0.8, 55.30N×163.14E, h0km, mb3.6/14, mb1 3.9/15, mb1mx3.6/53, mbtmp3.6/15, ML2.7/1, Error ellipse: s-maj=26.2km s-min=15.0km az=141.0*
**ISC 24 00:20:38.1**±0.8, **55.4N**±0.1×**163.2E**±0.1, **h30**km, **n21, σ1s02/17, mb3.6**/14, **Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **3.91** | **237** | | Pn | **Pn** | **00 21 35.9** | **-0.3** |
| PETK | 2.5nm,0.3s,baz=67,slow=15,SNR=37 | | | | Sn | **Sn** | **00 22 23.2** | **+2.2** |
| **TIXI** | 1.9nm,0.3s,baz=77,slow=22,SNR=4.1 **Tiksi** | **21.87** | **331** | P | P | **P** | **00 25 29.5** | **+1.5** |
| **MJAR** | 1.1nm,0.4s,baz=91,slow=23,SNR=4.8 **Matsushiro Arr** | **25.36** | **233** | P | P | **P** | **00 26 02.4** | **0.0** |
| **ILAR** | 0.3nm,0.3s,baz=22,slow=6.1,SNR=1.6 **Eielson Array** | **25.96** | **49** | P | P | **P** | **00 26 06.5** | **-1.0** |
| **INK** | 0.2nm,0.6s,baz=257,slow=8.2,SNR=1.4 **Inuvik** | **30.98** | **40** | P | P | **P** | **00 26 53.4** | **+1.2** |
| **SONM** | 0.9nm,0.9s,baz=282,slow=9.3,SNR=4.6 **Songino Array** | **35.17** | **282** | P | P | **P** | **00 27 28.9** | **-0.2** |
| **H11N2** | 0.2nm,0.6s,baz=63,slow=10,SNR=2.6 **WAKE ISLAND Hy** | **35.67** | **174** | T | T | | 01 06 52.1 | |
| **H11N3** | baz=359,slow=76,SNR=22 **WAKE ISLAND Hy** | **35.68** | **174** | T | T | | 01 06 59.8 | |
| **H11N1** | baz=359,slow=76,SNR=17 **WAKE ISLAND Hy** | **35.69** | **174** | T | T | | 01 07 01.7 | |
| **H11S1** | baz=359,slow=76,SNR=20 **WAKE ISLAND Hy** | **36.87** | **174** | T | T | | 01 08 25.2 | |
| **H11S3** | baz=3.4 **WAKE ISLAND Hy** | **36.88** | **174** | T | T | | 01 08 25.9 | |
| **H11S2** | baz=3.4 **WAKE ISLAND Hy** | **36.89** | **174** | T | T | | 01 08 31.7 | |
| **YKA** | baz=3.4 **Yellowknife Ar** | **40.29** | **45** | P | P | **P** | **00 28 12.1** | **+0.1** |
| YKA | 0.6nm,0.6s,baz=299,slow=8.0,SNR=8.5 | | | | PcP | **PcP** | **00 30 15.6** | **+0.6** |
| **MKAR** | 0.1nm,0.3s,baz=280,slow=9.0,SNR=1.3 **Makanchi Array** | **48.80** | **296** | P | P | **P** | **00 29 19.0** | **-1.2** |
| **PDAR** | 0.2nm,0.5s,baz=52,slow=7.0,SNR=5.1 **Pinedale Array** | **54.88** | **64** | P | P | **P** | **00 30 06.5** | **+0.7** |
| **FINES** | 0.1nm,0.3s,baz=341,slow=5.2,SNR=3.2 **FINESS Array B** | **58.75** | **337** | P | P | **P** | **00 30 32.5** | **0.0** |
| **CMAR** | 2.0nm,1.0s,baz=23,slow=6.2,SNR=4.2 **Chiang Mai Arr** | **60.39** | **259** | P | P | **P** | **00 30 43.7** | **-0.8** |
| **AKASG** | 1.2nm,0.3s,baz=37,slow=7.9,SNR=1.7 **Malin Array Be** | **67.58** | **330** | P | P | **P** | **00 31 30.5** | **-0.8** |
| **WRA** | 0.6nm,0.4s,baz=24,slow=5.5,SNR=2.5 **Warramunga Arr** | **78.90** | **208** | P | P | **P** | **00 32 37.6** | **-0.7** |
| **FITZ** | 0.3nm,0.7s,baz=17,slow=5.8,SNR=1.4 **Fitzroy Crossi** | **79.78** | **216** | P | P | **P** | **00 32 43.5** | **+0.4** |
| **ASAR** | 1.1nm,0.9s,baz=0.0,slow=14,SNR=1.9 **Alice Springs** | **82.57** | **207** | P | P | **P** | **00 32 57.0** | **-0.9** |
| | 0.2nm,0.3s,baz=19,slow=5.4,SNR=1.9 | | | | | | | |

*IDC **24** 00:38:06.3±0.7, 11.84N×87.04W, h0km, mb4.2/13, mb1 4.3/16, mb1mx4.1/54, mbtmp4.2/16, ML3.2/5, MS3.4/12, Ms1 3.4/12, ms1mx3.1/64, Error ellipse: s-maj=31.0km s-min=11.1km az=45.0*
*INET **24** 00:38:10.0±0.7, 11.50N×87.36W, h15km±22km, ML4.2*
*UCR **24** 00:38:10.4±1.8, 11.49N×87.47W, h36km±14km, ML3.7, MW4.1, mb4.6(NEIC)*
*NEIC **24** 00:38:12.6±1.7, 11.63N±0.05×87.22W±0.06, h40km±6km, mb4.6/118, Error ellipse: s-maj=9.3km s-min=7.3km az=65.0*
**ISC 24 00:38:10.1**±1.5, **11.62N**±0.05×**87.30W**±0.05, **h31**km±10km, **n260, σ1s24/265, mb4.5**/70, **MS3.3**/11, **3C, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **COPN** | **Copaltepe** | **0.89** | **51** | *i*P | P | **Pn** | **00 38 28.6** | **+2.1** |
| **TEL3** | **Telica 3** | **1.05** | **25** | *e*P | | **Pb** | **00 38 30.7** | **+0.9** |
| **CNGN** | **Cerro Negro** | **1.06** | **34** | | | **Pb** | **00 38 30.7** | **+0.8** |
| CNGN | | | | | Sn | **Sn** | **00 38 39.2** | **-3.3** |
| **CNGN** | **Cerro Negro** | **1.06** | **34** | *i*P | P | **Pb** | **00 38 30.8** | **+0.9** |
| **MOMN** | **Momotombo** | **1.08** | **43** | *i*P | P | **Pb** | **00 38 31.0** | **+0.7** |
| **CRIN** | **San Cristobal** | **1.10** | **13** | | | **Pb** | **00 38 31.6** | **+0.8** |
| **CRIN** | **San Cristobal** | **1.10** | **13** | ⇑*i*P | | **Pb** | **00 38 31.7** | **+1.0** |
| **TISN** | **Laguna Tiscapa** | **1.13** | **62** | *e*P | | **Pb** | **00 38 30.3** | **-0.9** |
| **MGAN** | **Managua** | **1.16** | **63

MATN Matagalpa 1.87 46 Pb 00 38 42.0 -1.8
MATN Matagalpa 1.87 46 *i* P Pb 00 38 41.9 -1.8
HZTE Horizontes, Gu 1.89 118 Pn Pn 00 38 40.8 +0.4
HZTE Horizontes, Gu 1.89 118 *eP* Pn 00 38 40.8 +0.4
BUEV Buena Vista 2.02 113 *i* P Pn 00 38 42.6 +0.4
VSM San Miguel 2.04 332 *eP* Pn 00 38 43.6 +1.0
VSM IAML 00 39 28.1
comp=Z,2µm,0.4s
VSM San Miguel 2.04 332 *eP* Pn 00 38 43.6 +1.0
VSM IAML 00 39 28.1
comp=Z,2µm,0.4s
LCY Lacayo 2.04 332 IAML 00 39 22.3
comp=Z,652nm,0.4s
LCY Lacayo 2.04 332 IAML 00 39 22.3
comp=Z,652nm,0.4s
RANC El Ranchito 2.05 332 *eP* Pn 00 38 43.2 +0.5
RANC IAML 00 39 27.4
comp=Z,1µm,0.5s
RANC El Ranchito 2.05 332 *eP* Pn 00 38 43.2 +0.5
RANC IAML 00 39 27.4
comp=Z,1µm,0.5s
BUAI Buenos Aires 2.06 111 *i* P Pn 00 38 43.5 +0.9
GPS2 Hotel Rincn d 2.09 114 *i* P Pn 00 38 43.8 +0.7
PACA Pacayal 2.10 332 *eP* Pn 00 38 44.9 +1.6
PACA Pacayal 2.10 332 *eP* Pn 00 38 44.9 +1.6
PACA Pacayal 2.10 332 *eP* Pn 00 38 44.9 +1.6
ACON Acoyapa 2.11 80 Pn 00 38 43.8 +0.5
ORTG Ortega, Santa 2.19 124 Pn 00 38 45.1 +0.5
ORTG Ortega, Santa 2.19 124 *eP* Pn 00 38 44.8 +0.2
GUAI GUAI 2.21 127 *i* P Pn 00 38 45.1 +0.4
COEB Comit de Eme 2.23 327 *eP* Pn 00 38 45.6 +0.6
COEB IAML 00 39 17.8
comp=Z,588nm,0.5s
COEB Comit de Eme 2.23 327 *eP* Pn 00 38 45.6 +0.6
COEB IAML 00 39 17.8
comp=Z,588nm,0.5s
COLC Colonia 2.26 114 *i* P Pn 00 38 46.4 +1.0
HORNC Hornillas 2.26 113 *i* P Pn 00 38 46.5 +1.0
VMAR Armenia, Volca 2.28 110 *eS* Sb 00 39 17.9 -0.6
CUI Cuipilapa 2.30 114 *i* P Pn 00 38 46.4 +0.4
CUI *i* S Sn 00 39 15.8 +2.5
DUNO Dulce Nombre, 2.34 131 Pn Pn 00 38 46.3 -0.1
DUNO Dulce Nombre, 2.34 131 *eP* Pn 00 38 46.1 -0.4
PQSS Presa 15 de Se 2.35 328⇑ *eP* Pn 00 38 47.5 +0.9
PQSS Presa 15 de Se 2.35 328⇑ *eP* Pn 00 38 47.5 +0.9
TGUH Tegucigalpa,Un 2.43 1 Pb 00 38 50.2 -3.0
TGUH Tegucigalpa,Un 2.43 1 *i* P Pb 00 38 50.2 -3.0
SCLA Alcaldia de Sa 2.50 326 *eP* Pn 00 38 49.7 +0.9
SCLA Alcaldia de Sa 2.50 326 *eP* Pn 00 38 49.7 +0.9
COEG Centro de Oper 2.52 322 *eP* Pn 00 38 49.6 +0.5
COEG *eS* Sn 00 39 19.4 +0.6
COEG Centro de Oper 2.52 322 *eP* Pn 00 38 49.6 +0.5
COEG *eS* Sn 00 39 19.4 +0.6
SJTE Alcalda de S 2.59 320 *eP* Pn 00 38 50.8 +0.7
SJTE IAML 00 39 24.5
comp=Z,262nm,0.3s
SJTE Alcalda de S 2.59 320 *eP* Pn 00 38 50.8 +0.7
SJTE IAML 00 39 24.5
comp=Z,262nm,0.3s
PAVA Las Pavas 2.63 323 *eP* Pn 00 38 51.2 +0.7
PAVA *eS* Sn 00 39 23.1 +1.6
PAVA Las Pavas 2.63 323 *eP* Pn 00 38 51.3 +0.7
PAVA Las Pavas 2.63 323 *eP* Pn 00 38 51.2 +0.7
PAVA *eS* Sn 00 39 23.1 +1.6
LFRS El Faro 2.64 319 *eP* Pn 00 38 51.0 +0.3
LFRS El Faro 2.64 319 *eP* Pn 00 38 51.0 +0.3
JTS Las Juntas de 2.65 120 Pn Pn 00 38 51.0 +0.2
comp=Z,5.0nm,0.3s,baz=22,slow=16,SNR=14
JTS LR LR 00 39 21.6
comp=Z,118nm,20.7s,baz=353,slow=29
JTS Sn Sn 00 39 21.6 -0.3
comp=Z,41nm,0.3s,baz=1.1,slow=18,SNR=9.0
JTS Las Juntas de 2.65 120 Pn 00 38 51.5 +0.7
JTS Las Juntas de 2.65 120 *eP* Pn 00 38 51.4 +0.7
ARE1 Arenal 1 2.78 114 *eS* Sn 00 39 28.8 +3.7
BOQS Boqueron 2.86 318 *eP* Pn 00 38 54.9 +1.0
BOQS IAML 00 39 30.1
comp=Z,254nm,0.4s
BOQS Boqueron 2.86 318 *eP* Pn 00 38 54.9 +1.0
BOQS IAML 00 39 30.1
comp=Z,254nm,0.4s
CAO2 Cobano, Puntar 2.88 131 Pn Pn 00 38 55.0 +1.0
JAYA Jayaque - finc 2.92 314 *eP* Pn 00 38 54.6 0.0
JAYA *eS* Sn 00 39 27.6 -1.2
JAYA IAML 00 39 30.5
comp=Z,531nm,0.3s
JAYA Jayaque - finc 2.92 314 *eP* Pn 00 38 54.6 0.0
JAYA *eS* Sn 00 39 27.6 -1.2
JAYA IAML 00 39 30.5
comp=Z,531nm,0.3s
LAFE Finca La Fe, P 2.95 127 *i* P Pn 00 38 55.1 +0.1
LAFE Finca La Fe, P 2.95 127 *eP* Pn 00 38 54.4 -0.5
ESPN Las Esperanzas 2.99 79 Pn Pn 00 38 56.7 +1.3
TACO Tacachico 3.08 320 *eP* Pn 00 38 57.2 +0.5
TACO *eS* Sn 00 39 33.3 +0.7
TACO Tacachico 3.08 320 *eP* Pn 00 38 57.2 +0.5
TACO *eS* Sn 00 39 33.3 +0.7
CEVE Cerro Verde 3.16 314 *eP* Pn 00 38 58.7 +0.7
CEVE IAML 00 39 39.9
comp=Z,984nm,0.4s
CEVE Cerro Verde 3.16 314 *eP* Pn 00 38 58.7 +0.7
CEVE IAML 00 39 39.9
comp=Z,984nm,0.4s
SBLS San Blas 3.17 314 *eP* Pn 00 38 58.5 +0.4
SBLS IAML 00 39 40.1
comp=Z,348nm,0.3s
SBLS San Blas 3.17 314 *eP* Pn 00 38 58.5 +0.4
SBLS IAML 00 39 40.1
comp=Z,348nm,0.3s
JACO JACO, Garabito 3.24 127 Pn Pn 00 39 00.9 +2.0
JACO JACO, Garabito 3.24 127 *i* P Pn 00 39 00.1 +1.2
NUBE Las Nubes 3.32 313 *eS* Sn 00 39 37.0 -1.6
NUBE IAML 00 39 40.4
comp=Z,203nm,0.5s
NUBE Las Nubes 3.32 313 *eS* Sn 00 39 37.0 -1.6
NUBE IAML 00 39 40.4
comp=Z,203nm,0.5s
MTO3 Montecristo 3.42 324 Pn 00 39 02.4 +0.8
MTO3 Montecristo 3.42 324 *eP* Pn 00 39 02.1 +0.6
MTO3 Montecristo 3.42 324 *eP* Pn 00 39 02.5 +1.0
MTO3 Montecristo 3.42 324 *eP* Pn 00 39 02.1 +0.6
OCM Ochomogo 3.70 117 *eP* Pn 00 39 08.0 +2.6
LCR2 La Lucha 2 3.73 120 *i* P Pn 00 39 07.8 +2.0
RIMA Rio Macho 3.84 118 Pn Pn 00 39 08.7 +1.4
RIMA Rio Macho 3.84 118 *eP* Pn 00 39 08.4 +1.1
CDM Cerro de Muert 4.03 120 *eP* Pn 00 39 11.9 +1.7
MRVA Moravia de Chi 4.18 115 *eP* Pn 00 39 14.9 +2.9
PEZE Perez Zeledon, 4.19 122 Pn 00 39 13.8 +1.8
SRBA San Rafael, Bu 4.54 121 Pn Pn 00 39 17.6 +0.8
SRBA San Rafael, Bu 4.54 121 *eP* Pn 00 39 18.9 +2.0
APG El Apazote 4.57 318 Pn Pn 00 39 17.7 +0.3
comp=Z,1.2nm,0.3s,baz=122,slow=8.1,SNR=8.4
APG Sn Sn 00 40 12.1 +2.6
comp=Z,0.5nm,0.3s,baz=75,slow=15,SNR=1.6
RIOS Rincon, Osa 4.72 128 Pn Pn 00 39 20.7 +1.5
RIOS Rincon, Osa 4.72 128 *eP* Pn 00 39 20.3 +1.1
PIRO Carate, Puerto 5.04 129 *eP* Pn 00 39 25.4 +1.8
CCOL Caracol de Cor 5.32 126 *eP* Pn 00 39 29.7 +2.2
BRU2 Volcan 5.33 121 Pn Pn 00 39 29.9 +2.1
CCIG Comitan 6.60 315 Pn 00 39 48.6 +3.4
CMIG Matias Romero 9.15 307 Pn Pn 00 40 21.2 +1.1
comp=Z,1.3nm,0.3s,baz=116,slow=9.3,SNR=12
OCAC Ocana 14.17 102 P 00 41 36.2 +0.1
ROSC El Rosal 14.49 117 Pn Pn 00 41 31.9 -1.8
comp=Z,0.7nm,0.3s,baz=297,slow=9.7,SNR=1.4
SDV Santo Domingo 16.62 98 Pn Pn 00 41 59.3 -1.8
comp=Z,0.5nm,0.3s,baz=306,slow=9.1,SNR=2.1
SDV LR LR 00 49 42.1
comp=Z,42nm,21.0s,baz=282,slow=42
344A Westbrook Farm 20.00 351 P Pn 00 42 42.5 +0.5
TIGA Tifton 20.02 9 P Pn 00 42 42.8 +0.5
833A Chaparral WMA, 20.11 327 P P 00 42 42.1 +0.6
342A Flagon Creek P 20.21 347 P Pn 00 42 43.8 -0.7
ATAH Atahualpa 20.62 154 LR LR 00 49 45.5
comp=Z,131nm,19.4s,baz=342,slow=34
152A Waverly Hall 21.09 6 P P 00 42 53.3 +1.3
152A IAmb IAmb 00 42 57.3
comp=Z,24nm,0.8s
LRAL Lakeview Retre 21.32 1 P P 00 42 56.0 +1.5
LRAL IAmb IAmb 00 42 59.8
comp=Z,13nm,0.7s
435B Jarrell 21.32 335 P P 00 42 58.9 +4.3
SJG San Juan 21.42 70 LR LR 00 51 44.0
comp=Z,103nm,18.1s,baz=264,slow=39
Z47A Carrollton 21.50 358 P P 00 42 57.5 +1.2
Z47A IAmb IAmb 00 43 00.5
comp=Z,24nm,0.8s
Z51A Franklin 21.69 5 P P 00 43 00.6 +2.1
Z51A IAmb IAmb 00 43 03.9
comp=Z,15nm,0.6s
GOGA Godfrey 21.98 9 P P 00 43 03.9 +2.4
GOGA IAmb IAmb 00 43 05.4
comp=Z,14nm,0.8s
JCT Junction City 22.07 330 P P 00 43 03.2 +0.5
Z41A Richland Creek 22.12 348 P P 00 43 04.5 +1.4
Z41A IAmb IAmb 00 43 07.0
comp=Z,24nm,0.8s
Y49A Blount Mountai 22.16 2 P P 00 43 04.6 +1.1
Y49A IAmb IAmb 00 43 06.2
comp=Z,17nm,0.8s
PCRV Puerto La Cruz 22.30 91 P P 00 43 03.7 -1.6
comp=Z,17nm,0.9s,baz=182,slow=21,SNR=1.4
Y52A Lilburn 22.34 7 P P 00 43 07.1 +1.6
Y52A IAmb IAmb 00 43 09.0
comp=Z,30nm,0.9s
PLCV Puerto La Cruz 22.34 91 P P 00 43 03.7 -2.0
Z38A Mt. Pleasant 22.67 343 P P 00 43 11.7 +2.7
X48A Hartselle 22.73 1 P P 00 43 10.4 +0.8
OXF Oxford 22.87 356 P P 00 43 10.8 -0.2
JSC Jenkinsville 23.23 13 P P 00 43 15.3 +0.7
TXAR Lajitas Array 23.31 322 P P 00 43 16.9 +1.2
comp=Z,3.8nm,0.6s,baz=134,slow=10,SNR=14
TXAR PcP PcP 00 47 04.0 +1.5
comp=Z,0.8nm,0.6s,baz=57,slow=3.3,SNR=3.5
TXAR Lajitas Array 23.31 322 P P 00 43 16.6 +0.8
TX31 Lajitas Ar. Si 23.32 322 P P 00 43 16.8 +1.1
TX31 IAmb IAmb 00 43 30.9
comp=Z,19nm,0.8s
TX32 Lajitas Array 23.32 322 P P 00 43 17.0 +1.3
SWET Sewanee 23.53 3 P P 00 43 18.4 +0.7
W50A Signal Mountai 23.55 4 P P 00 43 18.3 +0.4
W50A IAmb IAmb 00 43 20.4
comp=Z,27nm,0.9s
W52A Murphy 23.57 7 P P 00 43 19.7 +1.6
W52A IAmb IAmb 00 43 21.1
comp=Z,16nm,0.8s
BG3 Lake Jocassee 23.61 9 P P 00 43 19.6 +1.2
BG3 IAmb IAmb 00 43 20.8
comp=Z,17nm,0.7s
BIRD Birdtown, Kers 23.76 14 P P 00 43 21.5 +1.7
CPCT Cooper Cave 23.86 6 P P 00 43 22.0 +1.1
CPCT IAmb IAmb 00 43 23.6
comp=Z,29nm,1.2s
W41B Gary Mavity, V 23.88 350 P P 00 43 21.7 +0.7
WHAR Wooly Hollow 24.00 350 P P 00 43 22.6 +0.5
WHAR IAmb IAmb 00 43 24.0
comp=Z,11nm,0.8s
V48A Smith Brothers 24.02 1 P P 00 43 24.1 +1.8
X37A Clayton 24.02 343 P P 00 43 24.5 +2.2
KMSC Kings Mountain 24.04 12 P P 00 43 23.7 +1.2
KMSC IAmb IAmb 00 43 24.9
comp=Z,9.5nm,0.7s
TKL Tuckaleechee C 24.15 7 P P 00 43 23.7 +0.2
comp=Z,9.6nm,0.7s,baz=172,slow=10,SNR=15
TKL Tuckaleechee C 24.15 7 P P 00 43 24.7 +1.2
TKL IAmb IAmb 00 43 30.0
comp=Z,14nm,0.9s
W39A Magazine 24.20 347 P P 00 43 25.0 +1.0
V51A Loudon 24.23 6 P P 00 43 25.1 +0.9
V51A IAmb IAmb 00 43 26.6
comp=Z,12nm,0.8s
V53A Saluda 24.29 9 P P 00 43 26.1 +1.3
V53A IAmb IAmb 00 43 27.4
comp=Z,10nm,0.6s
V52A Sevierville 24.35 7 P P 00 43 26.6 +1.2
V52A IAmb IAmb 00 43 26.6
comp=Z,16nm,1.2s
W57A Gilead 24.35 15 P P 00 43 25.4 0.0
W57A IAmb IAmb 00 43 31.2
comp=Z,17nm,1.3s
CLTN Cedars of Leba 24.38 2 P P 00 43 26.0 +0.4
WVT Waverly 24.41 359 P P 00 43 25.8 -0.1
FCAR Ozark Folk Cen 24.56 351 P P 00 43 26.5 -0.7
FCAR IAmb IAmb 00 43 28.3
comp=Z,12nm,0.7s
LCAR Lake Charles 24.60 352 P P 00 43 27.1 -0.4
LCAR IAmb IAmb 00 43 28.1
comp=Z,12nm,0.7s
V55A Taylorsville 24.75 12 P P 00 43 30.4 +1.4
V55A IAmb IAmb 00 43 45.2
comp=Z,16nm,1.1s
U49A Red Boiling Sp 24.83 3 P P 00 43 29.7 0.0
U49A IAmb IAmb 00 43 32.5
comp=Z,11nm,0.7s
W35A Tecumseh 25.00 341 P P 00 43 32.1 +0.9
W35A IAmb IAmb 00 43 34.8
comp=Z,10.0nm,0.8s
TZTN Tazewell 25.05 7 P P 00 43 32.6 +0.9
TZTN IAmb IAmb 00 43 33.9
comp=Z,9.0nm,0.8s
U40A Yellville 25.14 349 P P 00 43 32.5 0.0
U40A IAmb IAmb 00 43 33.4
comp=Z,16nm,0.8s
PBMO Poplar Bluff 25.21 354 P P 00 43 32.6 -0.5
PBMO IAmb IAmb 00 43 35.0
comp=Z,13nm,0.7s
FNO Franklin 25.26 340 P P 00 43 33.9 +0.2
T47A Sharon Grove 25.26 0 P P 00 43 33.3 -0.3
T47A IAmb IAmb 00 43 34.6
comp=Z,15nm,0.8s
WMOK Wichita Mounta 25.28 337 P P 00 43 34.8 +1.0
HHAR Hobbs 25.28 347 P P 00 43 33.2 -0.6
HHAR IAmb IAmb 00 43 36.0
comp=Z,8.0nm,0.6s
MGMO Mountain Grove 25.82 351 P P 00 43 39.7 +1.0
S51A Beattyville 26.13 7 P P 00 43 42.3 +0.8
S51A IAmb IAmb 00 43 43.4
comp=Z,12nm,0.8s
T57A Hurt 26.29 15 P P 00 43 44.5 +1.6
MSTX Muleshoe 26.36 330 P P 00 43 43.9 +0.2
MSTX IAmb IAmb 00 43 50.5
comp=Z,13nm,0.9s
WCI Wyandotte Cave 26.52 2 P P 00 43 45.3 +0.3
WCI IAmb IAmb 00 43 48.7
comp=Z,11nm,0.8s
S39A Bolivar 26.52 349 P P 00 43 45.0 0.0
R40A Maddies Statio 26.93 351 P P 00 43 47.9 -0.8
R55A Marlinton 27.32 12 P P 00 43 53.0 +0.8
Q51A Peebles 27.52 7 P P 00 43 54.8 +0.8
Q52A Bidwell 27.60 8 P P 00 43 55.3 +0.6
Q52A IAmb IAmb 00 43 56.6
comp=Z,8.2nm,0.6s
Q54A Coxs Mills 27.86 11 P P 00 43 58.0 +1.0
Q54A IAmb IAmb 00 44 13.7
comp=Z,27nm,1.5s
P53A Whipple 28.25 10 P P 00 44 01.1 +0.6
P53A IAmb IAmb 00 44 02.2
comp=Z,11nm,0.6s
Q56A Snyder Ridge, 28.25 13 P P 00 44 01.5 +1.0
Q56A IAmb IAmb 00 44 08.2
comp=Z,27nm,1.4s
P52A Corning 28.28 8 P P 00 44 01.2 +0.5
P52A IAmb IAmb 00 44 01.9
comp=Z,12nm,0.7s
P38A Dawn 28.44 350 P P 00 44 01.8 -0.4
P38A IAmb IAmb 00 44 03.2
comp=Z,9.0nm,0.8s
ACSO Alum Creek Sta 28.76 7 P P 00 44 04.9 -0.1
ACSO IAmb IAmb 00 44 06.0
comp=Z,9.3nm,0.6s
Q52A Adamsville 28.80 9 P P 00 44 05.5 +0.2
Q52A IAmb IAmb 00 44 06.4
comp=Z,11nm,0.7s
O53A New Philadelph 29.02 10 P P 00 44 08.2 +0.9
O53A IAmb IAmb 00 44 09.8
comp=Z,8.7nm,0.8s
N49A Columbus Grove 29.32 5 P P 00 44 10.2 +0.2
PTGA Pitinga 29.79 112 P P 00 44 13.6 -0.9
comp=Z,1.1nm,0.3s,baz=335,slow=23,SNR=1.2
PTGA LR LR 00 56 55.4
comp=Z,60nm,18.4s,baz=296,slow=38
SSPA Standing Stone 30.07 14 P P 00 44 17.4 +0.7
SSPA IAmb IAmb 00 44 19.4
comp=Z,15nm,1.1s
M54A Oil Creek Stat 30.52 11 P P 00 44 20.8 +0.2
M54A IAmb IAmb 00 44 21.9
comp=Z,18nm,1.2s
N58A Sunbury 30.57 16 P P 00 44 22.4 +1.4
N59A State Game Lan 30.90 17 P P 00 44 24.7 +0.7
KSPA Keystone Colle 31.49 17 P P 00 44 31.0 +1.8
KSPA IAmb IAmb 00 44 47.7
comp=Z,14nm,1.2s
BINY Binghamton 32.03 16 P P 00 44 34.2 +0.3
I42A Draeger Farm, 32.19 358 P P 00 44 34.4 -0.9
I42A IAmb IAmb 00 44 36.1
comp=Z,9.2nm,1.0s
L59A Walton 32.28 17 P P 00 44 37.4 +1.2
ECSD EROS Data Cent 33.00 348 P P 00 44 41.4 -1.0
ECSD IAmb IAmb 00 44 50.7
comp=Z,4.9nm,0.7s
J58A Remsen 33.30 16 P P 00 44 45.6 +0.6
SADO Sadowa 33.77 10 LR LR 00 59 13.2
comp=Z,47nm,18.5s,baz=328,slow=38
SADO Sadowa 33.77 10 P P 00 44 48.6 -0.5
O20A White River Ci 33.91 331 P P 00 44 53.1 +2.6
O20A IAmb IAmb 00 44 59.6
comp=Z,5.5nm,0.9s
NCB Newcomb 34.16 17 P P 00 44 52.7 +0.2
SRU San Rafael Swe 34.29 327 P P 00 44 55.2 +1.2
COWI Conover 34.40 358 P P 00 44 53.3 -1.3
PFO Pinyon Flats O 34.49 314 LR LR 01 01 08.0
comp=Z,56nm,19.2s,baz=204,slow=40
F36A Milaca 34.54 352 P P 00 44 54.0 -1.8
F36A IAmb IAmb 00 44 55.1
comp=Z,7.2nm,0.9s
E43A Lone Tree Farm 34.65 0 P P 00 44 55.7 -1.0
F33A 5 Mile Ranch, 34.96 349 P P 00 44 57.9 -1.5
TRQ Mont Tremblant 36.15 15 P P 00 45 09.3 -0.3
TRQ IAmb IAmb 00 45 10.2
comp=Z,8.6nm,0.9s
EYMN Ely 36.39 355 P P 00 45 09.8 -1.8
EYMN IAmb IAmb 00 45 21.7
comp=Z,7.1nm,1.1s
G62A West of Eustis 36.43 20 P P 00 45 12.7 +0.7
BW06 Boulder Array 36.58 332 P P 00 45 13.5 -0.1
PD31 Pinedale Array 36.58 332 P P 00 45 13.5 0.0
PDAR Pinedale Array 36.58 332 P P 00 45 13.6 0.0
comp=Z,1.0nm,0.6s,baz=132,slow=9.7,SNR=17
PDAR PcP PcP 00 47 37.5 +0.9
comp=Z,0.8nm,0.8s,baz=123,slow=5.5,SNR=4.8
PDAR Pinedale Array 36.58 332 P P 00 45 14.0 +0.5
HWUT Hardware Ranch 36.66 329 P P 00 45 14.4 +0.1
HWUT IAmb IAmb 00 45 16.3
comp=Z,6.0nm,0.7s
PKME Peaks-Kenny Pk 36.90 21 P P 00 45 17.7 +1.7
AHID Auburn Hatcher 37.30 331 P P 00 45 20.1 +0.4
AHID IAmb IAmb 00 45 31.1
comp=Z,7.1nm,0.9s
REDW Red Top Meadow 37.64 331 P P 00 45 23.2 +0.6
SIV San Ignacio 37.76 136 P P 00 45 23.5 -0.2
comp=Z,5.3nm,0.6s,baz=309,slow=8.0,SNR=27
SIV PcP PcP 00 47 42.3 +2.0
comp=Z,2.1nm,0.6s,baz=318,slow=3.1,SNR=5.8
SIV LR LR 01 01 21.0
comp=Z,39nm,18.2s,baz=277,slow=37
TPAW Teton Pass 37.78 332 P P 00 45 23.4 -0.4
TPAW IAmb IAmb 00 45 38.1
comp=Z,8.1nm,1.0s
MOOW Moose Ponds 37.88 332 P P 00 45 25.1 +0.5
RLMT Red Lodge 38.32 335 P P 00 45 28.9 +0.6
NVAR Mina Array Bea 38.43 319 P P 00 45 30.7 +1.4
comp=Z,1.1nm,0.8s,baz=123,slow=7.8,SNR=7.4
NVAR PcP PcP 00 47 44.1 +1.8
comp=Z,1.1nm,0.7s,baz=125,slow=3.9,SNR=8.3
LMQ La Malbaie 38.56 18 P P 00 45 30.0 +0.1
LMQ IAmb IAmb 00 45 30.2
comp=Z,11nm,1.2s
D62A Allapoint, All 38.56 20 P P 00 45 31.2 +1.2
D62A IAmb IAmb 00 45 52.5
comp=Z,12nm,1.4s
LMN Caledonia Moun 39.12 25 P P 00 45 35.2 +0.4
LMN IAmb IAmb 00 45 42.2
comp=Z,8.7nm,1.1s
ULM Lac du Bonnet 39.16 351 P P 00 45 33.0 -2.0
comp=Z,4.4nm,0.8s,baz=168,slow=10.0,SNR=5.9
MCMT McKenzie Canyo 39.59 331 P P 00 45 41.1 +1.3
BOZ Bozeman (W) 39.71 333 P P 00 45 40.9 +1.0
LRM Limekiln Ridge 40.26 333 P P 00 45 45.5 +1.0
PLID Pearl Lake 41.41 329 P P 00 45 54.1 +0.1
F10A Beach Ranch, E 42.65 329 P P 00 46 03.9 0.0
SCHQ Schefferville 46.03 16 P P 00 46 29.5 -1.2
comp=Z,4.5nm,0.6s,baz=216,slow=5.9,SNR=15
SCHQ Schefferville 46.03 16 P P 00 46 29.6 -1.2
SCHQ IAmb IAmb 00 46 54.5
comp=Z,11nm,1.4s
FCC Fort Churchill 47.33 355 P P 00 46 39.7 -1.1
BDFB Brasilia 47.39 124 P P 00 46 41.7 -0.3
comp=Z,3.6nm,0.6s,baz=288,slow=9.7,SNR=8.2
BDFB Brasilia 47.39 124 P P 00 46 42.0 +0.1
BDFB IAmb IAmb 00 46 43.0
comp=Z,4.3nm,0.8s
FRB Frobisher Bay 53.72 10 LR LR 01 12 39.1
comp=Z,69nm,18.1s,baz=252,slow=39
YKA Yellowknife Ar 54.45 345 P P 00 47 32.8 -1.5
comp=Z,0.8nm,0.6s,baz=141,slow=7.6,SNR=19
YKA PcP PcP 00 48 37.1 -0.5
comp=Z,0.7nm,1.0s,baz=147,slow=4.0,SNR=6.0
DLBC Lease Lake 56.72 335 LR LR 01 18 18.5
comp=Z,147nm,19.5s,baz=282,slow=43
SFJD Kangerlussuaq 60.48 16 LR LR 01 14 20.4
comp=Z,81nm,18.3s,baz=243,slow=36
INK Inuvik 64.04 343 P P 00 48 39.9 -0.7
comp=Z,1.0nm,0.7s,baz=150,slow=9.2,SNR=4.1
INK Inuvik 64.04 343 P P 00 48 41.2 +0.6
BCAR Beaver Creek A 64.07 336 P P 00 48 42.9 +2.0
L27K Beaver Creek, 64.08 336 P P 00 48 43.2 +2.2
J25K Salcha River, 66.18 336 P P 00 48 55.9 +1.2
ILAR Eielson Array 66.84 336 P P 00 48 58.9 +0.1
comp=Z,0.5nm,0.8s,baz=138,slow=3.6,SNR=9.6
ILAR Eielson Array 66.84 336 P P 00 48 59.2 +0.4
BMAR Burnt Mountain 67.11 339 P P 00 49 01.1 +0.6
RND Reindeer 67.13 335 P P 00 49 02.0 +1.3
KTH Kantishna Hill 68.05 334 P P 00 49 07.5 +1.0
J20K Nowinta River 69.60 335 P P 00 49 16.1 +0.1
EKA Eskdalemuir Ar 77.21 36 P P 00 49 57.9 -3.2
comp=Z,0.7nm,0.7s,baz=282,slow=4.2,SNR=1.7
NOA NORSAR Array B 84.02 29 LR LR 01 27 04.1
comp=Z,9.9nm,18.8s,baz=305,slow=35
MSVF Nonsavu 97.83 254 LR LR 01 26 29.0
comp=Z,235nm,21.0s,baz=333,slow=30
KURBB Kurchatov Arra 116.80 10 PKP PKPdf 00 56 51.5 -0.1
comp=Z,0.2nm,0.3s,baz=347,slow=2.3,SNR=6.2
SONM Songino Array 119.57 349 PKP PKiKP 00 56 58.4 +1.2
comp=Z,0.4nm,0.5s,baz=344,slow=1.3,SNR=4.7
SONM Songino Array 119.57 349 PKPdf 00 56 57.7 +0.4
GEYT Alibeck 121.02 32 PKP PKPdf 00 56 59.9 -0.3
comp=Z,2.7nm,0.7s,baz=262,slow=2.9,SNR=3.6
GEYT Alibeck 121.02 32 PKPdf PKPdf 00 56 59.2 -0.9
KSRS Korea Array 121.06 328 PKP PKiKP 00 57 01.7 +1.4
comp=Z,0.6nm,0.3s,baz=93,slow=2.4,SNR=2.0
MKAR Makanchi Array 121.11 8 PKP PKPdf 00 56 59.5 -0.6
comp=Z,0.2nm,0.4s,baz=298,slow=3.0,SNR=8.9
KSH Kashi 126.80 16 PKP PKPdf 00 57 10.3 -1.0
KSH SKKS 01 05 59.1
ASAR Alice Springs 139.09 247 PKP PKPdf 00 57 35.9 +1.2
comp=Z,0.8nm,0.7s,baz=119,slow=2.0,SNR=4.2
WRA Warramunga Arr 139.18 253 PKP PKPdf 00 57 35.7 +0.8
comp=Z,1.1nm,0.6s,baz=93,slow=1.6,SNR=6.9
WRA Warramunga Arr 139.18 253 PKPdf PKPdf 00 57 33.1 -1.8
PZH PanZhiHua 141.10 347 PKP PKPdf 00 57 37.8 -0.6
CMAR Chiang Mai Arr 149.49 348 PKPbc PKPbc 00 57 58.4 +1.1
comp=Z,5.4nm,0.7s,baz=348,slow=4.2,SNR=22
CMAR Chiang Mai Arr 149.49 348 PKPbc 00 57 58.2 +0.9

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*IDC* ***24*** *00:47:32.3ₛ1.1, 35.°69Nₓ3.°53W, h0ᵏᵐ, mb3.3/5, mb1 3.5/8, mb1mx3.3/58, mbtmp3.3/8, ML3.2/3, Error ellipse: s-maj=29.5km s-min=15.8km az=92.0*
*MDD* ***24*** *00:47:33.8ₛ0.3, 35.°66Nₓ3.°64W, h0ᵏᵐ, mb_Lg3.1/15, Error ellipse: s-maj=2.7km s-min=2.1km az=5.0*
*SFS* ***24*** *00:47:34.0, 35.°50Nₓ3.°60W, h10ᵏᵐ, ML3.0, ALBORAN SUR*
*CNRM* ***24*** *00:47:34.7, 35.°67Nₓ3.°62W, h20ᵏᵐ, ml3.1*
*INMG* ***24*** *00:47:34.7ₛ1.5, 35.°64Nₓ3.°67W, h1ᵏᵐ±4ᵏᵐ, ML2.8, Error ellipse: s-maj=3.3km s-min=2.7km az=19.0*
**ISC 24 00:47:34.1**±1.2**, 35.°67N**±0.°02ₓ**3.°60W**±0.°02**, h14**ᵏᵐ±8ᵏᵐ**, n78**,σ1**s23**/133**, mb3.6/5, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| EALB | Alboran | 0.53 | 60 | Pg | Pb | | | 00 47 45.3 | +0.1 |
| EALB | | | | Sg | Sb | | | 00 47 53.6 | +0.9 |

EALB *i* Vmb_Lg 00 47 55.6
**PALE Palemas 0.53 211** P **Pb** **00 47 45.3 +0.1**
PALE S **Sb** **00 47 54.0 +1.3**
**PALE Palemas 0.53 211** P **Pb** **00 47 45.3 +0.1**
PALE S **Sn** **00 47 55.6 -0.5**
**EMEL Melilla 0.64 125** Pg **Pg** **00 47 46.5 -0.1**
EMEL Sg **Sg** **00 47 54.9 -0.3**
**GOG Mont Gurugu 0.67 132** P **Pg** **00 47 47.1 -0.1**
GOG S **Sb** **00 47 58.0 +1.3**
**GOG Mont Gurugu 0.67 132** P **Pb** **00 47 47.4 -0.1**
GOG S **Sg** **00 47 56.3 +0.3**
**CHAS Isla Isabel II 1.07 117** P **Pb** **00 47 52.8 -1.6**
CHAS S **Sb** **00 48 07.9 -0.4**
**ELGU Los Guajares, 1.19 359** Pg **Pn** **00 47 55.4 -1.0**
ELGU Sg **Sb** **00 48 09.6 -2.2**
ELGU *i* Vmb_Lg 00 48 16.5
**EMAL Malaga-Limoner 1.28 329** P **Pn** **00 47 56.5 -0.9**
EMAL S **Sb** **00 48 11.7 -2.4**
**TAF Taforalt 1.29 131** P **Pn** **00 47 57.1 -0.7**
**TAF Taforalt 1.29 131** P **Pn** **00 47 56.8 -1.0**
TAF S **Sb** **00 48 12.5 -2.2**
**EMIJ Mijas 1.30 314** Pg **Pn** **00 47 56.7 -1.1**
EMIJ Sg **Sb** **00 48 12.7 -2.1**
EMIJ *i* Vmb_Lg 00 48 18.8
**EGOR Sierra Gorda, 1.49 344** Pn **Pn** **00 48 00.3 -0.3**
EGOR Sn **Sb** **00 48 21.3 +0.8**
EGOR *i* Vmb_Lg 00 48 25.6
**CHEFC Chefchaouen 1.53 249** P **Pn** **00 48 01.0 0.0**
**CHEFC Chefchaouen 1.53 249** P **Pn** **00 48 01.4 +0.4**
CHEFC S **Sb** **00 48 21.4 -0.1**
**EQUE Quentar 1.54 5** Sn **Sn** **00 48 20.3 -0.7**
EQUE *i* Vmb_Lg 00 48 28.0
**JBK JBK 1.58 147** P **Pn** **00 48 01.0 -0.9**
**JBK JBK 1.58 147** P **Pn** **00 48 01.1 -0.8**
JBK S **Sn** **00 48 20.1 -2.1**
**ENIJ Nijar 1.72 41** Pn **Pn** **00 48 02.4 -1.1**
ENIJ Sn **Sn** **00 48 23.8 -1.5**
ENIJ *i* Vmb_Lg 00 48 36.5
**LIJA Lijar 1.91 311** P **Pg** **00 48 10.8 0.0**
LIJA S **Sn** **00 48 31.0 +0.9**
**SICH Sidi Chahed 2.11 223** P **Pb** **00 48 11.3 -0.8**
SICH S **Sn** **00 48 36.1 +1.2**
**LCRM LCR 2.24 208** P **Pn** **00 48 12.0 +1.1**
**LCRM LCR 2.24 208** P **Pn** **00 48 11.3 +0.5**
LCRM S **Sb** **00 48 41.8 -0.1**
**IFR Ifrane 2.49 211** P **Pn** **00 48 14.5 +0.1**
IFR S **Sn** **00 48 42.7 -1.9**
**EZAR Zarzadilla de 2.68 34** Pn **Pn** **00 48 18.0 +1.2**
EZAR Sn **Sn** **00 48 49.3 +0.2**
**ECAB El Cabril 2.81 329** Pn **Pn** **00 48 19.8 +1.2**
ECAB Sn **Sn** **00 48 52.6 +0.4**
ECAB *i* Vmb_Lg 00 49 03.2
**CZD Col de Zad 2.89 205** P **Pn** **00 48 21.0 +1.0**
CZD S **Sn** **00 48 54.5 -0.1**
**TDRA Tendrara 2.93 153** P **Pn** **00 48 20.1 -0.3**
**MD31 MD31 2.96 199** P **Pn** **00 48 21.6 +0.9**
MD31 S **Sn** **00 48 55.6 -0.4**
**MDT Midelt 2.97 197** Pn **Pn** **00 48 21.2 +0.3**
1.1nm,0.3s,baz=7.5,slow=11,SNR=27
MDT Sn **Sn** **00 48 57.4 +1.0**
2.5nm,0.3s,baz=18,slow=20,SNR=4.2
**MDT Midelt 2.97 197** P **Pn** **00 48 21.1 +0.3**
**MDT Midelt 2.97 197** P **Pn** **00 48 21.8 +0.3**
MDT S **Sn** **00 48 56.7 +0.4**
**ZHG ZHG 3.35 229** P **Pn** **00 48 26.4 +0.3**
**ETOB Tobarra 3.39 28** Pn **Pn** **00 48 28.6 +2.0**
ETOB Sn **Sn** **00 49 07.3 +0.7**
ETOB *i* Vmb_Lg 00 49 31.4
**EGRO El Granado 3.63 302** Pn **Pn** **00 48 30.2 +0.4**
EGRO Sn **Sn** **00 49 11.3 -1.2**
EGRO *i* Vmb_Lg 00 49 19.8
**PBAR Barrancos 3.72 313** *e*Pn **Pn** **00 48 31.5 +0.5**
PBAR *e*Sn **Sn** **00 49 13.1 -1.5**
PBAR A A 00 49 15.1
21nm,0.6s
**PVAQ Vaqueiros 3.74 299** *e*Pn **Pn** **00 48 31.5 +0.2**
PVAQ *e*Sn **Sn** **00 49 13.0 -2.1**
PVAQ A A 00 49 20.8
12nm,0.4s
**PVAQ Vaqueiros 3.74 299** P **Pn** **00 48 31.5 +0.2**
**PVAQ Vaqueiros 3.74 299** P **Pn** **00 48 31.5 +0.2**
PVAQ S **Sn** **00 49 14.4 -0.7**
**PBDV Barranco-do-Ve 3.83 295** *e*Pn **Pn** **00 48 32.9 +0.3**
PBDV *e*Sn **Sn** **00 49 15.7 -1.6**
PBDV A A 00 49 24.4
16nm,0.3s
**PAB San Pablo 3.91 351** Pn **Pn** **00 48 34.8 +1.1**
PAB Sn **Sn** **00 49 20.2 +0.7**
PAB *i* Vmb_Lg 00 49 59.8
**ESDC Sonseca Array 4.00 356** Pn **Pn** **00 48 36.6 +1.6**
0.5nm,0.3s,baz=176,slow=12,SNR=25
ESDC Sn **Sn** **00 49 21.8 0.0**
0.5nm,0.3s,baz=171,slow=23,SNR=6.2
ESDC Lg Lg 00 49 37.7
1.1nm,0.3s,baz=172,slow=28,SNR=2.2
**FIGM Figuig 4.03 150** P **Pn** **00 48 35.4 0.0**
FIGM S **Sn** **00 49 22.2 -0.3**
**PCVE Castro Verde 4.07 300** *e*Pn **Pn** **00 48 36.3 +0.4**
PCVE *e*Sn **Sn** **00 49 22.6 -0.7**
PCVE A A 00 49 24.7
14nm,0.6s
**EBAD Badajoz 4.11 320** Pn **Pn** **00 48 37.1 +0.7**
EBAD Sn **Sn** **00 49 23.0 -1.2**
EBAD *i* Vmb_Lg 00 49 25.6
**PBEJ Beja 4.15 306** *e*Sn **Sn** **00 49 23.9 -1.4**
PBEJ A A 00 49 26.9
6.6nm,0.3s
**MORF Marmelete 4.38 293** *e*Pn **Pn** **00 48 40.8 +0.6**
MORF *e*Sn **Sn** **00 49 30.5 -0.6**
MORF A A 00 49 34.2
8.1nm,0.3s
**PFVI Vila Bisbo 4.46 291** *e*Pn **Pn** **00 48 42.8 +1.6**
PFVI *e*Sn **Sn** **00 49 31.0 -1.9**
PFVI A A 00 49 37.3
13nm,0.5s
**PFVI Vila Bisbo 4.46 291** P **Pn** **00 48 42.6 +1.4**
**PESTR Estremoz 4.50 316** *e*Pn **Pn** **00 48 42.8 +0.9**
PESTR *e*Sn **Sn** **00 49 32.9 -1.1**
PESTR A A 00 49 36.6
8.6nm,0.4s
**PESTR Estremoz 4.50 316** P **Pn** **00 48 42.5 +0.6**
PESTR S **Sn** **00 49 33.3 -0.8**
**PTEO Sao Teotonio 4.53 296** *e*Pn **Pn** **00 48 43.4 +1.3**
PTEO *e*Sn **Sn** **00 49 33.4 -1.1**
PTEO A A 00 49 39.7
14nm,0.4s
**EVO Evora 4.54 310** P **Pn** **00 48 44.9 +2.6**
EVO S **Sn** **00 49 34.6 -0.1**
**EVO Evora 4.54 310** *e*Pn **Pn** **00 48 45.4 +3.1**
EVO *e*Sn **Sn** **00 49 34.7 -0.1**
EVO A A 00 49 36.5
17nm,0.3s
**UCM Universidad Co 4.64 3** P **Pn** **00 48 46.9 +3.2**
UCM S **Sn** **00 49 40.0 +2.7**
**PNCL Nicolau / Gran 4.64 303** *e*Pn **Pn** **00 48 44.4 +0.7**
PNCL *e*Sn **Sn** **00 49 35.9 -1.4**
PNCL A A 00 49 36.6
7.0nm,0.6s
**EPLA Plasencia 4.80 337** Pn **Pn** **00 48 47.3 +1.3**
EPLA Sn **Sn** **00 49 41.5 0.0**
EPLA *i* Vmb_Lg 00 50 03.5
**PMRV Marv??o 4.81 322** *e*Pn **Pn** **00 48 47.3 +1.2**
PMRV *e*Sn **Sn** **00 49 40.9 -0.6**
PMRV A A 00 49 53.9
8.0nm,0.4s
**PMTG Montargil 5.00 314** *e*Pn **Pn** **00 48 50.3 +1.6**
PMTG *e*Sn **Sn** **00 49 45.1 -1.2**
**PCBR Castelo Branco 5.17 325** *e*Pn **Pn** **00 48 52.5 +1.5**
PCBR *e*Sn **Sn** **00 49 49.3 -1.1**
PCBR A A 00 49 51.0
7.6nm,0.5s
**PACT Alcochete 5.19 308** *e*Pn **Pn** **00 48 52.6 +1.3**
PACT *e*Sn **Sn** **00 49 50.5 -0.5**
PACT A A 00 49 57.6
11nm,0.9s
**OUZM OUZ 5.44 210** P **Pn** **00 48 56.0 +1.2**
**PMAFR Mafra 5.59 308** *e*Sn **Sn** **00 49 59.1 -1.7**
PMAFR A A 00 50 00.7
21nm,0.6s
**PSBE So Bento 5.63 314** *e*Pn **Pn** **00 48 58.6 +1.2**
PSBE *e*Sn **Sn** **00 49 59.8 -2.0**
PSBE A A 00 50 36.1
8.2nm,0.5s
**MTE Manteigas 5.65 328** *e*Pn **Pn** **00 48 59.5 +1.8**
MTE *e*Sn **Sn** **00 50 01.7 -0.7**
MTE A A 00 50 35.3
11nm,0.5s
**PCAS Casmilo, Conde 5.84 320** *e*Sn **Sn** **00 50 04.6 -2.4**
PCAS A A 00 50 22.3
6.2nm,0.6s
**COI Coimbra 5.91 321** *e*Pn **Pn** **00 49 03.4 +2.2**
**PVIS Viseu 6.06 327** *e*Pn **Pn** **00 49 05.5 +2.2**
PVIS *e*Sn **Sn** **00 50 11.4 -1.1**
PVIS A A 00 50 13.8
8.1nm,0.7s
**MVO Moncorvo 6.11 335** *e*Pn **Pn** **00 49 05.8 +1.9**
MVO *e*Sn **Sn** **00 50 12.3 -1.3**
MVO A A 00 50 52.4
9.7nm,0.5s
**PVRL Vila Real 6.46 331** *e*Pn **Pn** **00 49 10.2 +1.5**
PVRL *e*Sn **Sn** **00 50 20.5 -1.7**
PVRL A A 00 50 26.6
11nm,0.7s
**POLO Lamas de Olo 6.57 331** *e*Pn **Pn** **00 49 12.3 +2.0**
**PBRG Braganca 6.60 339** *e*Pn **Pn** **00 49 12.0 +1.4**
**EKA Eskdalemuir Ar 19.66 1** P **Pn** **00 52 03.9 +0.1**
baz=171,slow=11,SNR=1.5
**TORD Torodi Ar. Bea 22.93 167** P **P** **00 52 38.5 +0.7**
0.5nm,1.0s,baz=345,slow=10,SNR=2.0
**KURBB Kurchatov Arra 58.77 48** P **P** **00 57 32.1 +0.7**
0.2nm,0.3s,baz=294,slow=7.6,SNR=1.6
**MKAR Makanchi Array 62.49 51** P **P** **00 57 57.0 0.0**
0.3nm,0.7s,baz=290,slow=6.0,SNR=4.3
**YKA Yellowknife Ar 67.75 332** P **P** **00 58 31.6 +0.8**
0.2nm,0.4s,baz=61,slow=6.4,SNR=5.9
**PDAR Pinedale Array 76.82 313** P **P** **00 59 24.8 -0.9**
0.1nm,0.4s,baz=82,slow=7.4,SNR=2.0

*NEIC **24** 00:50:28.5*e*1.3, 18°.65N*e*0°.07×145°.5E*e*0°.1, h584km*e*8km, mb3.9/84, Error ellipse: s-maj=19.5km s-min=10.5km az=87.0*
*IDC **24** 00:50:29.6*e*1.3, 18°.63N×145°.43E, h608km*e*15km, mb3.5/34, mb1 3.6/39, mb1mx3.4/75, mbtmp4.5/39, Error ellipse: s-maj=13.3km s-min=10.1km az=101.0*
**ISC 24 00:50:28.7**±0.5, **18°.55N**±0°.07×**145°.5E**±0°.1, **h600**km, **n144, s93**/149, **mb3.9**/73, **1C, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.97** | **187** | P | **P** | **00 52 01.5** | **0.0** |
| | 34nm,0.3s,baz=336,slow=20,SNR=6.6 | | | | | | |
| GUMO | | | | S | **S** | **00 53 14.5** | **-2.6** |
| | 35nm,0.3s,baz=15,slow=22,SNR=4.3 | | | | | | |
| **GUMO** | **Guam** | **4.97** | **187** | P | **P** | **00 52 00.9** | **-0.6** |
| **JCJ** | **Chichijima** | **9.03** | **341** | P | **P** | **00 52 37.1** | **-0.7** |
| **JHJ2** | **Mitsune** | **15.36** | **342** | P | **P** | **00 53 39.6** | **-0.4** |
| **JHJ** | **Hachijo jima 2** | **15.38** | **342** | P | **P** | **00 53 39.4** | **-0.8** |
| | 16nm,0.3s,baz=63,slow=22,SNR=1.6 | | | | | | |
| **JOW** | **Kuigami** | **17.88** | **301** | P | **P** | **00 54 03.6** | **+0.4** |
| | 2.2nm,0.3s,baz=157,slow=30,SNR=1.0 | | | | | | |
| **JMN** | **Monobe** | **18.33** | **328** | P | **P** | **00 54 08.8** | **+1.5** |
| **INU** | **Inuyama** | **18.34** | **338** | P | **P** | **00 54 08.2** | **+0.9** |
| **JGF** | **Kuroka** | **18.44** | **339** | P | **P** | **00 54 09.8** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **19.03** | **342** | P | **P** | **00 54 12.5** | **-1.1** |
| | 0.2nm,0.3s,baz=164,slow=7.7,SNR=5.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.03** | **342** | P | **P** | **00 54 14.8** | **+1.2** |
| **MAJO** | **Matsushiro** | **19.03** | **342** | P | **P** | **00 54 13.6** | **0.0** |
| **MJB9** | **Matsu-Tunnel** | **19.04** | **342** | P | **P** | **00 54 15.2** | **+1.6** |
| **JNU** | **Nakatsue** | **19.54** | **321** | P | **P** | **00 54 17.5** | **-0.8** |
| | 1.1nm,0.3s,baz=63,slow=9.3,SNR=2.2 | | | | | | |
| **KSRS** | **Korea Array** | **24.32** | **324** | P | **P** | **00 55 00.4** | **-0.3** |
| | 5.0nm,0.8s,baz=145,slow=9.2,SNR=9.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.60** | **355** | P | **P** | **00 55 12.7** | **+0.7** |
| | 4.0nm,0.4s,baz=182,slow=22,SNR=1.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **27.97** | **339** | P | **P** | **00 55 33.1** | **+0.4** |
| | 2.0nm,0.6s,baz=151,slow=9.2,SNR=2.6 | | | | | | |
| **TOLI2** | **Tolitoli** | **29.80** | **237** | P | **P** | **00 55 49.4** | **+0.4** |
| **CN2** | **Changchun** | **30.29** | **331** | *e*P | **P** | **00 55 52.9** | **+0.2** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **32.55** | **343** | P | **P** | **00 56 11.7** | **-0.1** |
| | comp=Z,5.1nm,0.6s,baz=141,slow=6.8,SNR=24 | | | | | | |
| KLR | | | | PcP | **PcP** | **00 58 40.0** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=85,slow=12,SNR=3.0 | | | | | | |
| **MTN** | **Manton Dam** | **34.26** | **205** | P | **P** | **00 56 27.4** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **35.77** | **13** | P | **P** | **00 56 38.6** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=176,slow=25,SNR=1.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.77** | **13** | P | **P** | **00 56 38.3** | **-0.3** |
| **SBUM** | **Sibu** | **36.30** | **248** | P | **P** | **00 56 44.9** | **+1.4** |
| SBUM | | | | IAmb | IAmb | 00 56 45.4 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.61** | **197** | P | **P** | **00 57 11.5** | **+1.3** |
| WB0 | | | | IAmb | IAmb | 00 57 39.3 | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **39.75** | **196** | P | **P** | **00 57 12.1** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 00 57 37.9 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **39.79** | **196** | P | **P** | **00 57 12.5** | **+0.9** |
| WB2 | | | | IAmb | IAmb | 00 57 41.3 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.79** | **197** | P | **P** | **00 57 13.1** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=19,slow=8.4,SNR=5.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 59 03.2** | **+0.8** |
| | comp=Z,0.3nm,0.5s,baz=14,slow=3.7,SNR=0.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.79** | **197** | P | **P** | **00 57 12.8** | **+1.2** |
| **LZH** | **Lanzhou** | **40.56** | **304** | ⇑PKP | **P** | **00 57 19.3** | **+1.5** |
| LZH | | | | sPKP | | 00 57 39.5 | |
| **MA2** | **Magadan** | **41.15** | **4** | P | **P** | **00 57 21.7** | **-0.1** |
| | comp=Z,6.9nm,0.7s,baz=185,slow=6.8,SNR=9.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.32** | **209** | P | **P** | **00 57 24.2** | **+0.5** |
| | comp=Z,1.5nm,0.3s,baz=32,slow=9.3,SNR=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.32** | **209** | P | **P** | **00 57 24.1** | **+0.4** |
| FITZ | | | | IAmb | IAmb | 00 57 38.4 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.76** | **322** | P | **P** | **00 57 35.1** | **+0.3** |
| ULN | | | | IAmb | IAmb | 00 57 35.8 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **43.13** | **322** | P | **P** | **00 57 38.1** | **+0.4** |
| | comp=Z,3.9nm,0.5s,baz=124,slow=5.9,SNR=30 | | | | | | |
| SONM | | | | PcP | **PcP** | **00 59 12.8** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=129,slow=2.0,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **43.13** | **322** | P | **P** | **00 57 37.8** | **+0.1** |
| SONM | | | | IAmb | IAmb | 00 57 39.9 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **43.46** | **196** | P | **P** | **00 57 40.5** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **44.04** | **278** | P | **P** | **00 57 45.0** | **+0.1** |
| | comp=Z,1.7nm,0.4s,baz=74,slow=6.3,SNR=4.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.04** | **278** | P | **P** | **00 57 44.7** | **-0.3** |
| **SEY** | **Seymchan** | **44.59** | **4** | P | **P** | **00 57 49.1** | **+0.6** |
| | comp=Z,1.7nm,0.5s,baz=153,slow=7.0,SNR=9.6 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **47.12** | **213** | P | **P** | **00 58 09.4** | **+1.2** |
| PSA00 | | | | IAmb | IAmb | 00 58 13.4 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **GOMU** | **GeErMu** | **47.76** | **302** | P | **P** | **00 58 14.9** | **+1.6** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,93nm,5.1s | | | | | | |
| **BILL** | **Bilibino** | **51.20** | **10** | P | **P** | **00 58 38.1** | **+0.6** |
| BILL | | | | IAmb | IAmb | 00 58 38.7 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **TIXI** | **Tiksi** | **53.99** | **354** | P | **P** | **00 58 56.0** | **-1.3** |
| | comp=Z,1.6nm,0.3s,baz=267,slow=20,SNR=9.2 | | | | | | |
| **TIXI** | **Tiksi** | **53.99** | **354** | P | **P** | **00 58 56.8** | **-0.4** |
| TIXI | | | | IAmb | IAmb | 00 59 03.3 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.01** | **323** | P | **P** | **00 59 24.6** | **-0.5** |
| ZAA0 | | | | IAmb | IAmb | 00 59 25.7 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.01** | **323** | P | **P** | **00 59 24.8** | **-0.4** |
| | comp=Z,2.7nm,0.4s,baz=109,slow=8.1,SNR=21 | | | | | | |
| ZALV | | | | PcP | **PcP** | **01 00 07.7** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=73,slow=5.0,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.01** | **323** | P | **P** | **00 59 24.6** | **-0.6** |
| **MK31** | **Makanchi Array** | **58.42** | **314** | P | **P** | **00 59 28.6** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 00 59 29.0 | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.42** | **314** | P | **P** | **00 59 28.6** | **+0.5** |
| | comp=Z,3.8nm,0.4s,baz=89,slow=8.2,SNR=89 | | | | | | |
| MKAR | | | | PcP | **PcP** | **01 00 09.8** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=103,slow=3.9,SNR=3.7 | | | | | | |
| **MAKZ** | **Makanchi** | **58.63** | **314** | P | **P** | **00 59 30.2** | **+0.6** |
| MAKZ | | | | IAmb | IAmb | 00 59 30.8 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **OHAK** | **Old Harbor** | **59.08** | **34** | P | **P** | **00 59 32.0** | **-0.3** |
| **TTA** | **Tatalina** | **59.47** | **27** | P | **P** | **00 59 35.6** | **+0.7** |
| **K20K** | **Telida** | **60.44** | **27** | P | **P** | **00 59 42.5** | **+1.3** |
| K20K | | | | IAmb | IAmb | 00 59 43.6 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **60.67** | **26** | P | **P** | **00 59 44.0** | **+1.3** |
| J20K | | | | IAmb | IAmb | 00 59 48.2 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **PPLA** | **Purkeypile** | **61.12** | **28** | P | **P** | **00 59 46.5** | **+0.6** |
| PPLA | | | | IAmb | IAmb | 00 59 58.6 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **61.24** | **318** | P | **P** | **00 59 46.7** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **61.29** | **318** | P | **P** | **00 59 47.1** | **+0.1** |
| | comp=Z,27nm,0.9s,baz=97,slow=6.8,SNR=157 | | | | | | |
| **CAST** | **Castle Rocks** | **61.31** | **27** | P | **P** | **00 59 47.6** | **+0.7** |
| **IMAR** | **Indian Mountai** | **61.43** | **24** | P | **P** | **00 59 48.2** | **+0.5** |
| **NRIK** | **Noril'sk** | **61.67** | **340** | P | **P** | **00 59 49.0** | **-0.2** |
| | comp=Z,5.4nm,0.5s,baz=107,slow=7.5,SNR=19 | | | | | | |
| **NRIK** | **Noril'sk** | **61.67** | **340** | P | **P** | **00 59 49.0** | **-0.2** |
| NRIK | | | | IAmb | IAmb | 00 59 49.8 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **61.69** | **24** | P | **P** | **00 59 50.2** | **+0.8** |
| **RC01** | **Rabbit Creek A** | **61.78** | **30** | P | **P** | **00 59 50.0** | **0.0** |
| **KTH** | **Kantishna Hill** | **61.85** | **27** | P | **P** | **00 59 50.9** | **+0.4** |
| KTH | | | | IAmb | IAmb | 00 59 51.0 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **I21K** | **Tanana** | **61.87** | **25** | P | **P** | **00 59 51.6** | **+1.1** |
| I21K | | | | IAmb | IAmb | 00 59 52.4 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **TRF** | **Thorofare Moun** | **62.10** | **27** | P | **P** | **00 59 52.3** | **0.0** |
| **MLY** | **Manley** | **62.34** | **25** | P | **P** | **00 59 54.4** | **+0.9** |
| **PWL** | **Port Wells** | **62.40** | **30** | P | **P** | **00 59 54.3** | **+0.3** |
| **KNK** | **Knik Glacier** | **62.45** | **30** | P | **P** | **00 59 54.3** | **0.0** |
| KNK | | | | IAmb | IAmb | 01 00 12.1 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **SML** | **Sawmill** | **62.60** | **29** | P | **P** | **00 59 55.7** | **+0.4** |
| **RND** | **Reindeer** | **62.72** | **27** | P | **P** | **00 59 55.8** | **-0.3** |
| RND | | | | IAmb | IAmb | 01 00 02.3 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **62.79** | **305** | P | **P** | **01 00 01.0** | **+3.9** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **63.17** | **23** | P | **P** | **01 00 00.4** | **+1.6** |
| COLD | | | | IAmb | IAmb | 01 00 00.6 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **63.35** | **26** | P | **P** | **01 00 00.7** | **+0.7** |
| MDM | | | | IAmb | IAmb | 01 00 01.9 | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **63.45** | **26** | P | **P** | **01 00 00.0** | **-0.6** |
| **M24K** | **Tolsona, Glenn** | **63.65** | **29** | P | **P** | **01 00 03.2** | **+1.1** |
| **KLU** | **Klutina** | **63.66** | **30** | P | **P** | **01 00 03.0** | **+0.8** |
| KLU | | | | IAmb | IAmb | 01 00 13.3 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **63.70** | **25** | P | **P** | **01 00 03.2** | **+0.9** |
| **AAK** | **Ala-Archa** | **63.80** | **309** | P | **P** | **01 00 04.0** | **+0.4** |
| **IL31** | | **63.86** | **26** | P | **P** | **01 00 02.3** | **-0.9** |
| IL31 | | | | IAmb | IAmb | 01 00 02.6 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **63.86** | **26** | P | **P** | **01 00 02.3** | **-1.0** |
| | comp=Z,1.5nm,0.6s,baz=244,slow=6.2,SNR=25 | | | | | | |
| **PAX** | **Paxson** | **64.13** | **28** | P | **P** | **01 00 05.6** | **+0.5** |
| PAX | | | | IAmb | IAmb | 01 00 06.0 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **BMRM** | **Bremner River** | **64.21** | **31** | P | **P** | **01 00 06.7** | **+1.1** |
| **J25K** | **Salcha River,** | **64.47** | **27** | P | **P** | **01 00 06.5** | **-0.7** |
| **RIDG** | **Independent Ri** | **64.54** | **28** | P | **P** | **01 00 07.7** | **+0.1** |
| RIDG | | | | IAmb | IAmb | 01 00 34.9 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **VRDI** | **Verde Repeater** | **64.80** | **30** | P | **P** | **01 00 09.9** | **+0.4** |
| VRDI | | | | IAmb | IAmb | 01 00 10.4 | |
| | comp=Z,1.1nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **64.91** | **24** | P | **P** | **01 00 11.0** | **+1.2** |
| FYU | | | | IAmb | IAmb | 01 00 11.1 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **SCRK** | **Sand Creek** | **64.95** | **27** | P | **P** | **01 00 10.8** | **+0.5** |
| **M26K** | **Nabesna, AK** | **65.17** | **29** | P | **P** | **01 00 12.6** | **+1.0** |
| M26K | | | | IAmb | IAmb | 01 00 29.3 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **65.33** | **24** | P | **P** | **01 00 14.1** | **+1.6** |
| **NIL** | **Nilore** | **65.42** | **299** | P | **P** | **01 00 14.0** | **+0.3** |
| **L27K** | **Beaver Creek,** | **65.79** | **28** | P | **P** | **01 00 16.1** | **+0.7** |
| **BCAR** | **Beaver Creek A** | **65.81** | **28** | P | **P** | **01 00 16.0** | **+0.4** |
| **EGAK** | **Eagle** | **66.28** | **27** | P | **P** | **01 00 19.1** | **+0.7** |
| EGAK | | | | IAmb | IAmb | 01 00 38.0 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **66.52** | **320** | P | **P** | **01 00 20.6** | **+0.5** |
| BRVK | | | | IAmb | IAmb | 01 00 21.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **66.70** | **310** | P | **P** | **01 00 22.0** | **+0.5** |
| **DAWY** | **Dawson** | **66.97** | **28** | P | **P** | **01 00 23.7** | **+1.0** |
| **GAR** | **Garm** | **67.20** | **305** | P | **P** | **01 00 24.8** | **+0.1** |
| **M30M** | **Minto, Yukon** | **68.05** | **29** | P | **P** | **01 00 30.5** | **+1.2** |
| M30M | | | | IAmb | IAmb | 01 00 50.6 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron** | **68.14** | **305** | P | **P** | **01 00 30.4** | **0.0** |
| **KBL** | **Kabul** | **68.77** | **301** | P | **P** | **01 00 34.7** | **+0.2** |
| KBL | | | | IAmb | IAmb | 01 00 35.2 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **69.58** | **23** | P | **P** | **01 00 38.0** | **-0.3** |
| | comp=Z,1.5nm,0.6s,baz=252,slow=7.3,SNR=7.0 | | | | | | |
| **INK** | **Inuvik** | **69.58** | **23** | P | **P** | **01 00 37.9** | **-0.3** |
| INK | | | | IAmb | IAmb | 01 00 39.1 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **71.52** | **34** | P | **P** | **01 00 50.8** | **+0.8** |
| | comp=Z,2.8nm,0.7s,baz=250,slow=9.5,SNR=5.6 | | | | | | |
| **DLBC** | **Dease Lake** | **71.52** | **34** | P | **P** | **01 00 51.6** | **+1.6** |
| DLBC | | | | IAmb | IAmb | 01 00 51.9 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **C36M** | **Paulatuk** | **72.96** | **22** | P | **P** | **01 00 57.7** | **-0.2** |
| C36M | | | | IAmb | IAmb | 01 00 58.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **ARU** | **Arti** | **73.06** | **325** | P | **P** | **01 00 58.7** | **-0.1** |
| | comp=Z,3.9nm,0.5s,baz=96,slow=3.5,SNR=32 | | | | | | |
| **ARU** | **Arti** | **73.06** | **325** | P | **P** | **01 00 58.6** | **-0.2** |
| **ABKAR** | **Akbulak array** | **73.31** | **317** | P | **P** | **01 00 59.9** | **-0.4** |
| **AKTO** | **Aktyubinsk** | **74.34** | **318** | P | **P** | **01 01 05.5** | **-0.6** |
| | comp=Z,1.2nm,0.6s,baz=91,slow=8.1,SNR=5.9 | | | | | | |
| **GEYT** | **Alibeck** | **76.82** | **306** | P | **P** | **01 01 19.7** | **-0.5** |
| | comp=Z,2.0nm,0.7s,baz=37,slow=15,SNR=2.6 | | | | | | |
| **KIRV** | **Kirov** | **77.47** | **328** | P | **P** | **01 01 22.8** | **-0.4** |
| | comp=Z,10nm,0.6s,baz=160,slow=5.8,SNR=3.9 | | | | | | |
| **EUNU** | **Eureka** | **77.89** | **8** | P | **P** | **01 01 25.6** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **78.21** | **28** | P | **P** | **01 01 27.2** | **+0.1** |
| | comp=Z,2.0nm,0.5s,ba

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **96.34** | **354** | P | | **P** | **01 02 52.5** | **-1.4** |
| | comp=Z,5.2nm,0.9s,baz=334,slow=8.1,SNR=1.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.39** | **309** | PKP | | **PKPdf** | **01 08 36.0** | **-0.6** |
| | comp=Z,0.2nm,0.4s,baz=55,slow=1.4,SNR=8.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.39** | **309** | | | **PKPdf** | **01 08 35.8** | **-0.8** |
| **DBIC** | **Dimbokro** | **141.48** | **308** | PKhKP | | PKPpre | 01 08 48.9 | |
| | comp=Z,0.9nm,0.4s,baz=237,slow=4.7,SNR=4.6 | | | | | | | |
| **LPAZ** | **La Paz** | **147.87** | **91** | PKPbc | | **PKPbc** | **01 09 09.3** | **+0.4** |
| | comp=Z,1.3nm,0.5s,baz=331,slow=6.0,SNR=4.5 | | | | | | | |

*IDC **24** 01:02:16.8±3.0,8°.92S×119°.03E,h117km±22km, mb3.2/4, mb1 3.3/8, mb1mx3.0/52, mbtmp3.7/8, Error ellipse: s-maj=61.1km s-min=11.9km az=55.0*
*DJA **24** 01:02:18.7±0.3,9°.S±2°×119°.9E±°, h94km±5km, M4.3/12, mb4.3/5, mB5.1/1, MLv4.3/12, Mw(mB)4.5/1*
**ISC 24 01:02:15.6±0.7, 8°.86S±0°.04×119°.19E±0°.04, h102km, n29, σ3°32/45, mb3.5/4, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.80** | **166** | P | | **Pn** | **01 02 38.0** | **+3.8** |
| WBSI | | | | S | | **Sn** | **01 02 53.1** | **+4.9** |
| **PLAI** | **Plampang** | **1.40** | **271** | P | | **Pn** | **01 02 44.2** | **+3.5** |
| PLAI | | | | S | | **Sn** | **01 03 04.4** | **+3.7** |
| **BASI** | **Baing, Sumba** | **1.92** | **135** | P | | **Pn** | **01 02 51.1** | **+3.8** |
| **BSSI** | **Bau Bau, Buton** | **2.99** | **26** | P | | **Pn** | **01 03 03.6** | **+2.3** |
| BSSI | | | | S | | **Sn** | **01 03 36.2** | **-0.3** |
| **MMRI** | **Maumere** | **3.02** | **86** | P | | **Pn** | **01 03 05.3** | **+3.6** |
| MMRI | | | | S | | **Sn** | **01 03 38.2** | **+1.0** |
| **BKSI** | **Bulukumba** | **3.63** | **15** | P | | **Pn** | **01 03 12.4** | **+2.5** |
| BKSI | | | | S | | **Sn** | **01 03 52.5** | **+0.6** |
| **KAPI** | **Kappang** | **3.86** | **8** | P | | **Pn** | **01 03 15.3** | **+2.4** |
| | 6.2nm,0.3s,baz=208,slow=8.5,SNR=8.4 | | | | | | | |
| KAPI | | | | S | | **Sn** | **01 03 58.0** | **+0.6** |
| | 5.6nm,0.3s,baz=247,slow=23,SNR=7.1 | | | | | | | |
| **IGBI** | **Denpasar** | **4.00** | **270** | P | | **Pn** | **01 03 18.6** | **+3.9** |
| **BNSI** | **Bone** | **4.52** | **12** | P | | **Pn** | **01 03 26.1** | **+4.2** |
| BNSI | | | | S | | **Sn** | **01 04 20.7** | **+7.3** |
| **BATI** | **Baumata** | **4.61** | **107** | P | | **Pn** | **01 03 26.6** | **+3.5** |
| | 18nm,0.3s,baz=292,slow=5.4,SNR=13 | | | | | | | |
| BATI | | | | S | | **Sn** | **01 04 16.7** | **+1.1** |
| | 24nm,0.3s,baz=287,slow=20,SNR=5.9 | | | | | | | |
| **BATI** | **Baumata** | **4.61** | **107** | P | | **Pn** | **01 03 26.6** | **+3.5** |
| BATI | | | | S | | **Sn** | **01 04 16.2** | **+0.6** |
| **BBSI** | **Bau Bau** | **4.74** | **45** | P | | **Pn** | **01 03 28.3** | **+3.5** |
| BBSI | | | | S | | **Sn** | **01 04 19.5** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **5.00** | **274** | P | | **Pn** | **01 03 29.8** | **+1.5** |
| JAGI | | | | S | | **Sn** | **01 04 23.8** | **-1.1** |
| **GMJI** | **Gumukmas** | **5.71** | **275** | P | | **Pn** | **01 03 39.3** | **+1.3** |
| | 0.2nm24nm,0.8s | | | | | | | |
| GMJI | | | | S | | **Sn** | **01 04 43.9** | **+1.6** |
| | 0.2nm24nm,0.8s | | | | | | | |
| **PWJI** | **Pagerwojo** | **7.35** | **276** | P | | **Pn** | **01 04 04.7** | **+4.4** |
| | 0.2nm26nm,1.0s | | | | | | | |
| PWJI | | | | S | | **Sn** | **01 05 23.6** | **+1.4** |
| | 0.2nm26nm,1.0s | | | | | | | |
| **PCJI** | **Pacitan** | **7.95** | **274** | P | | **Pn** | **01 04 11.4** | **+2.9** |
| | 0.2nm13nm,0.5s | | | | | | | |
| PCJI | | | | S | | **Sn** | **01 05 29.9** | **-6.9** |
| | 0.2nm13nm,0.5s | | | | | | | |
| **UGM** | **Wanagama** | **8.63** | **276** | P | | **Pn** | **01 04 22.0** | **+4.3** |
| | 25nm,1.2s | | | | | | | |
| UGM | | | | S | | **Sn** | **01 05 48.0** | **-5.3** |
| | 25nm,1.2s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.12** | **146** | P | | **Pn** | **01 04 52.0** | **+0.5** |
| | 0.3nm,0.3s,baz=335,slow=9.7,SNR=9.8 | | | | | | | |
| FITZ | | | | S | | **Sn** | **01 06 48.6** | **-5.3** |
| | 1.2nm,0.3s,baz=238,slow=15,SNR=10 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.33** | **129** | P | | **P** | **01 06 23.5** | **+1.4** |
| | 0.2nm,0.3s,baz=300,slow=14,SNR=2.5 | | | | | | | |
| WRA | | | | S | | **S** | **01 09 39.4** | **-7.1** |
| | 0.3nm,0.3s,baz=307,slow=28,SNR=6.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.37** | **138** | P | | **P** | **01 06 46.2** | **+2.0** |
| | 0.9nm,0.5s,baz=318,slow=9.5,SNR=14 | | | | | | | |
| ASAR | | | | S | | **S** | **01 10 27.9** | **+0.8** |
| | 0.3nm,0.3s,baz=306,slow=21,SNR=4.2 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **01 14 19.1** | **-1.6** |
| | 0.2nm,0.3s,baz=343,slow=2.0,SNR=4.1 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **46.21** | **268** | T | | T | 02 00 15.5 | |
| | baz=97,slow=74 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **46.22** | **268** | T | | T | 02 00 22.3 | |
| | baz=97,slow=74 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **46.23** | **268** | T | | T | 02 00 19.5 | |
| | baz=97 | | | | | | | |
| **SONM** | **Songino Array** | **57.57** | **350** | P | | **P** | **01 11 54.9** | **+0.1** |
| | 0.3nm,0.5s,baz=167,slow=5.7,SNR=3.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.42** | **333** | P | | **P** | **01 12 40.7** | **-0.3** |
| | 0.4nm,0.6s,baz=146,slow=5.6,SNR=8.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **68.93** | **334** | P | | **P** | **01 13 08.4** | **-1.1** |
| | 0.3nm,0.2s,baz=145,slow=6.3,SNR=1.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.98** | **339** | P | | **P** | **01 13 09.3** | **-0.4** |
| | 0.2nm,0.3s,baz=132,slow=4.7,SNR=3.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.62** | **280** | PKP | | **PKPdf** | **01 20 51.5** | **-1.1** |
| | 0.1nm,0.5s,baz=98,slow=1.9,SNR=1.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **120.78** | **50** | PKP | | **PKPdf** | **01 20 54.1** | **-2.4** |
| | 0.3nm,0.6s,baz=217,slow=2.3,SNR=2.4 | | | | | | | |

*NEIC **24** 01:10:15.4±1.8,22°.2N±0°.1×103°.3E±0°.1, h10km±2km, mb4.5/15, Error ellipse: s-maj=24.8km s-min=19.2km az=48.0*
*IDC **24** 01:11:02.9±0.9,27°.51N×100°.15E, h0km, mb3.8/12, mb1 4.0/12, mb1mx3.7/58, mbtmp3.9/12, MS3.3/6, Ms1 3.4/6, ms1mx2.8/90, Error ellipse: s-maj=30.9km s-min=16.0km az=60.0*
**ISC 24 01:11:04.2±0.6, 27°.60N±0°.08×99°.99E±0°.07, h10km, n48, σ1°74/49, mb4.0/17, MS3.2/5, 1C, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PZH** | **PanZhiHua** | **1.90** | **125** | Pg | | **Pn** | **01 11 36.8** | **0.0** |
| PZH | | | | Sg | | **Sn** | **01 12 01.0** | **+0.1** |
| PZH | | | | smax | | smax | | |
| | comp=N,1μm,1.0s | | | | | | | |
| PZH | | | | smax | | smax | | |
| | comp=E,660nm,0.8s | | | | | | | |
| **KMI** | **Kunming** | **3.48** | **134** | ⇑Pn | | **Pn** | **01 11 59.9** | **+1.2** |
| KMI | | | | Pg | | **Pb** | **01 12 05.8** | **-0.3** |
| KMI | | | | Sg | | **Sb** | **01 12 50.4** | **+1.8** |
| KMI | | | | smax | | smax | | |
| | comp=N,110nm,1.7s | | | | | | | |
| KMI | | | | smax | | smax | | |
| | comp=E,120nm,1.2s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=N,1μm,4.8s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=E,1μm,4.7s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=Z,450nm,4.3s | | | | | | | |
| **SHL** | **Shillong** | **7.54** | **256** | Pn | | **Pn** | **01 12 53.1** | **-1.2** |
| **LSA** | **Lhasa** | **8.05** | **287** | P | | **Pn** | **01 13 04.8** | **+3.2** |
| **CMAR** | **Chiang Mai Arr** | **9.15** | **186** | Lg | | Lg | 01 15 55.9 | |
| | comp=Z,1.4nm,0.3s,baz=15,slow=29,SNR=2.5 | | | | | | | |
| CMAR | | | | LR | | LR | 01 17 24.3 | |
| | comp=Z,130nm,18.0s,baz=15,slow=42 | | | | | | | |
| **GOMU** | **GeErMu** | **9.63** | **334** | P | | **Pn** | **01 13 25.6** | **+2.4** |
| GOMU | | | | pP | | | 01 13 31.3 | |
| GOMU | | | | sP | | | 01 13 36.0 | |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **XAN** | **Xi'an** | **10.00** | **48** | P | | **Pn** | **01 13 25.9** | **-2.1** |
| XAN | | | | pP | | | 01 13 32.3 | |
| XAN | | | | sP | | | 01 13 36.5 | |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **TAPN** | **Taplejung** | **10.91** | **272** | *e*P | | **Pn** | **01 13 40.6** | **-0.1** |
| | comp=Z,20nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **11.93** | **270** | *e*P | | **Pn** | **01 13 55.7** | **+1.1** |
| | comp=Z,10nm,0.5s | | | | | | | |
| **JIRN** | **Jiri** | **12.24** | **273** | *e*P | | **Pn** | **01 13 59.3** | **+0.3** |
| | comp=Z,25nm,0.5s | | | | | | | |
| **GUN** | **Gumba** | **12.51** | **275** | *e*P | | **Pn** | **01 14 02.7** | **+0.1** |
| | comp=Z,34nm,0.6s | | | | | | | |
| **PKI** | **Pulchoki** | **12.94** | **273** | *e*P | | **Pn** | **01 14 08.5** | **0.0** |
| | comp=Z,27nm,0.6s | | | | | | | |
| **PKIN** | **Phulchoki** | **12.95** | **273** | *e*P | | **Pn** | **01 14 08.1** | **-0.5** |
| | comp=Z,22nm,0.5s | | | | | | | |
| **KKN** | **Kakani** | **13.04** | **274** | *e*P | | **Pn** | **01 14 09.3** | **-0.5** |
| | comp=Z,24nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **13.60** | **275** | *e*P | | **Pn** | **01 14 16.9** | **-0.4** |
| | comp=Z,5.9nm,0.4s | | | | | | | |
| **DANN** | **Dangsing** | **14.37** | **277** | *e*P | | **Pn** | **01 14 26.7** | **-1.3** |
| | comp=Z,25nm,0.5s | | | | | | | |
| **KOLN** | **Koldanda** | **14.53** | **274** | *e*P | | **Pn** | **01 14 29.5** | **-0.6** |
| | comp=Z,14nm,0.7s | | | | | | | |
| **PYUN** | **Piuthan** | **15.05** | **276** | *e*P | | **Pn** | **01 14 35.7** | **-1.5** |
| | comp=Z,5.2nm,0.4s | | | | | | | |
| **WMQ** | **Urumqi** | **18.98** | **332** | *e*P | | **P** | **01 15 24.9** | **-0.9** |
| **SONM** | **Songino Array** | **20.81** | **12** | P | | **P** | **01 15 45.7** | **-0.1** |
| | comp=Z,3.1nm,0.9s,baz=190,slow=13,SNR=15 | | | | | | | |
| SONM | | | | LR | | LR | 01 25 27.0 | |
| | comp=Z,98nm,19.4s,baz=49,slow=41 | | | | | | | |
| **SONM** | **Songino Array** | **20.81** | **12** | P | | **P** | **01 15 45.5** | **-0.3** |
| **ULN** | **Ulaanbaatar** | **20.97** | **13** | P | | **P** | **01 15 45.3** | **-2.2** |
| ULN | | | | IAmb | | IAmb | 01 15 50.7 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **22.97** | **314** | P | | **P** | **01 16 11.2** | **+1.9** |
| TARG | | | | IAmb | | IAmb | 01 16 36.9 | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| **KSH** | **Kashi** | **23.20** | **307** | P | | **P** | **01 16 15.3** | **+3.9** |
| KSH | | | | pP | | sP | 01 16 20.4 | +3.3 |
| KSH | | | | sP | | pP | 01 16 23.4 | +8.0 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **MK31** | **Makanchi Array** | **23.69** | **329** | P | | **P** | **01 16 17.2** | **+1.2** |
| **MKAR** | **Makanchi Array** | **23.69** | **329** | P | | **P** | **01 16 16.8** | **+0.8** |
| | comp=Z,1.0nm,0.8s,baz=130,slow=9.7,SNR=11 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **01 19 59.7** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=116,slow=3.4,SNR=3.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **23.69** | **329** | P | | **P** | **01 16 17.3** | **+1.3** |
| **NIL** | **Nilore** | **23.75** | **291** | P | | **P** | **01 16 12.9** | **-3.9** |
| **KSRS** | **Korea Array** | **25.43** | **60** | P | | **P** | **01 16 32.6** | **+0.5** |
| | comp=Z,2.3nm,0.8s,baz=257,slow=9.6,SNR=3.5 | | | | | | | |
| KSRS | | | | LR | | LR | 01 27 30.1 | |
| | comp=Z,74nm,20.8s,baz=280,slow=39 | | | | | | | |
| **AAK** | **Ala-Archa** | **25.56** | **313** | P | | **P** | **01 16 35.7** | **+2.3** |
| | comp=Z,2.8nm,0.8s,baz=142,slow=6.1,SNR=10 | | | | | | | |
| AAK | | | | LR | | LR | 01 28 18.1 | |
| | comp=Z,94nm,18.0s,baz=49,slow=40 | | | | | | | |
| **AAK** | **Ala-Archa** | **25.56** | **313** | P | | **P** | **01 16 36.0** | **+2.5** |
| AAK | | | | IAmb | | IAmb | 01 16 38.7 | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **GAR** | **Garm** | **27.17** | **302** | P | | **P** | **01 16 47.9** | **-0.1** |
| GAR | | | | IAmb | | IAmb | 01 16 53.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **PALK** | **Pallekele** | **27.26** | **226** | LR | | LR | 01 29 06.2 | |
| | comp=Z,72nm,20.1s,baz=99,slow=40 | | | | | | | |
| **KBL** | **Kabul** | **27.33** | **292** | P | | **P** | **01 16 44.8** | **-4.7** |
| KBL | | | | IAmb | | IAmb | 01 16 53.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **CHGR** | **Chuyangaron** | **27.96** | **301** | P | | **P** | **01 16 53.8** | **-1.2** |
| CHGR | | | | IAmb | | IAmb | 01 17 09.0 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.19** | **330** | P | | **P** | **01 16 58.6** | **+1.8** |
| | comp=Z,1.2nm,0.2s,baz=144,slow=9.6,SNR=4.3 | | | | | | | |
| **KURK** | **Kurchatov** | **28.22** | **331** | P | | **P** | **01 16 59.9** | **+2.8** |
| **ZALV** | **Zalesovo Beam** | **28.60** | **341** | P | | **P** | **01 17 03.2** | **+2.9** |
| | comp=Z,1.0nm,0.6s,baz=138,slow=12,SNR=5.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.60** | **341** | P | | **P** | **01 17 02.4** | **+2.1** |
| **KLR** | **Kul'dur** | **32.57** | **40** | P | | **P** | **01 17 35.2** | **-0.3** |
| | comp=Z,1.1nm,0.8s,baz=253,slow=9.1,SNR=3.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.41** | **65** | LR | | LR | 01 32 36.2 | |
| | comp=Z,36nm,19.3s,baz=266,slow=39 | | | | | | | |
| **ABKAR** | **Akbulak array** | **37.51** | **316** | P | | **P** | **01 18 19.3** | **+1.2** |
| **ARU** | **Arti** | **41.16** | **326** | P | | **P** | **01 18 48.5** | **0.0** |
| ARU | | | | IAmb | | IAmb | 01 19 07.9 | |
| | comp=Z,9.9nm,1.5s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.78** | **148** | P | | **P** | **01 20 12.2** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=315,slow=7.1,SNR=1.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.78** | **141** | P | | **P** | **01 20 54.6** | **-1.2** |
| | comp=Z,1.5nm,0.8s,baz=330,slow=7.7,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **60.57** | **144** | P | | **P** | **01 21 14.3** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=324,slow=6.9,SNR=6.8 | | | | | | | |
| **INK** | **Inuvik** | **76.61** | **18** | P | | **P** | **01 22 55.2** | **+0.6** |
| | comp=Z,1.6nm,0.9s,baz=316,slow=4.7,SNR=5.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.05** | **15** | P | | **P** | **01 23 44.8** | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=325,slow=4.8,SNR=7.1 | | | | | | | |

**OMAN 24 01:46:00.4±0.1, 17°.45N×59°.76E, h63km±7km, mb4.5/11, ml4.0/7, Error ellipse: s-maj=1.8km s-min=0.8km az=311.0, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MHTO** | **MHTO** | **3.91** | **335** | P | | Pn | 01 46 58.1 | +0.1 |
| MHTO | | | | S | | Sn | 01 47 44.3 | +1.7 |
| **SHAO** | **Shalim** | **3.98** | **279** | P | | Pn | 01 46 58.7 | -0.4 |
| SHAO | | | | S | | Sn | 01 47 45.2 | +0.7 |
| **DMTO** | **DMTO** | **4.60** | **274** | P | | Pn | 01 47 06.6 | -0.8 |
| | SNR=32 | | | | | | | |
| DMTO | | | | S | | Sn | 01 47 58.9 | -0.7 |
| **JLN** | **Jalan Bani Buh** | **4.69** | **356** | P | | Pn | 01 47 07.2 | -1.6 |
| | SNR=40 | | | | | | | |
| JLN | | | | S | | Sn | 01 48 01.5 | -0.4 |
| **JMDO** | **Jabal Madar** | **5.14** | **343** | P | | Pn | 01 47 15.0 | +0.1 |
| JMDO | | | | S | | Sn | 01 48 13.9 | +1.0 |
| **WBK** | **Wadi Bani Khal** | **5.19** | **352** | P | | Pn | 01 47 14.9 | -0.7 |
| | SNR=29 | | | | | | | |
| WBK | | | | S | | Sn | 01 48 14.3 | 0.0 |
| **RBK** | **Rabkut** | **5.30** | **271** | P | | Pn | 01 47 17.0 | -0.2 |
| RBK | | | | S | | Sn | 01 48 16.0 | -1.0 |
| **DOK** | **Doka** | **5.48** | **283** | P | | Pn | 01 47 19.8 | +0.2 |
| | SNR=9.9 | | | | | | | |
| DOK | | | | S | | Sn | 01 48 21.8 | +0.5 |
| **WHFO** | **Wadi Hawf** | **5.73** | **276** | P | | Pn | 01 47 22.8 | -0.2 |
| | SNR=19 | | | | | | | |
| WHFO | | | | S | | Sn | 01 48 28.3 | +0.9 |
| **BSY** | **Bisya** | **5.79** | **336** | P | | Pn | 01 47 24.8 | +0.9 |
| BSY | | | | S | | Sn | 01 48 30.9 | +1.9 |
| **SMDO** | **Samad** | **5.81** | **344** | P | | Pn | 01 47 23.9 | -0.3 |
| | SNR=25 | | | | | | | |
| SMDO | | | | S | | Sn | 01 48 29.8 | +0.3 |
| **WSAR** | **Wadi Sarin** | **5.86** | **350** | P | | Pn | 01 47 24.7 | 0.0 |
| WSAR | | | | S | | Sn | 01 48 30.6 | 0.0 |
| **ABTO** | **Aybut** | **6.17** | **270** | P | | Pn | 01 47 29.0 | -0.1 |
| ABTO | | | | S | | Sn | 01 48 38.4 | 0.0 |
| **BIDO** | **Bidbid** | **6.24** | **346** | P | | Pn | 01 47 30.1 | +0.2 |
| BIDO | | | | S | | Sn | 01 48 40.4 | +0.6 |
| **HOQ** | **Hoqain** | **6.52** | **340** | P | | Pn | 01 47 34.2 | +0.3 |
| HOQ | | | | S | | Sn | 01 48 48.4 | +1.5 |
| **ARQ** | **Araqi** | **6.60** | **333** | P | | Pn | 01 47 35.6 | +0.7 |
| | SNR=12 | | | | | | | |
| ARQ | | | | S | | Sn | 01 48 51.7 | +2.9 |
| **ALNE** | **Al Ain** | **7.57** | **331** | P | | Pn | 01 47 49.8 | +1.6 |
| ALNE | | | | S | | Sn | 01 49 15.4 | +2.8 |
| **MZR** | **Muzera** | **8.08** | **314** | P | | Pn | 01 47 58.0 | +2.8 |
| MZR | | | | S | | Sn | 01 49 25.2 | +0.1 |
| **HATD** | **Hatta, Dubai** | **8.09** | **336** | P | | Pn | 01 47 56.1 | +0.9 |
| HATD | | | | S | | Sn | 01 49 25.6 | +0.4 |

*IDC **24** 01:51:09.6±8.3,7°.27S×129°.04E, h161km±88km, mb3.2/1, mb1 3.3/5, mb1mx2.7/32, mbtmp3.8/5, Error ellipse: s-maj=79.3km s-min=26.0km az=38.0*
*DJA **24** 01:51:17.7±1.0,8°.S±7°×12°.9E±°, h10km, M4.4/5, mb4.5/3, mB4.9/1, MLv4.3/5, Mw(mB)4.2/1*
**ISC 24 01:51:08.2±1.0, 7°.33S±0°.07×129°.07E±0°.07, h150km, n15, σ3°05/21, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SOEI** | **Soe** | **5.33** | **243** | P | | **Pn** | **01 52 29.5** | **+3.5** |
| SOEI | | | | S | | **Sn** | **01 53 23.9** | **-2.9** |
| **SOEI** | **Soe** | **5.33** | **243** | P | | **Pn** | **01 52 29.3** | **+3.3** |
| **DRS** | **Darwin Rock St** | **5.38** | **161** | P | | **Pn** | **01 52 30.7** | **+4.1** |
| **FAKI** | **Fak Fak** | **5.41** | **36** | P | | **Pn** | **01 52 25.0** | **-2.0** |
| **MTN** | **Manton Dam** | **5.84** | **160** | P | | **Pn** | **01 52 36.9** | **+4.1** |
| **BATI** | **Baumata** | **6.06** | **242** | P | | **Pn** | **01 52 38.5** | **+2.7** |
| | 16nm,0.3s,baz=123,slow=5.1,SNR=6.5 | | | | | | | |
| BATI | | | | S | | **Sn** | **01 53 46.1** | **+1.9** |
| | 10nm,0.3s,baz=284,slow=21,SNR=3.2 | | | | | | | |
| **BATI** | **Baumata** | **6.06** | **242** | P | | **Pn** | **01 52 39.9** | **+4.2** |
| | 0.2nm28nm,0.5s | | | | | | | |
| BATI | | | | S | | **Sn** | **01 53 44.4** | **+0.2** |
| | 0.2nm28nm,0.5s | | | | | | | |
| **KDU** | **Kakadu** | **6.29** | **148** | P | | **Pn** | **01 52 42.6** | **+3.9** |
| **KNRA** | **Kununurra** | **8.30** | **182** | P | | **Pn** | **01 53 08.2** | **+2.6** |
| **FITZ** | **Fitzroy Crossi** | **11.21** | **197** | P | | **Pn** | **01 53 44.9** | **+0.8** |
| | 0.3nm,0.3s,baz=24,slow=11,SNR=14 | | | | | | | |
| FITZ | | | | S | | **Sn** | **01 55 43.4** | **-4.8** |
| | 1.2nm,0.3s,baz=15,slow=10,SNR=11 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.21** | **197** | P | | **Pn** | **01 53 45.2** | **+1.1** |
| **PLAI** | **Plampang** | **11.28** | **262** | P | | **Pn** | **01 53 44.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **13.54** | **158** | P | | **Pn** | **01 54 15.1** | **+0.8** |
| | 0.5nm,0.3s,baz=341,slow=12,SNR=28 | | | | | | | |
| WRA | | | | S | | **Sn** | **01 56 41.7** | **-2.5** |
| | 0.8nm,0.3s,baz=332,slow=25,SNR=7.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.89** | **165** | P | | **Pn** | **01 54 58.8** | **+3.0** |
| | 0.2nm,0.3s,baz=345,slow=11,SNR=5.5 | | | | | | | |
| ASAR | | | | S | | **S** | **01 58 01.1** | **-2.6** |
| | 0.1nm,0.3s,baz=343,slow=25,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | | **P** | **02 01 51.0** | **-0.2** |
| | 0.2nm,0.3s,baz=128,slow=7.3,SNR=5.0 | | | | | | | |

**IDC 24 02:10:51.3±2.1, 3°.73S×127°.96E, h0km, mb3.0/2, mb1 3.3/3, mb1mx3.2/34, mbtmp3.1/3, ML3.2/1, Error ellipse: s-maj=149.0km s-min=29.7km az=67.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **17.28** | **159** | P | | Pn | 02 14 53.1 | -1.0 |
| | 0.1nm,0.3s,baz=338,slow=12,SNR=5.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.64** | **164** | P | | P | 02 15 32.8 | +0.2 |
| | 0.2nm,0.5s,baz=341,slow=9.8,SNR=1.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.39** | **327** | P | | P | 02 21 29.4 | +0.1 |
| | 0.3nm,0.6s,baz=117,slow=8.7,SNR=4.9 | | | | | | | |

*IDC **24** 02:24:59.6±1.1, 11°.62N×142°.79E, h0km, mb3.3/5, mb1 3.6/6, mb1mx3.3/43, mbtmp3.4/6, ML3.7/1, MS4.0/1, Ms1 4.0/1, ms1mx2.7/51, Error ellipse: s-maj=45.0km s-min=21.5km az=116.0*
**ISC 24 02:25:04.5±1.0, 11°.6N±0°.2×142°.8E±0°.2, h32km, n8, σ0°56/8, mb3.5/6, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.82** | **45** | Pn | | **Pn** | **02 25 47.5** | **+0.2** |
| | 13nm,0.3s,baz=177,slow=19,SNR=2.1 | | | | | | | |
| GUMO | | | | Sn | | **Sn** | **02 26 20.2** | **-0.1** |
| | 24nm,0.3s,baz=0.0,slow=20,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.43** | **195** | P | | **P** | **02 31 32.0** | **+0.2** |
| | 0.3nm,0.6s,baz=19,slow=9.8,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **36.11** | **194** | P | | **P** | **02 32 03.5** | **-0.2** |
| | 0.1nm,0.5s,baz=11,slow=10,SNR=1.4 | | | | | | | |
| **LEM** | **Lembang** | **39.51** | **244** | LR | | LR | 02 47 29.8 | |
| | comp=Z,258nm,21.4s,baz=70,slow=34 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.55** | **317** | P | | **P** | **02 35 19.1** | **+0.4** |
| | 0.1nm,0.3s,baz=94,slow=10,SNR=1.7 | | | | | | | |
| **ILAR** | **Eielson Array** | **71.22** | **25** | P | | **P** | **02 36 19.5** | **-0.7** |
| | 0.3nm,0.5s,baz=254,slow=6.1,SNR=5.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.54** | **27** | P | | **P** | **02 37 40.0** | **+0.7** |
| | 0.2nm,0.4s,baz=286,slow=4.7,SNR=3.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **92.10** | **335** | P | | **P** | **02 38 09.9** | **-0.6** |
| | 2.1nm,0.9s,baz=76,slow=5.9,SNR=3.4 | | | | | | | |

*SJA **24** 02:32:53.9±0.7, 31°.16S×71°.73W, h20km±3km, ML4.2, MW4.0*
*IDC **24** 02:32:57.1±3.7, 31°.13S×71°.46W, h38km±28km, mb4.0/4, mb1 3.9/9, mb1mx3.6/35, mbtmp3.9/9, ML3.8/5, MS3.1/2, Ms1 3.1/2, ms1mx2.6/53, Error ellipse: s-maj=43.7km s-min=20.6km az=108.0*
*GUC **24** 02:32:58.4±0.8, 31°.09S×71°.36W, h45km±4km, ML4.4*
*NEIC **24** 02:32:58.3±1.9, 31°.15S±0°.03×71°.54W±0°.09, h43km±7km, mb4.0/8, ML4.4(GUC), Error ellipse: s-maj=11.8km s-min=4.8km az=90.0*
**ISC 24 02:32:57.5±0.8, 31°.16S±0°.03×71°.52W±0°.04, h44km±7km, n123, σ2°23/161, mb4.1/4, 1C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO02** | **Combarbal** | **0.45** | **95** | | | **Pn** | **02 33 08.3** | **+0.5** |
| CO02 | | | | Sn | | **Sn** | **02 33 15.3** | **+0.1** |
| **CO02** | **Combarbal** | **0.45** | **95** | ⇓*i*P | | **Pn** | **02 33 08.4** | **+0.5** |
| CO02 | | | | *e*S | | **Sn** | **02 33 15.3** | **+0.1** |
| **CO02** | **Combarbal** | **0.45** | **95** | *e*P | | **Pn** | **02 33 08.0** | **+0.1** |
| CO02 | | | | *e*S | | **Sn** | **02 33 16.0** | **+0.8** |
| CO02 | | | | *e*S | | **Sn** | **02 33 16.1** | **+0.8** |
| **CO06** | **Fray Jorge** | **0.50** | **349** | | | **Pn** | **02 33 09.9** | **+1.5** |
| CO06 | | | | Sn | | **Sn** | **02 33 18.4** | **+2.3** |
| **CO06** | **Fray Jorge** | **0.50** | **349** | ⇑*i*P | | **Pn** | **02 33 09.9** | **+1.5** |
| CO06 | | | | *e*S | | **Sn** | **02 33 18.0** | **+1.9** |
| **CO03** | **El Pedregal** | **0.78** | **66** | | | **Pn** | **02 33 12.5** | **+0.3** |
| CO03 | | | | Sn | | **Sn** | **02 33 22.8** | **-0.1** |
| **CO03** | **El Pedregal** | **0.78** | **66** | ⇓*i*P | | **Pn** | **02 33 12.6** | **+0.3** |
| CO03 | | | | *e*S | | **Sn** | **02 33 22.6** | **-0.3** |
| CO03 | | | | IAML | | | 02 33 23.4 | |
| | comp=E,27μm,0.2s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.17** | **32** | Pn | | **Pn** | **02 33 18.4** | **+0.8** |
| GO04 | | | | Sn | | **Sn** | **02 33 32.6** | **+0.2**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MT03** | **Universidad Ad** | **2.48** | **160** | Pn | | **Pn** | **02 33 37.1** | **+1.7** | |
| **MT03** | **Universidad Ad** | **2.48** | **160** | *eP* | | **Pn** | **02 33 37.0** | **+1.6** | |
| MT03 | | | | *eS* | | **Sn** | **02 34 05.7** | **+1.1** | |
| MT03 | | | | IAML | | | 02 34 13.2 | | |
| | comp=N,3μm,0.2s | | | | | | | | |
| **MT03** | **Universidad Ad** | **2.48** | **160** | *eP* | | **Pn** | **02 33 37.0** | **+1.6** | |
| MT03 | | | | *eS* | | **Sn** | **02 34 00.5** | **-4.0** | |
| MT03 | | | | *eS* | | **Sn** | **02 34 08.2** | **+3.7** | |
| MT03 | | | | IAML | | | 02 34 14.7 | | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **VA05** | **Santo Domingo** | **2.49** | **182** | | | **Pn** | **02 33 36.1** | **+0.6** | |
| **VA05** | **Santo Domingo** | **2.49** | **182** | *eP* | | **Pn** | **02 33 35.9** | **+0.4** | |
| VA05 | | | | IAML | | | 02 34 15.7 | | |
| | comp=E,2μm,0.6s | | | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.61** | **94** | *eP* | | **Pn** | **02 33 40.0** | **+2.8** | |
| RTLL | | | | *eS* | | **Sn** | **02 34 08.5** | **+0.6** | |
| **RTCV** | **Cerro Valdivia** | **2.64** | **106** | *eP* | | **Pn** | **02 33 41.7** | **+4.1** | |
| RTCV | | | | *eP* | | **Pn** | **02 33 42.0** | **+4.4** | |
| RTCV | | | | *eS* | | Sn | 02 34 19.1 | +11 | |
| **MT09** | **Talagante** | **2.65** | **170** | | | **Pn** | **02 33 39.3** | **+1.6** | |
| **MT09** | **Talagante** | **2.65** | **170** | *eP* | | **Pn** | **02 33 39.3** | **+1.6** | |
| MT09 | | | | *eS* | | **Sn** | **02 34 10.6** | **+1.9** | |
| MT09 | | | | IAML | | | 02 34 17.4 | | |
| | comp=N,2μm,0.1s | | | | | | | | |
| **ASAL** | **Salagasta** | **2.69** | **123** | *eP* | | **Pn** | **02 33 42.0** | **+3.6** | |
| ASAL | | | | *eS* | | **Sn** | **02 34 12.5** | **+2.7** | |
| **MT01** | **Popeta** | **2.70** | **175** | | | **Pn** | **02 33 39.5** | **+1.0** | |
| **MT01** | **Popeta** | **2.70** | **175** | *eP* | | **Pn** | **02 33 39.5** | **+1.0** | |
| **MT01** | **Popeta** | **2.70** | **175** | *eP* | | **Pn** | **02 33 34.0** | **-4.5** | |
| MT01 | | | | *eP* | | **Pn** | **02 33 39.4** | **+1.0** | |
| MT01 | | | | *eS* | | Sn | 02 34 00.5 | -9.5 | |
| MT01 | | | | *eS* | | **Sn** | **02 34 12.2** | **+2.3** | |
| MT01 | | | | IAML | | | 02 34 20.8 | | |
| | comp=Z,616nm,0.5s | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.76** | **128** | *eP* | | **Pn** | **02 33 43.9** | **+4.5** | |
| ARCO | | | | *eS* | | Sn | 02 34 25.9 | +14 | |
| ARCO | | | | IAML | | | 02 34 28.8 | | |
| | comp=Z,579nm,0.3s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.90** | **158** | Pn | | **Pn** | **02 33 43.5** | **+2.2** | |
| **LMEL** | **Las Melosas** | **2.90** | **158** | *eP* | | **Pn** | **02 33 43.6** | **+2.3** | |
| LMEL | | | | IAML | | | 02 34 26.5 | | |
| | comp=N,1μm,0.1s | | | | | | | | |
| **BO04** | **La Punta** | **2.92** | **165** | | | **Pn** | **02 33 43.1** | **+1.5** | |
| **BO04** | **La Punta** | **2.92** | **165** | *eP* | | **Pn** | **02 33 43.0** | **+1.5** | |
| BO04 | | | | *eS* | | **Sn** | **02 34 16.6** | **+1.2** | |
| BO04 | | | | IAML | | | 02 34 26.3 | | |
| | comp=N,876nm,0.4s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.97** | **8** | Pn | | **Pn** | **02 33 43.2** | **+1.0** | |
| **AC04** | **Llanos de Chal** | **2.97** | **8** | *eP* | | **Pn** | **02 33 43.5** | **+1.4** | |
| AC04 | | | | IAML | | | 02 34 32.9 | | |
| | comp=E,637nm,0.2s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.97** | **8** | *eP* | | **Pn** | **02 33 43.0** | **+0.8** | |
| AC04 | | | | *eS* | | **Sn** | **02 34 20.5** | **+3.9** | |
| AC04 | | | | IAML | | | 02 34 30.5 | | |
| | comp=Z,449nm,0.7s | | | | | | | | |
| **AAGR** | **Agrelo** | **2.98** | **131** | *eP* | | **Pn** | **02 33 46.0** | **+3.6** | |
| AAGR | | | | *eS* | | Sn | 02 34 28.9 | +12 | |
| **BO01** | **Tunca** | **3.24** | **174** | Pn | | **Pn** | **02 33 46.8** | **+1.0** | |
| **BO01** | **Tunca** | **3.24** | **174** | *eP* | | **Pn** | **02 33 46.6** | **+0.8** | |
| **BO01** | **Tunca** | **3.24** | **174** | *eP* | | **Pn** | **02 33 47.0** | **+1.2** | |
| BO01 | | | | *eS* | | **Sn** | **02 34 26.9** | **+3.7** | |
| **BO03** | **Pichilemu** | **3.34** | **186** | *eP* | | **Pn** | **02 33 47.0** | **-0.3** | |
| **BO02** | **Sierra Bellavi** | **3.67** | **170** | | | **Pn** | **02 33 52.8** | **+1.0** | |
| **BO02** | **Sierra Bellavi** | **3.67** | **170** | *eP* | | **Pn** | **02 33 52.9** | **+1.0** | |
| **BO02** | **Sierra Bellavi** | **3.67** | **170** | *eP* | | **Pn** | **02 33 53.2** | **+1.4** | |
| BO02 | | | | *eS* | | **Sn** | **02 34 37.1** | **+3.2** | |
| BO02 | | | | IAML | | | 02 34 51.7 | | |
| | comp=Z,477nm,0.6s | | | | | | | | |
| **GO03** | **Copiap** | **3.73** | **18** | Pn | | **Pn** | **02 33 54.3** | **+1.7** | |
| **GO03** | **Copiap** | **3.73** | **18** | *eP* | | **Pn** | **02 33 54.1** | **+1.5** | |
| **GO03** | **Copiap** | **3.73** | **18** | *eP* | | **Pn** | **02 33 54.3** | **+1.7** | |
| GO03 | | | | *eS* | | **Sn** | **02 34 39.5** | **+4.1** | |
| **VCA** | **Vinchina** | **3.76** | **51** | *eP* | | **Pn** | **02 33 57.0** | **+3.9** | |
| VCA | | | | *eS* | | **Sn** | **02 34 42.5** | **+6.3** | |
| VCA | | | | IAML | | | 02 34 55.7 | | |
| | comp=Z,681nm,0.4s | | | | | | | | |
| **GO05** | **Huala** | **3.85** | **185** | Pn | | **Pn** | **02 33 54.0** | **-0.2** | |
| **GO05** | **Huala** | **3.85** | **185** | *eP* | | **Pn** | **02 33 54.0** | **-0.2** | |
| **GO05** | **Huala** | **3.85** | **185** | *eP* | | **Pn** | **02 33 54.2** | **-0.1** | |
| GO05 | | | | *eS* | | Sn | 02 34 53.5 | +15 | |
| **AC06** | **Mina Casimiro** | **3.93** | **15** | Pn | | **Pn** | **02 33 56.4** | **+1.1** | |
| **AC06** | **Mina Casimiro** | **3.93** | **15** | *eP* | | **Pn** | **02 33 56.6** | **+1.3** | |
| **ACLC** | **CERRO LA CRUZ** | **4.31** | **68** | *eP* | | **Pn** | **02 34 03.0** | **+2.2** | |
| ACLC | | | | *eP* | | **Pn** | **02 34 03.0** | **+2.2** | |
| ACLC | | | | *eS* | | **Sn** | **02 34 52.3** | **+2.4** | |
| ACLC | | | | IAML | | | 02 34 59.6 | | |
| | comp=Z,830nm,0.4s | | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.37** | **81** | *eP* | | **Pn** | **02 34 03.2** | **+1.9** | |
| APLL | | | | *eS* | | Sn | 02 35 00.4 | +9.4 | |
| **ML02** | **Panimavida** | **4.59** | **179** | Pn | | **Pn** | **02 34 04.6** | **+0.3** | |
| **AC02** | **Maricunga** | **4.79** | **27** | Pn | | **Pn** | **02 34 09.2** | **+1.6** | |
| **H03N1** | **Juan Fernandez** | **6.66** | **248** | T | | T | 02 41 21.5 | | |
| | baz=78,slow=72,SNR=2374 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.67** | **248** | T | | T | 02 41 12.8 | | |
| | baz=78,slow=72,SNR=1705 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.67** | **248** | T | | T | 02 41 16.2 | | |
| | baz=78,slow=72,SNR=2340 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.78** | **245** | T | | T | 02 41 37.4 | | |
| | baz=74 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **6.79** | **245** | T | | T | 02 41 32.5 | | |
| | baz=74 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **6.80** | **245** | T | | T | 02 41 34.8 | | |
| | baz=74 | | | | | | | | |
| **LC01** | **Cunco** | **7.72** | **182** | Pn | | **Pn** | **02 34 46.0** | **-1.4** | |
| **PB15** | **IPOC Station P** | **8.13** | **13** | *eP* | | **Pn** | **02 34 54.1** | **+0.9** | |
| **LVC** | **Limon Verde** | **8.83** | **16** | Pn | | **Pn** | **02 35 01.9** | **-1.0** | |
| | comp=Z,0.5nm,0.3s,baz=146,slow=7.3,SNR=1.7 | | | | | | | | |
| LVC | | | | Sn | | **Sn** | **02 36 38.9** | **-2.4** | |
| | comp=Z,0.4nm,0.3s,baz=351,slow=19,SNR=1.6 | | | | | | | | |
| **LVC** | **Limon Verde** | **8.83** | **16** | Pn | | **Pn** | **02 35 02.4** | **-0.6** | |
| **PLCA** | **Paso Flores** | **9.58** | **176** | Pn | | **Pn** | **02 35 12.7** | **-0.2** | |
| | comp=Z,0.2nm,0.3s,baz=338,slow=15,SNR=6.8 | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.58** | **176** | | | **Pn** | **02 35 13.3** | **+0.4** | |
| **LL04** | **Puerto Octay** | **9.75** | **184** | Pn | | **Pn** | **02 35 14.3** | **-0.8** | |
| **ITQB** | **Itaqui** | **12.94** | **87** | Pn | | **Pn** | **02 35 58.6** | **-0.1** | |
| **CPUP** | **Villa Florida** | **13.35** | **72** | Pn | | **Pn** | **02 36 03.2** | **-1.1** | |
| | comp=Z,0.2nm,0.3s,baz=222,slow=13,SNR=2.9 | | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **02 38 28.9** | **-2.4** | |
| | comp=Z,0.2nm,0.3s,baz=143,slow=20,SNR=2.2 | | | | | | | | |
| CPUP | | | | LR | | LR | 02 41 04.7 | | |
| | comp=Z,58nm,18.2s,baz=232,slow=37 | | | | | | | | |
| **CPUP** | **Villa Florida** | **13.35** | **72** | | | **Pn** | **02 36 03.5** | **-0.8** | |
| **LPAZ** | **La Paz** | **15.13** | **13** | Pn | | **Pn** | **02 36 27.7** | **-1.2** | |
| | comp=Z,0.2nm,0.3s,baz=169,slow=5.2,SNR=2.3 | | | | | | | | |
| **LPAZ** | **La Paz** | **15.13** | **13** | Pn | | **Pn** | **02 36 29.1** | **+0.2** | |
| **PLTB** | **Pedras Altas** | **15.31** | **97** | Pn | | **Pn** | **02 36 28.0** | **-2.6** | |
| PLTB | | | | IAmb | | IAmb | 02 36 45.2 | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **SIV** | **San Ignacio** | **17.86** | **35** | P | | **P** | **02 37 02.9** | **-0.2** | |
| | comp=Z,0.3nm,0.3s,baz=209,slow=8.7,SNR=8.1 | | | | | | | | |
| **USHA** | **Ushuaia** | **23.76** | **176** | P | | **P** | **02 38 06.2** | **+0.7** | |
| | comp=Z,4.8nm,0.6s,baz=4.4,slow=13,SNR=1.4 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.45** | **60** | P | | **P** | **02 38 30.3** | **-0.3** | |
| | comp=Z,2.0nm,0.5s,baz=309,slow=13,SNR=4.2 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.45** | **60** | P | | **P** | **02 38 30.6** | **+0.1** | |
| BDFB | | | | IAmb | | IAmb | 02 38 30.7 | | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| **PTGA** | **Pitinga** | **32.19** | **22** | LR | | LR | 02 53 09.8 | | |
| | comp=Z,46nm,20.6s,baz=169,slow=38 | | | | | | | | |
| **SNAA** | **Sanae** | **54.05** | **159** | P | | **P** | **02 42 16.9** | **-0.3** | |
| **DBIC** | **Dimbokro** | **73.87** | **72** | P | | **P** | **02 44 27.9** | **-0.2** | |
| | comp=Z,3.7nm,0.9s,baz=306,slow=3.4,SNR=3.6 | | | | | | | | |
| **DBIC** | **Dimbokro** | **73.87** | **72** | P | | **P** | **02 44 27.6** | **-0.4** | |
| **TORD** | **Torodi Ar. Bea** | **82.83** | **70** | P | | **P** | **02 45 17.6** | **0.0** | |
| | comp=Z,1.9nm,0.8s,baz=278,slow=6.0,SNR=12 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.83** | **70** | P | | **P** | **02 45 16.9** | **-0.6** | |
| TORD | | | | IAmb | | IAmb | 02 45 18.3 | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.44** | **209** | PKP | | **PKPdf** | **02 51 50.1** | **-0.4** | |
| | comp=Z,0.3nm,0.3s,baz=152,slow=1.8,SNR=2.5 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.21** | **271** | T | | T | 05 10 43.8 | | |
| | baz=116,slow=75,SNR=146 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.22** | **271** | T | | T | 05 10 44.7 | | |
| | baz=116,slow=75,SNR=224 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.22** | **271** | T | | T | 05 10 45.1 | | |
| | baz=116,slow=75,SNR=208 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.55** | **272** | T | | T | 05 11 16.7 | | |
| | baz=116,slow=75,SNR=25 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.56** | **272** | T | | T | 05 11 16.9 | | |
| | baz=116,slow=75,SNR=10.0 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.56** | **272** | T | | T | 05 11 13.0 | | |
| | baz=116,slow=75,SNR=42 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.58** | **30** | PKPbc | | **PKiKP** | **02 52 46.8** | **+0.1** | |
| | comp=Z,3.6nm,0.4s,baz=314,slow=3.0,SNR=20 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.58** | **30** | PKPbc | | **PKPbc** | **02 52 46.5** | **+0.2** | |
| **MKAR** | **Makanchi Array** | **154.51** | **45** | PKPbc | | **PKPbc** | **02 52 52.8** | **-0.3** | |
| | comp=Z,0.4nm,0.7s,baz=287,slow=2.2,SNR=4.6 | | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | **02 53 07.8** | **+0.1** | |
| | comp=Z,0.6nm,0.7s,baz=278,slow=2.7,SNR=5.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **154.51** | **45** | | | **PKPbc** | **02 52 53.1** | **0.0** | |
| MKAR | | | | | | **PKPab** | **02 53 08.1** | **+0.4** | |

*IDC **24** 02:33:46.7±2.5,9.˝18S×127.˝31E, h45km±27km, mb4.2/8, mb1 4.5/14, mb1mx4.1/38, mbtmp4.6/14, ML4.5/6, MS3.8/21, Ms1 3.8/21, ms1mx3.5/70, Error ellipse: s-maj=24.5km s-min=15.1km az=40.0*

*NEIC **24** 02:33:49.0±2.4, 9.˝06S±0.˝07×127.˝20E±0.˝06, h46km±7km, mb4.7/17, Error ellipse: s-maj=9.7km s-min=9.1km az=180.0*

*DJA **24** 02:33:49.6±0.2, 9˝S±2˝×12˝7E±˚, h57km±4km, M4.7/43, mB5.3/17, mb4.7/43, MLv4.9/12, Mw(mB)4.7/17*

**ISC 24 02:33:48.2±0.4, 9.˝19S±0.˝05×127.˝26E±0.˝05, h50km, n123, σ1§72/114, mb4.6/28, MS3.7/15, 1C-2D, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | h | m | s | ISC | Res |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **3.00** | **259** | Pn | | **Pn** | | **02** | **34** | **34.5** | **+1.0** | |
| **SOEI** | **Soe** | **3.00** | **259** | P | | **Pn** | | **02** | **34** | **34.2** | **+0.8** | |
| SOEI | | | | S | | **Sn** | | **02** | **35** | **07.2** | **-1.1** | |
| **SOEI** | **Soe** | **3.00** | **259** | P | | **Pn** | | **02** | **34** | **34.5** | **+1.0** | |
| **BATI** | **Baumata** | **3.69** | **254** | P | | **Pn** | | **02** | **34** | **42.2** | **-0.5** | |
| | 14nm,0.3s,baz=173,slow=1.1,SNR=54 | | | | | | | | | | | |
| BATI | | | | S | | **Sn** | | **02** | **35** | **25.9** | **+0.9** | |
| | 36nm,0.3s,baz=146,slow=17,SNR=3.7 | | | | | | | | | | | |
| **BATI** | **Baumata** | **3.69** | **254** | P | | **Pn** | | **02** | **34** | **43.8** | **+1.1** | |
| BATI | | | | S | | **Sn** | | **02** | **35** | **28.8** | **+3.8** | |
| **SAUI** | **Saumlaki** | **4.17** | **74** | Pn | | **Pn** | | **02** | **34** | **51.8** | **+2.4** | |
| **DRS** | **Darwin Rock St** | **4.82** | **132** | P | | **Pn** | | **02** | **35** | **00.8** | **+2.6** | |
| **MMRI** | **Maumere** | **4.99** | **276** | Pn | | **Pn** | | **02** | **34** | **58.7** | **-1.9** | |
| **MTN** | **Manton Dam** | **5.26** | **134** | Pn | | **Pn** | | **02** | **35** | **07.2** | **+2.9** | |
| **MTN** | **Manton Dam** | **5.26** | **134** | P | | Pn | | 02 | 35 | 08.2 | +3.9 | |
| **BBSI** | **Bau Bau** | **5.92** | **308** | P | | **Pn** | | **02** | **35** | **14.4** | **+1.0** | |
| | 0.1nm362nm43nm,1.1s | | | | | | | | | | | |
| **MSAI** | **Masohi** | **6.04** | **16** | P | | **Pn** | | **02** | **35** | **18.0** | **+3.0** | |
| | 0.1nm2μm11nm,0.8s | | | | | | | | | | | |
| **KNRA** | **Kununurra** | **6.62** | **167** | Pn | | **Pn** | | **02** | **35** | **25.3** | **+2.5** | |
| **KNRA** | **Kununurra** | **6.62** | **167** | P | | **Pn** | | **02** | **35** | **25.4** | **+2.5** | |
| **BASI** | **Baing, Sumba** | **6.67** | **261** | P | | **Pn** | | **02** | **35** | **26.5** | **+2.9** | |
| | 1.0nm2μm186nm,1.2s | | | | | | | | | | | |
| **SANI** | **Sanana** | **7.20** | **350** | P | | **Pn** | | **02** | **35** | **31.3** | **+0.4** | |
| | 0.3nm1μm72nm,1.5s | | | | | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **7.36** | **294** | P | | **Pn** | | **02** | **35** | **34.2** | **+1.1** | |
| | 0.3nm77nm,1.2s | | | | | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **7.78** | **266** | P | | **Pn** | | **02** | **35** | **38.3** | **-0.6** | |
| | 0.6nm962nm94nm,0.7s | | | | | | | | | | | |
| **FAKI** | **Fak Fak** | **7.96** | **39** | Pn | | **Pn** | | **02** | **35** | **39.6** | **-1.8** | |
| **FAKI** | **Fak Fak** | **7.96** | **39** | P | | **Pn** | | **02** | **35** | **38.5** | **-2.9** | |
| | 26nm,1.1s | | | | | | | | | | | |
| **FAKI** | **Fak Fak** | **7.96** | **39** | P | | **Pn** | | **02** | **35** | **40.0** | **-1.4** | |
| **BKSI** | **Bulukumba** | **8.05** | **298** | P | | **Pn** | | **02** | **35** | **42.7** | **+0.1** | |
| | 0.2nm57nm,1.1s | | | | | | | | | | | |
| **KAPI** | **Kappang** | **8.52** | **299** | P | | **Pn** | | **02** | **35** | **48.8** | **-0.2** | |
| | 1.2nm,0.3s,baz=107,slow=7.9,SNR=7.7 | | | | | | | | | | | |
| KAPI | | | | LR | | LR | | 02 | 39 | 30.7 | | |
| | comp=Z,394nm,19.7s,baz=142,slow=40 | | | | | | | | | | | |
| **KAPI** | **Kappang** | **8.52** | **299** | Pn | | **Pn** | | **02** | **35** | **47.9** | **-1.2** | |
| **BNSI** | **Bone** | **8.54** | **303** | P | | **Pn** | | **02** | **35** | **49.6** | **+0.2** | |
| | 2μm178nm,1.1s | | | | | | | | | | | |
| **FITZ** | **Fitzoy Crossi** | **9.00** | **190** | P | | **Pn** | | **02** | **35** | **54.5** | **-1.1** | |
| | 4.1nm,0.3s,baz=30,slow=12,SNR=101 | | | | | | | | | | | |
| FITZ | | | | S | | **Sn** | | **02** | **37** | **33.6** | **-2.0** | |
| | 6.1nm,0.3s,baz=94,slow=17,SNR=12 | | | | | | | | | | | |
| FITZ | | | | LR | | LR | | 02 | 40 | 14.2 | | |
| | comp=Z,631nm,18.1s,baz=12,slow=43 | | | | | | | | | | | |
| **FITZ** | **Fitzoy Crossi** | **9.00** | **190** | Pn | | **Pn** | | **02** | **35** | **56.0** | **+0.4** | |
| **FITZ** | **Fitzoy Crossi** | **9.00** | **190** | P | | **Pn** | | **02** | **35** | **55.9** | **+0.4** | |
| **SPSI** | **Sidrap Palu** | **9.07** | **304** | P | | **Pn** | | **02** | **35** | **57.1** | **+0.6** | |
| | 36nm,1.1s | | | | | | | | | | | |
| **SIJI** | **Sorong** | **9.18** | **26** | P | | **Pn** | | **02** | **36** | **01.0** | **+3.0** | |
| | 3.0nm,0.3s,baz=346,slow=21,SNR=4.6 | | | | | | | | | | | |
| SIJI | | | | S | | **Sn** | | **02** | **37** | **37.1** | **-2.8** | |
| | 0.7nm,0.3s,baz=217,slow=20,SNR=1.4 | | | | | | | | | | | |
| SIJI | | | | LR | | LR | | 02 | 40 | 24.6 | | |
| | comp=Z,344nm,20.6s,baz=192,slow=44 | | | | | | | | | | | |
| **LUWI** | **Luwuk** | **9.24** | **331** | Pn | | **Pn** | | **02** | **35** | **59.2** | **+0.3** | |
| **LUWI** | **Luwuk** | **9.24** | **331** | P | | **Pn** | | **02** | **36** | **00.2** | **+1.3** | |
| | 4μm97nm,1.4s | | | | | | | | | | | |
| **PLAI** | **Plampang** | **9.37** | **271** | P | | **Pn** | | **02** | **35** | **59.8** | **-0.9** | |
| | 828nm84nm,0.7s | | | | | | | | | | | |
| **PLAI** | **Plampang** | **9.37** | **271** | P | | **Pn** | | **02** | **36** | **00.5** | **-0.2** | |
| **TTSI** | **Tana Toraja** | **9.59** | **309** | P | | **Pn** | | **02** | **36** | **04.8** | **+1.2** | |
| **APSI** | **Ampana** | **9.94** | **326** | P | | **Pn** | | **02** | **36** | **10.5** | **+2.1** | |
| | 775nm75nm,1.2s | | | | | | | | | | | |
| **GTOI** | **Gorontalo** | **10.63** | **336** | P | | **Pn** | | **02** | **36** | **22.1** | **+4.1** | |
| | 17nm,1.0s | | | | | | | | | | | |
| **MRSI** | **Marisa** | **10.96** | **331** | P | | **Pn** | | **02** | **36** | **25.2** | **+2.7** | |
| | 872nm31nm,0.8s | | | | | | | | | | | |
| **MPSI** | **Mapaga** | **11.97** | **322** | P | | **Pn** | | **02** | **36** | **39.9** | **+3.7** | |
| | 37nm,1.4s | | | | | | | | | | | |
| **WB0** | **Warramunga Arr** | **12.58** | **148** | Pn | | **Pn** | | **02** | **36** | **43.1** | **-1.5** | |
| **WRAB** | **Tennant Creek** | **12.70** | **148** | Pn | | **Pn** | | **02** | **36** | **44.5** | **-1.7** | |
| **WRA** | **Warramunga Arr** | **12.70** | **148** | P | | **Pn** | | **02** | **36** | **44.3** | **-1.9** | |
| | 7.1nm,0.3s,baz=320,slow=14,SNR=258 | | | | | | | | | | | |
| WRA | | | | S | | **Sn** | | **02** | **39** | **03.2** | **-3.0** | |
| | 4.6nm,0.3s,baz=322,slow=24,SNR=15 | | | | | | | | | | | |
| WRA | | | | LR | | LR | | 02 | 41 | 44.5 | | |
| | comp=Z,338nm,20.0s,baz=329,slow=38 | | | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **12.70** | **148** | | | **Pn** | | **02** | **36** | **43.6** | **-2.6** | |
| **WB2** | **Warramunga Arr** | **12.70** | **148** | Pn | | **Pn** | | **02** | **36** | **43.6** | **-2.6** | |
| **WR0** | **Warramunga Arr** | **12.82** | **147** | Pn | | **Pn** | | **02** | **36** | **45.9** | **-1.9** | |
| **JAGI** | **Jajag, Banyuwa** | **12.97** | **272** | Pn | | **Pn** | | **02** | **36** | **50.1** | **+0.2** | |
| **JAGI** | **Jajag, Banyuwa** | **12.97** | **272** | P | | **Pn** | | **02** | **36** | **51.2** | **+1.3** | |
| | 20nm,1.0s | | | | | | | | | | | |
| **GMJI** | **Gumukmas** | **13.69** | **273** | P | | **Pn** | | **02** | **37** | **00.6** | **+0.9** | |
| | 1μm19nm,0.8s | | | | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **14.23** | **209** | Pn | | **Pn** | | **02** | **37** | **05.8** | **-1.3** | |
| **PWJI** | **Pagerwojo** | **15.32** | **273** | P | | **Pn** | | **02** | **37** | **20.7** | **-0.7** | |
| | 56nm,0.9s | | | | | | | | | | | |
| **AS31** | **Alice Springs** | **15.74** | **157** | Pn | | **Pn** | | **02** | **37** | **25.4** | **-1.3** | |
| **ASAR** | **Alice Springs** | **15.74** | **157** | P | | **Pn** | | **02** | **37** | **25.3** | **-1.4** | |
| | 2.2nm,0.3s,baz=332,slow=9.2,SNR=108 | | | | | | | | | | | |
| ASAR | | | | S | | **Sn** | | **02** | **40** | **14.7** | **-5.5** | |
| | 1.4nm,0.3s,baz=322,slow=19,SNR=6.5 | | | | | | | | | | | |
| ASAR | | | | LR | | LR | | 02 | 44 | 07.0 | | |
| | comp=Z,409nm,18.4s,baz=336,slow=39 | | | | | | | | | | | |
| **PCJI** | **Pacitan** | **15.93** | **272** | P | | **Pn** | | **02** | **37** | **27.2** | **-1.9** | |
| | 55nm,1.1s | | | | | | | | | | | |
| **COEN** | **Coen** | **16.30** | **108** | Pn | | **Pn** | | **02** | **37** | **33.3** | **-0.5** | |
| **UGM** | **Wanagama** | **16.60** | **273** | P | | **P** | | **02** | **37** | **39.9** | **+0.5** | |
| **UGM** | **Wanagama** | **16.60** | **273** | P | | **P** | | **02** | **37** | **39.4** | **-0.1** | |
| | 97nm,1.6s | | | | | | | | | | | |
| **SMRI** | **Semarang** | **16.78** | **276** | P | | **P** | | **02** | **37** | **41.7** | **+0.2** | |
| | 84nm,1.2s | | | | | | | | | | | |
| **STKI** | **Sintang** | **18.20** | **299** | P | | **Pn** | | **02** | **37** | **57.3** | **-0.1** | |
| | 18μm35nm,0.5s | | | | | | | | | | | |
| **KPJI** | **Karang Pucung** | **18.23** | **274** | P | | **P** | | **02** | **37** | **57.1** | **-0.4** | |
| | 28nm,0.9s | | | | | | | | | | | |
| **CMJI** | **Cimerak** | **18.66** | **273** | P | | **P** | | **02** | **37** | **59.5** | **-2.6** | |
| | 29nm,0.9s | | | | | | | | | | | |
| **SBUM** | **Sibu** | **18.93** | **307** | P | | **Pn** | | **02** | **38** | **05.3** | **-0.9** | |
| **LEM** | **Lembang** | **19.59** | **275** | P | | **P** | | **02** | **38** | **10.6** | **-2.0** | |
| | 2.0nm,0.3s,baz=68,slow=9.9,SNR=5.0 | | | | | | | | | | | |
| **LEM** | **Lembang** | **19.59** | **275** | P | | **P** | | **02** | **38** | **12.2** | **-0.3** | |
| | 31nm,1.0s | | | | | | | | | | | |
| **PMG** | **Port Moresby** | **19.64** | **92** | LR | | LR | | 02 | 47 | 35.2 | | |
| | comp=Z,425nm,20.0s,baz=198,slow=42 | | | | | | | | | | | |
| **KSM** | **Kuching** | **19.93** | **301** | P | | **P** | | **02** | **38** | **15.3** | **-0.8** | |
| KSM | | | | IAmb | | IAmb | | 02 | 38 | 17.3 | | |
| | comp=Z,51nm,1.1s | | | | | | | | | | | |
| **CNJI** | **Cibinong** | **20.01** | **274** | P | | **P** | | **02** | **38** | **16.2** | **-0.7** | |
| | comp=Z,1μmcomp=Z,150nm,1.1s | | | | | | | | | | | |
| **CBJI** | **Citeko** | **20.40** | **276** | P | | **P** | | **02** | **38** | **19.3** | **-1.9** | |
| | comp=Z,123nm,0.9s | | | | | | | | | | | |
| **DBJI** | **Dramaga** | **20.48** | **276** | P | | **P** | | **02** | **38** | **21.2** | **-0.9** | |
| **CTA** | **Charters Tower** | **21.31** | **123** | P | | **P** | | **02** | **38** | **33.4** | **+2.4** | |
| | comp=Z,2.3nm,0.8s,baz=330,slow=14,SNR=2.8 | | | | | | | | | | | |
| CTA | | | | LR | | LR | | 02 | 47 | 08.0 | | |
| | comp=Z,275nm,20.9s,baz=288,slow=38 | | | | | | | | | | | |
| **FORT** | **Forrest** | **21.50** | **178** | P | | **P** | | **02** | **38** | **34.7** | **+1.9** | |
| **CGJI** | **Cibinong** | **21.51** | **275** | P | | **P** | | **02** | **38** | **31.7** | **-1.4** | |
| | comp=Z,2μmcomp=Z,48nm,1.3s | | | | | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **22.13** | **287** | P | | **P** | | **02** | **38** | **37.5** | **-2.3** | |
| **MORW** | **Morawa** | **22.41** | **207** | P | | **P** | | **02** | **38** | **44.7** | **+2.1** | |
| MORW | | | | IAmb | | IAmb | | 02 | 39 | 10.6 | | |
| | comp=Z,28nm,1.1s | | | | | | | | | | | |
| **KASI** | **Kota Agung** | **22.86** | **278** | P | | **P** | | **02** | **38** | **47.9** | **+0.3** | |
| | comp=Z,27nm,1.0s | | | | | | | | | | | |
| **STKA** | **Stephens Creek** | **26.21** | **152** | P | | **P** | | **02** | **39** | **20.3** | **+1.9** | |
| | comp=Z,7.5nm,0.9s,baz=319,slow=9.1,SNR=9.9 | | | | | | | | | | | |
| STKA | | | | LR | | LR | | 02 | 50 | 12.0 | | |
| | comp=Z,238nm,19.4s,baz=309,slow=38 | | | | | | | | | | | |
| **HNR** | **Honiara** | **32.25** | **93** | LR | | LR | | 02 | 53 | 27.4 | | |
| | comp=Z,138nm,21.6s,baz=330,slow=37 | | | | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **39.18** | **315** | P | | **P** | | **02** | **41** | **11.1** | **-0.6** | |
| CM31 | | | | IAmb | | IAmb | | 02 | 41 | 11.7 | | |
| | comp=Z,14nm,1.1s | | | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.18** | **315** | P | | **P** | | **02** | **41** | **10.8** | **-0.9** | |
| | comp=Z,5.2nm,0.7s,baz=145,slow=7.1,SNR=28 | | | | | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.42** | **315** | P | | **P** | | **02** | **41** | **12.4** | **-1.2** | |
| CHTO | | | | IAmb | | IAmb | | 02 | 41 | 13.7 | | |
| | comp=Z,13nm,1.0s | | | | | | | | | | | |
| **KMI** | **Kunming** | **41.64** | **326** | ⇑P | | **P** | | **02** | **41** | **32.9** | **+0.8** | |
| KMI | | | | pP | | sP | | 02 | 41 | 51.0 | +0.4 | |
| KMI | | | | sP | | pwP | | 02 | 41 | 59.9 | +15 | |
| KMI | | | | pmax | | pmax | | | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | | | |
| **NJ2** | **Nanjing** | **41.78** | **349** | *eP* | | **P** | | **02** | **41** | **35.3** | **+2.4** | |
| NJ2 | | | | pmax | | pmax | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | | | | |
| **PZH** | **PanZhiHua** | **43.27** | **326** | P | | **P** | | **02** | **41** | **44.1** | **-1.1** | |
| PZH | | | | pmax | | pmax | | | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | | | |
| PZH | | | | pmax | | pmax | | | | | | |
| | comp=Z,120nm,6.1s | | | | | | | | | | | |
| **KSRS** | **Korea Array** | **

comp=Z,1.8nm,0.5s,baz=60,slow=9.7,SNR=14
FITZ S **S** **02 56 01.1 -0.9**
comp=Z,1.1nm,0.8s,baz=45,slow=20,SNR=1.8
**FITZ Fitzroy Crossi 27.01 240** P **P** **02 51 26.5 -0.1**
**LPAZ La Paz 136.56 120** PKPdf **PKPdf** **03 05 06.6 -1.2**
**TORD Torodi Ar. Bea 147.84 286** PKPbc **PKPdf** **03 05 28.6 +1.5**
comp=Z,0.9nm,0.5s,baz=78,slow=2.0,SNR=16
**TORD Torodi Ar. Bea 147.84 286** **PKPdf** **03 05 26.9 -0.2**
**KOWA Kowa 152.90 292** PKPbc **PKPbc** **03 05 40.8 -1.4**

*IDC **24** 02:46:09.7±1.6,35°.72N×3°.69W, h0km, mb3.2/3, mb1 3.3/4, mb1mx3.2/35, mbtmp3.2/4, ML2.7/1, Error ellipse: s-maj=41.9km s-min=20.0km az=81.0*
*CNRM **24** 02:46:12.0, 35°.75N×3°.56W, h31km, ml3.0*
*INMG **24** 02:46:12.3±1.3, 35°.64N×3°.58W, h16km±6km, ML2.6, Error ellipse: s-maj=4.2km s-min=3.1km az=111.0*
*IGIL **24** 02:46:13.4, 35°.66N×3°.70W, h10km, ML2.5*
*SFS **24** 02:46:13.0, 35°.60N×3°.40W, h20km, ML2.9, ALBORAN SUR*
**ISC 24 02:46:11.0±1.3, 35°.73N±0°.02×3°.52W±0°.03, h14km±9km, n62, σ1°$37/103, mb3.6/3, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.61** | **214** | P | **Pg** | | **02 46 23.2** | **+0.2** |
| PALE | | | | S | **Sb** | | **02 46 33.0** | **+1.0** |
| **PALE** | **Palemas** | **0.61** | **214** | S | **Sb** | | **02 46 32.2** | **+0.2** |
| **CHAS** | **Isla Isabel II** | **1.04** | **121** | P | **Pb** | | **02 46 29.4** | **-1.5** |
| CHAS | | | | S | **Sb** | | **02 46 44.6** | **+0.3** |
| **AKLM** | **AKL** | **1.25** | **193** | P | **Pn** | | **02 46 34.0** | **-0.1** |
| **AKLM** | **AKL** | **1.25** | **193** | P | **Pn** | | **02 46 33.2** | **-0.8** |
| AKLM | | | | S | **Sn** | | **02 46 50.9** | **+0.2** |
| **EMAL** | **Malaga-Limoner** | **1.27** | **325** | P | **Pn** | | **02 46 33.3** | **-1.0** |
| EMAL | | | | S | **Sb** | | **02 46 49.4** | **-1.4** |
| **TAF** | **Taforalt** | **1.28** | **135** | P | **Pn** | | **02 46 33.7** | **-1.0** |
| **TAF** | **Taforalt** | **1.28** | **135** | P | **Pn** | | **02 46 33.8** | **-0.8** |
| TAF | | | | S | **Sg** | | **02 46 52.4** | **-0.2** |
| **SMIR** | **Smir Dam** | **1.51** | **269** | S | **Sg** | | **02 46 60.0** | **+0.2** |
| **JBK** | **JBK** | **1.59** | **150** | P | **Pn** | | **02 46 38.0** | **-1.0** |
| **JBK** | **JBK** | **1.59** | **150** | P | **Pn** | | **02 46 37.9** | **-1.0** |
| JBK | | | | S | **Sn** | | **02 46 57.8** | **-1.7** |
| **CHEFC** | **Chefchaouen** | **1.61** | **248** | P | **Pn** | | **02 46 39.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.61** | **248** | P | **Pn** | | **02 46 39.3** | **+0.3** |
| CHEFC | | | | S | **Sn** | | **02 46 56.9** | **-2.7** |
| **LIJA** | **Lijar** | **1.92** | **308** | P | **Pn** | | **02 46 44.0** | **+0.6** |
| **SICH** | **Sidi Chahed** | **2.19** | **223** | P | **Pn** | | **02 46 48.2** | **+1.2** |
| **LCRM** | **LCR** | **2.31** | **209** | P | **Pn** | | **02 46 48.9** | **+0.1** |
| LCRM | | | | S | **Sb** | | **02 47 20.4** | **-0.7** |
| **IFR** | **Ifrane** | **2.57** | **211** | P | **Pn** | | **02 46 52.2** | **-0.2** |
| IFR | | | | S | **Sn** | | **02 47 22.1** | **-1.4** |
| **CART** | **Cartagena** | **2.75** | **47** | P | **Pn** | | **02 46 54.0** | **-0.7** |
| CART | | | | S | **Sn** | | **02 47 25.6** | **-2.1** |
| **TDRA** | **Tendrara** | **2.95** | **155** | P | **Pn** | | **02 46 58.1** | **+0.5** |
| TDRA | | | | S | **Sn** | | **02 47 31.9** | **-1.1** |
| **CZD** | **Col de Zad** | **2.97** | **205** | P | **Pn** | | **02 46 57.6** | **-0.4** |
| CZD | | | | S | **Sn** | | **02 47 34.5** | **+1.1** |
| **MD31** | **MD31** | **3.03** | **200** | P | **Pn** | | **02 46 58.6** | **0.0** |
| MD31 | | | | S | **Sn** | | **02 47 34.7** | **0.0** |
| **MDT** | **Midelt** | **3.04** | **197** | P | **Pn** | | **02 46 58.5** | **-0.3** |
| **MDT** | **Midelt** | **3.04** | **197** | P | **Pn** | | **02 46 58.5** | **-0.3** |
| MDT | | | | S | **Sn** | | **02 47 36.7** | **+1.7** |
| **ZHG** | **ZHG** | **3.43** | **229** | P | **Pn** | | **02 47 03.9** | **-0.3** |
| ZHG | | | | S | **Sn** | | **02 47 43.2** | **-1.5** |
| **PBAR** | **Barrancos** | **3.73** | **312** | *e*Pn | **Pn** | | **02 47 08.4** | **+0.3** |
| PBAR | | | | *e*Sn | **Sn** | | **02 47 50.8** | **-1.0** |
| PBAR | | | | A | A | | 02 47 52.9 | |
| | 7.4nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Pn | **Pn** | | **02 47 08.6** | **-0.1** |
| PVAQ | | | | *e*Sn | **Sn** | | **02 47 50.8** | **-2.0** |
| PVAQ | | | | A | A | | 02 47 57.2 | |
| | 9.1nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | | **02 47 08.3** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | | **02 47 08.3** | **-0.4** |
| PVAQ | | | | S | **Sn** | | **02 47 51.7** | **-1.2** |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **294** | *e*Pn | **Pn** | | **02 47 09.8** | **-0.2** |
| PBDV | | | | *e*Sn | **Sn** | | **02 47 52.7** | **-2.5** |
| PBDV | | | | A | A | | 02 47 56.7 | |
| | 9.7nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **3.96** | **355** | Pn | **Pn** | | **02 47 12.9** | **+1.6** |
| | 0.2nm,0.3s,baz=178,slow=13,SNR=12 | | | | | | | |
| ESDC | | | | Sn | **Sn** | | **02 47 58.3** | **+0.7** |
| | 0.4nm,0.3s,baz=188,slow=22,SNR=3.7 | | | | | | | |
| ESDC | | | | Lg | Lg | | 02 48 15.5 | |
| | 0.6nm,0.3s,baz=179,slow=30,SNR=6.7 | | | | | | | |
| **FIGM** | **Figuig** | **4.05** | **152** | P | **Pn** | | **02 47 14.2** | **+1.6** |
| FIGM | | | | S | **Sn** | | **02 48 00.3** | **+0.4** |
| **PCVE** | **Castro Verde** | **4.10** | **299** | *e*Pn | **Pn** | | **02 47 13.5** | **+0.3** |
| PCVE | | | | *e*Sn | **Sn** | | **02 47 59.4** | **-1.5** |
| PCVE | | | | A | A | | 02 48 01.0 | |
| | 12nm,0.4s | | | | | | | |
| **PBEJ** | **Beja** | **4.17** | **305** | *e*Pn | **Pn** | | **02 47 15.5** | **+1.3** |
| PBEJ | | | | *e*Sn | **Sn** | | **02 48 01.1** | **-1.6** |
| PBEJ | | | | A | A | | 02 48 06.2 | |
| | 4.5nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.42** | **292** | *e*P | **Pn** | | **02 47 17.2** | **-0.5** |
| MORF | | | | *e*S | **Sn** | | **02 48 04.1** | **-4.9** |
| MORF | | | | IAML | | | 02 48 09.7 | |
| | comp=N,9.5nm,0.3s | | | | | | | |
| **MORF** | **Marmelete** | **4.42** | **292** | *e*Pn | **Pn** | | **02 47 17.7** | **0.0** |
| MORF | | | | *e*Sn | **Sn** | | **02 48 07.2** | **-1.8** |
| MORF | | | | A | A | | 02 48 17.9 | |
| | comp=N,4.8nm,0.4s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.50** | **290** | *e*Pn | **Pn** | | **02 47 18.5** | **-0.3** |
| PFVI | | | | *e*Sn | **Sn** | | **02 48 08.4** | **-2.5** |
| PFVI | | | | A | A | | 02 48 14.8 | |
| | comp=N,7.7nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.50** | **290** | P | **Pn** | | **02 47 19.0** | **+0.3** |
| PFVI | | | | S | **Sn** | | **02 48 08.6** | **-2.3** |
| **PESTR** | **Estremoz** | **4.51** | **315** | *e*Pn | **Pn** | | **02 47 19.9** | **+1.0** |
| PESTR | | | | *e*Sn | **Sn** | | **02 48 09.9** | **-1.2** |
| **PESTR** | **Estremoz** | **4.51** | **315** | P | **Pn** | | **02 47 19.8** | **+1.0** |
| PESTR | | | | S | **Sn** | | **02 48 08.5** | **-2.6** |
| **EVO** | **Evora** | **4.55** | **309** | P | **Pn** | | **02 47 21.9** | **+2.5** |
| EVO | | | | S | **Sn** | | **02 48 11.5** | **-0.6** |
| **EVO** | **Evora** | **4.55** | **309** | *e*Pn | **Pn** | | **02 47 21.8** | **+2.4** |
| EVO | | | | *e*Sn | **Sn** | | **02 48 11.3** | **-0.8** |
| EVO | | | | A | A | | 02 48 18.7 | |
| | comp=N,7.1nm,0.5s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.56** | **295** | *e*Pn | **Pn** | | **02 47 21.0** | **+1.4** |
| PTEO | | | | *e*Sn | **Sn** | | **02 48 11.1** | **-1.2** |
| PTEO | | | | A | A | | 02 48 15.3 | |
| | comp=N,16nm,0.7s | | | | | | | |
| **UCM** | **Universidad Co** | **4.58** | **3** | P | **Pn** | | **02 47 22.3** | **+2.5** |
| UCM | | | | S | **Sn** | | **02 48 11.7** | **-1.1** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **302** | *e*Pn | **Pn** | | **02 47 21.1** | **+0.1** |
| PNCL | | | | *e*Sn | **Sn** | | **02 48 13.2** | **-1.7** |
| PNCL | | | | A | A | | 02 48 13.9 | |
| | comp=N,4.3nm,0.4s | | | | | | | |
| **PMRV** | **Marv??o** | **4.81** | **321** | *e*Pn | **Pn** | | **02 47 24.3** | **+1.3** |
| PMRV | | | | *e*Sn | **Sn** | | **02 48 17.3** | **-1.1** |
| PMRV | | | | A | A | | 02 48 29.1 | |
| | comp=N,4.7nm,0.5s | | | | | | | |
| **PMTG** | **Montargil** | **5.01** | **313** | *e*Pn | **Pn** | | **02 47 26.9** | **+1.1** |
| PMTG | | | | *e*Sn | **Sn** | | **02 48 22.5** | **-1.0** |
| **PCBR** | **Castelo Branco** | **5.16** | **324** | *e*Pn | **Pn** | | **02 47 29.7** | **+1.8** |
| PCBR | | | | *e*Sn | **Sn** | | **02 48 26.1** | **-1.1** |
| PCBR | | | | A | A | | 02 48 27.4 | |
| | comp=N,4.8nm,0.5s | | | | | | | |
| **PACT** | **Alcochete** | **5.21** | **307** | *e*Pn | **Pn** | | **02 47 29.5** | **+1.0** |
| PACT | | | | *e*Sn | **Sn** | | **02 48 28.1** | **-0.3** |
| **OUZM** | **OUZ** | **5.51** | **210** | P | **Pn** | | **02 47 33.5** | **+0.7** |
| **PMAFR** | **Mafra** | **5.61** | **307** | *e*Sn | **Sn** | | **02 48 35.9** | **-2.3** |
| **PSBE** | **So Bento** | **5.64** | **314** | *e*Pn | **Pn** | | **02 47 35.7** | **+1.3** |
| PSBE | | | | *e*Sn | **Sn** | | **02 48 37.4** | **-1.6** |
| **MTE** | **Manteigas** | **5.64** | **327** | *e*Pn | **Pn** | | **02 47 36.3** | **+1.8** |
| MTE | | | | *e*Sn | **Sn** | | **02 48 38.5** | **-0.6** |
| MTE | | | | A | A | | 02 48 40.7 | |
| | comp=N,4.8nm,0.7s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.79** | **220** | P | **Pn** | | **02 47 36.0** | **-0.7** |
| **PCAS** | **Casmilo, Conde** | **5.84** | **319** | *e*Sn | **Sn** | | **02 48 42.6** | **-1.3** |
| **PVIS** | **Viseu** | **6.05** | **327** | *e*Pn | **Pn** | | **02 47 41.6** | **+1.5** |
| **MVO** | **Moncorvo** | **6.09** | **334** | *e*Pn | **Pn** | | **02 47 42.3** | **+1.7** |
| **PVRL** | **Vila Real** | **6.44** | **331** | *e*Pn | **Pn** | | **02 47 47.6** | **+2.1** |
| PVRL | | | | *e*Sn | **Sn** | | **02 48 58.3** | **-0.5** |
| PVRL | | | | A | A | | 02 49 00.2 | |
| | comp=N,5.3nm,0.7s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.56** | **331** | *e*Pn | **Pn** | | **02 47 48.7** | **+1.6** |
| **PBRG** | **Braganca** | **6.57** | **338** | *e*Pn | **Pn** | | **02 47 49.0** | **+1.8** |
| **TORD** | **Torodi Ar. Bea** | **22.97** | **167** | P | **P** | | **02 51 16.4** | **+1.3** |
| | comp=N,0.5nm,1.0s,baz=346,slow=11,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.41** | **51** | P | **P** | | **02 56 34.3** | **+0.9** |
| | comp=N,0.4nm,0.8s,baz=298,slow=4.1,SNR=3.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.73** | **332** | P | **P** | | **02 57 08.6** | **+1.0** |
| | comp=N,0.2nm,0.5s,baz=58,slow=6.5,SNR=3.0 | | | | | | | |

*IDC **24** 03:05:21.6±2.9, 20°.37S×178°.16W, h548km±29km, mb3.6/7, mb1 3.7/8, mb1mx3.2/51, mbtmp4.6/8, Error ellipse: s-maj=24.0km s-min=19.5km az=96.0*
**ISC 24 03:05:19.7±1.5, 20°.3S±0°.2×178°.1W±0°.2, h534km, n13, σ0°81/16, mb4.3/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **18.40** | **192** | P | **P** | | **03 09 03.3** | **+1.4** |
| | 1.5nm,0.3s,baz=2.4,slow=10,SNR=3.7 | | | | | | | |
| URZ | | | | S | **S** | | **03 12 01.5** | **-1.2** |
| | 0.3nm,0.3s,baz=303,slow=17,SNR=1.9 | | | | | | | |
| **CTA** | **Charters Tower** | **33.44** | **264** | P | **P** | | **03 11 15.1** | **+0.5** |
| | 4.5nm,0.6s,baz=96,slow=10,SNR=7.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.82** | **244** | P | **P** | | **03 11 50.8** | **0.0** |
| | 2.1nm,0.7s,baz=76,slow=12,SNR=5.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.50** | **257** | P | **P** | | **03 12 44.0** | **0.0** |
| | 7.1nm,0.5s,baz=97,slow=7.6,SNR=108 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **03 14 15.8** | **-0.1** |
| | 0.8nm,0.6s,baz=109,slow=3.6,SNR=5.6 | | | | | | | |
| ASAR | | | | S | **S** | | **03 18 40.1** | **-0.4** |
| | 0.8nm,0.9s,baz=89,slow=15,SNR=5.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **262** | P | **P** | | **03 12 44.0** | **-0.4** |
| | 2.1nm,0.3s,baz=96,slow=7.6,SNR=103 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **03 14 15.5** | **-0.5** |
| | 0.5nm,0.8s,baz=116,slow=2.8,SNR=2.3 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.98** | **262** | P | **P** | | **03 13 46.6** | **-0.3** |
| | 2.0nm,0.5s,baz=87,slow=3.4,SNR=21 | | | | | | | |
| **SIJI** | **Sorong** | **53.11** | **285** | P | **P** | | **03 13 47.9** | **0.0** |
| | 12nm,0.7s,baz=174,slow=3.5,SNR=4.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.97** | **290** | P | **P** | | **03 17 23.6** | **+0.9** |
| | 1.9nm,0.3s,baz=157,slow=2.9,SNR=6.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **110.99** | **313** | PKiKP | **PKiKP** | | **03 22 50.8** | **-1.6** |
| | 0.2nm,0.6s,baz=112,slow=1.3,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.78** | **331** | PKhKP | PKPpre | | 03 23 48.8 | |
| | 1.7nm,0.4s,baz=43,slow=4.4,SNR=15 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **146.60** | **298** | PKPbc | **PKPbc** | | **03 24 01.5** | **-0.5** |
| | 1.3nm,0.7s,baz=357,slow=4.9,SNR=4.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.63** | **313** | PKPbc | **PKPbc** | | **03 24 01.8** | **-0.2** |
| | 1.1nm,0.7s,baz=131,slow=4.4,SNR=2.9 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.64** | **300** | PKPbc | **PKPbc** | | **03 24 05.4** | **+0.7** |
| | 1.6nm,0.5s,baz=54,slow=11,SNR=5.2 | | | | | | | |

*ROM **24** 03:10:51.4±0.3, 38°.78N±0°.02×14°.98E±0°.03, h284km±2km, ML3.1/13, Error ellipse: s-maj=2.5km s-min=1.5km az=127.0*
*IDC **24** 03:10:52.2±0.8, 38°.94N×14°.62E, h295km±16km, mb3.0/7, mb1 3.0/11, mb1mx2.8/66, mbtmp3.6/11, Error ellipse: s-maj=31.7km s-min=20.5km az=42.0*
**ISC 24 03:10:51.2±0.8, 38°.83N±0°.08×14°.93E±0°.08, h287km±7km, n59, σ1°$48/63, mb3.4/6, 1C-6D, Sicily**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IST3** | **Stromboli F** | **0.24** | **98** | P | **Pn** | | **03 11 28.9** | **+1.1** |
| IST3 | | | | AML | AML | | | |
| | comp=E,277μm,0.9s | | | | | | | |
| IST3 | | | | AML | AML | | | |
| | comp=N,368μm,0.2s | | | | | | | |
| **IFIL** | **Filicudi I Eol** | **0.39** | **227** | ⇓P | **Pn** | | **03 11 28.9** | **+0.7** |
| **VPL** | **Vulcano Piano** | **0.46** | **175** | ⇓P | **Pn** | | **03 11 29.0** | **+0.6** |
| **MSRU** | **Castanea** | **0.73** | **141** | ⇓P | **Pn** | | **03 11 28.9** | **-0.2** |
| MSRU | | | | S | **S** | | **03 11 58.0** | **-1.2** |
| **MPNC** | **Port Mandanici** | **0.76** | **154** | P | **Pn** | | **03 11 29.4** | **+0.1** |
| MPNC | | | | AML | AML | | | |
| | comp=E,184μm,1.4s | | | | | | | |
| MPNC | | | | AML | AML | | | |
| | comp=N,161μm,0.7s | | | | | | | |
| **JOPP** | **Joppolo** | **0.78** | **107** | ⇓P | **Pn** | | **03 11 29.4** | **+0.1** |
| JOPP | | | | S | **S** | | **03 11 57.4** | **-2.1** |
| JOPP | | | | AML | AML | | | |
| | comp=N,166μm,1.3s | | | | | | | |
| JOPP | | | | AML | AML | | | |
| | comp=E,188μm,0.4s | | | | | | | |
| JOPP | | | | AML | AML | | | |
| | comp=N,167μm,1.3s | | | | | | | |
| **MUCR** | **Ucria** | **0.79** | **183** | P | **Pn** | | **03 11 29.7** | **+0.1** |
| **MCSR** | **Castroreale** | **0.81** | **162** | P | **Pn** | | **03 11 29.9** | **+0.3** |
| MCSR | | | | AML | AML | | | |
| | comp=N,506μm,0.3s | | | | | | | |
| MCSR | | | | AML | AML | | | |
| | comp=E,327μm,0.8s | | | | | | | |
| **NOV** | **Novara** | **0.82** | **169** | P | **Pn** | | **03 11 30.3** | **+0.7** |
| NOV | | | | AML | AML | | | |
| | comp=E,164μm,0.3s | | | | | | | |
| NOV | | | | AML | AML | | | |
| | comp=E,165μm,0.3s | | | | | | | |
| NOV | | | | AML | AML | | | |
| | comp=N,136μm,0.2s | | | | | | | |
| **MSFR** | **San Fratello** | **0.84** | **199** | P | **Pn** | | **03 11 30.2** | **+0.5** |
| **EPZF** | **Pizzo Felice** | **1.01** | **183** | P | **Pn** | | **03 11 31.6** | **+1.1** |
| **EMSG** | **Monte Spagnolo** | **1.01** | **179** | P | **Pn** | | **03 11 32.1** | **+1.5** |
| **MTTG** | **Motta San Giov** | **1.02** | **144** | P | **Pn** | | **03 11 31.0** | **+0.6** |
| MTTG | | | | AML | AML | | | |
| | comp=E,114μm,1.4s | | | | | | | |
| MTTG | | | | AML | AML | | | |
| | comp=N,147μm,1.5s | | | | | | | |
| MTTG | | | | AML | AML | | | |
| | comp=N,146μm,1.5s | | | | | | | |
| MTTG | | | | AML | AML | | | |
| | comp=E,113μm,1.4s | | | | | | | |
| **CAR1** | **CAROLEI** | **1.08** | **67** | ⇓P | **Pn** | | **03 11 30.9** | **+0.3** |
| CAR1 | | | | S | **S** | | **03 12 00.4** | **-1.5** |
| CAR1 | | | | AML | AML | | | |
| | comp=N,342μm,1.6s | | | | | | | |
| CAR1 | | | | AML | AML | | | |
| | comp=E,370μm,0.5s | | | | | | | |
| **CSLB** | **Castelbuono** | **1.13** | **218** | P | **Pn** | | **03 11 31.4** | **+0.4** |
| **GALF** | **Gagliano Caste** | **1.16** | **194** | P | **Pn** | | **03 11 32.7** | **+1.5** |
| GALF | | | | AML | AML | | | |
| | comp=E,61μm,1.0s | | | | | | | |
| GALF | | | | AML | AML | | | |
| | comp=E,61μm,1.0s | | | | | | | |
| GALF | | | | AML | AML | | | |
| | comp=N,60μm,0.6s | | | | | | | |
| **SOI** | **Samo** | **1.17** | **130** | P | **Pn** | | **03 11 31.3** | **+0.2** |
| SOI | | | | S | **S** | | **03 12 00.9** | **-1.9** |
| **SPS2** | **Spezzano della** | **1.19** | **67** | P | **Pn** | | **03 11 31.7** | **+0.5** |
| SPS2 | | | | AML | AML | | | |
| | comp=N,145μm,0.4s | | | | | | | |
| SPS2 | | | | AML | AML | | | |
| | comp=E,71μm,0.3s | | | | | | | |
| **BULG** | **Bulgheria - Ca** | **1.29** | **15** | P | **Pn** | | **03 11 33.2** | **+1.4** |
| **SOLUN** | **Solunto** | **1.32** | **236** | P | **Pn** | | **03 11 32.2** | **+0.2** |
| **CELI** | **Celico** | **1.35** | **65** | P | **Pn** | | **03 11 33.3** | **+1.1** |
| **TDS** | **Terranova Siba** | **1.37** | **53** | P | **Pn** | | **03 11 33.5** | **+1.3** |
| **RESU** | **Resuttano** | **1.37** | **210** | P | **Pn** | | **03 11 33.6** | **+1.2** |
| **SERS** | **Sersale** | **1.39** | **81** | P | **Pn** | | **03 11 33.2** | **+0.7** |
| SERS | | | | S | **S** | | **03 12 04.1** | **-1.1** |
| SERS | | | | AML | AML | | | |
| | comp=N,246μm,0.4s | | | | | | | |
| SERS | | | | AML | AML | | | |
| | comp=E,228μm,0.4s | | | | | | | |
| SERS | | | | AML | AML | | | |
| | comp=N,246μm,0.4s | | | | | | | |
| **MGR** | **Morigerati** | **1.39** | **20** | P | **Pn** | | **03 11 33.7** | **+1.4** |
| **MPG** | **Monte Pellegri** | **1.40** | **242** | P | **Pn** | | **03 11 33.0** | **+0.4** |
| **VAE** | **Valguarnera** | **1.41** | **197** | P | **Pn** | | **03 11 33.9** | **+1.2** |
| | comp=N,1.2nm,0.3s,baz=170,slow=20,SNR=6.1 | | | | | | | |
| VAE | | | | S | **S** | | **03 12 09.4** | **+3.8** |
| | comp=N,0.2nm,0.3s,baz=184,slow=17,SNR=1.8 | | | | | | | |
| **ALJA** | **Alia** | **1.42** | **221** | ⇓P | **Pn** | | **03 11 33.9** | **+1.1** |
| ALJA | | | | AML | AML | | | |
| | comp=E,114μm,0.9s | | | | | | | |
| ALJA | | | | AML | AML | | | |
| | comp=E,114μm,0.9s | | | | | | | |
| ALJA | | | | AML | AML | | | |
| | comp=N,116μm,1.4s | | | | | | | |
| **TIP** | **Timpagrande** | **1.47** | **76** | P | **Pn** | | **03 11 33.8** | **+0.9** |
| TIP | | | | AML | AML | | | |
| | comp=E,130μm,0.5s | | | | | | | |
| TIP | | | | AML | AML | | | |
| | comp=N,126μm,0.4s | | | | | | | |
| **HLNI** | **Lentini** | **1.48** | **182** | P | **Pn** | | **03 11 33.3** | **+0.3** |
| **CMPR** | **Campora** | **1.51** | **11** | P | **Pn** | | **03 11 34.7** | **+1.5** |
| **SALB** | **San Lorenzo Be** | **1.51** | **46** | P | **Pn** | | **03 11 34.7** | **+1.4** |
| SALB | | | | AML | AML | | | |
| | comp=E,89μm,0.8s | | | | | | | |
| SALB | | | | AML | AML | | | |
| | comp=E,88μm,0.8s | | | | | | | |
| SALB | | | | AML | AML | | | |
| | comp=N,47μm,0.5s | | | | | | | |
| **HAGA** | **Augusta** | **1.56** | **173** | P | **Pn** | | **03 11 33.7** | **+0.1** |
| **PIPA** | **Pietrapaola** | **1.60** | **65** | P | **Pn** | | **03 11 35.0** | **+1.2** |
| PIPA | | | | AML | AML | | | |
| | comp=E,132μm,0.3s | | | | | | | |
| PIPA | | | | AML | AML | | | |
| | comp=N,142μm,1.3s | | | | | | | |
| PIPA | | | | AML | AML | | | |
| | comp=E,132μm,0.3s | | | | | | | |
| PIPA | | | | AML | AML | | | |
| | comp=N,143μm,1.3s | | | | | | | |
| **MEU** | **Monte Lauro** | **1.73** | **180** | P | **Pn** | | **03 11 35.4** | **+0.5** |
| **CLTA** | **Licata** | **1.84** | **205** | P | **Pn** | | **03 11 36.6** | **+1.0** |
| **HAVL** | **Avola** | **1.88** | **175** | P | **Pn** | | **03 11 36.3** | **+0.3** |
| **SCTE** | **Santa Cesarea** | **3.00** | **65** | ⇑P | **Pn** | | **03 11 46.6** | **+0.6** |
| SCTE | | | | S | **S** | | **03 12 29.0** | **-0.8** |
| **VIVA** | **Pratoni del Vi** | **3.35** | **331** | P | **Pn** | | **03 11 53.8** | **+4.2** |
| **STON** | **Ston** | **4.55** | **27** | P | Pn | | 03 12 12.8 | +10 |
| **OBKA** | **Obir** | **7.68** | **358** | *e*Pn | Pn | | 03 12 45.5 | +4.9 |
| | comp=N,0.7nm,0.2s,SNR=7.5 | | | | | | | |
| **SOKA** | **Soboth** | **7.84** | **1** | *i* Pn | Pn | | 03 12 48.2 | +5.6 |
| | comp=N,1.0nm,0.3s,SNR=4.9 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **8.11** | **348** | *e*Pn | **Pn** | | **03 12 50.0** | **+4.1** |
| | comp=N,2.9nm,0.4s,SNR=4.9 | | | | | | | |
| **IDI** | **Anoyia** | **8.71** | **111** | P | **Pn** | | **03 12 57.1** | **+3.5** |
| | comp=N,0.3nm,0.3s,baz=282,slow=14,SNR=1.3 | | | | | | | |
| **FETA** | **Feichten** | **8.74** | **341** | *e*Pn | **P** | | **03 12 57.9** | **-1.7** |
| | comp=N,1.8nm,0.7s | | | | | | | |
| **WTTA** | **Wattenberg** | **8.76** | **345** | *e*Pn | **P** | | **03 12 58.1** | **-1.7** |
| | comp=N,1.0nm,0.3s | | | | | | | |
| **WATA** | **Walderalm** | **8.85** | **345** | *e*Pn | **P** | | **03 12 59.6** | **-1.1** |
| | comp=N,4.1nm,0.5s,SNR=6.0 | | | | | | | |
| **MOTA** | **Moosalm** | **8.96** | **343** | *e*Pn | **P** | | **03 13 01.0** | **-0.8** |
| | comp=N,2.8nm,0.7s,SNR=4.2 | | | | | | | |
| **MOA** | **Molln** | **9.03** | **357** | *e*Pn | **P** | | **03 13 01.1** | **-1.5** |
| | comp=N,1.2nm,0.4s | | | | | | | |
| **GERES** | **GERESS Array B** | **10.05** | **355** | P | **Pn** | | **03 13 10.7** | **+0.8** |
| | comp=N,0.3nm,0.3s,baz=179,slow=12,SNR=5.6 | | | | | | | |
| **VRAC** | **Vranov** | **10.54** | **6** | P | **Pn** | | **03 13 17.3** | **+1.4** |
| | comp=N,0.2nm,0.3s,baz=188,slow=14,SNR=2.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **15.58** | **36** | P | **P** | | **03 14 15.4** | **+0.3** |
| | comp=N,1.3nm,0.3s,baz=229,slow=9.8,SNR=6.6 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **20.49** | **330** | P | **P** | | **03 15 05.2** | **-2.5** |
| | comp=N,0.3nm,0.4s,baz=143,slow=12,SNR=5.0 | | | | | | | |
| **HFS** | **Hagfors** | **21.34** | **358** | P | **P** | | **03 15 14.0** | **-1.8** |
| | comp=N,2.4nm,0.9s,baz=172,slow=11,SNR=2.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **23.67** | **13** | P | **P** | | **03 15 37.0** | **+0.1** |
| | comp=N,0.9nm,0.3s,baz=270,slow=9.5,SNR=14 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.28** | **7** | P | **P** | | **03 16 43.5** | **-1.0** |
| | comp=N,2.6nm,0.9s,baz=195,slow=8.8,SNR=5.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.51** | **48** | P | **P** | | **03 19 06.4** | **+1.1** |
| | comp=N,0.4nm,0.3s,baz=287,slow=6.6,SNR=2.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.68** | **58** | P | **P** | | **03 19 08.3** | **+1.6** |
| | comp=N,0.3nm,0.4s,baz=280,slow=7.2,SNR=6.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **71.20** | **338** | P | **P** | | **03 21 39.2** | **+0.5** |
| | comp=N,0.2nm,0.5s,baz=38,slow=5.9,SNR=2.7 | | | | | | | |

*NIED **24** 03:15:43.7, 36°.67N×140°.66E, h10km, MW3.5, Moment Tensor Solution. s2 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=1.62; $M_{\theta\theta}$=0.25; $M_{\phi\phi}$=1.87; $M_{r\theta}$=0.87; $M_{\theta\phi}$=-0.40; $M_{r\phi}$=0.33; Fault plane solution: $M_0$=2.03000×$10^{14}$ NP1: $\phi_s$147.00000°, δ58.00000°, λ-119.00000°. NP2: $\phi_s$13.00000°, δ42.00000°, λ-53.00000°.*
*JMA **24** 03:15:43.7, 36°.67N×140°.66E, h10km±1km, M3.7 Broadband fault plane solution: P waves. NP1: $\phi_s$8.00000°, δ46.00000°, λ-40.00000°. NP2:$\phi_s$129.00000°, δ63.00000°, λ-128.00000°. Principal axes: T Plg10.0000°, Azm245.0000°; N Plg33.0000°, Azm148.0000°; P Plg55.0000°, Azm349.0000°;*
*JMA Felt III J1.*
*IDC **24** 03:15:49.9±3.7, 36°.61N×140°.58E, h64km±29km, mb3.3/5, mb1 3.5/7, mb1mx3.1/52, mbtmp3.7/7, ML2.7/2 Error ellipse: s-maj=34.1km s-min=11.9km az=59.0*
**ISC 24 03:15:42.8±1.0, 36°.64N±0°.03×140°.69E±0°.05, h11km±6km, n28, σ0°94/27, mb3.7/5, 4C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.10** | **251** | ⇓P | **Pg** | | **03 15 46.1** | **+0.5** |
| JHO | | | | S | **Sg** | | **03 15 47.9** | **+0.3** |
| **JHYU** | **Hitachinakayam** | **0.31** | **195** | ⇓P | **Pb** | | **03 15 50.4** | **0.0** |
| JHYU | | | | S | **Sb** | | **03 15 55.2** | **-0.3** |
| **JFFD** | **Fukushimafurud** | **0.46** | **347** | P | **Pg** | | **03 15 52.1** | **+0.3** |
| JFFD | | | | S | **Sg** | | **03 15 58.0** | **+0.1** |
| **ONAJ** | **Iwakimizuishiy** | **0.47** | **11** | 

**mb1 3.7/4,mb1mx3.4/22,mbtmp3.5/4,MS3.8/13,**
**Ms1 3.8/13,ms1mx3.5/31,Error ellipse: s-maj=176.5km**
**s-min=62.6km az=62.0,Macquarie Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **29.22** | **329** | P | P | 03 39 08.1 | +0.8 |
| | 0.6nm,0.6s,baz=176,slow=14,SNR=1.5 | | | | | | |
| STKA | | | | LR | LR | 03 48 35.1 | |
| | comp=Z,65nm,18.9s,baz=210,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **37.07** | **12** | LR | LR | 03 53 19.4 | |
| | comp=Z,428nm,19.8s,baz=214,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **39.19** | **323** | P | P | 03 40 31.8 | -1.8 |
| | 0.2nm,0.8s,baz=159,slow=8.0,SNR=1.7 | | | | | | |
| **CTA** | **Charters Tower** | **39.63** | **342** | LR | LR | 03 54 51.5 | |
| | comp=Z,256nm,19.2s,baz=192,slow=33 | | | | | | |
| **MAW** | **Mawson** | **39.80** | **217** | LR | LR | 03 55 12.1 | |
| | comp=Z,277nm,19.3s,baz=96,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.55** | **325** | P | P | 03 41 02.3 | +1.0 |
| | 0.8nm,0.9s,baz=167,slow=7.5,SNR=4.3 | | | | | | |
| WRA | | | | LR | LR | 03 56 57.3 | |
| | comp=Z,76nm,18.1s,baz=162,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **47.17** | **315** | P | P | 03 41 37.5 | -0.7 |
| | 1.1nm,1.0s,baz=153,slow=14,SNR=1.4 | | | | | | |
| FITZ | | | | LR | LR | 03 58 33.4 | |
| | comp=Z,48nm,18.0s,baz=159,slow=32 | | | | | | |
| **HNR** | **Honiara** | **49.21** | **2** | LR | LR | 04 00 24.0 | |
| | comp=Z,76nm,18.9s,baz=328,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **49.99** | **345** | LR | LR | 04 01 24.3 | |
| | comp=Z,145nm,18.1s,baz=164,slow=34 | | | | | | |
| **BATI** | **Baumata** | **55.17** | **317** | LR | LR | 04 04 55.2 | |
| | comp=Z,98nm,18.1s,baz=238,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **61.39** | **315** | LR | LR | 04 06 19.5 | |
| | comp=Z,46nm,21.1s,baz=192,slow=32 | | | | | | |
| **LEM** | **Lembang** | **64.72** | **301** | LR | LR | 04 06 40.2 | |
| | comp=Z,79nm,21.1s,baz=270,slow=31 | | | | | | |
| **PSI** | **Prapat** | **77.19** | **298** | LR | LR | 04 16 56.7 | |
| | comp=Z,40nm,18.6s,baz=258,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.05** | **305** | LR | LR | 04 23 59.3 | |
| | comp=Z,26nm,20.2s,baz=150,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **114.53** | **324** | PKP | PKPdf | 03 51 44.5 | -0.5 |
| | 0.8nm,1.1s,baz=120,slow=5.2,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **156.57** | **297** | PKPab | PKPab | 03 53 28.7 | +0.2 |
| | 2.7nm,1.1s,baz=64,slow=3.2,SNR=1.7 | | | | | | |

*KRSC **24** 03:34:39.5±1.3,56.24N×163.66E,h6km±14km,ML4.4*
*MOS **24** 03:34:42.8±0.8,56.30N×163.55E,h23km,mb4.4/10,Error ellipse: s-maj=7.9km s-min=4.8km az=64.1*
*IDC **24** 03:34:47.6±2.4,56.15N×163.34E,h59km±23km,mb3.6/19,mb1 3.8/22,mb1mx3.6/48,mbtmp3.9/22,ML4.3/2,MS3.1/5,Ms1 3.1/5,ms1mx2.6/94,Error ellipse: s-maj=19.1km s-min=12.7km az=146.0*
*NEIC **24** 03:34:47.4±1.9,56.16N±0.10×163.4E±0.2,h59km±8km,mb4.2/20,Error ellipse: s-maj=16.2km s-min=11.8km az=134.0*
**ISC 24 03:34:44.0±1.6,56.26N±0.04×163.51E±0.04,h24km±12km,**
**n148,σ1§47/156,mb4.1/27,3C-6D,Near east coast of**
**Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.39** | **262** | PN | Pb | 03 34 49.3 | -3.0 |
| **KBTR** | **Krutoberegovo** | **0.39** | **262** | *i* P | Pb | 03 34 49.3 | -3.0 |
| **KBG** | **Krutoberegovo** | **0.45** | **269** | PN | Pb | 03 34 50.1 | -3.2 |
| KBG | | | | S | **Sb** | **03 34 57.2** | **-2.4** |
| **KBG** | **Krutoberegovo** | **0.45** | **269** | *i* P | Pb | 03 34 50.1 | -3.2 |
| KBG | | | | *e*S | **Sb** | **03 34 57.2** | **-2.4** |
| **SMKR** | **Semkarok** | **1.18** | **287** | PN | **Pn** | **03 35 03.1** | **-2.0** |
| **SMKR** | **Semkarok** | **1.18** | **287** | *e*P | **Pn** | **03 35 03.1** | **-2.0** |
| **BDR** | **Baidarnaya** | **1.32** | **284** | PN | **Pn** | **03 35 05.6** | **-1.3** |
| BDR | | | | S | **Sn** | **03 35 24.1** | **+0.3** |
| **BDR** | **Baidarnaya** | **1.32** | **284** | *e*P | **Pn** | **03 35 05.6** | **-1.3** |
| BDR | | | | *e*S | **Sn** | **03 35 24.1** | **+0.3** |
| **SRKR** | **Sorokina** | **1.36** | **288** | PN | **Pn** | **03 35 06.3** | **-1.2** |
| **SRKR** | **Sorokina** | **1.36** | **288** | *e*P | **Pn** | **03 35 06.3** | **-1.2** |
| **ZLN** | **Zelenaya** | **1.54** | **262** | PN | **Pn** | **03 35 09.7** | **-0.3** |
| ZLN | | | | S | **Sn** | **03 35 31.1** | **+1.9** |
| **ZLN** | **Zelenaya** | **1.54** | **262** | *e*P | **Pn** | **03 35 09.7** | **-0.3** |
| ZLN | | | | *e*S | **Sn** | **03 35 31.1** | **+1.9** |
| **CIRR** | **Tsirk** | **1.55** | **266** | PN | **Pn** | **03 35 09.9** | **-0.3** |
| **CIRR** | **Tsirk** | **1.55** | **266** | *e*P | **Pn** | **03 35 09.9** | **-0.3** |
| **KLY** | **Klyuchi** | **1.60** | **273** | PN | **Pn** | **03 35 08.0** | **-2.7** |
| KLY | | | | S | **Sn** | **03 35 28.4** | **-2.1** |
| **KLY** | **Klyuchi** | **1.60** | **273** | *e*P | **Pn** | **03 35 08.0** | **-2.7** |
| KLY | | | | *e*S | **Sn** | **03 35 28.4** | **-2.1** |
| **BZGR** | **Bezymyannyi-Gr** | **1.61** | **260** | PN | **Pn** | **03 35 10.7** | **-0.3** |
| **BZGR** | **Bezymyannyi-Gr** | **1.61** | **260** | *e*P | **Pn** | **03 35 10.7** | **-0.3** |
| **KRSR** | **Krestovskiy** | **1.65** | **270** | PN | **Pn** | **03 35 10.6** | **-0.9** |
| **KRSR** | **Krestovskiy** | **1.65** | **270** | *i* P | **Pn** | **03 35 10.6** | **-0.9** |
| **BZWR** | **Bezymyannyi-We** | **1.72** | **261** | PN | **Pn** | **03 35 12.6** | **+0.1** |
| **BZWR** | **Bezymyannyi-We** | **1.72** | **261** | *e*P | **Pn** | **03 35 12.6** | **+0.1** |
| **BKI** | **Bering** | **1.75** | **126** | PN | **Pn** | **03 35 11.3** | **-1.4** |
| BKI | | | | S | **Sn** | **03 35 33.6** | **-0.6** |
| **BKI** | **Bering** | **1.75** | **126** | *e*P | **Pn** | **03 35 11.3** | **-1.4** |
| BKI | | | | *e*S | **Sn** | **03 35 33.6** | **-0.6** |
| **KIRR** | **Kirishev** | **1.80** | **261** | PN | **Pn** | **03 35 14.0** | **+0.3** |
| KIRR | | | | S | **Sb** | **03 35 39.0** | **+0.4** |
| **KIRR** | **Kirishev** | **1.80** | **261** | *e*P | **Pn** | **03 35 14.0** | **+0.3** |
| KIRR | | | | *e*S | **Sb** | **03 35 39.0** | **+0.4** |
| **KPT** | **Kopyto** | **1.87** | **262** | PN | **Pn** | **03 35 14.6** | **+0.1** |
| **KPT** | **Kopyto** | **1.87** | **262** | *e*P | **Pn** | **03 35 14.6** | **+0.1** |
| **KMNR** | **Kamenistaya** | **1.91** | **256** | PN | **Pn** | **03 35 15.6** | **+0.5** |
| **KMNR** | **Kamenistaya** | **1.91** | **256** | *e*P | **Pn** | **03 35 15.6** | **+0.5** |
| **KOZ** | **Kozyrevsk** | **2.05** | **266** | PN | **Pn** | **03 35 18.0** | **+1.1** |
| KOZ | | | | S | **Sb** | **03 35 45.7** | **+0.3** |
| **KOZ** | **Kozyrevsk** | **2.05** | **266** | *e*P | **Pn** | **03 35 18.0** | **+1.1** |
| KOZ | | | | *e*S | **Sb** | **03 35 45.7** | **+0.3** |
| **TUMD** | **Tumrok D** | **2.06** | **240** | *e*P | **Pn** | **03 35 17.1** | **+0.1** |
| **TUMR** | **Tumrok** | **2.14** | **244** | PN | **Pn** | **03 35 19.3** | **+1.0** |
| **TUMR** | **Tumrok** | **2.14** | **244** | *e*P | **Pn** | **03 35 19.3** | **+1.0** |
| **OSSR** | **Ossora** | **3.01** | **356** | PN | **Pn** | **03 35 29.2** | **-0.8** |
| **OSSR** | **Ossora** | **3.01** | **356** | *e*P | **Pn** | **03 35 29.2** | **-0.8** |
| **PALN** | **Palana** | **3.42** | **328** | PN | **Pn** | **03 35 37.8** | **+2.2** |
| **PALN** | **Palana** | **3.42** | **328** | *e*P | **Pn** | **03 35 37.8** | **+2.2** |
| **SPN** | **Mys Shipunski** | **3.76** | **214** | PN | **Pn** | **03 35 39.5** | **-0.9** |
| **SPN** | **Mys Shipunski** | **3.76** | **214** | *e*P | **Pn** | **03 35 39.5** | **-0.9** |
| **NLC** | **Nalytchevo** | **3.93** | **220** | *e*S | **Sn** | **03 36 30.5** | **+2.5** |
| **SDLR** | **Sedlovina** | **4.02** | **224** | PN | **Pn** | **03 35 44.8** | **+0.8** |
| **SDLR** | **Sedlovina** | **4.02** | **224** | *e*P | **Pn** | **03 35 44.8** | **+0.8** |
| **KRER** | **Koryakskii** | **4.05** | **225** | PN | **Pn** | **03 35 47.1** | **+2.5** |
| **KRER** | **Koryakskii** | **4.05** | **225** | *e*P | **Pn** | **03 35 47.1** | **+2.5** |
| **SMAR** | **Somma** | **4.06** | **224** | PN | **Pn** | **03 35 46.7** | **+2.0** |
| **SMAR** | **Somma** | **4.06** | **224** | *e*P | **Pn** | **03 35 46.7** | **+2.0** |
| **AVH** | **Avacha** | **4.08** | **225** | PN | **Pn** | **03 35 46.1** | **+1.2** |
| **AVH** | **Avacha** | **4.08** | **225** | *e*P | **Pn** | **03 35 46.1** | **+1.2** |
| **KOK** | **Koryaka** | **4.10** | **226** | PN | **Pn** | **03 35 47.9** | **+2.7** |
| **KOK** | **Koryaka** | **4.10** | **226** | *e*P | **Pn** | **03 35 47.9** | **+2.7** |
| **GNL** | **Ganaly** | **4.11** | **234** | PN | **Pn** | **03 35 46.5** | **+1.1** |
| **GNL** | **Ganaly** | **4.11** | **234** | *e*P | **Pn** | **03 35 46.5** | **+1.1** |
| **DALK** | **Dalny** | **4.26** | **222** | PN | **Pn** | **03 35 48.2** | **+1.0** |
| **DALK** | **Dalny** | **4.26** | **222** | P | **Pn** | **03 35 48.2** | **+1.0** |
| **PET** | **Petropavlovsk** | **4.30** | **223** | *e*PN | **Pn** | **03 35 49.8** | **+1.9** |
| PET | | | | pmax | pmax | | |
| | comp=Z,55nm,0.6s | | | | | | |
| **PET** | **Petropavlovsk** | **4.30** | **223** | | **Pn** | **03 35 49.2** | **+1.4** |
| PET | | | | Sn | **Sn** | **03 36 38.6** | **+1.5** |
| **PET** | **Petropavlovsk** | **4.30** | **223** | *e*P | **Pn** | **03 35 49.7** | **+1.9** |
| **TILK** | **Tilichiki** | **4.42** | **17** | PN | **Pn** | **03 35 49.7** | **+0.3** |
| **TILK** | **Tilichiki** | **4.42** | **17** | *e*P | **Pn** | **03 35 49.7** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **4.62** | **229** | ‖*e*PN | **Pn** | **03 35 56.0** | **+3.7** |
| **PEA0B** | **Petropavlovsk-** | **4.62** | **229** | Pn | **Pn** | **03 35 53.8** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **4.62** | **229** | P | **Pn** | **03 35 53.6** | **+1.4** |
| | comp=Z,1.8nm,0.3s,baz=82,slow=17,SNR=9.2 | | | | | | |
| PETK | | | | S | **Sn** | **03 36 44.3** | **-0.8** |
| | baz=78,slow=14,SNR=0.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **4.62** | **229** | Pn | **Pn** | **03 35 51.0** | **-1.3** |
| **KRMR** | **Karymshinskiy** | **4.65** | **225** | PN | **Pn** | **03 35 55.0** | **+2.3** |
| **KRMR** | **Karymshinskiy** | **4.65** | **225** | *e*P | **Pn** | **03 35 55.0** | **+2.3** |
| **RUS** | **Russkaya** | **4.82** | **219** | PN | **Pn** | **03 35 55.7** | **+0.7** |
| **RUS** | **Russkaya** | **4.82** | **219** | *e*P | **Pn** | **03 35 55.7** | **+0.7** |
| **GRL** | **Gorelyy** | **4.89** | **223** | PN | **Pn** | **03 35 58.0** | **+1.9** |
| **GRL** | **Gorelyy** | **4.89** | **223** | *e*P | **Pn** | **03 35 58.0** | **+1.9** |
| **MTVR** | **Mutnovka** | **4.90** | **222** | PN | **Pn** | **03 35 58.5** | **+2.2** |
| **MTVR** | **Mutnovka** | **4.90** | **222** | *e*P | **Pn** | **03 35 58.5** | **+2.2** |
| **APC** | **Apacha** | **4.98** | **231** | PN | **Pn** | **03 36 00.2** | **+3.0** |
| **APC** | **Apacha** | **4.98** | **231** | *e*P | **Pn** | **03 36 00.2** | **+3.0** |
| **KMSK** | **Kamenskaya** | **6.38** | **11** | PN | **Pn** | **03 36 17.6** | **+1.4** |
| **KMSK** | **Kamenskaya** | **6.38** | **11** | *e*P | **Pn** | **03 36 17.6** | **+1.4** |
| **SHEM** | **Shemya Is, Ala** | **7.11** | **115** | LR | LR | 03 38 56.5 | |
| | comp=Z,114nm,19.0s,baz=319,slow=35 | | | | | | |
| **MA2** | **Magadan** | **7.55** | **301** | P | **Pn** | **03 36 34.8** | **+2.3** |
| | comp=Z,1.4nm,0.3s,baz=136,slow=20,SNR=2.5 | | | | | | |
| MA2 | | | | LR | LR | 03 39 43.7 | |
| | comp=Z,126nm,21.6s,baz=106,slow=39 | | | | | | |
| **SEY** | **Seymchan** | **8.74** | **324** | LR | LR | 03 40 29.3 | |
| | comp=Z,128nm,19.0s,baz=312,slow=39 | | | | | | |
| **BILL** | **Bilibino** | **11.89** | **5** | *e*PN | **Pn** | **03 37 34.1** | **+2.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,187nm,9.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **15.85** | **243** | *e*P | **Pn** | **03 38 27.8** | **+2.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **TNA** | **Tin City** | **16.56** | **44** | | **P** | **03 38 37.4** | **+0.8** |
| **ASAJ** | **Asahikawa** | **18.00** | **236** | P | **Pn** | **03 38 50.5** | **-1.7** |
| | comp=Z,0.6nm,0.3s,baz=300,slow=33,SNR=1.6 | | | | | | |
| **YAK** | **Yakutsk** | **18.13** | **302** | ‖*e*P | **P** | **03 38 56.9** | **+2.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **20.34** | **263** | P | **P** | **03 39 18.5** | **+0.3** |
| | comp=Z,2.0nm,0.9s,baz=55,slow=14,SNR=4.7 | | | | | | |
| KLR | | | | LR | LR | 03 47 24.5 | |
| | comp=Z,36nm,20.1s,baz=327,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **20.34** | **263** | ‖*e*P | Pn | 03 39 20.9 | +0.6 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| **TIXI** | **Tiksi** | **21.17** | **330** | P | **P** | **03 39 28.2** | **+1.2** |
| | comp=Z,2.2nm,0.5s,baz=91,slow=23,SNR=13 | | | | | | |
| **TIXI** | **Tiksi** | **21.17** | **330** | ‖P | **P** | **03 39 28.7** | **+1.7** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **21.17** | **330** | P | **P** | **03 39 26.5** | **-0.5** |
| TIXI | | | | IAmb | IAmb | 03 39 34.8 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **22.54** | **33** | P | **P** | **03 39 40.9** | **-0.9** |
| **COLD** | **Coldfoot** | **23.86** | **44** | P | **P** | **03 39 55.2** | **+0.1** |
| COLD | | | | IAmb | IAmb | 03 39 57.2 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **24.14** | **49** | P | **P** | **03 39 58.3** | **+0.6** |
| I23K | | | | IAmb | IAmb | 03 40 00.4 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **24.25** | **41** | P | **P** | **03 39 59.6** | **+0.9** |
| **COLA** | **College** | **24.79** | **50** | ‖*e*P | **P** | **03 40 04.4** | **+0.9** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,70nm,4.9s | | | | | | |
| **IL31** | | **25.21** | **50** | P | **P** | **03 40 07.5** | **+0.2** |
| IL31 | | | | IAmb | IAmb | 03 40 10.3 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **25.21** | **50** | P | **P** | **03 40 07.8** | **+0.4** |
| | comp=Z,1.7nm,0.5s,baz=269,slow=9.3,SNR=39 | | | | | | |
| **ILAR** | **Eielson Array** | **25.21** | **50** | P | **P** | **03 40 07.6** | **+0.2** |
| **J25K** | **Salcha River,** | **25.87** | **50** | P | **P** | **03 40 13.0** | **-0.4** |
| **SCRK** | **Sand Creek** | **26.54** | **52** | P | **P** | **03 40 18.4** | **-1.3** |
| SCRK | | | | IAmb | IAmb | 03 40 19.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **30.15** | **41** | P | **P** | **03 40 52.9** | **+1.4** |
| | comp=Z,2.4nm,0.6s,baz=293,slow=6.8,SNR=21 | | | | | | |
| **INK** | **Inuvik** | **30.15** | **41** | P | **P** | **03 40 52.7** | **+1.2** |
| INK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **30.15** | **41** | P | **P** | **03 40 52.7** | **+1.2** |
| INK | | | | IAmb | IAmb | 03 40 55.2 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **A36M** | **Sachs Harbour** | **32.38** | **33** | P | **P** | **03 41 12.2** | **+1.1** |
| A36M | | | | IAmb | IAmb | 03 41 13.5 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **C36M** | **Paulatuk** | **33.31** | **38** | P | **P** | **03 41 20.5** | **+1.3** |
| **SONM** | **Songino Array** | **35.18** | **281** | P | **P** | **03 41 33.6** | **-2.3** |
| | comp=Z,0.4nm,0.5s,baz=62,slow=6.0,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **35.18** | **281** | *e*P | **P** | **03 41 37.0** | **+1.1** |
| **SONM** | **Songino Array** | **35.18** | **281** | P | **P** | **03 41 34.3** | **-1.6** |
| **YKA** | **Yellowknife Ar** | **39.50** | **46** | P | **P** | **03 42 12.7** | **+0.5** |
| | comp=Z,1.2nm,0.6s,baz=300,slow=8.2,SNR=15 | | | | | | |
| **YKA** | **Yellowknife Ar** | **39.50** | **46** | *e*P | **P** | **03 42 13.2** | **+1.1** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **39.50** | **46** | P | **P** | **03 42 12.4** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **42.78** | **301** | PcP | **PcP** | **03 44 28.8** | **-1.3** |
| | comp=Z,1.1nm,0.6s,baz=27,slow=3.5,SNR=3.8 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **44.33** | **351** | P | **P** | **03 42 52.2** | **+0.9** |
| | comp=Z,9.8nm,1.0s,baz=40,slow=7.5,SNR=1.4 | | | | | | |
| **KURK** | **Kurchatov** | **47.77** | **301** | ‖*e*P | **P** | **03 43 17.0** | **-1.7** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,11nm,2.9s | | | | | | |
| **KURK** | **Kurchatov** | **47.77** | **301** | P | **P** | **03 43 17.5** | **-1.2** |
| KURK | | | | IAmb | IAmb | 03 43 18.1 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **48.59** | **295** | ‖*e*P | **P** | **03 43 23.4** | **-1.8** |
| **MK31** | **Makanchi Array** | **48.59** | **295** | P | **P** | **03 43 23.3** | **-1.9** |
| **MKAR** | **Makanchi Array** | **48.59** | **295** | P | **P** | **03 43 23.2** | **-2.0** |
| | comp=Z,0.8nm,0.5s,baz=56,slow=6.5,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.59** | **295** | *e*P | **P** | **03 43 23.6** | **-1.6** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.59** | **295** | P | **P** | **03 43 23.6** | **-1.6** |
| **FCC** | **Fort Churchill** | **49.77** | **42** | P | **P** | **03 43 34.9** | **+0.9** |
| FCC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **FCC** | **Fort Churchill** | **49.77** | **42** | P | **P** | **03 43 34.9** | **+0.9** |
| **PDAR** | **Pinedale Array** | **54.31** | **65** | P | **P** | **03 44 08.8** | **+0.5** |
| | comp=Z,0.3nm,0.6s,baz=11,slow=3.0,SNR=4.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.31** | **65** | P | **P** | **03 44 07.9** | **-0.4** |
| **AAK** | **Ala-Archa** | **55.45** | **296** | ‖*e*P | **P** | **03 44 15.0** | **-1.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **55.45** | **296** | P | **P** | **03 44 15.6** | **-0.9** |
| AAK | | | | IAmb | IAmb | 03 44 15.9 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **57.07** | **299** | P | **P** | **03 44 26.4** | **-1.5** |
| **KKAR** | **Karatay Array** | **57.07** | **299** | P | **P** | **03 44 26.4** | **-1.5** |
| **FINES** | **FINESS Array B** | **57.97** | **337** | P | **P** | **03 44 33.4** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=312,slow=17,SNR=1.0 | | | | | | |
| **OBN** | **Obninsk** | **60.89** | **328** | *e*P | **P** | **03 44 55.0** | **+1.0** |
| OBN | | | | *e* | | 03 45 34.4 | |
| OBN | | | | *e* | | 03 47 07.0 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,28nm,8.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **61.02** | **345** | P | **P** | **03 44 54.7** | **-0.3** |
| | comp=Z,1.1nm,0.8s,baz=7.7,slow=8.9,SNR=3.4 | | | | | | |
| **SCHQ** | **Schefferville** | **61.91** | **30** | P | **P** | **03 45 01.1** | **+0.1** |
| | comp=Z,2.4nm,0.6s,baz=333,slow=6.4,SNR=12 | | | | | | |
| **SCHQ** | **Schefferville** | **61.91** | **30** | P | **P** | **03 45 01.1** | **+0.1** |
| **AKASG** | **Malin Array Be** | **66.88** | **330** | P | **P** | **03 45 33.1** | **-0.5** |
| | comp=Z,0.8nm,0.5s,baz=26,slow=6.0,SNR=2.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.88** | **330** | P | **P** | **03 45 33.2** | **-0.3** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **66.88** | **330** | P | **P** | **03 45 33.2** | **-0.3** |
| AKASG | | | | IAmb | IAmb | 03 45 49.4 | |
| | comp=Z,2.7nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **67.64** | **71** | P | **P** | **03 45 38.9** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=320,slow=5.6,SNR=4.4 | | | | | | |
| **KBZ** | **Khabaz** | **68.56** | **318** | P | **P** | **03 45 44.2** | **0.0** |
| | comp=Z,2.4nm,1.0s,baz=252,slow=2.0,SNR=5.1 | | | | | | |
| **KBZ** | **Khabaz** | **68.56** | **318** | ‖*e*P | **P** | **03 45 44.4** | **+0.2** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **VRAC** | **Vranov** | **71.25** | **338** | LR | LR | 04 21 18.7 | |
| | comp=Z,27nm,18.1s,baz=7.5,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.38** | **322** | P | **P** | **03 46 25.6** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=91,slow=1.5,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **79.81** | **208** | P | **P** | **03 46 47.2** | **-2.8** |
| | comp=Z,0.3nm,0.7s,baz=21,slow=6.2,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **83.48** | **207** | P | **P** | **03 47 08.9** | **-0.4** |
| | comp=Z,0.7nm,0.8s,baz=4.2,slow=5.0,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **83.48** | **207** | P | **P** | **03 47 07.9** | **-1.4** |
| **ESDC** | **Sonseca Array** | **83.84** | **350** | P | **P** | **03 47 11.9** | **+0.6** |
| | comp=Z,0.4nm,0.6s,baz=349,slow=5.4,SNR=5.5 | | | | | | |
| **ESDC** | **Sonseca Array** | **83.84** | **350** | P | **P** | **03 47 10.1** | **-1.2** |
| **BDFB** | **Brasilia** | **132.89** | **43** | PKP | **PKPdf** | **03 53 57.3** | **+0.2** |
| | comp=Z,3.7nm,0.9s,baz=113,slow=3.0,SNR=4.9 | | | | | | |
| **BDFB** | **Brasilia** | **132.89** | **43** | | **PKPdf** | **03 53 53.9** | **-3.2** |

**IDC 24 03:39:43.5±4.7,57.48S×148.83E,h0km,mb3.4/2,**
**mb1 3.7/2,mb1mx3.1/31,mbtmp3.4/2,MS3.2/1,Ms1 3.3/1,**
**ms1mx2.7/25,Error ellipse: s-maj=243.7km**
**s-min=58.9km az=84.0,West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **20.63** | **172** | LR | LR | 03 51 58.5 | |
| | comp=Z,69nm,18.6s,baz=250,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **35.46** | **336** | P | P | 03 46 42.2 | +0.8 |
| | 0.3nm,0.6s,baz=161,slow=9.4,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.98** | **338** | P | P | 03 47 10.3 | -1.0 |
| | 0.4nm,0.6s,baz=168,slow=7.3,SNR=2.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **76.25** | **277** | T | T | 05 14 55.6 | |
| | baz=147,slow=76,SNR=5.4 | | | | | | |
| **H08S1** | **Diego Carcia H** | **76.26** | **277** | T | T | 05 14 54.7 | |
| | baz=147,slow=76,SNR=5.4 | | | | | | |
| **H08S3** | **Diego Garcia H** | **76.27** | **277** | T | T | 05 14 58.1 | |
| | baz=147,slow=76,SNR=6.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.00** | **285** | PKPbc | PKPbc | 03 59 20.1 | -0.7 |
| | 0.2nm,0.3s,baz=112,slow=2.5,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **151.46** | **302** | PKPbc | PKPbc | 03 59 37.3 | -0.4 |
| | 2.4nm,0.8s,baz=90,slow=2.8,SNR=3.6 | | | | | | |

*IDC **24** 03:46:32.2±1.9,6.50S×125.00E,h0km,mb1 4.2/5,mb1mx3.6/41,mbtmp4.1/5,ML3.9/5,Error ellipse: s-maj=44.3km s-min=23.1km az=68.0*
*DJA **24** 03:46:37.6±0.6,7.5±4.1×12.5±0.7,h72km±28km,M4.0/7,mb4.1/2,mB5.2/1,MLv4.0/7,Mw(mB)4.6/1*
**ISC 24 03:46:37.7±1.1,6.51S±0.07×124.81E±0.07,h50km,n12,**
**σ2§05/18,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBSI** | **Bau Bau** | **2.44** | **294** | P | **Pn** | **03 47 16.4** | **+1.2** |
| BBSI | | | | S | **Sn** | **03 47 46.3** | **+2.5** |
| **SOEI** | **Soe** | **3.27** | **189** | P | **Pn** | **03 47 28.6** | **+1.9** |
| **BATI** | **Baumata** | **3.85** | **197** | Pn | **Pn** | **03 47 35.5** | **+1.1** |
| | 6.3nm,0.3s,baz=333,slow=6.5,SNR=2.5 | | | | | | |
| BATI | | | | Sn | **Sn** | **03 48 20.8** | **+2.4** |
| | 6.8nm,0.3s,baz=165,slow=21,SNR=6.4 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **4.31** | **275** | P | **Pn** | **03 47 41.1** | **+0.4** |
| BSSI | | | | S | **Sn** | **03 48 28.7** | **-1.0** |
| **SANI** | **Sanana** | **4.58** | **15** | P | **Pn** | **03 47 44.8** | **+0.3** |
| **BKSI** | **Bulukumba** | **4.81** | **284** | P | **Pn** | **03 47 48.1** | **+0.5** |
| BKSI | | | | S | **Sn** | **03 48 38.4** | **-3.6** |
| **BNSI** | **Bone** | **5.12** | **294** | P | **Pn** | **03 47 51.5** | **-0.5** |
| | 0.3nm2µm24nm,0.7s | | | | | | |
| BNSI | | | | S | **Sn** | **03 48 49.4** | **-0.5** |
| | 0.3nm2µm24nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **5.24** | **286** | Pn | **Pn** | **03 47 54.7** | **+1.1** |
| | 2.1nm,0.3s,baz=145,slow=8.4,SNR=4.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 48 51.4** | **-1.3** |
| | 4.1nm,0.3s,baz=232,slow=23,SNR=9.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.55** | **176** | Pn | **Pn** | **03 49 16.7** | **-3.3** |
| | 0.6nm,0.3s,baz=1.6,slow=9.7,SNR=17 | | | | | | |
| FITZ | | | | Sn | Sn | 03 51 17.6 | -10 |
| | 0.9nm,0.3s,baz=129,slow=16,SNR=9.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.25** | **146** | Pn | **Pn** | **03 50 19.2** | **-3.6** |
| | 0.6nm,0.3s,baz=320,slow=13,SNR=21 | | | | | | |
| WRA | | | | Sn | Sn | 03 53 10.7 | -12 |
| | 0.4nm,0.3s,baz=319,slow=26,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.18** | **154** | P | **P** | **03 50 57.9** | **+0.6** |
| | 0.5nm,0.3s,baz=319,slow=11,SNR=39 | | | | | | |
| ASAR | | | | S | S | 03 54 20.6 | -12 |
| | 0.1nm,0.3s,baz=317,slow=20,SN

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AROD** | **Rodeo** | **2.85** | **55** | *eP* | | **Pb** | **03 49 03.0** | **-1.2** |
| AROD | | | | *eS* | | **Sg** | **03 49 46.6** | **+2.1** |
| **ASAL** | **Salagasta** | **2.94** | **106** | *eP* | | **Pn** | **03 49 00.0** | **+0.1** |
| ASAL | | | | *eP* | | **Pb** | **03 49 05.0** | **-0.4** |
| ASAL | | | | *eS* | | **Sg** | **03 49 49.5** | **+2.4** |
| **ACCO** | **Cerro Coronel** | **2.94** | **66** | *eP* | | **Pb** | **03 49 05.0** | **-0.7** |
| ACCO | | | | *eS* | | **Sg** | **03 49 45.0** | **-2.3** |
| **ZON** | **Zonda** | **3.00** | **86** | *eP* | | **Pn** | **03 49 00.0** | **-0.7** |
| ZON | | | | *eP* | | **Pb** | **03 49 06.0** | **-0.5** |
| ZON | | | | *eS* | | **Sg** | **03 49 50.1** | **+1.0** |
| ZON | | | | IAML | | | 03 49 54.8 | |
| | comp=Z,188nm,0.5s | | | | | | | |
| **LCO** | **Las Campanas** | **3.09** | **25** | *eP* | | **Pn** | **03 49 03.0** | **+0.9** |
| **AAGR** | **Agrelo** | **3.10** | **115** | *eP* | | **Pb** | **03 49 07.0** | **-1.2** |
| **BO02** | **Sierra Bellavi** | **3.18** | **159** | *eP* | | **Pn** | **03 49 05.0** | **+1.8** |
| BO02 | | | | *eS* | | **Sb** | **03 49 51.0** | **+2.5** |
| BO02 | | | | IAML | | | 03 50 00.2 | |
| | comp=Z,296nm,0.8s | | | | | | | |
| **GO05** | **Huala** | **3.18** | **176** | *eP* | | **Pn** | **03 49 03.0** | **-0.1** |
| GO05 | | | | *eS* | | **Sn** | **03 49 39.0** | **-2.3** |
| **RTLL** | **Cerro Villicun** | **3.20** | **82** | *eP* | | **Pb** | **03 49 09.0** | **-0.9** |
| RTLL | | | | *eS* | | **Sg** | **03 49 54.0** | **-1.6** |
| **AC04** | **Llanos de Chal** | **3.74** | **15** | *eP* | | **Pn** | **03 49 11.4** | **+0.5** |
| AC04 | | | | *eS* | | **Sg** | **03 50 12.5** | **-0.3** |
| AC04 | | | | IAML | | | 03 50 25.3 | |
| | comp=Z,162nm,0.7s | | | | | | | |
| **GO03** | **Copiap** | **4.55** | **22** | *eP* | | **Pn** | **03 49 23.7** | **+1.6** |
| GO03 | | | | *eS* | | **Sb** | **03 50 31.0** | **+3.1** |
| **VCA** | **Vinchina** | **4.62** | **49** | *eP* | | Pn | 03 49 28.0 | +4.9 |
| VCA | | | | *eS* | | **Sb** | **03 50 30.0** | **0.0** |
| VCA | | | | IAML | | | 03 50 44.1 | |
| | comp=Z,272nm,1.2s | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **5.05** | **75** | *eP* | | Pn | 03 49 34.0 | +5.0 |
| **ACLC** | **CERRO LA CRUZ** | **5.10** | **63** | *eP* | | **Pn** | **03 49 34.0** | **+4.2** |
| ACLC | | | | *eP* | | **Pn** | **03 49 34.0** | **+4.2** |
| ACLC | | | | *eS* | | **Sb** | **03 50 40.5** | **-3.5** |
| **H03N1** | **Juan Fernandez** | **5.90** | **252** | T | | T | 03 56 23.3 | |
| | baz=82,slow=71,SNR=72 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.92** | **252** | T | | T | 03 56 24.9 | |
| | baz=82,slow=71,SNR=96 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.92** | **252** | T | | T | 03 56 23.6 | |
| | baz=82,slow=71,SNR=80 | | | | | | | |
| **PLCA** | **Paso Flores** | **8.98** | **172** | Pn | | **Pn** | **03 50 24.3** | **+1.4** |
| | comp=Z,0.4nm,0.3s,baz=343,slow=13,SNR=15 | | | | | | | |
| **LVC** | **Limon Verde** | **9.63** | **18** | Pn | | **Pn** | **03 50 30.9** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=256,slow=8.3,SNR=2.1 | | | | | | | |
| **SIV** | **San Ignacio** | **18.73** | **35** | P | | **P** | **03 52 29.3** | **-2.8** |
| | comp=Z,0.3nm,0.3s,baz=215,slow=11,SNR=1.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.59** | **70** | P | | **P** | **04 00 43.3** | **+1.2** |
| | comp=Z,1.3nm,0.8s,baz=253,slow=3.4,SNR=7.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **151.34** | **41** | PKPbc | | **PKiKP** | **04 08 08.0** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=304,slow=3.2,SNR=4.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.43** | **30** | PKPbc | | **PKiKP** | **04 08 10.7** | **+1.4** |
| | comp=Z,0.7nm,0.4s,baz=284,slow=1.5,SNR=4.0 | | | | | | | |

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*SJA **24** 03:51:28.1±1.0,31.74S×69.44W,h127km±3km,ML4.9, MW4.5*

*NEIC **24** 03:51:29.8,31.74S×69.46W,h112km,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr=4.42; Mθθ=1.31; Mϕϕ=3.11; Mrθ=-1.62; Mθϕ=5.68; Mϕr=2.78; Fault plane solution: M₀=7.62000×10¹⁵ NP1:ϕ₁=187.86000°, δ=61.77000°, λ=-137.01000°. NP2:ϕ₂=74.07000°, δ=53.08000°, λ=-36.28000°. Principal axes: T 8.0526, Plg=5.0000°, Azm=309.0000°; N -0.9658, Plg=40.0000°, Azm=215.0000°; P -7.0869, Plg=49.0000°, Azm=45.0000°;*

*NEIC **24** 03:51:29.6±1.8,31.75S×70.04W×69.46W×0.06,h116km±4km, mb4.7/84, Mwr=4.5/25, Mww=4.7, Md=5.0(SJA), ML=4.8(GUC) Error ellipse: s-maj=7.7km s-min=6.2km az=114.0*

*GUC **24** 03:51:29.5±0.9,31.77S×69.82W,h141km±6km, ML=4.8*

*VAO **24** 03:51:29.0±0.4,31.85S×69.47W,h123km, mb4.7*

*IDC **24** 03:51:30.6±0.6,31.70S×69.34W,h122km±4km, mb4.1/12, mb1 4.2/14, mb1mx4.2/22, mbtmp4.6/14, Error ellipse: s-maj=20.3km s-min=15.4km az=56.0*

*NEIC **24** 03:51:33,31.86S×69.44W,h120km, Moment Tensor Solution. Duration: 8s0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.56; Mθθ=0.24; Mϕϕ=0.32; Mrθ=0.02; Mθϕ=0.94; Mϕr=0.57; Fault plane solution: M₀=1.21000×10¹⁶ NP1:ϕ₁=82.00000°, δ=50.00000°, λ=-25.00000°. NP2:ϕ₂=189.00000°, δ=71.00000°, λ=-136.00000°. Principal axes: T 1.3249, Plg=13.0000°, Azm=311.0000°; N -0.2893, Plg=43.0000°, Azm=208.0000°; P -1.0356, Plg=44.0000°, Azm=54.0000°;*

**ISC 24 03:51:29.4±0.4,31.73S±0.03×69.48W±0.03,h122km±3km, n281,σ1°33/338,mb4.7/45,7C-14D,San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **AUSP** | **Uspallata** | **0.50** | **171** | *eP* | | | **Pn** | **03 51 47.8** | **-0.2** |
| AUSP | | | | *eS* | | | **Sn** | **03 52 02.7** | **+0.7** |
| **ZON** | **Zonda** | **0.70** | **75** | Pn | | | **Pn** | **03 51 48.8** | **-0.4** |
| ZON | | | | Sn | | | **Sn** | **03 52 02.9** | **-1.0** |
| **ZON** | **Zonda** | **0.70** | **75** | *eP* | | | **Pn** | **03 51 48.7** | **-0.4** |
| ZON | | | | *eS* | | | **Sn** | **03 52 03.1** | **-0.9** |
| **RTCV** | **Cerro Valdivia** | **0.81** | **100** | *eP* | | | **Pn** | **03 51 49.6** | **-0.3** |
| RTCV | | | | *eS* | | | **Sn** | **03 52 05.3** | **-0.1** |
| **RTLL** | **Cerro Villicun** | **0.94** | **65** | *eP* | | | **Pn** | **03 51 50.8** | **-0.4** |
| RTLL | | | | *eS* | | | **Sn** | **03 52 07.1** | **-0.5** |
| **ASAL** | **Salagasta** | **1.02** | **148** | *eP* | | | **Pn** | **03 51 51.9** | **0.0** |
| **ACCO** | **Cerro Coronel** | **1.19** | **17** | *eP* | | | **Pn** | **03 51 54.2** | **+0.3** |
| **ARCO** | **CERRO ARCO** | **1.21** | **158** | *eP* | | | **Pn** | **03 51 54.0** | **+0.1** |
| ARCO | | | | *eS* | | | **Sn** | **03 52 12.6** | **+0.1** |
| ARCO | | | | IAML | | | | 03 52 14.8 | |
| | comp=Z,27μm,0.4s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.36** | **310** | Pn | | | **Pn** | **03 51 56.0** | **+0.5** |
| CO03 | | | | Sn | | | **Sn** | **03 52 15.8** | **+0.5** |
| **CO03** | **El Pedregal** | **1.36** | **310** | *eP* | ⇑ | | **Pn** | **03 51 56.0** | **+0.5** |
| CO03 | | | | *i* S | | | **Sn** | **03 52 15.6** | **+0.2** |
| CO03 | | | | IAML | | | | 03 52 18.0 | |
| | comp=E,24μm,0.2s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.36** | **310** | *eP* | | | **Pn** | **03 51 55.8** | **+0.2** |
| CO03 | | | | *eS* | | | **Sn** | **03 52 16.4** | **+1.1** |
| CO03 | | | | IAML | | | | 03 52 20.9 | |
| | comp=Z,11μm,0.5s | | | | | | | | |
| **VA03** | **San Esteban** | **1.38** | **221** | Pn | | | **Pn** | **03 51 56.0** | **+0.3** |
| VA03 | | | | Sn | | | **Sn** | **03 52 16.1** | **+0.4** |
| **VA03** | **San Esteban** | **1.38** | **221** | *eP* | ⇓ | | **Pn** | **03 51 56.0** | **+0.3** |
| VA03 | | | | *i* S | | | **Sn** | **03 52 15.8** | **+0.1** |
| VA03 | | | | IAML | | | | 03 52 17.5 | |
| | comp=N,20μm,0.5s | | | | | | | | |
| **VA03** | **San Esteban** | **1.38** | **221** | *eP* | | | **Pn** | **03 51 55.8** | **+0.1** |
| VA03 | | | | *eS* | | | **Sn** | **03 52 19.2** | **+3.5** |
| **CO02** | **Combarbal** | **1.40** | **291** | Pn | | | **Pn** | **03 51 56.2** | **+0.2** |
| **CO02** | **Combarbal** | **1.40** | **291** | *eP* | ⇑ | | **Pn** | **03 51 56.1** | **+0.2** |
| CO02 | | | | *i* S | | | **Sn** | **03 52 15.6** | **-0.5** |
| **CO02** | **Combarbal** | **1.40** | **291** | *eP* | | | **Pn** | **03 51 56.3** | **+0.2** |
| CO02 | | | | *eS* | | | **Sn** | **03 52 17.0** | **+0.8** |
| CO02 | | | | IAML | | | | 03 52 18.1 | |
| | comp=Z,20μm,0.7s | | | | | | | | |
| **AAGR** | **Agrelo** | **1.46** | **158** | *eP* | | | **Pn** | **03 51 56.6** | **-0.1** |
| **AROD** | **Rodeo** | **1.55** | **0** | *eP* | | | **Pn** | **03 51 58.9** | **+0.9** |
| AROD | | | | *eS* | | | **Sn** | **03 52 20.4** | **+0.8** |
| **ACDV** | **Cuesta del Vie** | **1.58** | **11** | *eP* | | | **Pn** | **03 51 58.9** | **+0.7** |
| ACDV | | | | *eS* | | | **Sn** | **03 52 21.0** | **+1.1** |
| **PEL** | **Peldehue** | **1.74** | **216** | Pn | | | **Pn** | **03 51 59.3** | **-0.6** |
| **PEL** | **Peldehue** | **1.74** | **216** | *eP* | ⇓ | | **Pn** | **03 51 59.8** | **-0.1** |
| PEL | | | | *i* S | | | **Sn** | **03 52 22.7** | **-0.5** |
| PEL | | | | IAML | | | | 03 52 25.1 | |
| | comp=E,6μm,0.7s | | | | | | | | |
| **PEL** | **Peldehue** | **1.74** | **216** | *eP* | | | **Pn** | **03 51 59.9** | **-0.1** |
| **VA06** | **Catapilco** | **1.75** | **241** | Pn | | | **Pn** | **03 51 59.0** | **-1.0** |
| **VA06** | **Catapilco** | **1.75** | **241** | *eP* | ⇓ | | **Pn** | **03 51 59.0** | **-1.0** |
| VA06 | | | | *i* S | | | **Sn** | **03 52 20.6** | **-2.6** |
| VA06 | | | | IAML | | | | 03 52 24.2 | |
| | comp=E,12μm,0.5s | | | | | | | | |
| **ROCH** | **El Roble** | **1.80** | **226** | *eP* | ⇓ | | **Pn** | **03 52 00.3** | **-0.4** |
| ROCH | | | | Pn | ⇓ | | **Pn** | **03 51 58.8** | **-2.0** |
| ROCH | | | | *i* S | | | **Sn** | **03 52 22.2** | **-2.4** |
| ROCH | | | | *i* S | | | **Sn** | **03 52 22.6** | **-1.9** |
| ROCH | | | | IAML | | | | 03 52 26.8 | |
| | comp=N,7μm,0.6s | | | | | | | | |
| ROCH | | | | IAML | | | | 03 52 28.3 | |
| | comp=N,8μm,0.6s | | | | | | | | |
| **ROC1** | **El Roble** | **1.80** | **226** | Pn | | | **Pn** | **03 51 58.8** | **-2.0** |
| **ROC1** | **El Roble** | **1.80** | **226** | *eP* | | | **Pn** | **03 51 58.6** | **-2.2** |
| ROC1 | | | | *eP* | | | **Pn** | **03 51 58.8** | **-2.0** |
| ROC1 | | | | *eS* | | | **Sn** | **03 52 23.7** | **-1.1** |
| **GO04** | **Tololo Observa** | **1.92** | **323** | Pn | | | **Pn** | **03 52 02.2** | **-0.1** |
| **GO04** | **Tololo Observa** | **1.92** | **323** | *i* P | | | **Pn** | **03 52 02.1** | **-0.2** |
| **GO04** | **Tololo Observa** | **1.92** | **323** | *eP* | | | **Pn** | **03 52 02.3** | **0.0** |
| GO04 | | | | *eS* | | | **Sn** | **03 52 27.9** | **+0.6** |
| **AVIZ** | **Vizcacheras** | **1.92** | **155** | *eP* | | | **Pn** | **03 52 02.1** | **-0.1** |
| **MT03** | **Universidad Ad** | **1.97** | **206** | Pn | | | **Pn** | **03 52 03.0** | **+0.3** |
| **MT03** | **Universidad Ad** | **1.97** | **206** | *i* P | ⇓ | | **Pn** | **03 52 02.9** | **+0.3** |
| MT03 | | | | *eS* | | | **Sn** | **03 52 28.2** | **+0.1** |
| MT03 | | | | IAML | | | | 03 52 30.8 | |
| | comp=E,10μm,0.2s | | | | | | | | |
| **MT03** | **Universidad Ad** | **1.97** | **206** | *eP* | | | **Pn** | **03 52 02.8** | **+0.1** |
| MT03 | | | | *eP* | | | **Pn** | **03 52 03.0** | **+0.3** |
| MT03 | | | | *eS* | | | **Sn** | **03 52 29.3** | **+1.2** |
| MT03 | | | | IAML | | | | 03 52 31.7 | |
| | comp=Z,7μm,0.6s | | | | | | | | |
| **MT05** | **Renca** | **1.97** | **212** | Pn | | | **Pn** | **03 52 02.8** | **+0.1** |
| **MT05** | **Renca** | **1.97** | **212** | *i* P | ⇓ | | **Pn** | **03 52 02.7** | **+0.1** |
| MT05 | | | | *i* S | | | **Sn** | **03 52 27.4** | **-0.7** |
| MT05 | | | | IAML | | | | 03 52 30.8 | |
| | comp=E,11μm,0.6s | | | | | | | | |
| **MT05** | **Renca** | **1.97** | **212** | *eP* | | | **Pn** | **03 52 02.8** | **+0.1** |
| MT05 | | | | *eS* | | | **Sn** | **03 52 28.3** | **+0.2** |
| MT05 | | | | IAML | | | | 03 52 30.0 | |
| | comp=Z,4μm,0.6s | | | | | | | | |
| **MT02** | **Curacav** | **2.08** | **222** | Pn | | | **Pn** | **03 52 02.8** | **-1.1** |
| **MT02** | **Curacav** | **2.08** | **222** | *i* P | ⇓ | | **Pn** | **03 52 02.7** | **-1.2** |
| **MT02** | **Curacav** | **2.08** | **222** | *eP* | | | **Pn** | **03 52 02.8** | **-1.1** |
| MT02 | | | | *eP* | | | **Pn** | **03 52 03.0** | **-1.0** |
| MT02 | | | | *eS* | | | **Sn** | **03 52 32.5** | **+2.1** |
| **CO06** | **Fray Jorge** | **2.12** | **299** | Pn | | | **Pn** | **03 52 03.6** | **-1.0** |
| **CO06** | **Fray Jorge** | **2.12** | **299** | *i* P | ⇑ | | **Pn** | **03 52 03.6** | **-1.0** |
| CO06 | | | | *i* S | | | **Sn** | **03 52 29.0** | **-2.5** |
| CO06 | | | | IAML | | | | 03 52 36.5 | |
| | comp=E,6μm,0.4s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.20** | **196** | Pn | | | **Pn** | **03 52 06.1** | **+0.4** |
| **LMEL** | **Las Melosas** | **2.20** | **196** | *i* P | ⇓ | | **Pn** | **03 52 06.1** | **+0.4** |
| LMEL | | | | *eS* | | | **Sn** | **03 52 34.1** | **+0.7** |
| LMEL | | | | IAML | | | | 03 52 42.5 | |
| | comp=N,3μm,0.5s | | | | | | | | |
| **VA01** | **Torpederas** | **2.25** | **234** | Pn | | | **Pn** | **03 52 04.6** | **-1.4** |
| **VA01** | **Torpederas** | **2.25** | **234** | *i* P | ⇓ | | **Pn** | **03 52 04.4** | **-1.6** |
| VA01 | | | | *eS* | | | **Sn** | **03 52 31.3** | **-2.8** |
| **VA01** | **Torpederas** | **2.25** | **234** | *eP* | | | **Pn** | **03 52 05.1** | **-0.9** |
| VA01 | | | | *eS* | | | **Sn** | **03 52 32.9** | **-1.2** |
| **CO05** | **La Serena** | **2.35** | **319** | Pn | | | **Pn** | **03 52 06.8** | **-0.7** |
| **CO05** | **La Serena** | **2.35** | **319** | *i* P | ⇑ | | **Pn** | **03 52 06.7** | **-0.7** |
| CO05 | | | | IAML | | | | 03 52 36.8 | |
| | comp=N,8μm,0.4s | | | | | | | | |
| **MT09** | **Talagante** | **2.41** | **212** | Pn | | | **Pn** | **03 52 07.2** | **-1.1** |
| **MT09** | **Talagante** | **2.41** | **212** | *i* P | ⇓ | | **Pn** | **03 52 07.2** | **-1.1** |
| MT09 | | | | IAML | | | | 03 52 39.0 | |
| | comp=N,4μm,0.5s | | | | | | | | |
| **BO04** | **La Punta** | **2.45** | **203** | Pn | | | **Pn** | **03 52 08.5** | **-0.2** |
| **BO04** | **La Punta** | **2.45** | **203** | *i* P | ⇓ | | **Pn** | **03 52 08.5** | **-0.2** |
| BO04 | | | | *eS* | | | **Sn** | **03 52 37.9** | **-0.9** |
| BO04 | | | | IAML | | | | 03 52 40.0 | |
| | comp=N,7μm,0.8s | | | | | | | | |
| **MT01** | **Popeta** | **2.60** | **215** | Pn | | | **Pn** | **03 52 09.1** | **-1.5** |
| **MT01** | **Popeta** | **2.60** | **215** | *i* P | ⇓ | | **Pn** | **03 52 09.1** | **-1.5** |
| MT01 | | | | *eS* | | | **Sn** | **03 52 39.0** | **-3.3** |
| **MT01** | **Popeta** | **2.60** | **215** | *eP* | | | **Pn** | **03 52 09.2** | **-1.5** |
| MT01 | | | | *eS* | | | **Sn** | **03 52 42.0** | **-0.3** |
| **VA05** | **Santo Domingo** | **2.64** | **223** | | | | Pn | **03 52 09.4** | **-1.6** |
| **VA05** | **Santo Domingo** | **2.64** | **223** | *eP* | | | **Pn** | **03 52 09.0** | **-2.0** |
| VA05 | | | | IAML | | | | 03 52 51.6 | |
| | comp=E,4μm,0.4s | | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **2.86** | **63** | *eP* | | | **Pn** | **03 52 13.6** | **-0.4** |
| **LCO** | **Las Campanas** | **2.91** | **338** | Pn | | | **Pn** | **03 52 14.6** | **-0.3** |
| **LCO** | **Las Campanas** | **2.91** | **338** | *i* P | | | **Pn** | **03 52 14.5** | **-0.3** |
| LCO | | | | *eS* | | | **Sn** | **03 52 47.8** | **+1.9** |
| **BO01** | **Tunca** | **2.98** | **206** | Pn | | | **Pn** | **03 52 14.1** | **-1.5** |
| **BO01** | **Tunca** | **2.98** | **206** | *i* P | | | **Pn** | **03 52 13.9** | **-1.5** |
| BO01 | | | | *eS* | | | **Sn** | **03 52 46.1** | **-5.0** |
| **BO01** | **Tunca** | **2.98** | **206** | *eP* | | | **Pn** | **03 52 14.0** | **-1.5** |
| BO01 | | | | *eS* | | | **Sn** | **03 52 50.5** | **-0.5** |
| **ACLC** | **CERRO LA CRUZ** | **3.16** | **44** | *eP* | | | **Pn** | **03 52 17.7** | **-0.4** |
| ACLC | | | | *eS* | | | **Sn** | **03 52 56.6** | **+1.0** |
| ACLC | | | | IAML | | | | 03 52 58.1 | |
| | comp=Z,3μm,0.4s | | | | | | | | |
| **VCA** | **Vinchina** | **3.18** | **21** | *eP* | | | **Pn** | **03 52 18.8** | **+0.5** |
| VCA | | | | *eS* | | | **Sn** | **03 52 55.9** | **-0.1** |
| VCA | | | | IAML | | | | 03 53 02.4 | |
| | comp=Z,5μm,0.6s | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **3.25** | **199** | | | | Pn | **03 52 18.3** | **-0.8** |
| **BO02** | **Sierra Bellavi** | **3.25** | **199** | *i* P | ⇓ | | **Pn** | **03 52 18.4** | **-0.7** |
| BO02 | | | | *eS* | | | **Sn** | **03 52 55.1** | **-2.4** |
| **BO02** | **Sierra Bellavi** | **3.25** | **199** | *eP* | | | **Pn** | **03 52 18.7** | **-0.4** |
| BO02 | | | | *eS* | | | **Sn** | **03 52 58.6** | **+1.1** |
| BO02 | | | | IAML | | | | 03 53 06.7 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **MRA** | **San Martin** | **3.27** | **103** | *eP* | | | **Pn** | **03 52 18.8** | **-0.6** |
| MRA | | | | *eS* | | | **Sn** | **03 52 56.0** | **-2.0** |
| MRA | | | | IAML | | | | 03 52 59.5 | |
| | comp=Z,4μm,0.9s | | | | | | | | |
| **BO03** | **Pichilemu** | **3.46** | **216** | *eP* | | | **Pn** | **03 52 18.7** | **-3.1** |
| **AC04** | **Llanos de Chal** | **3.77** | **338** | Pn | | | **Pn** | **03 52 25.2** | **-0.8** |
| **AC04** | **Llanos de Chal** | **3.77** | **338** | *i* P | | | **Pn** | **03 52 24.8** | **-1.2** |
| **GO05** | **Huala** | **3.86** | **211** | Pn | | | **Pn** | **03 52 24.3** | **-2.9** |
| **GO05** | **Huala** | **3.86** | **211** | *eP* | | | **Pn** | **03 52 24.1** | **-3.1** |
| **GO03** | **Copiap** | **4.17** | **351** | Pn | | | **Pn** | **03 52 30.7** | **-0.7** |
| **GO03** | **Copiap** | **4.17** | **351** | *i* P | | | **Pn** | **03 52 30.5** | **-0.9** |
| **TCA** | **Tanti** | **4.19** | **86** | *eP* | | | **Pn** | **03 52 30.9** | **-0.7** |
| TCA | | | | *eS* | | | **Sn** | **03 53 16.8** | **-3.0** |
| TCA | | | | IAML | | | | 03 53 33.1 | |
| | comp=Z,1μm,0.7s | | | | | | | | |
| **ML02** | **Panimavida** | **4.34** | **201** | Pn | | | **Pn** | **03 52 31.5** | **-2.0** |
| **ML02** | **Panimavida** | **4.34** | **201** | *i* P | | | **Pn** | **03 52 31.3** | **-2.2** |
| **AC06** | **Mina Casimiro** | **4.42** | **350** | | | | **Pn** | **03 52 33.7** | **-1.1** |
| **AC06** | **Mina Casimiro** | **4.42** | **350** | *eP* | | | **Pn** | **03 52 33.6** | **-1.1** |
| **BI05** | **Punta Hualpn** | **5.88** | **211** | | | | **Pn** | **03 52 52.7** | **-1.5** |
| **LC01** | **Cunco** | **7.42** | **195** | Pn | | | **Pn** | **03 53 11.2** | **-3.8** |
| **LR03** | **Panguipulli** | **8.23** | **196** | | | | **Pn** | **03 53 22.8** | **-3.1** |
| **LR04** | **Corral** | **8.74** | **200** | | | | **Pn** | **03 53 30.2** | **-2.7** |
| **PLCA** | **Paso Flores** | **9.03** | **185** | P | | | **Pn** | **03 53 35.2** | **-1.6** |
| | comp=Z,0.9nm,0.3s,baz=354,slow=11,SNR=16 | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.03** | **185** | Pn | | | **Pn** | **03 53 33.6** | **-3.1** |
| **PLCA** | **Paso Flores** | **9.03** | **185** | *eP* | | | **Pn** | **03 53 34.3** | **-2.5** |
| **LVC** | **Limon Verde** | **9.09** | **3** | P | | | **Pn** | **03 53 35.9** | **-2.1** |
| | comp=Z,3.0nm,0.3s,baz=151,slow=10.0,SNR=20 | | | | | | | | |
| LVC | | | | S | | | **Sn** | **03 55 10.5** | **-8.4** |
| | comp=Z,6.0nm,0.3s,baz=42,slow=18,SNR=3.3 | | | | | | | | |
| **LVC** | **Limon Verde** | **9.09** | **3** | | | | **Pn** | **03 53 37.2** | **-0.8** |
| **LVC** | **Limon Verde** | **9.09** | **3** | *eP* | | | **Pn** | **03 53 37.5** | **-0.6** |
| **LL04** | **Puerto Octay** | **9.46** | **194** | | | | **Pn** | **03 53 38.0** | **-4.5** |
| **LL03** | **Petrohue** | **9.68** | **193** | | | | **Pn** | **03 53 42.6** | **-2.9** |
| **PB09** | **IPOC Station P** | **9.89** | **1** | *eP* | | | **Pn** | **03 53 47.7** | **-1.9** |
| **ITQB** | **Itaqui** | **11.25** | **83** | Pn | | | **Pn** | **03 54 02.5** | **-4.2** |
| **PB08** | **IPOC Station P** | **11.54** | **2** | | | | **Pn** | **03 54 08.5** | **-2.4** |
| **CPUP** | **Villa Florida** | **11.91** | **66** | P | | | **Pn** | **03 54 11.1** | **-4.3** |
| | comp=Z,1.7nm,0.3s,baz=241,slow=12,SNR=18 | | | | | | | | |
| **GO01** | **Chusmiza** | **12.01** | **1** | | | | **Pn** | **03 54 14.7** | **-2.5** |
| **PLTB** | **Pedras Altas** | **13.51** | **94** | Pn | | | **Pn** | **03 54 33.0** | **-3.2** |
| **COYC** | **Coyhaique** | **13.97** | **188** | Pn | | | **Pn** | **03 54 42.1** | **+0.1** |
| **LPAZ** | **La Paz** | **15.42** | **5** | P | | | **Pn** | **03 55 01.5** | **+0.5** |
| | comp=Z,2.1nm,0.3s,baz=178,slow=6.6,SNR=60 | | | | | | | | |
| **LPAZ** | **La Paz** | **15.42** | **5** | Pn | | | **Pn** | **03 55 01.1** | **+0.1** |
| LPAZ | | | | IAml | | | IAmb | 03 55 04.0 | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **15.42** | **5** | *eP* | | | **P** | **03 55 02.5** | **-0.5** |
| **ITAB** | **Concordia** | **15.75** | **78** | P | | | **Pn** | **03 55 03.4** | **-1.1** |
| ITAB | | | | IAml | | | IAmb | 03 55 07.9 | |
| | comp=Z,42nm,1.0s | | | | | | | | |
| **ITAB** | **Concordia** | **15.75** | **78** | *eP* | | | **Pn** | **03 55 03.9** | **-0.7** |
| **AQDB** | **Aquidauana** | **16.67** | **51** | P | | | **Pn** | **03 55 15.5** | **-0.4** |
| **AQDB** | **Aquidauana** | **16.67** | **51** | *eP* | | | **Pn** | **03 55 15.3** | **-0.6** |
| **PTGB** | **Pitanga** | **16.85** | **70** | *eP* | | | **Pn** | **03 55 17.6** | **-0.5** |
| **GO08** | **Villa O'Higgin** | **16.88** | **187** | | | | **Pn** | **03 55 17.1** | **-1.1** |
| **SIV** | **San Ignacio** | **17.43** | **28** | P | | | **P** | **03 55 23.7** | **-1.0** |
| | comp=Z,5.6nm,0.3s,baz=212,slow=14,SNR=101 | | | | | | | | |
| **TER01** | **Tubaro-SC** | **17.89** | **85** | *eP* | | | **P** | **03 55 29.7** | **+0.2** |
| **PTLB** | **Pontes e Lacer** | **18.75** | **33** | *eP* | | | **Pn** | **03 55 40.0** | **-0.8** |
| **PCMB** | **Pacembu** | **19.12** | **63** | *eP* | | | **P** | **03 55 43.6** | **+0.6** |
| **PP1B** | **Ponte de Pedra** | **19.30** | **47** | *eP* | | | **P** | **03 55 46.1** | **+1.1** |
| **FRTB** | **Fartura** | **19.51** | **70** | *eP* | | | **P** | **03 55 48.1** | **+0.8** |
| **SALV** | **Santo Antonio** | **20.14** | **42** | *eP* | | | **P** | **03 55 54.6** | **+0.5** |
| **VILB** | **Vilhena** | **20.54** | **27** | *eP* | | | **P** | **03 55 58.9** | **+0.5** |
| **NNA** | **Nana** | **20.79** | **339** | P | | | **P** | **03 56 00.8** | **-0.2** |
| | comp=Z,2.9nm,0.4s,baz=283,slow=11,SNR=1.7 | | | | | | | | |
| **PET01** | **Itanhaem-SP** | **20.93** | **75** | *eP* | | | **P** | **03 56 02.5** | **0.0** |
| **ITRB** | **Iturama** | **20.94** | **60** | *eP* | | | **P** | **03 56 02.6** | **0.0** |
| **BB19B** | **Bebedouro** | **21.52** | **66** | *eP* | | | **P** | **03 56 08.2** | **-0.7** |
| **RCLB** | **Rio Claro- Sao** | **21.60** | **70** | *eP* | | | **P** | **03 56 08.9** | **-0.8** |
| **EFI** | **East Falkland** | **21.63** | **160** | P | | | **P** | **03 56 08.9** | **-0.8** |
| EFI | | | | IAmb | | | IAmb | 03 56 26.5 | |
| | comp=Z,64nm,1.1s | | | | | | | | |
| **VAO** | **Valinhos** | **21.77** | **72** | *eP* | | | **P** | **03 56 10.8** | **-0.8** |
| **ETMB** | **Extrema** | **22.01** | **9** | *eP* | | | **P** | **03 56 14.5** | **+0.5** |
| **MG03** | **Isla Dawson** | **22.12** | **182** | P | | | **P** | **03 56 15.0** | **+0.2** |
| MG03 | | | | IAmb | | | IAmb | 03 56 19.2 | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **22.66** | **49** | *eP* | | | **P** | **03 56 19.7** | **-0.8** |
| **USHA** | **Ushuaia** | **23.11** | **178** | P | | | **P** | **03 56 25.5** | **+1.1** |
| | comp=Z,23nm,0.7s,baz=339,slow=9.0,SNR=14 | | | | | | | | |
| **PDRB** | **Porto dos Gac** | **23.22** | **33** | *eP* | | | **P** | **03 56 26.1** | **+0.2** |
| **IPMB** | **Ipameri, GO** | **23.60** | **60** | *eP* | | | **P** | **03 56 28.3** | **-1.1** |
| **CZSB** | **Cruzeiro do Su** | **24.06** | **352** | *eP* | | | **P** | **03 56 34.0** | **+0.5** |
| **CLDB** | **Colider** | **24.30** | **34** | *eP* | | | **P** | **03 56 36.0** | **+0.3** |
| **BSCB** | **Bom Sucesso** | **24.52** | **70** | *eP* | | | **P** | **03 56 38.2** | **+0.5** |
| **VAS01** | **Vassouras-RJ** | **24.98** | **74** | *eP* | | | **P** | **03 56 41.8** | **0.0** |
| **BDFB** | **Brasilia** | **25.27** | **56** | P | | | **P** | **03 56 44.1** | **-0.5** |
| | comp=Z,8.1nm,0.6s,baz=228,slow=10,SNR=16 | | | | | | | | |
| **BDFB** | **Brasilia** | **25.27** | **56** | P | | | **P** | **03 56 44.5** | **-0.2** |
| BDFB | | | | IAmb | | | IAmb | 03 56 46.8 | |
| | comp=Z,22nm,1.2s | | | | | | | | |
| **SNDB** | **Serra Nova Dou** | **25.83** | **44** | *eP* | | | **P** | **03 56 49.8** | **+0.2** |
| **ATAH** | **Atahualpa** | **25.84** | **339** | P | | | **P** | **03 56 54.8** | **+4.7** |
| | comp=Z,3.4nm,0.7s,baz=162,slow=15,SNR=3.9 | | | | | | | | |
| **DUB01** | **Friburgo-RJ** | **25.95** | **75** | *eP* | | | **P** | **03 56 49.6** | **-1.1** |
| **CAM01** | **Campos-RJ** | **26.66** | **75** | *eP* | | | **P** | **03 56 56.1** | **-0.8** |
| **DIAM** | **Diamantina, MG** | **26.86** | **66** | *eP* | | | **P** | **03 56 59.1** | **+0.2** |
| **PEXB** | **Peixe** | **27.60** | **50** | *eP* | | | **P** | **03 57 05.6** | **+0.1** |
| **NPGB** | **Novo Progresso** | **27.87** | **31** | *eP* | | | **P** | **03 57 07.7** | **-0.2** |
| **JANB** | **Januaria** | **28.33** | **60** | *eP* | | | **P** | **03 57 11.8** | **-0.2** |
| **SJMB** | **Sao Joao De Ma** | **28.60** | **70** | *eP* | | | **P** | **03 57 14.4** | **+0.1** |
| **MACA** | **Manacapuru-AM** | **29.60** | **18** | *eP* | | | **P** | **03 57 23.3** | **+0.2** |
| **SDBA** | **SAO DESIDERIO** | **29.68** | **55** | *eP* | | | **P** | **03 57 23.9** | **-0.1** |
| **NAN01** | **Guarapari, ES** | **29.91** | **69** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **N35A** | **Tabor** | **76.17** | **340** | P | **P** | **04 03 04.5** | **+0.7** | |
| **JFWS** | **Jewell Farm** | **76.69** | **344** | P | **P** | **04 03 08.0** | **+1.2** | |
| JFWS | | | | IAmb | IAmb | 04 03 08.1 | | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **76.74** | **325** | P | **P** | **04 03 08.5** | **+1.0** | |
| **Y14A** | **Wickenburg** | **77.12** | **324** | P | **P** | **04 03 08.9** | **-0.6** | |
| Y14A | | | | IAmb | IAmb | 04 03 12.8 | | |
| | comp=Z,5.6nm,0.5s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **77.41** | **330** | P | **P** | **04 03 12.2** | **+1.0** | |
| **KOWA** | **Kowa** | **77.72** | **64** | P | **P** | **04 03 11.1** | **-2.0** | |
| KOWA | | | | IAmb | IAmb | 04 03 14.7 | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| **ISCO** | **Idaho Springs** | **78.66** | **332** | P | **P** | **04 03 19.1** | **+0.9** | |
| **K31A** | **O'Neill** | **78.72** | **338** | P | **P** | **04 03 19.4** | **+1.3** | |
| **ECSD** | **EROS Data Cent** | **79.09** | **340** | P | **P** | **04 03 21.1** | **+1.0** | |
| ECSD | | | | IAmb | IAmb | 04 03 22.0 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **79.19** | **117** | P | **P** | **04 03 21.7** | **+0.4** | |
| | comp=Z,3.3nm,0.8s,baz=210,slow=4.7,SNR=4.4 | | | | | | | |
| **BOSA** | **Boshof** | **79.19** | **117** | P | **P** | **04 03 19.8** | **-1.5** | |
| BOSA | | | | IAmb | IAmb | 04 03 35.3 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| **MTPU** | **Mount Pierson** | **80.02** | **327** | P | **P** | **04 03 25.0** | **-0.6** | |
| **SRU** | **San Rafael Swe** | **80.14** | **329** | P | **P** | **04 03 25.0** | **-1.1** | |
| **CCUT** | **Cedar City** | **80.18** | **326** | P | **P** | **04 03 29.1** | **+2.7** | |
| **P18A** | **Preston Nutter** | **80.44** | **329** | P | **P** | **04 03 29.4** | **+1.6** | |
| **TORD** | **Torodi Ar. Bea** | **81.39** | **69** | P | **P** | **04 03 33.2** | **+0.1** | |
| | comp=Z,7.7nm,0.9s,baz=283,slow=6.6,SNR=38 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.39** | **69** | P | **P** | **04 03 33.4** | **+0.3** | |
| **EYMN** | **Ely** | **81.74** | **345** | P | **P** | **04 03 33.8** | **-0.3** | |
| **RSSD** | **Black Hills** | **81.81** | **336** | P | **P** | **04 03 37.0** | **+2.1** | |
| RSSD | | | | IAmb | IAmb | 04 03 37.8 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.76** | **331** | P | **P** | **04 03 40.8** | **+0.9** | |
| | comp=Z,1.2nm,0.8s,baz=139,slow=5.9,SNR=11 | | | | | | | |
| PDAR | | | | pP | **pP** | **04 04 12.3** | **+0.6** | |
| | comp=Z,0.7nm,0.8s,baz=126,slow=3.8,SNR=4.1 | | | | | | | |
| **AGMN** | **Agassiz Nation** | **83.10** | **343** | P | **P** | **04 03 40.3** | **-0.8** | |
| **NVAR** | **Mina Array Bea** | **83.30** | **323** | P | **P** | **04 03 44.8** | **+2.0** | |
| | comp=Z,1.3nm,0.8s,baz=161,slow=6.1,SNR=9.2 | | | | | | | |
| NVAR | | | | pP | **pP** | **04 04 15.3** | **+0.5** | |
| | comp=Z,0.2nm,0.5s,baz=206,slow=35,SNR=2.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.30** | **323** | P | **P** | **04 03 42.1** | **-0.6** | |
| **HVU** | **Hansel Valley** | **83.31** | **329** | P | **P** | **04 03 41.5** | **-1.1** | |
| **ELK** | **Elko** | **83.60** | **327** | P | **P** | **04 03 43.0** | **-1.3** | |
| **YMR** | **Madison River** | **84.90** | **332** | P | **P** | **04 03 50.0** | **-0.6** | |
| **ULM** | **Lac du Bonnet** | **84.91** | **343** | P | **P** | **04 03 50.5** | **+0.3** | |
| | comp=Z,4.0nm,0.7s,baz=175,slow=5.7,SNR=5.6 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **84.91** | **343** | P | **P** | **04 03 51.0** | **+0.7** | |
| ULM | | | | IAmb | IAmb | 04 03 51.7 | | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| **YHH** | **Holmes Hill** | **84.95** | **332** | P | **P** | **04 03 51.0** | **0.0** | |
| **HLID** | **Hailey** | **85.46** | **329** | P | **P** | **04 03 53.2** | **-0.2** | |
| **MCMT** | **McKenzie Canyo** | **85.81** | **331** | P | **P** | **04 03 57.0** | **+1.9** | |
| **SCHQ** | **Schefferville** | **86.23** | **2** | P | **P** | **04 03 56.9** | **+0.1** | |
| | comp=Z,6.2nm,0.9s,baz=185,slow=4.8,SNR=9.1 | | | | | | | |
| **SCHQ** | **Schefferville** | **86.23** | **2** | P | **P** | **04 03 57.1** | **+0.3** | |
| SCHQ | | | | IAmb | IAmb | 04 03 58.4 | | |
| | comp=Z,20nm,1.3s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **87.15** | **327** | P | **P** | **04 04 01.7** | **+0.1** | |
| J08A | | | | IAmb | IAmb | 04 04 04.6 | | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **PLID** | **Pearl Lake** | **87.36** | **329** | P | **P** | **04 04 01.9** | **-0.9** | |
| PLID | | | | IAmb | IAmb | 04 04 05.2 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **PINE** | **Pine Mountain** | **88.65** | **325** | P | **P** | **04 04 09.0** | **+0.2** | |
| PINE | | | | IAmb | IAmb | 04 04 11.6 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **FCC** | **Fort Churchill** | **92.46** | **347** | P | **P** | **04 04 26.8** | **+0.9** | |
| **ASAR** | **Alice Springs** | **120.55** | **205** | pPKP | pPKPdf | 04 10 39.1 | -1.7 | |
| | comp=Z,0.4nm,0.5s,baz=129,slow=1.5,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.78** | **207** | PKP | **PKPdf** | **04 10 13.3** | **-0.2** | |
| | comp=Z,0.3nm,0.6s,baz=154,slow=1.6,SNR=5.9 | | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **04 10 45.7** | **-1.4** | |
| | comp=Z,1.1nm,0.6s,baz=171,slow=1.6,SNR=5.9 | | | | | | | |
| **KLMR** | **Klimovskoe** | **126.31** | **35** | *e*PKPdf | **PKiKP** | **04 10 17.5** | **+0.2** | |
| KLMR | | | | AMP | | 04 10 18.9 | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **SEY** | **Seymchan** | **139.08** | **332** | PKP | **PKiKP** | **04 10 42.2** | **-1.0** | |
| | comp=Z,0.8nm,0.4s,baz=93,slow=2.5,SNR=8.1 | | | | | | | |
| SEY | | | | pPKP | **pPKPdf** | **04 11 15.1** | **+0.7** | |
| | comp=Z,1.9nm,0.6s,baz=197,slow=23,SNR=2.9 | | | | | | | |
| **BVAR** | **Borovoye Array** | **144.15** | **42** | PKP | **PKPdf** | **04 10 50.3** | **0.0** | |
| | comp=Z,1.5nm,0.6s,baz=25,slow=8.7,SNR=6.9 | | | | | | | |
| **AAK** | **Ala-Archa** | **149.51** | **59** | PKPbc | **PKiKP** | **04 11 06.2** | **+0.7** | |
| | comp=Z,6.0nm,0.6s,baz=204,slow=2.1,SNR=16 | | | | | | | |
| AAK | | | | PKPab | **PKPab** | **04 11 11.3** | **+1.5** | |
| | comp=Z,5.1nm,0.5s,baz=249,slow=4.2,SNR=14 | | | | | | | |
| **AAK** | **Ala-Archa** | **149.51** | **59** | | **PKPbc** | **04 11 04.1** | **-0.4** | |
| **KURBB** | **Kurchatov Arra** | **149.74** | **42** | PKPbc | **PKiKP** | **04 11 05.7** | **+0.3** | |
| | comp=Z,6.7nm,0.9s,baz=300,slow=3.1,SNR=40 | | | | | | | |
| KURBB | | | | PKPab | **PKPab** | **04 11 11.1** | **+0.9** | |
| | comp=Z,2.5nm,0.7s,baz=296,slow=4.4,SNR=9.5 | | | | | | | |
| KURBB | | | | pPKPbc | **pPKPbc** | **04 11 38.4** | **+0.2** | |
| | comp=Z,0.8nm,0.5s,baz=127,slow=22,SNR=4.0 | | | | | | | |
| **KURK** | **Kurchatov** | **149.75** | **42** | | **PKPbc** | **04 11 04.2** | **-0.3** | |
| **KSH** | **Kashi** | **150.99** | **65** | PKPbc | **PKPdf** | **04 11 04.3** | **+2.1** | |
| KSH | | | | pPKP | pPKPdf | 04 11 31.3 | -4.6 | |
| **ZALV** | **Zalesovo Beam** | **151.16** | **32** | PKPbc | **PKiKP** | **04 11 09.0** | **+0.8** | |
| | comp=Z,17nm,0.7s,baz=297,slow=3.2,SNR=58 | | | | | | | |
| ZALV | | | | pPKPbc | **pPKPbc** | **04 11 40.8** | **-0.3** | |
| | comp=Z,3.0nm,0.5s,baz=312,slow=3.3,SNR=3.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.16** | **32** | | **PKPbc** | **04 11 07.0** | **-0.7** | |
| **MKAR** | **Makanchi Array** | **153.65** | **47** | PKPbc | **PKiKP** | **04 11 14.2** | **+0.5** | |
| | comp=Z,1.5nm,0.8s,baz=298,slow=2.3,SNR=14 | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **04 11 27.5** | **+0.8** | |
| | comp=Z,4.0nm,0.7s,baz=296,slow=4.2,SNR=30 | | | | | | | |
| MKAR | | | | pPKPab | **pPKPab** | **04 11 59.0** | **-0.5** | |
| | comp=Z,1.5nm,0.8s,baz=300,slow=3.1,SNR=3.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.65** | **47** | | **PKPbc** | **04 11 13.2** | **-0.4** | |
| **WMQ** | **Urumqi** | **158.37** | **50** | *e*P | **PKPdf** | **04 11 11.3** | **-0.8** | |
| **SONM** | **Songino Array** | **163.61** | **10** | PKPab | **PKPab** | **04 12 10.8** | **+0.9** | |
| | comp=Z,0.8nm,0.6s,baz=327,slow=4.3,SNR=6.4 | | | | | | | |
| **PZH** | **PanZhiHua** | **170.73** | **122** | PKP | **PKPdf** | **04 11 23.1** | **-0.4** | |
| **HHC** | **Hu-ho-hao-te** | **170.86** | **355** | *e*P | **PKPdf** | **04 11 25.3** | **+2.2** | |
| **NJ2** | **Nanjing** | **172.91** | **275** | *e*P | **PKPdf** | **04 11 23.3** | **-0.9** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |

*IDC* ***24*** *04:21:05.3±0.7, 6.76N×73.00W, h162km±12km, mb3.3/4, mb1 3.7/8, mb1mx3.3/31, mbtmp4.1/8, Error ellipse: s-maj=35.4km s-min=7.3km az=133.0*

*RSNC* ***24*** *04:21:05.3±1.2, 6.84N×73.12W, h154km±5km, ML3.7, Mw3.9, Fault plane solution: NP1:ϕ=94.00000°, δ=78.00000°, λ=-162.00000°.*

**ISC 24 04:21:04.6±0.7, 6.85N±0.03×73.08W±0.03, h159km±6km, n55, σ1$70/99, mb3.6/4, 9C-5D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.28** | **202** | ↓*i*P | | **Pn** | **04 21 26.3** | **-0.2** |
| BARC | | | | *i* | | | 04 21 42.6 | |
| | comp=Z,1μm,0.4s | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.62** | **38** | ↑*i*P | | **Pn** | **04 21 29.1** | **+0.9** |
| PAMC | | | | *e*S | | **Sn** | **04 21 45.9** | **-0.3** |
| PAMC | | | | *i* | | | 04 21 48.2 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **BRRC** | **Barranca, Sant** | **0.68** | **292** | *e*P | | **Pn** | **04 21 28.1** | **+0.2** |
| BRRC | | | | *e*S | | **Sn** | **04 21 44.9** | **-0.8** |
| BRRC | | | | *i* | | | 04 21 48.1 | |
| | comp=Z,741nm,0.2s | | | | | | | |
| **RUSC** | **La Rusia** | **0.95** | **180** | ↓*e*P | | **Pn** | **04 21 30.2** | **-0.3** |
| RUSC | | | | *e*S | | **Sn** | **04 21 49.2** | **-1.0** |
| RUSC | | | | *i* | | | 04 21 50.4 | |
| | comp=Z,500nm,0.4s | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.34** | **108** | ↓*i*P | | **Pn** | **04 21 34.7** | **+1.3** |
| TAMC | | | | *e*S | | **Sn** | **04 21 54.6** | **-0.8** |
| TAMC | | | | *i* | | | 04 21 55.5 | |
| | comp=Z,294nm,0.4s | | | | | | | |
| **OCAC** | **Ocana** | **1.40** | **350** | ↑*e*P | | **Pn** | **04 21 34.3** | **+0.2** |
| OCAC | | | | *e*S | | **Sn** | **04 21 56.0** | **-0.7** |
| OCAC | | | | *i* | | | 04 21 59.4 | |
| | comp=Z,995nm,0.3s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.40** | **257** | *e*P | | **Pn** | **04 21 32.8** | **-1.1** |
| PTBC | | | | *e*S | | **Sn** | **04 21 55.0** | **-1.3** |
| PTBC | | | | *i* | | | 04 22 00.5 | |
| | comp=Z,403nm,0.4s | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.54** | **220** | *e*P | | **Pn** | **04 21 34.9** | **-0.6** |
| SPBC | | | | *e*S | | **Sn** | **04 21 57.4** | **-1.7** |
| SPBC | | | | *i* | | | 04 22 02.3 | |
| | comp=Z,994nm,0.4s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.88** | **290** | *e*P | | **Pn** | **04 21 38.4** | **-0.5** |
| ZARC | | | | *e*S | | **Sn** | **04 22 04.0** | **-1.3** |
| ZARC | | | | *i* | | | 04 22 09.3 | |
| | comp=Z,589nm,0.3s | | | | | | | |
| **NORC** | **Norcasia** | **2.19** | **234** | *e*P | | **Pn** | **04 21 42.1** | **-0.5** |
| NORC | | | | ↑*e*S | | **Sn** | **04 22 10.1** | **-1.7** |
| NORC | | | | *i* | | | 04 22 19.5 | |
| | comp=Z,339nm,0.4s | | | | | | | |
| **CHIC** | **Chingaza** | **2.30** | **196** | ↑*e*P | | **Pn** | **04 21 44.2** | **0.0** |
| CHIC | | | | *e*S | | **Sn** | **04 22 13.9** | **-0.8** |
| CHIC | | | | *i* | | | 04 22 17.1 | |
| | comp=Z,435nm,0.6s | | | | | | | |
| **ROSC** | **El Rosal** | **2.35** | **212** | P | | **Pn** | **04 21 46.6** | **+1.8** |
| | comp=Z,115nm,0.3s,baz=276,slow=7.3,SNR=109 | | | | | | | |
| ROSC | | | | S | | **Sn** | **04 22 16.2** | **+0.5** |
| | comp=Z,242nm,0.3s,baz=47,slow=22,SNR=17 | | | | | | | |
| **ROSC** | **El Rosal** | **2.35** | **212** | *e*P | | **Pn** | **04 21 45.1** | **+0.3** |
| ROSC | | | | *e*S | | **Sn** | **04 22 15.8** | **+0.1** |
| ROSC | | | | *i* | | | 04 22 20.6 | |
| | comp=Z,916nm,0.4s | | | | | | | |
| **HELC** | **Santa Helena** | **2.52** | **255** | *e*P | | **Pn** | **04 21 45.6** | **-1.2** |
| HELC | | | | *e*S | | **Sn** | **04 22 18.3** | **-1.0** |
| HELC | | | | *i* | | | 04 22 23.9 | |
| | comp=Z,290nm,0.3s | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.59** | **290** | *e*P | | **Pn** | **04 21 46.0** | **-1.3** |
| UREC | | | | *e*S | | **Sn** | **04 22 17.6** | **-2.7** |
| UREC | | | | *i* | | | 04 22 29.7 | |
| | comp=Z,230nm,0.3s | | | | | | | |
| **SOCV** | **Socops** | **2.63** | **57** | *e*P | | **Pn** | **04 21 48.0** | **+0.3** |
| SOCV | | | | *e*S | | **Sn** | **04 22 19.8** | **-1.3** |
| **LL1C** | **La Loma 1 Cana** | **2.72** | **350** | *e*P | | **Pn** | **04 21 50.5** | **+1.7** |
| LL1C | | | | *e*S | | **Sn** | **04 22 26.6** | **+3.5** |
| **GUY2C** | **Guyana, Caldas** | **2.79** | **235** | *e*P | | **Pn** | **04 21 50.2** | **0.0** |
| GUY2C | | | | *e*S | | **Sn** | **04 22 27.3** | **+1.9** |
| **PTGC** | **Puerto Gaitan,** | **2.80** | **160** | ↓*i*P | | **Pn** | **04 21 49.4** | **-0.5** |
| PTGC | | | | *e*S | | **Sn** | **04 22 22.6** | **-2.3** |
| PTGC | | | | *i* | | | 04 22 27.6 | |
| | comp=Z,236nm,0.5s | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.87** | **356** | *e*P | | **Pn** | **04 21 50.7** | **0.0** |
| LL6C | | | | *e*S | | **Sn** | **04 22 25.4** | **-1.3** |
| LL6C | | | | *i* | | | 04 22 32.8 | |
| | comp=Z,167nm,0.5s | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.07** | **252** | *e*P | | **Pn** | **04 21 53.8** | **+0.4** |
| CBOC | | | | *e*S | | **Sn** | **04 22 31.0** | **-0.3** |
| CBOC | | | | *i* | | | 04 22 35.4 | |
| | comp=Z,75nm,0.4s | | | | | | | |
| **DBBC** | **Dabeiba** | **3.11** | **273** | *e*P | | **Pn** | **04 21 53.6** | **-0.2** |
| **SDV** | **Santo Domingo** | **3.16** | **50** | P | | **Pn** | **04 21 55.7** | **+1.2** |
| | comp=Z,50nm,0.3s,baz=216,slow=6.6,SNR=515 | | | | | | | |
| SDV | | | | S | | **Sn** | **04 22 34.2** | **+1.0** |
| | comp=Z,43nm,0.3s,baz=46,slow=20,SNR=20 | | | | | | | |
| **SDV** | **Santo Domingo** | **3.16** | **50** | ↑*e*P | | **Pn** | **04 21 55.7** | **+1.2** |
| SDV | | | | *e*S | | **Sn** | **04 22 32.6** | **-0.6** |
| SDV | | | | *i* | | | 04 22 36.4 | |
| | comp=Z,91nm,0.4s | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.20** | **307** | *e*P | | **Pn** | **04 21 53.2** | **-1.6** |
| MOTC | | | | *e*S | | **Sn** | **04 22 31.4** | **-2.4** |
| **ANIL** | **Santa Ana** | **3.29** | **225** | *e*P | | **Pn** | **04 21 57.1** | **+0.8** |
| ANIL | | | | *e*S | | **Sn** | **04 22 38.3** | **+1.9** |
| **ELOV** | **Elorza** | **3.58** | **87** | ↑*i*P | | **Pn** | **04 22 00.5** | **+0.9** |
| ELOV | | | | *e*S | | **Sn** | **04 22 41.5** | **-0.9** |
| **ORTC** | **Ortega, Tolima** | **3.63** | **217** | ↑*e*P | | **Pn** | **04 22 00.0** | **-0.4** |
| ORTC | | | | *e*S | | **Sn** | **04 22 43.5** | **-0.3** |
| ORTC | | | | *i* | | | 04 22 47.4 | |
| | comp=Z,201nm,0.3s | | | | | | | |
| **CVALL** | **Valledupar, Ce** | **3.64** | **357** | *e*P | | **Pn** | **04 22 00.1** | **-0.4** |
| CVALL | | | | *e*S | | **Sn** | **04 22 43.6** | **-0.4** |
| CVALL | | | | *i* | | | 04 22 48.5 | |
| | comp=Z,114nm,0.4s | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | ↓*e*P | | **Pn** | **04 21 59.8** | **-1.1** |
| SJCC | | | | *e*S | | **Sn** | **04 22 41.6** | **-3.2** |
| SJCC | | | | *i* | | | 04 22 48.2 | |
| | comp=Z,96nm,0.6s | | | | | | | |
| **PLMC** | **San Jos del P** | **3.73** | **239** | ↑*e*P | | **Pn** | **04 22 01.7** | **0.0** |
| PLMC | | | | *e*S | | **Sn** | **04 22 43.1** | **-2.9** |
| PLMC | | | | *i* | | | 04 22 49.6 | |
| | comp=Z,57nm,0.3s | | | | | | | |
| **LCBC** | **Los crdobas,** | **3.82** | **302** | *e*P | | **Pn** | **04 22 01.7** | **-1.0** |
| LCBC | | | | *e*S | | **Sn** | **04 22 49.5** | **+1.4** |
| LCBC | | | | *i* | | | 04 22 50.9 | |
| | comp=Z,101nm,0.4s | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.15** | **3** | *e*P | | **Pn** | **04 22 06.4** | **-0.8** |
| CRJC | | | | *e*S | | **Sn** | **04 22 54.2** | **-1.7** |
| CRJC | | | | *i* | | | 04 23 01.0 | |
| | comp=Z,167nm,0.4s | | | | | | | |
| **GUVC** | **San Jose del G** | **4.30** | **174** | *e*P | | **Pn** | **04 22 08.5** | **-0.6** |
| GUVC | | | | *e*S | | **Sn** | **04 22 57.2** | **-2.1** |
| GUVC | | | | *i* | | | 04 23 03.2 | |
| | comp=Z,169nm,0.4s | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.32** | **229** | *e*P | | **Pn** | **04 22 07.6** | **-1.8** |
| YOTC | | | | *e*S | | **Sn** | **04 22 58.9** | **-1.1** |
| **SOLC** | **Bahia Solano** | **4.34** | **262** | *e*P | | **Pn** | **04 22 07.7** | **-1.9** |
| SOLC | | | | *e*S | | **Sn** | **04 22 55.0** | **-5.3** |
| **SMRC** | **Santa Marta, M** | **4.43** | **345** | *e*P | | **Pn** | **04 22 11.1** | **+0.4** |
| SMRC | | | | *e*S | | **Sn** | **04 22 59.4** | **-3.1** |
| SMRC | | | | *i* | | | 04 23 01.9 | |
| | comp=Z,72nm,0.3s | | | | | | | |
| **PIZC** | **Pizarro, Choco** | **4.65** | **246** | *e*P | | **Pn** | **04 22 13.9** | **+0.3** |
| PIZC | | | | *e*S | | **Sn** | **04 23 05.3** | **-2.2** |
| **MACC** | **Macarena, Meta** | **4.74** | **189** | *e*P | | **Pn** | **04 22 13.2** | **-1.6** |
| MACC | | | | *e*S | | **Sn** | **04 23 05.2** | **-4.4** |
| MACC | | | | *i* | | | 04 23 28.8 | |
| | comp=Z,66nm,0.4s | | | | | | | |
| **BETC** | **Betania** | **4.76** | **210** | *e*P | | **Pn** | **04 22 14.1** | **-1.0** |
| BETC | | | | *e*S | | **Sn** | **04 23 05.4** | **-4.8** |
| **MARP** | **Paez Belalcaza** | **4.90** | **216** | *e*P | | **Pn** | **04 22 16.8** | **-0.4** |
| MARP | | | | *e*S | | **Sn** | **04 23 13.7** | **-0.2** |
| **GARC** | **Garzon, Huila** | **5.22** | **208** | *e*P | | **Pn** | **04 22 20.3** | **-1.1** |
| GARC | | | | *e*S | | **Sn** | **04 23 17.5** | **-3.8** |
| GARC | | | | *i* | | | 04 23 22.5 | |
| | comp=Z,97nm,0.3s | | | | | | | |
| **PCON** | **Cinco Dias** | **5.58** | **217** | *e*P | | **Pn** | **04 22 27.4** | **+1.0** |
| PCON | | | | *e*S | | **Sn** | **04 23 32.1** | **+1.9** |
| **POPC** | **Popayan, Colom** | **5.58** | **220** | ↑*e*P | | **Pn** | **04 22 25.6** | **-0.5** |
| POPC | | | | *e*S | | **Sn** | **04 23 29.7** | **-0.2** |
| **FLOC** | **Florencia** | **5.83** | **206** | *e*P | | **Pn** | **04 22 28.3** | **-0.9** |
| **SOTA** | **Rioblanco** | **5.86** | **217** | *e*P | | **Pn** | **04 22 30.9** | **+0.9** |
| **BBAC** | **Balboa, Cauca** | **6.34** | **221** | *e*P | | **Pn** | **04 22 35.6** | **-0.6** |
| BBAC | | | | *e*S | | **Sn** | **04 23 45.8** | **-2.3** |
| BBAC | | | | *i* | | | 04 23 54.2 | |
| | comp=Z,9.7nm,0.3s | | | | | | | |
| **GCUF** | **Volcan Galeras** | **7.02** | **217** | *e*P | | **Pn** | **04 22 45.9** | **+0.4** |
| **PCRV** | **Puerto La Cruz** | **8.98** | **68** | P | | **Pn** | **04 23 12.6** | **+1.5** |
| | comp=Z,0.7nm,0.3s,baz=166,slow=22,SNR=2.6 | | | | | | | |
| PCRV | | | | S | | **Sn** | **04 24 45.6** | **-5.5** |
| | comp=Z,0.2nm,0.3s,baz=351,slow=21,SNR=2.1 | | | | | | | |
| **SJG** | **San Juan** | **13.07** | **30** | P | | **Pn** | **04 24 03.8** | **-0.7** |
| | comp=Z,1.1nm,0.3s,baz=32,slow=22,SNR=2.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.47** | **312** | P | | **P** | **04 27 56.0** | **+1.4** |
| | comp=Z,0.4nm,0.5s,baz=130,slow=8.1,SNR=6.7 | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.08** | **324** | P | | **P** | **04 29 29.6** | **+1.2** |
| | comp=Z,0.2nm,0.4s,baz=131,slow=8.9,SNR=4.2 | | | | | | | |
| **SCHQ** | **Schefferville** | **48.11** | **5** | P | | **P** | **04 29 29.4** | **+1.3** |
| | comp=Z,1.3nm,0.5s,baz=214,slow=7.3,SNR=6.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.25** | **340** | P | | **P** | **04 31 16.7** | **+0.8** |
| | comp=Z,1.1nm,0.5s,baz=133,slow=6.6,SNR=27 | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.38** | **241** | PKPbc | | **PKiKP** | **04 40 37.8** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=280,slow=0.8,SNR=9.0 | | | | | | | |

*IDC* ***24*** *04:35:47.9±1.0, 21.09N×121.64E, h0km, mb3.7/6, mb1 3.9/6, mb1mx3.6/40, mbtmp3.7/6, Error ellipse: s-maj=71.0km s-min=19.5km az=68.0*

*TAP* ***24*** *04:35:52.0, 21.19N×121.32E, h69km, ML4.1, D*

*JMA* ***24*** *04:35:53.5±0.5, 21.08N×122.01E, h6km, M4.4*

**ISC 24 04:35:50.1±1.8, 21.16N±0.06×121.36E±0.04, h12km±10km, n116, σ1$37/145, mb3.7/6, 7D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TSEB** | **Hengchuen, Pin** | **0.85** | **330** | *i*P | | **Pn** | **04 36 08.7** | **+0.8** |
| | baz=322 | | | | | | | |
| TSEB | | | | *i*S | | **Sn** | **04 36 21.6** | **+1.2** |
| | baz=322 | | | | | | | |
| **LYUB** | **Lan-yu** | **0.87** | **14** | ↓P | | **Pn** | **04 36 08.8** | **+0.7** |
| | baz=17 | | | | | | | |
| LYUB | | | | S | | **Sn** | **04 36 20.8** | **+0.1** |
| | baz=17 | | | | | | | |
| **LAY** | **Lan-yu** | **0.90** | **12** | ↓*i*P | | **Pn** | **04 36 09.4** | **+0.9** |
| | baz=14 | | | | | | | |
| LAY | | | | S | | **Sn** | **04 36 21.0** | **-0.4** |
| | baz=14 | | | | | | | |
| **TWKBT** | **Hengchun** | **0.93** | **327** | ↓P | | **Pn** | **04 36 09.4** | **+0.4** |
| | baz=321 | | | | | | | |
| TWKBT | | | | S | | **Sb** | **04 36 22.8** | **+2.4** |
| | baz=321 | | | | | | | |
| **TWK1** | **Hengchun** | **0.94** | **327** | *i*P | | **Pn** | **04 36 09.5** | **+0.4** |
| | baz=322 | | | | | | | |
| TWK1 | | | | *i*S | | **Sb** | **04 36 22.7** | **+2.0** |
| | baz=322 | | | | | | | |
| **SNW** | **Nanwan** | **0.98** | **325** | *e*P | | **Pn** | **04 36 11.4** | **+1.7** |
| | baz=325 | | | | | | | |
| SNW | | | | *e*S | | **Sn** | **04 36 25.4** | **+2.0** |
| | baz=325 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.98** | **331** | P | | **Pn** | **04 36 10.0** | **+0.2** |
| | baz=327 | | | | | | | |
| SMST | | | | S | | **Sb** | **04 36 23.5** | **+1.4** |
| | baz=327 | | | | | | | |
| **HEN** | **Hengchun** | **1.02** | **326** | *e*P | | **Pn** | **04 36 11.5** | **+1.3** |
| | baz=327 | | | | | | | |
| HEN | | | | *i*S | | **Sn** | **04 36 25.5** | **+1.0** |
| | baz=327 | | | | | | | |
| **SLIU** | **Shizi** | **1.17** | **334** | P | | **Pb** | **04 36 12.6** | **+0.2** |
| | baz=325 | | | | | | | |
| SLIU | | | | *e*S | | **Sg** | **04 36 28.6** | **+0.5** |
| | baz=325 | | | | | | | |
| **TAWH** | **Dawu Township** | **1.25** | **340** | P | | **Pn** | **04 36 13.3** | **-0.2** |
| | baz=348 | | | | | | | |
| TAWH | | | | S | | **Sb** | **04 36 29.1** | **-0.8** |
| | baz=348 | | | | | | | |
| **TAW** | **Tawu** | **1.27** | **340** | ↓*i*P | | **Pn** | **04 36 13.4** | **-0.2** |
| | baz=348 | | | | | | | |
| TAW | | | | *i*S | | **Sb** | **04 36 28.8** | **-1.4** |
| | baz=348 | | | | | | | |
| **EAST** | **Anshuo** | **1.31** | **339** | ↓*i*P | | **Pn** | **04 36 14.1** | **-0.2** |
| | baz=349 | | | | | | | |
| EAST | | | | S | | **Sb** | **04 36 30.1** | **-1.3** |
| | baz=349 | | | | | | | |
| **SCZT** | **Fangliau** | **1.39** | **331** | ↓*i*P | | **Pg** | **04 36 16.3** | **-0.6** |
| | baz=323 | | | | | | | |
| SCZT | | | | S | | **Sn** | **04 36 32.8** | **-0.8** |
| | baz=323 | | | | | | | |
| **ECL** | **Taimali** | **1.48** | **345** | ↓*i*P | | **Pn** | **04 36 15.8** | **-0.7** |
| | baz=354 | | | | | | | |
| ECL | | | | *i*S | | **Sn** | **04 36 34.5** | **-1.4** |
| | baz=354 | | | | | | | |
| **WLCH** | **Liuqiu** | **1.50** | **323** | P | | **Pg** | **04 36 19.5** | **+0.6** |
| | baz=323 | | | | | | | |
| WLCH | | | | *e*S | | **Sn** | **04 36 37.1** | **+0.9** |
| | baz=323 | | | | | | | |
| **SSPT** | **Xinbi** | **1.51** | **331** | *e*P | | **Pb** | **04 36 17.6** | **-0.4** |
| | baz=325 | | | | | | | |
| SSPT | | | | *e*S | | **Sn** | **04 36 36.1** | **-0.4** |
| | baz=325 | | | | | | | |
| **LDUT** | **Ludao** | **1.51** | **4** | *i*P | | **Pb** | **04 36 17.1** | **-1.1** |
| | baz=5.0 | | | | | | | |
| LDUT | | | | S | | **Sn** | **04 36 37.2** | **+0.6** |
| | baz=5.0 | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.60** | **335** | P | | **Pb** | **04 36 19.1** | **-0.5** |
| | baz=344 | | | | | | | |
| MASBT | | | | *e*S | | **Sn** | **04 36 38.1** | **-0.6** |
| | baz=344 | | | | | | | |
| **TTN** | **Taitung** | **1.60** | **353** | *i*P | | **Pb** | **04 36 19.2** | **-0.5** |
| | baz=354 | | | | | | | |
| TTN | | | | *e*S | | **Sn** | **04 36 38.0** | **-0.8** |
| | baz=354 | | | | | | | |
| **TWGBT** | **Beinan** | **1.67** | **351** | P | | **Pn** | **04 36 18.5** | **-0.8** |
| | baz=346 | | | | | | | |
| **TSMG** | **Majia** | **1.68** | **337** | *e*P | | **Pb** | **04 36 20.0** | **-0.9** |
| | baz=344 | | | | | | | |
| **TWG** | **Pinlang** | **1.68** | **351** | *i*P | | **Pn** | **04 36 18.4** | **-0.8** |
| | baz=352 | | | | | | | |
| TWG | | | | S | | **Sn** | **04 36 38.1** | **-2.6** |
| | baz=352 | | | | | | | |
| **SSD** | **Sandimen** | **1.72** | **337** | *i*P | | **Pn** | **04 36 20.6** | **+0.8** |
| | baz=344 | | | | | | | |
| **LONT** | **Longtian** | **1.75** | **353** | *i*P | | **Pn** | **04 36 19.9** | **-0.4** |
| | baz=348 | | | | | | | |
| **EDH** | **Donghe** | **1.81** | **358** | P | | **Pn** | **04 36 21.4** | **+0.3** |
| | baz=350 | | | | | | | |
| EDH | | | | S | | **Sn** | **04

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ETLH** | **Xiulin Townshi** baz=3.0 | **3.04** | **2** | *eP* | **Pn** | **04 36 40.3** | **+2.2** |
| **FUSS** | **Fushou** baz=347 | **3.08** | **358** | *eP* | **Pn** | **04 36 40.0** | **+1.2** |
| **TWT** | **Tachien** baz=347 | **3.09** | **357** | *eP* | **Pn** | **04 36 40.0** | **+1.2** |
| **TDCB** | **Techi** baz=347 | **3.09** | **357** | *eP* | **Pn** | **04 36 38.7** | **-0.1** |
| **NNSB** | **Datong** baz=8.0 | **3.26** | **0** | *eP* | **Pn** | **04 36 43.4** | **+2.3** |
| **NNS** | **Nan Shan** baz=9.0 | **3.27** | **0** | *eP* | **Pn** | **04 36 43.6** | **+2.4** |
| **ENA** | **Nanau** baz=7.0 | **3.27** | **6** | *eP* | **Pn** | **04 36 43.7** | **+2.4** |
| **EWUT** | **Wuta** baz=7.0 | **3.30** | **7** | *eP* | **Pn** | **04 36 42.3** | **+0.7** |
| **LATG** | **Datong** baz=3.0 | **3.37** | **3** | *eP* | **Pn** | **04 36 43.9** | **+1.3** |
| **NDT** | **Datong Townshi** baz=9.0 | **3.43** | **2** | *eP* | **Pn** | **04 36 44.3** | **+0.8** |
| **NFF** | **Wufeng Townshi** baz=357 | **3.47** | **356** | *eP* | **Pn** | **04 36 45.8** | **+1.8** |
| **TWC** | **Suao** baz=8.0 | **3.47** | **7** | *eP* | **Pn** | **04 36 45.3** | **+1.4** |
| **ENTT** | **Nioudou** baz=4.0 | **3.47** | **3** | *eP* | **Pn** | **04 36 44.5** | **+0.5** |
| **NSTT** | **Nanjuang** baz=355 | **3.47** | **355** | *eP* | **Pn** | **04 36 45.1** | **+1.1** |
| **NDS** | **Dongshan** baz=354 | **3.48** | **5** | *eP* | **Pn** | **04 36 44.6** | **+0.6** |
| **YHNB** | **Yeheng** baz=350 | **3.50** | **0** | *eP* | **Pn** | **04 36 46.0** | **+1.6** |
| **NSK** | **Sanguang** baz=350 | **3.50** | **0** | *eP* | **Pn** | **04 36 46.6** | **+2.1** |
| **TWE** | **Neicheng** baz=5.0 | **3.56** | **5** | *eP* | **Pn** | **04 36 46.4** | **+1.2** |
| **FUSB** | **Fushanzhiwuyua** baz=4.0 | **3.59** | **3** | *eP* | **Pn** | **04 36 47.7** | **+2.0** |
| **YOJ** | **Yonaguni jima** | **3.63** | **25** | *eS* | **Sn** | **04 37 32.3** | **+3.5** |
| **HATJ** | **Hateruma jima** | **3.67** | **38** | P | **Pn** | **04 36 48.2** | **+1.5** |
| HATJ | | | | *eS* | **Sn** | **04 37 28.8** | **-1.0** |
| **NTC** | **Toucheng** baz=354 | **3.71** | **7** | *eP* | **Pn** | **04 36 48.6** | **+1.5** |
| **TIPB** | **Shuangxi** baz=355 | **3.82** | **6** | *eP* | **Pn** | **04 36 49.5** | **+0.7** |
| **IRIF** | **Iriomote-Funau** | **3.85** | **34** | P | **Pn** | **04 36 52.0** | **+2.9** |
| IRIF | | | | *eS* | **Sn** | **04 37 34.8** | **+0.5** |
| **NWF** | **Wu-fen Shan** baz=354 | **3.92** | **6** | *eP* | **Pn** | **04 36 52.6** | **+2.5** |
| **JKRS** | **Kuro-shima** | **3.92** | **38** | P | **Pn** | **04 36 52.3** | **+2.1** |
| JKRS | | | | *eS* | **Sn** | **04 37 35.5** | **-0.7** |
| **SXI1** | **Grass Mountain** baz=355 | **3.95** | **7** | *eP* | **Pn** | **04 36 53.1** | **+2.5** |
| **JIJ** | **Ishigaki jima** | **4.10** | **38** | P | **Pn** | **04 36 54.0** | **+1.4** |
| JIJ | | | | *eS* | **Sn** | **04 37 38.8** | **-1.7** |
| **KNM** | **Kinmen** baz=319 | **4.22** | **321** | *eP* | **Pn** | **04 36 56.3** | **+2.1** |
| **KNMB** | **Chin-men Tao** baz=321 | **4.28** | **321** | *eP* | **Pn** | **04 36 56.0** | **+0.9** |
| **ZPLA** | **Ao Xicun** baz=310 | **4.33** | **310** | *eP* | **Pn** | **04 36 56.0** | **+0.3** |
| **JISG** | **Ishigakijimahi** | **4.37** | **38** | P | **Pn** | **04 36 57.9** | **+1.6** |
| JISG | | | | *eS* | **Sn** | **04 37 46.3** | **-0.8** |
| **PTMZ** | **Houxiangcun** baz=332 | **4.38** | **332** | *eP* | **Pn** | **04 36 57.2** | **+0.8** |
| **JTJ** | **Tarama** | **4.64** | **41** | P | **Pn** | **04 37 02.3** | **+2.3** |
| JTJ | | | | *eS* | **Sn** | **04 37 53.5** | **-0.4** |
| **AXDP** | **Jialang** baz=320 | **4.86** | **321** | *eP* | **Pn** | **04 37 04.5** | **+1.4** |
| **JMJ2** | **Miyako jima3** | **5.11** | **45** | *S* | **Sn** | **04 38 04.3** | **-1.1** |
| **MATB** | **Ma-tsu** baz=346 | **5.14** | **346** | *eP* | **Pn** | **04 37 07.8** | **+1.0** |
| **MHZQ** | **Yeshan** baz=337 | **5.36** | **337** | *eP* | **Pn** | **04 37 10.8** | **+0.8** |
| **LYJJ** | **Jianjiangzhen** baz=345 | **5.56** | **345** | *eP* | **Pn** | **04 37 13.7** | **+1.0** |
| **XPSS** | **Dashiqiu** baz=358 | **5.84** | **350** | *eP* | **Pn** | **04 37 17.8** | **+1.3** |
| **SXFK** | **Yanhouchang** baz=327 | **6.23** | **328** | *eP* | **Pn** | **04 37 22.8** | **+0.9** |
| **SONM** | **Songino Array** 1.1nm,0.8s,baz=156,slow=8.2,SNR=8.5 | **29.22** | **339** | P | **P** | **04 41 52.1** | **+0.3** |
| **MKAR** | **Makanchi Array** 0.5nm,0.7s,baz=119,slow=9.3,SNR=6.2 | **40.66** | **318** | P | **P** | **04 43 31.5** | **+1.3** |
| **H11N1** | **WAKE ISLAND Hy 42.58** baz=282,slow=75,SNR=8.2 | | **84** | T | T | 05 29 04.9 | |
| **H11N2** | **WAKE ISLAND Hy 42.59** baz=282,slow=75,SNR=9.6 | | **84** | T | T | 05 29 04.1 | |
| **H11N3** | **WAKE ISLAND Hy 42.60** baz=282,slow=75,SNR=8.1 | | **84** | T | T | 05 29 04.1 | |
| **H11S3** | **WAKE ISLAND Hy 42.62** baz=282,slow=75,SNR=23 | | **85** | T | T | 05 29 08.3 | |
| **H11S1** | **WAKE ISLAND Hy 42.63** baz=282,slow=75,SNR=15 | | **85** | T | T | 05 29 07.4 | |
| **H11S2** | **WAKE ISLAND Hy 42.64** baz=282,slow=75,SNR=14 | | **85** | T | T | 05 29 02.8 | |
| **WRA** | **Warramunga Arr** 0.6nm,0.6s,baz=344,slow=9.1,SNR=6.7 | **42.78** | **162** | P | **P** | **04 43 45.5** | **-2.3** |
| **ZALV** | **Zalesovo Beam** 0.9nm,0.6s,baz=94,slow=9.4,SNR=4.6 | **42.88** | **329** | P | **P** | **04 43 50.1** | **+1.9** |
| **ASAR** | **Alice Springs** 0.5nm,0.4s,baz=348,slow=7.5,SNR=8.1 | **46.20** | **164** | P | **P** | **04 44 13.9** | **-1.1** |
| **YKA** | **Yellowknife Ar** 0.4nm,0.8s,baz=307,slow=4.6,SNR=7.4 | **85.69** | **23** | P | **P** | **04 48 28.4** | **-0.2** |

*ECX **24** 04:44:01.8±0.5, 32.°30N×115.°33W, h14km±3km, MD2.5, ML2.6*

*MEX **24** 04:44:02.9±0.8, 32.°48N×115.°09W, h28km±6km, MD3.6*

**ISC 24 04:44:02.4±1.0, 32°34N±0.°04×115°28W±0.°03, h21km±1km, n25, σ0s74/42, 3C-1D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.09** | **345** | *eP* | **Pb** | **04 44 06.4** | **0.0** |
| CPBX | | | | *eS* | **Sb** | **04 44 09.8** | **+0.7** |
| CPBX | | | | ⇑*e* | | 04 44 10.2 | |
| CPBX | comp=N,3µm,0.3s | | | IAML | | 04 44 10.2 | |
| CPBX | | | | ⇓*e* | | 04 44 10.6 | |
| CPBX | comp=E,5µm,0.2s | | | IAML | | 04 44 10.6 | |
| **MBIG** | **Mexicali** | **0.10** | **43** | *eP* | **Pb** | **04 44 06.0** | **-0.4** |
| MBIG | | | | *i* P | **Pb** | **04 44 07.1** | **+0.7** |
| MBIG | | | | *i* S | **Sb** | **04 44 09.9** | **+0.7** |
| MBIG | | | | *eS* | **Sb** | **04 44 10.7** | **+1.5** |
| **MBIG** | **Mexicali** | **0.10** | **43** | *eP* | **Pb** | **04 44 07.2** | **+0.8** |
| MBIG | | | | *i* S | **Sb** | **04 44 11.1** | **+1.9** |
| **GUVIX** | **Guadalupe Vict** | **0.17** | **101** | *eP* | **Pb** | **04 44 08.3** | **+0.1** |
| GUVIX | | | | *eS* | **Sb** | **04 44 12.4** | **+0.2** |
| **CTLX** | **Tlaxcala, TLX** | **0.18** | **39** | ⇑*iP* | **Pb** | **04 44 08.7** | **+0.6** |
| **POT2** | **Potabilizadora** | **0.30** | **343** | *eS* | **Sn** | **04 44 16.5** | **-1.0** |
| **RITX** | **Riito Sonora** | **0.32** | **122** | *eP* | **Pn** | **04 44 10.6** | **-1.2** |
| RITX | | | | *eS* | **Sn** | **04 44 16.5** | **-1.3** |
| **EMSC** | **East Mesa** | **0.47** | **31** | *eP* | **Pn** | **04 44 13.6** | **-0.4** |
| **SGL** | **Mount Signal** | **0.49** | **310** | *eP* | **Pb** | **04 44 12.9** | **+0.5** |
| **COA** | **Coachella** | **0.54** | **14** | *eP* | **Pn** | **04 44 14.4** | **-0.5** |
| **WESC** | **Westside Schoo** | **0.57** | **318** | *eP* | **Pn** | **04 44 14.6** | **-0.7** |
| WESC | | | | *i* S | **Sn** | **04 44 23.9** | **-0.2** |
| **YUH2** | **Yuha Desert** | **0.63** | **300** | *eP* | **Pb** | **04 44 14.9** | **+0.1** |
| YUH2 | | | | *eS* | **Sb** | **04 44 23.5** | **+0.3** |
| **COK2** | **Cook Ranch 2** | **0.64** | **324** | *eP* | **Pn** | **04 44 15.6** | **-0.6** |
| **YMD** | **Yuma Desert** | **0.66** | **70** | *eP* | **Pn** | **04 44 15.9** | **-0.5** |
| **RMX** | **La Rumorosa** | **0.73** | **292** | *eP* | **Pb** | **04 44 15.5** | **-1.0** |
| RMX | | | | *eS* | **Sb** | **04 44 24.2** | **-1.9** |
| **SWSC** | **Sam W. Stewart** | **0.75** | **324** | *eP* | **Pb** | **04 44 16.7** | **-0.1** |
| SWSC | | | | *eS* | **Sn** | **04 44 28.7** | **+0.2** |
| **IKP** | **In-Ko-Pah, Jac** | **0.77** | **294** | ⇑*eP* | **Pb** | **04 44 17.5** | **+0.3** |
| IKP | | | | *eS* | **Sb** | **04 44 27.5** | **+0.3** |
| **CBX** | **Cerro Bola** | **1.17** | **269** | *eP* | **Pn** | **04 44 23.8** | **+0.1** |
| CBX | | | | *eS* | **Sb** | **04 44 39.1** | **+0.3** |
| **CBX** | **Cerro Bola** | **1.17** | **269** | *eP* | **Pb** | **04 44 24.3** | **+0.2** |
| CBX | | | | *eS* | **Sn** | **04 44 39.5** | **+0.3** |
| **TJIG** | **Tijuana** | **1.19** | **275** | *eP* | **Pn** | **04 44 23.9** | **+0.1** |
| TJIG | | | | *i* S | **Sb** | **04 44 39.3** | **+0.2** |
| **BAR** | **Barrett** | **1.23** | **287** | *eP* | **Pn** | **04 44 24.6** | **+0.2** |
| BAR | | | | *eS* | **Sn** | **04 44 40.9** | **+0.5** |
| **CCX** | **Cicese** | **1.27** | **249** | *eS* | **Sb** | **04 44 41.7** | **+0.3** |
| **SPIG** | **San Pedro Mart** | **1.30** | **187** | *eP* | **Pn** | **04 44 25.4** | **-0.3** |
| SPIG | | | | *i* S | **Sb** | **04 44 43.4** | **+0.9** |
| **EML** | **El Monte Cty P** | **1.44** | **293** | *eP* | **Pn** | **04 44 27.4** | **+0.2** |
| **214A** | **Organ Pipe Nat** | **2.13** | **100** | *e* | **Pb** | **04 44 40.5** | **+0.2** |

*WEL **24** 04:48:54.8±0.7, 34.°S±10.°×18.°0W±2.°0, h403km±11km, M3.8/25, mB4.4/12, ML4.5/26, MLv4.5/25, Mw(mB)3.5/12, Error ellipse: s-maj=0.0km s-min=0.0km az=114.9*

*NOU **24** 04:49:28.5, 36.°05S×178.°50E, h321km, mb4.2/8, Off E. Coast of N. Island, N.Z.*

**ISC 24 04:48:55.5±3.0, 33.°5S±0.°2×180.°0E±0.°2, h400km, n65, σ1s33/96, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **4.25** | **198** | P | **Pn** | **04 50 09.5** | **-0.3** |
| MXZ | | | | S | **Sn** | **04 51 09.0** | **-1.3** |
| **WMGZ** | **Waiomatatini S** | **4.47** | **196** | P | **Pn** | **04 50 11.6** | **-0.4** |
| WMGZ | | | | S | **Sn** | **04 51 15.7** | **+1.5** |
| **HAZ** | **Te Kaha** | **4.59** | **202** | P | **Pn** | **04 50 11.0** | **-2.1** |
| HAZ | | | | S | **Sn** | **04 51 15.9** | **-0.3** |
| **PKGZ** | **Pakihiroa** | **4.62** | **199** | P | **Pn** | **04 50 14.1** | **+0.6** |
| PKGZ | | | | S | **Sn** | **04 51 15.3** | **-1.8** |
| **PUZ** | **Puketiti** | **4.75** | **197** | P | **Pn** | **04 50 12.0** | **-2.8** |
| PUZ | | | | S | **Sn** | **04 51 19.4** | **+0.1** |
| **URZ** | **Urewera** | **5.27** | **205** | P | **Pn** | **04 50 19.9** | **-0.2** |
| **MUGZ** | **Murupara** | **5.58** | **207** | P | **Pn** | **04 50 23.9** | **+0.4** |
| **SNGZ** | **Shannon Statio** | **5.66** | **201** | P | **Pn** | **04 50 25.2** | **+0.9** |
| **GRRZ** | **Galatos Road** | **5.75** | **212** | P | **Pn** | **04 50 26.4** | **+1.2** |
| **MTHZ** | **Maungataniwha** | **5.89** | **205** | P | **Pn** | **04 50 27.1** | **+0.3** |
| MTHZ | | | | S | **Sn** | **04 51 41.6** | **+0.3** |
| **WHHZ** | **Waihua** | **5.97** | **201** | P | **Pn** | **04 50 31.3** | **+3.7** |
| WHHZ | | | | S | **Sn** | **04 51 48.2** | **+5.5** |
| **KUTZ** | **Kaahu Road** | **5.99** | **213** | P | **Pn** | **04 50 28.9** | **+1.0** |
| **MRHZ** | **Matea Rd** | **6.03** | **207** | P | **Pn** | **04 50 27.9** | **-0.4** |
| MRHZ | | | | S | **Sn** | **04 51 44.4** | **+0.4** |
| **NMHZ** | **Naumai** | **6.12** | **204** | P | **Pn** | **04 50 29.1** | **-0.2** |
| NMHZ | | | | S | **Sn** | **04 51 47.4** | **+1.4** |
| **ARHZ** | **Aropaoanui** | **6.21** | **202** | P | **Pn** | **04 50 30.6** | **+0.4** |
| ARHZ | | | | S | **Sn** | **04 51 48.6** | **+1.0** |
| **BKZ** | **Black Stump Fm** | **6.29** | **205** | P | **Pn** | **04 50 30.7** | **-0.5** |
| BKZ | | | | S | **Sn** | **04 51 50.0** | **+0.7** |
| **BKZ** | **Black Stump Fm** | **6.29** | **205** | P | **Pn** | **04 50 30.6** | **-0.6** |
| **MCHZ** | **McNeill Hill** | **6.47** | **203** | P | **Pn** | **04 50 33.4** | **+0.3** |
| MCHZ | | | | S | **Sn** | **04 51 55.1** | **+2.3** |
| **HIZ** | **Hauiti** | **6.48** | **218** | P | **P** | **04 50 34.9** | **+1.8** |
| **HIZ** | **Hauiti** | **6.48** | **218** | P | **P** | **04 50 35.1** | **+1.9** |
| **KWHZ** | **Kaweka Forest** | **6.55** | **205** | P | **P** | **04 50 34.1** | **-0.5** |
| KWHZ | | | | S | **S** | **04 51 54.4** | **-0.1** |
| **NTVZ** | **North Tongarir** | **6.56** | **211** | P | **Pn** | **04 50 34.1** | **-0.1** |
| **TMVZ** | **Te Maari** | **6.56** | **210** | P | **Pn** | **04 50 33.8** | **-0.4** |
| **ETVZ** | **East Tongariro** | **6.57** | **210** | P | **Pn** | **04 50 33.6** | **-0.7** |
| **WTVZ** | **West Tongariro** | **6.61** | **211** | P | **Pn** | **04 50 34.2** | **-0.5** |
| **NNVZ** | **North Ngauruho** | **6.61** | **211** | P | **Pn** | **04 50 34.4** | **-0.4** |
| **OTVZ** | **Oturere** | **6.62** | **210** | P | **Pn** | **04 50 34.1** | **-0.8** |
| OTVZ | | | | S | **S** | **04 51 56.3** | **+0.2** |
| **TWVZ** | **Taurewa** | **6.64** | **212** | P | **Pn** | **04 50 34.8** | **-0.2** |
| **SNVZ** | **South Ngauruho** | **6.64** | **210** | P | **Pn** | **04 50 34.7** | **-0.5** |
| **NGZ** | **Ngauruhoe** | **6.65** | **211** | P | **Pn** | **04 50 34.7** | **-0.6** |
| **TUVZ** | **Tukino** | **6.71** | **210** | P | **Pn** | **04 50 35.2** | **-0.7** |
| TUVZ | | | | S | **S** | **04 51 59.3** | **+1.4** |
| **BHHZ** | **Black Hill Sta** | **6.74** | **207** | P | **Pn** | **04 50 35.0** | **-1.1** |
| BHHZ | | | | S | **S** | **04 51 58.2** | **-0.1** |
| **KAHZ** | **Kahuranaki** | **6.74** | **201** | P | **P** | **04 50 36.0** | **-0.7** |
| KAHZ | | | | S | **S** | **04 52 00.5** | **+2.2** |
| **FWVZ** | **Far West T-bar** | **6.74** | **211** | P | **Pn** | **04 50 35.5** | **-0.8** |
| **KRHZ** | **Kereru** | **6.76** | **204** | P | **Pn** | **04 50 35.8** | **-0.6** |
| KRHZ | | | | S | **S** | **04 51 58.4** | **-0.4** |
| **TRVZ** | **Turoa** | **6.78** | **210** | P | **Pn** | **04 50 36.0** | **-0.7** |
| **WNVZ** | **Wahianoa** | **6.78** | **210** | P | **Pn** | **04 50 35.3** | **-1.4** |
| WNVZ | | | | S | **S** | **04 52 01.2** | **+1.8** |
| **MOVZ** | **Moawhango** | **6.78** | **209** | P | **Pn** | **04 50 35.5** | **-1.1** |
| MOVZ | | | | S | **S** | **04 51 56.5** | **-2.9** |
| **PKVZ** | **Pokaka** | **6.86** | **212** | P | **Pn** | **04 50 36.9** | **-0.6** |
| **PNHZ** | **Pukenui** | **7.06** | **204** | P | **Pn** | **04 50 38.9** | **-0.8** |
| PNHZ | | | | S | **S** | **04 52 05.6** | **+0.7** |
| **PRHZ** | **Porangahau** | **7.24** | **201** | P | **P** | **04 50 42.3** | **0.0** |
| **TSZ** | **Takapari Road** | **7.27** | **205** | P | **Pn** | **04 50 41.0** | **-1.1** |
| TSZ | | | | S | **S** | **04 52 10.3** | **+1.0** |
| **DVHZ** | **Dannevirke** | **7.42** | **203** | P | **Pn** | **04 50 43.1** | **-0.6** |
| DVHZ | | | | S | **S** | **04 52 11.7** | **-0.6** |
| **PKE** | **Pukeiti** | **7.44** | **219** | P | **P** | **04 50 46.2** | **+1.7** |
| **ANWZ** | **Angora Road** | **7.47** | **201** | P | **P** | **04 50 44.6** | **-0.2** |
| ANWZ | | | | S | **S** | **04 52 16.9** | **+3.7** |
| **BFZ** | **Birch Farm** | **7.74** | **202** | P | **Pn** | **04 50 47.0** | **-0.4** |
| BFZ | | | | S | **S** | **04 52 19.1** | **+0.2** |
| **BFZ** | **Birch Farm** | **7.74** | **202** | P | **P** | **04 50 47.9** | **-0.3** |
| **MRZ** | **Mangatainoka R** | **7.94** | **205** | P | **Pn** | **04 50 48.5** | **-1.1** |
| MRZ | | | | S | **S** | **04 52 22.5** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **8.17** | **204** | P | **Pn** | **04 50 50.8** | **-1.5** |
| HOWZ | | | | S | **S** | **04 52 26.7** | **-1.4** |
| **OGWZ** | **Otaki Gorge** | **8.23** | **206** | P | **Pn** | **04 50 51.2** | **-1.7** |
| OGWZ | | | | S | **S** | **04 52 29.4** | **+0.2** |
| **TMWZ** | **Te Maipa** | **8.24** | **202** | P | **Pn** | **04 50 52.7** | **-0.4** |
| TMWZ | | | | S | **S** | **04 52 30.0** | **+0.6** |
| **MTW** | **Mount Morrison** | **8.41** | **204** | P | **Pn** | **04 50 54.3** | **-0.7** |
| MTW | | | | S | **S** | **04 52 31.9** | **-1.2** |
| **CAW** | **Cannon Point** | **8.52** | **206** | P | **Pn** | **04 50 55.1** | **-1.1** |
| CAW | | | | S | **S** | **04 52 34.2** | **-1.2** |
| **TRWZ** | **Traveller** | **8.57** | **202** | P | **P** | **04 50 56.9** | **-0.1** |
| **MSWZ** | **Moikau Station** | **8.73** | **204** | P | **Pn** | **04 50 57.9** | **-0.8** |
| **PLWZ** | **Palliser** | **8.86** | **204** | P | **Pn** | **04 50 59.3** | **-0.9** |
| **TCW** | **Tory Channel** | **8.91** | **209** | P | **Pn** | **04 50 59.2** | **-1.5** |
| **TUWZ** | **Inamarina** | **9.23** | **209** | P | **P** | **04 51 02.8** | **-1.5** |
| **NNZ** | **Nelson** | **9.30** | **212** | P | **P** | **04 51 03.3** | **-1.8** |
| **QRZ** | **Quartz Range** | **9.40** | **217** | P | **P** | **04 51 04.2** | **-2.0** |
| **QRZ** | **Quartz Range** | **9.40** | **217** | P | **P** | **04 51 05.4** | **-0.8** |
| **BSWZ** | **Blackbirch Sta** | **9.50** | **209** | P | **P** | **04 51 06.9** | **-0.4** |
| **KHZ** | **Kahutara** | **10.22** | **208** | P | **P** | **04 51 14.5** | **-0.8** |
| **RPZ** | **Rata Peaks** 133nm,2.2s | **12.33** | **212** | P | **Pn** | **04 51 40.7** | **+0.4** |
| **ODZ** | **Otahua Downs** | **13.57** | **209** | P | **Pn** | **04 51 56.3** | **+1.7** |

*IDC **24** 04:50:11.8±1.7, 4.°50S×152.°55E, h0km, mb3.9/5, mb1 4.1/5, mb1mx3.7/39, mbtmp3.9/5, MS3.2/1, Ms1 3.2/1, ms1mx2.5/57, Error ellipse: s-maj=65.7km s-min=26.0km az=126.0*

*NEIC **24** 04:50:15.1±1.5, 4.°9S±0.°2×153.°0E±0.°1, h25km±8km, mb4.3/8, Error ellipse: s-maj=25.6km s-min=12.6km az=217.0*

**ISC 24 04:50:15.4±1.1, 4.°9S±0.°1×153.°0E±0.°2, h35km, n17, σ1s06/17, mb4.0/9, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.09** | **308** | Pn | **Pn** | **04 50 34.0** | **-0.2** |
| RABL | | | | Sn | **Sn** | **04 50 49.0** | **+1.0** |
| **DZM** | **Mont Dzumac** | **21.48** | **144** | P | **P** | **04 55 00.9** | **-0.3** |
| **WB0** | **Warramunga Arr** | **23.41** | **229** | P | **P** | **04 55 22.1** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 04 55 25.0 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.42** | **229** | P | **P** | **04 55 22.6** | **+1.1** |
| **WB2** | **Warramunga Arr** | **23.55** | **229** | P | **P** | **04 55 23.4** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 04 55 34.9 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** comp=Z,0.8nm,0.5s,baz=52,slow=9.9,SNR=13 | **23.56** | **229** | P | **P** | **04 55 23.4** | **+0.5** |
| **WRA** | **Warramunga Arr** | **23.56** | **229** | P | **P** | **04 55 23.3** | **+0.3** |
| **KNRA** | **Kununurra** | **26.14** | **244** | P | **P** | **04 55 45.8** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 04 55 47.0 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** comp=Z,0.1nm,0.3s,baz=53,slow=9.3,SNR=4.1 | **26.24** | **223** | P | **P** | **04 55 49.5** | **+2.0** |
| **STKA** | **Stephens Creek** comp=Z,47nm,18.5s,baz=26,slow=35 | **28.92** | **200** | LR | LR | 05 07 09.7 | |
| **FITZ** | **Fitzroy Crossi** comp=Z,1.6nm,0.6s,baz=95,slow=10,SNR=3.6 | **29.81** | **242** | P | **P** | **04 56 17.8** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **29.81** | **242** | P | **P** | **04 56 18.1** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **36.18** | **240** | P | **P** | **04 57 14.7** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 04 57 15.9 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.18** | **240** | P | **P** | **04 57 15.5** | **+0.6** |
| PSA00 | | | | IAmb | IAmb | 04 57 16.1 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,4.0nm,0.3s,baz=122,slow=6.5,SNR=4.3 | **58.10** | **295** | P | **P** | **05 00 04.2** | **-1.7** |
| **ILAR** | **Eielson Array** comp=Z,0.5nm,0.7s,baz=235,slow=5.2,SNR=7.8 | **82.14** | **22** | P | **P** | **05 02 33.1** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.5nm,0.7s,baz=63,slow=1.8,SNR=5.4 | **150.53** | **288** | PKPbc | **PKPbc** | **05 10 04.5** | **-0.1** |

*WEL **24** 04:54:00, 45.°57S×166.°60E, h16km, ML4.2, Mw3.8, Moment Tensor Solution. s4 Moment tensor: Scale $10^{14}$ Nm; Mrr=3.06; Mθθ=2.27; Mφφ=-5.33; Mrθ=1.19; Mθφ=0.27; Mφr=-4.23; Fault plane solution: M0=6.16000×$10^{14}$ NP1: φs=24.00000°, δ26.00000°, λ129.00000°. NP2: φs=162.00000°, δ70.00000°, λ73.00000°. Principal axes: T 51.7000, Plg61.0000°, Azm46.0000°; N 19.7900, Plg16.0000°, Azm167.0000°; P -71.5000, Plg23.0000°, Azm265.0000°;*

**WEL 24 04:54:01.8±1.0, 46.°S±4.°×167.°E±.°, h5km, M4.0/13, ML4.2/13, MLv4.0/13 Error ellipse: s-maj=0.0km s-min=0.0km az=110.1, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DCZ** | **Deep Cove** | **0.40** | **74** | P | Pb | 04 54 10.5 | -0.8 |
| DCZ | | | | S | Sb | 04 54 16.4 | -1.3 |
| **PYZ** | **Puysegur Point** | **0.59** | **175** | P | Pg | 04 54 13.7 | +0.4 |
| PYZ | | | | S | Sg | 04 54 21.5 | +0.6 |
| **WHZ** | **Wether Hill Ro** | **0.99** | **109** | P | Pg | 04 54 20.9 | +0.1 |
| **MLZ** | **Mavora Lakes** | **1.08** | **79** | P | Pg | 04 54 22.1 | -0.5 |
| MLZ | | | | S | Sg | 04 54 35.6 | -1.0 |
| **MSZ** | **Milford Sound** | **1.30** | **46** | P | Pn | 04 54 23.6 | -3.0 |
| MSZ | | | | S | Sn | 04 54 44.7 | +0.4 |
| **APZ** | **The Paps** | **1.58** | **143** | P | Pn | 04 54 30.2 | -0.3 |
| APZ | | | | S | Sn | 04 54 51.2 | -0.2 |
| **WKZ** | **Wanaka** | **1.86** | **67** | P | Pn | 04 54 34.1 | -0.3 |
| **EAZ** | **Earnscleugh** | **1.93** | **81** | P | Pn | 04 54 35.6 | +0.2 |
| **SYZ** | **Scrubby Hill** | **2.01** | **120** | P | Pn | 04 54 37.4 | +1.1 |
| **TUZ** | **Tuapeka** | **2.15** | **101** | P | Pn | 04 54 39.6 | +1.3 |
| **JCZ** | **Jackson Bay** | **2.16** | **47** | P | Pn | 04 54 39.7 | +1.2 |
| **LBZ** | **Lake Benmore** | **2.80** | **66** | P | Pn | 04 54 46.2 | -1.1 |
| **HHSZ** | **Highcliff Hill** | **2.81** | **98** | P | Pn | 04 54 48.1 | +0.7 |
| **ODZ** | **Otahua Downs** | **2.90** | **81** | P | Pn | 04 54 47.7 | -0.9 |
| **FOZ** | **Fox Glacier** | **3.07** | **49** | P | Pn | 04 54 50.1 | -0.9 |
| **TMZ** | **Timaru** | **3.34** | **71** | P | Pn | 04 54 53.2 | -1.5 |
| **GCSZ** | **Gaunt Creek Bo** | **3.49** | **51** | P | Pn | 04 54 57.6 | +0.9 |
| **ARCZ** | **Arundel** | **3.64** | **65** | P | Pn | 04 54 56.8 | -1.9 |
| **RPZ** | **Rata Peaks** | **3.68** | **61** | P | Pn | 04 54 57.3 | -2.1 |
| RPZ | | | | S | Sn | 04 55 44.0 | +0.9 |
| **WVZ** | **Waitaha Valley** | **3.88** | **51** | P | Pn | 04 55 02.0 | -0.1 |
| **WACZ** | **Wakanui South** | **4.07** | **68** | P | Pn | 04 55 04.3 | -0.3 |
| **MHCZ** | **Mount Hutt** | **4.09** | **62** | P | Pn | 04 55 04.5 | -0.5 |
| **RACZ** | **Rakaia** | **4.36** | **67** | P | Pn | 04 55 08.1 | -0.5 |
| **INZ** | **Inchbonnie** | **4.50** | **52** | P | Pn | 04 55 09.9 | -0.6 |
| **AKCZ** | **Akaroa Harbour** | **4.80** | **71** | P | Pn | 04 55 12.7 | -2.0 |
| **LTZ** | **Lake Taylor** | **4.94** | **58** | P | Pn | 04 55 15.2 | -1.5 |
| **AMCZ** | **Amberley** | **4.95** | **63** | P | Pn | 04 55 16.5 | -0.2 |
| **OKCZ** | **Okains Bay** | **4.96** | **70** | P | Pn | 04 55 17.7 | +0.8 |
| **GVZ** | **Greta Valley S** | **5.30** | **63** | P | Pn | 04 55 20.2 | -1.5 |
| **DSZ** | **Denniston Nort** | **5.37** | **46** | P | Pn | 04 55 20.8 | -1.8 |
| **KHZ** | **Kahutara** | **5.91** | **60** | P | Pn | 04 55 29.4 | -0.6 |
| **THZ** | **Tophouse** | **5.95** | **52** | P | Pn | 04 55 29.0 | -1.5 |
| **MRNZ** | **Matariki Terra** | **6.12** | **49** | P | Pn | 04 55 31.7 | -1.2 |
| **QRZ** | **Quartz Range** | **6.42** | **44** | P | Pn | 04 55 35.5 | -1.5 |
| **NNZ** | **Nelson** | **6.58** | **51** | P | Pn | 04 55 41.2 | +2.1 |
| **TCW** | **Tory Channel** | **7.08** | **55** | P | Pn | 04 55 48.0 | +1.9 |
| **DUWZ** | **D'Urville Isla** | **7.16** | **51** | P | Pn | 04 55 48.4 | +1.2 |
| **KHEZ** | **Kahui Hut** | **8.33** | **44** | P | Pn | 04 56 02.2 | -1.0 |
| **PKE** | **Pukeiti** | **8.39** | **43** | P | Pn | 04 56 03.8 | -0.3 |
| **VRZ** | **Vera Road** | **8.82** | **46** | P | Pn | 04 56 14.2 | +4.2 |
| **TRVZ** | **Turoa** | **9.11** | **50** | P | Pn | 04 56 15.9 | +1.8 |
| **WNVZ** | **Wahianoa** | **9.11** | **50** | P | Pn | 04 56 17.9 | +3.8 |
| **WTVZ** | **West Tongariro** | **9.26** | **49** | P | Pn | 04 56 18.7 | +2.6 |
| **OTVZ** | **Oturere** | **9.27** | **49** | P | Pn | 04 56 17.0 | +0.8 |

*IDC **24** 05:08:14.9±1.1, 17.°21N×46.°42W, h0km, mb3.7/7, mb1 4.1/8, mb1mx3.7/43, mbtmp3.9/8, ML3.9/1, MS3.5/38, Ms1 3.5/38, ms1mx3.3/85, Error ellipse: s-maj=31.1km s-min=23.7km az=106.0*

**ISC 24 05:08:17.2±1.0, 17.°2N±0.°1×46.°4W±0.°2, h15km, n47, σ1s06/8, mb3.8/7, MS3.6/36, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | 

comp=Z,56nm,18.3s,baz=252,slow=35
**ILAR Eielson Array 79.02 335** P **P** 05 20 20.1 -0.3
0.7nm,0.7s,baz=76,slow=4.4,SNR=6.0
**LSZ Lusaka 80.32 109** LR LR 05 51 10.5
comp=Z,56nm,19.2s,baz=214,slow=32
**SUR Sutherland 80.98 128** LR LR 05 48 37.3
comp=Z,33nm,21.9s,baz=163,slow=30
**LBTB Lobatse 81.69 119** LR LR 05 51 51.7
comp=Z,66nm,20.4s,baz=254,slow=32
**KMBO Kilima Mbogo 84.28 93** LR LR 05 57 31.8
comp=Z,74nm,18.1s,baz=292,slow=35
**AKTO Aktyubinsk 85.81 38** LR LR 05 57 27.4
comp=Z,22nm,20.3s,baz=7.2,slow=34
**ATD Arta Tunnel 85.97 79** LR LR 05 59 22.2
comp=Z,47nm,18.9s,baz=322,slow=36
**WSAR Wadi Sarin 96.51 63** LR LR 06 08 33.7
comp=Z,27nm,18.4s,baz=261,slow=38

*IDC **24** 05:38:30.6±0.8,59°.395S×25°.21W,h0km,mb4.2/6, mb1 4.3/7,mb1mx4.0/30,mbtmp4.2/7,ML4.7/1,MS3.3/2, Ms1 3.2/2,ms1mx2.7/45,Error ellipse: s-maj=27.0km s-min=26.3km az=61.0*
*NEIC **24** 05:38:37.0±0.7,59°.4S±0°.1×25°.2W±0°.3,h42km±3km, mb4.6/20,Error ellipse: s-maj=21.1km s-min=17.9km az=216.0*
**ISC 24 05:38:34.5±0.6,59°.45S±0°.10×25°.2W±0°.1,h27km,n37, σ0s75/33,mb4.5/13,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| VNA1 | **Neumayer--Stat** | **13.25** | **155** | P | **Pn** | **05 41 40.0** | **-0.4** |
| VNA3 | **Neumayer Olymp** | **13.43** | **158** | P | **Pn** | **05 41 42.2** | **-0.7** |
| VNA3 | | | | S | Sn | 05 43 52.5 | -19 |
| VNA2 | **Neumayer--Watz** baz=323,slow=15 | **13.65** | **155** | P | **Pn** | **05 41 45.2** | **-0.7** |
| VNA2 | | | | S | Sn | 05 43 59.0 | -17 |
| SNAA | **Sanae** | **15.21** | **153** | P | **Pn** | **05 42 06.8** | **-0.4** |
| SNAA | | | | S | Sn | 05 44 38.2 | -16 |
| SNAA | **Sanae** 3.0nm,0.3s,baz=51,slow=13,SNR=110 | **15.21** | **153** | Pn | **Pn** | **05 42 06.5** | **-0.7** |
| SNAA | **Sanae** | **15.21** | **153** | | **Pn** | **05 42 06.7** | **-0.4** |
| ESPZ | **Base Esperanza** | **15.60** | **242** | Pn | **P** | **05 42 14.6** | **-1.4** |
| PMSA | **Palmer Station** comp=Z,175nm,19.9s,baz=282,slow=32 | **18.68** | **237** | LR | LR | 05 48 30.1 | |
| BELA | **Belgrano 2** | **18.77** | **186** | P | **Pn** | **05 42 52.7** | **+1.0** |
| QSPA | **South Pole Qui** 1.0nm,0.9s,baz=208,slow=2.1,SNR=5.3 | **30.79** | **180** | P | **P** | **05 44 48.6** | **+1.1** |
| QSPA | **South Pole Qui** comp=Z,14nm,1.4s | **30.79** | **180** | IAmb | IAmb | 05 45 06.9 | |
| PLCA | **Paso Flores** comp=Z,1.2nm,0.9s,baz=46,slow=22,SNR=2.8 | **33.72** | **283** | P | **P** | **05 45 13.1** | **-0.2** |
| PLCA | **Paso Flores** comp=Z,7.1nm,1.4s | **33.72** | **283** | P | **P** | **05 45 10.9** | **-2.4** |
| PLCA | | | | IAmb | IAmb | 05 45 36.3 | |
| LL05 | **Los Muermos** | **34.68** | **280** | P | **P** | **05 45 22.0** | **+0.5** |
| LC01 | **Cunco** | **35.78** | **284** | P | **P** | **05 45 31.2** | **+0.3** |
| LC01 | comp=Z,5.0nm,0.8s | | | IAmb | IAmb | 05 45 52.4 | |
| BO04 | **La Punta** | **39.05** | **290** | P | **P** | **05 45 59.3** | **+0.5** |
| BO04 | comp=Z,26nm,1.4s | | | IAmb | IAmb | 05 46 11.5 | |
| MT09 | **Talagante** comp=Z,9.3nm,0.7s | **39.41** | **290** | P | **P** | **05 46 02.3** | **+0.4** |
| MT09 | | | | IAmb | IAmb | 05 46 03.8 | |
| MT03 | **Universidad Ad** | **39.41** | **291** | P | **P** | **05 46 02.4** | **+0.5** |
| MT01 | **Popeta** | **39.47** | **290** | P | **P** | **05 46 02.2** | **0.0** |
| MT01 | comp=Z,26nm,1.4s | | | IAmb | IAmb | 05 46 11.5 | |
| PEL | **Peldehue** | **39.78** | **291** | P | **P** | **05 46 05.5** | **+0.6** |
| CPUP | **Villa Florida** comp=Z,18nm,18.3s,baz=148,slow=37 | **39.86** | **312** | LR | LR | 06 03 18.2 | |
| MT02 | **Curacav** | **39.90** | **290** | P | **P** | **05 46 06.0** | **+0.1** |
| VA06 | **Catapilco** | **40.55** | **291** | P | **P** | **05 46 12.1** | **+0.9** |
| CO02 | **Combarbal** | **41.53** | **292** | P | **P** | **05 46 20.1** | **+0.7** |
| CO02 | comp=Z,26nm,1.2s | | | IAmb | IAmb | 05 46 25.0 | |
| CO03 | **El Pedregal** comp=Z,12nm,1.4s | **41.69** | **293** | P | **P** | **05 46 21.6** | **+0.9** |
| CO03 | | | | IAmb | IAmb | 05 46 23.7 | |
| LCO | **Las Campanas** comp=Z,18nm,1.5s | **43.23** | **294** | P | **P** | **05 46 32.9** | **-0.6** |
| LCO | | | | IAmb | IAmb | 05 46 42.4 | |
| LBTB | **Lobatse** comp=Z,3.2nm,0.8s,baz=208,slow=6.2,SNR=3.9 | **49.14** | **68** | P | **P** | **05 47 19.3** | **-0.5** |
| LPAZ | **La Paz** comp=Z,1.6nm,0.6s,baz=135,slow=3.0,SNR=5.7 | **53.20** | **305** | P | **P** | **05 47 50.6** | **-0.3** |
| LPAZ | **La Paz** | **53.20** | **305** | P | **P** | **05 47 50.6** | **-0.3** |
| DBIC | **Dimbokro** comp=Z,1.7nm,0.5s,baz=191,slow=5.5,SNR=4.1 | **67.89** | **22** | P | **P** | **05 49 30.3** | **0.0** |
| DBIC | **Dimbokro** comp=Z,1.1nm,1.3s | **67.89** | **22** | IAmb | IAmb | 05 49 36.4 | |
| TORD | **Torodi Ar. Bea** comp=Z,2.7nm,0.5s,baz=200,slow=6.3,SNR=36 | **75.56** | **27** | P | **P** | **05 50 16.8** | **+0.4** |
| TORD | **Torodi Ar. Bea** | **75.56** | **27** | PKP | **PKPdf** | **05 50 16.7** | **+0.4** |
| YKA | **Yellowknife Ar** comp=Z,0.2nm,0.4s,baz=130,slow=2.6,SNR=8.3 | **139.36** | **315** | PKP | **PKPdf** | **05 57 57.6** | **+0.2** |
| INK | **Inuvik** baz=122,slow=3.6 | **149.06** | **317** | PKPbc | **PKPbc** | **05 58 18.5** | **+0.3** |
| SONM | **Songino Array** comp=Z,0.9nm,0.4s,baz=217,slow=4.0,SNR=8.7 | **149.76** | **91** | PKPbc | **PKPbc** | **05 58 20.3** | **-0.5** |
| ILAR | **Eielson Array** comp=Z,2.2nm,1.1s,baz=119,slow=1.1,SNR=6.3 | **153.08** | **306** | PKPbc | **PKiKP** | **05 58 28.1** | **+0.1** |

**MAN 24 05:40:27.7,10°.97N×121°.77E,h53km,mb4.4,ML3.2, MS3.0,1C-4D,Panay**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAP** | **San Jose, Anti** | **0.28** | **143** | ⇓*i*P | Pn | 05 40 38.3 | +1.3 |
| JAP | | | | *i* S | Sn | 05 40 41.2 | -2.4 |
| **RCP** | **Roxas** | **1.12** | **58** | ⇓*e*P | Pn | 05 40 47.8 | +0.7 |
| RCP | | | | *e*S | Sn | 05 41 03.5 | +2.0 |
| **CNOP** | **Candoni, Negro** | **1.42** | **143** | ⇑*i*P | Pn | 05 40 52.4 | +1.1 |
| CNOP | | | | *e*S | Sn | 05 41 10.9 | +2.1 |
| **LLP** | **Lapu-Lapu** | **2.25** | **107** | ⇓*e*P | Pn | 05 41 03.3 | +0.7 |
| LLP | | | | *i* S | Sn | 05 41 30.2 | +1.1 |
| **TBP** | **Tagbilaran** | **2.42** | **122** | ⇓*e*P | Pn | 05 41 06.2 | +1.3 |

**TRN 24 05:57:45.4,18°.05N×61°.22W,h49km,MD3.6,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **0.66** | **235** | *e*P | Pn | 05 58 00.6 | +2.0 |
| **ANBD** | **Bethesda, Anti** | **1.12** | **207** | *e*P | Pn | 05 58 05.5 | +0.7 |
| ANBD | | | | *e*S | Sn | 05 58 20.8 | +1.7 |
| **CBE** | **Ff, Capester** | **2.01** | **191** | *e*P | Pn | 05 58 19.5 | +2.6 |
| CBE | | | | *e*S | Sn | 05 58 44.5 | +3.7 |
| **MAGL** | **Barre de l'ile** | **2.09** | **182** | *e*P | Pn | 05 58 19.4 | +1.3 |
| MAGL | | | | *e*S | Sn | 05 58 44.3 | +1.4 |
| **TBG** | **Guadaloupe-3** | **2.23** | **191** | *e*P | Pn | 05 58 21.5 | +1.7 |
| TBG | | | | *e*S | Sn | 05 58 47.4 | +1.2 |
| **TDBA** | **Terre de Bas,** | **2.23** | **190** | *e*P | Pn | 05 58 21.9 | +2.0 |
| TDBA | | | | *e*S | Sn | 05 58 47.0 | +0.9 |
| **DSLB** | **Salisbury** | **2.61** | **184** | *e*P | Pn | 05 58 26.2 | +1.1 |
| DSLB | | | | *e*S | Sn | 05 58 58.5 | +2.9 |
| **MPOM** | **Morne Pois Mar** | **3.60** | **174** | *e* | Pn | 05 58 39.2 | +0.4 |
| MPOM | | | | *e*S | Sn | 05 59 20.7 | +0.6 |

**IDC 24 06:14:33.9±2.7,54°.18N×86°.31E,h0km,mb1 2.9/2, mb1mx2.7/53,mbtmp2.9/2,ML2.5/2,Error ellipse: s-maj=20.8km s-min=11.7km az=63.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** baz=73,slow=353,SNR=11 | **0.91** | **256** | *i* | | 06 20 13.2 | |
| **ZALV** | **Zalesovo Beam** 1.8nm,0.3s,baz=78,slow=18,SNR=17 | **0.91** | **256** | Pg | Pg | 06 14 49.6 | -1.7 |
| ZALV | 3.3nm,0.3s,baz=77,slow=30,SNR=13 | | | Lg | Lg | 06 15 04.7 | |
| ZALV | 30nm,1.0s,baz=68,slow=29,SNR=6.9 | | | Rg | Rg | 06 15 08.4 | |
| KURBB | **Kurchatov Arra** 0.1nm,0.3s,baz=54,slow=13,SNR=8.1 | **5.95** | **236** | Pn | Pn | 06 16 04.2 | +1.1 |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=22,slow=12,SNR=3.1 | **7.83** | **201** | Pn | Pn | 06 16 30.2 | +1.2 |
| MKAR | 0.1nm,0.3s,baz=25,slow=28,SNR=6.8 | | | Lg | Lg | 06 18 42.9 | |

**IDC 24 06:14:38.8±4.4,12°.12S×116°.86E,h0km,mb3.3/1, mb1 3.4/4,mb1mx3.0/44,mbtmp3.2/4,ML3.4/2,Error ellipse: s-maj=257.8km s-min=28.3km az=45.0,South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** 0.3nm,0.3s,baz=312,slow=7.3,SNR=21 | **10.36** | **126** | Pn | Pn | 06 17 08.2 | -0.5 |
| FITZ | 0.2nm,0.3s,baz=204,slow=21,SNR=7.1 | | | Sn | Sn | 06 18 55.5 | -10 |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=285,slow=14,SNR=4.8 | **18.51** | **117** | P | P | 06 18 56.2 | -0.6 |
| **ASAR** | **Alice Springs** baz=316,slow=13,SNR=1.3 | **19.85** | **128** | P | Pn | 06 19 12.4 | -0.7 |
| **MKAR** | **Makanchi Array** 0.2nm,0.5s,baz=148,slow=6.5,SNR=2.3 | **66.31** | **335** | P | P | 06 25 29.0 | 0.0 |

*IDC **24** 06:36:34.6±2.2,1°.05N×127°.58E,h0km,mb3.7/3, mb1 4.0/3,mb1mx3.6/31,mbtmp3.8/3,MS3.1/3,Ms1 3.1/3, ms1mx2.5/71,Error ellipse: s-maj=190.4km s-min=24.2km az=67.0*
*DJA **24** 06:36:36.8±0.4,1°.N±3°×12°.7E±°,h10km,M3.5/5,MLv3.5/5*
**ISC 24 06:36:36.1±1.1,0°.8N±0°.2×127°.08E±0°.07,h10km,n8, σ1s02/6,mb3.8/3,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.29** | **99** | P | **Pg** | **06 36 41.9** | **-0.1** |
| TNTI | | | | S | **Sg** | **06 36 45.1** | **-0.8** |
| **GTOI** | **Gorontalo** | **4.07** | **267** | P | **Pb** | **06 37 47.1** | **-0.9** |
| **JAY** | **Jayapura** comp=Z,35nm,19.1s,baz=357,slow=38 | **14.02** | **104** | LR | LR | 06 45 07.6 | |
| **WRA** | **Warramunga Arr** 4.4nm,1.0s,baz=342,slow=11,SNR=11 | **21.83** | **161** | P | **P** | **06 41 29.6** | **+0.7** |
| **PMG** | **Port Moresby** comp=Z,48nm,19.7s,baz=352,slow=43 | **22.43** | **117** | LR | LR | 06 52 28.9 | |
| **ASAR** | **Alice Springs** 1.0nm,0.6s,baz=342,slow=9.2,SNR=12 | **25.23** | **165** | P | **P** | **06 42 03.2** | **+0.8** |
| **MKAR** | **Makanchi Array** 0.8nm,0.6s,baz=121,slow=8.5,SNR=11 | **60.14** | **326** | P | **P** | **06 46 44.7** | **+0.7** |
| **TIXI** | **Tiksi** comp=Z,21nm,20.9s,baz=185,slow=37 | **70.73** | **1** | LR | LR | 07 19 56.1 | |

**JMA 24 07:05:36.6,35°.39N×136°.85E,h41km,M3.0,2C-1D Broadband fault plane solution: P waves. NP1:** $\phi_s$129.00000°,δ52.00000°,λ174.00000°. **NP2:** $\phi_s$223.00000°,δ85.00000°,λ39.00000°. **Principal axes:** T Plg30.0000°, Azm93.0000°; N Plg51.0000°, Azm229.0000°; P Plg22.0000°, Azm349.0000°; **Western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JICN** | **Ichinomiyachia** | **0.09** | **184** | P | Pn | 07 05 43.3 | 0.0 |
| JICN | | | | S | Sn | 07 05 48.2 | +0.3 |
| **JYTA** | **Yamagatataniai** | **0.22** | **335** | ⇑P | Pn | 07 05 44.1 | -0.1 |
| JYTA | | | | S | Sn | 07 05 49.3 | -0.2 |
| **TSUJ** | **Tsu 2** | **0.77** | **208** | P | Pn | 07 05 51.1 | +0.2 |
| TSUJ | | | | S | Sn | 07 06 01.9 | +0.6 |
| **JKG** | **Kaga** | **0.98** | **335** | P | Pn | 07 05 54.2 | +0.3 |
| JKG | | | | S | Sn | 07 06 07.6 | +1.0 |
| **JIE** | **Ise** | **1.00** | **187** | ⇓P | Pn | 07 05 54.5 | +0.3 |
| JIE | | | | S | Sn | 07 06 08.0 | +0.9 |
| **SHZ3** | **Shizuoka 3** | **1.16** | **106** | P | Pn | 07 05 56.1 | -0.3 |
| **JWT** | **Wachi** | **1.19** | **265** | ⇑P | Pn | 07 05 56.6 | -0.1 |
| JWT | | | | *e*S | Sn | 07 06 11.5 | -0.2 |
| **JHE** | **Heguri** | **1.21** | **233** | P | Pn | 07 05 56.9 | -0.1 |
| JHE | | | | *e*S | Sn | 07 06 12.2 | +0.1 |
| **JKN2** | **Miekihoku** | **1.24** | **203** | P | Pn | 07 05 57.4 | -0.1 |
| **TK04** | **Tokai 4** | **1.31** | **140** | P | Pn | 07 05 58.7 | +0.4 |
| **MAT** | **Matsushiro** | **1.59** | **43** | P | Pn | 07 06 02.8 | +0.5 |
| MAT | | | | S | Sn | 07 06 22.7 | +1.0 |

*BJI **24** 07:06:52.4±0.0,36°.49N×70°.19E,h174km,mb4.3/14, mB4.6/3*
*IDC **24** 07:06:56.8±0.9,36°.35N×70°.31E,h203km±7km,mb3.8/19, mb1 3.8/25,mb1mx3.6/58,mbtmp4.3/25,Error ellipse: s-maj=13.3km s-min=9.7km az=174.0*
*MOS **24** 07:06:56.4±1.0,36°.55N×70°.39E,h199km,mb4.3/18,Error ellipse: s-maj=8.0km s-min=4.2km az=79.3*
*NEIC **24** 07:06:57.6±2.5,36°.47N±0°.07×70°.27E±0°.09,h206km±6km, mb4.4/20,Error ellipse: s-maj=9.9km s-min=9.7km az=85.0*
*NNC **24** 07:06:59.9±1.9,36°.79N×70°.39E,h196km±15km,mb3.6, mpv4.7,Error ellipse: s-maj=16.4km s-min=11.0km az=7.0*
**ISC 24 07:06:57.2±0.4,36°.44N±0°.04×70°.43E±0°.05,h204km,n239, σ1s57/251,mb4.1/35,16C-12D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.21** | **211** | PN | **Pn** | **07 07 38.3** | **-0.1** |
| **KBL** | **Kabul** | **2.21** | **211** | Pn | **Pn** | **07 07 38.3** | **-0.1** |
| **CHGR** | **Chuyangaron** | **2.43** | **336** | | **Pn** | **07 07 39.2** | **-1.4** |
| **GAR** | **Garm** | **2.56** | **358** | | **Pn** | **07 07 41.2** | **-0.8** |
| **CEP** | **Cherat** | **2.88** | **155** | P | **Pn** | **07 07 47.0** | **+1.2** |
| CEP | | | | S | **S** | **07 08 24.0** | **+0.8** |
| **CHCP** | **Chirah Chowk** | **3.62** | **139** | P | **Pn** | **07 07 56.1** | **+1.6** |
| **NIL** | **Nilore** | **3.62** | **139** | PN | **Pn** | **07 07 56.3** | **+1.8** |
| **NIL** | **Nilore** | **3.62** | **139** | Pn | **Pn** | **07 07 56.3** | **+1.8** |
| **THW** | **Thamme Wali** | **3.80** | **163** | P | **Pn** | **07 07 57.5** | **+0.8** |
| **SARP** | **Sargodha** | **4.88** | **157** | P | **Pn** | **07 08 10.5** | **+0.4** |
| **TAS** | **Tashkent** | **4.96** | **350** | PN | **Pn** | **07 08 10.7** | **-0.4** |
| **TAS** | **Tashkent** | **4.96** | **350** | Pn | **Pn** | **07 08 10.7** | **-0.4** |
| **JMU** | **Jammu** | **5.24** | **134** | *e*P | **Pn** | **07 08 16.1** | **+1.4** |
| **KSH** | **Kashi** | **5.35** | **53** | P | **Pn** | **07 08 11.8** | **-4.4** |
| KSH | | | | sP | | 07 08 45.9 | |
| KSH | | | | S | S | 07 09 05.5 | -13 |
| KSH | comp=Z,65nm,0.8s | | | pmax | pmax | | |
| KSH | comp=N,220nm,0.5s | | | smax | smax | | |
| KSH | comp=E,210nm,0.7s | | | smax | smax | | |
| **THN** | **Thein Dam** | **5.92** | **131** | *e*P | **Pn** | **07 08 24.3** | **+0.9** |
| THN | | | | *e*S | **S** | **07 09 30.3** | **-1.2** |
| **AML** | **Almayashu** SNR=384 | **6.22** | **23** | P | **Pn** | **07 08 26.9** | **-0.8** |
| **DZA** | **Taraz** | **6.48** | **6** | *e*PN | **Pn** | **07 08 29.4** | **-1.2** |
| **DZA** | **Taraz** baz=6.3 | **6.48** | **6** | *e*P | **Pn** | **07 08 29.4** | **-1.2** |
| **UCH** | **Uchtor** SNR=103 | **6.59** | **27** | P | **Pn** | **07 08 31.9** | **-0.6** |
| **KKAR** | **Karatay Array** | **6.66** | **1** | PN | **Pn** | **07 08 31.7** | **-1.2** |
| **KKAR** | **Karatay Array** | **6.66** | **1** | Pn | **Pn** | **07 08 31.7** | **-1.2** |
| **KK08** | **Karatay Array** 15nm,0.4s | **6.66** | **0** | ⇓P | **Pn** | **07 08 31.4** | **-1.5** |
| KK08 | 20nm,0.4s | | | ⇓S | **S** | **07 09 43.7** | **-5.0** |
| **EKS2** | **Erkin-Say** SNR=70 | **6.73** | **22** | P | **Pn** | **07 08 33.5** | **-0.5** |
| **AAK** | **Ala-Archa** 13nm,0.3s,baz=201,slow=7.0,SNR=142 | **6.94** | **26** | P | **Pn** | **07 08 36.3** | **-0.4** |
| AAK | 10nm,0.3s,baz=153,slow=23,SNR=12 | | | S | **S** | **07 09 51.8** | **-3.9** |
| **AAK** | **Ala-Archa** SNR=74 | **6.94** | **26** | P | **Pn** | **07 08 36.4** | **-0.4** |
| **AAK** | **Ala-Archa** | **6.94** | **26** | PN | **Pn** | **07 08 36.6** | **-0.1** |
| **AAK** | **Ala-Archa** | **6.94** | **26** | Pn | **Pn** | **07 08 36.5** | **-0.1** |
| **AAK** | **Ala-Archa** 27nm,0.5s | **6.94** | **26** | ⇑P | **Pn** | **07 08 35.6** | **-1.1** |
| AAK | 47nm,0.6s | | | ⇓S | **S** | **07 09 52.1** | **-3.5** |
| **BHK** | **Bhakra** | **7.06** | **133** | *e*P | **Pn** | **07 08 38.4** | **+0.1** |
| **KBK** | **Karagaybulak** SNR=36 | **7.12** | **28** | P | **Pn** | **07 08 38.7** | **-0.3** |
| **ULHL** | **Ulahol** SNR=26 | **7.34** | **36** | P | **Pn** | **07 08 41.1** | **-0.9** |
| **CHMS** | **Chumysh** SNR=9.7 | **7.35** | **26** | P | **Pn** | **07 08 41.8** | **-0.1** |
| **USP** | **Ospenovka** SNR=35 | **7.50** | **23** | P | **Pn** | **07 08 43.0** | **-0.9** |
| **TKM2** | **Tokmak 2** SNR=145 | **7.60** | **30** | P | **Pn** | **07 08 44.8** | **-0.5** |
| **TKM2** | **Tokmak 2** | **7.60** | **30** | PN | **Pn** | **07 08 44.4** | **-0.9** |
| TKM2 | | | | S | **S** | **07 10 07.2** | **-4.1** |
| **TKM2** | **Tokmak 2** 80nm,0.5s | **7.60** | **30** | ⇑P | **Pn** | **07 08 44.4** | **-0.9** |
| TKM2 | 27nm,0.7s | | | ⇑S | **S** | **07 10 07.3** | **-4.1** |
| **SGDS** | **Sogindy** | **7.71** | **23** | *e*PN | **Pn** | **07 08 45.0** | **-1.6** |
| **SGDS** | **Sogindy** 3.8nm,0.3s,baz=23 | **7.71** | **23** | *e*P | **Pn** | **07 08 44.6** | **-2.0** |
| **SMLA** | **Simla** | **7.71** | **131** | *e*P | **Pn** | **07 08 45.8** | **-0.9** |
| SMLA | | | | *e*S | **S** | **07 10 10.2** | **-3.7** |
| SMLA | | | | IAML | | 07 10 13.2 | |
| SMLA | comp=E,259nm,0.4s | | | IAML | | 07 10 14.7 | |
| **TARG** | **Taragay, Kyrgy** | **7.80** | **45** | Pn | **Pn** | **07 08 47.7** | **-0.3** |
| **TNSS** | **Tian-Shan** baz=35 | **8.28** | **35** | *e*P | **Pn** | **07 08 53.6** | **-0.7** |
| **AAA** | **Alma-Ata** | **8.40** | **34** | *e*PN | **Pn** | **07 08 55.0** | **-0.6** |
| **AAA** | **Alma-Ata** baz=34 | **8.40** | **34** | *e*P | **Pn** | **07 08 55.0** | **-0.6** |
| **MDOK** | **Medeo** | **8.43** | **35** | PN | **Pn** | **07 08 55.5** | **-0.5** |
| **MDOK** | **Medeo** baz=35 | **8.43** | **35** | *e*P | **Pn** | **07 08 54.8** | **-1.2** |
| **MDOK** | **Medeo** comp=N,28nm,1.0s | **8.43** | **35** | ⇑P | **Pn** | **07 08 55.6** | **-0.5** |
| **KUU** | **Kurty** | **8.71** | **29** | *e*PN | **Pn** | **07 08 57.1** | **-2.4** |
| **KUU** | **Kurty** comp=N,4.8nm,0.4s,baz=29 | **8.71** | **29** | *e*P | **Pn** | **07 08 57.2** | **-2.4** |
| **CHKK** | **Chushkaly** baz=32 | **8.94** | **32** | *e*P | **Pn** | **07 09 00.5** | **-2.1** |
| **BTLS** | **Baital** | **9.02** | **17** | *e*PN | **Pn** | **07 09 01.7** | **-1.8** |
| **BTLS** | **Baital** baz=17 | **9.02** | **17** | *e*P | **Pn** | **07 09 01.8** | **-1.8** |
| **SATY** | **Saty** | **9.02** | **40** | *e*PN | **Pn** | **07 09 02.2** | **-1.5** |
| SATY | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| **SATY** | **Saty** comp=Z,6.7nm,0.9s,baz=40 | **9.02** | **40** | *e*P | **Pn** | **07 09 02.3** | **-1.5** |
| **ZHN** | **Zhinishke** | **9.11** | **40** | *e*P | **Pn** | **07 09 03.4** | **-1.4** |
| **ZHN** | **Zhinishke** baz=40 | **9.11** | **40** | *e*P | **Pn** | **07 09 03.5** | **-1.4** |
| **UZB** | **Uzynbulak** | **9.41** | **42** | *e*P | **Pn** | **07 09 07.2** | **-1.5** |
| **UZB** | **Uzynbulak** baz=42 | **9.41** | **42** | *e*P | **Pn** | **07 09 07.3** | **-1.5** |
| **KPKS** | **Kokpek** | **9.45** | **40** | *e*P | **Pn** | **07 09 07.6** | **-1.6** |
| KPKS | comp=Z,5.0nm,0.6s | | | pmax | pmax | | |
| **KPKS** | **Kokpek** comp=Z,5.1nm,0.6s,baz=39 | **9.45** | **40** | *e*P | **Pn** | **07 09 07.7** | **-1.6** |
| **KHET** | **Khetri** | **9.50** | **150** | *e*P | **Pn** | **07 09 08.7** | **-1.2** |
| KHET | | | | *e*S | **S** | **07 10 49.7** | **-6.9** |
| **ARXS** | **Arharly** | **9.60** | **34** | *e*P | **Pn** | **07 09 09.4** | **-1.7** |
| **NDI** | **New Delhi** | **9.62** | **142** | *e*P | **Pn** | **07 09 10.6** | **-0.9** |
| NDI | | | | *e*P | P | 07 09 12.0 | -7.8 |
| NDI | | | | *e*S | S | 07 10 51.0 | -8.4 |
| NDI | | | | *e*S | S | 07 10 55.0 | -4.4 |
| **KUDL** | **Kundal** | **9.73** | **147** | *e*P | **Pn** | **07 09 11.8** | **-1.1** |
| KUDL | | | | *e*S | S | 07 10 54.5 | -7.5 |
| **AYAN** | **Aya Nagar** | **9.74** | **143** | *e*P | **Pn** | **07 09 12.8** | **-0.3** |
| AYAN | | | | *e*S | **S** | **07 10 54.8** | **-7.4** |
| **SONA** | **Sohna** | **9.92** | **144** | *e*P | **Pn** | **07 09 16.2** | **+1.0** |
| SONA | | | | *e*S | **S** | **07 10 59.3** | **-7.1** |
| **GEYT** | **Alibeck** comp=Z,0.8nm,0.3s,baz=109,slow=16,SNR=6.0 | **9.94** | **282** | P | **Pn** | **07 09 12.9** | **-2.6** |
| **AJM** | **Ajmer** | **10.56** | **159** | *e*P | **Pn** | **07 09 23.9** | **+0.2** |
| **PTH** | **Pithoragarh** | **10.71** | **127** | *e*P | **Pn** | **07 09 23.8** | **-1.9** |
| **LGTI** | **Lohaghat** | **10.79** | **127** | *e*P | **Pn** | **07 09 25.1** | **-1.5** |
| LGTI | | | | *e*S | S | 07 11 16.8 | -11 |
| **OTUK** | **Ortayu** comp=Z,8.8nm,0.9s | **11.88** | **6** | ⇑P | **Pn** | **07 09 38.5** | **-1.8** |
| **JHNI** | **Jhansi** | **12.96** | **145** | *e*P | **Pn** | **07 09 54.8** | **+0.7** |
| JHNI | | | | *e*S | S | 07 12 08.1 | -10 |
| **MAKZ** | **Makanchi** | **13.47** | **36** | P | **Pn** | **07 09 59.9** | **-0.4** |
| **MAKZ** | **Makanchi** | **13.47** | **36** | Pn | **Pn** | **07 09 59.9** | **-0.4** |
| **MAKZ** | **Makanchi** comp=Z,11nm,0.8s | **13.47** | **36** | ⇓P | **Pn** | **07 09 59.5** | **-0.8** |
| **PYUN** | **Piuthan** comp=Z,37nm,0.4s | **13.49** | **125** | *e*P | **Pn** | **07 10 01.4** | **+0.6** |
| **PYUN** | **Piuthan** comp=Z,29nm,0.4s | **13.49** | **125** | *e*P | **Pn** | **07 10 00.2** | **-0.6** |
| **PYUN** | **Piuthan** comp=Z,43nm,0.4s | **13.49** | **125** | *e*P | **Pn** | **07 10 00.5** | **-0.3** |
| **MK31** | **Makanchi Array** | **13.61** | **37** | *i* P | **Pn** | **07 10 01.4** | **-0.6** |
| **MK31** | **Makanchi Array** | **13.61** | **37** | | **Pn** | **07 10 02.1** | **+0.1** |
| **MK31** | **Makanchi Array** comp=Z,1.6nm,0.4s,baz=228,slow=10,SNR=75 | **13.61** | **37** | P | **Pn** | **07 10 01.4** | **-0.6** |
| **MKAR** | **Makanchi Array** comp=Z,0.5nm,0.3s,baz=222,slow=17,SNR=31 | **13.61** | **37** | *i* P | **Pn** | **07 10 01.9** | **-0.1** |
| MKAR | comp=Z,2.0nm,0.6s | | | pmax | pmax | | |
| **MKAR** | **Makanchi Array** | **13.61** | **37** | Pn | **Pn** | **07 10 01.5** | **-0.5** |
| **BRZS** | **Berezniki** | **13.63** | **6** | *e*P | **Pn** | **07 10 01.3** | **-0.9** |
| **BRZS** | **Berezniki** baz=6.3 | **13.63** | **6** | *e*P | **Pn** | **07 10 01.4** | **-0.9** |
| **DANN** | **Dangsing** comp=Z,9.2nm,0.2s | **13.85** | **122** | *e*P | **Pn** | **07 10 05.5** | **+0.1** |
| **DANN** | **Dangsing** comp=Z,58nm,0.4s | **13.85** | **122** | *e*P | **Pn** | **07 10 05.2** | **-0.2** |
| **KOLN** | **Koldanda** comp=Z,26nm,0.5s | **14.11** | **124** | *e*P | **Pn** | **07 10 09.0** | **+0.5** |
| **KOLN** | **Koldanda** comp=Z,22nm,0.4s | **14.11** | **124** | *e*P | **Pn** | **07 10 08.4** | **-0.1** |
| **KOLN** | **Koldanda** comp=Z,15nm,0.3s | **14.11** | **124** | *e*P | **Pn** | **07 10 08.4** | **-0.1** |
| **BHPL** | **Bhopal** | **14.48** | **153** | *e*P | **Pn** | **07 10 14.4** | **+1.4** |
| BHPL | | | | *e*S | S | 07 12 46.2 | -7.5 |
| **GKN** | **Gorkha** comp=Z,69nm,0.3s | **14.66** | **121** | *e*P | **Pn** | **07 10 15.6** | **+0.3** |
| **GKN** | **Gorkha** comp=Z,80nm,0.3s | **14.66** | **121** | *e*P | **Pn** | **07 10 15.8** | **+0.5** |
| **GKN** | **Gorkha** comp=Z,80nm,0.3s | **14.66** | **121** | *e*P | **Pn** | **07 10 15.6** | **+0.3** |
| **AB31** | **Akbulak array** | **14.92** | **332** | *e*P | **Pn** | **07 10 15.2** | **-2.8** |
| **AB31** | **Akbulak array** comp=Z,4.3nm,0.3s,baz=144,slow=10,SNR=446 | **14.92** | **332** | P | **Pn** | **07 10 15.2** | **-2.8** |
| ABKAR | **Akbulak array** | **14.92** | **332** | | **Pn** | **07 10 16.8** | **-1.2** |
| ABKAR | **Akbulak array** | **14.92** | **332** | | **Pn** | **07 10 16.6** | **-1.4** |
| **DMN** | **Daman** comp=Z,28nm,0.4s | **15.23** | **121** | *e*P | **P** | **07 10 23.3** | **+0.6** |
| **DMN** | **Daman** comp=Z,27nm,0.5s | **15.23** | **121** | *e*P | **Pn** | **07 10 23.1** | **+0.7** |
| **DMN** | **Daman** comp=Z,27nm,0.4s | **15.23** | **121** | *e*P | **Pn** | **07 10 22.5** | **+0.1** |
| **KKN** | **Kakani** comp=Z,28nm,0.3s | **15.24** | **120** | *e*P | **Pn** | **07 10 22.6** | **+0.2** |
| **KKN** | **Kakani** comp=Z,33nm,0.3s | **15.24** | **120** | *e*P | **Pn** | **07 10 22.9** | **+0.5** |
| **KKN** | **Kakani** comp=Z,30nm,0.3s | **15.24** | **

comp=Z,9.2nm,0.7s
**BRVK Borovoye 16.62 360** *de* P **Pn 07 10 38.4 0.0**
BRVK pmax pmax
comp=Z,17nm,1.3s
**BRVK Borovoye 16.62 360** P **Pn 07 10 37.5 -1.0**
BRVK lAmb lAmb 07 10 40.5
comp=Z,9.2nm,0.7s
**BRVK Borovoye 16.62 360** ⇑P **Pn 07 10 37.9 -0.5**
comp=Z,8.7nm,0.7s
**RAMN Ramite 16.68 120** *eP* **Pn 07 10 41.5 +1.7**
comp=Z,18nm,0.5s
**RAMN Ramite 16.68 120** *eP* **Pn 07 10 40.4 +0.6**
comp=Z,18nm,0.5s
**RAMN Ramite 16.68 120** *eP* **Pn 07 10 40.7 +0.9**
comp=Z,18nm,0.5s
**TAPN Taplejung 17.23 117** *eP* **Pn 07 10 47.3 +1.0**
comp=Z,36nm,0.7s
**TAPN Taplejung 17.23 117** *eP* **Pn 07 10 47.6 +1.3**
comp=Z,34nm,0.5s
**ODAN Odare 17.29 119** *eP* **Pn 07 10 48.7 +1.7**
comp=Z,47nm,0.5s
**ODAN Odare 17.29 119** *eP* **Pn 07 10 47.9 +0.9**
comp=Z,20nm,0.5s
**ODAN Odare 17.29 119** *eP* **Pn 07 10 47.9 +0.9**
comp=Z,21nm,0.4s
**DGZ Jazzator, Alta 18.11 38** *d iP* **Pn 07 10 55.9 -0.3**
DGZ pmax pmax
comp=Z,9.0nm,0.5s
**SRSP Sriramsagar 18.79 156** *eP* **P 07 11 03.0 +1.6**
**KLRI Killari 19.09 162** *eP* **P 07 11 06.5 +1.8**
**RPR Rampur 19.18 154** *eP* **P 07 11 07.6 +2.1**
**GOMU GeErMu 19.64 83** P **Pn 07 11 14.0 -0.8**
GOMU pmax pmax
comp=Z,2.0nm,0.6s
GOMU pmax pmax
comp=Z,210nm,7.7s
**ZAA0 Zalesovo Array 20.16 25** P **P 07 11 16.0 +0.3**
ZAA0 lAmb lAmb 07 11 19.6
comp=Z,12nm,0.5s
**ZAA0 Zalesovo Array 20.16 25** ⇑P **P 07 11 15.6 -0.1**
comp=Z,1.2nm,0.5s
**ZALV Zalesovo Beam 20.16 25** P **P 07 11 16.2 +0.5**
comp=Z,10nm,0.4s,baz=218,slow=12,SNR=32
**HYBB Hyderabad (bro 20.27 157** *eP* Pn 07 11 20.6 -1.6
**GNI Garni 20.47 288** P **P 07 11 18.0 -1.4**
comp=Z,12nm,0.7s,baz=70,slow=4.8,SNR=7.9
**GNI Garni 20.47 288** *c iP* **P 07 11 21.6 +2.2**
GNI pmax pmax
comp=Z,24nm,1.3s
**GNI Garni 20.47 288** P **P 07 11 19.6 +0.2**
GNI lAmb lAmb 07 11 23.3
comp=Z,18nm,0.9s
**CUPL Choutuppal 20.50 156** *eP* **P 07 11 20.8 +1.0**
**SHL Shillong 21.30 115** P **P 07 11 29.3 +1.0**
SHL pmax pmax
comp=Z,11nm,0.8s
**SHL Shillong 21.30 115** P **P 07 11 29.3 +1.0**
SHL lAmb lAmb 07 11 36.9
comp=Z,11nm,0.8s
**NJS Nagarjunasagar 21.32 156** *eP* **P 07 11 30.0 +1.7**
**ZEI Tsey 21.35 295** *eP* **P 07 11 29.8 +1.2**
ZEI pmax pmax
comp=Z,5.0nm,0.9s
**CHLP Challavanipeta 21.53 142** *eP* **P 07 11 33.3 +2.9**
**PVM Polavaram 21.54 150** *eP* **P 07 11 32.2 +1.7**
**ARU Arti 21.54 342** P **P 07 11 29.8 -0.4**
comp=Z,2.7nm,0.4s,baz=140,slow=5.6,SNR=16
**ARU Arti 21.54 342** *c iP* **P 07 11 30.4 +0.2**
ARU S **S 07 15 18.6 +3.5**
ARU pmax pmax
comp=Z,25nm,1.5s
**ARU Arti 21.54 342** P **P 07 11 30.5 +0.3**
ARU lAmb lAmb 07 11 33.0
comp=Z,11nm,0.6s
**MYLAV Mylavaram 21.60 153** *eP* **P 07 11 32.8 +1.6**
**SRLM Srisailam 21.61 157** *eP* **P 07 11 32.5 +1.1**
**ONI Oni 21.65 295** P **P 07 11 32.4 +0.9**
ONI pmax pmax
comp=Z,5.0nm,0.9s
**ONI Oni 21.65 295** P **P 07 11 32.4 +0.9**
ONI lAmb lAmb 07 11 34.6
comp=Z,4.6nm,0.9s
**ADKI Addanki 22.20 155** *eP* **P 07 11 39.0 +2.0**
**KBZ Khabaz 22.22 298** P **P 07 11 35.5 -1.4**
comp=Z,1.4nm,0.3s,baz=107,slow=7.6,SNR=6.2
**KBZ Khabaz 22.22 298** ⇓ *eP* **P 07 11 36.5 -0.4**
KBZ pmax pmax
comp=Z,4.0nm,1.1s
**RCLA Racherla 22.24 158** *eP* **P 07 11 39.0 +1.6**
**URV Uravakonda 22.26 162** *eP* **P 07 11 40.2 +2.6**
**KIV Kislovodsk 22.41 298** *eP* **P 07 11 39.3 +0.5**
KIV *eS* **S 07 15 32.9 +3.5**
KIV pmax pmax
comp=Z,6.0nm,1.0s
**BELG Belogornoye 22.65 322** P **P 07 11 40.5 -0.2**
baz=150,slow=0.5
**BELG Belogornoye 22.65 322** *ceP* **P 07 11 41.1 +0.4**
BELG pmax pmax
comp=Z,4.0nm,0.7s
**SOC Sochi 24.48 296** *eP* **P 07 11 56.0 -1.5**
SOC *e* 07 12 39.5
SOC *eS* **S 07 16 03.0 +0.5**
**RAYN Ar Rayn 25.05 246** P **P 07 12 00.8 -2.1**
RAYN pmax pmax
comp=Z,8.0nm,1.2s
**RAYN Ar Rayn 25.05 246** P **P 07 12 00.8 -2.1**
RAYN lAmb lAmb 07 12 04.7
comp=Z,8.1nm,1.2s
**KIRV Kirov 26.09 335** ⇓ *eP* **P 07 12 12.1 +0.3**
**ZAK Zakamensk 27.38 49** *eP* **P 07 12 25.4 +1.9**
ZAK *e* 07 13 08.6
ZAK pmax pmax
comp=Z,4.0nm,1.2s
ZAK pmax pmax
comp=Z,2.0nm,1.1s
**SONM Songino Array 28.75 55** P **P 07 12 36.3 +0.6**
comp=Z,1.2nm,0.6s,baz=262,slow=8.8,SNR=11
**SONM Songino Array 28.75 55** lAmb lAmb 07 12 38.5
comp=Z,1.6nm,1.0s
**BRTR Keskin Array B 29.01 288** P **P 07 12 37.6 -0.6**
comp=Z,1.0nm,0.6s,baz=98,slow=8.9,SNR=2.7
**ULN Ulaanbaatar 29.19 55** ⇑ *iP* **P 07 12 41.4 +1.8**
ULN pmax pmax
comp=Z,2.0nm,0.5s
**PRGR Permogore 29.64 336** *eP* **P 07 12 42.7 -0.5**
PRGR pmax pmax
comp=Z,11nm,0.9s
**OBN Obninsk 29.68 320** *eP* **P 07 12 43.2 -0.4**
OBN *e**PP **pP 07 13 19.7 -5.6**
OBN *e* 07 13 48.2
OBN pmax pmax
comp=Z,10.0nm,1.1s
**KLMR Klimovskoe 31.31 331** *eP* P 07 12 52.8 -5.1
KLMR pmax pmax
comp=Z,13nm,1.4s
**KLMR Klimovskoe 31.31 331** *eP* P 07 12 52.9 -5.0
KLMR AMP 07 12 54.5
comp=Z,13nm,1.4s
**AKASG Malin Array Be 32.62 309** P **P 07 13 08.9 -0.6**
comp=Z,2.0nm,0.6s,baz=82,slow=7.4,SNR=18
**AKBB Malin Array Si 32.62 309** ⇓ *eP* **P 07 13 09.1 -0.4**
**AKBB Malin Array Si 32.62 309** P **P 07 13 09.6 +0.1**
AKBB lAmb lAmb 07 13 10.3
comp=Z,2.8nm,0.6s
**NRIK Noril'sk 34.27 11** P **P 07 13 24.2 +0.8**
comp=Z,8.4nm,0.6s,baz=202,slow=5.9,SNR=11
**NRIK Noril'sk 34.27 11** *c iP* **P 07 13 24.8 +1.4**
NRIK pmax pmax
comp=Z,16nm,1.2s
**NRIK Noril'sk 34.27 11** P **P 07 13 24.3 +0.8**
NRIK lAmb lAmb 07 13 25.9
comp=Z,13nm,1.1s
**BOD Bodaibo 35.69 39** *eP* **P 07 13 36.9 +1.2**
BOD pmax pmax
comp=Z,6.0nm,1.2s
**FIA1 FINESS Array S 37.27 326** P **P 07 13 49.1 0.0**
**FINES FINESS Array B 37.28 326** P **P 07 13 49.7 +0.6**
comp=Z,5.5nm,0.6s,baz=113,slow=10,SNR=17
**FINES FINESS Array B 37.28 326** P **P 07 13 50.0 +0.9**
**FINES FINESS Array B 37.28 326** P **P 07 13 50.0 +0.9**
**LVZ Lovozero 37.34 339** P **P 07 13 49.7 +0.1**
LVZ pmax pmax
comp=Z,52nm,1.5s
**LVZ Lovozero 37.34 339** P **P 07 13 49.7 +0.1**
**KEV Kevo 40.69 338** P **P 07 14 17.7 +0.5**
KEV pmax pmax
comp=Z,29nm,1.2s
**KEV Kevo 40.69 338** P **P 07 14 17.7 +0.5**
**ARA0 ARCESS Array S 41.02 338** *eP* **P 07 14 20.4 +0.4**
**ARCES ARCESS Array B 41.02 338** P **P 07 14 20.4 +0.4**
comp=Z,5.8nm,0.6s,baz=111,slow=7.7,SNR=40
**ARCES ARCESS Array B 41.02 338** lAmb lAmb 07 14 21.3
comp=Z,9.8nm,0.8s
**KTK1 Kautokeino 41.49 336** *eP* **P 07 14 24.1 +0.4**
**HAMF Hammerfest 42.11 339** *eP* **P 07 14 29.8 +1.0**
**JETT Jettan, Norway 42.63 337** *eP* **P 07 14 34.3 +1.3**
**TRO Tromso 43.14 336** *eP* **P 07 14 37.4 +0.4**
**MOR8 Moi Rana 43.64 331** *eP* **P 07 14 40.4 -0.7**
**FAUS Fauske 43.64 333** *eP* **P 07 14 41.4 +0.3**
**STEI Steigen 43.82 333** *eP* **P 07 14 41.9 -0.5**
**NB2 NORSAR Subarra 44.15 323** P **P 07 14 45.2 -0.1**
comp=Z,1.5nm,0.6s,baz=97,slow=7.9
**NB2 NORSAR Subarra 44.15 323** P **P 07 14 45.2 -0.1**
baz=97,slow=7.9
**NOA NORSAR Array B 44.15 323** P **P 07 14 45.2 -0.1**
comp=Z,3.8nm,0.8s,baz=98,slow=7.9,SNR=10
**KONS Konsvik 44.24 331** *eP* **P 07 14 45.7 -0.1**
**YAK Yakutsk 44.28 35** P **P 07 14 46.9 +0.7**
comp=Z,14nm,0.4s,baz=53,slow=0.5,SNR=5.3
**YAK Yakutsk 44.28 35** *eP* **P 07 14 46.8 +0.6**
YAK pmax pmax
comp=Z,17nm,0.8s
**NC204 NORSAR Array S 44.39 323** P **P 07 14 47.5 +0.3**
**BJO1 Bjornoya 45.19 343** *eP* **P 07 14 54.0 +0.8**
**TJN Taejon 45.23 72** ‖ *eP* **P 07 14 56.8 +2.7**
**DOMB Dombas 45.27 324** *eP* **P 07 14 54.5 +0.4**
**HOMB Homborsund 45.36 319** *eP* **P 07 14 54.3 -0.5**
**KLR Kul'dur 45.55 54** P **P 07 14 57.6 +1.2**
comp=Z,1.2nm,0.5s,baz=268,slow=5.9,SNR=8.3
**KLR Kul'dur 45.55 54** ⇓ *eP* **P 07 14 58.0 +1.6**
KLR pmax pmax
comp=Z,7.0nm,3.1s
**TIXI Tiksi 46.00 22** P **P 07 15 00.7 +1.1**
comp=Z,5.6nm,0.3s,baz=274,slow=23,SNR=12
**TIXI Tiksi 46.00 22** *ceP* **P 07 15 00.2 +0.6**
TIXI pmax pmax
comp=Z,9.0nm,1.0s
**SPA0 Spitsbergen Ar 47.45 347** *eP* **P 07 15 11.8 +1.1**
**SPITS Spitsbergen Ar 47.45 347** P **P 07 15 12.1 +1.4**
SPITS pmax pmax
comp=Z,63nm,1.4s
**KBS Kingsbay 48.57 347** P **P 07 15 20.7 +1.4**
KBS pmax pmax
comp=Z,42nm,1.4s
**KBS Kingsbay 48.57 347** P **P 07 15 20.7 +1.4**
**BILL Bilibino 58.86 26** *eP* **P 07 16 35.6 +1.6**
BILL pmax pmax
comp=Z,2.0nm,0.9s
**SUMG Summit 60.97 341** *i* P **P 07 16 49.0 +0.3**
**TORD Torodi Ar. Bea 65.25 268** P **P 07 17 15.8 -1.5**
comp=Z,1.3nm,0.5s,baz=44,slow=5.7,SNR=8.8
TORD pP **pP 07 18 03.8 -1.1**
comp=Z,1.0nm,0.8s,baz=52,slow=6.3,SNR=3.0
**TORD Torodi Ar. Bea 65.25 268** P **P 07 17 16.0 -1.3**
**COLA College 74.66 16** ‖ *eP* **P 07 18 15.2 +1.5**
COLA pmax pmax
comp=Z,5.0nm,0.9s
**YKA Yellowknife Ar 81.32 2** P **P 07 18 51.0 +0.7**
comp=Z,1.6nm,0.6s,baz=348,slow=5.1,SNR=30
YKA pP **pP 07 19 40.2 +0.1**
comp=Z,0.7nm,0.6s,baz=350,slow=5.4,SNR=5.5
**SCHQ Schefferville 81.97 337** P **P 07 18 53.7 -0.2**
comp=Z,1.8nm,0.7s,baz=29,slow=3.1,SNR=4.9
**SCHQ Schefferville 81.97 337** lAmb lAmb 07 18 59.2
comp=Z,4.0nm,1.2s
**WRA Warramunga Arr 82.35 122** P **P 07 18 55.2 -1.2**
comp=Z,0.9nm,0.7s,baz=322,slow=4.7,SNR=7.0
**WRA Warramunga Arr 82.35 122** *i* P **P 07 18 56.0 -0.4**
WRA pmax pmax
comp=Z,1.0nm,0.7s
**ASAR Alice Springs 84.60 125** P **P 07 19 07.2 -0.6**
comp=Z,1.2nm,0.7s,baz=311,slow=4.9,SNR=17
ASAR pP **pP 07 19 58.5 -0.5**
comp=Z,0.5nm,0.7s,baz=319,slow=5.5,SNR=3.5
**PLCA Paso Flores 149.37 250** PKPbc **PKPbc 07 26 22.0 +0.2**
comp=Z,1.8nm,0.8s,baz=108,slow=2.6,SNR=4.6

*IDC **24** 07:16:18.2±2.8, 6.05N×126.56E, h67km±23km, mb3.6/13, mb1 3.7/13, mb1mx3.6/42, mbtmp3.9/13, MS3.2/4, Ms1 3.2/4, ms1mx2.6/64, Error ellipse: s-maj=54.4km s-min=14.2km az=69.0*
*NEIC **24** 07:16:20.8±1.0, 6.04N±0.10×126.4E±0.2, h89km±5km, mb4.3/7, Error ellipse: s-maj=28.9km s-min=12.5km az=74.0*
*MAN **24** 07:16:22.6, 6.23N×126.37E, h51km, mb4.5, ML3.3, MS3.1*
**ISC 24 07:16:20.2**±1.4, **5.98N**±0.07×**126.39E**±0.10, **h85**km±11km, **n33**, σ1°**44**/35, **mb4.0**/17, **2C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.97** | **352** | ⇑ *eP* | | Pn | | 07 16 35.6 | -3.6 |
| **DAV** | **Davao City (W)** | **1.35** | **323** | P | | **Pn** | | **07 16 41.8** | **-2.0** |
| DAV | 63nm,0.3s,baz=101,slow=3.5,SNR=4.8<br>191nm,0.3s,baz=243,slow=22,SNR=10 | | | S | | **Sn** | | **07 17 06.1** | **+4.4** |
| **DAV** | **Davao City (W)** | **1.35** | **323** | Pn | | **Pn** | | **07 16 44.3** | **+0.5** |
| **GSPH** | **General Santos** | **1.44** | **274** | ‖ *iP* | | **Pn** | | **07 16 43.7** | **-1.4** |
| GSPH | | | | *i* S | | **Sn** | | **07 17 04.5** | **+0.6** |
| **BIPH** | **Bislig** | **2.19** | **359** | ⇓ *eP* | | **Pn** | | **07 16 54.7** | **0.0** |
| BIPH | | | | *eS* | | **Sn** | | **07 17 18.9** | **-2.2** |
| **BUKP** | **Musuan** | **2.30** | **325** | ⇓ *eP* | | **Pn** | | **07 16 57.9** | **+1.6** |
| BUKP | | | | *eS* | | **Sn** | | **07 17 20.6** | **-3.3** |
| **CTBH** | **Cotabato--PC H** | **2.46** | **300** | ⇓ *iP* | | **Pn** | | **07 17 00.3** | **+1.9** |
| CTBH | | | | *i* S | | **Sn** | | **07 17 25.9** | **-1.8** |
| **GLSP** | **General Luna,** | **3.79** | **356** | ⇓ *eP* | | **Pn** | | **07 17 17.3** | **+1.0** |
| GLSP | | | | *i* S | | **Sn** | | **07 18 00.9** | **+1.1** |
| **TOLI2** | **Tolitoli** | **7.40** | **229** | | | **Pn** | | **07 18 05.7** | **+0.1** |
| **KNRA** | **Kununurra** | **21.65** | **174** | P | | **P** | | **07 21 04.0** | **+0.3** |
| KNRA | | | | lAmb | lAmb | | | 07 21 16.8 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.94** | **182** | P | | **P** | | **07 21 26.4** | **-0.1** |
| | comp=Z,2.1nm,0.9s,baz=200,slow=18,SNR=3.6 | | | | | | | | |
| **COEN** | **Coen** | **25.88** | **140** | P | | **P** | | **07 21 44.0** | **-0.2** |
| COEN | | | | lAmb | lAmb | | | 07 22 05.4 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **26.77** | **163** | P | | **P** | | **07 21 53.6** | **+1.4** |
| WB0 | | | | lAmb | lAmb | | | 07 21 56.8 | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.92** | **163** | P | | **P** | | **07 21 53.0** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=344,slow=10,SNR=5.9 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **27.00** | **163** | P | | **P** | | **07 21 54.6** | **+0.4** |
| WR0 | | | | lAmb | lAmb | | | 07 22 52.5 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **PSI** | **Prapat** | **27.57** | **265** | LR | | LR | | 07 35 25.2 | |
| | comp=Z,37nm,18.1s,baz=22,slow=41 | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **29.74** | **23** | LR | | LR | | 07 37 13.5 | |
| | comp=Z,33nm,18.1s,baz=256,slow=42 | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.37** | **166** | P | | **P** | | **07 22 24.3** | **+0.1** |
| | comp=Z,0.6nm,0.8s,baz=341,slow=7.0,SNR=6.3 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **07 25 23.1** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=344,slow=2.5,SNR=5.1 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.28** | **18** | LR | | LR | | 07 34 50.8 | |
| | comp=Z,31nm,19.5s,baz=134,slow=35 | | | | | | | | |
| **STKA** | **Stephens Creek** | **40.34** | **160** | LR | | LR | | 07 44 41.2 | |
| | comp=Z,59nm,19.1s,baz=29,slow=42 | | | | | | | | |
| **SONM** | **Songino Array** | **45.07** | **341** | P | | **P** | | **07 24 26.4** | **-1.4** |
| | comp=Z,1.2nm,1.1s,baz=168,slow=8.7,SNR=3.1 | | | | | | | | |
| **SONM** | **Songino Array** | **45.07** | **341** | lAmb | lAmb | | | 07 25 26.9 | |
| | comp=Z,5.9nm,1.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.53** | **325** | P | | **P** | | **07 25 47.1** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=115,slow=7.5,SNR=15 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **07 26 46.2** | **+0.6** |
| | comp=Z,0.7nm,0.8s,baz=128,slow=3.7,SNR=4.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.44** | **333** | P | | **P** | | **07 26 06.3** | **-0.7** |
| | comp=Z,0.6nm,0.4s,baz=129,slow=5.7,SNR=3.1 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.68** | **327** | P | | **P** | | **07 26 15.8** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=122,slow=7.5,SNR=16 | | | | | | | | |
| **KURK** | **Kurchatov** | **59.68** | **327** | P | | **P** | | **07 26 16.2** | **+0.6** |
| **BVAR** | **Borovoye Array** | **65.27** | **327** | P | | **P** | | **07 26 54.2** | **+1.4** |
| | comp=Z,0.7nm,0.6s,baz=64,slow=13,SNR=4.3 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.70** | **321** | P | | **P** | | **07 27 33.5** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=114,slow=7.1,SNR=4.8 | | | | | | | | |
| **ARU** | **Arti** | **72.87** | **327** | P | | **P** | | **07 27 39.7** | **0.0** |
| | comp=Z,1.6nm,0.2s,baz=204,slow=8.1,SNR=4.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.23** | **26** | P | | **P** | | **07 28 36.9** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=245,slow=5.6,SNR=9.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.23** | **340** | P | | **P** | | **07 29 00.4** | **-1.2** |
| | comp=Z,2.6nm,0.8s,baz=76,slow=5.4,SNR=4.9 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **89.94** | **321** | P | | **P** | | **07 29 09.7** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=80,slow=3.9,SNR=4.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.88** | **289** | PKP | | **PKiKP** | | **07 35 06.6** | **+0.9** |
| | comp=Z,0.6nm,0.8s,baz=59,slow=2.4,SNR=3.6 | | | | | | | | |

*SOME **24** 07:17:11.1, 43.92N×84.00E, h5km*
*NNC **24** 07:17:13.1±3.1, 43.86N×83.93E, h0km, mb2.7, mpv2.4, Error ellipse: s-maj=28.3km s-min=10.4km az=109.0*
**ISC 24 07:17:06.6**±3.5, **43.7N**±0.1×**84.1E**±0.1, **h10**km, **n7,** σ0°**98**/12, **6C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **3.19** | **282** | *eP* | | **Pg** | | **07 18 08.3** | **+0.6** |
| | 3.8nm,0.2s | | | | | | | | |
| DJR | | | | *eS* | | **Sg** | | **07 18 49.0** | **+0.1** |
| | 9.9nm,0.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.32** | **338** | ⇑Pg | | **Pg** | | **07 18 11.0** | **+0.7** |
| | 0.4nm,0.2s,baz=145,slow=17,SNR=8.9 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | | 07 18 53.3 | |
| | 0.8nm,0.3s,baz=153,slow=28,SNR=6.6 | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.40** | **265** | ⇑Pn | | **Pb** | | **07 18 06.1** | **-0.9** |
| | 0.7nm,0.7s | | | | | | | | |
| PDGK | | | | ⇑Pg | | **Pg** | | **07 18 12.2** | **+0.5** |
| | 0.6nm,0.4s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | | 07 18 56.5 | |
| | 3.7nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.43** | **334** | ⇑Pg | | **Pg** | | **07 18 12.3** | **+0.1** |
| | 0.8nm,0.7s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | | 07 18 56.9 | |
| | 1.1nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.77** | **263** | *eP* | | **Pg** | | **07 18 20.0** | **+1.3** |
| UZB | | | | *eS* | | **Sg** | | **07 19 09.2** | **+1.6** |
| **KPKS** | **Kokpek** | **3.96** | **268** | *eP* | | **Pg** | | **07 18 21.9** | **-0.6** |
| | 2.2nm,0.2s | | | | | | | | |
| KPKS | | | | *eS* | | **Sg** | | **07 19 12.5** | **-1.4** |
| | 4.1nm,0.2s | | | | | | | | |
| **ARXS** | **Arharly** | **4.57** | **278** | *eP* | | **Pg** | | **07 18 34.4** | **+0.3** |
| | 1.2nm,0.3s | | | | | | | | |
| ARXS | | | | *eS* | | **Sg** | | **07 19 33.5** | **+0.1** |
| | 4.8nm,0.4s | | | | | | | | |

*EAF **24** 07:36:03.6±0.8, 26.81S×26.83E, h10km±13km, MD3.8*
**BUL 24 07:36:03.6**±0.8, **26.81S×26.83E, h10**km±13km, **MD4.1, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LBTB** | **Lobatse** | **2.11** | **328** | *eP* | | Pn | | 07 36 38.7 | -0.4 |
| LBTB | | | | *i* S | | Sn | | 07 37 04.4 | -1.0 |
| **LBTB** | **Lobatse** | **2.11** | **328** | *eP* | | Pn | | 07 36 38.7 | -0.4 |
| LBTB | | | | *i* S | | Sn | | 07 37 04.4 | -1.0 |
| **CNG** | **Changalane** | **4.83** | **85** | *eP* | | Pn | | 07 37 16.3 | -0.1 |
| CNG | | | | *eS* | | Sn | | 07 38 08.2 | -4.2 |
| **CNG** | **Changalane** | **4.83** | **85** | *eP* | | Pn | | 07 37 16.3 | -0.1 |
| CNG | | | | *eS* | | Sn | | 07 38 08.2 | -4.2 |
| **MATP** | **Matopo** | **6.54** | **14** | *eP* | | Pn | | 07 37 38.6 | -1.5 |
| MATP | | | | *i* S | | Sn | | 07 38 49.2 | -5.7 |
| **MATP** | **Matopo** | **6.54** | **14** | *eP* | | Pn | | 07 37 38.6 | -1.5 |
| MATP | | | | *i* S | | Sn | | 07 38 49.2 | -5.7 |

*IDC **24** 07:57:35.1±4.8, 20.62S×178.84W, h588km±34km, mb3.2/4, mb1 3.4/5, mb1mx3.1/26, mbtmp4.1/5, Error ellipse: s-maj=111.6km s-min=24.6km az=139.0*
**ISC 24 07:57:36.4**±2.2, **20.4S**±0.4×**179.0W**±0.4, **h600**km, **n6,** σ1°**23**/7, **mb4.0**/4, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.83** | **314** | P | | **P** | | **07 59 00.6** | **-0.4** |
| | 4.1nm,0.3s,baz=144,slow=13,SNR=5.6 | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.95** | **244** | P | | **P** | | **08 03 56.0** | **-0.4** |
| | 1.8nm,0.5s,baz=87,slow=12,SNR=9.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **43.59** | **257** | P | | **P** | | **08 04 50.0** | **+0.7** |
| | 3.1nm,0.5s,baz=95,slow=7.8,SNR=51 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **08 06 24.0** | **+0.9** |
| | 0.5nm,0.6s,baz=94,slow=3.9,SNR=6.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.65** | **262** | P | | **P** | | **08 04 50.0** | **+0.3** |
| | 1.3nm,0.3s,baz=96,slow=7.0,SNR=24 | | | | | | | | |
| **ILAR** | **Eielson Array** | **88.45** | **13** | P | | **P** | | **08 09 26.1** | **+0.8** |
| | 0.3nm,0.4s,baz=213,slow=4.8,SNR=6.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.46** | **330** | PKP | | **PKPdf** | | **08 15 59.8** | **-2.0** |
| | 1.2nm,0.4s,baz=45,slow=4.1,SNR=13 | | | | | | | | |

*IDC **24** 08:00:57.6±2.3, 36.78N×141.02E, h0km, mb3.3/3, mb1 3.5/4, mb1mx3.3/41, mbtmp3.3/4, ML2.6/1, Error ellipse: s-maj=42.5km s-min=32.5km az=52.0*
*JMA **24** 08:01:00.8±0.1, 36.49N×140.99E, h46km±1km, M3.2 Broadband fault plane solution: P waves. NP1: ϕs208.00000°, δ11.00000°, λ108.00000°. NP2:ϕs9.00000°, δ80.00000°, λ87.00000°. Principal axes: T Plg55.0000°, Azm275.0000°; N Plg3.0000°, Azm10.0000°; P Plg35.0000°, Azm102.0000°;*
*JMA Felt I J1.*
**ISC 24 08:01:00.1**±3.3, **36.52N**±0.05×**140.98E**±0.09, **h15**km±23km, **n13,** σ0°**99**/19, **mb3.4**/3, **6D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.34** | **286** | ⇓P | | **Pn** | | **08 01 10.1** | **-0.4** |
| JHO | | | | S | | **Sn** | | **08 01 16.6** | **-0.5** |
| **JHYU** | **Hitachinakayam** | **0.36** | **240** | ⇓P | | **Pn** | | **08 01 10.2** | **-0.6** |
| JHYU | | | | S | | **Sn** | | **08 01 16.8** | **-0.8** |
| **ONAJ** | **Iwakimizuishiy** | **0.60** | **346** | ⇓P | | **Pb** | | **08 01 13.1** | **+0.8** |
| **JIHU** | **Itakohorinouch** | **0.66** | **213** | P | | **Pn** | | **08 01 14.5** | **-0.4** |
| **JYT** | **Yasato** | **0.70** | **245** | P | | **Pb** | | **08 01 14.2** | **+0.3** |
| JYT | | | | S | | **Sb** | | **08 01 23.4** | **+0.1** |
| **JFK** | **Kawauchi** | **0.85** | **355** | ⇓P | | **Pb** | | **08 01 16.4** | **-0.2** |
| **JFT** | **Otama** | **1.12** | **333** | ⇓P | | **Pb** | | **08 01 21.6** | **+0.4** |
| JFT | | | | S | | **Sn** | | **08 01 36.8** | **+0.4** |
| **JAG** | **Ashikaga** | **1.23** | **266** | ⇓P | | **Pn** | | **08 01 22.0** | **-0.8** |
| **MJAR** | **Matsushiro Arr** | **2.23** | **271** | Pn | | **Pn** | | **08 01 36.1** | **-0.4** |
| | 1.6nm,0.3s,baz=83,slow=9.5,SNR=37 | | | | | | | | |
| MJAR | | | | Sn | | **Sn** | | **08 02 05.6** | **+1.8** |
| | 0.9nm,0.3s,baz=84,slow=15,SNR=6.9 | | | | | | | | |
| **MAT** | **Matsushiro** | **2.23** | **271** | P | | **Pn** | | **08 01 37.1** | **+0.6** |
| MAT | | | | *eS* | | **Sn** | | **08 02 04.5** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **42.00** | **313** | P | | **P** | | **08 08 49.0** | **-1.5** |
| | 0.3nm,0.3s,baz=90,slow=12,SNR=3.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.09** | **302** | P | | **P** | | **08 09 06.2** | **-1.4** |
| | 0.1nm,0.4s,baz=88,slow=9.9,SNR=2.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.51** | **187** | P | | **P** | | **08 10 43.4** | **+1.7** |
| | 0.2nm,0.5s,baz=3.8,slow=7.7,SNR=1.8 | | | | | | | | |

**IDC 24 08:07:41.1**±4.3, **21.42S×175.69W, h0**km, **mb3.9**/3, **mb1 4.0**/3, **mb1mx3.5**/42, **mbtmp3.9**/3, **Error ellipse: s-maj=206.1km s-min=64.9km az=150.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **39.35** | **246** | P | | P | | 08 15 12.4 | +0.1 |
| | 0.7nm,0.4s,baz=94,slow=10,SNR=4.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **46.41** | **257** | P | | P | | 08 16 09.8 | 0.0 |
| | 1.5nm,0.7s,baz=100,slow=7.4,SNR=16 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.61** | **262** | P | | P | | 08 16 10.8 | -0.6 |
| | 0.9nm,0.7s,baz=100,slow=7.8,SNR=6.0 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.84** | **332** | PKP | | PKPbc | | 08 27 19.3 | +0.4 |
| | 0.8nm,0.4s,baz=44,slow=4.2,SNR=9.1 | | | | | | | | |

*DJA **24** 08:14:36.2±0.2, 4.3S×12.7E±1, h10km, M4.5/12, mb4.7/11, mB5.2/5, MLv4.4/12, Mw(mB)4.6/5*
*IDC **24** 08:14:37.6±2.2, 3.66S×127.44E, h45km±22km, mb3.9/7, mb1 4.2/10, mb1mx3.8/41, mbtmp4.3/10, ML4.2/3, MS2.9/5, Ms1 2.9/5, ms1mx2.6/74, Error ellipse: s-maj=20.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SANI | Sanana | 2.19 | 316 | P | | Pn | 08 15 09.8 | -2.0 |
| SIJI | Sorong | 4.65 | 54 | P | | Pn | 08 15 46.6 | +1.0 |
| | 15nm,0.3s,baz=244,slow=9.6,SNR=20 | | | | | | | |
| SIJI | | | | S | | Sn | 08 16 40.2 | +1.8 |
| | 6.2nm,0.3s,baz=261,slow=16,SNR=11 | | | | | | | |
| SIJI | | | | LR | | LR | 08 17 39.7 | |
| | comp=Z,147nm,21.0s,baz=287,slow=38 | | | | | | | |
| FAKI | Fak Fak | 4.78 | 82 | | | Pn | 08 15 49.4 | +1.9 |
| FAKI | Fak Fak | 4.78 | 82 | P | | Pn | 08 15 49.6 | +2.1 |
| KMSI | Cibinong | 5.47 | 320 | P | | Pn | 08 15 56.8 | -0.1 |
| | 2.7nm10µm194nm,0.5s | | | | | | | |
| APSI | Ampana | 6.45 | 295 | P | | Pn | 08 16 11.2 | +0.8 |
| | 0.3nm820nm97nm,0.9s | | | | | | | |
| MRSI | Marisa | 6.91 | 306 | P | | Pn | 08 16 16.9 | +0.3 |
| | 0.4nm1µm101nm,0.6s | | | | | | | |
| BSSI | Bau Bau, Buton | 7.43 | 250 | P | | Pn | 08 16 23.7 | -0.1 |
| | 0.1nm46nm,0.9s | | | | | | | |
| BKSI | Bulukumba | 7.56 | 257 | P | | Pn | 08 16 26.3 | +0.7 |
| | 0.1nm35nm,0.7s | | | | | | | |
| BATI | Baumata | 7.57 | 210 | LR | | LR | 08 18 59.2 | |
| | comp=Z,170nm,21.1s,baz=52,slow=35 | | | | | | | |
| KAPI | Kappang | 7.86 | 260 | P | | Pn | 08 16 29.2 | -0.6 |
| | 5.1nm,0.3s,baz=125,slow=3.5,SNR=28 | | | | | | | |
| KAPI | | | | LR | | LR | 08 19 41.2 | |
| | comp=Z,33nm,21.1s,baz=98,slow=39 | | | | | | | |
| KAPI | Kappang | 7.86 | 260 | | | Pn | 08 16 29.9 | +0.2 |
| MPSI | Mapaga | 8.57 | 297 | P | | Pn | 08 16 40.4 | +0.9 |
| | 17nm,0.9s | | | | | | | |
| MTN | Manton Dam | 9.83 | 159 | Pn | | Pn | 08 16 57.7 | +1.0 |
| SMPI | Sarmi | 11.30 | 82 | P | | Pn | 08 17 21.6 | +4.7 |
| KNRA | Kununurra | 12.03 | 174 | Pn | | Pn | 08 17 25.7 | -1.2 |
| JAY | Jayapura | 13.22 | 86 | LR | | LR | 08 24 37.1 | |
| | comp=Z,103nm,18.1s,baz=224,slow=45 | | | | | | | |
| FITZ | Fitzroy Crossi | 14.49 | 187 | LR | | LR | 08 23 25.2 | |
| | comp=Z,49nm,19.2s,baz=13,slow=36 | | | | | | | |
| FITZ | Fitzroy Crossi | 14.49 | 187 | Pn | | Pn | 08 18 02.5 | +2.0 |
| WB0 | Warramunga Arr | 17.39 | 158 | Pn | | Pn | 08 18 35.5 | -2.0 |
| WB0 | | | | IAmb | | IAmb | 08 18 45.0 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| WRA | Warramunga Arr | 17.53 | 158 | P | | Pn | 08 18 37.1 | -2.1 |
| | comp=Z,0.7nm,0.3s,baz=343,slow=13,SNR=15 | | | | | | | |
| WRA | Warramunga Arr | 17.53 | 158 | Pn | | Pn | 08 18 37.2 | -2.1 |
| WB2 | Warramunga Arr | 17.53 | 158 | Pn | | Pn | 08 18 37.7 | -1.6 |
| WB2 | | | | IAmb | | IAmb | 08 19 03.4 | |
| | comp=Z,9.1nm,0.7s | | | | | | | |
| WR0 | Warramunga Arr | 17.62 | 158 | Pn | | Pn | 08 18 38.5 | -1.9 |
| WR0 | | | | IAmb | | IAmb | 08 18 57.5 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| COEN | Coen | 18.55 | 125 | P | | Pn | 08 18 52.6 | +0.8 |
| COEN | | | | IAmb | | IAmb | 08 19 06.5 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| AS31 | Alice Springs | 20.85 | 163 | P | | P | 08 19 17.5 | +1.2 |
| AS31 | | | | IAmb | | IAmb | 08 19 18.6 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 20.85 | 163 | P | | P | 08 19 16.4 | +0.1 |
| | comp=Z,37nm,0.8s,baz=345,slow=11,SNR=318 | | | | | | | |
| ASAR | | | | PcP | | PcP | 08 23 22.4 | -1.6 |
| | comp=Z,0.7nm,0.8s,baz=349,slow=1.8,SNR=4.1 | | | | | | | |
| ASAR | Alice Springs | 20.85 | 163 | P | | P | 08 19 17.5 | +1.2 |
| FORT | Forrest | 27.01 | 179 | P | | P | 08 20 15.7 | -0.3 |
| BBOO | Buckleboo | 30.11 | 166 | P | | P | 08 20 43.2 | -0.5 |
| STKA | Stephens Creek | 31.06 | 156 | P | | P | 08 20 51.1 | -0.9 |
| | comp=Z,1.3nm,0.6s,baz=320,slow=6.6,SNR=3.7 | | | | | | | |
| STKA | Stephens Creek | 31.06 | 156 | IAmb | | IAmb | 08 20 52.5 | |
| | comp=Z,2.1nm,1.4s | | | | | | | |
| KSRS | Korea Array | 40.88 | 0 | P | | P | 08 22 16.6 | +0.7 |
| | comp=Z,0.9nm,0.6s,baz=182,slow=7.2,SNR=2.7 | | | | | | | |
| XAN | Xi'an | 41.37 | 336 | P | | P | 08 22 20.0 | -0.1 |
| XAN | | | | pP | | pP | 08 22 25.5 | -5.1 |
| XAN | | | | sP | | sP | 08 22 29.3 | -5.8 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| USRK | Ussuriysk Ar. | 47.78 | 4 | P | | P | 08 23 12.2 | +1.2 |
| | comp=Z,2.3nm,0.7s,baz=163,slow=5.1,SNR=1.9 | | | | | | | |
| SONM | Songino Array | 54.50 | 343 | P | | P | 08 24 00.4 | -1.2 |
| | comp=Z,1.5nm,1.0s,baz=150,slow=5.8,SNR=7.2 | | | | | | | |
| SONM | Songino Array | 54.50 | 343 | IAmb | | IAmb | 08 24 02.6 | |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| KSH | Kashi | 63.88 | 318 | P | | P | 08 25 07.6 | +1.0 |
| MKAR | Makanchi Array | 64.07 | 327 | P | | P | 08 25 06.3 | -1.3 |
| | comp=Z,2.8nm,0.6s,baz=118,slow=9.0,SNR=10 | | | | | | | |
| ZALV | Zalesovo Beam | 67.49 | 334 | P | | P | 08 25 27.8 | -1.6 |
| | comp=Z,1.8nm,0.7s,baz=104,slow=6.3,SNR=7.3 | | | | | | | |
| ZALV | Zalesovo Beam | 67.49 | 334 | P | | P | 08 25 27.9 | -1.5 |
| KURK | Kurchatov | 68.37 | 329 | P | | P | 08 25 34.5 | -0.5 |
| KURK | | | | IAmb | | IAmb | 08 25 35.2 | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| PLCA | Paso Flores | 132.85 | 161 | PKP | | PKiKP | 08 33 49.8 | -0.4 |
| | comp=Z,1.8nm,1.1s,baz=281,slow=5.1,SNR=4.5 | | | | | | | |
| CPUP | Villa Florida | 149.85 | 171 | PKPbc | | PKPbc | 08 34 23.3 | -1.0 |
| | comp=Z,2.7nm,1.0s,baz=192,slow=4.4,SNR=3.7 | | | | | | | |
| LPAZ | La Paz | 154.88 | 142 | PKPbc | | PKPbc | 08 34 36.4 | -0.3 |
| | comp=Z,0.6nm,0.4s,baz=5.0,slow=3.7,SNR=4.1 | | | | | | | |

*OSPL **24** 08:18:18.6±1.8, 18°.71N×69°.19W,h108km±10km,ML4.7, Fault plane solution: NP1:ϕs148.50000°, δ40.50000°, λ64.40000°.*
*IDC **24** 08:18:19.6±0.5, 18°.61N×69°.42W,h104km±4km,mb4.1/29, mb1 4.2/33,mb1mx4.2/47,mbtmp4.5/33,MS3.1/7, Ms1 3.1/7,ms1mx2.7/77,Error ellipse: s-maj=10.3km s-min=8.2km az=73.0*
*NEIC **24** 08:18:20.5±1.3, 18°.73N±0°.07×69°.42W±0°.05,h102km±5km, mb4.6/158,Error ellipse: s-maj=11.0km s-min=6.0km az=201.0*
*JSN **24** 08:19:49.3±0.5, 18°.38N×76°.30W,h10km±35km*
**ISC 24 08:18:19.8±0.4, 18°.69N±0°.04×69°.44W±0°.03, h103km±4km, h104km:pP-P,n485,c1947/456,mb4.6/99,3C-9D,**
**Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SDD | Santo Domingo | 0.50 | 243 | | | Pn | 08 18 36.0 | 0.0 |
| SDD | | | | Sn | | Sn | 08 18 47.6 | -0.5 |
| SDD | Santo Domingo | 0.50 | 243 | ASPG | | | 08 18 35.5 | |
| | comp=Z,5µm,0.3s | | | | | | | |
| SDD | | | | ⇑*i*P | | Pn | 08 18 35.9 | 0.0 |
| SDD | | | | ATPG | | | 08 18 37.6 | |
| | comp=Z,16µm,0.3s | | | | | | | |
| SDD | | | | ASSG | | | 08 18 47.1 | |
| | comp=Z,40µm,0.3s | | | | | | | |
| SDD | | | | *e*S | | Sn | 08 18 47.5 | -0.5 |
| SDD | | | | ATSG | | | 08 18 48.2 | |
| | comp=Z,107µm,0.3s | | | | | | | |
| LONA1 | Toro Cenizo, N | 0.80 | 330 | *i* P | | Pn | 08 18 38.4 | 0.0 |
| LONA1 | | | | *e*S | | Sn | 08 18 52.6 | +0.2 |
| LONA1 | | | | IAML | | | 08 18 56.4 | |
| | comp=Z,16µm,0.4s | | | | | | | |
| BANI | BANI | 0.92 | 251 | ⇓*i*P | | Pn | 08 18 27.1 | -13 |
| PCDR | Punta Cana, DR | 1.02 | 100 | | | Pn | 08 18 41.0 | +0.4 |
| PCDR | | | | Sn | | Sn | 08 18 56.9 | +0.5 |
| SC01 | Santiago de lo | 1.42 | 301 | | | Pn | 08 18 46.0 | +0.8 |
| SC01 | | | | Sn | | Sn | 08 19 05.1 | +0.5 |
| SC01 | Santiago de lo | 1.42 | 301 | ⇓*i*P | | Pn | 08 18 46.1 | +0.8 |
| SC01 | | | | *e*S | | Sn | 08 19 06.5 | +1.9 |
| SC01 | | | | IAML | | | 08 19 07.1 | |
| | comp=Z,7µm,1.3s | | | | | | | |
| SDDR | Presa de Saban | 1.77 | 280 | | | Pn | 08 18 50.5 | +0.9 |
| SDDR | Presa de Saban | 1.77 | 280 | *e*P | | Pn | 08 18 50.9 | +1.2 |
| SDDR | Presa de Saban | 1.77 | 280 | *e*P | | Pn | 08 18 50.7 | +1.0 |
| SDDR | | | | *e*S | | Sn | 08 19 13.8 | +1.5 |
| SDDR | Presa de Saban | 1.77 | 280 | ⇓*i*P | | Pn | 08 18 50.7 | +1.0 |
| SDDR | | | | *e*S | | Sn | 08 19 13.9 | +1.5 |
| SDDR | | | | IAML | | | 08 19 20.2 | |
| | comp=Z,4µm,0.5s | | | | | | | |
| LONE2 | Loma La Sidra | 1.93 | 266 | ⇓*i*P | | Pn | 08 18 52.4 | +0.7 |
| LONE2 | | | | *e*S | | Sn | 08 19 17.3 | +1.2 |
| LONE2 | | | | IAML | | | 08 19 21.8 | |
| | comp=Z,3µm,0.5s | | | | | | | |
| LOPP1 | Punta Rusia, P | 2.02 | 305 | *i* P | | Pn | 08 18 52.9 | +0.1 |
| LOPP1 | | | | IAML | | | 08 19 28.0 | |
| | comp=Z,8µm,0.5s | | | | | | | |
| PRSN | Puerto Rico Se | 2.23 | 102 | | | Pn | 08 18 56.9 | +1.4 |
| LODA1 | ITESIL, Dajabo | 2.30 | 292 | *i* P | | Pn | 08 18 56.2 | -0.2 |
| LODA1 | | | | *e*S | | Sn | 08 19 24.1 | -0.3 |
| LODA1 | | | | IAML | | | 08 19 27.6 | |
| | comp=Z,4µm,0.5s | | | | | | | |
| CRPR | Cabo Rojo, PR | 2.32 | 107 | | | Pn | 08 18 57.2 | +0.6 |
| MLPR | Magueyes Islan | 2.39 | 107 | Pn | | Pn | 08 18 57.3 | -0.2 |
| AOPR | Arecibo Observ | 2.57 | 97 | | | Pn | 08 18 59.9 | -0.1 |
| AOPR | Arecibo Observ | 2.57 | 97 | *e*P | | Pn | 08 19 02.0 | +2.0 |
| AOPR | | | | *e*S | | Sn | 08 19 35.3 | +4.4 |
| NQUSE | US Embassy, Po | 2.66 | 268 | | | Pn | 08 19 02.3 | +1.1 |
| PAPH | Port-au-Prince | 2.71 | 267 | ⇓*i*P | | Pn | 08 19 02.6 | +0.8 |
| PAPH | | | | *e*S | | Sn | 08 19 36.3 | +2.1 |
| PAPH | | | | IAML | | | 08 19 41.2 | |
| | comp=Z,693nm,0.5s | | | | | | | |
| OBIP | Obispado Ponce | 2.77 | 103 | | | Pn | 08 19 02.6 | 0.0 |
| EMPR | Esperanza - Ma | 2.77 | 94 | | | Pn | 08 19 02.7 | +0.2 |
| CELP | Cerrillos | 2.79 | 102 | | | Pn | 08 19 03.5 | +0.7 |
| ICMP | Isla Caja de M | 2.88 | 106 | Pn | | Pn | 08 19 04.7 | +0.7 |
| JAKH | Jacmel | 2.95 | 262 | Pn | | Pn | 08 19 05.7 | +0.7 |
| JAKH | Jacmel | 2.95 | 262 | ⇓*i*P | | Pn | 08 19 05.7 | +0.7 |
| JAKH | | | | *e*S | | Sn | 08 19 40.7 | +0.9 |
| JAKH | | | | IAML | | | 08 19 51.5 | |
| | comp=Z,394nm,0.7s | | | | | | | |
| LGNH | Logne | 3.01 | 267 | | | Pn | 08 19 06.3 | +0.6 |
| LGNH | Logne | 3.01 | 267 | *i* P | | Pn | 08 19 06.6 | +0.9 |
| SJG | San Juan | 3.18 | 100 | P | | Pn | 08 19 08.3 | +0.3 |
| | comp=Z,392nm,0.3s,baz=301,slow=7.6,SNR=198 | | | | | | | |
| SJG | | | | S | | Sn | 08 19 47.6 | +2.4 |
| | comp=Z,453nm,0.3s,baz=103,slow=22,SNR=17 | | | | | | | |
| SJG | San Juan | 3.18 | 100 | *e*P | | Pn | 08 19 10.0 | +2.0 |
| SJG | San Juan | 3.18 | 100 | *e*P | | Pn | 08 19 09.5 | +1.5 |
| SJG | | | | *e*S | | Sn | 08 19 48.9 | +3.7 |
| GCPR | Guaynabo City | 3.21 | 96 | | | Pn | 08 19 08.0 | -0.4 |
| GRTK | Grand Turk | 3.23 | 331 | *i* P | | Pn | 08 19 07.1 | -1.6 |
| GRTK | | | | *e*S | | Sn | 08 19 42.5 | -3.8 |
| GRTK | | | | IAML | | | 08 19 44.1 | |
| | comp=Z,1µm,0.7s | | | | | | | |
| PDPR | Patillas Dam, | 3.32 | 101 | Pn | | Pn | 08 19 10.4 | +0.6 |
| CBYP | Canovanas | 3.43 | 96 | | | Pn | 08 19 10.9 | -0.5 |
| HUMP | Col San Antoni | 3.45 | 99 | | | Pn | 08 19 11.4 | -0.3 |
| MTP | Monte Pirata | 3.74 | 98 | Pn | | Pn | 08 19 15.5 | 0.0 |
| CUPR | Culebra, Puert | 3.97 | 95 | Pn | | Pn | 08 19 17.3 | -1.3 |
| STVI | Saint Thomas | 4.27 | 94 | Pn | | Pn | 08 19 21.3 | -1.4 |
| MASC | Masc | 4.75 | 289 | *e*P | | Pn | 08 19 25.6 | -3.6 |
| MASC | | | | *e*S | | Sn | 08 20 17.3 | -5.9 |
| MASC | | | | IAML | | | 08 20 20.6 | |
| | comp=N,208nm,0.4s | | | | | | | |
| MASC | | | | IAML | | | 08 20 21.0 | |
| | comp=E,305nm,0.4s | | | | | | | |
| GTBY | Guantanamo Bay | 5.49 | 284 | Pn | | Pn | 08 19 36.5 | -2.7 |
| GTBY | Guantanamo Bay | 5.49 | 284 | *i* P | | Pn | 08 19 36.7 | -2.5 |
| GTBY | | | | *e*S | | Sn | 08 20 36.4 | -4.7 |
| MOAC | Moa | 5.56 | 292 | *e*P | | Pn | 08 19 35.6 | -4.5 |
| MOAC | | | | *e*S | | Sn | 08 20 36.2 | -6.4 |
| RCC | Rio Carpintero | 6.04 | 283 | *e*P | | Pn | 08 19 43.2 | -3.5 |
| RCC | | | | *e*S | | Sn | 08 20 49.1 | -5.5 |
| SMRT | St. Maarten | 6.08 | 95 | Pn | | Pn | 08 19 45.5 | -1.7 |
| CMJ | Castle Mountai | 6.60 | 266 | ⇑*i*P | | Pn | 08 19 54.4 | +0.1 |
| HLGC | Holguin | 6.60 | 290 | *e*P | | Pn | 08 19 52.0 | -2.4 |
| HLGC | | | | *e*S | | Sn | 08 21 05.1 | -3.1 |
| GWJ | Greenwich | 6.95 | 266 | ⇓*i*P | | Pn | 08 19 59.3 | +0.2 |
| HOJ | Hope | 6.97 | 266 | ⇓*i*P | | Pn | 08 19 59.5 | +0.2 |
| STH | Stony Hill | 7.02 | 266 | ⇓*i*P | | Pn | 08 19 59.6 | -0.5 |
| LMGC | Las Mercedes | 7.27 | 282 | *e*P | | Pn | 08 19 59.2 | -4.1 |
| LMGC | | | | *e*S | | Sn | 08 21 17.2 | -7.1 |
| ANWB | Willy Bob | 7.35 | 97 | *e*P | | Pn | 08 20 01.2 | -3.3 |
| ANWB | Willy Bob | 7.35 | 97 | *e*S | | Sn | 08 21 19.8 | -6.5 |
| ANBD | Bethesda, Anti | 7.49 | 101 | *e*P | | Pn | 08 20 04.5 | -1.9 |
| ANBD | Bethesda, Anti | 7.49 | 101 | *e*S | | Sn | 08 21 22.6 | -7.2 |
| MTDJ | Mount Denham | 7.69 | 268 | Pn | | Pn | 08 20 10.0 | +0.8 |
| MCJ | Malvern | 7.87 | 266 | ⇑*i*P | | Pn | 08 20 13.4 | +1.8 |
| TBG | Guadaloupe-3 | 7.96 | 110 | *e*P | | Pn | 08 20 13.2 | +0.3 |
| TDBA | Terre de Bas, | 7.97 | 110 | *e*P | | Pn | 08 20 13.3 | +0.4 |
| MDCT | Cottage Hill, | 8.22 | 111 | *e*P | | Pn | 08 20 16.5 | +0.2 |
| MDCT | Cottage Hill, | 8.22 | 111 | *e*P | | Pn | 08 20 17.5 | +1.2 |
| CCCC | Cccc | 8.22 | 289 | *e*P | | Pn | 08 20 06.0 | -10 |
| CCCC | | | | *e*S | | Sn | 08 21 31.0 | -16 |
| MAGL | Barre de l'ile | 8.26 | 108 | *e*P | | Pn | 08 20 18.5 | +1.7 |
| CRJC | Cerrejon, Guaj | 8.32 | 204 | *e*P | | Pn | 08 20 17.6 | -0.1 |
| DSLB | Salisbury | 8.32 | 112 | *e*P | | Pn | 08 20 18.2 | +0.5 |
| DSLB | Salisbury | 8.32 | 112 | *e*S | | Sn | 08 21 45.4 | -4.7 |
| MDN | Morne-Daniel | 8.40 | 118 | *e*P | | Pn | 08 20 17.8 | -0.9 |
| BIRV | Birongo | 8.72 | 159 | | | Pn | 08 20 24.7 | +1.5 |
| SMRC | Santa Marta, M | 8.79 | 212 | *e*P | | Pn | 08 20 21.6 | -2.5 |
| FDF | Fort de France | 8.86 | 115 | | | Pn | 08 20 25.5 | +0.4 |
| FDF | Fort de France | 8.86 | 115 | *e*P | | Pn | 08 20 25.1 | 0.0 |
| MPOM | Morne Pois Mar | 9.25 | 116 | *e*P | | Pn | 08 20 30.6 | +0.3 |
| SLBI | Saint Lucia, B | 9.36 | 118 | *e*P | | Pn | 08 20 32.2 | +0.4 |
| SVB | Belmont | 9.54 | 123 | Pn | | Pn | 08 20 33.9 | -0.4 |
| SVB | Belmont | 9.54 | 123 | *e*P | | Pn | 08 20 34.0 | -0.3 |
| MCLT | Moule a Chique | 9.55 | 120 | *e*P | | Pn | 08 20 37.5 | +3.2 |
| SVOC | Richmond Hill, | 9.63 | 124 | *e*P | | Pn | 08 20 37.4 | +1.9 |
| LL6C | La Loma 6 Bece | 9.64 | 203 | *e*P | | Pn | 08 20 35.2 | -0.5 |
| PCRV | Puerto La Cruz | 9.66 | 151 | P | | Pn | 08 20 35.4 | -0.5 |
| | comp=E,3.8nm,0.3s,baz=0.9,slow=3.7,SNR=16 | | | | | | | |
| PLCV | Puerto La Cruz | 9.69 | 150 | | | Pn | 08 20 35.4 | -1.0 |
| SDV | Santo Domingo | 9.81 | 187 | P | | Pn | 08 20 38.8 | +0.6 |
| | comp=E,6.1nm,0.3s,baz=51,slow=5.8,SNR=40 | | | | | | | |
| SDV | | | | S | | Sn | 08 22 22.5 | -4.2 |
| | comp=E,3.0nm,0.3s,baz=1.1,slow=18,SNR=2.5 | | | | | | | |
| SDV | | | | LR | | LR | 08 24 58.0 | |
| | comp=E,44nm,19.5s,baz=5.0,slow=41 | | | | | | | |
| SDV | Santo Domingo | 9.81 | 187 | | | Pn | 08 20 39.8 | +1.6 |
| SDV | Santo Domingo | 9.81 | 187 | *e*P | | Pn | 08 20 39.8 | +1.6 |
| SDV | Santo Domingo | 9.81 | 187 | *e*P | | Pn | 08 20 40.5 | +2.4 |
| GCMP | Grenada, Carri | 9.88 | 127 | *e*P | | Pn | 08 20 38.0 | -0.9 |
| GRFF | Grenada Fort F | 9.94 | 131 | *e*P | | Pn | 08 20 39.4 | -0.3 |
| GRGR | Grenville | 9.94 | 130 | *e*P | | Pn | 08 20 39.3 | -0.4 |
| SJCC | San Jacinto, C | 10.36 | 213 | *e*P | | Pn | 08 20 43.9 | -1.6 |
| SOCO | Socopo | 10.44 | 188 | *e*P | | Pn | 08 20 47.5 | +1.0 |
| BBGH | Gun Hill | 10.99 | 119 | *e*P | | Pn | 08 20 57.7 | +3.8 |
| OCAC | Ocana | 11.05 | 200 | | | Pn | 08 20 53.6 | -1.3 |
| OCAC | Ocana | 11.05 | 200 | *e*P | | Pn | 08 20 53.5 | -1.5 |
| TRN | Trinidad (W) | 11.15 | 135 | *e*P | | Pn | 08 20 58.1 | +1.9 |
| TOSP | Speyside | 11.31 | 129 | *e* | | Pn | 08 21 01.4 | +3.1 |
| MOTC | Monteria, Cord | 11.56 | 212 | | | Pn | 08 21 02.4 | +0.8 |
| MOTC | Monteria, Cord | 11.56 | 212 | *e*P | | Pn | 08 21 02.8 | +1.2 |
| PAMC | Pamplona, Colo | 11.72 | 196 | *e*P | | Pn | 08 21 04.3 | +0.1 |
| BRRC | Barranca, Sant | 12.24 | 200 | *e*P | | Pn | 08 21 09.9 | -0.7 |
| ZARC | Zaragoza, Cauc | 12.31 | 206 | Pn | | Pn | 08 21 12.6 | +1.0 |
| ZARC | Zaragoza, Cauc | 12.31 | 206 | *e*P | | Pn | 08 21 12.7 | +1.0 |
| UREC | San Jos de Ur | 12.38 | 209 | *e*P | | Pn | 08 21 12.5 | -0.1 |
| TAMC | Tame, Arauca | 12.39 | 191 | *e*P | | Pn | 08 21 14.2 | +1.5 |
| TAMC | Tame, Arauca | 12.39 | 191 | *e*P | | Pn | 08 21 13.9 | +1.2 |
| BARC | Barichara | 12.56 | 197 | *e*P | | Pn | 08 21 15.3 | +0.2 |
| PTBC | PUERTO BERRIO, | 13.03 | 203 | *e*P | | Pn | 08 21 21.5 | +0.5 |
| RUSC | La Rusia | 13.21 | 196 | *e*P | | Pn | 08 21 24.8 | +1.0 |
| SPBC | San Pablo de B | 13.72 | 200 | *e*P | | Pn | 08 21 35.3 | +0.1 |
| HELC | Santa Helena | 13.77 | 206 | *e*P | | Pn | 08 21 31.3 | +0.3 |
| BCIP | Isla Barro Col | 13.83 | 228 | *e*P | | Pn | 08 21 30.0 | -1.5 |
| NORC | Norcasia | 14.08 | 203 | *e*P | | Pn | 08 21 35.6 | +0.9 |
| CBOC | Ciudad Bolivar | 14.27 | 208 | *e*P | | P | 08 21 40.9 | -0.5 |
| ROSC | El Rosal | 14.57 | 200 | P | | P | 08 21 44.9 | -0.1 |
| | comp=E,13nm,0.3s,baz=35,slow=21,SNR=18 | | | | | | | |
| ROSC | El Rosal | 14.57 | 200 | Pn | | Pn | 08 21 43.1 | +1.8 |
| ROSC | El Rosal | 14.57 | 200 | *e*P | | P | 08 21 47.0 | +2.0 |
| GUY2C | Guyana, Caldas | 14.58 | 204 | *e*P | | Pn | 08 21 43.6 | +2.0 |
| CHIC | Chingaza | 14.59 | 197 | *e*P | | Pn | 08 21 43.0 | +1.3 |
| PLMC | San Jos del P | 15.24 | 207 | *e*P | | P | 08 21 51.6 | -0.5 |
| ANIL | Santa Ana | 15.27 | 203 | *e*P | | P | 08 21 53.1 | +0.5 |
| ORTC | Ortega, Tolima | 15.75 | 202 | *e*P | | P | 08 21 57.9 | +0.2 |
| YOTC | Yotoco, Valle | 16.10 | 206 | *e*P | | P | 08 22 03.5 | +1.8 |
| GUVC | San Jose del G | 16.35 | 191 | *e*P | | P | 08 22 04.9 | +0.6 |
| SRBA | San Rafael, Bu | 16.45 | 237 | | | P | 08 22 05.6 | +0.1 |
| BOAB | BOACO BROADBAN | 16.81 | 251 | P | | P | 08 22 13.9 | +4.5 |
| MATN | Matagalpa | 16.86 | 253 | P | | P | 08 22 14.9 | +4.8 |
| MARP | Paez Belalcaza | 16.99 | 203 | *e*P | | P | 08 22 14.7 | +3.0 |
| MACC | Macarena, Meta | 17.00 | 195 | *e*P | | P | 08 22 12.2 | +0.7 |
| JTS | Las Juntas de | 17.17 | 243 | P | | P | 08 22 13.8 | +0.4 |
| | comp=E,1.0nm,0.3s,baz=122,slow=6.0,SNR=5.0 | | | | | | | |
| JTS | | | | LR | | LR | 08 29 13.5 | |
| | comp=E,48nm,19.9s,baz=88,slow=38 | | | | | | | |
| JTS | Las Juntas de | 17.17 | 243 | IAmb | | IAmb | 08 22 18.0 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| GARC | Garzon, Huila | 17.44 | 201 | *e*P | | Pn | 08 22 19.7 | +2.8 |
| POPC | Popayan, Colom | 17.54 | 205 | *e*P | | Pn | 08 22 20.1 | +2.0 |
| PCON | Cinco Dias | 17.63 | 204 | *e*P | | Pn | 08 22 22.8 | +3.3 |
| GR1C | Gorgona, Isla | 17.78 | 210 | *e*P | | Pn | 08 22 22.7 | +2.0 |
| SOTA | Rioblanco | 17.89 | 204 | *e*P | | Pn | 08 22 25.2 | +2.6 |
| TIGA | Tifton | 18.01 | 318 | P | | P | 08 22 22.8 | +0.2 |
| | baz=132 | | | | | | | |
| FLOC | Florencia | 18.06 | 200 | *e*P | | Pn | 08 22 26.1 | +2.0 |
| BBAC | Balboa, Cauca | 18.25 | 206 | *e*P | | Pn | 08 22 27.7 | +1.1 |
| BOAV | Boa Vista | 18.40 | 151 | *e*P | | P | 08 22 27.4 | +0.5 |
| GCUF | Volcan Galeras | 19.01 | 205 | *e*P | | Pn | 08 22 37.0 | +1.1 |
| PTLC | Puerto Leguiza | 19.14 | 197 | *e*P | | Pn | 08 22 40.1 | +3.1 |
| KMSC | Kings Mountain | 19.49 | 330 | P | | P | 08 22 39.3 | +0.6 |
| | baz=144 | | | | | | | |
| BRAL | Brewton | 20.20 | 311 | P | | P | 08 22 47.1 | +0.8 |
| | baz=124 | | | | | | | |
| CUSE | Cuicocha Este | 20.28 | 207 | *e*P | | Pn | 08 22 51.0 | +0.4 |
| APG | El Apazote | 20.45 | 263 | P | | P | 08 22 49.9 | +0.4 |
| | comp=Z,5.4nm,0.7s,baz=68,slow=4.3,SNR=9.0 | | | | | | | |
| BLA | Blacksburg | 20.82 | 335 | P | | P | 08 22 53.8 | +0.8 |
| | baz=150 | | | | | | | |
| U54A | Nelsons Funny | 20.84 | 331 | IAmb | | IAmb | 08 22 55.1 | |
| | comp=Z,40nm,1.2s | | | | | | | |
| TKL | Tuckaleechee C | 21.13 | 326 | P | | P | 08 22 57.3 | +1.0 |
| | comp=Z,3.5nm,0.6s,baz=132,slow=12,SNR=6.3 | | | | | | | |
| TKL | | | | S | | S | 08 26 44.5 | -1.1 |
| | comp=Z,20nm,0.7s,baz=184,slow=9.5,SNR=6.6 | | | | | | | |
| LRAL | Lakeview Retre | 21.25 | 316 | P | | P | 08 22 58.5 | +0.8 |
| | baz=128 | | | | | | | |
| PTGA | Pitinga | 21.43 | 153 | P | | P | 08 22 59.0 | -0.7 |
| | comp=Z,9.5nm,0.7s,baz=345,slow=14,SNR=12 | | | | | | | |
| PTGA | | | | LR | | LR | 08 31 34.6 | |
| | comp=Z,46nm,18.3s,baz=338,slow=37 | | | | | | | |
| S54A | Dingess, Becki | 21.68 | 334 | IAmb | | IAmb | 08 23 04.0 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| TZTN | Tazewell | 21.69 | 328 | P | | P | 08 23 03.0 | +0.6 |
| | baz=141 | | | | | | | |
| Z47A | Carrollton | 22.07 | 315 | P | | P | 08 23 07.4 | +1.1 |
| Z47A | | | | IAmb | | IAmb | 08 23 35.5 | |
| | comp=Z,45nm,1.5s | | | | | | | |
| Q54A | Coxs Mills | 22.51 | 336 | P | | P | 08 23 10.6 | -0.3 |
| TBTG | Tabatinga, AM | 22.74 | 181 | *e*P | | P | 08 23 12.6 | -0.7 |
| TBTG | Tabatinga, AM | 22.74 | 181 | *e*P | | P | 08 23 13.1 | -0.2 |
| MCWV | Mont Chateau | 22.75 | 339 | P | | P | 08 23 14.5 | +1.2 |
| | baz=154 | | | | | | | |
| O56A | Blue Knob Stat | 22.90 | 342 | P | | P | 08 23 15.9 | +1.1 |
| | baz=157 | | | | | | | |
| Q52A | Bidwell | 23.07 | 334 | P | | P | 08 23 15.9 | -0.4 |
| Q52A | | | | IAmb | | IAmb | 08 23 17.8 | |
| | comp=Z,23nm,0.7s | | | | | | | |
| MACA | Manacapuru-AM | 23.36 | 157 | *e*P | | P | 08 23 20.7 | +1.4 |
| P52A | Corning | 23.58 | 335 | P | | P | 08 23 22.0 | +0.9 |
| | baz=149 | | | | | | | |
| O53A | New Philadelph | 23.76 | 337 | IAmb | | IAmb | 08 23 26.1 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| O53A | New Philadelph | 23.76 | 337 | P | | P | 08 23 23.9 | +1.2 |
| | baz=151 | | | | | | | |
| WVT | Waverly | 23.77 | 321 | P | | P | 08 23 23.2 | +0.4 |
| WVT | Waverly | 23.77 | 321 | P | | P | 08 23 23.4 | +0.6 |
| | baz=132 | | | | | | | |
| O52A | Adamsville | 23.88 | 336 | IAmb | | IAmb | 08 23 27.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| N54A | Moraine State | 23.97 | 340 | P | | P | 08 23 25.9 | +1.3 |
| | baz=155 | | | | | | | |
| BINY | Binghamton | 24.09 | 348 | P | | P | 08 23 27.3 | +1.6 |
| | baz=165 | | | | | | | |
| N53A | Lisbon | 24.12 | 338 | IAmb | | IAmb | 08 23 29.7 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| M54A | Oil Creek Stat | 24.36 | 341 | P | | P | 08 23 29.4 | +1.2 |
| | baz=156 | | | | | | | |
| WCI | Wyandotte Cave | 24.39 | 326 | P | | P | 08 23 29.8 | +1.4 |
| | baz=138 | | | | | | | |
| ACSO | Alum Creek Sta | 24.43 | 334 | P | | P | 08 23 30.0 | +1.2 |
| | baz=148 | | | | | | | |
| P49A | Miami Univ. Ec | 24.62 | 331 | IAmb | | IAmb | 08 23 33.5 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| P49A | Miami Univ. Ec | 24.62 | 331 | P | | P | 08 23 32.0 | +1.5 |
| | baz=143 | | | | | | | |
| M53A | WI Miller and | 24.62 | 339 | P | | P | 08 23 31.8 | +1.2 |
| | baz=154 | | | | | | | |
| O49A | Covington | 24.97 | 332 | IAmb | | IAmb | 08 23 37.0 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| ERPA | Erie | 25.02 | 341 | P | | P | 08 23 35.2 | +1.1 |
| | baz=156 | | | | | | | |
| MALB | Monte Alegre | 25.29 | 142 | *e*P | | P | 08 23 37.4 | +0.6 |
| O48B | Farmland | 25.40 | 331 | P | | P | 08 

NBPS **Pedro II - PI** 35.87 127 *e*P P **08 25 08.8 -1.3**
SCHQ **Schefferville** 36.13 3 P P **08 25 11.3 -0.5**
comp=Z,6.7nm,0.8s,baz=197,slow=7.9,SNR=15
SCHQ **Schefferville** 36.13 3 P P **08 25 12.1 +0.3**
SCHQ IAmb IAmb 08 25 13.5
comp=Z,5.8nm,0.8s
NBMO **Morrinhos-CE** 36.27 124 *e*P P **08 25 12.1 -1.4**
AGMN **Agassiz Nation** 36.49 330 IAmb IAmb 08 25 15.5
comp=Z,4.6nm,0.6s
AGMN **Agassiz Nation** 36.49 330 P P **08 25 14.8 -0.1**
baz=135,SNR=5.2
ANMO **Albuquerque** 36.54 304 P P **08 25 16.6 +0.9**
ANMO **Albuquerque** 36.54 304 P P **08 25 17.3 +1.5**
baz=107
SDCO **Great Sand Dun** 36.71 309 P P **08 25 18.3 +1.0**
baz=111,SNR=5.8
Q24A **Divide** 36.91 311 IAmb IAmb 08 25 20.8
comp=Z,6.4nm,1.1s
Q24A **Divide** 36.91 311 P P **08 25 19.8 +0.8**
baz=113
SALV **Santo Antonio** 36.94 158 *e*P P **08 25 18.5 -0.5**
121A **Cookes Peak, D** 37.01 299 P P **08 25 21.1 +1.3**
baz=102
ISCO **Idaho Springs** 37.57 312 IAmb IAmb 08 25 26.8
comp=Z,6.9nm,0.9s
ISCO **Idaho Springs** 37.57 312 P P **08 25 25.8 +1.3**
baz=114,SNR=8.3
S22A **4UR Ranch, Cre** 37.70 308 P P **08 25 25.5 -0.1**
baz=110
ULM **Lac du Bonnet** 37.90 332 P P **08 25 27.2 +0.5**
comp=Z,2.9nm,0.7s,baz=111,slow=7.5,SNR=3.8
SLBS **Sierra La Lagu** 38.00 285 P P **08 25 28.8 +0.7**
NBPB **Pedra_Branca-C** 38.03 126 *e*P P **08 25 26.8 -1.5**
MDND **Maddock** 38.05 327 P P **08 25 28.8 +0.7**
baz=129
PHWY **Pilot Hill** 38.08 314 IAmb IAmb 08 25 30.5
comp=Z,7.6nm,1.1s
N23A **Red Feather La** 38.25 313 P P **08 25 30.7 +0.5**
baz=114
ARAG **Araguaiana, MT** 38.33 152 *e*P P **08 25 30.9 +0.1**
PP1B **Ponte de Pedra** 38.80 157 *e*P P **08 25 35.4 +0.7**
H07S1 **FLORES T-PHASE** 38.89 50 T T 09 06 17.7
SNR=28
H07S1 **FLORES T-PHASE** 38.89 50 *e*T T 09 05 51.9
H07N1 **FLORES T-PHASE** 39.06 49 T T 09 06 26.4
SNR=9.2
H07N1 **FLORES T-PHASE** 39.06 49 *e*T T 09 05 57.4
PV15 **Paradox Valley** 39.13 308 IAmb IAmb 08 25 41.0
comp=Z,12nm,1.0s
SDBA **SAO DESIDERIO** 39.25 140 *e*P P **08 25 37.3 -1.2**
K22A **Casper** 39.38 315 IAmb IAmb 08 25 41.1
comp=Z,6.4nm,0.8s
K22A **Casper** 39.38 315 P P **08 25 40.4 +0.9**
baz=116
PV11 **David Mesa, Pa** 39.41 308 IAmb IAmb 08 25 44.0
comp=Z,12nm,1.3s
TUC **Tucson** 39.46 298 P P **08 25 41.5 +1.3**
baz=100
O20A **White River Ci** 39.57 311 IAmb IAmb 08 25 44.5
comp=Z,5.9nm,0.8s
O20A **White River Ci** 39.57 311 P P **08 25 42.0 +0.9**
baz=111
NBMA **Muriti-CE** 39.82 128 *e*P P **08 25 42.1 -1.2**
BDFB **Brasilia** 40.11 147 P P **08 25 44.2 -1.5**
comp=Z,1.9nm,0.4s,baz=314,slow=15,SNR=4.4
WUAZ **Wupatki** 40.58 303 P P **08 25 50.8 +1.3**
baz=103
P18A **Preston Nutter** 40.84 309 IAmb IAmb 08 25 53.9
comp=Z,11nm,1.3s
DGMT **Dagmar** 40.88 325 P P **08 25 53.1 +1.5**
DGMT **Dagmar** 40.88 325 P P **08 25 52.9 +1.2**
baz=124,SNR=6.6
LVC **Limon Verde** 41.05 179 P P **08 25 52.2 -1.4**
comp=Z,6.9nm,0.6s,baz=22,slow=5.2,SNR=10
LVC **Limon Verde** 41.05 179 P P **08 25 52.7 -0.9**
LVC **Limon Verde** 41.05 179 *e*P P **08 25 52.4 -1.2**
LAO **LASA Array** 41.09 321 P P **08 25 54.1 +0.7**
baz=120
214A **Organ Pipe Nat** 41.10 297 P P **08 25 54.6 +0.9**
baz=98
NBPN **Ponto Novo - B** 41.15 133 *e*P P **08 25 53.3 -0.9**
P17A **Butcher Ranch,** 41.16 309 P P **08 25 55.0 +0.7**
P17A IAmb IAmb 08 25 56.4
comp=Z,7.1nm,0.7s
AQDB **Aquidauana** 41.19 160 P P **08 25 54.7 +0.4**
AQDB IAmb IAmb 08 25 56.1
comp=Z,13nm,0.8s
AQDB **Aquidauana** 41.19 160 *e*P P **08 25 54.7 +0.4**
TMUT **Trail Mountain** 41.45 309 IAmb IAmb 08 25 59.6
comp=Z,7.3nm,0.7s
BW06 **Boulder Array** 41.47 314 P P **08 25 57.6 +0.8**
baz=113
PDAR **Pinedale Array** 41.47 314 P P **08 25 57.0 +0.2**
comp=Z,1.5nm,0.5s,baz=113,slow=11,SNR=21
PDAR PcP **PcP** **08 27 52.5 -0.2**
comp=Z,1.8nm,0.6s,baz=109,slow=5.2,SNR=9.8
NBPV **Pedro Velho** 41.91 123 *e*P P **08 25 58.3 -2.1**
JLU **Jordanelle** 42.03 310 IAmb IAmb 08 26 03.4
comp=Z,5.0nm,0.6s
RLMT **Red Lodge** 42.24 318 P P **08 26 03.2 +0.2**
RLMT **Red Lodge** 42.24 318 P P **08 26 03.5 +0.5**
baz=116,SNR=20
LOHW **Long Hollow** 42.50 315 IAmb IAmb 08 26 06.8
comp=Z,6.4nm,0.6s
ITRB **Iturama** 42.50 153 *e*P P **08 26 05.4 +0.3**
SNOW **Snow King Moun** 42.55 315 IAmb IAmb 08 26 10.1
comp=Z,16nm,1.5s
REDW **Red Top Meadow** 42.57 315 IAmb IAmb 08 26 07.5
comp=Z,7.1nm,1.0s
MOOW **Moose Ponds** 42.65 315 IAmb IAmb 08 26 08.0
comp=Z,5.4nm,0.6s
H17A **Grant Village** 42.79 316 P P **08 26 08.6 +1.1**
baz=113
DUG **Dugway, Tooele** 42.90 309 P P **08 26 09.4 +1.1**
DUG **Dugway, Tooele** 42.90 309 P P **08 26 09.5 +1.1**
baz=107,SNR=6.6
GLA **Glamis** 42.94 299 P P **08 26 10.1 +1.4**
baz=98
BGU **Big Grassy Mou** 43.27 310 IAmb IAmb 08 26 12.8
comp=Z,4.8nm,0.6s
BGU pP pP 08 26 36.3 +0.9
IRM **Iron Mountain** 43.37 300 P P **08 26 13.6 +1.6**
baz=99
BC3 **Big Chuckawall** 43.55 299 P P **08 26 14.7 +1.1**
baz=98
FFC **Flin Flon** 43.70 333 P P **08 26 14.4 +0.1**
FFC pP pP **08 26 38.4 0.0**
PCMB **Pacaembu** 43.83 155 *e*P P **08 26 15.4 -0.3**
EGMT **Eagleton** 43.84 321 P P **08 26 16.6 +0.9**
EGMT IAmb IAmb 08 26 18.0
comp=Z,15nm,1.1s
EGMT **Eagleton** 43.84 321 P P **08 26 16.9 +1.2**
baz=118,SNR=5.1
FCC **Fort Churchill** 43.88 342 IAmb IAmb 08 26 16.2
comp=Z,7.2nm,0.7s
GMRC **Granite Mounta** 43.88 301 P P **08 26 17.1 +0.8**
baz=99
BOZ **Bozeman (W)** 43.95 317 IAmb IAmb 08 26 18.8
comp=Z,5.8nm,0.8s
BOZ **Bozeman (W)** 43.95 317 P P **08 26 18.0 +1.3**
baz=114,SNR=6.3
IKP **In-Ko-Pah, Jac** 43.96 298 P P **08 26 17.8 +0.9**
baz=97
BELC **Belle Mtn. Jos** 44.04 300 P P **08 26 18.8 +1.2**
baz=98
MONP2 **Monument Peak** 44.25 298 P P **08 26 20.6 +1.2**
baz=97
TPFO **Pinon Flats** 44.37 299 P P **08 26 20.8 +0.6**
baz=97
PFO **Pinyon Flats O** 44.37 299 P P **08 26 21.0 +0.8**
baz=97
HEC **Hector,Ludlow** 44.44 301 P P **08 26 21.7 +1.1**
baz=99
S11A **Rachel** 44.48 305 IAmb IAmb 08 26 24.7
comp=Z,7.8nm,1.0s
R11A **Troy Canyon, C** 44.50 306 P P **08 26 22.9 +1.6**
baz=103,SNR=7.1
BB19B **Bebedouro** 44.51 152 *e*P P **08 26 20.9 -0.3**
NBIT **Itapeh - BA** 44.61 136 *e*P P **08 26 21.4 -0.6**
TPNV **Topopah Spring** 44.73 304 P P **08 26 25.3 +2.2**
baz=101,SNR=17
BBRC **Big Bear Solar** 44.84 300 P P **08 26 25.4 +1.3**
baz=98
CMC01 **Camacan, BA** 44.87 137 *e*P P **08 26 23.1 -1.0**
GSC **Goldstone, Bar** 44.89 302 P P **08 26 25.9 +1.6**
baz=99
MURC **Murrieta** 44.98 299 P P **08 26 26.2 +1.3**
baz=97
HLID **Hailey** 45.07 313 P P **08 26 26.6 +0.9**
baz=109
FURC **Furnace Creek,** 45.13 303 P P **08 26 28.0 +2.0**
baz=100
MPMC **Manual Prospec** 45.56 302 P P **08 26 31.3 +1.6**
baz=99,SNR=5.2
GRAC **Grevenire Rang** 45.62 304 IAmb IAmb 08 26 33.4
comp=Z,10nm,0.8s
GRAC **Grapevine Rang** 45.62 304 P P **08 26 31.8 +1.8**
baz=100
LRMC **Laurel Mtn Rad** 45.63 302 P P **08 26 31.5 +1.3**
baz=98
LCH **Last Change Ra** 45.88 304 IAmb IAmb 08 26 35.1
comp=Z,8.1nm,1.2s
MSO **Missoula** 45.91 318 P P **08 26 33.0 +0.8**
baz=112
FRTB **Fartura** 46.07 154 *e*P P **08 26 33.5 0.0**
CWC **Cottonwood Cre** 46.09 303 P P **08 26 35.6 +1.8**
baz=99
CPUP **Villa Florida** 46.27 165 P P **08 26 33.4 -1.6**
comp=Z,3.0nm,0.6s,baz=3.6,slow=6.3,SNR=5.7
CPUP PcP **PcP** **08 28 08.5 -0.3**
comp=Z,1.7nm,0.6s,baz=277,slow=4.6,SNR=3.1
ISA **Isabella, Lake** 46.29 302 P P **08 26 37.2 +1.8**
baz=98
PTGB **Pitanga** 46.35 158 *e*P P **08 26 34.6 -1.1**
ARVC **Arvin** 46.51 301 P P **08 26 38.6 +1.7**
baz=97
KVN **Kaiserville** 46.58 306 IAmb IAmb 08 26 40.0
comp=Z,7.1nm,0.7s
NVAR **Mina Array Bea** 46.61 306 P P **08 26 38.7 +0.8**
comp=Z,8.4nm,0.8s,baz=87,slow=6.8,SNR=40
NVAR pP **pP** **08 27 03.5 +1.2**
comp=Z,5.5nm,1.1s,baz=113,slow=8.3,SNR=2.5
NVAR sP **sP** **08 27 14.4 +0.4**
comp=Z,3.2nm,0.8s,baz=93,slow=7.2,SNR=3.0
LHV **Little Huntoon** 46.73 305 IAmb IAmb 08 26 41.6
comp=Z,11nm,0.6s
VES **Vestal, Richgr** 46.81 302 P P **08 26 41.2 +2.0**
baz=98
RYN **Ryan** 46.82 306 IAmb IAmb 08 26 42.0
comp=Z,9.8nm,0.7s
PKM **Mcpherson Peak** 47.28 300 P P **08 26 44.6 +1.5**
baz=96
YERR **Yerington** 47.43 306 IAmb IAmb 08 26 47.1
comp=Z,12nm,0.7s
LCO **Las Campanas** 47.44 181 P P **08 26 44.3 -0.1**
WVOR **Wild Horse Val** 47.72 311 IAmb IAmb 08 26 48.3
comp=Z,9.5nm,1.2s
ACLC **CERRO LA CRUZ** 47.90 177 *i* P P **08 26 46.3 -1.5**
EDM **Edmonton** 48.31 326 IAmb IAmb 08 26 51.8
comp=Z,9.2nm,0.7s
EDM pP pP 08 27 15.7 +0.6
NEW **Newport** 48.44 319 P P **08 26 52.1 +0.3**
NEW IAmb IAmb 08 26 52.9
comp=Z,8.1nm,0.8s
NEW pP **pP** **08 27 15.9 -0.3**
NEW **Newport** 48.44 319 P P **08 26 52.0 +0.3**
baz=110,SNR=7.3
BEKR **Beckworth** 48.45 307 P P **08 26 52.5 +0.5**
AROD **Rodeo** 48.57 180 *i* P P **08 26 53.7 +0.5**
ACDV **Cuesta del Vie** 48.58 180 *i* P P **08 26 53.2 +0.2**
I07A **Izee** 48.75 313 IAmb IAmb 08 26 55.9
comp=Z,3.5nm,0.6s
APLL **PUNTA DE LOS L** 48.88 177 *i* P P **08 26 54.1 -1.1**
ACCO **Cerro Coronel** 48.99 180 *i* P P **08 26 56.2 -0.1**
AVFE **Valle Fertil** 49.10 178 *i* P P **08 26 56.2 -0.7**
CO03 **El Pedregal** 49.26 181 IAmb IAmb 08 26 58.5
comp=Z,12nm,1.1s
ITQB **Itaqui** 49.64 165 *e*P P **08 26 58.9 -2.0**
SFJD **Kangerlussuaq** 49.80 10 P P **08 27 01.7 +0.1**
comp=Z,7.0nm,0.8s,baz=166,slow=3.1,SNR=4.4
B08A **Colville Reser** 49.86 318 IAmb IAmb 08 27 04.0
comp=Z,3.7nm,0.8s
M04C **Macdoel** 49.91 309 P P **08 27 03.5 +0.4**
baz=101
ZON **Zonda** 49.95 179 *i* P P **08 27 03.3 0.0**
TCA **Tanti** 49.96 175 *i* P P **08 27 01.2 -2.2**
I05D **Terrebonne, OR** 50.09 313 P P **08 27 06.0 +1.7**
baz=104
L04D **Klamath Falls** 50.33 310 P P **08 27 07.5 +1.2**
baz=101,SNR=5.7
O02D **Mt. Diablo Mer** 50.34 307 P P **08 27 05.8 -0.5**
baz=99
J04D **Umpqua Nationa** 50.39 311 P P **08 27 07.9 +1.1**
baz=102
M02C **Callahan** 50.59 309 P P **08 27 08.1 0.0**
100
AUSP **Uspallata** 50.62 180 *i* P P **08 27 09.1 +0.4**
I04A **Tendick Farm,** 50.72 312 P P **08 27 09.7 +0.6**
baz=102
H04A **Detroit Lake** 50.76 313 IAmb IAmb 08 27 35.0
comp=Z,7.2nm,0.9s
MRA **San Martin** 50.94 176 *i* P P **08 27 09.7 -1.1**
ASAL **Salagasta** 50.99 179 *i* P P **08 27 11.2 +0.1**
H04D **Lebanon** 51.11 313 P P **08 27 12.1 +0.1**
baz=102
ARCO **CERRO ARCO** 51.24 179 *i* P P **08 27 12.9 -0.2**
I03D **Drain, OR** 51.37 311 P P **08 27 14.2 +0.4**
baz=101
AAGR **Agrelo** 51.49 179 *i* P P **08 27 14.8 -0.1**
I02E **Swisshome, OR** 51.80 312 P P **08 27 17.4 +0.4**
baz=101
RFA **San Rafael** 53.17 179 *i* P P **08 27 26.8 -0.5**
YKA **Yellowknife Ar** 53.67 336 P P **08 27 30.0 -0.5**
comp=Z,6.9nm,0.6s,baz=114,slow=7.3,SNR=96
YKA PcP **PcP** **08 28 35.7 +0.2**
comp=Z,1.7nm,0.8s,baz=113,slow=5.8,SNR=6.6
BBB **Bella Bella** 56.33 321 LR LR 08 50 50.7
comp=Z,36nm,18.1s,baz=38,slow=35
SUMG **Summit** 56.73 11 *i* P P **08 27 51.3 -1.5**
SUMG IAmb IAmb 08 27 54.2
comp=Z,6.2nm,0.7s
SUMG **Summit** 56.73 11 P P **08 27 53.1 +0.3**
LC01 **Cunco** 57.33 182 IAmb IAmb 08 27 56.5
comp=Z,7.1nm,0.7s
WRGLY **Wrigley** 57.58 334 P P **08 27 59.0 +0.6**
baz=115
PLCA **Paso Flores** 59.12 181 P P **08 28 09.3 -0.2**
comp=Z,6.2nm,0.7s,baz=358,slow=8.1,SNR=24
PLCA **Paso Flores** 59.12 181 *e*P P **08 28 07.5 -2.1**
NEEM **North Greenlan** 59.50 5 *i* P P **08 28 11.2 -0.7**
NEEM IAmb IAmb 08 28 13.0
comp=Z,7.0nm,0.7s
ESDC **Sonseca Array** 59.59 55 P P **08 28 13.6 +0.7**
comp=Z,2.8nm,0.7s,baz=270,slow=7.8,SNR=16
ESDC pP **pP** **08 28 38.7 +0.3**
comp=Z,0.7nm,0.6s,baz=269,slow=6.5,SNR=2.2
ESDC **Sonseca Array** 59.59 55 IAmb IAmb 08 28 15.1
comp=Z,1.4nm,0.8s
MMPY **Sheldon Lake,** 60.70 332 P P **08 28 20.9 +0.8**
baz=107
P33M **Teslin, Yukon** 60.79 329 P P **08 28 21.4 +0.7**
baz=104
LL02 **Futaleuf** 61.61 182 P P **08 28 25.9 -0.4**
LL02 IAmb IAmb 08 28 26.4
comp=Z,8.5nm,0.8s
SKAG **Skagway** 61.86 328 P P **08 28 28.6 +0.8**
baz=101
M31M **Drury Creek, Y** 62.00 331 P P **08 28 29.9 +1.1**
baz=103
A36M **Sachs Harbour** 62.07 343 P P **08 28 28.6 -0.5**
A36M **Sachs Harbour** 62.07 343 P P **08 28 29.4 +0.4**
baz=117,SNR=23
KOWA **Kowa** 62.55 83 P P **08 28 33.5 +0.3**
KOWA IAmb IAmb 08 28 34.6
comp=Z,5.0nm,0.7s
M30M **Minto, Yukon** 63.17 331 P P **08 28 37.3 +0.7**
baz=101
DAG **Danmarks Havn** 63.39 12 *i* P P **08 28 37.1 -0.7**
DAG IAmb IAmb 08 28 38.2
comp=Z,3.6nm,0.8s
YUK6 **Outpost Mounta** 63.61 329 P P **08 28 41.2 +1.3**
baz=99
TIC **Toumodi** 63.70 92 *e*P P **08 28 40.7 -0.1**
LIC **Lamto** 63.81 92 *e*P P **08 28 40.8 -0.8**
comp=Z,8.9nm,0.4s
YUK4 **Talbot Arm** 63.81 330 P P **08 28 41.8 +0.7**
baz=99
DBIC **Dimbokro** 63.84 92 P P **08 28 42.0 +0.2**
comp=Z,3.7nm,0.5s,baz=296,slow=6.7,SNR=8.5
EPYK **Eagle Plains** 63.95 336 P P **08 28 42.1 +0.4**
baz=103
COYC **Coyhaique** 64.00 182 P P **08 28 41.7 -0.4**
KIC **Kosan Boka** 64.04 92 *e*P P **08 28 43.0 -0.1**
comp=Z,17nm,0.3s
DAWY **Dawson** 64.60 333 P P **08 28 46.5 +0.6**
baz=100
BVCY **Beaver Creek** 65.01 331 P P **08 28 49.5 +0.9**
baz=98
EGAK **Eagle** 65.47 333 P P **08 28 52.0 +0.6**
baz=98
L27K **Beaver Creek,** 65.53 332 P P **08 28 52.7 +0.7**
baz=97
L26K **Log Cabin Wild** 66.22 331 P P **08 28 57.4 +1.0**
baz=96
NOR **Nord** 66.46 7 *i* P P **08 28 57.0 -0.6**
NOR IAmb IAmb 08 28 57.6
comp=Z,1.7nm,0.6s
J26L **Joseph Creek** 66.46 333 P P **08 28 59.3 +1.3**
baz=96
SCRK **Sand Creek** 66.59 332 P P **08 28 59.7 +0.8**
baz=95
BMRM **Bremner River** 66.64 329 P P **08 29 00.0 +0.8**
baz=94
N25K **Chitina, Valde** 66.68 330 P P **08 29 00.0 +0.6**
baz=94
RIDG **Independent Ri** 66.95 332 P P **08 29 02.3 +1.2**
baz=94
HARP **HAARP** 67.00 331 P P **08 29 01.8 +0.4**
baz=94
J25K **Salcha River,** 67.25 333 P P **08 29 03.8 +0.9**
baz=94
KLU **Klutina** 67.31 330 P P **08 29 04.0 +0.6**
baz=93
PRP **Porcupine Dome** 67.38 334 P P **08 29 04.3 +0.5**
baz=95
IL31 **Iliamna** 67.91 333 P P **08 29 06.8 -0.1**
IL31 IAmb IAmb 08 29 08.1
comp=Z,17nm,1.4s
ILAR **Eielson Array** 67.91 333 P P **08 29 07.0 0.0**
comp=Z,1.9nm,0.7s,baz=110,slow=3.8,SNR=18
ILAR pP **PcP** **08 29 33.0 +0.3**
comp=Z,0.9nm,0.6s,baz=120,slow=2.7,SNR=3.9
HDA **Harding Lake** 67.92 333 P P **08 29 07.6 +0.5**
baz=93
POKR **Poker Plat Res** 68.16 334 P P **08 29 08.8 +0.3**
baz=93
TORD **Torodi Ar. Bea** 68.25 83 P P **08 29 08.9 -1.1**
comp=Z,3.3nm,0.6s,baz=286,slow=6.2,SNR=25
TORD pP **PcP** **08 29 35.4 +0.2**
comp=Z,1.6nm,0.8s,baz=296,slow=6.4,SNR=3.7
TORD **Torodi Ar. Bea** 68.25 83 P P **08 29 09.7 -0.3**
H24K **Noodor Dome** 68.38 334 P P **08 29 10.4 +0.4**
baz=93
SML **Sawmill** 68.47 330 P P **08 29 11.6 +0.9**
baz=91
KNK **Knik Glacier** 68.52 330 P P **08 29 11.8 +0.9**
baz=90
MCK **McKinley** 68.77 332 P P **08 29 13.5 +1.1**
baz=91
I23K **Minto, Yukon-K** 68.97 334 P P **08 29 14.1 +0.5**
baz=91,SNR=6.1
TOLK **Toolik Lake Re** 69.15 337 P P **08 29 14.8 0.0**
baz=92
M22K **Willow** 69.32 330 P P **08 29 16.0 +0.3**
baz=89
NB2 **NORSAR Subarra** 69.32 31 P P **08 29 17.2 +1.3**
comp=Z,2.8nm,0.8s,baz=274,slow=6.5
NOA **NORSAR Array B** 69.32 31 P P **08 29 15.8 -0.1**
comp=Z,2.5nm,0.8s,baz=274,slow=6.4,SNR=5.4
COLD **Coldfoot** 69.35 336 P P **08 29 16.8 +0.9**
COLD IAmb IAmb 08 29 17.8
comp=Z,4.3nm,0.6s
COLD **Coldfoot** 69.35 336 P P **08 29 16.7 +0.7**
baz=91
TRF **Thorofare Moun** 69.37 332 P P **08 29 16.8 +0.5**
baz=90
MLY **Manley** 69.56 333 P P **08 29 17.6 +0.3**
baz=90
BPAW **Bear Paw Mtn.** 69.67 332 P P **08 29 18.1 +0.1**
baz=89
I21K **Tanana** 70.08 334 P P **08 29 20.7 +0.3**
baz=89
CAST **Castle Rocks** 70.18 332 P P **08 29 21.1 0.0**
baz=88
CHUM **Lake Minchumin** 70.27 332 P P **08 29 21.9 +0.4**
baz=88
H21K **Melozitna Rive** 70.41 334 P P **08 29 23.0 +0.6**
baz=88
KEST **Kesra** 70.42 58 P P **08 29 23.5 +0.4**
comp=Z,8.1nm,0.8s,baz=38,slow=3.4,SNR=5.5
KEST **Kesra** 70.42 58 P P **08 29 22.8 -0.3**
L20K **Farewell, AK** 71.05 331 P P **08 29 26.5 0.0**
baz=86
J20K **Nowinta River** 71.06 333 IAmb IAmb 08 29 26.7
comp=Z,6.6nm,0.8s
J20K **Nowinta River** 71.06 333 P P **08 29 26.2 -0.1**
baz=86
K20K **Telida** 71.08 332 P P **08 29 26.6 +0.1**
baz=86
O19K **Port Alsworth** 71.45 328 P P **08 29 29.0 +0.2**
baz=85
N19K **Bonanza Creek** 71.47 329 P P **08 29 28.8 -0.3**
baz=85
L19K **White Mountain** 71.53 330 P P **08 29 29.8 +0.5**
baz=85
A21K **Barrow** 71.54 340 P P **08 29 29.5 +0.4**
baz=86
GERES **GERESS Array B** 71.71 44 P P **08 29 30.4 -0.3**
comp=Z,1.7nm,0.9s,baz=285,slow=5.1,SNR=7.0
O18K **Koktuh Hills** 71.92 328 P P **08 29 32.5 +0.8**
baz=84
P18K **Big Mountain,** 71.98 328 P P **08 29 32.3 +0.2**
baz=84
TTA **Tatalina** 71.99 331 P P **08 29 32.0 -0.1**
baz=84
GCSA **Galena City Sc** 72.19 333 P P **08 29 33.4 +0.3**
baz=84
RDOG **Red Dog Mine** 74.12 337 P P **08 29 44.8 +0.3**
baz=80
ARCES **ARCESS Array B** 74.37 21 P P **08 29 46.2 +0.3**
comp=Z,5.5nm,0.5s,baz=294,slow=4.6,SNR=38
ARCES pP **pP** **08 30 12.6 +0.3**
comp=Z,1.9nm,0.5s,baz=288,slow=4.7,SNR=2.2
ANM **Nome** 75.82 334 P P **08 29 54.5 +0.2**
baz=76
FINES **FINESS Array B** 76.38 29 P P **08 29 57.7 +0.2**
comp=Z,5.5nm,0.6s,baz=267,slow=4.1,SNR=30
TNA **Tin City** 76.62 335 IAmb IAmb 08 30 00.9
comp=Z,10nm,1.0s
TNA **Tin City** 76.62 335 P P **08 29 59.5 +0.8**
baz=74,SNR=5.6
GAMB **Gambell** 78.70 334 P P **08 30 10.5 +0.1**
baz=71
MLR **Muntele Rosu** 80.57 45 P P **08 30 22.7 +1.7**
MLR IAmb IAmb 08 30 24.0
comp=Z,7.7nm,0.7s
AKASG **Malin Array Be** 81.08 40 P P **08 30 23.9 +0.4**
comp=Z,0.9nm,0.6s,baz=278,slow=5.5,SNR=5.0
BILL **Bilibino** 84.59 342 P P **08 30 42.1 +0.8**
BILL IAmb IAmb 08 30 43.3
comp=Z,7.8nm,0.8s
BRTR **Keskin Array B** 87.86 49 P P **08 30 58.0 -0.1**
comp=Z,3.3nm,0.8s,baz=248,slow=3.3,SNR=11
BRTR **Keskin Array B** 87.86 49 P P **08 30 57.9 -0.3**
TIXI **Tiksi** 89.02 354 P P **08 31 03.2 +0.5**
comp=Z,4.4nm,0.6s,baz=90,slow=20,SNR=7.5
TIXI **Tiksi** 89.02 354 P P **08 31 03.5 +0.8**
TIXI IAmb IAmb 08 31 04.1
comp=Z,6.3nm,0.8s
NRIK **Noril'sk** 90.68 8 P P **08 31 11.0 +0.5**
comp=Z,2.7nm,0.6s,baz=348,slow=2.0,SNR=6.1
NRIK **Noril'sk** 90.68 8 IAmb IAmb 08 31 12.0
comp=Z,3.2nm,0.7s
PZH **PanZhiHua** 134.27 11 PKP **PKPdf** **08 37 26.8 +0.5**
STKA **Stephens Creek** 149.14 239 PKPbc **PKPbc** **08 37 55.8 -0.8**
comp=Z,5.3nm,0.7s,baz=88,slow=4.5,SNR=9.7
WRA **Warramunga Arr** 157.53 263 PKP **PKPdf** **08 38 03.5 -1.2**
comp=Z,2.9nm,0.8s,baz=70,slow=1.2,SNR=15
WRA PKPab **PKPab** **08 38 35.7 -1.3**
comp=Z,0.9nm,0.5s,baz=87,slow=4.0,SNR=8.4
WRA **Warramunga Arr** 157.53 263 **PKPdf** **08 38 03.7 -1.0**
ASAR **Alice Springs** 157.69 253 PKP **PKPdf** **08 38 03.9 -1.0**
comp=Z,1.0nm,0.6s,baz=97,slow=1.2,SNR=18
ASAR PKPab **PKPab** **08 38 37.1 -0.5**
comp=Z,2.2nm,0.5s,baz=105,slow=4.5,SNR=23

*IDC **24** 08:29:19.2ₛ 3.0, 36˚54Nᵥ 71˚09E, h61ᵏᵐ±26ᵏᵐ, mb3.8/16, mb1 4.0/23, mb1mx3.7/49, mbtmp4.1/23, ML4.0/6, MS2.7/7, Ms1 2.7/7, ms1mx2.5/91, Error ellipse: s-maj=19.4km s-min=15.7km az=158.0*

*BJI **24** 08:29:21.0±0.0,36°.83N×70°.94E,h80km,mb4.1/12, mB4.6/6*
*MOS **24** 08:29:21.5±1.1,36°.72N×71°.13E,h90km,mb4.3/12,Error ellipse: s-maj=9.7km s-min=6.1km az=92.8*
*NEIC **24** 08:29:22.1±2.9,36°.73N±0°.06×71°.02E±0°.08,h78km±7km, mb4.2/11,Error ellipse: s-maj=9.1km s-min=8.2km az=81.0*
*SOME **24** 08:29:22.4,38°.13N×71°.17E,h10km,MS3.3*
*NNC **24** 08:29:23.9±2.9,36°.89N×70°.55E,h158km±41km,mb3.6, mpv4.6,Error ellipse: s-maj=27.8km s-min=14.6km az=159.0*

**ISC 24 08:29:22.7**±0.4,**36°.64N**±0°.04×**71°.03E**±0°.04,**h100**km,**n141**, σ2$**27**/147,**mb4.1**/28,**14C-11D**,**Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GAR** | **Garm** | **2.42** | **347** | | | | **Pn** | **08 29 59.6** | **-1.2** |
| **CHGR** | **Chuyangaron** | **2.50** | **324** | | | | **Pn** | **08 29 59.6** | **-2.3** |
| **KBL** | **Kabul** | **2.65** | **218** | PN | | | **Pn** | **08 30 04.8** | **+0.8** |
| **KBL** | **Kabul** | **2.65** | **218** | Pn | | | **Pn** | **08 30 04.8** | **+0.8** |
| **CEP** | **Cherat** | **2.90** | **165** | P | | | **Pn** | **08 30 07.8** | **+0.5** |
| CEP | | | | S | | | **Sn** | **08 30 43.0** | **+1.4** |
| **CHCP** | **Chirah Chowk** | **3.49** | **148** | P | | | **Pn** | **08 30 15.9** | **+0.8** |
| **NIL** | **Nilore** | **3.50** | **148** | PN | | | **Pn** | **08 30 15.9** | **+0.8** |
| **NIL** | **Nilore** | **3.50** | **148** | Pn | | | **Pn** | **08 30 15.9** | **+0.8** |
| **THW** | **Thamme Wali** | **3.88** | **171** | P | | | **Pn** | **08 30 20.5** | **+0.2** |
| **KSH** | **Kashi** | **4.84** | **52** | P | | | **Pn** | **08 30 29.8** | **-3.5** |
| KSH | | | | sP | | | | 08 30 48.4 | |
| KSH | | | | S | | | **Sn** | **08 31 20.4** | **-7.8** |
| KSH | comp=N,300nm,0.8s | | | smax | | | smax | | |
| KSH | comp=E,310nm,0.8s | | | smax | | | smax | | |
| **JMU** | **Jammu** | **5.05** | **140** | *eP* | | | **Pn** | **08 30 35.5** | **-0.5** |
| **THN** | **Thein Dam** | **5.71** | **136** | *eP* | | | **Pn** | **08 30 44.2** | **-0.8** |
| THN | | | | *eS* | | | **Sn** | **08 31 47.5** | **-1.6** |
| **CHM** | **Chimkent** 3.9nm,0.0s | **5.78** | **349** | *eP* | | | **Pn** | **08 30 44.1** | **-1.8** |
| CHM | 512nm,0.0s | | | *eS* | | | **Sn** | **08 31 47.9** | **-2.8** |
| **AML** | **Almayashu** SNR=134 | **5.86** | **20** | P | | | **Pn** | **08 30 47.1** | **-0.2** |
| **UCH** | **Uchtor** SNR=32 | **6.19** | **25** | P | | | **Pn** | **08 30 51.8** | **-0.2** |
| **DZA** | **Taraz** 42nm,0.0s | **6.25** | **2** | *eP* | | | **Pn** | **08 30 51.1** | **-1.2** |
| DZA | 334nm,0.1s | | | *eS* | | | **Sn** | **08 32 00.3** | **-1.8** |
| **MRKS** | **Merke** 58nm,0.4s | **6.32** | **15** | *eP* | | | **Pn** | **08 30 53.9** | **+0.5** |
| MRKS | 74nm,0.0s | | | *eS* | | | **Sn** | **08 32 05.2** | **+1.0** |
| **EKS2** | **Erkin-Say** SNR=37 | **6.37** | **19** | P | | | **Pn** | **08 30 54.1** | **0.0** |
| **KK06** | **Karatay Array** 22nm,0.3s | **6.46** | **357** | ⇓P | | | **Pn** | **08 30 54.0** | **-1.1** |
| KK06 | 118nm,0.7s | | | ⇑S | | | **Sn** | **08 32 05.2** | **-2.1** |
| **KKAR** | **Karatay Array** | **6.46** | **357** | PN | | | **Pn** | **08 30 53.8** | **-1.4** |
| **KKAR** | **Karatay Array** | **6.46** | **357** | Pn | | | **Pn** | **08 30 53.8** | **-1.4** |
| **AAK** | **Ala-Archa** 12nm,0.3s,baz=196,slow=5.5,SNR=122 | **6.55** | **23** | P | | | **Pn** | **08 30 55.8** | **-0.7** |
| AAK | 3.5nm,0.3s,baz=2.2,slow=22,SNR=1.8 | | | S | | | **Sn** | **08 32 10.1** | **+0.2** |
| AAK | comp=Z,63nm,21.8s,baz=210,slow=40 | | | LR | | | LR | 08 33 44.3 | |
| **AAK** | **Ala-Archa** SNR=51 | **6.55** | **23** | P | | | **Pn** | **08 30 56.9** | **+0.3** |
| **AAK** | **Ala-Archa** | **6.55** | **23** | *d* | *i* | PN | **Pn** | **08 30 56.7** | **+0.1** |
| AAK | comp=Z,30nm,0.8s | | | pmax | | | pmax | | |
| **AAK** | **Ala-Archa** | **6.55** | **23** | Pn | | | **Pn** | **08 30 56.6** | **+0.1** |
| **AAK** | **Ala-Archa** comp=Z,18nm,0.4s | **6.55** | **23** | ⇓P | | | **Pn** | **08 30 56.9** | **+0.3** |
| AAK | comp=Z,33nm,0.6s | | | ⇓S | | | **Sn** | **08 32 10.6** | **+0.7** |
| **KBK** | **Karagaybulak** SNR=10.0 | **6.72** | **25** | P | | | **Pn** | **08 30 59.5** | **+0.7** |
| **BHK** | **Bhakra** | **6.87** | **138** | *eP* | | | **Pn** | **08 30 58.4** | **-2.3** |
| **ULHL** | **Ulahol** SNR=12 | **6.89** | **34** | P | | | **Pn** | **08 31 01.4** | **+0.1** |
| **CHMS** | **Chumysh** SNR=49 | **6.96** | **23** | P | | | **Pn** | **08 31 02.0** | **0.0** |
| **USP** | **Ospenovka** SNR=17 | **7.13** | **21** | P | | | **Pn** | **08 31 03.9** | **-0.4** |
| **TKM2** | **Tokmak 2** SNR=8.4 | **7.19** | **28** | P | | | **Pn** | **08 31 05.8** | **+0.6** |
| **TKM2** | **Tokmak 2** | **7.19** | **28** | PN | | | **Pn** | **08 31 05.0** | **-0.2** |
| TKM2 | comp=Z,32nm,0.7s | | | ⇓P | | | **Pn** | 08 32 27.8 **08 31 05.0** | **-0.2** |
| TKM2 | comp=Z,14nm,0.7s | | | ⇓S | | | **Sn** | **08 32 27.8** | **+2.5** |
| **TARG** | **Taragay, Kyrgy** | **7.31** | **44** | Pn | | | **Pn** | **08 31 06.9** | **-0.2** |
| **SMLA** | **Simla** | **7.50** | **135** | *eS* | | | **Sn** | **08 32 27.1** | **-5.7** |
| SMLA | comp=E,156nm,0.4s | | | IAML | | | | 08 32 35.0 | |
| **HRA** | **Herat** | **7.51** | **255** | Pn | | | **Pn** | **08 31 09.2** | **-0.5** |
| **KHET** | **Khetri** | **9.45** | **153** | *eP* | | | **Pn** | **08 31 32.8** | **-3.1** |
| **NDI** | **New Delhi** | **9.49** | **145** | *eP* | | | **Pn** | **08 31 33.0** | **-3.5** |
| **AYAN** | **Aya Nagar** | **9.62** | **146** | *eP* | | | **Pn** | **08 31 36.0** | **-2.2** |
| **KUDL** | **Kundal** | **9.65** | **150** | *eP* | | | **Pn** | **08 31 34.9** | **-3.6** |
| **GEYT** | **Alibeck** comp=E,1.9nm,0.3s,baz=119,slow=12,SNR=12 | **10.37** | **281** | P | | | Pn | 08 31 42.6 | -5.8 |
| GEYT | comp=E,3.1nm,0.3s,baz=133,slow=30,SNR=6.9 | | | S | | | **Sn** | **08 33 35.8** | **-6.9** |
| GEYT | comp=E,62nm,20.1s,baz=150,slow=46 | | | LR | | | LR | 08 37 13.8 | |
| **GEYT** | **Alibeck** | **10.37** | **281** | Pn | | | Pn | 08 31 43.5 | -4.9 |
| **GYA0B** | **ALIBECK ARRAY** | **10.37** | **281** | Pn | | | **Pn** | **08 31 43.8** | **-4.6** |
| **GYA0B** | **ALIBECK ARRAY** | **10.37** | **281** | ⇑P | | | Pn | 08 31 43.0 | -5.4 |
| GYA0B | | | | ⇑S | | | Sn | 08 33 33.4 | -9.3 |
| **PTH** | **Pithoragarh** | **10.45** | **130** | *eP* | | | **Pn** | **08 31 45.3** | **-4.4** |
| **LGTI** | **Lohaghat** | **10.54** | **130** | *eP* | | | **Pn** | **08 31 46.8** | **-3.9** |
| **AJM** | **Ajmer** | **10.59** | **162** | *eP* | | | **Pn** | **08 31 48.7** | **-2.7** |
| **JHNI** | **Jhansi** | **12.86** | **148** | *eP* | | | **Pn** | **08 32 18.6** | **-3.2** |
| **MAKZ** | **Makanchi** | **13.02** | **35** | P | | | **Pn** | **08 32 22.3** | **-1.5** |
| **MAKZ** | **Makanchi** | **13.02** | **35** | Pn | | | **Pn** | **08 32 22.3** | **-1.5** |
| **MAKZ** | **Makanchi** comp=E,5.4nm,0.9s | **13.02** | **35** | ⇓P | | | **Pn** | **08 32 21.7** | **-2.1** |
| **MK31** | **Makanchi Array** | **13.16** | **36** | *d* | *i* | P | **Pn** | **08 32 24.7** | **-0.8** |
| **MK31** | **Makanchi Array** | **13.16** | **36** | | | | **Pn** | **08 32 24.6** | **-1.0** |
| **MK31** | **Makanchi Array** comp=E,2.3nm,0.6s,baz=224,slow=14,SNR=34 | **13.16** | **36** | P | | | **Pn** | **08 32 24.4** | **-1.0** |
| **MKAR** | **Makanchi Array** comp=E,0.3nm,0.3s,baz=226,slow=15,SNR=41 | **13.16** | **36** | P | | | **Pn** | **08 32 23.1** | **-2.4** |
| MKAR | comp=E,26nm,21.1s,baz=330,slow=35 | | | LR | | | LR | 08 37 03.6 | |
| **MKAR** | **Makanchi Array** | **13.16** | **36** | P | | | **Pn** | **08 32 24.1** | **-1.4** |
| **MKAR** | **Makanchi Array** | **13.16** | **36** | Pn | | | **Pn** | **08 32 24.1** | **-1.4** |
| **PYUN** | **Piuthan** comp=E,30nm,0.4s | **13.21** | **127** | *eP* | | | **Pn** | **08 32 22.6** | **-3.9** |
| **DANN** | **Dangsing** comp=E,18nm,0.3s | **13.54** | **124** | *eP* | | | **Pn** | **08 32 27.6** | **-3.4** |
| **KOLN** | **Koldanda** comp=E,12nm,0.4s | **13.83** | **126** | *eP* | | | **Pn** | **08 32 30.7** | **-3.8** |
| **GKN** | **Gorkha** comp=E,7.5nm,0.2s | **14.36** | **123** | *eP* | | | **Pn** | **08 32 38.6** | **-2.8** |
| **BHPL** | **Bhopal** | **14.45** | **156** | *eP* | | | **Pn** | **08 32 38.2** | **-4.3** |
| BHPL | | | | *eS* | | | Sn | 08 35 11.8 | -10 |
| **DMN** | **Daman** comp=E,5.3nm,0.4s | **14.93** | **123** | *eP* | | | **Pn** | **08 32 45.9** | **-2.8** |
| **AB31** | **Akbulak array** | **14.97** | **331** | *eP* | | | **Pn** | **08 32 45.1** | **-3.7** |
| **AB31** | **Akbulak array** comp=E,0.6nm,0.3s,baz=143,slow=12,SNR=58 | **14.97** | **331** | P | | | **Pn** | **08 32 45.1** | **-3.7** |
| AB31 | comp=E,7.6nm,0.6s,baz=355,slow=48,SNR=7.2 | | | ⇑S | | | Sn | 08 35 19.8 | -14 |
| **ABKAR** | **Akbulak array** | **14.97** | **331** | Pn | | | **Pn** | **08 32 45.5** | **-3.3** |
| **ABKAR** | **Akbulak array** | **14.97** | **331** | Pn | | | **Pn** | **08 32 45.9** | **-2.9** |
| **KURBB** | **Kurchatov Arra** comp=E,0.0nm,0.3s,baz=221,slow=9.7,SNR=2.5 | **14.98** | **19** | P | | | **Pn** | **08 32 46.7** | **-2.2** |
| **KURK** | **Kurchatov** | **15.09** | **19** | ⇓*e* | | | **P** | **08 32 52.5** | **-0.6** |
| KURK | comp=Z,5.0nm,1.0s | | | pmax | | | pmax | | |
| **KURK** | **Kurchatov** | **15.09** | **19** | Pn | | | **Pn** | **08 32 48.5** | **-1.7** |
| KURK | comp=Z,5.4nm,0.8s | | | IAmb | | | IAmb | 08 33 40.2 | |
| **PKIN** | **Phulchoki** comp=Z,3.4nm,0.3s | **15.15** | **123** | *eP* | | | **Pn** | **08 32 49.0** | **-2.5** |
| **PKI** | **Pulchoki** comp=Z,2.6nm,0.2s | **15.16** | **123** | *eP* | | | **Pn** | **08 32 48.6** | **-3.1** |
| **GUN** | **Gumba** comp=Z,3.5nm,0.2s | **15.27** | **121** | *eP* | | | **Pn** | **08 32 50.5** | **-2.6** |
| **JIRN** | **Jiri** comp=Z,18nm,0.4s | **15.64** | **121** | *eP* | | | **Pn** | **08 32 55.9** | **-1.9** |
| **RAMN** | **Ramite** comp=Z,2.3nm,0.3s | **16.37** | **122** | *eP* | | | **Pn** | **08 33 03.9** | **-2.8** |
| **BVAR** | **Borovoye Array** comp=E,1.6nm,0.3s,baz=310,slow=22,SNR=13 | **16.39** | **359** | P | | | **Pn** | **08 33 04.9** | **-1.6** |
| **BVB5** | **Borovoye Array** comp=Z,3.8nm,0.5s | **16.39** | **359** | ⇑P | | | **Pn** | **08 33 03.8** | **-2.7** |
| **BRVK** | **Borovoye** | **16.42** | **358** | ⇑*i* | *P* | | **Pn** | **08 33 04.7** | **-2.2** |
| BRVK | comp=Z,4.0nm,0.9s | | | | pmax | | pmax | | |
| **BRVK** | **Borovoye** | **16.42** | **358** | Pn | | | **Pn** | **08 33 04.5** | **-2.4** |
| **AKTO** | **Aktyubinsk** comp=Z,0.5nm,0.3s,baz=133,slow=14,SNR=15 | **16.67** | **330** | P | | | **Pn** | **08 33 08.7** | **-1.3** |
| **AKTO** | **Aktyubinsk** comp=Z,9.5nm,0.9s | **16.67** | **330** | ⇑P | | | **Pn** | **08 33 07.2** | **-2.8** |
| AKTO | comp=Z,17nm,0.8s | | | ⇑S | | | Sn | 08 36 01.2 | -14 |
| **AKL** | **Akola** | **16.72** | **160** | *eP* | | | **Pn** | **08 33 08.2** | **-2.7** |
| **WSAR** | **Wadi Sarin** comp=Z,0.5nm,0.3s,baz=36,slow=10,SNR=5.6 | **17.12** | **222** | P | | | **Pn** | **08 33 14.5** | **-1.3** |
| **UOSS** | **Minazif** | **17.25** | **232** | | | | **Pn** | **08 33 19.2** | **+1.9** |
| UOSS | comp=Z,7.5nm,1.0s | | | | IAmb | | IAmb | 08 33 19.8 | |
| **DGZ** | **Jazzator, Alta** | **17.65** | **37** | ⇓*e* | *P* | | **Pn** | **08 33 21.0** | **-1.1** |
| DGZ | comp=Z,4.0nm,0.6s | | | | pmax | | pmax | | |
| **SEKA** | **Sheki** | **19.08** | **291** | P | | | **P** | **08 33 35.9** | **-1.4** |
| **GOMU** | **GeErMu** | **19.14** | **84** | P | | | **Pn** | **08 33 40.5** | **+0.3** |
| GOMU | comp=Z,2.0nm,0.4s | | | | pmax | | pmax | | |
| GOMU | comp=Z,200nm,8.4s | | | | pmax | | pmax | | |
| **ZAA0** | **Zalesovo Array** | **19.77** | **25** | P | | | **P** | **08 33 44.1** | **-0.6** |
| ZAA0 | comp=Z,6.5nm,0.7s | | | | IAmb | | IAmb | 08 34 12.7 | |
| **ZALV** | **Zalesovo Beam** comp=Z,0.9nm,0.3s,baz=232,slow=9.5,SNR=7.4 | **19.77** | **25** | P | | | **P** | **08 33 44.1** | **-0.5** |
| ZALV | comp=Z,16nm,19.8s,baz=354,slow=35 | | | LR | | | LR | 08 40 54.9 | |
| **ZALV** | **Zalesovo Beam** | **19.77** | **25** | *eP* | | | **Pn** | **08 33 44.8** | **-2.3** |
| ZALV | comp=Z,1.0nm,0.3s | | | | pmax | | pmax | | |
| **ZALV** | **Zalesovo Beam** | **19.77** | **25** | P | | | **P** | **08 33 44.5** | **-0.1** |
| **GROC** | **Groznyy** | **20.39** | **297** | *eP* | | | Pn | 08 33 53.5 | -0.9 |
| GROC | | | | *eS* | | | **S** | **08 37 36.4** | **+2.2** |
| GROC | comp=Z,36nm,1.2s | | | | pmax | | pmax | | |
| **GNI** | **Garni** comp=Z,48nm,1.0s,baz=109,slow=1.4,SNR=16 | **20.88** | **288** | P | | | Pn | 08 33 58.1 | -2.1 |
| GNI | comp=Z,31nm,21.0s,baz=93,slow=42 | | | LR | | | LR | 08 43 59.1 | |
| **GNI** | **Garni** | **20.88** | **288** | *c* | *iP* | | Pn | 08 34 00.0 | -0.2 |
| GNI | comp=Z,49nm,1.0s | | | | pmax | | pmax | | |
| **GNI** | **Garni** | **20.88** | **288** | P | | | Pn | 08 33 59.0 | -1.2 |
| **ARU** | **Arti** comp=Z,1.6nm,0.2s,baz=163,slow=7.3,SNR=4.6 | **21.51** | **341** | P | | | **P** | **08 34 05.0** | **+1.8** |
| **ARU** | **Arti** | **21.51** | **341** | *c* | *iP* | | **P** | **08 34 07.5** | **+4.3** |
| ARU | | | | | | | | 08 34 31.0 | |
| ARU | | | | S | | | Sn | 08 38 02.3 | -8.3 |
| ARU | | | | SS | | | SnSn | 08 38 48.3 | +20 |
| ARU | comp=Z,15nm,1.8s | | | | pmax | | pmax | | |
| **ARU** | **Arti** comp=Z,7.3nm,0.6s | **21.51** | **341** | | IAmb | | IAmb | 08 34 41.9 | |
| **ZEI** | **Tsey** | **21.70** | **295** | *eP* | | | **P** | **08 34 06.1** | **+0.4** |
| ZEI | comp=Z,11nm,1.2s | | | | pmax | | pmax | | |
| **ONI** | **Oni** | **22.01** | **294** | P | | | **P** | **08 34 10.0** | **+1.2** |
| ONI | comp=Z,12nm,1.0s | | | | pmax | | pmax | | |
| **ONI** | **Oni** | **22.01** | **294** | P | | | **P** | **08 34 10.0** | **+1.2** |
| ONI | comp=Z,12nm,1.0s | | | | IAmb | | IAmb | 08 34 18.1 | |
| **KBZ** | **Khabaz** comp=Z,4.5nm,0.7s,baz=126,slow=8.1,SNR=11 | **22.56** | **297** | P | | | **P** | **08 34 14.6** | **+0.2** |
| **KBZ** | **Khabaz** comp=Z,5.0nm,0.7s | **22.56** | **297** | *eP* | | | **P** | **08 34 15.0** | **+0.6** |
| KBZ | | | | | pmax | | pmax | | |
| **KIV** | **Kislovodsk** | **22.75** | **298** | *eP* | | | **P** | **08 34 18.9** | **+2.5** |
| KIV | | | | *eS* | | | **S** | **08 38 21.6** | **+4.0** |
| KIV | comp=Z,8.0nm,1.0s | | | | pmax | | pmax | | |
| KIV | comp=Z,21nm,14.0s | | | | MLR | | MLR | | |
| **BELG** | **Belogornoye** comp=Z,4.4nm,0.6s,baz=197,slow=5.3,SNR=3.5 | **22.80** | **321** | P | | | **P** | **08 34 16.9** | **+0.2** |
| **BELG** | **Belogornoye** | **22.80** | **321** | ⇑*e* | *P* | | **P** | **08 34 19.0** | **+2.3** |
| BELG | comp=Z,2.0nm,1.2s | | | | pmax | | pmax | | |
| **GTA** | **Gaotai** comp=Z,3.0nm,0.8s | **22.80** | **74** | *eP* | | | **P** | **08 34 20.0** | **+2.9** |
| GTA | | | | | pmax | | pmax | | |
| **SOC** | **Sochi** | **24.83** | **296** | *eP* | | | **P** | **08 34 36.5** | **+1.0** |
| SOC | | | | *eS* | | | **S** | **08 38 53.2** | **+2.3** |
| SOC | comp=Z,9.0nm,0.6s | | | | pmax | | pmax | | |
| **KIRV** | **Kirov** | **26.12** | **334** | ⇑*e* | *P* | | **P** | **08 34 48.9** | **+1.9** |
| **PZH** | **PanZhiHua** comp=Z,10.0nm,0.6s | **27.94** | **102** | P | | | **P** | **08 35 06.8** | **+3.0** |
| PZH | comp=Z,80nm,6.0s | | | | pmax | | pmax | | |
| **BRTR** | **Keskin Array B** comp=Z,1.2nm,0.8s,baz=94,slow=7.8,SNR=4.2 | **29.42** | **288** | P | | | **P** | **08 35 17.2** | **+0.4** |
| **OBN** | **Obninsk** | **29.85** | **319** | *e* | *P* | | **P** | **08 35 20.7** | **+0.5** |
| OBN | | | | *e* | *PP* | | **pP** | **08 35 43.6** | **+0.5** |
| OBN | | | | *e* | | | | 08 36 23.1 | |
| OBN | comp=Z,3.0nm,0.8s | | | | pmax | | pmax | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,5.3nm,21.7s,baz=345,slow=44 | **30.50** | **119** | LR | | | LR | 08 51 34.2 | |
| **AKASG** | **Malin Array Be** comp=Z,1.6nm,0.5s,baz=87,slow=7.5,SNR=9.6 | **32.88** | **309** | P | | | **P** | **08 35 48.6** | **+1.8** |
| **AKBB** | **Malin Array Si** | **32.88** | **309** | P | | | **P** | **08 35 48.6** | **+1.7** |
| AKBB | comp=Z,8.0nm,1.4s | | | | pmax | | pmax | | |
| **AKBB** | **Malin Array Si** | **32.88** | **309** | P | | | **P** | **08 35 48.5** | **+1.7** |
| AKBB | comp=Z,8.2nm,1.4s | | | | IAmb | | IAmb | 08 36 21.2 | |
| **FINES** | **FINESS Array B** comp=Z,2.0nm,0.7s,baz=101,slow=9.9,SNR=6.4 | **37.38** | **326** | P | | | **P** | **08 36 27.1** | **+1.8** |
| **ARCES** | **ARCESS Array B** comp=Z,3.3nm,0.8s,baz=113,slow=8.7,SNR=10 | **41.02** | **338** | P | | | **P** | **08 36 56.9** | **+1.3** |
| **ARCES** | **ARCESS Array B** | **41.02** | **338** | *eP* | | | **P** | **08 36 58.7** | **+3.1** |
| ARCES | comp=Z,2.0nm,0.8s | | | | pmax | | pmax | | |
| **CLL** | **Collm** | **43.12** | **309** | *eP* | | | **P** | **08 37 14.0** | **+1.1** |
| **CLL** | **Collm** | **43.12** | **309** | *eP* | | | **P** | **08 37 14.0** | **+1.1** |
| **NB2** | **NORSAR Subarra** comp=Z,2.0nm,0.7s,baz=95,slow=7.9 | **44.28** | **323** | P | | | **P** | **08 37 23.2** | **+1.1** |
| **NOA** | **NORSAR Array B** comp=Z,1.3nm,0.5s,baz=97,slow=7.8,SNR=6.2 | **44.28** | **323** | P | | | **P** | **08 37 22.5** | **+0.4** |
| NOA | comp=Z,14nm,21.2s,baz=270,slow=40 | | | LR | | | LR | 08 59 01.2 | |
| **NOA** | **NORSAR Array B** | **44.28** | **323** | *eP* | | | **P** | **08 37 23.6** | **+1.5** |
| NOA | comp=Z,1.0nm,0.5s | | | | pmax | | pmax | | |
| **TIXI** | **Tiksi** | **45.63** | **22** | ⇓*e* | *P* | | **P** | **08 37 33.4** | **+0.9** |
| TIXI | | | | *i* | *PP* | | **pP** | **08 37 53.2** | **-4.1** |
| TIXI | comp=Z,1.0nm,1.4s | | | | pmax | | pmax | | |
| **MBAR** | **Mbarara** | **52.61** | **234** | *c* | *eP* | | **P** | **08 38 28.8** | **+2.1** |
| MBAR | comp=Z,5.0nm,1.3s | | | | pmax | | pmax | | |
| **SEY** | **Seymchan** | **54.28** | **34** | ⇑*e* | *P* | | **P** | **08 38 39.9** | **+1.8** |
| **ESDC** | **Sonseca Array** comp=Z,1.5nm,0.9s,baz=72,slow=6.8,SNR=6.3 | **57.41** | **298** | P | | | **P** | **08 39 02.5** | **+1.6** |
| **ESDC** | **Sonseca Array** comp=Z,8.1nm,1.6s | **57.41** | **298** | IAmb | | | IAmb | 08 40 13.9 | |
| **TORD** | **Torodi Ar. Bea** comp=Z,2.4nm,0.6s,baz=48,slow=6.0,SNR=22 | **65.75** | **269** | P | | | **P** | **08 39 57.6** | **+0.5** |
| **INK** | **Inuvik** comp=Z,0.8nm,0.6s,baz=356,slow=6.1,SNR=4.0 | **73.76** | **9** | P | | | **P** | **08 40 46.8** | **+1.4** |
| **ILAR** | **Eielson Array** comp=Z,0.6nm,0.8s,baz=318,slow=4.6,SNR=6.4 | **74.63** | **16** | pP | | | pP | 08 41 11.2 | -5.9 |
| **KIC** | **Kosan Boka** comp=Z,5.4nm,0.5s | **74.82** | **267** | *eP* | | | **P** | **08 40 53.6** | **+1.1** |
| **TIC** | **Toumodi** | **74.88** | **267** | *eP* | | | **P** | **08 40 52.8** | **0.0** |
| **LIC** | **Lamto** comp=Z,45nm,1.8s | **75.13** | **267** | *eP* | | | **P** | **08 40 52.2** | **-2.1** |
| **BOSA** | **Boshof** comp=Z,3.6nm,0.8s,baz=26,slow=4.1,SNR=6.0 | **77.87** | **220** | P | | | **P** | **08 41 11.1** | **+1.7** |
| **YKA** | **Yellowknife Ar** comp=Z,0.9nm,0.5s,baz=349,slow=5.4,SNR=28 | **81.10** | **3** | P | | | **P** | **08 41 28.7** | **+2.3** |
| YKA | comp=Z,0.7nm,0.6s,baz=350,slow=5.4,SNR=6.0 | | | pP | | | **pP** | **08 41 48.3** | **-4.9** |
| **WRA** | **Warramunga Arr** comp=Z,0.3nm,0.6s,baz=327,slow=5.0,SNR=2.4 | **82.04** | **122** | P | | | **P** | **08 41 32.0** | **0.0** |
| **ASAR** | **Alice Springs** comp=Z,0.3nm,0.6s,baz=306,slow=5.8,SNR=4.5 | **84.31** | **125** | P | | | **P** | **08 41 44.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **84.31** | **125** | P | | | **P** | **08 41 44.0** | **+0.3** |

*IDC **24** 08:57:38.5±4.6,31°.78S×179°.94E,h311km±40km,mb3.9/4, mb1 4.1/6,mb1mx3.6/28,mbtmp4.7/6,Error ellipse: s-maj=40.2km s-min=22.0km az=36.0*
*NEIC **24** 08:57:44.3±1.2,32°.4S±0°.1×179°.8E±0°.2,h371km±10km, mb4.0/11,Error ellipse: s-maj=22.7km s-min=14.3km az=108.0*
*WEL **24** 08:57:48.9±0.7,33°.5S±9°×17°.9W±1°.5,h412km±10km, M4.2/46,mB4.8/40,ML5.2/40,MLv5.1/46,Mw(mB)4.1/40, Error ellipse: s-maj=0.0km s-min=0.0km az=114.9*
*NOU **24** 08:57:53.5,33°.15S×179°.47E,h351km,mb4.8/8,South of Kermadec Islands*

**ISC 24 08:57:49.2**±1.1,**32°.71S**±0°.09×**179°.7E**±0°.1,**h400**km,**n123**, σ1$**80**/148,**mb4.1**/10,**South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **4.97** | **193** | | | | **Pn** | **08 59 10.1** | **-0.7** |
| MXZ | | | | | | | **S** | **09 00 17.1** | **0.0** |
| **MXZ** | **Matakaoa Point** | **4.97** | **193** | P | | | **Pn** | **08 59 11.3** | **+0.5** |
| MXZ | | | | S | | | **S** | **09 00 16.2** | **-1.0** |
| **KUZ** | **Kuaotunu** | **5.18** | **218** | P | | | **Pn** | **08 59 10.2** | **-2.9** |
| **WMGZ** | **Waiomatatini S** | **5.20** | **191** | P | | | **Pn** | **08 59 11.3** | **-1.9** |
| WMGZ | | | | S | | | **S** | **09 00 20.5** | **-1.1** |
| **HAZ** | **Te Kaha** | **5.27** | **197** | P | | | **Pn** | **08 59 13.8** | **-0.1** |
| HAZ | | | | S | | | **S** | **09 00 22.2** | **-0.7** |
| **PKGZ** | **Pakihiroa** | **5.33** | **194** | P | | | **Pn** | **08 59 12.8** | **-1.8** |
| PKGZ | | | | S | | | **S** | **09 00 19.5** | **-4.7** |
| **PUZ** | **Puketiti** | **5.47** | **192** | P | | | **Pn** | **08 59 15.3** | **-0.8** |
| PUZ | | | | S | | | **S** | **09 00 25.1** | **-1.8** |
| **RUGZ** | **Raukumara Rang** | **5.49** | **197** | P | | | **Pn** | **08 59 16.9** | **+0.5** |
| RUGZ | | | | S | | | **S** | **09 00 21.9** | **-5.5** |
| **WHRZ** | **Whale Island** | **5.59** | **203** | P | | | **Pn** | **08 59 20.1** | **+2.7** |
| **TWGZ** | **Tauwhareparae** | **5.63** | **194** | P | | | **Pn** | **08 59 15.7** | **-2.1** |
| TWGZ | | | | S | | | **S** | **09 00 31.2** | **+1.3** |
| **OUZ** | **Omahuta** | **5.65** | **242** | Pn | | | **Pn** | **08 59 16.1** | **-1.8** |
| **OUZ** | **Omahuta** | **5.65** | **242** | P | | | **Pn** | **08 59 16.5** | **-1.5** |
| **CNGZ** | **Carnagh Statio** | **5.89** | **191** | P | | | **Pn** | **08 59 20.5** | **0.0** |
| **EDRZ** | **Edgecumbe** | **5.90** | **203** | P | | | **Pn** | **08 59 22.0** | **+1.4** |
| **TKGZ** | **Te Karaka** | **5.91** | **194** | P | | | **Pn** | **08 59 17.6** | **-3.1** |
| TKGZ | | | | S | | | **S** | **09 00 34.2** | **-1.1** |
| **URZ** | **Urewera** 6.9nm,0.3s,baz=269,slow=5.0,SNR=94 | **5.92** | **200** | P | | | **Pn** | **08 59 18.9** | **-2.0** |
| URZ | 17nm,0.3s,baz=69,slow=21,SNR=18 | | | S | | | **S** | **09 00 33.0** | **-2.6** |
| **URZ** | **Urewera** | **5.92** | **200** | Pn | | | **Pn** | **08 59 18.0** | **-2.9** |
| **URZ** | **Urewera** | **5.92** | **200** | P | | | **Pn** | **08 59 17.8** | **-3.0** |
| **KARZ** | **Kaharoa** | **6.00** | **207** | P | | | **Pn** | **08 59 23.6** | **+1.9** |
| **OMRZ** | **Omania** | **6.03** | **206** | P | | | **Pn** | **08 59 24.5** | **+2.4** |
| **RAGZ** | **Rawiri** | **6.06** | **197** | P | | | **Pn** | **08 59 23.0** | **+0.5** |
| RAGZ | | | | S | | | **S** | **09 00 40.6** | **+2.1** |
| **TOZ** | **Tahuroa Road** | **6.07** | **213** | P | | | **Pn** | **08 59 23.2** | **+0.8** |
| **TARZ** | **Mount Tarawera** | **6.09** | **204** | P | | | **Pn** | **08 59 24.7** | **+1.9** |
| **HSRZ** | **Hossack Road** | **6.25** | **206** | P | | | **Pn** | **08 59 26.6** | **+2.1** |
| **RTZ** | **Ruatahuna** | **6.29** | **200** | P | | | **Pn** | **08 59 22.3** | **-2.7** |
| RTZ | | | | S | | | **S** | **09 00 43.7** | **+0.6** |
| **GRRZ** | **Galatos Road** | **6.34** | **206** | P | | | **Pn** | **08 59 27.6** | **+2.1** |
| **WPRZ** | **Whakapapatarin** | **6.47** | **205** | P | | | **Pn** | **08 59 28.4** | **+1.6** |
| **RAHZ** | **Arahi** | **6.54** | **198** | P | | | **Pn** | **08 59 27.0** | **-0.7** |
| RAHZ | | | | S | | | **S** | **09 00 47.3** | **-0.8** |
| **TLZ** | **Tolley Road** | **6.55** | **210** | P | | | **Pn** | **08 59 30.7** | **+2.9** |
| **WHHZ** | **Waihua** | **6.66** | **197** | P | | | **Pn** | **08 59 31.4** | **+2.4** |
| WHHZ | | | | S | | | **S** | **09 00 52.8** | **+2.4** |
| **MRHZ** | **Matea Rd** | **6.66** | **203** | P | | | **Pn** | **08 59 27.9** | **-1.1** |
| MRHZ | | | | S | | | **S** | **09 00 51.3** | **+0.7** |
| **NMHZ** | **Naumai** | **6.79** | **199** | P | | | **P** | **08 59 30.1** | **-1.0** |
| NMHZ | | | | S | | | **S** | **09 00 52.8** | **-0.4** |
| **BKZ** | **Black Stump Fm** | **6.94** | **201** | Pn | | | **Pn** | **08 59 30.5** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **6.94** | **201** | P | | | **Pn** | **08 59 29.9** | **-2.3** |
| **HIZ** | **Hauiti** | **7.00** | **213** | | | | **P** | **08 59 33.4** | **0.0** |
| **HIZ** | **Hauiti** | **7.00** | **213** | P | | | **P** | **08 59 34.8** | **+1.4** |
| **KATZ** | **Kakaramea** | **7.04** | **206** | P | | | **P** | **08 59 34.0** | **+0.1** |
| **MCHZ** | **McNeill Hill** | **7.14** | **199** | P | | | **Pn** | **08 59 33.2** | **-1.2** |
| MCHZ | | | | S | | | **S** | **09 01 00.9** | **+0.6** |
| **NTVZ** | **North Tongarir** | **7.16** | **206** | P | | | **P** | **08 59 34.5** | **-0.7** |
| **KRVZ** | **Karewarewa** | **7.17** | **206** | P | | | **P** | **08 59 34.8** | **-0.5** |
| **KWHZ** | **Kaweka Forest** | **7.20** | **201** | P | | | **P** | **08 59 35.0** | **-0.6** |
| KWHZ | | | | S | | | **S** | **09 01 01.1** | **-0.6** |
| **WTVZ

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RPZ | **Rata Peaks** | **12.90 209** | P | | **Pn** | **09 00 39.4** | **-1.3** |
| STKA | **Stephens Creek** | **32.10 261** | P | | **P** | **09 03 41.6** | **+0.4** |
| | 3.4nm,0.5s,baz=103,slow=11,SNR=19 | | | | | | |
| STKA | **Stephens Creek** | **32.10 261** | IAmb | | IAmb | 09 03 42.2 | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| BBOO | **Buckleboo** | **36.49 258** | P | | **P** | **09 04 17.8** | **-0.6** |
| AS31 | **Alice Springs** | **41.09 271** | P | | **P** | **09 04 53.9** | **-2.3** |
| AS31 | | | IAmb | | IAmb | 09 04 55.2 | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **41.09 271** | P | | **P** | **09 04 54.0** | **-2.1** |
| | comp=Z,4.0nm,0.4s,baz=106,slow=7.2,SNR=84 | | | | | | |
| WR0 | **Warramunga Arr** | **42.12 276** | P | | **P** | **09 05 01.8** | **-2.6** |
| WR0 | | | IAmb | | IAmb | 09 05 01.9 | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| WB2 | **Warramunga Arr** | **42.28 276** | P | | **P** | **09 05 03.1** | **-2.6** |
| WRAB | **Tennant Creek** | **42.29 276** | P | | **P** | **09 05 02.7** | **-3.1** |
| WRAB | | | IAmb | | IAmb | 09 05 03.5 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| WRA | **Warramunga Arr** | **42.29 276** | P | | **P** | **09 05 03.0** | **-2.8** |
| | comp=Z,6.8nm,0.4s,baz=112,slow=7.9,SNR=98 | | | | | | |
| WB0 | **Warramunga Arr** | **42.33 276** | P | | **P** | **09 05 03.4** | **-2.7** |
| WB0 | | | IAmb | | IAmb | 09 05 03.9 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| VNDA | **Vanda** | **45.61 185** | P | | **P** | **09 05 31.1** | **+0.1** |
| VNDA | | | IAmb | | IAmb | 09 05 54.0 | |
| | comp=Z,21nm,1.4s | | | | | | |
| FITZ | **Fitzroy Crossi** | **50.45 273** | P | | **P** | **09 06 05.6** | **-2.7** |
| FITZ | | | IAmb | | IAmb | 09 06 12.7 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| QSPA | **South Pole Qui** | **57.40 180** | P | | **P** | **09 07 01.1** | **+3.6** |
| | comp=Z,2.9nm,0.8s,baz=63,slow=0.5,SNR=7.8 | | | | | | |
| SNAA | **Sanae** | **75.89 179** | P | | **P** | **09 08 54.4** | **+1.8** |
| VNA3 | **Neumayer Olymp** | **76.12 177** | P | | **P** | **09 08 55.9** | **+2.1** |
| VNA2 | **Neumayer--Watz** | **76.53 178** | P | | **P** | **09 08 58.4** | **+2.3** |
| | baz=194,slow=4.8 | | | | | | |
| FINES | **FINESS Array B** | **146.57 337** | PKPbc | | **PKPdf** | **09 16 40.1** | **-1.3** |
| | comp=Z,2.5nm,0.5s,baz=41,slow=4.7,SNR=18 | | | | | | |
| NOA | **NORSAR Array B** | **150.68 349** | PKPbc | | **PKPdf** | **09 16 50.8** | **+2.6** |
| | comp=Z,0.8nm,0.5s,baz=17,slow=4.3,SNR=3.7 | | | | | | |

*NNC **24** 09:04:16.2±2.3, 53.67N×90.63E, h0km, mb4.0, mpv3.8, Error ellipse: s-maj=17.8km s-min=16.5km az=164.0, Suspected Mining explosion.*

*IDC **24** 09:04:19.0±2.5, 53.39N×90.55E, h0km, mb1 3.4/4, mb1mx3.2/53, mbtmp3.4/4, ML2.9/4, Error ellipse: s-maj=23.3km s-min=19.6km az=46.0*

**ISC 24 09:04:16.7±4.0, 53.7N±0.1×90.4E±0.2, h0km, n10, σ2s51/15, 6C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| ZALV | **Zalesovo Beam** | **3.33** | **276** | Pn | | Pn | **Pb** | **09 05 15.6** | **-1.0** |
| | 1.9nm,0.3s,baz=93,slow=15,SNR=24 | | | | | | | | |
| ZALV | | | | Lg | | Lg | Lg | 09 06 08.4 | |
| | 2.9nm,0.3s,baz=94,slow=24,SNR=13 | | | | | | | | |
| KURK | **Kurchatov** | **7.85** | **252** | ⇑Pn | | | **Pn** | **09 06 13.8** | **+1.8** |
| | 6.1nm,0.9s | | | | | | | | |
| KURK | | | | ⇓Sn | | | **Sn** | **09 07 44.2** | **+2.7** |
| | 13nm,0.8s | | | | | | | | |
| KURK | | | | ⇓Lg | | | Lg | 09 08 30.6 | |
| | 32nm,1.0s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **7.94** | **252** | Pn | | | **Pn** | **09 06 14.4** | **+1.1** |
| | 0.3nm,0.3s,baz=68,slow=15,SNR=18 | | | | | | | | |
| KURBB | | | | Sn | | | **Sn** | **09 07 44.1** | **+0.4** |
| | baz=67,slow=23,SNR=5.0 | | | | | | | | |
| KURBB | | | | Lg | | | Lg | 09 08 31.5 | |
| | 0.1nm,0.3s,baz=61,slow=34,SNR=5.8 | | | | | | | | |
| KURBB | **Kurchatov Arra** | **7.94** | **252** | ⇓Pn | | | **Pn** | **09 06 14.5** | **+1.1** |
| | 10.0nm,0.8s | | | | | | | | |
| KURBB | | | | ⇑Sn | | | **Sn** | **09 07 46.3** | **+2.5** |
| | 63nm,0.8s | | | | | | | | |
| KURBB | | | | ⇑Lg | | | Lg | 09 08 33.9 | |
| | 25nm,0.7s | | | | | | | | |
| MK31 | **Makanchi Array** | **8.67** | **220** | Pn | | | **Pn** | **09 06 23.9** | **+0.6** |
| | 1.0nm,0.8s,baz=287,slow=5.9,SNR=20 | | | | | | | | |
| MK31 | | | | ⇑Sn | | | **Sn** | **09 08 04.2** | **+2.5** |
| | 3.5nm,0.8s,baz=43,slow=24,SNR=2.7 | | | | | | | | |
| MK31 | | | | ⇓Lg | | | Lg | 09 08 56.0 | |
| | 24nm,1.0s,baz=34,slow=30,SNR=5.8 | | | | | | | | |
| MKAR | **Makanchi Array** | **8.67** | **220** | Pn | | | **Pn** | **09 06 23.9** | **+0.6** |
| | 0.4nm,0.3s,baz=34,slow=12,SNR=22 | | | | | | | | |
| MKAR | | | | Sn | | | **Sn** | **09 07 57.7** | **-4.0** |
| | 0.1nm,0.3s,baz=36,slow=23,SNR=1.5 | | | | | | | | |
| MKAR | | | | Lg | | | Lg | 09 08 49.6 | |
| | baz=40,slow=32,SNR=1.8 | | | | | | | | |
| MAKZ | **Makanchi** | **8.78** | **221** | ⇑Pn | | | **Pn** | **09 06 23.4** | **-1.4** |
| | 2.7nm,1.1s | | | | | | | | |
| MAKZ | | | | ⇑Sn | | | **Sn** | **09 08 06.3** | **+1.9** |
| | 5.9nm,0.8s | | | | | | | | |
| MAKZ | | | | ⇓Lg | | | Lg | 09 08 54.0 | |
| | 18nm,1.2s | | | | | | | | |
| SONM | **Songino Array** | **11.69** | **114** | Pg | | | Pg | 09 07 49.0 | |
| | 0.0nm,0.3s,baz=302,slow=12,SNR=3.5 | | | | | | | | |
| BVAR | **Borovoye Array** | **11.98** | **275** | Pn | | | **Pn** | **09 07 11.1** | **+2.4** |
| | 0.1nm,0.3s,baz=74,slow=12,SNR=1.8 | | | | | | | | |
| BVAR | | | | Sn | | | **Sn** | **09 09 18.3** | **-4.6** |
| | 0.1nm,0.3s,baz=90,slow=29,SNR=1.7 | | | | | | | | |
| AAK | **Ala-Archa** | **15.31** | **230** | Lg | | | Lg | 09 12 20.2 | |
| | 0.0nm,0.3s,baz=61,slow=19,SNR=1.5 | | | | | | | | |

**IDC 24 09:04:50.6±2.5, 3.86N×126.23E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/51, mbtmp3.3/3, Error ellipse: s-maj=212.2km s-min=30.1km az=65.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| WRA | **Warramunga Arr** | **24.96** | **162** | P | | P | P | 09 10 15.6 | -0.4 |
| | 0.8nm,0.8s,baz=340,slow=11,SNR=4.9 | | | | | | | | |
| ASAR | **Alice Springs** | **28.36** | **165** | P | | P | P | 09 10 47.0 | +0.3 |
| | 0.2nm,0.6s,baz=341,slow=7.8,SNR=1.5 | | | | | | | | |
| MKAR | **Makanchi Array** | **57.17** | **325** | P | | P | P | 09 14 39.4 | +0.1 |
| | 0.2nm,0.5s,baz=108,slow=8.2,SNR=1.9 | | | | | | | | |

**IDC 24 09:08:58.4±9.3, 33.15S×179.99W, h256km±98km, mb3.0/2, mb1 3.2/3, mb1mx3.1/33, mbtmp3.6/3, Error ellipse: s-maj=106.4km s-min=46.1km az=4.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| URZ | **Urewera** | **5.62** | **204** | P | | Pn | | 09 10 23.0 | +1.1 |
| | 0.3nm,0.3s,baz=194,slow=23,SNR=1.5 | | | | | | | | |
| URZ | | | | S | | S | | 09 11 28.2 | -0.5 |
| | 1.7nm,0.3s,baz=351,slow=19,SNR=8.3 | | | | | | | | |
| ASAR | **Alice Springs** | **41.36** | **271** | P | | P | | 09 16 20.2 | +0.3 |
| | 0.5nm,0.7s,baz=106,slow=7.0,SNR=2.8 | | | | | | | | |
| WRA | **Warramunga Arr** | **42.60** | **276** | P | | P | | 09 16 29.6 | -0.3 |
| | 0.6nm,0.3s,baz=116,slow=8.2,SNR=9.4 | | | | | | | | |
| FINES | **FINESS Array B** | **147.07** | **337** | PKPbc | | PKPbc | | 09 28 09.4 | -0.9 |
| | 2.9nm,1.0s,baz=60,slow=3.4,SNR=7.6 | | | | | | | | |

*GUC **24** 09:12:46.8±0.8, 21.80S×67.29W, h207km±10km, ML3.8*
*SCB **24** 09:12:49.2±3.7, 21.61S×67.34W, h37km±47km, ML3.1/6, Error ellipse: s-maj=27.5km s-min=26.0km az=0.0*

**ISC 24 09:12:46.6±2.4, 21.74S±0.07×67.24W±0.06, h188km±20km, n30, σ0s95/47, 4C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| MOCB | **Mochara** | **1.57** | **72** | P | | **Pn** | **Pn** | **09 13 20.5** | **0.0** |
| MOCB | | | | S | | **Sn** | **Sn** | **09 13 45.2** | **-1.4** |
| MOCB | | | | IAML | | | | 09 13 49.5 | |
| | 129nm,0.4s | | | | | | | | |
| LVC | **Limon Verde** | **1.77** | **240** | *e*P | | | **Pn** | **09 13 23.0** | **+0.6** |
| LVC | | | | *e*S | | | **Sn** | **09 13 50.5** | **+0.5** |
| LVC | **Limon Verde** | **1.77** | **240** | P | | | **Pn** | **09 13 23.0** | **+0.6** |
| PB09 | **IPOC Station P** | **1.86** | **268** | *i* P | | | **Pn** | **09 13 24.2** | **+1.2** |
| PB09 | | | | *e*S | | | **Sn** | **09 13 52.8** | **+1.5** |
| PB09 | | | | IAML | | | | 09 13 59.2 | |
| | comp=N,104nm,0.3s | | | | | | | | |
| PB09 | **IPOC Station P** | **1.86** | **268** | P | | | **Pn** | **09 13 24.3** | **+1.3** |
| PB09 | | | | S | | | **Sn** | **09 13 50.0** | **-1.2** |
| PB09 | | | | IAML | | | | 09 13 56.7 | |
| | comp=N,42nm,0.3s | | | | | | | | |
| PB01 | **IPOC Station P** | **2.21** | **288** | *i* P | | | **Pn** | **09 13 27.1** | **+0.5** |
| PB01 | | | | *e*S | | | **Sn** | **09 13 58.3** | **+0.7** |
| PB01 | | | | IAML | | | | 09 13 59.5 | |
| | comp=N,526nm,0.2s | | | | | | | | |
| PB01 | **IPOC Station P** | **2.21** | **288** | P | | | **Pn** | **09 13 27.3** | **+0.7** |
| PB01 | | | | S | | | **Sn** | **09 13 57.0** | **-0.7** |
| PB01 | | | | IAML | | | | 09 13 59.7 | |
| | comp=N,267nm,0.3s | | | | | | | | |
| PB03 | **IPOC Station P** | **2.35** | **262** | *e*P | | | **Pn** | **09 13 28.4** | **+0.1** |
| PB03 | | | | *e*S | | | **Sn** | **09 14 00.4** | **-0.4** |
| PB03 | | | | IAML | | | | 09 14 01.3 | |
| | comp=E,343nm,0.1s | | | | | | | | |
| PB03 | **IPOC Station P** | **2.35** | **262** | P | | | **Pn** | **09 13 29.1** | **+0.8** |
| PB03 | | | | S | | | **Sn** | **09 13 58.8** | **-1.9** |
| PB03 | | | | IAML | | | | 09 14 02.4 | |
| | comp=E,74nm,0.4s | | | | | | | | |
| PB06 | **IPOC Station P** | **2.37** | **246** | *e*P | | | **Pn** | **09 13 28.6** | **+0.1** |
| PB06 | | | | *e*S | | | **Sn** | **09 14 00.9** | **-0.1** |
| PB06 | | | | IAML | | | | 09 14 02.9 | |
| | comp=E,266nm,0.2s | | | | | | | | |
| PB06 | **IPOC Station P** | **2.37** | **246** | P | | | **Pn** | **09 13 28.6** | **+0.1** |
| PB08 | **IPOC Station P** | **2.39** | **311** | *i* P | | | **Pn** | **09 13 30.5** | **+1.5** |
| PB08 | | | | IAML | | | | 09 14 07.4 | |
| | comp=N,44nm,0.2s | | | | | | | | |
| PB08 | **IPOC Station P** | **2.39** | **311** | P | | | **Pn** | **09 13 30.6** | **+1.6** |
| PB07 | **IPOC Station P** | **2.46** | **270** | *e*P | | | **Pn** | **09 13 29.8** | **+0.2** |
| PB07 | | | | *e*S | | | **Sn** | **09 14 02.5** | **-0.3** |
| PB07 | | | | IAML | | | | 09 14 03.6 | |
| | comp=N,332nm,0.1s | | | | | | | | |
| PB07 | **IPOC Station P** | **2.46** | **270** | P | | | **Pn** | **09 13 30.4** | **+0.9** |
| PB07 | | | | S | | | **Sn** | **09 14 01.5** | **-1.4** |
| PB07 | | | | IAML | | | | 09 14 03.3 | |
| | comp=N,151nm,0.6s | | | | | | | | |
| PB02 | **IPOC Station P** | **2.51** | **279** | *i* P | | | **Pn** | **09 13 30.4** | **+0.4** |
| PB02 | | | | *e*S | | | **Sn** | **09 14 03.0** | **-0.8** |
| PB02 | | | | IAML | | | | 09 14 04.2 | |
| | comp=N,410nm,0.3s | | | | | | | | |
| PB02 | **IPOC Station P** | **2.51** | **279** | P | | | **Pn** | **09 13 30.6** | **+0.6** |
| PB15 | **IPOC Station P** | **2.53** | **234** | *e*P | | | **Pn** | **09 13 30.7** | **+0.4** |
| PB15 | | | | *e*S | | | **Sn** | **09 14 04.5** | **+0.1** |
| PB15 | **IPOC Station P** | **2.53** | **234** | P | | | **Pn** | **09 13 31.0** | **+0.7** |
| GO01 | **Chusmiza** | **2.75** | **318** | *e*P | | | **Pn** | **09 13 34.1** | **+0.9** |
| GO01 | | | | IAML | | | | 09 14 17.3 | |
| | comp=E,195nm,0.2s | | | | | | | | |
| PB04 | **IPOC Station P** | **2.76** | **257** | *e*P | | | **Pn** | **09 13 33.3** | **+0.2** |
| PB04 | | | | *e*S | | | **Sn** | **09 14 07.7** | **-1.4** |
| PB04 | | | | IAML | | | | 09 14 10.6 | |
| | comp=N,180nm,0.2s | | | | | | | | |
| PB04 | **IPOC Station P** | **2.76** | **257** | P | | | **Pn** | **09 13 33.5** | **+0.5** |
| PATCX | **Punta Patache** | **2.87** | **288** | *e*P | | | **Pn** | **09 13 34.5** | **+0.3** |
| PATCX | | | | *e*S | | | **Sn** | **09 14 10.2** | **-1.0** |
| PATCX | | | | IAML | | | | 09 14 13.3 | |
| | comp=N,170nm,0.2s | | | | | | | | |
| HMBC | **Humberstone** | **2.87** | **300** | *i* P | | | **Pn** | **09 13 34.1** | **-0.2** |
| HMBC | | | | *e*S | | | **Sn** | **09 14 10.1** | **-1.3** |
| HMBC | | | | IAML | | | | 09 14 11.3 | |
| | comp=N,276nm,0.2s | | | | | | | | |
| HMBC | **Humberstone** | **2.87** | **300** | P | | | **Pn** | **09 13 34.5** | **+0.2** |
| HMBC | | | | S | | | **Sn** | **09 14 09.2** | **-2.2** |
| HMBC | | | | IAML | | | | 09 14 11.5 | |
| | comp=N,181nm,0.4s | | | | | | | | |
| TA01 | **Diego Aracena** | **2.98** | **293** | *e*P | | | **Pn** | **09 13 35.2** | **-0.2** |
| PB11 | **IPOC Station P** | **3.00** | **311** | *i* P | | | **Pn** | **09 13 36.0** | **+0.1** |
| PB11 | **IPOC Station P** | **3.00** | **311** | P | | | **Pn** | **09 13 36.1** | **+0.3** |
| BBOE | **La Paz, Chanca** | **4.95** | **352** | P | | | **Pn** | **09 14 01.9** | **+1.2** |
| LPAZ | **La Paz** | **5.49** | **351** | P | | | **Pn** | **09 14 08.8** | **+1.1** |

*IDC **24** 09:22:13.9±0.5, 27.64N×85.56E, h0km, mb4.3/25, mb1 4.4/28, mb1mx4.3/43, mbtmp4.2/28, ML4.1/3, MS3.7/38, Ms1 3.7/38, ms1mx3.4/90, Error ellipse: s-maj=16.1km s-min=12.7km az=54.0*

*MOS **24** 09:22:14.4±1.4, 27.65N×85.65E, h9km, mb4.8/31, Error ellipse: s-maj=8.5km s-min=4.6km az=110.5*

*BJI **24** 09:22:15.3±0.0, 27.87N×85.78E, h5km, mb4.5/55, mB4.9/31, Ms4.3/41, Ms7 4.2/37*

*NEIC **24** 09:22:16.7±1.4, 27.83N±0.07×85.74E±0.05, h10km±1km, mb4.7/57, Error ellipse: s-maj=12.8km s-min=7.6km az=171.0*

*DMN **24** 09:22:16.1±0.1, 27.80N×85.74E, h20km, Ml5.4/6, Error ellipse: s-maj=2.4km s-min=1.0km az=10.0*

*NDI **24** 09:22:18.3±4.1, 27.51N×85.58E, h10km, ML4.5, mb4.7(NEIC)*

**ISC 24 09:22:17.1±0.6, 27.72N±0.03×85.69E±0.02, h18km±3km, n303, σ2s14/313, mb4.6/75, MS3.7/40, 21C-10D, Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| GUN | **Gumba** | **0.26** | **41** | *e*Pg | | | **Pg** | **09 22 21.1** | **-2.1** |
| GUN | | | | *e*Sg | | | **Sg** | **09 22 25.1** | **-2.3** |
| PKI | **Pulchoki** | **0.28** | **240** | *e*Pg | | | **Pb** | **09 22 24.4** | **+0.5** |
| PKI | | | | *e*Sg | | | **Sb** | **09 22 29.4** | **+0.9** |
| PKIN | **Phulchoki** | **0.29** | **242** | *e*Pg | | | **Pb** | **09 22 24.4** | **+0.4** |
| PKIN | | | | *e*Sg | | | **Sb** | **09 22 30.1** | **+1.5** |
| | 26μm,0.3s | | | | | | | | |
| KKN | **Kakani** | **0.37** | **282** | *e*Pg | | | **Pg** | **09 22 24.8** | **-0.1** |
| JIRN | **Jiri** | **0.45** | **97** | *e*Pg | | | **Pg** | **09 22 25.4** | **-1.1** |
| JIRN | | | | *e*Sg | | | **Sg** | **09 22 30.8** | **-1.9** |
| | 75μm,0.3s | | | | | | | | |
| DMN | **Daman** | **0.53** | **259** | *e*Pg | | | **Pb** | **09 22 28.3** | **+0.3** |
| DMN | | | | *e*Sg | | | **Sb** | **09 22 36.7** | **+1.3** |
| | 13μm,0.3s | | | | | | | | |
| GKN | **Gorkha** | **0.97** | **287** | *e*Pg | | | **Pb** | **09 22 35.6** | **0.0** |
| GKN | | | | *e*Sg | | | **Sb** | **09 22 48.9** | **+0.7** |
| | 5μm,0.2s | | | | | | | | |
| RAMN | **Ramite** | **1.11** | **133** | *e*Pg | | | **Pb** | **09 22 37.7** | **-0.4** |
| RAMN | | | | *e*Sg | | | **Sg** | **09 22 53.8** | **+0.4** |
| | 10μm,0.3s | | | | | | | | |
| ODAN | **Odare** | **1.74** | **119** | *e*Pg | | | **Pb** | **09 22 49.3** | **+0.6** |
| ODAN | | | | *e*Sg | | | **Sb** | **09 23 11.6** | **+1.3** |
| | 21μm,0.3s | | | | | | | | |
| DANN | **Dangsing** | **1.82** | **291** | *e*Pg | | | **Pb** | **09 22 50.4** | **+0.3** |
| DANN | | | | *e*Sg | | | **Sb** | **09 23 14.2** | **+1.6** |
| | 2μm,0.3s | | | | | | | | |
| TAPN | **Taplejung** | **1.83** | **101** | *e*Pg | | | **Pb** | **09 22 50.3** | **-0.1** |
| TAPN | | | | *e*Sg | | | **Sb** | **09 23 13.7** | **+0.6** |
| | 11μm,0.3s | | | | | | | | |
| KOLN | **Koldanda** | **1.85** | **272** | *e*Pg | | | **Pb** | **09 22 51.3** | **+0.7** |
| PYUN | **Piuthan** | **2.42** | **280** | *e*Pg | | | **Pg** | **09 23 02.3** | **-1.2** |
| PYUN | | | | *e*Sg | | | **Sg** | **09 23 33.5** | **-1.4** |
| | 4μm,0.4s | | | | | | | | |
| GTK | **Tadong** | **2.62** | **98** | *e*P | | | **Pb** | **09 23 01.5** | **-2.1** |
| GTK | | | | *e*S | | | **Sb** | **09 23 36.9** | **+1.3** |
| GTK | | | | IAML | | | | 09 23 39.0 | |
| | comp=Z,4μm,0.4s | | | | | | | | |
| BRCI | **Bahraich** | **3.64** | **269** | *e*P | | | **Pn** | **09 23 12.8** | **+0.1** |
| BRCI | | | | *e*S | | | **Sn** | **09 23 58.1** | **+2.9** |
| BOK | **Bokaro** | **3.91** | **177** | *e*P | | | **Pn** | **09 23 15.0** | **-1.3** |
| DHUB | **DHUBRI** | **4.20** | **113** | *e*P | | | **Pn** | **09 23 21.9** | **+1.5** |
| DHUB | | | | IAML | | | | 09 24 27.8 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| TURI | **Tura** | **4.69** | **116** | *e*P | | | **Pn** | **09 23 27.6** | **+0.6** |
| TURI | | | | *e*S | | | **Sn** | **09 24 18.7** | **-2.3** |
| TURI | | | | IAML | | | | 09 24 20.2 | |
| | comp=E,2μm,0.4s | | | | | | | | |
| TURI | | | | IAML | | | | 09 24 21.2 | |
| | comp=N,1μm,0.4s | | | | | | | | |
| LGTI | **Lohaghat** | **5.09** | **291** | *e*P | | | **Pn** | **09 23 36.3** | **+3.8** |
| LGTI | | | | *e*S | | | **Sn** | **09 24 33.4** | **+2.6** |
| LGTI | | | | *e*S | | | **Sn** | **09 24 35.8** | **+5.0** |
| PTH | **Pithoragarh** | **5.14** | **292** | *e*P | | | **Pn** | **09 23 34.6** | **+1.1** |
| LSA | **Lhasa** | **5.19** | **66** | Pn | | | **Pn** | **09 23 36.6** | **+2.2** |
| LSA | | | | Sg | | | **Sg** | **09 24 58.1** | **-5.8** |
| LSA | | | | LR | | | LR | | |
| | comp=N,2μm,9.0s | | | | | | | | |
| LSA | | | | LR | | | LR | | |
| | comp=N,2μm,8.4s | | | | | | | | |
| GUWA | **GUWAHATI** | **5.57** | **104** | *e*P | | | **Pn** | **09 23 40.0** | **+0.8** |
| GUWA | | | | *e*S | | | **Sn** | **09 24 42.3** | **-0.4** |
| SHL | **Shillong** | **5.94** | **110** | P | | | **Pn** | **09 23 44.9** | **+0.4** |
| SHL | **Shillong** | **5.94** | **110** | Pn | | | **Pn** | **09 23 44.9** | **+0.4** |
| SHL | **Shillong** | **5.94** | **110** | P | | | **Pn** | **09 23 45.2** | **+0.7** |
| | SNR=37 | | | | | | | | |
| JHNI | **Jhansi** | **6.78** | **252** | *e*P | | | **Pn** | **09 23 54.7** | **-1.1** |
| JHNI | | | | *e*S | | | **Sn** | **09 25 06.5** | **-6.1** |
| JHNI | | | | *e*S | | | **Sn** | **09 25 06.8** | **-5.8** |
| ITAN | **ITANAGAR** | **7.16** | **93** | *e*P | | | **Pn** | **09 24 03.3** | **+2.2** |
| ITAN | | | | *e*S | | | **Sn** | **09 25 20.2** | **-1.9** |
| ITAN | | | | IAML | | | | 09 26 01.6 | |
| | comp=E,757nm,1.2s | | | | | | | | |
| NDI | **New Delhi** | **7.54** | **279** | *e*P | | | **Pn** | **09 24 04.0** | **-2.2** |
| NDI | | | | *e*P | | | **Pn** | **09 24 06.6** | **+0.4** |
| NDI | | | | *e*S | | | **Sn** | **09 25 26.6** | **-4.6** |
| NDI | | | | *e*S | | | **Sn** | **09 25 29.0** | **-2.2** |
| SONA | **Sohna** | **7.62** | **276** | *e*P | | | **Pn** | **09 24 07.0** | **-0.4** |
| KOHI | **KOHIMA** | **7.79** | **103** | *e*P | | | **Pn** | **09 24 10.6** | **+0.8** |
| KOHI | | | | *e*S | | | **Sn** | **09 25 36.7** | **-1.0** |
| KOHI | | | | IAML | | | | 09 25 40.2 | |
| | comp=N,275nm,0.8s | | | | | | | | |
| KOHI | | | | IAML | | | | 09 25 42.3 | |
| | comp=E,471nm,0.6s | | | | | | | | |
| IMP | **Imphal** | **7.95** | **109** | *e*P | | | **Pn** | **09 24 11.4** | **-0.5** |
| IMP | | | | *e*S | | | **Sn** | **09 25 42.8** | **+1.2** |
| IMP | | | | IAML | | | | 09 25 48.9 | |
| | comp=N,102nm,0.7s | | | | | | | | |
| MOKO | **MOKOCHONG** | **8.00** | **98** | *e*P | | | **Pn** | **09 24 16.7** | **+4.1** |
| MOKO | | | | *e*S | | | **Sn** | **09 25 40.5** | **-2.2** |
| MOKO | | | | IAML | | | | 09 25 44.7 | |
| | comp=N,473nm,0.5s | | | | | | | | |
| MOKO | | | | IAML | | | | 09 25 47.7 | |
| | comp=E,447nm,0.3s | | | | | | | | |
| KUDL | **Kundal** | **8.15** | **275** | *e*P | | | **Pn** | **09 24 14.8** | **+0.3** |
| KHET | **Khetri** | **8.75** | **275** | *e*P | | | **Pn** | **09 24 22.1** | **-0.8** |
| KHET | | | | *e*S | | | **Sn** | **09 25 56.9** | **-4.2** |
| BHK | **Bhakra** | **8.87** | **297** | *e*P | | | **Pn** | **09 24 25.2** | **+0.7** |
| CHLP | **Challavanipeta** | **9.29** | **190** | *e*P | | | **Pn** | **09 24 31.4** | **+1.2** |
| THN | **Thein Dam** | **9.83** | **301** | *e*P | | | **Pn** | **09 24 36.9** | **-0.7** |
| THN | | | | *e*S | | | **Sn** | **09 26 22.3** | **-5.3** |
| AJM | **Ajmer** | **9.92** | **265** | *e*P | | | **Pn** | **09 24 37.7** | **-1.2** |
| AJM | | | | *e*S | | | **Sn** | **09 26 21.4** | **-8.4** |
| AKL | **Akola** | **10.55** | **230** | *e*P | | | **Pn** | **09 24 45.5** | **-2.1** |
| RPR | **Rampur** | **10.59** | **215** | *e*P | | | **Pn** | **09 24 49.1** | **+1.0** |
| SRSP | **Sriramsagar** | **11.04** | **219** | *e*P | | | **Pn** | **09 24 52.7** | **-1.6** |
| PVM | **Polavaram** | **11.07** | **201** | *e*P | | | **Pn** | **09 24 54.2** | **-0.4** |
| GOMU | **GeErMu** | **11.47** | **40** | P | | | **Pn** | **09 25 01.4** | **+1.0** |
| GOMU | | | | pP | | | | 09 25 09.8 | |
| GOMU | | | | pmax | | | pmax | | |
| | comp=E,3.0nm,0.9s | | | | | | | | |
| GOMU | | | | LR | | | LR | | |
| | comp=E,600nm,11.6s | | | | | | | | |
| GOMU | | | | LR | | | LR | | |
| | comp=E,510nm,13.2s | | | | | | | | |
| GOMU | | | | LR | | | LR | | |
| | comp=E,700nm,12.8s | | | | | | | | |
| MYLAV | **Mylavaram** | **11.87** | **204** | *e*P | | | **Pn** | **09 25 04.2** | **-1.4** |
| CUPL | **Choutuppal** | **12.11** | **212** | *e*P | | | **Pn** | **09 25 07.2** | **-1.6** |
| HYBB | **Hyderabad (bro** | **12.18** | **214** | *e*P | | | **Pn** | **09 25 07.5** | **-2.3** |
| HYB | **Hyderabad** | **12.18** | **214** | *e*P | | | **Pn** | **09 25 07.5** | **-2.4** |
| CHCP | **Chirah Chowk** | **12.22** | **302** | P | | | **Pn** | **09 25 09.8** | **-0.6** |
| NIL | **Nilore** | **12.22** | **302** | P | | | **Pn** | **09 25 08.2** | **-2.3** |
| NIL | **Nilore** | **12.22** | **302** | Pn | | | **Pn** | **09 25 08.2** | **-2.3** |
| NIL | **Nilore** | **12.22** | **302** | P | | | **Pn** | **09 25 12.0** | **+1.6** |
| NJS | **Nagarjunasagar** | **12.58** | **209** | *e*P | | | **Pn** | **09 25 13.0** | **-2.3** |
| KLRI | **Killari** | **12.73** | **223** | *e*P | | | **Pn** | **09 25 14.6** | **-2.9** |
| ADKI | **Addanki** | **12.95** | **205** | *e*P | | | **Pn** | **09 25 18.2** | **-2.1** |
| THW | **Thamme Wali** | **13.07** | **296** | P | | | **Pn** | **09 25 19.5** | **-2.6** |
| THW | **Thamme Wali** | **13.07** | **296** | P | | | **Pn** | **09 25 19.4** | **-2.6** |
| THW | | | | S | | | **Sn** | **09 27 40.0** | **-7.0** |
| SRLM | **Srisailam** | **13.16** | **210** | *e*P | | | **Pn** | **09 25 20.6** | **-2.7** |
| CEP | **Cherat** | **13.31** | **301** | P | | | **Pn** | **09 25 23.1** | **-2.4** |
| CEP | | | | S | | | Sn | 09 27 44.0 | -9.1 |
| CEP | **Cherat** | **13.31** | **301** | P | | | **Pn** | **09 25 23.0** | **-2.4** |
| CEP | | | | S | | | **Sn** | **09 27 46.0** | **-7.1** |
| RCLA | **Racherla** | **13.71** | **208** | *e*P | | | **Pn** | **09 25 27.5** | **-3.2** |
| KSH | **Kashi** | **14.27** | **328** | P | | | Pn | 09 25 34.3 | -4.2 |
| KSH | | | | S | | | Sn | 09 28 06.3 | -10 |
| KSH | | | | pmax | | | pmax | | |
| | comp=E,9.0nm,0.8s | | | | | | | | |
| KSH | | | | LR | | | LR | | |
| | comp=E,670nm,17.2s | | | | | | | | |
| KSH | | | | LR | | | LR | | |
| | comp=E,460nm,16.8s | | | | | | | | |
| KSH | | | | LR | | | LR | | |
| | comp=E,450nm,10.7s | | | | | | | | |
| PZH | **PanZhiHua** | **14.35** | **91** | P | | | **Pn** | **09 25 40.6** | **+0.9** |
| PZH | | | | S | | | **Sn** | **09 28 23.8** | **+5.3** |
| PZH | | | | pmax | | | pmax | | |
| | comp=E,10.0nm,0.6s | | | | | | | | |
| PZH | | | | pmax | | | pmax | | |
| | comp=E,100nm,5.7s | | | | | | | | |
| PZH | | | | LR | | | LR | | |
| | comp=E,830nm,16.5s | | | | | | | | |
| PZH | | | | LR | | | LR | | |
| | comp=E,850nm,16.7s | | | | | | | | |
| PZH | | | | LR | | | LR | | |
| | comp=E,1μm,16.3s | | | | | | | | |
| URV | **Uravakonda** | **14.93** | **213** | *e*P | | | **Pn** | **09 25 43.7** | **-3.7** |
| CHTO | **Chiang Mai** | **15.05** | **123** | P | | | **Pn** | **09 25 51.1** | **+2.0** |
| CHTO | | | | pmax | | | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| CHTO | **Chiang Mai** | **15.05** | **123** | Pn | | | **Pn** | **09 25 51.1** | **+2.0** |
| CHTO | | | | IAmb | | | IAmb | 09 25 55.3 | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| CHTO | **Chiang Mai** | **15.05** | **123** | P | | | **P** | **09 25 52.0** | **-2.3** |
| CM31 | **Chiang Mai Arr** | **15.28** | **124** | Pn | | | **Pn** | **09 25 52.7** | **+0.7** |
| CM31 | | | | IAmb | | | IAmb | 09 25 58.3 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **15.28** | **124** | Pn | | | **Pn** | **09 25 49.6** | **-2.5** |
| | comp=Z,0.7nm,0.3s,baz=304,slow=13,SNR=13 | | | | | | | | |
| CMAR | | | | LR | | | LR | 09 33 56.8 | |
| | comp=Z,48nm,20.2s,baz=305,slow=46 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **15.28

AAK **Ala-Archa** 17.45 331 P **P** 09 26 26.9 +5.9
SNR=8.3
AAK **Ala-Archa** 17.45 331⇓ *e*P **P** 09 26 23.8 +2.9
AAK pmax pmax
comp=Z,15nm,1.3s
AAK **Ala-Archa** 17.45 331 P **P** 09 26 20.8 -0.2
AAK **Ala-Archa** 17.45 331 P **P** 09 26 24.8 +3.8
LZH **Lanzhou** 17.51 57 ⇓P **Pn** 09 26 19.0 -1.6
LZH pP P 09 26 22.4 +0.7
LZH sP pP 09 26 26.4 -0.7
LZH pmax pmax
comp=Z,17nm,1.5s
LZH pmax pmax
comp=Z,320nm,6.0s
LZH LR LR
comp=Z,450nm,11.4s
LZH LR LR
comp=Z,880nm,10.8s
LZH LR LR
comp=Z,900nm,12.5s
CHGR **Chuyangaron** 17.59 313 P **P** 09 26 22.5 +0.1
CHGR IAmb IAmb 09 26 41.7
comp=Z,72nm,0.9s
EKS2 **Erkin-Say** 17.78 330 P **P** 09 26 29.6 +5.1
SNR=6.6
KUU **Kurty** 17.81 337 *e*P **P** 09 26 26.2 +1.4
KUU pmax pmax
comp=Z,37nm,1.0s
KUU **Kurty** 17.81 337 *e*P **P** 09 26 26.2 +1.4
comp=Z,36nm,1.0s,baz=337
SGDS **Sogindy** 18.07 333 *e*P **P** 09 26 29.4 +1.8
baz=333
GYA **Guiyang** 18.72 89 ⇓P **Pn** 09 26 36.3 +0.8
GYA pmax pmax
comp=Z,37nm,0.8s
MK31 **Makanchi Array** 19.23 353 *c i*P **P** 09 26 40.5 +0.1
MK31 **Makanchi Array** 19.23 353 P **P** 09 26 39.8 -0.6
MKAR **Makanchi Array** 19.23 353 P **P** 09 26 40.7 +0.3
comp=Z,0.5nm,0.3s,baz=174,slow=12,SNR=34
MKAR **Makanchi Array** 19.23 353 P **P** 09 26 40.3 -0.1
MAKZ **Makanchi** 19.28 352 P **P** 09 26 41.1 +0.2
MAKZ pmax pmax
comp=Z,9.0nm,0.8s
MAKZ **Makanchi** 19.28 352 **P** 09 26 41.1 +0.2
BTLS **Baital** 19.63 335 *e*P **Pn** 09 26 47.3 +1.2
BTLS **Baital** 19.63 335 *e*P **Pn** 09 26 47.4 +1.3
baz=334
KKAR **Karatay Array** 19.67 325 P **P** 09 26 45.1 -0.1
KKAR **Karatay Array** 19.67 325 P **P** 09 26 45.1 -0.1
ZSN **Zaisan** 19.71 358 *e*P **Pn** 09 26 47.1 0.0
ZSN **Zaisan** 19.71 358 *e*P **Pn** 09 26 47.1 0.0
baz=358
PALK **Pallekele** 20.87 194 LR LR 09 34 51.3
comp=Z,237nm,21.7s,baz=117,slow=36
PALK **Pallekele** 20.87 194 P Pn 09 27 01.1 +0.1
PALK pmax pmax
comp=Z,14nm,0.8s
PALK **Pallekele** 20.87 194 P Pn 09 27 01.1 +0.1
PALK **Pallekele** 20.87 194 P Pn 09 27 03.8 +2.8
PALK P Pn 09 27 03.8 +2.8
XAN **Xi'an** 20.89 67 P Pn 09 27 04.8 +3.7
XAN pmax pmax
comp=Z,30nm,0.8s
ENH **Enshi** 20.97 77 P **P** 09 26 59.3 -0.1
ENH IAmb IAmb 09 27 17.4
comp=Z,24nm,0.8s
HRA **Herat** 21.13 294 P **P** 09 27 01.3 -0.1
DGZ **Jazzator, Alta** 22.00 3⇑ *e*P **P** 09 27 11.0 +0.6
DGZ pmax pmax
comp=Z,8.0nm,0.7s
UBPT **Khong Chiam** 22.14 120 P **P** 09 27 12.1 +0.1
UBPT IAmb IAmb 09 27 14.5
comp=Z,16nm,0.7s
KURBB **Kurchatov Arra** 23.52 349 P **P** 09 27 26.8 +0.7
comp=Z,6.7nm,0.9s,baz=169,slow=9.6,SNR=28
KURBB LR LR 09 36 39.8
comp=Z,60nm,21.0s,baz=142,slow=37
KURK **Kurchatov** 23.59 349⇑ *e*P **P** 09 27 26.4 -0.4
KURK pmax pmax
comp=Z,2.0nm,0.7s
KURK **Kurchatov** 23.59 349 P **P** 09 27 27.0 +0.2
KURK IAmb IAmb 09 27 33.6
comp=Z,16nm,0.8s
KURK **Kurchatov** 23.59 349 P **P** 09 27 28.1 +1.3
LYN **LuoYang** 23.87 67 *e*P **P** 09 27 34.3 +4.6
LYN pP sP 09 27 38.6 +0.9
LYN PP **PnPn** 09 28 05.3 +7.4
LYN S **S** 09 31 51.1 +6.0
LYN pmax pmax
comp=Z,20nm,1.0s
LYN pmax pmax
comp=Z,150nm,6.5s
LYN LR LR
comp=Z,300nm,9.3s
LYN LR LR
comp=Z,190nm,6.0s
BRZS **Berezniki** 24.36 339 *e*P **P** 09 27 36.2 +2.1
BRZS pmax pmax
comp=Z,11nm,1.2s
BRZS **Berezniki** 24.36 339 *e*P **P** 09 27 36.3 +2.1
comp=Z,11nm,1.2s,baz=339
JLN **Jalan Bani Buh** 24.44 263 P **P** 09 27 37.1 +2.1
SNR=8.1
JLN P **P** 09 27 37.1 +2.1
SNR=8.1
KNGR **Kungurtug, Tuv** 24.57 18⇑ *e*P **P** 09 27 37.8 +1.7
WBK **Wadi Bani Khal** 24.69 264 P **P** 09 27 39.5 +2.1
SNR=5.7
WSAR **Wadi Sarin** 24.81 266 P **P** 09 27 37.0 -1.4
comp=Z,2.5nm,0.6s,baz=101,slow=11,SNR=2.6
WSAR LR LR 09 38 51.3
comp=Z,66nm,19.2s,baz=92,slow=40
WSAR **Wadi Sarin** 24.81 266 P **P** 09 27 40.5 +2.1
SNR=8.6
HHC **Hu-ho-hao-te** 24.97 52 *e*P **P** 09 27 37.1 -2.7
HHC pmax pmax
comp=Z,11nm,0.9s
HHC pmax pmax
comp=Z,260nm,5.6s
HHC LR LR
comp=Z,440nm,10.0s
HHC LR LR
comp=Z,480nm,11.4s
HHC LR LR
comp=Z,580nm,11.9s
SMDO **Samad** 25.37 266 P **P** 09 27 46.0 +2.5
SNR=5.4
SMDO P **P** 09 27 46.0 +2.5
SNR=5.4
JMDO **Jabal Madar** 25.52 264 P **P** 09 27 46.8 +1.9
SONM **Songino Array** 25.77 33 P **P** 09 27 48.1 +1.1
comp=Z,7.1nm,0.6s,baz=218,slow=9.7,SNR=67
SONM LR LR 09 39 41.1
comp=Z,192nm,21.1s,baz=218,slow=40
SONM **Songino Array** 25.77 33 P **P** 09 27 47.4 +0.4
SONM IAmb IAmb 09 27 56.5
comp=Z,31nm,1.2s
HOQ **Hoqain** 25.88 267 P **P** 09 27 51.5 +3.4
HOQ P **P** 09 27 51.5 +3.4
MHTO **MHTO** 26.09 261 P **P** 09 27 51.8 +1.8
ULN **Ulaanbaatar** 26.11 34 *d i*P **P** 09 27 50.4 +0.3
ULN pmax pmax
comp=Z,11nm,0.7s
ULN **Ulaanbaatar** 26.11 34 P **P** 09 27 50.9 +0.8
ULN IAmb IAmb 09 27 59.5
comp=Z,19nm,0.9s
ULN **Ulaanbaatar** 26.11 34 P **P** 09 27 50.9 +0.8
BSY **Bisya** 26.21 266 P **P** 09 27 53.1 +2.0
HNS **HongShan** 26.21 61 ⇑P **P** 09 27 51.9 +1.0
HNS pmax pmax
comp=Z,22nm,1.0s
ZAA0 **Zalesovo Array** 26.22 359 P **P** 09 27 49.9 -0.9
ZALV **Zalesovo Beam** 26.22 359 P **P** 09 27 51.4 +0.6
comp=Z,6.9nm,0.8s,baz=184,slow=8.1,SNR=14
ZALV LR LR 09 40 00.2
comp=Z,298nm,18.6s,baz=122,slow=41
ZALV **Zalesovo Beam** 26.22 359 P **P** 09 27 50.3 -0.5
ZAK **Zakamensk** 26.31 26 *e*P **P** 09 27 52.2 +0.4
ZAK pmax pmax
comp=Z,13nm,1.4s
KULM **Kulim** 26.46 145 P **P** 09 27 54.3 +1.0
UOSS **Minazif** 26.54 271 P **P** 09 27 53.9 -0.2
MOY **Mondy** 26.55 22 *e*P **P** 09 27 57.7 +3.6
MOY pmax pmax
comp=Z,25nm,2.3s

BVAR **Borovoye Array** 27.72 340 P **P** 09 28 05.1 +0.7
comp=Z,1.6nm,1.0s,baz=173,slow=13,SNR=6.4
BRVK **Borovoye** 27.78 340⇑ *e*P **P** 09 28 08.7 +3.8
BRVK pmax pmax
comp=Z,2.0nm,0.9s
PSI **Prapat** 27.82 151 LR LR 09 40 59.8
comp=Z,78nm,20.0s,baz=27,slow=40
NJ2 **Nanjing** 29.01 73 *e*P **P** 09 28 16.0 -0.1
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
ABKAR **Akbulak array** 29.23 324 P **P** 09 28 18.1 +0.4
ABKAR **Akbulak array** 29.23 324 P **P** 09 28 18.2 +0.4
XLT **XiLinHaoTe** 29.25 48 *e*P **P** 09 28 15.5 -2.8
XLT pP pP 09 28 20.0 -4.2
XLT sP sP 09 28 24.6 -1.7
XLT S **S** 09 33 03.3 -7.1
XLT pmax pmax
comp=Z,6.0nm,0.9s
XLT pmax pmax
comp=Z,170nm,6.6s
XLT LR LR
comp=Z,360nm,8.4s
XLT LR LR
comp=Z,410nm,11.6s
AKTO **Aktyubinsk** 30.93 325 LR LR 09 42 26.6
comp=Z,143nm,20.1s,baz=134,slow=39
ARU **Arti** 34.61 334 *d i*P P 09 29 09.9 +4.9
ARU 09 30 25.2
ARU S S 09 34 43.4 +10
ARU pmax pmax
comp=Z,11nm,1.1s
ARU **Arti** 34.61 334 P **P** 09 29 05.8 +0.8
ARU IAmb IAmb 09 29 12.9
comp=Z,9.7nm,1.0s
CN2 **Changchun** 35.66 53 *e*P **P** 09 29 17.5 +3.3
CN2 pmax pmax
comp=Z,10.0nm,0.6s
BOD **Bodaibo** 36.05 26 *e*P **P** 09 29 18.0 +0.6
BOD pmax pmax
comp=Z,18nm,1.1s
RAYN **Ar Rayn** 36.36 273 P **P** 09 29 20.7 +0.2
RAYN pmax pmax
comp=Z,7.0nm,1.2s
RAYN **Ar Rayn** 36.36 273 P **P** 09 29 20.7 +0.2
KSRS **Korea Array** 36.63 64 P **P** 09 29 21.9 -0.6
comp=Z,1.3nm,0.7s,baz=263,slow=8.1,SNR=1.9
KSRS LR LR 09 45 32.6
comp=Z,103nm,21.6s,baz=255,slow=38
KSRS **Korea Array** 36.63 64 P **P** 09 29 22.0 -0.6
ZEI **Tsey** 36.89 305 *e*P **P** 09 29 24.1 -0.9
ZEI pmax pmax
comp=Z,8.0nm,1.2s
BELG **Belogorno**ye 37.50 322 LR LR 09 46 27.0
comp=Z,86nm,19.6s,baz=138,slow=39
BELG **Belogornoye** 37.50 322⇑ *e*P **P** 09 29 32.1 +2.4
BELG pmax pmax
comp=Z,2.0nm,1.0s
JOW **Kunigami** 37.73 81 LR LR 09 46 09.9
comp=Z,172nm,18.8s,baz=107,slow=38
KBZ **Khabaz** 37.78 307 P **P** 09 29 32.4 +0.1
comp=Z,0.8nm,0.7s,baz=62,slow=4.8,SNR=2.2
KBZ **Khabaz** 37.78 307⇓ *e*P **P** 09 29 33.7 +1.4
KIV **Kislovodsk** 37.98 307 *e*P **P** 09 29 36.4 +2.4
KIV pmax pmax
comp=Z,4.0nm,1.0s
KIV MLR MLR
comp=Z,42nm,16.0s
MDJ **Mudanjiang** 38.74 52 P **P** 09 29 39.9 -0.4
MDJ pmax pmax
comp=Z,5.0nm,1.2s
MDJ pmax pmax
comp=Z,180nm,4.9s
KIRV **Kirov** 39.78 331 LR LR 09 47 22.6
comp=Z,82nm,18.4s,baz=98,slow=38
KIRV **Kirov** 39.78 331⇑ *e*P **P** 09 29 50.1 +1.3
VRH **Novokhopyorsk** 40.44 318 *e*P **P** 09 29 57.8 +3.4
VRH pmax pmax
comp=Z,30nm,1.4s
KLR **Kul'dur** 41.18 46⇑ *e*P **P** 09 30 03.0 +2.4
KLR pmax pmax
comp=Z,3.0nm,0.9s
NRIK **Noril'sk** 41.67 1 P **P** 09 30 03.8 -0.4
comp=Z,4.6nm,0.8s,baz=159,slow=18,SNR=4.5
NRIK LR LR 09 49 47.1
comp=Z,291nm,18.3s,baz=176,slow=40
NRIK **Noril'sk** 41.67 1 *de*P **P** 09 30 05.5 +1.2
NRIK pmax pmax
comp=Z,22nm,1.1s
NRIK **Noril'sk** 41.67 1 P **P** 09 30 03.6 -0.6
NRIK IAmb IAmb 09 30 10.4
comp=Z,31nm,1.4s
VSR **Storozhevoye** 41.98 317 *e*P **P** 09 30 10.5 +3.4
VSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR **Galich'ya Gora** 42.52 319 *e*P **P** 09 30 15.5 +4.1
LPSR pmax pmax
comp=Z,20nm,0.9s
PRGR **Permogore** 43.07 333 *e*P **P** 09 30 15.6 -0.2
PRGR pmax pmax
comp=Z,13nm,0.8s
ATD **Arta Tunnel** 43.20 257 LR LR 09 45 47.5
comp=Z,32nm,21.6s,baz=40,slow=33
MMAI **Mount Meron Ar** 43.38 290 LR LR 09 53 20.7
comp=Z,47nm,20.3s,baz=248,slow=43
BRTR **Keskin Array B** 44.36 300 *i*P **P** 09 30 28.3 +1.6
BRTR pmax pmax
comp=Z,2.0nm,0.8s
OBN **Obninsk** 44.60 322 *e*P **P** 09 30 28.2 +0.1
OBN *e* 09 32 14.7
OBN *e*PPP PPP 09 32 53.6
OBN pmax pmax
comp=Z,10.0nm,1.3s
OBN MLR MLR
comp=Z,51nm,14.0s
MJB9 **Matsu-Tunnel** 44.87 65 P **P** 09 30 30.3 -0.3
YAK **Yakutsk** 44.87 28 LR LR 09 50 28.8
comp=Z,115nm,20.8s,baz=322,slow=38
KLMR **Klimovskoe** 45.25 330 *e*P **P** 09 30 31.7 -1.5
KLMR *e* 09 32 11.1
KLMR pmax pmax
comp=Z,24nm,1.2s
KLMR **Klimovskoe** 45.25 330 *e*P **P** 09 30 31.8 -1.5
KLMR AMP 09 30 38.6
comp=Z,24nm,1.2s
KLMR *e*PcP **PcP** 09 32 11.1 -1.9
ELL **Elmali** 47.46 296 P **P** 09 30 51.2 0.0
ELL pmax pmax
comp=Z,54nm,0.8s
ELL **Elmali** 47.46 296 P **P** 09 30 51.2 0.0
ASAJ **Asahikawa** 47.97 54 LR LR 09 52 11.7
comp=Z,83nm,19.1s,baz=338,slow=37
AKASG **Malin Array Be** 48.05 315 P **P** 09 30 54.3 -1.0
comp=Z,1.8nm,0.9s,baz=83,slow=7.1,SNR=9.7
AKASG LR LR 09 55 28.1
comp=Z,60nm,18.8s,baz=0.5,slow=42
AKASG **Malin Array Be** 48.05 315 P **P** 09 30 54.5 -0.8
AKASG pmax pmax
comp=Z,9.0nm,1.9s
AKASG **Malin Array Be** 48.05 315 P **P** 09 30 54.5 -0.8
AKASG IAmb IAmb 09 31 11.8
comp=Z,9.5nm,1.9s
AKBB **Malin Array Si** 48.05 315⇑ *e*P **P** 09 30 54.7 -0.6
YSS **Yuzh-Sakhalins** 48.15 51 *e*P **P** 09 30 58.2 +2.0
YSS pmax pmax
comp=Z,10.0nm,1.3s
CFR **Carcaliu** 48.43 307 ⇑P **P** 09 30 59.0 +0.6
VRI **Vrincioaia** 49.43 308 ⇑P **P** 09 31 07.8 +1.7
PLOR **Plostina** 49.48 308 ⇑P **P** 09 31 07.9 +1.4
TIXI **Tiksi** 49.94 16 LR LR 09 53 38.4
comp=Z,206nm,19.8s,baz=202,slow=38
TIXI **Tiksi** 49.94 16⇑ *e*P **P** 09 31 09.4 -0.1
TIXI pmax pmax
comp=Z,8.0nm,1.3s
TIXI **Tiksi** 49.94 16 P **P** 09 31 08.9 -0.6
MLR **Muntele Rosu** 49.98 307 ⇑P **P** 09 31 11.8 +1.4
MLR **Muntele Rosu** 49.98 307 P **P** 09 31 09.9 -0.5
MLR pmax pmax
comp=Z,18nm,1.1s
MLR **Muntele Rosu** 49.98 307 P **P** 09 31 09.9 -0.5
MLR IAmb IAmb 09 31 22.8
comp=Z,18nm,1.1s
NACGM **Naroch** 50.05 320 *i*P P 09 31 15.6 +5.0
BURAR **Bucovina Array** 50.48 310 ⇑P P 09 31 19.2 +5.1
BURAR **Bucovina Array** 50.48 310 P **P** 09 31 13.4 -0.7
BURAR IAmb IAmb 09 31 20.6

comp=Z,9.2nm,1.4s
VSU **Vasula** 50.66 324⇑ *e*P **P** 09 31 15.5 +0.4
VSU pmax pmax
comp=Z,37nm,1.2s
FINES **FINESS Array B** 51.59 328 P **P** 09 31 22.1 0.0
comp=Z,8.9nm,0.8s,baz=103,slow=8.2,SNR=13
FINES LR LR 09 54 56.0
comp=Z,133nm,19.5s,baz=108,slow=38
FINES **FINESS Array B** 51.59 328 P **P** 09 31 22.4 +0.3
FINES **FINESS Array B** 51.59 328 P **P** 09 31 22.4 +0.3
PABE **Paberze** 51.73 320 P **P** 09 31 22.9 -0.3
SUW **Suwalki** 52.05 318 P **P** 09 31 24.9 -0.7
SUW pmax pmax
comp=Z,24nm,0.8s
SUW **Suwalki** 52.05 318 P **P** 09 31 24.9 -0.7
VTS **Vitosha** 52.06 304 ⇑P **P** 09 31 27.2 +1.0
VTS **Vitosha** 52.06 304 P **P** 09 31 26.6 +0.5
VTS pmax pmax
comp=Z,6.0nm,1.0s
VTS **Vitosha** 52.06 304 P **P** 09 31 26.6 +0.5
VTS IAmb IAmb 09 31 27.9
comp=Z,6.3nm,1.0s
KWP **Kalwaria Pacla** 52.17 313 P **P** 09 31 26.3 -0.3
KWP pmax pmax
comp=Z,541nm,0.6s
KWP **Kalwaria Pacla** 52.17 313 P **P** 09 31 26.3 -0.3
DRGR 52.20 309 ⇑P **P** 09 31 27.7 +0.7
UZH **Uzhgorod** 52.44 312 *e*P **P** 09 31 32.0 +3.4
UZH *e* 09 31 38.2
SOEI **Soe** 52.75 129 P **P** 09 31 29.8 -1.6
MA2 **Magadan** 53.96 35 LR LR 09 54 07.5
comp=Z,64nm,21.8s,baz=276,slow=35
MA2 **Magadan** 53.96 35⇓ *e*P **P** 09 31 40.1 +0.4
MA2 pmax pmax
comp=Z,9.0nm,1.0s
ARCES **ARCESS Array B** 53.98 338 P **P** 09 31 40.1 +0.5
comp=Z,8.9nm,0.8s,baz=96,slow=6.1,SNR=9.3
ARCES **ARCESS Array B** 53.98 338 P **P** 09 31 40.3 +0.6
ARCES pmax pmax
comp=Z,50nm,1.6s
ARCES **ARCESS Array B** 53.98 338 P **P** 09 31 40.3 +0.6
KMBO **Kilima Mbogo** 54.62 247 P **P** 09 31 44.4 -1.0
comp=Z,1.7nm,0.6s,baz=33,slow=8.2,SNR=8.1
KMBO **Kilima Mbogo** 54.62 247 P **P** 09 31 44.6 -0.7
KMBO pmax pmax
comp=Z,12nm,1.4s
KMBO **Kilima Mbogo** 54.62 247 P **P** 09 31 44.6 -0.7
KMBO IAmb IAmb 09 31 46.9
comp=Z,12nm,1.4s
SEY **Seymchan** 55.12 31⇓ *e*P **P** 09 31 48.8 +0.8
VRAC **Vranov** 56.16 313 LR LR 09 57 56.3
comp=Z,43nm,21.6s,baz=30,slow=38
HFS **Hagfors** 57.47 326 LR LR 10 00 36.9
comp=Z,109nm,19.1s,baz=54,slow=40
PETK **Petropavlovsk-** 57.71 43 LR LR 10 01 37.3
comp=Z,31nm,20.6s,baz=123,slow=41
GERES **GERESS Array B** 58.10 312 P **P** 09 32 09.0 -0.6
comp=Z,1.3nm,0.8s,baz=76,slow=5.2,SNR=2.8
GERES **GERESS Array B** 58.10 312 P **P** 09 32 09.6 0.0
GERES **GERESS Array B** 58.10 312 P **P** 09 32 09.6 0.0
NB2 **NORSAR Subarra** 58.69 327 P **P** 09 32 12.8 -0.6
comp=Z,14nm,1.2s,baz=89,slow=6.9
NOA **NORSAR Array B** 58.69 327 P **P** 09 32 12.4 -1.0
comp=Z,4.3nm,1.0s,baz=96,slow=6.5,SNR=2.9
NOA LR LR 09 59 06.6
comp=Z,78nm,18.6s,baz=80,slow=38
SPITS **Spitsbergen Ar** 58.85 347 LR LR 10 01 56.3
comp=Z,65nm,20.4s,baz=228,slow=40
FITZ **Fitzroy Crossi** 59.77 135 LR LR 10 02 20.2
comp=Z,34nm,19.2s,baz=289,slow=40
FITZ **Fitzroy Crossi** 59.77 135 P **P** 09 32 20.7 -0.6
FITZ IAmb IAmb 09 34 28.6
comp=Z,14nm,1.6s
KNRA **Kununurra** 60.03 131 P **P** 09 32 23.2 +0.1
BILL **Bilibino** 61.10 25 *e*P **P** 09 32 33.6 +3.7
BILL *e* 09 33 08.0
BILL pmax pmax
comp=Z,9.0nm,2.1s
SENIN **Lac Senin/Sane** 62.78 310 P **P** 09 32 41.4 -0.4
SENIN IAmb IAmb 09 32 55.9
comp=Z,11nm,1.1s
KEST **Kesra** 63.94 298 P **P** 09 32 47.9 -1.6
comp=Z,15nm,0.9s,baz=23,slow=18,SNR=6.5
NOR **Nord** 64.55 351 *i*P **P** 09 32 56.0 +3.4
DAG **Danmarks Havn** 66.45 346 *i*P **P** 09 33 02.0 -2.9
DAG IAML 09 33 12.2
comp=Z,3.3nm,0.8s
WB0 **Warramunga Arr** 66.70 130 P **P** 09 33 07.6 +0.2
WRA **Warramunga Arr** 66.79 130 P **P** 09 33 08.5 +0.6
comp=Z,9.1nm,0.6s,baz=324,slow=6.7,SNR=84
WRA **Warramunga Arr** 66.79 130 P **P** 09 33 08.0 +0.1
WRA **Warramunga Arr** 66.79 130 P **P** 09 33 08.0 +0.1
WRAB **Tennant Creek** 66.79 130 *ce*P **P** 09 33 08.3 +0.4
WRAB pmax pmax
comp=Z,5.0nm,0.6s
WB2 **Warramunga Arr** 66.80 130 P **P** 09 33 08.3 +0.4
WR0 **Warramunga Arr** 66.94 130 P **P** 09 33 09.2 +0.4
WR0 IAmb IAmb 09 33 10.2
comp=Z,7.7nm,0.7s
SHEM **Shemya Is, Ala** 67.53 41 LR LR 10 04 49.9
comp=Z,104nm,19.4s,baz=107,slow=38
DBG **Daneborg** 67.73 344 *i*P **P** 09 33 10.1 -3.0
AS31 **Alice Springs** 69.09 133 P **P** 09 33 22.5 +0.2
AS31 IAmb IAmb 09 33 23.5
comp=Z,2.7nm,0.6s
ASAR **Alice Springs** 69.09 133 P **P** 09 33 22.9 +0.5
comp=Z,7.2nm,0.7s,baz=316,slow=6.3,SNR=104
ASAR **Alice Springs** 69.09 133 P **P** 09 33 22.7 +0.3
ASAR **Alice Springs** 69.09 133 P **P** 09 33 22.7 +0.3
LSZ **Lusaka** 70.21 240 LR LR 10 04 47.8
comp=Z,53nm,18.1s,baz=133,slow=36
LSZ **Lusaka** 70.21 240 P **P** 09 33 29.2 -0.3
LSZ pmax pmax
comp=Z,7.0nm,1.1s
LSZ **Lusaka** 70.21 240 P **P** 09 33 29.2 -0.3
LSZ IAmb IAmb 09 33 30.3
comp=Z,7.1nm,1.1s
NEEM **North Greenlan** 71.93 351 *i*P **P** 09 33 42.9 +3.6
ESDC **Sonseca Array** 72.64 306 P **P** 09 33 43.2 -0.7
comp=Z,1.4nm,0.8s,baz=48,slow=3.1,SNR=6.2
ESDC **Sonseca Array** 72.64 306 P **P** 09 33 44.0 +0.1
ESDC IAmb IAmb 09 33 44.9
comp=Z,7.9nm,1.4s
SUMG **Summit** 73.07 345 P **P** 09 33 46.3 +0.1
SUMG pmax pmax
comp=Z,18nm,1.0s
SUMG **Summit** 73.07 345 *i*P **P** 09 33 46.0 -0.3
SUMG IAmb IAmb 09 33 54.8
comp=Z,8.2nm,0.9s
SUMG **Summit** 73.07 345 P **P** 09 33 46.3 +0.1
TULEG **Thule** 74.80 354 *i*P **P** 09 33 57.7 +1.9
TULEG IAmb IAmb 09 34 28.9
comp=Z,8.2nm,1.0s
ICESG **Greenland Ices** 75.66 342 *i*P **P** 09 33 58.7 -2.6
ICESG IAmb IAmb 09 34 10.3
comp=Z,9.7nm,0.8s
BBOO **Buckleboo** 76.90 138 P **P** 09 34 08.8 +0.4
RES **Resolute Bay** 77.85 0 LR LR 10 11 49.1
comp=Z,55nm,18.1s,baz=280,slow=38
LBTB **Lobatse** 78.08 233 LR LR 10 04 39.2
comp=Z,56nm,21.5s,baz=72,slow=33
LBTB **Lobatse** 78.08 233 P **P** 09 34 15.5 +0.2
LBTB pmax pmax
comp=Z,8.0nm,0.9s
LBTB **Lobatse** 78.08 233 P **P** 09 34 15.5 +0.2
LBTB IAmb IAmb 09 34 16.4
comp=Z,8.5nm,0.8s
TORD **Torodi Ar. Bea** 78.76 279 P **P** 09 34 17.8 -1.5
comp=Z,2.0nm,0.8s,baz=48,slow=4.8,SNR=10
TORD **Torodi Ar. Bea** 78.76 279 P **P** 09 34 18.6 -0.6
ILAR **Eielson Array** 79.22 20 P **P** 09 34 20.6 -0.3
comp=Z,0.9nm,1.0s,baz=278,slow=4.3,SNR=5.1
ILAR LR LR 10 12 14.2
comp=Z,136nm,18.9s,baz=224,slow=38
STKA **Stephens Creek** 79.65 134 P **P** 09 34 23.8 +0.1
comp=Z,6.4nm,0.8s,baz=325,slow=7.1,SNR=15
STKA **Stephens Creek** 79.65 134 P **P** 09 34 23.8 +0.1
SFJD **Kangerlussuaq** 80.01 344 LR LR 10 13 12.9
comp=Z,36nm,21.1s,baz=300,slow=38
BOSA **Boshof** 80.55 231 P **P** 09 34 28.4 -0.4
comp=Z,6.3nm,0.9s,baz=94,slow=3.8,SNR=6.8
BOSA LR LR 10 09 15.3
comp=Z,68nm,18.2s,baz=48,slow=35
BOSA **Boshof** 80.55 231 P **P** 09 34 28.6 -0.1
BOSA IAmb IAmb 09 34 29.8

comp=Z,15nm,1.2s
**TSUM Tsumeb 80.72 243** LR LR 10 10 58.7
comp=Z,46nm,18.4s,baz=144,slow=36
**TOO Toolangi 85.79 136** P **P** **09 34 56.8 +1.3**
TOO pmax pmax
comp=Z,12nm,1.1s
**TOO Toolangi 85.79 136** P **P** **09 34 56.8 +1.3**
TOO IAmb IAmb 09 34 57.6
comp=Z,12nm,1.1s
**SUR Sutherland 85.87 230** LR LR 10 10 30.6
comp=Z,76nm,19.9s,baz=145,slow=34
**FRB Frobisher Bay 86.60 349** P **P** **09 34 58.1 -1.0**
comp=Z,1.2nm,0.8s,baz=22,slow=5.1,SNR=2.7
**DBIC Dimbokro 87.42 276** P **P** **09 35 02.4 -1.6**
comp=Z,2.7nm,0.8s,baz=94,slow=4.9,SNR=3.3
DBIC LR LR 10 17 08.5
comp=Z,52nm,18.1s,baz=127,slow=38
**YKA Yellowknife Ar 88.64 9** P **P** **09 35 08.6 -0.4**
comp=Z,0.6nm,0.8s,baz=335,slow=4.7,SNR=12
**TXAR Lajitas Array 122.57 10** PKP **PKPdf** **09 41 10.3 -2.0**
comp=Z,0.3nm,0.8s,baz=301,slow=2.6,SNR=4.4
**CPUP Villa Florida 147.10 264** PKPbc **PKPdf** **09 41 58.3 +0.9**
comp=Z,3.8nm,0.9s,baz=51,slow=6.5,SNR=4.1
**LPAZ La Paz 153.25 290** PKPbc **PKPbc** **09 42 14.9 -0.6**
comp=Z,0.6nm,0.6s,baz=23,slow=3.2,SNR=3.7

*KRNET **24** 09:32:28.6±0.1, 41.°08N×69.°55E, h11km, mb3.0*
*SOME **24** 09:32:31.6, 41.°30N×69.°75E, h0km*
**ISC 24 09:32:28.5±1.4, 41°00N±0°.03×69°3E±0°.1, h10km±15km, n14, σ1°44/28, 21C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAS** | **Tashkent** | **0.33** | **359** | ⇑*i*P | **Pg** | **09 32 35.0** | **0.0** |
| | baz=22 | | | | | | |
| TAS | | | | ⇑*i*S | **Sg** | **09 32 39.6** | **+0.2** |
| | baz=22 | | | | | | |
| **TRKS** | **Terek-Say** | **1.48** | **68** | ⇑*i*P | **Pn** | **09 32 52.7** | **-2.7** |
| | baz=72 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sn** | **09 33 11.1** | **-3.8** |
| | baz=72 | | | | | | |
| **BTK** | **Batken** | **1.49** | **129** | ⇑*i*P | **Pn** | **09 32 54.9** | **-0.4** |
| | baz=36 | | | | | | |
| BTK | | | | ⇑*i*S | **Sb** | **09 33 15.2** | **0.0** |
| | baz=36 | | | | | | |
| **GAR** | **Garm** | **2.14** | **158** | ⇑*i*P | **Pb** | **09 33 07.7** | **+0.3** |
| | baz=64 | | | | | | |
| GAR | | | | ⇑*i*S | **Sg** | **09 33 36.7** | **-0.6** |
| | baz=64 | | | | | | |
| **ARK** | **Arkit** | **2.15** | **67** | ⇑*i*P | **Pn** | **09 33 04.9** | **+0.4** |
| | baz=68 | | | | | | |
| ARK | | | | ⇑*i*S | **Sn** | **09 33 31.7** | **+0.3** |
| | baz=68 | | | | | | |
| **KK09** | **Karatay Array** | **2.30** | **22** | ⇑Pn | **Pb** | **09 33 09.2** | **-0.9** |
| | 0.5nm,0.5s | | | | | | |
| KK09 | | | | ⇑Pg | **Pg** | **09 33 11.3** | **-1.3** |
| | 2.8nm,0.2s,baz=196,slow=16 | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 09 33 40.7 | |
| | 22nm,0.5s,baz=204,slow=25 | | | | | | |
| **DRK** | **Karamyk** | **2.44** | **128** | ⇓*i*P | **Pn** | **09 33 10.8** | **+2.2** |
| | baz=32 | | | | | | |
| DRK | | | | ⇓*i*S | **Sb** | **09 33 41.9** | **-0.9** |
| | baz=32 | | | | | | |
| **OHH** | **Osh** | **2.69** | **99** | ⇑*i*P | **Pn** | **09 33 12.6** | **+0.8** |
| | baz=2.0 | | | | | | |
| OHH | | | | ⇑*i*S | **Sn** | **09 33 44.9** | **+0.5** |
| | baz=2.0 | | | | | | |
| **MNAS** | **Manas** | **2.82** | **57** | ⇑*i*P | **Pn** | **09 33 14.0** | **+0.3** |
| | baz=57 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sn** | **09 33 47.7** | **-0.1** |
| | baz=57 | | | | | | |
| **MRKS** | **Merke** | **3.41** | **58** | *e*P | **Pb** | **09 33 29.2** | **+0.2** |
| | 4.3nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **09 34 10.2** | **-0.3** |
| | 9.3nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **3.73** | **62** | ⇑*i*P | **Pn** | **09 33 26.6** | **+0.4** |
| | baz=62 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **09 34 09.3** | **-1.0** |
| | baz=62 | | | | | | |
| **ARLS** | **Aral** | **3.87** | **75** | ⇑*i*P | **Pn** | **09 33 28.9** | **+0.7** |
| | baz=76 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **09 34 13.2** | **-0.6** |
| | baz=76 | | | | | | |
| **DGS** | **Degeres** | **5.31** | **63** | *e*P | **Pb** | **09 34 02.5** | **+1.1** |
| | 3.7nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sb** | **09 35 07.3** | **+2.2** |
| | 1.4nm,0.1s | | | | | | |
| **BTLS** | **Baital** | **5.33** | **39** | *e*P | **Pb** | **09 34 03.0** | **+1.3** |
| | 1.7nm,0.2s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **09 35 08.6** | **+3.0** |
| | 4.9nm,0.5s | | | | | | |

*CNRM **24** 10:13:31.1, 35.°41N×3.°80W, h26km, ml2.5*
*SFS **24** 10:13:31.0, 35.°52N×3.°77W, ML2.4, ALBORAN S.*
**ISC 24 10:13:30.3±1.1, 35°43N±0°.03×3°72W±0°.03, h25km±10km, n20, σ1°10/32, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.28** | **220** | P | **Pb** | **10 13 37.3** | **+0.2** |
| PALE | | | | S | **Sb** | **10 13 41.0** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.62** | **110** | P | **Pn** | **10 13 43.4** | **-0.3** |
| GOG | | | | S | **Sn** | **10 13 52.6** | **-0.3** |
| **CHAS** | **Isla Isabel II** | **1.08** | **103** | P | **Pb** | **10 13 50.1** | **-0.2** |
| CHAS | | | | S | **Sb** | **10 14 04.1** | **+0.1** |
| **TAF** | **Taforalt** | **1.23** | **120** | P | **Pb** | **10 13 53.1** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.37** | **257** | P | **Pb** | **10 13 55.3** | **0.0** |
| **EMAL** | **Malaga-Limoner** | **1.45** | **337** | P | **Pb** | **10 13 57.2** | **+0.6** |
| EMAL | | | | S | **Sn** | **10 14 12.6** | **-0.5** |
| **JBK** | **JBK** | **1.45** | **139** | P | **Pb** | **10 13 56.4** | **-0.3** |
| JBK | | | | S | **Sn** | **10 14 13.6** | **+0.2** |
| **SICH** | **Sidi Chahed** | **1.87** | **225** | P | **Pn** | **10 14 00.1** | **-0.7** |
| **LCRM** | **LCR** | **1.98** | **209** | P | **Pb** | **10 14 07.6** | **+1.9** |
| LCRM | | | | S | **Sb** | **10 14 29.6** | **-0.5** |
| **IFR** | **Ifrane** | **2.24** | **212** | S | **Sn** | **10 14 32.0** | **-1.0** |
| **MD31** | **MD31** | **2.70** | **199** | P | **Pn** | **10 14 10.4** | **+1.7** |
| MD31 | | | | S | **Sn** | **10 14 44.6** | **+0.3** |
| **MDT** | **Midelt** | **2.72** | **196** | P | **Pb** | **10 14 15.8** | **-2.5** |
| MDT | | | | S | **Sn** | **10 14 44.4** | **-0.2** |
| **ZHG** | **ZHG** | **3.13** | **231** | P | **Pn** | **10 14 20.2** | **+2.1** |
| ZHG | | | | S | **Sn** | **10 14 52.7** | **-2.0** |
| **PVAQ** | **Vaqueiros** | **3.78** | **303** | *e*Pn | **Pn** | **10 14 27.8** | **+0.8** |
| PVAQ | | | | *e*Sn | **Sn** | **10 15 10.0** | **-0.7** |
| PVAQ | | | | A | A | 10 15 12.1 | |
| | 3.5nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.78** | **303** | P | **Pn** | **10 14 27.7** | **+0.7** |
| PVAQ | | | | S | **Sn** | **10 15 09.0** | **-1.7** |
| **MORF** | **Marmelete** | **4.40** | **297** | *e*Sn | **Sn** | **10 15 25.2** | **-0.9** |
| MORF | | | | A | A | 10 15 28.9 | |
| | 2.6nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.46** | **294** | *e*Sn | **Sn** | **10 15 26.8** | **-0.8** |
| **PFVI** | **Vila Bisbo** | **4.46** | **294** | P | **Pn** | **10 14 36.4** | **0.0** |
| **PNCL** | **Nicolau / Gran** | **4.70** | **306** | *e*Pn | **Pn** | **10 14 40.4** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **10 15 33.2** | **-0.1** |
| PNCL | | | | A | A | 10 15 37.6 | |
| | 1.7nm,0.4s | | | | | | |
| **OUZM** | **OUZ** | **5.18** | **210** | P | **Pn** | **10 14 48.3** | **+1.9** |

*IDC **24** 10:28:46.8±1.1, 28.°22N×43.°71W, h0km, mb3.7/9,*
*mb1 3.9/9, mb1mx3.6/52, mbtmp3.7/9, MS3.5/9, Ms1 3.5/9,*
*ms1mx2.9/92, Error ellipse: s-maj=30.7km s-min=25.7km*
*az=29.0*
**ISC 24 10:28:48.2±1.0, 28°2N±0°.2×43°7W±0°.2, h10km, n21, σ0°51/9, mb3.9/9, MS3.4/9, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SADO** | **Sadowa** | **32.61** | **310** | LR | LR | 10 47 42.5 | |
| | comp=Z,60nm,18.9s,baz=336,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.61** | **293** | LR | LR | 10 46 15.5 | |
| | comp=Z,63nm,20.6s,baz=302,slow=30 | | | | | | |
| **FRB** | **Frobisher Bay** | **38.97** | **343** | LR | LR | 10 50 24.3 | |
| | comp=Z,53nm,18.6s,baz=208,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | **42.54** | **113** | LR | LR | 10 52 39.0 | |
| | comp=Z,42nm,18.9s,baz=308,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.78** | **100** | P | **P** | **10 37 02.9** | **+0.4** |
| | 0.9nm,0.9s,baz=300,slow=7.9,SNR=4.3 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.62** | **137** | T | T | 11 26 05.8 | |
| | baz=323,slow=75,SNR=23 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.62** | **137** | T | T | 11 26 03.6 | |
| | baz=323,slow=75,SNR=24 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.64** | **137** | T | T | 11 26 06.8 | |
| | baz=323,slow=75,SNR=31 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.41** | **139** | T | T | 11 26 60.0 | |
| | baz=258,slow=74,SNR=23 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.43** | **139** | T | T | 11 27 01.4 | |
| | baz=322,slow=74,SNR=18 | | | | | | |
| **SIV** | **San Ignacio** | **47.05** | **203** | LR | LR | 10 55 04.3 | |
| | comp=Z,74nm,21.2s,baz=107,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **50.16** | **211** | P | **P** | **10 37 44.8** | **-0.1** |
| | 1.7nm,1.0s,baz=350,slow=4.1,SNR=4.3 | | | | | | |
| LPAZ | | | | LR | LR | 10 58 52.5 | |
| | comp=Z,50nm,18.0s,baz=77,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.04** | **287** | LR | LR | 11 00 09.7 | |
| | comp=Z,24nm,19.6s,baz=319,slow=36 | | | | | | |
| **RES** | **Resolute Bay** | **53.10** | **345** | P | **P** | **10 38 05.4** | **0.0** |
| | 1.4nm,1.0s,baz=30,slow=8.1,SNR=4.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **54.26** | **304** | P | **P** | **10 38 14.4** | **-0.3** |
| | 0.6nm,0.6s,baz=85,slow=8.1,SNR=7.6 | | | | | | |
| **LVC** | **Limon Verde** | **56.08** | **208** | LR | LR | 11 03 00.6 | |
| | comp=Z,46nm,18.5s,baz=36,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.58** | **328** | P | **P** | **10 38 30.9** | **+0.1** |
| | 0.3nm,0.8s,baz=88,slow=7.4,SNR=4.9 | | | | | | |
| YKA | | | | LR | LR | 11 00 47.2 | |
| | comp=Z,76nm,21.7s,baz=302,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **58.15** | **46** | P | **P** | **10 38 42.0** | **-0.1** |
| | 0.7nm,0.5s,baz=275,slow=6.3,SNR=5.9 | | | | | | |
| **INK** | **Inuvik** | **64.04** | **336** | P | **P** | **10 39 22.3** | **+0.6** |
| | 0.5nm,0.6s,baz=117,slow=6.6,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **70.20** | **334** | P | **P** | **10 40 01.4** | **+0.5** |
| | 0.9nm,0.8s,baz=63,slow=4.7,SNR=8.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **86.41** | **33** | P | **P** | **10 41 30.0** | **-0.8** |
| | 0.2nm,0.4s,baz=322,slow=3.2,SNR=1.4 | | | | | | |

*IDC **24** 10:38:41.4±1.9, 32.°06N×99.°91E, h0km, mb3.5/5,*
*mb1 3.7/8, mb1mx3.5/39, mbtmp3.5/8, ML3.7/3, MS2.8/3,*
*Ms1 2.8/3, ms1mx2.5/79, Error ellipse: s-maj=40.7km*
*s-min=30.1km az=36.0*
**ISC 24 10:38:46.1±1.0, 32°0N±0°.1×99°8E±0°.2, h35km, n8, σ0°77/8, mb3.5/5, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **13.54** | **184** | Pn | **Pn** | **10 41 55.6** | **-0.1** |
| | 0.5nm,0.3s,baz=354,slow=8.8,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 10 47 26.0 | |
| | comp=Z,26nm,21.2s,baz=15,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **16.56** | **16** | Pn | **Pn** | **10 42 35.2** | **-0.4** |
| | 0.1nm,0.3s,baz=202,slow=12,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.96** | **323** | P | **Pn** | **10 43 16.7** | **-0.3** |
| | 0.1nm,0.3s,baz=140,slow=11,SNR=1.6 | | | | | | |
| **KSRS** | **Korea Array** | **23.67** | **69** | P | **P** | **10 43 54.1** | **-0.2** |
| | 1.2nm,0.7s,baz=260,slow=11,SNR=4.2 | | | | | | |
| KSRS | | | | LR | LR | 10 53 55.7 | |
| | comp=Z,14nm,21.0s,baz=75,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.36** | **326** | P | **P** | **10 44 00.1** | **-0.6** |
| | 0.3nm,0.3s,baz=140,slow=7.5,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **24.40** | **338** | P | **P** | **10 44 01.8** | **+0.8** |
| | 1.7nm,0.7s,baz=148,slow=8.7,SNR=7.5 | | | | | | |
| ZALV | | | | LR | LR | 10 54 41.1 | |
| | comp=Z,47nm,20.4s,baz=33,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **70.55** | **25** | P | **P** | **10 49 56.6** | **-0.6** |
| | 1.2nm,1.1s,baz=288,slow=6.6,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.83** | **15** | P | **P** | **10 51 02.4** | **+1.2** |
| | 0.2nm,0.8s,baz=334,slow=5.2,SNR=3.1 | | | | | | |

**IDC 24 10:40:40.6±9.5, 18°16S×177°54W, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.4/33, mbtmp3.4/3, Error ellipse: s-maj=420.4km s-min=43.0km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.40** | **260** | P | P | 10 49 01.3 | -0.1 |
| | 0.6nm,1.0s,baz=96,slow=7.6,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **45.52** | **254** | P | P | 10 49 02.2 | -0.1 |
| | 0.3nm,0.6s,baz=91,slow=7.7,SNR=4.9 | | | | | | |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | P | 10 53 22.1 | 0.0 |
| | 0.2nm,0.5s,baz=222,slow=8.0,SNR=1.3 | | | | | | |

**IDC 24 10:50:10.0±2.2, 54°62N×83°78E, h0km, mb1 2.8/2, mb1mx2.6/58, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=17.9km s-min=10.4km az=169.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.91** | **137** | *i* | | 10 55 45.2 | |
| | baz=318,slow=334,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.91** | **137** | Pg | Pg | 10 50 27.1 | -0.2 |
| | 3.1nm,0.3s,baz=320,slow=20,SNR=22 | | | | | | |
| ZALV | | | | Lg | Lg | 10 50 40.5 | |
| | 11nm,0.3s,baz=317,slow=28,SNR=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.12** | **221** | Pn | Pn | 10 51 27.7 | -0.2 |
| | 0.1nm,0.3s,baz=40,slow=13,SNR=2.6 | | | | | | |
| KURBB | | | | Pg | Pb | 10 51 40.6 | +0.3 |
| | 0.1nm,0.3s,baz=35,slow=17,SNR=1.4 | | | | | | |
| KURBB | | | | Lg | Lg | 10 52 50.6 | |
| | 0.1nm,0.3s,baz=38,slow=30,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.89** | **187** | Pn | Pn | 10 52 05.4 | -0.5 |
| | 0.1nm,0.3s,baz=9.2,slow=12,SNR=4.4 | | | | | | |
| MKAR | | | | Lg | Lg | 10 54 20.5 | |
| | 0.1nm,0.3s,baz=13,slow=27,SNR=2.1 | | | | | | |

*IDC **24** 10:56:55.1±1.2, 32.°29S×72.°40W, h0km, mb3.6/3,*
*mb1 3.7/5, mb1mx3.6/31, mbtmp3.5/5, ML3.2/2, Error*
*ellipse: s-maj=50.3km s-min=32.3km az=80.0*
*SJA **24** 10:56:56.6±1.5, 31.°86S×72.°12W, h9km±13km, ML3.9,*
*MW4.0*
*GUC **24** 10:56:58.5±0.8, 31.°83S×72.°20W, h29km±3km, ML4.0*
**ISC 24 10:56:55.7±1.7, 31°85S±0°.02×72°30W±0°.05, h1km±11km, n58, σ1°93/85, mb3.5/3, 4C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VA06** | **Catapilco** | **1.11** | **130** | *e*P | **Pg** | **10 57 17.7** | **+0.8** |
| VA06 | | | | *e*S | **Sg** | **10 57 31.3** | **0.0** |
| VA06 | | | | IAML | | 10 57 36.3 | |
| | comp=E,6μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **1.28** | **60** | *e*P | **Pn** | **10 57 19.7** | **-1.1** |
| CO02 | | | | *e*S | **Sb** | **10 57 35.2** | **-2.5** |
| CO02 | | | | IAML | | 10 57 37.6 | |
| | comp=E,9μm,0.3s | | | | | | |
| **VA01** | **Torpederas** | **1.29** | **155** | *e*P | **Pn** | **10 57 20.9** | **+0.1** |
| VA01 | | | | *e*S | **Sb** | **10 57 34.8** | **-3.2** |
| **CO06** | **Fray Jorge** | **1.30** | **26** | *e*P | **Pn** | **10 57 20.5** | **-0.5** |
| CO06 | | | | *e*S | **Sb** | **10 57 36.5** | **-1.6** |
| **ROC1** | **El Roble** | **1.56** | **136** | *e*P | **Pn** | **10 57 23.1** | **-1.7** |
| ROC1 | | | | *e*S | **Sn** | **10 57 44.0** | **-1.8** |
| **ROCH** | **El Roble** | **1.56** | **136** | *e*P | **Pb** | **10 57 24.7** | **-0.9** |
| ROCH | | | | *e*P | **Pn** | **10 57 23.2** | **-1.6** |
| ROCH | | | | *e*S | **Sn** | **10 57 44.7** | **-1.1** |
| ROCH | | | | *i* S | **Sb** | **10 57 45.2** | **-0.6** |
| ROCH | | | | IAML | | 10 57 53.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| ROCH | | | | IAML | | 10 57 55.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| **CO03** | **El Pedregal** | **1.70** | **54** | *e*P | **Pn** | **10 57 26.8** | **+0.2** |
| CO03 | | | | *e*S | **Sn** | **10 57 47.4** | **-1.7** |
| CO03 | | | | IAML | | 10 57 52.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **1.70** | **54** | *e*P | **Pb** | **10 57 27.0** | **-0.9** |
| CO03 | | | | *e*S | **Sb** | **10 57 48.4** | **-1.5** |
| CO03 | | | | IAML | | 10 57 52.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **MT02** | **Curacav** | **1.71** | **146** | ⇑*e*P | **Pn** | **10 57 27.0** | **+0.3** |
| MT02 | | | | *e*S | **Sn** | **10 57 48.7** | **-0.5** |
| **VA03** | **San Esteban** | **1.74** | **122** | *e*P | **Pn** | **10 57 27.1** | **0.0** |
| VA03 | | | | *e*S | **Sn** | **10 57 49.0** | **-0.9** |
| VA03 | | | | IAML | | 10 57 53.6 | |
| | comp=N,4μm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **1.74** | **122** | *e*P | **Pn** | **10 57 27.1** | **0.0** |
| VA03 | | | | *e*S | **Sb** | **10 57 49.6** | **-1.2** |
| VA03 | | | | IAML | | 10 57 53.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.88** | **134** | *e*P | **Pn** | **10 57 29.3** | **+0.3** |
| PEL | | | | *e*S | **Sb** | **10 57 54.7** | **-0.1** |
| **VA05** | **Santo Domingo** | **1.89** | **163** | ⇑*e*P | **Pn** | **10 57 29.8** | **+0.6** |
| VA05 | | | | *e*S | **Sn** | **10 57 54.2** | **+0.5** |
| VA05 | | | | IAML | | 10 58 09.5 | |
| | comp=E,2μm,0.6s | | | | | | |
| **MT05** | **Renca** | **2.02** | **140** | *e*P | **Pb** | **10 57 32.4** | **-0.9** |
| MT05 | | | | *e*S | **Sb** | **10 57 57.9** | **-1.2** |
| MT05 | | | | IAML | | 10 58 05.2 | |
| | comp=E,4μm,0.4s | | | | | | |
| **MT05** | **Renca** | **2.02** | **140** | *e*P | **Pb** | **10 57 33.0** | **-0.3** |
| MT05 | | | | *e*S | **Sn** | **10 57 56.0** | **-1.1** |
| MT05 | | | | IAML | | 10 58 04.8 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **2.11** | **38** | ⇑*e*P | **Pn** | **10 57 32.5** | **+0.2** |
| GO04 | | | | *e*S | **Sn** | **10 57 59.1** | **-0.2** |
| GO04 | | | | IAML | | 10 58 10.0 | |
| | comp=E,5μm,0.6s | | | | | | |
| **GO04** | **Tololo Observa** | **2.11** | **38** | *e*P | **Pn** | **10 57 33.0** | **+0.7** |
| **MT01** | **Popeta** | **2.19** | **157** | *e*P | **Pn** | **10 57 34.1** | **+0.7** |
| MT01 | | | | *e*S | **Sn** | **10 58 01.8** | **+0.7** |
| **MT01** | **Popeta** | **2.19** | **157** | *e*P | **Pn** | **10 57 34.0** | **+0.7** |
| MT01 | | | | *e*S | **Sn** | **10 57 54.5** | **-6.7** |
| MT01 | | | | IAML | | 10 58 13.4 | |
| | comp=Z,459nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **2.22** | **151** | *e*P | **Pb** | **10 57 35.4** | **-1.2** |
| MT09 | | | | *e*S | **Sn** | **10 58 02.8** | **+1.0** |
| MT09 | | | | IAML | | 10 58 13.4 | |
| | comp=E,988nm,0.2s | | | | | | |
| **MT03** | **Universidad Ad** | **2.23** | **138** | *e*P | **Pn** | **10 57 34.7** | **+0.8** |
| MT03 | | | | *i* S | **Sn** | **10 58 02.6** | **+0.6** |
| MT03 | | | | IAML | | 10 58 09.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| **MT03** | **Universidad Ad** | **2.23** | **138** | *e*P | **Pn** | **10 57 34.8** | **+0.8** |
| MT03 | | | | *e*P | **Pb** | **10 57 35.0** | **-1.8** |
| MT03 | | | | *e*S | **Sn** | **10 58 00.9** | **-1.1** |
| MT03 | | | | IAML | | 10 58 14.8 | |
| | comp=Z,869nm,0.8s | | | | | | |
| **AUSP** | **Uspallata** | **2.50** | **99** | *e*P | **Pb** | **10 57 40.0** | **-1.5** |
| AUSP | | | | *e*S | **Sb** | **10 58 12.0** | **-0.9** |
| **BO04** | **La Punta** | **2.56** | **147** | ⇑*e*P | **Pn** | **10 57 39.7** | **+1.3** |
| BO04 | | | | *e*S | **Sn** | **10 58 11.0** | **+0.7** |
| BO04 | | | | IAML | | 10 58 19.8 | |
| | comp=E,529nm,0.5s | | | | | | |
| BO04 | | | | IAML | | 10 58 25.4 | |
| | comp=N,607nm,0.7s | | | | | | |
| **LMEL** | **Las Melosas** | **2.66** | **139** | *e*P | **Pn** | **10 57 41.1** | **+1.3** |
| LMEL | | | | *e*S | **Sn** | **10 58 14.4** | **+1.6** |
| LMEL | | | | IAML | | 10 58 24.5 | |
| | comp=N,758nm,0.1s | | | | | | |
| **BO01** | **Tunca** | **2.73** | **158** | *e*P | **Pn** | **10 57 42.0** | **+1.3** |
| BO01 | | | | *e*S | **Sn** | **10 58 08.9** | **-5.4** |
| BO01 | | | | *e*S | **Sb** | **10 58 18.4** | **-0.9** |
| **AROD** | **Rodeo** | **2.95** | **56** | *e*P | **Pb** | **10 57 46.6** | **-2.6** |
| AROD | | | | *e*P | **Pn** | **10 57 47.0** | **+3.1** |
| AROD | | | | *e*S | **Sb** | **10 58 27.1** | **+1.3** |
| **ARCO** | **CERRO ARCO** | **3.02** | **110** | *e*P | **Pb** | **10 57 49.0** | **-1.3** |
| ARCO | | | | *e*S | **Sb** | **10 58 25.9** | **-1.7** |
| ARCO | | | | IAML | | 10 58 38.8 | |
| | comp=Z,390nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **3.03** | **105** | *e*P | **Pb** | **10 57 48.0** | **-2.4** |
| ASAL | | | | *e*S | **Sg** | **10 58 37.2** | **+4.3** |
| **ACCO** | **Cerro Coronel** | **3.04** | **66** | *e*P | **Pb** | **10 57 48.0** | **-2.8** |
| ACCO | | | | *e*P | **Pb** | **10 57 48.0** | **-2.8** |
| ACCO | | | | *e*S | **Sb** | **10 58 29.5** | **+0.9** |
| **LCO** | **Las Campanas** | **3.15** | **26** | *e*P | **Pn** | **10 57 47.0** | **+0.4** |
| **GO05** | **Huala** | **3.17** | **175** | *e*P | **Pn** | **10 57 48.0** | **+1.3** |
| GO05 | | | | *e*S | **Sn** | **10 58 23.1** | **-2.0** |
| **AAGR** | **Agrelo** | **3.18** | **114** | *e*P | **Pn** | **10 57 48.0** | **+1.0** |
| AAGR | | | | *e*S | **Sg** | **10 58 36.3** | **-1.6** |
| **ACDV** | **Cuesta del Vie** | **3.20** | **59** | *e*P | **Pb** | **10 57 50.0** | **-3.4** |
| ACDV | | | | *e*S | **Sb** | **10 58 34.6** | **+1.7** |
| ACDV | | | | IAML | | 10 58 36.4 | |
| | comp=Z,352nm,1.1s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.78** | **17** | *e*P | **Pn** | **10 57 55.0** | **-0.1** |
| AC04 | | | | *e*S | **Sb** | **10 58 49.8** | **+0.2** |
| AC04 | | | | IAML | | 10 59 04.8 | |
| | comp=Z,114nm,0.8s | | | | | | |
| **AVFE** | **Valle Fertil** | **4.31** | **75** | *e*P | Pn | 10 57 50.5 | -12 |
| AVFE | | | | *e*S | **Sn** | **10 58 56.0** | **+2.5** |
| AVFE | | | | *e*S | **Sb** | **10 59 00.9** | **-3.9** |
| AVFE | | | | IAML | | 10 59 08.0 | |
| | comp=Z,219nm,0.6s | | | | | | |
| **RFA** | **San Rafael** | **4.33** | **133** | *e*P | **Pn** | **10 58 05.2** | **+2.4** |
| RFA | | | | *e*S | **Sb** | **10 59 08.9** | **+3.4** |
| **APLL** | **PUNTA DE LOS L** | **5.15** | **75** | *e*P | Pn | 10 57 58.2 | -16 |
| APLL | | | | *e*S | **Sn** | **10 59 18.4** | **+4.3** |
| **ACLC** | **CERRO LA CRUZ** | **5.20** | **64** | *e*P | **Pn** | **10 58 11.9** | **-2.8** |
| **H03N1** | **Juan Fernandez** | **5.80** | **252** | T | T | 11 05 12.1 | |
| | baz=87,slow=74 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.81** | **252** | T | T | 11 05 10.8 | |
| | baz=87,slow=74,SNR=210 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.82** | **252** | T | T | 11 05 09.7 | |
| | baz=87,slow=74,SNR=252 | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.91** | **249** | T | T | 11 05 12.9 | |
| | baz=84 | | | | | | |
| **H03S1** | **Juan Fernandez** | **5.91** | **249** | T | T | 11 05 14.4 | |
| | baz=84 | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.92** | **249** | T | T | 11 05 15.7 | |
| | baz=84 | | | | | | |
| **PLCA** | **Paso Flores** | **8.98** | **171** | Pn | Pn | 10 59 01.4 | -5.2 |
| | comp=Z,0.1nm,0.3s,baz=354,slow=19,SNR=1.7 | | | | | | |
| **LVC** | **Limon Verde** | **9.68** | **19** | Pn | Pn | 10 59 24.0 | +7.5 |
| | comp=Z,0.2nm,0.3s,baz=302,slow=8.7,SNR=2.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.76** | **331** | P | **P** | **11 07 56.5** | **+1.4** |
| | comp=Z,0.2nm,0.7s,baz=166,slow=8.4,SNR=2.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.00** | **325** | P | **P** | **11 09 19.0** | **+1.5** |
| | comp=Z,0.2nm,0.5s,baz=151,slow=4.1,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.69** | **70** | P | **P** | **11 09 26.8** | **+0.2** |
| | comp=Z,1.3nm,0.7s,baz=266,slow=4.0,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.52** | **210** | PKP | **PKPdf** | **11 15 52.2** | **-1.3** |
| | comp=Z,0.2nm,0.6s,baz=156,slow=1.7,SNR=2.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.56** | **271** | T | T | 13 34 54.8 | |
| | baz=116 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.57** | **271** | T | T | 13 35 04.7 | |
| | baz=116 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.57** | **271** | T | T | 13 35 03.0 | |
| | baz=116 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KOLL | | | | *e*SG | | Sg | | 11 04 29.2 | +0.6 |
| **VYHS** | **Vyhne** | **0.45** | **77** | Pg | | Pg | | 11 04 29.5 | -0.1 |
| VYHS | | | | Lg | | Lg | | 11 04 35.9 | |
| **VYHS** | **Vyhne** | **0.45** | **77** | *e*PG | | Pg | | 11 04 29.2 | -0.4 |
| VYHS | | | | *e*SG | | Sg | | 11 04 35.9 | +0.5 |
| **SMOL** | **Smolenice** | **0.51** | **284** | *e*PG | | Pg | | 11 04 30.4 | -0.3 |
| SMOL | | | | *e*SG | | Sg | | 11 04 38.8 | +1.5 |
| **JAVC** | **Velka Javorina** | **0.57** | **325** | *e*PG | | Pg | | 11 04 32.3 | +0.4 |
| JAVC | | | | *e*SG | | Sg | | 11 04 40.8 | +1.5 |
| **JAVC** | **Velka Javorina** | **0.57** | **325** | Pg | | Pg | | 11 04 32.4 | +0.5 |
| JAVC | | | | Lg | | Lg | | 11 04 40.5 | |
| **ZST** | **Bratislava** | **0.74** | **255** | Pg | | Pb | | 11 04 36.3 | -0.3 |
| ZST | | | | Lg | | Lg | | 11 04 47.1 | |
| **ZST** | **Bratislava** | **0.74** | **255** | *e*PG | | Pb | | 11 04 36.3 | -0.4 |
| ZST | | | | *e*SG | | Sb | | 11 04 47.0 | -0.4 |
| **IZAB** | **Izabela** | **1.04** | **80** | Lg | | Lg | | 11 04 54.4 | |
| **MORC** | **Moravsky Berou** | **1.45** | **344** | Pg | | Pg | | 11 04 48.6 | -0.1 |
| MORC | | | | Sn | | Sg | | 11 05 06.4 | -0.9 |
| **CONA** | **Conrad Observa** | **1.62** | **254** | Pn | | Pn | | 11 04 48.9 | -1.8 |
| | 1.0nm,0.3s | | | | | | | | |
| CONA | | | | Sn | | Sn | | 11 05 10.7 | -1.6 |
| | 1.6nm,0.3s | | | | | | | | |
| **CONA** | **Conrad Observa** | **1.62** | **254** | Pn | | Pn | | 11 04 48.9 | -1.9 |
| CONA | | | | Sn | | Sn | | 11 05 10.8 | -1.5 |

*SOME **24** 11:19:41.2, 40°.48N×81°.22E, h5km*
*NNC **24** 11:19:45.7±7.7, 40°.78N×82°.42E, h0km, mb3.2, mpv2.9, Error ellipse: s-maj=58.4km s-min=44.2km az=169.0*
**ISC 24 11:19:37.9**±3.0, **40°.3N**±0°.1×**81°.10E**±0°.08, **h10**km, **n15,** σ0§**91**/30, **4C-1D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDGK** | **Podgornoye** | **3.22** | **339** | ⇓Pn | **Pg** | **11 20 41.4** | **+1.7** |
| | 4.6nm,0.7s | | | | | | |
| PDGK | | | | ⇑Sn | **Sg** | **11 21 20.8** | **-0.7** |
| | 7.7nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.39** | **324** | *e*P | **Pg** | **11 20 42.4** | **-0.5** |
| | 1.4nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **11 21 26.6** | **-0.1** |
| | 10nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **3.61** | **331** | *e*P | **Pg** | **11 20 46.2** | **-0.9** |
| | 3.7nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **11 21 33.5** | **-0.4** |
| | 24nm,0.3s | | | | | | |
| **KURS** | **Kuram** | **3.83** | **326** | *e*P | **Pg** | **11 20 51.0** | **-0.5** |
| | 2.6nm,0.1s | | | | | | |
| KURS | | | | *e*S | **Sg** | **11 21 40.8** | **-0.3** |
| | 4.1nm,0.1s | | | | | | |
| **DJR** | **Jarkent** | **4.11** | **347** | *e*P | **Pg** | **11 20 56.1** | **-0.6** |
| | 1.1nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | **11 21 50.3** | **+0.4** |
| | 2.8nm,0.0s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.12** | **312** | *e*P | **Pg** | **11 20 57.1** | **+0.3** |
| | 1.8nm,0.0s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **11 21 51.7** | **+1.5** |
| | 4.2nm,0.0s | | | | | | |
| **MDOK** | **Medeo** | **4.14** | **314** | *e*P | **Pg** | **11 20 57.0** | **-0.4** |
| | 2.2nm,0.0s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **11 21 51.2** | **+0.2** |
| | 7.5nm,0.1s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.16** | **315** | *e*P | **Pg** | **11 20 58.4** | **+0.8** |
| | 2.0nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **11 21 53.8** | **+2.3** |
| | 16nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **4.23** | **333** | *e*P | **Pg** | **11 20 58.4** | **-0.7** |
| | 4.8nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sg** | **11 21 53.9** | **0.0** |
| | 20nm,0.1s | | | | | | |
| **MTBS** | **Maitube** | **4.47** | **310** | *e*P | **Pg** | **11 21 03.0** | **-0.7** |
| | 0.8nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **11 22 01.8** | **+0.2** |
| | 5.1nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **4.57** | **329** | *e*P | **Pg** | **11 21 05.3** | **-0.2** |
| | 1.0nm,0.1s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **11 22 05.8** | **+1.1** |
| | 7.0nm,0.8s | | | | | | |
| **CHKK** | **Chushkaly** | **4.66** | **320** | *e*P | **Pg** | **11 21 06.2** | **-1.0** |
| | 2.0nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **11 22 07.1** | **-0.5** |
| | 6.9nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **4.71** | **317** | *e*P | **Pg** | **11 21 06.9** | **-1.3** |
| | 1.9nm,0.1s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **11 22 08.1** | **-1.2** |
| | 6.3nm,0.1s | | | | | | |
| **MAKZ** | **Makanchi** | **6.50** | **5** | ⇑Pn | **Pn** | **11 21 14.1** | **+0.4** |
| | 0.5nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **11 22 28.8** | **+0.9** |
| | 1.2nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **6.51** | **7** | Pn | **Pn** | **11 21 13.8** | **-0.1** |
| | 0.1nm,0.2s,baz=196,slow=13,SNR=19 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **11 22 27.2** | **-0.9** |
| | 1.3nm,0.7s,baz=187,slow=23,SNR=6.0 | | | | | | |

*EAF **24** 11:25:06.9±1.5, 26°.08S×29°.43E, h10km, MD3.7*
*BUL **24** 11:25:07.1±0.6, 26°.10S×29°.41E, h10km, MD3.9*
**ISC 24 11:25:04.1**±1.0, **26°.11S**±0°.05×**29°.49E**±0°.04, **h10**km, **n14,** σ1§**84**/28, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.44** | **95** | *i* P | **Pb** | **11 25 47.6** | **-0.3** |
| CNG | | | | *i* S | **Sb** | **11 26 17.2** | **-0.9** |
| **CNG** | **Changalane** | **2.44** | **95** | *i* P | **Pb** | **11 25 47.6** | **-0.3** |
| CNG | | | | *i* S | **Sb** | **11 26 17.2** | **-0.9** |
| **MOPA** | **Mopani** | **3.12** | **34** | *i* P | **Pn** | **11 25 54.5** | **+1.2** |
| MOPA | | | | *i* S | **Sn** | **11 26 29.9** | **-0.6** |
| **MOPA** | **Mopani** | **3.12** | **34** | *i* P | **Pn** | **11 25 54.5** | **+1.2** |
| MOPA | | | | *i* S | **Sn** | **11 26 29.9** | **-0.6** |
| **LBTB** | **Lobatse** | **3.68** | **286** | *i* P | **Pn** | **11 26 02.6** | **+1.5** |
| LBTB | | | | *i* S | **Sn** | **11 26 43.6** | **-1.0** |
| **LBTB** | **Lobatse** | **3.68** | **286** | *i* P | **Pn** | **11 26 02.6** | **+1.5** |
| LBTB | | | | *i* S | **Sn** | **11 26 43.6** | **-1.0** |
| **MSNA** | **Messina** | **3.78** | **8** | *i* P | **Pn** | **11 26 05.2** | **+2.6** |
| MSNA | | | | *e*S | **Sn** | **11 26 48.1** | **+0.9** |
| **MSNA** | **Messina** | **3.78** | **8** | *i* P | **Pn** | **11 26 05.2** | **+2.6** |
| MSNA | | | | *e*S | **Sn** | **11 26 48.1** | **+0.9** |
| **BOSA** | **Boshof** | **4.51** | **236** | *i* P | **Pn** | **11 26 14.1** | **+1.6** |
| BOSA | | | | *i* S | **Sn** | **11 27 04.0** | **-1.1** |
| **BOSA** | **Boshof** | **4.51** | **236** | *i* P | **Pn** | **11 26 14.1** | **+1.6** |
| BOSA | | | | *i* S | **Sn** | **11 27 04.0** | **-1.1** |
| **MATP** | **Matopo** | **5.73** | **351** | *i* P | **Pn** | **11 26 31.2** | **+1.8** |
| MATP | | | | *i* S | **Sn** | **11 27 32.4** | **-3.0** |
| **MATP** | **Matopo** | **5.73** | **351** | *i* P | **Pn** | **11 26 31.2** | **+1.8** |
| MATP | | | | *i* S | **Sn** | **11 27 32.4** | **-3.0** |
| **BLWY** | **Bulawayo** | **6.00** | **352** | *i* P | **Pn** | **11 26 34.8** | **+1.8** |
| BLWY | | | | *i* S | **Sn** | **11 27 38.9** | **-3.0** |
| **BLWY** | **Bulawayo** | **6.00** | **352** | *i* P | **Pn** | **11 26 34.8** | **+1.8** |
| BLWY | | | | *i* S | **Sn** | **11 27 38.9** | **-3.0** |

*IDC **24** 11:29:20.3±2.0, 6°.81S×131°.25E, h0km, mb3.3/1, mb1 3.8/5, mb1mx3.4/26, mbtmp3.7/5, ML3.8/4, Error ellipse: s-maj=86.5km s-min=25.0km az=86.0*
**ISC 24 11:29:25.9**±1.0, **6°.64S**±0°.07×**131°.3E**±0°.2, **h35**km, **n14,** σ2§**98**/14, **Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.33** | **179** | P | **Pn** | **11 29 52.7** | **+4.7** |
| **BNDI** | **Bandanaira** | **2.51** | **327** | P | Pn | 11 30 11.6 | +7.4 |
| **FAKI** | **Fak Fak** | **3.82** | **15** | P | **Pn** | **11 30 25.7** | **+3.5** |
| **SIJI** | **Sorong** | **5.73** | **360** | Pn | **Pn** | **11 30 50.9** | **+2.3** |
| | 6.0nm,0.3s,baz=79,slow=1.9,SNR=12 | | | | | | |
| SIJI | | | | Sn | **Sn** | **11 31 51.0** | **-2.2** |
| | 2.6nm,0.3s,baz=116,slow=24,SNR=7.0 | | | | | | |
| **DRS** | **Darwin Rock St** | **5.77** | **184** | P | **Pn** | **11 30 50.7** | **+1.7** |
| **MTN** | **Manton Dam** | **6.17** | **181** | P | **Pn** | **11 30 56.0** | **+1.5** |
| **SOEI** | **Soe** | **7.60** | **246** | P | **Pn** | **11 31 16.8** | **+2.4** |
| **KNRA** | **Kununurra** | **9.31** | **195** | P | **Pn** | **11 31 38.5** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **12.65** | **205** | Pn | **Pn** | **11 32 20.1** | **-3.3** |
| | 0.2nm,0.3s,baz=28,slow=9.6,SNR=22 | | | | | | |
| FITZ | | | | Sn | Sn | 11 34 28.7 | -14 |
| | 0.4nm,0.3s,baz=203,slow=21,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.65** | **205** | P | **Pn** | **11 32 22.5** | **-0.9** |
| **WRAB** | **Tennant Creek** | **13.55** | **168** | P | **Pn** | **11 32 33.7** | **-2.0** |
| | 5.5nm,2.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **13.55** | **168** | Pn | **Pn** | **11 32 31.7** | **-4.1** |
| | 0.4nm,0.3s,baz=350,slow=13,SNR=21 | | | | | | |
| WRA | | | | Sn | Sn | 11 34 54.5 | -11 |
| | 0.4nm,0.3s,baz=348,slow=24,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.12** | **172** | Pn | **Pn** | **11 33 19.2** | **-3.3** |
| | 0.3nm,0.3s,baz=355,slow=14,SNR=19 | | | | | | |
| ASAR | | | | Sn | Sn | 11 36 21.4 | -11 |
| | 0.1nm,0.3s,baz=348,slow=26,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.63** | **326** | P | **P** | **11 40 25.4** | **-0.1** |
| | 0.1nm,0.4s,baz=113,slow=7.4,SNR=4.3 | | | | | | |

*TUL **24** 11:29:47.1±1.4, 35°.67N±0°.01×97°.42W±0°.02, h6km±3km, ML3.4, mb_Lg2.9/62(NEIC), Error ellipse: s-maj=1.9km s-min=1.6km az=119.0*
**NEIC 24 11:29:47.3**±1.2, **35°.69N**±0°.01×**97°.43W**±0°.03, **h9**km±6km, **Error ellipse: s-maj=3.4km s-min=1.9km az=109.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.11** | **179** | | Pg | 11 29 49.4 | -0.5 |
| OK009 | | | | Sg | Sg | 11 29 51.2 | -0.4 |
| **OK005** | **Luther M Schoo** | **0.19** | **100** | | Pg | 11 29 51.3 | 0.0 |
| **OKCFA** | **Oklahoma City** | **0.27** | **184** | | Pg | 11 29 52.5 | -0.3 |
| OKCFA | | | | Sg | Sg | 11 29 56.7 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **182** | Pg | Pg | 11 29 52.7 | -0.2 |
| OKCSW | | | | Sg | Sg | 11 29 56.9 | +0.2 |
| **FNO** | **Franklin** | **0.43** | **177** | Pg | Pg | 11 29 55.5 | -0.2 |
| FNO | | | | Sg | Sg | 11 30 01.6 | +0.2 |
| **W35A** | **Tecumseh** | **0.70** | **140** | Pg | Pg | 11 30 00.3 | -0.5 |
| W35A | | | | Sg | Sg | 11 30 09.7 | -0.2 |
| **X34A** | **Smith Ranch, M** | **1.14** | **197** | | Pg | 11 30 08.6 | -0.5 |
| **TUL1** | **Leonard** | **1.35** | **80** | | Pn | 11 30 11.1 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.43** | **31** | | Pn | 11 30 13.4 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.45** | **299** | Pn | Pn | 11 30 13.8 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.46** | **230** | | Pn | 11 30 13.4 | -0.5 |
| **X37A** | **Clayton** | **2.01** | **123** | | Pn | 11 30 22.0 | +0.6 |
| X37A | | | | IAmb_Lg | | 11 30 55.4 | |
| | comp=Z,52nm,0.7s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.36** | **176** | Pn | Pn | 11 30 25.1 | -1.1 |
| **HHAR** | **Hobbs** | **2.89** | **77** | | Pn | 11 30 33.3 | -0.2 |
| **W39A** | **Magazine** | **3.01** | **98** | | Pn | 11 30 35.8 | +0.5 |
| **Z38A** | **Mt. Pleasant** | **3.15** | **140** | | Pn | 11 30 37.4 | +0.3 |
| Z38A | | | | IAmb_Lg | | 11 31 30.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.47** | **11** | | Pn | 11 30 40.4 | -1.1 |
| KSU1 | | | | IAmb_Lg | | 11 31 46.3 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | | Pn | 11 30 42.3 | -0.7 |
| ABTX | | | | IAmb_Lg | | 11 31 40.4 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.69** | **180** | IAmb_Lg | | 11 31 43.4 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **U40A** | **Yellville** | **3.77** | **78** | IAmb_Lg | | 11 31 56.3 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.85** | **58** | IAmb_Lg | | 11 31 52.3 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **3.92** | **159** | Pn | Pn | 11 30 46.1 | -1.5 |
| **WLAR** | **White Oak Lake** | **4.08** | **118** | IAmb_Lg | | 11 32 02.5 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.21** | **94** | Pn | Pn | 11 30 52.1 | +0.4 |
| WHAR | | | | IAmb_Lg | | 11 32 05.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.26** | **95** | | Pn | 11 30 52.8 | +0.4 |
| W41B | | | | IAmb_Lg | | 11 32 13.8 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.31** | **86** | IAmb_Lg | | 11 32 06.4 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.41** | **69** | IAmb_Lg | | 11 32 08.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.52** | **121** | IAmb_Lg | | 11 32 17.2 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **4.88** | **56** | IAmb_Lg | | 11 32 20.0 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **4.89** | **182** | IAmb_Lg | | 11 32 29.2 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **5.00** | **37** | IAmb_Lg | | 11 32 37.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **N33A** | **J Bar K, Exete** | **5.04** | **360** | IAmb_Lg | | 11 32 35.6 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.11** | **84** | IAmb_Lg | | 11 32 34.8 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.31** | **310** | IAmb_Lg | | 11 32 50.2 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **5.35** | **15** | Pn | Pn | 11 31 08.1 | +0.7 |
| **CCM** | **Cathedral Cave** | **5.49** | **63** | IAmb_Lg | | 11 32 39.9 | |
| | comp=Z,36nm,1.2s | | | | | | |
| **JCT** | **Junction City** | **5.56** | **202** | IAmb_Lg | | 11 32 55.0 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.76** | **77** | IAmb_Lg | | 11 33 00.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.82** | **286** | IAmb_Lg | | 11 33 01.0 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **FVM** | **French Village** | **6.06** | **66** | IAmb_Lg | | 11 33 00.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **6.07** | **32** | Pn | Pn | 11 31 17.4 | +0.1 |
| **OGNE** | **Ogallala** | **6.38** | **327** | IAmb_Lg | | 11 33 15.1 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **W45A** | **Hickory Valley** | **6.75** | **92** | IAmb_Lg | | 11 33 33.3 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.80** | **290** | Pn | Pn | 11 31 29.4 | +1.8 |
| **S44A** | **Carbondale** | **6.86** | **71** | IAmb_Lg | | 11 33 37.1 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **6.97** | **300** | IAmb_Lg | | 11 33 29.9 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **7.02** | **27** | IAmb_Lg | | 11 33 40.6 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **7.99** | **35** | IAmb_Lg | | 11 34 07.0 | |
| | comp=Z,16nm,0.7s | | | | | | |

*INMG **24** 11:41:14.0±1.2, 35°.62N×3°.67W, h5km, ML2.3, Error ellipse: s-maj=4.5km s-min=2.4km az=25.0*
*CNRM **24** 11:41:15.2, 35°.60N×3°.64W, h32km, ml2.7*
*SFS **24** 11:41:15.0, 35°.67N×3°.53W, h23km, ML2.9, ALBORAN SUR*
**ISC 24 11:41:12.9**±1.3, **35°.70N**±0°.03×**3°.55W**±0°.03, **h15**km±10km, **n24,** σ1§**11**/37, **Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.57** | **214** | P | **Pb** | **11 41 25.0** | **+0.4** |
| PALE | | | | S | **Sb** | **11 41 32.5** | **-0.2** |
| **GOG** | **Mont Gurugu** | **0.65** | **136** | P | **Pb** | **11 41 26.5** | **+0.4** |
| GOG | | | | S | **Sb** | **11 41 36.0** | **+1.0** |
| **CHAS** | **Isla Isabel II** | **1.05** | **119** | P | **Pg** | **11 41 32.3** | **-0.8** |
| CHAS | | | | S | **Sg** | **11 41 46.5** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **326** | P | **Pn** | **11 41 36.6** | **+0.4** |
| EMAL | | | | S | **Sb** | **11 41 52.3** | **-0.7** |
| **TAF** | **Taforalt** | **1.28** | **133** | P | **Pn** | **11 41 36.5** | **+0.2** |
| **SMIR** | **Smir Dam** | **1.49** | **270** | S | **Sg** | **11 42 02.0** | **+1.0** |
| **CHEFC** | **Chefchaouen** | **1.58** | **249** | P | **Pn** | **11 41 40.8** | **+0.4** |
| **JBK** | **JBK** | **1.58** | **149** | P | **Pn** | **11 41 40.5** | **-0.1** |
| **IFR** | **Ifrane** | **2.53** | **211** | P | **Pg** | **11 42 00.5** | **-1.0** |
| IFR | | | | S | **Sn** | **11 42 23.9** | **-0.5** |
| **TDRA** | **Tendrara** | **2.93** | **154** | P | **Pn** | **11 41 59.8** | **+0.6** |
| TDRA | | | | S | **Sn** | **11 42 33.5** | **-0.7** |
| **MD31** | **MD31** | **3.00** | **200** | P | **Pn** | **11 42 01.4** | **+1.5** |
| MD31 | | | | S | **Sn** | **11 42 32.6** | **-3.0** |
| **MDT** | **Midelt** | **3.01** | **197** | P | **Pn** | **11 42 02.1** | **+2.0** |
| **ZHG** | **ZHG** | **3.40** | **230** | P | **Pn** | **11 42 05.9** | **+0.5** |
| ZHG | | | | S | **Sn** | **11 42 44.8** | **-0.7** |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | *e*Pn | **Pn** | **11 42 11.1** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **11 42 53.1** | **-1.3** |
| PVAQ | | | | A | A | 11 43 00.0 | |
| | 4.8nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.76** | **298** | P | **Pn** | **11 42 10.7** | **+0.3** |
| PVAQ | | | | S | **Sn** | **11 42 53.5** | **-1.0** |
| **PBDV** | **Barranco-do-Ve** | **3.85** | **295** | *e*Pn | **Pn** | **11 42 12.2** | **+0.5** |
| PBDV | | | | *e*Sn | **Sn** | **11 42 56.1** | **-0.6** |
| PBDV | | | | A | A | 11 43 10.0 | |
| | 4.4nm,0.5s | | | | | | |
| **FIGM** | **Figuig** | **4.03** | **151** | P | **Pn** | **11 42 15.7** | **+1.5** |
| **PCVE** | **Castro Verde** | **4.09** | **299** | *e*Pn | **Pn** | **11 42 15.3** | **+0.4** |
| **PESTR** | **Estremoz** | **4.52** | **316** | *e*Sn | **Sn** | **11 43 11.8** | **-1.2** |
| **EVO** | **Evora** | **4.55** | **310** | *e*Sn | **Sn** | **11 43 13.8** | **-0.1** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **303** | *e*Pn | **Pn** | **11 42 23.5** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **11 43 15.2** | **-1.4** |
| PNCL | | | | A | A | 11 43 19.1 | |
| | 3.1nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **4.82** | **322** | *e*Pn | **Pn** | **11 42 27.0** | **+2.1** |
| **PMTG** | **Montargil** | **5.02** | **314** | *e*Pn | **Pn** | **11 42 29.3** | **+1.7** |
| **OUZM** | **OUZ** | **5.48** | **210** | P | **Pn** | **11 42 34.8** | **+0.7** |
| OUZM | | | | S | **Sn** | **11 43 37.5** | **+0.6** |

**IDC 24 12:45:17.5**±5.7, **6°.44S**×**153°.88E, h0**km, **mb3.4**/3, **mb1 3.6**/3, **mb1mx3.4**/33, **mbtmp3.4**/3, **MS2.6**/1, **Ms1 2.6**/1, **ms1mx2.3**/36, **Error ellipse: s-maj=171.9km s-min=38.3km az=111.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.25** | **233** | P | P | 12 50 26.9 | +0.2 |
| | 1.7nm,1.1s,baz=56,slow=9.5,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **25.74** | **226** | P | P | 12 50 49.4 | -0.6 |
| | 0.3nm,0.7s,baz=58,slow=8.5,SNR=7.1 | | | | | | |
| **KAPI** | **Kappang** | **33.98** | **271** | LR | LR | 13 08 46.6 | |
| | comp=Z,10nm,19.2s,baz=285,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.25** | **319** | P | P | 12 57 41.2 | +0.4 |
| | 0.3nm,0.5s,baz=102,slow=6.0,SNR=6.4 | | | | | | |

**IDC 24 12:50:57.4**±2.0, **1°.62N**×**126°.93E, h0**km, **mb3.4**/3, **mb1 3.6**/4, **mb1mx3.4**/51, **mbtmp3.4**/4, **ML3.4**/1, **Error ellipse: s-maj=119.9km s-min=25.7km az=69.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **19.63** | **184** | P | Pn | 12 55 29.1 | +0.1 |
| | 0.1nm,0.3s,baz=5.2,slow=11,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.63** | **162** | P | P | 12 56 00.1 | 0.0 |
| | 0.6nm,0.4s,baz=339,slow=10,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **26.03** | **165** | P | P | 12 56 31.6 | -0.9 |
| | 0.1nm,0.3s,baz=341,slow=9.3,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.40** | **326** | P | P | 13 01 01.9 | +0.1 |
| | 0.2nm,0.4s,baz=114,slow=7.6,SNR=4.3 | | | | | | |

**IDC 24 12:51:45.4**±55.0, **14°.85S**×**166°.88E, h0**km, **mb4.2**/3, **mb1 4.4**/3, **mb1mx3.7**/39, **mbtmp4.2**/3, **Error ellipse: s-maj=923.6km s-min=106.2km az=66.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **28.62** | **229** | P | P | 12 57 43.1 | -0.6 |
| | 1.9nm,0.7s,baz=78,slow=9.3,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.43** | **256** | P | P | 12 58 09.0 | +0.3 |
| | 1.2nm,0.5s,baz=87,slow=9.1,SNR=26 | | | | | | |
| **ASAR** | **Alice Springs** | **32.27** | **249** | P | P | 12 58 16.1 | +0.1 |
| | 1.7nm,0.4s,baz=74,slow=9.6,SNR=48 | | | | | | |

**JMA 24 12:52:25.6, 35°.11N×138°.18E, h13**km±1km, **M3.0, 1C-2D Broadband fault plane solution: P waves. NP1:** φs77.00000°, δ61.00000°, λ-162.00000°. **NP2:** φs338.00000°, δ75.00000°, λ-30.00000°. **Principal axes:** T Plg9.0000°, Azm30.0000°; N Plg56.0000°, Azm134.0000°; P Plg32.0000°, Azm294.0000°; **Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHZ3** | **Shizuoka 3** | **0.05** | **151** | P | Pg | 12 52 28.2 | 0.0 |
| SHZ3 | | | | S | Sg | 12 52 30.1 | +0.1 |
| **JNY** | **Yasuok** | **0.36** | **314** | ⇓P | Pg | 12 52 32.9 | 0.0 |
| JNY | | | | S | Sg | 12 52 37.9 | +0.1 |
| **JFNN** | **Fujinakano** | **0.42** | **78** | P | Pb | 12 52 34.5 | -0.4 |
| **JYN** | **Shimob** | **0.49** | **38** | ⇑P | Pg | 12 52 35.1 | -0.2 |
| JYN | | | | S | Sb | 12 52 42.6 | -0.6 |
| **JIZS** | **Izushimoda** | **0.69** | **124** | ⇓P | Pg | 12 52 38.6 | -0.5 |
| JIZS | | | | S | Sg | 12 52 48.1 | -0.1 |
| **JOD2** | **Odawara 2** | **0.76** | **78** | P | Pg | 12 52 39.8 | -0.5 |
| JOD2 | | | | S | Sg | 12 52 50.2 | -0.1 |
| **MAT** | **Matsushiro** | **1.43** | **1** | P | Pn | 12 52 51.1 | -0.2 |
| MAT | | | | S | Sn | 12 53 09.8 | -0.2 |

*EAF **24** 12:53:52.5±1.6, 25°.67S×29°.47E, h10km, MD3.7*
**BUL 24 12:53:52.7**±0.9, **25°.68S**×**29°.45E, h10**km, **MD3.8, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.53** | **104** | *i* P | Pn | 12 54 33.9 | 0.0 |
| CNG | | | | *i* S | Sn | 12 55 03.6 | -1.3 |
| **CNG** | **Changalane** | **2.53** | **104** | *i* P | Pn | 12 54 33.9 | 0.0 |
| CNG | | | | *i* S | Sn | 12 55 03.6 | -1.3 |
| **MOPA** | **Mopani** | **2.79** | **40** | *i* P | Pn | 12 54 35.8 | -1.6 |
| MOPA | | | | *i* S | Sn | 12 55 07.1 | -4.0 |
| **MOPA** | **Mopani** | **2.79** | **40** | *i* P | Pn | 12 54 35.8 | -1.6 |
| MOPA | | | | *i* S | Sn | 12 55 07.1 | -4.0 |
| **MSNA** | **Messina** | **3.36** | **9** | *i* P | Pn | 12 54 45.1 | -0.3 |
| MSNA | | | | *i* S | Sn | 12 55 23.0 | -2.4 |
| **MSNA** | **Messina** | **3.36** | **9** | *i* P | Pn | 12 54 45.1 | -0.3 |
| MSNA | | | | *i* S | Sn | 12 55 23.0 | -2.4 |
| **LBTB** | **Lobatse** | **3.55** | **280** | *i* P | Pn | 12 54 46.5 | -1.5 |
| LBTB | | | | *i* S | Sn | 12 55 28.3 | -1.8 |
| **LBTB** | **Lobatse** | **3.55** | **280** | *i* P | Pn | 12 54 46.5 | -1.5 |
| LBTB | | | | *i* S | Sn | 12 55 28.3 | -1.8 |
| **BOSA** | **Boshof** | **4.74** | **231** | *i* P | Pn | 12 55 03.8 | -0.7 |
| BOSA | | | | *i* S | Sn | 12 55 55.9 | -3.7 |
| **BOSA** | **Boshof** | **4.74** | **231** | *i* P | Pn | 12 55 03.8 | -0.7 |
| BOSA | | | | *i* S | Sn | 12 55 55.9 | -3.7 |
| **MATP** | **Matopo** | **5.31** | **350** | *i* P | Pn | 12 55 11.8 | -0.4 |
| MATP | | | | *i* S | Sn | 12 56 09.5 | -4.0 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **87.81** | **323** | P | **P** | **13 20 25.7** | **-0.3** | |
| | 0.4nm,0.7s,baz=113,slow=3.7,SNR=3.8 | | | | | | | |
| **INK** | **Inuvik** | **97.89** | **19** | LR | LR | 14 03 39.4 | | |
| | comp=Z,67nm,18.2s,baz=196,slow=34 | | | | | | | |

*TUL **24** 13:20:28.9±0.9, 35°.89N±0°.02×96°.74W±0°.02, h5km±6km, ML2.7, mb_Lg2.2/7(NEIC), Error ellipse: s-maj=3.3km s-min=2.0km az=140.0*

**NEIC 24 13:20:28.9±0.9, 35°.90N±0°.02×96°.75W±0°.02, h8km±7km, Error ellipse: s-maj=2.5km s-min=2.2km az=188.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.75** | **230** | | Pg | 13 20 42.9 | -0.5 |
| **W35A** | **Tecumseh** | **0.75** | **188** | Pg | Pg | 13 20 43.0 | -0.3 |
| W35A | | | | IAmb_Lg | | 13 20 53.3 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **0.78** | **89** | Pg | Pg | 13 20 43.6 | -0.3 |
| **FNO** | **Franklin** | **0.83** | **220** | Pg | Pg | 13 20 44.7 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.03** | **11** | Pg | Pg | 13 20 48.5 | -0.3 |
| **X37A** | **Clayton** | **1.73** | **139** | Pn | Pn | 13 20 59.9 | +0.7 |
| X37A | | | | IAmb_Lg | | 13 21 26.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.02** | **236** | Pn | Pn | 13 21 04.5 | +1.1 |
| WMOK | | | | IAmb_Lg | | 13 21 32.3 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **2.31** | **80** | | Pn | 13 21 08.6 | +1.4 |
| **U40A** | **Yellville** | **3.19** | **81** | IAmb_Lg | | 13 22 09.3 | |
| | comp=Z,4.8nm,0.8s | | | | | | |

*NEIC **24** 13:32:26.8±1.2, 63°.05S±0°.1×146°.9E±0°.2, h10km±1km, mb4.6/15, Error ellipse: s-maj=18.6km s-min=12.0km az=16.0*

*IDC **24** 13:32:28.4±1.3, 62°.94S×144°.93E, h0km, mb3.9/3, mb1 4.0/3, mb1mx3.5/24, mbtmp3.9/3, MS3.3/4, Ms1 3.3/4, ms1mx2.9/45, Error ellipse: s-maj=109.1km s-min=24.1km az=82.0*

**ISC 24 13:32:27.1±0.7, 62°.93S±0°.09×146°.8E±0°.1, h10km, n27, σ1§01/19, mb4.4/6, MS3.5/3, South of Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **15.41** | **168** | Pn | **Pn** | **13 36 02.7** | **-1.5** |
| | 1.4nm,0.3s,baz=332,slow=13,SNR=25 | | | | | | |
| VNDA | | | | Sn | Sn | 13 38 47.0 | -7.6 |
| | 0.2nm,0.3s,baz=126,slow=19,SNR=1.1 | | | | | | |
| VNDA | | | | LR | LR | 13 41 18.8 | |
| | comp=Z,42nm,20.9s,baz=12,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **15.41** | **168** | IAmb | IAmb | 13 36 26.0 | |
| | comp=Z,44nm,1.5s | | | | | | |
| **CASY** | **Casey** | **15.76** | **242** | Pn | **Pn** | **13 36 07.8** | **-0.9** |
| CASY | | | | IAmb | IAmb | 13 36 16.9 | |
| | comp=Z,49nm,1.3s | | | | | | |
| **SBA** | **Scott Base** | **16.23** | **165** | Pn | **Pn** | **13 36 14.6** | **-0.3** |
| SBA | | | | IAmb | IAmb | 13 36 30.9 | |
| | comp=Z,164nm,1.4s | | | | | | |
| **TAU** | **Tasmania Unive** | **20.06** | **1** | P | **P** | **13 36 59.9** | **-0.4** |
| TAU | | | | IAmb | IAmb | 13 37 04.6 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **PYZ** | **Puysegur Point** | **20.22** | **43** | P | **P** | **13 37 01.3** | **-0.7** |
| **DCZ** | **Deep Cove** | **21.00** | **43** | P | **P** | **13 37 09.3** | **-1.0** |
| DCZ | | | | IAmb | IAmb | 13 37 33.5 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **27.15** | **180** | P | **P** | **13 38 13.0** | **+2.7** |
| | comp=Z,1.9nm,0.7s,baz=332,slow=1.2,SNR=11 | | | | | | |
| **QSPA** | **South Pole Qui** | **27.15** | **180** | P | **P** | **13 38 09.4** | **-0.9** |
| QSPA | | | | IAmb | IAmb | 13 38 31.2 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **PLWZ** | **Palliser** | **27.18** | **52** | P | **P** | **13 38 09.9** | **-0.6** |
| **STKA** | **Stephens Creek** | **31.25** | **351** | LR | LR | 13 48 39.5 | |
| | comp=Z,64nm,19.8s,baz=195,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **40.20** | **342** | P | **P** | **13 40 04.5** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=165,slow=8.6,SNR=11 | | | | | | |
| **AS31** | **Alice Springs** | **40.20** | **342** | P | **P** | **13 40 04.4** | **+0.9** |
| **CTA** | **Charters Tower** | **42.81** | **359** | LR | LR | 13 56 32.4 | |
| | comp=Z,59nm,18.2s,baz=80,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **43.76** | **343** | P | **P** | **13 40 32.4** | **-0.2** |
| **WB2** | **Warramunga Arr** | **43.80** | **343** | P | **P** | **13 40 32.7** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 13 40 41.5 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.80** | **343** | P | **P** | **13 40 33.4** | **+0.4** |
| | comp=Z,1.7nm,0.7s,baz=170,slow=7.1,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.80** | **343** | IAmb | IAmb | 13 40 41.0 | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **44.05** | **193** | P | **P** | **13 40 35.2** | **+0.7** |
| SNAA | | | | IAmb | IAmb | 13 40 45.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.20** | **324** | P | **P** | **13 40 43.9** | **-0.2** |
| **MSVF** | **Nonsavu** | **50.06** | **40** | P | **P** | **13 41 22.6** | **+0.7** |
| **SBUM** | **Sibu** | **70.21** | **323** | P | **P** | **13 43 39.9** | **-0.1** |
| SBUM | | | | IAmb | IAmb | 13 43 47.8 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **76.11** | **281** | T | T | 15 07 09.1 | |
| | baz=153,slow=76,SNR=3.9 | | | | | | |
| **H08S1** | **Diego Carcia H** | **76.11** | **281** | T | T | 15 07 11.4 | |
| | baz=153,slow=76,SNR=4.4 | | | | | | |
| **H08S3** | **Diego Garcia H** | **76.13** | **281** | T | T | 15 07 11.7 | |
| | baz=153,slow=76,SNR=3.8 | | | | | | |
| **GUMO** | **Guam** | **76.29** | **358** | LR | LR | 14 17 39.7 | |
| | comp=Z,23nm,19.8s,baz=110,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.01** | **53** | PKPbc | **PKiKP** | **13 52 07.1** | **+0.4** |
| | comp=Z,0.3nm,0.9s,baz=223,slow=2.8,SNR=3.2 | | | | | | |

*IDC **24** 13:45:52.7±1.5, 19°.19S×177°.52W, h575km±18km, mb3.0/6, mb1 3.3/9, mb1mx3.2/27, mbtmp4.0/9, Error ellipse: s-maj=35.7km s-min=14.9km az=149.0*

**ISC 24 13:45:53.7±0.8, 19°.05S±0°.2×177°.5W±0°.2, h600km, n9, σ1§87/12, mb3.5/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.42** | **286** | P | **P** | **13 47 21.4** | **-0.9** |
| | 2.3nm,0.3s,baz=195,slow=21,SNR=2.1 | | | | | | |
| **AFI** | **Afiamalu** | **7.45** | **48** | P | **P** | **13 47 46.2** | **-1.9** |
| | 8.8nm,0.3s,baz=252,slow=3.2,SNR=13 | | | | | | |
| AFI | | | | S | **S** | **13 49 19.2** | **-2.5** |
| | 2.8nm,0.3s,baz=244,slow=18,SNR=2.2 | | | | | | |
| **URZ** | **Urewera** | **19.77** | **193** | P | **P** | **13 49 43.2** | **-2.0** |
| | 0.8nm,0.3s,baz=338,slow=5.4,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **38.89** | **243** | P | **P** | **13 52 29.7** | **+0.3** |
| | 1.1nm,0.5s,baz=53,slow=10,SNR=3.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.30** | **260** | P | **P** | **13 53 19.1** | **-0.6** |
| | 1.3nm,0.4s,baz=97,slow=8.4,SNR=47 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 54 47.4** | **+0.9** |
| | 0.2nm,0.5s,baz=91,slow=3.2,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **45.35** | **255** | P | **P** | **13 53 19.8** | **-0.3** |
| | 3.6nm,0.8s,baz=87,slow=8.4,SNR=26 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 54 46.6** | **+0.1** |
| | 0.5nm,0.7s,baz=106,slow=3.9,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.60** | **43** | P | **P** | **13 57 02.1** | **+2.0** |
| | 0.6nm,0.8s,baz=223,slow=8.8,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.84** | **57** | P | **P** | **13 57 34.0** | **+2.6** |
| | 0.5nm,0.7s,baz=214,slow=5.6,SNR=6.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.54** | **43** | P | **P** | **13 57 41.4** | **+2.2** |
| | 0.2nm,0.5s,baz=208,slow=3.7,SNR=3.5 | | | | | | |

*EAF **24** 14:02:06.4±3.2, 26°.40S×30°.40E, h10km, MD3.6*

**BUL 24 14:02:06.6±1.6, 26°.46S×30°.37E, h10km, MD3.8, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **1.64** | **85** | *i* P | Pn | 14 02 34.2 | -1.3 |
| CNG | | | | *i* S | Sn | 14 02 56.4 | -0.2 |
| **CNG** | **Changalane** | **1.64** | **85** | *i* P | Pn | 14 02 34.2 | -1.3 |
| CNG | | | | *i* S | Sn | 14 02 56.4 | -0.2 |
| **MOPA** | **Mopani** | **3.08** | **18** | *i* P | Pn | 14 02 52.4 | -2.9 |
| MOPA | | | | *i* S | Sn | 14 03 24.7 | -7.4 |
| **MOPA** | **Mopani** | **3.08** | **18** | *i* P | Pn | 14 02 52.4 | -2.9 |
| MOPA | | | | *i* S | Sn | 14 03 24.7 | -7.4 |
| **MSNA** | **Messina** | **4.11** | **356** | *i* P | Pn | 14 03 08.9 | -0.6 |
| MSNA | | | | *i* S | Sn | 14 03 55.4 | -2.3 |
| **MSNA** | **Messina** | **4.11** | **356** | *i* P | Pn | 14 03 08.9 | -0.6 |
| MSNA | | | | *i* S | Sn | 14 03 55.4 | -2.3 |
| **LBTB** | **Lobatse** | **4.54** | **287** | *i* P | Pn | 14 03 15.1 | -0.4 |
| LBTB | | | | *i* S | Sn | 14 04 05.5 | -2.9 |
| **LBTB** | **Lobatse** | **4.54** | **287** | *i* P | Pn | 14 03 15.1 | -0.4 |
| LBTB | | | | *i* S | Sn | 14 04 05.5 | -2.9 |
| **BOSA** | **Boshof** | **5.02** | **244** | *i* P | Pn | 14 03 21.1 | -1.1 |
| BOSA | | | | *i* S | Sn | 14 04 16.3 | -4.1 |
| **BOSA** | **Boshof** | **5.02** | **244** | *i* P | Pn | 14 03 21.1 | -1.1 |
| BOSA | | | | *i* S | Sn | 14 04 16.3 | -4.1 |
| **MATP** | **Matopo** | **6.25** | **344** | *i* P | Pn | 14 03 38.5 | -0.6 |
| MATP | | | | *i* S | Sn | 14 04 42.2 | -8.4 |
| **MATP** | **Matopo** | **6.25** | **344** | *i* P | Pn | 14 03 38.5 | -0.6 |
| MATP | | | | *i* S | Sn | 14 04 42.2 | -8.4 |
| **BLWY** | **Bulawayo** | **6.50** | **345** | *e*P | Pn | 14 03 41.8 | -0.6 |
| BLWY | | | | *i* S | Sn | 14 04 51.3 | -5.5 |
| **BLWY** | **Bulawayo** | **6.50** | **345** | *e*P | Pn | 14 03 41.8 | -0.6 |
| BLWY | | | | *i* S | Sn | 14 04 51.3 | -5.5 |

*PRE **24** 14:41:00.8±1.0, 26°.41S×27°.56E, h2km, ML2.2*

*EAF **24** 14:41:03.9±1.4, 26°.33S×27°.67E, h10km, MD3.6*

*BUL **24** 14:41:04.0±1.5, 26°.32S×27°.66E, h10km, MD3.8*

**ISC 24 14:41:01.0±1.3, 26°.33S±0°.03×27°.61E±0°.04, h9km±10km, n20, σ1§96/40, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HRAO** | **HartRAO** | **0.44** | **9** | *e*P | **Pb** | **14 41 11.4** | **+0.4** |
| HRAO | | | | *e*S | **Sb** | **14 41 18.5** | **+0.7** |
| HRAO | | | | IAML | | 14 41 20.1 | |
| | comp=Z,90nm,0.3s | | | | | | |
| **PRYS** | **Parys** | **0.64** | **201** | *e*P | **Pg** | **14 41 11.9** | **-1.4** |
| PRYS | | | | *e*S | **Sg** | **14 41 19.5** | **-2.2** |
| PRYS | | | | IAML | | 14 41 23.9 | |
| | comp=Z,65nm,0.5s | | | | | | |
| **KSR** | **Koster** | **0.80** | **306** | *e*P | **Pg** | **14 41 17.0** | **+0.6** |
| KSR | | | | *e*S | **Sg** | **14 41 27.6** | **+0.8** |
| KSR | | | | IAML | | 14 41 37.0 | |
| | comp=Z,161nm,0.3s | | | | | | |
| **SLR** | **Silverton** | **0.84** | **46** | *e*P | **Pn** | **14 41 19.1** | **-0.1** |
| SLR | | | | *e*S | **Sn** | **14 41 31.6** | **-0.3** |
| SLR | | | | IAML | | 14 41 37.4 | |
| | comp=Z,32nm,0.3s | | | | | | |
| **SNKL** | **Senekal, Frees** | **1.95** | **176** | *e*P | **Pn** | **14 41 34.5** | **0.0** |
| SNKL | | | | *e*S | **Sn** | **14 41 58.8** | **-0.3** |
| SNKL | | | | IAML | | 14 42 02.4 | |
| | comp=Z,48nm,0.3s | | | | | | |
| **SWZ** | **Schweizer** | **2.21** | **247** | *e*P | **Pn** | **14 41 37.8** | **-0.2** |
| SWZ | | | | *e*S | **Sn** | **14 42 05.2** | **-0.4** |
| SWZ | | | | IAML | | 14 42 10.1 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **LBTB** | **Lobatse** | **2.24** | **305** | *i* P | **Pb** | **14 41 42.4** | **+0.7** |
| LBTB | | | | *i* S | **Sb** | **14 42 08.9** | **-0.6** |
| **LBTB** | **Lobatse** | **2.24** | **305** | *i* P | **Pb** | **14 41 42.4** | **+0.7** |
| LBTB | | | | *i* S | **Sb** | **14 42 08.9** | **-0.6** |
| **BOSA** | **Boshof** | **3.09** | **222** | *e*P | **Pn** | **14 41 50.3** | **+0.2** |
| BOSA | | | | *e*S | **Sn** | **14 42 25.5** | **-1.8** |
| BOSA | | | | IAML | | 14 42 34.2 | |
| | comp=Z,20nm,2.8s | | | | | | |
| **BOSA** | **Boshof** | **3.09** | **222** | *i* P | **Pn** | **14 41 51.5** | **+1.4** |
| BOSA | | | | *i* S | **Sn** | **14 42 29.3** | **+1.9** |
| **BOSA** | **Boshof** | **3.09** | **222** | *i* P | **Pn** | **14 41 51.5** | **+1.4** |
| BOSA | | | | *i* S | **Sn** | **14 42 29.3** | **+1.9** |
| **POGA** | **Pongola** | **3.80** | **106** | *e*P | **Pn** | **14 42 01.5** | **+1.7** |
| POGA | | | | *e*S | **Sn** | **14 42 45.2** | **+0.7** |
| POGA | | | | IAML | | 14 43 01.6 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MOPA** | **Mopani** | **4.43** | **52** | *i* P | **Pn** | **14 42 11.1** | **+2.6** |
| MOPA | | | | *i* S | **Sn** | **14 42 58.8** | **-1.5** |
| **MOPA** | **Mopani** | **4.43** | **52** | *i* P | **Pn** | **14 42 11.1** | **+2.6** |
| MOPA | | | | *i* S | **Sn** | **14 42 58.8** | **-1.5** |
| **MSNA** | **Messina** | **4.53** | **30** | *i* P | **Pn** | **14 42 12.2** | **+2.2** |
| MSNA | | | | *i* S | **Sn** | **14 43 00.8** | **-2.0** |
| **MSNA** | **Messina** | **4.53** | **30** | *i* P | **Pn** | **14 42 12.2** | **+2.2** |
| MSNA | | | | *i* S | **Sn** | **14 43 00.8** | **-2.0** |
| **MATP** | **Matopo** | **5.93** | **8** | *i* P | **Pn** | **14 42 31.1** | **+1.9** |
| MATP | | | | *i* S | **Sn** | **14 43 33.8** | **-3.6** |
| **MATP** | **Matopo** | **5.93** | **8** | *i* P | **Pn** | **14 42 31.1** | **+1.9** |
| MATP | | | | *i* S | **Sn** | **14 43 33.8** | **-3.6** |
| **BLWY** | **Bulawayo** | **6.23** | **9** | *e*P | **Pn** | **14 42 35.3** | **+2.0** |
| BLWY | | | | *i* S | **Sn** | **14 43 40.6** | **-4.1** |
| **BLWY** | **Bulawayo** | **6.23** | **9** | *e*P | **Pn** | **14 42 35.3** | **+2.0** |
| BLWY | | | | *i* S | **Sn** | **14 43 40.6** | **-4.1** |

*IDC **24** 14:41:40.2±1.2, 36°.08N×23°.91E, h53km±14km, mb3.6/13, mb1 3.8/20, mb1mx3.6/59, mbtmp3.9/20, ML4.0/7, MS2.9/7, Ms1 2.9/7, ms1mx2.5/82, Error ellipse: s-maj=17.0km s-min=10.8km az=42.0*

*NEIC **24** 14:41:40.8±1.9, 36°.05N±0°.08×23°.85E±0°.07, h53km±3km, Error ellipse: s-maj=12.3km s-min=7.0km az=210.0*

*ISK **24** 14:41:40.7, 36°.10N×23°.94E, h26km, ML4.0/28*

*ATH **24** 14:41:40.9, 36°.07N×23°.85E, h20km, Mw3.8, Moment Tensor Solution. s8 Moment tensor: Mrr-1.93; Mθθ-4.03; Mφφ5.95; Mrθ4.28; Mrφ0.48; Mθφ3.13; Fault plane solution: NP1:φs324.00000°, δ43.00000°, λ-165.00000°. NP2:φs223.00000°, δ80.00000°, λ-48.00000°.*

*HLW **24** 14:41:41.3, 35°.93N×24°.26E, h15km±36km, Md4.5, Ml4.6*

*THE **24** 14:41:42.4, 36°.08N×23°.85E, h31km±3km, ML4.0/20, Error ellipse: s-maj=3.4km s-min=0.6km az=288.0*

*DDA **24** 14:41:44.0±0.0, 36°.24N×23°.92E, h40km±23km, MW4.1*

*GII **24** 14:41:47.1±0.5, 35°.57N×24°.48E, h44km, mb4.2/3, MD3.9/3*

**ISC 24 14:41:39.8±0.7, 36°.05N±0°.03×23°.85E±0°.03, h51km±7km, n255, σ2§12/300, mb3.8/17, 6C-5D, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANKY** | **Antikythira Is** | **0.48** | **248** | P | **Pn** | **14 41 52.5** | **+1.6** |
| ANKY | | | | S | **Sn** | **14 42 00.1** | **+1.3** |
| | 23µm,0.5s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.48** | **248** | P | **Pn** | **14 41 52.5** | **+1.6** |
| ANKY | | | | S | **Sn** | **14 42 00.0** | **+1.3** |
| ANKY | | | | AML | AML | 14 42 00.2 | |
| | comp=E,48180µm,0.5s | | | | | | |
| ANKY | | | | AML | AML | 14 42 01.6 | |
| | comp=N,43212µm,0.6s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.59** | **169** | P | **Pn** | **14 41 54.4** | **+2.1** |
| IMMV | | | | S | **Sn** | **14 42 03.6** | **+2.3** |
| | comp=N,20µm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.59** | **169** | P | **Pn** | **14 41 54.5** | **+2.1** |
| IMMV | | | | S | **Sn** | **14 42 03.1** | **+1.8** |
| IMMV | | | | AML | AML | 14 42 03.6 | |
| | comp=E,37408µm,0.4s | | | | | | |
| IMMV | | | | AML | AML | 14 42 03.8 | |
| | comp=N,40743µm,0.3s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.59** | **169** | PG | **Pn** | **14 41 54.3** | **+2.0** |
| IMMV | | | | SG | **Sn** | **14 42 03.5** | **+2.3** |
| **KTHA** | **Kythira Island** | **0.67** | **289** | P | **Pn** | **14 41 54.7** | **+1.5** |
| KTHA | | | | S | **Sn** | **14 42 03.6** | **+0.7** |
| | comp=N,33µm,0.2s | | | | | | |
| **KTHA** | **Kythira Island** | **0.67** | **289** | P | **Pn** | **14 41 55.0** | **+1.8** |
| KTHA | | | | AML | AML | 14 42 04.7 | |
| | comp=E,81188µm,0.3s | | | | | | |
| KTHA | | | | AML | AML | 14 42 05.2 | |
| | comp=N,49732µm,0.3s | | | | | | |
| **VAM** | **Vamos** | **0.70** | **156** | P | **Pn** | **14 41 55.5** | **+1.9** |
| VAM | | | | S | **Sn** | **14 42 05.6** | **+2.0** |
| | comp=N,19µm,0.2s | | | | | | |
| **VAM** | **Vamos** | **0.70** | **156** | P | **Pn** | **14 41 55.5** | **+1.9** |
| VAM | | | | S | **Sn** | **14 42 05.5** | **+2.0** |
| VAM | | | | AML | AML | 14 42 06.6 | |
| | comp=N,45251µm,0.2s | | | | | | |
| VAM | | | | AML | AML | 14 42 13.4 | |
| | comp=E,31123µm,0.3s | | | | | | |
| **KTHR** | **Kythira** | **0.71** | **288** | P | **Pn** | **14 41 55.5** | **+1.7** |
| KTHR | | | | S | **Sn** | **14 42 05.1** | **+1.1** |
| | comp=E,25µm,0.3s | | | | | | |
| **MHLO** | **Agia Marina, M** | **0.78** | **35** | P | **Pn** | **14 41 56.4** | **+1.7** |
| MHLO | | | | S | **Sn** | **14 42 07.0** | **+1.4** |
| | comp=E,34µm,0.6s | | | | | | |
| **MHLO** | **Agia Marina, M** | **0.78** | **35** | P | **Pn** | **14 41 56.6** | **+1.9** |
| MHLO | | | | S | **Sn** | **14 42 06.7** | **+1.1** |
| MHLO | | | | AML | AML | 14 42 09.0 | |
| | comp=E,77184µm,0.9s | | | | | | |
| MHLO | | | | AML | AML | 14 42 10.4 | |
| | comp=N,59558µm,0.3s | | | | | | |
| **PRNS** | **Prines Rethymn** | **0.86** | **142** | P | **Pn** | **14 41 57.4** | **+1.6** |
| PRNS | | | | S | **Sn** | **14 42 08.6** | **+1.2** |
| | comp=N,4µm,0.2s | | | | | | |
| **MNVA** | **Monemvasia** | **0.91** | **315** | P | **Pn** | **14 41 58.0** | **+1.6** |
| MNVA | | | | S | **Sn** | **14 42 09.2** | **+0.6** |
| MNVA | | | | AML | AML | 14 42 09.4 | |
| | comp=E,21261µm,0.3s | | | | | | |
| MNVA | | | | AML | AML | 14 42 09.9 | |
| | comp=N,13481µm,0.4s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VLI** | **Velíai** | **0.99** | **313** | P | **Pn** | **14 41 58.9** | **+1.4** |
| VLI | | | | S | **Sn** | **14 42 10.8** | **+0.3** |
| | comp=N,10µm,0.3s | | | | | | |
| **VLI** | **Velíai** | **0.99** | **313** | P | **Pn** | **14 41 59.0** | **+1.4** |
| VLI | | | | AML | AML | 14 42 11.1 | |
| | comp=N,17570µm,0.2s | | | | | | |
| VLI | | | | AML | AML | 14 42 11.7 | |
| | comp=E,23646µm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.14** | **131** | P | **Pn** | **14 42 00.7** | **+1.2** |
| | comp=E,75nm,0.3s,baz=287,slow=12,SNR=553 | | | | | | |
| IDI | | | | S | **Sn** | **14 42 14.4** | **+0.3** |
| | comp=E,544nm,0.3s,baz=253,slow=16,SNR=22 | | | | | | |
| IDI | | | | LR | LR | 14 42 34.6 | |
| | comp=E,180nm,18.8s,baz=269,slow=48 | | | | | | |
| **IDI** | **Anoyia** | **1.14** | **131** | P | **Pn** | **14 42 00.6** | **+1.1** |
| IDI | | | | S | **Sn** | **14 42 15.9** | **+1.8** |
| | comp=E,4µm,0.3s | | | | | | |
| **IDI** | **Anoyia** | **1.14** | **131** | P | **Pn** | **14 42 00.6** | **+1.1** |
| IDI | | | | AML | AML | 14 42 19.0 | |
| | comp=E,7324µm,0.2s | | | | | | |
| IDI | | | | AML | AML | 14 42 23.7 | |
| | comp=N,6057µm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.14** | **131** | PN | **Pn** | **14 42 00.7** | **+1.1** |
| **GVD** | **Gavdhos** | **1.22** | **171** | P | **Pn** | **14 42 04.0** | **+3.4** |
| GVD | | | | S | **Sn** | **14 42 20.1** | **+4.1** |
| | comp=N,4µm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **1.22** | **171** | P | **Pn** | **14 42 03.9** | **+3.4** |
| GVD | | | | AML | AML | 14 42 31.9 | |
| | comp=N,8805µm,0.4s | | | | | | |
| GVD | | | | AML | AML | 14 42 32.7 | |
| | comp=E,7351µm,0.3s | | | | | | |
| **GVD** | **Gavdhos** | **1.22** | **171** | PN | **Pn** | **14 42 03.8** | **+3.2** |
| **TMBK** | **Timbaki Herakl** | **1.23** | **142** | P | **Pn** | **14 42 03.8** | **+3.2** |
| TMBK | | | | S | **Sn** | **14 42 19.7** | **+3.6** |
| | comp=E,4µm,0.6s | | | | | | |
| **IACM** | **Heraklion** | **1.24** | **126** | P | **Pn** | **14 42 02.5** | **+1.7** |
| IACM | | | | S | **Sn** | **14 42 18.1** | **+1.7** |
| **IACM** | **Heraklion** | **1.24** | **126** | P | **Pn** | **14 42 02.5** | **+1.7** |
| **KSTL** | **Kastelli Herak** | **1.24** | **126** | P | Pn | 14 42 06.1 | +5.3 |
| KSTL | | | | S | **Sn** | **14 42 23.7** | **+7.2** |
| | comp=E,1µm,0.3s | | | | | | |
| **HRKL** | **Herakleio** | **1.26** | **125** | P | **Pn** | **14 42 02.9** | **+1.8** |
| HRKL | | | | S | **Sn** | **14 42 18.4** | **+1.6** |
| | comp=E,11µm,0.3s | | | | | | |
| **HRKL** | **Herakleio** | **1.26** | **125** | PN | **Pn** | **14 42 02.8** | **+1.7** |
| HRKL | | | | SN | **Sn** | **14 42 18.5** | **+1.6** |
| **THR9** | **Santorini-Faro** | **1.26** | **75** | P | **Pn** | **14 42 03.1** | **+2.0** |
| **THR9** | **Santorini-Faro** | **1.26** | **75** | P | **Pn** | **14 42 03.3** | **+2.2** |
| **THR5** | **Thira Island,** | **1.27** | **73** | P | **Pn** | **14 42 03.4** | **+2.2** |
| **THR5** | **Thira Island,** | **1.27** | **73** | P | **Pn** | **14 42 03.6** | **+2.3** |
| **SAP3** | **Santorini-Thir** | **1.27** | **72** | P | **Pn** | **14 42 03.6** | **+2.3** |
| SAP3 | | | | S | **Sn** | **14 42 19.8** | **+2.5** |
| | comp=E,28µm,0.5s | | | | | | |
| **SIVA** | **Sivas** | **1.29** | **142** | P | **Pn** | **14 42 05.0** | **+3.5** |
| **SIVA** | **Sivas** | **1.29** | **142** | P | **Pn** | **14 42 03.8** | **+2.3** |
| SIVA | | | | S | **Sn** | **14 42 21.0** | **+3.3** |
| SIVA | | | | AML | AML | 14 42 29.0 | |
| | comp=E,14771µm,0.6s | | | | | | |
| SIVA | | | | AML | AML | 14 42 32.3 | |
| | comp=N,10422µm,0.5s | | | | | | |
| **THR6** | **Thira Island,** | **1.29** | **76** | P | **Pn** | **14 42 03.7** | **+2.2** |
| **THR6** | **Thira Island,** | **1.29** | **76** | P | **Pn** | **14 42 03.7** | **+2.2** |
| **SAP4** | **Santorini-Oia** | **1.31** | **70** | P | **Pn** | **14 42 03.9** | **+2.2** |
| SAP4 | | | | S | **Sn** | **14 42 20.7** | **+2.7** |
| **THR3** | **Thira Island,** | **1.31** | **73** | P | **Pn** | **14 42 03.6** | **+1.9** |
| **CMBO** | **Columbo, Santo** | **1.33** | **71** | P | **Pn** | **14 42 04.2** | **+2.2** |
| CMBO | | | | S | **Sn** | **14 42 21.0** | **+2.4** |
| | comp=N,11µm,0.4s | | | | | | |
| **CMBO** | **Columbo, Santo** | **1.33** | **71** | P | **Pn** | **14 42 04.3** | **+2.2** |
| CMBO | | | | S | **Sn** | **14 42 20.8** | **+2.1** |
| CMBO | | | | AML | AML | 14 42 21.4 | |
| | comp=N,37020µm,0.5s | | | | | | |
| CMBO | | | | AML | AML | 14 42 26.0 | |
| | comp=E,16684µm,0.3s | | | | | | |
| **THR2** | **Thira island,** | **1.35** | **72** | P | **Pn** | **14 42 04.0** | **+1.7** |
| **THR8** | **Santorini-Mono** | **1.37** | **74** | P | **Pn** | **14 42 03.8** | **+1.2** |
| **KRND** | **KRANIDI** | **1.45** | **337** | P | **Pn** | **14 42 05.2** | **+1.6** |
| KRND | | | | S | **Sn** | **14 42 22.9** | **+1.4** |
| | comp=E,6µm,0.4s | | | | | | |
| **KRND** | **KRANIDI** | **1.45** | **337** | P | **Pn** | **14 42 05.4** | **+1.7** |
| KRND | | | | S | **Sn** | **14 42 22.9** | **+1.4** |
| **NPS** | **Neapolis** | **1.64** | **118** | P | **Pn** | **14 42 07.8** | **+1.6** |
| NPS | | | | S | **Sn** | **14 42 27.9** | **+1.7** |
| | comp=E,3µm,0.2s | | | | | | |
| **NPS** | **Neapolis** | **1.64** | **118** | P | **Pn** | **14 42 07.8** | **+1.6** |
| NPS | | | | AML | AML | 14 42 28.5 | |
| | comp=N,6324µm,0.2s | | | | | | |
| NPS | | | | AML | AML | 14 42 29.2 | |
| | comp=E,6928µm,0.2s | | | | | | |
| **EPID** | **Epidavros** | **1.67** | **340** | P | **Pn** | **14 42 08.5** | **+1.8** |
| EPID | | | | S | **Sn** | **14 42 28.4** | **+1.4** |
| | comp=E,952nm,0.3s | | | | | | |
| **EPID** | **Epidavros** | **1.67** | **340** | P | **Pn** | **14 42 08.5** | **+1.8** |
| **VLY** | **Voula,Athens** | **1.80** | **359** | P | **Pn** | **14 42 09.7** | **+1.2** |
| VLY | | | | S | **Sn** | **14 42 31.4** | **+1.2** |
| | comp=E,2µm,0.3s | | | | | | |
| **VLY** | **Voula,Athens** | **1.80** | **359** | P | **Pn** | **14 42 10.1** | **+1.6** |
| VLY | | | | AML | AML | 14 42 34.2 | |
| | comp=E,3403µm,0.4s | | | | | | |
| VLY | | | | AML | AML | 14 42 38.7 | |
| | comp=N,3693µm,0.4s | | | | | | |
| **TNSA** | **Tinos** | **1.83** | **35** | P | **Pn** | **14 42 10.5** | **+1.7** |
| **PYL** | **PYLOS** | **1.90** | **297** | P | **Pn** | **14 42 12.1** | **+2.3** |
| **PYL** | **PYLOS** | **1.90** | **297** | P | **Pn** | **14 42 12.1** | **+2.3** |
| **ITM** | **Ithomi** | **1.92** | **307** | P | **Pn** | **14 42 13.4** | **+3.4** |
| **ITM** | **Ithomi** | **1.92** | **307** | P | **Pn** | **14 42 13.5** | **+3.4** |
| ITM | | | | AML | AML | 14 42 40.0 | |
| | comp=E,2083µm,0.6s | | | | | | |
| ITM | | | | AML | AML | 14 42 41.0 | |
| | comp=N,2535µm,0.3s | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NIS1 | Nisyros Isl. | 2.75 | 77 | PN | | Pn | 14 42 23.1 | +1.7 | |
| YKAV | Yalıkavak-Bodr | 2.97 | 68 | PN | | Pn | 14 42 26.4 | +2.0 | |
| BODT | Bodrum | 2.97 | 69 | PN | | Pn | 14 42 26.7 | +2.2 | |
| BODT | Bodrum | 2.97 | 69 | P | | Pn | 14 42 27.0 | +2.6 | |
| BODT | | | | S | | Sn | 14 42 59.3 | +0.4 | |
| ANX | Ano Chora | 2.97 | 329 | P | | Pn | 14 42 27.0 | +2.4 | |
| ZEYE | Izmir, Urla-Ze | 3.05 | 43 | P | | Pn | 14 42 26.1 | +0.5 | |
| DDIM | Aydin, Didim | 3.07 | 62 | P | | Pn | 14 42 28.3 | +2.5 | |
| DDIM | | | | S | | Sn | 14 43 02.6 | +1.3 | |
| GCAM | G?zelcaml? | 3.18 | 58 | PN | | Pn | 14 42 29.7 | +2.4 | |
| URLA | Izmir | 3.19 | 43 | PN | | Pn | 14 42 29.3 | +1.8 | |
| URLA | Izmir | 3.19 | 43 | P | | Pn | 14 42 29.4 | +2.0 | |
| URLA | | | | S | | Sn | 14 43 05.3 | +1.1 | |
| AGG | Agios Georgios | 3.21 | 338 | PN | | Pn | 14 42 30.2 | +2.4 | |
| AGG | Agios Georgios | 3.21 | 338 | Pn | | Pn | 14 42 30.1 | +2.4 | |
| AGG | Agios Georgios | 3.21 | 338 | P | | Pn | 14 42 30.1 | +2.4 | |
| AGG | | | | S | | Sn | 14 43 05.3 | +0.6 | |
| MAKR | Makrakomi, Fth | 3.26 | 336 | P | | Pn | 14 42 31.0 | +2.5 | |
| MLSB | Milas | 3.40 | 67 | PN | | Pn | 14 42 32.3 | +1.9 | |
| MLSB | Milas | 3.40 | 67 | P | | Pn | 14 42 33.1 | +2.7 | |
| MLSB | | | | S | | Sn | 14 43 11.0 | +1.6 | |
| ARG | Arkhangelos | 3.47 | 86 | P | | Pn | 14 42 34.5 | +3.2 | |
| ARG | Arkhangelos | 3.47 | 86 | PN | | Pn | 14 42 33.6 | +2.3 | |
| SIGR | SIGRI | 3.54 | 26 | PN | | Pn | 14 42 33.7 | +1.4 | |
| TURN | Turunc | 3.62 | 77 | PN | | Pn | 14 42 36.1 | +2.7 | |
| YER | Yerkesik | 3.73 | 72 | PN | | Pn | 14 42 37.5 | +2.5 | |
| YER | Yerkesik | 3.73 | 72 | P | | Pn | 14 42 38.6 | +3.6 | |
| MULA | Mugla, Merkez- | 3.80 | 70 | P | | Pn | 14 42 38.9 | +3.1 | |
| DKL | Dikili | 3.88 | 38 | P | | Pn | 14 42 39.2 | +2.4 | |
| ZEDA | zmir-Bergama | 3.89 | 40 | P | | Pn | 14 42 37.6 | +0.5 | |
| KOCA | Canakkale, Ayv | 3.90 | 27 | P | | Pn | 14 42 38.1 | +0.8 | |
| DALY | Dalyan (Mula) | 3.95 | 77 | PN | | Pn | 14 42 40.5 | +2.6 | |
| BOZC | Bozcaada | 4.17 | 24 | PN | | Pn | 14 42 43.4 | +2.4 | |
| BOZC | Bozcaada | 4.17 | 24 | P | | Pn | 14 42 41.9 | +1.0 | |
| LIT | Litokhoron | 4.19 | 346 | | | Pn | 14 42 43.4 | +2.2 | |
| LIT | Litokhoron | 4.19 | 346 | P | | Pn | 14 42 43.5 | +2.2 | |
| LIT | | | | S | | Sn | 14 43 28.8 | -0.1 | |
| EZN | Ezine | 4.25 | 27 | PN | | Pn | 14 42 43.5 | +1.5 | |
| EZN | Ezine | 4.25 | 27 | P | | Pn | 14 42 43.3 | +1.2 | |
| BAYC | CANAKKALE_Bayr | 4.26 | 29 | P | | Pn | 14 42 43.0 | +0.8 | |
| FETY | Fethiye | 4.27 | 81 | PN | | Pn | 14 42 45.2 | +2.9 | |
| CAME | Cameli-Denizli | 4.49 | 77 | PN | | Pn | 14 42 47.9 | +2.5 | |
| KULA | Kula-Manisa | 4.56 | 56 | PN | | Pn | 14 42 48.9 | +2.5 | |
| HORT | Hortiatis | 4.58 | 353 | PN | | Pn | 14 42 49.3 | +2.6 | |
| AKAS | Kas | 4.67 | 86 | PN | | Pn | 14 42 50.7 | +2.8 | |
| AKAS | Kas | 4.67 | 86 | Pn | | Pn | 14 42 49.2 | +1.3 | |
| SLUM | Salum | 4.68 | 166 | P | | Pn | 14 42 49.6 | +1.6 | |
| | baz=169 | | | | | | | | |
| SLUM | | | | S | | Sn | 14 43 38.1 | -2.9 | |
| | baz=169 | | | | | | | | |
| GELI | Tayfur-Gelibol | 4.81 | 25 | PN | | Pn | 14 42 51.8 | +2.1 | |
| ELL | Elmali | 4.94 | 80 | PN | | Pn | 14 42 54.0 | +2.4 | |
| ELL | Elmali | 4.94 | 80 | | | Pn | 14 42 51.7 | 0.0 | |
| ERIK | Erikli-Kesan | 5.07 | 24 | P | | Pn | 14 42 54.7 | +1.4 | |
| FNA | Florina | 5.11 | 338 | Pn | | Pn | 14 42 55.6 | +1.7 | |
| FNA | Florina | 5.11 | 338 | P | | Pn | 14 42 56.3 | +2.4 | |
| FNA | | | | S | | Sn | 14 43 53.4 | +1.7 | |
| ALN | Alexandroupoli | 5.14 | 19 | Pn | | Pn | 14 42 54.9 | +0.7 | |
| KORT | Korkueli | 5.32 | 78 | PN | | Pn | 14 42 59.3 | +2.4 | |
| VAY | Valandovo | 5.36 | 350 | *i* Pn | | Pn | 14 43 02.2 | +4.9 | |
| OHR | Ohrid | 5.59 | 336 | *i* Pn | | Pn | 14 43 02.5 | +2.0 | |
| RZN | Rozhen | 5.67 | 7 | *e*P | | Pn | 14 43 04.1 | +2.4 | |
| KDZ | Kurdzhali | 5.73 | 12 | *e*P | | Pn | 14 43 03.6 | +1.3 | |
| STIP | Stip | 5.79 | 348 | *i* Pn | | Pn | 14 43 06.3 | +3.2 | |
| KKB | Krupnik | 5.84 | 354 | *e*P | | Pn | 14 43 06.6 | +2.7 | |
| SCTE | Santa Cesarea | 5.84 | 315 | Pn | | Pn | 14 43 04.2 | +0.3 | |
| TIR | Tirane | 6.14 | 331 | Pn | | Pn | 14 43 09.2 | +1.3 | |
| PGB | Panagyurishte | 6.50 | 2 | *e*P | | Pn | 14 43 15.5 | +2.6 | |
| VTS | Vitosha | 6.58 | 356 | *e*P | | Pn | 14 43 17.2 | +3.1 | |
| CEL | Celeste | 6.72 | 292 | Pn | | Pn | 14 43 15.6 | -0.4 | |
| SWA2 | | 6.92 | 168 | P | | Pn | 14 43 19.3 | +0.6 | |
| | baz=171 | | | | | | | | |
| SWA2 | | | | S | | Sn | 14 44 31.8 | -4.1 | |
| | baz=171 | | | | | | | | |
| DRME | Dracevica, Mon | 7.12 | 331 | *e*Pn | | Pn | 14 43 20.9 | -0.5 | |
| PDG | Podgorica | 7.30 | 332 | Pn | | Pn | 14 43 23.2 | -0.6 | |
| PDG | Podgorica | 7.30 | 332 | *e*Pn | | Pn | 14 43 21.0 | -2.8 | |
| HCY | Herceg Novi | 7.62 | 329 | *e*Pn | | Pn | 14 43 27.3 | -0.9 | |
| VAE | Valguarnera | 7.71 | 283 | P | | Pn | 14 43 30.4 | +0.9 | |
| | comp=N,3.1nm,0.3s,baz=122,slow=13,SNR=2.1 | | | | | | | | |
| VAE | | | | S | | Sn | 14 44 50.2 | -5.1 | |
| | comp=N,2.0nm,0.3s,baz=124,slow=9.9,SNR=2.0 | | | | | | | | |
| CSS | Mathiatis | 7.81 | 95 | Pn | | Pn | 14 43 30.9 | 0.0 | |
| TREB | Trebinje | 7.90 | 329 | *e*Pn | | Pn | 14 43 30.1 | -2.0 | |
| BRY | Bratogost | 7.98 | 331 | *e*Pn | | Pn | 14 43 32.2 | -1.1 | |
| UPM | Unac-Piva | 8.10 | 333 | *e*Pn | | Pn | 14 43 35.4 | +0.4 | |
| RUDO | Rudo | 8.31 | 337 | *e*Pn | | Pn | 14 43 35.9 | -1.7 | |
| STON | Ston | 8.31 | 327 | *e*Pn | | Pn | 14 43 35.9 | -1.7 | |
| SGRT | San Giovanni R | 8.51 | 315 | Pn | | Pn | 14 43 40.0 | -0.4 | |
| BBLS | Lazići | 8.52 | 338 | *e*Pn | | Pn | 14 43 39.6 | -1.0 | |
| DIVS | Divibare | 8.57 | 341 | Pn | | Pn | 14 43 41.9 | +0.7 | |
| DIVS | Divibare | 8.57 | 341 | *e*Pn | | Pn | 14 43 41.4 | +0.1 | |
| BRTR | Keskin Array B | 8.57 | 62 | P | | Pn | 14 43 46.5 | +5.2 | |
| | comp=N,1.3nm,0.3s,baz=238,slow=15,SNR=31 | | | | | | | | |
| BRTR | Keskin Array B | 8.57 | 62 | | | Pn | 14 43 40.5 | -0.9 | |
| CLTB | Caltabellotta | 8.66 | 283 | Pn | | Pn | 14 43 41.6 | -1.0 | |
| RYAN | Fayoum | 8.81 | 140 | P | | Pn | 14 43 44.7 | +0.1 | |
| | baz=141 | | | | | | | | |
| HERR | Herculane | 8.89 | 353 | ⇑P | | Pn | 14 43 47.9 | +2.3 | |
| TIRR | Tirgusor | 9.10 | 21 | Pn | | Pn | 14 43 48.3 | -0.1 | |
| HSAF | As Saff | 9.11 | 132 | P | | Pn | 14 43 48.8 | 0.0 | |
| | baz=133 | | | | | | | | |
| GLL | Jalalah | 9.24 | 132 | P | | Pn | 14 43 51.0 | +0.5 | |
| | baz=133 | | | | | | | | |
| ARR | Arges | 9.33 | 3 | ⇓P | | Pn | 14 43 51.8 | +0.1 | |
| GZR | Gura Zlata | 9.37 | 355 | ⇓P | | Pn | 14 43 54.1 | +1.8 | |
| LOT | Lotru | 9.39 | 360 | ⇑P | | Pn | 14 43 52.7 | +0.1 | |
| VOIR | | 9.43 | 5 | ⇑P | | Pn | 14 43 54.6 | +1.6 | |
| MLR | Muntele Rosu | 9.57 | 9 | ⇓P | | Pn | 14 43 58.7 | +3.7 | |
| MLR | Muntele Rosu | 9.57 | 9 | P | | Pn | 14 43 56.4 | +1.4 | |
| | comp=N,0.6nm,0.3s,baz=157,slow=13,SNR=11 | | | | | | | | |
| MLR | | | | LR | | LR | 14 47 38.8 | | |
| | comp=N,60nm,19.2s,baz=258,slow=38 | | | | | | | | |
| MLR | Muntele Rosu | 9.57 | 9 | Pn | | Pn | 14 43 56.2 | +1.3 | |
| HFRF | Wahat Farafira | 9.65 | 156 | P | | Pn | 14 43 55.9 | -0.2 | |
| | baz=157 | | | | | | | | |
| HFRF | | | | S | | Sn | 14 45 35.6 | -7.4 | |
| | baz=157 | | | | | | | | |
| BZS | Buzias | 9.71 | 351 | ⇑P | | Pn | 14 44 00.5 | +3.7 | |
| NBNS | Bani Suef | 9.72 | 138 | P | | Pn | 14 43 57.6 | +0.6 | |
| | baz=138 | | | | | | | | |
| DOPR | Dopca | 9.98 | 6 | ⇑P | | Pn | 14 44 02.3 | +1.8 | |
| MMA0B | Mount Meron ar | 10.00 | 104 | Pn | | Pn | 14 43 59.8 | -1.1 | |
| MMA0B | | | | | | Sn | 14 45 45.9 | -5.8 | |
| MMAI | Mount Meron Ar | 10.00 | 104 | P | | Pn | 14 43 59.4 | -1.5 | |
| | comp=N,4.5nm,0.3s,baz=315,slow=13,SNR=9.0 | | | | | | | | |
| MMAI | | | | S | | Sn | 14 45 45.0 | -6.7 | |
| | comp=N,5.2nm,0.3s,baz=292,slow=20,SNR=5.4 | | | | | | | | |
| PLOR | Plostina | 10.02 | 11 | ⇑P | | Pn | 14 44 05.7 | +4.6 | |
| VRI | Vrincioaia | 10.05 | 12 | ⇓P | | Pn | 14 44 06.2 | +4.7 | |
| GEM | Giv'at Ha'Em | 10.14 | 103 | Pn | | Pn | 14 44 01.6 | -1.1 | |
| GEM | | | | Sn | | Sn | 14 45 48.2 | -6.8 | |
| NATI | Neve Ativ | 10.18 | 102 | Pn | | Pn | 14 44 01.8 | -1.5 | |
| KZIT | Kziot | 10.19 | 117 | Pn | | Pn | 14 44 02.6 | -0.9 | |
| KZIT | | | | Sn | | Sn | 14 45 48.0 | -8.3 | |
| MMLI | Mount Malkishu | 10.23 | 107 | Pn | | Pn | 14 44 03.8 | -0.3 | |
| KSHT | Keshet | 10.33 | 104 | Pn | | Pn | 14 44 04.9 | -0.6 | |
| HMDT | Nahal Hemdat | 10.39 | 108 | Pn | | Pn | 14 44 05.7 | -0.5 | |
| HMDT | | | | Sn | | Sn | 14 45 54.8 | -6.3 | |
| MRAK | Mrakovica | 10.40 | 332 | *e*Pn | | Pn | 14 44 04.4 | -1.9 | |
| YTIR | Yattir | 10.48 | 113 | Pn | | Pn | 14 44 07.1 | -0.4 | |
| YTIR | | | | Sn | | Sn | 14 45 55.3 | -8.2 | |
| DSI | Dead Sea | 10.58 | 112 | Pn | | Pn | 14 44 08.2 | -0.6 | |
| DSI | | | | Sn | | Sn | 14 45 58.3 | -7.5 | |
| NRCA | Norcia | 10.71 | 313 | | | Pn | 14 44 11.6 | +1.0 | |
| GRB | Gharib | 10.83 | 133 | P | | Pn | 14 44 11.7 | -0.6 | |
| | baz=134 | | | | | | | | |
| KRMI | Paran Flat | 10.87 | 120 | Pn | | Pn | 14 44 11.1 | -1.7 | |
| MORH | Mrgy, Hungar | 10.89 | 341 | *e*Pn | | Pn | 14 44 12.0 | -0.9 | |
| PRNI | Paran | 10.93 | 118 | Pn | | Pn | 14 44 12.1 | -1.5 | |
| PRNI | | | | Sn | | Sn | 14 46 05.8 | -8.7 | |
| HRFI | Mount Harif | 11.14 | 119 | Pn | | Pn | 14 44 14.8 | -1.6 | |
| MBRI | Mt Berech | 11.19 | 121 | Pn | | Pn | 14 44 16.0 | -1.2 | |
| MBRI | | | | Sn | | Sn | 14 46 12.9 | -8.0 | |
| EIL | Elat | 11.29 | 121 | P | | Pn | 14 44 17.2 | -1.3 | |
| | comp=N,1.3nm,0.3s,baz=285,slow=2.7,SNR=16 | | | | | | | | |
| EIL | | | | S | | Sn | 14 46 13.5 | -10 | |
| | comp=N,2.0nm,0.3s,baz=112,slow=22,SNR=6.1 | | | | | | | | |
| EIL | Elat | 11.29 | 121 | Pn | | Pn | 14 44 17.0 | -1.5 | |
| BURAR | Bucovina Array | 11.61 | 5 | ⇓P | | Pn | 14 44 24.2 | +1.4 | |
| BURAR | Bucovina Array | 11.61 | 5 | Pn | | Pn | 14 44 20.6 | -2.2 | |
| BUR08 | Bucovina Ar. S | 11.63 | 5 | Pn | | Pn | 14 44 21.3 | -1.9 | |
| CRES | Cresnjev | 11.64 | 330 | *e*Pn | | Pn | 14 44 20.4 | -2.8 | |
| KEST | Kesra | 11.77 | 273 | S | | Sn | 14 46 31.5 | -3.4 | |
| | comp=N,0.3nm,0.3s,baz=215,slow=22,SNR=2.2 | | | | | | | | |
| CEY | Cerknica | 12.01 | 327 | *e*Pn | | Pn | 14 44 26.5 | -1.8 | |
| SKDS | Skadanscina | 12.05 | 325 | *e*Pn | | Pn | 14 44 24.3 | -4.6 | |
| STAL | STALIGIAL | 13.20 | 324 | Pn | | Pn | 14 44 43.6 | -0.8 | |
| KBA | Koelnbreinsper | 13.52 | 328 | *e*P | | P | 14 44 57.8 | +1.0 | |
| | comp=N,1.5nm,0.3s | | | | | | | | |
| VRAC | Vranov | 14.28 | 340 | LR | | LR | 14 52 19.2 | | |
| | comp=N,17nm,19.3s,baz=171,slow=45 | | | | | | | | |
| WTTA | Wattenberg | 14.43 | 325 | *e*Pn | | Pn | 14 45 02.1 | +0.8 | |
| | comp=N,1.4nm,0.2s | | | | | | | | |
| CKRC | Cesky Krumlov | 14.56 | 334 | *e*P | | P | 14 45 10.5 | +2.3 | |
| FETA | Feichten | 14.70 | 322 | *e*P | | P | 14 45 10.3 | +0.5 | |
| | comp=N,2.0nm,0.5s | | | | | | | | |
| GEC2 | GERESS Array S | 14.80 | 333 | | | Pn | 14 45 06.6 | +0.6 | |
| GERES | GERESS Array B | 14.80 | 333 | P | | Pn | 14 45 06.0 | 0.0 | |
| | comp=N,0.2nm,0.3s,baz=153,slow=11,SNR=2.1 | | | | | | | | |
| GERES | | | | LR | | LR | 14 51 14.0 | | |
| | comp=N,61nm,18.6s,baz=20,slow=39 | | | | | | | | |
| GERES | GERESS Array B | 14.80 | 333 | | | Pn | 14 45 07.2 | +1.1 | |
| DAVOX | Davos/Dischmat | 14.97 | 320 | P | | Pn | 14 45 10.2 | +1.9 | |
| | comp=N,0.3nm,0.3s,baz=165,slow=20,SNR=2.0 | | | | | | | | |
| DAVOX | | | | S | | Sn | 14 47 44.0 | -8.9 | |
| | comp=N,0.2nm,0.3s,baz=357,slow=21,SNR=1.7 | | | | | | | | |
| DAVOX | | | | LR | | LR | 14 51 59.9 | | |
| | comp=N,40nm,19.9s,baz=72,slow=41 | | | | | | | | |
| KHC | Kasperske Hory | 15.09 | 333 | *e*P | | P | 14 45 15.7 | +1.7 | |
| KHC | | | | *ex* | | x | 14 45 28.5 | | |
| AKASG | Malin Array Be | 15.15 | 13 | P | | Pn | 14 45 10.3 | -0.1 | |
| | comp=N,0.3nm,0.3s,baz=206,slow=10,SNR=1.5 | | | | | | | | |
| KBZ | Khabaz | 16.49 | 56 | P | | P | 14 45 30.6 | +1.0 | |
| | comp=N,0.1nm,0.3s,baz=246,slow=20,SNR=3.6 | | | | | | | | |
| KBZ | | | | LR | | LR | 14 53 10.4 | | |
| | comp=N,26nm,18.1s,baz=16,slow=42 | | | | | | | | |
| ESDC | Sonseca Array | 22.22 | 288 | P | | P | 14 46 31.8 | -0.3 | |
| | comp=N,2.2nm,0.7s,baz=83,slow=9.4,SNR=15 | | | | | | | | |
| ESDC | Sonseca Array | 22.22 | 288 | IAmb | | IAmb | 14 46 35.5 | | |
| | comp=Z,4.9nm,1.5s | | | | | | | | |
| PAB | San Pablo | 22.51 | 287 | P | | P | 14 46 35.9 | +0.6 | |
| PAB | | | | IAmb | | IAmb | 14 46 39.1 | | |
| | comp=Z,7.8nm,1.1s | | | | | | | | |
| MTE | Manteigas | 24.97 | 290 | P | | P | 14 46 58.8 | +0.2 | |
| HFS | Hagfors | 24.98 | 348 | P | | P | 14 46 57.7 | -0.8 | |
| | comp=Z,1.3nm,0.5s,baz=169,slow=16,SNR=6.9 | | | | | | | | |
| FINES | FINESS Array B | 25.46 | 2 | P | | P | 14 47 01.9 | -0.8 | |
| | comp=Z,1.9nm,0.9s,baz=174,slow=15,SNR=1.4 | | | | | | | | |
| FINES | FINESS Array B | 25.46 | 2 | P | | P | 14 47 02.8 | +0.1 | |
| NOA | NORSAR Array B | 26.28 | 346 | P | | P | 14 47 09.8 | -0.5 | |
| | comp=Z,0.4nm,0.7s,baz=154,slow=11,SNR=4.1 | | | | | | | | |
| NOA | | | | LR | | LR | 15 00 19.8 | | |
| | comp=Z,18nm,18.4s,baz=340,slow=43 | | | | | | | | |
| EKA | Eskdalemuir Ar | 26.70 | 325 | P | | P | 14 47 14.4 | +0.3 | |
| | comp=Z,0.9nm,0.4s,baz=117,slow=9.5,SNR=4.5 | | | | | | | | |
| TORD | Torodi Ar. Bea | 30.28 | 227 | P | | P | 14 47 47.4 | +1.1 | |
| | comp=Z,1.2nm,0.4s,baz=32,slow=9.0,SNR=11 | | | | | | | | |
| TORD | Torodi Ar. Bea | 30.28 | 227 | P | | P | 14 47 45.8 | -0.4 | |
| ARCES | ARCESS Array B | 33.56 | 1 | P | | P | 14 48 13.9 | -0.6 | |
| | comp=Z,2.8nm,1.0s,baz=182,slow=11,SNR=1.4 | | | | | | | | |
| SOCY | Socotra | 36.09 | 124 | | | P | 14 48 36.7 | -0.2 | |
| KKAR | Karatay Array | 36.27 | 64 | P | | P | 14 48 39.7 | +1.4 | |
| KURBB | Kurchatov Array | 41.41 | 52 | LR | | LR | 15 09 41.3 | | |
| | comp=Z,37nm,18.6s,baz=34,slow=41 | | | | | | | | |
| MAKZ | Makanchi | 43.97 | 57 | P | | P | 14 49 41.8 | -0.2 | |
| MK31 | Makanchi Array | 44.19 | 57 | P | | P | 14 49 43.4 | -0.3 | |
| MK31 | | | | IAmb | | IAmb | 14 50 11.5 | | |
| | comp=Z,3.2nm,1.5s | | | | | | | | |
| MKAR | Makanchi Array | 44.19 | 57 | P | | P | 14 49 44.0 | +0.3 | |
| | comp=Z,0.8nm,0.4s,baz=270,slow=8.1,SNR=27 | | | | | | | | |
| MKAR | Makanchi Array | 44.19 | 57 | P | | P | 14 49 43.5 | -0.2 | |
| ZAA0 | Zalesovo Array | 45.17 | 47 | P | | P | 14 49 51.6 | +0.3 | |
| ZAA0 | | | | IAmb | | IAmb | 14 50 07.6 | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| ZALV | Zalesovo Beam | 45.17 | 47 | P | | P | 14 49 51.0 | -0.4 | |
| | comp=Z,0.9nm,0.3s,baz=271,slow=8.9,SNR=5.4 | | | | | | | | |
| NRS | Narsarsuaq | 49.35 | 323 | P | | P | 14 50 24.9 | +1.3 | |
| EUNU | Eureka | 58.12 | 349 | P | | P | 14 51 28.9 | +1.3 | |
| EUNU | | | | IAmb | | IAmb | 14 51 30.5 | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| SONM | Songino Array | 59.75 | 51 | P | | P | 14 51 39.9 | +0.3 | |
| | comp=Z,0.1nm,0.4s,baz=291,slow=8.0,SNR=2.2 | | | | | | | | |
| SONM | Songino Array | 59.75 | 51 | IAmb | | IAmb | 14 51 59.7 | | |
| | comp=Z,1.9nm,1.3s | | | | | | | | |
| SCHQ | Schefferville | 61.82 | 319 | P | | P | 14 51 53.9 | +0.5 | |
| | comp=Z,2.2nm,0.4s,baz=71,slow=4.1,SNR=17 | | | | | | | | |
| SCHQ | Schefferville | 61.82 | 319 | IAmb | | IAmb | 14 51 58.6 | | |
| | comp=Z,6.2nm,1.2s | | | | | | | | |
| YKA | Yellowknife Ar | 76.28 | 342 | P | | P | 14 53 22.9 | +0.2 | |
| | comp=Z,0.2nm,0.5s,baz=30,slow=5.2,SNR=4.8 | | | | | | | | |
| KSRS | Korea Array | 78.59 | 52 | P | | P | 14 53 34.8 | -1.3 | |
| | comp=Z,0.9nm,0.9s,baz=303,slow=4.0,SNR=1.4 | | | | | | | | |
| WRA | Warramunga Arr | 117.75 | 95 | PKP | | PKPdf | 15 00 20.3 | -0.5 | |
| | comp=Z,0.3nm,1.0s,baz=310,slow=1.4,SNR=1.5 | | | | | | | | |
| ASAR | Alice Springs | 119.25 | 99 | PKP | | PKiKP | 15 00 23.8 | 0.0 | |
| | comp=Z,0.2nm,0.5s,baz=312,slow=1.3,SNR=9.8 | | | | | | | | |

*PAS **24** 15:02:13.5±3.3, 31°.60N±0°.06×114°.41W±0°.04, h6km±2km, Error ellipse: s-maj=9.5km s-min=6.1km az=183.0*
*NEIC **24** 15:02:14±3.2, 31°.56N±0°.05×114°.45W±0°.05, h15km±9km, Error ellipse: s-maj=8.2km s-min=5.5km az=148.0*
*ECX **24** 15:02:14.3±0.6, 31°.54N×114°.38W, h20km±24km, MD3.0, ML3.3*

**ISC 24 15:02:13.3**±0.9, **31°.57N**±0°.04×**114°.49W**±0°.06, **h11**km, **n41, σ1 826/44, 2C-1D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SFX | San Felipe | 0.62 | 210 | | | Pb | 15 02 26.2 | +0.1 |
| SFX | | | | Sg | | Sb | 15 02 34.7 | -0.1 |
| SFX | San Felipe | 0.62 | 210 | *e*P | | Pb | 15 02 26.0 | -0.1 |
| SFX | | | | *e*S | | Sb | 15 02 35.1 | +0.3 |
| SFX | | | | *e* | | | 15 02 35.4 | |
| SFX | | | | IAML | | | 15 02 35.4 | |
| | comp=N,3μm,0.2s | | | | | | | |
| SFX | | | | IAML | | | 15 02 35.4 | |
| | comp=E,3μm,0.2s | | | | | | | |
| SFX | | | | ⇓*e* | | | 15 02 35.4 | |
| SLRCX | San Luis Rio C | 0.90 | 348 | *e*P | | Pb | 15 02 31.1 | +0.1 |
| SLRCX | | | | *e*S | | Sn | 15 02 44.1 | -0.8 |
| YMD | Yuma Desert | 0.98 | 357 | *e*P | | Pg | 15 02 31.6 | -0.6 |
| SPIG | San Pedro Mart | 0.99 | 238 | *e*P | | Pg | 15 02 32.1 | -0.3 |
| SPIG | | | | *e*S | | Sb | 15 02 46.6 | +0.8 |
| CPBX | Cerro Prieto | 1.09 | 321 | | | Pn | 15 02 34.4 | -0.2 |
| EMSC | East Mesa | 1.24 | 340 | *e*P | | Pn | 15 02 35.9 | -0.6 |
| 113A | Mohawk Valley, | 1.34 | 27 | Pn | | Pn | 15 02 36.8 | -1.2 |
| 113A | | | | IAML | | | 15 02 55.6 | |
| | comp=E,233nm,0.4s | | | | | | | |
| 113A | | | | IAML | | | 15 02 56.2 | |
| | comp=N,194nm,0.4s | | | | | | | |
| 214A | Organ Pipe Nat | 1.48 | 75 | Pn | | Pn | 15 02 38.3 | -1.6 |
| 214A | | | | IAML | | | 15 03 10.0 | |
| | comp=E,246nm,0.4s | | | | | | | |
| GLA | Glamis | 1.50 | 349 | Pn | | Pn | 15 02 39.3 | -0.9 |
| GLA | | | | IAML | | | 15 03 12.4 | |
| | comp=E,310nm,0.6s | | | | | | | |
| GLA | Glamis | 1.50 | 349 | *e*P | | Pn | 15 02 39.6 | -0.6 |
| SVX | San Vicente | 1.53 | 261 | *e*P | | Pn | 15 02 41.0 | +0.5 |
| YUH | Yuha Desert | 1.62 | 312 | Pn | | Pn | 15 02 40.1 | -1.7 |
| RMX | La Rumorosa | 1.69 | 308 | Pn | | Pn | 15 02 40.6 | -2.4 |
| RMX | | | | IAML | | | 15 03 08.8 | |
| | comp=E,125nm,0.2s | | | | | | | |
| IKP | In-Ko-Pah, Jac | 1.74 | 308 | *e*P | | Pn | 15 02 42.4 | -1.2 |
| CBX | Cerro Bola | 1.99 | 292 | Pn | | Pn | 15 02 46.8 | -0.2 |
| CBX | | | | IAML | | | 15 03 30.1 | |
| | comp=N,105nm,0.5s | | | | | | | |
| CBX | | | | IAML | | | 15 03 37.8 | |
| | comp=E,85nm,0.6s | | | | | | | |
| CBX | Cerro Bola | 1.99 | 292 | *e*P | | Pn | 15 02 46.9 | -0.2 |
| BAR | Barrett | 2.16 | 301 | Pn | | Pn | 15 02 48.5 | -0.7 |
| BAR | | | | IAML | | | 15 03 31.9 | |
| | comp=N,89nm,0.5s | | | | | | | |
| BAR | | | | IAML | | | 15 03 33.1 | |
| | comp=E,114nm,0.3s | | | | | | | |
| BAR | Barrett | 2.16 | 301 | ⇑*e* | | | 15 03 31.9 | |
| BAR | | | | IAML | | | 15 03 31.9 | |
| | comp=N,85nm,0.4s | | | | | | | |
| BAR | | | | ⇑*e* | | | 15 03 33.1 | |
| BAR | | | | IAML | | | 15 03 33.1 | |
| | comp=E,110nm,0.3s | | | | | | | |
| BLYC | Blythe | 2.17 | 359 | Pn | | Pn | 15 02 49.2 | -0.2 |
| BLYC | | | | IAML | | | 15 03 34.0 | |
| | comp=N,79nm,0.6s | | | | | | | |
| BLYC | | | | IAML | | | 15 03 44.5 | |

*JMA **24** 15:49:18.2±0.2, 31°.00N×138°.31E, h491km, M3.4*
*IDC **24** 15:49:23.6±2.1, 30°.97N×137°.92E, h395km±24km, mb3.0/10, mb1 3.2/11, mb1mx3.0/43, mbtmp3.8/11, Error ellipse: s-maj=32.5km s-min=12.6km az=75.0*

**ISC 24 15:49:24.5**±1.0, **31°.31N**±0°.09×**139°.1E**±0°.2, **h450**km, **n23, σ2 836/24, mb3.4**/10, **Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| JHJ | Hachijo jima 2 | 1.90 | 19 | S | | S | 15 51 09.0 | -4.2 |
| | 13nm,0.3s,baz=68,slow=22,SNR=2.1 | | | | | | | |
| JIE | Ise | 3.66 | 328 | P | | P | 15 50 34.2 | -2.4 |
| HMMJ | Hamamatsu 2 | 3.71 | 343 | P | | P | 15 50 35.9 | -1.2 |
| JKN2 | Miekihoku | 3.75 | 322 | P | | P | 15 50 34.0 | -3.4 |
| JTNC | Tanabenakahech | 3.84 | 312 | P | | P | 15 50 33.6 | -4.6 |
| JNY | Yasuok | 4.16 | 346 | P | | P | 15 50 40.4 | -0.7 |
| JAO | Obara | 4.22 | 340 | P | | P | 15 50 40.4 | -1.2 |
| JHU | Hanno | 4.53 | 2 | P | | P | 15 50 43.4 | -0.9 |
| JHU | | | | *e*S | | S | 15 51 50.0 | +0.5 |
| JRY | Ryogami san | 4.70 | 358 | P | | P | 15 50 45.8 | -0.1 |
| JRY | | | | *e*S | | S | 15 51 50.5 | -1.8 |
| JYT | Yasato | 4.99 | 11 | *e*S | | S | 15 51 52.9 | -4.5 |
| CBIJ | Chichi jima | 5.01 | 146 | P | | P | 15 50 47.0 | -2.1 |
| MJAR | Matsushiro Arr | 5.26 | 352 | P | | P | 15 50 50.4 | -1.0 |
| | 0.8nm,0.3s,baz=174,slow=11,SNR=24 | | | | | | | |
| MAT | Matsushiro | 5.27 | 352 | P | | P | 15 50 51.1 | -0.3 |
| SONM | Songino Array | 29.82 | 313 | P | | P | 15 54 53.4 | 0.0 |
| | 0.2nm,0.4s,baz=120,slow=8.5,SNR=3.2 | | | | | | | |
| ZALV | Zalesovo Beam | 44.54 | 317 | P | | P | 15 56 54.3 | -0.2 |
| | 0.4nm,0.4s,baz=105,slow=11,SNR=2.5 | | | | | | | |
| MKAR | Makanchi Array | 45.73 | 307 | P | | P | 15 57 03.0 | -0.9 |
| | 0.6nm,0.3s,baz=84,slow=9.9,SNR=22 | | | | | | | |
| WRA | Warramunga Arr | 51.16 | 186 | P | | P | 15 57 45.0 | +0.2 |
| | 1.1nm,0.8s,baz=1.0,slow=7.8,SNR=13 | | | | | | | |
| ASAR | Alice Springs | 54.89 | 186 | P | | P | 15 58 12.1 | +0.6 |
| | 0.3nm,0.5s,baz=21,slow=11,SNR=13 | | | | | | | |
| ARCES | ARCESS Array B | 68.67 | 340 | P | | P | 15 59 45.0 | +3.9 |
| | 2.9nm,0.8s,baz=64,slow=8.5,SNR=7.8 | | | | | | | |
| FINES | FINESS Array B | 72.97 | 332 | P | | P | 16 00 09.6 | +2.8 |
| | 0.8nm,0.4s,baz=59,slow=6.0,SNR=11 | | | | | | | |
| KBZ | Khabaz | 73.17 | 311 | P | | P | 16 00 08.7 | +0.4 |
| | 1.0nm,0.7s,baz=68,slow=6.0,SNR=4.4 | | | | | | | |
| AKASG | Malin Array Be | 77.62 | 322 | P | | P | 16 00 35.0 | +1.9 |
| | 0.5nm,0.4s,baz=54,slow=5.2,SNR=4.4 | | | | | | | |
| NVAR | Mina Array Bea | 80.03 | 51 | P | | P | 16 00 57.1 | +11 |
| | 0.1nm,0.5s,baz=298,slow=4.0,SNR=1.8 | | | | | | | |

*JMA **24** 15:56:36.8±0.1, 28°.66N×130°.75E, h64km±2km, M3.1*
*IDC **24** 15:56:39.5±2.9, 28°.73N×130°.38E, h47km±30km, mb3.4/3, mb1 3.6/5, mb1mx3.1/41, mbtmp3.6/5, ML3.0/2, Error ellipse: s-maj=45.3km s-min=18.0km az=109.0*

**ISC 24 15:56:34.1**±2.5, **28°.64N**±0°.04×**130°.75E**±0°.07, **h10**km±15km, **n20, σ1 933/32, mb3.5**/3, **Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| JZK | Kikaishima | 0.76 | 245 | P | | Pn | 15 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SHZ3 | | | | S | S | 16 09 18.6 | -34 | | |
| **MJAR** | **Matsushiro Arr** | **2.21** | **31** | P | **Pn** | **16 09 26.6** | **+0.4** | | |
| | 0.2nm,0.3s,baz=221,slow=7.2,SNR=11 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **10.46** | **24** | LR | LR | 16 15 46.5 | | | |
| | comp=Z,145nm,19.6s,baz=184,slow=41 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.25** | **304** | P | **P** | **16 16 00.9** | **-1.1** | | |
| | 0.1nm,0.3s,baz=90,slow=9.4,SNR=2.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.34** | **183** | P | **P** | **16 17 34.9** | **+1.0** | | |
| | 0.3nm,0.8s,baz=0.7,slow=7.6,SNR=1.7 | | | | | | | | |

*DNK* ***24*** *16:09:02.2±2.0, 51.42N×16.36E, h25km±78km*
*IPEC* ***24*** *16:09:02.3±0.2, 51.57N×16.20E, h0km, ML2.5/3, Error ellipse: s-maj=2.0km s-min=1.2km az=36.0*
*BGR* ***24*** *16:09:03.8±0.7, 51.54N×16.11E, h1km, ML3.1/10, Error ellipse: s-maj=8.9km s-min=3.3km az=29.0*
*VIE* ***24*** *16:09:03.3±0.7, 51.49N×16.14E, h0km, mb2.5/3, ml3.0/3, Error ellipse: s-maj=8.1km s-min=3.4km az=60.0 75 km NW of Wroclaw Suspected Mining induced.*
*PRU* ***24*** *16:09:04.0±0.0, 51.51N×16.06E, h0km*
*IDC* ***24*** *16:09:05.7±1.1, 51.35N×16.07E, h0km, mb1 3.6/4, mb1mx3.2/35, mbtmp3.4/4, ML2.8/4, Error ellipse: s-maj=21.8km s-min=8.9km az=131.0*
**ISC 24 16:09:02.5±0.7, 51.57N±0.03×16.11E±0.02, h0km, n46, σ1§01/83, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.74** | **171** | *e*Pg | | **Pg** | | **16 09 16.5** | **0.0** |
| KSP | | | | *e*Sg | | **Sg** | | **16 09 25.8** | **-0.4** |
| **KSP** | **Ksiaz** | **0.74** | **171** | *e*Pg | | **Pg** | | **16 09 16.6** | **0.0** |
| KSP | | | | *e*Sg | | **Sg** | | **16 09 26.0** | **-0.1** |
| **CHVC** | **Chvalec** | **0.98** | **182** | *e*PG | | **Pg** | | **16 09 21.4** | **+0.1** |
| CHVC | | | | *e*SG | | **Sg** | | **16 09 33.7** | **-0.4** |
| | comp=Z,80nm,0.4s | | | | | | | | |
| **OSTC** | **Ostas** | **1.02** | **176** | *e*PG | | **Pg** | | **16 09 22.1** | **+0.1** |
| OSTC | | | | *e*SG | | **Sg** | | **16 09 34.8** | **-0.3** |
| | comp=Z,68nm,0.4s | | | | | | | | |
| **UPC** | **Upice** | **1.07** | **183** | *e*PG | | **Pg** | | **16 09 22.5** | **-0.4** |
| UPC | | | | *e*SG | | **Sg** | | **16 09 35.9** | **-0.8** |
| | comp=Z,138nm,0.4s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.23** | **174** | *e*PG | | **Pg** | | **16 09 25.3** | **-0.7** |
| DPC | | | | *e*SG | | **Sg** | | **16 09 40.7** | **-1.2** |
| **DPC** | **Dobruska-Polom** | **1.23** | **174** | *e*Pg | | **Pg** | | **16 09 25.4** | **-0.7** |
| DPC | | | | *e*Sg | | **Sb** | | **16 09 42.7** | **-0.3** |
| **PVCC** | **Panska Ves** | **1.43** | **224** | *e*PG | | **Pn** | | **16 09 29.5** | **-0.2** |
| PVCC | | | | *e*SG | | **Sg** | | **16 09 48.5** | **+0.2** |
| | comp=Z,192nm,0.2s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.53** | **244** | Pg | | **Pn** | | **16 09 31.8** | **+0.7** |
| BRG | | | | Sg | | **Sb** | | **16 09 52.3** | **+0.6** |
| BRG | | | | Amp | | | | 16 09 53.3 | |
| | comp=Z,180nm,0.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.53** | **244** | *e*Pg | | **Pn** | | **16 09 31.9** | **+0.7** |
| BRG | | | | *e*Sg | | **Sb** | | **16 09 52.3** | **+0.6** |
| **KRLC** | **Kraliky** | **1.56** | **164** | *e*PG | | **Pn** | | **16 09 31.1** | **-0.4** |
| KRLC | | | | *e*SG | | **Sg** | | **16 09 51.5** | **-0.9** |
| | comp=Z,53nm,0.3s | | | | | | | | |
| **FBE** | **Freiberg** | **1.85** | **251** | *e*Sg | | **Sg** | | **16 10 02.1** | **+0.2** |
| **PRU** | **Pruhonice** | **1.87** | **213** | *e*PG | | **Pn** | | **16 09 36.7** | **+0.9** |
| PRU | | | | *e*SG | | **Sb** | | **16 10 01.2** | **-0.3** |
| | comp=Z,87nm,0.4s | | | | | | | | |
| **CLL** | **Collm** | **1.96** | **264** | *e*Pn | | **Pn** | | **16 09 36.0** | **-1.0** |
| CLL | | | | *e*Pg | | **Pb** | | **16 09 39.0** | **-0.1** |
| CLL | | | | *e*Sg | | **Sb** | | **16 10 05.0** | **+0.9** |
| | comp=Z,60nm,0.8s | | | | | | | | |
| **CLL** | **Collm** | **1.96** | **264** | *e*Pg | | **Pb** | | **16 09 40.1** | **+1.0** |
| CLL | | | | *e*Sg | | **Sg** | | **16 10 05.7** | **+0.1** |
| **MORC** | **Moravsky Berou** | **2.01** | **153** | *e*Pn | | **Pn** | | **16 09 37.0** | **-0.8** |
| | baz=335 | | | | | | | | |
| MORC | | | | *e*Sg | | **Sb** | | **16 10 04.8** | **-0.8** |
| | comp=Z,27nm,0.4s,baz=335 | | | | | | | | |
| **MORC** | **Moravsky Berou** | **2.01** | **153** | *e*Pn | | **Pn** | | **16 09 37.2** | **-0.6** |
| **OKC** | **Ostrava-Krasne** | **2.16** | **142** | *e*SG | | **Sg** | | **16 10 12.5** | **+0.5** |
| **VRAC** | **Vranov** | **2.29** | **172** | *e*Pn | | **Pn** | | **16 09 41.2** | **-0.3** |
| | baz=354 | | | | | | | | |
| VRAC | | | | *e*Sg | | **Sb** | | **16 10 13.7** | **+0.3** |
| | comp=Z,24nm,0.3s,baz=354 | | | | | | | | |
| **TREC** | **Trest** | **2.31** | **190** | *e*SG | | **Sb** | | **16 10 14.9** | **+0.7** |
| **KRUC** | **Moravsky** | **2.52** | **176** | *e*Pn | | **Pn** | | **16 09 44.3** | **-0.3** |
| | baz=357 | | | | | | | | |
| KRUC | | | | *e*Sg | | **Sb** | | **16 10 21.0** | **+0.9** |
| | comp=Z,26nm,0.6s,baz=357 | | | | | | | | |
| **WERD** | **Werda** | **2.65** | **246** | *e*Pg | | **Pg** | | **16 09 53.8** | **+0.4** |
| **NKC** | **Novy Kostel** | **2.68** | **241** | *e*PN | | **Pn** | | **16 09 47.5** | **+0.6** |
| NKC | | | | *e*PG | | **Pb** | | **16 09 52.8** | **+1.5** |
| NKC | | | | *e*SG | | **Sg** | | **16 10 27.6** | **-0.9** |
| | comp=Z,99nm,0.3s | | | | | | | | |
| **OJC** | **Ojcow** | **2.70** | **119** | *e*Pg | | **Pg** | | **16 09 55.0** | **+0.8** |
| OJC | | | | *e*Sg | | **Sg** | | **16 10 29.7** | **+0.6** |
| **JAVC** | **Velka Javorina** | **2.89** | **159** | *e*Pn | | **Pn** | | **16 09 49.5** | **-0.3** |
| | baz=341 | | | | | | | | |
| **JAVC** | **Velka Javorina** | **2.89** | **159** | *e*PN | | **Pn** | | **16 09 49.6** | **-0.3** |
| **KHC** | **Kasperske Hory** | **2.93** | **215** | *e*PN | | **Pn** | | **16 09 50.1** | **-0.3** |
| KHC | | | | *e*PG | | **Pb** | | **16 09 56.2** | **+0.6** |
| KHC | | | | *e*SN | | **Sn** | | **16 10 25.2** | **-1.1** |
| KHC | | | | *e*SG | | **Sg** | | **16 10 34.7** | **-2.0** |
| | comp=Z,20nm,0.4s | | | | | | | | |
| **MOX** | **Moxa** | **2.98** | **254** | *e*Pg | | **Pg** | | **16 09 59.2** | **-0.5** |
| MOX | | | | *e*Sg | | **Sg** | | **16 10 38.3** | **+0.1** |
| **CKRC** | **Cesky Krumlov** | **2.99** | **204** | *e*PN | | **Pn** | | **16 09 51.4** | **+0.3** |
| CKRC | | | | *e*PG | | **Pb** | | **16 09 57.7** | **+1.1** |
| CKRC | | | | *e*SG | | **Sb** | | **16 10 35.7** | **+2.1** |
| | comp=Z,20nm,0.4s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **3.14** | **211** | *e*Pn | | **Pn** | | **16 09 53.9** | **+0.7** |
| **GERES** | **GERESS Array B** | **3.14** | **211** | Pn | | **Pn** | | **16 09 53.0** | **-0.3** |
| | comp=Z,0.9nm,0.3s,baz=32,slow=15,SNR=15 | | | | | | | | |
| GERES | | | | Pg | | **Pb** | | **16 09 60.0** | **+0.8** |
| | comp=Z,1.8nm,0.3s,baz=31,slow=19,SNR=24 | | | | | | | | |
| GERES | | | | Sn | | **Sn** | | **16 10 29.6** | **-1.9** |
| | comp=Z,1.8nm,0.3s,baz=28,slow=25,SNR=5.6 | | | | | | | | |
| GERES | | | | Lg | | Lg | | 16 10 37.4 | |
| | comp=Z,2.5nm,0.3s,baz=33,slow=33,SNR=6.6 | | | | | | | | |
| **SMOL** | **Smolenice** | **3.17** | **164** | *e*PG | | **Pg** | | **16 10 04.6** | **+1.3** |
| SMOL | | | | *e*SG | | **Sg** | | **16 10 43.9** | **-0.6** |
| **NIE** | **Niedzica** | **3.43** | **127** | *e*P | | **Pg** | | **16 10 08.6** | **+0.3** |
| NIE | | | | *e*S | | **Sg** | | **16 10 53.1** | **+0.3** |
| **ZST** | **Bratislava** | **3.44** | **169** | *e*SG | | **Sg** | | **16 10 51.1** | **-1.8** |
| **VYHS** | **Vyhne** | **3.54** | **149** | *e*PN | | **Pn** | | **16 09 58.8** | **0.0** |
| VYHS | | | | *e*PG | | **Pg** | | **16 10 10.4** | **0.0** |
| VYHS | | | | *e*SG | | **Sg** | | **16 10 55.8** | **-0.5** |
| **CLZ** | **Clausthal** | **3.58** | **277** | *e*Pn | | **Pn** | | **16 10 00.5** | **+1.2** |
| **BSD** | **Bornholm Skovb** | **3.62** | **349** | *i* P | | **Pn** | | **16 10 00.2** | **+0.4** |
| BSD | | | | *i* S | | **Sn** | | **16 10 41.6** | **-1.6** |
| BSD | | | | IAML | | | | 16 10 44.5 | |
| | comp=Z,1.9nm,0.1s | | | | | | | | |
| **CONA** | **Conrad Observa** | **3.65** | **183** | *i* Pn | | **Pn** | | **16 10 00.7** | **+0.4** |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| **MOA** | **Molln** | **3.91** | **199** | *e*Pn | | **Pn** | | **16 10 04.0** | **+0.1** |
| | comp=Z,1.2nm,0.2s | | | | | | | | |
| **ARSA** | **Arzberg** | **4.34** | **185** | *e*Pn | | **Pn** | | **16 10 10.3** | **+0.6** |
| | comp=Z,0.7nm,0.2s | | | | | | | | |
| **BLEU** | **Blekinge** | **4.75** | **358** | *i* P | | **Pn** | | **16 10 15.5** | **+0.3** |
| BLEU | | | | *i* S | | **Sn** | | **16 11 08.3** | **-2.6** |
| **DEL** | **Delary** | **5.08** | **346** | *i* P | | **Pn** | | **16 10 19.0** | **-0.9** |
| DEL | | | | *i* S | | **Sn** | | **16 11 15.6** | **-3.6** |
| DEL | | | | IAML | | | | 16 11 19.4 | |
| | comp=Z,0.6nm,0.2s | | | | | | | | |
| **FABU** | **Falkenberg** | **5.79** | **341** | *i* P | | **Pn** | | **16 10 32.2** | **+2.6** |
| FABU | | | | *i* S | | **Sn** | | **16 11 34.2** | **-2.4** |
| **AKASG** | **Malin Array Be** | **8.29** | **91** | Pn | | **Pn** | | **16 11 03.9** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=278,slow=12,SNR=6.8 | | | | | | | | |
| AKASG | | | | Lg | | Lg | | 16 13 24.8 | |
| | comp=Z,0.1nm,0.3s,baz=270,slow=30,SNR=1.6 | | | | | | | | |
| **FINES** | **FINESS Array B** | **11.31** | **25** | Pn | | **Pn** | | **16 11 46.6** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=218,slow=12,SNR=1.7 | | | | | | | | |
| FINES | | | | Sn | | Sn | | 16 13 43.0 | -9.1 |
| | comp=Z,0.2nm,0.3s,baz=213,slow=20,SNR=2.1 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.56** | **10** | Pn | | **Pn** | | **16 13 21.6** | **+1.0** |
| | baz=191,slow=13,SNR=2.3 | | | | | | | | |

*BJI* ***24*** *16:10:47.2±0.0, 38.14N×142.07E, h45km, mb4.8/74, mB5.0/44, Ms4.2/31, Ms7 4.0/35*
*MOS* ***24*** *16:10:48.8±1.0, 38.37N×141.88E, h40km, mb5.1/50, Error ellipse: s-maj=6.2km s-min=4.0km az=105.3*
*NEIC* ***24*** *16:10:50.7±1.9, 38.29N±0.05×141.88E±0.08, h40km±5km, mb5.0/91, Mwr4.5/18, Error ellipse: s-maj=9.7km s-min=7.0km az=124.0*
*NIED* ***24*** *16:10:50.9, 38.30N×141.88E, h46km, MW4.6, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr5.08; Mθθ-0.43; Mϕϕ-4.65; Mrθ3.33; Mθϕ-2.15; Mϕr6.36;*
*Fault plane solution: M₀8.93000×10¹⁵ NP1:ϕ₁27.00000°, δ72.00000°, λ.93.00000°. NP2:ϕ₂198.00000°, δ18.00000°, λ.82.00000°.*
*NEIC* ***24*** *16:10:50.7, 38.29N×141.90E, h44km, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr4.74; Mθθ-0.17; Mϕϕ-4.56; Mrθ1.68; Mθϕ-1.38; Mϕr5.32; Fault plane solution: M₀7.40000×10¹⁵ NP1:ϕ₁194.82000°, δ20.51000°, λ.87.79000°. NP2:ϕ₂17.18000°, δ69.51000°, λ.90.83000°. Principal axes: T 7.2809, Plg65.0000°, Azm289.0000°; N 0.2239, Plg1.0000°, Azm197.0000°; P -7.5048, Plg25.0000°, Azm107.0000°;*
*JMA* ***24*** *16:10:50.8±0.1, 38.30N×141.88E, h46km±1km, M4.6 Broadband fault plane solution: P waves. NP1: ϕ₁193.00000°, δ21.00000°, λ.85.00000°. NP2:ϕ₂19.00000°, δ69.00000°, λ.92.00000°. Principal axes: T Plg66.0000°, Azm292.0000°; N Plg2.0000°, Azm198.0000°; P Plg24.0000°, Azm107.0000°;*
*JMA Felt III J1.*
*IDC* ***24*** *16:10:51.3±0.5, 38.30N×141.83E, h48km±4km, mb4.3/23, mb1 4.4/29, mb1mx4.4/37, mbtmp4.5/29, MS3.7/53, Ms1 3.7/53, ms1mx3.6/92 Error ellipse: s-maj=13.2km s-min=10.2km az=109.0*
**ISC 24 16:10:50.3±0.4, 38.29N±0.03×141.91E±0.04, h44km±2km, h44km:pP-P, n517, σ1§49/554, mb4.9/171, MS3.9/58, 27C-53D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.35** | **274** | ⇓P | | **Pn** | | **16 10 59.9** | **+0.5** |
| JIKH | | | | S | | **Sn** | | **16 11 06.1** | **+0.2** |
| **JIO** | **Ouri** | **0.47** | **291** | ⇓P | | **Pn** | | **16 11 01.2** | **+0.3** |
| JIO | | | | S | | **Sn** | | **16 11 08.5** | **+0.2** |
| **JKMT** | **Kesennumamotoy** | **0.62** | **327** | P | | **Pn** | | **16 11 03.1** | **+0.3** |
| JKMT | | | | S | | **Sn** | | **16 11 11.7** | **-0.1** |
| **OFUJ** | **Ofunato** | **0.81** | **347** | ⇓P | | **Pn** | | **16 11 05.6** | **+0.2** |
| OFUJ | | | | S | | **Sn** | | **16 11 15.8** | **-0.5** |
| **JMK** | **Ichinoseki** | **0.85** | **321** | ⇓P | | **Pn** | | **16 11 06.5** | **+0.5** |
| JMK | | | | S | | **Sn** | | **16 11 17.4** | **+0.1** |
| **JMM** | **Marumori** | **0.98** | **245** | ⇓P | | **Pn** | | **16 11 07.5** | **-0.1** |
| JMM | | | | S | | **Sn** | | **16 11 19.8** | **-0.5** |
| **JMM** | **Marumori** | **0.98** | **245** | | | **Pn** | | **16 11 07.4** | **-0.1** |
| JMM | | | | | Sn | **Sn** | | **16 11 18.9** | **-1.4** |
| **JOU** | **Okura** | **0.98** | **275** | ⇓P | | **Pn** | | **16 11 08.3** | **+0.6** |
| JOU | | | | S | | **Sn** | | **16 11 21.0** | **+0.5** |
| **JFK** | **Kawauchi** | **1.23** | **222** | ⇓P | | **Pn** | | **16 11 11.1** | **-0.1** |
| JFK | | | | S | | **Sn** | | **16 11 26.1** | **-0.5** |
| **JOM** | **Ohasama** | **1.28** | **338** | P | | **Pn** | | **16 11 12.4** | **+0.7** |
| JOM | | | | *e*S | | **Sn** | | **16 11 28.5** | **+0.8** |
| **JYK** | **Kaneyama** | **1.37** | **298** | ⇓P | | **Pn** | | **16 11 13.6** | **+0.6** |
| **JYS** | **Shirataka** | **1.45** | **268** | P | | **Pn** | | **16 11 14.8** | **+0.7** |
| JYS | | | | S | | **Sn** | | **16 11 33.1** | **+1.1** |
| **JFT** | **Otama** | **1.46** | **239** | ⇓P | | **Pn** | | **16 11 15.0** | **+0.7** |
| **JRG** | **Rokugo** | **1.49** | **318** | ⇓P | | **Pn** | | **16 11 15.4** | **+0.8** |
| **JYT** | **Yasato** | **2.47** | **214** | | | **Pn** | | **16 11 28.0** | **-0.1** |
| **JTM** | **Tenmabayashi** | **2.58** | **346** | Pn | | **Pn** | | **16 11 30.4** | **+0.9** |
| **JSD** | **Sado** | **2.89** | **266** | Pn | | **Pn** | | **16 11 34.0** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **3.42** | **241** | P | | **Pn** | | **16 11 43.0** | **+1.8** |
| | 2.6nm,0.3s,baz=52,slow=9.7,SNR=66 | | | | | | | | |
| MJAR | | | | S | | **Sn** | | **16 12 24.0** | **+3.5** |
| | 3.0nm,0.3s,baz=77,slow=28,SNR=4.8 | | | | | | | | |
| MJAR | | | | LR | | LR | | 16 13 26.1 | |
| | comp=Z,1μm,18.7s,baz=60,slow=46 | | | | | | | | |
| **MAJO** | **Matsushiro** | **3.42** | **241** | *d* iP | | **Pn** | | **16 11 43.1** | **+1.9** |
| **MAJO** | **Matsushiro** | **3.42** | **241** | | | **Pn** | | **16 11 42.6** | **+1.4** |
| **MAT** | **Matsushiro** | **3.42** | **241** | P | | **Pn** | | **16 11 43.1** | **+1.9** |
| MAT | | | | S | | **Sn** | | **16 12 24.5** | **+3.9** |
| **MJB9** | **Matsu-Tunnel** | **3.43** | **241** | | | **Pn** | | **16 11 42.8** | **+1.6** |
| **ERM** | **Erimo** | **3.84** | **14** | *ce*P | | **Pn** | | **16 11 47.6** | **+0.7** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,85nm,1.3s | | | | | | | | |
| **ERM** | **Erimo** | **3.84** | **14** | | | **Pn** | | **16 11 47.3** | **+0.4** |
| **JGF** | **Kuroka** | **4.53** | **235** | Pn | | **Pn** | | **16 11 58.2** | **+1.8** |
| **JEW** | **Eniwo** | **4.56** | **356** | Pn | | **Pn** | | **16 11 57.9** | **+1.1** |
| **INU** | **Inuyama** | **4.90** | **235** | Pn | | **Pn** | | **16 12 04.4** | **+2.9** |
| **JHJ2** | **Mitsune** | **5.44** | **199** | Pn | | **Pn** | | **16 12 09.2** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **5.44** | **199** | P | | **Pn** | | **16 12 09.5** | **+0.6** |
| | comp=Z,49nm,0.3s,baz=323,slow=20,SNR=9.4 | | | | | | | | |
| JHJ | | | | S | | **Sn** | | **16 13 07.1** | **-3.1** |
| | comp=Z,98nm,0.3s,baz=66,slow=20,SNR=5.8 | | | | | | | | |
| JHJ | | | | LR | | LR | | 16 14 45.3 | |
| | comp=Z,256nm,19.1s,baz=351,slow=43 | | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **5.84** | **28** | *e*P | | **Pn** | | **16 12 12.7** | **-1.6** |
| NMR | | | | *e*S | | **Sn** | | **16 13 15.5** | **-4.5** |
| **ASAJ** | **Asahikawa** | **5.84** | **5** | P | | **Pn** | | **16 12 14.5** | **+0.1** |
| | comp=Z,10.0nm,0.3s,baz=222,slow=12,SNR=73 | | | | | | | | |
| ASAJ | | | | S | | **Sn** | | **16 13 20.7** | **+0.7** |
| | comp=Z,4.4nm,0.3s,baz=169,slow=18,SNR=6.2 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **5.84** | **5** | Pn | | **Pn** | | **16 12 14.4** | **0.0** |
| **GLVR** | **Golovnino** | **6.09** | **25** | *e*P | | **Pn** | | **16 12 17.1** | **-0.6** |
| GLVR | | | | *e*S | | **Sn** | | **16 13 23.2** | **-2.8** |
| GLVR | | | | smax | | smax | | | |
| | comp=E,857nm,0.2s | | | | | | | | |
| GLVR | | | | smax | | smax | | | |
| | comp=N,893nm,0.3s | | | | | | | | |
| **RUSJ** | **Misakicho** | **6.33** | **22** | *e*P | | **Pn** | | **16 12 20.6** | **-0.4** |
| RUSJ | | | | *e*S | | **Sn** | | **16 13 29.4** | **-2.6** |
| **YUK** | **Yuzh-Kuril'sk** | **6.47** | **26** | *e*P | | **Pn** | | **16 12 20.4** | **-2.5** |
| YUK | | | | *e*S | | **Sn** | | **16 13 30.6** | **-4.7** |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,129nm,0.2s | | | | | | | | |
| YUK | | | | smax | | smax | | | |
| | comp=E,423nm,0.6s | | | | | | | | |
| YUK | | | | smax | | smax | | | |
| | comp=N,660nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **6.70** | **32** | *e*P | | **Pn** | | **16 12 23.9** | **-2.2** |
| SHO | | | | *e*S | | **Sn** | | **16 13 34.2** | **-6.8** |
| SHO | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.2s | | | | | | | | |
| SHO | | | | smax | | smax | | | |
| | comp=N,291nm,0.5s | | | | | | | | |
| SHO | | | | smax | | smax | | | |
| | comp=E,310nm,0.5s | | | | | | | | |
| **TEY** | **Ternei** | **7.82** | **331** | ⇓ *i*P | | Pn | | 16 12 47.4 | +5.9 |
| TEY | | | | pmax | | pmax | | | |
| | comp=E,100nm,0.9s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=N,100nm,0.8s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=Z,100nm,0.9s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=N,140nm,0.7s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=E,90nm,0.7s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=Z,140nm,0.7s | | | | | | | | |
| **JMN** | **Monobe** | **7.94** | **237** | Pn | | **Pn** | | **16 12 44.4** | **+1.2** |
| **KUR** | **Kuril'sk** | **8.24** | **31** | P | | **Pn** | | **16 12 48.9** | **+1.7** |
| KUR | | | | S | | **Sn** | | **16 14 13.7** | **-5.2** |
| KUR | | | | smax | | smax | | | |
| | comp=E,128nm,0.6s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.68** | **4** | *e*P | | **Pn** | | **16 12 53.5** | **+0.3** |
| YSS | | | | *e*S | | **Sn** | | **16 14 29.1** | **-0.6** |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.68** | **4** | Pn | | **Pn** | | **16 12 54.1** | **+0.9** |
| **MSHR** | **Mys Shultsa** | **9.25** | **301** | *d* iP | | **Pn** | | **16 13 01.9** | **+0.8** |
| **USA0B** | **Ussuriysk Arra** | **9.52** | **311** | *ce*P | | **Pn** | | **16 13 06.3** | **+1.6** |
| **USA0B** | **Ussuriysk Arra** | **9.52** | **311** | | | **Pn** | | **16 13 05.8** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **9.52** | **311** | P | | **Pn** | | **16 13 06.2** | **+1.5** |
| | baz=122,slow=13,SNR=80 | | | | | | | | |
| USRK | | | | LR | | LR | | 16 16 35.3 | |
| | comp=Z,584nm,19.0s,baz=102,slow=36 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.52** | **311** | | | **Pn** | | **16 13 05.7** | **+1.0** |
| **KSRS** | **Korea Array** | **11.09** | **270** | P | | **Pn** | | **16 13 29.6** | **+3.4** |
| | comp=Z,0.5nm,0.3s,baz=78,slow=14,SNR=11 | | | | | | | | |
| KSRS | | | | LR | | LR | | 16 17 23.2 | |
| | comp=Z,439nm,20.1s,baz=80,slow=35 | | | | | | | | |
| **KS19** | **Wonju Array Si** | **11.13** | **270** | | | **Pn** | | **16 13 26.4** | **-0.3** |
| **JCJ** | **Chichijima** | **11.16** | **179** | Pn | | **Pn** | | **16 13 24.4** | **-2.9** |
| **MDJ** | **Mudanjiang** | **11.19** | **308** | Pn | | **Pn** | | **16 13 30.4** | **+2.8** |
| **MDJ** | **Mudanjiang** | **11.19** | **308** | P | | **Pn** | | **16 13 30.0** | **+2.4** |
| MDJ | | | | S | | **Sn** | | **16 15 32.5** | **+1.2** |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,52nm,1.2s | | | | | | | | |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,290nm,3.5s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,300nm,6.7s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,470nm,9.2s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,660nm,15.7s | | | | | | | | |
| **TJN** | **Taejon** | **11.74** | **265** | ⇑ *e*P | | **Pn** | | **16 13 36.2** | **+1.1** |
| **BNX** | **BinXian** | **13.09** | **309** | ⇓P | | **Pn** | | **16 13 55.8** | **+2.2** |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.5s | | | | | | | | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,420nm,6.9s | | | | | | | | |
| **KLR** | **Kul'dur** | **13.16** | **329** | P | | **Pn** | | **16 13 53.8** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=133,slow=12,SNR=11 | | | | | | | | |
| KLR | | | | LR | | LR | | 16 19 03.2 | |
| | comp=Z,494nm,18.6s,baz=144,slow=38 | | | | | | | | |
| **KLR** | **Kul'dur** | **13.16** | **329** | *de*P | | **Pn** | | **16 13 54.5** | **+0.1** |
| **CN2** | **Changchun** | **13.58** | **299** | *e*P | | **P** | | **16 14 05.5** | **-2.8** |
| CN2 | | | | pP | | Pn | | 16 14 15.1 | +15 |
| CN2 | | | | S | | **Sn** | | **16 16 35.1** | **+5.4** |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,200nm,4.0s | | | | | | | | |
| CN2 | | | | LR | | LR | | | |
| | comp=Z,300nm,12.0s | | | | | | | | |
| CN2 | | | | LR | | LR | | | |
| | comp=Z,400nm,12.0s | | | | | | | | |
| CN2 | | | | LR | | LR | | | |
| | comp=Z,400nm,15.0s | | | | | | | | |
| **DL2** | **Dalian** | **15.87** | **279** | P | | **P** | | **16 14 33.0** | **-0.7** |
| DL2 | | | | sP | | **sP** | | **16 14 49.0** | **-0.7** |
| DL2 | | | | pmax | | pmax | | | |
| | comp=Z,56nm,1.0s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,200nm,17.1s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,430nm,15.4s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,360nm,23.1s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **18.41** | **31** | P | | **Pn** | | **16 15 02.9** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=207,slow=9.6,SNR=4.2 | | | | | | | | |
| PETK | | | | LR | | LR | | 16 23 24.7 | |
| | comp=Z,108nm,18.3s,baz=202,slow=41 | | | | | | | | |
| **ZEA** | **Zeya** | **18.44** | **332** | *e*P | | **P** | | **16 15 00.9** | **-1.1** |
| ZEA | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,1.2s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| ZEA | | | | MLR | | MLR | | | |
| | comp=Z,200nm,13.0s | | | | | | | | |
| **PET** | **Petropavlovsk** | **18.75** | **33** | ⇓ *e*P | | **Pn** | | **16 15 06.1** | **0.0** |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,43nm,2.5s | | | | | | | | |
| **HIA** | **Hailar** | **19.33** | **312** | P | | **P** | | **16 15 11.3** | **-0.6** |
| HIA | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.6s | | | | | | | | |
| **HIA** | **Hailar** | **19.33** | **312** | P | | **P** | | **16 15 11.2** | **-0.6** |
| **NJ2** | **Nanjing** | **19.83** | **259** | *e*P | | **P** | | **16 15 18.1** | **+0.8** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **TIA** | **Tai'an** | **19.83** | **272** | ⇓P | | **P** | | **16 15 16.1** | **-1.2** |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **BJI** | **Beijing** | **20.01** | **283** | P | | **P** | | **16 15 16.6** | **-2.7** |
| BJI | | | | pP | | **pP** | | **16 15 26.3** | **-3.5** |
| BJI | | | | sP | | **sP** | | **16 15 32.0** | **-3.4** |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **BJT** | **Baijiatuan** | **20.02** | **283** | P | | **P** | | **16 15 16.9** | **-2.5** |
| BJT | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **BJT** | **Baijiatuan** | **20.02** | **283** | P | | **P** | | **16 15 16.9** | **-2.5** |
| **XLT** | **XiLinHaoTe** | **20.22** | **294** | ⇑ *i*P | | **P** | | **16 15 19.8** | **-1.8** |
| XLT | | | | pP | | pP | | 16 15 32.4 | +0.3 |
| XLT | | | | sP | | sP | | 16 15 35.9 | -1.8 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,260nm,5.5s | | | | | | | | |
| **HNS** | **HongShan** | **21.48** | **276** | ⇓P | | **P** | | **16 15 32.3** | **-2.8** |
| HNS | | | | PP | | **PnPn** | | **16 15 55.0** | **-1.4** |
| HNS | | | | S | | **S** | | **16 19 21.4** | **-9.4** |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,580nm,17.4s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,350nm,10.0s | | | | | | | | |
| **MA2** | **Magadan** | **22.05** | **12** | P | | **P** | | **16 15 41.4** | **+0.5** |
| | comp=Z,37nm,0.9s,baz=196,slow=9.2,SNR=37 | | | | | | | | |
| MA2 | | | | LR | | LR | | 16 25 59.6 | |
| | comp=Z,96nm,18.9s,baz=196,slow=41 | | | | | | | | |
| **MA

XAN **Xi'an** **26.89 271** P **P** **16 16 26.3 -0.8**
XAN pP pP 16 16 33.9 -4.8
XAN sP sP 16 16 38.4 -5.6
XAN pmax pmax
comp=Z,24nm,0.6s
**ULN** **Ulaanbaatar** **27.00 302***d i*P **P** **16 16 28.9 +0.8**
ULN pmax pmax
comp=Z,17nm,1.3s
**ULN** **Ulaanbaatar** **27.00 302** P **P** **16 16 27.6 -0.6**
**SONM** **Songino Array** **27.44 302** P **P** **16 16 32.4 +0.4**
comp=Z,4.1nm,0.7s,baz=109,slow=9.1,SNR=23
SONM PcP **PcP** **16 19 50.0 +0.3**
comp=Z,1.0nm,0.7s,baz=157,slow=3.2,SNR=4.1
SONM ScP **ScP** **16 23 26.2 -0.3**
comp=Z,0.6nm,0.8s,baz=128,slow=2.4,SNR=4.5
SONM LR LR 16 27 51.5
comp=Z,169nm,19.1s,baz=94,slow=37
**SONM** **Songino Array** **27.44 302** P **P** **16 16 31.7 -0.3**
**ENH** **Enshi** **27.85 263** P **P** **16 16 34.6 -1.2**
**H11N2** **WAKE ISLAND Hy** **28.48 123** T T 16 46 54.5
baz=316,slow=75,SNR=2955
**H11N1** **WAKE ISLAND Hy** **28.49 123** T T 16 46 55.4
baz=316,slow=75,SNR=4190
**H11N3** **WAKE ISLAND Hy** **28.50 123** T T 16 46 54.2
baz=316,slow=75,SNR=2527
**H11S1** **WAKE ISLAND Hy** **29.24 125** T T 16 47 51.0
baz=318,slow=76,SNR=1106
**H11S3** **WAKE ISLAND Hy** **29.24 125** T T 16 47 50.0
baz=318,slow=76,SNR=1433
**H11S2** **WAKE ISLAND Hy** **29.25 125** T T 16 47 52.2
baz=318,slow=76,SNR=1063
**ZAK** **Zakamensk** **29.82 307** *e*P **P** **16 16 51.6 -1.6**
ZAK pmax pmax
comp=Z,23nm,1.0s
**LZH** **Lanzhou** **30.27 278** ⇓P **P** **16 16 57.8 +0.5**
LZH pP pP 16 17 09.5 +0.4
LZH sP sP 16 17 14.8 +0.5
LZH pmax pmax
comp=Z,42nm,1.5s
LZH LR LR
comp=Z,280nm,11.9s
LZH LR LR
comp=Z,230nm,12.5s
LZH LR LR
comp=Z,240nm,12.5s
**MOY** **Mondy** **31.45 309** *e*P **P** **16 17 07.6 +0.1**
MOY pmax pmax
comp=Z,9.0nm,1.3s
**GYA** **Guiyang** **31.84 259** ⇓P **P** **16 17 10.6 -0.6**
GYA pP pP 16 17 25.1 +2.2
GYA pmax pmax
comp=Z,24nm,1.4s
**CD2** **Chengdu** **32.08 268** *e*P **P** **16 17 12.0 -1.2**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
**GTA** **Gaotai** **32.59 285** *e*P **P** **16 17 17.1 -0.6**
GTA pP pP 16 17 27.8 -1.7
GTA sP sP 16 17 34.1 -0.6
GTA PcP **PcP** **16 20 04.5 +1.3**
GTA pmax pmax
comp=Z,5.0nm,0.7s
GTA pmax pmax
comp=Z,160nm,6.8s
GTA LR LR
comp=Z,120nm,15.1s
GTA LR LR
comp=Z,260nm,15.9s
GTA LR LR
comp=Z,270nm,15.5s
**BILL** **Bilibino** **32.71 17** *e*P **P** **16 17 18.7 +0.4**
BILL *e* 16 17 35.9
BILL *e* 16 18 29.1
BILL pmax pmax
comp=Z,15nm,2.5s
**KNGR** **Kungurtug, Tuv** **33.50 306***d i*P **P** **16 17 25.9 +0.4**
**TIXI** **Tiksi** **34.09 353**⇓*e*P **P** **16 17 29.9 -0.3**
TIXI pmax pmax
comp=Z,4.0nm,0.7s
**TIXI** **Tiksi** **34.09 353** P **P** **16 17 29.2 -1.0**
**DAV** **Davao City (W)** **34.42 210** LR LR 16 31 46.3
comp=Z,49nm,20.8s,baz=318,slow=36
**KMI** **Kunming** **35.55 260** ⇓P **P** **16 17 43.8 +0.2**
KMI pP pP 16 17 56.1 +0.6
KMI sP sP 16 18 00.3 -0.4
KMI PP **PP** **16 19 06.0 +1.2**
KMI S **S** **16 23 14.6 -2.0**
KMI SS **SnSn** **16 25 40.8 +1.2**
KMI pmax pmax
comp=Z,21nm,0.9s
KMI pmax pmax
comp=Z,140nm,4.9s
KMI LR LR
comp=Z,310nm,12.2s
KMI LR LR
comp=Z,200nm,9.5s
KMI LR LR
comp=Z,200nm,18.2s
**PZH** **PanZhiHua** **35.64 263** ⇓P **P** **16 17 44.0 -0.2**
PZH pmax pmax
comp=Z,30nm,0.7s
PZH pmax pmax
comp=Z,100nm,5.1s
**GOMU** **GeErMu** **37.24 282** P **P** **16 17 58.8 +0.7**
GOMU pP pP 16 18 05.1 -4.9
GOMU sP sP 16 18 11.4 -3.8
GOMU pmax pmax
comp=Z,19nm,1.0s
GOMU pmax pmax
comp=Z,150nm,8.8s
**DGZ** **Jazzator, Alta** **39.99 305***c i*P **P** **16 18 21.9 +1.2**
DGZ pmax pmax
comp=Z,60nm,0.9s
**SIJI** **Sorong** **40.18 197** LR LR 16 31 27.0
comp=Z,106nm,20.6s,baz=218,slow=31
**ANM** **Nome** **40.32 32** P **P** **16 18 24.7 +1.6**
ANM pmax pmax
comp=Z,19nm,1.8s
**ANM** **Nome** **40.32 32** P **P** **16 18 24.7 +1.6**
**JAY** **Jayapura** **40.62 182** LR LR 16 35 01.7
comp=Z,61nm,19.5s,baz=13,slow=36
**WMQ** **Urumqi** **40.64 296** *e*P **P** **16 18 27.3 +1.2**
WMQ pP pP 16 18 36.8 -1.3
WMQ sP sP 16 18 43.9 +0.6
WMQ PcP **PcP** **16 20 22.4 -4.8**
WMQ pmax pmax
comp=Z,87nm,0.9s
WMQ pmax pmax
comp=Z,260nm,4.7s
WMQ LR LR
comp=Z,140nm,21.9s
**ZAA0** **Zalesovo Array** **41.37 311** P **P** **16 18 31.7 -0.2**
ZAA0 IAmb IAmb 16 18 32.8
comp=Z,17nm,0.7s
**ZALV** **Zalesovo Beam** **41.37 311** P **P** **16 18 32.0 +0.1**
comp=Z,18nm,0.6s,baz=85,slow=7.9,SNR=70
ZALV PcP **PcP** **16 20 29.1 -0.2**
comp=Z,4.6nm,0.7s,baz=87,slow=3.8,SNR=5.7
ZALV LR LR 16 36 26.2
comp=Z,170nm,18.0s,baz=62,slow=37
**ZALV** **Zalesovo Beam** **41.37 311** P **P** **16 18 31.7 -0.1**
**ZSN** **Zaisan** **41.95 302** *e*P **P** **16 18 36.2 -0.5**
ZSN pmax pmax
comp=Z,21nm,0.9s
**ZSN** **Zaisan** **41.95 302** *e*P **P** **16 18 36.3 -0.5**
comp=Z,22nm,0.9s,baz=302
**FAKI** **Fak Fak** **41.97 195** P **P** **16 18 38.1 +1.0**
FAKI IAmb IAmb 16 19 21.2
comp=Z,38nm,1.2s
**CHTO** **Chiang Mai** **41.99 255** P **P** **16 18 37.0 -0.4**
CHTO pmax pmax
comp=Z,7.0nm,0.8s
**CHTO** **Chiang Mai** **41.99 255** P **P** **16 18 37.0 -0.4**
**CM31** **Chiang Mai Arr** **42.20 254** P **P** **16 18 39.4 +0.3**
**CMAR** **Chiang Mai Arr** **42.20 254** P **P** **16 18 39.5 +0.4**
comp=Z,2.4nm,0.8s,baz=51,slow=5.0,SNR=21
CMAR PcP **PcP** **16 20 33.4 +0.7**
comp=Z,1.5nm,0.8s,baz=5.7,slow=2.7,SNR=6.9
CMAR LR LR 16 36 19.4
comp=Z,29nm,20.2s,baz=65,slow=36
**CMAR** **Chiang Mai Arr** **42.20 254** P **P** **16 18 38.9 -0.2**
**NRIK** **Noril'sk** **42.30 335** P **P** **16 18 38.9 -0.3**
comp=Z,2.0nm,0.3s,baz=98,slow=10.0,SNR=5.7
NRIK LR LR 16 37 17.7
comp=Z,237nm,18.3s,baz=91,slow=38
**NRIK** **Noril'sk** **42.30 335***ce*P **P** **16 18 38.7 -0.5**
NRIK pmax pmax
comp=Z,10.0nm,1.4s
**NRIK** **Noril'sk** **42.30 335** P **P** **16 18 38.7 -0.5**
**SANI** **Sanana** **42.75 204** P **P** **16 18 42.3 -1.1**
comp=Z,28nm,0.9s
**MK31** **Makanchi Array** **43.80 301***c i*P **P** **16 18 51.6 -0.1**
**MK31** **Makanchi Array** **43.80 301** P **P** **16 18 51.5 -0.1**
MK31 IAmb IAmb 16 18 53.6
comp=Z,15nm,0.8s
**MKAR** **Makanchi Array** **43.80 301** P **P** **16 18 51.9 +0.1**
comp=Z,14nm,0.8s,baz=86,slow=9.2,SNR=114
MKAR LR LR 16 37 16.9
comp=Z,78nm,20.8s,baz=51,slow=36
**SHL** **Shillong** **43.83 268** P **P** **16 18 52.3 0.0**
SHL pmax pmax
comp=Z,16nm,0.6s
**SHL** **Shillong** **43.83 268** P **P** **16 18 52.3 0.0**
SHL IAmb IAmb 16 18 57.5
comp=Z,16nm,0.6s
**MAKZ** **Makanchi** **44.01 301** P **P** **16 18 53.4 0.0**
MAKZ pmax pmax
comp=Z,15nm,0.8s
**MAKZ** **Makanchi** **44.01 301** P **P** **16 18 53.4 0.0**
MAKZ IAmb IAmb 16 18 55.4
comp=Z,15nm,0.8s
**SVW2** **Sparrevohn** **44.29 38** P **P** **16 18 58.5 +3.1**
SVW2 IAmb IAmb 16 19 33.3
comp=Z,76nm,1.7s
**SEM** **Semipalatinsk** **44.50 307** *e*P **P** **16 18 56.5 -1.0**
SEM pmax pmax
comp=Z,14nm,0.9s
**SEM** **Semipalatinsk** **44.50 307** *e*P **P** **16 18 56.6 -1.0**
comp=Z,14nm,0.9s,baz=306
**K20K** **Telida** **45.07 35** P **P** **16 19 04.0 +2.4**
K20K IAmb IAmb 16 20 30.8
comp=Z,37nm,1.8s
**SII** **Sitkinak Islan** **45.13 45** P **P** **16 19 01.5 -0.6**
**IMAR** **Indian Mountai** **45.37 31** P **P** **16 19 05.2 +1.2**
**KURK** **Kurchatov** **45.48 307***c i*P **P** **16 19 04.9 -0.1**
KURK pmax pmax
comp=Z,51nm,0.7s
**KURK** **Kurchatov** **45.48 307** P **P** **16 19 04.6 -0.3**
**KURBB** **Kurchatov Arra** **45.55 307** LR LR 16 38 51.0
comp=Z,108nm,20.7s,baz=61,slow=37
**KDAK** **Kodiak Island** **45.91 43** LR LR 16 38 20.1
comp=Z,203nm,20.3s,baz=271,slow=36
**CAST** **Castle Rocks** **45.97 35** P **P** **16 19 11.0 +2.3**
CAST IAmb IAmb 16 19 49.3
comp=Z,51nm,1.9s
**TAPN** **Taplejung** **46.26 273** *e*P **P** **16 19 11.9 +0.1**
**ODAN** **Odare** **46.74 273** *e*P **P** **16 19 15.6 +0.1**
comp=Z,26nm,0.6s
**UZB** **Uzynbulak** **46.93 297** *e*P **P** **16 19 16.1 -0.5**
**UZB** **Uzynbulak** **46.93 297** *e*P **P** **16 19 16.2 -0.5**
baz=297
**BNSI** **Bone** **47.04 210** P **P** **16 19 16.4 -1.2**
comp=Z,18nm,1.2s
**KPKS** **Kokpek** **47.07 297** *e*P **P** **16 19 17.4 -0.3**
**KPKS** **Kokpek** **47.07 297** *e*P **P** **16 19 17.4 -0.3**
baz=297
**TOLK** **Toolik Lake Re** **47.18 28** P **P** **16 19 20.1 +1.9**
TOLK IAmb IAmb 16 20 13.0
comp=Z,16nm,1.4s
**JIRN** **Jiri** **47.31 274** *e*P **P** **16 19 20.5 +0.4**
comp=Z,3.9nm,0.2s
**RAMN** **Ramite** **47.32 273** *e*P **P** **16 19 20.6 +0.6**
comp=Z,3.3nm,0.4s
**ZHN** **Zhinishke** **47.33 297** *e*P **P** **16 19 19.3 -0.5**
**ZHN** **Zhinishke** **47.33 297** *e*P **P** **16 19 19.3 -0.5**
baz=297
**SATY** **Saty** **47.38 297** *e*P **P** **16 19 19.9 -0.3**
**SATY** **Saty** **47.38 297** *e*P **P** **16 19 19.9 -0.3**
baz=297
**GUN** **Gumba** **47.43 275** *e*P **P** **16 19 21.4 +0.4**
comp=Z,14nm,0.3s
**MDM** **Murphy Dome** **47.65 33** P **P** **16 19 23.6 +1.8**
MDM IAmb IAmb 16 19 24.6
comp=Z,16nm,1.3s
**PMG** **Port Moresby** **47.70 173** LR LR 16 37 33.9
comp=Z,21nm,21.2s,baz=268,slow=34
**KAPI** **Kappang** **47.74 211** LR LR 16 39 22.0
comp=Z,15nm,21.5s,baz=40,slow=36
**SML** **Sawmill** **47.75 37** P **P** **16 19 24.6 +1.9**
**KKN** **Kakani** **47.96 275** *e*P **P** **16 19 25.2 +0.2**
comp=Z,81nm,0.8s
**PKI** **Pulchoki** **47.96 275** *e*P **P** **16 19 25.0 -0.1**
comp=Z,13nm,0.5s
**PKIN** **Phulchoki** **47.97 275** *e*P **P** **16 19 25.0 -0.1**
comp=Z,27nm,0.6s
**CHKK** **Chushkaly** **48.14 298** *e*P **P** **16 19 25.5 -0.4**
baz=298
**DMN** **Daman** **48.18 275** *e*P **P** **16 19 26.9 +0.2**
comp=Z,18nm,0.5s
**SCM** **Sheep Creek Mo** **48.23 37** P **P** **16 19 28.0 +1.6**
SCM pmax pmax
comp=Z,180nm,1.8s
**SCM** **Sheep Creek Mo** **48.23 37** P **P** **16 19 28.0 +1.6**
**IL31** **48.23 33** P **P** **16 19 27.3 +1.1**
IL31 IAmb IAmb 16 20 46.8
comp=Z,25nm,1.7s
**ILAR** **Eielson Array** **48.23 33** P **P** **16 19 26.4 +0.2**
comp=Z,2.3nm,0.8s,baz=271,slow=6.7,SNR=23
**ILAR** **Eielson Array** **48.23 33** P **P** **16 19 27.8 +1.5**
**ILAR** **Eielson Array** **48.23 33** P **P** **16 19 27.8 +1.5**
**MDOK** **Medeo** **48.30 297** *e*P **P** **16 19 27.2 -0.1**
**MDOK** **Medeo** **48.30 297** *e*P **P** **16 19 27.3 -0.1**
baz=297
**GKN** **Gorkha** **48.37 276** *e*P **P** **16 19 28.1 +0.1**
**KUU** **Kurty** **48.58 299** *e*P **P** **16 19 28.6 -0.7**
KUU pmax pmax
comp=Z,4.0nm,0.5s
**KUU** **Kurty** **48.58 299** *e*P **P** **16 19 28.6 -0.7**
comp=Z,4.2nm,0.5s,baz=299
**DANN** **Dangsing** **48.89 276** *e*P **P** **16 19 32.8 +0.6**
comp=Z,223nm,0.7s
**KLU** **Klutina** **48.93 37** P **P** **16 19 33.4 +1.6**
**BMAR** **Burnt Mountain** **49.05 29** P **P** **16 19 34.9 +2.3**
**KOLN** **Koldanda** **49.29 276** *e*P **P** **16 19 35.1 0.0**
comp=Z,80nm,1.0s
**BRZS** **Berezniki** **49.35 307** *e*P **P** **16 19 34.2 -0.9**
BRZS pmax pmax
comp=Z,3.0nm,0.4s
**BRZS** **Berezniki** **49.35 307** *e*P **P** **16 19 34.2 -0.9**
comp=Z,3.0nm,0.4s,baz=307
**TKM2** **Tokmak 2** **49.39 298** P **P** **16 19 36.6 +0.9**
SNR=18
**SCRK** **Sand Creek** **49.54 34** P **P** **16 19 37.5 +1.0**
SCRK IAmb IAmb 16 21 10.1
comp=Z,28nm,1.8s
**PYUN** **Piuthan** **49.61 277** *e*P **P** **16 19 38.1 +0.5**
comp=Z,139nm,1.0s
**BTLS** **Baital** **49.80 301** *e*P **P** **16 19 37.9 -0.7**
**BTLS** **Baital** **49.80 301** *e*P **P** **16 19 38.0 -0.7**
baz=301
**SGDS** **Sogindy** **49.89 299** *e*P **P** **16 19 39.2 -0.2**
baz=298
**KBK** **Karagaybulak** **49.93 297** P **P** **16 19 40.3 +0.5**
SNR=9.8
**USP** **Ospenovka** **50.04 298** P **P** **16 19 40.8 +0.3**
SNR=6.1
**BRVK** **Borovoye** **50.08 312***ce*P **P** **16 19 40.7 +0.1**
BRVK pmax pmax
comp=Z,12nm,1.3s
**BRVK** **Borovoye** **50.08 312** P **P** **16 19 40.5 -0.1**
BRVK IAmb IAmb 16 19 41.9
comp=Z,9.8nm,1.1s
**AAK** **Ala-Archa** **50.25 298** LR LR 16 41 55.5
comp=Z,109nm,19.1s,baz=78,slow=37
**AAK** **Ala-Archa** **50.25 298** P **P** **16 19 42.5 +0.3**
SNR=6.0
**AAK** **Ala-Archa** **50.25 298***c i*P **P** **16 19 42.1 -0.1**
AAK pmax pmax
comp=Z,3.0nm,0.9s
**AAK** **Ala-Archa** **50.25 298** P **P** **16 19 42.6 +0.3**
**AAK** **Ala-Archa** **50.25 298** *i*P **P** **16 19 42.6 +0.3**
SNR=7.3
**KSH** **Kashi** **50.26 293** P **P** **16 19 46.8 +4.5**
KSH pP sP 16 19 59.1 -0.6
KSH sP pP 16 20 04.1 +9.5
KSH pmax pmax
comp=Z,8.0nm,0.9s
**SOEI** **Soe** **50.56 203** P **P** **16 19 43.7 -1.0**
comp=Z,21nm,1.1s
**BCAR** **Beaver Creek A** **50.64 35** P **P** **16 19 47.0 +2.2**
**AML** **Almayashu** **50.98 297** P **P** **16 19 48.9 +0.8**
SNR=12
**AML** **Almayashu** **50.98 297** *i*P **P** **16 19 49.0 +0.9**
SNR=12
**COEN** **Coen** **51.98 178** P **P** **16 19 57.8 +2.6**
COEN IAmb IAmb 16 20 14.8
comp=Z,37nm,1.6s
**DZA** **Taraz** **52.36 299** *e*P **P** **16 19 57.4 -0.4**
**DZA** **Taraz** **52.36 299** *e*P **P** **16 19 57.4 -0.4**
baz=299
**PSI** **Prapat** **52.78 239** LR LR 16 43 51.9
comp=Z,89nm,18.7s,baz=31,slow=38
**KKAR** **Karatay Array** **52.84 299** P **P** **16 20 01.1 -0.3**
**KKAR** **Karatay Array** **52.84 299** P **P** **16 20 01.1 -0.3**
**INK** **Inuvik** **53.09 28** LR LR 16 44 44.8
comp=Z,145nm,18.2s,baz=174,slow=38
**INK** **Inuvik** **53.09 28** P **P** **16 20 02.1 -0.7**
INK pmax pmax
comp=Z,9.0nm,1.1s
**INK** **Inuvik** **53.09 28** P **P** **16 20 02.1 -0.7**
**BRLS** **Borolday** **53.33 300** *e*P **P** **16 20 06.1 +1.1**
**BRLS** **Borolday** **53.33 300** *e*P **P** **16 20 06.2 +1.1**
baz=299
**CHLP** **Challavanipeta** **53.70 265** *e*P **P** **16 20 08.8 +0.9**
**M31M** **Drury Creek, Y** **54.16 35** P **P** **16 20 12.8 +2.0**
M31M IAmb IAmb 16 21 55.5
comp=Z,45nm,2.0s
**SVE** **Sverdlovsk** **54.47 318** *e*P **P** **16 20 14.0 +0.9**
SVE pmax pmax
comp=Z,28nm,1.0s
**UGM** **Wanagama** **54.48 219** P **P** **16 20 13.5 -0.1**
**GAR** **Garm** **54.52 295** P **P** **16 20 13.7 -0.3**
GAR IAmb IAmb 16 20 36.3
comp=Z,39nm,1.6s
**NIL** **Nilore** **54.60 288** P **P** **16 20 15.9 +1.4**
NIL pmax pmax
comp=Z,23nm,0.8s
**NIL** **Nilore** **54.60 288** P **P** **16 20 15.9 +1.4**
**GSI** **Gunungsitoli** **54.78 239** P **P** **16 20 16.5 +0.6**
**KLSI** **54.92 227** P **P** **16 20 15.4 -1.4**
comp=Z,11nm,1.0s
**A36M** **Sachs Harbour** **54.95 22** P **P** **16 20 17.3 +1.0**
A36M IAmb IAmb 16 20 19.4
comp=Z,12nm,0.9s
**LEM** **Lembang** **55.06 223** LR LR 16 44 39.0
comp=Z,35nm,19.4s,baz=196,slow=37
**KNRA** **Kununurra** **55.08 196** P **P** **16 20 18.8 +1.0**
**CHGR** **Chuyangaron** **55.49 295** P **P** **16 20 20.5 -0.4**
**ARU** **Arti** **55.69 318** LR LR 16 46 42.6
comp=Z,191nm,18.4s,baz=98,slow=39
**ARU** **Arti** **55.69 318***c i*P **P** **16 20 22.1 +0.2**
ARU *PP **pP** **16 20 32.4 -1.9**
ARU 16 21 17.3
ARU S **S** **16 28 07.5 +2.7**
ARU SS **SS** **16 31 47.9 -2.0**
ARU pmax pmax
comp=Z,41nm,1.4s
**ARU** **Arti** **55.69 318** P **P** **16 20 20.8 -1.0**
**C36M** **Paulatuk** **56.13 25** P **P** **16 20 25.6 +0.9**
C36M IAmb IAmb 16 20 26.9
comp=Z,10nm,0.9s
**PVM** **Polavaram** **56.32 266** *e*P **P** **16 20 27.5 +0.6**
**RPR** **Rampur** **57.25 269** *e*P **P** **16 20 33.8 +0.3**
**KBL** **Kabul** **57.34 290** P **P** **16 20 33.5 -0.7**
KBL pmax pmax
comp=Z,20nm,1.0s
**KBL** **Kabul** **57.34 290** P **P** **16 20 33.5 -0.7**
KBL IAmb IAmb 16 20 35.5
comp=Z,20nm,1.0s
**MYLAV** **Mylavaram** **57.38 266** *e*P **P** **16 20 35.2 +0.8**
**ABKAR** **Akbulak array** **57.44 310** P **P** **16 20 33.8 -0.7**
**ABKAR** **Akbulak array** **57.44 310** P **P** **16 20 34.0 -0.4**
ABKAR IAmb IAmb 16 20 35.2
comp=Z,17nm,1.3s
**SRSP** **Sriramsagar** **57.96 270** *e*P **P** **16 20 38.5 0.0**
**FITZ** **Fitzroy Crossi** **58.13 198** P **P** **16 20 40.3 +0.8**
**AKTO** **Aktyubinsk** **58.13 312** LR LR 16 46 31.2
comp=Z,73nm,18.2s,baz=42,slow=37
**WB0** **Warramunga Arr** **58.18 188** P **P** **16 20 39.4 -0.4**
WB0 IAmb IAmb 16 20 58.6
comp=Z,11nm,0.8s
**WRAB** **Tennant Creek** **58.35 188**⇓*i*P **P** **16 20 40.9 -0.1**
WRAB pmax pmax
comp=Z,5.0nm,0.9s
**WRAB** **Tennant Creek** **58.35 188** P **P** **16 20 40.2 -0.7**
WRAB IAmb IAmb 16 20 59.9
comp=Z,10nm,0.9s
**WR0** **Warramunga Arr** **58.35 188** P **P** **16 20 40.6 -0.4**
WR0 IAmb IAmb 16 20 59.9
comp=Z,8.3nm,0.8s
**WB2** **Warramunga Arr** **58.36 188** P **P** **16 20 41.0 0.0**
WB2 IAmb IAmb 16 20 60.0
comp=Z,8.7nm,0.8s
**WRA** **Warramunga Arr** **58.36 188** P **P** **16 20 40.9 -0.2**
comp=Z,5.5nm,0.8s,baz=6.8,slow=7.3,SNR=36
WRA pP **pP** **16 20 54.4 +0.8**
comp=Z,4.6nm,0.7s,baz=5.4,slow=7.2,SNR=10
WRA LR LR 16 44 20.5
comp=Z,49nm,21.2s,baz=352,slow=34
**WRA** **Warramunga Arr** **58.36 188** P **P** **16 20 40.2 -0.8**
**CUPL** **Choutuppal** **58.42 268** *e*P **P** **16 20 42.1 +0.3**
**NJS** **Nagarjunasagar** **58.53 267** *e*P **P** **16 20 42.6 +0.1**
**HYBB** **Hyderabad (bro** **58.64 268** *e*P **P** **16 20 43.7 +0.4**
**EUNU** **Eureka** **58.89 9** P **P** **16 20 44.6 +0.4**
EUNU IAmb IAmb 16 20 45.5
comp=Z,5.6nm,0.8s
**SRLM** **Srisailam** **59.12 267** *e*P **P** **16 20 46.4 -0.3**
**RCLA** **Racherla** **59.44 266** *e*P **P** **16 20 49.0 +0.2**
**KIRV** **Kirov** **59.49 323** LR LR 16 47 23.7
comp=Z,62nm,18.6s,baz=35,slow=37
**KIRV** **Kirov** **59.49 323***de*P **P** **16 20 49.1 +0.6**
**KLRI** **Killari** **59.81 270** *e*P **P** **16 20 50.9 -0.5**
**NOR** **Nord** **59.83 356** *i*P **P** **16 20 50.0 -0.6**
NOR IAmb IAmb 16 20 51.3
comp=Z,2.7nm,0.8s
**SKHT** **Srikalahasti** **59.85 264** *e*P **P** **16 20 52.2 +0.6**
**PRGR** **Permogore** **59.93 327** *e*P **P** **16 20 50.9 -0.6**
PRGR *PP **pP** **16 21 02.4 -1.6**
PRGR *e* 16 21 35.4
PRGR *e* 16 23 02.6
PRGR pmax pmax
comp=Z,15nm,0.9s
**URV** **Uravakonda** **61.07 266** *e*P **P** **16 21 00.9 +0.9**
**RES** **Resolute Bay** **61.29 15** P **P** **16 21 00.3 -0.3**
RES pmax pmax
comp=Z,6.0nm,0.7s
**RES** **Resolute Bay** **61.29 15** P **P** **16 21 00.3 -0.3**
RES IAmb IAmb 16 21 01.7
comp=Z,5.6nm,0.7s
**AS31** **Alice Springs** **62.08 188** P **P** **16 21 06.2 -0.4**
**ASAR** **Alice Springs** **62.08 188** P **P** **16 21 06.7 +0.1**
comp=Z,4.1nm,0.7s,baz=12,slow=5.9,SNR=55
ASAR PKP2bc 16 50 22.2
comp=Z,0.3nm,0.8s,baz=190,slow=4.7,SNR=4.1
**ASAR** **Alice Springs** **62.08 188** P **P** **16 21 07.1 +0.5**
**ASAR** **Alice Springs** **62.08 188** P **P** **16 21 07.1 +0.5**
**KEV** **Kevo** **62.41 339** P **P** **16 21 08.6 +0.4**
KEV pmax pmax
comp=Z,90nm,1.8s
**KEV** **Kevo** **62.41 339** P **P** **16 21 08.6 +0.4**
**YKA** **Yellowknife Ar** **62.53 31** P **P** **16 21 09.4 +0.4**
comp=Z,2.3nm,0.8s,baz=303,slow=6.7,SNR=30
YKA pP **pP** **16 21 23.3 +1.7**
comp=Z,0.9nm,0.7s,baz=300,slow=6.7,SNR=4.3
YKA PcP **PcP** **16 21 49.0 +1.2**
comp=Z,1.2nm,0.8s,baz=303,slow=4.6,SNR=7.8
**YKA** **Yellowknife Ar** **62.53 31** P **P** **16 21 09.2 +0.1**
**KLMR** **Klimovskoe** **62.91 328** *e*P **P** **16 21 08.5 -3.1**
KLMR *e* 16 21 48.3
KLMR pmax pmax
comp=Z,10.0nm,1.1s
**KLMR** **Klimovskoe** **62.91 328** *e*P **P** **16 21 08.5 -3.1**
KLMR AMP 16 21 25.3
comp=Z,10.0nm,1.1s
KLMR *e*PcP **PcP** **16 21 48.3 -1.2**
**ARA0** **ARCESS Array S** **62.96 339** *e*P **P** **16 21 12.5 +0.6**
**ARCES** **ARCESS Array B** **62.96 339** P **P** **16 21 12.3 +0.4**
comp=Z,3.8nm,0.6s,baz=53,slow=8.1,SNR=32
ARCES LR LR 16 54 33.2
comp=Z,52nm,19.7s,baz=12,slow=42
**ARCES** **ARCESS Array B** **62.96 339** P **P** **16 21 12.7 +0.8**
ARCES pmax pmax
comp=Z,55nm,1.7s
**ARCES** **ARCESS Array B** **62.96 339** P **P** **16 21 12.7 +0.8**
**PALK** **Pallekele** **63.03 257** LR LR 16 48 39.7
comp=Z,19nm,21.4s,baz=145,slow=36

**BELG Belogornoye 63.16 317** LR LR 16 50 35.9
comp=Z,153nm,18.9s,baz=341,slow=38
**BELG Belogornoye 63.16 317** *d* iP **P 16 21 13.7 +0.3**
BELG pmax pmax
comp=Z,5.0nm,1.0s
**GEYT Alibeck 63.58 299** LR LR 16 50 58.0
comp=Z,106nm,19.4s,baz=119,slow=38
**TULEG Thule 63.81 8** P **P 16 21 17.5 +0.2**
TULEG IAmb IAmb 16 21 18.2
comp=Z,11nm,0.9s
**KTK1 Kautokeino 63.92 339** *e*P **P 16 21 19.2 +0.9**
**NEEM North Greenlan 64.26 3** *i* P **P 16 21 20.5 -0.2**
NEEM IAmb IAmb 16 21 21.9
comp=Z,7.6nm,0.9s
**DZM Mont Dzumac 64.31 155** LR LR 16 47 20.3
comp=Z,119nm,20.2s,baz=18,slow=34
**JETT Jettan, Norway 64.33 341** *e*P **P 16 21 22.4 +1.5**
**DAG Danmarks Havn 64.56 355** *i* P **P 16 21 21.0 -1.3**
DAG IAmb IAmb 16 21 22.8
comp=Z,6.1nm,0.8s
**TRO Tromso 64.66 341** *e*P **P 16 21 23.4 +0.4**
**MSVF Nonsavu 65.24 142** LR LR 16 49 44.0
comp=Z,47nm,18.1s,baz=320,slow=36
**STEI Steigen 66.81 341** *e*P **P 16 21 37.3 +0.4**
**VRH Novokhopyorsk 66.92 318** *e*P **P 16 21 36.4 -1.4**
VRH pmax pmax
comp=Z,20nm,0.7s
**FAUS Fauske 67.20 340** *e*P **P 16 21 39.7 +0.3**
**OBN Obninsk 67.33 323** LR LR 16 54 23.2
comp=Z,15nm,19.3s,baz=215,slow=39
**OBN Obninsk 67.33 323** *e*P **P 16 21 40.3 -0.1**
OBN *e* 16 22 09.0
OBN *e* 16 24 04.9
OBN pmax pmax
comp=Z,9.0nm,0.5s
OBN MLR MLR
comp=Z,58nm,16.0s
**LPSR Galich'ya Gora 67.59 320** *e*P **P 16 21 41.1 -1.0**
LPSR pmax pmax
comp=Z,20nm,0.8s
**AFI Afiamalu 67.64 131** LR LR 16 46 57.2
comp=Z,20nm,21.7s,baz=310,slow=32
**FIA1 FINESS Array S 67.89 332** P **P 16 21 43.5 -0.3**
FIA1 IAmb IAmb 16 21 44.9
comp=Z,20nm,0.8s
**FINES FINESS Array B 67.89 332** P **P 16 21 44.1 +0.3**
comp=Z,16nm,0.8s,baz=57,slow=7.3,SNR=30
FINES LR LR 16 56 17.5
comp=Z,74nm,18.5s,baz=53,slow=40
**FINES FINESS Array B 67.89 332** *i* P **P 16 21 44.0 +0.2**
FINES pmax pmax
comp=Z,16nm,0.7s
**FINES FINESS Array B 67.89 332** P **P 16 21 43.8 -0.1**
**VORR Voronezh 67.97 319** *e*P **P 16 21 45.8 +1.3**
VORR pmax pmax
comp=Z,50nm,0.4s
**VSR Storozhevoye 68.25 319** *e*P **P 16 21 45.9 -0.4**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**MOR8 Moi Rana 68.33 340** *e*P **P 16 21 45.8 -0.7**
**VORD Divnogorie 68.33 318** *e*P **P 16 21 46.2 -0.5**
VORD pmax pmax
comp=Z,10.0nm,0.6s
**SUMG Summit 69.43 0** P **P 16 21 54.0 +0.2**
SUMG pmax pmax
comp=Z,14nm,0.9s
**SUMG Summit 69.43 0** *i* P **P 16 21 54.0 +0.2**
SUMG IAmb IAmb 16 21 55.2
comp=Z,8.5nm,0.9s
**SUMG Summit 69.43 0** P **P 16 21 54.0 +0.2**
SUMG IAmb IAmb 16 21 55.8
comp=Z,14nm,0.9s
**GOF Gofitskoye 69.55 312**⇑ *e*P **P 16 21 55.1 +0.6**
GOF pmax pmax
comp=Z,34nm,0.9s
**VSU Vasula 69.57 329** *d* iP **P 16 21 54.6 +0.3**
VSU pmax pmax
comp=Z,60nm,0.9s
**VSU Vasula 69.57 329** *e*P **P 16 21 55.1 +0.7**
**STKA Stephens Creek 69.81 180** P **P 16 21 57.1 +1.1**
comp=Z,1.4nm,0.8s,baz=16,slow=9.1,SNR=3.6
**STKA Stephens Creek 69.81 180** P **P 16 21 56.9 +0.9**
**FORT Forrest 69.92 193** P **P 16 21 57.2 +0.5**
**NSS Namsos 70.25 339** *e*P **P 16 21 58.3 -0.1**
**ZEI Tsey 70.31 309** *e*P **P 16 21 58.1 -1.4**
ZEI pmax pmax
comp=Z,5.0nm,0.9s
**KIV Kislovodsk 70.39 311** *e*P **P 16 22 00.1 +0.4**
KIV pmax pmax
comp=Z,39nm,1.0s
KIV MLR MLR
comp=Z,56nm,18.0s
**KIV Kislovodsk 70.39 311** P **P 16 21 59.5 -0.3**
**KIV Kislovodsk 70.39 311** *i* P **P 16 22 01.4 +1.7**
SNR=11
**KBZ Khabaz 70.39 311** P **P 16 22 00.1 +0.5**
comp=Z,14nm,0.8s,baz=33,slow=4.7,SNR=42
KBZ LR LR 16 54 46.6
comp=Z,61nm,20.9s,baz=31,slow=38
**KBZ Khabaz 70.39 311** *c* iP **P 16 21 59.8 +0.2**
KBZ pmax pmax
comp=Z,21nm,1.0s
**MTSE Matsula 70.55 331** *e*P **P 16 22 01.3 +1.0**
**ONI Oni 70.69 309** P **P 16 22 02.0 +0.4**
ONI pmax pmax
comp=Z,11nm,1.0s
**ONI Oni 70.69 309** P **P 16 22 02.0 +0.4**
ONI IAmb IAmb 16 22 03.6
comp=Z,11nm,1.0s
**SCO Scoresbysund 70.91 354** *i* P **P 16 22 01.9 -0.4**
SCO IAmb IAmb 16 22 03.2
comp=Z,2.2nm,0.8s
**WSAR Wadi Sarin 70.93 285** LR LR 16 56 36.7
comp=Z,41nm,18.6s,baz=101,slow=39
**BANOM Banah 71.18 288** P **P 16 22 05.4 +0.6**
**GNI Garni 71.28 307** LR LR 16 56 51.5
comp=Z,56nm,18.2s,baz=45,slow=39
**GNI Garni 71.28 307** *d* iP **P 16 22 06.5 +1.2**
GNI pmax pmax
comp=Z,10.0nm,1.1s
**GNI Garni 71.28 307** P **P 16 22 06.8 +1.5**
**MSFE Esma-Masafi 71.60 288** P **P 16 22 07.8 +0.5**
**IDID Didziasalis 71.64 327** *e*P **P 16 22 07.8 +0.9**
**MNK Minsk 71.68 326** *i* P **P 16 22 08.3 +1.1**
MNK *i* *PP **pP 16 22 22.6 +2.5**
MNK *i* 16 22 27.2
MNK *i* 16 24 47.3
MNK *i* PPP PPP 16 26 30.9
MNK *i* S **S 16 31 22.6 -0.9**
MNK *i* *SS **sS 16 31 48.5 +3.6**
MNK *i* 16 32 08.9
MNK *i* SS **SS 16 36 00.8 +2.1**
MNK pmax pmax
comp=Z,30nm,0.9s
MNK pmax pmax
comp=E,4.0nm,1.0s
MNK pmax pmax
comp=N,19nm,0.9s
MNK MLR MLR
comp=N,140nm,17.0s
MNK MLR MLR
comp=Z,115nm,19.0s
MNK MLR MLR
comp=E,12nm,18.0s
**MNK Minsk 71.68 326** *i* P **P 16 22 08.4 +1.1**
comp=E,4.0nm,1.0s
MNK *i* P **P 16 22 08.4 +1.1**
comp=N,19nm,0.9s
MNK *i* P **P 16 22 08.4 +1.1**
comp=Z,30nm,0.9s,baz=228
MNK *i* pP **pP 16 22 22.6 +2.6**
MNK *i* PP **PP 16 24 47.4 +1.2**
MNK *i* PPP PPP 16 26 31.0
MNK *i* S **S 16 31 22.6 -0.9**
MNK *i* sS **sS 16 31 48.6 +3.7**
MNK *i* SS **SS 16 36 00.9 +2.2**
MNK *i* SSS SSS 16 39 20.5
MNK *i* LR LR 16 54 12.5
MNK *i* LRM MLR 16 56 27.3
comp=N,140nm,16.6s
MNK *i* LRM MLR 16 56 31.7
comp=Z,115nm,18.8s
MNK *i* LRM MLR 16 56 33.8
comp=E,12nm,18.1s
**UOSS Minazif 71.80 288** P **P 16 22 08.9 +0.4**
**UOSS Minazif 71.80 288** P **P 16 22 08.6 +0.1**
**IIGN Ignalina 71.84 327** *e*P **P 16 22 09.2 +1.0**
**NACGM Naroch 71.89 327** *i* P **P 16 22 08.8 +0.3**
**HATD Hatta, Dubai 71.92 288** *i* P **P 16 22 10.0 +0.7**
SNR=6.4
**UPP Uppsala 72.00 334** *e*P **P 16 22 09.6 +0.5**
**ASHO Ashiyiah 72.06 288** P **P 16 22 10.5 +0.4**
**SOC Sochi 72.36 312** *e*P **P 16 22 09.3 -2.2**
SOC *e* 16 24 49.8
SOC *e*PPP PPP 16 26 37.7
SOC *e*S **S 16 31 28.1 -3.5**
SOC *e*SS **SS 16 36 08.6 -1.0**
SOC pmax pmax
comp=Z,6.0nm,0.4s
**FAQ Al Faqa, Dubai 72.37 288** P **P 16 22 11.9 0.0**
**FFC Flin Flon 72.44 33** P **P 16 22 12.2 +0.4**
FFC pmax pmax
comp=Z,5.0nm,1.0s
**FFC Flin Flon 72.44 33** P **P 16 22 12.2 +0.4**
**ASUD Al Ashush, Dub 72.64 288** P **P 16 22 14.0 +0.5**
**PABE Paberze 72.68 328** P **P 16 22 13.9 +0.8**
**PABE Paberze 72.68 328** *e*P **P 16 22 14.0 +0.8**
**ICESG Greenland Ices 72.93 1** *i* P **P 16 22 15.6 +0.6**
ICESG IAmb IAmb 16 22 16.0
comp=Z,6.1nm,0.7s
**ANN Anapa 72.95 314** *e*P **P 16 22 12.1 -2.9**
ANN *e**PP **pP 16 22 26.1 -1.7**
ANN *e* 16 25 00.6
ANN *e*S **S 16 31 35.8 -2.5**
ANN pmax pmax
comp=Z,131nm,1.7s
ANN MLR MLR
comp=Z,1μm,21.0s
**NC405 NORSAR Array S 72.97 337** P **P 16 22 15.2 +0.3**
**DOMB Dombas 73.02 339** *e*P **P 16 22 15.9 +0.8**
**EGMT Eagleton 73.07 42** P **P 16 22 15.9 +0.1**
**HFS Hagfors 73.11 336** LR LR 16 57 19.1
comp=Z,150nm,20.1s,baz=49,slow=38
**NB2 NORSAR Subarra 73.18 337** P **P 16 22 16.4 +0.2**
comp=Z,8.6nm,0.8s,baz=39,slow=6.2
**NB2 NORSAR Subarra 73.18 337** P **P 16 22 16.4 +0.2**
baz=39,slow=6.2
**NOA NORSAR Array B 73.18 337** P **P 16 22 16.4 +0.2**
comp=Z,14nm,0.8s,baz=38,slow=5.9,SNR=43
NOA LR LR 16 57 00.8
comp=Z,84nm,21.6s,baz=45,slow=38
**NC602 NORSAR Array S 73.32 337** *e*P **P 16 22 17.0 +0.1**
**AKN Aaknes 73.48 340** *e*P **P 16 22 20.6 +2.7**
**AKASG Malin Array Be 73.55 322** P **P 16 22 18.3 -0.1**
comp=Z,4.3nm,0.4s,baz=48,slow=6.1,SNR=96
AKASG LR LR 16 56 08.3
comp=Z,73nm,19.7s,baz=346,slow=37
**AKASG Malin Array Be 73.55 322** P **P 16 22 18.7 +0.3**
AKASG pmax pmax
comp=Z,6.0nm,1.1s
**AKASG Malin Array Be 73.55 322** P **P 16 22 18.7 +0.3**
**AKBB Malin Array Si 73.55 322** *d* iP **P 16 22 18.7 +0.3**
**AKBB Malin Array Si 73.55 322** P **P 16 22 18.1 -0.3**
AKBB IAmb IAmb 16 22 19.2
comp=Z,19nm,0.9s
**NVAR Mina Array Bea 73.92 54** P **P 16 22 22.8 +1.7**
comp=Z,0.8nm,0.7s,baz=272,slow=6.7,SNR=6.5
NVAR pP **PcP 16 22 36.4 0.0**
comp=Z,1.2nm,0.6s,baz=290,slow=5.9,SNR=8.7
**NVAR Mina Array Bea 73.92 54** P **P 16 22 22.1 +0.9**
**SKAR Skarslia 74.33 338** *e*P **P 16 22 22.0 -0.9**
**HYA Hoyanger 74.54 339** *e*P **P 16 22 24.7 +0.7**
**SFJD Kangerlussuaq 74.60 5** P **P 16 22 25.8 +1.5**
SFJD pmax pmax
comp=Z,26nm,1.4s
**SFJD Kangerlussuaq 74.60 5** P **P 16 22 25.8 +1.5**
SFJD IAmb IAmb 16 24 12.2
comp=Z,26nm,1.4s
**SORM Soroca 75.67 321** ⇓P **P 16 22 30.8 0.0**
**BORG Borgarnes 76.46 353** LR LR 16 59 06.9
comp=Z,50nm,18.5s,baz=327,slow=38
**BW06 Boulder Array 76.51 46** P **P 16 22 36.3 +0.3**
**PD31 Pinedale Array 76.51 46** P **P 16 22 35.9 -0.1**
**PDAR Pinedale Array 76.51 46** P **P 16 22 37.1 +1.1**
comp=Z,1.1nm,0.5s,baz=319,slow=0.9,SNR=15
PDAR pP **pP 16 22 50.8 +1.9**
comp=Z,2.2nm,0.6s,baz=270,slow=1.7,SNR=12
**PDAR Pinedale Array 76.51 46** P **P 16 22 36.8 +0.8**
**BZK Bozkurt 76.67 313** ⇓P **P 16 22 37.3 +0.7**
**BZK Bozkurt 76.67 313** P **P 16 22 37.8 +1.2**
**KWP Kalwaria Pacla 77.34 324** *e*P **P 16 22 41.6 +1.3**
**BUR08 Bucovina Ar. S 77.56 322** P **P 16 22 42.2 +0.6**
BUR08 IAmb IAmb 16 22 43.2
comp=Z,8.4nm,0.8s
**BURAR Bucovina Array 77.57 322** ⇓P **P 16 22 42.5 +0.8**
**BURAR Bucovina Array 77.57 322** P **P 16 22 42.1 +0.5**
BURAR IAmb IAmb 16 22 43.5
comp=Z,9.0nm,0.8s
**TESR Tescani 77.62 320** ⇓P **P 16 22 42.6 +0.8**
**CFR Carcaliu 77.77 319** ⇓P **P 16 22 43.5 +0.8**
**TPGR Topolog 77.84 318** ⇓P **P 16 22 43.4 +0.3**
**VRI Vrincioaia 78.03 320** ⇓P **P 16 22 45.4 +1.3**
**OJC Ojcow 78.22 326** *e*P **P 16 22 46.1 +1.0**
**UZH Uzhgorod 78.25 324** *e*P **P 16 22 46.0 +0.8**
UZH *e* 16 22 52.2
**BR131 Keskin Array S 78.31 312** P **P 16 22 46.7 +0.7**
BR131 pmax pmax
comp=Z,7.0nm,0.8s
**BR131 Keskin Array S 78.31 312** P **P 16 22 46.7 +0.7**
**BRTR Keskin Array B 78.32 312** P **P 16 22 46.1 +0.1**
comp=Z,1.5nm,0.4s,baz=100,slow=3.8,SNR=10
BRTR LR LR 17 01 21.8
comp=Z,43nm,18.4s,baz=32,slow=39
**BRTR Keskin Array B 78.32 312** *i* P **P 16 22 46.5 +0.4**
BRTR pmax pmax
comp=Z,2.0nm,0.4s
**BRTR Keskin Array B 78.32 312** P **P 16 22 46.4 +0.4**
**ARCR ARCALIA 78.36 322** ⇑P **P 16 22 47.3 +1.3**
**CRVS Cervenica-Dubn 78.43 325** *e*P **P 16 22 47.6 +1.3**
**CRVS Cervenica-Dubn 78.43 325** *e*P **P 16 22 47.6 +1.3**
**TRPA Tarpa 78.49 323** ⇓P **P 16 22 47.3 +0.7**
**NIE Niedzica 78.58 325** *e*P **P 16 22 49.3 +2.1**
**DOPR Dopca 78.63 320** ⇓P **P 16 22 49.0 +1.6**
**MLR Muntele Rosu 78.68 320** ⇑P **P 16 22 49.3 +1.3**
**MLR Muntele Rosu 78.68 320** LR LR 17 01 36.9
comp=Z,119nm,18.6s,baz=49,slow=39
**BSEG Bad Segeberg 79.12 333** *e*P **P 16 22 50.7 +0.8**
comp=Z,20nm,0.9s,baz=37,slow=5.5
**VOIR 79.17 320** ⇑P **P 16 22 51.3 +0.8**
**KSP Ksiaz 79.24 328** *e*P **P 16 22 51.8 +1.1**
**DRGR 79.36 322** ⇑P **P 16 22 52.3 +0.8**
**ARR Arges 79.43 320** ⇑P **P 16 22 52.3 +0.4**
**MORC Moravsky Berou 79.52 327** ⇑P **P 16 22 52.7 +0.4**
**MORC Moravsky Berou 79.52 327** P **P 16 22 53.6 +1.3**
MORC pmax pmax
comp=Z,13nm,0.9s
**MORC Moravsky Berou 79.52 327** P **P 16 22 53.6 +1.3**
MORC IAmb IAmb 16 22 54.2
comp=Z,13nm,0.9s
**MORC Moravsky Berou 79.52 327** *e*P **P 16 22 53.0 +0.7**
**DPC Dobruska-Polom 79.61 328** *e*P **P 16 22 54.1 +1.3**
**DPC Dobruska-Polom 79.61 328** *e*P **P 16 22 54.1 +1.3**
**KRLC Kraliky 79.62 328** *e*P **P 16 22 53.9 +1.1**
**KRLC Kraliky 79.62 328** *e*P **P 16 22 53.9 +1.1**
**PSZ Piszkesteto 79.86 325** ⇑P **P 16 22 53.9 -0.3**
**VYHS Vyhne 79.92 326** *e*P **P 16 22 55.4 +1.0**
VYHS pmax pmax
comp=Z,10.0nm,1.0s
**VYHS Vyhne 79.92 326** *e*P **P 16 22 55.4 +1.0**
**FLTG Flechtingen 80.07 332** *e*P **P 16 22 55.2 0.0**
comp=Z,20nm,1.0s,baz=37,slow=5.5
**JAVC Velka Javorina 80.16 326** *e*P **P 16 22 57.6 +1.8**
**BRG Berggiesshubel 80.17 330** *e*P **P 16 22 56.2 +0.4**
BRG Amp 16 22 57.8
comp=Z,10nm,0.9s
BRG *ex* x 16 38 53.2
BRG Amp 16 38 55.4
comp=Z,36nm,2.2s
**BRG Berggiesshubel 80.17 330** *e*P **P 16 22 56.2 +0.4**
BRG pmax pmax
comp=Z,10.0nm,1.0s
BRG pmax pmax
comp=Z,36nm,2.2s
**BRG Berggiesshubel 80.17 330** *e*P **P 16 22 56.1 +0.4**
comp=Z,10nm,1.0s,baz=37,slow=5.5
**CLL Collm 80.20 330** *i* P **P 16 22 56.1 +0.2**
CLL *e**PP **sP 16 23 12.0 -1.8**
CLL pmax pmax
comp=Z,19nm,0.9s
**CLL Collm 80.20 330** *e*P **P 16 22 56.2 +0.3**
comp=Z,19nm,0.8s,baz=37,slow=5.5
**SIRR Siria 80.25 323** ⇑P **P 16 22 54.1 -2.2**
**VRAC Vranov 80.28 327** ⇓P **P 16 22 54.5 -1.8**
**VRAC Vranov 80.28 327** LR LR 17 02 35.2
comp=Z,53nm,19.4s,baz=9.0,slow=39
**VRAC Vranov 80.28 327** *e*P **P 16 22 57.2 +0.8**
**FBE Freiberg 80.37 330** *e*P **P 16 22 57.6 +0.8**
comp=Z,18nm,0.9s,baz=37,slow=5.5
**RETH Rethem/Aller, 80.42 333** *e*P **P 16 22 57.5 +0.4**
comp=Z,187nm,2.8s,baz=37,slow=5.5
**SMOL Smolenice 80.52 326** *e*P **P 16 22 59.3 +1.6**
SMOL pmax pmax
comp=Z,7.0nm,0.9s
**SMOL Smolenice 80.52 326** *e*P **P 16 22 59.3 +1.6**
**RAYN Ar Rayn 80.55 292** P **P 16 22 58.5 +0.2**
RAYN pmax pmax
comp=Z,13nm,1.1s
**RAYN Ar Rayn 80.55 292** P **P 16 22 58.5 +0.2**
RAYN IAmb IAmb 16 22 59.4
comp=Z,13nm,1.1s
**RAYN Ar Rayn 80.55 292** *i* P **P 16 22 58.4 +0.2**
SNR=12
**KRUC Moravsky 80.56 327** *e*P **P 16 22 58.6 +0.8**
**RAR Rarotonga 80.58 126** LR LR 16 56 15.4
comp=Z,47nm,19.1s,baz=201,slow=34
**PRU Pruhonice 80.62 329** *e*P **P 16 22 59.1 +0.9**
**PRU Pruhonice 80.62 329** *e*P **P 16 22 59.1 +0.9**
**SRO Srobarova 80.66 325** *e*P **P 16 22 59.9 +1.5**
SRO pmax pmax
comp=Z,15nm,0.9s
**SRO Srobarova 80.66 325** *e*P **P 16 22 59.9 +1.5**
**SRO2 Moca 80.66 325** *e*P **P 16 22 58.8 +0.4**
**SRO2 Moca 80.66 325** *e*P **P 16 22 58.8 +0.4**
**BZS Buzias 80.74 322** ⇓P **P 16 22 58.5 -0.3**
**NEUB Neuenburg 80.76 331** *e*P **P 16 22 59.4 +0.5**
comp=Z,27nm,1.1s,baz=37,slow=5.5
**TREC Trest 80.76 328** *e*P **P 16 23 00.1 +1.1**
**TREC Trest 80.76 328** *e*P **P 16 23 00.1 +1.1**
**CLZ Clausthal 80.78 332** *e*P **P 16 22 59.9 +0.8**
comp=Z,16nm,0.9s,baz=37,slow=5.5
**HERR Herculane 80.88 321** ⇓P **P 16 22 60.0 +0.4**
**SOCY Socotra 80.95 278** P **P 16 22 58.5 -2.1**
SOCY IAmb IAmb 16 22 59.8
comp=Z,18nm,0.9s
**WERN Wernitzgruen 81.25 330** *e*P **P 16 23 02.2 +0.6**
comp=Z,9.4nm,1.0s,baz=37,slow=5.5
**MOX Moxa 81.27 331** *e*P **P 16 23 01.9 +0.3**
comp=Z,10nm,1.1s,baz=37,slow=5.5
**MMAI Mount Meron Ar 81.56 305** LR LR 17 02 58.9
comp=Z,55nm,18.1s,baz=226,slow=38
**MANZ Manzenberg 81.60 330** *e*P **P 16 23 03.9 +0.5**
comp=Z,2.4nm,1.1s,baz=37,slow=5.5
**CSS Mathiatis 81.60 308** P **P 16 23 04.0 +0.3**
CSS IAmb IAmb 16 23 04.7
comp=Z,9.2nm,0.7s
**CKRC Cesky Krumlov 81.62 328** *e*P **P 16 23 04.4 +0.9**
**CONA Conrad Observa 81.65 327** *e*P **P 16 23 04.9 +1.1**
comp=Z,9.5nm,0.9s
**KHC Kasperske Hory 81.68 329** *e*P **P 16 23 04.8 +0.9**
KHC *e* 16 23 17.2
**KHC Kasperske Hory 81.68 329** *e*P **P 16 23 04.8 +0.9**
KHC *e*pP **pP 16 23 17.2 +0.3**
**MORH Mrgy, Hungar 81.70 324** ⇓P **P 16 23 02.7 -1.2**
**GEC2 GERESS Array S 81.85 328** P **P 16 23 05.2 +0.4**
**GEC2 GERESS Array S 81.85 328** *e*P **P 16 23 05.1 +0.2**
comp=Z,9.4nm,1.1s,baz=37,slow=5.5
**GERES GERESS Array B 81.85 328** P **P 16 23 05.0 +0.1**
comp=Z,4.2nm,0.9s,baz=22,slow=4.6,SNR=23
**GERES GERESS Array B 81.85 328** P **P 16 23 05.2 +0.4**
**GERES GERESS Array B 81.85 328** P **P 16 23 05.2 +0.4**
**FRGS Fruska Gora 81.94 323** ⇑P **P 16 23 04.8 -0.5**
**WET Wettzell 81.95 329** *e*P **P 16 23 05.8 +0.5**
comp=Z,8.6nm,1.0s,baz=37,slow=5.5
**EKA Eskdalemuir Ar 82.08 341** LR LR 17 04 08.1
comp=Z,43nm,18.4s,baz=5.0,slow=39
**GRF Grafenberg Arr 82.18 330** *e*P **P 16 23 07.3 +0.8**
comp=Z,22nm,0.9s,baz=37,slow=5.5
**MOA Molln 82.39 327** *e*P **P 16 23 08.0 +0.4**
comp=Z,6.8nm,1.1s,SNR=8.6
**ELL Elmali 82.48 311** P **P 16 23 08.7 +0.3**
ELL pmax pmax
comp=Z,222nm,1.9s
**ELL Elmali 82.48 311** P **P 16 23 08.7 +0.3**
**DIVS Divibare 82.64 322** P **P 16 23 09.3 +0.3**
DIVS IAmb IAmb 16 23 10.3
comp=Z,12nm,1.1s
**GROS Grobnik 82.93 326** *i* P **P 16 23 10.7 +0.2**
**PERS Pernice 82.97 326** *e*P **P 16 23 11.0 +0.3**
**SOKA Soboth 82.97 326** *i* P **P 16 23 10.9 +0.2**
comp=Z,11nm,0.9s
**RJOB Jochberg 83.10 328** *e*P **P 16 23 12.1 +0.7**
comp=Z,18nm,1.0s,baz=37,slow=5.5
**OBKA Obir 83.31 326** *e*P **P 16 23 12.8 +0.3**
comp=Z,4.7nm,0.8s
**BTNL Ternell 83.34 333** *d*P **P 16 23 12.9 +0.4**
comp=Z,6.7nm,0.9s
BTNL *d*PcP **PcP 16 23 17.5 +0.7**
**MEM Membach 83.37 333** *d*P **P 16 23 12.9 +0.3**
**KBA Koelnbreinsper 83.39 327** *e*P **P 16 23 13.8 +0.8**
comp=Z,9.4nm,0.9s
**CRES Cresnjev 83.44 326** *e*P **P 16 23 12.8 -0.3**
**ANMO Albuquerque 83.48 50**⇑ *e*P **P 16 23 15.3 +1.6**
ANMO pmax pmax
comp=Z,2.0nm,1.2s
**BGES Gesves 83.88 334** *d*P **P 16 23 15.8 +0.6**
**CADS Cadrg 83.89 327** *e*P **P 16 23 14.2 -1.2**
**WTTA Wattenberg 83.95 328** *i* P **P 16 23 15.3 -0.6**
comp=Z,10nm,1.1s
**ABTA Abfaltersbach 84.00 328** *e*P **P 16 23 15.5 -0.5**
comp=Z,8.9nm,1.1s
**SCHQ Schefferville 84.02 16** P **P 16 23 16.1 +0.2**
comp=Z,1.9nm,0.7s,baz=0.0,slow=9.1,SNR=4.0
**BMRD Maredsous 84.06 334** *d*P **P 16 23 16.8 +0.7**
BMRD *d*PcP **PcP 16 23 21.7 +1.7**
**MOTA Moosalm 84.11 329** *e*P **P 16 23 16.8 +0.2**
comp=Z,7.3nm,0.9s,SNR=4.4
**RETA Reutte 84.13 329** *e*P **P 16 23 16.9 +0.3**
comp=Z,15nm,0.9s,SNR=5.7
**PDG Podgorica 84.24 321** ⇑P **P 16 23 14.7 -2.5**
**LIT Litokhoron 84.30 318** P **P 16 23 17.3 -0.3**
LIT pmax pmax
comp=Z,19nm,0.9s
**LIT Litokhoron 84.30 318** P **P 16 23 17.3 -0.3**
LIT IAmb IAmb 16 23 18.7
comp=Z,20nm,0.9s
**STAL STALIGIAL 84.30 327** P **P 16 23 16.6 -0.9**
STAL IAmb IAmb 16 23 17.2
comp=Z,12nm,0.8s
**BFO Black Forest 84.40 331** P **P 16 23 17.9 0.0**
BFO pmax pmax
comp=Z,9.0nm,0.8s
**BFO Black Forest 84.40 331** P **P 16 23 17.9 0.0**
BFO IAmb IAmb 16 23 19.3
comp=Z,8.7nm,0.8s
**FETA Feichten 84.52 329** *e*P **P 16 23 18.7 0.0**
comp=Z,6.9nm,0.8s
**DAVA Damuels 84.65 329** *i* P **P 16 23 19.3 -0.1**
comp=Z,13nm,0.8s
**ECH Echery 84.94 332** P **P 16 23 20.4 -0.2**
ECH pmax pmax
comp=Z,11nm,1.0s
**ECH Echery 84.94 332** P **P 16 23 20.4 -0.2**
ECH IAmb IAmb 16 23 21.8
comp=Z,11nm,1.0s
**DAVOX Davos/Dischmat 85.06 329** LR LR 17 04 35.1
comp=Z,71nm,19.4s,baz=56,slow=38
**RPZ Rata Peaks 85.79 159** LR LR 17 01 23.5
comp=Z,50nm,18.3s,baz=294,slow=35
**TXAR Lajitas Array 89.05 53** P **P 16 23 42.4 +1.4**
comp=Z,1.3nm,0.7s,baz=291,slow=3.2,SNR=16
TXAR pP **pP 16 23 55.9 +1.8**
comp=Z,1.8nm,0.6s,baz=304,slow=3.2,SNR=12
**TXAR Lajitas Array 89.05 53** P **P 16 23 40.7 -0.3**
**ESDC Sonseca Array 96.34 334** LR LR 17 12 49.0
comp=Z,65nm,18.4s,baz=345,slow=39
**TORD Torodi Ar. Bea 116.72 316** PKP **PKPdf 16 29 29.2 -1.1**
comp=Z,0.2nm,0.3s,baz=41,slow=3.2,SNR=2.1
**TORD Torodi Ar. Bea 116.72 316** PKPdf **PKPdf 16 29 29.6 -0.6**
**LPAZ La Paz 145.71 59** PKPbc **PKPdf 16 30 24.8 -0.4**
comp=Z,4.8nm,0.9s,baz=26,slow=10,SNR=15
**LPAZ La Paz 145.71 59** PKP2 **PKPdf 16 30 25.2 0.0**

LPAZ La Paz 145.71 59 PKPdf 16 30 25.2 0.0

*NEIC* ***24*** *16:30:18.0±1.4,3°.3N±0°.1×125°.3E±0°.1,h167km±11km, mb4.0/15, Error ellipse: s-maj=23.1km s-min=15.4km az=222.0*

*IDC* ***24*** *16:30:19.7±7.7,3°.23N×125°.18E,h193km±76km, mb3.3/7, mb1 3.5/7, mb1mx3.1/43, mbtmp3.8/7, Error ellipse: s-maj=72.8km s-min=16.3km az=73.0*

*DJA* ***24*** *16:30:20.4±1.2,3°N±9°×12°6E±°,h156km±11km, M3.9/7, MLv3.9/7*

**ISC 24 16:30:20.1±0.6,3°.36N±0°.07×125°.63E±0°.10,h200km,n36, σ1°87/40,mb3.8/14,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **0.34** | **343** | P | | | **Pn** | **16 30 42.0** | **-4.7** |
| SGSI | | | | S | | | **Sn** | **16 31 01.0** | **-6.4** |
| **TNTI** | **Ternate** | **3.11** | **146** | Pn | | | **Pn** | **16 31 09.2** | **-1.8** |
| **TNTI** | **Ternate** | **3.11** | **146** | P | | | **Pn** | **16 31 08.9** | **-2.1** |
| **KMSI** | **Cibinong** | **3.22** | **211** | P | | | **Pn** | **16 31 11.1** | **-1.2** |
| **GTOI** | **Gorontalo** | **3.76** | **224** | P | | | **Pn** | **16 31 16.7** | **-2.2** |
| **MRSI** | **Marisa** | **4.67** | **232** | P | | | **Pn** | **16 31 30.3** | **0.0** |
| **SANI** | **Sanana** | **5.39** | **176** | P | | | **Pn** | **16 31 35.3** | **-4.2** |
| **FAKI** | **Fak Fak** | **9.10** | **133** | Pn | | | **Pn** | **16 32 28.6** | **+1.0** |
| **MTN** | **Manton Dam** | **17.00** | **161** | | | | **P** | **16 34 04.9** | **-0.3** |
| MTN | comp=Z,15nm,1.1s | | | IAmb | | | IAmb | 16 34 19.9 | |
| **KNRA** | **Kununurra** | **19.17** | **171** | P | | | **P** | **16 34 28.8** | **+0.2** |
| KNRA | comp=Z,14nm,1.1s | | | IAmb | | | IAmb | 16 34 42.8 | |
| **WB0** | **Warramunga Arr** | **24.55** | **160** | P | | | **P** | **16 35 23.2** | **+1.5** |
| WB0 | comp=Z,2.0nm,0.9s | | | IAmb | | | IAmb | 16 35 44.7 | |
| **WRAB** | **Tennant Creek** | **24.69** | **160** | P | | | **P** | **16 35 22.5** | **-0.4** |
| WRAB | comp=Z,2.5nm,0.8s | | | IAmb | | | IAmb | 16 35 32.6 | |
| **WRA** | **Warramunga Arr** | **24.69** | **160** | P | | | **P** | **16 35 23.2** | **+0.3** |
| | comp=Z,0.7nm,0.7s,baz=341,slow=10,SNR=7.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.69** | **160** | P | | | **P** | **16 35 22.9** | **0.0** |
| **WB2** | **Warramunga Arr** | **24.70** | **160** | P | | | **P** | **16 35 23.0** | **+0.1** |
| **WR0** | **Warramunga Arr** | **24.78** | **160** | P | | | **P** | **16 35 24.2** | **+0.5** |
| WR0 | comp=Z,3.7nm,1.1s | | | IAmb | | | IAmb | 16 35 37.7 | |
| **ASAR** | **Alice Springs** | **28.05** | **164** | P | | | **P** | **16 35 53.4** | **+0.4** |
| | comp=Z,0.3nm,0.8s,baz=343,slow=7.0,SNR=2.7 | | | | | | | | |
| ASAR | | | | pP | | | **pP** | **16 36 33.5** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=337,slow=8.8,SNR=3.2 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **16 39 03.7** | **+1.2** |
| | comp=Z,0.1nm,0.4s,baz=343,slow=2.9,SNR=1.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **28.05** | **164** | P | | | **P** | **16 35 54.2** | **+1.2** |
| **JMN** | **Monobe** | **31.18** | **13** | P | | | **P** | **16 36 22.2** | **+1.8** |
| **JHS** | **Saijyo** | **32.24** | **12** | P | | | **P** | **16 36 32.7** | **+3.0** |
| JHS | comp=Z,13nm,0.9s | | | IAmb | | | IAmb | 16 36 55.2 | |
| **KSRS** | **Korea Array** | **33.99** | **3** | P | | | **P** | **16 36 46.5** | **+1.7** |
| | comp=Z,1.0nm,0.7s,baz=180,slow=10,SNR=5.4 | | | | | | | | |
| **JMM** | **Marumori** | **37.04** | **20** | P | | | **P** | **16 37 11.9** | **+1.2** |
| **JTM** | **Tenmabayashi** | **39.77** | **18** | P | | | **P** | **16 37 35.2** | **+1.7** |
| **USRK** | **Ussuriysk Ar.** | **41.05** | **7** | P | | | **P** | **16 37 44.8** | **+0.9** |
| **SONM** | **Songino Array** | **47.30** | **342** | P | | | **P** | **16 38 33.6** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=151,slow=6.6,SNR=2.3 | | | | | | | | |
| **MK31** | **Makanchi Array** | **57.23** | **326** | P | | | **P** | **16 39 46.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **57.23** | **326** | P | | | **P** | **16 39 46.2** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=118,slow=7.7,SNR=16 | | | | | | | | |
| MKAR | | | | PcP | | | **PcP** | **16 40 37.9** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=132,slow=4.1,SNR=6.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.23** | **326** | P | | | **P** | **16 39 46.4** | **-0.2** |
| **MAKZ** | **Makanchi** | **57.42** | **326** | P | | | **P** | **16 39 47.7** | **-0.1** |
| MAKZ | comp=Z,0.9nm,0.9s | | | IAmb | | | IAmb | 16 40 15.6 | |
| **KURK** | **Kurchatov** | **61.46** | **328** | P | | | **P** | **16 40 15.2** | **-0.2** |
| KURK | comp=Z,2.0nm,0.8s | | | IAmb | | | IAmb | 16 40 15.9 | |
| **TIXI** | **Tiksi** | **68.22** | **1** | P | | | **P** | **16 40 59.1** | **+0.5** |
| TIXI | comp=Z,2.6nm,0.5s | | | IAmb | | | IAmb | 16 40 59.7 | |
| **ABKAR** | **Akbulak array** | **71.74** | **321** | P | | | **P** | **16 41 20.0** | **-0.4** |
| **IMAR** | **Indian Mountai** | **83.12** | **24** | P | | | **P** | **16 42 25.6** | **+2.4** |
| **ARCES** | **ARCESS Array B** | **90.41** | **340** | P | | | **P** | **16 42 58.4** | **0.0** |
| | comp=Z,6.0nm,1.2s,baz=75,slow=4.8,SNR=1.3 | | | | | | | | |
| **FINES** | **FINESS Array B** | **91.63** | **332** | P | | | **P** | **16 43 03.3** | **-0.9** |
| | comp=Z,3.3nm,1.0s,baz=86,slow=8.5,SNR=3.6 | | | | | | | | |
| **FINES** | **FINESS Array B** | **91.63** | **332** | P | | | **P** | **16 43 03.8** | **-0.4** |

**IDC 24 16:30:24.8±3.9,19°.92S×176°.17W,h0km,mb3.4/2, mb1 3.7/2,mb1mx3.2/36,mbtmp3.4/2,Error ellipse: s-maj=249.2km s-min=78.9km az=162.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **46.33** | **256** | P | | | P | 16 38 52.9 | 0.0 |
| | 0.5nm,0.6s,baz=95,slow=8.2,SNR=13 | | | | | | | | |
| ASAR | | | | PcP | | | PcP | 16 40 27.7 | -0.5 |
| | 0.1nm,0.7s,baz=91,slow=4.0,SNR=4.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.39** | **261** | P | | | P | 16 38 53.2 | -0.2 |
| | 0.2nm,0.3s,baz=97,slow=7.5,SNR=5.1 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.31** | **333** | PKP | | | PKPdf | 16 50 00.9 | -0.1 |
| | 0.5nm,0.5s,baz=43,slow=3.9,SNR=2.7 | | | | | | | | |

*JMA* ***24*** *16:36:57.9±0.1,24°.94N×122°.12E,h115km±2km,M2.7*

*TAP* ***24*** *16:36:57.5,24°.92N×122°.16E,h120km,ML3.6,C*

**ISC 24 16:36:58.3±1.4,24°.90N±0°.04×122°.12E±0°.03,h117km±7km, n112,σ0662/189,7C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.16** | **312** | ⇑*iP* | | | **Pn** | **16 37 14.2** | **-0.2** |
| TWB1 | baz=300 | | | *i* | S | | **Sn** | **16 37 25.9** | **-0.8** |
| **EGS** | | **0.18** | **253** | *e* | P | | **Pn** | **16 37 14.0** | **-0.5** |
| EGS | baz=249 | | | | S | | **Sn** | **16 37 26.2** | **-0.4** |
| **NTC** | **Toucheng** | **0.27** | **260** | *e* | P | | **Pn** | **16 37 14.4** | **-0.3** |
| NTC | baz=258 | | | | S | | **Sn** | **16 37 27.6** | **+0.5** |
| **TIPB** | **Shuangxi** | **0.28** | **285** | *i* | P | | **Pn** | **16 37 14.7** | **-0.1** |
| TIPB | baz=280 | | | *i* | S | | **Sn** | **16 37 26.8** | **-0.5** |
| **SXI1** | **Grass Mountain** | **0.30** | **311** | | P | | **Pn** | **16 37 14.4** | **-0.6** |
| SXI1 | baz=304 | | | *e* | S | | **Sn** | **16 37 27.7** | **+0.2** |
| **NWF** | **Wu-fen Shan** | **0.35** | **299** | *i* | P | | **Pn** | **16 37 15.1** | **-0.1** |
| NWF | baz=293 | | | *i* | S | | **Sn** | **16 37 27.6** | **-0.3** |
| **WFSB** | **Wu-fen Shan** | **0.35** | **299** | | P | | **Pn** | **16 37 14.9** | **-0.2** |
| WFSB | baz=293 | | | | S | | **Sn** | **16 37 27.5** | **-0.2** |
| **ILA** | **Ilan** | **0.36** | **249** | | P | | **Pn** | **16 37 15.1** | **0.0** |
| ILA | baz=247 | | | | S | | **Sn** | **16 37 27.4** | **-0.4** |
| **TWC** | **Suao** | **0.38** | **221** | *i* | P | | **Pn** | **16 37 15.1** | **-0.1** |
| TWC | baz=221 | | | *i* | S | | **Sn** | **16 37 26.8** | **-1.2** |
| **TNOU** | **National Taiwa** | **0.40** | **308** | | P | | **Pn** | **16 37 15.0** | **-0.3** |
| TNOU | baz=303 | | | *e* | S | | **Sn** | **16 37 28.1** | **-0.1** |
| **TWE** | **Neicheng** | **0.45** | **247** | *i* | P | | **Pn** | **16 37 15.6** | **0.0** |
| TWE | baz=245 | | | *i* | S | | **Sn** | **16 37 29.6** | **+1.0** |
| **NDS** | **Dongshan** | **0.45** | **234** | | P | | **Pn** | **16 37 16.4** | **+0.7** |
| NDS | baz=235 | | | | S | | **Sn** | **16 37 29.8** | **+1.1** |
| **TWA** | **Mucha** | **0.49** | **279** | *i* | P | | **Pn** | **16 37 15.3** | **-0.6** |
| TWA | baz=276 | | | *i* | S | | **Sn** | **16 37 30.0** | **+0.9** |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **254** | | P | | **Pn** | **16 37 15.6** | **-0.4** |
| FUSB | baz=253 | | | | S | | **Sn** | **16 37 29.8** | **+0.4** |
| **NHDH** | **Xindian Distri** | **0.55** | **277** | *i* | P | | **Pn** | **16 37 15.8** | **-0.3** |
| NHDH | baz=274 | | | *i* | S | | **Sn** | **16 37 30.3** | **+0.6** |
| **EWUT** | **Wuta** | **0.55** | **215** | | P | | **Pn** | **16 37 16.6** | **+0.3** |
| EWUT | baz=216 | | | | S | | **Sn** | **16 37 30.0** | **+0.3** |
| **YM01** | **YM01** | **0.56** | **296** | | P | | **Pn** | **16 37 16.8** | **+0.4** |
| YM01 | baz=293 | | | | S | | **Sn** | **16 37 31.0** | **+1.1** |
| **ENTT** | **Nioudou** | **0.57** | **243** | *i* | P | | **Pn** | **16 37 16.8** | **+0.4** |
| ENTT | baz=242 | | | *i* | S | | **Sn** | **16 37 30.7** | **+0.7** |
| **NWLT** | **Wulai** | **0.57** | **258** | *e* | P | | **Pn** | **16 37 16.0** | **-0.4** |
| NWLT | baz=256 | | | | S | | **Sn** | **16 37 30.1** | **-0.1** |
| **TAP** | **Taipei** | **0.58** | **284** | | P | | **Pn** | **16 37 16.9** | **+0.5** |
| TAP | baz=281 | | | | S | | **Sn** | **16 37 31.3** | **+1.3** |
| **ENA** | **Nanau** | **0.58** | **216** | *i* | P | | **Pn** | **16 37 16.9** | **+0.4** |
| ENA | baz=217 | | | *i* | S | | **Sn** | **16 37 30.8** | **+0.7** |
| **TWY** | **Chenhua** | **0.60** | **308** | | P | | **Pn** | **16 37 16.4** | **-0.2** |
| TWY | baz=305 | | | | S | | **Sn** | **16 37 29.8** | **-0.6** |
| **ANP** | **Anpu** | **0.62** | **298** | | P | | **Pn** | **16 37 16.1** | **-0.7** |
| | baz=294 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.63** | **242** | *i* | P | | **Pn** | **16 37 17.2** | **+0.4** |
| NDT | baz=242 | | | | S | | **Sn** | **16 37 32.3** | **+1.5** |
| **LATG** | **Datong** | **0.65** | **236** | | P | | **Pn** | **16 37 17.8** | **+0.7** |
| LATG | baz=236 | | | | S | | **Sn** | **16 37 32.0** | **+0.8** |
| **NTST** | **Danshui** | **0.67** | **294** | *e* | P | | **Pn** | **16 37 16.6** | **-0.5** |
| NTST | baz=290 | | | *e* | S | | **Sn** | **16 37 32.0** | **+0.9** |
| **TWS1** | **Kuangyinshan** | **0.67** | **288** | *i* | P | | **Pn** | **16 37 16.9** | **-0.2** |
| TWS1 | baz=285 | | | *i* | S | | **Sn** | **16 37 32.5** | **+1.2** |
| **YHNB** | **Yeheng** | **0.71** | **252** | ⇑ | P | | **Pn** | **16 37 17.4** | **-0.2** |
| YHNB | baz=250 | | | | S | | **Sn** | **16 37 31.3** | **-0.8** |
| **NSK** | **Sanguang** | **0.73** | **252** | ⇑*i* | P | | **Pn** | **16 37 17.5** | **-0.2** |
| NSK | baz=251 | | | *i* | S | | **Sn** | **16 37 31.3** | **-0.9** |
| **NTY** | **Taoyuan** | **0.76** | **278** | | P | | **Pn** | **16 37 18.2** | **+0.4** |
| NTY | baz=275 | | | *e* | S | | **Sn** | **16 37 33.5** | **+1.0** |
| **NNS** | **Nan Shan** | **0.82** | **236** | ⇑*i* | P | | **Pn** | **16 37 18.7** | **+0.2** |
| NNS | baz=236 | | | | S | | **Sn** | **16 37 33.7** | **0.0** |
| **NNSB** | **Datong** | **0.82** | **235** | ⇑ | P | | **Pn** | **16 37 18.6** | **+0.1** |
| NNSB | baz=235 | | | | S | | **Sn** | **16 37 33.9** | **+0.1** |
| **NCU** | **National Centr** | **0.85** | **275** | ⇑*i* | P | | **Pn** | **16 37 18.7** | **+0.1** |
| NCU | baz=273 | | | *i* | S | | **Sn** | **16 37 34.3** | **+0.3** |
| **NCUH** | **Zhongli** | **0.85** | **275** | | P | | **Pn** | **16 37 18.7** | **+0.1** |
| NCUH | baz=273 | | | | S | | **Sn** | **16 37 34.8** | **+0.8** |
| **ETL** | **Fush Village** | **0.87** | **212** | | P | | **Pn** | **16 37 18.7** | **-0.2** |
| ETL | baz=213 | | | | S | | **Sn** | **16 37 34.3** | **-0.1** |
| **NACB** | **Ninganchiao** | **0.87** | **214** | ⇑ | P | | **Pn** | **16 37 18.2** | **-0.6** |
| NACB | baz=214 | | | | S | | **Sn** | **16 37 33.5** | **-0.8** |
| **ETLH** | **Xiulin Townshi** | **0.90** | **220** | | P | | **Pn** | **16 37 19.2** | **0.0** |
| ETLH | baz=221 | | | | S | | **Sn** | **16 37 35.0** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.92** | **118** | | P | | **Pn** | **16 37 19.2** | **0.0** |
| YOJ | | | | *e* | S | | **Sn** | **16 37 35.1** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.92** | **118** | | P | | **Pn** | **16 37 19.2** | **0.0** |
| YOJ | baz=120 | | | *e* | S | | **Sn** | **16 37 34.9** | **-0.2** |
| **TWD** | **Chiawan** | **0.95** | **211** | *i* | P | | **Pn** | **16 37 19.2** | **-0.4** |
| TWD | baz=211 | | | *i* | S | | **Sn** | **16 37 34.7** | **-0.9** |
| **NFF** | **Wufeng Townshi** | **0.95** | **254** | | P | | **Pn** | **16 37 19.3** | **-0.3** |
| NFF | baz=253 | | | | S | | **Sn** | **16 37 34.9** | **-0.9** |
| **HSN1** | **Hsinchu** | **1.01** | **263** | *i* | P | | **Pn** | **16 37 20.6** | **+0.5** |
| HSN1 | baz=262 | | | *i* | S | | **Sn** | **16 37 36.8** | **+0.1** |
| **FUSS** | **Fushou** | **1.03** | **231** | *i* | P | | **Pn** | **16 37 21.3** | **+0.6** |
| FUSS | baz=231 | | | *i* | S | | **Sn** | **16 37 38.0** | **+0.5** |
| **HWA** | **Hwalien** | **1.03** | **207** | *e* | S | | **Sn** | **16 37 37.2** | **+0.1** |
| | baz=208 | | | | | | | | |
| **LIOB** | **Emei** | **1.04** | **256** | *i* | P | | **Pn** | **16 37 20.5** | **0.0** |
| LIOB | baz=255 | | | *e* | S | | **Sn** | **16 37 35.9** | **-1.3** |
| **SBCB** | **Hsinchu** | **1.04** | **264** | | P | | **Pn** | **16 37 20.8** | **+0.3** |
| SBCB | baz=263 | | | | S | | **Sn** | **16 37 37.2** | **0.0** |
| **HSN** | **Hsinchu** | **1.05** | **265** | | P | | **Pn** | **16 37 20.2** | **-0.3** |
| HSN | baz=265 | | | | S | | **Sn** | **16 37 36.7** | **-0.7** |
| **NSTT** | **Nanjuang** | **1.05** | **256** | *i* | P | | **Pn** | **16 37 20.5** | **-0.1** |
| NSTT | baz=254 | | | *i* | S | | **Sn** | **16 37 36.5** | **-1.0** |
| **TWT** | **Tachien** | **1.07** | **233** | *i* | P | | **Pn** | **16 37 21.6** | **+0.6** |
| TWT | baz=233 | | | | S | | **Sn** | **16 37 38.6** | **+0.4** |
| **WHF** | **Hehuan Shan** | **1.08** | **226** | *i* | P | | **Pn** | **16 37 21.6** | **+0.2** |
| WHF | baz=226 | | | | S | | **Sn** | **16 37 38.6** | **-0.2** |
| **TDCB** | **Techi** | **1.09** | **234** | | P | | **Pn** | **16 37 21.7** | **+0.6** |
| TDCB | baz=234 | | | | S | | **Sn** | **16 37 38.5** | **+0.1** |
| **ETM** | **Tongmen** | **1.09** | **212** | *i* | P | | **Pn** | **16 37 20.5** | **-0.5** |
| | baz=212 | | | | | | | | |
| **CHGB** | **Renai** | **1.20** | **226** | | P | | **Pn** | **16 37 22.9** | **+0.5** |
| CHGB | baz=226 | | | | S | | **Sn** | **16 37 41.0** | **+0.3** |
| **WHP** | **Taichung City** | **1.24** | **240** | *i* | P | | **Pn** | **16 37 23.1** | **+0.5** |
| WHP | baz=240 | | | | S | | **Sn** | **16 37 41.1** | **0.0** |
| **ESL** | **Shilin** | **1.25** | **210** | *i* | P | | **Pn** | **16 37 21.7** | **-1.0** |
| ESL | baz=210 | | | | S | | **Sn** | **16 37 40.2** | **-1.0** |
| **NMLH** | **Miaoli** | **1.26** | **254** | *e* | P | | **Pn** | **16 37 22.9** | **+0.1** |
| NMLH | baz=253 | | | *e* | S | | **Sn** | **16 37 41.1** | **-0.4** |
| **WUSB** | **Renai** | **1.29** | **226** | | P | | **Pn** | **16 37 24.1** | **+0.8** |
| WUSB | baz=225 | | | | S | | **Sn** | **16 37 42.3** | **+0.2** |
| **NSY** | **Sanyi** | **1.33** | **249** | | P | | **Pn** | **16 37 23.8** | **+0.3** |
| NSY | baz=248 | | | | S | | **Sn** | **16 37 43.1** | **+0.4** |
| **TWQ1** | **Liyutan** | **1.34** | **246** | *i* | P | | **Pn** | **16 37 23.7** | **0.0** |
| TWQ1 | baz=245 | | | *i* | S | | **Sn** | **16 37 42.3** | **-0.8** |
| **WPL** | **Puli Township** | **1.38** | **230** | *i* | P | | **Pn** | **16 37 25.0** | **+0.9** |
| **WCS** | **Beigang Elemen** | **1.39** | **233** | *e* | P | | **Pn** | **16 37 24.6** | **+0.4** |
| WCS | baz=233 | | | *e* | S | | **Sn** | **16 37 43.9** | **+0.1** |
| **VWDT** | **VWDT** | **1.45** | **218** | | P | | **Pn** | **16 37 25.5** | **+0.5** |
| VWDT | baz=218 | | | | S | | **Sn** | **16 37 45.2** | **0.0** |
| **WDJ** | **Dajia District** | **1.46** | **248** | | P | | **Pn** | **16 37 25.4** | **+0.4** |
| WDJ | baz=247 | | | | S | | **Sn** | **16 37 45.6** | **+0.3** |
| **SMLT** | **Sun Moon Lake** | **1.50** | **228** | | P | | **Pn** | **16 37 26.3** | **+0.6** |
| SMLT | baz=227 | | | | S | | **Sn** | **16 37 47.3** | **+0.8** |
| **TCU** | **Taichung** | **1.52** | **241** | *e* | P | | **Pn** | **16 37 26.0** | **+0.3** |
| TCU | baz=240 | | | *e* | S | | **Sn** | **16 37 45.8** | **-0.7** |
| **TYC** | **Yuchr** | **1.52** | **230** | | P | | **Pn** | **16 37 26.3** | **+0.5** |
| TYC | baz=229 | | | *e* | S | | **Sn** | **16 37 47.3** | **+0.7** |
| **SSLB** | **Suanglung** | **1.54** | **224** | | P | | **Pn** | **16 37 26.6** | **+0.6** |
| SSLB | baz=224 | | | | S | | **Sn** | **16 37 47.3** | **+0.3** |
| **HGSD** | **Ruisui** | **1.54** | **205** | | P | | **Pn** | **16 37 25.9** | **-0.1** |
| HGSD | baz=205 | | | *e* | S | | **Sn** | **16 37 46.7** | **-0.4** |
| **WWF** | **Wufeng** | **1.55** | **237** | *i* | P | | **Pn** | **16 37 26.8** | **+0.6** |
| WWF | baz=236 | | | *e* | S | | **Sn** | **16 37 48.0** | **+0.7** |
| **EHY** | **Hungye** | **1.57** | **208** | | P | | **Pn** | **16 37 25.4** | **-1.0** |
| EHY | baz=208 | | | | S | | **Sn** | **16 37 46.3** | **-1.4** |
| **IRIF** | **Iriomote-Funau** | **1.57** | **111** | | P | | **Pn** | **16 37 26.2** | **-0.1** |
| IRIF | | | | *e* | S | | **Sn** | **16 37 47.4** | **-0.2** |
| **WCHH** | **Zhanghua** | **1.64** | **241** | *e* | P | | **Pn** | **16 37 27.1** | **-0.1** |
| | baz=240 | | | | | | | | |
| **WNT** | **Mingjian** | **1.66** | **232** | | P | | **Pn** | **16 37 28.1** | **+0.6** |
| WNT | baz=232 | | | *e* | S | | **Sn** | **16 37 50.0** | **+0.4** |
| **WJS** | **Zhushan** | **1.66** | **230** | *e* | P | | **Pn** | **16 37 28.2** | **+0.8** |
| | baz=230 | | | | | | | | |
| **YULB** | **Yu-li** | **1.68** | **207** | | P | | **Pn** | **16 37 26.7** | **-1.0** |
| YULB | baz=207 | | | *e* | S | | **Sn** | **16 37 48.4** | **-1.7** |
| **EYUL** | **Yuli** | **1.71** | **206** | *e* | P | | **Pn** | **16 37 29.3** | **+1.2** |
| | baz=206 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.75** | **118** | | P | | **Pn** | **16 37 28.6** | **+0.1** |
| HATJ | | | | *e* | S | | **Sn** | **16 37 52.0** | **+0.5** |
| **YUS** | **Yu-Shan** | **1.76** | **218** | | P | | **Pn** | **16 37 30.3** | **+1.1** |
| YUS | baz=217 | | | *e* | S | | **Sn** | **16 37 53.7** | **+1.0** |
| **ALS** | **Alishan** | **1.83** | **221** | | P | | **Pn** | **16 37 30.8** | **+1.0** |
| ALS | baz=221 | | | *e* | S | | **Sn** | **16 37 54.3** | **+0.4** |
| **JKRS** | **Kuro-shima** | **1.84** | **111** | | P | | **Pn** | **16 37 29.7** | **+0.1** |
| JKRS | | | | *e* | S | | **Sn** | **16 37 53.5** | **0.0** |
| **CHN5** | **Tsauling** | **1.85** | **226** | *e* | P | | **Pn** | **16 37 30.4** | **+0.6** |
| CHN5 | baz=225 | | | *e* | S | | **Sn** | **16 37 54.8** | **+0.9** |
| **FULB** | **Fuli** | **1.85** | **204** | *e* | P | | **Pn** | **16 37 29.9** | **0.0** |
| | baz=204 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.88** | **238** | *e* | P | | **Pn** | **16 37 30.1** | **0.0** |
| | baz=238 | | | | | | | | |
| **WDLH** | **Douliu** | **1.88** | **230** | *e* | P | | **Pn** | **16 37 30.6** | **+0.5** |
| | baz=230 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.92** | **106** | | P | | **Pn** | **16 37 30.5** | **0.0** |
| JIJ | | | | | S | | **Sn** | **16 37 54.6** | **-0.6** |
| **CHKT** | **Chengkung** | **1.92** | **201** | *e* | P | | **Pn** | **16 37 30.2** | **-0.4** |
| | baz=201 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.98** | **211** | *e* | P | | **Pn** | **16 37 31.0** | **-0.5** |
| | baz=211 | | | | | | | | |
| **WTK** | **Tuku** | **1.99** | **233** | *e* | P | | **Pn** | **16 37 31.4** | **0.0** |
| | baz=232 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.02** | **98** | | P | | **Pn** | **16 37 31.9** | **+0.1** |
| JISG | | | | | S | | **Sn** | **16 37 57.0** | **-0.4** |
| **EDH** | **Donghe** | **2.06** | **201** | *e* | P | | **Pn** | **16 37 32.4** | **0.0** |
| | baz=202 | | | | | | | | |
| **CHY** | **Chiayi** | **2.09** | **228** | *e* | P | | **Pn** | **16 37 33.1** | **+0.4** |
| | baz=228 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.10** | **221** | *e* | P | | **Pn** | **16 37 33.1** | **+0.2** |
| | baz=221 | | | | | | | | |
| **STYH** | **Taoyuan** | **2.12** | **216** | *e* | P | | **Pn** | **16 37 33.4** | **+0.3** |
| | baz=216 | | | | | | | | |
| **WSF** | **Szhu** | **2.14** | **234** | *e* | P | | **Pn** | **16 37 33.1** | **-0.3** |
| | baz=234 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.15** | **220** | *e* | P | | **Pn** | **16 37 33.6** | **+0.1** |
| | baz=220 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.21** | **232** | *e* | P | | **Pn** | **16 37 34.0** | **-0.2** |
| | baz=231 | | | | | | | | |
| **TWK** | **Hsinying** | **2.21** | **223** | *e* | P | | **Pn** | **16 37 34.3** | **0.0** |
| | baz=222 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.24** | **221** | *e* | P | | **Pn** | **16 37 34.7** | **0.0** |
| | baz=220 | | | | | | | | |
| **TWGBT** | **Beinan** | **2.28** | **205** | *e* | P | | **Pn** | **16 37 34.6** | **-0.6** |
| | baz=205 | | | | | | | | |
| **SGST** | **Jiashian** | **2.29** | **218** | *e* | P | | **Pn** | **16 37 36.7** | **+1.3** |
| | baz=218 | | | | | | | | |
| **JTJ** | **Tarama** | **2.36** | **96** | | P | | **Pn** | **16 37 36.9** | **+0.8** |
| JTJ | | | | *e* | S | | **Sn** | **16 38 05.8** | **+0.6** |
| **SCST** | **Cishan** | **2.50** | **217** | *e* | P | | **Pn** | **16 37 38.4** | **+0.4** |
| | baz=217 | | | | | | | | |
| **SSD** | **Sandimen** | **2.54** | **213** | *e* | P | | **Pn** | **16 37 39.2** | **+0.7** |
| | baz=212 | | | | | | | | |
| **TSMG** | **Majia** | **2.57** | **212** | *e* | P | | **Pn** | **16 37 39.8** | **+0.9** |
| | baz=212 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.65** | **211** | *e* | P | | **Pn** | **16 37 40.6** | **+0.6** |
| | baz=211 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.69** | **308** | *e* | P | | **Pn** | **16 37 39.4** | **-1.0** |
| | baz=306 | | | | | | | | |
| **PNG** | **Penghu** | **2.69** | **241** | *e* | P | | **Pn** | **16 37 39.4** | **-1.0** |
| | baz=240 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.71** | **240** | *e* | P | | **Pn** | **16 37 39.3** | **-1.3** |
| | baz=239 | | | | | | | | |
| **JIRB** | **Irabujima** | **2.77** | **91** | *e* | S | | **Sn** | **16 38 14.3** | **-0.5** |
| **SCZT** | **Fangliau** | **2.87** | **209** | *e* | P | | **Pn** | **16 37 43.7** | **+0.9** |
| | baz=209 | | | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.92** | **92** | | P | | **Pn** | **16 37 44.6** | **+1.2** |
| **LYUB** | **Lan-yu** | **2.93** | **190** | *e* | P | | **Pn** | **16 37 42.3** | **-1.3** |
| | baz=190 | | | | | | | | |

**IDC 24 16:43:18.0±1.9,4°.84N×122°.35E,h0km,mb3.5/3, mb1 3.7/3,mb1mx3.3/41,mbtmp3.5/3,MS2.8/1,Ms1 3.0/1, ms1mx2.3/43,Error ellipse: s-maj=239.3km s-min=26.7km az=62.0,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **26.57** | **303** | LR | | | LR | 16 59 42.6 | |
| | comp=Z,20nm,18.8s,baz=110,slow=37 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.30** | **155** | P | | | P | 16 49 04.1 | -0.5 |
| | 0.4nm,0.6s,baz=333,slow=10,SNR=4.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.49** | **159** | P | | | P | 16 49 33.5 | +0.4 |
| | 0.2nm,0.3s,baz=336,slow=8.2,SNR=8.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.20** | **327** | P | | | P | 16 52 45.4 | -0.1 |
| | 0.3nm,0.5s,baz=118,slow=8.3,SNR=5.8 | | | | | | | | |

*SJA* ***24*** *17:01:59.4±0.7,29°.90S×72°.06W,h11km,ML4.8,MW4.4*

*IDC* ***24*** *17:02:00.4±0.6,29°.97S×71°.58W,h0km,mb4.4/11, mb1 4.4/15,mb1mx4.2/39,mbtmp4.2/15,ML3.9/4,MS3.9/26, Ms1 3.9/26,ms1mx3.8/54,Error ellipse: s-maj=21.9km s-min=16.9km az=82.0*

*NEIC* ***24*** *17:02:04.6±1.7,29°.96S±0°.02×71°.67W±0°.08,h24km±4km, mb4.6/21,ML4.7(GUC),Error ellipse: s-maj=9.6km s-min=2.9km az=87.0*

*GUC **24** 17:02:04.2±0.6,29.96S×71.66W,h39km±3km, ML4.7*
**ISC 24 17:02:01.3**±1.2,**29.94S**±0.02×**71.66W**±0.03,**h7**km±7km,
**n159**,σ1§**76**/181,**mb4.7**/19,**MS4.0**/22,**6D**,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.37** | **86** | | **Pn** | | **17 02 12.9** | **-0.1** |
| CO05 | | | | Sg | **Sb** | | **17 02 18.8** | **+2.8** |
| **CO05** | **La Serena** | **0.37** | **86** | ⇓*i*P | **Pn** | | **17 02 13.0** | **-0.1** |
| CO05 | | | | *i* S | **Sb** | | **17 02 18.9** | **+2.8** |
| **CO06** | **Fray Jorge** | **0.73** | **178** | | **Pn** | | **17 02 17.8** | **-0.3** |
| **CO06** | **Fray Jorge** | **0.73** | **178** | ⇓*i*P | **Pn** | | **17 02 17.8** | **-0.3** |
| CO06 | | | | *i* S | **Sb** | | **17 02 27.7** | **+1.1** |
| **GO04** | **Tololo Observa** | **0.78** | **107** | | **Pn** | | **17 02 19.2** | **+0.2** |
| **GO04** | **Tololo Observa** | **0.78** | **107** | ⇓*i*P | **Pn** | | **17 02 19.3** | **+0.3** |
| GO04 | | | | *i* S | **Sn** | | **17 02 30.1** | **-1.0** |
| **GO04** | **Tololo Observa** | **0.78** | **107** | *e*P | **Pn** | | **17 02 19.0** | **0.0** |
| **CO03** | **El Pedregal** | **1.22** | **137** | | **Pn** | | **17 02 25.8** | **+0.8** |
| CO03 | | | | Sn | **Sb** | | **17 02 41.2** | **+0.3** |
| **CO03** | **El Pedregal** | **1.22** | **137** | ⇓*i*P | **Pn** | | **17 02 25.7** | **+0.8** |
| CO03 | | | | *i* S | **Sn** | | **17 02 42.0** | **+0.2** |
| CO03 | | | | IAML | | | 17 02 43.9 | |
| | comp=N,11μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **1.25** | **42** | | **Pn** | | **17 02 26.9** | **+1.4** |
| LCO | | | | Sn | **Sn** | | **17 02 43.1** | **+0.4** |
| **LCO** | **Las Campanas** | **1.25** | **42** | *e*P | **Pn** | | **17 02 26.9** | **+1.4** |
| LCO | | | | *i* S | **Sn** | | **17 02 43.3** | **+0.6** |
| **LCO** | **Las Campanas** | **1.25** | **42** | *e*P | **Pn** | | **17 02 27.1** | **+1.6** |
| **CO02** | **Combarbal** | **1.38** | **156** | | **Pg** | | **17 02 28.3** | **+0.5** |
| **CO02** | **Combarbal** | **1.38** | **156** | ⇓*i*P | **Pg** | | **17 02 28.3** | **+0.5** |
| CO02 | | | | *i* S | **Sn** | | **17 02 46.5** | **+0.9** |
| CO02 | | | | IAML | | | 17 02 49.2 | |
| | comp=N,29μm,0.5s | | | | | | | |
| **CO02** | **Combarbal** | **1.38** | **156** | *e*P | **Pg** | | **17 02 28.7** | **+0.9** |
| CO02 | | | | *e*S | **Sn** | | **17 02 47.7** | **+2.0** |
| CO02 | | | | IAML | | | 17 02 48.3 | |
| | comp=Z,12μm,0.7s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | | **Pb** | | **17 02 33.9** | **-0.9** |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | ⇓*i*P | **Pb** | | **17 02 33.9** | **-0.9** |
| AC04 | | | | *i* S | **Sg** | | **17 02 59.4** | **-0.1** |
| AC04 | | | | IAML | | | 17 03 06.0 | |
| | comp=E,5μm,0.7s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | *e*P | **Pb** | | **17 02 34.0** | **-0.8** |
| AC04 | | | | *e*S | **Sg** | | **17 03 02.0** | **+2.6** |
| AC04 | | | | IAML | | | 17 03 05.7 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **AROD** | **Rodeo** | **1.91** | **97** | *e*P | **Pg** | | **17 02 38.4** | **+0.4** |
| AROD | | | | *e*S | **Sn** | | **17 02 58.5** | **-0.6** |
| **ACDV** | **Cuesta del Vie** | **2.21** | **96** | *e*P | **Pg** | | **17 02 43.1** | **-0.7** |
| ACDV | | | | *e*S | **Sb** | | **17 03 08.5** | **-1.0** |
| **ACCO** | **Cerro Coronel** | **2.33** | **107** | *e*P | **Pg** | | **17 02 45.4** | **-0.7** |
| ACCO | | | | *e*S | **Sb** | | **17 03 11.5** | **-1.6** |
| **VA06** | **Catapilco** | **2.63** | **173** | | **Pn** | | **17 02 45.4** | **+1.3** |
| **VA06** | **Catapilco** | **2.63** | **173** | *e*P | **Pn** | | **17 02 45.4** | **+1.3** |
| VA06 | | | | IAML | | | 17 03 35.5 | |
| | comp=E,4μm,0.6s | | | | | | | |
| **GO03** | **Copiap** | **2.66** | **28** | | **Pn** | | **17 02 46.5** | **+1.9** |
| **GO03** | **Copiap** | **2.66** | **28** | *e*P | **Pn** | | **17 02 46.5** | **+1.9** |
| GO03 | | | | IAML | | | 17 03 33.4 | |
| | comp=E,6μm,0.8s | | | | | | | |
| **GO03** | **Copiap** | **2.66** | **28** | *e*P | **Pn** | | **17 02 41.5** | **-3.1** |
| GO03 | | | | *e*P | **Sg** | | **17 02 46.7** | **-2.5** |
| GO03 | | | | *e*S | **Sg** | | **17 03 27.0** | **+0.3** |
| **AC06** | **Mina Casimiro** | **2.82** | **24** | Pn | **Pn** | | **17 02 48.5** | **+1.6** |
| **VA03** | **San Esteban** | **2.97** | **162** | | **Pn** | | **17 02 51.5** | **+2.6** |
| **VA03** | **San Esteban** | **2.97** | **162** | *e*P | **Pn** | | **17 02 51.8** | **+2.8** |
| VA03 | | | | *i* S | **Sn** | | **17 03 27.4** | **+2.6** |
| VA03 | | | | IAML | | | 17 03 43.9 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.97** | **162** | *e*P | **Pn** | | **17 02 51.8** | **+2.8** |
| VA03 | | | | *e*S | **Sn** | | **17 03 25.0** | **+0.1** |
| VA03 | | | | IAML | | | 17 03 50.1 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **AUSP** | **Uspallata** | **2.99** | **140** | *e*P | **Pn** | | **17 02 48.5** | **-1.0** |
| AUSP | | | | *e*P | **Pb** | | **17 02 54.0** | **-1.2** |
| AUSP | | | | *e*S | **Sn** | | **17 03 22.0** | **-3.8** |
| **ZON** | **Zonda** | **3.02** | **123** | | **Pb** | | **17 02 53.4** | **-2.1** |
| **ZON** | **Zonda** | **3.02** | **123** | *e*P | **Pn** | | **17 02 49.5** | **-0.2** |
| ZON | | | | *e*P | **Pb** | | **17 02 55.0** | **-0.5** |
| ZON | | | | *e*S | **Sg** | | **17 03 41.2** | **+2.8** |
| **ROCH** | **El Roble** | **3.07** | **170** | *e*P | **Pb** | | **17 02 52.1** | **-4.3** |
| ROCH | | | | *e*P | **Pn** | | **17 02 50.6** | **+0.1** |
| ROCH | | | | IAML | | | 17 03 45.0 | |
| | comp=N,3μm,0.6s | | | | | | | |
| **VA01** | **Torpederas** | **3.07** | **180** | | **Pn** | | **17 02 50.9** | **+0.7** |
| **ROC1** | **El Roble** | **3.07** | **170** | | **Pn** | | **17 02 50.4** | **-0.2** |
| **ROC1** | **El Roble** | **3.07** | **170** | *e*P | **Pn** | | **17 02 50.7** | **+0.2** |
| ROC1 | | | | *e*S | **Sn** | | **17 03 29.5** | **+1.8** |
| **RTLL** | **Cerro Villicun** | **3.07** | **118** | *e*P | **Pn** | | **17 02 49.5** | **-0.9** |
| RTLL | | | | *e*P | **Pb** | | **17 02 55.0** | **-1.4** |
| RTLL | | | | *e*S | **Sg** | | **17 03 40.7** | **+0.7** |
| **VCA** | **Vinchina** | **3.25** | **69** | *e*P | **Pb** | | **17 02 58.6** | **-0.8** |
| VCA | | | | *i* S | **Sb** | | **17 03 39.5** | **+0.2** |
| **VCA** | **Vinchina** | **3.25** | **69** | *e*P | **Pb** | | **17 02 59.0** | **-0.4** |
| VCA | | | | *e*S | **Sb** | | **17 03 41.0** | **+1.8** |
| VCA | | | | *e*S | **Sg** | | **17 03 46.5** | **+0.8** |
| VCA | | | | IAML | | | 17 03 50.4 | |
| | comp=Z,4μm,0.5s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.29** | **126** | *e*P | **Pb** | | **17 02 58.7** | **-1.4** |
| RTCV | | | | *e*S | **Sb** | | **17 03 41.5** | **+1.0** |
| **PEL** | **Peldehue** | **3.30** | **166** | | **Pn** | | **17 02 55.4** | **+1.9** |
| **PEL** | **Peldehue** | **3.30** | **166** | *e*P | **Pn** | | **17 02 55.7** | **+2.2** |
| PEL | | | | *e*S | **Sb** | | **17 03 39.5** | **-1.1** |
| **MT02** | **Curacav** | **3.33** | **172** | | **Pn** | | **17 02 55.4** | **+1.4** |
| **MT02** | **Curacav** | **3.33** | **172** | *e*P | **Pn** | | **17 02 55.2** | **+1.3** |
| **MT02** | **Curacav** | **3.33** | **172** | *e*P | **Pn** | | **17 02 55.0** | **+1.1** |
| MT02 | | | | *e*S | **Sb** | | **17 03 39.5** | **-2.1** |
| MT02 | | | | IAML | | | 17 03 49.0 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **MT05** | **Renca** | **3.53** | **167** | | **Pn** | | **17 02 59.2** | **+2.5** |
| **MT05** | **Renca** | **3.53** | **167** | *e*P | **Pn** | | **17 02 59.1** | **+2.5** |
| MT05 | | | | *e*S | **Sb** | | **17 03 46.5** | **-0.7** |
| MT05 | | | | IAML | | | 17 04 00.0 | |
| | comp=Z,2μm,1.2s | | | | | | | |
| **ASAL** | **Salagasta** | **3.58** | **138** | *e*P | **Pb** | | **17 03 02.0** | **-3.0** |
| ASAL | | | | *e*S | **Sb** | | **17 03 49.5** | **+0.8** |
| **MT03** | **Universidad Ad** | **3.67** | **165** | Pn | **Pn** | | **17 02 57.2** | **-1.5** |
| **MT03** | **Universidad Ad** | **3.67** | **165** | *e*P | **Pn** | | **17 03 01.3** | **+2.6** |
| MT03 | | | | *e*P | Pb | | 17 03 02.0 | -4.6 |
| MT03 | | | | *e*S | **Sb** | | **17 03 48.5** | **-2.9** |
| MT03 | | | | IAML | | | 17 04 07.9 | |
| | comp=Z,2μm,1.2s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.70** | **179** | | **Pn** | | **17 02 58.1** | **-0.8** |
| **ARCO** | **CERRO ARCO** | **3.71** | **142** | *e*P | **Pb** | | **17 03 05.0** | **-2.4** |
| ARCO | | | | *e*S | **Sb** | | **17 03 53.5** | **+0.9** |
| ARCO | | | | IAML | | | 17 04 04.4 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **AC02** | **Maricunga** | **3.82** | **36** | | **Pn** | | **17 03 02.2** | **+1.3** |
| **AC02** | **Maricunga** | **3.82** | **36** | *e*P | **Pn** | | **17 03 04.0** | **+3.0** |
| AC02 | | | | *e*S | **Sb** | | **17 03 52.5** | **-3.4** |
| AC02 | | | | IAML | | | 17 04 06.8 | |
| | comp=Z,2μm,0.9s | | | | | | | |
| **MT09** | **Talagante** | **3.86** | **172** | | **Pn** | | **17 03 02.6** | **+1.3** |
| **MT09** | **Talagante** | **3.86** | **172** | *e*P | **Pn** | | **17 03 02.9** | **+1.6** |
| **MT01** | **Popeta** | **3.92** | **175** | | **Pn** | | **17 03 02.9** | **+0.9** |
| **MT01** | **Popeta** | **3.92** | **175** | *e*P | **Pn** | | **17 02 58.5** | **-3.5** |
| MT01 | | | | *e*P | Pb | | 17 03 03.0 | -7.9 |
| MT01 | | | | *e*S | **Sb** | | **17 03 59.0** | **+0.4** |
| MT01 | | | | IAML | | | 17 04 08.1 | |
| | comp=Z,815nm,0.5s | | | | | | | |
| **AAGR** | **Agrelo** | **3.96** | **143** | *e*P | **Pb** | | **17 03 08.7** | **-2.7** |
| AAGR | | | | *e*S | **Sb** | | **17 03 59.0** | **-0.6** |
| **LMEL** | **Las Melosas** | **4.08** | **163** | | **Pn** | | **17 03 07.2** | **+2.9** |
| **LMEL** | **Las Melosas** | **4.08** | **163** | *e*P | **Pn** | | **17 03 07.5** | **+3.2** |
| LMEL | | | | *i* S | **Sb** | | **17 03 59.1** | **-4.3** |
| **ACLC** | **CERRO LA CRUZ** | **4.13** | **84** | *e*P | **Pn** | | **17 03 08.6** | **+3.6** |
| ACLC | | | | *e*S | **Sn** | | **17 03 56.0** | **+2.3** |
| ACLC | | | | *e*S | **Sb** | | **17 03 59.0** | **-5.6** |
| ACLC | | | | IAML | | | 17 04 08.9 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| **BO04** | **La Punta** | **4.13** | **168** | | **Pn** | | **17 03 06.4** | **+1.5** |
| **BO01** | **Tunca** | **4.46** | **174** | | **Pn** | | **17 03 11.4** | **+2.0** |
| **BO01** | **Tunca** | **4.46** | **174** | *e*P | **Pn** | | **17 03 11.0** | **+1.6** |
| BO01 | | | | *e*S | **Sn** | | **17 04 07.5** | **+5.9** |
| BO01 | | | | IAML | | | 17 04 27.6 | |
| | comp=Z,524nm,1.2s | | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **4.47** | **97** | *e*P | **Pn** | | **17 03 13.0** | **+3.5** |
| **BO02** | **Sierra Bellavi** | **4.89** | **171** | | **Pn** | | **17 03 17.1** | **+1.8** |
| **BO02** | **Sierra Bellavi** | **4.89** | **171** | *e*P | **Pn** | | **17 03 17.3** | **+1.9** |
| BO02 | | | | *e*S | **Sn** | | **17 04 13.5** | **+1.2** |
| BO02 | | | | IAML | | | 17 04 36.7 | |
| | comp=Z,587nm,0.8s | | | | | | | |
| **GO05** | **Huala** | **5.06** | **183** | Pn | **Pn** | | **17 03 16.2** | **-1.4** |
| **GO05** | **Huala** | **5.06** | **183** | *e*P | **Pn** | | **17 03 18.0** | **+0.4** |
| GO05 | | | | *e*S | **Sb** | | **17 04 34.0** | **+2.8** |
| **PB14** | **IPOC Station P** | **5.41** | **12** | | **Pn** | | **17 03 21.5** | **-1.3** |
| **RFA** | **San Rafael** | **5.52** | **152** | *e*P | **Pn** | | **17 03 22.0** | **-2.0** |
| **ML02** | **Panimavida** | **5.81** | **178** | Pn | **Pn** | | **17 03 27.6** | **-0.3** |
| **PB15** | **IPOC Station P** | **6.99** | **17** | | **Pn** | | **17 03 44.2** | **-0.1** |
| **H03N1** | **Juan Fernandez** | **7.09** | **239** | T | T | | 17 11 27.0 | |
| | baz=65,slow=72,SNR=6036 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.11** | **239** | T | T | | 17 11 25.5 | |
| | baz=65,slow=72,SNR=7031 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.11** | **239** | T | T | | 17 11 30.0 | |
| | baz=65,slow=72,SNR=5320 | | | | | | | |
| **PB06** | **IPOC Station P** | **7.45** | **15** | Pn | **Pn** | | **17 03 48.2** | **-2.4** |
| **LVC** | **Limon Verde** | **7.71** | **19** | Pn | **Pn** | | **17 03 53.4** | **-1.0** |
| **LVC** | **Limon Verde** | **7.71** | **19** | Pn | **Pn** | | | |
| | comp=Z,1.1nm,0.3s,baz=191,slow=6.3,SNR=9.5 | | | | | | | |
| LVC | | | | LR | LR | | 17 06 56.1 | |
| | comp=Z,1μm,18.8s,baz=219,slow=38 | | | | | | | |
| **LVC** | **Limon Verde** | **7.71** | **19** | Pn | **Pn** | | **17 03 55.2** | **+0.8** |
| **LC01** | **Cunco** | **8.93** | **181** | Pn | **Pn** | | **17 04 08.2** | **-2.6** |
| **PLCA** | **Paso Flores** | **10.80** | **176** | Pn | **Pn** | | **17 04 37.4** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=344,slow=13,SNR=5.0 | | | | | | | |
| PLCA | | | | LR | LR | | 17 08 41.2 | |
| | comp=Z,770nm,18.6s,baz=350,slow=37 | | | | | | | |
| **PLCA** | **Paso Flores** | **10.80** | **176** | | **Pn** | | **17 04 35.4** | **-1.1** |
| **ITQB** | **Itaqui** | **13.06** | **93** | | **Pn** | | **17 05 06.4** | **-0.9** |
| **CPUP** | **Villa Florida** | **13.15** | **78** | Pn | **Pn** | | **17 05 08.2** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=261,slow=9.2,SNR=3.5 | | | | | | | |
| CPUP | | | | Sn | **Sn** | | **17 07 36.6** | **+1.5** |
| | comp=Z,1.0nm,0.3s,baz=38,slow=20,SNR=3.0 | | | | | | | |
| CPUP | | | | LR | LR | | 17 10 35.0 | |
| | comp=Z,586nm,18.7s,baz=256,slow=39 | | | | | | | |
| **CPUP** | **Villa Florida** | **13.15** | **78** | Pn | **Pn** | | **17 05 06.4** | **-2.1** |
| **LPAZ** | **La Paz** | **13.97** | **14** | Pn | **Pn** | | **17 05 23.9** | **+3.5** |
| | comp=Z,0.4nm,0.3s,baz=186,slow=6.5,SNR=19 | | | | | | | |
| **LPAZ** | **La Paz** | **13.97** | **14** | | **Pn** | | **17 05 24.1** | **+3.7** |
| **COYC** | **Coyhaique** | **15.61** | **181** | | **Pn** | | **17 05 40.3** | **-1.4** |
| COYC | | | | IAmb | IAmb | | 17 05 48.8 | |
| | comp=Z,41nm,1.3s | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.62** | **101** | | **Pn** | | **17 05 39.9** | **-2.1** |
| **SIV** | **San Ignacio** | **16.95** | **37** | Pn | **P** | | **17 06 00.7** | **-0.4** |
| | comp=Z,0.6nm,0.3s,baz=217,slow=11,SNR=22 | | | | | | | |
| **AQDB** | **Aquidauana** | **17.23** | **60** | | **Pn** | | **17 06 00.9** | **-1.7** |
| **ITAB** | **Concordia** | **17.36** | **86** | | **Pn** | | **17 06 01.1** | **-3.1** |
| **NNA** | **Nana** | **18.51** | **344** | LR | LR | | 17 12 07.5 | |
| | comp=Z,270nm,19.9s,baz=182,slow=33 | | | | | | | |
| **ATAH** | **Atahualpa** | **23.56** | **343** | LR | LR | | 17 14 35.9 | |
| | comp=Z,202nm,21.0s,baz=221,slow=32 | | | | | | | |
| **USHA** | **Ushuaia** | **24.98** | **176** | P | **P** | | **17 07 25.8** | **+0.4** |
| | comp=Z,19nm,0.9s,baz=13,slow=4.1,SNR=4.8 | | | | | | | |
| USHA | | | | LR | LR | | 17 18 02.9 | |
| | comp=Z,544nm,18.5s,baz=350,slow=39 | | | | | | | |
| **BDFB** | **Brasilia** | **25.96** | **62** | P | **P** | | **17 07 34.2** | **-0.6** |
| | comp=Z,8.2nm,1.0s,baz=203,slow=6.7,SNR=6.5 | | | | | | | |
| **BDFB** | **Brasilia** | **25.96** | **62** | P | **P** | | **17 07 33.7** | **-1.1** |
| BDFB | | | | IAmb | IAmb | | 17 07 36.4 | |
| | comp=Z,8.7nm,1.0s | | | | | | | |
| **PTGA** | **Pitinga** | **31.11** | **23** | LR | LR | | 17 23 10.0 | |
| | comp=Z,165nm,20.7s,baz=200,slow=41 | | | | | | | |
| **ROSC** | **El Rosal** | **34.68** | **355** | LR | LR | | 17 24 12.3 | |
| | comp=Z,115nm,18.5s,baz=158,slow=38 | | | | | | | |
| **PMSA** | **Palma Station** | **35.17** | **174** | LR | LR | | 17 22 40.0 | |
| | comp=Z,301nm,19.6s,baz=338,slow=35 | | | | | | | |
| **SDV** | **Santo Domingo** | **38.62** | **2** | LR | LR | | 17 26 39.4 | |
| | comp=Z,141nm,18.0s,baz=196,slow=38 | | | | | | | |
| **MDP** | **Montagnes des** | **39.33** | **31** | LR | LR | | 17 27 27.4 | |
| | comp=Z,220nm,18.7s,baz=226,slow=39 | | | | | | | |
| **RCBR** | **Riachuelo** | **41.34** | **62** | LR | LR | | 17 28 28.0 | |
| | comp=Z,168nm,18.6s,baz=7.0,slow=38 | | | | | | | |
| **JTS** | **Las Juntas de** | **42.00** | **340** | LR | LR | | 17 23 15.2 | |
| | comp=Z,62nm,20.2s,baz=228,slow=30 | | | | | | | |
| **BELA** | **Belgrano 2** | **50.81** | **171** | P | **P** | | **17 11 02.8** | **+0.8** |
| BELA | | | | IAmb | IAmb | | 17 11 04.0 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **53.00** | **159** | P | **P** | | **17 11 18.7** | **+0.4** |
| **VNA1** | **Neumayer--Stat** | **53.29** | **158** | P | **P** | | **17 11 20.8** | **+0.4** |
| **VNA2** | **Neumayer--Watz** | **53.63** | **158** | P | **P** | | **17 11 23.4** | **+0.4** |
| | baz=281,slow=9.3 | | | | | | | |
| **SNAA** | **Sanae** | **55.23** | **159** | P | **P** | | **17 11 34.9** | **+0.2** |
| **SNAA** | **Sanae** | **55.23** | **159** | P | **P** | | **17 11 34.7** | **+0.1** |
| | comp=Z,14nm,0.8s,baz=283,slow=7.3,SNR=38 | | | | | | | |
| SNAA | | | | LR | LR | | 17 32 46.9 | |
| | comp=Z,124nm,21.5s,baz=316,slow=34 | | | | | | | |
| **SNAA** | **Sanae** | **55.23** | **159** | P | **P** | | **17 11 34.6** | **0.0** |
| **Z51A** | **Franklin** | **64.21** | **347** | P | **P** | | **17 12 36.9** | **+0.2** |
| **JCT** | **Junction City** | **65.79** | **333** | P | **P** | | **17 12 48.3** | **+1.1** |
| JCT | | | | IAmb | IAmb | | 17 12 49.8 | |
| | comp=Z,4.5nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.38** | **330** | P | **P** | | **17 12 52.2** | **+1.1** |
| | comp=Z,0.3nm,0.4s,baz=153,slow=8.2,SNR=9.8 | | | | | | | |
| TXAR | | | | LR | LR | | 17 37 07.8 | |
| | comp=Z,109nm,20.3s,baz=300,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | **72.40** | **331** | LR | LR | | 17 40 46.6 | |
| | comp=Z,90nm,18.8s,baz=278,slow=32 | | | | | | | |
| **LIC** | **Lamto** | **73.22** | **72** | *e*PKP1 | **P** | | **17 13 33.9** | **+0.4** |
| | comp=Z,17nm,0.9s | | | | | | | |
| **TIC** | **Toumodi** | **73.45** | **72** | *e*PKP1 | **P** | | **17 13 34.4** | **-0.5** |
| **KIC** | **Kosan Boka** | **73.53** | **72** | *e*PKP1 | **P** | | **17 13 34.6** | **-0.7** |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **DBIC** | **Dimbokro** | **73.60** | **72** | P | **P** | | **17 13 35.4** | **-0.3** |
| | comp=Z,5.1nm,0.9s,baz=176,slow=6.4,SNR=5.8 | | | | | | | |
| DBIC | | | | LR | LR | | 17 44 17.2 | |
| | comp=Z,117nm,19.1s,baz=252,slow=34 | | | | | | | |
| **DBIC** | **Dimbokro** | **73.60** | **72** | P | **P** | | **17 13 34.7** | **-1.0** |
| DBIC | | | | IAmb | IAmb | | 17 13 36.9 | |
| | comp=Z,8.9nm,1.0s | | | | | | | |
| **SUR** | **Sutherland** | **76.52** | **120** | LR | LR | | 17 43 34.9 | |
| | comp=Z,63nm,19.1s,baz=190,slow=33 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **76.80** | **342** | P | **P** | | **17 13 54.2** | **+0.8** |
| ECSD | | | | IAmb | IAmb | | 17 13 55.4 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **TSUM** | **Tsumeb** | **80.03** | **106** | LR | LR | | 17 46 17.1 | |
| | comp=Z,114nm,18.1s,baz=162,slow=33 | | | | | | | |
| **TSUM** | **Tsumeb** | **80.03** | **106** | P | **P** | | **17 14 12.5** | **+0.3** |
| TSUM | | | | IAmb | IAmb | | 17 14 14.0 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.31** | **333** | P | **P** | | **17 14 13.4** | **+0.3** |
| | comp=Z,0.4nm,0.5s,baz=124,slow=7.4,SNR=5.6 | | | | | | | |
| PDAR | | | | LR | LR | | 17 45 54.4 | |
| | comp=Z,83nm,19.3s,baz=303,slow=33 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.76** | **325** | P | **P** | | **17 14 17.6** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=140,slow=6.5,SNR=5.1 | | | | | | | |
| **ELK** | **Elko** | **81.09** | **328** | LR | LR | | 17 46 29.1 | |
| | comp=Z,112nm,18.4s,baz=234,slow=33 | | | | | | | |
| **ELK** | **Elko** | **81.09** | **328** | P | **P** | | **17 14 17.5** | **+0.1** |
| **BOSA** | **Boshof** | **81.68** | **118** | P | **P** | | **17 14 20.6** | **-0.2** |
| | comp=Z,6.9nm,1.0s,baz=284,slow=5.1,SNR=8.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.53** | **70** | P | **P** | | **17 14 25.1** | **-0.2** |
| | comp=Z,7.9nm,1.0s,baz=266,slow=5.4,SNR=26 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.53** | **70** | P | **P** | | **17 14 25.0** | **-0.2** |
| TORD | | | | IAmb | IAmb | | 17 14 26.5 | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **BEKR** | **Beckworth** | **82.89** | **324** | P | **P** | | **17 14 27.5** | **+0.7** |
| BEKR | | | | IAmb | IAmb | | 17 14 29.5 | |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **ORV** | **Oroville** | **83.24** | **323** | P | **P** | | **17 14 30.2** | **+1.9** |
| ORV | | | | IAmb | IAmb | | 17 14 31.4 | |
| | comp=Z,7.4nm,1.2s | | | | | | | |
| **LBTB** | **Lobatse** | **83.72** | **115** | LR | LR | | 17 47 16.0 | |
| | comp=Z,69nm,18.7s,baz=209,slow=32 | | | | | | | |
| **LBTB** | **Lobatse** | **83.72** | **115** | P | **P** | | **17 14 30.9** | **-0.7** |
| **SCHQ** | **Schefferville** | **84.53** | **3** | P | **P** | | **17 14 34.3** | **-0.3** |
| | comp=Z,3.8nm,0.9s,baz=198,slow=6.4,SNR=4.6 | | | | | | | |
| **SCHQ** | **Schefferville** | **84.53** | **3** | P | **P** | | **17 14 33.4** | **-1.3** |
| **MATP** | **Matopo** | **88.35** | **113** | LR | LR | | 17 50 08.9 | |
| | comp=Z,51nm,21.9s,baz=215,slow=33 | | | | | | | |
| **MDT** | **Midelt** | **89.02** | **51** | LR | LR | | 17 53 40.7 | |
| | comp=Z,42nm,19.6s,baz=1.0,slow=35 | | | | | | | |
| **FRB** | **Frobisher Bay** | **93.40** | **1** | LR | LR | | 18 01 58.8 | |
| | comp=Z,42nm,18.0s,baz=267,slow=38 | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.53** | **46** | LR | LR | | 17 57 05.3 | |
| | comp=Z,50nm,18.5s,baz=242,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.33** | **341** | P | **P** | | **17 15 38.6** | **-0.5** |
| | comp=Z,0.2nm,0.6s,baz=149,slow=3.7,SNR=4.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **121.31** | **208** | PKP | **PKPdf** | | **17 20 54.8** | **-1.1** |
| | comp=Z,0.5nm,0.8s,baz=130,slow=1.7,SNR=7.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.44** | **210** | PKP | **PKPdf** | | **17 21 00.9** | **-1.0** |
| | comp=Z,1.0nm,0.6s,baz=148,slow=1.6,SNR=16 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.06** | **272** | T | T | | 19 39 53.7 | |
| | baz=115,slow=75,SNR=58 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.07** | **272** | T | T | | 19 39 54.3 | |
| | baz=115,slow=75,SNR=83 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.08** | **272** | T | T | | 19 39 54.8 | |
| | baz=115,slow=75,SNR=68 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.37** | **273** | T | T | | 19 40 26.7 | |
| | baz=116,slow=74 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.38** | **273** | T | T | | 19 40 33.6 | |
| | baz=116 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.38** | **273** | T | T | | 19 40 23.6 | |
| | baz=116,slow=74 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.58** | **29** | PKPbc | **PKPbc** | | **17 21 53.8** | **+0.3** |
| | comp=Z,7.4nm,0.7s,baz=296,slow=3.4,SNR=37 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.58** | **29** | | **PKPbc** | | **17 21 53.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **153.72** | **43** | PKPbc | **PKPbc** | | **17 22 01.0** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=299,slow=1.9,SNR=4.6 | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | | **17 22 13.7** | **0.0** |
| | comp=Z,1.4nm,0.9s,baz=298,slow=2.6,SNR=8.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.72** | **43** | | **PKPbc** | | **17 21 58.8** | **-2.1** |
| MKAR | | | | | **PKAP** | | **17 22 11.0** | **-2.7** |
| **SONM** | **Songino Array** | **162.07** | **4** | PKPab | **PKPab** | | **17 22 50.3** | **+0.5** |
| | comp=Z,0.8nm,0.9s,baz=353,slow=1.8,SNR=5.9 | | | | | | | |
| **GOMU** | **GeErMu** | **167.06** | **58** | PKP | **PKPdf** | | **17 22 08.0** | **-0.5** |
| GOMU | | | | pPKP | sPKPdf | | 17 22 27.9 | +16 |
| GOMU | | | | sPKP | | | 17 22 37.3 | |
| GOMU | | | | AMB | AMB | | | |
| | comp=Z,160nm,5.1s | | | | | | | |
| **PZH** | **PanZhiHua** | **173.25** | **119** | PKP | **PKPdf** | | **17 22 12.4** | **+0.4** |

*NOU **24** 17:11:05.9,21.90S×170.75E,h0km,mb4.9/9,Southeast of Loyalty Islands*
*IDC **24** 17:11:07.5±4.7,21.57S×170.76E,h114km±28km,mb3.8/5,mb1 4.0/6,mb1mx3.4/39,mbtmp4.2/6,Error ellipse: s-maj=79.3km s-min=32.2km az=157.0*
*NEIC **24** 17:11:08.0±1.6,21.85±0.2×170.7E±0.1,h105km±9km,mb4.5/15,Error ellipse: s-maj=24.7km s-min=13.9km az=178.0*
**ISC 24 17:11:07.8**±1.0,**21.8S**±0.2×**170.76E**±0.09,**h112**km,**n39**,σ1§**02**/40,**mb4.3**/12,**Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **3.18** | **254** | | **Pn** | | **17 11 56.2** | **0.0** |
| **PINNC** | **Pines Island,** | **3.18** | **254** | P | **Pn** | | **17 11 56.8** | **+0.6** |
| **LIFNC** | **LIFOU** | **3.43** | **286** | | **Pn** | | **17 11 59.2** | **+0.4** |
| LIFNC | | | | | **Sn** | | **17 12 37.4** | **-2.1** |
| **LIFNC** | **LIFOU** | **3.43** | **286** | P | **Pn** | | **17 12 00.3** | **+0.8** |
| **YATNC** | **Mamie plateau,** | **3.60** | **265** | P | **Pn** | | **17 12 01.9** | **+0.1** |
| **OUENC** | **Ouen Island, N** | **3.69** | **259** | | **Pn** | | **17 12 03.0** | **0.0** |
| **OUENC** | **Ouen Island, N** | **3.69** | **259** | P | **Pn** | | **17 12 03.7** | **+0.7** |
| **DZM** | **Mont Dzumac** | **4.02** | **265** | P | **Pn** | | **17 12 08.2** | **+0.7** |
| | 62nm,0.3s,baz=60,slow=20,SNR=456 | | | | | | | |
| DZM | | | | S | **Sn** | | **17 12 54.7** | **+1.0** |
| | 51nm,0.3s,baz=0.0,slow=20,SNR=12 | | | | | | | |
| **DZM** | **Mont Dzumac** | **4.02** | **265** | *e*Pn | **Pn** | | **17 12 08.4** | **+1.0** |
| | 141nm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0.1nm,0.3s,baz=92,slow=3.6,SNR=1.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.56** | **255** | P | P | 17 35 51.6 | 0.0 | |
| | 2.4nm,0.4s,baz=90,slow=8.5,SNR=120 | | | | | | | |
| ASAR | | | | PcP | PcP | 17 37 23.2 | -0.5 | |
| | 0.2nm,0.9s,baz=101,slow=4.1,SNR=5.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.28** | **58** | P | P | 17 40 12.8 | -0.1 | |
| | 0.4nm,0.5s,baz=224,slow=6.3,SNR=5.6 | | | | | | | |

*VIE* ***24*** *17:42:38.9±1.1,51˚.45N×16˚.37E, h0km, mb2.4/2, ml2.8/3, Error ellipse: s-maj=13.9km s-min=6.3km az=121.0 60 km NW of Wroclaw Suspected Mining induced.*
*IPEC* ***24*** *17:42:38.2±0.3,51˚.50N×16˚.28E, h0km, ML2.2/3, Error ellipse: s-maj=2.1km s-min=1.1km az=38.0*
*IDC* ***24*** *17:42:40.3±1.0,51˚.44N×16˚.05E, h0km, mb1 3.3/4, mb1mx3.1/28, mbtmp3.1/4, ML2.5/4, Error ellipse: s-maj=23.5km s-min=8.4km az=124.0*
*PRU* ***24*** *17:42:40.2±0.0,51˚.41N×16˚.17E, h0km*

**ISC 24 17:42:37.2±0.8, 51˚.54N±0˚.03×16˚.24E±0˚.03, h0km, n34, σ1§18/64, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.70** | **177** | *e*Pg | **Pg** | | **17 42 50.9** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | | **17 42 58.9** | **-0.8** |
| **CHVC** | **Chvalec** | **0.96** | **187** | *e*PG | **Pg** | | **17 42 55.9** | **+0.2** |
| CHVC | | | | *e*SG | **Sg** | | **17 43 07.5** | **-0.7** |
| **OSTC** | **Ostas** | **0.99** | **181** | *e*PG | **Pg** | | **17 42 56.4** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | | **17 43 08.1** | **-0.9** |
| | comp=Z,31nm,0.4s | | | | | | | |
| **UPC** | **Upice** | **1.05** | **188** | *e*PG | **Pg** | | **17 42 57.2** | **-0.1** |
| UPC | | | | *e*SG | **Sg** | | **17 43 09.6** | **-1.3** |
| | comp=Z,174nm,0.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.20** | **178** | *e*PG | **Pg** | | **17 42 59.9** | **-0.2** |
| DPC | | | | *e*SG | **Sg** | | **17 43 14.5** | **-1.1** |
| | comp=Z,35nm,0.3s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.47** | **227** | *e*PG | **Pg** | | **17 43 05.3** | **0.0** |
| PVCC | | | | *e*SG | **Sg** | | **17 43 23.9** | **-0.4** |
| | comp=Z,149nm,0.3s | | | | | | | |
| **KRLC** | **Kraliky** | **1.51** | **167** | *e*PG | **Pn** | | **17 43 05.3** | **-0.3** |
| KRLC | | | | *e*SG | **Sg** | | **17 43 24.0** | **-1.7** |
| | comp=Z,14nm,0.3s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.60** | **246** | Pg | **Pg** | | **17 43 08.4** | **+0.6** |
| BRG | | | | Sg | **Sg** | | **17 43 28.6** | **+0.1** |
| BRG | | | | Amp | | | 17 43 29.8 | |
| | comp=Z,34nm,0.7s | | | | | | | |
| **PRU** | **Pruhonice** | **1.90** | **215** | *e*PG | **Pn** | | **17 43 11.7** | **+0.9** |
| PRU | | | | *e*SG | **Sn** | | **17 43 36.0** | **+0.6** |
| | comp=Z,32nm,0.3s | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.95** | **154** | *e*Pn | **Pn** | | **17 43 11.6** | **-0.1** |
| | baz=336 | | | | | | | |
| MORC | | | | *e*Sg | **Sb** | | **17 43 37.8** | **-0.8** |
| | comp=Z,16nm,0.4s,baz=336 | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.95** | **154** | *e*PN | **Pn** | | **17 43 11.7** | **0.0** |
| MORC | | | | *e*SG | **Sb** | | **17 43 37.9** | **-0.7** |
| **CLL** | **Collm** | **2.04** | **265** | *e*Pg | **Pg** | | **17 43 17.0** | **+0.6** |
| CLL | | | | *e*Sg | **Sg** | | **17 43 44.0** | **+1.2** |
| | comp=Z,16nm,0.4s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.09** | **144** | *e*PG | **Pg** | | **17 43 17.2** | **-0.1** |
| OKC | | | | *e*SG | **Sb** | | **17 43 43.2** | **+0.6** |
| **VRAC** | **Vranov** | **2.25** | **174** | *e*Pn | **Pn** | | **17 43 16.0** | **+0.3** |
| | baz=355 | | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | | **17 43 47.1** | **0.0** |
| | comp=Z,12nm,0.3s,baz=355 | | | | | | | |
| **TREC** | **Trest** | **2.30** | **192** | *e*SG | **Sb** | | **17 43 48.9** | **+0.2** |
| **KRUC** | **Moravsky** | **2.49** | **178** | *e*Pn | **Pn** | | **17 43 19.2** | **+0.2** |
| | baz=358 | | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | | **17 43 54.7** | **+0.8** |
| | comp=Z,16nm,0.6s,baz=358 | | | | | | | |
| **OJC** | **Ojcow** | **2.61** | **119** | *e*Pg | **Pg** | | **17 43 28.4** | **+1.2** |
| OJC | | | | *e*Sg | **Sg** | | **17 44 03.0** | **+1.9** |
| **NKC** | **Novy Kostel** | **2.74** | **243** | *e*SG | **Sg** | | **17 44 05.4** | **+0.2** |
| | comp=Z,29nm,0.3s | | | | | | | |
| **JAVC** | **Velka Javorina** | **2.84** | **161** | *e*PN | **Pn** | | **17 43 24.2** | **+0.3** |
| **KHC** | **Kasperske Hory** | **2.96** | **216** | *e*PN | **Pn** | | **17 43 26.0** | **+0.5** |
| KHC | | | | *e*PG | **Pb** | | **17 43 31.5** | **+0.7** |
| KHC | | | | *e*SN | **Sn** | | **17 44 00.5** | **-1.2** |
| KHC | | | | *e*SG | **Sb** | | **17 44 08.8** | **+1.3** |
| | comp=Z,11nm,0.4s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.00** | **205** | *e*PN | **Pn** | | **17 43 26.7** | **+0.7** |
| CKRC | | | | *e*PG | **Pb** | | **17 43 32.6** | **+1.1** |
| CKRC | | | | *e*SG | **Sb** | | **17 44 09.6** | **+1.0** |
| | comp=Z,15nm,0.4s | | | | | | | |
| **SMOL** | **Smolenice** | **3.13** | **165** | *e*PG | **Pg** | | **17 43 37.8** | **+0.6** |
| SMOL | | | | *e*SG | **Sg** | | **17 44 17.0** | **-0.7** |
| **GERES** | **GERESS Array B** | **3.16** | **212** | Pn | **Pn** | | **17 43 29.2** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=34,slow=16,SNR=7.5 | | | | | | | |
| GERES | | | | Pg | **Pb** | | **17 43 35.0** | **+0.8** |
| | comp=Z,2.5nm,0.3s,baz=31,slow=19,SNR=38 | | | | | | | |
| GERES | | | | Sn | **Sn** | | **17 44 05.6** | **-1.1** |
| | comp=Z,1.3nm,0.3s,baz=32,slow=28,SNR=4.1 | | | | | | | |
| GERES | | | | Lg | Lg | | 17 44 14.4 | |
| | comp=Z,4.1nm,0.3s,baz=32,slow=33,SNR=13 | | | | | | | |
| **NIE** | **Niedzica** | **3.35** | **128** | *e*P | **Pg** | | **17 43 42.3** | **+0.9** |
| NIE | | | | *e*S | **Sg** | | **17 44 26.9** | **+2.0** |
| **VYHS** | **Vyhne** | **3.48** | **150** | *e*PG | **Pg** | | **17 43 44.7** | **+0.8** |
| VYHS | | | | *e*SG | **Sg** | | **17 44 29.1** | **+0.1** |
| **CONA** | **Conrad Observa** | **3.63** | **184** | *e*Pn | **Pn** | | **17 43 35.7** | **+1.0** |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **BSD** | **Bornholm Skovb** | **3.66** | **348** | *i* S | **Sn** | | **17 44 17.0** | **-2.0** |
| **MOA** | **Molln** | **3.92** | **200** | *e*Pn | **Pn** | | **17 43 38.7** | **+0.1** |
| | comp=Z,0.6nm,0.2s | | | | | | | |
| **ARSA** | **Arzberg** | **4.32** | **187** | *e*Pn | **Pn** | | **17 43 44.4** | **+0.1** |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| ARSA | | | | Pg | **Pg** | | **17 43 59.9** | **-0.1** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **BLEU** | **Blekinge** | **4.78** | **357** | *e* | **Pn** | | **17 43 46.3** | **-4.1** |
| | baz=157,slow=7.9 | | | | | | | |
| BLEU | | | | *i* P | **Pn** | | **17 43 51.8** | **+1.4** |
| BLEU | | | | *i* S | **Sn** | | **17 44 45.9** | **-0.4** |
| **DEL** | **Delary** | **5.13** | **345** | *e* | Pn | | 17 43 48.0 | -7.2 |
| | baz=217,slow=16 | | | | | | | |
| DEL | | | | *i* P | **Pn** | | **17 43 56.0** | **+0.8** |
| DEL | | | | IAML | | | 17 44 56.8 | |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| **AKASG** | **Malin Array Be** | **8.21** | **91** | Pn | **Pn** | | **17 44 39.3** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=280,slow=12,SNR=2.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **11.30** | **25** | Pn | **Pn** | | **17 45 19.6** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=212,slow=11,SNR=1.9 | | | | | | | |
| FINES | | | | Sn | **Sn** | | **17 47 21.7** | **-4.8** |
| | comp=Z,0.1nm,0.3s,baz=219,slow=20,SNR=2.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.57** | **10** | Pn | **Pn** | | **17 46 55.7** | **+0.2** |
| | baz=192,slow=12,SNR=1.0 | | | | | | | |

*IDC* ***24*** *17:48:32.2±2.6,41˚.99N×120˚.04W, h0km, mb2.6/1, mb1 3.2/3, mb1mx3.0/35, mbtmp2.7/3, ML3.2/2, Error ellipse: s-maj=38.7km s-min=15.3km az=98.0*
*REN* ***24*** *17:48:32.4±1.7,41˚.89N±0˚.04×119˚.60W±0˚.06, h9km±1km, ML3.4/5, ML3.2/90(NEIC), Error ellipse: s-maj=6.3km s-min=5.5km az=86.0*
*ANF* ***24*** *17:48:32.5±1.0,41˚.81N×119˚.65W, h0km, ML3.4/11, Error ellipse: s-maj=9.8km s-min=6.4km az=123.0*
*NEIC* ***24*** *17:48:33.0±1.8,41˚.90N±0˚.04×119˚.62W±0˚.06, h13km±1km, Error ellipse: s-maj=6.3km s-min=5.6km az=85.0*

**ISC 24 17:48:32.0±1.2, 41˚.88N±0˚.03×119˚.59W±0˚.02, h4km±12km, n67, σ1§30/74, Nevada**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MOD** | **Modoc Plateau** | **0.54** | **273** | Pg | **Pg** | | **17 48 43.1** | **+0.8** |
| **MOD** | **Modoc Plateau** | **0.54** | **273** | | **Sb** | | **17 48 50.8** | **-1.5** |
| **WVOR** | **Wild Horse Val** | **0.90** | **52** | | **Pg** | | **17 48 49.5** | **+0.3** |
| WVOR | | | | | **Sg** | | **17 49 02.1** | **+1.3** |
| **WVOR** | **Wild Horse Val** | **0.90** | **52** | IAML | | | 17 49 06.0 | |
| | 1µm,0.6s | | | | | | | |
| WVOR | | | | IAML | | | 17 49 06.3 | |
| | 623nm,0.8s | | | | | | | |
| **K05A** | **Summer Lake** | **1.29** | **312** | | **Pb** | | **17 48 56.5** | **-0.4** |
| **M04C** | **Macdoel** | **1.69** | **267** | | **Pn** | | **17 49 02.3** | **-0.1** |
| **M04C** | **Macdoel** | **1.69** | **267** | P | **Pn** | | **17 49 02.5** | **+0.1** |
| | baz=86,SNR=150 | | | | | | | |
| M04C | | | | Sb | **Sg** | | **17 49 26.7** | **+0.5** |
| | baz=86 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **1.69** | **29** | | **Pn** | | **17 49 02.2** | **-0.2** |
| J08A | | | | IAML | | | 17 49 32.9 | |
| | comp=E,274nm,0.4s | | | | | | | |
| J08A | | | | IAML | | | 17 49 33.1 | |
| | comp=N,261nm,0.7s | | | | | | | |
| **K04D** | **Chiloquin, OR** | **1.77** | **296** | P | **Pb** | | **17 49 04.7** | **-0.4** |
| | baz=114,SNR=42 | | | | | | | |
| K04D | | | | S | **Sg** | | **17 49 28.7** | **-0.2** |
| | baz=114 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **1.86** | **320** | P | **Pb** | | **17 49 06.5** | **-0.1** |
| | baz=139,SNR=442 | | | | | | | |
| J05D | | | | S | **Sg** | | **17 49 32.3** | **+0.6** |
| | baz=139 | | | | | | | |
| **L04D** | **Klamath Falls** | **2.05** | **280** | Pn | **Pn** | | **17 49 07.3** | **-0.2** |
| L04D | | | | IAML | | | 17 49 41.4 | |
| | comp=E,233nm,0.7s | | | | | | | |
| L04D | | | | IAML | | | 17 49 45.6 | |
| | comp=N,164nm,0.6s | | | | | | | |
| **L04D** | **Klamath Falls** | **2.05** | **280** | P | **Pn** | | **17 49 07.4** | **-0.1** |
| | baz=98,SNR=55 | | | | | | | |
| L04D | | | | Sb | **Sg** | | **17 49 37.4** | **-0.6** |
| | baz=98 | | | | | | | |
| **BEKR** | **Beckworth** | **2.10** | **197** | Pn | **Pn** | | **17 49 09.3** | **+1.3** |
| BEKR | | | | IAML | | | 17 49 41.3 | |
| | comp=E,120nm,0.7s | | | | | | | |
| BEKR | | | | IAML | | | 17 49 50.7 | |
| | comp=N,109nm,0.7s | | | | | | | |
| **PINE** | **Pine Mountain** | **2.16** | **333** | | **Pb** | | **17 49 11.0** | **-0.7** |
| PINE | | | | IAML | | | 17 49 56.3 | |
| | comp=N,165nm,0.8s | | | | | | | |
| **PAHR** | **Pah Rah Range** | **2.18** | **176** | Pg | **Pb** | | **17 49 12.9** | **+0.8** |
| **I07A** | **Izee** | **2.20** | **2** | | **Pb** | | **17 49 12.3** | **-0.1** |
| I07A | | | | IAML | | | 17 49 43.2 | |
| | comp=N,202nm,0.7s | | | | | | | |
| **BMN** | **Battle Mountai** | **2.30** | **128** | | **Pb** | | **17 49 14.3** | **+0.2** |
| **BMN** | **Battle Mountai** | **2.30** | **128** | IAML | | | 17 49 47.1 | |
| | comp=N,92nm,0.6s | | | | | | | |
| BMN | | | | IAML | | | 17 49 47.3 | |
| | comp=E,108nm,0.6s | | | | | | | |
| **J04D** | **Umpqua Nationa** | **2.31** | **307** | | **Pb** | | **17 49 14.0** | **-0.3** |
| **J04D** | **Umpqua Nationa** | **2.31** | **307** | Pb | **Pb** | | **17 49 14.4** | **+0.1** |
| | baz=125 | | | | | | | |
| J04D | | | | Sb | **Sg** | | **17 49 47.0** | **+0.8** |
| | baz=125 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **2.34** | **267** | | **Pn** | | **17 49 11.2** | **-0.2** |
| **M02C** | **Callahan** | **2.50** | **260** | | **Pn** | | **17 49 12.7** | **-0.9** |
| **M02C** | **Callahan** | **2.50** | **260** | P | **Pn** | | **17 49 12.9** | **-0.6** |
| | baz=78,SNR=16 | | | | | | | |
| M02C | | | | Sb | **Sg** | | **17 49 50.5** | **-1.8** |
| | baz=78 | | | | | | | |
| **N02D** | **Trinity Center** | **2.52** | **250** | | **Pn** | | **17 49 13.0** | **-0.7** |
| **N02D** | **Trinity Center** | **2.52** | **250** | Pb | **Pb** | | **17 49 16.7** | **-1.1** |
| | baz=68 | | | | | | | |
| N02D | | | | Sg | **Sg** | | **17 49 52.5** | **-0.3** |
| | baz=68 | | | | | | | |
| **WDC** | **Whiskeytown Da** | **2.58** | **241** | | **Pn** | | **17 49 14.4** | **-0.1** |
| **WDC** | **Whiskeytown Da** | **2.58** | **241** | Pn | **Pn** | | **17 49 14.0** | **-0.5** |
| **WDC** | **Whiskeytown Da** | **2.58** | **241** | IAML | | | 17 49 55.7 | |
| | comp=N,83nm,0.8s | | | | | | | |
| **VCNR** | **Virginia City** | **2.58** | **181** | | **Pb** | | **17 49 20.3** | **+1.3** |
| VCNR | | | | IAML | | | 17 49 56.7 | |
| | comp=N,124nm,0.8s | | | | | | | |
| VCNR | | | | IAML | | | 17 49 57.8 | |
| | comp=E,134nm,1.1s | | | | | | | |
| **MPK** | **Martis Peak** | **2.60** | **188** | | **Pb** | | **17 49 20.4** | **+1.0** |
| MPK | | | | IAML | | | 17 50 04.1 | |
| | comp=E,136nm,1.4s | | | | | | | |
| MPK | | | | IAML | | | 17 50 08.6 | |
| | comp=N,131nm,0.9s | | | | | | | |
| **HUMO** | **Hull Mountain** | **2.61** | **287** | Pn | **Pn** | | **17 49 14.6** | **-0.3** |
| HUMO | | | | IAML | | | 17 49 54.4 | |
| | comp=N,84nm,0.7s | | | | | | | |
| HUMO | | | | IAML | | | 17 50 00.8 | |
| | comp=E,62nm,2.1s | | | | | | | |
| **ORV** | **Oroville** | **2.74** | **213** | | **Pn** | | **17 49 16.9** | **+0.1** |
| **PNTR** | **Pine Nut** | **2.79** | **180** | | **Pn** | | **17 49 17.1** | **-0.5** |
| PNTR | | | | IAML | | | 17 50 09.4 | |
| | comp=E,115nm,0.9s | | | | | | | |
| **I04A** | **Tendick Farm,** | **2.83** | **314** | Pb | **Pb** | | **17 49 23.4** | **+0.3** |
| | baz=132 | | | | | | | |
| **RUBR** | **Rubicon Trail** | **2.86** | **189** | | **Pn** | | **17 49 16.2** | **-2.4** |
| RUBR | | | | IAML | | | 17 50 08.7 | |
| | comp=E,68nm,0.7s | | | | | | | |
| RUBR | | | | IAML | | | 17 50 09.9 | |
| | comp=N,62nm,1.1s | | | | | | | |
| **YERR** | **Yerington** | **2.90** | **175** | | **Pn** | | **17 49 16.3** | **-2.9** |
| YERR | | | | IAML | | | 17 50 07.8 | |
| | comp=E,109nm,1.0s | | | | | | | |
| YERR | | | | IAML | | | 17 50 10.5 | |
| | comp=N,98nm,1.0s | | | | | | | |
| **EMB** | **Emerald Bay** | **2.93** | **188** | | **Pb** | | **17 49 26.7** | **+1.8** |
| EMB | | | | IAML | | | 17 50 08.2 | |
| | comp=E,52nm,1.0s | | | | | | | |
| EMB | | | | IAML | | | 17 50 11.1 | |
| | comp=N,50nm,1.0s | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **2.96** | **236** | Pn | **Pn** | | **17 49 20.1** | **+0.2** |
| **DBO** | **Dodson Butte** | **2.98** | **296** | | **Pb** | | **17 49 24.9** | **-0.8** |
| DBO | | | | IAML | | | 17 50 07.7 | |
| | comp=N,58nm,0.7s | | | | | | | |
| DBO | | | | IAML | | | 17 50 14.7 | |
| | comp=E,60nm,3.8s | | | | | | | |
| **L02E** | **Cave Junction** | **3.01** | **277** | | **Pn** | | **17 49 17.5** | **-3.0** |
| **L02E** | **Cave Junction** | **3.01** | **277** | P | **Pn** | | **17 49 21.2** | **+0.8** |
| | baz=94 | | | | | | | |
| **KVN** | **Kaiserville** | **3.04** | **158** | | **Pn** | | **17 49 18.4** | **-2.7** |
| KVN | | | | IAML | | | 17 50 13.4 | |
| | comp=N,42nm,0.8s | | | | | | | |
| KVN | | | | IAML | | | 17 50 14.7 | |
| | comp=E,41nm,1.6s | | | | | | | |
| **K02D** | **Willamette Mer** | **3.13** | **286** | P | **Pn** | | **17 49 23.8** | **+1.6** |
| | baz=104 | | | | | | | |
| K02D | | | | S | **Sn** | | **17 50 02.2** | **+2.0** |
| | baz=104 | | | | | | | |
| **MFID** | **Camas Ranch** | **3.17** | **60** | Pn | **Pn** | | **17 49 23.6** | **+0.8** |
| **KHMM** | **Horse Mountain** | **3.28** | **254** | | **Pb** | | **17 49 32.1** | **+1.3** |
| KHMM | | | | IAML | | | 17 50 27.2 | |
| | comp=E,58nm,1.2s | | | | | | | |
| KHMM | | | | IAML | | | 17 50 30.7 | |
| | comp=N,79nm,3.8s | | | | | | | |
| **I03D** | **Drain, OR** | **3.31** | **305** | Pb | **Pb** | | **17 49 32.6** | **+1.3** |
| | baz=122 | | | | | | | |
| **RYN** | **Ryan** | **3.35** | **166** | | **Pn** | | **17 49 24.6** | **-0.6** |
| RYN | | | | IAML | | | 17 50 28.5 | |
| | comp=N,39nm,0.7s | | | | | | | |
| RYN | | | | IAML | | | 17 50 29.4 | |
| | comp=E,39nm,1.0s | | | | | | | |
| **H04A** | **Detroit Lake** | **3.39** | **327** | | **Pb** | | **17 49 32.9** | **+0.3** |
| **BMO** | **Blue Mountains** | **3.41** | **28** | | **Pn** | | **17 49 26.3** | **+0.4** |
| **G08A** | **Pilot Rock** | **3.44** | **7** | | **Pb** | | **17 49 34.4** | **+0.9** |
| **J01E** | **Myrtle Point** | **3.46** | **293** | | **Pn** | | **17 49 26.1** | **-0.5** |
| J01E | | | | IAML | | | 17 50 29.9 | |
| | comp=E,49nm,2.0s | | | | | | | |
| **ELK** | **Elko** | **3.46** | **108** | | **Pb** | | **17 49 32.8** | **-1.3** |
| ELK | | | | IAML | | | 17 50 21.5 | |
| | comp=E,51nm,0.3s | | | | | | | |
| **H04D** | **Lebanon** | **3.51** | **320** | | **Pn** | | **17 49 25.3** | **-2.0** |
| **NVAR** | **Mina Array Bea** | **3.58** | **164** | Pn | **Pn** | | **17 49 32.0** | **+3.5** |
| | comp=E,0.5nm,0.3s,baz=340,slow=13,SNR=9.3 | | | | | | | |
| NVAR | | | | Pg | **Pg** | | **17 49 39.7** | **-1.0** |
| | comp=E,2.2nm,0.3s,baz=339,slow=14,SNR=16 | | | | | | | |
| NVAR | | | | Lg | Lg | | 17 50 27.4 | |
| | comp=E,3.7nm,0.3s,baz=348,slow=34,SNR=8.7 | | | | | | | |
| **LHV** | **Little Huntoon** | **3.72** | **167** | | **Pn** | | **17 49 29.0** | **-1.1** |
| LHV | | | | IAML | | | 17 50 40.4 | |
| | comp=N,55nm,0.8s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **4.43** | **22** | | **Pb** | | **17 49 48.8** | **-1.6** |
| F10A | | | | IAML | | | 17 50 56.3 | |
| | comp=E,17nm,3.0s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **4.67** | **138** | | **Pn** | | **17 49 43.6** | **+0.2** |
| R11A | | | | IAML | | | 17 51 03.6 | |
| | comp=E,14nm,0.6s | | | | | | | |
| R11A | | | | IAML | | | 17 51 16.2 | |
| | comp=N,15nm,4.7s | | | | | | | |
| **E09A** | **Wood Farm, Sta** | **4.75** | **12** | Pn | **Pn** | | **17 49 42.4** | **-1.9** |
| E09A | | | | IAML | | | 17 51 16.0 | |
| | comp=N,13nm,4.2s | | | | | | | |
| E09A | | | | IAML | | | 17 52 03.0 | |
| | comp=E,12nm,3.5s | | | | | | | |
| **BGU** | **Big Grassy Mou** | **5.02** | **99** | | **Pn** | | **17 49 47.0** | **-1.3** |
| BGU | | | | IAML | | | 17 51 24.3 | |
| | comp=E,18nm,0.9s | | | | | | | |
| **PRN** | **Pahroc Range** | **5.67** | **140** | | **Pn** | | **17 50 00.0** | **+2.8** |
| **MCMT** | **McKenzie Canyo** | **5.73** | **57** | | **Pn** | | **17 49 58.3** | **+0.3** |
| **TPAW** | **Teton Pass** | **6.56** | **73** | | **Pb** | | **17 50 25.2** | **-1.6** |
| **MOOW** | **Moose Ponds** | **6.76** | **71** | | **Pb** | | **17 50 30.7** | **+0.5** |
| **LOHW** | **Long Hollow** | **6.83** | **72** | | **Pb** | | **17 50 29.4** | **-2.1** |
| **MTPU** | **Mount Pierson** | **6.86** | **122** | Pn | **Pn** | | **17 50 13.3** | **-0.3** |
| **PDAR** | **Pinedale Array** | **7.48** | **80** | Pn | Pn | | 17 50 30.2 | +8.1 |
| | comp=E,0.1nm,0.3s,baz=265,slow=11,SNR=3.1 | | | | | | | |
| PDAR | | | | Pg | **Pb** | | **17 50 45.2** | **+2.7** |
| | comp=E,0.2nm,0.3s,baz=258,slow=13,SNR=5.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.86** | **6** | P | **P** | | **17 53 14.4** | **-0.2** |
| | comp=E,0.3nm,0.8s,baz=192,slow=11,SNR=5.1 | | | | | | | |

**IDC 24 17:59:06.3±1.8, 25˚.19N×96˚.76E, h0km, mb3.1/2, mb1 3.1/3, mb1mx2.9/40, mbtmp3.0/3, ML3.2/1, MS3.0/1, Ms1 3.0/1, ms1mx2.3/26, Error ellipse: s-maj=83.1km s-min=26.4km az=66.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.00** | **163** | Pn | Pn | | 18 00 49.2 | -0.9 |
| | 0.1nm,0.3s,baz=337,slow=13,SNR=3.1 | | | | | | | |
| CMAR | | | | Pg | Pb | | 18 01 13.8 | +4.9 |
| | 0.1nm,0.3s,baz=339,slow=16,SNR=8.7 | | | | | | | |
| CMAR | | | | Lg | Lg | | 18 02 44.5 | |
| | 0.0nm,0.3s,baz=339,slow=29,SNR=3.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **24.45** | **336** | P | P | | 18 04 26.6 | -0.2 |
| | 0.2nm,0.5s,baz=132,slow=9.0,SNR=3.7 | | | | | | | |
| **KAPI** | **Kappang** | **37.43** | **140** | LR | LR | | 18 23 03.2 | |
| | comp=Z,21nm,19.5s,baz=193,slow=38 | | | | | | | |
| **ASAR** | **Alice Springs** | **60.45** | **140** | P | P | | 18 09 18.4 | +0.4 |
| | 0.2nm,0.8s,baz=330,slow=7.5,SNR=1.9 | | | | | | | |

*NEIC* ***24*** *18:01:46.9±5.3, 15˚.45S×72˚.2W±0˚.2, h113km±52km, Error ellipse: s-maj=24.2km s-min=17.2km az=91.0*
*IDC* ***24*** *18:01:50.3±1.9, 16˚.00S×72˚.37W, h0km, mb3.4/1, mb1 3.5/3, mb1mx3.4/28, mbtmp3.3/3, ML2.8/2, MS2.9/2, Ms1 3.0/2, ms1mx2.5/22, Error ellipse: s-maj=65.9km s-min=30.5km az=56.0*
*ARE* ***24*** *18:01:50.2±2.8, 15˚.71S±0˚.06×71˚.8W±0˚.1, h11km±9km, ML4.1, Error ellipse: s-maj=17.4km s-min=6.5km az=69.0*

**ISC 24 18:01:50.8±1.4, 15˚.76S±0˚.07×71˚.8W±0˚.1, h10km, n24, σ1§52/24, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **2.94** | **152** | Pn | **Pn** | | **18 02 35.5** | **-2.1** |
| **PB12** | **IPOC Station P** | **3.16** | **154** | Pn | **Pn** | | **18 02 39.9** | **-0.8** |
| PB12 | | | | | **Pb** | | **18 02 44.7** | **-2.5** |
| PB12 | | | | | **Sb** | | **18 03 26.2** | **+0.4** |
| **LPAZ** | **La Paz** | **3.54** | **99** | Pn | **Pb** | | **18 02 54.2** | **+0.2** |
| | 0.2nm,0.3s,baz=265,slow=12,SNR=3.5 | | | | | | | |
| **LPAZ** | **La Paz** | **3.54** | **99** | Pn | **Pn** | | **18 02 45.4** | **-1.1** |
| **PB11** | **IPOC Station P** | **4.46** | **153** | Pn | **Pn** | | **18 02 57.4** | **-1.4** |
| **GO01** | **Chusmiza** | **4.60** | **148** | Pn | **Pn** | | **18 03 01.0** | **+0.1** |
| **TA02** | **Huaiquique** | **4.75** | **161** | Pn | **Pn** | | **18 02 59.1** | **-3.5** |
| **PB08** | **IPOC Station P** | **5.02** | **151** | Pn | **Pn** | | **18 03 06.4** | **-0.2** |
| **PB01** | **IPOC Station P** | **5.69** | **158** | Pn | **Pn** | | **18 03 16.2** | **+0.7** |
| **PB02** | **IPOC Station P** | **5.81** | **162** | Pn | **Pn** | | **18 03 16.4** | **-0.9** |
| **NNA** | **Nana** | **6.18** | **307** | LR | LR | | 18 05 40.3 | |
| | comp=Z,69nm,21.2s,baz=23,slow=39 | | | | | | | |
| **PB07** | **IPOC Station P** | **6.20** | **164** | Pn | **Pn** | | **18 03 23.7** | **+1.0** |
| **PB09** | **IPOC Station P** | **6.47** | **159** | Pn | **Pn** | | **18 03 26.1** | **-0.2** |
| **PB03** | **IPOC Station P** | **6.54** | **163** | Pn | **Pn** | | **18 03 28.9** | **+1.6** |
| PB03 | | | | Sn | **Sn** | | **18 04 41.9** | **-0.3** |
| **PB04** | **IPOC Station P** | **6.72** | **167** | Pn | **Pn** | | **18 03 30.6** | **+0.8** |
| **LVC** | **Limon Verde** | **7.33** | **159** | Pn | **Pn** | | **18 03 38.7** | **+0.3** |
| | 0.4nm,0.3s,baz=342,slow=11,SNR=2.8 | | | | | | | |
| LVC | | | | Sn | **Sn** | | **18 05 04.0** | **+2.0** |
| | 0.1nm,0.3s,baz=60,slow=13,SNR=1.7 | | | | | | | |
| **LVC** | **Limon Verde** | **7.33** | **159** | Pn | **Pn** | | **18 03 39.2** | **+0.8** |
| **PB15** | **IPOC Station P** | **7.72** | **164** | Pn | **Pn** | | **18 03 45.8** | **+2.2** |
| PB15 | | | | Sn | **Sn** | | **18 05 13.9** | **+2.5** |
| **H03N1** | **Juan Fernandez** | **18.75** | **199** | T | T | | 18 24 32.0 | |
| | baz=19 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **18.76** | **199** | T | T | | 18 24 25.7 | |
| | baz=19 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **18.77** | **199** | T | T | | 18 24 33.4 | |
| | baz=19 | | | | | | | |
| **PLCA** | **Paso Flores** | **24.91** | **178** | LR | LR | | 18 18 00.5 | |
| | comp=Z,53nm,18.4s,baz=193,slow=39 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.90** | **342** | P | **P** | | **18 14 25.6** | **0.0** |
| | 0.1nm,0.4s,baz=141,slow=6.6,SNR=2.4 | | | | | | | |
| **SONM** | **Songino Array** | **147.98** | **2** | PKPbc | **PKPab** | | **18 21 39.8** | **+0.5** |
| | 0.2nm,0.4s,baz=5.7,slow=1.4,SNR=1.8 | | | | | | | |

**IDC 24 18:19:35.9±9.3, 4˚.92S×127˚.12E, h530km±128km, mb2.5/1, mb1 2.6/4, mb1mx2.4/45, mbtmp3.4/4, Error ellipse: s-maj=128.4km s-min=39.1km az=53.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **13.18** | **186** | P | P | | 18 22 25.9 | -0.9 |
| | 0.1nm,0.3s,baz=355,slow=11,SNR=1.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.51** | **155** | P | P | | 18 23 00.9 | -0.1 |
| | 0.2nm,0.3s,baz=335,slow=10,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **19.76** | **161** | P | P | | 18 23 30.9 | +0.1 |
| | 0.0nm,0.3s,baz=339,slow=8.9,SNR=6.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.94** | **328** | P | P | | 18 29 23.3 | +0.1 |
| | 0.4nm,1.0s,baz=142,slow=5.1,SNR=2.2 | | | | | | | |

*NNC* ***24*** *18:33:05.0±1.5, 40˚.56N×62˚.96E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=20.4km s-min=9.2km az=126.0*
*IDC* ***24*** *18:33:06.8±1.9, 40˚.49N×62˚.99E, h0km, mb3.8/3, mb1 3.7/7, mb1mx3.4/45, mbtmp3.6/7, ML3.1/4, Error ellipse: s-maj=39.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BKZ** | **Black Stump Fm** | **16.83** | **190** | P | **P** | **18 49 50.5** | **-0.5** |
| BKZ | | | | IAmb | IAmb | 18 50 33.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.53** | **246** | P | **P** | **18 52 34.6** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=57,slow=12,SNR=3.1 | | | | | | |
| **STKA** | **Stephens Creek** | **35.53** | **246** | IAmb | IAmb | 18 52 44.5 | |
| | comp=Z,4.9nm,1.6s | | | | | | |
| **BBOO** | **Buckleboo** | **40.27** | **246** | P | **P** | **18 53 14.3** | **+1.1** |
| **AS31** | **Alice Springs** | **42.59** | **259** | P | **P** | **18 53 32.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **42.59** | **259** | P | **P** | **18 53 31.8** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=101,slow=7.5,SNR=16 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 55 10.5** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=100,slow=4.2,SNR=6.6 | | | | | | |
| **WR0** | **Warramunga Arr** | **42.66** | **265** | P | **P** | **18 53 32.4** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 18 55 18.8 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.83** | **265** | P | **P** | **18 53 33.7** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 18 53 54.8 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.84** | **265** | P | **P** | **18 53 33.9** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 18 54 43.7 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.84** | **265** | P | **P** | **18 53 33.9** | **+0.3** |
| WRAB | | | | IAmb | IAmb | 18 53 42.7 | |
| | comp=Z,14nm,1.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.85** | **265** | P | **P** | **18 53 33.7** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=92,slow=5.8,SNR=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.28** | **264** | P | **P** | **18 54 37.5** | **+0.7** |
| **QSPA** | **South Pole Qui** | **67.46** | **180** | P | **P** | **18 56 24.1** | **+0.1** |
| QSPA | | | | IAmb | IAmb | 18 58 18.2 | |
| | comp=Z,21nm,1.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.59** | **44** | P | **P** | **18 57 54.5** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=223,slow=7.1,SNR=4.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.40** | **290** | P | **P** | **18 58 22.6** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=125,slow=2.9,SNR=6.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.47** | **58** | P | **P** | **18 58 22.3** | **+0.7** |
| | comp=Z,0.9nm,1.0s,baz=210,slow=4.3,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.53** | **313** | PKiKP | **PKiKP** | **19 03 53.6** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=92,slow=0.7,SNR=4.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.70** | **349** | PKP | **PKPdf** | **19 04 30.3** | **-0.1** |
| | comp=Z,3.9nm,1.0s,baz=280,slow=0.7,SNR=5.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.70** | **349** | | **PKPdf** | **19 04 29.7** | **-0.7** |
| **AKASG** | **Malin Array Be** | **144.07** | **328** | PKP | PKPbc | 19 04 54.1 | -0.8 |
| | comp=Z,0.6nm,0.3s,baz=44,slow=4.1,SNR=14 | | | | | | |
| **CLL** | **Collm** | **149.72** | **344** | *i* PKPbc | **PKPbc** | **19 05 10.0** | **-0.1** |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B** | **151.76** | **341** | PKPbc | **PKPbc** | **19 05 14.6** | **-0.4** |
| | comp=Z,0.1nm,0.2s,baz=57,slow=3.6,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **170.50** | **188** | PKP | **PKPdf** | **19 05 27.6** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=218,slow=1.4,SNR=3.7 | | | | | | |

*SFS **24** 19:02:15.0,35°.62N×3°.69W,ML2.7,ALBORAN S.*
*CNRM **24** 19:02:15.0,35°.73N×3°.55W,h23km,ml2.7*
**ISC 24 19:02:13.4±1.1,35°.64N±0°.04×3°.61W±0°.03,h17km±10km, n13,σ1§46/25,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.50** | **213** | P | **Pn** | **19 02 27.3** | **+1.6** |
| PALE | | | | S | **Sn** | **19 02 34.4** | **+0.4** |
| **GOG** | **Mont Gurugu** | **0.65** | **129** | P | **Pn** | **19 02 28.8** | **+0.9** |
| GOG | | | | S | **Sn** | **19 02 37.4** | **-0.4** |
| **CHAS** | **Isla Isabel II** | **1.06** | **115** | P | **Pg** | **19 02 34.9** | **+0.8** |
| CHAS | | | | S | **Sn** | **19 02 48.0** | **+0.1** |
| **TAF** | **Taforalt** | **1.28** | **130** | P | **Pg** | **19 02 38.5** | **+0.4** |
| TAF | | | | S | **Sg** | **19 02 55.3** | **+0.5** |
| **EMAL** | **Malaga-Limoner** | **1.30** | **330** | P | **Pg** | **19 02 38.2** | **-0.3** |
| EMAL | | | | S | **Sg** | **19 02 54.3** | **-1.2** |
| **CHEFC** | **Chefchaouen** | **1.51** | **250** | P | **Pg** | **19 02 42.6** | **+0.1** |
| CHEFC | | | | S | **Sg** | **19 03 03.2** | **+1.0** |
| **JBK** | **JBK** | **1.56** | **146** | P | **Pg** | **19 02 42.6** | **-0.8** |
| JBK | | | | S | **Sb** | **19 03 01.3** | **-0.1** |
| **SICH** | **Sidi Chahed** | **2.08** | **223** | P | **Pn** | **19 02 48.6** | **+1.2** |
| **IFR** | **Ifrane** | **2.46** | **211** | P | **Pb** | **19 02 57.7** | **+0.5** |
| IFR | | | | S | **Sb** | **19 03 26.0** | **-1.3** |
| **MD31** | **MD31** | **2.92** | **199** | P | **Pb** | **19 03 03.5** | **-1.6** |
| MD31 | | | | S | **Sb** | **19 03 39.8** | **-0.8** |
| **MDT** | **Midelt** | **2.94** | **197** | P | **Pb** | **19 03 03.2** | **-2.2** |
| MDT | | | | S | **Sb** | **19 03 38.3** | **-2.7** |
| **ZHG** | **ZHG** | **3.32** | **230** | P | **Pn** | **19 03 08.0** | **+3.4** |
| ZHG | | | | S | **Sb** | **19 03 50.6** | **-1.5** |
| **PVAQ** | **Vaqueiros** | **3.75** | **299** | P | **Pn** | **19 03 12.5** | **+2.1** |
| PVAQ | | | | S | **Sn** | **19 03 53.2** | **-0.9** |

*DJA **24** 19:08:02.8±0.3,1°.N±3°.×9°.9E±°,h54km±9km,M4.2/13, mb4.2/6,mB5.2/1,MLv4.2/13,Mw(mB)4.6/1*
*IDC **24** 19:08:03.3±5.5,0°.81N×99°.12E,h87km±31km,mb3.3/7, mb1 3.5/7,mb1mx3.2/36,mbtmp3.6/7,Error ellipse: s-maj=143.1km s-min=17.2km az=60.0*
**ISC 24 19:08:02.5±0.8,0°.74N±0°.08×98°.74E±0°.07,h100km,n26, σ1§50/25,mb3.5/7,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SBSI** | **Sibolga** | **0.82** | **11** | P | **Pn** | **19 08 19.9** | **-1.2** |
| SBSI | | | | S | **Sn** | **19 08 33.8** | **-1.2** |
| **MNSI** | **Mandailing Nat** | **0.84** | **86** | P | **Pn** | **19 08 19.1** | **-2.1** |
| MNSI | | | | S | **Sn** | **19 08 31.6** | **-3.7** |
| **GSI** | **Gunungsitoli** | **1.29** | **296** | P | **Pn** | **19 08 25.1** | **-1.1** |
| GSI | | | | S | **Sn** | **19 08 41.7** | **-2.5** |
| **GSI** | **Gunungsitoli** | **1.29** | **296** | P | **Pn** | **19 08 25.4** | **-0.8** |
| **PSI** | **Prapat** | **2.06** | **5** | P | **Pn** | **19 08 33.9** | **-2.0** |
| | 11nm,0.3s,baz=317,slow=5.6,SNR=20 | | | | | | |
| PSI | | | | S | Sn | 19 08 51.4 | -10 |
| | 18nm,0.3s,baz=347,slow=14,SNR=12 | | | | | | |
| **BKNI** | **Bangkinang** | **2.34** | **100** | P | **Pn** | **19 08 39.0** | **-0.4** |
| **BKNI** | **Bangkinang** | **2.34** | **100** | P | **Pn** | **19 08 39.6** | **+0.2** |
| **KCSI** | **Kotacane, Aceh** | **2.93** | **341** | P | **Pn** | **19 08 46.9** | **-0.4** |
| **KRJI** | **Kerinci** | **3.92** | **136** | P | Pn | 19 09 08.7 | +8.1 |
| **IPM** | **Ipoh** | **4.36** | **32** | P | **Pn** | **19 09 08.3** | **+1.7** |
| **TPRI** | **Tanjung Pinang** | **5.79** | **88** | P | **Pn** | **19 09 26.0** | **+0.1** |
| | 0.2nm32nm,1.2s | | | | | | |
| **MNAI** | **Manna** | **6.59** | **140** | P | **Pn** | **19 09 36.4** | **-0.4** |
| **MNAI** | **Manna** | **6.59** | **140** | P | **Pn** | **19 09 37.1** | **+0.3** |
| **MDSI** | **Maura Dua** | **7.52** | **134** | P | **Pn** | **19 09 49.4** | **0.0** |
| | 0.0nm11nm,0.7s | | | | | | |
| **KLSI** | | **8.06** | **132** | P | **Pn** | **19 09 57.3** | **+0.5** |
| | 4.1nm,2.1s | | | | | | |
| **KASI** | **Kota Agung** | **8.47** | **137** | P | **Pn** | **19 10 02.5** | **+0.1** |
| **H08S2** | **Diego Garcia H** | **27.47** | **252** | T | T | 19 41 18.6 | |
| | baz=72,slow=75,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.47** | **252** | T | T | 19 41 19.7 | |
| | baz=72,slow=75,SNR=15 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.49** | **252** | T | T | 19 41 19.2 | |
| | baz=72,slow=75,SNR=4.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.42** | **127** | P | **P** | **19 14 22.8** | **-0.4** |
| | 2.9nm,1.0s,baz=284,slow=8.3,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.49** | **122** | P | **P** | **19 15 31.7** | **-0.1** |
| | 0.7nm,0.8s,baz=303,slow=8.9,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **41.90** | **128** | P | **P** | **19 15 43.6** | **+0.2** |
| | 0.5nm,0.7s,baz=300,slow=7.3,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **47.38** | **7** | P | **P** | **19 16 27.4** | **+0.8** |
| | 0.4nm,0.5s,baz=165,slow=6.0,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.07** | **345** | P | **P** | **19 16 34.3** | **+2.4** |
| | 0.2nm,0.5s,baz=142,slow=8.4,SNR=2.7 | | | | | | |
| **STKA** | **Stephens Creek** | **51.91** | **133** | P | **P** | **19 17 00.6** | **-0.6** |
| | 1.3nm,0.8s,baz=306,slow=8.7,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.26** | **350** | P | **P** | **19 17 20.4** | **+2.4** |
| | 0.2nm,0.3s,baz=158,slow=7.0,SNR=1.9 | | | | | | |

**IDC 24 19:08:45.7±3.3,11°.47N×95°.08E,h0km,mb3.6/5, mb1 3.8/5,mb1mx3.4/37,mbtmp3.6/5,Error ellipse: s-maj=145.2km s-min=22.9km az=65.0,Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **36.84** | **345** | P | P | 19 15 55.7 | +0.1 |
| | 0.3nm,0.6s,baz=162,slow=7.7,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **37.48** | **13** | P | P | 19 16 00.8 | -0.4 |
| | 0.1nm,0.4s,baz=206,slow=8.1,SNR=1.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **42.11** | **134** | P | P | 19 16 39.0 | -0.8 |
| | 2.4nm,1.0s,baz=303,slow=9.5,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.68** | **129** | P | P | 19 17 40.7 | +1.0 |
| | 1.5nm,0.7s,baz=308,slow=8.2,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **51.58** | **133** | P | P | 19 17 53.4 | -0.7 |
| | 0.5nm,0.5s,baz=308,slow=7.3,SNR=7.4 | | | | | | |

*IDC **24** 19:09:55.2±0.7,30°.16S×71°.65W,h0km,mb4.3/8, mb1 4.4/12,mb1mx4.2/29,mbtmp4.3/12,ML4.1/4,MS3.8/23,*

*Ms1 3.8/23,ms1mx3.6/56,Error ellipse: s-maj=24.2km s-min=20.8km az=97.0*
*NEIC **24** 19:09:57.6±1.9,29°.93S±0°.04×71°.83W±0°.05,h15km±4km, mb4.6/14,ML4.7(GUC),Error ellipse: s-maj=6.4km s-min=6.2km az=162.0*
*VAO **24** 19:09:58.6±0.5,30°.04S×71°.64W,h15km,mb4.4*
*SJA **24** 19:09:59.0,29°.84S×71°.77W,h10km,ML4.6*
*GUC **24** 19:10:01.9±0.7,29°.80S×71°.48W,h38km±2km,ML4.7*
**ISC 24 19:09:57.7±1.2,29°.94S±0°.02×71°.67W±0°.04,h12km±7km, n175,σ1§62/172,mb4.6/9,MS3.8/17,2C-6D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO05** | **La Serena** | **0.37** | **87** | | **Pn** | **19 10 08.5** | **-0.4** |
| CO05 | | | | Sg | **Sn** | **19 10 14.5** | **+4.3** |
| **CO05** | **La Serena** | **0.37** | **87** | ↓*i* | **Pn** | **19 10 08.5** | **-0.4** |
| CO05 | | | | *i* S | **Sn** | **19 10 14.3** | **+4.1** |
| CO05 | | | | IAML | | 19 10 16.0 | |
| | comp=N,94μm,0.4s | | | | | | |
| **CO06** | **Fray Jorge** | **0.73** | **178** | | **Pg** | **19 10 13.1** | **+1.2** |
| **CO06** | **Fray Jorge** | **0.73** | **178** | *eP* | **Pn** | **19 10 18.2** | **+4.3** |
| **GO04** | **Tololo Observa** | **0.79** | **107** | | **Pn** | **19 10 14.7** | **-0.1** |
| **GO04** | **Tololo Observa** | **0.79** | **107** | ↓*iP* | **Pn** | **19 10 14.9** | **0.0** |
| GO04 | | | | *i* S | **Sn** | **19 10 25.7** | **-1.0** |
| **GO04** | **Tololo Observa** | **0.79** | **107** | *i* P | **Pn** | **19 10 14.9** | **0.0** |
| GO04 | | | | *i* S | **Sn** | **19 10 26.0** | **-0.6** |
| **CO03** | **El Pedregal** | **1.23** | **137** | Pn | **Pn** | **19 10 21.2** | **+0.4** |
| CO03 | | | | Sn | **Sb** | **19 10 36.2** | **-0.7** |
| **CO03** | **El Pedregal** | **1.23** | **137** | ↓*iP* | **Pn** | **19 10 21.2** | **+0.4** |
| CO03 | | | | *i* S | **Sb** | **19 10 37.5** | **+0.6** |
| **LCO** | **Las Campanas** | **1.25** | **43** | | **Pg** | **19 10 22.4** | **+0.6** |
| **LCO** | **Las Campanas** | **1.25** | **43** | *eP* | **Pg** | **19 10 22.4** | **+0.6** |
| **LCO** | **Las Campanas** | **1.25** | **43** | *i* P | **Pg** | **19 10 22.5** | **+0.7** |
| LCO | | | | *i* S | **Sg** | **19 10 39.1** | **+0.9** |
| **CO02** | **Combarbal** | **1.39** | **156** | Pn | **Pn** | **19 10 23.8** | **+0.8** |
| **CO02** | **Combarbal** | **1.39** | **156** | ↓*iP* | **Pn** | **19 10 23.8** | **+0.8** |
| CO02 | | | | *i* S | **Sn** | **19 10 41.8** | **+0.5** |
| CO02 | | | | IAML | | 19 10 46.6 | |
| | comp=N,31μm,0.4s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | | **Pn** | **19 10 29.3** | **+0.6** |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | ↓*iP* | **Pn** | **19 10 29.4** | **+0.8** |
| AC04 | | | | *i* S | **Sn** | **19 10 50.9** | **-0.5** |
| AC04 | | | | IAML | | 19 11 01.7 | |
| | comp=N,7μm,0.7s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.81** | **17** | *i* P | **Pn** | **19 10 29.5** | **+0.8** |
| AC04 | | | | *i* S | **Sg** | **19 10 57.4** | **+1.6** |
| **ACDV** | **Cuesta del Vie** | **2.22** | **97** | *i* P | **Pb** | **19 10 38.8** | **+0.9** |
| ACDV | | | | *i* S | **Sg** | **19 11 07.6** | **-1.6** |
| **ACCO** | **Cerro Coronel** | **2.34** | **107** | *i* P | **Pb** | **19 10 40.7** | **+0.6** |
| **VA06** | **Catapilco** | **2.63** | **173** | | **Pn** | **19 10 39.9** | **-0.1** |
| **VA06** | **Catapilco** | **2.63** | **173** | *i* S | **Sb** | **19 11 18.5** | **+1.4** |
| VA06 | | | | IAML | | 19 11 31.6 | |
| | comp=N,4μm,0.1s | | | | | | |
| **GO03** | **Copiap** | **2.66** | **29** | Pn | **Pn** | **19 10 41.7** | **+1.4** |
| **GO03** | **Copiap** | **2.66** | **29** | *eP* | **Pn** | **19 10 41.5** | **+1.2** |
| GO03 | | | | IAML | | 19 11 28.9 | |
| | comp=E,4μm,0.3s | | | | | | |
| **GO03** | **Copiap** | **2.66** | **29** | *i* P | **Pn** | **19 10 42.0** | **+1.6** |
| GO03 | | | | *i* S | **Sg** | **19 11 22.5** | **-0.6** |
| **AC06** | **Mina Casimiro** | **2.82** | **24** | | **Pn** | **19 10 42.7** | **+0.1** |
| **AC06** | **Mina Casimiro** | **2.82** | **24** | ↓*iP* | **Pn** | **19 10 44.0** | **+1.3** |
| AC06 | | | | IAML | | 19 11 30.5 | |
| | comp=E,3μm,0.8s | | | | | | |
| **VA03** | **San Esteban** | **2.97** | **162** | | **Pn** | **19 10 45.6** | **+0.8** |
| **VA03** | **San Esteban** | **2.97** | **162** | *eP* | **Pn** | **19 10 47.2** | **+2.4** |
| VA03 | | | | *i* S | **Sb** | **19 11 26.1** | **-0.9** |
| VA03 | | | | IAML | | 19 11 44.4 | |
| | comp=N,3μm,0.8s | | | | | | |
| **VA03** | **San Esteban** | **2.97** | **162** | *i* P | **Pn** | **19 10 48.0** | **+3.2** |
| **AUSP** | **Uspallata** | **3.00** | **140** | *i* P | **Pb** | **19 10 49.9** | **-1.4** |
| AUSP | | | | *i* S | **Sb** | **19 11 26.9** | **-1.1** |
| **ZON** | **Zonda** | **3.03** | **123** | Pn | **Pn** | **19 10 48.6** | **+3.1** |
| **ZON** | **Zonda** | **3.03** | **123** | *i* P | **Pb** | **19 10 50.0** | **-1.6** |
| **VA01** | **Torpederas** | **3.07** | **180** | Pn | **Pn** | **19 10 44.2** | **-1.9** |
| **VA01** | **Torpederas** | **3.07** | **180** | IAML | | 19 11 42.1 | |
| | comp=E,734nm,0.6s | | | | | | |
| **ROCH** | **El Roble** | **3.08** | **170** | *eP* | Pb | 19 10 47.5 | -5.0 |
| ROCH | | | | *eP* | **Pn** | **19 10 45.9** | **-0.4** |
| ROCH | | | | IAML | | 19 11 42.0 | |
| | comp=N,3μm,0.3s | | | | | | |
| **ROC1** | **El Roble** | **3.08** | **170** | | **Pn** | **19 10 43.0** | **-3.4** |
| **RTLL** | **Cerro Villicun** | **3.08** | **118** | *i* P | **Pn** | **19 10 48.0** | **+1.8** |
| **PEL** | **Peldehue** | **3.30** | **166** | Pn | **Pn** | **19 10 50.4** | **+1.1** |
| **PEL** | **Peldehue** | **3.30** | **166** | ↑*iP* | **Pn** | **19 10 51.0** | **+1.7** |
| PEL | | | | IAML | | 19 11 42.6 | |
| | comp=E,1μm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **3.30** | **166** | *i* P | **Pn** | **19 10 51.0** | **+1.7** |
| **MT02** | **Curacav** | **3.34** | **172** | | **Pn** | **19 10 50.6** | **+0.8** |
| **MT02** | **Curacav** | **3.34** | **172** | IAML | | 19 11 47.5 | |
| | comp=E,946nm,0.4s | | | | | | |
| **MT05** | **Renca** | **3.53** | **167** | | **Pn** | **19 10 51.6** | **-0.8** |
| **MT03** | **Universidad Ad** | **3.68** | **165** | Pn | **Pn** | **19 10 54.6** | **+0.1** |
| **VA05** | **Santo Domingo** | **3.71** | **179** | | **Pn** | **19 10 54.4** | **-0.4** |
| **AC02** | **Maricunga** | **3.82** | **36** | Pn | **Pn** | **19 10 57.3** | **+0.5** |
| **AC02** | **Maricunga** | **3.82** | **36** | *i* P | **Pn** | **19 11 00.0** | **+3.3** |
| **MT09** | **Talagante** | **3.87** | **172** | | **Pn** | **19 10 58.3** | **+1.2** |
| **MT09** | **Talagante** | **3.87** | **172** | *eP* | **Pn** | **19 10 58.4** | **+1.2** |
| **MT01** | **Popeta** | **3.93** | **175** | | **Pn** | **19 10 58.1** | **+0.3** |
| **LMEL** | **Las Melosas** | **4.09** | **163** | | **Pn** | **19 11 02.1** | **+1.9** |
| **LMEL** | **Las Melosas** | **4.09** | **163** | *eP* | **Pn** | **19 11 02.9** | **+2.6** |
| LMEL | | | | *i* S | **Sn** | **19 11 53.3** | **+5.2** |
| **BO04** | **La Punta** | **4.14** | **168** | Pn | **Pn** | **19 11 02.0** | **+1.3** |
| **BO04** | **La Punta** | **4.14** | **168** | ↑*iP* | **Pn** | **19 11 02.1** | **+1.3** |
| **BO01** | **Tunca** | **4.47** | **174** | | **Pn** | **19 11 05.2** | **0.0** |
| **BO01** | **Tunca** | **4.47** | **174** | *i* P | **Pn** | **19 11 06.9** | **+1.6** |
| BO01 | | | | *i* S | **Sg** | **19 12 17.3** | **-3.8** |
| **BO02** | **Sierra Bellavi** | **4.90** | **171** | | **Pn** | **19 11 10.2** | **-1.0** |
| **GO05** | **Huala** | **5.06** | **182** | | **Pn** | **19 11 12.4** | **-1.0** |
| **PB14** | **IPOC Station P** | **5.41** | **12** | | **Pn** | **19 11 16.7** | **-1.9** |
| **PB14** | **IPOC Station P** | **5.41** | **12** | *i* P | **Pn** | **19 11 16.0** | **-2.5** |
| **ML02** | **Panimavida** | **5.81** | **178** | | **Pn** | **19 11 23.3** | **-0.3** |
| **TCA** | **Tanti** | **6.25** | **105** | *i* P | **Pn** | **19 11 31.0** | **+1.1** |
| **FSA** | **Cafayete** | **6.31** | **54** | *i* P | **Pn** | **19 11 35.3** | **+4.5** |
| FSA | | | | *i* S | **Sb** | **19 12 58.2** | **-4.9** |
| **PB15** | **IPOC Station P** | **6.99** | **17** | | **Pn** | **19 11 40.2** | **+0.2** |
| **PB15** | **IPOC Station P** | **6.99** | **17** | *i* P | **Pn** | **19 11 41.0** | **+0.9** |
| **H03N1** | **Juan Fernandez** | **7.09** | **239** | Pn | **Pn** | **19 11 40.1** | **-0.9** |
| | baz=114,slow=19,SNR=51 | | | | | | |
| H03N1 | | | | T | T | 19 19 08.5 | |
| | baz=65,slow=72,SNR=7191 | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.11** | **239** | Pn | **Pn** | **19 11 40.4** | **-0.8** |
| | baz=114,slow=19,SNR=34 | | | | | | |
| H03N2 | | | | T | T | 19 19 06.8 | |
| | baz=65,slow=72,SNR=3919 | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.11** | **239** | Pn | **Pn** | **19 11 40.2** | **-1.1** |
| | baz=114,slow=19,SNR=52 | | | | | | |
| H03N3 | | | | T | T | 19 19 05.1 | |
| | baz=65,slow=72,SNR=5334 | | | | | | |
| **PB06** | **IPOC Station P** | **7.45** | **15** | Pn | **Pn** | **19 11 44.9** | **-1.4** |
| **PB04** | **IPOC Station P** | **7.70** | **11** | Pn | **Pn** | **19 11 47.3** | **-2.4** |
| **LVC** | **Limon Verde** | **7.71** | **19** | Pn | **Pn** | **19 11 49.8** | **-0.3** |
| | comp=E,1.0nm,0.3s,baz=202,slow=7.6,SNR=9.6 | | | | | | |
| LVC | | | | Sn | **Sn** | **19 13 15.5** | **-2.0** |
| | comp=E,8.3nm,0.3s,baz=173,slow=9.1,SNR=4.3 | | | | | | |
| LVC | | | | LR | LR | 19 14 52.5 | |
| | comp=E,682nm,20.5s,baz=220,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **7.71** | **19** | Pn | **Pn** | **19 11 49.3** | **-0.8** |
| **LVC** | **Limon Verde** | **7.71** | **19** | *eP* | **Pn** | **19 11 51.4** | **+1.3** |
| **LVC** | **Limon Verde** | **7.71** | **19** | *i* P | **Pn** | **19 11 49.9** | **-0.3** |
| **PB03** | **IPOC Station P** | **8.04** | **13** | Pn | **Pn** | **19 11 53.1** | **-1.5** |
| **PB07** | **IPOC Station P** | **8.33** | **12** | Pn | **Pn** | **19 11 56.3** | **-2.2** |
| **PB09** | **IPOC Station P** | **8.40** | **16** | Pn | **Pn** | **19 11 58.0** | **-1.4** |
| **PB09** | **IPOC Station P** | **8.40** | **16** | *i* P | **Pn** | **19 12 00.0** | **+0.6** |
| **PB02** | **IPOC Station P** | **8.73** | **11** | Pn | **Pn** | **19 12 01.3** | **-2.7** |
| **PB02** | **IPOC Station P** | **8.73** | **11** | *i* P | **Pn** | **19 12 04.0** | **+0.1** |
| **LC01** | **Cunco** | **8.94** | **181** | | **Pn** | **19 12 04.0** | **-2.6** |
| **PB01** | **IPOC Station P** | **9.07** | **13** | Pn | **Pn** | **19 12 05.6** | **-3.0** |
| **PATCX** | **Punta Patache** | **9.18** | **9** | Pn | **Pn** | **19 12 07.9** | **-2.2** |
| **PB08** | **IPOC Station P** | **10.02** | **14** | *i* P | **Pn** | **19 12 23.0** | **+1.2** |
| **PB11** | **IPOC Station P** | **10.30** | **11** | Pn | **Pn** | **19 12 23.9** | **-1.6** |
| **PLCA** | **Paso Flores** | **10.81** | **175** | Pn | **Pn** | **19 12 32.5** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=347,slow=14,SNR=5.4 | | | | | | |
| PLCA | | | | Lg | Lg | 19 15 35.6 | |
| | comp=E,0.1nm,0.3s,baz=70,slow=21,SNR=2.0 | | | | | | |
| PLCA | | | | LR | LR | 19 16 46.3 | |
| | comp=E,428nm,19.2s,baz=352,slow=39 | | | | | | |
| **PLCA** | **Paso Flores** | **10.81** | **175** | Pn | **Pn** | **19 12 32.7** | **+0.4** |
| **PLCA** | **Paso Flores** | **10.81** | **175** | *eP* | **Pn** | **19 12 31.3** | **-1.0** |
| **ITQB** | **Itaqui** | **13.07** | **93** | | **Pn** | **19 13 03.2** | **+0.1** |
| **ITQB** | **Itaqui** | **13.07** | **93** | *eP* | **Pn** | **19 13 02.3** | **-0.9** |
| **CPUP** | **Villa Florida** | **13.15** | **78** | Pn | **Pn** | **19 13 04.7** | **+0.4** |
| | comp=E,0.3nm,0.3s,baz=257,slow=11,SNR=1.7 | | | | | | |
| CPUP | | | | Sn | **Sn** | **19 15 32.7** | **+2.1** |
| | comp=E,0.8nm,0.3s,baz=256,slow=12,SNR=1.9 | | | | | | |
| CPUP | | | | Lg | Lg | 19 16 41.2 | |
| | comp=E,0.8nm,0.3s,baz=9.0,slow=19,SNR=3.6 | | | | | | |
| CPUP | | | | LR | LR | 19 18 31.4 | |
| | comp=E,502nm,18.4s,baz=255,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **13.15** | **78** | *eP* | **Pn** | **19 13 06.0** | **+1.6** |
| **LPAZ** | **La Paz** | **13.97** | **14** | Pn | **Pn** | **19 13 19.7** | **+3.6** |
| | comp=E,0.4nm,0.3s,baz=204,slow=5.8,SNR=16 | | | | | | |
| LPAZ | | | | LR | LR | 19 19 00.9 | |
| | comp=E,245nm,19.8s,baz=166,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **13.97** | **14** | | **Pn** | **19 13 14.8** | **-1.3** |
| **PLTB** | **Pedras Altas** | **15.62** | **101** | | **Pn** | **19 13 37.8** | **0.0** |
| **PLTB** | **Pedras Altas** | **15.62** | **101** | *eP* | **Pn** | **19 13 37.4** | **-0.4** |
| **CPSB** | **Cacapava Do Su** | **15.78** | **96** | *eP* | **Pn** | **19 13 40.6** | **+0.8** |
| **SIV** | **San Ignacio** | **16.95** | **37** | P | **Pn** | **19 13 56.1** | **+1.2** |
| | comp=E,0.8nm,0.3s,baz=218,slow=11,SNR=17 | | | | | | |
| SIV | | | | LR | LR | 19 21 45.0 | |
| | comp=E,228nm,21.3s,baz=214,slow=42 | | | | | | |
| **ITAB** | **Concordia** | **17.37** | **86** | | **Pn** | **19 14 00.1** | **+0.1** |
| **ITAB** | **Concordia** | **17.37** | **86** | *eP* | **Pn** | **19 14 00.7** | **+0.7** |
| **PTGB** | **Pitanga** | **18.17** | **78** | *eP* | **Pn** | **19 14 10.2** | **+0.2** |
| **PTLB** | **Pontes e Lacer** | **18.46** | **41** | *eP* | **Pn** | **19 14 14.5** | **+1.0** |
| **NNA** | **Nana** | **18.50** | **344** | LR | LR | 19 19 53.3 | |
| | comp=E,192nm,20.6s,baz=183,slow=32 | | | | | | |
| **PP1B** | **Ponte de Pedra** | **19.64** | **55** | *eP* | **P** | **19 14 27.1** | **+0.8** |
| **TER01** | **Tubaro-SC** | **19.72** | **92** | *eP* | **Pn** | **19 14 28.7** | **+0.1** |
| **VILB** | **Vilhena** | **19.97** | **35** | *eP* | **Pn** | **19 14 31.3** | **-0.3** |
| **PCMB** | **Pacaembu** | **20.14** | **70** | *eP* | Pn | 19 14 33.3 | -0.4 |
| **SALV** | **Santo Antonio** | **20.26** | **50** | *eP* | **P** | **19 14 33.1** | **+0.1** |
| **ETMB** | **Extrema** | **20.66** | **15** | *eP* | **P** | **19 14 38.2** | **+0.8** |
| **FRTB** | **Fartura** | **20.80** | **77** | *eP* | **P** | **19 14 39.4** | **+0.4** |
| **ITRB** | **Iturama** | **21.83** | **67** | *eP* | **P** | **19 14 50.0** | **0.0** |
| **CZSB** | **Cruzeiro do Su** | **22.12** | **357** | *eP* | **P** | **19 14 55.5** | **+2.4** |
| **BB19B** | **Bebedouro** | **22.64** | **72** | *eP* | **P** | **19 14 59.4** | **+0.5** |
| **PDRB** | **Porto dos Gac** | **22.92** | **40** | *eP* | **P** | **19 15 01.6** | **-0.1** |
| **VAO** | **Valinhos** | **23.14** | **78** | *eP* | **P** | **19 15 04.2** | **+0.2** |
| **ATAH** | **Atahualpa** | **23.55** | **343** | LR | LR | 19 22 39.9 | |
| | comp=E,129nm,20.4s,baz=213,slow=32 | | | | | | |
| **CLDB** | **Colider** | **24.05** | **41** | *eP* | **P** | **19 15 13.4** | **+0.6** |
| **PARB** | **Paraibuna** | **24.16** | **80** | *eP* | **P** | **19 15 14.4** | **+0.4** |
| **IPMB** | **Ipameri, GO** | **24.46** | **66** | *eP* | **P** | **19 15 16.7** | **-0.1** |
| **USHA** | **Ushuaia** | **24.99** | **176** | P | **P** | **19 15 18.5** | **-2.5** |
| | comp=E,15nm,0.8s,baz=263,slow=4.4,SNR=4.2 | | | | | | |
| USHA | | | | LR | LR | 19 25 38.2 | |
| | comp=E,340nm,19.0s,baz=12,slow=38 | | | | | | |
| **BSCB** | **Bom Sucesso** | **25.81** | **76** | *eP* | **P** | **

*MW5.0/95,Moment Tensor Solution. s63,c77; s95,c132; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.33±.15; $M_{\theta\theta}$-1.75±.12; $M_{\phi\phi}$-1.58±.12; $M_{r\theta}$-1.63±.08; $M_{r\phi}$2.10±.07; $M_{\theta\phi}$0.66±.09; Best double couple: $M_o$3.96800×$10^{16}$ NP1:$\phi_s$145.00000°,$\delta$34.00000°,$\lambda$108.00000°. NP2: $\phi_s$303.00000°,$\delta$58.00000°,$\lambda$78.00000°. Principal axes: T 3.8080, Plg74.0000°, Azm182.0000°; N 0.3190, Plg10.0000°, Azm310.0000°; P -4.1270, Plg12.0000°, Azm42.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 24 19:36:14.7**±0.4,**24°03N**±0'.04×**142°23E**±0'.06,**h51**km±2km, **h52**km:**pP-P,n434,**σ1$**26/428,**mb4.8**/164,**MS4.0**/86, **15C-15D,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.05** | **359** | Pn | **Pn** | **19 37 01.6** | **+1.2** |
| **JHJ** | **Hachijo jima 2** | **9.30** | **347** | LR | LR | 19 42 04.6 | |
| | comp=Z,603nm,20.8s,baz=86,slow=38 | | | | | | |
| **GUMO** | **Guam** | **10.68** | **166** | LR | LR | 19 42 22.9 | |
| | comp=Z,694nm,22.0s,baz=358,slow=34 | | | | | | |
| **JOW** | **Kunigami** | **12.91** | **285** | LR | LR | 19 43 41.3 | |
| | comp=Z,673nm,20.9s,baz=116,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.94** | **345** | P | **Pn** | **19 39 14.7** | **-1.1** |
| | 0.1nm,0.3s,baz=160,slow=10,SNR=5.5 | | | | | | |
| MJAR | | | | LR | LR | 19 44 28.7 | |
| | comp=Z,901nm,18.7s,baz=142,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.94** | **345** | P | **Pn** | **19 39 15.8** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **12.94** | **345** | Pn | **Pn** | **19 39 15.8** | **0.0** |
| **MAJO** | **Matsushiro** | **12.94** | **345** | P | **Pn** | **19 39 16.2** | **+0.3** |
| **MAJO** | **Matsushiro** | **12.94** | **345** | Pn | **Pn** | **19 39 16.2** | **+0.3** |
| **MAT** | **Matsushiro** | **12.94** | **345** | P | **Pn** | **19 39 15.3** | **-0.5** |
| MAT | | | | S | **Sn** | **19 41 36.2** | **-2.1** |
| **MJB9** | **Matsu-Tunnel** | **12.95** | **345** | Pn | **Pn** | **19 39 15.7** | **-0.2** |
| **JMM** | **Marumori** | **13.84** | **355** | | **Pn** | **19 39 28.8** | **+0.7** |
| **ERM** | **Erimo** | **17.95** | **2** | *eP* | **Pn** | **19 40 20.4** | **-0.1** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,84nm,1.6s | | | | | | |
| **KSRS** | **Korea Array** | **18.14** | **321** | P | **Pn** | **19 40 23.4** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=138,slow=11,SNR=9.6 | | | | | | |
| KSRS | | | | LR | LR | 19 46 24.0 | |
| | comp=Z,360nm,21.6s,baz=130,slow=34 | | | | | | |
| **JEW** | **Eniwo** | **18.77** | **358** | P | **P** | **19 40 28.5** | **-1.0** |
| **YULB** | **Yu-li** | **19.18** | **272** | P | **Pn** | **19 40 37.4** | **+2.0** |
| YULB | | | | IAmb | IAmb | 19 40 53.5 | |
| | comp=Z,102nm,1.1s | | | | | | |
| **TWG** | **Pinlang** | **19.45** | **271** | P | **P** | **19 40 36.2** | **-0.9** |
| TWG | | | | IAmb | IAmb | 19 40 43.7 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **19.45** | **274** | P | **P** | **19 40 37.0** | **-0.2** |
| SSLB | | | | IAmb | IAmb | 19 40 46.6 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **19.80** | **272** | P | **P** | **19 40 41.2** | **+0.3** |
| TPUB | | | | IAmb | IAmb | 19 40 49.8 | |
| | comp=Z,59nm,0.9s | | | | | | |
| **SSE** | **Sheshan** | **19.92** | **295** | P | **P** | **19 40 42.9** | **+0.8** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,280nm,4.5s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,150nm,19.1s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,230nm,19.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.04** | **1** | P | Pn | 19 40 45.3 | -0.1 |
| **ASAJ** | **Asahikawa** | **20.04** | **1** | P | Pn | 19 40 45.3 | -0.1 |
| | comp=Z,3.5nm,0.6s,baz=179,slow=6.0,SNR=6.4 | | | | | | |
| ASAJ | | | | LR | LR | 19 49 20.4 | |
| | comp=Z,486nm,21.4s,baz=196,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **20.04** | **1** | P | Pn | 19 40 45.3 | -0.1 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MSHR** | **Mys Shultsa** | **20.65** | **336** | *eP* | Pn | 19 40 51.4 | -1.3 |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.80** | **340** | P | **P** | **19 41 01.3** | **-0.9** |
| | comp=Z,3.9nm,0.7s,baz=153,slow=8.2,SNR=5.9 | | | | | | |
| **NJ2** | **Nanjing** | **22.09** | **296** | *eP* | **P** | **19 41 06.3** | **+0.8** |
| NJ2 | | | | sP | **sP** | **19 41 21.6** | **-1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **22.88** | **1** | *eP* | **P** | **19 41 15.4** | **+1.7** |
| YSS | | | | *eS* | **S** | **19 45 19.0** | **-0.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,400nm,5.5s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,400nm,13.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **22.88** | **1** | | **P** | **19 41 15.8** | **+2.1** |
| YSS | | | | IAmb | IAmb | 19 41 29.2 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **MDJ** | **Mudanjiang** | **22.98** | **336** | P | **P** | **19 41 15.8** | **+1.0** |
| MDJ | | | | S | **S** | **19 45 23.4** | **+2.1** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,290nm,5.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,410nm,6.9s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,330nm,13.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,620nm,15.5s | | | | | | |
| **DAV** | **Davao City (W)** | **23.23** | **226** | LR | LR | 19 48 31.0 | |
| | comp=Z,872nm,21.5s,baz=40,slow=32 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.28** | **96** | T | T | 20 06 18.4 | |
| | baz=283,slow=74,SNR=44 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.28** | **96** | T | T | 20 06 18.1 | |
| | baz=283,slow=74,SNR=49 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.29** | **96** | T | T | 20 06 17.5 | |
| | baz=283,slow=74,SNR=44 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **23.44** | **99** | T | T | 20 06 54.4 | |
| | baz=289,slow=75,SNR=49 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.45** | **99** | T | T | 20 06 53.9 | |
| | baz=289,slow=75,SNR=48 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.45** | **99** | T | T | 20 06 54.9 | |
| | baz=289,slow=75,SNR=31 | | | | | | |
| **SNY** | **Shenyang** | **23.57** | **323** | | **P** | **19 41 19.8** | **-0.8** |
| SNY | | | | S | **S** | **19 45 32.3** | **+1.3** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,280nm,4.3s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,240nm,6.8s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,300nm,4.5s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,390nm,9.7s | | | | | | |
| **CN2** | **Changchun** | **24.05** | **329** | *eP* | **P** | **19 41 25.5** | **+0.5** |
| CN2 | | | | S | **S** | **19 45 36.8** | **-1.9** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,300nm,4.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,400nm,17.0s | | | | | | |
| **BNX** | **BinXian** | **24.76** | **335** | | **P** | **19 41 30.6** | **-0.8** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,240nm,4.1s | | | | | | |
| **TIA** | **Tai'an** | **24.80** | **305** | | **P** | **19 41 32.0** | **+0.1** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | |
| **UGL** | **Uglegorsk** | **25.00** | **360** | *eP* | P | 19 41 40.9 | +7.4 |
| UGL | | | | pmax | pmax | | |
| | comp=Z,50nm,1.2s | | | | | | |
| **WHN** | **Wuhan** | **25.57** | **291** | | **P** | **19 41 42.1** | **+3.2** |
| WHN | | | | sP | **pwP** | **19 41 55.3** | **+0.7** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | |
| **JAY** | **Jayapura** | **26.43** | **183** | LR | LR | 19 51 32.4 | |
| | comp=Z,249nm,19.4s,baz=22,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **26.46** | **344** | P | **P** | **19 41 45.9** | **-0.9** |
| | comp=Z,3.3nm,0.7s,baz=163,slow=8.0,SNR=14 | | | | | | |
| KLR | | | | ScP | **ScP** | **19 48 44.6** | **-1.8** |
| | comp=Z,1.6nm,0.8s,baz=271,slow=4.2,SNR=6.6 | | | | | | |
| KLR | | | | LR | LR | 19 52 13.6 | |
| | comp=Z,482nm,20.7s,baz=156,slow=36 | | | | | | |
| **KLR** | **Kul'dur** | **26.46** | **344** | *eP* | **P** | **19 41 46.6** | **-0.2** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **26.95** | **205** | P | **P** | **19 41 52.6** | **+1.2** |
| | comp=Z,7.8nm,1.0s,baz=115,slow=21,SNR=1.9 | | | | | | |
| SIJI | | | | LR | LR | 19 50 03.8 | |
| | comp=Z,600nm,20.1s,baz=66,slow=31 | | | | | | |
| **HNS** | **HongShan** | **27.04** | **306** | | **P** | **19 41 51.5** | **-0.6** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,31nm,1.2s | | | | | | |
| **BJI** | **Beijing** | **27.11** | **312** | P | **P** | **19 41 53.8** | **+1.1** |
| BJI | | | | pP | **pP** | **19 42 05.3** | **+0.3** |
| BJI | | | | sP | **sP** | **19 42 11.1** | **+0.3** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **LYN** | **LuoYang** | **27.90** | **299** | *iP* | **P** | **19 42 00.1** | **+0.3** |
| LYN | | | | sP | pwP | 19 42 16.6 | +1.0 |
| LYN | | | | S | **S** | **19 46 40.9** | **+1.0** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,90nm,9.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,320nm,14.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,280nm,20.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **29.17** | **319** | *eP* | **P** | **19 42 11.9** | **+0.7** |
| XLT | | | | pP | pwP | 19 42 27.8 | +0.8 |
| XLT | | | | sP | sP | 19 42 33.8 | +4.4 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.6s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,280nm,5.0s | | | | | | |
| **QIZ** | **Qiongzhong** | **30.49** | **267** | P | **P** | **19 42 21.3** | **-1.7** |
| QIZ | | | | S | **S** | **19 47 21.9** | **+1.0** |
| QIZ | | | | LR | LR | | |
| | comp=Z,550nm,19.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,570nm,18.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,540nm,21.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.63** | **311** | *eP* | **P** | **19 42 24.0** | **-0.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,5.6s | | | | | | |
| **XAN** | **Xi'an** | **30.66** | **297** | P | **P** | **19 42 24.5** | **+0.1** |
| XAN | | | | pP | pP | 19 42 35.0 | -1.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.31** | **18** | LR | LR | 19 53 52.5 | |
| | comp=Z,202nm,21.8s,baz=199,slow=34 | | | | | | |
| **ZEA** | **Zeya** | **31.73** | **343** | *eP* | **P** | **19 42 33.0** | **-0.6** |
| ZEA | | | | *e* | | 19 42 47.8 | |
| ZEA | | | | *e* | | 19 52 55.6 | |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.1s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=E,200nm,12.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,200nm,17.0s | | | | | | |
| **GYA** | **Guiyang** | **32.20** | **282** | | **P** | **19 42 39.5** | **+1.4** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **33.58** | **171** | LR | LR | 19 56 16.1 | |
| | comp=Z,147nm,18.3s,baz=348,slow=36 | | | | | | |
| **CD2** | **Chengdu** | **34.69** | **290** | *eP* | **P** | **19 42 59.0** | **-0.6** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **LZH** | **Lanzhou** | **35.11** | **299** | | **P** | **19 43 03.9** | **+0.5** |
| LZH | | | | pP | pwP | 19 43 19.4 | 0.0 |
| LZH | | | | sP | sP | 19 43 25.1 | +3.4 |
| LZH | | | | PcP | **PcP** | **19 45 34.8** | **+0.7** |
| LZH | | | | ScS | ScS | 19 53 18.1 | -1.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,31nm,1.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,340nm,14.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,230nm,14.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,380nm,15.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **35.40** | **221** | P | **P** | **19 43 05.9** | **+0.1** |
| | comp=Z,487nmcomp=Z,21nm,1.2s | | | | | | |
| **KMI** | **Kunming** | **35.84** | **280** | | **P** | **19 43 11.4** | **+1.6** |
| KMI | | | | pP | pP | 19 43 22.6 | +0.2 |
| KMI | | | | sP | pwP | 19 43 26.8 | +1.0 |
| KMI | | | | PP | **PnPn** | **19 44 30.1** | **-1.1** |
| KMI | | | | PcP | **PcP** | **19 45 38.3** | **+1.8** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,26nm,1.2s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,150nm,4.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,430nm,9.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,340nm,12.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,330nm,23.7s | | | | | | |
| **MA2** | **Magadan** | **36.02** | **7** | P | **P** | **19 43 11.9** | **+1.2** |
| | comp=Z,2.5nm,0.6s,baz=170,slow=6.3,SNR=12 | | | | | | |
| MA2 | | | | PcP | **PcP** | **19 45 36.3** | **+0.2** |
| | comp=Z,2.4nm,0.8s,baz=143,slow=20,SNR=2.2 | | | | | | |
| MA2 | | | | LR | LR | 19 56 18.2 | |
| | comp=Z,128nm,21.9s,baz=193,slow=33 | | | | | | |
| **MA2** | **Magadan** | **36.02** | **7** | *eP* | **P** | **19 43 12.2** | **+1.5** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **MA2** | **Magadan** | **36.02** | **7** | P | **P** | **19 43 11.7** | **+1.0** |
| MA2 | | | | IAmb | IAmb | 19 43 30.7 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **KAPI** | **Kappang** | **36.24** | **220** | LR | LR | 19 56 19.6 | |
| | comp=Z,103nm,21.8s,baz=42,slow=33 | | | | | | |
| **PZH** | **PanZhiHua** | **36.59** | **283** | | **P** | **19 43 16.9** | **+0.8** |
| PZH | | | | S | **S** | **19 48 58.3** | **+2.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,550nm,19.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,840nm,20.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,22.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.62** | **319** | *eP* | **P** | **19 43 14.9** | **-1.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.62** | **319** | P | **P** | **19 43 14.8** | **-1.2** |
| **SONM** | **Songino Array** | **36.99** | **319** | P | **P** | **19 43 17.7** | **-1.6** |
| | comp=Z,1.8nm,0.8s,baz=134,slow=7.3,SNR=14 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 45 39.6** | **+0.1** |
| | comp=Z,1.7nm,0.7s,baz=90,slow=2.9,SNR=6.8 | | | | | | |
| SONM | | | | LR | LR | 19 58 56.2 | |
| | comp=Z,240nm,20.3s,baz=102,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **36.99** | **319** | P | **P** | **19 43 19.6** | **+0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **36.99** | **319** | P | **P** | **19 43 19.6** | **+0.3** |
| **SHEM** | **Shemya Is, Ala** | **37.47** | **32** | LR | LR | 19 55 14.7 | |
| | comp=Z,488nm,21.3s,baz=220,slow=30 | | | | | | |
| **GTA** | **Gaotai** | **38.83** | **304** | | **P** | **19 43 34.1** | **-0.8** |
| GTA | | | | PcP | **PcP** | **19 45 46.3** | **+1.0** |
| GTA | | | | ScP | **S** | **19 49 26.5** | **-2.7** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **38.93** | **351** | P | **P** | **19 43 34.0** | **-1.2** |
| | comp=Z,2.8nm,0.3s,baz=153,slow=2.6,SNR=7.5 | | | | | | |
| YAK | | | | ScP | **ScP** | **19 49 28.7** | **-0.3** |
| | comp=Z,2.8nm,0.5s,baz=27,slow=4.5,SNR=1.6 | | | | | | |
| YAK | | | | LR | LR | 19 59 25.1 | |
| | comp=Z,393nm,21.9s,baz=148,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **38.93** | **351** | *eP* | **P** | **19 43 34.9** | **-0.3** |
| YAK | | | | *e**PP | **pP** | **19 43 49.1** | **+1.2** |
| YAK | | | | *e* | | 19 45 45.6 | |
| YAK | | | | *eS* | **S** | **19 49 30.7** | **+0.9** |
| YAK | | | | *e**SS | **sS** | **19 49 46.1** | **-5.0** |
| YAK | | | | *e*SS | SnSn | 19 52 45.1 | +21 |
| YAK | | | | *e* | | 19 53 41.4 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,363nm,5.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,131nm,6.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,181nm,5.8s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,146nm,2.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,50nm,2.7s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,513nm,22.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,316nm,27.0s | | | | | | |
| **YAK** | **Yakutsk** | **38.93** | **351** | P | **P** | **19 43 34.6** | **-0.6** |
| YAK | | | | IAmb | IAmb | 19 43 38.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BOD** | **Bodaibo** | **39.35** | **336** | *eP* | **P** | **19 43 37.4** | **-1.4** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,11nm,1.7s | | | | | | |
| **SEY** | **Seymchan** | **39.48** | **7** | P | **P** | **19 43 40.7** | **+0.9** |
| | comp=Z,2.1nm,0.7s,baz=190,slow=23,SNR=7.2 | | | | | | |
| SEY | | | | LR | LR | 20 01 07.8 | |
| | comp=Z,159nm,19.9s,baz=174,slow=38 | | | | | | |
| **SEY** | **Seymchan** | **39.48** | **7** | *iP* | **P** | **19 43 41.2** | **+1.4** |
| **ZAK** | **Zakamensk** | **39.97** | **321** | *eP* | **P** | **19 43 42.6** | **-1.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.51** | **271** | P | **P** | **19 43 48.7** | **-0.2** |
| CHTO | | | | | | 19 45 50.7 | |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.51** | **271** | P | **P** | **19 43 48.7** | **-0.2** |
| CHTO | | | | IAmb | IAmb | 19 43 50.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| CHTO | | | | PcP | **PcP** | **19 45 50.7** | **-0.1** |
| **CM31** | **Chiang Mai Arr** | **40.60** | **271** | P | **P** | **19 43 49.5** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **40.60** | **271** | P | **P** | **19 43 50.0** | **+0.3** |
| | comp=Z,4.2nm,0.7s,baz=61,slow=7.6,SNR=36 | | | | | | |
| CMAR | | | | PcP | **PcP** | **19 45 51.3** | **+0.2** |
| | comp=Z,1.5nm,0.9s,baz=66,slow=3.1,SNR=7.3 | | | | | | |
| CMAR | | | | ScP | **ScP** | **19 49 36.0** | **-0.4** |
| | comp=Z,0.4nm,0.7s,baz=123,slow=3.3,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 20 00 31.7 | |
| | comp=Z,162nm,19.1s,baz=85,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.60** | **271** | *i* P | **P** | **19 43 51.2** | **+1.5** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.60** | **271** | P | **P** | **19 43 48.8** | **-0.9** |
| **GOMU** | **GeErMu** | **42.39** | **298** | P | **P** | **19 44 05.8** | **+1.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,190nm,4.7s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **43.43** | **319** | *iP* | **P** | **19 44 10.9** | **-1.6** |
| **CTA** | **Charters Tower** | **44.03** | **175** | LR | LR | 20 01 09.2 | |
| | comp=Z,158nm,21.4s,baz=351,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **44.03** | **175** | P | **P** | **19 44 17.6** | **+0.2** |
| **WB0** | **Warramunga Arr** | **44.20** | **191** | P | **P** | **19 44 17.9** | **-0.9** |
| **WR0** | **Warramunga Arr** | **44.36** | **190** | P | **P** | **19 44 19.0** | **-1.1** |
| **WRAB** | **Tennant Creek** | **44.37** | **191** | P | **P** | **19 44 19.0** | **-1.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,69nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.37** | **191** | P | **P** | **19 44 19.0** | **-1.2** |
| **WRAB** | **Tennant Creek** | **44.37** | **191** | P | **P** | **19 44 20.1** | **-0.1** |
| **WB2** | **Warramunga Arr** | **44.38** | **191** | P | **P** | **19 44 19.8** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.38** | **191** | P | **P** | **19 44 19.6** | **-0.7** |
| | comp=Z,11nm,0.4s,baz=8.8,slow=8.0,SNR=140 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 46 03.8** | **+0.3** |
| | comp=Z,7.2nm,0.9s,baz=8.0,slow=3.6,SNR=10 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 49 51.0** | **-0.4** |
| | comp=Z,1.3nm,0.9s,baz=17,slow=4.8,SNR=5.1 | | | | | | |
| WRA | | | | LR | LR | 20 01 49.4 | |
| | comp=Z,185nm,20.6s,baz=359,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.38** | **191** | P | **P** | **19 44 18.6** | **-1.6** |
| **QIS** | **Mount Isa** | **44.40** | **184** | P | **P** | **19 44 20.4** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **44.89** | **203** | LR | LR | 20 01 13.6 | |
| | comp=Z,141nm,22.0s,baz=34,slow=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.89** | **203** | P | **P** | **19 44 22.4** | **-1.9** |
| FITZ | | | | IAmb | IAmb | 19 44 25.4 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.89** | **203** | P | **P** | **19 44 24.2** | **-0.1** |
| **SHL** | **Shillong** | **45.50** | **283** | P | **P** | **19 44 29.4** | **-0.1** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,115nm,1.5s | | | | | | |
| **SHL** | **Shillong** | **45.50** | **283** | P | **P** | **19 44 29.4** | **-0.1** |
| **LEM** | **Lembang** | **45.62** | **232** | LR | LR | 20 06 08.2 | |
| | comp=Z,81nm,18.9s,baz=84,slow=39 | | | | | | |
| **LSA** | **Lhasa** | **45.62** | **289** | P | **P** | **19 44 32.8** | **+2.1** |
| **SANVU** | **Saraoutou** | **46.21** | **146** | P | **P** | **19 44 33.8** | **-1.0** |
| **SANVU** | **Saraoutou** | **46.21** | **146** | P | **P** | **19 44 35.3** | **+0.6** |
| **BILL** | **Bilibino** | **46.42** | **12** | *eP* | **P** | **19 44 36.0** | **+0.1** |
| BILL | | | | *e**PP | **pwP** | **19 44 52.3** | **0.0** |
| BILL | | | | *e* | | 19 46 08.4 | |
| BILL | | | | *e* | | 19 46 27.6 | |
| BILL | | | | *e*PPP | PPP | 19 47 10.8 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,182nm,19.0s | | | | | | |
| **BILL** | **Bilibino** | **46.42** | **12** | P | **P** | **19 44 36.8** | **+0.9** |
| **PSI** | **Prapat** | **46.82** | **250** | LR | LR | 20 02 34.8 | |
| | comp=Z,139nm,20.5s,baz=70,slow=34 | | | | | | |
| **MNSI** | **Mandailing Nat** | **47.31** | **247** | P | **P** | **19 44 43.9** | **+0.4** |
| | comp=Z,15nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **48.10** | **190** | P | **P** | **19 44 48.5** | **-0.9** |
| **ASAR** | **Alice Springs** | **48.10** | **190** | P | **P** | **19 44 49.0** | **-0.5** |
| | comp=Z,1.7nm,0.3s,baz=11,slow=6.3,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 46 16.9** | **+0.4** |
| | comp=Z,2.8nm,1.0s,baz=20,slow=3.0,SNR=8.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 50 06.1** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=22,slow=5.2,SNR=3.7 | | | | | | |
| ASAR | | | | LR | LR | 20 03 33.1 | |
| | comp=Z,338nm,22.0s,baz=18,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **48.10** | **190** | P | **P** | **19 44 47.9** | **-1.6** |
| ASAR | | | | | | 19 46 15.6 | |
| **ASAR** | **Alice Springs** | **48.10** | **190** | P | **P** | **19 44 47.9** | **-1.6** |
| ASAR | | | | PcP | **PcP** | **19 46 15.6** | **-0.9** |
| **TIXI** | **Tiksi** | **48.25** | **354** | P | **P** | **19 44 49.7** | **-0.3** |
| | comp=Z,4.5nm,0.6s,baz=272,slow=22,SNR=23 | | | | | | |
| **TIXI** | **Tiksi** | **48.25** | **354** | *eP* | **P** | **19 44 50.1** | **+0.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **TIXI** | **Tiksi** | **48.25** | **354** | P | **P** | **19 44 49.3** | **-0.7** |
| TIXI | | | | IAmb | IAmb | 19 45 07.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WMQ** | **Urumqi** | **48.44** | **308** | *eP* | **P** | **19 44 52.1** | **+0.1** |
| WMQ | | | | pP | pP | 19 45 04.3 | -0.7 |
| WMQ | | | | sP | sP | 19 45 15.9 | +5.2 |
| WMQ | | | | PcP | **PcP** | **19 46 18.3** | **+0.7** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,220nm,5.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,150nm,21.5s | | | | | | |
| **TAPN** | **Taplejung** | **48.92** | **286** | *eP* | **P** | **19 44 56.8** | **+0.6** |
| | comp=Z,39nm,1.0s | | | | | | |
| **ODAN** | **Odare** | **49.28** | **286** | *eP* | **P** | **19 44 59.4** | **+0.5** |
| | comp=Z,13nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **49.44** | **316** | *d iP* | **P** | **19 44 59.2** | **-0.5** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| **RAMN** | **Ramite** | **49.96** | **286** | *eP* | **P** | **19 45 04.7** | **+0.6** |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **JIRN** | **Jiri** | **50.20** | **287** | *eP* | **P** | **19 45 07.0** | **+0.9**

**ZAA0 Zalesovo Array 51.85 321** P **P** **19 45 15.8 -1.7**
**ZALV Zalesovo Beam 51.85 321** P **P** **19 45 15.8 -1.7**
comp=Z,4.1nm,0.8s,baz=98,slow=6.7,SNR=21
ZALV PcP **PcP** **19 46 29.2 -0.6**
comp=Z,5.3nm,0.8s,baz=110,slow=4.1,SNR=11
ZALV ScP **ScP** **19 50 21.2 -1.2**
comp=Z,0.4nm,0.3s,baz=64,slow=5.1,SNR=3.5
ZALV LR LR 20 08 41.1
comp=Z,121nm,20.4s,baz=94,slow=38
**ZALV Zalesovo Beam 51.85 321** P **P** **19 45 15.6 -1.9**
ZALV 19 46 28.7
**ZALV Zalesovo Beam 51.85 321** P **P** **19 45 15.6 -1.9**
ZALV PcP **PcP** **19 46 28.7 -1.1**
**DANN Dangsing 52.21 288** *eP* **P** **19 45 22.0 +1.0**
comp=Z,140nm,0.7s
**KOLN Koldanda 52.45 287** *eP* **P** **19 45 23.2 +0.5**
comp=Z,65nm,0.9s
**MK31 Makanchi Array 52.48 311***d iP* **P** **19 45 21.7 -0.7**
**MK31 Makanchi Array 52.48 311** P **P** **19 45 21.8 -0.7**
MK31 IAmb IAmb 19 45 23.3
comp=Z,8.2nm,0.9s
**MKAR Makanchi Array 52.48 311** P **P** **19 45 21.9 -0.6**
comp=Z,4.9nm,0.7s,baz=92,slow=9.1,SNR=46
MKAR PcP **PcP** **19 46 32.9 +0.4**
comp=Z,4.7nm,0.8s,baz=85,slow=5.7,SNR=8.0
MKAR ScP **ScP** **19 50 25.3 -0.1**
comp=Z,2.4nm,0.8s,baz=106,slow=3.6,SNR=3.8
MKAR LR LR 20 09 29.0
comp=Z,129nm,19.5s,baz=70,slow=38
**MKAR Makanchi Array 52.48 311** P **P** **19 45 21.5 -0.9**
**MKAR Makanchi Array 52.48 311** P **P** **19 45 21.5 -0.9**
MKAR ScP **ScP** **19 50 23.4 -2.0**
**MAKZ Makanchi 52.70 311** P **P** **19 45 23.3 -0.7**
MAKZ pmax pmax
comp=Z,12nm,0.9s
**MAKZ Makanchi 52.70 311** P **P** **19 45 23.3 -0.7**
MAKZ IAmb IAmb 19 45 25.0
comp=Z,12nm,0.9s
**PYUN Piuthan 52.92 288** *eP* **P** **19 45 26.8 +0.6**
comp=Z,17nm,0.5s
**MSVF Nonsavy 54.27 137** LR LR 20 07 29.9
comp=Z,57nm,19.1s,baz=355,slow=34
**LCRK Leigh Creek 54.31 184** P **P** **19 45 36.1 +0.3**
**MULG Mulgathing 54.57 189** P **P** **19 45 37.6 -0.1**
**KURK Kurchatov 55.18 316***c iP* **P** **19 45 40.5 -1.5**
KURK *i* *PP **pP** **19 45 55.9 +0.7**
KURK pmax pmax
comp=Z,18nm,1.1s
**KURK Kurchatov 55.18 316** P **P** **19 45 40.8 -1.2**
**CMSA Cobar Meteorol 55.35 176** P **P** **19 45 43.8 +0.4**
**NRIK Noril'sk 55.51 339** P **P** **19 45 43.1 -0.9**
comp=Z,12nm,0.8s,baz=111,slow=8.4,SNR=16
NRIK LR LR 20 10 25.5
comp=Z,219nm,18.8s,baz=112,slow=37
**NRIK Noril'sk 55.51 339***de*P **P** **19 45 43.2 -0.9**
NRIK pmax pmax
comp=Z,17nm,0.9s
**NRIK Noril'sk 55.51 339** P **P** **19 45 43.0 -1.1**
**STKA Stephens Creek 55.60 181** P **P** **19 45 44.6 -0.5**
comp=Z,8.1nm,0.8s,baz=344,slow=9.2,SNR=15
STKA LR LR 20 09 08.4
comp=Z,137nm,21.1s,baz=18,slow=36
**STKA Stephens Creek 55.60 181** P **P** **19 45 44.4 -0.7**
STKA pmax pmax
comp=Z,2.0nm,1.0s
**STKA Stephens Creek 55.60 181** P **P** **19 45 44.4 -0.7**
**FORT Forrest 56.17 195** P **P** **19 45 49.0 -0.2**
**ULHL Ulahol 56.80 306** P **P** **19 45 54.5 +0.5**
SNR=5.9
**KDAK Kodiak Island 56.80 36** LR LR 20 09 23.4
comp=Z,367nm,19.9s,baz=256,slow=35
**KSH Kashi 57.22 303** P **P** **19 46 00.5 +3.6**
KSH pP sP 19 46 16.6 +0.9
KSH sP pwP 19 46 25.4 +12
KSH PcP **PcP** **19 46 54.1 +3.2**
KSH S **S** **19 53 50.1 +1.0**
KSH pmax pmax
comp=Z,10.0nm,1.0s
**TKM2 Tokmak 2 57.23 307** P **P** **19 45 57.6 +0.6**
SNR=6.6
**KBK Karagaybulak 57.73 306** P **P** **19 46 01.0 +0.5**
SNR=7.0
**IMAR Indian Mountai 57.76 26** P **P** **19 46 01.6 +1.4**
**USP Ospenovka 58.01 307** P **P** **19 46 02.3 -0.1**
SNR=5.8
**AAK Ala-Archa 58.06 306** LR LR 20 13 11.4
comp=Z,104nm,18.7s,baz=85,slow=38
**AAK Ala-Archa 58.06 306** P **P** **19 46 03.0 +0.2**
SNR=5.8
**AAK Ala-Archa 58.06 306***de*P **P** **19 46 03.0 +0.2**
AAK pmax pmax
comp=Z,6.0nm,1.0s
**AAK Ala-Archa 58.06 306** P **P** **19 46 02.5 -0.3**
AAK IAmb IAmb 19 46 19.3
comp=Z,8.2nm,1.1s
**UCH Uchtor 58.08 306** P **P** **19 46 04.3 +1.0**
SNR=17
**AFI Afiamalu 58.66 125** LR LR 20 06 53.8
comp=Z,115nm,18.6s,baz=326,slow=31
**AML Almayashu 58.70 306** P **P** **19 46 08.4 +0.8**
SNR=11
**TOLK Toolik Lake Re 59.92 23** P **P** **19 46 16.9 +1.8**
TOLK IAmb IAmb 19 46 34.7
comp=Z,11nm,1.2s
**CCB Clear Creek Bu 59.98 28** P **P** **19 46 17.5 +2.0**
CCB IAmb IAmb 19 46 34.2
comp=Z,16nm,1.4s
**NIL Nilore 60.20 296** P **P** **19 46 18.2 +0.6**
NIL pmax pmax
comp=Z,29nm,1.2s
**NIL Nilore 60.20 296** P **P** **19 46 18.2 +0.6**
**IL31 60.38 28** P **P** **19 46 18.3 +0.1**
IL31 IAmb IAmb 19 46 35.3
comp=Z,8.7nm,0.9s
**ILAR Eielson Array 60.38 28** P **P** **19 46 19.1 +0.8**
comp=Z,3.7nm,0.8s,baz=260,slow=5.8,SNR=28
ILAR LR LR 20 10 50.1
comp=Z,152nm,20.5s,baz=244,slow=34
**ILAR Eielson Array 60.38 28** P **P** **19 46 18.6 +0.3**
**ILAR Eielson Array 60.38 28** P **P** **19 46 18.6 +0.3**
**BRVK Borovoye 60.40 319***c iP* **P** **19 46 17.4 -1.2**
BRVK pmax pmax
comp=Z,13nm,0.9s
**BRVK Borovoye 60.40 319** P **P** **19 46 17.5 -1.1**
**KKAR Karatay Array 60.93 307** P **P** **19 46 22.2 -0.3**
**KKAR Karatay Array 60.93 307** P **P** **19 46 22.1 -0.3**
**PALK Pallekele 61.09 265** LR LR 20 13 46.3
comp=Z,46nm,18.8s,baz=173,slow=37
**TOO Toolangi 61.35 177** P **P** **19 46 24.6 -0.6**
TOO pmax pmax
comp=Z,26nm,1.5s
**TOO Toolangi 61.35 177** P **P** **19 46 24.6 -0.6**
**SCRK Sand Creek 61.57 29** P **P** **19 46 27.6 +1.1**
**BMAR Burnt Mountain 61.60 25** P **P** **19 46 28.4 +1.8**
**GAR Garm 61.64 303** P **P** **19 46 26.7 -0.7**
**CHGR Chuyangaron 62.59 302** P **P** **19 46 33.5 -0.2**
CHGR pmax pmax
comp=Z,69nm,1.3s
**CHGR Chuyangaron 62.59 302** P **P** **19 46 33.5 -0.2**
**KBL Kabul 63.45 298** P **P** **19 46 39.5 -0.2**
KBL pmax pmax
comp=Z,34nm,1.2s
**KBL Kabul 63.45 298** P **P** **19 46 39.5 -0.2**
**EPYK Eagle Plains 64.66 26** P **P** **19 46 48.1 +1.2**
**INK Inuvik 65.79 24** P **P** **19 46 55.4 +1.3**
comp=Z,5.1nm,1.0s,baz=274,slow=7.2,SNR=9.5
**INK Inuvik 65.79 24** P **P** **19 46 55.3 +1.2**
INK pmax pmax
comp=Z,8.0nm,1.1s
**INK Inuvik 65.79 24** P **P** **19 46 55.3 +1.2**
INK IAmb IAmb 19 46 56.3
comp=Z,7.9nm,1.1s
**ARU Arti 66.87 323** LR LR 20 17 42.5
comp=Z,99nm,20.3s,baz=83,slow=37
**ARU Arti 66.87 323***c iP* **P** **19 46 59.6 -1.6**
ARU *PP **pP** **19 47 12.1 -2.7**
ARU 19 49 24.3
ARU S **S** **19 55 48.7 -1.3**
ARU pmax pmax
comp=Z,14nm,1.0s
**ARU Arti 66.87 323** P **P** **19 46 59.1 -2.1**
ARU IAmb IAmb 19 47 16.2
comp=Z,12nm,1.0s
**ABKAR Akbulak array 67.27 315** P **P** **19 47 02.1 -1.8**
**ABKAR Akbulak array 67.27 315** P **P** **19 47 02.4 -1.5**
ABKAR IAmb IAmb 19 47 19.7
comp=Z,11nm,1.0s
**A36M Sachs Harbour 68.14 20** P **P** **19 47 10.0 +1.1**
A36M IAmb IAmb 19 47 11.6
comp=Z,12nm,1.1s
**AKTO Aktyubinsk 68.26 317** LR LR 20 17 55.9
comp=Z,68nm,20.8s,baz=76,slow=37
**DLBC Dease Lake 68.69 34** P **P** **19 47 14.8 +2.1**
comp=Z,7.6nm,1.2s,baz=306,slow=9.9,SNR=3.1
DLBC LR LR 20 17 57.2
comp=Z,192nm,18.9s,baz=276,slow=36
**DLBC Dease Lake 68.69 34** IAmb IAmb 19 47 16.1
comp=Z,20nm,1.4s
**HRA Herat 68.95 299** P **P** **19 47 14.7 -0.2**
HRA IAmb IAmb 19 47 18.7
comp=Z,7.3nm,0.8s
**C36M Paulatuk 69.04 22** P **P** **19 47 15.4 +0.8**
C36M IAmb IAmb 19 47 16.4
comp=Z,8.4nm,0.9s
**URZ Urewera 70.08 151** LR LR 20 16 23.4
comp=Z,56nm,18.8s,baz=358,slow=34
**BKZ Black Stump Fm 70.57 152** P **P** **19 47 24.0 -0.4**
BKZ IAmb IAmb 19 47 24.4
comp=Z,16nm,1.1s
**BBB Bella Bella 71.19 41** LR LR 20 11 04.4
comp=Z,230nm,21.8s,baz=229,slow=29
**GEYT Alibeck 71.21 304** LR LR 20 23 19.8
comp=Z,70nm,18.4s,baz=87,slow=40
**KIRV Kirov 71.25 326** LR LR 20 21 39.0
comp=Z,160nm,18.8s,baz=67,slow=38
**KIRV Kirov 71.25 326***ll eP* **P** **19 47 28.0 -0.2**
**RAR Rarotonga 72.16 124** LR LR 20 11 46.7
comp=Z,164nm,20.5s,baz=230,slow=30
**PRGR Permogore 72.20 330** *eP* P 19 47 43.5 +10
PRGR pmax pmax
comp=Z,29nm,1.8s
**RPZ Rata Peaks 72.43 158** LR LR 20 15 49.8
comp=Z,123nm,21.9s,baz=288,slow=33
**EUNU Eureka 72.92 8** P **P** **19 47 39.8 +1.8**
**SPITS Spitsbergen Ar 73.39 350** LR LR 20 21 56.4
comp=Z,131nm,19.6s,baz=263,slow=37
**NOR Nord 74.03 357** *i* P **P** **19 47 43.7 -0.7**
**BELG Belogornoye 74.03 321** LR LR 20 21 59.5
comp=Z,91nm,19.8s,baz=109,slow=37
**BELG Belogornoye 74.03 321***ll eP* **P** **19 47 43.8 -1.1**
BELG pmax pmax
comp=Z,3.0nm,1.0s
**YKA Yellowknife Ar 74.81 28** P **P** **19 47 50.1 +0.8**
comp=Z,4.4nm,0.9s,baz=291,slow=5.6,SNR=41
YKA LR LR 20 19 36.3
comp=Z,49nm,20.7s,baz=230,slow=35
**YKA Yellowknife Ar 74.81 28** P **P** **19 47 50.0 +0.7**
**RES Resolute Bay 75.02 13** P **P** **19 47 50.9 +0.7**
comp=Z,4.1nm,0.8s,baz=325,slow=6.4,SNR=18
RES LR LR 20 24 20.2
comp=Z,69nm,19.1s,baz=294,slow=38
**RES Resolute Bay 75.02 13** P **P** **19 47 50.1 -0.2**
RES pmax pmax
comp=Z,8.0nm,0.9s
**RES Resolute Bay 75.02 13** P **P** **19 47 50.1 -0.2**
RES IAmb IAmb 19 48 08.3
comp=Z,8.0nm,0.9s
**KLMR Klimovskoe 75.25 330** *eP* P 19 47 58.1 +6.3
KLMR pmax pmax
comp=Z,11nm,1.3s
**KLMR Klimovskoe 75.25 330** *eP* P 19 47 58.1 +6.3
KLMR AMP 19 48 04.3
comp=Z,11nm,1.3s
**ARCES ARCESS Array B 76.44 341** P **P** **19 47 58.4 -0.1**
comp=Z,12nm,1.0s,baz=81,slow=8.2,SNR=10
ARCES LR LR 20 25 43.2
comp=Z,207nm,21.1s,baz=74,slow=39
**H04A Detroit Lake 77.27 47** P **P** **19 48 05.1 +1.4**
H04A IAmb IAmb 19 48 06.5
comp=Z,8.8nm,1.0s
**MAK Makhachkala 77.31 311** *eP* **P** **19 48 06.8 +3.0**
MAK *eS* **S** **19 57 55.9 +5.9**
MAK *eSS* **SS** **20 02 50.6 +2.1**
MAK pmax pmax
comp=Z,89nm,1.1s
MAK MLR MLR
comp=Z,118nm,17.0s
**B08A Colville Reser 77.75 42** P **P** **19 48 07.7 +1.5**
B08A IAmb IAmb 19 48 08.9
comp=Z,7.5nm,1.0s
**TULEG Thule 77.87 7** *i* P **P** **19 48 05.9 -0.4**
TULEG IAmb IAmb 19 48 07.0
comp=Z,5.4nm,0.8s
**VRH Novokhopyorsk 77.88 321** *eP* **P** **19 48 04.3 -2.6**
VRH pmax pmax
comp=Z,9.0nm,1.0s
**LKRN Lenkeran, Azer 77.92 307** P **P** **19 48 08.3 +0.9**
**YBH Yreka Blue Hor 77.98 50** LR LR 20 18 08.9
comp=Z,150nm,19.4s,baz=320,slow=32
**SEKA Sheki 78.15 310** P **P** **19 48 07.9 -0.8**
**MNGR Mingechevir, A 78.39 309** P **P** **19 48 10.3 +0.4**
**NEEM North Greenlan 78.43 3** *i* P **P** **19 48 09.1 -0.8**
NEEM IAmb IAmb 19 48 11.0
comp=Z,8.6nm,0.8s
**PINE Pine Mountain 78.43 47** P **P** **19 48 12.2 +1.9**
PINE IAmb IAmb 19 48 13.7
comp=Z,16nm,1.0s
**O02D Mt. Diablo Mer 78.50 51** P **P** **19 48 12.2 +1.5**
**M04C Macdoel 78.57 49** P **P** **19 48 13.1 +2.0**
M04C IAmb IAmb 19 48 14.0
comp=Z,12nm,1.0s
**C09A Chrisman Ranch 78.62 43** P **P** **19 48 11.9 +0.8**
C09A IAmb IAmb 19 48 30.8
comp=Z,19nm,1.4s
**DAG Danmarks Havn 78.75 356** *i* P **P** **19 48 10.3 -0.9**
DAG IAmb IAmb 19 48 11.6
comp=Z,2.2nm,0.8s
**K05A Summer Lake 78.87 48** P **P** **19 48 14.9 +2.1**
K05A IAmb IAmb 19 48 16.1
comp=Z,21nm,1.1s
**LPSR Galich'ya Gora 78.89 323** *eP* **P** **19 48 10.7 -1.7**
LPSR pmax pmax
comp=Z,10.0nm,0.6s
**GANJ Ganja 78.98 310** P **P** **19 48 14.2 +1.0**
**OBN Obninsk 79.06 326** LR LR 20 26 24.0
comp=Z,43nm,19.1s,baz=3.5,slow=38
**OBN Obninsk 79.06 326** *eP* **P** **19 48 11.0 -2.3**
OBN *e* 19 48 19.6
OBN *e*PP **pP** **19 48 27.6 +0.4**
OBN *e* 19 51 13.2
OBN pmax pmax
comp=Z,7.0nm,0.4s
OBN MLR MLR
comp=Z,155nm,18.0s
**VORR Voronezh 79.13 322** *eP* **P** **19 48 13.0 -0.7**
VORR pmax pmax
comp=Z,40nm,0.5s
**NEW Newport 79.14 42** LR LR 20 15 14.7
comp=Z,125nm,21.3s,baz=283,slow=30
**NEW Newport 79.14 42** P **P** **19 48 15.6 +1.6**
NEW pmax pmax
comp=Z,8.0nm,1.1s
**NEW Newport 79.14 42** P **P** **19 48 15.6 +1.6**
**G08A Pilot Rock 79.17 45** P **P** **19 48 16.2 +2.0**
**E09A Wood Farm, Sta 79.21 44** P **P** **19 48 16.2 +1.9**
**EDM Edmonton 79.24 36** P **P** **19 48 16.5 +2.1**
EDM pmax pmax
comp=Z,15nm,1.0s
**EDM Edmonton 79.24 36** P **P** **19 48 16.5 +2.1**
EDM IAmb IAmb 19 48 17.0
comp=Z,15nm,1.0s
**VSR Storozhevoye 79.34 321** *eP* **P** **19 48 13.7 -1.2**
VSR pmax pmax
comp=Z,10.0nm,1.1s
**VORD Divnogorie 79.38 321** *eP* **P** **19 48 11.2 -3.9**
VORD pmax pmax
comp=Z,5.0nm,0.5s
**MOD Modoc Plateau 79.59 49** P **P** **19 48 17.2 +0.5**
**ORV Oroville 79.65 51** P **P** **19 48 17.4 +0.5**
ORV pmax pmax
comp=Z,13nm,1.5s
**ORV Oroville 79.65 51** P **P** **19 48 17.4 +0.5**
ORV IAmb IAmb 19 48 35.4
comp=Z,12nm,1.5s
**ZEI Tsey 79.83 312** *eP* **P** **19 48 16.5 -1.5**
ZEI pmax pmax
comp=Z,5.0nm,0.7s
**KBZ Khabaz 80.12 313** P **P** **19 48 19.4 +0.1**
comp=Z,8.3nm,0.8s,baz=137,slow=1.9,SNR=34
KBZ LR LR 20 27 28.0
comp=Z,96nm,20.2s,baz=42,slow=38
**NAX Nakhchivan 80.13 308** P **P** **19 48 19.8 +0.3**
**KIV Kislovodsk 80.17 314** *eP* **P** **19 48 19.5 -0.2**
KIV pmax pmax
comp=Z,8.0nm,1.0s
KIV MLR MLR
comp=Z,53nm,19.0s
**KIV Kislovodsk 80.17 314** P **P** **19 48 19.1 -0.6**
KIV IAmb IAmb 19 48 24.1
comp=Z,6.7nm,0.8s
**ONI Oni 80.21 312** P **P** **19 48 20.4 +0.5**
ONI pmax pmax
comp=Z,15nm,1.1s
**ONI Oni 80.21 312** P **P** **19 48 20.4 +0.5**
ONI IAmb IAmb 19 48 23.6
comp=Z,15nm,1.1s
**J08A Circle Bar Ran 80.25 47** P **P** **19 48 22.0 +1.8**
J08A IAmb IAmb 19 48 23.6
comp=Z,10nm,1.0s
**GNI Garni 80.28 310** LR LR 20 26 43.5
comp=Z,44nm,20.5s,baz=57,slow=38
**GNI Garni 80.28 310***ll eP* **P** **19 48 21.1 +0.7**
GNI pmax pmax
comp=Z,17nm,1.7s
**GNI Garni 80.28 310** P **P** **19 48 21.2 +0.7**
GNI IAmb IAmb 19 48 25.7
comp=Z,8.4nm,1.0s
**BEKR Beckworth 80.34 51** P **P** **19 48 21.9 +1.1**
**BMO Blue Mountains 80.42 45** P **P** **19 48 22.5 +1.5**
BMO pmax pmax
comp=Z,7.0nm,1.0s
**BMO Blue Mountains 80.42 45** P **P** **19 48 22.4 +1.5**
**WVOR Wild Horse Val 80.52 48** P **P** **19 48 23.1 +1.5**
WVOR pmax pmax
comp=Z,6.0nm,1.0s
**WVOR Wild Horse Val 80.52 48** P **P** **19 48 23.1 +1.5**
**FINES FINESS Array B 80.70 334** P **P** **19 48 21.3 -0.7**
comp=Z,4.2nm,0.6s,baz=65,slow=3.5,SNR=12
FINES LR LR 20 27 20.8
comp=Z,40nm,18.6s,baz=56,slow=38
**FINES FINESS Array B 80.70 334** *i* P **P** **19 48 21.2 -0.8**
FINES pmax pmax
comp=Z,4.0nm,0.6s
**WALA Waterton Lakes 80.74 40** P **P** **19 48 24.8 +2.1**
WALA IAmb IAmb 19 48 25.7
comp=Z,11nm,0.9s
**MPK Martis Peak 80.80 51** P **P** **19 48 24.1 +0.7**
MPK IAmb IAmb 19 48 26.1
comp=Z,13nm,1.2s
**CMB Columbia Colle 81.05 52** P **P** **19 48 25.3 +0.8**
CMB pmax pmax
comp=Z,6.0nm,1.0s
**CMB Columbia Colle 81.05 52** P **P** **19 48 25.3 +0.8**
**JTMT Jette 81.09 42** P **P** **19 48 25.9 +1.3**
JTMT IAmb IAmb 19 48 27.3
comp=Z,10nm,1.1s
**PAHR Pah Rah Range 81.10 51** P **P** **19 48 26.1 +1.3**
PAHR IAmb IAmb 19 48 43.4
comp=Z,12nm,1.4s
**DBG Daneborg 81.23 355** *i* P **P** **19 48 22.7 -1.9**
DBG IAmb IAmb 19 48 24.7
comp=Z,1.6nm,0.8s
**MFID Camas Ranch 81.98 46** P **P** **19 48 30.6 +1.2**
MFID IAmb IAmb 19 48 32.2
comp=Z,8.1nm,0.9s
**KVN Kaiserville 82.27 51** P **P** **19 48 31.9 +0.8**
KVN pmax pmax
comp=Z,4.0nm,1.0s
**KVN Kaiserville 82.27 51** P **P** **19 48 31.9 +0.8**
**NVAR Mina Array Bea 82.39 51** P **P** **19 48 33.6 +1.9**
comp=Z,3.9nm,0.9s,baz=264,slow=5.8,SNR=20
NVAR LR LR 20 18 44.4
comp=Z,75nm,20.4s,baz=255,slow=31
**NVAR Mina Array Bea 82.39 51** P **P** **19 48 33.0 +1.3**
**HLID Hailey 82.85 45** P **P** **19 48 35.5 +1.6**
**GURO Guroymak-BITLI 82.85 309** P **P** **19 48 34.2 +0.1**
GURO IAmb IAmb 19 48 36.2
comp=Z,18nm,1.2s
**HRY Holter Researc 83.05 42** P **P** **19 48 35.9 +1.0**
**LRM Limekiln Ridge 83.08 43** P **P** **19 48 36.0 +0.8**
**KOPT Kop Dagi 83.30 311** P **P** **19 48 36.4 -0.1**
**LCH Last Change Ra 83.36 52** P **P** **19 48 37.8 +1.1**
**ELK Elko 83.54 48** LR LR 20 21 51.2
comp=Z,128nm,18.8s,baz=299,slow=33
**ELK Elko 83.54 48** P **P** **19 48 38.3 +0.6**
ELK pmax pmax
comp=Z,7.0nm,1.2s
**ELK Elko 83.54 48** P **P** **19 48 38.3 +0.6**
**SUMG Summit 83.64 0** *i* P **P** **19 48 38.0 +0.2**
SUMG IAmb IAmb 19 48 54.8
comp=Z,2.6nm,0.6s
**EGMT Eagleton 83.67 40** P **P** **19 48 40.0 +2.0**
EGMT IAmb IAmb 19 48 40.4
comp=Z,12nm,1.2s
**BOZ Bozeman (W) 83.69 43** P **P** **19 48 39.5 +1.2**
BOZ pmax pmax
comp=Z,2.0nm,1.0s
**BOZ Bozeman (W) 83.69 43** P **P** **19 48 39.5 +1.2**
**MNK Minsk 83.73 328** *i* P **P** **19 48 38.2 +0.2**
MNK *i* *PP **pwP** **19 48 55.0 -0.6**
MNK *i* 19 51 50.8
MNK *i* S **S** **19 58 54.6 -2.2**
MNK *i* SS **SS** **20 04 25.2 +1.6**
MNK *i* SSS SSS 20 07 58.8
MNK pmax pmax
comp=Z,22nm,1.1s
MNK pmax pmax
comp=N,8.0nm,0.9s
MNK pmax pmax
comp=E,3.0nm,1.2s
MNK MLR MLR
comp=Z,146nm,19.0s
MNK MLR MLR
comp=E,14nm,19.0s
MNK MLR MLR
comp=N,254nm,20.0s
**MNK Minsk 83.73 328** *i* P **P** **19 48 38.2 +0.2**
comp=E,3.0nm,1.2s
MNK *i* P **P** **19 48 38.2 +0.2**
comp=N,8.0nm,0.9s
MNK *i* P **P** **19 48 38.2 +0.2**
comp=Z,22nm,1.1s,baz=237
MNK *i* pP **pwP** **19 48 55.0 -0.6**
MNK *i* PP **PP** **19 51 50.9 -0.1**
MNK *i* PPP PPP 19 53 33.8
MNK *i* S **S** **19 58 54.6 -2.2**
MNK *i* sS **sS** **19 59 24.6 +4.1**
MNK *i* SS **SS** **20 04 25.3 +1.6**
MNK *i* SSS SSS 20 07 58.9
MNK *i* LR LR 20 24 39.7
MNK *i* LRM MLR 20 28 27.1
comp=Z,146nm,19.1s
MNK *i* LRM MLR 20 28 36.7
comp=E,14nm,18.5s
MNK *i* LRM MLR 20 28 43.1
comp=N,254nm,20.4s
**NACGM Naroch 84.05 328** *i* P **P** **19 48 36.9 -2.7**
**QLMT Earthquake Lak 84.18 43** P **P** **19 48 41.0 +0.2**
**MARD Mardin 84.27 308** P **P** **19 48 41.1 -0.3**
**FFC Flin Flon 84.31 32** P **P** **19 48 41.5 +0.5**
FFC pmax pmax
comp=Z,11nm,1.1s
**FFC Flin Flon 84.31 32** P **P** **19 48 41.5 +0.5**
FFC IAmb IAmb 19 48 43.3
comp=Z,11nm,1.1s
**R11A Troy Canyon, C 84.35 51** P **P** **19 48 43.0 +1.2**
R11A IAmb IAmb 19 48 43.8
comp=Z,8.3nm,1.3s
**QSM Queen of Sheba 84.47 53** P **P** **19 48 43.3 +1.1**
**TPNV Topopah Spring 84.49 52** P **P** **19 48 43.4 +0.9**
TPNV pmax pmax
comp=Z,2.0nm,0.8s
**TPNV Topopah Spring 84.49 52** P **P** **19 48 43.4 +0.9**
**GWY Greenwater Val 84.52 53** P **P** **19 48 44.1 +1.4**
GWY IAmb IAmb 19 49 02.1
comp=Z,6.6nm,0.9s
**YMR Madison River 84.55 43** P **P** **19 48 44.5 +1.8**
YMR IAmb IAmb 19 48 46.6
comp=Z,11nm,0.9s
**YHH Holmes Hill 84.56 43** P **P** **19 48 43.7 +0.9**
**YNR Norris Junctio 84.70 43** P **P** **19 48 45.5 +2.0**
**HVU Hansel Valley 84.73 47** P **P** **19 48 44.9 +1.3**
HVU pmax pmax
comp=Z,12nm,1.4s
**HVU Hansel Valley 84.73 47** P **P** **19 48 44.9 +1.3**
HVU IAmb IAmb 19 49 08.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,12nm,1.4s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **84.80** | **54** | P | **P** | **19 48 45.1** | **+1.1** |
| GSC | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.3s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **84.80** | **54** | P | **P** | **19 48 45.1** | **+1.1** |
| GSC | | | | IAmb | IAmb | 19 49 02.0 | | |
| | comp=Z,8.6nm,1.3s | | | | | | | |
| **H17A** | **Grant Village** | **84.92** | **43** | P | **P** | **19 48 47.7** | **+3.1** |
| H17A | | | | IAmb | IAmb | 19 48 49.3 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **84.99** | **44** | P | **P** | **19 48 47.1** | **+2.2** |
| FLWY | | | | IAmb | IAmb | 19 48 48.5 | | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **85.10** | **324** | P | **P** | **19 48 43.9** | **-1.1** |
| | comp=Z,5.9nm,1.0s,baz=49,slow=5.5,SNR=19 | | | | | | | |
| AKASG | | | | LR | LR | 20 30 48.6 | | |
| | comp=Z,101nm,18.4s,baz=5.5,slow=38 | | | | | | | |
| **AKASG** | **Malin Array Be** | **85.10** | **324** | *i* P | **P** | **19 48 43.9** | **-1.1** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **85.10** | **324** | P | **P** | **19 48 43.7** | **-1.4** |
| **AKBB** | **Malin Array Si** | **85.10** | **324** | *e*P | **P** | **19 48 43.7** | **-1.3** |
| **AKBB** | **Malin Array Si** | **85.10** | **324** | P | **P** | **19 48 44.1** | **-1.0** |
| AKBB | | | | IAmb | IAmb | 19 48 44.7 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MOOW** | **Moose Ponds** | **85.12** | **44** | P | **P** | **19 48 47.0** | **+1.3** |
| **PRN** | **Pahroc Range** | **85.15** | **51** | P | **P** | **19 48 47.2** | **+1.5** |
| PRN | | | | IAmb | IAmb | 19 48 48.5 | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **LOHW** | **Long Hollow** | **85.28** | **44** | P | **P** | **19 48 47.5** | **+1.1** |
| LOHW | | | | IAmb | IAmb | 19 49 06.8 | | |
| | comp=Z,8.4nm,1.5s | | | | | | | |
| **FCC** | **Fort Churchill** | **85.33** | **26** | P | **P** | **19 48 46.0** | **0.0** |
| FCC | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **FCC** | **Fort Churchill** | **85.33** | **26** | P | **P** | **19 48 46.0** | **0.0** |
| **DUG** | **Dugway, Tooele** | **85.44** | **48** | P | **P** | **19 48 48.3** | **+1.1** |
| DUG | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **85.44** | **48** | P | **P** | **19 48 48.3** | **+1.1** |
| DUG | | | | IAmb | IAmb | 19 48 49.7 | | |
| | comp=Z,6.7nm,0.9s | | | | | | | |
| **SHPR** | **Sheep Range** | **85.47** | **52** | P | **P** | **19 48 49.1** | **+1.7** |
| **HWUT** | **Hardware Ranch** | **85.61** | **46** | P | **P** | **19 48 49.3** | **+1.2** |
| HWUT | | | | IAmb | IAmb | 19 48 50.6 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.79** | **55** | LR | LR | 20 20 11.0 | | |
| | comp=Z,182nm,20.0s,baz=292,slow=31 | | | | | | | |
| **HFS** | **Hagfors** | **86.24** | **337** | LR | LR | 20 29 26.9 | | |
| | comp=Z,185nm,21.8s,baz=45,slow=37 | | | | | | | |
| **SUW** | **Suwalki** | **86.28** | **329** | *e*P | **P** | **19 48 49.9** | **-0.9** |
| **SUW** | **Suwalki** | **86.28** | **329** | P | **P** | **19 48 49.3** | **-1.5** |
| SUW | | | | pmax | pmax | | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **SUW** | **Suwalki** | **86.28** | **329** | P | **P** | **19 48 49.3** | **-1.5** |
| **PDAR** | **Pinedale Array** | **86.36** | **44** | P | **P** | **19 48 52.4** | **+0.6** |
| | comp=Z,1.3nm,0.9s,baz=290,slow=4.3,SNR=8.5 | | | | | | | |
| PDAR | | | | LR | LR | 20 19 57.6 | | |
| | comp=Z,179nm,21.9s,baz=300,slow=30 | | | | | | | |
| **RAYN** | **Ar Rayn** | **86.42** | **294** | P | **P** | **19 48 52.0** | **-0.2** |
| RAYN | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **RAYN** | **Ar Rayn** | **86.42** | **294** | P | **P** | **19 48 52.0** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **86.46** | **338** | P | **P** | **19 48 49.9** | **-1.7** |
| | comp=Z,9.0nm,1.0s,baz=47,slow=5.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **86.46** | **338** | P | **P** | **19 48 49.8** | **-1.9** |
| | comp=Z,5.1nm,0.8s,baz=48,slow=4.7,SNR=11 | | | | | | | |
| NOA | | | | LR | LR | 20 31 03.6 | | |
| | comp=Z,96nm,21.6s,baz=50,slow=38 | | | | | | | |
| **LCMT** | **Little Creek M** | **86.61** | **51** | P | **P** | **19 48 53.1** | **+0.1** |
| LCMT | | | | IAmb | IAmb | 19 48 55.7 | | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **KNB** | **Kanab** | **86.91** | **51** | P | **P** | **19 48 55.8** | **+1.3** |
| KNB | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **KNB** | **Kanab** | **86.91** | **51** | P | **P** | **19 48 55.8** | **+1.3** |
| **W13A** | **Hualapai Mount** | **87.03** | **53** | P | **P** | **19 48 56.0** | **+0.8** |
| W13A | | | | IAmb | IAmb | 19 49 13.9 | | |
| | comp=Z,7.5nm,1.4s | | | | | | | |
| **BNN** | **Bunyan** | **87.04** | **311** | P | **P** | **19 48 54.2** | **-0.8** |
| **Q16A** | **Castle Valley** | **87.16** | **48** | P | **P** | **19 48 56.6** | **+0.9** |
| Q16A | | | | IAmb | IAmb | 19 49 15.6 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **SRU** | **San Rafael Swe** | **87.51** | **48** | P | **P** | **19 48 58.0** | **+0.6** |
| SRU | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **SRU** | **San Rafael Swe** | **87.51** | **48** | P | **P** | **19 48 58.0** | **+0.6** |
| SRU | | | | IAmb | IAmb | 19 48 59.5 | | |
| | comp=Z,4.6nm,1.0s | | | | | | | |
| **U15A** | **North Rim** | **87.56** | **51** | P | **P** | **19 48 59.2** | **+1.4** |
| U15A | | | | IAmb | IAmb | 19 49 00.5 | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **BRTR** | **Keskin Array B** | **88.11** | **313** | P | **P** | **19 48 59.2** | **-0.9** |
| | comp=Z,5.7nm,0.8s,baz=101,slow=3.2,SNR=24 | | | | | | | |
| **BRTR** | **Keskin Array B** | **88.11** | **313** | P | **P** | **19 48 58.3** | **-1.9** |
| **113A** | **Mohawk Valley,** | **88.18** | **55** | P | **P** | **19 49 00.4** | **-0.1** |
| 113A | | | | IAmb | IAmb | 19 49 03.0 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **88.74** | **5** | LR | LR | 20 31 53.1 | | |
| | comp=Z,47nm,20.7s,baz=332,slow=38 | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **89.00** | **323** | P | **P** | **19 49 02.7** | **-1.5** |
| **PV13** | **Radium Mtn., P** | **89.14** | **48** | P | **P** | **19 49 06.5** | **+1.3** |
| PV13 | | | | IAmb | IAmb | 19 49 08.2 | | |
| | comp=Z,4.9nm,1.0s | | | | | | | |
| **FRB** | **Frobisher Bay** | **89.23** | **13** | LR | LR | 20 32 31.3 | | |
| | comp=Z,77nm,20.2s,baz=348,slow=38 | | | | | | | |
| **MLR** | **Muntele Rosu** | **89.82** | **321** | LR | LR | 20 32 15.6 | | |
| | comp=Z,133nm,20.8s,baz=53,slow=38 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **89.98** | **33** | LR | LR | 20 29 35.9 | | |
| | comp=Z,32nm,19.9s,baz=302,slow=36 | | | | | | | |
| **BORA** | **Eskisehir** | **90.13** | **314** | P | **P** | **19 49 07.5** | **-2.1** |
| BORA | | | | IAmb | IAmb | 19 49 09.2 | | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **90.16** | **306** | LR | LR | 20 34 19.7 | | |
| | comp=Z,32nm,18.8s,baz=180,slow=39 | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **90.25** | **325** | *e*P | **P** | **19 49 09.8** | **0.0** |
| CRVS | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **90.25** | **325** | *e*P | **P** | **19 49 09.8** | **0.0** |
| **OJC** | **Ojcow** | **90.26** | **327** | *e*P | **P** | **19 49 09.2** | **-0.7** |
| **OJC** | **Ojcow** | **90.26** | **327** | P | **P** | **19 49 07.9** | **-2.0** |
| OJC | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **OJC** | **Ojcow** | **90.26** | **327** | P | **P** | **19 49 07.9** | **-2.0** |
| **BORG** | **Borgarnes** | **90.59** | **353** | LR | LR | 20 31 20.6 | | |
| | comp=Z,25nm,18.2s,baz=346,slow=36 | | | | | | | |
| **CSS** | **Mathiatis** | **90.70** | **309** | P | **P** | **19 49 10.5** | **-1.7** |
| **GHAJ** | **Ghor Haditha** | **90.86** | **305** | P | **P** | **19 49 11.9** | **-1.0** |
| **KSP** | **Ksiaz** | **91.55** | **329** | *e*P | **P** | **19 49 15.3** | **-0.5** |
| **MORC** | **Moravsky Berou** | **91.66** | **328** | *e*P | **P** | 19 49 11.1 | -5.3 |
| **OSTC** | **Ostas** | **91.78** | **329** | *e*P | **P** | **19 49 16.4** | **-0.5** |
| **KRLC** | **Kraliky** | **91.83** | **328** | *e*P | **P** | **19 49 15.8** | **-1.4** |
| **KRLC** | **Kraliky** | **91.83** | **328** | *e*P | **P** | **19 49 15.8** | **-1.4** |
| **VYHS** | **Vyhne** | **91.85** | **326** | *e*P | **P** | **19 49 17.2** | **-0.1** |
| **VYHS** | **Vyhne** | **91.85** | **326** | *e*P | **P** | **19 49 17.2** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **91.86** | **329** | *e*P | **P** | **19 49 16.7** | **-0.7** |
| **DPC** | **Dobruska-Polom** | **91.86** | **329** | *e*P | **P** | **19 49 16.7** | **-0.7** |
| **JAVC** | **Velka Javorina** | **92.20** | **327** | *e*P | **P** | **19 49 18.7** | **-0.3** |
| **ANMO** | **Albuquerque** | **92.41** | **50** | LR | LR | 20 28 32.0 | | |
| | comp=Z,70nm,20.4s,baz=291,slow=34 | | | | | | | |
| **ANMO** | **Albuquerque** | **92.41** | **50** | P | **P** | **19 49 20.4** | **0.0** |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **92.41** | **50** | P | **P** | **19 49 20.4** | **0.0** |
| ANMO | | | | IAmb | IAmb | 19 49 23.1 | | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **VRAC** | **Vranov** | **92.43** | **328** | LR | LR | 20 33 47.2 | | |
| | comp=Z,125nm,21.2s,baz=36,slow=37 | | | | | | | |
| **VRAC** | **Vranov** | **92.43** | **328** | *e*P | **P** | **19 49 18.9** | **-1.1** |
| **SMOL** | **Smolenice** | **92.55** | **327** | *e*P | **P** | **19 49 20.7** | **+0.2** |
| SMOL | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.7s | | | | | | | |
| **SMOL** | **Smolenice** | **92.55** | **327** | *e*P | **P** | **19 49 20.7** | **+0.2** |
| **KRUC** | **Moravsky** | **92.69** | **328** | *e*P | **P** | **19 49 19.8** | **-1.4** |
| **CLL** | **Collm** | **92.73** | **331** | *e*P | **P** | **19 49 19.0** | **-2.3** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **92.73** | **331** | *e*Px | Px | 19 49 19.0 | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| CLL | | | | *e*SSSS | | 20 13 42.0 | | |
| CLL | | | | Lm | MLR | 20 33 00.0 | | |
| | comp=Z,100nm,21.1s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **93.87** | **328** | *e*P | **P** | **19 49 25.5** | **-1.1** |
| CKRC | | | | *ex* | x | 19 49 42.2 | | |
| **KHC** | **Kasperske Hory** | **94.00** | **329** | *e*P | **P** | **19 49 25.9** | **-1.3** |
| KHC | | | | *e* | | 19 49 42.7 | | |
| **KHC** | **Kasperske Hory** | **94.00** | **329** | *e*P | **P** | **19 49 25.9** | **-1.3** |
| KHC | | | | *ep*P | *p*P | **19 49 42.7** | **+1.4** |
| **GERES** | **GERESS Array B** | **94.14** | **329** | P | **P** | **19 49 26.2** | **-1.8** |
| | comp=Z,1.3nm,0.8s,baz=12,slow=5.0,SNR=12 | | | | | | | |
| **LPIG** | **La Paz** | **94.95** | **61** | LR | LR | 20 25 26.1 | | |
| | comp=Z,116nm,20.2s,baz=24,slow=31 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **95.60** | **341** | LR | LR | 20 36 48.6 | | |
| | comp=Z,37nm,18.4s,baz=12,slow=38 | | | | | | | |
| **TXAR** | **Lajitas Array** | **97.39** | **53** | P | Pdif | 19 49 43.9 | +0.6 | |
| | comp=Z,0.4nm,0.7s,baz=130,slow=3.8,SNR=4.3 | | | | | | | |
| TXAR | | | | LR | LR | 20 28 01.4 | | |
| | comp=Z,98nm,19.4s,baz=303,slow=32 | | | | | | | |
| **TXAR** | **Lajitas Array** | **97.39** | **53** | P | **P** | **19 49 43.2** | **0.0** |
| **TXAR** | **Lajitas Array** | **97.39** | **53** | P | **P** | **19 49 43.2** | **0.0** |
| **DAVOX** | **Davos/Dischmat** | **97.42** | **329** | LR | LR | 20 38 17.2 | | |
| | comp=Z,69nm,19.1s,baz=35,slow=38 | | | | | | | |
| **SCHQ** | **Schefferville** | **97.59** | **16** | LR | LR | 20 36 23.8 | | |
| | comp=Z,105nm,20.9s,baz=312,slow=37 | | | | | | | |
| **LBTB** | **Lobatse** | **122.83** | **255** | PKIKP | **PKiKP** | **19 55 05.9** | **0.0** |
| **LBTB** | **Lobatse** | **122.83** | **255** | PKPdf | **PKiKP** | **19 55 05.9** | **0.0** |
| **BOSA** | **Boshof** | **123.89** | **251** | PKP | **PKPdf** | **19 55 07.6** | **0.0** |
| | comp=Z,3.1nm,0.8s,baz=75,slow=5.6,SNR=4.8 | | | | | | | |
| **BOSA** | **Boshof** | **123.89** | **251** | PKIKP | **PKPdf** | **19 55 07.4** | **-0.2** |
| **BOSA** | **Boshof** | **123.89** | **251** | | **PKPdf** | **19 55 07.4** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **126.59** | **310** | PKP | **PKPdf** | **19 55 13.0** | **-0.1** |
| | comp=Z,3.3nm,0.9s,baz=19,slow=2.3,SNR=16 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **126.59** | **310** | | **PKPdf** | **19 55 11.8** | **-1.3** |
| **TSUM** | **Tsumeb** | **128.58** | **264** | PKPdf | **PKPdf** | **19 55 15.7** | **-1.2** |
| **SDV** | **Santo Domingo** | **134.17** | **48** | PKP | **PKPdf** | **19 55 28.2** | **+0.5** |
| | comp=Z,7.0nm,0.7s,baz=262,slow=3.5,SNR=3.3 | | | | | | | |
| **SDV** | **Santo Domingo** | **134.17** | **48** | PKPdf | **PKPdf** | **19 55 27.5** | **-0.2** |
| **DBIC** | **Dimbokro** | **135.70** | **309** | PKP | **PKiKP** | **19 55 31.5** | **-0.4** |
| | comp=Z,3.3nm,0.8s,baz=180,slow=1.7,SNR=3.9 | | | | | | | |
| **PLCA** | **Paso Flores** | **147.93** | **129** | PKPbc | **PKPbc** | **19 55 55.0** | **+0.6** |
| | comp=Z,6.8nm,1.0s,baz=205,slow=5.2,SNR=5.8 | | | | | | | |
| **PLCA** | **Paso Flores** | **147.93** | **129** | PKP2 | **PKPbc** | **19 55 54.8** | **+0.3** |
| **PLCA** | **Paso Flores** | **147.93** | **129** | | **PKPbc** | **19 55 54.8** | **+0.3** |
| **LPAZ** | **La Paz** | **150.53** | **81** | PKP | **PKPdf** | **19 55 57.6** | **+0.8** |
| | comp=Z,1.5nm,0.9s,baz=14,slow=1.3,SNR=3.9 | | | | | | | |
| LPAZ | | | | PKPbc | **PKiKP** | **19 56 03.5** | **+0.5** |
| | comp=Z,9.0nm,1.1s,baz=351,slow=4.3,SNR=14 | | | | | | | |
| **LPAZ** | **La Paz** | **150.53** | **81** | PKIKP | **PKPdf** | **19 55 53.3** | **-3.6** |
| **LPAZ** | **La Paz** | **150.53** | **81** | PKPdf | **PKPdf** | **19 55 53.3** | **-3.6** |

*PRU **24** 19:49:11.4±0.0, 51.46°N×16.14°E, h0km*

**ISC 24 19:49:12.0±2.2, 51.4°N±0.1×16.14°E±0.06, h10km, n16, σ0s43/25, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.60** | **170** | *e*Pg | **Pg** | **19 49 23.1** | **-0.5** |
| KSP | | | | *e*Sg | **Sg** | **19 49 31.5** | **+0.1** |
| **CHVC** | **Chvalec** | **0.85** | **184** | *e*PG | **Pg** | **19 49 27.9** | **-0.4** |
| CHVC | | | | *e*SG | **Sg** | **19 49 39.5** | **+0.2** |
| **OSTC** | **Ostas** | **0.88** | **177** | *e*PG | **Pg** | **19 49 28.5** | **-0.4** |
| OSTC | | | | *e*SG | **Sg** | **19 49 40.7** | **+0.4** |
| **UPC** | **Upice** | **0.93** | **185** | *e*PG | **Pg** | **19 49 29.6** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | **19 49 42.2** | **+0.3** |
| | comp=Z,9.7nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.09** | **174** | *e*PG | **Pg** | **19 49 32.2** | **-0.7** |
| DPC | | | | *e*SG | **Sg** | **19 49 46.6** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **1.09** | **174** | *e* | **Pg** | **19 49 32.2** | **-0.7** |
| **PVCC** | **Panska Ves** | **1.34** | **228** | *e*PG | **Pn** | **19 49 36.4** | **-0.4** |
| PVCC | | | | *e*SG | **Sg** | **19 49 55.0** | **-0.1** |
| | comp=Z,15nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.42** | **163** | *e*PG | **Pn** | **19 49 38.0** | **+0.1** |
| KRLC | | | | *e*SG | **Sn** | **19 49 56.8** | **+0.2** |
| **KRLC** | **Kraliky** | **1.42** | **163** | *e* | **Pn** | **19 49 38.0** | **+0.1** |
| **BRG** | **Berggiesshubel** | **1.49** | **249** | Pg | **Pn** | **19 49 38.9** | **+0.1** |
| BRG | | | | Sg | **Sb** | **19 49 59.0** | **+0.3** |
| BRG | | | | Amp | | 19 49 59.8 | |
| | comp=Z,3.7nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.77** | **216** | *e*SG | **Sb** | **19 50 07.2** | **+0.6** |
| **MORC** | **Moravsky Berou** | **1.89** | **151** | *e*PN | **Pn** | **19 49 44.2** | **-0.1** |
| MORC | | | | *e*SG | **Sb** | **19 50 10.9** | **+0.8** |
| **CLL** | **Collm** | **1.97** | **268** | *e*Sg | **Sb** | **19 50 13.0** | **+0.6** |
| **NKC** | **Novy Kostel** | **2.63** | **244** | *e*SG | **Sg** | **19 50 36.7** | **+0.3** |
| **KHC** | **Kasperske Hory** | **2.83** | **216** | *e*SG | **Sg** | **19 50 42.4** | **-0.4** |
| **CKRC** | **Cesky Krumlov** | **2.87** | **205** | *e*SG | **Sg** | **19 50 43.9** | **-0.1** |

*TUL **24** 20:04:02.5±1.2, 36.18°N±0.02×97.26°W±0.02, h8km±7km, ML2.7, mb_Lg2.1/4(NEIC), Error ellipse: s-maj=2.5km s-min=2.2km az=90.0*

**NEIC 24 20:04:01.8±1.5, 36.18°N±0.02×97.26°W±0.02, h5km±2km, Error ellipse: s-maj=3.3km s-min=3.0km az=116.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FNO** | **Franklin** | **0.93** | **187** | | Pg | 20 04 19.9 | +0.3 |
| **T35A** | **Sooner Cattle** | **0.95** | **39** | | Pb | 20 04 20.4 | -0.3 |
| **W35A** | **Tecumseh** | **1.07** | **163** | Pg | Pg | 20 04 21.9 | -0.4 |
| **TUL1** | **Leonard** | **1.22** | **102** | Pn | Pg | 20 04 24.5 | -0.7 |
| **U32A** | **Winter Ranch,** | **1.42** | **278** | Pn | Pn | 20 04 28.0 | -0.3 |
| **X34A** | **Smith Ranch, M** | **1.65** | **197** | Pn | Pn | 20 04 30.7 | -0.7 |
| **WMOK** | **Wichita Mounta** | **1.90** | **221** | | Pn | 20 04 34.8 | -0.1 |
| **MIAR** | **Mount Ida** | **3.42** | **117** | IAmb_Lg | | 20 05 51.6 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.50** | **61** | IAmb_Lg | | 20 06 38.1 | |
| | comp=Z,4.8nm,0.8s | | | | | | |

*MAN **24** 20:08:23.3, 14.62°N×120.09°E, h26km, mb4.6, ML3.5, MS3.4*

*IDC **24** 20:08:25.9±0.9, 14.60°N×120.42°E, h77km±12km, mb3.2/8, mb1 3.4/8, mb1mx3.2/56, mbtmp3.6/8, MS2.8/1, Ms1 2.8/1, ms1mx2.3/28, Error ellipse: s-maj=48.1km s-min=15.7km az=60.0*

**ISC 24 20:08:23.1±1.4, 14.57°N±0.05×119.99°E±0.09, h44km±16km, n19, σ1s27/24, mb3.5/7, 4C-5D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MACP** | **Maragondon, Ca** | **0.77** | **113** | *e*P | **Pn** | **20 08 36.5** | **-1.0** |
| MACP | | | | *e*S | **Sn** | **20 08 46.4** | **-1.6** |
| **LUBP** | **Lubang** | **0.86** | **163** | *e*P | **Pn** | **20 08 38.6** | **-0.3** |
| LUBP | | | | *e*S | **Sn** | **20 08 52.8** | **+2.5** |
| **TGY** | **Tagaytay City** | **1.02** | **117** | P | **Pn** | **20 08 41.5** | **+0.4** |
| | 212nm,0.3s,baz=298,slow=2.5,SNR=22 | | | | | | |
| TGY | | | | S | **Sn** | **20 08 54.6** | **+0.3** |
| | 268nm,0.3s,baz=195,slow=23,SNR=8.5 | | | | | | |
| **TGY** | **Tagaytay City** | **1.02** | **117** | *e*P | **Pn** | **20 08 41.5** | **+0.4** |
| TGY | | | | *e*S | **Sn** | **20 08 55.3** | **+1.0** |
| **SCZP** | **Santa Cruz** | **1.21** | **356** | *e*P | **Pn** | **20 08 43.7** | **+0.2** |
| **PGP** | **Puerto Galera** | **1.41** | **138** | *e*P | **Pn** | **20 08 46.5** | **+0.1** |
| PGP | | | | *e*S | **Sn** | **20 09 01.8** | **-1.9** |
| **PCPH** | **Palayan** | **1.46** | **47** | *e*P | **Pn** | **20 08 46.7** | **-0.2** |
| PCPH | | | | *e*S | **Sn** | **20 09 04.5** | **-0.4** |
| **LQP** | **Lukban** | **1.56** | **107** | *e*P | **Pn** | **20 08 49.1** | **+0.5** |
| LQP | | | | *i* S | **Sn** | **20 09 08.5** | **+0.6** |
| **SMPP** | **San Manuel, Pa** | **1.71** | **23** | *e*P | **Pn** | **20 08 50.6** | **+0.1** |
| **GQP** | **Guinayangan** | **2.47** | **105** | *e*P | **Pn** | **20 09 03.8** | **+3.0** |
| GQP | | | | *i* S | Sn | 20 09 47.6 | +18 |
| **CMAR** | **Chiang Mai Arr** | **20.55** | **284** | P | Pn | 20 13 02.8 | +2.1 |
| | 0.7nm,0.6s,baz=93,slow=9.4,SNR=9.5 | | | | | | |
| **KSRS** | **Korea Array** | **23.86** | **16** | LR | LR | 20 22 32.6 | |
| | comp=Z,23nm,21.6s,baz=110,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **35.04** | **344** | P | **P** | **20 15 11.9** | **+0.1** |
| | 0.3nm,0.4s,baz=163,slow=5.3,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.08** | **157** | P | **P** | **20 15 27.6** | **-1.8** |
| | 0.1nm,0.4s,baz=331,slow=9.9,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **40.36** | **160** | P | **P** | **20 15 55.3** | **-1.5** |
| | 0.3nm,0.4s,baz=332,slow=7.2,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.93** | **323** | P | **P** | **20 16 34.3** | **+0.6** |
| | 0.3nm,0.7s,baz=118,slow=6.7,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.98** | **333** | P | **P** | **20 16 57.5** | **+0.1** |
| | 0.4nm,0.4s,baz=130,slow=6.9,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.09** | **326** | P | **P** | **20 17 07.3** | **+1.3** |
| | 0.8nm,0.6s,baz=130,slow=8.2,SNR=8.9 | | | | | | |
| **FINES** | **FINESS Array B** | **79.20** | **331** | P | **P** | **20 20 23.7** | **+0.4** |
| | 2.8nm,1.1s,baz=14,slow=6.2,SNR=1.5 | | | | | | |

**WEL 24 20:11:04.9±0.8, 33°S±14×18°0W±2.5, h411km±14km, M3.7/15, mB4.2/11, ML4.7/18, MLv4.3/15, Mw(mB)3.4/11, Error ellipse: s-maj=0.0km s-min=0.0km az=117.2, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PKGZ** | **Pakihiroa** | **4.99** | **200** | P | P | 20 12 26.1 | -0.9 | |
| PKGZ | | | | S | S | 20 13 34.6 | +0.3 | |
| **PUZ** | **Puketiti** | **5.11** | **197** | P | S | 20 12 28.5 | +0.3 | |
| PUZ | | | | S | S | 20 13 37.5 | +1.0 | |
| **RUGZ** | **Raukumara Rang** | **5.18** | **203** | P | S | 20 12 27.8 | -1.3 | |
| RUGZ | | | | S | S | 20 13 34.4 | -3.5 | |
| **TWGZ** | **Tauwhareparae** | **5.28** | **199** | P | S | 20 12 31.5 | +1.5 | |
| TWGZ | | | | S | S | 20 13 40.4 | +0.6 | |
| **RTZ** | **Ruatahuna** | **6.00** | **205** | P | S | 20 12 37.0 | -0.5 | |
| RTZ | | | | S | S | 20 13 53.0 | -0.6 | |
| **MTHZ** | **Maungataniwha** | **6.26** | **205** | P | S | 20 12 41.1 | +0.8 | |
| MTHZ | | | | S | S | 20 13 58.7 | 0.0 | |
| **MRHZ** | **Matea Rd** | **6.40** | **208** | P | S | 20 12 42.0 | +0.2 | |
| **ARHZ** | **Aropaoanui** | **6.58** | **202** | P | S | 20 12 45.1 | +0.7 | |
| ARHZ | | | | S | S | 20 14 06.1 | +1.1 | |
| **BKZ** | **Black Stump Fm** | **6.66** | **206** | P | S | 20 12 44.8 | -0.6 | |
| BKZ | | | | S | S | 20 14 05.6 | -1.2 | |
| **CKHZ** | **Cape Kidnapper** | **6.92** | **200** | P | S | 20 12 49.6 | +1.5 | |
| CKHZ | | | | S | S | 20 14 13.1 | +1.3 | |
| **TMVZ** | **Te Maari** | **6.93** | **210** | P | P | 20 12 48.5 | +0.1 | |
| **TWVZ** | **Taurewa** | **7.01** | **212** | P | P | 20 12 49.0 | -0.2 | |
| **SNVZ** | **South Ngauruho** | **7.02** | **210** | P | P | 20 12 48.9 | -0.5 | |
| **TUVZ** | **Tukino** | **7.08** | **210** | P | P | 20 12 49.3 | -0.8 | |
| TUVZ | | | | S | S | 20 14 17.3 | +1.9 | |
| **KAHZ** | **Kahuranaki** | **7.10** | **201** | P | S | 20 12 50.5 | +0.3 | |
| KAHZ | | | | S | S | 20 14 16.7 | +1.0 | |
| **BHHZ** | **Black Hill Sta** | **7.11** | **207** | P | S | 20 12 49.3 | -1.0 | |
| BHHZ | | | | S | S | 20 14 14.8 | -1.0 | |
| **KRHZ** | **Kereru** | **7.13** | **205** | P | S | 20 12 50.1 | -0.4 | |
| KRHZ | | | | S | S | 20 14 15.8 | -0.4 | |
| **TRVZ** | **Turoa** | **7.15** | **210** | P | P | 20 12 50.2 | -0.7 | |
| **WNVZ** | **Wahianoa** | **7.15** | **210** | P | P | 20 12 50.2 | -0.7 | |
| WNVZ | | | | S | S | 20 14 19.5 | +2.6 | |
| **PNHZ** | **Pukenui** | **7.43** | **204** | P | P | 20 12 53.0 | -0.8 | |
| PNHZ | | | | S | S | 20 14 22.5 | +0.2 | |
| **PRHZ** | **Porangahau** | **7.61** | **201** | P | P | 20 12 56.5 | +0.8 | |
| PRHZ | | | | S | S | 20 14 28.0 | +2.1 | |
| **TSZ** | **Takapari Road** | **7.64** | **205** | P | P | 20 12 55.3 | -0.8 | |
| TSZ | | | | S | S | 20 14 26.5 | -0.3 | |
| **PKE** | **Pukeiti** | **7.81** | **218** | P | P | 20 13 00.0 | +2.1 | |
| **MRZ** | **Mangatainoka R** | **8.31** | **205** | P | P | 20 13 02.4 | -1.0 | |
| MRZ | | | | S | S | 20 14 39.5 | -1.0 | |
| **OGWZ** | **Otaki Gorge** | **8.60** | **206** | P | P | 20 13 05.9 | -0.6 | |
| **TMWZ** | **Te Maipa** | **8.61** | **202** | P | P | 20 13 06.9 | +0.2 | |
| **KIW** | **Kapiti Island** | **8.73** | **207** | P | P | 20 13 06.9 | -1.2 | |
| **PAWZ** | **Paruwai Farm** | **9.01** | **204** | P | P | 20 13 10.7 | -0.4 | |
| **DUWZ** | **D'Urville Isla** | **9.09** | **212** | P | P | 20 13 10.6 | -1.4 | |
| **MSWZ** | **Moikau Station** | **9.10** | **204** | P | P | 20 13 11.7 | -0.4 | |
| **PLWZ** | **Palliser** | **9.23** | **204** | P | P | 20 13 12.9 | +0.2 | |
| **TUWZ** | **Tuamarina** | **9.60** | **209** | P | P | 20 13 17.0 | -0.6 | |
| **NNZ** | **Nelson** | **9.67** | **212** | P | P | 20 13 17.0 | -1.4 | |
| **QRZ** | **Quartz Range** | **9.77** | **217** | P | P | 20 13 17.8 | -1.7 | |

*PDG **24** 20:21:01.5±0.1, 42.60°N×18.30°E, h10km, MD2.7/1, ML1.9/14, Error ellipse: s-maj=0.1km s-min=0.1km az=0.0*

*RHSSO **24** 20:21:02.0±0.3, 42.59°N×18.29°E, h3km±1km, ML2.3/10*

*BEO **24** 20:21:02.0±0.5, 42.54°N×18.29°E, h0km, ML2.2/10*

**ISC 24 20:21:01.9±0.9, 42.59°N±0.02×18.28°E±0.02, h6km±7km, n51, σ0s92/95, 5C-7D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBR

**IDC 24** 20:26:15.2±6.1, 50°09N×114°96W, h0km, **mb1 3.7**/1, **mb1mx3.0**/31, **mbtmp3.4**/1, **ML3.3**/1, **Error ellipse: s-maj=73.4km s-min=41.6km az=60.0, Alberta**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I56US** | **NEWPORT INFRAS** | **2.31** | **219** | *i* | | 20 41 10.0 | |
| | baz=37,slow=331,SNR=1.4 | | | | | | |
| **I10CA** | **LAC DU BONNET** | **12.15** | **82** | *i* | | 21 48 50.0 | |
| | baz=278,slow=376,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **12.44** | **1** | Pn | Pn | 20 29 09.3 | -4.0 |
| | 0.2nm,0.3s,baz=181,slow=13,SNR=12 | | | | | | |
| YKA | | | | Sn | Sn | 20 31 22.9 | -9.4 |
| | 0.2nm,0.3s,baz=176,slow=22,SNR=7.1 | | | | | | |

*IDC **24** 20:45:46.1±1.0, 43°.70N×105°.46W, h0km, mb4.1/2, mb1 3.7/7, mb1mx3.4/46, mbtmp3.5/7, ML3.3/4, Error ellipse: s-maj=20.9km s-min=9.1km az=147.0*
*NEIC **24** 20:45:47.6±1.2, 43°.61N±0°.05×105°.20W±0°.04, h0km±1km, ML3.5/66, Error ellipse: s-maj=8.7km s-min=5.1km az=162.0*

**ISC 24 20:45:46.5**±0.7, **43°.60N**±0°.04×**105°.22W**±0°.04, **h0**km, **n87,** σ1**$27/88, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.00** | **58** | Pg | **Pb** | **20 46 06.3** | **-0.6** |
| **K22A** | **Casper** | **1.34** | **226** | | **Pg** | **20 46 11.6** | **-0.7** |
| K22A | | | | IAML | | 20 46 37.3 | |
| | comp=E,473nm,0.3s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.30** | **184** | | **Pn** | **20 46 26.9** | **+1.0** |
| **RWWY** | **Rawlins** | **2.41** | **218** | | **Pb** | **20 46 29.3** | **-1.5** |
| RWWY | | | | IAML | | 20 47 04.0 | |
| | comp=E,261nm,0.9s | | | | | | |
| RWWY | | | | IAML | | 20 47 04.8 | |
| | comp=E,335nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **2.75** | **192** | Pn | **Pn** | **20 46 33.8** | **+1.6** |
| N23A | | | | IAML | | 20 47 19.7 | |
| | comp=E,128nm,0.6s | | | | | | |
| N23A | | | | IAML | | 20 47 27.8 | |
| | comp=N,154nm,0.7s | | | | | | |
| **LAO** | **LASA Array** | **3.17** | **347** | | **Pn** | **20 46 38.6** | **+0.8** |
| **BW06** | **Boulder Array** | **3.28** | **257** | | **Pn** | **20 46 40.2** | **+0.8** |
| **PD31** | **Pinedale Array** | **3.28** | **257** | | **Pn** | **20 46 40.3** | **+1.0** |
| **PDAR** | **Pinedale Array** | **3.28** | **257** | Pn | **Pn** | **20 46 40.1** | **+0.7** |
| | comp=N,3.9nm,0.3s,baz=76,slow=17,SNR=77 | | | | | | |
| PDAR | | | | Lg | Lg | 20 47 25.0 | |
| | comp=N,5.3nm,0.3s,baz=72,slow=25,SNR=1.9 | | | | | | |
| **RLMT** | **Red Lodge** | **3.28** | **299** | | **Pn** | **20 46 40.4** | **+1.1** |
| RLMT | | | | IAML | | 20 47 40.4 | |
| | comp=N,113nm,0.8s | | | | | | |
| RLMT | | | | IAML | | 20 47 44.9 | |
| | comp=N,86nm,1.0s | | | | | | |
| **OGNE** | **Ogallala** | **3.55** | **137** | Pn | **Pn** | **20 46 44.8** | **+1.9** |
| **YMP** | **Mirror Lake Pl** | **3.73** | **290** | | **Pn** | **20 46 47.0** | **+1.3** |
| **ISCO** | **Idaho Springs** | **3.80** | **185** | | **Pn** | **20 46 48.2** | **+1.6** |
| ISCO | | | | IAML | | 20 47 54.0 | |
| | comp=N,46nm,0.9s | | | | | | |
| **LKWY** | **Lake** | **3.86** | **286** | | **Pn** | **20 46 48.9** | **+1.6** |
| LKWY | | | | IAML | | 20 47 57.5 | |
| | comp=N,53nm,1.3s | | | | | | |
| LKWY | | | | IAML | | 20 48 03.3 | |
| | comp=N,72nm,1.6s | | | | | | |
| **GCMT** | **Greycliff** | **3.86** | **306** | | **Pn** | **20 46 48.4** | **+1.2** |
| **LOHW** | **Long Hollow** | **3.91** | **272** | | **Pn** | **20 46 49.8** | **+1.7** |
| **H17A** | **Grant Village** | **3.95** | **284** | | **Pn** | **20 46 50.1** | **+1.6** |
| H17A | | | | IAML | | 20 47 53.8 | |
| | comp=E,42nm,1.1s | | | | | | |
| H17A | | | | IAML | | 20 47 54.1 | |
| | comp=N,75nm,1.2s | | | | | | |
| **FLWY** | **Flagg Ranch** | **4.00** | **279** | | **Pn** | **20 46 50.6** | **+1.4** |
| FLWY | | | | IAML | | 20 47 58.3 | |
| | comp=N,95nm,2.5s | | | | | | |
| FLWY | | | | IAML | | 20 48 02.8 | |
| | comp=N,68nm,1.0s | | | | | | |
| **MOOW** | **Moose Ponds** | **4.01** | **274** | Pn | **Pn** | **20 46 50.9** | **+1.4** |
| **SNOW** | **Snow King Moun** | **4.03** | **270** | Pn | **Pn** | **20 46 50.1** | **+0.4** |
| SNOW | | | | | **Pb** | **20 46 58.5** | **0.0** |
| SNOW | | | | IAML | | 20 48 06.7 | |
| | comp=N,79nm,1.0s | | | | | | |
| SNOW | | | | IAML | | 20 48 09.5 | |
| | comp=N,66nm,1.1s | | | | | | |
| **YNR** | **Norris Junctio** | **4.09** | **288** | Pn | **Pn** | **20 46 51.5** | **+1.0** |
| YNR | | | | | **Pb** | **20 46 59.3** | **-0.2** |
| **REDW** | **Red Top Meadow** | **4.11** | **269** | | **Pb** | **20 46 58.4** | **-1.4** |
| REDW | | | | IAML | | 20 48 10.8 | |
| | comp=N,90nm,1.1s | | | | | | |
| REDW | | | | IAML | | 20 48 19.6 | |
| | comp=N,80nm,1.4s | | | | | | |
| **O20A** | **White River Ci** | **4.13** | **214** | Pn | **Pn** | **20 46 52.1** | **+1.1** |
| O20A | | | | IAML | | 20 48 05.9 | |
| | comp=E,77nm,0.8s | | | | | | |
| O20A | | | | IAML | | 20 48 39.5 | |
| | comp=N,84nm,1.7s | | | | | | |
| **TPAW** | **Teton Pass** | **4.17** | **271** | | **Pn** | **20 46 52.3** | **+0.7** |
| TPAW | | | | IAML | | 20 48 15.8 | |
| | comp=N,83nm,0.9s | | | | | | |
| TPAW | | | | IAML | | 20 48 16.6 | |
| | comp=N,45nm,1.1s | | | | | | |
| **YHH** | **Holmes Hill** | **4.22** | **288** | Pn | **Pn** | **20 46 53.1** | **+0.7** |
| YHH | | | | IAML | | 20 48 20.4 | |
| | comp=N,35nm,1.1s | | | | | | |
| **YMR** | **Madison River** | **4.27** | **287** | | **Pn** | **20 46 54.1** | **+1.1** |
| YMR | | | | IAML | | 20 48 19.4 | |
| | comp=N,89nm,1.0s | | | | | | |
| YMR | | | | IAML | | 20 48 22.5 | |
| | comp=E,63nm,1.7s | | | | | | |
| **E28A** | **Huff** | **4.38** | **46** | Pn | **Pn** | **20 46 54.4** | **+0.2** |
| **AHID** | **Auburn Hatcher** | **4.38** | **261** | | **Pn** | **20 46 52.8** | **-1.6** |
| AHID | | | | IAML | | 20 48 09.0 | |
| | comp=E,63nm,1.1s | | | | | | |
| AHID | | | | IAML | | 20 48 11.9 | |
| | comp=E,39nm,1.0s | | | | | | |
| **RDMU** | **Red Mountain** | **4.43** | **228** | | **Pn** | **20 46 55.3** | **+0.1** |
| RDMU | | | | IAML | | 20 48 13.9 | |
| | comp=E,72nm,1.1s | | | | | | |
| RDMU | | | | IAML | | 20 48 19.5 | |
| | comp=N,35nm,1.1s | | | | | | |
| **ECR** | **Eagle Creek** | **4.52** | **265** | | **Pn** | **20 46 58.7** | **+2.3** |
| **SUSD** | **Miller** | **4.60** | **77** | Pg | **Pb** | **20 47 09.9** | **+1.9** |
| **SMCO** | **Snowmass** | **4.61** | **197** | | **Pb** | **20 47 08.1** | **-0.3** |
| SMCO | | | | IAML | | 20 48 20.9 | |
| | comp=N,48nm,1.2s | | | | | | |
| SMCO | | | | IAML | | 20 48 30.5 | |
| | comp=N,30nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **4.63** | **179** | | **Pb** | **20 47 09.0** | **+0.3** |
| Q24A | | | | IAML | | 20 48 22.9 | |
| | comp=E,48nm,0.8s | | | | | | |
| **QLMT** | **Earthquake Lak** | **4.63** | **288** | | **Pn** | **20 46 58.4** | **+0.4** |
| **K31A** | **O'Neill** | **4.83** | **99** | | **Pn** | **20 47 01.6** | **+1.2** |
| **DGMT** | **Dagmar** | **4.93** | **8** | Pn | **Pn** | **20 47 02.5** | **+0.7** |
| **KSCO** | **Kaye Shedlock'** | **4.98** | **156** | | **Pn** | **20 47 02.7** | **+0.1** |
| **BOZ** | **Bozeman (W)** | **5.00** | **296** | | **Pn** | **20 47 03.0** | **+0.2** |
| BOZ | | | | IAML | | 20 48 33.0 | |
| | comp=E,23nm,1.0s | | | | | | |
| BOZ | | | | IAML | | 20 48 34.9 | |
| | comp=E,20nm,1.1s | | | | | | |
| **P18A** | **Preston Nutter** | **5.47** | **225** | | **Pn** | **20 47 10.1** | **+0.6** |
| **JLU** | **Jordanelle** | **5.52** | **239** | | **Pn** | **20 47 09.9** | **-0.2** |
| **DLMT** | **Dillon** | **5.57** | **291** | | **Pb** | **20 47 27.4** | **+2.8** |
| **LRM** | **Limekiln Ridge** | **5.62** | **296** | | **Pn** | **20 47 10.7** | **-0.8** |
| **HRY** | **Holter Researc** | **5.62** | **306** | | **Pn** | **20 47 11.4** | **+0.1** |
| **MCMT** | **McKenzie Canyo** | **5.62** | **285** | | **Pn** | **20 47 11.4** | **-0.2** |
| **BGNE** | **Belgrade** | **5.66** | **110** | | **Pn** | **20 47 10.2** | **-1.8** |
| **PV07** | **Paradox Valley** | **5.77** | **208** | | **Pn** | **20 47 13.0** | **-0.5** |
| **MDND** | **Maddock** | **5.79** | **41** | | **Pn** | **20 47 12.2** | **-1.5** |
| **PV15** | **Paradox Valley** | **5.80** | **206** | | **Pn** | **20 47 14.6** | **+0.6** |
| **P17A** | **Butcher Ranch,** | **5.84** | **227** | | **Pn** | **20 47 16.9** | **+2.4** |
| P17A | | | | | **Pb** | **20 47 30.8** | **+1.5** |
| **SDCO** | **Great Sand Dun** | **5.85** | **182** | | **Pn** | **20 47 15.1** | **+0.4** |
| **HVU** | **Hansel Valley** | **5.86** | **255** | Pn | **Pn** | **20 47 16.3** | **+1.6** |
| **PV23** | **Carpenter Ridg** | **5.88** | **210** | | **Pb** | **20 47 30.6** | **+0.5** |
| **BCYI** | **Bear Canyon** | **5.95** | **280** | | **Pn** | **20 47 15.5** | **-0.6** |
| **PV11** | **David Mesa, Pa** | **5.97** | **209** | | **Pn** | **20 47 16.8** | **+0.6** |
| **S22A** | **4UR Ranch, Cre** | **5.97** | **192** | Pn | **Pn** | **20 47 17.8** | **+1.4** |
| **SRU** | **San Rafael Swe** | **6.00** | **223** | | **Pn** | **20 47 17.0** | **+0.3** |
| **PV13** | **Radium Mtn., P** | **6.08** | **208** | | **Pn** | **20 47 18.7** | **+0.9** |
| **TMUT** | **Trail Mountain** | **6.22** | **228** | | **Pn** | **20 47 21.3** | **+1.5** |
| **ECSD** | **EROS Data Cent** | **6.24** | **86** | Pn | **Pn** | **20 47 20.2** | **+0.4** |
| **NLU** | **North Lily Min** | **6.28** | **237** | | **Pn** | **20 47 21.8** | **+1.1** |
| **CBKS** | **Cedar Bluff** | **6.32** | **137** | | **Pn** | **20 47 20.9** | **0.0** |
| **BGU** | **Big Grassy Mou** | **6.38** | **248** | | **Pn** | **20 47 22.5** | **+0.6** |
| **Q16A** | **Castle Valley** | **6.48** | **226** | | **Pn** | **20 47 24.1** | **+0.8** |
| **T25A** | **Trinidad** | **6.48** | **174** | Pn | **Pn** | **20 47 24.8** | **+1.5** |
| **DUG** | **Dugway, Tooele** | **6.61** | **242** | | **Pn** | **20 47 25.4** | **+0.4** |
| **HLID** | **Hailey** | **6.68** | **273** | | **Pn** | **20 47 24.9** | **-1.1** |
| **F33A** | **5 Mile Ranch,** | **6.74** | **67** | Pn | **Pn** | **20 47 26.6** | **-0.1** |
| **MVCO** | **Mesa Verde** | **6.85** | **203** | Pn | **Pn** | **20 47 28.1** | **-0.3** |
| **MSO** | **Missoula** | **6.96** | **301** | Pn | **Pn** | **20 47 30.1** | **+0.3** |
| **R32A** | **Long Quarter,** | **7.13** | **134** | | **Pn** | **20 47 32.4** | **+0.2** |
| **MSU** | **Marysvale** | **7.31** | **228** | | **Pn** | **20 47 34.7** | **0.0** |
| **TCRU** | **Three Creeks R** | **7.39** | **230** | Pn | **Pn** | **20 47 32.4** | **-3.4** |
| **JTMT** | **Jette** | **7.58** | **306** | Pn | **Pn** | **20 47 40.0** | **+1.6** |
| **MTPU** | **Mount Pierson** | **7.66** | **226** | | **Pn** | **20 47 41.3** | **+1.6** |
| **PLID** | **Pearl Lake** | **7.87** | **285** | Pn | **Pn** | **20 47 46.1** | **+3.7** |
| **ELK** | **Elko** | **7.97** | **252** | Pn | **Pn** | **20 47 42.5** | **-1.3** |
| | comp=E,0.1nm,0.3s,baz=26,slow=20,SNR=2.2 | | | | | | |
| **AGMN** | **Agassiz Nation** | **8.04** | **51** | Pn | **Pn** | **20 47 44.9** | **+0.4** |
| **WALA** | **Waterton Lakes** | **8.12** | **315** | Pn | **Pn** | **20 47 45.1** | **-0.7** |
| **PKCU** | **Pink Cliffs** | **8.18** | **224** | Pn | **Pn** | **20 47 46.5** | **-0.2** |
| **U15A** | **North Rim** | **8.98** | **220** | Pn | **Pn** | **20 47 58.3** | **+0.7** |
| **I10CA** | **LAC DU BONNET** | **9.12** | **40** | *i* | | 21 42 00.0 | |
| | baz=221,slow=329,SNR=8.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.22** | **41** | Pn | **Pn** | **20 47 58.8** | **-1.9** |
| | comp=E,1.0nm,0.3s,baz=230,slow=13,SNR=5.1 | | | | | | |
| ULM | | | | Lg | Lg | 20 50 29.9 | |
| | comp=E,0.5nm,0.3s,baz=156,slow=10.0,SNR=1.8 | | | | | | |
| **NEW** | **Newport** | **9.52** | **304** | Lg | Lg | 20 50 36.7 | |
| | comp=E,0.1nm,0.3s,baz=146,slow=18,SNR=2.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.29** | **175** | Pn | **Pn** | **20 49 13.1** | **+3.0** |
| | baz=346,slow=14,SNR=1.8 | | | | | | |
| TXAR | | | | Pg | Pg | 20 50 10.3 | |
| | comp=E,0.1nm,0.3s,baz=12,slow=14,SNR=2.2 | | | | | | |
| TXAR | | | | Lg | Lg | 20 53 14.7 | |
| | comp=E,0.0nm,0.3s,baz=337,slow=32,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.71** | **347** | P | **P** | **20 50 16.9** | **-0.3** |
| | comp=E,0.1nm,0.3s,baz=155,slow=11,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.54** | **18** | P | **P** | **20 56 03.9** | **-1.0** |
| | comp=E,1.4nm,0.7s,baz=325,slow=7.8,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **68.15** | **23** | P | **P** | **20 56 47.8** | **-0.1** |
| | comp=E,2.7nm,0.9s,baz=343,slow=2.9,SNR=3.8 | | | | | | |

*IDC **24** 20:46:03.7±4.1, 8°.75S×149°.89E, h124km±31km, mb3.4/6, mb1 3.6/8, mb1mx3.4/40, mbtmp3.8/8, MS2.7/1, Ms1 2.7/1, ms1mx2.4/33, Error ellipse: s-maj=39.7km s-min=23.4km az=100.0*
*NEIC **24** 20:46:03.7±1.4, 8°.75S±0°.1×149°.9E±0°.1, h116km±7km, mb4.1/11, Error ellipse: s-maj=24.1km s-min=11.8km az=141.0*

**ISC 24 20:46:00.5**±1.0, **8°.7S**±0°.2×**150°.1E**±0°.1, **h100**km, **n24,** σ1**$04/21, mb3.7/7, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **2.99** | **257** | P | **Pn** | **20 46 46.8** | **+0.7** |
| | 8.4nm,0.3s,baz=48,slow=5.8,SNR=12 | | | | | | |
| PMG | | | | S | **Sn** | **20 47 21.8** | **+0.6** |
| | 7.2nm,0.3s,baz=337,slow=7.2,SNR=4.4 | | | | | | |
| **RABL** | **Rabaul** | **4.96** | **24** | Pn | Pn | 20 47 17.3 | +4.6 |
| **WR0** | **Warramunga Arr** | **18.74** | **232** | P | **P** | **20 50 11.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 20 51 01.5 | |
| | comp=Z,30nm,2.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **18.75** | **233** | P | **P** | **20 50 11.3** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 20 50 12.7 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.87** | **232** | P | **P** | **20 50 12.4** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 20 50 18.8 | |
| | comp=Z,32nm,1.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **18.88** | **232** | P | **P** | **20 50 12.3** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 20 50 19.9 | |
| | comp=Z,30nm,2.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.89** | **232** | P | **P** | **20 50 12.7** | **-0.6** |
| | comp=Z,0.6nm,0.3s,baz=57,slow=11,SNR=56 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.89** | **232** | P | **P** | **20 50 12.1** | **-1.2** |
| **MTN** | **Manton Dam** | **19.08** | **256** | P | **P** | **20 50 13.7** | **-1.6** |
| **AS31** | **Alice Springs** | **21.47** | **224** | P | **P** | **20 50 40.9** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 20 50 43.0 | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **21.47** | **224** | P | **P** | **20 50 41.0** | **-0.2** |
| | comp=Z,1.9nm,0.4s,baz=55,slow=9.0,SNR=52 | | | | | | |
| **KNRA** | **Kununurra** | **21.96** | **250** | P | **P** | **20 50 44.2** | **-2.2** |
| **STKA** | **Stephens Creek** | **24.34** | **198** | P | **P** | **20 51 09.8** | **+0.7** |
| | comp=Z,1.6nm,0.6s,baz=23,slow=15,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **24.34** | **198** | IAmb | IAmb | 20 51 17.9 | |
| | comp=Z,4.9nm,1.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.52** | **246** | P | **P** | **20 51 18.2** | **-1.8** |
| | comp=Z,5.9nm,0.5s,baz=60,slow=8.5,SNR=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.52** | **246** | P | **P** | **20 51 18.1** | **-1.8** |
| FITZ | | | | IAmb | IAmb | 20 51 18.7 | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **30.36** | **275** | LR | LR | 21 05 31.0 | |
| | comp=Z,15nm,19.4s,baz=62,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **68.29** | **330** | P | **P** | **20 56 51.3** | **+0.4** |
| | comp=Z,0.2nm,0.6s,baz=104,slow=3.0,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **68.29** | **330** | IAmb | IAmb | 20 58 24.9 | |
| | comp=Z,5.3nm,1.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **81.56** | **320** | P | **P** | **20 58 07.3** | **0.0** |
| | comp=Z,0.2nm,0.6s,baz=96,slow=6.2,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **86.79** | **22** | P | **P** | **20 58 33.5** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=243,slow=6.0,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.69** | **281** | PKPbc | **PKPbc** | **21 05 36.9** | **-0.3** |
| | comp=Z,0.8nm,0.5s,baz=54,slow=2.7,SNR=9.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.69** | **281** | PKPdf | **PKPdf** | **21 05 32.9** | **-0.5** |
| **BDFB** | **Brasilia** | **149.85** | **143** | PKPbc | **PKPbc** | **21 05 40.6** | **+0.4** |
| | comp=Z,2.3nm,0.6s,baz=136,slow=2.4,SNR=4.2 | | | | | | |

*IDC **24** 21:02:50.7±5.8, 20°.29N×64°.73W, h0km, mb3.5/5, mb1 3.8/5, mb1mx3.5/46, mbtmp3.5/5, MS3.4/5, Ms1 3.4/5, ms1mx2.9/55, Error ellipse: s-maj=182.6km s-min=32.0km az=9.0*
*NEIC **24** 21:02:50.3±0.9, 19°.18N±0°.04×64°.88W±0°.03, h21km±6km, Error ellipse: s-maj=6.5km s-min=4.2km az=156.0*
*RSPR **24** 21:02:51.4, 19°.24N×64°.81W, h29km±12km, MD3.6/16*

**ISC 24 21:02:49.9**±0.7, **19°.23N**±0°.05×**64°.85W**±0°.03, **h25**km, **n96,** σ0**$83/99, mb3.5/7, MS3.5**/4, **17C-2D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBVI** | **Tortola** | **0.84** | **164** | *ieP* | **Pb** | **21 03 05.1** | **-0.6** |
| **TBVI** | **Tortola** | **0.84** | **164** | *eS* | **Sb** | **21 03 16.4** | **-0.3** |
| **STVI** | **Saint Thomas** | **0.88** | **186** | *ieP* | **Pb** | **21 03 05.9** | **-0.5** |
| **STVI** | **Saint Thomas** | **0.88** | **186** | *eS* | **Sb** | **21 03 17.6** | **-0.1** |
| **STVI** | **Saint Thomas** | **0.88** | **186** | | **Pb** | **21 03 17.6** | **-0.5** |
| STVI | | | | | **Sb** | **21 03 17.6** | **-0.1** |
| **CUPR** | **Culebra, Puert** | **1.00** | **204** | *ieP* | **Pn** | **21 03 07.7** | **-0.6** |
| **CUPR** | **Culebra, Puert** | **1.00** | **204** | *eS* | **Sb** | **21 03 20.8** | **-0.5** |
| **CUPR** | **Culebra, Puert** | **1.00** | **204** | | **Pn** | **21 03 07.7** | **-0.6** |
| CUPR | | | | | **Sb** | **21 03 20.8** | **-0.5** |
| **MTP** | **Monte Pirata** | **1.30** | **211** | *ieP* | **Pn** | **21 03 12.5** | **0.0** |
| **MTP** | **Monte Pirata** | **1.30** | **211** | *eS* | **Sn** | **21 03 28.8** | **-0.4** |
| **MTP** | **Monte Pirata** | **1.30** | **211** | | **Pn** | **21 03 12.5** | **0.0** |
| MTP | | | | | **Sn** | **21 03 28.8** | **-0.4** |
| **MTP** | **Monte Pirata** | **1.30** | **211** | IAML | | 21 03 34.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **CBYP** | **Canovanas** | **1.34** | **225** | *ieP* | **Pn** | **21 03 13.1** | **0.0** |
| **CBYP** | **Canovanas** | **1.34** | **225** | *eS* | **Sn** | **21 03 29.7** | **-0.5** |
| **CBYP** | **Canovanas** | **1.34** | **225** | | **Pn** | **21 03 13.1** | **0.0** |
| CBYP | | | | | **Sn** | **21 03 29.7** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.43** | **221** | *ieP* | **Pn** | **21 03 14.3** | **0.0** |
| **HUMP** | **Col San Antoni** | **1.43** | **221** | *eS* | **Sn** | **21 03 31.9** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.43** | **221** | | **Pn** | **21 03 14.3** | **0.0** |
| HUMP | | | | | **Sn** | **21 03 31.9** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.43** | **221** | IAML | | 21 03 37.5 | |
| | comp=N,1μm,0.4s | | | | | | |
| **CDVI** | **St. Croix** | **1.47** | **177** | Pn | **Pb** | **21 03 15.9** | **-0.7** |
| **GCPR** | **Guaynabo City** | **1.48** | **232** | *ieP* | **Pn** | **21 03 14.8** | **-0.1** |
| **GCPR** | **Guaynabo City** | **1.48** | **232** | *eS* | **Sn** | **21 03 33.0** | **-0.5** |
| **GCPR** | **Guaynabo City** | **1.48** | **232** | | **Pn** | **21 03 14.8** | **-0.1** |
| GCPR | | | | | **Sn** | **21 03 33.0** | **-0.5** |
| **GCPR** | **Guaynabo City** | **1.48** | **232** | IAML | | 21 03 38.4 | |
| | comp=E,1μm,0.7s | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.64** | **223** | *ieP* | **Pn** | **21 03 16.9** | **-0.1** |
| **PDPR** | **Patillas Dam,** | **1.64** | **223** | | **Pn** | **21 03 16.9** | **-0.1** |
| **SJG** | **San Juan** | **1.66** | **228** | | **Pn** | **21 03 17.1** | **-0.2** |
| **SJG** | **San Juan** | **1.66** | **228** | *eP* | **Pn** | **21 03 17.4** | **+0.1** |
| **IGPR** | **InterUniversit** | **1.73** | **224** | *ieP* | **Pn** | **21 03 18.2** | **-0.1** |
| **IGPR** | **InterUniversit** | **1.73** | **224** | *eS* | **Sn** | **21 03 39.0** | **-0.6** |
| **EMPR** | **Esperanza - Ma** | **1.75** | **245** | *ieP* | **Pn** | **21 03 18.9** | **+0.3** |
| **EMPR** | **Esperanza - Ma** | **1.75** | **245** | *eS* | **Sn** | **21 03 40.1** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **1.75** | **245** | | **Pn** | **21 03 18.9** | **+0.3** |
| EMPR | | | | | **Sn** | **21 03 40.1** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **1.75** | **245** | IAML | | 21 03 47.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| **CELP** | **Cerrillos** | **2.00** | **235** | *ieP* | **Pn** | **21 03 22.3** | **+0.2** |
| **CELP** | **Cerrillos** | **2.00** | **235** | *eS* | **Sn** | **21 03 46.2** | **-0.1** |
| **CELP** | **Cerrillos** | **2.00** | **235** | | **Pn** | **21 03 22.3** | **+0.2** |
| CELP | | | | | **Sn** | **21 03 46.2** | **-0.1** |
| **CELP** | **Cerrillos** | **2.00** | **235** | IAML | | 21 03 50.9 | |
| | comp=E,852nm,0.4s | | | | | | |
| CELP | | | | IAML | | 21 03 53.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.00** | **244** | *ieP* | **Pn** | **21 03 22.5** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **2.00** | **244** | *eS* | **Sn** | **21 03 46.2** | **-0.3** |
| **AOPR** | **Arecibo Observ** | **2.00** | **244** | | **Pn** | **21 03 22.5** | **+0.4** |
| AOPR | | | | | **Sn** | **21 03 46.2** | **-0.3** |
| **UUPR** | **Utuado, UPR, P** | **2.02** | **242** | *ieP* | **Pn** | **21 03 22.7** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **2.02** | **242** | *eS* | **Sb** | **21 03 49.0** | **-1.5** |
| **UUPR** | **Utuado, UPR, P** | **2.02** | **242** | | **Pn** | **21 03 22.7** | **+0.4** |
| UUPR | | | | | **Sb** | **21 03 49.0** | **-1.5** |
| **OBIP** | **Obispado Ponce** | **2.04** | **235** | *ieP* | **Pn** | **21 03 22.3** | **-0.3** |
| **OBIP** | **Obispado Ponce** | **2.04** | **235** | *eS* | **Sn** | **21 03 47.2** | **-0.1** |
| **OBIP** | **Obispado Ponce** | **2.04** | **235** | | **Pn** | **21 03 22.3** | **-0.3** |
| OBIP | | | | | **Sn** | **21 03 47.2** | **-0.1** |
| **OBIP** | **Obispado Ponce** | **2.04** | **235** | IAML | | 21 03 52.6 | |
| | comp=N,651nm,0.6s | | | | | | |
| **SMRT** | **St. Maarten** | **2.05** | **124** | Pn | **Pn** | **21 03 22.9** | **0.0** |
| SMRT | | | | IAML | | 21 04 04.5 | |
| | comp=N,776nm,0.6s | | | | | | |
| SMRT | | | | IAML | | 21 04 07.1 | |
| | comp=E,956nm,0.5s | | | | | | |
| **SMRT** | **St. Maarten** | **2.05** | **124** | *eP* | **Pn** | **21 03 23.9** | **+1.1** |
| SMRT | | | | *eS* | **Sb** | **21 03 49.8** | **-1.8** |
| **ICMP** | **Isla Caja de M** | **2.07** | **230** | | **Pn** | **21 03 24.1** | **+1.0** |
| ICMP | | | | IAML | | 21 04 00.7 | |
| | comp=N,785nm,0.8s | | | | | | |
| ICMP | | | | IAML | | 21 04 04.3 | |
| | comp=E,928nm,0.8s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **2.29** | **237** | *ieP* | **Pn** | **21 03 27.7** | **+1.7** |
| **LSP** | **Las Mesas** | **2.36** | **244** | *ieP* | **Pb** | **21 03 30.2** | **-1.5** |
| **PRSN** | **Puerto Rico Se** | **2.39** | **246** | | **Pn** | **21 03 27.9** | **+0.4** |
| PRSN | | | | IAML | | 21 04 00.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| PRSN | | | | IAML | | 21 04 05.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.42** | **239** | *ieP* | **Pn** | **21 03 28.1** | **+0.2** |
| **MLPR** | **Magueyes Islan** | **2.42** | **239** | *eS* | **Sn** | **21 03 57.2** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **2.42** | **239** | | **Pn** | **21 03 27.3** | **-0.6** |
| MLPR | | | | IAML | | 21 04 02.9 | |
| | comp=E,625nm,0.8s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.42** | **239** | | **Sn** | **21 03 57.2** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.46** | **241** | *eP* | **Pn** | **21 03 28.5** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **2.46** | **241** | *eS* | **Sn** | **21 03 58.9** | **+1.2** |
| **CRPR** | **Cabo Rojo, PR** | **2.46** | **241** | | **Pn** | **21 03 28.5** | **+0.1** |
| CRPR | | | | | **Sn** | **21 03 58.9** | **+1.2** |
| **IDE** | **Isla Desecheo** | **2.62** | **252** | *ieP* | **Pn** | **21 03 31.2** | **+0.6** |
| **SKI** | **Saint Kitts** | **2.75** | **133** | *eP* | **Pn** | **21 03 34.2** | **+1.7** |
| **ANWB** | **Willy Bob** | **3.30** | **118** | Pn | **Pn** | **21 03 38.6** | **-1.4** |
| **PCDR** | **Punta Cana, DR** | **3.42** | **259** | Pn | **Pn** | **21 03 42.3** | **+0.7** |
| PCDR | | | | IAML | | 21 04 49.3 | |
| | comp=N,354nm,1.2s | | | | | | |
| **ANBD** | **Bethesda, Anti** | **3.65** | **126** | *eP* | **Pn** | **21 03 43.8** | **-1.0** |
| ANBD | | | | *eS* | **Sn** | **21 04 24.3** | **-2.8** |
| **GDHS** | **Morne Mazeau,** | **4.16** | **134** | Pn | **Pn** | **21 03 53.2** | **+1.3** |
| GDHS | | | | IAML | | 21 05 28.2 | |
| | comp=E,272nm,0.6s | | | | | | |
| **ABD** | **La Joyeuse, An** | **4.22** | **130** | Pn | **Pn** | **21 03 52.0** | **-0.6** |
| ABD | | | | IAML | | 21 05 10.8 | |
| | comp=E,265nm,2.0s | | | | | | |
| ABD | | | | IAML | | 21 05 41.5 | |
| | comp=N,193nm,2.0s | | | | | | |
| **CBE** | **Ff, Capester** | **4.41** | **135** | Pn | **Pn** | **21 03 55.2** | **-0.1** |
| **CBE** | **Ff, Capester** | **4.41** | **135** | *eP* | **Pn** | **21 03 55.8** | **+0.5** |
| **GDSD** | **La Dsirade Is** | **4.63** | **128** | P

*s118,c175; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.13±.18; $M_{\theta\theta}$4.49±.21; $M_{\phi\phi}$-3.36±.17; $M_{r\theta}$-1.02±.28; $M_{\theta\phi}$5.44±.13; $M_{r\phi}$-0.23±.26; Best double couple: $M_0$6.77500×$10^{16}$ NP1:$\phi_s$198.00000°,$\delta$83.00000°, $\lambda$177.00000°. NP2:$\phi_s$288.00000°,$\delta$87.00000°,$\lambda$7.00000°. Principal axes: T 7.3940, Plg7.0000°, Azm153.0000°; N -1.2380, Plg83.0000°, Azm309.0000°; P -6.1560, Plg3.0000°, Azm63.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 24 21:09:21.9**±0.4,**54.6S**±0.1×**120.07W**±0.10,**h10**km,**n130, s**1$^9$**34/83, mb4.8/21, MS4.4/47, 2C-1D, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **28.55** | **20** | LR | LR | 21 24 15.9 | |
| | comp=Z,672nm,18.1s,baz=162,slow=32 | | | | | | |
| **PMSA** | **Palmer Station** | **29.05** | **133** | LR | LR | 21 24 22.7 | |
| | comp=Z,951nm,18.7s,baz=278,slow=31 | | | | | | |
| **USHA** | **Ushuaia** | **29.28** | **112** | LR | LR | 21 24 31.8 | |
| | comp=Z,191nm,20.1s,baz=248,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **34.92** | **202** | LR | LR | 21 25 49.2 | |
| | comp=Z,295nm,21.0s,baz=94,slow=28 | | | | | | |
| **PLCA** | **Paso Flores** | **35.34** | **88** | LR | LR | 21 27 25.7 | |
| | comp=Z,501nm,19.0s,baz=230,slow=31 | | | | | | |
| **H03S2** | **Juan Fernandez** | **35.37** | **71** | T | T | 21 53 42.9 | |
| | baz=216 | | | | | | |
| **H03S1** | **Juan Fernandez** | **35.37** | **71** | T | T | 21 53 46.3 | |
| | baz=216 | | | | | | |
| **H03S3** | **Juan Fernandez** | **35.38** | **71** | T | T | 21 53 47.4 | |
| | baz=216 | | | | | | |
| **QSPA** | **South Pole Qui** | **35.59** | **180** | P | **P** | **21 16 21.9** | **+2.7** |
| | 8.3nm,1.0s,baz=106,slow=6.8,SNR=12 | | | | | | |
| QSPA | | | | LR | LR | 21 29 23.4 | |
| | comp=Z,610nm,19.5s,baz=96,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **35.59** | **180** | P | **P** | **21 16 21.3** | **+2.0** |
| QSPA | | | | IAmb | IAmb | 21 16 24.7 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **H03N3** | **Juan Fernandez** | **35.65** | **71** | T | T | 21 54 02.2 | |
| | baz=222,slow=72,SNR=1006 | | | | | | |
| **H03N2** | **Juan Fernandez** | **35.66** | **71** | T | T | 21 53 59.8 | |
| | baz=222,slow=72,SNR=1663 | | | | | | |
| **H03N1** | **Juan Fernandez** | **35.67** | **71** | T | T | 21 54 00.3 | |
| | baz=222,slow=72,SNR=791 | | | | | | |
| **LC01** | **Cunco** | **35.78** | **84** | P | **P** | **21 16 21.3** | **+0.4** |
| **TBI** | **Tubuai** | **38.14** | **313** | *e*LR | LR | 21 26 57.3 | |
| | comp=Z,1μm,26.8s,baz=160 | | | | | | |
| **TBI** | **Tubuai** | **38.14** | **313** | *e*T | T | 21 56 35.3 | |
| | comp=Z,17nm,0.3s | | | | | | |
| **ML02** | **Panimavida** | **38.20** | **81** | P | **P** | **21 16 42.2** | **+0.6** |
| **CO03** | **El Pedregal** | **42.21** | **76** | P | **P** | **21 17 15.1** | **+0.1** |
| CO03 | | | | IAmb | IAmb | 21 17 16.8 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **GO04** | **Tololo Observa** | **42.65** | **76** | P | **P** | **21 17 18.8** | **0.0** |
| GO04 | | | | IAmb | IAmb | 21 17 20.2 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **PPT2** | **Papeete2** | **43.34** | **317** | *e*S | **S** | **21 23 56.6** | **+4.9** |
| | comp=Z,129nm,26.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 21 29 24.2 | |
| | comp=Z,2μm,25.8s,baz=140 | | | | | | |
| **PPT** | **Papeete** | **43.36** | **317** | LR | LR | 21 30 39.6 | |
| | comp=Z,700nm,20.6s,baz=179,slow=30 | | | | | | |
| **RPZ** | **Rata Peaks** | **44.59** | **254** | LR | LR | 21 31 40.3 | |
| | comp=Z,771nm,20.4s,baz=110,slow=30 | | | | | | |
| **URZ** | **Urewera** | **44.70** | **265** | LR | LR | 21 31 18.0 | |
| | comp=Z,171nm,20.5s,baz=126,slow=30 | | | | | | |
| **RAR** | **Rarotonga** | **44.74** | **302** | LR | LR | 21 30 56.2 | |
| | comp=Z,232nm,20.9s,baz=167,slow=29 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **45.26** | **155** | P | **P** | **21 17 39.6** | **+0.7** |
| **VNA1** | **Neumayer--Stat** | **46.00** | **155** | P | **P** | **21 17 46.0** | **+1.3** |
| **VNA2** | **Neumayer--Watz** | **46.03** | **155** | P | **P** | **21 17 46.3** | **+1.4** |
| | baz=220,slow=9.4 | | | | | | |
| **AC02** | **Maricunga** | **46.15** | **74** | P | **P** | **21 17 46.7** | **-0.3** |
| AC02 | | | | IAmb | IAmb | 21 17 48.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **46.59** | **157** | P | **P** | **21 17 50.4** | **+1.0** |
| | comp=Z,2.0nm,0.8s,baz=221,slow=11,SNR=1.7 | | | | | | |
| SNAA | | | | LR | LR | 21 37 53.1 | |
| | comp=Z,795nm,18.5s,baz=230,slow=37 | | | | | | |
| **SNAA** | **Sanae** | **46.59** | **157** | P | **P** | **21 17 50.8** | **+1.4** |
| **PB14** | **IPOC Station P** | **47.18** | **71** | P | **P** | **21 17 54.1** | **-0.8** |
| **TAOE** | **Nuku Hiva Isla** | **48.36** | **333** | *e*S | **S** | **21 25 08.8** | **+4.7** |
| | comp=Z,211nm,24.6s | | | | | | |
| TAOE | | | | *e*LR | LR | 21 31 34.5 | |
| | comp=Z,1μm,27.3s | | | | | | |
| **LVC** | **Limon Verde** | **49.60** | **71** | P | **P** | **21 18 13.8** | **+0.1** |
| | comp=Z,9.2nm,0.9s,baz=225,slow=7.4,SNR=8.9 | | | | | | |
| LVC | | | | LR | LR | 21 33 29.5 | |
| | comp=Z,319nm,20.6s,baz=222,slow=29 | | | | | | |
| **LVC** | **Limon Verde** | **49.60** | **71** | P | **P** | **21 18 13.6** | **-0.1** |
| LVC | | | | IAmb | IAmb | 21 18 15.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **PB01** | **IPOC Station P** | **50.55** | **69** | P | **P** | **21 18 20.9** | **+0.4** |
| PB01 | | | | IAmb | IAmb | 21 18 22.2 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **ITQB** | **Itaqui** | **51.18** | **88** | P | **P** | **21 18 25.7** | **+0.7** |
| **PLTB** | **Pedras Altas** | **51.40** | **92** | P | **P** | **21 18 27.9** | **+1.1** |
| **CPUP** | **Villa Florida** | **53.28** | **84** | P | **P** | **21 18 40.7** | **-0.1** |
| | comp=Z,3.7nm,0.8s,baz=242,slow=9.8,SNR=5.2 | | | | | | |
| CPUP | | | | LR | LR | 21 38 40.0 | |
| | comp=Z,876nm,18.0s,baz=230,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **53.28** | **84** | P | **P** | **21 18 41.2** | **+0.5** |
| **NNA** | **Nana** | **54.36** | **56** | LR | LR | 21 36 01.7 | |
| | comp=Z,199nm,18.6s,baz=208,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **55.17** | **67** | P | **P** | **21 18 55.6** | **+0.3** |
| | comp=Z,9.3nm,1.1s,baz=184,slow=4.0,SNR=15 | | | | | | |
| **LPAZ** | **La Paz** | **55.17** | **67** | P | **P** | **21 18 54.8** | **-0.5** |
| LPAZ | | | | IAmb | IAmb | 21 18 57.3 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **SYO** | **Syowa Base** | **55.80** | **171** | ‖*e*PcP | **PcP** | **21 19 57.6** | **+0.3** |
| **AFI** | **Afiamalu** | **57.01** | **295** | LR | LR | 21 41 21.1 | |
| | comp=Z,143nm,18.5s,baz=134,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **57.88** | **51** | LR | LR | 21 38 12.9 | |
| | comp=Z,478nm,18.3s,baz=218,slow=30 | | | | | | |
| **MAW** | **Mawson** | **58.10** | **181** | LR | LR | 21 41 07.2 | |
| | comp=Z,265nm,21.2s,baz=164,slow=33 | | | | | | |
| **MAW** | **Mawson** | **58.10** | **181** | P | **P** | **21 19 16.2** | **+1.5** |
| **SIV** | **San Ignacio** | **59.28** | **74** | LR | LR | 21 41 57.1 | |
| | comp=Z,171nm,18.6s,baz=272,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **62.79** | **270** | LR | LR | 21 41 46.3 | |
| | comp=Z,120nm,20.8s,baz=115,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **62.79** | **270** | *e*LR | LR | 21 38 39.6 | |
| | comp=Z,414nm,23.1s | | | | | | |
| **BDFB** | **Brasilia** | **67.01** | **85** | P | **P** | **21 20 15.3** | **+0.2** |
| | comp=Z,3.7nm,0.9s,baz=188,slow=7.1,SNR=2.7 | | | | | | |
| BDFB | | | | LR | LR | 21 46 46.6 | |
| | comp=Z,372nm,18.7s,baz=196,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **69.17** | **244** | P | **P** | **21 20 27.1** | **-1.3** |
| | comp=Z,2.1nm,0.7s,baz=219,slow=16,SNR=4.9 | | | | | | |
| STKA | | | | LR | LR | 21 45 45.9 | |
| | comp=Z,200nm,18.4s,baz=169,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **69.17** | **244** | P | **P** | **21 20 27.4** | **-1.0** |
| **ROSC** | **El Rosal** | **70.34** | **49** | LR | LR | 21 46 11.0 | |
| | comp=Z,276nm,18.6s,baz=225,slow=31 | | | | | | |
| **JTS** | **Las Juntas de** | **71.09** | **37** | LR | LR | 21 44 20.8 | |
| | comp=Z,304nm,22.0s,baz=230,slow=30 | | | | | | |
| **PTGA** | **Pitinga** | **72.53** | **65** | LR | LR | 21 48 49.8 | |
| | comp=Z,253nm,18.8s,baz=207,slow=33 | | | | | | |
| **SDV** | **Santo Domingo** | **75.58** | **51** | LR | LR | 21 50 28.6 | |
| | comp=Z,160nm,18.0s,baz=190,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **75.96** | **255** | LR | LR | 21 49 44.5 | |
| | comp=Z,164nm,18.9s,baz=103,slow=32 | | | | | | |
| **LPIG** | **La Paz** | **78.83** | **9** | LR | LR | 21 48 16.3 | |
| | comp=Z,200nm,18.6s,baz=128,slow=30 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **79.43** | **223** | T | T | 22 49 43.9 | |
| | baz=150,slow=76,SNR=41 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **79.43** | **223** | T | T | 22 49 46.8 | |
| | baz=150,slow=76,SNR=59 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **79.44** | **223** | T | T | 22 49 46.7 | |
| | baz=150,slow=76,SNR=34 | | | | | | |
| **ASAR** | **Alice Springs** | **79.78** | **244** | P | **P** | **21 21 29.4** | **-0.9** |
| | comp=Z,2.5nm,0.8s,baz=147,slow=5.3,SNR=18 | | | | | | |
| ASAR | | | | LR | LR | 21 51 18.0 | |
| | comp=Z,273nm,20.4s,baz=134,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **81.34** | **69** | LR | LR | 21 53 03.7 | |
| | comp=Z,87nm,19.2s,baz=222,slow=32 | | | | | | |
| **WR0** | **Warramunga Arr** | **82.49** | **246** | P | **P** | **21 21 43.1** | **-1.5** |
| WR0 | | | | IAmb | IAmb | 21 21 45.2 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **82.60** | **246** | P | **P** | **21 21 43.7** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 21 21 46.3 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.61** | **246** | P | **P** | **21 21 43.3** | **-2.1** |
| | comp=Z,7.2nm,0.8s,baz=141,slow=4.8,SNR=45 | | | | | | |
| WRA | | | | LR | LR | 21 53 42.0 | |
| | comp=Z,239nm,19.7s,baz=168,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.61** | **246** | P | **P** | **21 21 43.6** | **-1.8** |
| **PMG** | **Port Moresby** | **84.01** | **262** | LR | LR | 21 51 41.1 | |
| | comp=Z,92nm,21.6s,baz=162,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **84.78** | **14** | P | **P** | **21 21 55.4** | **-0.7** |
| | comp=Z,1.1nm,0.9s,baz=203,slow=5.0,SNR=8.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **84.78** | **14** | P | **P** | **21 21 55.2** | **-0.9** |
| **JCT** | **Junction City** | **86.52** | **17** | P | **P** | **21 22 03.3** | **-1.4** |
| JCT | | | | IAmb | IAmb | 21 22 06.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **SUR** | **Sutherland** | **87.05** | **148** | LR | LR | 21 53 36.6 | |
| | comp=Z,112nm,21.9s,baz=176,slow=30 | | | | | | |
| **PFO** | **Pinyon Flats O** | **87.91** | **3** | LR | LR | 21 53 13.0 | |
| | comp=Z,261nm,18.1s,baz=206,slow=30 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **88.66** | **240** | LR | LR | 21 56 45.6 | |
| | comp=Z,122nm,19.9s,baz=142,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **88.66** | **240** | P | **P** | **21 22 13.3** | **-2.0** |
| FITZ | | | | IAmb | IAmb | 21 22 16.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **89.95** | **11** | P | **P** | **21 22 21.0** | **-0.1** |
| | comp=Z,2.2nm,0.9s,baz=228,slow=6.8,SNR=4.1 | | | | | | |
| ANMO | | | | LR | LR | 21 55 30.1 | |
| | comp=Z,121nm,18.3s,baz=227,slow=31 | | | | | | |
| **ANMO** | **Albuquerque** | **89.95** | **11** | P | **P** | **21 22 19.2** | **-1.8** |
| **BOSA** | **Boshof** | **91.91** | **150** | LR | LR | 21 58 22.2 | |
| | comp=Z,200nm,19.5s,baz=188,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.67** | **1** | P | **P** | **21 22 32.7** | **-1.0** |
| | comp=Z,0.7nm,0.8s,baz=199,slow=7.6,SNR=5.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.67** | **1** | P | **P** | **21 22 31.6** | **-2.1** |
| **JAY** | **Jayapura** | **93.31** | **261** | LR | LR | 22 01 27.1 | |
| | comp=Z,59nm,21.3s,baz=150,slow=34 | | | | | | |
| **TKL** | **Tuckaleechee C** | **95.17** | **29** | LR | LR | 22 01 49.0 | |
| | comp=Z,97nm,18.3s,baz=102,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **95.39** | **149** | LR | LR | 21 57 58.7 | |
| | comp=Z,157nm,21.8s,baz=192,slow=30 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **95.98** | **358** | LR | LR | 21 55 38.4 | |
| | comp=Z,244nm,21.4s,baz=198,slow=29 | | | | | | |
| **BATI** | **Baumata** | **96.33** | **243** | LR | LR | 22 02 55.7 | |
| | comp=Z,279nm,19.0s,baz=168,slow=33 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **96.47** | **295** | T | T | 23 09 45.0 | |
| | baz=144,slow=76,SNR=23 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **96.47** | **295** | T | T | 23 09 53.4 | |
| | baz=144,slow=76,SNR=26 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **96.49** | **295** | T | T | 23 09 54.3 | |
| | baz=144,slow=76,SNR=25 | | | | | | |
| **PDAR** | **Pinedale Array** | **97.41** | **8** | P | **P** | **21 22 54.6** | **-0.6** |
| | comp=Z,0.1nm,0.4s,baz=191,slow=3.7,SNR=2.0 | | | | | | |
| PDAR | | | | LR | LR | 21 59 37.3 | |
| | comp=Z,151nm,19.2s,baz=238,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **98.08** | **140** | LR | LR | 22 02 05.2 | |
| | comp=Z,75nm,18.4s,baz=156,slow=32 | | | | | | |
| **SIJI** | **Sorong** | **100.02** | **254** | LR | LR | 22 07 35.5 | |
| | comp=Z,105nm,18.1s,baz=160,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **120.81** | **347** | PKP | **PKPdf** | **21 28 10.9** | **-1.7** |
| | comp=Z,0.5nm,0.9s,baz=178,slow=1.7,SNR=4.9 | | | | | | |
| **ILAR** | **Eielson Array** | **120.81** | **347** | | **PKPdf** | **21 28 11.4** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **133.24** | **235** | PKP | **PKPdf** | **21 28 35.7** | **-2.1** |
| | comp=Z,0.8nm,0.6s,baz=208,slow=2.3,SNR=9.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **133.24** | **235** | | **PKPdf** | **21 28 37.7** | **-0.2** |
| **SEY** | **Seymchan** | **135.38** | **319** | PKP | **PKPdf** | **21 28 40.7** | **+0.3** |
| | comp=Z,0.5nm,0.3s,baz=157,slow=2.9,SNR=5.0 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **144.88** | **62** | PKP | **PKPab** | **21 28 56.4** | **-0.6** |
| | comp=Z,3.7nm,0.8s,baz=242,slow=2.8,SNR=9.0 | | | | | | |
| **PKI** | **Pulchoki** | **147.22** | **225** | *e*P | **PKPbc** | **21 29 04.7** | **-0.8** |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **147.23** | **225** | *e*P | **PKPbc** | **21 29 04.6** | **-0.8** |
| **DMN** | **Daman** | **147.38** | **224** | *e*P | **PKPbc** | **21 29 05.4** | **-0.4** |
| | comp=Z,6.5nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **147.46** | **225** | *e*P | **PKPdf** | **21 29 04.1** | **+0.6** |
| **GKN** | **Gorkha** | **147.91** | **224** | *e*P | **PKPdf** | **21 29 05.1** | **+1.0** |
| **DAVOX** | **Davos/Dischmat** | **147.95** | **83** | PKPbc | **PKPdf** | **21 29 03.6** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=225,slow=5.7,SNR=1.5 | | | | | | |
| **FETA** | **Feichten** | **148.57** | **83** | *e*P | **PKPbc** | **21 29 07.9** | **-0.3** |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **DANN** | **Dangsing** | **148.57** | **223** | *e*P | **PKPdf** | **21 29 06.2** | **+0.8** |
| | comp=Z,38nm,0.9s | | | | | | |
| **WSAR** | **Wadi Sarin** | **148.67** | **178** | PKPbc | **PKPdf** | **21 29 06.8** | **+1.5** |
| | comp=Z,5.3nm,1.1s,baz=187,slow=8.1,SNR=1.7 | | | | | | |
| **RETA** | **Reutte** | **148.84** | **83** | *e*P | **PKiKP** | **21 29 11.1** | **+0.9** |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **MOTA** | **Moosalm** | **148.96** | **83** | *e*P | **PKPbc** | **21 29 09.4** | **+0.1** |
| | comp=Z,10nm,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **149.22** | **84** | *e*P | **PKiKP** | **21 29 12.4** | **+1.2** |
| | comp=Z,7.3nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.46** | **85** | *e*P | **PKPbc** | **21 29 08.6** | **-1.8** |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **KBA** | **Koenbreinsper** | **150.11** | **85** | *e*P | **PKiKP** | **21 29 13.5** | **+0.5** |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **OBKA** | **Obir** | **150.51** | **87** | *e*P | **PKiKP** | **21 29 13.8** | **+0.1** |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **150.57** | **276** | PKPbc | **PKPbc** | **21 29 11.0** | **-2.2** |
| | comp=Z,1.4nm,0.8s,baz=127,slow=1.9,SNR=7.2 | | | | | | |
| **SOKA** | **Soboth** | **150.88** | **87** | *e*P | **PKiKP** | **21 29 15.5** | **+1.1** |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **MOA** | **Mon** | **151.05** | **84** | *e*P | **PKiKP** | **21 29 15.1** | **+0.4** |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **GERES** | **GERESS Array B** | **151.22** | **82** | PKPbc | **PKPbc** | **21 29 13.2** | **-1.4** |
| | comp=Z,2.6nm,0.8s,baz=245,slow=2.8,SNR=17 | | | | | | |
| **KHC** | **Kasperske Hory** | **151.29** | **82**⇑ | *e*PKP | **PKiKP** | **21 29 16.1** | **+0.9** |
| **ARSA** | **Arzberg** | **151.47** | **86** | *e*P | **PKPbc** | **21 29 14.8** | **-0.3** |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **151.56** | **83**⇑ | *e*PKP | **PKiKP** | **21 29 15.9** | **+0.2** |
| **CLL** | **Collm** | **151.95** | **77** | *i* PKPbc | **PKiKP** | **21 29 17.7** | **+1.3** |
| | comp=Z,13nm,1.5s | | | | | | |
| CLL | | | | *i* x | x | 21 29 24.8 | |
| CLL | | | | *i* PKPab | **pPKPab** | **21 29 27.3** | **-0.7** |
| | comp=Z,16nm,1.5s | | | | | | |
| **CONA** | **Conrad Observa** | **152.01** | **85** | *e*P | **PKiKP** | **21 29 17.1** | **+0.3** |
| | comp=Z,8.1nm,1.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **153.81** | **56** | PKPbc | **PKPbc** | **21 29 18.5** | **-1.4** |
| | comp=Z,0.6nm,0.9s,baz=314,slow=23,SNR=1.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **156.93** | **119** | PKPab | **PKPab** | **21 29 47.3** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=194,slow=5.5,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **156.93** | **119** | PKPdf | **PKPdf** | **21 29 17.5** | **+0.4** |
| BRTR | | | | | **PKPab** | **21 29 47.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **163.87** | **250** | PKPab | **PKPab** | **21 30 17.1** | **0.0** |
| | comp=Z,1.4nm,0.8s,baz=110,slow=5.3,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **163.87** | **250** | | **PKPab** | **21 30 16.3** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **165.46** | **278** | PKPab | **PKPab** | **21 30 24.1** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=46,slow=4.2,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **165.46** | **278** | | **PKPab** | **21 30 22.5** | **-1.4** |
| **KURBB** | **Kurchatov Arra** | **168.02** | **258** | PKP | **PKPdf** | **21 29 25.3** | **-2.1** |
| | comp=Z,0.3nm,0.8s,baz=112,slow=1.0,SNR=2.4 | | | | | | |

*BEO **24** 21:10:25.9±0.6, 41°.03N×19°.90E, h0km, ML2.5/14*
*ATH **24** 21:10:25.2, 41°.32N×20°.01E, h14km±6km, ML2.6/1, Error ellipse: s-maj=11.2km s-min=2.3km az=175.0*
*SKO **24** 21:10:25.6, 41°.04N×19°.88E, h0km*
*TIR **24** 21:10:26.7, 41°.19N×20°.06E, h10km±1km, Md2.7, Ml2.6*
*PDG **24** 21:10:27.3±0.3, 41°.23N×20°.01E, h1km, ML2.6/14, Error ellipse: s-maj=0.4km s-min=0.7km az=0.0*
*THE **24** 21:10:27.9, 41°.19N×20°.08E, h2km±2km, ML2.3/7, Error ellipse: s-maj=2.5km s-min=0.9km az=32.0*

**ISC 24 21:10:27.5**±0.8,**41.19N**±0.02×**19.99E**±0.02,**h13**km±6km, **n85**,σ1$^8$**37**/137,**7C-2D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.18** | **329** | *e*Pg | **Pg** | **21 10 31.0** | **-0.6** |
| TIR | | | | *e*Sg | **Sg** | **21 10 34.5** | **+0.1** |
| **TIR** | **Tirane** | **0.18** | **329** | P | **Pg** | **21 10 31.2** | **-0.4** |
| TIR | | | | S | **Sg** | **21 10 35.4** | **+1.0** |
| | 1μm,0.2s | | | | | | |
| **TIR** | **Tirane** | **0.18** | **329** | ‖*i*Pg | **Pg** | **21 10 31.2** | **-0.4** |
| **TIR** | **Tirane** | **0.18** | **329** | P | **Pg** | **21 10 31.2** | **-0.4** |
| | baz=317 | | | | | | |
| TIR | | | | S | **Sg** | **21 10 35.1** | **+0.7** |
| | baz=317 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,5.1nm,0.3s,baz=317 | | | | | | |
| **PHP** | **Peshkopia** | **0.60** | **35** | P | **Pg** | **21 10 38.3** | **-0.9** |
| PHP | | | | S | **Sb** | **21 10 47.6** | **-0.7** |
| **PHP** | **Peshkopia** | **0.60** | **35** | P | **Pg** | **21 10 38.3** | **-0.9** |
| | baz=30 | | | | | | |
| PHP | | | | S | **Sg** | **21 10 46.9** | **-0.3** |
| | baz=30 | | | | | | |
| PHP | | | | AMP | | | |
| | comp=N,2.0nm,0.2s,baz=30 | | | | | | |
| **OHR** | **Ohrid** | **0.62** | **97** | *e*Pg | **Pg** | **21 10 38.2** | **-1.3** |
| OHR | | | | *e*Sg | **Sb** | **21 10 48.0** | **-0.8** |
| **OHR** | **Ohrid** | **0.62** | **97**⇑ | *i*Pg | **Pg** | **21 10 38.2** | **-1.3** |
| OHR | | | | *i* Sg | **Sb** | **21 10 48.0** | **-0.8** |
| **VLO** | **Vlora** | **0.81** | **207** | P | **Pn** | **21 10 44.5** | **-0.2** |
| VLO | | | | S | **Sb** | **21 10 55.6** | **+1.2** |
| | comp=N,710nm,0.5s | | | | | | |
| **VLO** | **Vlora** | **0.81** | **207** | P | **Pb** | **21 10 43.4** | **0.0** |
| | baz=211 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=N,2.4nm,0.2s,baz=211 | | | | | | |
| **KBN** | **Korca** | **0.83** | **133** | P | **Pg** | **21 10 42.9** | **-0.7** |
| KBN | | | | S | **Sg** | **21 10 53.4** | **-1.0** |
| | comp=N,212nm,0.6s | | | | | | |
| **KBN** | **Korca** | **0.83** | **133** | P | **Pg** | **21 10 42.8** | **-0.7** |
| | baz=135 | | | | | | |
| KBN | | | | S | **Sg** | **21 10 54.0** | **-0.4** |
| | baz=135 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,0.8nm,0.5s,baz=135 | | | | | | |
| **ULC** | **Ulcinj** | **0.95** | **324** | *i* Pg | **Pg** | **21 10 44.6** | **-1.2** |
| **ULC** | **Ulcinj** | **0.95** | **324** | *e*Pg | **Pg** | **21 10 44.3** | **-1.5** |
| ULC | | | | *i* Sg | **Sb** | **21 10 59.0** | **+0.6** |
| **NEST** | **Nestorio** | **1.12** | **134** | P | **Pg** | **21 10 47.8** | **-1.2** |
| NEST | | | | S | **Sb** | **21 11 03.2** | **-0.1** |
| | comp=E,92nm,0.5s | | | | | | |
| **NEST** | **Nestorio** | **1.12** | **134** | P | **Pg** | **21 10 47.7** | **-1.3** |
| **FNA** | **Florina** | **1.13** | **111** | P | **Pg** | **21 10 47.2** | **-2.0** |
| FNA | | | | S | **Sg** | **21 11 02.8** | **-1.1** |
| | comp=E,232nm,0.4s | | | | | | |
| **FNA** | **Florina** | **1.13** | **111** | P | **Pg** | **21 10 47.4** | **-1.8** |
| FNA | | | | S | **Sb** | **21 11 03.6** | **+0.1** |
| FNA | | | | AML | AML | 21 11 10.1 | |
| | comp=N,516μm,0.4s | | | | | | |
| FNA | | | | AML | AML | 21 11 11.7 | |
| | comp=E,410μm,0.3s | | | | | | |
| **FNA** | **Florina** | **1.13** | **111** | P | **Pg** | **21 10 47.4** | **-1.8** |
| | baz=111 | | | | | | |
| FNA | | | | S | **Sb** | **21 11 04.2** | **+0.7** |
| | baz=111 | | | | | | |
| **LSK** | **Leskovik** | **1.14** | **156** | P | **Pb** | **21 10 49.3** | **+0.2** |
| | baz=158 | | | | | | |
| **DRME** | **Dracevica, Mon** | **1.16** | **329** | *e*Pn | **Pg** | **21 10 48.5** | **-1.3** |
| **DRME** | **Dracevica, Mon** | **1.16** | **329** | *e*Pg | **Pg** | **21 10 48.3** | **-1.5** |
| DRME | | | | *e*Sg | **Sn** | **21 11 06.1** | **+0.9** |
| **BCI** | **Bajram Curri** | **1.18** | **3** | P | **Pg** | **21 10 49.2** | **-0.9** |
| | baz=0.0 | | | | | | |
| BCI | | | | S | **Sn** | **21 11 06.9** | **+1.2** |
| | baz=0.0 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,0.7nm,0.5s,baz=0.0 | | | | | | |
| **SRN** | **Sarande** | **1.31** | **180** | P | **Pb** | **21 10 53.1** | **+1.1** |
| SRN | | | | S | **Sn** | **21 11 11.1** | **+2.2** |
| | comp=E,92nm,0.4s | | | | | | |
| **SRN** | **Sarande** | **1.31** | **180** | P | **Pb** | **21 10 52.6** | **+0.6** |
| | baz=182 | | | | | | |
| SRN | | | | S | **Sn** | **21 11 11.4** | **+2.5** |
| | baz=182 | | | | | | |
| **SKO** | **Skopje** | **1.34** | **54** | *i* Pg | **Pb** | **21 10 53.1** | **+0.7** |
| SKO | | | | *i* Sg | **Sn** | **21 11 10.2** | **+0.6** |
| **PDG** | **Podgorica** | **1.35** | **336** | *e*Pn | **Pn** | **21 10 52.2** | **+0.1** |
| PDG | | | | *e*Sn | **Sn** | **21 11 14.4** | **+4.5** |
| **PDG** | **Podgorica** | **1.35** | **336** | *e*Pn | **Pn** | **21 10 51.7** | **-0.4** |
| **PDG** | **Podgorica** | **1.35** | **336** | *i* Pg | **Pn** | **21 10 51.9** | **-0.2** |
| **TTG** | **Podgorica** | **1.35** | **336**⇑ | *i*Pg | **Pn** | **21 10 51.7** | **-0.4** |
| TTG | | | | *i* Sg | **Sn** | **21 11 12.4** | **+2.5** |
| **BUM** | **Brajici-Budva** | **1.38** | **324**⇑ | *i*Pg | **Pn** | **21 10 52.3** | **-0.2** |
| BUM | | | | *i* Sg | **Sn** | **21 11 13.5** | **+2.8** |
| **PVY** | **Plav** | **1.40** | **359**⇑ | *i*Pg | **Pn** | **21 10 52.4** | **-0.5** |
| PVY | | | | *e*Sg | **Sn** | **21 11 13.6** | **+2.2** |
| **KEK** | **Kerkira** | **1.48** | **186** | P | **Pg** | **21 10 55.7** | **-0.3** |
| **CEME** | **Cevo** | **1.57** | **330**⇑ | *i*Pg | **Pn** | **21 10 55.7** | **+0.5** |
| CEME | | | | *i* Sg | **Sg** | **21 11 19.9** | **+1.8** |
| **KPRO** | **Kipourio** | **1.62** | **139** | P | **Pb** | **21 10 57.0** | **-0.3** |
| **HCY** | **Herceg Novi** | **1.68** | **319** | *e*Pn | **Pb** | **21 10 57.9** | **-0.4** |
| **HCY** | **Herceg Novi** | **1.68** | **319** | *e*Pn | **Pn** | **21 10 57.7** | **+1.1** |
| HCY | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RODP** | **Rodopos** | **0.50** | **66** | P | **Pn** | **21 16 00.8** | **+0.2** |
| RODP | 1μm,0.4s | | | S | **Sn** | **21 16 07.5** | **-1.2** |
| **ANKY** | **Antikythira Is** | **0.51** | **9** | P | **Pn** | **21 16 00.0** | **-0.8** |
| ANKY | 6μm,0.6s | | | S | **Sn** | **21 16 07.8** | **-1.3** |
| **ANKY** | **Antikythira Is** | **0.51** | **9** | P | **Pn** | **21 15 59.9** | **-0.9** |
| ANKY | | | | S | **Sn** | **21 16 09.6** | **+0.5** |
| ANKY | comp=N,15280μm,0.6s | | | AML | AML | 21 16 10.5 | |
| ANKY | comp=E,6711μm,0.6s | | | AML | AML | 21 16 11.0 | |
| **IMMV** | **Iera Moni Meta** | **0.64** | **81** | P | **Pn** | **21 16 02.9** | **+0.6** |
| IMMV | comp=E,4μm,0.5s | | | S | **Sn** | **21 16 14.0** | **+2.2** |
| **IMMV** | **Iera Moni Meta** | **0.64** | **81** | P | **Pn** | **21 16 02.9** | **+0.6** |
| IMMV | | | | S | **Sn** | **21 16 13.7** | **+1.8** |
| IMMV | comp=E,7554μm,0.6s | | | AML | AML | 21 16 14.5 | |
| IMMV | comp=N,9802μm,0.4s | | | AML | AML | 21 16 15.3 | |
| **VAM** | **Vamos** | **0.82** | **86** | P | **Pn** | **21 16 05.8** | **+1.3** |
| VAM | comp=N,1μm,0.5s | | | S | **Sn** | **21 16 18.8** | **+3.0** |
| **VAM** | **Vamos** | **0.82** | **86** | P | **Pn** | **21 16 05.7** | **+1.1** |
| VAM | | | | S | **Sn** | **21 16 18.0** | **+2.2** |
| VAM | comp=N,2357μm,0.3s | | | AML | AML | 21 16 23.2 | |
| VAM | comp=E,3049μm,0.6s | | | AML | AML | 21 16 25.5 | |
| **GVD** | **Gavdhos** | **0.89** | **125** | P | **Pn** | **21 16 06.1** | **+0.6** |
| GVD | comp=E,1μm,0.4s | | | S | **Sn** | **21 16 19.4** | **+1.9** |
| **GVD** | **Gavdhos** | **0.89** | **125** | P | **Pn** | **21 16 05.9** | **+0.4** |
| GVD | | | | S | **Sn** | **21 16 19.5** | **+2.0** |
| GVD | comp=E,1899μm,0.6s | | | AML | AML | 21 16 24.1 | |
| GVD | comp=N,2396μm,0.5s | | | AML | AML | 21 16 26.2 | |
| **KTHA** | **Kythira Island** | **0.90** | **353** | P | **Pn** | **21 16 06.2** | **+0.5** |
| KTHA | comp=N,2μm,0.8s | | | S | **Sn** | **21 16 20.8** | **+3.0** |
| **KTHA** | **Kythira Island** | **0.90** | **353** | P | **Pn** | **21 16 06.3** | **+0.5** |
| KTHA | comp=N,1846μm,0.7s | | | AML | AML | 21 16 20.1 | |
| KTHA | | | | S | **Sn** | **21 16 20.6** | **+2.8** |
| KTHA | comp=E,7356μm,0.9s | | | AML | AML | 21 16 21.5 | |
| **KTHR** | **Kythira** | **0.91** | **350** | P | **Pn** | **21 16 06.2** | **+0.3** |
| KTHR | comp=E,2μm,0.6s | | | S | **Sn** | **21 16 20.1** | **+2.0** |
| **VLI** | **Veliai** | **1.37** | **351** | P | **Pn** | **21 16 13.7** | **+1.7** |
| VLI | comp=E,768nm,0.6s | | | S | **Sn** | **21 16 34.1** | **+5.0** |
| **VLI** | **Veliai** | **1.37** | **351** | P | **Pn** | **21 16 13.7** | **+1.7** |
| VLI | | | | S | **Sn** | **21 16 33.5** | **+4.4** |
| VLI | comp=N,1454μm,0.6s | | | AML | AML | 21 16 40.3 | |
| VLI | comp=E,1476μm,0.6s | | | AML | AML | 21 16 42.4 | |
| **IDI** | **Anoyia** | **1.38** | **92** | Pn | **Pn** | **21 16 13.4** | **+1.2** |
| IDI | comp=E,5.8nm,0.3s,baz=288,slow=17,SNR=2.4 | | | Sn | **Sn** | **21 16 32.5** | **+3.1** |
| IDI | comp=E,12nm,0.3s,baz=261,slow=22,SNR=2.4 | | | LR | LR | 21 17 07.0 | |
| **IDI** | **Anoyia** | **1.38** | **92** | P | **Pn** | **21 16 14.7** | **+2.6** |
| **BRTR** | **Keskin Array B** | **9.36** | **59** | Pn | **Pn** | **21 18 01.6** | **0.0** |
| | comp=E,0.1nm,0.3s,baz=243,slow=11,SNR=4.6 | | | | | | |
| **KBZ** | **Khabaz** | **17.31** | **55** | P | **P** | **21 19 48.1** | **+0.3** |
| | comp=E,0.1nm,0.3s,baz=270,slow=8.1,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **26.17** | **3** | P | **P** | **21 21 16.1** | **-2.3** |
| | comp=E,3.1nm,0.9s,baz=165,slow=12,SNR=3.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.26** | **1** | P | **P** | **21 22 27.3** | **-2.5** |
| | comp=E,1.3nm,0.8s,baz=189,slow=11,SNR=1.1 | | | | | | |
| **KURBB** | **Kurchatov Array** | **42.24** | **51** | P | **P** | **21 23 35.4** | **-1.7** |
| | comp=E,0.2nm,0.2s,baz=275,slow=8.8,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.00** | **56** | P | **P** | **21 23 58.5** | **-0.9** |
| | comp=E,0.4nm,0.4s,baz=268,slow=8.2,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.02** | **46** | P | **P** | **21 24 05.6** | **-1.7** |
| | comp=E,0.8nm,0.4s,baz=270,slow=9.5,SNR=6.2 | | | | | | |
| **DLBC** | **Dease Lake** | **83.91** | **346** | LR | LR | 22 05 44.8 | |
| | comp=E,298nm,18.7s,baz=168,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **86.37** | **47** | LR | LR | 22 12 02.4 | |
| | comp=E,93nm,18.0s,baz=172,slow=39 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **88.68** | **17** | LR | LR | 22 11 27.8 | |
| | comp=E,194nm,18.1s,baz=142,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **97.67** | **243** | LR | LR | 22 15 59.7 | |
| | comp=E,31nm,18.2s,baz=216,slow=37 | | | | | | |

**IDC 24 21:21:35.3±3.3, 11°34S×66°57E, h0km, mb3.6/5, mb1 3.7/5, mb1mx3.3/59, mbtmp3.6/5, MS3.5/8, Ms1 3.5/8, ms1mx3.0/71, Error ellipse: s-maj=112.8km s-min=31.9km az=59.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Garcia H** | **6.88** | **58** | T | T | 21 30 17.8 | |
| | baz=238,slow=75,SNR=58 | | | | | | |
| **H08S2** | **Diego Garcia H** | **6.90** | **58** | T | T | 21 30 21.8 | |
| | baz=238,slow=75,SNR=88 | | | | | | |
| **H08S3** | **Diego Garcia H** | **6.90** | **58** | T | T | 21 30 21.8 | |
| | baz=238,slow=75,SNR=117 | | | | | | |
| **PALK** | **Pallekele** | **23.23** | **38** | LR | LR | 21 32 40.9 | |
| | comp=Z,49nm,20.2s,baz=309,slow=29 | | | | | | |
| **PSI** | **Prapat** | **35.11** | **68** | LR | LR | 21 40 30.8 | |
| | comp=Z,110nm,18.5s,baz=242,slow=32 | | | | | | |
| **MBAR** | **Mbarara** | **37.15** | **284** | LR | LR | 21 42 13.2 | |
| | comp=Z,47nm,18.4s,baz=104,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **37.52** | **260** | LR | LR | 21 42 14.0 | |
| | comp=Z,60nm,20.9s,baz=118,slow=33 | | | | | | |
| **MATP** | **Matopo** | **37.64** | **251** | LR | LR | 21 43 10.9 | |
| | comp=Z,50nm,18.4s,baz=180,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.55** | **48** | LR | LR | 21 46 17.8 | |
| | comp=Z,23nm,18.6s,baz=235,slow=34 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **49.06** | **127** | T | T | 22 22 55.9 | |
| | baz=287,slow=75 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **49.06** | **127** | T | T | 22 22 53.7 | |
| | baz=287,slow=75 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **49.08** | **127** | T | T | 22 22 55.8 | |
| | baz=287,slow=75 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.56** | **12** | P | P | 21 31 40.0 | -0.7 |
| | 0.3nm,0.7s,baz=200,slow=6.2,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Array** | **62.58** | **9** | P | P | 21 32 00.8 | -0.2 |
| | 0.3nm,0.7s,baz=213,slow=7.3,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **64.88** | **111** | P | P | 21 32 15.7 | -1.3 |
| | 0.6nm,0.9s,baz=278,slow=7.0,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.46** | **107** | P | P | 21 32 21.5 | +0.7 |
| | 0.5nm,0.6s,baz=272,slow=5.9,SNR=8.6 | | | | | | |
| **SONM** | **Songino Array** | **68.71** | **28** | P | P | 21 32 41.6 | +0.7 |
| | 0.3nm,0.5s,baz=232,slow=7.1,SNR=3.8 | | | | | | |
| **DBIC** | **Dimbokro** | **73.28** | **281** | LR | LR | 22 05 14.7 | |
| | comp=Z,75nm,19.4s,baz=197,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **87.99** | **44** | LR | LR | 22 14 07.3 | |
| | comp=Z,39nm,19.0s,baz=155,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **148.51** | **355** | PKPbc | PKPbc | 21 41 24.2 | -0.5 |
| | 0.5nm,0.7s,baz=30,slow=2.5,SNR=4.1 | | | | | | |

*JMA **24** 21:22:06.5±0.1, 36°.94N×141°.33E, h25km±1km, M3.1*
*IDC **24** 21:22:07.2±1.7, 36°.29N×141°.13E, h0km, mb3.3/3, mb1 3.5/4, mb1mx3.1/65, mbtmp3.2/4, ML2.1/1, Error ellipse: s-maj=35.2km s-min=28.5km az=2.0*
**ISC 24 21:22:05.4±2.3, 36°.94N±0°.05×141°.29E±0°.09, h7km±14km, n21, σ1°45/19, mb3.3/3, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONAJ** | **Iwakimizuishiy** | **0.43** | **293** | P | **Pb** | **21 22 15.7** | **+0.3** |
| ONAJ | | | | S | **Sb** | **21 22 22.3** | **+0.3** |
| **JFK** | **Kawauchi** | **0.54** | **322** | P | **Pb** | **21 22 17.4** | **+0.1** |
| JFK | | | | S | **Sb** | **21 22 25.2** | **-0.2** |
| **JFFD** | **Fukushimafurud** | **0.60** | **285** | P | **Pb** | **21 22 18.6** | **+0.2** |
| JFFD | | | | S | **Sb** | **21 22 26.8** | **-0.3** |
| **JHO** | **Hitachi** | **0.67** | **241** | P | **Pb** | **21 22 19.7** | **+0.3** |
| JHO | | | | S | **Sb** | **21 22 29.5** | **+0.7** |
| **JFT** | **Otama** | **0.96** | **308** | P | **Pn** | **21 22 25.1** | **-0.2** |
| JFT | | | | S | **Sn** | **21 22 38.0** | **-1.2** |
| **JMM** | **Marumori** | **1.01** | **337** | S | **Sb** | **21 22 38.2** | **-0.5** |
| **JYT** | **Yasato** | **1.13** | **232** | P | **Pg** | **21 22 26.8** | **-0.3** |
| JYT | | | | *e*S | **Sg** | **21 22 41.5** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **2.51** | **262** | Pn | **Pn** | **21 22 48.0** | **+1.4** |
| | 0.5nm,0.3s,baz=90,slow=14,SNR=8.4 | | | | | | |
| MJAR | | | | Sn | **Sb** | **21 23 19.4** | **-2.4** |
| | 0.6nm,0.3s,baz=77,slow=20,SNR=5.7 | | | | | | |
| **MAT** | **Matsushiro** | **2.51** | **262** | P | **Pn** | **21 22 48.1** | **+1.4** |
| MAT | | | | S | **Sb** | **21 23 21.0** | **-0.9** |
| **SONM** | **Songino Array** | **27.76** | **304** | P | **P** | **21 27 58.4** | **+3.6** |
| | 0.3nm,0.6s,baz=111,slow=7.9,SNR=2.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.18** | **120** | T | T | 21 57 28.2 | |
| | baz=313,slow=75,SNR=16 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.19** | **120** | T | T | 21 57 28.4 | |
| | baz=313,slow=75,SNR=12 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.20** | **120** | T | T | 21 57 28.6 | |
| | baz=313,slow=75,SNR=9.4 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.89** | **123** | T | T | 21 58 17.8 | |
| | baz=315,slow=76,SNR=9.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.89** | **123** | T | T | 21 58 20.9 | |
| | baz=315,slow=76,SNR=10 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.91** | **123** | T | T | 21 58 21.9 | |
| | baz=315,slow=76,SNR=7.3 | | | | | | |
| **ILAR** | **Eielson Array** | **49.63** | **32** | P | P | 21 31 05.5 | +8.4 |
| | 0.3nm,0.8s,baz=265,slow=7.2,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.95** | **188** | P | **P** | **21 31 49.3** | **-2.1** |
| | 0.2nm,0.7s,baz=6.1,slow=7.9,SNR=1.7 | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.11** | **96** | T | T | 00 26 14.1 | |
| | baz=293 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.12** | **96** | T | T | 00 26 17.7 | |
| | baz=293,slow=74 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.13** | **96** | T | T | 00 26 15.9 | |
| | baz=293,slow=74 | | | | | | |

*SOME **24** 21:23:19.2, 43°.92N×83°.72E, h10km*
*NNC **24** 21:23:21.1±0.8, 43°.92N×83°.81E, h0km, mb2.8, mpv2.5, Error ellipse: s-maj=8.3km s-min=3.2km az=117.0*
**ISC 24 21:23:17.9±2.5, 43°.7N±0°.1×84°.3E±0°.1, h10km, n17, σ1°83/34, 3C-3D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **2.85** | **266** | *e*P | **Pb** | **21 24 06.1** | **-2.8** |
| | 2.7nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **21 24 40.0** | **+2.0** |
| | 24nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **3.29** | **283** | *e*P | **Pn** | **21 24 11.2** | **+1.7** |
| | 1.4nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sn** | **21 24 48.8** | **+0.1** |
| | 35nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **3.40** | **337** | Pn | **Pn** | **21 24 10.7** | **-0.4** |
| | baz=101,slow=17,SNR=28 | | | | | | |
| MK31 | | | | Pg | **Pb** | **21 24 17.2** | **-1.1** |
| | 0.7nm,0.3s,baz=159,slow=17,SNR=28 | | | | | | |
| MK31 | | | | Lg | Lg | 21 24 58.2 | |
| | 1.5nm,0.3s,baz=165,slow=30,SNR=14 | | | | | | |
| **PDGK** | **Podgornoye** | **3.48** | **266** | ⇑Pn | **Pn** | **21 24 12.6** | **+0.3** |
| | 0.2nm,0.4s | | | | | | |
| PDGK | | | | ⇓Pg | **Pb** | **21 24 19.5** | **-0.3** |
| | 1.7nm,0.4s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 21 25 02.3 | |
| | 6.4nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **3.51** | **334** | ⇓Pn | **Pn** | **21 24 11.9** | **-0.7** |
| | 0.3nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Pg | **Pb** | **21 24 18.8** | **-1.3** |
| | 1.3nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 21 25 02.1 | |
| | 2.1nm,0.5s | | | | | | |
| **KNOS** | **Konyrlen** | **3.72** | **282** | *e*P | **Pn** | **21 24 18.1** | **+2.5** |
| | 2.3nm,0.3s | | | | | | |
| KNOS | | | | *e*S | **Sn** | **21 25 00.1** | **+0.6** |
| | 4.9nm,0.1s | | | | | | |
| **ZSN** | **Zaisan** | **3.79** | **6** | *e*P | **Pb** | **21 24 24.0** | **-0.9** |
| | 1.8nm,0.1s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **21 25 11.1** | **+0.2** |
| | 20nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **3.85** | **264** | *e*P | **Pb** | **21 24 24.8** | **-1.3** |
| | 2.1nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sb** | **21 25 12.9** | **+0.1** |
| | 4.6nm,0.4s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.85** | **296** | *e*P | **Pn** | **21 24 20.7** | **+3.4** |
| | 1.0nm,0.2s | | | | | | |
| KAPS | | | | *e*S | **Sn** | **21 25 04.9** | **+2.2** |
| | 2.9nm,0.1s | | | | | | |
| **KPKS** | **Kokpek** | **4.05** | **269** | *e*P | **Pb** | **21 24 26.5** | **-3.0** |
| | 1.4nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **21 25 14.9** | **-3.7** |
| | 13nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **4.27** | **265** | *e*P | **Pb** | **21 24 32.2** | **-0.9** |
| | 3.5nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **21 25 25.2** | **+0.4** |
| | 8.3nm,0.2s | | | | | | |
| **SATY** | **Saty** | **4.31** | **264** | *e*P | **Pb** | **21 24 33.0** | **-0.9** |
| | 0.9nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sb** | **21 25 26.1** | **+0.1** |
| | 5.0nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **4.42** | **270** | *e*P | **Pb** | **21 24 33.3** | **-2.5** |
| | 0.8nm,0.3s | | | | | | |
| KURS | | | | *e*S | **Sb** | **21 25 26.3** | **-2.9** |
| | 2.2nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **4.67** | **279** | *e*P | **Pb** | **21 24 37.2** | **-2.8** |
| | 0.8nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **21 25 34.1** | **-2.1** |
| | 5.2nm,0.1s | | | | | | |
| **CHKK** | **Chushkaly** | **5.26** | **274** | *e*P | **Pb** | **21 24 48.4** | **-1.6** |
| | 0.6nm,0.0s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **21 25 52.5** | **-0.8** |
| | 5.8nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **5.49** | **273** | *e*P | **Pb** | **21 24 53.4** | **-0.5** |
| | 0.8nm,0.5s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **21 26 00.9** | **+1.0** |
| | 12nm,0.1s | | | | | | |
| **KUU** | **Kurty** | **5.73** | **275** | *e*P | **Pb** | **21 24 58.0** | **-0.1** |
| | 1.4nm,1.0s | | | | | | |
| KUU | | | | *e*S | **Sb** | **21 26 08.9** | **+2.1** |
| | 3.4nm,0.0s | | | | | | |

*IDC **24** 21:38:01.0±1.0, 32°.68N×138°.99E, h192km±7km, mb3.2/5, mb1 3.4/7, mb1mx3.1/38, mbtmp3.6/7, MS4.0/1, Ms1 4.2/1, ms1mx2.7/29, Error ellipse: s-maj=41.2km s-min=16.0km az=97.0*
*JMA **24** 21:38:00.6±0.2, 32°.80N×139°.35E, h214km±2km, M3.7*
*NEIC **24** 21:38:02.3±2.8, 32°.8N±0°.1×139°.1E±0°.1, h196km±8km, mb4.1/13, Error ellipse: s-maj=16.4km s-min=11.8km az=156.0*
**ISC 24 21:38:02.0±0.8, 32°.78N±0°.07×139°.24E±0°.06, h202km±6km, n57, σ1°28/65, mb4.0/11, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **0.56** | **58** | P | **Pn** | **21 38 29.4** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **0.57** | **53** | P | **Pn** | **21 38 29.6** | **0.0** |
| | 105nm,0.3s,baz=94,slow=23,SNR=19 | | | | | | |
| JHJ | | | | S | **S** | **21 38 49.9** | **-1.2** |
| | 30nm,0.3s,baz=80,slow=23,SNR=2.2 | | | | | | |
| **JHJ2** | **Mitsune** | **0.59** | **56** | P | **Pn** | **21 38 29.5** | **-0.1** |
| JHJ2 | | | | S | **S** | **21 38 51.7** | **+0.6** |
| **JHJ2** | **Mitsune** | **0.59** | **56** | Pn | **Pn** | **21 38 29.5** | **-0.1** |
| **JMKN** | **Mikurajimanish** | **1.15** | **15** | P | **Pn** | **21 38 32.5** | **-0.5** |
| **JKO** | **Kozu shima** | **1.41** | **357** | P | **Pn** | **21 38 34.7** | **-0.3** |
| **JIM2** | **Oshima 3** | **1.94** | **5** | P | **Pn** | **21 38 39.7** | **-0.3** |
| JIM2 | | | | *e*S | **S** | **21 39 09.5** | **+0.2** |
| **JIZS** | **Izushimoda** | **1.96** | **351** | P | **Pn** | **21 38 40.0** | **-0.1** |
| **TK04** | **Tokai 4** | **1.96** | **325** | P | **Pn** | **21 38 40.5** | **+0.4** |
| TK04 | | | | *e*S | **S** | **21 39 11.0** | **+1.6** |
| **BSO1** | **Boso 1** | **2.37** | **37** | P | **Pn** | **21 38 42.9** | **-1.0** |
| BSO1 | | | | S | **S** | **21 39 16.1** | **-0.1** |
| **JOD2** | **Odawara 2** | **2.48** | **357** | P | **Pn** | **21 38 45.6** | **-0.2** |
| JOD2 | | | | *e*S | **S** | **21 39 19.8** | **+0.3** |
| **JIE** | **Ise** | **2.65** | **308** | P | **Pn** | **21 38 47.5** | **-0.2** |
| **JYN** | **Shimob** | **2.77** | **348** | P | **Pn** | **21 38 49.3** | **+0.2** |
| **INU** | **Inuyama** | **3.16** | **325** | | **Pn** | **21 38 52.9** | **-0.7** |
| **JTNC** | **Tanabenakahech** | **3.21** | **290** | P | **Pn** | **21 38 53.9** | **-0.3** |
| JTNC | | | | *e*S | **S** | **21 39 36.3** | **+1.9** |
| **JGF** | **Kuroka** | **3.22** | **332** | | **Pn** | **21 38 53.6** | **-0.7** |
| **JRY** | **Ryogami san** | **3.24** | **355** | P | **Pn** | **21 38 54.5** | **-0.1** |
| JRY | | | | *e*S | **S** | **21 39 35.7** | **+0.4** |
| **JWY** | **Kouya** | **3.37** | **296** | P | **Pn** | **21 38 56.3** | **+0.2** |
| **JYTA** | **Yamagatataniai** | **3.49** | **324** | P | **Pn** | **21 38 57.6** | **+0.1** |
| **JYT** | **Yasato** | **3.53** | **13** | Pn | **Pn** | **21 38 56.3** | **-1.7** |
| **JAG** | **Ashikaga** | **3.64** | **3** | P | **Pn** | **21 38 57.5** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **3.85** | **348** | P | **Pn** | **21 39 01.2** | **-0.8** |
| | 0.6nm,0.3s,baz=166,slow=9.1,SNR=19 | | | | | | |
| **MAJO** | **Matsushiro** | **3.85** | **348** | | **Pn** | **21 39 01.7** | **-0.3** |
| **MAT** | **Matsushiro** | **3.85** | **348** | P | **Pn** | **21 39 01.6** | **-0.3** |
| MAT | | | | *e*S | **S** | **21 39 46.7** | **-1.9** |
| **MAT** | **Matsushiro** | **3.85** | **348** | P | **Pn** | **21 39 01.6** | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | **3.85** | **348** | | **Pn** | **21 39 01.6** | **-0.4** |
| **JMN** | **Monobe** | **4.59** | **283** | Pn | **Pn** | **21 39 10.3** | **-0.9** |
| **JMM** | **Marumori** | **5.24** | **14** | | **Pn** | **21 39 17.3** | **-2.1** |
| **JSD** | **Sado** | **5.31** | **352** | Pn | **Pn** | **21 39 18.6** | **-1.7** |
| **JHS** | **Saijyo** | **5.55** | **295** | Pn | **Pn** | **21 39 21.9** | **-1.6** |
| **JTM** | **Tenmabayashi** | **8.13** | **10** | Pn | **Pn** | **21 39 55.1** | **-1.6** |
| **ERM** | **Erimo** | **9.73** | **18** | Pn | **Pn** | **21 40 16.4** | **-1.2** |
| **JEW** | **Eniwo** | **10.20** | **9** | Pn | **Pn** | **21 40 21.4** | **-2.2** |
| **ASAJ** | **Asahikawa** | **11.62** | **12** | P | **Pn** | **21 40 40.0** | **-1.8** |
| | 1.1nm,0.3s,baz=198,slow=10,SNR=8.7 | | | | | | |
| ASAJ | | | | S | S | 21 42 38.9 | -12 |
| | 0.2nm,0.3s,baz=62,slow=30,SNR=1.0 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **11.62** | **12** | | **Pn** | **21 40 39.6** | **-2.2** |
| **KLR** | **Kul'dur** | **17.36** | **343** | P | **P** | **21 41 49.9** | **-0.7** |
| | 0.1nm,0.3s,baz=153,slow=14,SNR=2.1 | | | | | | |
| **YULB** | **Yu-li** | **18.36** | **244** | P | **P** | **21 42 00.2** | **-1.5** |
| **SSLB** | **Suanglung** | **18.40** | **246** | P | **P** | **21 42 01.2** | **-0.9** |
| **K20K** | **Telida** | **50.86** | **32** | P | **P** | **21 46 43.7** | **+1.8** |
| K20K | | | | IAmb | IAmb | 21 47 01.0 | |
| | comp=Z,6.2nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **52.45** | **186** | P | **P** | **21 46 53.0** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 21 46 54.6 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.63** | **186** | P | **P** | **21 46 54.2** | **-1.2** |
| | comp=Z,0.5nm,0.4s,baz=2.0,slow=8.3,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.63** | **186** | P | **P** | **21 46 54.3** | **-1.2** |
| **MDM** | **Murphy Dome** | **53.48** | **30** | P | **P** | **21 47 03.1** | **+2.0** |
| **H24K** | **Noodor Dome** | **53.62** | **29** | P | **P** | **21 47 04.1** | **+1.9** |
| **ILAR** | **Eielson Array** | **54.05** | **31** | LR | LR | 22 11 03.7 | |
| | comp=Z,147nm,18.7s,baz=172,slow=37 | | | | | | |
| **BMAR** | **Burnt Mountain** | **54.92** | **27** | P | **P** | **21 47 13.9** | **+2.3** |
| **SCRK** | **Sand Creek** | **55.35** | **31** | P | **P** | **21 47 15.6** | **+0.9** |
| SCRK | | | | IAmb | IAmb | 21 47 41.3 | |
| | comp=Z,4.6nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **56.36** | **186** | P | **P** | **21 47 21.3** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=358,slow=6.2,SNR=7.7 | | | | | | |
| **BCAR** | **Beaver Creek A** | **56.42** | **32** | P | **P** | **21 47 23.8** | **+1.5** |
| **EPYK** | **Eagle Plains** | **58.11** | **28** | P | **P** | **21 47 36.2** | **+2.2** |
| EPYK | | | | IAmb | IAmb | 21 47 48.6 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **INK** | **Inuvik** | **58.98** | **26** | P | **P** | **21 47 41.0** | **+1.0** |
| | comp=Z,0.5nm,0.4s,baz=248,slow=5.4,SNR=5.3 | | | | | | |
| **INK** | **Inuvik** | **58.98** | **26** | P | **P** | **21 47 40.9** | **+1.0** |
| INK | | | | IAmb | IAmb | 21 47 59.1 | |
| | comp=Z,3.6nm,1.3s | | | | | | |
| **GEYT** | **Alibeck** | **64.36** | **300** | P | **P** | **21 48 14.9** | **-1.5** |
| GEYT | | | | IAmb | IAmb | 21 48 26.5 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **64.36** | **300** | P | **P** | **21 48 15.2** | **-1.3** |
| **PINE** | **Pine Mountain** | **74.49** | **48** | P | **P** | **21 49 21.3** | **+2.8** |
| PINE | | | | IAmb | IAmb | 21 49 47.7 | |
| | comp=Z,4.1nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.00** | **51** | P | **P** | **21 49 45.1** | **+1.2** |
| | comp=Z,0.3nm,0.6s,baz=304,slow=6.4,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **94.16** | **51** | P | **P** | **21 50 59.5** | **+1.3** |
| | comp=Z,0.3nm,0.6s,baz=296,slow=3.3,SNR=3.8 | | | | | | |

*SOME **24** 21:43:41.1, 39°.00N×72°.40E, h5km*
*NNC **24** 21:43:48.7±6.4, 38°.60N×72°.39E, h209km±69km, mb2.8, mpv3.7, Error ellipse: s-maj=67.9km s-min=38.7km az=22.0*
**ISC 24 21:43:40.4±2.9, 38°.7N±0°.1×72°.28E±0°.09, h10km, n7, σ1°72/14, 3C-5D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **4.13** | **10** | *e*P | **Pb** | **21 44 53.5** | **+0.3** |
| | 11nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **21 45 44.7** | **+1.6** |
| | 28nm,0.5s | | | | | | |
| **DZA** | **Taraz** | **4.27** | **351** | *e*P | **Pb** | **21 44 56.3** | **+0.7** |
| | 28nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sb** | **21 45 49.7** | **+2.4** |
| | 70nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **4.30** | **22** | ⇑P | **Pb** | **21 44 54.0** | **-2.2** |
| | 4.0nm,0.5s | | | | | | |
| AAK | | | | ⇓S | **Sb** | **21 45 48.1** | **-0.1** |
| | 38nm,0.9s | | | | | | |
| **KK01** | **Karatay Array** | **4.63** | **344** | ⇑P | **Pb** | **21 44 59.2** | **-2.4** |
| | 7.6nm,0.4s | | | | | | |
| KK01 | | | | ⇑S | **Sb** | **21 45 56.9** | **-0.5** |
| | 12nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.73** | **338** | *e*P | **Pb** | **21 45 02.9** | **-0.5** |
| | 11nm,0.0s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **21 46 00.5** | **+0.1** |
| | 23nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **13.79** | **324** | ⇓P | **Pn** | **21 46 57.9** | **+2.1** |
| | 2.3nm,0.5s,baz=132,slow=14,SNR=6.6 | | | | | | |
| AB31 | | | | ⇓S | **Sn** | **21 49 26.4** | **-2.7** |
| | 1.0nm,0.5s,baz=138,slow=23,SNR=6.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.51** | **324** | ⇓P | **P** | **21 47 23.5** | **0.0** |
| | 2.5nm,0.5s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **21 50 09.8** | **-1.0** |
| | 1.9nm,0.8s | | | | | | |

**TAP 24 21:53:27.8, 23°.17N×120°.93E, h1km, ML2.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **0.09** | **78** | P | Pg | 21 53 30.5 | +0.9 |
| | baz=80 | | | | | | |
| ELDTW | | | | S | Sg | 21 53 32.0 | +1.2 |
| | baz=80 | | | | | | |
| **STYH** | **Taoyuan** | **0.14** | **270** | *i* P | Pg | 21 53 31.3 | +0.8 |
| | baz=270 | | | | | | |
| STYH | | | | *i* S | Sg | 21 53 33.2 | +0.9 |
| | baz=270 | | | | | | |
| **STYT** | **Tauyuan** | **0.16** | **267** | P | Pg | 21 53 31.6 | +0.8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=131 | | | | | | | | |
| EDH | | | | | *e*S | Sb | 21 53 44.0 | -0.3 | |
| | baz=131 | | | | | | | | |
| **EYUL** | **Yuli** | **0.40** | **64** | | *e*P | Pg | 21 53 36.3 | +0.7 | |
| | baz=64 | | | | | | | | |
| EYUL | | | | | *e*S | Sb | 21 53 42.6 | -1.8 | |
| | baz=64 | | | | | | | | |
| **YULB** | **Yu-li** | **0.41** | **57** | | *e*P | Pg | 21 53 36.0 | +0.3 | |
| | baz=57 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.41** | **100** | | *e*P | Pb | 21 53 37.2 | -0.6 | |
| | baz=100 | | | | | | | | |
| **TWK** | **Hsinying** | **0.41** | **283** | | *e*P | Pb | 21 53 37.4 | -0.6 | |
| | baz=283 | | | | | | | | |
| TWK | | | | | *e*S | Sb | 21 53 44.5 | -0.3 | |
| | baz=283 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.48** | **332** | | *e*P | Pb | 21 53 38.2 | -0.9 | |
| | baz=332 | | | | | | | | |
| CHN5 | | | | | *e*S | Sb | 21 53 46.2 | -0.5 | |
| | baz=332 | | | | | | | | |
| **EHY** | **Hungye** | **0.49** | **47** | | *e*S | Sb | 21 53 46.7 | -0.4 | |
| | baz=48 | | | | | | | | |
| **SSD** | **Sandimen** | **0.50** | **213** | | *e*P | Pg | 21 53 37.6 | +0.1 | |
| | baz=214 | | | | | | | | |
| **TSMG** | **Majia** | **0.53** | **209** | | *e*P | Pg | 21 53 38.5 | +0.5 | |
| | baz=219 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.56** | **55** | | *e*S | Sb | 21 53 48.5 | -0.3 | |
| | baz=45 | | | | | | | | |
| **ECL** | **Taimali** | **0.57** | **177** | | *e*P | Pg | 21 53 39.2 | +0.4 | |
| | baz=178 | | | | | | | | |
| **VWDT** | **VWDT** | **0.61** | **19** | | *e*P | Pb | 21 53 40.7 | -0.6 | |
| | baz=12 | | | | | | | | |
| VWDT | | | | | *e*S | Sb | 21 53 50.5 | +0.1 | |
| | baz=12 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.61** | **2** | | *e*S | Sb | 21 53 51.0 | +0.5 | |
| | baz=2.0 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.62** | **206** | | *e*P | Pg | 21 53 39.6 | -0.1 | |
| | baz=207 | | | | | | | | |
| MASBT | | | | | *e*S | Sb | 21 53 49.9 | -0.7 | |
| | baz=207 | | | | | | | | |
| **WDLH** | **Douliu** | **0.63** | **325** | | *e*P | Pb | 21 53 41.7 | +0.1 | |
| | baz=324 | | | | | | | | |
| WDLH | | | | | *e*S | Sb | 21 53 51.6 | +0.8 | |
| | baz=324 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.73** | **299** | | *e*P | Pb | 21 53 42.9 | -0.4 | |
| | baz=298 | | | | | | | | |
| WSL | | | | | *e*S | Sb | 21 53 54.1 | +0.3 | |
| | baz=298 | | | | | | | | |
| **TYC** | **Yuchr** | **0.73** | **355** | | *e*P | Pg | 21 53 42.5 | +0.6 | |
| | baz=4.0 | | | | | | | | |
| TYC | | | | | *e*S | Sb | 21 53 54.2 | +0.4 | |
| | baz=4.0 | | | | | | | | |
| **WNT** | **Mingjian** | **0.74** | **343** | | *e*S | Sb | 21 53 54.8 | +0.8 | |
| | baz=343 | | | | | | | | |
| **SSPT** | **Xinbi** | **0.76** | **206** | | *e*P | Pb | 21 53 43.1 | -0.7 | |
| | baz=197 | | | | | | | | |
| **EAST** | **Anshuo** | **0.79** | **185** | | *e*P | Pb | 21 53 43.9 | -0.4 | |
| | baz=185 | | | | | | | | |
| EAST | | | | | *e*S | Sb | 21 53 54.5 | -1.0 | |
| | baz=185 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.84** | **200** | | *e*P | Pb | 21 53 44.8 | -0.5 | |
| | baz=192 | | | | | | | | |
| SCZT | | | | | *e*S | Sb | 21 53 56.6 | -0.5 | |
| | baz=192 | | | | | | | | |

**TAP 24 21:53:27.5, 23.95N×121.54E, h46km, ML2.6, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETM** | **Tongmen** | **0.05** | **288** | *e*P | Pn | 21 53 35.4 | +0.7 |
| | baz=288 | | | | | | |
| ETM | | | | *e*S | Sn | 21 53 41.3 | +1.5 |
| | baz=288 | | | | | | |
| **TWD** | **Chiawan** | **0.14** | **20** | P | Pn | 21 53 35.5 | +0.5 |
| | baz=23 | | | | | | |
| TWD | | | | S | Sn | 21 53 40.8 | +0.5 |
| | baz=23 | | | | | | |
| **ESL** | **Shilin** | **0.17** | **217** | P | Pn | 21 53 35.3 | +0.1 |
| | baz=214 | | | | | | |
| ESL | | | | *e*S | Sn | 21 53 40.6 | 0.0 |
| | baz=214 | | | | | | |
| **ETL** | **Fush Village** | **0.22** | **19** | *e*P | Pn | 21 53 36.0 | +0.4 |
| | baz=19 | | | | | | |
| ETL | | | | *e*S | Sn | 21 53 41.9 | +0.5 |
| | baz=19 | | | | | | |
| **NACB** | **Ninganchiao** | **0.23** | **12** | *e*P | Pn | 21 53 35.3 | -0.3 |
| | baz=11 | | | | | | |
| NACB | | | | *e*S | Sn | 21 53 41.2 | -0.2 |
| | baz=11 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.26** | **347** | P | Pn | 21 53 36.4 | +0.4 |
| | baz=347 | | | | | | |
| ETLH | | | | *e*S | Sn | 21 53 42.2 | +0.1 |
| | baz=347 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.32** | **307** | P | Pn | 21 53 37.4 | +0.5 |
| | baz=307 | | | | | | |
| WHF | | | | S | Sn | 21 53 44.3 | +0.7 |
| | baz=307 | | | | | | |
| **CHGB** | **Renai** | **0.36** | **288** | P | Pn | 21 53 37.6 | +0.6 |
| | baz=287 | | | | | | |
| CHGB | | | | S | Sn | 21 53 44.5 | +0.7 |
| | baz=287 | | | | | | |
| **WUSB** | **Renai** | **0.39** | **276** | P | Pn | 21 53 38.0 | +0.6 |
| | baz=276 | | | | | | |
| WUSB | | | | S | Sn | 21 53 44.7 | +0.4 |
| | baz=276 | | | | | | |
| **FUSS** | **Fushou** | **0.40** | **317** | *e*P | Pn | 21 53 38.2 | +0.6 |
| | baz=317 | | | | | | |
| FUSS | | | | *e*S | Sn | 21 53 45.7 | +0.9 |
| | baz=317 | | | | | | |
| **VWDT** | **VWDT** | **0.42** | **242** | *i* P | Pn | 21 53 38.1 | +0.6 |
| | baz=242 | | | | | | |
| VWDT | | | | *i* S | Sn | 21 53 45.5 | +0.9 |
| | baz=242 | | | | | | |
| **TDCB** | **Techi** | **0.46** | **311** | P | Pn | 21 53 38.4 | +0.2 |
| | baz=310 | | | | | | |
| TDCB | | | | S | Sn | 21 53 46.7 | +0.8 |
| | baz=310 | | | | | | |
| **HGSD** | **Ruisui** | **0.47** | **194** | P | Pn | 21 53 38.7 | +0.6 |
| | baz=193 | | | | | | |
| HGSD | | | | *e*S | Sn | 21 53 47.1 | +1.4 |
| | baz=193 | | | | | | |
| **EHY** | **Hungye** | **0.49** | **205** | P | Pn | 21 53 37.8 | -0.6 |
| | baz=203 | | | | | | |
| EHY | | | | *e*S | Sn | 21 53 46.0 | -0.1 |
| | baz=203 | | | | | | |
| **NNSB** | **Datong** | **0.50** | **343** | P | Pn | 21 53 39.1 | +0.5 |
| | baz=342 | | | | | | |
| NNSB | | | | S | Sn | 21 53 47.2 | +0.6 |
| | baz=342 | | | | | | |
| **ENA** | **Nanau** | **0.51** | **21** | *e*P | Pn | 21 53 39.4 | +0.7 |
| | baz=21 | | | | | | |
| ENA | | | | *e*S | Sn | 21 53 48.1 | +1.6 |
| | baz=21 | | | | | | |
| **NNS** | **Nan Shan** | **0.51** | **342** | P | Pn | 21 53 39.2 | +0.3 |
| | baz=343 | | | | | | |
| NNS | | | | S | Sn | 21 53 47.6 | +0.7 |
| | baz=343 | | | | | | |
| **EWUT** | **Wuta** | **0.54** | **23** | *e*P | Pn | 21 53 39.7 | +0.7 |
| | baz=23 | | | | | | |
| EWUT | | | | *e*S | Sn | 21 53 48.6 | +1.4 |
| | baz=23 | | | | | | |
| **SSLB** | **Suanglung** | **0.56** | **253** | P | Pn | 21 53 39.7 | +0.3 |
| | baz=253 | | | | | | |
| SSLB | | | | *e*S | Sn | 21 53 49.1 | +1.2 |
| | baz=253 | | | | | | |
| **LATG** | **Datong** | **0.58** | **358** | *e*P | Pn | 21 53 40.0 | +0.3 |
| | baz=358 | | | | | | |
| LATG | | | | *e*S | Sn | 21 53 48.9 | +0.5 |
| | baz=358 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.59** | **281** | *e*P | Pn | 21 53 40.2 | +0.6 |
| | baz=280 | | | | | | |
| WCS | | | | *e*S | Sn | 21 53 49.8 | +1.4 |
| | baz=280 | | | | | | |
| **YULB** | **Yu-li** | **0.60** | **202** | *e*P | Pn | 21 53 39.1 | -0.8 |
| | baz=202 | | | | | | |
| YULB | | | | *e*S | Sn | 21 53 47.9 | -0.8 |
| | baz=202 | | | | | | |
| **TYC** | **Yuchr** | **0.63** | **266** | *e*P | Pn | 21 53 40.6 | +0.4 |
| | baz=265 | | | | | | |
| TYC | | | | *e*S | Sn | 21 53 50.1 | +0.8 |
| | baz=265 | | | | | | |
| **WHP** | **Taichung City** | **0.64** | **301** | *e*P | Pn | 21 53 40.5 | +0.1 |
| | baz=300 | | | | | | |
| WHP | | | | *e*S | Sn | 21 53 50.4 | +0.8 |
| | baz=300 | | | | | | |
| **NDT** | **Datong Townshi** | **0.65** | **357** | *e*P | Pn | 21 53 41.1 | +0.6 |
| | baz=357 | | | | | | |
| NDT | | | | *e*S | Sn | 21 53 50.9 | +1.1 |
| | baz=357 | | | | | | |
| **ENTT** | **Nioudou** | **0.69** | **2** | P | Pn | 21 53 41.6 | +0.6 |
| | baz=2.0 | | | | | | |
| ENTT | | | | *e*S | Sn | 21 53 51.7 | +1.0 |
| | baz=2.0 | | | | | | |
| **NDS** | **Dongshan** | **0.70** | **13** | *e*P | Pn | 21 53 41.7 | +0.6 |
| | baz=13 | | | | | | |
| NDS | | | | *e*S | Sn | 21 53 51.3 | +0.4 |
| | baz=13 | | | | | | |
| **TWC** | **Suao** | **0.71** | **23** | *e*P | Pn | 21 53 42.0 | +0.8 |
| | baz=23 | | | | | | |
| TWC | | | | *e*S | Sn | 21 53 52.6 | +1.4 |
| | baz=23 | | | | | | |
| **YHNB** | **Yeheng** | **0.73** | **348** | *e*P | Pn | 21 53 42.2 | +0.5 |
| | baz=347 | | | | | | |
| YHNB | | | | *e*S | Sn | 21 53 52.4 | +0.6 |
| | baz=347 | | | | | | |
| **NSK** | **Sanguang** | **0.74** | **347** | *e*P | Pn | 21 53 42.3 | +0.5 |
| | baz=347 | | | | | | |
| NSK | | | | *e*S | Sn | 21 53 52.8 | +0.7 |
| | baz=347 | | | | | | |
| **WJS** | **Zhushan** | **0.76** | **260** | *e*P | Pn | 21 53 42.5 | +0.6 |
| | baz=260 | | | | | | |
| WJS | | | | *e*S | Sn | 21 53 53.3 | +1.0 |
| | baz=260 | | | | | | |
| **TWE** | **Neicheng** | **0.78** | **8** | *e*P | Pn | 21 53 42.5 | +0.4 |
| | baz=9.0 | | | | | | |
| TWE | | | | *e*S | Sn | 21 53 53.5 | +0.8 |
| | baz=9.0 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.78** | **330** | *e*P | Pn | 21 53 42.8 | +0.5 |
| | baz=330 | | | | | | |
| NFF | | | | *e*S | Sn | 21 53 54.3 | +1.3 |
| | baz=330 | | | | | | |
| **WNT** | **Mingjian** | **0.79** | **265** | *e*P | Pn | 21 53 42.8 | +0.5 |
| | baz=264 | | | | | | |
| WNT | | | | *e*S | Sn | 21 53 54.2 | +1.1 |
| | baz=264 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.81** | **3** | *e*P | Pn | 21 53 43.2 | +0.6 |
| | baz=2.0 | | | | | | |
| FUSB | | | | *e*S | Sn | 21 53 54.3 | +0.7 |
| | baz=2.0 | | | | | | |
| **TWQ1** | **Liyutan** | **0.81** | **300** | *e*P | Pn | 21 53 43.2 | +0.6 |
| | baz=299 | | | | | | |
| TWQ1 | | | | *e*S | Sn | 21 53 54.4 | +0.9 |
| | baz=299 | | | | | | |
| **TCU** | **Taichung** | **0.82** | **284** | *e*P | Pn | 21 53 43.2 | +0.5 |
| | baz=283 | | | | | | |
| TCU | | | | *e*S | Sn | 21 53 54.9 | +1.2 |
| | baz=283 | | | | | | |
| **NWLT** | **Wulai** | **0.82** | **357** | *e*P | Pn | 21 53 43.5 | +0.6 |
| | baz=357 | | | | | | |
| NWLT | | | | *e*S | Sn | 21 53 54.1 | +0.2 |
| | baz=357 | | | | | | |
| **NSTT** | **Nanjuang** | **0.84** | **324** | *e*P | Pn | 21 53 44.0 | +1.0 |
| | baz=324 | | | | | | |
| NSTT | | | | *e*S | Sn | 21 53 55.4 | +1.1 |
| | baz=324 | | | | | | |
| **LIOB** | **Emei** | **0.84** | **325** | *e*P | Pn | 21 53 43.8 | +0.7 |
| | baz=325 | | | | | | |
| LIOB | | | | *e*S | Sn | 21 53 55.7 | +1.3 |
| | baz=325 | | | | | | |
| **CHKT** | **Chengkung** | **0.86** | **191** | *e*P | Pn | 21 53 44.5 | +1.2 |
| | baz=190 | | | | | | |
| CHKT | | | | *e*S | Sn | 21 53 56.7 | +1.9 |
| | baz=190 | | | | | | |
| **CHN5** | **Tsauling** | **0.87** | **246** | *e*S | Sn | 21 53 56.5 | +1.4 |
| | baz=246 | | | | | | |
| **WCHH** | **Zhanghua** | **0.91** | **278** | *e*S | Sn | 21 53 57.1 | +1.1 |
| | baz=278 | | | | | | |
| **EDH** | **Donghe** | **1.00** | **193** | *e*S | Sn | 21 53 58.9 | +0.9 |
| | baz=192 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.01** | **359** | *e*P | Pn | 21 53 45.7 | +0.5 |
| | baz=359 | | | | | | |
| NHDH | | | | *e*S | Sn | 21 53 59.1 | +0.7 |
| | baz=359 | | | | | | |
| **TWA** | **Mucha** | **1.03** | **2** | *e*S | Sn | 21 53 59.2 | +0.4 |
| | baz=2.0 | | | | | | |
| **TIPB** | **Shuangxi** | **1.05** | **14** | *e*P | Pn | 21 53 46.3 | +0.4 |
| | baz=14 | | | | | | |
| TIPB | | | | *e*S | Sn | 21 54 00.2 | +0.8 |
| | baz=14 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.14** | **11** | *e*P | Pn | 21 53 47.4 | +0.3 |
| | baz=10.0 | | | | | | |
| NWF | | | | *e*S | Sn | 21 54 02.6 | +1.0 |
| | baz=10.0 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.15** | **354** | *e*S | Sn | 21 54 02.3 | +0.4 |
| | baz=354 | | | | | | |
| **YM01** | **YM01** | **1.19** | **1** | *e*S | Sn | 21 54 03.7 | +0.8 |
| | baz=1.0 | | | | | | |

*IDC* ***24*** *21:59:21.5±0.9, 30.29S×71.06W, h0km, mb4.2/6, mb1 4.2/10, mb1mx4.1/30, mbtmp4.1/10, ML3.5/4, Error ellipse: s-maj=28.4km s-min=26.1km az=99.0*

*SJA* ***24*** *21:59:29.4±1.6, 30.05S×71.17W, h61km±9km, ML4.1, MW4.0*

*NEIC* ***24*** *21:59:31.1±1.7, 30.07S±0.02×71.07W±0.06, h64km±5km, Error ellipse: s-maj=7.6km s-min=2.4km az=79.0*

*GUC* ***24*** *21:59:31.0±0.7, 30.07S×71.05W, h70km±2km, ML4.3*

**ISC 24 21:59:30.3±0.6, 30.05S±0.03×71.14W±0.04, h64km±5km, n128, σ1$27/150, mb4.4/8, 13C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.15** | **327** | Pn | **Pn** | **21 59 41.0** | **+1.0** |
| CO05 | | | | Sn | **Sn** | **21 59 48.9** | **+2.0** |
| **CO05** | **La Serena** | **0.15** | **327** | ⇑*i*P | **Pn** | **21 59 41.2** | **+1.2** |
| CO05 | | | | *i* S | **Sn** | **21 59 49.0** | **+2.0** |
| CO05 | | | | IAML | | 21 59 50.6 | |
| | comp=N,24μm,0.2s | | | | | | |
| **GO04** | **Tololo Observa** | **0.32** | **113** | Pn | **Pn** | **21 59 41.8** | **+0.5** |
| GO04 | | | | Sn | **Sn** | **21 59 49.9** | **+0.7** |
| **GO04** | **Tololo Observa** | **0.32** | **113** | ⇑*i*P | **Pn** | **21 59 41.8** | **+0.5** |
| GO04 | | | | *i* S | **Sn** | **21 59 49.8** | **+0.6** |
| **GO04** | **Tololo Observa** | **0.32** | **113** | *i* P | **Pn** | **21 59 41.0** | **-0.3** |
| **CO06** | **Fray Jorge** | **0.75** | **214** | Pn | **Pn** | **21 59 46.5** | **+1.0** |
| CO06 | | | | Sn | **Sn** | **21 59 58.1** | **+1.5** |
| **CO06** | **Fray Jorge** | **0.75** | **214** | ⇑*i*P | **Pn** | **21 59 46.5** | **+1.0** |
| CO06 | | | | *i* S | **Sn** | **21 59 58.4** | **+1.8** |
| **CO03** | **El Pedregal** | **0.88** | **154** | Pn | **Pn** | **21 59 47.3** | **+0.2** |
| CO03 | | | | Sn | **Sn** | **21 59 59.5** | **0.0** |
| **CO03** | **El Pedregal** | **0.88** | **154** | ⇑*i*P | **Pn** | **21 59 47.3** | **+0.2** |
| CO03 | | | | *i* S | **Sn** | **21 59 59.4** | **0.0** |
| CO03 | | | | IAML | | 22 00 00.2 | |
| | comp=N,12μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **0.88** | **154** | *i* P | **Pn** | **21 59 47.0** | **-0.1** |
| CO03 | | | | *e*S | **Sn** | **21 59 59.4** | **0.0** |
| CO03 | | | | IAML | | 22 00 00.6 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.10** | **21** | Pn | **Pn** | **21 59 50.7** | **+0.6** |
| LCO | | | | Sn | **Sn** | **22 00 05.8** | **+1.0** |
| **LCO** | **Las Campanas** | **1.10** | **21** | ⇓*i*P | **Pn** | **21 59 50.7** | **+0.6** |
| LCO | | | | *i* S | **Sn** | **22 00 05.7** | **+1.0** |
| **LCO** | **Las Campanas** | **1.10** | **21** | *i* P | **Pn** | **21 59 50.0** | **-0.1** |
| LCO | | | | *e*S | **Sn** | **22 00 05.7** | **+0.9** |
| LCO | | | | IAML | | 22 00 06.2 | |
| | comp=Z,17μm,0.5s | | | | | | |
| **CO02** | **Combarbal** | **1.16** | **174** | | **Pn** | **21 59 51.2** | **+0.5** |
| CO02 | | | | Sn | **Sn** | **22 00 06.8** | **+1.0** |
| **CO02** | **Combarbal** | **1.16** | **174** | ⇑*i*P | **Pn** | **21 59 51.2** | **+0.5** |
| CO02 | | | | *i* S | **Sn** | **22 00 06.8** | **+1.0** |
| CO02 | | | | IAML | | 22 00 10.4 | |
| | comp=E,11μm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **1.16** | **174** | *i* P | **Pn** | **21 59 51.0** | **+0.3** |
| CO02 | | | | *e*S | **Sn** | **22 00 07.3** | **+1.4** |
| CO02 | | | | IAML | | 22 00 11.8 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **AROD** | **Rodeo** | **1.45** | **95** | *i* P | **Pn** | **21 59 56.2** | **+1.5** |
| AROD | | | | *e*S | **Sn** | **22 00 14.2** | **+1.2** |
| **ACDV** | **Cuesta del Vie** | **1.76** | **94** | *i* P | **Pn** | **21 59 59.9** | **+1.2** |
| ACDV | | | | IAML | | 22 00 26.5 | |
| | comp=Z,284nm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.84** | **2** | Pn | **Pn** | **22 00 01.4** | **+1.8** |
| **AC04** | **Llanos de Chal** | **1.84** | **2** | ⇑*i*P | **Pn** | **22 00 01.5** | **+1.8** |
| AC04 | | | | *e*S | **Sn** | **22 00 23.9** | **+2.0** |
| AC04 | | | | IAML | | 22 00 30.2 | |
| | comp=E,2μm,0.6s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.84** | **2** | *i* P | **Pn** | **22 00 01.0** | **+1.3** |
| AC04 | | | | IAML | | 22 00 29.1 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **ACCO** | **Cerro Coronel** | **1.88** | **107** | *i* P | **Pn** | **22 00 02.0** | **+1.6** |
| ACCO | | | | IAML | | 22 00 34.0 | |
| | comp=Z,781nm,0.5s | | | | | | |
| **VA06** | **Catapilco** | **2.51** | **183** | Pn | **Pn** | **22 00 09.3** | **+0.6** |
| **VA06** | **Catapilco** | **2.51** | **183** | ⇑*i*P | **Pn** | **22 00 10.1** | **+1.3** |
| VA06 | | | | *i* S | **Sn** | **22 00 38.7** | **+0.5** |
| VA06 | | | | IAML | | 22 00 52.3 | |
| | comp=E,3μm,0.3s | | | | | | |
| **GO03** | **Copiap** | **2.57** | **18** | Pn | **Pn** | **22 00 10.9** | **+1.3** |
| **GO03** | **Copiap** | **2.57** | **18** | ⇑*i*P | **Pn** | **22 00 10.9** | **+1.3** |
| GO03 | | | | *e*S | **Sn** | **22 00 40.8** | **+0.9** |
| GO03 | | | | IAML | | 22 00 47.0 | |
| | comp=N,1μm,0.7s | | | | | | |
| **GO03** | **Copiap** | **2.57** | **18** | *i* P | **Pn** | **22 00 11.0** | **+1.3** |
| **ZON** | **Zonda** | **2.59** | **126** | Pn | **Pn** | **22 00 11.0** | **+1.1** |
| **ZON** | **Zonda** | **2.59** | **126** | *i* P | **Pn** | **22 00 11.0** | **+1.1** |
| ZON | | | | IAML | | 22 00 51.1 | |
| | comp=Z,299nm,0.5s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.63** | **120** | *i* P | **Pn** | **22 00 11.0** | **+0.6** |
| RTLL | | | | *e*S | **Sn** | **22 00 44.0** | **+2.8** |
| **AUSP** | **Uspallata** | **2.64** | **146** | *i* P | **Pn** | **22 00 13.0** | **+2.2** |
| **VA03** | **San Esteban** | **2.75** | **170** | | **Pn** | **22 00 13.0** | **+0.8** |
| **VA03** | **San Esteban** | **2.75** | **170** | ⇑*i*P | **Pn** | **22 00 13.6** | **+1.4** |
| VA03 | | | | *i* S | **Sn** | **22 00 44.7** | **+0.4** |
| VA03 | | | | IAML | | 22 00 53.7 | |
| | comp=E,1μm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **2.75** | **170** | *i* P | **Pn** | **22 00 14.0** | **+1.8** |
| VA03 | | | | IAML | | 22 00 55.3 | |
| | comp=Z,771nm,0.6s | | | | | | |
| **AC06** | **Mina Casimiro** | **2.77** | **15** | | **Pn** | **22 00 13.4** | **+1.1** |
| **AC06** | **Mina Casimiro** | **2.77** | **15** | ⇑*i*P | **Pn** | **22 00 13.4** | **+1.1** |
| AC06 | | | | *i* S | **Sn** | **22 00 45.0** | **+0.4** |
| AC06 | | | | IAML | | 22 00 58.1 | |
| | comp=E,856nm,0.3s | | | | | | |
| **VCA** | **Vinchina** | **2.88** | **64** | *i* P | **Pn** | **22 00 17.0** | **+3.1** |
| VCA | | | | IAML | | 22 00 57.9 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **ROCH** | **El Roble** | **2.92** | **178** | ⇑*i*P | **Pn** | **22 00 15.9** | **+1.3** |
| ROCH | | | | ⇑*i*P | **Pn** | **22 00 14.3** | **-0.2** |
| ROCH | | | | *e*S | **Sn** | **22 00 49.1** | **+0.6** |
| ROCH | | | | *e*S | **Sn** | **22 00 49.3** | **+0.8** |
| ROCH | | | | IAML | | 22 00 59.1 | |
| | comp=N,1μm,0.4s | | | | | | |
| ROCH | | | | IAML | | 22 01 00.7 | |
| | comp=N,1μm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **2.92** | **178** | | **Pn** | **22 00 14.5** | **-0.1** |
| **ROC1** | **El Roble** | **2.92** | **178** | *i* P | **Pn** | **22 00 14.0** | **-0.6** |
| **VA01** | **Torpederas** | **3.00** | **188** | Pn | **Pn** | **22 00 15.3** | **0.0** |
| **VA01** | **Torpederas** | **3.00** | **188** | IAML | | 22 01 04.1 | |
| | comp=E,539nm,0.6s | | | | | | |
| **MT02** | **Curacav** | **3.20** | **180** | | **Pn** | **22 00 18.8** | **+0.6** |
| **MT02** | **Curacav** | **3.20** | **180** | ⇓*i*P | **Pn** | **22 00 18.8** | **+0.6** |
| MT02 | | | | *i* S | **Sn** | **22 00 55.4** | **+0.2** |
| MT02 | | | | IAML | | 22 01 16.5 | |
| | comp=E,560nm,0.7s | | | | | | |
| **MT02** | **Curacav** | **3.20** | **180** | *i* P | **Pn** | **22 00 19.0** | **+0.8** |
| MT02 | | | | IAML | | 22 01 07.4 | |
| | comp=Z,317nm,0.7s | | | | | | |
| **ASAL** | **Salagasta** | **3.21** | **143** | *i* P | **Pn** | **22 00 20.0** | **+1.6** |
| ASAL | | | | IAML | | 22 01 28.6 | |
| | comp=Z,215nm,1.0s | | | | | | |
| **MT05** | **Renca** | **3.35** | **174** | *e*P | **Pn** | **22 00 21.0** | **+0.7** |
| MT05 | | | | *e*S | **Sn** | **22 00 58.8** | **-0.1** |
| MT05 | | | | IAML | | 22 01 19.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MT05** | **Renca** | **3.35** | **174** | *i* P | **Pn** | **22 00 24.0** | **+3.7** |
| MT05 | | | | IAML | | 22 01 10.2 | |
| | comp=Z,473nm,0.3s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.37** | **146** | *i* P | **Pn** | **22 00 24.0** | **+3.4** |
| ARCO | | | | IAML | | 22 01 13.9 | |
| | comp=Z,352nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **3.48** | **171** | | **Pn** | **22 00 24.0** | **+1.9** |
| **MT03** | **Universidad Ad** | **3.48** | **171** | ⇑*i*P | **Pn** | **22 00 24.2** | **+2.2** |
| MT03 | | | | *i* S | **Sn** | **22 01 02.1** | **+0.1** |
| MT03 | | | | IAML | | 22 01 19.0 | |
| **MT03** | **Universidad Ad** | **3.48** | **171** | *i* P | **Pn** | **22 00 24.0** | **+1.9** |
| MT03 | | | | IAML | | 22 01 21.4 | |
| | comp=Z,423nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **3.62** | **147** | *i* P | **Pn** | **22 00 27.0** | **+3.1** |
| AAGR | | | | IAML | | 22 01 45.7 | |
| | comp=Z,210nm,0.8s | | | | | | |
| **VA05** | **Santo Domingo** | **3.62** | **186** | | **Pn** | **22 00 23.6** | **-0.3** |
| **AC02** | **Maricunga** | **3.66** | **29** | Pn | **Pn** | **22 00 25.8** | **+0.8** |
| **AC02** | **Maricunga** | **3.66** | **29** | *i* P | **Pn** | **22 00 27.0** | **+2.1** |
| AC02 | | | | IAML | | 22 01 29.3 | |
| | comp=Z,366nm,0.5s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **3.70** | **81** | *i* P | **Pn** | **22 00 26.0** | **+0.9** |
| ACLC | | | | IAML | | 22 01 17.6 | |
| | comp=Z,565nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **3.72** | **178** | | **Pn** | **22 00 26.6** | **+1.3** |
| **MT09** | **Talagante** | **3.72** | **178** | ⇓*i*P | **Pn** | **22 00 26.5** | **+1.1** |
| MT09 | | | | *e*S | **Sn** | **22 01 08.2** | **+0.2** |
| MT09 | | | | IAML | | 22 01 30.4 | |
| | comp=N,616nm,0.6s | | | | | | |
| **MT01** | **Popeta** | **3.81** | **181** | | **Pn** | **22 00 26.9** | **+0.5** |
| **MT01** | **Popeta** | **3.81** | **181** | *i* P | **Pn** | **22 00 27.0** | **+0.5** |
| MT01 | | | | IAML | | 22 01 21.4 | |
| | comp=Z,436nm,0.6s | | | | | | |
| **LMEL** | **Las Melosas** | **3.87** | **168** | | **Pn** | **22 00 29.6** | **+2.1** |
| **BO04** | **La Punta** | **3.96** | **174** | | **Pn** | **22 00 29.6** | **+1.0** |
| **APLL** | **PUNTA DE LOS L** | **4.01** | **96** | *i* P | **Pn** | **22 00 30.0** | **+0.7** |
| APLL | | | | IAML | | 22 01 21.4 | |
| | comp=Z,305nm,2.0s | | | | | | |
| **BO01** | **Tunca** | **4.33** | **179** | | **Pn** | **22 00 34.0** | **+0.3** |
| **BO01** | **Tunca** | **4.33** | **179** | *i* P | **Pn** | **22 00 35.0** | **+1.4** |
| BO01 | | | | IAML | | 22 01 48.9 | |
| | comp=Z,139nm,0.7s | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.74** | **176** | | **Pn** | **22 00 40.3** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **4.74** | **176** | *i* P | **Pn** | **22 00 41.0** | **+1.7** |
| BO02 | | | | IAML | | 22 01 51.9 | |
| | comp=Z,206nm,0.6s | | | | | | |
| **GO05** | **Huala** | **4.99** | **187** | Pn | **Pn** | **22 00 42.0** | **-0.7** |
| **GO05** | **Huala** | **4.99** | **187** | *i* P | **Pn** | **22 00 42.0** | **-0.7** |
| **RFA** | **San Rafael** | **5.22** | **155** | ⇓*i*P | **Pn** | **22 00 46.9** | **+0.9** |
| RFA | | | | IAML | | 22 02 14.9 | |
| | comp=Z,72nm,0.5s | | | | | | |
| **PB14** | **IPOC Station P** | **5.44** | **7** | Pn | **Pn** | **22 00 48.0** | **-1.2** |
| **PB14** | **IPOC Station P** | **5.44** | **7** | *i* P | **Pn** | **22 00 50.0** | **+0.8** |
| PB14 | | | | IAML | | 22 02 16.0 | |
| | comp=Z,227nm,1.1s | | | | | | |
| **FSA** | **Cafayete** | **6.02** | **51** | *i* P | **Pn** | **22 00 58.0** | **+1.1** |
| **AHML** | **Horco Molle** | **6.06** | **59** | *i* P | **Pn** | **22 00 58.0** | **+0.6** |
| AHML | | | | IAML | | 22 02 32.8 | |
| | comp=Z,62nm,0.8s | | | | | | |
| **PB15** | **IPOC Station P** | **6.97** | **13** | | **Pn** | **22 01 08.7** | **-1.3** |
| **PB15** | **IPOC Station P** | **6.97** | **13** | *i* P | **Pn** | **22 01 10.0** | **-0.1** |
| PB15 | | | | IAML | | 22 02 57.2 | |
| | comp=Z,223nm,0.4s | | | | | | |
| **H03N1** | **Juan Fernandez** | **7.43** | **241** | T | T | 22 08 25.7 | |
| | baz=69,slow=72,SNR=994 | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.45** | **241** | T | T | 22 08 20.3 | |
| | baz=69,slow=72,SNR=788 | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.45** | **241** | T | T | 22 08 19.1 | |
| | baz=69,slow=72,SNR=906 | | | | | | |
| **PB06** | **IPOC Station P** | **7.45** | **11** | Pn | **Pn** | **22 01 14.8** | **-1.7** |
| **LVC** | **Limon Verde** | **7.67** | **16** | Pn | **Pn** | **22 01 17.8** | **-1.9** |
| | comp=Z,1.2nm,0.3s,baz=198,slow=6.5,SNR=7.6 | | | | | | |
| LVC | | | | Sn | **Sn** | **22 02 43.1** | **-2.3** |
| | comp=Z,2.3nm,0.3s,baz=178,slow=18,SNR=2.0 | | | | | | |
| LVC | | | | Lg | Lg | 22 03 18.4 | |
| | comp=Z,10.0nm,0.3s,baz=238,slow=15,SNR=7.7 | | | | | | |
| **LVC** | **Limon Verde** | **7.67** | **16** | Pn | **Pn** | **22 01 18.8** | **-1.0** |
| **LVC** | **Limon Verde** | **7.67** | **16** | *i* P | **Pn** | **22 01 18.0** | **-1.8** |
| LVC | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **25.62** | **61** | P | **P** | | **22 04 53.2** | **-0.8** |
| | comp=Z,2.5nm,0.4s,baz=236,slow=9.6,SNR=7.4 | | | | | | | |
| **BDFB** | **Brasilia** | **25.62** | **61** | P | **P** | | **22 04 53.2** | **-0.8** |
| **CELP** | **Cerrillos** | **48.05** | **6** | P | **P** | | **22 08 03.6** | **+0.2** |
| **SNAA** | **Sanae** | **54.97** | **159** | P | **P** | | **22 08 54.6** | **+0.1** |
| SNAA | | | | IAmb | IAmb | | 22 09 01.0 | |
| | comp=Z,9.6nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.18** | **180** | P | **P** | | **22 09 32.5** | **+1.2** |
| **352A** | **Blakely** | **62.58** | **347** | P | **P** | | **22 09 47.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **66.70** | **329** | P | **P** | | **22 10 16.7** | **+2.0** |
| | comp=Z,0.5nm,0.7s,baz=148,slow=7.3,SNR=5.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.70** | **329** | P | **P** | | **22 10 16.1** | **+1.4** |
| **DBIC** | **Dimbokro** | **73.21** | **72** | P | **P** | | **22 10 54.4** | **-0.4** |
| | comp=Z,2.1nm,0.4s,baz=243,slow=5.9,SNR=8.3 | | | | | | | |
| **DBIC** | **Dimbokro** | **73.21** | **72** | P | **P** | | **22 10 53.8** | **-1.0** |
| DBIC | | | | IAmb | IAmb | | 22 10 56.2 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **SUR** | **Sutherland** | **76.08** | **119** | P | **P** | | **22 11 12.4** | **+0.9** |
| **KOWA** | **Kowa** | **78.32** | **66** | P | **P** | | **22 11 23.7** | **-0.2** |
| KOWA | | | | IAmb | IAmb | | 22 11 24.4 | |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **BOSA** | **Boshof** | **81.23** | **118** | P | **P** | | **22 11 39.4** | **-0.4** |
| | comp=Z,4.0nm,0.7s,baz=244,slow=4.2,SNR=10 | | | | | | | |
| **BOSA** | **Boshof** | **81.23** | **118** | P | **P** | | **22 11 39.6** | **-0.3** |
| BOSA | | | | IAmb | IAmb | | 22 11 40.3 | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.15** | **70** | P | **P** | | **22 11 44.2** | **-0.4** |
| | comp=Z,2.2nm,0.8s,baz=268,slow=5.2,SNR=10 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.15** | **70** | P | **P** | | **22 11 44.1** | **-0.4** |
| **LBTB** | **Lobatse** | **83.27** | **115** | P | **P** | | **22 11 50.0** | **-0.5** |
| **YKA** | **Yellowknife Ar** | **98.57** | **341** | P | Pdif | | 22 13 01.6 | +0.3 |
| | comp=Z,0.2nm,0.5s,baz=145,slow=4.4,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.57** | **209** | PKP | **PKPdf** | | **22 18 22.2** | **-0.8** |
| | comp=Z,0.9nm,0.8s,baz=187,slow=1.6,SNR=7.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.57** | **209** | | **PKPdf** | | **22 18 22.7** | **-0.4** |
| **H11S2** | **WAKE ISLAND Hyl** | **26.51** | **272** | T | T | | 00 37 24.5 | |
| | baz=115,slow=75,SNR=19 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.52** | **272** | T | T | | 00 37 26.2 | |
| | baz=115,slow=75,SNR=11 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.53** | **272** | T | T | | 00 37 25.8 | |
| | baz=115,slow=75,SNR=11 | | | | | | | |
| **KURBB** | **Kurchatov Array** | **149.41** | **39** | PKPbc | **PKPbc** | | **22 19 12.3** | **+0.6** |
| | comp=Z,2.1nm,0.4s,baz=299,slow=3.1,SNR=18 | | | | | | | |
| **KURK** | **Kurchatov** | **149.41** | **39** | | **PKPbc** | | **22 19 11.9** | **+0.2** |
| **AAK** | **Ala-Archa** | **149.81** | **56** | PKPbc | **PKiKP** | | **22 19 13.9** | **-0.1** |
| | comp=Z,3.5nm,0.7s,baz=208,slow=2.2,SNR=21 | | | | | | | |
| **AAK** | **Ala-Archa** | **149.81** | **56** | | **PKiKP** | | **22 19 13.9** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **150.45** | **29** | PKPbc | **PKiKP** | | **22 19 14.7** | **-0.2** |
| | comp=Z,9.8nm,0.7s,baz=298,slow=3.1,SNR=48 | | | | | | | |
| **KSH** | **Kashi** | **151.52** | **62** | PKPbc | **PKPbc** | | **22 19 15.6** | **-1.7** |
| **MKAR** | **Makanchi Array** | **153.49** | **43** | PKPbc | **PKiKP** | | **22 19 21.5** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=286,slow=2.7,SNR=8.5 | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | | **22 19 34.5** | **+0.6** |
| | comp=Z,1.4nm,0.8s,baz=289,slow=3.7,SNR=11 | | | | | | | |
| **PZH** | **PanZhiHua** | **172.80** | **118** | PKP | **PKPdf** | | **22 19 33.1** | **+0.5** |

**WEL 24 22:01:46.1±0.3, 38°S±2°×17°6E±°, h5km±2km, M3.4/41, ML3.6/41, MLv3.4/41, Error ellipse: s-maj=0.0km s-min=0.0km az=116.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HSRZ** | **Hossack Road** | **0.02** | **287** | P | Pg | 22 01 47.6 | +0.4 |
| HSRZ | | | | S | Sg | 22 01 49.1 | +1.3 |
| **HRRZ** | **Handcock Road** | **0.07** | **171** | P | Pg | 22 01 48.0 | +0.2 |
| HRRZ | | | | S | Sg | 22 01 49.8 | +0.7 |
| **HLRZ** | **Highlands Stat** | **0.09** | **45** | P | Pg | 22 01 48.5 | +0.4 |
| **GRRZ** | **Galatos Road** | **0.13** | **255** | P | Pg | 22 01 49.2 | +0.4 |
| **UTU** | **Utuhina** | **0.15** | **337** | P | Pg | 22 01 49.8 | +0.6 |
| **RRRZ** | **Republican Roa** | **0.19** | **97** | P | Pg | 22 01 50.1 | +0.1 |
| **TARZ** | **Mount Tarawera** | **0.20** | **66** | P | Pg | 22 01 50.8 | +0.6 |
| **PRRZ** | **Plateau Road** | **0.21** | **152** | P | Pg | 22 01 50.3 | +0.1 |
| **WPRZ** | **Whakapapataran** | **0.22** | **202** | P | Pg | 22 01 50.7 | +0.3 |
| WPRZ | | | | S | Sg | 22 01 54.3 | +1.0 |
| **NGRZ** | **Ngongotaha** | **0.22** | **343** | P | Pg | 22 01 51.1 | +0.5 |
| **OMRZ** | **Omania** | **0.23** | **21** | P | Pg | 22 01 50.8 | +0.3 |
| OMRZ | | | | S | Sg | 22 01 54.4 | +0.8 |
| **MKRZ** | **Makatiti** | **0.24** | **41** | P | Pg | 22 01 51.5 | +0.7 |
| **ALRZ** | **Allen Road** | **0.25** | **167** | P | Pg | 22 01 51.2 | +0.1 |
| **KARZ** | **Kaharoa** | **0.30** | **356** | P | Pg | 22 01 52.3 | +0.4 |
| **LIRZ** | **Lichensteins R** | **0.33** | **16** | P | Pg | 22 01 52.9 | +0.5 |
| **KUTZ** | **Kaahu Road** | **0.39** | **244** | P | Pg | 22 01 54.3 | +0.6 |
| **MUGZ** | **Murupara** | **0.42** | **112** | P | Pg | 22 01 54.7 | +0.4 |
| **WHTZ** | **Whakaora** | **0.42** | **215** | P | Pg | 22 01 55.3 | +0.9 |
| **EDRZ** | **Edgecumbe** | **0.43** | **61** | P | Pg | 22 01 55.0 | +0.6 |
| **MARZ** | **Manawahe** | **0.46** | **44** | P | Pb | 22 01 55.9 | -0.9 |
| **OPRZ** | **Ohinepanea** | **0.52** | **26** | P | Pg | 22 01 56.5 | +0.3 |
| **MRHZ** | **Matea Rd** | **0.53** | **167** | P | Pg | 22 01 56.3 | -0.1 |
| **KMRZ** | **Kaimai** | **0.54** | **331** | P | Pg | 22 01 56.8 | +0.3 |
| **WATZ** | **Wairara** | **0.57** | **227** | P | Pg | 22 01 57.4 | +0.2 |
| **TLZ** | **Tolley Road** | **0.57** | **269** | P | Pg | 22 01 57.1 | -0.1 |
| **TGRZ** | **Tauranga** | **0.59** | **359** | P | Pg | 22 01 57.9 | +0.4 |
| **HATZ** | **Hinemaiaia** | **0.59** | **194** | P | Pg | 22 01 57.6 | +0.1 |
| **RTZ** | **Ruatahuna** | **0.63** | **118** | P | Pg | 22 01 58.5 | +0.2 |
| **URZ** | **Urewera** | **0.67** | **85** | P | Pg | 22 01 59.8 | +0.1 |
| **RATZ** | **Rangitukua** | **0.67** | **215** | P | Pb | 22 01 59.9 | -0.6 |
| **MTHZ** | **Maungataniwha** | **0.70** | **140** | P | Pg | 22 01 59.7 | +0.1 |
| **RITZ** | **Rihia Road** | **0.73** | **206** | P | Pg | 22 02 00.8 | +0.6 |
| **KATZ** | **Kakaramea** | **0.80** | **214** | P | Pg | 22 02 01.5 | +0.1 |
| **TOZ** | **Tahuroa Road** | **0.84** | **314** | P | Pg | 22 02 01.7 | -0.6 |
| **BKZ** | **Black Stump Fm** | **0.86** | **168** | P | Pg | 22 02 02.6 | -0.1 |
| **RAHZ** | **Arahi** | **0.88** | **133** | P | Pb | 22 02 03.7 | -0.1 |
| **NMHZ** | **Naumai** | **0.89** | **152** | P | Pb | 22 02 03.8 | -0.2 |
| **NTVZ** | **North Tongarir** | **0.91** | **211** | P | Pg | 22 02 03.7 | +0.2 |
| **TMVZ** | **Te Maari** | **0.91** | **209** | P | Pg | 22 02 03.6 | 0.0 |
| **KRVZ** | **Karewarewa** | **0.92** | **212** | P | Pg | 22 02 04.0 | +0.2 |
| **RAGZ** | **Rawiri** | **0.92** | **102** | P | Pb | 22 02 04.4 | -0.2 |
| **ETVZ** | **East Tongariro** | **0.93** | **208** | P | Pg | 22 02 03.8 | -0.1 |
| **WTVZ** | **West Tongariro** | **0.96** | **213** | P | Pg | 22 02 04.3 | -0.3 |
| **SNGZ** | **Shannon Statio** | **0.96** | **119** | P | Pb | 22 02 05.2 | -0.1 |
| **NNVZ** | **North Ngauruho** | **0.96** | **212** | P | Pg | 22 02 04.5 | -0.1 |
| **OTVZ** | **Oturere** | **0.97** | **202** | P | Pg | 22 02 04.9 | +0.1 |
| **MWZ** | **Matawai** | **0.99** | **91** | P | Pg | 22 02 05.2 | +0.1 |
| **TWVZ** | **Taurewa** | **0.99** | **221** | P | Pg | 22 02 04.7 | -0.6 |
| **SNVZ** | **South Ngauruho** | **1.00** | **209** | P | Pg | 22 02 05.3 | 0.0 |
| **NGZ** | **Ngauruhoe** | **1.00** | **211** | P | Pg | 22 02 05.5 | +0.1 |
| **TUVZ** | **Tukino** | **1.06** | **207** | P | Pg | 22 02 06.3 | -0.3 |
| **WHHZ** | **Waihua** | **1.07** | **135** | P | Pn | 22 02 10.2 | +2.4 |
| **FWVZ** | **Far West T-bar** | **1.09** | **211** | P | Pg | 22 02 06.8 | -0.3 |
| **WHVZ** | **Whangaehu Hut** | **1.10** | **209** | P | Pg | 22 02 07.1 | -0.2 |
| **ARHZ** | **Aropaoanui** | **1.10** | **149** | P | Pn | 22 02 08.5 | +0.3 |
| **DRZ** | **Dome Shelter** | **1.10** | **210** | P | Pg | 22 02 07.3 | 0.0 |
| **KWHZ** | **Kaweka Forest** | **1.11** | **174** | P | Pg | 22 02 07.3 | -0.1 |
| **HIZ** | **Hauiti** | **1.13** | **260** | P | Pg | 22 02 06.4 | -1.3 |
| **TRVZ** | **Turoa** | **1.13** | **210** | P | Pg | 22 02 07.1 | -0.7 |
| **WNVZ** | **Wahianoa** | **1.14** | **207** | P | Pg | 22 02 07.4 | -0.6 |
| **MOVZ** | **Moawhango** | **1.16** | **200** | P | Pg | 22 02 07.3 | -1.1 |
| **RUGZ** | **Raukumara Rang** | **1.17** | **73** | P | Pg | 22 02 05.8 | -2.7 |
| **MCHZ** | **McNeill Hill** | **1.17** | **164** | P | Pg | 22 02 09.8 | +0.5 |
| **BHHZ** | **Black Hill Sta** | **1.18** | **188** | P | Pg | 22 02 07.7 | -1.1 |
| **PKVZ** | **Pokaka** | **1.21** | **216** | P | Pg | 22 02 08.0 | -1.3 |
| **RIGZ** | **Rimuhau** | **1.23** | **109** | P | Pn | 22 02 10.8 | +0.7 |
| **MTVZ** | **Mangateitei** | **1.23** | **210** | P | Pg | 22 02 09.3 | -0.6 |
| **TKGZ** | **Te Karaka** | **1.25** | **96** | P | Pn | 22 02 10.8 | +0.6 |
| **KNZ** | **Kokohu** | **1.30** | **123** | P | Pn | 22 02 11.0 | 0.0 |
| **KRHZ** | **Kereru** | **1.33** | **177** | P | Pn | 22 02 10.5 | -0.9 |
| **TWGZ** | **Tauwhareparae** | **1.35** | **85** | P | Pg | 22 02 12.8 | +0.7 |
| **PRGZ** | **Paritu Road** | **1.40** | **116** | P | Pg | 22 02 13.4 | +0.4 |
| **VRZ** | **Vera Road** | **1.43** | **235** | P | Pn | 22 02 11.1 | -1.6 |
| **CKHZ** | **Cape Kidnapper** | **1.48** | **155** | P | Pg | 22 02 14.3 | -0.2 |
| **MHGZ** | **Mahia Peninsul** | **1.53** | **124** | P | Pg | 22 02 17.1 | +1.6 |
| **KAHZ** | **Kahuranaki** | **1.55** | **162** | P | Pb | 22 02 15.5 | +0.2 |
| **PUZ** | **Puketiti** | **1.59** | **82** | P | Pg | 22 02 16.5 | -0.1 |
| **PNHZ** | **Pukenui** | **1.59** | **182** | P | Pn | 22 02 14.9 | -0.2 |
| **KUZ** | **Kuaotunu** | **1.63** | **344** | P | Pg | 22 02 17.1 | -0.2 |
| **ETAZ** | **East Tamaki Re** | **1.73** | **322** | P | Pg | 22 02 19.2 | 0.0 |
| **WAZ** | **Wanganui** | **1.75** | **218** | P | Pb | 22 02 18.4 | -0.4 |
| **TSZ** | **Takapari Road** | **1.75** | **188** | P | Pn | 22 02 17.1 | -0.2 |
| **WIAZ** | **Waiheke Island** | **1.77** | **329** | P | Pn | 22 02 18.2 | +0.8 |
| **AWAZ** | **Awhitu Peninsu** | **1.80** | **314** | P | Pb | 22 02 19.8 | +0.3 |
| **LREZ** | **Lake Rotokare** | **1.85** | **231** | P | Pb | 22 02 19.6 | -0.9 |
| **MBAZ** | **Motutapu North** | **1.89** | **324** | P | Pg | 22 02 22.0 | -0.4 |
| **WTAZ** | **Waiatarua** | **1.93** | **315** | P | Pb | 22 02 22.1 | +0.3 |
| **NEZ** | **North Egmont** | **1.95** | **240** | P | Pn | 22 02 19.9 | -0.1 |
| **PRHZ** | **Porangahau** | **1.97** | **172** | P | Pg | 22 02 23.8 | 0.0 |
| **DVHZ** | **Dannevirke** | **1.98** | **182** | P | Pn | 22 02 20.0 | -0.4 |
| **PKE** | **Pukeiti** | **1.99** | **243** | P | Pn | 22 02 20.3 | -0.2 |
| **KHEZ** | **Kahui Hut** | **2.01** | **240** | P | Pn | 22 02 20.8 | -0.1 |
| **ABAZ** | **Army Bay** | **2.06** | **326** | P | Pb | 22 02 24.4 | +0.4 |
| **NBEZ** | **Newall Road No** | **2.10** | **242** | P | Pb | 22 02 24.9 | +0.2 |
| **ANWZ** | **Angora Road** | **2.15** | **176** | P | Pg | 22 02 28.0 | +0.7 |
| **GRZ** | **Great Barrier** | **2.16** | **342** | P | Pg | 22 02 26.8 | -0.7 |
| **PRWZ** | **Pori Road** | **2.25** | **186** | P | Pn | 22 02 24.1 | 0.0 |
| **MRZ** | **Mangatainoka R** | **2.40** | **193** | P | Pn | 22 02 25.6 | -0.5 |
| **OGWZ** | **Otaki Gorge** | **2.64** | **198** | P | Pn | 22 02 29.1 | -0.3 |
| **HOWZ** | **Holdsworth Sta** | **2.64** | **192** | P | Pn | 22 02 28.3 | -1.2 |
| **TMWZ** | **Te Maipa** | **2.80** | **186** | P | Pn | 22 02 30.8 | -0.9 |
| **WCZ** | **Waipu Caves** | **2.83** | **326** | P | Pb | 22 02 37.6 | +0.5 |
| **DUWZ** | **D'Urville Isla** | **3.07** | **215** | P | Pb | 22 02 39.9 | -1.5 |
| **TRWZ** | **Traveller** | **3.11** | **188** | P | Pn | 22 02 36.5 | +0.6 |
| **TCW** | **Tory Channel** | **3.27** | **207** | P | Pb | 22 02 44.1 | -0.6 |
| **DSZ** | **Denniston Hor** | **4.84** | **224** | P | Pn | 22 03 01.8 | +2.0 |

*IDC 24 22:19:46.8±4.9, 35°.81N×70°.98E, h86km±42km, mb3.5/7, mb1 3.6/9, mb1mx3.2/47, mbtmp3.8/9, MS3.6/1, Ms1 3.6/1, ms1mx2.5/75, Error ellipse: s-maj=32.2km s-min=24.4km az=32.0*
*NNC 24 22:19:51.1±1.0, 36°.23N×70°.33E, h60km, mb3.7, mpv3.6, Error ellipse: s-maj=1.0km s-min=1.0km az=1.0*
**ISC 24 22:19:49.3±1.0, 36°.09N±0°.08×70°.6E±0°.1, h100km, n15, σ2s 66/28, mb3.6/6, 6C-8D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK02** | **Karatay Array** | **7.01** | **359** | ⇓P | **Pn** | **22 21 30.1** | **+0.9** |
| | 1.7nm,0.4s | | | | | | |
| KK02 | | | | ⇓P | **Pn** | **22 21 30.1** | **+0.9** |
| | 1.7nm,0.4s | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **22 22 48.1** | **+0.7** |
| | 4.7nm,0.6s | | | | | | |
| KK02 | | | | ⇑S | **Sn** | **22 22 48.1** | **+0.7** |
| | 4.7nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **7.19** | **23** | P | **Pn** | **22 21 32.6** | **+0.7** |
| | 1.6nm,0.3s,baz=194,slow=6.4,SNR=27 | | | | | | |
| AAK | | | | S | **Sn** | **22 22 53.1** | **+1.1** |
| | 0.3nm,0.3s,baz=3.6,slow=22,SNR=4.2 | | | | | | |
| **AAK** | **Ala-Archa** | **7.19** | **23** | ⇓P | **Pn** | **22 21 32.0** | **+0.1** |
| | 2.4nm,0.5s | | | | | | |
| AAK | | | | ⇓P | **Pn** | **22 21 32.0** | **+0.1** |
| | 2.4nm,0.5s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **22 22 53.6** | **+1.5** |
| | 3.1nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **22 22 53.6** | **+1.5** |
| | 3.1nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.80** | **36** | P | **Pn** | **22 22 57.7** | **-2.8** |
| | 0.0nm,0.3s,baz=239,slow=6.9,SNR=1.9 | | | | | | |
| **AB31** | **Akbulak array** | **15.31** | **333** | ⇑P | **Pn** | **22 23 20.5** | **+0.8** |
| | 0.7nm,0.2s,baz=166,slow=11,SNR=99 | | | | | | |
| AB31 | | | | ⇑P | **Pn** | **22 23 20.5** | **+0.8** |
| | 0.7nm,0.2s,baz=166,slow=11,SNR=99 | | | | | | |
| AB31 | | | | S | **Sn** | **22 26 02.5** | **-6.1** |
| | 0.8nm,0.6s,baz=157,slow=22,SNR=5.2 | | | | | | |
| AB31 | | | | S | **Sn** | **22 26 02.5** | **-6.1** |
| | 0.8nm,0.6s,baz=157,slow=22,SNR=5.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.99** | **331** | P | **P** | **22 23 43.8** | **+2.8** |
| | 0.3nm,0.3s,baz=146,slow=13,SNR=7.4 | | | | | | |
| AKTO | | | | S | **Sn** | **22 26 45.3** | **-4.0** |
| | 0.1nm,0.3s,baz=29,slow=19,SNR=2.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.99** | **331** | ⇑P | **P** | **22 23 44.0** | **+3.1** |
| | 1.2nm,0.5s | | | | | | |
| AKTO | | | | ⇑P | **P** | **22 23 44.0** | **+3.1** |
| | 1.2nm,0.5s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **22 26 46.2** | **-3.1** |
| | 2.9nm,1.4s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **22 26 46.2** | **-3.1** |
| | 2.9nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.41** | **25** | P | **P** | **22 24 17.8** | **-0.4** |
| | 0.9nm,0.3s,baz=204,slow=11,SNR=8.3 | | | | | | |
| **FINES** | **FINESS Array B** | **37.66** | **327** | P | **P** | **22 26 56.5** | **+2.2** |
| | 4.8nm,1.0s,baz=85,slow=4.2,SNR=4.1 | | | | | | |
| **DAV** | **Davao City (W)** | **57.77** | **106** | LR | LR | 22 56 45.1 | |
| | comp=Z,47nm,20.0s,baz=318,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.41** | **269** | P | **P** | **22 30 21.9** | **+0.3** |
| | 0.5nm,0.6s,baz=50,slow=6.0,SNR=4.3 | | | | | | |
| **INK** | **Inuvik** | **74.36** | **9** | P | **P** | **22 31 16.3** | **+0.8** |
| | 0.7nm,0.5s,baz=339,slow=6.6,SNR=6.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.67** | **2** | P | **P** | **22 31 56.4** | **+0.4** |
| | 0.2nm,0.3s,baz=350,slow=4.8,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.03** | **122** | P | **P** | **22 31 55.6** | **-2.9** |
| | 0.5nm,0.5s,baz=328,slow=4.8,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **84.27** | **125** | P | **P** | **22 32 07.5** | **-2.6** |
| | 0.3nm,0.6s,baz=302,slow=4.9,SNR=4.2 | | | | | | |

*IDC 24 22:37:55.9±0.9, 27°.86S×176°.97W, h0km, mb3.9/8, mb1 4.1/10, mb1mx3.9/35, mbtmp4.0/10, ML4.0/2, MS3.5/7, Ms1 3.5/7, ms1mx3.1/54, Error ellipse: s-maj=29.5km s-min=19.1km az=129.0*
*NEIC 24 22:37:57.4±2.0, 28°.02S±0°.08×176°.75W±0°.05, h10km±1km, mb4.3/5, Error ellipse: s-maj=14.2km s-min=7.7km az=167.0*
**ISC 24 22:38:02.0±0.6, 28°.00S±0°.10×176°.9W±0°.1, h49km, n31, σ1s 49/28, mb3.9/10, MS3.6/5, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.52** | **215** | Pn | **Pn** | **22 38 26.6** | **-0.1** |
| | 957nm,0.3s,baz=160,slow=22,SNR=22 | | | | | | |
| RAO | | | | Sn | **Sn** | **22 38 42.5** | **-2.7** |
| | 2µm,0.3s,baz=291,slow=23,SNR=11 | | | | | | |
| **RAO** | **Raoul Island** | **1.52** | **215** | | **Pn** | **22 38 26.4** | **-0.2** |
| RAO | | | | Sn | **Sn** | **22 38 44.7** | **-0.5** |
| **NIUE** | **Niue** | **10.96** | **37** | Pn | Pn | 22 40 32.4 | -3.8 |
| **MSVF** | **Nonsavu** | **11.22** | **335** | LR | LR | 22 44 27.4 | |
| | comp=Z,267nm,21.3s,baz=231,slow=35 | | | | | | |
| **URZ** | **Urewera** | **11.38** | **204** | Pn | **Pn** | **22 40 41.3** | **-0.4** |
| | 0.4nm,0.3s,baz=171,slow=23,SNR=1.2 | | | | | | |
| URZ | | | | Sn | Sn | 22 42 37.0 | -10 |
| | 2.1nm,0.3s,baz=147,slow=20,SNR=8.1 | | | | | | |
| **URZ** | **Urewera** | **11.38** | **204** | | **Pn** | **22 40 39.0** | **-2.8** |
| **AFI** | **Afiamalu** | **14.82** | **20** | Pn | **Pn** | **22 41 25.4** | **-3.3** |
| | 1.9nm,0.3s,baz=177,slow=7.4,SNR=1.9 | | | | | | |
| AFI | | | | Sn | Sn | 22 44 00.0 | -12 |
| | 3.3nm,0.3s,baz=38,slow=22,SNR=1.7 | | | | | | |
| **AFI** | **Afiamalu** | **14.82** | **20** | | **Pn** | **22 41 25.7** | **-3.0** |
| **RAR** | **Rarotonga** | **17.00** | **70** | LR | LR | 22 46 28.6 | |
| | comp=Z,189nm,20.3s,baz=231,slow=30 | | | | | | |
| **PPT** | **Papeete** | **27.22** | **73** | LR | LR | 22 54 03.2 | |
| | comp=Z,43nm,18.2s,baz=296,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **34.43** | **275** | P | **P** | **22 44 45.9** | **+0.9** |
| | 1.4nm,0.4s,baz=96,slow=9.2,SNR=1.7 | | | | | | |
| CTA | | | | LR | LR | 22 57 28.4 | |
| | comp=Z,96nm,18.4s,baz=84,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **35.99** | **253** | P | **P** | **22 44 58.7** | **+0.4** |
| | 0.4nm,0.4s,baz=108,slow=16,SNR=1.3 | | | | | | |
| STKA | | | | LR | LR | 22 58 07.6 | |
| | comp=Z,58nm,19.7s,baz=72,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **44.23** | **264** | P | **P** | **22 46 07.7** | **+1.0** |
| AS31 | | | | IAmb | IAmb | 22 46 29.3 | |
| | comp=Z,1.6nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.23** | **264** | P | **P** | **22 46 06.5** | **-0.2** |
| | comp=Z,0.6nm,0.7s,baz=89,slow=7.4,SNR=7.8 | | | | | | |
| ASAR | | | | LR | LR | 23 03 17.6 | |
| | comp=Z,83nm,18.3s,baz=101,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **44.82** | **269** | P | **P** | **22 46 12.5** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 22 46 30.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.00** | **269** | P | **P** | **22 46 12.8** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=109,slow=6.3,SNR=6.6 | | | | | | |
| WRA | | | | LR | LR | 23 03 11.3 | |
| | comp=Z,62nm,18.3s,baz=131,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.00** | **269** | P | **P** | **22 46 12.5** | **-0.4** |
| **QSPA** | **South Pole Qui** | **62.10** | **180** | P | **P** | **22 48 19.3** | **+1.7** |
| | comp=Z,1.3nm,0.6s,baz=357,slow=1.1,SNR=6.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **62.10** | **180** | P | **P** | **22 48 19.1** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 22 48 38.5 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **BELA** | **Belgrano 2** | **72.02** | **172** | P | **P** | **22 49 20.7** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **83.74** | **345** | P | **P** | **22 50 26.6** | **+1.2** |
| | comp=Z,2.3nm,0.8s,baz=147,slow=8.2,SNR=1.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.85** | **42** | P | **P** | **22 50 38.8** | **+2.2** |
| | comp=Z,0.7nm,0.7s,baz=218,slow=9.7,SNR=5.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.85** | **42** | P | **P** | **22 50 36.8** | **+0.2** |
| **TXAR** | **Lajitas Array** | **90.31** | **57** | P | **P** | **22 50 57.5** | **-0.5** |
| | comp=Z,0.3nm,0.9s,baz=182,slow=5.1,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **116.94** | **311** | PKP | **PKPdf** | **22 56 41.2** | **+0.1** |
| | comp=Z,0.1nm,0.6s,baz=110,slow=3.4,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **116.94** | **311** | | **PKPdf** | **22 56 41.5** | **+0.4** |
| **FINES** | **FINESS Array B** | **143.20** | **342** | PKhKP | PKPpre | 22 57 27.3 | |
| | comp=Z,2.6nm,1.0s,baz=53,slow=5.4,SNR=5.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **146.51** | **353** | PKP | **PKPbc** | **22 57 37.6** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=10,slow=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **146.51** | **353** | PKPbc | **PKPbc** | **22 57 38.0** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=19,slow=4.7,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **149.90** | **326** | PKPbc | **PKPbc** | **22 57 45.3** | **-1.2** |
| | comp=Z,0.4nm,0.5s,baz=51,slow=2.7,SNR=2.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **149.90** | **326** | | **PKPdf** | **22 57 43.2** | **+1.7** |

**IDC 24 22:40:10.3±4.0, 3°.36S×100°.26E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.4/45, mbtmp3.7/5, MS3.4/1, Ms1 3.4/1, ms1mx2.4/81, Error ellipse: s-maj=168.4km s-min=22.5km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.96** | **260** | T | T | 23 15 21.0 | |
| | baz=83,slow=75,SNR=241 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.96** | **260** | T | T | 23 15 21.6 | |
| | baz=83,slow=75,SNR=258 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.97** | **260** | T | T | 23 15 22.4 | |
| | baz=83,slow=75,SNR=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.10** | **119** | P | P | 22 47 21.2 | -1.6 |
| | 0.3nm,0.3s,baz=305,slow=8.3,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **38.26** | **125** | P | P | 22 47 33.7 | +1.0 |
| | 0.5nm,0.4s,baz=299,slow=7.7,SNR=8.3 | | | | | | |
| **SONM** | **Songino Array** | **51.26** | **5** | P | P | 22 49 16.4 | +0.3 |
| | 1.1nm,0.6s,baz=186,slow=5.8,SNR=11 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **52.08** | **43** | LR | LR | 23 09 08.8 | |
| | comp=Z,43nm,21.4s,baz=157,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.40** | **344** | P | P | 22 49 24.5 | 0.0 |
| | 0.5nm,0.6s,baz=148,slow=9.3,SNR=9.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.54** | **349** | P | P | 22 50 07.9 | -0.6 |
| | 0.6nm,0.6s,baz=177,slow=5.9,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.60** | **39** | PKPbc | PKPdf | 22 59 50.5 | -1.1 |
| | 0.6nm,0.6s,baz=320,slow=1.3,SNR=6.5 | | | | | | |

*IDC 24 23:03:06.0±1.0, 43°.40N×105°.18W, h0km, mb3.6/2, mb1 3.6/8, mb1mx3.4/48, mbtmp3.4/8, ML3.0/5, MS3.4/2, Ms1 3.4/2, ms1mx2.7/87, Error ellipse: s-maj=24.4km s-min=11.2km az=143.0*
*NEIC 24 23:03:08.7±1.7, 43°.67N±0°.06×105°.25W±0°.07, h0km±2km, ML3.3/60, Error ellipse: s-maj=9.6km s-min=8.2km az=343.0*
**ISC 24 23:03:07.8±0.9, 43°.71N±0°.06×105°.22W±0°.07, h0km, n54, σ0s 94/50, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.95** | **64** | Pg | **Pb** | **23 03 26.8** | **-0.5** |
| **K22A** | **Casper** | **1.42** | **223** | | **Pn** | **23 03 32.6** | **-2.5** |
| K22A | | | | IAML | | 23 03 55.1 | |
| | comp=E,621nm,0.3

*IDC **24** 23:05:13.6±0.9,25˚.76S×70˚.73W,h0$^{km}$,mb4.1/6, mb1 4.0/10,mb1mx3.9/35,mbtmp4.0/10,ML3.7/4,MS3.2/5, Ms1 3.2/5,ms1mx2.9/54,Error ellipse: s-maj=28.9km s-min=19.9km az=109.0*

*NEIC **24** 23:05:15.7±1.3,25˚.58S±0˚.03×71˚.2W±0˚.1,h20$^{km}$±6$^{km}$, mb4.2/9,Error ellipse: s-maj=16.0km s-min=4.8km az=94.0*

**ISC 24 23:05:14.2±0.7,25˚.66S±0˚.04×70˚.99W±0˚.08,h10$^{km}$,n57, σ1°09/56,mb4.3/6,1C,Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB14** | **IPOC Station P** | **1.16** | **27** | | | **Pn** | **23 05 37.2** | **+0.4** |
| PB14 | | | | Sn | | **Sg** | **23 05 51.3** | **-0.3** |
| **AC06** | **Mina Casimiro** | **1.78** | **162** | | | **Pb** | **23 05 47.3** | **+0.3** |
| AC06 | | | | Sn | | **Sn** | **23 06 08.8** | **+0.8** |
| **AC06** | **Mina Casimiro** | **1.78** | **162** | *i* S | | **Sn** | **23 06 08.7** | **+0.8** |
| **AC06** | **Mina Casimiro** | **1.78** | **162** | *eP* | | **Pb** | **23 05 47.4** | **+0.3** |
| **AC02** | **Maricunga** | **2.04** | **125** | | | **Pb** | **23 05 52.1** | **+0.4** |
| **AC02** | **Maricunga** | **2.04** | **125** | *i* S | | **Sn** | **23 06 16.9** | **+2.0** |
| **AC02** | **Maricunga** | **2.04** | **125** | *eP* | | **Pb** | **23 05 51.9** | **+0.2** |
| **GO03** | **Copiap** | **2.04** | **161** | | | **Pb** | **23 05 51.3** | **-0.1** |
| **GO03** | **Copiap** | **2.04** | **161** | *i* S | | **Sn** | **23 06 14.7** | **+0.4** |
| **GO03** | **Copiap** | **2.04** | **161** | ⇑*i*P | | **Pb** | **23 05 51.4** | **-0.1** |
| **PB10** | **IPOC Station P** | **2.17** | **11** | | | **Pn** | **23 05 50.5** | **0.0** |
| **AC04** | **Llanos de Chal** | **2.54** | **182** | | | **Pn** | **23 05 56.0** | **+0.5** |
| **PB15** | **IPOC Station P** | **2.81** | **30** | | | **Pn** | **23 06 01.1** | **+1.7** |
| **PB06** | **IPOC Station P** | **3.21** | **24** | | | **Pn** | **23 06 05.2** | **+0.2** |
| **PB04** | **IPOC Station P** | **3.40** | **13** | | | **Pn** | **23 06 07.4** | **-0.1** |
| **LVC** | **Limon Verde** | **3.58** | **32** | Pn | | **Pn** | **23 06 12.3** | **+2.1** |
| | 3.0nm,0.3s,baz=231,slow=9.7,SNR=7.0 | | | | | | | |
| LVC | | | | Pg | | **Pb** | **23 06 18.8** | **+0.9** |
| | 53nm,0.3s,baz=236,slow=11,SNR=36 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **23 06 53.5** | **+0.8** |
| | 36nm,0.3s,baz=220,slow=23,SNR=5.3 | | | | | | | |
| LVC | | | | Lg | | Lg | 23 07 03.3 | |
| | 117nm,0.3s,baz=327,slow=5.5,SNR=9.9 | | | | | | | |
| LVC | | | | LR | | LR | 23 07 51.7 | |
| | comp=Z,308nm,20.2s,baz=206,slow=45 | | | | | | | |
| **LVC** | **Limon Verde** | **3.58** | **32** | | | **Pn** | **23 06 11.7** | **+1.6** |
| **PB03** | **IPOC Station P** | **3.77** | **18** | | | **Pn** | **23 06 12.7** | **+0.1** |
| **PB07** | **IPOC Station P** | **4.04** | **15** | | | **Pn** | **23 06 16.3** | **0.0** |
| **PB09** | **IPOC Station P** | **4.17** | **23** | | | **Pn** | **23 06 19.6** | **+1.5** |
| **PB02** | **IPOC Station P** | **4.43** | **13** | | | **Pn** | **23 06 21.9** | **+0.2** |
| **PB01** | **IPOC Station P** | **4.80** | **17** | | | **Pn** | **23 06 26.8** | **+0.1** |
| **PATCX** | **Punta Patache** | **4.88** | **9** | Pn | | **Pn** | **23 06 27.5** | **-0.3** |
| **TA01** | **Diego Aracena** | **5.12** | **9** | Pn | | **Pn** | **23 06 30.5** | **-0.6** |
| **PB08** | **IPOC Station P** | **5.75** | **17** | Pn | | **Pn** | **23 06 39.6** | **-0.4** |
| **PB11** | **IPOC Station P** | **6.00** | **12** | | | **Pn** | **23 06 42.2** | **-1.0** |
| **GO01** | **Chusmiza** | **6.19** | **16** | | | **Pn** | **23 06 46.4** | **+0.3** |
| **PB12** | **IPOC Station P** | **7.04** | **5** | Pn | | **Pn** | **23 06 56.7** | **-0.8** |
| **LPAZ** | **La Paz** | **9.70** | **17** | Pn | | **Pn** | **23 07 34.8** | **+0.3** |
| | 0.2nm,0.3s,baz=218,slow=5.9,SNR=3.0 | | | | | | | |
| LPAZ | | | | LR | | LR | 23 11 38.2 | |
| | comp=Z,148nm,20.7s,baz=201,slow=40 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **10.38** | **220** | T | | T | 23 18 31.8 | |
| | baz=47,slow=72,SNR=48 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.39** | **220** | T | | T | 23 18 30.7 | |
| | baz=47,slow=72,SNR=48 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.39** | **220** | T | | T | 23 18 29.4 | |
| | baz=47,slow=72,SNR=44 | | | | | | | |
| **CPUP** | **Villa Florida** | **12.30** | **96** | Pn | | **Pn** | **23 08 06.2** | **-3.4** |
| | 0.3nm,0.3s,baz=292,slow=11,SNR=3.0 | | | | | | | |
| CPUP | | | | LR | | LR | 23 13 16.1 | |
| | comp=Z,135nm,20.1s,baz=258,slow=40 | | | | | | | |
| **SIV** | **San Ignacio** | **13.35** | **46** | Pn | | **Pn** | **23 08 27.6** | **+3.6** |
| | 1.9nm,0.3s,baz=251,slow=8.0,SNR=19 | | | | | | | |
| SIV | | | | Sn | | **Sn** | **23 10 50.9** | **-1.7** |
| | 0.1nm,0.3s,baz=258,slow=19,SNR=1.8 | | | | | | | |
| **NNA** | **Nana** | **14.68** | **337** | LR | | LR | 23 13 27.2 | |
| | comp=Z,51nm,21.1s,baz=198,slow=33 | | | | | | | |
| **PLCA** | **Paso Flores** | **15.04** | **179** | Pn | | **Pn** | **23 08 46.9** | **0.0** |
| | 0.1nm,0.3s,baz=351,slow=22,SNR=1.2 | | | | | | | |
| **PLTB** | **Pedras Altas** | **16.41** | **116** | Pn | | **P** | **23 09 07.1** | **-0.5** |
| **ITAB** | **Concordia** | **16.96** | **99** | Pn | | **P** | **23 09 13.8** | **+0.1** |
| ITAB | | | | IAmb | | IAmb | 23 09 14.3 | |
| | comp=Z,31nm,1.4s | | | | | | | |
| **BDFB** | **Brasilia** | **23.66** | **70** | P | | **P** | **23 10 24.7** | **-1.5** |
| | comp=Z,4.0nm,0.6s,baz=202,slow=8.6,SNR=5.8 | | | | | | | |
| BDFB | **Brasilia** | **23.66** | **70** | P | | **P** | **23 10 24.5** | **-1.7** |
| BDFB | | | | IAmb | | IAmb | 23 10 27.3 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **PTGA** | **Pitinga** | **26.97** | **25** | P | | **P** | **23 10 57.1** | **+0.9** |
| | comp=Z,1.6nm,0.3s,baz=193,slow=14,SNR=4.7 | | | | | | | |
| PTGA | | | | LR | | LR | 23 22 20.7 | |
| | comp=Z,60nm,21.9s,baz=188,slow=38 | | | | | | | |
| **SNAA** | **Sanae** | **59.02** | **160** | P | | **P** | **23 15 14.2** | **+0.3** |
| | comp=Z,2.4nm,0.9s,baz=274,slow=14,SNR=1.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **63.04** | **328** | P | | **P** | **23 15 43.5** | **+1.8** |
| | comp=Z,0.2nm,0.6s,baz=148,slow=8.6,SNR=1.4 | | | | | | | |
| **DBIC** | **Dimbokro** | **71.76** | **73** | P | | **P** | **23 16 37.1** | **-0.1** |
| | comp=Z,3.5nm,0.8s,baz=270,slow=4.5,SNR=4.1 | | | | | | | |
| **DBIC** | **Dimbokro** | **71.76** | **73** | P | | **P** | **23 16 37.0** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **80.54** | **71** | P | | **P** | **23 17 27.1** | **-0.1** |
| | comp=Z,3.7nm,0.7s,baz=259,slow=5.1,SNR=22 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.54** | **71** | P | | **P** | **23 17 26.9** | **-0.4** |
| TORD | | | | IAmb | | IAmb | 23 17 28.1 | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **125.36** | **208** | PKP | | **PKiKP** | **23 24 16.9** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=155,slow=3.1,SNR=2.9 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **126.41** | **275** | T | | T | 01 43 53.1 | |
| | baz=108,slow=75,SNR=50 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **126.42** | **275** | T | | T | 01 43 52.0 | |
| | baz=108,slow=75,SNR=45 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **126.42** | **275** | T | | T | 01 43 54.8 | |
| | baz=108,slow=75,SNR=44 | | | | | | | |
| **WRA** | **Warramunga Arr** | **128.42** | **211** | PKP | | **PKiKP** | **23 24 22.7** | **0.0** |
| | comp=Z,1.0nm,0.7s,baz=162,slow=1.7,SNR=6.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **128.42** | **211** | | | **PKiKP** | **23 24 22.6** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **146.51** | **26** | PKPbc | | **PKPbc** | **23 24 55.3** | **-0.1** |
| | comp=Z,8.3nm,0.8s,baz=311,slow=4.5,SNR=34 | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.09** | **38** | PKPbc | | **PKiKP** | **23 25 06.0** | **0.0** |
| | comp=Z,2.1nm,0.7s,baz=309,slow=3.1,SNR=26 | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.09** | **38** | | | **PKiKP** | **23 25 06.0** | **0.0** |
| **SONM** | **Songino Array** | **157.77** | **5** | PKP | | **PKPdf** | **23 25 12.5** | **+1.4** |
| | comp=Z,0.5nm,0.8s,baz=5.7,slow=1.4,SNR=1.2 | | | | | | | |
| SONM | | | | PKPab | | **pPKPab** | **23 25 44.9** | **-1.3** |
| | comp=Z,0.2nm,0.4s,baz=330,slow=5.0,SNR=2.9 | | | | | | | |

**GUC 24 23:05:33.8±0.4,30˚.00S×71˚.64W,h28$^{km}$±8$^{km}$,ML2.8,4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.36** | **77** | ⇓*i*P | | Pb | 23 05 41.4 | -0.5 |
| CO05 | | | | *i* S | | Sb | 23 05 47.1 | -0.3 |
| CO05 | | | | IAML | | | 23 05 47.6 | |
| | comp=N,2μm,0.3s | | | | | | | |
| **CO06** | **Fray Jorge** | **0.67** | **180** | ⇓*i*P | | Pb | 23 05 46.3 | -0.7 |
| CO06 | | | | *i* S | | Sb | 23 05 55.8 | -0.2 |
| CO06 | | | | IAML | | | 23 05 57.7 | |
| | comp=E,596nm,0.1s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.75** | **103** | ⇓*i*P | | Pb | 23 05 47.7 | -0.7 |
| GO04 | | | | *i* S | | Sb | 23 05 58.5 | +0.1 |
| **CO03** | **El Pedregal** | **1.17** | **136** | ⇓*i*P | | Pn | 23 05 54.1 | -0.3 |
| CO03 | | | | *i* S | | Sb | 23 06 09.9 | -0.4 |
| CO03 | | | | IAML | | | 23 06 11.5 | |
| | comp=E,216nm,0.2s | | | | | | | |
| **CO02** | **Combarbal** | **1.32** | **156** | *eP* | | Pn | 23 05 57.1 | +0.7 |
| CO02 | | | | *i* S | | Sb | 23 06 14.3 | -0.3 |
| CO02 | | | | IAML | | | 23 06 16.9 | |
| | comp=N,670nm,0.2s | | | | | | | |

**IDC 24 23:08:49.4±2.1,1˚.44N×127˚.71E,h0$^{km}$,mb3.5/3, mb1 3.8/4,mb1mx3.3/44,mbtmp3.6/4,ML3.9/1,MS3.2/2, Ms1 3.2/2,ms1mx2.5/47,Error ellipse: s-maj=110.5km s-min=25.9km az=70.0,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **19.52** | **186** | P | | P | 23 13 17.8 | -0.7 |
| | 0.2nm,0.3s,baz=14,slow=11,SNR=7.0 | | | | | | | |
| **GUMO** | **Guam** | **20.84** | **54** | LR | | LR | 23 21 18.8 | |
| | comp=Z,48nm,19.0s,baz=102,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.22** | **163** | P | | P | 23 13 48.9 | +1.1 |
| | 1.2nm,0.4s,baz=344,slow=10.0,SNR=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.67** | **167** | P | | P | 23 14 20.4 | -0.8 |
| | 0.2nm,0.3s,baz=344,slow=9.6,SNR=3.2 | | | | | | | |
| **PSI** | **Prapat** | **28.79** | **273** | LR | | LR | 23 26 02.4 | |
| | comp=Z,65nm,18.6s,baz=82,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.98** | **326** | P | | P | 23 18 58.0 | +0.1 |
| | 0.2nm,0.3s,baz=117,slow=8.3,SNR=4.4 | | | | | | | |

*IDC **24** 23:22:46.5±2.7,18˚.60S×176˚.68W,h337$^{km}$±26$^{km}$, mb3.4/11,mb1 3.6/12,mb1mx3.5/38,mbtmp4.0/12,Error ellipse: s-maj=30.5km s-min=16.4km az=138.0*

**ISC 24 23:22:44.8±0.9,18˚.65S×176˚.56W±0˚.2,h323$^{km}$,n13, σ0°87/13,mb3.6/10,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.18** | **279** | P | | **Pn** | **23 24 06.5** | **+1.0** |
| | 2.3nm,0.3s,baz=125,slow=21,SNR=7.1 | | | | | | | |
| **URZ** | **Urewera** | **20.32** | **194** | P | | **P** | **23 26 57.0** | **-0.4** |
| | 2.1nm,0.3s,baz=63,slow=4.5,SNR=1.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **39.82** | **242** | P | | **P** | **23 29 48.5** | **+0.6** |
| | 1.9nm,0.5s,baz=85,slow=7.3,SNR=6.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.22** | **260** | P | | **P** | **23 30 38.1** | **-0.7** |
| | 0.5nm,0.5s,baz=98,slow=6.3,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **46.28** | **255** | P | | **P** | **23 30 39.1** | **-0.2** |
| | 2.8nm,0.4s,baz=90,slow=8.4,SNR=57 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.83** | **344** | P | | **P** | **23 33 50.1** | **0.0** |
| | 1.9nm,0.6s,baz=132,slow=6.0,SNR=2.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.75** | **43** | P | | **P** | **23 34 13.7** | **+1.2** |
| | 1.1nm,0.8s,baz=227,slow=8.9,SNR=8.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.92** | **57** | P | | **P** | **23 34 45.5** | **+1.0** |
| | 0.5nm,0.8s,baz=207,slow=7.9,SNR=7.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.20** | **12** | P | | **P** | **23 34 49.2** | **-0.5** |
| | 0.3nm,0.4s,baz=209,slow=5.6,SNR=7.0 | | | | | | | |
| **INK** | **Inuvik** | **92.13** | **15** | P | | **P** | **23 35 17.2** | **-0.2** |
| | 0.3nm,0.6s,baz=214,slow=3.6,SNR=3.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.26** | **24** | P | | **P** | **23 35 26.4** | **-0.9** |
| | 0.3nm,0.6s,baz=248,slow=4.6,SNR=6.2 | | | | | | | |
| **SONM** | **Songino Array** | **95.23** | **319** | P | | **P** | **23 35 31.1** | **-1.2** |
| | 0.1nm,0.5s,baz=118,slow=5.8,SNR=2.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.73** | **347** | PKPbc | | **PKPbc** | **23 41 53.6** | **-0.7** |
| | 0.8nm,0.7s,baz=36,slow=7.1,SNR=7.0 | | | | | | | |

*NEIC **24** 23:24:20.0±1.8,23˚.67S±0˚.06×68˚.0W±0˚.1,h126$^{km}$±11$^{km}$, mb4.2/6,ML3.8(GUC),Error ellipse: s-maj=14.7km s-min=7.9km az=103.0*

*IDC **24** 23:24:20.8±2.2,23˚.57S×67˚.85W,h124$^{km}$±19$^{km}$,mb3.4/3, mb1 3.6/5,mb1mx3.3/31,mbtmp4.0/5,Error ellipse: s-maj=33.5km s-min=20.6km az=147.0*

*GUC **24** 23:24:22.1±0.6,23˚.55S×68˚.27W,h152$^{km}$±5$^{km}$,ML3.8*

*VAO **24** 23:24:22.0±0.7,23˚.47S×68˚.19W,h151$^{km}$,mb3.9*

**ISC 24 23:24:20.8±0.7,23˚.59S±0˚.05×68˚.15W±0˚.07,h143$^{km}$±9$^{km}$, n80,σ1°39/100,mb4.0/3,5C-5D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **1.20** | **324** | P | | **Pn** | **23 24 47.6** | **+0.4** |
| | 69nm,0.3s,baz=133,slow=11,SNR=700 | | | | | | | |
| LVC | | | | S | | **Sn** | **23 25 07.3** | **0.0** |
| | 168nm,0.3s,baz=80,slow=18,SNR=59 | | | | | | | |
| **LVC** | **Limon Verde** | **1.20** | **324** | ⇓*i*P | | **Pn** | **23 24 47.5** | **+0.4** |
| LVC | | | | *i* S | | **Sn** | **23 25 07.2** | **-0.1** |
| **LVC** | **Limon Verde** | **1.20** | **324** | *eP* | | **Pn** | **23 24 47.5** | **+0.4** |
| **PB15** | **IPOC Station P** | **1.27** | **287** | | | **Pn** | **23 24 48.2** | **+0.5** |
| PB15 | | | | Sn | | **Sn** | **23 25 07.9** | **-0.3** |
| **PB15** | **IPOC Station P** | **1.27** | **287** | ⇓*i*P | | **Pn** | **23 24 48.3** | **+0.6** |
| PB15 | | | | *i* S | | **Sn** | **23 25 08.2** | **0.0** |
| **PB06** | **IPOC Station P** | **1.58** | **304** | | | **Pn** | **23 24 51.4** | **+0.5** |
| PB06 | | | | Sn | | **Sn** | **23 25 13.5** | **-0.4** |
| **PB06** | **IPOC Station P** | **1.58** | **304** | ⇓*i*P | | **Pn** | **23 24 51.6** | **+0.7** |
| PB06 | | | | *i* S | | **Sn** | **23 25 13.7** | **-0.1** |
| PB06 | | | | IAML | | | 23 25 16.0 | |
| | comp=N,1μm,0.1s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.05** | **330** | | | **Pn** | **23 24 57.3** | **+1.0** |
| PB09 | | | | Sn | | **Sn** | **23 25 23.7** | **+0.2** |
| **PB09** | **IPOC Station P** | **2.05** | **330** | ⇓*i*P | | **Pn** | **23 24 57.6** | **+1.2** |
| PB09 | | | | *i* S | | **Sn** | **23 25 24.1** | **+0.5** |
| PB09 | | | | IAML | | | 23 25 26.0 | |
| | comp=N,441nm,0.6s | | | | | | | |
| **PB03** | **IPOC Station P** | **2.13** | **316** | | | **Pn** | **23 24 57.7** | **+0.4** |
| PB03 | | | | Sn | | **Sn** | **23 25 24.7** | **-0.5** |
| **PB03** | **IPOC Station P** | **2.13** | **316** | ⇑*i*P | | **Pn** | **23 24 57.6** | **+0.4** |
| PB03 | | | | *i* S | | **Sn** | **23 25 24.7** | **-0.5** |
| PB03 | | | | IAML | | | 23 25 26.8 | |
| | comp=E,648nm,0.3s | | | | | | | |
| **PB10** | **IPOC Station P** | **2.21** | **272** | | | **Pn** | **23 24 58.5** | **+0.5** |
| **PB10** | **IPOC Station P** | **2.21** | **272** | ⇑*i*P | | **Pn** | **23 24 58.6** | **+0.6** |
| PB10 | | | | *i* S | | **Sn** | **23 25 25.6** | **-1.0** |
| PB10 | | | | IAML | | | 23 25 33.9 | |
| | comp=N,229nm,0.6s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.23** | **304** | | | **Pn** | **23 24 58.9** | **+0.5** |
| **PB04** | **IPOC Station P** | **2.23** | **304** | *eP* | | **Pn** | **23 24 59.0** | **+0.5** |
| PB04 | | | | *i* S | | **Sn** | **23 25 26.6** | **-0.7** |
| PB04 | | | | IAML | | | 23 25 30.1 | |
| | comp=N,596nm,0.6s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.31** | **243** | | | **Pn** | **23 24 59.5** | **+0.1** |
| **PB14** | **IPOC Station P** | **2.31** | **243** | ⇑*i*P | | **Pn** | **23 24 59.6** | **+0.1** |
| PB14 | | | | IAML | | | 23 25 30.1 | |
| | comp=E,127nm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.46** | **319** | | | **Pn** | **23 25 01.6** | **+0.4** |
| **PB07** | **IPOC Station P** | **2.46** | **319** | ⇓*i*P | | **Pn** | **23 25 01.7** | **+0.5** |
| PB07 | | | | *i* S | | **Sn** | **23 25 31.8** | **-0.5** |
| PB07 | | | | IAML | | | 23 25 32.9 | |
| | comp=E,604nm,0.2s | | | | | | | |
| **PB02** | **IPOC Station P** | **2.78** | **324** | | | **Pn** | **23 25 05.6** | **+0.4** |
| **PB02** | **IPOC Station P** | **2.78** | **324** | *eP* | | **Pn** | **23 25 05.4** | **+0.2** |
| PB02 | | | | *i* S | | **Sn** | **23 25 38.7** | **-0.7** |
| PB02 | | | | IAML | | | 23 25 46.1 | |
| | comp=E,536nm,0.6s | | | | | | | |
| **PB01** | **IPOC Station P** | **2.82** | **334** | | | **Pn** | **23 25 06.2** | **+0.5** |
| **PB01** | **IPOC Station P** | **2.82** | **334** | *eP* | | **Pn** | **23 25 05.7** | **-0.1** |
| PB01 | | | | *i* S | | **Sn** | **23 25 39.6** | **-0.8** |
| PB01 | | | | IAML | | | 23 25 41.7 | |
| | comp=E,432nm,0.3s | | | | | | | |
| **PATCX** | **Punta Patache** | **3.33** | **326** | | | **Pn** | **23 25 13.0** | **+0.8** |
| **PATCX** | **Punta Patache** | **3.33** | **326** | *eP* | | **Pn** | **23 25 11.6** | **-0.6** |
| PATCX | | | | *i* S | | **Sn** | **23 25 45.2** | **-6.7** |
| PATCX | | | | IAML | | | 23 25 58.7 | |
| | comp=E,257nm,0.4s | | | | | | | |
| **AC02** | **Maricunga** | **3.35** | **195** | | | **Pn** | **23 25 13.6** | **+0.8** |
| **AC02** | **Maricunga** | **3.35** | **195** | ⇑*i*P | | **Pn** | **23 25 13.6** | **+0.8** |
| **TA01** | **Diego Aracena** | **3.55** | **328** | Pn | | **Pn** | **23 25 15.2** | **+0.2** |
| **PB08** | **IPOC Station P** | **3.56** | **345** | | | **Pn** | **23 25 16.2** | **+0.7** |
| **PB08** | **IPOC Station P** | **3.56** | **345** | *eP* | | **Pn** | **23 25 16.2** | **+0.7** |
| PB08 | | | | *i* S | | **Sn** | **23 25 57.6** | **-0.2** |
| **HMBC** | **Humberstone** | **3.67** | **334** | *eP* | | **Pn** | **23 25 15.8** | **-0.9** |
| **GO01** | **Chusmiza** | **4.02** | **346** | | | **Pn** | **23 25 22.2** | **+0.6** |
| **GO01** | **Chusmiza** | **4.02** | **346** | *eP* | | **Pn** | **23 25 22.2** | **+0.6** |
| GO01 | | | | *i* S | | **Sn** | **23 26 08.5** | **-0.3** |
| **PB11** | **IPOC Station P** | **4.06** | **340** | Pn | | **Pn** | **23 25 20.9** | **-0.9** |
| **AC06** | **Mina Casimiro** | **4.25** | **208** | Pn | | **Pn** | **23 25 22.2** | **-1.8** |
| **AC06** | **Mina Casimiro** | **4.25** | **208** | *eP* | | **Pn** | **23 25 22.3** | **-1.8** |
| **GO03** | **Copiap** | **4.41** | **205** | P | | **Pn** | **23 25 24.8** | **-1.4** |
| **GO03** | **Copiap** | **4.41** | **205** | ⇑*i*P | | **Pn** | **23 25 24.9** | **-1.4** |
| **AC04** | **Llanos de Chal** | **5.30** | **209** | Pn | | **Pn** | **23 25 35.0** | **-3.0** |
| **GO04** | **Tololo Observa** | **6.97** | **199** | Pn | | **Pn** | **23 25 56.8** | **-3.7** |
| **LPAZ** | **La Paz** | **7.27** | **0** | P | | **Pn** | **23 26 05.2** | **+0.2** |
| | comp=E,1.1nm,0.3s,baz=181,slow=7.9,SNR=17 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **23 27 27.3** | **+0.8** |
| | comp=E,0.2nm,0.3s,baz=274,slow=19,SNR=1.4 | | | | | | | |
| **LPAZ** | **La Paz** | **7.27** | **0** | Pn | | **Pn** | **23 26 04.5** | **-0.4** |
| **LPAZ** | **La Paz** | **7.27** | **0** | *eP* | | **Pn** | **23 26 04.9** | **-0.1** |
| **CO03** | **El Pedregal** | **7.56** | **197** | Pn | | **Pn** | **23 26 05.6** | **-2.8** |
| **CO02** | **Combarbal** | **8.00** | **198** | Pn | | **Pn** | **23 26 10.9** | **-3.3** |
| **ROC1** | **El Roble** | **9.69** | **194** | Pn | | **Pn** | **23 26 33.8** | **-3.1** |
| **SIV** | **San Ignacio** | **10.07** | **43** | P | | **Pn** | **23 26 38.7** | **-3.2** |
| | comp=E,3.4nm,0.3s,baz=232,slow=12,SNR=38 | | | | | | | |
| SIV | | | | S | | **Sn** | **23 28 28.3** | **-5.1** |
| | comp=E,0.1nm,0.3s,baz=298,slow=20,SNR=1.2 | | | | | | | |
| **VILB** | **Vilhena** | **12.99** | **37** | *eP* | | **Pn** | **23 27 19.1** | **-1.1** |
| **SALV** | **Santo Antonio** | **13.99** | **59** | *eP* | | **Pn** | **23 27 33.9** | **+1.0** |
| **CPSB** | **Cacapava Do Su** | **14.76** | **121** | *eP* | | **P** | **23 27 45.0** | **+0.3** |
| **ITAB** | **Concordia** | **14.92** | **107** | *eP* | | **P** | **23 27 46.6** | **+0.1** |
| **PLTB** | **Pedras Altas** | **15.23** | **125** | | | **Pn** | **23 27 48.0** | **-0.3** |
| PLTB | | | | IAmb | | IAmb | 23 27 50.3 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.23** | **125** | *eP* | | **P** | **23 27 49.9** | **-0.1** |
| **PDRB** | **Porto dos Gac** | **16.12** | **44** | *eP* | | **P** | **23 28 01.0** | **+1.0** |
| **ARAG** | **Araguaiana, MT** | **17.26** | **66** | *eP* | | **Pn** | **23 28 14.4** | **+1.1** |
| **CLDB** | **Colider** | **17.28** | **45** | *eP* | | **P** | **23 28 12.8** | **+0.1** |
| **TIJ01** | **Guaruva-PR** | **17.52** | **100** | *eP* | | **P** | **23 28 16.2** | **+0.9** |
| **PET01** | **Itanhaem-SP** | **19.09** | **96** | *eP* | | **Pn** | **23 28 35.0** | **+0.2** |
| **IPMB** | **Ipameri, GO** | **19.45** | **77** | *eP* | | **P** | **23 28 36.9** | **+0.4** |
| **SNDB** | **Serra Nova Dou** | **19.75** | **57** | *eP* | | **P** | **23 28 39.0** | **-0.7** |
| **BDFB** | **Brasilia** | **20.53** | **71** | P | | **P** | **23 28 47.9** | **-0.2** |
| | comp=Z,3.6nm,0.6s,baz=256,slow=11,SNR=6.7 | | | | | | | |
| **BDFB** | **Brasilia** | **20.53** | **71** | P | | **P** | **23 28 46.5** | **-1.7** |
| **NPGB** | **Novo Progresso** | **20.53** | **39** | *eP* | | **P** | **23 28 47.3** | **-0.8** |
| **MACA** | **Manacapuru-AM** | **21.55** | **21** | *eP* | | **P** | **23 28 58.8** | **-0.1** |
| **PEXB** | **Peixe** | **22.04** | **62** | *eP* | | **P** | **23 29 03.3** | **-0.8** |
| **ITTB** | **Itaituba** | **22.56** | **34** | *eP* | | **P** | **23 29 07.8** | **-1.3** |
| **JANB** | **Januaria** | **24.01** | **74** | *eP* | | **P** | **23 29 22.6** | **+0.1** |
| **PTGA** | **Pitinga** | **24.07** | **20** | P | | **P** | **23 29 24.1** | **+1.1** |
| | comp=Z,3.1nm,0.7s,baz=248,slow=5.7,SNR=5.4 | | | | | | | |
| **SMTB** | **Santa Maria do** | **24.53** | **57** | *eP* | | **P** | **23 29 28.2** | **+1.0** |
| **SDBA** | **SAO DESIDERIO** | **24.70** | **67** | *eP* | | **P** | **23 29 28.5** | **-0.4** |
| **PRPB** | **Parauapebas** | **24.72** | **48** | *eP* | | **P** | **23 29 29.4** | **+0.5** |
| **MALB** | **Monte Alegre** | **25.45** | **34** | *eP* | | **P** | **23 29 35.5** | **0.0** |
| **GUA01** | **Guaratinga, BA** | **27.48** | **81** | *eP* | | **P** | **23 29 54.5** | **+0.7** |
| **MCPB** | **Macapa, AP** | **27.88** | **36** | *eP* | | **P** | **23 29 57.8** | **+0.5** |
| **GDU01** | **Guandu, BA** | **28.74** | **75** | *eP* | | **P** | **23 30 05.1** | **+0.1** |
| **NBPN** | **Ponto Novo - B** | **29.48** | **69** | *eP* | | **P** | **23 30 11.5** | **-0.1** |
| **QSPA** | **South Pole Qui** | **66.61** | **180** | P | | **P** | **23 34 58.1** | **+2.6** |
| QSPA | | | | IAmb | | IAmb | 23 35 03.0 | |
| | comp=Z,4.2nm,1.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.41** | **70** | P | | **P** | **23 35 59.9** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=248,slow=4.8,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **131.49** | **209** | PKP | | **PKiKP** | **23 43 19.7** | **+1.6** |
| | comp=Z,0.4nm,0.7s,baz=153,slow=1.6,SNR=8.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **146.87** | **38** | PKPbc | | **PKPbc** | **23 43 47.3** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=284,slow=4.2,SNR=4.4 | | | | | | | |

*IDC **24** 23:51:48.3±4.5,4˚.18S×142˚.42E,h79$^{km}$±37$^{km}$,mb3.4/4, mb1 3.8/7,mb1mx3.5/29,mbtmp4.0/7,Error ellipse: s-maj=53.0km s-min=21.1km az=100.0*

**ISC 24 23:51:50.8±1.2,4˚.1S±0˚.1×142˚.1E±0˚.2,h100$^{km}$,n8, σ0°86/9,mb3.7/3,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **2.15** | **318** | P | | **Pn** | **23 52 26.1** | **+0.7** |
| | 3.4nm,0.3s,baz=153,slow=9.0,SNR=12 | | | | | | | |
| JAY | | | | S | | **Sn** | **23 52 50.7** | **-1.1** |
| | 9.3nm,0.3s,baz=90,slow=20,SNR=8.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.46** | **205** | P | | **Pn** | **23 55 47.7** | **-0.5** |
| | 1.0nm,0.3s,baz=28,slow=13,SNR=33 | | | | | | | |
| **BATI** | **Baumata** | **19.29** | **251** | P | | **Pn** | **23 56 09.7** | **-0.3** |
| | 3.5nm,0.3s,baz=89,slow=4.5,SNR=1.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.99** | **201** | P | | **P** | **23 56 26.7** | **+0.4** |
| | 1.1nm,0.5s,baz=31,slow=9.1,SNR=26 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.29** | **228** | P | | **P** | **23 56 29.4** | **-0.1** |
| | 3.2nm,0.7s,baz=45,slow=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **2.30** | **302** | *e*P | **Pn** | **01 03 21.7** | **+1.0** |
| PB01 | | | | *e*S | **Sn** | **01 03 52.5** | **+0.1** |
| PB01 | | | | IAML | | 01 03 54.3 | |
| | comp=E,175nm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **2.30** | **302** | P | **Pn** | **01 03 21.9** | **+1.2** |
| PB01 | | | | S | **Sn** | **01 03 50.6** | **-1.8** |
| PB01 | | | | IAML | | 01 03 54.3 | |
| | comp=E,184nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.38** | **283**⇓ | *e*P | **Pn** | **01 03 22.7** | **+1.1** |
| PB07 | | | | *e*S | **Sn** | **01 03 53.1** | **-0.9** |
| PB07 | | | | IAML | | 01 03 54.9 | |
| | comp=E,326nm,0.1s | | | | | | |
| **PB07** | **IPOC Station P** | **2.38** | **283** | P | **Pn** | **01 03 22.9** | **+1.3** |
| **PB02** | **IPOC Station P** | **2.52** | **292** | *e*P | **Pn** | **01 03 24.0** | **+0.9** |
| PB02 | | | | *e*S | **Sn** | **01 03 55.5** | **-1.2** |
| PB02 | | | | IAML | | 01 03 58.5 | |
| | comp=E,191nm,0.1s | | | | | | |
| **PB02** | **IPOC Station P** | **2.52** | **292** | P | **Pn** | **01 03 24.3** | **+1.2** |
| PB02 | | | | S | **Sn** | **01 03 54.6** | **-2.1** |
| PB02 | | | | IAML | | 01 03 58.6 | |
| | comp=E,136nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **2.56** | **268** | *e*P | **Pn** | **01 03 24.6** | **+1.0** |
| PB04 | | | | *e*S | **Sn** | **01 03 56.6** | **-1.0** |
| PB04 | | | | IAML | | 01 03 58.9 | |
| | comp=N,278nm,0.1s | | | | | | |
| **PB04** | **IPOC Station P** | **2.56** | **268** | P | **Pn** | **01 03 24.6** | **+1.0** |
| PB04 | | | | S | **Sn** | **01 03 55.2** | **-2.4** |
| PB04 | | | | IAML | | 01 03 58.8 | |
| | comp=N,213nm,0.5s | | | | | | |
| **PB08** | **IPOC Station P** | **2.69** | **322**⇑ | *i*P | **Pn** | **01 03 27.5** | **+2.1** |
| PB08 | | | | IAML | | 01 04 05.7 | |
| | comp=E,33nm,0.2s | | | | | | |
| **PB08** | **IPOC Station P** | **2.69** | **322** | P | **Pn** | **01 03 27.5** | **+2.1** |
| **PATCX** | **Punta Patache** | **2.95** | **299** | *e*P | **Pn** | **01 03 29.0** | **+0.7** |
| PATCX | | | | *e*S | **Sn** | **01 04 03.6** | **-2.3** |
| PATCX | | | | IAML | | 01 04 06.1 | |
| | comp=E,138nm,0.3s | | | | | | |
| **SLA** | **San Lorenzo** | **2.99** | **145** | P | **Pn** | **01 03 29.1** | **+0.4** |
| **HMBC** | **Humberstone** | **3.06** | **310** | *e*P | **Pn** | **01 03 30.0** | **+0.3** |
| HMBC | | | | *e*S | **Sn** | **01 04 06.7** | **-1.7** |
| HMBC | | | | IAML | | 01 04 08.7 | |
| | comp=N,108nm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **3.06** | **310** | P | **Pn** | **01 03 30.2** | **+0.6** |
| HMBC | | | | S | **Sn** | **01 04 05.8** | **-2.6** |
| HMBC | | | | IAML | | 01 04 09.9 | |
| | comp=N,65nm,0.4s | | | | | | |
| **GO01** | **Chusmiza** | **3.09** | **327**⇑ | *i*P | **Pn** | **01 03 31.9** | **+1.6** |
| GO01 | | | | IAML | | 01 04 14.3 | |
| | comp=N,172nm,0.1s | | | | | | |
| **PB10** | **IPOC Station P** | **3.17** | **247** | P | **Pn** | **01 03 30.7** | **0.0** |
| **PB11** | **IPOC Station P** | **3.28** | **319** | P | **Pn** | **01 03 33.1** | **+0.8** |
| PB11 | | | | S | **Sn** | **01 04 10.5** | **-2.7** |
| PB11 | | | | IAML | | 01 04 14.8 | |
| | comp=N,58nm,0.2s | | | | | | |
| **BBOE** | **La Paz, Chanca** | **5.46** | **354** | P | **Pn** | **01 04 02.7** | **+2.1** |
| **BBOD** | **La Paz, Gloria** | **5.72** | **348** | P | **Pn** | **01 04 05.6** | **+1.7** |
| **LPAZ** | **La Paz** | **6.00** | **353** | P | **Pn** | **01 04 09.4** | **+1.8** |

*SFS **25** 01:03:24.0, 34˚.71N×5˚.08W, ML2.8, RHAFSAI (MARRUECOS)*
*IGIL **25** 01:03:24.4, 34˚.69N×4˚.98W, h18km, ML2.7*
*INMG **25** 01:03:25.6±1.3, 34˚.77N×5˚.04W, h23km±10km, ML2.6, Error ellipse: s-maj=7.3km s-min=3.3km az=7.0*
*CNRM **25** 01:03:25.3, 34˚.50N×5˚.11W, h16km, ml3.5*

**ISC 25 01:03:24.0±1.1, 34˚.71N±0˚.02×5˚.07W±0˚.03, h23km±12km, n61, σ1§72/107, 1C-1D, Morocco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHEFC** | **Chefchaouen** | **0.45** | **330** | S | **Sb** | **01 03 38.0** | **-1.8** |
| **CHEFC** | **Chefchaouen** | **0.45** | **330** | P | **Sb** | **01 03 38.0** | **-1.8** |
| CHEFC | | | | S | **Sn** | **01 03 48.2** | **+5.5** |
| **SICH** | **Sidi Chahed** | **0.64** | **199** | S | **Sn** | **01 03 49.0** | **+1.8** |
| **SICH** | **Sidi Chahed** | **0.64** | **199** | P | **Pn** | **01 03 38.5** | **+0.7** |
| SICH | | | | S | **Sn** | **01 03 47.5** | **+0.3** |
| **AKLM** | **AKL** | **1.02** | **101** | P | **Pn** | **01 03 43.5** | **+0.5** |
| AKLM | | | | S | **Sn** | **01 03 56.5** | **-0.1** |
| **LCRM** | **LCR** | **1.04** | **170** | P | **Pn** | **01 03 43.1** | **-0.3** |
| LCRM | | | | S | **Sn** | **01 03 59.0** | **+1.7** |
| **LCRM** | **LCR** | **1.04** | **170** | P | **Pn** | **01 03 43.1** | **-0.3** |
| LCRM | | | | S | **Sn** | **01 03 59.0** | **+1.7** |
| **PALE** | **Palemas** | **1.05** | **61** | P | **Pb** | **01 03 44.2** | **+0.6** |
| **PALE** | **Palemas** | **1.05** | **61** | P | **Pb** | **01 03 44.1** | **+0.4** |
| PALE | | | | S | **Sb** | **01 03 56.3** | **-0.7** |
| **IFR** | **Ifrane** | **1.20** | **182** | P | **Pn** | **01 03 44.0** | **-1.5** |
| IFR | | | | S | **Sb** | **01 03 57.9** | **-3.3** |
| **CEU** | **Ceuta** | **1.21** | **348** | P | **Pb** | **01 03 47.3** | **+1.1** |
| CEU | | | | S | **Sb** | **01 04 07.3** | **+6.0** |
| **CZD** | **Col de Zad** | **1.68** | **179** | P | **Pb** | **01 03 53.8** | **-0.6** |
| CZD | | | | S | **Sb** | **01 04 15.7** | **+0.5** |
| **ZHG** | **ZHG** | **1.82** | **226** | P | **Pn** | **01 03 53.7** | **-0.3** |
| ZHG | | | | S | **Sb** | **01 04 22.2** | **+3.2** |
| **MD31** | **MD31** | **1.86** | **172** | P | **Pn** | **01 03 53.5** | **-1.1** |
| MD31 | | | | S | **Sb** | **01 04 19.1** | **-1.2** |
| **MDT** | **Midelt** | **1.93** | **168** | P | **Pn** | **01 03 54.4** | **-1.2** |
| **MDT** | **Midelt** | **1.93** | **168** | P | **Pn** | **01 03 54.4** | **-1.2** |
| MDT | | | | S | **Sn** | **01 04 19.9** | **+0.7** |
| **JBK** | **JBK** | **2.10** | **100** | P | **Pn** | **01 03 59.0** | **+1.0** |
| **JBK** | **JBK** | **2.10** | **100** | P | **Pn** | **01 03 59.1** | **+1.1** |
| JBK | | | | S | **Sn** | **01 04 23.0** | **-0.5** |
| **EMAL** | **Malaga-Limoner** | **2.11** | **14** | S | **Sn** | **01 04 22.5** | **-0.9** |
| **TAF** | **Taforalt** | **2.19** | **87** | P | **Pn** | **01 03 59.0** | **-0.1** |
| **TAF** | **Taforalt** | **2.19** | **87** | P | **Pn** | **01 03 59.4** | **+0.3** |
| TAF | | | | S | **Sn** | **01 04 24.4** | **-1.1** |
| **AVE** | **Averroes** | **2.41** | **235** | P | **Pn** | **01 04 02.0** | **0.0** |
| AVE | | | | S | **Sn** | **01 04 30.7** | **0.0** |
| **AVE** | **Averroes** | **2.41** | **235** | P | **Pn** | **01 04 02.0** | **0.0** |
| **GOLM** | **Goulmima** | **3.00** | **178** | P | **Pn** | **01 04 10.2** | **-0.1** |
| GOLM | | | | S | **Sn** | **01 04 49.2** | **+3.5** |
| **TDRA** | **Tendrara** | **3.03** | **123** | P | **Pn** | **01 04 08.8** | **-2.0** |
| TDRA | | | | S | **Sn** | **01 04 46.6** | **+0.2** |
| **PBDV** | **Barranco-do-Ve** | **3.43** | **318** | *e*Pn | **Pn** | **01 04 16.4** | **+0.3** |
| PBDV | | | | *e*Sn | **Sn** | **01 04 54.2** | **-1.8** |
| PBDV | | | | A | A | 01 05 01.3 | |
| | 9.8nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.44** | **322**⇓ | *e*Pn | **Pn** | **01 04 16.6** | **+0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **01 04 54.8** | **-1.3** |
| PVAQ | | | | A | A | 01 04 58.2 | |
| | 18nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.44** | **322** | P | **Pn** | **01 04 16.4** | **+0.2** |
| **PVAQ** | **Vaqueiros** | **3.44** | **322** | P | **Pn** | **01 04 16.6** | **+0.5** |
| PVAQ | | | | S | **Sn** | **01 04 54.5** | **-1.6** |
| **PCVE** | **Castro Verde** | **3.77** | **321** | *e*Pn | **Pn** | **01 04 21.2** | **+0.4** |
| PCVE | | | | *e*Sn | **Sn** | **01 05 03.0** | **-1.5** |
| PCVE | | | | A | A | 01 05 03.8 | |
| | 5.6nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **3.80** | **336** | *e*Pn | **Pn** | **01 04 21.6** | **+0.4** |
| PBAR | | | | *e*Sn | **Sn** | **01 05 03.6** | **-1.6** |
| PBAR | | | | A | A | 01 05 07.0 | |
| | 8.9nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **3.89** | **313** | *e*P | **Pn** | **01 04 22.6** | **+0.3** |
| MORF | | | | *e*S | **Sn** | **01 05 05.3** | **-2.1** |
| MORF | | | | IAML | | 01 05 08.2 | |
| | comp=N,18nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **3.89** | **313** | *e*Pn | **Pn** | **01 04 22.7** | **+0.3** |
| MORF | | | | *e*Sn | **Sn** | **01 05 06.0** | **-1.4** |
| MORF | | | | A | A | 01 05 12.1 | |
| | comp=N,9.5nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.89** | **309** | *e*Pn | **Pn** | **01 04 22.6** | **+0.2** |
| PFVI | | | | *e*Sn | **Sn** | **01 05 06.0** | **-1.3** |
| PFVI | | | | A | A | 01 05 17.9 | |
| | comp=N,10nm,0.7s | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.89** | **309** | P | **Pn** | **01 04 21.8** | **-0.5** |
| PFVI | | | | S | **Sn** | **01 05 04.6** | **-2.7** |
| **TZRR** | **Tazzarine** | **3.94** | **186** | P | **Pn** | **01 04 22.4** | **-0.8** |
| TZRR | | | | S | **Sn** | **01 05 11.2** | **+2.4** |
| **PBEJ** | **Beja** | **4.00** | **326** | *e*Pn | **Pn** | **01 04 24.5** | **+0.6** |
| PBEJ | | | | *e*Sn | **Sn** | **01 05 09.4** | **-0.7** |
| PBEJ | | | | A | A | 01 05 11.9 | |
| | comp=N,5.8nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.09** | **315** | *e*Pn | **Pn** | **01 04 25.4** | **+0.3** |
| PTEO | | | | *e*Sn | **Sn** | **01 05 10.9** | **-1.4** |
| PTEO | | | | A | A | 01 05 17.1 | |
| | comp=N,10nm,0.7s | | | | | | |
| **FIGM** | **Figuig** | **4.09** | **128** | P | **Pn** | **01 04 24.1** | **-1.2** |
| FIGM | | | | S | **Sn** | **01 05 11.5** | **-1.1** |
| **OUK** | **Oukaimeden** | **4.21** | **215** | P | **Pn** | **01 04 26.3** | **-0.9** |
| OUK | | | | S | **Sn** | **01 05 17.9** | **+2.0** |
| **PNCL** | **Nicolau / Gran** | **4.39** | **322** | *e*Pn | **Pn** | **01 04 29.6** | **+0.3** |
| PNCL | | | | *e*Sn | **Sn** | **01 05 18.3** | **-1.4** |
| PNCL | | | | A | A | 01 05 20.0 | |
| | comp=N,6.2nm,0.4s | | | | | | |
| **EVO** | **Evora** | **4.49** | **329** | P | **Pn** | **01 04 33.0** | **+2.4** |
| EVO | | | | S | **Sn** | **01 05 22.1** | **0.0** |
| **EVO** | **Evora** | **4.49** | **329** | *e*Pn | **Pn** | **01 04 33.2** | **+2.6** |
| EVO | | | | *e*Sn | **Sn** | **01 05 22.4** | **+0.4** |
| EVO | | | | A | A | 01 05 26.4 | |
| | comp=N,14nm,0.1s | | | | | | |
| **PESTR** | **Estremoz** | **4.61** | **335** | *e*Pn | **Pn** | **01 04 33.3** | **+1.0** |
| PESTR | | | | *e*Sn | **Sn** | **01 05 22.6** | **-2.6** |
| PESTR | | | | A | A | 01 05 24.3 | |
| | comp=N,3.1nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **4.61** | **335** | P | **Pn** | **01 04 33.4** | **+1.1** |
| **PESTR** | **Estremoz** | **4.61** | **335** | P | **Pn** | **01 04 33.4** | **+1.1** |
| PESTR | | | | S | **Sn** | **01 05 21.7** | **-3.4** |
| **EAH** | **EAH** | **4.87** | **232** | P | **Pn** | **01 04 35.6** | **-0.3** |
| **EAH** | **EAH** | **4.87** | **232** | P | **Pn** | **01 04 35.8** | **-0.1** |
| EAH | | | | S | **Sn** | **01 05 28.6** | **-2.9** |
| **PMTG** | **Montargil** | **5.03** | **331** | *e*Pn | **Pn** | **01 04 38.6** | **+0.6** |
| PMTG | | | | *e*Sn | **Sn** | **01 05 33.8** | **-1.6** |
| PMTG | | | | A | A | 01 05 38.5 | |
| | comp=N,4.2nm,0.9s | | | | | | |
| **PACT** | **Alcochete** | **5.05** | **324** | *e*Pn | **Pn** | **01 04 39.6** | **+1.3** |
| **PMRV** | **Marv??o** | **5.06** | **339** | *e*Pn | **Pn** | **01 04 39.4** | **+0.9** |
| PMRV | | | | *e*Sn | **Sn** | **01 05 34.0** | **-2.2** |
| PMRV | | | | A | A | 01 05 35.1 | |
| | comp=N,3.8nm,0.7s | | | | | | |
| **PCBR** | **Castelo Branco** | **5.46** | **340** | *e*Pn | **Pn** | **01 04 44.9** | **+0.9** |
| PCBR | | | | *e*Sn | **Sn** | **01 05 43.7** | **-2.4** |
| PCBR | | | | A | A | 01 05 45.0 | |
| | comp=N,6.5nm,0.5s | | | | | | |
| **PSBE** | **So Bento** | **5.64** | **329** | *e*Pn | **Pn** | **01 04 47.5** | **+1.0** |
| PSBE | | | | *e*Sn | **Sn** | **01 05 48.7** | **-1.8** |
| **PCAS** | **Casmilo, Conde** | **5.99** | **334** | *e*Pn | **Pn** | **01 04 52.3** | **+1.1** |
| **MTE** | **Manteigas** | **6.01** | **342** | *e*Pn | **Pn** | **01 04 52.9** | **+1.4** |
| MTE | | | | *e*Sn | **Sn** | **01 05 57.3** | **-2.3** |
| MTE | | | | A | A | 01 06 00.5 | |
| | comp=N,3.6nm,0.4s | | | | | | |
| **PVIS** | **Viseu** | **6.39** | **340** | *e*Pn | **Pn** | **01 04 57.9** | **+1.0** |
| PVIS | | | | *e*Sn | **Sn** | **01 06 06.8** | **-2.4** |
| PVIS | | | | A | A | 01 06 09.5 | |
| | comp=N,4.6nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **6.62** | **347** | *e*Pn | **Pn** | **01 05 00.6** | **+0.6** |
| MVO | | | | *e*Sn | **Sn** | **01 06 12.0** | **-2.8** |
| MVO | | | | A | A | 01 06 13.6 | |
| | comp=N,3.9nm,0.6s | | | | | | |
| **PVRL** | **Vila Real** | **6.88** | **343**⇑ | *e*Pn | **Pn** | **01 05 04.3** | **+0.9** |
| PVRL | | | | *e*Sn | **Sn** | **01 06 17.3** | **-3.7** |
| PVRL | | | | A | A | 01 06 20.4 | |
| | comp=N,9.1nm,0.2s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.99** | **343** | *e*Pn | **Pn** | **01 05 05.9** | **+0.9** |
| POLO | | | | *e*Sn | **Sn** | **01 06 20.8** | **-3.0** |
| POLO | | | | A | A | 01 06 23.9 | |
| | comp=N,1.7nm,1.1s | | | | | | |
| **PBRG** | **Braganca** | **7.20** | **350** | *e*Sn | **Sn** | **01 06 26.0** | **-3.0** |
| **PGAV** | **Gavieira, Arco** | **7.66** | **342** | *e*Pn | **Pn** | **01 05 15.5** | **+1.2** |

**IDC 25 01:25:45.3±3.7, 4˚.06S×144˚.35E, h0km, mb3.3/2, mb1 3.7/3, mb1mx3.4/19, mbtmp3.5/3, ML4.0/1, Error ellipse: s-maj=113.3km s-min=33.1km az=97.0, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.56** | **211** | P | P | 01 30 03.9 | -0.1 |
| | 0.5nm,0.3s,baz=32,slow=12,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **21.95** | **206** | P | P | 01 30 40.8 | 0.0 |
| | 0.7nm,0.5s,baz=35,slow=10,SNR=8.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.33** | **321** | P | P | 01 37 24.9 | 0.0 |
| | 0.2nm,0.6s,baz=126,slow=7.3,SNR=2.0 | | | | | | |

*IDC **25** 01:36:57.7±2.4, 31˚.55S×68˚.05W, h92km±21km, mb3.6/7, mb1 3.7/12, mb1mx3.6/27, mbtmp3.8/12, Error ellipse: s-maj=27.2km s-min=16.8km az=88.0*

**ISC 25 01:36:58.1±0.7, 31˚.49S±0˚.07×68˚.0W±0˚.1, h100km, n15, σ1§41/17, mb3.8/7, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **8.88** | **354** | P | **Pn** | **01 39 05.1** | **+1.2** |
| | 0.8nm,0.3s,baz=144,slow=12,SNR=2.2 | | | | | | |
| LVC | | | | S | **Sn** | **01 40 39.6** | **-2.9** |
| | 0.5nm,0.3s,baz=224,slow=20,SNR=1.8 | | | | | | |
| **PLCA** | **Paso Flores** | **9.45** | **192** | P | **Pn** | **01 39 09.2** | **-2.0** |
| | 0.3nm,0.3s,baz=10,slow=13,SNR=10 | | | | | | |
| **CPUP** | **Villa Florida** | **10.66** | **64** | P | **Pn** | **01 39 27.7** | **0.0** |
| | 0.1nm,0.3s,baz=249,slow=7.6,SNR=2.0 | | | | | | |
| CPUP | | | | S | **Sn** | **01 41 23.9** | **-1.2** |
| | 0.4nm,0.3s,baz=238,slow=9.0,SNR=2.3 | | | | | | |
| **LPAZ** | **La Paz** | **15.14** | **359** | P | **P** | **01 40 29.2** | **-0.8** |
| | 0.1nm,0.3s,baz=197,slow=15,SNR=1.7 | | | | | | |
| **SIV** | **San Ignacio** | **16.67** | **24** | P | **Pn** | **01 40 46.0** | **+0.3** |
| | 0.2nm,0.3s,baz=202,slow=11,SNR=8.0 | | | | | | |
| **USHA** | **Ushuaia** | **23.33** | **181** | P | **P** | **01 41 56.0** | **-1.2** |
| | 9.1nm,1.0s,baz=19,slow=12,SNR=2.7 | | | | | | |
| **SNAA** | **Sanae** | **52.65** | **159** | P | **P** | **01 46 03.6** | **+2.1** |
| | 1.4nm,0.6s,baz=266,slow=13,SNR=8.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.36** | **327** | P | **P** | **01 47 56.2** | **+1.1** |
| | 0.4nm,0.7s,baz=156,slow=8.5,SNR=5.2 | | | | | | |
| **DBIC** | **Dimbokro** | **71.12** | **69** | P | **P** | **01 48 07.1** | **+1.0** |
| | 3.4nm,0.9s,baz=201,slow=6.3,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.13** | **68** | P | **P** | **01 48 57.7** | **+0.3** |
| | 1.4nm,0.8s,baz=268,slow=5.1,SNR=7.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **83.17** | **331** | P | **P** | **01 49 13.0** | **-0.1** |
| | 0.4nm,0.7s,baz=146,slow=3.4,SNR=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.88** | **323** | P | **P** | **01 49 18.1** | **+1.3** |
| | 0.3nm,0.7s,baz=144,slow=6.3,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **124.55** | **206** | PKP | **PKPdf** | **01 55 45.0** | **-1.3** |
| | 0.6nm,0.7s,baz=156,slow=1.8,SNR=12 | | | | | | |
| **GEYT** | **Alibeck** | **135.75** | **66** | PKP | **PKiKP** | **01 56 08.2** | **-0.3** |
| | 1.4nm,0.5s,baz=347,slow=5.9,SNR=2.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.28** | **33** | PKPbc | **PKiKP** | **01 56 37.7** | **0.0** |
| | 2.6nm,0.6s,baz=298,slow=3.3,SNR=15 | | | | | | |

*BJI **25** 01:48:26.0±0.0, 3˚.57N×95˚.88E, h46km, mb4.3/20, mB4.9/11, Ms4.6/5, Ms7 4.1/5*
*IDC **25** 01:48:30.3±3.7, 3˚.98N×95˚.59E, h51km±33km, mb3.9/20, mb1 4.0/22, mb1mx3.9/38, mbtmp4.2/22, ML4.3/2, MS3.7/41, Ms1 3.7/41, ms1mx3.5/89, Error ellipse: s-maj=23.6km s-min=12.7km az=53.0*
*DJA **25** 01:48:30.0±0.4, 4˚N±2˚×95˚5E±1˚, h54km±4km, M5.0/32, mB5.5/11, mb4.9/32, MLv4.9/11, Mw(mB)5.0/11*
*NEIC **25** 01:48:31.0±1.8, 3˚.81N±0˚.06×95˚.52E±0˚.08, h60km±6km, mb4.5/31, Error ellipse: s-maj=11.9km s-min=8.0km az=70.0*

**ISC 25 01:48:29.7±0.7, 3˚.81N±0˚.04×95˚.43E±0˚.06, h50km±7km, h51km:pP-P, n154, σ1§25/132, mb4.4/59, MS3.7/39, 2C-1D, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **1.66** | **147** | P | **Pn** | **01 48 55.8** | **-0.6** |
| SNSI | | | | S | **Sn** | **01 49 15.9** | **-0.6** |
| **LHMI** | **Lhok Sumawe** | **2.07** | **47** | P | **Pn** | **01 49 01.9** | **-0.1** |
| LHMI | | | | S | **Sn** | **01 49 27.7** | **+1.0** |
| **LHMI** | **Lhok Sumawe** | **2.07** | **47** | P | **Pn** | **01 49 02.7** | **+0.7** |
| LHMI | | | | S | **Sn** | **01 49 28.2** | **+1.6** |
| **LHMI** | **Lhok Sumawe** | **2.07** | **47** | P | **Pn** | **01 49 04.0** | **+2.0** |
| **KCSI** | **Kotacane, Aceh** | **2.35** | **97** | P | **Pn** | **01 49 06.4** | **+0.4** |
| KCSI | | | | S | **Sn** | **01 49 35.7** | **+2.0** |
| **TSI** | **Tuntungan** | **3.14** | **96** | P | **Pn** | **01 49 17.4** | **+0.6** |
| **GSI** | **Gunungsitoli** | **3.29** | **139** | Pn | **Pn** | **01 49 18.0** | **-0.8** |
| GSI | | | | Sn | **Sn** | **01 49 54.7** | **-1.9** |
| **GSI** | **Gunungsitoli** | **3.29** | **139** | P | **Pn** | **01 49 18.3** | **-0.5** |
| **GSI** | **Gunungsitoli** | **3.29** | **139** | P | **Pn** | **01 49 18.8** | **0.0** |
| **PSI** | **Prapat** | **3.63** | **106** | P | **Pn** | **01 49 23.6** | **+0.1** |
| | 15nm,0.3s,baz=300,slow=8.7,SNR=22 | | | | | | |
| PSI | | | | S | **Sn** | **01 50 10.2** | **+5.0** |
| | 17nm,0.3s,baz=277,slow=17,SNR=3.4 | | | | | | |
| PSI | | | | LR | LR | 01 51 02.3 | |
| | comp=Z,1µm,19.7s,baz=282,slow=43 | | | | | | |
| **RPSI** | **Rantau Prapat** | **3.66** | **108** | | **Pn** | **01 49 23.6** | **-0.2** |
| RPSI | | | | | **Sn** | **01 50 10.2** | **+4.4** |
| **MNSI** | **Mandailing Nat** | **5.12** | **126** | P | **Pn** | **01 49 43.8** | **-0.1** |
| | 1.2nm5µm131nm,0.4s | | | | | | |
| **KULM** | **Kulim** | **5.41** | **74** | Pn | **Pn** | **01 49 47.1** | **-0.8** |
| **IPM** | **Ipoh** | **5.62** | **83** | Pn | **Pn** | **01 49 50.0** | **-0.8** |
| **IPM** | **Ipoh** | **5.62** | **83** | P | **Pn** | **01 49 51.2** | **+0.4** |
| **SRIT** | **Nakonsritamara** | **6.31** | **41** | Pn | **Pn** | **01 49 59.6** | **-0.6** |
| **PPI** | **Padang Panjang** | **6.53** | **130** | P | **Pn** | **01 50 03.1** | **-0.2** |
| | 36nm,0.5s | | | | | | |
| **BKNI** | **Bangkinang** | **6.59** | **122** | P | **Pn** | **01 50 03.9** | **-0.2** |
| | 0.8nm126nm,0.8s | | | | | | |
| **BKNI** | **Bangkinang** | **6.59** | **122** | P | **Pn** | **01 50 04.4** | **+0.3** |
| **MYKOM** | **Kota Tinggi** | **8.65** | **103** | | **Pn** | **01 50 29.8** | **-2.6** |
| **PMBI** | **Palembang** | **11.49** | **126** | P | **Pn** | **01 51 10.3** | **-0.9** |
| | 46µm360nm,0.4s | | | | | | |
| **KLSI** | | **12.56** | **132** | P | **Pn** | **01 51 24.5** | **-1.3** |
| | 12nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **14.96** | **13** | P | **Pn** | **01 51 57.4** | **-0.8** |
| | 0.7nm,0.3s,baz=195,slow=10,SNR=1.6 | | | | | | |
| CMAR | | | | LR | LR | 01 57 57.0 | |
| | comp=Z,216nm,19.6s,baz=195,slow=38 | | | | | | |
| **PALK** | **Pallekele** | **15.05** | **284** | P | **P** | **01 52 05.8** | **+2.0** |
| | 0.3nm,0.3s,baz=220,slow=7.6,SNR=5.7 | | | | | | |
| PALK | | | | S | Sn | 01 54 31.5 | -14 |
| | 0.4nm,0.3s,baz=153,slow=13,SNR=1.8 | | | | | | |
| PALK | | | | LR | LR | 01 57 19.4 | |
| | comp=Z,394nm,20.9s,baz=206,slow=35 | | | | | | |
| **CHTO** | **Chiang Mai** | **15.30** | **13** | Pn | **Pn** | **01 52 02.0** | **-0.7** |
| **CHTO** | **Chiang Mai** | **15.30** | **13** | P | **P** | **01 52 05.6** | **-1.0** |
| **SBUM** | **Sibu** | **16.82** | **94** | Pn | **Pn** | **01 52 20.6** | **-1.3** |
| **MTKI** | **Muara Teweh, K** | **20.02** | **103** | P | **P** | **01 52 58.5** | **-0.1** |
| **BLJI** | **Banyuglugur** | **21.45** | **122** | P | **P** | **01 53 14.9** | **+0.9** |
| | 8µm76nm,0.4s | | | | | | |
| **ABJI** | **Asem Bagus** | **22.02** | **122** | P | **P** | **01 53 19.7** | **-0.4** |
| | 43nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **22.30** | **123** | P | **P** | **01 53 24.0** | **+0.8** |
| | 19nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **22.30** | **123** | P | **P** | **01 53 25.7** | **+2.5** |
| **KMI** | **Kunming** | **22.33** | **18** | ⇑P | **P** | **01 53 21.9** | **-1.7** |
| KMI | | | | pP | pP | 01 53 30.8 | -4.4 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,340nm,20.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,250nm,19.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,280nm,18.6s | | | | | | |
| **PZH** | **PanZhiHua** | **23.36** | **14** | P | **P** | **01 53 33.3** | **-0.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,80nm,4.0s | | | | | | |
| **ODAN** | **Odare** | **24.18** | **342** | *e*P | **P** | **01 53 42.5** | **+0.7** |
| **RAMN** | **Ramite** | **24.51** | **341** | *e*P | **P** | **01 53 46.1** | **+1.3** |
| | 2.2nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **24.54** | **343** | *e*P | **P** | **01 53 44.7** | **-0.5** |
| | 4.8nm,0.3s | | | | | | |
| **MPSI** | **Mapaga** | **24.69** | **97** | P | **P** | **01 53 46.5** | **+0.2** |
| | 27nm,1.3s | | | | | | |
| **JIRN** | **Jiri** | **25.30** | **341** | *e*P | **P** | **01 53 52.3** | **+0.1** |
| | 3.9nm,0.3s | | | | | | |
| **TOLI2** | **Tolitoli** | **25.47** | **95** | P | **P** | **01 53 52.9** | **-0.5** |
| **TOLI2** | **Tolitoli** | **25.47** | **95** | P | **P** | **01 53 54.9** | **+1.5** |
| **H08S2** | **Diego Garcia H** | **25.56** | **244** | T | T | 02 20 23.0 | |
| | baz=63,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.56** | **244** | T | T | 02 20 03.3 | |
| | baz=63 | | | | | | |
| **PLAI** | **Plampang** | **25.57** | **119** | P | **P** | **01 53 52.7** | **-1.6** |
| | 21nm,0.7s | | | | | | |
| **PLAI** | **Plampang** | **25.57** | **119** | P | **P** | **01 53 57.4** | **+3.1** |
| **H08S1** | **Diego Carcia H** | **25.57** | **244** | T | T | 02 19 58.7 | |
| | baz=63,slow=74 | | | | | | |
| **GUN** | **Gumba** | **25.64** | **340** | *e*P | **P** | **01 53 55.2** | **0.0** |
| | 5.4nm,0.4s | | | | | | |
| **KAPI** | **Kappang** | **25.83** | **110** | P | **P** | **01 53 56.7** | **+0.1** |
| | 9.7nm,0.5s,baz=295,slow=12,SNR=5.3 | | | | | | |
| KAPI | | | | LR | LR | 02 04 57.6 | |
| | comp=Z,168nm,20.0s,baz=302,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **25.83** | **110** | P | **P** | **01 53 56.0** | **-0.7** |
| KAPI | | | | IAmb | IAmb | 01 54 11.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **25.83** | **110** | P | **P** | **01 53 59.7** | **+3.0** |
| | comp=Z,31nm,1.2s | | | | | | |
| **GKN** | **Gorkha** | **26.17** | **338** | *e*P | **P** | **01 54 00.0** | **+0.3** |
| | comp=Z,7.9nm,0.2s | | | | | | |
| **BKSI** | **Bulukumba** | **26.28** | **110** | P | **P** | **01 54 00.0** | **-0.7** |
| | comp=Z,590nmcomp=Z,44nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **26.36** | **336** | *e*P | **P** | **01 54 02.3** | **+0.7** |
| | comp=Z,2.1nm,0.2s | | | | | | |
| **DANN** | **Dangsing** | **26.81** | **337** | *e*P | **P** | **01 54 06.0** | **+0.3** |
| **PYUN** | **Piuthan** | **26.91** | **335** | *e*P | **P** | **01 54 07.2** | **+0.7** |
| | comp=Z,1.5nm,0.2s | | | | | | |
| **BATI** | **Baumata** | **31.38** | **117** | LR | LR | 02 08 11.2 | |
| | comp=Z,250nm,21.4s,baz=298,slow=38 | | | | | | |
| **GOMU** | **GeErMu** | **32.23** | **359** | P | **P** | **01 54 53.3** | **-0.5** |
| GOMU | | | | pP | pP | 01 55 01.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,62nm,21.9s,baz=112,slow=34 | | | | | | | |
| **BNX** | **BinXian** | **50.22** | **29** | ⇓P | | **P** | **01 57 19.3** | **-1.4** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,380nm,5.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **50.73** | **352** | P | | **P** | **01 57 23.1** | **-1.2** |
| ZAA0 | | | | IAmb | | IAmb | 01 57 24.4 | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.73** | **352** | P | | **P** | **01 57 23.4** | **-1.0** |
| | comp=Z,3.5nm,0.4s,baz=168,slow=8.5,SNR=20 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.73** | **352** | P | | **P** | **01 57 23.2** | **-1.2** |
| **MJAR** | **Matsushiro Arr** | **51.03** | **45** | LR | | LR | 02 19 59.8 | |
| | comp=Z,94nm,21.0s,baz=204,slow=37 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.51** | **33** | LR | | LR | 02 21 22.2 | |
| | comp=Z,76nm,19.4s,baz=191,slow=38 | | | | | | | |
| **RAYN** | **Ar Rayn** | **51.99** | **297** | P | | **P** | **01 57 35.5** | **+1.0** |
| RAYN | | | | IAmb | | IAmb | 01 57 50.6 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **ATD** | **Arta Tunnel** | **52.60** | **282** | LR | | LR | 02 17 06.6 | |
| | comp=Z,48nm,19.6s,baz=133,slow=33 | | | | | | | |
| **BRVK** | **Borovoye** | **53.29** | **341** | P | | **P** | **01 57 42.4** | **-1.0** |
| BRVK | | | | IAmb | | IAmb | 01 57 43.9 | |
| | comp=Z,6.1nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.39** | **332** | P | | **P** | **01 57 51.9** | **+0.3** |
| **ABKAR** | **Akbulak array** | **54.39** | **332** | P | | **P** | **01 57 51.6** | **0.0** |
| ABKAR | | | | IAmb | | IAmb | 01 58 09.6 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **KLR** | **Kul'dur** | **54.77** | **28** | LR | | LR | 02 24 00.8 | |
| | comp=Z,63nm,19.1s,baz=276,slow=39 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.11** | **332** | LR | | LR | 02 23 32.1 | |
| | comp=Z,31nm,18.3s,baz=97,slow=38 | | | | | | | |
| **STKA** | **Stephens Creek** | **56.41** | **133** | P | | **P** | **01 58 07.0** | **+0.6** |
| | comp=Z,1.6nm,0.6s,baz=301,slow=9.7,SNR=6.5 | | | | | | | |
| **STKA** | **Stephens Creek** | **56.41** | **133** | P | | **P** | **01 58 05.4** | **-1.0** |
| **KIBK** | **Kibwezi** | **57.67** | **265** | P | | **P** | **01 58 15.6** | **-0.2** |
| KIBK | | | | IAmb | | IAmb | 01 58 34.8 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.70** | **39** | LR | | LR | 02 24 25.7 | |
| | comp=Z,68nm,18.8s,baz=84,slow=38 | | | | | | | |
| **GNI** | **Garni** | **58.20** | **316** | LR | | LR | 02 24 23.2 | |
| | comp=Z,26nm,21.8s,baz=84,slow=37 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **58.35** | **266** | P | | **P** | **01 58 21.4** | **+0.7** |
| | comp=Z,0.5nm,0.4s,baz=82,slow=18,SNR=1.7 | | | | | | | |
| KMBO | | | | LR | | LR | 02 21 34.9 | |
| | comp=Z,70nm,18.0s,baz=97,slow=34 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **58.35** | **266** | P | | **P** | **01 58 21.4** | **+0.7** |
| KMBO | | | | IAmb | | IAmb | 01 58 37.9 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **59.50** | **313** | P | | **P** | **01 58 28.5** | **+0.4** |
| GURO | | | | IAmb | | IAmb | 01 58 45.3 | |
| | comp=Z,5.2nm,1.3s | | | | | | | |
| **ARU** | **Arti** | **60.11** | **337** | LR | | LR | 02 28 08.2 | |
| | comp=Z,32nm,19.2s,baz=104,slow=40 | | | | | | | |
| **KBZ** | **Khabaz** | **60.95** | **319** | P | | **P** | **01 58 37.8** | **0.0** |
| | comp=Z,1.4nm,0.9s,baz=118,slow=6.5,SNR=4.9 | | | | | | | |
| **EIL** | **Elat** | **62.59** | **301** | LR | | LR | 02 26 28.7 | |
| | comp=Z,92nm,19.1s,baz=92,slow=36 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **62.96** | **305** | LR | | LR | 02 28 42.6 | |
| | comp=Z,55nm,19.1s,baz=247,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **63.45** | **17** | LR | | LR | 02 28 54.4 | |
| | comp=Z,99nm,19.5s,baz=267,slow=38 | | | | | | | |
| **MBAR** | **Mbarara** | **64.80** | **268** | LR | | LR | 02 23 57.5 | |
| | comp=Z,60nm,22.0s,baz=86,slow=33 | | | | | | | |
| **NRIK** | **Noril'sk** | **65.64** | **357** | P | | **P** | **01 59 07.1** | **-1.2** |
| | comp=Z,1.5nm,0.3s,baz=161,slow=6.5,SNR=6.7 | | | | | | | |
| **NRIK** | **Noril'sk** | **65.64** | **357** | P | | **P** | **01 59 07.2** | **-1.1** |
| NRIK | | | | IAmb | | IAmb | 01 59 08.4 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **66.06** | **312** | P | | **P** | **01 59 12.2** | **+0.4** |
| | comp=Z,0.5nm,0.5s,baz=123,slow=7.3,SNR=2.5 | | | | | | | |
| BRTR | | | | LR | | LR | 02 30 20.7 | |
| | comp=Z,27nm,19.9s,baz=128,slow=38 | | | | | | | |
| **LSZ** | **Lusaka** | **69.19** | **252** | LR | | LR | 02 26 17.0 | |
| | comp=Z,92nm,19.2s,baz=138,slow=33 | | | | | | | |
| **MA2** | **Magadan** | **69.78** | **26** | LR | | LR | 02 34 01.2 | |
| | comp=Z,77nm,19.7s,baz=109,slow=39 | | | | | | | |
| **KLMR** | **Klimovskoe** | **70.65** | **335** | *eP* | | **P** | **01 59 39.6** | **-0.2** |
| KLMR | | | | AMP | | | 01 59 41.8 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **TIXI** | **Tiksi** | **70.95** | **11** | LR | | LR | 02 33 32.3 | |
| | comp=Z,56nm,20.1s,baz=186,slow=38 | | | | | | | |
| **TIXI** | **Tiksi** | **70.95** | **11** | P | | **P** | **01 59 39.6** | **-1.9** |
| TIXI | | | | IAmb | | IAmb | 01 59 40.8 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **IDI** | **Anoyia** | **71.94** | **306** | LR | | LR | 02 36 20.4 | |
| | comp=Z,8.9nm,19.1s,baz=82,slow=40 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.12** | **322** | P | | **P** | **01 59 48.4** | **-0.6** |
| | comp=Z,0.1nm,0.3s,baz=88,slow=5.2,SNR=1.6 | | | | | | | |
| **LBTB** | **Lobatse** | **73.48** | **243** | LR | | LR | 02 27 22.0 | |
| | comp=Z,111nm,21.6s,baz=84,slow=32 | | | | | | | |
| **BOSA** | **Boshof** | **74.57** | **239** | P | | **P** | **02 00 06.0** | **+2.0** |
| | comp=Z,1.1nm,0.8s,baz=21,slow=17,SNR=0.9 | | | | | | | |
| BOSA | | | | LR | | LR | 02 26 14.9 | |
| | comp=Z,76nm,20.2s,baz=135,slow=30 | | | | | | | |
| **NACGM** | **Naroch** | **74.71** | **326** | *i P* | | **P** | **02 00 05.5** | **+1.5** |
| **FINES** | **FINESS Array B** | **76.88** | **333** | P | | **P** | **02 00 16.6** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=112,slow=5.9,SNR=8.6 | | | | | | | |
| **SUR** | **Sutherland** | **79.12** | **236** | LR | | LR | 02 28 08.6 | |
| | comp=Z,81nm,19.5s,baz=103,slow=30 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.50** | **340** | P | | **P** | **02 00 31.1** | **+0.4** |
| | comp=Z,4.0nm,1.0s,baz=97,slow=7.0,SNR=9.4 | | | | | | | |
| ARCES | | | | LR | | LR | 02 38 43.4 | |
| | comp=Z,52nm,19.6s,baz=160,slow=38 | | | | | | | |
| **KRLC** | **Kraliky** | **79.80** | **320** | *eP* | | **P** | **02 00 33.5** | **+0.7** |
| KRLC | | | | *epP* | | **pP** | **02 00 48.1** | **+1.1** |
| **TSUM** | **Tsumeb** | **79.81** | **250** | LR | | LR | 02 32 57.6 | |
| | comp=Z,93nm,20.0s,baz=82,slow=33 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **80.13** | **320** | *eP* | | **P** | **02 00 36.5** | **+1.9** |
| DPC | | | | *epP* | | **pP** | **02 00 49.1** | **+0.4** |
| **CONA** | **Conrad Observa** | **80.19** | **318** | *eP* | | pP | 02 00 49.7 | +0.6 |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **ARSA** | **Arzberg** | **80.36** | **317** | *eP* | | pP | 02 00 50.8 | +0.8 |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **80.65** | **317** | *eP* | | **P** | **02 00 39.3** | **+1.9** |
| | comp=Z,4.5nm,1.0s | | | | | | | |
| SOKA | | | | *eP* | | **pP** | **02 00 52.0** | **+0.4** |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **OBKA** | **Obir** | **80.97** | **316** | *eP* | | pP | 02 00 53.8 | +0.4 |
| | comp=Z,7.0nm,1.4s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **81.30** | **319** | *eP* | | **P** | **02 00 41.5** | **+0.7** |
| CKRC | | | | *epP* | | **pP** | **02 00 51.3** | **-3.7** |
| **GERES** | **GERESS Array B** | **81.70** | **319** | P | | **P** | **02 00 44.3** | **+1.2** |
| | comp=Z,1.3nm,0.9s,baz=76,slow=5.6,SNR=8.5 | | | | | | | |
| **KHC** | **Kasperske Hory** | **81.80** | **319** | *eP* | | **P** | **02 00 45.4** | **+1.9** |
| KHC | | | | *epP* | | **pP** | **02 00 58.3** | **+0.6** |
| **HFS** | **Hagfors** | **82.59** | **330** | LR | | LR | 02 39 55.7 | |
| | comp=Z,25nm,18.2s,baz=59,slow=37 | | | | | | | |
| **WTTA** | **Wattenberg** | **83.00** | **317** | *eP* | | pP | 02 01 04.2 | 0.0 |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **WATA** | **Walderalm** | **83.05** | **317** | *eP* | | pP | 02 01 02.9 | -1.5 |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **RETA** | **Reutte** | **83.60** | **317** | *eP* | | pP | 02 01 08.4 | +1.2 |
| **FETA** | **Feichten** | **83.61** | **317** | *eP* | | pP | 02 01 07.7 | +0.3 |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **NOA** | **NORSAR Array B** | **83.88** | **331** | LR | | LR | 02 42 35.2 | |
| | comp=Z,11nm,18.5s,baz=270,slow=39 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **84.05** | **348** | LR | | LR | 02 45 45.9 | |
| | comp=Z,48nm,18.6s,baz=256,slow=41 | | | | | | | |
| **DAVA** | **Damuels** | **84.20** | **317** | *eP* | | pP | 02 01 11.1 | +0.8 |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **92.77** | **283** | P | | **P** | **02 01 37.7** | **+0.1** |
| | comp=Z,0.5nm,1.0s,baz=151,slow=2.9,SNR=2.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **92.77** | **283** | P | | **P** | **02 01 36.9** | **-0.6** |
| TORD | | | | IAmb | | IAmb | 02 01 55.1 | |
| | comp=Z,2.6nm,1.4s | | | | | | | |
| **ESDC** | **Sonseca Array** | **94.80** | **310** | P | | **P** | **02 01 48.8** | **+2.4** |
| | comp=Z,1.3nm,1.1s,baz=101,slow=6.7,SNR=2.8 | | | | | | | |
| ESDC | | | | LR | | LR | 02 50 32.7 | |
| | comp=Z,23nm,18.6s,baz=334,slow=39 | | | | | | | |
| **DBIC** | **Dimbokro** | **99.75** | **277** | LR | | LR | 02 46 45.6 | |
| | comp=Z,34nm,18.2s,baz=102,slow=35 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **127.65** | **33** | PKP | | **PKiKP** | **02 07 30.7** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=286,slow=2.6,SNR=3.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **142.29** | **28** | PKhKP | | PKPpre | 02 07 51.6 | |
| | comp=Z,0.1nm,0.6s,baz=270,slow=0.1,SNR=2.3 | | | | | | | |
| TXAR | | | | PKP | | **PKPdf** | **02 07 58.0** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=282,slow=1.2,SNR=4.8 | | | | | | | |

*IDC **25** 01:52:55.0±1.9,24.29S×116.33W,h0km,mb3.9/4, mb1 4.2/4,mb1mx3.9/28,mbtmp3.9/4,MS3.4/5,Ms1 3.4/5, ms1mx3.1/57,Error ellipse: s-maj=102.5km s-min=54.3km az=112.0*

**ISC 25 01:52:55.8±2.0,24.5S±0.5×116.6W±0.6,h10km,n22, σ1§10/8,mb3.9/4,MS3.4/4,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RPN** | **Rapa Nui** | **7.02** | **114** | LR | | LR | | 01 56 30.1 | |
| | comp=Z,399nm,18.2s,baz=311,slow=31 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **33.95** | **114** | T | | T | | 02 34 51.8 | |
| | baz=280,slow=75,SNR=137 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **33.96** | **114** | T | | T | | 02 34 53.0 | |
| | baz=280,slow=75,SNR=216 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **33.97** | **114** | T | | T | | 02 34 52.9 | |
| | baz=280,slow=75,SNR=262 | | | | | | | | |
| **NNA** | **Nana** | **39.56** | **79** | LR | | LR | | 02 11 56.0 | |
| | comp=Z,65nm,18.2s,baz=234,slow=29 | | | | | | | | |
| **ATAH** | **Atahualpa** | **40.37** | **71** | LR | | LR | | 02 12 32.9 | |
| | comp=Z,31nm,20.9s,baz=203,slow=29 | | | | | | | | |
| **PLCA** | **Paso Flores** | **41.51** | **124** | LR | | LR | | 02 13 10.7 | |
| | comp=Z,77nm,19.3s,baz=251,slow=29 | | | | | | | | |
| **LVC** | **Limon Verde** | **43.55** | **98** | LR | | LR | | 02 13 08.2 | |
| | comp=Z,34nm,19.1s,baz=267,slow=28 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.60** | **358** | P | | **P** | | **02 03 21.1** | **+0.7** |
| | 0.5nm,0.8s,baz=186,slow=7.2,SNR=2.8 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **67.22** | **6** | P | | **P** | | **02 03 49.0** | **-1.4** |
| | 0.4nm,0.6s,baz=179,slow=6.5,SNR=6.2 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 86.08** | **292** | | T | | T | | 03 41 27.7 | |
| | baz=117,slow=75,SNR=61 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 86.09** | **292** | | T | | T | | 03 41 28.8 | |
| | baz=117,slow=75,SNR=57 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 86.09** | **292** | | T | | T | | 03 41 29.3 | |
| | baz=117,slow=75,SNR=48 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 86.47** | **293** | | T | | T | | 03 41 55.2 | |
| | baz=113,slow=78,SNR=9.6 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 86.48** | **293** | | T | | T | | 03 41 56.8 | |
| | baz=113,slow=78,SNR=7.7 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 86.48** | **293** | | T | | T | | 03 41 57.2 | |
| | baz=113,slow=78,SNR=13 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.68** | **1** | P | | **P** | | **02 05 38.6** | **-0.7** |
| | 1.0nm,0.8s,baz=174,slow=5.4,SNR=21 | | | | | | | | |
| **SCHQ** | **Schefferville** | **89.73** | **26** | P | | **P** | | **02 05 55.5** | **+1.5** |
| | 2.5nm,0.9s,baz=175,slow=4.1,SNR=3.3 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.49** | **267** | PKPbc | | **PKPab** | | **02 12 39.1** | **0.0** |
| | 1.2nm,0.3s,baz=97,slow=3.9,SNR=1.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.50** | **337** | PKPbc | | **PKPbc** | | **02 12 37.1** | **+0.1** |
| | 1.0nm,0.6s,baz=18,slow=2.5,SNR=7.1 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.69** | **52** | PKPbc | | **PKPbc** | | **02 12 47.7** | **-0.9** |
| | 0.4nm,0.4s,baz=283,slow=7.2,SNR=3.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.11** | **331** | PKPbc | | **PKiKP** | | **02 12 54.2** | **+0.4** |
| | 0.5nm,0.7s,baz=63,slow=1.6,SNR=6.2 | | | | | | | | |

*IDC **25** 02:13:05.5±1.2,14.2S×166.68E,h0km,mb3.9/8, mb1 4.1/9,mb1mx3.9/52,mbtmp3.9/9,ML4.0/1,MS3.6/10, Ms1 3.6/10,ms1mx3.2/59,Error ellipse: s-maj=36.8km s-min=21.9km az=123.0*

**ISC 25 02:13:10.8±1.0,14.24S±0.09×166.7E±0.2,h35km,n19, σ1§15/15,mb3.9/7,MS3.7/7,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **7.79** | **182** | Pn | | **Pn** | | **02 15 00.7** | **-1.1** |
| | 2.2nm,0.3s,baz=189,slow=20,SNR=16 | | | | | | | | |
| DZM | | | | Sn | | **Sn** | | **02 16 30.9** | **+2.0** |
| | 1.4nm,0.3s,baz=133,slow=22,SNR=1.2 | | | | | | | | |
| DZM | | | | LR | | LR | | 02 17 48.3 | |
| | comp=Z,204nm,18.7s,baz=232,slow=36 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **7.79** | **182** | *e*Pn | | **Pn** | | **02 15 00.4** | **-1.4** |
| | 5.0nm,0.2s | | | | | | | | |
| **HNR** | **Honiara** | **8.13** | **305** | LR | | LR | | 02 17 45.2 | |
| | comp=Z,112nm,20.2s,baz=13,slow=34 | | | | | | | | |
| **MSVF** | **Nonsavu** | **11.48** | **109** | LR | | LR | | 02 19 27.0 | |
| | comp=Z,375nm,18.2s,baz=317,slow=33 | | | | | | | | |
| **CTA** | **Charters Tower** | **20.34** | **251** | P | | **P** | | **02 17 45.0** | **+0.8** |
| | 4.7nm,0.9s,baz=47,slow=19,SNR=3.2 | | | | | | | | |
| **STKA** | **Stephens Creek** | **28.87** | **228** | P | | **P** | | **02 19 06.2** | **0.0** |
| | 1.6nm,0.4s,baz=34,slow=8.3,SNR=6.2 | | | | | | | | |
| STKA | | | | LR | | LR | | 02 30 48.0 | |
| | comp=Z,172nm,18.5s,baz=27,slow=37 | | | | | | | | |
| **WRA** | **Warramunga Ar** | **31.38** | **255** | P | | **P** | | **02 19 27.2** | **-1.5** |
| | 0.5nm,0.8s,baz=86,slow=9.2,SNR=5.2 | | | | | | | | |
| WRA | | | | LR | | LR | | 02 31 41.5 | |
| | comp=Z,109nm,18.6s,baz=110,slow=36 | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.30** | **248** | P | | **P** | | **02 19 36.3** | **-0.5** |
| | 0.6nm,0.5s,baz=78,slow=9.1,SNR=12 | | | | | | | | |
| ASAR | | | | LR | | LR | | 02 31 55.3 | |
| | comp=Z,76nm,19.2s,baz=87,slow=35 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.53** | **259** | P | | **P** | | **02 20 38.6** | **0.0** |
| | 2.2nm,0.9s,baz=45,slow=5.6,SNR=2.6 | | | | | | | | |
| FITZ | | | | LR | | LR | | 02 36 49.7 | |
| | comp=Z,101nm,18.3s,baz=89,slow=36 | | | | | | | | |
| **BATI** | **Baumata** | **42.17** | **270** | LR | | LR | | 02 38 50.2 | |
| | comp=Z,74nm,19.2s,baz=58,slow=37 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **74.22** | **294** | P | | **P** | | **02 24 44.9** | **+0.2** |
| | 0.9nm,0.3s,baz=127,slow=15,SNR=1.6 | | | | | | | | |
| **SONM** | **Songino Array** | **81.76** | **324** | P | | **P** | | **02 25 27.4** | **+1.3** |
| | 0.2nm,0.5s,baz=113,slow=5.5,SNR=2.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.25** | **18** | P | | **P** | | **02 25 48.1** | **-0.3** |
| | 1.2nm,0.9s,baz=237,slow=5.1,SNR=6.3 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.40** | **49** | LR | | LR | | 02 59 03.9 | |
| | comp=Z,87nm,18.8s,baz=278,slow=32 | | | | | | | | |
| **ELK** | **Elko** | **90.40** | **48** | LR | | LR | | 03 01 10.7 | |
| | comp=Z,61nm,18.3s,baz=244,slow=32 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.64** | **345** | PKP | | **PKPdf** | | **02 31 56.4** | **0.0** |
| | 1.8nm,0.8s,baz=64,slow=2.1,SNR=1.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **125.06** | **338** | PKP | | **PKPdf** | | **02 32 05.7** | **-1.3** |
| | 1.6nm,0.9s,baz=95,slow=4.7,SNR=1.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **130.01** | **326** | PKP | | **PKPdf** | | **02 32 16.6** | **-0.2** |
| | 0.3nm,0.5s,baz=85,slow=1.9,SNR=1.8 | | | | | | | | |
| **KEST** | **Kesh** | **150.47** | **320** | PKPbc | | **PKiKP** | | **02 33 01.5** | **+1.5** |
| | 2.3nm,0.7s,baz=134,slow=0.3,SNR=4.7 | | | | | | | | |

*INET **25** 02:14:06.1±0.6,11.21N×87.56W,h15km±13km,MW3.9*
*IDC **25** 02:14:08.6±1.9,12.08N×86.88W,h0km,mb3.3/5, mb1 3.7/7,mb1mx3.5/49,mbtmp3.4/7,ML3.1/2,Error ellipse: s-maj=60.0km s-min=25.2km az=40.0*

**ISC 25 02:14:11.0±1.1,11.5N±0.1×87.30W±0.10,h35km,n16, σ1§22/17,mb3.3/5,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **COPN** | **Copaltepe** | **0.95** | **47** | *eP* | | **Pn** | | **02 14 29.2** | **+1.3** |
| **TEL3** | **Telica 3** | **1.13** | **23** | *eP* | | **Pn** | | **02 14 31.2** | **+0.8** |
| **CNGN** | **Cerro Negro** | **1.13** | **31** | *eP* | | **Pn** | | **02 14 31.4** | **+0.9** |
| **CRIN** | **San Cristobal** | **1.19** | **12** | *eP* | | **Pn** | | **02 14 32.1** | **+0.8** |
| **HUEN** | | **1.37** | **54** | *eP* | | **Pn** | | **02 14 34.9** | **+1.3** |
| **CSGN** | **Cosiguina Volc** | **1.46** | **350** | *eP* | | **Pn** | | **02 14 34.9** | **-0.1** |
| **BOAB** | **BOACO BROADBAN** | **1.84** | **60** | *eP* | | **Pn** | | **02 14 41.2** | **+1.1** |
| **MATN** | **Matagalpa** | **1.94** | **44** | *eP* | | **Pn** | | **02 14 42.6** | **+1.0** |
| **ACON** | **Acoyapa** | **2.13** | **78** | *eP* | | **Pn** | | **02 14 43.8** | **-0.3** |
| **JTS** | **Las Juntas de** | **2.61** | **118** | Pn | | **Pn** | | **02 14 51.8** | **+1.1** |
| | 1.5nm,0.3s,baz=172,slow=20,SNR=6.6 | | | | | | | | |
| JTS | | | | Sn | | **Sn** | | **02 15 21.5** | **+0.2** |
| | 16nm,0.3s,baz=341,slow=21,SNR=12 | | | | | | | | |
| **CMIG** | **Matias Romero** | **9.20** | **308** | Pn | | **Pn** | | **02 16 22.2** | **+0.9** |
| | 0.5nm,0.3s,baz=105,slow=7.4,SNR=4.8 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.38** | **322** | P | | **P** | | **02 19 17.4** | **+0.6** |
| | 0.6nm,0.6s,baz=135,slow=10,SNR=9.0 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **36.65** | **332** | P | | **P** | | **02 21 14.2** | **-0.3** |
| | 0.2nm,0.6s,baz=135,slow=14,SNR=2.4 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.49** | **319** | P | | **P** | | **02 21 32.5** | **+2.3** |
| | 0.2nm,0.5s,baz=137,slow=11,SNR=1.7 | | | | | | | | |
| **SCHQ** | **Schefferville** | **46.12** | **16** | P | | **P** | | **02 22 29.9** | **-1.9** |
| | 0.9nm,0.5s,baz=214,slow=6.2,SNR=6.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.54** | **345** | P | | **P** | | **02 23 33.9** | **-1.4** |
| | 0.2nm,0.6s,baz=137,slow=7.8,SNR=4.1 | | | | | | | | |

**NEIC 25 02:39:39.5±0.8,37.05N±0.01×97.91W±0.03,h8km±4km, Error ellipse: s-maj=3.4km s-min=0.4km az=119.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.13** | **96** | Pg | | Pg | | 02 40 00.6 | -0.6 |
| **R32A** | **Long Quarter,** | **1.52** | **336** | | | Pn | | 02 40 07.2 | +0.2 |
| **OKCFA** | **Oklahoma City** | **1.67** | **167** | IAmb_Lg | | | | 02 40 35.1 | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.68** | **167** | | | Pn | | 02 40 09.4 | +0.2 |
| **FNO** | **Franklin** | **1.83** | **167** | | | Pb | | 02 40 12.6 | -0.7 |
| **TUL1** | **Leonard** | **2.05** | **123** | | | Pn | | 02 40 15.1 | +0.8 |
| TUL1 | | | | IAmb_Lg | | | | 02 40 48.7 | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **W35A** | **Tecumseh** | **2.07** | **156** | | | Pn | | 02 40 15.2 | +0.6 |
| **CBKS** | **Cedar Bluff** | **2.28** | **321** | Pn | | Pn | | 02 40 17.4 | -0.1 |
| CBKS | | | | IAmb_Lg | | | | 02 40 57.1 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.44** | **178** | Pn | | Pn | | 02 40 19.1 | -0.6 |
| **X37A** | **Clayton** | **3.20** | **139** | Pn | | Pn | | 02 40 32.1 | +1.9 |
| **HHAR** | **Hobbs** | **3.28** | **102** | IAmb_Lg | | | | 02 41 24.6 | |
| | comp=Z,8.4nm,1.0s | | | | | | | | |
| **S39A** | **Bolivar** | **3.71** | **79** | Pn | | Pn | | 02 40 37.7 | +0.4 |
| **AMTX** | **Amarillo** | **3.74** | **236** | Pn | | Pn | | 02 40 38.7 | +1.0 |
| AMTX | | | | IAmb_Lg | | | | 02 41 45.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **U40A** | **Yellville** | **4.12** | **98** | Pn | | Pn | | 02 40 43.0 | +0.1 |
| **N35A** | **Tabor** | **4.20** | **24** | Pn | | Pn | | 02 40 42.0 | -2.0 |
| **P38A** | **Dawn** | **4.30** | **52** | IAmb_Lg | | | | 02 42 04.0 | |
| | comp=Z,8.9nm,1.2s | | | | | | | | |
| **MIAR** | **Mount Ida** | **4.32** | **124** | Pn | | Pn | | 02 40 46.1 | +0.6 |
| **X40A** | **Basin Creek Fa** | **4.85** | **120** | IAmb_Lg | | | | 02 42 23.6 | |
| | comp=Z,15nm,1.3s | | | | | | | | |

*IDC **25** 02:40:41.0±1.9,4.85S×128.46E,h0km,mb3.8/1, mb1 3.7/3,mb1mx3.4/35,mbtmp3.5/3,ML3.5/2,MS3.6/2, Ms1 3.6/2,ms1mx2.6/69,Error ellipse: s-maj=134.0km s-min=28.2km az=67.0*

**ISC 25 02:40:42.7±1.5,4.9S±0.1×128.4E±0.1,h10km,n9,σ1§16/7, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **6.32** | **220** | P | | P | | **02 42 43.0** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **13.38** | **191** | P | | **P** | | **02 44 04.0** | **+1.6** |
| **WRAB** | **Tennant Creek** | **16.01** | **159** | P | | **P** | | **02 44 31.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **16.02** | **159** | Pn | | **P** | | **02 44 30.5** | **-1.3** |
| | 0.2nm,0.3s,baz=339,slow=11,SNR=12 | | | | | | | | |
| WRA | | | | Sn | | Sn | | 02 47 13.2 | -13 |
| | 0.1nm,0.3s,baz=338,slow=19,SNR=4.2 | | | | | | | | |
| **COEN** | **Coen** | **17.11** | **123** | P | | **P** | | **02 44 44.1** | **+0.2** |
| | 11nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **19.38** | **165** | P | | **P** | | **02 45 08.3** | **-0.6** |
| | 0.2nm,0.3s,baz=344,slow=12,SNR=7.5 | | | | | | | | |
| **PALK** | **Pallekele** | **49.12** | **284** | LR | | LR | | 03 09 58.9 | |
| | comp=Z,27nm,20.3s,baz=262,slow=36 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.62** | **327** | P | | **P** | | **02 51 26.9** | **-0.2** |
| | 0.5nm,0.4s,baz=116,slow=8.2,SNR=15 | | | | | | | | |
| **RAR** | **Rarotonga** | **71.30** | **111** | LR | | LR | | 03 20 00.1 | |
| | comp=Z,104nm,21.9s,baz=198,slow=33 | | | | | | | | |

*NIED **25** 02:43:53.0,38.17N×141.67E,h50km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr3.69; Mθθ-0.11; Mϕϕ-3.58; Mrθ1.23; Mrϕ-0.20; Mθϕ3.77; Fault plane solution: M₀5.38000×10¹⁴ NP1:ϕs14.00000°, δ69.00000°,λ,97.00000°. NP2:ϕs174.00000°,δ22.00000°, λ,72.00000°.*
*JMA **25** 02:43:52.9±0.1,38.17N×141.67E,h50km±1km,M3.9 Broadband fault plane solution: P waves. NP1: ϕs202.00000°,δ23.00000°,λ93.00000°. NP2:ϕs19.00000°, δ67.00000°,λ,89.00000°. Principal axes: T Plg68.0000°, Azm287.0000°; N Plg1.0000°, Azm20.0000°; P Plg22.0000°, Azm110.0000°;*
*JMA Felt II J1.*
*IDC **25** 02:43:53.8±2.8,38.19N×141.72E,h65km±26km,mb3.4/13, mb1 3.6/16,mb1mx3.5/35,mbtmp3.7/16,ML3.0/3,MS2.9/4, Ms1 3.0/4,ms1mx2.6/46 Error ellipse: s-maj=21.1km s-min=15.6km az=92.0*

**ISC 25 02:43:51.7±0.8,38.16N±0.04×141.81E±0.07,h47km±6km, n38,σ1§33/47,mb3.8/13,10D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|

**ISC 25 03:16:58.8±0.5, 56°52S±0°07×27°20W±0°09, h101km, n28, σ1§74/32, mb4.3/8, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **5.74** | **289** | Pn | **Pn** | **03 18 23.1** | **+1.6** |
| HOPE | | | | Sn | **Sn** | **03 19 23.2** | **-2.7** |
| **ORCD** | **Orcadas** | **10.06** | **238** | Pn | **Pn** | **03 19 18.7** | **-1.3** |
| **VNA1** | **Neumayer--Stat** | **16.36** | **157** | P | **P** | **03 20 45.3** | **+2.2** |
| **VNA3** | **Neumayer Olymp** | **16.55** | **160** | P | **P** | **03 20 47.3** | **+2.1** |
| VNA3 | | | | S | **Sn** | **03 23 44.5** | **-3.2** |
| **VNA2** | **Neumayer--Watz** | **16.76** | **157** | P | **P** | **03 20 49.1** | **+1.6** |
| | baz=313,slow=12 | | | | | | |
| VNA2 | | | | S | **Sn** | **03 23 46.9** | **-5.8** |
| **SNAA** | **Sanae** | **18.32** | **155** | P | **Pn** | **03 21 06.6** | **+0.7** |
| **SNAA** | **Sanae** | **18.32** | **155** | P | **Pn** | **03 21 06.3** | **+0.5** |
| **BELA** | **Belgrano 2** | **21.61** | **184** | P | **P** | **03 21 41.6** | **+1.6** |
| BELA | | | | IAmb | IAmb | 03 21 44.9 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **33.73** | **180** | P | **P** | **03 23 32.3** | **+2.1** |
| QSPA | | | | IAmb | IAmb | 03 23 34.0 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ITQB** | **Itaqui** | **33.89** | **310** | P | **P** | **03 23 31.1** | **-0.5** |
| ITQB | | | | IAmb | IAmb | 03 23 33.7 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **BOSA** | **Boshof** | **46.09** | **75** | P | **P** | **03 25 12.2** | **-0.5** |
| BOSA | | | | IAmb | IAmb | 03 25 30.6 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **46.10** | **183** | P | **P** | **03 25 13.3** | **+1.3** |
| **LPAZ** | **La Paz** | **50.64** | **306** | P | **P** | **03 25 49.0** | **+0.8** |
| | comp=Z,1.3nm,0.4s,baz=136,slow=3.4,SNR=5.8 | | | | | | |
| **LPAZ** | **La Paz** | **50.64** | **306** | P | **P** | **03 25 48.7** | **+0.5** |
| LPAZ | | | | IAmb | IAmb | 03 25 49.4 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **65.60** | **25** | P | **P** | **03 27 30.4** | **-1.3** |
| | comp=Z,4.5nm,1.1s,baz=256,slow=8.3,SNR=3.0 | | | | | | |
| **DBIC** | **Dimbokro** | **65.60** | **25** | P | **P** | **03 27 29.6** | **-2.0** |
| DBIC | | | | IAmb | IAmb | 03 27 32.1 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **MCQ** | **Macquarie Isla** | **69.23** | **184** | P | **P** | **03 27 54.5** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** | **73.47** | **29** | P | **P** | **03 28 19.9** | **-0.1** |
| | comp=Z,1.0nm,0.4s,baz=201,slow=6.2,SNR=24 | | | | | | |
| TORD | | | | pP | **pwP** | **03 28 48.1** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=201,slow=6.2,SNR=6.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.47** | **29** | P | **P** | **03 28 19.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **98.55** | **163** | P | **P** | **03 30 26.1** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=190,slow=4.2,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **102.26** | **162** | P | **Pdif** | **03 30 42.6** | **+0.1** |
| | comp=Z,0.1nm,0.5s,baz=197,slow=4.4,SNR=1.1 | | | | | | |
| **FINES** | **FINESS Array B** | **124.80** | **28** | PKP | **PKPdf** | **03 35 44.6** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=90,slow=0.4,SNR=9.7 | | | | | | |
| **FINES** | **FINESS Array B** | **124.80** | **28** | | **PKPdf** | **03 35 43.8** | **-1.3** |
| **ARCES** | **ARCESS Array B** | **131.38** | **22** | PKP | **PKPdf** | **03 35 56.9** | **-0.6** |
| | comp=Z,2.1nm,0.8s,baz=215,slow=3.8,SNR=5.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **136.51** | **318** | PKP | **PKPdf** | **03 36 06.5** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=122,slow=2.4,SNR=4.6 | | | | | | |
| **INK** | **Inuvik** | **146.16** | **320** | PKPbc | **PKPbc** | **03 36 25.4** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=24,slow=1.5,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **150.42** | **311** | PKPbc | **PKPbc** | **03 36 36.8** | **-0.1** |
| | comp=Z,1.5nm,0.8s,baz=117,slow=1.9,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **150.76** | **87** | PKPbc | **PKPbc** | **03 36 38.2** | **-0.1** |
| | comp=Z,1.4nm,0.5s,baz=223,slow=3.8,SNR=17 | | | | | | |

**IDC 25 03:18:04.9±14.0, 11°18S×165°88E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/33, mbtmp3.5/3, Error ellipse: s-maj=460.5km s-min=57.5km az=125.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **31.56** | **250** | P | P | 03 24 29.4 | -0.1 |
| | 0.1nm,0.4s,baz=83,slow=7.9,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.85** | **244** | P | P | 03 24 40.8 | 0.0 |
| | 0.5nm,0.7s,baz=69,slow=9.9,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **93.70** | **317** | P | P | 03 31 23.6 | -0.1 |
| | 0.2nm,0.4s,baz=90,slow=5.6,SNR=4.5 | | | | | | |

**IDC 25 03:18:50.0±2.5, 27°74N×85°80E, h0km, mb3.3/4, mb1 3.4/5, mb1mx3.2/61, mbtmp3.3/5, ML3.3/1, MS3.4/1, Ms1 3.4/1, ms1mx2.4/57, Error ellipse: s-maj=93.1km s-min=24.9km az=71.0, Nepal**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **19.22** | **353** | P | Pn | 03 23 16.1 | -0.4 |
| | 0.1nm,0.3s,baz=171,slow=10,SNR=7.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.51** | **348** | P | P | 03 24 00.9 | -0.6 |
| | 0.3nm,0.7s,baz=168,slow=9.8,SNR=1.4 | | | | | | |
| **SONM** | **Songino Array** | **25.69** | **33** | P | P | 03 24 22.2 | +0.4 |
| | 0.4nm,0.7s,baz=210,slow=11,SNR=3.1 | | | | | | |
| **BATI** | **Baumata** | **52.60** | **130** | LR | LR | 03 52 21.9 | |
| | comp=Z,37nm,21.1s,baz=268,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.73** | **130** | P | P | 03 29 43.1 | -0.1 |
| | 0.4nm,0.8s,baz=324,slow=6.4,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **69.03** | **133** | P | P | 03 29 57.7 | 0.0 |
| | 0.3nm,0.5s,baz=312,slow=6.9,SNR=2.0 | | | | | | |

*IDC* ***25*** *03:26:57.0±1.7, 3°70N×92°35E, h0km, mb3.5/6, mb1 3.8/9, mb1mx3.5/55, mbtmp3.6/9, ML3.9/3, MS3.0/5, Ms1 3.0/5, ms1mx2.7/60, Error ellipse: s-maj=44.4km s-min=25.3km az=37.0*

*NEIC* ***25*** *03:26:59.8±1.7, 3°70N±0°09×92°41E±0°10, h25km±6km, mb4.4/3, Error ellipse: s-maj=14.4km s-min=12.1km az=77.0*

**ISC 25 03:26:59.7±0.9, 3°7N±0°1×92°46E±0°08, h24km, n24, σ1§16/20, mb3.6/8, MS3.0/3, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LHMI** | **Lhok Sumawe** | **4.72** | **71** | Pn | **Pn** | **03 28 08.4** | **-1.0** |
| **GSI** | **Gunungsitoli** | **5.64** | **115** | Pn | **Pn** | **03 28 21.5** | **-0.5** |
| **PSI** | **Prapat** | **6.51** | **98** | Pn | **Pn** | **03 28 34.6** | **+0.4** |
| | 1.6nm,0.3s,baz=308,slow=12,SNR=2.7 | | | | | | |
| PSI | | | | Sn | **Sn** | **03 29 46.1** | **-1.8** |
| | 1.5nm,0.3s,baz=179,slow=21,SNR=1.9 | | | | | | |
| **RPSI** | **Rantau Prapat** | **6.53** | **99** | | **Pn** | **03 28 34.6** | **+0.3** |
| **KULM** | **Kulim** | **8.31** | **79** | Pn | **Pn** | **03 28 58.6** | **-0.2** |
| **PALK** | **Pallekele** | **12.23** | **287** | Pn | **Pn** | **03 29 52.2** | **-0.3** |
| | 0.5nm,0.3s,baz=275,slow=21,SNR=1.5 | | | | | | |
| PALK | | | | Sn | Sn | 03 31 55.3 | -13 |
| | 1.5nm,0.3s,baz=316,slow=19,SNR=5.8 | | | | | | |
| PALK | | | | LR | LR | 03 33 49.5 | |
| | comp=Z,42nm,19.2s,baz=224,slow=34 | | | | | | |
| **PALK** | **Pallekele** | **12.23** | **287** | Pn | **Pn** | **03 29 50.4** | **-2.1** |
| **CMAR** | **Chiang Mai Arr** | **15.97** | **23** | Pn | **Pn** | **03 30 43.4** | **+0.4** |
| | 0.3nm,0.3s,baz=216,slow=15,SNR=6.8 | | | | | | |
| CMAR | | | | LR | LR | 03 37 06.9 | |
| | comp=Z,26nm,18.2s,baz=200,slow=38 | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.89** | **241** | T | T | 03 57 34.8 | |
| | baz=61,slow=75,SNR=7.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **22.89** | **240** | T | T | 03 57 34.8 | |
| | baz=61,slow=75,SNR=7.8 | | | | | | |
| **H08S1** | **Diego Carcia H** | **22.91** | **240** | T | T | 03 57 34.8 | |
| | baz=61,slow=75,SNR=5.6 | | | | | | |
| **AAK** | **Ala-Archa** | **41.94** | **340** | LR | LR | 03 52 43.8 | |
| | comp=Z,41nm,20.5s,baz=92,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.82** | **350** | P | **P** | **03 35 04.2** | **+0.5** |
| | 0.3nm,0.6s,baz=167,slow=8.1,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.82** | **350** | P | **P** | **03 35 03.5** | **-0.3** |
| **SONM** | **Songino Array** | **45.57** | **13** | P | **P** | **03 35 20.4** | **+2.5** |
| | 0.4nm,0.6s,baz=200,slow=8.6,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **45.57** | **13** | P | **P** | **03 35 17.9** | **0.0** |
| SONM | | | | IAmb | IAmb | 03 35 30.6 | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.68** | **39** | P | **P** | **03 35 26.0** | **-0.5** |
| **KSRS** | **Korea Array** | **46.71** | **39** | LR | LR | 03 55 29.5 | |
| | comp=Z,16nm,21.1s,baz=90,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.37** | **121** | P | **P** | **03 35 34.4** | **+2.2** |
| | comp=Z,0.3nm,0.8s,baz=299,slow=8.5,SNR=2.5 | | | | | | |
| **WB2** | **Warramunga Arr** | **47.38** | **121** | P | **P** | **03 35 32.2** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 03 35 51.9 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.21** | **348** | P | **P** | **03 35 39.4** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=173,slow=7.4,SNR=1.9 | | | | | | |
| **KURK** | **Kurchatov** | **48.28** | **348** | P | **P** | **03 35 38.1** | **-0.7** |
| KURK | | | | IAmb | IAmb | 03 35 50.7 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.48** | **354** | P | **P** | **03 35 55.5** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=218,slow=28,SNR=2.2 | | | | | | |
| ZALV | | | | LR | LR | 03 59 19.0 | |
| | comp=Z,17nm,20.4s,baz=78,slow=38 | | | | | | |
| **GERES** | **GERESS Array B** | **79.82** | **319** | P | **P** | **03 39 06.4** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=74,slow=6.0,SNR=4.2 | | | | | | |

*IDC* ***25*** *03:51:10.8±1.1, 17°58S×178°71W, h604km±11km, mb3.5/10, mb1 3.7/12, mb1mx3.4/39, mbtmp4.4/12, Error ellipse: s-maj=29.3km s-min=14.3km az=147.0*

*NEIC* ***25*** *03:51:11.7±0.6, 17°6S±0°1×178°8W±0°2, h610km±10km, mb4.0/13, Error ellipse: s-maj=29.0km s-min=14.3km az=112.0*

**ISC 25 03:51:10.6±0.7, 17°6S±0°2×178°7W±0°1, h600km, n29, σ0§70/31, mb4.0/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.12** | **267** | P | **P** | **03 52 31.2** | **+0.6** |
| | 9.9nm,0.3s,baz=143,slow=4.2,SNR=33 | | | | | | |
| MSVF | | | | S | **S** | **03 53 36.2** | **+0.5** |
| | 1.0nm,0.3s,baz=141,slow=23,SNR=1.0 | | | | | | |
| **MSVF** | **Nonsavu** | **3.12** | **267** | P | **P** | **03 52 31.4** | **+0.9** |
| MSVF | | | | | **S** | **03 53 35.3** | **-0.4** |
| **DZM** | **Mont Dzumac** | **14.69** | **250** | P | **P** | **03 54 16.4** | **+0.4** |
| | 0.4nm,0.3s,baz=84,slow=19,SNR=1.3 | | | | | | |
| **URZ** | **Urewera** | **20.91** | **189** | P | **P** | **03 55 13.2** | **+0.8** |
| | 2.3nm,0.3s,baz=270,slow=2.0,SNR=1.6 | | | | | | |
| **ARMA** | **Armidale** | **29.88** | **239** | P | **P** | **03 56 30.5** | **-0.9** |
| ARMA | | | | IAmb | IAmb | 03 56 39.5 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.17** | **230** | P | **P** | **03 57 31.0** | **-1.2** |
| TOO | | | | IAmb | IAmb | 03 57 31.9 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **03 57 43.1** | **-0.4** |
| | comp=Z,5.4nm,0.7s,baz=58,slow=6.4,SNR=9.9 | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **03 57 43.2** | **-0.4** |
| **JAY** | **Jayapura** | **42.58** | **286** | P | **P** | **03 58 16.7** | **+1.0** |
| | comp=Z,15nm,0.6s,baz=72,slow=2.7,SNR=4.2 | | | | | | |
| **WB0** | **Warramunga Arr** | **44.40** | **260** | P | **P** | **03 58 28.8** | **-0.9** |
| **WB2** | **Warramunga Arr** | **44.43** | **259** | | **P** | **03 58 28.6** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 03 58 29.9 | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.44** | **259** | P | **P** | **03 58 29.1** | **-0.8** |
| | comp=Z,4.6nm,0.5s,baz=96,slow=7.2,SNR=174 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.44** | **259** | | **P** | **03 58 29.0** | **-0.9** |
| **AS31** | **Alice Springs** | **44.63** | **254** | | **P** | **03 58 30.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.63** | **254** | P | **P** | **03 58 30.9** | **-0.5** |
| | comp=Z,26nm,0.6s,baz=87,slow=8.6,SNR=276 | | | | | | |
| **ASAR** | **Alice Springs** | **44.63** | **254** | | **P** | **03 58 30.4** | **-1.1** |
| **CASY** | **Casey** | **66.31** | **205** | P | **P** | **04 01 00.8** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **79.38** | **44** | P | **P** | **04 02 15.9** | **+0.1** |
| | comp=Z,1.2nm,0.7s,baz=224,slow=9.1,SNR=12 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.38** | **44** | P | **P** | **04 02 16.1** | **+0.3** |
| **MOD** | **Modoc Plateau** | **80.01** | **40** | P | **P** | **04 02 19.1** | **+0.1** |
| MOD | | | | IAmb | IAmb | 04 02 20.1 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **PINE** | **Pine Mountain** | **80.71** | **38** | P | **P** | **04 02 23.5** | **+0.9** |
| PINE | | | | IAmb | IAmb | 04 02 24.9 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **I07A** | **Izee** | **81.73** | **39** | P | **P** | **04 02 28.2** | **+0.5** |
| I07A | | | | IAmb | IAmb | 04 02 28.6 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **F10A** | **Beach Ranch, E** | **84.11** | **38** | P | **P** | **04 02 39.6** | **+0.1** |
| F10A | | | | IAmb | IAmb | 04 02 40.7 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **85.65** | **13** | P | **P** | **04 02 45.9** | **-0.5** |
| | comp=Z,0.6nm,0.4s,baz=222,slow=5.0,SNR=15 | | | | | | |
| **ILAR** | **Eielson Array** | **85.65** | **13** | P | **P** | **04 02 46.2** | **-0.2** |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | **P** | **04 02 49.1** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=219,slow=6.6,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | **P** | **04 02 49.3** | **+0.1** |
| **PDAR** | **Pinedale Array** | **87.30** | **44** | P | **P** | **04 02 54.7** | **-0.3** |
| | comp=Z,0.9nm,0.6s,baz=215,slow=4.7,SNR=9.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.16** | **25** | P | **P** | **04 03 25.2** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=246,slow=4.5,SNR=2.5 | | | | | | |

*IDC* ***25*** *04:04:02.7±0.7, 3°50S×68°34E, h0km, mb4.1/15, mb1 4.2/15, mb1mx3.9/62, mbtmp4.1/15, MS3.5/20, Ms1 3.5/20, ms1mx3.2/81, Error ellipse: s-maj=19.9km s-min=19.2km az=13.0*

*NEIC* ***25*** *04:04:05.1±2.1, 3°5S±0°1×68°3E±0°1, h12km±5km, mb4.3/14, Error ellipse: s-maj=19.2km s-min=17.3km az=50.0*

**ISC 25 04:04:04.5±0.6, 3°5S±0°1×68°3E±0°1, h12km, n52, σ1§11/39, mb4.2/22, MS3.5/19, Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DGAR** | **Diego Garcia** | **5.66** | **133** | Pn | **Pn** | **04 05 28.2** | **-0.4** |
| **PALK** | **Pallekele** | **16.40** | **49** | LR | LR | 04 12 45.3 | |
| | comp=Z,231nm,19.8s,baz=340,slow=32 | | | | | | |
| **WSAR** | **Wadi Sarin** | **28.23** | **341** | LR | LR | 04 19 06.3 | |
| | comp=Z,76nm,18.8s,baz=172,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **31.09** | **274** | LR | LR | 04 21 00.9 | |
| | comp=Z,47nm,18.9s,baz=61,slow=33 | | | | | | |
| **PSI** | **Prapat** | **31.26** | **79** | LR | LR | 04 21 20.1 | |
| | comp=Z,95nm,18.1s,baz=216,slow=33 | | | | | | |
| **SHL** | **Shillong** | **36.89** | **37** | P | **P** | **04 11 13.3** | **-0.1** |
| SHL | | | | IAmb | IAmb | 04 11 14.4 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.28** | **53** | P | **P** | **04 11 17.6** | **+0.9** |
| | comp=Z,1.2nm,0.3s,baz=245,slow=11,SNR=7.0 | | | | | | |
| CMAR | | | | LR | LR | 04 24 33.7 | |
| | comp=Z,40nm,21.8s,baz=250,slow=33 | | | | | | |
| **MBAR** | **Mbarara** | **37.63** | **274** | LR | LR | 04 26 30.8 | |
| | comp=Z,31nm,18.9s,baz=186,slow=36 | | | | | | |
| **LEM** | **Lembang** | **39.30** | **96** | LR | LR | 04 26 47.9 | |
| | comp=Z,43nm,18.7s,baz=231,slow=35 | | | | | | |
| **LSZ** | **Lusaka** | **41.16** | **251** | P | **P** | **04 11 50.7** | **+1.4** |
| | comp=Z,1.1nm,0.3s,baz=61,slow=6.4,SNR=4.9 | | | | | | |
| LSZ | | | | LR | LR | 04 26 20.7 | |
| | comp=Z,107nm,18.1s,baz=108,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **41.16** | **251** | P | **P** | **04 11 48.6** | **-0.7** |
| **GEYT** | **Alibeck** | **42.32** | **348** | LR | LR | 04 28 19.9 | |
| | comp=Z,77nm,21.6s,baz=155,slow=34 | | | | | | |
| **KSH** | **Kashi** | **43.42** | **9** | P | **P** | **04 12 05.4** | **-2.0** |
| KSH | | | | sP | pwP | 04 12 12.3 | -1.7 |
| KSH | | | | PP | **PcP** | **04 13 52.9** | **-2.8** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **46.26** | **238** | LR | LR | 04 29 15.1 | |
| | comp=Z,84nm,18.4s,baz=79,slow=33 | | | | | | |
| **AAK** | **Ala-Archa** | **46.30** | **6** | P | **P** | **04 12 31.0** | **+0.6** |
| | comp=Z,1.6nm,0.7s,baz=206,slow=12,SNR=5.7 | | | | | | |
| AAK | | | | LR | LR | 04 30 27.7 | |
| | comp=Z,25nm,19.2s,baz=128,slow=34 | | | | | | |
| **AAK** | **Ala-Archa** | **46.30** | **6** | P | **P** | **04 12 30.1** | **-0.2** |
| AAK | | | | IAmb | IAmb | 04 12 41.3 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **GOMU** | **GeErMu** | **46.66** | **30** | P | **P** | **04 12 36.9** | **+3.3** |
| GOMU | | | | pP | pwP | 04 12 41.8 | +1.6 |
| GOMU | | | | sP | sP | 04 12 46.6 | +8.7 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,170nm,5.0s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **47.85** | **322** | LR | LR | 04 30 43.7 | |
| | comp=Z,32nm,19.8s,baz=188,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **47.88** | **234** | P | **P** | **04 12 44.1** | **+1.2** |
| | comp=Z,3.6nm,1.0s,baz=40,slow=4.8,SNR=3.3 | | | | | | |
| BOSA | | | | LR | LR | 04 30 53.1 | |
| | comp=Z,50nm,18.1s,baz=30,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **47.88** | **234** | P | **P** | **04 12 44.1** | **+1.2** |
| **KAPI** | **Kappang** | **51.34** | **94** | LR | LR | 04 34 20.7 | |
| | comp=Z,15nm,18.2s,baz=297,slow=35 | | | | | | |
| **MK31** | **Makanchi Array** | **51.62** | **12** | P | **P** | **04 13 10.5** | **-0.5** |
| **MKAR** | **Makanchi Array** | **51.62** | **12** | P | **P** | **04 13 10.1** | **-0.8** |
| | comp=Z,0.6nm,0.7s,baz=189,slow=6.8,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.62** | **12** | P | **P** | **04 13 09.5** | **-1.4** |
| **TSUM** | **Tsumeb** | **51.87** | **248** | LR | LR | 04 32 57.3 | |
| | comp=Z,27nm,18.1s,baz=136,slow=33 | | | | | | |
| **KBZ** | **Khabaz** | **52.30** | **337** | P | **P** | **04 13 16.4** | **+0.4** |
| | comp=Z,3.9nm,0.8s,baz=172,slow=6.5,SNR=13 | | | | | | |
| **SUR** | **Sutherland** | **52.88** | **231** | LR | LR | 04 32 25.6 | |
| | comp=Z,108nm,20.5s,baz=92,slow=32 | | | | | | |
| **ABKAR** | **Akbulak array** | **53.07** | **353** | P | **P** | **04 13 21.2** | **-0.4** |
| ABKAR | | | | IAmb | IAmb | 04 13 22.6 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **53.07** | **353** | P | **P** | **04 13 20.2** | **-1.4** |
| **BRTR** | **Keskin Array B** | **53.54** | **327** | P | **P** | **04 13 25.7** | **+0.3** |
| | comp=Z,1.3nm,0.9s,baz=143,slow=10,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **53.54** | **327** | P | **P** | **04 13 24.1** | **-1.4** |
| **AKTO** | **Aktyubinsk** | **54.48** | **352** | P | **P** | **04 13 31.7** | **-0.2** |
| | comp=Z,1.2nm,0.8s,baz=155,slow=7.2,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.66** | **8** | P | **P** | **04 13 32.4** | **-0.9** |
| | comp=Z,2.1nm,0.9s,baz=203,slow=7.5,SNR=12 | | | | | | |
| **KURK** | **Kurchatov** | **54.76** | **8** | P | **P** | **04 13 32.7** | **-1.2** |
| KURK | | | | IAmb | IAmb | 04 13 34.7 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.92** | **11** | P | **P** | **04 14 03.1** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 04 14 18.3 | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.92** | **11** | P | **P** | **04 14 02.4** | **-1.1** |
| | comp=Z,2.2nm,0.7s,baz=216,slow=7.3,SNR=12 | | | | | | |
| ZALV | | | | LR | LR | 04 39 10.7 | |
| | comp=Z,41nm,18.1s,baz=31,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **61.06** | **28** | P | **P** | **04 14 18.8** | **+0.3** |
| | comp=Z,4.8nm,0.8s,baz=221,slow=6.7,SNR=28 | | | | | | |
| **SONM** | **Songino Array** | **61.06** | **28** | P | **P** | **04 14 19.0** | **+0.5** |
| **VAE** | **Valguarnera** | **64.47** | **315** | LR | LR | 04 39 38.1 | |
| | comp=Z,39nm,20.7s,baz=245,slow=33 | | | | | | |
| **JOW** | **Kunigami** | **65.26** | **58** | LR | LR | 04 42 06.6 | |
| | comp=Z,46nm,19.8s,baz=307,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **66.28** | **114** | P | **P** | **04 14 53.0** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=293,slow=5.9,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.31** | **110** | P | **P** | **04 14 53.0** | **-0.5** |
| | comp=Z,1.7nm,0.9s,baz=284,slow=6.0,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.31** | **110** | P | **P** | **04 14 52.7** | **-0.8** |
| **WB2** | **Warramunga Arr** | **66.32** | **110** | P | **P** | **04 14 53.1** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 04 15 01.1 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **68.63** | **48** | LR | LR | 04 45 54.6 | |
| | comp=Z,33nm,20.0s,baz=95,slow=37 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **71.64** | **322** | P | **P** | **04 15 25.5** | **-0.9** |
| | comp=Z,2.6nm,0.8s,baz=116,slow=18,SNR=5.6 | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **73.08** | **321** | P | **P** | **04 15 34.8** | **-0.2** |
| **ESDC** | **Sonseca Array** | **78.70** | **311** | P | **P** | **04 16 07.2** | **+0.1** |
| | comp=Z,2.2nm,0.8s,baz=96,slow=3.7,SNR=8.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.70** | **311** | P | **P** | **04 16 07.6** | **+0.5** |
| ESDC | | | | IAmb | IAmb | 04 16 16.2 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| **YKA** | **Yellowknife Ar** | **121.14** | **2** | PKP | **PKPdf** | **04 22 56.0** | **-1.0** |
| | comp=Z,0.4nm,0.8s,baz=354,slow=2.2,SNR=6.6 | | | | | | |
| YKA | | | | PP | **PP** | **04 24 26.6** | **+0.4** |
| | comp=Z,0.5nm,1.1s,baz=345,slow=6.4,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **144.75** | **9** | PKP | PKPbc | 04 23 41.1 | +0.1 |
| | comp=Z,0.9nm,0.9s,baz=348,slow=1.6,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **153.23** | **344** | PKPbc | **PKiKP** | **04 24 03.3** | **-0.1** |
| | comp=Z,0.7nm,0.9s,baz=112,slow=1.3,SNR=5.6 | | | | | | |
| TXAR | | | | PKPab | **PKPab** | **04 24 14.8** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=48,slow=1.9,SNR=6.2 | | | | | | |

*IDC* ***25*** *04:13:22.4±1.9, 15°26S×173°56W, h0km, mb4.0/9, mb1 4.3/9, mb1mx4.0/36, mbtmp4.0/9, MS3.6/12, Ms1 3.6/12, ms1mx3.3/63, Error ellipse: s-maj=113.2km s-min=17.7km az=145.0*

**ISC 25 04:13:22.9±1.8, 15°3S±0°6×173°4W±0°4, h10km, n30, σ1§35/12, mb3.9/8, MS3.6/11, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **2.09** | **49** | Pn | **Pn** | **04 13 56.3** | **-1.8** |
| | 138nm,0.3s,baz=140,slow=0.6,SNR=100 | | | | | | |
| AFI | | | | Sn | Sn | 04 14 15.0 | -9.3 |
| | 538nm,0.3s,baz=232,slow=21,SNR=20 | | | | | | |
| AFI | | | | LR | LR | 04 14 40.1 | |
| | comp=Z,524nm,21.6s,baz=230,slow=36 | | | | | | |
| **MSVF** | **Nonsavu** | **8.55** | **252** | LR | LR | 04 18 29.4 | |
| | comp=Z,427nm,19.9s,baz=124,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.24** | **248** | P | Pn | 04 17 58.6 | -1.9 |
| | 5.3nm,0.9s,baz=66,slow=19,SNR=1.3 | | | | | | |
| DZM | | | | LR | LR | 04 24 31.9 | |
| | comp=Z,190nm,20.1s,baz=142,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.24** | **248** | eLR | LR | 04 22 59.2 | |
| | comp=Z,290nm,25.2s | | | | | | |
| **PAE** | **Paea** | **22.95** | **99** | *e*T | T | 04 41 53.1 | |
| | 1.1nm,0.2s | | | | | | |
| **TBI** | **Tubuai** | **23.94** | **113** | *e*T | T | 04 42 59.2 | |
| | 3.5nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **24.36** | **198** | LR | LR | 04 26 23.1 | |
| | comp=Z,117nm,19.9s,baz=34,slow=32 | | | | | | |
| **RPZ** | **Rata Peaks** | **31.27** | **202** | LR | LR | 04 30 58.2 

GRON A A 04 21 36.3
5µm,0.4s
**CMLA Cha da Macela 0.59 105** Pg **Pb 04 21 15.6 0.0**
CMLA Sg **Sg 04 21 23.1 +0.4**
**CMLA Cha da Macela 0.59 105**⇑*iP* **Pb 04 21 15.7 +0.2**
CMLA *eS* **Sg 04 21 23.2 +0.5**
CMLA A A 04 21 32.5
22µm,0.2s
**PCALD Caldeiras da R 0.61 101 Pg 04 21 15.7 +0.4**
PCALD **Sg 04 21 23.2 -0.2**
**PCALD Caldeiras da R 0.61 101**⇑*iP* **Pg 04 21 15.8 +0.5**
PCALD *eS* **Sg 04 21 23.3 0.0**
PCALD A A 04 21 25.5
8µm,0.3s
**BART Pico Bartolome 0.86 99** *eP* Pn 04 21 29.0 +7.7
**ADH Angra Heroismo 1.08 314**⇑*iP* **Pb 04 21 23.6 -0.3**
ADH *eS* **Sb 04 21 36.8 -1.1**
ADH A A 04 21 40.4
911nm,0.3s
**PAGU Agualva, Azore 1.13 319 Pn 04 21 24.3 -0.7**
PAGU **Sb 04 21 37.9 -1.5**
**PAGU Agualva, Azore 1.13 319**⇑*iP* **Pn 04 21 24.3 -0.7**
PAGU *eS* **Sb 04 21 38.0 -1.5**
PAGU A A 04 21 39.8
6µm,0.2s
**PSMA Santa Maria 1.27 136 Pn 04 21 25.7 -1.3**
**PSMA Santa Maria 1.27 136** *eP* **Pn 04 21 25.6 -1.3**
PSMA *eS* **Sb 04 21 39.9 -3.6**
PSMA A A 04 21 42.8
1µm,0.2s
**PSMN Pico do Norte, 1.30 134** *eP* **Pn 04 21 26.1 -1.2**
PSMN *eS* **Sn 04 21 40.4 -4.2**
PSMN A A 04 21 43.0
743nm,0.2s
**PMAN Manadas 1.62 297 Pn 04 21 31.8 +0.1**
PMAN **Sn 04 21 49.7 -2.7**
**PMAN Manadas 1.62 297** *eP* **Pn 04 21 31.7 0.0**
PMAN *eS* **Sn 04 21 50.0 -2.5**
PMAN A A 04 21 52.1
247nm,0.3s
**PPNO Prainha do Nor 1.69 290 Pn 04 21 32.9 +0.2**
PPNO **Sn 04 21 52.4 -1.8**
**PPNO Prainha do Nor 1.69 290** *eP* **Pn 04 21 32.7 0.0**
PPNO *eS* **Sn 04 21 52.2 -2.0**
PPNO A A 04 21 57.4
421nm,0.2s
**PGRA Graciosa 1.76 310 Pn 04 21 33.6 -0.1**
PGRA **Sn 04 21 53.9 -2.0**
**PGRA Graciosa 1.76 310** *eP* **Pn 04 21 33.6 -0.1**
PGRA *eS* **Sn 04 21 53.8 -2.2**
PGRA A A 04 21 58.7
206nm,0.3s
**ROSA Rosais 1.77 298 Pn 04 21 33.8 0.0**
ROSA Sn **Sn 04 21 53.9 -2.2**
**ROSA Rosais 1.77 298** *eP* **Pn 04 21 33.7 0.0**
ROSA *eS* **Sn 04 21 54.1 -2.0**
ROSA A A 04 21 58.8
197nm,0.1s
**SRBC Serra Branca 1.81 309 Pn 04 21 34.4 +0.2**
SRBC **Sn 04 21 55.4 -1.7**
**SRBC Serra Branca 1.81 309** *eP* **Pn 04 21 34.4 +0.2**
SRBC *eS* **Sn 04 21 55.3 -1.7**
SRBC A A 04 21 57.0
498nm,0.1s
**PICO Pico 1.82 289 Pn 04 21 35.0 +0.5**
PICO **Sn 04 21 55.7 -1.7**
**PICO Pico 1.82 289** *eP* **Pn 04 21 34.8 +0.3**
PICO *eS* **Sn 04 21 55.5 -1.9**
PICO A A 04 21 58.1
517nm,0.2s
**PCAN Candelaria 1.85 288 Pn 04 21 35.3 +0.4**
PCAN **Sn 04 21 56.4 -1.8**
**PCAN Candelaria 1.85 288** *eP* **Pn 04 21 35.2 +0.3**
PCAN *eS* **Sn 04 21 56.2 -2.0**
PCAN A A 04 21 58.7
400nm,0.2s
**HOR Horta 1.98 289** *eP* **Pn 04 21 36.5 -0.1**
HOR *eS* **Sn 04 21 59.1 -2.2**
HOR A A 04 22 01.1
429nm,0.3s
**PFCBR Castelo Branco 2.04 288 Pn 04 21 37.6 +0.2**
PFCBR **Sn 04 22 00.9 -1.9**
**PFCBR Castelo Branco 2.04 288** *eP* **Pn 04 21 37.7 +0.2**
PFCBR *eS* **Sn 04 22 00.6 -2.2**
PFCBR A A 04 22 05.5
89nm,0.4s
**CALA Caldeira 2.05 290 Pn 04 21 37.6 0.0**
CALA **Sn 04 22 01.2 -1.9**
**CALA Caldeira 2.05 290** *eP* **Pn 04 21 37.7 0.0**
CALA *eS* **Sn 04 22 01.1 -2.0**
CALA A A 04 22 07.2
696nm,0.4s
**PCED Cedros 2.06 291 Pn 04 21 37.9 +0.1**
PCED **Sn 04 22 01.4 -2.0**
**PCED Cedros 2.06 291** *eP* **Pn 04 21 37.6 -0.2**
PCED *eS* **Sn 04 22 00.9 -2.5**
PCED A A 04 22 03.3
183nm,0.3s
**PCAPE Capelo, Faial 2.15 289 Pn 04 21 39.3 +0.3**
PCAPE **Sn 04 22 03.4 -2.0**
**PCAPE Capelo, Faial 2.15 289** *eP* **Pn 04 21 39.2 +0.3**
PCAPE *eS* **Sn 04 22 03.4 -2.0**
PCAPE A A 04 22 05.3
674nm,0.2s
**PMOZ Porto Moniz, M 8.96 122** *eP* **Pn 04 23 14.9 +2.3**
**PMOZ Porto Moniz, M 8.96 122** Pn **Pn 04 23 13.4 +0.8**
**FUL Funchal 9.27 122** *eP* **Pn 04 23 17.5 +0.7**
**PSBE So Bento 13.72 78** *eP* **Pn 04 24 16.1 -1.5**
**PTEO Sao Teotonio 13.87 86** *eP* **Pn 04 24 18.3 -1.4**
**PCAS Casmilo, Conde 13.97 76** *eP* **Pn 04 24 18.6 -2.4**
**PNCL Nicolau / Gran 13.97 84** *eP* **Pn 04 24 18.0 -3.0**
**PTO Porto 13.99 71** *eP* **Pn 04 24 16.9 -4.4**
**PMTG Montargil 14.16 80** *eP* **Pn 04 24 20.6 -3.0**
**EVO Evora 14.35 82** *eP* **Pn 04 24 25.4 -0.8**
**PGAV Gavieira, Arco 14.37 68** *eP* **Pn 04 24 21.9 -4.6**
**PVIS Viseu 14.48 73** *eP* **Pn 04 24 24.1 -3.9**
**PCAB Cabril 14.50 69** *eP* **Pn 04 24 24.0 -4.3**
**PBDV Barranco-do-Ve 14.54 87** *eP* **Pn 04 24 28.4 -0.4**
**POLO Lamas de Olo 14.62 71** *eP* **Pn 04 24 26.6 -3.5**
**PVRL Vila Real 14.67 71** *eP* **Pn 04 24 26.2 -4.5**
**MTE Manteigas 14.72 74** *eP* **Pn 04 24 26.7 -4.6**
**MTE Manteigas 14.72 74** Pn **Pn 04 24 26.8 -4.5**
**PCBR Castelo Branco 14.74 77** *eP* **Pn 04 24 28.7 -2.9**
**PMRV Marv??o 14.80 78** *eP* **Pn 04 24 29.6 -2.8**
**PBAR Barrancos 15.13 83** *eP* **Pn 04 24 34.7 -2.2**
**MVO Moncorvo 15.17 72** *eP* **Pn 04 24 32.9 -4.5**
**PAB San Pablo 17.16 78** Pn **Pn 04 25 00.1 -2.8**
PAB IAmb IAmb 04 25 10.8
comp=Z,9.0nm,1.2s
**ESDC Sonseca Array 17.45 77** P **Pn 04 25 04.1 -2.4**
comp=Z,0.3nm,0.3s,baz=266,slow=14,SNR=12
ESDC LR LR 04 30 27.1
comp=Z,42nm,21.5s,baz=298,slow=32
**ESDC Sonseca Array 17.45 77** Pn **Pn 04 25 04.3 -2.3**
**ESBB Sonseca Array 17.45 77** Pn **Pn 04 25 04.4 -2.1**
ESBB IAmb IAmb 04 25 19.5
comp=Z,8.8nm,1.3s
**MDT Midelt 18.35 100** P **Pn 04 25 15.2 -2.5**
comp=Z,0.0nm,0.3s,baz=277,slow=17,SNR=1.5
MDT LR LR 04 31 01.2
comp=Z,30nm,19.9s,baz=354,slow=33
**EKA Eskdalemuir Ar 23.38 34** P **P 04 26 12.2 +0.7**
comp=Z,3.6nm,0.9s,baz=226,slow=8.6,SNR=2.8
EKA LR LR 04 33 26.6
comp=Z,39nm,20.2s,baz=262,slow=32
**BORG Borgarnes 27.03 5** LR LR 04 34 06.5
comp=Z,87nm,20.8s,baz=259,slow=29
**DAVOX Davos/Dischmat 27.92 60** LR LR 04 37 00.4
comp=Z,24nm,19.4s,baz=273,slow=34
**KOWA Kowa 30.53 134** P **P 04 27 17.4 +0.9**
KOWA IAmb IAmb 04 27 27.9
comp=Z,4.6nm,0.9s
**NOA NORSAR Array B 32.85 33** LR LR 04 39 10.9
comp=Z,37nm,18.9s,baz=255,slow=33
**HFS Hagfors 33.56 36** LR LR 04 39 03.5
comp=Z,36nm,19.8s,baz=256,slow=32
**TORD Torodi Ar. Bea 35.02 127** P **P 04 27 57.7 +1.9**
comp=Z,1.8nm,0.6s,baz=316,slow=9.8,SNR=15
**DBIC Dimbokro 36.66 143** LR LR 04 42 25.1
comp=Z,32nm,18.2s,baz=314,slow=35
**SADO Sadowa 39.71 297** LR LR 04 43 04.6
comp=Z,67nm,18.4s,baz=334,slow=33
**FINES FINESS Array B 39.74 36** P **P 04 28 36.8 +1.5**
comp=Z,1.8nm,0.9s,baz=258,slow=7.0,SNR=1.5
FINES LR LR 04 43 14.3
comp=Z,28nm,21.7s,baz=18,slow=34
**MDP Montagnes des 40.56 223** LR LR 04 41 16.0
comp=Z,41nm,22.0s,baz=102,slow=30
**AKASG Malin Array Be 40.77 53** P **P 04 28 44.4 +0.4**
comp=Z,0.3nm,0.5s,baz=275,slow=7.6,SNR=2.0
AKASG LR LR 04 45 22.8
comp=Z,20nm,18.9s,baz=358,slow=36
**RCBR Riachuelo 44.44 194** LR LR 04 43 02.2
comp=Z,50nm,20.4s,baz=182,slow=30
**H10N2 ASCENSION HYDR 46.81 164** T T 05 19 18.2
baz=347,slow=75,SNR=92
**H10N3 ASCENSION HYDR 46.82 164** T T 05 19 16.1
baz=347,slow=75,SNR=74
**H10N1 ASCENSION HYDR 46.83 164** T T 05 19 19.5
baz=347,slow=75,SNR=122
**SDV Santo Domingo 49.28 246** LR LR 04 47 00.3
comp=Z,24nm,21.5s,baz=84,slow=32
**PTGA Pitinga 49.46 227** LR LR 04 46 53.7
comp=Z,26nm,19.9s,baz=45,slow=31
**KIRV Kirov 51.40 40** LR LR 04 51 28.4
comp=Z,50nm,18.5s,baz=337,slow=36
**ROSC El Rosal 54.70 245** LR LR 04 51 10.7
comp=Z,33nm,21.1s,baz=64,slow=33
**YKA Yellowknife Ar 56.47 326** P **P 04 30 46.5 +1.9**
comp=Z,1.1nm,0.7s,baz=66,slow=7.0,SNR=1.9
**PDAR Pinedale Array 61.20 303** P **P 04 31 19.4 +1.3**
comp=Z,1.1nm,0.9s,baz=76,slow=6.3,SNR=6.7
**PDAR Pinedale Array 61.20 303** P **P 04 31 17.7 -0.5**
**SIV San Ignacio 62.81 218** LR LR 04 54 23.6
comp=Z,34nm,21.9s,baz=124,slow=32
**TX31 Lajitas Ar. Si 63.35 288** P **P 04 31 32.0 -0.5**
**TX32 Lajitas Array 63.35 288** P **P 04 31 32.9 +0.3**
TX32 IAmb IAmb 04 31 36.3
comp=Z,2.9nm,0.9s
**TXAR Lajitas Array 63.35 288** P **P 04 31 35.1 +2.6**
comp=Z,2.1nm,0.8s,baz=76,slow=6.8,SNR=19
**TXAR Lajitas Array 63.35 288** P **P 04 31 32.5 -0.1**
**GEYT Alibeck 64.15 61** LR LR 04 59 35.8
comp=Z,20nm,21.2s,baz=355,slow=36
**PLID Pearl Lake 64.26 308** P **P 04 31 38.3 -0.2**
PLID IAmb IAmb 04 31 41.9
comp=Z,4.8nm,1.1s
**ATAH Atahualpa 66.04 239** LR LR 04 59 15.7
comp=Z,22nm,19.7s,baz=315,slow=35
**ATD Arta Tunnel 66.53 94** LR LR 05 01 17.3
comp=Z,22nm,18.1s,baz=343,slow=36
**NVAR Mina Array Bea 69.12 303** P **P 04 32 11.5 +1.9**
comp=Z,0.2nm,0.5s,baz=31,slow=7.4,SNR=2.3
**ZALV Zalesovo Beam 71.00 36** P P 04 32 23.4 +2.8
comp=Z,0.3nm,0.3s,baz=309,slow=6.9,SNR=1.7
**AAK Ala-Archa 72.29 50** LR LR 05 06 08.3
comp=Z,40nm,18.1s,baz=23,slow=37
**MKAR Makanchi Array 74.22 43** P **P 04 32 41.2 +1.3**
comp=Z,0.8nm,0.8s,baz=310,slow=5.9,SNR=9.6
**MKAR Makanchi Array 74.22 43** P **P 04 32 40.4 +0.5**
**SONM Songino Array 84.77 30** P P 04 33 40.1 +2.7
comp=Z,1.2nm,1.0s,baz=322,slow=3.5,SNR=6.3

*INET **25** 04:23:35.7±0.3, 14.4°40N×90.6°3W, h3km±3km, MW3.0*
*GCG **25** 04:23:35.5±0.5, 14.4°49N×90.6°2W, h16km±4km, MD3.2*
*SNET **25** 04:23:36.3±0.7, 14.5°0N×90.6°4W, h11km±8km, ML2.9*
*NEIC **25** 04:23:36.9±0.6, 14.5°2N±0.07°×90.7°0W±0.03, h36km±64km, ML3.2/10, Error ellipse: s-maj=11.0km s-min=3.1km az=191.0*
**ISC 25 04:23:35.7**±0.9, **14.53N**±0.05°×**90.66W**±0.03, **h17**km±7km, **n23**, σ0.99/31, **Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCG** | **Pacaya** | **0.15** | **160** | *eP* | **Pg** | **04 23 39.9** | **-0.3** |
| PCG | | | | *eS* | **Sg** | **04 23 43.6** | **+0.5** |
| **FUG** | **Fuego 3** | **0.20** | **244** | *eP* | **Pg** | **04 23 41.3** | **+0.7** |
| **NBG** | **Las Nubes** | **0.31** | **80** | *eP* | **Pg** | **04 23 42.3** | **-0.2** |
| NBG | | | | *eS* | **Sg** | **04 23 46.9** | **-0.2** |
| **SLOZ** | **Alcaldia de Sa** | **0.99** | **121** | *eP* | **Pg** | **04 23 53.5** | **-1.4** |
| **RTAL** | **Retalhuleu** | **1.00** | **270** | Pn | **Pg** | **04 23 54.0** | **-1.2** |
| RTAL | | | | | **Sg** | **04 24 06.3** | **-2.0** |
| RTAL | | | | IAML | | 04 24 29.4 | |
| comp=E,735nm,0.6s | | | | | | | |
| **MRL** | **Marmol** | **1.09** | **60** | *eP* | **Pg** | **04 23 56.7** | **-0.2** |
| **HUEH** | **Huehuetenango** | **1.13** | **314** | Pn | **Pb** | **04 23 57.0** | **+0.1** |
| **HUEH** | **Huehuetenango** | **1.13** | **314** | *eS* | **Sn** | **04 24 14.6** | **+2.4** |
| **MTO3** | **Montecristo** | **1.27** | **96** | Pn | **Pn** | **04 23 57.8** | **-1.1** |
| MTO3 | | | | | **Sb** | **04 24 15.1** | **-0.3** |
| **MTO3** | **Montecristo** | **1.27** | **96** | *eP* | **Pn** | **04 23 58.6** | **-0.3** |
| MTO3 | | | | *eS* | **Sn** | **04 24 16.8** | **+1.2** |
| **MTO3** | **Montecristo** | **1.27** | **96** | *eP* | **Sn** | **04 23 58.7** | **-0.2** |
| MTO3 | | | | *eS* | **Sn** | **04 24 17.1** | **+1.5** |
| MTO3 | | | | IAML | | 04 24 18.0 | |
| comp=Z,189nm,0.4s | | | | | | | |
| **ESQI** | **Esquipulas** | **1.28** | **89** | Pn | **Pn** | **04 23 58.6** | **-0.3** |
| ESQI | | | | Sn | **Sb** | **04 24 15.2** | **-0.4** |
| ESQI | | | | IAML | | 04 24 19.1 | |
| comp=E,469nm,0.6s | | | | | | | |
| ESQI | | | | IAML | | 04 24 22.7 | |
| comp=N,308nm,0.6s | | | | | | | |
| **ESQI** | **Esquipulas** | **1.28** | **89** | *i* P | **Pn** | **04 23 59.0** | **0.0** |
| ESQI | | | | *eS* | **Sg** | **04 24 16.9** | **-0.3** |
| ESQI | | | | IAML | | 04 24 17.8 | |
| comp=Z,511nm,0.6s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.47** | **126** | *eP* | **Pn** | **04 24 01.8** | **+0.2** |
| JAYA | | | | IAML | | 04 24 22.9 | |
| comp=Z,155nm,0.2s | | | | | | | |
| **PMON** | **Piamonte** | **1.54** | **122** | *eP* | **Pn** | **04 24 03.2** | **+0.7** |
| **SNET** | **Serv Nac Est T** | **1.62** | **121** | Pn | **Pn** | **04 24 04.3** | **+0.6** |
| **PAVA** | **Las Pavas** | **1.86** | **116** | *eP* | **Pn** | **04 24 06.1** | **-0.9** |
| **PAVA** | **Las Pavas** | **1.86** | **116** | *eP* | **Pn** | **04 24 07.7** | **+0.7** |
| **COEG** | **Centro de Oper** | **1.95** | **118** | *eP* | **Pn** | **04 24 09.3** | **+1.2** |
| COEG | | | | IAML | | 04 24 32.8 | |
| comp=Z,71nm,0.6s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.05** | **114** | *eP* | **Pn** | **04 24 10.7** | **+1.2** |
| **CCIG** | **Comitan** | **2.25** | **321** | Pn | **Pn** | **04 24 11.1** | **-1.2** |
| CCIG | | | | IAML | | 04 25 11.7 | |
| comp=N,120nm,0.6s | | | | | | | |
| CCIG | | | | IAML | | 04 25 13.8 | |
| comp=E,139nm,0.8s | | | | | | | |
| **COEB** | **Comit de Eme** | **2.31** | **116** | *eP* | **Pb** | **04 24 16.8** | **-0.3** |
| **RIMA** | **Rio Macho** | **8.16** | **125** | Pn | **Pn** | **04 25 33.1** | **-0.5** |

*IDC **25** 04:36:23.8±0.5, 51.5°55N×15.5°99E, h0km, mb4.0/12, mb1 4.1/20, mb1mx3.9/51, mbtmp4.0/20, ML3.4/7, Error ellipse: s-maj=10.1km s-min=6.0km az=104.0*
*LDG **25** 04:36:23.6±0.1, 51.4°41N×16.2°2E, h1km, Ml4.3/9, Error ellipse: s-maj=3.0km s-min=2.2km az=12.0, Suspected Mining induced.*
*VIE **25** 04:36:23.7±0.6, 51.4°43N×16.3°4E, h0km, mb3.4/19, ml3.6/13, ms4.1/5, Error ellipse: s-maj=5.5km s-min=3.3km az=41.0 60 km NW of Wroclaw Suspected Mining induced.*
*MOS **25** 04:36:23.8±0.9, 51.4°45N×16.1°6E, h10km, mb4.3/12, Error ellipse: s-maj=7.1km s-min=4.2km az=79.8*
*IPEC **25** 04:36:23.1±0.3, 51.5°2N×16.2°4E, h1km, ML3.7/3, Error ellipse: s-maj=3.1km s-min=1.4km az=58.0*
*DNK **25** 04:36:24.5±2.5, 51.5°9N×16.3°1E, h0km±98km, ML3.0*
*MCSM **25** 04:36:24.3±0.6, 52.°N±5.°×1.°6E±.°, h4km±2km, mb4.1/6, ML4.0/3, MLv4.0/10*
*NEIC **25** 04:36:24.3±1.3, 51.°51N±0.°06×16.°25E±0.°09, h8km±5km, mb4.0/5, ML3.6/13(VIE), Error ellipse: s-maj=8.5km s-min=7.8km az=168.0*
*BGR **25** 04:36:24.8±0.3, 51.°45N×16.°23E, h1km, ML3.7/12, Error ellipse: s-maj=5.6km s-min=2.2km az=14.0*
*UPP **25** 04:36:27.0±3.0, 51.°63N×15.°74E, h0km, ML3.3, Suspected explosion*
**ISC 25 04:36:23.2**±0.4, **51.50N**±0.02×**16.19E**±0.02, **h0**km, **n293**, σ1.73/384, **mb4.0**/18, **22C-9D, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.66** | **174** | *i* Pg | **Pg** | **04 36 36.3** | **+0.5** |
| KSP | | | | *eSg* | **Sg** | **04 36 44.4** | **+0.1** |
| **KSP** | **Ksiaz** | **0.66** | **174** | *eP* | **Pg** | **04 36 36.4** | **+0.5** |
| KSP | | | | *eSg* | **Sg** | **04 36 44.7** | **+0.4** |
| **KSP** | **Ksiaz** | **0.66** | **174** | Pg | **Pg** | **04 36 36.2** | **+0.4** |
| **CHVC** | **Chvalec** | **0.92** | **185** | *eP* | **Pg** | **04 36 40.8** | **+0.1** |
| CHVC | | | | *eSG* | **Sg** | **04 36 51.1** | **-1.5** |
| comp=Z,400nm,0.7s | | | | | | | |
| **OSTC** | **Ostas** | **0.94** | **179** | *eP* | **Pg** | **04 36 41.0** | **-0.2** |
| OSTC | | | | *eSG* | **Sg** | **04 36 52.2** | **-1.3** |
| comp=Z,553nm,0.8s | | | | | | | |
| **UPC** | **Upice** | **1.00** | **186** | *eP* | **Pg** | **04 36 42.5** | **+0.2** |
| UPC | | | | *e* | | 04 36 53.4 | |
| UPC | | | | smax | smax | | |
| comp=N,921nm,0.5s | | | | | | | |
| **UPC** | **Upice** | **1.00** | **186** | *eP* | **Pg** | **04 36 42.5** | **+0.2** |
| UPC | | | | *eSG* | **Sg** | **04 36 53.4** | **-1.8** |
| comp=N,921nm,0.5s | | | | | | | |
| **UPC** | **Upice** | **1.00** | **186** | Pg | **Pg** | **04 36 42.6** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **1.16** | **176** | *eP* | **Pg** | **04 36 44.8** | **-0.5** |
| DPC | | | | *e* | | 04 36 58.4 | |
| DPC | | | | smax | smax | | |
| comp=N,526nm,0.6s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.16** | **176** | *eP* | **Pg** | **04 36 44.8** | **-0.5** |
| DPC | | | | *eSG* | **Sg** | **04 36 58.4** | **-1.8** |
| comp=N,526nm,0.6s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.16** | **176** | *eP* | **Pg** | **04 36 45.2** | **0.0** |
| DPC | | | | *eSg* | **Sg** | **04 37 00.4** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **1.16** | **176** | Pg | **Pg** | **04 36 45.1** | **-0.2** |
| **PVCC** | **Panska Ves** | **1.41** | **227** | *eP* | **Pb** | **04 36 50.5** | **+0.2** |
| PVCC | | | | *e* | | 04 37 08.8 | |
| PVCC | | | | smax | smax | | |
| comp=N,1µm,0.6s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.41** | **227** | *eP* | **Pb** | **04 36 50.5** | **+0.2** |
| PVCC | | | | *eSG* | **Sb** | **04 37 08.8** | **-0.1** |
| comp=N,1µm,0.6s | | | | | | | |
| **KRLC** | **Kraliky** | **1.48** | **165** | *eP* | **Pn** | **04 36 50.5** | **-0.5** |
| KRLC | | | | *e* | | 04 37 08.7 | |
| KRLC | | | | smax | smax | | |
| comp=N,880nm,1.1s | | | | | | | |
| **KRLC** | **Kraliky** | **1.48** | **165** | *eP* | **Pn** | **04 36 50.5** | **-0.5** |
| KRLC | | | | *eSG* | **Sg** | **04 37 08.7** | **-1.8** |
| comp=N,880nm,1.1s | | | | | | | |
| **KRLC** | **Kraliky** | **1.48** | **165** | Pn | **Pn** | **04 36 50.7** | **-0.3** |
| **BRG** | **Berggiesshubel** | **1.54** | **247** | Pn | **Pn** | **04 36 51.9** | **0.0** |
| BRG | | | | Pg | **Pg** | **04 36 53.9** | **+1.2** |
| BRG | | | | Sg | **Sg** | **04 37 14.1** | **+1.3** |
| BRG | | | | Amp | | 04 37 15.4 | |
| comp=Z,306nm,0.7s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.54** | **247** | P | **Pn** | **04 36 51.9** | **0.0** |
| BRG | | | | | | 04 37 14.0 | |
| BRG | | | | smax | smax | | |
| comp=Z,306nm,0.7s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.54** | **247** | *eP* | **Pn** | **04 36 51.9** | **0.0** |
| BRG | | | | *eSg* | **Sg** | **04 36 53.7** | **+0.9** |
| BRG | | | | *eSg* | **Sg** | **04 37 14.4** | **+1.7** |
| **PRU** | **Pruhonice** | **1.84** | **215** | *eP* | **Pn** | **04 36 56.0** | **0.0** |
| PRU | | | | *e* | | 04 37 21.6 | |
| PRU | | | | smax | smax | | |
| comp=N,580nm,1.2s | | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **215** | *eP* | **Pn** | **04 36 56.0** | **0.0** |
| PRU | | | | *eSG* | **Sb** | **04 37 21.6** | **+0.4** |
| comp=N,580nm,1.2s | | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **215** | Pn | **Pn** | **04 36 55.9** | **0.0** |
| **FBE** | **Freiberg** | **1.87** | **253** | *eP* | **Pn** | **04 36 56.9** | **+0.4** |
| FBE | | | | *eP* | **Pg** | **04 36 59.6** | **+0.6** |
| FBE | | | | *eSg* | **Sg** | **04 37 24.3** | **+1.0** |
| **GKP** | **Gorka Klasztor** | **1.89** | **20** | *eP* | **Pb** | **04 36 58.3** | **-0.2** |
| **RAC** | **Raciborz** | **1.91** | **137** | *eP* | **Pn** | **04 36 56.4** | **-0.5** |
| RAC | | | | *eP* | **Pg** | **04 36 59.9** | **+0.2** |
| RAC | | | | *eSG* | **Sg** | **04 37 24.9** | **+0.5** |
| **RAC** | **Raciborz** | **1.91** | **137** | *eP* | **Pn** | **04 36 56.4** | **-0.5** |
| RAC | | | | *e* | | 04 37 24.9 | |
| **MORC** | **Moravsky Berou** | **1.93** | **153** | ⇑P | **Pn** | **04 36 57.4** | **+0.2** |
| **MORC** | **Moravsky Berou** | **1.93** | **153** | P | **Pn** | **04 36 56.6** | **-0.6** |
| MORC | | | | | | 04 37 21.3 | |
| **MORC** | **Moravsky Berou** | **1.93** | **153** | | **Pn** | **04 36 56.6** | **-0.6** |
| MORC | | | | Sn | **Sn** | **04 37 21.3** | **-0.9** |
| **MORC** | **Moravsky Berou** | **1.93** | **153** | *ePn* | **Pn** | **04 36 56.9** | **-0.3** |
| baz=335 | | | | | | | |
| MORC | | | | *eSg* | **Sb** | **04 37 23.7** | **-0.1** |
| comp=N,458nm,1.4s,baz=335 | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.93** | **153** | *ePg* | **Pn** | **04 36 57.0** | **-0.3** |
| **CLL** | **Collm** | **2.00** | **266** | *eP* | **Pn** | **04 36 59.0** | **+0.8** |
| CLL | | | | *e* | | 04 37 29.0 | |
| **CLL** | **Collm** | **2.00** | **266** | *ePn* | **Pn** | **04 36 59.0** | **+0.8** |
| CLL | | | | *eP* | **Pg** | **04 37 02.0** | **+0.5** |
| CLL | | | | *eSg* | **Sg** | **04 37 29.0** | **+1.5** |
| comp=Z,205nm,0.8s | | | | | | | |
| **CLL** | **Collm** | **2.00** | **266** | | **Pn** | **04 36 58.2** | **0.0** |
| **CLL** | **Collm** | **2.00** | **266** | *ePn* | **Pn** | **04 36 58.5** | **+0.3** |
| CLL | | | | *eP* | **Pg** | **04 37 01.8** | **+0.3** |
| **OKC** | **Ostrava-Krasne** | **2.08** | **142** | *eP* | **Pb** | **04 37 01.4** | **-0.3** |
| OKC | | | | *e* | | 04 37 28.3 | |
| OKC | | | | smax | smax | | |
| comp=N,312nm,0.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.08** | **142** | *ePG* | **Pb** | **04 37 01.4** | **-0.3** |
| OKC | | | | *eSG* | **Sb** | **04 37 28.3** | **+0.2** |
| comp=N,312nm,0.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.08** | **142** | *ePn* | **Pn** | **04 36 58.6** | **-0.7** |
| OKC | | | | *eP* | **Pg** | **04 37 02.6** | **-0.4** |
| OKC | | | | *eSg* | **Sb** | **04 37 28.4** | **+0.3** |
| **VRAC** | **Vranov** | **2.21** | **173** | ⇓P | **Pb** | **04 37 03.0** | **-1.0** |
| **VRAC** | **Vranov** | **2.21** | **173** | Pn | **Pn** | **04 37 01.8** | **+0.7** |
| comp=N,12nm,0.3s,baz=342,slow=14,SNR=51 | | | | | | | |
| VRAC | | | | Sn | **Sb** | **04 37 31.9** | **0.0** |
| comp=N,20nm,0.3s,baz=264,slow=18,SNR=10 | | | | | | | |
| **VRAC** | **Vranov** | **2.21** | **173** | *ePn* | **Pn** | **04 37 01.0** | **-0.1** |
| baz=354 | | | | | | | |
| VRAC | | | | *eSg* | **Sb** | **04 37 32.6** | **+0.7** |
| comp=N,320nm,1.1s,baz=354 | | | | | | | |
| **TREC** | **Trest** | **2.25** | **192** | *eP* | **Pn** | **04 37 01.8** | **+0.1** |
| TREC | | | | *e* | | 04 37 33.3 | |
| TREC | | | | smax | smax | | |
| comp=N,184nm,0.9s | | | | | | | |
| **TREC** | **Trest** | **2.25** | **192** | *ePN* | **Pn** | **04 37 01.8** | **+0.1** |
| TREC | | | | *eSG* | **Sb** | **04 37 33.3** | **+0.2** |
| comp=N,184nm,0.9s | | | | | | | |
| **KRUC** | **Moravsky** | **2.44** | **177** | *ePn* | **Pn** | **04 37 04.7** | **+0.4** |
| baz=358 | | | | | | | |
| KRUC | | | | *eSg* | **Sg** | **04 37 40.5** | **-1.1** |
| comp=N,407nm,1.2s,baz=358 | | | | | | | |
| **TANN** | **Tannenbergstha** | **2.59** | **247** | *ePn* | **Pn** | **04 37 07.4** | **+1.0** |
| TANN | | | | *eP* | **Pg** | **04 37 14.3** | **+1.5** |
| TANN | | | | *eSg* | **Sg** | **04 37 46.6** | **+0.2** |
| **OJC** | **Ojcow** | **2.62** | **118** | *ePn* | **Pn** | **04 37 05.2** | **-1.5** |
| OJC | | | | *i* Pg | **Pg** | **04 37 13.9** | **+0.5** |
| OJC | | | | *eSg* | **Sg** | **04 37 49.1** | **+1.7** |
| **OJC** | **Ojcow** | **2.62** | **118** | P | **Pn** | **04 37 04.8** | **-2.0** |
| **OJC** | **Ojcow** | **2.62** | **118** | | **Pn** | **04 37 04.8** | **-2.0** |
| **OJC** | **Ojcow** | **2.62** | **118** | *ePn* | **Pn** | **04 37 05.6** | **-1.2** |
| OJC | | | | *eP* | **Pg** | **04 37 13.9** | **+0.5** |
| OJC | | | | *eSg* | **Sg** | **04 37 48.4** | **+1.0** |
| **WERD** | **Werda** | **2.67** | **248** | *ePn* | **Pn** | **04 37 08.5** | **+1.1** |
| WERD | | | | *eP* | **Pg** | **04 37 15.0** | **+0.7** |
| WERD | | | | *eSg* | **Sg** | **04 37 50.3** | **+1.4** |
| **NKC** | **Novy Kostel** | **2.69** | **243** | *eP* | **Pn** | **04 37 08.3** | **+0.7** |
| NKC | | | | *e* | | 04 37 49.7 | |
| NKC | | | | smax | smax | | |
| comp=N,237nm,0.6s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.69** | **243** | *ePN* | **Pn** | **04 37 08.3** | **+0.7** |
| NKC | | | | *eSG* | **Sg** | **04 37 49.7** | **+0.3** |
| comp=N,236nm,0.6s | | | | | | | |
| **JAVC** | **Velka Javorina** | **2.81** | **160** | *ePN* | **Pn** | **04 37 09.3** | **-0.1** |
| **KHC** | **Kasperske Hory** | **2.90** | **216** | *d* P | **Pn** | **04 37 10.4** | **-0.2** |
| KHC | | | | pmax | pmax | | |
| comp=Z,43nm,0.4s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **216** | *ePN* | **Pn** | **04 37 11.0** | **+0.4** |
| KHC | | | | *ePG* | **Pb** | **04 37 16.6** | **+0.8** |
| KHC | | | | *eSG* | **Sg** | **04 37 54.2** | **-2.1** |
| comp=Z,178nm,0.8s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **216** | | **Pn** | **04 37 10.6** | **0.0** |
| **KHC** | **Kasperske Hory** | **2.90** | **216** | Pn | **Pn** | **04 37 10.6** | **0.0** |
| **CKRC** | **Cesky Krumlov** | **2.94** | **205** | *ePN* | **Pn** | **04 37 12.1** | **+0.9** |
| CKRC | | | | *eSG* | **Sb** | **04 37 55.2** | **+2.2** |
| **MOX** | **Moxa** | **3.01** | **255** | *ePn* | **Pn** | **04 37 12.7** | **+0.7** |
| MOX | | | | *eP* | **Pg** | **04 37 21.5** | **+0.7** |
| MOX | | | | *eSg* | **Sg** | **04 38 01.6** | **+1.9** |
| **SMOL** | **Smolenice** | **3.10** | **165** | *eP* | **Pn** | **04 37 15.4** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KOLL | **Kolacno** | 3.25 | 153 | *e*PN | | Pn | 04 37 16.1 | +0.7 | |
| NIE | **Niedzica** | 3.35 | 127 | *e*P | | Pn | 04 37 18.2 | +1.4 | |
| NIE | | | | *e*S | | Sg | 04 38 11.1 | +0.3 | |
| ZST | **Bratislava** | 3.36 | 169 | *e*P | | Pg | 04 37 26.1 | -1.4 | |
| ZST | **Bratislava** | 3.36 | 169 | *e*PG | | Pg | 04 37 26.1 | -1.4 | |
| ZST | | | | *e*SG | | Sg | 04 38 10.1 | -0.9 | |
| VYHS | **Vyhne** | 3.46 | 149 | *e*P | | Pn | 04 37 18.2 | -0.1 | |
| VYHS | **Vyhne** | 3.46 | 149 | *e*PN | | Pn | 04 37 18.2 | -0.1 | |
| VYHS | | | | *e*PG | | Pg | 04 37 29.9 | +0.4 | |
| VYHS | | | | *e*SG | | Sg | 04 38 14.7 | +0.4 | |
| CONA | **Conrad Observa** | 3.58 | 183 | *e*Pn | | Pn | 04 37 20.5 | +0.5 | |
| | comp=Z,8.7nm,0.4s,SNR=9.5 | | | | | | | | |
| CONA | | | | Pg | | Pg | 04 37 30.5 | -1.3 | |
| | comp=Z,17nm,0.4s | | | | | | | | |
| CONA | **Conrad Observa** | 3.58 | 183 | | | Pn | 04 37 20.5 | +0.5 | |
| CONA | | | | | | Pg | 04 37 30.4 | -1.3 | |
| CLZ | **Clausthal** | 3.64 | 278 | *e*Pn | | Pn | 04 37 22.6 | +1.9 | |
| GRA1 | **Grafenberg Arr** | 3.64 | 242 | | | Pn | 04 37 21.3 | +0.5 | |
| GRF | **Grafenberg Arr** | 3.64 | 242 | P | | Pn | 04 37 21.3 | +0.5 | |
| GRF | **Grafenberg Arr** | 3.64 | 242 | *e*Pn | | Pn | 04 37 21.9 | +1.1 | |
| GRF | | | | *e*Sg | | Sg | 04 38 21.3 | +1.1 | |
| GRFO | **Grafenberg** | 3.65 | 242 | P | | Pn | 04 37 21.4 | +0.6 | |
| GRFO | **Grafenberg** | 3.65 | 242 | | | Pn | 04 37 21.4 | +0.6 | |
| BSD | **Bornholm Skovb** | 3.70 | 349 | *i* P | | Pn | 04 37 21.3 | -0.2 | |
| BSD | | | | IAML | | | 04 37 39.0 | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| BSD | **Bornholm Skovb** | 3.70 | 349 | *e*P | | Pn | 04 37 21.8 | +0.3 | |
| IZAB | **Izabela** | 3.71 | 141 | *e*P | | Pg | 04 37 34.3 | 0.0 | |
| SOP | **Sopron** | 3.83 | 176 | PN | | Pn | 04 37 24.4 | +1.1 | |
| SOP | | | | SN | | Sn | 04 38 11.4 | +2.5 | |
| STHS | **Stebnicka Huta** | 3.85 | 121 | *e*P | | Pn | 04 37 24.8 | +1.2 | |
| STHS | **Stebnicka Huta** | 3.85 | 121 | *e*PN | | Pn | 04 37 24.8 | +1.2 | |
| STHS | | | | *e*PG | | Pg | 04 37 38.4 | +1.6 | |
| MOA | **Molln** | 3.86 | 200 | *i* Pn | | Pn | 04 37 24.3 | +0.5 | |
| | comp=Z,14nm,0.4s,SNR=23 | | | | | | | | |
| MOA | **Molln** | 3.86 | 200 | | | Pn | 04 37 24.3 | +0.5 | |
| KECS | **Kecovo** | 4.10 | 136 | *e*P | | Pn | 04 37 26.3 | -0.7 | |
| KECS | **Kecovo** | 4.10 | 136 | *e*PN | | Pn | 04 37 26.3 | -0.7 | |
| KECS | | | | *e*PG | | Pg | 04 37 43.6 | +1.9 | |
| KECS | | | | *e*SG | | Sg | 04 38 35.3 | +0.5 | |
| EGYH | **Egyhazaskeszo** | 4.16 | 169 | PN | | Pn | 04 37 30.7 | +2.9 | |
| CRVS | **Cervenica-Dubn** | 4.27 | 125 | *e*P | | Pn | 04 37 30.6 | +1.2 | |
| CRVS | **Cervenica-Dubn** | 4.27 | 125 | *e*PN | | Pn | 04 37 30.6 | +1.2 | |
| CRVS | | | | *e*PG | | Pg | 04 37 45.3 | +0.3 | |
| ARSA | **Arzberg** | 4.28 | 186 | *e*Pn | | Pn | 04 37 30.6 | +1.2 | |
| | comp=Z,7.1nm,0.4s,SNR=7.4 | | | | | | | | |
| ARSA | **Arzberg** | 4.28 | 186 | | | Pn | 04 37 30.6 | +1.2 | |
| PSZ | **Piszkesteto** | 4.32 | 145 | ⇑P | | Pn | 04 37 29.9 | -0.2 | |
| PSZ | **Piszkesteto** | 4.32 | 145 | P | | Pn | 04 37 30.0 | -0.1 | |
| PSZ | **Piszkesteto** | 4.32 | 145 | | | Pn | 04 37 30.0 | -0.1 | |
| PSZ | **Piszkesteto** | 4.32 | 145 | PN | | Pn | 04 37 30.3 | +0.2 | |
| PSZ | **Piszkesteto** | 4.32 | 145 | Pn | | Pn | 04 37 31.0 | +0.9 | |
| CSKK | **Cskako** | 4.36 | 161 | PN | | Pn | 04 37 31.4 | +0.8 | |
| MPLH | **Magyarpolny** | 4.42 | 168 | PN | | Pn | 04 37 32.2 | +0.7 | |
| LUNU | **Lund** | 4.45 | 340 | P | | Pn | 04 37 31.5 | -0.3 | |
| LUNU | | | | S | | Sn | 04 38 23.3 | -1.0 | |
| LUNU | **Lund** | 4.45 | 340 | P | | Pn | 04 37 31.5 | -0.3 | |
| LUNU | | | | S | | Sn | 04 38 23.3 | -1.0 | |
| KWP | **Kalwaria Pacla** | 4.56 | 112 | P | | Pn | 04 37 30.1 | -3.3 | |
| KWP | **Kalwaria Pacla** | 4.56 | 112 | | | Pn | 04 37 30.1 | -3.3 | |
| TIH | **Tihany** | 4.74 | 166 | PN | | Pn | 04 37 36.1 | +0.3 | |
| KBA | **Koelnbreinsper** | 4.80 | 204 | *i* Pn | | Pn | 04 37 37.5 | +0.7 | |
| | comp=Z,15nm,0.5s,SNR=13 | | | | | | | | |
| KBA | **Koelnbreinsper** | 4.80 | 204 | P | | Pn | 04 37 37.5 | +0.7 | |
| KBA | **Koelnbreinsper** | 4.80 | 204 | | | Pn | 04 37 37.5 | +0.7 | |
| BLEU | **Blekinge** | 4.82 | 358 | *i* P | | Pn | 04 37 37.3 | +0.5 | |
| BLEU | | | | P | | Pn | 04 37 37.6 | +0.7 | |
| BLEU | | | | S | | Sn | 04 38 30.2 | -3.1 | |
| BLEU | **Blekinge** | 4.82 | 358 | P | | Pn | 04 37 37.6 | +0.7 | |
| BLEU | | | | S | | Sn | 04 38 30.2 | -3.1 | |
| UZH | **Uzhgorod** | 4.87 | 124 | *e*P | | Pn | 04 37 41.1 | +3.5 | |
| UZH | | | | *e*S | | Sn | 04 38 39.5 | +4.9 | |
| UZH | | | | smax | | smax | | | |
| | comp=N,20nm,0.8s | | | | | | | | |
| UZH | | | | smax | | smax | | | |
| | comp=E,20nm,0.8s | | | | | | | | |
| SOKA | **Soboth** | 4.89 | 189 | *e*Pn | | Pn | 04 37 39.4 | +1.5 | |
| | comp=E,2.5nm,0.4s | | | | | | | | |
| SOKA | **Soboth** | 4.89 | 189 | | | Pn | 04 37 39.4 | +1.5 | |
| PERS | **Pernice** | 4.92 | 189 | *i* Pn | | Pn | 04 37 39.7 | +1.4 | |
| SUW | **Suwalki** | 4.94 | 57 | P | | Pn | 04 37 39.4 | +0.9 | |
| SUW | **Suwalki** | 4.94 | 57 | | | Pn | 04 37 39.4 | +0.9 | |
| SUW | **Suwalki** | 4.94 | 57 | *e*P | | Pn | 04 37 37.0 | -1.5 | |
| BEHE | **Becsehely** | 5.05 | 175 | PN | | Pn | 04 37 43.1 | +3.1 | |
| KOGS | **Kog** | 5.06 | 179 | *i* Pn | | Pn | 04 37 40.7 | +0.6 | |
| GROS | **Grobnik** | 5.06 | 185 | *i* Pn | | Pn | 04 37 41.6 | +1.3 | |
| OBKA | **Obir** | 5.11 | 193 | *e*Pn | | Pn | 04 37 41.5 | +0.5 | |
| | comp=E,5.9nm,0.9s | | | | | | | | |
| OBKA | | | | *e*Pg | | Pg | 04 38 02.4 | +1.4 | |
| | comp=E,11nm,0.7s | | | | | | | | |
| OBKA | **Obir** | 5.11 | 193 | | | Pn | 04 37 41.5 | +0.5 | |
| OBKA | | | | | | Pg | 04 38 02.4 | +1.4 | |
| WATA | **Walderalm** | 5.14 | 218 | *i* Pn | | Pn | 04 37 42.8 | +1.3 | |
| | comp=E,12nm,0.5s,SNR=9.3 | | | | | | | | |
| WATA | **Walderalm** | 5.14 | 218 | P | | Pn | 04 37 42.8 | +1.3 | |
| WATA | **Walderalm** | 5.14 | 218 | | | Pn | 04 37 42.8 | +1.3 | |
| MYKA | **Terra Mystica** | 5.15 | 200 | Pn | | Pn | 04 37 41.7 | +0.1 | |
| | comp=E,1.2nm,0.3s | | | | | | | | |
| MYKA | | | | Sg | | Sg | 04 39 12.2 | +3.6 | |
| | comp=E,60nm,0.8s | | | | | | | | |
| MYKA | **Terra Mystica** | 5.15 | 200 | | | Pn | 04 37 41.7 | +0.1 | |
| MYKA | | | | | | Sg | 04 39 12.2 | +3.6 | |
| DEL | **Delary** | 5.16 | 346 | *i* P | | Pn | 04 37 41.0 | -0.6 | |
| DEL | | | | P | | Pn | 04 37 41.8 | +0.1 | |
| DEL | **Delary** | 5.16 | 346 | *e*P | | Pn | 04 37 41.1 | -0.6 | |
| DEL | **Delary** | 5.16 | 346 | P | | Pn | 04 37 41.8 | +0.1 | |
| WTTA | **Wattenberg** | 5.18 | 217 | *e*Pn | | Pn | 04 37 42.2 | +0.2 | |
| | comp=E,12nm,0.5s,SNR=8.2 | | | | | | | | |
| WTTA | **Wattenberg** | 5.18 | 217 | P | | Pn | 04 37 42.2 | +0.2 | |
| WTTA | **Wattenberg** | 5.18 | 217 | | | Pn | 04 37 42.2 | +0.2 | |
| STU | **Stuttgart** | 5.26 | 241 | P | | Pn | 04 37 42.9 | -0.1 | |
| STU | **Stuttgart** | 5.26 | 241 | Pn | | Pn | 04 37 42.9 | -0.1 | |
| LVV | **L'vov** | 5.27 | 106 | *e*P | | Pn | 04 37 43.6 | +0.5 | |
| LVV | | | | *e*S | | Sn | 04 38 42.2 | -2.2 | |
| TRPA | **Tarpa** | 5.32 | 127 | ⇑P | | Pn | 04 37 42.5 | -1.2 | |
| TRPA | **Tarpa** | 5.32 | 127 | PN | | Pn | 04 37 43.2 | -0.6 | |
| MOTA | **Moosalm** | 5.32 | 221 | *e*Pn | | Pn | 04 37 44.3 | +0.3 | |
| | comp=E,6.9nm,0.4s | | | | | | | | |
| MOTA | **Moosalm** | 5.32 | 221 | P | | Pn | 04 37 44.3 | +0.3 | |
| MOTA | **Moosalm** | 5.32 | 221 | | | Pn | 04 37 44.3 | +0.3 | |
| ABTA | **Abfaltersbach** | 5.33 | 208 | *e*Pn | | Pn | 04 37 45.1 | +1.1 | |
| | comp=E,5.2nm,0.5s,SNR=12 | | | | | | | | |
| ABTA | | | | *e*Sg | | Sg | 04 39 16.0 | +1.6 | |
| | comp=E,49nm,0.7s | | | | | | | | |
| ABTA | **Abfaltersbach** | 5.33 | 208 | | | Pn | 04 37 45.1 | +1.1 | |
| ABTA | | | | | | Sg | 04 39 16.0 | +1.6 | |
| RETA | **Reutte** | 5.35 | 223 | *e*Pn | | Pn | 04 37 44.4 | +0.2 | |
| | comp=E,1.0nm,0.3s,SNR=6.9 | | | | | | | | |
| RETA | **Reutte** | 5.35 | 223 | | | Pn | 04 37 44.4 | +0.2 | |
| LOBO | **Lobor** | 5.35 | 181 | P | | Pn | 04 37 44.5 | +0.3 | |
| KALN | **Kalnik** | 5.38 | 178 | P | | Pn | 04 37 44.9 | +0.3 | |
| VXJU | **Vaexsjoe** | 5.48 | 353 | P | | Pn | 04 37 46.7 | +0.7 | |
| VXJU | **Vaexsjoe** | 5.48 | 353 | P | | Pn | 04 37 46.7 | +0.7 | |
| MORH | **Mrgy, Hungar** | 5.53 | 162 | PN | | Pn | 04 37 47.6 | +0.9 | |
| KOVH | **Kovagotottos** | 5.56 | 166 | PN | | Pn | 04 37 47.4 | +0.3 | |
| STAL | **STALIGIAL** | 5.72 | 205 | | | Pn | 04 37 49.7 | +0.3 | |
| FETA | **Feichten** | 5.73 | 221 | *e*Pn | | Pn | 04 37 50.5 | +0.9 | |
| | comp=E,2.2nm,0.4s | | | | | | | | |
| FETA | **Feichten** | 5.73 | 221 | | | Pn | 04 37 50.5 | +0.9 | |
| BYXU | **Byxelkrok** | 5.82 | 4 | P | | Pn | 04 37 51.4 | +0.8 | |
| BYXU | **Byxelkrok** | 5.82 | 4 | P | | Pn | 04 37 51.4 | +0.8 | |
| FABU | **Falkenberg** | 5.87 | 341 | *i* P | | Pn | 04 37 51.2 | -0.2 | |
| FABU | | | | P | | Pn | 04 37 51.4 | +0.1 | |
| FABU | **Falkenberg** | 5.87 | 341 | P | | Pn | 04 37 51.4 | +0.1 | |
| DAVA | **Damuels** | 5.89 | 227 | *e*Pn | | Pn | 04 37 51.7 | -0.1 | |
| | comp=E,6.4nm,0.5s | | | | | | | | |
| DAVA | | | | *e*Sn | | Sn | 04 38 59.9 | -0.2 | |
| | comp=E,6.9nm,0.4s | | | | | | | | |
| DAVA | **Damuels** | 5.89 | 227 | | | Pn | 04 37 51.7 | -0.1 | |
| DAVA | | | | | | Sn | 04 38 59.9 | -0.2 | |
| GNOU | **Gnosjoe** | 5.97 | 347 | P | | Pn | 04 37 53.2 | +0.5 | |
| GNOU | **Gnosjoe** | 5.97 | 347 | P | | Pn | 04 37 53.2 | +0.5 | |
| BFO | **Black Forest** | 5.98 | 241 | P | | Pn | 04 37 52.7 | -0.3 | |
| BFO | **Black Forest** | 5.98 | 241 | | | Pn | 04 37 52.7 | -0.3 | |
| EKSU | **Eksjoe** | 6.11 | 356 | P | | Pn | 04 37 55.4 | +0.8 | |
| EKSU | **Eksjoe** | 6.11 | 356 | P | | Pn | 04 37 55.4 | +0.8 | |
| PABE | **Paberze** | 6.13 | 46 | Pn | | Pn | 04 37 54.6 | -0.4 | |
| PABE | **Paberze** | 6.13 | 46 | *e*P | | Pn | 04 37 55.2 | +0.3 | |
| A252A | **Venje** | 6.17 | 169 | P | | Pn | 04 37 54.5 | -0.9 | |
| VSTU | **Vaestervik** | 6.18 | 2 | P | | Pn | 04 37 56.5 | +1.0 | |
| VSTU | **Vaestervik** | 6.18 | 2 | P | | Pn | 04 37 56.5 | +1.0 | |
| CTI | **Castel Tesino** | 6.22 | 211 | P | | Pn | 04 37 56.3 | 0.0 | |
| CTI | **Castel Tesino** | 6.22 | 211 | | | Pn | 04 37 56.3 | 0.0 | |
| DAVOX | **Davos/Dischmat** | 6.28 | 224 | Pn | | Pn | 04 37 57.0 | -0.1 | |
| | baz=342,slow=20 | | | | | | | | |
| DAVOX | | | | Sn | | Sn | 04 39 09.0 | -0.7 | |
| | comp=E,0.8nm,0.3s,baz=232,slow=14,SNR=1.3 | | | | | | | | |
| DAVOX | | | | Lg | | Lg | 04 39 40.5 | | |
| | comp=E,1.1nm,0.3s,baz=24,slow=13,SNR=5.1 | | | | | | | | |
| DAVOX | **Davos/Dischmat** | 6.28 | 224 | P | | Pn | 04 37 57.0 | -0.1 | |
| DAVOX | | | | | | | 04 39 09.0 | | |
| SIRR | **Siria** | 6.36 | 143 | ⇑P | | Pn | 04 37 57.2 | -0.9 | |
| DRGR | | 6.37 | 135 | ⇑P | | Pn | 04 37 57.1 | -1.1 | |
| ONAU | **Onsala** | 6.41 | 339 | *i* P | | Pn | 04 38 00.8 | +2.1 | |
| MUD | **Monsted U'grnd** | 6.46 | 323 | *i* P | | Pn | 04 38 04.0 | +4.7 | |
| MUD | | | | IAML | | | 04 38 16.9 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | | |
| A250A | **Rusevo Krmpots** | 6.48 | 188 | P | | Pn | 04 37 60.0 | +0.2 | |
| CDF | **Champ du Feu** | 6.53 | 245 | *e*Pn | | Pn | 04 37 58.2 | -2.3 | |
| CDF | | | | *e*Sg | | Sg | 04 39 48.2 | -4.5 | |
| | comp=Z,85nm,0.8s | | | | | | | | |
| PLIT | **Plitvice** | 6.64 | 183 | P | | Pn | 04 38 02.8 | +0.9 | |
| ECH | **Echery** | 6.70 | 244 | P | | Pn | 04 38 02.7 | 0.0 | |
| ECH | **Echery** | 6.70 | 244 | | | Pn | 04 38 02.7 | 0.0 | |
| TUE | **Stuetta** | 6.75 | 224 | Pn | | Pn | 04 38 04.1 | +0.4 | |
| FRGS | **Fruska Gora** | 6.79 | 158 | ⇑P | | Pn | 04 38 05.0 | +1.0 | |
| RABC | **Rab** | 6.82 | 188 | P | | Pn | 04 38 05.2 | +0.8 | |
| BZS | **Buzias** | 6.90 | 146 | ⇑P | | Pn | 04 38 04.6 | -1.0 | |
| ARCR | **ARCALIA** | 6.93 | 126 | ⇑P | | Pn | 04 38 05.3 | -0.6 | |
| UDBI | **Udbina** | 6.98 | 182 | P | | Pn | 04 38 08.2 | +1.5 | |
| VIKU | **Vikbolandet** | 7.02 | 2 | *e*P | | Pn | 04 38 08.2 | +1.1 | |
| BURAR | **Bucovina Array** | 7.04 | 120 | ⇓P | | Pn | 04 38 06.3 | -1.3 | |
| BURAR | **Bucovina Array** | 7.04 | 120 | Pn | | Pn | 04 38 07.4 | -0.2 | |
| HINF | **Hinteralfeld** | 7.09 | 242 | *e*Pn | | Pn | 04 38 06.7 | -1.4 | |
| HINF | | | | *e*Sg | | Sg | 04 40 04.3 | -6.4 | |
| | comp=Z,60nm,0.9s | | | | | | | | |
| SLIT | **Slitere, Latvi** | 7.09 | 28 | *e*P | | Pn | 04 38 09.1 | +1.1 | |
| IIGN | **Ignalina** | 7.13 | 53 | *e*P | | Pn | 04 38 08.5 | -0.1 | |
| NACGM | **Naroch** | 7.22 | 58 | *i* P | | Pn | 04 38 11.3 | +1.5 | |
| KMPD | **K-Podol'skiy** | 7.24 | 110 | Pn | | Pn | 04 38 09.8 | -0.3 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| HAU | **Haudompre** | 7.27 | 245 | *e*Pn | | Pn | 04 38 08.0 | -2.6 | |
| HAU | | | | *e*Sg | | Sg | 04 40 10.1 | -6.3 | |
| | comp=Z,96nm,1.1s | | | | | | | | |
| GIVF | **Givet** | 7.34 | 263 | *e*Sg | | Sg | 04 40 11.9 | -6.7 | |
| | comp=Z,139nm,1.1s | | | | | | | | |
| PAGF | **Fort de Pagny** | 7.35 | 250 | *e*Pn | | Pn | 04 38 10.3 | -1.4 | |
| | baz=72 | | | | | | | | |
| PAGF | | | | *e*Sg | | Sg | 04 40 13.3 | -5.9 | |
| | comp=Z,143nm,1.1s | | | | | | | | |
| IDID | **Didziasalis** | 7.37 | 55 | *e*P | | Pn | 04 38 09.6 | -2.4 | |
| GZR | **Gura Zlata** | 7.52 | 142 | ⇑P | | Pn | 04 38 14.5 | +0.5 | |
| LUBAR | **Lubar, Ukraine** | 7.52 | 98 | Pn | | Pn | 04 38 14.6 | +0.7 | |
| MNK | **Minsk** | 7.67 | 62 | *i* P | | Pn | 04 38 15.1 | -0.9 | |
| MNK | | | | *i* S | | Sn | 04 39 42.7 | -0.8 | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,1.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,8.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| MNK | **Minsk** | 7.67 | 62 | *i* P | | Pn | 04 38 15.2 | -0.9 | |
| | comp=E,1.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | Pn | 04 38 15.2 | -0.9 | |
| | comp=N,8.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | Pn | 04 38 15.2 | -0.9 | |
| | comp=Z,6.0nm,0.8s,baz=251 | | | | | | | | |
| MNK | | | | *i* S | | Sn | 04 39 42.7 | -0.8 | |
| SAVF | **Savonnieres en** | 7.68 | 252 | *e*Sg | | Sg | 04 40 24.0 | -5.7 | |
| | comp=Z,107nm,1.3s | | | | | | | | |
| BAIF | **Baives** | 7.73 | 264 | *e*Pn | | Pn | 04 38 16.0 | -0.9 | |
| BAIF | | | | *e*Sg | | Sg | 04 40 25.7 | -5.5 | |
| | comp=Z,94nm,1.2s | | | | | | | | |
| MEZF | **Maizieres J'vi** | 7.78 | 252 | *e*Pn | | Pn | 04 38 16.3 | -1.2 | |
| | baz=73 | | | | | | | | |
| MEZF | | | | *e*Sg | | Sg | 04 40 27.6 | -5.1 | |
| | comp=Z,92nm,1.1s | | | | | | | | |
| LOT | **Lotru** | 7.88 | 137 | ⇑P | | Pn | 04 38 18.7 | -0.2 | |
| SFTF | **Sexfontaines** | 7.92 | 250 | *e*Pn | | Pn | 04 38 18.0 | -1.5 | |
| SFTF | | | | *e*Sg | | Sg | 04 40 31.5 | -5.9 | |
| | comp=Z,125nm,1.3s | | | | | | | | |
| AKASG | **Malin Array Be** | 8.25 | 90 | Pn | | Pn | 04 38 22.8 | -1.1 | |
| | comp=Z,1.9nm,0.3s,baz=280,slow=12,SNR=18 | | | | | | | | |
| AKASG | | | | Sn | | Sn | 04 39 51.7 | -6.1 | |
| | comp=Z,1.9nm,0.3s,baz=264,slow=25,SNR=4.9 | | | | | | | | |
| AKASG | | | | Lg | | Lg | 04 40 46.0 | | |
| | comp=Z,0.6nm,0.3s,baz=16,slow=21,SNR=4.2 | | | | | | | | |
| AKASG | **Malin Array Be** | 8.25 | 90 | P | | Pn | 04 38 23.5 | -0.4 | |
| AKASG | **Malin Array Be** | 8.25 | 90 | | | Pn | 04 38 23.5 | -0.4 | |
| AKBB | **Malin Array Si** | 8.25 | 90 | ⇑*e*P | | Pn | 04 38 22.4 | -1.5 | |
| AKBB | **Malin Array Si** | 8.25 | 90 | Pn | | Pn | 04 38 22.9 | -1.0 | |
| AKBB | **Malin Array Si** | 8.25 | 90 | Pn | | Pn | 04 38 22.9 | -1.0 | |
| AKBB | **Malin Array Si** | 8.25 | 90 | pP | | Pn | 04 38 25.2 | +1.3 | |
| AKBB | **Malin Array Si** | 8.25 | 90 | sP | | Pn | 04 38 26.2 | +2.3 | |
| MTSE | **Mt Seula** | 8.44 | 28 | *e*P | | Pn | 04 38 27.7 | +1.1 | |
| SORM | **Soroca** | 8.56 | 108 | ⇑P | | Pn | 04 38 26.1 | -2.0 | |
| LPL | **La Plagne** | 8.67 | 230 | *e*Pn | | Pn | 04 38 27.9 | -2.1 | |
| LPG | **La Plagne** | 8.67 | 230 | *e*Pn | | Pn | 04 38 28.8 | -1.3 | |
| HFS | **Hagfors** | 8.77 | 352 | Pn | | Pn | 04 38 27.1 | -3.9 | |
| | comp=Z,0.7nm,0.3s,baz=174,slow=16,SNR=2.0 | | | | | | | | |
| HFS | | | | Sn | | Sn | 04 40 08.9 | -1.6 | |
| | comp=Z,0.7nm,0.3s,baz=175,slow=20,SNR=2.7 | | | | | | | | |
| HFS | | | | Lg | | Lg | 04 40 58.5 | | |
| | baz=161,slow=32,SNR=1.4 | | | | | | | | |
| KONO | **Kongsberg** | 8.97 | 338 | ⇑*e*P | | Pn | 04 38 36.3 | +2.4 | |
| KONO | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| LOR | **Lormes** | 9.09 | 247 | *e*Pn | | Pn | 04 38 32.8 | -2.7 | |
| | baz=68 | | | | | | | | |
| VSU | **Vasula** | 9.23 | 37 | ⇑*e*P | | Pn | 04 38 39.1 | +1.7 | |
| VSU | | | | pmax | | pmax | | | |
| | comp=Z,73nm,1.0s | | | | | | | | |
| VSU | **Vasula** | 9.23 | 37 | *e*P | | Pn | 04 38 38.4 | +1.0 | |
| MBDF | **Montbardon** | 9.24 | 227 | *e*Pn | | Pn | 04 38 36.0 | -1.8 | |
| SSF | **Saint Saulge** | 9.40 | 247 | *e*Pn | | Pn | 04 38 37.2 | -2.6 | |
| ORIF | **Oris-en-Rattie** | 9.52 | 230 | *e*Pn | | Pn | 04 38 40.6 | -0.9 | |
| SBF | **Sospel** | 9.65 | 221 | *e*Pn | | Pn | 04 38 42.0 | -1.2 | |
| NOA | **NORSAR Array B** | 9.95 | 346 | Pn | | Pn | 04 38 43.4 | -3.9 | |
| | comp=Z,0.0nm,0.3s,baz=166,slow=12,SNR=8.7 | | | | | | | | |
| NOA | | | | Sn | | Sn | 04 40 29.9 | -10 | |
| | comp=Z,0.0nm,0.3s,baz=191,slow=15,SNR=1.7 | | | | | | | | |
| NOA | | | | Lg | | Lg | 04 41 34.0 | | |
| | comp=Z,0.0nm,0.3s,baz=231,slow=12,SNR=2.0 | | | | | | | | |
| VIVF | **Saint-Julien-l** | 10.16 | 234 | *e*Pn | | Pn | 04 38 46.7 | -3.5 | |
| FRF | **La Foret Royal** | 10.22 | 223 | *e*Pn | | Pn | 04 38 50.2 | -0.9 | |
| SMRF | **Simiane la Rot** | 10.37 | 228 | *e*Pn | | Pn | 04 38 51.2 | -1.9 | |
| LMR | **La Mourre** | 10.47 | 222 | *e*Pn | | Pn | 04 38 53.6 | -0.8 | |
| FINES | **FINESS Array B** | 11.35 | 25 | Pn | | Pn | 04 39 03.1 | -3.3 | |
| | comp=Z,0.7nm,0.3s,baz=200,slow=12,SNR=20 | | | | | | | | |
| FINES | | | | Sn | | Sn | 04 41 05.7 | -8.1 | |
| | comp=Z,0.4nm,0.3s,baz=208,slow=20,SNR=2.6 | | | | | | | | |
| FINES | | | | Lg | | Lg | 04 42 18.7 | | |
| | comp=Z,0.2nm,0.3s,baz=232,slow=23,SNR=1.0 | | | | | | | | |
| FINES | **FINESS Array B** | 11.35 | 25 | P | | Pn | 04 39 04.9 | -1.5 | |
| FINES | **FINESS Array B** | 11.35 | 25 | | | Pn | 04 39 04.9 | -1.5 | |
| EKA | **Eskdalemuir Ar** | 12.15 | 296 | Pn | | Pn | 04 39 13.7 | -3.7 | |
| | baz=101,slow=14,SNR=6.6 | | | | | | | | |
| OBN | **Obninsk** | 12.70 | 65 | *i* P | | Pn | 04 39 18.9 | -6.0 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,59nm,17.0s | | | | | | | | |
| LPSR | **Galich'ya Gora** | 14.03 | 77 | *e*P | | Pn | 04 39 38.2 | -4.8 | |
| LPSR | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| VORR | **Voronezh** | 14.30 | 80 | *e*P | | Pn | 04 39 41.6 | -5.2 | |
| VORR | | | | pmax | | pmax | | | |
| | comp=Z,80nm,0.4s | | | | | | | | |
| VSR | **Storozhevoye** | 14.35 | 82 | *e*P | | Pn | 04 39 40.5 | -6.9 | |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | | |
| KLMR | **Klimovskoe** | 15.93 | 45 | *e*P | | Pn | 04 40 01.1 | -7.2 | |
| KLMR | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| KLMR | **Klimovskoe** | 15.93 | 45 | *e*Pn | | Pn | 04 40 01.2 | -7.1 | |
| KLMR | | | | AMP | | | 04 40 05.5 | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| KLMR | | | | *e*Pg | | | 04 41 16.6 | | |
| KLMR | | | | *e*Sn | | Sn | 04 42 53.9 | -11 | |
| KLMR | | | | *e*Sn | | Sn | 04 42 53.9 | -11 | |
| KLMR | | | | *e*Lg | | Lg | 04 44 53.1 | | |
| KLMR | | | | *e*Lg | | Lg | 04 44 53.1 | | |
| KLMR | | | | *e*Lg | | Lg | 04 44 53.1 | | |
| VRH | **Novokhopyorsk** | 15.94 | 81 | *e*P | | Pn | 04 40 01.9 | -6.6 | |
| VRH | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| ARCES | **ARCESS Array B** | 18.62 | 10 | P | | P | 04 40 39.0 | -2.9 | |
| | baz=193,slow=13,SNR=21 | | | | | | | | |
| ARCES | **ARCESS Array B** | 18.62 | 10 | P | | P | 04 40 40.0 | -1.9 | |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| ARCES | **ARCESS Array B** | 18.62 | 10 | P | | P | 04 40 40.0 | -1.9 | |
| ARCES | | | | IAmb | | IAmb | 04 40 48.0 | | |
| | comp=Z,5.2nm,1.1s | | | | | | | | |
| PRGR | **Permogore** | 18.96 | 46 | *e*P | | P | 04 40 40.1 | -5.4 | |
| PRGR | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| KEV | **Kevo** | 19.01 | 12 | P | | Pn | 04 40 46.5 | -0.2 | |
| KEV | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.3s | | | | | | | | |
| KEV | **Kevo** | 19.01 | 12 | P | | Pn | 04 40 46.5 | -0.2 | |
| KEV | | | | IAmb | | IAmb | 04 41 03.7 | | |
| | comp=Z,31nm,1.3s | | | | | | | | |
| KIV | **Kislovodsk** | 19.28 | 103 | *e*P | | Pn | 04 40 51.4 | +1.1 | |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| BELG | **Belogornoye** | 19.33 | 75 | *de*P | | Pn | 04 40 50.9 | +0.3 | |
| | comp=Z,0.6nm,0.3s,baz=309,slow=1.7,SNR=5.8 | | | | | | | | |
| BELG | **Belogornoye** | 19.33 | 75 | *de*P | | Pn | 04 40 51.5 | +0.9 | |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| KIRV | **Kirov** | 20.15 | 56 | ⇑*e*P | | Pn | 04 41 00.4 | 0.0 | |
| ZEI | **Tsey** | 20.66 | 104 | *e*P | | P | 04 41 04.9 | +0.3 | |
| ZEI | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| ARU | **Arti** | 25.10 | 62 | P | | P | 04 41 49.8 | +0.6 | |
| | comp=Z,2.7nm,0.2s,baz=289,slow=4.7,SNR=6.1 | | | | | | | | |
| ARU | **Arti** | 25.10 | 62 | *c iP* | | P | 04 41 50.1 | +0.9 | |
| ARU | | | | S | | S | 04 46 17.0 | +2.5 | |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| ARU | **Arti** | 25.10 | 62 | P | | P | 04 41 50.2 | +0.9 | |
| AKTO | **Aktyubinsk** | 26.11 | 76 | P | | P | 04 41 59.5 | +1.1 | |
| | comp=Z,2.0nm,0.6s,baz=286,slow=10,SNR=5.2 | | | | | | | | |
| BRVK | **Borovoye** | 32.48 | 66 | ⇑*e*P | | P | 04 42 57.2 | +2.2 | |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| KURBB | **Kurchatov Arra** | 38.14 | 66 | P | | P | 04 43 44.3 | +0.7 | |
| | comp=Z,2.0nm,1.0s,baz=298,slow=9.1,SNR=8.0 | | | | | | | | |
| KURBB | | | | PP | | PP | 04 45 10.9 | +0.5 | |
| | comp=Z,0.4nm,0.7s,baz=290,slow=34,SNR=2.5 | | | | | | | | |
| KURK | **Kurchatov** | 38.15 | 66 | ⇑*e*P | | P | 04 43 45.0 | +1.2 | |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | | |
| KURK | **Kurchatov** | 38.15 | 66 | P | | P | 04 43 44.8 | +1.1 | |
| KURK | | | | IAmb | | IAmb | 04 43 46.8 | | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| AAK | **

**MKAR Makanchi Array 49.65 325** P **P** **05 11 45.0 +0.8**
0.2nm,0.7s,baz=125,slow=7.6,SNR=2.2
**PLCA Paso Flores 147.62 162** PKPbc **PKPdf** **05 22 37.0 +2.0**
1.4nm,0.9s,baz=304,slow=3.6,SNR=4.6

*SFS **25** 05:04:00.0, 35°.57N × 3°.85W, ML2.2, ALBORAN S.*
*CNRM **25** 05:04:01.3, 35°.63N × 3°.69W, h16km, ml2.5*
**ISC 25 05:04:00.7 ± 1.2, 35°.65N ± 0°.04 × 3°.65W ± 0°.05, h13km ± 10km, n7, σ0s88/14, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.49** | **209** | P | **Pg** | **05 04 10.1** | **-0.2** |
| PALE | | | | S | **Sg** | **05 04 17.0** | **+0.2** |
| **EMAL** | **Malaga-Limoner** | **1.28** | **331** | P | **Pg** | **05 04 25.7** | **+0.4** |
| EMAL | | | | S | **Sg** | **05 04 42.1** | **+0.1** |
| **TAF** | **Taforalt** | **1.31** | **129** | P | **Pg** | **05 04 26.5** | **+0.6** |
| TAF | | | | S | **Sg** | **05 04 43.0** | **0.0** |
| **CHEFC** | **Chefchaouen** | **1.48** | **249** | P | **Pn** | **05 04 27.1** | **-0.1** |
| CHEFC | | | | S | **Sn** | **05 04 45.6** | **-0.8** |
| **JBK** | **JBK** | **1.58** | **145** | P | **Pb** | **05 04 29.2** | **-0.8** |
| JBK | | | | S | **Sn** | **05 04 48.3** | **-0.8** |
| **MD31** | **MD31** | **2.92** | **199** | P | **Pn** | **05 04 47.7** | **+0.8** |
| MD31 | | | | S | **Sn** | **05 05 23.2** | **+1.3** |
| **MDT** | **Midelt** | **2.93** | **196** | P | **Pn** | **05 04 46.4** | **-0.7** |
| MDT | | | | S | **Sn** | **05 05 23.8** | **+1.5** |

*IDC **25** 05:04:58.7 ± 3.6, 31°.24S × 180°.00W, h414km ± 34km, mb3.2/4, mb1 3.4/6, mb1mx3.0/41, mbtmp4.1/6, Error ellipse: s-maj=36.0km s-min=24.2km az=38.0*
**ISC 25 05:04:57.2 ± 0.8, 31°.08S ± 0°.07 × 179°.9W ± 0°.1, h400km, n102, σ1s63/105, mb3.5/4, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RIZ** | **Raoul Island** | **2.49** | **43** | S | **S** | **05 06 44.4** | **0.0** |
| **RAO** | **Raoul Island** | **2.49** | **43** | S | **S** | **05 06 42.0** | **-2.4** |
| | 157nm,0.3s,baz=72,slow=19,SNR=2.0 | | | | | | |
| **MXZ** | **Matakaoa Point** | **6.63** | **193** | P | **Pn** | **05 06 37.5** | **+0.8** |
| MXZ | | | | S | **S** | **05 07 58.5** | **+0.7** |
| **PUZ** | **Puketiti** | **7.14** | **192** | P | **P** | **05 06 44.6** | **+1.7** |
| PUZ | | | | S | **S** | **05 08 06.9** | **-1.4** |
| **RUGZ** | **Raukumara Rang** | **7.16** | **196** | P | **P** | **05 06 45.7** | **+2.6** |
| RUGZ | | | | S | **S** | **05 08 07.4** | **-1.3** |
| **WHRZ** | **Whale Island** | **7.24** | **200** | P | P | 05 06 50.0 | +6.0 |
| **TWGZ** | **Tauwhareparae** | **7.29** | **193** | P | **P** | **05 06 46.4** | **+1.8** |
| TWGZ | | | | S | **S** | **05 08 12.1** | **+0.6** |
| **TGRZ** | **Tauranga** | **7.36** | **205** | P | P | 05 06 50.4 | +5.1 |
| **OPRZ** | **Ohinepanea** | **7.36** | **203** | P | P | 05 06 50.1 | +4.8 |
| **MARZ** | **Manawahe** | **7.45** | **202** | P | P | 05 06 51.1 | +4.8 |
| **EDRZ** | **Edgecumbe** | **7.54** | **201** | P | P | 05 06 51.9 | +4.5 |
| **MWZ** | **Matawai** | **7.54** | **196** | P | **P** | **05 06 48.6** | **+1.2** |
| MWZ | | | | S | **S** | **05 08 14.5** | **-2.1** |
| **CNGZ** | **Carnagh Statio** | **7.55** | **192** | P | **P** | **05 06 49.9** | **+2.5** |
| **LIRZ** | **Lichensteins R** | **7.56** | **203** | P | P | 05 06 52.3 | +4.7 |
| **TKGZ** | **Te Karaka** | **7.57** | **194** | P | **P** | **05 06 49.9** | **+2.2** |
| TKGZ | | | | S | **S** | **05 08 16.5** | **-0.7** |
| **URZ** | **Urewera** | **7.58** | **198** | P | **P** | **05 06 47.5** | **-0.2** |
| | 45nm,0.3s,baz=265,slow=3.9,SNR=187 | | | | | | |
| URZ | | | | S | **S** | **05 08 15.0** | **-2.3** |
| | 41nm,0.3s,baz=295,slow=23,SNR=19 | | | | | | |
| **URZ** | **Urewera** | **7.58** | **198** | P | **P** | **05 06 48.6** | **+0.9** |
| URZ | | | | S | **S** | **05 08 16.3** | **-1.0** |
| **KMRZ** | **Kaimai** | **7.58** | **206** | P | P | 05 06 52.9 | +5.1 |
| **KARZ** | **Kaharoa** | **7.62** | **204** | P | P | 05 06 53.1 | +4.8 |
| **TOZ** | **Tahuroa Road** | **7.65** | **209** | P | P | 05 06 54.9 | +6.3 |
| **NGRZ** | **Ngongotaha** | **7.72** | **204** | P | P | 05 06 55.1 | +5.7 |
| **RAGZ** | **Rawiri** | **7.72** | **196** | P | **P** | **05 06 51.8** | **+2.4** |
| RAGZ | | | | S | **S** | **05 08 19.9** | **-0.6** |
| **TARZ** | **Mount Tarawera** | **7.73** | **202** | P | P | 05 06 54.4 | +4.8 |
| **RRRZ** | **Republican Roa** | **7.82** | **201** | P | **P** | **05 06 53.9** | **+3.4** |
| **RIGZ** | **Rimuhau** | **7.85** | **194** | P | **P** | **05 06 51.7** | **+0.9** |
| RIGZ | | | | S | **S** | **05 08 21.1** | **-2.0** |
| **MUGZ** | **Murupara** | **7.88** | **200** | P | **P** | **05 06 53.7** | **+2.6** |
| MUGZ | | | | S | **S** | **05 08 22.2** | **-1.4** |
| **GRRZ** | **Galatos Road** | **7.97** | **203** | P | P | 05 06 56.8 | +4.7 |
| **PRRZ** | **Plateau Road** | **8.01** | **202** | P | **P** | **05 06 55.8** | **+3.3** |
| **SNGZ** | **Shannon Statio** | **8.01** | **196** | P | **P** | **05 06 54.5** | **+1.9** |
| SNGZ | | | | S | **S** | **05 08 26.0** | **-0.4** |
| **PRGZ** | **Paritu Road** | **8.03** | **193** | P | **P** | **05 06 55.4** | **+2.5** |
| PRGZ | | | | S | **S** | **05 08 25.8** | **-1.1** |
| **TLZ** | **Tolley Road** | **8.15** | **206** | P | **P** | **05 06 54.0** | **+3.8** |
| **RAHZ** | **Arahi** | **8.20** | **197** | P | **P** | **05 06 56.0** | **+1.3** |
| RAHZ | | | | S | **S** | **05 08 28.2** | **-2.2** |
| **HIZ** | **Hauiti** | **8.58** | **209** | P | P | 05 07 04.1 | +5.2 |
| **BKZ** | **Black Stump Fm** | **8.59** | **199** | P | **P** | **05 06 59.5** | **+0.4** |
| BKZ | | | | S | **S** | **05 08 37.2** | **-1.6** |
| **RITZ** | **Rihia Road** | **8.62** | **203** | P | **P** | **05 07 01.9** | **+2.6** |
| **NTVZ** | **North Tongarir** | **8.79** | **203** | P | **P** | **05 07 02.9** | **+1.6** |
| **TMVZ** | **Te Maari** | **8.79** | **203** | P | **P** | **05 07 02.9** | **+1.5** |
| **MCHZ** | **McNeill Hill** | **8.80** | **198** | P | **P** | **05 07 02.5** | **+1.2** |
| MCHZ | | | | S | **S** | **05 08 43.8** | **+0.8** |
| **ETVZ** | **East Tongariro** | **8.81** | **203** | P | **P** | **05 07 02.4** | **+0.9** |
| **WTVZ** | **West Tongariro** | **8.83** | **204** | P | **P** | **05 07 03.3** | **+1.5** |
| **NNVZ** | **North Ngauruho** | **8.84** | **203** | P | **P** | **05 07 03.7** | **+1.8** |
| **TWVZ** | **Taurewa** | **8.85** | **204** | P | **P** | **05 07 04.7** | **+2.8** |
| **OTVZ** | **Oturere** | **8.85** | **203** | P | **P** | **05 07 02.0** | **0.0** |
| OTVZ | | | | S | **S** | **05 08 45.5** | **+1.1** |
| **SNVZ** | **South Ngauruho** | **8.88** | **203** | P | **P** | **05 07 03.3** | **+0.9** |
| **CKHZ** | **Cape Kidnapper** | **8.91** | **195** | P | **P** | **05 07 04.3** | **+1.8** |
| CKHZ | | | | S | **S** | **05 08 43.1** | **-2.3** |
| **TUVZ** | **Tukino** | **8.95** | **203** | P | **P** | **05 07 04.4** | **+1.2** |
| **FWVZ** | **Far West T-bar** | **8.97** | **203** | P | **P** | **05 07 05.7** | **+2.3** |
| **WHVZ** | **Whangaehu Hut** | **8.98** | **203** | P | **P** | **05 07 05.7** | **+2.1** |
| **TRVZ** | **Turoa** | **9.01** | **203** | P | **P** | **05 07 05.4** | **+1.5** |
| **BHHZ** | **Black Hill Sta** | **9.02** | **200** | P | **P** | **05 07 03.6** | **-0.2** |
| **WNVZ** | **Wahianoa** | **9.02** | **203** | P | **P** | **05 07 03.4** | **-0.5** |
| **MOVZ** | **Moawhango** | **9.04** | **202** | P | **P** | **05 07 05.2** | **+1.2** |
| **PKVZ** | **Pokaka** | **9.07** | **204** | P | **P** | **05 07 05.0** | **+0.6** |
| **KRHZ** | **Kereru** | **9.07** | **199** | P | **P** | **05 07 05.6** | **+1.2** |
| **KAHZ** | **Kahuranaki** | **9.09** | **196** | P | **P** | **05 07 05.4** | **+0.8** |
| **MTVZ** | **Mangateitei** | **9.11** | **203** | P | **P** | **05 07 07.5** | **+2.6** |
| **VRZ** | **Vera Road** | **9.15** | **207** | P | **P** | **05 07 08.8** | **+3.7** |
| **PNHZ** | **Pukenui** | **9.37** | **199** | P | **P** | **05 07 06.5** | **-1.2** |
| **PKE** | **Pukeiti** | **9.52** | **210** | P | Pn | 05 07 14.7 | +5.1 |
| **NEZ** | **North Egmont** | **9.54** | **209** | P | Pn | 05 07 14.4 | +4.5 |
| **TSZ** | **Takapari Road** | **9.57** | **208** | P | **Pn** | **05 07 09.9** | **-0.2** |
| **LREZ** | **Lake Rotokare** | **9.57** | **208** | P | **Pn** | **05 07 10.9** | **+4.8** |
| **PRHZ** | **Porangahau** | **9.59** | **196** | P | **Pn** | **05 07 12.4** | **+2.1** |
| **KHEZ** | **Kahui Hut** | **9.60** | **210** | P | Pn | 05 07 14.8 | +4.4 |
| **WAZ** | **Wanganui** | **9.61** | **204** | P | **Pn** | **05 07 12.5** | **+1.9** |
| **DVHZ** | **Dannevirke** | **9.74** | **198** | P | **Pn** | **05 07 12.3** | **+0.2** |
| **ANWZ** | **Angora Road** | **9.81** | **197** | P | **Pn** | **05 07 14.5** | **+1.6** |
| **POWZ** | **Post Office Ro** | **9.94** | **200** | P | **Pn** | **05 07 16.0** | **+1.7** |
| **PRWZ** | **Pori Road** | **10.03** | **198** | P | **Pn** | **05 07 16.9** | **+1.5** |
| **BFZ** | **Birch Farm** | **10.08** | **197** | P | **Pn** | **05 07 16.8** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **10.24** | **200** | P | **P** | **05 07 16.2** | **-1.1** |
| **TIWZ** | **Tintock** | **10.26** | **198** | P | **Pn** | **05 07 19.8** | **+1.6** |
| **CPWZ** | **Castlepoint** | **10.31** | **197** | P | **Pn** | **05 07 20.7** | **+2.1** |
| **HOWZ** | **Holdsworth Sta** | **10.48** | **200** | P | **P** | **05 07 19.1** | **-0.8** |
| **OGWZ** | **Otaki Gorge** | **10.51** | **201** | P | **P** | **05 07 19.5** | **-0.7** |
| **TMWZ** | **Te Maipa** | **10.57** | **198** | P | **Pn** | **05 07 22.3** | **+0.6** |
| **MTW** | **Mount Morrison** | **10.72** | **199** | P | **Pn** | **05 07 22.6** | **-0.9** |
| **CAW** | **Cannon Point** | **10.80** | **201** | P | **Pn** | **05 07 23.4** | **-1.0** |
| **TRWZ** | **Traveller** | **10.90** | **198** | P | **Pn** | **05 07 25.9** | **+0.4** |
| **DUWZ** | **D'Urville Isla** | **10.92** | **206** | P | **P** | **05 07 24.6** | **-0.2** |
| **PAWZ** | **Paruwai Farm** | **10.95** | **199** | P | **Pn** | **05 07 26.2** | **+0.1** |
| **MSWZ** | **Moikau Station** | **11.03** | **200** | P | **Pn** | **05 07 26.7** | **-0.4** |
| **BHW** | **Baring Head** | **11.14** | **201** | P | **Pn** | **05 07 27.1** | **-1.1** |
| **PLWZ** | **Palliser** | **11.17** | **199** | P | **Pn** | **05 07 28.3** | **-0.5** |
| **NNZ** | **Nelson** | **11.48** | **206** | P | **Pn** | **05 07 31.1** | **-1.2** |
| **BSWZ** | **Blackbirch Sta** | **11.74** | **204** | P | **Pn** | **05 07 34.3** | **-0.9** |
| **THZ** | **Tophouse** | **12.13** | **207** | P | **Pn** | **05 07 38.9** | **-1.0** |
| **RPZ** | **Rata Peaks** | **14.51** | **207** | P | **P** | **05 08 03.9** | **-0.3** |
| | 1.2nm,0.3s,baz=300,slow=1.2,SNR=7.4 | | | | | | |
| RPZ | | | | S | **S** | **05 10 35.5** | **-3.5** |
| | 0.3nm,0.3s,baz=72,slow=20,SNR=0.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.17** | **303** | P | **P** | **05 08 10.9** | **-0.8** |
| | baz=126,slow=19,SNR=2.0 | | | | | | |
| **CTA** | **Charters Tower** | **32.34** | **282** | P | **P** | **05 10 52.7** | **+1.4** |
| | 2.1nm,0.6s,baz=110,slow=9.7,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **41.47** | **269** | P | **P** | **05 12 06.6** | **-0.7** |
| | 0.6nm,0.5s,baz=108,slow=7.6,SNR=7.2 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 13 55.9** | **-0.4** |
| | 0.2nm,0.3s,baz=115,slow=3.9,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.52** | **274** | P | **P** | **05 12 15.0** | **-0.7** |
| | 1.9nm,0.6s,baz=111,slow=8.1,SNR=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.75** | **271** | P | **P** | **05 13 18.1** | **-0.5** |
| | 1.4nm,0.8s,baz=134,slow=3.9,SNR=5.6 | | | | | | |

**MKAR Makanchi Array 116.98 310** PKP **PKPdf** **05 22 54.6 -0.4**
0.2nm,0.6s,baz=90,slow=1.4,SNR=2.5
**KURBB Kurchatov Arra 120.39 314** PKP **PKPdf** **05 22 59.8 -1.5**
0.2nm,0.5s,baz=104,slow=1.7,SNR=4.4
**ARCES ARCESS Array B 138.90 347** PKhKP PKPpre 05 23 28.9
4.6nm,1.1s,baz=70,slow=1.4,SNR=5.0
ARCES PKP **PKPdf** **05 23 37.0 +1.3**
3.6nm,1.0s,baz=74,slow=3.2,SNR=1.7
**KBZ Khabaz 144.14 303** PKP PKPbc 05 23 45.4 +0.4
1.6nm,0.6s,baz=98,slow=2.8,SNR=4.0
**FINES FINESS Array B 145.21 338** PKPbc **PKPdf** **05 23 47.7 +0.6**
3.1nm,0.4s,baz=54,slow=4.5,SNR=32
**NB2 NORSAR Subarra1 149.16 349** PKP **PKPbc** **05 23 58.5 0.0**
comp=Z,0.5nm,0.4s,baz=16,slow=2.5
**NOA NORSAR Array B 149.16 349** PKPbc **PKPbc** **05 23 58.4 -0.1**
comp=Z,1.3nm,0.6s,baz=16,slow=4.1,SNR=5.1
**AKASG Malin Array Be 150.83 321** PKPbc **PKPbc** **05 24 02.5 -0.2**
comp=Z,0.8nm,0.4s,baz=47,slow=3.1,SNR=6.8
**BRTR Keskin Array B 151.49 297** PKPbc **PKPbc** **05 24 04.7 -0.1**
comp=Z,0.8nm,0.5s,baz=138,slow=4.1,SNR=9.0

*IDC **25** 05:10:33.7 ± 0.5, 10°.17N × 122°.37E, h0km, mb4.0/21, mb1 4.2/22, mb1mx4.0/53, mbtmp4.1/22, ML4.8/1, MS3.7/31, Ms1 3.7/31, ms1mx3.4/83, Error ellipse: s-maj=27.1km s-min=11.9km az=71.0*
*NEIC **25** 05:10:36.0 ± 1.4, 10°.28N ± 0°.07 × 122°.47E ± 0°.08, h10km ± 1km, mb4.5/32, Error ellipse: s-maj=13.5km s-min=11.6km az=72.0*
*MAN **25** 05:10:36.6, 10°.18N × 122°.11E, h16km, mb4.9, ML3.8, MS3.8*
*MAN INTENSITY II - ANINI-Y, ANTIQUE; INTENSITY I - GUIMBAL, SAN JOAQUIN & MIAGAO, ANTIQUE; ILO-ILO CITY.*
**ISC 25 05:10:35.7 ± 1.2, 10°.21N ± 0°.03 × 122°.30E ± 0°.03, h12km ± 7km, n103, σ1s54/97, mb4.4/33, MS3.8/28, 5C-15D, Panay**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNOP** | **Candoni, Negro** | **0.51** | **139** | ↓eP | **Pn** | **05 10 48.6** | **-0.1** |
| CNOP | | | | eS | **Sn** | **05 10 58.8** | **+1.4** |
| **JAP** | **San Jose, Anti** | **0.64** | **327** | ↓iP | **Pg** | **05 10 48.3** | **+0.2** |
| JAP | | | | iS | **Sg** | **05 10 56.8** | **+0.3** |
| **RCP** | **Roxas** | **1.41** | **18** | ↓eP | **Pg** | **05 11 02.1** | **-0.7** |
| RCP | | | | eS | **Sg** | **05 11 23.0** | **+2.0** |
| **CUYO** | **Cuyo Island** | **1.41** | **297** | ↓eP | **Pn** | **05 10 59.4** | **-1.9** |
| CUYO | | | | eS | **Sn** | **05 11 17.1** | **-2.8** |
| **KALP** | **Kalibo** | **1.46** | **1** | ↓eP | **Pn** | **05 11 00.4** | **-1.4** |
| **TBP** | **Tagbilaran** | **1.62** | **108** | eP | **Pg** | **05 11 07.5** | **+0.7** |
| TBP | | | | iS | **Sg** | **05 11 32.1** | **+4.2** |
| **LLP** | **Lapu-Lapu** | **1.64** | **86** | ↑iP | **Pg** | **05 11 07.2** | **0.0** |
| LLP | | | | iS | **Sg** | **05 11 30.3** | **+1.8** |
| **OCLP** | **Ormoc** | **2.42** | **70** | ↓eP | **Pg** | **05 11 19.1** | **-2.9** |
| OCLP | | | | eS | **Sb** | **05 11 45.2** | **-3.7** |
| **SJMP** | **San Jose** | **2.52** | **333** | ↓eP | **Pn** | **05 11 15.1** | **-1.4** |
| **MSLP** | **Maasin** | **2.52** | **92** | ↓eP | **Pb** | **05 11 20.3** | **-0.6** |
| MSLP | | | | eS | **Sg** | **05 11 53.8** | **-2.9** |
| **PAGZ** | **Pagadian** | **2.58** | **155** | ↓eP | **Pb** | **05 11 19.6** | **-2.4** |
| **BUSP** | **Coron** | **2.73** | **311** | ↑eP | **Pn** | **05 11 17.8** | **-1.5** |
| **ENPP** | **El Nido** | **3.00** | **290** | ↓eP | **Pn** | **05 11 22.0** | **-1.0** |
| ENPP | | | | eS | **Sn** | **05 11 55.1** | **-3.8** |
| **BOAC** | **Boac** | **3.26** | **352** | ↑eP | **Pn** | **05 11 27.6** | **+1.0** |
| **PGP** | **Puerto Galera** | **3.53** | **338** | ↓eP | **Pn** | **05 11 30.2** | **-0.2** |
| **CTBH** | **Cotabato--PC H** | **3.54** | **147** | ↓iP | **Pb** | **05 11 35.6** | **-2.7** |
| CTBH | | | | iS | **Sb** | **05 12 21.3** | **+0.1** |
| **BUKP** | **Musuan** | **3.58** | **130** | ↑eP | **Pb** | **05 11 37.1** | **-1.9** |
| **GLSP** | **General Luna,** | **3.79** | **96** | ↓eP | Pb | 05 11 37.0 | -5.5 |
| **LQP** | **Lukban** | **3.95** | **349** | eP | **Pn** | **05 11 38.5** | **+2.2** |
| **JCNP** | **Jose Panganiba** | **4.07** | **5** | ↓eP | **Pn** | **05 11 37.3** | **-0.6** |
| **TGY** | **Tagaytay City** | **4.09** | **341** | Pn | **Pn** | **05 11 38.2** | **+0.1** |
| | 53nm,0.3s,baz=86,slow=16,SNR=1.7 | | | | | | |
| **KCP** | **Kidapawan** | **4.21** | **139** | ↑eP | **Pb** | **05 11 51.3** | **+1.5** |
| KCP | | | | iS | **Sg** | **05 12 49.1** | **-2.0** |
| **MACP** | **Maragondon, Ca** | **4.31** | **339** | ↓eP | **Pn** | **05 11 39.0** | **-2.2** |
| **DAV** | **Davao City (W)** | **4.50** | **134** | LR | LR | 05 13 49.6 | |
| | comp=Z,2μm,18.5s,baz=330,slow=44 | | | | | | |
| **MYLDM** | **Lake Datu** | **6.26** | **217** | | **Pn** | **05 12 10.2** | **+2.2** |
| **TOLI2** | **Tolitoli** | **9.17** | **190** | Pn | **Pn** | **05 12 48.6** | **+0.7** |
| **SIJI** | **Sorong** | **14.17** | **140** | LR | LR | 05 19 42.4 | |
| | comp=Z,316nm,21.8s,baz=358,slow=39 | | | | | | |
| **KAPI** | **Kappang** | **15.34** | **190** | Pn | **Pn** | **05 14 14.9** | **+2.7** |
| | 1.0nm,0.3s,baz=88,slow=19,SNR=1.7 | | | | | | |
| KAPI | | | | LR | LR | 05 20 09.4 | |
| | comp=Z,47nm,20.5s,baz=33,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **15.34** | **190** | | **Pn** | **05 14 13.9** | **+1.8** |
| KAPI | | | | IAmb | IAmb | 05 14 22.9 | |
| | comp=Z,42nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **20.33** | **176** | P | **P** | **05 15 10.7** | **-1.3** |
| | comp=Z,39nm,0.6s,baz=315,slow=4.3,SNR=2.4 | | | | | | |
| **GUMO** | **Guam** | **22.33** | **79** | LR | LR | 05 25 09.1 | |
| | comp=Z,48nm,18.2s,baz=106,slow=39 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **24.05** | **293** | P | **P** | **05 15 52.4** | **+1.4** |
| CM31 | | | | IAmb | IAmb | 05 16 10.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.05** | **293** | P | **P** | **05 15 51.3** | **+0.3** |
| | comp=Z,6.8nm,1.1s,baz=118,slow=8.1,SNR=14 | | | | | | |
| CMAR | | | | LR | LR | 05 26 32.0 | |
| | comp=Z,64nm,18.6s,baz=105,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.05** | **293** | P | **P** | **05 15 51.5** | **+0.5** |
| **CHTO** | **Chiang Mai** | **24.15** | **293** | P | **P** | **05 15 52.4** | **+0.5** |
| CHTO | | | | IAmb | IAmb | 05 15 55.4 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **PSI** | **Prapat** | **24.35** | **254** | LR | LR | 05 25 30.5 | |
| | comp=Z,83nm,20.3s,baz=77,slow=37 | | | | | | |
| **PZH** | **PanZhiHua** | **25.30** | **313** | P | **P** | **05 16 07.5** | **+5.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,60nm,4.2s | | | | | | |
| **KNRA** | **Kununurra** | **26.51** | **166** | P | **P** | **05 16 14.6** | **+1.3** |
| **FITZ** | **Fitzroy Crossi** | **28.32** | **173** | P | **P** | **05 16 28.8** | **-0.8** |
| | comp=Z,7.3nm,1.2s,baz=6.5,slow=13,SNR=4.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.32** | **173** | P | **P** | **05 16 30.4** | **+0.9** |
| FITZ | | | | IAmb | IAmb | 05 16 31.5 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **COEN** | **Coen** | **31.71** | **139** | P | **P** | **05 16 58.9** | **-0.7** |
| COEN | | | | IAmb | IAmb | 05 17 08.4 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.08** | **158** | P | **P** | **05 17 02.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | **32.22** | **158** | P | **P** | **05 17 03.0** | **-1.1** |
| | comp=Z,1.6nm,0.9s,baz=342,slow=9.3,SNR=9.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 19 52.0** | **-0.8** |
| | comp=Z,1.4nm,0.9s,baz=340,slow=3.2,SNR=9.0 | | | | | | |
| WRA | | | | LR | LR | 05 33 06.7 | |
| | comp=Z,54nm,18.8s,baz=341,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.22** | **158** | P | **P** | **05 17 03.4** | **-0.7** |
| **WB2** | **Warramunga Arr** | **32.23** | **158** | P | **P** | **05 17 03.2** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 05 17 16.7 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.31** | **158** | P | **P** | **05 17 04.9** | **0.0** |
| WR0 | | | | IAmb | IAmb | 05 17 05.1 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **35.53** | **161** | P | **P** | **05 17 32.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **35.53** | **162** | P | **P** | **05 17 32.9** | **0.0** |
| | comp=Z,2.2nm,0.7s,baz=344,slow=7.0,SNR=27 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 20 01.8** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=349,slow=3.4,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **35.53** | **162** | P | **P** | **05 17 32.7** | **-0.2** |
| **CTA** | **Charters Tower** | **38.24** | **142** | LR | LR | 05 37 17.3 | |
| | comp=Z,79nm,18.6s,baz=280,slow=42 | | | | | | |
| **KLR** | **Kul'dur** | **39.69** | **10** | P | **P** | **05 18 08.2** | **+0.5** |
| | comp=Z,1.4nm,0.8s,baz=275,slow=7.9,SNR=3.8 | | | | | | |
| KLR | | | | LR | LR | 05 35 33.2 | |
| | comp=Z,100nm,21.4s,baz=217,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **39.83** | **343** | P | **P** | **05 18 09.4** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=154,slow=11,SNR=6.0 | | | | | | |
| SONM | | | | LR | LR | 05 35 24.3 | |
| | comp=Z,149nm,20.9s,baz=162,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **39.83** | **343** | P | **P** | **05 18 09.2** | **+0.2** |
| **PALK** | **Pallekele** | **41.20** | **269** | LR | LR | 05 37 10.2 | |
| | comp=Z,44nm,18.0s,baz=179,slow=39 | | | | | | |
| **HNR** | **Honiara** | **42.24** | **116** | LR | LR | 05 34 43.7 | |
| | comp=Z,74nm,20.6s,baz=345,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **45.74** | **157** | P | **P** | **05 18 56.2** | **-0.9** |
| | comp=Z,3.3nm,1.0s,baz=336,slow=10.0,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 05 40 15.9 | |
| | comp=Z,41nm,19.0s,baz=22,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **45.74** | **157** | P | **P** | **05 18 56.9** | **-0.1** |
| **MK31** | **Makanchi Array** | **49.76** | **325** | P | **P** | **05 19 28.1** | **0.0** |
| **MKAR** | **Makanchi Array** | **49.76** | **325** | P | **P** | **05 19 29.0** | **+0.9** |
| | comp=Z,0.7nm,0.8s,baz=131,slow=6.6,SNR=4.4 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 20 49.1** | **+0.1** |
| | comp=Z,0.8nm,0.9s,baz=123,slow=5.3,SNR=2.4 | | | | | | |
| MKAR | | | | LR | LR | 05 41 33.1 | |
| | comp=Z,112nm,18.1s,baz=110,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.76** | **325** | P | **P** | **05 19 27.9** | **-0.2** |
| **TARG** | **Taragay, Kyrgy** | **50.03** | **317** | P | **P** | **05 19 31.1** | **+0.3** |
| **KSH** | **Kashi** | **50.40** | **313** | P | **P** | **05 19 37.0** | **+3.7** |
| **NIL** | **Nilore** | **50.56** | **305** | P | **P** | **05 19 35.3** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **51.37** | **27** | P | **P** | **05 19 41.5** | **+1.4** |
| | comp=Z,1.2nm,0.6s,baz=240,slow=2.8,SNR=1.8 | | | | | | |
| **AAK** | **Ala-Archa** | **52.65** | **317** | P | **P** | **05 19 50.9** | **+0.8** |
| | comp=Z,0.6nm,0.4s,baz=144,slow=19,SNR=2.4 | | | | | | |
| AAK | | | | LR | LR | 05 43 29.2 | |
| | comp=Z,100nm,21.7s,baz=94,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **52.65** | **317** | P | **P** | **05 19 48.9** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **52.86** | **333** | P | **P** | **05 19 53.1** | **+1.9** |
| | comp=Z,0.3nm,0.4s,baz=115,slow=9.7,SNR=1.8 | | | | | | |
| ZALV | | | | LR | LR | 05 43 01.6 | |
| | comp=Z,60nm,18.6s,baz=118,slow=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.95** | **327** | P | **P** | **05 19 59.0** | **-0.3** |
| | comp=Z,1.2nm,1.0s,baz=131,slow=6.7,SNR=5.8 | | | | | | |
| **KURK** | **Kurchatov** | **53.95** | **327** | P | **P** | **05 19 58.8** | **-0.4** |
| KURK | | | | IAmb | IAmb | 05 20 11.9 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **54.16** | **305** | P | **P** | **05 20 01.7** | **+0.3** |
| KBL | | | | IAmb | IAmb | 05 20 03.7 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **GAR** | **Garm** | **54.35** | **311** | P | **P** | **05 20 03.6** | **+1.0** |
| **CHGR** | **Chuyangaron** | **55.12** | **310** | P | **P** | **05 20 08.3** | **+0.1** |
| **KKAR** | **Karatay Array** | **55.54** | **316** | P | **P** | **05 20 11.8** | **+0.8** |
| **BVAR** | **Borovoye Array** | **59.52** | **327** | P | **P** | **05 20 38.8** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=104,slow=17,SNR=3.9 | | | | | | |
| **TIXI** | **Tiksi** | **61.52** | **2** | P | **P** | **05 20 51.7** | **-0.5** |
| | comp=Z,6.6nm,0.9s,baz=87,slow=23,SNR=11 | | | | | | |
| TIXI | | | | LR | LR | 05 51 26.5 | |
| | comp=Z,89nm,18.1s,baz=188,slow=40 | | | | | | |
| **TIXI** | **Tiksi** | **61.52** | **2** | P | **P** | **05 20 51.2** | **-0.9** |
| **GEYT** | **Alibeck** | **63.46** | **307** | LR | LR | 05 52 27.7 | |
| | comp=Z,69nm,19.1s,baz=104,slow=40 | | | | | | |
| **GEYT** | **Alibeck** | **63.46** | **307** | P | **P** | **05 21 07.1** | **+1.3** |
| GEYT | | | | IAmb | IAmb | 05 21 18.4 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **63.46** | **307** | P | **P** | **05 21 07.4** | **+1.5** |
| **ABKAR** | **Akbulak array** | **64.39** | **320** | P | **P** | **05 21 12.2** | **+0.6** |
| ABKAR | | | | IAmb | IAmb | 05 21 31.9 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **65.89** | **321** | P | **P** | **05 21 23.4** | **+2.1** |
| | comp=Z,1.5nm,0.6s,baz=77,slow=7.5,SNR=5.3 | | | | | | |
| AKTO | | | | LR | LR | 05 52 16.6 | |
| | comp=Z,104nm,18.5s,baz=71,slow=38 | | | | | | |
| **ARU** | **Arti** | **67.14** | **327** | LR | LR | 05 52 14.9 | |
| | comp=Z,53nm,19.9s,baz=68,slow=37 | | | | | | |
| **RAYN** | **Ar Rayn** | **73.96** | **292** | P | **P** | **05 22 11.9** | **+0.3** |
| RAYN | | | | IAmb | IAmb | 05 22 17.9 | |
| | comp=Z,3.1nm,0

baz=264
**NACB Ninganchiao 1.15 232** *e*P **Pb 05 30 34.7 -0.2**
baz=214
**NNSB Datong 1.19 248** *e*P **Pn 05 30 35.0 -0.2**
baz=233
**TWD Chiawan 1.21 229** *e*P **Pb 05 30 36.1 +0.3**
baz=225
**ETLH Xiulin Townshi 1.21 237** *e*P **Pn 05 30 35.3 -0.3**
baz=219
**NFF Wufeng Townshi 1.36 260** *e*P **Pn 05 30 37.2 -0.3**
baz=253
**FUSS Fushou 1.38 243** *e*P **Pg 05 30 39.8 -0.5**
baz=238
**WHF Hehuan Shan 1.41 239** *e*P **Pb 05 30 39.7 +0.1**
baz=234
**JKRS Kuro-shima 1.44 116** P **Pn 05 30 38.1 -0.5**
**NSTT Nanjuang 1.47 260** *e*P **Pb 05 30 39.8 -0.5**
baz=254
**CHGB Renai 1.53 238** *e*P **Pb 05 30 41.3 -0.1**
baz=223
**WUSB Renai 1.61 237** *e*P **Pb 05 30 42.0 -0.8**
baz=221
**WHP Taichung City 1.61 248** *e*P **Pb 05 30 43.0 +0.2**
baz=253
**WCS Beigang Elemen 1.74 242** *e*P **Pn 05 30 43.0 +0.3**
baz=228
**SSLB Suanglung 1.85 234** *e*P **Pb 05 30 47.2 +0.4**
baz=220
**TYC Yuchr 1.86 239** *e*P **Pb 05 30 46.0 -0.9**
baz=224
**STYH Taoyuan 2.38 225** *e*P **Pn 05 30 51.2 -0.4**
baz=213
**KSRS Korea Array 13.33 19** LR LR 05 39 09.7
comp=Z,51nm,19.5s,baz=155,slow=38
**KLR Kul'dur 25.34 14** LR LR 05 46 44.4
comp=Z,33nm,21.6s,baz=224,slow=38
**SONM Songino Array 26.25 335** P **P 05 35 49.6 +2.0**
0.3nm,0.8s,baz=142,slow=7.3,SNR=2.4
**MKAR Makanchi Array 38.74 315** P **P 05 37 35.6 -1.0**
1.2nm,0.9s,baz=102,slow=8.8,SNR=9.9
**ZALV Zalesovo Beam 40.37 326** P **P 05 37 49.4 -0.6**
1.5nm,0.8s,baz=105,slow=8.2,SNR=4.7
**WRA Warramunga Arr 46.00 165** P P 05 38 30.3 -5.5
0.7nm,1.1s,baz=336,slow=7.4,SNR=2.2
**YKA Yellowknife Ar 81.83 23** P **P 05 42 33.2 +2.1**
0.3nm,0.6s,baz=306,slow=5.1,SNR=5.8
**GERES GERESS Array B 83.11 321** LR LR 06 22 48.7
comp=Z,45nm,18.2s,baz=0.0,slow=38

*IDC* ***25*** *05:48:37.7±1.1, 16.˚65N×93.˚74W, h118km±20km, mb3.6/6, mb1 3.8/8, mb1mx3.4/40, mbtmp3.9/8, Error ellipse: s-maj=65.3km s-min=15.1km az=45.0*
*MEX* ***25*** *05:48:40.3±1.6, 16.˚57N×93.˚96W, h130km±9km, MD4.4*
**ISC 25 05:48:38.6±0.7, 16˚52N±0.˚05×93˚98W±0.˚03, h134km±6km, n40, σ1§26/70, mb4.0/6, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CARR** | **Arriaga** | **0.28** | **168** | *e*P | **Pn** | **05 48 57.5** | **+0.3** |
| CARR | | | | *e*S | **Sn** | **05 49 11.3** | **+0.1** |
| **NILT** | **Santiago Nilte** | **0.62** | **274** | *e*P | **Pn** | **05 49 00.3** | **+1.5** |
| NILT | | | | *e*S | **Sn** | **05 49 14.1** | **0.0** |
| **UXUV** | **UXUV** | **0.81** | **348** | *e*P | **Pn** | **05 49 00.2** | **0.0** |
| UXUV | | | | *e*S | **Sn** | **05 49 15.2** | **-1.4** |
| **TGIG** | | **0.86** | **73** | *e*P | **Pn** | **05 49 00.6** | **0.0** |
| TGIG | | | | *e*S | **Sn** | **05 49 15.6** | **-1.8** |
| **TGBT** | **Tuxtla Gutierr** | **0.89** | **73** | *e*P | **Pn** | **05 49 00.5** | **-0.3** |
| TGBT | | | | *e*S | **Sn** | **05 49 16.6** | **-1.1** |
| **CMIG** | **Matias Romero** | **1.04** | **303** | P | **Pn** | **05 49 02.4** | **+0.2** |
| | 25nm,0.3s,baz=166,slow=9.0,SNR=619 | | | | | | |
| CMIG | | | | S | **Sn** | **05 49 19.3** | **-0.9** |
| | 112nm,0.3s,baz=270,slow=20,SNR=21 | | | | | | |
| CMIG | | | | LR | LR | 05 49 35.2 | |
| | comp=Z,109nm,19.2s,baz=132,slow=49 | | | | | | |
| **CMIG** | **Matias Romero** | **1.04** | **303** | *e*P | **Pn** | **05 49 02.4** | **+0.2** |
| CMIG | | | | *e*S | **Sn** | **05 49 19.3** | **-0.9** |
| **PCIG** | | **1.09** | **138** | *e*P | **Pn** | **05 49 03.0** | **+0.3** |
| PCIG | | | | *e*S | **Sn** | **05 49 20.6** | **-0.4** |
| **VHSA** | **Villahermosa** | **1.76** | **34** | *e*P | **Pn** | **05 49 09.9** | **+0.1** |
| VHSA | | | | *e*S | **Sn** | **05 49 31.9** | **-2.0** |
| **CCIG** | **Comitan** | **1.78** | **97** | *e*P | **Pn** | **05 49 10.8** | **+0.4** |
| **NEUV** | **Arroyo Zacate** | **2.11** | **304** | *e*P | **Pn** | **05 49 14.1** | **0.0** |
| NEUV | | | | *e*S | **Sn** | **05 49 39.8** | **-1.5** |
| **PAVE** | **Pavencul** | **2.18** | **127** | *i* P | **Pn** | **05 49 15.7** | **+0.6** |
| PAVE | | | | *e*S | **Sn** | **05 49 44.0** | **+0.8** |
| **HUIG** | **Huatulco** | **2.18** | **250** | *e*P | **Pn** | **05 49 13.2** | **-1.8** |
| HUIG | | | | *e*S | **Sn** | **05 49 41.4** | **-1.6** |
| **PATR** | **El Naranjo** | **2.18** | **130** | *i* P | **Pn** | **05 49 15.6** | **+0.4** |
| PATR | | | | *i* S | **Sn** | **05 49 43.2** | **-0.2** |
| **THIG** | | **2.30** | **134** | *e*P | **Pn** | **05 49 17.4** | **+0.9** |
| THIG | | | | *e*S | **Sn** | **05 49 46.2** | **+0.6** |
| **OXLC** | **Oaxaca** | **2.67** | **282** | *e*P | **Pn** | **05 49 21.8** | **+0.5** |
| OXLC | | | | *e*S | **Sn** | **05 49 52.2** | **-1.9** |
| **VHO** | **Vista Hermosa** | **2.70** | **282** | *i* P | **Pn** | **05 49 22.9** | **+1.3** |
| VHO | | | | *e*S | **Sn** | **05 49 51.7** | **-3.1** |
| **PEIG** | **Puerto Escondi** | **3.09** | **261** | *e*P | **Pn** | **05 49 25.1** | **-1.5** |
| PEIG | | | | *e*S | **Sn** | **05 50 03.2** | **-0.4** |
| **TOIG** | **Toxpalan** | **3.34** | **298** | *e*P | **Pn** | **05 49 30.6** | **+0.8** |
| TOIG | | | | *e*S | **Sn** | **05 50 08.1** | **-1.4** |
| **YOIG** | **Yosondua** | **3.44** | **276** | *e*P | **Pn** | **05 49 32.2** | **+0.9** |
| YOIG | | | | *e*S | **Sn** | **05 50 11.6** | **-0.5** |
| **TXIG** | **Tlaxiaco** | **3.70** | **282** | *e*P | **Pn** | **05 49 35.8** | **+1.1** |
| TXIG | | | | *e*S | **Sn** | **05 50 18.1** | **-0.2** |
| **TPIG** | **Tehuac#an** | **3.74** | **301** | *e*P | **Pn** | **05 49 35.9** | **+0.7** |
| TPIG | | | | *e*S | **Sn** | **05 50 18.2** | **-0.9** |
| **HLIG** | **Huajuapan de L** | **3.88** | **290** | *e*P | **Pn** | **05 49 38.5** | **+1.4** |
| HLIG | | | | *e*S | **Sn** | **05 50 21.4** | **-1.1** |
| **JAUV** | **Jalcomulco** | **3.90** | **317** | *e*P | **Pn** | **05 49 36.3** | **-0.9** |
| JAUV | | | | *e*S | **Sn** | **05 50 21.3** | **-1.4** |
| **PNIG** | **Pinotepa** | **3.99** | **269** | *e*P | **Pn** | **05 49 37.5** | **-0.8** |
| PNIG | | | | *e*S | **Sn** | **05 50 24.7** | **+0.1** |
| **FTIG** | **Fresnillo de T** | **4.21** | **290** | *e*P | **Pn** | **05 49 43.0** | **+1.7** |
| FTIG | | | | *e*S | **Sn** | **05 50 29.2** | **-0.7** |
| **MGIG** | **Malinaltepec** | **4.52** | **280** | *e*P | **Pn** | **05 49 46.2** | **+0.7** |
| MGIG | | | | *e*S | **Sn** | **05 50 37.0** | **-0.4** |
| **CRIG** | **Cruz Grande** | **4.95** | **273** | *e*P | **Pn** | **05 49 50.4** | **-0.7** |
| CRIG | | | | *e*S | **Sn** | **05 50 47.0** | **-0.4** |
| **YAIG** | **Yautepec** | **5.38** | **296** | *e*P | **Pn** | **05 49 59.1** | **+2.1** |
| YAIG | | | | *e*S | **Sn** | **05 50 55.6** | **-2.5** |
| **DAIG** | **Los Arroyos** | **5.46** | **276** | *e* | **Pn** | **05 49 57.6** | **-0.3** |
| DAIG | | | | *e* | | 05 50 53.9 | |
| **MEIG** | **Mezcala** | **5.57** | **285** | *e*P | **Pn** | **05 50 01.2** | **+1.8** |
| MEIG | | | | *e*S | **Sn** | **05 50 59.1** | **-3.5** |
| **PLIG** | **Platanillo** | **5.59** | **290** | *e*P | **Pn** | **05 50 01.3** | **+1.5** |
| PLIG | | | | *e* | | 05 50 52.1 | |
| **JTS** | **Las Juntas de** | **10.74** | **124** | P | **Pn** | **05 51 08.7** | **-0.2** |
| | 2.1nm,0.3s,baz=10.0,slow=18,SNR=11 | | | | | | |
| JTS | | | | S | **Sn** | **05 53 04.7** | **-2.7** |
| | 0.4nm,0.3s,baz=29,slow=19,SNR=1.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **15.55** | **327** | P | **P** | **05 52 12.8** | **+0.6** |
| | 0.0nm,0.3s,baz=146,slow=14,SNR=5.2 | | | | | | |
| **SDV** | **Santo Domingo** | **23.88** | **106** | P | **P** | **05 53 39.3** | **-1.8** |
| | 2.2nm,0.4s,baz=333,slow=4.9,SNR=9.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **30.52** | **320** | P | **P** | **05 54 41.4** | **+1.9** |
| | 0.3nm,0.7s,baz=143,slow=6.8,SNR=2.8 | | | | | | |
| **LPAZ** | **La Paz** | **41.38** | **141** | P | **P** | **05 56 12.4** | **-0.1** |
| | 1.0nm,0.6s,baz=0.0,slow=3.0,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.15** | **347** | P | **P** | **05 57 04.5** | **-0.3** |
| | 3.2nm,1.1s,baz=151,slow=7.5,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **57.49** | **344** | P | **P** | **05 58 13.9** | **+0.6** |
| | 0.8nm,0.4s,baz=107,slow=5.7,SNR=6.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **84.34** | **18** | P | **P** | **06 00 55.3** | **0.0** |
| | 1.2nm,0.4s,baz=302,slow=5.1,SNR=16 | | | | | | |

*IDC* ***25*** *05:52:26.5±0.9, 47.˚04N×155.˚72E, h0km, mb3.8/15, mb1 3.9/18, mb1mx3.8/53, mbtmp3.8/18, ML3.5/3, MS3.0/2, Ms1 3.0/2, ms1mx2.4/95, Error ellipse: s-maj=25.1km s-min=15.5km az=167.0*
**ISC 25 05:52:29.0±0.9, 47˚0N±0.˚1×155˚7E±0.˚1, h18km, n26, σ1§03/19, mb3.8/15, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.25** | **11** | Pn | **Pn** | **05 53 58.2** | **-2.1** |
| | 1.1nm,0.3s,baz=97,slow=26,SNR=18 | | | | | | |
| PETK | | | | Sn | **Sn** | **05 55 13.5** | **+2.3** |
| | 0.2nm,0.3s,baz=212,slow=29,SNR=1.9 | | | | | | |
| **ASAJ** | **Asahikawa** | **9.64** | **257** | Pn | **Pn** | **05 54 46.4** | **-0.4** |
| | 1.3nm,0.3s,baz=96,slow=10,SNR=2.1 | | | | | | |
| **MA2** | **Magadan** | **12.94** | **349** | LR | LR | 05 59 56.4 | |
| | comp=Z,62nm,19.2s,baz=260,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **16.14** | **287** | Pn | **Pn** | **05 56 15.1** | **+0.3** |
| | 0.1nm,0.3s,baz=78,slow=18,SNR=2.0 | | | | | | |
| **YAK** | **Yakutsk** | **21.11** | **325** | LR | LR | 06 04 57.1 | |
| | comp=Z,40nm,20.2s,baz=82,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.70** | **158** | T | T | 06 28 27.9 | |
| | baz=345,slow=77 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.71** | **158** | T | T | 06 28 27.6 | |
| | baz=345,slow=77 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.71** | **158** | T | T | 06 28 26.1 | |
| | baz=345,slow=77 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.82** | **159** | T | T | 06 29 56.0 | |
| | baz=345,slow=76 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.83** | **159** | T | T | 06 29 56.8 | |
| | baz=345,slow=76 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.84** | **159** | T | T | 06 29 53.1 | |
| | baz=345,slow=76 | | | | | | |
| **ILAR** | **Eielson Array** | **35.24** | **39** | P | **P** | **05 59 22.1** | **+0.1** |
| | 0.4nm,0.5s,baz=249,slow=7.4,SNR=12 | | | | | | |
| **INK** | **Inuvik** | **40.48** | **33** | P | **P** | **06 00 06.9** | **+0.7** |
| | 1.7nm,0.5s,baz=284,slow=5.4,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.90** | **306** | P | **P** | **06 00 34.0** | **-0.2** |
| | 0.5nm,0.4s,baz=68,slow=4.5,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.40** | **298** | P | **P** | **06 01 09.6** | **-0.2** |
| | 0.6nm,0.7s,baz=67,slow=9.1,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.79** | **304** | P | **P** | **06 01 12.5** | **-0.2** |
| | 2.5nm,0.7s,baz=67,slow=8.4,SNR=14 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.65** | **38** | P | **P** | **06 01 18.4** | **-0.7** |
| | 0.8nm,0.8s,baz=295,slow=7.1,SNR=7.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **52.07** | **310** | P | **P** | **06 01 37.5** | **+0.1** |
| | 1.1nm,0.6s,baz=54,slow=20,SNR=6.5 | | | | | | |
| **AAK** | **Ala-Archa** | **55.31** | **298** | P | **P** | **06 02 02.2** | **+0.7** |
| | 1.0nm,0.5s,baz=110,slow=10.0,SNR=3.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.73** | **64** | P | **P** | **06 02 40.4** | **+0.7** |
| | 0.5nm,0.7s,baz=297,slow=7.1,SNR=5.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **63.15** | **55** | P | **P** | **06 02 55.8** | **-0.1** |
| | 0.4nm,0.8s,baz=318,slow=1.2,SNR=3.7 | | | | | | |
| **BELG** | **Belogornoye** | **63.52** | **319** | P | **P** | **06 02 58.9** | **+1.1** |
| | 3.0nm,0.4s,baz=18,slow=3.2,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **64.56** | **336** | P | **P** | **06 03 05.1** | **+0.6** |
| | 0.6nm,0.3s,baz=37,slow=7.3,SNR=7.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **72.31** | **328** | P | **P** | **06 03 51.6** | **-1.6** |
| | 0.1nm,0.3s,baz=36,slow=5.9,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **73.04** | **201** | P | **P** | **06 03 58.6** | **+0.9** |
| | 0.3nm,0.7s,baz=15,slow=5.0,SNR=4.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.81** | **62** | P | **P** | **06 04 13.7** | **-0.4** |
| | 0.4nm,0.5s,baz=303,slow=4.5,SNR=8.5 | | | | | | |

*JMA* ***25*** *06:03:32.8±0.2, 24.˚86N×122.˚60E, h30km, M2.7*
*TAP* ***25*** *06:03:32.3, 24.˚94N×122.˚63E, h11km±1km, ML3.2, D*
*IDC* ***25*** *06:04:18.1±5.7, 26.˚33N×122.˚39E, h393km±68km, mb2.7/5, mb1 2.9/6, mb1mx2.6/45, mbtmp3.5/6, Error ellipse: s-maj=43.9km s-min=23.6km az=61.0*
**ISC 25 06:03:31.4±1.3, 24˚96N±0.˚05×122˚62E±0.˚03, h11km±11km, n68, σ0§72/74, mb3.4/5, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.58** | **275** | P | **Pb** | **06 03 43.2** | **-0.4** |
| | baz=276 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.58** | **150** | P | **Pg** | **06 03 43.1** | **+0.3** |
| JYNG | | | | *e*S | **Sg** | **06 03 50.7** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.61** | **145** | P | **Pg** | **06 03 43.7** | **+0.4** |
| YOJ | | | | *e*S | **Sg** | **06 03 51.0** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.61** | **145** | *e*P | **Pg** | **06 03 44.0** | **+0.7** |
| | baz=144 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.69** | **281** | *e*P | **Pb** | **06 03 45.3** | **-0.3** |
| | baz=282 | | | | | | |
| SXI1 | | | | *e*S | **Sb** | **06 03 55.5** | **+0.4** |
| | baz=282 | | | | | | |
| **TIPB** | **Shuangxi** | **0.72** | **271** | *e*P | **Pb** | **06 03 45.9** | **-0.2** |
| | baz=272 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **06 03 56.7** | **+0.6** |
| | baz=272 | | | | | | |
| **NTC** | **Toucheng** | **0.73** | **262** | *e*P | **Pb** | **06 03 46.4** | **+0.3** |
| | baz=263 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.77** | **278** | *e*P | **Pb** | **06 03 46.8** | **-0.1** |
| | baz=279 | | | | | | |
| NWF | | | | *e*S | **Sb** | **06 03 58.3** | **+0.8** |
| | baz=279 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.77** | **278** | *e*P | **Pb** | **06 03 46.8** | **-0.1** |
| | baz=279 | | | | | | |
| **TWC** | **Suao** | **0.79** | **244** | *e*P | **Pg** | **06 03 45.7** | **-0.9** |
| | baz=244 | | | | | | |
| TWC | | | | S | **Sb** | **06 03 57.5** | **-0.3** |
| | baz=244 | | | | | | |
| **TNOU** | **National Taiwa** | **0.79** | **284** | *e*P | **Pb** | **06 03 47.5** | **+0.2** |
| | baz=284 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.83** | **323** | *e*P | **Pb** | **06 03 48.6** | **+0.7** |
| | baz=323 | | | | | | |
| **NDS** | **Dongshan** | **0.89** | **249** | *e*P | **Pg** | **06 03 48.2** | **-0.4** |
| | baz=249 | | | | | | |
| NDS | | | | S | **Sb** | **06 04 00.9** | **+0.1** |
| | baz=249 | | | | | | |
| **TWE** | **Neicheng** | **0.90** | **255** | *e*P | **Pb** | **06 03 49.2** | **+0.1** |
| | baz=255 | | | | | | |
| **EWUT** | **Wuta** | **0.92** | **236** | P | **Pg** | **06 03 49.3** | **+0.1** |
| | baz=237 | | | | | | |
| EWUT | | | | *e*S | **Sb** | **06 04 01.9** | **+0.2** |
| | baz=237 | | | | | | |
| **TWA** | **Mucha** | **0.94** | **271** | *e*P | **Pb** | **06 03 49.9** | **0.0** |
| | baz=272 | | | | | | |
| **ENA** | **Nanau** | **0.96** | **237** | *e*P | **Pg** | **06 03 49.5** | **-0.5** |
| | baz=237 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.96** | **258** | *e*P | **Pg** | **06 03 49.4** | **-0.6** |
| | baz=259 | | | | | | |
| **YM08** | **YM08** | **0.96** | **284** | *e*P | **Pb** | **06 03 50.1** | **-0.1** |
| | baz=284 | | | | | | |
| **YM01** | **YM01** | **0.97** | **281** | *e*P | **Pb** | **06 03 50.5** | **+0.2** |
| | baz=282 | | | | | | |
| **TWY** | **Chenhua** | **0.98** | **289** | *e*P | **Pb** | **06 03 50.5** | **0.0** |
| | baz=289 | | | | | | |
| **ENTT** | **Nioudou** | **1.01** | **252** | *e*P | **Pg** | **06 03 50.9** | **0.0** |
| | baz=252 | | | | | | |
| **NWLT** | **Wulai** | **1.03** | **260** | *e*P | **Pg** | **06 03 50.9** | **-0.4** |
| | baz=260 | | | | | | |
| **NDT** | **Datong Townshi** | **1.07** | **251** | *e*P | **Pb** | **06 03 52.1** | **+0.1** |
| | baz=251 | | | | | | |
| **LATG** | **Datong** | **1.08** | **247** | *e*P | **Pg** | **06 03 52.0** | **-0.3** |
| | baz=248 | | | | | | |
| **YHNB** | **Yeheng** | **1.17** | **256** | *e*P | **Pg** | **06 03 53.8** | **-0.2** |
| | baz=256 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.18** | **122** | P | **Pg** | **06 03 52.7** | **-1.5** |
| **NSK** | **Sanguang** | **1.19** | **256** | *e*P | **Pg** | **06 03 54.0** | **-0.2** |
| | baz=256 | | | | | | |
| **NACB** | **Ninganchiao** | **1.22** | **230** | *e*P | **Pg** | **06 03 53.5** | **-1.5** |
| | baz=230 | | | | | | |
| **NNSB** | **Datong** | **1.25** | **245** | *e*P | **Pg** | **06 03 54.8** | **-0.6** |
| | baz=245 | | | | | | |
| **NNS** | **Nan Shan** | **1.25** | **246** | *e*P | **Pg** | **06 03 55.0** | **-0.5** |
| | baz=246 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.28** | **234** | *e*P | **Pg** | **06 03 54.8** | **-1.3** |
| | baz=235 | | | | | | |
| **TWD** | **Chiawan** | **1.28** | **227** | *e*P | **Pn** | **06 03 55.3** | **0.0** |
| | baz=227 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.41** | **257** | *e*P | **Pn** | **06 03 56.9** | **-0.2** |
| | baz=257 | | | | | | |
| **FUSS** | **Fushou** | **1.44** | **241** | *e*P | **Pn** | **06 03 58.2** | **+0.5** |
| | baz=241 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.45** | **119** | P | **Pn** | **06 03 58.0** | **+0.4** |
| **WHF** | **Hehuan Shan** | **1.48** | **237** | *e*P | **Pn** | **06 03 58.6** | **+0.2** |
| | baz=237 | | | | | | |
| **TWT** | **Tachien** | **1.49** | **242** | *e*P | **Pb** | **06 03 59.7** | **+0.4** |
| | baz=242 | | | | | | |
| **LIOB** | **Emei** | **1.50** | **258** | *e*P | **Pn** | **06 03 58.6** | **+0.4** |
| | baz=258 | | | | | | |
| **NSTT** | **Nanjuang** | **1.51** | **258** | *e*P | **Pn** | **06 03 58.9** | **+0.5** |
| | baz=258 | | | | | | |
| **CHGB** | **Renai** | **1.60** | **236** | *e*P | **Pn** | **06 04 00.6** | **+0.8** |
| | baz=236 | | | | | | |
| **WHP** | **Taichung City** | **1.67** | **246** | *e*P | **Pb** | **06 04 02.7** | **+0.4** |
| | baz=246 | | | | | | |
| **WUSB** | **Renai** | **1.68** | **235** | *e*P | **Pn** | **06 04 01.5** | **+0.6** |
| | baz=235 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.80** | **240** | *e*P | **Pn** | **06 04 03.1** | **+0.7** |
| | baz=240 | | | | | | |
| **DPDB** | **Guoxing** | **1.80** | **240** | *e*P | **Pn** | **06 04 03.0** | **+0.5** |
| | baz=239 | | | | | | |
| **VWDT** | **VWDT** | **1.81** | **229** | *e*P | **Pn** | **06 04 02.8** | **+0.3** |
| | baz=228 | | | | | | |
| **HGSD** | **Ruisui** | **1.83** | **217** | *e*P | **Pn** | **06 04 03.3** | **+0.5** |
| | baz=217 | | | | | | |
| **EHY** | **Hungye** | **1.87** | **220** | *e*P | **Pn** | **06 04 03.9** | **+0.4** |
| | baz=219 | | | | | | |
| **SSLB** | **Suanglung** | **1.92** | **233** | *e*P | **Pn** | **06 04 04.9** | **+0.8** |
| | baz=233 | | | | | | |
| **TYC** | **Yuchr** | **1.92** | **237** | *e*P | **Pn** | **06 04 05.1** | **+1.0** |
| | baz=237 | | | | | | |
| **YULB** | **Yu-li** | **1.98** | **218** | *e*P | **Pn** | **06 04 03.7** | **-1.2** |
| | baz=218 | | | | | | |
| **TWF1** | **Yuli** | **2.01** | **217** | *e*P | **Pn** | **06 04 05.1** | **-0.3** |
| | baz=217 | | | | | | |
| **YUS** | **Yu-Shan** | **2.12** | **227** | *e*P | **Pn** | **06 04 07.4** | **+0.2** |
| | baz=226 | | | | | | |
| **FULB** | **Fuli** | **2.13** | **215** | *e*P | **Pn** | **06 04 07.7** | **+0.6** |
| | baz=215 | | | | | | |
| **ALS** | **Alishan** | **2.20** | **229** | *e*P | **Pn** | **06 04 08.5** | **+0.3** |
| | baz=229 | | | | | | |
| **CHN5** | **Tsauling** | **2.23** | **233** | *e*P | **Pn** | **06 04 10.3** | **+1.7** |
| | baz=233 | | | | | | |
| **ELDTW** | **Lidau** | **2.29** | **220** | *e*P | **Pn** | **06 04 10.8** | **+1.4** |
| | baz=220 | | | | | | |
| **CHN4** | **Tsaushan** | **2.45** | **230** | *e*P | **Pn** | **06 04 13.1** | **+1.6** |
| | baz=229 | | | | | | |
| **STYH** | **Taoyuan** | **2.46** | **224** | *e*P | **Pn** | **06 04 12.2** | **+0.7** |
| | baz=223 | | | | | | |
| **STYT** | **Tauyuan** | **2.47** | **224** | *e*P | **Pn** | **06 04 12.6** | **+0.9** |
| | baz=223 | | | | | | |
| **WTP** | **Ta-pu** | **2.51** | **228** | *e*P | **Pn** | **06 04 12.9** | **+0.7** |
| | baz=227 | | | | | | |
| **CHN1** | **Nanshi** | **2.61** | **228** | *e*P | **Pn** | **06 04 14.4** | **+0.9** |
| | baz=227 | | | | | | |
| **KSRS** | **Korea Array** | **13.25** | **19** | P | P | 06 06 58.0 | +8.6 |
| | 0.2nm,0.3s,baz=201,slow=12,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **26.20** | **335** | P | **P** | **06 09 07.1** | **+0.9** |
| | 0.2nm,0.4s,baz=150,slow=6.0,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.71** | **315** | P | **P** | **06 10 56.6** | **+1.1** |
| | 0.7nm,0.7s,baz=99,slow=9.7,SNR=8.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.32** | **326** | P | **P** | **06 11 09.2** | **+0.5** |
| | 0.3nm,0.3s,baz=107,slow=4.8,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.07** | **165** | P | P | 06 12 15.1 | +20 |
| | 0.6nm,0.6s,baz=329,slow=8.1,SNR=2.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.75** | **23** | P | **P** | **06 15 47.6** | **-2.4** |
| | 0.1nm,0.8s,baz=307,slow=5.5,SNR=1.8 | | | | | | |

**IDC 25 06:11:53.7±3.5, 53˚58N×87˚79E, h0km, mb1 2.5/2, mb1mx2.5/42, mbtmp2.5/2, ML2.2/2, 2C-2D, Error ellipse: s-maj=33.2km s-min=18.0km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.80** | **283** | *i* | | 06 23 40.0 | |
| | baz=100,slow=336,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.80** | **283** | Pg | Pn | 06 12 25.8 | -0.2 |
| | 0.5nm,0.3s,baz=105,slow=15,SNR=8.2 | | | | | | |
| ZALV | | | | Lg | Lg | 06 12 51.6 | |
| | 0.7nm,0.3s,baz=102,slow=25,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.42** | **246** | Pn | Pn | 06 13 29.2 | -0.2 |
| | 0.0nm,0.3s,baz=64,slow=13,SNR=4.3 | | | | | | |
| **MK31** | **Makanchi Array** | **7.65** | **210** | ⇓Lg | Lg | 06 15 50.4 | |
| | 0.5nm,0.3s,baz=79,slow=30,SNR=4.0 | | | | | | |
| **MK31** | **Makanchi Array** | **7.65** | **210** | ⇓Sn | Sb | 06 15 31.8 | -7.1 |
| | 1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.65** | **210** | Pn | Pn | 06 13 48.3 | +2.0 |
| | 0.1nm,0.3s,baz=30,slow=13,SNR=3.1 | | | | | | |
| **MAKZ** | **Makanchi** | **7.73** | **211** | ⇑Sn | Sb | 06 15 37.6 | -3.6 |
| | 0.8nm,0.7s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 06 15 56.9 | |
| | 2.2nm,0.8s | | | | | | |

**IDC 25 06:12:56.8±2.8, 54˚16N×86˚36E, h0km, mb1 2.7/2, mb1mx2.7/45, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=22.3km s-min=12.8km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.93** | **257** | *i* | | 06 18 32.2 | |
| | baz=80,slow=346,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.94** | **257** | Pg | Pg | 06 13 13.3 | -1.3 |
| | 0.7nm,0.3s,baz=72,slow=18,SNR=5.3 | | | | | | |
| ZALV | | | | Lg | Lg | 06 13 28.6 | |
| | 0.9nm,0.3s,baz=74,slow=32,SNR=6.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.96** | **237** | Pn | Pn | 06 14 26.5 | +0.2 |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.82** | **201** | Pn | Pn | 06 14 53.6 | +1.8 |
| | 0.1nm,0.3s,baz=27,slow=14,SNR=2.2 | | | | | | |

*FUNV* ***25*** *06:15:17.5, 8.˚48N×71.˚51W, h5km, MW3.5*
**ISC 25 06:15:15.5±0.7, 8˚55N±0.˚03×71˚39W±0.˚02, h10km, n31, σ1§66/50, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDV** | **Santo Domingo** | **0.82** | **66** | *i* P | **Pn** | **06 15 33.0** | **-0.3** |
| SDV | | | | *e*S | **Sn** | **06 15 44.7** | **-1.0** |
| SDV | | | | *i* | | 06 15 48.1 | |
| | comp=Z,79nm,0.3s | | | | | | |
| **CAPV** | **Capacho** | **1.14** | **233** | *e*P | **Pg** | **06 15 36.2** | **-1.2** |
| CAPV | | | | *e*S | **Sg** | **06 15 50.6** | **-1.7** |
| **PAMC** | **Pamplona, Colo** | **1.77** | **227** | *e*P | **Pb** | **06 15 48.2** | **-0.1** |
| PAMC | | | | *e*S | **Sg** | **06 16 12.1** | **-0.4** |
| PAMC | | | | *i* | | 06 16 14.8 | |
| | comp=Z,118nm,0.4s | | | | | | |
| **MCQV** | **Machiques** | **1.87** | **323** | *e*P | **Pb** | **06 15 49.6** | **-0.1** |
| MCQV | | | | *e*S | **Sg** | **06 16 13.7** | **-2.0** |
| **OCAC** | **Ocana** | **1.93** | **261** | *e*P | **Pb** | **06 15 49.4** | **-1.5** |
| OCAC | | | | *e*S | **Sb** | **06 16 15.3** | **+0.1** |
| OCAC | | | | *i* | | 06 16 16.5 | |
| | comp=Z,246nm,0.2s | | | | | | |
| **CURV** | **Curarigua** | **2.03** | **44** | *e*S | **Sg** | **06 16 20.5** | **-0.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CEP | | | | | S | Sn | 06 20 18.0 | +0.1 |
| **CHCP** | **Chirah Chowk** | **3.38** | **149** | | P | Pn | **06 19 53.7** | **+1.6** |
| **THW** | **Thamme Wali** | **3.80** | **173** | | P | Pn | **06 19 58.6** | **+0.9** |
| **AML** | **Almayashu** | **5.89** | **19** | | P | Pn | **06 20 28.1** | **+1.8** |
| | SNR=98 | | | | | | | |
| **UCH** | **Uchtor** | **6.22** | **24** | | P | Pn | **06 20 32.6** | **+1.7** |
| | SNR=46 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.41** | **18** | | P | Pn | **06 20 35.6** | **+2.5** |
| | SNR=9.5 | | | | | | | |
| **KK09** | **Karatay Array** | **6.56** | **356** | ⇑ | P | Pn | **06 20 36.4** | **+1.3** |
| | 29nm,0.4s,baz=180,slow=13 | | | | | | | |
| KK09 | | | | ⇑ | S | Sn | **06 21 44.0** | **-4.5** |
| | 20nm,0.6s,baz=182,slow=22 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **22** | | P | Pn | **06 20 37.5** | **+2.0** |
| | 16nm,0.3s,baz=190,slow=6.5,SNR=194 | | | | | | | |
| AAK | | | | | S | Sn | **06 21 49.0** | **-0.2** |
| | 1.0nm,0.3s,baz=80,slow=20,SNR=2.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **22** | | P | Pn | **06 20 37.6** | **+2.0** |
| | SNR=79 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.58** | **22** | ⇓ | P | Pn | **06 20 37.5** | **+2.0** |
| | 20nm,0.4s | | | | | | | |
| AAK | | | | | S | Sn | **06 21 48.9** | **-0.2** |
| | 28nm,0.7s | | | | | | | |
| **KBK** | **Karagaybulak** | **6.75** | **25** | | P | Pn | **06 20 40.0** | **+2.2** |
| | SNR=9.9 | | | | | | | |
| **CHMS** | **Chumysh** | **6.99** | **22** | | P | Pn | **06 20 42.6** | **+1.6** |
| | SNR=13 | | | | | | | |
| **USP** | **Ospenovka** | **7.16** | **20** | | P | Pn | **06 20 44.8** | **+1.5** |
| | SNR=22 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.20** | **27** | | P | Pn | **06 20 45.8** | **+1.8** |
| | SNR=5.8 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.20** | **27** | ⇑ | P | Pn | **06 20 45.7** | **+1.6** |
| | 11nm,0.5s | | | | | | | |
| TKM2 | | | | ⇑ | S | Sn | **06 22 02.0** | **-2.4** |
| | 2.1nm,0.4s | | | | | | | |
| **GEYT** | **Alibeck** | **10.49** | **281** | | P | Pn | **06 21 27.2** | **-1.4** |
| | 0.8nm,0.3s,baz=314,slow=27,SNR=3.1 | | | | | | | |
| GEYT | | | | | S | Sn | **06 23 20.2** | **-3.8** |
| | 4.7nm,0.3s,baz=115,slow=13,SNR=4.8 | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **10.49** | **281** | ⇓ | P | Pn | 06 21 35.1 | +6.6 |
| GYA0B | | | | ⇓ | S | Sn | **06 23 23.9** | **-0.1** |
| **PYUN** | **Piuthan** | **13.08** | **127** | | *e*P | Pn | **06 21 59.7** | **-3.7** |
| | 21nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.16** | **36** | | P | Pn | **06 22 04.0** | **-0.1** |
| | 0.1nm,0.3s,baz=220,slow=13,SNR=7.5 | | | | | | | |
| **DANN** | **Dangsing** | **13.42** | **124** | | *e*P | Pn | **06 22 04.8** | **-3.1** |
| | 14nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **13.70** | **126** | | *e*P | Pn | **06 22 08.3** | **-3.2** |
| | 6.9nm,0.3s | | | | | | | |
| **GKN** | **Gorkha** | **14.23** | **123** | | *e*P | Pn | **06 22 15.2** | **-3.1** |
| | 62nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **14.80** | **123** | | *e*P | Pn | **06 22 22.0** | **-3.7** |
| | 7.9nm,0.3s | | | | | | | |
| **KKN** | **Kakani** | **14.80** | **122** | | *e*P | Pn | **06 22 22.4** | **-3.3** |
| | 22nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.02** | **18** | | P | P | **06 22 30.9** | **0.0** |
| | 0.1nm,0.3s,baz=208,slow=10,SNR=7.3 | | | | | | | |
| **PKIN** | **Phulchoki** | **15.02** | **123** | | *e*P | Pn | **06 22 25.6** | **-2.9** |
| | 35nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **15.03** | **123** | | *e*P | Pn | **06 22 25.7** | **-3.0** |
| | 36nm,0.5s | | | | | | | |
| **AB31** | **Akbulak array** | **15.09** | **331** | ⇓ | P | Pn | **06 22 28.8** | **-0.1** |
| | 2.1nm,0.4s,baz=142,slow=11,SNR=122 | | | | | | | |
| AB31 | | | | ⇑ | S | Sn | **06 25 08.6** | **-6.6** |
| | 4.0nm,0.5s,baz=153,slow=22,SNR=9.8 | | | | | | | |
| **GUN** | **Gumba** | **15.14** | **121** | | *e*P | Pn | **06 22 26.4** | **-3.7** |
| | 29nm,0.4s | | | | | | | |
| **JIRN** | **Jiri** | **15.51** | **121** | | *e*P | Pn | **06 22 31.3** | **-3.5** |
| | 21nm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **16.24** | **122** | | *e*P | Pn | **06 22 40.3** | **-3.5** |
| | 4.6nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.46** | **358** | | P | P | **06 22 48.3** | **+1.3** |
| | 0.5nm,0.3s,baz=155,slow=39,SNR=4.7 | | | | | | | |
| **TAPN** | **Taplejung** | **16.77** | **119** | | *e*P | Pn | **06 22 47.8** | **-2.5** |
| | 36nm,0.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.78** | **330** | | P | P | **06 22 51.6** | **+1.1** |
| | 0.8nm,0.3s,baz=159,slow=12,SNR=11 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.78** | **330** | ⇑ | P | P | **06 22 51.7** | **+1.1** |
| | 5.7nm,0.8s | | | | | | | |
| AKTO | | | | ⇓ | S | Sn | **06 25 52.6** | **-3.6** |
| | 5.2nm,0.8s | | | | | | | |
| **ODAN** | **Odare** | **16.84** | **120** | | *e*P | Pn | **06 22 48.0** | **-3.2** |
| | 6.5nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.80** | **24** | | P | P | **06 23 23.8** | **+0.3** |
| | 2.8nm,0.4s,baz=204,slow=10,SNR=12 | | | | | | | |
| **GNI** | **Garni** | **20.99** | **288** | | P | Pn | 06 23 40.0 | -0.3 |
| | 7.1nm,0.6s,baz=124,slow=7.2,SNR=3.7 | | | | | | | |
| **KBZ** | **Khabaz** | **22.68** | **297** | | P | P | **06 23 57.5** | **+3.3** |
| | 0.5nm,0.3s,baz=90,slow=13,SNR=1.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.00** | **309** | | P | P | **06 25 28.5** | **+2.0** |
| | 1.1nm,0.5s,baz=82,slow=6.8,SNR=8.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.50** | **326** | | P | P | **06 26 07.1** | **+2.2** |
| | 1.9nm,0.8s,baz=113,slow=11,SNR=1.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.13** | **338** | | P | P | **06 26 37.2** | **+2.1** |
| | 0.8nm,0.4s,baz=106,slow=8.5,SNR=11 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.40** | **323** | | P | P | **06 27 03.1** | **+1.5** |
| | comp=Z,0.3nm,0.4s,baz=97,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.40** | **323** | | P | P | **06 27 03.7** | **+2.1** |
| | comp=Z,0.1nm,0.3s,baz=104,slow=7.3,SNR=4.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.85** | **269** | | P | P | **06 29 35.7** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=50,slow=5.4,SNR=5.1 | | | | | | | |
| **INK** | **Inuvik** | **73.81** | **9** | | P | P | **06 30 26.1** | **+1.8** |
| | comp=Z,0.6nm,0.4s,baz=317,slow=5.8,SNR=6.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.17** | **3** | | P | P | **06 31 06.5** | **+1.2** |
| | comp=Z,0.6nm,0.4s,baz=351,slow=5.4,SNR=24 | | | | | | | |
| **ASAR** | **Alice Springs** | **84.19** | **125** | | P | P | **06 31 19.9** | **-1.7** |
| | comp=Z,0.2nm,0.3s,baz=309,slow=4.7,SNR=1.3 | | | | | | | |

*IDC **25** 06:20:39.6±1.0,56°.32N×113°.65E,h0km,mb3.5/8, mb1 3.8/11,mb1mx3.5/48,mbtmp3.6/11,ML3.5/3,MS3.0/2, Ms1 3.0/2,ms1mx2.4/83,Error ellipse: s-maj=20.2km s-min=19.0km az=138.0*

*MOS **25** 06:20:39.8±1.3,56°.34N×113°.52E,h9km,mb3.9/2,Error ellipse: s-maj=10.8km s-min=6.3km az=79.5*

*BYKL **25** 06:20:42.0±0.2,56°.32N×113°.57E,h12km±2km*

**ISC 25 06:20:40.4±0.9,56°.27N±0°.02×113°.51E±0°.02,h11km±6km, n72,σ2s64/127,mb3.4/8,5C-5D,East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **SVKR** | **Severomuysk** | **0.16** | **170** | ⇑ | *i*PG | **Pg** | **06 20 45.3** | **+1.4** |
| SVKR | | | | | *e* | | 06 20 47.0 | |
| SVKR | | | | | pmax | pmax | | |
| | comp=Z,4μm,0.1s | | | | | | | |
| SVKR | | | | | smax | smax | | |
| | comp=N,11μm,0.4s | | | | | | | |
| **SVKR** | **Severomuysk** | **0.16** | **170** | ⇑ | *i*Pg | **Pg** | **06 20 45.3** | **+1.4** |
| SVKR | | | | | *e*Sg | **Sg** | **06 20 48.0** | **+1.6** |
| **UKT** | **Uakit** | **0.79** | **175** | | *e*PG | **Pn** | **06 20 57.8** | **+0.2** |
| **UKT** | **Uakit** | **0.79** | **175** | ⇑ | *i*Pg | **Pn** | **06 20 56.9** | **-0.7** |
| UKT | | | | | *e*Pb | **Pn** | **06 20 57.8** | **+0.2** |
| UKT | | | | | max | | 06 20 57.9 | |
| | comp=N,428nm,0.3s | | | | | | | |
| UKT | | | | | *e*Sg | **Sb** | **06 21 07.9** | **+1.1** |
| UKT | | | | | Smax | | 06 21 10.3 | |
| | comp=N,2μm,0.6s | | | | | | | |
| UKT | | | | | *e*Sb | **Sn** | **06 21 12.5** | **+3.1** |
| **YOA** | **Uoyan** | **1.01** | **263** | | *e*Pg | **Pn** | **06 21 01.2** | **+0.7** |
| YOA | | | | | Pmax | | 06 21 01.7 | |
| | comp=N,551nm,0.2s | | | | | | | |
| YOA | | | | | *e*Sg | **Sn** | **06 21 15.5** | **+0.8** |
| YOA | | | | | *e* | | 06 21 22.2 | |
| YOA | | | | | max | | 06 21 22.7 | |
| | comp=N,10μm,0.3s | | | | | | | |
| **NLYR** | **Nelyaty** | **1.24** | **79** | | *e*PG | **Pg** | **06 21 03.8** | **-0.4** |
| NLYR | | | | | *e* | | 06 21 20.4 | |
| NLYR | | | | | pmax | pmax | | |
| | comp=Z,698nm,0.7s | | | | | | | |
| NLYR | | | | | smax | smax | | |
| | comp=N,6μm,1.0s | | | | | | | |
| **NLYR** | **Nelyaty** | **1.24** | **79** | | *e*Pg | **Pg** | **06 21 03.8** | **-0.4** |
| NLYR | | | | | *e*Pb | **Pb** | **06 21 05.3** | **+1.4** |
| NLYR | | | | | max | | 06 21 05.6 | |
| | comp=N,496nm,0.5s | | | | | | | |
| NLYR | | | | | *e*Sg | **Sn** | **06 21 20.9** | **+0.4** |
| NLYR | | | | | *e*Sb | **Sg** | **06 21 23.1** | **+2.8** |
| NLYR | | | | | max | | 06 21 23.5 | |
| | comp=N,6μm,1.0s | | | | | | | |
| **KMO** | **Kumora** | **1.35** | **254** | | *e*PG | **Pg** | **06 21 07.4** | **+1.1** |
| KMO | | | | | *e* | | 06 21 25.4 | |
| KMO | | | | | pmax | pmax | | |
| | comp=Z,141nm,0.3s | | | | | | | |
| KMO | | | | | smax | smax | | |
| | comp=N,2μm,0.9s | | | | | | | |
| **KMO** | **Kumora** | **1.35** | **254** | | *e*Pg | **Pg** | **06 21 07.3** | **+1.0** |
| KMO | | | | | *e*Pb | **Pb** | **06 21 08.1** | **+2.4** |
| KMO | | | | | max | | 06 21 08.3 | |
| | comp=N,305nm,0.4s | | | | | | | |
| KMO | | | | | *e* | | 06 21 12.5 | |
| KMO | | | | | *e*Sg | **Sg** | **06 21 25.6** | **+1.8** |
| KMO | | | | | *e*Sb | **Sn** | **06 21 27.0** | **+3.8** |
| KMO | | | | | max | | 06 21 29.2 | |
| | comp=N,2μm,1.0s | | | | | | | |
| **BOD** | **Bodaibo** | **1.58** | **10** | ⇑ | *i*PG | **Pg** | **06 21 09.5** | **-1.1** |
| BOD | | | | | *e* | | 06 21 29.5 | |
| BOD | | | | | pmax | pmax | | |
| | comp=Z,480nm,0.3s | | | | | | | |
| BOD | | | | | smax | smax | | |
| | comp=E,3μm,0.8s | | | | | | | |
| **BOD** | **Bodaibo** | **1.58** | **10** | ⇑ | *i*Pg | **Pg** | **06 21 09.5** | **-1.1** |
| BOD | | | | | Pmax | | 06 21 09.7 | |
| | comp=E,480nm,0.5s | | | | | | | |
| BOD | | | | | *e*Sg | **Sg** | **06 21 29.5** | **-1.6** |
| BOD | | | | | Smax | | 06 21 30.8 | |
| | comp=E,3μm,0.9s | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.93** | **225** | ⇓ | *i*PN | **Pg** | **06 21 16.1** | **-1.3** |
| YLYR | | | | | *e* | | 06 21 17.6 | |
| YLYR | | | | | *e*S | **Sb** | **06 21 40.6** | **+0.9** |
| YLYR | | | | | *e* | | 06 21 41.9 | |
| YLYR | | | | | pmax | pmax | | |
| | comp=Z,118nm,0.3s | | | | | | | |
| YLYR | | | | | smax | smax | | |
| | comp=E,712nm,0.4s | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.93** | **225** | ⇓ | *i*Pn | **Pg** | **06 21 16.1** | **-1.3** |
| YLYR | | | | | *e*Pg | **Pb** | **06 21 17.1** | **+1.5** |
| YLYR | | | | | *e* | | 06 21 23.6 | |
| YLYR | | | | | max | | 06 21 23.8 | |
| | comp=E,134nm,0.4s | | | | | | | |
| YLYR | | | | | *e*Sg | **Sg** | **06 21 43.9** | **+1.5** |
| YLYR | | | | | Smax | | 06 21 45.9 | |
| | comp=E,683nm,0.2s | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.28** | **259** | | *e*PN | **Pg** | **06 21 23.3** | **-0.8** |
| NIZ | | | | | *e* | | 06 21 54.7 | |
| NIZ | | | | | pmax | pmax | | |
| | comp=Z,183nm,0.9s | | | | | | | |
| NIZ | | | | | smax | smax | | |
| | comp=N,818nm,0.6s | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.28** | **259** | | *e*Pn | **Pb** | **06 21 21.2** | **-0.4** |
| NIZ | | | | | *e*Pg | **Pg** | **06 21 23.4** | **-0.7** |
| NIZ | | | | | *e* | | 06 21 30.2 | |
| NIZ | | | | | max | | 06 21 30.9 | |
| | comp=N,165nm,0.6s | | | | | | | |
| NIZ | | | | | *e*Sn | **Sb** | **06 21 48.9** | **-0.9** |
| NIZ | | | | | *e*Sg | **Sg** | **06 21 54.3** | **+0.6** |
| NIZ | | | | | Smax | | 06 21 56.7 | |
| | comp=N,811nm,0.6s | | | | | | | |
| **CRS** | **Chara** | **2.71** | **75** | | *e*PN | **Pn** | **06 21 25.2** | **+1.3** |
| CRS | | | | | *e* | | 06 21 30.4 | |
| CRS | | | | | *e* | | 06 22 03.8 | |
| CRS | | | | | pmax | pmax | | |
| | comp=Z,304nm,0.9s | | | | | | | |
| CRS | | | | | smax | smax | | |
| | comp=E,503nm,1.0s | | | | | | | |
| **CRS** | **Chara** | **2.71** | **75** | | *e*Pn | **Pb** | **06 21 25.5** | **-3.4** |
| CRS | | | | | *e*Pg | **Pg** | **06 21 30.8** | **-1.4** |
| CRS | | | | | *e* | | 06 21 35.7 | |
| CRS | | | | | max | | 06 21 36.3 | |
| | comp=E,309nm,1.2s | | | | | | | |
| CRS | | | | | *e*Sn | **Sn** | **06 21 57.6** | **+0.9** |
| CRS | | | | | *e*Sg | **Sg** | **06 22 04.7** | **-2.6** |
| CRS | | | | | Smax | | 06 22 07.0 | |
| | comp=E,1μm,1.9s | | | | | | | |
| **VTMR** | **Vitim** | **3.22** | **351** | | *e*Pn | **Pn** | **06 21 31.9** | **+1.0** |
| VTMR | | | | | *e* | | 06 21 40.3 | |
| VTMR | | | | | *e*Sn | **Sn** | **06 22 09.6** | **+0.4** |
| VTMR | | | | | *e*Sg | **Sg** | **06 22 19.8** | **-3.9** |
| **SYVR** | **Suvo** | **3.31** | **219** | ⇓ | *i*PN | **Pn** | **06 21 34.5** | **+2.4** |
| SYVR | | | | | *e* | | 06 22 25.5 | |
| SYVR | | | | | pmax | pmax | | |
| | comp=Z,48nm,0.7s | | | | | | | |
| SYVR | | | | | smax | smax | | |
| | comp=E,371nm,0.6s | | | | | | | |
| **SYVR** | **Suvo** | **3.31** | **219** | ⇓ | *i*Pn | **Pn** | **06 21 34.6** | **+2.4** |
| SYVR | | | | | *e*Pg | **Pg** | **06 21 42.2** | **-1.5** |
| SYVR | | | | | *e*PgPg | **PbPb** | **06 21 46.0** | **+3.8** |
| SYVR | | | | | max | | 06 21 47.5 | |
| | comp=E,47nm,0.8s | | | | | | | |
| SYVR | | | | | *e* | | 06 21 51.0 | |
| SYVR | | | | | *e*Sn | **Sn** | **06 22 13.6** | **+2.1** |
| SYVR | | | | | *e*Sg | **Sg** | **06 22 25.9** | **-0.7** |
| SYVR | | | | | Smax | | 06 22 34.9 | |
| | comp=E,366nm,0.9s | | | | | | | |
| **KHNR** | **Khani** | **3.64** | **77** | | *e*Pn | **Pn** | **06 21 37.5** | **+0.8** |
| KHNR | | | | | *e*Pg | **Pb** | **06 21 46.3** | **+1.6** |
| KHNR | | | | | *e*Sn | **Sn** | **06 22 18.5** | **-1.1** |
| KHNR | | | | | *e*Sg | **Sg** | **06 22 34.3** | **-2.8** |
| **MXMB** | **Maximikha** | **4.08** | **224** | | *e*Pg | **Pg** | **06 21 56.0** | **-2.6** |
| MXMB | | | | | *e*Sg | **Sg** | **06 22 49.2** | **-2.3** |
| **TUP** | **Tupik** | **4.12** | **114** | | *e*PN | **Pn** | **06 21 44.4** | **+1.1** |
| TUP | | | | | *e* | | 06 21 55.0 | |
| TUP | | | | | *e*S | **Sn** | **06 22 32.0** | **+0.6** |
| TUP | | | | | *e* | | 06 22 48.6 | |
| TUP | | | | | pmax | pmax | | |
| | comp=Z,36nm,0.5s | | | | | | | |
| TUP | | | | | smax | smax | | |
| | comp=N,687nm,0.9s | | | | | | | |
| **TUP** | **Tupik** | **4.12** | **114** | | *e*Pn | **Pn** | **06 21 44.3** | **+1.0** |
| TUP | | | | | *e* | | 06 21 48.6 | |
| TUP | | | | | *e*Pg | **Pg** | **06 21 56.3** | **-2.9** |
| TUP | | | | | Pmax | | 06 21 59.5 | |
| | comp=N,29nm,0.9s | | | | | | | |
| TUP | | | | | *e*Sn | **Sn** | **06 22 30.6** | **-0.8** |
| TUP | | | | | *e*Sg | **Sg** | **06 22 49.1** | **-3.4** |
| TUP | | | | | *e*SgSg | **SbSb** | **06 22 52.3** | **+4.6** |
| TUP | | | | | max | | 06 22 55.0 | |
| | comp=N,792nm,1.1s | | | | | | | |
| **CIT** | **Chita** | **4.26** | **180** | | *e*Pg | **Pg** | **06 21 58.8** | **-3.1** |
| CIT | | | | | Pmax | | 06 21 59.5 | |
| | comp=N,46nm,0.3s | | | | | | | |
| CIT | | | | | *e*Sg | **Sg** | **06 22 54.5** | **-2.5** |
| CIT | | | | | Smax | | 06 22 59.0 | |
| | comp=N,468nm,0.5s | | | | | | | |
| **OGRR** | **Ongureny** | **4.31** | **235** | ⇓ | *i*PN | Pn | 06 21 50.3 | +4.5 |
| OGRR | | | | | *e* | | 06 22 01.9 | |
| OGRR | | | | | *e* | | 06 22 58.1 | |
| OGRR | | | | | pmax | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | | |
| OGRR | | | | | smax | smax | | |
| | comp=N,131nm,1.8s | | | | | | | |
| **OGRR** | **Ongureny** | **4.31** | **235** | | *e*Pn | Pn | 06 21 50.2 | +4.3 |
| OGRR | | | | | *e*Pg | **Pg** | **06 22 00.7** | **-2.1** |
| OGRR | | | | | *e* | | 06 22 09.0 | |
| OGRR | | | | | max | | 06 22 09.9 | |
| | comp=N,41nm,1.2s | | | | | | | |
| OGRR | | | | | *e*Sg | **Sg** | **06 22 58.2** | **-0.4** |
| OGRR | | | | | Smax | | 06 23 05.5 | |
| | comp=N,131nm,1.4s | | | | | | | |
| **YKLR** | **Yuktali** | **4.53** | **83** | | *e*Pn | **Pn** | **06 21 50.3** | **+1.3** |
| YKLR | | | | | *e*Pg | **Pg** | **06 22 03.3** | **-3.9** |
| YKLR | | | | | *e*Sn | **Sn** | **06 22 42.2** | **+0.6** |
| YKLR | | | | | *e*Sg | **Sg** | **06 23 00.9** | **-4.9** |
| **KELR** | **Kotokel** | **4.73** | **224** | | *e*Pg | **Pg** | **06 22 07.3** | **-3.6** |
| KELR | | | | | *e*Sg | **Sg** | **06 23 10.4** | **-1.7** |
| **TRG** | **Tyrgan** | **5.46** | **233** | | *e*PN | **Pn** | **06 22 04.3** | **+2.7** |
| TRG | | | | | *e* | | 06 22 20.0 | |
| TRG | | | | | *e*S | **Sn** | **06 23 06.0** | **+1.6** |
| TRG | | | | | *e* | | 06 23 30.4 | |
| TRG | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| TRG | | | | | smax | smax | | |
| | comp=E,67nm,0.6s | | | | | | | |
| **TRG** | **Tyrgan** | **5.46** | **233** | | *e*Pn | **Pn** | **06 22 04.5** | **+2.9** |
| TRG | | | | | *e*Pg | **Pg** | **06 22 21.9** | **-2.9** |
| TRG | | | | | Pmax | | 06 22 29.9 | |
| | comp=E,7.0nm,0.7s | | | | | | | |
| TRG | | | | | *e*Sn | **Sn** | **06 23 04.7** | **+0.3** |
| TRG | | | | | *e*Sg | **Sg** | **06 23 33.3** | **-2.1** |
| TRG | | | | | Smax | | 06 23 48.1 | |
| | comp=E,66nm,0.5s | | | | | | | |
| **KAB** | **Kabansk** | **5.84** | **226** | | *e*Sg | **Sg** | **06 23 44.3** | **-3.3** |
| KAB | | | | | Smax | | 06 24 06.8 | |
| | comp=E,398nm,1.4s | | | | | | | |
| **STDB** | **Stepnoy Dvoret** | **5.87** | **229** | | *e*Sg | **Sg** | **06 23 45.4** | **-3.2** |
| **IENR** | **Iengra** | **6.33** | **86** | | *e*Pn | **Pn** | **06 22 14.7** | **+1.1** |
| IENR | | | | | *e*Pg | **Pb** | **06 22 33.8** | **+3.3** |
| IENR | | | | | *e*Sn | **Sn** | **06 23 24.2** | **-1.7** |
| IENR | | | | | *e*Sg | **Sg** | **06 23 56.1** | **-7.2** |
| **BGT** | **Bolshoye Golou** | **6.37** | **232** | | *e*Pn | Pn | 06 22 18.8 | +4.7 |
| BGT | | | | | *e*Pg | **Pg** | **06 22 37.7** | **-4.5** |
| BGT | | | | | Pmax | | 06 22 46.2 | |
| | comp=E,9.0nm,0.5s | | | | | | | |
| BGT | | | | | *e*Sg | **Sg** | **06 23 59.8** | **-4.8** |
| BGT | | | | | Smax | | 06 24 24.5 | |
| | comp=E,211nm,1.9s | | | | | | | |
| **KPC** | **Khapcheranga** | **6.61** | **186** | | *e*PN | **Pn** | **06 22 18.7** | **+1.1** |
| KPC | | | | | *e* | | 06 22 39.0 | |
| KPC | | | | | *e* | | 06 24 07.0 | |
| KPC | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| KPC | | | | | smax | smax | | |
| | comp=E,162nm,1.2s | | | | | | | |
| **KPC** | **Khapcheranga** | **6.61** | **186** | | *e* | **Pn** | **06 22 18.7** | **+1.1** |
| KPC | | | | | *e*Pg | **Pg** | **06 22 42.9** | **-4.0** |
| KPC | | | | | Pmax | | 06 22 48.0 | |
| | comp=E,9.0nm,1.0s | | | | | | | |
| KPC | | | | | *e*Sn | **Sn** | **06 23 32.1** | **-0.9** |
| KPC | | | | | *e*Sg | **Sg** | **06 24 08.7** | **-3.8** |
| KPC | | | | | Smax | | 06 24 19.4 | |
| | comp=E,162nm,1.2s | | | | | | | |
| **LSTR** | **Listvyanka** | **6.75** | **233** | | *e*Pg | **Pg** | **06 22 45.0** | **-4.4** |
| LSTR | | | | | Pmax | | 06 22 47.5 | |
| | comp=E,3.0nm,0.6s | | | | | | | |
| LSTR | | | | | *e*Sg | **Sg** | **06 24 12.9** | **-3.8** |
| LSTR | | | | | Smax | | 06 24 21.0 | |
| | comp=E,71nm,1.6s | | | | | | | |
| **IVK** | **Ivanovka** | **6.98** | **234** | | *e*Pg | Pg | 06 22 49.0 | -4.9 |
| IVK | | | | | Pmax | | 06 22 51.0 | |
| | comp=E,2.0nm,0.3s | | | | | | | |
| IVK | | | | | *e*Sg | **Sg** | **06 24 19.4** | **-4.8** |
| IVK | | | | | Smax | | 06 24 28.8 | |
| | comp=E,63nm,1.9s | | | | | | | |
| **TLY** | **Talaya** | **7.41** | **236** | | *e*Pg | Pg | 06 22 56.4 | -5.8 |
| TLY | | | | | Pmax | | 06 23 03.0 | |
| | comp=E,3.0nm,0.4s | | | | | | | |
| TLY | | | | | *e*Sg | **Sg** | **06 24 32.0** | **-6.1** |
| TLY | | | | | Smax | | 06 24 47.1 | |
| | comp=E,38nm,1.4s | | | | | | | |
| **ARS** | **Arshan** | **7.84** | **241** | | *e*Pg | Pg | 06 23 03.9 | -6.4 |
| ARS | | | | | Pmax | | 06 23 09.8 | |
| | comp=E,10.0nm,0.9s | | | | | | | |
| ARS | | | | | *e*Sg | **Sg** | **06 24 46.6** | **-5.1** |
| ARS | | | | | Smax | | 06 24 57.8 | |
| | comp=E,201nm,1.0s | | | | | | | |
| **ZEA** | **Zeya** | **8.30** | **102** | | *e*PG | Pb | 06 23 10.4 | +6.4 |
| ZEA | | | | | *e*S | **Sn** | **06 24 14.2** | **0.0** |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=N,100nm,1.8s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=N,100nm,0.8s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=Z,100nm,5.0s | | | | | | | |
| **ZAK** | **Zakamensk** | **8.49** | **230** | | *e*PN | Pn | 06 22 57.4 | +14 |
| ZAK | | | | | *e* | | 06 25 10.3 | |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **ZAK** | **Zakamensk** | **8.49** | **230** | | *e*Sg | **Sg** | **06 25 07.6** | **-5.2** |
| ZAK | | | | | Smax | | 06 25 31.0 | |
| | comp=Z,40nm,1.5s | | | | | | | |
| **MOY** | **Mondy** | **8.70** | **243** | | *e*Sn | **Sn** | **06 24 23.4** | **-0.8** |
| MOY | | | | | *e*Sg | **Sg** | **06 25 11.6** | **-7.6** |
| MOY | | | | | Smax | | 06 25 45.3 | |
| | comp=Z,94nm,1.8s | | | | | | | |
| **ORL** | **Orlik** | **8.82** | **251** | | *e*Pn | **Pn** | **06 22 50.7** | **+2.8** |
| ORL | | | | | max | | 06 23 08.7 | |
| | comp=Z,16nm,1.8s | | | | | | | |
| ORL | | | | | *e*Sn | **Sn** | **06 24 27.4** | **+0.2** |
| ORL | | | | | *e*Sg | **Sg** | **06 25 16.7** | **-6.4** |
| ORL | | | | | Smax | | 06 25 21.9 | |
| | comp=Z,72nm,1.4s | | | | | | | |
| **SONM** | **Songino Array** | **9.51** | **210** | | Pn | **Pn** | **06 23 00.2** | **+2.8** |
| | comp=Z,0.3nm,0.3s,baz=21,slow=15,SNR=11 | | | | | | | |
| SONM | | | | | Lg | | 06 25 42.3 | |
| | comp=Z,1.8nm,0.3s,baz=24,slow=26,SNR=13 | | | | | | | |
| **YAK** | **Yakutsk** | **10.10** | **48** | | Sn | **Sn** | **06 24 51.8** | **-6.5** |
| | comp=Z,0.2nm,0.3s,baz=309,slow=9.2,SNR=1.6 | | | | | | | |
| YAK | | | | | Lg | Lg | 06 25 48.5 | |
| | comp=Z,0.2nm,0.3s,baz=16,slow=19,SNR=7.5 | | | | | | | |
| YAK | | | | | LR | LR | 06 26 56.0 | |
| | comp=Z,58nm,20.7s,baz=84,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **10.10** | **48** | *i* | P | **Pn** | **06 23 06.2** | **+1.0** |
| **KNGR** | **Kungurtug, Tuv** | **11.09** | **246** | *i* | P | **Pn** | **06 23 20.7** | **+1.8** |
| **KRAR** | **Krasnoyarsk** | **11.51** | **277** | *i* | P | **Pn** | **06 23 26.7** | **+2.2** |
| **KZLR** | **Kyzyl** | **12.10** | **256** | *i* | P | **Pn** | **06 23 34.3** | **+1.7** |
| **ABNR** | **Abakan** | **12.91** | **268** | *i* | P | **Pn** | **06 23 45.5** | **+1.8** |
| **KLR** | **Kul'dur** | **13.08** | **115** | | Pn | **Pn** | **06 23 47.5** | **+1.5** |
| | comp=Z,0.3nm,0.3s,baz=302,slow=13,SNR=5.1 | | | | | | | |
| KLR | | | | | Sn | Sn | 06 25 59.0 | -12 |
| | comp=Z,0.8nm,0.3s,baz=342,slow=20,SNR=5.6 | | | | | | | |
| KLR | | | | | Lg | Lg | 06 27 29.8 | |
| | comp=Z,0.1nm,0.3s,baz=247,slow=15,SNR=3.1 | | | | | | | |
| **TIXI** | **Tiksi** | **16.75** | **17** | | Pn | **Pn** | **06 24 30.7** | **-3.9** |
| | comp=Z,0.8nm,0.3s,baz=255,slow=18,SNR=6.6 | | | | | | | |
| TIXI | | | | | Sn | Sn | 06 27 24.2 | -16 |
| | comp=Z,0.9nm,0.3s,baz=90,slow=23,SNR=3.2 | | | | | | | |
| TIXI | | | | | Lg | Lg | 06 29 31.1 | |
| | comp=Z,0.5nm,0.3s,baz=273,slow=23,SNR=3.2 | | | | | | | |
| **TIXI** | **Tiksi** | **16.75** | **17** | *i* | P | **P** | **06 24 34.5** | **-2.3** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **16.83** | **128** | *i* | P | **P** | **06 24 38.0** | **0.0** |
| **NRIK** | **Noril'sk** | **17.46** | **329** | | P | **P** | **06 24 43.5** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=127,slow=10,SNR=1.9 | | | | | | | |
| NRIK | | | | | S | Sn | 06 27 44.7 | -13 |
| | comp=Z,0.5nm,0.3s,baz=347,slow=22,SNR=1.6 | | | | | | | |
| NRIK | | | | | Lg | Lg | 06 29 55.9 | |
| | comp=Z,0.2nm,0.3s,baz=229,slow=21,SNR=4.1 | | | | | | | |
| NRIK | | | | | LR | LR | 06 31 58.0 | |
| | comp=Z,77nm,21.8s,baz=40,slow=39 | | | | | | | |
| **NRIK** | **Noril'sk** | **17.46** | **329** | *i* | P | **P** | **06 24 44.8** | **0.0** |
| NRIK | | | | | pmax | pmax | | |
| | comp=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=294 | | | | | | |
| NWF | | | | *e*S | **Sg** | **06 29 45.6** | **-0.5** |
| | baz=294 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.72** | **281** | *e*P | **Pn** | **06 29 38.4** | **-0.6** |
| | baz=294 | | | | | | |
| WFSB | | | | *e*S | **Sg** | **06 29 45.3** | **-0.8** |
| | baz=294 | | | | | | |
| **TWC** | **Suao** | **0.72** | **244** | *e*P | **Pg** | **06 29 37.6** | **+0.9** |
| | baz=236 | | | | | | |
| **NDS** | **Dongshan** | **0.82** | **249** | *e*P | **Pb** | **06 29 39.7** | **+0.5** |
| | baz=245 | | | | | | |
| **TWE** | **Neicheng** | **0.84** | **256** | *e*P | **Pn** | **06 29 41.1** | **+0.5** |
| | baz=255 | | | | | | |
| TWE | | | | *e*S | **Sg** | **06 29 47.5** | **-2.3** |
| | baz=255 | | | | | | |
| **EWUT** | **Wuta** | **0.86** | **236** | *e*P | **Pn** | **06 29 41.5** | **+0.6** |
| | baz=227 | | | | | | |
| **TWA** | **Mucha** | **0.89** | **273** | *e*P | **Pn** | **06 29 41.2** | **-0.1** |
| | baz=280 | | | | | | |
| **ENA** | **Nanau** | **0.90** | **236** | *e*P | **Pg** | **06 29 40.8** | **+0.7** |
| | baz=227 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.90** | **259** | *e*P | **Pb** | **06 29 40.7** | **+0.2** |
| | baz=260 | | | | | | |
| **YM08** | **YM08** | **0.92** | **286** | *e*P | **Pn** | **06 29 41.7** | **-0.1** |
| | baz=297 | | | | | | |
| **YM01** | **YM01** | **0.92** | **284** | *e*P | **Pn** | **06 29 41.9** | **0.0** |
| | baz=293 | | | | | | |
| **TWY** | **Chenhua** | **0.93** | **292** | *e*P | **Pn** | **06 29 43.7** | **+1.8** |
| | baz=303 | | | | | | |
| **ENTT** | **Nioudou** | **0.95** | **252** | *e*P | **Pn** | **06 29 42.8** | **+0.7** |
| | baz=250 | | | | | | |
| **NWLT** | **Wulai** | **0.97** | **261** | *e*P | **Pn** | **06 29 42.4** | **-0.1** |
| | baz=263 | | | | | | |
| NWLT | | | | *e*S | **Sg** | **06 29 52.5** | **-1.6** |
| | baz=263 | | | | | | |
| **TATO** | **Taipei** | **0.97** | **273** | *e*P | **Pn** | **06 29 42.6** | **+0.2** |
| | baz=278 | | | | | | |
| **NDT** | **Datong Townshi** | **1.00** | **251** | *e*P | **Pn** | **06 29 43.2** | **+0.3** |
| | baz=249 | | | | | | |
| **LATG** | **Datong** | **1.02** | **247** | *e*P | **Pg** | **06 29 43.0** | **+0.6** |
| | baz=244 | | | | | | |
| **YHNB** | **Yeheng** | **1.11** | **257** | *e*P | **Pg** | **06 29 44.5** | **+0.5** |
| | baz=256 | | | | | | |
| **NSK** | **Sanguang** | **1.12** | **257** | *e*P | **Pn** | **06 29 44.9** | **+0.3** |
| | baz=257 | | | | | | |
| **NACB** | **Ninganchiao** | **1.16** | **230** | *e*P | **Pg** | **06 29 45.8** | **+0.8** |
| | baz=222 | | | | | | |
| **NNSB** | **Datong** | **1.18** | **245** | *e*P | **Pg** | **06 29 46.2** | **+0.7** |
| | baz=242 | | | | | | |
| **NNS** | **Nan Shan** | **1.18** | **246** | *e*P | **Pg** | **06 29 47.3** | **+1.8** |
| | baz=242 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.22** | **234** | *e*P | **Pn** | **06 29 46.4** | **+0.5** |
| | baz=227 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.22** | **119** | *e*S | **Sb** | **06 29 59.6** | **-2.2** |
| **ETM** | **Tongmen** | **1.37** | **226** | *e*P | **Pg** | **06 29 50.5** | **+1.4** |
| | baz=218 | | | | | | |
| **FUSS** | **Fushou** | **1.38** | **241** | *e*P | **Pg** | **06 29 50.6** | **+1.4** |
| | baz=236 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.41** | **237** | *e*P | **Pg** | **06 29 50.8** | **+0.9** |
| | baz=231 | | | | | | |
| **TWT** | **Tachien** | **1.43** | **242** | *e*P | **Pg** | **06 29 52.0** | **+1.8** |
| | baz=238 | | | | | | |
| **LIOB** | **Emei** | **1.43** | **259** | *e*P | **Pg** | **06 29 51.3** | **+1.0** |
| | baz=259 | | | | | | |
| **NSTT** | **Nanjuang** | **1.45** | **258** | *e*P | **Pg** | **06 29 51.6** | **+1.1** |
| | baz=258 | | | | | | |
| **CHGB** | **Renai** | **1.53** | **236** | *e*P | **Pg** | **06 29 52.6** | **+0.5** |
| | baz=231 | | | | | | |
| **WHP** | **Taichung City** | **1.60** | **246** | *e*P | **Pg** | **06 29 53.8** | **+0.2** |
| | baz=244 | | | | | | |
| **WUSB** | **Renai** | **1.61** | **235** | *e*P | **Pb** | **06 29 53.2** | **+0.5** |
| | baz=230 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.73** | **240** | *e*P | **Pg** | **06 29 56.2** | **+0.1** |
| | baz=237 | | | | | | |
| **VWDT** | **VWDT** | **1.75** | **228** | *e*P | **Pb** | **06 29 55.4** | **+0.5** |
| | baz=223 | | | | | | |
| **HGSD** | **Ruisui** | **1.77** | **216** | *e*P | **Pg** | **06 29 58.0** | **+1.3** |
| | baz=209 | | | | | | |
| **EHY** | **Hungye** | **1.81** | **219** | *e*P | **Pg** | **06 29 58.4** | **+0.9** |
| | baz=212 | | | | | | |
| **SSLB** | **Suanglung** | **1.85** | **232** | *e*P | **Pb** | **06 29 57.9** | **+1.1** |
| | baz=228 | | | | | | |
| **TYC** | **Yuchr** | **1.86** | **237** | *e*P | **Pg** | **06 29 58.4** | **0.0** |
| | baz=233 | | | | | | |
| **YULB** | **Yu-li** | **1.92** | **217** | *e*P | **Pg** | **06 29 59.6** | **+0.1** |
| | baz=211 | | | | | | |
| **TWF1** | **Yuli** | **1.95** | **217** | *e*P | **Pb** | **06 29 58.8** | **+0.4** |
| | baz=210 | | | | | | |
| **YUS** | **Yu-Shan** | **2.05** | **226** | *e*P | **Pb** | **06 29 59.8** | **-0.6** |
| | baz=221 | | | | | | |
| **ALS** | **Alishan** | **2.14** | **229** | *e*P | **Pb** | **06 30 02.8** | **+1.0** |
| | baz=224 | | | | | | |
| **CHN5** | **Tsauling** | **2.17** | **233** | *e*P | **Pb** | **06 30 02.5** | **+0.2** |
| | baz=229 | | | | | | |
| **STYH** | **Taoyuan** | **2.39** | **223** | *e*P | **Pb** | **06 30 05.4** | **-0.5** |
| | baz=219 | | | | | | |

**IDC 25 06:32:57.2±7.9, 27°.92S×177°.51W, h0km, mb3.7/2, mb1 3.9/2, mb1mx3.6/23, mbtmp3.7/2, MS3.3/4, Ms1 3.3/4, ms1mx2.9/55, Error ellipse: s-maj=416.7km s-min=62.6km az=157.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.66** | **288** | LR | LR | 06 40 50.6 | |
| | comp=Z,45nm,20.7s,baz=72,slow=30 | | | | | | |
| **CTA** | **Charters Tower** | **33.91** | **275** | LR | LR | 06 52 16.9 | |
| | comp=Z,68nm,18.7s,baz=82,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **43.73** | **264** | P | P | 06 41 04.6 | +0.1 |
| | 0.5nm,0.5s,baz=106,slow=7.4,SNR=7.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.49** | **269** | P | P | 06 41 10.2 | -0.4 |
| | 0.4nm,0.5s,baz=106,slow=8.2,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.84** | **268** | LR | LR | 07 02 44.4 | |
| | comp=Z,27nm,19.6s,baz=98,slow=34 | | | | | | |
| **USHA** | **Ushuaia** | **77.73** | **146** | LR | LR | 07 13 31.7 | |
| | comp=Z,44nm,18.7s,baz=354,slow=31 | | | | | | |
| **AKASG** | **Malin Array Be** | **149.54** | **326** | PKPbc | PKPbc | 06 52 47.8 | -0.5 |
| | 0.4nm,0.4s,baz=49,slow=3.3,SNR=4.9 | | | | | | |

**IDC 25 06:44:01.8±3.2, 5°.02S×153°.55E, h0km, mb3.3/2, mb1 3.6/2, mb1mx3.3/44, mbtmp3.3/2, Error ellipse: s-maj=59.6km s-min=40.2km az=70.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **1.68** | **295** | Pn | Pb | 06 44 33.4 | -0.3 |
| KRVT | | | | Sn | Sn | 06 44 51.5 | -3.3 |
| **PMG** | **Port Moresby** | **7.70** | **235** | Sn | Sn | 06 47 19.3 | -4.0 |
| | 1.4nm,0.3s,baz=262,slow=22,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.87** | **230** | P | P | 06 49 16.8 | -0.5 |
| | 0.7nm,0.6s,baz=52,slow=9.6,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.50** | **224** | P | P | 06 49 42.2 | +1.0 |
| | 0.1nm,0.5s,baz=57,slow=8.6,SNR=1.5 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.71** | **29** | T | T | 07 17 27.9 | |
| | baz=208 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.72** | **29** | T | T | 07 17 24.9 | |
| | baz=208 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.73** | **29** | T | T | 07 18 15.8 | |
| | baz=208 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.09** | **288** | PKPbc | PKPbc | 07 03 56.8 | -1.2 |
| | 0.2nm,0.3s,baz=62,slow=1.8,SNR=2.1 | | | | | | |

**IDC 25 06:51:54.9±3.2, 55°.64N×86°.09E, h0km, mb1 3.0/2, mb1mx2.9/53, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=26.4km s-min=23.3km az=44.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.84** | **204** | *i* | | 07 02 41.5 | |
| | baz=22,slow=342,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.84** | **204** | Pg | Pn | 06 52 27.3 | -0.4 |
| | 3.2nm,0.3s,baz=21,slow=17,SNR=34 | | | | | | |
| ZALV | | | | Lg | Lg | 06 52 53.1 | |
| | 1.7nm,0.3s,baz=23,slow=28,SNR=19 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.77** | **225** | Pn | Pn | 06 53 35.3 | -0.1 |
| | 0.1nm,0.3s,baz=42,slow=14,SNR=9.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 55 33.6 | |
| | 0.1nm,0.3s,baz=41,slow=27,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **9.17** | **197** | Pn | Pn | 06 54 08.6 | +0.3 |
| | 0.1nm,0.3s,baz=21,slow=13,SNR=4.2 | | | | | | |
| MKAR | | | | Lg | Lg | 06 56 45.9 | |
| | 0.1nm,0.3s,baz=31,slow=27,SNR=2.6 | | | | | | |

*AEIC* ***25*** *06:57:53.8±2.0, 65°.66N×0°.04×143°.76W±0°.06, h13km±4km, ML4.3, mb4.0/4(NEIC), ML4.5/118(NEIC), Mwr4.0/79(NEIC), Error ellipse: s-maj=5.2km s-min=3.6km az=173.0*

*NEIC* ***25*** *06:57:53.8±2.5, 65°.63N×0°.03×143°.73W±0°.05, h10km±1km, Error ellipse: s-maj=5.7km s-min=3.2km az=12.0*

*ANF* ***25*** *06:57:53.0±0.6, 65°.67N×143°.76W, h2km±4km, ML4.7/48, Error ellipse: s-maj=2.6km s-min=2.0km az=7.0*

*PGC* ***25*** *06:57:54.0±0.9, 65°.69N×143°.62W, h0km, ML4.3, ML3.8/10, 212km Ene of Fairbanks, Ak Northern Alaska*

*NEIC* ***25*** *06:57:55, 65°.65N×143°.81W, h11km, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.11; Mθθ-0.57; Mφφ0.47; Mrθ0.23; Mrφ-1.14; Mθφ-0.25; Fault plane solution: M₀1.30000×10¹⁵ NP1:φs193.31000°, δ77.11000°, λ,9.56000°. NP2:φs101.16000°, δ80.69000°, λ166.93000°. Principal axes: T 1.2960, Plg16.0000°, Azm57.0000°; N 0.0137, Plg74.0000°, Azm246.0000°; P -1.3097, Plg2.0000°, Azm148.0000°;*

*IDC* ***25*** *06:57:55.0±0.6, 65°.52N×143°.70W, h0km, mb3.8/14, mb1 4.0/16, mb1mx3.8/50, mbtmp3.8/16, ML4.2/2, MS3.4/8, Ms1 3.4/8, ms1mx2.9/93 Error ellipse: s-maj=12.4km s-min=8.1km az=175.0*

**ISC 25 06:57:53.5±0.4, 65°.68N±0°.02×143°.64W±0°.02, h10km, n234, σ1°86/263, mb3.8/18, MS3.4/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRP** | **Porcupine Dome** | **0.80** | **259** | | **Pg** | **06 58 08.1** | **-0.9** |
| PRP | | | | Sg | **Sg** | **06 58 17.9** | **-1.4** |
| **PRP** | **Porcupine Dome** | **0.80** | **259** | P | **Pg** | **06 58 08.1** | **-0.9** |
| | baz=78,SNR=1000 | | | | | | |
| PRP | | | | S | **Sg** | **06 58 18.0** | **-1.4** |
| | baz=78 | | | | | | |
| **FYU** | **Fort Yukon** | **1.10** | **325** | Pn | **Pn** | **06 58 15.3** | **+0.4** |
| FYU | | | | IAML | | 06 58 36.2 | |
| | comp=E,8μm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **1.19** | **178** | P | **Pg** | **06 58 15.9** | **-0.3** |
| | baz=355 | | | | | | |
| J26L | | | | S | **Sb** | **06 58 30.8** | **-0.7** |
| | baz=355 | | | | | | |
| **J25K** | **Salcha River,** | **1.30** | **215** | | **Pg** | **06 58 17.6** | **-0.8** |
| J25K | | | | Sn | **Sb** | **06 58 32.6** | **-2.1** |
| J25K | | | | IAML | | 06 58 33.5 | |
| | comp=N,7μm,0.3s | | | | | | |
| J25K | | | | IAML | | 06 58 35.4 | |
| | comp=E,9μm,0.3s | | | | | | |
| **J25K** | **Salcha River,** | **1.30** | **215** | P | **Pb** | **06 58 17.3** | **-0.7** |
| | baz=32,SNR=1000 | | | | | | |
| J25K | | | | S | **Sb** | **06 58 32.7** | **-2.1** |
| | baz=32 | | | | | | |
| **EGAK** | **Eagle** | **1.38** | **130** | | **Pb** | **06 58 19.3** | **-0.1** |
| EGAK | | | | Sn | **Sb** | **06 58 37.2** | **+0.1** |
| **EGAK** | **Eagle** | **1.38** | **130** | P | **Pn** | **06 58 18.6** | **-0.3** |
| | baz=310,SNR=512 | | | | | | |
| **IL31** | | **1.65** | **238** | | **Pn** | **06 58 22.0** | **-0.3** |
| **ILAR** | **Eielson Array** | **1.65** | **238** | Pg | **Pb** | **06 58 23.1** | **-0.7** |
| | comp=E,404nm,0.3s,baz=52,slow=17,SNR=2293 | | | | | | |
| ILAR | | | | Lg | Lg | 06 58 42.9 | |
| | comp=E,806nm,0.3s,baz=53,slow=28,SNR=7.8 | | | | | | |
| ILAR | | | | LR | LR | 06 58 45.5 | |
| | comp=E,1μm,19.6s,baz=152,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **1.65** | **238** | Pn | **Pn** | **06 58 22.0** | **-0.4** |
| **POKR** | **Poker Plat Res** | **1.69** | **252** | | **Pn** | **06 58 22.6** | **-0.4** |
| POKR | | | | | **Sg** | **06 58 46.1** | **-1.6** |
| POKR | | | | IAML | | 06 58 46.7 | |
| | comp=E,6μm,0.5s | | | | | | |
| **POKR** | **Poker Plat Res** | **1.69** | **252** | P | **Pn** | **06 58 22.4** | **-0.6** |
| | baz=69,SNR=685 | | | | | | |
| POKR | | | | S | **Sb** | **06 58 45.2** | **-0.7** |
| | baz=69 | | | | | | |
| **SCRK** | **Sand Creek** | **1.72** | **185** | | **Pb** | **06 58 24.1** | **-1.1** |
| SCRK | | | | IAML | | 06 58 49.2 | |
| | comp=N,4μm,0.4s | | | | | | |
| **SCRK** | **Sand Creek** | **1.72** | **185** | P | **Pb** | **06 58 24.3** | **-0.9** |
| | baz=2.8,SNR=835 | | | | | | |
| SCRK | | | | S | **Sb** | **06 58 46.7** | **-0.1** |
| | baz=2.8 | | | | | | |
| **H24K** | **Noodor Dome** | **1.76** | **277** | | **Pb** | **06 58 24.0** | **-1.8** |
| H24K | | | | IAML | | 06 58 52.1 | |
| | comp=E,6μm,0.8s | | | | | | |
| H24K | | | | IAML | | 06 58 54.9 | |
| | comp=N,6μm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **1.76** | **277** | P | **Pn** | **06 58 23.5** | **-0.5** |
| | baz=94 | | | | | | |
| H24K | | | | Sb | **Sg** | **06 58 48.5** | **-1.4** |
| | baz=94 | | | | | | |
| **PS08** | **TAPS Pump Stn8** | **1.77** | **231** | | **Pn** | **06 58 23.8** | **-0.3** |
| PS08 | | | | | **Sb** | **06 58 47.2** | **-0.9** |
| **BM03** | **Burnt Mountain** | **1.79** | **348** | | **Pb** | **06 58 25.1** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **1.80** | **348** | | **Pb** | **06 58 25.3** | **-1.1** |
| **HDA** | **Harding Lake** | **1.90** | **229** | | **Pn** | **06 58 25.8** | **-0.1** |
| **HDA** | **Harding Lake** | **1.90** | **229** | P | **Pn** | **06 58 25.4** | **-0.5** |
| | baz=45 | | | | | | |
| HDA | | | | Sb | **Sb** | **06 58 51.8** | **-0.1** |
| | baz=45 | | | | | | |
| HDA | | | | Sb | **Sb** | **06 58 51.8** | **-0.1** |
| | baz=45 | | | | | | |
| **COLA** | **College** | **1.95** | **247** | IAML | | 06 58 53.9 | |
| | comp=N,5μm,0.5s | | | | | | |
| **COLA** | **College** | **1.95** | **247** | | **Pn** | **06 58 26.2** | **-0.4** |
| **COLA** | **College** | **1.95** | **247** | P | **Pn** | **06 58 26.1** | **-0.4** |
| | baz=63 | | | | | | |
| COLA | | | | Sb | **Sb** | **06 58 53.4** | **+0.1** |
| | baz=63 | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **1.95** | **247** | | **Pn** | **06 58 26.2** | **-0.4** |
| **TCOL** | **CIGO, UAF Yank** | **1.95** | **247** | P | **Pn** | **06 58 26.1** | **-0.5** |
| | baz=63,SNR=822 | | | | | | |
| TCOL | | | | Sb | **Sg** | **06 58 53.7** | **-2.4** |
| | baz=63 | | | | | | |
| **PS07** | **TAPS Pump Stn7** | **1.97** | **261** | | **Pn** | **06 58 26.5** | **-0.3** |
| **RIDG** | **Independent Ri** | **2.02** | **195** | | **Pn** | **06 58 28.0** | **+0.5** |
| **RIDG** | **Independent Ri** | **2.02** | **195** | P | **Pn** | **06 58 28.1** | **+0.5** |
| | baz=13,SNR=467 | | | | | | |
| RIDG | | | | Sb | **Sb** | **06 58 55.5** | **+0.1** |
| | baz=13 | | | | | | |
| **CCB** | **Clear Creek Bu** | **2.04** | **241** | | **Pn** | **06 58 27.2** | **-0.6** |
| CCB | | | | IAML | | 06 58 56.6 | |
| | comp=N,4μm,0.5s | | | | | | |
| CCB | | | | IAML | | 06 58 56.7 | |
| | comp=E,4μm,0.4s | | | | | | |
| **DOT** | **Dot Lake** | **2.05** | **185** | | **Pn** | **06 58 27.2** | **-0.8** |
| **DOT** | **Dot Lake** | **2.05** | **185** | Pn | **Pn** | **06 58 28.5** | **+0.5** |
| DOT | | | | Sn | **Sn** | **06 58 53.4** | **-0.2** |
| DOT | | | | Sg | **Sb** | **06 58 57.1** | **+0.8** |
| **MDM** | **Murphy Dome** | **2.06** | **251** | | **Pn** | **06 58 27.5** | **-0.6** |
| MDM | | | | IAML | | 06 58 57.4 | |
| | comp=N,3μm,0.8s | | | | | | |
| MDM | | | | IAML | | 06 58 58.2 | |
| | comp=E,4μm,0.5s | | | | | | |
| **WRH** | **Wood River Hil** | **2.24** | **239** | | **Pn** | **06 58 30.1** | **-0.5** |
| WRH | | | | IAML | | 06 59 02.5 | |
| | comp=E,3μm,0.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **2.24** | **96** | | **Pn** | **06 58 31.3** | **+0.6** |
| I29M | | | | IAML | | 06 59 11.6 | |
| | comp=N,2μm,0.9s | | | | | | |
| I29M | | | | IAML | | 06 59 15.9 | |
| | comp=E,2μm,0.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **2.24** | **96** | P | **Pn** | **06 58 30.9** | **+0.2** |
| | baz=280,SNR=190 | | | | | | |
| **DAWY** | **Dawson** | **2.43** | **130** | | **Pn** | **06 58 33.2** | **0.0** |
| DAWY | | | | IAML | | 06 59 11.3 | |
| | comp=N,2μm,0.6s | | | | | | |
| **DAWY** | **Dawson** | **2.43** | **130** | Pn | **Pn** | **06 58 33.1** | **-0.2** |
| DAWY | | | | Sg | **Sb** | **06 59 09.2** | **+1.9** |
| **DAWY** | **Dawson** | **2.43** | **130** | P | **Pn** | **06 58 33.1** | **-0.2** |
| | baz=312,SNR=170 | | | | | | |
| DAWY | | | | Sb | **Sg** | **06 59 09.6** | **-1.9** |
| | baz=312 | | | | | | |
| **PS10** | **TAPS Pump St10** | **2.45** | **203** | | **Pn** | **06 58 34.0** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **2.45** | **260** | | **Pn** | **06 58 32.7** | **-0.8** |
| I23K | | | | IAML | | 06 59 13.0 | |
| | comp=E,3μm,0.6s | | | | | | |
| I23K | | | | IAML | | 06 59 13.9 | |
| | comp=N,2μm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **2.45** | **260** | P | **Pn** | **06 58 32.7** | **-0.8** |
| | baz=75,SNR=77 | | | | | | |
| I23K | | | | Sb | **Sb** | **06 59 08.6** | **+0.8** |
| | baz=75 | | | | | | |
| **PS06** | **TAPS Pump Stn6** | **2.52** | **277** | | **Pn** | **06 58 34.0** | **-0.4** |
| **NEA2** | **Nenana** | **2.54** | **247** | | **Pn** | **06 58 33.6** | **-1.1** |
| NEA2 | | | | IAML | | 06 59 16.4 | |
| | comp=N,2μm,0.7s | | | | | | |
| NEA2 | | | | IAML | | 06 59 16.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| **NEA2** | **Nenana** | **2.54** | **247** | P | **Pn** | **06 58 33.8** | **-0.9** |
| | baz=62,SNR=79 | | | | | | |
| NEA2 | | | | Sb | **Sb** | **06 59 10.4** | **0.0** |
| | baz=62 | | | | | | |
| **J29M** | **Klondike Camp** | **2.61** | **116** | P | **Pn** | **06 58 37.0** | **+1.3** |
| | baz=300,SNR=331 | | | | | | |
| **L26K** | **Log Cabin Wild** | **2.67** | **177** | | **Pn** | **06 58 36.6** | **+0.1** |
| **L26K** | **Log Cabin Wild** | **2.67** | **177** | P | **Pn** | **06 58 37.2** | **+0.7** |
| | baz=356,SNR=85 | | | | | | |
| **L27K** | **Beaver Creek,** | **2.75** | **163** | | **Pn** | **06 58 37.4** | **-0.2** |
| L27K | | | | IAML | | 06 59 24.7 | |
| | comp=E,2μm,0.6s | | | | | | |
| **L27K** | **Beaver Creek,** | **2.75** | **163** | P | **Pn** | **06 58 38.0** | **+0.4** |
| | baz=343 | | | | | | |
| **BC03** | | **2.75** | **162** | | **Pn** | **06 58 38.0** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **2.75** | **162** | | **Pn** | **06 58 37.8** | **+0.2** |
| **MENT** | **Mentasta** | **2.75** | **181** | | **Pn** | **06 58 38.2** | **+0.5** |
| **PAX** | **Paxson** | **2.84** | **197** | Pn | **Pn** | **06 58 38.1** | **-0.8** |
| **PAX** | **Paxson** | **2.84** | **197** | P | **Pn** | **06 58 39.7** | **+0.8** |
| | baz=14,SNR=95 | | | | | | |
| PAX | | | | Sb | **Sb** | **06 59 19.7** | **+0.7** |
| | baz=14 | | | | | | |
| **BWN** | **Browne** | **2.91** | **241** | | **Pn** | **06 58 38.5** | **-1.2** |
| **EPYK** | **Eagle Plains** | **2.91** | **73** | | **Pn** | **06 58 40.3** | **+0.4** |
| EPYK | | | | IAML | | 06 59 33.4 | |
| | comp=N,2μm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **2.91** | **73** | Pn | **Pn** | **06 58 40.1** | **+0.3** |
| EPYK | | | | Sn | **Sn** | **06 59 14.8** | **0.0** |
| **EPYK** | **Eagle Plains** | **2.91** | **73** | P | **Pn** | **06 58 40.2** | **+0.4** |
| | baz=259 | | | | | | |
| **MCK** | **McKinley** | **3.00** | **232** | | **Pn** | **06 58 41.1** | **0.0** |
| **MCK** | **McKinley** | **3.00** | **232** | P | **Pn** | **06 58 41.0** | **0.0** |
| | baz=46,SNR=17 | | | | | | |
| **MLY** | **Manley** | **3.05** | **261** | | **Pn** | **06 58 40.9** | **-0.9** |
| MLY | | | | IAML | | 06 59 29.2 | |
| | comp=E,1μm,0.7s | | | | | | |
| **MLY** | **Manley** | **3.05** | **261** | P | **Pn** | **06 58 40.4** | **-1.3** |
| | baz=74 | | | | | | |
| **COLD** | **Coldfoot** | **3.06** | **303** | Pn | **Pn** | **06 58 40.6** | **-1.2** |
| **COLD** | **Coldfoot** | **3.06** | **303** | Pn | **Pn** | **06 58 41.9** | **+0.1** |
| COLD | | | | Sg | **Sg** | **06 59 28.1** | **-3.5** |
| **COLD** | **Coldfoot** | **3.06** | **303** | P | **Pn** | **06 58 42.1** | **+0.3** |
| | baz=118 | | | | | | |
| **DHY** | **Denali Highway** | **3.08** | **214** | | **Pn** | **06 58 43.4** | **+1.1** |
| DHY | | | | IAML | | 06 59 28.5 | |
| | comp=E,1μm,1.0s | | | | | | |
| DHY | | | | IAML | | 06 59 30.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **DHY** | **Denali Highway** | **3.08** | **214** | P | **Pn** | **06 58 43.3** | **+1.1** |
| | baz=29,SNR=27 | | | | | | |
| **M26K** | **Nabesna, AK** | **3.31** | **175** | | **Pn** | **06 58 46.1** | **+0.8** |
| **M26K** | **Nabesna, AK** | **3.31** | **175** | P | **Pn** | **06 58 46.0** | **+0.8** |
| | baz=354 | | | | | | |
| **HARP** | **HAARP** | **3.36** | **192** | | **Pn** | **06 58 47.6** | **+1.6** |
| **HARP** | **HAARP** | **3.36** | **192** | P | **Pn** | **06 58 47.6** | **+1.6** |
| | baz=9.8 | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.43** | **166** | | **Pn** | **06 58 47.9** | **+0.9** |
| M27K | | | | IAML | | 06 59 48.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.43** | **166** | P | **Pn** | **06 58 47.6** | **+0.6** |
| | baz=347 | | | | | | |
| **BVCY** | **Beaver Creek** | **3.50** | **158** | | **Pn** | **06 58 48.9** | **+1.0** |
| **BVCY** | **Beaver Creek** | **3.50** | **158** | Pn | **Pn** | **06 58 48.6** | **+0.7** |
| BVCY | | | | Sg | **Sg** | **06 59 41.7** | **-4.1** |
| **BVCY** | **Beaver Creek** | **3.50** | **158** | P | **Pn** | **06 58 48.6** | **+0.7** |
| | baz=340,SNR=14 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **3.51** | **246** | Pn | **Pn** | **06 58 47.1** | **-1.0** |
| BPAW | | | | IAML | | 06 59 43.5 | |
| | comp=N,933nm,1.0s | | | | | | |
| BPAW | | | | IAML | | 06 59 43.9 | |
| | comp=E,841nm,0.8s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **3.51** | **246** | P | **Pn** | **06 58 46.8** | **-1.2** |
| | baz=60,SNR=16 | | | | | | |
| **I21K** | **Tanana** | **3.52** | **266** | | **Pn** | **06 58 47.0** | **-1.2** |
| I21K | | | | IAML | | 06 59 53.3 | |
| | comp=E,1μm,1.2s | | | | | | |
| I21K | | | | IAML | | 06 59 53.3 | |
| | comp=N,1μm,1.1s | | | | | | |
| **I21K** | **Tanana** | **3.52** | **266** | P | **Pn** | **06 58 47.2** | **-1.0** |
| | baz=78 | | | | | | |
| **WAT6** | **Susitna Watana** | **3.59** | **212** | | **Pn** | **06 58 50.5** | **+1.1** |
| **WAT6** | **Susitna Watana** | **3.59** | **212** | P | **Pn** | **06 58 50.4** | **+1.1** |
| | baz=28,SNR=31 | | | | | | |
| **TRF** | **Thorofare Moun** | **3.64** | **235** | P | **Pn** | **06 58 49.8** | **-0.1** |
| | baz=49,SNR=18 | | | | | | |
| **PS11** | **TAPS Pump St11** | **3.71** | **193** | | **Pn** | **06 58 52.8** | **+2.1** |
| **M24K** | **Tolsona, Glenn** | **3.76** | **199** | | **Pn** | **06 58 53.5** | **+2.0** |
| **M24K** | **Tolsona, Glenn** | **3.76** | **199** | P | **Pn** | **06 58 53.2** | **+1.6** |
| | baz=15 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **3.77** | **325** | | **Pn** | **06 58 51.5** | **-0.1** |
| **TOLK** | **Toolik Lake Re** | **3.77** | **325** | P | **Pn** | **06 58 53.5** | **+2.0** |
| | baz=140 | | | | | | |
| **H21K** | **Melozitna Rive** | **3.79** | **274** | | **Pn** | **06 58 50.9** | **-1.1** |
| H21K | | | | IAML | | 06 59 54.7 | |
| | comp=N,614nm,0.9s | | | | | | |
| H21K | | | | IAML | | 07 00 02.1 | |
| | comp=E,616nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **3.79** | **274** | P | **Pn** | **06 58 50.6** | **-1.3** |
| | baz=86 | | | | | | |
| **KTH** | **Kantishna Hill** | **3.79** | **239** | | **Pn** | **06 58 50.7** | **-1.3** |
| KTH | | | | IAML | | 06 59 58.6 | |
| | comp=N,798nm,1.0s | | | | | | |
| KTH | | | | IAML | | 07 00 03.9 | |
| | comp=E,738nm,1.1s | | | | | | |
| **MAYO** | **Mayo, Yukon** | **3.94** | **119** | Sg | **Sb** | **06 59 54.2** | **+3.7** |
| **YUK2** | **White River** | **4.10** | **161** | | **Pn** | **06 58 57.5** | **+1.2** |
| **YUK2** | **White River** | **4.10** | **161** | Pn | **Pn** | **06 58 57.3** | **+1.0** |
| YUK2 | | | | Sg | **Sg** | **07 00 01.1** | **-3.9** |
| **N25K** | **Chitina, Valde** | **4.11** | **186** | | **Pn** | **06 58 57.7** | **+1.3** |
| **N25K** | **Chitina, Valde** | **4.11** | **186** | P | **Pn** | **06 58 56.9** | **+0.5** |
| | baz=4.7 | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.13** | **248** | | **Pn** | **06 58 55.5** | **-1.0** |
| **CHUM** | **Lake Minchumin** | **4.13** | **248** | P | **Pn** | **06 58 55.4** | **-1.0** |
| | baz=60,SNR=28 | | | | | | |
| **YUK3** | **Moose Creek** | **4.17** | **159** | | **Pn** | **06 58 58.1** | **+0.9** |
| **YUK3** | **Moose Creek** | **4.17** | **159** | Pn | **Pn** | **06 58 58.0** | **+0.7** |
| YUK3 | | | | Sg | **Sg** | **07 00 03.0** | **-4.2** |
| **YUK3** | **Moose Creek** | **4.17** | **159** | P | **Pn** | **06 58 58.0** | **+0.7** |
| | baz=341,SNR=11 | | | | | | |
| **IM03** | | **4.17** | **279** | | **Pn** | **06 58 56.4** | **-0.6** |
| **IMAR** | **Indian Mountai** | **4.17** | **279** | | **Pn** | **06 58 56.1** | **-1.0** |
| **SCM** | **Sheep Creek Mo** | **4.20** | **205** | | **Pn** | **06 58 59.5** | **+1.9** |
| **SCM** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J20K** | **Nowinta River** | **4.72** | **256** | | | **Pn** | **06 59 03.7 -0.9** |
| J20K | | | | IAML | | | 07 00 29.9 |
| | comp=E,510nm,0.8s | | | | | | |
| J20K | | | | IAML | | | 07 00 39.1 |
| | comp=N,386nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **4.72** | **256** | P | | **Pn** | **06 59 03.5 -1.2** |
| | baz=67 | | | | | | |
| **BARN** | **Barnard Glacie** | **4.72** | **168** | | | **Pn** | **06 59 03.5 -1.4** |
| **YUK8** | **Steele Glacier** | **4.74** | **157** | Pn | | **Pn** | **06 59 06.5 +1.3** |
| **BMRM** | **Bremner River** | **4.75** | **186** | Pn | | **Pn** | **06 59 07.2 +2.0** |
| BMRM | | | | IAML | | | 07 00 21.6 |
| | comp=E,323nm,1.1s | | | | | | |
| BMRM | | | | IAML | | | 07 00 30.4 |
| | comp=N,351nm,1.0s | | | | | | |
| **BMRM** | **Bremner River** | **4.75** | **186** | P | | **Pn** | **06 59 06.3 +1.1** |
| | baz=4.1,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **4.76** | **52** | Pn | | **Pn** | **06 59 06.2 +1.0** |
| | comp=N,11nm,0.3s,baz=222,slow=16,SNR=263 | | | | | | |
| INK | | | | Sn | | **Sn** | **06 59 59.1 -1.2** |
| | comp=N,11nm,0.3s,baz=177,slow=18,SNR=3.2 | | | | | | |
| INK | | | | Lg | Lg | | 07 00 25.9 |
| | comp=N,10nm,0.3s,baz=198,slow=15,SNR=3.6 | | | | | | |
| INK | | | | LR | LR | | 07 01 21.9 |
| | comp=N,306nm,20.9s,baz=178,slow=42 | | | | | | |
| **INK** | **Inuvik** | **4.76** | **52** | Pn | | **Pn** | **06 59 06.2 +1.0** |
| **INK** | **Inuvik** | **4.76** | **52** | Pn | | **Pn** | **06 59 05.9 +0.8** |
| **INK** | **Inuvik** | **4.76** | **52** | P | | **Pn** | **06 59 05.9 +0.8** |
| | baz=241 | | | | | | |
| **PMR** | **Palmer** | **4.78** | **213** | | | **Pn** | **06 59 04.3 -1.1** |
| PMR | | | | IAML | | | 07 00 24.1 |
| | comp=E,349nm,1.3s | | | | | | |
| **KNK** | **Knik Glacier** | **4.79** | **209** | | | **Pn** | **06 59 07.5 +1.8** |
| KNK | | | | IAML | | | 07 00 26.4 |
| | comp=N,434nm,0.8s | | | | | | |
| KNK | | | | IAML | | | 07 00 28.7 |
| | comp=E,423nm,1.0s | | | | | | |
| **KNK** | **Knik Glacier** | **4.79** | **209** | P | | **Pn** | **06 59 07.7 +2.0** |
| | baz=24,SNR=18 | | | | | | |
| **KIAG** | **Kiagna River** | **4.81** | **173** | | | **Pn** | **06 59 08.0 +1.9** |
| **KIAG** | **Kiagna River** | **4.81** | **173** | Pn | | **Pn** | **06 59 08.0 +1.9** |
| KIAG | | | | Sg | | **Sg** | **07 00 23.8 -4.0** |
| **CTGM** | **Chitina Glacie** | **4.85** | **167** | | | **Pn** | **06 59 06.2 -0.3** |
| **CTGM** | **Chitina Glacie** | **4.85** | **167** | Pn | | **Pn** | **06 59 08.1 +1.6** |
| **YUK4** | **Talbot Arm** | **4.89** | **151** | Pn | | **Pn** | **06 59 07.3 +0.1** |
| **YUK4** | **Talbot Arm** | **4.89** | **151** | P | | **Pn** | **06 59 07.2 +0.1** |
| | baz=333,SNR=14 | | | | | | |
| **PS01** | **TAPS Pump Stn** | **4.96** | **340** | | | **Pn** | **06 59 10.0 +2.1** |
| **LOGN** | **Logan Glacier** | **5.02** | **165** | | | **Pn** | **06 59 08.5 -0.4** |
| LOGN | | | | IAML | | | 07 00 38.7 |
| | comp=E,257nm,1.1s | | | | | | |
| **LOGN** | **Logan Glacier** | **5.02** | **165** | Pn | | **Pn** | **06 59 09.6 +0.7** |
| **K20K** | **Telida** | **5.07** | **247** | | | **Pn** | **06 59 08.6 -0.9** |
| K20K | | | | IAML | | | 07 00 33.7 |
| | comp=E,296nm,1.1s | | | | | | |
| K20K | | | | IAML | | | 07 00 42.3 |
| | comp=N,324nm,0.8s | | | | | | |
| **K20K** | **Telida** | **5.07** | **247** | P | | **Pn** | **06 59 09.2 -0.3** |
| | baz=58 | | | | | | |
| **FID** | **Port Fidalgo** | **5.11** | **196** | | | **Pn** | **06 59 09.8 -0.3** |
| FID | | | | IAML | | | 07 00 34.3 |
| | comp=E,278nm,1.6s | | | | | | |
| FID | | | | IAML | | | 07 00 36.6 |
| | comp=N,221nm,1.1s | | | | | | |
| **YUK5** | **Granite Creek** | **5.25** | **148** | Pn | | **Pn** | **06 59 12.8 +0.7** |
| YUK5 | | | | Sg | | **Sg** | **07 00 36.2 -5.7** |
| **KHIT** | **Khitrov Hills** | **5.26** | **178** | | | **Pn** | **06 59 14.9 +2.7** |
| **WAX** | **Waxell Ridge** | **5.26** | **176** | | | **Pn** | **06 59 15.1 +2.9** |
| WAX | | | | IAML | | | 07 00 49.1 |
| | comp=E,211nm,1.3s | | | | | | |
| WAX | | | | IAML | | | 07 00 56.6 |
| | comp=N,303nm,1.3s | | | | | | |
| **PWL** | **Port Wells** | **5.28** | **206** | | | **Pn** | **06 59 14.3 +1.9** |
| PWL | | | | IAML | | | 07 00 51.0 |
| | comp=E,266nm,0.9s | | | | | | |
| PWL | | | | IAML | | | 07 00 59.2 |
| | comp=N,236nm,1.1s | | | | | | |
| **YUK6** | **Outpost Mounta** | **5.32** | **151** | | | **Pn** | **06 59 14.6 +1.5** |
| **YUK6** | **Outpost Mounta** | **5.32** | **151** | Pn | | **Pn** | **06 59 14.3 +1.3** |
| **YUK6** | **Outpost Mounta** | **5.32** | **151** | P | | **Pn** | **06 59 14.5 +1.5** |
| | baz=335,SNR=14 | | | | | | |
| **RC01** | **Rabbit Creek A** | **5.36** | **214** | | | **Pn** | **06 59 10.7 -2.7** |
| RC01 | | | | IAML | | | 07 00 51.5 |
| | comp=N,196nm,1.0s | | | | | | |
| **TABL** | **Table Mountain** | **5.38** | **167** | Pn | | **Pn** | **06 59 15.9 +2.0** |
| TABL | | | | Sg | | **Sg** | **07 00 39.5 -6.5** |
| **L20K** | **Farewell, AK** | **5.52** | **239** | P | | **Pn** | **06 59 14.5 -1.1** |
| | baz=50 | | | | | | |
| **SNH** | **Sunshine Point** | **5.54** | **176** | Pn | | **Pn** | **06 59 13.7 -2.2** |
| **MESA** | **MESA** | **5.58** | **171** | Pn | | **Pn** | **06 59 16.7 +0.1** |
| **HYT** | **Haines Junctio** | **5.60** | **148** | | | **Pn** | **06 59 17.9 +1.0** |
| **HYT** | **Haines Junctio** | **5.60** | **148** | Pn | | **Pn** | **06 59 17.9 +1.0** |
| HYT | | | | Sg | | **Sg** | **07 00 48.3 -4.9** |
| **HYT** | **Haines Junctio** | **5.60** | **148** | P | | **Pn** | **06 59 17.9 +1.0** |
| | baz=332,SNR=7.6 | | | | | | |
| **GCSA** | **Galena City Sc** | **5.65** | **266** | P | | **Pn** | **06 59 17.4 +0.1** |
| | baz=75 | | | | | | |
| **FARO** | **Faro, Yukon** | **5.70** | **123** | Pn | | **Pn** | **06 59 18.7 +0.5** |
| FARO | | | | Sg | | **Sg** | **07 00 51.3 -5.0** |
| **SAMH** | **Samovar Hills** | **5.72** | **166** | Pn | | **Pn** | **06 59 19.3 +0.8** |
| **YUK7** | **Dusty Glacier** | **5.74** | **152** | Pn | | **Pn** | **06 59 19.1 +0.3** |
| YUK7 | | | | Sn | | **Sn** | **07 00 27.4 +2.7** |
| YUK7 | | | | Sg | | **Sg** | **07 00 54.9 -2.7** |
| **SPNN** | **North Nagishla** | **5.93** | **227** | | | **Pn** | **06 59 22.7 +1.3** |
| **TTA** | **Tatalina** | **6.05** | **249** | | | **Pn** | **06 59 21.6 -1.3** |
| **TTA** | **Tatalina** | **6.05** | **249** | P | | **Pn** | **06 59 22.8 -0.1** |
| | baz=57 | | | | | | |
| **L19K** | **White Mountain** | **6.06** | **240** | | | **Pn** | **06 59 21.7 -1.4** |
| **L19K** | **White Mountain** | **6.06** | **240** | P | | **Pn** | **06 59 22.9 -0.1** |
| | baz=50,SNR=16 | | | | | | |
| **TT01** | **Tatalina** | **6.06** | **248** | | | **Pn** | **06 59 22.2 -0.9** |
| **M19K** | **Big River Lodg** | **6.08** | **236** | | | **Pn** | **06 59 21.4 -2.0** |
| **M19K** | **Big River Lodg** | **6.08** | **236** | P | | **Pn** | **06 59 23.3 -0.1** |
| | baz=47 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **6.22** | **114** | Pn | | **Pn** | **06 59 26.3 +1.0** |
| **MMPY** | **Sheldon Lake,** | **6.22** | **114** | P | | **Pn** | **06 59 26.2 +1.0** |
| | baz=305,SNR=9.5 | | | | | | |
| **SKAG** | **Skagway** | **7.32** | **145** | Pn | | **Pn** | **06 59 41.3 +1.0** |
| **A21K** | **Barrow** | **7.39** | **326** | Pn | | **Pn** | **06 59 40.5 -0.7** |
| **A21K** | **Barrow** | **7.39** | **326** | P | | **Pn** | **06 59 41.8 +0.7** |
| | baz=134 | | | | | | |
| **O18K** | **Koktuh Hills** | **7.88** | **228** | | | **Pn** | **06 59 49.0 +0.9** |
| **O18K** | **Koktuh Hills** | **7.88** | **228** | P | | **Pn** | **06 59 48.6 +0.5** |
| | baz=37 | | | | | | |
| **BESE** | **Bessie Mountai** | **8.22** | **146** | Sg | | **Sg** | **07 02 14.0 -3.0** |
| **C36M** | **Paulatuk** | **8.33** | **55** | | | **Pn** | **06 59 53.0 -1.1** |
| **C36M** | **Paulatuk** | **8.33** | **55** | Pn | | **Pn** | **06 59 52.8 -1.3** |
| C36M | | | | Sn | | Sn | 07 01 16.9 -11 |
| **C36M** | **Paulatuk** | **8.33** | **55** | P | | **Pn** | **06 59 52.8 -1.3** |
| | baz=253 | | | | | | |
| **KDAK** | **Kodiak Island** | **8.98** | **212** | Pn | | **Pn** | **07 00 03.8 +0.8** |
| | comp=N,0.3nm,0.3s,baz=27,slow=14,SNR=2.4 | | | | | | |
| KDAK | | | | LR | | LR | 07 03 34.8 |
| | comp=N,449nm,21.5s,baz=55,slow=38 | | | | | | |
| **A36M** | **Sachs Harbour** | **9.14** | **38** | Pn | | **Pn** | **07 00 04.9 -0.2** |
| **A36M** | **Sachs Harbour** | **9.14** | **38** | Pn | | **Pn** | **07 00 04.7 -0.4** |
| **A36M** | **Sachs Harbour** | **9.14** | **38** | P | | **Pn** | **07 00 04.8 -0.2** |
| | baz=236 | | | | | | |
| **DLBC** | **Dease Lake** | **9.65** | **132** | Pn | | **Pn** | **07 00 14.4 +2.1** |
| | comp=N,1.1nm,0.3s,baz=338,slow=7.9,SNR=23 | | | | | | |
| DLBC | | | | Lg | | Lg | 07 02 57.8 |
| | comp=N,1.2nm,0.3s,baz=196,slow=21,SNR=2.9 | | | | | | |
| **DLBC** | **Dease Lake** | **9.65** | **132** | Pn | | **Pn** | **07 00 12.7 +0.4** |
| **DLBC** | **Dease Lake** | **9.65** | **132** | Pn | | **Pn** | **07 00 14.2 +1.8** |
| DLBC | | | | Sg | | Sn | 07 02 58.2 +57 |
| **KUKN** | **Kugluktuk,NWT** | **11.43** | **66** | Pn | | **Pn** | **07 00 33.8 -2.6** |
| KUKN | | | | Sn | | Sn | 07 02 34.2 -10 |
| **FNBB** | **Fort Nelson** | **11.72** | **116** | Pn | | **Pn** | **07 00 42.5 +1.9** |
| FNBB | | | | Sn | | **Sn** | **07 02 49.4 -1.9** |
| **NBC6** | **NorthernBC 6** | **12.56** | **114** | Pn | | **Pn** | **07 00 53.9 +1.8** |
| **NBC5** | **NorthernBC 5** | **12.83** | **120** | Sg | | | 07 04 42.8 |
| **YKA** | **Yellowknife Ar** | **13.02** | **91** | Pn | | **Pn** | **07 00 55.6 -2.6** |
| | comp=N,1.4nm,0.3s,baz=292,slow=13,SNR=50 | | | | | | |
| YKA | | | | Sn | | **Sn** | **07 03 14.6 -8.3** |
| | comp=N,0.7nm,0.3s,baz=300,slow=23,SNR=5.9 | | | | | | |
| YKA | | | | Lg | | Lg | 07 04 46.5 |
| | baz=306,slow=28,SNR=1.1 | | | | | | |
| YKA | | | | LR | | LR | 07 05 59.4 |
| | comp=N,157nm,20.9s,baz=122,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.02** | **91** | Pn | | **Pn** | **07 00 55.7 -2.5** |
| **RES** | **Resolute Bay** | **18.18** | **40** | P | | **Pn** | **07 02 05.0 -0.6** |
| | comp=N,0.4nm,0.3s,baz=258,slow=14,SNR=6.4 | | | | | | |
| RES | | | | S | | **Sn** | **07 05 19.2 -8.8** |
| | comp=N,0.2nm,0.3s,baz=109,slow=22,SNR=2.2 | | | | | | |
| **RES** | **Resolute Bay** | **18.18** | **40** | Pn | | **Pn** | **07 02 03.3 -2.2** |
| **BILL** | **Bilibino** | **19.38** | **300** | | | **P** | **07 02 17.1 -2.0** |
| BILL | | | | IAmb | | IAmb | 07 02 25.0 |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **NEW** | **Newport** | **22.36** | **128** | P | | **P** | **07 02 57.9 +6.5** |
| | comp=Z,2.3nm,0.8s,baz=303,slow=8.2,SNR=4.4 | | | | | | |
| **HRY** | **Holter Researc** | **25.49** | **123** | P | | **P** | **07 03 21.0 -0.7** |
| **SEY** | **Seymchan** | **26.81** | **294** | P | | **P** | 07 03 39.7 +6.4 |
| | comp=Z,1.2nm,0.8s,baz=52,slow=19,SNR=2.3 | | | | | | |
| **WVOR** | **Wild Horse Val** | **27.16** | **137** | P | | **P** | **07 03 36.4 -0.3** |
| **MA2** | **Magadan** | **29.47** | **290** | LR | | LR | 07 16 32.2 |
| | comp=Z,47nm,18.3s,baz=121,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **29.73** | **124** | P | | **P** | **07 04 02.5 +2.7** |
| | comp=Z,0.6nm,0.9s,baz=324,slow=4.5,SNR=2.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **29.73** | **124** | P | | **P** | **07 03 57.9 -1.9** |
| **FRB** | **Frobisher Bay** | **30.39** | **58** | P | | P | 07 04 09.4 +4.4 |
| | comp=Z,1.1nm,0.6s,baz=329,slow=12,SNR=3.2 | | | | | | |
| FRB | | | | LR | | LR | 07 15 43.5 |
| | comp=Z,56nm,19.8s,baz=290,slow=35 | | | | | | |
| **NVAR** | **Mina Array Bea** | **30.98** | **139** | P | | **P** | **07 04 14.1 +3.3** |
| | comp=Z,0.9nm,0.8s,baz=335,slow=8.2,SNR=7.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **30.98** | **139** | P | | **P** | **07 04 08.4 -2.4** |
| **PETK** | **Petropavlovsk-** | **31.12** | **275** | LR | | LR | 07 17 09.9 |
| | comp=Z,68nm,18.4s,baz=86,slow=37 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **34.06** | **44** | LR | | LR | 07 19 48.2 |
| | comp=Z,58nm,18.0s,baz=298,slow=38 | | | | | | |
| **SCHQ** | **Schefferville** | **37.15** | **69** | P | | **P** | **07 05 06.2 +2.2** |
| | comp=Z,3.1nm,1.0s,baz=340,slow=15,SNR=2.2 | | | | | | |
| **NRIK** | **Noril'sk** | **40.64** | **335** | P | | P | 07 05 37.6 +4.7 |
| | comp=Z,1.1nm,0.3s,baz=45,slow=4.3,SNR=4.0 | | | | | | |
| **NRIK** | **Noril'sk** | **40.64** | **335** | P | | **P** | **07 05 32.1 -0.8** |
| NRIK | | | | IAmb | | IAmb | 07 05 40.5 |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **43.88** | **126** | P | | **P** | **07 06 03.8 +3.9** |
| | comp=Z,0.6nm,0.8s,baz=338,slow=6.8,SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **43.88** | **126** | P | | **P** | **07 05 58.0 -2.0** |
| **KLR** | **Kul'dur** | **44.53** | **291** | P | | P | 07 06 08.9 +4.1 |
| | comp=Z,0.7nm,0.5s,baz=63,slow=6.8,SNR=2.9 | | | | | | |
| **FINES** | **FINESS Array B** | **52.95** | **6** | P | | **P** | **07 07 12.2 +2.9** |
| | comp=Z,3.3nm,0.9s,baz=4.2,slow=7.5,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **54.74** | **300** | P | | **P** | **07 07 24.9 +2.2** |
| | comp=Z,0.1nm,0.4s,baz=57,slow=5.3,SNR=2.0 | | | | | | |
| SONM | | | | LR | | LR | 07 32 19.9 |
| | comp=Z,72nm,19.4s,baz=42,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.12** | **327** | P | | P | 07 07 30.5 +5.3 |
| | comp=Z,0.3nm,0.4s,baz=37,slow=9.9,SNR=2.0 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.63** | **26** | P | | P | 07 07 34.7 +5.8 |
| | comp=Z,3.3nm,1.0s,baz=337,slow=7.0,SNR=4.2 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.15** | **301** | *eP* | | **P** | **07 07 55.0 +1.0** |
| HHC | | | | pmax | | pmax | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| HHC | | | | pmax | | pmax | |
| | comp=Z,180nm,6.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.59** | **330** | P | | P | 07 08 01.6 +4.8 |
| | comp=Z,0.5nm,0.2s,baz=26,slow=6.3,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.39** | **326** | P | | **P** | **07 08 19.2 +3.3** |
| | comp=Z,0.4nm,0.7s,baz=37,slow=9.2,SNR=4.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **63.82** | **5** | P | | **P** | **07 08 29.0 +3.7** |
| | comp=Z,0.1nm,0.3s,baz=359,slow=6.9,SNR=1.8 | | | | | | |
| **WMQ** | **Urumqi** | **63.85** | **321** | *eP* | | **P** | **07 08 27.3 +1.6** |
| **PZH** | **PanZhiHua** | **75.56** | **303** | P | | **P** | **07 09 37.5 -0.6** |
| PZH | | | | pmax | | pmax | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | | pmax | |
| | comp=Z,100nm,4.4s | | | | | | |

*UCR **25** 07:00:24.3±1.7, 10.07N×86.13W, h16km±5km, MW4.0*
*INET **25** 07:00:25.9±1.1, 10.09N×86.03W, h15km±6km, MW3.4*
**ISC 25 07:00:23.6±2.5, 10.08N±0.05×86.2W±0.1, h20km±4km, n45, σ0 71/57, 8C, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SAJU** | **San Juanillo,** | **0.45** | **92** | *eP* | | | **Pb** | **07 00 33.0** | **+0.2** |
| SAJU | | | | *eS* | | | **Sg** | **07 00 39.4** | **+0.4** |
| **GRZA** | **Playa Garza** | **0.55** | **108** | *eP* | | | **Pb** | **07 00 35.0** | **+0.5** |
| **DUNO** | **Dulce Nombre,** | **0.66** | **90** | *eP* | | | **Pb** | **07 00 36.5** | **0.0** |
| **DUNO** | **Dulce Nombre,** | **0.66** | **90** | *eP* | | | **Pb** | **07 00 36.5** | **0.0** |
| DUNO | | | | *eS* | | | **Sg** | **07 00 45.1** | **-0.5** |
| **GUAI** | **GUAI** | **0.67** | **74** | *i* | P | | **Pg** | **07 00 36.5** | **-0.4** |
| GUAI | | | | *i* | P | | **Pg** | **07 00 36.6** | **-0.4** |
| GUAI | | | | *i* | S | | **Sg** | **07 00 45.6** | **-0.2** |
| **NICO** | **Nicoya** | **0.71** | **86** | *eP* | | | **Pn** | **07 00 38.1** | **-0.5** |
| **ORTG** | **Ortega, Santa** | **0.75** | **68** | *eP* | | | **Pb** | **07 00 37.7** | **-0.3** |
| **ORTG** | **Ortega, Santa** | **0.75** | **68** | *eP* | | | **Pb** | **07 00 37.7** | **-0.3** |
| ORTG | | | | *eS* | | | **Sb** | **07 00 48.0** | **+0.1** |
| **HZTE** | **Horizontes, Gu** | **0.84** | **42** | *eP* | | | **Pg** | **07 00 39.9** | **-0.2** |
| HZTE | | | | *eS* | | | **Sn** | **07 00 52.6** | **+0.3** |
| **HZTE** | **Horizontes, Gu** | **0.84** | **42** | *eP* | | | **Pg** | **07 00 39.9** | **-0.2** |
| HZTE | | | | *eS* | | | **Sg** | **07 00 51.6** | **+0.3** |
| **PLVR** | **Palo Verde** | **0.84** | **72** | *eP* | | | **Pb** | **07 00 39.2** | **-0.5** |
| **GBS3** | **Finca Las Img** | **0.98** | **45** | *i* | P | | **Pb** | **07 00 41.7** | **-0.4** |
| **LAPC** | **Finca la Perla** | **0.99** | **46** | *i* | P | | **Pb** | **07 00 41.7** | **-0.5** |
| **BUEV** | **Buena Vista** | **1.03** | **46** | *i* | P | | **Pb** | **07 00 42.3** | **-0.5** |
| BUEV | | | | *i* | S | | **Sn** | **07 00 58.4** | **+1.4** |
| **GPS2** | **Hotel Rincn d** | **1.04** | **50** | *i* | P | | **Pb** | **07 00 42.6** | **-0.4** |
| GPS2 | | | | *i* | S | | **Sg** | **07 00 58.7** | **+1.1** |
| **GB1A** | **Borinquen Arri** | **1.05** | **46** | *i* | P | | **Pb** | **07 00 42.7** | **-0.5** |
| **VRLE** | **La Escondida,** | **1.05** | **48** | *eP* | | | **Pb** | **07 00 42.6** | **-0.7** |
| **LIM1** | **Limonal** | **1.09** | **56** | *i* | P | | **Pn** | **07 00 43.2** | **-0.6** |
| **COLC** | **Colonia** | **1.11** | **58** | *i* | P | | **Pn** | **07 00 43.5** | **-0.6** |
| **GUAB** | **Guayabo de Bag** | **1.11** | **56** | *i* | P | | **Pn** | **07 00 43.5** | **-0.7** |
| **CAO2** | **Cobano, Puntar** | **1.11** | **111** | *eP* | | | **Pn** | **07 00 43.4** | **-0.7** |
| CAO2 | | | | *eS* | | | **Sb** | **07 00 56.8** | **-1.5** |
| **BUAI** | **Buenos Aires** | **1.14** | **46** | *i* | P | | **Pn** | **07 00 44.2** | **-0.2** |
| **CUI** | **Cuipilapa** | **1.14** | **60** | *eP* | | | **Pn** | **07 00 44.0** | **-0.5** |
| CUI | | | | | *iP* | | **Pb** | **07 00 44.1** | **-0.6** |
| CUI | | | | *i* | S | | **Sb** | **07 00 59.6** | **+0.6** |
| **HORNC** | **Hornillas** | **1.15** | **57** | *i* | P | | **Pn** | **07 00 44.2** | **-0.6** |
| **ACAL** | **Aguas Claras** | **1.24** | **64** | *i* | P | | **Pn** | **07 00 45.6** | **-0.3** |
| **VMAR** | **Armenia, Volca** | **1.26** | **55** | *eP* | | | **Pn** | **07 00 46.0** | **-0.1** |
| **LAFE** | **Finca La Fe, P** | **1.26** | **102** | *eP* | | | **Pn** | **07 00 44.7** | **-1.5** |
| **LAFE** | **Finca La Fe, P** | **1.26** | **102** | *eP* | | | **Pn** | **07 00 44.8** | **-1.4** |
| **ARE1** | **Arenal 1** | **1.47** | **75** | *eP* | | | **Pn** | **07 00 49.4** | **+0.3** |
| **CEDE** | **Laguna Cedeo** | **1.49** | **74** | *eP* | | | **Pb** | **07 00 50.0** | **-0.7** |
| **JACO** | **JACO, Garabito** | **1.54** | **106** | *eP* | | | **Pb** | **07 00 51.0** | **-0.5** |
| **SRA1** | **San Ramn** | **1.66** | **90** | *eP* | | | **Pn** | **07 00 51.9** | **+0.2** |
| **COVE** | **Coope Vega, Sa** | **1.84** | **70** | *eP* | | | **Pn** | **07 00 54.0** | **-0.2** |
| **HDC3** | **Heredia 3** | **2.02** | **92** | *eP* | | | **Pb** | **07 00 58.8** | **-1.0** |
| **ACON** | **Acoyapa** | **2.11** | **27** | *eP* | | | **Pn** | **07 00 58.0** | **+0.2** |
| **ACON** | **Acoyapa** | **2.11** | **27** | *eP* | | | **Pn** | **07 00 58.1** | **+0.2** |
| **RIFO** | **Rio Frio, Sara** | **2.22** | **84** | *eP* | | | **Pn** | **07 00 59.9** | **+0.6** |
| **RIMA** | **Rio Macho** | **2.29** | **98** | *eP* | | | **Pn** | **07 01 01.4** | **+1.0** |
| **RIMA** | **Rio Macho** | **2.29** | **98** | *eP* | | | **Pn** | **07 01 01.3** | **+0.8** |
| **CDM** | **Cerro de Muert** | **2.42** | **102** | *eP* | | | **Pn** | **07 01 03.1** | **+0.5** |
| **CDM** | **Cerro de Muert** | **2.42** | **102** | *eP* | | | **Pn** | **07 01 03.4** | **+0.9** |
| **PEZE** | **Perez Zeledon,** | **2.55** | **106** | *eP* | | | **Pn** | **07 01 05.0** | **+1.0** |
| **MRVA** | **Moravia de Chi** | **2.69** | **95** | *eP* | | | **Pn** | **07 01 07.3** | **+1.3** |
| **ESPN** | **Las Esperanzas** | **2.78** | **41** | *eP* | | | **Pn** | **07 01 07.3** | **+0.2** |
| **SRBA** | **San Rafael, Bu** | **2.89** | **107** | *eP* | | | **Pn** | **07 01 10.5** | **+1.8** |

*NNC **25** 07:10:03.4±0.4, 50.00N×78.70E, h0km, mb3.4, mpv3.1, Error ellipse: s-maj=3.7km s-min=1.7km az=72.0, Suspected Mining explosion.*
*IDC **25** 07:10:04.4±1.1, 50.04N×78.77E, h0km, mb1 3.0/2, mb1mx2.9/34, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=18.0km s-min=6.1km az=67.0*
**ISC 25 07:10:04.5±0.8, 50.05N±0.04×78.81E±0.04, h0km, n23, σ1 11/37, 17C-13D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.56** | **341** | | *iP* | | **Pg** | **07 10 15.0** | **-0.3** |
| KUR07 | | | | | *iS* | | **Sb** | **07 10 24.0** | **-1.8** |
| **KUR14** | **Kurchatov Arra** | **0.58** | **346** | | *iP* | | **Pg** | **07 10 15.4** | **-0.1** |
| KUR14 | | | | | *iS* | | **Sb** | **07 10 24.5** | **-1.8** |
| **KUR06** | **Kurchatov Arra** | **0.58** | **342** | | *iP* | | **Pg** | **07 10 15.4** | **-0.2** |
| KUR06 | | | | | *iS* | | **Sb** | **07 10 24.7** | **-1.6** |
| **KUR15** | **Kurchatov Arra** | **0.59** | **345** | | *iP* | | **Pg** | **07 10 15.5** | **-0.2** |
| KUR15 | | | | | *iS* | | **Sb** | **07 10 24.7** | **-1.8** |
| **KURBB** | **Kurchatov Arra** | **0.60** | **343** | Pg | | | **Pg** | **07 10 15.6** | **-0.3** |
| | 3.0nm,0.3s,baz=166,slow=19,SNR=59 | | | | | | | | |
| KURBB | | | | Lg | | | Lg | 07 10 24.8 | |
| | 4.3nm,0.3s,baz=179,slow=28,SNR=32 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.60** | **343** | | *iP* | | **Pg** | **07 10 15.8** | **-0.1** |
| | 25nm,0.4s | | | | | | | | |
| KURBB | | | | | *iS* | | **Sg** | **07 10 24.7** | **+1.0** |
| | 112nm,0.6s | | | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.61** | **341** | | *iP* | | **Pg** | **07 10 15.8** | **-0.3** |
| KUR16 | | | | | *iS* | | **Sg** | **07 10 24.9** | **+0.9** |
| **KUR05** | **Kurchatov Arra** | **0.61** | **344** | | *iP* | | **Pg** | **07 10 16.0** | **-0.3** |
| KUR05 | | | | | *iS* | | **Sg** | **07 10 25.2** | **+1.0** |
| **KUR17** | **Kurchatov Arra** | **0.62** | **340** | | *iP* | | **Pg** | **07 10 16.0** | **-0.3** |
| KUR17 | | | | | *iS* | | **Sb** | **07 10 25.7** | **-1.7** |
| **KUR04** | **Kurchatov Arra** | **0.63** | **345** | | *iP* | | **Pg** | **07 10 16.5** | **-0.1** |
| KUR04 | | | | | *iS* | | **Sg** | **07 10 25.7** | **+0.9** |
| **KURK** | **Kurchatov** | **0.67** | **350** | | *iP* | | **Pg** | **07 10 17.0** | **-0.4** |
| | 24nm,0.9s | | | | | | | | |
| KURK | | | | | *iS* | | **Sb** | **07 10 27.5** | **-1.5** |
| | 33nm,0.7s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **0.99** | **69** | P | | | **Pg** | **07 10 23.4** | **-0.1** |
| | 14nm,0.2s | | | | | | | | |
| SEM | | | | S | | | **Sn** | **07 10 39.5** | **-1.3** |
| | 49nm,0.3s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.87** | **146** | | *iPg* | | **Pb** | **07 11 12.8** | **-0.8** |
| | 2.4nm,0.7s | | | | | | | | |
| MAKZ | | | | | *iLg* | | Lg | 07 12 04.0 | |
| | 13nm,1.0s | | | | | | | | |
| **MK31** | **Makanchi Array** | **4.00** | **143** | | *iPn* | | **Pn** | **07 11 07.7** | **+0.6** |
| | 0.1nm,0.2s,baz=121,slow=9.2,SNR=68 | | | | | | | | |
| MK31 | | | | | *iPg* | | **Pb** | **07 11 15.5** | **-0.4** |
| | 0.4nm,0.2s,baz=322,slow=14,SNR=27 | | | | | | | | |
| MK31 | | | | | *iLg* | | Lg | 07 12 09.4 | |
| | 6.8nm,0.5s,baz=327,slow=26,SNR=12 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.00** | **143** | Pn | | | **Pn** | **07 11 07.7** | **+0.6** |
| | 0.4nm,0.3s,baz=327,slow=11,SNR=43 | | | | | | | | |
| MKAR | | | | Pg | | | **Pb** | **07 11 14.6** | **-1.3** |
| | 0.7nm,0.3s,baz=325,slow=15,SNR=18 | | | | | | | | |
| MKAR | | | | Sn | | | **Sn** | **07 11 54.5** | **-0.2** |
| | 0.4nm,0.3s,baz=325,slow=14,SNR=2.2 | | | | | | | | |
| MKAR | | | | Lg | | | Lg | 07 12 08.2 | |
| | 1.2nm,0.3s,baz=329,slow=27,SNR=5.4 | | | | | | | | |
| **OTUK** | **Ortayu** | **4.61** | **249** | | *iPn* | | **Pn** | **07 11 14.7** | **-0.8** |
| | 1.2nm,0.3s | | | | | | | | |
| OTUK | | | | | *iPg* | | **Pb** | **07 11 26.9** | **+0.6** |
| | 1.9nm,0.9s | | | | | | | | |
| OTUK | | | | | *iLg* | | Lg | 07 12 28.9 | |
| | 4.3nm,0.5s | | | | | | | | |
| **ZSN** | **Zaisan** | **4.78** | **121** | Pg | | | **Pb** | **07 11 29.0** | **-0.1** |
| | 6.5nm,0.3s | | | | | | | | |
| ZSN | | | | Lg | | | Lg | 07 12 33.4 | |
| | 9.0nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.38** | **41** | Pn | | | **Pn** | **07 11 28.2** | **+2.2** |
| | 0.9nm,0.3s,baz=231,slow=14,SNR=9.7 | | | | | | | | |
| ZALV | | | | Sn | | | **Sn** | **07 12 30.7** | **+2.0** |
| | 0.2nm,0.3s,baz=230,slow=24,SNR=1.7 | | | | | | | | |
| ZALV | | | | Lg | | | Lg | 07 12 56.4 | |
| | 0.2nm,0.3s,baz=239,slow=22,SNR=2.1 | | | | | | | | |
| **I46RU** | **ZALESSOVO INFRA** | **5.39** | **41** | *i* | | | | 07 37 30.0 | |
| | baz=218,slow=324,SNR=2.5 | | | | | | | | |
| **ARXS** | **Arharly** | **5.88** | **187** | Pg | | | **Pb** | **07 11 49.4** | **+1.5** |
| | 1.9nm,0.2s | | | | | | | | |
| ARXS | | | | Lg | | | Lg | 07 13 06.9 | |
| | 16nm,0.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **6.11** | **303** | | *iSn* | | **Sn** | **07 12 45.0** | **-1.4** |
| | 2.2nm,0.5s | | | | | | | | |
| BRVK | | | | | *iLg* | | Lg | 07 13 17.9 | |
| | 1.9nm,0.5s | | | | | | | | |
| **KUU** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **VES** | **Vestal, Richgr** | **1.46** | **205** | P | **Pn** | **07 29 10.2** | **+0.2** | | |
| | baz=24,SNR=99 | | | | | | | | |
| VES | | | | S | **Sn** | **07 29 29.0** | **-0.1** | | |
| | baz=24 | | | | | | | | |
| **RYN** | **Ryan** | **1.46** | **354** | | **Pn** | **07 29 09.9** | **-0.4** | | |
| RYN | | | | IAML | | 07 29 31.7 | | | |
| | comp=E,199nm,0.5s | | | | | | | | |
| **ISA** | **Isabella, Lake** | **1.51** | **184** | | **Pn** | **07 29 11.0** | **+0.2** | | |
| **ISA** | **Isabella, Lake** | **1.51** | **184** | P | **Pn** | **07 29 11.2** | **+0.4** | | |
| | baz=4.0,SNR=157 | | | | | | | | |
| ISA | | | | S | **Sn** | **07 29 30.9** | **+0.5** | | |
| | baz=4.0 | | | | | | | | |
| **GWY** | **Greenwater Val** | **1.66** | **126** | | **Pn** | **07 29 12.0** | **-1.0** | | |
| GWY | | | | IAML | | 07 29 40.2 | | | |
| | comp=N,206nm,0.4s | | | | | | | | |
| GWY | | | | IAML | | 07 29 40.7 | | | |
| | comp=E,179nm,0.3s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **1.68** | **97** | | **Pn** | **07 29 13.4** | **+0.1** | | |
| **TPNV** | **Topopah Spring** | **1.68** | **97** | P | **Pn** | **07 29 13.5** | **+0.1** | | |
| | baz=278,SNR=252 | | | | | | | | |
| **QSM** | **Queen of Sheba** | **1.69** | **135** | | **Pn** | **07 29 12.9** | **-0.3** | | |
| QSM | | | | IAML | | 07 29 40.2 | | | |
| | comp=E,317nm,0.4s | | | | | | | | |
| QSM | | | | IAML | | 07 29 40.6 | | | |
| | comp=N,327nm,0.7s | | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **1.77** | **162** | Pb | **Pb** | **07 29 16.4** | **0.0** | | |
| | baz=343,SNR=47 | | | | | | | | |
| LRMC | | | | Sb | **Sg** | **07 29 40.1** | **-0.9** | | |
| | baz=343 | | | | | | | | |
| **PDRM** | **Domengine Ranc** | **1.83** | **244** | | **Pn** | **07 29 16.4** | **+1.1** | | |
| **CMB** | **Columbia Colle** | **1.84** | **298** | | **Pn** | **07 29 15.8** | **+0.5** | | |
| **KVN** | **Kaiserville** | **1.89** | **6** | | **Pn** | **07 29 16.2** | **0.0** | | |
| **YERR** | **Yerington** | **1.95** | **339** | | **Pn** | **07 29 17.0** | **0.0** | | |
| YERR | | | | IAML | | 07 29 47.1 | | | |
| | comp=N,117nm,0.4s | | | | | | | | |
| YERR | | | | IAML | | 07 29 47.5 | | | |
| | comp=E,225nm,0.4s | | | | | | | | |
| **ARVC** | **Arvin** | **2.08** | **191** | Pb | **Pb** | **07 29 21.3** | **-0.3** | | |
| | baz=11,SNR=32 | | | | | | | | |
| ARVC | | | | Sb | **Sb** | **07 29 48.7** | **+1.4** | | |
| | baz=11 | | | | | | | | |
| **THIS** | **South End of C** | **2.10** | **227** | | **Pn** | **07 29 19.9** | **+0.9** | | |
| **PAGB** | **Antelope Grade** | **2.11** | **228** | | **Pn** | **07 29 19.1** | **0.0** | | |
| **PKD** | **Bear Valley Ra** | **2.16** | **236** | | **Pn** | **07 29 20.2** | **+0.5** | | |
| **PNTR** | **Pine Nut** | **2.16** | **333** | | **Pn** | **07 29 19.2** | **-0.7** | | |
| PNTR | | | | IAML | | 07 29 56.9 | | | |
| | comp=N,106nm,0.7s | | | | | | | | |
| PNTR | | | | IAML | | 07 29 57.2 | | | |
| | comp=E,147nm,0.9s | | | | | | | | |
| **TRAM** | **Private Proper** | **2.16** | **227** | | **Pn** | **07 29 20.9** | **+1.1** | | |
| **PMPB** | **Monarch Peak** | **2.20** | **245** | | **Pn** | **07 29 20.6** | **+0.3** | | |
| **TCHL** | **Shandon** | **2.23** | **229** | | **Pn** | **07 29 21.7** | **+1.0** | | |
| **BBGB** | **Big Mountain B** | **2.25** | **256** | | **Pn** | **07 29 21.1** | **+0.1** | | |
| **SMMC** | **Simmler** | **2.29** | **216** | Pb | **Pb** | **07 29 24.9** | **-0.3** | | |
| | baz=35 | | | | | | | | |
| SMMC | | | | Sb | **Sb** | **07 29 54.7** | **+1.3** | | |
| | baz=35 | | | | | | | | |
| **TSCN** | **Private Proper** | **2.30** | **226** | | **Pn** | **07 29 23.0** | **+1.4** | | |
| **EDW2** | **Edwards Air Fo** | **2.30** | **173** | Pb | **Pb** | **07 29 25.3** | **-0.1** | | |
| | baz=353,SNR=23 | | | | | | | | |
| EDW2 | | | | Sb | **Sb** | **07 29 55.5** | **+1.6** | | |
| | baz=353 | | | | | | | | |
| **VCNR** | **Virginia City** | **2.36** | **334** | | **Pn** | **07 29 22.6** | **-0.1** | | |
| VCNR | | | | IAML | | 07 30 01.6 | | | |
| | comp=E,88nm,1.2s | | | | | | | | |
| **BLRM** | **Lewis Ranch** | **2.41** | **259** | | **Pn** | **07 29 24.1** | **+1.0** | | |
| **COSM** | **Mount Oso** | **2.44** | **279** | | **Pn** | **07 29 25.2** | **+1.5** | | |
| **HFEM** | **San Felipe** | **2.46** | **267** | | **Pn** | **07 29 25.5** | **+1.6** | | |
| **R11A** | **Troy Canyon, C** | **2.48** | **61** | P | **Pn** | **07 29 24.6** | **+0.3** | | |
| | baz=242,SNR=32 | | | | | | | | |
| **SAO** | **San Andreas Ge** | **2.52** | **262** | | **Pn** | **07 29 25.8** | **+1.1** | | |
| **SCZ** | **Santa Cruz** | **2.52** | **258** | | **Pn** | **07 29 25.3** | **+0.6** | | |
| **BJCM** | **Johnson Can.** | **2.53** | **257** | | **Pn** | **07 29 25.4** | **+0.6** | | |
| **RAMR** | **Ramage Ranch** | **2.56** | **234** | | **Pn** | **07 29 26.0** | **+0.9** | | |
| **PKM** | **Mcpherson Peak** | **2.57** | **208** | Pb | **Pb** | **07 29 29.5** | **-0.7** | | |
| | baz=27 | | | | | | | | |
| **BSMM** | **Soledad Missio** | **2.60** | **253** | | **Pn** | **07 29 26.6** | **+0.7** | | |
| **PRN** | **Pahroc Range** | **2.63** | **84** | | **Pn** | **07 29 26.5** | **+0.2** | | |
| PRN | | | | IAML | | 07 30 23.7 | | | |
| | comp=N,79nm,0.8s | | | | | | | | |
| PRN | | | | IAML | | 07 30 24.3 | | | |
| | comp=E,81nm,0.6s | | | | | | | | |
| **HAST** | **Hastings Reser** | **2.70** | **254** | | **Pn** | **07 29 27.7** | **+0.6** | | |
| **HEC** | **Hector,Ludlow** | **2.84** | **145** | Pg | **Pg** | **07 29 37.9** | **-0.7** | | |
| | baz=326 | | | | | | | | |
| **BMN** | **Battle Mountai** | **3.37** | **15** | | **Pn** | **07 29 36.4** | **-0.1** | | |
| **PFO** | **Pinyon Flats O** | **3.87** | **156** | | **Pn** | **07 29 43.8** | **+0.5** | | |
| **ELK** | **Elko** | **4.31** | **33** | Pn | **Pn** | **07 29 50.1** | **+0.6** | | |
| ELK | | | | IAML | | 07 31 01.8 | | | |
| | comp=E,17nm,0.5s | | | | | | | | |
| ELK | | | | IAML | | 07 31 02.7 | | | |
| | comp=E,16nm,0.4s | | | | | | | | |
| **KNB** | **Kanab** | **4.41** | **90** | | **Pn** | **07 29 50.1** | **-0.7** | | |
| **WDC** | **Whiskeytown Da** | **4.73** | **317** | | **Pn** | **07 29 55.7** | **+0.7** | | |
| WDC | | | | IAML | | 07 31 12.0 | | | |
| | comp=E,12nm,4.1s | | | | | | | | |
| WDC | | | | IAML | | 07 31 42.1 | | | |
| | comp=N,13nm,3.2s | | | | | | | | |

*KRSC* ***25*** *07:37:06.5±2.5,50°.13N×157°.00E,h66km±21km,ML5.4*
*BJI* ***25*** *07:37:08.0±0.0,50°.40N×156°.49E,h81km,mb4.7/49, mB4.9/31,Ms4.4/10,Ms7 3.9/10*
*MOS* ***25*** *07:37:09.3±0.9,50°.30N×156°.51E,h93km,mb4.8/15, MS3.2/9,Error ellipse: s-maj=8.0km s-min=3.2km az=74.6*
*MOS Felt (IV) at Severo-Kuril'sk.*
*IDC* ***25*** *07:37:10.2±0.5,50°.43N×156°.35E,h79km±4km,mb4.1/28, mb1 4.3/32,mb1mx4.2/46,mbtmp4.4/32,MS3.5/47, Ms1 3.5/47,ms1mx3.3/98,Error ellipse: s-maj=12.9km s-min=8.3km az=146.0*
*NEIC* ***25*** *07:37:10.1±1.5,50°.38N±0°.09×156°.4E±0°.1,h78km±3km, mb4.8/75,Error ellipse: s-maj=14.5km s-min=9.8km az=143.0*
**ISC 25 07:37:10.3±0.5,50°.31N±0°.05×156°.61E±0°.04,h82km±3km, h82km:pP-P,n481,σ1s38/498,mb4.7/90,14C-5D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **0.49** | **320** | PN | | **Pn** | **07 37 23.7** | **-0.3** |
| SKR | | | | S | | **Sn** | **07 37 34.0** | **-0.3** |
| **SKR** | **Severo-Kuril's** | **0.49** | **320** | *i* P | | **Pn** | **07 37 23.7** | **-0.3** |
| SKR | | | | *e*S | | **Sn** | **07 37 34.0** | **-0.3** |
| **PAU** | **Pauzhetka** | **1.16** | **6** | PN | | **Pn** | **07 37 31.6** | **+0.3** |
| PAU | | | | S | | **Sn** | **07 37 47.6** | **+0.4** |
| **PAU** | **Pauzhetka** | **1.16** | **6** | *i* P | | **Pn** | **07 37 31.6** | **+0.3** |
| PAU | | | | *e*S | | **Sn** | **07 37 47.6** | **+0.4** |
| **KDTR** | **Khodutka, Kamc** | **1.76** | **31** | PN | | **Pn** | **07 37 38.3** | **-0.7** |
| KDTR | | | | S | | **Sn** | **07 37 59.6** | **-1.2** |
| **KDTR** | **Khodutka, Kamc** | **1.76** | **31** | *e*P | | **Pn** | **07 37 38.3** | **-0.7** |
| KDTR | | | | *e*S | | **Sn** | **07 37 59.6** | **-1.2** |
| **MTVR** | **Mutnovka** | **2.38** | **24** | PN | | **Pn** | **07 37 47.7** | **+0.3** |
| MTVR | | | | S | | **Sn** | **07 38 15.9** | **0.0** |
| **MTVR** | **Mutnovka** | **2.38** | **24** | *e*P | | **Pn** | **07 37 47.7** | **+0.3** |
| MTVR | | | | *e*S | | **Sn** | **07 38 15.9** | **0.0** |
| **GRL** | **Gorelyy** | **2.42** | **22** | PN | | **Pn** | **07 37 48.5** | **+0.6** |
| GRL | | | | S | | **Sn** | **07 38 17.9** | **+1.2** |
| **GRL** | **Gorelyy** | **2.42** | **22** | *e*P | | **Pn** | **07 37 48.5** | **+0.6** |
| GRL | | | | *e*S | | **Sn** | **07 38 17.9** | **+1.2** |
| **RUS** | **Russkaya** | **2.43** | **29** | PN | | **Pn** | **07 37 47.5** | **-0.4** |
| RUS | | | | S | | **Sn** | **07 38 15.4** | **-1.4** |
| **RUS** | **Russkaya** | **2.43** | **29** | *e*P | | **Pn** | **07 37 47.5** | **-0.4** |
| RUS | | | | *e*S | | **Sn** | **07 38 15.4** | **-1.4** |
| **KRMR** | **Karymshinskiy** | **2.69** | **20** | PN | | **Pn** | **07 37 52.8** | **+1.4** |
| **KRMR** | **Karymshinskiy** | **2.69** | **20** | *e*P | | **Pn** | **07 37 52.8** | **+1.4** |
| **PEA0B** | **Petropavlovsk-** | **2.88** | **13** | *de*PN | | **Pn** | **07 37 55.4** | **+1.4** |
| **PEA0B** | **Petropavlovsk-** | **2.88** | **13** | Pn | | **Pn** | **07 37 55.3** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **2.88** | **13** | P | | **Pn** | **07 37 54.6** | **+0.6** |
| | 26nm,0.3s,baz=178,slow=16,SNR=204 | | | | | | | |
| PETK | | | | S | | Sn | 07 38 16.1 | -11 |
| | 24nm,0.3s,baz=173,slow=13,SNR=8.2 | | | | | | | |
| PETK | | | | LR | | LR | 07 39 27.7 | |
| | comp=Z,315nm,20.5s,baz=160,slow=49 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.88** | **13** | PN | | **Pn** | **07 37 54.4** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **2.88** | **13** | Pn | | **Pn** | **07 37 54.4** | **+0.4** |
| **PET** | **Petropavlovsk** | **3.00** | **24** | *i* PN | | **Pn** | **07 37 56.0** | **+0.5** |
| PET | | | | *i* S | | **Sn** | **07 38 31.1** | **+0.7** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,202nm,0.5s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=N,2μm,0.8s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=E,2μm,0.6s | | | | | | | |
| PET | | | | MLR | | MLR | | |
| | comp=Z,700nm,15.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **3.00** | **24** | | | **Pn** | **07 37 55.3** | **-0.2** |
| **DALK** | **Dalny** | **3.03** | **25** | PN | | **Pn** | **07 37 56.4** | **+0.5** |
| DALK | | | | S | | **Sn** | **07 38 31.3** | **+0.1** |
| **DALK** | **Dalny** | **3.03** | **25** | *e*P | | **Pn** | **07 37 56.4** | **+0.5** |
| DALK | | | | *e*S | | **Sn** | **07 38 31.3** | **+0.1** |
| **UGLR** | **Uglovaya** | **3.21** | **24** | PN | | **Pn** | **07 37 59.7** | **+1.2** |
| **UGLR** | **Uglovaya** | **3.21** | **24** | *e*P | | **Pn** | **07 37 59.7** | **+1.2** |
| **KOK** | **Koryaka** | **3.24** | **22** | PN | | **Pn** | **07 38 01.0** | **+2.1** |
| **KOK** | **Koryaka** | **3.24** | **22** | *e*P | | **Pn** | **07 38 01.0** | **+2.1** |
| **AVH** | **Avacha** | **3.24** | **23** | PN | | **Pn** | **07 38 00.6** | **+1.8** |
| **AVH** | **Avacha** | **3.24** | **23** | *e*P | | **Pn** | **07 38 00.6** | **+1.8** |
| **SMAR** | **Somma** | **3.25** | **24** | PN | | **Pn** | **07 38 00.4** | **+1.2** |
| **SMAR** | **Somma** | **3.25** | **24** | *e*P | | **Pn** | **07 38 00.4** | **+1.2** |
| **KRER** | **Koryakskii** | **3.27** | **23** | PN | | **Pn** | **07 38 01.1** | **+1.6** |
| **KRER** | **Koryakskii** | **3.27** | **23** | *e*P | | **Pn** | **07 38 01.1** | **+1.6** |
| **SDLR** | **Sedlovina** | **3.29** | **25** | PN | | **Pn** | **07 38 00.1** | **+0.5** |
| **SDLR** | **Sedlovina** | **3.29** | **25** | *e*P | | **Pn** | **07 38 00.1** | **+0.5** |
| **NLC** | **Nalytchevo** | **3.33** | **30** | PN | | **Pn** | **07 37 59.1** | **-0.9** |
| NLC | | | | S | | **Sn** | **07 38 35.9** | **-2.5** |
| **NLC** | **Nalytchevo** | **3.33** | **30** | *e*P | | **Pn** | **07 37 59.1** | **-0.9** |
| NLC | | | | *e*S | | **Sn** | **07 38 35.9** | **-2.5** |
| **GNL** | **Ganaly** | **3.48** | **13** | PN | | **Pn** | **07 38 04.2** | **+2.0** |
| **GNL** | **Ganaly** | **3.48** | **13** | *e*P | | **Pn** | **07 38 04.2** | **+2.0** |
| **SPN** | **Mys Shipunski** | **3.50** | **36** | PN | | **Pn** | **07 38 02.4** | **0.0** |
| SPN | | | | S | | **Sn** | **07 38 41.2** | **-1.5** |
| **SPN** | **Mys Shipunski** | **3.50** | **36** | *e*P | | **Pn** | **07 38 02.4** | **0.0** |
| SPN | | | | *e*S | | **Sn** | **07 38 41.2** | **-1.5** |
| **MKZ** | **Mys Kozlova** | **5.28** | **34** | PN | | **Pn** | **07 38 25.3** | **-1.1** |
| **MKZ** | **Mys Kozlova** | **5.28** | **34** | *e*P | | **Pn** | **07 38 25.3** | **-1.1** |
| MKZ | | | | *e*S | | **Sn** | **07 39 21.5** | **-4.3** |
| **TUMD** | **Tumrok D** | **5.41** | **24** | *e*P | | **Pn** | **07 38 28.9** | **+0.6** |
| **TUMR** | **Tumrok** | **5.42** | **22** | PN | | **Pn** | **07 38 28.9** | **+0.4** |
| **ESO** | **Esso** | **5.76** | **12** | PN | | **Pn** | **07 38 35.8** | **+2.7** |
| **ESO** | **Esso** | **5.76** | **12** | *e*P | | **Pn** | **07 38 35.8** | **+2.7** |
| **KMNR** | **Kamenistaya** | **5.87** | **20** | PN | | **Pn** | **07 38 37.2** | **+2.5** |
| **KMNR** | **Kamenistaya** | **5.87** | **20** | *e*P | | **Pn** | **07 38 37.2** | **+2.5** |
| **KPT** | **Kopyto** | **6.06** | **20** | PN | | **Pn** | **07 38 39.3** | **+2.0** |
| **KPT** | **Kopyto** | **6.06** | **20** | *e*P | | **Pn** | **07 38 39.3** | **+2.0** |
| **KIRR** | **Kirishev** | **6.08** | **20** | PN | | **Pn** | **07 38 39.7** | **+2.2** |
| **KIRR** | **Kirishev** | **6.08** | **20** | *e*P | | **Pn** | **07 38 39.7** | **+2.2** |
| **KOZ** | **Kozyrevsk** | **6.08** | **18** | PN | | **Pn** | **07 38 40.1** | **+2.7** |
| **KOZ** | **Kozyrevsk** | **6.08** | **18** | *e*P | | **Pn** | **07 38 40.1** | **+2.7** |
| **BZWR** | **Bezymyannyi-We** | **6.12** | **21** | PN | | **Pn** | **07 38 40.1** | **+1.9** |
| **BZWR** | **Bezymyannyi-We** | **6.12** | **21** | *e*P | | **Pn** | **07 38 40.1** | **+1.9** |
| **BZGR** | **Bezymyannyi-Gr** | **6.15** | **22** | PN | | **Pn** | **07 38 40.2** | **+1.8** |
| **BZGR** | **Bezymyannyi-Gr** | **6.15** | **22** | *e*P | | **Pn** | **07 38 40.2** | **+1.8** |
| **ZLN** | **Zelenaya** | **6.24** | **22** | PN | | **Pn** | **07 38 41.8** | **+2.0** |
| **ZLN** | **Zelenaya** | **6.24** | **22** | *e*P | | **Pn** | **07 38 41.8** | **+2.0** |
| **LGNR** | **Loginova** | **6.28** | **21** | PN | | **Pn** | **07 38 43.0** | **+2.6** |
| **LGNR** | **Loginova** | **6.28** | **21** | *e*P | | **Pn** | **07 38 43.0** | **+2.6** |
| **CIRR** | **Tsirk** | **6.32** | **22** | PN | | **Pn** | **07 38 42.8** | **+2.0** |
| **CIRR** | **Tsirk** | **6.32** | **22** | *e*P | | **Pn** | **07 38 42.8** | **+2.0** |
| **KRSR** | **Krestovskiy** | **6.37** | **20** | PN | | **Pn** | **07 38 42.9** | **+1.4** |
| **KRSR** | **Krestovskiy** | **6.37** | **20** | *e*P | | **Pn** | **07 38 42.9** | **+1.4** |
| **KBG** | **Krutoberegovo** | **6.98** | **29** | PN | | **Pn** | **07 38 51.0** | **+1.3** |
| **KBG** | **Krutoberegovo** | **6.98** | **29** | *e*P | | **Pn** | **07 38 51.0** | **+1.3** |
| **BKI** | **Bering** | **7.50** | **46** | PN | | **Pn** | **07 38 55.3** | **-1.4** |
| **BKI** | **Bering** | **7.50** | **46** | *e*P | | **Pn** | **07 38 55.3** | **-1.4** |
| BKI | | | | *e*S | | Sn | 07 40 10.5 | -10 |
| **KUR** | **Kuril'sk** | **7.78** | **233** | PN | | **Pn** | **07 39 01.8** | **+1.2** |
| KUR | | | | S | | **Sn** | **07 40 27.5** | **+0.4** |
| KUR | | | | pmax | | pmax | | |
| | comp=N,48nm,0.5s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,42nm,0.5s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,82nm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,58nm,1.0s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,102nm,1.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.90** | **279** | *e*PN | | **Pn** | **07 39 19.5** | **+3.6** |
| TYV | | | | *e*S | | **Sn** | **07 40 56.4** | **+2.0** |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,600nm,2.5s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,52nm,1.2s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=N,10.0nm,1.1s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,10.0nm,1.1s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,300nm,5.0s | | | | | | | |
| **PALN** | **Palana** | **9.00** | **11** | PN | | **Pn** | **07 39 20.9** | **+3.7** |
| **PALN** | **Palana** | **9.00** | **11** | *e*P | | **Pn** | **07 39 20.9** | **+3.7** |
| **SHO** | **Shikotan** | **9.27** | **230** | *e*PN | | **Pn** | **07 39 17.7** | **-3.3** |
| **UGL** | **Uglegorsk** | **9.51** | **268** | *e*PN | | **Pn** | **07 39 27.6** | **+3.4** |
| UGL | | | | *e*S | | **Sn** | **07 41 11.4** | **+2.1** |
| UGL | | | | pmax | | pmax | | |
| | comp=Z,300nm,0.8s | | | | | | | |
| UGL | | | | pmax | | pmax | | |
| | comp=Z,700nm,1.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **9.64** | **233** | *i* PN | | **Pn** | **07 39 25.0** | **-1.0** |
| **OSSR** | **Ossora** | **9.69** | **20** | PN | | **Pn** | **07 39 29.0** | **+2.4** |
| **OSSR** | **Ossora** | **9.69** | **20** | P | | **Pn** | **07 39 29.0** | **+2.4** |
| **YSS** | **Yuzh-Sakhalins** | **9.77** | **255** | *e*PN | | **Pn** | **07 39 28.0** | **+0.2** |
| YSS | | | | *e*S | | **Sn** | **07 41 20.9** | **+5.2** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,400nm,2.8s | | | | | | | |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,80nm,0.6s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,400nm,18.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.77** | **255** | Pn | | **Pn** | **07 39 29.4** | **+1.6** |
| **MA2** | **Magadan** | **9.87** | **342** | LR | | LR | 07 43 29.5 | |
| | comp=Z,140nm,20.1s,baz=142,slow=39 | | | | | | | |
| **MA2** | **Magadan** | **9.87** | **342** | *i* PN | | **Pn** | **07 39 28.3** | **-0.7** |
| MA2 | | | | pmax | | pmax | | |
| MA2 | | | | MLR | | MLR | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| MA2 | | | | MLR | | MLR | | |
| | comp=Z,111nm,10.0s | | | | | | | |
| **MA2** | **Magadan** | **9.87** | **342** | Pn | | **Pn** | **07 39 29.6** | **+0.6** |
| **SHEM** | **Shemya Is, Ala** | **11.16** | **71** | P | | **Pn** | **07 39 46.2** | **-0.4** |
| | comp=Z,20nm,0.3s,baz=263,slow=19,SNR=13 | | | | | | | |
| SHEM | | | | S | | Sn | 07 41 40.9 | -8.5 |
| | comp=Z,61nm,0.3s,baz=203,slow=22,SNR=21 | | | | | | | |
| SHEM | | | | LR | | LR | 07 43 46.2 | |
| | comp=Z,109nm,21.8s,baz=306,slow=35 | | | | | | | |
| **SMY** | **Shemya** | **11.16** | **71** | PN | | **Pn** | **07 39 46.4** | **-0.2** |
| **SMY** | **Shemya** | **11.16** | **71** | Pn | | **Pn** | **07 39 46.4** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **11.36** | **242** | Pn | | **Pn** | **07 39 49.6** | **+0.2** |
| **ASAJ** | **Asahikawa** | **11.36** | **242** | P | | **Pn** | **07 39 50.1** | **+0.7** |
| | comp=Z,3.9nm,0.3s,baz=76,slow=11,SNR=27 | | | | | | | |
| ASAJ | | | | LR | | LR | 07 43 42.7 | |
| | comp=Z,156nm,21.9s,baz=86,slow=35 | | | | | | | |
| **TILK** | **Tilichiki** | **11.49** | **24** | PN | | **Pn** | **07 39 52.4** | **+1.3** |
| **TILK** | **Tilichiki** | **11.49** | **24** | *e*P | | **Pn** | **07 39 52.4** | **+1.3** |
| **ERM** | **Erimo** | **12.47** | **233** | *i* PN | | **Pn** | **07 40 01.8** | **-2.7** |
| **ERM** | **Erimo** | **12.47** | **233** | Pn | | **Pn** | **07 40 01.4** | **-3.0** |
| **GRNR** | **Gornyy** | **12.85** | **280** | *i*PN | | **Pn** | **07 40 12.0** | **+2.4** |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=N,190nm,15.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=E,190nm,15.0s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=Z,170nm,16.0s | | | | | | | |
| **SEY** | **Seymchan** | **12.86** | **351** | P | | **Pn** | **07 40 10.6** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=159,slow=11,SNR=15 | | | | | | | |
| SEY | | | | LR | | LR | 07 45 03.5 | |
| | comp=Z,186nm,19.1s,baz=26,slow=37 | | | | | | | |
| **SEY** | **Seymchan** | **12.86** | **351** | *i* PN | | **Pn** | **07 40 05.6** | **-4.0** |
| **KLR** | **Kul'dur** | **16.08** | **276** | P | | **P** | **07 40 52.1** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=72,slow=11,SNR=33 | | | | | | | |
| KLR | | | | LR | | LR | 07 47 03.1 | |
| | comp=Z,158nm,21.7s,baz=45,slow=37 | | | | | | | |
| **KLR** | **Kul'dur** | **16.08** | **276** | *ce*P | | **P** | **07 40 51.9** | **-1.2** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| KLR | | | | MLR | | MLR | | |
| | comp=Z,237nm,14.0s | | | | | | | |
| **JMM** | **Marumori** | **16.81** | **228** | P | | **Pn** | **07 40 58.8** | **-1.5** |
| JMM | | | | IAmb | | IAmb | 07 41 02.1 | |
| | comp=Z,48nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.75** | **259** | P | | **P** | **07 41 10.6** | **-0.9** |
| | baz=63,slow=14,SNR=2.9 | | | | | | | |
| USRK | | | | S | | Sn | 07 44 13.8 | -15 |
| | baz=134,slow=43,SNR=3.1 | | | | | | | |
| USRK | | | | LR | | LR | 07 47 50.0 | |
| | comp=Z,138nm,21.2s,baz=24,slow=36 | | | | | | | |
| **JSD** | **Sado** | **17.94** | **234** | P | | **P** | **07 41 13.1** | **-0.5** |
| **ZEA** | **Zeya** | **18.33** | **292** | *e*P | | **Pn** | **07 41 17.7** | **-1.0** |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=E,100nm,17.0s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=N,100nm,13.0s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=Z,200nm,15.0s | | | | | | | |
| **BILL** | **Bilibino** | **18.41** | **12** | *ce*P | | **Pn** | **07 41 18.6** | **-0.9** |
| BILL | | | | *e*S | | **Sn** | **07 44 45.0** | **+0.4** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,137nm,10.0s | | | | | | | |
| **BILL** | **Bilibino** | **18.41** | **12** | P | | **P** | **07 41 17.5** | **-1.1** |
| **JYT** | **Yasato** | **18.41** | **226** | P | | **P** | **07 41 17.9** | **-0.9** |
| JYT | | | | IAmb | | IAmb | 07 41 19.2 | |
| | comp=Z,58nm,0.7s | | | | | | | |
| **YAK** | **Yakutsk** | **18.87** | **319** | P | | **P** | **07 41 21.9** | **-1.7** |
| | comp=Z,0.0nm,0.3s,baz=120,slow=20,SNR=1.8 | | | | | | | |
| YAK | | | | LR | | LR | 07 48 43.5 | |
| | comp=Z,162nm,19.3s,baz=62,slow=37 | | | | | | | |
| **YAK** | **Yakutsk** | **18.87** | **319** | *ce*P | | **P** | **07 41 22.7** | **-0.9** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **YAK** | **Yakutsk** | **18.87** | **319** | P | | **P** | **07 41 22.0** | **-1.6** |
| YAK | | | | IAmb | | IAmb | 07 41 26.3 | |
| | comp=Z,38nm,0.6s | | | | | | | |
| **MDJ** | **Mudanjiang** | **19.08** | **263** | | | **P** | **07 41 23.4** | **-2.7** |
| **MDJ** | **Mudanjiang** | **19.08** | **263** | P | | **P** | **07 41 24.5** | **-1.6** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,260nm,6.1s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **19.11** | **231** | P | | **P** | **07 41 25.6** | **-1.0** |
| MJB9 | | | | IAmb | | IAmb | 07 41 33.0 | |
| | comp=Z,29nm,0.7s | | | | | | | |
| **MAJO** | **Matsushiro** | **19.11** | **231** | *i* P | | **P** | **07 41 25.8** | **-0.7** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **MAJO** | **Matsushiro** | **19.11** | **231** | P | | **P** | **07 41 25.4** | **-1.1** |
| MAJO | | | | IAmb | | IAmb | 07 41 33.0 | |
| | comp=Z,30nm,0.6s | | | | | | | |
| **MAT** | **Matsushiro** | **19.11** | **231** | P | | **P** | **07 41 26.3** | **-0.2** |
| MAT | | | | S | | **S** | **07 45 00.6** | **+1.7** |
| **MJAR** | **Matsushiro Arr** | **19.11** | **231** | P | | **P** | **07 41 25.7** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=21,slow=11,SNR=18 | | | | | | | |
| MJAR | | | | LR | | LR | 07 48 39.3 | |
| | comp=Z,130nm,19.7s,baz=33,slow=36 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.11** | **231** | P | | **P** | **07 41 26.2** | **-0.3** |
| MJAR | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.11** | **231** | P | | **P** | **07 41 26.2** | **-0.3** |
| **BNX** | **BinXian** | **20.00** | **268** | ⇓P | | **P** | **07 41 34.8** | **-1.2** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,240nm,6.6s | | | | | | | |
| **JGF** | **Kuroka** | **20.28** | **231** | P | | **P** | **07 41 38.5** | **-0.7** |
| JGF | | | | IAmb | | IAmb | 07 41 44.7 | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **INU** | **Inuyama** | **20.65** | **231** | P | | **P** | **07 41 42.4** | **-0.7** |
| INU | | | | IAmb | | IAmb | 07 41 43.7 | |
| | comp=Z,50nm,1.0s | | | | | | | |
| **NIKH** | **Nikolski High** | **21.47** | **69** | P | | **P** | **07 41 52.3** | **+0.6** |
| | baz=277 | | | | | | | |
| **GAMB** | **Gambell** | **21.58** | **39** | P | | **P** | **07 41 52.9** | **+0.1** |
| | baz=247 | | | | | | | |
| **UNV** | **Unalaska Valle** | **22.77** | **67** | P | | **P** | **07 42 06.1** | **+0.5** |
| | baz=276 | | | | | | | |
| **TNA** | **Tin City** | **23.78** | **37** | P | | **P** | **07 42 15.3** | **+0.4** |
| **TNA** | **Tin City** | **23.78** | **37** | P | | **P** | **07 42 15.7** | **+0.8** |
| | baz=248,SNR=8.5 | | | | | | | |
| **KSRS** | **Korea Array** | **24.18** | **249** | P | | **P** | **07 42 19.1** | **+0.4** |
| | comp=Z,7.7nm,0.9s,baz=47,slow=9.5,SNR=16 | | | | | | | |
| KSRS | | | | LR | | LR | 07 50 55.9 | |
| | comp=Z,74nm,21.4s,baz=45,slow=34 | | | | | | | |
| **KS19** | **Wonju Array Si** | **24.18** | **249** | P | | **P** | **07 42 19.2** | **+0.5**

**MCK McKinley** 31.45 44 P P 07 43 23.6 +0.1
baz=271
**PMR Palmer** 31.45 48 P P 07 43 23.9 +0.4
baz=274
**TOLK Toolik Lake Re** 31.49 34 P P 07 43 24.1 +0.3
baz=262,SNR=5.5
**RND Reindeer** 31.49 45 P P 07 43 23.3 -0.6
RND pmax pmax
comp=Z,50nm,1.8s
**RND Reindeer** 31.49 45 P P 07 43 23.3 -0.6
RND IAmb IAmb 07 43 25.1
comp=Z,50nm,1.8s
**H11N2 WAKE ISLAND Hy** 31.59 161 T T 08 17 10.6
baz=348,slow=76,SNR=56
**H11N3 WAKE ISLAND Hy** 31.61 161 T T 08 17 09.8
baz=348,slow=76,SNR=185
**H11N1 WAKE ISLAND Hy** 31.61 161 T T 08 17 08.3
baz=348,slow=76,SNR=88
**KNK Knik Glacier** 31.79 48 P P 07 43 26.5 0.0
baz=275
**SML Sawmill** 31.81 48 P P 07 43 26.7 -0.1
**SML Sawmill** 31.81 48 P P 07 43 26.9 +0.2
baz=275
**PWL Port Wells** 31.90 49 P P 07 43 27.5 0.0
baz=276
**TCOL CIGO, UAF Yank** 31.91 42 P P 07 43 28.0 +0.6
baz=270,SNR=5.0
**COLA College** 31.91 42 *i* P P 07 43 28.0 +0.6
COLA pmax pmax
comp=Z,13nm,0.9s
**COLA College** 31.91 42 P P 07 43 27.9 +0.5
baz=270
**H24K Noodor Dome** 31.91 40 P P 07 43 27.8 +0.3
baz=269
**CCB Clear Creek Bu** 31.93 42 P P 07 43 27.8 +0.1
CCB IAmb IAmb 07 44 04.0
comp=Z,26nm,1.5s
**ULN Ulaanbaatar** 32.07 285 *ce* P P 07 43 28.3 -1.0
ULN pmax pmax
comp=Z,5.0nm,2.5s
**POKR Poker Plat Res** 32.09 41 P P 07 43 29.5 +0.4
baz=270
**DHY Denali Highway** 32.17 45 P P 07 43 30.2 +0.2
baz=274
**SCM Sheep Creek Mo** 32.28 47 P P 07 43 31.1 +0.2
SCM pmax pmax
comp=Z,151nm,1.8s
**SCM Sheep Creek Mo** 32.28 47 P P 07 43 31.1 +0.2
**HDA Harding Lake** 32.30 43 P P 07 43 31.1 +0.1
baz=272
**IL31** 32.32 42 P P 07 43 31.1 0.0
IL31 IAmb IAmb 07 43 33.0
comp=Z,29nm,1.8s
**ILAR Eielson Array** 32.32 42 P P 07 43 30.9 -0.2
comp=Z,3.1nm,0.7s,baz=259,slow=6.6,SNR=41
ILAR PcP PcP 07 46 16.3 -0.6
comp=Z,0.6nm,0.8s,baz=260,slow=3.6,SNR=3.1
ILAR LR LR 07 57 23.5
comp=Z,42nm,18.4s,baz=258,slow=38
**HNS HongShan** 32.42 263 ⇑ P P 07 43 31.8 -0.4
HNS pmax pmax
comp=Z,14nm,1.3s
**HHC Hu-ho-hao-te** 32.47 271 *eP* P 07 43 34.3 +1.5
HHC pmax pmax
comp=Z,13nm,0.8s
HHC pmax pmax
comp=Z,140nm,7.9s
**SONM Songino Array** 32.49 285 P P 07 43 31.7 -1.2
comp=Z,0.6nm,0.6s,baz=64,slow=7.0,SNR=5.6
SONM PcP PcP 07 46 17.0 -0.9
comp=Z,0.7nm,0.8s,baz=88,slow=2.4,SNR=3.7
SONM LR LR 07 57 04.1
comp=Z,79nm,21.5s,baz=356,slow=37
**H11S1 WAKE ISLAND Hy** 32.74 162 T T 08 18 29.7
baz=348,slow=76,SNR=917
**H11S3 WAKE ISLAND Hy** 32.75 162 T T 08 18 31.7
baz=348,slow=76,SNR=1096
**H11S2 WAKE ISLAND Hy** 32.76 162 T T 08 18 31.1
baz=348,slow=76,SNR=562
**PRP Porcupine Dome** 32.89 41 P P 07 43 36.3 +0.1
PRP IAmb IAmb 07 43 37.8
comp=Z,15nm,0.9s
**PRP Porcupine Dome** 32.89 41 P P 07 43 36.7 +0.5
baz=271,SNR=9.3
**J25K Salcha River,** 32.98 42 P P 07 43 36.1 -0.8
baz=273
**FYU Fort Yukon** 33.00 39 P P 07 43 38.0 +1.1
FYU IAmb IAmb 07 43 38.7
comp=Z,18nm,0.8s
**HARP HAARP** 33.24 46 P P 07 43 39.3 +0.1
baz=276
**RIDG Independent Ri** 33.26 44 P P 07 43 38.8 -0.6
baz=275
**NJ2 Nanjing** 33.31 251 *eP* P 07 43 38.8 -1.2
NJ2 pmax pmax
comp=Z,11nm,0.5s
**ZAK Zakamensk** 33.42 291 *eP* P 07 43 39.9 -1.0
ZAK *e* 07 43 58.8
ZAK pmax pmax
comp=Z,9.0nm,1.3s
ZAK pmax pmax
comp=Z,6.0nm,1.1s
**N25K Chitina, Valde** 33.60 48 P P 07 43 41.8 -0.6
baz=278
**SCRK Sand Creek** 33.62 43 P P 07 43 42.5 -0.1
SCRK IAmb IAmb 07 43 44.3
comp=Z,47nm,1.9s
**SCRK Sand Creek** 33.62 43 P P 07 43 42.2 -0.4
baz=275
**BMRM Bremner River** 33.69 49 P P 07 43 42.9 -0.3
baz=279
**J26L Joseph Creek** 33.77 42 P P 07 43 43.2 -0.5
baz=274
**L26K Log Cabin Wild** 34.00 45 P P 07 43 46.5 +0.7
baz=277
**M26K Nabesna, AK** 34.24 46 P P 07 43 49.1 +1.2
baz=278
**L27K Beaver Creek,** 34.69 45 P P 07 43 51.6 0.0
L27K IAmb IAmb 07 43 54.0
comp=Z,18nm,0.8s
**L27K Beaver Creek,** 34.69 45 P P 07 43 53.1 +1.5
baz=278
**M27K Edge Creek, AK** 34.77 46 P P 07 43 52.9 +0.5
baz=279
**EGAK Eagle** 34.77 42 P P 07 43 52.4 0.0
**EGAK Eagle** 34.77 42 P P 07 43 51.9 -0.4
baz=276,SNR=7.2
**BVCY Beaver Creek** 35.22 46 P P 07 43 57.3 +1.0
baz=280
**YUK3 Moose Creek** 35.52 47 P P 07 43 59.8 +0.8
baz=281
**DAWY Dawson** 35.62 43 P P 07 44 00.3 +0.6
baz=279
**I29M Ogilvie Camp,** 35.91 40 P P 07 44 02.7 +0.6
baz=278,SNR=5.7
**EPYK Eagle Plains** 36.42 39 P P 07 44 07.6 +1.1
baz=278
**YUK4 Talbot Arm** 36.46 47 P P 07 44 08.2 +1.1
baz=283
**KNGR Kungurtug, Tuv** 36.75 294 *i* P P 07 44 07.9 -1.6
**NRIK Norilʹsk** 36.98 327 LR LR 07 59 15.4
comp=Z,81nm,18.2s,baz=56,slow=36
**HYT Haines Junctio** 37.12 48 P P 07 44 13.6 +1.0
baz=284
**MAYO Mayo, Yukon** 37.23 43 P P 07 44 14.9 +1.6
baz=282
**INK Inuvik** 37.39 35 P P 07 44 15.1 +0.5
comp=Z,5.7nm,0.5s,baz=293,slow=6.7,SNR=39
INK LR LR 08 01 46.7
comp=Z,64nm,18.3s,baz=192,slow=40
**INK Inuvik** 37.39 35 P P 07 44 15.3 +0.8
INK IAmb IAmb 07 44 16.1
comp=Z,7.0nm,0.6s
**INK Inuvik** 37.39 35 P P 07 44 15.3 +0.8
baz=278,SNR=8.4
**KRAR Krasnoyarsk** 37.41 304 *i* P P 07 44 13.5 -1.4
**GUMO Guam** 37.86 199 LR LR 07 56 57.6
comp=Z,56nm,21.3s,baz=86,slow=31
**M31M Drury Creek, Y** 38.22 45 P P 07 44 23.3 +1.6
baz=285
**SKAG Skagway** 38.54 49 P P 07 44 26.3 +2.0
baz=288
**FARO Faro, Yukon** 38.69 45 P P 07 44 27.1 +1.4
baz=286
**MMPY Sheldon Lake,** 39.51 44 P P 07 44 34.1 +1.6
baz=287
**P33M Teslin, Yukon** 39.52 48 P P 07 44 33.7 +1.1
baz=288
**A36M Sachs Harbour** 39.62 29 P P 07 44 34.2 +1.0
A36M IAmb IAmb 07 44 35.1
comp=Z,11nm,0.8s
**A36M Sachs Harbour** 39.62 29 P P 07 44 34.2 +1.0
baz=280,SNR=14
**LZH Lanzhou** 40.16 270 *eP* P 07 44 38.5 +0.2
LZH pP pP 07 44 55.0 -2.9
LZH sP sP 07 45 03.5 -3.8
LZH pmax pmax
comp=Z,33nm,1.0s
**C36M Paulatuk** 40.56 32 P P 07 44 41.7 +0.7
baz=285,SNR=8.5
**GTA Gaotai** 40.78 277 *eP* P 07 44 43.0 -0.4
GTA pP pP 07 45 00.5 -2.5
GTA sP sP 07 45 10.5 -1.9
GTA pmax pmax
comp=Z,6.0nm,1.0s
**DLBC Dease Lake** 41.47 50 P P 07 44 50.6 +1.9
comp=Z,4.4nm,0.5s,baz=320,slow=4.1,SNR=6.6
**ZALV Zalesovo Beam** 42.49 304 P P 07 44 55.0 -2.0
comp=Z,1.2nm,0.4s,baz=59,slow=6.3,SNR=6.0
ZALV LR LR 08 02 46.7
comp=Z,28nm,19.6s,baz=36,slow=36
**ZALV Zalesovo Beam** 42.49 304 *i* P P 07 44 55.2 -1.7
ZALV pmax pmax
comp=Z,1.0nm,0.4s
**WRGLY Wrigley** 42.69 41 P P 07 45 00.2 +1.8
baz=292,SNR=6.0
**DGZ Jazzator, Alta** 42.98 297 *i* P P 07 45 00.1 -1.1
DGZ pmax pmax
comp=Z,4.0nm,0.8s
**GYA Guiyang** 44.77 257 ⇑ P P 07 45 15.8 0.0
GYA pmax pmax
comp=Z,12nm,1.0s
**EUNU Eureka** 45.16 13 P P 07 45 18.5 +0.4
EUNU IAmb IAmb 07 45 19.7
comp=Z,7.8nm,0.7s
**BBB Bella Bella** 45.16 57 LR LR 08 03 18.8
comp=Z,111nm,21.3s,baz=296,slow=35
**WMQ Urumqi** 45.86 290 *eP* P 07 45 24.5 +0.4
WMQ pmax pmax
comp=Z,14nm,1.1s
WMQ LR LR
comp=Z,110nm,21.3s
**GOMU GeErMu** 45.87 277 P P 07 45 23.5 -1.1
GOMU pmax pmax
comp=Z,4.0nm,1.0s
GOMU pmax pmax
comp=Z,96nm,5.7s
**YKA Yellowknife Ar** 46.68 40 P P 07 45 31.1 +0.9
comp=Z,8.8nm,0.7s,baz=297,slow=7.7,SNR=102
YKA PcP PcP 07 47 03.1 +0.7
comp=Z,1.0nm,0.7s,baz=297,slow=3.3,SNR=5.8
**YKA Yellowknife Ar** 46.68 40 P P 07 45 30.8 +0.6
**YKA Yellowknife Ar** 46.68 40 P P 07 45 30.8 +0.6
**RES Resolute Bay** 46.70 20 P P 07 45 30.6 +0.5
comp=Z,2.7nm,0.6s,baz=292,slow=7.7,SNR=12
RES LR LR 08 08 09.9
comp=Z,65nm,18.6s,baz=266,slow=40
**KURK Kurchatov** 47.38 302 *ce* P P 07 45 34.5 -1.2
KURK pmax pmax
comp=Z,11nm,1.3s
**KURK Kurchatov** 47.38 302 P P 07 45 34.5 -1.2
KURK IAmb IAmb 07 45 35.1
comp=Z,15nm,1.3s
**MK31 Makanchi Array** 47.42 296 *i* P P 07 45 34.6 -1.6
**MK31 Makanchi Array** 47.42 296 P P 07 45 34.4 -1.8
**MKAR Makanchi Array** 47.42 296 P P 07 45 34.8 -1.4
comp=Z,1.7nm,0.4s,baz=51,slow=5.8,SNR=51
MKAR pP pP 07 45 55.1 -1.2
comp=Z,2.5nm,0.9s,baz=60,slow=7.2,SNR=5.2
MKAR LR LR 08 06 12.0
comp=Z,116nm,20.4s,baz=34,slow=37
**KURBB Kurchatov Arra** 47.47 302 LR LR 08 04 48.2
comp=Z,47nm,18.6s,baz=14,slow=35
**MAKZ Makanchi** 47.59 296 P P 07 45 36.2 -1.3
MAKZ pmax pmax
comp=Z,3.0nm,0.6s
**MAKZ Makanchi** 47.59 296 P P 07 45 36.2 -1.3
**PZH PanZhiHua** 47.84 261 P P 07 45 39.5 -0.3
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,80nm,4.4s
**KMI Kunming** 48.19 259 ⇑ P P 07 45 43.5 +0.9
KMI pP pP 07 46 01.8 -0.8
KMI pmax pmax
comp=Z,16nm,0.9s
**OBL Observatory Le** 48.88 111 P P 07 45 49.8 +2.0
**SBLHI Steaming Bluff** 48.88 111 P P 07 45 49.5 +1.7
**NPH North Pit** 48.88 111 P P 07 45 49.1 +1.3
**LLLB Lillooet** 49.32 56 P P 07 45 51.3 +0.5
LLLB IAmb IAmb 07 45 52.9
comp=Z,12nm,1.1s
**A04D Lummi Island** 49.92 59 P P 07 45 56.4 +1.2
baz=304
**D03D Eldon** 50.39 60 P P 07 46 00.3 +1.5
baz=305
**BRVK Borovoye** 50.46 309 *ce* P P 07 45 57.7 -1.6
BRVK pmax pmax
comp=Z,5.0nm,0.7s
**BRVK Borovoye** 50.46 309 P P 07 45 57.8 -1.4
BRVK IAmb IAmb 07 45 59.4
comp=Z,5.1nm,0.7s
**B05A Bryant** 50.52 59 P P 07 46 01.1 +1.3
baz=305,SNR=5.1
**E04D Cinebar** 51.24 61 P P 07 46 06.8 +1.6
baz=306
**B08A Colville Reser** 51.97 57 P P 07 46 11.2 +0.5
B08A IAmb IAmb 07 46 12.7
comp=Z,11nm,1.0s
**EDM Edmonton** 52.20 50 P P 07 46 13.1 +0.8
EDM pmax pmax
comp=Z,22nm,0.9s
**EDM Edmonton** 52.20 50 P P 07 46 13.1 +0.8
**H04D Lebanon** 52.35 63 P P 07 46 15.1 +1.6
baz=307
**J01E Myrtle Point** 52.49 65 P P 07 46 16.6 +2.1
baz=308
**I03D Drain, OR** 52.50 64 P P 07 46 16.6 +2.0
baz=308
**G05D Wamic, OR** 52.73 62 P P 07 46 17.7 +1.4
baz=307
**C09A Chrisman Ranch** 52.87 57 P P 07 46 17.6 +0.3
C09A IAmb IAmb 07 46 19.2
comp=Z,12nm,1.2s
**I04A Tendick Farm,** 52.98 64 P P 07 46 19.8 +1.5
baz=308
**HAWA Hanford** 53.03 59 P P 07 46 19.4 +0.9
HAWA IAmb IAmb 07 46 20.1
comp=Z,8.2nm,1.0s
**DAG Danmarks Havn** 53.15 359 *i* P P 07 46 17.0 -2.0
DAG IAmb IAmb 07 46 18.4
comp=Z,1.7nm,0.9s
**NEW Newport** 53.21 56 P P 07 46 21.1 +1.2
baz=307
**E08A Dider Farm, El** 53.23 59 P P 07 46 20.8 +0.9
**I05D Terrebonne, OR** 53.26 62 P P 07 46 21.8 +1.5
baz=308
**L02E Cave Junction** 53.29 66 P P 07 46 22.7 +2.2
baz=308
**J04D Umpqua Nationa** 53.49 64 P P 07 46 23.7 +1.5
**J04D Umpqua Nationa** 53.49 64 P P 07 46 24.2 +2.0
baz=308
**J05D Fort Rock, OR** 53.97 63 P P 07 46 27.7 +2.1
baz=308,SNR=15
**ARU Arti** 53.97 317 LR LR 08 12 34.4
comp=Z,44nm,19.6s,baz=30,slow=40
**ARU Arti** 53.97 317 *d* *i* P P 07 46 24.1 -1.1
ARU *PP pP 07 46 49.0 +3.4
ARU 07 48 24.7
ARU S S 07 53 53.9 -0.4
ARU SS SKiKP 07 57 27.1 -1.9
ARU pmax pmax
comp=Z,12nm,1.8s
**L04D Klamath Falls** 54.01 65 P P 07 46 28.0 +2.0
baz=309,SNR=11
**YBH Yreka Blue Hor** 54.08 66 LR LR 08 06 41.4
comp=Z,59nm,19.2s,baz=302,slow=33
**K04D Chiloquin, OR** 54.08 64 P P 07 46 28.2 +1.8
baz=309
**M02C Callahan** 54.21 66 P P 07 46 29.5 +2.2
baz=309
**AAK Ala-Archa** 54.35 296 LR LR 08 10 11.2
comp=Z,101nm,21.5s,baz=48,slow=37
**AAK Ala-Archa** 54.35 296 *ce* P P 07 46 27.5 -0.9
AAK pmax pmax
comp=Z,3.0nm,0.7s
**AAK Ala-Archa** 54.35 296 P P 07 46 27.2 -1.2
**WALA Waterton Lakes** 54.42 54 P P 07 46 29.0 +0.2
WALA IAmb IAmb 07 46 30.4
comp=Z,12nm,0.7s
WALA pP 07 46 48.5 -0.6
**K05A Summer Lake** 54.51 64 P P 07 46 31.4 +1.8
K05A IAmb IAmb 07 46 33.1
comp=Z,18nm,1.0s
**M04C Macdoel** 54.55 65 P P 07 46 31.9 +2.1
baz=309,SNR=8.3
**N02D Trinity Center** 54.56 67 P P 07 46 32.1 +2.3
baz=309,SNR=6.5
**SHL Shillong** 54.79 269 P P 07 46 30.9 -0.9
SHL pmax pmax
comp=Z,17nm,1.0s
**SHL Shillong** 54.79 269 P P 07 46 30.9 -0.9
SHL IAmb IAmb 07 46 32.1
comp=Z,17nm,1.0s
**O02D Mt. Diablo Mer** 55.01 67 P P 07 46 35.5 +2.4
baz=310
**CHTO Chiang Mai** 55.20 257 P P 07 46 34.8 +0.2
CHTO pmax pmax
comp=Z,38nm,0.9s
**CHTO Chiang Mai** 55.20 257 P P 07 46 34.8 +0.2
**ARCES ARCESS Array B** 55.24 341 P P 07 46 32.6 -1.6
comp=Z,2.4nm,0.8s,baz=46,slow=7.7,SNR=5.8
ARCES LR LR 08 12 48.3
comp=Z,56nm,21.4s,baz=24,slow=39
**MOD Modoc Plateau** 55.37 64 P P 07 46 37.1 +1.4
MOD pP 07 46 55.9 -0.2
**SIJI Sorong** 55.41 211 LR LR 08 08 26.6
comp=Z,18nm,21.3s,baz=293,slow=34
**KSH Kashi** 55.46 292 P P 07 46 40.3 +3.9
KSH PcP PcP 07 47 39.3 +3.7
KSH PP PP 07 48 47.5 +6.8
KSH ScP ScP 07 51 32.5 +5.7
KSH PcS PcS 07 51 36.5 +0.6
KSH pmax pmax
comp=Z,5.0nm,0.9s
**CMAR Chiang Mai Arr** 55.46 257 P P 07 46 37.6 +1.1
comp=Z,19nm,0.8s,baz=29,slow=6.9,SNR=72
CMAR LR LR 08 10 30.8
comp=Z,37nm,20.9s,baz=0.0,slow=36
**CMAR Chiang Mai Arr** 55.46 257 *i* P P 07 46 38.0 +1.5
CMAR pmax pmax
comp=Z,19nm,0.8s
**CMAR Chiang Mai Arr** 55.46 257 P P 07 46 37.2 +0.7
**J08A Circle Bar Ran** 55.49 62 P P 07 46 37.9 +1.3
J08A IAmb IAmb 07 46 39.6
comp=Z,17nm,1.2s
**O03E Paynes Creek** 55.52 67 P P 07 46 38.0 +1.2
baz=310,SNR=11
**PRGR Permogore** 55.62 327 *eP* P 07 46 30.8 -6.2
PRGR pmax pmax
comp=Z,12nm,0.5s
**DBG Daneborg** 55.65 359 *i* P P 07 46 35.0 -2.1
DBG IAmb IAmb 07 46 36.0
comp=Z,1.6nm,0.7s
**PLID Pearl Lake** 55.78 59 P P 07 46 39.7 +1.0
PLID IAmb IAmb 07 46 41.1
comp=Z,15nm,0.9s
**MSO Missoula** 55.79 56 P P 07 46 39.6 +0.9
baz=309,SNR=12
**WVOR Wild Horse Val** 55.99 63 P P 07 46 41.6 +1.4
WVOR pmax pmax
comp=Z,19nm,1.0s
**WVOR Wild Horse Val** 55.99 63 P P 07 46 41.5 +1.4
**KIRV Kirov** 56.33 323 LR LR 08 12 23.0
comp=Z,59nm,20.6s,baz=45,slow=38
**KKAR Karatay Array** 56.33 299 P P 07 46 40.7 -1.7
**KKAR Karatay Array** 56.33 299 P P 07 46 40.7 -1.7
**BEKR Beckworth** 56.64 66 P P 07 46 46.1 +1.2
BEKR IAmb IAmb 07 46 47.4
comp=Z,11nm,1.0s
BEKR pP 07 47 04.3 -1.0
**SUMG Summit** 56.96 5 *i* P P 07 46 46.7 -0.2
SUMG IAmb IAmb 07 46 47.9
comp=Z,4.1nm,0.9s
**EGMT Eagleton** 57.21 53 P P 07 46 49.4 +0.7
baz=311,SNR=6.2
**PAHR Pah Rah Range** 57.32 66 P P 07 46 49.7 0.0
PAHR IAmb IAmb 07 46 52.9
comp=Z,10nm,1.2s
PAHR pP 07 47 10.2 +0.1
**HLID Hailey** 57.63 59 P P 07 46 53.4 +1.6
baz=311,SNR=15
**BOZ Bozeman (W)** 57.81 56 P P 07 46 54.7 +1.6
baz=311,SNR=20
**AKTO Aktyubinsk** 58.08 312 LR LR 08 11 39.0
comp=Z,31nm,21.6s,baz=39,slow=36
**NVAR Mina Array Bea** 58.79 66 P P 07 47 01.4 +1.4
comp=Z,6.0nm,0.8s,baz=294,slow=7.6,SNR=46
NVAR pP 07 47 20.6 +0.1
comp=Z,1.2nm,0.7s,baz=293,slow=7.9,SNR=3.4
**ELK Elko** 59.02 62 LR LR 08 12 35.8
comp=Z,40nm,18.2s,baz=296,slow=36
**H17A Grant Village** 59.17 56 P P 07 47 05.8 +3.2
baz=312,SNR=18
**RLMT Red Lodge** 59.38 55 P P 07 47 06.0 +2.0
baz=312,SNR=20
**HNR Honiara** 59.56 176 LR LR 08 06 39.0
comp=Z,56nm,21.4s,baz=326,slow=30
**DGMT Dagmar** 59.69 50 P P 07 47 07.0 +1.2
baz=313,SNR=5.9
**TIN Tinemaha, Big** 59.75 67 P P 07 47 08.2 +1.7
baz=313
**LAO LASA Array** 59.89 52 P P 07 47 08.7 +1.4
LAO pP 07 47 27.6 -0.4
**LAO LASA Array** 59.89 52 P P 07 47 09.2 +1.9
baz=313,SNR=16
**CHGR Chuyangaron** 60.02 295 P P 07 47 06.5 -1.8
**CWC Cottonwood Cre** 60.25 68 P P 07 47 11.3 +1.3
baz=313
**PKM Mcpherson Peak** 60.27 70 P P 07 47 11.5 +1.3
baz=313
**GRAC Grapevine Rang** 60.30 67 P P 07 47 11.9 +1.7
baz=313,SNR=6.1
**R11A Troy Canyon, C** 60.43 65 P P 07 47 12.1 +0.9
R11A IAmb IAmb 07 47 13.7
comp=Z,9.6nm,1.1s
R11A pP 07 47 30.7 -1.2
**R11A Troy Canyon, C** 60.43 65 P P 07 47 12.5 +1.3
baz=313,SNR=12
**ISA Isabella, Lake** 60.55 69 P P 07 47 12.0 +0.1
baz=313
**DUG Dugway, Tooele** 60.76 61 P P 07 47 15.2 +1.7
baz=313,SNR=5.8
**BW06 Boulder Array** 60.81 57 P P 07 47 15.2 +1.4
baz=313,SNR=22
**PDAR Pinedale Array** 60.81 57 P P 07 47 15.2 +1.3
comp=Z,15nm,0.9s,baz=319,slow=2.5,SNR=90
PDAR pP 07 47 35.0 +0.4
comp=Z,3.8nm,0.9s,baz=316,slow=4.1,SNR=3.8
PDAR LR LR 08 12 03.9
comp=Z,34nm,20.4s,baz=210,slow=34
**MPMC Manual Prospec** 60.86 68 P P 07 47 15.5 +1.3
baz=313,SNR=6.6
**FRB Frobisher Bay** 60.90 21 LR LR 08 14 54.4
comp=Z,32nm,20.4s,baz=323,slow=37
**FURC Furnace Creek,** 60.95 67 P P 07 47 16.3 +1.7
baz=313,SNR=16
**NIL Nilore** 60.98 289 P P 07 47 14.0 -0.9
NIL pmax pmax
comp=Z,13nm,0.7s
**NIL Nilore** 60.98 289 P P 07 47 13.9 -0.9
**TPNV Topopah Spring** 60.99 66 P P 07 47 16.2 +1.1
baz=313,SNR=14
**LRMC Laurel Mtn Rad** 61.14 68 P P 07 47 17.0 +0.9
baz=313,SNR=5.7
**EDW2 Edwards Air Fo** 61.36 69 P P 07 47 18.4 +1.0
baz=314,SNR=6.9
**FINES FINESS Array B** 61.78 336 P P 07 47 17.5 -2.2
comp=Z,0.9nm,0.5s,baz=41,slow=7.4,SNR=4.0
**FINES FINESS Array B** 61.78 336 *i* P P 07 47 19.2 -0.5
FINES pmax pmax
comp=Z,1.0nm,0.5s
**GSC Goldstone, Bar** 61.78 68 P P 07 47 21.5 +1.1
baz=314,SNR=5.9
**TUQ Turquoise Moun** 62.22 67 P P 07 47 24.6 +1.3
baz=314
**DY2G Dye2** 62.24 10 *i* P P 07 47 22.4 -0.6
**ULM Lac du Bonnet** 62.32 44 P P 07 47 23.6 +0.1
comp=Z,6.6nm,0.7s,baz=291,slow=6.7,SNR=7.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MDND** | **Maddock** | **62.33** | **48** | P | | **P** | **07 47 25.1** | **+1.4** |
| | baz=316,SNR=5.1 | | | | | | | |
| **HEC** | **Hector,Ludlow** | **62.39** | **68** | P | | **P** | **07 47 25.7** | **+1.3** |
| | baz=314,SNR=10 | | | | | | | |
| **BBRC** | **Big Bear Solar** | **62.43** | **69** | P | | **P** | **07 47 25.9** | **+1.1** |
| | baz=314 | | | | | | | |
| **K22A** | **Casper** | **62.51** | **56** | P | | **P** | **07 47 26.2** | **+1.0** |
| | baz=314 | | | | | | | |
| **MURC** | **Murrieta** | **62.73** | **70** | P | | **P** | **07 47 27.5** | **+1.0** |
| | baz=314 | | | | | | | |
| **RSSD** | **Black Hills** | **62.78** | **53** | P | | **P** | **07 47 27.9** | **+0.9** |
| | baz=315 | | | | | | | |
| **GMRC** | **Granite Mounta** | **62.82** | **68** | P | | **P** | **07 47 28.7** | **+1.4** |
| | baz=314,SNR=7.0 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **63.16** | **69** | P | | **P** | **07 47 30.1** | **+0.6** |
| | baz=314 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **63.16** | **68** | P | | **P** | **07 47 30.3** | **+0.7** |
| | baz=314 | | | | | | | |
| **TPFO** | **Pinon Flats** | **63.16** | **69** | P | | **P** | **07 47 30.2** | **+0.6** |
| | baz=314 | | | | | | | |
| **O20A** | **White River Ci** | **63.34** | **59** | P | | **P** | **07 47 32.0** | **+1.2** |
| | baz=315,SNR=6.1 | | | | | | | |
| **IRM** | **Iron Mountain** | **63.56** | **68** | P | | **P** | **07 47 33.4** | **+1.3** |
| | baz=315,SNR=13 | | | | | | | |
| **U15A** | **North Rim** | **63.65** | **64** | P | | **P** | **07 47 34.0** | **+1.0** |
| U15A | | | | IAmb | | IAmb | 07 47 35.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| **OBN** | **Obninsk** | **63.66** | **326** | *i* P | | **P** | **07 47 31.6** | **-0.7** |
| OBN | | | | *i* SS | | SS | 08 00 02.3 | -5.3 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **BC3** | **Big Chuckawall** | **63.73** | **68** | P | | **P** | **07 47 34.2** | **+0.9** |
| | baz=315,SNR=5.4 | | | | | | | |
| **AGMN** | **Agassiz Nation** | **63.74** | **45** | P | | **P** | **07 47 33.4** | **+0.4** |
| | baz=317 | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **64.02** | **69** | P | | **P** | **07 47 36.0** | **+1.0** |
| | baz=315 | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **64.04** | **70** | P | | **P** | **07 47 36.3** | **+1.0** |
| | baz=315 | | | | | | | |
| **N23A** | **Red Feather La** | **64.05** | **57** | P | | **P** | **07 47 36.7** | **+1.2** |
| | baz=315,SNR=7.2 | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **64.05** | **67** | P | | **P** | **07 47 36.4** | **+1.2** |
| | baz=315 | | | | | | | |
| **GLA** | **Glamis** | **64.53** | **68** | P | | **P** | **07 47 39.9** | **+1.5** |
| | baz=315 | | | | | | | |
| **WUAZ** | **Wupatki** | **64.82** | **64** | P | | **P** | **07 47 41.0** | **+0.5** |
| WUAZ | | | | IAmb | | IAmb | 07 47 43.4 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **WUAZ** | **Wupatki** | **64.82** | **64** | P | | **P** | **07 47 42.1** | **+1.7** |
| | baz=315,SNR=8.2 | | | | | | | |
| **Y14A** | **Wickenburg** | **64.98** | **67** | P | | **P** | **07 47 42.4** | **+1.0** |
| Y14A | | | | IAmb | | IAmb | 07 47 43.8 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **ISCO** | **Idaho Springs** | **65.01** | **57** | P | | **P** | **07 47 43.7** | **+1.9** |
| | baz=316,SNR=12 | | | | | | | |
| **SUSD** | **Miller** | **65.10** | **50** | P | | **P** | **07 47 42.3** | **+0.3** |
| | baz=317 | | | | | | | |
| **MVCO** | **Mesa Verde** | **65.26** | **61** | P | | **P** | **07 47 43.2** | **-0.2** |
| MVCO | | | | IAmb | | IAmb | 07 47 45.8 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **MVCO** | **Mesa Verde** | **65.26** | **61** | P | | **P** | **07 47 44.7** | **+1.3** |
| | baz=316,SNR=7.7 | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **65.35** | **47** | P | | **P** | **07 47 43.9** | **+0.4** |
| F33A | | | | IAmb | | IAmb | 07 47 45.1 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **65.57** | **342** | P | | **P** | **07 47 43.4** | **-1.3** |
| | comp=Z,0.6nm,0.7s,baz=23,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.57** | **342** | P | | **P** | **07 47 42.4** | **-2.3** |
| | comp=Z,1.5nm,0.8s,baz=24,slow=6.6,SNR=4.5 | | | | | | | |
| NOA | | | | LR | | LR | 08 21 49.4 | |
| | comp=Z,22nm,18.2s,baz=25,slow=41 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **65.81** | **60** | P | | **P** | **07 47 48.8** | **+1.8** |
| | baz=316,SNR=12 | | | | | | | |
| **Q24A** | **Divide** | **65.86** | **58** | P | | **P** | **07 47 48.0** | **+0.8** |
| | baz=316 | | | | | | | |
| **HFS** | **Hagfors** | **65.89** | **341** | LR | | LR | 08 18 54.6 | |
| | comp=Z,33nm,19.8s,baz=56,slow=38 | | | | | | | |
| **EYMN** | **Ely** | **65.96** | **43** | P | | **P** | **07 47 47.8** | **+0.3** |
| | baz=320 | | | | | | | |
| **W18A** | **Petrified Fore** | **66.04** | **64** | P | | **P** | **07 47 49.5** | **+1.1** |
| | baz=316 | | | | | | | |
| **OGNE** | **Ogallala** | **66.08** | **54** | P | | **P** | **07 47 49.5** | **+1.1** |
| | baz=317 | | | | | | | |
| **214A** | **Organ Pipe Nat** | **66.50** | **68** | P | | **P** | **07 47 52.5** | **+1.4** |
| | baz=316 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **66.54** | **59** | P | | **P** | **07 47 52.3** | **+0.7** |
| | baz=316 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **66.76** | **49** | P | | **P** | **07 47 53.2** | **+0.6** |
| ECSD | | | | IAmb | | IAmb | 07 47 54.0 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **66.76** | **49** | P | | **P** | **07 47 53.0** | **+0.4** |
| | baz=318,SNR=8.8 | | | | | | | |
| **SPMN** | **Marine on St.** | **67.44** | **46** | P | | **P** | **07 47 57.1** | **+0.3** |
| | baz=320 | | | | | | | |
| **TUC** | **Tucson** | **67.44** | **66** | P | | **P** | **07 47 58.2** | **+1.0** |
| | baz=316 | | | | | | | |
| **T25A** | **Trinidad** | **67.58** | **59** | P | | **P** | **07 47 59.3** | **+1.2** |
| | baz=317 | | | | | | | |
| **PSI** | **Prapat** | **67.69** | **246** | LR | | LR | 08 16 40.2 | |
| | comp=Z,12nm,21.9s,baz=59,slow=35 | | | | | | | |
| **BGNE** | **Belgrade** | **67.73** | **52** | P | | **P** | **07 47 58.8** | **+0.1** |
| | baz=318 | | | | | | | |
| **ANMO** | **Albuquerque** | **68.03** | **62** | *ce* P | | **P** | **07 48 02.2** | **+1.2** |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | | |
| **ANMO** | **Albuquerque** | **68.03** | **62** | P | | **P** | **07 48 02.1** | **+1.1** |
| | baz=317 | | | | | | | |
| **CBKS** | **Cedar Bluff** | **68.85** | **54** | P | | **P** | **07 48 06.5** | **+0.7** |
| | baz=318 | | | | | | | |
| **121A** | **Cookes Peak, D** | **69.03** | **64** | P | | **P** | **07 48 08.6** | **+1.4** |
| | baz=317 | | | | | | | |
| **SCHQ** | **Schefferville** | **69.11** | **25** | P | | **P** | **07 48 06.8** | **-0.3** |
| | comp=Z,2.1nm,0.4s,baz=335,slow=6.0,SNR=20 | | | | | | | |
| **SCIA** | **State Center** | **69.78** | **48** | P | | **P** | **07 48 12.0** | **+0.5** |
| | baz=320 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.84** | **327** | P | | **P** | **07 48 09.2** | **-2.4** |
| | comp=Z,0.4nm,0.3s,baz=30,slow=6.3,SNR=8.1 | | | | | | | |
| AKASG | | | | LR | | LR | 08 21 28.3 | |
| | comp=Z,28nm,18.2s,baz=352,slow=38 | | | | | | | |
| **KIV** | **Kislovodsk** | **69.94** | **315** | *eP* | | **P** | **07 48 11.5** | **-1.0** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| KIV | | | | MLR | | MLR | | |
| | comp=Z,17nm,17.0s | | | | | | | |
| **KBZ** | **Khabaz** | **70.02** | **315** | P | | **P** | **07 48 11.3** | **-1.6** |
| | comp=Z,0.9nm,0.3s,baz=166,slow=2.7,SNR=5.8 | | | | | | | |
| **KBZ** | **Khabaz** | **70.02** | **315** | *ce* P | | **P** | **07 48 12.9** | **+0.1** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **70.12** | **315** | *i* P | | **P** | **07 48 12.3** | **-1.5** |
| **KSU1** | **Kansas State U** | **70.24** | **52** | P | | **P** | **07 48 14.2** | **-0.1** |
| | baz=320 | | | | | | | |
| **AMTX** | **Amarillo** | **70.73** | **59** | P | | **P** | **07 48 18.3** | **+0.8** |
| | baz=319 | | | | | | | |
| **MSTX** | **Muleshoe** | **70.81** | **60** | P | | **P** | **07 48 18.8** | **+0.8** |
| | baz=318,SNR=5.1 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **71.02** | **63** | P | | **P** | **07 48 20.3** | **+1.1** |
| | baz=318,SNR=8.8 | | | | | | | |
| **GNI** | **Garni** | **71.95** | **312** | LR | | LR | 08 22 19.4 | |
| | comp=Z,22nm,19.8s,baz=44,slow=38 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **72.41** | **57** | P | | **P** | **07 48 28.3** | **+0.8** |
| | baz=320 | | | | | | | |
| **WRA** | **Warramunga Arr** | **72.67** | **202** | P | | **P** | **07 48 28.9** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=18,slow=6.5,SNR=5.6 | | | | | | | |
| WRA | | | | pP | | **PcP** | **07 48 49.2** | **+3.3** |
| | comp=Z,3.4nm,0.9s,baz=19,slow=6.6,SNR=10 | | | | | | | |
| **WRA** | **Warramunga Arr** | **72.67** | **202** | P | | **P** | **07 48 28.9** | **-0.1** |
| **HDIL** | **Hopedale** | **72.68** | **47** | P | | **P** | **07 48 29.0** | **0.0** |
| | baz=322 | | | | | | | |
| **TUL1** | **Leonard** | **73.09** | **54** | P | | **P** | **07 48 31.8** | **+0.3** |
| | baz=321 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **73.39** | **211** | P | | **P** | **07 48 33.5** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=45,slow=13,SNR=1.8 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **73.55** | **59** | P | | **P** | **07 48 35.3** | **+1.0** |
| | baz=320 | | | | | | | |
| **CCM** | **Cathedral Cave** | **73.72** | **50** | P | | **P** | **07 48 35.1** | **0.0** |
| | baz=322 | | | | | | | |
| **TXAR** | **Lajitas Array** | **73.77** | **64** | P | | **P** | **07 48 36.9** | **+1.2** |
| | comp=Z,11nm,0.8s,baz=299,slow=4.6,SNR=115 | | | | | | | |
| TXAR | | | | pP | | **pP** | **07 48 57.5** | **+0.5** |
| | comp=Z,3.3nm,0.9s,baz=284,slow=5.0,SNR=4.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **73.77** | **64** | P | | **P** | **07 48 36.1** | **+0.4** |
| **TXAR** | **Lajitas Array** | **73.77** | **64** | P | | **P** | **07 48 36.1** | **+0.4** |
| **AAM** | **Ann Arbor** | **73.81** | **42** | P | | **P** | **07 48 35.9** | **+0.3** |
| | baz=325 | | | | | | | |
| **SFIN** | **Lafayette** | **73.84** | **45** | P | | **P** | **07 48 35.6** | **-0.1** |
| | baz=324 | | | | | | | |
| **CLL** | **Collm** | **74.13** | **337** | *eP* | | **P** | **07 48 38.0** | **+0.7** |
| **CLL** | **Collm** | **74.13** | **337** | *eP* | | **P** | **07 48 38.0** | **+0.7** |
| CLL | | | | *ep* P | | **pP** | **07 49 01.0** | **+2.3** |
| CLL | | | | LmV | | | 08 23 00.0 | |
| | comp=Z,100nm,18.9s | | | | | | | |
| **U40A** | **Yellville** | **74.25** | **52** | P | | **P** | **07 48 38.2** | **0.0** |
| | baz=322,SNR=10 | | | | | | | |
| **O48B** | **Farmland** | **74.82** | **44** | P | | **P** | **07 48 41.2** | **-0.3** |
| | baz=324 | | | | | | | |
| **VRAC** | **Vranov** | **75.01** | **334** | LR | | LR | 08 24 39.2 | |
| | comp=Z,74nm,19.5s,baz=12,slow=38 | | | | | | | |
| **JCT** | **Junction City** | **75.09** | **60** | P | | **P** | **07 48 43.9** | **+0.6** |
| | baz=320 | | | | | | | |
| **WHTX** | **Lake Whitney,** | **75.22** | **58** | P | | **P** | **07 48 44.6** | **+0.7** |
| | baz=321 | | | | | | | |
| **MIAR** | **Mount Ida** | **75.30** | **53** | P | | **P** | **07 48 44.8** | **+0.5** |
| | baz=322,SNR=5.1 | | | | | | | |
| **MLR** | **Muntele Rosu** | **75.43** | **327** | LR | | LR | 08 24 30.1 | |
| | comp=Z,61nm,18.9s,baz=51,slow=38 | | | | | | | |
| **W41B** | **Gary Mavity, V** | **75.48** | **52** | P | | **P** | **07 48 45.8** | **+0.4** |
| | baz=322 | | | | | | | |
| **LONY** | **Lake Ozonia** | **75.50** | **35** | P | | **P** | **07 48 43.7** | **-1.7** |
| | baz=329 | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **75.60** | **44** | P | | **P** | **07 48 45.9** | **-0.1** |
| | baz=325 | | | | | | | |
| **X40A** | **Basin Creek Fa** | **75.72** | **53** | P | | **P** | **07 48 47.5** | **+0.7** |
| | baz=322 | | | | | | | |
| **M53A** | **Wi Miller and** | **75.79** | **41** | P | | **P** | **07 48 47.1** | **+0.1** |
| | baz=326 | | | | | | | |
| **WCI** | **Wyandotte Cave** | **75.94** | **46** | P | | **P** | **07 48 48.4** | **+0.5** |
| | baz=324 | | | | | | | |
| **ASAR** | **Alice Springs** | **76.35** | **201** | P | | **P** | **07 48 51.1** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=13,slow=5.1,SNR=8.0 | | | | | | | |
| ASAR | | | | pP | | **pP** | **07 49 10.2** | **-1.5** |
| | comp=Z,1.6nm,0.8s,baz=12,slow=5.4,SNR=8.9 | | | | | | | |
| **N54A** | **Moraine State** | **76.47** | **41** | P | | **P** | **07 48 51.0** | **0.0** |
| | baz=327 | | | | | | | |
| **P52A** | **Corning** | **76.66** | **43** | P | | **P** | **07 48 52.0** | **0.0** |
| | baz=326 | | | | | | | |
| **NATX** | **Nacogdoches** | **76.90** | **56** | P | | **P** | **07 48 54.6** | **+1.2** |
| | baz=322 | | | | | | | |
| **WVT** | **Waverly** | **76.90** | **49** | P | | **P** | **07 48 53.9** | **+0.5** |
| | baz=324 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.33** | **318** | P | | **P** | **07 48 55.6** | **-0.3** |
| | comp=Z,1.9nm,0.8s,baz=336,slow=2.7,SNR=5.6 | | | | | | | |
| BRTR | | | | LR | | LR | 08 26 50.6 | |
| | comp=Z,22nm,18.6s,baz=5.5,slow=39 | | | | | | | |
| **WSAR** | **Wadi Sarin** | **77.34** | **291** | LR | | LR | 08 26 43.2 | |
| | comp=Z,38nm,18.2s,baz=88,slow=38 | | | | | | | |
| **OXF** | **Oxford** | **77.43** | **51** | P | | **P** | **07 48 56.6** | **+0.3** |
| | baz=323 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **79.10** | **337** | LR | | LR | 08 28 33.3 | |
| | comp=Z,27nm,18.9s,baz=54,slow=39 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **79.20** | **46** | LR | | LR | 08 25 44.7 | |
| | comp=Z,55nm,19.7s,baz=297,slow=37 | | | | | | | |
| **MMAI** | **Mont Meron Ar** | **82.12** | **313** | LR | | LR | 08 32 37.9 | |
| | comp=Z,20nm,18.6s,baz=240,slow=41 | | | | | | | |
| **TIGA** | **Tifton** | **82.76** | **48** | P | | **P** | **07 49 25.1** | **0.0** |
| | baz=326 | | | | | | | |
| **RAYN** | **Ar Rayn** | **84.69** | **301** | P | | **P** | **07 49 33.9** | **-1.2** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **RAYN** | **Ar Rayn** | **84.69** | **301** | P | | **P** | **07 49 33.9** | **-1.2** |
| **ESDC** | **Sonseca Array** | **88.78** | **345** | P | | **P** | **07 49 53.7** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=342,slow=3.8,SNR=5.9 | | | | | | | |
| ESDC | | | | LR | | LR | 08 34 56.1 | |
| | comp=Z,24nm,19.7s,baz=344,slow=39 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **136.40** | **89** | T | | T | 10 28 34.9 | |
| | baz=313,slow=77,SNR=7.1 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **136.42** | **89** | T | | T | 10 28 35.3 | |
| | baz=313,slow=77,SNR=7.3 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **136.42** | **89** | T | | T | 10 28 34.8 | |
| | baz=313,slow=77,SNR=8.9 | | | | | | | |
| **CPUP** | **Villa Florida** | **144.67** | **60** | PKP | | **PKPab** | **07 56 36.3** | **+0.3** |
| | comp=Z,7.2nm,0.8s,baz=339,slow=3.8,SNR=8.0 | | | | | | | |
| **PLCA** | **Paso Flores** | **146.11** | **92** | PKPbc | | **PKPbc** | **07 56 41.2** | **+0.8** |
| | comp=Z,5.8nm,0.7s,baz=305,slow=4.1,SNR=24 | | | | | | | |

**BEO 25 07:38:57.5±0.3, 43.08N×20.89E, h0km, ML1.9/12, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SELS** | **Selova** | **0.22** | **51** | *e*Pg | Pg | 07 39 01.0 | -0.7 |
| SELS | | | | *e*Sg | Sg | 07 39 03.4 | -1.1 |
| **SJES** | **Sjenica** | **0.69** | **285** | *e*Pg | Pg | 07 39 09.5 | -1.3 |
| SJES | | | | *e*Sg | Sg | 07 39 18.8 | -0.9 |
| **IVAS** | **Ivanjica** | **0.73** | **313** | *e*Pg | Pg | 07 39 09.6 | -1.9 |
| IVAS | | | | *e*Sg | Sg | 07 39 21.5 | +0.6 |
| **BARS** | **Barje** | **0.73** | **111** | *e*Pg | Pg | 07 39 10.8 | -0.7 |
| **BARS** | **Barje** | **0.73** | **111** | *e*Pg | Pn | 07 39 20.3 | +5.2 |
| BARS | | | | *e*Sg | Sg | 07 39 21.0 | 0.0 |
| BARS | | | | *e*Sg | Sn | 07 39 37.9 | +11 |
| **GRUS** | **Gruza** | **0.81** | **351** | *e*Pg | Pg | 07 39 12.6 | -0.5 |
| GRUS | | | | *e*Sg | Sg | 07 39 22.6 | -1.1 |
| **TRUS** | **Trudelj** | **1.19** | **343** | *e*Pg | Pg | 07 39 18.7 | -1.6 |
| TRUS | | | | *e*Sg | Sg | 07 39 36.3 | +0.5 |
| **DIVS** | **Divibare** | **1.21** | **328** | *e*Pg | Pg | 07 39 19.3 | -1.3 |
| DIVS | | | | *e*Sg | Sg | 07 39 35.4 | -0.8 |
| **SVIS** | **Svilajnac** | **1.21** | **11** | *e*Pg | Pg | 07 39 19.6 | -1.0 |
| SVIS | | | | *e*Sg | Sg | 07 39 36.4 | +0.2 |
| **ZAGS** | **Zajecar** | **1.22** | **53** | *e*Pg | Pg | 07 39 19.4 | -1.5 |
| ZAGS | | | | *e*Sg | Sg | 07 39 36.7 | 0.0 |
| **ZAPS** | **Zavoj** | **1.29** | **81** | *e*Pg | Pg | 07 39 21.2 | -1.0 |
| ZAPS | | | | *e*Sg | Sg | 07 39 38.5 | -0.5 |
| **BOSS** | **Bosilegrad** | **1.31** | **116** | *e*Pg | Pg | 07 39 21.1 | -1.5 |
| BOSS | | | | *e*Sg | Sg | 07 39 38.3 | -1.3 |
| **KUBS** | **Kucevo** | **1.45** | **23** | *e*Pg | Pn | 07 39 23.7 | -1.2 |
| KUBS | | | | *e*Sg | Sg | 07 39 42.9 | -1.0 |

**BUC 25 07:39:45.8±0.9, 44.64N×21.84E, h17km±2km, ml0.9/4, 4C-4D, Error ellipse: s-maj=7.1km s-min=2.7km az=10.0, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MDVR** | **Moldovita** | **0.17** | **328** | ⇑P | Pb | 07 39 50.5 | -0.1 |
| MDVR | | | | ⇓S | Sb | 07 39 53.9 | +0.1 |
| **HERR** | **Herculane** | **0.48** | **59** | ⇑P | Pg | 07 39 54.7 | -0.7 |
| HERR | | | | ⇑S | Sb | 07 40 02.5 | +0.1 |
| **BZS** | **Buzias** | **0.99** | **351** | ⇓P | Pn | 07 40 05.0 | 0.0 |
| BZS | | | | ⇓S | Sb | 07 40 17.7 | +0.3 |
| **GZR** | **Gura Zlata** | **1.01** | **41** | ⇓P | Pb | 07 40 04.9 | +0.1 |
| GZR | | | | ⇑S | Sn | 07 40 19.1 | +0.1 |

**RSNC 25 08:04:05.2±1.0, 6.81N×73.16W, h142km±4km, ML3.0, Mw3.5, 5C-1D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.22** | **187** | ⇑*e*P | Pn | 08 04 24.8 | -0.2 |
| BARC | | | | *e*S | Sn | 08 04 38.9 | -1.0 |
| BARC | | | | *i* | | 08 04 41.9 | |
| | comp=Z,181nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.69** | **41** | ⇑*i*P | Pn | 08 04 27.8 | +0.4 |
| PAMC | | | | *e*S | Sn | 08 04 44.7 | +0.4 |
| PAMC | | | | *i* | | 08 04 46.5 | |
| | comp=Z,227nm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **176** | ⇑*e*P | Pn | 08 04 28.8 | -0.4 |
| RUSC | | | | *e*S | Sn | 08 04 47.3 | 0.0 |
| RUSC | | | | *i* | | 08 04 48.2 | |
| | comp=Z,154nm,0.2s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.32** | **258** | *e*P | Pn | 08 04 31.0 | -1.3 |
| PTBC | | | | *e*S | Sn | 08 04 52.4 | -0.7 |
| PTBC | | | | *i* | | 08 04 59.2 | |
| | comp=Z,136nm,0.4s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.41** | **105** | ⇓*i*P | Pn | 08 04 33.2 | -0.1 |
| TAMC | | | | *e*S | Sn | 08 04 54.3 | -0.3 |
| TAMC | | | | *i* | | 08 04 55.6 | |
| | comp=Z,35nm,0.4s | | | | | | |
| **OCAC** | **Ocana** | **1.43** | **353** | *e*P | Pn | 08 04 32.8 | -0.8 |
| OCAC | | | | *e*S | Sn | 08 04 54.9 | -0.4 |
| OCAC | | | | *i* | | 08 05 00.9 | |
| | comp=Z,185nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.47** | **218** | *e*P | Pn | 08 04 33.5 | -0.5 |
| SPBC | | | | *e*S | Sn | 08 04 55.7 | -0.2 |
| SPBC | | | | *i* | | 08 04 57.8 | |
| | comp=Z,202nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.82** | **292** | *e*P | Pn | 08 04 37.0 | -0.8 |
| ZARC | | | | *e*S | Sn | 08 05 02.0 | -0.7 |
| ZARC | | | | *i* | | 08 05 12.6 | |
| | comp=Z,111nm,0.5s | | | | | | |
| **NORC** | **Norcasia** | **2.11** | **234** | *e*P | Pn | 08 04 40.5 | -0.7 |
| NORC | | | | *e*S | Sn | 08 05 08.8 | -0.1 |
| NORC | | | | *i* | | 08 05 16.2 | |
| | comp=Z,104nm,0.2s | | | | | | |
| **CHIC** | **Chingaza** | **2.24** | **195** | *e*P | Pn | 08 04 42.7 | -0.6 |
| CHIC | | | | *e*S | Sn | 08 05 12.0 | -0.4 |
| CHIC | | | | *i* | | 08 05 15.4 | |
| | comp=Z,72nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.28** | **211** | *e*P | Pn | 08 04 43.9 | +0.3 |
| ROSC | | | | *e*S | Sn | 08 05 16.1 | +3.0 |
| ROSC | | | | *i* | | 08 05 22.6 | |
| | comp=Z,96nm,0.3s | | | | | | |
| **HELC** | **Santa Helena** | **2.44** | **255** | *e*P | Pn | 08 04 46.0 | +0.5 |
| HELC | | | | *e*S | Sn | 08 05 16.7 | +0.2 |
| HELC | | | | *i* | | 08 05 21.9 | |
| | comp=Z,54nm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.54** | **292** | *e*P | Pn | 08 04 44.4 | -2.0 |
| UREC | | | | *e*S | Sn | 08 05 15.6 | -2.6 |
| UREC | | | | *i* | | 08 05 27.0 | |
| | comp=Z,60nm,0.2s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.71** | **234** | ⇑*i*P | Pn | 08 04 48.8 | -0.2 |
| GUY2C | | | | *e*S | Sn | 08 05 24.4 | +1.7 |
| GUY2C | | | | *i* | | 08 05 29.7 | |
| | comp=Z,52nm,0.7s | | | | | | |
| **VILC** | **Villavicencio,** | **2.73** | **191** | *e*P | Pn | 08 04 47.6 | -1.5 |
| VILC | | | | *e*S | Sn | 08 05 22.2 | -0.7 |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **159** | *e*P | Pn | 08 04 47.3 | -2.3 |
| PTGC | | | | *e*S | Sn | 08 05 20.8 | -3.1 |
| **CBOC** | **Ciudad Bolivar** | **2.99** | **252** | *e*P | Pn | 08 04 52.4 | 0.0 |
| CBOC | | | | *e*S | Sn | 08 05 28.4 | -0.3 |
| CBOC | | | | *i* | | 08 05 45.1 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.16** | **308** | *e*P | Pn | 08 04 51.8 | -2.6 |
| MOTC | | | | *e*S | Sn | 08 05 29.9 | -2.5 |
| MOTC | | | | *i* | | 08 05 45.7 | |
| | comp=Z,29nm,0.4s | | | | | | |
| **ANIL** | **Santa Ana** | **3.21** | **224** | *e*P | Pn | 08 04 55.5 | +0.2 |
| ANIL | | | | *e*S | Sn | 08 05 35.4 | +1.3 |
| **SDV** | **Santo Domingo** | **3.24** | **50** | *e*P | Pn | 08 04 54.4 | -1.1 |
| SDV | | | | *e*S | Sn | 08 05 31.4 | -3.0 |
| SDV | | | | *i* | | 08 05 34.3 | |
| | comp=Z,22nm,0.3s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.56** | **216** | *e*P | Pn | 08 04 58.8 | -0.7 |
| ORTC | | | | *e*S | Sn | 08 05 41.6 | 0.0 |
| ORTC | | | | *i* | | 08 05 48.0 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **PLMC** | **San Jos del P** | **3.64** | **239** | ⇑*e*P | Pn | 08 05 00.4 | -0.3 |
| PLMC | | | | *e*S | Sn | 08 05 43.6 | 0.0 |
| PLMC | | | | *i* | | 08 05 48.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.66** | **327** | *e*P | Pn | 08 04 58.8 | -2.1 |
| SJCC | | | | *e*S | Sn | 08 05 39.9 | -4.2 |
| SJCC | | | | *i* | | 08 05 47.1 | |
| | comp=Z,18nm,0.4s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.19** | **4** | *e*P | Pn | 08 05 04.6 | -3.3 |
| CRJC | | | | *e*S | Sn | 08 05 52.2 | -4.4 |
| CRJC | | | | *i* | | 08 05 55.8 | |
| | comp=Z,25nm,0.2s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.24** | **229** | *e*P | Pn | 08 05 07.1 | -1.5 |
| YOTC | | | | *e*S | Sn | 08 05 59.9 | +2.1 |
| **GUVC** | **San Jose del G** | **4.27** | **173** | *e*P | Pn | 08 05 07.3 | -1.6 |
| GUVC | | | | *e*S | Sn | 08 05 55.2 | -3.2 |
| GUVC | | | | *i* | | 08 06 00.2 | |
| | comp=Z,41nm,0.4s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.69** | **189** | *e*P | Pn | 08 05 11.7 | -2.7 |
| MACC | | | | *e*S | Sn | 08 06 02.3 | -6.0 |
| MACC | | | | *i* | | 08 06 09.9 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **FLOC** | **Florencia** | **5.76** | **206** | *e*P | Pn | 08 05 26.9 | -1.9 |
| FLOC | | | | *e*S | Sn | 08 06 32.0 | -2.0 |

*IDC **25** 08:05:52.3±1.6, 30.46S×72.36W, h0km, mb3.2/1, mb1 3.7/3, mb1mx3.6/22, mbtmp3.3/3, ML3.6/2, Error ellipse: s-maj=97.8km s-min=36.0km az=83.0*
*GUC **25** 08:05:53.3±0.9, 30.43S×72.05W, h24km±5km, ML3.9*
**ISC 25 08:05:54.1±1.9, 30.42S±0.04×72.03W±0.08, h12km±11km, n20, σ1.923/25, 5C-2D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.42** | **127** | *e*P | **Pg** | **08 06 03.1** | **+0.6** |
| CO06 | | | | *e*S | **Sb** | **08 06 09.7** | **-0.2** |
| CO06 | | | | IAML | | 08 06 10.2 | |
| | comp=E,11μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **0.85** | **54** | ⇓*e*P | **Pg** | **08 06 10.1** | **-0.4** |
| CO05 | | | | *e*S | **Sg** | **08 06 21.5** | **-0.1** |
| CO05 | | | | IAML | | 08 06 25.2 | |
| | comp=E,8μm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **1.09** | **77** | *e*P | **Pb** | **08 06 14.2** | **-0.9** |
| GO04 | | | | *e*S | **Sb** | **08 06 28.7** | **-0.6** |
| **CO02** | **Combarbal** | **1.18** | **132** | *e*P | **Pn** | **08 06 16.0** | **-0.5** |
| CO02 | | | | *e*S | **Sg** | **08 06 32.3** | **+0.1** |
| CO02 | | | | IAML | | 08 06 37.1 | |
| | comp=N,7μm,0.6s | | | | | | |
| **CO03** | **El Pedregal** | **1.23** | **110** | ⇓*e*P | **Pn** | **08 06 16.2** | **-0.9** |
| CO03 | | | | *i* S | **Sg** | **08 06 34.3** | **+0.6** |
| CO03 | | | | IAML | | 08 06 36.5 | |
| | comp=E,3μm,0.5s | | | | | | |
| CO03 | | | | IAML | | 08 06 37.7 | |
| | comp=N,3μm,0.5s | | | | | | |
| **LCO** | **Las Campanas** | **1.82** | **40** | *e*P | **Pn** | **08 06 24.8** | **-0.7** |
| LCO | | | | *e*S | **Sn** | **08 06 48.5** | **-0.1** |
| **VA06** | **Catapilco** | **2.22** | **164** | ⇑*

**FINES FINESS Array B 145.84 339** PKPbc PKPdf 08 31 34.3 -0.2
1.1nm,0.5s,baz=20,slow=2.1,SNR=9.2

*NIED **25** 08:31:56.7, 40.16N × 142.39E, h36km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale 10^15 Nm; Mrr0.62; Mθθ-0.08; Mφφ-0.54; Mrθ0.37; Mθφ-0.15; Mφr0.73; Fault plane solution: M0 1.01000×10^15 NP1: φs24.00000°, δ72.00000°, λ95.00000°. NP2: φs190.00000°, δ19.00000°, λ76.00000°.*
*JMA **25** 08:31:56.6±0.1, 40.16N × 142.39E, h36km±1km, M3.9 Broadband half plane solution: P waves. NP1: φs194.00000°, δ25.00000°, λ62.00000°. NP2: φs44.00000°, δ68.00000°, λ102.00000°. Principal axes: T Plg65.0000°, Azm335.0000°; N Plg11.0000°, Azm220.0000°; P Plg22.0000°, Azm125.0000°.*
*JMA Felt I J1.*
*IDC **25** 08:31:57.2±0.7, 40.12N × 142.49E, h54km±5km, mb3.6/21, mb1 3.8/27, mb1mx3.7/63, mbtmp3.9/27, MS3.0/6, Ms1 3.0/6, ms1mx2.6/90 Error ellipse: s-maj=15.1km s-min=12.8km az=141.0*
*NEIC **25** 08:31:57.6±1.4, 40.13N±0.06 × 142.5E±0.1, h55km±4km, mb4.2/10, Error ellipse: s-maj=15.9km s-min=7.8km az=108.0*

**ISC 25 08:31:57.3±0.7, 40.15N±0.04 × 142.39E±0.06, h49km±5km, n67, σ1s38/77, mb4.0/26, 1C-8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTH** | **Tanohata** | **0.46** | **243** | ⇓P | **Pn** | **08 32 06.7** | **-1.2** |
| JTH | | | | S | **Sn** | **08 32 14.0** | **-1.5** |
| **JKEN** | **Kujiedanarisaw** | **0.53** | **277** | ⇓P | **Pn** | **08 32 07.3** | **-1.4** |
| JKEN | | | | S | **Sn** | **08 32 14.8** | **-2.2** |
| **JANG** | **Nango** | **0.71** | **289** | ⇓P | **Pn** | **08 32 09.9** | **-1.2** |
| JANG | | | | S | **Sn** | **08 32 19.2** | **-1.9** |
| **MIYJ** | **Miyakonagasawa** | **0.72** | **218** | ⇑P | **Pn** | **08 32 10.1** | **-1.1** |
| MIYJ | | | | S | **Sn** | **08 32 20.4** | **-0.9** |
| **JKZ** | **Kuzumaki** | **0.83** | **259** | ⇓P | **Pn** | **08 32 12.2** | **-0.5** |
| JKZ | | | | *e*S | **Sn** | **08 32 23.0** | **-1.0** |
| **JOM** | **Ohasama** | **1.08** | **232** | ⇓P | **Pn** | **08 32 16.0** | **-0.1** |
| JOM | | | | S | **Sn** | **08 32 30.5** | **+0.5** |
| **JARK** | **Aomorirokkasho** | **1.16** | **318** | ⇓P | **Pn** | **08 32 16.7** | **-0.4** |
| JARK | | | | *e*S | **Sn** | **08 32 31.8** | **-0.1** |
| **JTM** | **Tenmabayashi** | **1.20** | **303** | ⇓P | **Pn** | **08 32 17.4** | **-0.2** |
| JTM | | | | *e*S | **Sn** | **08 32 32.6** | **-0.1** |
| **JAH** | **Hinai** | **1.35** | **272** | ⇓P | **Pn** | **08 32 19.9** | **+0.2** |
| JAH | | | | S | **Sn** | **08 32 37.4** | **+1.0** |
| **JRG** | **Rokugo** | **1.55** | **242** | P | **Pn** | **08 32 23.2** | **+0.8** |
| **ERM** | **Erimo** | **1.95** | **17** | | **Pn** | **08 32 28.3** | **+0.3** |
| **JMM** | **Marumori** | **2.60** | **209** | | **Pn** | **08 32 37.7** | **+0.9** |
| **JEW** | **Eniwo** | **2.78** | **346** | | **Pn** | **08 32 40.4** | **+1.1** |
| **JSD** | **Sado** | **3.84** | **238** | | **Pn** | **08 32 54.6** | **+0.8** |
| **ASAJ** | **Asahikawa** | **3.97** | **2** | P | **Pn** | **08 32 56.3** | **+0.7** |
| | 8.0nm,0.3s,baz=198,slow=14,SNR=9.4 | | | | | | |
| ASAJ | | | | S | **Sn** | **08 33 41.0** | **+0.2** |
| | 2.5nm,0.3s,baz=131,slow=33,SNR=1.2 | | | | | | |
| ASAJ | | | | LR | LR | 08 34 53.9 | |
| | comp=Z,180nm,19.8s,baz=140,slow=44 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **3.97** | **2** | | **Pn** | **08 32 56.3** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **3.97** | **2** | | **Sn** | **08 33 41.0** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **4.88** | **224** | P | **Pn** | **08 33 10.3** | **+2.2** |
| | 0.6nm,0.3s,baz=31,slow=13,SNR=34 | | | | | | |
| MJAR | | | | S | Sn | 08 34 19.2 | +16 |
| | baz=38,slow=11,SNR=1.8 | | | | | | |
| MJAR | | | | LR | LR | 08 34 48.2 | |
| | comp=Z,23nm,19.4s,baz=60,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.88** | **224** | | **Pn** | **08 33 10.1** | **+2.1** |
| **MJB9** | **Matsu-Tunnel** | **4.88** | **224** | | **Pn** | **08 33 10.0** | **+1.9** |
| **MAJO** | **Matsushiro** | **4.88** | **224** | | **Pn** | **08 33 10.4** | **+2.4** |
| **MAT** | **Matsushiro** | **4.88** | **224** | P | **Pn** | **08 33 10.5** | **+2.4** |
| MAT | | | | *e*S | **Sn** | **08 34 09.1** | **+5.9** |
| **JGF** | **Kuroka** | **6.04** | **223** | Pn | **Pn** | **08 33 25.0** | **+1.0** |
| **INU** | **Inuyama** | **6.41** | **223** | Pn | **Pn** | **08 33 31.7** | **+2.7** |
| **JHJ** | **Hachijo jima 2** | **7.32** | **197** | P | **Pn** | **08 33 40.8** | **-0.7** |
| | 11nm,0.3s,baz=250,slow=21,SNR=1.2 | | | | | | |
| JHJ | | | | S | **Sn** | **08 35 00.1** | **-3.2** |
| | 12nm,0.3s,baz=70,slow=22,SNR=1.4 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **8.72** | **301** | P | **Pn** | **08 34 03.5** | **+2.8** |
| **USRK** | **Ussuriysk Ar.** | **8.72** | **301** | P | **Pn** | **08 34 02.7** | **+2.0** |
| | baz=111,slow=15,SNR=5.7 | | | | | | |
| USRK | | | | LR | LR | 08 37 27.5 | |
| | comp=Z,83nm,18.7s,baz=162,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **11.61** | **261** | P | **Pn** | **08 34 42.1** | **+2.0** |
| | 0.3nm,0.3s,baz=73,slow=14,SNR=2.1 | | | | | | |
| KSRS | | | | LR | LR | 08 38 45.0 | |
| | comp=Z,52nm,18.6s,baz=125,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **11.81** | **324** | P | **Pn** | **08 34 44.1** | **+1.1** |
| | 0.1nm,0.3s,baz=87,slow=6.3,SNR=2.9 | | | | | | |
| KLR | | | | LR | LR | 08 39 19.0 | |
| | comp=Z,83nm,18.4s,baz=150,slow=37 | | | | | | |
| **BJT** | **Baijiatuan** | **20.05** | **278** | P | **P** | **08 36 25.8** | **-0.4** |
| **SEY** | **Seymchan** | **23.59** | **11** | P | **P** | **08 37 02.8** | **-0.5** |
| | 2.0nm,0.7s,baz=3.3,slow=22,SNR=8.7 | | | | | | |
| **YULB** | **Yu-li** | **24.41** | **233** | P | **P** | **08 37 10.5** | **-0.7** |
| **SONM** | **Songino Array** | **26.82** | **299** | P | **P** | **08 37 33.1** | **+0.1** |
| | 1.3nm,0.8s,baz=102,slow=8.5,SNR=9.8 | | | | | | |
| **SONM** | **Songino Array** | **26.82** | **299** | P | **P** | **08 37 32.9** | **-0.1** |
| **H11N2** | **WAKE ISLAND Hy** | **29.24** | **127** | T | T | 09 08 40.5 | |
| | baz=318,slow=75,SNR=240 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.25** | **127** | T | T | 09 08 50.3 | |
| | baz=318,slow=75,SNR=213 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.26** | **127** | T | T | 09 08 43.9 | |
| | baz=318,slow=75,SNR=209 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.06** | **129** | T | T | 09 09 49.3 | |
| | baz=321,slow=76,SNR=49 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.06** | **129** | T | T | 09 09 49.1 | |
| | baz=321,slow=76,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.07** | **129** | T | T | 09 09 50.7 | |
| | baz=321,slow=76,SNR=32 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.45** | **310** | P | **P** | **08 39 30.2** | **-0.6** |
| ZAA0 | | | | IAmb | IAmb | 08 39 43.6 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.45** | **310** | P | **P** | **08 39 30.7** | **0.0** |
| | comp=Z,0.8nm,0.3s,baz=84,slow=8.1,SNR=5.8 | | | | | | |
| ZALV | | | | pP | **pP** | **08 39 45.5** | **+1.8** |
| | comp=Z,2.4nm,0.6s,baz=94,slow=9.4,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.09** | **253** | P | **P** | **08 39 52.4** | **-0.3** |
| | comp=Z,1.6nm,0.4s,baz=40,slow=7.1,SNR=2.0 | | | | | | |
| **MK31** | **Makanchi Array** | **43.19** | **300** | P | **P** | **08 39 53.1** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 08 40 10.7 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.19** | **300** | P | **P** | **08 39 53.3** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=86,slow=9.8,SNR=16 | | | | | | |
| MKAR | | | | pP | **pP** | **08 40 07.7** | **+1.5** |
| | comp=Z,1.8nm,0.6s,baz=84,slow=8.9,SNR=8.6 | | | | | | |
| **MAKZ** | **Makanchi** | **43.39** | **300** | P | **P** | **08 39 54.8** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 08 40 12.4 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **44.68** | **306** | P | **P** | **08 40 04.6** | **-0.4** |
| KURK | | | | IAmb | IAmb | 08 40 08.9 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.75** | **306** | P | **P** | **08 40 04.7** | **-0.9** |
| | comp=Z,2.8nm,0.4s,baz=82,slow=8.6,SNR=13 | | | | | | |
| KURBB | | | | pP | **pP** | **08 40 19.9** | **+1.3** |
| | comp=Z,3.1nm,0.5s,baz=79,slow=8.5,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **46.47** | **34** | P | **P** | **08 40 18.6** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=269,slow=6.1,SNR=6.5 | | | | | | |
| ILAR | | | | pP | **pP** | **08 40 32.2** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=268,slow=6.5,SNR=3.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **49.09** | **311** | P | **P** | **08 40 39.2** | **-0.3** |
| | comp=Z,1.0nm,0.5s,baz=44,slow=11,SNR=5.6 | | | | | | |
| **INK** | **Inuvik** | **51.28** | **28** | P | **P** | **08 40 56.4** | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=251,slow=6.6,SNR=8.1 | | | | | | |
| **ABKAR** | **Akbulak array** | **56.55** | **309** | P | **P** | **08 41 34.0** | **-0.6** |
| ABKAR | | | | IAmb | IAmb | 08 41 35.5 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **56.55** | **309** | P | **P** | **08 41 34.5** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **57.20** | **311** | P | **P** | **08 41 38.6** | **-0.5** |
| | comp=Z,2.6nm,0.7s,baz=66,slow=13,SNR=8.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.25** | **189** | P | **P** | **08 41 59.5** | **-1.1** |
| | comp=Z,0.8nm,0.8s,baz=6.3,slow=7.1,SNR=6.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **60.74** | **31** | P | **P** | **08 42 03.6** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=297,slow=6.2,SNR=2.9 | | | | | | |
| YKA | | | | pP | **pP** | **08 42 15.9** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=303,slow=6.4,SNR=6.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.36** | **339** | P | **P** | **08 42 07.5** | **-0.1** |
| | comp=Z,4.9nm,1.0s,baz=43,slow=6.7,SNR=2.3 | | | | | | |
| **BELG** | **Belogorsk Array** | **62.07** | **316** | P | **P** | **08 42 11.0** | **-1.6** |
| | comp=Z,7.7nm,0.8s,baz=156,slow=5.6,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **63.97** | **189** | P | **P** | **08 42 24.7** | **-0.8** |
| | comp=Z,0.3nm,0.7s,baz=5.4,slow=5.0,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **66.43** | **332** | P | **P** | **08 42 40.6** | **-0.3** |
| | comp=Z,2.8nm,1.0s,baz=39,slow=12,SNR=5.6 | | | | | | |
| **KBZ** | **Khabaz** | **69.47** | **310** | P | **P** | **08 43 00.2** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=346,slow=17,SNR=4.5 | | | | | | |
| **HFS** | **Hagfors** | **71.57** | **336** | P | **P** | **08 43 13.0** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=62,slow=3.4,SNR=5.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **72.31** | **322** | P | **P** | **08 43 17.5** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=43,slow=5.9,SNR=8.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **72.31** | **322** | IAmb | IAmb | 08 43 19.2 | |
| | comp=Z,3.7nm,1.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **74.95** | **46** | P | **P** | **08 43 32.7** | **-0.7** |
| | comp=Z,0.2nm,0.6s,baz=5.7,slow=2.7,SNR=1.8 | | | | | | |
| PDAR | | | | pP | **pP** | **08 43 48.0** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=3.0,slow=1.5,SNR=3.1 | | | | | | |
| **MLR** | **Muntele Rosu** | **77.51** | **320** | LR | LR | 09 21 50.5 | |
| | comp=Z,45nm,18.1s,baz=5.0,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.63** | **53** | P | **P** | **08 44 39.5** | **-1.1** |
| | comp=Z,0.2nm,0.9s,baz=297,slow=8.0,SNR=1.6 | | | | | | |

*IDC **25** 08:40:15.0±0.8, 3.46S × 68.22E, h0km, mb4.0/16, mb1 4.1/16, mb1mx3.9/48, mbtmp4.0/16, MS3.7/24, Ms1 3.7/24, ms1mx3.3/82, Error ellipse: s-maj=23.4km s-min=19.4km az=15.0*
*NEIC **25** 08:40:17.9±1.3, 3.36S±0.08 × 68.32E±0.09, h10km±1km, mb4.6/27, Error ellipse: s-maj=14.9km s-min=13.4km az=125.0*

**ISC 25 08:40:17.5±0.5, 3.38S±0.08 × 68.28E±0.07, h12km, n79, σ0s93/56, mb4.3/28, MS3.7/23, Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DGAR** | **Diego Garcia** | **5.77** | **134** | Pn | **Pn** | **08 41 42.2** | **-0.8** |
| **KAAM** | **Kaadhehdhoo** | **6.08** | **51** | Pn | **Pn** | **08 41 47.0** | **-0.3** |
| **MSEY** | **Mahe Island** | **12.83** | **264** | Pn | **Pn** | **08 43 19.9** | **-0.1** |
| **PALK** | **Pallekele** | **16.30** | **50** | LR | LR | 08 48 58.8 | |
| | comp=Z,290nm,19.7s,baz=332,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **16.30** | **50** | Pn | **Pn** | **08 44 04.5** | **-2.0** |
| **WSAR** | **Wadi Sarin** | **28.08** | **341** | LR | LR | 08 55 09.3 | |
| | comp=Z,141nm,20.1s,baz=164,slow=32 | | | | | | |
| **PSI** | **Prapat** | **31.24** | **79** | LR | LR | 08 56 42.2 | |
| | comp=Z,134nm,20.8s,baz=235,slow=32 | | | | | | |
| **LODK** | **Lodwar** | **33.59** | **281** | P | **P** | **08 46 58.2** | **+0.1** |
| LODK | | | | IAmb | IAmb | 08 47 10.0 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **35.92** | **82** | P | **P** | **08 47 18.1** | **0.0** |
| **SHL** | **Shillong** | **36.77** | **37** | P | **P** | **08 47 26.3** | **+1.0** |
| SHL | | | | IAmb | IAmb | 08 47 29.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.19** | **53** | P | **P** | **08 47 30.1** | **+1.2** |
| | comp=Z,0.9nm,0.3s,baz=243,slow=9.3,SNR=6.9 | | | | | | |
| CMAR | | | | LR | LR | 09 00 48.1 | |
| | comp=Z,53nm,21.5s,baz=240,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.19** | **53** | P | **P** | **08 47 28.6** | **-0.3** |
| **CHTO** | **Chiang Mai** | **37.38** | **53** | P | **P** | **08 47 30.1** | **-0.4** |
| **MBAR** | **Mbarara** | **37.62** | **273** | LR | LR | 09 03 03.1 | |
| | comp=Z,26nm,18.1s,baz=92,slow=36 | | | | | | |
| **KBL** | **Kabul** | **37.72** | **1** | P | **P** | **08 47 33.6** | **+0.2** |
| KBL | | | | IAmb | IAmb | 08 47 44.5 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **LEM** | **Lembang** | **39.32** | **97** | LR | LR | 09 01 27.5 | |
| | comp=Z,42nm,20.3s,baz=170,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **41.20** | **251** | P | **P** | **08 48 02.2** | **-0.4** |
| | comp=Z,1.2nm,0.4s,baz=178,slow=14,SNR=1.7 | | | | | | |
| LSZ | | | | LR | LR | 09 02 23.3 | |
| | comp=Z,115nm,19.0s,baz=152,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **41.20** | **251** | IAmb | IAmb | 08 49 19.5 | |
| | comp=Z,8.7nm,1.3s | | | | | | |
| **GEYT** | **Alibeck** | **42.17** | **348** | LR | LR | 09 04 34.2 | |
| | comp=Z,101nm,21.6s,baz=170,slow=34 | | | | | | |
| **GAR** | **Garm** | **42.21** | **2** | P | **P** | **08 48 09.6** | **-1.0** |
| GAR | | | | IAmb | IAmb | 08 48 20.3 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **KSH** | **Kashi** | **43.27** | **9** | P | **P** | **08 48 21.5** | **+2.4** |
| **AAK** | **Ala-Archa** | **46.15** | **6** | P | **P** | **08 48 40.6** | **-1.5** |
| | comp=Z,0.8nm,0.4s,baz=147,slow=16,SNR=2.9 | | | | | | |
| AAK | | | | LR | LR | 09 07 57.5 | |
| | comp=Z,50nm,18.1s,baz=171,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **46.15** | **6** | IAmb | IAmb | 08 48 52.6 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **46.31** | **2** | P | **P** | **08 48 43.1** | **-0.1** |
| **LBTB** | **Lobatse** | **46.34** | **238** | LR | LR | 09 06 28.5 | |
| | comp=Z,116nm,19.0s,baz=68,slow=34 | | | | | | |
| **GOMU** | **GeErMu** | **46.53** | **30** | P | **P** | **08 48 45.5** | **0.0** |
| GOMU | | | | pP | pwP | 08 48 53.5 | +1.3 |
| GOMU | | | | sP | sP | 08 49 00.0 | +10 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,120nm,5.8s | | | | | | |
| **BOSA** | **Boshof** | **47.97** | **234** | LR | LR | 09 07 14.2 | |
| | comp=Z,76nm,18.1s,baz=26,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **51.35** | **94** | LR | LR | 09 08 46.8 | |
| | comp=Z,31nm,21.5s,baz=308,slow=33 | | | | | | |
| **MAKZ** | **Makanchi** | **51.42** | **12** | P | **P** | **08 49 22.3** | **-0.1** |
| **MK31** | **Makanchi Array** | **51.47** | **12** | P | **P** | **08 49 22.3** | **-0.5** |
| **MKAR** | **Makanchi Array** | **51.47** | **12** | P | **P** | **08 49 23.0** | **+0.2** |
| | comp=Z,0.4nm,0.8s,baz=211,slow=9.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.47** | **12** | P | **P** | **08 49 22.4** | **-0.4** |
| **GTA** | **Gaotai** | **51.53** | **31** | *e*P | **P** | **08 49 25.0** | **+1.5** |
| GTA | | | | pP | pwP | 08 49 29.3 | -0.9 |
| GTA | | | | sP | sP | 08 49 32.8 | +5.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **TSUM** | **Tsumeb** | **51.92** | **248** | LR | LR | 09 08 07.7 | |
| | comp=Z,37nm,20.7s,baz=153,slow=32 | | | | | | |
| **KBZ** | **Khabaz** | **52.16** | **337** | P | **P** | **08 49 27.7** | **-0.2** |
| | comp=Z,4.1nm,0.9s,baz=179,slow=6.5,SNR=8.6 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **52.78** | **132** | T | T | 09 46 14.0 | |
| | baz=295 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **52.78** | **132** | T | T | 09 46 15.3 | |
| | baz=295 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **52.80** | **132** | T | T | 09 46 28.4 | |
| | baz=295 | | | | | | |
| **ABKAR** | **Akbulak array** | **52.92** | **353** | P | **P** | **08 49 33.5** | **+0.1** |
| ABKAR | | | | IAmb | IAmb | 08 49 42.7 | |
| | comp=Z,11nm,1.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **52.92** | **353** | P | **P** | **08 49 33.8** | **+0.4** |
| **SUR** | **Sutherland** | **52.97** | **231** | LR | LR | 09 08 48.0 | |
| | comp=Z,85nm,19.4s,baz=36,slow=32 | | | | | | |
| **XAN** | **Xi'an** | **53.39** | **42** | P | **P** | **08 49 38.3** | **+1.0** |
| XAN | | | | pP | pwP | 08 49 44.8 | +0.8 |
| XAN | | | | sP | sP | 08 49 48.8 | +7.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **53.41** | **327** | P | **P** | **08 49 37.2** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=142,slow=7.3,SNR=2.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **53.41** | **327** | P | **P** | **08 49 37.4** | **0.0** |
| **AKTO** | **Aktyubinsk** | **54.33** | **352** | P | **P** | **08 49 42.8** | **-1.0** |
| | comp=Z,0.4nm,0.2s,baz=186,slow=10,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.51** | **8** | P | **P** | **08 49 45.1** | **+0.1** |
| | baz=202,slow=7.6 | | | | | | |
| KURBB | | | | LR | LR | 09 12 13.7 | |
| | comp=Z,40nm,18.2s,baz=168,slow=35 | | | | | | |
| **KURK** | **Kurchatov** | **54.61** | **8** | P | **P** | **08 49 46.0** | **+0.2** |
| KURK | | | | IAmb | IAmb | 08 49 54.9 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.77** | **11** | P | **P** | **08 50 14.9** | **-0.5** |
| ZAA0 | | | | IAmb | IAmb | 08 50 23.9 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.77** | **11** | P | **P** | **08 50 15.3** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=212,slow=5.3,SNR=7.2 | | | | | | |
| ZALV | | | | LR | LR | 09 15 03.9 | |
| | comp=Z,61nm,19.7s,baz=16,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.77** | **11** | P | **P** | **08 50 14.6** | **-0.7** |
| **SONM** | **Songino Array** | **60.93** | **28** | P | **P** | **08 50 31.5** | **+1.0** |
| | comp=Z,6.4nm,1.1s,baz=218,slow=5.7,SNR=21 | | | | | | |
| SONM | | | | LR | LR | 09 16 47.0 | |
| | comp=Z,210nm,20.3s,baz=230,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **60.93** | **28** | P | **P** | **08 50 31.6** | **+1.1** |
| SONM | | | | IAmb | IAmb | 08 50 40.5 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **VTS** | **Vitosha** | **61.24** | **323** | P | **P** | **08 50 33.6** | **+0.9** |
| VTS | | | | IAmb | IAmb | 08 50 36.7 | |
| | comp=Z,16nm,1.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **63.40** | **333** | P | **P** | **08 50 46.5** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=122,slow=5.6,SNR=4.5 | | | | | | |
| **MAW** | **Mawson** | **64.22** | **182** | LR | LR | 09 11 24.2 | |
| | comp=Z,117nm,20.3s,baz=350,slow=29 | | | | | | |
| **MAW** | **Mawson** | **64.22** | **182** | P | **P** | **08 50 52.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **66.35** | **114** | P | **P** | **08 51 06.3** | **-0.4** |
| | comp=Z,0.6nm,1.0s,baz=190,slow=29,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **66.35** | **114** | P | **P** | **08 51 05.9** | **-0.8** |
| **AS31** | **Alice Springs** | **66.35** | **114** | P | **P** | **08 51 06.2** | **-0.6** |
| AS31 | | | | IAmb | IAmb | 08 51 08.4 | |
| | comp=Z,4.3nm,1.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **66.36** | **110** | P | **P** | **08 51 06.1** | **-0.7** |
| | comp=Z,1.4nm,0.9s,baz=283,slow=5.9,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.36** | **110** | IAmb | IAmb | 08 51 15.5 | |
| | comp=Z,1.5nm,1.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **66.37** | **110** | P | **P** | **08 51 06.1** | **-0.8** |
| **KLMR** | **Klimovskoe** | **67.83** | **345** | *e*P | **P** | **08 51 14.8** | **-0.5** |
| KLMR | | | | AMP | | 08 51 30.5 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **68.53** | **48** | P | **P** | **08 51 19.8** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=258,slow=6.0,SNR=1.7 | | | | | | |
| KSRS | | | | LR | LR | 09 22 16.7 | |
| | comp=Z,45nm,19.1s,baz=235,slow=37 | | | | | | |
| **PABE** | **Paberze** | **69.01** | **335** | P | **P** | **08 51 22.9** | **+0.2** |
| **CASY** | **Casey** | **69.36** | **163** | P | **P** | **08 51 27.2** | **+2.5** |
| **CLL** | **Collm** | **71.86** | **327** | *e*P | **P** | **08 51 42.0** | **+1.7** |
| **DBIC** | **Dimbokro** | **73.69** | **278** | P | **P** | **08 51 49.7** | **-2.2** |
| | comp=Z,2.1nm,0.7s,baz=90,slow=4.0,SNR=2.0 | | | | | | |
| **KLR** | **Kul'dur** | **75.64** | **37** | P | **P** | **08 52 01.1** | **-1.4** |
| | comp=Z,1.6nm,0.9s,baz=281,slow=5.6,SNR=4.4 | | | | | | |
| KLR | | | | LR | LR | 09 28 23.5 | |
| | comp=Z,40nm,18.0s,baz=140,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.29** | **346** | LR | LR | 09 27 42.4 | |
| | comp=Z,50nm,20.1s,baz=64,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.59** | **311** | P | **P** | **08 52 20.1** | **+0.6** |
| | comp=Z,2.1nm,1.0s,baz=88,slow=3.9,SNR=6.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.59** | **311** | IAmb | IAmb | 08 52 28.9 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **80.00** | **25** | LR | LR | 09 28 51.3 | |
| | comp=Z,81nm,18.5s,baz=200,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **86.63** | **180** | LR | LR | 09 24 10.2 | |
| | comp=Z,66nm,20.8s,baz=302,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **86.63** | **180** | P | **P** | **08 53 01.2** | **+0.3** |
| **BORG** | **Borgarnes** | **92.86** | **335** | LR | LR | 09 37 49.9 | |
| | comp=Z,43nm,18.1s,baz=316,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **120.98** | **2** | PKP | **PKPdf** | **08 59 09.0** | **-0.7** |
| | comp=Z,0.3nm,0.9s,baz=357,slow=1.2,SNR=2.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **144.60** | **9** | PKP | **PKPdf** | **08 59 54.0** | **-0.8** |
| | comp=Z,0.6nm,1.0s,baz=34,slow=9.6,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **153.08** | **344** | PKPbc | **PKPbc** | **09 00 15.7** | **-0.3** |
| | comp=Z,1.7nm,1.1s,baz=90,slow=3.8,SNR=3.5 | | | | | | |

*IDC **25** 08:41:21.6±10.0, 10.20N × 87.06W, h0km, mb3.6/5, mb1 3.9/6, mb1mx3.6/40, mbtmp3.7/6, ML3.5/1, Error ellipse: s-maj=192.3km s-min=46.6km az=179.0*
*INET **25** 08:41:37.1±0.5, 11.51N × 87.41W, h15km±999km, MW3.7*

**ISC 25 08:41:33.5±2.9, 11.1N±0.3 × 87.2W±0.1, h35km, n11, σ1s15/11, mb3.3/5, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOMN** | **Momotombo** | **1.48** | **27** | *e*P | **Pn** | **08 41 58.5** | **+0.8** |
| **CNGN** | **Cerro Negro** | **1.50** | **20** | *e*P | **Pn** | **08 41 58.1** | **+0.1** |
| **CRIN** | **San Cristobal** | **1.61** | **6** | *e*P | **Pn** | **08 41 58.5** | **-1.1** |
| **ORTG** | **Ortega, Santa** | **1.88** | **112** | *e*P | Pn | 08 42 12.2 | +9.0 |
| **CSGN** | **Cosiguina Volc** | **1.91** | **350** | *e*P | **Pn** | **08 42 01.6** | **-2.0** |
| **CMIG** | **Matias Romero** | **9.53** | **310** | Pn | **Pn** | **08 43 48.4** | **+0.1** |
| | 0.4nm,0.3s,baz=129,slow=13,SNR=12 | | | | | | |
| CMIG | | | | Sn | **Sn** | **08 45 35.0** | **+0.7** |
| | 0.2nm,0.3s,baz=127,slow=5.0,SNR=1.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **23.77** | **322** | P | **P** | **08 46 44.3** | **+1.3** |
| | 0.7nm,0.7s,baz=135,slow=9.7,SNR=10 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.66** | **7** | P | **P** | **08 46 52.0** | **+0.9** |
| | 5.8nm,0.9s,baz=175,slow=12,SNR=5.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **37.07** | **332** | P | **P** | **08 48 41.3** | **+0.6** |
| | 0.2nm,0.6s,baz=150,slow=11,SNR=2.7 | | | | | | |
| **SCHQ** | **Schefferville** | **46.52** | **16** | P | **P** | **08 49 57.0** | **-0.4** |
| | 2.2nm,0.9s,baz=228,slow=14,SNR

**LDG 25 09:13:10.0±0.1, 50.51N×7.13E, h8km, MI2.2/5, Error ellipse: s-maj=1.7km s-min=1.2km az=10.0, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GIVF** | **Givet** | **1.53** | **255** | *e*Pg | Pb | 09 13 38.7 | +0.1 |
| GIVF | | | | *e*Sg | Sb | 09 13 58.2 | 0.0 |
| | 6.9nm,0.3s | | | | | | |
| **BAIF** | **Baives** | **1.93** | **258** | *e*Pn | Pn | 09 13 41.1 | -2.0 |
| **BAIF** | **Baives** | **1.93** | **258** | *e*Pg | Pb | 09 13 45.4 | +0.1 |
| BAIF | | | | *e*Sn | Sn | 09 14 05.4 | -2.0 |
| BAIF | | | | *e*Sg | Sb | 09 14 10.5 | +1.0 |
| | 3.4nm,0.3s | | | | | | |
| **CDF** | **Champ du Feu** | **2.10** | **177** | *e*Pn | Pn | 09 13 44.4 | -1.1 |
| **CDF** | **Champ du Feu** | **2.10** | **177** | *e*Pg | Pb | 09 13 49.1 | +0.7 |
| CDF | | | | *e*Sn | Sn | 09 14 09.8 | -2.1 |
| CDF | | | | *e*Sg | Sb | 09 14 15.9 | +1.3 |
| | 0.9nm,0.2s | | | | | | |
| **CDF** | **Champ du Feu** | **2.10** | **177** | *e*Sg | Pn | 09 13 44.4 | -1.1 |
| **PAGF** | **Fort de Pagny** | **2.16** | **206** | *e*Pn | Pn | 09 13 45.2 | -1.1 |
| **PAGF** | **Fort de Pagny** | **2.16** | **206** | *e*Pg | Pb | 09 13 50.1 | +0.8 |
| PAGF | | | | *e*Sg | Sb | 09 14 17.7 | +1.5 |
| | 3.8nm,0.3s | | | | | | |
| **SFTF** | **Sexfontaines** | **2.68** | **211** | *e*Pg | Pb | 09 13 59.6 | +1.4 |
| SFTF | | | | *e*Sn | Sn | 09 14 23.8 | -2.3 |
| | 1.1nm,0.2s | | | | | | |

**IDC 25 09:15:00.4±3.9, 55.94N×86.27E, h0km, mb1 3.1/3, mb1mx2.9/52, mbtmp3.1/3, ML2.1/3, Error ellipse: s-maj=34.6km s-min=31.1km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **2.16** | **203** | *i* | | 09 27 40.0 | |
| | baz=21,slow=341,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.16** | **203** | Pn | Pn | 09 15 37.9 | +0.2 |
| | 1.6nm,0.3s,baz=23,slow=16,SNR=22 | | | | | | |
| ZALV | | | | Lg | Lg | 09 16 09.3 | |
| | 3.2nm,0.3s,baz=24,slow=24,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.06** | **224** | Pn | Pn | 09 16 44.7 | -0.2 |
| | 0.1nm,0.3s,baz=38,slow=14,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **9.49** | **197** | Pn | Pn | 09 17 17.9 | -0.3 |
| | 0.0nm,0.3s,baz=18,slow=13,SNR=1.7 | | | | | | |

**IDC 25 09:19:41.9±17.0, 12.90N×141.72E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.0/53, mbtmp3.2/3, 1C-2D, Error ellipse: s-maj=724.1km s-min=33.8km az=78.0, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **33.43** | **193** | P | P | 09 26 22.6 | 0.0 |
| | 0.3nm,0.6s,baz=16,slow=9.3,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **37.13** | **192** | P | P | 09 26 54.4 | -0.1 |
| | 0.3nm,0.8s,baz=17,slow=13,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.87** | **317** | P | P | 09 29 49.5 | 0.0 |
| | 0.1nm,0.6s,baz=107,slow=8.0,SNR=1.7 | | | | | | |
| **AB31** | **Akbulak array** | **74.99** | **318** | ⇑Pn | P | 09 31 25.8 | +0.6 |
| | 1.0nm,1.0s,baz=34,slow=12,SNR=4.2 | | | | | | |
| AB31 | | | | ⇓Pg | PcP | 09 31 42.5 | +3.5 |
| | 0.4nm,0.6s,baz=10,slow=15,SNR=3.4 | | | | | | |
| AB31 | | | | ⇓Lg | Lg | 09 32 51.7 | |
| | 2.5nm,0.7s,baz=19,slow=27,SNR=7.1 | | | | | | |

*KRNET **25** 09:37:26.4±0.1, 40.91N×69.16E, h8km, mb2.8*
**ISC 25 09:37:27.0±2.0, 40.94N±0.05×69.22E±0.09, h16km±14km, n9, σ1§14/16, 16C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAS** | **Tashkent** | **0.39** | **8** | ⇓*i*P | **Pg** | **09 37 34.7** | **-0.3** |
| | baz=14 | | | | | | |
| TAS | | | | ⇓*i*S | **Sb** | **09 37 41.3** | **0.0** |
| | baz=14 | | | | | | |
| **BTK** | **Batken** | **1.50** | **125** | ⇑*i*P | **Pg** | **09 37 55.5** | **-0.3** |
| | baz=23 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **09 38 16.2** | **+0.8** |
| | baz=23 | | | | | | |
| **TRKS** | **Terek-Say** | **1.56** | **67** | ⇑*i*P | **Pg** | **09 37 57.2** | **+0.2** |
| | baz=69 | | | | | | |
| TRKS | | | | ⇑*e*S | **Sg** | **09 38 19.1** | **+1.7** |
| | baz=69 | | | | | | |
| **ARK** | **Arkit** | **2.23** | **66** | ⇑*e*P | **Pb** | **09 38 07.7** | **+0.7** |
| | baz=66 | | | | | | |
| ARK | | | | ⇑*e*S | **Sg** | **09 38 37.9** | **-0.9** |
| | baz=66 | | | | | | |
| **KK09** | **Karatay Array** | **2.38** | **23** | ⇑Pn | **Pg** | **09 38 13.7** | **+1.1** |
| | 1.9nm,0.2s,baz=199,slow=16 | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 09 38 48.0 | |
| | 8.3nm,0.4s,baz=200,slow=29 | | | | | | |
| **DRK** | **Karamyk** | **2.45** | **126** | ⇑*i*P | **Pb** | **09 38 10.3** | **-0.5** |
| | baz=24 | | | | | | |
| DRK | | | | ⇑*i*S | **Sb** | **09 38 42.5** | **+1.6** |
| | baz=24 | | | | | | |
| **OHH** | **Osh** | **2.74** | **97** | ⇑*i*P | **Pb** | **09 38 14.2** | **-1.4** |
| | baz=97 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **09 38 49.6** | **+0.7** |
| | baz=97 | | | | | | |
| **MNAS** | **Manas** | **2.90** | **57** | ⇑*i*P | **Pb** | **09 38 17.3** | **-1.1** |
| | baz=57 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **09 38 54.1** | **+0.4** |
| | baz=57 | | | | | | |
| **AAK** | **Ala-Archa** | **4.29** | **65** | ⇑Pg | **Pg** | **09 38 47.5** | **-1.6** |
| | 2.4nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 09 39 44.9 | |
| | 2.5nm,0.8s | | | | | | |

*EAF **25** 09:40:51.1±1.5, 25.89S×29.27E, h10km, MD3.5*
**BUL 25 09:40:51.2±1.0, 25.90S×29.25E, h10km, MD3.7, 2D, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.67** | **99** | *i*P | Pn | 09 41 32.8 | -1.4 |
| CNG | | | | *i*S | Sn | 09 42 06.0 | -0.7 |
| **CNG** | **Changalane** | **2.67** | **99** | *i*P | Pn | 09 41 32.8 | -1.4 |
| CNG | | | | *i*S | Sn | 09 42 06.0 | -0.7 |
| **MOPA** | **Mopani** | **3.07** | **40** | *i*P | Pn | 09 41 38.2 | -1.6 |
| MOPA | | | | *i*S | Sn | 09 42 12.6 | -4.0 |
| **MOPA** | **Mopani** | **3.07** | **40** | *i*P | Pn | 09 41 38.2 | -1.6 |
| MOPA | | | | *i*S | Sn | 09 42 12.6 | -4.0 |
| **LBTB** | **Lobatse** | **3.42** | **284** | *i*P | Pn | 09 41 44.3 | -0.4 |
| LBTB | | | | *i*S | Sn | 09 42 23.4 | -2.0 |
| **LBTB** | **Lobatse** | **3.42** | **284** | *i*P | Pn | 09 41 44.3 | -0.4 |
| LBTB | | | | *i*S | Sn | 09 42 23.4 | -2.0 |
| **MSNA** | **Messina** | **3.60** | **11** | *i*P | Pn | 09 41 46.4 | -0.9 |
| MSNA | | | | ⇓*i*S | Sn | 09 42 27.4 | -2.5 |
| **MSNA** | **Messina** | **3.60** | **11** | *i*P | Pn | 09 41 46.4 | -0.9 |
| MSNA | | | | ⇓*i*S | Sn | 09 42 27.4 | -2.5 |
| **BOSA** | **Boshof** | **4.47** | **232** | *i*P | Pn | 09 41 59.2 | 0.0 |
| BOSA | | | | *i*S | Sn | 09 42 47.5 | -3.8 |
| **BOSA** | **Boshof** | **4.47** | **232** | *i*P | Pn | 09 41 59.2 | 0.0 |
| BOSA | | | | *i*S | Sn | 09 42 47.5 | -3.8 |
| **MATP** | **Matopo** | **5.49** | **353** | *i*P | Pn | 09 42 12.8 | -0.4 |
| MATP | | | | *i*S | Sn | 09 43 12.0 | -4.5 |
| **MATP** | **Matopo** | **5.49** | **353** | *i*P | Pn | 09 42 12.8 | -0.4 |
| MATP | | | | *i*S | Sn | 09 43 12.0 | -4.5 |
| **BLWY** | **Bulawayo** | **5.76** | **354** | *i*P | Pn | 09 42 16.6 | -0.3 |
| BLWY | | | | *i*S | Sn | 09 43 17.8 | -5.4 |
| **BLWY** | **Bulawayo** | **5.76** | **354** | *i*P | Pn | 09 42 16.6 | -0.3 |
| BLWY | | | | *i*S | Sn | 09 43 17.8 | -5.4 |

*TUL **25** 09:55:31.3±1.2, 35.78N±0.01×97.49W±0.02, h7km±5km, ML3.0, mb_Lg2.4/18(NEIC), Error ellipse: s-maj=1.9km s-min=1.4km az=74.0*
**NEIC 25 09:55:31.3±0.8, 35.78N±0.009×97.49W±0.02, h11km±4km, Error ellipse: s-maj=2.5km s-min=1.3km az=87.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK001** | **Jones High Sch** | **0.27** | **143** | Pg | Pg | 09 55 37.0 | 0.0 |
| OK001 | | | | Sg | Sg | 09 55 41.1 | +0.4 |
| **OK005** | **Luther M Schoo** | **0.27** | **117** | Pg | Pg | 09 55 37.0 | 0.0 |
| OK005 | | | | Sg | Sg | 09 55 41.1 | +0.5 |
| **OKCFA** | **Oklahoma City** | **0.36** | **175** | | Pg | 09 55 38.6 | 0.0 |
| OKCFA | | | | | Sg | 09 55 43.8 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.38** | **173** | Pg | Pg | 09 55 38.7 | -0.1 |
| OKCSW | | | | Sg | Sg | 09 55 44.3 | +0.5 |
| **FNO** | **Franklin** | **0.53** | **172** | Pg | Pg | 09 55 41.2 | -0.4 |
| **W35A** | **Tecumseh** | **0.80** | **141** | Pg | Pg | 09 55 46.3 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.21** | **193** | | Pb | 09 55 54.3 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.36** | **297** | Pn | Pn | 09 55 56.3 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.38** | **35** | | Pn | 09 55 56.6 | 0.0 |
| **TUL1** | **Leonard** | **1.39** | **84** | | Pn | 09 55 56.1 | -0.6 |
| TUL1 | | | | IAmb_Lg | | 09 56 17.4 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.48** | **226** | Pn | Pn | 09 55 58.3 | +0.3 |
| **X37A** | **Clayton** | **2.10** | **124** | Pn | Pn | 09 56 07.5 | +1.0 |
| **HHAR** | **Hobbs** | **2.92** | **79** | Pn | Pn | 09 56 18.4 | +0.6 |
| **W39A** | **Magazine** | **3.08** | **100** | Pn | Pn | 09 56 20.2 | +0.3 |
| **Z38A** | **Mt. Pleasant** | **3.26** | **140** | Pn | Pn | 09 56 22.2 | -0.2 |
| **KSU1** | **Kansas State U** | **3.39** | **12** | IAmb_Lg | | 09 57 24.9 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.44** | **110** | IAmb_Lg | | 09 57 25.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.54** | **257** | IAmb_Lg | | 09 57 24.9 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.62** | **210** | IAmb_Lg | | 09 57 28.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.78** | **180** | Pn | Pn | 09 56 29.5 | 0.0 |
| **U40A** | **Yellville** | **3.80** | **80** | Pn | Pn | 09 56 31.1 | +1.2 |
| U40A | | | | IAmb_Lg | | 09 57 38.9 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.85** | **59** | Pn | Pn | 09 56 31.0 | +0.4 |
| **435B** | **Jarrell** | **4.98** | **181** | IAmb_Lg | | 09 58 15.4 | |
| | comp=Z,11nm,0.8s | | | | | | |

*IDC **25** 09:58:09.2±1.5, 7.48S×154.95E, h0km, mb3.7/8, mb1 3.9/9, mb1mx3.7/41, mbtmp3.7/9, ML2.3/1, MS2.7/1, Ms1 2.7/1, ms1mx2.3/59, Error ellipse: s-maj=44.7km s-min=23.5km az=127.0*
**ISC 25 09:58:14.3±1.2, 7.45S±0.2×154.96E±0.1, h31km, n12, σ0§79/12, mb3.7/8, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRVT** | **Keravat (AS076** | **4.18** | **317** | Pn | **Pn** | **09 59 15.3** | **-0.8** |
| KRVT | | | | Sn | Sn | 09 59 56.9 | -7.0 |
| **HNR** | **Honiara** | **5.40** | **112** | LR | LR | 10 01 35.0 | |
| | comp=Z,77nm,19.7s,baz=9.5,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **7.91** | **255** | Pn | **Pn** | **10 00 07.0** | **-0.3** |
| | 2.5nm,0.3s,baz=57,slow=11,SNR=5.1 | | | | | | |
| PMG | | | | Sn | **Sn** | **10 01 36.4** | **+0.6** |
| | 0.6nm,0.3s,baz=267,slow=15,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.51** | **236** | P | **P** | **10 03 20.9** | **-0.9** |
| | 1.4nm,0.7s,baz=58,slow=9.5,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **25.84** | **229** | P | **P** | **10 03 42.5** | **-0.8** |
| | 0.2nm,0.4s,baz=58,slow=9.2,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **69.61** | **327** | P | **P** | **10 09 22.0** | **+1.2** |
| | 0.4nm,0.5s,baz=145,slow=5.7,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.63** | **319** | P | **P** | **10 10 40.3** | **+0.3** |
| | 0.9nm,0.9s,baz=100,slow=4.3,SNR=6.4 | | | | | | |
| **ILAR** | **Eielson Array** | **83.78** | **22** | P | **P** | **10 10 40.9** | **+0.7** |
| | 0.6nm,0.8s,baz=250,slow=5.9,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.45** | **326** | P | **P** | **10 10 43.6** | **-0.2** |
| | 0.7nm,0.5s,baz=123,slow=7.3,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **87.11** | **322** | P | **P** | **10 10 56.8** | **-0.3** |
| | 0.2nm,0.7s,baz=101,slow=5.0,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.73** | **28** | P | **P** | **10 11 40.8** | **-0.8** |
| | 0.1nm,0.4s,baz=267,slow=4.6,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.02** | **284** | PKPbc | **PKiKP** | **10 18 10.4** | **+0.4** |
| | 0.3nm,0.8s,baz=108,slow=1.5,SNR=4.1 | | | | | | |

**NEIC 25 10:17:10.7±0.6, 35.78N±0.01×97.48W±0.01, h8km±1km, mb_Lg2.4/15, Error ellipse: s-maj=1.7km s-min=1.5km az=45.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.27** | **118** | Pg | Pg | 10 17 15.7 | -0.3 |
| OK005 | | | | Sg | Sg | 10 17 19.9 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.36** | **176** | | Pg | 10 17 17.3 | -0.6 |
| OKCFA | | | | Sg | Sg | 10 17 22.6 | -0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.38** | **175** | Pg | Pg | 10 17 17.5 | -0.5 |
| OKCSW | | | | Sg | Sg | 10 17 23.1 | +0.2 |
| **FNO** | **Franklin** | **0.53** | **173** | Pg | Pg | 10 17 20.2 | -0.7 |
| FNO | | | | Sg | Sg | 10 17 27.7 | 0.0 |
| **W35A** | **Tecumseh** | **0.80** | **142** | Pg | Pg | 10 17 25.0 | -1.0 |
| **X34A** | **Smith Ranch, M** | **1.21** | **194** | Pg | Pb | 10 17 33.0 | -0.9 |
| **U32A** | **Winter Ranch,** | **1.37** | **296** | | Pn | 10 17 34.6 | -1.6 |
| **T35A** | **Sooner Cattle** | **1.38** | **34** | | Pn | 10 17 35.1 | -1.2 |
| **TUL1** | **Leonard** | **1.38** | **84** | | Pn | 10 17 34.6 | -1.7 |
| TUL1 | | | | IAmb_Lg | | 10 17 56.1 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.49** | **226** | | Pn | 10 17 36.9 | -0.9 |
| **X37A** | **Clayton** | **2.10** | **124** | Pn | Pn | 10 17 46.0 | -0.2 |
| X37A | | | | IAmb_Lg | | 10 18 22.6 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **2.91** | **79** | Pn | Pn | 10 17 57.5 | +0.1 |
| **W39A** | **Magazine** | **3.07** | **100** | Pn | Pn | 10 17 58.6 | -1.0 |
| **KSU1** | **Kansas State U** | **3.39** | **12** | Pn | Pn | 10 18 03.8 | -0.1 |
| KSU1 | | | | IAmb_Lg | | 10 19 03.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.43** | **110** | Pn | Pn | 10 18 04.5 | +0.1 |
| **CBKS** | **Cedar Bluff** | **3.52** | **330** | Pn | Pn | 10 18 05.7 | -0.1 |
| **U40A** | **Yellville** | **3.79** | **80** | IAmb_Lg | | 10 19 19.3 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.02** | **107** | IAmb_Lg | | 10 19 22.7 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.42** | **70** | IAmb_Lg | | 10 19 29.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.86** | **57** | Pn | Pn | 10 18 22.7 | -1.5 |
| **435B** | **Jarrell** | **4.98** | **181** | IAmb_Lg | | 10 19 55.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **5.75** | **286** | IAmb_Lg | | 10 20 23.3 | |
| | comp=Z,7.7nm,1.1s | | | | | | |

*IDC **25** 10:17:27.1±1.2, 28.98N×51.43E, h0km, mb3.8/15, mb1 3.9/18, mb1mx3.6/56, mbtmp3.8/18, ML3.4/3, Error ellipse: s-maj=25.1km s-min=19.7km az=164.0*
*TEH **25** 10:17:29.1, 29.08N×51.46E, h8km, ML3.6*
**ISC 25 10:17:29.9±0.6, 29.04N±0.04×51.46E±0.04, h17km, n50, σ1§64/53, mb3.9/15, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AHBU** | **AHRAM** | **0.22** | **221** | *e*Pg | **Pg** | **10 17 34.2** | **-0.9** |
| **KAZ1** | **Kazerun** | **0.61** | **15** | *e*Pg | **Pg** | **10 17 39.8** | **-2.2** |
| KAZ1 | | | | *e*Sg | **Sg** | **10 17 50.2** | **0.0** |
| **SHI** | **Shiraz** | **1.10** | **56** | *e*Pg | **Pb** | **10 17 50.1** | **-0.5** |
| SHI | | | | *e*Sg | **Sn** | **10 18 05.3** | **-0.3** |
| **QIR1** | **Qir** | **1.50** | **111** | *e*Pg | **Pg** | **10 17 58.4** | **-0.4** |
| QIR1 | | | | *e*Sg | **Sg** | **10 18 20.3** | **+2.0** |
| **GHIR** | **Ghir-Karzin** | **1.54** | **119** | *e*Pg | **Pg** | **10 17 59.0** | **-0.5** |
| **ABEH** | **Behbahan** | **1.88** | **326** | *e*Pg | **Pg** | **10 18 04.6** | **+0.8** |
| **JHRM** | **Jahrom** | **1.93** | **105** | *e*Pg | **Pg** | **10 18 06.8** | **-0.2** |
| **KLNJ** | **Kolanjah** | **1.97** | **3** | *e*Pn | **Pb** | **10 18 04.5** | **-1.0** |
| KLNJ | | | | *e* | | 10 18 44.6 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **LMD1** | **Lamerd** | **2.26** | **138** | *e*Pn | **Pb** | **10 18 10.5** | **+0.2** |
| LMD1 | | | | *e* | | 10 19 10.0 | |
| | comp=Z,6μm,0.7s | | | | | | |
| **IBRJ** | **Brojen** | **2.87** | **357** | *e*Pn | **Pn** | **10 18 16.6** | **+1.5** |
| **IRAM** | **Rameshieh** | **2.88** | **16** | *e*Pn | **Pn** | **10 18 16.8** | **+1.6** |
| **LAR1** | **LAR** | **2.91** | **117** | *e* | Sg | 10 19 21.6 | +18 |
| | comp=E,3μm,0.8s | | | | | | |
| **AMIS** | **Naft Sefid** | **3.23** | **325** | *e*Pn | **Pn** | **10 18 21.3** | **+1.5** |
| **IMEH** | **Mehriz** | **3.60** | **49** | *e*Pn | **Pn** | **10 18 27.7** | **+2.6** |
| IMEH | | | | *e* | | 10 19 44.6 | |
| | comp=Z,502nm,0.8s | | | | | | |
| **IPIR** | **Pirpir** | **3.67** | **352** | *e*Pn | **Pn** | **10 18 27.8** | **+1.6** |
| **IZEF** | **Zefreh** | **3.92** | **11** | *e*Pn | **Pn** | **10 18 31.2** | **+1.6** |
| **NASN** | **Na'in** | **3.93** | **17** | *e*Pn | **Pn** | **10 18 30.8** | **+1.1** |
| **IKLH** | **Kolahrood** | **4.27** | **1** | *e*Pn | **Pn** | **10 18 35.9** | **+1.5** |
| **YZKH** | **Yazd** | **4.30** | **38** | *e*Pn | **Pn** | **10 18 36.4** | **+1.8** |
| **KHGB** | **Koh Gabri** | **4.56** | **72** | *e*Pn | **Pn** | **10 18 40.5** | **+2.1** |
| KHGB | | | | *e* | | 10 18 58.9 | |
| | comp=Z,383nm,0.9s | | | | | | |
| **ANAR** | **Anarak** | **4.58** | **25** | *e*Pn | **Pn** | **10 18 40.0** | **+1.5** |
| **KRBR** | **Kerman** | **4.71** | **77** | *e*Pn | **Pn** | **10 18 42.8** | **+2.3** |
| **KHMZ** | **Khomeyn** | **4.86** | **345** | *e*Pn | **Pn** | **10 18 44.8** | **+2.3** |
| **KRSH** | **Karshahi** | **4.95** | **7** | *e*Pn | **Pn** | **10 18 45.4** | **+1.7** |
| **ISFB** | **Sefidab** | **5.34** | **7** | *e*Pn | **Pn** | **10 18 50.2** | **+1.2** |
| **GHVR** | **GHOM** | **5.43** | **359** | *e*Pn | **Pn** | **10 18 52.0** | **+1.8** |
| **IDOB** | **Doab** | **5.51** | **330** | *e*Pn | **Pn** | **10 18 53.6** | **+2.3** |
| **TPRV** | **Parvadeh(Tabas** | **6.00** | **47** | *e*Pn | **Pn** | **10 18 59.5** | **+1.6** |
| **TNSJ** | **Nastanj** | **6.59** | **41** | *e*Pn | **Pn** | **10 19 08.3** | **+2.2** |
| **TKDS** | **Koohdasht(Taba** | **6.65** | **45** | *e*Pn | **Pn** | **10 19 08.6** | **+1.6** |
| **IGHG** | **Ghaleghazi** | **6.72** | **323** | *e*Pn | **Pn** | **10 19 10.4** | **+2.3** |
| **BSRN** | **Basiran** | **7.23** | **64** | *e*Pn | **Pn** | **10 19 16.9** | **+2.0** |
| **WSAR** | **Wadi Sarin** | **8.65** | **130** | Pn | **Pn** | **10 19 31.9** | **-2.4** |
| | comp=Z,0.5nm,0.3s,baz=288,slow=6.3,SNR=2.1 | | | | | | |
| WSAR | | | | Sn | **Sn** | **10 21 05.8** | **-5.7** |
| | comp=Z,0.5nm,0.3s,baz=54,slow=24,SNR=1.5 | | | | | | |
| **KBZ** | **Khabaz** | **16.19** | **337** | Pn | **P** | **10 21 19.8** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=163,slow=8.7,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **18.14** | **311** | P | **Pn** | **10 21 41.0** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=135,slow=14,SNR=4.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.94** | **11** | P | **P** | **10 22 22.6** | **+0.1** |
| | comp=Z,0.7nm,0.3s,baz=250,slow=4.0,SNR=2.9 | | | | | | |
| **IDI** | **Anoyia** | **23.30** | **292** | P | **P** | **10 22 38.0** | **+0.9** |
| | comp=Z,3.6nm,0.8s,baz=54,slow=17,SNR=2.2 | | | | | | |
| **BELG** | **Belogornoye** | **23.51** | **354** | P | **P** | **10 22 39.3** | **+0.5** |
| | comp=Z,3.8nm,0.6s,baz=163,slow=20,SNR=1.8 | | | | | | |
| **MLR** | **Muntele Rosu** | **25.96** | **316** | P | **P** | **10 23 01.7** | **+0.1** |
| | comp=Z,1.2nm,0.6s,baz=123,slow=17,SNR=2.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **27.36** | **328** | P | **P** | **10 23 12.3** | **-1.7** |
| | comp=Z,0.3nm,0.3s,baz=128,slow=6.8,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.67** | **36** | P | **P** | **10 23 34.7** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=230,slow=8.6,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.83** | **45** | P | **P** | **10 23 37.2** | **+1.1** |
| | comp=Z,0.4nm,0.9s,baz=194,slow=3.7,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **36.52** | **340** | P | **P** | **10 24 33.3** | **-0.9** |
| | comp=Z,4.8nm,1.2s,baz=162,slow=15,SNR=1.1 | | | | | | |
| **HFS** | **Hagfors** | **40.14** | **332** | P | **P** | **10 25 04.3** | **-0.4** |
| | comp=Z,1.9nm,0.7s,baz=153,slow=9.7,SNR=2.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **41.66** | **332** | P | **P** | **10 25 16.4** | **-0.8** |
| | comp=Z,0.2nm,0.5s,baz=126,slow=7.2,SNR=1.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.20** | **347** | P | **P** | **10 25 29.9** | **+0.3** |
| | comp=Z,3.5nm,1.0s,baz=164,slow=10,SNR=2.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.69** | **262** | P | **P** | **10 26 12.7** | **-1.0** |
| | comp=Z,0.7nm,0.4s,baz=55,slow=7.9,SNR=10 | | | | | | |
| **DBIC** | **Dimbokro** | **57.44** | **259** | P | **P** | **10 27 18.4** | **+0.2** |
| | comp=Z,3.5nm,0.8s,baz=31,slow=2.7,SNR=3.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.25** | **37** | P | **P** | **10 29 18.4** | **+1.0** |
| | comp=Z,2.2nm,0.8s,baz=326,slow=12,SNR=6.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.11** | **354** | P | **P** | **10 30 19.4** | **+0.2** |
| | comp=Z,0.1nm,0.4s,baz=16,slow=6.0,SNR=2.4 | | | | | | |

*NEIC **25** 10:23:59.5±1.2, 20.20S±0.2×177.4W±0.1, h539km±9km, mb4.5/23, Error ellipse: s-maj=25.3km s-min=16.4km az=153.0*
*IDC **25** 10:24:00.0±1.5, 19.84S×177.50W, h549km±17km, mb3.5/12, mb1 3.7/16, mb1mx3.5/36, mbtmp4.4/16, Error ellipse: s-maj=24.0km s-min=13.2km az=148.0*
**ISC 25 10:23:58.8±0.6, 20.08S±0.1×177.30W±0.09, h550km, n91, σ1§78/58, mb4.4/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.94** | **296** | P | **P** | **10 25 29.0** | **+0.8** |
| | 1.7nm,0.3s,baz=158,slow=5.1,SNR=4.5 | | | | | | |
| **NIUE** | **Niue** | **7.01** | **84** | P | **P** | **10 25 47.1** | **+0.2** |
| **AFI** | **Afiamalu** | **8.02** | **42** | P | **P** | **10 25 56.4** | **-0.4** |
| | 6.0nm,0.3s,baz=227,slow=18,SNR=6.4 | | | | | | |
| AFI | | | | S | **S** | **10 27 28.9** | **-4.7** |
| | 4.9nm,0.3s,baz=180,slow=20,SNR=6.1 | | | | | | |
| **PINNC** | **Pines Island,** | **14.46** | **257** | P | **P** | **10 27 02.1** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.32** | **259** | P | **P** | **10 27 10.6** | **-1.2** |
| | 0.5nm,0.3s,baz=77,slow=17,SNR=8.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.32** | **259** | P | **P** | **10 27 11.2** | **-0.6** |
| DZM | | | | IAmb | IAmb | 10 27 16.0 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.29** | **265** | P | **P** | **10 27 31.4** | **+1.2** |
| **HAZ** | **Te Kaha** | **18.23** | **193** | P | **P** | **10 27 39.7** | **+1.1** |
| **ETAZ** | **East Tamaki Re** | **18.23** | **200** | P | **P** | **10 27 40.7** | **+2.0** |
| **AWAZ** | **Awhitu Peninsu** | **18.43** | **201** | P | **P** | **10 27 43.2** | **+2.8** |
| **RUGZ** | **Raukumara Rang** | **18.45** | **193** | P | **P** | **10 27 38.2** | **-2.6** |
| **MWZ** | **Matawai** | **18.84** | **193** | P | **P** | 10 27 38.8 | -5.4 |
| **URZ** | **Urewera** | **18.86** | **194** | P | **P** | **10 27 45.3** | **+1.0** |
| | comp=Z,1.8nm,0.3s,baz=85,slow=11,SNR=7.5 | | | | | | |
| **URZ** | **Urewera** | **18.86** | **194** | IAmb | IAmb | 10 27 54.6 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **18.86** | **194** | P | P | 10 27 36.3 | -8.0 |
| **TKGZ** | **Te Karaka** | **18.88** | **192** | P | P | **10 27 41.5** | **-3.0** |
| **RAGZ** | **Rawiri** | **19.02** | **193** | P | P | 10 27 39.1 | -6.7 |
| **MUGZ** | **Murupara** | **19.14** | **194** | P | P | 10 27 36.6 | -10 |
| **RIGZ** | **Rimuhau** | **19.15** | **192** | P | P | **10 27 42.1** | **-5.0** |
| **RTZ** | **Ruatahuna** | **19.23** | **194** | P | P | 10 27 37.9 | -10 |
| **SNGZ**

**WRAB Tennant Creek 45.32 261 P P 10 31 27.7 -0.5**
WRAB IAmb IAmb 10 31 28.4
comp=Z,22nm,1.2s
**WRA Warramunga Arr 45.33 261 P P 10 31 27.7 -0.6**
comp=Z,3.4nm,0.2s,baz=98,slow=7.0,SNR=164
**WRA Warramunga Arr 45.33 261 P P 10 31 27.2 -1.1**
**MTN Manton Dam 49.82 270 P P 10 32 01.1 -0.8**
MTN IAmb IAmb 10 32 02.2
comp=Z,12nm,0.7s
**FORT Forrest 50.11 246 P P 10 32 03.3 -0.5**
FORT IAmb IAmb 10 32 04.3
comp=Z,15nm,0.8s
**KNRA Kununurra 51.35 266 P P 10 32 12.7 -0.5**
**SIJI Sorong 53.74 284 P P 10 32 30.1 -0.1**
comp=Z,14nm,0.7s,baz=71,slow=7.2,SNR=5.4
**FITZ Fitzroy Crossi 53.75 262 P P 10 32 29.6 -0.7**
comp=Z,2.8nm,0.6s,baz=158,slow=3.9,SNR=12
**FITZ Fitzroy Crossi 53.75 262 P P 10 32 29.6 -0.7**
**NVAR Mina Array Bea 80.19 43 P P 10 35 15.4 +2.8**
comp=Z,0.3nm,0.7s,baz=215,slow=7.7,SNR=2.5
**TXAR Lajitas Array 86.22 57 P P 10 35 44.6 +1.9**
comp=Z,0.3nm,0.6s,baz=218,slow=6.9,SNR=4.8
**ILAR Eielson Array 87.66 13 P P 10 35 48.3 -0.2**
comp=Z,0.6nm,0.7s,baz=222,slow=5.9,SNR=6.1
**PDAR Pinedale Array 88.13 43 P P 10 35 53.6 +2.1**
comp=Z,0.3nm,0.5s,baz=184,slow=5.9,SNR=4.3
**CMAR Chiang Mai Arr 90.56 289 P P 10 36 03.5 +0.4**
comp=Z,0.8nm,0.3s,baz=90,slow=5.4,SNR=1.6
**GERES GERESS Array B 149.87 345** PKPbc **PKPbc 10 42 47.3 +0.1**
comp=Z,0.2nm,0.3s,baz=318,slow=1.3,SNR=3.8

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*IDC **25** 10:52:55.8±0.5, 3.˚53S×68.˚27E, h0km, mb4.4/36, mb1 4.4/36, mb1mx4.3/56, mbtmp4.4/36, MS4.2/66, Ms1 4.2/66, ms1mx4.1/79, Error ellipse: s-maj=14.1km s-min=11.4km az=172.0*

*NEIC **25** 10:52:58.0±2.4, 3.˚48S±0.˚09×68.˚37E±0.˚09, h9km±3km, mb4.9/58, Error ellipse: s-maj=12.9km s-min=11.8km az=135.0*

*GCMT **25** 10:53:00.0±0.2, 3.˚56S±0.˚01×68.˚33E±0.˚01, h12km, MW5.0/119, Moment Tensor Solution. s45,c58; s119,c195; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-4.58±.08; Mθθ3.46±.07; Mϕϕ1.12±.07; Mrθ1.32±.25; Mθϕ-1.87±.06; Mrϕ0.62±.29; Best double couple: Mo4.75700×10^16^ NP1:ϕs132.00000°, δ41.00000°, λ-70.00000°. NP2:ϕs286.00000°, δ52.00000°, λ-107.00000°. Principal axes: T 4.5790, Plg6.0000°, Azm28.0000°; N 0.3560, Plg13.0000°, Azm296.0000°; P -4.9350, Plg76.0000°, Azm140.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 25 10:52:58.0±0.4, 3.˚50Ss±0.˚06×68.˚30Ee±0.˚05, h12km, n214, σ1821/191, mb4.8/96, MS4.3/80, 3C-4D, Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DGAR** | **Diego Garcia** | **5.67** | **133** | Pn | **Pn** | **10 54 21.6** | **-0.5** |
| **KAAM** | **Kaadhehdhoo** | **6.15** | **50** | Pn | **Pn** | **10 54 26.1** | **-2.5** |
| **PALK** | **Pallekele** | **16.36** | **49** | Pn | **Pn** | **10 56 45.1** | **-2.7** |
| | 0.3nm,0.3s,baz=258,slow=16,SNR=2.3 | | | | | | |
| PALK | | | | LR | LR | 11 01 39.4 | |
| | comp=Z,3μm,20.3s,baz=328,slow=32 | | | | | | |
| **URV** | **Uravakonda** | **20.37** | **26** | *eP* | **P** | **10 57 35.5** | **+0.8** |
| URV | | | | IVMs_BB | IVMs_BB | 11 03 20.5 | |
| | comp=Z,312nm,24.9s | | | | | | |
| **SKHT** | **Srikalahasti** | **20.53** | **33** | *eP* | **P** | **10 57 37.1** | **+0.6** |
| SKHT | | | | IVMs_BB | IVMs_BB | 11 04 09.8 | |
| | comp=Z,660nm,15.0s | | | | | | |
| **SOCY** | **Socotra** | **21.10** | **318** | P | **P** | **10 57 46.8** | **+4.0** |
| SOCY | | | | IAmb | IAmb | 10 57 59.3 | |
| | comp=Z,57nm,1.5s | | | | | | |
| **RCLA** | **Racherla** | **21.59** | **29** | *eP* | **P** | **10 57 48.0** | **+0.1** |
| RCLA | | | | IVMs_BB | IVMs_BB | 11 04 20.1 | |
| | comp=Z,569nm,17.7s | | | | | | |
| **SRLM** | **Srisailam** | **22.12** | **28** | *eP* | **P** | **10 57 53.9** | **+0.3** |
| SRLM | | | | IVMs_BB | IVMs_BB | 11 04 55.6 | |
| | comp=Z,307nm,17.1s | | | | | | |
| **ADKI** | **Addanki** | **22.42** | **31** | *eP* | **P** | **10 57 57.1** | **+0.2** |
| ADKI | | | | IVMs_BB | IVMs_BB | 11 04 58.0 | |
| | comp=Z,362nm,17.4s | | | | | | |
| **NJS** | **Nagarjunasagar** | **22.70** | **28** | *eP* | **P** | **10 58 00.7** | **+0.8** |
| NJS | | | | IVMs_BB | IVMs_BB | 11 05 30.5 | |
| | comp=Z,294nm,15.6s | | | | | | |
| **KLRI** | **Killari** | **22.94** | **21** | *eP* | **P** | **10 58 03.1** | **+0.7** |
| KLRI | | | | IVMs_BB | IVMs_BB | 11 05 16.0 | |
| | comp=Z,520nm,18.4s | | | | | | |
| **HYBB** | **Hyderabad (bro** | **23.12** | **26** | *eP* | **P** | **10 58 04.5** | **+0.3** |
| HYBB | | | | IVMsBB | | 11 05 14.5 | |
| | comp=Z,297nm,20.7s | | | | | | |
| **CUPL** | **Choutuppal** | **23.17** | **27** | *eP* | **P** | **10 58 05.5** | **+0.8** |
| CUPL | | | | IVMs_BB | IVMs_BB | 11 05 17.1 | |
| | comp=Z,303nm,18.3s | | | | | | |
| **MYLAV** | **Mylavaram** | **23.52** | **31** | *eP* | **P** | **10 58 08.9** | **+0.7** |
| MYLAV | | | | IVMs_BB | IVMs_BB | 11 05 22.4 | |
| | comp=Z,279nm,20.1s | | | | | | |
| **SRSP** | **Sriramsagar** | **24.38** | **24** | *eP* | **P** | **10 58 17.3** | **+0.9** |
| **PVM** | **Polavaram** | **24.46** | **32** | *eP* | **P** | **10 58 17.6** | **+0.6** |
| PVM | | | | IVMs_BB | IVMs_BB | 11 06 11.8 | |
| | comp=Z,491nm,19.8s | | | | | | |
| **RPR** | **Rampur** | **24.72** | **26** | *eP* | **P** | **10 58 20.1** | **+0.7** |
| RPR | | | | IVMs_BB | IVMs_BB | 11 06 00.1 | |
| | comp=Z,271nm,24.9s | | | | | | |
| **CHLP** | **Challavaripeta** | **26.82** | **35** | *eP* | **P** | **10 58 37.7** | **-0.7** |
| CHLP | | | | IVMs_BB | IVMs_BB | 11 08 43.3 | |
| | comp=Z,225nm,15.9s | | | | | | |
| **WSAR** | **Wadi Sarin** | **28.20** | **341** | LR | LR | 11 07 58.8 | |
| | comp=Z,863nm,18.8s,baz=168,slow=32 | | | | | | |
| **ATD** | **Arta Tunnel** | **29.39** | **301** | LR | LR | 11 09 58.8 | |
| | comp=Z,84nm,18.1s,baz=128,slow=35 | | | | | | |
| **KIBK** | **Kibwezi** | **30.24** | **271** | P | **P** | **10 59 09.9** | **+0.7** |
| KIBK | | | | IAmb | IAmb | 10 59 19.0 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **UOSS** | **Minazif** | **30.62** | **338** | P | **P** | **10 59 13.3** | **+1.0** |
| UOSS | | | | IAmb | IAmb | 10 59 20.5 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **31.11** | **274** | P | **P** | **10 59 16.0** | **-1.0** |
| | comp=Z,1.1nm,0.4s,baz=30,slow=22,SNR=2.9 | | | | | | |
| KMBO | | | | LR | LR | 11 09 22.5 | |
| | comp=Z,289nm,21.5s,baz=92,slow=32 | | | | | | |
| **PSI** | **Prapat** | **31.24** | **79** | LR | LR | 11 09 34.2 | |
| | comp=Z,993nm,22.0s,baz=263,slow=32 | | | | | | |
| **KULM** | **Kulim** | **33.47** | **75** | P | **P** | **10 59 38.4** | **+0.9** |
| **LODK** | **Lodwar** | **33.63** | **281** | P | **P** | **10 59 41.3** | **+2.4** |
| LODK | | | | IAmb | IAmb | 10 59 49.8 | |
| | comp=Z,37nm,1.5s | | | | | | |
| **KOLN** | **Koldanda** | **34.41** | **24** | *eP* | **P** | **10 59 46.0** | **+0.3** |
| **PYUN** | **Piuthan** | **34.46** | **23** | *eP* | **P** | **10 59 46.3** | **+0.2** |
| **RAYN** | **Ar Rayn** | **34.86** | **322** | P | **P** | **10 59 49.1** | **-0.3** |
| **DMN** | **Daman** | **34.92** | **27** | *eP* | **P** | **10 59 50.9** | **+0.8** |
| | comp=Z,44nm,1.0s | | | | | | |
| **DANN** | **Dangsing** | **34.99** | **24** | *eP* | **P** | **10 59 51.1** | **+0.3** |
| | comp=Z,112nm,1.5s | | | | | | |
| **PKI** | **Pulchoki** | **35.02** | **27** | *eP* | **P** | **10 59 51.4** | **+0.3** |
| | comp=Z,53nm,1.3s | | | | | | |
| **PKIN** | **Phulchoki** | **35.02** | **27** | *eP* | **P** | **10 59 51.3** | **+0.3** |
| **GKN** | **Gorkha** | **35.05** | **26** | *eP* | **P** | **10 59 51.5** | **+0.3** |
| **KKN** | **Kakani** | **35.15** | **27** | *eP* | **P** | **10 59 52.5** | **+0.4** |
| **ODAN** | **Odare** | **35.38** | **30** | *eP* | **P** | **10 59 55.1** | **+1.1** |
| **JIRN** | **Jiri** | **35.46** | **28** | *eP* | **P** | **10 59 55.5** | **+0.6** |
| **MDSI** | **Maura Dua** | **35.80** | **93** | P | **P** | **10 59 58.3** | **+0.7** |
| | comp=Z,581nmcomp=Z,14nm,2.0s | | | | | | |
| **TAPN** | **Taplejung** | **35.94** | **30** | *eP* | **P** | **10 59 59.8** | **+0.8** |
| **KLSI** | | **36.35** | **93** | P | **P** | **11 00 03.8** | **+1.4** |
| | comp=Z,14nm,2.6s | | | | | | |
| **SHL** | **Shillong** | **36.85** | **37** | P | **P** | **11 00 07.6** | **+1.0** |
| SHL | | | | IAmb | IAmb | 11 00 15.9 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.25** | **53** | P | **P** | **11 00 10.8** | **+0.9** |
| | comp=Z,4.2nm,0.9s,baz=244,slow=9.8,SNR=19 | | | | | | |
| CMAR | | | | PcP | **PcP** | **11 02 30.2** | **+0.6** |
| | comp=Z,0.7nm,0.4s,baz=243,slow=5.9,SNR=2.1 | | | | | | |
| CMAR | | | | LR | LR | 11 13 28.5 | |
| | comp=Z,406nm,21.6s,baz=240,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.25** | **53** | P | **P** | **11 00 09.2** | **-0.7** |
| **NIL** | **Nilore** | **37.25** | **7** | P | **P** | **11 00 10.6** | **+0.9** |
| NIL | | | | IAmb | IAmb | 11 00 18.6 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **37.44** | **53** | P | **P** | **11 00 12.0** | **+0.4** |
| CHTO | | | | IAmb | IAmb | 11 00 19.6 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **MBAR** | **Mbarara** | **37.64** | **274** | P | **P** | **11 00 12.7** | **-0.9** |
| | comp=Z,5.0nm,0.2s,baz=135,slow=8.6,SNR=1.0 | | | | | | |
| MBAR | | | | LR | LR | 11 15 24.3 | |
| | comp=Z,151nm,18.5s,baz=80,slow=36 | | | | | | |
| **LEM** | **Lembang** | **39.29** | **96** | P | **P** | **11 00 28.2** | **+0.9** |
| | comp=Z,22nm,0.7s,baz=191,slow=11,SNR=6.3 | | | | | | |
| LEM | | | | LR | LR | 11 14 14.4 | |
| | comp=Z,313nm,19.4s,baz=238,slow=32 | | | | | | |
| **LEM** | **Lembang** | **39.29** | **96** | P | **P** | **11 00 28.1** | **+0.7** |
| | comp=Z,52nm,1.3s | | | | | | |
| **LSA** | **Lhasa** | **39.61** | **32** | P | **P** | **11 00 31.8** | **+1.6** |
| LSA | | | | S | **S** | **11 06 28.5** | **-5.0** |
| LSA | | | | LR | LR | | |
| | comp=Z,820nm,20.0s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,480nm,21.0s | | | | | | |
| **LSZ** | **Lusaka** | **41.18** | **251** | P | **P** | **11 00 42.8** | **-0.2** |
| | comp=Z,6.7nm,0.9s,baz=65,slow=7.5,SNR=11 | | | | | | |
| LSZ | | | | LR | LR | 11 15 22.6 | |
| | comp=Z,870nm,18.8s,baz=106,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **41.18** | **251** | P | **P** | **11 00 43.1** | **+0.1** |
| LSZ | | | | IAmb | IAmb | 11 00 58.1 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MATP** | **Matopo** | **42.24** | **243** | P | **P** | **11 00 51.1** | **-0.5** |
| | comp=Z,2.0nm,0.7s,baz=61,slow=18,SNR=5.1 | | | | | | |
| MATP | | | | LR | LR | 11 16 12.6 | |
| | comp=Z,94nm,20.8s,baz=87,slow=33 | | | | | | |
| **GEYT** | **Alibeck** | **42.29** | **348** | LR | LR | 11 17 14.4 | |
| | comp=Z,727nm,22.0s,baz=164,slow=34 | | | | | | |
| **GAR** | **Garm** | **42.33** | **2** | P | **P** | **11 00 52.0** | **0.0** |
| **KSH** | **Kashi** | **43.39** | **9** | P | **P** | **11 00 57.8** | **-2.8** |
| KSH | | | | pP | sP | 11 01 04.3 | -0.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,600nm,20.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,350nm,15.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,840nm,24.1s | | | | | | |
| **KMI** | **Kunming** | **43.90** | **48** | ⇑P | **P** | **11 01 06.3** | **+1.2** |
| KMI | | | | sP | pwP | 11 01 12.5 | +1.0 |
| KMI | | | | S | **S** | **11 07 38.0** | **+1.4** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,240nm,4.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,400nm,19.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,290nm,20.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,480nm,21.5s | | | | | | |
| **PZH** | **PanZhiHua** | **43.99** | **45** | P | **P** | **11 01 06.3** | **+0.6** |
| PZH | | | | S | **S** | **11 07 37.3** | **-0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,5.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,21.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,680nm,19.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,20.4s | | | | | | |
| **IUG** | **Iuzhnay** | **45.46** | **2** | *eP* | **P** | **11 01 17.0** | **-0.2** |
| | baz=1.6 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **45.84** | **10** | P | **P** | **11 01 18.8** | **-1.7** |
| TARG | | | | IAmb | IAmb | 11 01 34.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **45.84** | **98** | P | **P** | **11 01 19.1** | **-1.4** |
| | comp=Z,40nm,0.8s | | | | | | |
| **EIL** | **Elat** | **45.91** | **318** | LR | LR | 11 18 38.1 | |
| | comp=Z,90nm,19.9s,slow=34 | | | | | | |
| **DZA** | **Taraz** | **46.26** | **3** | *eP* | **P** | **11 01 23.3** | **0.0** |
| | baz=2.9 | | | | | | |
| **AAK** | **Ala-Archa** | **46.27** | **6** | LR | LR | 11 20 29.0 | |
| | comp=Z,444nm,20.9s,baz=192,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **46.27** | **6** | P | **P** | **11 01 24.1** | **+0.6** |
| **LBTB** | **Lobatse** | **46.29** | **238** | P | **P** | **11 01 21.5** | **-2.5** |
| | comp=Z,1.1nm,0.6s,baz=27,slow=9.0,SNR=1.5 | | | | | | |
| LBTB | | | | LR | LR | 11 19 17.4 | |
| | comp=Z,778nm,18.3s,baz=70,slow=34 | | | | | | |
| **KKAR** | **Karatay Array** | **46.43** | **2** | P | **P** | **11 01 23.7** | **-1.0** |
| **QIZ** | **Qiongzhong** | **46.60** | **60** | P | **P** | **11 01 29.0** | **+2.6** |
| QIZ | | | | S | **S** | **11 08 16.0** | **+0.5** |
| QIZ | | | | LR | LR | | |
| | comp=Z,690nm,19.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,600nm,17.7s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **46.62** | **88** | P | **P** | **11 01 27.0** | **+0.3** |
| **GOMU** | **GeErMu** | **46.62** | **30** | P | **P** | **11 01 27.5** | **+0.7** |
| GOMU | | | | pP | sP | 11 01 31.8 | +1.0 |
| GOMU | | | | sP | pwP | 11 01 36.8 | +3.6 |
| GOMU | | | | S | **S** | **11 08 16.0** | **-0.1** |
| GOMU | | | | sS | sS | 11 08 29.3 | +8.4 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,160nm,5.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,450nm,19.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,370nm,17.1s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,620nm,20.4s | | | | | | |
| **SGDS** | **Sogindy** | **47.09** | **6** | *eP* | **P** | **11 01 28.8** | **-1.1** |
| | baz=6.1 | | | | | | |
| **MDOK** | **Medeo** | **47.12** | **9** | *eP* | **P** | **11 01 29.3** | **-0.9** |
| | baz=8.5 | | | | | | |
| **AAA** | **Alma-Ata** | **47.14** | **9** | *eP* | **P** | **11 01 29.8** | **-0.5** |
| | baz=8.4 | | | | | | |
| **SATY** | **Saty** | **47.24** | **10** | *eP* | **P** | **11 01 30.1** | **-1.0** |
| | comp=Z,17nm,1.1s,baz=9.9 | | | | | | |
| **ZHN** | **Zhinishke** | **47.35** | **10** | *eP* | **P** | **11 01 31.2** | **-0.8** |
| | baz=9.9 | | | | | | |
| **UZB** | **Uzynbulak** | **47.44** | **11** | *eP* | **P** | **11 01 31.0** | **-1.7** |
| | comp=Z,26nm,1.8s,baz=10 | | | | | | |
| **GYA** | **Guiyang** | **47.57** | **49** | ⇓P | P | 11 01 40.8 | +6.8 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| **KPKS** | **Kokpek** | **47.68** | **10** | *eP* | **P** | **11 01 33.1** | **-1.5** |
| | comp=Z,24nm,1.7s,baz=10.0 | | | | | | |
| **KUU** | **Kurty** | **47.73** | **8** | *eP* | **P** | **11 01 33.2** | **-1.6** |
| | comp=Z,8.5nm,1.4s,baz=7.7 | | | | | | |
| **CHKK** | **Chushkaly** | **47.79** | **8** | *eP* | **P** | **11 01 34.4** | **-0.8** |
| | baz=8.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **47.84** | **322** | LR | LR | 11 19 37.0 | |
| | comp=Z,178nm,21.8s,baz=274,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **47.91** | **234** | P | **P** | **11 01 35.5** | **-1.1** |
| | comp=Z,4.5nm,0.9s,baz=68,slow=8.2,SNR=6.2 | | | | | | |
| BOSA | | | | LR | LR | 11 19 53.3 | |
| | comp=Z,594nm,18.1s,baz=68,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **47.91** | **234** | IAmb | IAmb | 11 01 38.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **CD2** | **Chengdu** | **48.10** | **42** | P | **P** | **11 01 39.0** | **+1.0** |
| CD2 | | | | S | **S** | **11 08 38.0** | **+1.3** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,40nm,14.2s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,270nm,10.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,200nm,10.0s | | | | | | |
| **GNI** | **Garni** | **48.52** | **336** | P | **P** | **11 01 42.2** | **+1.0** |
| | comp=Z,3.5nm,0.3s,baz=143,slow=15,SNR=8.8 | | | | | | |
| GNI | | | | LR | LR | 11 21 51.6 | |
| | comp=Z,242nm,20.4s,baz=136,slow=36 | | | | | | |
| **GNI** | **Garni** | **48.52** | **336** | IAmb | IAmb | 11 01 50.2 | |
| | comp=Z,52nm,1.2s | | | | | | |
| **BTLS** | **Baital** | **48.60** | **5** | *eP* | **P** | **11 01 40.2** | **-1.3** |
| | comp=Z,10nm,1.5s,baz=5.2 | | | | | | |
| **WMQ** | **Urumqi** | **50.24** | **18** | *eP* | **P** | **11 01 55.5** | **+1.4** |
| WMQ | | | | pP | pwP | 11 02 00.5 | -0.1 |
| WMQ | | | | PcP | **PcP** | **11 03 13.8** | **+0.7** |
| WMQ | | | | PP | **PP** | **11 03 48.3** | **-1.3** |
| WMQ | | | | S | **S** | **11 09 10.0** | **+3.7** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,35nm,1.7s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,230nm,4.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,1μm,20.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,530nm,18.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,810nm,20.7s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **51.08** | **100** | P | **P** | **11 02 01.0** | **+0.1** |
| | comp=Z,43nm,1.4s | | | | | | |
| **KAPI** | **Kappang** | **51.32** | **94** | LR | LR | 11 21 27.2 | |
| | comp=Z,210nm,21.9s,baz=294,slow=33 | | | | | | |
| **LZH** | **Lanzhou** | **51.52** | **37** | *eP* | **P** | **11 02 04.5** | **+0.5** |
| LZH | | | | pP | sP | 11 02 09.0 | +0.9 |
| LZH | | | | sP | pwP | 11 02 11.3 | +0.7 |
| LZH | | | | *eS* | **S** | **11 09 23.0** | **-1.5** |
| LZH | | | | sS | sS | 11 09 35.5 | +6.1 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,230nm,4.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,290nm,16.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,420nm,13.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,450nm,17.9s | | | | | | |
| **MAKZ** | **Makanchi** | **51.53** | **12** | P | **P** | **11 02 02.8** | **-0.9** |
| MAKZ | | | | IAmb | IAmb | 11 02 11.0 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.59** | **12** | P | **P** | **11 02 03.0** | **-1.1** |
| | comp=Z,1.9nm,0.7s,baz=196,slow=7.9,SNR=24 | | | | | | |
| **GTA** | **Gaotai** | **51.62** | **31** | ⇓P | **P** | **11 02 06.0** | **+1.3** |
| GTA | | | | pP | pwP | 11 02 10.8 | -0.4 |
| GTA | | | | sP | sP | 11 02 14.5 | +5.7 |
| GTA | | | | S | **S** | **11 09 27.5** | **+1.7** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.6s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,160nm,4.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,560nm,19.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,540nm,20.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,890nm,19.1s | | | | | | |
| **BKSI** | **Bulukumba** | **51.69** | **94** | P | **P** | **11 02 04.5** | **-1.0** |
| | comp=Z,15nm,1.4s | | | | | | |
| **ENH** | **Enshi** | **51.73** | **47** | P | **P** | **11 02 05.1** | **-0.5** |
| **TSUM** | **Tsumeb** | **51.90** | **248** | P | **P** | **11 02 07.0** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=107,slow=4.1,SNR=1.7 | | | | | | |
| TSUM | | | | LR | LR | 11 21 42.7 | |
| | comp=Z,181nm,18.6s,baz=140,slow=33 | | | | | | |
| **KBZ** | **Khabaz** | **52.28** | **337** | P | **P** | **11 02 09.2** | **0.0** |
| | comp=Z,7.8nm,0.8s,baz=153,slow=7.6,SNR=25 | | | | | | |
| KBZ | | | | LR | LR | 11 24 25.1 | |
| | comp=Z,109nm,20.6s,baz=132,slow=36 | | | | | | |
| **ZSN** | **Zaisan** | **52.79** | **14** | *eP* | **P** | **11 02 12.2** | **-0.9** |
| | baz=14 | | | | | | |
| **SUR** | **Sutherland** | **52.91** | **231** | LR | LR | 11 21 08.5 | |
| | comp=Z,886nm,21.7s,baz=53,slow=32 | | | | | | |
| **ABKAR** | **Akbulak array** | **53.04** | **353** | P | **P** | **11 02 14.2** | **-0.7** |
| **ABKAR** | **Akbulak array** | **53.04** | **353** | P | **P** | **11 02 14.4** | **-0.5** |
| ABKAR | | | | IAmb | IAmb | 11 02 22.6 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **53.13** | **114** | P | **P** | **11 02 16.2** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 11 02 24.1 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **BRZS** | **Berezniki** | **53.41** | **4** | *eP* | **P** | **11 02 15.9** | **-1.7** |
| | baz=3.4 | | | | | | |
| **XAN** | **Xi'an** | **53.47** | **42** | P | **P** | **11 02 17.5** | **-0.9** |
| XAN | | | | pP | pwP | 11 02 24.8 | -0.1 |
| XAN | | | | sP | sP | 11 02 30.8 | +8.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **53.52** | **327** | P | **P** | **11 02 18.4** | **-0.4** |
| | comp=Z,1.7nm,0.8s,baz=144,slow=11,SNR=6.4 | | | | | | |
| BRTR | | | | LR | LR | 11 25 20.8 | |
| | comp=Z,275nm,18.8s,baz=132,slow=36 | | | | | | |
| **AKTO** | **Aktyubinsk** | **54.45** | **352** | P | **P** | **11 02 24.6** | **-0.6** |
| | comp=Z,3.1nm,0.8s,baz=173,slow=7.3,SNR=14 | | | | | | |
| AKTO | | | | LR | LR | 11 26 03.4 | |
| | comp=Z,134nm,20.6s,baz=153,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.63** | **8** | LR | LR | 11 25 20.7 | |
| | comp=Z,269nm,20.8s,baz=174,slow=36 | | | | | | |
| **SEM** | **Semipalatinsk** | **54.68** | **9** | *eP* | **P** | **11 02 25.9** | **-1.2** |
| | baz=9.2 | | | | | | |
| **KURK** | **Kurchatov** | **54.73** | **8** | P | **P** | **11 02 26.2** | **-1.0** |
| **BATI** | **Baumata** | **55.31** | **100** | LR | LR | 11 25 14.3 | |
| | comp=Z,206nm,21.6s,baz=284,slow=35 | | | | | | |
| **WHN** | **Wuhan** | **55.46** | **49** | ⇓P | P | 11 02 39.8 | +6.9 |
| **SOEI** | **Soe** | **55.88** | **99** | P | **P** | **11 02 36.5** | **+0.1** |
| | comp=Z,35nm,1.3s | | | | | | |
| **IDI** | **Anoyia** | **56.06** | **317** | P | **P** | **11 02 36.6** | **-0.6** |
| | comp=Z,5.3nm,0.9s,baz=76,slow=10,SNR=3.6 | | | | | | |
| IDI | | | | LR | LR | 11 26 42.2 | |
| | comp=Z,56nm,20.0s,baz=88,slow=36 | | | | | | |
| **IDI** | **Anoyia** | **56.06** | **317** | IAmb | IAmb | 11 02 50.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **56.35** | **2** | P | **P** | **11 02 38.3** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=96,slow=7.5,SNR=4.9 | | | | | | |
| **BRVK** | **Borovoye** | **56.38** | **1** | P | **P** | **11 02 38.2** | **-0.8** |
| BRVK | | | | IAmb | IAmb | 11 02 46.9 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.92** | **109** | LR | LR | 11 24 41.2 | |
| | comp=Z,74nm,20.1s,baz=284,slow=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.92** | **109** | P | **P** | **11 02 49.2** | **-1.4** |
| FITZ | | | | IAmb | IAmb | 11 02 58.5 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **BELG** | **Belogornoye** | **58.38** | **345** | LR | LR | 11 29 10.5 | |
| | comp=Z,175nm,20.9s,baz=151,slow=37 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.89** | **11** | IAmb | IAmb | 11 02 57.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.89** | **11** | P | **P** | **11 02 55.5** | **-1.2** |
| | comp=Z,5.4nm,0.7s,baz=205,slow=6.9,SNR=27 | | | | | | |
| ZALV | | | | LR | LR | 11 27 43.5 | |
| | comp=Z,296nm,20.6s,baz=209,slow=35 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.21** | **37** | *eP* | P | 11 03 05.0 | +5.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,250nm,7.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,360nm,17.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,310nm,16.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,380nm,17.8s | | | | | | |
| **HNS** | **HongShan** | **59.24** | **42** | ⇓P | **P** | **11 02 59.8** | **+0.3** |
| HNS | | | | S | **S** | **11 11 10.5** | **+3.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,380nm,16.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,390nm,23.0s | | | | | | |
| **NJ2** | **Nanjing** | **59.57** | **50** | *eP* | **P** | **11 03 03.0** | **+1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **ARU** | **Arti** | **60.26** | **354** | P | **P** | **11 03 05.6** | **-0.5** |
| | comp=Z,0.7nm,0.2s,baz=251,slow=20,SNR=9.5 | | | | | | |
| ARU | | | | LR | LR | 11 30 02.0 | |
| | comp=Z,87nm,19.6s,baz=150,slow=37 | | | | | | |
| **ARU** | **Arti** | **60.26** | **354** | P | **P** | **11 03 05.6** | **-0.5** |
| **TIA** | **Tai'an** | **60.28** | **45** | *eP* | **P** | **11 03 06.5** | **-0.2** |
| TIA

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AKASG | **Malin Array Be** | **63.52** | **333** | IAmb | IAmb | 11 03 34.0 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| **KIRV** | **Kirov** | **63.71** | **349** | LR | LR | 11 33 17.7 | |
| | comp=Z,143nm,18.3s,baz=146,slow=38 | | | | | | |
| **XLT** | **XiLinHaoTe** | **63.71** | **37** ⇑ | *iP* | **P** | **11 03 31.0** | **+1.3** |
| XLT | | | | pP | pwP | 11 03 35.8 | -0.5 |
| XLT | | | | S | **S** | **11 12 03.0** | **-1.2** |
| XLT | | | | sS | sS | 11 12 11.0 | +1.9 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.7s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,230nm,4.7s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,230nm,14.9s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,260nm,14.5s | | | | | | |
| **OBN** | **Obninsk** | **64.02** | **340** | P | **P** | **11 03 31.5** | **+0.2** |
| | comp=Z,3.8nm,0.3s,baz=30,slow=22,SNR=3.1 | | | | | | |
| **OBN** | **Obninsk** | **64.02** | **340** | IAmb | IAmb | 11 03 38.5 | |
| | comp=Z,22nm,0.4s | | | | | | |
| **MAW** | **Mawson** | **64.10** | **182** | LR | LR | 11 24 28.1 | |
| | comp=Z,622nm,21.5s,baz=36,slow=30 | | | | | | |
| **JOW** | **Kunigami** | **65.22** | **58** | LR | LR | 11 33 55.9 | |
| | comp=Z,131nm,18.1s,baz=311,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **66.28** | **114** | P | **P** | **11 03 46.8** | **-0.1** |
| | comp=Z,3.0nm,1.0s,baz=290,slow=5.9,SNR=15 | | | | | | |
| ASAR | | | | SKP | | 11 13 32.5 | |
| | comp=Z,0.2nm,0.6s,baz=65,slow=8.5,SNR=1.3 | | | | | | |
| ASAR | | | | LR | LR | 11 31 07.9 | |
| | comp=Z,73nm,19.6s,baz=280,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.30** | **110** | P | **P** | **11 03 46.8** | **-0.2** |
| | comp=Z,4.4nm,0.8s,baz=283,slow=6.1,SNR=25 | | | | | | |
| WRA | | | | LR | LR | 11 28 39.8 | |
| | comp=Z,78nm,21.5s,baz=344,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.30** | **110** | P | **P** | **11 03 46.0** | **-0.9** |
| **WRAB** | **Tennant Creek** | **66.31** | **110** | P | **P** | **11 03 45.6** | **-1.4** |
| **WB2** | **Warramunga Arr** | **66.31** | **110** | P | **P** | **11 03 45.1** | **-1.9** |
| **WB0** | **Warramunga Arr** | **66.34** | **110** | P | **P** | **11 03 46.9** | **-0.2** |
| **MNK** | **Minsk** | **66.80** | **336** | *iP* | **P** | **11 03 47.8** | **-1.6** |
| MNK | | | | *i* P | **P** | **11 03 47.8** | **-1.6** |
| | comp=N,12nm,0.8s | | | | | | |
| MNK | | | | *i* P | **P** | **11 03 47.8** | **-1.6** |
| | comp=Z,9.0nm,0.8s,baz=135 | | | | | | |
| MNK | | | | *i* PP | **PP** | **11 06 14.7** | **-1.9** |
| MNK | | | | *i* PPP | PPP | 11 07 50.3 | |
| MNK | | | | *i* S | **S** | **11 12 40.9** | **-0.6** |
| MNK | | | | *i* SS | **SS** | **11 16 59.9** | **+0.2** |
| MNK | | | | *i* SSS | SSS | 11 20 31.1 | |
| MNK | | | | *i* LQ | LQ | 11 30 13.4 | |
| MNK | | | | *i* LR | LR | 11 32 19.3 | |
| MNK | | | | *i* LRM | MLR | 11 36 13.2 | |
| | comp=N,485nm,18.5s | | | | | | |
| MNK | | | | *i* LRM | MLR | 11 36 14.5 | |
| | comp=Z,100nm,18.5s | | | | | | |
| MNK | | | | *i* LRM | MLR | 11 36 15.3 | |
| | comp=E,95nm,18.5s | | | | | | |
| **KEST** | **Kesra** | **67.45** | **311** | P | **P** | **11 03 54.3** | **+0.3** |
| | comp=E,1.4nm,0.4s,baz=272,slow=14,SNR=1.8 | | | | | | |
| **KLMR** | **Klimovskoe** | **67.95** | **345** | *eP* | **P** | **11 03 54.6** | **-2.0** |
| KLMR | | | | AMP | | 11 04 04.7 | |
| | comp=Z,45nm,1.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.14** | **286** | P | **P** | **11 03 58.6** | **-0.1** |
| | comp=Z,2.6nm,1.3s,baz=92,slow=1.6,SNR=7.2 | | | | | | |
| **ARSA** | **Arzberg** | **68.47** | **324** | *eP* | **P** | **11 03 58.8** | **-1.4** |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **68.56** | **48** | P | **P** | **11 04 01.1** | **+0.2** |
| **KSRS** | **Korea Array** | **68.60** | **48** | P | **P** | **11 04 00.6** | **-0.5** |
| | comp=Z,2.1nm,0.7s,baz=241,slow=7.9,SNR=7.3 | | | | | | |
| KSRS | | | | LR | LR | 11 34 47.9 | |
| | comp=Z,338nm,19.6s,baz=235,slow=37 | | | | | | |
| **CONA** | **Conrad Observa** | **68.64** | **325** | *eP* | **P** | **11 03 59.8** | **-1.4** |
| | comp=Z,13nm,1.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **68.71** | **327** | *eP* | **P** | **11 04 00.0** | **-1.6** |
| **KRUC** | **Moravsky** | **68.94** | **326** | *eP* | **P** | **11 04 01.2** | **-1.8** |
| **VRAC** | **Vranov** | **68.96** | **327** | P | **P** | **11 04 03.4** | **+0.2** |
| | comp=Z,1.8nm,0.4s,baz=151,slow=5.1,SNR=3.8 | | | | | | |
| VRAC | | | | LR | LR | 11 36 09.2 | |
| | comp=Z,58nm,19.2s,baz=96,slow=38 | | | | | | |
| **VRAC** | **Vranov** | **68.96** | **327** | *eP* | **P** | **11 04 02.0** | **-1.2** |
| **CN2** | **Changchun** | **69.50** | **40** | *eP* | **P** | **11 04 05.3** | **-1.3** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **70.01** | **323** | *eP* | **P** | **11 04 08.5** | **-1.3** |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **WTTA** | **Wattenberg** | **70.78** | **323** | *eP* | **P** | **11 04 14.0** | **-0.6** |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **70.85** | **323** | *eP* | **P** | **11 04 15.4** | **+0.4** |
| | comp=Z,17nm,1.4s | | | | | | |
| **MOTA** | **Moosalm** | **71.14** | **323** | *eP* | **P** | **11 04 15.9** | **-0.9** |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **71.22** | **322** | *eP* | **P** | **11 04 16.6** | **-0.6** |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **71.24** | **327** | *ex* | **P** | **11 04 16.0** | **-1.1** |
| BRG | | | | Amp | | 11 04 31.4 | |
| | comp=Z,36nm,2.0s | | | | | | |
| **RETA** | **Reutte** | **71.41** | **323** | *eP* | **P** | **11 04 17.2** | **-1.1** |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **BNX** | **BinXian** | **71.60** | **39** ⇑ | P | **P** | **11 04 19.0** | **-0.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,48nm,1.4s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,270nm,3.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **71.63** | **322** | P | **P** | **11 04 19.1** | **-0.7** |
| | comp=Z,4.5nm,0.8s,baz=126,slow=12,SNR=4.2 | | | | | | |
| **DAVA** | **Damuels** | **71.86** | **322** | *eP* | **P** | **11 04 20.0** | **-1.1** |
| | comp=Z,11nm,0.8s | | | | | | |
| **CLL** | **Collm** | **71.97** | **327** | *eP* | **P** | **11 04 21.0** | **-0.5** |
| | comp=Z,20nm,1.6s | | | | | | |
| CLL | | | | *ex* | x | 11 04 27.0 | |
| | comp=Z,38nm,1.6s | | | | | | |
| CLL | | | | *e*PP | **PP** | **11 07 01.0** | **-0.5** |
| CLL | | | | *e*PPPP | | 11 09 36.0 | |
| CLL | | | | *e*SS | SS | 11 18 24.0 | +4.4 |
| CLL | | | | *e*(SSS) | | 11 21 24.0 | |
| CLL | | | | *ex* | x | 11 22 30.0 | |
| **FINES** | **FINESS Array B** | **72.43** | **340** | LR | LR | 11 39 22.8 | |
| | comp=Z,93nm,18.3s,baz=106,slow=38 | | | | | | |
| **MDJ** | **Mudanjiang** | **72.55** | **41** | P | **P** | **11 04 25.8** | **+0.7** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,180nm,5.5s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **73.06** | **321** | IAmb | IAmb | 11 04 29.2 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **73.72** | **278** | P | **P** | **11 04 32.2** | **-0.4** |
| | comp=Z,5.9nm,0.9s,baz=117,slow=7.7,SNR=5.8 | | | | | | |
| DBIC | | | | LR | LR | 11 37 15.3 | |
| | comp=Z,71nm,18.9s,baz=126,slow=36 | | | | | | |
| **KOWA** | **Kowa** | **73.83** | **286** | P | **P** | **11 04 34.8** | **+1.6** |
| **NRIK** | **Noril'sk** | **73.88** | **7** | P | **P** | **11 04 32.4** | **-0.1** |
| | comp=Z,0.9nm,0.4s,baz=190,slow=5.0,SNR=7.3 | | | | | | |
| NRIK | | | | LR | LR | 11 37 39.4 | |
| | comp=Z,174nm,20.6s,baz=202,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **73.97** | **42** | P | **P** | **11 04 32.9** | **-0.6** |
| | comp=Z,2.0nm,0.6s,baz=245,slow=12,SNR=4.4 | | | | | | |
| USRK | | | | LR | LR | 11 37 45.8 | |
| | comp=Z,131nm,21.2s,baz=215,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **73.98** | **122** | P | **P** | **11 04 32.7** | **-1.1** |
| | comp=Z,2.7nm,0.7s,baz=289,slow=10,SNR=5.0 | | | | | | |
| STKA | | | | LR | LR | 11 33 27.0 | |
| | comp=Z,128nm,21.6s,baz=233,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **75.72** | **37** | LR | LR | 11 39 26.8 | |
| | comp=Z,213nm,20.8s,baz=237,slow=37 | | | | | | |
| **MAT** | **Matsushiro** | **76.10** | **51** | P | **P** | **11 04 45.6** | **-0.4** |
| MAT | | | | *e*S | **S** | **11 14 31.6** | **+1.8** |
| **MJAR** | **Matsushiro Arr** | **76.10** | **51** | P | **P** | **11 04 46.2** | **+0.2** |
| | comp=Z,2.4nm,0.8s,baz=258,slow=5.9,SNR=4.1 | | | | | | |
| MJAR | | | | LR | LR | 11 38 34.0 | |
| | comp=Z,128nm,19.7s,baz=207,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **76.10** | **51** | P | **P** | **11 04 44.5** | **-1.5** |
| MJAR | | | | IAmb | IAmb | 11 04 55.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **HFS** | **Hagfors** | **76.30** | **335** | P | **P** | **11 04 45.9** | **-0.7** |
| | comp=Z,4.2nm,0.8s,baz=141,slow=9.6,SNR=4.9 | | | | | | |
| **CTA** | **Charters Tower** | **77.50** | **110** | LR | LR | 11 37 43.3 | |
| | comp=Z,57nm,20.0s,baz=260,slow=35 | | | | | | |
| **MDT** | **Midelt** | **77.62** | **305** | LR | LR | 11 40 59.0 | |
| | comp=Z,59nm,18.0s,baz=159,slow=37 | | | | | | |
| **GUMO** | **Guam** | **77.80** | **75** | LR | LR | 11 37 59.4 | |
| | comp=Z,67nm,20.5s,baz=111,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.42** | **346** | LR | LR | 11 41 07.4 | |
| | comp=Z,106nm,20.1s,baz=132,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **78.45** | **99** | LR | LR | 11 39 57.9 | |
| | comp=Z,54nm,20.2s,baz=242,slow=36 | | | | | | |
| **ESBB** | **Sonseca Array** | **78.69** | **311** | P | **P** | **11 05 01.9** | **+1.5** |
| **ESDC** | **Sonseca Array** | **78.69** | **311** | P | **P** | **11 05 01.2** | **+0.7** |
| | comp=Z,3.6nm,0.8s,baz=89,slow=5.2,SNR=18 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.69** | **311** | P | **P** | **11 05 00.1** | **-0.3** |
| ESDC | | | | IAmb | IAmb | 11 05 09.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **YAK** | **Yakutsk** | **80.10** | **25** | LR | LR | 11 41 22.3 | |
| | comp=Z,525nm,20.3s,baz=44,slow=36 | | | | | | |
| **SNAA** | **Sanae** | **80.81** | **198** | LR | LR | 11 35 18.6 | |
| | comp=Z,225nm,18.6s,baz=11,slow=32 | | | | | | |
| **ASAJ** | **Asahikawa** | **81.23** | **45** | LR | LR | 11 42 39.9 | |
| | comp=Z,133nm,19.4s,baz=236,slow=37 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **82.44** | **327** | P | **P** | **11 05 20.5** | **+0.3** |
| | comp=Z,0.9nm,0.6s,baz=106,slow=8.8,SNR=2.5 | | | | | | |
| EKA | | | | LR | LR | 11 43 16.2 | |
| | comp=Z,38nm,19.1s,baz=34,slow=37 | | | | | | |
| **TIXI** | **Tiksi** | **84.39** | **16** | LR | LR | 11 44 01.0 | |
| | comp=Z,363nm,19.6s,baz=185,slow=36 | | | | | | |
| **TIXI** | **Tiksi** | **84.39** | **16** | P | **P** | **11 05 28.6** | **-1.3** |
| TIXI | | | | IAmb | IAmb | 11 05 42.3 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **86.13** | **351** | LR | LR | 11 47 08.2 | |
| | comp=Z,130nm,19.7s,baz=195,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **86.50** | **180** | LR | LR | 11 38 05.6 | |
| | comp=Z,362nm,21.3s,baz=274,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **86.50** | **180** | P | **P** | **11 05 42.0** | **+1.3** |
| **VNDA** | **Vanda** | **87.38** | **167** | LR | LR | 11 40 35.8 | |
| | comp=Z,218nm,18.2s,baz=246,slow=33 | | | | | | |
| **JMIC** | **Jan Mayen** | **89.01** | **341** | LR | LR | 11 47 43.5 | |
| | comp=Z,85nm,18.8s,baz=66,slow=37 | | | | | | |
| **MA2** | **Magadan** | **89.18** | **30** | LR | LR | 11 46 56.3 | |
| | comp=Z,189nm,18.5s,baz=294,slow=36 | | | | | | |
| **MA2** | **Magadan** | **89.18** | **30** | P | **P** | **11 05 52.7** | **-0.7** |
| **SEY** | **Seymchan** | **90.39** | **27** | LR | LR | 11 47 33.5 | |
| | comp=Z,356nm,21.0s,baz=281,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **92.41** | **37** | LR | LR | 11 50 09.0 | |
| | comp=Z,238nm,20.4s,baz=257,slow=37 | | | | | | |
| **BORG** | **Borgarnes** | **92.98** | **335** | LR | LR | 11 50 12.4 | |
| | comp=Z,95nm,20.4s,baz=82,slow=37 | | | | | | |
| **DZM** | **Mont Dzumac** | **96.23** | **113** | LR | LR | 11 49 07.0 | |
| | comp=Z,83nm,18.8s,baz=224,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **121.10** | **2** | PKP | **PKPdf** | **11 11 49.4** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=348,slow=2.1,SNR=13 | | | | | | |
| YKA | | | | PP | **PP** | **11 13 20.4** | **+0.9** |
| | comp=Z,1.6nm,1.1s,baz=2.3,slow=5.5,SNR=6.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **140.86** | **358** | PKP | **PKPdf** | **11 12 28.1** | **-0.5** |
| | comp=Z,0.5nm,0.6s,baz=90,slow=3.0,SNR=5.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **144.72** | **9** | PKP | **PKPdf** | **11 12 35.5** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=344,slow=2.7,SNR=10 | | | | | | |
| **TXAR** | **Lajitas Array** | **153.20** | **344** | PKP | **PKPdf** | **11 12 49.7** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=64,slow=2.1,SNR=4.0 | | | | | | |
| TXAR | | | | PKPbc | **PKPbc** | **11 12 56.7** | **-0.1** |
| | comp=Z,1.4nm,1.0s,baz=147,slow=1.8,SNR=7.5 | | | | | | |
| TXAR | | | | PKPab | **PKPab** | **11 13 08.8** | **+0.6** |
| | comp=Z,3.2nm,1.0s,baz=79,slow=3.1,SNR=9.8 | | | | | | |

*INMG **25** 10:59:20.0±1.0,36°.94N×10°.58W,h31km,ML2.0, Error ellipse: s-maj=6.0km s-min=3.0km az=76.0*
*CNRM **25** 10:59:20.8, 36°.74N×10°.29W, h75km, ml2.6*
*IGIL **25** 10:59:20.6, 36°.94N×10°.56W, h31km, ML2.2*

**ISC 25 10:59:13.8±2.1, 36°.90N±0°.04×10°.60W±0°.09, h16km±11km, n27,σ1°68/44, 2C, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.44** | **80** | *i*Pn | **Pg** | **10 59 41.9** | **+0.4** |
| PFVI | | | | *e*Sn | **Sb** | **10 59 58.5** | **+0.2** |
| PFVI | | | | A | A | 10 59 59.8 | |
| | 23nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.44** | **80** | P | **Pg** | **10 59 42.5** | **+1.0** |
| PFVI | | | | S | **Sg** | **10 59 59.1** | **-1.2** |
| **MORF** | **Marmelete** | **1.61** | **75** | *e*P | **Pg** | **10 59 44.3** | **-0.5** |
| MORF | | | | *e*S | **Sn** | **11 00 01.7** | **-0.4** |
| MORF | | | | IAML | | 11 00 04.2 | |
| | comp=E,22nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **1.61** | **75** | *e*Pn | **Pg** | **10 59 44.3** | **-0.5** |
| MORF | | | | *e*Sn | **Sb** | **11 00 02.7** | **-0.6** |
| MORF | | | | A | A | 11 00 03.5 | |
| | comp=E,12nm,0.5s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.04** | **53** | *e*Pn | **Pb** | **10 59 50.0** | **-0.5** |
| PNCL | | | | *e*Sn | **Sn** | **11 00 12.7** | **0.0** |
| PNCL | | | | A | A | 11 00 14.7 | |
| | comp=E,5.5nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.16** | **80** ⇑ | *e*Pn | **Pb** | **10 59 52.2** | **-0.4** |
| PBDV | | | | *e*Sn | **Sn** | **11 00 16.3** | **+0.6** |
| PBDV | | | | A | A | 11 00 22.6 | |
| | comp=E,5.0nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **2.17** | **70** | *e*Pn | **Pb** | **10 59 52.0** | **-0.7** |
| PCVE | | | | *e*Sn | **Sn** | **11 00 16.0** | **+0.2** |
| PCVE | | | | A | A | 11 00 20.9 | |
| | comp=E,3.2nm,0.4s | | | | | | |
| **PMAFR** | **Mafra** | **2.30** | **27** | *e*Sn | **Sn** | **11 00 18.5** | **-0.5** |
| PMAFR | | | | A | A | 11 00 22.0 | |
| | comp=E,26nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.36** | **77** | *e*Pn | **Pb** | **10 59 55.0** | **-0.9** |
| PVAQ | | | | *e*Sn | **Sn** | **11 00 20.8** | **+0.4** |
| PVAQ | | | | A | A | 11 00 23.8 | |
| | comp=E,5.0nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.36** | **77** | P | **Pb** | **10 59 55.7** | **-0.2** |
| PVAQ | | | | S | **Sn** | **11 00 21.3** | **+0.8** |
| **PBEJ** | **Beja** | **2.45** | **62** | *e*Sn | **Sn** | **11 00 22.2** | **-0.5** |
| PBEJ | | | | A | A | 11 00 23.1 | |
| | comp=E,2.9nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **2.87** | **40** | *e*Pn | **Pn** | **11 00 00.8** | **+2.0** |
| PMTG | | | | *e*Sn | **Sn** | **11 00 32.3** | **-0.6** |
| PMTG | | | | A | A | 11 00 33.8 | |
| | comp=E,3.6nm,0.2s | | | | | | |
| **PSBE** | **So Bento** | **2.97** | **28** | *e*Sn | **Sn** | **11 00 35.9** | **+0.3** |
| PSBE | | | | A | A | 11 00 41.9 | |
| | comp=E,8.9nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **3.09** | **50** | *e*Sn | **Sn** | **11 00 37.8** | **-0.6** |
| PESTR | | | | A | A | 11 00 39.6 | |
| | comp=E,2.9nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **3.09** | **50** | P | **Pb** | **11 00 06.9** | **-1.4** |
| PESTR | | | | S | **Sn** | **11 00 38.4** | **-0.1** |
| **PBAR** | **Barrancos** | **3.10** | **65** | *e*Pn | **Pn** | **11 00 04.7** | **+2.6** |
| PBAR | | | | *e*Sn | **Sn** | **11 00 38.3** | **-0.5** |
| PBAR | | | | A | A | 11 00 39.0 | |
| | comp=E,3.3nm,0.4s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.55** | **27** | *e*Sn | **Sn** | **11 00 49.1** | **-0.8** |
| PCAS | | | | A | A | 11 00 50.7 | |
| | comp=E,4.7nm,0.8s | | | | | | |
| **PVIS** | **Viseu** | **4.36** | **28** | *e*Sn | **Sn** | **11 01 08.1** | **-1.7** |
| **ZHG** | **ZHG** | **4.73** | **136** | P | Pn | 11 00 29.7 | +5.1 |
| ZHG | | | | S | **Sn** | **11 01 18.6** | **-0.6** |
| **POLO** | **Lamas de Olo** | **4.97** | **25** | *e*Sn | **Sn** | **11 01 22.5** | **-2.5** |
| **MVO** | **Moncorvo** | **5.09** | **32** | *e*Sn | **Sn** | **11 01 25.7** | **-2.1** |
| MVO | | | | A | A | 11 01 27.8 | |
| | comp=E,2.4nm,0.3s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.37** | **19** | *e*Sn | **Sn** | **11 01 32.1** | **-2.7** |
| **OUK** | **Oukaimeden** | **6.12** | **157** | P | **Pn** | **11 00 46.8** | **+3.0** |
| OUK | | | | S | **Sn** | **11 01 51.7** | **-1.9** |
| **MD31** | **MD31** | **6.26** | **128** | P | **Pn** | **11 00 47.7** | **+2.1** |
| MD31 | | | | S | **Sn** | **11 01 53.4** | **-3.5** |
| **MDT** | **Midelt** | **6.40** | **128** | P | **Pn** | **11 00 50.2** | **+2.8** |
| MDT | | | | S | **Sn** | **11 01 57.9** | **-2.3** |
| **TTIG** | **Tnine Tigouga,** | **6.59** | **164** | P | **Pn** | **11 00 49.6** | **-0.5** |
| TTIG | | | | S | **Sn** | **11 02 01.0** | **-4.0** |
| **OUZM** | **OUZ** | **6.78** | **151** | P | **Pn** | **11 00 55.8** | **+3.1** |
| OUZM | | | | S | **Sn** | **11 02 08.0** | **-1.6** |

**NOU 25 11:06:43.2, 22°.96S×171°.22E, h95km, ML3.9/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **3.50** | **275** | P | Pn | 11 07 35.6 | +0.1 |
| **OUENC** | **Ouen Island, N** | **4.08** | **277** | P | Pn | 11 07 43.5 | +0.1 |
| **OUENC** | **Ouen Island, N** | **4.08** | **277** | P | Pn | 11 07 43.3 | -0.1 |
| **YATNC** | **Mamie plateau,** | **4.10** | **282** | P | Pn | 11 07 42.2 | -1.5 |
| **YATNC** | **Mamie plateau,** | **4.10** | **282** | P | Pn | 11 07 43.3 | -0.4 |
| **LIFNC** | **LIFOU** | **4.29** | **300** | P | Pn | 11 07 48.1 | +1.9 |
| **LIFNC** | **LIFOU** | **4.29** | **300** | P | Pn | 11 07 46.4 | +0.2 |
| **ONTNC** | **Ouen Toro** | **4.45** | **277** | P | Pn | 11 07 49.7 | +1.3 |
| **ONTNC** | **Ouen Toro** | **4.45** | **277** | P | Pn | 11 07 48.7 | +0.3 |
| **DZM** | **Mont Dzumac** | **4.50** | **280** | P | Pn | 11 07 48.7 | -0.5 |
| **NOUC** | **Port Laguerre** | **4.63** | **280** | P | Pn | 11 07 50.4 | -0.4 |
| **NOUC** | **Port Laguerre** | **4.63** | **280** | P | Pn | 11 07 50.9 | +0.1 |

*INET **25** 11:07:26.3±0.2, 9°.78N×84°.45W, h15km±1km, MW2.8*
*UPA **25** 11:07:26.8±0.4, 9°.71N×84°.44W, h0km±4km, MW4.1*

**ISC 25 11:07:26.6±1.3, 9°.72N±0°.06×84°.49W±0°.04, h11km±12km, n12,σ1°13/19, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAFE** | **Finca La Fe, P** | **0.42** | **282** | *e*P | **Pg** | **11 07 35.5** | **+0.6** |
| LAFE | | | | *e*S | **Sb** | **11 07 42.9** | **+0.5** |
| **HDC** | **Heredia** | **0.47** | **53** | *e*P | **Pb** | **11 07 36.9** | **0.0** |
| HDC | | | | *e*S | **Sb** | **11 07 44.6** | **+0.7** |
| **RIMA** | **Rio Macho** | **0.62** | **85** | *e*P | **Pg** | **11 07 38.3** | **-0.4** |
| **CDM** | **Cerro de Muert** | **0.73** | **103** | *e*P | **Pg** | **11 07 40.4** | **-0.5** |
| **PEZE** | **Perez Zeledon,** | **0.87** | **112** | *e*P | **Pg** | **11 07 42.2** | **-1.1** |
| **ORTG** | **Ortega, Santa** | **1.15** | **304** | *e*P | **Pg** | **11 07 46.7** | **-2.0** |
| **BATAN** | **Batan** | **1.16** | **71** | *e*P | **Pn** | **11 07 48.7** | **0.0** |
| BATAN | | | | *e*S | **Sn** | **11 08 05.1** | **+0.6** |
| **DRK0** | **Durika** | **1.31** | **110** | *e*P | **Pn** | **11 07 50.0** | **-0.9** |
| DRK0 | | | | *e*S | **Sn** | **11 08 09.3** | **+0.8** |
| **DRK0** | **Durika** | **1.31** | **110** | *e*P | **Pn** | **11 07 49.9** | **-1.0** |
| **CDITO** | **Canoas** | **1.96** | **125** | *e*P | **Pb** | **11 08 01.6** | **-0.6** |
| CDITO | | | | *e*S | **Sg** | **11 08 31.9** | **+2.2** |
| **BRU2** | **Volcan** | **2.00** | **117** | *e*P | **Pn** | **11 08 01.1** | **+0.7** |
| BRU2 | | | | *e*S | **Sb** | **11 08 27.4** | **-0.6** |
| **BCO2** | **Palmira** | **2.18** | **117** | *e*P | **Pn** | **11 08 03.8** | **+1.0** |
| BCO2 | | | | *e*S | **Sb** | **11 08 31.7** | **-1.4** |

*TUL **25** 11:13:35.9±1.0, 36°.529N±0°.010×97°.88W±0°.01, h6km±5km, ML2.9, mb_Lg2.5/23(NEIC), Error ellipse: s-maj=1.6km s-min=1.4km az=82.0*

**NEIC 25 11:13:35.9±0.7, 36°.496N±0°.010×97°.88W±0°.01, h2km±7km, Error ellipse: s-maj=1.6km s-min=1.4km az=52.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.92** | **263** | | Pg | 11 13 53.2 | -0.2 |
| **OKCFA** | **Oklahoma City** | **1.13** | **162** | | Pg | 11 13 57.7 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **1.14** | **162** | | Pg | 11 13 57.8 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.17** | **69** | | Pg | 11 13 57.8 | -0.6 |
| **FNO** | **Franklin** | **1.29** | **163** | | Pg | 11 14 00.3 | -0.5 |
| **W35A** | **Tecumseh** | **1.57** | **148** | Pn | Pn | 11 14 04.7 | 0.0 |
| **TUL1** | **Leonard** | **1.78** | **109** | | Pn | 11 14 08.0 | +0.3 |
| TUL1 | | | | IAmb_Lg | | 11 14 33.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.89** | **179** | | Pb | 11 14 10.6 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.90** | **203** | Pn | Pn | 11 14 10.1 | +0.7 |
| **R32A** | **Long Quarter,** | **2.04** | **341** | | Pn | 11 14 11.6 | +0.4 |
| **X37A** | **Clayton** | **2.79** | **132** | Pn | Pn | 11 14 21.8 | +0.2 |
| X37A | | | | IAmb_Lg | | 11 15 11.2 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.49** | **244** | IAmb_Lg | | 11 15 24.8 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **S39A** | **Bolivar** | **3.83** | **70** | IAmb_Lg | | 11 15 41.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MIAR** | **Mount Ida** | **4.01** | **118** | IAmb_Lg | | 11 15 45.3 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **4.05** | **90** | IAmb_Lg | | 11 15 44.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.13** | **201** | IAmb_Lg | | 11 15 52.5 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.53** | **305** | IAmb_Lg | | 11 16 06.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.55** | **80** | IAmb_Lg | | 11 16 01.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.69** | **96** | IAmb_Lg | | 11 16 14.1 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.59** | **12** | IAmb_Lg | | 11 16 37.1 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.99** | **85** | IAmb_Lg | | 11 16 58.7 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.61** | **311** | IAmb_Lg | | 11 17 48.2 | |
| | comp=Z,4.4nm,0.9s | | | | | | |

**IDC 25 11:18:13.8±4.3, 4°.47S×155°.00E, h0km, mb3.5/2, mb1 3.8/2, mb1mx3.3/33, mbtmp3.5/2, Error ellipse: s-maj=197.0km s-min=55.9km az=122.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **25.33** | **231** | P | P | 11 23 43.5 | +0.9 |
| | 0.2nm,0.3s,baz=56,slow=8.4,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **27.90** | **225** | P | P | 11 24 05.0 | -0.8 |
| | 0.4nm,0.3s,baz=57,slow=9.5,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.27** | **290** | PKPbc | PKPbc | 11 38 12.5 | -0.3 |
| | 0.2nm,0.4s,baz=74,slow=2.2,SNR=1.6 | | | | | | |

*IDC **25** 11:19:57.9±0.8, 53°.95N×158°.41E, h161km±22km, mb3.1/8, mb1 3.4/8, mb1mx3.0/57

0.3nm,0.6s,baz=337,slow=4.4,SNR=3.7
**TXAR Lajitas Array 71.02 66** P **P** **11 30 59.1 +1.3**
0.1nm,0.3s,baz=306,slow=5.4,SNR=5.1

**IDC 25 11:26:39.1±413.0, 57.66N×32.67E, h0km, Error ellipse: s-maj=176.9km s-min=70.0km az=104.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON 2.65 109** | | | *i* | | 11 44 32.5 | |
| | baz=291,slow=282,SNR=7.3 | | | | | | |
| **I37NO** | **I37NO 13.03 337** | | | *i* | | 12 33 50.0 | |
| | baz=140,slow=331,SNR=1.0 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF 16.50 105** | | | *i* | | 13 04 20.0 | |
| | baz=311,slow=319,SNR=0.5 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS37.00 339** | | | *i* | | 15 12 40.0 | |
| | baz=58,slow=335,SNR=1.4 | | | | | | |

*SJA **25** 11:27:49.1±0.8, 30.80S×71.78W, h11km±4km, ML4.4, MW4.3*
*GUC **25** 11:27:53.4±0.8, 30.77S×71.38W, h45km±1km, ML4.7*
*IDC **25** 11:27:53.6±2.9, 30.84S×71.40W, h39km±24km, mb4.4/22, mb1 4.5/27, mb1mx4.3/43, mbtmp4.5/27, ML4.1/5, MS3.5/9, Ms1 3.5/9, ms1mx3.2/55, Error ellipse: s-maj=19.2km s-min=11.6km az=81.0*
*NEIC **25** 11:27:54.3±2.4, 30.79S±0.04×71.49W±0.09, h37km±6km, mb4.8/68, ML4.7(GUC), Error ellipse: s-maj=11.1km s-min=5.7km az=87.0*
*VAO **25** 11:27:54.1±0.5, 30.87S×71.35W, h41km, mb4.7*
**ISC 25 11:27:54.1±0.7, 30.79S±0.03×71.55W±0.04, h45km±5km, n228, σ1°94/243, mb4.8/47, MS3.7/4, 4C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge 0.14 329** | | | | **Pn** | **11 28 02.3 +0.9** | |
| **CO06** | **Fray Jorge 0.14 329** | | | *eP* | **Pn** | **11 28 02.4 +0.9** | |
| CO06 | | | | *eS* | **Sn** | **11 28 08.0 +1.4** | |
| CO06 | | | | IAML | | 11 28 09.2 | |
| | comp=N,71μm,0.5s | | | | | | |
| **CO02** | **Combarbal 0.63 131** | | | | **Pn** | **11 28 06.3 -0.5** | |
| **CO02** | **Combarbal 0.63 131** | | | *eP* | **Pn** | **11 28 06.4 -0.4** | |
| CO02 | | | | *eS* | **Sn** | **11 28 15.2 -0.7** | |
| **CO02** | **Combarbal 0.63 131** | | | *eP* | **Pn** | **11 28 03.0 -3.8** | |
| **CO03** | **El Pedregal 0.74 94** | | | | **Pn** | **11 28 07.6 -0.7** | |
| **CO03** | **El Pedregal 0.74 94** | | | *eP* | **Pn** | **11 28 07.1 -1.3** | |
| CO03 | | | | *eS* | **Sn** | **11 28 16.5 -2.1** | |
| **GO04** | **Tololo Observa 0.90 47** | | | | **Pn** | **11 28 10.5 -0.1** | |
| **GO04** | **Tololo Observa 0.90 47** | | | *eP* | **Pn** | **11 28 10.2 -0.4** | |
| GO04 | | | | *i* S | **Sn** | **11 28 22.4 -0.1** | |
| **GO04** | **Tololo Observa 0.90 47** | | | *eP* | **Pn** | **11 28 09.5 -1.0** | |
| GO04 | | | | *eP* | **Pn** | **11 28 10.0 -0.5** | |
| **CO05** | **La Serena 0.91 17** | | | | **Pn** | **11 28 10.9 +0.4** | |
| **CO05** | **La Serena 0.91 17** | | | *eP* | **Pn** | **11 28 10.3 -0.2** | |
| CO05 | | | | *eS* | **Sn** | **11 28 22.5 0.0** | |
| **VA06** | **Catapilco 1.78 173** | | | | **Pn** | **11 28 23.3 +0.9** | |
| **VA06** | **Catapilco 1.78 173** | | | *eP* | **Pn** | **11 28 23.2 +0.8** | |
| VA06 | | | | *eS* | **Sn** | **11 28 46.9 +3.2** | |
| VA06 | | | | IAML | | 11 29 04.6 | |
| | comp=N,10μm,0.5s | | | | | | |
| **AROD** | **Rodeo 1.90 71** | | | *eP* | **Pn** | **11 28 23.0 -1.3** | |
| AROD | | | | *eP* | **Pn** | **11 28 24.0 -0.4** | |
| AROD | | | | *eS* | **Sn** | **11 28 45.0 -2.2** | |
| **LCO** | **Las Campanas 1.92 23** | | Pn | *eP* | **Pn** | **11 28 25.3 +0.7** | |
| **LCO** | **Las Campanas 1.92 23** | | | *eP* | **Pn** | **11 28 25.3 +0.7** | |
| LCO | | | | *eS* | **Sn** | **11 28 49.8 +2.1** | |
| **LCO** | **Las Campanas 1.92 23** | | | *eP* | **Pn** | **11 28 25.0 +0.4** | |
| **VA03** | **San Esteban 2.14 157** | | | | **Pn** | **11 28 28.5 +1.0** | |
| **VA03** | **San Esteban 2.14 157** | | | *eP* | **Pn** | **11 28 28.8 +1.3** | |
| VA03 | | | | *i* S | **Sn** | **11 28 56.0 +3.1** | |
| VA03 | | | | IAML | | 11 29 05.2 | |
| | comp=E,5μm,0.6s | | | | | | |
| **VA03** | **San Esteban 2.14 157** | | | *eP* | **Pn** | **11 28 28.8 +1.3** | |
| VA03 | | | | *eS* | **Sn** | **11 28 57.0 +4.1** | |
| VA03 | | | | IAML | | 11 29 03.4 | |
| | comp=Z,3μm,0.8s | | | | | | |
| **ACCO** | **Cerro Coronel 2.15 85** | | | *eP* | **Pn** | **11 28 27.5 -0.3** | |
| ACCO | | | | IAML | | 11 29 09.9 | |
| | comp=Z,2μm,1.2s | | | | | | |
| **ACDV** | **Cuesta del Vie 2.19 74** | | | *eP* | **Pn** | **11 28 30.0 +1.8** | |
| ACDV | | | | IAML | | 11 29 15.8 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **ROCH** | **El Roble 2.22 168** | | | *eP* | **Pn** | **11 28 29.7 +1.0** | |
| ROCH | | | | *eP* | **Pn** | **11 28 28.1 -0.5** | |
| ROCH | | | | *eS* | **Sn** | **11 28 58.0 +3.0** | |
| ROCH | | | | *eS* | **Sn** | **11 28 58.4 +3.4** | |
| ROCH | | | | IAML | | 11 29 04.3 | |
| | comp=N,6μm,0.6s | | | | | | |
| ROCH | | | | IAML | | 11 29 09.3 | |
| | comp=N,5μm,0.3s | | | | | | |
| **ROC1** | **El Roble 2.22 168** | | | | **Pn** | **11 28 29.1 +0.3** | |
| **ROC1** | **El Roble 2.22 168** | | | *eP* | **Pn** | **11 28 28.0 -0.7** | |
| ROC1 | | | | *eS* | **Sn** | **11 28 58.0 +2.9** | |
| **VA01** | **Torpederas 2.23 182** | | | | **Pn** | **11 28 28.6 +0.1** | |
| **VA01** | **Torpederas 2.23 182** | | | *eP* | **Pn** | **11 28 28.8 +0.3** | |
| VA01 | | | | *i* S | **Sn** | **11 28 58.7 +4.0** | |
| **VA01** | **Torpederas 2.23 182** | | | *eP* | **Pn** | **11 28 23.5 -5.0** | |
| VA01 | | | | *eP* | **Pn** | **11 28 28.0 -0.5** | |
| VA01 | | | | *eS* | **Sn** | **11 28 58.0 +3.3** | |
| VA01 | | | | IAML | | 11 29 08.4 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **AUSP** | **Uspallata 2.33 128** | | | *eP* | **Pn** | **11 28 27.0 -3.3** | |
| AUSP | | | | *eP* | **Pn** | **11 28 32.9 +2.7** | |
| AUSP | | | | *eP* | **Pn** | **11 28 33.0 +2.7** | |
| AUSP | | | | *eS* | Sn | 11 28 46.4 -12 | |
| **PEL** | **Peldehue 2.46 163** | | | | **Pn** | **11 28 32.7 +1.0** | |
| **MT02** | **Curacav 2.48 172** | | | | **Pn** | **11 28 32.5 +0.4** | |
| **MT02** | **Curacav 2.48 172** | | | *eP* | **Pn** | **11 28 32.9 +0.8** | |
| MT02 | | | | *i* S | **Sn** | **11 29 04.7 +3.5** | |
| **MT02** | **Curacav 2.48 172** | | | *eP* | **Pn** | **11 28 28.0 -4.1** | |
| MT02 | | | | *eP* | **Pn** | **11 28 32.8 +0.8** | |
| MT02 | | | | *eP* | **Pn** | **11 28 33.0 +0.9** | |
| MT02 | | | | *eS* | Sn | 11 28 49.3 -12 | |
| MT02 | | | | IAML | | 11 29 14.1 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **ZON** | **Zonda 2.57 108** | | | | **Pn** | **11 28 35.6 +2.3** | |
| **ZON** | **Zonda 2.57 108** | | | *eP* | **Pn** | **11 28 35.9 +2.5** | |
| ZON | | | | *eS* | **Sn** | **11 29 10.0 +6.5** | |
| ZON | | | | IAML | | 11 29 24.6 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **AC04** | **Llanos de Chal 2.61 9** | | | | **Pn** | **11 28 35.0 +1.2** | |
| **AC04** | **Llanos de Chal 2.61 9** | | | *eP* | **Pn** | **11 28 34.0 +0.2** | |
| AC04 | | | | *eS* | **Sn** | **11 29 08.0 +3.7** | |
| AC04 | | | | *eS* | Sn | 11 29 16.7 +12 | |
| AC04 | | | | IAML | | 11 29 18.5 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **MT05** | **Renca 2.68 165** | | | | **Pn** | **11 28 35.8 +1.0** | |
| **MT05** | **Renca 2.68 165** | | | *eP* | **Pn** | **11 28 36.5 +1.7** | |
| MT05 | | | | *eS* | **Sn** | **11 29 08.0 +1.9** | |
| MT05 | | | | IAML | | 11 29 23.5 | |
| | comp=E,6μm,0.5s | | | | | | |
| **MT05** | **Renca 2.68 165** | | | *eP* | **Pn** | **11 28 35.0 +0.2** | |
| MT05 | | | | *eS* | **Sn** | **11 29 09.5 +3.4** | |
| MT05 | | | | IAML | | 11 29 18.5 | |
| | comp=Z,4μm,0.7s | | | | | | |
| **RTLL** | **Cerro Villicun 2.69 102** | | | *eP* | **Pn** | **11 28 36.9 +1.9** | |
| RTLL | | | | *eS* | **Sn** | **11 29 13.6 +7.1** | |
| **RTCV** | **Cerro Valdivia 2.79 113** | | | *eP* | **Pn** | **11 28 39.0 +2.7** | |
| RTCV | | | | *eS* | Sn | 11 29 16.7 +8.0 | |
| RTCV | | | | IAML | | 11 29 29.7 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **MT03** | **Universidad Ad 2.83 162** | | | | **Pn** | **11 28 38.4 +1.5** | |
| **MT03** | **Universidad Ad 2.83 162** | | | *eP* | Pn | 11 28 28.0 -9.0 | |
| MT03 | | | | *eP* | **Pn** | **11 28 39.0 +2.0** | |
| MT03 | | | | *eS* | **Sn** | **11 29 17.0 +7.1** | |
| MT03 | | | | IAML | | 11 29 29.2 | |
| | comp=Z,3μm,0.8s | | | | | | |
| **VA05** | **Santo Domingo 2.86 181** | | | | **Pn** | **11 28 37.1 -0.1** | |
| **VA05** | **Santo Domingo 2.86 181** | | | *eP* | **Pn** | **11 28 37.3 +0.1** | |
| VA05 | | | | *eS* | **Sn** | **11 29 12.6 +2.3** | |
| VA05 | | | | IAML | | 11 29 29.2 | |
| | comp=E,3μm,0.3s | | | | | | |
| **ASAL** | **Salagasta 2.93 128** | | | *eP* | **Pn** | **11 28 41.0 +2.8** | |
| ASAL | | | | *eS* | **Sn** | **11 29 19.5 +7.3** | |
| ASAL | | | | *eS* | | 11 29 27.5 | |
| ASAL | | | | IAML | | 11 29 34.2 | |
| | comp=Z,1μm,1.2s | | | | | | |
| **MT09** | **Talagante 3.01 171** | | | | **Pn** | **11 28 40.8 +1.4** | |
| **MT09** | **Talagante 3.01 171** | | | *eP* | **Pn** | **11 28 40.9 +1.4** | |
| MT09 | | | | *eS* | **Sn** | **11 29 17.3 +2.9** | |
| MT09 | | | | IAML | | 11 29 29.1 | |
| | comp=E,3μm,0.2s | | | | | | |
| **ARCO** | **CERRO ARCO 3.02 133** | | | *eP* | **Pn** | **11 28 43.0 +3.4** | |
| ARCO | | | | *eS* | Sn | 11 29 30.9 +16 | |
| ARCO | | | | IAML | | 11 29 31.8 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **MT01** | **Popeta 3.07 175** | | | | **Pn** | **11 28 41.2 +1.0** | |
| **MT01** | **Popeta 3.07 175** | | | IAML | | 11 29 31.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **MT01** | **Popeta 3.07 175** | | | *eP* | **Pn** | **11 28 40.9 +0.8** | |
| MT01 | | | | *eP* | **Pn** | **11 28 41.0 +0.8** | |
| MT01 | | | | *eS* | **Sn** | **11 29 18.5 +2.8** | |
| MT01 | | | | IAML | | 11 29 38.3 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **AAGR** | **Agrelo 3.25 135** | | | *eP* | **Pn** | **11 28 46.0 +3.3** | |
| AAGR | | | | IAML | | 11 29 43.1 | |
| | comp=Z,1μm,1.1s | | | | | | |
| **LMEL** | **Las Melosas 3.25 160** | | | | **Pn** | **11 28 45.1 +2.3** | |
| **LMEL** | **Las Melosas 3.25 160** | | | *eP* | **Pn** | **11 28 44.7 +2.0** | |
| LMEL | | | | *eS* | **Sn** | **11 29 23.1 +2.8** | |
| LMEL | | | | IAML | | 11 29 31.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **BO04** | **La Punta 3.29 166** | | | | **Pn** | **11 28 44.2 +1.1** | |
| **GO03** | **Copiap 3.39 20** | | Pn | | **Pn** | **11 28 45.2 +0.7** | |
| **GO03** | **Copiap 3.39 20** | | | *eP* | **Pn** | **11 28 45.7 +1.2** | |
| GO03 | | | | *eS* | **Sn** | **11 29 25.2 +1.6** | |
| **GO03** | **Copiap 3.39 20** | | | *eP* | **Pn** | **11 28 45.8 +1.2** | |
| GO03 | | | | *eP* | **Pn** | **11 28 46.0 +1.4** | |
| GO03 | | | | *eS* | **Sn** | **11 29 27.0 +3.5** | |
| **VCA** | **Vinchina 3.56 56** | | | *eP* | **Pn** | **11 28 50.0 +3.0** | |
| VCA | | | | *eS* | Sn | 11 29 36.5 +8.7 | |
| **BO01** | **Tunca 3.61 174** | | | | **Pn** | **11 28 48.8 +1.3** | |
| **BO01** | **Tunca 3.61 174** | | | *eP* | **Pn** | **11 28 48.4 +0.9** | |
| BO01 | | | | *eP* | **Pn** | **11 28 49.0 +1.5** | |
| BO01 | | | | *eS* | **Sn** | **11 29 36.5 +7.6** | |
| BO01 | | | | IAML | | 11 29 46.3 | |
| | comp=Z,697nm,0.6s | | | | | | |
| **BO02** | **Sierra Bellavi 4.04 171** | | | | **Pn** | **11 28 55.1 +1.6** | |
| **BO02** | **Sierra Bellavi 4.04 171** | | | *eP* | **Pn** | **11 28 54.7 +1.2** | |
| BO02 | | | | *eS* | **Sn** | **11 29 44.0 +4.4** | |
| BO02 | | | | *eS* | **Sn** | **11 29 45.0 +5.4** | |
| BO02 | | | | IAML | | 11 30 06.5 | |
| | comp=Z,865nm,0.8s | | | | | | |
| **ACLC** | **CERRO LA CRUZ 4.21 72** | | | *eP* | **Pn** | **11 28 57.6 +1.7** | |
| ACLC | | | | *eS* | **Sn** | **11 29 44.0 0.0** | |
| **GO05** | **Huala 4.22 184** | | Pn | | **Pn** | **11 28 55.2 -0.7** | |
| **GO05** | **Huala 4.22 184** | | | *eP* | **Pn** | **11 28 55.6 -0.3** | |
| **AC02** | **Maricunga 4.48 29** | | | *eS* | Sn | 11 30 06.5 +15 | |
| AC02 | | | | IAML | | 11 30 12.4 | |
| | comp=Z,760nm,1.4s | | | | | | |
| **PB14** | **IPOC Station P 6.23 10** | | Pn | | **Pn** | **11 29 23.1 -0.6** | |
| **LVC** | **Limon Verde 8.48 17** | | Pn | | **Pn** | **11 29 54.5 -0.3** | |
| | comp=Z,0.9nm,0.3s,baz=164,slow=12,SNR=11 | | | | | | |
| LVC | | | | | Sn | **Sn** | **11 31 36.6 +7.2** |
| | comp=Z,5.9nm,0.3s,baz=223,slow=16,SNR=4.2 | | | | | | |
| LVC | | | | | LR | LR | 11 33 00.7 |
| | comp=Z,330nm,20.1s,baz=212,slow=36 | | | | | | |
| **LVC** | **Limon Verde 8.48 17** | | | *eP* | **Pn** | **11 29 53.2 -1.6** | |
| **LVC** | **Limon Verde 8.48 17** | | | *eP* | **Pn** | **11 29 54.9 +0.1** | |
| **PB03** | **IPOC Station P 8.86 11** | | Pn | | **Pn** | **11 29 58.5 -1.2** | |
| **PLCA** | **Paso Flores 9.95 176** | | Pn | | **Pn** | **11 30 12.8 -1.8** | |
| | comp=Z,0.3nm,0.3s,baz=342,slow=11,SNR=10 | | | | | | |
| PLCA | | | | | LR | LR | 11 34 37.6 |
| | comp=Z,175nm,20.7s,baz=339,slow=41 | | | | | | |
| **LL04** | **Puerto Octay 10.12 184** | | | | **Pn** | **11 30 16.6 -0.1** | |
| **ITQB** | **Itaqui 12.96 89** | | Pn | | **Pn** | **11 30 51.7 -3.9** | |
| **ITQB** | **Itaqui 12.96 89** | | | *eP* | **Pn** | **11 30 52.5 -3.0** | |
| **CPUP** | **Villa Florida 13.26 74** | | Pn | | **Pn** | **11 30 57.6 -2.2** | |
| | comp=Z,0.5nm,0.3s,baz=254,slow=13,SNR=3.1 | | | | | | |
| CPUP | | | | | LR | LR | 11 36 51.7 |
| | comp=Z,158nm,19.1s,baz=243,slow=41 | | | | | | |
| **CPUP** | **Villa Florida 13.26 74** | | | *eP* | **Pn** | **11 30 57.4 -2.4** | |
| **LPAZ** | **La Paz 14.77 13** | | Pn | | **Pn** | **11 31 20.8 0.0** | |
| | comp=Z,0.3nm,0.3s,baz=193,slow=6.3,SNR=28 | | | | | | |
| **LPAZ** | **La Paz 14.77 13** | | | | **Pn** | **11 31 21.3 +0.5** | |
| **LPAZ** | **La Paz 14.77 13** | | | *eP* | **Pn** | **11 31 21.6 +0.8** | |
| **PLTB** | **Pedras Altas 15.38 98** | | Pn | | **Pn** | **11 31 25.9 -2.2** | |
| **PLTB** | **Pedras Altas 15.38 98** | | | *eP* | **Pn** | **11 31 25.1 -3.0** | |
| **CPSB** | **Cacapava Do Su 15.61 93** | | | *eP* | **Pn** | **11 31 28.2 -2.8** | |
| **ITAB** | **Concordia 17.35 83** | | P | | **Pn** | **11 31 51.0 -2.0** | |
| ITAB | | | | IAmb | IAmb | 11 32 11.9 | |
| | comp=Z,58nm,1.1s | | | | | | |
| **ITAB** | **Concordia 17.35 83** | | | *eP* | **Pn** | **11 31 51.6 -1.4** | |
| **SIV** | **San Ignacio 17.58 35** | | P | | **Pn** | **11 31 55.9 0.0** | |
| | comp=Z,1.7nm,0.3s,baz=215,slow=9.4,SNR=51 | | | | | | |
| SIV | | | | | LR | LR | 11 40 09.5 |
| | comp=Z,155nm,18.9s,baz=248,slow=42 | | | | | | |
| **AQDB** | **Aquidauana 17.58 58** | | | *eP* | **Pn** | **11 31 53.6 -2.3** | |
| **PTGB** | **Pitanga 18.27 75** | | | *eP* | **Pn** | **11 32 03.9 -0.5** | |
| **PTLB** | **Pontes e Lacer 19.04 39** | | | *eP* | **P** | **11 32 12.6 0.0** | |
| **NNA** | **Nana 19.34 344** | | LR | | LR | 11 38 16.0 | |
| | comp=Z,64nm,20.6s,baz=182,slow=32 | | | | | | |
| **TER01** | **Tubaro-SC 19.61 89** | | | *eP* | **P** | **11 32 18.7 -0.1** | |
| **PP1B** | **Ponte de Pedra 20.06 53** | | | *eP* | **P** | **11 32 23.5 -0.2** | |
| **PCMB** | **Pacaembu 20.35 68** | | | *eP* | **P** | **11 32 26.0 -0.8** | |
| **VILB** | **Vilhena 20.62 33** | | | *eP* | **P** | **11 32 29.5 -0.3** | |
| **SALV** | **Santo Antonio 20.74 48** | | | *eP* | **P** | **11 32 30.4 -0.7** | |
| **FRTB** | **Fartura 20.92 75** | | | *eP* | **P** | **11 32 32.4 -0.6** | |
| **ETMB** | **Extrema 21.45 15** | | | *eP* | **P** | **11 32 39.6 +0.9** | |
| **ITRB** | **Iturama 22.08 65** | | | *eP* | **P** | **11 32 44.2 -1.3** | |
| **PET01** | **Itanhaem-SP 22.45 79** | | | *eP* | **P** | **11 32 46.9 -2.5** | |
| **BB19B** | **Bebedouro 22.82 70** | | | *eP* | **P** | **11 32 50.7 -2.7** | |
| **CZSB** | **Cruzeiro do Su 22.97 357** | | | *eP* | **P** | **11 32 56.3 +1.5** | |
| **RCLB** | **Rio Claro- Sao 23.00 75** | | | *eP* | **P** | **11 32 54.9 -0.4** | |
| **MG03** | **Isla Dawson 23.05 178** | | | P | **P** | **11 32 56.0 +0.6** | |
| **VAO** | **Valinhos 23.23 76** | | | *eP* | **P** | **11 32 55.4 -2.1** | |
| **ARAG** | **Araguaiana, MT 23.49 55** | | | *eP* | **P** | **11 32 59.6 -0.3** | |
| **PDRB** | **Porto dos Gac 23.51 39** | | | *eP* | **P** | **11 32 59.7 -0.5** | |
| **USHA** | **Ushuaia 24.13 176** | | | P | **P** | **11 33 04.7 -0.8** | |
| | comp=Z,24nm,1.0s,baz=1.7,slow=4.6,SNR=8.4 | | | | | | |
| **PARB** | **Paraibuna 24.22 78** | | | *eP* | **P** | **11 33 05.3 -1.5** | |
| **CLDB** | **Colider 24.63 40** | | | *eP* | **P** | **11 33 10.3 -0.2** | |
| **IPMB** | **Ipameri, GO 24.73 64** | | | *eP* | **P** | **11 33 10.4 -1.0** | |
| **BSCB** | **Bom Sucesso 25.93 74** | | | *eP* | **P** | **11 33 21.4 -1.0** | |
| **BDFB** | **Brasilia 26.29 60** | | P | | **P** | **11 33 24.7 -1.0** | |
| | comp=Z,26nm,0.9s,baz=238,slow=7.4,SNR=23 | | | | | | |
| **BDFB** | **Brasilia 26.29 60** | | P | | **P** | **11 33 23.8 -1.9** | |
| BDFB | | | | IAmb | IAmb | 11 33 27.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **SNDB** | **Serra Nova Dou 26.50 49** | | | *eP* | **P** | **11 33 27.4 0.0** | |
| **TBTG** | **Tabatinga, AM 26.51 4** | | | *eP* | **P** | **11 33 28.8 +1.3** | |
| **DUB01** | **Friburgo-RJ 27.47 79** | | | *eP* | **P** | **11 33 35.5 -0.6** | |
| **NPGB** | **Novo Progresso 28.08 36** | | | *eP* | **P** | **11 33 40.0 -1.6** | |
| **DIAM** | **Diamantina, MG 28.16 70** | | | *eP* | **P** | **11 33 42.1 -0.4** | |
| **CAM01** | **Campos-RJ 28.18 79** | | | *eP* | **P** | **11 33 42.2 -0.2** | |
| **PEXB** | **Peixe 28.43 54** | | | *eP* | **P** | **11 33 43.3 -1.4** | |
| **MACA** | **Manacapuru-AM 29.34 23** | | | *eP* | **P** | **11 33 52.9 +0.2** | |
| **JANB** | **Januaria 29.46 64** | | | *eP* | **P** | **11 33 53.2 -0.8** | |
| **ALF01** | **Guarapari-ES 29.48 77** | | | *eP* | **P** | **11 33 53.8 -0.2** | |
| **SJMB** | **Sao Joao De Ma 29.99 73** | | | *eP* | **P** | **11 33 57.5 -1.1** | |
| **ITTB** | **Itaituba 30.22 33** | | | *eP* | **P** | **11 33 59.7 -0.8** | |
| **RIB01** | **Linhares ES 30.35 75** | | | *eP* | **P** | **11 34 01.2 -0.6** | |
| **SDBA** | **SAO DESIDERIO 30.67 59** | | | *eP* | **P** | **11 34 04.1 -0.5** | |
| **SMTB** | **Santa Maria do 31.23 51** | | | *eP* | **P** | **11 34 09.9 +0.4** | |
| **PTGA** | **Pitinga 31.86 22** | | P | | **P** | **11 34 14.6 -0.4** | |
| | comp=Z,12nm,0.9s,baz=201,slow=10,SNR=9.9 | | | | | | |
| PTGA | | | | | LR | LR | 11 48 57.4 |
| | comp=Z,98nm,20.2s,baz=168,slow=40 | | | | | | |
| **PRPB** | **Paraupebas 31.88 44** | | | *eP* | **P** | **11 34 14.7 -0.5** | |
| **GUA01** | **Guaratinga, BA 32.20 71** | | | *eP* | **P** | **11 34 17.2 -0.8** | |
| **CMC01** | **Camacan, BA 33.08 70** | | | *eP* | **P** | **11 34 25.1 -0.8** | |
| **MALB** | **Monte Alegre 33.11 33** | | | *eP* | **P** | **11 34 24.7 -1.3** | |
| **NBIT** | **Itapeh - BA 33.39 69** | | | *eP* | **P** | **11 34 27.9 -0.5** | |
| **GDU01** | **Guandu, BA 33.96 67** | | | *eP* | **P** | **11 34 32.0 -1.4** | |
| **BOAV** | **Boa Vista 34.64 20** | | | *eP* | **P** | **11 34 39.4 +0.1** | |
| **NBPN** | **Ponto Novo - B 35.20 62** | | | *eP* | **P** | **11 34 43.3 -0.9** | |
| **MCPB** | **Macapa, AP 35.48 35** | | | *eP* | **P** | **11 34 45.6 -0.9** | |
| **NBLA** | **Lagarto - SE 36.97 65** | | | *eP* | **P** | **11 34 57.6 -1.7** | |
| **ROSB** | **Rosrio 37.96 48** | | | *eP* | **P** | **11 35 07.0 -0.7** | |
| **NBMA** | **Muriti-CE 38.52 60** | | | *eP* | **P** | **11 35 11.9 -0.6** | |
| **NBPS** | **Pedro II - PI 38.64 53** | | | *eP* | **P** | **11 35 13.2 -0.3** | |
| **NBAN** | **Anadia - AL 38.95 65** | | | *eP* | **P** | **11 35 14.8 -1.3** | |
| **NBPB** | **Pedra_Branca-C 39.15 57** | | | *eP* | **P** | **11 35 17.4 -0.2** | |
| **SDV** | **Santo Domingo 39.46 1** | | P | | **P** | **11 35 20.5 +0.1** | |
| | comp=Z,4.7nm,0.6s,baz=4.5,slow=1.6,SNR=6.5 | | | | | | |
| **SDV** | **Santo Domingo 39.46 1** | | P | | **P** | **11 35 20.1 -0.3** | |
| **SDV** | **Santo Domingo 39.46 1** | | P | | **P** | **11 35 20.8 +0.4** | |
| **NBLV** | **Livramento - P 39.90 61** | | | *eP* | **P** | **11 35 23.3 -0.7** | |
| **MDP** | **Montagnes des 40.01 30** | | P | | **P** | **11 35 23.9 -0.9** | |
| | comp=Z,20nm,0.9s,baz=184,slow=13,SNR=1.9 | | | | | | |
| **NBPV** | **Pedro Velho 41.74 62** | | | *eP* | **P** | **11 35 39.3 +0.2** | |
| **MLPR** | **Magueyes Islan 48.67 6** | | | P | **P** | **11 36 32.8 -1.1** | |
| **CELP** | **Cerrillos 48.82 6** | | | P | **P** | **11 36 34.4 -0.6** | |
| **SJG** | **San Juan 48.90 7** | | | P | **P** | **11 36 35.1 -0.5** | |
| | comp=Z,23nm,0.6s,baz=235,slow=1.3,SNR=6.6 | | | | | | |
| **SJG** | **San Juan 48.90 7** | | | P | **P** | **11 36 35.5 -0.1** | |
| **VNA3** | **Neumayer Olymp 52.18 159** | | | P | **P** | **11 36 59.8 0.0** | |
| **VNA2** | **Neumayer--Watz 52.81 158** | | | P | **P** | **11 37 04.4 -0.1** | |
| | baz=283,slow=9.7 | | | | | | |
| **SNAA** | **Sanae 54.40 159** | | | P | **P** | **11 37 15.9 -0.4** | |
| **SNAA** | **Sanae 54.40 159** | | | P | **P** | **11 37 15.6 -0.7** | |
| | comp=Z,7.1nm,0.8s,baz=265,slow=8.9,SNR=13 | | | | | | |
| **SNAA** | **Sanae 54.40 159** | | | IAmb | IAmb | 11 37 38.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui 59.44 180** | | | P | **P** | **11 37 52.4 +0.3** | |
| | comp=Z,4.0nm,0.7s,baz=303,slow=1.6,SNR=32 | | | | | | |
| **QSPA** | **South Pole Qui 59.44 180** | | | IAmb | IAmb | 11 38 13.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **X48A** | **Hartselle 66.52 346** | | | IAmb | IAmb | 11 38 41.4 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **JCT** | **Junction City 66.59 334** | | | IAmb | IAmb | 11 38 42.4 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **V55A** | **Taylorsville 66.91 351** | | | IAmb | IAmb | 11 38 43.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **CPCT** | **Cooper Cave 67.01 349** | | | IAmb | IAmb | 11 38 43.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **TKL** | **Tuckaleechee C 67.09 349** | | | P | **P** | **11 38 42.7 -0.1** | |
| | comp=Z,6.4nm,0.8s,baz=161,slow=9.5,SNR=7.1 | | | | | | |
| **TKL** | **Tuckaleechee C 67.09 349** | | | IAmb | IAmb | 11 38 57.8 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array 67.16 330** | | | P | **P** | **11 38 44.6 +1.1** | |
| | comp=Z,1.7nm,0.7s,baz=150,slow=8.0,SNR=23 | | | | | | |
| **TX31** | **Lajitas Ar. Si 67.16 330** | | | P | **P** | **11 38 44.8 +1.3** | |
| TX31 | | | | IAmb | IAmb | 11 39 09.2 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **V48A** | **Smith Brothers 67.72 347** | | | IAmb | IAmb | 11 38 49.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **WVT** | **Waverly 68.30 346** | | | P | **P** | **11 38 50.7 +0.3** | |
| WVT | | | | IAmb | IAmb | 11 38 51.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MNTX** | **Cornudas Mount 69.94 330** | | | P | **P** | **11 39 01.4 +0.7** | |
| **LIC** | **Lamto 73.38 72** | | | *eP* | **P** | **11 39 21.0 -0.8** | |
| | comp=Z,43nm,0.7s | | | | | | |
| **TIC** | **Toumodi 73.63 72** | | | *eP* | **P** | **11 39 22.7 -0.6** | |
| **KIC** | **Kosan Boka 73.70 72** | | | *eP* | **P** | **11 39 23.4 -0.2** | |
| | comp=Z,30nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro 73.78 72** | | | P | **P** | **11 39 24.0 -0.1** | |
| | comp=Z,20nm,0.6s,baz=241,slow=6.2,SNR=32 | | | | | | |
| DBIC | | | | | LR | LR | 12 09 14.6 |
| | comp=Z,50nm,20.1s,baz=212,slow=34 | | | | | | |
| **DBIC** | **Dimbokro 73.78 72** | | | P | **P** | **11 39 23.7 -0.4** | |
| **T25A** | **Trinidad 74.25 333** | | | IAmb | IAmb | 11 39 30.3 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **SADO** | **Sadowa 75.52 354** | | | P | **P** | **11 39 33.6 +0.2** | |
| | comp=Z,6.4nm,0.6s,baz=170,slow=1.7,SNR=4.0 | | | | | | |
| **MAW** | **Mawson 76.13 164** | | | LR | LR | 12 13 56.2 | |
| | comp=Z,68nm,19.4s,baz=231,slow=36 | | | | | | |
| **PFO** | **Pinyon Flats O 76.82 323** | | | P | **P** | **11 39 42.9 +1.6** | |
| | comp=Z,4.3nm,1.0s,baz=113,slow=4.5,SNR=6.1 | | | | | | |
| **PV13** | **Radium Mtn., P 76.91 331** | | | IAmb | IAmb | 11 39 44.7 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **SMCO** | **Snowmass 77.02 332** | | | IAmb | IAmb | 11 39 46.1 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **ECSD** | **EROS Data Cent 77.64 342** | | | IAmb | IAmb | 11 39 47.3 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **P18A** | **Preston Nutter 78.75 331** | | | IAmb | IAmb | 11 39 55.1 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **F36A** | **Milaca 78.86 345** | | | IAmb | IAmb | 11 39 53.2 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **TSUM** | **Tsumeb 79.70 106** | | | P | **P** | **11 39 57.7 0.0** | |
| TSUM | | | | IAmb | IAmb | 11 39 59.0 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array 81.10 333** | | | P | **P** | **11 40 05.7 +1.0** | |
| | comp=Z,0.6nm,0.6s,baz=137,slow=8.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LBTB | | | | *i* S | Sn | 11 30 06.8 | -2.0 |
| **LBTB** | **Lobatse** | **3.67** | **288** | *i* P | Pn | 11 29 26.3 | +0.1 |
| LBTB | | | | *i* S | Sn | 11 30 06.8 | -2.0 |
| **MSNA** | **Messina** | **3.86** | **8** | *i* P | Pn | 11 29 28.4 | -0.4 |
| MSNA | | | | *i* S | Sn | 11 30 11.0 | -2.4 |
| **MSNA** | **Messina** | **3.86** | **8** | *i* P | Pn | 11 29 28.4 | -0.4 |
| MSNA | | | | *i* S | Sn | 11 30 11.0 | -2.4 |
| **BOSA** | **Boshof** | **4.44** | **236** | *i* P | Pn | 11 29 36.8 | -0.1 |
| BOSA | | | | *i* S | Sn | 11 30 24.0 | -3.9 |
| **BOSA** | **Boshof** | **4.44** | **236** | *i* P | Pn | 11 29 36.8 | -0.1 |
| BOSA | | | | *i* S | Sn | 11 30 24.0 | -3.9 |
| **MATP** | **Matopo** | **5.80** | **351** | *i* P | Pn | 11 29 55.4 | -0.2 |
| MATP | | | | *i* S | Sn | 11 30 56.4 | -5.1 |
| **MATP** | **Matopo** | **5.80** | **351** | *i* P | Pn | 11 29 55.4 | -0.2 |
| MATP | | | | *i* S | Sn | 11 30 56.4 | -5.1 |
| **BLWY** | **Bulawayo** | **6.07** | **353** | *i* P | Pn | 11 29 58.9 | -0.3 |
| BLWY | | | | *i* S | Sn | 11 31 02.8 | -5.3 |
| **BLWY** | **Bulawayo** | **6.07** | **353** | *i* P | Pn | 11 29 58.9 | -0.3 |
| BLWY | | | | *i* S | Sn | 11 31 02.8 | -5.3 |

*IDC **25** 11:39:02.5±0.9,35°.97N×97°.43W,h0km,mb4.0/5, mb1 4.1/10,mb1mx3.7/73,mbtmpb3.9/10,ML3.7/5,Error ellipse: s-maj=15.2km s-min=13.0km az=108.0*
*ANF **25** 11:39:02.9±0.6,35°.89N×97°.28W,h5km±5km,ML4.9/18, Error ellipse: s-maj=2.6km s-min=1.9km az=18.0*
*TUL **25** 11:39:03.6±0.6,35°.88N±0°.02×97°.31W±0°.02,h8km±5km, ML4.2,mb_Lg4.0/114(NEIC),Mwr3.6/34(NEIC),Error ellipse: s-maj=2.4km s-min=1.8km az=162.0*
*NEIC **25** 11:39:03.5,35°.90N×97°.32W,h6km,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.93; Mθθ=3.10; Mϕϕ=-2.17; Mrθ=0.45; Mϕθ=0.81; Mϕr=0.61; Fault plane solution: M₀=2.97000×10¹⁴ NP1:ϕs=125.56000°, δ=70.90000°,λ=-9.00000°. NP2:ϕs=218.53000°,δ=81.50000°, λ=-160.68000°. Principal axes: T 3.2932, Plg7.0000°, Azm351.0000°; N -0.8069, Plg69.0000°, Azm241.0000°; P -2.4863, Plg20.0000°, Azm83.0000°;*
*NEIC **25** 11:39:04.2±0.5,35°.88N±0°.02×97°.31W±0°.02,h4km±6km Error ellipse: s-maj=2.6km s-min=1.7km az=145.0*

**ISC 25 11:39:03.4±1.1,35°.90N±0°.03×97°.29W±0°.04,h9km±8km, n126,σ0s71/101,mb4.2/4,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.25** | **162** | | **Pg** | **11 39 08.8** | **+0.3** |
| OK005 | | | | Sg | **Sg** | 11 39 12.5 | +0.6 |
| **OK009** | **Oakdale Elemen** | **0.33** | **199** | | **Pg** | **11 39 10.0** | **0.0** |
| OK009 | | | | Sg | **Sg** | 11 39 14.6 | +0.2 |
| **OK001** | **Jones High Sch** | **0.34** | **180** | Pg | **Pg** | 11 39 10.1 | +0.1 |
| OK001 | | | | Sg | **Sg** | 11 39 14.8 | +0.4 |
| **OKCFA** | **Oklahoma City** | **0.50** | **196** | | **Pg** | **11 39 13.0** | **-0.1** |
| OKCFA | | | | Sg | **Sg** | 11 39 19.7 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **0.51** | **194** | | **Pg** | **11 39 13.1** | **-0.1** |
| **FNO** | **Franklin** | **0.65** | **188** | Pg | **Pg** | 11 39 15.6 | -0.2 |
| **W35A** | **Tecumseh** | **0.82** | **156** | | **Pg** | **11 39 18.6** | **-0.5** |
| **T35A** | **Sooner Cattle** | **1.19** | **31** | | **Pg** | **11 39 26.1** | **-0.1** |
| **TUL1** | **Leonard** | **1.21** | **89** | | **Pg** | **11 39 25.8** | **-0.8** |
| **TUL1** | **Leonard** baz=269,SNR=345 | **1.21** | **89** | P | **Pg** | **11 39 25.8** | **-0.8** |
| TUL1 | | | | S | **Sg** | **11 39 42.9** | **+0.4** |
| **X34A** | **Smith Ranch, M** baz=269 | **1.37** | **199** | | **Pn** | **11 39 28.8** | **+0.1** |
| **U32A** | **Winter Ranch,** | **1.47** | **290** | Pg | **Pn** | 11 39 30.1 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.68** | **227** | | **Pn** | **11 39 33.5** | **+0.5** |
| **WMOK** | **Wichita Mounta** baz=46,SNR=162 | **1.68** | **227** | P | **Pn** | **11 39 33.3** | **+0.3** |
| WMOK | | | | S | **Sb** | **11 39 55.8** | **0.0** |
| **X37A** | **Clayton** baz=46 | **2.04** | **129** | | **Pn** | **11 39 38.9** | **+1.0** |
| X37A | | | | lAmb_Lg | | 11 40 11.9 | |
| **Z35A** | **Perchaven, San** comp=Z,609nm,0.8s | **2.56** | **179** | | **Pn** | **11 39 45.7** | **+0.7** |
| **HHAR** | **Hobbs** | **2.74** | **81** | Pn | **Pn** | **11 39 48.3** | **+0.8** |
| **R32A** | **Long Quarter,** comp=Z,368nm,0.8s | **2.77** | **336** | Pn | **Pn** | **11 39 48.5** | **+0.6** |
| R32A | | | | lAmb_Lg | | 11 40 34.9 | |
| **W39A** | **Magazine** comp=Z,562nm,0.7s | **2.94** | **103** | Pn | **Pn** | **11 39 51.2** | **+0.9** |
| W39A | | | | lAmb_Lg | | 11 40 45.4 | |
| **W39A** | **Magazine** baz=284,SNR=82 | **2.94** | **103** | P | **Pn** | **11 39 51.1** | **+0.9** |
| W39A | | | | S | **Sn** | **11 40 27.4** | **+1.7** |
| **KSU1** | **Kansas State U** comp=Z,409nm,0.8s | **3.24** | **9** | Pn | **Pn** | **11 39 55.4** | **+1.0** |
| KSU1 | | | | lAmb_Lg | | 11 40 50.2 | |
| **KSU1** | **Kansas State U** baz=190,SNR=19 | **3.24** | **9** | P | **Pn** | **11 39 55.0** | **+0.6** |
| **Z38A** | **Mt. Pleasant** comp=Z,435nm,0.8s | **3.25** | **144** | | **Pn** | **11 39 55.3** | **+0.9** |
| Z38A | | | | lAmb_Lg | | 11 40 48.8 | |
| **MIAR** | **Mount Ida** comp=Z,313nm,0.9s | **3.32** | **113** | | **Pn** | **11 39 56.8** | **+1.3** |
| MIAR | | | | lAmb_Lg | | 11 40 56.5 | |
| **MIAR** | **Mount Ida** baz=295,SNR=33 | **3.32** | **113** | P | **Pn** | **11 39 56.4** | **+0.9** |
| MIAR | | | | S | **Sn** | **11 40 36.6** | **+1.5** |
| **CBKS** | **Cedar Bluff** comp=Z,291nm,0.9s | **3.50** | **327** | Pn | **Pn** | **11 39 58.8** | **+0.7** |
| CBKS | | | | lAmb_Lg | | 11 41 02.8 | |
| **CBKS** | **Cedar Bluff** baz=146 | **3.50** | **327** | P | **Pn** | **11 39 58.4** | **+0.3** |
| **U40A** | **Yellville** | **3.62** | **81** | Pn | **Pn** | **11 39 59.8** | **+0.2** |
| **U40A** | **Yellville** baz=264,SNR=17 | **3.62** | **81** | P | **Pn** | **11 39 59.9** | **+0.2** |
| U40A | | | | S | **Sn** | **11 40 44.0** | **+1.5** |
| **S39A** | **Bolivar** comp=Z,326nm,0.9s | **3.65** | **59** | Pn | **Pn** | **11 40 00.6** | **+0.6** |
| S39A | | | | lAmb_Lg | | 11 41 08.3 | |
| **AMTX** | **Amarillo** comp=Z,535nm,0.7s | **3.73** | **256** | Pn | **Pn** | **11 40 02.0** | **+0.8** |
| AMTX | | | | lAmb_Lg | | 11 41 11.4 | |
| **AMTX** | **Amarillo** baz=73 | **3.73** | **256** | P | **Pn** | **11 40 01.8** | **+0.6** |
| **ABTX** | **Abilene, Hawle** comp=Z,491nm,1.2s | **3.80** | **212** | lAmb_Lg | | 11 41 05.8 | |
| **ABTX** | **Abilene, Hawle** baz=30 | **3.80** | **212** | P | **Pn** | **11 40 02.0** | **-0.1** |
| **WHTX** | **Lake Whitney,** | **3.90** | **182** | Pn | **Pn** | **11 40 03.9** | **+0.5** |
| **WHTX** | **Lake Whitney,** baz=1.8 | **3.90** | **182** | P | **Pn** | **11 40 03.6** | **+0.2** |
| **X40A** | **Basin Creek Fa** | **3.91** | **110** | Pn | **Pn** | **11 40 04.5** | **+0.9** |
| **X40A** | **Basin Creek Fa** baz=292,SNR=16 | **3.91** | **110** | P | **Pn** | **11 40 04.2** | **+0.7** |
| **237A** | **Washetta, Mont** | **4.08** | **162** | | **Pn** | **11 40 05.6** | **-0.3** |
| **WLAR** | **White Oak Lake** comp=Z,340nm,0.8s | **4.08** | **121** | Pn | **Pn** | **11 40 06.3** | **+0.4** |
| WLAR | | | | lAmb_Lg | | 11 41 16.1 | |
| **WHAR** | **Wooly Hollow** comp=Z,225nm,0.8s | **4.12** | **97** | Pn | **Pn** | **11 40 07.2** | **+0.8** |
| WHAR | | | | lAmb_Lg | | 11 41 22.2 | |
| **W41B** | **Gary Mavity, V** comp=Z,297nm,0.8s | **4.17** | **99** | | **Pn** | **11 40 07.9** | **+0.7** |
| W41B | | | | lAmb_Lg | | 11 41 22.0 | |
| **W41B** | **Gary Mavity, V** baz=281,SNR=21 | **4.17** | **99** | P | **Pn** | **11 40 07.9** | **+0.7** |
| W41B | | | | S | **Sn** | **11 40 57.2** | **+1.1** |
| **FCAR** | **Ozark Folk Cen** comp=Z,439nm,0.8s | **4.19** | **89** | | **Pn** | **11 40 07.4** | **-0.1** |
| FCAR | | | | lAmb_Lg | | 11 41 19.0 | |
| **MGMO** | **Mountain Grove** comp=Z,373nm,0.7s | **4.23** | **71** | | **Pn** | **11 40 09.1** | **+1.0** |
| MGMO | | | | lAmb_Lg | | 11 41 20.4 | |
| **Z41A** | **Richland Creek** comp=Z,385nm,0.8s | **4.54** | **124** | lAmb_Lg | | 11 41 36.7 | |
| **Z41A** | **Richland Creek** baz=306 | **4.54** | **124** | P | **Pn** | **11 40 12.6** | **+0.4** |
| Z41A | | | | S | **Sn** | **11 41 04.0** | **-1.1** |
| **R40A** | **Maddies Statio** baz=306 | **4.67** | **58** | | **Pn** | **11 40 14.8** | **+0.8** |
| **NATX** | **Nacogdoches** baz=333 | **4.67** | **151** | S | **Sn** | **11 41 07.8** | **-0.6** |
| **P38A** | **Dawn** comp=Z,194nm,0.8s | **4.76** | **38** | Pn | **Pn** | **11 40 16.1** | **+0.8** |
| P38A | | | | lAmb_Lg | | 11 41 41.4 | |
| **N33A** | **J Bar K, Exete** comp=Z,310nm,1.0s | **4.83** | **359** | | **Pn** | **11 40 16.4** | **+0.1** |
| N33A | | | | lAmb_Lg | | 11 41 49.7 | |
| **MSTX** | **Muleshoe** baz=65 | **4.90** | **248** | P | **Pn** | **11 40 17.1** | **-0.2** |
| **LCAR** | **Lake Charles** | **4.98** | **86** | | **Pn** | **11 40 17.9** | **-0.4** |
| LCAR | | | | lAmb_Lg | | 11 41 39.2 | |
| **435B** | **Jarrell** comp=Z,184nm,1.0s | **5.11** | **183** | lAmb_Lg | | 11 41 43.7 | |
| **435B** | **Jarrell** baz=2.5 | **5.11** | **183** | P | **Pn** | **11 40 20.7** | **+0.7** |
| **N35A** | **Tabor** | **5.12** | **14** | | **Pn** | **11 40 20.6** | **+0.3** |
| **KSCO** | **Kaye Shedlock'** comp=Z,284nm,0.7s | **5.26** | **308** | lAmb_Lg | | 11 41 58.1 | |
| **KSCO** | **Kaye Shedlock'** baz=125 | **5.26** | **308** | P | **Pn** | **11 40 23.4** | **+1.1** |
| **CCM** | **Cathedral Cave** comp=Z,206nm,0.9s | **5.29** | **64** | | **Pn** | **11 40 23.1** | **+0.4** |
| CCM | | | | lAmb_Lg | | 11 42 02.3 | |
| **CCM** | **Cathedral Cave** baz=248 | **5.29** | **64** | P | **Pn** | **11 40 23.0** | **+0.4** |
| **BGNE** | **Belgrade** comp=Z,237nm,0.8s | **5.54** | **353** | | **Pn** | **11 40 25.8** | **-0.2** |
| BGNE | | | | lAmb_Lg | | 11 42 12.1 | |
| **BGNE** | **Belgrade** baz=173 | **5.54** | **353** | P | **Pn** | **11 40 25.6** | **-0.5** |
| **PBMO** | **Poplar Bluff** comp=Z,279nm,0.8s | **5.61** | **79** | lAmb_Lg | | 11 42 07.8 | |
| **JCT** | **Junction City** comp=Z,188nm,0.8s | **5.80** | **202** | lAmb_Lg | | 11 42 12.8 | |
| **JCT** | **Junction City** baz=20,SNR=11 | **5.80** | **202** | P | **Pn** | **11 40 28.6** | **-1.0** |
| **143A** | **Socs Landing,** comp=Z,214nm,0.8s | **5.82** | **122** | lAmb_Lg | | 11 42 19.1 | |
| **T25A** | **Trinidad** | **5.87** | **284** | Pn | **Pn** | **11 40 31.0** | **+0.2** |
| **T25A** | **Trinidad** baz=100 | **5.87** | **284** | P | **Pn** | **11 40 30.7** | **0.0** |
| **FVM** | **French Village** | **5.88** | **67** | | **Pn** | **11 40 31.2** | **+0.6** |
| FVM | | | | lAmb_Lg | | 11 42 09.5 | |
| **GNAR** | **Gosnell** comp=Z,300nm,0.8s | **5.90** | **87** | lAmb_Lg | | 11 42 18.9 | |
| **MET** | **Memphis--Engin** comp=Z,243nm,0.7s | **6.05** | **95** | lAmb_Lg | | 11 42 22.8 | |
| **PARMO** | **Parma** comp=Z,260nm,0.8s | **6.13** | **81** | lAmb_Lg | | 11 42 22.5 | |
| **PVMO** | **Portageville** comp=Z,291nm,1.0s | **6.16** | **83** | lAmb_Lg | | 11 42 35.0 | |
| **SLM** | **Saint Louis** comp=Z,287nm,0.8s | **6.25** | **62** | lAmb_Lg | | 11 42 21.7 | |
| **OGNE** | **Ogallala** comp=Z,239nm,0.8s | **6.27** | **325** | lAmb_Lg | | 11 42 25.6 | |
| **OGNE** | **Ogallala** baz=142 | **6.27** | **325** | P | **Pn** | **11 40 36.3** | **+0.2** |
| **HALT** | **Halls** comp=Z,280nm,1.0s | **6.45** | **88** | lAmb_Lg | | 11 42 45.5 | |
| **GLAT** | **Glass** comp=Z,253nm,0.7s | **6.49** | **84** | lAmb_Lg | | 11 42 41.8 | |
| **OXF** | **Oxford** comp=Z,159nm,0.8s | **6.60** | **100** | Pn | **Pn** | **11 40 40.0** | **-0.4** |
| OXF | | | | lAmb_Lg | | 11 42 41.6 | |
| **OXF** | **Oxford** baz=284,SNR=7.9 | **6.60** | **100** | P | **Pn** | **11 40 39.8** | **-0.7** |
| **W45A** | **Hickory Valley** comp=Z,189nm,0.8s | **6.65** | **94** | lAmb_Lg | | 11 42 34.9 | |
| **Y45A** | **Yeager Farm, C** comp=Z,134nm,1.0s | **6.68** | **105** | lAmb_Lg | | 11 42 52.8 | |
| **S44A** | **Carbondale** comp=Z,269nm,0.7s | **6.69** | **72** | lAmb_Lg | | 11 42 41.1 | |
| **UTMT** | **University of** comp=Z,234nm,0.8s | **6.83** | **84** | lAmb_Lg | | 11 42 53.4 | |
| **SDCO** | **Great Sand Dun** comp=Z,146nm,1.1s | **6.84** | **288** | lAmb_Lg | | 11 42 44.4 | |
| **SDCO** | **Great Sand Dun** baz=103 | **6.84** | **288** | P | **Pn** | **11 40 44.7** | **+0.6** |
| **Q24A** | **Divide** comp=Z,158nm,0.7s | **6.96** | **298** | lAmb_Lg | | 11 42 50.2 | |
| **Q24A** | **Divide** baz=114 | **6.96** | **298** | P | **Pn** | **11 40 45.6** | **-0.2** |
| **735A** | **Kenedy** comp=Z,127nm,1.0s | **7.04** | **184** | lAmb_Lg | | 11 42 58.2 | |
| **T45A** | **Paducah** comp=Z,227nm,0.7s | **7.05** | **78** | lAmb_Lg | | 11 42 57.1 | |
| **ANMO** | **Albuquerque** comp=Z,103nm,0.3s,baz=330,slow=0.1,SNR=7.0 | **7.55** | **265** | Lg | Lg | 11 43 04.2 | |
| **ISCO** | **Idaho Springs** | **7.65** | **303** | Pn | **Pn** | **11 40 55.5** | **+0.2** |
| ISCO | | | | lAmb_Lg | | 11 43 15.9 | |
| **ISCO** | **Idaho Springs** baz=118 | **7.65** | **303** | P | **Pn** | **11 40 55.5** | **+0.2** |
| **WVT** | **Waverly** baz=271 | **7.67** | **86** | P | **Pn** | **11 40 54.1** | **-1.1** |
| **L40A** | **Anamosa** comp=Z,160nm,0.7s | **7.76** | **36** | lAmb_Lg | | 11 43 27.6 | |
| **833A** | **Chaparral WMA,** baz=13 | **7.76** | **194** | P | **Pn** | **11 40 56.4** | **-0.1** |
| **HDIL** | **Hopedale** baz=236,SNR=7.5 | **7.82** | **51** | P | **Pn** | **11 40 56.7** | **-0.5** |
| **ECSD** | **EROS Data Cent** | **7.84** | **4** | Pn | **Pn** | **11 40 56.8** | **-0.9** |
| **ECSD** | **EROS Data Cent** baz=184,SNR=7.8 | **7.84** | **4** | P | **Pn** | **11 40 56.5** | **-1.1** |
| **BNM** | **Barren Site** | **7.86** | **260** | | **Pn** | **11 40 57.6** | **-0.4** |
| **MNTX** | **Cornudas Mount** | **7.93** | **240** | Pn | **Pn** | **11 40 58.6** | **-0.3** |
| **MNTX** | **Cornudas Mount** baz=56 | **7.93** | **240** | P | **Pn** | **11 40 58.5** | **-0.3** |
| **USIN** | **University of** comp=Z,206nm,1.0s | **7.98** | **72** | lAmb_Lg | | 11 43 23.8 | |
| **Y22D** | **IRIS PASSCAL I** comp=Z,166nm,0.8s | **8.11** | **260** | lAmb_Lg | | 11 43 34.4 | |
| **T47A** | **Sharon Grove** | **8.28** | **79** | Pn | **Pn** | **11 41 03.3** | **-0.3** |
| **PHWY** | **Pilot Hill** comp=Z,93nm,0.8s | **8.37** | **313** | lAmb_Lg | | 11 43 45.3 | |
| **N23A** | **Red Feather La** baz=124 | **8.43** | **309** | P | **Pn** | **11 41 06.7** | **+0.8** |
| **TXAR** | **Lajitas Array** comp=Z,0.3nm,0.3s,baz=48,slow=11,SNR=17 | **8.47** | **221** | Pn | **Pn** | **11 41 04.7** | **-1.7** |
| TXAR | | | | Lg | Lg | 11 43 28.8 | |
| **L42A** | **Oliver, Polo** comp=Z,144nm,0.7s | **8.51** | **42** | lAmb_Lg | | 11 43 46.0 | |
| **SUSD** | **Miller** comp=Z,112nm,1.1s | **8.63** | **352** | lAmb_Lg | | 11 43 52.6 | |
| **I37A** | **Lemond, Waseca** comp=Z,122nm,0.9s | **8.64** | **19** | lAmb_Lg | | 11 43 57.5 | |
| **JFWS** | **Jewell Farm** baz=220 | **8.87** | **36** | P | **Pn** | **11 41 11.3** | **-0.4** |
| **M44A** | **Midewin, Midew** comp=Z,159nm,0.8s | **9.07** | **50** | lAmb_Lg | | 11 43 57.9 | |
| **RWWY** | **Rawlins** comp=Z,82nm,1.1s | **9.66** | **310** | lAmb_Lg | | 11 44 26.2 | |
| **RSSD** | **Black Hills** baz=146 | **9.71** | **330** | P | **Pn** | **11 41 23.1** | **-0.2** |
| **K43A** | **Burlington** comp=Z,162nm,0.8s | **9.71** | **43** | lAmb_Lg | | 11 44 23.4 | |
| **SPMN** | **Marine on St.** comp=Z,84nm,0.9s | **9.92** | **19** | lAmb_Lg | | 11 44 28.5 | |
| **TKL** | **Tuckaleechee C** comp=Z,0.4nm,0.3s,baz=358,slow=15,SNR=1.4 | **10.98** | **87** | Pn | **Pn** | **11 41 41.5** | **+0.9** |
| TKL | | | | Lg | Lg | 11 44 47.9 | |
| **PDAR** | **Pinedale Array** comp=Z,0.4nm,0.3s,baz=128,slow=14,SNR=15 | **11.71** | **310** | Pn | **Pn** | **11 41 49.0** | **-1.9** |
| **ULM** | **Lac du Bonnet** comp=Z,0.9nm,0.3s,baz=184,slow=12,SNR=9.3 | **14.38** | **4** | Pn | Pn | 11 42 21.6 | -5.4 |
| ULM | | | | Lg | Lg | 11 46 28.5 | |
| **NVAR** | **Mina Array Bea** comp=Z,0.1nm,0.3s,baz=93,slow=14,SNR=4.7 | **16.94** | **285** | Pn | **Pn** | **11 43 01.4** | **+0.6** |
| **YBH** | **Yreka Blue Hor** comp=Z,1.1nm,0.7s,baz=124,slow=7.8,SNR=2.3 | **20.61** | **294** | P | **P** | **11 43 42.7** | **-0.2** |
| **APG** | **El Apazote** comp=Z,21nm,0.5s,baz=330,slow=20,SNR=6.7 | **21.68** | **162** | P | **P** | **11 43 56.1** | **+1.3** |
| **YKA** | **Yellowknife Ar** comp=Z,0.4nm,0.7s,baz=143,slow=9.0,SNR=7.4 | **28.73** | **343** | P | **P** | **11 45 00.6** | **-0.1** |
| **ILAR** | **Eielson Array** comp=Z,1.0nm,0.8s,baz=106,slow=7.5,SNR=8.4 | **41.15** | **330** | P | **P** | **11 46 48.0** | **+0.4** |
| **ARCES** | **ARCESS Array B** comp=Z,5.9nm,1.0s,baz=308,slow=6.0,SNR=3.7 | **66.93** | **19** | P | **P** | **11 49 55.5** | **-0.2** |

*KRNET **25** 11:39:11.9±0.1,39°.24N×77°.07E,mb3.0*
*SOME **25** 11:39:14.1,39°.50N×76°.92E,h5km*
*NNC **25** 11:39:16.2±1.8,39°.56N×76°.92E,h0km,mb3.5,mpv3.2, Error ellipse: s-maj=12.5km s-min=9.0km az=156.0*

**ISC 25 11:39:21.1±2.4,39°.7N±0°.1×76°.89E±0°.05,h10km,n35, σ1s05/54,12C-7D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **2.12** | **19** | ⇑*i*P | **Pn** | **11 39 56.9** | **-0.1** |
| TARG | baz=12 | | | ⇑*i*S | **Sg** | **11 40 29.6** | **+0.2** |
| **KDJ** | **Kajisay** baz=2.0 | **2.42** | **5** | ⇑*i*P | **Pn** | **11 40 01.3** | **+0.5** |
| KDJ | | | | ⇑*i*S | **Sg** | **11 40 37.7** | **-1.0** |
| **ULHL** | **Ulahol** baz=48 | **2.57** | **349** | ⇑*i*P | **Pn** | **11 40 04.2** | **+1.2** |
| ULHL | | | | ⇑*i*S | **Sg** | **11 40 42.2** | **-1.4** |
| **BOOM** | **Boomskoye usch** baz=46 | **2.86** | **346** | ⇑*i*P | **Pn** | **11 40 08.1** | **+1.2** |
| BOOM | | | | ⇑*i*S | **Sb** | **11 40 48.8** | **+1.4** |
| **ARLS** | **Aral** baz=22 | **2.89** | **318** | ⇓*i*P | **Pn** | **11 40 07.9** | **+0.5** |
| ARLS | | | | ⇓*i*S | **Sb** | **11 40 48.5** | **+0.1** |
| **UCH** | **Uchtor** baz=28 | **3.08** | **325** | ⇓*i*P | **Pn** | **11 40 10.8** | **+0.6** |
| UCH | | | | ⇓*i*S | **Sb** | **11 40 53.9** | **-0.2** |
| **ANVS** | **Anan'yevo** baz=7.0 | **3.12** | **11** | ⇑*i*P | **Pn** | **11 40 11.0** | **+0.6** |
| ANVS | | | | ⇑*i*S | **Sb** | **11 40 54.2** | **-0.6** |
| **TNSS** | **Tian-Shan** 5.1nm,0.4s | **3.31** | **1** | *e*P | **Pb** | **11 40 19.7** | **-0.5** |
| TNSS | 4.6nm,0.7s | | | *e*S | **Sg** | **11 41 06.8** | **-0.8** |
| **TNSS** | **Tian-Shan** 5.1nm,0.4s | **3.31** | **1** | Pg | **Pb** | **11 40 19.7** | **-0.5** |
| TNSS | 4.6nm,0.7s | | | Lg | Lg | 11 41 06.8 | |
| **AAK** | **Ala-Archa** 1.7nm,0.6s | **3.43** | **329** | ⇓Pg | **Pb** | **11 40 20.7** | **-1.3** |
| AAK | 11nm,0.6s | | | ⇓Lg | Lg | 11 41 09.6 | |
| **MDOK** | **Medeo** 3.4nm,0.3s | **3.44** | **2** | *e*P | **Pb** | **11 40 21.9** | **-0.3** |
| MDOK | 6.0nm,0.9s | | | *e*S | **Sg** | **11 41 10.8** | **-0.8** |
| **MDOK** | **Medeo** 1.8nm,0.5s | **3.44** | **2** | Pg | **Pb** | **11 40 20.4** | **-1.8** |
| MDOK | 6.3nm,0.6s | | | Lg | Lg | 11 41 11.6 | |
| **MDOK** | **Medeo** 3.4nm,0.3s | **3.44** | **2** | Pg | **Pb** | **11 40 21.9** | **-0.3** |
| MDOK | 6.0nm,0.9s | | | Lg | Lg | 11 41 10.8 | |
| **KOTS** | **Kotyrbulak** 2.8nm,0.4s | **3.51** | **3** | *e*P | **Pb** | **11 40 23.5** | **0.0** |
| KOTS | 11nm,0.4s | | | *e*S | **Sg** | **11 41 13.4** | **-0.5** |
| **KOTS** | **Kotyrbulak** 2.8nm,0.4s | **3.51** | **3** | Pg | **Pb** | **11 40 23.5** | **0.0** |
| KOTS | 11nm,0.4s | | | Lg | Lg | 11 41 13.4 | |
| **SATY** | **Saty** 0.9nm,0.1s | **3.52** | **18** | *e*P | **Pb** | **11 40 23.8** | **+0.2** |
| SATY | 5.3nm,0.3s | | | *e*S | **Sg** | **11 41 13.7** | **-0.6** |
| **SATY** | **Saty** 0.9nm,0.1s | **3.52** | **18** | Pg | **Pb** | **11 40 23.8** | **+0.2** |
| SATY | 5.3nm,0.3s | | | Lg | Lg | 11 41 13.7 | |
| **KPKS** | **Kokpek** 3.0nm,0.4s | **3.98** | **19** | *e*P | **Pb** | **11 40 31.9** | **+0.6** |
| KPKS | 10nm,0.6s | | | *e*S | **Sg** | **11 41 28.0** | **-0.8** |
| **KTBS** | **Karatobe** 2.6nm,0.6s | **3.99** | **358** | *e*P | **Pb** | **11 40 32.0** | **+0.5** |
| KTBS | 11nm,0.4s | | | *e*S | **Sg** | **11 41 28.0** | **-1.2** |
| **KTBS** | **Karatobe** 2.6nm,0.6s | **3.99** | **358** | Pg | **Pb** | **11 40 32.0** | **+0.5** |
| KTBS | 11nm,0.4s | | | Lg | Lg | 11 41 28.0 | |
| **KRBS** | **Karabastau** 0.7nm,0.1s | **4.07** | **348** | *e*P | **Pb** | **11 40 34.5** | **+1.5** |
| KRBS | 5.0nm,0.6s | | | *e*S | **Sg** | **11 41 32.2** | **+0.3** |
| **KRBS** | **Karabastau** 0.7nm,0.1s | **4.07** | **348** | Pg | **Pb** | **11 40 34.5** | **+1.5** |
| KRBS | 5.0nm,0.6s | | | Lg | Lg | 11 41 32.2 | |
| **MRKS** | **Merke** 2.1nm,0.3s | **4.09** | **319** | *e*P | **Pb** | **11 40 33.4** | **+0.1** |
| MRKS | 9.3nm,0.5s | | | *e*S | **Sg** | **11 41 30.4** | **-2.1** |
| **MRKS** | **Merke** 2.1nm,0.3s | **4.09** | **319** | Pg | **Pb** | **11 40 33.4** | **+0.1** |
| MRKS | 9.3nm,0.5s | | | Lg | Lg | 11 41 30.4 | |
| **PDGK** | **Podgornoye** 1.3nm,0.6s | **4.10** | **28** | Pg | **Pb** | **11 40 34.3** | **+0.9** |
| PDGK | 2.6nm,0.8s | | | Lg | Lg | 11 41 32.1 | |
| **PDGK** | **Podgornoye** 2.3nm,0.7s | **4.10** | **28** | ⇑Pg | **Pb** | **11 40 30.8** | **-2.6** |
| PDGK | 4.6nm,0.7s | | | ⇓Lg | Lg | 11 41 28.2 | |
| **CHKK** | **Chushkaly** 1.6nm,0.1s | **4.13** | **1** | *e*P | **Pb** | **11 40 35.2** | **+1.3** |
| CHKK | 6.0nm,0.3s | | | *e*S | **Sg** | **11 41 33.4** | **-0.3** |
| **CHKK** | **Chushkaly** 1.6nm,0.1s | **4.13** | **1** | Pg | **Pb** | **11 40 35.2** | **+1.3** |
| CHKK | 6.0nm,0.3s | | | Lg | Lg | 11 41 33.3 | |
| **KUU** | **Kurty** 0.6nm,0.2s | **4.19** | **355** | *e*P | **Pb** | **11 40 35.8** | **+0.9** |
| KUU | 6.0nm,0.8s | | | *e*S | **Sg** | **11 41 34.7** | **-0.9** |
| **KUU** | **Kurty** 0.6nm,0.2s | **4.19** | **355** | Pg | **Pb** | **11 40 35.8** | **+0.9** |
| KUU | 6.0nm,0.8s | | | Lg | Lg | 11 41 34.7 | |
| **BLB** | **Baldybastay** 1.9nm,0.1s | **4.53** | **15** | *e*P | **Pb** | **11 40 41.3** | **+0.5** |
| BLB | 7.1nm,0.3s | | | *e*S | **Sg** | **11 41 43.8** | **-2.7** |
| **BLB** | **Baldybastay** 1.9nm,0.1s | **4.53** | **15** | Pg | **Pb** | **11 40 41.3** | **+0.5** |
| BLB | 7.1nm,0.3s | | | Lg | Lg | 11 41 43.8 | |
| **ARXS** | **Arharly** 1.1nm,0.5s | **4.54** | **9** | *e*P | **Pb** | **11 40 42.5** | **+1.5** |
| ARXS | 5.2nm,0.9s | | | *e*S | **Sg** | **11 41 45.8** | **-1.1** |
| **ARXS** | **Arharly** 1.1nm,0.5s | **4.54** | **9** | Pg | **Pb** | **11 40 42.5** | **+1.5** |
| ARXS | 5.2nm,0.9s | | | Lg | Lg | 11 41 45.8 | |
| **KK09** | **Karatay Array** baz=121,slow=15 | **5.88** | **307** | Pg | **Pb** | **11 41 03.6** | **-0.1** |
| KK09 | 1.3nm,0.7s,baz=121,slow=30 | | | ⇑Lg | Lg | 11 42 25.6 | |

*IDC **25** 11:42:21.1±0.7,11°.89N×86°.96W,h0km,mb3.9/10, mb1 4.2/11,mb1mx3.9/54,mbtmpb3.9/11,ML3.4/2,Error ellipse: s-maj=40.0km s-min=12.8km az=54.0*
*INET **25** 11:42:23.9±0.3,11°.44N×87°.41W,h15km,MW4.1*
*UCR **25** 11:42:25.9±1.6,11°.34N×87°.31W,h20km,MW3.9, mb4.5(NEIC)*
*NEIC **25** 11:42:27.7±2.0,11°.62N±0°.07×87°.17W±0°.07,h57km±7km, mb4.5/6,Error ellipse: s-maj=12.2km s-min=7.5km az=50.0*

**ISC 25 11:42:27.2±1.3,11°.59N±0°.06×87°.24W±0°.08,h56km±12km, n60,σ1s20/68,mb4.2/12,1C,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNGN** | **Cerro Negro** | **1.05** | **30** | | **Pn** | **11 42 45.7** | **-0.1** |
| **CNGN** | **Cerro Negro** | **1.05** | **30** | *e*P | **Pn** | **11 42 45.7** | **-0.1** |
| **CRIN** | **San Cristobal** | **1.12** | **9** | | **Pn** | **11 42 46.6** | **-0.3** |
| **CRIN** | **San Cristobal** | **1.12** | **9** | *e*P | **Pn** | **11 42 46.4** | **-0.4** |
| **HUEN** | | **1.28** | **54** | *e*P | **Pn** | **11 42 49.0** | **+0.1** |
| **CSGN** | **Cosiguina Volc** | **1.42** | **347** | *e*P | **Pn** | **11 42 49.4** | **-1.4** |
| **BOAB** | **BOACO BROADBAN** | **1.76** | **61** | | **Pn** | **11 42 55.2** | **-0.2** |
| **HZTE** | **Horizontes, Gu** | **1.83** | **118** | | **Pn** | **11 42 55.0** | **-1.3** |
| **HZTE** | **Horizontes, Gu** | **1.83** | **118** | *e*P | **Pn** | **11 42 55.5** | **-0.8** |
| HZTE | | | | *e*S | **Sn** | **11 43 18.3** | **-0.1** |
| **MATN** | **Matagalpa** | **1.85** | **44** | | **Pn** | **11 42 56.6** | **-0.1** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MATN** | **Matagalpa** | **1.85** | **44** | *eP* | | **Pn** | **11 42 56.8** | **+0.1** |
| **LAPC** | **Finca la Perla** | **1.95** | **115** | *i* P | | **Pn** | **11 42 56.8** | **-1.1** |
| **BUEV** | **Buena Vista** | **1.96** | **113** | *i* P | | **Pn** | **11 42 57.3** | **-0.9** |
| BUEV | | | | *i* S | | **Sn** | **11 43 24.1** | **+2.4** |
| **ACON** | **Acoyapa** | **2.05** | **79** | Pn | | **Pn** | **11 42 58.6** | **-0.7** |
| **ORTG** | **Ortega, Santa** | **2.13** | **125** | | | **Pn** | **11 42 59.2** | **-1.3** |
| **LIM1** | **Limonal** | **2.14** | **114** | *i* P | | **Pn** | **11 43 00.6** | **0.0** |
| LIM1 | | | | *i* S | | **Sn** | **11 43 28.4** | **+2.4** |
| **COLC** | **Colonia** | **2.19** | **115** | *i* P | | **Pn** | **11 43 00.2** | **-1.2** |
| **VMAR** | **Armenia, Volca** | **2.21** | **110⇑** | *eP* | | **Pn** | **11 43 01.1** | **-0.5** |
| **CUI** | **Cuipilapa** | **2.23** | **114** | *i* P | | **Pn** | **11 43 02.1** | **+0.2** |
| CUI | | | | *i* S | | **Sn** | **11 43 29.8** | **+1.4** |
| **DUNO** | **Dulce Nombre,** | **2.27** | **131** | | | **Pn** | **11 43 00.9** | **-1.5** |
| **TGUH** | **Tegucigalpa,Un** | **2.45** | **359** | | | **Pn** | **11 43 04.9** | **-0.1** |
| **JTS** | **Las Juntas de** | **2.59** | **120** | Pn | | **Pn** | **11 43 05.1** | **-1.6** |
| | 3.2nm,0.3s,baz=158,slow=21,SNR=15 | | | | | | | |
| JTS | | | | | Sn | **Sn** | **11 43 37.0** | **0.0** |
| | 57nm,0.3s,baz=323,slow=20,SNR=14 | | | | | | | |
| **JTS** | **Las Juntas de** | **2.59** | **120** | | | **Pn** | **11 43 06.2** | **-0.5** |
| **ARE1** | **Arenal 1** | **2.71** | **114** | *eP* | | **Pn** | **11 43 08.5** | **+0.1** |
| ARE1 | | | | *eS* | | **Sn** | **11 43 41.1** | **+1.1** |
| **CAO2** | **Cobano, Puntar** | **2.82** | **132** | | | **Pn** | **11 43 09.7** | **-0.2** |
| **LAFE** | **Finca La Fe, P** | **2.89** | **128** | *eP* | | **Pn** | **11 43 08.4** | **-2.4** |
| **JACO** | **JACO, Garabito** | **3.17** | **127** | | | **Pn** | **11 43 14.6** | **-0.1** |
| **JACO** | **JACO, Garabito** | **3.17** | **127** | *eP* | | **Pn** | **11 43 14.5** | **-0.2** |
| JACO | | | | *eS* | | **Sn** | **11 43 50.6** | **-0.8** |
| **MTO3** | **Montecristo** | **3.48** | **324** | | | **Pn** | **11 43 21.0** | **+1.9** |
| **LCR2** | **La Lucha 2** | **3.67** | **120** | *eP* | | **Pn** | **11 43 23.0** | **+1.3** |
| **RIMA** | **Rio Macho** | **3.77** | **118** | | | **Pn** | **11 43 23.1** | **-0.1** |
| **RIMA** | **Rio Macho** | **3.77** | **118** | *eP* | | **Pn** | **11 43 23.1** | **-0.1** |
| RIMA | | | | *eS* | | **Sn** | **11 44 06.1** | **-0.4** |
| **PEZE** | **Perez Zeledon,** | **4.13** | **122** | | | **Pn** | **11 43 28.5** | **+0.6** |
| **SRBA** | **San Rafael, Bu** | **4.47** | **121** | | | **Pn** | **11 43 33.3** | **+0.6** |
| **SRBA** | **San Rafael, Bu** | **4.47** | **121** | *eP* | | **Pn** | **11 43 33.2** | **+0.6** |
| **PIRO** | **Carate, Puerto** | **4.97** | **129** | *eP* | | **Pn** | **11 43 39.6** | **+0.1** |
| **CDITO** | **Canoas** | **5.24** | **124** | Pn | | **Pn** | **11 43 43.9** | **+0.9** |
| **BRU2** | **Volcan** | **5.26** | **121** | Pn | | **Pn** | **11 43 44.6** | **+1.0** |
| **CMIG** | **Matias Romero** | **9.21** | **307** | Pn | | **Pn** | **11 44 36.7** | **-0.8** |
| | 0.8nm,0.3s,baz=152,slow=11,SNR=10.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.37** | **321** | P | | **P** | **11 47 31.6** | **+0.5** |
| | 1.8nm,0.6s,baz=143,slow=9.1,SNR=3.7 | | | | | | | |
| **LPAZ** | **La Paz** | **33.53** | **145** | P | | **P** | **11 49 03.8** | **+1.2** |
| | 0.8nm,0.3s,baz=29,slow=3.1,SNR=2.9 | | | | | | | |
| **NCB** | **Newcomb** | **34.17** | **17** | P | | **P** | **11 49 05.6** | **-1.5** |
| **PB08** | **IPOC Station P** | **36.21** | **150** | P | | **P** | **11 49 22.1** | **-3.2** |
| PB08 | | | | IAmb | IAmb | | 11 49 35.8 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **36.63** | **332** | P | | **P** | **11 49 29.2** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=123,slow=9.8,SNR=2.8 | | | | | | | |
| **PB01** | **IPOC Station P** | **36.82** | **152** | | | **PcP** | **11 51 50.0** | **-1.4** |
| **REDW** | **Red Top Meadow** | **37.69** | **331** | P | | **P** | **11 49 37.3** | **-0.3** |
| REDW | | | | IAmb | IAmb | | 11 49 49.4 | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **SIV** | **San Ignacio** | **37.70** | **136** | P | | **P** | **11 49 40.5** | **+2.9** |
| | comp=Z,4.4nm,0.6s,baz=304,slow=7.5,SNR=22 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.49** | **319** | P | | **P** | **11 49 46.2** | **+1.9** |
| | comp=Z,0.5nm,0.7s,baz=130,slow=7.5,SNR=5.3 | | | | | | | |
| NVAR | | | | PcP | | **PcP** | **11 51 58.2** | **+1.7** |
| | comp=Z,0.5nm,0.7s,baz=135,slow=4.1,SNR=5.8 | | | | | | | |
| **SCHQ** | **Schefferville** | **46.04** | **16** | P | | **P** | **11 50 42.6** | **-2.6** |
| | comp=Z,2.2nm,0.6s,baz=204,slow=6.0,SNR=8.4 | | | | | | | |
| **SCHQ** | **Schefferville** | **46.04** | **16** | IAmb | IAmb | | 11 51 06.0 | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **BDFB** | **Brasilia** | **47.32** | **124** | P | | **P** | **11 50 56.6** | **+0.7** |
| | comp=Z,4.3nm,0.6s,baz=204,slow=6.1,SNR=4.6 | | | | | | | |
| **PLCA** | **Paso Flores** | **54.30** | **164** | P | | **P** | **11 51 49.1** | **+1.1** |
| | comp=Z,2.4nm,0.5s,baz=338,slow=10,SNR=13 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.49** | **345** | P | | **P** | **11 51 47.5** | **-1.5** |
| | comp=Z,0.4nm,0.7s,baz=143,slow=6.8,SNR=6.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **66.89** | **336** | P | | **P** | **11 53 13.9** | **+0.6** |
| | comp=Z,0.2nm,0.8s,baz=168,slow=4.9,SNR=4.5 | | | | | | | |
| **SONM** | **Songino Array** | **119.61** | **349** | PKP | | **PKiKP** | **12 01 12.5** | **+1.2** |
| | comp=Z,0.2nm,0.4s,baz=227,slow=2.4,SNR=4.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **121.13** | **8** | PKP | | **PKPdf** | **12 01 13.8** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=290,slow=3.6,SNR=4.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **139.14** | **247** | PKP | | **PKiKP** | **12 01 51.0** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=101,slow=2.9,SNR=2.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.23** | **253** | PKP | | **PKiKP** | **12 01 50.9** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=91,slow=1.3,SNR=3.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.53** | **348** | PKPbc | | **PKiKP** | **12 02 13.2** | **+0.8** |
| | comp=Z,2.7nm,0.8s,baz=348,slow=3.7,SNR=14 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.53** | **348** | | | **PKPbc** | **12 02 10.0** | **-1.3** |

*IDC **25** 11:49:06.8±0.9, 30.93S×71.42W, h0km, mb4.1/6, mb1 4.1/10,mb1mx3.9/32,mbtmp4.0/10,ML3.6/4, Error ellipse: s-maj=29.3km s-min=24.8km az=87.0*
*SJA **25** 11:49:07.5±0.8, 30.75S×71.77W, h5km±2km, ML4.2, MW3.8*
*NEIC **25** 11:49:13.1±2.2, 30.77S±0.04×71.70W±0.08, h30km±3km, mb4.3/3, ML4.4(GUC), Error ellipse: s-maj=10.2km s-min=5.4km az=77.0*
*GUC **25** 11:49:13.9±0.7, 30.79S×71.40W, h45km±2km, ML4.4*
**ISC 25 11:49:08.4**±1.1, **30.97S**±0.02×**71.61W**±0.03, **h11**km±7km, **n102**, σ1§**87**/131, **mb4.2**/6, **1C-3D**, **Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.29** | **356** | | **Pn** | **11 49 21.5** | **+2.9** |
| **CO06** | **Fray Jorge** | **0.29** | **356** | ⇑*i*P | **Pn** | **11 49 21.5** | **+2.9** |
| CO06 | | | | *eS* | **Sb** | **11 49 27.0** | **+6.5** |
| CO06 | | | | IAML | | 11 49 27.7 | |
| | comp=N,26μm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **0.58** | **115** | | **Pn** | **11 49 25.2** | **+2.5** |
| **CO02** | **Combarbal** | **0.58** | **115** | ⇓*i*P | **Pn** | **11 49 25.5** | **+2.8** |
| CO02 | | | | *eS* | **Sn** | **11 49 33.7** | **+1.5** |
| **CO02** | **Combarbal** | **0.58** | **115** | *eP* | **Pn** | **11 49 25.0** | **+2.3** |
| CO02 | | | | *eS* | **Sn** | **11 49 34.2** | **+2.0** |
| **CO03** | **El Pedregal** | **0.81** | **81** | | **Pn** | **11 49 26.7** | **+0.9** |
| **CO03** | **El Pedregal** | **0.81** | **81** | ⇓*i*P | **Pn** | **11 49 26.6** | **+0.9** |
| CO03 | | | | *eS* | **Sb** | **11 49 35.3** | **-0.1** |
| **CO03** | **El Pedregal** | **0.81** | **81** | *eP* | **Pn** | **11 49 26.0** | **+0.2** |
| CO03 | | | | *eS* | **Sb** | **11 49 36.0** | **+0.6** |
| CO03 | | | | IAML | | 11 49 37.2 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **GO04** | **Tololo Observa** | **1.06** | **42** | | **Pn** | **11 49 29.6** | **+0.2** |
| **GO04** | **Tololo Observa** | **1.06** | **42** | ⇓*i*P | **Pb** | **11 49 29.4** | **+0.5** |
| GO04 | | | | *eS* | **Sg** | **11 49 41.1** | **-1.6** |
| **GO04** | **Tololo Observa** | **1.06** | **42** | *eP* | **Pb** | **11 49 29.0** | **+0.1** |
| GO04 | | | | *eS* | **Sg** | **11 49 41.7** | **-0.9** |
| **CO05** | **La Serena** | **1.09** | **17** | | **Pn** | **11 49 30.0** | **+0.4** |
| **CO05** | **La Serena** | **1.09** | **17** | *eP* | **Pb** | **11 49 29.9** | **+0.6** |
| **VA06** | **Catapilco** | **1.61** | **170** | | **Pg** | **11 49 42.1** | **+2.6** |
| **VA06** | **Catapilco** | **1.61** | **170** | *eP* | **Pg** | **11 49 42.1** | **+2.6** |
| VA06 | | | | IAML | | 11 50 11.4 | |
| | comp=N,5μm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **2.01** | **154** | | **Pg** | **11 49 47.8** | **+0.8** |
| **VA03** | **San Esteban** | **2.01** | **154** | *eP* | **Pg** | **11 49 47.6** | **+0.7** |
| VA03 | | | | IAML | | 11 50 18.1 | |
| | comp=E,4μm,0.1s | | | | | | |
| **VA03** | **San Esteban** | **2.01** | **154** | *eP* | **Pg** | **11 49 47.7** | **+0.7** |
| VA03 | | | | *eS* | **Sg** | **11 50 16.9** | **+3.8** |
| VA03 | | | | IAML | | 11 50 25.7 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **AROD** | **Rodeo** | **2.01** | **67** | *eP* | **Pb** | **11 49 45.6** | **+0.4** |
| AROD | | | | *eS* | **Sn** | **11 50 04.5** | **-3.4** |
| **VA01** | **Torpederas** | **2.05** | **181** | | **Pg** | **11 49 46.3** | **-1.5** |
| **ROCH** | **El Roble** | **2.07** | **166** | *eP* | **Pb** | **11 49 48.5** | **+2.5** |
| ROCH | | | | *eP* | **Pg** | **11 49 47.1** | **-1.0** |
| ROCH | | | | IAML | | 11 50 21.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| ROCH | | | | IAML | | 11 50 23.1 | |
| | comp=N,3μm,0.5s | | | | | | |
| **ROC1** | **El Roble** | **2.07** | **166** | | **Pg** | **11 49 47.3** | **-0.9** |
| **ROC1** | **El Roble** | **2.07** | **166** | *eP* | **Pg** | **11 49 47.2** | **+0.9** |
| ROC1 | | | | *eS* | **Sg** | **11 50 16.2** | **+1.2** |
| **LCO** | **Las Campanas** | **2.10** | **22** | | **Pn** | **11 49 44.5** | **+0.7** |
| **LCO** | **Las Campanas** | **2.10** | **22** | *eP* | **Pn** | **11 49 44.4** | **+0.7** |
| **LCO** | **Las Campanas** | **2.10** | **22** | *eP* | **Pn** | **11 49 44.0** | **+0.2** |
| LCO | | | | IAML | | 11 50 19.1 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.23** | **81** | *eP* | **Pn** | **11 49 44.0** | **-1.6** |
| ACCO | | | | *eP* | **Pg** | **11 49 49.5** | **-1.7** |
| ACCO | | | | *eS* | **Sg** | **11 50 25.6** | **+5.5** |
| ACCO | | | | IAML | | 11 50 27.8 | |
| | comp=Z,656nm,0.4s | | | | | | |
| **AUSP** | **Uspallata** | **2.28** | **124** | *eP* | **Pg** | **11 49 51.9** | **-0.3** |
| **ACDV** | **Cuesta del Vie** | **2.29** | **70** | *eP* | **Pb** | **11 49 50.0** | **+0.1** |
| ACDV | | | | IAML | | 11 50 29.6 | |
| | comp=Z,396nm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **2.31** | **160** | | **Pg** | **11 49 51.9** | **-0.9** |
| **MT02** | **Curacav** | **2.32** | **170** | | **Pg** | **11 49 52.3** | **-0.7** |
| **MT02** | **Curacav** | **2.32** | **170** | *eP* | **Pg** | **11 49 51.6** | **-1.4** |
| **MT02** | **Curacav** | **2.32** | **170** | *eP* | **Pn** | **11 49 47.0** | **+0.4** |
| MT02 | | | | *eP* | **Pg** | **11 49 51.5** | **-1.5** |
| MT02 | | | | *eS* | **Sn** | **11 50 15.0** | **-0.2** |
| MT02 | | | | *eS* | **Sg** | **11 50 25.0** | **+1.8** |
| MT02 | | | | IAML | | 11 50 28.0 | |
| | comp=Z,684nm,0.6s | | | | | | |
| **MT05** | **Renca** | **2.53** | **163** | | **Pg** | **11 49 55.4** | **-1.7** |
| **MT05** | **Renca** | **2.53** | **163** | *eP* | **Pg** | **11 49 54.9** | **-2.1** |
| MT05 | | | | IAML | | 11 50 41.5 | |
| | comp=E,3μm,0.3s | | | | | | |
| **MT05** | **Renca** | **2.53** | **163** | *eP* | **Pg** | **11 49 55.3** | **-1.7** |
| MT05 | | | | *eS* | **Sg** | **11 50 31.1** | **+1.2** |
| MT05 | | | | IAML | | 11 50 37.6 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **ZON** | **Zonda** | **2.58** | **104** | | **Pb** | **11 49 54.8** | **0.0** |
| **ZON** | **Zonda** | **2.58** | **104** | *eP* | **Pn** | **11 49 49.5** | **-0.7** |
| ZON | | | | *eP* | **Pb** | **11 49 55.2** | **+0.5** |
| ZON | | | | *eS* | **Sg** | **11 50 30.3** | **-1.1** |
| ZON | | | | IAML | | 11 50 43.4 | |
| | comp=Z,687nm,0.9s | | | | | | |
| **VA05** | **Santo Domingo** | **2.69** | **180** | | **Pb** | **11 49 56.2** | **-0.3** |
| **VA05** | **Santo Domingo** | **2.69** | **180** | *eP* | **Pb** | **11 49 55.9** | **-0.6** |
| VA05 | | | | IAML | | 11 50 46.1 | |
| | comp=E,2μm,0.6s | | | | | | |
| **MT03** | **Universidad Ad** | **2.69** | **160** | | **Pg** | **11 49 57.5** | **-2.6** |
| **MT03** | **Universidad Ad** | **2.69** | **160** | *eP* | **Pg** | **11 49 57.5** | **-2.6** |
| MT03 | | | | IAML | | 11 50 47.5 | |
| | comp=N,2μm,0.3s | | | | | | |
| **MT03** | **Universidad Ad** | **2.69** | **160** | *eP* | **Pg** | **11 49 57.7** | **-2.3** |
| MT03 | | | | *eS* | **Sg** | **11 50 36.0** | **+1.1** |
| MT03 | | | | IAML | | 11 50 47.8 | |
| | comp=Z,997nm,0.5s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.78** | **110** | *eP* | **Pb** | **11 49 58.9** | **+0.8** |
| RTCV | | | | *eS* | **Sg** | **11 50 36.5** | **-1.2** |
| **AC04** | **Llanos de Chal** | **2.79** | **10** | | **Pn** | **11 49 54.2** | **+1.1** |
| **AC04** | **Llanos de Chal** | **2.79** | **10** | *eP* | **Pn** | **11 49 53.8** | **+0.8** |
| AC04 | | | | IAML | | 11 50 40.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.79** | **10** | *eP* | **Pn** | **11 49 53.7** | **+0.8** |
| AC04 | | | | *eS* | **Sn** | **11 50 26.5** | **-0.2** |
| AC04 | | | | IAML | | 11 50 40.3 | |
| | comp=Z,844nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **2.85** | **169** | | **Pb** | **11 49 59.8** | **+0.3** |
| **MT09** | **Talagante** | **2.85** | **169** | *eP* | **Pb** | **11 49 59.6** | **+0.1** |
| MT09 | | | | IAML | | 11 50 48.0 | |
| | comp=E,1μm,0.2s | | | | | | |
| **ASAL** | **Salagasta** | **2.87** | **125** | *eP* | **Pb** | **11 50 00.5** | **+0.8** |
| ASAL | | | | *eS* | **Sg** | **11 50 39.8** | **-0.9** |
| ASAL | | | | IAML | | 11 51 00.2 | |
| | comp=Z,360nm,1.1s | | | | | | |
| **MT01** | **Popeta** | **2.91** | **174** | | **Pb** | **11 49 60.0** | **-0.3** |
| **MT01** | **Popeta** | **2.91** | **174** | *eP* | **Pb** | **11 49 59.8** | **-0.5** |
| **MT01** | **Popeta** | **2.91** | **174** | *eP* | **Pb** | **11 49 59.5** | **-0.8** |
| MT01 | | | | *eS* | **Sb** | **11 50 37.0** | **+1.1** |
| MT01 | | | | *eS* | **Sg** | **11 50 44.0** | **+2.1** |
| MT01 | | | | IAML | | 11 50 50.3 | |
| | comp=Z,458nm,0.2s | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.95** | **130** | *eP* | **Pb** | **11 50 02.0** | **+0.9** |
| ARCO | | | | *eS* | **Sg** | **11 50 44.0** | **+0.7** |
| ARCO | | | | IAML | | 11 50 49.8 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **LMEL** | **Las Melosas** | **3.11** | **158** | | **Pb** | **11 50 04.0** | **+0.1** |
| **LMEL** | **Las Melosas** | **3.11** | **158** | *eP* | **Pb** | **11 50 03.9** | **+0.1** |
| LMEL | | | | IAML | | 11 50 50.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| **BO04** | **La Punta** | **3.13** | **165** | | **Pb** | **11 50 03.2** | **-1.0** |
| **BO04** | **La Punta** | **3.13** | **165** | *eP* | **Pb** | **11 50 03.2** | **-1.0** |
| BO04 | | | | IAML | | 11 50 56.3 | |
| | comp=N,774nm,0.4s | | | | | | |
| **AAGR** | **Agrelo** | **3.17** | **133** | *eP* | **Pb** | **11 50 05.0** | **+0.1** |
| AAGR | | | | *eS* | **Sg** | **11 50 53.9** | **+3.5** |
| AAGR | | | | IAML | | 11 51 02.0 | |
| | comp=Z,389nm,0.4s | | | | | | |
| **BO01** | **Tunca** | **3.45** | **173** | | **Pb** | **11 50 07.4** | **-2.1** |
| **BO01** | **Tunca** | **3.45** | **173** | *eP* | **Pb** | **11 50 07.2** | **-2.2** |
| BO01 | | | | *eP* | Pg | 11 50 08.0 | -6.5 |
| BO01 | | | | *eS* | **Sg** | **11 50 54.5** | **-4.7** |
| BO01 | | | | IAML | | 11 51 05.1 | |
| | comp=Z,235nm,0.7s | | | | | | |
| **GO03** | **Copiap** | **3.57** | **20** | *eP* | **Pn** | **11 50 04.7** | **+0.9** |
| GO03 | | | | IAML | | 11 51 03.9 | |
| | comp=N,665nm,0.4s | | | | | | |
| **GO03** | **Copiap** | **3.57** | **20** | *eP* | **Pn** | **11 50 04.8** | **+1.1** |
| GO03 | | | | *eS* | **Sn** | **11 50 47.0** | **+1.0** |
| **VCA** | **Vinchina** | **3.70** | **54** | *eP* | **Pn** | **11 50 09.9** | **+4.3** |
| VCA | | | | *eS* | **Sn** | **11 50 51.5** | **+2.1** |
| VCA | | | | *eS* | **Sb** | **11 50 56.0** | **-2.9** |
| VCA | | | | IAML | | 11 51 04.9 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **AC06** | **Mina Casimiro** | **3.76** | **17** | Pn | **Pn** | **11 50 06.5** | **+0.2** |
| **BO02** | **Sierra Bellavi** | **3.88** | **170** | | **Pb** | **11 50 14.1** | **-2.8** |
| **BO02** | **Sierra Bellavi** | **3.88** | **170** | *eP* | **Pb** | **11 50 13.8** | **-3.2** |
| BO02 | | | | *eS* | **Sb** | **11 51 04.0** | **0.0** |
| BO02 | | | | IAML | | 11 51 18.4 | |
| | comp=Z,326nm,0.3s | | | | | | |
| **GO05** | **Huala** | **4.04** | **184** | Pn | **Pn** | **11 50 14.2** | **+3.9** |
| **GO05** | **Huala** | **4.04** | **184** | *eP* | Pb | 11 50 14.6 | -5.1 |
| GO05 | | | | *eS* | **Sg** | **11 51 15.5** | **-2.8** |
| **AC01** | **CERRO LA CRUZ** | **4.32** | **70** | *eP* | **Pn** | **11 50 19.9** | **+2.7** |
| ACLC | | | | *eP* | Pb | 11 50 17.0 | -7.5 |
| ACLC | | | | *eS* | **Sn** | **11 51 03.5** | **-1.1** |
| **APLL** | **PUNTA DE LOS L** | **4.42** | **84** | *eP* | **Pn** | **11 50 18.1** | **+2.6** |
| APLL | | | | *eS* | **Sb** | **11 51 17.4** | **-2.0** |
| **AC02** | **Maricunga** | **4.66** | **29** | | **Pn** | **11 50 20.6** | **+1.5** |
| **AC02** | **Maricunga** | **4.66** | **29** | *eP* | **Pn** | **11 50 20.7** | **+1.5** |
| AC02 | | | | *eS* | **Sn** | **11 51 15.0** | **+1.6** |
| AC02 | | | | IAML | | 11 51 42.4 | |
| | comp=Z,255nm,1.0s | | | | | | |
| **ML02** | **Panimavida** | **4.79** | **178** | | **Pb** | **11 50 28.6** | **-3.7** |
| **PB14** | **IPOC Station P** | **6.41** | **10** | Pn | **Pn** | **11 50 42.6** | **-0.3** |
| **H03N1** | **Juan Fernandez** | **6.66** | **246** | T | T | 11 57 40.6 | |
| | baz=74,slow=72,SNR=1603 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.67** | **246** | T | T | 11 57 41.2 | |
| | baz=74,slow=72,SNR=1842 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.67** | **246** | T | T | 11 57 41.2 | |
| | baz=74,slow=72,SNR=1715 | | | | | | |
| **AHML** | **Horco Molle** | **6.90** | **54** | *eP* | **Pn** | **11 50 51.5** | **+1.9** |
| AHML | | | | IAML | | 11 52 54.6 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **LC01** | **Cunco** | **7.92** | **181** | Pn | **Pn** | **11 51 07.3** | **+3.8** |
| **LVC** | **Limon Verde** | **8.66** | **17** | Pn | **Pn** | **11 51 10.9** | **-3.1** |
| | comp=Z,0.4nm,0.3s,baz=218,slow=17,SNR=2.2 | | | | | | |
| LVC | | | | | Sn | Sn | 11 53 01.4 | +9.5 |
| | comp=Z,1.9nm,0.3s,baz=190,slow=13,SNR=3.3 | | | | | | |
| **PLCA** | **Paso Flores** | **9.79** | **175** | Pn | **Pn** | **11 51 30.2** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=319,slow=8.3,SNR=5.6 | | | | | | |
| **LPAZ** | **La Paz** | **14.95** | **13** | Pn | **Pn** | **11 52 41.0** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=166,slow=7.3,SNR=7.5 | | | | | | |
| **SIV** | **San Ignacio** | **17.75** | **35** | P | **Pn** | **11 53 14.0** | **-1.6** |
| | comp=Z,0.5nm,0.3s,baz=210,slow=11,SNR=10.0 | | | | | | |
| **BDFB** | **Brasilia** | **26.42** | **60** | P | **P** | **11 54 44.2** | **-1.2** |
| | comp=Z,5.6nm,0.7s,baz=255,slow=8.2,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.28** | **330** | P | **P** | **12 00 04.0** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=148,slow=7.5,SNR=4.7 | | | | | | |
| **DBIC** | **Dimbokro** | **73.88** | **72** | P | **P** | **12 00 43.2** | **-0.5** |
| | comp=Z,4.6nm,0.5s,baz=236,slow=5.8,SNR=9.0 | | | | | | |
| **DBIC** | **Dimbokro** | **73.88** | **72** | IAmb | IAmb | 12 02 03.0 | |
| | comp=Z,27nm,1.6s | | | | | | |
| **BOSA** | **Boshof** | **81.17** | **118** | P | **P** | **12 01 24.5** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=263,slow=4.2,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.61** | **325** | P | **P** | **12 01 27.6** | **+1.1** |
| | comp=Z,0.1nm,0.5s,baz=156,slow=4.7,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.84** | **70** | P | **P** | **12 01 31.9** | **-1.4** |
| | comp=Z,1.2nm,0.7s,baz=279,slow=6.3,SNR=22 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.84** | **70** | P | **P** | **12 01 32.2** | **-1.1** |
| TORD | | | | IAmb | IAmb | 12 01 33.2 | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **123.58** | **210** | PKP | **PKPdf** | **12 08 05.7** | **-0.9** |
| | comp=Z,0.3nm,0.7s,baz=160,slow=1.5,SNR=4.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **126.12** | **271** | T | T | 14 26 59.2 | |
| | baz=115,slow=75,SNR=24 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **126.14** | **271** | T | T | 14 26 60.0 | |
| | baz=115,slow=75,SNR=21 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **126.14** | **271** | T | T | 14 26 59.4 | |
| | baz=115,slow=75,SNR=19 | | | | | | |
| **BVAR** | **Borovoye Array** | **144.78** | **40** | PKP | **PKPab** | **12 08 43.9** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=123,slow=5.5,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.37** | **40** | PKPbc | **PKPbc** | **12 08 58.7** | **-0.7** |
| | comp=Z,0.5nm,0.5s,baz=300,slow=3.1,SNR=6.1 | | | | | | |
| **KURK** | **Kurchatov** | **150.37** | **40** | | **PKPbc** | **12 08 58.7** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **151.44** | **30** | PKPbc | **PKPbc** | **12 09 01.4** | **-0.5** |
| | comp=Z,2.6nm,0.7s,baz=308,slow=3.5,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.44** | **30** | | **PKPbc** | **12 09 00.8** | **-1.0** |
| **MKAR** | **Makanchi Array** | **154.43** | **44** | PKPbc | **PKiKP** | **12 09 09.7** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=354,slow=4.3,SNR=2.4 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **12 09 22.6** | **-0.4** |
| | comp=Z,0.4nm,0.7s,baz=356,slow=2.7,SNR=5.1 | | | | | | |

*DDA **25** 12:06:08.0±0.0, 39.14N×22.35E, h27km±3km, MW3.9*
*ATH **25** 12:06:09.7, 39.21N×22.32E, h22km±1km, ML3.5/35, Error ellipse: s-maj=1.0km s-min=0.6km az=214.0*
*ISK **25** 12:06:09.6, 39.25N×22.48E, h7km, ML3.5/20*
*TIR **25** 12:06:09.7, 39.21N×22.62E, h27km±8km, Md4.5, Ml3.8*
*THE **25** 12:06:10.5, 39.20N×22.33E, h7km, ML3.5/16, Error ellipse: s-maj=1.0km s-min=0.5km az=214.0*
*IDC **25** 12:06:14.1±2.4, 39.17N×22.24E, h37km±21km, mb3.6/10, mb1 3.7/15,mb1mx3.5/56,mbtmp3.8/15,ML3.6/5,MS3.6/2, Ms1 3.6/2,ms1mx2.4/88, Error ellipse: s-maj=18.8km s-min=15.9km az=33.0*
**ISC 25 12:06:10.8**±0.8, **39.20N**±0.01×**22.35E**±0.02, **h11**km±5km, **n168**, σ0§**89**/203, **mb3.7**/10, **Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AGG** | **Agios Georgios** | **0.18** | **184** | P | **Pg** | **12 06 14.2** | **-0.6** |
| AGG | | | | S | **Sg** | **12 06 16.5** | **-1.1** |
| | 44μm,0.4s | | | | | | |
| **AGG** | **Agios Georgios** | **0.18** | **184** | P | **Pg** | **12 06 14.3** | **-0.6** |
| AGG | | | | AML | AML | 12 06 18.2 | |
| | comp=N,75915μm,0.5s | | | | | | |
| AGG | | | | S | **Sg** | **12 06 18.6** | **+0.9** |
| AGG | | | | AML | AML | 12 06 20.1 | |
| | comp=E,99968μm,0.3s | | | | | | |
| **AGG** | **Agios Georgios** | **0.18** | **184** | PG | **Pg** | **12 06 14.1** | **-0.7** |
| AGG | | | | SG | **Sg** | **12 06 19.3** | **+1.7** |
| **AGG** | **Agios Georgios** | **0.18** | **184** | P | **Pg** | **12 06 14.3** | **-0.6** |
| AGG | | | | S | **Sg** | **12 06 18.8** | **+1.1** |
| **MAKR** | **Makrakomi, Fth** | **0.25** | **221** | P | **Pg** | **12 06 15.3** | **-0.8** |
| **MAKR** | **Makrakomi, Fth** | **0.25** | **221** | P | **Pg** | **12 06 15.4** | **-0.7** |
| MAKR | | | | AML | AML | 12 06 21.9 | |
| | comp=N,26874μm,0.6s | | | | | | |
| MAKR | | | | AML | AML | 12 06 23.1 | |
| | comp=E,28939μm,0.7s | | | | | | |
| **THL** | **Klokotos Trika** | **0.44** | **325** | P | **Pg** | **12 06 18.5** | **-1.0** |
| THL | | | | S | **Sg** | **12 06 25.9** | **+0.5** |
| | comp=E,6μm,0.4s | | | | | | |
| **THL** | **Klokotos Trika** | **0.44** | **325** | P | **Pg** | **12 06 18.6** | **-1.0** |
| THL | | | | S | **Sg** | **12 06 25.1** | **-0.3** |
| THL | | | | AML | AML | 12 06 26.4 | |
| | comp=E,13932μm,0.5s | | | | | | |
| THL | | | | AML | AML | 12 06 27.9 | |
| | comp=N,10780μm,0.4s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.47** | **4** | P | **Pg** | **12 06 19.3** | **-0.7** |
| LRSO | | | | S | **Sg** | **12 06 26.6** | **+0.4** |
| | comp=N,11μm,0.5s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.47** | **4** | P | **Pg** | **12 06 19.4** | **-0.7** |
| LRSO | | | | S | **Sg** | **12 06 26.7** | **+0.5** |
| LRSO | | | | AML | AML | 12 06 30.3 | |
| | comp=N,24046μm,0.7s | | | | | | |
| LRSO | | |

comp=N,4173µm,0.6s
**THAL Thalero 1.19 168** P **Pb** **12 06 32.9 -0.4**
THAL AML AML 12 06 57.8
comp=N,5728µm,0.7s
THAL AML AML 12 07 00.0
comp=E,6066µm,0.7s
**KTI Kastanea 1.20 352** P **Pb** **12 06 32.7 -0.9**
**VIL2 Platees 1.23 144** P **Pn** **12 06 33.7 -0.2**
VIL2 AML AML 12 06 58.4
comp=N,2737µm,0.7s
VIL2 AML AML 12 07 03.2
comp=E,3742µm,0.6s
**JAN Janina 1.24 292** P **Pn** **12 06 33.4 -0.7**
JAN S **Sb** **12 06 50.9 +0.6**
comp=E,988nm,0.6s
**JAN Janina 1.24 292** P **Pn** **12 06 33.0 -1.1**
JAN AML AML 12 07 00.5
comp=N,2099µm,0.4s
JAN AML AML 12 07 01.5
comp=E,1840µm,0.8s
**PAIG Paliouri 1.26 55** P **Pn** **12 06 33.2 -1.1**
PAIG S **Sn** **12 06 52.7 +1.5**
comp=E,722nm,0.5s
**PAIG Paliouri 1.26 55** P **Pn** **12 06 33.2 -1.1**
PAIG AML AML 12 07 00.6
comp=N,1266µm,0.5s
PAIG AML AML 12 07 03.0
comp=E,1618µm,0.5s
**LTK Loutraki 1.28 157** P **Pn** **12 06 33.4 -1.2**
LTK AML AML 12 07 00.8
comp=N,2785µm,0.8s
LTK AML AML 12 07 01.9
comp=E,2785µm,0.7s
**RLS Riolos of Patr 1.34 211** P **Pn** **12 06 35.2 -0.1**
**RLS Riolos of Patr 1.34 211** P **Pn** **12 06 35.0 -0.3**
RLS AML AML 12 06 59.3
comp=N,2080µm,0.5s
RLS AML AML 12 07 01.5
comp=E,1173µm,0.5s
**DRO Drossia 1.34 202** P **Pn** **12 06 35.1 -0.4**
DRO AML AML 12 07 00.2
comp=E,3996µm,0.5s
DRO AML AML 12 07 00.9
comp=N,4700µm,0.5s
**PENT Pentalofos 1.36 317** P **Pn** **12 06 35.5 -0.3**
**PENT Pentalofos 1.36 317** P **Pn** **12 06 35.4 -0.4**
**NYDR Nydri-Lefkada 1.37 250** P **Pn** **12 06 35.7 -0.2**
**EVGI Lefkada island 1.44 247** P **Pn** **12 06 36.6 -0.1**
**PLG Polygyros 1.44 36** P **Pn** **12 06 36.0 -0.9**
**PLG Polygyros 1.44 36** P **Pn** **12 06 36.0 -0.9**
PLG AML AML 12 07 01.9
comp=N,1140µm,0.7s
PLG AML AML 12 07 03.1
comp=E,1541µm,0.6s
**DRAG Dragano-Lefkad 1.48 250** P **Pn** **12 06 37.7 +0.4**
**KYMI Kymi, Euboea I 1.48 112** P **Pn** **12 06 36.3 -1.1**
KYMI S **Sn** **12 06 56.9 +0.2**
comp=E,685nm,0.8s
**KYMI Kymi, Euboea I 1.48 112** P **Pn** **12 06 36.7 -0.6**
KYMI AML AML 12 07 04.7
comp=E,1476µm,0.8s
KYMI AML AML 12 07 08.9
comp=N,1258µm,0.9s
**THE Thessaloniki 1.50 18** P **Pn** **12 06 36.9 -0.7**
THE S **Sn** **12 06 57.2 0.0**
comp=N,320nm,0.9s
**THE Thessaloniki 1.50 18** P **Pn** **12 06 36.8 -0.9**
**THE Thessaloniki 1.50 18** P **Pn** **12 06 36.7 -0.9**
baz=10.0
THE S **Sn** **12 06 56.5 -0.7**
baz=10.0
**NEST Nestorio 1.57 321** P **Pn** **12 06 38.8 +0.2**
**NEST Nestorio 1.57 321** P **Pn** **12 06 39.4 +0.7**
NEST AML AML 12 07 09.4
comp=N,2357µm,0.6s
NEST AML AML 12 07 10.0
comp=E,3024µm,0.6s
**FSK Fiskardo 1.58 242** P **Pn** **12 06 38.4 -0.3**
FSK AML AML 12 07 11.7
comp=N,1623µm,0.5s
FSK AML AML 12 07 16.2
comp=E,2136µm,0.6s
**IGT Igoumenitsa 1.59 282** P **Pg** **12 06 41.6 +0.2**
baz=282
**ATH Athens Observa 1.63 138** P **Pn** **12 06 39.8 +0.4**
**ATH Athens Observa 1.63 138** P **Pn** **12 06 39.9 +0.5**
ATH AML AML 12 07 01.5
comp=E,2878µm,0.3s
ATH AML AML 12 07 09.3
comp=N,1750µm,0.6s
**LSK Leskovik 1.65 306** P **Pb** **12 06 42.2 +1.0**
baz=302
LSK S **Sg** **12 07 06.0 +2.3**
baz=302
LSK AMP
comp=E,6.3nm,0.6s,baz=302
**PTL Penteli 1.66 134** P **Pn** **12 06 39.8 0.0**
PTL S **Sn** **12 07 00.6 -0.5**
comp=E,615nm,0.6s
**PTL Penteli 1.66 134** P **Pn** **12 06 39.7 -0.1**
PTL AML AML 12 07 07.7
comp=E,1019µm,0.7s
PTL AML AML 12 07 10.6
comp=N,1442µm,0.5s
**ATHU Athens Univers 1.67 137** P **Pn** **12 06 40.3 +0.3**
ATHU S **Sn** **12 07 01.7 +0.3**
**DION Dionisos Attik 1.68 132** P **Pn** **12 06 40.1 0.0**
DION S **Sn** **12 07 01.4 -0.1**
comp=N,2µm,0.6s
**DION Dionisos Attik 1.68 132** P **Pn** **12 06 40.0 0.0**
DION AML AML 12 07 07.0
comp=E,2264µm,0.4s
DION AML AML 12 07 12.0
comp=N,3245µm,0.6s
**EPID Epidavros 1.70 159** P **Pn** **12 06 40.9 +0.5**
**VLS Valsamata 1.71 234** P **Pn** **12 06 40.9 +0.4**
VLS AML AML 12 07 12.6
comp=E,1319µm,0.5s
VLS AML AML 12 07 19.6
comp=N,1408µm,0.5s
**FNA Florina 1.74 335** P **Pn** **12 06 41.3 +0.3**
**FNA Florina 1.74 335** P **Pn** **12 06 41.3 +0.3**
**FNA Florina 1.74 335** PN **Pn** **12 06 41.4 +0.4**
**FNA Florina 1.74 335** P **Pn** **12 06 41.4 +0.4**
baz=330
FNA S **Sb** **12 07 05.8 +1.0**
baz=330
**FNA Florina 1.74 335** P **Pn** **12 06 41.2 +0.2**
FNA S **Sb** **12 07 06.3 +1.6**
**SKY Skiros Island 1.75 100** P **Pn** **12 06 40.8 -0.2**
**SKY Skiros Island 1.75 100** P **Pn** **12 06 40.7 -0.2**
SKY AML AML 12 07 15.5
comp=E,1121µm,0.5s
SKY AML AML 12 07 18.8
comp=N,1631µm,0.7s
**GRG Griva 1.75 1** P **Pn** **12 06 40.8 -0.3**
**GRG Griva 1.75 1** PN **Pn** **12 06 40.7 -0.3**
**PSDA Pessada-Kefalo 1.76 232** P **Pn** **12 06 41.4 +0.3**
**VLY Voula,Athens 1.77 139** P **Pn** **12 06 41.5 +0.3**
**VLY Voula,Athens 1.77 139** P **Pn** **12 06 41.2 0.0**
VLY AML AML 12 07 17.9
comp=N,1953µm,0.9s
VLY AML AML 12 07 18.7
comp=E,1839µm,0.9s
**SOH Sokhos 1.79 25** P **Pn** **12 06 41.5 -0.2**
**SOH Sokhos 1.79 25** P **Pn** **12 06 41.7 +0.1**
**DMLN Damoulianata-K 1.82 239** P **Pn** **12 06 42.3 +0.3**
**KBN Korca 1.86 320** P **Pb** **12 06 44.7 0.0**
baz=316
KBN S **Sg** **12 07 10.4 -0.1**
baz=316
KBN AMP
comp=E,1.8nm,0.7s,baz=316
**KRND KRANIDI 1.93 161** P **Pn** **12 06 43.7 +0.3**
**KRND KRANIDI 1.93 161** P **Pn** **12 06 43.7 +0.3**
**SRN Sarande 1.93 291** P **Pb** **12 06 45.7 -0.3**
baz=290
SRN S **Sg** **12 07 13.3 +0.3**
baz=290
SRN AMP
comp=N,1.6nm,0.4s,baz=290
**KNT Kendrikon 2.00 12** P **Pn** **12 06 44.6 +0.1**
**KNT Kendrikon 2.00 12** P **Pn** **12 06 44.6 +0.1**
**KNT Kendrikon 2.00 12** PN **Pn** **12 06 43.8 -0.7**
**KARY Karystos 2.01 125** P **Pn** **12 06 44.6 -0.1**

**ITM Ithomi 2.05 189** PN **Pn** **12 06 46.4 +1.2**
**KOKK Kokkinochori, 2.05 38** P **Pn** **12 06 44.9 -0.3**
**KOKK Kokkinochori, 2.05 38** P **Pn** **12 06 44.9 -0.3**
**VAY Valandovo 2.12 5** *i* Pn **Pn** **12 06 46.6 +0.4**
**SRS Serrai 2.14 26** P **Pn** **12 06 46.5 +0.1**
**SRS Serrai 2.14 26** P **Pn** **12 06 46.4 0.0**
**OHR Ohrid 2.24 329** *i* Pn **Pn** **12 06 49.2 +1.3**
**THAS Thassos island 2.30 52** P **Pn** **12 06 47.7 -0.9**
**NVR Nevrokopi 2.44 28** P **Pn** **12 06 50.8 +0.2**
**KAVA Kavala 2.44 42** P **Pn** **12 06 49.9 -0.7**
**STIP Stip 2.49 357** *i* Pn **Pn** **12 06 52.2 +0.9**
**VLI Veliai 2.53 169** P **Pn** **12 06 52.0 +0.3**
**SIGR SIGRI 2.73 89** PN **Pn** **12 06 53.8 -0.7**
**TIR Tirane 2.86 319** P **Pb** **12 07 00.4 -1.4**
baz=317
TIR AMP
comp=N,0.5nm,0.9s,baz=317
**PHP Peshkopia 2.87 330** P **Pn** **12 06 57.4 +0.9**
baz=327
PHP S **Sb** **12 07 35.2 -2.0**
baz=327
PHP AMP
comp=N,0.9nm,0.8s,baz=327
**GADA Gvkgeada 2.91 69** PN **Pn** **12 06 56.0 -1.0**
**BOZC Bozcaada 2.94 76** PN **Pn** **12 06 56.6 -0.8**
**BOZC Bozcaada 2.94 76** P **Pn** **12 06 57.7 +0.3**
**KOCA Canakkale, Ayv 2.96 83** P **Pn** **12 06 57.3 -0.3**
**KTHA Kythira Island 3.00 169** P **Pn** **12 06 58.5 +0.3**
**RDO Rodhopi 3.12 51** PN **Pn** **12 06 59.2 -0.7**
**BAYC CANAKKALE_Bayr 3.30 79** P **Pn** **12 07 02.3 0.0**
**ENEZ Enez 3.30 61** PN **Pn** **12 07 01.6 -0.8**
**ALN Alexandroupoli 3.31 58** PN **Pn** **12 07 01.4 -1.0**
**ALN Alexandroupoli 3.31 58** P **Pn** **12 07 01.3 -1.0**
**GELI Tayfur-Gelibol 3.40 68** PN **Pn** **12 07 02.9 -0.8**
**ANKY Antikythira Is 3.42 167** P **Pn** **12 07 04.2 +0.3**
**URLA Izmir 3.43 103** PN **Pn** **12 07 04.0 -0.1**
**BCI Bajram Curri 3.60 332** P **Pn** **12 07 06.8 +0.3**
baz=330
**UKOP Uzunkoru-Edir 3.81 58** PN **Pn** **12 07 09.2 -0.1**
**RODP Rodopos 3.81 162** PN **Pn** **12 07 10.2 +0.9**
**IMMV Iera Moni Meta 3.96 160** PN **Pn** **12 07 12.5 +1.1**
**PDG Podgorica 3.98 325** *e*Pn **Pn** **12 07 12.3 +0.6**
**RKY Sarkoy-Tekirda 4.00 67** PN **Pn** **12 07 11.9 -0.1**
**MAR3 Marsite Statio 4.10 66** PN **Pn** **12 07 13.5 +0.1**
**EDRB Edirne 4.27 50** PN **Pn** **12 07 15.4 -0.2**
**HCY Herceg Novi 4.36 319** *e*Pn **Pn** **12 07 17.3 +0.3**
**IDI Anoyia 4.41 152** Pn **Pn** **12 07 18.7 +1.1**
comp=N,2.2nm,0.3s,baz=307,slow=17,SNR=11
IDI Sn **Sn** **12 08 09.1 +0.2**
comp=N,2.2nm,0.3s,baz=118,slow=20,SNR=1.8
**IDI Anoyia 4.41 152** PN **Pn** **12 07 18.8 +1.2**
**GVD Gavdhos 4.58 162** PN **Pn** **12 07 21.9 +2.0**
**TREB Trebinje 4.63 321** *e*Pn **Pn** **12 07 20.9 +0.2**
**BRY Bratogost 4.68 323** *e*Pn **Pn** **12 07 22.3 +0.8**
**STON Ston 5.08 318** *e*Pn **Pn** **12 07 26.2 -0.5**
**ZKR Zakros 5.12 142** PN **Pn** **12 07 29.3 +1.9**
**BBLS Lazići 5.15 336** *e*Pn **Pn** **12 07 28.6 +0.7**
**DIVS Divibare 5.20 341** *e*Pn **Pn** **12 07 28.8 +0.3**
**FRGS Fruska Gora 6.24 343** *e*Pn **Pn** **12 07 42.2 -0.6**
**MGRS Mrkonjic Grad 6.52 325** *e*Pn **Pn** **12 07 49.0 +2.3**
**BLY Banja Luka 6.74 327** *e*Pn **Pn** **12 07 49.1 -0.5**
**MLR Muntele Rosu 6.82 22** Pn **Pn** **12 07 53.4 +2.6**
comp=N,0.9nm,0.3s,baz=238,slow=13,SNR=4.8
**MRAK Mrakovica 7.08 327** *e*Pn **Pn** **12 07 54.1 -0.2**
**MORH Mrgy, Hungar 7.52 340** *e*Pn **Pn** **12 08 00.2 0.0**
**CRES Cresnjev 8.34 325** *e*Pn **Pn** **12 08 10.1 -1.5**
**BRTR Keskin Array B 8.75 83** Pn **Pn** **12 08 19.6 +2.3**
comp=N,0.3nm,0.3s,baz=254,slow=10,SNR=2.8
**CEY Cerknica 8.76 321** *e*Pn Pn 12 08 13.1 -4.3
**SOKA Soboth 9.19 327** *e*Pn **Pn** **12 08 21.9 -1.4**
comp=N,3.6nm,0.7s
**ARSA Arzberg 9.45 330** *e*Pn **Pn** **12 08 25.6 -1.2**
comp=N,3.5nm,0.4s
**GERES GERESS Array B 11.46 330** Pn **Pn** **12 08 56.0 +1.6**
comp=N,0.2nm,0.3s,baz=146,slow=15,SNR=3.2
**KBZ Khabaz 16.05 67** Pn **P** **12 10 01.2 +1.5**
comp=N,0.1nm,0.3s,baz=288,slow=9.5,SNR=4.8
**HFS Hagfors 21.65 348** P **P** **12 11 01.2 +0.3**
comp=N,1.3nm,0.8s,baz=165,slow=11,SNR=1.5
**BELG Belogornoye 21.87 45** P **P** **12 11 05.4 +2.1**
comp=N,12nm,0.8s,baz=332,slow=4.5,SNR=5.3
**FINES FINESS Array B 22.39 5** P **P** **12 11 08.5 -0.3**
comp=N,2.2nm,0.8s,baz=169,slow=11,SNR=5.2
**EKA Eskdalemuir Ar 23.46 322** P **P** **12 11 18.9 -1.1**
comp=N,1.1nm,0.4s,baz=123,slow=8.5,SNR=7.4
**TORD Torodi Ar. Bea 31.73 221** P **P** **12 12 34.2 -0.6**
comp=N,0.5nm,0.6s,baz=37,slow=8.9,SNR=2.9
**ATD Arta Tunnel 33.04 141** LR LR 12 26 04.8
comp=N,46nm,20.2s,baz=58,slow=36
**KURBB Kurchatov Arra 40.47 55** P **P** **12 13 48.7 -0.5**
comp=N,0.3nm,0.3s,baz=280,slow=9.0,SNR=1.7
**MKAR Makanchi Array 43.55 60** P **P** **12 14 14.7 +0.2**
comp=N,1.1nm,0.5s,baz=279,slow=7.5,SNR=21
**ZALV Zalesovo Beam 43.94 49** P **P** **12 14 17.5 +0.1**
comp=N,1.0nm,0.4s,baz=272,slow=11,SNR=4.6
**SCHQ Schefferville 58.67 317** P **P** **12 16 07.4 -0.5**
comp=N,2.3nm,0.6s,baz=46,slow=5.2,SNR=10.0
**YKA Yellowknife Ar 72.91 341** P **P** **12 17 39.2 -0.3**
comp=N,0.4nm,0.7s,baz=32,slow=5.7,SNR=4.8
**JHJ Hachijo jima 2 87.60 48** LR LR 12 59 22.5
comp=N,84nm,21.4s,baz=76,slow=36

**KRSC 25 12:08:18.6±0.8, 54.99N×162.64E, h34km±15km, ML3.6,**
**Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **0.69** | **231** | *e*P | Pb | 12 08 32.8 | +0.6 |
| MKZ | | | | *e*S | Sb | 12 08 42.2 | +0.7 |
| **KBTR** | **Krutoberegovo** | **1.22** | **5** | *e*P | Pb | 12 08 40.7 | -0.4 |
| KBTR | | | | *e*S | Sb | 12 08 56.9 | +0.3 |
| **KBG** | **Krutoberegovo** | **1.26** | **2** | P | Pb | 12 08 41.4 | -0.4 |
| **BZGR** | **Bezymyannyi-Gr** | **1.46** | **311** | *e*P | Pn | 12 08 43.7 | +1.2 |
| BZGR | | | | *e*S | Sb | 12 09 02.2 | -1.2 |
| **TUMR** | **Tumrok** | **1.46** | **282** | *e*P | Pb | 12 08 44.1 | -1.1 |
| TUMR | | | | *e*S | Sn | 12 09 01.6 | +1.0 |
| **ZLN** | **Zelenaya** | **1.46** | **315** | *e*P | Pb | 12 08 44.0 | -1.3 |
| **CIRR** | **Tsirk** | **1.56** | **317** | *e*P | Pn | 12 08 45.3 | +1.4 |
| CIRR | | | | S | Sb | 12 09 05.4 | -0.8 |
| **LGNR** | **Loginova** | **1.56** | **315** | *e*P | Pb | 12 08 45.7 | -1.2 |
| LGNR | | | | *e*S | Sb | 12 09 05.2 | -1.2 |
| **BZWR** | **Bezymyannyi-We** | **1.56** | **309** | *e*P | Pn | 12 08 45.1 | +1.1 |
| **KMNR** | **Kamenistaya** | **1.57** | **300** | *e*P | Pn | 12 08 45.4 | +1.3 |
| KMNR | | | | *e*S | Sb | 12 09 05.3 | -1.3 |
| **KIRR** | **Kirishev** | **1.62** | **307** | P | Pb | 12 08 46.6 | -1.4 |
| **KPT** | **Kopyto** | **1.69** | **306** | *e*P | Pn | 12 08 47.2 | +1.6 |
| **KRSR** | **Krestovskiy** | **1.70** | **317** | *e*P | Pn | 12 08 46.8 | +1.0 |
| KRSR | | | | *e*S | Sb | 12 09 09.9 | -0.4 |
| **SMKR** | **Semkarok** | **1.72** | **338** | *e*P | Pb | 12 08 48.0 | -1.6 |
| **KLY** | **Klyuchi** | **1.74** | **320** | *e*P | Pn | 12 08 46.3 | +0.1 |
| **BDR** | **Baidarnaya** | **1.77** | **333** | *e*P | Pb | 12 08 49.0 | -1.5 |
| **SRKR** | **Sorokina** | **1.86** | **334** | P | Pn | 12 08 49.9 | +1.9 |
| **BKI** | **Bering** | **1.93** | **82** | S | Sn | 12 09 13.8 | +2.0 |
| **KII** | **Karymskiy** | **2.10** | **244** | *e*P | Pb | 12 08 53.9 | -2.0 |
| KII | | | | *e*S | Sb | 12 09 19.0 | -2.6 |
| **ESO** | **Esso** | **2.43** | **294** | *e*P | Pn | 12 08 58.2 | +2.4 |
| **SPN** | **Mys Shipunski** | **2.45** | **220** | *e*P | Pn | 12 08 58.5 | +2.5 |
| SPN | | | | S | Sn | 12 09 26.9 | +2.2 |
| **NLC** | **Nalytchevo** | **2.67** | **228** | S | Sn | 12 09 33.3 | +3.3 |
| **SDLR** | **Sedlovina** | **2.80** | **234** | *e*P | Pn | 12 09 04.3 | +3.3 |
| SDLR | | | | *e*S | Sb | 12 09 39.3 | -2.5 |
| **KRER** | **Koryakskii** | **2.85** | **235** | P | Pb | 12 09 05.3 | -3.5 |
| **SMAR** | **Somma** | **2.85** | **234** | *e*P | Pn | 12 09 04.9 | +3.2 |
| **UGLR** | **Uglovaya** | **2.87** | **233** | *e*P | Pn | 12 09 05.3 | +3.3 |
| **AVH** | **Avacha** | **2.88** | **235** | *e*P | Pb | 12 09 06.1 | -3.1 |
| AVH | | | | S | Sb | 12 09 40.3 | -3.7 |
| **KOK** | **Koryaka** | **2.91** | **236** | *e*P | Pn | 12 09 05.8 | +3.4 |
| **DALK** | **Dalny** | **3.02** | **231** | *e*P | Pn | 12 09 07.4 | +3.5 |
| DALK | | | | *e*S | Sb | 12 09 43.9 | -4.1 |
| **PET** | **Petropavlovsk** | **3.07** | **232** | P | Pn | 12 09 07.5 | +2.9 |
| PET | | | | S | Sn | 12 09 43.8 | +3.7 |
| **KRMR** | **Karymshinskiy** | **3.44** | **233** | *e*P | Pn | 12 09 13.7 | +4.1 |
| KRMR | | | | *e*S | Sb | 12 09 54.9 | -5.1 |
| **GRL** | **Gorelyy** | **3.65** | **230** | *e*P | Pn | 12 09 17.1 | +4.4 |
| **MTVR** | **Mutnovka** | **3.65** | **228** | *e*P | Pn | 12 09 16.1 | +3.4 |

*IDC **25** 12:10:55.5±2.3, 3.74S×67.79E, h0km, mb4.1/10, mb1 4.2/10, mb1mx3.8/62, mbtmp4.1/10, MS3.7/39, Ms1 3.7/39, ms1mx3.5/78, Error ellipse: s-maj=56.1km s-min=30.9km az=173.0*

*NEIC **25** 12:10:58.4±0.9, 3.65S±0.1×68.1E±0.1, h10km±1km, mb4.5/12, Error ellipse: s-maj=32.5km s-min=5.1km az=224.0*

**ISC 25 12:10:58.2±1.2, 3.65S±0.2×68.08E±0.2, h15km, n59, σ0.967/26, mb4.3/14, MS3.8/38, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DGAR** | **Diego Garcia** | **5.83** | **130** | Pn | **Pn** | **12 12 24.3** | **+0.1** |
| **PALK** | **Pallekele** | **16.69** | **50** | LR | LR | 12 19 41.2 | |
| | comp=Z,694nm,20.3s,baz=325,slow=31 | | | | | | |
| **OPO** | **Amboihidratompo** | **25.18** | **232** | LR | LR | 12 24 23.7 | |
| | comp=Z,200nm,19.6s,baz=202,slow=32 | | | | | | |
| **WSAR** | **Wadi Sarin** | **28.22** | **342** | LR | LR | 12 26 08.7 | |
| | comp=Z,180nm,18.4s,baz=166,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **30.79** | **274** | LR | LR | 12 27 12.2 | |
| | comp=Z,89nm,21.0s,baz=88,slow=32 | | | | | | |
| **PSI** | **Prapat** | **31.59** | **79** | LR | LR | 12 29 11.1 | |
| | comp=Z,186nm,18.8s,baz=258,slow=35 | | | | | | |
| **MBAR** | **Mbarara** | **37.33** | **274** | LR | LR | 12 31 43.7 | |
| | comp=Z,18nm,21.2s,baz=74,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.58** | **53** | P | **P** | **12 18 13.2** | **+0.7** |
| | 2.4nm,1.0s,baz=242,slow=10,SNR=16 | | | | | | |
| CMAR | | | | LR | LR | 12 31 19.4 | |
| | comp=Z,107nm,21.9s,baz=235,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.58** | **53** | P | **P** | **12 18 12.2** | **-0.4** |
| **CHTO** | **Chiang Mai** | **37.78** | **53** | P | **P** | **12 18 14.2** | **+0.1** |
| CHTO | | | | IAmb | IAmb | 12 18 15.7 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **LSZ** | **Lusaka** | **40.83** | **251** | LR | LR | 12 33 24.3 | |
| | comp=Z,213nm,19.5s,baz=132,slow=33 | | | | | | |
| **GEYT** | **Alibeck** | **42.35** | **348** | LR | LR | 12 35 14.9 | |
| | comp=Z,157nm,21.6s,baz=162,slow=34 | | | | | | |
| **GAR** | **Garm** | **42.47** | **3** | P | **P** | **12 18 51.6** | **-1.3** |
| **LBTB** | **Lobatse** | **45.94** | **238** | LR | LR | 12 37 08.9 | |
| | comp=Z,190nm,18.1s,baz=77,slow=34 | | | | | | |
| **AAK** | **Ala-Archa** | **46.43** | **7** | P | **P** | **12 19 25.7** | **+1.1** |
| | comp=Z,2.3nm,1.0s,baz=196,slow=8.1,SNR=6.8 | | | | | | |
| AAK | | | | LR | LR | 12 38 30.6 | |
| | comp=Z,103nm,20.5s,baz=177,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **46.43** | **7** | P | **P** | **12 19 25.1** | **+0.5** |
| AAK | | | | IAmb | IAmb | 12 19 27.4 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **47.57** | **234** | LR | LR | 12 37 56.1 | |
| | comp=Z,123nm,18.1s,baz=28,slow=34 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **47.74** | **322** | LR | LR | 12 37 26.2 | |
| | comp=Z,50nm,20.0s,baz=252,slow=33 | | | | | | |
| **GNI** | **Garni** | **48.51** | **336** | LR | LR | 12 39 52.7 | |
| | comp=Z,62nm,20.9s,baz=114,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **51.64** | **94** | LR | LR | 12 39 29.5 | |
| | comp=Z,58nm,22.0s,baz=281,slow=33 | | | | | | |
| **MAKZ** | **Makanchi** | **51.73** | **12** | P | **P** | **12 20 04.4** | **-0.5** |
| MAKZ | | | | IAmb | IAmb | 12 20 05.9 | |
| | comp=Z,5.7nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **51.78** | **12** | P | **P** | **12 20 04.8** | **-0.5** |
| **MKAR** | **Makanchi Array** | **51.78** | **12** | P | **P** | **12 20 05.3** | **-0.1** |
| | comp=Z,0.5nm,0.7s,baz=195,slow=8.8,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.78** | **12** | P | **P** | **12 20 04.8** | **-0.5** |
| **KBZ** | **Khabaz** | **52.27** | **337** | P | **P** | **12 20 09.7** | **+0.7** |
| | comp=Z,3.4nm,0.8s,baz=150,slow=7.2,SNR=8.8 | | | | | | |
| KBZ | | | | LR | LR | 12 41 18.7 | |
| | comp=Z,35nm,21.1s,baz=132,slow=35 | | | | | | |
| **SUR** | **Sutherland** | **52.58** | **231** | LR | LR | 12 39 10.7 | |
| | comp=Z,209nm,21.6s,baz=22,slow=32 | | | | | | |
| **ABKAR** | **Akbulak array** | **53.13** | **353** | P | **P** | **12 20 15.8** | **+0.5** |
| **ABKAR** | **Akbulak array** | **53.13** | **353** | P | **P** | **12 20 15.4** | **+0.1** |
| ABKAR | | | | IAmb | IAmb | 12 20 17.4 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **53.45** | **327** | LR | LR | 12 43 12.2 | |
| | comp=Z,54nm,19.5s,baz=32,slow=36 | | | | | | |
| **AKTO** | **Aktyubinsk** | **54.53** | **352** | P | **P** | **12 20 25.8** | **+0.3** |
| | comp=Z,1.8nm,0.9s,baz=187,slow=6.9,SNR=4.5 | | | | | | |
| AKTO | | | | LR | LR | 12 44 05.9 | |
| | comp=Z,38nm,19.2s,baz=134,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.80** | **8** | P | **P** | **12 20 26.9** | **-0.5** |
| | comp=Z,2.8nm,1.0s,baz=201,slow=7.7,SNR=13 | | | | | | |
| KURBB | | | | LR | LR | 12 42 33.2 | |
| | comp=Z,99nm,21.9s,baz=156,slow=35 | | | | | | |
| **KURK** | **Kurchatov** | **54.90** | **8** | P | **P** | **12 20 28.4** | **+0.2** |
| KURK | | | | IAmb | IAmb | 12 20 29.6 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **55.61** | **100** | LR | LR | 12 43 04.4 | |
| | comp=Z,83nm,20.6s,baz=274,slow=35 | | | | | | |
| **BELG** | **Belogornoye** | **58.42** | **346** | LR | LR | 12 48 45.1 | |
| | comp=Z,48nm,18.0s,baz=133,slow=39 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **59.08** | **12** | P | **P** | **12 20 57.4** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 12 20 58.5 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.08** | **12** | P | **P** | **12 20 57.1** | **-0.6** |
| | comp=Z,1.7nm,0.6s,baz=213,slow=7.9,SNR=12 | | | | | | |
| ZALV | | | | LR | LR | 12 45 44.5 | |
| | comp=Z,72nm,20.3s,baz=194,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **61.29** | **29** | P | **P** | **12 21 14.5** | **+1.2** |
| | comp=Z,4.4nm,1.1s,baz=223,slow=7.0,SNR=23 | | | | | | |
| SONM | | | | LR | LR | 12 47 28.7 | |
| | comp=Z,344nm,20.7s,baz=214,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **61.29** | **29** | P | **P** | **12 21 13.0** | **-0.2** |
| **AKASG** | **Malin Array Be** | **63.49** | **334** | P | **P** | **12 21 27.7** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=134,slow=5.7,SNR=6.9 | | | | | | |
| **MAW** | **Mawson** | **63.96** | **182** | LR | LR | 12 42 41.0 | |
| | comp=Z,135nm,19.5s,baz=54,slow=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.56** | **110** | LR | LR | 12 47 53.7 | |
| | comp=Z,38nm,20.5s,baz=19,slow=33 | | | | | | |
| **VRAC** | **Vranov** | **68.89** | **327** | LR | LR | 12 54 19.8 | |
| | comp=Z,21nm,18.6s,baz=354,slow=38 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **71.53** | **322** | LR | LR | 12 52 36.6 | |
| | comp=Z,11nm,21.4s,baz=89,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **72.44** | **340** | LR | LR | 12 55 02.8 | |
| | comp=Z,41nm,20.7s,baz=76,slow=36 | | | | | | |
| **DBIC** | **Dimbokro** | **73.42** | **278** | LR | LR | 12 54 26.1 | |
| | comp=Z,33nm,18.1s,baz=346,slow=36 | | | | | | |
| **NRIK** | **Noril'sk** | **74.04** | **7** | LR | LR | 12 55 29.7 | |
| | comp=Z,46nm,19.2s,baz=151,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.29** | **42** | LR | LR | 12 57 51.5 | |
| | comp=Z,44nm,19.4s,baz=195,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **76.02** | **37** | LR | LR | 12 59 16.5 | |
| | comp=Z,51nm,18.5s,baz=174,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **76.44** | **51** | LR | LR | 12 56 05.2 | |
| | comp=Z,55nm,19.8s,baz=193,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.46** | **346** | LR | LR | 12 57 49.7 | |
| | comp=Z,57nm,21.6s,baz=104,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.53** | **312** | P | **P** | **12 22 59.6** | **+0.3** |
| | comp=Z,2.5nm,1.0s,baz=93,slow=3.7,SNR=7.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.53** | **312** | IAmb | IAmb | 12 23 09.9 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **TIXI** | **Tiksi** | **84.60** | **16** | LR | LR | 13 02 10.4 | |
| | comp=Z,85nm,18.5s,baz=186,slow=36 | | | | | | |
| **TIXI** | **Tiksi** | **84.60** | **16** | P | **P** | **12 23 30.4** | **-0.2** |
| **MA2** | **Magadan** | **89.45** | **30** | LR | LR | 13 05 33.1 | |
| | comp=Z,71nm,18.3s,baz=114,slow=37 | | | | | | |
| **SEY** | **Seymchan** | **90.66** | **27** | LR | LR | 13 05 35.2 | |
| | comp=Z,135nm,20.1s,baz=315,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **92.71** | **37** | LR | LR | 13 09 29.8 | |
| | comp=Z,71nm,18.5s,baz=155,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **144.89** | **9** | PKPbc | **PKPdf** | **12 30 35.7** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=347,slow=3.5,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **153.23** | **344** | PKPbc | **PKPbc** | **12 30 55.1** | **-1.4** |
| | comp=Z,0.7nm,0.9s,baz=47,slow=2.2,SNR=6.0 | | | | | | |

*NEIC **25** 12:17:33.7±1.4, 18.10N±0.07×67.67W±0.02, h32km±9km, Error ellipse: s-maj=10.0km s-min=1.8km az=192.0*
*RSPR **25** 12:17:34.9, 18.21N×67.64W, h48km±1km, MD3.1/10*
*OSPL **25** 12:17:34.6±0.9, 18.46N×67.54W, h0km±14km, ML2.6*

**ISC 25 12:17:34.3±1.2, 18.13N±0.07×67.61W±0.03, h30km±11km, n50, σ1.908/59, 13C, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDE** | **Isla Desecheo** | **0.28** | **28** | *e*P | **Pb** | **12 17 42.1** | **+0.5** |
| **IDE** | **Isla Desecheo** | **0.28** | **28** | *e*S | **Sn** | **12 17 48.3**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MLPR** | **Magueyes Islan** | **0.56** | **107** | ⇑*e*P | | **Pb** | **12 17 45.0** | **-0.8** |
| **MLPR** | **Magueyes Islan** | **0.56** | **107** | *e*S | | **Sn** | **12 17 55.9** | **+1.3** |
| **MLPR** | **Magueyes Islan** | **0.56** | **107** | | | **Pb** | **12 17 45.0** | **-0.8** |
| MLPR | | | | | | **Sn** | **12 17 55.9** | **+1.3** |
| **MLPR** | **Magueyes Islan** | **0.56** | **107** | IAML | | | 12 17 56.0 | |
| | comp=N,310nm,0.4s | | | | | | | |
| MLPR | | | | IAML | | | 12 17 56.5 | |
| | comp=E,347nm,0.3s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.82** | **298** | ⇑*e*P | | **Pn** | **12 17 48.6** | **-1.2** |
| **PCDR** | **Punta Cana, DR** | **0.82** | **298** | | | **Pn** | **12 17 48.6** | **-1.2** |
| PCDR | | | | | | **Sn** | **12 17 59.4** | **-1.5** |
| **PCDR** | **Punta Cana, DR** | **0.82** | **298** | IAML | | | 12 18 03.9 | |
| | comp=N,302nm,0.7s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.82** | **298** | *i* P | | **Pn** | **12 17 48.4** | **-1.4** |
| PCDR | | | | *e*S | | **Sb** | **12 17 59.7** | **-1.1** |
| PCDR | | | | IAML | | | 12 18 03.0 | |
| | comp=Z,197nm,1.1s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **0.84** | **75** | ⇑*e*P | | **Pn** | **12 17 49.4** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **0.84** | **75** | *e*S | | **Sn** | **12 18 01.5** | **0.0** |
| **AOPR** | **Arecibo Observ** | **0.84** | **75** | | | **Pn** | **12 17 49.4** | **-0.7** |
| AOPR | | | | | | **Sn** | **12 18 01.5** | **0.0** |
| **OBIP** | **Obispado Ponce** | **0.96** | **95** | ⇑*e*P | | **Pn** | **12 17 50.4** | **-1.3** |
| **OBIP** | **Obispado Ponce** | **0.96** | **95** | *e*S | | **Sn** | **12 18 04.5** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **0.96** | **95** | | | **Pn** | **12 17 50.4** | **-1.3** |
| OBIP | | | | | | **Sn** | **12 18 04.5** | **+0.1** |
| **CELP** | **Cerrillos** | **0.98** | **93** | ⇑*e*P | | **Pn** | **12 17 51.8** | **-0.2** |
| **CELP** | **Cerrillos** | **0.98** | **93** | *e*S | | **Sn** | **12 18 03.8** | **-1.2** |
| **CELP** | **Cerrillos** | **0.98** | **93** | | | **Pn** | **12 17 51.8** | **-0.2** |
| CELP | | | | | | **Sn** | **12 18 03.8** | **-1.2** |
| **CELP** | **Cerrillos** | **0.98** | **93** | IAML | | | 12 18 13.7 | |
| | comp=N,171nm,0.2s | | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.08** | **71** | ⇑*e*P | | **Pn** | **12 17 53.6** | **+0.2** |
| **EMPR** | **Esperanza - Ma** | **1.08** | **71** | *e*S | | **Sn** | **12 18 08.7** | **+1.3** |
| **EMPR** | **Esperanza - Ma** | **1.08** | **71** | | | **Pn** | **12 17 53.6** | **+0.2** |
| EMPR | | | | | | **Sn** | **12 18 08.7** | **+1.3** |
| **SJG** | **San Juan** | **1.39** | **91** | | | **Pn** | **12 17 57.6** | **0.0** |
| SJG | | | | | | **Sn** | **12 18 15.8** | **+0.8** |
| SJG | | | | IAML | | | 12 18 19.6 | |
| | comp=N,216nm,0.3s | | | | | | | |
| SJG | | | | IAML | | | 12 18 20.3 | |
| | comp=N,139nm,0.2s | | | | | | | |
| **IGPR** | **InterUniversit** | **1.44** | **96** | ⇑*e*P | | **Pn** | **12 17 57.4** | **-1.0** |
| **IGPR** | **InterUniversit** | **1.44** | **96** | *e*S | | **Sn** | **12 18 16.0** | **-0.3** |
| **GCPR** | **Guaynabo City** | **1.46** | **83** | | | **Pn** | **12 17 58.2** | **-0.5** |
| GCPR | | | | IAML | | | 12 18 20.6 | |
| | comp=N,130nm,0.6s | | | | | | | |
| GCPR | | | | IAML | | | 12 18 20.9 | |
| | comp=E,118nm,0.3s | | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.52** | **94** | Pn | | **Pn** | **12 17 59.6** | **+0.2** |
| PDPR | | | | | | **Sb** | **12 18 20.3** | **-0.3** |
| PDPR | | | | IAML | | | 12 18 26.4 | |
| | comp=E,83nm,0.3s | | | | | | | |
| **CBYP** | **Canovanas** | **1.68** | **85** | ⇑*e*P | | **Pn** | **12 18 01.5** | **-0.1** |
| **CBYP** | **Canovanas** | **1.68** | **85** | *e*S | | **Sn** | **12 18 19.7** | **-2.4** |
| **CBYP** | **Canovanas** | **1.68** | **85** | | | **Pn** | **12 18 01.5** | **-0.1** |
| CBYP | | | | | | **Sn** | **12 18 19.7** | **-2.4** |
| **HUMP** | **Col San Antoni** | **1.68** | **89** | ⇑*e*P | | **Pn** | **12 18 01.4** | **-0.1** |
| **HUMP** | **Col San Antoni** | **1.68** | **89** | *e*S | | **Sn** | **12 18 21.1** | **-1.0** |
| **HUMP** | **Col San Antoni** | **1.68** | **89** | | | **Pn** | **12 18 01.4** | **-0.1** |
| HUMP | | | | | | **Sn** | **12 18 21.1** | **-1.0** |
| **HUMP** | **Col San Antoni** | **1.68** | **89** | IAML | | | 12 18 26.7 | |
| | comp=N,114nm,0.2s | | | | | | | |
| **MTP** | **Monte Pirata** | **1.96** | **91** | ⇑*e*P | | **Pn** | **12 18 05.2** | **-0.3** |
| **MTP** | **Monte Pirata** | **1.96** | **91** | *e*S | | **Sn** | **12 18 30.2** | **+1.2** |
| **MTP** | **Monte Pirata** | **1.96** | **91** | | | **Pn** | **12 18 05.2** | **-0.3** |
| MTP | | | | | | **Sn** | **12 18 30.2** | **+1.2** |
| **MTP** | **Monte Pirata** | **1.96** | **91** | IAML | | | 12 18 34.0 | |
| | comp=E,53nm,0.2s | | | | | | | |
| MTP | | | | IAML | | | 12 18 35.4 | |
| | comp=N,46nm,0.2s | | | | | | | |
| **CUPR** | **Culebra, Puert** | **2.22** | **85** | Pn | | **Pn** | **12 18 09.4** | **+0.4** |
| **STVI** | **Saint Thomas** | **2.54** | **85** | Pn | | **Pn** | **12 18 13.9** | **+0.5** |
| STVI | | | | IAML | | | 12 18 45.9 | |
| | comp=N,62nm,0.2s | | | | | | | |
| **SDDR** | **Presa de Saban** | **3.59** | **284** | | | **Pn** | **12 18 31.1** | **+3.2** |
| SDDR | | | | IAML | | | 12 19 22.2 | |
| | comp=N,24nm,0.7s | | | | | | | |
| SDDR | | | | IAML | | | 12 19 24.1 | |
| | comp=N,32nm,1.0s | | | | | | | |
| **SDDR** | **Presa de Saban** | **3.59** | **284** | *i* P | | **Pn** | **12 18 30.2** | **+2.3** |
| SDDR | | | | IAML | | | 12 19 24.3 | |
| | comp=Z,18nm,0.5s | | | | | | | |

*BJI* ***25*** *12:17:43.5±0.0, 7.85S×128.92E, h173km, mb4.9/71, mB4.9/39*

*MOS* ***25*** *12:17:46.1±0.9, 7.47S×128.43E, h160km, mb4.9/46, Error ellipse: s-maj=12.5km s-min=5.4km az=112.0*

*GCMT* ***25*** *12:17:48.2±0.4, 7.53S±0.02×128.55E±0.03, h179km±4km, MW5.0/77, Moment Tensor Solution. s14,c14; s77,c97; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.09±.14; Mθθ-1.45±.19; Mφφ-0.63±.19; Mrθ1.73±.13; Mθφ2.51±.14; Mφr0.28±.13; Best double couple: M₀3.54800×10¹⁶ NP1:φ343.00000°, δ45.00000°, λ144.00000°. NP2: φ100.00000°, δ65.00000°, λ51.00000°. Principal axes: T 3.2770, Plg52.0000°, Azm323.0000°; N 0.5460, Plg35.0000°, Azm119.0000°; P -3.8180, Plg12.0000°, Azm217.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA* ***25*** *12:17:48.6±0.2, 8˚S±2˚×12˚9E±˚, h151km±3km, M4.9/52, mb4.9/52, mB5.4/28, MLv5.3/12, Mw(mB)4.8/28, MwMwp4.6/4, Mwp4.9/4*

*NEIC* ***25*** *12:17:48.2±3.0, 7.50S±0.07×128.53E±0.07, h159km±5km, mb5.0/52, Error ellipse: s-maj=10.3km s-min=9.7km az=155.0*

*IDC* ***25*** *12:17:48.5±1.3, 7.41S×128.49E, h161km±10km, mb4.4/20, mb1 4.5/24, mb1mx4.3/38, mbtmp5.0/24, MS3.5/8, Ms1 3.5/8, ms1mx3.0/65, Error ellipse: s-maj=14.0km s-min=10.1km az=62.0*

**ISC 25 12:17:47.6±0.6, 7.55S±0.04×128.50E±0.04, h160km±5km, n380, σ1s43/386, mb4.9/95, 29C-3D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.81** | **99** | Pn | **Pn** | **12 18 34.1** | **+1.1** |
| **SAUI** | **Saumlaki** | **2.81** | **99** | P | **Pn** | **12 18 34.2** | **+1.2** |
| **SAUI** | **Saumlaki** | **2.81** | **99** | P | **Pn** | **12 18 35.0** | **+2.0** |
| **BNDI** | **Bandanaira** | **3.32** | **25** | P | **Pn** | **12 18 41.3** | **+2.0** |
| **AAI** | **Ambon** | **3.85** | **355** | P | **Pn** | **12 18 48.4** | **+2.2** |
| **MSAI** | **Masohi** | **4.20** | **6** | P | **Pn** | **12 18 53.1** | **+2.4** |
| **SOEI** | **Soe** | **4.72** | **242** | Pn | **Pn** | **12 18 58.7** | **+1.1** |
| **SOEI** | **Soe** | **4.72** | **242** | P | **Pn** | **12 18 58.6** | **+0.9** |
| **SOEI** | **Soe** | **4.72** | **242** | P | **Pn** | **12 18 59.6** | **+1.9** |
| **DRS** | **Darwin Rock St** | **5.40** | **154** | P | **Pn** | **12 19 07.4** | **+1.0** |
| **BATI** | **Baumata** | **5.46** | **241** | P | **Pn** | **12 19 08.5** | **+1.2** |
| | 569nm,0.3s,baz=120,slow=2.0,SNR=274 | | | | | | |
| BATI | | | | S | **Sn** | **12 20 08.7** | **-1.0** |
| | 347nm,0.3s,baz=252,slow=19,SNR=12 | | | | | | |
| BATI | | | | LR | LR | 12 21 08.9 | |
| | comp=Z,612nm,19.9s,baz=302,slow=36 | | | | | | |
| **BATI** | **Baumata** | **5.46** | **241** | P | **Pn** | **12 19 08.4** | **+1.2** |
| | 5.8nm1µm26µm901nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **5.87** | **154** | P | **Pn** | **12 19 12.5** | **-0.1** |
| | baz=5.9,SNR=850 | | | | | | |
| MTN | | | | S | Sn | 12 20 13.6 | -5.7 |
| | baz=5.9 | | | | | | |
| **MTN** | **Manton Dam** | **5.87** | **154** | Pn | **Pn** | **12 19 13.0** | **+0.4** |
| **MTN** | **Manton Dam** | **5.87** | **154** | P | **Pn** | **12 19 13.4** | **+0.8** |
| **FAKI** | **Fak Fak** | **5.92** | **39** | Pn | **Pn** | **12 19 11.8** | **-1.6** |
| **FAKI** | **Fak Fak** | **5.92** | **39** | P | **Pn** | **12 19 11.8** | **-1.6** |
| | 2.5nm2µm8µm202nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **5.92** | **39** | P | **Pn** | **12 19 14.8** | **+1.4** |
| **SANI** | **Sanana** | **6.01** | **335** | P | **Pn** | **12 19 17.0** | **+2.5** |
| | 0.3nm1µm95nm,1.7s | | | | | | |
| **SANI** | **Sanana** | **6.01** | **335** | P | **Pn** | **12 19 17.5** | **+3.0** |
| **BBSI** | **Bau Bau** | **6.24** | **289** | P | **Pn** | **12 19 20.2** | **+2.6** |
| | 0.1nm197nm25nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **6.29** | **260** | Pn | **Pn** | **12 19 19.4** | **+1.1** |
| **MMRI** | **Maumere** | **6.29** | **260** | P | **Pn** | **12 19 19.1** | **+0.8** |
| | 1.9nm6µm451nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **6.29** | **260** | P | **Pn** | **12 19 20.2** | **+1.9** |
| **KDU** | **Kakadu** | **6.43** | **143** | P | **Pn** | **12 19 20.2** | **+0.1** |
| | baz=6.5,SNR=1000 | | | | | | |
| KDU | | | | S | **Sn** | **12 20 28.4** | **-4.4** |
| | baz=6.5 | | | | | | |
| **KDU** | **Kakadu** | **6.43** | **143** | P | **Pn** | **12 19 20.7** | **+0.6** |
| **SIJI** | **Sorong** | **7.19** | **23** | P | **Pn** | **12 19 29.7** | **-0.5** |
| | 134nm,0.3s,baz=219,slow=23,SNR=157 | | | | | | |
| SIJI | | | | S | **Sn** | **12 20 46.8** | **-4.1** |
| | 22nm,0.3s,baz=180,slow=20,SNR=9.6 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **8.07** | **279** | P | **Pn** | **12 19 43.9** | **+1.9** |
| | 56nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **8.08** | **178** | P | **Pn** | **12 19 41.6** | **-0.5** |
| | baz=8.2,SNR=282 | | | | | | |
| KNRA | | | | S | Sn | 12 21 06.2 | -6.1 |
| | baz=8.2 | | | | | | |
| **KNRA** | **Kununurra** | **8.08** | **178** | Pn | **Pn** | **12 19 41.6** | **-0.5** |
| **BASI** | **Baing, Sumba** | **8.26** | **251** | P | **Pn** | **12 19 44.4** | **-0.1** |
| | 9µm342nm,1.1s | | | | | | |
| **BKSI** | **Bulukumba** | **8.61** | **284** | P | **Pn** | **12 19 51.6** | **+2.5** |
| | 40nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **8.62** | **318** | | **Pn** | **12 19 51.5** | **+2.2** |
| **LUWI** | **Luwuk** | **8.62** | **318** | P | **Pn** | **12 19 52.6** | **+3.3** |
| | 332nm,1.4s | | | | | | |
| **BNSI** | **Bone** | **8.91** | **290** | P | **Pn** | **12 19 55.3** | **+2.2** |
| | 48nm,1.3s | | | | | | |
| **KMSI** | **Cibinong** | **9.24** | **331** | P | **Pn** | **12 20 00.2** | **+2.7** |
| | 209nm,1.0s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **9.24** | **256** | P | **Pn** | **12 19 55.4** | **-2.1** |
| | 4µm215nm,0.6s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.39** | **292** | P | **Pn** | **12 20 01.0** | **+1.6** |
| | 29nm,0.6s | | | | | | |
| **APSI** | **Ampana** | **9.49** | **314** | P | **Pn** | **12 20 04.2** | **+3.4** |
| | 991nm76nm,1.1s | | | | | | |
| **MRSI** | **Marisa** | **10.31** | **320** | P | **Pn** | **12 20 14.7** | **+3.1** |
| | 1µm97nm,1.6s | | | | | | |
| **PLAI** | **Plampang** | **10.69** | **262** | P | **Pn** | **12 20 14.9** | **-1.7** |
| | 3µm239nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.85** | **195** | P | Pn | 12 20 16.1 | -2.5 |
| | 16nm,0.3s,baz=360,slow=10,SNR=496 | | | | | | |
| FITZ | | | | S | Sn | 12 22 10.7 | -8.1 |
| | 20nm,0.3s,baz=73,slow=16,SNR=8.4 | | | | | | |
| FITZ | | | | LR | LR | 12 25 45.2 | |
| | comp=Z,361nm,18.9s,baz=12,slow=43 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.85** | **195** | P | Pn | 12 20 16.2 | -2.4 |
| | baz=11,SNR=158 | | | | | | |
| FITZ | | | | S | Sn | 12 22 09.3 | -10 |
| | baz=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.85** | **195** | | **Pn** | **12 20 16.9** | **-1.7** |
| **FITZ** | **Fitzroy Crossi** | **10.85** | **195** | P | **Pn** | **12 20 18.3** | **-0.3** |
| **TOLI2** | **Tolitoli** | **11.54** | **318** | Pn | **Pn** | **12 20 29.2** | **+1.5** |
| **SMPI** | **Sarmi** | **11.57** | **62** | P | **Pn** | **12 20 27.8** | **-0.4** |
| | 8µm47nm,1.0s | | | | | | |
| **MPSI** | **Mapaga** | **11.62** | **312** | P | **P** | **12 20 34.4** | **-1.2** |
| | 705nm20nm,1.0s | | | | | | |
| **MMPI** | **Merauke** | **11.80** | **95** | P | **Pn** | **12 20 31.6** | **+0.5** |
| | 9µm312nm,0.6s | | | | | | |
| **GENI** | **Genyem** | **12.62** | **68** | P | **Pn** | **12 20 42.8** | **+1.1** |
| | 104nm,0.8s | | | | | | |
| **JAY** | **Jayapura** | **13.14** | **68** | P | **Pn** | **12 20 49.1** | **+0.7** |
| | 1.8nm,0.3s,baz=106,slow=14,SNR=3.6 | | | | | | |
| **JAY** | **Jayapura** | **13.14** | **68** | P | **Pn** | **12 20 49.3** | **+0.9** |
| | 22nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **13.42** | **155** | | **Pn** | **12 20 50.2** | **-1.7** |
| **WRAB** | **Tennant Creek** | **13.55** | **156** | *ce*P | **Pn** | **12 20 52.0** | **-1.6** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,34nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **13.55** | **156** | | **Pn** | **12 20 51.9** | **-1.6** |
| **WRAB** | **Tennant Creek** | **13.55** | **156** | P | **Pn** | **12 20 54.5** | **+0.9** |
| **WRA** | **Warramunga Arr** | **13.56** | **156** | P | Pn | 12 20 51.0 | -2.6 |
| | comp=Z,14nm,0.3s,baz=331,slow=14,SNR=222 | | | | | | |
| WRA | | | | S | Sn | 12 23 15.8 | -8.3 |
| | comp=Z,31nm,0.3s,baz=332,slow=22,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.56** | **156** | P | **Pn** | **12 20 51.4** | **-2.2** |
| **WRA** | **Warramunga Arr** | **13.56** | **156** | Pn | **Pn** | **12 20 51.4** | **-2.2** |
| **WB2** | **Warramunga Arr** | **13.56** | **156** | Pn | **Pn** | **12 20 51.8** | **-1.9** |
| **WR0** | **Warramunga Arr** | **13.66** | **155** | | Pn | 12 20 52.5 | -2.3 |
| **JAGI** | **Jajag, Banyuwa** | **14.24** | **265** | P | **Pn** | **12 21 03.4** | **+1.2** |
| | comp=Z,2µmcomp=Z,44nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.24** | **265** | P | **Pn** | **12 21 04.1** | **+1.9** |
| **GMJI** | **Gumukmas** | **14.93** | **266** | P | **P** | **12 21 12.9** | **+0.5** |
| | comp=Z,26nm,1.0s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **15.06** | **295** | P | **P** | **12 21 16.5** | **+2.5** |
| | comp=Z,114nm,1.0s | | | | | | |
| **COEN** | **Coen** | **15.76** | **115** | | **Pn** | **12 21 20.7** | **-0.3** |
| COEN | | | | IAmb | IAmb | 12 21 25.1 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **16.11** | **321** | P | **P** | **12 21 27.4** | **+1.9** |
| MYLDM | | | | IAmb | IAmb | 12 21 42.3 | |
| | comp=Z,105nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.25** | **210** | | **P** | **12 21 25.5** | **-1.5** |
| PSA00 | | | | IAmb | IAmb | 12 21 43.0 | |
| | comp=Z,72nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.25** | **210** | | **P** | **12 21 26.1** | **-1.0** |
| PSA00 | | | | IAmb | IAmb | 12 21 29.0 | |
| | comp=Z,74nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.25** | **210** | P | **P** | **12 21 28.6** | **+1.6** |
| **QIS** | **Mount Isa** | **16.82** | **141** | P | **P** | **12 21 34.7** | **+1.4** |
| | baz=17,SNR=30 | | | | | | |
| QIS | | | | S | S | 12 24 30.1 | -10 |
| | baz=17 | | | | | | |
| **QIS** | **Mount Isa** | **16.82** | **141** | P | **P** | **12 21 35.0** | **+1.7** |
| **AS31** | **Alice Springs** | **16.84** | **163** | | **P** | **12 21 34.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **16.84** | **163** | P | **P** | **12 21 34.4** | **+0.8** |
| | comp=Z,8.4nm,0.3s,baz=337,slow=10.0,SNR=471 | | | | | | |
| ASAR | | | | S | **S** | **12 24 35.0** | **-5.9** |
| | comp=Z,6.5nm,0.3s,baz=344,slow=25,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **16.84** | **163** | P | **P** | **12 21 34.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **16.84** | **163** | P | **P** | **12 21 34.0** | **+0.4** |
| **PCJI** | **Pacitan** | **17.17** | **267** | P | **P** | **12 21 35.9** | **-1.3** |
| | comp=Z,54nm,0.8s | | | | | | |
| **WRKA** | **Warakurna** | **17.39** | **181** | P | **P** | **12 21 40.2** | **+0.6** |
| | baz=18,SNR=239 | | | | | | |
| WRKA | | | | S | **S** | **12 24 46.2** | **-6.4** |
| | baz=18 | | | | | | |
| **WRKA** | **Warakurna** | **17.39** | **181** | P | **P** | **12 21 41.1** | **+1.5** |
| **PBKI** | **Pangkalan Bun** | **17.43** | **285** | P | **Pn** | **12 21 42.7** | **+1.4** |
| | comp=Z,8µmcomp=Z,355nm,1.0s | | | | | | |
| **UGM** | **Wanagama** | **17.82** | **268** | P | **P** | **12 21 45.5** | **+1.1** |
| **UGM** | **Wanagama** | **17.82** | **268** | P | **P** | **12 21 45.2** | **+0.9** |
| | comp=Z,68nm,1.5s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.23** | **317** | P | **Pn** | **12 21 50.0** | **-0.9** |
| **KKM** | **Kota Kinabalu** | **18.23** | **317** | P | **Pn** | **12 21 51.0** | **+0.2** |
| **PMG** | **Port Moresby** | **18.55** | **97** | P | **P** | **12 21 54.3** | **+2.0** |
| | comp=Z,3.2nm,0.3s,baz=279,slow=5.8,SNR=21 | | | | | | |
| PMG | | | | LR | LR | 12 30 35.1 | |
| | comp=Z,84nm,18.9s,baz=254,slow=41 | | | | | | |
| **PMG** | **Port Moresby** | **18.55** | **97** | *de*P | **Pn** | **12 21 55.2** | **+0.8** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,68nm,1.0s | | | | | | |
| **STKI** | **Sintang** | **18.58** | **293** | P | **Pn** | **12 21 54.9** | **+0.1** |
| | comp=Z,98nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **18.65** | **126** | P | **P** | **12 21 55.7** | **+2.3** |
| | baz=19,SNR=11 | | | | | | |
| **SBUM** | **Sibu** | **19.04** | **301** | P | **Pn** | **12 21 59.7** | **-0.5** |
| SBUM | | | | IAmb | IAmb | 12 22 02.3 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **GIRL** | **Giralia** | **20.34** | **221** | P | **P** | **12 22 13.2** | **+1.7** |
| | baz=20,SNR=4.9 | | | | | | |
| **GIRL** | **Giralia** | **20.34** | **221** | P | **P** | **12 22 13.9** | **+2.4** |
| **GIRL** | **Giralia** | **20.34** | **221** | P | **P** | **12 22 14.4** | **+2.9** |
| **LEM** | **Lembang** | **20.73** | **271** | P | **P** | **12 22 16.9** | **+1.0** |
| | comp=Z,16nm,0.3s,baz=29,slow=21,SNR=4.0 | | | | | | |
| **MEEK** | **Meekatharra** | **21.18** | **205** | P | **P** | **12 22 21.3** | **+0.8** |
| | baz=21,SNR=22 | | | | | | |
| **CTA** | **Charters Tower** | **21.25** | **128** | P | **P** | **12 22 22.7** | **+1.4** |
| | comp=Z,7.4nm,0.8s,baz=319,slow=12,SNR=5.6 | | | | | | |
| CTA | | | | LR | LR | 12 30 55.9 | |
| | comp=Z,129nm,18.3s,baz=314,slow=37 | | | | | | |
| **OOD** | **Oodnadatta** | **21.26** | **162** | P | **P** | **12 22 23.1** | **+1.8** |
| **TGY** | **Tagaytay City** | **22.78** | **341** | P | **P** | **12 22 36.2** | **-0.4** |
| | comp=Z,108nm,0.4s,baz=164,slow=9.9,SNR=8.0 | | | | | | |
| **FORT** | **Forrest** | **23.11** | **181** | P | **P** | **12 22 41.5** | **+2.0** |
| | baz=23,SNR=13 | | | | | | |
| **FORT** | **Forrest** | **23.11** | **181** | P | **P** | **12 22 40.5** | **+0.9** |
| FORT | | | | IAmb | IAmb | 12 22 52.6 | |
| | comp=Z,51nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **23.11** | **181** | P | **P** | **12 22 41.8** | **+2.3** |
| **INKA** | **Innaminka** | **23.19** | **151** | P | **P** | **12 22 42.9** | **+2.7** |
| **MULG** | **Mulgathing** | **23.21** | **168** | P | **P** | **12 22 42.6** | **+2.2** |
| **QLP** | **Quilpie** | **24.13** | **144** | P | **P** | **12 22 50.7** | **+2.0** |
| | baz=24,SNR=8.4 | | | | | | |
| **QLP** | **Quilpie** | **24.13** | **144** | P | **P** | **12 22 50.8** | **+2.0** |
| **MORW** | **Morawa** | **24.41** | **207** | P | **P** | **12 22 54.0** | **+2.6** |
| | baz=25,SNR=15 | | | | | | |
| **MORW** | **Morawa** | **24.41** | **207** | P | **P** | **12 22 53.7** | **+2.3** |
| **MORW** | **Morawa** | **24.41** | **207** | P | **P** | **12 22 54.3** | **+2.9** |
| **LCRK** | **Leigh Creek** | **24.53** | **159** | P | **P** | **12 22 54.6** | **+2.2** |
| **BLDU** | **Ballidu** | **25.47** | **204** | P | **P** | **12 23 02.2** | **+1.3** |
| | baz=26,SNR=17 | | | | | | |
| **KLBR** | **Kellerberrin** | **25.94** | **201** | P | **P** | **12 23 06.9** | **+1.8** |
| | baz=26,SNR=6.1 | | | | | | |
| **KLBR** | **Kellerberrin** | **25.94** | **201** | P | **P** | **12 23 07.2** | **+2.1** |
| **BBOO** | **Buckleboo** | **26.10** | **165** | P | **P** | **12 23 08.7** | **+2.1** |
| | baz=26,SNR=9.6 | | | | | | |
| **BBOO** | **Buckleboo** | **26.10** | **165** | P | **P** | **12 23 08.2** | **+1.6** |
| **BBOO** | **Buckleboo** | **26.10** | **165** | P | **P** | **12 23 08.6** | **+2.1** |
| **MUN** | **Mundaring** | **26.87** | **204** | P | **P** | **12 23 15.5** | **+2.0** |
| | baz=27,SNR=3.8 | | | | | | |
| **MUN** | **Mundaring** | **26.87** | **204** | P | **P** | **12 23 15.4** | **+2.0** |
| **STKA** | **Stephens Creek** | **27.11** | **155** | P | **P** | **12 23 17.3** | **+1.7** |
| | comp=Z,4.6nm,0.5s,baz=338,slow=8.8,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **27.11** | **155** | P | **P** | **12 23 17.4** | **+1.8** |
| | baz=27,SNR=10 | | | | | | |
| **STKA** | **Stephens Creek** | **27.11** | **155** | P | **P** | **12 23 17.4** | **+1.8** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **27.11** | **155** | P | **P** | **12 23 17.4** | **+1.8** |
| **STKA** | **Stephens Creek** | **27.11** | **155** | P | **P** | **12 23 17.3** | **+1.7** |
| **HTT** | **Hallett** | **27.50** | **161** | P | **P** | **12 23 19.7** | **+0.6** |
| | baz=28,SNR=6.4 | | | | | | |
| **HTT** | **Hallett** | **27.50** | **161** | P | **P** | **12 23 21.2** | **+2.0** |
| **CMSA** | **Cobar Meteorol** | **28.76** | **148** | P | **P** | **12 23 32.3** | **+2.1** |
| | baz=29,SNR=28 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.76** | **148** | P | **P** | **12 23 32.4** | **+2.1** |
| **TWOA** | **Tennyson Woods** | **28.88** | **163** | P | **P** | **12 23 34.1** | **+2.8** |
| **IPM** | **Ipoh** | **29.90** | **293** | P | **P** | **12 23 41.7** | **+1.1** |
| IPM | | | | IAmb | IAmb | 12 23 45.6 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **HNR** | **Honiara** | **31.15** | **96** | LR | LR | 12 37 07.2 | |
| | comp=Z,94nm,18.4s,baz=319,slow=37 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.52** | **159** | P | **P** | **12 23 56.0** | **+1.4** |
| | baz=32,SNR=27 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.52** | **159** | P | **P** | **12 23 57.2** | **+2.6** |
| **CAN** | **Canberra** | **33.43** | **149** | P | **P** | **12 24 13.2** | **+1.9** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,67nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **33.43** | **149** | P | **P** | **12 24 13.2** | **+1.9** |
| **CAN** | **Canberra** | **33.43** | **149** | P | **P** | **12 24 14.7** | **+3.4** |
| **TOO** | **Toolangi** | **33.63** | **155** | P | **P** | **12 24 14.0** | **+1.0** |
| | baz=34,SNR=8.0 | | | | | | |
| **TOO** | **Toolangi** | **33.63** | **155** | P | **P** | **12 24 14.4** | **+1.4** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **33.63** | **155** | P | **P** | **12 24 14.4** | **+1.4** |
| **TOO** | **Toolangi** | **33.63** | **155** | P | **P** | **12 24 16.5** | **+3.5** |
| **CMAR** | **Chiang Mai Arr** | **38.96** | **312** | P | **P** | **12 24 58.4** | **0.0** |
| | comp=Z,8.4nm,0.8s,baz=142,slow=6.9,SNR=51 | | | | | | |
| CMAR | | | | PcP | **PcP** | **12 27 07.3** | **+1.6** |
| | comp=Z,4.0nm,0.8s,baz=170,slow=2.6,SNR=12 | | | | | | |
| CMAR | | | | ScP | **ScP** | **12 30 40.1** | **+0.9** |
| | comp=Z,0.9nm,0.3s,baz=140,slow=4.2,SNR=4.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.96** | **312** | *i* P | **P** | **12 24 59.2** | **+0.8** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.96** | **312** | P | **P** | **12 24 57.9** | **-0.5** |
| **CHTO** | **Chiang Mai** | **39.19** | **312** | P | **P** | **12 25 00.1** | **-0.2** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **39.19** | **312** | P | **P** | **12 25 00.1** | **-0.2** |
| CHTO | | | | IAmb | IAmb | 12 25 01.7 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **39.90** | **329** | ⇑P | **P** | **12 25 06.0** | **-0.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,22nm,1.4s | | | | | | |
| **WHN** | **Wuhan** | **40.23** | **341** | ⇑P | **P** | **12 25 08.5** | **-0.2** |
| **NJ2** | **Nanjing** | **40.44** | **347** | ⇑P | **P** | **12 25 10.5** | **+0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,60nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **41.03** | **323** | ⇑P | **P** | **12 25 16.5** | **+0.8** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,19nm,1.4s | | | | | | |
| **ENH** | **Enshi** | **41.80** | **335** | IAmb | IAmb | 12 25 22.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **42.66** | **323** | P | **P** | **12 25 28.5** | **-0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,4.7s | | | | | | |
| **TJN** | **Taejon** | **43.71** | **359** | *ce*P | **P** | **12 25 37.6** | **+0.8** |
| **LYN** | **LuoYang** | **44.53** | **341** | ⇑P | **P** | **12 25 43.3** | **

GTA pmax pmax
comp=Z,34nm,1.0s
**GOMU GeErMu 53.80 326 P P 12 26 54.3 0.0**
GOMU PcP PcP 12 27 56.8 -1.3
GOMU S S 12 34 17.5 +0.5
GOMU pmax pmax
comp=Z,6.0nm,1.3s
GOMU pmax pmax
comp=Z,130nm,5.3s
**JIRN Jiri 53.84 312** *eP* **P 12 26 54.4 -0.3**
comp=Z,20nm,0.3s
**GUN Gumba 54.21 312** *eP* **P 12 26 56.9 -0.4**
**PKI Pulchoki 54.36 312** *eP* **P 12 26 57.7 -0.8**
comp=Z,12nm,0.2s
**PKIN Phulchoki 54.38 312** *eP* **P 12 26 57.7 -0.8**
comp=Z,7.5nm,0.2s
**KKN Kakani 54.58 312** *eP* **P 12 26 59.4 -0.5**
**DMN Daman 54.61 312** *eP* **P 12 26 59.8 -0.3**
**GKN Gorkha 55.17 312** *eP* **P 12 27 03.6 -0.5**
**KUR Kuril'sk 55.35 17** *eP* **P 12 27 08.7 +3.9**
KUR *i* S **pwP 12 27 43.4 -1.5**
**YSS Yuzh-Sakhalins 55.73 12** *eP* **P 12 27 06.8 -0.6**
YSS pmax pmax
comp=Z,30nm,0.8s
**YSS Yuzh-Sakhalins 55.73 12** P P **12 27 06.1 -1.3**
YSS IAmb IAmb 12 27 09.2
comp=Z,20nm,0.8s
**KOLN Koldanda 55.82 311** *eP* **P 12 27 08.2 -0.5**
**DANN Dangsing 56.01 312** *eP* **P 12 27 09.6 -0.6**
**PYUN Piuthan 56.45 311** *eP* **P 12 27 12.9 -0.3**
**KLR Kul'dur 56.61 3***ceP* **P 12 27 13.6 -0.1**
KLR pmax pmax
comp=Z,11nm,1.0s
**HIA Hailar 57.09 353** *i* P P **12 27 17.2 +0.1**
HIA pmax pmax
comp=Z,5.0nm,0.8s
**UGL Uglegorsk 57.63 11** *eP* **P 12 27 20.9 +0.1**
UGL pmax pmax
comp=Z,40nm,1.1s
**ULN Ulaanbaatar 58.34 343***ceP* **P 12 27 26.7 +0.6**
ULN pmax pmax
comp=Z,40nm,1.7s
**ULN Ulaanbaatar 58.34 343** P P **12 27 26.6 +0.6**
ULN IAmb IAmb 12 27 27.9
comp=Z,30nm,1.2s
**GRNR Gornyy 58.48 6**⇑*iP* **P 12 27 26.8 0.0**
GRNR pmax pmax
comp=N,3.0nm,1.1s
GRNR pmax pmax
comp=Z,8.0nm,0.9s
GRNR MLR MLR
comp=E,100nm,17.0s
GRNR MLR MLR
comp=N,90nm,16.0s
GRNR MLR MLR
comp=Z,90nm,15.0s
**SONM Songino Array 58.50 343** P P **12 27 27.5 +0.3**
comp=Z,11nm,0.9s,baz=158,slow=7.5,SNR=61
**SONM Songino Array 58.50 343** P P **12 27 27.8 +0.7**
SONM pmax pmax
comp=Z,22nm,1.1s
**SONM Songino Array 58.50 343** P P **12 27 27.8 +0.7**
SONM IAmb IAmb 12 27 28.9
comp=Z,22nm,1.1s
**TYV Tymovskoe 59.45 10** *eP* **P 12 27 34.1 +0.7**
TYV pmax pmax
comp=Z,12nm,0.8s
TYV pmax pmax
comp=Z,200nm,4.0s
**ZEA Zeya 61.06 359** *eP* **P 12 27 44.9 +0.6**
ZEA pmax pmax
comp=N,10.0nm,0.8s
ZEA pmax pmax
comp=Z,10.0nm,0.9s
**ZAK Zakamensk 61.71 342** *eP* **P 12 27 48.3 -0.5**
ZAK *e* 12 28 25.1
ZAK pmax pmax
comp=Z,11nm,1.1s
ZAK pmax pmax
comp=Z,6.0nm,1.1s
**WMQ Urumqi 63.05 328** ⇓P **P 12 27 58.8 +0.9**
WMQ PcP **PcP 12 28 35.0 +0.8**
WMQ pP pwP 12 28 41.0 +2.3
WMQ pmax pmax
comp=Z,44nm,0.9s
WMQ pmax pmax
comp=Z,240nm,4.3s
WMQ LR LR
comp=Z,300nm,17.7s
WMQ LR LR
comp=Z,260nm,20.7s
**MOY Mondy 63.54 341** *eP* **P 12 28 01.5 +0.5**
MOY pmax pmax
comp=Z,44nm,2.0s
**KNGR Kungurtug, Tuv 63.83 339** *i* P **P 12 28 02.6 -0.3**
**PEA0B Petropavlovsk- 65.31 19***ceP* **P 12 28 12.9 +0.6**
**PEA0B Petropavlovsk- 65.31 19** P P **12 28 12.9 +0.6**
**PETK Petropavlovsk- 65.31 19** P **P 12 28 12.3 0.0**
comp=Z,24nm,0.7s,baz=198,slow=9.0,SNR=29
**PET Petropavlovsk 65.55 19***ceP* **P 12 28 14.2 +0.4**
PET pmax pmax
comp=Z,80nm,2.5s
**BOD Bodaibo 66.21 352** *eP* **P 12 28 17.6 -0.3**
BOD pmax pmax
comp=Z,18nm,0.9s
**NIL Nilore 66.46 312** P P **12 28 19.4 -0.7**
NIL pmax pmax
comp=Z,17nm,0.7s
**NIL Nilore 66.46 312** P P **12 28 19.4 -0.7**
NIL IAmb IAmb 12 28 20.4
comp=Z,18nm,0.7s
**ZSN Zaisan 66.97 329** *eP* **P 12 28 22.1 -0.9**
**ZSN Zaisan 66.97 329** *eP* **P 12 28 22.1 -0.9**
baz=329
**DGZ Jazzator, Alta 67.29 332***c iP* **P 12 28 25.5 +0.3**
DGZ pmax pmax
comp=Z,41nm,1.0s
**PDGK Podgornoye 67.34 323** P **P 12 28 25.6 0.0**
**KSH Kashi 67.43 318** P **P 12 28 27.0 +0.8**
KSH SS SS 12 41 32.5 -0.6
KSH pmax pmax
comp=Z,14nm,1.0s
**UZB Uzynbulak 67.51 323** *eP* **P 12 28 25.9 -0.8**
UZB pmax pmax
comp=Z,9.0nm,0.8s
**UZB Uzynbulak 67.51 323** *eP* **P 12 28 26.0 -0.8**
comp=Z,8.7nm,0.8s,baz=323
**SATY Saty 67.83 323** *eP* **P 12 28 27.5 -1.2**
SATY pmax pmax
comp=Z,13nm,0.9s
**SATY Saty 67.83 323** *eP* **P 12 28 27.5 -1.2**
comp=Z,14nm,0.9s,baz=323
**ZHN Zhinishke 67.87 323** *eP* **P 12 28 28.3 -0.6**
**ZHN Zhinishke 67.87 323** *eP* **P 12 28 28.3 -0.6**
baz=323
**MK31 Makanchi Array 67.88 328** *i* P **P 12 28 28.4 -0.4**
MK31 pmax pmax
comp=Z,40nm,1.1s
**MK31 Makanchi Array 67.88 328** P **P 12 28 29.3 +0.5**
MK31 IAmb IAmb 12 28 30.2
comp=Z,27nm,1.1s
**MKAR Makanchi Array 67.88 328** P **P 12 28 29.1 +0.3**
comp=Z,17nm,0.8s,baz=124,slow=8.2,SNR=124
**KPKS Kokpek 67.89 323** *eP* **P 12 28 28.0 -1.0**
KPKS pmax pmax
comp=Z,15nm,0.8s
**KPKS Kokpek 67.89 323** *eP* **P 12 28 28.1 -1.0**
comp=Z,15nm,0.8s,baz=323
**MAKZ Makanchi 68.05 327** P **P 12 28 29.9 +0.1**
MAKZ pmax pmax
comp=Z,27nm,1.1s
**MAKZ Makanchi 68.05 327** P **P 12 28 29.9 +0.1**
MAKZ IAmb IAmb 12 28 31.1
comp=Z,27nm,1.1s
**MDOK Medeo 68.71 322** *eP* **P 12 28 32.8 -1.4**
**MDOK Medeo 68.71 322** *eP* **P 12 28 32.8 -1.4**
baz=322
**AAA Alma-Ata 68.81 322** *eP* **P 12 28 34.6 -0.1**
**AAA Alma-Ata 68.81 322** *eP* **P 12 28 34.6 -0.1**
baz=322
**CHKK Chushkaly 69.13 323** *eP* **P 12 28 35.9 -0.7**
baz=323
**MA2 Magadan 69.23 12***ceP* **P 12 28 37.4 +0.6**
MA2 pmax pmax
comp=Z,29nm,1.3s
**MA2 Magadan 69.23 12** P **P 12 28 36.4 -0.5**
MA2 IAmb IAmb 12 28 38.4
comp=Z,18nm,0.9s
**YAK Yakutsk 69.38 1** *eP* **P 12 28 37.2 -0.4**
YAK pmax pmax
comp=Z,71nm,0.9s
**YAK Yakutsk 69.38 1** P **P 12 28 37.2 -0.4**
**KUU Kurty 69.54 322** *eP* **P 12 28 37.6 -1.5**
**KUU Kurty 69.54 322** *eP* **P 12 28 37.7 -1.5**
baz=322
**KBK Karagaybulak 69.73 321** P **P 12 28 41.7 +1.1**
SNR=7.1
**UCH Uchtor 69.78 320** P **P 12 28 41.9 +0.8**
SNR=18
**KBL Kabul 69.98 311** P **P 12 28 41.6 -0.7**
KBL pmax pmax
comp=Z,7.0nm,0.9s
**KBL Kabul 69.98 311** P **P 12 28 41.5 -0.7**
**AAK Ala-Archa 70.01 321** P **P 12 28 42.6 +0.4**
baz=110,slow=6.3
AAK LR LR 13 02 44.2
comp=Z,30nm,20.1s,baz=68,slow=39
**AAK Ala-Archa 70.01 321** P **P 12 28 42.9 +0.7**
SNR=14
**AAK Ala-Archa 70.01 321***ceP* **P 12 28 42.8 +0.6**
AAK pmax pmax
comp=Z,18nm,0.8s
**AAK Ala-Archa 70.01 321** IAmb IAmb 12 28 44.1
comp=Z,18nm,0.9s
**AML Almayashu 70.25 320** P **P 12 28 44.7 +0.7**
SNR=19
**USP Ospenovka 70.33 321** P **P 12 28 44.5 +0.5**
SNR=5.9
**SGDS Sogindy 70.35 321** *eP* **P 12 28 43.0 -1.1**
baz=321
**EKS2 Erkin-Say 70.47 320** P **P 12 28 47.0 +2.0**
SNR=6.0
**GAR Garm 71.00 316** P **P 12 28 47.9 -0.3**
GAR IAmb IAmb 12 28 49.1
comp=Z,24nm,1.1s
**SEM Semipalatinsk 71.21 330** *eP* **P 12 28 47.6 -1.7**
SEM pmax pmax
comp=Z,32nm,1.2s
**SEM Semipalatinsk 71.21 330** *eP* **P 12 28 47.6 -1.7**
comp=Z,32nm,1.2s,baz=330
**ZAA0 Zalesovo Array 71.42 334** P **P 12 28 49.5 -0.8**
**ZALV Zalesovo Beam 71.42 334** P **P 12 28 49.6 -0.7**
comp=Z,19nm,0.8s,baz=117,slow=5.2,SNR=70
**ZALV Zalesovo Beam 71.42 334** P **P 12 28 49.2 -1.1**
**BTLS Baital 71.54 323** *eP* **P 12 28 49.8 -1.3**
**BTLS Baital 71.54 323** *eP* **P 12 28 49.9 -1.3**
baz=323
**VNDA Vanda 72.09 173** P **P 12 28 55.0 +1.1**
VNDA pmax pmax
comp=Z,16nm,1.3s
**VNDA Vanda 72.09 173** P **P 12 28 55.0 +1.1**
**DZA Taraz 72.15 320** *eP* **P 12 28 53.8 -1.1**
**DZA Taraz 72.15 320** *eP* **P 12 28 53.9 -1.1**
baz=320
**KURBB Kurchatov Arra 72.21 329** P **P 12 28 55.1 +0.1**
comp=Z,40nm,0.8s,baz=130,slow=4.9,SNR=376
**KURBB Kurchatov Arra 72.21 329** P **P 12 28 54.9 -0.1**
**KURK Kurchatov 72.22 329***ceP* **P 12 28 55.1 0.0**
KURK pmax pmax
comp=Z,110nm,1.3s
**KURK Kurchatov 72.22 329** P **P 12 28 55.3 +0.2**
**SEY Seymchan 72.62 11** *i* P **P 12 28 57.1 -0.1**
**IUG Iuzhnay 72.64 318** *eP* **P 12 28 57.5 -0.4**
**IUG Iuzhnay 72.64 318** *eP* **P 12 28 57.5 -0.4**
baz=318
**OTUK Ortayu 74.22 325** P **P 12 29 07.1 +0.2**
**BRZS Berezniki 74.94 326** *eP* **P 12 29 10.4 -0.6**
BRZS pmax pmax
comp=Z,24nm,1.0s
**BRZS Berezniki 74.94 326** *eP* **P 12 29 10.4 -0.6**
comp=Z,24nm,1.0s,baz=326
**BVAR Borovoye Array 77.74 328** P **P 12 29 26.7 0.0**
comp=Z,28nm,0.9s,baz=77,slow=13,SNR=87
**BRVK Borovoye 77.81 328***ceP* **P 12 29 27.2 +0.1**
BRVK pmax pmax
comp=Z,56nm,1.3s
**BRVK Borovoye 77.81 328** P **P 12 29 26.2 -0.9**
**TIXI Tiksi 79.03 0***ceP* **P 12 29 32.8 -0.6**
TIXI pmax pmax
comp=Z,15nm,1.0s
**TIXI Tiksi 79.03 0** P **P 12 29 31.4 -2.0**
**GEYT Alibeck 79.44 311** P **P 12 29 36.8 +0.4**
comp=Z,1.8nm,0.4s,baz=281,slow=2.3,SNR=2.0
**BILL Bilibino 79.99 14**⇑*iP* **P 12 29 38.3 -0.3**
BILL *e* 12 32 47.5
BILL *eS* S 12 39 47.6 +19
BILL pmax pmax
comp=Z,12nm,2.5s
**NRIK Noril'sk 81.73 346** P **P 12 29 48.4 +0.6**
comp=Z,28nm,0.9s,baz=136,slow=5.9,SNR=26
**NRIK Noril'sk 81.73 346***ceP* **P 12 29 48.2 +0.3**
NRIK pmax pmax
comp=Z,33nm,1.0s
**NRIK Noril'sk 81.73 346** IAmb IAmb 12 29 49.7
comp=Z,31nm,1.0s
**AB31 Akbulak array 82.02 322** *i* P **P 12 29 49.3 -0.5**
**QSPA South Pole Qui 82.43 180** P **P 12 29 51.6 -0.2**
**AKTO Aktyubinsk 83.60 323** P **P 12 29 58.0 +0.1**
comp=Z,19nm,0.9s,baz=115,slow=5.1,SNR=40
**GAMB Gambell 83.99 23** IAmb IAmb 12 30 01.3
comp=Z,18nm,0.9s
**GAMB Gambell 83.99 23** P **P 12 30 00.2 +0.7**
baz=239
**SVE Sverdlovsk 84.47 329**⇑*eP* **P 12 30 02.6 +0.4**
SVE pmax pmax
comp=Z,54nm,1.2s
**ARU Arti 85.39 328** P **P 12 30 06.8 +0.1**
comp=Z,11nm,0.9s,baz=121,slow=2.9,SNR=36
**ARU Arti 85.39 328***c iP* **P 12 30 06.3 -0.4**
ARU 12 33 21.1
ARU S S 12 40 14.0 -10
ARU SS **SS 12 45 56.7 -6.3**
ARU pmax pmax
comp=Z,53nm,1.1s
**ARU Arti 85.39 328** P **P 12 30 05.5 -1.3**
**RAYN Ar Rayn 86.61 294** P **P 12 30 12.7 -0.9**
RAYN pmax pmax
comp=Z,6.0nm,0.9s
**RAYN Ar Rayn 86.61 294** P **P 12 30 12.7 -0.9**
**ANM Nome 86.82 23** P **P 12 30 13.8 +0.3**
baz=245
**RDOG Red Dog Mine 89.14 20** P **P 12 30 24.6 +0.1**
baz=247
**P18K Big Mountain, 89.53 30** P **P 12 30 26.3 -0.3**
baz=254
**TTA Tatalina 90.14 26** P **P 12 30 29.7 +0.3**
baz=254
**Q19K Cape Douglas, 90.20 30** P **P 12 30 31.0 +1.3**
baz=256
**N19K Bonanza Creek 90.26 29** P **P 12 30 30.5 +0.5**
baz=255
**BELG Belogornoye 90.39 323** P **P 12 30 29.7 -0.9**
comp=Z,12nm,1.0s,baz=335,slow=3.7,SNR=3.6
**BELG Belogornoye 90.39 323** *i* P **P 12 30 29.8 -0.9**
BELG pmax pmax
comp=Z,2.0nm,1.0s
**L19K White Mountain 90.45 27** IAmb IAmb 12 30 32.1
comp=Z,17nm,1.1s
**L19K White Mountain 90.45 27** P **P 12 30 31.7 +0.9**
baz=255
**M19K Big River Lodg 90.59 27** P **P 12 30 31.8 +0.3**
baz=255
**KIRV Kirov 90.73 329***ceP* **P 12 30 31.6 -0.5**
**L20K Farewell, AK 90.97 27** P **P 12 30 33.8 +0.6**
baz=256
**KMBO Kilima Mbogo 91.09 269** *i* P **P 12 30 34.2 -0.9**
**K20K Telida 91.10 26** P **P 12 30 34.1 +0.3**
baz=255
**ZEI Tsey 91.12 313** *eP* **P 12 30 31.4 -3.2**
ZEI pmax pmax
comp=Z,5.0nm,1.3s
**J20K Nowinta River 91.28 25** P **P 12 30 34.7 +0.2**
baz=255
**CAST Castle Rocks 91.99 26** P **P 12 30 38.3 +0.4**
baz=257
**CHUM Lake Minchumin 91.99 26** P **P 12 30 38.5 +0.6**
baz=257
**KBZ Khabaz 91.99 314** P **P 12 30 37.4 -0.9**
comp=Z,1.6nm,0.7s,baz=128,slow=4.5,SNR=5.8
**KBZ Khabaz 91.99 314** *i* P **P 12 30 36.5 -1.8**
KBZ pmax pmax
comp=Z,8.0nm,2.3s
**NEY Neytrino 92.05 313** *i* P **P 12 30 39.8 +0.9**
NEY pmax pmax
comp=Z,2.0nm,1.0s
**KIV Kislovodsk 92.18 314** *eP* **P 12 30 38.8 -0.5**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**I21K Tanana 92.42 25** P **P 12 30 40.0 +0.2**
baz=257
**MLY Manley 92.90 25** P **P 12 30 41.8 -0.3**
baz=258
**PMR Palmer 92.96 28** P **P 12 30 42.0 -0.4**
baz=260
**PWL Port Wells 93.22 29** P **P 12 30 42.6 -1.0**
baz=260
**KNK Knik Glacier 93.25 29** P **P 12 30 43.4 -0.4**
baz=260
**SML Sawmill 93.38 28** P **P 12 30 44.1 -0.3**
baz=260
**MCK McKinley 93.43 26** P **P 12 30 43.0 -1.5**
baz=260
**I23K Minto, Yukon-K 93.50 25** P **P 12 30 44.5 -0.2**
baz=260
**COLD Coldfoot 93.55 23** P **P 12 30 44.7 -0.2**
baz=259
**WAT6 Susitna Watana 93.77 27** P **P 12 30 45.9 -0.4**
baz=261
**VRH Novokhopyorsk 93.81 321** *eP* **P 12 30 44.0 -2.5**
VRH pmax pmax
comp=Z,7.0nm,0.5s
**TOLK Toolik Lake Re 94.04 21** P **P 12 30 47.8 +0.6**
baz=260
**H24K Noodor Dome 94.22 24** P **P 12 30 48.4 +0.2**
baz=261
**ILAR Eielson Array 94.48 25** P **P 12 30 47.5 -1.7**
comp=Z,2.6nm,0.9s,baz=275,slow=4.1,SNR=20
ILAR PKKP **PKKPdf 12 47 48.2 -1.4**
comp=Z,0.6nm,0.8s,baz=92,slow=2.9,SNR=5.4
**RIDG Independent Ri 95.23 26** P **P 12 30 52.2 -0.6**
baz=264
**VSR Storozhevoye 95.41 321** *eP* **P 12 30 53.9 +0.1**
VSR pmax pmax
comp=Z,10.0nm,1.2s
**SCRK Sand Creek 95.63 26** P **P 12 30 54.5 -0.2**
baz=264
**LPSR Galich'ya Gora 95.68 322** *eP* **P 12 30 53.3 -1.7**
LPSR pmax pmax
comp=Z,20nm,1.4s
**L26K Log Cabin Wild 95.83 27** P **P 12 30 56.0 +0.5**
baz=265
**J26L Joseph Creek 95.87 26** P **P 12 30 55.1 -0.7**
baz=265
**KLMR Klimovskoe 96.04 331** *eP* **P 12 30 53.6 -2.9**
KLMR pmax pmax
comp=Z,7.0nm,1.0s
**KLMR Klimovskoe 96.04 331** AMP 12 31 09.2
comp=Z,7.0nm,1.0s
**KLMR Klimovskoe 96.04 331** *eP* **P 12 30 53.6 -2.9**
**L27K Beaver Creek, 96.52 27** P **P 12 30 59.1 +0.4**
baz=266
**OBN Obninsk 97.24 325** *i* P **P 12 30 59.6 -2.4**
OBN pmax pmax
comp=Z,4.0nm,1.0s
**DAWY Dawson 97.66 26** P **P 12 31 03.6 -0.3**
baz=268
**I29M Ogilvie Camp, 98.14 25** P **P 12 31 06.1 +0.1**
baz=270
**LBTB Lobatse 98.39 243** LR LR 13 07 40.7
comp=Z,19nm,20.7s,baz=167,slow=30
**YKA Yellowknife Ar 108.89 26** PKiKP **PKiKP 12 35 57.8 +0.2**
comp=Z,1.4nm,0.8s,baz=286,slow=1.7,SNR=16
YKA PKKPbc **PKKPbc 12 47 06.4 -2.1**
comp=Z,0.8nm,0.7s,baz=105,slow=3.0,SNR=11
**GERES GERESS Array B 111.88 320** PKiKP **PKiKP 12 36 03.9 +0.1**
comp=Z,0.9nm,0.7s,baz=349,slow=1.4,SNR=9.9
**NVAR Mina Array Bea 112.80 52** PKKPbc PKKPbc 12 46 56.1 +0.8
comp=Z,0.3nm,0.6s,baz=102,slow=4.3,SNR=4.5
**DAVOX Davos/Dischmat 114.91 318** PKP **PKiKP 12 36 08.8 -1.0**
comp=Z,1.3nm,0.4s,baz=179,slow=11,SNR=2.6
**PDAR Pinedale Array 118.33 45** PKP **PKiKP 12 36 17.2 +0.6**
comp=Z,1.2nm,0.8s,baz=258,slow=1.4,SNR=7.4
PDAR PKKPbc **PKKPab 12 46 39.0 +1.0**
comp=Z,0.9nm,0.8s,baz=104,slow=2.6,SNR=7.1
**FRB Frobisher Bay 122.58 9** PKP **PKPdf 12 36 23.6 -0.1**
comp=Z,6.6nm,0.8s,baz=3.2,slow=2.9,SNR=17
**ANMO Albuquerque 122.83 53***c iP*KIKP **PKPdf 12 36 24.7 -0.7**
ANMO pmax pmax
comp=Z,3.0nm,1.3s
**ANMO Albuquerque 122.83 53** PKPdf **PKPdf 12 36 25.4 0.0**
**MNTX Cornudas Mount 124.50 57** PKPdf **PKPdf 12 36 28.3 -0.1**
**TXAR Lajitas Array 126.49 59** PKP **PKPdf 12 36 33.0 +0.5**
comp=Z,0.8nm,0.7s,baz=202,slow=1.8,SNR=11
**ESDC Sonseca Array 126.84 315** PKP **PKPdf 12 36 33.2 +0.4**
comp=Z,2.0nm,1.0s,baz=3.6,slow=1.3,SNR=5.4
**TORD Torodi Ar. Bea 127.45 281** PKP **PKPdf 12 36 34.5 0.0**
comp=Z,3.0nm,0.9s,baz=52,slow=1.8,SNR=24
**TORD Torodi Ar. Bea 127.45 281** **PKPdf 12 36 33.3 -1.2**
**PLCA Paso Flores 128.85 161** PKP **PKPdf 12 36 37.9 +1.3**
comp=Z,4.7nm,1.0s,baz=198,slow=2.8,SNR=6.8
PLCA SKPbc SKPbc 12 39 42.6
comp=Z,1.5nm,0.8s,baz=63,slow=3.5,SNR=3.7
PLCA PKKPbc PKKPbc 12 45 57.3
comp=Z,0.8nm,0.7s,baz=63,slow=10,SNR=3.4
**JCT Junction City 129.44 57** PKiKP **PKPdf 12 36 35.9 -2.1**
**JCT Junction City 129.44 57** PKPdf **PKPdf 12 36 35.9 -2.1**
**SCHQ Schefferville 131.27 12** PKP **PKPdf 12 36 40.8 +0.1**
comp=Z,3.1nm,0.7s,baz=331,slow=3.5,SNR=6.8
SCHQ SKPbc **SKPbc 12 39 49.5 -1.4**
comp=Z,6.7nm,0.8s,baz=33,slow=4.2,SNR=9.4
**DBIC Dimbokro 133.72 272** PKP **PKPdf 12 36 46.3 -0.1**
comp=Z,3.3nm,0.8s,baz=121,slow=3.9,SNR=5.3
DBIC SKPbc **SKPbc 12 39 59.1 -1.4**
comp=Z,3.4nm,0.9s,baz=90,slow=2.1,SNR=4.4
**LVC Limon Verde 145.52 151** PKP2 **PKPdf 12 37 07.7 -0.4**
**LVC Limon Verde 145.52 151** PKPab **PKPdf 12 37 07.7 -0.4**
**CPUP Villa Florida 145.85 171** PKPbc **PKPdf 12 37 09.1 +1.0**
comp=Z,12nm,0.9s,baz=218,slow=3.2,SNR=13
**CPUP Villa Florida 145.85 171** PKP2 **PKPdf 12 37 08.4 +0.3**
**CPUP Villa Florida 145.85 171** PKPab **PKPdf 12 37 08.4 +0.3**
**BOAB BOACO BROADBAN 146.02 79** PKPab **PKPbc 12 37 10.0 +0.3**
**NNA Nana 148.19 127***c iP*KP2 **PKiKP 12 37 18.5 +1.1**
NNA pmax pmax
comp=Z,69nm,1.7s
**SRBA San Rafael, Bu 148.44 85** PKPab **PKPbc 12 37 17.9 +1.3**
**LPAZ La Paz 151.16 145** PKP **PKPdf 12 37 19.4 +1.7**
comp=Z,2.1nm,1.0s,baz=146,slow=1.6,SNR=5.1
LPAZ PKPbc **PKiKP 12 37 25.2 +1.0**
comp=Z,9.8nm,0.7s,baz=104,slow=2.5,SNR=25
**LPAZ La Paz 151.16 145** PKiKP **PKPdf 12 37 19.8 +2.1**
**LPAZ La Paz 151.16 145** **PKPdf 12 37 19.8 +2.1**

*EAF **25** 12:22:18.0±0.9,25°51'S×29°43'E,h10km,MD3.5*
**BUL 25 12:22:18.1±0.4,25°52'S×29°42'E,h10km,MD3.6,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CNG** | **Changalane** | **2.61** | **108** | *i* P | P | Pn | 12 23 00.0 | -0.4 |
| CNG | | | | *i* S | S | Sn | 12 23 30.9 | -1.3 |
| **CNG** | **Changalane** | **2.61** | **108** | *i* P | P | Pn | 12 23 00.0 | -0.4 |
| CNG | | | | *i* S | S | Sn | 12 23 30.9 | -1.3 |
| **MOPA** | **Mopani** | **2.69** | **43** | *i* P | P | Pn | 12 23 00.1 | -1.4 |
| MOPA | | | | *i* S | S | Sn | 12 23 31.2 | -2.9 |
| **MOPA** | **Mopani** | **2.69** | **43** | *i* P | P | Pn | 12 23 00.1 | -1.4 |
| MOPA | | | | *i* S | S | Sn | 12 23 31.2 | -2.9 |
| **MSNA** | **Messina** | **3.21** | **10** | *i* P | P | Pn | 12 23 08.3 | -0.4 |
| MSNA | | | | *i* S | S | Sn | 12 23 45.0 | -2.0 |
| **MSNA** | **Messina** | **3.21** | **10** | *i* P | P | Pn | 12 23 08.3 | -0.4 |
| MSNA | | | | *i* S | S | Sn | 12 23 45.0 | -2.0 |
| **LBTB** | **Lobatse** | **3.49** | **277** | *i* P | P | Pn | 12 23 12.2 | -0.5 |
| LBTB | | | | *i* S | S | Sn | 12 23 51.8 | -2.3 |
| **LBTB** | **Lobatse** | **3.49** | **277** | *i* P | P | Pn | 12 23 12.2 | -0.5 |
| LBTB | | | | *i* S | S | Sn | 12 23 51.8 | -2.3 |
| **BOSA** | **Boshof** | **4.82** | **229** | *i* P | P | Pn | 12 23 30.2 | -0.7 |
| BOSA | | | | *i* S | S | Sn | 12 24 23.3 | -3.6 |
| **BOSA** | **Boshof** | **4.82** | **229** | *i* P | P | Pn | 12 23 30.2 | -0.7 |
| BOSA | | | | *i* S | S | Sn | 12 24 23.3 | -3.6 |
| **MATP** | **Matopo** | **5.14** | **350** | *i* P | P | Pn | 12 23 34.4 | -0.9 |
| MATP | | | | *i* S | S | Sn | 12 24 30.7 | -4.0 |
| **MATP** | **Matopo** | **5.14** | **350** | *i* P | P | Pn | 12 23 34.4 | -0.9 |
| MATP | | | | *i* S | S | Sn | 12 24 30.7 | -4.0 |
| **BLWY** | **Bulawayo** | **5.41** | **352** | *i* P | P | Pn | 12 23 38.0 | -1.0 |
| BLWY | | | | *i* S | S | Sn | 12 24 36.8 | -4.5 |
| **BLWY** | **Bulawayo** | **5.41** | **352** | *i* P | P | Pn | 12 23 38.0 | -1.0 |
| BLWY | | | | *i* S | S | Sn | 12 24 36.8 | -4.5 |

*TUL **25** 12:22:56.2±1.1,36°.23N±0°.02×98°.44W±0°.02,h7km±7km, ML2.8,mb_Lg2.2/12(NEIC),Error ellipse: s-maj=3.4km s-min=2.0km az=213.0*

**NEIC 25 12:22:56.2±0.4,36°.23N±0°.03×98°.43W±0°.04,h15km±6km, Error ellipse: s-maj=4.5km s-min=4.0km az=88.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.48** | **288** | Pg | | Pg | 12 23 05.8 | -0.1 |
| **OKCFA** | **Oklahoma City** | **1.14** | **135** | Pg | | Pb | 12 23 17.3 | -0.2 |
| **FNO** | **Franklin** | **1.28** | **139** | | | Pb | 12 23 20.1 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.51** | **191** | | | Pn | 12 23 22.5 | -0.3 |
| **W35A** | **Tecumseh** | **1.66** | **130** | | | Pb | 12 23 26.0 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.69** | **65** | | | Pb | 12 23 26.9 | 0.0 |
| T35A | comp=Z,16nm,0.9s | | | IAmb_Lg | | | 12 23 52.3 | |
| **X34A** | **Smith Ranch, M** | **1.69** | **163** | | | Pb | 12 23 27.4 | +0.4 |
| X34A | comp=Z,18nm,0.7s | | | IAmb_Lg | | | 12 23 53.9 | |
| **R32A** | **Long Quarter,** | **2.20** | **354** | | | Pb | 12 23 35.4 | -0.3 |
| **U38A** | **Gravette** comp=Z,5.7nm,1.1s | **3.27** | **85** | IAmb_Lg | | | 12 24 38.8 | |
| **HHAR** | **Hobbs** comp=Z,8.7nm,1.2s | **3.63** | **88** | IAmb_Lg | | | 12 24 49.9 | |
| **MGMO** | **Mountain Grove** comp=Z,3.7nm,0.9s | **5.04** | **78** | IAmb_Lg | | | 12 25 40.9 | |

*UCC **25** 12:26:12.7±1.0,51°.47N×3°.01E,h5km±6km,ML2.5,Mining explosion.*
*BGS **25** 12:26:13.2±1.1,51°.50N×2°.90E,h10km±13km,ML2.7*

**ISC 25 12:26:10.0±0.8,51°.51N±0°.05×2°.94E±0°.03,h0km,n53, σ1§31/65,1C-28D,North Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **BZEV** | **Zevekote** | **0.38** | **183** | *bP* | | **Pb** | **12 26 18.7** | **-0.8** |
| BZEV | comp=N,401nm,0.2s | | | *dS* | | **Sg** | **12 26 23.9** | **+1.8** |
| **BSKQ** | **Steenkerk** | **1.13** | **140** | *dP* | | **Pb** | **12 26 32.7** | **+0.4** |
| BSKQ | | | | *dS* | | **Sg** | **12 26 46.7** | **+0.5** |
| **UCC** | **Uccle** | **1.15** | **128** | *eP* | g | **Pn** | **12 26 33.9** | **+0.6** |
| **UCC** | **Uccle** | **1.15** | **128** | *dP* | | **Pg** | **12 26 33.2** | **+1.2** |
| UCC | | | | *dS* | | **Sg** | **12 26 46.6** | **-0.2** |
| **ELSH** | **Elham, Standar** | **1.19** | **253** | *eP* | | **Pb** | **12 26 33.4** | **0.0** |
| ELSH | | | | *eS* | | **Sb** | **12 26 49.4** | **+0.2** |
| ELSH | comp=N,96nm,0.2s | | | IAML | | | 12 26 53.0 | |
| ELSH | comp=E,113nm,0.2s | | | IAML | | | 12 26 54.2 | |
| **BRQR** | **Ronquire** | **1.22** | **138** | *dP* | | **Pb** | **12 26 34.5** | **+0.6** |
| **BBOU** | **Bougnies** | **1.29** | **150** | *dP* | | **Pn** | **12 26 36.6** | **+1.3** |
| **SNF** | **Seneffe** | **1.32** | **139** | *dP* | | **Pn** | **12 26 36.4** | **+0.8** |
| SNF | | | | *dS* | | **Sg** | **12 26 53.2** | **+0.9** |
| **ELMS** | **Elmsett, Ipswi** | **1.34** | **296** | *eP* | | **Pg** | **12 26 35.5** | **-0.2** |
| ELMS | | | | *eS* | | **Sg** | **12 26 53.2** | **+0.2** |
| ELMS | comp=N,185nm,0.2s | | | IAML | | | 12 26 57.0 | |
| ELMS | comp=E,139nm,0.4s | | | IAML | | | 12 26 59.4 | |
| **BMOL** | **Mol** | **1.38** | **102** | *dP* | | **Pn** | **12 26 35.5** | **-1.0** |
| BMOL | | | | *dS* | | **Sg** | **12 26 55.1** | **+0.7** |
| **BMRD** | **Maredsous** | **1.68** | **136** | *dP* | | **Pn** | **12 26 41.6** | **+1.0** |
| **DOU** | **Dourbes** | **1.77** | **143** | *eP* | | **Pn** | **12 26 42.5** | **+0.7** |
| **DOU** | **Dourbes** | **1.77** | **143** | *dP* | | **Pn** | **12 26 41.9** | **+0.1** |
| DOU | comp=N,26nm,0.2s | | | *dS* | | **Sn** | **12 27 01.8** | **-3.2** |
| **BGES** | **Gesves** | **1.77** | **129** | *dP* | | **Pn** | **12 26 42.8** | **+0.9** |
| BGES | | | | *dS* | | **Sn** | **12 27 01.7** | **-3.3** |
| **BCLA** | **Clavier** | **1.85** | **125** | *dP* | | **Pn** | **12 26 43.9** | **+0.9** |
| BCLA | comp=E,30nm,0.3s | | | *dS* | | **Sn** | **12 27 04.5** | **-2.7** |
| **WACR** | **West Acre** | **1.87** | **311** | *eP* | | **Pn** | **12 26 44.4** | **+1.2** |
| WACR | comp=N,113nm,0.2s | | | IAML | | | 12 27 11.8 | |
| WACR | comp=E,102nm,0.2s | | | IAML | | | 12 27 13.5 | |
| **BSTI** | **Sart Tilman** | **1.90** | **118** | *dP* | | **Pn** | **12 26 45.0** | **+1.3** |
| **RCHB** | **Rochefort** | **1.99** | **132** | *dP* | | **Pn** | **12 26 44.9** | **0.0** |
| **HGN** | **Heimansgroeve** | **2.03** | **111** | *eP* | | **Pn** | **12 26 46.5** | **+1.0** |
| **MEM** | **Membach** | **2.14** | **114** | *eP* | n | **Pn** | **12 26 48.0** | **+1.0** |
| MEM | | | | *eS* | n | **Sn** | **12 27 11.2** | **-3.0** |
| **MEM** | **Membach** | **2.14** | **114** | *dP* | | **Pn** | **12 26 47.9** | **+1.0** |
| MEM | | | | *dS* | | **Sn** | **12 27 11.1** | **-3.1** |
| **BTNL** | **Ternell** | **2.22** | **113** | *dP* | | **Pn** | **12 26 49.1** | **+1.1** |
| **BHOU** | **Houvegnez** | **2.26** | **120** | *dP* | | **Pn** | **12 26 49.7** | **+1.1** |
| **LKLB** | **Kalborn** | **2.46** | **124** | *dP* | | **Pn** | **12 26 52.6** | **+1.2** |
| **LVIA** | **Vianden** | **2.61** | **126** | *dP* | | **Pn** | **12 26 54.0** | **+0.6** |
| **WLF** | **Walferdange** | **2.76** | **131** | *eP* | g | **Pg** | **12 27 02.6** | **-0.3** |
| **WLF** | **Walferdange** | **2.76** | **131** | *dP* | | **Pb** | **12 27 01.9** | **+1.7** |
| **LMK** | **Market Rasen** | **2.79** | **316** | *eP* | | **Pn** | **12 26 57.3** | **+1.5** |
| **CWF** | **Charnwood Fore** | **2.89** | **297** | *eP* | | **Pn** | **12 26 58.2** | **+1.0** |
| **STRD** | **Stroud** | **3.19** | **277** | *eP* | | **Pn** | **12 27 02.9** | **+1.6** |
| **ABH** | **Alteburg** | **3.36** | **117** | *ePn* | | **Pn** | **12 27 04.7** | **+1.0** |
| **LBWR** | **Ladybower, Pea** | **3.42** | **305** | *eP* | | **Pn** | **12 27 05.1** | **+0.6** |
| LBWR | comp=N,18nm,0.3s | | | IAML | | | 12 28 03.9 | |
| LBWR | comp=E,14nm,0.5s | | | IAML | | | 12 28 07.1 | |
| **KASTN** | **Kahler Asten** | **3.45** | **93** | *ePn* | | **Pn** | **12 27 07.3** | **+2.3** |
| **MONM** | **Monmouth** | **3.59** | **277** | *eP* | | **Pn** | **12 27 07.8** | **+1.0** |
| MONM | comp=E,14nm,0.7s | | | IAML | | | 12 28 09.9 | |
| MONM | comp=N,14nm,0.9s | | | IAML | | | 12 28 16.6 | |
| **GDLE** | **Glaisdale, N Y** | **3.69** | **324** | *eP* | | **Pn** | **12 27 09.2** | **+0.9** |
| **HPK** | **Haverah Park** | **3.70** | **313** | *eP* | | **Pn** | **12 27 08.8** | **+0.5** |
| **MCH1** | **Michaelchurch** | **3.72** | **280** | *eP* | | **Pn** | **12 27 09.3** | **+0.7** |
| **TNS** | **Taunus Mts** | **3.72** | **108** | *ePn* | | **Pn** | **12 27 10.5** | **+1.7** |
| **HLM1** | **Long Mynd** | **3.73** | **288** | *eP* | | **Pn** | **12 27 09.8** | **+0.9** |
| **FOEL** | **Foel Wylfa** | **4.02** | **292** | *eP* | | **Pn** | **12 27 13.8** | **+1.0** |
| **MILB** | **Miltenberg** | **4.38** | **110** | *ePn* | | **Pn** | **12 27 20.0** | **+2.3** |
| **EDMD** | **Edmundbyers** | **4.44** | **320** | *eP* | | **Pn** | **12 27 18.8** | **+0.3** |
| **CLZ** | **Clausthal** | **4.64** | **83** | *ePn* | | **Pn** | **12 27 23.1** | **+1.8** |
| **KESW** | **Keswick, Cumbr** | **4.77** | **313** | *eP* | | **Pn** | **12 27 23.2** | **+0.1** |
| **RSBS** | **Rosebush, Pemb** | **4.79** | **278** | *eP* | | **Pn** | **12 27 23.6** | **+0.2** |
| **WME** | **Myndd Eilian** | **4.81** | **296** | *eP* | | **Pn** | **12 27 24.5** | **+0.9** |
| **WLF1** | **Llynfaes** | **4.83** | **294** | *eP* | | **Pn** | **12 27 24.8** | **+0.9** |
| **YRC** | **Rhoscolyn** | **4.92** | **294** | *eP* | | **Pn** | **12 27 25.8** | **+0.8** |
| **ESK** | **Eskdalemuir** | **5.29** | **318** | *eP* | | **Pn** | **12 27 30.4** | **+0.2** |
| **ESY** | **Stoneypath** | **5.51** | **325** | *eP* | | **Pn** | **12 27 33.6** | **+0.4** |
| **EBL** | **Broad Law** | **5.55** | **323** | *eP* | | **Pn** | **12 27 34.7** | **+0.8** |
| **NEWG** | **New Galloway** | **5.61** | **313** | *eP* | | **Pn** | **12 27 34.7** | **+0.1** |
| **IWEX** | **Carrickbyrne,** | **6.07** | **282** | *eP* | | **Pn** | **12 27 41.4** | **+0.5** |

**UPP 25 12:29:11.7±2.7,63°.76N×28°.06E,h0km,ML1.6, Suspected explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SJUU** | **Sjulsmark** | **3.28** | **305** | P | | Pn | 12 30 04.3 | 0.0 |
| SJUU | | | | S | | Sn | 12 30 43.7 | -0.3 |
| **ODEU** | **Stanfors** | **3.29** | **285** | P | | Pn | 12 30 04.0 | -0.4 |
| **ERTU** | **Ertsjaerv** | **3.74** | **321** | P | | Pn | 12 30 10.5 | -0.1 |
| **SVAU** | **Svanoeiden** | **3.79** | **285** | P | | Pn | 12 30 11.2 | -0.1 |
| **HARU** | **Harads** | **3.86** | **312** | P | | Pn | 12 30 12.3 | +0.2 |
| **LILU** | **Lilltraesk** | **3.86** | **297** | P | | Pn | 12 30 11.9 | -0.4 |
| **PAJU** | **Pajala** | **3.87** | **330** | P | | Pn | 12 30 11.7 | -0.7 |
| PAJU | | | | S | | Sn | 12 30 56.1 | -2.4 |

*IDC **25** 12:34:41.9±1.2,68°.21N×136°.54W,h0km,mb3.7/3, mb1 3.9/7,mb1mx3.5/57,mbtmp3.7/7,ML3.6/4,Error ellipse: s-maj=19.6km s-min=11.0km az=164.0*
*ANF **25** 12:34:45.7±1.2,68°.10N×136°.39W,h35km±12km,ML3.6/10, Error ellipse: s-maj=4.2km s-min=3.1km az=169.0*
*PGC **25** 12:34:45.3±0.0,68°.11N×136°.42W,h20km,ML3.3,ML3.4/2, 112km Wnw of Fort McPherson, Nt Northern Yukon Territory, Canada*

**ISC 25 12:34:41.4±0.7,68°.07N±0°.04×136°.23W±0°.04,h10km,n58, σ2§22/83,mb3.9/3,Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **INK** | **Inuvik** 19nm,0.3s,baz=251,slow=17,SNR=487 | **1.04** | **75** | Pg | | **Pn** | **12 35 03.2** | **+1.2** |
| INK | 94nm,0.3s,baz=163,slow=11,SNR=17 | | | Lg | | Lg | 12 35 18.6 | |
| **INK** | **Inuvik** | **1.04** | **75** | P | | **Pn** | **12 35 03.2** | **+1.2** |
| INK | | | | S | | **Sn** | **12 35 19.1** | **+2.5** |
| **INK** | **Inuvik** baz=261,SNR=112 | **1.04** | **75** | P | | **Pn** | **12 35 03.4** | **+1.4** |
| INK | baz=261 | | | S | | **Sn** | **12 35 19.4** | **+2.8** |
| **I29M** | **Ogilvie Camp,** baz=14 | **2.84** | **198** | S | | **Sn** | **12 36 03.1** | **+2.1** |
| **EGAK** | **Eagle** baz=27,SNR=5.6 | **3.85** | **213** | P | | **Pn** | **12 35 42.0** | **+1.4** |
| EGAK | baz=27 | | | S | | **Sn** | **12 36 25.0** | **-0.8** |
| **DAWY** | **Dawson** | **4.22** | **199** | Pn | | **Pn** | **12 35 47.6** | **+1.9** |
| DAWY | | | | Sn | | **Sn** | **12 36 35.4** | **+0.4** |
| **DAWY** | **Dawson** baz=15 | **4.22** | **199** | P | | **Pn** | **12 35 47.3** | **+1.5** |
| DAWY | baz=15 | | | S | | **Sn** | **12 36 35.6** | **+0.6** |
| **PRP** | **Porcupine Dome** baz=50 | **4.48** | **240** | S | | **Sn** | **12 36 41.0** | **-0.5** |
| **MAYO** | **Mayo, Yukon** | **4.49** | **178** | Sn | | **Sn** | **12 36 42.6** | **+0.9** |
| **MAYO** | **Mayo, Yukon** baz=357 | **4.49** | **178** | S | | **Sn** | **12 36 44.1** | **+2.4** |
| **C36M** | **Paulatuk** | **4.62** | **68** | Pn | | **Pn** | **12 35 53.9** | **+2.8** |
| C36M | | | | Sn | | **Sn** | **12 36 45.2** | **+0.5** |
| **C36M** | **Paulatuk** baz=260,SNR=18 | **4.62** | **68** | P | | **Pn** | **12 35 53.8** | **+2.7** |
| C36M | baz=260 | | | S | | **Sn** | **12 36 46.3** | **+1.6** |
| **J26L** | **Joseph Creek** baz=35 | **4.64** | **223** | P | | **Pn** | **12 35 53.0** | **+1.4** |
| J26L | baz=35 | | | S | | **Sn** | **12 36 43.8** | **-1.7** |
| **TOLK** | **Toolik Lake Re** baz=90,SNR=18 | **4.97** | **283** | P | | **Pn** | **12 35 57.4** | **+1.3** |
| TOLK | baz=90 | | | S | | **Sn** | **12 36 54.1** | **+0.5** |
| **J25K** | **Salcha River,** baz=42 | **5.05** | **231** | P | | **Pn** | **12 35 58.9** | **+1.7** |
| J25K | baz=42 | | | S | | **Sn** | **12 36 55.9** | **+0.3** |
| **H24K** | **Noodor Dome** baz=58 | **5.09** | **249** | P | | **Pn** | **12 35 57.4** | **-0.3** |
| **POKR** | **Poker Plat Res** baz=51 | **5.35** | **242** | P | | **Pn** | **12 36 02.3** | **+1.0** |
| **COLD** | **Coldfoot** | **5.40** | **268** | Pn | | **Pn** | **12 36 03.2** | **+1.3** |
| COLD | | | | Sn | | **Sn** | **12 37 00.4** | **-3.5** |
| **COLD** | **Coldfoot** baz=74,SNR=5.6 | **5.40** | **268** | P | | **Pn** | **12 36 02.8** | **+0.9** |
| COLD | baz=74 | | | S | | **Sn** | **12 37 02.7** | **-1.3** |
| **ILAR** | **Eielson Array** 0.9nm,0.3s,baz=44,slow=13,SNR=38 | **5.40** | **237** | Pn | | **Pn** | **12 36 03.0** | **+1.0** |
| ILAR | 0.8nm,0.3s,baz=49,slow=26,SNR=5.2 | | | Sn | | **Sn** | **12 37 02.8** | **-1.3** |
| **A36M** | **Sachs Harbour** | **5.44** | **39** | Pn | | **Pn** | **12 36 04.9** | **+2.4** |
| A36M | | | | Sn | | **Sn** | **12 37 03.5** | **-1.5** |
| **A36M** | **Sachs Harbour** baz=230,SNR=27 | **5.44** | **39** | P | | **Pn** | **12 36 04.2** | **+1.8** |
| A36M | baz=230 | | | S | | **Sn** | **12 37 05.6** | **+0.6** |
| **DOT** | **Dot Lake** | **5.47** | **220** | Pn | | **Pn** | **12 36 04.9** | **+1.9** |
| DOT | | | | Sn | | **Sn** | **12 37 04.3** | **-1.6** |
| **M30M** | **Minto, Yukon** baz=1.2,SNR=8.8 | **5.52** | **183** | P | | **Pn** | **12 36 05.5** | **+1.9** |
| **L27K** | **Beaver Creek,** baz=21 | **5.53** | **207** | P | | **Pn** | **12 36 05.3** | **+1.6** |
| **MMPY** | **Sheldon Lake,** | **5.85** | **157** | Pn | | **Pn** | **12 36 11.0** | **+2.8** |
| MMPY | | | | Sn | | **Sn** | **12 37 14.4** | **-0.8** |
| **MMPY** | **Sheldon Lake,** baz=341 | **5.85** | **157** | P | | **Pn** | **12 36 10.9** | **+2.8** |
| **L26K** | **Log Cabin Wild** baz=26,SNR=10 | **5.86** | **214** | P | | **Pn** | **12 36 09.6** | **+1.4** |
| **M31M** | **Drury Creek, Y** baz=352 | **5.94** | **172** | P | | **Pn** | **12 36 11.7** | **+2.3** |
| **FARO** | **Faro, Yukon** | **5.98** | **167** | Pn | | **Pn** | **12 36 12.5** | **+2.6** |
| FARO | | | | Sn | | **Sn** | **12 37 18.6** | **+0.2** |
| **I23K** | **Minto, Yukon-K** baz=54 | **5.99** | **247** | P | | **Pn** | **12 36 10.2** | **+0.2** |
| **BVCY** | **Beaver Creek** | **6.00** | **201** | Pn | | **Pn** | **12 36 11.7** | **+1.5** |
| BVCY | | | | Sn | | **Sn** | **12 37 17.8** | **-1.0** |
| **BVCY** | **Beaver Creek** baz=16 | **6.00** | **201** | P | | **Pn** | **12 36 11.9** | **+1.7** |
| **M27K** | **Edge Creek, AK** baz=19 | **6.20** | **205** | P | | **Pn** | **12 36 14.2** | **+1.1** |
| **YUK3** | **Moose Creek** | **6.56** | **198** | Pn | | **Pn** | **12 36 19.8** | **+1.7** |
| YUK3 | | | | Sn | | **Sn** | **12 37 30.2** | **-2.8** |
| **YUK2** | **White River** | **6.60** | **199** | Pn | | **Pn** | **12 36 19.6** | **+1.1** |
| YUK2 | | | | Sn | | **Sn** | **12 37 31.6** | **-2.1** |
| **MCK** | **McKinley** baz=44 | **6.77** | **236** | P | | **Pn** | **12 36 22.0** | **+1.2** |
| **YUK4** | **Talbot Arm** baz=6.6 | **6.83** | **190** | P | | **Pn** | **12 36 22.1** | **+0.4** |
| **H21K** | **Melozitna Rive** baz=62 | **6.96** | **257** | P | | **Pn** | **12 36 24.1** | **+0.8** |
| **YUK8** | **Steele Glacier** | **6.97** | **194** | Pn | | **Pn** | **12 36 25.6** | **+1.9** |
| **YUK5** | **Granite Creek** | **7.00** | **186** | Sn | | **Sn** | **12 37 41.1** | **-2.5** |
| **WRGLY** | **Wrigley** baz=318 | **7.16** | **127** | P | | **Pn** | **12 36 28.3** | **+2.3** |
| **HYT** | **Haines Junctio** | **7.29** | **185** | Pn | | **Pn** | **12 36 29.7** | **+1.7** |
| HYT | | | | Sn | | **Sn** | **12 37 49.6** | **-1.1** |
| **PTPK** | **Patty Peak** | **7.40** | **204** | Pn | | **Pn** | **12 36 30.4** | **+0.8** |
| **BALM** | **Baldy** | **7.53** | **203** | Pn | | **Pn** | **12 36 32.1** | **+0.9** |
| **LOGN** | **Logan Glacier** | **7.55** | **198** | Pn | | **Pn** | **12 36 33.5** | **+1.9** |
| LOGN | | | | Sn | | **Sn** | **12 37 55.0** | **-2.3** |
| **KUKN** | **Kugluktuk,NWT** | **7.95** | **82** | Sn | | **Sn** | **12 38 04.0** | **-2.7** |
| **DLBC** | **Dease Lake** 0.3nm,0.3s,baz=2.1,slow=20,SNR=7.1 | **10.05** | **161** | Pn | | **Pn** | **12 37 07.8** | **+2.0** |
| **DLBC** | **Dease Lake** | **10.05** | **161** | Pn | | **Pn** | **12 37 08.0** | **+2.2** |
| **NBC2** | **NorthernBC 2** | **10.25** | **138** | Pn | | **Pn** | **12 37 10.4** | **+2.0** |
| NBC2 | | | | Sn | | **Sn** | **12 38 58.5** | **-4.8** |
| **YKA** | **Yellowknife Ar** 0.6nm,0.3s,baz=313,slow=12,SNR=43 | **10.59** | **111** | Pn | | **Pn** | **12 37 14.0** | **+0.9** |
| YKA | 1.4nm,0.3s,baz=310,slow=23,SNR=21 | | | Sn | | **Sn** | **12 39 05.4** | **-6.1** |
| **FNBB** | **Fort Nelson** | **10.91** | **141** | Sn | | **Sn** | **12 39 14.7** | **-4.6** |
| **NBC6** | **NorthernBC 6** | **11.59** | **138** | Sn | | **Sn** | **12 39 31.0** | **-5.0** |
| **RES** | **Resolute Bay** 0.5nm,0.3s,baz=251,slow=8.3,SNR=8.7 | **14.45** | **45** | Pn | | **Pn** | **12 38 05.1** | **-0.4** |
| RES | 0.1nm,0.3s,baz=258,slow=5.2,SNR=5.1 | | | Sn | | **Sn** | **12 40 37.8** | **-7.6** |
| **RES** | **Resolute Bay** | **14.45** | **45** | Sn | | Sn | 12 40 33.0 | -12 |
| **NVAR** | **Mina Array Bea** 0.5nm,0.8s,baz=334,slow=7.5,SNR=4.0 | **31.31** | **152** | P | | **P** | **12 41 04.1** | **+2.5** |
| **FINES** | **FINESS Array B** 0.8nm,0.6s,baz=349,slow=5.8,SNR=3.5 | **50.15** | **11** | P | | **P** | **12 43 37.8** | **+1.5** |
| **EKA** | **Eskdalemuir Ar** 0.8nm,0.4s,baz=329,slow=6.6,SNR=9.2 | **52.12** | **32** | P | | **P** | **12 43 52.7** | **+1.5** |

*IDC **25** 12:42:22.1±1.7,3°.45S×68°.29E,h0km,mb3.7/7,mb1 3.9/7, mb1mx3.6/56,mbtmp3.7/7,MS3.2/2,Ms1 3.2/2, ms1mx2.6/80,Error ellipse: s-maj=47.8km s-min=28.9km az=54.0*

**ISC 25 12:42:24.3±1.7,3°.4S±0°.3×68°.3E±0°.3,h12km,n9,σ1§21/7, mb3.7/7,Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PALK** | **Pallekele** comp=Z,56nm,19.3s,baz=283,slow=31 | **16.29** | **49** | LR | | LR | 12 50 55.1 | |
| **CMAR** | **Chiang Mai Arr** 0.4nm,0.3s,baz=246,slow=9.8,SNR=6.4 | **37.17** | **53** | P | | **P** | **12 49 36.0** | **+0.5** |
| **MKAR** | **Makanchi Array** 0.3nm,0.8s,baz=197,slow=7.6,SNR=3.6 | **51.49** | **12** | P | | **P** | **12 51 27.9** | **-1.9** |
| **ZALV** | **Zalesovo Beam** 0.7nm,0.6s,baz=222,slow=5.8,SNR=4.9 | **58.79** | **11** | P | | **P** | **12 52 21.8** | **-0.5** |
| **SONM** | **Songino Array** 1.3nm,1.0s,baz=237,slow=5.1,SNR=8.7 | **60.93** | **28** | P | | **P** | **12 52 38.6** | **+1.2** |
| **KIRV** | **Kirov** comp=Z,31nm,20.7s,baz=18,slow=36 | **63.62** | **349** | LR | | LR | 13 20 19.9 | |
| **ASAR** | **Alice Springs** 0.5nm,1.0s,baz=275,slow=5.9,SNR=4.2 | **66.30** | **114** | P | | **P** | **12 53 13.2** | **-0.1** |
| **WRA** | **Warramunga Arr** 1.0nm,0.9s,baz=280,slow=5.7,SNR=5.7 | **66.31** | **110** | P | | **P** | **12 53 12.8** | **-0.6** |
| **ESDC** | **Sonseca Array** 0.5nm,0.7s,baz=97,slow=7.0,SNR=2.3 | **78.64** | **311** | P | | **P** | **12 54 27.0** | **+0.4** |

*HEL **25** 12:45:00.9±0.1,63°.65N×17°.41E,h0km,ML1.9, ML1.5(UPP),Explosion*
*IDC **25** 12:45:04.9±1.0,64°.19N×16°.79E,h0km,mb1 2.9/4, mb1mx2.8/49,mbtmp2.8/4,ML1.9/4,Error ellipse: s-maj=15.3km s-min=8.9km az=120.0*

**ISC 25 12:44:58.1±0.9,63°.66N±0°.04×17°.39E±0°.04,h0km,n17, σ1§65/27,Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SOLU** | **Sollefteaa** | **0.42** | **188** | *i* P | | **Pb** | **12 45 08.2** | **-0.1** |
| SOLU | | | | *i* S | | **Sb** | **12 45 13.6** | **-1.6** |
| **BREU** | **Bredtraesk** | **0.58** | **66** | *i* P | | **Pb** | **12 45 11.2** | **+0.1** |
| BREU | | | | *i* S | | **Sb** | **12 45 18.8** | **-1.0** |
| **HUSU** | **Husum** | **0.88** | **110** | *eP* | | **Pb** | **12 45 16.3** | **+0.1** |
| HUSU | | | | *eS* | | **Sb** | **12 45 27.8** | **-0.7** |
| **HEMU** | **Hemsoen** | **1.03** | **163** | *eP* | | **Pb** | **12 45 19.2** | **+0.4** |
| HEMU | | | | *eS* | | **Sb** | **12 45 32.3** | **-0.4** |
| **NOD** | **Norderasen** | **1.16** | **260** | *eP* | | **Pn** | **12 45 21.9** | **+0.3** |
| **SVAU** | **Svanoeiden** | **1.27** | **48** | *eP* | | **Pn** | **12 45 23.8** | **+0.6** |
| **HASU** | **Hassela** | **1.55** | **194** | *eP* | | **Pg** | **12 45 28.4** | **+0.5** |
| HASU | | | | *eS* | | **Sg** | **12 45 48.3** | **+0.4** |
| **ODEU** | **Stanfors** | **1.65** | **61** | *eP* | | **Pg** | **12 45 30.2** | **+0.6** |
| ODEU | | | | *eS* | | **Sg** | **12 45 52.1** | **+1.2** |
| **VAF** | **Ylistaro** | **2.46** | **102** | *ePB* | | **Pb** | **12 45 43.8** | **+0.7** |
| VAF | | | | *eSG* | | **Sg** | **12 46 15.6** | **-1.4** |
| **OBF0** | **Syolatti, Pyha** comp=Z,4.5nm,0.3s | **3.12** | **71** | MSG | | | 12 46 43.7 | |
| **OUF** | **Merijarvi** | **3.31** | **74** | *eS* | | **Sn** | **12 46 32.2** | **+1.2** |
| **RAF** | **Rauma** | **3.34** | **140** | *eSB* | | **Sb** | **12 46 38.6** | **-0.5** |
| RAF | comp=Z,2.2nm,0.2s | | | MSG | | | 12 46 42.0 | |
| **KEF** | **Keuruu** | **3.73** | **110** | *eS* | | **Sn** | **12 46 43.3** | **+1.8** |
| KEF | comp=Z,1.7nm,0.2s | | | MSG | | | 12 46 59.8 | |
| **NOA** | **NORSAR Array B** comp=Z,0.0nm,0.3s,baz=39,slow=17,SNR=4.8 | **3.90** | **230** | Pn | | **Pb** | **12 46 09.4** | **+1.8** |
| NOA | comp=Z,0.1nm,0.3s,baz=47,slow=26,SNR=5.4 | | | Sn | | **Sg** | **12 47 01.2** | **-2.0** |
| **HFS** | **Hagfors** comp=Z,0.4nm,0.3s,baz=17,slow=16,SNR=9.1 | **3.95** | **208** | Pn | | **Pb** | **12 46 10.0** | **+1.5** |
| HFS | comp=Z,0.7nm,0.3s,baz=20,slow=26,SNR=7.0 | | | Sn | | **Sg** | **12 47 02.8** | **-2.0** |
| **FINES** | **FINESS Array B** comp=Z,0.1nm,0.3s,baz=304,slow=15,SNR=3.4 | **4.59** | **115** | Pn | | **Pb** | **12 46 21.6** | **+2.2** |
| FINES | comp=Z,1.2nm,0.3s,baz=313,slow=26,SNR=14 | | | Sn | | **Sg** | **12 47 21.4** | **-4.0** |
| **ARCES** | **ARCESS Array B** baz=212,slow=12,SNR=9.6 | **6.72** | **25** | Pn | | **Pn** | **12 46 38.5** | **+0.6** |
| ARCES | baz=210,slow=25,SNR=5.5 | | | Sn | | **Sn** | **12 47 51.1** | **-4.0** |

**IDC 25 13:04:32.7±7.4,6°.49S×129°.58E,h126km±76km,mb3.1/1, mb1 3.2/3,mb1mx3.0/27,mbtmp3.5/3,Error ellipse: s-maj=108.4km s-min=23.7km az=73.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=341,slow=13,SNR=7.5 | **14.14** | **161** | P | | Pn | 13 07 49.2 | +1.6 |
| WRA | 0.2nm,0.3s,baz=344,slow=25,SNR=6.0 | | | S | | Sn | 13 10 22.5 | -1.4 |
| **ASAR** | **Alice Springs** 0.3nm,0.3s,baz=347,slow=12,SNR=11 | **17.57** | **167** | P | | P | 13 08 29.2 | +0.1 |
| ASAR | 0.0nm,0.3s,baz=347,slow=27,SNR=2.8 | | | S | | S | 13 11 45.5 | -0.1 |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=112,slow=9.1,SNR=6.1 | **67.58** | **327** | P | | P | 13 15 15.6 | -0.1 |

*EAF **25** 13:09:07.6±4.7,21°.26S×25°.10E,h10km,MD3.4*

**BUL 25 13:09:09.8±1.3,21°.42S×25°.31E,h10km,MD3.5, Botswana**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MATP** | **Matopo** | **3.14** | **72** | *i* P | | Pn | 13 09 59.5 | 0.0 |
| MATP | | | | *i* S | | Sn | 13 10 34.3 | -2.8 |
| **MATP** | **Matopo** | **3.14** | **72** | *i* P | | Pn | 13 09 59.5 | 0.0 |
| MATP | | | | *i* S | | Sn | 13 10 34.3 | -2.8 |
| **BLWY** | **Bulawayo** | **3.34** | **68** | *i* P | | Pn | 13 10 02.0 | -0.2 |
| BLWY | | | | *i* S | | Sn | 13 10 39.0 | -3.0 |
| **BLWY** | **Bulawayo** | **3.34** | **68** | *i* P | | Pn | 13 10 02.0 | -0.2 |
| BLWY | | | | *i* S | | Sn | 13 10 39.0 | -3.0 |
| **LBTB** | **Lobatse** | **3.59** | **176** | *i* P | | Pn | 13 10 05.3 | -0.3 |
| LBTB | | | | *i* S | | Sn | 13 10 44.9 | -3.3 |
| **LBTB** | **Lobatse** | **3.59** | **176** | *i* P | | Pn | 13 10 05.3 | -0.3 |
| LBTB | | | | *i* S | | Sn | 13 10 44.9 | -3.3 |
| **MSNA** | **Messina** | **4.47** | **103** | *i* P | | Pn | 13 10 18.3 | +0.6 |
| MSNA | | | | *i* S | | Sn | 13 11 07.0 | -2.9 |
| **MSNA** | **Messina** | **4.47** | **103** | *i* P | | Pn | 13 10 18.3 | +0.6 |
| MSNA | | | | *i* S | | Sn | 13 11 07.0 | -2.9 |
| **MOPA** | **Mopani** | **6.00** | **112** | *i* P | | Pn | 13 10 43.4 | +4.7 |
| MOPA | | | | *i* S | | Sn | 13 11 50.6 | +3.0 |
| **MOPA** | **Mopani** | **6.00** | **112** | *i* P | | Pn | 13 10 43.4 | +4.7 |
| MOPA | | | | *i* S | | Sn | 13 11 50.6 | +3.0 |

*NIED **25** 13:29:10.1,38°.49N×144°.61E,h46km,MW3.7,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-2.58; Mθθ0.07; Mφφ2.52; Mrθ-0.73; Mθφ0.85; Mφ3.23; Fault plane solution: M04.26000×10¹⁴ NP1: φs175.00000°,δ71.00000°,λ-105.00000°. NP2: φs36.00000°,δ24.00000°,λ-52.00000°.*

**JMA 25 13:29:10.1±0.2,38°.49N×144°.61E,h46km,M3.9,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **OFUJ** | **Ofunato** | **2.37** | **285** | P | | Pn | 13 29 47.9 | +1.4 |
| OFUJ | | | | *eS* | | Sn | 13 30 15.9 | +1.5 |
| **MIYJ** | **Miyakonagasawa** | **2.43** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BLWY** | **Bulawayo** | **5.55** | **342** | *i* P | Pn | 14 30 38.6 | -1.0 |
| BLWY | | | | *i* S | Sn | 14 31 38.3 | -5.2 |

*NNC **25** 14:58:04.3±0.5,45°.76N×81°.37E,h0km,mb3.1,mpv3.1, Error ellipse: s-maj=11.0km s-min=2.0km az=125.0*
*SOME **25** 14:58:06.4,45°.67N×81°.35E,h15km*
**ISC 25 14:58:05.5**±3.3,**45°.73N**±0°.05×**81°.56E**±0°.06,**h7**km±27km, **n34**,σ1⅛**28**/51,**4C-4D**,**Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **1.12** | **15** | ⇓P | **Pb** | **14 58 26.6** | **-0.6** |
| MAKZ | 4.7nm,0.2s | | | ⇑S | **Sb** | **14 58 41.3** | **-0.7** |
| **MK31** | 32nm,0.5s **Makanchi Array** | **1.18** | **25** | ⇑P | **Pb** | **14 58 28.0** | **-0.3** |
| MK31 | 4.3nm,0.2s,baz=205,slow=16,SNR=537 | | | ⇓S | **Sb** | **14 58 43.6** | **-0.2** |
| **KAPS** | 16nm,0.2s,baz=205,slow=32,SNR=22 **Kapalarasan** | **1.61** | **255** | *e*P | **Pn** | **14 58 33.9** | **-0.5** |
| KAPS | 5.4nm,0.1s | | | *e*S | **Sn** | **14 58 53.8** | **-1.6** |
| **DJR** | 56nm,0.2s **Jarkent** | **1.88** | **223** | *e*P | **Pb** | **14 58 39.1** | **-1.0** |
| DJR | 12nm,0.2s | | | *e*S | **Sn** | **14 59 02.5** | **+0.5** |
| **KNOS** | 28nm,0.3s **Konyrlen** | **2.17** | **232** | *e*P | **Pb** | **14 58 43.8** | **-1.4** |
| KNOS | 5.1nm,0.2s | | | *e*S | **Sb** | **14 59 11.4** | **-1.0** |
| **KTMS** | 59nm,0.3s **Ketmen** | **2.44** | **201** | *e*P | **Pb** | **14 58 49.3** | **-0.4** |
| KTMS | 4.1nm,0.1s | | | *e*S | **Sb** | **14 59 19.9** | **-0.1** |
| **BLB** | 17nm,0.2s **Baldybastay** | **2.73** | **234** | *e*P | **Pb** | **14 58 53.7** | **-0.9** |
| BLB | 4.8nm,0.1s | | | *e*S | **Sb** | **14 59 27.9** | **-0.5** |
| **BLB** | 23nm,0.4s **Baldybastay** | **2.73** | **234** | Pg | **Pb** | **14 58 53.7** | **-0.9** |
| BLB | 4.8nm,0.1s | | | Lg | Lg | 14 59 27.9 | |
| **PDGK** | 23nm,0.4s **Podgornoye** | **2.82** | **212** | Pg | **Pb** | **14 58 55.1** | **-1.0** |
| PDGK | 0.9nm,0.2s | | | Lg | Lg | 14 59 30.0 | |
| **PDGK** | 9.6nm,0.6s **Podgornoye** | **2.82** | **212** | ⇑Pg | **Pb** | **14 58 55.0** | **-1.1** |
| PDGK | 4.9nm,0.7s | | | ⇓Lg | Lg | 14 59 32.1 | |
| **ZSN** | 11nm,0.7s **Zaisan** | **2.86** | **52** | *e*P | **Pb** | **14 58 57.2** | **+0.4** |
| ZSN | 1.7nm,0.2s | | | *e*S | **Sb** | **14 59 34.0** | **+2.0** |
| **ARXS** | 21nm,0.5s **Arharly** | **3.05** | **242** | *e*P | **Pb** | **14 58 58.5** | **-1.6** |
| ARXS | 0.5nm,0.2s | | | *e*S | **Sb** | **14 59 36.2** | **-1.4** |
| **ARXS** | 16nm,0.6s **Arharly** | **3.05** | **242** | Pg | **Pb** | **14 58 58.5** | **-1.6** |
| ARXS | 0.5nm,0.2s | | | Lg | Lg | 14 59 36.2 | |
| **KPKS** | 16nm,0.6s **Kokpek** | **3.05** | **223** | *e*P | **Pb** | **14 58 59.3** | **-0.9** |
| KPKS | 2.9nm,0.2s | | | *e*S | **Sb** | **14 59 37.2** | **-0.5** |
| **UZB** | 44nm,0.2s **Uzynbulak** | **3.15** | **216** | *e*P | **Pb** | **14 59 01.1** | **-0.9** |
| UZB | 3.3nm,0.1s | | | *e*S | **Sb** | **14 59 40.3** | **-0.3** |
| **UZB** | 12nm,0.2s **Uzynbulak** | **3.15** | **216** | Pg | **Pb** | **14 59 01.1** | **-0.9** |
| UZB | 3.3nm,0.1s | | | Lg | Lg | 14 59 40.3 | |
| **KURS** | 12nm,0.2s **Kuram** | **3.29** | **228** | *e*P | **Pb** | **14 59 04.1** | **-0.2** |
| KURS | 3.6nm,0.6s | | | *e*S | **Sb** | **14 59 46.0** | **+1.4** |
| **KURS** | 7.2nm,0.6s **Kuram** | **3.29** | **228** | Pg | **Pb** | **14 59 04.1** | **-0.2** |
| KURS | 3.6nm,0.6s | | | Lg | Lg | 14 59 46.0 | |
| **SATY** | 7.2nm,0.6s **Saty** | **3.50** | **221** | *e*P | **Pb** | **14 59 07.6** | **-0.2** |
| SATY | 1.7nm,0.2s | | | *e*S | **Sb** | **14 59 51.7** | **+1.2** |
| **SATY** | 16nm,0.2s **Saty** | **3.50** | **221** | Pg | **Pb** | **14 59 07.6** | **-0.2** |
| SATY | 1.7nm,0.2s | | | Lg | Lg | 14 59 51.7 | |
| **CHKK** | 16nm,0.2s **Chushkaly** | **3.75** | **242** | *e*P | **Pb** | **14 59 11.8** | **-0.3** |
| CHKK | 0.6nm,0.1s | | | *e*S | **Sb** | **14 59 58.8** | **+1.0** |
| **CHKK** | 6.6nm,0.2s **Chushkaly** | **3.75** | **242** | Pg | **Pb** | **14 59 11.8** | **-0.3** |
| CHKK | 0.6nm,0.1s | | | Lg | Lg | 14 59 58.8 | |
| **KTBS** | 6.6nm,0.2s **Karatobe** | **4.02** | **242** | *e*P | **Pb** | **14 59 16.0** | **-0.6** |
| KTBS | 0.5nm,0.3s | | | *e*S | **Sb** | **15 00 06.2** | **+0.8** |
| **KTBS** | 15nm,0.4s **Karatobe** | **4.02** | **242** | Pg | **Pb** | **14 59 16.0** | **-0.6** |
| KTBS | 0.5nm,0.3s | | | Lg | Lg | 15 00 06.1 | |
| **KOTS** | 15nm,0.4s **Kotyrbulak** | **4.04** | **233** | *e*P | **Pb** | **14 59 17.2** | **+0.2** |
| KOTS | 1.4nm,0.3s | | | *e*S | **Sb** | **15 00 08.2** | **+2.0** |
| **KOTS** | 9.4nm,0.7s **Kotyrbulak** | **4.04** | **233** | Pg | **Pb** | **14 59 17.2** | **+0.2** |
| KOTS | 1.4nm,0.3s | | | Lg | Lg | 15 00 08.2 | |
| **KUU** | 9.4nm,0.7s **Kurty** | **4.14** | **246** | *e*P | **Pb** | **14 59 18.7** | **0.0** |
| KUU | 1.0nm,0.3s | | | *e*S | **Sb** | **15 00 10.9** | **+2.0** |
| **KUU** | 11nm,0.3s **Kurty** | **4.14** | **246** | Pg | **Pb** | **14 59 18.7** | **0.0** |
| KUU | 1.0nm,0.3s | | | Lg | Lg | 15 00 10.9 | |
| **TNSS** | 11nm,0.3s **Tian-Shan** | **4.26** | **232** | *e*P | **Pb** | **14 59 22.0** | **+1.1** |
| TNSS | 0.5nm,0.1s | | | *e*S | **Sb** | **15 00 16.3** | **+3.6** |
| **TNSS** | 1.7nm,0.4s **Tian-Shan** | **4.26** | **232** | Pg | **Pb** | **14 59 22.0** | **+1.1** |
| TNSS | 0.5nm,0.1s | | | Lg | Lg | 15 00 16.3 | |
| **DGS** | 1.7nm,0.4s **Degeres** | **4.83** | **241** | *e*P | **Pb** | **14 59 31.8** | **+1.4** |
| DGS | 0.8nm,0.4s | | | *e*S | **Sb** | **15 00 33.0** | **+4.3** |
| **DGS** | 5.5nm,0.5s **Degeres** | **4.83** | **241** | Pg | **Pb** | **14 59 31.8** | **+1.4** |
| DGS | 0.8nm,0.4s | | | Lg | Lg | 15 00 33.1 | |
| **KURBB** | 5.5nm,0.5s **Kurchatov Arra** | **5.30** | **339** | ⇑Lg | Lg | 15 00 51.0 | |
| **KURK** | 11nm,0.6s **Kurchatov** | **5.36** | **340** | ⇓Lg | Lg | 15 00 54.6 | |
| | 7.6nm,0.6s | | | | | | |

*IDC **25** 15:09:22.2±2.1,21°.52N×108°.09W,h0km,mb3.9/6, mb1 4.3/11,mb1mx4.0/49,mbtmp4.0/11,ML3.9/5,MS3.9/26, Ms1 3.9/26,ms1mx3.6/74,Error ellipse: s-maj=43.5km s-min=35.3km az=74.0*
*NEIC **25** 15:09:25.8±2.8,21°.93N±0°.07×108°.25W±0°.06,h10km±1km, mb4.2/151,Md4.2/14(MEX),Error ellipse: s-maj=13.3km s-min=8.3km az=211.0*
*MEX **25** 15:09:27.4±0.6,21°.80N×108°.05W,h5km,MD4.2*
**ISC 25 15:09:28.9**±0.7,**21°.81N**±0°.06×**108°.09W**±0°.05,**h35**km, **n305**,σ1⅛**44**/278,**mb4.2**/20,**MS4.0**/25,**Revilla Gigedo Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAIG** | **Mazatlaan** | **2.06** | **48** | | **Pn** | **15 09 59.3** | **-1.8** |
| MAIG | | | | | **Sn** | **15 10 23.5** | **-2.0** |
| **MAIG** | **Mazatlaan** | **2.06** | **48** | *e*P | **Pn** | **15 09 59.3** | **-1.8** |
| MAIG | | | | *i* S | **Sn** | **15 10 23.5** | **-2.0** |
| **SLBS** | **Sierra La Lagu** | **2.54** | **318** | Pn | Pn | 15 10 02.0 | -5.7 |
| SLBS | | | | | Sn | 15 10 28.9 | -8.5 |
| **SLBS** | **Sierra La Lagu** | **2.54** | **318** | *e*P | **Pn** | **15 10 06.2** | **-1.4** |
| SLBS | | | | *i* S | **Sn** | **15 10 36.3** | **-1.1** |
| **LPIG** | **La Paz** | **3.07** | **319** | Pn | **Pn** | **15 10 16.6** | **+1.7** |
| LPIG | 9.4nm,0.3s,baz=167,slow=19,SNR=1.8 | | | LR | LR | 15 11 18.7 | |
| **SSIG** | comp=Z,678nm,18.5s,baz=186,slow=35 **Sanalona** | **3.12** | **16** | *e*P | **Pn** | **15 10 14.0** | **-1.6** |
| SSIG | | | | *i* S | **Sn** | **15 10 50.8** | **-1.0** |
| **ANIG** | **Ahuacatlan** | **3.41** | **102** | | **Pn** | **15 10 19.0** | **-0.6** |
| ANIG | | | | | **Sn** | **15 10 57.6** | **-1.2** |
| **ANIG** | **Ahuacatlan** | **3.41** | **102** | *e*P | **Pn** | **15 10 19.0** | **-0.6** |
| ANIG | | | | *i* S | **Sn** | **15 10 57.6** | **-1.2** |
| **CJM** | **Chamela** | **3.66** | **128** | *e*P | **Pn** | **15 10 21.7** | **-1.3** |
| CJM | | | | *e*S | **Sn** | **15 11 03.5** | **-1.4** |
| **PDIG** | **Papasquiaro** | **4.06** | **37** | *i* P | **Pn** | **15 10 29.8** | **+1.1** |
| PDIG | | | | *i* S | **Sn** | **15 11 18.8** | **+3.7** |
| **CDAR** | **Ciudad de Arme** | **4.77** | **126** | *i* P | **Pn** | **15 10 37.7** | **-0.6** |
| **COIG** | **Colima** | **4.88** | **122** | *e*P | **Pn** | **15 10 40.5** | **+0.6** |
| **ZAIG** | **Zacatecas** | **5.20** | **78** | Pn | **Pn** | **15 10 44.7** | **+0.2** |
| ZAIG | | | | | **Sn** | **15 11 44.0** | **+0.6** |
| **HPIG** | | **5.56** | **23** | | **Pn** | **15 10 47.5** | **-1.9** |
| **TX31** | **Lajitas Ar. Si** | **8.49** | **27** | | **Pn** | **15 11 30.5** | **+1.0** |
| **TX32** | **Lajitas Array** | **8.49** | **27** | Pn | **Pn** | **15 11 30.3** | **+0.8** |
| **TXAR** | **Lajitas Array** | **8.49** | **27** | Pn | **Pn** | **15 11 30.7** | **+1.3** |
| **TXAR** | 1.6nm,0.3s,baz=206,slow=13,SNR=86 **Lajitas Array** | **8.49** | **27** | Pn | **Pn** | **15 11 30.4** | **+0.9** |
| **UNM** | **Universidad Na** | **8.70** | **105** | Pn | Pn | 15 11 36.5 | +3.9 |
| **319A** | **Douglas** | **9.59** | **354** | Pn | **Pn** | **15 11 44.8** | **+0.2** |
| **MNTX** | **Cornudas Mount** | **10.14** | **13** | Pn | **Pn** | **15 11 51.6** | **-0.5** |
| **MNTX** | **Cornudas Mount** baz=195 | **10.14** | **13** | P | **Pn** | **15 11 52.3** | **+0.2** |
| **833A** | **Chaparral WMA,** | **10.21** | **49** | Pn | **Pn** | **15 11 51.1** | **-1.7** |
| **833A** | **Chaparral WMA,** baz=233 | **10.21** | **49** | P | **Pn** | **15 11 54.8** | **+1.9** |
| **121A** | **Cookes Peak, D** | **10.69** | **1** | | **Pn** | **15 11 57.5** | **-2.2** |
| **121A** | **Cookes Peak, D** baz=182 | **10.69** | **1** | P | **Pn** | **15 12 00.1** | **+0.5** |
| **TUC** | **Tucson** | **10.73** | **348** | Pn | **Pn** | **15 11 58.7** | **-1.5** |
| **TUC** | **Tucson** baz=167 | **10.73** | **348** | P | **Pn** | **15 12 01.4** | **+1.2** |
| **214A** | **Organ Pipe Nat** | **10.95** | **338** | Pn | **Pn** | **15 12 02.5** | **-0.7** |
| **214A** | **Organ Pipe Nat** baz=157 | **10.95** | **338** | P | **Pn** | **15 12 04.2** | **+1.0** |
| **JCT** | **Junction City** | **11.40** | **39** | | **Pn** | **15 12 08.2** | **-1.0** |
| **113A** | **Mohawk Valley,** | **12.03** | **336** | Pn | **Pn** | **15 12 15.4** | **-2.4** |
| **LENM** | **Lemitar** | **12.35** | **4** | | **Pn** | **15 12 20.3** | **-2.1** |
| **BNM** | **Barren Site** | **12.37** | **6** | Pn | **Pn** | **15 12 25.9** | **+3.2** |
| **GLA** | **Glamis** | **12.70** | **333** | Pn | **Pn** | **15 12 27.8** | **+0.8** |
| **GLA** | **Glamis** baz=151 | **12.70** | **333** | P | **Pn** | **15 12 28.9** | **+1.9** |
| **X18A** | **Snowflake** | **12.78** | **353** | | **Pn** | **15 12 30.9** | **+2.6** |
| **Y14A** | **Wickenburg** | **12.84** | **341** | | **Pn** | **15 12 30.3** | **+1.3** |
| **YUH** | **Yuha Desert** | **12.85** | **329** | Pn | **Pn** | **15 12 29.3** | **+0.3** |
| **X16A** | **Lo Mia Camp, P** | **12.91** | **347** | | **Pn** | **15 12 33.4** | **+3.4** |
| **IKP** | **In-Ko-Pah, Jac** baz=145 | **12.94** | **328** | P | **Pn** | **15 12 31.2** | **+0.9** |
| **MSTX** | **Muleshoe** | **12.99** | **20** | | **Pn** | **15 12 32.1** | **+1.0** |
| **MSTX** | **Muleshoe** baz=203,SNR=5.7 | **12.99** | **20** | P | **Pn** | **15 12 33.6** | **+2.5** |
| **SWSC** | **Sam W. Stewart** baz=147 | **13.04** | **330** | P | **Pn** | **15 12 30.9** | **-0.7** |
| **TKX** | **Tecate** | **13.12** | **327** | Pn | **P** | **15 12 37.8** | **-4.7** |
| **ABTX** | **Abilene, Hawle** | **13.13** | **33** | | **Pn** | **15 12 32.7** | **-0.2** |
| **ABTX** | **Abilene, Hawle** baz=218 | **13.13** | **33** | P | **Pn** | **15 12 36.3** | **+3.4** |
| **ANMO** | **Albuquerque** 0.1nm,0.3s,baz=179,slow=14,SNR=17 | **13.17** | **6** | Pn | **Pn** | **15 12 35.9** | **+2.3** |
| ANMO | comp=Z,433nm,21.9s,baz=186,slow=37 | | | LR | LR | 15 17 40.2 | |
| **ANMO** | **Albuquerque** | **13.17** | **6** | Pn | **Pn** | **15 12 38.3** | **+4.7** |
| **ANMO** | **Albuquerque** baz=187 | **13.17** | **6** | P | **Pn** | **15 12 37.8** | **+4.2** |
| **BLYC** | **Blythe** | **13.19** | **336** | Pn | **Pn** | **15 12 34.5** | **+0.8** |
| **BAR** | **Barrett** | **13.25** | **327** | Pn | **Pn** | **15 12 33.1** | **-1.4** |
| **CMIG** | **Matias Romero** 0.7nm,0.3s,baz=302,slow=9.0,SNR=5.0 | **13.30** | **108** | Pn | **Pn** | **15 12 38.5** | **+3.2** |
| CMIG | comp=Z,252nm,19.7s,baz=277,slow=38 | | | LR | LR | 15 17 43.9 | |
| **W18A** | **Petrified Fore** | **13.34** | **354** | Pn | **Pn** | **15 12 34.0** | **-2.0** |
| **W18A** | **Petrified Fore** baz=174 | **13.34** | **354** | P | **Pn** | **15 12 38.3** | **+2.4** |
| **BC3** | **Big Chuckawall** baz=150 | **13.48** | **333** | P | **Pn** | **15 12 39.3** | **+1.6** |
| **PDMCI** | **Parker Dam,Lak** baz=156 | **13.54** | **338** | P | **Pn** | **15 12 40.4** | **+1.9** |
| **IRM** | **Iron Mountain** baz=152,SNR=6.0 | **13.79** | **335** | P | **Pn** | **15 12 43.1** | **+1.2** |
| **WHTX** | **Lake Whitney,** | **13.88** | **41** | Pn | **Pn** | **15 12 45.1** | **+2.0** |
| **TPFO** | **Pinon Flats** baz=146 | **13.89** | **330** | P | **Pn** | **15 12 43.9** | **+0.5** |
| **PFO** | **Pinyon Flats O** 0.2nm,0.3s,baz=169,slow=8.6,SNR=6.6 | **13.89** | **330** | Pn | **Pn** | **15 12 44.5** | **+1.0** |
| **PFO** | **Pinyon Flats O** | **13.89** | **330** | Pn | **Pn** | **15 12 41.3** | **-2.1** |
| **PFO** | **Pinyon Flats O** baz=146 | **13.89** | **330** | P | **Pn** | **15 12 44.2** | **+0.7** |
| **WUAZ** | **Wupatki** | **13.96** | **349** | | **Pn** | **15 12 42.3** | **-2.1** |
| **WUAZ** | **Wupatki** baz=168 | **13.96** | **349** | P | **Pn** | **15 12 45.3** | **+0.9** |
| **BELC** | **Belle Mtn. Jos** baz=148,SNR=6.8 | **14.01** | **332** | P | **Pn** | **15 12 45.2** | **+0.2** |
| **W13A** | **Hualapai Mount** | **14.19** | **340** | P | **Pn** | **15 12 46.2** | **-1.4** |
| **AMTX** | **Amarillo** | **14.19** | **22** | Pn | **Pn** | **15 12 46.2** | **-1.3** |
| **AMTX** | **Amarillo** baz=206 | **14.19** | **22** | P | **Pn** | **15 12 49.2** | **+1.7** |
| **GMRC** | **Granite Mounta** baz=151,SNR=6.6 | **14.54** | **334** | P | **Pn** | **15 12 53.7** | **+1.4** |
| **HEC** | **Hector,Ludlow** baz=149 | **14.86** | **333** | P | **Pn** | **15 12 57.5** | **+1.0** |
| **Z35A** | **Perchaven, San** | **14.96** | **38** | Pn | **Pn** | **15 12 59.1** | **+1.4** |
| **U15A** | **North Rim** | **15.02** | **347** | P | **Pn** | **15 12 59.8** | **+1.0** |
| **PASC** | **Pasadena Art C** | **15.20** | **326** | | **Pn** | **15 13 02.5** | **+1.6** |
| PASC | comp=Z,6.8nm,0.6s | | | IAmb | IAmb | 15 13 26.4 | |
| **TUQ** | **Turquoise Moun** baz=152 | **15.21** | **335** | P | **Pn** | **15 13 02.4** | **+1.1** |
| **WMOK** | **Wichita Mounta** baz=215 | **15.26** | **30** | P | **P** | **15 13 04.1** | **-2.1** |
| **MVCO** | **Mesa Verde** | **15.36** | **359** | P | **Pn** | **15 13 01.2** | **-2.0** |
| **MVCO** | **Mesa Verde** baz=179 | **15.36** | **359** | P | **P** | **15 13 05.4** | **-2.1** |
| **GSC** | **Goldstone, Bar** | **15.46** | **332** | P | **Pn** | **15 13 03.4** | **-1.1** |
| GSC | comp=Z,13nm,1.1s | | | IAmb | IAmb | 15 13 11.0 | |
| **GSC** | **Goldstone, Bar** baz=148,SNR=6.0 | **15.46** | **332** | P | **Pn** | **15 13 05.7** | **+1.2** |
| **NATX** | **Nacogdoches** | **15.54** | **48** | P | **Pn** | **15 13 06.4** | **+1.0** |
| **T25A** | **Trinidad** | **15.61** | **11** | P | **Pn** | **15 13 05.7** | **-0.8** |
| T25A | comp=Z,15nm,1.3s | | | IAmb | IAmb | 15 13 35.4 | |
| **T25A** | **Trinidad** baz=193 | **15.61** | **11** | P | **P** | **15 13 08.9** | **-1.4** |
| **X34A** | **Smith Ranch, M** | **15.61** | **33** | P | **P** | **15 13 08.2** | **-2.0** |
| X34A | comp=Z,19nm,1.1s | | | IAmb | IAmb | 15 13 23.5 | |
| **EDW2** | **Edwards Air Fo** baz=144 | **15.66** | **328** | P | **Pn** | **15 13 07.4** | **+0.4** |
| **KNB** | **Kanab** | **15.71** | **346** | P | **Pn** | **15 13 07.8** | **+0.1** |
| **LCMT** | **Little Creek M** | **15.80** | **345** | P | **Pn** | **15 13 08.9** | **0.0** |
| LCMT | comp=Z,22nm,1.6s | | | IAmb | IAmb | 15 13 13.8 | |
| **SHPR** | **Sheep Range** | **15.89** | **339** | P | **Pn** | **15 13 10.9** | **+0.9** |
| SHPR | comp=Z,13nm,1.2s | | | IAmb | IAmb | 15 13 16.1 | |
| **CCAC** | **Calif City Air** | **15.89** | **329** | P | **Pn** | **15 13 10.2** | **+0.3** |
| CCAC | comp=Z,16nm,1.0s | | | IAmb | IAmb | 15 13 14.9 | |
| **S22A** | **4UR Ranch, Cre** | **15.92** | **4** | P | **Pn** | **15 13 10.4** | **-0.2** |
| S22A | comp=Z,22nm,1.4s | | | IAmb | IAmb | 15 13 21.1 | |
| **S22A** | **4UR Ranch, Cre** baz=185,SNR=7.0 | **15.92** | **4** | P | **Pn** | **15 13 11.0** | **+0.4** |
| **LRMC** | **Laurel Mtn Rad** baz=146,SNR=5.9 | **16.00** | **330** | P | **Pn** | **15 13 11.7** | **+0.3** |
| **PKCU** | **Pink Cliffs** | **16.01** | **348** | P | **P** | **15 13 13.9** | **-0.9** |
| PKCU | comp=Z,14nm,1.1s | | | IAmb | IAmb | 15 13 18.8 | |
| **SDCO** | **Great Sand Dun** | **16.04** | **7** | P | **Pn** | **15 13 12.4** | **+0.3** |
| SDCO | comp=Z,25nm,1.6s | | | IAmb | IAmb | 15 13 25.5 | |
| **SDCO** | **Great Sand Dun** baz=189,SNR=9.8 | **16.04** | **7** | P | **Pn** | **15 13 12.0** | **0.0** |
| **441A** | **DeRidder** | **16.04** | **53** | P | **P** | **15 13 14.3** | **-0.6** |
| **QSM** | **Queen of Sheba** | **16.06** | **333** | | **Pn** | **15 13 11.6** | **-0.4** |
| QSM | | | | | IAmb | IAmb | 15 13 17.6 |
| **GWY** | comp=Z,26nm,1.1s **Greenwater Val** | **16.16** | **334** | P | **Pn** | **15 13 14.5** | **+1.0** |
| GWY | comp=Z,18nm,1.1s | | | | IAmb | IAmb | 15 13 18.8 |
| **Z38A** | **Mt. Pleasant** | **16.27** | **43** | P | **Pn** | **15 13 15.0** | **+0.3** |
| Z38A | comp=Z,18nm,0.7s | | | | IAmb | IAmb | 15 13 25.3 |
| **PV13** | **Radium Mtn., P** | **16.31** | **358** | P | **Pn** | **15 13 13.5** | **-2.0** |
| **SZCU** | **Shurtz Canyon** | **16.32** | **346** | P | **Pn** | **15 13 13.2** | **-2.4** |
| SZCU | comp=Z,22nm,1.5s | | | | IAmb | IAmb | 15 13 24.0 |
| **CCUT** | **Cedar City** | **16.34** | **345** | P | **Pn** | **15 13 14.4** | **-1.4** |
| **FNO** | **Franklin** | **16.35** | **33** | P | **P** | **15 13 16.9** | **-1.3** |
| FNO | comp=Z,15nm,0.7s | | | | IAmb | IAmb | 15 13 38.8 |
| **MPMC** | **Manual Prospec** baz=148,SNR=16 | **16.40** | **332** | P | **Pn** | **15 13 17.2** | **+0.6** |
| **BCW** | **Bitter Crk WRg** | **16.43** | **325** | P | **Pn** | **15 13 17.0** | **+0.1** |
| BCW | comp=Z,38nm,1.4s | | | | IAmb | IAmb | 15 13 25.8 |
| **PV15** | **Paradox Valley** | **16.48** | **359** | P | **Pn** | **15 13 17.8** | **+0.1** |
| **FURC** | **Furnace Creek,** baz=150 | **16.49** | **334** | P | **Pn** | **15 13 17.4** | **0.0** |
| **ISA** | **Isabella, Lake** | **16.52** | **329** | | **Pn** | **15 13 17.9** | **-0.1** |
| **ISA** | **Isabella, Lake** baz=144 | **16.52** | **329** | P | **Pn** | **15 13 17.8** | **-0.3** |
| **W35A** | **Tecumseh** | **16.53** | **34** | | **Pn** | **15 13 18.5** | **+0.4** |
| W35A | comp=Z,24nm,1.1s | | | | IAmb | IAmb | 15 13 29.7 |
| **PV10** | **Paradox Valley** | **16.54** | **357** | P | **Pn** | **15 13 16.4** | **-1.9** |
| PV10 | comp=Z,30nm,1.6s | | | | IAmb | IAmb | 15 13 25.3 |
| **MTPU** | **Mount Pierson** | **16.56** | **349** | P | **Pn** | **15 13 17.8** | **-1.0** |
| **PV07** | **Paradox Valley** | **16.59** | **358** | P | **Pn** | **15 13 19.4** | **+0.5** |
| PV07 | comp=Z,21nm,1.5s | | | | IAmb | IAmb | 15 13 27.9 |
| **PKM** | **Mcpherson Peak** baz=139 | **16.61** | **324** | P | **Pn** | **15 13 19.8** | **+0.7** |
| **PV23** | **Carpenter Ridg** | **16.61** | **357** | P | **Pn** | **15 13 19.6** | **+0.3** |
| PV23 | comp=Z,26nm,1.4s | | | | IAmb | IAmb | 15 13 58.3 |
| **TPNV** | **Topopah Spring** | **16.67** | **337** | P | **Pn** | **15 13 19.6** | **-0.3** |
| **TPNV** | **Topopah Spring** baz=153 | **16.67** | **337** | P | **Pn** | **15 13 20.3** | **+0.3** |
| **PRN** | **Pahroc Range** | **16.68** | **340** | P | **Pn** | **15 13 20.8** | **+0.8** |
| **X37A** | **Clayton** | **16.94** | **39** | P | **Pn** | **15 13 23.7** | **+0.5** |
| X37A | comp=Z,25nm,1.3s | | | | IAmb | IAmb | 15 13 29.7 |
| **CWC** | **Cottonwood Cre** baz=147 | **16.98** | **331** | P | **P** | **15 13 24.8** | **-0.7** |
| **MSU** | **Marysvale** | **17.02** | **349** | P | **Pn** | **15 13 24.1** | **-0.3** |
| **S11A** | **Rachel** | **17.12** | **339** | P | **Pn** | **15 13 24.7** | **-0.8** |
| S11A | comp=Z,36nm,1.5s | | | | IAmb | IAmb | 15 13 35.4 |
| **GRAC** | **Grapevine Rang** | **17.14** | **334** | P | **Pn** | **15 13 25.1** | **-0.6** |
| **GRAC** | **Grapevine Rang** baz=150,SNR=6.1 | **17.14** | **334** | P | **Pn** | **15 13 25.3** | **-0.4** |
| **TCRU** | **Three Creeks R** | **17.16** | **348** | P | **Pn** | **15 13 26.7** | **+0.5** |
| **Q16A** | **Castle Valley** | **17.26** | **352** | P | **Pn** | **15 13 26.8** | **-0.5** |
| **Q24A** | **Divide** | **17.29** | **8** | P | **Pn** | **15 13 26.4** | **-1.4** |
| **SMCO** | **Snowmass** | **17.34** | **3** | P | **Pn** | **15 13 27.7** | **-0.8** |
| SMCO | comp=Z,20nm,1.5s | | | | IAmb | IAmb | 15 13 50.0 |
| **SRU** | **San Rafael Swe** | **17.38** | **354** | P | **Pn** | **15 13 26.5** | **-2.3** |
| **PSUT** | **Pine Spring** | **17.39** | **345** | P | **Pn** | **15 13 28.2** | **-0.8** |
| PSUT | comp=Z,20nm,1.4s | | | | IAmb | IAmb | 15 13 33.4 |
| **LCH** | **Last Change Ra** | **17.46** | **334** | P | **Pn** | **15 13 29.4** | **-0.4** |
| **TMUT** | **Trail Mountain** | **17.64** | **352** | P | **Pn** | **15 13 31.2** | **-0.9** |
| **TUL1** | **Leonard** | **17.68** | **35** | P | **Pn** | **15 13 31.8** | **-0.6** |
| TUL1 | comp=Z,18nm,1.0s | | | | IAmb | IAmb | 15 13 35.2 |
| **TUL1** | **Leonard** baz=221 | **17.68** | **35** | P | **P** | **15 13 33.4** | **+0.3** |
| **Z41A** | **Richland Creek** | **17.69** | **47** | P | **Pn** | **15 13 32.1** | **-0.4** |
| **R11A** | **Troy Canyon, C** | **17.71** | **340** | P | **Pn** | **15 13 32.0** | **-0.9** |
| **R11A** | **Troy Canyon, C** baz=157 | **17.71** | **340** | P | **Pn** | **15 13 33.1** | **+0.2** |
| **WLAR** | **White Oak Lake** | **17.75** | **45** | P | **P** | **15 13 34.0** | **+0.3** |
| WLAR | comp=Z,17nm,0.7s | | | | IAmb | IAmb | 15 13 58.5 |
| **P17A** | **Butcher Ranch,** | **17.76** | **353** | P | **Pn** | **15 13 29.7** | **-3.8** |
| **KSCO** | **Kaye Shedlock**[1] | **17.78** | **14** | P | **Pn** | **15 13 32.1** | **-1.5** |
| KSCO | comp=Z,34nm,1.2s | | | | IAmb | IAmb | 15 13 40.4 |
| **P18A** | **Preston Nutter** | **17.86** | **355** | P | **Pn** | **15 13 34.1** | **-0.7** |
| P18A | comp=Z,32nm,1.5s | | | | IAmb | IAmb | 15 13 40.0 |
| **MIAR** | **Mount Ida** | **17.99** | **42** | P | **Pn** | **15 13 35.9** | **-0.3** |
| MIAR | comp=Z,28nm,1.6s | | | | IAmb | IAmb | 15 13 58.2 |
| **TPH** | **Tonopah** | **18.03** | **336** | P | **Pn** | **15 13 35.3** | **-1.5** |
| TPH | comp=Z,27nm,1.2s | | | | IAmb | IAmb | 15 13 39.6 |
| **ISCO** | **Idaho Springs** | **18.06** | **6** | P | **Pn** | **15 13 36.9** | **-0.5** |
| **ISCO** | **Idaho Springs** baz=188 | **18.06** | **6** | P | **P** | **15 13 38.2** | **+0.6** |
| **T35A** | **Sooner Cattle** | **18.10** | **31** | P | **Pn** | **15 13 36.5** | **-1.0** |
| T35A | comp=Z,24nm,1.1s | | | | IAmb | IAmb | 15 13 40.4 |
| **344A** | **Westbrook Farm** | **18.23** | **55** | P | **P** | **15 13 37.1** | **-1.9** |
| **O20A** | **White River Ci** | **18.27** | **360** | P | **P** | **15 13 38.6** | **-1.1** |
| O20A | comp=Z,23nm,1.4s | | | | IAmb | IAmb | 15 13 51.7 |
| **O20A** | **White River Ci** baz=180 | **18.27** | **360** | P | **Pn** | **15 13 40.3** | **+0.5** |
| **W39A** | **Magazine** | **18.30** | **40** | P | **P** | **15 13 39.5** | **-0.4** |
| W39A | comp=Z,37nm,1.4s | | | | IAmb | IAmb | 15 13 43.8 |
| **W39A** | **Magazine** baz=228 | **18.30** | **40** | P | **Pn** | **15 13 41.9** | **+2.0** |
| **143A** | **Socs Landing,** | **18.35** | **50** | P | **Pn** | **15 13 40.9** | **+0.3** |
| **CBKS** | **Cedar Bluff** | **18.41** | **21** | P | **P** | **15 13 40.6** | **-0.5** |
| CBKS | comp=Z,15nm,1.0s | | | | IAmb | IAmb | 15 13 46.9 |
| **NLU** | **North Lily Min** | **18.41** | **350** | P | **P** | **15 13 39.1** | **-2.2** |
| **R32A** | **Long Quarter,** | **18.42** | **24** | P | **P** | **15 13 39.6** | **-1.6** |
| R32A | comp=Z,37nm,1.4s | | | | IAmb | IAmb | 15 13 48.9 |
| **X40A** | **Basin Creek Fa** | **18.42** | **43** | P | **P** | **15 13 40.5** | **-0.7** |
| X40A | comp=Z,20nm,1.3s | | | | IAmb | IAmb | 15 13 45.0 |
| **X40A** | **Basin Creek Fa** baz=231 | **18.42** | **43** | P | **Pn** | **15 13 43.3** | **+1.8** |
| **BBGB** | **Big Mountain B** | **18.53** | **325** | P | **P** | **15 13 39.6** | **-2.9** |
| BBGB | comp=Z,26nm,1.1s | | | | IAmb | IAmb | 15 13 47.3 |
| **LHV** | **Little Huntoon** | **18.68** | **334** | P | **P** | **15 13 41.1** | **-2.9** |
| **NV11** | **Mina Array Sit** | **18.70** | **335** | P | **P** | **15 13 42.4** | **-2.0** |
| **RDMU** | **Red Mountain** | **18.75** | **356** | P | **P** | **15 13 43.7** | **-1.3** |
| RDMU | comp=Z,17nm,1.3s | | | | IAmb | IAmb | 15 14 00.2 |
| **NVAR** | **Mina Array Bea** comp=Z,0.3nm,0.3s,baz=160,slow=13,SNR=33 | **18.75** | **334** | P | **Pn** | **15 13 46.1** | **+0.4** |
| NVAR | comp=Z,178nm,22.0s,baz=158,slow=34 | | | LR | LR | 15 20 00.4 | |
| **NVAR** | **Mina Array Bea** | **18.75

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MPK** | **Martis Peak** | **20.21** | **332** | P | **P** | **15 13 57.6** | **-3.4** |
| MPK | comp=Z,12nm,0.9s | | | IAmb | IAmb | 15 14 07.4 | |
| **PAHR** | **Pah Rah Range** | **20.28** | **334** | P | **P** | **15 14 00.6** | **-1.1** |
| **HVU** | **Hansel Valley** | **20.30** | **350** | P | **P** | **15 14 00.2** | **-1.6** |
| **S39A** | **Bolivar** | **20.33** | **36** | P | **P** | **15 13 59.4** | **-2.6** |
| S39A | comp=Z,26nm,1.4s | | | IAmb | IAmb | 15 14 12.6 | |
| **MGMO** | **Mountain Grove** | **20.53** | **38** | P | **P** | **15 14 01.7** | **-2.6** |
| MGMO | comp=Z,17nm,1.2s | | | IAmb | IAmb | 15 14 14.6 | |
| **BEKR** | **Beckworth** | **20.82** | **333** | P | **P** | **15 14 05.6** | **-2.0** |
| BEKR | comp=Z,15nm,1.1s | | | IAmb | IAmb | 15 14 10.2 | |
| **K22A** | **Casper** | **20.83** | **3** | P | **P** | **15 14 05.0** | **-2.6** |
| **K22A** | **Casper** baz=184 | **20.83** | **3** | P | Pn | 15 14 09.0 | -1.2 |
| **BW06** | **Boulder Array** baz=177 | **20.94** | **357** | P | **P** | **15 14 09.9** | **+1.0** |
| **PD31** | **Pinedale Array** | **20.94** | **357** | P | **P** | **15 14 08.3** | **-0.6** |
| **PDAR** | **Pinedale Array** comp=Z,2.1nm,0.9s,baz=161,slow=9.4,SNR=12 | **20.94** | **357** | P | **P** | **15 14 09.9** | **+1.1** |
| **PDAR** | **Pinedale Array** | **20.94** | **357** | P | **P** | **15 14 06.2** | **-2.7** |
| **R40A** | **Maddies Statio** | **21.34** | **36** | P | **P** | **15 14 11.5** | **-1.3** |
| **TPAW** | **Teton Pass** comp=Z,21nm,1.4s | **21.76** | **354** | IAmb | IAmb | 15 14 24.9 | |
| **O03E** | **Paynes Creek** | **21.81** | **331** | P | **P** | **15 14 17.5** | **-0.5** |
| **O03E** | **Paynes Creek** baz=144,SNR=5.6 | **21.81** | **331** | P | **P** | **15 14 18.7** | **+0.6** |
| **LOHW** | **Long Hollow** comp=Z,21nm,1.5s | **21.85** | **355** | IAmb | IAmb | 15 14 22.7 | |
| **MOOW** | **Moose Ponds** comp=Z,15nm,1.4s | **22.00** | **355** | IAmb | IAmb | 15 14 33.6 | |
| **FLWY** | **Flagg Ranch** comp=Z,21nm,1.5s | **22.32** | **355** | IAmb | IAmb | 15 14 40.5 | |
| **HLID** | **Hailey** | **22.33** | **348** | P | **P** | **15 14 23.8** | **+0.1** |
| HLID | comp=Z,10nm,1.1s | | | IAmb | IAmb | 15 14 27.7 | |
| **HLID** | **Hailey** baz=165,SNR=9.7 | **22.33** | **348** | P | **P** | **15 14 24.6** | **+0.9** |
| **P40A** | **Paris** | **22.35** | **34** | P | **P** | **15 14 25.1** | **+1.3** |
| **WVOR** | **Wild Horse Val** comp=Z,13nm,1.2s | **22.39** | **339** | IAmb | IAmb | 15 14 27.3 | |
| **MFID** | **Camas Ranch** comp=Z,11nm,1.4s | **22.49** | **345** | IAmb | IAmb | 15 14 28.6 | |
| **H17A** | **Grant Village** comp=Z,13nm,1.4s | **22.62** | **355** | IAmb | IAmb | 15 14 35.1 | |
| **H17A** | **Grant Village** baz=174 | **22.62** | **355** | P | **P** | **15 14 27.8** | **+0.9** |
| **LKWY** | **Lake** comp=Z,14nm,1.4s | **22.78** | **356** | IAmb | IAmb | 15 14 44.8 | |
| **BCYI** | **Bear Canyon** | **22.87** | **350** | P | **P** | **15 14 29.0** | **-0.5** |
| **YMR** | **Madison River** comp=Z,17nm,1.5s | **22.93** | **355** | IAmb | IAmb | 15 14 37.1 | |
| **YMP** | **Mirror Lake Pl** | **22.94** | **356** | P | **P** | **15 14 29.4** | **-0.9** |
| YMP | comp=Z,12nm,1.4s | | | IAmb | IAmb | 15 14 55.6 | |
| **YHH** | **Holmes Hill** comp=Z,6.5nm,1.1s | **23.04** | **355** | IAmb | IAmb | 15 14 35.4 | |
| **M04C** | **Macdoel** baz=146 | **23.04** | **333** | P | **P** | **15 14 31.8** | **+0.7** |
| **M02C** | **Callahan** baz=143 | **23.16** | **331** | P | **P** | **15 14 32.9** | **+0.5** |
| **J08A** | **Circle Bar Ran** | **23.17** | **340** | P | **P** | **15 14 32.9** | **+0.5** |
| J08A | comp=Z,5.3nm,0.8s | | | IAmb | IAmb | 15 14 35.6 | |
| **RLMT** | **Red Lodge** baz=178 | **23.28** | **358** | P | **P** | **15 14 33.9** | **+0.3** |
| **YBH** | **Yreka Blue Hor** comp=Z,170nm,21.2s,baz=158,slow=34 | **23.37** | **332** | LR | LR | 15 22 39.6 | |
| **BOZ** | **Bozeman (W)** baz=172 | **23.91** | **354** | P | **P** | **15 14 40.1** | **+0.6** |
| **J05D** | **Fort Rock, OR** baz=149 | **24.06** | **336** | P | **P** | **15 14 41.1** | **+0.1** |
| **PLID** | **Pearl Lake** comp=Z,7.2nm,1.4s | **24.12** | **346** | IAmb | IAmb | 15 14 57.9 | |
| **I07A** | **Izee** | **24.15** | **340** | P | **P** | **15 14 42.2** | **+0.4** |
| I07A | comp=Z,11nm,1.4s | | | IAmb | IAmb | 15 14 44.1 | |
| **BMO** | **Blue Mountains** comp=Z,12nm,1.4s | **24.21** | **344** | IAmb | IAmb | 15 14 44.7 | |
| **K02D** | **Willamette Mer** baz=143 | **24.57** | **332** | P | **P** | **15 14 45.4** | **-0.2** |
| **LAO** | **LASA Array** baz=184 | **24.87** | **3** | P | **P** | **15 14 48.7** | **+0.5** |
| **I04A** | **Tendick Farm,** baz=147 | **24.94** | **335** | P | **P** | **15 14 49.0** | **+0.1** |
| **I05D** | **Terrebonne, OR** baz=150 | **25.00** | **337** | P | **P** | **15 14 49.4** | **0.0** |
| **J01E** | **Myrtle Point** baz=144 | **25.06** | **332** | P | **P** | **15 14 49.7** | **-0.2** |
| **TKL** | **Tuckaleechee C** comp=Z,130nm,18.7s,baz=257,slow=39 | **25.31** | **52** | LR | LR | 15 26 04.4 | |
| **MSO** | **Missoula** | **25.41** | **351** | P | **P** | **15 14 52.4** | **-0.8** |
| **MSO** | **Missoula** baz=168,SNR=7.1 | **25.41** | **351** | P | **P** | **15 14 53.4** | **+0.2** |
| **I02E** | **Swisshome, OR** baz=145 | **25.79** | **333** | P | **P** | **15 14 56.3** | **-0.1** |
| **TZTN** | **Tazewell** baz=242 | **25.88** | **50** | P | **P** | **15 14 58.5** | **+1.1** |
| **EGMT** | **Eagleton** | **26.19** | **357** | P | **P** | **15 14 57.3** | **-2.9** |
| **EGMT** | **Eagleton** baz=177 | **26.19** | **357** | P | **P** | **15 15 00.5** | **+0.3** |
| **B08A** | **Colville Reser** | **27.98** | **344** | P | **P** | **15 15 15.2** | **-1.1** |
| **ULM** | **Lac du Bonnet** comp=Z,144nm,21.3s,baz=198,slow=38 | **29.97** | **16** | LR | LR | 15 28 35.4 | |
| **SADO** | **Sadowa** comp=Z,279nm,19.3s,baz=335,slow=37 | **33.02** | **39** | LR | LR | 15 29 47.7 | |
| **DLBC** | **Dease Lake** comp=Z,168nm,19.5s,baz=192,slow=36 | **39.87** | **342** | LR | LR | 15 33 08.5 | |
| **YKA** | **Yellowknife Ar** comp=Z,1.1nm,0.8s,baz=170,slow=7.8,SNR=17 | **40.91** | **355** | P | **P** | **15 17 07.5** | **0.0** |
| YKA | comp=Z,96nm,19.2s,baz=314,slow=38 | | | LR | LR | 15 35 04.4 | |
| **MMPY** | **Sheldon Lake,** baz=148 | **43.74** | **345** | P | **P** | **15 17 31.5** | **+0.8** |
| **TAOE** | **Nuku Hiva Isla** comp=Z,252nm,22.1s | **43.80** | **229** | *e*LR | LR | 15 29 38.8 | |
| **PNL** | **Peninsula** baz=136 | **43.85** | **338** | P | **P** | **15 17 31.9** | **+0.4** |
| **M31M** | **Drury Creek, Y** baz=144 | **44.21** | **343** | P | **P** | **15 17 34.5** | **+0.1** |
| **SCHQ** | **Schefferville** comp=Z,202nm,21.1s,baz=227,slow=37 | **45.13** | **33** | LR | LR | 15 37 21.6 | |
| **M27K** | **Edge Creek, AK** baz=135 | **46.62** | **339** | P | **P** | **15 17 53.1** | **-0.4** |
| **DAWY** | **Dawson** baz=139 | **47.09** | **342** | P | **P** | **15 17 57.2** | **+0.1** |
| **L27K** | **Beaver Creek,** baz=135 | **47.10** | **340** | P | **P** | **15 17 57.4** | **+0.2** |
| **GLI** | **Glacier Island** baz=128 | **47.52** | **335** | P | **P** | **15 18 00.6** | **+0.2** |
| **EGAK** | **Eagle** baz=137 | **48.14** | **342** | P | **P** | **15 18 05.4** | **+0.3** |
| **PAX** | **Paxson** baz=131 | **48.25** | **338** | P | **P** | **15 18 06.1** | **-0.1** |
| **SCRK** | **Sand Creek** baz=133 | **48.43** | **340** | P | **P** | **15 18 07.8** | **+0.2** |
| **C36M** | **Paulatuk** baz=160 | **48.53** | **353** | P | **P** | **15 18 08.8** | **+0.7** |
| **RIDG** | **Independent Ri** baz=132 | **48.55** | **339** | P | **P** | **15 18 08.7** | **+0.3** |
| **WAT6** | **Susitna Watana** baz=128 | **48.81** | **337** | P | **P** | **15 18 09.8** | **-0.7** |
| **INK** | **Inuvik** comp=Z,4.1nm,0.9s,baz=143,slow=8.8,SNR=12 | **49.09** | **348** | P | **P** | **15 18 12.5** | **+0.1** |
| INK | comp=Z,79nm,18.1s,baz=165,slow=35 | | | LR | LR | 15 38 06.4 | |
| **INK** | **Inuvik** | **49.09** | **348** | P | **P** | **15 18 12.8** | **+0.4** |
| **INK** | **Inuvik** baz=148,SNR=5.9 | **49.09** | **348** | P | **P** | **15 18 12.7** | **+0.4** |
| **M22K** | **Willow** baz=125 | **49.22** | **335** | P | **P** | **15 18 13.1** | **-0.3** |
| **J25K** | **Salcha River,** baz=132 | **49.31** | **340** | P | **P** | **15 18 15.0** | **+0.8** |
| **FRB** | **Frobisher Bay** comp=Z,69nm,20.1s,baz=200,slow=38 | **49.50** | **22** | LR | LR | 15 41 14.2 | |
| **CUT** | **Chulitna** baz=125 | **49.65** | **336** | P | **P** | **15 18 16.7** | **0.0** |
| **SPCR** | **Spurr Chakacha** baz=122 | **49.75** | **334** | P | **P** | **15 18 17.9** | **+0.3** |
| **ILAR** | **Eielson Array** comp=Z,3.6nm,0.8s,baz=150,slow=6.9,SNR=26 | **49.91** | **339** | P | **P** | **15 18 19.4** | **+0.6** |
| ILAR | comp=Z,94nm,20.7s,baz=148,slow=37 | | | LR | LR | 15 40 23.2 | |
| **ILAR** | **Eielson Array** | **49.91** | **339** | P | **P** | **15 18 18.4** | **-0.3** |
| **MCK** | **McKinley** | **49.95** | **338** | P | **P** | **15 18 18.5** | **-0.6** |
| **O19K** | **Port Alsworth** baz=119 | **50.13** | **332** | P | **P** | **15 18 19.9** | **-0.5** |
| **TRF** | **Thorofare Moun** | **50.26** | **337** | P | **P** | **15 18 21.6** | **0.0** |
| **TRF** | **Thorofare Moun** baz=126,SNR=5.0 | **50.26** | **337** | P | **P** | **15 18 21.6** | **0.0** |
| **BWN** | **Browne** | **50.40** | **338** | P | **P** | **15 18 20.2** | **-2.2** |
| **N19K** | **Bonanza Creek** baz=119 | **50.50** | **333** | P | **P** | **15 18 23.3** | **-0.1** |
| **NEA2** | **Nenana** baz=128 | **50.52** | **338** | P | **P** | **15 18 22.9** | **-0.5** |
| **PPLA** | **Purkeypile** baz=123 | **50.66** | **336** | P | **P** | **15 18 24.3** | **-0.3** |
| **CAST** | **Castle Rocks** baz=124 | **50.91** | **336** | P | **P** | **15 18 25.7** | **-0.6** |
| **H24K** | **Noodor Dome** baz=130 | **50.91** | **340** | P | **P** | **15 18 25.3** | **-1.1** |
| **I23K** | **Minto Yukon-K** baz=128 | **50.96** | **339** | P | **P** | **15 18 26.7** | **0.0** |
| **A36M** | **Sachs Harbour** | **51.15** | **353** | P | **P** | **15 18 27.9** | **-0.1** |
| **A36M** | **Sachs Harbour** baz=160,SNR=9.0 | **51.15** | **353** | P | **P** | **15 18 28.1** | **+0.2** |
| **CHUM** | **Lake Minchumin** baz=124 | **51.25** | **337** | P | **P** | **15 18 28.6** | **-0.2** |
| **L19K** | **White Mountain** baz=120 | **51.34** | **334** | P | **P** | **15 18 29.2** | **-0.3** |
| **K20K** | **Telida** baz=122 | **51.63** | **336** | P | **P** | **15 18 31.5** | **-0.2** |
| **I21K** | **Tanana** baz=125 | **51.87** | **338** | P | **P** | **15 18 33.7** | **+0.2** |
| **J20K** | **Nowinta River** baz=122 | **52.09** | **336** | P | **P** | **15 18 34.7** | **-0.4** |
| **TTA** | **Tatalina** baz=119 | **52.17** | **335** | P | **P** | **15 18 35.7** | **-0.2** |
| **H21K** | **Melozitna Rive** | **52.42** | **338** | P | **P** | **15 18 36.6** | **-1.1** |
| **H21K** | **Melozitna Rive** baz=125 | **52.42** | **338** | P | **P** | **15 18 37.8** | **+0.2** |
| **COLD** | **Coldfoot** baz=128 | **52.52** | **341** | P | **P** | **15 18 38.3** | **0.0** |
| **IMAR** | **Indian Mountai** | **52.93** | **338** | P | **P** | **15 18 40.3** | **-1.0** |
| **TOLK** | **Toolik Lake Re** | **53.23** | **342** | P | **P** | **15 18 43.0** | **-0.5** |
| **TOLK** | **Toolik Lake Re** baz=130 | **53.23** | **342** | P | **P** | **15 18 43.4** | **-0.1** |
| **RES** | **Resolute Bay** comp=Z,121nm,19.4s,baz=231,slow=36 | **53.38** | **4** | LR | LR | 15 41 25.8 | |
| **PPT2** | **Papeete2** comp=Z,204nm,24.2s | **56.42** | **229** | *e*LR | LR | 15 35 29.6 | |
| **RDOG** | **Red Dog Mine** | **57.08** | **339** | P | **P** | **15 19 10.6** | **-0.7** |
| **SFJD** | **Kangerlussuaq** comp=Z,108nm,21.1s,baz=252,slow=36 | **57.59** | **23** | LR | LR | 15 44 16.1 | |
| **SIV** | **San Ignacio** comp=Z,902nm,20.0s,baz=256,slow=34 | **59.45** | **125** | LR | LR | 15 43 08.3 | |
| **TBI** | **Tubuai** comp=Z,178nm,28.8s | **60.30** | **224** | *e*LR | LR | 15 37 17.5 | |
| **BORG** | **Borgarnes** comp=Z,156nm,18.8s,baz=288,slow=36 | **69.14** | **27** | LR | LR | 15 50 39.7 | |
| **BDFB** | **Brasilia** comp=Z,287nm,19.8s,baz=284,slow=34 | **69.65** | **117** | LR | LR | 15 49 23.0 | |
| **JMIC** | **Jan Mayen** comp=Z,74nm,18.9s,baz=287,slow=36 | **72.65** | **20** | LR | LR | 15 53 24.7 | |
| **SPITS** | **Spitsbergen Ar** comp=Z,118nm,18.3s,baz=350,slow=37 | **75.35** | **10** | LR | LR | 15 55 30.2 | |
| **ARCES** | **ARCESS Array B** comp=Z,81nm,20.9s,baz=299,slow=36 | **83.09** | **15** | LR | LR | 15 59 12.1 | |
| **NB2** | **NORSAR Subarra** comp=Z,4.9nm,1.1s,baz=308,slow=5.1 | **84.19** | **25** | P | **P** | **15 21 57.6** | **+1.2** |
| **NOA** | **NORSAR Array B** comp=Z,1.5nm,0.9s,baz=305,slow=5.2,SNR=4.5 | **84.19** | **25** | P | **P** | **15 21 57.8** | **+1.4** |
| NOA | comp=Z,73nm,18.1s,baz=315,slow=36 | | | LR | LR | 15 59 44.9 | |
| **HFS** | **Hagfors** comp=Z,90nm,18.8s,baz=269,slow=36 | **85.71** | **25** | LR | LR | 16 00 49.9 | |
| **NRIK** | **Noril'sk** comp=Z,28nm,19.4s,baz=12,slow=38 | **88.42** | **355** | LR | LR | 16 05 19.7 | |
| **AKASG** | **Malin Array Be** comp=Z,66nm,18.2s,baz=348,slow=37 | **98.59** | **26** | LR | LR | 16 09 45.2 | |
| **ASAR** | **Alice Springs** comp=Z,0.4nm,1.0s,baz=64,slow=2.2,SNR=1.6 | **123.20** | **255** | PKP | **PKPdf** | **15 28 20.8** | **-1.8** |
| **PZH** | **PanZhiHua** | **123.95** | **327** | PKP | **PKiKP** | **15 28 29.5** | **+5.0** |

*NEIC **25** 15:12:27.2±2.3,31°.03S±0°.08×178°.8W±0°.2, h99km±10km, mb4.5/9, Error ellipse: s-maj=27.1km s-min=2.8km az=114.0*

*IDC **25** 15:12:33.6±7.5,31°.03S×179°.14W, h146km±57km, mb3.8/4, mb1 3.9/5, mb1mx3.4/28, mbtmp4.2/5, Error ellipse: s-maj=57.8km s-min=23.8km az=44.0*

**ISC 25 15:12:34.2±1.3,31°.11S±0°.09×179°.4W±0°.2, h150km, n46, σ35/57, mb4.2/8, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **6.73** | **196** | Pn | Pn | 15 14 02.6 | -7.9 |
| **MXZ** | **Matakaoa Point** | **6.73** | **196** | S | **Sn** | **15 15 27.9** | **+1.9** |
| **HAZ** | **Te Kaha** | **7.05** | **199** | P | **Pn** | **15 14 18.1** | **+3.4** |
| HAZ | | | | S | **Sn** | **15 15 37.2** | **+3.6** |
| **PKGZ** | **Pakihiroa** | **7.09** | **197** | P | **Pn** | **15 14 17.5** | **+2.0** |
| PKGZ | | | | S | **Sn** | **15 15 36.2** | **+1.3** |
| **PUZ** | **Puketiti** | **7.22** | **195** | P | **Pn** | **15 14 18.9** | **+1.7** |
| PUZ | | | | S | **Sn** | **15 15 38.0** | **0.0** |
| **RUGZ** | **Raukumara Rang** | **7.27** | **199** | P | **Pn** | **15 14 20.7** | **+2.8** |
| RUGZ | | | | S | **Sn** | **15 15 35.8** | **-3.4** |
| **TWGZ** | **Tauwhareparae** | **7.39** | **197** | P | **Pn** | **15 14 21.3** | **+1.9** |
| TWGZ | | | | S | **Sn** | **15 15 42.3** | **+0.3** |
| **MWZ** | **Matawai** | **7.66** | **199** | P | **Pn** | **15 14 24.6** | **+1.6** |
| MWZ | | | | S | **Sn** | **15 15 49.7** | **+1.3** |
| **TKGZ** | **Te Karaka** | **7.67** | **197** | P | **Pn** | **15 14 26.0** | **+3.0** |
| TKGZ | | | | S | **Sn** | **15 15 49.7** | **+1.1** |
| **URZ** | **Urewera** 0.5nm,0.3s,baz=269,slow=4.6,SNR=9.6 | **7.71** | **201** | P | **Pn** | **15 14 26.7** | **+3.1** |
| URZ | | | | S | **Sn** | **15 15 49.1** | **-0.4** |
| **URZ** | **Urewera** 2.2nm,0.3s,baz=183,slow=19,SNR=14 | **7.71** | **201** | | Pn | 15 14 18.0 | -5.6 |
| **URZ** | **Urewera** | **7.71** | **201** | P | **Pn** | **15 14 26.8** | **+3.1** |
| URZ | | | | S | **Sn** | **15 15 50.7** | **+1.1** |
| **MUGZ** | **Murupara** | **8.02** | **202** | P | **Pn** | **15 14 30.5** | **+2.8** |
| MUGZ | | | | S | **Sn** | **15 15 56.5** | **-0.6** |
| **RTZ** | **Ruatahuna** | **8.08** | **201** | P | **Pn** | **15 14 28.6** | **0.0** |
| RTZ | | | | S | **Sn** | **15 15 56.1** | **-2.5** |
| **MTHZ** | **Maungataniwha** | **8.34** | **201** | P | **Pn** | **15 14 33.7** | **+1.7** |
| MTHZ | | | | S | **Sn** | **15 16 04.7** | **-0.1** |
| **ARHZ** | **Aropaoanui** | **8.67** | **199** | P | **Pn** | **15 14 37.5** | **+1.1** |
| ARHZ | | | | S | **Sn** | **15 16 11.7** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **8.73** | **202** | Pn | **Pn** | **15 14 32.8** | **-4.5** |
| **HIZ** | **Hauiti** | **8.79** | **211** | Pn | **Pn** | **15 14 37.1** | **-0.9** |
| **HIZ** | **Hauiti** | **8.79** | **211** | P | Pn | 15 14 47.6 | +10 |
| **OTVZ** | **Oturere** | **9.02** | **206** | P | **Pn** | **15 14 43.8** | **+2.6** |
| **SNVZ** | **South Ngauruho** | **9.05** | **206** | P | **Pn** | **15 14 44.9** | **+3.4** |
| **TSZ** | **Takapari Road** | **9.71** | **202** | P | **Pn** | **15 14 51.5** | **+1.1** |
| TSZ | | | | S | **Sn** | **15 16 31.2** | **-6.7** |
| **BFZ** | **Birch Farm** | **10.20** | **199** | Pn | **Pn** | **15 14 53.9** | **-2.8** |
| **MSWZ** | **Moikau Station** | **11.17** | **201** | Pn | **Pn** | **15 15 08.4** | **-1.1** |
| **BHW** | **Baring Head** | **11.29** | **203** | Pn | **Pn** | **15 15 09.9** | **-1.1** |
| **PLWZ** | **Palliser** | **11.31** | **201** | Pn | **Pn** | **15 15 06.9** | **-4.5** |
| **TUWZ** | **Tuamarina** | **11.63** | **206** | Pn | **Pn** | **15 15 11.3** | **-4.3** |
| **NNZ** | **Nelson** | **11.67** | **208** | Pn | **Pn** | **15 15 15.4** | **-0.7** |
| **QRZ** | **Quartz Range** | **11.72** | **212** | Pn | **Pn** | **15 15 16.3** | **-0.3** |
| **THZ** | **Tophouse** | **12.32** | **208** | Pn | **Pn** | **15 15 23.9** | **-0.7** |
| **KHZ** | **Kahutara** | **12.64** | **205** | Pn | **Pn** | **15 15 24.4** | **-4.2** |
| **MQZ** | **McQueen's Vall** | **14.08** | **205** | Pn | **Pn** | **15 15 43.5** | **-3.4** |
| **STKA** | **Stephens Creek** 5.0nm,1.0s,baz=106,slow=12,SNR=7.1 | **33.20** | **258** | P | **P** | **15 18 58.7** | **+2.0** |
| **AS31** | **Alice Springs** | **41.92** | **268** | P | **P** | **15 20 10.4** | **+0.3** |
| **ASAR** | **Alice Springs** 1.0nm,0.4s,baz=105,slow=7.5,SNR=33 | **41.92** | **268** | P | **P** | **15 20 11.2** | **+1.1** |
| **ASAR** | **Alice Springs** | **41.92** | **268** | P | **P** | **15 20 10.7** | **+0.5** |
| **WR0** | **Warramunga Arr** | **42.80** | **274** | P | **P** | **15 20 17.9** | **+0.7** |
| WR0 | comp=Z,6.2nm,1.4s | | | IAmb | IAmb | 15 20 32.7 | |
| **WB2** | **Warramunga Arr** | **42.97** | **274** | P | **P** | **15 20 19.4** | **+0.8** |
| WB2 | comp=Z,14nm,1.6s | | | IAmb | IAmb | 15 20 32.3 | |
| **WRAB** | **Tennant Creek** | **42.97** | **274** | P | **P** | **15 20 19.4** | **+0.8** |
| WRAB | comp=Z,3.7nm,0.3s | | | IAmb | IAmb | 15 20 19.9 | |
| **WRA** | **Warramunga Arr** comp=Z,2.2nm,0.3s,baz=111,slow=8.1,SNR=85 | **42.98** | **274** | P | **P** | **15 20 19.8** | **+1.0** |
| **WB0** | **Warramunga Arr** | **43.00** | **274** | P | **P** | **15 20 19.5** | **+0.6** |
| WB0 | comp=Z,9.3nm,1.6s | | | IAmb | IAmb | 15 20 30.8 | |
| **KNRA** | **Kununurra** | **49.61** | **276** | P | **P** | **15 21 11.5** | **+1.0** |
| **QSPA** | **South Pole Qui** comp=Z,2.2nm,0.8s,baz=63,slow=2.2,SNR=12 | **59.01** | **180** | P | **P** | **15 22 18.5** | **+0.7** |
| **QSPA** | **South Pole Qui** | **59.01** | **180** | P | **P** | **15 22 17.7** | **-0.2** |
| QSPA | comp=Z,9.9nm,1.5s | | | IAmb | IAmb | 15 22 42.8 | |
| **SNAA** | **Sanae** | **77.48** | **179** | P | **P** | **15 24 11.9** | **-0.7** |
| **FINES** | **FINESS Array B** comp=Z,1.6nm,0.8s,baz=113,slow=3.6,SNR=4.5 | **145.39** | **339** | PKPbc | **PKPab** | **15 31 51.4** | **-2.7** |

**IDC 25 15:18:35.7±9.3, 18°.74N×145°.48E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/28, mbtmp3.4/3, Error ellipse: s-maj=341.6km s-min=33.6km az=77.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.8nm,0.8s,baz=19,slow=9.4,SNR=8.1 | **39.97** | **196** | P | P | 15 26 12.3 | +0.1 |
| **ASAR** | **Alice Springs** 0.5nm,1.1s,baz=15,slow=7.3,SNR=6.3 | **43.64** | **195** | P | P | 15 26 41.9 | -0.3 |
| **MKAR** | **Makanchi Array** 0.5nm,1.1s,baz=104,slow=6.1,SNR=3.6 | **58.28** | **314** | P | P | 15 28 32.2 | -0.1 |

**IDC 25 15:20:30.5±450.0, 59°.46N×30°.56E, h0km, Error ellipse: s-maj=147.9km s-min=66.4km az=145.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** baz=310,slow=312,SNR=0.8 | **4.47** | **125** | *i* | | 15 48 10.0 | |
| **I37NO** | **I37NO** baz=146,slow=330,SNR=0.5 | **10.93** | **337** | *i* | | 16 30 40.0 | |
| **I31KZ** | **AKTYUBINSK INF** baz=314,slow=329 | **18.08** | **108** | *i* | | 17 13 25.0 | |

*EAF **25** 15:32:29.6±2.1,26°.40S×29°.38E, h10km, MD3.5*

**BUL 25 15:32:29.8±1.3, 26°.42S×29°.36E, h10km, MD3.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNG** | **Changalane** | **2.54** | **88** | *i* P | Pn | 15 33 11.4 | +0.3 |
| CNG | | | | *i* S | Sn | 15 33 40.2 | -2.0 |
| **CNG** | **Changalane** | **2.54** | **88** | *i* P | Pn | 15 33 11.4 | +0.3 |
| CNG | | | | *i* S | Sn | 15 33 40.2 | -2.0 |
| **MOPA** | **Mopani** | **3.43** | **33** | *i* P | Pn | 15 33 20.9 | -2.5 |
| MOPA | | | | *i* S | Sn | 15 33 58.9 | -5.3 |
| **MOPA** | **Mopani** | **3.43** | **33** | *i* P | Pn | 15 33 20.9 | -2.5 |
| MOPA | | | | *i* S | Sn | 15 33 58.9 | -5.3 |
| **LBTB** | **Lobatse** | **3.67** | **292** | *i* P | Pn | 15 33 24.6 | -2.1 |
| LBTB | | | | *i* S | Sn | 15 34 08.3 | -1.8 |
| **LBTB** | **Lobatse** | **3.67** | **292** | *i* P | Pn | 15 33 24.6 | -2.1 |
| LBTB | | | | *i* S | Sn | 15 34 08.3 | -1.8 |
| **MSNA** | **Messina** | **4.10** | **9** | *i* P | Pn | 15 33 32.5 | -0.1 |
| MSNA | | | | *i* S | Sn | 15 34 17.0 | -3.7 |
| **MSNA** | **Messina** | **4.10** | **9** | *i* P | Pn | 15 33 32.5 | -0.1 |
| MSNA | | | | *i* S | Sn | 15 34 17.0 | -3.7 |
| **BOSA** | **Boshof** | **4.25** | **238** | *i* P | Pn | 15 33 34.6 | -0.1 |
| BOSA | | | | *i* S | Sn | 15 34 21.2 | -3.3 |
| **BOSA** | **Boshof** | **4.25** | **238** | *i* P | Pn | 15 33 34.6 | -0.1 |
| BOSA | | | | *i* S | Sn | 15 34 21.2 | -3.3 |
| **MATP** | **Matopo** | **6.02** | **352** | *i* P | Pn | 15 33 58.8 | -0.3 |
| MATP | | | | *i* S | Sn | 15 35 02.7 | -5.4 |
| **MATP** | **Matopo** | **6.02** | **352** | *i* P | Pn | 15 33 58.8 | -0.3 |
| MATP | | | | *i* S | Sn | 15 35 02.7 | -5.4 |
| **BLWY** | **Bulawayo** | **6.29** | **354** | *i* P | Pn | 15 34 02.3 | -0.5 |
| BLWY | | | | *i* S | Sn | 15 35 09.0 | -5.8 |
| **BLWY** | **Bulawayo** | **6.29** | **354** | *i* P | Pn | 15 34 02.3 | -0.5 |
| BLWY | | | | *i* S | Sn | 15 35 09.0 | -5.8 |

*MOS **25** 15:35:06.2±1.2,23°.09S×69°.01W, h83km, mb5.4/20, Error ellipse: s-maj=12.0km s-min=7.0km az=98.1*

*VAO **25** 15:35:06.9±0.3,23°.03S×68°.91W, h84km, mb5.3*

*NEIC **25** 15:35:06.7±2.5,23°.11S±0°.05×68°.97W±0°.05, h85km±2km, mb5.4/447, Mwr5.2/42, Mww5.2, Mwr5.3(GUC), Error ellipse: s-maj=7.5km s-min=6.4km az=118.0*

*NEIC **25** 15:35:06.8,23°.12S×68°.93W, h96km, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-7.04; $M_{\theta\theta}$0.31; $M_{\phi\phi}$6.73; $M_{r\theta}$-2.62; $M_{r\phi}$-0.82; $M_{\theta\phi}$-3.83; Fault plane solution: $M_o$8.35000×$10^{16}$ NP1:$\phi_s$157.16000°, δ33.85000°, λ-120.46000°. NP2:$\phi_s$12.46000°, δ61.31000°, λ-71.22000°. Principal axes: T 7.7249, Plg14.0000°, Azm89.0000°; N 1.1269, Plg16.0000°, Azm183.0000°; P -8.8518, Plg68.0000°, Azm320.0000°;*

*SJA **25** 15:35:06.3±0.7,23°.06S×69°.03W, h95km±3km, ML5.3, MW5.1*

*GUC **25** 15:35:07.6±0.7,23°.06S×69°.05W, h95km±3km, ML5.3, MW5.3*

*IDC **25** 15:35:07.8±0.4,22°.92S×68°.88W, h88km±2km, mb4.9/17, mb1 4.9/23, mb1mx4.9/25, mbtmp5.1/23, MS4.0/38, Ms1 4.0/38, ms1mx3.9/56, Error ellipse: s-maj=12.9km s-min=9.2km az=73.0*

*BJI **25** 15:35:08.0±0.0,23°.10S×69°.00W, h87km, mB5.2/14, Ms5.3/8, Ms7.5 0/9*

*GCMT **25** 15:35:10.7±0.2,23°.05S±0°.01×69°.17W±0°.01, h108km±1km, MW5.2/122, Moment Tensor Solution. s80,c103; s122,c180; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-5.37±.13; $M_{\theta\theta}$-0.75±.15; $M_{\phi\phi}$6.12±.18; $M_{r\theta}$-2.20±.09; $M_{\theta\phi}$-0.20±.15; $M_{r\phi}$-3.10±.13; Best double couple: $M_o$6.92200×$10^{16}$ NP1:$\phi_s$159.00000°, δ34.00000°, λ-124.00000°. NP2:$\phi_s$18.00000°, δ62.00000°, λ-69.00000°. Principal axes: T 6.9190, Plg15.0000°, Azm93.0000°; N 0.0040, Plg18.0000°, Azm188.0000°; P -6.9260, Plg66.0000°, Azm326.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **25** 15:35:10,23°.12S×68°.74W, h70km, Moment Tensor Solution. Duration: 8$^{s}$0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-8.56; $M_{\theta\theta}$-0.37; $M_{\phi\phi}$8.92; $M_{r\theta}$-1.62; $M_{\theta\phi}$-0.20; $M_{\phi r}$-2.10; Fault plane solution: $M_o$9.14000×$10^{16}$ NP1: $\phi_s$168.00000°, δ39.00000°, λ-106.00000°. NP2:$\phi_s$9.00000°, δ53.00000°, λ-76.00000°. Principal axes: T 9.1706, Plg7.0000°, Azm90.0000°; N -0.0608, Plg11.0000°, Azm181.0000°; P -9.1098, Plg77.0000°, Azm328.0000°;*

**ISC 25 15:35:07.0±0.2, 23°.07S±0°.03×69°.02W±0°.04, h87km±1km, h87km:pP-P, n927, σ1$^{s}$38/903, mb5.4/230, 19C-14D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB15** | **IPOC Station P** | **0.44** | **251** | | **Pn** | **15 35 21.4** | **+0.1** |
| PB15 | | | | Sn | **Sn** | **15 35 33.0** | **+1.2** |
| **PB15** | **IPOC Station P** | **0.44** | **251** | ⇓*i*P | **Pn** | **15 35 22.4** | **+1.2** |
| PB15 | | | | *i

**PB04 IPOC Station P** 1.27 305 ⇑ *iP* Pn 15 35 30.4 +0.4
PB04 *i* S Sn **15 35 48.1 +0.9**
PB04 IAML 15 35 50.0
comp=N,76µm,0.4s
**PB04 IPOC Station P** 1.27 305 *eP* Pn **15 35 30.6 +0.6**
PB04 *e*S Sn **15 35 48.7 +1.4**
PB04 IAML 15 35 53.5
comp=Z,67µm,0.9s
**PB09 IPOC Station P** 1.28 351 Pn **15 35 31.1 +1.0**
PB09 Sn **15 35 48.6 +1.2**
**PB09 IPOC Station P** 1.28 351 ⇑ *iP* Pn **15 35 31.5 +1.4**
PB09 *i* S Sn **15 35 48.9 +1.5**
**PB09 IPOC Station P** 1.28 351 *eP* Pn **15 35 31.6 +1.5**
PB09 *e*S Sn **15 35 49.2 +1.8**
PB09 IAML 15 35 58.2
comp=Z,19µm,1.2s
**PB10 IPOC Station P** 1.48 252 Pn **15 35 32.8 +0.4**
**PB10 IPOC Station P** 1.48 252 ⇑ *iP* Pn **15 35 32.9 +0.6**
PB10 *i* S Sn **15 35 52.1 +0.5**
PB10 IAML 15 35 57.8
comp=E,40µm,0.5s
**PB10 IPOC Station P** 1.48 252 *eP* Pn **15 35 33.0 +0.6**
PB10 *e*S Sn **15 35 52.9 +1.3**
PB10 IAML 15 35 59.2
comp=Z,20µm,0.6s
**PB07 IPOC Station P** 1.56 329 Pn **15 35 33.4 -0.1**
**PB07 IPOC Station P** 1.56 329 ⇓ *iP* Pn **15 35 34.3 +0.7**
PB07 *i* S Sn **15 35 54.2 +0.6**
PB07 IAML 15 35 56.5
comp=N,52µm,0.5s
**PB07 IPOC Station P** 1.56 329 *eP* Pn **15 35 34.3 +0.7**
PB07 *e*S Sn **15 35 54.7 +1.1**
PB07 IAML 15 35 56.1
comp=Z,45µm,1.1s
**PB02 IPOC Station P** 1.92 335 Pn **15 35 38.0 -0.1**
**PB02 IPOC Station P** 1.92 335 ⇓ *iP* Pn **15 35 38.7 +0.5**
PB02 *i* S Sn **15 36 02.8 +0.8**
PB02 IAML 15 36 10.2
comp=E,36µm,0.5s
**PB02 IPOC Station P** 1.92 335 *eP* Pn **15 35 38.8 +0.5**
PB02 *e*S Sn **15 36 03.4 +1.5**
PB02 IAML 15 36 05.1
comp=Z,29µm,0.4s
**PB14 IPOC Station P** 2.00 219 Pn Pn **15 35 39.1 -0.4**
**PB14 IPOC Station P** 2.00 219 ⇑ *iP* Pn **15 35 39.9 +0.4**
PB14 *i* S Sn **15 36 01.5 -2.7**
PB14 IAML 15 36 13.2
comp=E,32µm,0.2s
**PB14 IPOC Station P** 2.00 219 *eP* Pn **15 35 40.6 +1.1**
PB14 *e*S Sn **15 36 05.4 +1.2**
PB14 IAML 15 36 13.1
comp=Z,62µm,0.6s
**PB01 IPOC Station P** 2.06 348 Pn **15 35 40.1 +0.1**
**PB01 IPOC Station P** 2.06 348 *eP* Pn **15 35 40.8 +0.7**
PB01 *e*S Sn **15 36 05.7 +0.6**
PB01 IAML 15 36 15.0
comp=Z,11µm,0.3s
**PATCX Punta Patache** 2.47 335 Pn **15 35 44.9 -0.6**
**PATCX Punta Patache** 2.47 335 ⇓ *iP* Pn **15 35 44.4 -1.1**
PATCX IAML 15 36 24.5
comp=N,18µm,0.5s
**TA01 Diego Aracena** 2.71 336 Pn **15 35 47.5 -1.1**
**TA01 Diego Aracena** 2.71 336 *eP* Pn **15 35 47.7 -0.9**
**TA01 Diego Aracena** 2.71 336 *eP* Pn **15 35 47.9 -0.8**
TA01 IAML 15 36 27.1
comp=Z,9µm,1.2s
**HMBC Humberstone** 2.89 344 *eP* Pn **15 35 50.3 -0.9**
**PB08 IPOC Station P** 2.91 357 Pn **15 35 51.8 +0.1**
**PB08 IPOC Station P** 2.91 357 ⇓ *iP* Pn **15 35 52.1 +0.4**
**PB08 IPOC Station P** 2.91 357 *eP* Pn **15 35 52.4 +0.6**
PB08 *e*S Sn 15 36 36.6 +11
PB08 IAML 15 36 57.9
comp=Z,5µm,0.8s
**TA02 Huaiquique** 2.97 339 Pn **15 35 51.3 -0.8**
**TA02 Huaiquique** 2.97 339 *eP* Pn **15 35 54.0 +1.9**
TA02 IAML 15 36 36.7
comp=Z,10µm,0.9s
**PB11 IPOC Station P** 3.34 350 Pn Pn **15 35 56.2 -1.1**
**PB11 IPOC Station P** 3.34 350 ⇓ *iP* Pn **15 35 56.3 -1.0**
**PB11 IPOC Station P** 3.34 350 *eP* Pn **15 35 56.7 -0.6**
PB11 *e*S Sn **15 36 40.4 +4.3**
PB11 IAML 15 37 02.8
comp=Z,4µm,0.4s
**GO01 Chusmiza** 3.38 357 Pn **15 35 57.8 -0.4**
**SLA San Lorenzo** 3.61 118 *eP* Pn **15 36 04.8 +3.8**
**AC02 Maricunga** 3.75 182 Pn Pn **15 36 04.7 +1.6**
**AC06 Mina Casimiro** 4.44 196 Pn Pn **15 36 10.7 -1.3**
**PB12 IPOC Station P** 4.60 344 Pn Pn **15 36 12.1 -2.2**
**PB12 IPOC Station P** 4.60 344 *eP* Pn 15 36 04.4 -10
PB12 *e*S Sn **15 37 04.9 -1.6**
PB12 IAML 15 37 21.3
comp=Z,3µm,0.6s
**GO03 Copiap** 4.64 193 Pn Pn **15 36 13.7 -1.1**
**PB16 IPOC Station P** 4.73 354 Pn **15 36 16.3 -0.2**
**PB16 IPOC Station P** 4.73 354 *eP* Pn **15 36 17.0 +0.5**
**AP01 Chacalluta** 4.83 345 Pn Pn **15 36 14.4 -2.9**
**AHML Horco Molle** 4.99 139 *i* P Pn **15 36 22.4 +2.9**
**AC04 Llanos de Chal** 5.44 200 Pn Pn **15 36 22.8 -2.8**
**LCO Las Campanas** 6.11 194 P Pn **15 36 32.4 -2.6**
**LCO Las Campanas** 6.11 194 Pn Pn **15 36 32.4 -2.6**
**LPAZ La Paz** 6.79 7 P Pn **15 36 45.1 +0.4**
comp=Z,7.9nm,0.3s,baz=176,slow=3.7,SNR=102
LPAZ LR LR 15 39 29.5
comp=Z,1µm,19.6s,baz=186,slow=39
**LPAZ La Paz** 6.79 7 *eP* Pn **15 36 44.8 +0.1**
**LPAZ La Paz** 6.79 7 Pn **15 36 44.8 +0.1**
**CO05 La Serena** 7.11 196 Pn **15 36 44.7 -3.6**
**GO04 Tololo Observa** 7.25 192 Pn **15 36 47.9 -2.6**
**CO03 El Pedregal** 7.88 191 Pn **15 36 56.3 -2.7**
**CO06 Fray Jorge** 7.93 197 Pn **15 36 55.4 -4.1**
**CO02 Combarbal** 8.29 192 Pn **15 37 00.7 -3.9**
**ZON Zonda** 8.45 178 P Pn **15 37 05.1 -1.6**
**ZON Zonda** 8.45 178 Pn Pn **15 37 05.1 -1.6**
**VA06 Catapilco** 9.67 192 Pn **15 37 19.3 -3.9**
**VA03 San Esteban** 9.76 188 Pn **15 37 21.2 -3.3**
**ROC1 El Roble** 10.03 190 Pn Pn **15 37 24.4 -4.0**
**VA01 Torpederas** 10.19 193 Pn Pn **15 37 26.5 -3.7**
**SIV San Ignacio** 10.28 48 P Pn **15 37 29.9 -1.8**
comp=Z,23nm,0.3s,baz=245,slow=11,SNR=332
**MT05 Renca** 10.40 188 Pn Pn **15 37 30.7 -2.5**
**MT03 Universidad Ad** 10.47 187 Pn Pn **15 37 31.4 -2.9**
**LMEL Las Melosas** 10.79 185 Pn **15 37 36.3 -2.4**
**VA05 Santo Domingo** 10.80 192 Pn Pn **15 37 35.1 -3.5**
**MT09 Talagante** 10.81 189 Pn 15 37 34.0 -4.9
**MT01 Popeta** 10.94 190 Pn 15 37 34.3 -6.2
**BO04 La Punta** 10.97 187 Pn 15 37 35.8 -5.2
**CPUP Villa Florida** 11.11 109 P Pn **15 37 42.3 -0.6**
comp=Z,4.1nm,0.3s,baz=290,slow=12,SNR=53
CPUP LR LR 15 42 30.1
comp=Z,2µm,20.6s,baz=289,slow=40
**CPUP Villa Florida** 11.11 109 Pn **15 37 41.5 -1.4**
**CPUP Villa Florida** 11.11 109 *eP* Pn **15 37 41.9 -1.0**
**BO01 Tunca** 11.43 189 Pn 15 37 41.5 -5.7
**BO02 Sierra Bellavi** 11.79 187 Pn **15 37 48.9 -3.2**
**PTLB Pontes e Lacer** 12.02 53 *eP* Pn **15 37 52.8 -2.4**
**GO05 Huala** 12.17 191 Pn Pn **15 37 58.7 +1.5**
**AQDB Aquidauana** 12.64 81 Pn Pn **15 38 01.4 -2.2**
**AQDB Aquidauana** 12.64 81 *eP* Pn **15 38 02.2 -1.4**
**ML02 Panimavida** 12.82 189 Pn **15 38 04.3 -1.6**
**ITQB Itaqui** 12.91 123 Pn **15 38 03.4 -3.7**
**ITQB Itaqui** 12.91 123 *eP* Pn **15 38 05.5 -1.6**
**VILB Vilhena** 13.09 41 *eP* Pn **15 38 08.5 -1.1**
**NNA Nana** 13.30 325 P Pn **15 38 14.3 +1.9**
comp=Z,1.0nm,0.3s,baz=210,slow=20,SNR=1.8
**NNA Nana** 13.30 325 *ceP* **P** **15 38 16.5 -2.4**
NNA pmax pmax
comp=Z,75nm,1.0s
**NNA Nana** 13.30 325 Pn **15 38 11.6 -0.8**
**BI05 Punta Hualpn** 14.10 194 Pn Pn **15 38 18.4 -4.3**
**PP1B Ponte de Pedra** 14.33 70 *eP* Pn **15 38 25.0 -0.8**
**SALV Santo Antonio** 14.44 63 *eP* Pn **15 38 25.1 -2.1**
**PTGB Pitanga** 15.59 99 *eP* Pn **15 38 42.3 +0.3**
**CZSB Cruzeiro do Su** 15.66 346 *eP* Pn **15 38 42.6 -0.1**
**CPSB Cacapava Do Su** 15.71 121 *eP* Pn **15 38 42.1 -1.2**
**ITAB Concordia** 15.84 109 P Pn **15 38 43.2 -1.7**
**ITAB Concordia** 15.84 109 *eP* Pn **15 38 44.4 -0.6**
**LC01 Cunco** 15.97 188 Pn Pn **15 38 45.0 -1.5**
**PLTB Pedras Altas** 16.18 126 P Pn **15 38 46.2 -3.0**
**PLTB Pedras Altas** 16.18 126 *eP* Pn **15 38 47.5 -1.8**
**PDRB Porto dos Gac** 16.34 48 *eP* Pn **15 38 50.0 -1.3**
**PCMB Pacaembu** 16.49 88 *eP* Pn **15 38 52.5 -0.6**
**LR03 Panguipulli** 16.75 189 Pn **15 38 55.3 -0.9**
LR03 IAmb IAmb 15 39 35.5
comp=Z,95nm,0.3s
**LR04 Corral** 17.17 192 P Pn **15 38 59.8 -1.6**
**CLDB Colider** 17.50 48 *eP* P **15 39 04.7 -0.7**
**PLCA Paso Flores** 17.66 184 P Pn **15 39 08.5 +1.1**
comp=Z,1.0nm,0.3s,baz=0.8,slow=12,SNR=27
PLCA LR LR 15 47 18.5
comp=Z,398nm,20.3s,baz=1.5,slow=41
**PLCA Paso Flores** 17.66 184 P P **15 39 05.3 -1.8**
**PLCA Paso Flores** 17.66 184 *eP* P **15 39 06.8 -0.3**
**ITRB Iturama** 17.69 83 *eP* P **15 39 07.3 -0.3**
**ARAG Araguaiana, MT** 17.80 69 *eP* P **15 39 07.9 -0.8**
**FRTB Fartura** 17.89 95 *eP* P **15 39 09.6 -0.2**
**LL04 Puerto Octay** 18.02 188 P P **15 39 08.7 -2.2**
**ATAH Atahualpa** 18.23 329 P Pn **15 39 15.5 +0.7**
comp=Z,0.4nm,0.3s,baz=151,slow=8.6,SNR=12
**LL03 Petrohue** 18.24 188 P P **15 39 11.6 -1.8**
LL03 IAmb IAmb 15 40 01.2
comp=Z,264nm,0.9s
**TIJ01 Guaruva-PR** 18.39 101 *eP* P **15 39 15.4 0.0**
**LL05 Los Muermos** 18.66 191 P P **15 39 16.0 -2.0**
LL05 IAmb IAmb 15 39 25.3
comp=Z,191nm,0.8s
**TER01 Tubaro-SC** 18.71 111 *eP* P **15 39 18.1 -0.6**
**TBTG Tabatinga, AM** 18.79 357 *eP* P **15 39 18.4 -1.2**
**TBTG Tabatinga, AM** 18.79 357 *eP* Pn **15 39 20.7 -0.4**
**BB19B Bebedouro** 19.09 88 *eP* P **15 39 21.9 -1.1**
**LL01 San Ignacio de** 19.47 188 P P **15 39 24.7 -2.0**
**RCLB Rio Claro- Sao** 19.83 92 *eP* P **15 39 29.8 -1.2**
**PET01 Itanhaem-SP** 19.95 98 *eP* P **15 39 31.4 -0.8**
**LL07 Hotel Espejo d** 20.06 190 P P **15 39 31.9 -1.3**
**IPMB Ipameri, GO** 20.12 79 *eP* P **15 39 32.5 -1.7**
**SNDB Serra Nova Dou** 20.16 60 *eP* P **15 39 32.7 -1.8**
**LL02 Futaleuf** 20.21 186 P P **15 39 34.4 -0.4**
**VAO Valinhos** 20.30 94 *eP* P **15 39 34.6 -1.4**
**NPGB Novo Progresso** 20.65 42 *eP* P **15 39 37.4 -2.5**
**BDFB Brasilia** 21.13 73 P P **15 39 44.3 -0.8**
comp=Z,160nm,0.9s,baz=248,slow=12,SNR=97
**BDFB Brasília** 21.13 73 P P **15 39 43.0 -2.1**
BDFB IAmb IAmb 15 39 46.7
comp=Z,231nm,1.0s
**MACA Manacapuru-AM** 21.37 23 *eP* P **15 39 46.6 -0.9**
**PARB Paraibuna** 21.50 95 *eP* P **15 39 47.5 -1.5**
**PEXB Peixe** 22.52 65 *eP* P **15 39 57.5 -2.3**
**BSCB Bom Sucesso** 22.56 89 *eP* P **15 39 57.7 -2.6**
**COYC Coyhaique** 22.59 186 P P **15 39 59.3 -0.9**
**ITTB Itaituba** 22.59 37 *eP* P **15 39 58.7 -1.9**
**MAN01 Angra dos Reis** 23.06 94 *eP* P **15 40 03.7 -1.6**
**VAS01 Vassouras-RJ** 23.61 93 *eP* P **15 40 08.8 -1.4**
**PTLC Puerto Leguiza** 23.77 346 *eP* P **15 40 09.8 -2.0**
**PTGA Pitinga** 23.88 23 P P **15 40 11.6 -1.1**
comp=Z,61nm,0.8s,baz=204,slow=11,SNR=72
**DIAM Diamantina, MG** 24.17 83 *eP* P **15 40 13.8 -1.7**
**DUB01 Friburgo-RJ** 24.61 93 *eP* P **15 40 17.8 -1.6**
**JANB Januaria** 24.65 76 *eP* P **15 40 17.6 -2.2**
**SMTB Santa Maria do** 24.93 59 *eP* P **15 40 20.9 -1.4**
**PRPB Parauapebas** 24.99 51 *eP* P **15 40 21.4 -1.4**
**TULM Tulcn-Chalpat** 25.13 339 *eP* P **15 40 25.0 +0.4**
**SDBA SAO DESIDERIO** 25.25 69 *eP* P **15 40 23.4 -1.9**
**CAM01 Campos-RJ** 25.31 93 *eP* P **15 40 23.5 -2.1**
**FLOC Florencia** 25.34 344 *eP* P **15 40 26.9 +0.9**
**GCUF Volcan Galeras** 25.47 340 *eP* P **15 40 29.8 +2.1**
**MALB Monte Alegre** 25.49 36 *eP* P **15 40 26.3 -1.0**
**MACC Macarena, Meta** 25.50 349 *eP* P **15 40 25.0 -2.4**
**GO08 Villa O'Higgin** 25.50 185 P P **15 40 25.0 -2.1**
**GARC Garzon, Huila** 25.88 345 *eP* P **15 40 31.7 +0.5**
**SOTA Rioblanco** 26.12 343 *eP* P **15 40 34.5 +1.0**
**BBAC Balboa, Cauca** 26.20 341 *eP* P **15 40 35.5 +1.6**
**PCON Cinco Dias** 26.25 343 *eP* P **15 40 37.4 +2.6**
**BETC Betania** 26.35 345 *eP* P **15 40 35.5 +0.4**
**ALF01 Guarapari-ES** 26.36 90 *eP* P **15 40 35.8 +0.6**
**POPC Popayan, Colom** 26.52 343 *eP* P **15 40 37.4 +0.5**
**BOAV Boa Vista** 26.63 19 *eP* P **15 40 37.3 -0.3**
**RIB01 Linhares ES** 26.93 87 *eP* P **15 40 40.7 +0.4**
**PTGC Puerto Gaitan,** 27.27 353 *eP* P **15 40 42.1 -1.2**
**VILC Villavicencio,** 27.40 350 *eP* P **15 40 45.0 +0.4**
**ORTC Ortega, Tolima** 27.49 346 *eP* P **15 40 46.4 +1.0**
**YOTC Yotoco, Valle** 27.82 344 *eP* P **15 40 47.9 -0.5**
**CHIC Chingaza** 27.91 350 *eP* P **15 40 48.8 -0.7**
**MCPB Macapa, AP** 27.95 38 *eP* P **15 40 49.1 -0.3**
**ANIL Santa Ana** 28.09 346 *eP* P **15 40 50.7 -0.3**
**GUA01 Guaratinga, BA** 28.19 82 *eP* P **15 40 50.7 -0.9**
**ROSC El Rosal** 28.22 349 P P **15 40 52.1 -0.1**
comp=Z,14nm,0.4s,baz=146,slow=8.1,SNR=6.7
ROSC LR LR 15 52 41.9
comp=Z,285nm,18.5s,baz=188,slow=38
**ROSC El Rosal** 28.22 349 P P **15 40 49.3 -2.9**
ROSC IAmb IAmb 15 41 28.5
comp=Z,132nm,1.4s
**ROSC El Rosal** 28.22 349 *eP* P **15 40 53.6 +1.4**
**MG05 Puerto Natales** 28.69 185 P P **15 40 55.5 -0.1**
**PLMC San Jos del P** 28.69 345 *eP* P **15 40 56.4 +0.3**
**GUY2C Guyana, Caldas** 28.79 347 *eP* P **15 40 58.1 +0.7**
**CMC01 Camacan, BA** 28.85 80 *eP* P **15 40 57.6 +0.1**
**TMAB Tom-Au,PA,Br** 28.89 48 *eP* P **15 40 58.2 +0.4**
**SPBC San Pablo de B** 28.97 350 *eP* P **15 40 58.3 -0.2**
**NORC Norcasia** 29.02 348 *eP* P **15 40 58.3 -0.7**
**RUSC La Rusia** 29.05 352 *eP* P **15 40 58.3 -1.4**
**NBIT Itapeti - BA** 29.07 79 *eP* P **15 40 59.1 -0.4**
**GDU01 Guandu, BA** 29.39 77 *eP* P **15 41 01.0 -1.3**
**TAMC Tame, Arauca** 29.45 354 *eP* P **15 41 03.1 +0.3**
**CBOC Ciudad Bolivar** 29.55 346 *eP* P **15 41 02.1 -1.7**
**MG02 Cerro Sombrero** 29.67 180 P P **15 41 04.0 -0.3**
**BARC Barichara** 29.76 352 *eP* P **15 41 05.0 -0.7**
**HELC Santa Helena** 29.77 347 *eP* P **15 41 05.0 -1.0**
**EFI East Falkland** 29.79 166 *i* P P **15 41 04.4 -0.9**
EFI pmax pmax
comp=Z,35nm,1.0s
**EFI East Falkland** 29.79 166 P P **15 41 03.8 -1.6**
EFI IAmb IAmb 15 41 27.8
comp=Z,90nm,0.8s
**PTBC PUERTO BERRIO,** 29.90 349 *eP* P **15 41 05.9 -0.9**
**NBPN Ponto Novo - B** 30.06 71 *eP* P **15 41 07.1 -1.0**
**GO10 Punta Arenas** 30.08 182 P P **15 41 07.7 -0.3**
GO10 IAmb IAmb 15 42 08.6
comp=Z,72nm,0.9s
**PAYG Puerto Ayora** 30.37 314 P P **15 41 10.8 -0.1**
**PAMC Pamplona, Colo** 30.43 353 *eP* P **15 41 11.6 -0.3**
**DBBC Dabeiba** 30.72 346 *eP* P **15 41 15.4 +1.4**
**MG03 Isla Dawson** 30.76 182 P P **15 41 13.2 -0.7**
MG03 IAmb IAmb 15 41 51.5
comp=Z,65nm,1.1s
**DSPA Despedida** 30.85 179 P P **15 41 13.3 -1.4**
**ZARC Zaragoza, Cauc** 30.90 349 *eP* P **15 41 12.6 -3.0**
**UREC San Jos de Ur** 31.29 347 *eP* P **15 41 16.4 -2.5**
**ROSB Rosrio** 31.36 54 *eP* P **15 41 18.8 -0.8**
**USHA Ushuaia** 31.73 179 P P **15 41 22.7 +0.4**
comp=Z,7.1nm,0.8s,baz=6.3,slow=7.3,SNR=4.5
USHA LR LR 15 56 06.8
comp=Z,185nm,20.7s,baz=354,slow=40
**SDV Santo Domingo** 31.80 357 LR LR 15 57 05.5
comp=Z,197nm,18.7s,baz=183,slow=42
**SDV Santo Domingo** 31.80 357 P P **15 41 21.8 -1.8**
**SDV Santo Domingo** 31.80 357 *eP* P **15 41 22.8 -0.8**
**MG01 Puerto William** 31.84 178 P P **15 41 22.3 -1.1**
MG01 IAmb IAmb 15 42 31.6
comp=Z,53nm,1.1s
**NBLA Lagarto - SE** 32.10 73 *eP* P **15 41 25.1 -1.1**
**MDP Montagnes des** 32.25 32 LR LR 15 56 02.6
comp=Z,241nm,19.2s,baz=209,slow=39
**NBPS Pedro II - PI** 32.47 59 *eP* P **15 41 28.6 -0.8**
**NBMA Muriti-CE** 33.00 67 *eP* P **15 41 33.1 -0.9**
**NBPB Pedra_Branca-C** 33.30 63 *eP* P **15 41 36.0 -0.6**
**SJCC San Jacinto, C** 33.31 349 *eP* P **15 41 35.4 -1.3**
**BIRV Birongo** 33.44 5 P P **15 41 35.4 -2.4**
BIRV IAmb IAmb 15 42 10.6
comp=Z,62nm,1.4s
**BCIP Isla Barro Col** 33.74 341 P P **15 41 38.8 -1.6**
BCIP pmax pmax
comp=Z,228nm,1.9s
**BCIP Isla Barro Col** 33.74 341 P P **15 41 38.8 -1.6**
**NBAN Anadia - AL** 34.02 72 *eP* P **15 41 42.2 -0.7**
**NBMO Morrinhos-CE** 34.24 59 *eP* P **15 41 43.8 -0.9**
**CDITO Canoas** 34.24 335 P P **15 41 43.5 -1.3**
**BRU2 Volcan** 34.38 336 P P **15 41 45.0 -1.0**
**NBLV Livramento - P** 34.57 68 *eP* P **15 41 47.0 -0.7**
**DRK0 Durika** 35.02 335 P P **15 41 53.6 +2.0**
**SRBA San Rafael, Bu** 35.04 335 P P **15 41 50.7 -1.0**
SRBA IAmb IAmb 15 41 55.4
comp=Z,84nm,1.2s
**NBCL Cascavel-CE** 35.11 62 *eP* P **15 41 52.0 -0.3**
**TOSP Speyside** 35.15 15 P P **15 41 50.7 -1.8**

**PEZE Perez Zeledon,** 35.30 334 P P **15 41 53.3 -0.7**
PEZE IAmb IAmb 15 41 57.7
comp=Z,51nm,1.2s
**RIMA Rio Macho** 35.72 334 P P **15 41 57.1 -0.6**
RIMA IAmb IAmb 15 42 01.4
comp=Z,102nm,1.4s
**BATAN Batan** 35.83 335 P P **15 41 57.4 -1.0**
**CVTR Volcan Turrial** 35.91 335 P P **15 41 58.4 -1.2**
**JACO JACO, Garabito** 35.95 333 P P **15 41 58.9 -0.5**
JACO IAmb IAmb 15 42 03.1
comp=Z,40nm,0.9s
**HDC Heredia** 36.04 334 P P **15 42 01.2 +1.0**
**CAO2 Cobano, Puntar** 36.16 332 P P **15 41 59.9 -1.4**
**RCBR Riachuelo** 36.22 67 LR LR 15 57 08.2
comp=Z,264nm,18.5s,baz=36,slow=37
**RCBR Riachuelo** 36.22 67 P P **15 42 01.0 -0.8**
RCBR pmax pmax
comp=Z,38nm,0.9s
**RCBR Riachuelo** 36.22 67 P P **15 42 01.0 -0.8**
RCBR IAmb IAmb 15 42 03.2
comp=Z,38nm,0.9s
**RCBR Riachuelo** 36.22 67 *eP* P **15 42 02.0 +0.2**
**NBPV Pedro Velho** 36.44 68 *eP* P **15 42 03.5 -0.1**
**RPN Rapa Nui** 36.63 255 P P **15 42 07.0 +1.9**
comp=Z,61nm,0.2s,baz=40,slow=8.8,SNR=7.3
RPN LR LR 15 52 06.7
comp=Z,106nm,21.3s,baz=90,slow=28
**DUNO Dulce Nombre,** 36.68 332 P P **15 42 05.6 0.0**
DUNO IAmb IAmb 15 42 41.1
comp=Z,35nm,1.0s
**VA02 Isla de Pascua** 36.71 255 P P **15 42 06.3 +0.4**
**COVE Coope Vega, Sa** 36.80 334 P P **15 42 06.4 -0.3**
**SVB Belmont** 36.91 13 P P **15 42 06.2 -1.4**
**ORTG Ortega, Santa** 36.92 332 P P **15 42 06.8 -0.9**
ORTG IAmb IAmb 15 42 11.5
comp=Z,74nm,1.2s
**HZTE Horizontes, Gu** 37.29 332 P P **15 42 10.8 0.0**
**ESPN Las Esperanzas** 38.11 335 P P **15 42 16.7 -1.0**
ESPN IAmb IAmb 15 42 25.4
comp=Z,20nm,0.6s
**ACON Acoyapa** 38.24 334 P P **15 42 18.0 -0.8**
ACON IAmb IAmb 15 42 21.4
comp=Z,44nm,1.2s
**BOAB BOACO BROADBAN** 38.88 334 P P **15 42 24.3 +0.1**
BOAB IAmb IAmb 15 42 58.1
comp=Z,74nm,1.1s
**CNGN Cerro Negro** 39.36 332 P P **15 42 28.0 -0.2**
CNGN IAmb IAmb 15 43 13.5
comp=Z,83nm,1.4s
**MATN Matagalpa** 39.42 333 P P **15 42 27.8 -1.0**
**HOPE Hope Point** 39.57 150 P P **15 42 29.0 -0.4**
HOPE pmax pmax
comp=Z,111nm,0.8s
**HOPE Hope Point** 39.57 150 P P **15 42 29.0 -0.4**
**ICMP Isla Caja de M** 40.77 4 P P **15 42 37.3 -2.4**
ICMP IAmb IAmb 15 42 41.4
comp=Z,57nm,0.9s
**MLPR Magueyes Islan** 40.83 3 P P **15 42 37.4 -2.8**
MLPR IAmb IAmb 15 42 38.5
comp=Z,45nm,0.9s
**CRPR Cabo Rojo, PR** 40.86 3 P P **15 42 38.2 -2.3**
CRPR IAmb IAmb 15 42 39.6
comp=Z,60nm,0.8s
**OBIP Obispado Ponce** 40.93 4 P P **15 42 36.7 -4.3**
OBIP IAmb IAmb 15 42 40.5
comp=Z,86nm,1.1s
**PDPR Patillas Dam,** 40.94 4 P P **15 42 38.1 -3.0**
PDPR IAmb IAmb 15 42 39.8
comp=Z,53nm,0.9s
**CELP Cerrillos** 40.96 4 P P **15 42 38.9 -2.4**
CELP IAmb IAmb 15 42 41.6
comp=Z,97nm,1.1s
**TGUH Tegucigalpa,Un** 41.00 332 P P **15 42 41.0 -0.8**
**SJG San Juan** 41.02 4 P P **15 42 39.0 -2.8**
SJG pmax pmax
comp=Z,58nm,1.0s
**SJG San Juan** 41.02 4 P P **15 42 39.0 -2.8**
SJG IAmb IAmb 15 42 40.4
comp=Z,58nm,0.9s
**PRSN Puerto Rico Se** 41.07 3 P P **15 42 40.0 -2.1**
PRSN IAmb IAmb 15 42 41.1
comp=Z,66nm,0.9s
**PMSA Palmer Station** 41.83 177 P P **15 42 48.6 +0.8**
comp=Z,30nm,0.7s,baz=27,slow=8.6,SNR=5.4
PMSA LR LR 16 00 24.9
comp=Z,170nm,18.4s,baz=5.5,slow=36
**PMSA Palmer Station** 41.83 177 P P **15 42 47.8 0.0**
**PMSA Palmer Station** 41.83 177 *eP* P **15 42 49.4 +1.6**
**MTDJ Mount Denham** 41.88 348 IAmb IAmb 15 42 52.8
comp=Z,79nm,1.1s
**MTO3 Montecristo** 42.23 330 P P **15 42 52.7 +0.8**
MTO3 IAmb IAmb 15 42 54.6
comp=Z,68nm,0.9s
**ESQI Esquipulas** 42.36 330 P P **15 42 54.1 +1.2**
ESQI IAmb IAmb 15 42 55.9
comp=Z,84nm,0.9s
**SOR Soroa** 47.57 342 P P **15 43 34.2 +0.2**
SOR pmax pmax
comp=Z,67nm,0.9s
**SOR Soroa** 47.57 342 P P **15 43 34.2 +0.2**
SOR IAmb IAmb 15 43 35.4
comp=Z,67nm,0.9s
**060A Indiantown** 51.00 347 P P **15 44 00.8 +0.8**
**TIGA Tifton** 55.97 345 P P **15 44 36.5 +0.2**
baz=164
**352A Blakely** 56.34 344 P P **15 44 38.5 -0.4**
**BRAL Brewton** 56.63 341 P P **15 44 41.1 0.0**
baz=160,SNR=5.4
**NHSC New Hope** 56.87 349 P P **15 44 43.4 +0.8**
baz=168
**BELA Belgrano 2** 57.22 172 P P **15 44 44.4 -0.3**
**GOGA Godfrey** 57.83 346 IAmb IAmb 15 44 50.1
comp=Z,29nm,0.9s
**GOGA Godfrey** 57.83 346 P P **15 44 48.9 -0.5**
baz=164,SNR=5.2
**344A Westbrook Farm** 58.06 338 P P **15 44 51.0 -0.2**
**Z51A Franklin** 58.15 344 IAmb IAmb 15 44 51.8
comp=Z,45nm,1.1s
**LRAL Lakeview Retre** 58.37 342 P P **15 44 52.3 -1.0**
LRAL sP **sP** **15 45 24.9 -0.9**
**LRAL Lakeview Retre** 58.37 342 P P **15 44 52.7 -0.5**
baz=160,SNR=10.0
**Y52A Lilburn** 58.40 345 IAmb IAmb 15 44 54.1
comp=Z,42nm,0.9s
**BIRD Birdtown, Kers** 58.41 349 P P **15 44 52.8 -0.7**
BIRD sP **sP** **15 45 24.6 -1.2**
**VNA3 Neumayer Olymp** 58.63 161 P P **15 44 55.5 +0.8**
**VBMS Vicksburg** 58.69 339 P P **15 44 55.6 +0.1**
baz=157
**W57A Gilead** 58.83 349 P P **15 44 55.3 -1.1**
W57A IAmb IAmb 15 44 57.8
comp=Z,41nm,0.8s
W57A pP **pP** **15 45 18.7 -0.2**
W57A sP **sP** **15 45 27.8 -0.9**
**PAULI Pauline** 58.84 348 IAmb IAmb 15 44 57.8
comp=Z,50nm,1.0s
**VNA1 Neumayer--Stat** 58.85 160 P P **15 44 57.6 +1.4**
**833A Chaparral WMA,** 58.90 329 P P **15 44 56.7 -0.3**
833A pP **pP** **15 45 19.1 -0.4**
833A sP **sP** **15 45 30.5 +1.1**
**833A Chaparral WMA,** 58.90 329 P P **15 44 57.6 +0.6**
baz=147,SNR=19
**Y49A Blount Mountai** 58.98 343 IAmb IAmb 15 44 57.8
comp=Z,45nm,0.9s
**KMSC Kings Mountain** 59.06 348 P P **15 44 57.6 -0.4**
KMSC pP **pP** **15 45 20.4 -0.1**
KMSC sP **sP** **15 45 31.2 +0.8**
**KMSC Kings Mountain** 59.06 348 P P **15 44 58.0 +0.1**
baz=167,SNR=8.9
**VNA2 Neumayer--Watz** 59.22 160 P P **15 44 59.8 +1.1**
baz=289,slow=10.0
**BG3 Lake Jocassee** 59.23 347 IAmb IAmb 15 45 00.4
comp=Z,51nm,1.0s
**FPAL Fort Paine** 59.42 344 P P **15 44 59.7 -0.9**
FPAL pP **pP** **15 45 23.9 +0.7**
FPAL sP **sP** **15 45 33.1 0.0**
**SHEL Horse Pasture** 59.67 96 P P **15 45 03.5 +0.7**
SHEL pmax pmax
comp=Z,111nm,0.8s
**SHEL Horse Pasture** 59.67 96 P P **15 45 03.5 +0.7**
**X48A Hartselle** 59.71 343 P P **15 45 01.8 -0.7**
X48A pP **pP** **15 45 23.6 -1.5**
X48A sP **sP** **15 45 34.9 -0.2**
**NATX Nacogdoches** 59.79 335 P P **15 45 03.9 +0.9**
baz=153

**V53A Saluda** 59.86 347 IAmb IAmb 15 45 04.5
comp=Z,46nm,0.9s
**W50A Signal Mountai** 59.97 345 P **P** **15 45 03.5 -0.9**
W50A sP **sP** **15 45 37.0 0.0**
**TKL Tuckaleechee C** 60.05 346 LR LR 16 13 00.1
comp=Z,86nm,21.6s,baz=154,slow=38
**435B Jarrell** 60.15 332 P **P** **15 45 05.7 +0.2**
baz=150
**V52A Sevierville** 60.19 346 P **P** **15 45 05.2 -0.5**
V52A pP **pP** **15 45 26.2 -2.2**
V52A sP **sP** **15 45 38.0 -0.3**
**T59A Double "B" Far** 60.26 352 IAmb IAmb 15 45 07.7
comp=Z,45nm,0.9s
**V51A Loudon** 60.32 346 IAmb IAmb 15 45 07.3
comp=Z,47nm,0.9s
**Z41A Richland Creek** 60.43 337 P **P** **15 45 07.8 +0.4**
baz=155
**OXF Oxford** 60.45 341 P **P** **15 45 06.9 -0.7**
OXF pP **pP** **15 45 29.0 -1.3**
OXF sP **sP** **15 45 39.2 -1.0**
**OXF Oxford** 60.45 341 P **P** **15 45 06.4 -1.1**
baz=158,SNR=6.9
**T57A Hurt** 60.52 351 IAmb IAmb 15 45 09.5
comp=Z,53nm,1.1s
**SNAA Sanae** 60.84 161 P **P** **15 45 10.8 +0.9**
**SNAA Sanae** 60.84 161 LR LR 16 11 57.8
comp=Z,97nm,18.7s,baz=0.5,slow=36
**SNAA Sanae** 60.84 161 *de*P **P** **15 45 10.7 +0.8**
SNAA pmax pmax
comp=Z,56nm,1.3s
**SNAA Sanae** 60.84 161 P **P** **15 45 09.7 -0.2**
SNAA pP **pP** **15 45 32.9 +0.3**
SNAA sP **sP** **15 45 43.2 +0.6**
**TZTN Tazewell** 60.86 347 IAmb IAmb 15 45 11.0
comp=Z,44nm,1.1s
**TZTN Tazewell** 60.86 347 P **P** **15 45 10.0 -0.3**
baz=165,SNR=5.3
**V48A Smith Brothers** 60.87 343 P **P** **15 45 09.3 -1.1**
V48A **pP** **15 45 30.7 -2.4**
V48A sP **sP** **15 45 43.6 +0.6**
**JCT Junction City** 60.89 330 P **P** **15 45 11.0 +0.3**
baz=147,SNR=19
**BLA Blacksburg** 60.91 350 P **P** **15 45 11.3 +0.6**
baz=168,SNR=5.1
**W45A Hickory Valley** 60.98 341 P **P** **15 45 10.1 -1.1**
W45A pP **pP** **15 45 32.4 -1.5**
W45A sP **sP** **15 45 42.7 -1.1**
**HPIG** 61.04 322 IAmb IAmb 15 45 14.5
comp=Z,69nm,1.3s
**WHTX Lake Whitney,** 61.13 332 P **P** **15 45 12.6 +0.3**
baz=150
**SLBS Sierra La Lagu** 61.16 317 P **P** **15 45 12.8 +0.1**
SLBS **sP** **15 45 46.0 +0.9**
**R58B Mineral** 61.27 352 P **P** **15 45 12.3 -0.8**
R58B **pP** **15 45 35.0 -1.1**
R58B **sP** **15 45 46.4 +0.4**
**WVT Waverly** 61.51 343 P **P** **15 45 13.0 -1.6**
WVT pP **pP** **15 45 36.0 -1.5**
WVT sP **sP** **15 45 46.9 -0.4**
**WVT Waverly** 61.51 343 P **P** **15 45 13.9 -0.8**
baz=160
**X40A Basin Creek Fa** 61.55 338 P **P** **15 45 14.3 -0.7**
baz=155
**T50A Nancy** 61.60 346 IAmb IAmb 15 45 15.8
comp=Z,34nm,0.9s
**LPIG La Paz** 61.69 317 LR LR 16 07 38.2
comp=Z,106nm,19.1s,baz=204,slow=32
**TXAR Lajitas Array** 61.86 326 P **P** **15 45 17.6 +0.3**
comp=Z,14nm,1.0s,baz=145,slow=8.3,SNR=78
TXAR PKPPKP P'P'df 16 14 34.8 +10
comp=Z,0.5nm,0.9s,baz=299,slow=1.3,SNR=3.7
**TX32 Lajitas Array** 61.86 326 P **P** **15 45 17.1 -0.3**
**MIAR Mount Ida** 61.87 337 IAmb IAmb 15 45 18.3
comp=Z,41nm,0.9s
**MIAR Mount Ida** 61.87 337 P **P** **15 45 17.1 0.0**
baz=154,SNR=13
**S51A Beattyville** 61.92 347 P **P** **15 45 16.4 -1.1**
**W41B Gary Mavity, V** 61.97 339 IAmb IAmb 15 45 18.8
comp=Z,49nm,1.1s
**W41B Gary Mavity, V** 61.97 339 P **P** **15 45 17.5 -0.3**
baz=156,SNR=11
**WHAR Wooly Hollow** 62.09 339 IAmb IAmb 15 45 19.5
comp=Z,40nm,1.0s
**T47A Sharon Grove** 62.12 344 P **P** **15 45 17.7 -1.1**
T47A **pP** **15 45 39.8 -1.8**
T47A **sP** **15 45 51.3 -0.1**
**W39A Magazine** 62.52 337 IAmb IAmb 15 45 23.2
comp=Z,50nm,0.9s
**W39A Magazine** 62.52 337 P **P** **15 45 21.9 +0.4**
baz=154,SNR=19
**X37A Clayton** 62.57 336 IAmb IAmb 15 45 23.5
comp=Z,53nm,1.0s
**FCAR Ozark Folk Cen** 62.58 339 P **P** **15 45 21.2 -0.7**
**ABTX Abilene, Hawle** 62.63 331 IAmb IAmb 15 45 23.8
comp=Z,83nm,1.3s
**ABTX Abilene, Hawle** 62.63 331 P **P** **15 45 22.5 +0.2**
baz=148,SNR=8.9
**R50A Paris** 62.69 346 IAmb IAmb 15 45 23.2
comp=Z,36nm,1.1s
**Q54A Coxs Mills** 62.71 350 IAmb IAmb 15 45 23.1
comp=Z,39nm,1.1s
**P57A Homestead Farm** 62.79 352 IAmb IAmb 15 46 30.4
comp=Z,38nm,1.1s
**PBMO Poplar Bluff** 62.86 341 IAmb IAmb 15 45 24.3
comp=Z,49nm,0.8s
**R49A Shelbyville** 62.89 346 P **P** **15 45 22.5 -1.3**
R49A IAmb IAmb 15 45 24.1
comp=Z,45nm,1.1s
**WCI Wyandotte Cave** 63.09 345 P **P** **15 45 23.7 -1.5**
WCI *PP **pP** **15 45 47.4 -0.6**
WCI *SP **sP** **15 45 57.0 -0.9**
WCI pmax pmax
comp=Z,73nm,1.1s
**WCI Wyandotte Cave** 63.09 345 P **P** **15 45 23.7 -1.5**
WCI IAmb IAmb 15 45 25.4
comp=Z,73nm,1.1s
WCI pP **pP** **15 45 47.4 -0.6**
WCI sP **sP** **15 45 57.0 -0.9**
**WCI Wyandotte Cave** 63.09 345 P **P** **15 45 24.4 -0.8**
baz=162
**MVL Millersville** 63.11 354 IAmb IAmb 15 45 27.0
comp=Z,42nm,1.1s
**Q51A Peebles** 63.21 348 IAmb IAmb 15 45 26.6
comp=Z,46nm,1.2s
**MCWV Mont Chateau** 63.21 351 IAmb IAmb 15 45 27.6
comp=Z,54nm,0.9s
**MCWV Mont Chateau** 63.21 351 P **P** **15 45 26.3 +0.3**
baz=169
**U40A Yellville** 63.25 339 P **P** **15 45 25.2 -1.1**
U40A IAmb IAmb 15 45 27.1
comp=Z,42nm,0.8s
U40A **pP** **15 45 47.7 -1.3**
U40A **sP** **15 45 58.3 -0.5**
**U40A Yellville** 63.25 339 P **P** **15 45 26.1 -0.2**
baz=155,SNR=18
**P53A Whipple** 63.29 349 IAmb IAmb 15 45 27.8
comp=Z,74nm,1.1s
**S44A Carbondale** 63.37 342 IAmb IAmb 15 45 28.9
comp=Z,48nm,0.8s
**X34A Smith Ranch, M** 63.55 334 IAmb IAmb 15 45 29.8
comp=Z,99nm,1.4s
**HHAR Hobbs** 63.55 338 IAmb IAmb 15 45 29.4
comp=Z,81nm,1.3s
**P52A Corning** 63.57 349 P **P** **15 45 27.3 -1.0**
P52A IAmb IAmb 15 45 29.0
comp=Z,68nm,1.2s
**P52A Corning** 63.57 349 P **P** **15 45 27.6 -0.7**
baz=166
**P51A Williamsport** 63.59 348 IAmb IAmb 15 45 28.9
comp=Z,71nm,1.4s
**O56A Blue Knob Stat** 63.63 352 IAmb IAmb 15 45 31.4
comp=Z,49nm,1.1s
**O56A Blue Knob Stat** 63.63 352 P **P** **15 45 29.7 +0.9**
baz=170,SNR=6.0
**W35A Tecumseh** 63.64 335 IAmb IAmb 15 45 29.4
comp=Z,49nm,1.3s
**MGMO Mountain Grove** 63.78 339 P **P** **15 45 28.4 -1.4**
MGMO IAmb IAmb 15 45 30.7
comp=Z,36nm,0.8s
MGMO pP **pP** **15 45 53.2 +0.5**
MGMO sP **sP** **15 46 02.9 +0.3**
**O54A Avella** 63.81 350 IAmb IAmb 15 45 30.4
comp=Z,119nm,1.6s
**TUL1 Leonard** 63.90 336 IAmb IAmb 15 45 31.7
comp=Z,50nm,0.9s
**TUL1 Leonard** 63.90 336 P **P** **15 45 30.5 0.0**
baz=153,SNR=5.7
**SSPA Standing Stone** 63.91 352 P **P** **15 45 31.2 +0.6**
baz=171
**N59A State Game Lan** 63.96 354 P **P** **15 45 30.2 -0.7**
baz=173
**N58A Sunbury** 63.98 354 IAmb IAmb 15 46 06.5
comp=Z,57nm,1.2s
**P49A Miami Univ. Ec** 63.98 347 P **P** **15 45 30.0 -1.0**
P49A IAmb IAmb 15 45 31.1
comp=Z,57nm,1.1s
P49A **pP** **15 45 52.8 -1.1**
**P49A Miami Univ. Ec** 63.98 347 P **P** **15 45 30.3 -0.8**
baz=164,SNR=6.1
**O53A New Philadelph** 64.01 350 P **P** **15 45 31.0 -0.2**
baz=168
**OLIL Olney** 64.03 343 IAmb IAmb 15 45 31.3
comp=Z,56nm,1.1s
**WMOK Wichita Mounta** 64.06 333 P **P** **15 45 31.1 -0.6**
baz=150,SNR=5.7
**P48A Milroy** 64.06 346 IAmb IAmb 15 45 31.5
comp=Z,43nm,1.2s
**CCM Cathedral Cave** 64.29 341 P **P** **15 45 31.6 -1.5**
CCM *PP **pP** **15 45 54.4 -1.6**
CCM *SP **sP** **15 46 05.6 -0.2**
CCM pmax pmax
comp=Z,61nm,0.8s
**CCM Cathedral Cave** 64.29 341 P **P** **15 45 31.6 -1.5**
CCM IAmb IAmb 15 45 33.8
comp=Z,61nm,0.8s
CCM pP **pP** **15 45 54.4 -1.6**
CCM sP **sP** **15 46 05.6 -0.2**
**CCM Cathedral Cave** 64.29 341 P **P** **15 45 32.8 -0.3**
baz=157
**ACSO Alum Creek Sta** 64.30 348 IAmb IAmb 15 45 33.8
comp=Z,44nm,0.8s
**ACSO Alum Creek Sta** 64.30 348 P **P** **15 45 32.6 -0.5**
baz=166,SNR=5.3
**Q44A Meyer Farm, Va** 64.43 343 P **P** **15 45 32.5 -1.5**
Q44A IAmb IAmb 15 45 34.0
comp=Z,58nm,1.0s
**N54A Moraine State** 64.51 351 IAmb IAmb 15 45 36.1
comp=Z,54nm,1.0s
**N54A Moraine State** 64.51 351 P **P** **15 45 34.9 +0.4**
baz=169
**O49A Covington** 64.53 347 P **P** **15 45 33.0 -1.6**
O49A IAmb IAmb 15 45 34.9
comp=Z,73nm,1.1s
O49A **pP** **15 45 56.1 -1.4**
**MNTX Cornudas Mount** 64.63 326 P **P** **15 45 34.7 -0.8**
MNTX IAmb IAmb 15 45 36.8
comp=Z,39nm,1.0s
MNTX sP **PcP** **15 46 08.7 0.0**
**MNTX Cornudas Mount** 64.63 326 P **P** **15 45 35.5 0.0**
baz=143,SNR=34
**P46A Rosedale** 64.63 345 IAmb IAmb 15 45 35.1
comp=Z,67nm,1.1s
**O48B Farmland** 64.77 346 P **P** **15 45 36.2 0.0**
baz=164
**R40A Maddies Statio** 64.82 340 IAmb IAmb 15 45 37.3
comp=Z,46nm,0.8s
**M55A Ridgway** 64.84 352 IAmb IAmb 15 45 38.1
comp=Z,73nm,1.1s
**M54A Oil Creek Stat** 65.00 351 P **P** **15 45 37.8 +0.1**
M54A IAmb IAmb 15 45 38.9
comp=Z,57nm,0.9s
**M54A Oil Creek Stat** 65.00 351 P **P** **15 45 37.9 +0.2**
baz=169,SNR=6.6
**T35A Sooner Cattle** 65.05 336 IAmb IAmb 15 45 39.4
comp=Z,57nm,1.1s
**M53A WI Miller and** 65.08 350 P **P** **15 45 38.3 +0.1**
baz=168
**MSTX Muleshoe** 65.18 329 P **P** **15 45 39.2 +0.1**
baz=146,SNR=12
**N49A Columbus Grove** 65.20 347 P **P** **15 45 38.0 -1.0**
**BINY Binghamton** 65.26 354 IAmb IAmb 15 45 41.8
comp=Z,66nm,1.1s
**BINY Binghamton** 65.26 354 P **P** **15 45 40.1 +0.8**
baz=173,SNR=5.1
**P43A Skaggs, Pawnee** 65.26 343 P **P** **15 45 37.5 -1.9**
P43A IAmb IAmb 15 45 39.5
comp=Z,66nm,1.0s
P43A **pP** **15 46 00.6 -1.7**
**HRV Adam Dziewonsk** 65.28 358 P **P** **15 45 40.3 +0.9**
baz=177
**SFIN Lafayette** 65.33 345 P **P** **15 45 38.8 -0.9**
baz=162
**NVL N'lazarevskaya** 65.41 159 *e*P P 15 45 49.1 +9.1
NVL pmax pmax
comp=Z,110nm,2.0s
**AMTX Amarillo** 65.44 331 P **P** **15 45 40.5 -0.2**
baz=147
**U32A Winter Ranch,** 65.56 334 **P** **15 45 41.3 -0.2**
U32A sP **sP** **15 46 14.3 +0.3**
**TRY Troy** 65.61 356 IAmb IAmb 15 45 43.3
comp=Z,49nm,0.9s
**ERPA Erie** 65.64 351 P **P** **15 45 41.8 0.0**
baz=169
**K57A Scipio Center** 65.83 354 IAmb IAmb 15 45 43.8
comp=Z,68nm,1.1s
**P40A Paris** 65.89 341 IAmb IAmb 15 45 44.2
comp=Z,75nm,1.0s
**HDIL Hopedale** 66.05 343 P **P** **15 45 43.2 -1.2**
baz=160
**J59A Piesco** 66.39 356 IAmb IAmb 15 45 48.6
comp=Z,86nm,1.1s
**P38A Dawn** 66.44 340 P **P** **15 45 46.2 -0.8**
P38A IAmb IAmb 15 45 47.7
comp=Z,48nm,0.8s
P38A pP **pP** **15 46 10.2 +0.3**
P38A sP **sP** **15 46 20.7 +0.8**
**J57A Williamstown** 66.46 354 IAmb IAmb 15 45 48.4
comp=Z,49nm,1.1s
**121A Cookes Peak, D** 66.54 325 IAmb IAmb 15 45 51.1
comp=Z,61nm,1.1s
**121A Cookes Peak, D** 66.54 325 P **P** **15 45 49.8 +1.8**
baz=141,SNR=27
**N41A Harden Midland** 66.62 342 P **P** **15 45 46.9 -1.2**
N41A IAmb IAmb 15 45 48.4
comp=Z,83nm,1.1s
**KSU1 Kansas State U** 67.02 337 P **P** **15 45 50.2 -0.5**
baz=152
**LBNH Lisbon** 67.03 358 IAmb IAmb 15 45 53.0
comp=Z,70nm,1.1s
**LBNH Lisbon** 67.03 358 P **P** **15 45 51.7 +1.1**
baz=177
**PECO Prince Edward** 67.07 354 IAmb IAmb 15 45 52.3
comp=Z,56nm,1.2s
**QSPA South Pole Qui** 67.13 180 LR LR 16 15 13.3
comp=Z,106nm,19.0s,baz=140,slow=36
**R32A Long Quarter,** 67.21 335 IAmb IAmb 15 45 53.4
comp=Z,78nm,1.0s
**Y22D IRIS PASSCAL i** 67.30 326 P **P** **15 45 53.7 +1.0**
baz=142
**LENM Lemitar** 67.40 326 P **P** **15 45 54.9 +1.5**
**EMMW East Machias** 67.46 1 IAmb IAmb 15 45 55.2
comp=Z,62nm,0.9s
**L42A Oliver, Polo** 67.50 343 IAmb IAmb 15 45 53.9
comp=Z,45nm,1.1s
**LONY Lake Ozonia** 67.55 356 P **P** **15 45 54.6 +0.7**
baz=174,SNR=7.8
**FRNY Flat Rock** 67.70 356 IAmb IAmb 15 45 56.7
comp=Z,57nm,0.9s
**DELO Deloro Mine** 67.71 353 IAmb IAmb 15 45 56.3
comp=Z,83nm,1.4s
**ANMO Albuquerque** 67.75 327 *de*P **P** **15 45 56.9 +1.3**
ANMO pmax pmax
comp=Z,68nm,1.3s
**ANMO Albuquerque** 67.75 327 P **P** **15 45 56.2 +0.6**
ANMO IAmb IAmb 15 45 58.3
comp=Z,47nm,0.9s
ANMO sP **sP** **15 46 29.8 +1.4**
**ANMO Albuquerque** 67.75 327 P **P** **15 45 57.0 +1.4**
baz=143
**G65A Princeton** 67.95 1 IAmb IAmb 15 45 58.4
comp=Z,63nm,0.8s
**CBKS Cedar Bluff** 67.95 334 P **P** **15 45 57.2 +0.5**
baz=150,SNR=7.6
**PKME Peaks-Kenny Pk** 68.00 360 P **P** **15 45 57.7 +1.1**
**PKME Peaks-Kenny Pk** 68.00 360 P **P** **15 45 57.8 +1.1**
baz=180
**TUC Tucson** 68.01 323 P **P** **15 45 58.1 +0.9**
TUC *SP **sP** **15 46 31.7 +1.9**
TUC pmax pmax
comp=Z,74nm,1.2s
**TUC Tucson** 68.01 323 P **P** **15 45 58.1 +0.9**
TUC IAmb IAmb 15 46 00.1
comp=Z,74nm,1.2s
TUC sP **sP** **15 46 31.7 +1.9**
**TUC Tucson** 68.01 323 P **P** **15 45 58.9 +1.7**
baz=139
**SADO Sadowa** 68.14 352 LR LR 16 18 25.6
comp=Z,79nm,18.9s,baz=166,slow=38
**SCIA State Center** 68.42 341 P **P** **15 45 59.0 -0.4**
baz=156
**JFWS Jewell Farm** 68.51 343 IAmb IAmb 15 46 00.7
comp=Z,46nm,0.8s
**JFWS Jewell Farm** 68.51 343 P **P** **15 45 59.5 -0.4**
baz=159
**T25A Trinidad** 68.55 330 P **P** **15 46 01.7 +1.2**
baz=145,SNR=12
**F64A Sherman** 68.60 1 P **P** **15 46 00.9 +0.5**
F64A **PcP** **15 46 24.6 -0.3**
F64A **sP** **15 46 32.4 -1.0**
**LMN Caledonia Moun** 68.69 3 IAmb IAmb 15 46 02.4
comp=Z,56nm,0.8s
**214A Organ Pipe Nat** 68.91 321 IAmb IAmb 15 46 06.0
comp=Z,64nm,0.9s
**214A Organ Pipe Nat** 68.91 321 P **P** **15 46 04.8 +2.1**
baz=137,SNR=26
**LIC Lamto** 68.93 73 *e*P **P** **15 46 02.0 -1.2**
comp=Z,31nm,0.8s
**TIC Toumodi** 69.13 73 *e*P **P** **15 46 04.4 0.0**
**TRQ Mont Tremblant** 69.14 356 IAmb IAmb 15 46 05.2
comp=Z,66nm,0.8s
**KIC Kosan Boka** 69.24 73 *e*P **P** **15 46 05.0 -0.1**
comp=Z,21nm,0.6s
**TAOE Nuku Hiva Isla** 69.27 269 *e*LR LR 16 07 12.0
comp=Z,316nm,29.3s
**DBIC Dimbokro** 69.28 73 P **P** **15 46 05.2 -0.1**
comp=Z,15nm,0.7s,baz=252,slow=6.0,SNR=21
DBIC LR LR 16 16 26.6
comp=Z,170nm,18.6s,baz=250,slow=36
**DBIC Dimbokro** 69.28 73 P **P** **15 46 05.2 -0.1**
DBIC IAmb IAmb 15 46 29.5
comp=Z,47nm,1.0s
**KSCO Kaye Shedlock'** 69.31 333 IAmb IAmb 15 46 41.0
comp=Z,61nm,0.9s
**KSCO Kaye Shedlock'** 69.31 333 P **P** **15 46 06.1 +1.0**
baz=147
**I40A Norwalk** 69.52 343 P **P** **15 46 05.5 -0.7**
I40A IAmb IAmb 15 46 41.3
comp=Z,56nm,1.2s
**SDCO Great Sand Dun** 69.54 330 IAmb IAmb 15 46 09.4
comp=Z,73nm,1.2s
**SDCO Great Sand Dun** 69.54 330 P **P** **15 46 08.3 +1.5**
baz=144,SNR=51
**W18A Petrified Fore** 69.56 325 IAmb IAmb 15 46 09.8
comp=Z,82nm,1.1s
**W18A Petrified Fore** 69.56 325 P **P** **15 46 08.4 +1.5**
baz=140,SNR=19
**BGNE Belgrade** 69.61 337 P **P** **15 46 07.0 +0.2**
BGNE pP **pP** **15 46 30.5 +0.7**
BGNE sP **sP** **15 46 41.1 +1.5**
**BGNE Belgrade** 69.61 337 P **P** **15 46 07.0 +0.2**
baz=152,SNR=14
**D62A Allapont, All** 69.82 360 IAmb IAmb 15 46 33.5
comp=Z,74nm,0.9s
**X16A Lo Mia Camp, P** 69.95 324 IAmb IAmb 15 46 12.5
comp=Z,54nm,1.0s
**BATG Bathurst New B** 70.06 2 P **P** **15 46 09.1 -0.3**
BATG **PcP** **15 46 31.0 +0.1**
BATG IAmb IAmb 15 46 34.9
comp=Z,54nm,1.0s
BATG **sP** **15 46 43.7 +1.2**
**S22A 4UR Ranch, Cre** 70.17 329 P **P** **15 46 11.8 +1.1**
baz=143,SNR=12
**LMQ La Malbaie** 70.30 359 P **P** **15 46 11.2 +0.4**
LMQ **PcP** **15 46 30.3 -1.6**
LMQ IAmb IAmb 15 46 36.1
comp=Z,46nm,1.1s
**Q24A Divide** 70.37 331 IAmb IAmb 15 46 14.4
comp=Z,52nm,1.0s
**Q24A Divide** 70.37 331 P **P** **15 46 13.1 +1.2**
baz=145,SNR=33
**I37A Lemond, Waseca** 70.40 342 IAmb IAmb 15 46 12.4
comp=Z,53nm,0.9s
**MVCO Mesa Verde** 70.55 327 IAmb IAmb 15 46 15.7
comp=Z,59nm,1.0s
**MVCO Mesa Verde** 70.55 327 P **P** **15 46 14.4 +1.4**
baz=142,SNR=30
**OGNE Ogallala** 70.69 334 P **P** **15 46 14.0 +0.5**
baz=148
**WUAZ Wupatki** 70.74 324 IAmb IAmb 15 46 17.3
comp=Z,87nm,1.0s
**WUAZ Wupatki** 70.74 324 P **P** **15 46 16.0 +1.9**
baz=139,SNR=45
**GLA Glamis** 70.87 320 P **P** **15 46 15.8 +1.1**
GLA *SP **sP** **15 46 48.8 +1.3**
**GLA Glamis** 70.87 320 P **P** **15 46 15.8 +1.1**
GLA **sP** **15 46 48.8 +1.3**
GLA IAmb IAmb 15 46 51.4
comp=Z,52nm,1.3s
**GLA Glamis** 70.87 320 P **P** **15 46 16.6 +1.8**
baz=136,SNR=7.2
**K31A O'Neill** 70.89 337 P **P** **15 46 14.5 -0.1**
K31A pP **pP** **15 46 38.8 +0.9**
K31A sP **sP** **15 46 49.3 +1.7**
**ECSD EROS Data Cent** 71.14 339 P **P** **15 46 15.8 -0.2**
baz=153,SNR=13
**BLYC Blythe** 71.19 321 IAmb IAmb 15 46 19.9
comp=Z,61nm,1.0s
**VLDQ Val d'Or** 71.25 354 P **P** **15 46 16.9 +0.4**
VLDQ IAmb IAmb 15 46 18.1
comp=Z,53nm,1.0s
VLDQ **pP** **15 46 39.5 -0.5**
**ISCO Idaho Springs** 71.26 331 P **P** **15 46 18.6 +1.3**
baz=145,SNR=15
**RMX La Rumorosa** 71.30 319 P **P** **15 46 18.0 +0.6**
RMX IAmb IAmb 15 46 20.4
comp=Z,46nm,1.0s
RMX **PcP** **15 46 37.6 +0.8**
**SPMN Marine on St.** 71.34 342 P **P** **15 46 16.9 -0.3**
baz=157,SNR=5.3
**IKP In-Ko-Pah, Jac** 71.35 319 P **P** **15 46 19.6 +1.9**
baz=135,SNR=11
**SWSC Sam W. Stewart** 71.37 320 P **P** **15 46 19.6 +1.9**
baz=135,SNR=7.3
**PDMC Parker Dam,Lak** 71.37 322 P **P** **15 46 19.3 +1.7**
baz=137,SNR=6.8
**PV15 Paradox Valley** 71.43 328 P **P** **15 46 18.9 +0.7**
PV15 IAmb IAmb 15 46 21.4
comp=Z,74nm,1.1s
**PV13 Radium Mtn., P** 71.45 328 IAmb IAmb 15 46 21.1
comp=Z,50nm,1.1s
**PV07 Paradox Valley** 71.59 328 P **P** **15 46 19.5 +0.3**
**PV11 David Mesa, Pa** 71.59 328 IAmb IAmb 15 46 55.5
comp=Z,56nm,1.4s
**TKX Tecate** 71.59 319 IAmb IAmb 15 46 22.2
comp=Z,45nm,1.0s
**BC3 Big Chuckawall** 71.67 320 P **P** **15 46 21.6 +2.0**
baz=135,SNR=27
**MONP2 Monument Peak** 71.71 319 P **P** **15 46 22.1 +2.1**
baz=135,SNR=11
**BAR Barrett** 71.71 319 IAmb IAmb 15 46 22.8
comp=Z,55nm,1.1s
**W13A Hualapai Mount** 71.81 322 P **P** **15 46 21.5 +0.9**
**IRM Iron Mountain** 71.85 321 P **P** **15 46 21.9 +1.3**
baz=136,SNR=32
**U15A North Rim** 71.91 324 IAmb IAmb 15 46 24.7
comp=Z,56nm,1.0s
**NEE2 Needles Airpor** 71.98 322 P **P** **15 46 23.0 +1.7**
baz=136
**109C Camp Elliot, M** 72.12 319 P **P** **15 46 23.8 +1.6**
baz=134
**TPFO Pinon Flats** 72.22 320 P **P** **15 46 24.8 +1.8**
baz=135,SNR=11
**BELC Belle Mtn. Jos** 72.23 320 P **P** **15 46 24.9 +1.9**
baz=135,SNR=14
**PFO Pinyon Flats O** 72.23 320 LR LR 16 14 02.4
comp=Z,129nm,18.1s,baz=163,slow=32
**PFO Pinyon Flats O** 72.23 320 P **P** **15 46 23.1 +0.1**
PFO pmax pmax
comp=Z,37nm,1.2s
**PFO Pinyon Flats O** 72.23 320 P **P** **15 46 23.1 +0.1**
**PFO Pinyon Flats O** 72.23 320 P **P** **15 46 25.0 +2.0**
baz=135,SNR=9.3
**N23A Red Feather La** 72.30 331 P **P** **15 46 24.9 +1.4**
baz=145,SNR=12
**PHWY Pilot Hill** 72.42 332 IAmb IAmb 15 47 00.2
comp=Z,70nm,1.6s
**GMRC Granite Mounta** 72.59 321 P **P** **15 46 27.4 +2.3**
baz=136,SNR=49
**MURC Murrieta** 72.66 319 P **P** **15 46 27.4 +1.9**
baz=134,SNR=5.1

**O20A White River Ci 72.73 329** P **P** **15 46 26.8 +0.9**
O20A IAmb IAmb 15 47 02.3
comp=Z,65nm,0.9s
**O20A White River Ci 72.73 329** P **P** **15 46 27.4 +1.5**
baz=142,SNR=14
**ELS Elsinore Mount 72.83 319** IAmb IAmb 15 46 29.6
comp=Z,47nm,1.0s
**TBI Tubuai 72.90 251** *e*LR LR 16 08 54.5
comp=Z,189nm,25.0s
**BBRC Big Bear Solar 72.96 320** P **P** **15 46 29.5 +2.1**
baz=134
**HEC Hector,Ludlow 73.01 321** P **P** **15 46 29.7 +2.2**
baz=135,SNR=31
**SRU San Rafael Swe 73.03 327** P **P** **15 46 28.5 +0.8**
SRU pmax pmax
comp=Z,52nm,0.9s
**SRU San Rafael Swe 73.03 327** P **P** **15 46 28.5 +0.8**
SRU IAmb IAmb 15 46 30.2
comp=Z,52nm,0.9s
**SCI2 San Clemente I 73.06 318** P **P** **15 46 29.8 +2.1**
baz=133
**TUQ Turquoise Moun 73.20 321** P **P** **15 46 30.8 +2.0**
baz=136,SNR=11
**CIS Catalina Islan 73.27 318** P **P** **15 46 30.8 +1.8**
baz=133
**P18A Preston Nutter 73.29 328** IAmb IAmb 15 46 32.3
comp=Z,55nm,1.0s
**CCUT Cedar City 73.32 325** P **P** **15 46 30.0 +0.5**
CCUT IAmb IAmb 15 46 33.2
comp=Z,71nm,1.0s
**FMP Fort Macarthur 73.40 319** P **P** **15 46 31.9 +2.2**
baz=133
**P17A Butcher Ranch, 73.42 327** P **P** **15 46 31.0 +1.1**
P17A IAmb IAmb 15 46 32.6
comp=Z,65nm,1.1s
P17A **pP** **15 46 50.6 -2.6**
**RRX Edison Barstow 73.43 320** P **P** **15 46 32.3 +2.4**
baz=135
**RWWY Rawlins 73.50 331** IAmb IAmb 15 46 33.0
comp=Z,39nm,1.0s
**EYMN Ely 73.52 344** P **P** **15 46 29.9 -0.2**
baz=158
**SHPR Sheep Range 73.54 323** P **P** **15 46 30.9 +0.1**
**GSC Goldstone, Bar 73.62 321** IAmb IAmb 15 46 34.4
comp=Z,58nm,1.3s
**GSC Goldstone, Bar 73.62 321** P **P** **15 46 33.1 +1.9**
baz=135,SNR=23
**PASC Pasadena Art C 73.65 319** IAmb IAmb 15 46 34.4
comp=Z,90nm,1.4s
**KOWA Kowa 73.73 66** P **P** **15 46 31.5 -0.6**
**DECC Green Verdugo 73.80 319** P **P** **15 46 34.1 +1.9**
baz=134
**SNCC San Nicolas Is 73.84 318** P **P** **15 46 33.9 +1.5**
baz=132
**K22A Casper 73.98 332** P **P** **15 46 34.3 +1.1**
baz=144,SNR=5.5
**EDW2 Edwards Air Fo 74.03 320** P **P** **15 46 34.9 +1.5**
baz=134,SNR=21
**PRN Pahroc Range 74.13 323** IAmb IAmb 15 46 37.6
comp=Z,50nm,1.1s
**RSSD Black Hills 74.16 335** P **P** **15 46 34.9 +0.7**
RSSD pmax pmax
comp=Z,38nm,0.9s
**RSSD Black Hills 74.16 335** P **P** **15 46 34.9 +0.7**
RSSD IAmb IAmb 15 46 36.4
comp=Z,38nm,0.9s
**RSSD Black Hills 74.16 335** P **P** **15 46 35.2 +1.0**
baz=147
**GWY Greenwater Val 74.16 322** IAmb IAmb 15 46 37.2
comp=Z,44nm,0.9s
**CCAC Calif City Air 74.23 320** IAmb IAmb 15 46 37.6
comp=Z,46nm,0.8s
**LRMC Laurel Mtn Rad 74.26 320** P **P** **15 46 36.6 +1.8**
baz=134,SNR=18
**OSI Osito Audit: C 74.28 319** P **P** **15 46 36.8 +1.8**
baz=133
**D32A Dogwood Acres, 74.30 341** P **P** **15 46 34.1 -0.6**
D32A IAmb IAmb 15 46 35.7
comp=Z,68nm,0.8s
**TPNV Topopah Spring 74.47 322** P **P** **15 46 37.1 +1.0**
TPNV pmax pmax
comp=Z,27nm,1.1s
**TPNV Topopah Spring 74.47 322** P **P** **15 46 37.1 +1.0**
**TPNV Topopah Spring 74.47 322** P **P** **15 46 38.3 +2.2**
baz=136,SNR=36
**B35A Bob, Littlefor 74.47 343** P **P** **15 46 35.1 -0.6**
B35A **pP** **15 46 58.0 -1.1**
**FURC Furnace Creek, 74.47 322** P **P** **15 46 38.1 +2.2**
baz=135,SNR=13
**MPMC Manual Prospec 74.55 321** P **P** **15 46 38.2 +1.5**
baz=134,SNR=19
**ARVC Arvin 74.69 320** P **P** **15 46 39.1 +1.8**
baz=133
**ISA Isabella, Lake 74.85 320** IAmb IAmb 15 46 41.4
comp=Z,52nm,1.0s
**ISA Isabella, Lake 74.85 320** P **P** **15 46 40.4 +2.1**
baz=134,SNR=33
**PPT2 Papeete2 74.86 257** *e*LR LR 16 09 47.5
comp=Z,622nm,29.8s
**BCW Bitter Crk WRg 74.92 319** IAmb IAmb 15 46 41.9
comp=Z,78nm,1.1s
**DUG Dugway, Tooele 75.00 327** P **P** **15 46 40.9 +1.8**
baz=139,SNR=26
**AGMN Agassiz Nation 75.01 342** P **P** **15 46 38.5 -0.3**
baz=154,SNR=7.0
**E28A Huff 75.01 338** P **P** **15 46 39.3 +0.4**
E28A **pP** **15 47 01.7 -0.6**
E28A sP **sP** **15 47 13.3 +1.3**
**SYO Syowa Base 75.08 159**↑ *e*X **P** **15 46 40.4 +1.4**
**R11A Troy Canyon, C 75.10 324** P **P** **15 46 41.8 +2.0**
baz=136,SNR=43
**PKM Mcpherson Peak 75.12 319** P **P** **15 46 41.8 +1.8**
baz=132,SNR=25
**GRAC Grapevine Rang 75.13 322** P **P** **15 46 41.8 +2.0**
baz=135,SNR=11
**CWC Cottonwood Cre 75.15 321** P **P** **15 46 42.1 +2.0**
baz=134
**VNDA Vanda 75.30 190** P **P** **15 46 42.0 +1.9**
comp=Z,6.6nm,0.8s,baz=80,slow=1.4,SNR=7.5
VNDA LR LR 16 18 41.0
comp=Z,80nm,19.9s,baz=136,slow=35
**VES Vestal, Richgr 75.33 320** P **P** **15 46 42.6 +1.7**
baz=133
**BW06 Boulder Array 75.41 330** P **P** **15 46 42.3 +0.7**
baz=142,SNR=14
**PD31 Pinedale Array 75.41 330** P **P** **15 46 41.6 +0.1**
**PDAR Pinedale Array 75.41 330** P **P** **15 46 41.4 -0.1**
comp=Z,3.2nm,0.7s,baz=151,slow=6.6,SNR=34
PDAR LR LR 16 21 55.0
comp=Z,43nm,18.7s,baz=139,slow=37
**SMMC Simmler 75.52 319** P **P** **15 46 44.2 +2.1**
baz=132,SNR=11
**TIN Tinemaha, Big 75.67 321** P **P** **15 46 45.0 +2.1**
baz=134,SNR=7.7
**MDND Maddock 75.75 339** P **P** **15 46 43.9 +0.8**
baz=151,SNR=17
**TPH Tonopah 75.81 323** P **P** **15 46 44.7 +0.8**
TPH pmax pmax
comp=Z,164nm,1.0s
**TPH Tonopah 75.81 323** P **P** **15 46 44.7 +0.8**
**PAGB Antelope Grade 75.95 319** P **P** **15 46 45.2 +0.7**
PAGB IAmb IAmb 15 46 47.7
comp=Z,85nm,1.2s
**AHID Auburn Hatcher 76.12 329** IAmb IAmb 15 46 47.8
comp=Z,52nm,0.8s
**MLAC Mammoth, Mammo 76.41 321** P **P** **15 46 49.2 +1.9**
baz=134,SNR=5.8
**REDW Red Top Meadow 76.47 330** IAmb IAmb 15 47 23.8
comp=Z,44nm,1.1s
**ECR Eagle Creek 76.47 329** P **P** **15 46 47.6 +0.1**
**SNOW Snow King Moun 76.50 330** IAmb IAmb 15 46 50.2
comp=Z,34nm,0.8s
**PMPB Monarch Peak 76.61 319** P **P** **15 46 49.6 +1.4**
PMPB IAmb IAmb 15 46 51.6
comp=Z,64nm,1.1s
**TPAW Teton Pass 76.62 330** IAmb IAmb 15 46 50.0
comp=Z,38nm,0.9s
**LHV Little Huntoon 76.65 322** IAmb IAmb 15 46 51.8
comp=Z,45nm,1.1s
**ELK Elko 76.65 326** LR LR 16 20 00.5
comp=Z,75nm,18.0s,baz=6.0,slow=35
**NVAR Mina Array Bea 76.66 322** P **P** **15 46 50.2 +1.5**
comp=Z,15nm,0.9s,baz=152,slow=6.2,SNR=79
**NVAR Mina Array Bea 76.66 322** P **P** **15 46 49.5 +0.8**
**ULM Lac du Bonnet 76.78 343** P **P** **15 46 48.5 -0.3**
comp=Z,20nm,0.6s,baz=150,slow=6.8,SNR=19
ULM LR LR 16 25 03.1
comp=Z,128nm,18.4s,baz=175,slow=39
**ULM Lac du Bonnet 76.78 343** IAmb IAmb 15 46 49.6
comp=Z,75nm,1.4s
**FLWY Flagg Ranch 76.96 331** IAmb IAmb 15 46 53.2
comp=Z,62nm,0.9s
**KVN Kaiserville 76.98 323** P **P** **15 46 51.2 +0.7**
KVN pmax pmax
comp=Z,49nm,1.0s
**KVN Kaiserville 76.98 323** P **P** **15 46 51.2 +0.7**
KVN IAmb IAmb 15 46 53.0
comp=Z,49nm,1.0s
**BBGB Big Mountain B 77.00 319** IAmb IAmb 15 47 00.0
comp=Z,65nm,0.9s
**RLMT Red Lodge 77.14 332** IAmb IAmb 15 47 27.8
comp=Z,116nm,1.6s
**RLMT Red Lodge 77.14 332** P **P** **15 46 52.7 +1.4**
baz=142,SNR=28
**H17A Grant Village 77.15 331** P **P** **15 46 53.6 +2.2**
baz=141,SNR=8.2
**LAO LASA Array 77.15 335** P **P** **15 46 51.0 0.0**
LAO IAmb IAmb 15 46 53.2
comp=Z,65nm,1.0s
LAO **pP** **15 47 14.7 +0.1**
LAO sP **sP** **15 47 23.9 -0.5**
**LAO LASA Array 77.15 335** P **P** **15 46 52.1 +1.1**
baz=145,SNR=22
**LKWY Lake 77.20 331** IAmb IAmb 15 47 29.2
comp=Z,45nm,1.1s
**YERR Yerington 77.58 322** P **P** **15 46 54.9 +1.1**
YERR IAmb IAmb 15 46 56.9
comp=Z,49nm,1.2s
**YHH Holmes Hill 77.58 331** IAmb IAmb 15 46 57.0
comp=Z,68nm,1.1s
**SCHQ Schefferville 77.60 1** P **P** **15 46 53.4 +0.1**
comp=Z,24nm,0.8s,baz=186,slow=4.6,SNR=28
**SCHQ Schefferville 77.60 1** P **P** **15 46 53.6 +0.3**
SCHQ **pP** **15 47 15.5 -1.4**
**PNTR Pine Nut 77.85 322** IAmb IAmb 15 46 58.5
comp=Z,60nm,0.9s
**DGMT Dagmar 77.87 337** P **P** **15 46 56.0 +1.0**
DGMT pP **pP** **15 47 17.7 -0.8**
DGMT sP **sP** **15 47 28.7 +0.4**
**DGMT Dagmar 77.87 337** P **P** **15 46 56.2 +1.3**
baz=147,SNR=28
**SUR Sutherland 77.88 120** LR LR 16 19 38.0
comp=Z,116nm,18.3s,baz=202,slow=34
**SUR Sutherland 77.88 120** P **P** **15 46 55.9 +0.1**
**TORD Torodi Ar. Bea 77.98 70** P **P** **15 46 56.1 -0.2**
comp=Z,64nm,0.7s,baz=254,slow=5.3,SNR=273
TORD pP **pP** **15 47 19.8 -0.3**
comp=Z,35nm,0.7s,baz=256,slow=5.3,SNR=6.5
TORD PKKPbc **PKKPbc** **16 06 01.1 +5.2**
comp=Z,1.1nm,0.9s,baz=63,slow=3.6,SNR=4.5
**RUBR Rubicon Trail 78.14 322** P **P** **15 46 58.5 +1.5**
RUBR IAmb IAmb 15 47 00.1
comp=Z,51nm,1.1s
**MPK Martis Peak 78.23 322** IAmb IAmb 15 47 00.8
comp=Z,58nm,1.1s
**HLID Hailey 78.31 328** P **P** **15 46 58.9 +1.1**
HLID IAmb IAmb 15 47 00.8
comp=Z,53nm,0.9s
**HLID Hailey 78.31 328** P **P** **15 46 59.7 +1.9**
baz=138,SNR=65
**BOZ Bozeman (W) 78.55 331** P **P** **15 47 00.2 +1.2**
baz=141,SNR=20
**DLMT Dillon 78.81 330** IAmb IAmb 15 47 03.2
comp=Z,57nm,1.4s
**BEKR Beckworth 78.81 322** P **P** **15 47 01.3 +0.8**
**MFID Camas Ranch 78.90 327** IAmb IAmb 15 47 03.9
comp=Z,76nm,1.4s
**ORV Oroville 79.25 321** IAmb IAmb 15 47 05.8
comp=Z,91nm,1.1s
**EGMT Eagleton 79.65 334** IAmb IAmb 15 47 06.7
comp=Z,58nm,1.2s
**EGMT Eagleton 79.65 334** P **P** **15 47 05.5 +0.7**
baz=142,SNR=18
**TSUM Tsumeb 79.69 106** LR LR 16 20 30.6
comp=Z,131nm,18.2s,baz=310,slow=34
**TSUM Tsumeb 79.69 106** P **P** **15 47 06.3 +0.4**
TSUM IAmb IAmb 15 47 10.7
comp=Z,38nm,0.9s
**O03E Paynes Creek 79.92 322** P **P** **15 47 06.2 -0.2**
O03E IAmb IAmb 15 47 08.0
comp=Z,58nm,1.1s
**O03E Paynes Creek 79.92 322** P **P** **15 47 06.9 +0.4**
baz=132,SNR=19
**MOD Modoc Plateau 80.17 324** IAmb IAmb 15 47 10.5
comp=Z,43nm,1.0s
**J08A Circle Bar Ran 80.20 326** IAmb IAmb 15 47 10.8
comp=Z,76nm,1.4s
**PLID Pearl Lake 80.20 328** IAmb IAmb 15 47 10.5
comp=Z,48nm,0.9s
**O02D Mt. Diablo Mer 80.40 321** P **P** **15 47 08.8 -0.2**
**O02D Mt. Diablo Mer 80.40 321** P **P** **15 47 10.0 +0.9**
baz=131,SNR=14
**MSO Missoula 80.53 331** P **P** **15 47 11.1 +1.5**
baz=139,SNR=9.0
**KCPM Cahto Peak 80.55 320** IAmb IAmb 15 47 13.1
comp=Z,55nm,1.1s
**BMO Blue Mountains 80.67 327** IAmb IAmb 15 47 12.9
comp=Z,51nm,1.1s
**N02D Trinity Center 80.88 322** P **P** **15 47 11.5 -0.1**
**N02D Trinity Center 80.88 322** P **P** **15 47 12.0 +0.4**
baz=131,SNR=17
**M04C Macdoel 80.93 323** IAmb IAmb 15 47 14.2
comp=Z,61nm,1.0s
**M04C Macdoel 80.93 323** P **P** **15 47 13.0 +1.1**
baz=132,SNR=24
**KMRM Mail Ridge 80.97 321** IAmb IAmb 15 47 15.2
comp=Z,101nm,1.2s
**K05A Summer Lake 81.05 324** IAmb IAmb 15 47 15.6
comp=Z,80nm,1.0s
**M02C Callahan 81.24 322** P **P** **15 47 14.1 +0.6**
baz=131,SNR=7.9
**I07A Izee 81.24 326** P **P** **15 47 14.0 +0.5**
**KMPM Mount Pierce 81.33 321** IAmb IAmb 15 47 17.0
comp=Z,76nm,1.1s
**YBH Yreka Blue Hor 81.38 322** P **P** **15 47 13.8 -0.5**
YBH pmax pmax
comp=Z,15nm,1.0s
**YBH Yreka Blue Hor 81.38 322** P **P** **15 47 13.8 -0.5**
**K04D Chiloquin, OR 81.45 324** P **P** **15 47 16.0 +1.3**
baz=132
**L04D Klamath Falls 81.48 323** P **P** **15 47 15.6 +0.8**
baz=132,SNR=7.6
**J05D Fort Rock, OR 81.61 324** P **P** **15 47 16.8 +1.3**
baz=133,SNR=26
**PINE Pine Mountain 81.80 325** IAmb IAmb 15 47 19.5
comp=Z,63nm,0.9s
**G08A Pilot Rock 81.81 327** P **P** **15 47 16.6 +0.1**
**J04D Umpqua Nationa 82.05 324** IAmb IAmb 15 47 20.2
comp=Z,49nm,0.9s
**J04D Umpqua Nationa 82.05 324** P **P** **15 47 19.1 +1.2**
baz=132,SNR=6.8
**L02E Cave Junction 82.17 322** P **P** **15 47 18.7 +0.4**
**L02E Cave Junction 82.17 322** P **P** **15 47 19.6 +1.3**
baz=131,SNR=7.6
**WALA Waterton Lakes 82.20 332** IAmb IAmb 15 47 20.4
comp=Z,41nm,1.0s
**I05D Terrebonne, OR 82.38 325** P **P** **15 47 20.9 +1.6**
baz=133,SNR=19
**FFC Flin Flon 82.48 341** *e*P **P** **15 47 19.9 +0.4**
**FFC Flin Flon 82.48 341** P **P** **15 47 19.8 +0.2**
**K02D Willamette Mer 82.55 323** P **P** **15 47 21.8 +1.4**
baz=131,SNR=12
**I04A Tendick Farm, 82.59 324** P **P** **15 47 20.9 +0.5**
baz=132,SNR=7.3
**BOSA Boshof 82.80 118** P **P** **15 47 22.3 +0.1**
comp=Z,23nm,0.9s,baz=265,slow=4.1,SNR=38
BOSA LR LR 16 22 33.1
comp=Z,94nm,18.1s,baz=208,slow=34
**MDT Midelt 82.83 50** LR LR 16 23 55.0
comp=Z,110nm,20.6s,baz=164,slow=35
**MAW Mawson 82.86 163** pP pP 15 47 47.0 +1.5
comp=Z,96nm,0.9s,baz=236,slow=10,SNR=5.2
**HAWA Hanford 82.87 327** P **P** **15 47 22.5 +0.7**
**G05D Wamic, OR 82.98 326** P **P** **15 47 24.0 +1.5**
baz=133,SNR=7.6
**J01E Myrtle Point 83.00 323** P **P** **15 47 23.8 +1.2**
baz=131
**I03D Drain, OR 83.03 324** P **P** **15 47 24.2 +1.5**
baz=131
**D08A Wollman Farm, 83.03 328** IAmb IAmb 15 47 25.0
comp=Z,68nm,1.9s
**NEW Newport 83.05 330** P **P** **15 47 22.9 +0.2**
baz=136,SNR=6.8
**H04A Detroit Lake 83.06 325** P **P** **15 47 22.6 -0.2**
**PBDV Barranco-do-Ve 83.07 45** *e*P **P** **15 47 24.8 +1.7**
comp=Z,59nm,1.6s
**BUCK Buck Mountain 83.16 324** IAmb IAmb 15 47 25.6
comp=Z,47nm,0.9s
**HOOD Mount Hood Mea 83.21 326** IAmb IAmb 15 47 26.3
comp=Z,51nm,1.3s
**PCVE Castro Verde 83.23 44** *e*P **P** **15 47 25.0 +1.1**
comp=Z,56nm,2.0s
**C09A Chrisman Ranch 83.25 329** IAmb IAmb 15 47 25.9
comp=Z,44nm,0.7s
**PVAQ Vaqueiros 83.31 45** *e*P **P** **15 47 25.9 +1.7**
comp=Z,36nm,1.4s
**F05D White Salmon 83.49 326** P **P** **15 47 26.4 +1.4**
baz=133
**I02E Swisshome, OR 83.57 324** P **P** **15 47 26.9 +1.4**
baz=131
**COR Corvallis 83.59 324** P **P** **15 47 26.5 +1.0**
COR pmax pmax
comp=Z,62nm,1.1s
**COR Corvallis 83.59 324** P **P** **15 47 26.5 +1.0**
COR IAmb IAmb 15 47 28.4
comp=Z,62nm,1.1s
**PMTG Montargil 83.95 43** *e*P **P** **15 47 29.0 +1.5**
**G03D McMinnville, O 83.98 325** P **P** **15 47 28.8 +1.3**
baz=131
**F04A Amboy 84.02 326** IAmb IAmb 15 47 29.6
comp=Z,56nm,1.2s
**FCC Fort Churchill 84.13 347** IAmb IAmb 15 47 29.4
comp=Z,24nm,0.8s
**B08A Colville Reser 84.15 329** P **P** **15 47 28.1 -0.3**
B08A pP **pP** **15 47 53.5 +1.5**
**PBAR Barrancos 84.19 44** *e*P **P** **15 47 30.1 +1.4**
comp=Z,22nm,1.6s
**LBTB Lobatse 84.46 115** LR LR 16 22 35.4
comp=Z,97nm,19.3s,baz=228,slow=34
**E04D Cinebar 84.51 326** P **P** **15 47 31.5 +1.4**
baz=132
**D05A Enumclaw 84.64 327** IAmb IAmb 15 47 32.6
comp=Z,30nm,0.9s
**E03A Lebam 85.02 326** IAmb IAmb 15 47 34.9
comp=Z,63nm,1.3s
**EDM Edmonton 85.13 335** P **P** **15 47 32.9 -0.3**
EDM *PP **pP** **15 47 55.7 -1.4**
EDM pmax pmax
comp=Z,86nm,1.2s
**EDM Edmonton 85.13 335** P **P** **15 47 32.9 -0.3**
EDM **pP** **15 47 55.7 -1.4**
**MTE Manteigas 85.16 42** *e*P **P** **15 47 33.9 +0.2**
comp=Z,52nm,1.8s
**D03D Eldon 85.43 327** P **P** **15 47 35.7 +0.9**
baz=132,SNR=5.7
**MVO Moncorvo 85.92 42** *e*P **P** **15 47 38.6 +1.2**
comp=Z,40nm,1.6s
**A04D Lummi Island 86.03 328** P **P** **15 47 38.8 +1.2**
baz=132
**PGC Sidney 86.35 327** P **P** **15 47 39.7 +0.5**
PGC IAmb IAmb 15 47 41.3
comp=Z,48nm,1.1s
**FRB Frobisher Bay 86.52 0** LR LR 16 28 52.0
comp=Z,54nm,19.5s,baz=194,slow=37
**PAB San Pablo 86.70 44** P **P** **15 47 40.9 -0.4**
PAB pmax pmax
comp=Z,30nm,1.1s
**PAB San Pablo 86.70 44** P **P** **15 47 40.9 -0.4**
PAB IAmb IAmb 15 48 07.4
comp=Z,30nm,1.1s
**ESDC Sonseca Array 87.02 44** P **P** **15 47 42.9 +0.1**
comp=Z,5.2nm,1.1s,baz=236,slow=5.8,SNR=13
ESDC pP **pP** **15 48 07.0 +0.1**
comp=Z,14nm,1.2s,baz=236,slow=5.5,SNR=8.1
ESDC LR LR 16 24 31.8
comp=Z,48nm,19.0s,baz=245,slow=34
**MATP Matopo 88.73 112** LR LR 16 25 02.2
comp=Z,93nm,18.8s,baz=266,slow=34
**LSZ Lusaka 90.54 107** LR LR 16 27 14.2
comp=Z,162nm,18.4s,baz=280,slow=35
**SFJD Kangerlussuaq 90.84 7** LR LR 16 29 40.5
comp=Z,26nm,19.4s,baz=220,slow=36
**CASY Casey 90.93 180** P **P** **15 48 01.0 +0.2**
CASY pP **pP** **15 48 26.6 +1.6**
**YKA Yellowknife Ar 92.62 341** P **P** **15 48 08.1 -0.3**
comp=Z,20nm,0.9s,baz=138,slow=4.6,SNR=208
YKA pP **pP** **15 48 33.6 +1.1**
comp=Z,13nm,0.8s,baz=137,slow=4.5,SNR=12
YKA sP **sP** **15 48 43.5 +1.4**
comp=Z,4.3nm,0.6s,baz=140,slow=4.6,SNR=3.5
**RPZ Rata Peaks 93.72 219** LR LR 16 21 43.5
comp=Z,41nm,21.3s,baz=148,slow=30
**KEST Kesra 94.32 53** LR LR 16 33 20.8
comp=Z,72nm,18.4s,baz=189,slow=37
**BORG Borgarnes 94.93 19** LR LR 16 25 46.3
comp=Z,62nm,19.0s,baz=265,slow=32
**DOU Dourbes 97.51 39** *d*PcP **P** **15 48 30.9 -0.1**
**SUMG Summit 97.62 9** *i* P Pdif 15 48 33.0 +1.4
**BMRD Maredsous 97.70 38** *d*PcP **P** **15 48 31.9 0.0**
comp=Z,5.4nm,1.0s
**P33M Teslin, Yukon 97.73 333** P Pdif 15 48 32.9 +0.9
baz=124
**MBAR Mbarara 98.74 94** LR LR 16 32 13.5
comp=Z,60nm,19.1s,baz=242,slow=35
**VAE Valguarnera 98.75 53** LR LR 16 35 09.9
comp=Z,129nm,20.1s,baz=182,slow=37
**RES Resolute Bay 98.94 353** LR LR 16 37 31.5
comp=Z,48nm,19.0s,baz=116,slow=38
**FARO Faro, Yukon 99.05 335** P **Pdif** **15 48 38.6 +0.9**
baz=123
**DAVOX Davos/Dischmat 99.27 43** LR LR 16 34 28.0
comp=Z,84nm,18.6s,baz=262,slow=36
**A36M Sachs Harbour 102.18 345** P **Pdif** **15 48 52.0 +0.6**
baz=128
**DAWY Dawson 102.35 335** P **Pdif** **15 48 53.0 +0.6**
baz=117
**INK Inuvik 102.37 340** P **Pdif** **15 48 52.9 +0.6**
baz=122
**GERES GERESS Array B 102.44 42** PP **PP** **15 53 13.5 +6.2**
comp=Z,0.2nm,0.4s,baz=286,slow=6.8,SNR=3.7
**L27K Beaver Creek, 102.88 333** P **Pdif** **15 48 55.7 +0.9**
baz=116
**CLL Collm 102.89 40** *e*PP **PP** **15 53 04.0 -6.4**
CLL Lm MLR 16 30 00.0
comp=Z,100nm,19.4s
**J26L Joseph Creek 104.18 335** P **Pdif** **15 49 01.2 +0.6**
baz=114
**PAX Paxson 104.36 333** P **Pdif** **15 49 01.4 0.0**
baz=112
**ILAR Eielson Array 105.61 334** Pdiff **Pdif** **15 49 06.3 -0.5**
comp=Z,0.5nm,0.8s,baz=124,slow=2.8,SNR=4.3
ILAR PP **PP** **15 53 33.7 +3.4**
comp=Z,1.6nm,1.0s,baz=110,slow=5.8,SNR=5.4
**POKR Poker Flat Res 105.95 334** P **PKiKP** **15 53 21.5 +1.4**
baz=110
**OHAK Old Harbor 106.08 326** P **PKiKP** **15 53 21.5 +1.0**
baz=108
**O19K Port Alsworth 107.45 329** P **PKiKP** **15 53 24.1 +1.1**
baz=106
**CHUM Lake Minchumin 107.56 333** P **PKiKP** **15 53 24.7 +1.6**
baz=106
**P18K Big Mountain, 107.67 328** P **PKiKP** **15 53 24.6 +1.1**
baz=105
**TOLK Toolik Lake Re 107.89 338** P **PKiKP** **15 53 24.8 +1.1**
baz=107
**DZM Mont Dzumac 109.81 234** *e*LR LR 16 26 17.8
comp=Z,175nm,30.2s
**AKASG Malin Array Be 112.62 43** PKiKP **PKiKP** **15 53 32.5 -0.5**
comp=Z,0.8nm,0.4s,baz=266,slow=2.7,SNR=10
AKASG PKKPbc **PKKPbc** **16 04 24.1 +0.8**
comp=Z,0.3nm,0.3s,baz=71,slow=3.7,SNR=6.2
**AKBB Malin Array Si 112.62 43** *c* iPKiKP **PKiKP** **15 53 33.3 +0.3**
**ARCES ARCESS Array B 112.97 22** PKKPbc PKKPbc 16 04 28.0 +5.2
comp=Z,2.3nm,0.8s,baz=72,slow=4.0,SNR=5.6
**BRTR Keskin Array B 113.81 55** PKiKP **PKiKP** **15 53 36.5 +0.6**
baz=132,SNR=12
BRTR pPKiKP **pPKiKP** **15 54 01.9 +0.7**
comp=Z,0.9nm,0.7s,baz=219,slow=3.2,SNR=2.9
**OBN Obninsk 117.45 39** *i* PKiKP **PKiKP** **15 53 42.8 +0.6**
OBN pmax pmax
comp=Z,15nm,1.0s
OBN MLR MLR
comp=Z,55nm,16.0s
**LPSR Galich'ya Gora 118.80 41** *e*PKiKP **PKPdf** **15 53 44.1 -0.8**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**SOC Sochi 118.85 52** *i* PKiKP **PKPdf** **15 53 44.9 -0.4**
SOC *e* 15 55 03.8
SOC *e*PPP PPP 15 57 35.2
SOC *e*PS **PS** **16 04 57.5 +3.7**
SOC *e*SS SS 16 11 19.2 +0.8

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|---|---|---|---|---|---|---|---|---|
| SOC | | | | *e*SSS | SSS | 16 15 49.5 | | |
| SOC | | | | MLR | MLR | | | |
| | comp=Z,95nm,17.0s | | | | | | | |
| **KLMR** | **Klimovskoe** | **118.88** | **32** | *e*PKIKP | **PKPdf** | **15 53 44.5** | **-0.2** | |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **KLMR** | **Klimovskoe** | **118.88** | **32** | *e*PKPdf | **PKPdf** | **15 53 44.6** | **-0.2** | |
| KLMR | | | | AMP | | 15 53 46.2 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **118.92** | **43** | *e*PKIKP | **PKPdf** | **15 53 44.5** | **-0.6** | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **VORR** | **Voronezh** | **118.96** | **43** | *e*PKIKP | **PKiKP** | **15 53 45.6** | **+0.4** | |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,60nm,0.4s | | | | | | | |
| **RAYN** | **Ar Rayn** | **120.36** | **75** | PKIKP | **PKiKP** | **15 53 49.1** | **+0.1** | |
| **RAYN** | **Ar Rayn** | **120.36** | **75** | PKPdf | **PKiKP** | **15 53 49.1** | **+0.1** | |
| **VRH** | **Novokhopyorsk** | **120.53** | **43** | *e*PKIKP | **PKPdf** | **15 53 47.3** | **-0.9** | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **KIV** | **Kislovodsk** | **121.03** | **52** | *i* PKIKP | **PKiKP** | **15 53 50.8** | **+1.1** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,18nm,22.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **121.03** | **52** | | **PKPdf** | **15 53 48.3** | **-1.3** | |
| **KBZ** | **Khabaz** | **121.17** | **52** | PKP | **PKiKP** | **15 53 50.9** | **+1.1** | |
| | comp=Z,13nm,0.9s,baz=236,slow=3.4,SNR=31 | | | | | | | |
| KBZ | | | | pPKP | **pPKPdf** | **15 54 15.9** | **+0.9** | |
| | comp=Z,5.6nm,0.9s,baz=163,slow=2.7,SNR=3.7 | | | | | | | |
| **KBZ** | **Khabaz** | **121.17** | **52***c* | *i*PKIKP | **PKiKP** | **15 53 51.1** | **+1.3** | |
| **PRGR** | **Permogore** | **121.71** | **31** | *e*PKIKP | **PKPdf** | **15 53 50.2** | **0.0** | |
| PRGR | | | | *e* | | 15 54 15.5 | | |
| PRGR | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **ZEI** | **Tsey** | **121.85** | **53** | *i* PKIKP | **PKiKP** | **15 53 51.6** | **+0.1** | |
| ZEI | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **GNI** | **Garni** | **122.32** | **56***c* | *i*PKIKP | **PKiKP** | **15 53 53.5** | **+1.0** | |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.7s | | | | | | | |
| **GROC** | **Groznyy** | **123.25** | **53** | *i* PKIKP | **PKPdf** | **15 53 53.6** | **-0.1** | |
| **BILL** | **Bilibino** | **123.93** | **338***c* | PKIKP | **PKiKP** | **15 53 55.8** | **+1.2** | |
| BILL | | | | *e* | | 15 55 40.8 | | |
| BILL | | | | ePS | **PS** | **16 05 25.0** | **-13** | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **BELG** | **Belogornoye** | **124.12** | **41** | *i* PKIKP | **PKPdf** | **15 53 55.2** | **+0.1** | |
| BELG | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **KIRV** | **Kirov** | **124.16** | **34***c* | *i*PKIKP | **PKiKP** | **15 53 56.3** | **+1.1** | |
| **ASAR** | **Alice Springs** | **128.48** | **207** | PKP | **PKiKP** | **15 54 05.2** | **0.0** | |
| | comp=Z,13nm,0.8s,baz=132,slow=2.0,SNR=10 | | | | | | | |
| ASAR | | | | PKKP | **PKKPdf** | **16 04 12.6** | **+0.5** | |
| | comp=Z,0.4nm,0.9s,baz=25,slow=2.7,SNR=4.1 | | | | | | | |
| **ARU** | **Arti** | **129.49** | **35** | *i* PKIKP | **PKiKP** | **15 54 06.7** | **+0.7** | |
| ARU | | | | | | 15 56 19.2 | | |
| ARU | | | | SS | SS | 16 13 28.9 | -2.5 | |
| **ARU** | **Arti** | **129.49** | **35** | | **PKPdf** | **15 54 05.5** | **+0.2** | |
| **TIXI** | **Tiksi** | **130.33** | **353** | *i* PKIKP | **PKPdf** | **15 54 06.4** | **0.0** | |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **TIXI** | **Tiksi** | **130.33** | **353** | | **PKPdf** | **15 54 05.3** | **-1.1** | |
| **SVE** | **Sverdlovsk** | **130.43** | **34** | *e*PKIKP | **PKiKP** | **15 54 08.2** | **+0.3** | |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **131.56** | **210** | PKP | **PKiKP** | **15 54 11.4** | **0.0** | |
| | comp=Z,7.7nm,0.6s,baz=175,slow=1.6,SNR=9.8 | | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **15 54 36.7** | **+1.1** | |
| | comp=Z,2.5nm,0.6s,baz=152,slow=1.8,SNR=2.9 | | | | | | | |
| WRA | | | | SKPbc | **SKPab** | **15 57 29.1** | **+0.4** | |
| | comp=Z,4.4nm,1.0s,baz=153,slow=3.8,SNR=7.7 | | | | | | | |
| **WRAB** | **Tennant Creek** | **131.56** | **210***c* | *i*PKIKP | **PKiKP** | **15 54 12.0** | **+0.6** | |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| **NRIK** | **Noril'sk** | **131.62** | **11** | PKP | **PKiKP** | **15 54 09.4** | **-0.5** | |
| | comp=Z,6.6nm,1.0s,baz=80,slow=2.0,SNR=8.7 | | | | | | | |
| **NRIK** | **Noril'sk** | **131.62** | **11***c* | *i*PKIKP | **PKiKP** | **15 54 10.4** | **+0.5** | |
| **NRIK** | **Noril'sk** | **131.62** | **11** | | **PKPdf** | **15 54 08.0** | **-0.9** | |
| **AB31** | **Akbulak array** | **132.36** | **44** | *i* PKIKP | **PKiKP** | **15 54 12.1** | **+0.1** | |
| **PETK** | **Petropavlovsk-** | **133.75** | **323** | PKP | **PKiKP** | **15 54 14.2** | **-0.5** | |
| | comp=Z,4.2nm,0.6s,baz=71,slow=3.1,SNR=10.0 | | | | | | | |
| **MA2** | **Magadan** | **134.07** | **333** | | **PKPdf** | **15 54 13.2** | **-0.6** | |
| **BRVK** | **Borovoye** | **137.06** | **35***c* | *i*PKIKP | **PKiKP** | **15 54 21.3** | **-0.1** | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.3s | | | | | | | |
| **BRVK** | **Borovoye** | **137.06** | **35** | PKPdf | **PKPdf** | **15 54 20.4** | **+0.8** | |
| **YAK** | **Yakutsk** | **139.01** | **347** | *e*PKIKP | **PKPdf** | **15 54 23.4** | **+0.5** | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **YAK** | **Yakutsk** | **139.01** | **347** | | PKPpre | 15 54 14.6 | | |
| YAK | | | | PKPdf | **PKPdf** | **15 54 23.3** | **+0.5** | |
| **BRZS** | **Berezniki** | **139.83** | **38** | *e*PKIKP | **PKPdf** | **15 54 24.7** | **0.0** | |
| **BRZS** | **Berezniki** | **139.83** | **38** | *e*PKP | **PKPdf** | **15 54 24.8** | **0.0** | |
| | baz=38 | | | | | | | |
| **OTUK** | **Ortayu** | **140.41** | **41** | PKIKP | **PKiKP** | **15 54 27.2** | **-1.3** | |
| **DZA** | **Taraz** | **141.75** | **49** | *e*PKIKP | **PKPdf** | **15 54 28.9** | **+0.4** | |
| **DZA** | **Taraz** | **141.75** | **49** | *e*PKP | **PKPdf** | **15 54 29.0** | **+0.4** | |
| | baz=49 | | | | | | | |
| **KURK** | **Kurchatov** | **142.68** | **34** | *i* PKIKP | **PKPdf** | **15 54 27.2** | **-2.6** | |
| **KURK** | **Kurchatov** | **142.68** | **34** | | **PKPdf** | **15 54 26.4** | **-3.5** | |
| **KURBB** | **Kurchatov Arra** | **142.69** | **34** | PKHKP | PKPpre | 15 54 26.3 | | |
| **TYV** | **Tymovskoe** | **142.95** | **326** | *e*PKIKP | **PKPdf** | **15 54 27.5** | **-2.8** | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,200nm,4.3s | | | | | | | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **143.40** | **26** | | PKPbc | 15 54 28.4 | 0.0 | |
| **ZALV** | **Zalesovo Beam** | **143.40** | **26** | PKP | PKPbc | 15 54 28.4 | 0.0 | |
| | comp=Z,12nm,0.6s,baz=314,slow=3.7,SNR=42 | | | | | | | |
| ZALV | | | | pPKP | pPKPdf | 15 54 54.9 | -1.3 | |
| | comp=Z,11nm,0.8s,baz=304,slow=2.9,SNR=3.5 | | | | | | | |
| **AML** | **Almayashu** | **143.65** | **49** | P | **PKPdf** | **15 54 31.6** | **-0.8** | |
| | SNR=29 | | | | | | | |
| **AAK** | **Ala-Archa** | **144.03** | **48** | PKP | **PKPdf** | **15 54 32.4** | **-0.4** | |
| | comp=Z,17nm,0.8s,baz=232,slow=1.4,SNR=66 | | | | | | | |
| **AAK** | **Ala-Archa** | **144.03** | **48** | P | **PKPdf** | **15 54 32.3** | **-0.4** | |
| | SNR=26 | | | | | | | |
| **AAK** | **Ala-Archa** | **144.03** | **48** | *i* PKIKP | **PKPdf** | **15 54 32.6** | **-0.1** | |
| **AAK** | **Ala-Archa** | **144.03** | **48** | | PKPbc | 15 54 31.6 | +0.7 | |
| **CHMS** | **Chumysh** | **144.07** | **48** | P | **PKPdf** | **15 54 32.0** | **-0.6** | |
| | SNR=12 | | | | | | | |
| **UCH** | **Uchtor** | **144.19** | **49** | P | **PKPdf** | **15 54 33.1** | **-0.4** | |
| | SNR=44 | | | | | | | |
| **KBK** | **Karagaybulak** | **144.33** | **48** | P | **PKPdf** | **15 54 33.4** | **+0.1** | |
| | SNR=15 | | | | | | | |
| **TKM2** | **Tokmak 2** | **144.68** | **47** | P | **PKPdf** | **15 54 34.2** | **+0.3** | |
| | SNR=6.3 | | | | | | | |
| **TKM2** | **Tokmak 2** | **144.68** | **47** | PKIKP | **PKPdf** | **15 54 33.6** | **-0.3** | |
| **BATI** | **Baumata** | **144.68** | **202** | PKP | **PKPdf** | **15 54 34.4** | **-0.2** | |
| | comp=Z,98nm,0.8s,baz=247,slow=0.7,SNR=25 | | | | | | | |
| **BATI** | **Baumata** | **144.68** | **202** | PKP | **PKPdf** | **15 54 35.2** | **+0.7** | |
| **SOEI** | **Soe** | **144.88** | **203** | PKP | **PKPdf** | **15 54 35.8** | **+0.8** | |
| **YSS** | **Yuzh-Sakhalins** | **145.10** | **321** | *e*PKIKP | **PKPdf** | **15 54 34.6** | **+0.4** | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,110nm,0.9s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **145.10** | **321** | | **PKPdf** | **15 54 34.1** | **-0.1** | |
| **BOD** | **Bodaibo** | **145.21** | **357** | *e*PKP2 | **PKPbc** | **15 54 33.5** | **-0.4** | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,152nm,1.5s | | | | | | | |
| **CHKK** | **Chushkaly** | **145.22** | **45** | *e*PKP | **PKPbc** | **15 54 34.3** | **-0.1** | |
| | baz=45 | | | | | | | |
| **NIL** | **Nilore** | **145.33** | **64** | PKP2 | **PKPbc** | **15 54 34.8** | **-0.3** | |
| **NIL** | **Nilore** | **145.33** | **64** | | **PKPbc** | **15 54 34.8** | **-0.3** | |
| **ULHL** | **Ulahoi** | **145.38** | **48** | P | **PKPab** | **15 54 37.1** | **+1.6** | |
| | SNR=94 | | | | | | | |
| **AAA** | **Alma-Ata** | **145.45** | **46** | *e*PKP2 | **PKPdf** | **15 54 35.1** | **+0.1** | |
| **AAA** | **Alma-Ata** | **145.45** | **46** | *e*PKP | **PKPbc** | **15 54 35.2** | **0.0** | |
| | baz=46 | | | | | | | |
| **TNSS** | **Tian-Shan** | **145.54** | **46** | *e*PKP | **PKPdf** | **15 54 35.4** | **-0.3** | |
| | baz=47 | | | | | | | |
| **MDOK** | **Medeo** | **145.55** | **46** | *e*PKIKP | **PKPdf** | **15 54 34.4** | **-0.9** | |
| **MDOK** | **Medeo** | **145.55** | **46** | *e*PKP | **PKPdf** | **15 54 34.4** | **-0.9** | |
| | baz=46 | | | | | | | |
| **ARXS** | **Arharly** | **145.61** | **44** | *e*PKP2 | **PKPab** | **15 54 36.1** | **0.0** | |
| **GRNR** | **Gornyy** | **146.00** | **331** | ⇑*i*PKP2 | **PKPab** | **15 54 37.6** | **+0.4** | |
| GRNR | | | | pmax | pmax | | | |
| | comp=N,9.0nm,1.1s | | | | | | | |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,70nm,0.9s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=E,50nm,15.0s | | | | | | | |
| **KSH** | **Kashi** | **146.14** | **53** | PKPbc | **PKPab** | **15 54 38.3** | **0.0** | |
| KSH | | | | pPKP | pPKPab | 15 55 03.8 | +0.8 | |
| KSH | | | | PP | **PP** | **15 58 05.3** | **+5.0** | |
| **WBSI** | **Waikabubak, Su** | **146.47** | **195** | PKP | **PKPab** | **15 54 39.7** | **-0.3** | |
| **ZHN** | **Zhinishke** | **146.47** | **45** | *e*PKIKP | **PKPdf** | **15 54 37.2** | **+0.4** | |
| **ZHN** | **Zhinishke** | **146.47** | **45** | *e*PKP | **PKPdf** | **15 54 37.3** | **+0.4** | |
| | baz=46 | | | | | | | |
| **KPKS** | **Kokpek** | **146.50** | **45** | *e*PKIKP | **PKPdf** | **15 54 36.6** | **-0.3** | |
| **KPKS** | **Kokpek** | **146.50** | **45** | *e*PKP | **PKPdf** | **15 54 36.6** | **-0.3** | |
| | baz=45 | | | | | | | |
| **SATY** | **Saty** | **146.50** | **46** | *e*PKIKP | **PKPdf** | **15 54 37.0** | **+0.1** | |
| **SATY** | **Saty** | **146.50** | **46** | *e*PKP | **PKPdf** | **15 54 37.0** | **+0.1** | |
| | baz=46 | | | | | | | |
| **GUMO** | **Guam** | **146.55** | **260** | PKPbc | **PKPbc** | **15 54 38.9** | **-0.3** | |
| | comp=E,205nm,0.9s,baz=295,slow=11,SNR=4.9 | | | | | | | |
| **MMRI** | **Maumere** | **146.62** | **201** | PKP | **PKPbc** | **15 54 39.8** | **+0.3** | |
| **MAKZ** | **Makanchi** | **146.76** | **37** | PKIKP | **PKPdf** | **15 54 37.2** | **+0.1** | |
| **MAKZ** | **Makanchi** | **146.76** | **37** | | **PKPdf** | **15 54 37.2** | **+0.1** | |
| **UZB** | **Uzynbulak** | **146.86** | **45** | *e*PKIKP | **PKPdf** | **15 54 37.8** | **+0.3** | |
| **UZB** | **Uzynbulak** | **146.86** | **45** | *e*PKP | **PKPdf** | **15 54 37.9** | **+0.3** | |
| | baz=45 | | | | | | | |
| UZB | | | | *e*PKPab | **PKPab** | **15 54 40.6** | **-0.4** | |
| | baz=45 | | | | | | | |
| **FAKI** | **Fak Fak** | **146.87** | **222** | | **PKPab** | **15 54 41.0** | **-0.6** | |
| **FAKI** | **Fak Fak** | **146.87** | **222** | PKP | **PKPab** | **15 54 41.3** | **-0.4** | |
| **PALK** | **Pallekele** | **146.93** | **114** | PKPbc | **PKPbc** | **15 54 40.3** | **-0.2** | |
| | comp=E,14nm,0.8s,baz=348,slow=4.2,SNR=6.9 | | | | | | | |
| **MK31** | **Makanchi Array** | **146.94** | **37***d* | *i*PKIKP | **PKPdf** | **15 54 38.1** | **+0.7** | |
| **MKAR** | **Makanchi Array** | **146.94** | **37** | PKPbc | **PKPdf** | **15 54 38.4** | **+1.0** | |
| | comp=E,39nm,0.8s,baz=320,slow=1.5,SNR=182 | | | | | | | |
| MKAR | | | | pPKPbc | pPKPbc | 15 55 03.8 | -0.6 | |
| | comp=E,25nm,0.8s,baz=311,slow=2.4,SNR=7.4 | | | | | | | |
| **ZEA** | **Zeya** | **146.99** | **342** | *e*PKIKP | **PKPbc** | **15 54 38.4** | **-0.9** | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,50nm,1.1s | | | | | | | |
| **PDGK** | **Podgornoye** | **147.08** | **45** | PKP2 | **PKPbc** | **15 54 39.2** | **-0.9** | |
| **URV** | **Uravakonda** | **147.17** | **98** | *e*PKPab | **PKPbc** | **15 54 40.7** | **-0.3** | |
| **ERM** | **Erimo** | **147.22** | **313***c* | *i*PKP2 | **PKPbc** | **15 54 41.1** | **+0.8** | |
| ERM | | | | pmax | pmax | | | |
| | comp=Z,139nm,1.7s | | | | | | | |
| **KLRI** | **Killari** | **147.47** | **92** | *e*PKiKP | **PKPbc** | **15 54 42.2** | **+0.4** | |
| **PLAI** | **Plampang** | **147.61** | **193** | PKP | **PKPbc** | **15 54 42.3** | **+0.1** | |
| **ZSN** | **Zaisan** | **147.93** | **34** | *e*PKiKP | **PKPdf** | **15 54 39.2** | **+0.2** | |
| **ZSN** | **Zaisan** | **147.93** | **34** | *e*PKP | **PKPdf** | **15 54 39.3** | **+0.2** | |
| | baz=34 | | | | | | | |
| ZSN | | | | *e*PKPab | **PKPab** | **15 54 45.7** | **+0.8** | |
| | baz=34 | | | | | | | |
| **IGBI** | **Denpasar** | **148.05** | **188** | PKP | **PKiKP** | **15 54 44.3** | **-0.9** | |
| **JAGI** | **Jajag, Banyuwa** | **148.50** | **186** | | **PKPbc** | **15 54 44.7** | **+0.1** | |
| **JAGI** | **Jajag, Banyuwa** | **148.50** | **186** | PKP | **PKPbc** | **15 54 45.2** | **+0.6** | |
| **AAI** | **Ambon** | **148.55** | **214** | PKP | **PKPbc** | **15 54 43.9** | **-0.8** | |
| **GMJI** | **Gumukmas** | **148.76** | **185** | PKP | **PKiKP** | **15 54 46.2** | **-0.4** | |
| **RCLA** | **Racherla** | **148.88** | **98** | *e*PKiKP | **PKPbc** | **15 54 45.4** | **-0.1** | |
| **PCJI** | **Pacitan** | **148.93** | **180** | PKP | **PKPbc** | **15 54 46.2** | **+0.5** | |
| **SKHT** | **Srikalahasti** | **148.97** | **102** | *e*PKiKP | **PKPbc** | **15 54 45.9** | **+0.2** | |
| **SRLM** | **Srisailam** | **149.03** | **97** | *e*PKiKP | **PKPbc** | **15 54 46.1** | **+0.2** | |
| **SIJI** | **Sorong** | **149.08** | **222** | PKPbc | **PKPbc** | **15 54 46.3** | **+0.2** | |
| | comp=Z,44nm,0.8s,baz=3.2,slow=6.4,SNR=24 | | | | | | | |
| **PWJI** | **Pagerwojo** | **149.09** | **182** | PKP | **PKiKP** | **15 54 46.9** | **-0.4** | |
| **HYBB** | **Hyderabad (bro** | **149.10** | **94** | *e*PKiKP | **PKPbc** | **15 54 46.0** | **0.0** | |
| HYBB | | | | *e* | | 15 55 03.2 | | |
| **UGM** | **Wanagama** | **149.21** | **179** | PKP | **PKPbc** | **15 54 46.8** | **+0.4** | |
| **CMJI** | **Cimerak** | **149.24** | **175** | PKP | **PKPbc** | **15 54 46.8** | **+0.4** | |
| **SRSP** | **Sriramsagar** | **149.29** | **92** | *e*PKiKP | **PKPbc** | **15 54 46.4** | **0.0** | |
| **CUPL** | **Chouttuppal** | **149.40** | **95** | *e*PKiKP | **PKPbc** | **15 54 46.8** | **0.0** | |
| **NJS** | **Nagarjunasagar** | **149.54** | **96** | *e*PKiKP | **PKPbc** | **15 54 46.9** | **-0.3** | |
| **CNJI** | **Cibinong** | **149.58** | **172** | PKP | **PKPbc** | **15 54 47.0** | **-0.3** | |
| **KPJI** | **Karang Pucung** | **149.72** | **176** | PKP | **PKiKP** | **15 54 48.3** | **-0.3** | |
| **ADKI** | **Addanki** | **149.93** | **98** | *e*PKiKP | **PKiKP** | **15 54 48.8** | **-0.1** | |
| **CGJI** | **Cibinong** | **150.05** | **169** | PKP | **PKiKP** | **15 54 49.3** | **0.0** | |
| **LEM** | **Lembang** | **150.11** | **173** | PKPbc | **PKiKP** | **15 54 49.8** | **+0.2** | |
| | comp=Z,142nm,0.8s,baz=62,slow=5.4,SNR=34 | | | | | | | |
| **LEM** | **Lembang** | **150.11** | **173** | PKP | **PKiKP** | **15 54 50.2** | **+0.6** | |
| **RPR** | **Rampur** | **150.15** | **92** | *e*PKPbc | **PKPbc** | **15 54 46.8** | **-1.8** | |
| RPR | | | | *e*PKiKP | **PKiKP** | **15 54 47.9** | **-1.4** | |
| **DBJI** | **Dramaga** | **150.27** | **171** | PKP | **PKPbc** | **15 54 49.3** | **+0.3** | |
| **BKSI** | **Bulukumba** | **150.41** | **199** | PKP | **PKiKP** | **15 54 50.3** | **+0.3** | |
| **MOY** | **Mondy** | **150.42** | **13** | *e*PKiKP | **PKPdf** | **15 54 45.3** | **+2.3** | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,102nm,2.2s | | | | | | | |
| **KAPI** | **Kappang** | **150.81** | **198** | PKPbc | **PKiKP** | **15 54 51.7** | **+0.8** | |
| | comp=Z,32nm,0.8s,baz=173,slow=9.9,SNR=3.7 | | | | | | | |
| **MYLAV** | **Mylavaram** | **150.82** | **97** | *e*PKiKP | **PKPbc** | **15 54 50.4** | **+0.3** | |
| **KASI** | **Kota Agung** | **150.89** | **167** | PKP | **PKiKP** | **15 54 51.3** | **+0.3** | |
| **SANI** | **Sanana** | **151.07** | **212** | PKP | **PKPbc** | **15 54 50.8** | **-0.1** | |
| **LWLI** | **Liwa** | **151.28** | **166** | PKP | **PKiKP** | **15 54 53.2** | **+1.2** | |
| **BNSI** | **Bone** | **151.28** | **199** | PKP | **PKiKP** | **15 54 52.2** | **+0.3** | |
| **KLSI** | | **151.75** | **167** | PKP | **PKiKP** | **15 54 53.4** | **+0.6** | |
| **WMQ** | **Urumqi** | **151.78** | **37** | PKPbc | **PKPdf** | **15 54 46.8** | **+1.5** | |
| WMQ | | | | PKPab | **PKPab** | **15 55 03.5** | **+2.6** | |
| WMQ | | | | sPKP | | 15 55 17.5 | | |
| WMQ | | | | PP | **PP** | **15 58 33.0** | **+0.6** | |
| WMQ | | | | AMB | AMB | | | |
| | comp=Z,260nm,4.7s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,83nm,21.5s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **151.80** | **199** | PKP | **PKiKP** | **15 54 53.4** | **+0.5** | |
| **MDSI** | **Maura Dua** | **151.82** | **166** | PKP | **PKPbc** | **15 54 52.2** | **-0.4** | |
| **PVM** | **Polavaram** | **151.87** | **96** | *e*PKiKP | **PKPbc** | **15 54 52.7** | **+0.1** | |
| **ZAK** | **Zakamensk** | **152.08** | **11** | *e*PKIKP | **PKPdf** | **15 54 46.8** | **+1.2** | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **152.76** | **326** | PKP | **PKPdf** | **15 54 44.6** | **-2.0** | |
| | comp=Z,7.2nm,0.9s,baz=279,slow=1.3,SNR=8.1 | | | | | | | |
| USRK | | | | PKPbc | **PKiKP** | **15 54 54.0** | **0.0** | |
| | comp=Z,24nm,0.9s,baz=343,slow=2.3,SNR=18 | | | | | | | |
| USRK | | | | pPKPbc | **pPKPbc** | **15 55 19.1** | **+0.4** | |
| | comp=Z,10nm,0.9s,baz=27,slow=2.1,SNR=3.3 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **152.76** | **326** | | **PKPdf** | **15 54 44.5** | **-2.1** | |
| USRK | | | | | PKPbc | **15 54 53.5** | **-0.3** | |
| **MJAR** | **Matsushiro Arr** | **152.93** | **306** | PKPbc | **PKiKP** | **15 54 55.3** | **+0.7** | |
| | comp=Z,28nm,0.9s,baz=52,slow=0.9,SNR=30 | | | | | | | |
| MJAR | | | | PKPab | **PKPab** | **15 55 06.8** | **+0.8** | |
| | comp=Z,33nm,0.9s,baz=66,slow=2.3,SNR=17 | | | | | | | |
| **MAJO** | **Matsushiro** | **152.94** | **306** | PKIKP | **PKPbc** | **15 54 52.8** | **-1.7** | |
| MAJO | | | | | | 15 55 05.7 | | |
| **MAJO** | **Matsushiro** | **152.94** | **306** | | **PKPbc** | **15 54 52.8** | **-1.7** | |
| MAJO | | | | PKPab | **PKPab** | **15 55 05.7** | **-0.3** | |
| **MAT** | **Matsushiro** | **152.94** | **306** | PKP | **PKiKP** | **15 54 55.1** | **+0.5** | |
| **KRJI** | **Kerinci** | **153.33** | **158** | PKP | **PKiKP** | **15 54 56.4** | **+0.2** | |
| **LUWI** | **Luwuk** | **153.43** | **207** | PKP | **PKiKP** | **15 54 57.3** | **+1.0** | |
| **BNX** | **BinXian** | **153.74** | **333** | ⇑PKPbc | **PKPdf** | **15 54 48.0** | **0.0** | |
| **CHLP** | **Challavanipeta** | **154.44** | **95** | *e*PKiKP | **PKiKP** | **15 54 58.5** | **+0.3** | |
| **SONM** | **Songino Array** | **155.01** | **7** | PKP | **PKPdf** | **15 54 50.5** | **+0.6** | |
| | comp=Z,5.7nm,0.9s,baz=32,slow=0.0,SNR=32 | | | | | | | |
| SONM | | | | PKPbc | PKPbc | 15 54 59.2 | | |
| | comp=Z,5.1nm,0.9s,baz=310,slow=1.3,SNR=12 | | | | | | | |
| SONM | | | | PKPab | **pPKPdf** | **15 55 15.6** | **+0.5** | |
| | comp=Z,6.2nm,0.8s,baz=332,slow=4.0,SNR=12 | | | | | | | |
| SONM | | | | pPKPab | **pPKPab** | **15 55 39.2** | **+0.3** | |
| | comp=Z,6.2nm,1.0s,baz=338,slow=5.4,SNR=3.5 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **155.06** | **6** | PKIKP | **PKPdf** | **15 54 49.4** | **-0.6** | |
| ULN | | | | | | 15 54 58.4 | | |
| ULN | | | | | | 15 55 14.3 | | |
| **ULN** | **Ulaanbaatar** | **155.06** | **6** | PKPdf | **PKPdf** | **15 54 49.4** | **-0.6** | |
| ULN | | | | | PKPbc | 15 54 58.4 | | |
| ULN | | | | PKPab | **PKPab** | **15 55 14.3** | **-0.4** | |
| ULN | | | | pPKPab | **pPKPab** | **15 55 37.1** | **-2.0** | |
| **CN2** | **Changchun** | **156.12** | **333** | *e*PKP | **PKPdf** | **15 54 47.5** | **-3.8** | |
| **XLT** | **XiLinHaoTe** | **158.80** | **350** | *e*PKP | **PKPdf** | **15 54 55.5** | **+0.7** | |
| XLT | | | | PKPab | **PKPab** | **15 55 31.8** | **+1.0** | |
| XLT | | | | PP | **PP** | **15 59 13.3** | **+2.5** | |
| XLT | | | | AMB | AMB | | | |
| | comp=Z,140nm,8.3s | | | | | | | |
| **KSRS** | **Korea Array** | **159.56** | **318** | PKP | **PKPdf** | **15 54 55.7** | **0.0** | |
| | comp=Z,12nm,1.0s,baz=74,slow=0.7,SNR=32 | | | | | | | |
| KSRS | | | | pPKP | **pPKPdf** | **15 55 20.9** | **-0.1** | |
| | comp=Z,5.2nm,1.0s,baz=88,slow=1.0,SNR=3.5 | | | | | | | |
| KSRS | | | | PKPab | **PKPab** | **15 55 35.6** | **+1.3** | |
| | comp=Z,9.2nm,0.8s,baz=58,slow=4.4,SNR=15 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **159.59** | **318** | PKPdf | **PKPdf** | **15 54 56.2** | **+0.5** | |
| KSAR | | | | pPKPdf | **pPKPdf** | **15 55 18.5** | **-2.6** | |
| KSAR | | | | | **PKPab** | **15 55 34.5** | **+0.1** | |
| KSAR | | | | pPKPab | **pPKPab** | **15 55 59.1** | **+0.6** | |
| **GOMU** | **GeErMu** | **160.83** | **43** | PKP | **PKPdf** | **15 54 59.3** | **+1.6** | |
| GOMU | | | | AMB | AMB | | | |
| | comp=Z,89nm,4.7s | | | | | | | |
| **GTA** | **Gaotai** | **161.14** | **28** | ⇓PKP | **PKPdf** | **15 54 58.8** | **+1.2** | |
| GTA | | | | pPKP | pPKPdf | 15 55 24.5 | +1.4 | |
| GTA | | | | sPKP | | 15 55 36.0 | | |
| GTA | | | | PKPab | **PKPab** | **15 55 41.5** | **+0.2** | |
| **HHC** | **Hu-ho-hao-te** | **162.26** | **359** | *e*PKP | **PKPdf** | **15 55 00.0** | **+1.3** | |
| **SHL** | **Shillong** | **162.41** | **78** | PKPdf | **PKPdf** | **15 54 58.2** | **-1.2** | |
| SHL | | | | pPKPdf | **pPKPdf** | **15 55 24.1** | **-0.7** | |
| **LZH** | **Lanzhou** | **165.62** | **24** | *e*PKP | **PKPdf** | **15 55 04.0** | **+2.0** | |
| LZH | | | | pPKP | pPKPdf | 15 55 30.0 | +2.5 | |
| LZH | | | | sPKP | | 15 55 40.3 | | |
| **CMAR** | **Chiang Mai Arr** | **167.84** | **110** | PKP | **PKPdf** | **15 55 03.9** | **-0.1** | |
| | comp=Z,3.7nm,1.0s,baz=268,slow=2.0,SNR=24 | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **15 56 10.9** | **-0.4** | |
| | comp=Z,1.5nm,0.8s,baz=251,slow=5.1,SNR=7.7 | | | | | | | |
| CMAR | | | | PP | **PP** | **15 59 57.6** | **-2.7** | |
| | comp=Z,0.2nm,0.4s,baz=247,slow=5.2,SNR=4.2 | | | | | | | |
| **LYN** | **LuoYang** | **168.48** | **354** | *e*PKP | **PKPdf** | **15 55 03.5** | **-0.4** | |
| **NJ2** | **Nanjing** | **168.65** | **324** | *e*PKP | **PKPdf** | **15 55 05.5** | **+1.4** | |
| **XAN** | **Xi'an** | **168.92** | **9** | PKP | **PKPdf** | **15 55 05.5** | **+1.2** | |
| **CD2** | **Chengdu** | **169.88** | **38** | PKP | **PKPdf** | **15 55 03.3** | **-1.7** | |
| **PZH** | **PanZhiHua** | **170.93** | **66** | PKP | **PKPdf** | **15 55 05.8** | **0.0** | |
| **KMI** | **Kunming** | **172.19** | **73** | ⇓PKP | **PKPdf** | **15 55 07.5** | **+0.9** | |
| **GYA** | **Guiyang** | **174.82** | **48** | ⇓PKP | **PKPdf** | **15 55 07.5** | **+0.1** | |

**IDC 25 15:39:56.3±419.0, 57.44N×32.88E, h0km, Error ellipse: s-maj=177.3km s-min=66.9km az=101.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **2.48** | **105** | *i* | | 15 56 00.0 | |
| | baz=287,slow=265,SNR=0.3 | | | | | | |
| **I37NO** | **I37NO** | **13.27** | **337** | *i* | | 16 46 20.0 | |
| | baz=141,slow=331,SNR=1.4 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **16.34** | **105** | *i* | | 17 19 49.4 | |
| | baz=312,slow=325,SNR=0.9 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **37.25** | **339** | *i* | | 19 27 40.0 | |
| | baz=60,slow=332,SNR=0.5 | | | | | | |

*IDC* ***25*** *15:44:01.4±2.1, 6.08S×130.40E, h127km±24km, mb3.6/5, mb1 4.0/11, mb1mx3.7/37, mbtmp4.4/11, MS3.3/2, Ms1 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **42.60** | **321** | P | **P** | **15** | **51** | **45.0 -0.1** |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | pmax | | | |
| PZH | comp=Z,100nm,6.4s | | | pmax | pmax | | | |
| **MJAR** | **Matsushiro Arr** | **42.92** | **9** | P | **P** | **15** | **51** | **47.7 +0.4** |
| **KSRS** | **Korea Array** | **43.27** | **357** | P | **P** | **15** | **51** | **51.1 +1.0** |
| | comp=Z,0.5nm,0.6s,baz=175,slow=8.1,SNR=1.8 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.71** | **341** | *eP* | **P** | **15** | **52** | **42.5 +2.0** |
| HHC | comp=Z,10.0nm,1.0s | | | pmax | pmax | | | |
| HHC | comp=Z,120nm,5.5s | | | pmax | pmax | | | |
| **ODAN** | **Odare** | **52.91** | **310** | *eP* | **P** | **15** | **53** | **05.3 +0.5** |
| | comp=Z,11nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **52.93** | **311** | *eP* | **P** | **15** | **53** | **05.2 +0.2** |
| | comp=Z,12nm,0.4s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **53.02** | **136** | P | **P** | **15** | **53** | **04.0 -1.2** |
| **GTA** | **Gaotai** | **53.29** | **331** | *eP* | **P** | **15** | **53** | **08.0 +0.8** |
| GTA | comp=Z,3.0nm,0.8s | | | pmax | pmax | | | |
| **RAMN** | **Ramite** | **53.56** | **310** | *eP* | **P** | **15** | **53** | **10.1 +0.6** |
| | comp=Z,6.4nm,0.4s | | | | | | | |
| **GOMU** | **GeErMu** | **53.61** | **324** | P | **P** | **15** | **53** | **11.5 +1.6** |
| GOMU | comp=Z,64nm,5.2s | | | pmax | pmax | | | |
| **JIRN** | **Jiri** | **54.24** | **310** | *eP* | **P** | **15** | **53** | **14.9 +0.3** |
| | comp=Z,4.6nm,0.3s | | | | | | | |
| **GUN** | **Gumba** | **54.60** | **310** | *eP* | **P** | **15** | **53** | **17.5 +0.3** |
| **PKI** | **Pulchoki** | **54.79** | **310** | *eP* | **P** | **15** | **53** | **18.4 -0.1** |
| **PKIN** | **Phulchoki** | **54.80** | **310** | *eP* | **P** | **15** | **53** | **18.3 -0.3** |
| | comp=Z,2.5nm,0.3s | | | | | | | |
| **KKN** | **Kakani** | **55.00** | **310** | *eP* | **P** | **15** | **53** | **20.0 +0.1** |
| | comp=Z,3.6nm,0.3s | | | | | | | |
| **GKN** | **Gorkha** | **55.60** | **310** | *eP* | **P** | **15** | **53** | **24.3 +0.2** |
| | comp=Z,9.7nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **56.28** | **309** | *eP* | **P** | **15** | **53** | **29.2 +0.2** |
| **AFI** | **Afiamalu** | **57.36** | **103** | P | **P** | **15** | **53** | **36.1 -0.6** |
| **ULN** | **Ulaanbaatar** | **57.43** | **342** | P | **P** | **15** | **53** | **37.9 +1.2** |
| ULN | comp=Z,2.9nm,0.8s | | | IAmb | IAmb | 15 | 53 | 38.9 |
| **SONM** | **Songino Array** | **57.61** | **341** | P | **P** | **15** | **53** | **38.2 +0.2** |
| | comp=Z,0.7nm,0.5s,baz=160,slow=6.6,SNR=7.5 | | | | | | | |
| **SONM** | **Songino Array** | **57.61** | **341** | P | **P** | **15** | **53** | **38.5 +0.5** |
| **WMQ** | **Urumqi** | **62.77** | **326** | *eP* | **P** | **15** | **54** | **14.5 +1.3** |
| WMQ | comp=Z,13nm,0.7s | | | pmax | pmax | | | |
| **PEA0B** | **Petropavlovsk-** | **63.23** | **18** | P | **P** | **15** | **54** | **15.1 -0.8** |
| **PETK** | **Petropavlovsk-** | **63.23** | **18** | P | **P** | **15** | **54** | **15.1 -0.8** |
| **AAK** | **Ala-Archa** | **70.04** | **319** | P | **P** | **15** | **54** | **59.2 -0.3** |
| AAK | comp=Z,13nm,1.0s | | | IAmb | IAmb | 15 | 55 | 11.8 |
| **SOCY** | **Socotra** | **78.09** | **284** | P | **P** | **15** | **55** | **45.8 -1.0** |
| SOCY | comp=Z,24nm,1.4s | | | IAmb | IAmb | 15 | 56 | 28.1 |
| **VOI** | **Vohitsoka** | **81.90** | **249** | P | **P** | **15** | **56** | **06.6 -0.7** |
| VOI | comp=Z,27nm,1.3s | | | IAmb | IAmb | 15 | 56 | 09.5 |
| **ABKAR** | **Akbulak array** | **81.97** | **321** | P | **P** | **15** | **56** | **07.0 +0.1** |

*NEIC* ***25*** *15:52:16.9±2.0, 20°.3S±0°.2×178°.0W±0°.2, h557km±12km, mb4.1/6, Error ellipse: s-maj=33.2km s-min=23.2km az=206.0*

*IDC* ***25*** *15:52:28.5±46.0, 18°.61S×179°.29W, h650km±414km, mb2.7/2, mb1 3.0/2, mb1mx2.3/36, mbtmp3.8/2, Error ellipse: s-maj=401.3km s-min=198.1km az=98.0*

**ISC 25 15:52:15.4±0.9, 20°.5S±0°.2×178°.0W±0°.1, h534km, n14, σ1°39/15, mb3.9/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.62** | **306** | P | | **P** | **15 53 43.4** | **+2.0** |
| **NIUE** | **Niue** | **7.76** | **81** | P | | **P** | **15 54 09.6** | **-0.8** |
| **AFI** | **Afiamalu** | **8.88** | **43** | P | | **P** | **15 54 21.7** | **-0.1** |
| **AS31** | **Alice Springs** | **44.49** | **257** | P | | **P** | **15 59 39.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.49** | **257** | P | | **P** | **15 59 39.3** | **-0.3** |
| | 1.1nm,0.6s,baz=88,slow=7.9,SNR=14 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **16 01 11.5** | **0.0** |
| | 0.3nm,0.4s,baz=106,slow=4.2,SNR=6.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.49** | **257** | P | | **P** | **15 59 39.1** | **-0.5** |
| ASAR | | | | PcP | | **PcP** | **16 01 09.1** | **-2.5** |
| **WB0** | **Warramunga Arr** | **44.55** | **262** | P | | **P** | **15 59 38.8** | **-1.3** |
| WB0 | comp=Z,3.9nm,1.1s | | | IAmb | | IAmb | 15 59 40.4 | |
| **WB2** | **Warramunga Arr** | **44.56** | **262** | P | | **P** | **15 59 39.2** | **-1.0** |
| WB2 | comp=Z,4.6nm,1.1s | | | IAmb | | IAmb | 16 00 03.2 | |
| **WRA** | **Warramunga Arr** | **44.57** | **262** | P | | **P** | **15 59 39.3** | **-0.9** |
| | comp=Z,0.8nm,0.7s,baz=96,slow=6.4,SNR=13 | | | | | | | |
| **KNRA** | **Kununurra** | **50.63** | **266** | P | | **P** | **16 00 23.6** | **-2.1** |
| KNRA | comp=Z,30nm,1.4s | | | IAmb | | IAmb | 16 00 35.5 | |
| **FAKI** | **Fak Fak** | **51.48** | **283** | P | | **P** | **16 00 31.2** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **53.00** | **262** | P | | **P** | **16 00 42.8** | **+0.1** |
| **QSPA** | **South Pole Qui** | **69.56** | **180** | P | | **P** | **16 02 32.5** | **+1.9** |
| QSPA | comp=Z,10.0nm,1.6s | | | IAmb | | IAmb | 16 02 45.2 | |
| **AKASG** | **Malin Array Be** | **143.01** | **331** | PKP | | PKPab | 16 10 44.2 | -1.5 |
| | comp=Z,0.6nm,0.5s,baz=39,slow=4.2,SNR=7.8 | | | | | | | |

**IDC 25 16:01:10.8±1.3, 9°.47S×158°.32E, h0km, mb3.5/3, mb1 3.6/3, mb1mx3.4/38, mbtmp3.5/3, Error ellipse: s-maj=45.0km s-min=20.5km az=169.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **HNR** | **Honiara** | **1.60** | **89** | Pn | | Pn | 16 01 40.6 | +0.2 |
| | 15nm,0.3s,baz=144,slow=10,SNR=2.1 | | | | | | | |
| HNR | | | | Sn | | Sg | 16 02 02.4 | 0.0 |
| | 26nm,0.3s,baz=242,slow=20,SNR=4.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.39** | **243** | P | | P | 16 06 38.6 | -1.6 |
| | 0.6nm,0.7s,baz=71,slow=9.6,SNR=5.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.27** | **236** | P | | P | 16 06 58.5 | +1.4 |
| | 0.3nm,0.7s,baz=68,slow=10,SNR=6.6 | | | | | | | |
| **SONM** | **Songino Array** | **73.19** | **326** | P | | P | 16 12 43.8 | +0.1 |
| | 0.8nm,0.8s,baz=138,slow=5.4,SNR=5.2 | | | | | | | |

*KRSC* ***25*** *16:08:36.9±0.9, 53°.79N×159°.09E, h177km±9km, ML4.2*
*MOS* ***25*** *16:08:37.5±0.7, 53°.84N×158°.82E, h175km, mb4.0/4, Error ellipse: s-maj=14.3km s-min=4.6km az=77.5*

*IDC* ***25*** *16:08:38.7±0.7, 53°.96N×158°.65E, h163km±7km, mb3.3/15, mb1 3.5/17, mb1mx3.3/53, mbtmp3.8/17, MS3.5/1, Ms1 3.5/1, ms1mx2.5/44, Error ellipse: s-maj=16.6km s-min=12.3km az=155.0*

*NEIC* ***25*** *16:08:40.0±2.6, 54°.0N±0°.1×158°.7E±0°.2, h174km±7km, mb4.0/16, Error ellipse: s-maj=18.0km s-min=12.7km az=181.0*

**ISC 25 16:08:38.6±0.6, 53°.82N±0°.03×158°.97E±0°.04, h169km±5km, n134, σ1°90/171, mb3.8/25, 2D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KII** | **Karymskiy** | **0.36** | **53** | PN | | **Pn** | **16 09 01.4** | **-0.2** |
| **KII** | **Karymskiy** | **0.36** | **53** | *eP* | | **Pn** | **16 09 01.4** | **-0.2** |
| **KRER** | **Koryakskii** | **0.54** | **194** | PN | | **Pn** | **16 09 02.8** | **+0.2** |
| KRER | | | | S | | **Sn** | **16 09 21.4** | **+0.5** |
| **KRER** | **Koryakskii** | **0.54** | **194** | *eP* | | **Pn** | **16 09 02.8** | **+0.2** |
| KRER | | | | *eS* | | **Sn** | **16 09 21.4** | **+0.5** |
| **SDLR** | **Sedlovina** | **0.55** | **185** | PN | | **Pn** | **16 09 02.6** | **+0.1** |
| **SDLR** | **Sedlovina** | **0.55** | **185** | *i* P | | **Pn** | **16 09 02.6** | **+0.1** |
| **KOK** | **Koryaka** | **0.57** | **200** | PN | | **Pn** | **16 09 02.8** | **+0.2** |
| KOK | | | | S | | **Sn** | **16 09 21.4** | **+0.5** |
| **KOK** | **Koryaka** | **0.57** | **200** | *eP* | | **Pn** | **16 09 02.8** | **+0.2** |
| KOK | | | | *eS* | | **Sn** | **16 09 21.4** | **+0.5** |
| **SMAR** | **Somma** | **0.57** | **190** | PN | | **Pn** | **16 09 03.0** | **+0.3** |
| SMAR | | | | S | | **Sn** | **16 09 21.5** | **+0.3** |
| **SMAR** | **Somma** | **0.57** | **190** | *eP* | | **Pn** | **16 09 03.0** | **+0.3** |
| SMAR | | | | *eS* | | **Sn** | **16 09 21.5** | **+0.3** |
| **AVH** | **Avacha** | **0.58** | **194** | PN | | **Pn** | **16 09 02.9** | **+0.3** |
| AVH | | | | S | | **Sn** | **16 09 21.9** | **+1.0** |
| **AVH** | **Avacha** | **0.58** | **194** | *eP* | | **Pn** | **16 09 02.9** | **+0.3** |
| AVH | | | | *eS* | | **Sn** | **16 09 21.9** | **+1.0** |
| **GNL** | **Ganaly** | **0.62** | **258** | PN | | **Pn** | **16 09 02.5** | **-0.3** |
| GNL | | | | S | | **Sn** | **16 09 20.6** | **-0.8** |
| **GNL** | **Ganaly** | **0.62** | **258** | *eP* | | **Pn** | **16 09 02.5** | **-0.3** |
| GNL | | | | *eS* | | **Sn** | **16 09 20.6** | **-0.8** |
| **UGLR** | **Uglovaya** | **0.62** | **188** | PN | | **Pn** | **16 09 03.2** | **+0.3** |
| UGLR | | | | S | | **Sn** | **16 09 22.1** | **+0.7** |
| **UGLR** | **Uglovaya** | **0.62** | **188** | *eP* | | **Pn** | **16 09 03.2** | **+0.3** |
| UGLR | | | | *eS* | | **Sn** | **16 09 22.1** | **+0.7** |
| **NLC** | **Nalytchevo** | **0.69** | **161** | PN | | **Pn** | **16 09 03.0** | **-0.1** |
| NLC | | | | S | | **Sn** | **16 09 21.7** | **-0.1** |
| **NLC** | **Nalytchevo** | **0.69** | **161** | *eP* | | **Pn** | **16 09 03.0** | **-0.1** |
| NLC | | | | *eS* | | **Sn** | **16 09 21.7** | **-0.1** |
| **DALK** | **Dalny** | **0.80** | **189** | PN | | **Pn** | **16 09 03.8** | **0.0** |
| DALK | | | | S | | **Sn** | **16 09 22.8** | **-0.3** |
| **DALK** | **Dalny** | **0.80** | **189** | *eP* | | **Pn** | **16 09 03.8** | **0.0** |
| DALK | | | | *eS* | | **Sn** | **16 09 22.8** | **-0.3** |
| **PET** | **Petropavlovsk** | **0.82** | **193** | ↓*eP* | | **Pn** | **16 09 04.1** | **+0.2** |
| PET | | | | *eS* | | **Sn** | **16 09 23.3** | **0.0** |
| PET | comp=Z,111nm,0.4s | | | pmax | pmax | | | |
| PET | comp=E,741nm,1.0s | | | smax | smax | | | |
| PET | comp=N,658nm,0.7s | | | smax | smax | | | |
| **PET** | **Petropavlovsk** | **0.82** | **193** | | | **Pn** | **16 09 03.8** | **-0.1** |
| **PET** | **Petropavlovsk** | **0.82** | **193** | *i* P | | **Pn** | **16 09 04.1** | **+0.2** |
| PET | | | | *eS* | | **Sn** | **16 09 23.3** | **0.0** |
| **SPN** | **Mys Shipunski** | **0.96** | **139** | PN | | **Pn** | **16 09 04.2** | **-0.7** |
| SPN | | | | S | | **Sn** | **16 09 23.8** | **-1.3** |
| **SPN** | **Mys Shipunski** | **0.96** | **139** | *i* P | | **Pn** | **16 09 04.2** | **-0.7** |
| SPN | | | | *eS* | | **Sn** | **16 09 23.8** | **-1.3** |
| **PEA0B** | **Petropavlovsk-** | **1.04** | **227** | PN | | **Pn** | **16 09 04.4** | **-1.2** |
| **PEA0B** | **Petropavlovsk-** | **1.04** | **227** | Pn | | **Pn** | **16 09 04.4** | **-1.2** |
| **PETK** | **Petropavlovsk-** | **1.04** | **227** | P | | **Pn** | **16 09 04.2** | **-1.3** |
| | comp=N,22nm,0.3s,baz=68,slow=8.6,SNR=405 | | | | | | | |
| PETK | | | | S | | **Sn** | **16 09 25.6** | **-0.7** |
| | comp=N,4.0nm,0.3s,baz=93,slow=20,SNR=4.2 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **1.04** | **227** | | | **Pn** | **16 09 03.9** | **-1.7** |
| **KRMR** | **Karymshinskiy** | **1.11** | **207** | PN | | **Pn** | **16 09 06.1** | **0.0** |
| KRMR | | | | S | | **Sn** | **16 09 27.1** | **-0.1** |
| **KRMR** | **Karymshinskiy** | **1.11** | **207** | *i* P | | **Pn** | **16 09 06.1** | **0.0** |
| KRMR | | | | *eS* | | **Sn** | **16 09 27.1** | **-0.1** |
| **GRL** | **Gorelyy** | **1.38** | **203** | PN | | **Pn** | **16 09 03.9** | **+0.7** |
| GRL | | | | S | | **Sn** | **16 09 33.9** | **+2.1** |
| **GRL** | **Gorelyy** | **1.38** | **203** | *eP* | | **Pn** | **16 09 03.9** | **+0.7** |
| GRL | | | | *eS* | | **Sn** | **16 09 33.9** | **+2.1** |
| **APC** | **Apacha** | **1.41** | **231** | PN | | **Pn** | **16 09 09.0** | **+0.3** |
| APC | | | | S | | **Sn** | **16 09 32.1** | **+0.2** |
| **APC** | **Apacha** | **1.41** | **231** | *eP* | | **Pn** | **16 09 09.0** | **+0.3** |
| APC | | | | *eS* | | **Sn** | **16 09 32.1** | **+0.2** |
| **RUS** | **Russkaya** | **1.42** | **191** | PN | | **Pn** | **16 09 08.5** | **-0.3** |
| RUS | | | | S | | **Sn** | **16 09 31.2** | **-0.9** |
| **RUS** | **Russkaya** | **1.42** | **191** | *i* P | | **Pn** | **16 09 08.5** | **-0.3** |
| RUS | | | | *eS* | | **Sn** | **16 09 31.2** | **-0.9** |
| **MTVR** | **Mutnovka** | **1.42** | **200** | PN | | **Pn** | **16 09 09.6** | **+0.5** |
| **MTVR** | **Mutnovka** | **1.42** | **200** | *eP* | | **Pn** | **16 09 09.6** | **+0.5** |
| **TUMD** | **Tumrok D** | **1.62** | **31** | *eP* | | **Pn** | **16 09 11.4** | **+0.7** |
| TUMD | | | | *eS* | | **Sn** | **16 09 36.0** | **+0.3** |
| **TUMR** | **Tumrok** | **1.62** | **25** | PN | | **Pn** | **16 09 11.4** | **+0.5** |
| TUMR | | | | S | | **Sn** | **16 09 36.4** | **+0.5** |
| **TUMR** | **Tumrok** | **1.62** | **25** | *eP* | | **Pn** | **16 09 11.4** | **+0.5** |
| TUMR | | | | *eS* | | **Sn** | **16 09 36.4** | **+0.5** |
| **MKZ** | **Mys Kozlova** | **1.78** | **65** | PN | | **Pn** | **16 09 12.1** | **-0.3** |
| MKZ | | | | S | | **Sn** | **16 09 36.3** | **-2.4** |
| **MKZ** | **Mys Kozlova** | **1.78** | **65** | *eP* | | **Pn** | **16 09 12.1** | **-0.3** |
| MKZ | | | | *eS* | | **Sn** | **16 09 36.3** | **-2.4** |
| **KMNR** | **Kamenistaya** | **2.07** | **20** | PN | | **Pn** | **16 09 16.3** | **+0.6** |
| KMNR | | | | S | | **Sn** | **16 09 46.0** | **+1.4** |
| **KMNR** | **Kamenistaya** | **2.07** | **20** | *eP* | | **Pn** | **16 09 16.3** | **+0.6** |
| KMNR | | | | *eS* | | **Sn** | **16 09 46.0** | **+1.4** |
| **KDTR** | **Khodutka, Kamc** | **2.09** | **195** | PN | | **Pn** | **16 09 15.0** | **-0.9** |
| KDTR | | | | S | | **Sn** | **16 09 42.7** | **-2.0** |
| **KDTR** | **Khodutka, Kamc** | **2.09** | **195** | *eP* | | **Pn** | **16 09 15.0** | **-0.9** |
| KDTR | | | | *eS* | | **Sn** | **16 09 42.7** | **-2.0** |
| **ESO** | **Esso** | **2.11** | **356** | PN | | **Pn** | **16 09 16.8** | **+0.7** |
| **ESO** | **Esso** | **2.11** | **356** | *eP* | | **Pn** | **16 09 16.8** | **+0.7** |
| **KPT** | **Kopyto** | **2.27** | **18** | PN | | **Pn** | **16 09 17.9** | **0.0** |
| **KPT** | **Kopyto** | **2.27** | **18** | *eP* | | **Pn** | **16 09 17.9** | **0.0** |
| **KIRR** | **Kirishev** | **2.28** | **20** | PN | | **Pn** | **16 09 17.9** | **-0.2** |
| **KIRR** | **Kirishev** | **2.28** | **20** | *eP* | | **Pn** | **16 09 17.9** | **-0.2** |
| **KOZ** | **Kozyrevsk** | **2.30** | **13** | PN | | **Pn** | **16 09 18.3** | **+0.1** |
| **KOZ** | **Kozyrevsk** | **2.30** | **13** | *eP* | | **Pn** | **16 09 18.3** | **+0.1** |
| **BZWR** | **Bezymyannyi-We** | **2.32** | **22** | PN | | **Pn** | **16 09 19.1** | **+0.5** |
| **BZWR** | **Bezymyannyi-We** | **2.32** | **22** | *eP* | | **Pn** | **16 09 19.1** | **+0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **2.34** | **25** | PN | | **Pn** | **16 09 19.2** | **+0.3** |
| **BZGR** | **Bezymyannyi-Gr** | **2.34** | **25** | *eP* | | **Pn** | **16 09 19.2** | **+0.3** |
| **ZLN** | **Zelenaya** | **2.44** | **25** | PN | | **Pn** | **16 09 20.9** | **+0.9** |
| **ZLN** | **Zelenaya** | **2.44** | **25** | *i* P | | **Pn** | **16 09 20.9** | **+0.9** |
| **LGNR** | **Loginova** | **2.47** | **23** | PN | | **Pn** | **16 09 21.3** | **+0.8** |
| **LGNR** | **Loginova** | **2.47** | **23** | *eP* | | **Pn** | **16 09 21.3** | **+0.8** |
| **CIRR** | **Tsirk** | **2.52** | **23** | PN | | **Pn** | **16 09 21.5** | **+0.6** |
| **CIRR** | **Tsirk** | **2.52** | **23** | *eP* | | **Pn** | **16 09 21.5** | **+0.6** |
| **KRSR** | **Krestovskiy** | **2.57** | **20** | PN | | **Pn** | **16 09 21.5** | **0.0** |
| **KRSR** | **Krestovskiy** | **2.57** | **20** | *eP* | | **Pn** | **16 09 21.5** | **0.0** |
| **KLY** | **Klyuchi** | **2.68** | **21** | PN | | **Pn** | **16 09 23.7** | **+1.0** |
| **KLY** | **Klyuchi** | **2.68** | **21** | *eP* | | **Pn** | **16 09 23.7** | **+1.0** |
| **PAU** | **Pauzhetka** | **2.70** | **210** | PN | | **Pn** | **16 09 23.3** | **+0.3** |
| **PAU** | **Pauzhetka** | **2.70** | **210** | *eP* | | **Pn** | **16 09 23.3** | **+0.3** |
| **SRKR** | **Sorokina** | **3.10** | **23** | PN | | **Pn** | **16 09 28.3** | **+0.3** |
| **SRKR** | **Sorokina** | **3.10** | **23** | *eP* | | **Pn** | **16 09 28.3** | **+0.3** |
| **SMKR** | **Semkarok** | **3.11** | **26** | PN | | **Pn** | **16 09 29.4** | **+1.3** |
| **SMKR** | **Semkarok** | **3.11** | **26** | *eP* | | **Pn** | **16 09 29.4** | **+1.3** |
| **KBG** | **Krutoberegovo** | **3.25** | **40** | PN | | **Pn** | **16 09 29.0** | **-0.7** |
| KBG | | | | S | | **Sn** | **16 10 08.0** | **-1.6** |
| **KBG** | **Krutoberegovo** | **3.25** | **40** | *eP* | | **Pn** | **16 09 29.0** | **-0.7** |
| KBG | | | | *eS* | | **Sn** | **16 10 08.0** | **-1.6** |
| **KBTR** | **Krutoberegovo** | **3.26** | **41** | PN | | **Pn** | **16 09 29.4** | **-0.4** |
| KBTR | | | | S | | **Sn** | **16 10 07.8** | **-2.0** |
| **KBTR** | **Krutoberegovo** | **3.26** | **41** | *eP* | | **Pn** | **16 09 29.4** | **-0.4** |
| KBTR | | | | *eS* | | **Sn** | **16 10 07.8** | **-2.0** |
| **SKR** | **Severo-Kuril's** | **3.60** | **210** | *ePN* | | **Pn** | **16 09 34.9** | **+0.7** |
| SKR | | | | *eS* | | **Sn** | **16 10 18.6** | **+1.1** |
| SKR | comp=Z,31nm,0.5s | | | pmax | pmax | | | |
| SKR | comp=E,104nm,0.5s | | | smax | smax | | | |
| SKR | comp=N,207nm,0.6s | | | smax | smax | | | |
| **SKR** | **Severo-Kuril's** | **3.60** | **210** | *eP* | | **Pn** | **16 09 34.2** | **0.0** |
| **BKI** | **Bering** | **4.31** | **68** | PN | | **Pn** | **16 09 42.7** | **-0.5** |
| **BKI** | **Bering** | **4.31** | **68** | *eP* | | **Pn** | **16 09 42.7** | **-0.5** |
| BKI | | | | *eS* | | Sn | 16 10 28.3 | -5.5 |
| **PALN** | **Palana** | **5.31** | **6** | PN | | **Pn** | **16 09 55.6** | **-0.6** |
| **PALN** | **Palana** | **5.31** | **6** | *eP* | | **Pn** | **16 09 55.6** | **-0.6** |
| **OSSR** | **Ossora** | **5.89** | **21** | PN | | **Pn** | **16 10 04.3** | **+0.5** |
| **OSSR** | **Ossora** | **5.89** | **21** | *eP* | | **Pn** | **16 10 04.3** | **+0.5** |
| **SMY** | **Shemya** | **9.14** | **91** | PN | | Pn | 16 10 40.9 | -5.8 |
| **SMY** | **Shemya** | **9.14** | **91** | Pn | | Pn | 16 10 40.9 | -5.8 |
| **BILL** | **Bilibino** | **14.68** | **11** | P | | **Pn** | **16 11 57.9** | **+0.1** |
| **YAK** | **Yakutsk** | **17.45** | **310** | P | | **Pn** | **16 12 29.9** | **-1.5** |
| | comp=N,0.1nm,0.3s,baz=159,slow=1.3,SNR=5.3 | | | | | | | |
| **YAK** | **Yakutsk** | **17.45** | **310** | P | | **P** | **16 12 27.6** | **-2.4** |
| **KLR** | **Kul'dur** | **17.49** | **266** | P | | **Pn** | **16 12 31.1** | **-0.9** |
| | comp=N,0.2nm,0.3s,baz=64,slow=9.4,SNR=6.3 | | | | | | | |
| **ANM** | **Nome** | **20.88** | **45** | P | | **P** | **16 13 07.5** | **+0.5** |
| ANM | comp=Z,3.0nm,0.9s | | | pmax | pmax | | | |
| **ANM** | **Nome** | **20.88** | **45** | P | | **P** | **16 13 07.5** | **+0.5** |
| **TIXI** | **Tiksi** | **22.13** | **335** | P | | **P** | **16 13 20.2** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=94,slow=19,SNR=1.7 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **22.85** | **37** | P | | **P** | **16 13 28.2** | **+1.5** |
| RDOG | comp=Z,13nm,1.3s | | | IAmb | | IAmb | 16 13 28.8 | |
| **COLD** | **Coldfoot** | **27.43** | **41** | P | | **P** | **16 14 09.2** | **+1.1** |
| **ILAR** | **Eielson Array** | **28.79** | **46** | P | | **P** | **16 14 19.9** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=266,slow=8.9,SNR=5.8 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **29.62** | **41** | P | | **P** | **16 14 28.8** | **+1.4** |
| **EGAK** | **Eagle** | **31.23** | **46** | P | | **P** | **16 14 42.3** | **+0.7** |
| **M27K** | **Edge Creek, AK** | **31.34** | **50** | P | | **P** | **16 14 44.8** | **+2.1** |
| **DAWY** | **Dawson** | **32.10** | **47** | P | | **P** | **16 14 50.6** | **+1.3** |
| DAWY | comp=Z,6.1nm,1.4s | | | IAmb | | IAmb | 16 15 16.0 | |
| **SONM** | **Songino Array** | **33.09** | **281** | P | | **P** | **16 14 57.2** | **-1.0** |
| | comp=Z,0.5nm,0.6s,baz=60,slow=6.1,SNR=4.4 | | | | | | | |
| **INK** | **Inuvik** | **33.71** | **38** | P | | **P** | **16 15 04.1** | **+1.0** |
| | comp=Z,1.2nm,0.3s,baz=293,slow=8.2,SNR=25 | | | | | | | |
| **INK** | **Inuvik** | **33.71** | **38** | P | | **P** | **16 15 04.6** | **+1.6** |
| INK | comp=Z,2.8nm,0.8s | | | IAmb | | IAmb | 16 15 13.7 | |
| **H11N2** | **WAKE ISLAND Hy** | **34.57** | **167** | T | | T | 16 51 44.1 | |
| | baz=353,slow=76,SNR=9.9 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.59** | **167** | T | | T | 16 51 41.8 | |
| | baz=353,slow=76,SNR=5.1 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.59** | **167** | T | | T | 16 51 42.0 | |
| | baz=353,slow=76,SNR=5.2 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **34.76** | **49** | | | **P** | **16 15 14.4** | **+2.1** |
| M31M | | | | IAmb | | IAmb | 16 15 21.4 | |
| | comp=Z,6.1nm,1.6s | | | | | | | |
| **C36M** | **Paulatuk** | **36.84** | **35** | P | | **P** | **16 15 30.9** | **+1.1** |
| C36M | | | | IAmb | | IAmb | 16 15 34.6 | |
| | comp=Z,6.7nm,1.6s | | | | | | | |
| **EUNU** | **Eureka** | **41.40** | **14** | P | | **P** | **16 16 08.2** | **+0.6** |
| EUNU | | | | IAmb | | IAmb | 16 16 17.6 | |
| | comp=Z,5.5nm,1.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.82** | **301** | P | | **P** | **16 16 09.2** | **-1.9** |
| | comp=Z,0.4nm,0.3s,baz=52,slow=9.3,SNR=2.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **43.08** | **43** | P | | **P** | **16 16 21.6** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=299,slow=8.1,SNR=8.0 | | | | | | | |
| **KURK** | **Kurchatov** | **46.78** | **301** | P | | **P** | **16 16 48.8** | **-1.7** |
| KURK | comp=Z,5.0nm,0.4s | | | pmax | pmax | | | |
| **KURK** | **Kurchatov** | **46.78** | **301** | P | | **P** | **16 16 48.8** | **-1.7** |
| **MK31** | **Makanchi Array** | **47.23** | **294** | P | | **P** | **16 16 52.6** | **-1.6** |
| MK31 | comp=Z,2.0nm,0.6s | | | pmax | pmax | | | |
| **MK31** | **Makanchi Array** | **47.23** | **294** | P | | **P** | **16 16 52.6** | **-1.6** |
| MK31 | comp=Z,1.6nm,0.6s | | | IAmb | | IAmb | 16 16 53.3 | |
| **MKAR** | **Makanchi Array** | **47.23** | **294** | P | | **P** | **16 16 52.5** | **-1.7** |
| | comp=Z,1.6nm,0.5s,baz=54,slow=6.9,SNR=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.23** | **294** | P | | **P** | **16 16 52.4** | **-1.8** |
| **MAKZ** | **Makanchi** | **47.39** | **295** | P | | **P** | **16 16 53.8** | **-1.7** |
| MAKZ | comp=Z,1.8nm,0.6s | | | IAmb | | IAmb | 16 16 54.1 | |
| MAKZ | | | | | | **PcP** | **16 18 24.2** | **+1.0** |
| **BRVK** | **Borovoye** | **49.44** | **307** | P | | **P** | **16 17 09.3** | **-1.6** |
| BRVK | comp=Z,1.0nm,0.6s | | | pmax | pmax | | | |
| **BRVK** | **Borovoye** | **49.44** | **307** | P | | **P** | **16 17 09.3** | **-1.6** |
| BRVK | comp=Z,1.4nm,0.6s | | | IAmb | | IAmb | 16 17 09.8 | |
| **AAK** | **Ala-Archa** | **54.15** | **295** | ↓Pn | | P | 16 17 39.0 | -7.1 |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **KIRV** | **Kirov** | **54.40** | **323** | LR | | LR | 16 42 29.4 | |
| | comp=Z,49nm,21.3s,baz=287,slow=38 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.12** | **70** | P | | **P** | **16 18 02.4** | **+2.0** |
| | comp=Z,0.3nm,0.5s,baz=305,slow=7.5,SNR=3.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **57.75** | **61** | P | | **P** | **16 18 13.4** | **+1.6** |
| | comp=Z,0.8nm,0.5s,baz=317,slow=2.1,SNR=7.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **59.18** | **336** | P | | **P** | **16 18 20.2** | **-0.8** |
| | comp=Z,1.5nm,0.9s,baz=51,slow=11,SNR=1.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **67.64** | **328** | P | | **P** | **16 19 15.2** | **-1.4** |
| | comp=Z,0.3nm,0.4s,baz=32,slow=7.3,SNR=2.4 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **70.21** | **349** | P | | **P** | **16 19 32.5** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=21,slow=6.1,SNR=2.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.97** | **66** | P | | **P** | **16 19 39.9** | **+2.2** |
| | comp=Z,0.2nm,0.4s,baz=279,slow=4.9,SNR=7.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.47** | **204** | P | | **P** | **16 20 09.9** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=24,slow=6.3,SNR=7.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **80.16** | **203** | P | | **P** | **16 20 31.3** | **+1.7** |
| | comp=Z,0.6nm,0.5s,baz=17,slow=4.9,SNR=24 | | | | | | | |

**IDC 25 16:19:17.6±687.0, 53°.97N×35°.12E, h0km, Error ellipse: s-maj=288.7km s-min=72.9km az=26.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **3.01** | **23** | *i* | | | 16 41 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HEF** | **Hetta** | **4.01 286** | PN | **Pn** | **16 58 51.8** | **+0.7** |
| | baz=96 | | | | | | |
| HEF | | | SN | **Sn** | **16 59 39.6** | **+0.8** |
| **TOF** | **Tornio** | **4.18 252** | PG | **Pb** | **16 59 04.9** | **+1.9** |
| **OUL** | **Oulu** | **4.21 236** | PB | **Pb** | **16 59 01.5** | **-1.8** |
| **KTK1** | **Kautokeino** | **4.26 294** | *e*P | **Pn** | **16 58 55.7** | **+1.1** |
| KTK1 | | | *e*S | **Sn** | **16 59 45.3** | **+0.2** |
| KTK1 | | | IAML | | 17 00 00.1 | |
| | comp=Z,7.7nm,0.3s | | | | | | |
| **PAJU** | **Pajala** | **4.32 267** | PN | **Pn** | **16 58 55.5** | **+0.1** |
| | baz=77 | | | | | | |
| PAJU | | | SN | **Sn** | **16 59 46.5** | **+0.2** |
| **LANU** | **Lannavaara** | **4.62 280** | PN | **Pn** | **16 58 59.5** | **0.0** |
| LANU | | | SG | **Sg** | **17 00 12.7** | **-4.0** |
| **KIF** | **Kilpisjarvi** | **5.12 291** | *e*P | **Pn** | **16 59 06.3** | **-0.1** |
| **FINES** | **FINESS Array B** | **7.14 213** | Pn | **Pn** | **16 59 34.6** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=32,slow=13,SNR=6.8 | | | | | | |
| FINES | | | Sn | **Sn** | **17 00 51.8** | **-3.9** |
| | comp=Z,0.1nm,0.3s,baz=32,slow=21,SNR=1.5 | | | | | | |
| FINES | | | Lg | Lg | 17 01 28.8 | | |
| | comp=Z,0.3nm,0.3s,baz=32,slow=26,SNR=2.6 | | | | | | |
| **FAUS** | **Fauske** | **7.23 277** | *e*P | **Pn** | **16 59 33.7** | **-1.5** |
| FAUS | | | *e*S | **Sn** | **17 00 53.1** | **-4.8** |
| FAUS | | | IAML | | 17 01 03.0 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **11.69 240** | Pn | **Pn** | **17 00 35.3** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=56,slow=11,SNR=1.6 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **11.69 342** | Pn | **Pn** | **17 00 34.1** | **-2.2** |
| | baz=145,slow=16,SNR=1.5 | | | | | | |
| SPITS | | | Sn | Sn | 17 02 34.1 | -13 | |
| | baz=192,slow=26,SNR=12 | | | | | | |
| **NOA** | **NORSAR Array B** | **11.88 247** | Pn | **Pn** | **17 00 36.2** | **-2.8** |
| | baz=67,slow=14,SNR=1.6 | | | | | | |

*JMA* ***25*** *17:17:19.2±0.1,24°.82N×121°.92E,h97km±2km,M3.2*
*TAP* ***25*** *17:17:19.3,24°.88N×121°.92E,h99km,ML4.0,B*
**ISC 25 17:17:19.1**±1.3,**24°.87N**±0°.03×**121°.94E**±0°.02,**h103**km±5km,
**n149,**$_{s0}$**64/274,47C-6D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NTC** | **Toucheng** | **0.10** | **261** | ⇑*i* | P | **Pn** | **17 17 33.2** | **-0.1** |
| | baz=253 | | | | | | | |
| NTC | | | | | S | **Sn** | **17 17 43.0** | **-1.0** |
| | baz=253 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.14** | **315** | ⇓*i* | P | **Pn** | **17 17 33.4** | **-0.1** |
| | baz=315 | | | | | | | |
| TIPB | | | | | S | **Sn** | **17 17 43.2** | **-1.0** |
| | baz=315 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.14** | **19** | ⇓*i* | P | **Pn** | **17 17 33.4** | **0.0** |
| | baz=28 | | | | | | | |
| TWB1 | | | | *i* | S | **Sn** | **17 17 43.5** | **-0.7** |
| | baz=28 | | | | | | | |
| **ILA** | **Ilan** | **0.20** | **239** | *e* | P | **Pn** | **17 17 33.8** | **+0.3** |
| | baz=233 | | | | | | | |
| ILA | | | | *e* | S | **Sn** | **17 17 44.5** | **+0.2** |
| | baz=233 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.23** | **346** | *i* | P | **Pn** | **17 17 33.5** | **-0.3** |
| | baz=348 | | | | | | | |
| SXI1 | | | | *i* | S | **Sn** | **17 17 44.1** | **-0.7** |
| | baz=348 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.24** | **325** | ⇑*i* | P | **Pn** | **17 17 33.7** | **-0.1** |
| | baz=326 | | | | | | | |
| NWF | | | | *e* | S | **Sn** | **17 17 44.0** | **-0.9** |
| | baz=326 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.24** | **325** | ⇑*i* | P | **Pn** | **17 17 33.7** | **0.0** |
| | baz=326 | | | | | | | |
| WFSB | | | | *e* | S | **Sn** | **17 17 44.0** | **-0.7** |
| | baz=326 | | | | | | | |
| **TWC** | **Suao** | **0.27** | **197** | ⇓*i* | P | **Pn** | **17 17 33.9** | **+0.1** |
| | baz=192 | | | | | | | |
| TWC | | | | | S | **Sn** | **17 17 44.6** | **-0.2** |
| | baz=192 | | | | | | | |
| **TWE** | **Neicheng** | **0.29** | **239** | *i* | P | **Pn** | **17 17 34.0** | **+0.1** |
| | baz=233 | | | | | | | |
| TWE | | | | *e* | S | **Sn** | **17 17 44.9** | **0.0** |
| | baz=233 | | | | | | | |
| **NDS** | **Dongshan** | **0.31** | **220** | *i* | P | **Pn** | **17 17 34.4** | **+0.4** |
| | baz=217 | | | | | | | |
| NDS | | | | | S | **Sn** | **17 17 45.4** | **+0.2** |
| | baz=217 | | | | | | | |
| **TNOU** | **National Taiwa** | **0.32** | **332** | | P | **Pn** | **17 17 33.9** | **-0.2** |
| | baz=333 | | | | | | | |
| TNOU | | | | *e* | S | **Sn** | **17 17 44.0** | **-1.2** |
| | baz=333 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.34** | **251** | ⇓*i* | P | **Pn** | **17 17 34.4** | **+0.2** |
| | baz=248 | | | | | | | |
| FUSB | | | | *e* | S | **Sn** | **17 17 45.7** | **+0.1** |
| | baz=248 | | | | | | | |
| **TWA** | **Mucha** | **0.34** | **289** | *i* | P | **Pn** | **17 17 34.1** | **0.0** |
| | baz=288 | | | | | | | |
| TWA | | | | *e* | S | **Sn** | **17 17 44.7** | **-0.8** |
| | baz=288 | | | | | | | |
| **NHY** | **Taipei** | **0.37** | **297** | *e* | P | **Pn** | **17 17 34.6** | **+0.3** |
| | baz=296 | | | | | | | |
| NHY | | | | *e* | S | **Sn** | **17 17 45.4** | **-0.3** |
| | baz=296 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.39** | **284** | ⇑*i* | P | **Pn** | **17 17 34.4** | **+0.1** |
| | baz=283 | | | | | | | |
| NHDH | | | | *e* | S | **Sn** | **17 17 45.8** | **0.0** |
| | baz=283 | | | | | | | |
| **NWLT** | **Wulai** | **0.41** | **257** | ⇑*i* | P | **Pn** | **17 17 34.6** | **0.0** |
| | baz=255 | | | | | | | |
| NWLT | | | | *e* | S | **Sn** | **17 17 45.6** | **-0.5** |
| | baz=255 | | | | | | | |
| **ENTT** | **Nioudou** | **0.41** | **236** | ⇑*i* | P | **Pn** | **17 17 35.1** | **+0.5** |
| | baz=233 | | | | | | | |
| ENTT | | | | *e* | S | **Sn** | **17 17 46.8** | **+0.7** |
| | baz=233 | | | | | | | |
| **TAP1** | **Taipei** | **0.41** | **294** | *e* | P | **Pn** | **17 17 34.9** | **+0.4** |
| | baz=293 | | | | | | | |
| TAP1 | | | | *e* | S | **Sn** | **17 17 45.6** | **-0.5** |
| | baz=293 | | | | | | | |
| **TATO** | **Taipei** | **0.42** | **284** | *e* | P | **Pn** | **17 17 34.6** | **+0.1** |
| | baz=283 | | | | | | | |
| TATO | | | | *e* | S | **Sn** | **17 17 45.8** | **-0.4** |
| | baz=283 | | | | | | | |
| **TAP** | **Taipei** | **0.43** | **293** | *e* | P | **Pn** | **17 17 34.7** | **+0.1** |
| | baz=293 | | | | | | | |
| TAP | | | | *e* | S | **Sn** | **17 17 45.6** | **-0.7** |
| | baz=293 | | | | | | | |
| **YM01** | **YM01** | **0.43** | **310** | *e* | P | **Pn** | **17 17 35.4** | **+0.7** |
| | baz=309 | | | | | | | |
| YM01 | | | | *e* | S | **Sn** | **17 17 47.1** | **+0.6** |
| | baz=309 | | | | | | | |
| **YM08** | **YM08** | **0.45** | **315** | *e* | P | **Pn** | **17 17 34.6** | **-0.1** |
| | baz=315 | | | | | | | |
| YM08 | | | | *e* | S | **Sn** | **17 17 45.1** | **-1.4** |
| | baz=315 | | | | | | | |
| **EWUT** | **Wuta** | **0.45** | **199** | ⇑ | P | **Pn** | **17 17 35.2** | **+0.5** |
| | baz=197 | | | | | | | |
| EWUT | | | | *e* | S | **Sn** | **17 17 47.0** | **+0.5** |
| | baz=197 | | | | | | | |
| **BACT** | **New Taipei Cit** | **0.47** | **286** | | P | **Pn** | **17 17 35.3** | **+0.4** |
| | baz=285 | | | | | | | |
| BACT | | | | *e* | S | **Sn** | **17 17 47.4** | **+0.7** |
| | baz=285 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.47** | **235** | ⇑*i* | P | **Pn** | **17 17 35.4** | **+0.4** |
| | baz=233 | | | | | | | |
| NDT | | | | *e* | S | **Sn** | **17 17 47.1** | **+0.3** |
| | baz=233 | | | | | | | |
| **ENA** | **Nanau** | **0.47** | **202** | ⇑ | P | **Pn** | **17 17 35.5** | **+0.5** |
| | baz=199 | | | | | | | |
| ENA | | | | *e* | S | **Sn** | **17 17 47.5** | **+0.7** |
| | baz=199 | | | | | | | |
| **ANP** | **Anpu** | **0.49** | **310** | *e* | P | **Pn** | **17 17 34.9** | **-0.3** |
| | baz=310 | | | | | | | |
| ANP | | | | *e* | S | **Sn** | **17 17 47.7** | **+0.4** |
| | baz=310 | | | | | | | |
| **LATG** | **Datong** | **0.50** | **228** | ⇑ | P | **Pn** | **17 17 35.7** | **+0.4** |
| | baz=226 | | | | | | | |
| LATG | | | | *e* | S | **Sn** | **17 17 48.0** | **+0.6** |
| | baz=226 | | | | | | | |
| **TWY** | **Chenhua** | **0.51** | **323** | *e* | P | **Pn** | **17 17 35.1** | **0.0** |
| | baz=324 | | | | | | | |
| TWY | | | | *e* | S | **Sn** | **17 17 46.6** | **-0.6** |
| | baz=324 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.52** | **296** | ⇑*i* | P | **Pn** | **17 17 35.5** | **+0.2** |
| | baz=296 | | | | | | | |
| TWS1 | | | | *e* | S | **Sn** | **17 17 47.6** | **+0.2** |
| | baz=296 | | | | | | | |
| **NTST** | **Danshui** | **0.53** | **304** | *e* | P | **Pn** | **17 17 35.6** | **+0.3** |
| | baz=303 | | | | | | | |
| NTST | | | | *e* | S | **Sn** | **17 17 48.3** | **+0.8** |
| | baz=303 | | | | | | | |
| **YHNB** | **Yeheng** | **0.55** | **249** | ⇑*i* | P | **Pn** | **17 17 35.5** | **-0.1** |
| | baz=247 | | | | | | | |
| YHNB | | | | *e* | S | **Sn** | **17 17 47.5** | **-0.4** |
| | baz=247 | | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **250** | ⇑*i* | P | **Pn** | **17 17 35.5** | **-0.1** |
| | baz=248 | | | | | | | |
| NSK | | | | *e* | S | **Sn** | **17 17 47.6** | **-0.5** |
| | baz=248 | | | | | | | |
| **EHP** | **Heping Village** | **0.59** | **198** | *e* | P | **Pn** | **17 17 37.1** | **+1.3** |
| | baz=196 | | | | | | | |
| **NTY** | **Taoyuan** | **0.59** | **283** | *e* | P | **Pn** | **17 17 36.2** | **+0.4** |
| | baz=282 | | | | | | | |
| NTY | | | | *e* | S | **Sn** | **17 17 49.0** | **+0.6** |
| | baz=282 | | | | | | | |
| **NNS** | **Nan Shan** | **0.67** | **230** | ⇑*i* | P | **Pn** | **17 17 36.8** | **+0.2** |
| | baz=228 | | | | | | | |
| NNS | | | | *e* | S | **Sn** | **17 17 50.0** | **+0.2** |
| | baz=228 | | | | | | | |
| **NNSB** | **Datong** | **0.67** | **229** | ⇑*i* | P | **Pn** | **17 17 36.9** | **+0.3** |
| | baz=228 | | | | | | | |
| NNSB | | | | *e* | S | **Sn** | **17 17 49.8** | **+0.1** |
| | baz=228 | | | | | | | |
| **NCU** | **National Centr** | **0.69** | **278** | ⇑*i* | P | **Pn** | **17 17 36.9** | **+0.3** |
| | baz=277 | | | | | | | |
| NCU | | | | *e* | S | **Sn** | **17 17 50.4** | **+0.6** |
| | baz=277 | | | | | | | |
| **NCUH** | **Zhongli** | **0.69** | **278** | ⇑ | P | **Pn** | **17 17 36.6** | **0.0** |
| | baz=277 | | | | | | | |
| NCUH | | | | *e* | S | **Sn** | **17 17 50.0** | **+0.2** |
| | baz=277 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.76** | **204** | ⇑ | P | **Pn** | **17 17 36.6** | **-0.7** |
| | baz=203 | | | | | | | |
| NACB | | | | *e* | S | **Sn** | **17 17 50.6** | **-0.3** |
| | baz=203 | | | | | | | |
| **ETL** | **Fush Village** | **0.76** | **202** | *e* | P | **Pn** | **17 17 36.9** | **-0.5** |
| | baz=201 | | | | | | | |
| ETL | | | | *e* | S | **Sn** | **17 17 51.0** | **0.0** |
| | baz=201 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.77** | **9** | *e* | P | **Pn** | **17 17 37.6** | **+0.3** |
| | baz=11 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.78** | **212** | ⇑ | P | **Pn** | **17 17 37.3** | **-0.3** |
| | baz=211 | | | | | | | |
| ETLH | | | | *e* | S | **Sn** | **17 17 50.9** | **-0.6** |
| | baz=211 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.78** | **252** | ⇑*i* | P | **Pn** | **17 17 37.4** | **-0.1** |
| | baz=251 | | | | | | | |
| NFF | | | | *e* | S | **Sn** | **17 17 51.1** | **-0.3** |
| | baz=251 | | | | | | | |
| **NJD** | **Zhudong** | **0.78** | **260** | *e* | P | **Pn** | **17 17 37.8** | **+0.3** |
| | baz=259 | | | | | | | |
| NJD | | | | *e* | S | **Sn** | **17 17 51.7** | **+0.4** |
| | baz=259 | | | | | | | |
| **NHW** | **Xinwu Township** | **0.82** | **280** | ⇑*e* | P | **Pn** | **17 17 38.1** | **+0.3** |
| | baz=279 | | | | | | | |
| NHW | | | | *e* | S | **Sn** | **17 17 52.9** | **+1.0** |
| | baz=279 | | | | | | | |
| **HSN1** | **Hsinchu** | **0.84** | **264** | ⇑*e* | P | **Pn** | **17 17 38.3** | **+0.2** |
| | baz=263 | | | | | | | |
| HSN1 | | | | *e* | S | **Sn** | **17 17 52.7** | **+0.4** |
| | baz=263 | | | | | | | |
| **TWD** | **Chiawan** | **0.85** | **202** | | P | **Pn** | **17 17 37.6** | **-0.5** |
| | baz=200 | | | | | | | |
| TWD | | | | *e* | S | **Sn** | **17 17 51.4** | **-1.0** |
| | baz=200 | | | | | | | |
| **LIOB** | **Emei** | **0.87** | **255** | ⇑*i* | P | **Pn** | **17 17 38.5** | **+0.1** |
| | baz=254 | | | | | | | |
| LIOB | | | | *e* | S | **Sn** | **17 17 52.8** | **0.0** |
| | baz=254 | | | | | | | |
| **SBCB** | **Hsinchu** | **0.87** | **265** | ⇑ | P | **Pn** | **17 17 38.5** | **+0.2** |
| | baz=264 | | | | | | | |
| SBCB | | | | *e* | S | **Sn** | **17 17 54.1** | **+1.3** |
| | baz=264 | | | | | | | |
| **HSN** | **Hsinchu** | **0.88** | **266** | *e* | P | **Pn** | **17 17 38.2** | **-0.2** |
| | baz=266 | | | | | | | |
| HSN | | | | *e* | S | **Sn** | **17 17 52.6** | **-0.4** |
| | baz=266 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.88** | **255** | ⇑ | P | **Pn** | **17 17 38.5** | **0.0** |
| | baz=253 | | | | | | | |
| NSTT | | | | *e* | S | **Sn** | **17 17 52.8** | **-0.2** |
| | baz=253 | | | | | | | |
| **FUSS** | **Fushou** | **0.89** | **226** | ⇑ | P | **Pn** | **17 17 39.4** | **+0.6** |
| | baz=224 | | | | | | | |
| FUSS | | | | *e* | S | **Sn** | **17 17 53.7** | **+0.1** |
| | baz=224 | | | | | | | |
| **TWT** | **Tachien** | **0.93** | **229** | ⇑*e* | P | **Pn** | **17 17 39.9** | **+0.8** |
| | baz=228 | | | | | | | |
| TWT | | | | *e* | S | **Sn** | **17 17 54.5** | **+0.3** |
| | baz=228 | | | | | | | |
| **TDCB** | **Techi** | **0.94** | **229** | | P | **Pn** | **17 17 39.8** | **+0.6** |
| | baz=228 | | | | | | | |
| TDCB | | | | *e* | S | **Sn** | **17 17 54.5** | **+0.2** |
| | baz=228 | | | | | | | |
| **HWA** | **Hwalien** | **0.94** | **199** | *e* | P | **Pn** | **17 17 39.0** | **0.0** |
| | baz=197 | | | | | | | |
| HWA | | | | *e* | S | **Sn** | **17 17 55.1** | **+1.1** |
| | baz=197 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.95** | **220** | ⇑ | P | **Pn** | **17 17 39.8** | **+0.2** |
| | baz=219 | | | | | | | |
| WHF | | | | *e* | S | **Sn** | **17 17 54.9** | **-0.1** |
| | baz=219 | | | | | | | |
| **ETM** | **Tongmen** | **0.99** | **204** | ⇓*e* | P | **Pn** | **17 17 38.9** | **-0.7** |
| | baz=203 | | | | | | | |
| ETM | | | | *e* | S | **Sn** | **17 17 54.3** | **-0.7** |
| | baz=203 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.01** | **114** | | P | **Pn** | **17 17 39.8** | **+0.1** |
| JYNG | | | | *e* | S | **Sn** | **17 17 55.3** | **0.0** |
| **TEYL** | **Yanliau Villag** | **1.04** | **197** | *e* | P | **Pn** | **17 17 40.2** | **+0.1** |
| | baz=197 | | | | | | | |
| TEYL | | | | *e* | S | **Sn** | **17 17 56.2** | **+0.2** |
| | baz=197 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.06** | **112** | | P | **Pn** | **17 17 40.3** | **0.0** |
| YOJ | | | | *e* | S | **Sn** | **17 17 55.9** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **1.06** | **112** | *e* | P | **Pn** | **17 17 40.3** | **0.0** |
| | baz=113 | | | | | | | |
| YOJ | | | | *e* | S | **Sn** | **17 17 55.9** | **-0.4** |
| | baz=113 | | | | | | | |
| **CHGB** | **Renai** | **1.06** | **221** | ⇑ | P | **Pn** | **17 17 41.2** | **+0.6** |
| | baz=220 | | | | | | | |
| CHGB | | | | *e* | S | **Sn** | **17 17 57.0** | **+0.1** |
| | baz=220 | | | | | | | |
| **WHP** | **Taichung City** | **1.08** | **237** | ⇑ | P | **Pn** | **17 17 41.1** | **+0.5** |
| | baz=236 | | | | | | | |
| WHP | | | | *e* | S | **Sn** | **17 17 56.8** | **-0.1** |
| | baz=236 | | | | | | | |
| **NMLH** | **Miaoli** | **1.09** | **253** | ⇑*e* | P | **Pn** | **17 17 40.9** | **+0.2** |
| | baz=252 | | | | | | | |
| NMLH | | | | *e* | S | **Sn** | **17 17 57.0** | **-0.1** |
| | baz=252 | | | | | | | |
| **ESL** | **Shilin** | **1.15** | **204** | | P | **Pn** | **17 17 40.2** | **-1.1** |
| | baz=202 | | | | | | | |
| ESL | | | | *e* | S | **Sn** | **17 17 56.8** | **-1.3** |
| | baz=202 | | | | | | | |
| **WUSB** | **Renai** | **1.15** | **221** | ⇑ | P | **Pn** | **17 17 42.1** | **+0.6** |
| | baz=220 | | | | | | | |
| WUSB | | | | *e* | S | **Sn** | **17 17 58.4** | **+0.1** |
| | baz=220 | | | | | | | |
| **NSY** | **Sanyi** | **1.16** | **247** | ⇑*e* | P | **Pn** | **17 17 41.9** | **+0.4** |
| | baz=246 | | | | | | | |
| NSY | | | | *e* | S | **Sn** | **17 17 59.0** | **+0.6** |
| | baz=246 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.18** | **244** | ⇑*e* | P | **Pn** | **17 17 41.8** | **+0.1** |
| | baz=243 | | | | | | | |
| TWQ1 | | | | *e* | S | **Sn** | **17 17 58.7** | **-0.1** |
| | baz=243 | | | | | | | |
| **TEGC** | **Jichi Village** | **1.21** | **197** | *e* | P | **Pn** | **17 17 42.5** | **+0.4** |
| | baz=196 | | | | | | | |
| TEGC | | | | *e* | S | **Sn** | **17 18 00.2** | **+0.9** |
| | baz=196 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.24** | **229** | ⇑ | P | **Pn** | **17 17 42.8** | **+0.5** |
| | baz=228 | | | | | | | |
| WCS | | | | *e* | S | **Sn** | **17 17 59.9** | **0.0** |
| | baz=228 | | | | | | | |
| **WPL** | **Puli Township** | **1.24** | **226** | *e* | P | **Pn** | **17 17 42.9** | **+0.5** |
| | baz=226 | | | | | | | |
| WPL | | | | *e* | S | **Sn** | **17 18 00.5** | **+0.6** |
| | baz=226 | | | | | | | |
| **DPDB** | **Guoxing** | **1.24** | **228** | *e* | P | **Pn** | **17 17 42.2** | **-0.2** |
| | baz=227 | | | | | | | |
| DPDB | | | | *e* | S | **Sn** | **17 18 01.6** | **+1.5** |
| | baz=227 | | | | | | | |
| **WDJ** | **Dajia District** | **1.29** | **246** | ⇑*e* | P | **Pn** | **17 17 43.2** | **+0.2** |
| | baz=246 | | | | | | | |
| WDJ | | | | *e* | S | **Sn** | **17 18 01.0** | **+0.1** |
| | baz=246 | | | | | | | |
| **VWDT** | **VWDT** | **1.33** | **213** | ⇑*e* | P | **Pn** | **17 17 43.9** | **+0.6** |
| | baz=212 | | | | | | | |
| VWDT | | | | *e* | S | **Sn** | **17 18 02.8** | **+1.0** |
| | baz=212 | | | | | | | |
| **TCU** | **Taichung** | **1.35** | **238** | ⇑*e* | P | **Pn** | **17 17 44.1** | **+0.4** |
| | baz=237 | | | | | | | |
| TCU | | | | *e* | S | **Sn** | **17 18 02.7** | **+0.4** |
| | baz=237 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.36** | **224** | ⇑*e* | P | **Pn** | **17 17 44.3** | **+0.4** |
| | baz=223 | | | | | | | |
| SMLT | | | | *e* | S | **Sn** | **17 18 03.3** | **+0.5** |
| | baz=223 | | | | | | | |
| **TYC** | **Yuchr** | **1.38** | **226** | ⇑*e* | P | **Pn** | **17 17 44.3** | **+0.4** |
| | baz=225 | | | | | | | |
| TYC | | | | *e* | S | **Sn** | **17 18 03.3** | **+0.5** |
| | baz=225 | | | | | | | |
| **WWF** | **Wufeng** | **1.40** | **234** | *e* | P | **Pn** | **17 17 44.6** | **+0.4** |
| | baz=233 | | | | | | | |
| WWF | | | | *e* | S | **Sn** | **17 18 03.8** | **+0.5** |
| | baz=233 | | | | | | | |
| **SSLB** | **Suanglung** | **1.40** | **220** | ⇑*e* | P | **Pn** | **17 17 44.7** | **+0.4** |
| | baz=219 | | | | | | | |
| SSLB | | | | *e* | S | **Sn** | **17 18 04.1** | **+0.7** |
| | baz=219 | | | | | | | |
| **HGSD** | **Ruisui** | **1.45** | **199** | *e* | P | **Pn** | **17 17 44.6** | **-0.2** |
| | baz=198 | | | | | | | |
| HGSD | | | | *e* | S | **Sn** | **17 18 04.9** | **+0.5** |
| | baz=198 | | | | | | | |
| **EHY** | **Hungye** | **1.47** | **203** | *e* | P | **Pn** | **17 17 43.8** | **-1.3** |
| | baz=202 | | | | | | | |
| EHY | | | | *e* | S | **Sn** | **17 18 03.9** | **-1.0** |
| | baz=202 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.48** | **238** | *e* | P | **Pn** | **17 17 45.3** | **+0.1** |
| | baz=237 | | | | | | | |
| WCHH | | | | *e* | S | **Sn** | **17 18 05.0** | **0.0** |
| | baz=237 | | | | | | | |
| **WNT1** | **Nantou City** | **1.50** | **230** | *e* | P | **Pn** | **17 17 45.8** | **+0.4** |
| | baz=229 | | | | | | | |
| WNT1 | | | | *e* | S | **Sn** | **17 18 05.7** | **+0.4** |
| | baz=229 | | | | | | | |
| **WNT** | **Mingjian** | **1.51** | **229** | *e* | P | **Pn** | **17 17 46.1** | **+0.5** |
| | baz=228 | | | | | | | |
| **WJS** | **Zhushan** | **1.52** | **227** | ⇑*e* | P | **Pn** | **17 17 46.0** | **+0.3** |
| | baz=226 | | | | | | | |
| WJS | | | | *e* | S | **Sn** | **17 18 06.1** | **+0.2** |
| | baz=226 | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.53** | **234** | *e* | P | **Pn** | **17 17 46.0** | **+0.2** |
| | baz=233 | | | | | | | |
| WYL | | | | *e* | S | **Sn** | **17 18 06.5** | **+0.4** |
| | baz=233 | | | | | | | |
| **YULB** | **Yu-li** | **1.58** | **202** | *e* | P | **Pn** | **17 17 45.3** | **-1.3** |
| | baz=201 | | | | | | | |
| YULB | | | | *e* | S | **Sn** | **17 18 05.3** | **-2.0** |
| | baz=201 | | | | | | | |
| **ECBN** | **Changbin** | **1.61** | **196** | *e* | P | **Pn** | **17 17 46.9** | **+0.1** |
| | baz=196 | | | | | | | |
| ECBN | | | | *e* | S | **Sn** | **17 18 07.5** | **-0.4** |
| | baz=196 | | | | | | | |
| **EYUL** | **Yuli** | **1.62** | **201** | *e* | P | **Pn** | **17 17 47.4** | **+0.5** |
| | baz=200 | | | | | | | |
| EYUL | | | | *e* | S | **Sn** | **17 18 06.4** | **-1.7** |
| | baz=200 | | | | | | | |
| **TWF1** | **Yuli** | **1.62** | **201** | *e* | P | **Pn** | **17 17 45.7** | **-1.3** |
| | baz=200 | | | | | | | |
| TWF1 | | | | *e* | S | **Sn** | **17 18 06.2** | **-2.0** |
| | baz=200 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.64** | **213** | *e* | P | **Pn** | **17 17 48.7** | **+1.0** |
| | baz=212 | | | | | | | |
| **ALS** | **Alishan** | **1.70** | **218** | *e* | P | **Pn** | **17 17 48.8** | **+0.5** |
| | baz=217 | | | | | | | |
| ALS | | | | *e* | S | **Sn** | **17 18 11.7** | **+1.3** |
| | baz=217 | | | | | | | |
| **CHN5** | **Tsauling** | **1.71** | **222** | *e* | P | **Pn** | **17 17 48.7** | **+0.6** |
| | baz=222 | | | | | | | |
| CHN5 | | | | *e* | S | **Sn** | **17 18 11.2** | **+1.0** |
| | baz=222 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.72** | **108** | | P | **Pn** | **17 17 47.8** | **-0.3** |
| IRIF | | | | *e* | S | **Sn** | **17 18 09.9** | **-0.4** |
| **WRL** | **Guolierlin Hig** | **1.72** | **236** | ⇑*e* | P | **Pn** | **17 17 47.9** | **-0.3** |
| | baz=235 | | | | | | | |
| WRL | | | | *e* | S | **Sn** | **17 18 09.2** | **-1.1** |
| | baz=235 | | | | | | | |
| **WGK** | **Gukeng** | **1.72** | **227** | ⇑*e* | P | **Pn** | **17 17 48.7** | **+0.5** |
| | baz=226 | | | | | | | |
| WGK | | | | *e* | S | **Sn** | **17 18 11.5** | **+1.2** |
| | baz=226 | | | | | | | |
| **WDLH** | **Douliu** | **1.74** | **228** | *e* | P | **Pn** | **17 17 48.8** | **+0.4** |
| | baz=227 | | | | | | | |
| WDLH | | | | *e* | S | **Sn** | **17 18 11.3** | **+0.6** |
| | baz=227 | | | | | | | |
| **FULB** | **Fuli** | **1.77** | **200** | *e* | P | **Pn** | **17 17 48.7** | **-0.1** |
| | baz=199 | | | | | | | |
| FULB | | | | *e* | S | **Sn** | **17 18 12.2** | **+0.7** |
| | baz=199 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.81** | **237** | *e* | P | **Pn** | **17 17 49.4** | **+0.1** |
| | baz=236 | | | | | | | |
| **CHKT** | **Chengkung** | **1.84** | **197** | *e* | P | **Pn** | **17 17 48.9** | **-0.8** |
| | baz=196 | | | | | | | |
| CHKT | | | | *e* | S | **Sn** | **17 18 11.5** | **-1.5** |
| | baz=196 | | | | | | | |
| **WTK** | **Tuku** | **1.84** | **231** | *e* | P | **Pn** | **17 17 49.6** | **-0.1** |
| | baz=230 | | | | | | | |
| WTK | | | | *e* | S | **Sn** | **17 18 12.8** | **-0.3** |
| | baz=230 | | | | | | | |
| **ELDTW** | **Lidau** | **1.87** | **207** | *e* | P | **Pn** | **17 17 49.9** | **-0.3** |
| | baz=206 | | | | | | | |
| ELDTW | | | | *e* | S | **Sn** | **17 18 14.4** | **+0.4** |
| | baz=206 | | | | | | | |
| **ECS** | **Chishang** | **1.89** | **201** | *e* | P | **Pn** | **17 17 50.2** | **-0.1** |
| | baz=200 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.89** | **115** | *e* | S | **Sn** | **17 18 14.0** | **-0.1** |
| **CHY** | **Chiayi** | **1.94** | **226** | *e* | P | **Pn** | **17 17 51.3** | **+0.3** |
| | baz=225 | | | | | | | |
| CHY | | | | *e* | S | **Sn** | **17 18 15.7** | **+0.4** |
| | baz=225 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.95** | **219** | ⇑*e* | P | **Pn** | **17 17 51.6** | **+0.5** |
| | baz=219 | | | | | | | |
| CHN4 | | | | *e* | S | **Sn** | **17 18 15.5** | **0.0** |
| | baz=219 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.97** | **218** | *e* | P | **Pn** | **17 17 51.6** | **+0.3** |
| | baz=217 | | | | | | | |
| TPUB | | | | *e* | S | **Sn** | **17 18 15.8** | **-0.2** |
| | baz=217 | | | | | | | |
| **EDH** | **Donghe** | **1.98** | **197** | *e* | P | **Pn** | **17 17 51.2** | **-0.3** |
| | baz=197 | | | | | | | |
| EDH | | | | *e* | S | **Sn** | **17 18 15.1** | **-1.1** |
| | baz=197 | | | | | | | |
| **WSF** | **Szhu** | **1.99** | **232** | ⇓*e* | P | **Pn** | **17 17 51.5** | **-0.1** |
| | baz=231 | | | | | | | |
| WSF | | | | *e* | S | **Sn** | **17 18 16.2** | **-0.2** |
| | baz=231 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.99** | **108** | | P | **Pn** | **17 17 52.0** | **+0.4** |
| JKRS | | | | | S | **Sn** | **17 18 16.2** | **-0.2** |
| **STYH** | **Taoyuan** | **2.00** | **212** | *e* | P | **Pn** | **17 17 52.5** | **+0.7** |
| | baz=212 | | | | | | | |
| STYH | | | | *e* | S | **Sn** | **17 18 16.8** | **+0.2** |
| | baz=212 | | | | | | | |
| **STYT** | **Tauyuan** | **2.01** | **213** | *e* | P | **Pn** | **17 17 52.6** | **+0.7** |
| | baz=212 | | | | | | | |
| STYT | | | | *e* | S | **Sn** | **17 18 17.6** | **+0.4** |
| | baz=212 | | | | | | | |
| **WTP** | **Ta-pu** | **2.02** | **217** | ⇑*e* | P | **Pn** | **17 17 52.3** | **+0.3** |
| | baz=216 | | | | | | | |
| WTP | | | | *e* | S | **Sn** | **17 18 17.0** | **-0.3** |
| | baz=216 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.06** | **230** | *e* | P | **Pn** | **17 17 52.4** | **-0.1** |
| | baz=229 | | | | | | | |
| WSL | | | | *e* | S | **Sn** | **17 18 18.2** | **+0.1** |
| | baz=229 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.07** | **104** | | P | **Pn** | **17 17 52.7** | **+0.1** |
| JIJ | | | | | S | **Sn** | **17 18 16.9** | **-1.4** |
| **TWK** | **Hsinying** | **2.07** | **220** | ⇑*e* | P | **Pn** | **17 17 52.9** | **+0.2** |
| | baz=219 | | | | | | | |
| TWK | | | | *e* | S | **Sn** | **17 18 19.0** | **+0.5** |
| | baz=219 | | | | | | | |
| **LONT** | **Longt

baz=214
**JISG Ishigakijimahi 2.18 97** P **Pn** 17 17 54.5 +0.5
JISG eS **Sn** 17 18 20.5 -0.3
**CHN8 Yiju 2.19 226** eP **Pn** 17 17 54.3 +0.2
baz=226
CHN8 eS **Sn** 17 18 21.4 +0.4
baz=226
**TWG Pinlang 2.19 201** eP **Pn** 17 17 53.2 -1.0
baz=201
**TWGBT Beinan 2.19 201** eP **Pn** 17 17 53.8 -0.4
baz=201
TWGBT eS **Sn** 17 18 20.1 -0.9
baz=201
**MATB Ma-tsu 2.21 306** eP **Pn** 17 17 53.8 -0.6
baz=305
**SLGT Liugui 2.21 213** eP **Pn** 17 17 55.4 +0.9
baz=212
SLGT eS **Sn** 17 18 22.2 +0.6
baz=212
**LDUT Ludao 2.23 191** eP **Pn** 17 17 54.2 -0.5
baz=191
LDUT eS **Sn** 17 18 19.5 -2.5
baz=191
**MSUT Lienchiang 2.23 306** eP **Pn** 17 17 54.2 -0.5
baz=305
**SHHT Tainan City 2.34 219** eP **Pn** 17 17 57.2 +1.0
baz=218
**SCST Cishan 2.38 214** eP **Pn** 17 17 57.6 +1.0
baz=213
**SSD Sandimen 2.43 210** eP **Pn** 17 17 58.2 +0.8
baz=209
**ECL Taimali 2.44 202** eP **Pn** 17 17 57.2 -0.2
baz=201
**TSMG Majia 2.46 209** eP **Pn** 17 17 58.6 +0.9
baz=208
TSMG eS **Sn** 17 18 27.4 0.0
baz=208
**JTJ Tarama 2.52 95** P **Pn** 17 17 59.4 +0.9
JTJ eS **Sn** 17 18 28.9 0.0
**PNG Penghu 2.53 240** eP **Pn** 17 17 57.8 -0.8
baz=239
PNG eS **Sn** 17 18 27.0 -2.1
baz=239
**MASBT Mashibuluo 2.55 208** eP **Pn** 17 17 59.5 +0.6
baz=208
**PHUB P'eng-hu 2.55 238** eP **Pn** 17 17 57.9 -1.0
baz=238
**PTMZ Houxiangcun 2.56 274** eP **Pn** 17 17 58.6 -0.5
baz=274
**SNJT Kaohsiung City 2.57 215** eP **Pn** 17 17 60.0 +0.8
baz=214
**LYJJ Jianjiangzhen 2.58 311** eP **Pn** 17 17 58.7 -0.5
baz=311
**XPSS Dashiqiu 2.58 323** eP **Pn** 17 17 58.7 -0.6
baz=323
**EAST Anshuo 2.67 202** eP **Pn** 17 18 01.7 +1.2
baz=201
**SCZT Fangliau 2.77 206** eP **Pn** 17 18 02.3 +0.5
baz=205
**JIRB Irabujima 2.94 90** P **Pn** 17 18 05.4 +1.3
JIRB S **Sn** 17 18 38.7 0.0
**JIKM Ikemajima 3.01 88** eS **Sn** 17 18 41.4 +1.1
**JMJ2 Miyako jima3 3.08 92** P **Pn** 17 18 07.8 +1.8
JMJ2 eS **Sn** 17 18 42.4 +0.2
**JOGS Gusukube 3.15 91** S **Sn** 17 18 43.7 -0.2

*IDC **25** 17:26:18.0±0.9, 10°07'S×122°11'E, h27km±4km, mb3.9/8, mb1 4.1/12, mb1mx3.8/33, mbtmp4.1/12, ML4.0/4, MS3.2/2, Ms1 3.2/2, ms1mx2.6/71, Error ellipse: s-maj=29.4km s-min=14.0km az=46.0*
*NEIC **25** 17:26:19.3±1.4, 10°02S±0°07'×122°03E±0°06, h46km±7km, mb4.3/15, Error ellipse: s-maj=11.0km s-min=7.7km az=196.0*
*DJA **25** 17:26:20.3±0.3, 10°S±4"×12°2E±", h62km±20km, M4.1/10, mb4.3/6, mB4.9/2, MLv4.0/10, Mw(mB)4.2/2*
**ISC 25 17:26:17.7±0.5, 10°07S±0°05×122°15E±0°05, h35km, n58, σ2§52/60, mb4.3/16, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **1.43** | **4** | | **Pn** | **17 26 42.0** | **+0.8** |
| **MMRI** | **Maumere** | **1.43** | **4** | P | **Pn** | **17 26 41.8** | **+0.6** |
| MMRI | | | | S | **Sn** | **17 27 01.9** | **+3.2** |
| **BATI** | **Baumata** | **1.50** | **95** | Pn | **Pn** | **17 26 45.1** | **+3.0** |
| | 102nm,0.3s,baz=277,slow=1.1,SNR=137 | | | | | | |
| BATI | | | | Sn | **Sn** | **17 27 06.5** | **+6.0** |
| | 130nm,0.3s,baz=172,slow=13,SNR=5.9 | | | | | | |
| **BATI** | **Baumata** | **1.50** | **95** | P | **Pn** | **17 26 45.9** | **+3.7** |
| **BASI** | **Baing, Sumba** | **1.55** | **264** | P | **Pn** | **17 26 46.5** | **+3.6** |
| **SOEI** | **Soe** | **2.11** | **82** | Pn | **Pn** | **17 26 53.8** | **+3.1** |
| **SOEI** | **Soe** | **2.11** | **82** | P | Pn | 17 26 54.9 | +4.2 |
| **WBSI** | **Waikabubak, Su** | **2.75** | **279** | P | **Pn** | **17 27 02.6** | **+3.2** |
| **PLAI** | **Plampang** | **4.49** | **286** | P | Pn | 17 27 27.8 | +4.5 |
| **BKSI** | **Bulukumba** | **5.13** | **337** | P | Pn | 17 27 35.0 | +2.9 |
| | 0.1nm26nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **5.56** | **335** | Pn | **Pn** | **17 27 39.7** | **+1.7** |
| | 1.6nm,0.3s,baz=157,slow=12,SNR=1.7 | | | | | | |
| **BNSI** | **Bone** | **5.99** | **340** | P | Pn | 17 27 47.0 | +3.1 |
| | 0.2nm638nm42nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.05** | **281** | Pn | **Pn** | **17 28 11.4** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **8.05** | **281** | P | **Pn** | **17 28 14.4** | **+2.1** |
| | 14nm,0.8s | | | | | | |
| **KNRA** | **Kunumurra** | **8.52** | **132** | | **Pn** | **17 28 18.5** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **8.67** | **157** | Pn | **Pn** | **17 28 21.4** | **+0.7** |
| | 0.8nm,0.3s,baz=354,slow=8.3,SNR=38 | | | | | | |
| FITZ | | | | Sn | **Sn** | **17 29 52.8** | **-4.5** |
| | 5.8nm,0.3s,baz=133,slow=9.7,SNR=12 | | | | | | |
| FITZ | | | | LR | LR | 17 32 05.6 | |
| | comp=Z,104nm,18.8s,baz=346,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.67** | **157** | | **Pn** | **17 28 20.6** | **-0.1** |
| **MTN** | **Manton Dam** | **9.23** | **108** | | **Pn** | **17 28 29.4** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **11.65** | **191** | Pn | **Pn** | **17 29 00.4** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **11.65** | **191** | Pn | **Pn** | **17 28 59.5** | **-2.1** |
| **TNTI** | **Ternate** | **11.96** | **26** | Pn | **Pn** | **17 29 02.5** | **-3.3** |
| **FAKI** | **Fak Fak** | **12.29** | **55** | Pn | **Pn** | **17 29 10.3** | **-0.1** |
| **GIRL** | **Giralia** | **14.62** | **210** | Pn | **Pn** | **17 29 42.3** | **+0.2** |
| **WB0** | **Warramunga Arr** | **15.25** | **131** | Pn | **Pn** | **17 29 46.6** | **-4.0** |
| **WRA** | **Warramunga Arr** | **15.32** | **131** | Pn | **Pn** | **17 29 47.8** | **-3.7** |
| | 2.2nm,0.3s,baz=307,slow=14,SNR=29 | | | | | | |
| WRA | | | | Sn | **Sn** | **17 32 31.2** | **-9.0** |
| | 1.3nm,0.3s,baz=306,slow=24,SNR=13 | | | | | | |
| **WRAB** | **Tennant Creek** | **15.32** | **131** | | **Pn** | **17 29 48.0** | **-3.5** |
| WRAB | | | | lAmb | lAmb | 17 29 59.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **15.33** | **131** | Pn | **Pn** | **17 29 47.8** | **-3.8** |
| WB2 | | | | lAmb | lAmb | 17 29 59.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.48** | **131** | Pn | **Pn** | **17 29 50.2** | **-3.3** |
| WR0 | | | | lAmb | lAmb | 17 30 00.4 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **17.57** | **142** | Pn | **Pn** | **17 30 19.5** | **-0.6** |
| **ASAR** | **Alice Springs** | **17.57** | **142** | P | **Pn** | **17 30 19.7** | **-0.4** |
| | comp=Z,16nm,0.3s,baz=324,slow=13,SNR=85 | | | | | | |
| ASAR | | | | S | Sn | 17 33 24.3 | -11 |
| | comp=Z,0.3nm,0.3s,baz=317,slow=24,SNR=9.2 | | | | | | |
| **JAY** | **Jayapura** | **19.90** | **69** | P | **Pn** | **17 30 48.1** | **-0.2** |
| | comp=Z,1.1nm,0.3s,baz=264,slow=2.9,SNR=4.7 | | | | | | |
| **FORT** | **Forrest** | **21.33** | **166** | P | **P** | **17 31 03.7** | **+2.0** |
| **PMG** | **Port Moresby** | **24.66** | **91** | LR | LR | 17 43 28.6 | |
| | comp=Z,85nm,18.4s,baz=247,slow=42 | | | | | | |
| **CTA** | **Charters Tower** | **25.28** | **116** | P | **P** | **17 31 42.6** | **+1.5** |
| | comp=Z,4.9nm,0.9s,baz=268,slow=7.5,SNR=4.6 | | | | | | |
| **BBOO** | **Buckleboo** | **26.02** | **153** | P | **P** | | |
| BBOO | | | | lAmb | lAmb | **17 31 49.1** | **+1.5** |
| | comp=Z,11nm,1.1s | | | | | 17 32 16.5 | |
| **STKA** | **Stephens Creek** | **28.20** | **143** | P | **P** | **17 32 08.0** | **+0.8** |
| | comp=Z,1.4nm,0.6s,baz=334,slow=11,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.44** | **321** | P | **P** | **17 33 21.4** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=139,slow=4.8,SNR=1.4 | | | | | | |
| CMAR | | | | pP | **pwP** | **17 33 29.6** | **-2.7** |
| | comp=Z,0.3nm,0.4s,baz=140,slow=6.5,SNR=2.5 | | | | | | |
| CMAR | | | | PcP | **PcP** | **17 35 45.5** | **+2.3** |
| | comp=Z,1.2nm,0.8s,baz=173,slow=2.5,SNR=9.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.44** | **321** | P | **P** | **17 33 16.4** | **-3.0** |
| **GOMU** | **GeErMu** | **52.74** | **332** | P | P | 17 35 36.0 | +6.3 |
| GOMU | | | | pP | pwP | 17 35 44.5 | +1.8 |
| GOMU | | | | sP | sP | 17 35 46.8 | +3.6 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,51nm,5.3s | | | | | | |
| **GTA** | **Gaotai** | **53.43** | **338** | eP | P | 17 35 44.8 | +10 |
| GTA | | | | pP | sP | 17 35 49.3 | +1.4 |
| GTA | | | | sP | pwP | 17 35 52.3 | +4.6 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.74** | **9** | P | **P** | **17 35 43.3** | **-0.4** |
| | comp=Z,1.0nm,0.4s,baz=198,slow=7.4,SNR=4.1 | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.22** | **348** | P | **P** | **17 36 14.4** | **-1.1** |
| ULN | | | | lAmb | lAmb | 17 36 26.1 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **59.32** | **348** | P | **P** | **17 36 17.2** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=166,slow=7.8,SNR=6.4 | | | | | | |
| SONM | | | | pP | **pP** | **17 36 26.1** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=167,slow=8.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **59.32** | **348** | P | **P** | **17 36 15.2** | **-1.0** |
| SONM | | | | lAmb | lAmb | 17 36 26.8 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **KSH** | **Kashi** | **65.33** | **322** | P | **P** | **17 36 58.8** | **+2.1** |
| KSH | | | | pP | sP | 17 37 12.8 | +2.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **66.85** | **331** | P | **P** | **17 37 06.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **66.85** | **331** | P | **P** | **17 37 07.5** | **+1.4** |
| | comp=Z,1.3nm,0.6s,baz=145,slow=7.1,SNR=17 | | | | | | |
| MKAR | | | | pP | **pP** | **17 37 16.3** | **+0.3** |
| | comp=Z,5.3nm,0.7s,baz=141,slow=7.3,SNR=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.85** | **331** | P | **P** | **17 37 06.5** | **+0.3** |
| **AAK** | **Ala-Archa** | **68.14** | **324** | P | **P** | **17 37 12.7** | **-1.9** |
| AAK | | | | lAmb | lAmb | 17 37 26.3 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **69.85** | **22** | P | **P** | **17 37 26.8** | **+2.0** |
| | comp=Z,3.7nm,1.0s,baz=205,slow=6.4,SNR=2.1 | | | | | | |
| **KKAR** | **Karatay Array** | **70.77** | **323** | P | **P** | **17 37 29.5** | **-1.1** |
| **ZAA0** | **Zalesovo Array** | **71.17** | **338** | P | **P** | **17 37 32.1** | **-0.7** |
| ZAA0 | | | | lAmb | lAmb | 17 37 43.4 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.17** | **338** | P | **P** | **17 37 32.5** | **-0.2** |
| | comp=Z,2.1nm,0.4s,baz=131,slow=4.8,SNR=16 | | | | | | |
| ZALV | | | | pP | **pP** | **17 37 41.7** | **-1.0** |
| | comp=Z,2.6nm,0.6s,baz=131,slow=4.3,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.17** | **338** | P | **P** | **17 37 32.3** | **-0.5** |
| **KURK** | **Kurchatov** | **71.35** | **332** | P | **P** | **17 37 32.5** | **-1.3** |
| KURK | | | | lAmb | lAmb | 17 37 44.4 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **113.86** | **25** | PKiKP | **PKiKP** | **17 44 53.9** | **+1.4** |
| | comp=Z,0.1nm,0.5s,baz=287,slow=1.9,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.70** | **279** | PKP | **PKiKP** | **17 45 10.9** | **+1.8** |
| | comp=Z,1.6nm,0.6s,baz=67,slow=1.7,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.70** | **279** | | **PKPdf** | **17 45 07.6** | **-1.4** |

**IDC 25 17:42:24.2±2.7, 3°88N×126°77E, h0km, mb3.1/3, mb1 3.3/3, mb1mx3.1/27, mbtmp3.1/3, Error ellipse: s-maj=248.0km s-min=27.7km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.81** | **163** | P | P | 17 47 47.1 | -1.1 |
| | 0.2nm,0.7s,baz=342,slow=11,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **28.25** | **166** | P | P | 17 48 20.5 | +1.3 |
| | 0.2nm,0.9s,baz=343,slow=12,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.46** | **325** | P | P | 17 52 14.9 | -0.1 |
| | 0.1nm,0.4s,baz=119,slow=7.6,SNR=6.1 | | | | | | |

*IDC **25** 17:57:42.4±2.1, 1°55N×125°97E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.1/35, mbtmp3.4/3, Error ellipse: s-maj=199.1km s-min=25.2km az=65.0*
*DJA **25** 17:57:46.6±0.7, 2°N±4"×12°7E±", h104km±11km, M3.7/9, mb4.0/1, MLv3.6/9*
**ISC 25 17:57:48.8±1.4, 1°6N±0°1×126°52E±0°08, h47km, n10, σ1§38/11, mb3.5/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.16** | **133** | P | **Pn** | **17 58 09.1** | **+0.5** |
| TNTI | | | | S | **Sn** | **17 58 24.4** | **+1.0** |
| **KMSI** | **Cibinong** | **2.73** | **249** | P | **Pn** | **17 58 30.6** | **+0.5** |
| **GTOI** | **Gorontalo** | **3.63** | **255** | P | **Pn** | **17 58 44.4** | **+1.9** |
| **SANI** | **Sanana** | **3.64** | **188** | P | **Pn** | **17 58 42.1** | **-0.5** |
| **LUWI** | **Luwuk** | **4.56** | **235** | P | **Pn** | **17 58 54.3** | **-1.0** |
| **MRSI** | **Marisa** | **4.71** | **257** | P | **Pn** | **17 58 58.5** | **+1.2** |
| **APSI** | **Ampana** | **5.46** | **243** | P | **Pn** | **17 59 07.3** | **-0.4** |
| **WRA** | **Warramunga Arr** | **22.72** | **161** | P | **P** | **18 02 46.3** | **-0.5** |
| | 1.3nm,0.7s,baz=337,slow=10,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **26.10** | **164** | P | **P** | **18 03 20.3** | **+2.0** |
| | 0.3nm,0.4s,baz=346,slow=12,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.21** | **326** | P | **P** | **18 07 43.4** | **-1.8** |
| | 0.2nm,0.5s,baz=122,slow=8.6,SNR=5.5 | | | | | | |

*BER **25** 18:03:29.7±1.3, 66°58N×21°58E, h0km, ML1.7, Suspected explosion*
*UPP **25** 18:03:31.8±0.1, 67°06N×20°98E, h0km, ML2.1, Explosion*
*HEL **25** 18:03:31.7, 67°04N×20°86E, h0km, ML2.2, Explosion*
*IDC **25** 18:03:32.5±1.0, 67°04N×20°85E, h0km, mb1 2.8/3, mb1mx2.7/55, mbtmp2.7/3, ML1.9/3, Error ellipse: s-maj=11.7km s-min=5.1km az=151.0*
**ISC 25 18:03:31.7±0.8, 67°07N±0°02×20°93E±0°03, h0km, n42, σ1§01/56, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERTU** | **Ertsjaerv** | **0.71** | **135** | P | **Pg** | **18 03 45.0** | **-0.3** |
| **ERTU** | **Ertsjaerv** | **0.71** | **135** | eP | **Pg** | **18 03 44.8** | **-0.5** |
| ERTU | | | | eS | **Sg** | **18 03 54.5** | **-0.1** |
| **PAJU** | **Pajala** | **0.86** | **92** | P | **Pg** | **18 03 47.5** | **-0.6** |
| **PAJU** | **Pajala** | **0.86** | **92** | eP | **Pg** | **18 03 47.6** | **-0.4** |
| PAJU | | | | eSB | **Sg** | **18 03 59.0** | **-0.1** |
| **HARU** | **Harads** | **0.91** | **179** | P | **Pg** | **18 03 48.6** | **-0.4** |
| **HARU** | **Harads** | **0.91** | **179** | eP | **Pg** | **18 03 48.6** | **-0.4** |
| **SALU** | **Saltoluokta** | **1.00** | **290** | P | **Pb** | **18 03 51.0** | **-0.8** |
| SALU | | | | S | **Sb** | **18 04 04.7** | **-0.7** |
| **SALU** | **Saltoluokta** | **1.00** | **290** | eP | **Pb** | **18 03 51.0** | **-0.8** |
| SALU | | | | eS | **Sb** | **18 04 04.7** | **-0.7** |
| **LANU** | **Lannavaara** | **1.07** | **22** | P | **Pg** | **18 03 51.7** | **-0.4** |
| **LANU** | **Lannavaara** | **1.07** | **22** | eP | **Pg** | **18 03 51.6** | **-0.6** |
| LANU | | | | eSB | **Sb** | **18 04 07.3** | **-0.3** |
| **NIKU** | **Nikkaluokta** | **1.09** | **319** | P | **Pg** | **18 03 52.4** | **-0.2** |
| **NIKU** | **Nikkaluokta** | **1.09** | **319** | eP | **Pg** | **18 03 52.4** | **-0.2** |
| **KLF** | **Kolari** | **1.20** | **80** | eP | **Pg** | **18 03 53.8** | **-0.7** |
| | baz=259 | | | | | | |
| **KOVU** | **Salmi** | **1.20** | **346** | P | **Pg** | **18 03 54.4** | **-0.3** |
| **KOVU** | **Salmi** | **1.20** | **346** | eP | **Pg** | **18 03 54.4** | **-0.3** |
| **SJUU** | **Sjulsmark** | **1.59** | **170** | P | **Pn** | **18 04 00.6** | **-0.4** |
| **SJUU** | **Sjulsmark** | **1.59** | **170** | eP | **Pn** | **18 04 00.6** | **-0.4** |
| **TOF** | **Tornio** | **1.68** | **125** | eP | **Pn** | **18 04 02.3** | **0.0** |
| TOF | | | | MSG | | 18 04 22.2 | |
| | comp=Z,31nm,0.2s | | | | | | |
| TOF | | | | eSN | **Sg** | **18 04 27.6** | **+2.1** |
| **HEF** | **Hetta** | **1.70** | **36** | eP | **Pn** | **18 04 02.5** | **-0.1** |
| HEF | | | | eS | **Sg** | **18 04 27.9** | **+1.6** |
| **HEF** | **Hetta** | **1.70** | **36** | eP | **Pn** | **18 04 02.7** | **+0.1** |
| | baz=220 | | | | | | |
| HEF | | | | MSG | | 18 04 23.5 | |
| | comp=Z,18nm,0.2s | | | | | | |
| HEF | | | | eSN | **Sg** | **18 04 28.1** | **+1.7** |
| **KIF** | **Kilpisjarvi** | **1.95** | **359** | eP | **Pb** | **18 04 08.4** | **-0.4** |
| **KIF** | **Kilpisjarvi** | **1.95** | **359** | ePB | **Pb** | **18 04 07.9** | **-0.1** |
| KIF | | | | MSG | | 18 04 31.6 | |
| | comp=Z,34nm,0.2s | | | | | | |
| KIF | | | | eSG | **Sg** | **18 04 35.8** | **+1.6** |
| **RNF** | **Rovaniemi** | **2.06** | **100** | ePB | **Pn** | **18 04 08.5** | **+1.0** |
| RNF | | | | eSG | **Sg** | **18 04 38.1** | **+0.3** |
| **KTK1** | **Kautokeino** | **2.14** | **23** | eP | **Pb** | **18 04 10.5** | **-0.8** |
| KTK1 | | | | IAML | | 18 04 46.7 | |
| | comp=Z,7.5nm,0.3s | | | | | | |
| **I37NO** | **I37NO** | **2.20** | **338** | *i* | | 18 18 10.0 | |
| | baz=157,slow=332,SNR=1.6 | | | | | | |
| **SGF** | **Sodankyl** | **2.21** | **78** | ePB | **Pn** | **18 04 10.6** | **+1.1** |
| **FAUS** | **Fauske** | **2.22** | **281** | eP | **Pb** | **18 04 11.6** | **-1.1** |
| FAUS | | | | IAML | | 18 04 51.5 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **OUL** | **Oulu** | **2.84** | **132** | eP | **Pn** | **18 04 19.8** | **+1.7** |
| **OBF0** | **Syolatti, Pyha** | **2.92** | **151** | ePB | **Pb** | **18 04 23.2** | **-1.2** |
| OBF0 | | | | eSG | **Sb** | **18 05 01.0** | **+0.4** |
| **ARA0** | **ARCESS Array S** | **3.01** | **32** | eP | **Pn** | **18 04 21.0** | **+0.5** |
| ARA0 | | | | IAML | | 18 05 07.3 | |
| | comp=Z,3.9nm,0.2s | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.01** | **32** | eP | **Pn** | **18 04 21.2** | **+0.7** |
| ARA0 | | | | eSB | **Sb** | **18 05 00.6** | **-2.7** |
| **ARCES** | **ARCESS Array B** | **3.01** | **32** | Pn | **Pn** | **18 04 21.4** | **+0.9** |
| | baz=214,slow=13,SNR=44 | | | | | | |
| ARCES | | | | Sn | **Sb** | **18 05 00.9** | **-2.3** |
| | baz=214,slow=24,SNR=5.0 | | | | | | |
| **OUF** | **Merijarvi** | **3.13** | **148** | eP | **Pn** | **18 04 23.2** | **+1.0** |
| OUF | | | | MSG | | 18 05 03.4 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.42** | **74** | eP | **Pn** | **18 04 27.0** | **+0.9** |
| **MSF** | **Maaselka** | **3.45** | **106** | eP | **Pn** | **18 04 28.1** | **+1.5** |
| **KEV** | **Kevo** | **3.51** | **37** | eP | **Pn** | **18 04 28.5** | **+1.1** |
| **KU6** | **Riekki** | **3.73** | **102** | eP | **Pn** | **18 04 31.6** | **+1.2** |
| **HUSU** | **Husum** | **3.81** | **192** | eP | **Pn** | **18 04 32.5** | **+1.0** |
| HUSU | | | | eS | **Sn** | **18 05 17.8** | **+0.9** |
| **VAF** | **Ylistaro** | **4.11** | **169** | eP | **Pn** | **18 04 37.1** | **+1.5** |
| | baz=351 | | | | | | |
| **HEMU** | **Hemsoen** | **4.58** | **197** | eP | **Pn** | **18 04 43.2** | **+1.2** |
| **FINES** | **FINESS Array B** | **6.07** | **156** | Pn | **Pn** | **18 05 03.4** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=347,slow=13,SNR=10 | | | | | | |
| FINES | | | | Sn | **Sn** | **18 06 12.8** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=23,SNR=7.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **7.39** | **220** | Pn | **Pn** | **18 05 20.3** | **-0.4** |
| | comp=Z,0.0nm,0.3s,baz=26,slow=11,SNR=4.1 | | | | | | |

**IDC 25 18:04:00.6±10.0, 15°85S×173°33W, h0km, mb4.0/2, mb1 4.2/2, mb1mx3.4/46, mbtmp4.0/2, Error ellipse: s-maj=471.4km s-min=60.7km az=141.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **49.81** | **257** | P | P | 18 12 55.1 | -0.6 |
| | 0.6nm,0.6s,baz=90,slow=7.9,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **50.04** | **252** | P | P | 18 12 57.8 | +0.3 |
| | 2.4nm,0.6s,baz=88,slow=8.2,SNR=50 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.54** | **321** | PKPbc | PKPdf | 18 23 43.6 | +0.6 |
| | 1.0nm,0.7s,baz=42,slow=2.4,SNR=6.3 | | | | | | |

*SFS **25** 18:06:22.0, 35°46N×3°84W, ML2.3, ALBORAN S.*
*CNRM **25** 18:06:23.1, 35°50N×3°84W, h22km, ml2.6*
**ISC 25 18:06:23.5±1.0, 35°38N±0°04×3°80W±0°04, h32km±8km, n13, σ1§42/23, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.20** | **215** | P | **Pb** | **18 06 30.5** | **+0.5** |
| PALE | | | | S | **Sb** | **18 06 33.6** | **-0.7** |
| **GOG** | **Mont Gurugu** | **0.68** | **103** | P | **Pn** | **18 06 37.6** | **+0.6** |
| GOG | | | | S | **Sb** | **18 06 45.9** | **-0.3** |
| **TAF** | **Taforalt** | **1.27** | **116** | P | **Pb** | **18 06 46.7** | **-0.2** |
| **CHEFC** | **Chefchaouen** | **1.29** | **258** | P | **Pb** | **18 06 48.3** | **+1.0** |
| **JBK** | **JBK** | **1.46** | **135** | P | **Pb** | **18 06 50.4** | **+0.3** |
| JBK | | | | S | **Sb** | **18 07 08.0** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.47** | **340** | P | **Pb** | **18 06 48.9** | **-1.3** |
| EMAL | | | | S | **Sb** | **18 07 06.5** | **-2.0** |
| **MD31** | **MD31** | **2.63** | **198** | P | **Pb** | **18 07 08.4** | **-1.6** |
| MD31 | | | | S | **Sb** | **18 07 41.0** | **-0.9** |
| **MDT** | **Midelt** | **2.65** | **195** | P | **Pb** | **18 07 08.8** | **-1.5** |
| MDT | | | | S | **Sb** | **18 07 40.1** | **-2.4** |
| **ZHG** | **ZHG** | **3.04** | **231** | P | **Pn** | **18 07 09.2** | **-0.3** |
| ZHG | | | | S | **Sn** | **18 07 47.4** | **+2.5** |
| **PVAQ** | **Vaqueiros** | **3.75** | **304** | ePn | **Pn** | **18 07 21.1** | **+1.9** |
| PVAQ | | | | eSn | **Sn** | **18 08 03.0** | **+0.8** |
| PVAQ | | | | A | A | 18 08 10.4 | |
| | 2.3nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.75** | **304** | P | **Pn** | **18 07 19.3** | **+0.1** |
| PVAQ | | | | S | **Sn** | **18 08 00.4** | **-1.8** |
| **PBAR** | **Barrancos** | **3.81** | **318** | eSn | **Sn** | **18 08 04.6** | **+0.8** |
| PBAR | | | | A | A | 18 08 11.2 | |
| | 1.6nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.67** | **307** | ePn | **Pn** | **18 07 33.9** | **+2.0** |
| PNCL | | | | eSn | **Sn** | **18 08 25.2** | **+0.2** |

**IDC 25 18:11:07.5±5.8, 24°46N×95°72E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.0/54, mbtmp3.2/3, Error ellipse: s-maj=603.2km s-min=29.6km az=59.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **24.75** | **338** | P | P | 18 16 30.7 | 0.0 |
| | 0.2nm,0.4s,baz=148,slow=9.0,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.98** | **136** | P | P | 18 21 01.9 | -0.3 |
| | 0.3nm,0.7s,baz=324,slow=7.3,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **60.50** | **139** | P | P | 18 21 19.8 | +0.1 |
| | 0.3nm,0.8s,baz=319,slow=6.8,SNR=4.8 | | | | | | |

*IDC **25** 18:15:48.7±1.3, 25°92N×128°33E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.3/50, mbtmp3.4/4, MS2.9/2, Ms1 2.9/2, ms1mx2.4/47, Error ellipse: s-maj=63.1km s-min=15.7km az=82.0*
*JMA **25** 18:15:51.0±0.3, 25°88N×128°47E, h47km, M3.1*
**ISC 25 18:15:50.4±1.4, 25°87N±0°06×128°51E±0°04, h20km±5km, n18, σ1§26/25, mb3.4/4, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JJT3** | **Tamagusuku3** | **0.70** | **293** | P | **Pg** | **18 16 04.5** | **+0.2** |
| JJT3 | | | | eS | **Sg** | **18 16 14.3** | **+0.5** |
| **JNTH** | **Nagotoyohara** | **0.78** | **326** | P | **Pg** | **18 16 04.9** | **-0.8** |
| JNTH | | | | eS | **Sg** | **18 16 15.4** | **-0.6** |
| **JOW** | **Kunigami** | **0.98** | **348** | Pn | **Pb** | **18 16 08.6** | **-0.2** |
| | 111nm,0.3s,baz=111,slow=26,SNR=96 | | | | | | |
| JOW | | | | Sn | **Sb** | **18 16 23.7** | **+2.5** |
| | 98nm,0.3s,baz=134,slow=30,SNR=5.6 | | | | | | |
| **JOW** | **Kunigami** | **0.98** | **348** | P | **Pb** | **18 16 08.5** | **-0.2** |
| **JYRO** | **Yoronjima** | **1.15** | **358** | P | **Pn** | **18 16 11.1** | **-0.3** |
| JYRO | | | | eS | **Sb** | **18 16 25.8** | **-0.3** |
| **JIH** | **Iheya** | **1.25** | **337** | P | **Pn** | **18 16 12.8** | **-0.1** |
| JIH | | | | eS | **Sb** | **18 16 28.2** | **-1.0** |
| **JAGN** | **Aguni-jima** | **1.34** | **302** | P | **Pn** | **18 16 13.7** | **-0.3** |
| **JOKE** | **Okinoerabujima** | **1.48** | **2** | P | **Pn** | **18 16 16.0** | **0.0** |
| **JKE** | **Kume jima 2** | **1.61** | **287** | P | **Pn** | **18 16 16.8** | **-1.0** |
| JKE | | | | S | **Sn** | **18 16 35.6** | **-2.4** |
| **JTK** | **Tokunoshima** | **1.95** | **12** | P | **Pn** | **18 16 22.6** | **+0.2** |
| JTK | | | | eS | **Sn** |

0.2nm,0.6s,baz=92,slow=8.3,SNR=6.6
WRA LR LR 18 54 40.7
comp=Z,55nm,21.9s,baz=106,slow=33
**ASAR Alice Springs 42.95 251** P **P** **18 39 08.0 0.0**
0.7nm,0.9s,baz=73,slow=9.6,SNR=7.2
ASAR LR LR 18 55 02.2
comp=Z,70nm,19.9s,baz=88,slow=33
**SIJI Sorong 48.83 282** LR LR 19 00 29.2
comp=Z,34nm,19.5s,baz=130,slow=36
**MJAR Matsushiro Arr 63.87 324** LR LR 19 04 26.9
comp=Z,29nm,20.4s,baz=181,slow=31
**RPN Rapa Nui 67.53 113** LR LR 19 03 06.8
comp=Z,68nm,22.0s,baz=42,slow=28
**PETK Petropavlovsk- 70.15 347** LR LR 19 17 04.0
comp=Z,14nm,18.0s,baz=114,slow=39
**KSRS Korea Array 70.63 319** LR LR 19 09 01.4
comp=Z,41nm,21.1s,baz=140,slow=32
**KLR Kul'dur 76.16 330** LR LR 19 12 03.6
comp=Z,43nm,20.4s,baz=135,slow=32
**MA2 Magadan 77.64 346** LR LR 19 13 54.0
comp=Z,35nm,20.0s,baz=106,slow=33
**NVAR Mina Array Bea 79.33 45** P **P** **18 43 14.8 +0.3**
0.2nm,0.3s,baz=214,slow=9.2,SNR=5.3
**ILAR Eielson Array 83.70 14** P **P** **18 43 37.2 +0.5**
1.9nm,0.9s,baz=229,slow=6.2,SNR=13
**TXAR Lajitas Array 86.86 59** P **P** **18 43 53.2 -0.2**
0.3nm,0.8s,baz=234,slow=6.0,SNR=4.5
**PDAR Pinedale Array 87.21 44** P **P** **18 43 54.3 -0.7**
1.1nm,1.0s,baz=212,slow=5.3,SNR=5.2
**PLCA Paso Flores 95.41 134** LR LR 19 20 15.0
comp=Z,23nm,18.6s,baz=189,slow=31

**WEL 25 18:40:09.3±1.0,37°S±5°×17°9E±°,h12km,M3.5/40,**
**ML3.7/46,MLv3.5/40,Error ellipse: s-maj=0.0km**
**s-min=0.0km az=76.1,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **0.82** | **211** | P | Pb | 18 40 25.7 | +0.2 |
| MXZ | | | | S | Sg | 18 40 35.8 | -0.3 |
| **PKGZ** | **Pakihiroa** | **1.20** | **210** | P | Pb | 18 40 32.1 | +0.2 |
| **HAZ** | **Te Kaha** | **1.23** | **223** | P | Pn | 18 40 31.2 | -1.1 |
| **PUZ** | **Puketiti** | **1.30** | **201** | P | Pb | 18 40 33.7 | 0.0 |
| PUZ | | | | S | Sg | 18 40 53.1 | +1.9 |
| **RUGZ** | **Raukumara Rang** | **1.44** | **219** | P | Pb | 18 40 35.8 | -0.4 |
| RUGZ | | | | S | Sg | 18 40 55.7 | -0.1 |
| **TWGZ** | **Tauwhareparae** | **1.48** | **207** | P | Pb | 18 40 36.5 | -0.4 |
| **CNGZ** | **Carnagh Station** | **1.70** | **197** | P | Pn | 18 40 39.4 | +0.5 |
| **TKGZ** | **Te Karaka** | **1.77** | **206** | P | Pn | 18 40 39.8 | +0.1 |
| **MWZ** | **Matawai** | **1.81** | **215** | P | Pn | 18 40 40.7 | +0.4 |
| **URZ** | **Urewera** | **1.96** | **224** | P | Pn | 18 40 42.4 | 0.0 |
| URZ | | | | S | Sn | 18 41 05.4 | -1.5 |
| **RAGZ** | **Rawiri** | **1.99** | **214** | P | Pn | 18 40 43.3 | +0.5 |
| **RIGZ** | **Rimuhau** | **2.03** | **204** | P | Pn | 18 40 43.4 | -0.1 |
| **OPRZ** | **Ohinepanea** | **2.07** | **241** | P | Pn | 18 40 43.9 | +0.1 |
| **PRGZ** | **Paritu Road** | **2.20** | **200** | P | Pn | 18 40 45.2 | -0.5 |
| **SNGZ** | **Shannon Statio** | **2.26** | **211** | P | Pn | 18 40 46.6 | +0.1 |
| **RTZ** | **Ruatahuna** | **2.29** | **219** | P | Pn | 18 40 46.8 | -0.2 |
| **MUGZ** | **Murupara** | **2.30** | **225** | P | Pn | 18 40 47.4 | +0.2 |
| **TARZ** | **Mount Tarawera** | **2.31** | **233** | P | Pn | 18 40 47.7 | +0.4 |
| **KNZ** | **Kokohu** | **2.35** | **203** | P | Pn | 18 40 46.6 | -1.1 |
| **KARZ** | **Kaharoa** | **2.37** | **240** | P | Pn | 18 40 48.6 | +0.6 |
| **MHGZ** | **Mahia Peninsul** | **2.41** | **197** | P | Pn | 18 40 47.9 | -0.7 |
| **RAHZ** | **Arahi** | **2.48** | **213** | P | Pn | 18 40 49.7 | +0.2 |
| **KUZ** | **Kuaotunu** | **2.50** | **272** | P | Pn | 18 40 48.9 | -0.9 |
| **PRRZ** | **Plateau Road** | **2.54** | **229** | P | Pn | 18 40 50.6 | +0.3 |
| **MTHZ** | **Maungataniwha** | **2.54** | **218** | P | Pn | 18 40 50.3 | -0.2 |
| **WHHZ** | **Waihua** | **2.55** | **209** | P | Pb | 18 40 52.9 | -2.2 |
| **ALRZ** | **Allen Road** | **2.61** | **228** | P | Pn | 18 40 51.7 | +0.4 |
| **MRHZ** | **Matea Rd** | **2.75** | **223** | P | Pn | 18 40 53.0 | -0.3 |
| **NMHZ** | **Naumai** | **2.75** | **215** | P | Pn | 18 40 53.3 | -0.1 |
| **TOZ** | **Tahuroa Road** | **2.80** | **251** | P | Pn | 18 40 53.2 | -0.7 |
| **BKZ** | **Black Stump Fm** | **2.96** | **218** | P | Pn | 18 40 55.5 | -0.6 |
| **WIAZ** | **Waiheke Island** | **2.97** | **270** | P | Pn | 18 40 56.1 | -0.2 |
| **MCHZ** | **McNeill Hill** | **3.09** | **212** | P | Pn | 18 40 57.1 | -0.8 |
| **CKHZ** | **Cape Kidnapper** | **3.12** | **206** | P | Pn | 18 40 56.7 | -1.6 |
| **RATZ** | **Rangitukua** | **3.15** | **229** | P | Pn | 18 40 59.4 | +0.6 |
| **KWHZ** | **Kaweka Forest** | **3.19** | **216** | P | Pn | 18 40 58.8 | -0.6 |
| **ABAZ** | **Army Bay** | **3.23** | **273** | P | Pn | 18 41 00.2 | +0.5 |
| **KATZ** | **Kakaramea** | **3.26** | **229** | P | Pn | 18 41 01.4 | +1.0 |
| **KAHZ** | **Kahuranaki** | **3.31** | **207** | P | Pn | 18 40 59.4 | -1.7 |
| **TMVZ** | **Te Maari** | **3.35** | **227** | P | Pn | 18 41 01.3 | -0.3 |
| **NTVZ** | **North Tongariro** | **3.35** | **227** | P | Pn | 18 41 01.6 | -0.1 |
| **ETVZ** | **East Tongariro** | **3.36** | **226** | P | Pn | 18 41 01.2 | -0.5 |
| **AWAZ** | **Awhitu Peninsu** | **3.36** | **265** | P | Pn | 18 41 01.7 | 0.0 |
| **KRVZ** | **Karewarewa** | **3.37** | **227** | P | Pn | 18 41 01.9 | 0.0 |
| **KRHZ** | **Kereru** | **3.39** | **214** | P | Pn | 18 41 00.7 | -1.5 |
| **OTVZ** | **Oturere** | **3.40** | **226** | P | Pn | 18 41 01.8 | -0.5 |
| **NNVZ** | **North Ngauruho** | **3.41** | **227** | P | Pn | 18 41 02.7 | +0.2 |
| **WTVZ** | **West Tongariro** | **3.42** | **228** | P | Pn | 18 41 02.7 | +0.1 |
| **RVAZ** | **Riverhead Bore** | **3.42** | **270** | P | Pn | 18 41 03.0 | +0.6 |
| **WTAZ** | **Waiatarua** | **3.42** | **267** | P | Pn | 18 41 03.1 | +0.6 |
| **BHHZ** | **Black Hill Sta** | **3.42** | **219** | P | Pb | 18 41 07.5 | -2.4 |
| **SNVZ** | **South Ngauruho** | **3.43** | **226** | P | Pn | 18 41 02.3 | -0.5 |
| **NGZ** | **Ngauruhoe** | **3.45** | **227** | P | Pn | 18 41 02.6 | -0.4 |
| **TWVZ** | **Taurewa** | **3.48** | **229** | P | Pn | 18 41 03.7 | +0.3 |
| **TUVZ** | **Tukino** | **3.48** | **225** | P | Pn | 18 41 03.0 | -0.4 |
| **MOVZ** | **Moawhango** | **3.52** | **223** | P | Pn | 18 41 02.9 | -1.1 |
| **FWVZ** | **Far West T-bar** | **3.53** | **226** | P | Pn | 18 41 03.7 | -0.5 |
| **WNVZ** | **Wahianoa** | **3.55** | **225** | P | Pn | 18 41 03.5 | -0.9 |
| **TRVZ** | **Turoa** | **3.56** | **226** | P | Pn | 18 41 04.0 | -0.6 |
| **PNHZ** | **Pukenui** | **3.69** | **213** | P | Pn | 18 41 04.0 | -2.2 |
| **WCZ** | **Waipu Caves** | **3.74** | **283** | P | Pn | 18 41 07.5 | +0.7 |
| **WAZ** | **Wanganui** | **4.19** | **225** | P | Pn | 18 41 13.0 | -0.1 |
| **PRWZ** | **Pori Road** | **4.32** | **210** | P | Pn | 18 41 12.4 | -2.5 |
| **PKE** | **Pukeiti** | **4.48** | **237** | P | Pn | 18 41 20.0 | +2.9 |
| **KHEZ** | **Kahui Hut** | **4.52** | **236** | P | Pn | 18 41 20.2 | +2.5 |
| **MRZ** | **Mangatainoka R** | **4.57** | **213** | P | Pn | 18 41 15.7 | -2.6 |
| **CTZ** | **Chatham Island** | **7.70** | **155** | P | Pn | 18 42 02.5 | +1.2 |

*IDC **25** 18:46:47.2±12.0,31°.21S×71°.69W,h0km,mb4.1/1,*
*mb1 4.1/1,mb1mx3.6/21,mbtmp4.1/1,MS2.6/2,Ms1 2.6/2,*
*ms1mx2.4/55,Error ellipse: s-maj=909.0km*
*s-min=108.1km az=3.0*
*NEIC **25** 18:46:51.4±1.2,31°.48S±0°.04×71°.7W±0°.1,h22km±4km,*
*mb3.9/2,ML4.0(GUC),Error ellipse: s-maj=16.6km*
*s-min=5.8km az=99.0*
*GUC **25** 18:46:51.5±0.7,31°.51S×71°.66W,h36km±2km,ML3.8*
**ISC 25 18:46:50.8±1.4,31°.49S±0°.03×71°.73W±0°.06,h23km±12km,**
**n59,σ0°90/70,3C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO02** | **Combarbal** | **0.69** | **66** | | **Pb** | **18 47 04.2** | **0.0** |
| **CO02** | **Combarbal** | **0.69** | **66** | ⇓*i*P | **Pb** | **18 47 04.2** | **0.0** |
| CO02 | | | | *i* S | **Sb** | **18 47 13.0** | **-0.3** |
| CO02 | | | | IAML | | 18 47 17.3 | |
| | comp=E,6μm,0.5s | | | | | | |
| **CO06** | **Fray Jorge** | **0.82** | **6** | | **Pb** | **18 47 07.0** | **+0.7** |
| **CO06** | **Fray Jorge** | **0.82** | **6** | *e*P | **Pb** | **18 47 06.9** | **+0.5** |
| CO06 | | | | *i* S | **Sn** | **18 47 18.0** | **-0.4** |
| CO06 | | | | IAML | | 18 47 20.3 | |
| | comp=N,2μm,0.6s | | | | | | |
| **CO03** | **El Pedregal** | **1.10** | **54** | | **Pn** | **18 47 10.7** | **-0.2** |
| **CO03** | **El Pedregal** | **1.10** | **54** | ⇓*i*P | **Pn** | **18 47 10.8** | **-0.2** |
| CO03 | | | | *i* S | **Sb** | **18 47 24.8** | **-0.5** |
| CO03 | | | | IAML | | 18 47 27.5 | |
| | comp=E,1μm,0.3s | | | | | | |
| **VA06** | **Catapilco** | **1.13** | **161** | | **Pn** | **18 47 11.0** | **-0.2** |
| **VA06** | **Catapilco** | **1.13** | **161** | ⇑*i*P | **Pn** | **18 47 11.1** | **-0.2** |
| VA06 | | | | *i* S | **Sb** | **18 47 25.5** | **-0.4** |
| VA06 | | | | IAML | | 18 47 27.6 | |
| | comp=N,7μm,0.4s | | | | | | |
| **VA01** | **Torpederas** | **1.53** | **177** | | **Pn** | **18 47 18.4** | **+1.6** |
| **VA01** | **Torpederas** | **1.53** | **177** | *e*P | **Pn** | **18 47 17.1** | **+0.4** |
| VA01 | | | | *i* S | **Sn** | **18 47 37.3** | **+1.3** |
| VA01 | | | | IAML | | 18 47 43.1 | |
| | comp=E,1μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **1.54** | **32** | | **Pn** | **18 47 17.8** | **+0.7** |
| **GO04** | **Tololo Observa** | **1.54** | **32** | *e*P | **Pn** | **18 47 18.0** | **+0.9** |
| GO04 | | | | *i* S | **Sb** | **18 47 38.1** | **+0.2** |
| **ROCH** | **El Roble** | **1.60** | **158** | ⇑*i*P | **Pb** | **18 47 18.5** | **-1.3** |
| ROCH | | | | *i*P | **Pn** | **18 47 17.1** | **-0.8** |
| ROCH | | | | *i* S | **Sn** | **18 47 39.0** | **+1.0** |
| ROCH | | | | IAML | | 18 47 42.5 | |
| | comp=N,3μm,0.6s | | | | | | |
| ROCH | | | | IAML | | 18 47 44.2 | |
| | comp=N,4μm,0.7s | | | | | | |
| **ROC1** | **El Roble** | **1.60** | **158** | | **Pn** | **18 47 16.9** | **-1.0** |
| **VA03** | **San Esteban** | **1.62** | **142** | | **Pn** | **18 47 18.8** | **+0.8** |
| **VA03** | **San Esteban** | **1.62** | **142** | *e*P | **Pn** | **18 47 18.9** | **+0.8** |
| VA03 | | | | *i* S | **Sn** | **18 47 39.2** | **+0.9** |
| VA03 | | | | IAML | | 18 47 41.0 | |
| | comp=N,5μm,0.5s | | | | | | |
| **CO05** | **La Serena** | **1.62** | **15** | | **Pb** | **18 47 19.4** | **-0.7** |
| **CO05** | **La Serena** | **1.62** | **15** | *e*P | **Pb** | **18 47 19.4** | **-0.7** |
| CO05 | | | | *i* S | **Sb** | **18 47 40.8** | **+0.7** |
| CO05 | | | | IAML | | 18 47 48.7 | |
| | comp=E,654nm,0.8s | | | | | | |
| **MT02** | **Curacav** | **1.83** | **164** | | **Pn** | **18 47 21.2** | **+0.3** |
| **MT02** | **Curacav** | **1.83** | **164** | *e*P | **Pn** | **18 47 21.3** | **+0.3** |
| MT02 | | | | *i* S | **Sn** | **18 47 44.9** | **+1.4** |
| MT02 | | | | IAML | | 18 47 51.4 | |
| | comp=N,464nm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **1.87** | **152** | | **Pn** | **18 47 22.4** | **+0.9** |
| **MT05** | **Renca** | **2.07** | **156** | | **Pn** | **18 47 24.5** | **+0.2** |
| **MT05** | **Renca** | **2.07** | **156** | *e*P | **Pn** | **18 47 26.5** | **+2.2** |
| MT05 | | | | *i* S | **Sn** | **18 47 51.0** | **+1.5** |
| MT05 | | | | IAML | | 18 47 53.6 | |
| | comp=E,2μm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **2.16** | **177** | | **Pn** | **18 47 25.9** | **+0.5** |
| **VA05** | **Santo Domingo** | **2.16** | **177** | *e*P | **Pn** | **18 47 25.8** | **+0.3** |
| VA05 | | | | IAML | | 18 48 00.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **2.25** | **153** | | **Pn** | **18 47 27.8** | **+1.0** |
| **MT09** | **Talagante** | **2.36** | **165** | | **Pn** | **18 47 29.1** | **+0.8** |
| **MT09** | **Talagante** | **2.36** | **165** | *e*P | **Pn** | **18 47 29.3** | **+0.9** |
| MT09 | | | | *i* S | **Sn** | **18 47 57.9** | **+1.1** |
| MT09 | | | | IAML | | 18 48 10.0 | |
| | comp=N,2μm,0.1s | | | | | | |
| **MT01** | **Popeta** | **2.40** | **170** | | **Pn** | **18 47 29.3** | **+0.5** |
| **MT01** | **Popeta** | **2.40** | **170** | *e*P | **Pn** | **18 47 29.1** | **+0.3** |
| MT01 | | | | IAML | | 18 48 08.5 | |
| | comp=E,917nm,0.3s | | | | | | |
| **ZON** | **Zonda** | **2.61** | **92** | | **Pn** | **18 47 31.5** | **-0.1** |
| **BO04** | **La Punta** | **2.67** | **160** | | **Pn** | **18 47 33.5** | **+1.0** |
| **BO04** | **La Punta** | **2.67** | **160** | *e*P | **Pn** | **18 47 33.7** | **+1.3** |
| BO04 | | | | *i* S | **Sn** | **18 48 05.7** | **+1.6** |
| BO04 | | | | IAML | | 18 48 17.5 | |
| | comp=E,885nm,0.5s | | | | | | |
| **LMEL** | **Las Melosas** | **2.68** | **152** | | **Pn** | **18 47 34.1** | **+1.3** |
| **LMEL** | **Las Melosas** | **2.68** | **152** | *e*P | **Pn** | **18 47 34.3** | **+1.6** |
| LMEL | | | | *i* S | **Sn** | **18 48 05.9** | **+1.3** |
| LMEL | | | | IAML | | 18 48 14.5 | |
| | comp=N,1μm,0.5s | | | | | | |
| **BO01** | **Tunca** | **2.94** | **170** | | **Pn** | **18 47 37.0** | **+0.8** |
| **BO03** | **Pichilemu** | **3.00** | **184** | *e*P | **Pn** | **18 47 36.5** | **-0.6** |
| BO03 | | | | IAML | | 18 48 31.4 | |
| | comp=N,158nm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.32** | **10** | Pn | **Pn** | **18 47 42.9** | **+1.5** |
| **BO02** | **Sierra Bellavi** | **3.39** | **167** | | **Pn** | **18 47 43.4** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **3.39** | **167** | *e*P | **Pn** | **18 47 43.6** | **+1.2** |
| BO02 | | | | *i* S | **Sn** | **18 48 22.5** | **+0.5** |
| **GO03** | **Copiap** | **4.09** | **19** | | **Pn** | **18 47 51.6** | **-0.6** |
| **ML02** | **Panimavida** | **4.27** | **177** | Pn | **Pn** | **18 47 55.1** | **+0.7** |
| **AC06** | **Mina Casimiro** | **4.29** | **17** | | **Pn** | **18 47 55.2** | **+0.4** |
| **AC02** | **Maricunga** | **5.16** | **27** | Pn | **Pn** | **18 48 07.4** | **+0.2** |
| **BI05** | **Punta Hualpn** | **5.38** | **193** | | **Pn** | **18 48 08.3** | **-1.4** |
| **AC01** | **Pan de Azucar** | **5.41** | **11** | Pn | **Pn** | **18 48 10.6** | **+0.4** |
| **H03N1** | **Juan Fernandez** | **6.38** | **250** | T | T | 18 55 06.3 | |
| | baz=83,slow=73,SNR=860 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.39** | **250** | T | T | 18 55 10.6 | |
| | baz=83,slow=73,SNR=973 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.39** | **250** | T | T | 18 55 11.9 | |
| | baz=83,slow=73,SNR=894 | | | | | | |
| **PB14** | **IPOC Station P** | **6.94** | **10** | Pn | **Pn** | **18 48 31.8** | **+0.4** |
| **LC01** | **Cunco** | **7.39** | **181** | Pn | **Pn** | **18 48 37.1** | **-0.2** |
| **LVC** | **Limon Verde** | **9.19** | **17** | LR | LR | 18 53 08.0 | |
| | comp=N,19nm,18.5s,baz=205,slow=43 | | | | | | |
| **CPUP** | **Villa Florida** | **13.62** | **71** | LR | LR | 18 55 51.9 | |
| | comp=N,49nm,21.4s,baz=250,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.11** | **70** | P | **P** | **18 59 14.7** | **-0.5** |
| | comp=N,1.3nm,0.8s,baz=240,slow=4.8,SNR=9.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.11** | **70** | P | **P** | **18 59 14.3** | **-0.9** |
| TORD | | | | IAmb | IAmb | 18 59 15.2 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **151.95** | **30** | | **PKPbc** | **19 06 42.8** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **151.95** | **30** | PKPbc | **PKPbc** | **19 06 43.2** | **-0.3** |
| | comp=Z,5.1nm,0.6s,baz=291,slow=3.5,SNR=24 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.95** | **30** | | **PKPbc** | **19 06 43.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **154.87** | **45** | PKPbc | **PKPbc** | **19 06 49.3** | **-0.9** |
| | comp=Z,0.2nm,0.7s,baz=311,slow=3.1,SNR=2.7 | | | | | | |

*IDC **25** 18:46:44.0±53.0,22°.80S×175°.27W,h0km,mb4.2/3,*
*mb1 4.3/3,mb1mx3.8/26,mbtmp4.2/3,Error ellipse:*
*s-maj=993.4km s-min=169.0km az=87.0*
*NEIC **25** 18:46:50.6±0.4,23°.9S±0°.3×175°.6W±0°.3,h10km±2km,*
*mb4.5/7,Error ellipse: s-maj=71.6km s-min=9.5km*
*az=142.0*
**ISC 25 18:46:53.5±2.7,23°.8S±1°.0×175°.7W±0°.6,h35km,n10,**
**σ0°20/10,mb4.4/8,Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **7.08** | **50** | Pn | **Pn** | **18 48 34.8** | **0.0** |
| **STKA** | **Stephens Creek** | **38.47** | **248** | P | **P** | **18 54 12.3** | **0.0** |
| | 1.4nm,0.5s,baz=86,slow=11,SNR=5.7 | | | | | | |
| **AS31** | **Alice Springs** | **45.98** | **259** | P | **P** | **18 55 13.6** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 18 55 15.8 | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **45.98** | **259** | P | **P** | **18 55 13.6** | **-0.1** |
| | comp=Z,0.7nm,0.3s,baz=93,slow=7.2,SNR=74 | | | | | | |
| **WR0** | **Warramunga Arr** | **46.20** | **265** | P | **P** | **18 55 15.5** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 18 55 19.1 | |
| | comp=Z,9.0nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.38** | **265** | P | **P** | **18 55 16.7** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 18 55 17.3 | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.38** | **265** | P | **P** | **18 55 16.9** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 18 55 18.7 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.39** | **265** | P | **P** | **18 55 16.5** | **-0.4** |
| | comp=Z,2.8nm,0.6s,baz=100,slow=7.2,SNR=46 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.81** | **264** | P | **P** | **18 56 20.7** | **+0.3** |
| FITZ | | | | IAmb | IAmb | 18 56 47.7 | |
| | comp=Z,5.7nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **60.65** | **249** | P | **P** | **18 57 01.4** | **0.0** |

*IDC **25** 19:14:34.7±0.7,8°.91S×127°.33E,h0km,mb4.3/10,*
*mb1 4.4/15,mb1mx4.1/44,mbtmp4.3/15,ML4.3/5,MS3.1/6,*
*Ms1 3.1/6,ms1mx2.7/68,Error ellipse: s-maj=27.1km*
*s-min=15.2km az=71.0*
*NEIC **25** 19:14:37.4±1.1,8°.98S±0°.08×127°.49E±0°.05,h20km±5km,*
*mb4.3/13,Error ellipse: s-maj=12.4km s-min=5.1km*
*az=204.0*
*DJA **25** 19:14:42.3±0.3,9°.S±3°×12°.7E±°,h104km±13km,M4.2/10,*
*mb4.4/10,mB5.0/2,MLv4.0/5,Mw(mB)4.3/2*
**ISC 25 19:14:39.1±0.5,9°.09S±0°.05×127°.40E±0°.07,h35km,n64,**
**σ1°63/59,mb4.2/16,MS3.0/3,Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **3.16** | **258** | | **Pn** | **19 15 27.3** | **+0.9** |
| **SOEI** | **Soe** | **3.16** | **258** | P | **Pn** | **19 15 27.4** | **+0.9** |
| **SOEI** | **Soe** | **3.16** | **258** | P | **Pn** | **19 15 27.5** | **+1.1** |
| **BATI** | **Baumata** | **3.84** | **253** | Pn | **Pn** | **19 15 36.8** | **+1.0** |
| | 8.5nm,0.3s,baz=148,slow=1.0,SNR=23 | | | | | | |
| BATI | | | | Sn | **Sn** | **19 16 22.9** | **+3.1** |
| | 20nm,0.3s,baz=88,slow=22,SNR=8.6 | | | | | | |
| **BATI** | **Baumata** | **3.84** | **253** | P | **Pn** | **19 15 37.2** | **+1.4** |
| **DRS** | **Darwin Rock St** | **4.78** | **134** | P | Pn | 19 15 54.6 | +5.9 |
| **MTN** | **Manton Dam** | **5.23** | **136** | | Pn | 19 16 00.3 | +5.5 |
| **MTN** | **Manton Dam** | **5.23** | **136** | P | Pn | 19 16 00.8 | +6.0 |
| **KDU** | **Kakadu** | **6.13** | **126** | P | Pn | 19 16 12.2 | +5.0 |
| **KNRA** | **Kununurra** | **6.68** | **169** | | **Pn** | **19 16 18.1** | **+3.3** |
| **KNRA** | **Kununurra** | **6.68** | **169** | P | **Pn** | **19 16 18.3** | **+3.5** |
| **WBSI** | **Waikabubak, Su** | **7.92** | **265** | P | **Pn** | **19 16 32.5** | **+0.7** |
| | 32nm,0.8s | | | | | | |
| **BKSI** | **Bulukumba** | **8.13** | **297** | P | **Pn** | **19 16 33.7** | **-1.0** |
| | 22nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **8.60** | **298** | LR | LR | 19 19 46.6 | |
| | comp=Z,58nm,20.9s,baz=171,slow=37 | | | | | | |
| **BNSI** | **Bone** | **8.61** | **302** | P | **Pn** | **19 16 42.5** | **+1.2** |
| | 43nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **9.03** | **25** | Pn | **Pn** | **19 16 50.0** | **+2.9** |
| | 2.4nm,0.3s,baz=210,slow=10,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.11** | **191** | Pn | **Pn** | **19 16 48.6** | **+0.5** |
| | 2.8nm,0.3s,baz=34,slow=13,SNR=59 | | | | | | |
| FITZ | | | | Sn | **Sn** | **19 18 28.1** | **-1.5** |
| | 6.7nm,0.3s,baz=295,slow=21,SNR=14 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.11** | **191** | | **Pn** | **19 16 49.1** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **9.11** | **191** | P | **Pn** | **19 16 49.0** | **+0.8** |
| **LUWI** | **Luwuk** | **9.23** | **330** | Pn | **Pn** | **19 16 48.2** | **-1.6** |
| **PLAI** | **Plampang** | **9.51** | **271** | P | **Pn** | **19 16 52.6** | **-1.0** |
| **PLAI** | **Plampang** | **9.51** | **271** | P | **Pn** | **19 16 53.3** | **-0.3** |
| **WB0** | **Warramunga Arr** | **12.59** | **148** | Pn | **Pn** | **19 17 35.5** | **-0.3** |
| **WRAB** | **Tennant Creek** | **12.70** | **149** | | **Pn** | **19 17 33.1** | **-4.3** |
| **WRA** | **Warramunga Arr** | **12.70** | **149** | Pn | **Pn** | **19 17 37.7** | **+0.3** |
| | 2.1nm,0.3s,baz=320,slow=14,SNR=51 | | | | | | |
| WRA | | | | Sn | **Sn** | **19 19 57.3** | **-0.4** |
| | 1.2nm,0.3s,baz=324,slow=23,SNR=15 | | | | | | |
| WRA | | | | LR | LR | 19 22 25.8 | |
| | comp=Z,82nm,19.3s,baz=344,slow=36 | | | | | | |
| **WB2** | **Warramunga Arr** | **12.71** | **149** | Pn | **Pn** | **19 17 36.9** | **-0.5** |
| **WR0** | **Warramunga Arr** | **12.82** | **148** | Pn | **Pn** | **19 17 39.4** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **14.38** | **210** | | **Pn** | **19 17 59.2** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **14.38** | **210** | Pn | **Pn** | **19 17 57.5** | **-2.7** |
| **PSA00** | **Pilbara Seismi** | **14.38** | **210** | P | **Pn** | **19 17 58.6** | **-1.6** |
| | 18nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **15.77** | **158** | | **Pn** | **19 18 18.0** | **-0.7** |
| **ASAR** | **Alice Springs** | **15.77** | **158** | Pn | **Pn** | **19 18 18.8** | **0.0** |
| | 0.7nm,0.3s,baz=331,slow=9.8,SNR=52 | | | | | | |
| ASAR | | | | Sn | **Sn** | **19 21 08.2** | **-4.3** |
| | 0.5nm,0.3s,baz=325,slow=21,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **15.77** | **158** | | **Pn** | **19 18 18.5** | **-0.3** |
| **COEN** | **Coen** | **16.20** | **109** | P | **P** | **19 18 25.6** | **-1.3** |
| **COEN** | **Coen** | **16.20** | **109** | P | **P** | **19 18 26.3** | **-0.7** |
| **QIS** | **Mount Isa** | **16.39** | **135** | P | **P** | **19 18 28.7** | **-0.5** |
| **LEM** | **Lembang** | **19.72** | **275** | P | **P** | **19 19 04.7** | **-1.3** |
| | 2.2nm,0.3s,baz=308,slow=23,SNR=6.8 | | | | | | |
| LEM | | | | LR | LR | 19 27 49.4 | |
| | comp=Z,60nm,19.1s,baz=35,slow=40 | | | | | | |
| **CTA** | **Charters Tower** | **21.25** | **123** | LR | LR | 19 29 08.5 | |
| | comp=Z,73nm,21.5s,baz=350,slow=41 | | | | | | |
| **XMIS** | **Christmas Isla** | **21.47** | **265** | P | **P** | **19 19 24.0** | **-0.8** |
| **STKA** | **Stephens Creek** | **26.23** | **152** | P | **P** | **19 20 13.9** | **+3.1** |
| | 4.0nm,1.1s,baz=304,slow=13,SNR=3.6 | | | | | | |
| STKA | | | | LR | LR | 19 32 02.2 | |
| | comp=Z,41nm,19.7s,baz=26,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.22** | **314** | P | **P** | **19 22 03.9** | **-0.4** |
| | 3.2nm,0.8s,baz=144,slow=6.6,SNR=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.22** | **314** | P | **P** | **19 22 03.1** | **-1.2** |
| **CHTO** | **Chiang Mai** | **39.45** | **315** | P | **P** | **19 22 05.0** | **-1.3** |
| CHTO | | | | IAmb | IAmb | 19 22 06.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **49.29** | **288** | LR | LR | 19 43 41.4 | |
| | comp=Z,27nm,20.8s,baz=212,slow=36 | | | | | | |
| **GTA** | **Gaotai** | **54.63** | **334** | *e*P | **P** | **19 24 04.3** | **-0.2** |
| GTA | | | | pP | pP | 19 24 09.3 | -5.3 |
| GTA | | | | sP | sP | 19 24 12.8 | -5.7 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.51** | **344** | P | **P** | **19 24 38.6** | **-0.3** |
| ULN | | | | IAmb | IAmb | 19 24 39.6 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **59.66** | **344** | P | **P** | **19 24 38.7** | **-1.3** |
| | comp=Z,6.6nm,0.7s,baz=157,slow=6.8,SNR=6.0 | | | | | | |
| **SONM** | **Songino Array** | **59.66** | **344** | IAmb | IAmb | 19 25 04.0 | |
| | comp=Z,2.2nm,1.5s | | | | | | |
| **MK31** | **Makanchi Array** | **68.60** | **328** | P | **P** | **19 25 38.2** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 19 25 39.3 | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.60** | **328** | P | **P** | **19 25 38.2** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=136,slow=7.7,SNR=15 | | | | | | |
| **VNDA** | **Vanda** | **70.71** | **173** | P | **P** | **19 25 52.9** | **+1.8** |
| | comp=Z,9.8nm,1.3s,baz=66,slow=1.0,SNR=7.3 | | | | | | |
| **VNDA** | **Vanda** | **70.71** | **173** | P | **P** | **19 25 53.5** | **+2.5** |
| **MA2** | **Magadan** | **70.96** | **12** | P | **P** | **19 25 52.3** | **-0.4** |
| | comp=Z,1.5nm,0.2s,baz=178,slow=22,SNR=4.3 | | | | | | |
| **MA2** | **Magadan** | **70.96** | **12** | IAmb | IAmb | 19 25 54.5 | |
| | comp=Z,3.7nm,0.8s | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **QIS** | **Mount Isa** | **16.93** | **162** | P | **P** | **20 04 51.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **19.13** | **180** | P | **Pn** | **20 05 17.9** | **+0.7** |
| | 0.7nm,0.3s,baz=1.6,slow=8.5,SNR=52 | | | | | | |
| ASAR | | | | S | **Sn** | **20 08 46.8** | **-4.4** |
| | 0.1nm,0.3s,baz=357,slow=21,SNR=4.2 | | | | | | |
| **CTA** | **Charters Tower** | **19.59** | **144** | P | **Pn** | **20 05 24.1** | **+1.3** |
| | 0.5nm,0.3s,baz=321,slow=11,SNR=12 | | | | | | |
| CTA | | | | LR | LR | 20 13 35.3 | |
| | comp=Z,65nm,19.2s,baz=349,slow=39 | | | | | | |
| **WRKA** | **Warakurna** | **21.22** | **195** | P | **P** | **20 05 42.8** | **+3.7** |
| **HNR** | **Honiara** | **26.19** | **102** | LR | LR | 20 17 56.1 | |
| | comp=Z,60nm,18.7s,baz=352,slow=39 | | | | | | |
| **JOW** | **Kunigami** | **31.57** | **350** | LR | LR | 20 18 27.6 | |
| | comp=Z,73nm,21.1s,baz=272,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.39** | **304** | P | **P** | **20 08 39.3** | **-0.3** |
| | 0.4nm,0.6s,baz=141,slow=6.3,SNR=6.0 | | | | | | |
| **SONM** | **Songino Array** | **57.42** | **338** | P | **P** | **20 10 43.8** | **+2.1** |
| | 0.5nm,1.0s,baz=145,slow=3.0,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.38** | **325** | P | **P** | **20 11 55.7** | **+1.1** |
| | 1.2nm,0.6s,baz=115,slow=8.0,SNR=20 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.15** | **332** | P | **P** | **20 12 11.4** | **0.0** |
| | 0.3nm,0.3s,baz=133,slow=6.1,SNR=2.5 | | | | | | |

*NEIC* ***25*** *20:05:20.1±1.7, 19.8S±0.1×177.47W±0.09, h342km±9km, mb4.3/17, Error ellipse: s-maj=20.7km s-min=12.0km az=170.0*
*IDC* ***25*** *20:05:27.2±6.7, 20.08S×177.58W, h420km±77km, mb3.3/5, mb1 3.5/7, mb1mx3.3/33, mbtmp4.1/7, Error ellipse: s-maj=45.9km s-min=25.8km az=170.0*

**ISC 25 20:05:20.6±0.7, 19.8S±0.1×177.48W±0.10, h350km, n28, σ1s10/27, mb4.0/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.69** | **295** | Pn | | Pn | 20 06 34.8 | -2.2 |
| **NIUE** | **Niue** | **7.16** | **86** | Pn | | **Pn** | **20 07 05.5** | **+0.5** |
| **AFI** | **Afiamalu** | **7.97** | **44** | Pn | | **Pn** | **20 07 13.8** | **-0.9** |
| AFI | | | | Sn | | S | 20 08 41.5 | -6.0 |
| **PINNC** | **Pines Island,** | **14.35** | **256** | | | **P** | **20 08 30.5** | **+2.3** |
| **DZM** | **Mont Dzumac** | **15.20** | **258** | P | | **P** | **20 08 40.1** | **+2.5** |
| | 0.7nm,0.3s,baz=85,slow=17,SNR=8.5 | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.20** | **258** | P | | **P** | **20 08 38.1** | **+0.5** |
| DZM | | | | IAmb | IAmb | 20 08 41.9 | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **URZ** | **Urewera** | **19.03** | **193** | P | | **P** | **20 09 17.3** | **-1.1** |
| | comp=Z,0.7nm,0.3s,baz=356,slow=23,SNR=2.0 | | | | | | | |
| **HNR** | **Honiara** | **24.10** | **292** | P | | **P** | **20 10 06.3** | **+0.2** |
| **EIDS** | **Eidsvold** | **29.52** | **253** | P | | **P** | **20 10 54.0** | **-0.1** |
| EIDS | | | | IAmb | | IAmb | 20 11 00.7 | |
| | comp=Z,29nm,1.8s | | | | | | | |
| **ARMA** | **Armidale** | **29.84** | **243** | P | | **P** | **20 10 56.4** | **-0.5** |
| ARMA | | | | IAmb | | IAmb | 20 11 10.6 | |
| | comp=Z,36nm,1.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **243** | P | | **P** | **20 12 10.8** | **-0.2** |
| | comp=Z,1.6nm,0.5s,baz=92,slow=11,SNR=4.9 | | | | | | | |
| **BBOO** | **Buckleboo** | **43.32** | **243** | P | | **P** | **20 12 48.6** | **-0.9** |
| **WR0** | **Warramunga Arr** | **45.00** | **261** | P | | **P** | **20 13 01.8** | **-1.1** |
| WR0 | | | | IAmb | | IAmb | 20 14 07.7 | |
| | comp=Z,20nm,1.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.17** | **261** | P | | **P** | **20 13 03.2** | **-0.9** |
| WB0 | | | | IAmb | | IAmb | 20 14 28.1 | |
| | comp=Z,22nm,1.8s | | | | | | | |
| **AS31** | **Alice Springs** | **45.17** | **256** | P | | **P** | **20 13 03.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.17** | **256** | P | | **P** | **20 13 03.5** | **-0.6** |
| | comp=Z,4.2nm,0.6s,baz=94,slow=8.4,SNR=44 | | | | | | | |
| **ASAR** | **Alice Springs** | **45.17** | **256** | P | | **P** | **20 13 02.6** | **-1.5** |
| **WB2** | **Warramunga Arr** | **45.18** | **261** | P | | **P** | **20 13 03.0** | **-1.3** |
| **WRAB** | **Tennant Creek** | **45.18** | **261** | P | | **P** | **20 13 02.9** | **-1.4** |
| **WRA** | **Warramunga Arr** | **45.19** | **261** | P | | **P** | **20 13 03.4** | **-0.9** |
| | comp=Z,2.1nm,0.4s,baz=95,slow=7.6,SNR=52 | | | | | | | |
| **FORT** | **Forrest** | **50.04** | **246** | P | | **P** | **20 13 40.4** | **-0.7** |
| FORT | | | | IAmb | | IAmb | 20 13 40.6 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **KNRA** | **Kununurra** | **51.20** | **265** | P | | **P** | **20 13 49.2** | **-0.6** |
| KNRA | | | | IAmb | | IAmb | 20 13 50.2 | |
| | comp=Z,42nm,1.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.61** | **262** | P | | **P** | **20 14 07.3** | **0.0** |
| FITZ | | | | IAmb | | IAmb | 20 15 25.8 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| **SOEI** | **Soe** | **56.97** | **271** | P | | **P** | **20 14 31.4** | **+0.1** |
| SOEI | | | | IAmb | | IAmb | 20 14 33.3 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **SMAI** | **San Martin Ant** | **79.13** | **159** | P | | **P** | **20 16 46.7** | **0.0** |
| **NVAR** | **Mina Array Bea** | **80.15** | **43** | P | | **P** | **20 16 54.3** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=224,slow=9.5,SNR=5.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.15** | **43** | P | | **P** | **20 16 52.1** | **-0.9** |
| **TXAR** | **Lajitas Array** | **86.24** | **57** | P | | **P** | **20 17 24.6** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=224,slow=5.2,SNR=5.6 | | | | | | | |

*GCG* ***25*** *20:12:41.9±2.8, 12.42N×88.77W, h46km±811km, MD4.5*
*INET* ***25*** *20:12:43.7±1.0, 12.54N×88.89W, h4km±8km, ML5.1*
*IDC* ***25*** *20:12:45.1±3.8, 12.90N×88.36W, h23km±25km, mb4.0/13, mb1 4.2/17, mb1mx3.9/48, mbtmp4.1/17, ML3.5/4, MS3.6/23, Ms1 3.6/23, ms1mx3.4/67, Error ellipse: s-maj=31.6km s-min=12.8km az=55.0*
*SNET* ***25*** *20:12:45.7±1.0, 12.63N×88.94W, h22km±3km, ML4.5*
*UCR* ***25*** *20:12:46.1±1.6, 12.62N×88.89W, h32km±5km, ML4.4, MW4.6, mb4.6(NEIC)*
*NEIC* ***25*** *20:12:48.2±1.4, 12.69N±0.07×88.74W±0.08, h50km±7km, mb4.6/64, Md4.5(SNET), Error ellipse: s-maj=13.0km s-min=7.1km az=48.0*

**ISC 25 20:12:44.5±1.2, 12.58N±0.04×88.93W±0.03, h28km±8km, n234, σ1s33/246, mb4.5/33, MS3.6/22, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ALJI** | **Alcalda de J** | **0.82** | **25** | *eP* | | **Pn** | **20 13 00.7** | **+0.4** |
| ALJI | | | | *eS* | | **Sb** | **20 13 11.5** | **+0.4** |
| **ALJI** | **Alcalda de J** | **0.82** | **25** | *eP* | | **Pn** | **20 13 00.7** | **+0.4** |
| ALJI | | | | *eS* | | **Sb** | **20 13 11.5** | **+0.4** |
| **JUCU** | **Jucuarįn** | **0.94** | **44** | *eP* | | **Pb** | **20 13 02.1** | **-0.2** |
| JUCU | | | | *eS* | | **Sn** | **20 13 15.4** | **+0.8** |
| **JUCU** | **Jucuarįn** | **0.94** | **44** | *eP* | | **Pb** | **20 13 02.2** | **-0.2** |
| **JUCU** | **Jucuarįn** | **0.94** | **44** | *eP* | | **Pb** | **20 13 02.1** | **-0.2** |
| JUCU | | | | *eS* | | **Sn** | **20 13 15.4** | **+0.8** |
| **TECO** | **Alcaldia de Te** | **0.97** | **9** | *eP* | | **Pn** | **20 13 02.7** | **+0.5** |
| TECO | | | | *eS* | | **Sb** | **20 13 15.3** | **+0.2** |
| **TECO** | **Alcaldia de Te** | **0.97** | **9** | *eP* | | **Pn** | **20 13 02.7** | **+0.5** |
| TECO | | | | *eS* | | **Sb** | **20 13 15.3** | **+0.2** |
| **LALI** | **Alcalda de L** | **0.98** | **337** | *eP* | | **Pn** | **20 13 03.0** | **+0.5** |
| **LALI** | **Alcalda de L** | **0.98** | **337** | *eP* | | **Pn** | **20 13 02.9** | **+0.5** |
| **LALI** | **Alcalda de L** | **0.98** | **337** | *eP* | | **Pn** | **20 13 03.0** | **+0.5** |
| **COEB** | **Comit de Eme** | **1.00** | **23** | *eP* | | **Pb** | **20 13 02.9** | **-0.3** |
| COEB | | | | *eS* | | **Sb** | **20 13 16.4** | **+0.4** |
| **COEB** | **Comit de Eme** | **1.00** | **23** | *eP* | | **Pb** | **20 13 02.9** | **-0.3** |
| **COEB** | **Comit de Eme** | **1.00** | **23** | *eP* | | **Pb** | **20 13 02.9** | **-0.3** |
| COEB | | | | *eS* | | **Sb** | **20 13 16.4** | **+0.4** |
| **SNVI** | **San Vicente** | **1.03** | **5** | *eP* | | **Pn** | **20 13 03.6** | **+0.3** |
| **SNVI** | **San Vicente** | **1.03** | **5** | *eP* | | **Pn** | **20 13 03.6** | **+0.3** |
| **SJTE** | **Alcalda de S** | **1.04** | **356** | *eP* | | **Pb** | **20 13 03.6** | **-0.3** |
| **SJTE** | **Alcalda de S** | **1.04** | **356** | *eP* | | **Pb** | **20 13 03.6** | **-0.3** |
| **LFRS** | **El Faro** | **1.05** | **353** | *i* P | | **Pb** | **20 13 03.8** | **-0.3** |
| **LFRS** | **El Faro** | **1.05** | **353** | *i* P | | **Pb** | **20 13 03.8** | **-0.3** |
| **PACA** | **Pacayal** | **1.07** | **33** | *eP* | | **Pb** | **20 13 04.2** | **-0.2** |
| PACA | | | | *eS* | | **Sn** | **20 13 19.9** | **+2.2** |
| **PACA** | **Pacayal** | **1.07** | **33** | *eP* | | **Pb** | **20 13 04.3** | **-0.2** |
| **PACA** | **Pacayal** | **1.07** | **33** | *eP* | | **Pb** | **20 13 04.2** | **-0.2** |
| PACA | | | | *eS* | | **Sn** | **20 13 19.9** | **+2.2** |
| **PQSS** | **Presa 15 de Se** | **1.10** | **19** | *eP* | | **Pb** | **20 13 05.0** | **+0.1** |
| PQSS | | | | *eS* | | **Sb** | **20 13 19.5** | **+0.5** |
| **PQSS** | **Presa 15 de Se** | **1.10** | **19** | *eP* | | **Pb** | **20 13 05.0** | **+0.1** |
| PQSS | | | | *eS* | | **Sb** | **20 13 19.5** | **+0.5** |
| **PAVA** | **Las Pavas** | **1.13** | **360** | *eP* | | **Pb** | **20 13 05.3** | **-0.2** |
| **PAVA** | **Las Pavas** | **1.13** | **360** | *eP* | | **Pb** | **20 13 05.2** | **-0.3** |
| **PAVA** | **Las Pavas** | **1.13** | **360** | *eP* | | **Pb** | **20 13 05.3** | **-0.2** |
| **SCLA** | **Alcaldia de Sa** | **1.14** | **10** | *eP* | | **Pb** | **20 13 05.6** | **0.0** |
| SCLA | | | | *eS* | | **Sn** | **20 13 20.5** | **+1.2** |
| **SCLA** | **Alcaldia de Sa** | **1.14** | **10** | *eP* | | **Pb** | **20 13 05.6** | **0.0** |
| SCLA | | | | *eS* | | **Sn** | **20 13 20.5** | **+1.2** |
| **SNET** | **Serv Nac Est T** | **1.14** | **345** | | | **Pb** | **20 13 05.5** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **1.14** | **345** | *eP* | | **Pn** | **20 13 04.9** | **+0.1** |
| SNET | | | | *eS* | | **Sn** | **20 13 21.0** | **+1.5** |
| **SNET** | **Serv Nac Est T** | **1.14** | **345** | *eP* | | **Pb** | **20 13 05.5** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **1.14** | **345** | *eP* | | **Pn** | **20 13 04.9** | **+0.1** |
| SNET | | | | *eS* | | **Sn** | **20 13 21.0** | **+1.5** |
| **OPAM** | **Oficina de Pla** | **1.16** | **347** | *eP* | | **Pb** | **20 13 05.6** | **-0.4** |
| OPAM | | | | *eS* | | **Sb** | **20 13 20.8** | **+0.1** |
| **OPAM** | **Oficina de Pla** | **1.16** | **347** | *eP* | | **Pb** | **20 13 05.6** | **-0.4** |
| OPAM | | | | *eS* | | **Sb** | **20 13 20.8** | **+0.1** |
| **LBRS** | **Las Brisas** | **1.16** | **354** | *eP* | | **Pb** | **20 13 05.8** | **-0.2** |
| **LBRS** | **Las Brisas** | **1.16** | **354** | *eP* | | **Pb** | **20 13 05.8** | **-0.2** |
| **UEES** | **Universidad Ev** | **1.17** | **345** | *eP* | | **Pb** | **20 13 06.2** | **-0.1** |
| **UEES** | **Universidad Ev** | **1.17** | **345** | *eP* | | **Pb** | **20 13 06.2** | **-0.1** |
| **LFU** | **La Fuente** | **1.18** | **351** | *eP* | | **Pb** | **20 13 06.1** | **-0.3** |
| **LFU** | **La Fuente** | **1.18** | **351** | *eP* | | **Pb** | **20 13 06.1** | **-0.3** |
| **JAYA** | **Jayaque - finc** | **1.19** | **335** | *eP* | | **Pb** | **20 13 06.1** | **-0.4** |
| JAYA | | | | | IAML | | 20 13 25.9 | |
| | comp=Z,9µm,0.2s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.19** | **335** | *eP* | | **Pb** | **20 13 06.1** | **-0.4** |
| JAYA | | | | | IAML | | 20 13 25.9 | |
| | comp=Z,9µm,0.2s | | | | | | | |
| **BOQS** | **Boqueron** | **1.20** | **343** | *eP* | | **Pb** | **20 13 06.5** | **-0.3** |
| **BOQS** | **Boqueron** | **1.20** | **343** | *eP* | | **Pb** | **20 13 06.5** | **-0.3** |
| **CEDA** | **San Andres** | **1.30** | **340** | *eP* | | **Pb** | **20 13 07.8** | **-0.6** |
| CEDA | | | | *eS* | | **Sb** | **20 13 25.0** | **+0.2** |
| CEDA | | | | | IAML | | 20 13 33.1 | |
| | comp=Z,8µm,0.3s | | | | | | | |
| **CEDA** | **San Andres** | **1.30** | **340** | *eP* | | **Pb** | **20 13 07.8** | **-0.6** |
| CEDA | | | | *eS* | | **Sb** | **20 13 25.0** | **+0.2** |
| CEDA | | | | | IAML | | 20 13 33.1 | |
| | comp=Z,8µm,0.3s | | | | | | | |
| **CSGN** | **Cosiguina Volc** | **1.39** | **73** | *eP* | | **Pn** | **20 13 07.2** | **-1.0** |
| **CEVE** | **Cerro Verde** | **1.42** | **332** | *eP* | | **Pb** | **20 13 09.8** | **-0.7** |
| CEVE | | | | | IAML | | 20 13 34.9 | |
| | comp=Z,9µm,0.4s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.42** | **332** | *eP* | | **Pb** | **20 13 09.8** | **-0.7** |
| CEVE | | | | | IAML | | 20 13 34.9 | |
| | comp=Z,9µm,0.4s | | | | | | | |
| **SBLS** | **San Blas** | **1.43** | **332** | *eP* | | **Pb** | **20 13 09.9** | **-0.7** |
| **SBLS** | **San Blas** | **1.43** | **332** | *eP* | | **Pb** | **20 13 09.9** | **-0.7** |
| **SNJE** | **San Jose** | **1.45** | **333** | *eP* | | **Pb** | **20 13 10.1** | **-0.8** |
| **SNJE** | **San Jose** | **1.45** | **333** | *eP* | | **Pb** | **20 13 10.1** | **-0.8** |
| **TACO** | **Tacachico** | **1.45** | **343** | *eP* | | **Pb** | **20 13 09.9** | **-0.9** |
| TACO | | | | *eS* | | **Sb** | **20 13 28.9** | **+0.1** |
| **TACO** | **Tacachico** | **1.45** | **343** | *eP* | | **Pb** | **20 13 09.9** | **-0.9** |
| TACO | | | | *eS* | | **Sb** | **20 13 28.9** | **+0.1** |
| **RTR** | **El Retiro** | **1.49** | **332** | *eP* | | **Pb** | **20 13 11.0** | **-0.6** |
| **RTR** | **El Retiro** | **1.49** | **332** | *eP* | | **Pb** | **20 13 11.0** | **-0.6** |
| **NUBE** | **Las Nubes** | **1.56** | **328** | *eP* | | **Pb** | **20 13 11.6** | **-1.2** |
| NUBE | | | | *eS* | | **Sn** | **20 13 30.6** | **+0.7** |
| **NUBE** | **Las Nubes** | **1.56** | **328** | *eP* | | **Pb** | **20 13 11.6** | **-1.2** |
| NUBE | | | | *eS* | | **Sn** | **20 13 30.6** | **+0.7** |
| **SLOZ** | **Alcaldia de Sa** | **1.67** | **330** | *eP* | | **Pb** | **20 13 13.0** | **-1.5** |
| **CRIN** | **San Cristobal** | **1.84** | **86** | | | **Pn** | **20 13 14.2** | **0.0** |
| **CRIN** | **San Cristobal** | **1.84** | **86** | *eP* | | **Pn** | **20 13 14.4** | **+0.1** |
| CRIN | | | | *eS* | | **Sn** | **20 13 38.3** | **+1.7** |
| CRIN | | | | | IAML | | 20 13 53.7 | |
| | comp=N,18µm,0.5s | | | | | | | |
| **MTO3** | **Montecristo** | **1.86** | **347** | | | **Pb** | **20 13 16.4** | **-1.5** |
| **MTO3** | **Montecristo** | **1.86** | **347** | *eP* | | **Pb** | **20 13 16.5** | **-1.5** |
| MTO3 | | | | *eS* | | **Sb** | **20 13 40.3** | **-0.7** |
| **MTO3** | **Montecristo** | **1.86** | **347** | *eP* | | **Pb** | **20 13 16.5** | **-1.5** |
| **MTO3** | **Montecristo** | **1.86** | **347** | *eP* | | **Pb** | **20 13 16.5** | **-1.5** |
| MTO3 | | | | *eS* | | **Sb** | **20 13 40.3** | **-0.7** |
| **ESQI** | **Esquipulas** | **2.01** | **349** | | | **Pb** | **20 13 18.7** | **-1.8** |
| **ESQI** | **Esquipulas** | **2.01** | **349** | *eP* | | **Pb** | **20 13 18.7** | **-1.8** |
| **TEL3** | **Telica 3** | **2.03** | **90** | *eP* | | **Pn** | **20 13 16.7** | **-0.2** |
| **CNGN** | **Cerro Negro** | **2.18** | **92** | | | **Pn** | **20 13 18.6** | **-0.3** |
| **TGUH** | **Tegucigalpa,Un** | **2.18** | **47** | | | **Pn** | **20 13 19.4** | **+0.3** |
| **TGUH** | **Tegucigalpa,Un** | **2.18** | **47** | *eP* | | **Pn** | **20 13 19.7** | **+0.6** |
| **TGUH** | **Tegucigalpa,Un** | **2.18** | **47** | *eP* | | **Pn** | **20 13 20.4** | **+1.3** |
| **TGUH** | **Tegucigalpa,Un** | **2.18** | **47** | *eP* | | **Pn** | **20 13 19.7** | **+0.6** |
| **COPN** | **Copaltepe** | **2.32** | **100** | *eP* | | **Pn** | **20 13 19.8** | **-1.0** |
| **MOMN** | **Momotombo** | **2.34** | **94** | *eP* | | **Pn** | **20 13 20.1** | **-1.0** |
| **NBG** | **Las Nubes** | **2.43** | **326** | *eP* | | **Pb** | **20 13 25.6** | **-2.1** |
| NBG | | | | *eS* | | **Sb** | **20 13 55.1** | **-2.3** |
| **PCG** | **Pacaya** | **2.44** | **318** | *eP* | | **Pn** | **20 13 23.0** | **+0.3** |
| **APYN** | **Apoyeque** | **2.54** | **97** | *eP* | | **Pn** | **20 13 23.8** | **-0.1** |
| **MRL** | **Marmol** | **2.60** | **344** | *eP* | | **Pn** | **20 13 24.8** | **-0.1** |
| MRL | | | | *eS* | | **Sn** | **20 13 58.0** | **+2.3** |
| **FUG** | **Fuego 3** | **2.63** | **315** | *eP* | | **Pn** | **20 13 25.1** | **-0.2** |
| FUG | | | | *eS* | | **Sn** | **20 13 59.1** | **+2.6** |
| **TISN** | **Laguna Tiscapa** | **2.63** | **99** | *eP* | | **Pn** | **20 13 25.1** | **0.0** |
| **MGAN** | **Managua** | **2.65** | **99** | *eP* | | **Pn** | **20 13 25.4** | **0.0** |
| **HUEN** | | **2.70** | **95** | *eP* | | **Pn** | **20 13 25.6** | **-0.5** |
| **APG** | **El Apazote** | **2.84** | **328** | Pn | | **Pb** | **20 13 31.3** | **-3.4** |
| | comp=N,3.3nm,0.3s,baz=130,slow=15,SNR=11 | | | | | | | |
| APG | | | | Sn | | **Sb** | **20 14 08.6** | **-0.5** |
| | comp=N,10nm,0.3s,baz=77,slow=22,SNR=5.7 | | | | | | | |
| **MATN** | **Matagalpa** | **2.95** | **83** | | | **Pn** | **20 13 29.2** | **-0.4** |
| **MATN** | **Matagalpa** | **2.95** | **83** | *eP* | | **Pn** | **20 13 29.2** | **-0.4** |
| **BOAB** | **BOACO BROADBAN** | **3.19** | **92** | | | **Pn** | **20 13 31.9** | **-0.9** |
| **STG3** | **Santiaguito 3,** | **3.33** | **310** | *eP* | | Pn | 20 13 25.9 | -9.1 |
| STG3 | | | | *eS* | | **Sn** | **20 14 16.8** | **+3.1** |
| **HUEH** | **Huehuetenango** | **3.70** | **318** | Pn | | **Pn** | **20 13 42.7** | **+2.7** |
| **ACON** | **Acoyapa** | **3.72** | **99** | | | **Pn** | **20 13 41.1** | **+1.0** |
| **HZTE** | **Horizontes, Gu** | **3.75** | **119** | | | **Pn** | **20 13 42.0** | **+1.3** |
| **HZTE** | **Horizontes, Gu** | **3.75** | **119** | *eP* | | **Pn** | **20 13 41.9** | **+1.3** |
| **GBS3** | **Finca Las Img** | **3.84** | **117** | *eP* | | **Pn** | **20 13 44.6** | **+2.8** |
| **LAPC** | **Finca la Perla** | **3.87** | **117** | *eP* | | **Pn** | **20 13 43.2** | **+1.1** |
| **SAJU** | **San Juanillo,** | **4.02** | **128** | *eP* | | **Pn** | **20 13 44.7** | **+0.5** |
| **ORTG** | **Ortega, Santa** | **4.05** | **123** | | | **Pn** | **20 13 45.6** | **+0.9** |
| **ORTG** | **Ortega, Santa** | **4.05** | **123** | *eP* | | **Pn** | **20 13 45.8** | **+1.1** |
| **LIM1** | **Limonal** | **4.05** | **117** | *eP* | | **Pn** | **20 13 46.2** | **+1.4** |
| **COLC** | **Colonia** | **4.11** | **117** | *eP* | | **Pn** | **20 13 46.9** | **+1.3** |
| COLC | | | | *eS* | | **Sn** | **20 14 33.4** | **+0.6** |
| **CUI** | **Cuipilapa** | **4.15** | **117** | *eP* | | **Pn** | **20 13 48.1** | **+2.0** |
| **GRZA** | **Playa Garza** | **4.17** | **129** | *eP* | | **Pn** | **20 13 47.0** | **+0.6** |
| **DUNO** | **Dulce Nombre,** | **4.18** | **126** | | | **Pn** | **20 13 47.4** | **+0.9** |
| **NICO** | **Nicoya** | **4.19** | **125** | *eP* | | **Pn** | **20 13 48.6** | **+2.1** |
| **ACAL** | **Aguas Claras** | **4.27** | **116** | *eP* | | **Pn** | **20 13 49.0** | **+1.2** |
| ACAL | | | | *eS* | | **Sn** | **20 14 37.4** | **+0.6** |
| **PTEN** | **Parque Tenorio** | **4.28** | **115** | *eP* | | **Pn** | **20 13 48.1** | **+0.2** |
| **PETF** | **Flores** | **4.41** | **348** | | | **Pn** | **20 13 51.7** | **+2.1** |
| **JTS** | **Las Juntas de** | **4.51** | **120** | Pn | | **Pn** | **20 13 49.3** | **-1.7** |
| | comp=N,6.0nm,0.3s,baz=6.5,slow=8.0,SNR=11 | | | | | | | |
| JTS | | | | Sn | | **Sn** | **20 14 42.5** | **-0.1** |
| | comp=N,23nm,0.3s,baz=16,slow=21,SNR=4.5 | | | | | | | |
| **JTS** | **Las Juntas de** | **4.51** | **120** | Pn | | **Pn** | **20 13 52.2** | **+1.2** |
| **JTS** | **Las Juntas de** | **4.51** | **120** | *eP* | | **Pn** | **20 13 52.4** | **+1.4** |
| **ESPN** | **Las Esperanzas** | **4.54** | **94** | | | **Pn** | **20 13 51.7** | **+0.3** |
| **ARE1** | **Arenal 1** | **4.63** | **117** | *eP* | | **Pn** | **20 13 54.9** | **+2.2** |
| **CAO2** | **Cobano, Puntar** | **4.72** | **127** | | | **Pn** | **20 13 55.1** | **+1.2** |
| **LAFE** | **Finca La Fe, P** | **4.81** | **125** | *eP* | | **Pn** | **20 13 56.1** | **+1.0** |
| **JACO** | **JACO, Garabito** | **5.09** | **124** | Pn | | **Pn** | **20 14 00.5** | **+1.5** |
| **JACO** | **JACO, Garabito** | **5.09** | **124** | *eP* | | **Pn** | **20 14 01.6** | **+2.6** |
| **LCR2** | **La Lucha 2** | **5.59** | **120** | *eP* | | **Pn** | **20 14 08.1** | **+2.1** |
| **CVTR** | **Volcan Turrial** | **5.67** | **116** | | | **Pn** | **20 14 07.4** | **+0.1** |
| **RIMA** | **Rio Macho** | **5.70** | **119** | | | **Pn** | **20 14 09.3** | **+1.7** |
| **RIMA** | **Rio Macho** | **5.70** | **119** | *eP* | | **Pn** | **20 14 09.2** | **+1.7** |
| **VTCV** | **VTCV, Calle Va** | **5.71** | **116** | *eP* | | **Pn** | **20 14 09.8** | **+2.0** |
| **CDM** | **Cerro de Muert** | **5.89** | **120** | *eP* | | **Pn** | **20 14 12.8** | **+2.4** |
| **EDDO** | **Dominical** | **5.97** | **123** | *eP* | | **Pn** | **20 14 12.5** | **+1.5** |
| **MRVA** | **Moravia de Chi** | **6.04** | **116** | *eP* | | **Pn** | **20 14 14.2** | **+2.0** |
| **PEZE** | **Perez Zeledon,** | **6.05** | **121** | | | **Pn** | **20 14 14.7** | **+2.4** |
| **PEZE** | **Perez Zeledon,** | **6.05** | **121** | *eP* | | **Pn** | **20 14 14.7** | **+2.4** |
| **SRBA** | **San Rafael, Bu** | **6.40** | **121** | Pn | | **Pn** | **20 14 19.1** | **+2.0** |
| **SRBA** | **San Rafael, Bu** | **6.40** | **121** | *eP* | | **Pn** | **20 14 18.9** | **+1.9** |
| **POTG** | **Potrero Grande** | **6.69** | **121** | *eP* | | **Pn** | **20 14 23.9** | **+2.8** |
| **PTJ1** | **Puerto Jimnez** | **6.83** | **125** | *eP* | | **Pn** | **20 14 25.9** | **+3.0** |
| **PIRO** | **Carate, Puerto** | **6.88** | **126** | *eP* | | **Pn** | **20 14 25.6** | **+2.0** |
| **CDITO** | **Canoas** | **7.16** | **123** | | | **Pn** | **20 14 28.4** | **+1.0** |
| **CDITO** | **Canoas** | **7.16** | **123** | *eP* | | **Pn** | **20 14 29.4** | **+2.0** |
| **CCOL** | **Caracol de Cor** | **7.17** | **125** | *eP* | | **Pn** | **20 14 30.4** | **+2.9** |
| **BRU2** | **Volcan** | **7.19** | **121** | | | **Pn** | **20 14 28.8** | **+0.8** |
| **CMIG** | **Matias Romero** | **7.30** | **309** | Pn | | **Pn** | **20 14 33.7** | **+4.3** |
| | comp=N,1.2nm,0.3s,baz=106,slow=9.9,SNR=6.4 | | | | | | | |
| CMIG | | | | Sn | | Sb | 20 16 04.0 | -13 |
| | comp=N,1.2nm,0.3s,baz=38,slow=22,SNR=5.2 | | | | | | | |
| CMIG | | | | LR | | LR | 20 17 46.3 | |
| | comp=N,424nm,20.6s,baz=118,slow=40 | | | | | | | |
| **SDV** | **Santo Domingo** | **18.34** | **100** | P | | **P** | **20 16 50.8** | **-6.3** |
| | comp=N,1.1nm,0.3s,baz=327,slow=12,SNR=2.6 | | | | | | | |
| **833A** | **Chaparral WMA,** | **18.46** | **330** | | | **Pn** | **20 16 59.1** | **+0.7** |
| **152A** | **Waverly Hall** | **20.37** | **10** | Pn | | Pn | 20 17 21.9 | +0.7 |
| **JCT** | **Junction City** | **20.46** | **332** | P | | Pn | 20 17 21.4 | -0.9 |
| JCT | | | | | IAmb | IAmb | 20 17 23.9 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **Z41A** | **Richland Creek** | **20.89** | **351** | P | | **P** | **20 17 24.7** | **+0.1** |
| Z41A | | | | | IAmb | IAmb | 20 17 31.0 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **HPIG** | | **21.23** | **315** | P | | **P** | **20 17 29.9** | **+1.3** |
| **GOGA** | **Godfrey** | **21.33** | **13** | P | | **P** | **20 17 31.6** | **+2.3** |
| GOGA | | | | | IAmb | IAmb | 20 17 35.5 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **21.58** | **323** | P | | **P** | **20 17 34.5** | **+2.3** |
| | comp=Z,2.0nm,0.6s,baz=142,slow=10,SNR=33 | | | | | | | |
| **TXAR** | **Lajitas Array** | **21.58** | **323** | P | | **P** | **20 17 33.6** | **+1.4** |
| **TX31** | **Lajitas Ar. Si** | **21.58** | **323** | P | | **P** | **20 17 33.6** | **+1.4** |
| **TX32** | **Lajitas Array** | **21.58** | **323** | P | | **P** | **20 17 33.4** | **+1.2** |
| **ATAH** | **Atahualpa** | **22.20** | **151** | P | | **P** | **20 17 41.7** | **+2.4** |
| | comp=Z,7.7nm,0.7s,baz=340,slow=5.5,SNR=6.8 | | | | | | | |
| ATAH | | | | LR | | LR | 20 25 28.4 | |
| **MIAR** | **Mount Ida** | **22.28** | **350** | P | | **P** | **20 17 42.1** | **+2.6** |
| MIAR | | | | | IAmb | IAmb | 20 17 44.6 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **W39A** | **Magazine** | **22.95** | **350** | P | | **P** | **20 17 47.8** | **+1.2** |
| **X34A** | **Smith Ranch, M** | **23.37** | **341** | P | | **P** | **20 17 53.3** | **+2.4** |
| **FCAR** | **Ozark Folk Cen** | **23.39** | **353** | P | | **P** | **20 17 51.6** | **+0.5** |
| **TKL** | **Tuckaleechee C** | **23.45** | **11** | P | | **P** | **20 17 50.5** | **-1.1** |
| | comp=Z,6.1nm,0.7s,baz=192,slow=13,SNR=6.1 | | | | | | | |
| TKL | | | | LR | | LR | 20 26 52.2 | |
| | comp=Z,131nm,20.2s,baz=206,slow=37 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.45** | **11** | P | | **P** | **20 17 51.8** | **+0.2** |
| **LCAR** | **Lake Charles** | **23.48** | **355** | P | | **P** | **20 17 53.0** | **+1.1** |
| **V53A** | **Saluda** | **23.65** | **12** | P | | **P** | **20 17 53.5** | **-0.1** |
| V53A | | | | | IAmb | IAmb | 20 17 59.5 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **FNO** | **Franklin** | **23.85** | **343** | P | | **P** | **20 17 54.3** | **-1.2** |
| **U40A** | **Yellville** | **23.94** | **352** | P | | **P** | **20 17 55.9** | **-0.4** |
| U40A | | | | | IAmb | IAmb | 20 18 04.2 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **HHAR** | **Hobbs** | **24.03** | **350** | P | | **P** | **20 17 54.7** | **-2.5** |
| HHAR | | | | | IAmb | IAmb | 20 18 01.1 | |
| | com

comp=Z,33nm,19.3s,baz=113,slow=36
**ESDC Sonseca Array 78.25 52** LR LR 20 53 09.5
comp=Z,29nm,21.4s,baz=309,slow=31
**MDT Midelt 78.58 59** LR LR 20 53 16.6
comp=Z,59nm,19.7s,baz=340,slow=31
**NOA NORSAR Array B 83.95 29** LR LR 20 58 37.8
comp=Z,13nm,21.8s,baz=350,slow=33
**YAK Yakutsk 99.72 343** LR LR 21 16 33.5
comp=Z,28nm,21.8s,baz=56,slow=38
**MKAR Makanchi Array 120.38 7** PKP **PKPdf 20 31 32.8 -0.7**
comp=Z,0.2nm,0.5s,baz=272,slow=3.6,SNR=4.5
**KSH Kashi 126.30 14** PKP **PKiKP 20 31 47.5 +1.9**
**WRA Warramunga Arr 137.92 254** PKP **PKiKP 20 32 09.0 -0.4**
comp=Z,0.6nm,0.6s,baz=90,slow=2.0,SNR=8.5
**ASAR Alice Springs 137.97 249** PKP **PKiKP 20 32 08.7 -0.8**
comp=Z,0.3nm,0.5s,baz=116,slow=2.0,SNR=6.5
**ASAR Alice Springs 137.97 249 PKPdf 20 32 05.7 -1.7**
**PZH PanZhiHua 139.79 345** PKP **PKPdf 20 32 08.0 -2.9**
**CMAR Chiang Mai Arr 148.20 346** PKPbc **PKPbc 20 32 29.2 +0.5**
comp=Z,1.6nm,0.6s,baz=338,slow=3.7,SNR=14

**IDC 25 20:15:54.1±2.3, 6°04'S×129°73'E, h0km, mb3.7/1, mb1 3.9/3, mb1mx3.5/36, mbtmp3.7/3, ML3.8/2, MS3.4/1, Ms1 3.4/1, ms1mx2.4/64, Error ellipse: s-maj=149.9km s-min=30.3km az=69.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.53** | **162** | Pn | Pn | 20 19 22.4 | +1.1 |
| | 0.5nm,0.3s,baz=345,slow=13,SNR=28 | | | | | | |
| WRA | | | | Sn | Sn | 20 21 50.6 | -12 |
| | 1.0nm,0.3s,baz=348,slow=20,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.98** | **168** | P | Pn | 20 20 04.8 | -0.9 |
| | 0.2nm,0.3s,baz=351,slow=10,SNR=17 | | | | | | |
| ASAR | | | | S | Sn | 20 23 10.8 | -16 |
| | 0.1nm,0.3s,baz=345,slow=24,SNR=2.8 | | | | | | |
| **HNR** | **Honiara** | **30.12** | **98** | LR | LR | 20 35 21.6 | |
| | comp=Z,67nm,18.9s,baz=7.5,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.28** | **327** | P | P | 20 26 50.8 | +0.1 |
| | 0.4nm,0.4s,baz=128,slow=6.4,SNR=8.5 | | | | | | |

**IDC 25 20:31:57.9±45.0, 15°84'S×173°96'W, h0km, mb4.2/3, mb1 4.4/3, mb1mx3.8/25, mbtmp4.2/3, Error ellipse: s-maj=865.3km s-min=170.5km az=79.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **43.35** | **240** | P | P | 20 40 02.4 | +0.3 |
| | 1.9nm,0.5s,baz=89,slow=9.9,SNR=8.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.22** | **257** | P | P | 20 40 48.0 | -0.5 |
| | 0.6nm,0.6s,baz=93,slow=8.2,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **49.47** | **252** | P | P | 20 40 50.2 | -0.1 |
| | 5.8nm,0.5s,baz=88,slow=8.1,SNR=128 | | | | | | |

*IDC **25** 20:39:46.8±1.4, 21°.16'S×178°.50'W, h526km±14km, mb3.8/12, mb1 4.0/15, mb1mx3.7/39, mbtmp4.7/15, Error ellipse: s-maj=24.6km s-min=12.1km az=153.0*
*NOU **25** 20:39:47.9, 20°.76'S×178°.30'W, h581km, mb4.6/12, Fiji Islands Region*
*NEIC **25** 20:39:48.2±1.7, 21°.11'S±0°.05×178°.5'W±0°.1, h538km±7km, mb4.3/85, Error ellipse: s-maj=14.8km s-min=6.8km az=77.0*
**ISC 25 20:39:48.4±0.5, 21°.0'S±0°.1×178°.46'W±0°.07, h550km, n152, σ1s39/151, mb4.3/54, 4C-6D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.65** | **314** | P | **P** | **20 41 14.3** | **-1.2** |
| | 3.5nm,0.3s,baz=146,slow=15,SNR=22 | | | | | | |
| **MSVF** | **Nonsavu** | **4.65** | **314** | P | **P** | **20 41 13.7** | **-1.7** |
| **NIUE** | **Niue** | **8.25** | **78** | P | **P** | **20 41 46.9** | **-1.7** |
| NIUE | | | | S | **S** | **20 43 26.0** | **-1.2** |
| **NIUE** | **Niue** | **8.25** | **78** | P | **P** | **20 41 47.2** | **-1.4** |
| | 177nm,0.9s | | | | | | |
| **AFI** | **Afiamalu** | **9.52** | **43** | P | **P** | **20 41 57.8** | **-3.8** |
| | 20nm,0.3s,baz=45,slow=6.0,SNR=11 | | | | | | |
| AFI | | | | S | S | 20 43 41.9 | -9.1 |
| | 24nm,0.3s,baz=21,slow=22,SNR=11 | | | | | | |
| **AFI** | **Afiamalu** | **9.52** | **43** | P | P | 20 41 57.5 | -4.2 |
| AFI | | | | S | S | 20 43 41.0 | -10 |
| **PINNC** | **Pines Island,** | **13.19** | **261** | P | **P** | **20 42 38.2** | **-1.0** |
| **DZM** | **Mont Dzumac** | **14.09** | **263** | P | **P** | **20 42 47.8** | **-0.8** |
| | 1.0nm,0.3s,baz=78,slow=17,SNR=10 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.09** | **263** | P | **P** | **20 42 47.3** | **-1.3** |
| **DZM** | **Mont Dzumac** | **14.09** | **263** | P | **P** | **20 42 48.8** | **+0.2** |
| | 48nm,0.8s | | | | | | |
| **SANVU** | **Saraoutou** | **14.70** | **290** | | **P** | **20 42 53.3** | **-1.6** |
| **OUZ** | **Omahuta** | **15.77** | **205** | P | **P** | **20 43 07.9** | **+2.4** |
| **HAZ** | **Te Kaha** | **16.99** | **190** | P | **P** | **20 43 16.7** | **-0.1** |
| **PUZ** | **Puketiti** | **17.22** | **189** | P | P | 20 43 28.2 | +9.3 |
| **TWGZ** | **Tauwhareparae** | **17.37** | **189** | P | **P** | **20 43 20.9** | **+0.6** |
| **URZ** | **Urewera** | **17.60** | **192** | P | **P** | **20 43 19.3** | **-3.0** |
| | 1.6nm,0.3s,baz=32,slow=2.6,SNR=7.1 | | | | | | |
| **URZ** | **Urewera** | **17.60** | **192** | P | **P** | **20 43 21.7** | **-0.6** |
| **URZ** | **Urewera** | **17.60** | **192** | P | **P** | **20 43 19.3** | **-3.0** |
| **URZ** | **Urewera** | **17.60** | **192** | P | **P** | **20 43 21.3** | **-1.0** |
| | 72nm,1.0s | | | | | | |
| **RTZ** | **Ruatahuna** | **17.97** | **192** | P | **P** | **20 43 24.6** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **18.59** | **192** | P | **P** | **20 43 29.2** | **-2.3** |
| **BKZ** | **Black Stump Fm** | **18.59** | **192** | P | **P** | **20 43 31.6** | **+0.1** |
| **TMVZ** | **Te Maari** | **18.71** | **194** | P | **P** | **20 43 31.6** | **-1.1** |
| **ETVZ** | **East Tongariro** | **18.73** | **194** | P | **P** | **20 43 31.6** | **-1.3** |
| **OTVZ** | **Oturere** | **18.77** | **194** | P | **P** | **20 43 31.6** | **-1.6** |
| **TRVZ** | **Turoa** | **18.93** | **194** | P | **P** | **20 43 29.9** | **-4.9** |
| **BHHZ** | **Black Hill Sta** | **18.99** | **193** | P | **P** | **20 43 32.9** | **-2.3** |
| **BFZ** | **Birch Farm** | **20.11** | **192** | P | **P** | **20 43 43.1** | **-2.1** |
| **BFZ** | **Birch Farm** | **20.11** | **192** | P | **P** | **20 43 44.7** | **-0.5** |
| | 22nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **21.17** | **199** | P | **P** | **20 43 54.0** | **-0.8** |
| **QRZ** | **Quartz Range** | **21.17** | **199** | P | **P** | **20 43 56.9** | **+2.1** |
| | 28nm,0.8s | | | | | | |
| **KHZ** | **Kahutara** | **22.36** | **196** | P | **P** | **20 44 04.6** | **-0.8** |
| **KHZ** | **Kahutara** | **22.36** | **196** | P | **P** | **20 44 07.0** | **+1.5** |
| **EIDS** | **Eidsvold** | **28.30** | **255** | P | **P** | **20 44 56.5** | **-1.6** |
| EIDS | | | | IAmb | IAmb | 20 44 58.6 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **28.45** | **245** | P | **P** | **20 44 58.1** | **-1.5** |
| **PMG** | **Port Moresby** | **35.05** | **284** | P | **P** | **20 45 54.6** | **-1.2** |
| | comp=Z,24nm,0.8s,baz=73,slow=7.3,SNR=9.5 | | | | | | |
| **PMG** | **Port Moresby** | **35.05** | **284** | P | **P** | **20 45 55.6** | **-0.2** |
| **STKA** | **Stephens Creek** | **37.17** | **245** | P | **P** | **20 46 13.3** | **+0.1** |
| | comp=Z,4.9nm,0.8s,baz=92,slow=10,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **37.17** | **245** | P | **P** | **20 46 13.5** | **+0.3** |
| **COEN** | **Coen** | **37.19** | **275** | P | **P** | **20 46 13.7** | **+0.2** |
| **BBOO** | **Buckleboo** | **41.93** | **244** | P | **P** | **20 46 50.7** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 20 46 51.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **JAY** | **Jayapura** | **43.81** | **289** | P | **P** | **20 47 06.4** | **+0.1** |
| | comp=Z,15nm,0.5s,baz=130,slow=5.5,SNR=12 | | | | | | |
| **AS31** | **Alice Springs** | **43.98** | **257** | P | **P** | **20 47 06.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **43.98** | **257** | P | **P** | **20 47 07.0** | **-0.5** |
| | comp=Z,13nm,0.9s,baz=96,slow=7.9,SNR=113 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 48 41.8** | **+0.6** |
| | comp=Z,0.9nm,0.6s,baz=102,slow=4.5,SNR=6.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **20 51 44.2** | **+3.4** |
| | comp=Z,1.1nm,0.9s,baz=114,slow=5.2,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **43.98** | **257** | P | **P** | **20 47 07.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.10** | **263** | P | **P** | **20 47 07.8** | **-0.7** |
| | comp=Z,7.5nm,0.7s,baz=95,slow=5.0,SNR=70 | | | | | | |
| **HMH** | **Humu'ula Sheep** | **46.22** | **31** | P | **P** | **20 47 25.5** | **+0.6** |
| **FORT** | **Forrest** | **48.69** | **247** | P | **P** | **20 47 42.5** | **-0.5** |
| **MTN** | **Manton Dam** | **48.74** | **271** | P | **P** | **20 47 42.6** | **-1.0** |
| **KNRA** | **Kununurra** | **50.20** | **267** | P | **P** | **20 47 53.9** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 20 47 55.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.53** | **263** | P | **P** | **20 48 11.1** | **-0.1** |
| **SOEI** | **Soe** | **56.09** | **272** | P | **P** | **20 48 36.9** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **57.13** | **257** | P | **P** | **20 48 42.5** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **57.13** | **257** | P | **P** | **20 48 42.7** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 20 48 43.3 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MORW** | **Morawa** | **59.23** | **248** | P | **P** | **20 48 57.1** | **-0.3** |
| MORW | | | | IAmb | IAmb | 20 49 01.3 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **GIRL** | **Giralia** | **62.00** | **255** | P | **P** | **20 49 16.8** | **+1.1** |
| **TOLI2** | **Tolitoli** | **63.30** | **282** | P | **P** | **20 49 26.0** | **+1.9** |
| TOLI2 | | | | IAmb | IAmb | 20 49 44.7 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.38** | **324** | P | **P** | **20 50 08.3** | **+1.0** |
| **MAJO** | **Matsushiro** | **70.38** | **324** | P | **P** | **20 50 08.2** | **+0.9** |
| MAJO | | | | IAmb | IAmb | 20 50 22.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **MAT** | **Matsushiro** | **70.38** | **324** | P | **P** | **20 50 07.6** | **+0.3** |
| **ADK** | **Adak** | **72.61** | **1** | P | **P** | **20 50 19.9** | **+0.1** |
| **KSAR** | **Wonju Array Be** | **77.01** | **319** | P | **P** | **20 50 44.5** | **-0.4** |
| **KMPM** | **Mount Pierce** | **79.31** | **39** | P | **P** | **20 50 59.6** | **+2.3** |
| **KMRM** | **Mail Ridge** | **79.43** | **40** | | **P** | **20 51 00.4** | **+2.5** |
| **KHMM** | **Horse Mountain** | **79.83** | **39** | P | **P** | **20 51 02.0** | **+1.9** |
| KHMM | | | | IAmb | IAmb | 20 51 06.1 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **79.95** | **40** | P | **P** | **20 51 02.7** | **+2.0** |
| O02D | | | | IAmb | IAmb | 20 51 03.9 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **ISA** | **Isabella, Lake** | **80.01** | **46** | P | **P** | **20 51 02.4** | **+1.4** |
| **WDC** | **Whiskeytown Da** | **80.35** | **40** | P | **P** | **20 51 04.4** | **+1.8** |
| **ORV** | **Oroville** | **80.35** | **41** | P | **P** | **20 51 03.9** | **+1.2** |
| **N02D** | **Trinity Center** | **80.50** | **39** | P | **P** | **20 51 05.4** | **+1.9** |
| N02D | | | | IAmb | IAmb | 20 51 06.6 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **O03E** | **Paynes Creek** | **80.62** | **40** | P | **P** | **20 51 05.7** | **+1.6** |
| O03E | | | | IAmb | IAmb | 20 51 11.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **M02C** | **Callahan** | **80.67** | **39** | P | **P** | **20 51 06.3** | **+1.9** |
| M02C | | | | IAmb | IAmb | 20 51 07.6 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.97** | **39** | P | **P** | **20 51 07.8** | **+1.9** |
| | comp=Z,7.3nm,0.7s,baz=174,slow=5.1,SNR=16 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.97** | **39** | P | **P** | **20 51 07.4** | **+1.5** |
| YBH | | | | IAmb | IAmb | 20 51 08.8 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **MPK** | **Martis Peak** | **81.11** | **42** | P | **P** | **20 51 08.4** | **+1.5** |
| MPK | | | | IAmb | IAmb | 20 51 09.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **BEKR** | **Beckworth** | **81.24** | **41** | P | **P** | **20 51 08.6** | **+1.1** |
| **QSM** | **Queen of Sheba** | **81.26** | **46** | P | **P** | **20 51 09.0** | **+1.5** |
| **HUMO** | **Hull Mountain** | **81.37** | **38** | P | **P** | **20 51 09.3** | **+1.4** |
| HUMO | | | | IAmb | IAmb | 20 51 11.6 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **YERR** | **Yerington** | **81.42** | **43** | P | **P** | **20 51 10.1** | **+1.6** |
| **LHV** | **Little Huntoon** | **81.47** | **44** | P | **P** | **20 51 09.8** | **+1.4** |
| **L04D** | **Klamath Falls** | **81.51** | **39** | P | **P** | **20 51 10.6** | **+1.9** |
| L04D | | | | IAmb | IAmb | 20 51 11.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **M04C** | **Macdoel** | **81.51** | **39** | P | **P** | **20 51 10.6** | **+1.8** |
| M04C | | | | IAmb | IAmb | 20 51 11.0 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **GWY** | **Greenwater Val** | **81.51** | **46** | P | **P** | **20 51 10.0** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **81.70** | **44** | P | **P** | **20 51 11.4** | **+1.5** |
| | comp=Z,3.7nm,0.7s,baz=226,slow=8.4,SNR=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.70** | **44** | P | **P** | **20 51 11.0** | **+1.1** |
| **PAHR** | **Pah Rah Range** | **81.75** | **42** | P | **P** | **20 51 11.3** | **+1.3** |
| **NV11** | **Mina Array Sit** | **81.80** | **44** | P | **P** | **20 51 11.9** | **+1.5** |
| NV11 | | | | IAmb | IAmb | 20 51 12.7 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **KVN** | **Kaiserville** | **82.19** | **43** | P | **P** | **20 51 13.5** | **+1.2** |
| KVN | | | | IAmb | IAmb | 20 51 14.1 | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **TPH** | **Tonopah** | **82.20** | **44** | P | **P** | **20 51 13.7** | **+1.3** |
| **TPNV** | **Tonopah Spring** | **82.22** | **46** | P | **P** | **20 51 13.8** | **+1.3** |
| **J04D** | **Umpqua Nationa** | **82.25** | **38** | P | **P** | **20 51 14.1** | **+1.5** |
| **MOD** | **Modoc Plateau** | **82.50** | **40** | P | **P** | **20 51 15.2** | **+1.4** |
| MOD | | | | IAmb | IAmb | 20 51 16.2 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **K05A** | **Summer Lake** | **82.64** | **39** | | **P** | **20 51 16.4** | **+1.8** |
| K05A | | | | IAmb | IAmb | 20 51 17.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **H04A** | **Detroit Lake** | **83.11** | **37** | P | **P** | **20 51 17.9** | **+1.2** |
| H04A | | | | IAmb | IAmb | 20 51 18.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **PINE** | **Pine Mountain** | **83.26** | **38** | P | **P** | **20 51 19.3** | **+1.7** |
| PINE | | | | IAmb | IAmb | 20 51 20.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **PRN** | **Pahroc Range** | **83.27** | **46** | P | **P** | **20 51 19.2** | **+1.5** |
| PRN | | | | IAmb | IAmb | 20 51 20.6 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **BMN** | **Battle Mountai** | **83.53** | **42** | P | **P** | **20 51 20.1** | **+1.1** |
| BMN | | | | IAmb | IAmb | 20 51 21.3 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **83.81** | **40** | P | **P** | **20 51 21.7** | **+1.4** |
| **X16A** | **Lo Mia Camp, P** | **84.21** | **50** | P | **P** | **20 51 24.1** | **+1.5** |
| **I07A** | **Izee** | **84.27** | **38** | P | **P** | **20 51 24.3** | **+1.8** |
| I07A | | | | IAmb | IAmb | 20 51 25.1 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **319A** | **Douglas** | **84.31** | **53** | P | **P** | **20 51 25.3** | **+2.3** |
| 319A | | | | IAmb | IAmb | 20 51 25.8 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **J08A** | **Circle Bar Ran** | **84.44** | **39** | P | **P** | **20 51 24.4** | **+1.0** |
| J08A | | | | IAmb | IAmb | 20 51 25.9 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **U15A** | **North Rim** | **84.63** | **48** | P | **P** | **20 51 26.2** | **+1.5** |
| U15A | | | | IAmb | IAmb | 20 51 27.4 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **ELK** | **Elko** | **84.96** | **43** | P | **P** | **20 51 27.2** | **+1.1** |
| | comp=Z,1.5nm,0.6s,baz=259,slow=8.7,SNR=7.0 | | | | | | |
| **ELK** | **Elko** | **84.96** | **43** | P | **P** | **20 51 27.5** | **+1.4** |
| **G08A** | **Pilot Rock** | **85.29** | **38** | P | **P** | **20 51 28.8** | **+1.3** |
| G08A | | | | IAmb | IAmb | 20 51 29.5 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **BMO** | **Blue Mountains** | **85.99** | **39** | P | **P** | **20 51 31.2** | **+0.4** |
| BMO | | | | IAmb | IAmb | 20 51 32.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **D08A** | **Wollman Farm,** | **86.36** | **36** | P | **P** | **20 51 32.6** | **+0.3** |
| D08A | | | | IAmb | IAmb | 20 51 34.8 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **F10A** | **Beach Ranch, E** | **86.68** | **38** | P | **P** | **20 51 34.4** | **+0.4** |
| **TMUT** | **Trail Mountain** | **86.83** | **46** | P | **P** | **20 51 36.6** | **+1.4** |
| **PLID** | **Pearl Lake** | **86.89** | **39** | P | **P** | **20 51 35.8** | **+0.6** |
| PLID | | | | IAmb | IAmb | 20 51 37.9 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **B08A** | **Colville Reser** | **86.91** | **35** | P | **P** | **20 51 35.3** | **+0.4** |
| B08A | | | | IAmb | IAmb | 20 51 36.5 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **HLID** | **Hailey** | **87.00** | **41** | P | **P** | **20 51 37.2** | **+1.5** |
| **TRF** | **Thorofare Moun** | **87.05** | **12** | P | **P** | **20 51 34.9** | **-0.5** |
| TRF | | | | IAmb | IAmb | 20 51 36.6 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **C09A** | **Chrisman Ranch** | **87.15** | **36** | P | **P** | **20 51 36.5** | **+0.4** |
| C09A | | | | IAmb | IAmb | 20 51 37.8 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **87.30** | **13** | P | **P** | **20 51 36.6** | **+0.1** |
| RND | | | | IAmb | IAmb | 20 51 37.1 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.70** | **57** | P | **P** | **20 51 41.4** | **+2.1** |
| | comp=Z,3.0nm,0.9s,baz=222,slow=5.0,SNR=8.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.70** | **57** | P | **P** | **20 51 40.9** | **+1.7** |
| **WRH** | **Wood River Hil** | **88.41** | **13** | P | **P** | **20 51 41.3** | **-0.3** |
| **HDA** | **Harding Lake** | **88.59** | **13** | P | **P** | **20 51 42.2** | **-0.1** |
| **H21K** | **Melozitna Rive** | **88.60** | **10** | P | **P** | **20 51 42.6** | **+0.2** |
| H21K | | | | IAmb | IAmb | 20 51 43.6 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **88.62** | **13** | P | **P** | **20 51 42.1** | **-0.4** |
| **MCMT** | **McKenzie Canyo** | **88.63** | **40** | P | **P** | **20 51 43.5** | **+0.2** |
| **MDM** | **Murphy Dome** | **88.81** | **12** | P | **P** | **20 51 43.1** | **-0.3** |
| MDM | | | | IAmb | IAmb | 20 51 44.3 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **88.92** | **13** | P | **P** | **20 51 43.5** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=220,slow=5.5,SNR=20 | | | | | | |
| **ILAR** | **Eielson Array** | **88.92** | **13** | P | **P** | **20 51 43.4** | **-0.6** |
| **REDW** | **Red Top Meadow** | **89.11** | **42** | P | **P** | **20 51 46.7** | **+1.1** |
| REDW | | | | IAmb | IAmb | 20 51 47.9 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **LOHW** | **Long Hollow** | **89.39** | **42** | P | **P** | **20 51 46.9** | **0.0** |
| LOHW | | | | IAmb | IAmb | 20 51 49.0 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **QLMT** | **Earthquake Lak** | **89.50** | **41** | P | **P** | **20 51 47.6** | **+0.2** |
| **PDAR** | **Pinedale Array** | **89.64** | **43** | P | **P** | **20 51 48.5** | **+0.5** |
| | comp=Z,2.8nm,0.6s,baz=356,slow=2.1,SNR=8.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **89.64** | **43** | P | **P** | **20 51 48.4** | **+0.3** |
| **BOZ** | **Bozeman (W)** | **89.77** | **40** | P | **P** | **20 51 48.4** | **-0.1** |
| BOZ | | | | IAmb | IAmb | 20 52 04.0 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **90.58** | **298** | P | **P** | **20 51 55.5** | **+2.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,5.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.17** | **25** | P | Pdif | 20 52 21.7 | +0.1 |
| | comp=Z,0.3nm,0.7s,baz=241,slow=4.5,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.25** | **313** | PKiKP | **PKiKP** | **20 57 19.8** | **-0.1** |
| | comp=Z,0.1nm,0.4s,baz=73,slow=1.4,SNR=4.2 | | | | | | |
| **ARU** | **Arti** | **125.39** | **325** | PKP | **PKiKP** | **20 57 46.9** | **-0.2** |
| | comp=Z,0.9nm,0.4s,baz=90,slow=1.9,SNR=8.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.36** | **349** | PKP | **PKPdf** | **20 57 53.3** | **-0.6** |
| | comp=Z,1.2nm,0.6s,baz=343,slow=1.3,SNR=9.3 | | | | | | |
| **BELG** | **Belogornoye** | **132.76** | **323** | PKP | **PKiKP** | **20 58 01.5** | **-0.5** |
| | comp=Z,2.9nm,0.6s,baz=319,slow=5.8,SNR=5.5 | | | | | | |
| **FINES** | **FINES Array B** | **136.15** | **343** | PKP | **PKPdf** | **20 58 07.3** | **+0.5** |
| | comp=Z,2.2nm,1.0s,baz=29,slow=4.4,SNR=4.3 | | | | | | |
| FINES | | | | SKPbc | **SKiKP** | **21 00 50.1** | **-2.5** |
| | comp=Z,3.1nm,0.8s,baz=58,slow=2.6,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.26** | **330** | PKhKP | PKPpre | 20 58 17.4 | |
| | comp=Z,2.2nm,0.5s,baz=42,slow=4.5,SNR=21 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.26** | **330** | | PKPab | 20 58 17.6 | -0.5 |
| **MILM** | **Milestii Mici** | **145.99** | **326** | ⇓P | **PKiKP** | **20 58 30.5** | **+1.3** |
| **BURAR** | **Burcovina Array** | **147.30** | **330** | ⇓P | **PKiKP** | **20 58 32.3** | **+0.2** |
| **VRI** | **Vrancioaia** | **147.77** | **326** | ⇓P | **PKPbc** | **20 58 31.9** | **+0.3** |
| **DOPR** | **Dopca** | **148.38** | **327** | ⇓P | **PKiKP** | **20 58 34.5** | **+0.2** |
| **MLR** | **Muntele Rosu** | **148.43** | **326** | ⇑P | **PKPbc** | **20 58 33.3** | **-0.1** |
| **CLL** | **Collm** | **148.47** | **346** | *i* PKPbc | **PKPbc** | **20 58 33.3** | **+0.2** |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **VOIR** | | **148.92** | **327** | ⇓P | **PKiKP** | **20 58 35.8** | **+0.3** |
| **GZR** | **Gura Zlata** | **150.07** | **329** | ⇑P | **PKPbc** | **20 58 37.4** | **+0.1** |
| **BZS** | **Buzias** | **150.45** | **331** | ⇑P | **PKPbc** | **20 58 38.2** | **+0.1** |
| **HERR** | **Herculane** | **150.62** | **329** | ⇑P | **PKiKP** | **20 58 39.2** | **+0.3** |
| **MORH** | **Mrgy, Hungar** | **151.25** | **335** | ⇓P | **PKPbc** | **20 58 39.6** | **-0.3** |

*IDC **25** 20:41:27.3±1.0, 36°.51'N×73°.18'E, h0km, mb3.7/8, mb1 3.6/14, mb1mx3.5/46, mbtmp3.6/14, ML3.1/6, MS2.9/2, Ms1 2.9/2, ms1mx2.3/88, Error ellipse: s-maj=24.6km s-min=19.0km az=72.0*
*NNC **25** 20:41:32.6±7.4, 36°.80'N×72°.75'E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=57.4km s-min=49.0km az=32.0*
**ISC 25 20:41:28.7±0.6, 36°.55'N±0°.05×73°.3'E±0°.1, h10km, n23, σ2s01/24, mb3.7/8, 6C-5D, Northwestern Kashmir**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHCP** | **Chirah Chowk** | **2.89** | **181** | P | **Pg** | **20 42 24.1** | **0.0** |
| **CEP** | **Cherat** | **2.96** | **204** | P | **Pg** | **20 42 25.9** | **+0.4** |
| **THW** | **Thamme Wali** | **3.97** | **200** | P | **Pb** | **20 42 37.2** | **-1.6** |
| **AAK** | **Ala-Archa** | **6.14** | **8** | Pn | **Pn** | **20 43 03.7** | **+4.0** |
| | 1.0nm,0.3s,baz=192,slow=4.6,SNR=34 | | | | | | |
| **AAK** | **Ala-Archa** | **6.14** | **8** | ⇑Pn | Pn | 20 43 04.2 | +4.5 |
| | 5.0nm,0.7s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **20 44 10.8** | **+0.8** |
| | 6.2nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 20 44 41.4 | |
| | 14nm,0.9s | | | | | | |
| **KK09** | **Karatay Array** | **6.91** | **343** | ⇓Pn | **Pn** | **20 43 12.9** | **+2.8** |
| | 2.7nm,0.6s,baz=167,slow=13 | | | | | | |
| KK09 | | | | ⇑Sn | **Sn** | **20 44 28.5** | **-0.4** |
| | 6.1nm,0.8s,baz=173,slow=25 | | | | | | |
| KK09 | | | | ⇑Lg | Lg | 20 44 60.0 | |
| | 5.5nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **7.19** | **22** | ⇓Pn | Pn | 20 43 19.0 | +4.9 |
| | 3.0nm,0.9s | | | | | | |
| MDOK | | | | Pg | **Pg** | **20 43 42.6** | **-3.8** |
| MDOK | | | | Lg | Lg | 20 45 19.0 | |
| | 10nm,0.9s | | | | | | |
| **PDGK** | **Podgornoye** | **8.25** | **33** | ⇑Pn | **Pn** | **20 43 31.3** | **+2.7** |
| | 2.9nm,0.8s | | | | | | |
| PDGK | | | | ⇑Pg | **Pg** | **20 44 04.3** | **-2.4** |
| | 3.0nm,0.7s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 20 45 56.7 | |
| | 12nm,1.1s | | | | | | |
| **GEYT** | **Alibeck** | **12.21** | **281** | LR | LR | 20 50 38.8 | |
| | comp=Z,70nm,18.4s,baz=28,slow=46 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.22** | **30** | Pn | **Pn** | **20 44 23.3** | **+0.5** |
| | 0.1nm,0.3s,baz=201,slow=13,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.55** | **13** | Pn | **Pn** | **20 44 53.4** | **-1.2** |
| | 0.0nm,0.3s,baz=204,slow=11,SNR=6.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.60** | **354** | Pn | **Pn** | **20 45 19.3** | **-2.2** |
| | 0.1nm,0.3s,baz=97,slow=12,SNR=1.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.73** | **326** | P | **P** | **20 45 35.0** | **-1.3** |
| | 0.2nm,0.3s,baz=144,slow=7.9,SNR=3.8 | | | | | | |
| AKTO | | | | LR | LR | 20 52 42.4 | |
| | comp=Z,26nm,18.3s,baz=43,slow=38 | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| X37A | | | | IAmb_Lg | | 20 47 14.2 | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.85** | **310** | IAmb_Lg | | 20 47 21.5 | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.00** | **190** | IAmb_Lg | | 20 47 27.5 | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **T25A** | **Trinidad** | **4.49** | **279** | IAmb_Lg | | 20 47 40.6 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **4.56** | **74** | Pn | Pn | 20 46 26.7 | -0.2 | |
| S39A | | | | IAmb_Lg | | 20 47 43.8 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.72** | **165** | Pn | Pn | 20 46 26.6 | -2.5 | |
| **MIAR** | **Mount Ida** | **4.76** | **114** | Pn | Pn | 20 46 29.3 | -0.3 | |
| **U40A** | **Yellville** | **4.85** | **91** | Pn | Pn | 20 46 30.7 | -0.1 | |
| U40A | | | | IAmb_Lg | | 20 47 58.3 | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **P38A** | **Dawn** | **5.19** | **52** | IAmb_Lg | | 20 48 09.5 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **MGMO** | **Mountain Grove** | **5.32** | **82** | Pn | Pn | 20 46 34.3 | -3.0 | |
| **X40A** | **Basin Creek Fa** | **5.34** | **111** | Pn | Pn | 20 46 34.9 | -2.6 | |
| **SDCO** | **Great Sand Dun** | **5.43** | **284** | Pn | Pn | 20 46 39.9 | +0.8 | |
| **FCAR** | **Ozark Folk Cen** | **5.49** | **95** | IAmb_Lg | | 20 48 16.3 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **R40A** | **Maddies Statio** | **5.52** | **70** | Pn | Pn | 20 46 37.2 | -2.7 | |
| **435B** | **Jarrell** | **5.88** | **169** | IAmb_Lg | | 20 48 23.7 | | |
| | comp=Z,19nm,1.1s | | | | | | | |
| **K31A** | **O'Neill** | **6.04** | **1** | IAmb_Lg | | 20 48 38.3 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **JCT** | **Junction City** | **6.13** | **188** | IAmb_Lg | | 20 48 41.5 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **N23A** | **Red Feather La** | **7.01** | **310** | IAmb_Lg | | 20 49 02.4 | | |
| | comp=Z,17nm,1.1s | | | | | | | |

*NIED* ***25*** *20:47:47.6, 31.˚73N×128.˚98E, h19km, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.29; $M_{\theta\theta}$=1.85; $M_{\phi\phi}$=-1.56; $M_{r\theta}$=0.55; $M_{\theta\phi}$=2.22; $M_{r\phi}$=0.89; Fault plane solution: $M_0$=2.97000×$10^{14}$ NP1:ϕs=19.00000°, δ=89.00000°, λ=160.00000°. NP2:ϕs=109.00000°, δ=70.00000°, λ=1.00000°.*

**JMA 25 20:47:47.5**±0.1**, 31.˚73N×128.˚98E, h19**km±2km**, M3.6, Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSJ** | **Shimokoshiki** | **0.63** | **95** | P | Pb | 20 47 59.2 | -0.6 |
| JSJ | | | | eS | Sb | 20 48 07.7 | -0.5 |
| **JFU** | **Fukue jima 2** | **0.94** | **348** | P | Pb | 20 48 05.0 | -0.3 |
| JFU | | | | eS | Sb | 20 48 17.2 | -0.2 |
| **NGSJ** | **Nagasakinomoza** | **1.14** | **37** | P | Pn | 20 48 08.0 | -0.4 |
| NGSJ | | | | eS | Sb | 20 48 23.0 | +0.1 |
| **JSU** | **Suzuyama** | **1.28** | **100** | P | Pn | 20 48 10.4 | 0.0 |
| **JIU3** | **Izumi3** | **1.76** | **62** | P | Pn | 20 48 17.3 | +0.4 |
| **JTZ** | **Takazaki** | **1.80** | **84** | P | Pn | 20 48 17.9 | +0.3 |
| **JYAK** | **Yakushimahirau** | **1.98** | **138** | P | Pn | 20 48 20.6 | +0.5 |
| **JTN** | **Tanegashima 3** | **2.02** | **122** | P | Pn | 20 48 21.1 | +0.5 |

*NEIC* ***25*** *21:12:40.8±1.2, 59.˚09N±0.˚04×153.˚06W±0.˚08, h78km±4km, Error ellipse: s-maj=7.3km s-min=4.1km az=127.0*
*IDC* ***25*** *21:12:41.8±4.2, 58.˚83N×151.˚44W, h0km, mb3.3/1, mb1 3.5/3, mb1mx3.2/46, mbtmp3.2/3, ML3.0/2, MS3.4/1, Ms1 3.4/1, ms1mx2.5/42, Error ellipse: s-maj=69.0km s-min=22.8km az=82.0*
*AEIC* ***25*** *21:12:41±1.2, 59.˚08N±0.˚03×153.˚06W±0.˚09, h73km±3km, ML3.3, ML3.7/106(NEIC), Error ellipse: s-maj=6.5km s-min=4.6km az=85.0*

**ISC 25 21:12:41.0**±1.0**, 59.˚07N**±0.˚04×**153.˚03W**±0.˚05**, h74**km±7km**, n204, σ0.˚78/192, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AU22** | **Augustine Moun** | **0.35** | **331** | | **Pn** | **21 12 52.8** | **-0.1** |
| AU22 | | | | | **Sn** | **21 13 01.6** | **-0.1** |
| **Q19K** | **Cape Douglas,** | **0.35** | **246** | | **Pn** | **21 12 52.7** | **-0.3** |
| Q19K | | | | | **Sn** | **21 13 01.4** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **0.35** | **246** | P | **Pn** | **21 12 52.6** | **-0.3** |
| | baz=64 | | | | | | |
| Q19K | | | | S | **Sn** | **21 13 01.7** | **-0.1** |
| | baz=64 | | | | | | |
| **AUQ** | **Augustine Qik'** | **0.35** | **326** | | **Pn** | **21 12 53.0** | **0.0** |
| **AGU** | **Augustine-Summ** | **0.36** | **325** | | **Pn** | **21 12 53.1** | **-0.1** |
| **AUH** | **Augustine H** | **0.36** | **325** | | **Pn** | **21 12 53.1** | **0.0** |
| **AUL** | **Augustine Lava** | **0.38** | **327** | | **Pn** | **21 12 53.1** | **0.0** |
| **OPT** | **Oil Point** | **0.59** | **350** | | **Pn** | **21 12 55.1** | **0.0** |
| **OPT** | **Oil Point** | **0.59** | **350** | P | **Pn** | **21 12 55.1** | **0.0** |
| | baz=171 | | | | | | |
| **HOM** | **Homer** | **0.93** | **50** | | **Pn** | **21 12 59.1** | **+0.4** |
| HOM | | | | IAML | | 21 13 14.1 | |
| | comp=N,3μm,1.0s | | | | | | |
| **HOM** | **Homer** | **0.93** | **50** | P | **Pn** | **21 12 59.2** | **+0.4** |
| | baz=232 | | | | | | |
| **O20K** | **Slope Mountain** | **1.04** | **11** | | **Pn** | **21 13 00.2** | **0.0** |
| O20K | | | | | **Sn** | **21 13 15.2** | **+0.7** |
| **O20K** | **Slope Mountain** | **1.04** | **11** | P | **Pn** | **21 13 00.2** | **0.0** |
| | baz=193 | | | | | | |
| O20K | | | | S | **Sn** | **21 13 15.3** | **+0.7** |
| | baz=193 | | | | | | |
| **P18K** | **Big Mountain,** | **1.18** | **287** | | **Pn** | **21 13 00.9** | **-1.0** |
| P18K | | | | | **Sn** | **21 13 16.1** | **-1.5** |
| **P18K** | **Big Mountain,** | **1.18** | **287** | P | **Pn** | **21 13 00.9** | **-1.0** |
| | baz=105 | | | | | | |
| P18K | | | | S | **Sn** | **21 13 16.1** | **-1.5** |
| | baz=105 | | | | | | |
| **BRLK** | **Bradley Lake** | **1.30** | **57** | | **Pn** | **21 13 02.8** | **-0.7** |
| BRLK | | | | IAML | | 21 13 23.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| BRLK | | | | IAML | | 21 13 23.7 | |
| | comp=E,907nm,0.3s | | | | | | |
| **O19K** | **Port Alsworth** | **1.31** | **330** | | **Pn** | **21 13 03.1** | **-0.4** |
| O19K | | | | | **Sn** | **21 13 19.5** | **-0.9** |
| **O19K** | **Port Alsworth** | **1.31** | **330** | P | **Pn** | **21 13 02.9** | **-0.6** |
| | baz=150 | | | | | | |
| O19K | | | | S | **Sn** | **21 13 19.5** | **-0.9** |
| | baz=150 | | | | | | |
| **KDAK** | **Kodiak Island** | **1.31** | **169** | | **Pn** | **21 13 03.4** | **-0.2** |
| KDAK | | | | | **Sn** | **21 13 19.8** | **-0.8** |
| **BRSE** | **Bradley Lake S** | **1.35** | **59** | | **Pn** | **21 13 03.6** | **-0.5** |
| **BRSE** | **Bradley Lake S** | **1.35** | **59** | P | **Pn** | **21 13 03.6** | **-0.5** |
| | baz=242 | | | | | | |
| **RED** | **Redoubt Volcan** | **1.36** | **5** | | **Pn** | **21 13 03.8** | **-0.5** |
| **O18K** | **Koktuh Hills** | **1.36** | **306** | | **Pn** | **21 13 03.6** | **-0.7** |
| **O18K** | **Koktuh Hills** | **1.36** | **306** | IAML | | 21 13 21.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **1.36** | **306** | P | **Pn** | **21 13 03.6** | **-0.7** |
| | baz=125 | | | | | | |
| **RSO** | **Redoubt South** | **1.41** | **6** | | **Pn** | **21 13 04.7** | **-0.3** |
| **KABU** | **Katmai Buttres** | **1.42** | **237** | | **Pn** | **21 13 05.1** | **0.0** |
| **RDWB** | **Redoubt West** | **1.43** | **4** | | **Pn** | **21 13 04.8** | **-0.5** |
| **NCT** | **North Crescent** | **1.50** | **2** | | **Pn** | **21 13 06.0** | **-0.1** |
| **RDJH** | **Redoubt Jeurge** | **1.53** | **4** | | **Pn** | **21 13 06.5** | **-0.1** |
| **DFR** | **Drift River** | **1.54** | **6** | | **Pn** | **21 13 06.4** | **-0.3** |
| **RDT** | **Redoubt** | **1.54** | **12** | | **Pn** | **21 13 06.3** | **-0.4** |
| **KELA** | **Mount Kelaz** | **1.55** | **247** | | **Pn** | **21 13 06.3** | **-0.4** |
| **CAHL** | **Cahill** | **1.57** | **230** | | **Pn** | **21 13 07.0** | **0.0** |
| **OHAK** | **Old Harbor** | **1.86** | **184** | | **Pn** | **21 13 10.3** | **-0.4** |
| **OHAK** | **Old Harbor** | **1.86** | **184** | IAML | | 21 13 33.3 | |
| | comp=N,423nm,0.3s | | | | | | |
| **OHAK** | **Old Harbor** | **1.86** | **184** | P | **Pn** | **21 13 10.3** | **-0.4** |
| | baz=3.6 | | | | | | |
| **N19K** | **Bonanza Creek** | **1.90** | **338** | | **Pn** | **21 13 11.2** | **-0.2** |
| **N19K** | **Bonanza Creek** | **1.90** | **338** | IAML | | 21 13 34.3 | |
| | comp=E,396nm,0.7s | | | | | | |
| **N19K** | **Bonanza Creek** | **1.90** | **338** | P | **Pn** | **21 13 11.2** | **-0.2** |
| | baz=157 | | | | | | |
| **CAPN** | **Captain Cook N** | **1.95** | **28** | | **Pn** | **21 13 13.5** | **+1.6** |
| CAPN | | | | IAML | | 21 14 00.5 | |
| | comp=N,835nm,0.9s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.95** | **28** | P | **Pn** | **21 13 13.5** | **+1.6** |
| | baz=210 | | | | | | |
| **SLKM** | **Skilak Lake** | **2.02** | **43** | | **Pn** | **21 13 12.4** | **-0.7** |
| **SEW** | **Seward** | **2.10** | **59** | | **Pn** | **21 13 13.0** | **-1.0** |
| **SEW** | **Seward** | **2.10** | **59** | P | **Pn** | **21 13 13.0** | **-1.0** |
| | baz=242 | | | | | | |
| **SPU** | **Mount Spurr** | **2.18** | **13** | | **Pn** | **21 13 15.1** | **0.0** |
| **SPCR** | **Spurr Chakacha** | **2.18** | **11** | | **Pn** | **21 13 15.2** | **0.0** |
| **SPCR** | **Spurr Chakacha** | **2.18** | **11** | P | **Pn** | **21 13 15.2** | **0.0** |
| | baz=192 | | | | | | |
| **O22K** | **Cooper Landing** | **2.19** | **48** | | **Pn** | **21 13 15.2** | **0.0** |
| **O22K** | **Cooper Landing** | **2.19** | **48** | IAML | | 21 13 55.5 | |
| | comp=E,626nm,0.7s | | | | | | |
| **O22K** | **Cooper Landing** | **2.19** | **48** | P | **Pn** | **21 13 15.2** | **0.0** |
| | baz=232 | | | | | | |
| **SPBG** | **Spurr Blockage** | **2.22** | **8** | | **Pn** | **21 13 16.0** | **+0.2** |
| **SPCG** | **Spurr Capps Gl** | **2.29** | **12** | | **Pn** | **21 13 16.7** | **+0.1** |
| **SVW2** | **Sparrevohn** | **2.40** | **329** | | **Pn** | **21 13 17.5** | **-0.6** |
| **STLK** | **Strandline Lak** | **2.51** | **13** | | **Pn** | **21 13 19.3** | **-0.3** |
| **FIS** | **Fire Island** | **2.51** | **33** | Pn | **Pn** | **21 13 19.0** | **-0.5** |
| FIS | | | | IAML | | 21 13 52.4 | |
| | comp=E,445nm,0.5s | | | | | | |
| FIS | | | | IAML | | 21 13 55.7 | |
| | comp=N,460nm,0.4s | | | | | | |
| **SII** | **Sitkinak Islan** | **2.59** | **194** | Pn | **Pn** | **21 13 19.7** | **-1.0** |
| SII | | | | IAML | | 21 13 50.6 | |
| | comp=N,315nm,0.6s | | | | | | |
| SII | | | | IAML | | 21 13 51.6 | |
| | comp=E,461nm,0.3s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.61** | **38** | | **Pn** | **21 13 20.9** | **-0.1** |
| **RC01** | **Rabbit Creek A** | **2.61** | **38** | IAML | | 21 13 53.3 | |
| | comp=N,360nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.61** | **38** | P | **Pn** | **21 13 20.9** | **-0.1** |
| | baz=221 | | | | | | |
| **M19K** | **Big River Lodg** | **2.92** | **347** | | **Pn** | **21 13 25.0** | **-0.2** |
| **PWL** | **Port Wells** | **2.97** | **51** | | **Pn** | **21 13 25.1** | **-0.7** |
| **PWL** | **Port Wells** | **2.97** | **51** | IAML | | 21 13 59.6 | |
| | comp=E,249nm,0.5s | | | | | | |
| PWL | | | | IAML | | 21 14 00.9 | |
| | comp=N,230nm,0.4s | | | | | | |
| **M22K** | **Willow** | **3.06** | **27** | | **Pn** | **21 13 27.4** | **+0.5** |
| **PMR** | **Palmer** | **3.19** | **36** | | **Pn** | **21 13 27.9** | **-0.8** |
| **PMR** | **Palmer** | **3.19** | **36** | IAML | | 21 14 06.0 | |
| | comp=N,105nm,0.4s | | | | | | |
| **PMR** | **Palmer** | **3.19** | **36** | P | **Pn** | **21 13 27.9** | **-0.8** |
| | baz=219 | | | | | | |
| **L19K** | **White Mountain** | **3.25** | **345** | | **Pn** | **21 13 29.4** | **-0.2** |
| **L19K** | **White Mountain** | **3.25** | **345** | IAML | | 21 14 07.0 | |
| | comp=N,116nm,0.4s | | | | | | |
| L19K | | | | IAML | | 21 14 07.0 | |
| | comp=E,151nm,0.5s | | | | | | |
| **L19K** | **White Mountain** | **3.25** | **345** | P | **Pn** | **21 13 29.4** | **-0.2** |
| | baz=163 | | | | | | |
| **KNK** | **Knik Glacier** | **3.27** | **42** | | **Pn** | **21 13 29.2** | **-0.7** |
| **KNK** | **Knik Glacier** | **3.27** | **42** | IAML | | 21 14 06.6 | |
| | comp=E,162nm,0.4s | | | | | | |
| KNK | | | | IAML | | 21 14 07.2 | |
| | comp=N,229nm,0.5s | | | | | | |
| **KNK** | **Knik Glacier** | **3.27** | **42** | P | **Pn** | **21 13 29.2** | **-0.7** |
| | baz=226 | | | | | | |
| **GHO** | **Glory Hole Cre** | **3.39** | **35** | IAML | | 21 14 11.8 | |
| | comp=N,203nm,0.4s | | | | | | |
| GHO | | | | IAML | | 21 14 11.8 | |
| | comp=E,148nm,0.3s | | | | | | |
| **GLI** | **Glacier Island** | **3.49** | **56** | | **Pn** | **21 13 31.2** | **-1.7** |
| **GLI** | **Glacier Island** | **3.49** | **56** | IAML | | 21 14 10.9 | |
| | comp=E,179nm,0.8s | | | | | | |
| GLI | | | | IAML | | 21 14 11.0 | |
| | comp=N,137nm,0.8s | | | | | | |
| **GLI** | **Glacier Island** | **3.49** | **56** | P | **Pn** | **21 13 31.2** | **-1.7** |
| | baz=242 | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.54** | **204** | Pn | **Pn** | **21 13 32.0** | **-1.6** |
| **SML** | **Sawmill** | **3.60** | **38** | | **Pn** | **21 13 33.8** | **-0.6** |
| **SML** | **Sawmill** | **3.60** | **38** | IAML | | 21 14 14.5 | |
| | comp=N,80nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **3.60** | **38** | P | **Pn** | **21 13 33.8** | **-0.6** |
| | baz=223 | | | | | | |
| **CUT** | **Chulitna** | **3.61** | **21** | | **Pn** | **21 13 34.5** | **+0.1** |
| CUT | | | | IAML | | 21 14 20.2 | |
| | comp=N,168nm,0.3s | | | | | | |
| CUT | | | | IAML | | 21 14 22.0 | |
| | comp=E,179nm,0.4s | | | | | | |
| **FID** | **Port Fidalgo** | **3.71** | **60** | | **Pn** | **21 13 33.7** | **-2.0** |
| **FID** | **Port Fidalgo** | **3.71** | **60** | IAML | | 21 14 15.9 | |
| | comp=E,132nm,0.4s | | | | | | |
| FID | | | | IAML | | 21 14 17.8 | |
| | comp=N,130nm,0.3s | | | | | | |
| **JPK** | **Jack Peak** | **3.79** | **56** | | **Pn** | **21 13 35.6** | **-1.3** |
| **PPLA** | **Purkeypile** | **3.86** | **6** | | **Pn** | **21 13 39.1** | **+1.1** |
| **SCM** | **Sheep Creek Mo** | **3.96** | **43** | | **Pn** | **21 13 38.8** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **3.96** | **43** | IAML | | 21 14 25.1 | |
| | comp=N,107nm,0.7s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **3.96** | **65** | | **Pn** | **21 13 37.9** | **-1.3** |
| **EYAK** | **Cordova Ski Ar** | **3.96** | **65** | P | **Pn** | **21 13 37.9** | **-1.3** |
| | baz=251 | | | | | | |
| **CHGN** | **Chignik** | **4.01** | **228** | Pn | **Pn** | **21 13 39.6** | **-0.2** |
| CHGN | | | | IAML | | 21 16 07.7 | |
| | comp=N,130nm,0.1s | | | | | | |
| **TT01** | **Tatalina** | **4.12** | **341** | | **Pn** | **21 13 41.1** | **-0.3** |
| **TTA** | **Tatalina** | **4.14** | **341** | | **Pn** | **21 13 41.3** | **-0.4** |
| **TTA** | **Tatalina** | **4.14** | **341** | P | **Pn** | **21 13 41.3** | **-0.4** |
| | baz=158 | | | | | | |
| **DIV** | **Divide** | **4.18** | **57** | Pn | **Pn** | **21 13 42.1** | **-0.2** |
| **KLU** | **Klutina** | **4.29** | **52** | | **Pn** | **21 13 43.1** | **-0.8** |
| **KLU** | **Klutina** | **4.29** | **52** | IAML | | 21 14 32.4 | |
| | comp=E,70nm,0.2s | | | | | | |
| KLU | | | | IAML | | 21 14 33.8 | |
| | comp=N,89nm,0.4s | | | | | | |
| **KLU** | **Klutina** | **4.29** | **52** | P | **Pn** | **21 13 43.1** | **-0.8** |
| | baz=239 | | | | | | |
| **K20K** | **Telida** | **4.33** | **354** | IAML | | 21 14 33.9 | |
| | comp=N,52nm,0.6s | | | | | | |
| **WAT6** | **Susitna Watana** | **4.37** | **34** | | **Pn** | **21 13 44.4** | **-0.6** |
| **WAT6** | **Susitna Watana** | **4.37** | **34** | P | **Pn** | **21 13 44.3** | **-0.6** |
| | baz=219 | | | | | | |
| **CAST** | **Castle Rocks** | **4.39** | **6** | Pn | **Pn** | **21 13 45.6** | **+0.5** |
| **RAGM** | **Ragged Mountai** | **4.43** | **69** | Pn | **Pn** | **21 13 45.5** | **-0.1** |
| **KAIM** | **Kayak Island** | **4.47** | **75** | Pn | **Pn** | **21 13 46.7** | **+0.5** |
| **M24K** | **Tolsona, Glenn** | **4.55** | **45** | | **Pn** | **21 13 47.3** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **4.55** | **45** | IAML | | 21 14 41.6 | |
| | comp=N,98nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.55** | **45** | P | **Pn** | **21 13 47.3** | **0.0** |
| | baz=231 | | | | | | |
| **TRF** | **Thorofare Moun** | **4.59** | **16** | | **Pn** | **21 13 47.8** | **-0.2** |
| **TRF** | **Thorofare Moun** | **4.59** | **16** | IAML | | 21 14 43.1 | |
| | comp=E,44nm,0.4s | | | | | | |
| TRF | | | | IAML | | 21 15 17.3 | |
| | comp=N,45nm,3.3s | | | | | | |
| **TRF** | **Thorofare Moun** | **4.59** | **16** | P | **Pn** | **21 13 47.8** | **-0.2** |
| | baz=198 | | | | | | |
| **KTH** | **Kantishna Hill** | **4.61** | **12** | | **Pn** | **21 13 47.8** | **-0.4** |
| **HMT** | **Hamilton** | **4.62** | **70** | Pn | **Pn** | **21 13 46.7** | **-1.5** |
| **BMRM** | **Bremner River** | **4.64** | **62** | | **Pn** | **21 13 47.4** | **-1.1** |
| BMRM | | | | IAML | | 21 14 41.7 | |
| | comp=E,60nm,0.4s | | | | | | |
| BMRM | | | | IAML | | 21 14 42.0 | |
| | comp=N,54nm,0.3s | | | | | | |
| **BMRM** | **Bremner River** | **4.64** | **62** | P | **Pn** | **21 13 47.2** | **-1.3** |
| | baz=250 | | | | | | |
| **RND** | **Reindeer** | **4.80** | **23** | | **Pn** | **21 13 50.6** | **-0.1** |
| **SUCK** | **Suckling Hills** | **4.81** | **74** | Pn | **Pn** | **21 13 50.6** | **-0.2** |
| **DHY** | **Denali Highway** | **4.87** | **32** | | **Pn** | **21 13 51.5** | **-0.3** |
| **DHY** | **Denali Highway** | **4.87** | **32** | IAML | | 21 14 48.3 | |
| | comp=E,64nm,0.3s | | | | | | |
| DHY | | | | IAML | | 21 14 48.5 | |
| | comp=N,42nm,0.3s | | | | | | |
| **DHY** | **Denali Highway** | **4.87** | **32** | P | **Pn** | **21 13 51.5** | **-0.3** |
| | baz=217 | | | | | | |
| **N25K** | **Chitina, Valde** | **4.90** | **55** | | **Pn** | **21 13 52.1** | **-0.1** |
| N25K | | | | IAML | | 21 14 47.9 | |
| | comp=N,30nm,0.8s | | | | | | |
| N25K | | | | IAML | | 21 14 50.0 | |
| | comp=E,40nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **4.90** | **55** | P | **Pn** | **21 13 51.3** | **-0.8** |
| | baz=243 | | | | | | |
| **BERG** | **Berg Lake** | **4.90** | **70** | | **Pn** | **21 13 51.3** | **-0.8** |
| **MCK** | **McKinley** | **5.08** | **21** | | **Pn** | **21 13 55.0** | **+0.5** |
| MCK | | | | IAML | | 21 15 12.0 | |
| | comp=N,34nm,4.9s | | | | | | |
| MCK | | | | IAML | | 21 15 15.2 | |
| | comp=E,35nm,3.0s | | | | | | |
| **MCK** | **McKinley** | **5.08** | **21** | P | **Pn** | **21 13 54.3** | **-0.1** |
| | baz=205 | | | | | | |
| **HARP** | **HAARP** | **5.11** | **46** | | **Pn** | **21 13 54.7** | **-0.2** |
| **HARP** | **HAARP** | **5.11** | **46** | P | **Pn** | **21 13 54.7** | **-0.2** |
| | baz=233 | | | | | | |
| **KHIT** | **Khitrov Hills** | **5.13** | **70** | | **Pn** | **21 13 54.5** | **-0.8** |
| **BPAW** | **Bear Paw Mtn.** | **5.14** | **10** | | **Pn** | **21 13 55.1** | **-0.2** |
| **BPAW** | **Bear Paw Mtn.** | **5.14** | **10** | P | **Pn** | **21 13 55.1** | **-0.2** |
| | baz=192 | | | | | | |
| **J20K** | **Nowinta River** | **5.16** | **355** | IAML | | 21 14 52.6 | |
| | comp=E,39nm,0.6s | | | | | | |
| J20K | | | | IAML | | 21 14 53.8 | |
| | comp=N,28nm,0.6s | | | | | | |
| **GLB** | **Gilahina Butte** | **5.17** | **59** | | **Pn** | **21 13 54.8** | **-1.0** |
| **GLB** | **Gilahina Butte** | **5.17** | **59** | IAML | | 21 14 53.8 | |
| | comp=E,42nm,0.4s | | | | | | |
| GLB | | | | IAML | | 21 14 54.6 | |
| | comp=N,35nm,0.8s | | | | | | |
| **VRDI** | **Verde Repeater** | **5.25** | **62** | | **Pn** | **21 13 55.9** | **-1.1** |
| **VRDI** | **Verde Repeater** | **5.25** | **62** | IAML | | 21 14 59.1 | |
| | comp=N,33nm,3.7s | | | | | | |
| VRDI | | | | IAML | | 21 15 04.4 | |
| | comp=E,23nm,4.1s | | | | | | |
| **SNH** | **Sunshine Point** | **5.29** | **73** | Pn | **Pn** | **21 13 57.0** | **-0.4** |
| **WAX** | **Waxell Ridge** | **5.33** | **71** | Pn | **Pn** | **21 13 57.3** | **-0.6** |
| **PAX** | **Paxson** | **5.37** | **40** | | **Pn** | **21 13 57.7** | **-0.8** |
| **PAX** | **Paxson** | **5.37** | **40** | P | **Pn** | **21 13 57.7** | **-0.8** |
| | baz=227 | | | | | | |
| **BWN** | **Browne** | **5.40** | **17** | Pn | **Pn** | **21 13 58.9** | **+0.1** |
| **MCARA** | **McCarthy VSAT** | **5.50** | **61** | | **Pn** | **21 13 59.2** | **-1.0** |
| **MCARA** | **McCarthy VSAT** | **5.50** | **61** | P | **Pn** | **21 13 59.2** | **-1.0** |
| | baz=250 | | | | | | |
| **ISLE** | **Juniper Island** | **5.61** | **70** | Pn | **Pn** | **21 14 01.1** | **-0.8** |
| **KIAG** | **Kiagna River** | **5.67** | **66** | | **Pn** | **21 14 01.4** | **-1.3** |
| **BALM** | **Baldy** | **5.71** | **65** | | **Pn** | **21 14 01.8** | **-1.3** |
| **BAGL** | **Bagley Icefiel** | **5.71** | **71** | | **Pn** | **21 14 02.6** | **-0.4** |
| **MESA** | **MESA** | **5.73** | **74** | | **Pn** | **21 14 04.0** | **+0.5** |
| **MESA** | **MESA** | **5.73** | **74** | P | **Pn** | **21 14 03.2** | **-0.4** |
| | baz=264 | | | | | | |
| **NEA2** | **Nenana** | **5.85** | **17** | | **Pn** | **21 14 04.1** | **-0.9** |
| **NEA2** | **Nenana** | **5.85** | **17** | P | **Pn** | **21 14 04.0** | **-1.0** |
| | baz=201 | | | | | | |
| **YAH** | **Yahtse** | **5.86** | **72** | | **Pn** | **21 14 05.5** | **+0.2** |
| **WRH** | **Wood River Hil** | **5.91** | **21** | | **Pn** | **21 14 05.1** | **-0.6** |
| **M26K** | **Nabesna, AK** | **5.95** | **52** | | **Pn** | **21 14 06.1** | **-0.3** |
| **M26K** | **Nabesna, AK** | **5.95** | **52** | P | **Pn** | **21 14 06.3** | **-0.1** |
| | baz=240 | | | | | | |
| **MENT** | **Mentasta** | **5.96** | **45** | Pn | **Pn** | **21 14 07.0** | **+0.4** |
| **BARN** | **Barnard Glacie** | **6.03** | **66** | | **Pn** | **21 14 07.7** | **0.0** |
| **MLY** | **Manley** | **6.08** | **9** | | **Pn** | **21 14 07.8** | **-0.4** |
| **HDA** | **Harding Lake** | **6.09** | **26** | | **Pn** | **21 14 08.1** | **-0.1** |
| **HDA** | **Harding Lake** | **6.09** | **26** | P | **Pn** | **21 14 08.1** | **-0.1** |
| | baz=211 | | | | | | |
| **RIDG** | **Independent Ri** | **6.11** | **36** | | **Pn** | **21 14 08.5** | **-0.1** |
| **RIDG** | **Independent Ri** | **6.11** | **36** | P | **Pn** | **21 14 08.5** | **-0.1** |
| | baz=224 | | | | | | |
| **CCB** | **Clear Creek Bu** | **6.12** | **22** | | **Pn** | **21 14 07.7** | **-0.9** |
| **L26K** | **Log Cabin Wild** | **6.15** | **46** | | **Pn** | **21 14 10.1** | **+1.0** |
| **I21K** | **Tanana** | **6.15** | **4** | | **Pn** | **21 14 09.1** | **0.0** |
| **TABL** | **Table Mountain** | **6.16** | **72** | | **Pn** | **21 14 09.5** | **0.0** |
| **CTGM** | **Chitina Glacie** | **6.17** | **67** | Pn | **Pn** | **21 14 10.2** | **+0.8** |
| **LOGN** | **Logan Glacier** | **6.29** | **69** | Pn | **Pn** | **21 14 10.4** | **-0.8** |
| **DOT** | **Dot Lake** | **6.30** | **39** | Pn | **Pn** | **21 14 11.3** | **+0.2** |
| **MDM** | **Murphy Dome** | **6.33** | **19** | | **Pn** | **21 14 11.1** | **-0.4** |
| **I23K** | **Minto, Yukon-K** | **6.34** | **14** | | **Pn** | **21 14 11.1** | **-0.5** |
| **I23K** | **Minto, Yukon-K** | **6.34** | **14** | P | **Pn** | **21 14 11.1** | **-0.5** |
| | baz=198 | | | | | | |
| **M27K** | **Edge Creek, AK** | **6.39** | **54** | | **Pn** | **21 14 12.4** | **0.0** |
| **M27K** | **Edge Creek, AK** | **6.39** | **54** | P | **Pn** | **21 14 12.4** | **0.0** |
| | baz=244 | | | | | | |
| **IL31** | | **6.41** | **24** | | **Pn** | **21 14 11.7** | **-0.9** |
| **ILAR** | **Eielson Array** | **6.41** | **24** | Pn | **Pn** | **21 14 12.1** | **-0.6** |
| | comp=E,0.6nm,0.3s,baz=204,slow=14,SNR=22 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 15 20.6** | **-3.7** |
| | comp=E,2.5nm,0.3s,baz=204,slow=22,SNR=13 | | | | | | |
| **SCRK** | **Sand Creek** | **6.55** | **37** | | **Pn** | **21 14 13.5** | **-1.2** |
| **SCRK** | **Sand Creek** | **6.55** | **37** | P | **Pn** | **21 14 13.5** | **-1.2** |
| | baz=226 | | | | | | |
| **PCA** | **Pinnacle** | **6.57** | **76** | Pn | **Pn** | **21 14 15.4** | **+0.5** |
| **POKR** | **Poker Plat Res** | **6.61** | **21** | Pn | **Pn** | **21 14 14.5** | **-0.9** |
| **YUK2** | **White River** | **6.62** | **60** | | **Pn** | **21 14 15.5** | **-0.1** |
| **J25K** | **Salcha River,** | **6.64** | **30** | | **Pn** | **21 14 14.8** | **-1.0** |
| **J25K** | **Salcha River,** | **6.64** | **30** | P | **Pn** | **21 14 14.8** | **-1.0** |
| | baz=217 | | | | | | |
| **L27K** | **Beaver Creek,** | **6.75** | **49** | Pn | **Pn** | **21 14 17.1** | **-0.1** |
| **BC03** | | **6.77** | **49** | | **Pn** | **21 14 17.2** | **-0.3** |
| **BCAR** | **Beaver Creek A** | **6.77** | **49** | Pn | **Pn** | **21 14 17.7** | **+0.1** |
| **BCPM** | **Bancas Point** | **6.88** | **77** | Pn | **Pn** | **21 14 19.4** | **+0.4** |
| **IM03** | | **6.95** | **358** | | **Pn** | **21 14 19.8** | **-0.2** |
| **IMAR** | **Indian Mountai** | **6.95** | **358** | | **Pn** | **21 14 20.2** | **+0.2** |
| **PNL** | **Peninsula** | **6.99** | **79** | | **Pn** | **21 14 19.9** | **-0.7** |
| **FALS** | **False Pass** | **7.07** | **238** | Pn | **Pn** | **21 14 23.0** | **+1.3** |
| **H24K** | **Noodor Dome** | **7.20** | **17** | Pn | **Pn** | **21 14 23.2** | **-0.3** |
| **HYT** | **Haines Junctio** | **7.99** | **71** | Pn | **Pn** | **21 14 34.5** | **+0.2** |
| **EGAK** | **Eagle** | **8.00** | **39** | Pn | **Pn** | **21 14 33.5** | **-0.8** |
| **DAWY** | **Dawson** | **8.20** | **47** | Pn | **Pn** | **21 14 37.3** | **+0.1** |
| **FYU** | **Fort Yukon** | **8.32** | **22** | Pn | **Pn** | **21 14 37.5** | **-1.1** |
| **M30M** | **Minto, Yukon** | **8.67** | **59** | Pn | **Pn** | **21 14 42.7** | **-0.8** |
| **BMAR** | **Burnt Mountain** | **9.21** | **21** | Pn | **Pn** | **21 14 50.0** | **-0.7** |
| **BESE** | **Bessie Mountai** | **9.44** | **85** | Pn | **Pn** | **21 14 56.1** | **+2.1** |
| **SIT** | **Sitka** | **9.60** | **94** | Pn | **Pn** | **21 14 53.4** | **-2.7** |
| **M31M** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YMR | | | | IAML | | | 21 25 26.6 | |
| | comp=E,54nm,1.0s | | | | | | | |
| YMR | | | | IAML | | | 21 25 33.9 | |
| | comp=N,51nm,1.3s | | | | | | | |
| **ISCO** | **Idaho Springs** | **4.23 185** | | Pn | | **Pn** | **21 23 57.0** | **+0.9** |
| **TPAW** | **Teton Pass** | **4.24 265** | | Pn | | **Pn** | **21 23 57.4** | **+1.2** |
| TPAW | | | | IAML | | | 21 25 31.9 | |
| | comp=N,38nm,2.6s | | | | | | | |
| **YHL** | **Hebgen Lake** | **4.40 283** | | Pn | | **Pn** | **21 23 59.1** | **+0.7** |
| YHL | | | | IAML | | | 21 25 24.0 | |
| | comp=N,30nm,0.8s | | | | | | | |
| YHL | | | | IAML | | | 21 25 26.6 | |
| | comp=E,32nm,1.0s | | | | | | | |
| **SUSD** | **Miller** | **4.47 82** | | Pn | | **Pn** | **21 23 59.3** | **+0.2** |
| **DGMT** | **Dagmar** | **4.50 8** | | | | **Pn** | **21 24 02.8** | **+3.2** |
| **O20A** | **White River Ci** | **4.51 212** | | | | **Pn** | **21 24 01.1** | **+1.2** |
| O20A | | | | IAML | | | 21 26 21.4 | |
| | comp=E,48nm,2.5s | | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.51 256** | | | | **Pn** | **21 24 01.4** | **+1.5** |
| AHID | | | | IAML | | | 21 25 15.8 | |
| | comp=E,28nm,1.5s | | | | | | | |
| AHID | | | | IAML | | | 21 25 22.9 | |
| | comp=E,23nm,1.8s | | | | | | | |
| **QLMT** | **Earthquake Lak** | **4.57 282** | | Pn | | **Pn** | **21 24 02.4** | **+1.7** |
| **RDMU** | **Red Mountain** | **4.75 225** | | Pn | | **Pn** | **21 24 03.5** | **+0.3** |
| RDMU | | | | IAML | | | 21 25 17.2 | |
| | comp=E,32nm,1.0s | | | | | | | |
| RDMU | | | | IAML | | | 21 25 19.2 | |
| | comp=N,26nm,1.1s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.87 291** | | Pn | | **Pn** | **21 24 03.4** | **-1.4** |
| BOZ | | | | IAML | | | 21 25 20.5 | |
| | comp=N,18nm,1.7s | | | | | | | |
| **SMCO** | **Snowmass** | **5.03 196** | | Pn | | **Pn** | **21 24 06.6** | **-0.5** |
| SMCO | | | | IAML | | | 21 25 33.7 | |
| | comp=N,26nm,1.4s | | | | | | | |
| SMCO | | | | IAML | | | 21 26 13.3 | |
| | comp=N,16nm,3.5s | | | | | | | |
| **Q24A** | **Divide** | **5.05 180** | | Pn | | **Pn** | **21 24 05.6** | **-1.7** |
| Q24A | | | | IAML | | | 21 25 33.3 | |
| | comp=E,23nm,1.0s | | | | | | | |
| Q24A | | | | IAML | | | 21 26 33.2 | |
| | comp=N,17nm,4.7s | | | | | | | |
| **EGMT** | **Eagleton** | **5.13 323** | | | | **Pn** | **21 24 09.1** | **+0.9** |
| **HWUT** | **Hardware Ranch** | **5.30 245** | | IAML | | | 21 25 31.3 | |
| | comp=N,26nm,2.3s | | | | | | | |
| HWUT | | | | IAML | | | 21 25 44.3 | |
| | comp=N,25nm,0.8s | | | | | | | |
| **KSCO** | **Kaye Shedlock**[*] | **5.35 158** | | Pn | | **Pn** | **21 24 10.7** | **-0.6** |
| **HRY** | **Holter Researc** | **5.42 302** | | Pn | | **Pn** | **21 24 11.8** | **-0.4** |
| **MDND** | **Maddock** | **5.44 43** | | Pn | | **Pn** | **21 24 13.4** | **+0.9** |
| **DLMT** | **Dillon** | **5.48 287** | | Pn | | **Pn** | **21 24 13.6** | **+0.6** |
| **LRM** | **Limekiln Ridge** | **5.49 292** | | Pn | | **Pn** | **21 24 14.2** | **+0.9** |
| **MCMT** | **McKenzie Canyo** | **5.57 281** | | Pn | | **Pn** | **21 24 16.3** | **+1.8** |
| **BGNE** | **Belgrade** | **5.78 114** | | Pn | | **Pn** | **21 24 17.3** | **+0.2** |
| BGNE | | | | Pg | | **Pg** | **21 24 41.6** | **+0.8** |
| **P18A** | **Preston Nutter** | **5.81 223** | | Pn | | **Pn** | **21 24 17.7** | **-0.1** |
| **BCYI** | **Bear Canyon** | **5.95 276** | | Pn | | **Pn** | **21 24 20.4** | **+0.8** |
| **HVU** | **Hansel Valley** | **6.03 251** | | Pn | | **Pn** | **21 24 20.3** | **-0.3** |
| **PV07** | **Paradox Valley** | **6.17 206** | | Pn | | **Pn** | **21 24 22.2** | **-0.4** |
| **P17A** | **Butcher Ranch,** | **6.17 225** | | Pn | | **Pn** | **21 24 22.0** | **-0.6** |
| **ECSD** | **EROS Data Cent** | **6.18 90** | | Pn | | **Pn** | **21 24 23.0** | **+0.4** |
| **PV15** | **Paradox Valley** | **6.20 205** | | Pn | | **Pn** | **21 24 23.8** | **+0.6** |
| **SDCO** | **Great Sand Dun** | **6.27 183** | | Pn | | **Pn** | **21 24 24.9** | **+0.8** |
| **PV23** | **Carpenter Ridg** | **6.28 209** | | Pn | | **Pn** | **21 24 24.2** | **+0.1** |
| **SRU** | **San Rafael Swe** | **6.35 221** | | | | **Pn** | **21 24 23.8** | **-1.2** |
| **PV10** | **Paradox Valley** | **6.35 209** | | Pn | | **Pn** | **21 24 26.7** | **+1.5** |
| **PV11** | **David Mesa, Pa** | **6.37 207** | | | | **Pn** | **21 24 24.9** | **-0.4** |
| **S22A** | **4UR Ranch, Cre** | **6.39 192** | | Pn | | **Pn** | **21 24 26.0** | **+0.2** |
| **PV13** | **Radium Mtn., P** | **6.48 207** | | Pn | | **Pn** | **21 24 26.8** | **0.0** |
| **NLU** | **North Lily Min** | **6.56 234** | | Pn | | **Pn** | **21 24 27.4** | **-0.7** |
| **MSO** | **Missoula** | **6.79 297** | | Pn | | **Pn** | **21 24 31.3** | **+0.2** |
| **Q16A** | **Castle Valley** | **6.81 224** | | Pn | | **Pn** | **21 24 30.2** | **-1.2** |
| **JTMT** | **Jette** | **7.38 304** | | Pn | | **Pn** | **21 24 38.9** | **-0.3** |
| **MSU** | **Marysvale** | **7.63 226** | | Pn | | **Pn** | **21 24 42.8** | **0.0** |
| **AGMN** | **Agassiz Nation** | **7.74 53** | | Pn | | **Pn** | **21 24 44.4** | **+0.4** |
| **MFID** | **Camas Ranch** | **7.76 269** | | Pn | | **Pn** | **21 24 45.2** | **+0.9** |
| **PLID** | **Pearl Lake** | **7.82 282** | | Pn | | **Pn** | **21 24 46.0** | **+0.7** |
| **ELK** | **Elko** | **8.15 250** | | Pn | | **Pn** | **21 24 50.7** | **+0.9** |
| **I10CA** | **LAC DU BONNET** | **8.77 42** | *i* | | | | 22 18 30.0 | |
| | baz=224,slow=329,SNR=2.8 | | | | | | | |
| **F10A** | **Beach Ranch, E** | **8.78 287** | | Pn | | **Pn** | **21 24 59.1** | **+0.8** |
| **ULM** | **Lac du Bonnet** | **8.87 42** | | Pn | | **Pn** | **21 24 59.2** | **-0.2** |
| | comp=N,0.8nm,0.3s,baz=225,slow=14,SNR=8.1 | | | | | | | |
| ULM | | | | Lg | | Lg | 21 27 27.4 | |
| | comp=N,0.4nm,0.3s,baz=137,slow=21,SNR=3.0 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **8.87 42** | | Pn | | **Pn** | **21 25 00.3** | **+0.9** |
| **CCUT** | **Cedar City** | **8.97 227** | | Pn | | **Pn** | **21 25 00.8** | **-0.2** |
| **U15A** | **North Rim** | **9.34 218** | | Pn | | **Pn** | **21 25 06.3** | **+0.1** |
| **AMTX** | **Amarillo** | **9.51 162** | | Pn | | **Pn** | **21 25 08.1** | **-0.2** |
| **YKA** | **Yellowknife Ar** | **19.31 347** | | P | | **P** | **21 27 13.8** | **-2.6** |
| | comp=N,0.0nm,0.3s,baz=153,slow=13,SNR=2.5 | | | | | | | |

*PRE* ***25*** *21:23:13.1±1.9,21.06S×33.40E,h10km,ML3.5*
**ISC 25 21:23:17.6±2.0,21.30S±0.07×33.16E±0.10,h15km,n34,**
**σ2.905/66,Mozambique**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSNA** | **Messina** | **3.10** | **250** | *e*P | | **Pn** | **21 24 09.4** | **+3.3** |
| MSNA | | | | *e*S | | **Sb** | **21 24 48.7** | **-1.4** |
| MSNA | | | | IAML | | | 21 25 01.8 | |
| | comp=Z,244nm,0.3s | | | | | | | |
| **MSNA** | **Messina** | **3.10** | **250** | *i* P | | **Pb** | **21 24 10.0** | **-2.5** |
| MSNA | | | | *i* S | | **Sb** | **21 24 53.8** | **+3.7** |
| **MSNA** | **Messina** | **3.10** | **250** | *i* P | | **Pb** | **21 24 10.0** | **-2.5** |
| MSNA | | | | *i* S | | **Sb** | **21 24 53.8** | **+3.7** |
| **BLWY** | **Bulawayo** | **4.41** | **284** | *e*P | | **Pn** | **21 24 26.2** | **+2.0** |
| BLWY | | | | *e*S | | **Sn** | **21 25 17.3** | **+1.8** |
| BLWY | | | | IAML | | | 21 25 41.8 | |
| | comp=Z,585nm,0.5s | | | | | | | |
| **BLWY** | **Bulawayo** | **4.41** | **284** | *i* P | | **Pn** | **21 24 25.2** | **+1.0** |
| BLWY | | | | *i* S | | **Sn** | **21 25 17.4** | **+2.0** |
| **BLWY** | **Bulawayo** | **4.41** | **284** | *i* P | | **Pn** | **21 24 25.2** | **+1.0** |
| BLWY | | | | *i* S | | **Sn** | **21 25 17.4** | **+2.0** |
| **MATP** | **Matopo** | **4.45** | **280** | *i* P | | **Pn** | **21 24 25.9** | **+1.2** |
| MATP | | | | *i* S | | **Sn** | **21 25 18.3** | **+2.1** |
| **MATP** | **Matopo** | **4.45** | **280** | *i* P | | **Pn** | **21 24 25.9** | **+1.2** |
| MATP | | | | *i* S | | **Sn** | **21 25 18.3** | **+2.1** |
| **CNG** | **Changalane** | **5.05** | **190** | *e*P | | **Pn** | **21 24 34.9** | **+2.1** |
| CNG | | | | *e*S | | **Sn** | **21 25 33.1** | **+2.1** |
| CNG | | | | IAML | | | 21 26 07.9 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **CNG** | **Changalane** | **5.05** | **190** | *i* P | | **Pn** | **21 24 34.2** | **+1.3** |
| CNG | | | | *i* S | | **Sn** | **21 25 33.4** | **+2.5** |
| **CNG** | **Changalane** | **5.05** | **190** | *i* P | | **Pn** | **21 24 34.2** | **+1.3** |
| CNG | | | | *i* S | | **Sn** | **21 25 33.4** | **+2.5** |
| **CRLN** | **Carolina, Mapu** | **5.49** | **211** | *e*P | | **Pn** | **21 24 41.8** | **+2.8** |
| CRLN | | | | *e*S | | **Sn** | **21 25 44.4** | **+2.4** |
| **POGA** | **Pongola** | **6.17** | **192** | *e*P | | **Pn** | **21 24 50.2** | **+2.0** |
| POGA | | | | *e*S | | **Sn** | **21 25 58.9** | **+0.4** |
| POGA | | | | IAML | | | 21 26 57.6 | |
| | comp=Z,40nm,0.5s | | | | | | | |
| **SLR** | **Silverton** | **6.29** | **224** | *e*P | | **Pn** | **21 24 51.6** | **+1.6** |
| SLR | | | | *e*S | | **Sn** | **21 26 03.9** | **+2.2** |
| SLR | | | | IAML | | | 21 26 53.5 | |
| | comp=Z,67nm,0.4s | | | | | | | |
| **HRAO** | **HartRAO** | **6.79** | **227** | *e*P | | **Pn** | **21 24 59.5** | **+2.6** |
| HRAO | | | | *e*S | | **Sn** | **21 26 15.7** | **+1.6** |
| HRAO | | | | IAML | | | 21 27 08.0 | |
| | comp=Z,57nm,0.6s | | | | | | | |
| **NWCL** | **Newcastle** | **7.07** | **204** | *e*P | | **Pn** | **21 25 02.2** | **+1.5** |
| NWCL | | | | *e*S | | **Sn** | **21 26 20.6** | **-0.2** |
| NWCL | | | | IAML | | | 21 27 10.5 | |
| | comp=Z,47nm,0.6s | | | | | | | |
| **KSR** | **Koster** | **7.32** | **231** | *e*P | | **Pn** | **21 25 05.8** | **+1.6** |
| KSR | | | | *e*S | | **Sn** | **21 26 29.1** | **+2.0** |
| KSR | | | | IAML | | | 21 27 20.2 | |
| | comp=Z,109nm,0.7s | | | | | | | |
| **PRYS** | **Parys** | **7.71** | **222** | *e*P | | **Pn** | **21 25 09.4** | **-0.2** |
| PRYS | | | | *e*S | | **Sn** | **21 26 36.6** | **-0.1** |
| PRYS | | | | IAML | | | 21 27 32.6 | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **LBTB** | **Lobatse** | **7.88** | **241** | *e*P | | **Pn** | **21 25 12.3** | **+0.5** |
| LBTB | | | | *e*S | | **Sn** | **21 26 42.2** | **+1.3** |
| LBTB | | | | IAML | | | 21 27 32.2 | |
| | comp=Z,51nm,0.6s | | | | | | | |
| **LBTB** | **Lobatse** | **7.88** | **241** | *i* P | | **Pn** | **21 25 14.2** | **+2.3** |
| LBTB | | | | *i* S | | **Sn** | **21 26 43.4** | **+2.5** |
| **LBTB** | **Lobatse** | **7.88** | **241** | *i* P | | **Pn** | **21 25 14.2** | **+2.3** |
| LBTB | | | | *i* S | | **Sn** | **21 26 43.4** | **+2.5** |
| **SNKL** | **Senekal, Frees** | **8.50** | **214** | *e*P | | **Pn** | **21 25 21.4** | **+1.1** |
| SNKL | | | | *e*S | | **Sn** | **21 26 56.7** | **+0.5** |
| SNKL | | | | IAML | | | 21 28 12.2 | |
| | comp=Z,59nm,0.7s | | | | | | | |
| **SWZ** | **Schweizer** | **9.24** | **229** | *e*P | | **Pn** | **21 25 30.9** | **+0.4** |
| SWZ | | | | *e*S | | **Sn** | **21 27 12.1** | **-2.2** |
| SWZ | | | | IAML | | | 21 28 27.5 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **BOSA** | **Boshof** | **10.22** | **223** | *e*P | | **Pn** | **21 25 44.1** | **+0.2** |
| BOSA | | | | *e*S | | **Sn** | **21 27 35.7** | **-2.7** |
| BOSA | | | | IAML | | | 21 28 52.0 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **BOSA** | **Boshof** | **10.22** | **223** | *i* P | | **Pn** | **21 25 44.4** | **+0.4** |
| BOSA | | | | *i* S | | **Sn** | **21 27 35.3** | **-3.0** |
| **BOSA** | **Boshof** | **10.22** | **223** | *i* P | | **Pn** | **21 25 44.4** | **+0.4** |
| BOSA | | | | *i* S | | **Sn** | **21 27 35.3** | **-3.0** |
| **HVD** | **Gariep Dam** | **11.55** | **215** | *e*P | | **Pn** | **21 26 02.0** | **-0.1** |
| **UPI** | **Upington** | **12.89** | **235** | *e*P | | **Pn** | **21 26 21.0** | **+0.5** |
| UPI | | | | *e*S | | **Sn** | **21 28 43.1** | **-0.7** |
| UPI | | | | IAML | | | 21 30 22.3 | |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **SOE** | **Somerset East** | **13.23** | **209** | *e*P | | **Pn** | **21 26 25.5** | **+0.5** |
| **KEIM** | **Keimoes** | **13.28** | **234** | *e*P | | **Pn** | **21 26 26.2** | **+0.4** |
| KEIM | | | | *e*S | | **Sn** | **21 28 50.9** | **-2.4** |
| KEIM | | | | IAML | | | 21 30 23.8 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **GRAN** | **Grantham** | **14.70** | **220** | *e*P | | **Pn** | **21 26 45.2** | **+0.1** |
| GRAN | | | | *e*S | | **Sn** | **21 29 25.6** | **-2.3** |
| GRAN | | | | IAML | | | 21 31 03.4 | |
| | comp=Z,8.7nm,0.7s | | | | | | | |
| **TSUM** | **Tsumeb** | **14.77** | **275** | *e*P | | **Pn** | **21 26 46.2** | **0.0** |
| TSUM | | | | *e*S | | **Sn** | **21 29 26.1** | **-3.6** |
| **CVNA** | **Calvinia** | **15.70** | **227** | *e*P | | **Pn** | **21 26 58.9** | **+0.5** |
| CVNA | | | | *e*S | | **Sn** | **21 29 47.3** | **-5.0** |
| CVNA | | | | IAML | | | 21 31 41.5 | |
| | comp=Z,8.7nm,0.6s | | | | | | | |
| **MATJ** | **Matjiesfontein** | **16.33** | **220** | *e*P | | **P** | **21 27 10.2** | **+0.8** |
| MATJ | | | | *e*S | | **Sn** | **21 30 04.9** | **-2.5** |
| MATJ | | | | IAML | | | 21 32 27.9 | |
| | comp=Z,7.5nm,0.7s | | | | | | | |

*IDC* ***25*** *21:29:55.3±1.8,8.54S×106.74E,h0km,mb3.6/5, mb1 3.7/5,mb1mx3.3/30,mbtmp3.6/5,MS2.7/3,Ms1 2.8/3, ms1mx2.5/65,Error ellipse: s-maj=38.4km s-min=29.9km az=66.0*
*DJA* ***25*** *21:29:59.6±0.4,9.°S±4.°×10.°7E±.°,h10km,M4.1/13,mb4.8/1, MLv3.8/13*
**ISC 25 21:30:00.9±1.2,8.6S±0.1×107.11E±0.06,h35km,n21,**
**σ1.959/21,mb3.6/5,Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CNJI** | **Cibinong** | **1.26** | **1** | P | | **Pn** | **21 30 21.0** | **-1.0** |
| **CMJI** | **Cimerak** | **1.54** | **59** | P | | **Pn** | **21 30 25.3** | **-0.6** |
| CMJI | | | | S | | **Sn** | **21 30 43.4** | **-1.4** |
| **SKJI** | **Sukabumi** | **1.66** | **341** | P | | **Pn** | **21 30 27.5** | **0.0** |
| **LEM** | **Lembang** | **1.81** | **16** | Pn | | **Pn** | **21 30 30.3** | **+0.5** |
| | 84nm,0.3s,baz=26,slow=10,SNR=28 | | | | | | | |
| LEM | | | | Sn | | **Sn** | **21 30 55.0** | **+3.4** |
| | 64nm,0.3s,baz=136,slow=18,SNR=6.2 | | | | | | | |
| LEM | | | | LR | | LR | 21 31 22.5 | |
| | comp=Z,380nm,18.8s,baz=238,slow=46 | | | | | | | |
| **LEM** | **Lembang** | **1.81** | **16** | P | | **Pn** | **21 30 31.3** | **+1.5** |
| **DBJI** | **Dramaga** | **2.04** | **350** | P | | **Pn** | **21 30 34.0** | **+1.2** |
| **KPJI** | **Karang Pucung** | **2.19** | **56** | P | | **Pn** | **21 30 36.0** | **+1.2** |
| **CGJI** | **Cibinong** | **2.40** | **324** | P | | **Pn** | **21 30 38.5** | **+0.7** |
| **UGM** | **Wanagama** | **3.44** | **79** | P | | **Pn** | **21 30 52.8** | **+0.7** |
| **KASI** | **Kota Agung** | **3.99** | **319** | P | | **Pn** | **21 31 00.5** | **+0.9** |
| **PCJI** | **Pacitan** | **4.04** | **85** | P | | **Pn** | **21 31 01.6** | **+1.3** |
| **KLSI** | | **4.53** | **328** | P | | **Pn** | **21 31 08.7** | **+1.7** |
| **PWJI** | **Pagerwojo** | **4.68** | **84** | P | | **Pn** | **21 31 10.0** | **+0.9** |
| **MNAI** | **Manna** | **5.88** | **315** | P | | **Pn** | **21 31 26.5** | **+0.9** |
| **KAPI** | **Kappang** | **13.04** | **75** | LR | | LR | 21 38 52.2 | |
| | comp=Z,31nm,21.4s,baz=308,slow=40 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.34** | **120** | LR | | LR | 21 43 04.8 | |
| | comp=Z,29nm,18.4s,baz=56,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.05** | **343** | P | | **P** | **21 35 46.1** | **-3.0** |
| | 0.4nm,0.4s,baz=182,slow=8.8,SNR=4.7 | | | | | | | |
| CMAR | | | | LR | | LR | 21 47 08.0 | |
| | comp=Z,12nm,19.2s,baz=80,slow=37 | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.66** | **116** | P | | **P** | **21 35 56.9** | **+2.2** |
| | 0.3nm,0.6s,baz=290,slow=12,SNR=1.7 | | | | | | | |
| **SONM** | **Songino Array** | **56.17** | **359** | P | | **P** | **21 39 35.8** | **-1.5** |
| | 0.4nm,0.7s,baz=178,slow=10,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.40** | **340** | P | | **P** | **21 39 59.5** | **-0.4** |
| | 0.6nm,0.6s,baz=148,slow=7.3,SNR=8.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **65.08** | **346** | P | | **P** | **21 40 36.7** | **-1.0** |
| | 0.4nm,0.3s,baz=138,slow=5.2,SNR=2.4 | | | | | | | |

*IDC* ***25*** *22:00:37.8±13.0, 15.23S×165.82E,h0km,mb4.0/3, mb1 4.2/4,mb1mx3.7/37,mbtmp4.0/4,ML4.1/1,Error ellipse: s-maj=228.4km s-min=36.1km az=56.0*
*NEIC* ***25*** *22:00:37.9±2.1, 15.2S±0.1×166.11E±0.05,h10km±1km, mb4.5/6,Error ellipse: s-maj=19.7km s-min=7.5km az=345.0*
*NOU* ***25*** *22:00:41.9, 15.25S×167.64E,h98km,MLv4.8/13, Vanuatu Islands*
**ISC 25 22:00:36.3±1.3,15.1S±0.1×166.12E±0.07,h10km,n24,**
**σ1.928/25,mb4.3/7,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SANVU** | **Saraoutou** | **1.11** | **110** | Pn | | **Pg** | **22 00 57.3** | **-0.4** |
| SANVU | | | | Sn | | **Sb** | **22 01 13.8** | **+1.7** |
| **SANVU** | **Saraoutou** | **1.11** | **110** | P | | **Pg** | **22 00 57.6** | **-0.1** |
| **DVP** | **Devils Point** | **3.30** | **143** | P | | Pn | 22 01 21.5 | -6.5 |
| **KOUNC** | **Koumac, New Ca** | **5.72** | **198** | P | | Pb | 22 02 11.6 | -4.6 |
| **LIFNC** | **LIFOU** | **5.77** | **170** | Pn | | **Pn** | **22 01 59.6** | **-2.5** |
| LIFNC | | | | Sn | | Sn | 22 03 00.3 | -8.1 |
| **LIFNC** | **LIFOU** | **5.77** | **170** | P | | **Pn** | **22 01 59.8** | **-2.2** |
| **DZM** | **Mont Dzumac** | **6.96** | **178** | Pn | | **Pn** | **22 02 19.6** | **+1.1** |
| | 3.3nm,0.3s,baz=68,slow=7.8,SNR=51 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **22 03 37.4** | **-0.5** |
| | 5.2nm,0.3s,baz=128,slow=22,SNR=11 | | | | | | | |
| **DZM** | **Mont Dzumac** | **6.96** | **178** | | | | **22 02 19.6** | **+1.1** |
| DZM | | | | | | **Sn** | **22 03 37.9** | **0.0** |
| **DZM** | **Mont Dzumac** | **6.96** | **178** | P | | **Pn** | **22 02 20.3** | **+1.7** |
| **YATNC** | **Mamie plateau,** | **6.98** | **174** | P | | **Pn** | **22 02 17.5** | **-1.3** |
| | 40nm,1.6s | | | | | | | |
| **NOUC** | **Port Laguerre** | **6.99** | **179** | P | | **Pn** | **22 02 21.3** | **+2.5** |
| **ONTNC** | **Ouen Toro** | **7.20** | **178** | Pn | | **Pn** | **22 02 23.0** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **7.20** | **178** | P | | **Pn** | **22 02 23.4** | **+1.7** |
| **OUENC** | **Ouen Island, N** | **7.33** | **175** | Pn | | **Pn** | **22 02 23.9** | **+0.4** |
| **OUENC** | **Ouen Island, N** | **7.33** | **175** | P | | **Pn** | **22 02 24.8** | **+1.2** |
| | 37nm,1.9s | | | | | | | |
| **PINNC** | **Pines Island,** | **7.60** | **171** | Pn | | **Pn** | **22 02 26.4** | **-0.9** |
| **STKA** | **Stephens Creek** | **27.93** | **229** | P | | **P** | **22 06 26.9** | **0.0** |
| | 1.7nm,0.3s,baz=64,slow=10,SNR=7.3 | | | | | | | |
| **WB0** | **Warramunga Arr** | **30.60** | **257** | P | | **P** | **22 06 51.4** | **+0.6** |
| WB0 | | | | IAmb | | IAmb | 22 07 46.6 | |
| | comp=Z,15nm,1.9s | | | | | | | |
| **WB2** | **Warramunga Arr** | **30.65** | **256** | P | | **P** | **22 06 51.4** | **+0.2** |
| WB2 | | | | IAmb | | IAmb | 22 07 46.1 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **30.66** | **256** | P | | **P** | **22 06 51.5** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=84,slow=9.3,SNR=6.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **31.51** | **249** | P | | **P** | **22 06 59.0** | **+0.2** |
| | comp=Z,1.1nm,0.4s,baz=77,slow=9.2,SNR=22 | | | | | | | |
| **BBOO** | **Buckleboo** | **32.49** | **232** | P | | **P** | **22 07 06.5** | **-0.8** |
| **FORT** | **Forrest** | **38.17** | **239** | P | | **P** | **22 07 55.3** | **-0.9** |
| FORT | | | | IAmb | | IAmb | 22 07 56.3 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.86** | **260** | P | | **P** | **22 08 02.4** | **+0.3** |
| FITZ | | | | IAmb | | IAmb | 22 08 12.8 | |
| | comp=Z,5.7nm,1.2s | | | | | | | |

*IDC* ***25*** *22:10:04.5±48.0, 17.57S×174.41W,h0km,mb4.1/3, mb1 4.3/3,mb1mx3.7/38,mbtmp4.1/3,MS3.7/1,Ms1 3.7/1, ms1mx2.7/66,Error ellipse: s-maj=903.6km s-min=172.5km az=80.0*
*NEIC* ***25*** *22:10:07.8±0.9, 18.48S±0.07×173.78W±0.08,h35km±2km, mb4.5/18,Error ellipse: s-maj=14.0km s-min=9.5km az=127.0*
**ISC 25 22:10:07.3±0.8,18.5S±0.2×173.81W±0.09,h35km,n25,**
**σ1.937/24,mb4.3/11,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **NIUE** | **Niue** | **3.72** | **99** | Pn | | **Pn** | **22 11 01.4** | **-0.9** |
| **MSVF** | **Nonsavu** | **7.78** | **274** | Pn | | **Pn** | **22 11 58.3** | **+0.2** |
| **RAO** | **Raoul Island** | **11.33** | **199** | LR | | LR | 22 17 06.0 | |
| | comp=Z,425nm,21.2s,baz=76,slow=35 | | | | | | | |
| **LIFNC** | **LIFOU** | **17.99** | **260** | Pn | | **Pn** | **22 14 13.3** | **-1.4** |
| LIFNC | | | | IAmb | | IAmb | 22 14 25.7 | |
| | comp=Z,66nm,1.0s | | | | | | | |
| **SANVU** | **Saraoutou** | **18.41** | **277** | | | **P** | **22 14 17.7** | **-2.0** |
| **OUENC** | **Ouen Island, N** | **18.54** | **255** | P | | **P** | **22 14 18.6** | **-2.4** |
| OUENC | | | | IAmb | | IAmb | 22 14 31.9 | |
| | comp=Z,31nm,1.1s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **27.58** | **202** | P | | **P** | **22 15 51.0** | **-0.1** |
| MQZ | | | | IAmb | | IAmb | 22 15 55.5 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **41.48** | **270** | P | | **P** | **22 17 50.9** | **-0.3** |
| **STKA** | **Stephens Creek** | **42.21** | **243** | P | | **P** | **22 17 59.6** | **+2.5** |
| | comp=Z,1.3nm,0.5s,baz=102,slow=10,SNR=3.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **42.21** | **243** | P | | **P** | **22 17 57.1** | **0.0** |
| **BBOO** | **Buckleboo** | **46.96** | **242** | P | | **P** | **22 18 36.5** | **+1.5** |
| BBOO | | | | IAmb | | IAmb | 22 18 51.3 | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **48.63** | **259** | P | | **P** | **22 18 48.0** | **-0.1** |
| **WB0** | **Warramunga Arr** | **48.79** | **260** | P | | **P** | **22 18 48.9** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 22 18 49.0 | |
| | comp=Z,2.9nm,0.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **48.81** | **259** | P | | **P** | **22 18 48.9** | **-0.6** |
| WB2 | | | | IAmb | | IAmb | 22 18 56.7 | |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.82** | **259** | P | | **P** | **22 18 48.8** | **-0.8** |
| | comp=Z,1.1nm,0.4s,baz=97,slow=7.4,SNR=37 | | | | | | | |
| **AS31** | **Alice Springs** | **48.84** | **254** | P | | **P** | **22 18 49.2** | **-0.5** |
| AS31 | | | | IAmb | | IAmb | 22 18 50.9 | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.84** | **254** | P | | **P** | **22 18 49.6** | **-0.1** |
| | comp=Z,1.6nm,0.5s,baz=89,slow=8.0,SNR=23 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.84** | **254** | P | | **P** | **22 18 49.5** | **-0.3** |
| **FORT** | **Forrest** | **53.71** | **245** | P | | **P** | **22 19 26.0** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **57.23** | **260** | P | | **P** | **22 19 51.3** | **-0.3** |
| FITZ | | | | IAmb | | IAmb | 22 19 59.4 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **MORW** | **Morawa** | **64.24** | **246** | P | | **P** | **22 20 41.4** | **+2.2** |
| MORW | | | | IAmb | | IAmb | 22 20 41.9 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **JTU** | **Tsushima** | **75.46** | **314** | P | | **P** | **22 21 49.5** | **+1.6** |
| **SVW2** | **Sparrevohn** | **80.68** | **9** | P | | **P** | **22 22 13.7** | **-2.6** |
| **KLU** | **Klutina** | **82.79** | **13** | P | | **P** | **22 22 28.5** | **+0.9** |
| KLU | | | | IAmb | | IAmb | 22 22 42.2 | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **82.81** | **12** | P | | **P** | **22 22 28.9** | **+1.3** |

*IDC* ***25*** *22:25:26.9±2.7,21.80S×176.35W,h0km,mb4.1/3, mb1 4.3/3,mb1mx3.9/24,mbtmp4.1/3,Error ellipse: s-maj=177.0km s-min=32.8km az=151.0*
*NEIC* ***25*** *22:25:36.0±1.3,22.2S±0.1×176.0W±0.1,h76km±8km, mb4.3/17,Error ellipse: s-maj=18.8km s-min=13.5km az=140.0*
**ISC 25 22:25:35.6±0.6,22.2S±0.1×175.99W±0.09,h76km,n38,**
**σ0.883/38,mb4.2/11,Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **NIUE** | **Niue** | **6.47** | **62** | Pn | | **Pn** | **22 27 08.7** | **+0.5** |
| NIUE | | | | Sn | | **Sn** | **22 28 18.3** | **-2.2** |
| **MSVF** | **Nonsavu** | **7.15** | **307** | Pn | | **Pn** | **22 27 17.3** | **-0.3** |
| **QRZ** | **Quartz Range** | **20.96** | **205** | P | | **P** | **22 30 13.0** | **+0.6** |
| **NNZ** | **Nelson** | **20.98** | **203** | P | | **P** | **22 30 13.3** | **+0.7** |
| NNZ | | | | IAmb | | IAmb | 22 30 23.0 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| **THZ** | **Tophouse** | **21.63** | **203** | P | | **P** | **22 30 19.4** | **-0.1** |
| **KHZ** | **Kahutara** | **21.99** | **201** | P | | **P** | **22 30 22.8** | **-0.5** |
| KHZ | | | | IAmb | | IAmb | 22 30 30.8 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **FOZ** | **Fox Glacier** | **24.32** | **206** | P | | **P** | **22 30 45.5** | **-0.5** |
| FOZ | | | | IAmb | | IAmb | 22 30 58.7 | |
| | comp=Z,30nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **30.09** | **247** | P | | **P** | **22 31 38.0** | **-0.1** |
| ARMA | | | | IAmb | | IAmb | 22 31 57.0 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NIS1** | **Nisyros Isl.** | **0.50** | **294** | P | **Pg** | **22 30 01.5** | **-0.1** |
| NIS1 | | | | S | **Sb** | **22 30 09.5** | **0.0** |
| NIS1 | | | | AML | AML | 22 30 13.4 | |
| | comp=N,3730μm,0.4s | | | | | | |
| NIS1 | | | | AML | AML | 22 30 17.1 | |
| | comp=E,3240μm,0.5s | | | | | | |
| **NIS1** | **Nisyros Isl.** | **0.50** | **294** | PG | **Pb** | **22 30 02.4** | **+0.1** |
| NIS1 | | | | SG | **Sb** | **22 30 10.3** | **+0.8** |
| **NISR** | **Nisiros** | **0.54** | **293** | P | **Pb** | **22 30 03.5** | **+0.6** |
| **BDRM** | **Kayabasi** | **0.71** | **340** | P | **Pb** | **22 30 06.2** | **+0.4** |
| BDRM | | | | S | **Sb** | **22 30 16.5** | **+1.0** |
| BDRM | | | | *i* AML | AML | 22 30 19.0 | |
| | comp=E,285nm,0.3s | | | | | | |
| BDRM | | | | *i* AML | AML | 22 30 20.0 | |
| | comp=E,400nm,0.3s | | | | | | |
| **BODT** | **Bodrum** | **0.75** | **332** | P | **Pg** | **22 30 05.5** | **-0.7** |
| BODT | | | | S | **Sb** | **22 30 17.5** | **+0.9** |
| **BODT** | **Bodrum** | **0.75** | **332** | PG | **Pg** | **22 30 06.1** | **-0.1** |
| BODT | | | | SG | **Sb** | **22 30 17.6** | **+0.9** |
| **DALY** | **Dalyan (Mula)** | **0.84** | **60** | PG | **Pg** | **22 30 07.3** | **-0.6** |
| **YER** | **Yerkesik** | **0.85** | **30** | P | **Pg** | **22 30 07.1** | **-1.1** |
| YER | | | | S | **Sn** | **22 30 20.9** | **-0.7** |
| **YER** | **Yerkesik** | **0.85** | **30** | PG | **Pg** | **22 30 07.1** | **-1.1** |
| YER | | | | SG | **Sb** | **22 30 20.1** | **+0.5** |
| **MLSB** | **Milas** | **0.90** | **1** | PG | **Pb** | **22 30 09.0** | **0.0** |
| MLSB | | | | SG | **Sn** | **22 30 21.9** | **-0.8** |
| **MULA** | **Mugla, Merkez-** | **0.97** | **28** | P | **Pg** | **22 30 10.5** | **0.0** |
| MULA | | | | S | **Sn** | **22 30 24.2** | **-0.5** |
| **KARP** | **Karpathos** | **0.97** | **209** | P | **Pb** | **22 30 10.1** | **-0.3** |
| KARP | | | | S | **Sb** | **22 30 23.1** | **0.0** |
| | comp=E,472nm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **0.97** | **209** | P | **Pn** | **22 30 11.2** | **+0.2** |
| **KARP** | **Karpathos** | **0.97** | **209** | P | **Pb** | **22 30 09.2** | **-1.1** |
| KARP | | | | S | **Sg** | **22 30 23.5** | **+0.3** |
| KARP | | | | AMI | | 22 30 26.6 | |
| | comp=E,1.0nm,0.6s | | | | | | |
| KARP | | | | AMI | | 22 30 26.6 | |
| | comp=E,1.0nm,0.6s | | | | | | |
| KARP | | | | AMI | | 22 30 27.6 | |
| | comp=E,0.9nm,0.2s | | | | | | |
| KARP | | | | AMI | | 22 30 27.6 | |
| | comp=E,0.9nm,0.2s | | | | | | |
| **FETY** | **Fethiye** | **1.10** | **77** | PG | **Pb** | **22 30 12.3** | **-0.2** |
| **FETY** | **Fethiye** | **1.10** | **77** | P | **Pg** | **22 30 13.1** | **+0.1** |
| FETY | | | | S | **Sn** | **22 30 27.9** | **+0.1** |
| **DDIM** | **Aydin, Didim** | **1.13** | **339** | P | **Pb** | **22 30 12.5** | **-0.5** |
| DDIM | | | | S | **Sn** | **22 30 29.0** | **+0.6** |
| DDIM | | | | *i* AML | AML | 22 30 32.0 | |
| | comp=E,153nm,0.6s | | | | | | |
| DDIM | | | | *i* AML | AML | 22 30 37.0 | |
| | comp=E,139nm,0.6s | | | | | | |
| DDIM | | | | *i* AML | AML | 22 30 38.0 | |
| | comp=E,154nm,0.6s | | | | | | |
| **AYDN** | **Tasoluk** | **1.26** | **5** | P | **Pn** | **22 30 14.4** | **-0.6** |
| AYDN | | | | S | **Sb** | **22 30 30.6** | **-0.9** |
| **GCAM** | **G?zelcaml?** | **1.36** | **343** | PN | **Pn** | **22 30 15.9** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **1.36** | **343** | P | **Pn** | **22 30 14.8** | **-1.5** |
| GCAM | | | | S | **Sb** | **22 30 34.6** | **+0.4** |
| **CAME** | **Cameli-Denizli** | **1.36** | **66** | PN | **Pn** | **22 30 16.1** | **-0.3** |
| **TAVA** | **DENIZLI_Tavas** | **1.42** | **41** | P | **Pg** | **22 30 21.3** | **+2.4** |
| TAVA | | | | S | **Sg** | **22 30 38.9** | **+1.5** |
| **CAEL** | **Denizli, Camel** | **1.45** | **60** | P | **Pg** | **22 30 19.6** | **0.0** |
| CAEL | | | | S | **Sg** | **22 30 42.4** | **+3.9** |
| CAEL | | | | *i* AML | AML | 22 30 57.0 | |
| | comp=E,177nm,0.9s | | | | | | |
| CAEL | | | | *i* AML | AML | 22 30 58.0 | |
| | comp=E,234nm,0.7s | | | | | | |
| CAEL | | | | *i* AML | AML | 22 31 03.0 | |
| | comp=E,233nm,0.8s | | | | | | |
| **SMG** | **Samos** | **1.50** | **331** | P | **Pn** | **22 30 17.3** | **-0.8** |
| **AKAS** | **Kas** | **1.51** | **96** | P | **Pb** | **22 30 19.7** | **+0.2** |
| AKAS | | | | S | **Sg** | **22 30 42.0** | **+1.7** |
| AKAS | | | | *i* AML | AML | 22 30 46.0 | |
| | comp=E,74nm,0.5s | | | | | | |
| **GOLH** | **Golhisar** | **1.68** | **60** | P | **Pg** | **22 30 23.4** | **-0.5** |
| GOLH | | | | S | **Sg** | **22 30 45.8** | **+0.1** |
| GOLH | | | | *i* AML | AML | 22 30 51.0 | |
| | comp=E,95nm,0.6s | | | | | | |
| GOLH | | | | *i* AML | AML | 22 31 02.0 | |
| | comp=E,70nm,1.0s | | | | | | |
| **ELL** | **Elmali** | **1.77** | **78** | PN | **Pn** | **22 30 22.1** | **+0.1** |
| **ELL** | **Elmali** | **1.77** | **78** | S | **Sb** | **22 30 46.2** | **0.0** |
| **ZKR** | **Zakros** | **1.79** | **225** | S | **Sn** | **22 30 45.3** | **+0.7** |
| **DGB** | **zmir** | **1.79** | **338** | P | **Pn** | **22 30 21.0** | **-1.1** |
| DGB | | | | S | **Sn** | **22 30 44.5** | **-0.2** |
| **ZEYE** | **Izmir, Urla-Ze** | **2.09** | **332** | P | **Pn** | **22 30 25.7** | **-0.5** |
| ZEYE | | | | S | **Sn** | **22 30 53.1** | **+1.1** |
| **URLA** | **Izmir** | **2.16** | **335** | PN | **Pn** | **22 30 27.2** | **-0.1** |
| **URLA** | **Izmir** | **2.16** | **335** | P | **Pn** | **22 30 26.8** | **-0.5** |
| URLA | | | | S | **Sg** | **22 31 02.1** | **+0.9** |
| URLA | | | | *i* AML | AML | 22 31 09.0 | |
| | comp=E,43nm,0.8s | | | | | | |
| URLA | | | | *i* AML | AML | 22 31 12.0 | |
| | comp=E,41nm,0.9s | | | | | | |
| **MANT** | **Manisa** | **2.19** | **17** | P | **Pn** | **22 30 27.9** | **+0.1** |
| MANT | | | | S | **Sb** | **22 30 58.2** | **0.0** |
| **KULA** | **Kula-Manisa** | **2.23** | **19** | PN | **Pn** | **22 30 28.7** | **+0.4** |
| **BRDR** | **BURDUR-Merkez** | **2.26** | **54** | P | **Pb** | **22 30 30.6** | **-1.7** |
| BRDR | | | | S | **Sb** | **22 31 00.3** | **+0.2** |
| **USAK** | **Uak-Merkez** | **2.52** | **23** | P | **Pn** | **22 30 32.0** | **-0.3** |
| USAK | | | | S | **Sn** | **22 30 59.6** | **-3.2** |
| USAK | | | | *i* AML | AML | 22 32 00.0 | |
| | comp=E,39nm,2.9s | | | | | | |
| USAK | | | | *i* AML | AML | 22 32 00.0 | |
| | comp=E,61nm,3.6s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **2.62** | **348** | P | **Pn** | **22 30 33.6** | **+0.1** |
| ZEDA | | | | S | **Sg** | **22 31 13.9** | **-1.9** |
| ZEDA | | | | *i* AML | AML | 22 31 26.0 | |
| | comp=E,26nm,1.1s | | | | | | |
| **AKMS** | **Akamas** | **3.98** | **109** | P | **Pn** | **22 30 52.6** | **+0.3** |
| AKMS | | | | AMI | | 22 31 41.7 | |
| | comp=E,0.1nm,1.2s | | | | | | |
| AKMS | | | | AMI | | 22 31 42.4 | |
| | comp=E,0.1nm,0.4s | | | | | | |
| **NATA** | **Nata** | **4.25** | **111** | P | **Pn** | **22 30 56.3** | **+0.3** |
| **SZAC** | **Souni** | **4.50** | **110** | P | **Pn** | **22 31 00.0** | **+0.6** |
| SZAC | | | | AMI | | 22 31 56.8 | |
| | comp=E,0.1nm,0.3s | | | | | | |
| SZAC | | | | AMI | | 22 31 57.5 | |
| | comp=E,0.1nm,0.7s | | | | | | |
| **ASGA** | **Asgata** | **4.76** | **108** | P | **Pn** | **22 31 03.4** | **+0.4** |
| **CSS** | **Mathiatis** | **4.76** | **106** | P | **Pn** | **22 31 03.2** | **+0.1** |

*TUL* ***25*** *22:33:33.4±1.4,35.64N±0.01×97.24W±0.01, h6km±3km, ML2.6, mb_Lg2.6/4(NEIC), Error ellipse: s-maj=1.8km s-min=1.2km az=135.0*

**NEIC 25 22:33:33.7±1.5, 35.64N±0.01×97.24W±0.01, h5km±1km, Error ellipse: s-maj=2.8km s-min=2.0km az=122.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.04** | **68** | | Pg | 22 33 35.0 | +0.1 |
| OK005 | | | | | Sg | 22 33 36.1 | +0.3 |
| **OKCFA** | **Oklahoma City** | **0.28** | **218** | Pg | Pg | 22 33 39.1 | 0.0 |
| OKCFA | | | | Sg | Sg | 22 33 43.7 | +0.8 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **215** | Pg | Pg | 22 33 39.3 | +0.1 |
| OKCSW | | | | Sg | Sg | 22 33 43.7 | +0.8 |
| **FNO** | **Franklin** | **0.40** | **199** | Pg | Pg | 22 33 41.6 | +0.2 |
| FNO | | | | Sg | Sg | 22 33 47.5 | +0.7 |
| **W35A** | **Tecumseh** | **0.57** | **148** | Pg | Pg | 22 33 44.6 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.14** | **205** | | Pg | 22 33 55.4 | -0.3 |
| **TUL1** | **Leonard** | **1.21** | **77** | Pn | Pg | 22 33 55.7 | -1.2 |
| **T35A** | **Sooner Cattle** | **1.40** | **25** | Pn | Pn | 22 33 59.1 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.55** | **235** | Pn | Pn | 22 34 01.8 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.61** | **298** | Pn | Pn | 22 34 02.2 | -0.6 |
| **X37A** | **Clayton** | **1.86** | **124** | Pn | Pn | 22 34 05.4 | -0.7 |
| **HHAR** | **Hobbs** | **2.75** | **76** | IAmb_Lg | | 22 35 06.4 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **W39A** | **Magazine** | **2.86** | **98** | Pn | Pn | 22 34 20.7 | +0.8 |
| **K31A** | **O'Neill** | **7.07** | **351** | IAmb_Lg | | 22 37 26.6 | |
| | comp=Z,17nm,1.0s | | | | | | |

*IDC* ***25*** *22:39:45.6±0.4, 47.13S×33.18E, h0km, mb4.6/22, mb1 4.7/24, mb1mx4.7/27, mbtmp4.6/24, ML4.4/2, MS4.7/54, Ms1 4.7/54, ms1mx4.6/68, Error ellipse: s-maj=17.3km s-min=11.5km az=77.0*

*MOS* ***25*** *22:39:46.9±1.0, 47.04S×33.14E, h12km, mb5.0/12, MS4.6/5, Error ellipse: s-maj=20.0km s-min=9.1km az=87.2*

*GCMT* ***25*** *22:39:47.5±0.1, 47.08S±0.01×33.15E±0.02, h12km, MW5.3/112, Moment Tensor Solution. s55,c78; s112,c193; Duration: 1s2 Moment tensor: Scale 10^17 Nm; Mrr-0.91±.02; Mθθ 1.06±.02; Mϕϕ-0.15±.02; Mrθ0.76±.06; Mrϕ0.50±.02; Mθϕ0.17±.07; Best double couple: M0 1.32700×10^17 NP1:ϕs62.00000°, δ28.00000°, λ-103.00000°. NP2:ϕs256.00000°, δ63.00000°, λ-83.00000°. Principal axes: T 1.4890, Plg18.0000°, Azm341.0000°; N -0.3230, Plg6.0000°, Azm73.0000°; P -1.1660, Plg71.0000°, Azm181.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***25*** *22:39:48.5±1.7, 47.10S±0.06×33.1E±0.1, h10km±1km, mb5.2/101, Mwb5.3/14 Error ellipse: s-maj=14.5km s-min=10.0km az=87.0*

*NEIC* ***25*** *22:39:48.6, 47.11S×33.07E, h24km, Moment Tensor Solution. Moment tensor: Scale 10^17Nm; Mrr0.13; Mθθ0.94; Mϕϕ-1.07; Mrθ0.31; Mθϕ0.69; Mrr0.20; Fault plane solution: M0 1.28000×10^17 NP1:ϕs119.12000°, δ74.63000°, λ9.50000°. NP2:ϕs26.58000°, δ80.84000°, λ164.43000°. Principal axes: T 1.2654, Plg17.0000°, Azm342.0000°; N 0.0252, Plg72.0000°, Azm177.0000°; P -1.2905, Plg4.0000°, Azm73.0000°;*

**ISC 25 22:39:47.9±0.3, 47.10S±0.05×33.09E±0.06, h10km, n281, σ1s20/253, mb5.1/83, MS4.7/60, 13C, Prince Edward Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRZF** | **Crozet Islands** | **12.89** | **94** | Pn | **Pn** | **22 42 50.2** | **-0.8** |
| **SUR** | **Sutherland** | **17.44** | **323** | P | **Pn** | **22 43 49.4** | **-2.0** |
| | 1.4nm,0.3s,baz=140,slow=14,SNR=25 | | | | | | |
| SUR | | | | LR | LR | 22 49 18.5 | |
| | comp=Z,5μm,20.8s,baz=150,slow=33 | | | | | | |
| **SUR** | **Sutherland** | **17.44** | **323** | Pn | **Pn** | **22 43 49.0** | **-2.3** |
| **BOSA** | **Boshof** | **19.44** | **339** | P | **P** | **22 44 13.7** | **-0.8** |
| | 0.6nm,0.3s,baz=164,slow=11,SNR=14 | | | | | | |
| BOSA | | | | LR | LR | 22 50 30.0 | |
| | comp=Z,4μm,20.3s,baz=150,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **19.44** | **339** | P | **P** | **22 44 13.8** | **-0.8** |
| BOSA | | | | pmax | pmax | | |
| | comp=E,114nm,1.8s | | | | | | |
| **BOSA** | **Boshof** | **19.44** | **339** | P | **P** | **22 44 13.8** | **-0.8** |
| **SYO** | **Syowa Base** | **22.21** | **174↑** | *e*P | **P** | **22 44 43.4** | **-0.7** |
| **SYO** | **Syowa Base** | **22.21** | **174↑** | *e*P | **P** | **22 44 44.5** | **+0.4** |
| **SYO** | **Syowa Base** | **22.21** | **174↑** | *es*P | sP | 22 44 47.6 | +0.5 |
| **LBTB** | **Lobatse** | **22.83** | **342** | P | **P** | **22 44 49.9** | **-1.2** |
| | comp=Z,8.3nm,0.9s,baz=161,slow=11,SNR=12 | | | | | | |
| LBTB | | | | LR | LR | 22 52 33.2 | |
| | comp=Z,4μm,19.8s,baz=166,slow=34 | | | | | | |
| **LBTB** | **Lobatse** | **22.83** | **342** | P | **P** | **22 44 50.7** | **-0.5** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,53nm,1.1s | | | | | | |
| **LBTB** | **Lobatse** | **22.83** | **342** | P | **P** | **22 44 50.7** | **-0.5** |
| LBTB | | | | IAmb | IAmb | 22 44 56.5 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **25.61** | **154** | P | **P** | **22 45 16.4** | **-0.6** |
| | comp=Z,46nm,0.9s,baz=305,slow=10,SNR=9.1 | | | | | | |
| MAW | | | | LR | LR | 22 52 46.0 | |
| | comp=Z,2μm,20.7s,baz=306,slow=30 | | | | | | |
| **MAW** | **Mawson** | **25.61** | **154** | P | **P** | **22 45 18.5** | **+1.5** |
| MAW | | | | pmax | pmax | | |
| | comp=Z,154nm,2.0s | | | | | | |
| **MAW** | **Mawson** | **25.61** | **154** | P | **P** | **22 45 18.5** | **+1.5** |
| MAW | | | | IAmb | IAmb | 22 45 21.7 | |
| | comp=Z,154nm,1.9s | | | | | | |
| **NVL** | **N'lazarevskaya** | **25.84** | **196↑** | *i*P | **P** | **22 45 25.1** | **+6.0** |
| NVL | | | | *i* S | **PcP** | **22 48 45.7** | **-2.1** |
| NVL | | | | *i* SS | | 22 51 08.5 | |
| NVL | | | | pmax | pmax | | |
| | comp=Z,144nm,2.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=N,975nm,17.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=E,1μm,17.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,669nm,17.0s | | | | | | |
| **MATP** | **Matopo** | **26.87** | **350** | P | **P** | **22 45 28.7** | **-0.2** |
| | comp=Z,4.8nm,1.0s,baz=162,slow=16,SNR=6.8 | | | | | | |
| MATP | | | | LR | LR | 22 54 21.9 | |
| | comp=Z,1μm,21.6s,baz=167,slow=33 | | | | | | |
| **VOI** | **Vohitsoka** | **27.47** | **28** | P | **P** | **22 45 33.7** | **-0.5** |
| VOI | | | | IAmb | IAmb | 22 45 35.0 | |
| | comp=Z,82nm,1.6s | | | | | | |
| **VOI** | **Vohitsoka** | **27.47** | **28** | P | **P** | **22 45 35.3** | **+1.0** |
| **SNAA** | **Sanae** | **29.80** | **202** | P | **P** | **22 45 54.3** | **-0.2** |
| **SNAA** | **Sanae** | **29.80** | **202** | P | **P** | **22 45 53.6** | **-1.0** |
| | comp=Z,14nm,0.8s,baz=67,slow=4.7,SNR=16 | | | | | | |
| SNAA | | | | LR | LR | 22 55 46.2 | |
| | comp=Z,850nm,19.9s,baz=28,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **29.80** | **202** | *ce*P | **P** | **22 45 54.8** | **+0.3** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **29.80** | **202** | P | **P** | **22 45 53.6** | **-1.0** |
| **ABPO** | **Ambohimpanom** | **30.31** | **27** | P | **P** | **22 45 59.3** | **-0.3** |
| ABPO | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **ABPO** | **Ambohimpanom** | **30.31** | **27** | P | **P** | **22 45 59.3** | **-0.3** |
| **TSUM** | **Tsumeb** | **30.58** | **330** | LR | LR | 22 57 31.1 | |
| | comp=Z,4μm,19.8s,baz=157,slow=35 | | | | | | |
| **TSUM** | **Tsumeb** | **30.58** | **330** | P | **P** | **22 46 01.8** | **-0.2** |
| TSUM | | | | IAmb | IAmb | 22 46 04.8 | |
| | comp=Z,48nm,1.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **30.63** | **205** | P | **P** | **22 46 01.6** | **-0.2** |
| | baz=52,slow=9.0 | | | | | | |
| **OPO** | **Ambohidratompo** | **30.72** | **27** | P | **P** | **22 46 02.9** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=217,slow=5.9,SNR=3.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **30.75** | **206** | P | **P** | **22 46 02.9** | **+0.1** |
| **VNA3** | **Neumayer Olymp** | **31.43** | **205** | P | **P** | **22 46 07.8** | **-1.1** |
| **LSZ** | **Lusaka** | **31.99** | **351** | LR | LR | 22 58 06.6 | |
| | comp=Z,2μm,18.4s,baz=185,slow=34 | | | | | | |
| **LSZ** | **Lusaka** | **31.99** | **351** | P | **P** | **22 46 13.9** | **-0.4** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **LSZ** | **Lusaka** | **31.99** | **351** | P | **P** | **22 46 13.9** | **-0.4** |
| LSZ | | | | IAmb | IAmb | 22 46 15.7 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **BELA** | **Belgrano 2** | **39.78** | **198** | P | **P** | **22 47 19.9** | **-0.5** |
| **QSPA** | **South Pole Qui** | **43.12** | **180** | P | **P** | **22 47 47.1** | **-1.0** |
| | comp=Z,34nm,0.8s,baz=252,slow=3.4,SNR=134 | | | | | | |
| QSPA | | | | LR | LR | 23 04 07.2 | |
| | comp=Z,1μm,21.6s,baz=248,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **43.12** | **180** | P | **P** | **22 47 47.4** | **-0.7** |
| QSPA | | | | IAmb | IAmb | 22 47 48.2 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **KIBK** | **Kibwezi** | **44.79** | **7** | P | **P** | **22 48 01.6** | **-0.3** |
| **KMBO** | **Kilima Mbogo** | **45.93** | **6** | P | **P** | **22 48 11.4** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=186,slow=12,SNR=8.4 | | | | | | |
| KMBO | | | | LR | LR | 23 06 29.1 | |
| | comp=Z,1μm,18.1s,baz=158,slow=35 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **45.93** | **6** | *i* P | **P** | **22 48 12.2** | **+1.1** |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **45.93** | **6** | P | **P** | **22 48 12.0** | **+0.9** |
| **MBAR** | **Mbarara** | **46.35** | **357** | LR | LR | 23 05 53.9 | |
| | comp=Z,1μm,20.7s,baz=154,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **46.35** | **357** | P | **P** | **22 48 15.2** | **+0.8** |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,23nm,1.7s | | | | | | |
| **MBAR** | **Mbarara** | **46.35** | **357** | P | **P** | **22 48 15.2** | **+0.8** |
| **LODK** | **Lodwar** | **50.34** | **3** | P | **P** | **22 48 45.9** | **+0.8** |
| **SMAI** | **San Martin Ant** | **50.82** | **208** | P | **P** | **22 48 47.7** | **-0.2** |
| SMAI | | | | IAmb | IAmb | 22 48 55.8 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **PMSA** | **Palmer Station** | **51.44** | **213** | LR | LR | 23 06 26.2 | |
| | comp=Z,381nm,20.3s,baz=118,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **51.71** | **168** | P | **P** | **22 48 53.7** | **-0.8** |
| | comp=Z,19nm,0.8s,baz=250,slow=7.5,SNR=27 | | | | | | |
| VNDA | | | | LR | LR | 23 09 14.8 | |
| | comp=Z,2μm,21.8s,baz=216,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **51.71** | **168** | P | **P** | **22 48 54.6** | **+0.1** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,29nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **51.71** | **168** | P | **P** | **22 48 54.6** | **+0.1** |
| VNDA | | | | IAmb | IAmb | 22 49 05.4 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **DGAR** | **Diego Garcia** | **51.87** | **53** | *ce*P | **P** | **22 48 55.6** | **-0.9** |
| DGAR | | | | pmax | pmax | | |
| | comp=Z,66nm,1.3s | | | | | | |
| **DGAR** | **Diego Garcia** | **51.87** | **53** | P | **P** | **22 48 55.5** | **-0.9** |
| **ASCN** | **Ascension** | **56.10** | **298** | P | **P** | **22 49 26.3** | **-1.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MG01** | **Puerto William** | **58.47** | **222** | | **P** | **22 49 42.7** | **-0.9** |
| **USHA** | **Ushuaia** | **58.89** | **221** | LR | LR | 23 11 05.4 | |
| | comp=Z,748nm,18.3s,baz=123,slow=32 | | | | | | |
| **ATD** | **Arta Tunnel** | **59.01** | **11** | LR | LR | 23 13 25.6 | |
| | comp=Z,495nm,21.8s,baz=190,slow=34 | | | | | | |
| **ATD** | **Arta Tunnel** | **59.01** | **11** | P | **P** | **22 49 48.2** | **+0.4** |
| ATD | | | | IAmb | IAmb | 22 49 54.3 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **SOCY** | **Socotra** | **61.91** | **23** | P | **P** | **22 50 08.7** | **+1.0** |
| SOCY | | | | IAmb | IAmb | 22 50 27.7 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **MG05** | **Puerto Natales** | **62.80** | **222** | P | **P** | **22 50 13.3** | **+0.1** |
| **KIC** | **Kosan Boka** | **62.87** | **317** | *e*P | **P** | **22 50 12.7** | **-1.4** |
| | comp=Z,12nm,1.1s | | | | | | |
| **LIC** | **Lamto** | **62.89** | **316** | *e*P | **P** | **22 50 12.0** | **-2.2** |
| | comp=Z,23nm,1.0s | | | | | | |
| **DBIC** | **Dimbokro** | **63.20** | **317** | P | **P** | **22 50 15.1** | **-1.2** |
| | comp=Z,5.0nm,0.6s,baz=151,slow=7.2,SNR=14 | | | | | | |
| DBIC | | | | LR | LR | 23 13 40.8 | |
| | comp=Z,401nm,20.6s,baz=159,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **63.20** | **317** | P | **P** | **22 50 16.1** | **-0.1** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| **DBIC** | **Dimbokro** | **63.20** | **317** | P | **P** | **22 50 16.1** | **-0.1** |
| DBIC | | | | IAmb | IAmb | 22 50 22.5 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TIC** | **Toumodi** | **63.25** | **317** | *e*P | **P** | **22 50 14.1** | **-2.5** |
| **COCO** | **West Island** | **63.34** | **79** | P | **P** | **22 50 17.1** | **-0.1** |
| COCO | | | | pmax | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | |
| **COCO** | **West Island** | **63.34** | **79** | P | **P** | **22 50 17.1** | **-0.1** |
| **MORW** | **Morawa** | **64.76** | **106** | P | **P** | **22 50 26.9** | **+0.4** |
| **GO08** | **Villa O'Higgin** | **65.02** | **225** | P | **P** | **22 50 28.5** | **+0.7** |
| **PLTB** | **Pedras Altas** | **65.41** | **249** | P | **P** | **22 50 31.4** | **+0.7** |
| **TORD** | **Torodi Ar. Bea** | **66.23** | **326** | P | **P** | **22 50 35.0** | **-1.0** |
| | comp=Z,9.3nm,0.9s,baz=166,slow=7.4,SNR=45 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.23** | **326** | IAmb | IAmb | 22 50 43.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **COYC** | **Coyhaique** | **66.78** | **228** | P | **P** | **22 50 39.5** | **+0.2** |
| **ITAB** | **Concordia** | **67.47** | **254** | P | **P** | **22 50 43.9** | **-0.1** |
| **LL02** | **Futaleuf** | **68.33** | **229** | P | **P** | **22 50 49.5** | **+0.4** |
| LL02 | | | | IAmb | IAmb | 22 50 53.2 | |
| | comp=Z,45nm,1.6s | | | | | | |
| **PALK** | **Pallekele** | **68.59** | **52** | LR | LR | 23 13 51.3 | |
| | comp=Z,297nm,18.7s,baz=317,slow=30 | | | | | | |
| **PALK** | **Pallekele** | **68.59** | **52** | P | **P** | **22 50 51.1** | **+0.1** |
| PALK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **PALK** | **Pallekele** | **68.59** | **52** | P | **P** | **22 50 51.1** | **+0.1** |
| PALK | | | | IAmb | IAmb | 22 52 30.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **ITQB** | **Itaqui** | **68.74** | **249** | | pP | 22 50 53.6 | -0.6 |
| **PLCA** | **Paso Flores** | **69.38** | **232** | P | **P** | **22 50 55.4** | **-0.4** |
| | comp=Z,5.4nm,0.9s,baz=132,slow=6.6,SNR=6.6 | | | | | | |
| PLCA | | | | LR | LR | 23 18 39.3 | |
| | comp=Z,185nm,18.5s,baz=136,slow=34 | | | | | | |
| **PLCA** | **Paso Flores** | **69.38** | **232** | P | **P** | **22 50 56.3** | **+0.5** |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.4s | | | | | | |
| **PLCA** | **Paso Flores** | **69.38** | **232** | P | **P** | **22 50 56.2** | **+0.5** |
| PLCA | | | | IAmb | IAmb | 22 50 59.3 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **KOWA** | **Kowa** | **69.75** | **321** | P | **P** | **22 50 59.3** | **+1.2** |
| **LR03** | **Panguipulli** | **71.12** | **232** | P | **P** | **22 51 06.8** | **+0.4** |
| **RAYN** | **Ar Rayn** | **71.18** | **12** | P | **P** | **22 51 07.2** | **+0.4** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **RAYN** | **Ar Rayn** | **71.18** | **12** | P | **P** | **22 51 07.2** | **+0.4** |
| **FORT** | **Forrest** | **71.28** | **115** | P | **P** | **22 51 06.7** | **-0.8** |
| FORT | | | | IAmb | IAmb | 22 53 17.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LC01** | **Cunco** | **71.40** | **233** | P | **P** | **22 51 08.0** | **-0.1** |
| LC01 | | | | IAmb | IAmb | 22 51 10.3 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **71.48** | **251** | P | **P** | **22 51 08.4** | **-0.2** |
| | comp=Z,9.3nm,0.9s,baz=125,slow=6.8,SNR=10 | | | | | | |
| CPUP | | | | LR | LR | 23 15 59.5 | |
| | comp=Z,225nm,21.4s,baz=144,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **71.48** | **251** | P | **P** | **22 51 08.9** | **+0.2** |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CPUP** | **Villa Florida** | **71.48** | **251** | P | **P** | **22 51 08.9** | **+0.2** |
| CPUP | | | | IAmb | IAmb | 22 51 11.5 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **RCBR** | **Riachuelo** | **71.50** | **282** | LR | LR | 23 15 36.7 | |
| | comp=Z,212nm,21.1s,baz=270,slow=30 | | | | | | |
| **BDFB** | **Brasilia** | **72.69** | **266** | P | **P** | **22 51 16.7** | **+0.4** |
| | comp=Z,6.2nm,1.0s,baz=80,slow=5.6,SNR=6.0 | | | | | | |
| BDFB | | | | LR | LR | 23 16 51.6 | |
| | comp=Z,353nm,20.3s,baz=140,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **72.69** | **266** | P | **P** | **22 51 16.7** | **+0.4** |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **BDFB** | **Brasilia** | **72.69** | **266** | P | **P** | **22 51 16.7** | **+0.4** |
| **KASI** | **Kota Agung** | **73.34** | **80** | P | **P** | **22 51 20.6** | **+0.7** |
| | comp=Z,761nmcomp=Z,77nm,0.7s | | | | | | |
| **ML02** | **Panimavida** | **73.40** | **235** | P | **P** | **22 51 20.4** | **+0.4** |
| **MASI** | **Maura Aman, Be** | **73.59** | **77** | P | **P** | **22 51 22.4** | **+1.0** |
| | comp=Z,2μmcomp=Z,78nm,1.1s | | | | | | |
| **BI05** | **Punta Hualpn** | **73.67** | **233** | P | **P** | **22 51 21.2** | **-0.4** |
| **WSAR** | **Wadi Sarin** | **73.71** | **24** | LR | LR | 23 19 21.7 | |
| | comp=Z,275nm,18.1s,baz=214,slow=32 | | | | | | |
| **BO02** | **Sierra Bellavi** | **73.74** | **236** | P | **P** | **22 51 21.8** | **-0.4** |
| BO02 | | | | IAmb | IAmb | 22 51 31.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MDSI** | **Maura Dua** | **73.89** | **79** | P | **P** | **22 51 23.8**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GO03 | | | | | IAmb | IAmb | 22 52 01.0 | | |
| | comp=Z,43nm,1.6s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **78.67** | **104** | | LR | LR | 23 20 28.3 | | |
| | comp=Z,420nm,21.6s,baz=252,slow=31 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **78.67** | **104** | | P | **P** | **22 51 51.1** | **+0.9** | |
| **AC04** | **Llanos de Chal** | **78.71** | **241** | | P | **P** | **22 51 50.8** | **+0.4** | |
| **AC06** | **Mina Casimiro** | **78.90** | **242** | | IAmb | IAmb | 22 51 54.7 | | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **79.77** | **2** | | LR | LR | 23 27 30.2 | | |
| | comp=Z,527nm,18.9s,baz=358,slow=36 | | | | | | | | |
| **ASAR** | **Alice Springs** | **79.98** | **114** | | P | **P** | **22 51 56.0** | **-1.5** | |
| | comp=Z,3.2nm,0.7s,baz=222,slow=4.4,SNR=32 | | | | | | | | |
| ASAR | | | | | LR | LR | 23 20 18.7 | | |
| | comp=Z,494nm,21.6s,baz=232,slow=30 | | | | | | | | |
| **AS31** | **Alice Springs** | **79.98** | **114** | | P | **P** | **22 51 57.0** | **-0.5** | |
| **SIV** | **San Ignacio** | **81.24** | **256** | | LR | LR | 23 22 05.8 | | |
| | comp=Z,568nm,21.1s,baz=124,slow=31 | | | | | | | | |
| **PB15** | **IPOC Station P** | **81.41** | **245** | | P | **P** | **22 52 05.1** | **-0.3** | |
| **LVC** | **Limon Verde** | **81.50** | **246** | | LR | LR | 23 24 21.7 | | |
| | comp=Z,170nm,19.2s,baz=164,slow=33 | | | | | | | | |
| **LVC** | **Limon Verde** | **81.50** | **246** | | P | **P** | **22 52 06.0** | **0.0** | |
| LVC | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **LVC** | **Limon Verde** | **81.50** | **246** | | P | **P** | **22 52 06.0** | **0.0** | |
| LVC | | | | | IAmb | IAmb | 22 52 09.7 | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **CSS** | **Mathiatis** | **81.69** | **0** | | P | **P** | **22 52 07.6** | **+1.6** | |
| **PB06** | **IPOC Station P** | **81.84** | **246** | | IAmb | IAmb | 22 52 11.3 | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **82.25** | **151** | | LR | LR | 23 27 35.6 | | |
| | comp=Z,511nm,19.2s,baz=227,slow=35 | | | | | | | | |
| **PB03** | **IPOC Station P** | **82.43** | **246** | | P | **P** | **22 52 11.3** | **+0.6** | |
| PB03 | | | | | IAmb | IAmb | 22 52 13.9 | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **PB07** | **IPOC Station P** | **82.75** | **246** | | P | **P** | **22 52 13.0** | **+0.6** | |
| PB07 | | | | | IAmb | IAmb | 22 52 15.7 | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.98** | **112** | | P | **P** | **22 52 11.8** | **-1.6** | |
| | comp=Z,3.9nm,1.0s,baz=221,slow=4.0,SNR=13 | | | | | | | | |
| WRA | | | | | LR | LR | 23 22 11.0 | | |
| | comp=Z,671nm,21.6s,baz=218,slow=31 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **82.99** | **112** | | P | **P** | **22 52 13.3** | **-0.1** | |
| **WRAB** | **Tennant Creek** | **82.99** | **112** | *i* | P | **P** | **22 52 13.4** | **-0.1** | |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **82.99** | **112** | | P | **P** | **22 52 13.6** | **+0.1** | |
| WRAB | | | | | IAmb | IAmb | 22 52 22.6 | | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **PB01** | **IPOC Station P** | **83.01** | **247** | | P | **P** | **22 52 14.4** | **+0.8** | |
| PB01 | | | | | IAmb | IAmb | 22 52 16.9 | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **PB02** | **IPOC Station P** | **83.06** | **246** | | P | **P** | **22 52 15.2** | **+1.3** | |
| PB02 | | | | | IAmb | IAmb | 22 52 17.2 | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **83.10** | **112** | | P | **P** | **22 52 14.0** | **+0.1** | |
| **WB0** | **Warramunga Arr** | **83.14** | **112** | | P | **P** | **22 52 13.9** | **-0.4** | |
| **PB08** | **IPOC Station P** | **83.46** | **248** | | P | **P** | **22 52 16.4** | **0.0** | |
| PB08 | | | | | IAmb | IAmb | 22 52 20.9 | | |
| | comp=Z,41nm,1.9s | | | | | | | | |
| **ELL** | **Elmali** | **83.52** | **357** | | P | **P** | **22 52 16.6** | **+0.9** | |
| ELL | | | | | pmax | pmax | | | |
| | comp=Z,56nm,1.2s | | | | | | | | |
| **ELL** | **Elmali** | **83.52** | **357** | | P | **P** | **22 52 16.6** | **+0.9** | |
| **TA01** | **Diego Aracena** | **83.80** | **247** | | P | **P** | **22 52 17.6** | **+0.1** | |
| **GO01** | **Chusmiza** | **83.84** | **248** | | P | **P** | **22 52 18.3** | **-0.1** | |
| GO01 | | | | | IAmb | IAmb | 22 52 24.8 | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **PB11** | **IPOC Station P** | **84.06** | **247** | | P | **P** | **22 52 19.8** | **+0.7** | |
| **MARD** | **Mardin** | **84.32** | **6** | | P | **P** | **22 52 20.9** | **+1.2** | |
| **SBUM** | **Sibu** | **84.39** | **80** | | P | **P** | **22 52 20.0** | **-0.6** | |
| SBUM | | | | | IAmb | IAmb | 22 52 21.1 | | |
| | comp=Z,20nm,1.6s | | | | | | | | |
| **KEST** | **Kesra** | **85.17** | **341** | | LR | LR | 23 32 27.2 | | |
| | comp=Z,2µm,18.0s,baz=134,slow=37 | | | | | | | | |
| **HRA** | **Herat** | **85.25** | **24** | | IAmb | IAmb | 22 52 24.6 | | |
| | comp=Z,8.2nm,0.8s | | | | | | | | |
| **MANT** | **Manisa** | **85.31** | **356** | | P | **P** | **22 52 25.7** | **+0.9** | |
| MANT | | | | | IAmb | IAmb | 22 52 30.6 | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **GEVA** | **Gevas** | **85.50** | **8** | | P | **P** | **22 52 26.5** | **+0.7** | |
| GEVA | | | | | IAmb | IAmb | 22 52 37.5 | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **BNN** | **Bunyan** | **85.61** | **2** | | P | **P** | **22 52 26.3** | **+0.1** | |
| BNN | | | | | IAmb | IAmb | 22 52 27.9 | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| **LPAZ** | **La Paz** | **85.65** | **251** | | P | **P** | **22 52 27.9** | **+0.2** | |
| | comp=Z,2.6nm,0.7s,baz=214,slow=1.9,SNR=4.4 | | | | | | | | |
| LPAZ | | | | | LR | LR | 23 27 24.8 | | |
| | comp=Z,320nm,18.0s,baz=116,slow=33 | | | | | | | | |
| **LPAZ** | **La Paz** | **85.65** | **251** | | P | **P** | **22 52 27.6** | **-0.1** | |
| LPAZ | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.5s | | | | | | | | |
| **LPAZ** | **La Paz** | **85.65** | **251** | | P | **P** | **22 52 27.6** | **-0.1** | |
| LPAZ | | | | | IAmb | IAmb | 22 52 40.3 | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| **VAE** | **Valguarnera** | **85.84** | **345** | | LR | LR | 23 31 55.3 | | |
| | comp=Z,2µm,18.8s,baz=176,slow=36 | | | | | | | | |
| **BR131** | **Keskin Array S** | **86.44** | **0** | | P | **P** | **22 52 30.3** | **0.0** | |
| BR131 | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **BR131** | **Keskin Array S** | **86.44** | **0** | | P | **P** | **22 52 30.3** | **0.0** | |
| **BRTR** | **Keskin Array B** | **86.44** | **0** | | P | **P** | **22 52 30.3** | **0.0** | |
| | comp=Z,3.5nm,0.6s,baz=170,slow=8.4,SNR=28 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **86.44** | **0** | | P | **P** | **22 52 30.1** | **-0.2** | |
| **MDT** | **Midelt** | **86.48** | **329** | | LR | LR | 23 31 29.1 | | |
| | comp=Z,772nm,21.0s,baz=150,slow=36 | | | | | | | | |
| **GNI** | **Garni** | **87.48** | **9** | | LR | LR | 23 30 52.6 | | |
| | comp=Z,417nm,20.7s,baz=208,slow=35 | | | | | | | | |
| **GNI** | **Garni** | **87.48** | **9** | *ce* | P | **P** | **22 52 35.9** | **+0.5** | |
| GNI | | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **GEYT** | **Alibeck** | **87.56** | **20** | | P | **P** | **22 52 35.2** | **-0.4** | |
| | comp=Z,4.2nm,0.8s,baz=216,slow=15,SNR=5.9 | | | | | | | | |
| GEYT | | | | | LR | LR | 23 29 25.1 | | |
| | comp=Z,138nm,20.6s,baz=226,slow=34 | | | | | | | | |
| **GEYT** | **Alibeck** | **87.56** | **20** | | P | **P** | **22 52 35.6** | **-0.1** | |
| GEYT | | | | | IAmb | IAmb | 22 52 36.3 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.97** | **60** | | P | **P** | **22 52 37.3** | **-0.7** | |
| | comp=Z,0.9nm,0.4s,baz=215,slow=5.5,SNR=9.2 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.97** | **60** | | P | **P** | **22 52 36.9** | **-1.2** | |
| **CHTO** | **Chiang Mai** | **88.25** | **60** | | P | **P** | **22 52 38.9** | **-0.5** | |
| CHTO | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **88.25** | **60** | | P | **P** | **22 52 38.9** | **-0.5** | |
| **URZ** | **Urewera** | **89.14** | **152** | | LR | LR | 23 29 50.4 | | |
| | comp=Z,889nm,19.8s,baz=214,slow=34 | | | | | | | | |
| **CTA** | **Charters Tower** | **90.19** | **120** | | LR | LR | 23 28 44.9 | | |
| | comp=Z,612nm,18.5s,baz=216,slow=33 | | | | | | | | |
| **MAK** | **Makhachkala** | **90.58** | **11** | *e* | P | P | 22 52 44.3 | -5.3 | |
| MAK | | | | | pmax | pmax | | | |
| | comp=Z,38nm,1.0s | | | | | | | | |
| **MDP** | **Montagnes des** | **90.79** | **277** | | LR | LR | 23 27 32.1 | | |
| | comp=Z,155nm,19.6s,baz=106,slow=32 | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **90.85** | **7** | *i* | P | **P** | **22 52 51.6** | **+0.4** | |
| **KBZ** | **Khabaz** | **90.86** | **7** | *i* | P | **P** | **22 52 51.4** | **+0.5** | |
| | comp=Z,3.5nm,0.9s,baz=176,slow=2.7,SNR=11 | | | | | | | | |
| KBZ | | | | | LR | LR | 23 33 45.5 | | |
| | comp=Z,299nm,20.0s,baz=186,slow=36 | | | | | | | | |
| **KBZ** | **Khabaz** | **90.86** | **7** | *ce* | P | **P** | **22 52 51.8** | **+0.9** | |
| KBZ | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **KIV** | **Kislovodsk** | **91.06** | **7** | *e* | P | **P** | **22 52 52.3** | **+0.3** | |
| KIV | | | | *e* | | | 23 03 23.8 | | |
| KIV | | | | *e* | SS | SS | 23 09 55.2 | +0.9 | |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| KIV | | | | | MLR | MLR | | | |
| | comp=Z,210nm,20.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | **91.06** | **7** | | P | **P** | **22 52 53.0** | **+0.9** | |
| **PTGA** | **Pitinga** | **91.56** | **267** | | LR | LR | 23 28 49.4 | | |
| | comp=Z,115nm,19.1s,baz=138,slow=32 | | | | | | | | |
| **GAR** | **Garm** | **91.94** | **28** | | P | **P** | **22 52 56.3** | **0.0** | |
| GAR | | | | | IAmb | IAmb | 22 53 05.2 | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **92.42** | **355** | | P | **P** | **22 52 57.6** | **-0.7** | |
| MLR | | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **92.42** | **355** | | P | **P** | **22 52 57.6** | **-0.7** | |
| MLR | | | | | IAmb | IAmb | 22 53 20.3 | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **92.50** | **332** | | P | **P** | **22 52 59.5** | **+0.7** | |
| | comp=Z,0.7nm,0.9s,baz=122,slow=5.6,SNR=4.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **92.50** | **332** | | P | **P** | **22 53 00.1** | **+1.4** | |
| **KSH** | **Kashi** | **94.33** | **32** | | P | **P** | **22 53 05.3** | **-2.0** | |
| **NNA** | **Nana** | **94.43** | **247** | | LR | LR | 23 34 47.9 | | |
| | comp=Z,115nm,18.8s,baz=120,slow=35 | | | | | | | | |
| **BURAR** | **Bucovina Array** | **94.58** | **355** | | P | **P** | **22 53 08.9** | **+0.7** | |
| **DAVOX** | **Davos/Dischmat** | **95.68** | **344** | | LR | LR | 23 39 09.1 | | |
| | comp=Z,1µm,19.0s,baz=162,slow=37 | | | | | | | | |
| **UZH** | **Uzhgorod** | **95.81** | **353** | *eP* | | **P** | **22 53 14.0** | **+0.4** | |
| UZH | | | | *i* | | | 22 53 22.6 | | |
| **PZH** | **PanZhiHua** | **95.81** | **57** | | P | **P** | **22 53 17.8** | **+3.4** | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,140nm,5.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **96.59** | **29** | *i* | P | **P** | **22 53 17.9** | **+0.3** | |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,2.5s | | | | | | | | |
| **GERES** | **GERESS Array B** | **97.04** | **347** | | LR | LR | 23 42 22.0 | | |
| | comp=Z,359nm,18.0s,baz=180,slow=39 | | | | | | | | |
| **VRAC** | **Vranov** | **97.09** | **349** | | LR | LR | 23 41 25.9 | | |
| | comp=Z,210nm,18.0s,baz=179,slow=38 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **97.48** | **358** | | LR | LR | 23 41 15.8 | | |
| | comp=Z,251nm,18.3s,baz=174,slow=38 | | | | | | | | |
| **RPN** | **Rapa Nui** | **98.71** | **213** | | LR | LR | 23 27 33.2 | | |
| | comp=Z,157nm,21.5s,baz=78,slow=29 | | | | | | | | |
| **PMG** | **Port Moresby** | **99.00** | **114** | | LR | LR | 23 32 57.9 | | |
| | comp=Z,453nm,20.2s,baz=192,slow=32 | | | | | | | | |
| **ATAH** | **Atahualpa** | **99.10** | **249** | | LR | LR | 23 34 53.4 | | |
| | comp=Z,148nm,19.8s,baz=142,slow=33 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **99.34** | **137** | | LR | LR | 23 29 45.0 | | |
| | comp=Z,297nm,20.7s,baz=210,slow=30 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **99.34** | **137** | *eLR* | | LR | 23 25 51.0 | | |
| | comp=Z,485nm,22.1s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **99.51** | **16** | | LR | LR | 23 38 46.5 | | |
| | comp=Z,127nm,21.6s,baz=207,slow=36 | | | | | | | | |
| **CLL** | **Collm** | **99.54** | **347** | *eP* | | **Pdif** | **22 53 28.0** | **-2.4** | |
| CLL | | | | | MLR | MLR | | | |
| | comp=Z,400nm,20.0s | | | | | | | | |
| **CLL** | **Collm** | **99.54** | **347** | *e* | Pdif | **Pdif** | **22 53 30.0** | **-0.4** | |
| CLL | | | | *e* | PP | **PP** | **22 57 36.0** | **+1.2** | |
| CLL | | | | *e* | PPPP | | 23 01 30.0 | | |
| CLL | | | | *e* | SKKSac | **SKKSac** | **23 04 42.0** | **+1.6** | |
| CLL | | | | *e* | PS | **PS** | **23 06 29.0** | **-2.6** | |
| CLL | | | | *e* | SS | **SS** | **23 11 56.0** | **+1.7** | |
| CLL | | | | | LmV | | 23 40 00.0 | | |
| | comp=Z,400nm,20.0s | | | | | | | | |
| **BELG** | **Belogornoye** | **99.89** | **9** | | LR | LR | 23 39 54.5 | | |
| | comp=Z,153nm,20.2s,baz=156,slow=36 | | | | | | | | |
| **JAY** | **Jayapura** | **100.06** | **105** | | LR | LR | 23 33 39.9 | | |
| | comp=Z,389nm,20.9s,baz=209,slow=32 | | | | | | | | |
| **CD2** | **Chengdu** | **100.31** | **56** | *eP* | | **Pdif** | **22 53 35.5** | **+1.1** | |
| **MNK** | **Minsk** | **101.32** | **357** | *i* | P | **Pdif** | **22 53 37.0** | **-1.2** | |
| MNK | | | | *i* | PPP | PPP | 22 59 59.0 | | |
| MNK | | | | *i* | S | **SKSac** | **23 04 16.3** | **-0.4** | |
| MNK | | | | *i* | SS | **SS** | **23 12 19.1** | **+0.1** | |
| MNK | | | | *i* | SSS | SSS | 23 16 10.9 | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=N,9.0nm,1.0s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=E,1.0nm,1.0s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=Z,176nm,18.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=N,103nm,18.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=E,13nm,18.0s | | | | | | | | |
| **MNK** | **Minsk** | **101.32** | **357** | *i* | P | **Pdif** | **22 53 37.1** | **-1.2** | |
| | comp=E,1.0nm,1.0s | | | | | | | | |
| MNK | | | | *i* | P | **Pdif** | **22 53 37.1** | **-1.2** | |
| | comp=N,9.0nm,1.0s | | | | | | | | |
| MNK | | | | *i* | P | **Pdif** | **22 53 37.1** | **-1.2** | |
| | comp=Z,3.0nm,1.0s,baz=176 | | | | | | | | |
| MNK | | | | *i* | PPP | PPP | 22 59 59.0 | | |
| MNK | | | | *i* | S | **SKSac** | **23 04 16.4** | **-0.4** | |
| MNK | | | | *i* | SKKS | | 23 06 27.7 | | |
| MNK | | | | *i* | SS | **SS** | **23 12 19.1** | **+0.1** | |
| MNK | | | | *i* | SSS | SSS | 23 16 10.9 | | |
| MNK | | | | *i* | LQ | LQ | 23 27 51.2 | | |
| MNK | | | | *i* | LR | LR | 23 30 48.0 | | |
| MNK | | | | *i* | LRM | MLR | 23 37 20.2 | | |
| | comp=Z,176nm,18.4s | | | | | | | | |
| MNK | | | | *i* | LRM | MLR | 23 39 49.9 | | |
| | comp=E,13nm,18.4s | | | | | | | | |
| MNK | | | | *i* | LRM | MLR | 23 39 49.9 | | |
| | comp=N,103nm,18.4s | | | | | | | | |
| **OBN** | **Obninsk** | **101.88** | **2** | *i* | P | **Pdif** | **22 53 38.0** | **-2.7** | |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **102.56** | **37** | *eP* | | **Pdif** | **22 53 50.5** | **+6.4** | |
| WMQ | | | | | pP | sPdif | 22 53 55.0 | +7.7 | |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| WMQ | | | | | LR | LR | | | |
| | comp=Z,130nm,17.9s | | | | | | | | |
| WMQ | | | | | LR | LR | | | |
| | comp=Z,180nm,20.5s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **111.85** | **53** | *e* | PKP | **PKiKP** | **22 58 20.0** | **-2.6** | |
| **SONM** | **Songino Array** | **114.04** | **45** | | PKP | PKPdf | 22 58 25.1 | -1.5 | |
| | comp=Z,0.6nm,0.7s,baz=199,slow=2.4,SNR=4.5 | | | | | | | | |
| **PPT2** | **Papeete2** | **115.57** | **177** | *e* | LR | LR | 23 33 23.1 | | |
| | comp=Z,1µm,23.0s | | | | | | | | |
| **CN2** | **Changchun** | **121.60** | **58** | *e* | PKP | **PKPdf** | **22 58 37.5** | **-3.6** | |
| CN2 | | | | *e* | PP | **PP** | **23 00 15.3** | **+1.1** | |
| CN2 | | | | | SKKS | | 23 07 03.3 | | |
| CN2 | | | | | AMB | AMB | | | |
| | comp=Z,190nm,6.0s | | | | | | | | |
| **NRIK** | **Noril'sk** | **122.81** | **20** | *c i* | PKiKP | **PKiKP** | **22 58 42.8** | **0.0** | |
| NRIK | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **123.97** | **188** | *e* | LR | LR | 23 37 18.8 | | |
| | comp=Z,231nm,22.8s | | | | | | | | |
| **KLR** | **Kul'dur** | **128.24** | **56** | *i* | PKiKP | **PKPdf** | **22 58 53.2** | **-0.4** | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **TIXI** | **Tiksi** | **135.60** | **27** | *c i* | PKiKP | **PKPdf** | **22 59 05.4** | **-1.4** | |
| TIXI | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,2.5s | | | | | | | | |
| **TIXI** | **Tiksi** | **135.60** | **27** | | PKPdf | **PKPdf** | **22 59 07.0** | **+0.1** | |
| **WMOK** | **Wichita Mounta** | **142.16** | **269** | | PKiKP | **PKPdf** | **22 59 17.5** | **-2.6** | |
| **WMOK** | **Wichita Mounta** | **142.16** | **269** | | | **PKPdf** | **22 59 17.5** | **-2.6** | |
| **TXAR** | **Lajitas Array** | **142.23** | **258** | | PKhKP | PKPpre | 22 59 16.2 | | |
| | comp=Z,0.9nm,0.7s,baz=158,slow=4.0,SNR=10.0 | | | | | | | | |
| TXAR | | | | | | **PKPdf** | **22 59 21.5** | **+1.1** | |
| | comp=Z,1.3nm,0.7s,baz=117,slow=4.6,SNR=9.1 | | | | | | | | |
| **SEY** | **Seymchan** | **143.35** | **42** | *i* | PKiKP | **PKPdf** | **22 59 20.5** | **-0.7** | |
| **RES** | **Resolute Bay** | **144.66** | **339** | | PKP | PKPbc | 22 59 22.4 | +0.3 | |
| | comp=Z,1.8nm,0.6s,baz=51,slow=6.0,SNR=12 | | | | | | | | |
| **RES** | **Resolute Bay** | **144.66** | **339** | | PKiKP | **PKPdf** | **22 59 23.3** | **+0.1** | |
| **RES** | **Resolute Bay** | **144.66** | **339** | | | **PKPdf** | **22 59 23.3** | **+0.1** | |
| **PETK** | **Petropavlovsk-** | **144.74** | **59** | | PKP | **PKPab** | **22 59 21.8** | **-1.0** | |
| | comp=Z,4.1nm,0.8s,baz=228,slow=5.8,SNR=4.1 | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **144.95** | **274** | | PKiKP | **PKPdf** | **22 59 25.2** | **+0.3** | |
| **CBKS** | **Cedar Bluff** | **144.95** | **274** | | | **PKPdf** | **22 59 25.2** | **+0.3** | |
| **ECSD** | **EROS Data Cent** | **145.03** | **283** | | | **PKPab** | **22 59 24.3** | **+0.1** | |
| **PET** | **Petropavlovsk** | **145.28** | **60** | *c i* | PKiKP | **PKPbc** | **22 59 23.6** | **-1.0** | |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,69nm,1.3s | | | | | | | | |
| **PET** | **Petropavlovsk** | **145.28** | **60** | | | **PKPbc** | **22 59 24.1** | **-0.5** | |
| **F33A** | **5 Mile Ranch,** | **145.61** | **287** | | | **PKPdf** | **22 59 25.7** | **0.0** | |
| **AGMN** | **Agassiz Nation** | **146.14** | **291** | | | **PKPbc** | **22 59 27.6** | **+0.1** | |
| **ULM** | **Lac du Bonnet** | **146.69** | **295** | | PKPbc | **PKPdf** | **22 59 27.5** | **+0.1** | |
| | comp=Z,3.1nm,0.7s,baz=140,slow=3.8,SNR=4.5 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **146.69** | **295** | | PKP2 | **PKPbc** | **22 59 28.6** | **-0.5** | |
| **ULM** | **Lac du Bonnet** | **146.69** | **295** | | | **PKPbc** | **22 59 28.6** | **-0.5** | |
| **FCC** | **Fort Churchill** | **146.97** | **310** | | PKP2 | **PKPbc** | **22 59 29.5** | **-0.1** | |
| **FCC** | **Fort Churchill** | **146.97** | **310** | | | **PKPbc** | **22 59 29.5** | **-0.1** | |
| **121A** | **Cookes Peak, D** | **146.99** | **258** | | | **PKPab** | **22 59 32.6** | **+0.4** | |
| **BNM** | **Barren Site** | **147.17** | **261** | | | **PKiKP** | **22 59 34.5** | **+0.8** | |
| **ANMO** | **Albuquerque** | **147.51** | **263** | *c i* | PKP2 | **PKPdf** | **22 59 30.7** | **+1.2** | |
| ANMO | | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.7s | | | | | | | | |
| **BILL** | **Bilibino** | **148.48** | **32** | *i* | PKP2 | **PKPbc** | **22 59 33.7** | **+0.3** | |
| BILL | | | | *e* | | | 23 03 05.6 | | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,37nm,1.3s | | | | | | | | |
| BILL | | | | | MLR | MLR | | | |
| | comp=Z,138nm,21.0s | | | | | | | | |
| **BILL** | **Bilibino** | **148.48** | **32** | | | **PKPbc** | **22 59 34.1** | **+0.7** | |
| **TUC** | **Tucson** | **148.84** | **255** | | PKP2 | **PKiKP** | **22 59 36.3** | **-0.6** | |
| **TUC** | **Tucson** | **148.84** | **255** | | | **PKiKP** | **22 59 36.3** | **-0.6** | |
| **214A** | **Organ Pipe Nat** | **149.94** | **252** | | PKPdf | **PKPdf** | **22 59 34.8** | **+1.5** | |
| **RSSD** | **Black Hills** | **150.13** | **280** | | PKiKP | **PKPbc** | **22 59 38.6** | **0.0** | |
| **RSSD** | **Black Hills** | **150.13** | **280** | | | **PKPbc** | **22 59 38.6** | **0.0** | |
| **PV07** | **Paradox Valley** | **150.85** | **267** | | | **PKiKP** | **22 59 43.6** | **+2.5** | |
| **FFC** | **Flin Flon** | **151.09** | **302** | | PKiKP | **PKiKP** | **22 59 43.8** | **+3.1** | |
| **FFC** | **Flin Flon** | **151.09** | **302** | | | **PKiKP** | **22 59 43.8** | **+3.1** | |
| **K22A** | **Casper** | **151.27** | **276** | | | **PKiKP** | **22 59 43.1** | **+1.4** | |
| **O20A** | **White River Ci** | **151.38** | **270** | | PKPbc | **PKiKP** | **22 59 41.9** | **-0.2** | |
| O20A | | | | | PKPab | **pPKPab** | **22 59 52.6** | **+0.4** | |
| **U15A** | **North Rim** | **152.27** | **260** | | PKPab | **PKPab** | **22 59 57.4** | **+3.6** | |
| **MTPU** | **Mount Pierson** | **153.06** | **263** | | PKPdf | **PKPdf** | **22 59 40.3** | **+1.9** | |
| MTPU | | | | | | **PKPab** | **22 59 57.3** | **+0.1** | |
| **A36M** | **Sachs Harbour** | **153.07** | **345** | | PKPdf | **PKPdf** | **22 59 38.5** | **+1.8** | |
| A36M | | | | | | **PKiKP** | **22 59 44.2** | **-0.1** | |
| **PDAR** | **Pinedale Array** | **153.38** | **274** | | PKPbc | **PKPbc** | **22 59 43.9** | **-2.1** | |
| | comp=Z,0.5nm,0.6s,baz=107,slow=4.8,SNR=5.1 | | | | | | | | |
| PDAR | | | | | PKPab | **PKPab** | **22 59 58.2** | **0.0** | |
| | comp=Z,0.8nm,0.6s,baz=126,slow=5.5,SNR=5.8 | | | | | | | | |
| **CCUT** | **Cedar City** | **153.60** | **261** | | PKPab | **PKPab** | **23 00 02.9** | **+3.5** | |
| **NLU** | **North Lily Min** | **153.91** | **267** | | | **PKPdf** | **22 59 39.7** | **+0.4** | |
| NLU | | | | | PKPbc | **PKPbc** | **22 59 47.1** | **-0.2** | |
| NLU | | | | | PKPab | **sPKPab** | **23 00 03.9** | **+0.1** | |
| **YKA** | **Yellowknife Ar** | **156.19** | **322** | | PKP | **PKPdf** | **22 59 39.1** | **-2.2** | |
| | comp=Z,0.4nm,0.8s,baz=62,slow=1.4,SNR=4.9 | | | | | | | | |
| YKA | | | | | PKPab | **PKPab** | **23 00 09.7** | **+0.4** | |
| | comp=Z,0.7nm,0.7s,baz=56,slow=2.6,SNR=8.4 | | | | | | | | |
| **INK** | **Inuvik** | **157.67** | **347** | | PKPab | **PKPab** | **23 00 15.1** | **-0.4** | |
| | comp=Z,2.6nm,0.8s,baz=31,slow=9.0,SNR=8.2 | | | | | | | | |
| **INK** | **Inuvik** | **157.67** | **347** | | PKiKP | **PKPdf** | **22 59 45.7** | **+2.7** | |
| **INK** | **Inuvik** | **157.67** | **347** | | PKPdf | **PKPdf** | **22 59 45.7** | **+2.7** | |
| INK | | | | | | **PKPab** | **23 00 16.5** | **+1.0** | |
| **TOLK** | **Toolik Lake Re** | **158.35** | **3** | | PKPdf | **PKPdf** | **22 59 45.6** | **+1.6** | |
| TOLK | | | | | | **pPKPab** | **23 00 20.5** | **-0.3** | |
| **J08A** | **Circle Bar Ran** | **159.68** | **270** | | PKPab | **PKPab** | **23 00 26.8** | **+1.6** | |
| **MOD** | **Modoc Plateau** | **160.37** | **264** | | PKPab | **PKPab** | **23 00 27.3** | **-1.0** | |
| **ILAR** | **Eielson Array** | **162.28** | **360** | | PKPab | **PKPab** | **23 00 35.0** | **-0.7** | |
| | comp=Z,0.8nm,0.8s,baz=337,slow=3.5,SNR=8.4 | | | | | | | | |

**JMA 25 22:50:15.4, 35.11N×138.18E, h13km, M2.7, 1D**
**Broadband fault plane solution: P waves. NP1:** $\phi_s$70.00000°, $\delta$64.00000°, $\lambda$-157.00000°. **NP2:** $\phi_s$329.00000°, $\delta$70.00000°, $\lambda$-28.00000°. **Principal axes:** T Plg4.0000°, Azm21.0000°; N Plg56.0000°, Azm117.0000°; P Plg34.0000°, Azm288.0000°; **Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHZ3** | **Shizuoka 3** | **0.05** | **151** | P | | Pg | 22 50 17.9 | -0.1 |
| SHZ3 | | | | S | | Sg | 22 50 19.8 | 0.0 |
| **JNY** | **Yasuok** | **0.36** | **314** | ↓P | | Pg | 22 50 22.6 | -0.1 |
| JNY | | | | *e*S | | Sg | 22 50 27.6 | 0.0 |
| **JFNN** | **Fujinakano** | **0.42** | **78** | P | | Pb | 22 50 24.3 | -0.4 |
| **JIZS** | **Izushimoda** | **0.69** | **124** | P | | Pg | 22 50 28.4 | -0.5 |
| **JOD2** | **Odawara 2** | **0.76** | **78** | P | | Pg | 22 50 29.7 | -0.4 |
| JOD2 | | | | S | | Sg | 22 50 40.0 | -0.1 |
| **TK04** | **Tokai 4** | **0.77** | **199** | P | | Pb | 22 50 30.7 | +0.2 |
| **MAT** | **Matsushiro** | **1.43** | **1** | P | | Pn | 22 50 41.0 | -0.1 |
| MAT | | | | *e*S | | Sn | 22 50 59.1 | -0.7 |

*AEIC* ***25*** *23:16:04±2.6, 51.8N±0.1×166.1W±0.1, h12km±6km Error ellipse: s-maj=15.9km s-min=9.5km az=156.0*
**NEIC 25 23:16:03.8±2.0, 52.03N±0.04×166.38W±0.08, h10km±2km, mb3.7/3, ML2.8**(AEIC)**, Error ellipse: s-maj=8.2km s-min=6.5km az=92.0, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SATY** | **Saty** 879nm,0.2s | **0.23** | **63** | ⇑ | *e*P | **Pg** | **23 31 40.8** | **+0.1** | MTBS | 358nm,0.3s | | | S | **Sb** | **23 32 15.7** | **-0.7** | **EKS2** | **Erkin-Say** SNR=8.0 | **3.22** | **266** | P | **Pb** | **23 32 31.1** | **-2.4** |
| SATY | 17μm,0.3s | | | | *e*S | **Sg** | **23 31 43.8** | **0.0** | **MTBS** | **Maitube** baz=78 | **1.26** | **279** | *e*P | **Pn** | **23 31 59.3** | **-0.7** | **AML** | **Almayashu** SNR=31 | **3.38** | **257** | P | **Pn** | **23 32 32.7** | **+3.3** |
| **SATY** | **Saty** baz=81 | **0.23** | **63** | ⇑ | *i*P | **Pg** | **23 31 40.7** | **+0.1** | MTBS | baz=78 | | | *e*S | **Sb** | **23 32 15.8** | **-0.7** | **BTLS** | **Baital** 42nm,0.5s | **3.61** | **307** | *e*P | **Pb** | **23 32 40.5** | **+0.5** |
| SATY | baz=81 | | | | *e*S | **Sg** | **23 31 44.5** | **+0.7** | **ARXS** | **Arharly** 154nm,0.3s | **1.28** | **350** | *e*P | **Pn** | **23 31 59.9** | **-0.4** | BTLS | 7.0nm,0.6s | | | *e*S | **Sb** | **23 33 26.4** | **+2.4** |
| **SATY** | **Saty** 879nm,0.2s | **0.23** | **63** | | P | **Pg** | **23 31 40.8** | **+0.1** | ARXS | 2μm,0.5s | | | *e*S | **Sg** | **23 32 16.8** | **-0.3** | **BTLS** | **Baital** baz=305 | **3.61** | **307** | *e*Pg | **Pb** | **23 32 40.6** | **+0.5** |
| SATY | 17μm,0.3s | | | | S | **Sg** | **23 31 43.8** | **0.0** | **ARXS** | **Arharly** 154nm,0.3s | **1.28** | **350** | P | **Pn** | **23 31 59.9** | **-0.4** | **BTLS** | **Baital** 42nm,0.5s | **3.61** | **307** | Pg | **Pb** | **23 32 40.5** | **+0.5** |
| **SATY** | **Saty** baz=64 | **0.23** | **63** | ⇑ | *e*P | **Pg** | **23 31 40.8** | **+0.1** | ARXS | 2μm,0.5s | | | S | **Sg** | **23 32 16.8** | **-0.3** | BTLS | 7.0nm,0.6s | | | Lg | Lg | 23 33 26.4 | |
| SATY | baz=64 | | | ⇑ | *e*S | **Sg** | **23 31 43.8** | **0.0** | **KTBS** | **Karatobe** 249nm,0.2s | **1.30** | **306** | *e*P | **Pn** | **23 32 00.4** | **-0.1** | **MRKS** | **Merke** 8.8nm,0.3s | **3.61** | **268** | *e*P | **Pb** | **23 32 42.5** | **+2.3** |
| **ZHN** | **Zhinishke** 697nm,0.2s | **0.31** | **46** | | *e*P | **Pg** | **23 31 42.1** | **-0.1** | KTBS | 364nm,0.4s | | | *e*S | **Sb** | **23 32 17.4** | **-0.2** | MRKS | 174nm,0.6s | | | *e*S | **Sg** | **23 33 29.5** | **-2.6** |
| ZHN | 7μm,0.2s | | | | *e*S | **Sg** | **23 31 46.4** | **+0.1** | **KTBS** | **Karatobe** 249nm,0.2s | **1.30** | **306** | P | **Pn** | **23 32 00.4** | **-0.1** | **MRKS** | **Merke** 8.8nm,0.3s | **3.61** | **268** | Pg | **Pb** | **23 32 42.5** | **+2.3** |
| **ZHN** | **Zhinishke** baz=54 | **0.31** | **46** | *i* | P | **Pg** | **23 31 42.2** | **-0.1** | KTBS | 364nm,0.4s | | | S | **Sb** | **23 32 17.4** | **-0.2** | MRKS | 174nm,0.6s | | | Lg | Lg | 23 33 29.5 | |
| ZHN | baz=54 | | | | *e*S | **Sg** | **23 31 46.3** | **0.0** | **KTBS** | **Karatobe** baz=5.0 | **1.30** | **306** | *e*P | **Pn** | **23 32 00.4** | **-0.1** | **MAKZ** | **Makanchi** 2.1nm,0.3s | **4.72** | **34** | ⇓ | Pn | **23 32 48.8** | **+1.3** |
| **ZHN** | **Zhinishke** 697nm,0.2s | **0.31** | **46** | | P | **Pg** | **23 31 42.1** | **-0.1** | KTBS | baz=5.0 | | | *e*S | **Sb** | **23 32 17.4** | **-0.2** | MAKZ | 31nm,0.6s | | | ⇑Lg | Lg | 23 34 02.8 | |
| ZHN | 7μm,0.2s | | | | S | **Sg** | **23 31 46.4** | **+0.1** | **ULHL** | **Ulahol** SNR=583 | **1.57** | **244** | P | **Pn** | **23 32 04.8** | **+0.5** | **MK31** | **Makanchi Array** 4.6nm,0.2s,baz=210,slow=13,SNR=810 | **4.84** | **36** | Pn | **Pn** | **23 32 50.3** | **+1.1** |
| **ZHN** | **Zhinishke** baz=46 | **0.31** | **46** | *e*P | | **Pg** | **23 31 42.2** | **-0.1** | **ULHL** | **Ulahol** baz=43 | **1.57** | **244** | ⇑ | *i*P | **Pn** | **23 32 04.8** | MK31 | 7.9nm,0.3s,baz=218,slow=30,SNR=11 | | | ⇑Lg | Lg | 23 34 05.7 | |
| ZHN | baz=46 | | | | *e*S | **Sg** | **23 31 46.5** | **+0.1** | ULHL | baz=43 | | | ⇑ | *i*S | **Sb** | **23 32 25.6** | **MKAR** | **Makanchi Array** 5.2nm,0.3s,baz=221,slow=17,SNR=637 | **4.84** | **36** | Pn | **Pn** | **23 32 50.8** | **+1.6** |
| **ANVS** | **Anan'yevo** baz=43 | **0.38** | **243** | ⇑ | *i*P | **Pg** | **23 31 43.8** | **+0.2** | **KUU** | **Kurty** 481nm,0.2s | **1.61** | **306** | *e*P | **Pb** | **23 32 05.6** | **-0.4** | MKAR | 2.0nm,0.3s,baz=216,slow=16,SNR=8.4 | | | Pg | **Pb** | **23 33 02.4** | **+1.3** |
| ANVS | baz=43 | | | ⇑ | *i*S | **Sg** | **23 31 49.7** | **+1.0** | KUU | 926nm,0.3s | | | *e*S | **Sb** | **23 32 26.6** | **+0.2** | MKAR | 13nm,0.3s,baz=216,slow=33,SNR=14 | | | Lg | Lg | 23 34 05.4 | |
| **PRZ** | **Przheval'sk** baz=58 | **0.51** | **157** | ⇑ | *i*P | **Pg** | **23 31 46.2** | **+0.2** | **KUU** | **Kurty** baz=303 | **1.61** | **306** | *i* | P | **Pb** | **23 32 05.6** | **DZA** | **Taraz** 25nm,0.1s | **5.00** | **272** | *e*P | **Pb** | **23 33 07.7** | **+4.0** |
| PRZ | baz=58 | | | ⇑ | *i*S | **Sg** | **23 31 53.2** | **+0.5** | **KUU** | **Kurty** 481nm,0.2s | **1.61** | **306** | P | **Pb** | **23 32 05.6** | **-0.4** | DZA | 134nm,0.6s | | | *e*S | **Sg** | **23 34 12.9** | **-3.5** |
| **KURS** | **Kuram** 268nm,0.2s | **0.53** | **3** | ⇓ | *e*P | **Pg** | **23 31 46.5** | **+0.1** | KUU | 926nm,0.3s | | | S | **Sb** | **23 32 26.6** | **+0.2** | **DZA** | **Taraz** baz=271 | **5.00** | **272** | *e*Pg | **Pg** | **23 33 08.6** | **-3.2** |
| KURS | 542nm,0.4s | | | | *e*S | **Sg** | **23 31 53.7** | **+0.2** | **KUU** | **Kurty** baz=6.0 | **1.61** | **306** | *e*P | **Pb** | **23 32 05.6** | **-0.4** | **KK09** | **Karatay Array** 3.1nm,0.4s | **5.60** | **274** | ⇑Pg | **Pb** | **23 33 18.2** | **+4.2** |
| **KURS** | **Kuram** 268nm,0.2s | **0.53** | **3** | | P | **Pg** | **23 31 46.5** | **+0.1** | KUU | baz=6.0 | | | *e*S | **Sb** | **23 32 26.6** | **+0.2** | KK09 | 21nm,0.5s | | | ⇑Lg | Lg | 23 34 32.8 | |
| KURS | 542nm,0.4s | | | | S | **Sg** | **23 31 53.7** | **+0.2** | **BOOM** | **Boomskoye usch** baz=54 | **1.68** | **255** | ⇓ | *i*P | **Pb** | **23 32 06.9** | **-0.4** | **IUG** | **Iuzhnay** 103nm,0.6s | **6.04** | **265** | *e*P | **Pg** | **23 33 29.2** | **-2.5** |
| **KURS** | **Kuram** baz=2.0 | **0.53** | **3** | ⇓ | *e*P | **Pg** | **23 31 46.5** | **+0.1** | BOOM | baz=54 | | | ⇓ | *i*S | **Sg** | **23 32 29.8** | IUG | 99nm,0.7s | | | *e*S | **Sg** | **23 34 50.5** | **+0.6** |
| KURS | baz=2.0 | | | ⇓ | *e*S | **Sg** | **23 31 53.7** | **+0.2** | **KTMS** | **Ketmen** 103nm,0.2s | **1.70** | **72** | *e*P | **Pb** | **23 32 06.6** | **-0.9** | **IUG** | **Iuzhnay** baz=264 | **6.04** | **265** | *e*Pg | **Pg** | **23 33 28.7** | **-3.0** |
| **KPKS** | **Kokpek** 439nm,0.2s | **0.65** | **38** | | *e*P | **Pg** | **23 31 48.4** | **-0.2** | KTMS | 546nm,0.3s | | | *e*S | **Sb** | **23 32 28.8** | **-0.3** | **BRLS** | **Boroldav** 1.5nm,0.5s | **6.08** | **274** | *e*P | **Pg** | **23 33 31.4** | **-1.2** |
| KPKS | 3μm,0.4s | | | | *e*S | **Sg** | **23 31 57.2** | **0.0** | **KTMS** | **Ketmen** 103nm,0.2s | **1.70** | **72** | P | **Pb** | **23 32 06.6** | **-0.9** | BRLS | 16nm,1.0s | | | *e*S | **Sg** | **23 34 52.9** | **+1.5** |
| **KPKS** | **Kokpek** baz=38 | **0.65** | **38** | *e*P | | **Pg** | **23 31 48.4** | **-0.2** | KTMS | 546nm,0.3s | | | S | **Sb** | **23 32 28.8** | **-0.3** | **BRLS** | **Boroldav** baz=271 | **6.08** | **274** | *e*Pg | **Pg** | **23 33 29.9** | **-2.7** |
| KPKS | baz=38 | | | | *e*S | **Sg** | **23 31 57.2** | **0.0** | **KTMS** | **Ketmen** baz=73 | **1.70** | **72** | *e*P | **Pb** | **23 32 06.6** | **-0.9** | **BRLS** | **Boroldav** 1.5nm,0.5s | **6.08** | **274** | Pg | **Pg** | **23 33 31.4** | **-1.2** |
| **UZB** | **Uzynbulak** 388nm,0.3s | **0.68** | **73** | *e*P | | **Pg** | **23 31 48.7** | **-0.5** | KTMS | baz=73 | | | *e*S | **Sb** | **23 32 28.7** | **-0.3** | BRLS | 16nm,1.0s | | | Lg | Lg | 23 34 52.9 | |
| UZB | 2μm,0.3s | | | | *e*S | **Sg** | **23 31 57.6** | **-0.5** | **DGS** | **Degeres** 70nm,0.3s | **1.75** | **280** | *e*P | **Pb** | **23 32 08.4** | **-0.1** | **ZSN** | **Zaisan** 2.8nm,0.4s | **6.54** | **44** | *e*P | **Pb** | **23 33 33.6** | **+3.6** |
| **UZB** | **Uzynbulak** baz=79 | **0.68** | **73** | ⇑ | *i*P | **Pg** | **23 31 48.6** | **-0.5** | DGS | 402nm,0.5s | | | *e*S | **Sg** | **23 32 31.5** | **-0.8** | ZSN | 15nm,0.6s | | | *e*S | **Sg** | **23 34 57.7** | **-8.3** |
| **UZB** | **Uzynbulak** 388nm,0.3s | **0.68** | **73** | | P | **Pg** | **23 31 48.7** | **-0.5** | **DGS** | **Degeres** 70nm,0.3s | **1.75** | **280** | P | **Pb** | **23 32 08.4** | **-0.1** | **ZSN** | **Zaisan** baz=44 | **6.54** | **44** | *e*Pn | **Pn** | **23 33 13.0** | **+0.5** |
| UZB | 2μm,0.3s | | | | S | **Sg** | **23 31 57.6** | **-0.5** | DGS | 402nm,0.5s | | | S | **Sg** | **23 32 31.5** | **-0.8** | **OTUK** | **Ortayu** 2.6nm,0.5s | **6.67** | **324** | ⇓Pn | **Pn** | **23 33 14.7** | **+0.4** |
| **UZB** | **Uzynbulak** baz=74 | **0.68** | **73** | *e*P | | **Pg** | **23 31 48.7** | **-0.5** | **DGS** | **Degeres** baz=80 | **1.75** | **280** | *e*P | **Pb** | **23 32 08.4** | **-0.1** | OTUK | 2.7nm,0.6s | | | ⇑Sn | **Sn** | **23 34 29.6** | **-0.8** |
| UZB | baz=74 | | | | *e*S | **Sg** | **23 31 57.6** | **-0.5** | DGS | baz=80 | | | *e*S | **Sg** | **23 32 31.6** | **-0.8** | OTUK | 21nm,0.7s | | | ⇑Lg | Lg | 23 35 04.1 | |
| **KOTS** | **Kotyrbulak** 175nm,0.2s | **0.80** | **291** | *e*P | | **Pg** | **23 31 51.1** | **-0.3** | **DJR** | **Jarkent** 206nm,0.2s | **1.83** | **41** | *e*P | **Pb** | **23 32 09.2** | **-0.6** | KURBB | **Kurchatov Arra** 0.1nm,0.3s,baz=185,slow=14,SNR=2.8 | **7.67** | **2** | Pn | **Pn** | **23 33 28.2** | **+0.2** |
| KOTS | 1μm,0.5s | | | | *e*S | **Sg** | **23 32 01.8** | **0.0** | DJR | 607nm,0.5s | | | *e*S | **Sb** | **23 32 32.9** | **+0.1** | KURBB | 0.8nm,0.3s,baz=190,slow=27,SNR=15 | | | Lg | Lg | 23 35 36.6 | |
| **KOTS** | **Kotyrbulak** 175nm,0.2s | **0.80** | **291** | | P | **Pg** | **23 31 51.1** | **-0.3** | **DJR** | **Jarkent** 206nm,0.2s | **1.83** | **41** | P | **Pb** | **23 32 09.2** | **-0.6** | KURBB | **Kurchatov Arra** 2.3nm,0.8s | **7.67** | **2** | ⇑Pn | **Pn** | **23 33 27.9** | **-0.1** |
| KOTS | 1μm,0.5s | | | | S | **Sg** | **23 32 01.8** | **0.0** | DJR | 607nm,0.5s | | | S | **Sb** | **23 32 32.9** | **+0.1** | KURBB | 84nm,0.7s | | | ⇑Lg | Lg | 23 35 35.4 | |
| **KOTS** | **Kotyrbulak** baz=90 | **0.80** | **291** | *e*P | | **Pg** | **23 31 51.1** | **-0.3** | **TKM2** | **Tokmak 2** SNR=51 | **1.86** | **270** | P | **Pb** | **23 32 10.2** | **-0.3** | **KURK** | **Kurchatov** 32nm,0.9s | **7.77** | **2** | ⇓Lg | Lg | 23 35 38.3 | |
| KOTS | baz=90 | | | | *e*S | **Sg** | **23 32 01.8** | **0.0** | **TKM2** | **Tokmak 2** 15nm,0.3s | **1.86** | **270** | ⇑ | P | **Pb** | **23 32 10.1** | **-0.3** | **BRZS** | **Berezniki** baz=333 | **7.97** | **334** | *e*Pn | **Pn** | **23 33 31.5** | **-0.6** |
| **MDOK** | **Medeo** 94nm,0.3s | **0.82** | **285** | *e*P | | **Pg** | **23 31 51.1** | **-0.7** | TKM2 | 191nm,0.3s | | | ⇑ | S | **Sb** | **23 32 34.6** | **+0.7** | **BVAR** | **Borovoye Array** 0.2nm,0.3s,baz=98,slow=18,SNR=2.5 | **11.32** | **336** | Pn | **Pn** | **23 34 17.3** | **-0.6** |
| MDOK | 565nm,0.7s | | | | *e*S | **Sg** | **23 32 01.8** | **-0.8** | **TKM2** | **Tokmak 2** baz=69 | **1.86** | **270** | ⇑ | *i*P | **Pb** | **23 32 09.8** | **-0.6** | BVAR | 0.4nm,0.3s,baz=166,slow=22,SNR=2.2 | | | Lg | Lg | 23 37 30.7 | |
| **MDOK** | **Medeo** baz=279 | **0.82** | **285** | *i* | P | **Pg** | **23 31 51.1** | **-0.7** | TKM2 | baz=69 | | | ⇑ | *i*S | **Sb** | **23 32 34.3** | **+0.4** | **ZALV** | **Zalesovo Beam** 0.4nm,0.3s,baz=212,slow=16,SNR=8.9 | **11.86** | **20** | Pn | **Pn** | **23 34 25.2** | **0.0** |
| **MDOK** | **Medeo** 48nm,0.4s | **0.82** | **285** | ⇑ | P | **Pg** | **23 31 51.2** | **-0.7** | **KRBS** | **Karabastau** 281nm,0.4s | **1.94** | **293** | *e*P | **Pb** | **23 32 11.2** | **-0.4** | ZALV | 0.1nm,0.3s,baz=203,slow=26,SNR=1.6 | | | Lg | Lg | 23 37 47.2 | |
| MDOK | 256nm,0.6s | | | ⇓ | S | **Sg** | **23 32 02.1** | **-0.5** | KRBS | 525nm,0.5s | | | *e*S | **Sb** | **23 32 36.6** | **+0.6** | **SONM** | **Songino Array** 0.6nm,0.7s,baz=270,slow=10,SNR=3.0 | **20.38** | **66** | P | **P** | **23 36 13.2** | **+0.1** |
| **MDOK** | **Medeo** 94nm,0.3s | **0.82** | **285** | | Pg | **Pg** | **23 31 51.1** | **-0.7** | **KRBS** | **Karabastau** 281nm,0.4s | **1.94** | **293** | P | **Pb** | **23 32 11.2** | **-0.4** | | | | | | | | |
| MDOK | 565nm,0.7s | | | | Lg | Lg | 23 32 01.8 | | KRBS | 525nm,0.5s | | | S | **Sb** | **23 32 36.6** | **+0.6** | | | | | | | | |
| **TNSS** | **Tian-Shan** 119nm,0.2s | **0.87** | **276** | *e*P | | **Pg** | **23 31 52.2** | **-0.7** | **KRBS** | **Karabastau** baz=93 | **1.94** | **293** | *e*P | **Pb** | **23 32 11.2** | **-0.4** | | | | | | | | |
| TNSS | 434nm,0.4s | | | | *e*S | **Sg** | **23 32 03.7** | **-0.6** | KRBS | baz=93 | | | *e*S | **Sb** | **23 32 36.6** | **+0.6** | | | | | | | | |
| **TNSS** | **Tian-Shan** baz=271 | **0.87** | **276** | *i* | P | **Pg** | **23 31 52.1** | **-0.8** | **KBK** | **Karagaybulak** SNR=39 | **2.36** | **264** | P | **Pb** | **23 32 19.1** | **+0.2** | | | | | | | | |
| **TNSS** | **Tian-Shan** 119nm,0.2s | **0.87** | **276** | | P | **Pg** | **23 31 52.2** | **-0.7** | **KBK** | **Karagaybulak** baz=64 | **2.36** | **264** | ⇑ | *i*P | **Pb** | **23 32 17.5** | **-1.4** | | | | | | | | |
| TNSS | 434nm,0.4s | | | | S | **Sg** | **23 32 03.7** | **-0.6** | KBK | baz=64 | | | ⇑ | *i*S | **Sb** | **23 32 46.3** | **-2.0** | | | | | | | | |
| **KNDC** | **Almaty** 37nm,0.3s | **0.89** | **287** | ⇑ | P | **Pg** | **23 31 53.2** | **-0.1** | **CHMS** | **Chumysh** SNR=79 | **2.48** | **272** | P | **Pb** | **23 32 20.6** | **-0.2** | | | | | | | | |
| KNDC | 429nm,0.6s | | | ⇑ | S | **Sb** | **23 32 05.4** | **-0.5** | **CHMS** | **Chumysh** baz=72 | **2.48** | **272** | ⇓ | *i*P | **Pb** | **23 32 19.2** | **-1.7** | | | | | | | | |
| **AAA** | **Alma-Ata** 110nm,0.1s | **0.93** | **286** | *e*P | | **Pg** | **23 31 54.0** | **+0.1** | CHMS | baz=72 | | | ⇓ | *i*S | **Sn** | **23 32 49.1** | **+1.9** | | | | | | | | |
| AAA | 739nm,0.4s | | | | *e*S | **Sb** | **23 32 06.6** | **-0.3** | **KAPS** | **Kapalarasan** 16nm,0.3s | **2.49** | **20** | *e*P | **Pb** | **23 32 20.9** | **-0.1** | | | | | | | | |
| **AAA** | **Alma-Ata** baz=281 | **0.93** | **286** | *e*P | | **Pb** | **23 31 54.2** | **-0.2** | KAPS | 712nm,0.4s | | | *e*S | **Sb** | **23 32 52.9** | **+1.1** | | | | | | | | |
| **AAA** | **Alma-Ata** 110nm,0.1s | **0.93** | **286** | | P | **Pg** | **23 31 54.0** | **+0.1** | **KAPS** | **Kapalarasan** 16nm,0.3s | **2.49** | **20** | Pg | **Pb** | **23 32 20.9** | **-0.1** | | | | | | | | |
| AAA | 739nm,0.4s | | | | S | **Sb** | **23 32 06.6** | **-0.3** | KAPS | 712nm,0.4s | | | Lg | Lg | 23 32 52.9 | | | | | | | | | |
| **AAA** | **Alma-Ata** baz=85 | **0.93** | **286** | *e*P | | **Pg** | **23 31 54.0** | **+0.1** | **FRU1** | **Bishkek** baz=68 | **2.58** | **268** | ⇑ | *i*P | **Pn** | **23 32 19.9** | **+1.8** | | | | | | | | |
| AAA | baz=85 | | | | *e*S | **Sb** | **23 32 06.6** | **-0.3** | FRU1 | baz=68 | | | ⇑ | *i*S | **Sn** | **23 32 51.5** | **+1.9** | | | | | | | | |
| **PDGK** | **Podgornoye** 166nm,0.2s | **1.06** | **69** | | P | **Pg** | **23 31 55.2** | **-1.2** | **SGDS** | **Sogindy** 18nm,0.3s | **2.61** | **282** | *e*P | **Pb** | **23 32 23.0** | **0.0** | | | | | | | | |
| PDGK | 368nm,0.5s | | | | S | **Sg** | **23 32 08.8** | **-1.4** | SGDS | 210nm,0.6s | | | *e*S | **Sb** | **23 32 56.4** | **+1.1** | | | | | | | | |
| **PDGK** | **Podgornoye** 112nm,0.3s | **1.06** | **69** | ⇑ | P | **Pg** | **23 31 55.2** | **-1.2** | **SGDS** | **Sogindy** baz=280 | **2.61** | **282** | *e*Pg | **Pb** | **23 32 23.2** | **+0.2** | | | | | | | | |
| PDGK | 654nm,0.7s | | | ⇑ | S | **Sg** | **23 32 09.0** | **-1.3** | **SGDS** | **Sogindy** 18nm,0.3s | **2.61** | **282** | Pg | **Pb** | **23 32 23.0** | **0.0** | | | | | | | | |
| **KDJ** | **Kajisay** baz=20 | **1.08** | **221** | ⇓ | *i*P | **Pg** | **23 31 56.2** | **-0.7** | SGDS | 210nm,0.6s | | | Lg | Lg | 23 32 56.3 | | | | | | | | | |
| KDJ | baz=20 | | | ⇓ | *i*S | **Sg** | **23 32 11.3** | **+0.3** | **USP** | **Ospenovka** SNR=72 | **2.68** | **278** | P | **Pb** | **23 32 21.9** | **-2.3** | | | | | | | | |
| **BLB** | **Baldybastay** 342nm,0.2s | **1.17** | **12** | *e*P | | **Pb** | **23 31 57.9** | **-0.6** | **USP** | **Ospenovka** baz=78 | **2.68** | **278** | ⇓ | *i*P | **Pb** | **23 32 21.8** | **-2.4** | | | | | | | | |
| BLB | 3μm,0.3s | | | | *e*S | **Sb** | **23 32 13.4** | **-0.5** | USP | baz=78 | | | ⇓ | *i*S | **Sn** | **23 32 53.9** | **+1.8** | | | | | | | | |
| **BLB** | **Baldybastay** 342nm,0.2s | **1.17** | **12** | | P | **Pb** | **23 31 57.9** | **-0.6** | **AAK** | **Ala-Archa** 8.5nm,0.3s,baz=78,slow=5.2,SNR=105 | **2.70** | **264** | Pn | | **Pb** | **23 32 23.8** | **-0.8** | | | | | | | | |
| BLB | 3μm,0.3s | | | | S | **Sb** | **23 32 13.4** | **-0.5** | AAK | 22nm,0.3s,baz=31,slow=22,SNR=24 | | | Lg | Lg | 23 33 00.4 | | | | | | | | | |
| **CHKK** | **Chushkaly** 291nm,0.2s | **1.23** | **318** | *e*P | | **Pn** | **23 31 58.9** | **-0.6** | **AAK** | **Ala-Archa** SNR=64 | **2.70** | **264** | P | | **Pb** | **23 32 23.9** | **-0.6** | | | | | | | | |
| CHKK | 2μm,0.4s | | | | *e*S | **Sb** | **23 32 15.0** | **-0.4** | **AAK** | **Ala-Archa** 32nm,0.7s | **2.70** | **264** | ⇑ | Pg | **Pb** | **23 32 23.7** | **-0.9** | | | | | | | | |
| **CHKK** | **Chushkaly** baz=314 | **1.23** | **318** | *i* | P | **Pn** | **23 31 58.9** | **-0.6** | AAK | 277nm,0.8s | | | ⇑ | Lg | Lg | 23 33 00.1 | | | | | | | | | |
| **CHKK** | **Chushkaly** 291nm,0.2s | **1.23** | **318** | | P | **Pn** | **23 31 58.9** | **-0.6** | **AAK** | **Ala-Archa** baz=64 | **2.70** | **264** | ⇑ | *i*P | **Pb** | **23 32 22.3** | **-2.3** | | | | | | | | |
| CHKK | 2μm,0.4s | | | | S | **Sb** | **23 32 15.0** | **-0.4** | AAK | baz=64 | | | ⇑ | *i*S | **Sn** | **23 32 54.5** | **+1.8** | | | | | | | | |
| **CHKK** | **Chushkaly** baz=17 | **1.23** | **318** | *e*P | | **Pn** | **23 31 58.9** | **-0.6** | **UCH** | **Uchtor** SNR=64 | **2.77** | **256** | P | | **Pb** | **23 32 25.3** | **-0.7** | | | | | | | | |
| CHKK | baz=17 | | | | *e*S | **Sb** | **23 32 15.0** | **-0.4** | **UCH** | **Uchtor** baz=56 | **2.77** | **256** | ⇑ | *i*P | **Pn** | **23 32 23.2** | **+2.1** | | | | | | | | |
| **MTBS** | **Maitube** 47nm,0.3s | **1.26** | **279** | *e*P | | **Pn** | **23 31 59.3** | **-0.7** | UCH | baz=56 | | | ⇑ | *i*S | **Sn** | **23 32 56.4** | **+1.5** | | | | | | | | |
| MTBS | 358nm,0.3s | | | | *e*S | **Sb** | **23 32 15.7** | **-0.7** | **ARLS** | **Aral** baz=50 | **3.02** | **250** | ⇑ | *e*P | **Pn** | **23 32 25.7** | **+1.4** | | | | | | | | |
| **MTBS** | **Maitube** 47nm,0.3s | **1.26** | **279** | P | | **Pn** | **23 31 59.3** | **-0.7** | ARLS | baz=50 | | | ⇑ | *i*S | **Sn** | **23 33 02.4** | **+1.6** | | | | | | | | |

*MOS* ***25*** *23:35:16.2±0.9, 8.°50S×111.°51E, h50km, mb5.2/39, Error ellipse: s-maj=8.1km s-min=4.9km az=118.4*
*BJI* ***25*** *23:35:16.0±0.0, 8.°90S×111.°40E, h60km, mb4.9/59, mB5.1/30, Ms4.6/13, Ms7 4.3/13*
*IDC* ***25*** *23:35:17.6±2.0, 8.°50S×111.°55E, h46km±18km, mb4.7/26, mb1 4.7/29, mb1mx4.6/37, mbtmp4.9/29, ML4.6/3, MS3.8/29, Ms1 3.8/29, ms1mx3.6/77, Error ellipse: s-maj=16.1km s-min=11.0km az=45.0*
*NEIC* ***25*** *23:35:19.3±2.8, 8.°75S±0.°06×111.°51E±0.°05, h57km±4km, mb5.1/119, Error ellipse: s-maj=9.7km s-min=7.0km az=209.0*
*DJA* ***25*** *23:35:19.0±0.2, 9.°S±2.°×11.°1E±.°, h61km±2km, M4.9/68, mb5.0/68, mB5.4/26, MLv5.3/26, Mw(mB)4.8/26, MwMwp4.7/1, Mwp5.0/1*
*GCMT* ***25*** *23:35:19.3±0.4, 9.°09S±0.°03×111.°58E±0.°03, h56km±2km, MW4.9/61, Moment Tensor Solution. s28,c32; s61,c74; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.18±.19; Mθθ-2.67±.11; Mφφ0.49±.16; Mrθ0.81±.08; Mφθ0.00±.11; Mφr-0.32±.09; Best double couple: Mo2.58300×10¹⁶ NP1:φs260.00000°, δ37.00000°, λ74.00000°. NP2: φs99.00000°, δ55.00000°, λ101.00000°. Principal axes: T 2.3650, Plg77.0000°, Azm47.0000°; N 0.4370, Plg9.0000°, Azm273.0000°; P -2.8010, Plg9.0000°, Azm181.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 25 23:35:19.5±0.4, 8.°71S±0.°04×111.°53E±0.°03, h67km±3km, h67km:pP-P, n592, σ1§52/598, mb5.0/146, 37C-13D, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCJI** | **Pacitan** | **0.62** | **326** | P | | **Pn** | **23 35 32.4** | **-0.8** |
| PCJI | | | | S | | **Sn** | **23 35 42.8** | **-0.5** |
| **PWJI** | **Pagerwojo** | **0.74** | **22** | P | | **Pn** | **23 35 35.6** | **+1.0** |
| PWJI | | | | S | | **Sn** | **23 35 47.7** | **+2.0** |
| **UGM** | **Wanagama** | **1.27** | **309** | Pn | | **Pn** | **23 35 41.8** | **+0.5** |
| UGM | | | | Sn | | **Sn** | **23 35 58.5** | **+0.8** |
| **UGM** | **Wanagama** | **1.27** | **309** | P | | **Pn** | **23 35 41.8** | **+0.5** |
| UGM | | | | S | | **Sn** | **23 35 58.8** | **+1.1** |
| **UGM** | **Wanagama** | **1.27** | **309** | P | | **Pn** | **23 35 42.3** | **+1.0** |
| **YOGI** | **Yogyakarta** | **1.51** | **306** | P | | **Pn** | **23 35 44.4** | **0.0** |
| YOGI | | | | S | | **Sn** | **23 36 04.9** | **+1.6** |
| **TBJI** | **Tambak Boyo** | **1.91** | **10** | P | | **Pn** | **23 35 52.7** | **+2.9** |
| **GMJI** | **Gumukmas** | **1.95** | **77** | P | | **Pn** | **23 35 51.0** | **+0.7** |
| GMJI | | | | S | | **Sn** | **23 36 15.4** | **+1.6** |
| **SMRI** | **Semarang** | **1.97** | **327** | P | | **Pn** | **23 35 53.1** | **+2.4** |
| **SMRI** | **Semarang** | **1.97** | **327** | P | | **Pn** | **23 35 53.3** | **+2.6** |
| **SMRI** | **Semarang** | **1.97** | **327** | P | | **Pn** | **23 35 53.8** | **+3.1** |
| **GRJI** | **Gresik** | **2.02** | **28** | P | | **Pn** | **23 35 54.3** | **+3.0** |
| **BLJI** | **Banyuglugur** | **2.26** | **65** | P | | **Pn** | **23 35 56.5** | **+1.9** |
| **UWJI** | **Ujung Watu** | **2.35** | **346** | P | | **Pn** | **23 35 58.3** | **+2.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **85** | Pn | | **Pn** | **23 36 00.1** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **85** | P | | **Pn** | **23 36 00.1** | **+0.7** |
| JAGI | | | | S | | **Sn** | **23 36 30.6** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **85** | P | | **Pn** | **23 36 00.6** | **+1.3** |
| **ABJI** | **Asem Bagus** | **2.83** | **71** | P | | **Pn** | **23 36 04.5** | **+2.2** |
| **KPJI** | **Karang Pucung** | **2.91** | **298** | P | | **Pn** | **23 36 04.2** | **+0.8** |
| **BWJI** | **Bawean** | **3.06** | **22** | P | | **Pn** | **23 36 08.5** | **+3.1** |
| **CMJI** | **Cimerak** | **3.18** | **287** | P | | **Pn** | **23 36 06.1** | **-1.0** |
| **IGBI** | **Denpasar** | **3.58** | **92** | P | | **Pn** | **23 36 12.4** | **-0.2** |
| **JCJI** | **Jatiwangi** | **3.91** | **304** | P | | **Pn** | **23 36 16.4** | **-0.7** |
| **LEM** | **Lembang** 36nm,0.3s,baz=82,slow=8.4,SNR=42 | **4.30** | **296** | P | | **Pn** | **23 36 23.8** | **+1.2** |
| LEM | | | | S | | **Sn** | **23 37 12.2** | **+0.6** |

14nm,0.3s,baz=31,slow=22,SNR=3.3
LEM LR LR 23 38 18.9
comp=Z,1µm,21.6s,baz=84,slow=43
**LEM Lembang 4.30 296** P **Pn 23 36 24.2 +1.6**
**CNJI Cibinong 4.57 287** P **Pn 23 36 25.2 -0.9**
**DBJI Dramaga 5.20 294** P **Pn 23 36 36.2 +1.5**
3.1nm297nm,0.7s
**SKJI Sukabumi 5.21 289** P **Pn 23 36 31.6 -3.2**
6.5nm7µm328nm,0.4s
**PBKI Pangkalan Bun 5.97 1** P **Pn 23 36 49.0 +3.7**
3.2nm10µm761nm,0.5s
**XMI Christmas Isla 6.01 253** P **Pn 23 36 42.6 -3.3**
**XMIS Christmas Isla 6.05 253** Pn **Pn 23 36 42.8 -3.7**
**XMIS Christmas Isla 6.05 253** P **Pn 23 36 43.0 -3.5**
**CGJI Cibinong 6.14 289** P **Pn 23 36 47.6 -0.1**
4µm356nm,0.6s
**PLAI Plampang 6.18 92** P **Pn 23 36 50.3 +2.1**
2.6nm4µm418nm,0.9s
**PLAI Plampang 6.18 92** P **Pn 23 36 50.4 +2.2**
**BLSI Bandar Lampung 7.06 298** P Pn 23 37 07.2 +6.9
**KBKI Kotabaru 7.08 41** P **Pn 23 37 03.1 +2.5**
0.4nm1µm92nm,0.8s
**KLI Kotabumi 7.64 300** P **Pn 23 37 12.3 +4.1**
0.9nm153nm,0.8s
**KASI Kota Agung 7.66 294** P **Pn 23 37 10.0 +1.6**
0.4nm1µm92nm,1.1s
**WBSI Waikabubak, Su 7.82 97** P **Pn 23 37 09.2 -1.5**
1.3nm1µm180nm,0.7s
**KLSI 7.84 300** P **Pn 23 37 11.2 +0.3**
0.1nm31nm,1.1s
**LWLI Liwa 8.27 296** P **Pn 23 37 19.9 +3.0**
25µm199nm,0.7s
**MTKI Muara Teweh, K 8.41 24** P **Pn 23 37 20.6 +1.8**
95nm,0.9s
**MDSI Maura Dua 8.42 299** P **Pn 23 37 21.3 +2.5**
412nm30nm,0.8s
**PPBI Pangkal Pinang 8.43 320** P **Pn 23 37 20.3 +1.3**
25µm157nm,0.6s
**STKI Sintang 8.72 360** P **Pn 23 37 27.7 +4.8**
20um69nm,0.5s
**KAPI Kappang 8.95 66** P **Pn 23 37 28.0 +1.9**
2.4nm,0.3s,baz=239,slow=5.8,SNR=10
KAPI LR LR 23 41 25.2
comp=Z,321nm,20.9s,baz=260,slow=42
**KAPI Kappang 8.95 66** P **Pn 23 37 27.3 +1.1**
**KAPI Kappang 8.95 66** Pn **Pn 23 37 27.3 +1.1**
**KAPI Kappang 8.95 66** P **Pn 23 37 28.6 +2.5**
**KAPI Kappang 8.95 66** P **Pn 23 37 29.1 +3.0**
**BASI Baing, Sumba 9.05 100** P **Pn 23 37 27.2 -0.3**
2um151nm,0.6s
**BKB Balikpapan 9.13 36** Pn **Pn 23 37 30.0 +1.5**
**BKSI Bulukumba 9.17 69** P **Pn 23 37 29.8 +0.7**
584nm75nm,0.6s
**BSSI Bau Bau, Buton 9.25 75** P **Pn 23 37 30.9 +0.7**
61nm,0.6s
**SPSI Sidrap Palu 9.45 61** P **Pn 23 37 31.2 -1.7**
36nm,0.9s
**BNSI Bone 9.54 64** P **Pn 23 37 36.5 +2.4**
867nm80nm,0.9s
**MNAI Manna 9.55 296** Pn **Pn 23 37 33.9 -0.4**
**MNAI Manna 9.55 296** P **Pn 23 37 34.4 +0.1**
214nm,0.7s
**TTSI Tana Toraja 9.98 56** P **Pn 23 37 43.1 +2.9**
53nm,1.1s
**KSM Kuching 10.19 353** Pn **Pn 23 37 43.1 0.0**
**KSM Kuching 10.19 353** P **Pn 23 37 47.0 +4.0**
**MMRI Maumere 10.59 90** Pn **Pn 23 37 47.9 -0.7**
**MMRI Maumere 10.59 90** P **Pn 23 37 48.2 -0.3**
100nm,0.6s
**MMRI Maumere 10.59 90** P **Pn 23 37 48.1 -0.4**
**DSRI Dabo 10.71 319** P **Pn 23 37 53.1 +2.9**
19nm,0.8s
**MASI Maura Aman, Be 10.76 300** P **Pn 23 37 51.2 +0.3**
2µm115nm,0.6s
**SBUM Sibu 11.11 4** Pn **Pn 23 37 55.7 +0.1**
**BBSI Bau Bau 11.42 74** P **Pn 23 38 01.2 +1.4**
6.5nm,1.0s
**KRJI Kerinci 11.98 303** P **Pn 23 38 07.2 -0.4**
**BATI Baumata 12.07 98** P **Pn 23 38 08.4 -0.3**
18nm,0.3s,baz=256,slow=5.4,SNR=6.3
**BATI Baumata 12.07 98** P **Pn 23 38 08.2 -0.5**
864nm60nm,0.8s
**MPSI Mapaga 12.26 43** P **Pn 23 38 13.6 +2.2**
30nm,1.1s
**RGRI Rengat 12.36 312** P **P 23 38 24.4 +2.0**
**SOEI Soe 12.62 96** Pn **Pn 23 38 15.4 -1.0**
**SOEI Soe 12.62 96** P **Pn 23 38 15.2 -1.2**
**SOEI Soe 12.62 96** P **Pn 23 38 16.5 +0.1**
**TOLI2 Tolitoli 13.43 44** **Pn 23 38 25.9 -1.2**
**TOLI2 Tolitoli 13.43 44** P **P 23 38 31.3 -3.0**
**MRSI Marisa 13.82 49** P **Pn 23 38 34.5 +2.1**
1um67nm,0.9s
**GIRL Giralia 14.10 170** Pn 23 38 30.4 -5.5
**GTOI Gorontalo 14.74 52** P **Pn 23 38 45.0 +0.6**
27nm,0.9s
**COCO West Island 14.85 255** P **Pn 23 38 45.3 -0.6**
**COCO West Island 14.85 255** Pn **Pn 23 38 45.3 -0.6**
**PSA00 Pilbara Seismi 15.09 149** Pn **Pn 23 38 44.8 -4.2**
**PSA00 Pilbara Seismi 15.09 149** Pn **Pn 23 38 43.3 -5.6**
PSA00 IAmb IAmb 23 39 16.2
comp=Z,8.0nm,1.0s
**PSA00 Pilbara Seismi 15.09 149** P **Pn 23 38 44.8 -4.2**
**MNSI Mandailing Nat 15.19 308** P **Pn 23 38 45.6 -4.7**
comp=Z,17nm,0.8s
**KKM Kota Kinabalu 15.38 18** Pn **Pn 23 38 53.7 +0.9**
**MYLDM Lahad Datu 15.45 27** Pn **Pn 23 38 54.7 +1.2**
MYLDM IAmb IAmb 23 39 05.4
comp=Z,111nm,1.0s
**SANI Sanana 15.84 66** P **P 23 39 01.1 0.0**
comp=Z,931nmcomp=Z,96nm,1.0s
**SANI Sanana 15.84 66** P **P 23 39 01.3 +0.2**
comp=Z,96nm,1.0s
**FITZ Fitzroy Crossi 16.59 126** P **Pn 23 39 06.6 -1.3**
comp=Z,1.1nm,0.3s,baz=299,slow=9.0,SNR=16
FITZ S Sn 23 41 54.8 -17
comp=Z,2.0nm,0.3s,baz=223,slow=19,SNR=6.0
FITZ LR LR 23 45 03.6
comp=Z,224nm,21.4s,baz=311,slow=35
**FITZ Fitzroy Crossi 16.59 126** **Pn 23 39 06.4 -1.5**
**FITZ Fitzroy Crossi 16.59 126** P **Pn 23 39 07.5 -0.4**
**IPM Ipoh 16.77 321** Pn **Pn 23 39 09.1 -1.1**
**RPSI Rantau Prapat 16.92 312** Pn **Pn 23 39 11.4 -0.6**
**PSI Prapat 16.99 312** P **Pn 23 39 08.2 -4.8**
comp=Z,0.8nm,0.3s,baz=159,slow=13,SNR=2.0
PSI LR LR 23 46 22.2
comp=Z,453nm,20.7s,baz=134,slow=40
**PSI Prapat 16.99 312** P **Pn 23 39 11.4 -1.6**
PSI pmax pmax
comp=Z,10.0nm,0.8s
**AAI Ambon 17.30 74** P **P 23 39 18.8 +1.5**
comp=Z,87nm,0.6s
**KULM Kulim 17.64 322** **Pn 23 39 20.2 -0.6**
**KNRA Kunununrra 18.21 114** **Pn 23 39 27.8 0.0**
**KNRA Kunununrra 18.21 114** P **Pn 23 39 28.3 +0.5**
**TNTI Ternate 18.38 60** P **Pn 23 39 29.9 0.0**
**MEEK Meekatharra 19.06 160** P **P 23 39 35.5 -1.0**
**SAUI Saumlaki 19.58 89** P **P 23 39 41.3 -1.0**
SAUI IAmb IAmb 23 39 45.1
comp=Z,162nm,0.6s
**SAUI Saumlaki 19.58 89** P **P 23 39 42.0 -0.3**
comp=Z,226nm,0.7s
**MTN Manton Dam 19.69 104** P **P 23 39 44.1 +0.6**
MTN IAmb IAmb 23 40 11.8
comp=Z,55nm,0.5s
**MTN Manton Dam 19.69 104** P **Pn 23 39 45.2 -0.3**
**MORW Morawa 20.69 169** P **P 23 39 54.1 -0.1**
**KDU Kakadu 20.96 103** P **P 23 39 57.2 0.0**
**SIJI Sorong 21.14 69** P **P 23 39 57.2 -2.0**
comp=Z,43nm,0.7s,baz=281,slow=6.5,SNR=17
SIJI LR LR 23 50 07.8
comp=Z,145nm,19.4s,baz=154,slow=42
**FAKI Fak Fak 21.40 76** P **P 23 40 01.4 -0.6**
FAKI IAmb IAmb 23 40 08.9
comp=Z,28nm,0.6s
**FAKI Fak Fak 21.40 76** P **P 23 39 59.3 -2.6**
comp=Z,41nm,0.6s
**BLDU Ballidu 22.33 168** P **P 23 40 10.8 -0.9**
**WRKA Warakurna 22.79 137** P **P 23 40 17.4 +0.7**
**WB0 Warramunga Arr 24.70 119** P **P 23 40 34.3 -0.3**
WB0 IAmb IAmb 23 40 50.7
comp=Z,22nm,0.7s
**WRA Warramunga Arr 24.73 119** P **P 23 40 35.1 +0.2**
comp=Z,15nm,0.6s,baz=291,slow=12,SNR=91
WRA PcP **PcP 23 44 11.0 +0.5**
comp=Z,2.1nm,0.5s,baz=296,slow=4.3,SNR=7.1
WRA S S 23 45 06.2 +14
comp=Z,0.8nm,0.6s,baz=282,slow=24,SNR=1.7
WRA LR LR 23 50 50.2
comp=Z,160nm,18.9s,baz=290,slow=38
WRA P3KPbc 00 13 42.6
comp=Z,0.8nm,0.7s,baz=106,slow=4.4,SNR=5.3
**WRAB Tennant Creek 24.73 119** *ceP* **P 23 40 34.4 -0.5**
WRAB pmax pmax
comp=Z,25nm,1.0s
**WRAB Tennant Creek 24.73 119** P **P 23 40 34.5 -0.4**
**WRAB Tennant Creek 24.73 119** P **P 23 40 35.5 +0.6**
comp=Z,32nm,1.0s
**WB2 Warramunga Arr 24.74 119** P **P 23 40 34.9 0.0**
**WR0 Warramunga Arr 24.91 119** P **P 23 40 36.9 +0.4**
WR0 IAmb IAmb 23 40 39.4
comp=Z,62nm,1.1s
**ASAR Alice Springs 26.07 127** P **P 23 40 47.4 +0.3**
comp=Z,7.6nm,0.6s,baz=302,slow=8.8,SNR=61
ASAR PcP **PcP 23 44 14.4 +0.9**
comp=Z,5.1nm,0.5s,baz=312,slow=1.7,SNR=12
ASAR S S 23 45 35.2 +21
comp=Z,0.9nm,0.8s,baz=300,slow=22,SNR=2.4
ASAR LR LR 23 51 13.6
comp=Z,143nm,21.6s,baz=328,slow=36
**ASAR Alice Springs 26.07 127** P **P 23 40 47.1 0.0**
**AS31 Alice Springs 26.07 127** P **P 23 40 47.1 0.0**
**FORT Forrest 26.84 147** P **P 23 40 54.0 +0.2**
FORT IAmb IAmb 23 41 31.8
comp=Z,47nm,0.7s
**FORT Forrest 26.84 147** P **P 23 40 54.7 +0.9**
**QIS Mount Isa 29.55 117** P **P 23 41 19.2 +1.0**
**OOD Oodnadatta 29.67 133** P **P 23 41 19.7 +0.6**
**CMAR Chiang Mai Arr 29.71 335** P **P 23 41 18.7 -0.8**
comp=Z,6.0nm,0.7s,baz=172,slow=7.9,SNR=27
CMAR PcP **PcP 23 44 23.8 +1.4**
comp=Z,4.3nm,0.6s,baz=190,slow=3.2,SNR=9.6
CMAR LR LR 23 54 34.0
comp=Z,238nm,19.1s,baz=160,slow=39
**CHTO Chiang Mai 30.03 336** P **P 23 41 22.6 +0.3**
CHTO pmax pmax
comp=Z,20nm,1.5s
**CHTO Chiang Mai 30.03 336** P **P 23 41 22.6 +0.3**
**CHTO Chiang Mai 30.03 336** P **P 23 41 22.6 +0.3**
**COEN Coen 31.45 102** P **P 23 41 35.8 +0.9**
COEN IAmb IAmb 23 41 36.6
comp=Z,23nm,0.8s
**COEN Coen 31.45 102** P **P 23 41 35.7 +0.8**
**BBOO Buckleboo 33.02 140** P **P 23 41 48.5 0.0**
BBOO IAmb IAmb 23 42 09.6
comp=Z,58nm,1.8s
**TPUB Ta-pu 33.04 15** P **P 23 41 50.0 +1.3**
**MTSU Mount Surprise 33.19 110** P **P 23 41 51.8 +1.6**
**YHNB Yeheng 34.54 16** P **P 23 42 03.2 +1.4**
**PALK Pallekele 34.58 296** P **P 23 42 01.9 -0.4**
PALK pmax pmax
comp=Z,56nm,1.7s
**PALK Pallekele 34.58 296** P **P 23 42 01.9 -0.4**
PALK IAmb IAmb 23 42 10.6
comp=Z,56nm,1.7s
**PMG Port Moresby 35.19 94** LR LR 23 58 43.8
comp=Z,111nm,19.0s,baz=274,slow=40
**CTA Charters Tower 35.41 112** LR LR 23 58 08.5
comp=Z,155nm,18.9s,baz=282,slow=39
**CTA Charters Tower 35.41 112** P **P 23 42 11.6 +2.2**
comp=Z,14nm,1.4s
**QLP Quilpie 35.72 124** P **P 23 42 13.8 +1.9**
comp=Z,56nm,0.5s
**STKA Stephens Creek 36.20 134** P **P 23 42 17.1 +1.2**
comp=Z,7.2nm,0.5s,baz=311,slow=8.6,SNR=18
STKA PcP **PcP 23 44 41.1 +0.9**
comp=Z,12nm,0.5s,baz=321,slow=2.3,SNR=8.2
STKA LR LR 23 57 36.0
comp=Z,214nm,21.8s,baz=280,slow=37
**STKA Stephens Creek 36.20 134** P **P 23 42 17.1 +1.2**
**STKA Stephens Creek 36.20 134** P **P 23 42 17.0 +1.0**
**PZH PanZhiHua 36.27 345** P **P 23 42 18.5 +1.8**
PZH S **S 23 47 55.5 +2.8**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,150nm,5.5s
PZH LR LR
comp=Z,480nm,21.2s
PZH LR LR
comp=Z,560nm,23.5s
PZH LR LR
comp=Z,570nm,24.5s
**H08S2 Diego Garcia H 38.64 269** P **P 23 42 37.8 +1.3**
baz=65,slow=9.7,SNR=4.5
H08S2 T T 00 23 44.2
baz=94,slow=75,SNR=142
**H08S3 Diego Garcia H 38.65 269** P **P 23 42 38.5 +1.9**
baz=65,slow=9.7,SNR=6.2
H08S3 T T 00 23 42.7
baz=94,slow=75,SNR=78
**H08S1 Diego Garcia H 38.66 269** P **P 23 42 38.5 +1.8**
baz=65,slow=9.7,SNR=5.5
H08S1 T T 00 23 43.8
baz=94,slow=75,SNR=30
**DGAR Diego Garcia 38.70 269** P **P 23 42 38.1 +0.8**
DGAR pmax pmax
comp=Z,109nm,1.2s
**DGAR Diego Garcia 38.70 269** P **P 23 42 38.1 +0.8**
**ENH Enshi 38.81 357** P **P 23 42 38.2 +0.2**
**JOW Kunigami 38.89 24** LR LR 00 01 39.5
comp=Z,53nm,18.4s,baz=306,slow=41
**JOW Kunigami 38.89 24** P **P 23 42 38.6 -0.1**
JOW IAmb IAmb 23 42 57.2
comp=Z,74nm,1.3s
**CMSA Cobar Meteorol 39.04 130** P **P 23 42 42.0 +2.1**
**SHL Shillong 39.07 331** P **P 23 42 39.6 -0.8**
SHL pmax pmax
comp=Z,19nm,0.8s
**SHL Shillong 39.07 331** P **P 23 42 39.6 -0.8**
SHL IAmb IAmb 23 42 42.5
comp=Z,19nm,0.8s
**SHL Shillong 39.07 331** P **P 23 42 39.4 -1.0**
**KAAM Kaadhehdhoo 39.46 281** P **P 23 42 43.4 -0.2**
KAAM IAmb IAmb 23 43 47.5
comp=Z,86nm,1.2s
**CD2 Chengdu 40.09 350** *eP* **P 23 42 51.0 +2.3**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
**EIDS Eidsvold 41.09 119** P **P 23 42 58.1 +1.1**
**NJ2 Nanjing 41.13 9** *eP* **P 23 43 00.5 +3.3**
NJ2 pmax pmax
comp=Z,11nm,0.6s
**ODAN Odare 42.41 327** *eP* **P 23 43 06.9 -1.1**
comp=Z,23nm,0.7s
**XAN Xi'an 42.59 357** P **P 23 43 08.5 -0.6**
XAN pmax pmax
comp=Z,15nm,0.7s
**TAPN Taplejung 42.63 328** *eP* **P 23 43 09.0 -0.9**
**RAMN Ramite 42.91 326** *eP* **P 23 43 11.5 -0.5**
comp=Z,1.6nm,0.4s
**LYN LuoYang 43.03 1** ⇑P **P 23 43 13.0 +0.4**
LYN pP pP 23 43 31.3 +2.1
LYN pmax pmax
comp=Z,20nm,0.9s
**ARMA Armidale 43.20 126** P **P 23 43 15.2 +1.0**
ARMA IAmb IAmb 23 43 25.0
comp=Z,78nm,2.0s
**JIRN Jiri 43.69 327** *eP* **P 23 43 16.7 -1.8**
comp=Z,5.3nm,0.4s
**PKI Pulchoki 44.05 326** *eP* **P 23 43 19.8 -1.5**
comp=Z,9.2nm,0.7s
**GUN Gumba 44.06 327** *eP* **P 23 43 19.7 -1.7**
comp=Z,28nm,0.5s
**PKIN Phulchoki 44.06 326** *eP* **P 23 43 20.5 -0.9**
comp=Z,7.3nm,0.5s
**DMN Daman 44.25 326** *eP* **P 23 43 22.3 -0.5**
comp=Z,10nm,0.5s
**KKN Kakani 44.29 326** *eP* **P 23 43 21.9 -1.2**
comp=Z,2.9nm,0.2s
**GKN Gorkha 44.81 325** *eP* **P 23 43 25.9 -1.3**
comp=Z,5.6nm,0.3s
**LZH Lanzhou 45.14 351** *eP* **P 23 43 30.5 +0.8**
LZH pP pP 23 43 44.3 -2.1
LZH sP sP 23 43 50.3 -3.7
LZH PcP **PcP 23 45 10.5 +1.3**
LZH pmax pmax
comp=Z,17nm,1.2s
LZH LR LR
comp=Z,380nm,13.8s
LZH LR LR
comp=Z,260nm,14.0s
LZH LR LR
comp=Z,160nm,16.5s
**KOLN Koldanda 45.23 324** *eP* **P 23 43 29.9 -0.7**
**DANN Dangsing 45.58 325** *eP* **P 23 43 31.9 -1.5**
comp=Z,45nm,0.6s
**PYUN Piuthan 45.83 324** *eP* **P 23 43 34.6 -0.7**
comp=Z,2.9nm,0.3s
**HNS HongShan 45.96 4** ⇑P **P 23 43 35.5 -0.4**
HNS pmax pmax
comp=Z,14nm,0.8s
**JTU Tsushima 46.21 21** P **P 23 43 37.7 -0.2**
**GOMU GeErMu 47.36 342** P **P 23 43 46.3 -1.0**
GOMU pmax pmax
comp=Z,4.0nm,0.4s
GOMU pmax pmax
comp=Z,61nm,4.9s
**JHS Saijyo 48.03 24** P **P 23 43 51.9 -0.2**
**KSRS Korea Array 48.42 17** P **P 23 43 52.9 -2.1**
comp=Z,5.9nm,0.8s,baz=201,slow=7.8,SNR=17
KSRS PcP **PcP 23 45 21.7 +1.2**
comp=Z,3.5nm,0.8s,baz=210,slow=2.7,SNR=6.8
KSRS LR LR 00 04 50.8
comp=Z,42nm,21.8s,baz=180,slow=37
**BJT Baijiatuau 48.67 5** IAmb IAmb 23 43 57.7
comp=Z,18nm,0.7s
**BJI Beijing 48.69 5** P **P 23 43 57.0 -0.1**
BJI pP **pP 23 44 11.8 -2.2**
BJI PcP **PcP 23 45 22.5 +1.1**
BJI pmax pmax
comp=Z,23nm,0.6s
**GTA Gaotai 49.09 348** ⇑P **P 23 44 01.0 +0.6**
GTA pP pP 23 44 15.0 -2.3
GTA sP sP 23 44 22.3 -2.6
GTA PcP **PcP 23 45 24.5 +1.4**
GTA pmax pmax
comp=Z,10.0nm,0.7s
GTA pmax pmax
comp=Z,140nm,5.6s
GTA LR LR
comp=Z,98nm,14.7s
GTA LR LR
comp=Z,160nm,15.1s
GTA LR LR
comp=Z,150nm,17.5s
**HHC Hu-ho-hao-te 49.31 0** *eP* **P 23 44 02.0 0.0**
HHC pmax pmax
comp=Z,24nm,1.3s
HHC pmax pmax
comp=Z,160nm,6.5s
**MAJO Matsushiro 51.52 28** P **P 23 44 17.5 -1.1**
MAJO pmax pmax
comp=Z,72nm,1.9s
**MAJO Matsushiro 51.52 28** P **P 23 44 17.5 -1.1**
MAJO IAmb IAmb 23 45 13.8
comp=Z,72nm,1.9s
**MAT Matsushiro 51.52 28** P **P 23 44 17.0 -1.6**
**MJAR Matsushiro Arr 51.52 28** P **P 23 44 17.3 -1.3**
comp=Z,9.3nm,0.7s,baz=215,slow=8.0,SNR=16
MJAR PcP **PcP 23 45 33.2 +1.2**
comp=Z,5.1nm,0.6s,baz=208,slow=4.1,SNR=5.8
MJAR LR LR 00 06 40.6
comp=Z,54nm,20.1s,baz=222,slow=37
**MJAR Matsushiro Arr 51.52 28** P **P 23 44 17.9 -0.7**
MJAR pmax pmax
comp=Z,9.0nm,1.0s
**MJAR Matsushiro Arr 51.52 28** P **P 23 44 17.9 -0.7**
MJAR IAmb IAmb 23 45 33.8
comp=Z,8.9nm,0.9s
**XLT XiLinHaoTe 52.52 4** ⇑ *iP* **P 23 44 26.0 0.0**
XLT sP sP 23 44 47.8 -2.9
XLT S **S 23 51 50.8 +2.9**
XLT pmax pmax
comp=Z,19nm,0.9s
XLT pmax pmax
comp=Z,270nm,4.6s
**JSD Sado 52.78 26** P **P 23 44 27.3 -0.6**
**DZM Mont Dzumac 54.32 111** P **P 23 44 39.6 -0.1**
**RER Riviere de l'E 55.05 250** P **P 23 44 46.2 +1.2**
**MDJ Mudanjiang 55.53 16** P **P 23 44 46.7 -1.1**
MDJ IAmb IAmb 23 44 48.1
comp=Z,8.9nm,0.7s
**NIL Nilore 55.64 321** P **P 23 44 46.7 -2.1**
NIL pmax pmax
comp=Z,11nm,0.7s
**NIL Nilore 55.64 321** P **P 23 44 46.7 -2.1**
NIL IAmb IAmb 23 44 48.4
comp=Z,11nm,0.7s
**NIL Nilore 55.64 321** P **P 23 44 46.7 -2.1**
**MSEY Mahe Island 55.77 270** P **P 23 44 51.3 +1.1**
MSEY pmax pmax
comp=Z,33nm,1.4s
**MSEY Mahe Island 55.77 270** P **P 23 44 51.3 +1.1**
MSEY IAmb IAmb 23 45 55.5
comp=Z,33nm,1.4s
**MSEY Mahe Island 55.77 270** P **P 23 44 51.4 +1.1**
**USA0B Ussuriysk Arra 55.83 18** IAmb IAmb 23 44 50.5
comp=Z,17nm,0.8s
**USRK Ussuriysk Ar. 55.83 18** P **P 23 44 48.1 -1.9**
comp=Z,19nm,0.7s,baz=186,slow=3.4,SNR=25
**USRK Ussuriysk Ar. 55.83 18** P **P 23 44 50.4 +0.4**
**USRK Ussuriysk Ar. 55.83 18** P **P 23 44 50.4 +0.4**
**JTM Tenmabayashi 56.28 27** P **P 23 44 52.9 -0.3**
**ULN Ulaanbaatar 56.47 356** *ceP* **P 23 44 54.2 -0.4**
ULN pmax pmax
comp=Z,15nm,0.8s
**ULN Ulaanbaatar 56.47 356** P **P 23 44 54.4 -0.2**
ULN IAmb IAmb 23 44 55.3
comp=Z,13nm,0.7s
**ULN Ulaanbaatar 56.47 356** P **P 23 44 54.6 0.0**
**SONM Songino Array 56.48 356** P **P 23 44 54.5 -0.2**
comp=Z,10nm,0.7s,baz=175,slow=8.6,SNR=69
SONM PcP **PcP 23 45 51.1 +0.3**
comp=Z,16nm,0.8s,baz=177,slow=4.0,SNR=19
SONM LR LR 00 11 46.2
comp=Z,135nm,18.0s,baz=259,slow=39
**SONM Songino Array 56.48 356** P **P 23 44 54.7 0.0**
SONM IAmb IAmb 23 45 51.8
comp=Z,11nm,0.7s
**WMQ Urumqi 56.58 339** *eP* **P 23 44 55.5 +0.1**
WMQ sP sP 23 45 22.3 +2.3
WMQ PcP **PcP 23 45 52.0 +0.8**
WMQ pmax pmax
comp=Z,20nm,0.7s
**JEW Eniwo 58.11 26** P **P 23 45 06.4 +0.3**
**HIA Hailar 58.18 6** *i* P **P 23 45 05.1 -1.4**
HIA pmax pmax
comp=Z,6.0nm,0.9s
**ERM Erimo 58.20 27** P **P 23 45 06.8 +0.1**
ERM pmax pmax
comp=Z,89nm,1.5s
**ERM Erimo 58.20 27** P **P 23 45 06.8 +0.1**
**KSH Kashi 58.21 328** P **P 23 45 05.3 -1.7**
KSH PcP **PcP 23 45 58.8 +1.0**
KSH pmax pmax
comp=Z,1.0nm,0.5s
**KBL Kabul 58.87 319** P **P 23 45 10.1 -1.8**
KBL pmax pmax
comp=Z,8.0nm,0.8s
**KBL Kabul 58.87 319** P **P 23 45 10.1 -1.8**
KBL IAmb IAmb 23 45 11.4
comp=Z,7.9nm,0.8s
**KBL Kabul 58.87 319** P **P 23 45 09.7 -2.1**
SNR=6.2
**TARG Taragay, Kyrgy 58.95 331** P **P 23 45 13.1 +0.6**
TARG IAmb IAmb 23 46 03.5
comp=Z,6.8nm,0.8s
**ZAK Zakamensk 59.28 354** *eP* **P 23 45 13.1 -1.1**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**UZB Uzynbulak 59.49 333** *eP* **P 23 45 14.3 -1.6**
**UZB Uzynbulak 59.49 333** *eP* **P 23 45 14.3 -1.6**
baz=333
**JLN Jalan Bani Buh 59.57 302** P **P 23 45 16.0 -0.7**
**ASAJ Asahikawa 59.63 26** P **P 23 45 15.9 -0.7**
ASAJ pmax pmax
comp=Z,76nm,1.6s
**JKA Kamikawa-asahi 59.63 26** P **P 23 45 15.9 -0.8**
**SATY Saty 59.70 332** *eP* **P 23 45 15.5 -1.8**
**SATY Saty 59.70 332** *eP* **P 23 45 15.6 -1.8**
baz=332
**KPKS Kokpek 59.89 333** *eP* **P 23 45 17.2 -1.4**
**KPKS Kokpek 59.89 333** *eP* **P 23 45 17.2 -1.4**
baz=333
**WBK Wadi Bani Khal 60.14 302** P **P 23 45 20.1 -0.4**
**DQM DQM 60.27 299** P **P 23 45 21.3 -0.2**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MHTO | **MHTO** | **60.32** | **300** | P | | **P** | **23 45 20.7** | **-1.1** | | |
| | SNR=6.2 | | | | | | | | | |
| KLR | **Kul'dur** | **60.36** | **15** | *ce*P | | **P** | **23 45 19.4** | **-2.1** | | |
| KLR | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| TNSS | **Tian-Shan** | **60.36** | **331** | *e*P | | **P** | **23 45 20.4** | **-1.7** | | |
| | baz=331 | | | | | | | | | |
| MDOK | **Medeo** | **60.41** | **332** | *e*P | | **P** | **23 45 20.8** | **-1.4** | | |
| MDOK | **Medeo** | **60.41** | **332** | *e*P | | **P** | **23 45 20.8** | **-1.4** | | |
| | baz=332 | | | | | | | | | |
| MLZ | **Mavora Lakes** | **60.63** | **138** | P | | **P** | **23 45 23.2** | **-0.4** | | |
| WSAR | **Wadi Sarin** | **60.69** | **303** | P | | **P** | **23 45 23.9** | **-0.4** | | |
| | comp=Z,29nm,0.7s,baz=139,slow=5.5,SNR=49 | | | | | | | | | |
| WSAR | **Wadi Sarin** | **60.69** | **303** | P | | **P** | **23 45 24.1** | **-0.2** | | |
| | SNR=6.8 | | | | | | | | | |
| ZSN | **Zaisan** | **60.72** | **340** | *e*P | | **P** | **23 45 22.9** | **-1.1** | | |
| ZSN | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | |
| ZSN | **Zaisan** | **60.72** | **340** | *e*P | | **P** | **23 45 22.9** | **-1.1** | | |
| | comp=Z,6.5nm,0.8s,baz=340 | | | | | | | | | |
| JMDO | **Jabal Madar** | **60.76** | **302** | P | | **P** | **23 45 24.3** | **-0.6** | | |
| | SNR=6.2 | | | | | | | | | |
| MOY | **Mondy** | **60.81** | **353** | *e*P | | **P** | **23 45 24.6** | **-0.1** | | |
| MOY | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,1.5s | | | | | | | | | |
| SOCY | **Socotra** | **60.84** | **289** | P | | **P** | **23 45 25.3** | **-0.3** | | |
| SOCY | | | | IAmb | | IAmb | 23 45 26.0 | | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| SOCY | **Socotra** | **60.84** | **289** | P | | **P** | **23 45 25.2** | **-0.3** | | |
| TKM2 | **Tokmak 2** | **60.92** | **330** | *i* P | | **P** | **23 45 23.5** | **-2.3** | | |
| TKM2 | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | | |
| GAR | **Garm** | **60.97** | **324** | P | | **P** | **23 45 23.9** | **-2.2** | | |
| GAR | | | | IAmb | | IAmb | 23 45 26.4 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| WKZ | **Wanaka** | **61.07** | **137** | P | | **P** | **23 45 27.3** | **+0.7** | | |
| MK31 | **Makanchi Array** | **61.09** | **337** | *i* P | | **P** | **23 45 24.7** | **-1.9** | | |
| MK31 | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | | |
| MK31 | **Makanchi Array** | **61.09** | **337** | P | | **P** | **23 45 25.9** | **-0.7** | | |
| MK31 | | | | IAmb | | IAmb | 23 45 27.5 | | | |
| | comp=Z,12nm,0.6s | | | | | | | | | |
| MKAR | **Makanchi Array** | **61.09** | **337** | P | | **P** | **23 45 25.6** | **-1.0** | | |
| | comp=Z,20nm,0.6s,baz=150,slow=6.7,SNR=178 | | | | | | | | | |
| SMDO | **Samad** | **61.10** | **302** | P | | **P** | **23 45 26.7** | **-0.5** | | |
| | SNR=5.7 | | | | | | | | | |
| MAKZ | **Makanchi** | **61.22** | **337** | P | | **P** | **23 45 26.5** | **-1.0** | | |
| MAKZ | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | | |
| MAKZ | **Makanchi** | **61.22** | **337** | P | | **P** | **23 45 26.5** | **-1.0** | | |
| MAKZ | | | | IAmb | | IAmb | 23 45 28.3 | | | |
| | comp=Z,4.9nm,0.7s | | | | | | | | | |
| BIDO | **Bidbid** | **61.23** | **303** | P | | **P** | **23 45 27.7** | **-0.3** | | |
| | SNR=14 | | | | | | | | | |
| SHAO | **Shalim** | **61.24** | **296** | P | | **P** | **23 45 27.6** | **-0.5** | | |
| AAK | **Ala-Archa** | **61.26** | **330** | LR | | LR | 00 16 17.8 | | | |
| | comp=Z,64nm,19.9s,baz=67,slow=40 | | | | | | | | | |
| AAK | **Ala-Archa** | **61.26** | **330** | *ce*P | | **P** | **23 45 27.3** | **-0.7** | | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | | | |
| AAK | **Ala-Archa** | **61.26** | **330** | P | | **P** | **23 45 28.5** | **+0.5** | | |
| AAK | **Ala-Archa** | **61.26** | **330** | P | | **P** | **23 45 28.5** | **+0.5** | | |
| AML | **Almayashu** | **61.30** | **329** | P | | **P** | **23 45 27.8** | **-0.8** | | |
| AML | **Almayashu** | **61.30** | **329** | *i* P | | **P** | **23 45 27.4** | **-1.1** | | |
| | SNR=14 | | | | | | | | | |
| KUU | **Kurty** | **61.30** | **332** | *e*P | | **P** | **23 45 25.7** | **-2.3** | | |
| KUU | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | | |
| KUU | **Kurty** | **61.30** | **332** | *e*P | | **P** | **23 45 25.8** | **-2.3** | | |
| | comp=Z,4.1nm,0.6s,baz=332 | | | | | | | | | |
| CHGR | **Chuyangaron** | **61.43** | **323** | IAmb | | IAmb | 23 46 11.5 | | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| BSY | **Bisya** | **61.68** | **302** | P | | **P** | **23 45 30.5** | **-0.6** | | |
| LBZ | **Lake Benmore** | **61.73** | **136** | P | | **P** | **23 45 29.4** | **-1.7** | | |
| DMTO | **DMTO** | **61.74** | **295** | P | | **P** | **23 45 30.8** | **-0.7** | | |
| SGDS | **Sogindy** | **61.79** | **330** | *e*P | | **P** | **23 45 29.5** | **-2.0** | | |
| | baz=330 | | | | | | | | | |
| DGZ | **Jazzator, Alta** | **61.86** | **343** | *i* P | | **P** | **23 45 31.6** | **-0.3** | | |
| DGZ | | | | pmax | | pmax | | | | |
| | comp=Z,26nm,0.7s | | | | | | | | | |
| HOQ | **Hoqain** | **61.93** | **302** | P | | **P** | **23 45 32.3** | **-0.4** | | |
| | SNR=6.8 | | | | | | | | | |
| YSS | **Yuzh-Sakhalins** | **62.00** | **24** | *e*P | | **P** | **23 45 32.4** | **-0.2** | | |
| YSS | | | | pmax | | pmax | | | | |
| | comp=Z,40nm,1.1s | | | | | | | | | |
| YSS | **Yuzh-Sakhalins** | **62.00** | **24** | P | | **P** | **23 45 32.6** | **-0.1** | | |
| RPZ | **Rata Peaks** | **62.15** | **135** | LR | | LR | 00 11 13.0 | | | |
| | comp=Z,166nm,21.8s,baz=273,slow=35 | | | | | | | | | |
| RPZ | **Rata Peaks** | **62.15** | **135** | P | | **P** | **23 45 34.2** | **+0.3** | | |
| RPZ | | | | IAmb | | IAmb | 23 45 37.0 | | | |
| | comp=Z,50nm,1.3s | | | | | | | | | |
| RBK | **Rabkut** | **62.33** | **295** | P | | **P** | **23 45 34.7** | **-0.8** | | |
| ARQ | **Araqi** | **62.49** | **302** | P | | **P** | **23 45 35.7** | **-0.7** | | |
| QRZ | **Quartz Range** | **62.51** | **132** | P | | **P** | **23 45 37.8** | **+1.5** | | |
| OXZ | **Oxford** | **62.74** | **134** | P | | **P** | **23 45 36.0** | **-1.8** | | |
| DOK | **Doka** | **62.78** | **296** | P | | **P** | **23 45 37.3** | **-1.1** | | |
| | SNR=7.0 | | | | | | | | | |
| WHFO | **Wadi Hawf** | **62.86** | **295** | P | | **P** | **23 45 37.8** | **-1.2** | | |
| ABPO | **Ambohimpanom** | **62.98** | **253** | P | | **P** | **23 45 40.9** | **+0.9** | | |
| ABPO | | | | pmax | | pmax | | | | |
| | comp=Z,33nm,1.7s | | | | | | | | | |
| ABPO | **Ambohimpanom** | **62.98** | **253** | P | | **P** | **23 45 40.9** | **+0.9** | | |
| ABPO | | | | IAmb | | IAmb | 23 47 15.9 | | | |
| | comp=Z,33nm,1.7s | | | | | | | | | |
| THZ | **Tophouse** | **62.99** | **133** | P | | **P** | **23 45 40.9** | **+1.4** | | |
| THZ | | | | IAmb | | IAmb | 23 46 08.9 | | | |
| | comp=Z,75nm,1.8s | | | | | | | | | |
| DZA | **Taraz** | **63.07** | **328** | *e*P | | **P** | **23 45 38.5** | **-1.4** | | |
| DZA | **Taraz** | **63.07** | **328** | *e*P | | **P** | **23 45 38.5** | **-1.4** | | |
| | baz=328 | | | | | | | | | |
| ABTO | **Aybut** | **63.09** | **294** | P | | **P** | **23 45 40.0** | **-0.6** | | |
| IUG | **Iuzhnay** | **63.25** | **327** | *e*P | | **P** | **23 45 39.0** | **-2.2** | | |
| IUG | **Iuzhnay** | **63.25** | **327** | *e*P | | **P** | **23 45 39.1** | **-2.2** | | |
| | baz=326 | | | | | | | | | |
| MQZ | **McQueen's Vall** | **63.27** | **135** | P | | **P** | **23 45 42.5** | **+1.2** | | |
| HRA | **Herat** | **63.34** | **315** | P | | **P** | **23 45 41.0** | **-1.1** | | |
| UMZA | **Um Al Zommool** | **63.39** | **301** | P | | **P** | **23 45 41.3** | **-1.1** | | |
| VOI | **Vohitsoka** | **63.40** | **250** | P | | **P** | **23 45 43.8** | **+1.0** | | |
| VOI | | | | IAmb | | IAmb | 23 45 44.7 | | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| VOI | **Vohitsoka** | **63.40** | **250** | P | | **P** | **23 45 44.2** | **+1.4** | | |
| UOSS | **Minazif** | **63.41** | **303** | P | | **P** | **23 45 41.1** | **-1.4** | | |
| UOSS | | | | IAmb | | IAmb | 23 45 42.2 | | | |
| | comp=Z,21nm,0.7s | | | | | | | | | |
| UOSS | **Minazif** | **63.41** | **303** | P | | **P** | **23 45 41.4** | **-1.1** | | |
| UOSS | **Minazif** | **63.41** | **303** | P | | **P** | **23 45 41.4** | **-1.1** | | |
| HATD | **Hatta, Dubai** | **63.42** | **303** | P | | **P** | **23 45 42.2** | **-0.4** | | |
| HATD | **Hatta, Dubai** | **63.42** | **303** | *i* P | | **P** | **23 45 42.0** | **-0.6** | | |
| | SNR=7.2 | | | | | | | | | |
| ALNE | **Al Ain** | **63.43** | **302** | P | | **P** | **23 45 42.1** | **-0.6** | | |
| ALNE | **Al Ain** | **63.43** | **302** | *i* P | | **P** | **23 45 41.9** | **-0.8** | | |
| | SNR=11 | | | | | | | | | |
| ASHO | **Ashiyiah** | **63.43** | **303** | P | | **P** | **23 45 42.0** | **-0.6** | | |
| ASHO | **Ashiyiah** | **63.43** | **303** | *i* P | | **P** | **23 45 41.9** | **-0.8** | | |
| | SNR=13 | | | | | | | | | |
| KHZ | **Kahutara** | **63.60** | **133** | P | | **P** | **23 45 44.3** | **+0.8** | | |
| ZEA | **Zeya** | **63.62** | **10** | *e*P | | **P** | **23 45 42.9** | **-0.4** | | |
| ZEA | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | | |
| MSFE | **Esma-Masafi** | **63.62** | **304** | P | | **P** | **23 45 43.6** | **-0.4** | | |
| MASF | **Masafi** | **63.63** | **304** | P | | **P** | **23 45 43.6** | **-0.4** | | |
| KKAR | **Karatay Array** | **63.65** | **328** | P | | **P** | **23 45 44.6** | **+0.9** | | |
| KKAR | **Karatay Array** | **63.65** | **328** | P | | **P** | **23 45 44.6** | **+0.9** | | |
| BANOM | **Banah** | **63.75** | **304** | P | | **P** | **23 45 44.2** | **-0.5** | | |
| BANOM | **Banah** | **63.75** | **304** | P | | **P** | **23 45 44.0** | **-0.8** | | |
| FAQ | **Al Faqa, Dubai** | **63.84** | **303** | P | | **P** | **23 45 44.7** | **-0.6** | | |
| | SNR=6.5 | | | | | | | | | |
| FAQ | **Al Faqa, Dubai** | **63.84** | **303** | *i* P | | **P** | **23 45 44.7** | **-0.6** | | |
| | SNR=38 | | | | | | | | | |
| NAZ | **Nazwa, Dubai** | **63.88** | **303** | P | | **P** | **23 45 44.9** | **-0.7** | | |
| NAZ | **Nazwa, Dubai** | **63.88** | **303** | *i* P | | **P** | **23 45 44.7** | **-0.9** | | |
| | SNR=6.4 | | | | | | | | | |
| SHME | **Shamm** | **63.93** | **304** | P | | **P** | **23 45 45.5** | **-0.4** | | |
| SHME | **Shamm** | **63.93** | **304** | P | | **P** | **23 45 45.2** | **-0.7** | | |
| BRLS | **Boroldaу** | **63.96** | **327** | *e*P | | **P** | **23 45 43.1** | **-2.7** | | |
| BRLS | **Boroldaу** | **63.96** | **327** | *e*P | | **P** | **23 45 43.1** | **-2.7** | | |
| | baz=327 | | | | | | | | | |
| ASUD | **Al Ashush, Dub** | **64.01** | **303** | P | | **P** | **23 45 46.3** | **-0.2** | | |
| ASUD | **Al Ashush, Dub** | **64.01** | **303** | *i* P | | **P** | **23 45 46.0** | **-0.5** | | |
| | SNR=15 | | | | | | | | | |
| UMQ | **Umm Al-Quwin** | **64.10** | **304** | P | | **P** | **23 45 46.7** | **-0.4** | | |
| AJN | **Ajban** | **64.27** | **303** | P | | **P** | **23 45 47.0** | **-1.1** | | |
| AJN | **Ajban** | **64.27** | **303** | P | | **P** | **23 45 46.9** | **-1.2** | | |
| SEM | **Semipalatinsk** | **64.85** | **338** | *e*P | | **P** | **23 45 49.6** | **-2.1** | | |
| SEM | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | | |
| SEM | **Semipalatinsk** | **64.85** | **338** | *e*P | | **P** | **23 45 49.7** | **-2.1** | | |
| | comp=Z,4.7nm,0.6s,baz=338 | | | | | | | | | |
| MZWR | **Madinat Zayed** | **64.88** | **301** | P | | **P** | **23 45 51.4** | **-0.7** | | |
| MZR | **Muzera** | **64.94** | **300** | P | | **P** | **23 45 52.0** | **-0.5** | | |
| MZR | **Muzera** | **64.94** | **300** | *i* P | | **P** | **23 45 51.9** | **-0.7** | | |
| | SNR=9.5 | | | | | | | | | |
| BKZ | **Black Stump Fm** | **65.18** | **129** | P | | **P** | **23 45 54.8** | **+0.9** | | |
| BKZ | | | | IAmb | | IAmb | 23 45 56.0 | | | |
| | comp=Z,32nm,1.3s | | | | | | | | | |
| BFZ | **Birch Farm** | **65.25** | **131** | P | | **P** | **23 45 55.0** | **+0.7** | | |
| URZ | **Urewera** | **65.52** | **128** | LR | | LR | 00 17 10.1 | | | |
| | comp=Z,90nm,18.2s,baz=280,slow=38 | | | | | | | | | |
| KURK | **Kurchatov** | **65.70** | **338** | *ce*P | | **P** | **23 45 56.1** | **-0.8** | | |
| KURK | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | | |
| KURK | **Kurchatov** | **65.70** | **338** | P | | **P** | **23 45 56.1** | **-0.8** | | |
| KURK | | | | IAmb | | IAmb | 23 45 56.7 | | | |
| | comp=Z,8.3nm,0.7s | | | | | | | | | |
| KURK | **Kurchatov** | **65.70** | **338** | P | | **P** | **23 45 56.1** | **-0.8** | | |
| GHWR | **Ruwais** | **65.81** | **301** | P | | **P** | **23 45 57.6** | **-0.5** | | |
| BOD | **Bodaibo** | **66.33** | **1** | *e*P | | **P** | **23 46 00.0** | **-0.8** | | |
| BOD | | | | pmax | | pmax | | | | |
| | comp=Z,21nm,1.0s | | | | | | | | | |
| ZAA0 | **Zalesovo Array** | **66.38** | **343** | IAmb | | IAmb | 23 46 00.7 | | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| ZALV | **Zalesovo Beam** | **66.38** | **343** | P | | **P** | **23 45 59.8** | **-1.4** | | |
| | comp=Z,14nm,0.6s,baz=160,slow=4.8,SNR=91 | | | | | | | | | |
| ZALV | | | | PKP2bc | | | 00 14 37.0 | | | |
| | comp=Z,0.6nm,0.8s,baz=346,slow=3.7,SNR=3.8 | | | | | | | | | |
| ZALV | **Zalesovo Beam** | **66.38** | **343** | *i* P | | **P** | **23 45 59.7** | **-1.5** | | |
| ZALV | | | | pmax | | pmax | | | | |
| | comp=Z,15nm,0.6s | | | | | | | | | |
| SLWR | **Sila** | **66.85** | **301** | P | | **P** | **23 46 04.3** | **-0.5** | | |
| MAW | **Mawson** | **67.09** | **198** | LR | | LR | 00 08 16.2 | | | |
| | comp=Z,148nm,20.7s,baz=54,slow=29 | | | | | | | | | |
| TRNA | **Turayna** | **67.50** | **301** | P | | **P** | **23 46 08.3** | **-0.6** | | |
| BRZS | **Berezniki** | **67.53** | **334** | *e*P | | **P** | **23 46 07.2** | **-1.4** | | |
| BRZS | **Berezniki** | **67.53** | **334** | *e*P | | **P** | **23 46 07.2** | **-1.4** | | |
| | baz=334 | | | | | | | | | |
| KHOR | **Al-Khor Airpor** | **67.58** | **302** | P | | **P** | **23 46 08.7** | **-0.7** | | |
| GEYT | **Alibeck** | **68.04** | **317** | P | | **P** | **23 46 11.2** | **-0.9** | | |
| | comp=Z,3.9nm,0.5s,baz=177,slow=12,SNR=8.9 | | | | | | | | | |
| GEYT | | | | LR | | LR | 00 19 51.3 | | | |
| | comp=Z,44nm,18.4s,baz=135,slow=39 | | | | | | | | | |
| GYA0B | **ALIBECK ARRAY** | **68.04** | **317** | IAmb | | IAmb | 23 46 29.1 | | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | | |
| SHMA | **Al-Shehemyia** | **68.13** | **302** | P | | **P** | **23 46 12.1** | **-0.7** | | |
| SAKB | **Bahrain** | **68.53** | **302** | P | | **P** | **23 46 14.6** | **-0.8** | | |
| BRVK | **Borovoye** | **70.81** | **335** | *ce*P | | **P** | **23 46 27.9** | **-0.9** | | |
| BRVK | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| BRVK | **Borovoye** | **70.81** | **335** | P | | **P** | **23 46 27.6** | **-1.2** | | |
| YAK | **Yakutsk** | **71.93** | **9** | *c i* P | | **P** | **23 46 34.4** | **-0.9** | | |
| YAK | | | | *e**PP | | **pP** | **23 46 50.0** | **-3.2** | | |
| YAK | | | | *e* | | | 23 49 14.2 | | | |
| YAK | | | | *e*PPP | | PPP | 23 50 58.5 | | | |
| YAK | | | | *e*S | | **S** | **23 55 49.6** | **-1.5** | | |
| YAK | | | | *e**SS | | **sS** | **23 56 25.7** | **+4.0** | | |
| YAK | | | | *e*SS | | **SS** | **00 00 25.0** | **-4.1** | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=Z,42nm,0.9s | | | | | | | | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=N,8.0nm,1.1s | | | | | | | | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=E,5.0nm,1.1s | | | | | | | | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=Z,251nm,6.7s | | | | | | | | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=N,120nm,5.0s | | | | | | | | | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=E,116nm,4.7s | | | | | | | | | |
| YAK | | | | smax | | smax | | | | |
| | comp=E,67nm,5.3s | | | | | | | | | |
| YAK | | | | smax | | smax | | | | |
| | comp=N,94nm,4.7s | | | | | | | | | |
| RAYN | **Ar Rayn** | **72.00** | **298** | P | | **P** | **23 46 35.9** | **-0.8** | | |
| RAYN | | | | pmax | | pmax | | | | |
| | comp=Z,23nm,1.1s | | | | | | | | | |
| RAYN | **Ar Rayn** | **72.00** | **298** | P | | **P** | **23 46 35.9** | **-0.8** | | |
| RAYN | | | | IAmb | | IAmb | 23 46 36.8 | | | |
| | comp=Z,23nm,1.1s | | | | | | | | | |
| RAYN | **Ar Rayn** | **72.00** | **298** | *i* P | | **P** | **23 46 35.9** | **-0.8** | | |
| | SNR=29 | | | | | | | | | |
| PEA0B | **Petropavlovsk-** | **72.98** | **27** | *ce*P | | **P** | **23 46 42.9** | **+1.1** | | |
| PETK | **Petropavlovsk-** | **72.98** | **27** | P | | **P** | **23 46 41.1** | **-0.7** | | |
| | comp=Z,15nm,0.7s,baz=217,slow=3.7,SNR=16 | | | | | | | | | |
| PETK | **Petropavlovsk-** | **72.98** | **27** | P | | **P** | **23 46 41.5** | **-0.3** | | |
| PETK | **Petropavlovsk-** | **72.98** | **27** | P | | **P** | **23 46 41.5** | **-0.3** | | |
| ABKAR | **Akbulak array** | **73.21** | **328** | P | | **P** | **23 46 42.6** | **-0.6** | | |
| ABKAR | **Akbulak array** | **73.21** | **328** | IAmb | | IAmb | 23 46 43.3 | | | |
| | comp=Z,40nm,0.7s | | | | | | | | | |
| KIBK | **Kibwezi** | **73.32** | **270** | IAmb | | IAmb | 23 46 46.7 | | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| KIBK | **Kibwezi** | **73.32** | **270** | P | | **P** | **23 46 45.8** | **+1.0** | | |
| VNDA | **Vanda** | **73.49** | **170** | LR | | LR | 00 15 53.2 | | | |
| | comp=Z,76nm,22.0s,baz=312,slow=33 | | | | | | | | | |
| VNDA | **Vanda** | **73.49** | **170** | P | | **P** | **23 46 46.3** | **+1.8** | | |
| VNDA | | | | pmax | | pmax | | | | |
| | comp=Z,100nm,1.8s | | | | | | | | | |
| VNDA | **Vanda** | **73.49** | **170** | P | | **P** | **23 46 46.3** | **+1.8** | | |
| VNDA | | | | IAmb | | IAmb | 23 47 00.4 | | | |
| | comp=Z,100nm,1.8s | | | | | | | | | |
| KMBO | **Kilima Mbogo** | **74.28** | **271** | P | | **P** | **23 46 51.5** | **+0.9** | | |
| | comp=Z,5.5nm,0.9s,baz=75,slow=8.8,SNR=22 | | | | | | | | | |
| KMBO | **Kilima Mbogo** | **74.28** | **271** | *ce*P | | **P** | **23 46 49.8** | **-0.8** | | |
| KMBO | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| KMBO | **Kilima Mbogo** | **74.28** | **271** | P | | **P** | **23 46 51.6** | **+0.9** | | |
| KMBO | **Kilima Mbogo** | **74.28** | **271** | P | | **P** | **23 46 51.8** | **+1.2** | | |
| KMBO | **Kilima Mbogo** | **74.28** | **271** | *i* P | | **P** | **23 46 51.5** | **+0.9** | | |
| | SNR=8.7 | | | | | | | | | |
| SBA | **Scott Base** | **74.55** | **170** | P | | **P** | **23 46 53.0** | **+2.4** | | |
| SBA | | | | pmax | | pmax | | | | |
| | comp=Z,392nm,1.9s | | | | | | | | | |
| SBA | **Scott Base** | **74.55** | **170** | P | | **P** | **23 46 53.0** | **+2.4** | | |
| MA2 | **Magadan** | **74.92** | **19** | *ce*P | | **P** | **23 46 53.2** | **+0.2** | | |
| MA2 | | | | pmax | | pmax | | | | |
| | comp=Z,31nm,0.8s | | | | | | | | | |
| MA2 | **Magadan** | **74.92** | **19** | P | | **P** | **23 46 53.4** | **+0.4** | | |
| MA2 | | | | IAmb | | IAmb | 23 46 54.1 | | | |
| | comp=Z,28nm,0.8s | | | | | | | | | |
| LODK | **Lodwar** | **76.87** | **276** | P | | **P** | **23 47 06.4** | **+1.1** | | |
| LODK | **Lodwar** | **76.87** | **276** | P | | **P** | **23 47 06.6** | **+1.4** | | |
| SVE | **Sverdlovsk** | **77.46** | **334** | *e*P | | **P** | **23 47 06.8** | **-0.7** | | |
| SVE | | | | pmax | | pmax | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| SEY | **Seymchan** | **77.98** | **18** | *i* P | | **P** | **23 47 10.6** | **+0.4** | | |
| ARU | **Arti** | **78.13** | **333** | *c i* P | | **P** | **23 47 10.3** | **-0.9** | | |
| ARU | | | | | | | 23 50 03.6 | | | |
| ARU | | | | S | | **S** | **23 57 01.3** | **+1.1** | | |
| ARU | | | | SS | | **SS** | **00 01 58.7** | **-4.8** | | |
| ARU | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| ARU | **Arti** | **78.13** | **333** | P | | **P** | **23 47 10.3** | **-0.9** | | |
| ARU | | | | IAmb | | IAmb | 23 47 11.2 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| GNI | **Garni** | **78.34** | **314** | P | | **P** | **23 47 12.4** | **-0.6** | | |
| | comp=Z,9.3nm,1.0s,baz=135,slow=4.3,SNR=7.8 | | | | | | | | | |
| GNI | **Garni** | **78.34** | **314** | *ce*P | | **P** | **23 47 12.5** | **-0.5** | | |
| GNI | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| GNI | **Garni** | **78.34** | **314** | P | | **P** | **23 47 12.6** | **-0.4** | | |
| GNI | | | | IAmb | | IAmb | 23 47 19.9 | | | |
| | comp=Z,9.4nm,0.8s | | | | | | | | | |
| GNI | **Garni** | **78.34** | **314** | P | | **P** | **23 47 12.8** | **-0.1** | | |
| GNI | **Garni** | **78.34** | **314** | P | | **P** | **23 47 12.9** | **0.0** | | |
| GROC | **Groznyy** | **78.78** | **317** | *e*P | | **P** | **23 47 14.6** | **-0.5** | | |
| GROC | | | | *e* | | | 23 47 23.1 | | | |
| GROC | | | | *e**PP | | **pP** | **23 47 31.4** | **-1.7** | | |
| GROC | | | | *e*S | | **S** | **23 57 10.7** | **+2.9** | | |
| GROC | | | | *e* | | | 23 57 30.1 | | | |
| GROC | | | | pmax | | pmax | | | | |
| | comp=Z,43nm,1.2s | | | | | | | | | |
| NRIK | **Noril'sk** | **79.63** | **352** | P | | **P** | **23 47 18.0** | **-1.2** | | |
| | comp=Z,2.0nm,0.4s,baz=133,slow=4.2,SNR=7.4 | | | | | | | | | |
| NRIK | **Noril'sk** | **79.63** | **352** | *ce*P | | **P** | **23 47 18.5** | **-0.7** | | |
| NRIK | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| ZEI | **Tsey** | **79.91** | **316** | *e*P | | **P** | **23 47 20.2** | **-1.3** | | |
| ZEI | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| ONI | **Oni** | **80.14** | **316** | P | | **P** | **23 47 23.8** | **+1.2** | | |
| ONI | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| ONI | **Oni** | **80.14** | **316** | P | | **P** | **23 47 23.8** | **+1.2** | | |
| NCK | **Nalchik** | **80.38** | **317** | *i* P | | **P** | **23 47 23.2** | **-0.6** | | |
| NCK | | | | pmax | | pmax | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| MBAR | **Mbarara** | **80.80** | **271** | LR | | LR | 00 16 29.8 | | | |
| | comp=Z,37nm,20.1s,baz=116,slow=31 | | | | | | | | | |
| MBAR | **Mbarara** | **80.80** | **271** | P | | **P** | **23 47 28.2** | **+1.3** | | |
| MBAR | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| MBAR | **Mbarara** | **80.80** | **271** | P | | **P** | **23 47 28.2** | **+1.3** | | |
| MBAR | | | | IAmb | | IAmb | 23 47 29.1 | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| MBAR | **Mbarara** | **80.80** | **271** | P | | **P** | **23 47 27.9** | **+0.9** | | |
| NEY | **Neytrino** | **80.88** | **316** | *i* P | | **P** | **23 47 25.9** | **-0.8** | | |
| NEY | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| PYA1 | **Pyatigorsk** | **80.92** | **317** | *i* P | | **P** | **23 47 26.1** | **-0.6** | | |
| PYA1 | | | | pmax | | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| KBZ | **Khabaz** | **80.94** | **317** | P | | **P** | **23 47 26.8** | **+0.1** | | |
| | comp=Z,16nm,0.8s,baz=119,slow=4.4,SNR=54 | | | | | | | | | |
| TIXI | **Tiksi** | **81.01** | **5** | *ce*P | | **P** | **23 47 25.3** | **-1.2** | | |
| TIXI | | | | pmax | | pmax | | | | |
| | comp=Z,25nm,0.7s | | | | | | | | | |
| TIXI | **Tiksi** | **81.01** | **5** | P | | **P** | **23 47 25.5** | **-1.0** | | |
| TIXI | | | | IAmb | | IAmb | 23 47 26.3 | | | |
| | comp=Z,26nm,0.8s | | | | | | | | | |
| SHA1 | **Shidzhatmaz** | **81.10** | **317** | *i* P | | **P** | **23 47 27.0** | **-0.9** | | |
| KIV | **Kislovodsk** | **81.16** | **317** | *e*P | | **P** | **23 47 27.7** | **-0.4** | | |
| KIV | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| KIV | **Kislovodsk** | **81.16** | **317** | P | | **P** | **23 47 27.8** | **-0.4** | | |
| KIV | | | | IAmb | | IAmb | 23 47 29.6 | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| KIV | **Kislovodsk** | **81.16** | **317** | P | | **P** | **23 47 27.8** | **-0.4** | | |
| KIV | **Kislovodsk** | **81.16** | **317** | *i* P | | **P** | **23 47 27.6** | **-0.4** | | |
| | SNR=14 | | | | | | | | | |
| QSPA | **South Pole Qui** | **81.29** | **180** | LR | | LR | 00 22 50.8 | | | |
| | comp=Z,78nm,18.9s,baz=0.5,slow=35 | | | | | | | | | |
| QSPA | **South Pole Qui** | **81.29** | **180** | P | | **P** | **23 47 29.1** | **+0.7** | | |
| QSPA | | | | IAmb | | IAmb | 23 47 47.1 | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| GOF | **Gofitskoye** | **81.32** | **318** | ⇑*e*P | | **P** | **23 47 28.8** | **0.0** | | |
| GOF | | | | pmax | | pmax | | | | |
| | comp=Z,29nm,0.9s | | | | | | | | | |
| LSZ | **Lusaka** | **81.37** | **256** | LR | | LR | 00 17 41.7 | | | |
| | comp=Z,80nm,20.3s,baz=131,slow=31 | | | | | | | | | |
| LSZ | **Lusaka** | **81.37** | **256** | P | | **P** | **23 47 30.7** | **+0.9** | | |
| LSZ | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| LSZ | **Lusaka** | **81.37** | **256** | P | | **P** | **23 47 30.7** | **+0.9** | | |
| BELG | **Belogornoye** | **81.51** | **326** | P | | **P** | **23 47 28.9** | **-0.7** | | |
| | comp=Z,49nm,0.7s,baz=161,slow=1.0,SNR=16 | | | | | | | | | |
| BELG | **Belogornoye** | **81.51** | **326** | *c i* P | | **P** | **23 47 28.6** | **-0.9** | | |
| BELG | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | | |
| BOSA | **Boshof** | **82.63** | **242** | P | | **P** | **23 47 37.3** | **+1.1** | | |
| | comp=Z,4.2nm,0.6s,baz=107,slow=4.3,SNR=27 | | | | | | | | | |
| BOSA | | | | LR | | LR | 00 19 55.6 | | | |
| | comp=Z,81nm,18.4s,baz=112,slow=32 | | | | | | | | | |
| BOSA | **Boshof** | **82.63** | **242** | IAmb | | IAmb | 23 49 38.3 | | | |
| | comp=Z,34nm,1.7s | | | | | | | | | |
| GHAJ | **Ghor Haditha** | **82.67** | **303** | IAmb | | IAmb | 23 47 37.8 | | | |
| | comp=Z,37nm,0.9s | | | | | | | | | |
| LBTB | **Lobatse** | **82.71** | **246** | P | | **P** | **23 47 37.7** | **+1.0** | | |
| LBTB | | | | pmax | | pmax | | | | |
| | comp=Z,41nm,1.9s | | | | | | | | | |
| LBTB | **Lobatse** | **82.71** | **246** | P | | **P** | **23 47 37.7** | **+1.0** | | |
| LBTB | | | | IAmb | | IAmb | 23 50 25.4 | | | |
| | comp=Z,41nm,1.9s | | | | | | | | | |
| SOC | **Sochi** | **83.05** | **316** | *e*P |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HARR | **Harsova** | **91.53** | **315** | ⇑P | | P | | 23 48 36.0 | +17 |
| AKASG | **Malin Array Be** | **91.83** | **321** | P | | **P** | | **23 48 18.8** | **-1.4** |
| | comp=Z,3.1nm,0.7s,baz=84,slow=4.5,SNR=21 | | | | | | | | |
| AKBB | **Malin Array Si** | **91.83** | **321** | *ce*P | | **P** | | **23 48 19.2** | **-0.9** |
| AKBB | **Malin Array Si** | **91.83** | **321** | IAmb | | IAmb | | 23 48 19.6 | |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| AKBB | | | | | | pP | | 23 48 35.7 | -2.8 |
| SORM | **Soroca** | **91.89** | **318** | ⇑P | | **P** | | **23 48 19.3** | **-1.2** |
| SORM | **Soroca** | **91.89** | **318** | ⇑P | | **P** | | **23 48 19.3** | **-1.2** |
| IDI | **Anoyia** | **92.24** | **305** | ⇓P | | **P** | | **23 48 21.5** | **-1.0** |
| VRI | **Vrincioaia** | **92.58** | **316** | ⇓P | | **P** | | **23 48 23.6** | **-0.2** |
| VRI | **Vrincioaia** | **92.58** | **316** | ⇓P | | **P** | | **23 48 23.6** | **-0.2** |
| PLOR | **Plostina** | **92.63** | **316** | ⇓P | | **P** | | **23 48 24.8** | **+0.8** |
| PLOR | **Plostina** | **92.63** | **316** | ⇓P | | **P** | | **23 48 24.8** | **+0.8** |
| TESR | **Tescani** | **92.74** | **316** | ⇓P | | **P** | | **23 48 24.1** | **-0.4** |
| NEHR | **Nehoiu** | **92.80** | **315** | ⇑P | | **P** | | **23 48 24.4** | **-0.4** |
| MLR | **Muntele Rosu** | **93.06** | **315** | ⇓P | | **P** | | **23 48 25.7** | **-0.5** |
| MLR | **Muntele Rosu** | **93.06** | **315** | ⇓P | | **P** | | **23 48 25.7** | **-0.5** |
| MLR | **Muntele Rosu** | **93.06** | **315** | P | | **P** | | **23 48 25.6** | **-0.5** |
| MLR | | | | IAmb | | IAmb | | 23 48 58.1 | |
| | comp=Z,5.1nm,1.0s | | | | | | | | |
| MNK | **Minsk** | **93.34** | **325** | *i* P | | **P** | | **23 48 23.6** | **-3.5** |
| MNK | | | | *i* *PP | | **pP** | | **23 48 45.3** | **-0.1** |
| MNK | | | | *i* | | | | 23 52 08.7 | |
| MNK | | | | *i* PPP | | PPP | | 23 54 09.3 | |
| MNK | | | | *i* S | | **SKSac** | | **23 58 50.2** | **-5.2** |
| MNK | | | | *i* SS | | **SS** | | **00 05 45.0** | **-1.8** |
| MNK | | | | *i* SSS | | SSS | | 00 09 19.9 | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,3.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,1.0nm,0.8s | | | | | | | | |
| **MNK** | **Minsk** | **93.34** | **325** | *i* P | | **P** | | **23 48 23.6** | **-3.4** |
| | comp=E,1.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | **P** | | **23 48 23.6** | **-3.4** |
| | comp=N,3.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | **P** | | **23 48 23.6** | **-3.4** |
| | comp=Z,6.0nm,0.8s,baz=100 | | | | | | | | |
| MNK | | | | *i* pP | | **pP** | | **23 48 45.3** | **-0.1** |
| MNK | | | | *i* sP | | **sP** | | **23 48 54.2** | **+1.7** |
| MNK | | | | *i* PP | | **PP** | | **23 52 08.7** | **-3.1** |
| MNK | | | | *i* PPP | | PPP | | 23 54 09.4 | |
| MNK | | | | *i* S | | **SKSac** | | **23 58 50.3** | **-5.2** |
| MNK | | | | *i* sS | | **ScS** | | **23 59 38.6** | **+7.8** |
| MNK | | | | *i* PS | | **PS** | | **00 01 01.6** | **+11** |
| MNK | | | | *i* SKKS | | | | 00 01 59.1 | |
| MNK | | | | *i* SS | | **SS** | | **00 05 45.0** | **-1.8** |
| MNK | | | | *i* SSS | | SSS | | 00 09 20.0 | |
| BURAR | **Bucovina Array** | **93.88** | **317** | ⇑P | | **P** | | **23 48 29.6** | **-0.1** |
| BURAR | **Bucovina Array** | **93.88** | **317** | ⇑P | | **P** | | **23 48 29.8** | **-0.1** |
| ARR | **Arges** | **93.95** | **315** | ⇓P | | **P** | | **23 48 29.1** | **-1.1** |
| VTS | **Vitosha** | **94.57** | **312** | ⇓P | | **P** | | **23 48 31.8** | **-1.4** |
| VTS | **Vitosha** | **94.57** | **312** | ⇓P | | **P** | | **23 48 31.8** | **-1.4** |
| VTS | **Vitosha** | **94.57** | **312** | IAmb | | IAmb | | 23 48 33.3 | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| ANM | **Nome** | **94.84** | **25** | P | | **P** | | **23 48 34.2** | **+0.4** |
| | baz=260 | | | | | | | | |
| FINES | **FINESS Array B** | **95.41** | **331** | P | | **P** | | **23 48 35.9** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=104,slow=7.1,SNR=12 | | | | | | | | |
| FINES | **FINESS Array B** | **95.41** | **331** | *ce*P | | **P** | | **23 48 36.0** | **-0.3** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| ARCES | **ARCESS Array B** | **96.70** | **339** | P | | **P** | | **23 48 40.0** | **-2.1** |
| | comp=Z,1.6nm,0.7s,baz=79,slow=6.3,SNR=8.6 | | | | | | | | |
| ARCES | | | | PKiKP | | **PKiKP** | | **23 53 20.5** | **+1.9** |
| | comp=Z,6.3nm,1.2s,baz=0.0,slow=3.6,SNR=4.8 | | | | | | | | |
| TTA | **Tatalina** | **98.81** | **28** | P | | Pdif | | 23 48 52.3 | +0.5 |
| | baz=268 | | | | | | | | |
| O18K | **Koktuh Hills** | **99.11** | **31** | P | | **Pdif** | | **23 48 53.6** | **+0.5** |
| | baz=268 | | | | | | | | |
| L19K | **White Mountain** | **99.33** | **28** | P | | **Pdif** | | **23 48 55.0** | **+0.8** |
| | baz=269 | | | | | | | | |
| N19K | **Bonanza Creek** | **99.49** | **30** | P | | **Pdif** | | **23 48 55.7** | **+0.7** |
| | baz=269 | | | | | | | | |
| M19K | **Big River Lodg** | **99.55** | **29** | P | | **Pdif** | | **23 48 55.8** | **+0.7** |
| | baz=270 | | | | | | | | |
| J20K | **Nowinta River** | **99.67** | **26** | P | | **Pdif** | | **23 48 56.6** | **+1.0** |
| | baz=270 | | | | | | | | |
| K20K | **Telida** | **99.70** | **27** | P | | **Pdif** | | **23 48 57.0** | **+1.3** |
| | baz=270 | | | | | | | | |
| L20K | **Farewell, AK** | **99.79** | **28** | P | | **Pdif** | | **23 48 56.7** | **+0.6** |
| | baz=270 | | | | | | | | |
| Q19K | **Cape Douglas,** | **99.89** | **32** | P | | **Pdif** | | **23 48 57.5** | **+0.9** |
| | baz=270 | | | | | | | | |
| OHAK | **Old Harbor** | **100.07** | **33** | P | | **Pdif** | | **23 48 58.6** | **+1.2** |
| | baz=270 | | | | | | | | |
| H21K | **Melozitna Rive** | **100.22** | **25** | P | | **Pdif** | | **23 48 58.8** | **+0.8** |
| | baz=272 | | | | | | | | |
| PPLA | **Purkeypile** | **100.56** | **28** | P | | **Pdif** | | **23 49 01.4** | **+1.7** |
| | baz=272 | | | | | | | | |
| I21K | **Tanana** | **100.58** | **25** | P | | **Pdif** | | **23 49 00.5** | **+0.9** |
| | baz=272 | | | | | | | | |
| CAST | **Castle Rocks** | **100.59** | **27** | P | | **Pdif** | | **23 49 00.7** | **+0.9** |
| | baz=272 | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **101.05** | **26** | P | | **Pdif** | | **23 49 02.5** | **+0.7** |
| | baz=273 | | | | | | | | |
| MLY | **Manley** | **101.11** | **25** | P | | **Pdif** | | **23 49 02.8** | **+0.8** |
| | baz=273 | | | | | | | | |
| CAPN | **Captain Cook N** | **101.12** | **30** | P | | **Pdif** | | **23 49 02.6** | **+0.6** |
| | baz=272 | | | | | | | | |
| TOLK | **Toolik Lake Re** | **101.31** | **22** | P | | **Pdif** | | **23 49 03.9** | **+1.1** |
| | baz=275 | | | | | | | | |
| I23K | **Minto, Yukon-K** | **101.69** | **25** | P | | **Pdif** | | **23 49 05.0** | **+0.6** |
| | baz=275 | | | | | | | | |
| CLL | **Collm** | **102.07** | **321** | *e*Pdif | | **Pdif** | | **23 49 07.0** | **+0.5** |
| H24K | **Noodor Dome** | **102.24** | **24** | P | | **Pdif** | | **23 49 07.7** | **+0.7** |
| | baz=276 | | | | | | | | |
| KNK | **Knik Glacier** | **102.39** | **29** | P | | **Pdif** | | **23 49 08.6** | **+0.8** |
| | baz=275 | | | | | | | | |
| SML | **Sawmill** | **102.42** | **29** | P | | **Pdif** | | **23 49 07.7** | **-0.2** |
| | baz=275 | | | | | | | | |
| NOA | **NORSAR Array B** | **102.56** | **331** | P | | **Pdif** | | **23 49 07.4** | **-1.2** |
| | comp=Z,1.3nm,0.8s,baz=80,slow=4.5,SNR=3.5 | | | | | | | | |
| WAT6 | **Susitna Watana** | **102.63** | **28** | P | | **Pdif** | | **23 49 09.3** | **+0.3** |
| | baz=276 | | | | | | | | |
| ILAR | **Eielson Array** | **102.77** | **25** | P | | **Pdif** | | **23 49 08.0** | **-1.3** |
| | comp=Z,0.4nm,0.6s,baz=258,slow=4.4,SNR=4.2 | | | | | | | | |
| ILAR | **Eielson Array** | **102.77** | **25** | P | | **Pdif** | | **23 49 08.0** | **-1.3** |
| SCRK | **Sand Creek** | **104.13** | **26** | P | | **Pdif** | | **23 49 17.6** | **+2.1** |
| | baz=279 | | | | | | | | |
| BMRM | **Bremner River** | **104.30** | **29** | P | | **Pdif** | | **23 49 17.3** | **+1.1** |
| | baz=278 | | | | | | | | |
| L27K | **Beaver Creek,** | **105.24** | **27** | P | | **PKiKP** | | **23 53 36.4** | **+2.2** |
| | baz=281 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | **111.14** | **281** | PKiKP | | **PKiKP** | | **23 53 46.0** | **-0.5** |
| | comp=Z,0.9nm,0.6s,baz=48,slow=1.3,SNR=7.8 | | | | | | | | |
| ESDC | **Sonseca Array** | **115.09** | **310** | PKP | | **PKPdf** | | **23 53 53.5** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=98,slow=2.6,SNR=3.4 | | | | | | | | |
| YKA | **Yellowknife Ar** | **116.83** | **22** | PKP | | **PKPdf** | | **23 53 55.7** | **-0.4** |
| | comp=Z,1.6nm,0.7s,baz=310,slow=1.8,SNR=23 | | | | | | | | |
| YKA | **Yellowknife Ar** | **116.83** | **22** | *ci* PKIKP | | **PKiKP** | | **23 53 56.0** | **-0.1** |
| YKA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| DBIC | **Dimbokro** | **116.98** | **273** | PKP | | **PKPdf** | | **23 53 57.1** | **-0.7** |
| | comp=Z,1.7nm,0.7s,baz=112,slow=5.4,SNR=1.7 | | | | | | | | |
| D03D | **Eldon** | **119.91** | **40** | P | | **PKiKP** | | **23 54 03.3** | **+0.8** |
| | baz=292 | | | | | | | | |
| I03D | **Drain, OR** | **121.07** | **44** | P | | **PKiKP** | | **23 54 06.0** | **+1.1** |
| | baz=289 | | | | | | | | |
| H04D | **Lebanon** | **121.21** | **43** | P | | **PKiKP** | | **23 54 05.8** | **+0.6** |
| | baz=290 | | | | | | | | |
| I04A | **Tendick Farm,** | **121.68** | **43** | P | | **PKiKP** | | **23 54 06.4** | **+0.2** |
| | baz=290 | | | | | | | | |
| J04D | **Umpqua Nationa** | **122.08** | **44** | PKPdf | | **PKiKP** | | **23 54 07.9** | **+0.7** |
| J04D | **Umpqua Nationa** | **122.08** | **44** | P | | **PKiKP** | | **23 54 07.4** | **+0.1** |
| | baz=290 | | | | | | | | |
| M02C | **Callahan** | **122.16** | **46** | P | | **PKiKP** | | **23 54 07.9** | **+0.6** |
| | baz=288 | | | | | | | | |
| L04D | **Klamath Falls** | **122.29** | **45** | P | | **PKPdf** | | **23 54 07.3** | **-0.1** |
| | baz=289 | | | | | | | | |
| N02D | **Trinity Center** | **122.40** | **47** | P | | **PKiKP** | | **23 54 08.7** | **+0.9** |
| | baz=288 | | | | | | | | |
| O02D | **Mt. Diablo Mer** | **122.58** | **48** | P | | **PKiKP** | | **23 54 09.1** | **+1.0** |
| | baz=288 | | | | | | | | |
| J05D | **Fort Rock, OR** | **122.66** | **44** | P | | **PKiKP** | | **23 54 09.2** | **+0.9** |
| | baz=291 | | | | | | | | |
| M04C | **Macdoel** | **122.76** | **46** | P | | **PKiKP** | | **23 54 09.0** | **+0.5** |
| | baz=289 | | | | | | | | |
| O03E | **Paynes Creek** | **123.27** | **47** | P | | **PKiKP** | | **23 54 09.3** | **-0.2** |
| | baz=289 | | | | | | | | |
| BEKR | **Beckworth** | **124.45** | **47** | PKPdf | | **PKiKP** | | **23 54 12.7** | **+0.7** |
| NVAR | **Mina Array Bea** | **126.44** | **48** | PKP | | **PKiKP** | | **23 54 17.4** | **+1.3** |
| | comp=Z,1.4nm,0.6s,baz=272,slow=2.0,SNR=11 | | | | | | | | |
| SBC | **Santa Barbara** | **126.60** | **53** | P | | **PKPdf** | | **23 54 15.5** | **-0.2** |
| | baz=286 | | | | | | | | |
| ISA | **Isabella, Lake** | **127.22** | **52** | P | | **PKiKP** | | **23 54 17.5** | **0.0** |
| | baz=288 | | | | | | | | |
| EDW2 | **Edwards Air Fo** | **127.83** | **52** | P | | **PKiKP** | | **23 54 20.0** | **+1.3** |
| | baz=288 | | | | | | | | |
| MPMC | **Manual Prospec** | **127.85** | **51** | P | | **PKiKP** | | **23 54 19.6** | **+0.7** |
| | baz=289 | | | | | | | | |
| LRMC | **Laurel Mtn Rad** | **127.89** | **52** | P | | **PKiKP** | | **23 54 19.2** | **+0.3** |
| | baz=289 | | | | | | | | |
| R11A | **Troy Canyon, C** | **128.46** | **47** | P | | **PKiKP** | | **23 54 21.2** | **+1.2** |
| | baz=292 | | | | | | | | |
| PDAR | **Pinedale Array** | **130.58** | **40** | PKP | | **PKiKP** | | **23 54 24.4** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=350,slow=0.8,SNR=6.2 | | | | | | | | |
| PDAR | | | | SKPbc | | **SKPbc** | | **23 57 40.9** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=318,slow=2.0,SNR=4.1 | | | | | | | | |
| PDAR | **Pinedale Array** | **130.58** | **40** | PKPdf | | **PKPdf** | | **23 54 23.3** | **-0.1** |
| SCHQ | **Schefferville** | **133.98** | **359** | PKP | | **PKPdf** | | **23 54 29.3** | **+0.2** |
| | comp=Z,2.7nm,0.6s,baz=333,slow=2.6,SNR=9.4 | | | | | | | | |
| ANMO | **Albuquerque** | **136.54** | **47** | *ci* PKIKP | | **PKiKP** | | **23 54 36.3** | **-0.2** |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.7s | | | | | | | | |
| TXAR | **Lajitas Array** | **141.15** | **53** | PKhKP | | PKPpre | | 23 54 37.1 | |
| | comp=Z,0.9nm,0.6s,baz=280,slow=2.2,SNR=14 | | | | | | | | |
| TXAR | | | | SKPbc | | **SKiKP** | | **23 58 16.0** | **-0.6** |
| | comp=Z,0.2nm,0.5s,baz=286,slow=3.7,SNR=2.0 | | | | | | | | |
| TXAR | **Lajitas Array** | **141.15** | **53** | PKiKP | | **PKPdf** | | **23 54 44.3** | **+1.1** |
| TXAR | **Lajitas Array** | **141.15** | **53** | PKPdf | | **PKPdf** | | **23 54 44.3** | **+1.1** |
| TUL1 | **Leonard** | **143.22** | **38** | P | | PKPbc | | 23 54 44.7 | +1.0 |
| | baz=311 | | | | | | | | |
| CPUP | **Villa Florida** | **143.52** | **197** | PKP | | PKPbc | | 23 54 45.8 | +1.0 |
| | comp=Z,3.9nm,0.8s,baz=135,slow=2.9,SNR=5.8 | | | | | | | | |
| JCT | **Junction City** | **143.61** | **49** | PKiKP | | PKPbc | | 23 54 45.6 | +0.6 |
| JCT | **Junction City** | **143.61** | **49** | PKPdf | | PKPbc | | 23 54 45.6 | +0.6 |
| CCM | **Cathedral Cave** | **144.29** | **32** | PKiKP | | PKPbc | | 23 54 46.8 | 0.0 |
| CCM | **Cathedral Cave** | **144.29** | **32** | PKPdf | | PKPbc | | 23 54 46.8 | +0.1 |
| SFIN | **Lafayette** | **144.37** | **25** | P | | PKPbc | | 23 54 47.0 | +0.1 |
| | baz=327 | | | | | | | | |
| WHTX | **Lake Whitney,** | **144.51** | **45** | P | | **PKPab** | | **23 54 47.1** | **-0.3** |
| | baz=304 | | | | | | | | |
| U40A | **Yellville** | **144.66** | **35** | P | | PKPbc | | 23 54 48.1 | +0.1 |
| | baz=315 | | | | | | | | |
| W39A | **Magazine** | **144.91** | **38** | P | | PKPbc | | 23 54 48.8 | 0.0 |
| | baz=313 | | | | | | | | |
| 833A | **Chaparral WMA,** | **144.96** | **52** | P | | **PKPdf** | | **23 54 50.4** | **+0.5** |
| | baz=298 | | | | | | | | |
| O48B | **Farmland** | **145.24** | **23** | P | | **PKPbc** | | **23 54 49.7** | **0.0** |
| | baz=330 | | | | | | | | |
| M53A | **Wi Miller and** | **145.66** | **16** | P | | **PKPab** | | **23 54 51.3** | **-0.1** |
| | baz=338 | | | | | | | | |
| W41B | **Gary Mavity, V** | **145.84** | **36** | P | | **PKPbc** | | **23 54 51.5** | **-0.2** |
| | baz=315 | | | | | | | | |
| M54A | **Oil Creek Stat** | **145.87** | **15** | P | | **PKPbc** | | **23 54 51.5** | **-0.2** |
| | baz=340 | | | | | | | | |
| X40A | **Basin Creek Fa** | **145.97** | **37** | P | | **PKPbc** | | **23 54 51.9** | **-0.3** |
| | baz=313 | | | | | | | | |
| P49A | **Miami Univ. Ec** | **146.04** | **23** | P | | **PKPab** | | **23 54 52.8** | **0.0** |
| | baz=330 | | | | | | | | |
| N54A | **Moraine State** | **146.29** | **16** | P | | **PKPbc** | | **23 54 52.9** | **0.0** |
| | baz=339 | | | | | | | | |
| WCI | **Wyandotte Cave** | **146.51** | **26** | PKP2 | | **PKPab** | | **23 54 54.2** | **-0.5** |
| WCI | **Wyandotte Cave** | **146.51** | **26** | | | **PKPab** | | **23 54 54.2** | **-0.5** |
| O53A | **New Philadelph** | **146.60** | **18** | P | | **PKPbc** | | **23 54 53.7** | **-0.2** |
| | baz=337 | | | | | | | | |
| Z41A | **Richland Creek** | **146.82** | **39** | P | | **PKPdf** | | **23 54 52.8** | **0.0** |
| | baz=312 | | | | | | | | |
| P52A | **Corning** | **146.87** | **19** | P | | **PKPdf** | | **23 54 53.5** | **+0.8** |
| | baz=335 | | | | | | | | |
| N59A | **State Game Lan** | **147.28** | **10** | P | | **PKPbc** | | **23 54 55.2** | **-0.6** |
| | baz=347 | | | | | | | | |
| O56A | **Blue Knob Stat** | **147.31** | **14** | P | | **PKPbc** | | **23 54 54.8** | **-1.1** |
| | baz=341 | | | | | | | | |
| PAL | **Palisades** | **147.48** | **8** | P | | **PKPbc** | | **23 54 55.5** | **-0.7** |
| | baz=350 | | | | | | | | |
| WVT | **Waverly** | **147.50** | **30** | PKP2 | | **PKPbc** | | **23 54 57.1** | **+0.6** |
| WVT | **Waverly** | **147.50** | **30** | | | **PKPbc** | | **23 54 57.1** | **+0.6** |
| BDFB | **Brasilia** | **148.44** | **220** | PKPbc | | **PKPbc** | | **23 55 00.1** | **+0.4** |
| | comp=Z,5.2nm,0.5s,baz=114,slow=2.2,SNR=13 | | | | | | | | |
| BDFB | **Brasilia** | **148.44** | **220** | PKP2 | | **PKiKP** | | **23 55 00.9** | **-0.4** |
| BDFB | **Brasilia** | **148.44** | **220** | PKPab | | **PKiKP** | | **23 55 00.8** | **-0.4** |
| PB07 | **IPOC Station P** | **149.72** | **177** | | | **PKiKP** | | **23 55 04.8** | **+0.9** |
| KMSC | **Kings Mountain** | **151.18** | **22** | P | | **PKPbc** | | **23 55 05.7** | **-0.1** |
| | baz=333 | | | | | | | | |
| LPAZ | **La Paz** | **155.16** | **181** | PKP | | **PKPdf** | | **23 55 08.5** | **+1.7** |
| | comp=Z,1.5nm,0.5s,baz=270,slow=6.1,SNR=2.4 | | | | | | | | |

*JMA* ***26*** *00:14:46.0±0.2, 26.02N×128.45E, h47km±4km, M2.9*
**ISC 26 00:14:43.9**±1.4**, 25.95N**±0.05**×128.56E**±0.04**, h17**km±9km**,**
**n18,** σ1§**57/27, mb3.4/5, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JJT3** | **Tamagusuku3** | **0.73** | **286** | P | | **Pg** | **00 14 58.7** | **+0.5** |
| JJT3 | | | | S | | **Sg** | **00 15 07.2** | **-0.6** |
| **JNTH** | **Nagotoyohara** | **0.75** | **320** | P | | **Pg** | **00 14 58.4** | **-0.2** |
| JNTH | | | | S | | **Sg** | **00 15 08.4** | **-0.1** |
| **JOW** | **Kunigami** | **0.92** | **344** | Pn | | **Pb** | **00 15 01.7** | **+0.2** |
| | 119nm,0.3s,baz=148,slow=19,SNR=212 | | | | | | | |
| JOW | | | | Sn | | **Sn** | **00 15 17.4** | **+2.4** |
| | 98nm,0.3s,baz=143,slow=20,SNR=6.9 | | | | | | | |
| **JOW** | **Kunigami** | **0.92** | **344** | P | | **Pb** | **00 15 01.6** | **+0.1** |
| JOW | | | | *e*S | | **Sb** | **00 15 12.5** | **-0.9** |
| **JYRO** | **Yoronjima** | **1.08** | **355** | P | | **Pb** | **00 15 03.9** | **-0.3** |
| JYRO | | | | S | | **Sb** | **00 15 16.8** | **-1.2** |
| **JIH** | **Iheya** | **1.21** | **334** | S | | **Sb** | **00 15 20.3** | **-1.4** |
| **JAGN** | **Aguni-jima** | **1.35** | **299** | P | | **Pn** | **00 15 07.7** | **-0.3** |
| JAGN | | | | *e*S | | **Sn** | **00 15 23.2** | **-2.3** |
| **JOKE** | **Okinoerabujima** | **1.41** | **0** | *e*S | | **Sn** | **00 15 25.3** | **-1.8** |
| **JKE** | **Kume jima 2** | **1.64** | **284** | P | | **Pn** | **00 15 11.1** | **-0.9** |
| JKE | | | | *e*S | | **Sn** | **00 15 29.8** | **-2.9** |
| **JTK** | **Tokunoshima** | **1.87** | **11** | P | | **Pn** | **00 15 15.4** | **+0.3** |
| JTK | | | | *e*S | | **Sn** | **00 15 36.8** | **-1.5** |
| **JMZ** | **Minamidaito 2** | **2.40** | **92** | P | | **Pn** | **00 15 22.0** | **-0.4** |
| JMZ | | | | *e*S | | **Sn** | **00 15 48.2** | **-3.2** |
| **JKDJ** | **Kitadaitoujima** | **2.46** | **89** | P | | **Pn** | **00 15 23.2** | **-0.1** |
| JKDJ | | | | S | | **Sn** | **00 15 51.0** | **-2.0** |
| **KSRS** | **Korea Array** | **11.49** | **357** | LR | | LR | 00 22 06.1 | |
| | comp=Z,36nm,21.2s,baz=305,slow=39 | | | | | | | |
| **SONM** | **Songino Array** | **27.95** | **327** | P | | **P** | **00 20 36.1** | **+2.5** |
| | 0.5nm,0.6s,baz=133,slow=11,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.95** | **312** | P | | **P** | **00 22 33.6** | **-0.2** |
| | 0.2nm,0.4s,baz=92,slow=9.5,SNR=7.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.96** | **172** | P | | **P** | **00 23 07.3** | **+1.1** |
| | 0.2nm,0.5s,baz=352,slow=8.5,SNR=2.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.59** | **174** | P | | **P** | **00 23 35.9** | **+1.6** |
| | 0.3nm,0.7s,baz=354,slow=8.7,SNR=2.2 | | | | | | | |
| AKASG | **Malin Array Be** | **75.94** | **320** | P | | **P** | **00 26 30.3** | **+0.6** |
| | 0.1nm,0.2s,baz=47,slow=7.0,SNR=1.7 | | | | | | | |

*CNRM* ***26*** *00:41:22.6, 36.29N×9.77W, h20km, ml3.4*
*IGIL* ***26*** *00:41:26.1, 36.53N×9.85W, h30km, ML2.0*
*SFS* ***26*** *00:41:26.0, 36.56N×9.87W, h30km, ML2.6, SW. CABO DE SAN VICENTE*
*INMG* ***26*** *00:41:26.6±1.5, 36.63N×9.77W, h15km±6km, ML1.8, Error ellipse: s-maj=7.2km s-min=4.9km az=43.0*
**ISC 26 00:41:21.0**±1.9**, 36.43N**±0.03**×9.99W**±0.09**, h32**km±9km**,**
**n34,** σ1§**81/54, 1C-2D, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.17** | **53** | *e*P | | **Pb** | **00 41 42.9** | **+0.2** |
| PFVI | | | | *e*S | | **Sn** | **00 41 55.2** | **-0.7** |
| PFVI | | | | A | | A | 00 41 56.1 | |
| | 14nm,0.5s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.17** | **53** | P | | **Pb** | **00 41 42.9** | **+0.2** |
| PFVI | | | | S | | **Sb** | **00 41 56.7** | **-0.8** |
| **MORF** | **Marmelete** | **1.39** | **50** | *e*P | | **Pb** | **00 41 46.1** | **-0.2** |
| MORF | | | | *e*S | | **Sn** | **00 42 00.4** | **-0.9** |
| MORF | | | | IAML | | | 00 42 01.4 | |
| | comp=N,20nm,0.1s | | | | | | | |
| **MORF** | **Marmelete** | **1.39** | **50** | ⇑*e*P | | **Pb** | **00 41 46.1** | **-0.2** |
| MORF | | | | *e*S | | **Sn** | **00 42 01.1** | **-0.3** |
| MORF | | | | A | | A | 00 42 01.7 | |
| | comp=N,16nm,0.3s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.51** | **42** | *e*S | | **Sn** | **00 42 04.1** | **-0.1** |
| **PBDV** | **Barranco-do-Ve** | **1.84** | **63** | ⇓*i*P | | **Pn** | **00 41 52.6** | **+2.2** |
| PBDV | | | | *e*S | | **Sn** | **00 42 12.0** | **-0.5** |
| PBDV | | | | A | | A | 00 42 19.6 | |
| | comp=N,3.1nm,0.2s | | | | | | | |
| **PCVE** | **Castro Verde** | **1.97** | **52** | *e*Pn | | **Pn** | **00 41 54.4** | **+2.3** |
| PCVE | | | | *e*Sn | | **Sn** | **00 42 15.6** | **-0.1** |
| PCVE | | | | A | | A | 00 42 16.8 | |
| | comp=N,5.3nm,0.4s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.04** | **34** | *e*Pn | | **Pn** | **00 41 55.1** | **+2.0** |
| PNCL | | | | *e*Sn | | **Sn** | **00 42 16.3** | **-1.2** |
| PNCL | | | | A | | A | 00 42 19.9 | |
| | comp=N,4.0nm,0.2s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.06** | **61** | ⇓*e*Pn | | **Pn** | **00 41 55.6** | **+2.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **00 42 17.3** | **-0.7** |
| PVAQ | | | | A | | A | 00 42 27.3 | |
| | comp=N,5.9nm,0.2s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.06** | **61** | P | | **Pn** | **00 41 55.5** | **+2.1** |
| **PBEJ** | **Beja** | **2.33** | **46** | *e*Sn | | **Sn** | **00 42 23.1** | **-1.4** |
| PBEJ | | | | A | | A | 00 42 25.5 | |
| | comp=N,4.0nm,0.4s | | | | | | | |
| **PMST** | **Lisbon--Monsan** | **2.39** | **15** | *e*Sn | | **Sn** | **00 42 25.6** | **-0.5** |
| **PACT** | **Alcochete** | **2.51** | **21** | *e*Pn | | **Pn** | **00 42 02.2** | **+2.7** |
| PACT | | | | *e*Sn | | **Sn** | **00 42 28.8** | **-0.2** |
| PACT | | | | A | | A | 00 42 33.7 | |
| | comp=N,11nm,0.5s | | | | | | | |
| **PMAFR** | **Mafra** | **2.58** | **12** | *e*Pn | | **Pn** | **00 42 02.4** | **+1.8** |
| PMAFR | | | | *e*Sn | | **Sn** | **00 42 29.9** | **-1.0** |
| PMAFR | | | | A | | A | 00 42 33.2 | |
| | comp=N,9.1nm,0.6s | | | | | | | |
| **EVO** | **Evora** | **2.62** | **36** | P | | **Pb** | **00 42 05.1** | **-2.2** |
| EVO | | | | S | | **Sn** | **00 42 31.9** | **+0.2** |
| **EVO** | **Evora** | **2.62** | **36** | *e*Pn | | **Pn** | **00 42 04.9** | **+3.8** |
| EVO | | | | *e*Sn | | **Sn** | **00 42 32.0** | **+0.2** |
| EVO | | | | A | | A | 00 42 33.8 | |
| | comp=N,5.2nm,0.1s | | | | | | | |
| **PBAR** | **Barrancos** | **2.93** | **53** | *e*Pn | | **Pn** | **00 42 07.3** | **+2.0** |
| PBAR | | | | *e*Sn | | **Sn** | **00 42 38.1** | **-1.2** |
| PBAR | | | | A | | A | 00 42 49.4 | |
| | comp=N,1.4nm,0.3s | | | | | | | |
| **PMTG** | **Montargil** | **2.98** | **27** | *e*Pn | | **Pn** | **00 42 08.1** | **+2.1** |
| PMTG | | | | *e*Sn | | **Sn** | **00 42 39.1** | **-1.6** |
| PMTG | | | | A | | A | 00 42 42.5 | |
| | comp=N,2.1nm,0.1s | | | | | | | |
| **PESTR** | **Estremoz** | **3.09** | **37** | *e*Sn | | **Sn** | **00 42 41.5** | **-1.9** |
| PESTR | | | | A | | A | 00 42 44.4 | |
| | comp=N,2.4nm,0.6s | | | | | | | |
| **PSBE** | **So Bento** | **3.22** | **17** | *e*Sn | | **Sn** | **00 42 45.4** | **-1.2** |
| PSBE | | | | A | | A | 00 42 48.9 | |
| | comp=N,3.6nm,0.6s | | | | | | | |
| **PMRV** | **Marv??o** | **3.63** | **34** | *e*Pn | | **Pn** | **00 42 17.1** | **+2.1** |
| PMRV | | | | *e*Sn | | **Sn** | **00 42 54.4** | **-2.3** |
| PMRV | | | | A | | A | 00 42 57.3 | |
| | comp=N,2.1nm,0.3s | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.80** | **18** | *e*Sn | | **Sn** | **00 42 59.5** | **-1.4** |
| PCAS | | | | A | | A | 00 43 03.0 | |
| | comp=N,2.4nm,0.7s | | | | | | | |
| **PCBR** | **Castelo Branco** | **3.94** | **29** | *e*Sn | | **Sn** | **00 43 01.8** | **-2.5** |
| PCBR | | | | A | | A | 00 43 03.5 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **ZHG** | **ZHG** | **4.05** | **136** | P | | **Pn** | **00 42 22.9** | **+2.1** |
| ZHG | | | | S | | **Sn** | **00 43 05.5** | **-1.7** |
| **MTE** | **Manteigas** | **4.41** | **25** | *e*Sn | | **Sn** | **00 43 14.5** | **-1.4** |
| MTE | | | | A | | A | 00 43 15.9 | |
| | comp=N,1.3nm,0.1s | | | | | | | |
| **PVIS** | **Viseu** | **4.58** | **20** | *e*Sn | | **Sn** | **00 43 18.2** | **-2.0** |
| **LCRM** | **LCR** | **5.02** | **122** | P | | **Pn** | **00 42 35.0** | **+0.8** |
| LCRM | | | | S | | **Sn** | **00 43 29.3** | **-1.9** |
| **POLO** | **Lamas de Olo** | **5.22** | **18** | *e*Sn | | **Sn** | **00 43 33.0** | **-3.1** |
| **MVO** | **Moncorvo** | **5.26** | **25** | *e*Sn | | **Sn** | **00 43 33.5** | **-3.5** |
| **OUK** | **Oukaimeden** | **5.50** | **161** | P | | **Pn** | **00 42 43.4** | **+2.4** |
| OUK | | | | S | | **Sn** | **00 43 40.5** | **-2.8** |
| **MD31** | **MD31** | **5.59** | **128** | P | | **Pn** | **00 42 43.9** | **+2.0** |
| MD31 | | | | S | | **Sn** | **00 

**ISC 26 00:41:42.1±0.8, 0°32N±0°06 × 98°59E±0°07, h55km, n34, σ1§59/37, mb4.0/13, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNSI** | **Mandailing Nat** | **1.10** | **65** | P | **Pn** | **00 42 02.9** | **+1.7** |
| **SBSI** | **Sibolga** | **1.26** | **14** | P | **Pn** | **00 42 06.3** | **+2.9** |
| SBSI | | | | S | **Sn** | **00 42 23.0** | **+3.7** |
| **GSI** | **Gunungsitoli** | **1.40** | **314** | Pn | **Pn** | **00 42 06.2** | **+0.9** |
| **GSI** | **Gunungsitoli** | **1.40** | **314** | P | **Pn** | **00 42 06.3** | **+0.9** |
| **PPI** | **Padang Panjang** | **1.97** | **113** | P | **Pn** | **00 42 14.2** | **+1.2** |
| **RPSI** | **Rantau Prapat** | **2.38** | **8** | | **Pn** | **00 42 19.5** | **+0.8** |
| **RPSI** | **Rantau Prapat** | **2.38** | **8** | | **Pn** | **00 42 20.2** | **+1.5** |
| RPSI | | | | | **Sn** | **00 42 44.5** | **-2.1** |
| **BKNI** | **Bangkinang** | **2.45** | **90** | Pn | **Pn** | **00 42 20.2** | **+0.5** |
| **PSI** | **Prapat** | **2.48** | **8** | P | **Pn** | **00 42 20.2** | **0.0** |
| | 3.9nm,0.3s,baz=263,slow=3.2,SNR=14 | | | | | | |
| PSI | | | | S | **Sn** | **00 42 44.5** | **-4.9** |
| | 6.6nm,0.3s,baz=124,slow=18,SNR=7.1 | | | | | | |
| PSI | | | | LR | LR | 00 43 26.6 | |
| | comp=Z,79nm,21.4s,baz=154,slow=47 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **3.28** | **346** | P | **Pn** | **00 42 32.4** | **+1.4** |
| **IPM** | **Ipoh** | **4.79** | **31** | Pn | **Pn** | **00 42 51.9** | **+0.1** |
| **KULM** | **Kulim** | **5.35** | **23** | Pn | **Pn** | **00 43 00.1** | **+0.8** |
| **MNAI** | **Manna** | **6.38** | **137** | Pn | **Pn** | **00 43 14.7** | **+1.2** |
| **MNAI** | **Manna** | **6.38** | **137** | P | **Pn** | **00 43 15.0** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **18.02** | **1** | LR | LR | 00 53 01.1 | |
| | comp=Z,19nm,20.9s,baz=150,slow=38 | | | | | | |
| **WB0** | **Warramunga Arr** | **40.37** | **122** | P | **P** | **00 49 14.2** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 00 49 15.1 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.40** | **122** | P | **P** | **00 49 13.7** | **-1.4** |
| | comp=Z,0.2nm,0.4s,baz=304,slow=8.9,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.40** | **122** | P | **P** | **00 49 14.5** | **-0.6** |
| **WB2** | **Warramunga Arr** | **40.41** | **122** | P | **P** | **00 49 14.3** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 00 49 27.2 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **40.58** | **122** | P | **P** | **00 49 15.6** | **-1.1** |
| **ASAR** | **Alice Springs** | **41.76** | **127** | P | **P** | **00 49 25.6** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=291,slow=8.7,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **45.80** | **33** | P | **P** | **00 49 57.2** | **-1.2** |
| | comp=Z,1.3nm,0.6s,baz=220,slow=9.1,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **47.81** | **7** | P | **P** | **00 50 13.4** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=190,slow=8.6,SNR=5.7 | | | | | | |
| SONM | | | | PcP | **PcP** | **00 51 43.1** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=186,slow=4.3,SNR=2.8 | | | | | | |
| **MK31** | **Makanchi Array** | **48.43** | **345** | P | **P** | **00 50 20.5** | **+1.6** |
| MK31 | | | | IAmb | IAmb | 00 50 21.0 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.43** | **345** | P | **P** | **00 50 20.0** | **+1.1** |
| | comp=Z,1.5nm,0.6s,baz=153,slow=9.2,SNR=22 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.43** | **345** | P | **P** | **00 50 20.1** | **+1.2** |
| **MAKZ** | **Makanchi** | **48.53** | **345** | P | **P** | **00 50 21.1** | **+1.4** |
| MAKZ | | | | IAmb | IAmb | 00 50 21.7 | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.65** | **350** | P | **P** | **00 51 06.2** | **+1.0** |
| | comp=Z,1.2nm,0.4s,baz=173,slow=6.0,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.65** | **350** | P | **P** | **00 51 05.5** | **+0.4** |
| **BVAR** | **Borovoye Array** | **57.53** | **340** | P | **P** | **00 51 26.3** | **+0.5** |
| | comp=Z,1.0nm,0.6s,baz=87,slow=16,SNR=8.6 | | | | | | |
| **BRVK** | **Borovoye** | **57.60** | **340** | P | **P** | **00 51 26.8** | **+0.6** |
| BRVK | | | | IAmb | IAmb | 00 51 27.1 | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.94** | **331** | P | **P** | **00 51 36.3** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **60.66** | **332** | P | **P** | **00 51 48.5** | **+1.0** |
| | comp=Z,1.0nm,0.4s,baz=217,slow=5.1,SNR=4.1 | | | | | | |
| **SGRT** | **San Giovanni R** | **84.44** | **312** | P | **P** | **00 54 08.1** | **-1.0** |

*IDC **26** 00:47:24.9±2.3, 8°22S × 120°71E, h174km±20km, mb3.6/6, mb1 3.6/10, mb1mx3.2/54, mbtmp4.0/10, Error ellipse: s-maj=61.8km s-min=14.1km az=57.0*
*NEIC **26** 00:47:25.6±1.7, 8°23S±0°09 × 120°63E±0°09, h179km±8km, mb4.0/18, Error ellipse: s-maj=15.8km s-min=9.6km az=221.0*
*DJA **26** 00:47:27.6±0.5, 8°S±4° × 12°1E±°, h149km±7km, M3.7/10, MLv3.7/10*

**ISC 26 00:47:25.2±0.5, 8°39S±0°05 × 120°58E±0°05, h179km, n65, σ1§52/69, mb3.9/12, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMRI** | **Maumere** | **1.66** | **99** | P | **Pn** | **00 47 59.3** | **+0.7** |
| **MMRI** | **Maumere** | **1.66** | **99** | P | **Pn** | **00 47 59.4** | **+0.8** |
| **MMRI** | **Maumere** | **1.66** | **99** | P | **Pn** | **00 47 59.6** | **+1.0** |
| **WBSI** | **Waikabubak, Su** | **1.71** | **223** | P | **Pn** | **00 47 58.9** | **-0.3** |
| **BASI** | **Baing, Sumba** | **1.82** | **180** | P | **Pn** | **00 48 00.2** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **2.23** | **358** | P | **Pn** | **00 48 05.9** | **+1.1** |
| **PLAI** | **Plampang** | **2.81** | **261** | P | **Pn** | **00 48 12.7** | **+1.3** |
| **PLAI** | **Plampang** | **2.81** | **261** | P | **Pn** | **00 48 13.1** | **+1.7** |
| **BKSI** | **Bulukumba** | **3.08** | **351** | P | **Pn** | **00 48 16.6** | **+1.8** |
| **KAPI** | **Kappang** | **3.45** | **346** | Pn | **Pn** | **00 48 17.7** | **-1.7** |
| **BBSI** | **Bau Bau** | **3.50** | **35** | P | **Pn** | **00 48 22.9** | **+3.0** |
| **BATI** | **Baumata** | **3.54** | **121** | P | **Pn** | **00 48 20.6** | **+0.1** |
| | 43nm,0.3s,baz=271,slow=2.3,SNR=16 | | | | | | |
| BATI | | | | S | **Sn** | **00 49 01.7** | **-1.9** |
| | 34nm,0.3s,baz=166,slow=19,SNR=2.5 | | | | | | |
| **BATI** | **Baumata** | **3.54** | **121** | P | **Pn** | **00 48 21.0** | **+0.5** |
| **SOEI** | **Soe** | **3.89** | **111** | Pn | **Pn** | **00 48 24.7** | **-0.2** |
| **SOEI** | **Soe** | **3.89** | **111** | P | **Pn** | **00 48 26.1** | **+1.2** |
| **SOEI** | **Soe** | **3.89** | **111** | P | **Pn** | **00 48 27.1** | **+2.2** |
| **JAGI** | **Jajag, Banyuwa** | **6.36** | **269** | Pn | **Pn** | **00 48 57.4** | **+0.4** |
| **KNRA** | **Kununurra** | **10.79** | **133** | | **Pn** | **00 49 53.9** | **-1.2** |
| **KNRA** | **Kununurra** | **10.79** | **133** | P | **Pn** | **00 49 54.8** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **10.83** | **153** | P | **Pn** | **00 49 55.2** | **-0.3** |
| | 0.5nm,0.3s,baz=344,slow=6.3,SNR=19 | | | | | | |
| FITZ | | | | S | Sn | 00 51 48.5 | -7.5 |
| | 0.7nm,0.3s,baz=170,slow=17,SNR=3.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.83** | **153** | | **Pn** | **00 49 56.0** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **10.83** | **153** | P | **Pn** | **00 49 56.3** | **+0.7** |
| **MTN** | **Manton Dam** | **11.28** | **114** | | **Pn** | **00 50 00.9** | **-0.5** |
| **MTN** | **Manton Dam** | **11.28** | **114** | P | **Pn** | **00 50 01.5** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **13.13** | **183** | Pn | **Pn** | **00 50 27.6** | **+2.7** |
| **PSA00** | **Pilbara Seismi** | **13.13** | **183** | Pn | **Pn** | **00 50 27.1** | **+2.1** |
| **PSA00** | **Pilbara Seismi** | **13.13** | **183** | P | **Pn** | **00 50 26.8** | **+1.8** |
| **GIRL** | **Giralia** | **15.43** | **203** | P | **P** | **00 50 56.9** | **+2.7** |
| **WB0** | **Warramunga Arr** | **17.52** | **132** | P | **P** | **00 51 17.5** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 00 51 23.9 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.59** | **132** | P | **P** | **00 51 18.8** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=309,slow=12,SNR=24 | | | | | | |
| WRA | | | | S | **S** | **00 54 27.5** | **-4.1** |
| | comp=Z,0.7nm,0.3s,baz=299,slow=20,SNR=7.3 | | | | | | |
| **WB2** | **Warramunga Arr** | **17.59** | **132** | P | **P** | **00 51 18.7** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 00 51 26.1 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **17.74** | **132** | P | **P** | **00 51 20.9** | **+1.1** |
| WR0 | | | | IAmb | IAmb | 00 51 28.5 | |
| | comp=Z,4.1nm,0.5s | | | | | | |
| **WRKA** | **Warakurna** | **18.12** | **157** | P | **P** | **00 51 25.9** | **+2.1** |
| **MEEK** | **Meekatharra** | **18.25** | **186** | P | **P** | **00 51 26.7** | **+1.5** |
| **AS31** | **Alice Springs** | **19.84** | **141** | P | **P** | **00 51 43.2** | **+0.7** |
| AS31 | | | | IAmb | IAmb | 00 51 47.2 | |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **19.84** | **141** | P | **P** | **00 51 43.2** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=324,slow=10.0,SNR=19 | | | | | | |
| ASAR | | | | S | **S** | **00 55 11.4** | **-4.8** |
| | comp=Z,0.1nm,0.3s,baz=318,slow=21,SNR=1.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **00 59 10.3** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=322,slow=2.1,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.84** | **141** | P | **P** | **00 51 43.8** | **+1.3** |
| **MORW** | **Morawa** | **21.01** | **191** | P | **P** | **00 51 56.1** | **+1.3** |
| MORW | | | | IAmb | IAmb | 00 51 58.0 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **QIS** | **Mount Isa** | **22.00** | **125** | P | **P** | **00 52 06.4** | **+1.1** |
| **BLDU** | **Ballidu** | **22.41** | **189** | P | **P** | **00 52 10.4** | **+1.4** |
| **COEN** | **Coen** | **22.84** | **106** | P | **P** | **00 52 13.6** | **+0.5** |
| COEN | | | | IAmb | IAmb | 00 52 16.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **COEN** | **Coen** | **22.84** | **106** | P | **P** | **00 52 14.6** | **+1.5** |
| | comp=Z,5.7nm,1.7s | | | | | | |
| **KLBR** | **Kellerberrin** | **23.23** | **186** | P | **P** | **00 52 18.1** | **+1.6** |
| **FORT** | **Forrest** | **23.35** | **164** | P | **P** | **00 52 18.9** | **+1.5** |
| **FORT** | **Forrest** | **23.35** | **164** | P | **P** | **00 52 19.2** | **+1.7** |
| **OOD** | **Oodnadatta** | **24.01** | **145** | P | **P** | **00 52 25.3** | **+1.7** |
| **MULG** | **Mulgathing** | **25.17** | **152** | P | **P** | **00 52 35.6** | **+1.5** |
| **BBOO** | **Buckleboo** | **28.21** | **152** | P | **P** | **00 53 02.6** | **+1.2** |
| BBOO | | | | IAmb | IAmb | 00 53 10.4 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **28.21** | **152** | P | **P** | **00 53 02.5** | **+1.2** |
| **STKA** | **Stephens Creek** | **30.46** | **143** | P | **P** | **00 53 22.9** | **+1.7** |
| | comp=Z,2.3nm,0.4s,baz=316,slow=8.9,SNR=6.8 | | | | | | |
| **STKA** | **Stephens Creek** | **30.46** | **143** | P | **P** | **00 53 22.9** | **+1.7** |
| **CMAR** | **Chiang Mai Arr** | **34.17** | **321** | P | **P** | **00 53 52.9** | **-0.7** |
| | comp=Z,1.0nm,0.3s,baz=145,slow=6.6,SNR=1.4 | | | | | | |
| **OUZ** | **Omahuta** | **55.21** | **127** | P | **P** | **00 56 39.2** | **-0.5** |
| **FOZ** | **Fox Glacier** | **55.29** | **138** | P | **P** | **00 56 40.8** | **+0.7** |
| **QRZ** | **Quartz Range** | **56.14** | **134** | P | **P** | **00 56 45.9** | **-0.3** |
| **SONM** | **Songino Array** | **57.37** | **349** | P | **P** | **00 56 55.0** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=152,slow=6.5,SNR=2.1 | | | | | | |
| **MK31** | **Makanchi Array** | **64.64** | **332** | P | **P** | **00 57 43.7** | **0.0** |
| **MKAR** | **Makanchi Array** | **64.64** | **332** | P | **P** | **00 57 43.5** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=143,slow=7.3,SNR=17 | | | | | | |
| **KBL** | **Kabul** | **64.77** | **314** | P | **P** | **00 57 45.0** | **0.0** |
| KBL | | | | IAmb | IAmb | 00 57 46.5 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **69.04** | **338** | P | **P** | **00 58 10.2** | **-1.0** |
| ZAA0 | | | | IAmb | IAmb | 00 58 16.3 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.04** | **338** | P | **P** | **00 58 10.3** | **-0.9** |
| | comp=Z,0.8nm,0.3s,baz=136,slow=5.6,SNR=7.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.13** | **333** | P | **P** | **00 58 11.3** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=137,slow=5.4,SNR=7.5 | | | | | | |
| **KURK** | **Kurchatov** | **69.16** | **333** | P | **P** | **00 58 12.0** | **-0.1** |
| KURK | | | | IAmb | IAmb | 00 58 15.9 | |
| | comp=Z,1.2nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **77.97** | **324** | P | **P** | **00 59 00.8** | **-2.7** |
| **RAYN** | **Ar Rayn** | **79.84** | **296** | P | **P** | **00 59 13.1** | **-1.2** |

*HEL **26** 00:48:05.5, 67°85N × 19°95E, h0km, ML1.7, Explosion*
*UPP **26** 00:48:06.6±0.1, 67°83N × 20°20E, h0km, ML2.1, Explosion*

**ISC 26 00:48:05.9±0.9, 67°82N±0°02 × 20°11E±0°03, h0km, n40, σ1§03/38, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOVU** | **Salmi** | **0.41** | **2** | P | **Pg** | **00 48 14.3** | **+0.6** |
| KOVU | | | | S | **Sg** | **00 48 19.2** | **+0.2** |
| **KOVU** | **Salmi** | **0.41** | **2** | *i* P | **Pg** | **00 48 14.3** | **+0.6** |
| **KOVU** | **Salmi** | **0.41** | **2** | *i* S | **Sg** | **00 48 19.2** | **+0.2** |
| **NIKU** | **Nikkaluokta** | **0.41** | **277** | P | **Pb** | **00 48 15.2** | **-0.9** |
| **NIKU** | **Nikkaluokta** | **0.41** | **277** | *i* P | **Pb** | **00 48 15.2** | **-0.9** |
| **DUNU** | **Dundret** | **0.72** | **166** | P | **Pg** | **00 48 20.3** | **+0.6** |
| **DUNU** | **Dundret** | **0.72** | **166** | *i* P | **Pg** | **00 48 20.3** | **+0.6** |
| **LANU** | **Lannavaara** | **0.74** | **71** | P | **Pg** | **00 48 20.1** | **-0.1** |
| **LANU** | **Lannavaara** | **0.74** | **71** | *e*P | **Pg** | **00 48 19.9** | **-0.3** |
| **LANU** | **Lannavaara** | **0.74** | **71** | *e*S | **Sg** | **00 48 29.9** | **+0.1** |
| **SALU** | **Saltoluokta** | **0.76** | **235** | P | **Pb** | **00 48 21.5** | **-0.4** |
| **SALU** | **Saltoluokta** | **0.76** | **235** | *i* P | **Pb** | **00 48 21.5** | **-0.4** |
| **KIF** | **Kilpisjarvi** | **1.22** | **12** | *e*P | **Pg** | **00 48 29.4** | **+0.1** |
| **KIF** | **Kilpisjarvi** | **1.22** | **12** | MSG | | 00 48 43.1 | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.22** | **12** | *e*SB | **Sb** | **00 48 45.8** | **-0.3** |
| **KIF** | **Kilpisjarvi** | **1.22** | **12** | *e*PB | **Pb** | **00 48 29.8** | **0.0** |
| **PAJU** | **Pajala** | **1.41** | **123** | P | **Pn** | **00 48 32.0** | **-0.8** |
| **PAJU** | **Pajala** | **1.41** | **123** | *e*P | **Pn** | **00 48 31.9** | **-0.9** |
| | baz=306 | | | | | | |
| **PAJU** | **Pajala** | **1.41** | **123** | *e*SB | **Sg** | **00 48 50.3** | **-0.6** |
| **HEF** | **Hetta** | **1.46** | **64** | *e*P | **Pn** | **00 48 31.4** | **-2.1** |
| **HEF** | **Hetta** | **1.46** | **64** | MSG | | 00 48 50.6 | |
| | comp=Z,3.8nm,0.2s | | | | | | |
| **HEF** | **Hetta** | **1.46** | **64** | *e*SN | **Sn** | **00 48 53.8** | **+0.5** |
| **HEF** | **Hetta** | **1.46** | **64** | *e*PG | **Pn** | **00 48 32.6** | **-0.8** |
| **ERTU** | **Ertsjaerv** | **1.50** | **147** | P | **Pn** | **00 48 34.0** | **-0.1** |
| **ERTU** | **Ertsjaerv** | **1.50** | **147** | *e*P | **Pn** | **00 48 33.7** | **-0.4** |
| **ERTU** | **Ertsjaerv** | **1.50** | **147** | *e*SN | **Sn** | **00 48 54.6** | **+0.2** |
| **KLF** | **Kolari** | **1.59** | **110** | *e*PG | **Pn** | **00 48 35.6** | **+0.3** |
| **KLF** | **Kolari** | **1.59** | **110** | *e*SN | **Sg** | **00 48 59.6** | **+2.7** |
| **HARU** | **Harads** | **1.70** | **168** | P | **Pb** | **00 48 37.6** | **-0.3** |
| **HARU** | **Harads** | **1.70** | **168** | *e*P | **Pb** | **00 48 37.6** | **-0.3** |
| **TOF** | **Tornio** | **2.41** | **135** | MSG | | 00 49 18.6 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| **TOF** | **Tornio** | **2.41** | **135** | *e*SB | **Sb** | **00 49 19.4** | **-0.7** |
| **TOF** | **Tornio** | **2.41** | **135** | *e*PB | **Pb** | **00 48 48.4** | **-1.6** |
| **SGF** | **Sodankyl** | **2.48** | **96** | *e*P | **Pn** | **00 48 48.8** | **+1.3** |
| | baz=286 | | | | | | |
| **SGF** | **Sodankyl** | **2.48** | **96** | *e*SB | **Sb** | **00 49 21.5** | **-0.9** |
| **RNF** | **Rovaniemi** | **2.60** | **115** | *e*SB | **Sn** | **00 49 23.0** | **+1.7** |
| **RNF** | **Rovaniemi** | **2.60** | **115** | *e*PB | **Pb** | **00 48 51.5** | **-1.8** |
| **ARA0** | **ARCESS Array S** | **2.62** | **46** | *e*PB | **Pn** | **00 48 51.1** | **+1.7** |
| **ARA0** | **ARCESS Array S** | **2.62** | **46** | *e*SB | **Sb** | **00 49 24.6** | **-1.7** |
| **KU6** | **Riekki** | **4.25** | **110** | *e*PG | **Pb** | **00 49 22.3** | **+0.9** |
| | baz=300 | | | | | | |

**UPP 26 00:48:38.2±0.1, 67°87N × 20°19E, h0km, ML2.0, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOVU** | **Salmi** | **0.36** | **358** | P | Pg | 00 48 45.1 | +0.1 |
| KOVU | | | | S | Sg | 00 48 50.1 | +0.5 |
| **NIKU** | **Nikkaluokta** | **0.44** | **271** | P | Pg | 00 48 46.5 | 0.0 |
| **LANU** | **Lannavaara** | **0.70** | **74** | P | Pg | 00 48 51.5 | -0.2 |
| LANU | | | | S | Sg | 00 49 00.6 | -0.2 |
| **SALU** | **Saltoluokta** | **0.81** | **234** | P | Pg | 00 48 53.5 | -0.1 |

*BJI **26** 00:55:26.8±0.0, 0°91N × 127°00E, h73km, mb4.6/24, mB4.9/12*
*IDC **26** 00:55:29.9±1.6, 1°25N × 126°88E, h65km±13km, mb4.1/10, mb1 4.1/12, mb1mx3.7/47, mbtmp4.3/12, MS3.2/8, Ms1 3.2/8, ms1mx2.8/72, Error ellipse: s-maj=26.3km s-min=8.8km az=60.0*
*DJA **26** 00:55:30.5±0.4, 1°N±5° × 12°7E±°, h55km±5km, M4.4/9, mb4.6/9, mB4.7/1, MLv4.2/9, Mw(mB)3.9/1*
*NEIC **26** 00:55:31.2±0.8, 1°29N±0°08 × 126°90E±0°05, h66km±6km, mb4.6/36, Error ellipse: s-maj=11.7km s-min=7.2km az=186.0*

**ISC 26 00:55:30.5±0.4, 1°32N±0°06 × 126°94E±0°06, h66km, n84, σ1§14/85, mb4.6/31, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.69** | **142** | Pn | **Pn** | **00 55 45.6** | **+0.6** |
| **TNTI** | **Ternate** | **0.69** | **142** | P | **Pn** | **00 55 45.7** | **+0.7** |
| **KMSI** | **Cibinong** | **3.05** | **256** | P | **Pn** | **00 56 16.9** | **+0.6** |
| **SANI** | **Sanana** | **3.48** | **196** | P | **Pn** | **00 56 22.6** | **+0.4** |
| **GTOI** | **Gorontalo** | **3.99** | **260** | P | **Pn** | **00 56 31.6** | **+2.4** |
| **LUWI** | **Luwuk** | **4.78** | **241** | Pn | **Pn** | **00 56 40.6** | **+0.6** |
| **LUWI** | **Luwuk** | **4.78** | **241** | P | **Pn** | **00 56 42.0** | **+2.0** |
| **SIJI** | **Sorong** | **4.84** | **117** | P | **Pn** | **00 56 41.2** | **+0.3** |
| | 2.0nm,0.3s,baz=310,slow=9.8,SNR=5.0 | | | | | | |
| SIJI | | | | S | **Sn** | **00 57 35.2** | **-0.4** |
| | 1.2nm,0.3s,baz=342,slow=20,SNR=1.3 | | | | | | |
| SIJI | | | | LR | LR | 00 58 55.7 | |
| | comp=Z,452nm,20.0s,baz=26,slow=42 | | | | | | |
| **MRSI** | **Marisa** | **5.07** | **261** | P | **Pn** | **00 56 44.6** | **+0.6** |
| | 0.3nm64nm,0.5s | | | | | | |
| **APSI** | **Ampana** | **5.74** | **247** | P | **Pn** | **00 56 54.2** | **+1.1** |
| | 0.2nm646nm50nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **6.16** | **268** | Pn | **Pn** | **00 56 58.9** | **-0.1** |
| **FAKI** | **Fak Fak** | **6.77** | **128** | Pn | **Pn** | **00 57 10.1** | **+2.7** |
| **MYLDM** | **Lahad Datu** | **9.26** | **295** | Pn | **Pn** | **00 57 43.1** | **+1.8** |
| **KAPI** | **Kappang** | **9.55** | **229** | LR | LR | 01 01 42.7 | |
| | comp=Z,39nm,19.3s,baz=54,slow=39 | | | | | | |
| **BATI** | **Baumata** | **11.90** | **196** | LR | LR | 01 03 39.3 | |
| | comp=Z,76nm,18.7s,baz=144,slow=41 | | | | | | |
| **MTN** | **Manton Dam** | **14.67** | **164** | Pn | **Pn** | **00 58 54.7** | **+0.2** |
| **KNRA** | **Kununurra** | **16.98** | **174** | P | **Pn** | **00 59 24.1** | **+0.3** |
| **PCJI** | **Pacitan** | **18.34** | **239** | P | **Pn** | **00 59 44.4** | **+4.0** |
| **FITZ** | **Fitzroy Crossi** | **19.34** | **184** | P | **P** | **00 59 49.1** | **-1.5** |
| | 0.1nm,0.3s,baz=7.2,slow=12,SNR=9.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.34** | **184** | P | **P** | **00 59 49.8** | **-0.9** |
| **KPJI** | **Karang Pucung** | **19.92** | **244** | P | **Pn** | **00 59 58.8** | **-0.4** |
| | 16nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **21.53** | **55** | LR | LR | 01 07 21.1 | |
| | comp=Z,89nm,20.9s,baz=90,slow=33 | | | | | | |
| **COEN** | **Coen** | **22.12** | **134** | P | **P** | **01 00 21.3** | **+0.6** |
| **WB0** | **Warramunga Arr** | **22.19** | **161** | P | **P** | **01 00 21.3** | **-0.2** |
| **WRAB** | **Tennant Creek** | **22.34** | **161** | P | **P** | **01 00 22.8** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 01 00 40.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.34** | **161** | P | **P** | **01 00 22.1** | **-0.9** |
| | comp=Z,8.1nm,0.5s,baz=339,slow=10,SNR=75 | | | | | | |
| WRA | | | | S | **S** | **01 04 23.0** | **-1.6** |
| | comp=Z,4.3nm,1.0s,baz=344,slow=17,SNR=8.0 | | | | | | |
| WRA | | | | ScP | **ScP** | **01 07 48.1** | **-0.4** |
| | comp=Z,1.2nm,1.0s,baz=347,slow=3.0,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.34** | **161** | P | **P** | **01 00 21.8** | **-1.3** |
| **WB2** | **Warramunga Arr** | **22.34** | **161** | P | **P** | **01 00 22.8** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 01 00 41.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.42** | **161** | P | **P** | **01 00 23.5** | **-0.4** |
| **PMG** | **Port Moresby** | **22.78** | **118** | LR | LR | 01 12 55.7 | |
| | comp=Z,70nm,18.2s,baz=29,slow=46 | | | | | | |
| **AS31** | **Alice Springs** | **25.74** | **165** | P | **P** | **01 00 55.0** | **-0.1** |
| **ASAR** | **Alice Springs** | **25.74** | **165** | P | **P** | **01 00 54.6** | **-0.4** |
| | comp=Z,12nm,0.8s,baz=344,slow=12,SNR=50 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 04 22.9** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=347,slow=3.8,SNR=3.6 | | | | | | |
| ASAR | | | | S | **S** | **01 05 19.5** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=345,slow=16,SNR=2.8 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 07 56.7** | **-1.1** |
| | comp=Z,0.6nm,0.7s,baz=333,slow=2.6,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.74** | **165** | P | **P** | **01 00 54.8** | **-0.2** |
| **CTA** | **Charters Tower** | **28.48** | **139** | P | **P** | **01 01 20.0** | **+0.3** |
| | comp=Z,3.9nm,1.0s,baz=310,slow=12,SNR=4.1 | | | | | | |
| **NJ2** | **Nanjing** | **31.51** | **347** | *e*P | **P** | **01 01 48.8** | **+2.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **31.94** | **178** | P | **P** | **01 01 49.8** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **32.32** | **304** | P | **P** | **01 01 51.6** | **-2.0** |
| | comp=Z,0.5nm,0.3s,baz=123,slow=7.7,SNR=5.1 | | | | | | |
| **PZH** | **PanZhiHua** | **34.84** | **318** | P | **P** | **01 02 17.5** | **+1.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,80nm,5.1s | | | | | | |
| **BBOO** | **Buckleboo** | **35.02** | **167** | P | **P** | **01 02 16.9** | **0.0** |
| BBOO | | | | IAmb | IAmb | 01 02 17.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **35.35** | **140** | P | **P** | **01 02 20.1** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 01 02 21.4 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **35.82** | **158** | P | **P** | **01 02 23.1** | **-0.7** |
| | comp=Z,3.3nm,0.4s,baz=340,slow=9.7,SNR=10.0 | | | | | | |
| **STKA** | **Stephens Creek** | **35.82** | **158** | P | **P** | **01 02 23.6** | **-0.2** |
| **JSD** | **Sado** | **37.99** | **15** | P | **P** | **01 02 41.9** | **-0.2** |
| **ARMA** | **Armidale** | **39.36** | **145** | P | **P** | **01 02 54.3** | **+0.5** |
| **BJT** | **Baijiatuau** | **39.75** | **347** | P | **P** | **01 02 56.7** | **-0.1** |
| BJT | | | | IAmb | IAmb | 01 02 58.1 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **BJI** | **Beijing** | **39.77** | **347** | P | **P** | **01 02 56.5** | **-0.4** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.74** | **342** | *e*P | **P** | **01 03 16.0** | **+2.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,7.1s | | | | | | |
| **CAN** | **Canberra** | **41.88** | **153** | P | **P** | **01 03 15.3** | **+0.9** |
| **GOMU** | **GeErMu** | **45.71** | **323** | P | **P** | **01 03 42.0** | **-3.6** |
| **PALK** | **Pallekele** | **46.46** | **279** | LR | LR | 01 24 50.4 | |
| | comp=Z,35nm,18.9s,baz=189,slow=38 | | | | | | |
| **ULN** | **Ulaanbaatar** | **49.47** | **342** | P | **P** | **01 04 14.6** | **+0.3** |
| ULN | | | | IAmb | IAmb | 01 04 15.6 | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **49.64** | **342** | P | **P** | **01 04 15.1** | **-0.4** |
| | comp=Z,4.1nm,1.0s,baz=160,slow=8.6,SNR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YOJ | Yonaguni jima | 0.45 | 47 | P | Pb | 01 03 53.4 | +0.2 |
| YOJ | | | | eS | Sb | 01 04 00.0 | +0.3 |
| YOJ | Yonaguni jima | 0.45 | 47 | eP | Pg | 01 03 53.2 | +0.2 |
| | baz=59 | | | | | | |
| YOJ | | | | eS | Sb | 01 03 59.9 | +0.3 |
| | baz=59 | | | | | | |
| EWUT | Wuta | 0.85 | 291 | eP | Pb | 01 03 59.5 | -0.4 |
| | baz=287 | | | | | | |
| EWUT | | | | eS | Sb | 01 04 11.0 | +0.1 |
| | baz=287 | | | | | | |
| TWC | Suao | 0.86 | 302 | P | Pb | 01 03 60.0 | -0.2 |
| | baz=290 | | | | | | |
| TWC | | | | S | Sb | 01 04 10.7 | -0.6 |
| | baz=290 | | | | | | |
| ENA | Nanau | 0.87 | 289 | eP | Pb | 01 03 59.8 | -0.6 |
| | baz=285 | | | | | | |
| ENA | | | | eS | Sb | 01 04 12.0 | +0.3 |
| | baz=285 | | | | | | |
| NACB | Ninganchiao | 0.96 | 272 | eP | Pb | 01 04 01.7 | -0.2 |
| | baz=277 | | | | | | |
| NACB | | | | eS | Sg | 01 04 15.3 | +0.2 |
| | baz=277 | | | | | | |
| NDS | Dongshan | 0.98 | 300 | eP | Pb | 01 04 02.3 | +0.2 |
| | baz=297 | | | | | | |
| NDS | | | | eS | Sb | 01 04 14.8 | +0.1 |
| | baz=297 | | | | | | |
| IRIF | Iriomote-Funau | 1.00 | 79 | P | Pb | 01 04 02.3 | -0.3 |
| IRIF | | | | S | Sb | 01 04 15.5 | 0.0 |
| NTC | Toucheng | 1.02 | 313 | eP | Pb | 01 04 03.1 | +0.2 |
| | baz=311 | | | | | | |
| NTC | | | | eS | Sn | 01 04 16.7 | -0.3 |
| | baz=311 | | | | | | |
| HATJ | Hateruma jima | 1.06 | 95 | P | Pb | 01 04 03.1 | -0.4 |
| HATJ | | | | S | Sb | 01 04 16.9 | -0.2 |
| TWE | Neicheng | 1.06 | 303 | eP | Pb | 01 04 03.4 | -0.1 |
| | baz=300 | | | | | | |
| TWE | | | | eS | Sb | 01 04 17.1 | 0.0 |
| | baz=300 | | | | | | |
| ETLH | Xiulin Townshi | 1.07 | 273 | eP | Pb | 01 04 03.9 | +0.1 |
| | baz=269 | | | | | | |
| ETLH | | | | eS | Sn | 01 04 18.1 | -0.2 |
| | baz=269 | | | | | | |
| LATG | Datong | 1.09 | 291 | P | Pb | 01 04 04.1 | -0.1 |
| | baz=287 | | | | | | |
| LATG | | | | eS | Sb | 01 04 18.5 | +0.3 |
| | baz=287 | | | | | | |
| ENTT | Nioudou | 1.10 | 297 | eP | Pb | 01 04 04.4 | +0.2 |
| | baz=294 | | | | | | |
| ENTT | | | | eS | Sb | 01 04 18.4 | +0.1 |
| | baz=294 | | | | | | |
| TIPB | Shuangxi | 1.11 | 318 | eP | Pg | 01 04 05.1 | -0.2 |
| | baz=316 | | | | | | |
| TIPB | | | | eS | Sb | 01 04 18.5 | 0.0 |
| | baz=316 | | | | | | |
| NDT | Datong Townshi | 1.13 | 294 | eP | Pb | 01 04 05.4 | +0.6 |
| | baz=291 | | | | | | |
| NDT | | | | eS | Sn | 01 04 19.4 | -0.3 |
| | baz=291 | | | | | | |
| FUSB | Fushanzhiwuyua | 1.14 | 302 | eP | Pg | 01 04 05.8 | -0.1 |
| | baz=312 | | | | | | |
| FUSB | | | | eS | Sb | 01 04 19.8 | +0.2 |
| | baz=312 | | | | | | |
| SXI1 | Grass Mountain | 1.18 | 323 | eP | Pb | 01 04 05.7 | +0.2 |
| | baz=335 | | | | | | |
| SXI1 | | | | eS | Sb | 01 04 20.3 | -0.1 |
| | baz=335 | | | | | | |
| NNSB | Datong | 1.19 | 284 | eP | Pb | 01 04 05.9 | +0.1 |
| | baz=281 | | | | | | |
| NNSB | | | | eS | Sb | 01 04 20.9 | 0.0 |
| | baz=281 | | | | | | |
| NWF | Wu-fen Shan | 1.21 | 319 | eP | Pb | 01 04 06.4 | +0.2 |
| | baz=318 | | | | | | |
| NWF | | | | eS | Sb | 01 04 21.2 | -0.3 |
| | baz=318 | | | | | | |
| NWLT | Wulai | 1.22 | 301 | eP | Pb | 01 04 06.1 | -0.1 |
| | baz=298 | | | | | | |
| NWLT | | | | eS | Sb | 01 04 21.2 | -0.5 |
| | baz=298 | | | | | | |
| JKRS | Kuro-shima | 1.25 | 86 | P | Pn | 01 04 06.4 | +0.2 |
| JKRS | | | | eS | Sn | 01 04 23.0 | +0.5 |
| WHF | Hehuan Shan | 1.26 | 270 | eP | Pn | 01 04 06.8 | -0.1 |
| | baz=267 | | | | | | |
| WHF | | | | eS | Sb | 01 04 23.1 | -0.2 |
| | baz=267 | | | | | | |
| YHNB | Yeheng | 1.27 | 294 | eP | Pn | 01 04 06.8 | +0.1 |
| | baz=298 | | | | | | |
| YHNB | | | | eS | Sn | 01 04 22.8 | -0.6 |
| | baz=298 | | | | | | |
| FUSS | Fushou | 1.29 | 275 | eP | Pn | 01 04 07.3 | +0.3 |
| | baz=271 | | | | | | |
| FUSS | | | | eS | Sn | 01 04 23.7 | -0.2 |
| | baz=271 | | | | | | |
| NSK | Sanguang | 1.29 | 294 | eP | Pn | 01 04 07.1 | +0.2 |
| | baz=291 | | | | | | |
| NSK | | | | eS | Sn | 01 04 23.3 | -0.4 |
| | baz=291 | | | | | | |
| HGSD | Ruisui | 1.30 | 240 | eP | Pb | 01 04 07.7 | +0.1 |
| | baz=237 | | | | | | |
| HGSD | | | | eS | Sb | 01 04 25.2 | +1.2 |
| | baz=237 | | | | | | |
| CHGB | Renai | 1.35 | 267 | eP | Pn | 01 04 07.9 | 0.0 |
| | baz=263 | | | | | | |
| CHGB | | | | eS | Sn | 01 04 25.5 | 0.0 |
| | baz=263 | | | | | | |
| EHY | Hungye | 1.37 | 242 | eS | Sn | 01 04 25.7 | 0.0 |
| | baz=239 | | | | | | |
| JIJ | Ishigaki jima | 1.38 | 81 | P | Pn | 01 04 08.3 | +0.2 |
| JIJ | | | | eS | Sn | 01 04 25.7 | -0.2 |
| YM01 | YM01 | 1.40 | 316 | eP | Pn | 01 04 08.3 | 0.0 |
| | baz=328 | | | | | | |
| YM01 | | | | eS | Sn | 01 04 25.2 | -1.1 |
| | baz=328 | | | | | | |
| WUSB | Renai | 1.41 | 264 | eP | Pn | 01 04 09.1 | +0.5 |
| | baz=261 | | | | | | |
| WUSB | | | | eS | Sb | 01 04 27.3 | 0.0 |
| | baz=261 | | | | | | |
| VWDT | VWDT | 1.43 | 254 | eP | Pn | 01 04 08.5 | -0.3 |
| | baz=251 | | | | | | |
| VWDT | | | | eS | Sn | 01 04 27.6 | +0.4 |
| | baz=251 | | | | | | |
| YULB | Yu-li | 1.45 | 239 | eP | Pn | 01 04 07.6 | -1.4 |
| | baz=223 | | | | | | |
| YULB | | | | eS | Sn | 01 04 26.4 | -1.2 |
| | baz=223 | | | | | | |
| EYUL | Yuli | 1.46 | 237 | eS | Sb | 01 04 28.6 | +0.1 |
| | baz=234 | | | | | | |
| NFF | Wufeng Townshi | 1.48 | 289 | eP | Pn | 01 04 09.8 | +0.3 |
| | baz=294 | | | | | | |
| NFF | | | | eS | Sb | 01 04 29.9 | +0.7 |
| | baz=294 | | | | | | |
| WHP | Taichung City | 1.56 | 275 | eP | Pn | 01 04 11.1 | +0.5 |
| | baz=272 | | | | | | |
| WHP | | | | eS | Sn | 01 04 30.6 | +0.1 |
| | baz=272 | | | | | | |
| FULB | Fuli | 1.56 | 233 | eS | Sb | 01 04 31.6 | +0.1 |
| | baz=217 | | | | | | |
| CHKT | Chengkung | 1.57 | 229 | eP | Pb | 01 04 11.9 | -0.4 |
| | baz=226 | | | | | | |
| JISG | Ishigakijimahi | 1.58 | 74 | P | Pn | 01 04 10.7 | -0.1 |
| JISG | | | | eS | Sn | 01 04 30.3 | -0.4 |
| WCS | Beigang Elemen | 1.59 | 267 | eP | Pn | 01 04 11.6 | +0.6 |
| | baz=264 | | | | | | |
| WCS | | | | eS | Sn | 01 04 31.4 | +0.4 |
| | baz=264 | | | | | | |
| SSLB | Suanglung | 1.59 | 257 | eP | Pn | 01 04 11.8 | +0.8 |
| | baz=255 | | | | | | |
| SSLB | | | | eS | Sn | 01 04 31.9 | +0.7 |
| | baz=255 | | | | | | |
| TYC | Yuchr | 1.66 | 262 | eP | Pn | 01 04 12.4 | +0.6 |
| | baz=259 | | | | | | |
| TYC | | | | eS | Sn | 01 04 32.8 | +0.1 |
| | baz=259 | | | | | | |
| ELDTW | Lidau | 1.77 | 238 | eS | Sn | 01 04 35.3 | -0.5 |
| | baz=235 | | | | | | |
| STYH | Taoyuan | 1.98 | 241 | eS | Sn | 01 04 41.3 | +0.8 |
| | baz=228 | | | | | | |
| TPUB | Ta-pu | 2.03 | 246 | eS | Sn | 01 04 42.7 | +0.6 |
| | baz=244 | | | | | | |

*PDG* ***26*** *01:38:22.3±0.5, 43°.21N×17°.58E, h13km, MD3.5/6, ML3.3/14, Error ellipse: s-maj=0.6km s-min=0.9km az=0.0*
*BEO* ***26*** *01:38:22.9±0.4, 43°.26N×17°.56E, h12km±2km, ML3.3/16*
*LDG* ***26*** *01:38:22.3±0.1, 43°.24N×17°.69E, h6km, Ml3.4/14, Error ellipse: s-maj=3.5km s-min=2.2km az=23.0*
*RHSSO* ***26*** *01:38:23.2±0.2, 43°.23N×17°.61E, h8km±2km, ML3.4/15*

*PRU* ***26*** *01:38:24.0±0.0, 43°.28N×17°.67E, h1km*
**ISC 26 01:38:22.3±0.9, 43°.25N±0°.02×17°.56E±0°.02, h13km±7km, n169,σ1s85/273, 26C-18D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| STON | Ston | 0.39 | 165 | ePg | | Pg | 01 38 29.7 | -0.4 |
| STON | | | | eSg | | Sg | 01 38 36.3 | +1.0 |
| STON | Ston | 0.39 | 165 | ePg | | Pg | 01 38 29.5 | -0.6 |
| STON | | | | eSg | | Sg | 01 38 35.9 | +0.6 |
| STON | Ston | 0.39 | 165 | ePg | | Pg | 01 38 29.4 | -0.6 |
| STON | | | | Sg | | Sg | 01 38 34.8 | -0.5 |
| MAKA | Makarska | 0.40 | 276 | ePg | | Pg | 01 38 30.5 | +0.2 |
| MAKA | | | | Sg | | Sb | 01 38 37.3 | 0.0 |
| RICI | Ricice | 0.40 | 309 | ePg | | Pg | 01 38 30.6 | +0.2 |
| RICI | | | | Sg | | Sb | 01 38 37.4 | +0.1 |
| LSTV | Lastovo | 0.69 | 226 | ePg | | Pg | 01 38 35.0 | -0.6 |
| LSTV | | | | Sg | | Sg | 01 38 45.1 | +0.5 |
| DBRK | Dubrovnik | 0.72 | 143 | ePg | | Pg | 01 38 34.9 | -1.4 |
| DBRK | | | | Sg | | Sb | 01 38 46.3 | -0.2 |
| TREB | Trebinje | 0.78 | 132 | ePg | | Pg | 01 38 36.0 | -1.5 |
| TREB | | | | eSg | | Sg | 01 38 47.9 | +0.1 |
| BRY | Bratogost | 0.79 | 115 | ePg | | Pg | 01 38 36.6 | -1.1 |
| BRY | | | | eSg | | Sg | 01 38 48.2 | 0.0 |
| BRY | Bratogost | 0.79 | 115 | ePg | | Pg | 01 38 36.3 | -1.4 |
| BRY | | | | *i* Sg | | Sb | 01 38 48.7 | -0.1 |
| HVAR | Hvar | 0.82 | 266 | ePg | | Pg | 01 38 37.9 | -0.3 |
| HVAR | | | | Sg | | Sg | 01 38 49.7 | +0.8 |
| UPM | Unac-Piva | 0.98 | 92 | ePg | | Pg | 01 38 40.3 | -1.1 |
| UPM | | | | eSg | | Sg | 01 38 53.5 | -0.7 |
| UPM | Unac-Piva | 0.98 | 92 | ePg | | Pg | 01 38 40.2 | -1.1 |
| UPM | | | | *i* Sg | | Sn | 01 38 55.3 | -0.6 |
| HCY | Herceg Novi | 1.05 | 139 | ePg | | Pb | 01 38 40.5 | -1.9 |
| HCY | | | | eSg | | Sb | 01 38 55.4 | -0.7 |
| HCY | Herceg Novi | 1.05 | 139 | ePg | | Pb | 01 38 40.8 | -1.6 |
| HCY | | | | *i* Sg | | Sg | 01 38 56.9 | +0.6 |
| NKME | Niksic | 1.13 | 115 | ePg | | Pb | 01 38 42.7 | -1.0 |
| NKME | | | | *i* Sg | | Sn | 01 39 00.1 | +0.8 |
| KLIV | Kijevo | 1.13 | 312 | ePg | | Pb | 01 39 42.9 | -0.9 |
| KLIV | | | | Sg | | Sn | 01 39 00.6 | +1.2 |
| NKY | Niksic | 1.13 | 112 | ePg | | Pb | 01 38 42.4 | -1.5 |
| NKY | | | | *i* Sg | | Sn | 01 39 00.3 | +0.8 |
| CEME | Cevo | 1.22 | 125 | ePg | | Pn | 01 38 43.8 | -1.3 |
| CEME | | | | *i* Sg | | Sn | 01 39 02.1 | +0.6 |
| MGRS | Mrkonjic Grad | 1.22 | 344 | ⇑*i*Pg | | Pg | 01 38 45.9 | +0.1 |
| MGRS | | | | eSg | | Sn | 01 39 02.8 | +1.2 |
| PLE | Pljevlja | 1.34 | 86 | ePg | | Pb | 01 38 47.3 | 0.0 |
| PLE | | | | *i* Sg | | Sg | 01 39 06.8 | +1.4 |
| BUM | Brajici-Budva | 1.36 | 134 | ePg | | Pn | 01 38 46.6 | -0.5 |
| BUM | | | | *i* Sg | | Sg | 01 39 07.4 | +1.2 |
| RUDO | Rudo | 1.37 | 74 | ⇓*i*Pg | | Pn | 01 38 46.7 | -0.5 |
| RUDO | | | | eSg | | Sg | 01 39 06.2 | -0.2 |
| ZIRJ | Zirje | 1.46 | 287 | ePg | | Pn | 01 38 49.1 | +0.7 |
| BBLS | Lazići | 1.48 | 65 | ePg | | Pb | 01 38 50.0 | +0.3 |
| BBLS | | | | eSg | | Sg | 01 39 10.2 | +0.3 |
| BBLS | Lazići | 1.48 | 65 | ⇑*i*Pg | | Pb | 01 38 49.9 | +0.3 |
| BBLS | | | | eSg | | Sg | 01 39 09.5 | -0.4 |
| KOME | Kolasin | 1.48 | 105 | ⇓ePg | | Pg | 01 38 50.4 | -0.5 |
| KOME | | | | *i* Sg | | Sg | 01 39 11.4 | +1.2 |
| MORI | Morici | 1.48 | 295 | ePg | | Pn | 01 38 49.5 | +0.7 |
| PDG | Podgorica | 1.49 | 123 | ⇓P | | Pb | 01 38 49.7 | -0.1 |
| PDG | | | | ⇑S | | Sg | 01 39 10.0 | -0.2 |
| PDG | Podgorica | 1.49 | 123 | ePg | | Pb | 01 38 49.6 | -0.3 |
| PDG | | | | eSg | | Sg | 01 39 11.1 | +0.9 |
| PDG | Podgorica | 1.49 | 123 | ⇓*i*Pg | | Pb | 01 38 49.5 | -0.3 |
| PDG | | | | eSg | | Sg | 01 39 09.7 | -0.5 |
| TTG | Podgorica | 1.49 | 123 | ⇑*i*Pg | | Pn | 01 38 49.0 | +0.2 |
| TTG | | | | *i* Sg | | Sg | 01 39 10.8 | +0.6 |
| BLY | Banja Luka | 1.53 | 350 | ePg | | Pg | 01 38 51.7 | 0.0 |
| BLY | | | | eSg | | Sg | 01 39 12.5 | +1.0 |
| BLY | Banja Luka | 1.53 | 350 | ⇑*i*Pn | | Pg | 01 38 51.4 | -0.3 |
| BLY | | | | eSn | | Sb | 01 39 10.9 | +1.1 |
| DRME | Dracevica, Mon | 1.60 | 131 | ⇓*i*Pn | | Pb | 01 38 51.4 | -0.3 |
| DRME | | | | eSn | | Sb | 01 39 12.7 | +0.9 |
| DRME | Dracevica, Mon | 1.60 | 131 | ePg | | Pn | 01 39 03.0 | +0.7 |
| DRME | | | | *i* Sg | | Sg | 01 39 13.5 | -0.2 |
| IVA | Berane | 1.75 | 102 | ⇓*i*Pn | | Pb | 01 38 54.3 | 0.0 |
| IVA | | | | *i* Sn | | Sg | 01 39 17.7 | -0.9 |
| SJES | Sjenica | 1.76 | 89 | ePg | | Pb | 01 38 54.8 | +0.2 |
| SJES | | | | eSg | | Sg | 01 39 19.0 | 0.0 |
| ULC | Ulcinj | 1.78 | 135 | ⇓*i*Pn | | Pn | 01 38 53.6 | +0.7 |
| ULC | | | | *i* Sn | | Sb | 01 39 18.1 | +0.9 |
| UDBI | Udbina | 1.83 | 315 | ePn | | Pb | 01 38 56.7 | +1.1 |
| UDBI | | | | Sn | | Sg | 01 39 20.9 | -0.2 |
| MRAK | Mrakovica | 1.83 | 345 | ePn | | Pb | 01 38 55.6 | -0.1 |
| MRAK | | | | eSn | | Sb | 01 39 18.6 | 0.0 |
| PRIJ | Prijedor | 1.83 | 341 | ePn | | Pb | 01 38 55.8 | 0.0 |
| PRIJ | | | | eSn | | Sb | 01 39 18.8 | +0.2 |
| PVY | Plav | 1.88 | 109 | ⇑*i*Pn | | Pb | 01 38 57.4 | +0.9 |
| PVY | | | | *i* Sn | | Sb | 01 39 20.3 | +0.3 |
| IVAS | Ivanjica | 1.92 | 79 | ePn | | Pn | 01 38 55.7 | +0.9 |
| IVAS | | | | eSn | | Sb | 01 39 19.2 | -1.1 |
| DIVS | Divibare | 1.96 | 63 | ePn | | Pn | 01 38 56.3 | +1.0 |
| DIVS | | | | eSn | | Sn | 01 39 20.2 | +0.4 |
| DIVS | Divibare | 1.96 | 63 | ⇑*i*Pn | | Pn | 01 38 56.3 | +1.0 |
| DIVS | | | | eSn | | Sb | 01 39 21.2 | -1.1 |
| DUGI | Dugi Otok | 1.97 | 293 | ePn | | Pn | 01 38 57.0 | +1.6 |
| DUGI | | | | Sn | | Sb | 01 39 22.4 | 0.0 |
| BLJ | Bijeljina | 1.97 | 38 | ePn | | Pn | 01 38 54.9 | -0.5 |
| BLJ | | | | eSn | | Sn | 01 39 19.9 | 0.0 |
| A251A | Rujevac | 2.10 | 334 | ePn | | Pb | 01 38 59.6 | -0.7 |
| PLIT | Plitvice | 2.15 | 320 | ePn | | Pb | 01 39 00.7 | -0.5 |
| A252A | Venje | 2.20 | 5 | ePn | | Pn | 01 38 59.5 | +0.9 |
| TRUS | Trudelj | 2.28 | 64 | ePn | | Pn | 01 39 00.3 | +0.6 |
| TRUS | | | | eSn | | Sn | 01 39 27.7 | 0.0 |
| NVLJ | Novalja | 2.35 | 305 | ePn | | Pn | 01 39 02.3 | +1.7 |
| NVLJ | | | | Sn | | Sb | 01 39 32.4 | -1.0 |
| GRUS | Gruza | 2.38 | 73 | ePn | | Pn | 01 39 02.4 | +1.3 |
| GRUS | | | | eSn | | Sn | 01 39 29.8 | -0.3 |
| MOSL | Moslavina | 2.44 | 347 | ePn | | Pn | 01 39 03.5 | +1.1 |
| FRGS | Fruska Gora | 2.50 | 39 | ⇓P | | Pn | 01 39 01.9 | -0.9 |
| FRGS | | | | ⇑S | | Sn | 01 39 32.4 | -0.8 |
| FRGS | Fruska Gora | 2.50 | 39 | ePn | | Pn | 01 39 01.9 | -0.9 |
| FRGS | | | | eSn | | Sn | 01 39 32.6 | -0.6 |
| RABC | Rab | 2.51 | 308 | ePn | | Pn | 01 39 04.6 | +1.8 |
| RABC | | | | Sn | | Sb | 01 39 37.0 | -1.0 |
| TIR | Tirane | 2.55 | 137 | ⇑P | | Pn | 01 39 04.1 | +0.7 |
| TIR | | | | ⇑S | | Sn | 01 39 35.7 | +1.4 |
| SELS | Selova | 2.60 | 89 | ePn | | Pn | 01 39 05.2 | +1.1 |
| SELS | | | | eSn | | Sn | 01 39 37.1 | +1.5 |
| A250A | Rusevo Krmpots | 2.65 | 315 | ePn | | Pn | 01 39 07.7 | +2.8 |
| MATE | Matera | 2.67 | 194 | ⇑P | | Pn | 01 39 05.6 | +0.5 |
| BOJS | Bojanci | 2.80 | 325 | *i* Pn | | Pn | 01 39 09.5 | +2.7 |
| ZAG | Zagreb | 2.82 | 337 | ePn | | Pn | 01 39 09.1 | +2.0 |
| ZAG | | | | eSn | | Sn | 01 39 43.4 | +2.5 |
| ZAG | Zagreb | 2.82 | 337 | ePn | | Pn | 01 39 09.4 | +2.4 |
| SVIS | Svilajnac | 2.84 | 68 | ePn | | Pn | 01 39 07.6 | +0.3 |
| SVIS | | | | eSn | | Sn | 01 39 40.9 | -0.4 |
| KOVH | Kovagototos | 2.87 | 7 | PN | | Pn | 01 39 08.6 | +0.8 |
| KOVH | | | | SN | | Sn | 01 39 41.6 | -0.6 |
| CRES | Cresnjev | 2.99 | 330 | ePn | | Pn | 01 39 12.0 | +2.6 |
| CRES | | | | eSn | | Sn | 01 39 47.5 | +2.4 |
| CRES | Cresnjev | 2.99 | 330 | *i* Pn | | Pn | 01 39 12.0 | +2.6 |
| CRES | | | | eSn | | Sn | 01 39 47.4 | +2.3 |
| CRES | | | | | IAML | | 01 39 56.6 | |
| | comp=Z,89nm,0.8s | | | | | | | |
| KALN | Kalnik | 2.99 | 345 | ePn | | Pn | 01 39 10.7 | +1.2 |
| RIY | Rijeka | 3.04 | 314 | ePn | | Pn | 01 39 12.3 | +2.2 |
| RIY | | | | eSn | | Sn | 01 39 48.3 | +2.0 |
| SMRN | Sveta Marina | 3.04 | 307 | ePn | | Pn | 01 39 11.4 | +1.3 |
| MORH | Mrgy, Hungar | 3.07 | 14 | ePn | | Pn | 01 39 11.2 | +0.7 |
| MORH | | | | eSn | | Sn | 01 39 48.1 | +1.1 |
| MORH | Mrgy, Hungar | 3.07 | 14 | PN | | Pn | 01 39 10.9 | +0.4 |
| BARS | Barje | 3.15 | 96 | ePn | | Pn | 01 39 13.3 | +1.7 |
| BARS | | | | eSn | | Sn | 01 39 49.5 | +0.4 |
| AQU | L'Aquila | 3.19 | 255 | ePn | | Pn | 01 39 13.8 | +1.6 |
| AQU | | | | eSn | | Sn | 01 39 51.4 | +1.2 |
| BRJN | Brijuni | 3.21 | 302 | ePn | | Pn | 01 39 14.2 | +1.8 |
| OHR | Ohrid | 3.21 | 130 | *i* Pn | | Pn | 01 39 14.3 | +1.8 |
| BEHE | Becsehely | 3.27 | 350 | ⇑*i*Pn | | Pn | 01 39 15.4 | +2.1 |
| BEHE | | | | eSn | | Sn | 01 39 54.2 | +2.1 |
| BEHE | Becsehely | 3.27 | 350 | PN | | Pn | 01 39 15.2 | +1.9 |
| BEHE | | | | SN | | Sn | 01 39 54.3 | +2.2 |
| KOGS | Kog | 3.33 | 344 | *i* Pn | | Pn | 01 39 15.9 | +1.7 |
| BANR | Banloc | 3.34 | 49 | ⇑P | | Pn | 01 39 13.3 | -0.9 |
| CEY | Cerknica | 3.35 | 319 | ePn | | Pn | 01 39 16.5 | +2.0 |
| CEY | | | | eSn | | Sn | 01 39 56.7 | +2.5 |
| MDVR | Moldovita | 3.36 | 61 | ⇑P | | Pn | 01 39 14.9 | +0.2 |
| MDVR | | | | ⇑S | | Sn | 01 39 53.4 | -1.0 |
| SKDS | Skadanscina | 3.43 | 313 | ePn | | Pn | 01 39 17.2 | +1.7 |
| SKDS | | | | eSn | | Sn | 01 39 57.0 | +1.0 |
| ZAGS | Zajecar | 3.44 | 79 | ePn | | Pn | 01 39 16.4 | +0.7 |
| ZAGS | | | | eSn | | Sn | 01 39 56.2 | -0.1 |
| LJU | Ljubljana | 3.54 | 323 | ePn | | Pn | 01 39 19.3 | +2.3 |
| LJU | | | | eSn | | Sn | 01 40 00.8 | +2.1 |
| TIH | Tihany | 3.66 | 4 | PN | | Pn | 01 39 19.5 | +0.9 |
| BOSS | Bosilegrad | 3.69 | 100 | ePn | | Pn | 01 39 20.6 | +1.5 |
| BOSS | | | | eSn | | Sn | 01 40 03.4 | +0.9 |
| ZAPS | Zavoj | 3.70 | 88 | ePn | | Pn | 01 39 21.7 | +2.4 |
| ZAPS | | | | eSn | | Sn | 01 40 02.2 | -0.6 |
| BLKB | Belogradchik | 3.74 | 82 | ⇓S | | Sn | 01 40 02.6 | -1.2 |
| BZS | Buzias | 3.75 | 49 | ⇑P | | Pn | 01 39 19.9 | 0.0 |
| BZS | | | | ⇓S | | Sn | 01 40 04.6 | +0.7 |
| STIP | Stip | 3.75 | 113 | *i* Pn | | Pn | 01 39 23.4 | +3.4 |
| PERS | Pernice | 3.81 | 334 | *i* Pn | | Pn | 01 39 23.1 | +2.4 |
| AMBH | Ambrzfalva | 3.83 | 35 | ⇓S | | Sn | 01 40 05.9 | 0.0 |
| HERR | Herculane | 3.86 | 63 | ⇓P | | Pn | 01 39 22.3 | +0.9 |
| HERR | | | | ⇑S | | Sn | 01 40 05.4 | -1.3 |
| SOKA | Soboth | 3.87 | 333 | *i* Pg | | Pn | 01 39 24.0 | +2.3 |
| | comp=Z,19nm,0.5s,SNR=52 | | | | | | | |
| SOKA | | | | eSn | | Sn | 01 40 08.6 | +1.5 |
| | comp=Z,4.2nm,0.4s | | | | | | | |
| OBKA | Obir | 3.90 | 328 | *i* Pn | | Pn | 01 39 24.8 | +2.7 |
| | comp=Z,1.3nm,0.3s,SNR=9.4 | | | | | | | |
| OBKA | | | | Pg | | Pg | 01 39 36.4 | -0.7 |
| | comp=Z,3.2nm,0.2s | | | | | | | |
| MPLH | Magyarpolny | 3.92 | 360 | PN | | Pn | 01 39 23.9 | +1.6 |
| RMGR | Halanga-Turnu | 3.96 | 67 | ⇑S | | Sn | 01 40 10.0 | +0.9 |
| PUNG | Punghina | 4.02 | 73 | ⇑S | | Sn | 01 40 12.5 | +1.9 |
| TIP | Timpagrande | 4.11 | 189 | ⇑P | | Pn | 01 39 25.6 | +0.7 |
| EGYH | Egyhazaskeszo | 4.17 | 358 | PN | | Pn | 01 39 27.9 | +2.2 |
| SIRR | Siria | 4.20 | 43 | ⇑P | | Pn | 01 39 26.1 | 0.0 |
| SIRR | | | | ⇑S | | Sn | 01 40 14.9 | -0.1 |
| VTS | Vitosha | 4.21 | 97 | ⇓S | | Sn | 01 40 16.3 | +0.7 |
| ARSA | Arzberg | 4.26 | 341 | *i* Pn | | Pn | 01 39 28.9 | +2.0 |
| | comp=Z,38nm,0.4s,SNR=49 | | | | | | | |
| ARSA | | | | eSn | | Sn | 01 40 17.9 | +1.4 |
| | comp=Z,3.6nm,0.4s | | | | | | | |
| GZR | Gura Zlata | 4.31 | 58 | ⇑P | | Pn | 01 39 28.3 | +0.6 |
| GZR | | | | ⇑S | | Sn | 01 40 17.1 | -0.8 |
| BUD | Budapest | 4.36 | 13 | PN | | Pn | 01 39 29.0 | +0.7 |
| MYKA | Terra Mystica | 4.38 | 322 | ePn | | Pn | 01 39 30.9 | +2.2 |
| | comp=Z,2.2nm,0.4s | | | | | | | |
| SRO2 | Moca | 4.55 | 7 | ePN | | Pn | 01 39 31.4 | +0.5 |
| SRO2 | | | | eSN | | Sn | 01 40 25.5 | +1.8 |
| CONA | Conrad Observa | 4.83 | 346 | *i* Pn | | Pn | 01 39 36.9 | +2.1 |
| | comp=Z,4.4nm,0.3s,SNR=22 | | | | | | | |
| CONA | | | | eSn | | Sn | 01 40 32.0 | +1.3 |
| | comp=Z,6.5nm,0.4s | | | | | | | |
| KBA | Koelnbreinsper | 4.86 | 324 | *i* Pn | | Pn | 01 39 37.8 | +2.6 |
| | comp=Z,2.7nm,0.3s,SNR=5.9 | | | | | | | |
| KBA | | | | eSn | | Sn | 01 40 34.6 | +3.2 |
| | comp=Z,5.2nm,0.4s | | | | | | | |
| PSZ | Piszkesteto | 4.95 | 18 | ⇓P | | Pn | 01 39 36.9 | +0.5 |
| PSZ | Piszkesteto | 4.95 | 18 | PN | | Pn | 01 39 37.0 | +0.5 |
| PSZ | | | | SN | | Sn | 01 40 31.9 | -1.7 |
| ZST | Bratislava | 4.96 | 356 | ePN | | Pn | 01 39 38.6 | +2.1 |
| ZST | | | | eSN | | Sn | 01 40 33.1 | -0.6 |
| LOT | Lotru | 4.97 | 62 | ⇑P | | Pn | 01 39 36.9 | +0.2 |
| ABTA | Abfaltersbach | 5.01 | 316 | *i* Pn | | Pn | 01 39 39.5 | +2.3 |
| | comp=Z,0.1nm,0.1s,SNR=12 | | | | | | | |
| ABTA | | | | Sg | | Sg | 01 41 06.4 | +3.3 |
| | comp=Z,20nm,0.8s | | | | | | | |
| MOA | Molln | 5.15 | 334 | *i* Pn | | Pn | 01 39 42.3 | +3.1 |
| | comp=Z,7.5nm,0.3s,SNR=27 | | | | | | | |
| MOA | | | | ePg | | Pb | 01 39 49.5 | -2.9 |
| | comp=Z,10nm,0.4s | | | | | | | |
| MOA | | | | Sg | | Sn | 01 40 40.6 | +2.1 |
| | comp=Z,7.2nm,0.5s | | | | | | | |
| SMOL | Smolenice | 5.27 | 359 | ePN | | Pn | 01 39 42.5 | +1.7 |
| SMOL | | | | eSN | | Sn | 01 40 42.7 | +1.3 |
| VYHS | Vyhne | 5.32 | 9 | ePN | | Pn | 01 39 42.7 | +1.2 |
| VYHS | | | | eSN | | Sn | 01 40 41.7 | -1.0 |
| KOLL | Kolacno | 5.37 | 6 | ePN | | Pn | 01 39 43.8 | +1.7 |
| KOLL | | | | eSN | | Sn | 01 40 42.3 | -1.4 |
| ARR | Arges | 5.50 | 65 | ⇓P | | Pn | 01 39 44.2 | +0.2 |
| JAVC | Velka Javorina | 5.62 | 1 | ePN | | Pn | 01 39 47.5 | +1.9 |
| VOIR | | 5.80 | 65 | ⇓S | | Sn | 01 40 54.4 | -0.1 |
| WTTA | Wattenberg | 5.80 | 316 | ePn | | Pn | 01 39 50.6 | +2.4 |
| | comp=Z,4.4nm,0.3s,SNR=9.0 | | | | | | | |
| WTTA | | | | eSn | | Sn | 01 41 01.1 | +6.4 |
| | comp=Z,9.1nm,0.5s | | | | | | | |
| KRUC | Moravsky | 5.87 | 352 | ePN | | Pn | 01 39 50.9 | +1.8 |
| KRUC | | | | eSN | | Sn | 01 40 56.0 | -0.2 |
| WATA | Walderalm | 5.88 | 316 | ePn | | Pn | 01 39 51.3 | +2.0 |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| TRPA | Tarpa | 6.00 | 34 | ⇑P | | Pn | 01 39 51.8 | +1.0 |
| CKRC | Cesky Krumlov | 6.02 | 339 | ePN | | Pn | 01 39 53.7 | +2.6 |
| CKRC | | | | eSN | | Sn | 01 40 59.1 | -0.7 |
| VRAC | Vranov | 6.10 | 354 | ePN | | Pn | 01 39 54.2 | +2.0 |
| MOTA | Moosalm | 6.13 | 314 | ePn | | Pn | 01 39 53.7 | +1.0 |
| | comp=Z,3.4nm,0.5s,SNR=8.8 | | | | | | | |
| MOTA | | | | eSn | | Sn | 01 41 05.3 | +2.6 |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| FETA | Feichten | 6.13 | 310 | ePn | | Pn | 01 39 55.8 | +3.0 |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| FETA | | | | Sg | | Sg | 01 41 38.5 | -0.6 |
| | comp=Z,5.2nm,0.6s | | | | | | | |
| PGF | Pioggiola | 6.33 | 267 | ePn | | Pn | 01 39 56.2 | +0.8 |
| RETA | Reutte | 6.40 | 314 | ePn | | Pn | 01 39 59.2 | +2.8 |
| | comp=Z,1.9nm,0.4s,SNR=4.7 | | | | | | | |
| MLR | Muntele Rosu | 6.41 | 67 | ⇓P | | Pn | 01 39 56.3 | -0.3 |
| KHC | Kasperske Hory | 6.50 | 336 | ePN | | Pn | 01 40 00.0 | +2.3 |
| KHC | | | | eSN | | Sn | 01 41 11.7 | -0.1 |
| MORC | Moravsky Berou | 6.53 | 360 | ⇓P | | Pn | 01 39 59.3 | +1.1 |
| MORC | Moravsky Berou | 6.53 | 360 | ePN | | Pn | 01 40 00.0 | +1.8 |
| DAVA | Damuels | 6.76 | 309 | ePn | | Pn | 01 40 05.6 | +4.2 

**BAIF Baives 11.42 311 *e*P Pn 01 41 08.8 +3.7**

*IDC* ***26*** *01:49:35.6±0.7,61.˙96S×155.˙47E,h0ᵏᵐ,mb4.7/6, mb1 4.8/6,mb1mx4.3/20,mbtmp4.6/6,MS4.9/42, Ms1 4.9/42,ms1mx4.9/48,Error ellipse: s-maj=43.4km s-min=19.0km az=68.0*

*NEIC* ***26*** *01:49:36.8±1.8,62.˙21S±0.˙09×155.˙3E±0.˙3,h10ᵏᵐ±1ᵏᵐ, mb5.1/38,Ms_20 5.2/73,Mwb5.7/14,Error ellipse: s-maj=21.8km s-min=15.5km az=84.0*

*MOS* ***26*** *01:49:36.8±1.5,62.˙30S×155.˙31E,h10ᵏᵐ,mb4.9/10,Error ellipse: s-maj=49.5km s-min=12.9km az=96.0*

*NEIC* ***26*** *01:49:36.8,62.˙21S×155.˙29E,h14ᵏᵐ,Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr0.32; Mθθ2.86; Mϕϕ-3.18; Mrθ0.11; Mθϕ-2.29; Mϕr-0.58; Fault plane solution: Mo3.85000×10¹⁷ NP1:ϕ333.55000°, δ88.78000°,λ-8.41000°. NP2:ϕ63.73000°,δ81.59000°, λ-178.77000°. Principal axes: T 3.6548, Plg5.0000°, Azm19.0000°; N 0.3570, Plg81.0000°, Azm145.0000°; P -4.0119, Plg7.0000°, Azm288.0000°;*

*BJI* ***26*** *01:49:37.0±0.0,62.˙20S×155.˙30E,h10ᵏᵐ,mb5.2/1, Ms5.1/7,Ms7 4.9/8*

*GCMT* ***26*** *01:49:40.8±0.1,62.˙14S±0.˙01×154.˙90E±0.˙02,h15ᵏᵐ, MW5.6/132,Moment Tensor Solution. s123,c214; s132,c248; Duration: 1ˢ6 Moment tensor: Scale 10¹⁷ Nm; Mrr-0.20±.03; Mθθ2.81±.04; Mϕϕ-2.60±.04; Mrθ-0.42±.07; Mθϕ-1.95±.03; Mϕr0.03±.07; Best double couple: Mo3.35900×10¹⁷ NP1:ϕ333.00000°,δ84.00000°, λ3.00000°. NP2:ϕ243.00000°,δ87.00000°,λ174.00000°. Principal axes: T 3.4850, Plg6.0000°, Azm198.0000°; N -0.2470, Plg83.0000°, Azm36.0000°; P -3.2330, Plg2.0000°, Azm288.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 26 01:49:36.9±0.3, 62˙21S±0˙05×155˙59E±0˙08, h10ᵏᵐ, n291, σ1ˢ98/216, mb5.1/25, MS5.1/86, 24C-20D, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **VNDA** | **Vanda** | **15.52** | **175** | Pn | **Pn** | | **01 53 10.9** | **-4.4** |
| | 5.2nm,0.3s,baz=341,slow=12,SNR=102 | | | | | | | |
| VNDA | | | | LR | LR | | 01 58 37.2 | |
| | comp=Z,15μm,19.4s,baz=359,slow=34 | | | | | | | |
| **VNDA** | **Vanda** | **15.52** | **175** | P | **Pn** | | **01 53 11.1** | **-4.2** |
| VNDA | | | | pmax | pmax | | | |
| | comp=Z,96nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **15.52** | **175** | | **Pn** | | **01 53 11.1** | **-4.2** |
| VNDA | | | | IAmb | IAmb | | 01 53 16.6 | |
| | comp=Z,96nm,0.8s | | | | | | | |
| **SBA** | **Scott Base** | **16.11** | **171** | P | **Pn** | | **01 53 21.0** | **-2.0** |
| SBA | | | | pmax | pmax | | | |
| | comp=Z,186nm,1.1s | | | | | | | |
| **SBA** | **Scott Base** | **16.11** | **171** | | **Pn** | | **01 53 21.0** | **-2.0** |
| SBA | | | | IAmb | IAmb | | 01 53 30.7 | |
| | comp=Z,186nm,1.1s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **17.83** | **29** | P | **Pn** | | **01 53 44.7** | **-0.2** |
| **WKZ** | **Wanaka** | **19.09** | **30** | P | **Pn** | | **01 54 00.1** | **0.0** |
| **CASY** | **Casey** | **19.64** | **238** | | **P** | | **01 54 03.2** | **-2.0** |
| CASY | | | | IAmb | IAmb | | 01 54 20.2 | |
| | comp=Z,250nm,1.7s | | | | | | | |
| **MOO** | **Moorlands** | **20.42** | **342** | P | Pn | | 01 54 17.5 | +1.5 |
| | baz=20 | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.63** | **33** | LR | LR | | 02 01 01.3 | |
| | comp=Z,7μm,18.1s,baz=184,slow=34 | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.63** | **33** | IAMs_20 | IAMs_20 | | 02 00 40.6 | |
| | comp=Z,8μm,20.0s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **21.07** | **36** | IAMs_20 | IAMs_20 | | 02 01 01.3 | |
| | comp=Z,7μm,19.0s | | | | | | | |
| **OXZ** | **Oxford** | **21.25** | **35** | IAMs_20 | IAMs_20 | | 02 01 27.1 | |
| | comp=Z,11μm,19.0s | | | | | | | |
| **LTZ** | **Lake Taylor** | **21.82** | **35** | IAMs_20 | IAMs_20 | | 02 00 55.2 | |
| | comp=Z,8μm,22.0s | | | | | | | |
| **KHZ** | **Kahutara** | **22.51** | **37** | IAMs_20 | IAMs_20 | | 02 02 16.4 | |
| | comp=Z,11μm,20.0s | | | | | | | |
| **THZ** | **Tophouse** | **22.94** | **35** | P | **P** | | **01 54 42.9** | **+1.9** |
| THZ | | | | IAmb | IAmb | | 01 55 02.5 | |
| | comp=Z,141nm,1.8s | | | | | | | |
| THZ | | | | IAMs_20 | IAMs_20 | | 02 02 14.8 | |
| | comp=Z,11μm,19.0s | | | | | | | |
| **NNZ** | **Nelson** | **23.58** | **35** | IAMs_20 | IAMs_20 | | 02 02 42.7 | |
| | comp=Z,9μm,20.0s | | | | | | | |
| **QRZ** | **Quartz Range** | **23.72** | **33** | IAMs_20 | IAMs_20 | | 02 02 49.3 | |
| | comp=Z,7μm,18.0s | | | | | | | |
| **SNZO** | **South Karori** | **23.86** | **38** | IAMs_20 | IAMs_20 | | 02 03 10.3 | |
| | comp=Z,7μm,20.0s | | | | | | | |
| **BFZ** | **Birch Farm** | **24.89** | **40** | IAMs_20 | IAMs_20 | | 02 03 51.7 | |
| | comp=Z,7μm,20.0s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **26.36** | **39** | P | **P** | | **01 55 12.4** | **-0.5** |
| **URZ** | **Urewera** | **27.38** | **39** | LR | LR | | 02 06 32.4 | |
| | comp=Z,3μm,18.1s,baz=211,slow=37 | | | | | | | |
| **QSPA** | **South Pole Qui** | **27.88** | **180** | P | **P** | | **01 55 28.2** | **+1.6** |
| | comp=Z,53nm,1.0s,baz=4.8,slow=6.9,SNR=76 | | | | | | | |
| QSPA | | | | LR | LR | | 02 06 05.7 | |
| | comp=Z,5μm,21.9s,baz=16,slow=35 | | | | | | | |
| **QSPA** | **South Pole Qui** | **27.88** | **180** | P | **P** | | **01 55 27.8** | **+1.2** |
| **QSPA** | **South Pole Qui** | **27.88** | **180** | IAMs_20 | IAMs_20 | | 02 05 55.4 | |
| | comp=Z,5μm,22.0s | | | | | | | |
| **MXZ** | **Matakaoa Point** | **28.38** | **40** | IAMs_20 | IAMs_20 | | 02 04 47.1 | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **31.66** | **337** | LR | LR | | 02 05 38.4 | |
| | comp=Z,2μm,21.1s,baz=156,slow=31 | | | | | | | |
| **STKA** | **Stephens Creek** | **31.66** | **337** | *e*P | **P** | | **01 55 59.9** | **-0.2** |
| **STKA** | **Stephens Creek** | **31.66** | **337** | P | **P** | | **01 55 59.9** | **-0.2** |
| **FORT** | **Forrest** | **36.15** | **318** | P | **P** | | **01 56 38.3** | **-0.7** |
| FORT | | | | IAmb | IAmb | | 01 56 56.1 | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **36.15** | **220** | LR | LR | | 02 11 32.1 | |
| | comp=Z,7μm,18.8s,baz=118,slow=36 | | | | | | | |
| **EIDS** | **Eidsvold** | **36.96** | **353** | P | **P** | | **01 56 44.7** | **-1.2** |
| EIDS | | | | IAmb | IAmb | | 01 57 30.7 | |
| | comp=Z,56nm,1.8s | | | | | | | |
| **RAO** | **Raoul Island** | **37.25** | **40** | LR | LR | | 02 10 13.8 | |
| | comp=Z,3μm,20.6s,baz=176,slow=33 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **37.64** | **297** | T | T | | 02 36 53.8 | |
| | baz=149,slow=76,SNR=276 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **37.64** | **297** | T | T | | 02 36 58.7 | |
| | baz=149,slow=76,SNR=228 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **37.65** | **297** | T | T | | 02 36 55.0 | |
| | baz=149,slow=76,SNR=184 | | | | | | | |
| **BELA** | **Belgrano 2** | **40.01** | **177** | P | **P** | | **01 57 11.1** | **-0.1** |
| BELA | | | | IAmb | IAmb | | 01 57 14.6 | |
| | comp=Z,56nm,1.1s | | | | | | | |
| **BLDU** | **Balliou** | **40.34** | **303** | P | **P** | | **01 57 12.3** | **-2.0** |
| | baz=40,SNR=5.6 | | | | | | | |
| **ONTNC** | **Ouen Toro** | **40.57** | **16** | P | **P** | | **01 57 15.6** | **-0.6** |
| **DZM** | **Mont Dzumac** | **40.80** | **16** | LR | LR | | 02 10 53.0 | |
| | comp=Z,3μm,19.3s,baz=248,slow=32 | | | | | | | |
| **DZM** | **Mont Dzumac** | **40.80** | **16** | *e*P | **P** | | **01 57 18.7** | **+0.4** |
| | comp=Z,74nm,1.2s | | | | | | | |
| DZM | | | | *e*S | **S** | | **02 03 27.6** | **-1.5** |
| | comp=Z,860nm,26.8s | | | | | | | |
| DZM | | | | *e*LR | LR | | 02 08 27.4 | |
| | comp=Z,6μm,25.8s,baz=208 | | | | | | | |
| **DZM** | **Mont Dzumac** | **40.80** | **16** | P | **P** | | **01 57 17.6** | **-0.7** |
| DZM | | | | IAmb | IAmb | | 01 57 28.4 | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **41.24** | **329** | P | **P** | | **01 57 19.5** | **-2.4** |
| | comp=Z,3.6nm,0.9s,baz=164,slow=9.2,SNR=17 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **01 59 20.5** | **-0.1** |
| | comp=Z,2.1nm,0.8s,baz=161,slow=3.5,SNR=4.1 | | | | | | | |
| ASAR | | | | LR | LR | | 02 12 06.2 | |
| | comp=Z,2μm,19.6s,baz=163,slow=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **41.24** | **329** | P | **P** | | **01 57 21.2** | **-0.6** |
| **AS31** | **Alice Springs** | **41.24** | **329** | P | **P** | | **01 57 20.8** | **-1.1** |
| **SYO** | **Syowa Base** | **41.41** | **209** | *e*sP | sP | | 01 57 26.6 | +0.7 |
| **MORW** | **Morawa** | **41.98** | **304** | P | **P** | | **01 57 25.9** | **-2.0** |
| MORW | | | | IAmb | IAmb | | 01 57 28.0 | |
| | comp=Z,40nm,1.4s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **42.06** | **12** | P | **P** | | **01 57 28.6** | **+0.1** |
| KOUNC | | | | IAmb | IAmb | | 01 57 38.4 | |
| | comp=Z,49nm,1.2s | | | | | | | |
| **CTA** | **Charters Tower** | **42.58** | **347** | LR | LR | | 02 12 20.9 | |
| | comp=Z,2μm,21.8s,baz=178,slow=32 | | | | | | | |
| **MEEK** | **Meekatharra** | **43.19** | **308** | P | **P** | | **01 57 38.6** | **+0.9** |
| | baz=43,SNR=4.0 | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.67** | **331** | P | **P** | | **01 57 47.7** | **-1.9** |
| **WB2** | **Warramunga Arr** | **44.73** | **331** | P | **P** | | **01 57 47.2** | **-2.9** |
| **WRA** | **Warramunga Arr** | **44.73** | **331** | P | **P** | | **01 57 46.5** | **-3.6** |
| | comp=Z,5.7nm,1.1s,baz=165,slow=7.1,SNR=11 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **01 59 32.3** | **0.0** |
| | comp=Z,2.4nm,0.8s,baz=168,slow=2.9,SNR=6.9 | | | | | | | |
| WRA | | | | LR | LR | | 02 13 59.9 | |
| | comp=Z,2μm,20.6s,baz=160,slow=33 | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.73** | **331** | *i* P | **P** | | **01 57 49.1** | **-1.1** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,36nm,2.4s | | | | | | | |
| **MTSU** | **Mount Surprise** | **44.73** | **345** | P | **P** | | **01 57 49.3** | **-0.9** |
| | baz=45,SNR=4.1 | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.88** | **331** | P | **P** | | **01 57 49.9** | **-1.4** |
| **NVL** | **N'lazarevskaya** | **44.91** | **196** | *i* P | P | | 01 57 57.8 | +6.8 |
| NVL | | | | *i* | | | 01 59 32.9 | |
| NVL | | | | *i* S | **S** | | **02 04 36.0** | **+7.7** |
| NVL | | | | *i* SS | **SS** | | **02 07 49.6** | **+0.7** |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.1s | | | | | | | |
| NVL | | | | MLR | MLR | | | |
| | comp=N,4μm,18.0s | | | | | | | |
| NVL | | | | MLR | MLR | | | |
| | comp=E,3μm,18.0s | | | | | | | |
| NVL | | | | MLR | MLR | | | |
| | comp=Z,6μm,18.0s | | | | | | | |
| **SNAA** | **Sanae** | **45.56** | **189** | P | **P** | | **01 57 55.2** | **-1.0** |
| **SNAA** | **Sanae** | **45.56** | **189** | LR | LR | | 02 17 29.3 | |
| | comp=Z,8μm,21.5s,baz=182,slow=36 | | | | | | | |
| **SNAA** | **Sanae** | **45.56** | **189** | *i* P | **P** | | **01 57 56.5** | **+0.2** |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **45.56** | **189** | P | **P** | | **01 57 56.1** | **-0.1** |
| **SMAI** | **San Martin Ant** | **46.37** | **159** | P | **P** | | **01 58 02.6** | **0.0** |
| **VNA3** | **Neumayer Olymp** | **46.43** | **187** | P | **P** | | **01 58 02.4** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | **46.61** | **188** | P | **P** | | **01 58 02.1** | **-2.3** |
| | baz=161,slow=7.7 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **46.94** | **187** | P | **P** | | **01 58 03.6** | **-3.4** |
| **MSVF** | **Nonsavu** | **47.14** | **30** | LR | LR | | 02 14 01.8 | |
| | comp=Z,2μm,20.8s,baz=165,slow=31 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **47.39** | **312** | P | **P** | | **01 58 08.5** | **-2.5** |
| PSA00 | | | | IAmb | IAmb | | 01 58 20.4 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.77** | **321** | LR | LR | | 02 17 37.1 | |
| | comp=Z,1μm,18.1s,baz=168,slow=35 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.77** | **321** | P | **P** | | **01 58 20.7** | **-1.1** |
| | baz=49,SNR=6.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.77** | **321** | P | **P** | | **01 58 21.3** | **-0.5** |
| FITZ | | | | IAmb | IAmb | | 01 58 31.9 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **COEN** | **Coen** | **49.00** | **344** | P | **P** | | **01 58 23.7** | **+0.2** |
| **PMSA** | **Palmer Station** | **49.95** | **159** | LR | LR | | 02 18 02.0 | |
| | comp=Z,1μm,18.7s,baz=211,slow=34 | | | | | | | |
| **PMSA** | **Palmer Station** | **49.95** | **159** | IAMs_20 | IAMs_20 | | 02 18 41.9 | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **KNRA** | **Kununurra** | **50.20** | **326** | P | **P** | | **01 58 34.7** | **+2.1** |
| | baz=50,SNR=4.7 | | | | | | | |
| **KNRA** | **Kununurra** | **50.20** | **326** | P | **P** | | **01 58 31.4** | **-1.2** |
| KNRA | | | | IAmb | IAmb | | 01 59 10.2 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **KDU** | **Kakadu** | **52.16** | **331** | P | **P** | | **01 58 47.6** | **+0.2** |
| | baz=52,SNR=4.1 | | | | | | | |
| **MTN** | **Manton Dam** | **52.32** | **329** | P | **P** | | **01 58 48.0** | **-0.6** |
| MTN | | | | IAmb | IAmb | | 01 59 23.6 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **HNR** | **Honiara** | **52.78** | **5** | LR | LR | | 02 16 13.0 | |
| | comp=Z,3μm,21.6s,baz=183,slow=30 | | | | | | | |
| **HNR** | **Honiara** | **52.78** | **5** | IAMs_20 | IAMs_20 | | 02 15 51.2 | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **PMG** | **Port Moresby** | **53.07** | **350** | LR | LR | | 02 18 18.2 | |
| | comp=Z,2μm,18.9s,baz=169,slow=33 | | | | | | | |
| **PMG** | **Port Moresby** | **53.07** | **350** | *i* P | **P** | | **01 58 54.1** | **0.0** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **53.07** | **350** | IAMs_20 | IAMs_20 | | 02 16 31.1 | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **AFI** | **Afiamalu** | **53.54** | **41** | LR | LR | | 02 21 21.1 | |
| | comp=Z,386nm,19.5s,baz=199,slow=36 | | | | | | | |
| **BATI** | **Baumata** | **56.83** | **322** | LR | LR | | 02 21 35.0 | |
| | comp=Z,1μm,21.2s,baz=197,slow=34 | | | | | | | |
| **SAUI** | **Saumlaki** | **56.98** | **331** | IAMs_20 | IAMs_20 | | 02 23 05.4 | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **SOEI** | **Soe** | **57.09** | **322** | IAMs_20 | IAMs_20 | | 02 20 53.8 | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **USHA** | **Ushuaia** | **58.30** | **152** | LR | LR | | 02 19 22.2 | |
| | comp=Z,980nm,22.0s,baz=205,slow=30 | | | | | | | |
| **PAE** | **Paea** | **58.42** | **66** | *e*T | T | | 03 02 22.2 | |
| | comp=Z,5.7nm,0.3s | | | | | | | |
| **TVO** | **Taravao** | **58.45** | **67** | *e*T | T | | 03 02 39.7 | |
| | comp=Z,7.9nm,0.3s | | | | | | | |
| **PPT2** | **Papeete2** | **58.48** | **66** | *e*S | **S** | | **02 07 32.7** | **-3.6** |
| | comp=Z,279nm,27.0s | | | | | | | |
| PPT2 | | | | *e*LQ | LQ | | 02 14 01.6 | |
| | comp=Z,3μm,25.2s | | | | | | | |
| PPT2 | | | | *e*LR | LR | | 02 16 31.1 | |
| | comp=Z,2μm,27.8s | | | | | | | |
| **PPT** | **Papeete** | **58.50** | **66** | LR | LR | | 02 19 34.9 | |
| | comp=Z,528nm,20.2s,baz=206,slow=31 | | | | | | | |
| **JAY** | **Jayapura** | **60.59** | **343** | LR | LR | | 02 23 49.6 | |
| | comp=Z,1μm,21.2s,baz=149,slow=34 | | | | | | | |
| **KAPI** | **Kappang** | **62.92** | **319** | LR | LR | | 02 24 50.8 | |
| | comp=Z,838nm,20.4s,baz=188,slow=34 | | | | | | | |
| **EFI** | **East Falkland** | **63.37** | **157** | *i* P | **P** | | **02 00 06.7** | **+1.0** |
| EFI | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.2s | | | | | | | |
| **LEM** | **Lembang** | **65.42** | **306** | LR | LR | | 02 23 56.4 | |
| | comp=Z,692nm,21.3s,baz=155,slow=32 | | | | | | | |
| **LL02** | **Futaleuf** | **68.25** | **145** | P | **P** | | **02 00 38.1** | **+0.8** |
| LL02 | | | | IAmb | IAmb | | 02 01 02.3 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **70.36** | **71** | *e*LQ | LQ | | 02 18 46.0 | |
| | comp=Z,3μm,27.6s | | | | | | | |
| TAOE | | | | *e*LR | LR | | 02 21 47.2 | |
| | comp=Z,637nm,29.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **70.89** | **145** | P | **P** | | **02 00 55.2** | **+1.4** |
| | comp=Z,3.5nm,0.7s,baz=216,slow=6.1,SNR=13 | | | | | | | |
| PLCA | | | | LR | LR | | 02 25 47.8 | |
| | comp=Z,900nm,20.6s,baz=208,slow=30 | | | | | | | |
| **PLCA** | **Paso Flores** | **70.89** | **145** | *e*P | **P** | | **02 00 54.3** | **+0.5** |
| **PLCA** | **Paso Flores** | **70.89** | **145** | P | **P** | | **02 00 54.3** | **+0.5** |
| **SBUM** | **Sibu** | **72.37** | **314** | P | **P** | | **02 01 01.7** | **-1.1** |
| **H03S2** | **Juan Fernandez** | **74.74** | **135** | T | T | | 03 24 04.0 | |
| | baz=202,SNR=58 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **74.74** | **135** | T | T | | 03 23 59.6 | |
| | baz=202,SNR=53 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **74.76** | **135** | T | T | | 03 24 04.8 | |
| | baz=202,SNR=55 | | | | | | | |
| **BO02** | **Sierra Bellavi** | **76.37** | **142** | P | **P** | | **02 01 25.4** | **-0.6** |
| **PSI** | **Prapat** | **77.62** | **301** | LR | LR | | 02 29 57.6 | |
| | comp=Z,392nm,21.9s,baz=130,slow=31 | | | | | | | |
| **SUR** | **Sutherland** | **78.96** | **218** | LR | LR | | 02 34 07.1 | |
| | comp=Z,1μm,20.3s,baz=162,slow=34 | | | | | | | |
| **SUR** | **Sutherland** | **78.96** | **218** | P | **P** | | **02 01 40.8** | **+0.1** |
| SUR | | | | IAmb | IAmb | | 02 01 50.8 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **80.06** | **273** | T | T | | 03 30 06.4 | |
| | baz=152,slow=76,SNR=25 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **80.07** | **273** | T | T | | 03 30 07.0 | |
| | baz=152,slow=76,SNR=20 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **80.08** | **273** | T | T | | 03 30 07.9 | |
| | baz=152,slow=76,SNR=27 | | | | | | | |
| **BOSA** | **Boshof** | **81.13** | **223** | P | **P** | | **02 01 53.2** | **+0.8** |
| | comp=Z,5.8nm,0.8s,baz=166,slow=4.9,SNR=8.1 | | | | | | | |
| BOSA | | | | LR | LR | | 02 33 56.9 | |
| | comp=Z,761nm,20.5s,baz=158,slow=33 | | | | | | | |
| **BOSA** | **Boshof** | **81.13** | **223** | P | **P** | | **02 01 51.7** | **-0.7** |
| BOSA | | | | IAmb | IAmb | | 02 02 02.3 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **PLTB** | **Pedras Altas** | **83.44** | **155** | P | **P** | | **02 02 04.7** | **+0.4** |
| PLTB | | | | IAmb | IAmb | | 02 02 09.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **LBTB** | **Lobatse** | **84.36** | **224** | LR | LR | | 02 36 43.0 | |
| | comp=Z,747nm,19.9s,baz=162,slow=34 | | | | | | | |
| **LBTB** | **Lobatse** | **84.36** | **224** | P | **P** | | **02 02 08.7** | **-0.5** |
| LBTB | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | **84.36** | **224** | P | **P** | | **02 02 08.7** | **-0.5** |
| LBTB | | | | IAmb | IAmb | | 02 02 18.8 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **ITQB** | **Itaqui** | **84.84** | **152** | P | **P** | | **02 02 11.7** | **+0.3** |
| **MATP** | **Matopo** | **87.63** | **228** | LR | LR | | 02 37 41.9 | |
| | comp=Z,138nm,19.0s,baz=158,slow=33 | | | | | | | |
| **CPUP** | **Villa Florida** | **87.90** | **151** | LR | LR | | 02 39 57.8 | |
| | comp=Z,496nm,18.2s,baz=198,slow=34 | | | | | | | |
| **LVC** | **Limon Verde** | **88.35** | **140** | LR | LR | | 02 34 29.4 | |
| | comp=Z,402nm,21.2s,baz=200,slow=30 | | | | | | | |
| **LVC** | **Limon Verde** | **88.35** | **140** | *e*P | **P** | | **02 02 29.1** | **0.0** |
| **LVC** | **Limon Verde** | **88.35** | **140** | P | **P** | | **02 02 29.1** | **0.0** |
| **QIZ** | **Qiongzhong** | **88.67** | **317** | P | **P** | | **02 02 30.0** | **0.0** |
| QIZ | | | | PP | **PP** | | **02 05 56.5** | **-2.5** |
| QIZ | | | | S | **S** | | **02 13 15.8** | **-0.7** |
| QIZ | | | | SS | **SS** | | **02 19 12.5** | **+4.2** |
| QIZ | | | | LR | LR | | | |
| | comp=Z,660nm,23.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,940nm,25.3s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,580nm,26.3s | | | | | | | |
| **PALK** | **Pallekele** | **89.42** | **287** | LR | LR | | 02 35 35.5 | |
| | comp=Z,695nm,19.3s,baz=244,slow=31 | | | | | | | |
| **PALK** | **Pallekele** | **89.42** | **287** | IAMs_20 | IAMs_20 | | 02 35 32.7 | |
| | comp=Z,778nm,19.0s | | | | | | | |
| **MSEY** | **Mahe Island** | **90.60** | **259** | IAMs_20 | IAMs_20 | | 02 33 54.0 | |
| | comp=Z,917nm,22.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.91** | **308** | LR | LR | | 02 43 26.8 | |
| | comp=Z,194nm,18.1s,baz=165,slow=35 | | | | | | | |
| **TSUM** | **Tsumeb** | **92.31** | **219** | LR | LR | | 02 42 35.6 | |
| | comp=Z,1μm,20.0s,baz=162,slow=34 | | | | | | | |
| **TSUM** | **Tsumeb** | **92.31** | **219** | P | **P** | | **02 02 44.9** | **-2.5** |
| TSUM | | | | IAmb | IAmb | | 02 02 59.2 | |
| | comp=Z,9.2nm,1.2s | | | | | | | |
| **HMDM** | **Hanimaadhoo** | **92.41** | **280** | IAMs_20 | IAMs_20 | | 02 34 00.6 | |
| | comp=Z,952nm,22.0s | | | | | | | |
| **LSZ** | **Lusaka** | **92.49** | **230** | LR | LR | | 02 39 03.0 | |
| | comp=Z,653nm,21.6s,baz=160,slow=32 | | | | | | | |
| **LSZ** | **Lusaka** | **92.49** | **230** | IAMs_20 | IAMs_20 | | 02 38 38.6 | |
| | comp=Z,913nm,21.0s | | | | | | | |
| **LPAZ** | **La Paz** | **94.54** | **138** | P | **P** | | **02 03 00.1** | **+1.9** |
| | comp=Z,2.4nm,0.8s,baz=243,slow=4.5,SNR=4.9 | | | | | | | |
| LPAZ | | | | LR | LR | | 02 37 56.4 | |
| | comp=Z,226nm,20.3s,baz=158,slow=31 | | | | | | | |
| **LPAZ** | **La Paz** | **94.54** | **138** | *e*P | **P** | | **02 02 58.7** | **+0.5** |
| **LPAZ** | **La Paz** | **94.54** | **138** | P | **P** | | **02 02 58.7** | **+0.5** |
| **NNA** | **Nana** | **95.59** | **129** | LR | LR | | 02 37 03.2 | |
| | comp=Z,545nm,21.7s,baz=200,slow=30 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **95.85** | **347** | LR | LR | | 02 42 26.7 | |
| | comp=Z,342nm,21.8s,baz=93,slow=33 | | | | | | | |
| **SIV** | **San Ignacio** | **96.88** | **145** | LR | LR | | 02 44 14.6 | |
| | comp=Z,267nm,18.9s,baz=174,slow=34 | | | | | | | |
| **PZH** | **PanZhiHua** | **98.30** | **313** | P | Pdif | | 02 03 17.5 | +3.2 |
| PZH | | | | S | **S** | | **02 14 43.5** | **+1.6** |
| PZH | | | | LR | LR | | | |
| | comp=Z,370nm,19.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,370nm,20.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,440nm,22.8s | | | | | | | |
| **NJ2** | **Nanjing** | **98.49** | **329** | *e*P | Pdif | | 02 03 16.0 | +1.2 |
| **MJAR** | **Matsushiro Arr** | **99.41** | **346** | LR | LR | | 02 45 36.5 | |
| | comp=Z,259nm,20.8s,baz=165,slow=34 | | | | | | | |
| **ATAH** | **Atahualpa** | **99.47** | **126** | LR | LR | | 02 39 42.0 | |
| | comp=Z,282nm,18.7s,baz=211,slow=30 | | | | | | | |
| **CD2** | **Chengdu** | **101.69** | **316** | *e*P | **Pdif** | | **02 03 30.0** | **+0.8** |
| **KMBO** | **Kilima Mbogo** | **101.84** | **244** | *i* P | **Pdif** | | **02 03 30.5** | **-0.1** |
| **MBAR** | **Mbarara** | **104.98** | **238** | IAMs_20 | IAMs_20 | | 02 56 50.8 | |
| | comp=Z,526nm,21.0s | | | | | | | |
| **SOCY** | **Socotra** | **106.11** | **266** | IAMs_20 | IAMs_20 | | 02 42 08.9 | |
| | comp=Z,867nm,20.0s | | | | | | | |
| **CN2** | **Changchun** | **108.41** | **337** | Pdif | **Pdif** | | **02 04 03.0** | **+4.3** |
| CN2 | | | | P | **PP** | | **02 08 36.8** | **+7.0** |
| CN2 | | | | S | **Sdif** | | **02 16 08.5** | **+3.2** |
| CN2 | | | | LR | LR | | | |
| | comp=Z,200nm,20.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,300nm,27.0s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **110.42** | **331** | *e*PKP | **PKiKP** | | **02 08 07.0** | **-1.3** |
| XLT | | | | SS | SS | | 02 24 17.0 | +4.7 |
| XLT | | | | LR | LR | | | |
| | comp=Z,260nm,17.7s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,200nm,18.3s | | | | | | | |
| **ATD** | **Arta Tunnel** | **110.67** | **255** | IAMs_20 | IAMs_20 | | 02 47 15.8 | |
| | comp=Z,472nm,20.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **116.37** | **326** | *i* PKiKP | **PKPdf** | | **02 08 17.8** | **-1.8** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **SDV** | **Santo Domingo** | **117.13** | **127** | IAMs_20 | IAMs_20 | | 02 50 07.4 | |
| | comp=Z,471nm,20.0s | | | | | | | |
| **WMQ** | **Urumqi** | **118.81** | **310** | *e*PKP | **PKiKP** | | **02 08 25.5** | **+1.1** |
| **ZAK** | **Zakamensk** | **119.68** | **324** | *e*PKiKP | **PKiKP** | | **02 08 29.8** | **+3.9** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.6s | | | | | | | |
| **RAYN** | **Ar Rayn** | **119.89** | **264** | IAMs_20 | IAMs_20 | | 02 51 20.2 | |
| | comp=Z,586nm,19.0s | | | | | | | |
| **ORV** | **Oroville** | **121.04** | **64** | PKiKP | **PKiKP** | | **02 08 30.6** | **+1.8** |
| **ORV** | **Oroville** | **121.04** | **64** | PKPdf | **PKiKP** | | **02 08 30.6** | **+1.8** |
| **KNGR** | **Kungurtug, Tuv** | **121.52** | **321** | *i* PKiKP | **PKiKP** | | **02 08 30.8** | **+1.3** |
| **KVN** | **Kaiserville** | **122.06** | **66** | PKiKP | **PKPdf** | | **02 08 29.1** | **-1.8** |
| **KVN** | **Kaiserville** | **122.06** | **66** | | **PKPdf** | | **02 08 29.1** | **-1.8** |
| **AAK** | **Ala-Archa** | **122.86** | **300** | *i* PKiKP | **PKiKP** | | **02 08 32.5** | **0.0** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **MK31** | **

comp=Z,10.0nm,0.6s
TIRR Tirgusor 145.02 264 ⇓P PKPbc 02 09 12.4 -0.3
TIRR Tirgusor 145.02 264 ⇓PKIKP PKPbc 02 09 12.4 -0.3
TIRR Tirgusor 145.02 264 PKPdf PKPbc 02 09 12.3 -0.3
VORR Voronezh 145.17 282 ePKP2 PKPbc 02 09 11.0 -1.9
VORR pmax pmax
comp=Z,30nm,0.4s
KIRV Kirov 145.17 298 PKPbc PKPdf 02 09 14.5 +1.6
comp=Z,8.5nm,0.5s,baz=182,slow=1.6,SNR=6.7
KIRV Kirov 145.17 298 iPKIKP PKPdf 02 09 13.9 +0.9
HARR Harsova 145.42 264 ⇓P PKPab 02 09 15.2 +1.1
HARR Harsova 145.42 264 ⇓PKIKP PKPab 02 09 15.2 +1.1
CFR Carcaliu 145.69 265 ⇑P PKPab 02 09 15.2 +0.1
CFR Carcaliu 145.69 265 ⇑PKIKP PKPab 02 09 15.2 +0.1
LPSR Galich'ya Gora 145.92 283 ePKIKP PKPdf 02 09 13.6 -0.9
LPSR pmax pmax
comp=Z,10.0nm,0.7s
VTS Vitosha 146.00 257 ⇑P PKPab 02 09 16.3 -0.3
VTS Vitosha 146.00 257 ⇑PKP2 PKPab 02 09 16.3 -0.3
VTS Vitosha 146.00 257 PKPdf 02 09 13.3 -1.9
TIP Timpagrande 146.10 247 IAMs_20 IAMs_20 03 19 55.1
comp=Z,419nm,20.0s
KEST Kesra 146.16 234 PKPbc PKiKP 02 09 19.4 -0.5
comp=Z,11nm,1.0s,baz=261,slow=7.1,SNR=5.1
KEST Kesra 146.16 234 PKiKP 02 09 23.1 +3.3
VLDR Vladesti 146.22 266 ⇓P PKPdf 02 09 13.8 -1.4
BISRR Bisoca 146.64 264 ⇓P PKiKP 02 09 19.6 -0.9
MILM Milestii Mici 146.67 268 ⇓P PKiKP 02 09 20.3 -0.1
MILM Milestii Mici 146.67 268 ⇓PKP2 PKiKP 02 09 20.3 -0.1
NEHR Nehoiu 146.74 264 ⇑P PKPab 02 09 18.5 -0.7
VRI Vrincioaia 146.87 265 ⇑P PKPbc 02 09 18.4 +0.1
VRI Vrincioaia 146.87 265 ⇑PKP2 PKPbc 02 09 18.4 +0.1
PLOR Plostina 146.89 264 ⇑P PKPdf 02 09 16.6 +0.2
PLOR Plostina 146.89 264 ⇑PKIKP PKPdf 02 09 16.6 +0.2
MLR Muntele Rosu 146.95 263 ⇓P PKPbc 02 09 19.1 +0.5
MLR Muntele Rosu 146.95 263 PKPbc PKPbc 02 09 19.2 +0.5
comp=Z,6.0nm,0.7s,baz=167,slow=7.5,SNR=8.6
FCC Fort Churchill 147.01 64 PKP2 PKPbc 02 09 18.9 +0.7
FCC Fort Churchill 147.01 64 PKPbc 02 09 18.9 +0.7
VOIR 147.33 262 ⇓P PKPab 02 09 20.8 -0.8
VOIR 147.33 262 ⇓PKP2 PKPab 02 09 20.8 -0.8
TESR Tescani 147.38 265 ⇓P PKPbc 02 09 18.6 -1.1
ARR Arges 147.47 262 ⇑P PKiKP 02 09 23.0 +0.9
OZUR 147.48 264 ⇑P PKPbc 02 09 18.8 -1.1
DOPR Dopca 147.57 263 ⇑P PKPbc 02 09 20.2 0.0
SORM Soroca 147.76 269 ⇑P PKPbc 02 09 19.6 -1.0
SORM Soroca 147.76 269 ⇑PKP2 PKPbc 02 09 19.6 -1.0
HERR Herculane 148.12 259 ⇑P PKiKP 02 09 22.7 -0.7
GZR Gura Zlata 148.35 260 ⇑P PKiKP 02 09 23.2 -0.8
GZR Gura Zlata 148.35 260 ⇑PKIKP PKiKP 02 09 23.2 -0.8
PRGR Permogore 148.49 301 ePKP2 PKPbc 02 09 22.6 +0.5
PRGR pmax pmax
comp=Z,23nm,0.9s
MOS Moscow 148.52 287 ePKP2 PKPab 02 09 26.4 +0.5
OBN Obninsk 148.61 285 PKPbc PKiKP 02 09 24.2 +0.2
comp=Z,1.5nm,0.3s,baz=234,slow=8.2,SNR=3.4
OBN Obninsk 148.61 285 ⇑iPKP2 PKiKP 02 09 24.2 +0.2
OBN PPS PPS 02 25 46.0
OBN pmax pmax
comp=Z,12nm,1.0s
DIVS Divibare 148.63 256 PKPbc PKPbc 02 09 22.9 -0.3
BURAR Bucovina Array 148.86 265 ⇓P PKPab 02 09 26.7 -1.0
BURAR Bucovina Array 148.86 265 ⇓PKP2 PKPab 02 09 26.7 -1.0
BURAR Bucovina Array 148.86 265 PKPbc PKPbc 02 09 23.7 0.0
BUR08 Bucovina Ar. S 148.88 265 PKPbc PKPbc 02 09 24.0 +0.3
BZS Buzias 149.05 259 ⇓P PKPbc 02 09 24.0 0.0
BZS Buzias 149.05 259 PKP2 PKPbc 02 09 24.0 0.0
AKASG Malin Array Be 149.14 273 PKPbc PKPbc 02 09 24.3 +0.2
comp=Z,6.7nm,0.8s,baz=112,slow=2.4,SNR=9.9
LATQ La Tuque 149.28 96 PKPbc PKPbc 02 09 24.6 +0.1
DRGR 149.42 262 ⇓P PKiKP 02 09 25.7 -0.5
DRGR 149.42 262 ⇓PKP2 PKiKP 02 09 25.7 -0.5
VSL Villasalto 149.43 238 IAMs_20 IAMs_20 03 21 12.1
comp=Z,579nm,20.0s
SIRR Siria 149.52 260 ⇑P PKPbc 02 09 25.5 +0.3
FRGS Fruska Gora 149.53 257 ⇑P PKPdf 02 09 21.0 +0.2
TRPA Tarpa 150.48 263 ⇓P PKPbc 02 09 26.9 -0.6
LMQ La Malbaie 150.54 98 PKPbc PKiKP 02 09 28.4 +0.1
KLMR Klimovskoe 150.59 296 ePKIKP PKiKP 02 09 27.9 0.0
KLMR pmax pmax
comp=Z,78nm,1.3s
KLMR Klimovskoe 150.59 296 ePKPdf PKiKP 02 09 28.0 0.0
KLMR AMP 02 09 37.4
comp=Z,78nm,1.3s
UZH Uzhgorod 150.95 264 ⇑iPKIKP PKiKP 02 09 31.5 +2.4
UZH i 02 09 36.0
PQI Presque Isle 150.96 102 PKPbc PKPbc 02 09 27.6 -1.0
LVV L'vov 150.97 267 ePKIKP PKiKP 02 09 30.7 +1.6
PSZ Piszkesteto 151.55 261 IAMs_20 IAMs_20 03 30 17.5
comp=Z,406nm,20.0s
MNK Minsk 152.22 278 iPKIKP PKPdf 02 09 24.3 -0.2
MNK i 02 13 12.5
MNK i 02 16 33.1
MNK iSS SS 02 32 42.8 +0.3
MNK iSSS SSS 02 38 28.8
MNK pmax pmax
comp=Z,29nm,1.0s
MNK Minsk 152.22 278 iPKP PKPdf 02 09 24.3 -0.2
MNK iPKP PKPdf 02 09 24.3 -0.2
MNK iPKP PKPdf 02 09 24.3 -0.2
comp=Z,29nm,1.0s,baz=128
MNK iPP PP 02 13 12.5 -1.7
MNK iSKS SKSdf 02 16 33.2 +2.0
MNK iSKKS SKKSdf 02 25 17.9 +2.1
MNK iSS SS 02 32 42.8 +0.4
MNK iSSS SSS 02 38 28.9
MNK iLR LR 03 10 27.7
MNK iLRM MLR 03 12 58.6
comp=E,34nm,22.6s
MNK iLRM MLR 03 12 58.6
comp=N,277nm,21.6s
MNK iLRM MLR 03 12 58.6
comp=Z,342nm,21.6s
SOKA Soboth 152.85 253 ePKiKP 02 09 33.7 +0.5
comp=Z,1.0nm,0.5s
VLC Villacollemand 152.91 244 IAMs_20 IAMs_20 03 21 31.2
comp=Z,482nm,20.0s
OBKA Obir 152.94 253 ePKiKP 02 09 38.1 +4.6
comp=Z,2.0nm,0.7s
ARSA Arzberg 153.06 255 ePKPab 02 09 39.5 -5.5
comp=Z,2.7nm,0.8s
JAVC Velka Javorina 153.26 260 ePKP PKiKP 02 09 38.3 +4.3
CONA Conrad Observa 153.41 256 ePKiKP 02 09 39.0 +4.6
comp=Z,2.1nm,1.0s
KBA Koelnbreinsper 153.91 252 iPKiKP 02 09 36.5 +0.9
comp=Z,1.5nm,0.7s
MORC Moravsky Berou 153.97 261 ePKP PKiKP 02 09 35.3 -0.1
KRUC Moravsky 153.99 259 ePKP PKPbc 02 09 33.6 -1.7
ABTA Abfaltersbach 154.03 251 ePKiKP 02 09 40.0 +4.3
comp=Z,2.3nm,0.8s
ESDC Sonseca Array 154.24 218 PKPbc PKPbc 02 09 36.0 -0.3
comp=Z,3.2nm,1.0s,baz=214,slow=0.8,SNR=9.5
ESDC Sonseca Array 154.24 218 PKPbc PKPbc 02 09 34.5 -1.8
CKRC Cesky Krumlov 154.77 256 ePKP PKPab 02 09 45.4 -6.8
CKRC AMS AMS 03 28 00.0
comp=Z,500nm,20.5s
WTTA Wattenberg 154.81 250 ePKiKP 02 09 40.5 +3.1
comp=Z,0.9nm,0.4s
DPC Dobruska-Polom 154.93 261 ePKP PKiKP 02 09 42.7 +5.3
DPC AMS AMS 03 29 00.0
comp=Z,500nm,17.1s
FETA Feichten 155.02 249 ePKPbc 02 09 38.4
comp=Z,2.9nm,1.2s
GERES GERESS Array B 155.06 255 PKPbc PKPbc 02 09 36.5
comp=Z,0.4nm,0.7s,baz=318,slow=1.8,SNR=4.4
GERES GERESS Array B 155.06 255 PKiKP PKPdf 02 09 35.8 +6.8
GERES GERESS Array B 155.06 255 PKPdf 02 09 35.8 +6.8
OSTC Ostas 155.12 261 AMS AMS 03 32 10.0
comp=Z,400nm,20.8s
DAVOX Davos/Dischmat 155.20 247 PKPab PKPab 02 09 55.5 +1.1
comp=Z,2.3nm,0.7s,baz=46,slow=4.1,SNR=5.3
KHC Kasperske Hory 155.33 256 ePKP PKPab 02 09 47.5 -7.1
KHC ex x 02 09 51.2
KHC AMS AMS 03 26 00.0
comp=Z,500nm,20.1s
PRU Pruhonice 155.50 258 AMS AMS 03 26 40.0
comp=Z,400nm,17.8s
PVCC Panska Ves 155.86 259 AMS AMS 03 27 20.0
comp=Z,400nm,20.6s
CLL Collm 157.12 259 ePKP2 PKPab 02 10 02.0 -0.2
CLL MLR MLR
comp=Z,400nm,20.0s
CLL Collm 157.12 259 ePKPab PKPab 02 10 02.0 -0.2
CLL ex x 02 10 14.0
CLL ePSKS 02 24 01.0
CLL ePPS PPS 02 27 06.0
CLL eSS SS 02 33 35.0 -0.6
CLL eSSP SSP 02 34 25.0
CLL ePSPS 02 35 06.0
CLL eSSS SSS 02 39 30.0
CLL eSSSS 02 43 38.0
CLL LmV 03 32 00.0
comp=Z,400nm,20.0s

**IDC 26 02:03:58.6±8.6, 21°.29N×107°.88W, h0km, mb3.1/3, mb1 3.7/5, mb1mx3.5/42, mbtmp3.3/5, ML3.6/2, Error ellipse: s-maj=141.0km s-min=63.2km az=155.0, Off coast of central Mexico**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TXAR | Lajitas Array | 8.87 | 25 | Pn | Pn | 02 06 09.9 | +1.7 |
| | 0.4nm,0.3s,baz=202,slow=14,SNR=19 | | | | | | |
| NVAR | Mina Array Bea | 19.30 | 335 | P | Pn | 02 08 25.9 | -0.5 |
| | 0.0nm,0.3s,baz=163,slow=12,SNR=6.9 | | | | | | |
| PDAR | Pinedale Array | 21.46 | 357 | P | P | 02 08 48.2 | -0.6 |
| | 0.2nm,0.6s,baz=180,slow=3.6,SNR=2.8 | | | | | | |
| YKA | Yellowknife Ar | 41.43 | 355 | P | P | 02 11 46.6 | -0.1 |
| | 0.4nm,0.8s,baz=183,slow=6.8,SNR=3.7 | | | | | | |
| ILAR | Eielson Array | 50.45 | 340 | P | P | 02 12 57.6 | -0.2 |
| | 0.6nm,0.9s,baz=152,slow=5.2,SNR=5.7 | | | | | | |

*TUL 26 02:05:42.8±0.5, 36°.53N±0°.02×98°.98W±0°.03, h6km±4km, ML2.6, ML2.5/34(NEIC), Error ellipse: s-maj=3.9km s-min=1.1km az=120.0*

**NEIC 26 02:05:43.4±0.4, 36°.52N±0°.02×98°.98W±0°.03, h6km±4km, Error ellipse: s-maj=4.1km s-min=2.0km az=123.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| U32A | Winter Ranch, | 0.14 | 188 | | Pg | 02 05 46.1 | -0.2 |
| WMOK | Wichita Mounta | 1.78 | 175 | Pn | Pn | 02 06 14.7 | -0.1 |
| FNO | Franklin | 1.80 | 134 | Pn | Pn | 02 06 15.1 | +0.2 |
| W35A | Tecumseh | 2.19 | 128 | Pn | Pn | 02 06 19.5 | -0.8 |
| CBKS | Cedar Bluff | 2.37 | 345 | Pn | Pn | 02 06 23.2 | +0.4 |
| TUL1 | Leonard | 2.65 | 102 | Pn | Pn | 02 06 26.6 | 0.0 |
| AMTX | Amarillo | 2.74 | 234 | Pn | Pn | 02 06 27.1 | -0.9 |
| X37A | Clayton | 3.51 | 122 | Pn | Pn | 02 06 37.8 | -0.8 |
| T25A | Trinidad | 4.40 | 280 | Pn | Pn | 02 06 49.4 | -1.6 |
| U40A | Yellville | 4.94 | 90 | Pn | Pn | 02 06 57.1 | -1.1 |

*IDC 26 02:14:10.1±1.7, 48°.23N×148°.24E, h363km±24km, mb2.7/5, mb1 3.1/8, mb1mx2.8/50, mbtmp3.6/8, Error ellipse: s-maj=49.5km s-min=18.6km az=145.0*

**ISC 26 02:14:08.7±0.8, 47°.5N±0°.1×148°.7E±0°.2, h377km, n23, σ1s74/26, mb3.1/5, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NEM2 | Nemuro 2 | 4.67 | 208 | P | Pn | 02 15 26.0 | -0.2 |
| NEM2 | | | | eS | S | 02 16 27.4 | -1.5 |
| JNK | Nakash | 4.86 | 217 | P | Pn | 02 15 29.3 | +1.2 |
| JTKR | Abashiri--Toko | 4.91 | 225 | P | Pn | 02 15 30.8 | +2.2 |
| JSE | Soyaes | 4.99 | 241 | P | Pn | 02 15 31.4 | +2.0 |
| JAK | Akkeshi | 5.36 | 214 | P | Pn | 02 15 34.9 | +1.4 |
| ASAJ | Asahikawa | 5.49 | 234 | P | Pn | 02 15 37.6 | +2.7 |
| | 1.7nm,0.3s,baz=76,slow=6.5,SNR=9.1 | | | | | | |
| JAR | Ashorobuto | 5.50 | 221 | P | Pn | 02 15 36.3 | +1.4 |
| JOB | Onbets | 5.78 | 219 | P | Pn | 02 15 39.4 | +1.3 |
| JOB | | | | eS | S | 02 16 50.0 | -0.7 |
| JFR | Furan | 6.15 | 227 | P | Pn | 02 15 44.4 | +2.2 |
| JCH | Churui | 6.22 | 220 | P | Pn | 02 15 42.9 | 0.0 |
| JCH | | | | eS | S | 02 16 57.6 | -2.0 |
| JNBK | Urakawa-nobuka | 6.76 | 221 | P | Pn | 02 15 49.1 | +0.1 |
| JEM | Erimo | 6.80 | 218 | P | Pn | 02 15 51.1 | +1.7 |
| JSH | Shimam | 7.86 | 235 | P | Pn | 02 16 03.2 | +1.6 |
| JKB | Kayabe | 7.87 | 227 | P | Pn | 02 16 02.0 | +0.2 |
| PETK | Petropavlovsk- | 8.00 | 42 | P | Pn | 02 16 02.1 | -0.9 |
| | 0.2nm,0.3s,baz=213,slow=8.6,SNR=6.8 | | | | | | |
| JYM2 | Yakumo 2 | 8.04 | 231 | P | Pn | 02 16 05.1 | +1.4 |
| JTM | Tenmabayashi | 8.71 | 222 | P | Pn | 02 16 11.8 | +0.3 |
| MJAR | Matsushiro Arr | 13.47 | 219 | P | Pn | 02 17 10.3 | +3.0 |
| | 0.1nm,0.3s,baz=17,slow=12,SNR=8.8 | | | | | | |
| ILAR | Eielson Array | 37.81 | 39 | P | P | 02 20 49.3 | -0.7 |
| | 0.8nm,0.6s,baz=265,slow=6.2,SNR=12 | | | | | | |
| INK | Inuvik | 42.59 | 32 | P | P | 02 21 27.6 | -1.1 |
| | 0.3nm,0.3s,baz=291,slow=7.0,SNR=6.7 | | | | | | |
| MKAR | Makanchi Array | 43.91 | 295 | P | P | 02 21 37.6 | -1.8 |
| | 0.1nm,0.4s,baz=65,slow=5.8,SNR=1.6 | | | | | | |
| YKA | Yellowknife Ar | 52.05 | 36 | P | P | 02 22 40.2 | -0.5 |
| | 0.5nm,0.6s,baz=302,slow=7.0,SNR=6.5 | | | | | | |
| TXAR | Lajitas Array | 79.65 | 58 | P | P | 02 25 38.8 | +3.4 |
| | 0.3nm,0.7s,baz=339,slow=6.7,SNR=3.9 | | | | | | |

*DJA 26 02:16:06.0±0.3, 10°.5s±5°.×12°.2E±°, h10km, M3.9/8, mb4.4/2, MLv3.6/8*
*NEIC 26 02:16:08.2±2.1, 10°.23S±0°.10×122°.2E±0°.1, h77km±10km, mb4.0/7, Error ellipse: s-maj=22.0km s-min=8.4km az=57.0*
*IDC 26 02:16:10.3±4.3, 10°.41S×122°.35E, h96km±48km, mb3.8/2, mb1 3.6/5, mb1mx3.2/43, mbtmp3.9/5, MS4.3/6, Ms1 4.3/6, ms1mx3.5/72, Error ellipse: s-maj=84.6km s-min=19.9km az=80.0*

**ISC 26 02:16:08.5±0.8, 10°.33S±0°.07×122°.33E±0°.07, h100km, n29, σ2s28/26, mb4.0/5, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BATI | Baumata | 1.31 | 85 | P | Pn | 02 16 33.5 | +0.9 |
| | 35nm,0.3s,baz=236,slow=0.5,SNR=14 | | | | | | |
| BATI | Baumata | 1.31 | 85 | P | Pn | 02 16 31.8 | -0.8 |
| MMRI | Maumere | 1.68 | 357 | Pn | Pn | 02 16 34.0 | -3.2 |
| MMRI | Maumere | 1.68 | 357 | P | Pn | 02 16 32.5 | -4.7 |
| BASI | Baing, Sumba | 1.73 | 273 | P | Pn | 02 16 34.8 | -2.9 |
| SOEI | Soe | 1.99 | 74 | | Pn | 02 16 41.6 | +0.5 |
| SOEI | Soe | 1.99 | 74 | P | Pn | 02 16 40.9 | -0.2 |
| WBSI | Waikabubak, Su | 2.98 | 283 | P | Pn | 02 16 52.8 | -1.3 |
| BSSI | Bau Bau, Buton | 4.54 | 336 | P | Pn | 02 17 13.3 | -1.8 |
| PLAI | Plampang | 4.74 | 288 | P | Pn | 02 17 14.6 | -3.1 |
| KNRA | Kununurra | 8.22 | 131 | | Pn | 02 18 04.8 | -0.2 |
| FITZ | Fitzroy Crossi | 8.36 | 158 | P | Pn | 02 18 09.2 | +2.1 |
| | 0.5nm,0.3s,baz=326,slow=11,SNR=9.8 | | | | | | |
| FITZ | | | | S | Sn | 02 19 40.2 | +0.4 |
| | 1.8nm,0.3s,baz=176,slow=9.4,SNR=8.5 | | | | | | |
| MTN | Manton Dam | 8.98 | 107 | | Pn | 02 18 15.9 | +0.5 |
| WB0 | Warramunga Arr | 14.95 | 130 | Pn | Pn | 02 19 34.1 | -0.6 |
| WB0 | | | | IAmb | IAmb | 02 19 58.5 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 15.01 | 131 | P | Pn | 02 19 35.5 | -0.1 |
| | comp=Z,0.5nm,0.3s,baz=306,slow=14,SNR=22 | | | | | | |
| WRA | | | | S | Sn | 02 22 15.1 | -6.3 |
| | comp=Z,0.3nm,0.3s,baz=308,slow=24,SNR=11 | | | | | | |
| WB2 | Warramunga Arr | 15.02 | 131 | | Pn | 02 19 36.3 | +0.6 |
| WB2 | | | | IAmb | IAmb | 02 19 47.0 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| AS31 | Alice Springs | 17.26 | 142 | Pn | P | 02 20 04.2 | +0.8 |
| ASAR | Alice Springs | 17.26 | 142 | P | Pn | 02 20 06.3 | +2.9 |
| | comp=Z,0.3nm,0.3s,baz=320,slow=12,SNR=26 | | | | | | |
| ASAR | | | | S | Sn | 02 23 11.6 | -3.9 |
| | comp=Z,0.1nm,0.3s,baz=319,slow=28,SNR=7.3 | | | | | | |
| KSRS | Korea Array | 47.82 | 6 | LR | LR | 02 45 17.2 | |
| | comp=Z,336nm,21.9s,baz=180,slow=36 | | | | | | |
| USRK | Ussuriysk Ar. | 54.97 | 8 | LR | LR | 02 49 19.9 | |
| | comp=Z,186nm,21.8s,baz=155,slow=36 | | | | | | |
| KLR | Kul'dur | 59.88 | 7 | LR | LR | 02 52 45.3 | |
| | comp=Z,295nm,21.4s,baz=168,slow=37 | | | | | | |
| MK31 | Makanchi Array | 67.16 | 331 | P | P | 02 26 51.6 | -0.1 |
| MK31 | | | | IAmb | IAmb | 02 27 04.5 | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 67.16 | 331 | P | P | 02 26 54.8 | +3.0 |
| | comp=Z,0.8nm,0.6s,baz=144,slow=7.8,SNR=15 | | | | | | |
| CHGR | Chuyangaron | 69.45 | 318 | P | P | 02 27 06.8 | +0.5 |
| ZAA0 | Zalesovo Array | 71.48 | 338 | P | P | 02 27 19.3 | +1.2 |
| ZAA0 | | | | IAmb | IAmb | 02 28 40.7 | |
| | comp=Z,5.2nm,1.5s | | | | | | |
| ZALV | Zalesovo Beam | 71.48 | 338 | P | P | 02 27 20.0 | +1.9 |
| | comp=Z,1.3nm,0.5s,baz=135,slow=5.8,SNR=6.6 | | | | | | |
| ZALV | | | | LR | LR | 03 01 21.8 | |
| | comp=Z,152nm,21.4s,baz=152,slow=38 | | | | | | |
| KURBB | Kurchatov Arra | 71.64 | 332 | LR | LR | 03 02 56.4 | |
| | comp=Z,197nm,19.9s,baz=115,slow=39 | | | | | | |
| ABKAR | Akbulak array | 80.55 | 324 | P | P | 02 28 10.9 | +1.1 |
| ABKAR | | | | IAmb | IAmb | 02 29 17.9 | |
| | comp=Z,6.3nm,1.9s | | | | | | |
| NRIK | Noril'sk | 83.09 | 348 | LR | LR | 03 08 45.7 | |
| | comp=Z,200nm,21.3s,baz=140,slow=38 | | | | | | |

*IDC 26 02:29:44.3±2.2, 38°.01N×22°.13E, h0km, mb3.2/3, mb1 3.2/5, mb1mx3.1/53, mbtmp3.1/5, ML2.8/2, Error ellipse: s-maj=50.2km s-min=25.6km az=39.0*
*IASPEI 26 02:29:46.2±0.9, 38°.05N±0°.03×22°.08E±0°.02, h18km±4km, mb3.2/3, Error ellipse: s-maj=3.7km s-min=3.3km az=179.1, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*ATH 26 02:29:46.4, 38°.04N×22°.07E, h16km±1km, ML3.1/4, Error ellipse: s-maj=1.7km s-min=1.0km az=324.0*
*THE 26 02:29:46.6, 38°.05N×22°.08E, h15km, ML3.0/4, Error ellipse: s-maj=0.9km s-min=0.6km az=4.0*

**ISC 26 02:29:46.5±0.8, 38°.04N±0°.02×22°.07E±0°.02, h17km±5km, n63, σ0s74/72, mb3.2/3, 2C-2D, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KLV | Kalavryta, Ach | 0.06 | 91 | P | Pg | 02 29 49.4 | -0.4 |
| KLV | | | | S | Sg | 02 29 51.8 | -0.2 |
| | 6μm,0.5s | | | | | | |
| KLV | Kalavryta, Ach | 0.06 | 91 | P | Pg | 02 29 49.6 | -0.2 |
| LAKA | Lakka | 0.21 | 339 | P | Pg | 02 29 51.3 | -0.2 |
| LAKA | | | | S | Sg | 02 29 54.8 | -0.1 |
| | 11μm,0.4s | | | | | | |
| LAKA | Lakka | 0.21 | 339 | P | Pg | 02 29 51.3 | -0.2 |
| LAKA | | | | S | Sg | 02 29 55.1 | +0.2 |
| ALIK | Aliki, Aigiali | 0.22 | 8 | P | Pg | 02 29 51.4 | -0.2 |
| DRO | Drossia | 0.30 | 252 | P | Pg | 02 29 52.9 | 0.0 |
| DRO | Drossia | 0.30 | 252 | P | Pg | 02 29 53.0 | 0.0 |
| DRO | | | | AML | AML | 02 30 00.1 | |
| | comp=N,17330μm,0.3s | | | | | | |
| DRO | | | | AML | AML | 02 30 00.3 | |
| | comp=E,17900μm,0.2s | | | | | | |
| TRIZ | Trizonia | 0.32 | 0 | P | Pg | 02 29 52.4 | -0.9 |
| TRIZ | Trizonia | 0.32 | 0 | P | Pg | 02 29 52.6 | -0.8 |
| UPR | University Cam | 0.33 | 317 | P | Pg | 02 29 53.2 | -0.2 |
| UPR | | | | S | Sb | 02 29 59.0 | +0.1 |
| EFP | Efpalio | 0.40 | 341 | P | Pg | 02 29 54.4 | -0.3 |
| EFP | | | | S | Sb | 02 30 01.4 | +0.3 |
| | comp=E,4μm,0.4s | | | | | | |
| EFP | Efpalio | 0.40 | 341 | P | Pg | 02 29 54.4 | -0.3 |
| EFP | | | | S | Sb | 02 30 01.0 | -0.1 |
| EFP | | | | AML | AML | 02 30 02.0 | |
| | comp=N,9965μm,0.3s | | | | | | |
| EFP | | | | AML | AML | 02 30 02.7 | |
| | comp=E,3747μm,0.4s | | | | | | |
| THAL | Thalero | 0.47 | 91 | P | Pg | 02 29 55.4 | -0.5 |
| THAL | Thalero | 0.47 | 91 | P | Pg | 02 29 55.6 | -0.3 |
| RLS | Riolos of Patr | 0.48 | 272 | P | Pg | 02 29 55.6 | -0.5 |
| RLS | | | | S | Sb | 02 30 03.7 | +0.5 |
| | comp=E,3μm,0.6s | | | | | | |
| RLS | Riolos of Patr | 0.48 | 272 | P | Pg | 02 29 55.7 | -0.5 |
| RLS | | | | AML | AML | 02 30 04.3 | |
| | comp=E,2284μm,0.6s | | | | | | |
| RLS | | | | AML | AML | 02 30 05.7 | |
| | comp=N,3449μm,0.3s | | | | | | |
| DLFA | Delphi | 0.55 | 37 | P | Pg | 02 29 56.7 | -0.7 |
| DLFA | | | | S | Sg | 02 30 04.1 | -0.6 |
| ANX | Ano Chora | 0.56 | 348 | P | Pg | 02 29 57.0 | -0.7 |
| ANX | Ano Chora | 0.56 | 348 | P | Pg | 02 29 57.0 | -0.7 |
| ANX | | | | AML | AML | 02 30 07.7 | |
| | comp=N,6448μm,0.6s | | | | | | |
| ANX | | | | AML | AML | 02 30 10.3 | |
| | comp=E,5877μm,0.5s | | | | | | |
| LTK | Loutraki | 0.71 | 91 | P | Pg | 02 29 59.9 | -0.5 |
| LTK | Loutraki | 0.71 | 91 | P | Pg | 02 30 00.0 | -0.3 |
| ITM | Ithomi | 0.87 | 188 | P | Pb | 02 30 02.1 | -1.1 |
| ITM | Ithomi | 0.87 | 188 | P | Pb | 02 30 02.2 | -0.9 |
| EVR | Evrytania | 0.90 | 347 | P | Pb | 02 30 02.8 | -0.8 |
| EVR | Evrytania | 0.90 | 347 | P | Pb | 02 30 02.9 | -0.7 |
| LKR | Lokris | 0.95 | 50 | P | Pb | 02 30 03.7 | -0.8 |
| LKR | Lokris | 0.95 | 50 | P | Pb | 02 30 03.7 | -0.8 |
| VIL2 | Platees | 0.96 | 80 | P | Pn | 02 30 05.2 | 0.0 |
| MAKR | Makrakomi, Fth | 0.97 | 3 | P | Pb | 02 30 04.6 | -0.2 |
| MAKR | Makrakomi, Fth | 0.97 | 3 | P | Pb | 02 30 04.7 | -0.2 |
| VILL | Villia | 0.99 | 83 | P | Pb | 02 30 05.1 | 0.0 |
| ATAL | Atalanti | 0.99 | 49 | P | Pb | 02 30 04.5 | -0.7 |
| ATAL | Atalanti | 0.99 | 49 | P | Pb | 02 30 04.7 | -0.5 |
| ATAL | | | | S | Sg | 02 30 18.5 | -0.1 |
| AGG | Agios Georgios | 1.00 | 12 | P | Pb | 02 30 04.4 | -0.9 |
| AGG | Agios Georgios | 1.00 | 12 | P | Pb | 02 30 04.5 | -0.9 |
| LTHK | Lithakia | 1.03 | 251 | P | Pb | 02 30 06.0 | +0.1 |
| KRND | KRANIDI | 1.08 | 127 | P | Pb | 02 30 06.7 | 0.0 |
| PSDA | Pessada-Kefalo | 1.18 | 274 | P | Pn | 02 30 07.4 | -0.7 |
| PYL | PYLOS | 1.18 | 193 | P | Pn | 02 30 07.6 | -0.6 |
| PYL | PYLOS | 1.18 | 193 | P | Pn | 02 30 07.6 | -0.6 |
| VLS | Valsamata | 1.18 | 277 | P | Pn | 02 30 07.3 | -0.9 |
| VLS | Valsamata | 1.18 | 277 | P | Pn | 02 30 07.4 | -0.9 |
| FSK | Fiskardo | 1.26 | 290 | P | Pb | 02 30 09.7 | -0.1 |
| FSK | Fiskardo | 1.26 | 290 | P | Pn | 02 30 09.5 | +0.2 |
| DMLN | Damoulianata-K | 1.35 | 279 | P | Pn | 02 30 10.4 | -0.2 |
| KEF3 | Kipouria, Keph | 1.37 | 277 | P | Pn | 02 30 10.4 | -0.4 |
| KEF3 | Kipouria, Keph | 1.37 | 277 | P | Pn | 02 30 10.5 | -0.4 |
| VLY | Voula,Athens | 1.38 | 97 | P | Pn | 02 30 10.7 | -0.2 |
| DION | Dionisos Attik | 1.47 | 88 | P | Pn | 02 30 12.2 | 0.0 |
| DION | Dionisos Attik | 1.47 | 88 | P | Pn | 02 30 12.2 | 0.0 |
| VLI | Veliai | 1.49 | 152 | P | Pn | 02 30 12.9 | +0.4 |
| NEO | Neokhori | 1.55 | 35 | P | Pn | 02 30 13.3 | 0.0 |
| XOR | Xorichti | 1.58 | 33 | P | Pn | 02 30 13.8 | 0.0 |
| KYMI | Kymi, Euboea I | 1.70 | 69 | P | Pn | 02 30 15.2 | -0.2 |
| IDI | Anoyia | 3.56 | 140 | Pn | Pn | 02 30 40.0 | -1.0 |
| | comp=E,0.9nm,0.3s,baz=322,slow=17,SNR=16 | | | | | | |
| TIP | Timpagrande | 4.31 | 287 | ⇑P | Pg | 02 31 08.2 | -0.9 |
| VTS | Vitosha | 4.65 | 11 | ⇓P | Pg | 02 31 14.1 | -1.6 |
| MLR | Muntele Rosu | 7.98 | 20 | ⇑P | Pb | 02 32 05.7 | +1.3 |
| VRI | Vrincioaia | 8.55 | 22 | ⇓P | Pn | 02 31 51.9 | +2.4 |
| BRTR | Keskin Array B | 9.18 | 76 | Pn | Pn | 02 32 00.7 | +2.5 |
| | comp=E,0.1nm,0.3s,baz=265,slow=12,SNR=2.0 | | | | | | |
| NOA | NORSAR Array B | 24.01 | 347 | P | P | 02 34 59.8 | -0.3 |
| | comp=E,0.3nm,0.7s,baz=152,slow=8.6,SNR=1.1 | | | | | | |
| EKA | Eskdalemuir Ar | 24.25 | 324 | P | P | 02 35 04.3 | +1.9 |
| | comp=E,0.4nm,0.5s,baz=127,slow=9.3,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 44.33 | 59 | P | P | 02 37 55.4 | -0.1 |
| | comp=E,0.2nm,0.5s,baz=266,slow=7.9,SNR=4.7 | | | | | | |

*IDC 26 02:29:59.7±1.1, 38°.08N×22°.16E, h0km, mb3.7/9, mb1 3.8/11, mb1mx3.6/53, mbtmp3.7/11, ML3.4/2, Error ellipse: s-maj=21.2km s-min=20.1km az=4.0*
*IASPEI 26 02:30:01.4±0.8, 38°.05N±0°.03×22°.09E±0°.02, h17km±5km, mb3.8/8, Error ellipse: s-maj=4.2km s-min=3.5km az=163.6, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*ATH 26 02:30:01.8, 38°.06N×22°.08E, h17km±1km, ML3.4/11, Error ellipse: s-maj=1.4km s-min=0.9km az=3.0*
*THE 26 02:30:01.6, 38°.04N×22°.09E, h16km±1km, ML3.7/6, Error ellipse: s-maj=1.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DRO | | | | S | **Sb** | **02 30 13.8** | **+0.1** |
| DRO | | | | AML | AML | 02 30 15.3 | |
| | comp=N,61263µm,0.3s | | | | | | |
| DRO | | | | AML | AML | 02 30 15.5 | |
| | comp=E,70193µm,0.2s | | | | | | |
| **TRIZ** | **Trizonia** | **0.34** | **356** | P | **Pg** | **02 30 08.1** | **-0.5** |
| **TRIZ** | **Trizonia** | **0.34** | **356** | P | **Pg** | **02 30 08.1** | **-0.5** |
| TRIZ | | | | S | **Sg** | **02 30 13.0** | **-0.4** |
| **EFP** | **Efpalio** | **0.43** | **339** | P | **Pg** | **02 30 10.2** | **0.0** |
| EFP | | | | S | **Sb** | **02 30 16.6** | **-0.3** |
| | comp=E,10µm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.43** | **339** | P | **Pg** | **02 30 09.7** | **-0.5** |
| EFP | | | | S | **Sg** | **02 30 15.9** | **-0.2** |
| EFP | | | | AML | AML | 02 30 17.3 | |
| | comp=N,29907µm,0.3s | | | | | | |
| EFP | | | | AML | AML | 02 30 17.9 | |
| | comp=E,11789µm,0.4s | | | | | | |
| **THAL** | **Thalero** | **0.44** | **89** | P | **Pb** | **02 30 11.0** | **0.0** |
| THAL | | | | S | **Sg** | **02 30 17.1** | **+0.5** |
| | comp=E,13µm,0.2s | | | | | | |
| **THAL** | **Thalero** | **0.44** | **89** | P | **Pb** | **02 30 11.0** | **0.0** |
| THAL | | | | AML | AML | 02 30 21.6 | |
| | comp=N,35295µm,0.3s | | | | | | |
| THAL | | | | AML | AML | 02 30 21.8 | |
| | comp=E,40198µm,0.2s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.50** | **274** | P | **Pg** | **02 30 10.8** | **-0.7** |
| RLS | | | | S | **Sg** | **02 30 18.2** | **0.0** |
| | comp=E,10µm,0.5s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.50** | **274** | P | **Pg** | **02 30 10.9** | **-0.6** |
| RLS | | | | S | **Sg** | **02 30 18.3** | **0.0** |
| RLS | | | | AML | AML | 02 30 19.3 | |
| | comp=E,6560µm,0.4s | | | | | | |
| RLS | | | | AML | AML | 02 30 20.9 | |
| | comp=N,13499µm,0.5s | | | | | | |
| **DLFA** | **Delphi** | **0.55** | **35** | P | **Pg** | **02 30 11.9** | **-0.6** |
| DLFA | | | | S | **Sg** | **02 30 19.0** | **-0.8** |
| DLFA | | | | AML | AML | 02 30 20.3 | |
| | comp=E,5502µm,0.5s | | | | | | |
| DLFA | | | | AML | AML | 02 30 21.8 | |
| | comp=N,4985µm,0.2s | | | | | | |
| **ITM** | **Ithomi** | **0.86** | **189** | P | **Pb** | **02 30 17.9** | **-0.1** |
| ITM | | | | AML | AML | 02 30 35.4 | |
| | comp=E,4604µm,0.5s | | | | | | |
| ITM | | | | AML | AML | 02 30 37.2 | |
| | comp=N,3754µm,0.5s | | | | | | |
| **EVR** | **Evrytania** | **0.92** | **346** | P | **Pb** | **02 30 17.6** | **-1.5** |
| EVR | | | | AML | AML | 02 30 34.2 | |
| | comp=N,5125µm,0.7s | | | | | | |
| EVR | | | | AML | AML | 02 30 38.9 | |
| | comp=E,5722µm,1.0s | | | | | | |
| **VIL2** | **Platees** | **0.94** | **78** | P | **Pg** | **02 30 19.9** | **+0.1** |
| VIL2 | | | | AML | AML | 02 30 36.0 | |
| | comp=N,4864µm,0.4s | | | | | | |
| VIL2 | | | | AML | AML | 02 30 43.4 | |
| | comp=E,6411µm,0.9s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.98** | **1** | P | **Pb** | **02 30 19.9** | **-0.4** |
| MAKR | | | | AML | AML | 02 30 37.9 | |
| | comp=E,3149µm,0.5s | | | | | | |
| MAKR | | | | AML | AML | 02 30 37.9 | |
| | comp=N,4316µm,0.6s | | | | | | |
| **PYL** | **PYLOS** | **1.17** | **194** | P | **Pb** | **02 30 23.5** | **+0.3** |
| PYL | | | | AML | AML | 02 30 46.1 | |
| | comp=E,3621µm,0.7s | | | | | | |
| PYL | | | | AML | AML | 02 30 47.7 | |
| | comp=N,2644µm,0.6s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **1.20** | **275** | P | **Pn** | **02 30 22.6** | **-1.0** |
| **VLS** | **Valsamata** | **1.20** | **278** | P | **Pn** | **02 30 22.9** | **-0.8** |
| **ATH** | **Athens Observa** | **1.28** | **92** | P | **Pg** | **02 30 26.2** | **0.0** |
| **FSK** | **Fiskardo** | **1.29** | **290** | P | **Pn** | **02 30 24.9** | **+0.1** |
| FSK | | | | AML | AML | 02 30 52.7 | |
| | comp=N,2392µm,0.7s | | | | | | |
| FSK | | | | AML | AML | 02 30 52.8 | |
| | comp=E,2202µm,0.7s | | | | | | |
| **LXRA** | **Lixouri, Kepha** | **1.32** | **278** | P | **Pn** | **02 30 25.2** | **-0.1** |
| **VLY** | **Voula,Athens** | **1.35** | **97** | P | **Pb** | **02 30 26.6** | **+0.2** |
| **KEF3** | **Kipouria, Keph** | **1.39** | **278** | P | **Pn** | **02 30 26.0** | **-0.3** |
| **IDI** | **Anoyia** | **3.54** | **140** | ⇓P | **Pn** | **02 30 56.4** | **+0.6** |
| IDI | | | | ⇑S | **Sn** | **02 31 30.9** | **-6.4** |
| **IDI** | **Anoyia** | **3.54** | **140** | Pn | **Pn** | **02 30 56.5** | **+0.7** |
| | comp=E,4.8nm,0.3s,baz=203,slow=3.8,SNR=13 | | | | | | |
| IDI | | | | Sn | **Sn** | **02 31 36.0** | **-1.3** |
| | comp=E,5.9nm,0.3s,baz=297,slow=22,SNR=2.9 | | | | | | |
| **TIR** | **Tirane** | **3.74** | **333** | ⇑P | **Pb** | **02 31 07.7** | **+0.6** |
| **PDG** | **Podgorica** | **4.91** | **335** | ⇓P | **Pg** | **02 31 38.8** | **+3.3** |
| **MATE** | **Matera** | **4.94** | **304** | ⇓P | **Pn** | **02 31 16.0** | **+1.0** |
| **VOIR** | | **7.72** | **16** | ⇓P | **Pn** | **02 31 55.9** | **+2.6** |
| **PLOR** | **Plostina** | **8.52** | **22** | ⇓P | **Pn** | **02 31 59.7** | **-4.5** |
| **BRTR** | **Keskin Array B** | **9.16** | **76** | Pn | **Pn** | **02 32 15.4** | **+2.3** |
| | comp=E,0.3nm,0.3s,baz=258,slow=13,SNR=14 | | | | | | |
| **SOKA** | **Soboth** | **10.10** | **331** | *e*Pn | **Pn** | **02 32 25.5** | **-0.3** |
| | comp=E,0.6nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **10.15** | **329** | *e*Pn | **Pn** | **02 32 27.3** | **+0.7** |
| | comp=E,0.8nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **20.35** | **283** | P | Pn | 02 34 38.3 | -0.9 |
| | comp=E,1.5nm,0.7s,baz=79,slow=11,SNR=8.8 | | | | | | |
| **HFS** | **Hagfors** | **22.76** | **349** | P | **P** | **02 35 02.6** | **-0.2** |
| | comp=E,1.1nm,0.5s,baz=182,slow=33,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **23.57** | **5** | P | **P** | **02 35 11.7** | **+0.7** |
| | comp=E,1.9nm,1.0s,baz=182,slow=7.6,SNR=1.0 | | | | | | |
| **NB2** | **NORSAR Subarra** | **24.03** | **347** | P | **P** | **02 35 15.2** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=152,slow=9.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **24.03** | **347** | P | **P** | **02 35 15.2** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=8.9,SNR=5.7 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **24.28** | **324** | P | **P** | **02 35 18.6** | **+0.8** |
| | comp=Z,1.2nm,0.5s,baz=126,slow=9.4,SNR=13 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.72** | **222** | P | **P** | **02 36 16.9** | **+1.0** |
| | comp=Z,0.9nm,0.7s,baz=31,slow=9.4,SNR=6.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.62** | **2** | P | **P** | **02 36 24.0** | **+0.7** |
| | comp=Z,4.4nm,1.1s,baz=187,slow=8.6,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.32** | **59** | P | **P** | **02 38 10.6** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=273,slow=7.4,SNR=17 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.86** | **48** | P | **P** | **02 38 14.1** | **-0.7** |
| | comp=Z,1.4nm,0.5s,baz=263,slow=8.8,SNR=5.7 | | | | | | |

*IDC **26** 02:34:59.0±2.4,2.51N×79.83W,h0km,mb3.5/5,mb1 3.9/7, mb1mx3.7/33,mbtmp3.7/7,ML2.8/2,MS3.7/3,Ms1 3.7/3, ms1mx3.2/44,Error ellipse: s-maj=70.0km s-min=27.4km az=11.0*

*RSNC **26** 02:35:03.3±0.9,2.55N×79.72W,h65km±16km,ML3.5, Mw3.8*

**ISC 26 02:34:59.8±2.0,2.50N±0.05×79.81W±0.07,h7km±12km, n37,σ2s01/59,mb3.5/5,5C-2D,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CTUM2** | **Tumaco** | **1.27** | **122** | ⇑*e*P | | **Pg** | **02 35 23.8** | **-0.5** |
| CTUM2 | | | | *e*S | | **Sg** | **02 35 40.4** | **-0.4** |
| **GR1C** | **Gorgona, Isla** | **1.71** | **73** | *e*P | | **Pn** | **02 35 28.6** | **-1.4** |
| GR1C | | | | *e*S | | **Sn** | **02 35 48.3** | **-3.9** |
| **CMBC** | **Cumbal** | **2.52** | **128** | *e*P | | **Pn** | **02 35 41.6** | **+0.1** |
| CMBC | | | | *e*S | | **Sn** | **02 36 10.1** | **-2.6** |
| **CUSE** | **Cuicocha Este** | **2.60** | **147** | *e*P | | **Pn** | **02 35 42.1** | **-0.6** |
| CUSE | | | | *e*S | | **Sn** | **02 36 10.1** | **-4.6** |
| CUSE | | | | *i* | | | 02 36 17.5 | |
| | comp=Z,261nm,0.4s | | | | | | | |
| **BBAC** | **Balboa, Cauca** | **2.60** | **101** | ⇑*e*P | | **Pn** | **02 35 42.0** | **-0.4** |
| BBAC | | | | *e*S | | **Sn** | **02 36 11.3** | **-3.1** |
| BBAC | | | | *i* | | | 02 36 22.4 | |
| | comp=Z,236nm,0.3s | | | | | | | |
| **CCUFI** | **Cufio, Nario** | **2.77** | **117** | *e*P | | **Pn** | **02 35 45.7** | **+0.7** |
| CCUFI | | | | *e*S | | **Sn** | **02 36 17.1** | **-1.8** |
| **GCUF** | **Volcan Galeras** | **2.77** | **117** | ⇑*e*P | | **Pn** | **02 35 45.5** | **+0.5** |
| GCUF | | | | *e*S | | **Sn** | **02 36 16.1** | **-2.8** |
| GCUF | | | | *i* | | | 02 36 21.4 | |
| | comp=Z,169nm,0.4s | | | | | | | |
| **CPAS1** | **Pasto** | **2.80** | **118** | *e*P | | **Pn** | **02 35 46.4** | **+0.9** |
| CPAS1 | | | | *e*S | | **Sn** | **02 36 17.5** | **-2.3** |
| **POPC** | **Popayan, Colom** | **3.13** | **89** | ⇑*i*P | | **Pn** | **02 35 49.2** | **-0.5** |
| POPC | | | | *e*S | | **Sn** | **02 36 24.4** | **-3.1** |
| **SOTA** | **Rioblanco** | **3.22** | **96** | ⇑*i*P | | **Pn** | **02 35 52.3** | **+1.1** |
| SOTA | | | | *e*S | | **Sn** | **02 36 27.7** | **-2.4** |
| SOTA | | | | *i* | | | 02 36 37.6 | |
| | comp=Z,240nm,0.5s | | | | | | | |
| **PCON** | **Cinco Dias** | **3.41** | **93** | *e*P | | **Pn** | **02 35 55.2** | **+1.3** |
| PCON | | | | *e*S | | **Sn** | **02 36 36.8** | **+1.9** |
| PCON | | | | *i* | | | 02 36 39.1 | |
| | comp=Z,328nm,0.5s | | | | | | | |
| **PIZC** | **Pizarro, Choco** | **3.46** | **45** | *e*P | | **Pn** | **02 35 54.2** | **+0.1** |
| PIZC | | | | *e*S | | **Sn** | **02 36 32.5** | **-2.7** |
| **YOTC** | **Yotoco, Valle** | **3.75** | **67** | *e*P | | **Pn** | **02 35 56.7** | **-1.5** |
| YOTC | | | | *e*S | | **Sn** | **02 36 38.6** | **-4.3** |
| YOTC | | | | *i* | | | 02 36 39.3 | |
| | comp=Z,57nm,0.3s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MARP** | **Paez Belalcaza** | **3.86** | **85** | *e*P | | **Pn** | **02 36 02.5** | **+2.6** |
| MARP | | | | *e*S | | **Sn** | **02 36 46.8** | **+1.2** |
| **PLMC** | **San Jos del P** | **4.25** | **56** | *e*P | | Pn | 02 36 02.5 | -2.6 |
| PLMC | | | | *e*S | | **Sn** | **02 36 51.5** | **-3.5** |
| PLMC | | | | *i* | | | 02 36 59.8 | |
| | comp=Z,63nm,0.4s | | | | | | | |
| **FLOC** | **Florencia** | **4.25** | **102** | *e*P | | **Pn** | **02 36 06.6** | **+1.6** |
| FLOC | | | | *e*S | | **Sn** | **02 36 54.5** | **-0.4** |
| FLOC | | | | *i* | | | 02 37 03.9 | |
| | comp=Z,44nm,0.6s | | | | | | | |
| **GARC** | **Garzon, Huila** | **4.32** | **94** | *e*P | | **Pn** | **02 36 07.9** | **+1.7** |
| GARC | | | | *e*S | | **Sn** | **02 36 58.1** | **+1.2** |
| **BETC** | **Betania** | **4.36** | **88** | ⇓*i*P | | **Pn** | **02 36 09.6** | **+3.0** |
| BETC | | | | *e*S | | **Sn** | **02 36 58.7** | **+1.0** |
| BETC | | | | *i* | | | 02 37 06.1 | |
| | comp=Z,54nm,0.4s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **4.76** | **73** | *e*P | | **Pn** | **02 36 13.1** | **+1.0** |
| ORTC | | | | *e*S | | **Sn** | **02 37 08.0** | **+0.4** |
| ORTC | | | | *i* | | | 02 37 11.8 | |
| | comp=Z,66nm,0.4s | | | | | | | |
| **ANIL** | **Santa Ana** | **4.82** | **66** | *e*P | | **Pn** | **02 36 14.2** | **+1.1** |
| ANIL | | | | *e*S | | **Sn** | **02 37 07.8** | **-1.5** |
| ANIL | | | | *i* | | | 02 37 16.1 | |
| | comp=Z,104nm,0.3s | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **5.05** | **48** | *e*P | | **Pn** | **02 36 14.3** | **-1.8** |
| CBOC | | | | *i* | | | 02 37 24.2 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **5.19** | **58** | *e*P | | **Pn** | **02 36 18.6** | **+0.3** |
| GUY2C | | | | *e*S | | **Sn** | **02 37 18.7** | **-0.1** |
| **NORC** | **Norcasia** | **5.79** | **58** | *e*P | | **Pn** | **02 36 27.3** | **+1.1** |
| **ROSC** | **El Rosal** | **5.95** | **67** | Pn | | **Pn** | **02 36 31.0** | **+2.3** |
| | comp=Z,4.0nm,0.3s,baz=36,slow=9.7,SNR=7.0 | | | | | | | |
| ROSC | | | | LR | | LR | 02 38 13.5 | |
| | comp=Z,84nm,21.9s,baz=223,slow=33 | | | | | | | |
| **MACC** | **Macarena, Meta** | **5.96** | **93** | *e*P | | **Pn** | **02 36 30.6** | **+2.0** |
| MACC | | | | *e*S | | **Sn** | **02 37 35.8** | **-1.5** |
| MACC | | | | *i* | | | 02 37 40.6 | |
| | comp=Z,44nm,0.6s | | | | | | | |
| **CHIC** | **Chingaza** | **6.42** | **71** | ⇓*e*P | | **Pn** | **02 36 37.3** | **+2.1** |
| CHIC | | | | *e*S | | **Sn** | **02 37 45.6** | **-3.4** |
| **SPBC** | **San Pablo de B** | **6.52** | **61** | *e*P | | **Pn** | **02 36 37.2** | **+1.0** |
| **RUSC** | **La Rusia** | **7.50** | **63** | *e*P | | **Pn** | **02 36 52.9** | **+2.7** |
| RUSC | | | | *i* | | | 02 36 56.6 | |
| | comp=Z,5.1nm,0.5s | | | | | | | |
| RUSC | | | | *e*S | | **Sn** | **02 38 18.9** | **+3.2** |
| **SDV** | **Santo Domingo** | **11.11** | **55** | Pn | | **Pn** | **02 37 39.6** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=239,slow=12,SNR=3.8 | | | | | | | |
| **CMIG** | **Matias Romero** | **20.73** | **315** | LR | | LR | 02 45 58.9 | |
| | comp=Z,263nm,19.1s,baz=197,slow=32 | | | | | | | |
| **TXAR** | **Lajitas Array** | **35.02** | **322** | PcP | | **PcP** | **02 44 27.3** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=115,slow=5.7,SNR=3.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.08** | **331** | P | | **P** | **02 43 40.4** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=108,slow=5.8,SNR=1.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **50.14** | **320** | P | | **P** | **02 43 57.6** | **+1.4** |
| | comp=Z,0.3nm,0.5s,baz=129,slow=7.1,SNR=4.9 | | | | | | | |
| NVAR | | | | PcP | | **PcP** | **02 45 16.9** | **+1.1** |
| | comp=Z,0.6nm,0.6s,baz=127,slow=3.7,SNR=6.4 | | | | | | | |
| **FRB** | **Frobisher Bay** | **61.67** | **6** | LR | | LR | 03 12 55.9 | |
| | comp=Z,389nm,21.8s,baz=242,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.21** | **343** | P | | **P** | **02 45 41.1** | **-0.4** |
| | comp=Z,0.6nm,0.7s,baz=138,slow=6.2,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **78.12** | **336** | P | | **P** | **02 46 58.7** | **-0.6** |
| | comp=Z,0.3nm,0.8s,baz=115,slow=6.1,SNR=3.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.16** | **77** | P | | **P** | **02 47 16.9** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=276,slow=6.7,SNR=7.2 | | | | | | | |

**IDC 26 02:53:39.5±26.0,18.91S×173.95W,h0km,mb4.3/4, mb1 4.4/4,mb1mx3.8/35,mbtmp4.3/4,Error ellipse: s-maj=492.2km s-min=157.4km az=74.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CTA** | **Charters Tower** | **37.47** | **261** | P | | P | 03 00 56.1 | +0.9 |
| | 2.4nm,0.7s,baz=94,slow=10,SNR=6.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **41.91** | **243** | P | | P | 03 01 32.4 | +0.4 |
| | 2.1nm,0.8s,baz=89,slow=10.0,SNR=4.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.60** | **255** | P | | P | 03 02 24.8 | -0.6 |
| | 5.0nm,0.8s,baz=97,slow=7.7,SNR=42 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.62** | **260** | P | | P | 03 02 24.7 | -0.8 |
| | 1.7nm,0.5s,baz=97,slow=7.8,SNR=17 | | | | | | | |

*ANF **26** 03:09:38.7±0.2,59.79N×152.98W,h110km±2km,ML3.5/34, Error ellipse: s-maj=1.9km s-min=1.8km az=41.0*

*IDC **26** 03:09:38.4±8.8,60.09N×153.55W,h100km±72km,mb2.8/1, mb1 3.2/3,mb1mx2.9/40,mbtmp3.4/3,ML3.5/2,Error ellipse: s-maj=66.3km s-min=35.7km az=26.0*

*NEIC **26** 03:09:38.5±1.3,59.80N±0.03×153.01W±0.07, h118km±4km,Error ellipse: s-maj=5.3km s-min=3.8km az=82.0*

*AEIC **26** 03:09:39.9±1.4,59.79N±0.03×152.97W±0.07, h109km±4km,ML3.0/124,ML3.3/106(NEIC),Error ellipse: s-maj=5.3km s-min=4.0km az=125.0*

**ISC 26 03:09:38.1±1.0,59.80N±0.03×152.96W±0.04, h119km±6km,n214,σ0s87/237,Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **OPT** | **Oil Point** | **0.20** | **223** | | | **Pn** | **03 09 54.8** | **+0.1** |
| **O20K** | **Slope Mountain** | **0.33** | **31** | | | **Pn** | **03 09 55.3** | **+0.2** |
| O20K | | | | | | **Sn** | **03 10 07.6** | **-0.4** |
| **O20K** | **Slope Mountain** | **0.33** | **31** | P | | **Pn** | **03 09 55.3** | **+0.2** |
| | baz=210 | | | | | | | |
| O20K | | | | S | | **Sn** | **03 10 07.5** | **-0.5** |
| | baz=210 | | | | | | | |
| **AU22** | **Augustine Moun** | **0.47** | **205** | | | **Sn** | **03 10 08.7** | **-0.3** |
| **AUL** | **Augustine Lava** | **0.48** | **210** | | | **Pn** | **03 09 56.4** | **+0.6** |
| AUL | | | | | | **Sn** | **03 10 08.7** | **-0.4** |
| **AUQ** | **Augustine Qik'** | **0.50** | **208** | | | **Pn** | **03 09 56.3** | **+0.3** |
| AUQ | | | | | | **Sn** | **03 10 09.6** | **+0.2** |
| **RED** | **Redoubt Volcan** | **0.63** | **9** | | | **Pn** | **03 09 57.0** | **+0.1** |
| RED | | | | | | **Sn** | **03 10 10.0** | **-1.1** |
| **RSO** | **Redoubt South** | **0.68** | **9** | | | **Pn** | **03 09 57.7** | **+0.4** |
| **HOM** | **Homer** | **0.68** | **101** | | | **Pn** | **03 09 57.6** | **+0.4** |
| HOM | | | | Sn | | **Sn** | **03 10 11.5** | **-0.1** |
| HOM | | | | IAML | | | 03 10 13.0 | |
| | comp=N,1µm,0.4s | | | | | | | |
| **HOM** | **Homer** | **0.68** | **101** | P | | **Pn** | **03 09 57.6** | **+0.4** |
| | baz=282 | | | | | | | |
| HOM | | | | S | | **Sn** | **03 10 11.2** | **-0.4** |
| | baz=282 | | | | | | | |
| **RDWB** | **Redoubt West** | **0.69** | **5** | | | **Pn** | **03 09 57.5** | **0.0** |
| RDWB | | | | | | **Sn** | **03 10 11.2** | **-1.0** |
| **O19K** | **Port Alsworth** | **0.79** | **301** | Pn | | **Pn** | **03 09 58.2** | **+0.1** |
| O19K | | | | Sn | | **Sn** | **03 10 12.3** | **-0.8** |
| **O19K** | **Port Alsworth** | **0.79** | **301** | P | | **Pn** | **03 09 58.3** | **+0.3** |
| | baz=120 | | | | | | | |
| O19K | | | | S | | **Sn** | **03 10 12.3** | **-0.8** |
| | baz=120 | | | | | | | |
| **RDJH** | **Redoubt Jeurge** | **0.80** | **6** | | | **Pn** | **03 09 58.5** | **+0.2** |
| **RDT** | **Redoubt** | **0.83** | **19** | | | **Pn** | **03 09 58.7** | **+0.2** |
| **Q19K** | **Cape Douglas,** | **0.94** | **202** | Pn | | **Pn** | **03 09 59.3** | **-0.2** |
| Q19K | | | | Sn | | **Sn** | **03 10 16.2** | **+0.6** |
| **Q19K** | **Cape Douglas,** | **0.94** | **202** | P | | **Pn** | **03 09 59.5** | **+0.1** |
| | baz=22,SNR=6.5 | | | | | | | |
| Q19K | | | | S | | **Sn** | **03 10 14.8** | **-0.8** |
| | baz=22 | | | | | | | |
| **BRLK** | **Bradley Lake** | **1.05** | **91** | Pn | | **Pn** | **03 10 00.7** | **+0.1** |
| BRLK | | | | IAML | | | 03 10 17.7 | |
| | comp=E,478nm,0.4s | | | | | | | |
| BRLK | | | | IAML | | | 03 10 18.3 | |
| | comp=N,736nm,0.1s | | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.13** | **92** | | | **Pn** | **03 10 01.6** | **+0.2** |
| **BRSE** | **Bradley Lake S** | **1.13** | **92** | P | | **Pn** | **03 10 01.5** | **+0.2** |
| | baz=273,SNR=13 | | | | | | | |
| BRSE | | | | S | | **Sn** | **03 10 18.1** | **-0.8** |
| | baz=273 | | | | | | | |
| **P18K** | **Big Mountain,** | **1.22** | **252** | Pn | | **Pn** | **03 10 02.1** | **-0.2** |
| **P18K** | **Big Mountain,** | **1.22** | **252** | P | | **Pn** | **03 10 02.3** | **-0.1** |
| | baz=70 | | | | | | | |
| P18K | | | | S | | **Sn** | **03 10 19.7** | **-1.1** |
| | baz=70 | | | | | | | |
| **N19K** | **Bonanza Creek** | **1.27** | **324** | Pn | | **Pn** | **03 10 03.2** | **+0.4** |
| **N19K** | **Bonanza Creek** | **1.27** | **324** | P | | **Pn** | **03 10 03.3** | **+0.4** |
| | baz=143,SNR=22 | | | | | | | |
| N19K | | | | S | | **Sn** | **03 10 20.9** | **-0.9** |
| | baz=143 | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.33** | **42** | Pn | | **Pn** | **03 10 05.6** | **+2.2** |
| **CAPN** | **Captain Cook N** | **1.33** | **42** | P | | **Pn** | **03 10 05.7** | **+2.2** |
| | baz=223 | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.46** | **15** | | | **Pn** | **03 10 05.5** | **+0.5** |
| **SPCR** | **Spurr Chakacha** | **1.46** | **15** | P | | **Pn** | **03 10 05.5** | **+0.5** |
| | baz=195,SNR=16 | | | | | | | |
| SPCR | | | | S | | **Sn** | **03 10 25.5** | **0.0** |
| | baz=195 | | | | | | | |
| **SPU** | **Mount Spurr** | **1.46** | **18** | | | **Pn** | **03 10 05.4** | **+0.4** |
| **SPCN** | **Chakachatna No** | **1.48** | **15** | | | **Pn** | **03 10 06.0** | **+0.7** |
| **SPBG** | **Spurr Blockage** | **1.50** | **11** | | | **Pn** | **03 10 06.3** | **+0.8** |
| **SLKM** | **Skilak Lake** | **1.54** | **61** | | | **Pn** | **03 10 06.3** | **+0.3** |
| **SPCG** | **Spurr Capps Gl** | **1.57** | **17** | | | **Pn** | **03 10 07.0** | **+0.6** |
| **SPNN** | **North Nagishla** | **1.58** | **5** | | | **Pn** | **03 10 07.2** | **+0.7** |
| **O22K** | **Cooper Landing** | **1.76** | **66** | Pn | | **Pn** | **03 10 09.0** | **+0.6** |
| **O22K** | **Cooper Landing** | **1.76** | **66** | | | **Sn** | **03 10 30.6** | **-1.0** |
| **O22K** | **Cooper Landing** | **1.76** | **66** | IAML | | | 03 10 38.6 | |
| | comp=E,475nm,0.7s | | | | | | | |
| O22K | | | | IAML | | | 03 10 38.8 | |
| | comp=N,558nm,0.5s | | | | | | | |
| **O22K** | **Cooper Landing** | **1.76** | **66** | P | | **Pn** | **03 10 09.1** | **+0.6** |
| | baz=248 | | | | | | | |
| O22K | | | | S | | **Sn** | **03 10 30.2** | **-1.5** |
| | baz=248 | | | | | | | |
| **SEW** | **Seward** | **1.79** | **79** | | | **Pn** | **03 10 09.0** | **+0.2** |
| **SEW** | **Seward** | **1.79** | **79** | P | | **Pn** | **03 10 09.1** | **+0.2** |
| | baz=261 | | | | | | | |
| SEW | | | | S | | **Sn** | **03 10 31.1** | **-1.2** |
| | baz=261 | | | | | | | |
| **STLK** | **Strandline Lak** | **1.79** | **18** | | | **Pn** | **03 10 10.0** | **+1.0** |
| **SVW2** | **Sparrevohn** | **1.84** | **316** | Pn | | **Pn** | **03 10 09.5** | **+0.1** |
| **KELA** | **Mount Kelaz** | **1.98** | **228** | | | **Pn** | **03 10 12.0** | **+0.7** |
| **KDAK** | **Kodiak Island** | **2.03** | **174** | Pn | | **Pn** | **03 10 11.6** | **-0.3** |
| KDAK | | | | IAML | | | 03 10 37.7 | |
| | comp=N,212nm,0.3s | | | | | | | |
| KDAK | | | | IAML | | | 03 10 38.3 | |
| | comp=N,354nm,0.2s | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.03** | **174** | P | | **Pn** | **03 10 11.6** | **-0.3** |
| | baz=354 | | | | | | | |
| KDAK | | | | S | | **Sn** | **03 10 37.0** | **-0.7** |
| | baz=354 | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.06** | **50** | Pn | | **Pn** | **03 10 12.7** | **+0.5** |
| RC01 | | | | IAML | | | 03 10 38.4 | |
| | comp=N,237nm,0.4s | | | | | | | |
| RC01 | | | | IAML | | | 03 10 39.2 | |
| | comp=E,347nm,0.3s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.06** | **50** | P | | **Pn** | **03 10 12.7** | **+0.5** |
| | baz=232 | | | | | | | |
| RC01 | | | | S | | **Sn** | **03 10 37.3** | **-0.9** |
| | baz=232 | | | | | | | |
| **M19K** | **Big River Lodg** | **2.23** | **342** | | | **Pn** | **03 10 15.0** | **+0.7** |
| **M19K** | **Big River Lodg** | **2.23** | **342** | P | | **Pn** | **03 10 15.0** | **+0.7** |
| | baz=161,SNR=23 | | | | | | | |
| **M22K** | **Willow** | **2.41** | **34** | | | **Pn** | **03 10 17.3** | **+0.8** |
| **M22K** | **Willow** | **2.41** | **34** | P | | **Pn** | **03 10 17.5** | **+1.0** |
| | baz=216,SNR=7.1 | | | | | | | |
| M22K | | | | S | | **Sn** | **03 10 46.5** | **+0.5** |
| | baz=216 | | | | | | | |
| **PWL** | **Port Wells** | **2.54** | **63** | Pn | | **Pn** | **03 10 19.0** | **+0.7** |
| PWL | | | | IAML | | | 03 10 48.3 | |
| | comp=E,214nm,0.4s | | | | | | | |
| **PWL** | **Port Wells** | **2.54** | **63** | P | | **Pn** | **03 10 18.5** | **+0.2** |
| | baz=247 | | | | | | | |
| PWL | | | | S | | **Sn** | **03 10 47.6** | **-1.5** |
| | baz=247 | | | | | | | |
| **L19K** | **White Mountain** | **2.56** | **340** | Pn | | **Pn** | **03 10 19.2** | **+0.6** |
| **L19K** | **White Mountain** | **2.56** | **340** | P | | **Pn** | **03 10 19.2** | **+0.6** |
| | baz=158,SNR=13 | | | | | | | |
| **OHAK** | **Old Harbor** | **2.59** | **184** | Pn | | **Pn** | **03 10 17.7** | **-1.3** |
| OHAK | | | | IAML | | | 03 10 50.0 | |
| | comp=E,106nm,0.8s | | | | | | | |
| OHAK | | | | IAML | | | 03 11 08.2 | |
| | comp=N,83nm,3.2s | | | | | | | |
| **OHAK** | **Old Harbor** | **2.59** | **184** | P | | **Pn** | **03 10 18.4** | **-0.5** |
| | baz=3.6 | | | | | | | |
| OHAK | | | | S | | **Sn** | **03 10 48.2** | **-2.1** |
| | baz=3.6 | | | | | | | |
| **PMR** | **Palmer** | **2.61** | **45** | Pn | | **Pn** | **03 10 18.8** | **-0.3** |
| PMR | | | | IAML | | | 03 10 50.8 | |
| | comp=N,66nm,0.4s | | | | | | | |
| PMR | | | | IAML | | | 03 10 50.9 | |
| | comp=E,81nm,0.2s | | | | | | | |
| **PMR** | **Palmer** | **2.61** | **45** | P | | **Pn** | **03 10 18.8** | **-0.3** |
| | baz=228 | | | | | | | |
| **L20K** | **Farewell, AK** | **2.73** | **351** | | | **Pn** | **03 10 21.6** | **+0.8** |
| **L20K** | **Farewell, AK** | **2.73** | **351** | P | | **Pn** | **03 10 21.7** | **+1.0** |
| | baz=170 | | | | | | | |
| **KNK** | **Knik Glacier** | **2.75** | **52** | Pn | | **Pn** | **03 10 20.9** | **-0.1** |
| KNK | | | | IAML | | | 03 10 53.9 | |
| | comp=E,212nm,0.4s | | | | | | | |
| KNK | | | | IAML | | | 03 10 53.0 | |
| | comp=N,174nm,0.5s | | | | | | | |
| **KNK** | **Knik Glacier** | **2.75** | **52** | P | | **Pn** | **03 10 20.9** | **-0.1** |
| | baz=236 | | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.80** | **43** | | | **Pn** | **03 10 21.6** | **-0.1** |
| **GHO** | **Glory Hole Cre** | **2.80** | **43** | IAML | | | 03 10 54.9 | |
| | comp=N,118nm,0.3s | | | | | | | |
| GHO | | | | IAML | | | 03 10 56.6 | |
| | comp=E

baz=185
**RND Reindeer 4.12 27 Pn Pn 03 10 39.6 +0.5**
RND IAML 03 12 23.6
comp=N,20nm,4.9s
**GOAT Goat Mountain 4.19 76 Pn 03 10 40.5 +0.5**
**RAGM Ragged Mountai 4.19 78 Pn Pn 03 10 40.4 +0.3**
**DHY Denali Highway 4.24 37 Pn 03 10 41.2 +0.2**
DHY IAML 03 11 30.9
comp=N,27nm,0.4s
DHY IAML 03 11 32.2
comp=E,37nm,0.4s
**DHY Denali Highway 4.24 37 P Pn 03 10 41.1 +0.2**
baz=222,SNR=10
**BMRM Bremner River 4.31 71 Pn Pn 03 10 42.3 +0.5**
BMRM IAML 03 11 30.5
comp=E,58nm,0.3s
BMRM IAML 03 11 33.8
comp=N,41nm,0.4s
**BMRM Bremner River 4.31 71 P Pn 03 10 42.3 +0.5**
baz=258
**PS11 TAPS Pump St11 4.31 55 Pn 03 10 42.8 +1.2**
**MCK McKinley 4.39 24 Pn Pn 03 10 43.5 +0.7**
MCK IAML 03 12 50.5
comp=N,19nm,3.7s
MCK IAML 03 13 04.6
comp=E,17nm,4.5s
**MCK McKinley 4.39 24 P Pn 03 10 43.4 +0.7**
baz=208,SNR=13
**HMT Hamilton 4.39 79 Pn Pn 03 10 43.9 +1.1**
**BPAW Bear Paw Mtn. 4.42 11 Pn Pn 03 10 43.2 +0.1**
BPAW IAML 03 12 06.4
comp=E,15nm,4.1s
**BPAW Bear Paw Mtn. 4.42 11 P Pn 03 10 43.4 +0.3**
baz=193
**J20K Nowinta River 4.43 353 Pn 03 10 44.2 +1.0**
J20K IAML 03 12 36.2
comp=E,16nm,4.8s
J20K IAML 03 13 41.5
comp=N,19nm,3.9s
**J20K Nowinta River 4.43 353 P Pn 03 10 44.3 +1.0**
baz=172,SNR=31
**N25K Chitina, Valde 4.49 63 Pn Pn 03 10 45.5 +1.3**
N25K IAML 03 11 36.9
comp=N,27nm,0.5s
N25K IAML 03 11 38.0
comp=E,31nm,0.5s
**N25K Chitina, Valde 4.49 63 P Pn 03 10 44.3 +0.1**
baz=250
**HARP HAARP 4.60 52 Pn 03 10 46.2 +0.7**
**HARP HAARP 4.60 52 P Pn 03 10 46.0 +0.5**
baz=239
**BERG Berg Lake 4.67 79 Pn Pn 03 10 47.7 +1.2**
**BWN Browne 4.69 19 Pn Pn 03 10 47.6 +0.9**
BWN IAML 03 12 58.5
comp=N,40nm,2.9s
BWN IAML 03 13 00.3
comp=E,41nm,3.3s
**GLB Gilahina Butte 4.80 66 Pn Pn 03 10 49.4 +1.1**
GLB IAML 03 11 42.9
comp=N,26nm,0.4s
GLB IAML 03 11 44.4
comp=E,24nm,0.5s
**PAX Paxson 4.81 45 Pn Pn 03 10 48.7 +0.3**
**PAX Paxson 4.81 45 P Pn 03 10 48.7 +0.3**
baz=232,SNR=5.1
**GRIN Grindle Hills 4.86 80 Pn 03 10 50.1 +1.0**
**KHIT Khitrov Hills 4.90 78 Pn 03 10 50.1 +0.5**
**VRDI Verde Repeater 4.91 69 Pn Pn 03 10 50.2 +0.3**
VRDI IAML 03 11 30.8
comp=E,23nm,4.8s
VRDI IAML 03 11 44.9
comp=N,28nm,0.4s
**PS10 TAPS Pump St10 5.00 40 Pn 03 10 52.4 +1.4**
**SNH Sunshine Point 5.10 81 Pn 03 10 54.0 +1.7**
**WAX Waxell Ridge 5.10 78 Pn Pn 03 10 53.0 +0.7**
**NEA2 Nenana 5.14 19 Pn 03 10 52.8 -0.1**
NEA2 IAML 03 12 39.5
comp=N,14nm,4.0s
NEA2 IAML 03 13 33.7
comp=E,16nm,4.4s
**NEA2 Nenana 5.14 19 P Pn 03 10 52.9 +0.1**
baz=202,SNR=23
**MCARA McCarthy VSAT 5.15 68 Pn 03 10 54.4 +1.4**
**MCARA McCarthy VSAT 5.15 68 P Pn 03 10 53.9 +0.9**
baz=256
**WRH Wood River Hil 5.22 24 Pn 03 10 53.8 0.0**
WRH IAML 03 11 52.2
comp=E,25nm,4.9s
WRH IAML 03 14 16.6
comp=N,14nm,4.4s
**MLY Manley 5.35 10 Pn 03 10 56.7 +1.0**
MLY IAML 03 12 00.5
comp=N,13nm,4.6s
MLY IAML 03 13 10.6
comp=E,12nm,5.0s
**MLY Manley 5.35 10 P Pn 03 10 56.2 +0.6**
baz=192
**ISLE Juniper Island 5.36 77 Pn Pn 03 10 56.5 +0.6**
**PTPK Patty Peak 5.37 70 Pn 03 10 57.4 +1.2**
**KIAG Kiagna River 5.38 73 Pn 03 10 57.2 +1.0**
**BALM Baldy 5.41 72 Pn 03 10 57.5 +1.0**
**HDA Harding Lake 5.42 29 Pn 03 10 56.7 +0.2**
**HDA Harding Lake 5.42 29 P Pn 03 10 56.7 +0.2**
baz=214
**I21K Tanana 5.42 4 Pn Pn 03 10 57.5 +0.9**
**I21K Tanana 5.42 4 P Pn 03 10 56.8 +0.3**
baz=185,SNR=5.1
**CCB Clear Creek Bu 5.43 24 Pn Pn 03 10 56.8 +0.1**
**MENT Mentasta 5.45 51 Pn Pn 03 10 58.3 +1.3**
**M26K Nabesna, AK 5.49 57 Pn 03 10 58.8 +1.2**
**M26K Nabesna, AK 5.49 57 P Pn 03 10 59.0 +1.4**
baz=246
**RIDG Independent Ri 5.52 41 Pn Pn 03 10 58.7 +0.8**
**RIDG Independent Ri 5.52 41 P Pn 03 10 58.5 +0.6**
baz=228
**MESA MESA 5.54 81 Pn Pn 03 10 56.8 -1.6**
**MESA MESA 5.54 81 P Pn 03 10 59.5 +1.1**
baz=271
**TCOL CIGO, UAF Yank 5.62 23 Pn 03 10 59.7 +0.5**
**COLA College 5.62 23 Pn 03 10 59.7 +0.5**
**I23K Minto, Yukon-K 5.62 16 Pn 03 10 59.8 +0.5**
**I23K Minto, Yukon-K 5.62 16 P Pn 03 10 59.6 +0.3**
baz=199,SNR=12
**MDM Murphy Dome 5.63 21 Pn 03 10 59.5 +0.2**
**L26K Log Cabin Wild 5.64 51 Pn Pn 03 11 00.1 +0.6**
**L26K Log Cabin Wild 5.64 51 P Pn 03 11 00.3 +0.7**
baz=239
**YAH Yahtse 5.64 79 Pn Pn 03 11 01.3 +1.5**
**DOT Dot Lake 5.73 44 Pn Pn 03 11 00.7 0.0**
**IL31 5.74 27 Pn 03 11 00.8 0.0**
**ILAR Eielson Array 5.74 27 P Pn 03 11 00.7 -0.1**
comp=E,1.8nm,0.3s,baz=220,slow=14,SNR=37
ILAR S Sn 03 12 02.5 -2.8
comp=E,1.0nm,0.3s,baz=211,slow=22,SNR=8.0
**ILAR Eielson Array 5.74 27 Pn Pn 03 11 00.1 -0.7**
**BARN Barnard Glacie 5.74 72 Pn Pn 03 11 02.2 +1.1**
BARN Sn 03 12 03.2 -2.5
**H21K Melozitna Rive 5.88 1 Pn 03 11 03.3 +0.5**
**H21K Melozitna Rive 5.88 1 P Pn 03 11 02.9 +0.2**
baz=181
**CTG Chitna Glacier 5.88 74 P Pn 03 11 04.4 +1.5**
baz=264
**CTGM Chitina Glacie 5.89 74 Pn Pn 03 11 03.5 +0.5**
**POKR Poker Plat Res 5.92 23 Pn Pn 03 11 03.1 -0.2**
**POKR Poker Plat Res 5.92 23 P Pn 03 11 03.8 +0.5**
baz=208
**TABL Table Mountain 5.95 79 Pn Pn 03 11 05.3 +1.4**
**M27K Edge Creek, AK 5.96 60 P Pn 03 11 05.8 +1.8**
baz=249
**SCRK Sand Creek 5.96 42 Pn Pn 03 11 04.0 0.0**
**SCRK Sand Creek 5.96 42 P Pn 03 11 03.6 -0.4**
baz=229
**J25K Salcha River, 5.99 33 Pn 03 11 04.3 0.0**
**J25K Salcha River, 5.99 33 P Pn 03 11 04.5 +0.1**
baz=220,SNR=5.3
**LOGN Logan Glacier 6.03 75 Pn Pn 03 11 05.5 +0.5**
**IM03 6.22 357 Pn 03 11 08.1 +0.9**
**IMAR Indian Mountai 6.22 357 Pn Pn 03 11 08.1 +0.8**
**L27K Beaver Creek, 6.26 54 Pn 03 11 08.5 +0.6**
**L27K Beaver Creek, 6.26 54 P Pn 03 11 09.0 +1.0**
baz=243
**BC03 6.28 54 Pn 03 11 08.2 +0.1**
**BCAR Beaver Creek A 6.28 54 Pn Pn 03 11 09.8 +1.6**
**PCA Pinnacle 6.39 82 Pn Pn 03 11 10.8 +1.1**
**PINM Pinnacle 6.39 82 P Pn 03 11 10.9 +1.1**
baz=273
**BVCY Beaver Creek 6.42 61 P Pn 03 11 11.4 +1.3**
baz=251
**YUK3 Moose Creek 6.43 67 P Pn 03 11 11.7 +1.2**
baz=258
**J26L Joseph Creek 6.45 39 P Pn 03 11 10.8 +0.3**
baz=227
**H24K Noodor Dome 6.49 19 Pn 03 11 11.0 0.0**
**H24K Noodor Dome 6.49 19 P Pn 03 11 11.2 +0.2**
baz=203
**PRP Porcupine Dome 6.68 28 Pn Pn 03 11 14.2 +0.6**
**PNL Peninsula 6.86 85 P Pn 03 11 16.7 +0.6**
baz=277
**YUK4 Talbot Arm 7.22 71 P Pn 03 11 23.2 +2.1**
baz=263
**EGAK Eagle 7.42 43 Pn Pn 03 11 23.3 -0.3**
**EGAK Eagle 7.42 43 P Pn 03 11 24.1 +0.5**
baz=233
**COLD Coldfoot 7.56 8 Pn Pn 03 11 25.8 +0.4**
**COLD Coldfoot 7.56 8 P Pn 03 11 25.6 +0.2**
baz=191
**FYU Fort Yukon 7.63 24 Pn Pn 03 11 25.9 -0.4**
**DAWY Dawson 7.69 50 Pn Pn 03 11 27.7 +0.4**
**DAWY Dawson 7.69 50 P Pn 03 11 28.4 +1.2**
baz=242
**HYT Haines Junctio 7.75 76 Pn Pn 03 11 30.1 +2.0**
**M30M Minto, Yukon 8.29 63 Pn Pn 03 11 36.2 +0.9**
**BM03 Burnt Mountain 8.50 22 Pn 03 11 38.0 -0.1**
**BMAR Burnt Mountain 8.51 22 Pn Pn 03 11 37.7 -0.6**
**SKAG Skagway 8.94 85 Pn Pn 03 11 45.8 +1.7**
**TOLK Toolik Lake Re 9.00 8 Pn Pn 03 11 45.7 +0.9**
**BESE Bessie Mountai 9.37 90 Pn Pn 03 11 53.2 +3.3**
**JIS Juneau Island 9.69 91 Pn Pn 03 11 56.8 +2.6**
**P33M Teslin, Yukon 10.09 79 Pn Pn 03 12 02.0 +2.3**
**INK Inuvik 11.99 37 Pn Pn 03 12 26.3 +1.5**
**YKA Yellowknife Ar 18.52 65 P Pn 03 13 47.3 +0.8**
comp=E,0.2nm,0.3s,baz=276,slow=9.9,SNR=16
**MKAR Makanchi Array 64.60 321 P P 03 20 02.2 -0.1**
comp=E,0.1nm,0.5s,baz=46,slow=6.9,SNR=1.8

*IDC **26** 03:11:41.3±0.8, 14°.67N×144°.50E, h0km, mb3.9/10, mb1 4.0/10, mb1mx3.8/36, mbtmp3.9/10, MS3.6/19, Ms1 3.6/19, ms1mx3.3/78, Error ellipse: s-maj=29.5km s-min=13.4km az=75.0*
*NEIC **26** 03:11:42.5±1.8, 14°.77N±0°.07×144°.8E±0°.1, h10km±1km, mb4.5/16, Error ellipse: s-maj=20.6km s-min=8.1km az=117.0*
**ISC 26 03:11:45.4±0.7, 14°.66N±0°.08×144°.5E±0°.2, h27km, n53, σ0°57/30, mb4.3/18, MS3.5/16, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.12** | **162** | Pn | **Pn** | **03 12 05.3** | **0.0** |
| | 184nm,0.3s,baz=317,slow=5.3,SNR=29 | | | | | | |
| GUMO | | | | Sn | **Sb** | **03 12 20.2** | **-0.1** |
| | 241nm,0.3s,baz=262,slow=21,SNR=36 | | | | | | |
| **GUMO** | **Guam** | **1.12** | **162** | | **Pn** | **03 12 04.5** | **-0.8** |
| **JAY** | **Jayapura** | **17.47** | **193** | LR | LR | 03 21 04.9 | |
| | comp=Z,136nm,21.1s,baz=22,slow=32 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **18.88** | **348** | LR | LR | 03 22 38.1 | |
| | comp=Z,197nm,20.1s,baz=58,slow=35 | | | | | | |
| **JOW** | **Kunigami** | **19.40** | **311** | LR | LR | 03 21 53.1 | |
| | comp=Z,277nm,20.9s,baz=147,slow=32 | | | | | | |
| **SIJI** | **Sorong** | **20.24** | **221** | LR | LR | 03 22 20.9 | |
| | comp=Z,216nm,21.3s,baz=174,slow=32 | | | | | | |
| **FAKI** | **Fak Fak** | **21.27** | **216** | P | **P** | **03 16 30.5** | **+0.7** |
| **H11S3** | **WAKE ISLAND Hy** | **21.59** | **77** | T | T | 03 39 30.6 | |
| | baz=262,slow=75,SNR=47 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.61** | **77** | T | T | 03 39 34.6 | |
| | baz=262,slow=75,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.61** | **77** | T | T | 03 39 38.9 | |
| | baz=262,slow=75,SNR=24 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.96** | **74** | T | T | 03 40 08.4 | |
| | baz=259,slow=75,SNR=4.1 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.97** | **74** | T | T | 03 40 08.1 | |
| | baz=259,slow=75,SNR=3.3 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.98** | **74** | T | T | 03 40 05.1 | |
| | baz=259,slow=75,SNR=5.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.51** | **347** | LR | LR | 03 25 03.8 | |
| | comp=Z,143nm,18.1s,baz=182,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **27.07** | **330** | P | **P** | **03 17 26.3** | **+0.6** |
| | 0.9nm,0.5s,baz=143,slow=8.1,SNR=4.3 | | | | | | |
| **HNR** | **Honiara** | **28.41** | **146** | LR | LR | 03 27 18.7 | |
| | comp=Z,145nm,21.6s,baz=13,slow=33 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.32** | **343** | LR | LR | 03 29 47.5 | |
| | comp=Z,87nm,18.8s,baz=147,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **31.38** | **233** | LR | LR | 03 30 34.5 | |
| | comp=Z,41nm,18.7s,baz=32,slow=36 | | | | | | |
| **BATI** | **Bamata** | **32.21** | **221** | LR | LR | 03 31 14.0 | |
| | comp=Z,72nm,19.8s,baz=74,slow=36 | | | | | | |
| **WB0** | **Warramunga Arr** | **35.63** | **196** | P | **P** | **03 18 41.2** | **0.0** |
| WB0 | | | | IAmb | IAmb | 03 18 42.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.80** | **196** | P | **P** | **03 18 42.6** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 03 18 44.6 | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.81** | **196** | P | **P** | **03 18 42.4** | **-0.4** |
| | comp=Z,4.1nm,1.1s,baz=16,slow=9.5,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 03 33 42.9 | |
| | comp=Z,124nm,18.4s,baz=65,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.81** | **196** | P | **P** | **03 18 43.3** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **37.49** | **210** | LR | LR | 03 35 08.9 | |
| | comp=Z,16nm,18.3s,baz=110,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **39.48** | **195** | P | **P** | **03 19 13.6** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=18,slow=9.8,SNR=6.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **39.76** | **12** | LR | LR | 03 33 35.8 | |
| | comp=Z,129nm,21.6s,baz=164,slow=33 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **43.38** | **214** | P | **P** | **03 19 45.8** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 03 19 47.4 | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **43.76** | **281** | P | **P** | **03 19 48.3** | **-0.7** |
| CM31 | | | | IAmb | IAmb | 03 20 12.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.76** | **281** | P | **P** | **03 19 48.5** | **-0.5** |
| | comp=Z,1.1nm,0.2s,baz=74,slow=6.7,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **45.66** | **324** | P | **P** | **03 20 03.6** | **-0.3** |
| | comp=Z,0.9nm,0.8s,baz=140,slow=9.7,SNR=4.5 | | | | | | |
| **PSI** | **Papat** | | **46.47** | **260** | LR | LR | 03 42 28.8 |
| | comp=Z,49nm,18.8s,baz=73,slow=40 | | | | | | |
| **FORT** | **Forrest** | **47.87** | **199** | P | **P** | **03 20 22.0** | **+0.9** |
| **SHL** | **Shillong** | **50.31** | **291** | P | **P** | **03 20 39.7** | **-0.6** |
| SHL | | | | IAmb | IAmb | 03 20 40.1 | |
| | comp=Z,8.2nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **60.49** | **316** | P | **P** | **03 21 53.5** | **+0.4** |
| **MKAR** | **Makanchi Array** | **60.49** | **316** | P | **P** | **03 21 53.3** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=90,slow=9.1,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.56** | **324** | P | **P** | **03 21 52.9** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=90,slow=4.3,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.56** | **324** | P | **P** | **03 21 54.2** | **+0.8** |
| **MAKZ** | **Makanchi** | **60.70** | **316** | P | **P** | **03 21 54.6** | **+0.1** |
| MAKZ | | | | IAmb | IAmb | 03 21 56.3 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **PALK** | **Pallekele** | **62.91** | **271** | LR | LR | 03 50 01.8 | |
| | comp=Z,41nm,18.2s,baz=127,slow=37 | | | | | | |
| **KURK** | **Kurchatov** | **63.55** | **320** | P | **P** | **03 22 12.9** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **63.59** | **319** | LR | LR | 03 50 50.2 | |
| | comp=Z,137nm,19.9s,baz=329,slow=37 | | | | | | |
| **NRIK** | **Noril'sk** | **65.02** | **341** | P | **P** | **03 22 22.8** | **0.0** |
| | comp=Z,1.5nm,0.5s,baz=137,slow=9.7,SNR=2.3 | | | | | | |
| **AAK** | **Ala-Archa** | **65.56** | **310** | LR | LR | 03 53 44.4 | |
| | comp=Z,95nm,18.8s,baz=333,slow=38 | | | | | | |
| **NIL** | **Nilore** | **66.54** | **301** | P | **P** | **03 22 33.9** | **+0.6** |
| **ILAR** | **Eielson Array** | **67.76** | **26** | P | **P** | **03 22 39.6** | **-0.8** |
| | comp=Z,0.5nm,0.9s,baz=247,slow=5.8,SNR=5.9 | | | | | | |
| **KKAR** | **Karatay Array** | **68.49** | **311** | P | **P** | **03 22 45.3** | **-0.2** |
| **BRVK** | **Borovoye** | **68.94** | **322** | P | **P** | **03 22 48.4** | **+0.3** |
| BRVK | | | | IAmb | IAmb | 03 22 54.9 | |
| | comp=Z,7.2nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.52** | **318** | P | **P** | **03 23 26.4** | **-1.0** |
| **HRA** | **Herat** | **75.58** | **302** | P | **P** | **03 23 29.0** | **+0.6** |
| HRA | | | | IAmb | IAmb | 03 23 33.3 | |
| | comp=Z,6.4nm,1.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.08** | **27** | P | **P** | **03 24 04.2** | **+1.0** |
| | comp=Z,0.4nm,0.6s,baz=288,slow=5.1,SNR=5.5 | | | | | | |
| **ELK** | **Elko** | **88.13** | **48** | LR | LR | 03 59 19.5 | |
| | comp=Z,76nm,18.8s,baz=5.0,slow=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **93.95** | **325** | LR | LR | 04 09 04.2 | |
| | comp=Z,92nm,18.3s,baz=354,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **95.93** | **339** | LR | LR | 04 08 48.4 | |
| | comp=Z,17nm,20.7s,baz=55,slow=36 | | | | | | |

**JMA 26 03:13:55.5, 37°.70N×141°.80E, h48km±1km, M3.5, 4C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **0.66** | **337** | ⇑P | Pn | 03 14 08.8 | +0.1 |
| JIKH | | | | S | Sn | 03 14 18.1 | -0.1 |
| **JMST** | **Minamisoumatoc** | **0.72** | **272** | ⇑P | Pn | 03 14 09.5 | 0.0 |
| JMST | | | | S | Sn | 03 14 19.6 | 0.0 |
| **JFK** | **Kawauchi** | **0.81** | **246** | ⇑P | Pn | 03 14 10.6 | 0.0 |
| JFK | | | | S | Sn | 03 14 21.4 | -0.2 |
| **JMM** | **Marumori** | **0.81** | **282** | ⇓P | Pn | 03 14 10.9 | +0.2 |
| JMM | | | | S | Sn | 03 14 21.8 | +0.1 |
| **JIO** | **Ouri** | **0.83** | **335** | ⇑P | Pn | 03 14 11.1 | +0.2 |
| JIO | | | | S | Sn | 03 14 22.1 | -0.1 |
| **ONAJ** | **Iwakimizuishiy** | **1.00** | **233** | P | Pn | 03 14 13.3 | +0.1 |
| ONAJ | | | | S | Sn | 03 14 25.7 | -0.5 |
| **JOU** | **Okura** | **1.12** | **307** | ⇓P | Pn | 03 14 15.0 | +0.2 |
| **JKMT** | **Kesennumamotoy** | **1.14** | **347** | P | Pn | 03 14 15.3 | +0.3 |
| JKMT | | | | S | Sn | 03 14 29.3 | -0.2 |
| **JFT** | **Otama** | **1.18** | **262** | P | Pn | 03 14 16.5 | +0.9 |
| JFT | | | | S | Sn | 03 14 31.6 | +1.1 |
| **JMK** | **Ichinoseki** | **1.33** | **340** | P | Pn | 03 14 18.3 | +0.6 |
| JMK | | | | S | Sn | 03 14 34.6 | +0.4 |
| **JYK** | **Kaneyama** | **1.66** | **317** | ⇓P | Pn | 03 14 22.9 | +0.7 |
| JYK | | | | S | Sn | 03 14 43.6 | +1.2 |
| **JFY** | **Yanaizu** | **1.69** | **261** | P | Pn | 03 14 23.5 | +0.9 |
| JFY | | | | S | Sn | 03 14 44.3 | +1.2 |
| **JOM** | **Ohasama** | **1.81** | **347** | P | Pn | 03 14 25.2 | +0.9 |
| JOM | | | | S | Sn | 03 14 47.4 | +1.3 |
| **MAT** | **Matsushiro** | **3.10** | **249** | P | Pn | 03 14 43.5 | +1.6 |
| MAT | | | | *e*S | Sn | 03 15 21.1 | +3.5 |

**IDC 26 03:24:56.5±1.3, 27°.59N×140°.00E, h0km, mb3.7/5, mb1 4.0/5, mb1mx3.5/36, mbtmp3.7/5, Error ellipse: s-maj=57.8km s-min=32.4km az=99.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **47.57** | **187** | P | P | 03 33 34.0 | 0.0 |
| | 0.3nm,0.9s,baz=7.6,slow=8.0,SNR=1.9 | | | | | | |
| **ILAR** | **Eielson Array** | **58.22** | **29** | P | P | 03 34 53.3 | +1.0 |
| | 0.3nm,0.8s,baz=264,slow=5.1,SNR=2.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **72.43** | **340** | P | P | 03 36 24.8 | +0.5 |
| | 2.5nm,1.0s,baz=74,slow=6.7,SNR=3.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.63** | **28** | P | P | 03 36 25.0 | -0.6 |
| | 0.6nm,0.5s,baz=297,slow=6.1,SNR=9.5 | | | | | | |
| **FINES** | **FINESS Array B** | **76.64** | **333** | P | P | 03 36 48.7 | -0.2 |
| | 1.1nm,0.4s,baz=64,slow=5.3,SNR=16 | | | | | | |

*TUL **26** 03:31:12.2±0.6, 36°.883N±0°.010×97°.798W±0°.009, h5km±3km, ML2.7, mb_Lg2.5/22(NEIC), Error ellipse: s-maj=1.5km s-min=0.9km az=154.0*
**NEIC 26 03:31:13.0±0.4, 36°.879N±0°.008×97°.79W±0°.01, h2km±4km, Error ellipse: s-maj=1.3km s-min=1.1km az=220.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **1.03** | **88** | | Pg | 03 31 31.1 | -1.5 |
| T35A | | | | Sg | Sg | 03 31 45.4 | -0.6 |
| **U32A** | **Winter Ranch,** | **1.09** | **243** | Pg | Pg | 03 31 32.7 | -1.2 |
| U32A | | | | Sg | Sg | 03 31 47.2 | -0.9 |
| **OKCFA** | **Oklahoma City** | **1.49** | **169** | | Pn | 03 31 39.9 | -0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **1.50** | **169** | | Pn | 03 31 40.0 | -1.0 |
| **FNO** | **Franklin** | **1.65** | **169** | Pn | Pn | 03 31 42.2 | -0.8 |
| **R32A** | **Long Quarter,** | **1.71** | **335** | Pn | Pn | 03 31 43.6 | -0.2 |
| **W35A** | **Tecumseh** | **1.88** | **156** | Pn | Pn | 03 31 45.7 | -0.5 |
| **TUL1** | **Leonard** | **1.88** | **120** | Pn | Pn | 03 31 45.8 | -0.4 |
| TUL1 | | | | IAmb_Lg | | 03 32 12.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.27** | **181** | IAmb_Lg | | 03 32 26.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.28** | **201** | Pn | Pn | 03 31 51.3 | -0.5 |
| WMOK | | | | IAmb_Lg | | 03 32 25.3 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.41** | **22** | Pn | Pn | 03 31 53.3 | -0.1 |
| **CBKS** | **Cedar Bluff** | **2.47** | **322** | Pn | Pn | 03 31 54.3 | 0.0 |
| **X37A** | **Clayton** | **3.02** | **139** | Pn | Pn | 03 32 00.6 | -1.2 |
| **HHAR** | **Hobbs** | **3.16** | **100** | Pn | Pn | 03 32 04.0 | +0.3 |
| HHAR | | | | IAmb_Lg | | 03 32 56.1 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.66** | **76** | Pn | Pn | 03 32 10.3 | -0.3 |
| S39A | | | | | LR | 03 33 05.8 | |
| S39A | | | | IAmb_Lg | | 03 33 14.2 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.73** | **239** | | LR | 03 33 08.8 | |
| AMTX | | | | IAmb_Lg | | 03 33 15.2 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **U40A** | **Yellville** | **4.01** | **96** | Pn | Pn | 03 32 14.1 | -1.4 |
| U40A | | | | | LR | 03 33 18.1 | |
| **MIAR** | **Mount Ida** | **4.15** | **123** | Pn | Pn | 03 32 16.4 | -0.9 |
| **P38A** | **Dawn** | **4.33** | **49** | Pn | Pn | 03 32 18.0 | -1.9 |
| P38A | | | | | LR | 03 33 27.8 | |
| P38A | | | | IAmb_Lg | | 03 33 28.4 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.43** | **85** | Pn | Pn | 03 32 22.1 | +0.9 |
| MGMO | | | | IAmb_Lg | | 03 33 32.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.51** | **200** | | LR | 03 33 30.9 | |
| ABTX | | | | IAmb_Lg | | 03 33 36.0 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **BGNE** | **Belgrade** | **4.53** | **357** | Pn | Pn | 03 32 21.8 | -0.9 |
| **R40A** | **Maddies Statio** | **4.61** | **71** | Pn | Pn | 03 32 23.4 | -0.3 |
| **X40A** | **Basin Creek Fa** | **4.69** | **119** | | LR | 03 33 39.1 | |
| **WHAR** | **Wooly Hollow** | **4.73** | **108** | | LR | 03 33 40.6 | |
| WHAR | | | | IAmb_Lg | | 03 33 52.0 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.24** | **322** | Pn | Pn | 03 32 30.5 | -1.9 |
| **T25A** | **Trinidad** | **5.30** | **275** | Pn | Pn | 03 32 30.5 | -3.0 |
| **CCM** | **Cathedral Cave** | **5.34** | **75** | | LR | 03 33 59.2 | |
| **K31A** | **O'Neill** | **5.78** | **353** | | LR | 03 34 15.5 | |
| **435B** | **Jarrell** | **6.08** | **178** | IAmb_Lg | | 03 34 31.2 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.60** | **195** | IAmb_Lg | | 03 34 49.9 | |
| | comp=Z,6.9nm,1.0s | | | | | | |

*IDC **26** 03:54:45.9±13.0, 11°.96S×166°.45E, h169km±143km, mb3.4/5, mb1 3.6/6, mb1mx3.3/40, mbtmp3.8/6, ML3.5/1, MS3.1/2, Ms1 3.1/2, ms1mx2.8/30, Error ellipse: s-maj=123.6km s-min=28.8km az=159.0*
**ISC 26 03:54:39.5±1.4, 11°.65S±0°.2×166°.3E±0°.2, h100km, n8, σ0°69/6, mb3.9/5, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **6.62** | **288** | LR | LR | 03 59 06.2 | |
| | comp=Z,64nm,18.4s,baz=121,slow=38 | | | | | | |
| **DZM** | **Mont Dzumac** | **10.44** | **179** | P | **Pn** | **03 57 06.2** | **0.0** |
| | 0.4nm,0.3s,baz=344,slow=18,SNR=1.5 | | | | | | |
| **PMG** | **Port Moresby** | **18.97** | **275** | LR | LR | 04 05 36.8 | |
| | comp=Z,106nm,19.4s,baz=226,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **21.06** | **244** | P | **P** | **03 59 16.7** | **+0.9** |
| | 5.8nm,0.9s,baz=72,slow=9.9,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.84** | **251** | P | **P** | **04 00 54.7** | **-0.5** |
| | 0.6nm,0.7s,baz=80,slow=8.9,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **33.07** | **244** | P | **P** | **04 01 05.4** | **-0.5** |
| | 1.7nm,0.8s,baz=74,slow=9.7,SNR=19 | | | | | | |
| **ILAR** | **Eielson Array** | **83.83** | **18** | P | **P** | **04 06 57.8** | **+0.3** |
| | 0.2nm,0.7s,baz=259,slow=5.5,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.29** | **317** | P | **P** | **04 07 47.5** | **-0.2** |
| | 0.3nm,0.7s,baz=87,slow=6.1,SNR=2.9 | | | | | | |

*IDC **26** 04:25:02.0±1.1, 25°.98N×128°.45E, h0km, mb3.7/8, mb1 3.8/8, mb1mx3.6/32, mbtmp3.7/8, Error ellipse: s-maj=49.4km s-min=18.0km az=76.0*
*JMA **26** 04:25:05.2±0.3, 25°.99N×128°.49E, h43km±5km, M3.3*
**ISC 26 04:25:03.6±1.4, 25°.96N±0°.05×128°.57E±0°.04, h16km±8km, n20, σ1°826/32, mb3.6/8, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JJT3** | **Tamagus

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JOW | | | | *e*S | | **Sg** | **04 25 32.9** | **-0.2** |
| **JYRO** | **Yoronjima** | **1.06** | **354** | P | | **Pb** | **04 25 23.4** | **-0.3** |
| JYRO | | | | *e*S | | **Sb** | **04 25 35.9** | **-1.5** |
| **JIH** | **Iheya** | **1.20** | **333** | P | | **Pn** | **04 25 25.7** | **0.0** |
| JIH | | | | *e*S | | **Sb** | **04 25 40.8** | **-0.4** |
| **JAGN** | **Aguni-jima** | **1.34** | **298** | P | | **Pn** | **04 25 27.3** | **-0.4** |
| JAGN | | | | *e*S | | **Sn** | **04 25 43.1** | **-2.2** |
| **JOKE** | **Okinoerabujima** | **1.39** | **0** | P | | **Pn** | **04 25 28.5** | **0.0** |
| JOKE | | | | *e*S | | **Sn** | **04 25 45.0** | **-1.6** |
| **JKE** | **Kume jima 2** | **1.64** | **283** | P | | **Pn** | **04 25 30.7** | **-1.1** |
| JKE | | | | S | | **Sn** | **04 25 49.6** | **-3.0** |
| **JTK** | **Tokunoshima** | **1.85** | **11** | P | | **Pn** | **04 25 34.9** | **+0.2** |
| JTK | | | | *e*S | | **Sn** | **04 25 57.5** | **-0.3** |
| **JMZ** | **Minamidaito 2** | **2.40** | **93** | P | | **Pn** | **04 25 41.5** | **-0.7** |
| JMZ | | | | S | | **Sn** | **04 26 08.0** | **-3.3** |
| **JKDJ** | **Kitadaitoujima** | **2.46** | **90** | P | | **Pn** | **04 25 42.6** | **-0.5** |
| JKDJ | | | | S | | **Sn** | **04 26 10.7** | **-2.2** |
| **SONM** | **Songino Array** | **27.94** | **327** | P | | **P** | **04 30 54.7** | **+1.3** |
| | 0.7nm,0.6s,baz=140,slow=9.4,SNR=5.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.94** | **312** | P | | **P** | **04 32 53.3** | **-0.3** |
| | 0.3nm,0.4s,baz=96,slow=11,SNR=6.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.97** | **172** | P | | **P** | **04 33 26.8** | **+0.6** |
| | 0.6nm,0.7s,baz=353,slow=8.3,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.61** | **174** | P | | **P** | **04 33 55.7** | **+1.3** |
| | 0.5nm,0.8s,baz=4.2,slow=8.8,SNR=5.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.93** | **320** | P | | **P** | **04 36 49.6** | **0.0** |
| | 0.6nm,0.5s,baz=64,slow=5.9,SNR=3.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.44** | **308** | P | | **P** | **04 36 59.3** | **+0.7** |
| | 0.4nm,0.8s,baz=107,slow=4.1,SNR=5.8 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.64** | **25** | P | | **P** | **04 37 06.0** | **+1.5** |
| | 0.5nm,1.0s,baz=298,slow=5.6,SNR=4.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **79.69** | **334** | P | | **P** | **04 37 10.6** | **+0.2** |
| | 0.6nm,0.8s,baz=51,slow=5.4,SNR=2.0 | | | | | | | |

*IDC **26** 04:34:19.1±1.1,25°.95N×128°.36E, h0km, mb3.5/6, mb1 3.7/6, mb1mx3.5/54, mbtmp3.5/6, MS3.4/3, Ms1 3.4/3, ms1mx2.7/70, Error ellipse: s-maj=46.3km s-min=18.3km az=79.0*

*JMA **26** 04:34:20.6±0.3,25°.92N×128°.59E, h35km, M3.3*

**ISC 26 04:34:20.3±1.5, 25°.96N±0°.05×128°.60E±0°.04, h12km±9km, n21, σ1s00/27, mb3.5/6, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JJT3** | **Tamagusuku3** | **0.76** | **285** | P | | | **Pg** | **04 34 35.2** | **+0.2** |
| JJT3 | | | | S | | | **Sg** | **04 34 45.7** | **+0.8** |
| **JNTH** | **Nagotoyohara** | **0.76** | **317** | P | | | **Pg** | **04 34 34.8** | **-0.3** |
| JNTH | | | | *e*S | | | **Sg** | **04 34 45.6** | **+0.5** |
| **JOW** | **Kunigami** | **0.92** | **342** | Pn | | | **Pg** | **04 34 38.1** | **0.0** |
| | 77nm,0.3s,baz=150,slow=17,SNR=118 | | | | | | | | |
| JOW | | | | Sn | | | **Sg** | **04 34 49.4** | **-0.7** |
| | 169nm,0.3s,baz=152,slow=24,SNR=12 | | | | | | | | |
| **JOW** | **Kunigami** | **0.92** | **342** | P | | | **Pg** | **04 34 37.9** | **-0.2** |
| JOW | | | | *e*S | | | **Sg** | **04 34 50.0** | **-0.1** |
| **JYRO** | **Yoronjima** | **1.07** | **353** | P | | | **Pg** | **04 34 40.6** | **-0.4** |
| **JIH** | **Iheya** | **1.22** | **332** | P | | | **Pn** | **04 34 43.0** | **-0.1** |
| JIH | | | | *e*S | | | **Sb** | **04 34 58.8** | **-0.1** |
| **JAGN** | **Aguni-jima** | **1.37** | **298** | P | | | **Pn** | **04 34 44.2** | **-1.0** |
| JAGN | | | | *e*S | | | **Sn** | **04 35 02.2** | **-1.1** |
| **JOKE** | **Okinoerabujima** | **1.40** | **359** | P | | | **Pn** | **04 34 45.3** | **-0.4** |
| JOKE | | | | *e*S | | | **Sn** | **04 35 03.4** | **-0.7** |
| **JKE** | **Kume jima 2** | **1.67** | **283** | P | | | **Pn** | **04 34 47.7** | **-1.7** |
| **JTK** | **Tokunoshima** | **1.85** | **10** | P | | | **Pn** | **04 34 52.0** | **+0.2** |
| **JMZ** | **Minamidaito 2** | **2.37** | **93** | P | | | **Pn** | **04 34 58.4** | **-0.5** |
| JMZ | | | | S | | | **Sn** | **04 35 25.7** | **-2.1** |
| **JKDJ** | **Kitadaitoujima** | **2.43** | **90** | P | | | **Pn** | **04 34 59.4** | **-0.4** |
| JKDJ | | | | S | | | **Sn** | **04 35 28.0** | **-1.4** |
| **JNU** | **Nakatsue** | **7.41** | **15** | LR | | | LR | 04 39 00.4 | |
| | comp=Z,808nm,20.5s,baz=318,slow=38 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.37** | **36** | LR | | | LR | 04 42 15.2 | |
| | comp=Z,50nm,21.9s,baz=118,slow=35 | | | | | | | | |
| **SONM** | **Songino Array** | **27.96** | **327** | P | | | **P** | **04 40 11.8** | **+1.0** |
| | 0.7nm,0.7s,baz=142,slow=9.9,SNR=5.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.96** | **312** | P | | | **P** | **04 42 09.7** | **-1.4** |
| | 0.2nm,0.4s,baz=90,slow=12,SNR=5.9 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.28** | **317** | LR | | | LR | 05 02 33.9 | |
| | comp=Z,52nm,19.9s,baz=260,slow=38 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.96** | **172** | P | | | **P** | **04 42 43.7** | **+0.3** |
| | 0.8nm,0.7s,baz=352,slow=8.2,SNR=2.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **49.59** | **174** | P | | | **P** | **04 43 12.3** | **+0.8** |
| | 0.7nm,0.8s,baz=336,slow=5.3,SNR=5.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **64.52** | **28** | P | | | **P** | **04 44 58.9** | **+2.2** |
| | 0.3nm,0.9s,baz=267,slow=7.2,SNR=1.8 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.46** | **308** | P | | | **P** | **04 46 16.2** | **+0.3** |
| | 0.3nm,0.7s,baz=47,slow=8.5,SNR=2.0 | | | | | | | | |

*DDA **26** 04:40:53.9±0.0,36°.85N×45°.12E, h2km±2km, ML3.6*
*ISK **26** 04:40:55.9,36°.61N×44°.82E, h1km, ML3.5/8*
*TEH **26** 04:40:57.8,37°.23N×45°.18E, h8km, ML3.8*
*AZER **26** 04:40:58.6±0.4,37°.38N×44°.75E, h2km, Error ellipse: s-maj=7.6km s-min=3.1km az=34.0*
*ISN **26** 04:41:02.7±2.0,36°.78N×45°.00E, h17km±12km, ML3.9*

**ISC 26 04:40:54.3±1.1, 37°.02N±0°.02×45°.16E±0°.02, h4km±10km, n72, σ1s89/102, Northwestern Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MAHB** | **Mahabad** | **0.50** | **119** | *e*Sg | | | **Sb** | **04 41 19.7** | **+6.2** |
| MAHB | | | | *e*Pg | | | **Pn** | **04 41 09.6** | **+1.2** |
| MAHB | | | | *e* | | | | 04 41 22.2 | |
| | comp=Z,64μm,0.6s | | | | | | | | |
| **IAZR** | **Azarshahr** | **0.93** | **44** | *e*Pg | | | **Pn** | **04 41 14.9** | **+0.5** |
| IAZR | | | | *e* | | | | 04 41 30.9 | |
| | comp=Z,72μm,0.4s | | | | | | | | |
| **CUKT** | **Cukurca** | **1.26** | **281** | PN | | | **Pn** | **04 41 18.9** | **0.0** |
| CUKT | | | | SN | | | **Sb** | **04 41 35.9** | **+0.5** |
| **CUKT** | **Cukurca** | **1.26** | **281** | P | | | **Pn** | **04 41 19.1** | **+0.2** |
| CUKT | | | | S | | | **Sn** | **04 41 37.0** | **+0.6** |
| CUKT | | | | *i* AML | | | AML | 04 41 43.0 | |
| | comp=Z,992nm,0.8s | | | | | | | | |
| CUKT | | | | *i* AML | | | AML | 04 41 45.0 | |
| | comp=Z,3μm,0.6s | | | | | | | | |
| **HAKT** | **HAKKARI** | **1.28** | **295** | P | | | **Pg** | **04 41 18.4** | **-0.5** |
| HAKT | | | | S | | | **Sn** | **04 41 37.1** | **+0.2** |
| **ISHB** | **Shabestar** | **1.32** | **16** | *e*Pg | | | **Pn** | **04 41 19.0** | **-0.7** |
| ISHB | | | | *e*Sg | | | **Sg** | **04 41 35.8** | **-0.9** |
| ISHB | | | | *e* | | | | 04 41 37.3 | |
| | comp=Z,65μm,0.4s | | | | | | | | |
| **TAB1** | **Tabriz** | **1.39** | **42** | *e*Pg | | | **Pg** | **04 41 22.3** | **+1.3** |
| TAB1 | | | | *e* | | | | 04 41 29.9 | |
| | comp=Z,36μm,0.2s | | | | | | | | |
| **ITBZ** | **Tabriz** | **1.45** | **33** | *e*Pg | | | **Pn** | **04 41 21.8** | **+0.3** |
| ITBZ | | | | *e* | | | | 04 41 43.5 | |
| | comp=Z,18μm,0.4s | | | | | | | | |
| **IBST** | **Bostanabad** | **1.54** | **63** | *e*Pg | | | **Pg** | **04 41 25.8** | **+1.9** |
| IBST | | | | *e*Sg | | | **Sg** | **04 41 46.2** | **+2.4** |
| IBST | | | | *e* | | | | 04 41 51.7 | |
| | comp=Z,9μm,0.2s | | | | | | | | |
| **IKRK** | **Kirkuk** | **1.74** | **203** | *e*Pg | | | **Pg** | **04 41 28.0** | **+0.3** |
| | baz=21 | | | | | | | | |
| IKRK | | | | *e*Sg | | | **Sg** | **04 41 50.0** | **-0.3** |
| IKRK | | | | AML | | | AML | 04 42 04.3 | |
| | comp=E,2μm,0.6s | | | | | | | | |
| IKRK | | | | AML | | | AML | 04 42 04.8 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| **IMRD** | **Marand** | **1.75** | **14** | *e*Pg | | | **Pn** | **04 41 26.7** | **+1.1** |
| IMRD | | | | *e* | | | | 04 41 32.7 | |
| | comp=Z,10μm,0.2s | | | | | | | | |
| **OZAP** | **Van, Ozalp-Mer** | **1.89** | **331** | P | | | **Pg** | **04 41 30.6** | **+0.1** |
| OZAP | | | | S | | | Sg | 04 42 07.1 | +12 |
| **TVRZ** | **Varzaqan** | **1.91** | **38** | *e*Pn | | | **Pg** | **04 41 31.7** | **+0.8** |
| **IHRS** | **Heris** | **1.98** | **48** | *e*Pn | | | **Pb** | **04 41 31.7** | **+0.6** |
| IHRS | | | | *e* | | | | 04 41 37.9 | |
| | comp=Z,5μm,0.2s | | | | | | | | |
| **ORD** | **Ordubad** | **2.02** | **19** | P | | | **Pb** | **04 41 32.8** | **+1.1** |
| | SNR=56 | | | | | | | | |
| ORD | | | | S | | | **Sb** | **04 41 58.3** | **+1.1** |
| **TVAN** | **Van** | **2.05** | **318** | P | | | **Pg** | **04 41 34.4** | **+0.7** |
| TVAN | | | | S | | | **Sg** | **04 42 03.5** | **+3.2** |
| **GEVA** | **Gevas** | **2.11** | **308** | P | | | **Pb** | **04 41 33.5** | **+0.3** |
| GEVA | | | | S | | | **Sg** | **04 42 03.8** | **+1.6** |
| **VANB** | **Van** | **2.11** | **319** | PN | | | **Pg** | **04 41 34.9** | **+0.1** |
| VANB | | | | SN | | | **Sg** | **04 42 03.1** | **+0.9** |
| **ISRB** | **Sarab** | **2.15** | **67** | *e*Pn | | | **Pg** | **04 41 35.6** | **0.0** |
| ISRB | | | | *e* | | | | 04 42 11.0 | |
| | comp=Z,6μm,0.3s | | | | | | | | |
| **AKDM** | **Akdamar-Van** | **2.17** | **308** | PN | | | **Pb** | **04 41 35.2** | **+0.9** |
| **NAX** | **Nakhchivan** | **2.17** | **7** | P | | | **Pb** | **04 41 35.6** | **+1.3** |
| | SNR=17 | | | | | | | | |
| NAX | | | | S | | | **Sb** | **04 42 02.7** | **+1.1** |
| **PERV** | **Siirt/Pervari-** | **2.28** | **295** | P | | | **Pb** | **04 41 36.7** | **+0.5** |
| PERV | | | | S | | | **Sg** | **04 42 08.3** | **+0.7** |
| PERV | | | | *i* AML | | | AML | 04 42 14.0 | |
| | comp=Z,328nm,1.0s | | | | | | | | |
| PERV | | | | *i* AML | | | AML | 04 42 15.0 | |
| | comp=Z,501nm,0.5s | | | | | | | | |
| **VMUR** | **Van-Muradiye** | **2.34** | **328** | P | | | **Pg** | **04 41 39.8** | **+0.7** |
| VMUR | | | | S | | | **Sg** | **04 42 11.2** | **+1.8** |
| **CLDR** | **Caldiran** | **2.34** | **336** | P | | | **Pb** | **04 41 38.0** | **+0.8** |
| CLDR | | | | S | | | **Sg** | **04 42 11.8** | **+2.2** |
| **MAKU** | **Maku** | **2.37** | **351** | *e*Pn | | | **Pb** | **04 41 38.3** | **+0.7** |
| **SBZ** | **Shahbuz** | **2.40** | **7** | P | | | **Pb** | **04 41 38.7** | **+0.5** |
| | SNR=19 | | | | | | | | |
| SBZ | | | | S | | | **Sb** | **04 42 09.2** | **+1.1** |
| **IDHR** | **Dehrash** | **2.52** | **156** | *e*Pn | | | **Pg** | **04 41 44.4** | **+1.8** |
| IDHR | | | | *e* | | | | 04 42 30.0 | |
| | comp=Z,5μm,0.6s | | | | | | | | |
| **ADCV** | **BITLIS_Adilcev** | **2.63** | **314** | P | | | **Pb** | **04 41 42.3** | **+0.2** |
| ADCV | | | | S | | | **Sb** | **04 42 17.1** | **+2.3** |
| **HYR** | **Heyderabad** | **2.71** | **355** | P | | | **Pb** | **04 41 42.0** | **-1.4** |
| | SNR=5.6 | | | | | | | | |
| HYR | | | | S | | | **Sn** | **04 42 14.0** | **+2.0** |
| **BLIS** | **Bitlis-Merkez** | **2.79** | **301** | P | | | **Pb** | **04 41 45.8** | **+0.9** |
| BLIS | | | | S | | | **Sb** | **04 42 19.8** | **+0.3** |
| **GRMI** | **Germi** | **2.81** | **50** | *e*Pn | | | **Pb** | **04 41 45.4** | **+0.3** |
| **ZNJK** | **Zanjan** | **2.85** | **96** | *e*Pn | | | **Pg** | **04 41 47.5** | **-1.4** |
| **IGHG** | **Ghaleghazi** | **2.92** | **156** | *e*Pn | | | **Pg** | **04 41 49.7** | **-0.5** |
| IGHG | | | | *e* | | | | 04 42 56.3 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **2.96** | **317** | PN | | | **Pb** | **04 41 47.4** | **-0.3** |
| MLAZ | | | | SN | | | **Sb** | **04 42 25.3** | **+1.0** |
| **QRD** | **Qoradiz** | **2.98** | **34** | P | | | **Pb** | **04 41 49.7** | **+1.8** |
| | SNR=6.0 | | | | | | | | |
| QRD | | | | S | | | **Sg** | **04 42 29.8** | **-0.1** |
| **LRK** | **Lerik** | **3.00** | **56** | P | | | **Pg** | **04 41 52.8** | **+1.0** |
| | SNR=5.6 | | | | | | | | |
| LRK | | | | S | | | **Sg** | **04 42 33.3** | **+2.7** |
| **MIDY** | **Mardin/Midyat-** | **3.03** | **279** | P | | | **Pb** | **04 41 50.0** | **+1.1** |
| MIDY | | | | S | | | **Sg** | **04 42 29.7** | **-1.9** |
| MIDY | | | | *i* AML | | | AML | 04 42 47.0 | |
| | comp=Z,165nm,0.5s | | | | | | | | |
| **TASB** | **TASBURUN-IGDIR** | **3.05** | **347** | PN | | | **Pg** | **04 41 51.8** | **-1.0** |
| **KER** | **Kermanshah** | **3.08** | **148** | *e*Pn | | | **Pg** | **04 41 51.8** | **-1.5** |
| **YRD** | **Yardimli** | **3.09** | **51** | P | | | **Pg** | **04 41 53.5** | **0.0** |
| | SNR=35 | | | | | | | | |
| YRD | | | | S | | | **Sg** | **04 42 35.7** | **+2.2** |
| **KCHF** | **Cheshme Sefid,** | **3.13** | **150** | *e*Pn | | | **Pg** | **04 41 52.0** | **-2.4** |
| KCHF | | | | *e* | | | | 04 42 58.8 | |
| | comp=Z,2μm,1.2s | | | | | | | | |
| **GNI** | **Garni** | **3.15** | **354** | PN | | | **Pg** | **04 41 53.8** | **-0.8** |
| **KOTA** | **Agri, Merkez-K** | **3.18** | **332** | P | | | **Pb** | **04 41 51.8** | **+0.3** |
| **BTMN** | **Batman** | **3.22** | **287** | P | | | **Pg** | **04 41 54.9** | **-1.0** |
| BTMN | | | | S | | | **Sg** | **04 42 36.1** | **-1.6** |
| BTMN | | | | *i* AML | | | AML | 04 42 50.0 | |
| | comp=Z,158nm,0.9s | | | | | | | | |
| BTMN | | | | *i* AML | | | AML | 04 42 52.0 | |
| | comp=Z,211nm,1.1s | | | | | | | | |
| **IALM** | **Almabolaq** | **3.25** | **130** | *e*Pn | | | **Pb** | **04 41 52.7** | **-0.1** |
| **ASTR** | **Astara** | **3.26** | **61** | P | | | **Pg** | **04 41 56.4** | **-0.5** |
| | SNR=10 | | | | | | | | |
| ASTR | | | | S | | | **Sg** | **04 42 41.4** | **+2.3** |
| **BLQ** | **Beylaqan** | **3.29** | **34** | P | | | **Pb** | **04 41 54.3** | **+0.9** |
| | SNR=12 | | | | | | | | |
| BLQ | | | | S | | | **Sb** | **04 42 36.3** | **+2.5** |
| **SVAN** | **Silvan-Diyarba** | **3.34** | **291** | PN | | | **Pn** | **04 41 50.0** | **+2.6** |
| **IBZA** | **Bozab** | **3.36** | **138** | *e*Pn | | | **Pg** | **04 41 56.7** | **-2.0** |
| **GLBA** | **Clilabad** | **3.38** | **48** | P | | | **Pb** | **04 41 56.9** | **+2.1** |
| | SNR=9.2 | | | | | | | | |
| GLBA | | | | S | | | **Sg** | **04 42 40.9** | **-2.0** |
| **AGDM** | **Agdam** | **3.44** | **26** | P | | | **Pb** | **04 41 55.0** | **-0.9** |
| | SNR=6.0 | | | | | | | | |
| AGDM | | | | S | | | **Sb** | **04 42 40.5** | **+2.3** |
| **MARD** | **Mardin** | **3.51** | **276** | P | | | **Pn** | **04 41 52.2** | **+2.4** |
| MARD | | | | S | | | **Sb** | **04 42 43.0** | **+2.9** |
| MARD | | | | *i* AML | | | AML | 04 42 54.0 | |
| | comp=Z,255nm,0.7s | | | | | | | | |
| MARD | | | | *i* AML | | | AML | 04 42 56.0 | |
| | comp=Z,165nm,0.5s | | | | | | | | |
| MARD | | | | *i* AML | | | AML | 04 42 58.0 | |
| | comp=Z,278nm,0.7s | | | | | | | | |
| **BRDA** | **Brd** | **3.61** | **25** | P | | | **Pb** | **04 41 57.1** | **-1.6** |
| | SNR=3.0 | | | | | | | | |
| **VRTB** | **Varto-Mus** | **3.62** | **307** | PN | | | **Pb** | **04 41 56.2** | **-2.8** |
| **GDB** | **GEDABAY** | **3.73** | **7** | P | | | **Pb** | **04 41 57.4** | **-3.5** |
| | SNR=6.0 | | | | | | | | |
| GDB | | | | S | | | **Sb** | **04 42 43.7** | **-2.8** |
| **GANJ** | **Ganja** | **3.74** | **14** | P | | | **Pb** | **04 41 58.6** | **-2.3** |
| | SNR=4.6 | | | | | | | | |
| GANJ | | | | S | | | **Sb** | **04 42 44.9** | **-1.6** |
| **QABG** | **Abgarm-Qazvin** | **3.80** | **109** | *e*Pn | | | **Pb** | **04 41 59.9** | **-2.2** |
| **HAGD** | **Aghdareh** | **3.90** | **123** | *e*Pn | | | **Pb** | **04 42 02.0** | **-1.8** |
| HAGD | | | | *e* | | | | 04 43 12.8 | |
| | comp=Z,441nm,0.8s | | | | | | | | |
| **KOPR** | **Koprukoy-ERZUR** | **3.94** | **320** | PN | | | **Pb** | **04 42 01.9** | **-2.6** |
| **IBDR** | **Badra** | **3.95** | **171** | *e*Pn | | | **Pb** | **04 42 02.0** | **-2.5** |
| IBDR | | | | *e*Sn | | | **Sn** | **04 42 45.0** | **+2.6** |
| **KARO** | **Karliova-Bingo** | **3.97** | **306** | PN | | | **Pb** | **04 42 00.8** | **-4.1** |
| **QZX** | **Qazax, Azerbai** | **4.04** | **2** | P | | | **Pn** | **04 42 01.3** | **+4.3** |
| | SNR=5.4 | | | | | | | | |
| QZX | | | | S | | | **Sb** | **04 42 51.0** | **-4.3** |
| **IDOB** | **Doab** | **4.05** | **142** | *e*Pn | | | **Pb** | **04 42 05.1** | **-1.3** |
| **IKFM** | **Kafar-mosalman** | **4.12** | **147** | *e*Pn | | | **Pb** | **04 42 05.9** | **-1.5** |
| **IRAZ** | **Razeghan** | **4.18** | **111** | *e*Pn | | | **Pb** | **04 42 05.9** | **-2.6** |
| **QALM** | **Alamut, Qazvin** | **4.45** | **96** | *e*Pn | | | Pb | 04 42 08.0 | -5.1 |
| **BMDN** | **Meydan** | **4.48** | **137** | *e*Pn | | | **Pb** | **04 42 11.1** | **-2.6** |
| **ASAO** | **Ashtian** | **4.66** | **120** | *e*Pn | | | Pb | 04 42 11.9 | -4.8 |
| **XNQ** | **Khinaliq** | **4.75** | **28** | P | | | Pb | 04 42 14.0 | -4.3 |
| XNQ | | | | S | | | **Sb** | **04 43 13.8** | **-2.2** |
| **SIZA** | **Siyzn** | **4.99** | **35** | P | | | Pb | **04 42 18.6** | **-3.7** |
| **AMIS** | **Naft Sefid** | **6.33** | **146** | *e*Pn | | | Pb | 04 42 36.4 | -8.8 |
| **IPIR** | **Pirpir** | **6.39** | **131** | *e*Pn | | | Pb | 04 42 38.2 | -8.1 |

*IDC **26** 04:47:42.8±1.7, 15°.59S×167°.77E, h120km±14km, mb4.7/24, mb1 4.8/26, mb1mx4.6/35, mbtmp5.1/26, MS3.7/24, Ms1 3.7/24, ms1mx3.5/56, Error ellipse: s-maj=15.5km s-min=11.3km az=100.0*

*NEIC **26** 04:47:43.5±2.1, 15°.65S±0°.07×167°.8E±0°.1, h124km±4km, mb5.0/94, Error ellipse: s-maj=15.0km s-min=9.4km az=64.0*

*NOU **26** 04:47:43.8, 15°.57S×167°.73E, h122km, mb5.1/69, Vanuatu Islands*

*BJI **26** 04:47:43.9±0.0, 15°.01S×167°.57E, h119km, mb5.2/68, mB5.1/41*

*GCMT **26** 04:47:44.5±0.2, 15°.70S±0°.02×167°.49E±0°.02, h138km±2km, MW5.1/114, Moment Tensor Solution. s51,c57; s114,c157; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr5.27±.11; Mθθ0.17±.15; Mϕϕ-5.44±.15; Mrθ0.59±.13; Mθϕ0.28±.17; Mϕr-1.12±.15; Best double couple: M◎5.51100×10^16^ NP1:ϕs3.00000°, δ39.00000°, λ99.00000°. NP2:ϕs171.00000°, δ51.00000°, λ83.00000°. Principal axes: T 5.4450, Plg82.0000°, Azm43.0000°; N 0.1340, Plg6.0000°, Azm176.0000°; P -5.5760, Plg6.0000°, Azm267.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*MOS **26** 04:47:45.5±1.1, 15°.51S×167°.50E, h146km, mb5.2/24 Error ellipse: s-maj=11.1km s-min=7.4km az=123.2*

**ISC 26 04:47:43.2±0.5, 15°.64S±0°.04×167°.74E±0°.06, h127km±4km, n595, σ1s18/607, mb5.1/115, 70C-50D, Fault plane solution: NP1:ϕs157.52586°, δ59.79675°, λ55.72538°. NP2:ϕs31.09209°, δ44.42494°, λ134.05304°. Principal axes:** T Plg59.3971°, Azm16.0619°; N Plg29.1245°, Azm176.4498°; P Plg8.5846°, Azm271.2746°; **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.55** | **290** | | | | **Pn** | **04 48 02.1** | **-0.1** |
| SANVU | | | | | | | **Sn** | **04 48 16.5** | **0.0** |
| **SANVU** | **Saraoutou** | **0.55** | **290** | P | | | **Pn** | **04 48 02.8** | **+0.6** |
| **DVP** | **Devils Point** | **2.12** | **168** | P | | | **Pn** | **04 48 20.2** | **+1.7** |
| **RTV** | **Rentapao** | **2.25** | **163** | P | | | **Pn** | **04 48 21.3** | **+1.3** |
| **LIFNC** | **LIFOU** | **5.14** | **185** | Pn | | | **Pn** | **04 48 57.1** | **-0.9** |
| **LIFNC** | **LIFOU** | **5.14** | **185** | P | | | **Pn** | **04 48 58.1** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **5.89** | **213** | P | | | **Pn** | **04 49 09.5** | **+1.3** |
| **YATNC** | **Mamie plateau,** | **6.44** | **187** | P | | | **Pn** | **04 49 15.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **6.52** | **191** | P | | | **Pn** | **04 49 17.7** | **+1.0** |
| | 51nm,0.3s,baz=40,slow=7.1,SNR=441 | | | | | | | | |
| DZM | | | | S | | | **Sn** | **04 50 28.3** | **-1.5** |
| | 9.0nm,0.3s,baz=323,slow=23,SNR=1.0 | | | | | | | | |
| DZM | | | | LR | | | LR | 04 51 28.1 | |
| | comp=Z,587nm,21.6s,baz=120,slow=34 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **6.52** | **191** | *e*Pn | | | **Pn** | **04 49 17.9** | **+1.2** |
| | 603nm,1.2s | | | | | | | | |
| DZM | | | | *e*Sn | | | **Sn** | **04 50 30.5** | **+0.7** |
| | 575nm,1.0s | | | | | | | | |
| DZM | | | | *e*LR | | | LR | 04 50 48.3 | |
| | comp=Z,1μm,29.4s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **6.52** | **191** | Pn | | | **Pn** | **04 49 17.3** | **+0.5** |
| **DZM** | **Mont Dzumac** | **6.52** | **191** | P | | | **Pn** | **04 49 18.5** | **+1.8** |
| **NOUC** | **Port Laguerre** | **6.57** | **192** | P | | | **Pn** | **04 49 18.9** | **+1.5** |
| **ONTNC** | **Ouen Toro** | **6.75** | **190** | Pn | | | **Pn** | **04 49 21.0** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **6.75** | **190** | P | | | **Pn** | **04 49 21.9** | **+2.2** |
| | 481nm,0.6s | | | | | | | | |
| **OUENC** | **Ouen Island, N** | **6.80** | **187** | Pn | | | **Pn** | **04 49 20.8** | **+0.3** |
| **OUENC** | **Ouen Island, N** | **6.80** | **187** | P | | | **Pn** | **04 49 22.8** | **+2.3** |
| **PINNC** | **Pines Island,** | **6.95** | **182** | Pn | | | **Pn** | **04 49 23.7** | **+1.3** |
| **PINNC** | **Pines Island,** | **6.95** | **182** | P | | | **Pn** | **04 49 23.9** | **+1.5** |
| **HNR** | **Honiara** | **9.79** | **308** | P | | | **Pn** | **04 50 02.0** | **+1.3** |
| | 36nm,0.3s,baz=161,slow=3.4,SNR=5.6 | | | | | | | | |
| HNR | | | | LR | | | LR | 04 53 33.8 | |
| | comp=Z,659nm,20.5s,baz=150,slow=36 | | | | | | | | |
| **HNR** | **Honiara** | **9.79** | **308** | P | | | **Pn** | **04 50 01.4** | **+0.6** |
| **HNR** | **Honiara** | **9.79** | **308** | Pn | | | **Pn** | **04 50 01.4** | **+0.6** |
| **MSVF** | **Nonsavu** | **10.10** | **103** | LR | | | LR | 04 53 11.5 | |
| | comp=Z,584nm,19.7s,baz=189,slow=33 | | | | | | | | |
| **RK1H** | **Rockhampton Ha** | **17.98** | **242** | P | | | **Pn** | **04 51 46.3** | **+1.2** |
| | 102nm,1.0s | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.34** | **235** | P | | | **Pn** | **04 51 50.3** | **+0.8** |
| | baz=18,SNR=55 | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.34** | **235** | P | | | **Pn** | **04 51 49.1** | **-0.4** |
| EIDS | | | | IAmb | | | IAmb | 04 51 51.4 | |
| | comp=Z,118nm,0.8s | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.34** | **235** | P | | | **Pn** | **04 51 50.5** | **+1.0** |
| **RMQ** | **Roma** | **20.71** | **235** | P | | | Pn | 04 52 15.5 | -1.7 |
| | baz=21,SNR=44 | | | | | | | | |
| **RMQ** | **Roma** | **20.71** | **235** | P | | | **P** | **04 52 15.3** | **+1.7** |
| | comp=Z,67nm,1.1s | | | | | | | | |
| **ARMA** | **Armidale** | **20.85** | **222** | P | | | Pn | 04 52 17.7 | -1.2 |
| | baz=21,SNR=7.9 | | | | | | | | |
| **ARMA** | **Armidale** | **20.85** | **222** | P | | | **P** | **04 52 16.3** | **+1.2** |
| ARMA | | | | IAmb | | | IAmb | 04 52 19.8 | |
| | comp=Z,99nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **20.85** | **222** | P | | | Pn | 04 52 18.0 | -0.9 |
| **CTA** | **Charters Tower** | **20.91** | **255** | P | | | **P** | **04 52 16.8** | **+1.0** |
| | comp=Z,32nm,0.9s,baz=77,slow=12,SNR=47 | | | | | | | | |
| **CTA** | **Charters Tower** | **20.91** | **255** | P | | | **P** | **04 52 17.0** | **+1.2** |
| | comp=Z,69nm,0.9s | | | | | | | | |
| **PMG** | **Port Moresby** | **21.01** | **285** | P | | | **P** | **04 52 17.8** | **+0.9** |
| | comp=Z,41nm,1.0s,baz=44,slow=1.8,SNR=6.1 | | | | | | | | |
| **PMG** | **Port Moresby** | **21.01** | **285** | *ce*P | | | **P** | **04 52 18.1** | **+1.3** |
| PMG | | | | pmax | | | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **21.01** | **285** | P | | | **P** | **04 52 17.3** | **+0.5** |
| PMG | | | | IAmb | | | IAmb | 04 52 49.4 | |
| | comp=Z,103nm,1.3s | | | | | | | | |
| **PMG** | **Port Moresby** | **21.01** | **285** | P | | | **P** | **04 52 18.6** | **+1.8** |
| | comp=Z,42nm,1.0s | | | | | | | | |
| **MTSU** | **Mount Surprise** | **22.54** | **260** | P | | | **P** | **04 52 33.8** | **+0.9** |
| | baz=23,SNR=41 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **22.54** | **260** | P | | | **P** | **04 52 35.0** | **+2.1** |
| **COEN** | **Coen** | **23.80** | **271** | P | | | **P** | **04 52 44.4** | **-0.2** |
| COEN | | | | IAmb | | | IAmb | 04 52 47.2 | |
| | comp=Z,51nm,0.9s | | | | | | | | |
| **COEN** | **Coen** | **23.80** | **271** | P | | | **P** | **04 52 45.8** | **+1.2** |
| **URZ** | **Urewera** | **24.01** | **162** | P | | | **P** | **04 52 47.8** | **+1.7** |
| | comp=Z,6.6nm,0.3s,baz=282,slow=1.8,SNR=14 | | | | | | | | |
| URZ | | | | LR | | | LR | 05 00 32.3 | |
| | comp=Z,101nm,21.1s,baz=282,slow=32 | |

ASAR PcP **PcP** **04 56 46.6 -0.3**
**BBOO Buckleboo 33.39 233** P **P** **04 54 10.4 +0.8**
baz=34,SNR=5.2
**BBOO Buckleboo 33.39 233** P **P** **04 54 10.4 +0.8**
BBOO IAmb IAmb 04 54 11.3
comp=Z,22nm,0.7s
BBOO PcP **PcP** **04 56 47.8 -0.6**
**BBOO Buckleboo 33.39 233** P **P** **04 54 10.5 +0.8**
**MULG Mulgathing 34.11 239** P **P** **04 54 16.6 +0.7**
**KDU Kakadu 34.29 270** P **P** **04 54 17.1 -0.5**
baz=34,SNR=8.4
**KDU Kakadu 34.29 270** P **P** **04 54 17.4 -0.2**
**MTN Manton Dam 35.56 270** P **P** **04 54 28.5 -0.1**
baz=36,SNR=3.7
**MTN Manton Dam 35.56 270** P **P** **04 54 28.4 -0.1**
**MTN Manton Dam 35.56 270** P **P** **04 54 28.5 -0.1**
**GUMO Guam 36.80 321** LR LR 05 08 30.2
comp=Z,121nm,19.5s,baz=88,slow=34
**FAKI Fak Fak 37.15 286** P **P** **04 54 41.9 -0.2**
FAKI IAmb IAmb 04 54 43.7
comp=Z,52nm,1.0s
**FAKI Fak Fak 37.15 286** P **P** **04 54 42.8 +0.7**
comp=Z,57nm,1.0s
**FAKI Fak Fak 37.15 286** P **P** **04 54 42.4 +0.3**
**KNRA Kununurra 37.49 265** P **P** **04 54 44.3 -0.6**
baz=38,SNR=32
**KNRA Kununurra 37.49 265** P **P** **04 54 44.1 -0.8**
KNRA IAmb IAmb 04 54 45.5
comp=Z,53nm,0.7s
**KNRA Kununurra 37.49 265** P **P** **04 54 44.9 0.0**
**WRKA Warakurna 38.03 249** P **P** **04 54 49.3 -0.2**
baz=38,SNR=42
**WRKA Warakurna 38.03 249** P **P** **04 54 49.9 +0.5**
**SIJI Sorong 38.85 289** LR LR 05 12 24.3
comp=Z,118nm,18.1s,baz=143,slow=38
**FORT Forrest 39.23 240** P **P** **04 54 60.0 +0.7**
baz=39,SNR=32
**FORT Forrest 39.23 240** P **P** **04 54 59.9 +0.5**
FORT IAmb IAmb 04 55 00.9
comp=Z,61nm,0.8s
**FORT Forrest 39.23 240** P **P** **04 55 00.5 +1.2**
**FITZ Fitzroy Crossi 40.30 260** P **P** **04 55 08.5 +0.2**
comp=Z,40nm,0.5s,baz=86,slow=9.2
FITZ LR LR 05 12 23.8
comp=Z,214nm,18.2s,baz=102,slow=37
**FITZ Fitzroy Crossi 40.30 260** P **P** **04 55 08.1 -0.2**
baz=40,SNR=114
**FITZ Fitzroy Crossi 40.30 260** P **P** **04 55 08.8 +0.5**
**PPT2 Papeete2 40.89 99** *e*LR LR 05 05 20.3
comp=Z,444nm,33.2s
**SOEI Soe 42.75 272** P **P** **04 55 28.3 -0.2**
SOEI IAmb IAmb 04 56 38.0
comp=Z,31nm,1.0s
**SOEI Soe 42.75 272** P **P** **04 55 28.9 +0.4**
comp=Z,29nm,1.0s
**SOEI Soe 42.75 272** P **P** **04 55 29.4 +0.9**
**BATI Baumata 43.23 272** LR LR 05 13 25.2
comp=Z,178nm,18.4s,baz=110,slow=36
**SANI Sanana 43.29 284** P **P** **04 55 33.8 +1.1**
comp=Z,45nm,0.9s
**SANI Sanana 43.29 284** P **P** **04 55 33.1 +0.4**
**MEEK Meekatharra 46.86 248** P **P** **04 56 01.1 +0.2**
baz=47,SNR=26
**MEEK Meekatharra 46.86 248** P **P** **04 56 02.0 +1.2**
**GTOI Gorontalo 47.04 286** P **P** **04 56 05.6 +3.3**
comp=Z,12nm,0.8s
**WBSI Waikabubak, Su 47.47 271** P **P** **04 56 07.5 +1.8**
comp=Z,34nm,1.0s
**KLBR Kellerberrin 48.06 241** P **P** **04 56 09.8 -0.2**
baz=48,SNR=7.3
**BNSI Bone 48.10 278** P **P** **04 56 11.3 +0.8**
**BLDU Balliduu 48.84 243** P **P** **04 56 15.2 -0.8**
baz=49,SNR=5.7
**PLAI Plampang 49.20 272** P **P** **04 56 20.0 +1.0**
comp=Z,40nm,1.1s
**PLAI Plampang 49.20 272** P **P** **04 56 19.8 +0.8**
**TOLI2 Tolitoli 49.28 285** P **P** **04 56 18.2 -1.4**
TOLI2 IAmb IAmb 04 56 20.0
comp=Z,13nm,0.7s
**TOLI2 Tolitoli 49.28 285** P **P** **04 56 19.4 -0.1**
**MORW Morawa 49.29 245** P **P** **04 56 19.5 +0.1**
baz=49,SNR=8.4
**MORW Morawa 49.29 245** P **P** **04 56 19.2 -0.3**
MORW IAmb IAmb 04 56 20.8
comp=Z,28nm,0.9s
**MORW Morawa 49.29 245** P **P** **04 56 20.0 +0.6**
**MPSI Mapaga 49.82 284** P **P** **04 56 23.7 0.0**
comp=Z,57nm,0.9s
**GIRL Giralia 50.81 253** P **P** **04 56 32.5 +1.6**
**TAOE Nuku Hiva Isla 51.27 89** *e*LR LR 05 10 12.9
comp=Z,270nm,39.0s
**KKM Kota Kinabalu 55.38 289** P **P** **04 57 04.7 0.0**
KKM IAmb IAmb 04 57 06.2
comp=Z,53nm,1.2s
**KKM Kota Kinabalu 55.38 289** P **P** **04 57 05.7 +1.0**
**PCJI Pacitan 55.70 271** P **P** **04 57 07.5 +0.6**
comp=Z,95nm,1.1s
**UGM Wanagama 56.40 271** P **P** **04 57 11.8 -0.1**
**JOW Kunigami 57.02 317** P **P** **04 57 17.0 +1.1**
JOW IAmb IAmb 04 57 18.0
comp=Z,39nm,0.9s
**STKI Sintang 57.67 280** P **P** **04 57 22.5 +1.7**
**SBUM Sibu 57.75 283** IAmb IAmb 04 57 23.1
comp=Z,11nm,1.1s
**JYT Yasato 57.78 334** P **P** **04 57 22.6 +1.5**
**KPJI Karang Pucung 58.06 271** P **P** **04 57 24.2 +0.6**
**INU Inuyama 58.48 331** P **P** **04 57 26.8 +0.8**
**JMN Monobe 58.75 327** P **P** **04 57 28.9 +0.9**
JMN IAmb IAmb 04 57 29.8
comp=Z,43nm,0.9s
**MJAR Matsushiro Arr 58.91 332** P **P** **04 57 28.4 -0.6**
comp=Z,24nm,0.8s,baz=165,slow=6.9,SNR=30
MJAR PcP **PcP** **04 58 17.9 +0.9**
comp=Z,10nm,0.9s,baz=153,slow=3.5,SNR=4.5
**MJAR Matsushiro Arr 58.91 332** IAmb IAmb 04 57 30.2
comp=Z,21nm,0.9s
**MAJO Matsushiro 58.91 332** *i* P **P** **04 57 29.4 +0.4**
MAJO pmax pmax
comp=Z,56nm,1.0s
**MAJO Matsushiro 58.91 332** P **P** **04 57 28.2 -0.9**
**MAJO Matsushiro 58.91 332** P **P** **04 57 28.9 -0.1**
**MAT Matsushiro 58.91 332** P **P** **04 57 28.1 -0.9**
**MJB9 Matsu-Tunnel 58.92 332** P **P** **04 57 28.4 -0.6**
**KSM Kuching 59.22 281** IAmb IAmb 04 57 33.3
comp=Z,52nm,1.2s
**KSM Kuching 59.22 281** P **P** **04 57 33.1 +1.5**
comp=Z,41nm,1.0s
**CNJI Cibinong 59.80 271** P **P** **04 57 35.1 -0.5**
comp=Z,106nm,0.9s
**JNU Nakatsue 59.92 324** P **P** **04 57 37.0 +1.0**
**NACB Ninganchiao 59.96 310** P **P** **04 57 35.3 -1.1**
**JHS Saijyo 60.13 327** P **P** **04 57 38.1 +0.7**
**SSLB Suanglung 60.20 310** P **P** **04 57 37.1 -1.0**
**SSLB Suanglung 60.20 310** P **P** **04 57 38.3 +0.2**
**CBJI Citeko 60.29 271** P **P** **04 57 38.8 -0.1**
**DBJI Dramaga 60.35 271** P **P** **04 57 40.0 +0.6**
**YHNB Yeheng 60.41 311** P **P** **04 57 38.8 -0.8**
**YHNB Yeheng 60.41 311** P **P** **04 57 40.2 +0.6**
**JTM Tenmabayashi 61.35 337** P **P** **04 57 46.7 +1.2**
**CGJI Cibinong 61.36 271** P **P** **04 57 45.6 -0.5**
comp=Z,2µmcomp=Z,171nm,0.9s
**JTU Tsushima 61.78 324** P **P** **04 57 47.9 -0.6**
**VNDA Vanda 61.97 181** P **P** **04 57 50.1 +0.9**
comp=Z,2.1nm,0.5s,baz=14,slow=5.3,SNR=6.2
VNDA LR LR 05 21 33.2
comp=Z,42nm,20.2s,baz=94,slow=33
**KASI Kota Agung 62.78 272** P **P** **04 57 54.0 -1.6**
comp=Z,707nmcomp=Z,91nm,0.9s
**MDSI Maura Dua 63.35 273** P **P** **04 57 58.0 -1.4**
**ASAJ Asahikawa 63.74 340** LR LR 05 21 23.2
comp=Z,42nm,21.4s,baz=119,slow=32
**TJN Taejon 64.27 325** *ce*P **P** **04 58 05.9 +1.0**
**MNAI Manna 64.56 273** P **P** **04 58 06.0 -1.4**
**KSRS Korea Array 64.74 326** P **P** **04 58 08.2 +0.2**
comp=Z,7.6nm,0.8s,baz=140,slow=7.0,SNR=25
KSRS PcP **PcP** **04 58 41.8 +1.3**
comp=Z,5.8nm,1.1s,baz=138,slow=5.7,SNR=5.3
KSRS LR LR 05 22 47.4
comp=Z,25nm,22.0s,baz=20,slow=32
**KSAR Wonju Array Be 64.75 326** P **P** **04 58 07.6 -0.5**
**KSAR Wonju Array Be 64.75 326** P **P** **04 58 07.6 -0.5**
**YSS Yuzh-Sakhalins 66.23 342** *α i* P **P** **04 58 18.8 +1.5**
YSS *e**PP **pP** **04 58 47.7 +0.3**
YSS *e* 04 59 06.4
YSS *eS* **S** **05 06 54.4 -1.8**
YSS pmax pmax
comp=Z,90nm,1.0s
YSS MLR MLR
comp=Z,300nm,15.0s
**YSS Yuzh-Sakhalins 66.23 342** P **P** **04 58 18.4 +1.1**
**YSS Yuzh-Sakhalins 66.23 342** P **P** **04 58 19.4 +2.1**
**NJ2 Nanjing 66.64 316** ⇑P **P** **04 58 20.8 +0.5**
NJ2 pmax pmax
comp=Z,36nm,0.8s
**MSHR Mys Shultsa 66.99 331** *ce*P **P** **04 58 23.6 +1.3**
MSHR pmax pmax
comp=Z,29nm,1.1s
**VLA Vladivostok 67.08 332** *i* P **P** **04 58 23.4 +0.5**
VLA pmax pmax
comp=Z,40nm,1.0s
**USA0B Ussuriysk Arra 67.89 333** *c i* P **P** **04 58 28.5 +0.6**
**USA0B Ussuriysk Arra 67.89 333** P **P** **04 58 28.3 +0.4**
**USRK Ussuriysk Ar. 67.89 333** P **P** **04 58 28.9 +1.0**
comp=Z,77nm,1.0s,baz=149,slow=4.7,SNR=61
**UGL Uglegorsk 68.33 342** ⇓*i* P **P** **04 58 32.2 +1.6**
UGL pmax pmax
comp=Z,90nm,1.1s
**PET Petropavlovsk 68.82 354** *ce*P **P** **04 58 32.8 -0.7**
PET pmax pmax
comp=Z,46nm,1.3s
**WHN Wuhan 68.88 312** ⇑P **P** **04 58 34.5 +0.1**
WHN pP **pP** **04 59 02.5 -2.9**
WHN pmax pmax
comp=Z,52nm,0.8s
**IPM Ipoh 68.96 281** P **P** **04 58 36.2 +0.9**
**PETK Petropavlovsk- 69.00 354** P **P** **04 58 35.6 +0.9**
comp=Z,11nm,0.9s,baz=182,slow=10,SNR=7.9
**PETK Petropavlovsk- 69.00 354** P **P** **04 58 35.1 +0.4**
**GULI GuiLin 69.11 305** ⇓P **P** **04 58 36.3 +0.3**
**MNSI Mandailing Nat 69.22 277** P **P** **04 58 37.1 +0.2**
**MDJ Mudanjiang 69.29 332** P **P** **04 58 37.8 +1.2**
MDJ pmax pmax
comp=Z,120nm,1.0s
MDJ pmax pmax
comp=Z,250nm,4.7s
**MDJ Mudanjiang 69.29 332** P **P** **04 58 37.9 +1.3**
**DL2 Dalian 69.29 323** P **P** **04 58 37.5 +0.8**
DL2 pmax pmax
comp=Z,73nm,0.9s
**TIA Tai'an 70.31 318** ⇑P **P** **04 58 43.0 -0.1**
TIA pmax pmax
comp=Z,21nm,0.7s
**RPSI Rantau Prapat 70.41 279** P **P** **04 58 43.2 -0.9**
RPSI IAmb IAmb 04 58 44.5
comp=Z,30nm,1.1s
**PSI Prapat 70.44 279** P **P** **04 58 43.2 -1.3**
PSI pmax pmax
comp=Z,30nm,1.1s
**PSI Prapat 70.44 279** P **P** **04 58 44.1 -0.4**
**CN2 Changchun 70.65 329** *e*P **P** **04 58 45.5 +0.5**
CN2 *e*pP pwP 04 59 19.0 +0.4
CN2 *eS* **S** **05 07 49.0 +0.2**
CN2 pmax pmax
comp=Z,40nm,0.9s
CN2 pmax pmax
comp=Z,200nm,4.0s
**BNX BinXian 71.14 331** ⇑P **P** **04 58 48.0 +0.1**
BNX pmax pmax
comp=Z,100nm,0.8s
BNX pmax pmax
comp=Z,160nm,4.3s
**GRNR Gornyy 71.59 340** ⇑*i* P **P** **04 58 52.2 +1.7**
GRNR *eS* **S** **05 08 04.2 +4.8**
GRNR pmax pmax
comp=E,9.0nm,1.0s
GRNR pmax pmax
comp=Z,50nm,1.1s
GRNR smax smax
comp=E,2.0nm,0.8s
**KLR Kul'dur 72.01 336** P **P** **04 58 54.2 +1.2**
comp=E,61nm,1.1s,baz=131,slow=4.2,SNR=96
**KLR Kul'dur 72.01 336** *ce*P **P** **04 58 54.0 +1.0**
KLR pmax pmax
comp=Z,97nm,1.2s
**LYN LuoYang 72.43 315** ⇑*i* P **P** **04 58 56.5 +0.7**
LYN pmax pmax
comp=Z,50nm,0.9s
**HNS HongShan 72.57 318** ⇑P **P** **04 58 57.5 +0.9**
HNS pmax pmax
comp=Z,60nm,1.1s
**GYA Guiyang 72.60 305** ⇑*i* P **P** **04 58 57.3 +0.1**
GYA PcP **PcP** **04 59 14.0 -0.1**
GYA pP pP 04 59 31.5 +3.0
GYA pmax pmax
comp=Z,32nm,1.0s
**BJI Beijing 73.25 321** P **P** **04 59 00.8 +0.3**
BJI pmax pmax
comp=Z,39nm,0.9s
**TIY Taiyuan 74.23 317** ⇑P **P** **04 59 07.8 +1.4**
TIY pmax pmax
comp=Z,38nm,1.0s
**XAN Xi'an 74.63 313** P **P** **04 59 09.3 +0.5**
XAN pmax pmax
comp=Z,54nm,1.0s
XAN pmax pmax
comp=Z,230nm,7.3s
**KMI Kunming 75.16 302** ⇓P **P** **04 59 13.5 +1.2**
KMI pmax pmax
comp=Z,32nm,0.8s
**XLT XiLinHaoTe 75.70 324** ⇑*i* P **P** **04 59 15.8 +1.0**
XLT PcP **PcP** **04 59 27.0 +0.1**
XLT pP pP 04 59 45.8 +0.2
XLT sP sP 05 00 02.3 +3.4
XLT pmax pmax
comp=Z,53nm,1.5s
XLT pmax pmax
comp=Z,130nm,4.7s
**CM31 Chiang Mai Arr 75.73 294** P **P** **04 59 16.6 +1.3**
CM31 IAmb IAmb 04 59 17.7
comp=Z,22nm,0.9s
**CMAR Chiang Mai Arr 75.73 294** P **P** **04 59 16.6 +1.3**
comp=Z,7.9nm,0.6s,baz=130,slow=4.5,SNR=44
**CMAR Chiang Mai Arr 75.73 294** *ce*P **P** **04 59 17.1 +1.7**
CMAR pmax pmax
comp=Z,8.0nm,0.5s
**CMAR Chiang Mai Arr 75.73 294** P **P** **04 59 16.2 +0.8**
**CHTO Chiang Mai 75.86 294** P **P** **04 59 16.0 -0.1**
CHTO pmax pmax
comp=Z,20nm,1.0s
**CHTO Chiang Mai 75.86 294** P **P** **04 59 16.0 -0.1**
CHTO IAmb IAmb 04 59 18.1
comp=Z,20nm,0.9s
**CHTO Chiang Mai 75.86 294** P **P** **04 59 17.7 +1.6**
**MA2 Magadan 76.20 351** P **P** **04 59 17.3 +0.2**
comp=Z,2.8nm,0.3s,baz=171,slow=6.6,SNR=7.5
MA2 LR LR 05 29 33.6
comp=Z,36nm,19.6s,baz=140,slow=33
**MA2 Magadan 76.20 351** *ce*P **P** **04 59 17.8 +0.7**
MA2 pmax pmax
comp=Z,21nm,2.5s
**MA2 Magadan 76.20 351** P **P** **04 59 16.0 -1.1**
**MA2 Magadan 76.20 351** P **P** **04 59 17.9 +0.8**
**HHC Hu-ho-hao-te 76.56 320** ⇑P **P** **04 59 21.0 +1.2**
HHC pmax pmax
comp=Z,50nm,0.9s
HHC pmax pmax
comp=Z,180nm,5.3s
**PZH PanZhiHua 76.56 303** P **P** **04 59 20.0 -0.1**
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,90nm,4.8s
**CD2 Chengdu 76.92 308** *e*P **P** **04 59 22.5 +0.6**
**ZEA Zeya 77.30 337** *e*P **P** **04 59 24.6 +1.2**
ZEA pmax pmax
comp=E,10.0nm,0.9s
ZEA pmax pmax
comp=N,30nm,1.1s
ZEA pmax pmax
comp=Z,50nm,1.0s
**BTO Baotou 77.40 319** *e*P **P** **04 59 26.3 +1.9**
**SEY Seymchan 79.23 353** P **P** **04 59 33.8 -0.1**
comp=Z,3.6nm,0.7s,baz=167,slow=6.7,SNR=16
**SEY Seymchan 79.23 353** *i* P **P** **04 59 34.7 +0.9**
**LZH Lanzhou 79.26 312** *e*P **P** **04 59 36.8 +1.9**
LZH pP pP 05 00 11.0 +4.6
LZH sP sP 05 00 23.3 +3.6
LZH pmax pmax
comp=Z,68nm,1.1s
LZH pmax pmax
comp=Z,210nm,4.7s
**CIT Chita 82.08 330** *e*P **P** **04 59 50.2 +0.8**
CIT pmax pmax
comp=Z,219nm,1.2s
**ANM Nome 82.56 11** P **P** **04 59 52.7 +1.2**
baz=206
**M19K Big River Lodg 82.87 17** P **P** **04 59 55.0 +1.8**
baz=216
**L19K White Mountain 82.97 17** P **P** **04 59 54.8 +1.1**
L19K IAmb IAmb 04 59 57.9
comp=Z,14nm,1.1s
**L19K White Mountain 82.97 17** P **P** **04 59 55.2 +1.5**
baz=216
**YAK Yakutsk 83.02 343** P **P** **04 59 54.0 +0.1**
comp=Z,15nm,0.4s,baz=122,slow=0.5,SNR=12
**YAK Yakutsk 83.02 343** *c i* P **P** **04 59 53.8 -0.1**
YAK *e* 05 03 05.2
YAK *eS* **S** **05 10 02.8 +0.4**
YAK *eSS* **SS** **05 15 29.3 -0.1**
YAK *eSSS* SSS 05 18 58.1
YAK pmax pmax
comp=Z,96nm,1.1s
YAK pmax pmax
comp=N,25nm,1.5s
YAK pmax pmax
comp=E,14nm,1.4s
YAK pmax pmax
comp=Z,142nm,5.7s
YAK pmax pmax
comp=N,128nm,4.3s
YAK pmax pmax
comp=E,128nm,4.8s
YAK smax smax
comp=E,143nm,6.3s
YAK smax smax
comp=N,136nm,5.8s
**YAK Yakutsk 83.02 343** P **P** **04 59 53.9 0.0**
**ULN Ulaanbaatar 83.13 324** *ce*P **P** **04 59 55.7 +0.7**
ULN pmax pmax
comp=Z,96nm,1.0s
**ULN Ulaanbaatar 83.13 324** P **P** **04 59 55.0 0.0**
**TTA Tatalina 83.26 16** P **P** **04 59 56.7 +1.4**
baz=215
**BILL Bilibino 83.45 359** *de*P **P** **04 59 55.5 -0.5**
BILL *SP **pwP** **05 00 33.0 +2.3**
BILL *e* 05 00 50.8
BILL *e* 05 11 27.6
BILL SS SS 05 15 42.0 +6.5
BILL pmax pmax
comp=Z,13nm,1.5s
**L20K Farewell, AK 83.47 17** P **P** **04 59 57.3 +1.0**
baz=217
**SONM Songino Array 83.49 323** P **P** **04 59 57.4 +0.5**
comp=Z,42nm,1.0s,baz=141,slow=5.5,SNR=178
**GTA Gaotai 83.62 314** ⇑P **P** **04 59 58.5 +0.8**
GTA pP pP 05 00 31.5 +1.9
GTA sP sP 05 00 44.8 +1.9
GTA PP **PP** **05 03 10.5 -1.8**
GTA pmax pmax
comp=Z,47nm,1.4s
GTA pmax pmax
comp=Z,160nm,6.9s
GTA LR LR
comp=Z,120nm,20.0s
GTA LR LR
comp=Z,270nm,24.7s
GTA LR LR
comp=Z,79nm,18.5s
**PWL Port Wells 83.91 20** P **P** **04 59 58.5 -0.1**
baz=222
**M22K Willow 84.02 19** P **P** **05 00 00.1 +1.1**
baz=220
**K20K Telida 84.13 16** P **P** **05 00 01.0 +1.4**
baz=217
**PMR Palmer 84.20 19** P **P** **05 00 01.0 +1.1**
baz=221
**KNK Knik Glacier 84.28 20** P **P** **05 00 00.3 -0.1**
baz=222
**SHL Shillong 84.39 298** P **P** **05 00 02.1 +0.1**
SHL pmax pmax
comp=Z,43nm,0.9s
**SHL Shillong 84.39 298** P **P** **05 00 02.0 +0.1**
SHL IAmb IAmb 05 00 03.2
comp=Z,43nm,0.9s
**CUT Chulitna 84.47 18** P **P** **05 00 01.1 -0.1**
baz=220
**CAST Castle Rocks 84.72 17** IAmb IAmb 05 00 02.7
comp=Z,21nm,1.2s
**CAST Castle Rocks 84.72 17** P **P** **05 00 01.9 -0.7**
baz=219
**J20K Nowinta River 84.77 16** IAmb IAmb 05 00 04.4
comp=Z,25nm,1.6s
**J20K Nowinta River 84.77 16** P **P** **05 00 02.8 0.0**
baz=217
**SCM Sheep Creek Mo 84.96 20** P **P** **05 00 05.2 +1.3**
baz=223
**CHUM Lake Minchumin 85.03 17** P **P** **05 00 03.7 -0.3**
baz=218
**O02D Mt. Diablo Mer 85.03 46** P **P** **05 00 05.1 +0.4**
O02D IAmb IAmb 05 00 07.9
comp=Z,19nm,1.5s
**O02D Mt. Diablo Mer 85.03 46** P **P** **05 00 05.0 +0.2**
baz=245
**KLU Klutina 85.18 20** P **P** **05 00 04.4 -0.5**
baz=224
**BMRM Bremner River 85.25 21** P **P** **05 00 06.1 +0.8**
baz=226
**TRF Thorofare Moun 85.26 18** P **P** **05 00 04.4 -1.1**
baz=220
**WAT6 Susitna Watana 85.38 19** P **P** **05 00 05.8 -0.3**
baz=223
**N02D Trinity Center 85.42 45** IAmb IAmb 05 00 10.4
comp=Z,19nm,1.5s
**N02D Trinity Center 85.42 45** P **P** **05 00 07.1 +0.4**
baz=245
**BOD Bodaibo 85.48 334** *e*P **P** **05 00 06.0 -0.4**
BOD pmax pmax
comp=Z,48nm,1.6s
**M02C Callahan 85.50 45** P **P** **05 00 07.0 -0.1**
baz=245
**M24K Tolsona, Glenn 85.53 20** P **P** **05 00 07.7 +0.9**
baz=224
**J01E Myrtle Point 85.54 43** P **P** **05 00 07.7 +0.6**
baz=244
**BPAW Bear Paw Mtn. 85.56 17** P **P** **05 00 05.9 -0.9**
baz=220
**RND Reindeer 85.65 18** P **P** **05 00 07.3 0.0**
RND pmax pmax
comp=Z,24nm,1.5s
**RND Reindeer 85.65 18** P **P** **05 00 07.3 0.0**
RND IAmb IAmb 05 00 08.8
comp=Z,24nm,1.5s
**N25K Chitina, Valde 85.70 21** P **P** **05 00 07.8 +0.2**
baz=226
**YBH Yreka Blue Hor 85.74 45** P **P** **05 00 08.2 0.0**
YBH pmax pmax
comp=Z,20nm,1.7s
**YBH Yreka Blue Hor 85.74 45** P **P** **05 00 08.2 0.0**
YBH IAmb IAmb 05 00 47.4
comp=Z,20nm,1.7s
**O03E Paynes Creek 85.76 46** P **P** **05 00 09.1 +0.7**
baz=246
**BELA Belgrano 2 85.79 175** P **P** **05 00 06.9 -0.9**
BELA IAmb IAmb 05 00 08.3
comp=Z,46nm,1.0s
**DHY Denali Highway 85.86 19** P **P** **05 00 08.1 -0.3**
baz=223
**MCK McKinley 85.87 18** P **P** **05 00 08.4 +0.1**
baz=221
**GOMU GeErMu 85.91 309** P **P** **05 00 10.5 +0.9**
GOMU pmax pmax
comp=Z,3.0nm,1.0s
**VES Vestal, Richgr 85.96 51** P **P** **05 00 10.3 +0.9**
baz=248
**RDOG Red Dog Mine 86.13 11** IAmb IAmb 05 00 11.3
comp=Z,19nm,1.3s
**RDOG Red Dog Mine 86.13 11** P **P** **05 00 10.7 +1.2**
baz=208
**I21K Tanana 86.13 16** P **P** **05 00 10.5 +1.0**
baz=219
**L04D Klamath Falls 86.22 44** P **P** **05 00 11.3 +0.7**
baz=245
**H21K Melozitna Rive 86.30 15** P **P** **05 00 11.1 +0.8**
baz=218
**IMAR Indian Mountai 86.32 15** P **P** **05 00 10.2 -0.3**
**MLY Manley 86.35 16** P **P** **05 00 11.0 +0.4**
baz=220

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ISA | **Isabella, Lake** | **86.36** | **52** | P | **P** | | **05 00 11.8** | **+0.4** |
| ISA | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **ISA** | **Isabella, Lake** | **86.36** | **52** | P | **P** | | **05 00 11.8** | **+0.4** |
| **ISA** | **Isabella, Lake** | **86.36** | **52** | P | **P** | | **05 00 11.9** | **+0.4** |
| | baz=248 | | | | | | | | |
| **SIT** | **Sitka** | **86.40** | **27** | P | **P** | | **05 00 12.6** | **+1.7** |
| | baz=234 | | | | | | | | |
| **CTG** | **Chitna Glacier** | **86.42** | **22** | P | **P** | | **05 00 12.0** | **+0.8** |
| | baz=228 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **86.43** | **52** | P | **P** | | **05 00 11.6** | **-0.2** |
| | baz=248 | | | | | | | | |
| **NEA2** | **Nenana** | **86.48** | **17** | P | **P** | | **05 00 12.8** | **+1.5** |
| | baz=221 | | | | | | | | |
| **CRAG** | **Craig** | **86.49** | **29** | P | **P** | | **05 00 11.9** | **+0.5** |
| | baz=236 | | | | | | | | |
| **ZAK** | **Zakamensk** | **86.55** | **325** | *e*P | **P** | | **05 00 11.9** | **-0.1** |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,63nm,1.2s | | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **86.70** | **50** | P | **P** | | **05 00 13.3** | **0.0** |
| **M26K** | **Nabesna, AK** | **86.80** | **21** | P | **P** | | **05 00 12.8** | **-0.1** |
| | baz=227 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.89** | **18** | IAmb | IAmb | | 05 01 18.5 | | |
| | comp=Z,28nm,1.9s | | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **86.89** | **52** | P | **P** | | **05 00 14.5** | **+0.4** |
| | baz=248 | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **86.94** | **51** | P | **P** | | **05 00 15.9** | **+1.5** |
| | baz=248 | | | | | | | | |
| **HDA** | **Harding Lake** | **86.96** | **18** | P | **P** | | **05 00 12.2** | **-1.4** |
| HDA | | | | IAmb | IAmb | | 05 00 14.5 | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **HDA** | **Harding Lake** | **86.96** | **18** | P | **P** | | **05 00 13.0** | **-0.6** |
| | baz=223 | | | | | | | | |
| **MDM** | **Murphy Dome** | **87.00** | **17** | IAmb | IAmb | | 05 00 15.2 | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **TCOL** | **CIGO, UAF Yank** | **87.04** | **17** | P | **P** | | **05 00 13.7** | **-0.2** |
| | baz=222 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **87.11** | **20** | P | **P** | | **05 00 13.5** | **-0.9** |
| | baz=227 | | | | | | | | |
| **RIDG** | **Independent Ri** | **87.13** | **19** | P | **P** | | **05 00 13.9** | **-0.6** |
| | baz=225 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **87.16** | **54** | LR | LR | | 05 29 38.9 | | |
| | comp=Z,72nm,21.6s,baz=316,slow=29 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **87.16** | **54** | P | **P** | | **05 00 14.6** | **-0.8** |
| | baz=249 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **87.16** | **21** | P | **P** | | **05 00 15.5** | **+0.7** |
| | baz=228 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **87.16** | **54** | P | **P** | | **05 00 15.4** | **0.0** |
| | baz=249 | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **87.23** | **48** | P | **P** | | **05 00 16.6** | **+0.9** |
| **ILAR** | **Eielson Array** | **87.25** | **18** | P | **P** | | **05 00 13.1** | **-1.9** |
| | comp=Z,12nm,1.2s,baz=236,slow=5.1,SNR=66 | | | | | | | | |
| ILAR | | | | LR | LR | | 05 33 15.6 | | |
| | comp=Z,50nm,19.7s,baz=162,slow=31 | | | | | | | | |
| **ILAR** | **Eielson Array** | **87.25** | **18** | P | **P** | | **05 00 12.8** | **-2.1** |
| **MPMC** | **Manual Prospec** | **87.25** | **52** | P | **P** | | **05 00 15.4** | **-0.5** |
| | baz=248 | | | | | | | | |
| **BBB** | **Bella Bella** | **87.27** | **34** | LR | LR | | 05 34 48.5 | | |
| | comp=Z,96nm,18.2s,baz=290,slow=32 | | | | | | | | |
| **LHV** | **Little Huntoon** | **87.31** | **49** | P | **P** | | **05 00 17.8** | **+2.0** |
| **DOT** | **Dot Lake** | **87.31** | **19** | IAmb | IAmb | | 05 00 16.4 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **87.38** | **44** | P | **P** | | **05 00 16.3** | **0.0** |
| | baz=246 | | | | | | | | |
| **RYN** | **Ryan** | **87.43** | **49** | IAmb | IAmb | | 05 00 18.7 | | |
| | comp=Z,30nm,2.0s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.52** | **49** | P | **P** | | **05 00 17.2** | **0.0** |
| | comp=Z,1.7nm,0.8s,baz=233,slow=7.1,SNR=14 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.52** | **49** | P | **P** | | **05 00 17.0** | **-0.2** |
| **SCRK** | **Sand Creek** | **87.57** | **19** | P | **P** | | **05 00 16.5** | **-0.2** |
| | baz=226 | | | | | | | | |
| **J25K** | **Salcha River,** | **87.58** | **18** | P | **P** | | **05 00 16.3** | **-0.4** |
| | baz=225 | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **87.65** | **54** | P | **P** | | **05 00 17.3** | **-0.6** |
| | baz=249 | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **87.68** | **51** | P | **P** | | **05 00 19.4** | **+1.6** |
| | baz=248 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **87.68** | **53** | P | **P** | | **05 00 20.0** | **+2.1** |
| | baz=249 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **87.86** | **51** | P | **P** | | **05 00 20.2** | **+1.7** |
| | baz=249 | | | | | | | | |
| **GWY** | **Greenwater Val** | **87.91** | **52** | P | **P** | | **05 00 18.9** | **-0.1** |
| **SYO** | **Syowa Base** | **87.97** | **196**⇑ | *e*P | **P** | | **05 00 19.6** | **+1.1** |
| **SYO** | **Syowa Base** | **87.97** | **196**⇓ | *e*pP | pP | | 05 00 50.0 | -0.7 |
| **D03D** | **Eldon** | **87.99** | **39** | P | **P** | | **05 00 20.3** | **+1.5** |
| | baz=244 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **88.19** | **53** | P | **P** | | **05 00 21.6** | **+1.3** |
| | baz=250 | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **88.21** | **53** | P | **P** | | **05 00 21.7** | **+1.3** |
| | baz=249 | | | | | | | | |
| **IRM** | **Iron Mountain** | **88.37** | **54** | P | **P** | | **05 00 22.3** | **+1.2** |
| | baz=250 | | | | | | | | |
| **A04D** | **Lummi Island** | **88.73** | **38** | P | **P** | | **05 00 24.2** | **+1.9** |
| | baz=244 | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **88.80** | **45** | IAmb | IAmb | | 05 00 24.2 | | |
| | comp=Z,15nm,1.7s | | | | | | | | |
| **B05A** | **Bryant** | **88.90** | **39** | P | **P** | | **05 00 23.3** | **+0.2** |
| | baz=245 | | | | | | | | |
| **CHLP** | **Challavanipeta** | **89.07** | **289** | *e*P | **P** | | **05 00 23.5** | **-1.1** |
| **PALK** | **Pallekele** | **89.10** | **278** | LR | LR | | 05 41 00.3 | | |
| | comp=Z,36nm,18.1s,baz=208,slow=36 | | | | | | | | |
| **M30M** | **Minto, Yukon** | **89.11** | **22** | P | **P** | | **05 00 22.9** | **-1.0** |
| | baz=232 | | | | | | | | |
| **DAWY** | **Dawson** | **89.13** | **21** | P | **P** | | **05 00 23.6** | **-0.3** |
| | baz=230 | | | | | | | | |
| **SHPR** | **Sheep Range** | **89.16** | **52** | P | **P** | | **05 00 25.2** | **+0.3** |
| **LPIG** | **La Paz** | **89.17** | **65** | LR | LR | | 05 35 31.4 | | |
| | comp=Z,55nm,18.4s,baz=273,slow=32 | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **89.20** | **54** | P | **P** | | **05 00 25.8** | **+0.9** |
| | baz=250 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **89.42** | **14** | P | **P** | | **05 00 26.6** | **+1.4** |
| | baz=221 | | | | | | | | |
| **PRN** | **Pahroc Range** | **89.55** | **51** | IAmb | IAmb | | 05 01 16.6 | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **E07A** | **Sunnyside** | **89.59** | **41** | IAmb | IAmb | | 05 01 16.7 | | |
| | comp=Z,17nm,1.6s | | | | | | | | |
| **G08A** | **Pilot Rock** | **89.67** | **43** | P | **P** | | **05 00 26.9** | **-0.2** |
| **TIXI** | **Tiksi** | **90.94** | **349** | P | **P** | | **05 00 31.9** | **-0.3** |
| | comp=Z,8.6nm,0.9s,baz=91,slow=23,SNR=19 | | | | | | | | |
| **TIXI** | **Tiksi** | **90.94** | **349** | *ce*P | **P** | | **05 00 31.8** | **-0.3** |
| TIXI | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **TIXI** | **Tiksi** | **90.94** | **349** | P | **P** | | **05 00 31.0** | **-1.1** |
| TIXI | | | | IAmb | IAmb | | 05 00 32.7 | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **PVM** | **Polavaram** | **90.95** | **288** | *e*P | **P** | | **05 00 33.1** | **-0.3** |
| **MYLAV** | **Mylavaram** | **91.72** | **287** | *e*P | **P** | | **05 00 37.3** | **+0.3** |
| **SKHT** | **Srikalahasti** | **91.78** | **284** | *e*P | **P** | | **05 00 37.2** | **0.0** |
| **ADKI** | **Addanki** | **92.09** | **286** | *e*P | **P** | | **05 00 38.2** | **-0.5** |
| **NVL** | **N'lazarevskaya** | **92.22** | **188** | *e*P | P | | 05 00 45.4 | +7.1 |
| NVL | | | | pmax | pmax | | | | |
| | comp=Z,52nm,1.2s | | | | | | | | |
| **SNAA** | **Sanae** | **92.67** | **183** | P | **P** | | **05 00 39.9** | **-0.6** |
| **SNAA** | **Sanae** | **92.67** | **183** | *ce*P | **P** | | **05 00 40.1** | **-0.4** |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,34nm,1.4s | | | | | | | | |
| **SNAA** | **Sanae** | **92.67** | **183** | P | **P** | | **05 00 39.8** | **-0.6** |
| **NJS** | **Nagarjunasagar** | **92.90** | **286** | *e*P | **P** | | **05 00 41.9** | **-0.5** |
| **RCLA** | **Racherla** | **92.93** | **285** | *e*P | **P** | | **05 00 42.5** | **-0.1** |
| **SRLM** | **Srisailam** | **93.16** | **286** | *e*P | **P** | | **05 00 43.1** | **-0.5** |
| **VNA3** | **Neumayer Olymp** | **93.32** | **181** | P | **P** | | **05 00 42.6** | **-0.7** |
| **CUPL** | **Choutuppal** | **93.45** | **287** | *e*P | **P** | | **05 00 44.1** | **-0.9** |
| **RPR** | **Rampur** | **93.51** | **288** | *e*P | **P** | | **05 00 44.4** | **-0.8** |
| **VNA2** | **Neumayer--Watz** | **93.59** | **182** | P | **P** | | **05 00 44.2** | **-0.4** |
| | baz=190,slow=3.4 | | | | | | | | |
| **WMQ** | **Urumqi** | **93.68** | **314** | *e*P | **P** | | **05 00 46.3** | **+0.8** |
| WMQ | | | | pP | pwP | | 05 01 21.3 | +1.2 |
| WMQ | | | | PP | **PP** | | **05 04 30.3** | **-2.2** |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,150nm,4.7s | | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **93.82** | **287** | *e*P | **P** | | **05 00 45.8** | **-0.9** |
| **URV** | **Uravakonda** | **94.38** | **284** | *e*P | **P** | | **05 00 48.6** | **-0.8** |
| **SRSP** | **Sriramsagar** | **94.40** | **288** | *e*P | **P** | | **05 00 48.6** | **-0.7** |
| **PDAR** | **Pinedale Array** | **95.23** | **47** | PP | **PP** | | **05 04 44.4** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=250,slow=3.0,SNR=4.2 | | | | | | | | |
| **ANMO** | **Albuquerque** | **95.44** | **55** | LR | LR | | 05 38 41.1 | | |
| | comp=Z,64nm,19.7s,baz=288,slow=32 | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **95.64** | **320** | *c* iP | **P** | | **05 00 54.1** | **-0.4** |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **KLRI** | **Killari** | **95.78** | **287** | *e*P | **P** | | **05 00 56.5** | **+0.8** |
| **TXAR** | **Lajitas Array** | **96.31** | **61** | PP | **PP** | | **05 04 53.8** | **+0.5** |
| | comp=Z,0.7nm,1.0s,baz=216,slow=6.2,SNR=4.6 | | | | | | | | |
| TXAR | | | | LR | LR | | 05 34 34.1 | | |
| | comp=Z,36nm,21.4s,baz=290,slow=29 | | | | | | | | |
| **C36M** | **Paulatuk** | **97.09** | **19** | P | **P** | | **05 00 59.4** | **-1.0** |
| | baz=244 | | | | | | | | |
| **Q24A** | **Divide** | **97.47** | **52** | P | **P** | | **05 01 01.8** | **-1.5** |
| | baz=256 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **97.90** | **17** | IAmb | IAmb | | 05 01 05.0 | | |
| | comp=Z,8.6nm,1.1s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **97.90** | **17** | P | Pdif | | 05 01 04.0 | 0.0 | |
| | baz=244 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.14** | **27** | P | **P** | | **05 01 04.6** | **-0.6** |
| | comp=Z,4.5nm,0.9s,baz=254,slow=4.7,SNR=43 | | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | | **05 17 37.1** | **-2.9** |
| | comp=Z,0.7nm,0.9s,baz=64,slow=2.5,SNR=5.6 | | | | | | | | |
| **MK31** | **Makanchi Array** | **98.17** | **316** | *i* P | Pdif | | 05 01 06.0 | +0.2 | |
| **MK31** | **Makanchi Array** | **98.17** | **316** | P | **P** | | **05 01 05.3** | **-0.5** |
| MK31 | | | | IAmb | IAmb | | 05 01 07.2 | | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **98.17** | **316** | P | **P** | | **05 01 05.7** | **-0.1** |
| | comp=Z,1.4nm,0.4s,baz=99,slow=6.3,SNR=28 | | | | | | | | |
| MKAR | | | | PP | **PP** | | **05 05 04.4** | **-2.6** |
| | comp=Z,2.3nm,1.0s,baz=101,slow=6.3,SNR=3.7 | | | | | | | | |
| MKAR | | | | PKiKP | **PKiKP** | | **05 05 38.5** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=219,slow=1.9,SNR=8.9 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **98.17** | **316** | *ce*P | Pdif | | 05 01 06.3 | +0.5 | |
| MKAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **98.38** | **316** | P | **P** | | **05 01 05.7** | **-1.0** |
| MAKZ | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **MAKZ** | **Makanchi** | **98.38** | **316** | P | **P** | | **05 01 05.7** | **-1.0** |
| MAKZ | | | | IAmb | IAmb | | 05 01 08.8 | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **98.38** | **324** | P | **P** | | **05 01 05.2** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **98.38** | **324** | P | **P** | | **05 01 05.6** | **-0.9** |
| | comp=Z,9.4nm,0.9s,baz=108,slow=4.8,SNR=36 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **98.38** | **324** | *i* P | **P** | | **05 01 06.0** | **-0.5** |
| ZALV | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **98.38** | **324** | P | **P** | | **05 01 05.2** | **-1.3** |
| **NRIK** | **Noril'sk** | **101.08** | **339** | P | **Pdif** | | **05 01 17.8** | **-0.3** |
| | comp=Z,12nm,1.0s,baz=100,slow=5.0,SNR=14 | | | | | | | | |
| **NRIK** | **Noril'sk** | **101.08** | **339** | *i* P | **Pdif** | | **05 01 18.0** | **-0.2** |
| NRIK | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **KSH** | **Kashi** | **101.11** | **308** | P | **Pdif** | | **05 01 21.8** | **+2.6** |
| KSH | | | | PP | **PP** | | **05 05 36.0** | **+6.3** |
| KSH | | | | SKS | | | 05 11 49.5 | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **101.38** | **320** | P | **Pdif** | | **05 01 20.1** | **+0.1** |
| **KURK** | **Kurchatov** | **101.38** | **320** | | **Pdif** | | **05 01 20.1** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **101.42** | **319** | P | **Pdif** | | **05 01 20.1** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=97,slow=4.2,SNR=4.2 | | | | | | | | |
| KURBB | | | | PP | **PP** | | **05 05 29.7** | **-1.8** |
| | comp=Z,1.1nm,1.0s,baz=105,slow=6.8,SNR=4.2 | | | | | | | | |
| KURBB | | | | PKiKP | **PKiKP** | | **05 05 43.8** | **+0.1** |
| | comp=Z,0.9nm,0.9s,baz=104,slow=1.6,SNR=4.1 | | | | | | | | |
| **KKAR** | **Karatay Array** | **105.73** | **311** | PKiKP | **PKiKP** | | **05 05 52.8** | **+1.0** |
| **BVAR** | **Borovoye Array** | **106.73** | **321** | PKiKP | **PKiKP** | | **05 05 53.3** | **-0.1** |
| | comp=Z,1.2nm,0.4s,baz=145,slow=31,SNR=5.3 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **113.28** | **317** | PKiKP | **PKiKP** | | **05 06 05.7** | **-0.1** |
| **ARU** | **Arti** | **113.48** | **325** | PKiKP | **PKiKP** | | **05 06 06.1** | **+0.1** |
| | comp=Z,4.0nm,0.4s,baz=198,slow=0.3,SNR=15 | | | | | | | | |
| **ARU** | **Arti** | **113.48** | **325** | *i* PKIKP | **PKiKP** | | **05 06 06.0** | **+0.1** |
| ARU | | | | | | | 05 06 58.7 | | |
| ARU | | | | | | | 05 13 06.8 | | |
| ARU | | | | SS | SS | | 05 22 28.8 | -7.3 | |
| **AKTO** | **Aktyubinsk** | **114.44** | **319** | PKP | PKPdf | | 05 06 08.0 | -0.1 | |
| | comp=Z,6.1nm,0.5s,baz=90,slow=3.1,SNR=19 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **114.44** | **319** | PKIKP | **PKiKP** | | **05 06 08.0** | **0.0** |
| **GEYT** | **Alibeck** | **114.82** | **305** | PKP | PKPdf | | 05 06 09.1 | -0.1 | |
| | comp=Z,5.5nm,0.9s,baz=228,slow=18,SNR=3.9 | | | | | | | | |
| **UOSS** | **Minazif** | **115.68** | **290** | PKPdf | **PKPdf** | | **05 06 10.1** | **-1.0** |
| **SPA0** | **Spitsbergen Ar** | **115.88** | **354** | *e*PKPdf | **PKiKP** | | **05 06 09.9** | **-0.2** |
| **SPITS** | **Spitsbergen Ar** | **115.88** | **354** | PKP | **PKiKP** | | **05 06 09.8** | **-0.2** |
| | comp=Z,8.5nm,1.0s,baz=92,slow=5.1,SNR=8.6 | | | | | | | | |
| **Q54A** | **Coxs Mills** | **116.24** | **54** | PKPdf | **PKPdf** | | **05 06 11.3** | **-0.5** |
| **KIRV** | **Kirov** | **117.88** | **329** | PKP | **PKiKP** | | **05 06 14.6** | **+0.3** |
| | comp=Z,15nm,0.4s,baz=2.6,slow=1.3,SNR=5.4 | | | | | | | | |
| **PLTB** | **Pedras Altas** | **118.42** | **140** | PKPdf | **PKPdf** | | **05 06 15.6** | **-0.8** |
| **PRGR** | **Permogore** | **118.68** | **333** | *e*PKIKP | **PKPdf** | | **05 06 13.7** | **-2.1** |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **LVZ** | **Lovozero** | **119.80** | **341** | *c* iPKIKP | **PKiKP** | | **05 06 18.4** | **+0.4** |
| LVZ | | | | pmax | pmax | | | | |
| | comp=Z,34nm,2.5s | | | | | | | | |
| **LVZ** | **Lovozero** | **119.80** | **341** | PKPdf | **PKPdf** | | **05 06 17.1** | **-0.7** |
| **KSPA** | **Keystone Colle** | **119.97** | **51** | PKPdf | **PKPdf** | | **05 06 18.4** | **-0.6** |
| **BELG** | **Belogornoye** | **120.52** | **322** | PKP | **PKiKP** | | **05 06 19.7** | **0.0** |
| | comp=Z,83nm,0.7s,baz=340,slow=1.1,SNR=25 | | | | | | | | |
| **HAMF** | **Hammerfest** | **120.84** | **347** | *e*PKPdf | **PKPdf** | | **05 06 19.3** | **-0.5** |
| **ARA0** | **ARCESS Array S** | **121.24** | **345** | *e*PKPdf | **PKPdf** | | **05 06 20.4** | **-0.2** |
| **ARCES** | **ARCESS Array B** | **121.24** | **345** | PKP | **PKPdf** | | **05 06 20.3** | **-0.2** |
| | comp=Z,6.5nm,0.4s,baz=81,slow=1.9,SNR=160 | | | | | | | | |
| ARCES | | | | PKKPab | **PKKPab** | | **05 16 22.1** | **-0.8** |
| | comp=Z,2.5nm,1.0s,baz=221,slow=2.6,SNR=9.4 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **121.69** | **333** | *e*PKIKP | **PKPdf** | | **05 06 20.3** | **-1.3** |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **121.69** | **333** | *e*PKPdf | **PKPdf** | | **05 06 20.3** | **-1.3** |
| KLMR | | | | AMP | | | 05 06 22.1 | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **KTK1** | **Kautokeino** | **122.17** | **346** | *e*PKPdf | **PKPdf** | | **05 06 21.8** | **-0.5** |
| **JETT** | **Jettan, Norway** | **122.39** | **347** | *e*PKPdf | **PKiKP** | | **05 06 23.0** | **-0.1** |
| **TRO** | **Tromso** | **122.64** | **348** | *e*PKPdf | **PKPdf** | | **05 06 22.4** | **-0.8** |
| **SDV** | **Santo Domingo** | **122.71** | **89** | PKPdf | **PKPdf** | | **05 06 24.4** | **-0.9** |
| **BOSA** | **Boshof** | **122.97** | **220** | PKP | **PKiKP** | | **05 06 25.5** | **-0.1** |
| | comp=Z,7.6nm,0.9s,baz=64,slow=4.8,SNR=10 | | | | | | | | |
| **BOSA** | **Boshof** | **122.97** | **220** | PKPdf | **PKPdf** | | **05 06 25.3** | **-0.1** |
| **GROC** | **Groznyy** | **123.74** | **312** | *i* PKIKP | **PKiKP** | | **05 06 26.5** | **+0.1** |
| GROC | | | | *e* | | | 05 07 14.8 | | |
| GROC | | | | *e* | | | 05 08 07.2 | | |
| GROC | | | | *e* | | | 05 13 15.2 | | |
| GROC | | | | *e* | | | 05 13 28.3 | | |
| GROC | | | | pmax | pmax | | | | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **124.37** | **322** | *e*PKIKP | **PKPdf** | | **05 06 26.8** | **-0.3** |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,50nm,0.6s | | | | | | | | |
| **PQI** | **Presque Isle** | **124.58** | **44** | PKPdf | **PKPdf** | | **05 06 26.4** | **-1.3** |
| **STEI** | **Steigen** | **124.81** | **348** | *e*PKPdf | **PKiKP** | | **05 06 27.8** | **+0.1** |
| **MOS** | **Moscow** | **124.89** | **328** | *e*PKIKP | **PKPdf** | | **05 06 26.9** | **-1.0** |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,42nm,0.7s | | | | | | | | |
| **GNI** | **Garni** | **125.04** | **308** | *c* iPKIKP | **PKiKP** | | **05 06 29.5** | **+0.2** |
| GNI | | | | pmax | pmax | | | | |
| | comp=Z,46nm,1.7s | | | | | | | | |
| **GNI** | **Garni** | **125.04** | **308** | PKPdf | **PKiKP** | | **05 06 29.6** | **+0.3** |
| **ZEI** | **Tsey** | **125.18** | **312** | *i* PKIKP | **PKPdf** | | **05 06 29.3** | **+0.1** |
| ZEI | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| **NCK** | **Nalchik** | **125.25** | **312** | *i* PKIKP | **PKiKP** | | **05 06 29.6** | **+0.2** |
| NCK | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **FAUS** | **Fauske** | **125.27** | **347** | *e*PKPdf | **PKPdf** | | **05 06 28.0** | **-0.3** |
| **GOF** | **Gofitskoye** | **125.28** | **314**⇑ | *e*PKIKP | **PKiKP** | | **05 06 29.4** | **0.0** |
| GOF | | | | pmax | pmax | | | | |
| | comp=Z,35nm,0.9s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **125.49** | **324** | *e*PKIKP | **PKiKP** | | **05 06 29.6** | **+0.1** |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,80nm,1.2s | | | | | | | | |
| **DR12** | **Loma Pena Alta** | **125.54** | **78** | PKPdf | **PKPdf** | | **05 06 29.5** | **-0.8** |
| **VORR** | **Voronezh** | **125.68** | **323** | *e*PKIKP | **PKiKP** | | **05 06 30.2** | **+0.2** |
| VORR | | | | pmax | pmax | | | | |
| | comp=Z,91nm,0.9s | | | | | | | | |
| **KBZ** | **Khabaz** | **125.70** | **313** | PKP | **PKiKP** | | **05 06 30.4** | **+0.2** |
| | comp=Z,8.3nm,0.9s,baz=124,slow=2.7,SNR=19 | | | | | | | | |
| **KBZ** | **Khabaz** | **125.70** | **313** | *c* iPKIKP | **PKPdf** | | **05 06 29.7** | **-0.1** |
| KBZ | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **OBN** | **Obninsk** | **125.70** | **328** | PKP | **PKiKP** | | **05 06 29.8** | **-0.1** |
| | comp=Z,3.3nm,0.4s,baz=148,slow=6.0,SNR=8.4 | | | | | | | | |
| **OBN** | **Obninsk** | **125.70** | **328**⇓ | *i* PKIKP | **PKPdf** | | **05 06 29.1** | **-0.4** |
| OBN | | | | | | | 05 07 09.0 | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,46nm,1.3s | | | | | | | | |
| **KIV** | **Kislovodsk** | **125.79** | **313** | *e*PKIKP | **PKPdf** | | **05 06 30.2** | **0.0** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **VSR** | **Storozhevoye** | **125.88** | **323** | *e*PKIKP | **PKPdf** | | **05 06 29.5** | **-0.4** |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| **VORD** | **Divnogorie** | **125.89** | **322** | *e*PKIKP | **PKPdf** | | **05 06 29.9** | **-0.1** |
| VORD | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| **NEY** | **Neytrino** | **125.93** | **312** | *i* PKIKP | **PKPdf** | | **05 06 30.2** | **-0.4** |
| NEY | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **MOR8** | **Moi Rana** | **126.47** | **347** | *e*PKPdf | **PKPdf** | | **05 06 30.5** | **-0.2** |
| **KONS** | **Konsvik** | **126.47** | **348** | *e*PKPdf | **PKPdf** | | **05 06 30.7** | **+0.1** |
| **FIA1** | **FINESS Array S** | **126.72** | **338** | PKPdf | **PKiKP** | | **05 06 31.5** | **-0.2** |
| **FINES** | **FINESS Array B** | **126.73** | **338** | PKP | **PKPdf** | | **05 06 31.0** | **-0.2** |
| | comp=Z,5.6nm,0.5s,baz=71,slow=1.4,SNR=39 | | | | | | | | |
| **BIRV** | **Birongo** | **127.25** | **89** | PKPdf | **PKPdf** | | **05 06 32.6** | **-1.1** |
| **CELP** | **Cerrillos** | **128.11** | **79** | PKPdf | **PKPdf** | | **05 06 33.1** | **-2.1** |
| **KMBO** | **Kilima Mbogo** | **128.33** | **256** | PKP | **PKiKP** | | **05 06 37.4** | **+0.6** |
| | comp=Z,5.1nm,1.0s,baz=42,slow=3.0,SNR=10 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **128.33** | **256** | PKIKP | **PKiKP** | | **05 06 36.9** | **+0.2** |
| **KMBO** | **Kilima Mbogo** | **128.33** | **256** | PKPdf | **PKiKP** | | **05 06 36.9** | **+0.2** |
| **NSS** | **Namsos** | **128.42** | **347** | *e*PKPdf | **PKPdf** | | **05 06 34.2** | **-0.2** |
| **MNK** | **Minsk** | **130.32** | **330** | *i* PKIKP | **PKiKP** | | **05 06 39.0** | **-0.2** |
| MNK | | | | *i* | | | 05 08 54.6 | | |
| MNK | | | | *i* SP | SP | | 05 18 51.5 | +0.7 | |
| MNK | | | | *i* PS | **PS** | | **05 19 03.6** | **-3.1** |
| MNK | | | | *i* SS | **SS** | | **05 26 07.8** | **-2.0** |
| MNK | | | | pmax | pmax | | | | |
| | comp=N,14nm,0.7s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=E,2.0nm,0.9s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=E,109nm,21.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=Z,113nm,20.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=N,2μm,23.0s | | | | | | | | |
| **MNK** | **Minsk** | **130.32** | **330** | *i* PKP | **PKiKP** | | **05 06 39.1** | **-0.1** |
| | comp=E,2.0nm,0.9s | | | | | | | | |
| MNK | | | | *i* PKP | **PKiKP** | | **05 06 39.1** | **-0.1** |
| | comp=N,14nm,0.7s | | | | | | | | |
| MNK | | | | *i* PKP | **PKiKP** | | **05 06 39.1** | **-0.1** |
| | comp=Z,21nm,0.8s,baz=234 | | | | | | | | |
| MNK | | | | *i* pPKP | **pPKPdf** | | **05 07 08.3** | **-3.4** |
| MNK | | | | *i* PP | **PP** | | **05 08 54.7** | **+1.5** |
| MNK | | | | *i* SKP | | | 05 10 02.3 | | |
| MNK | | | | *i* PKS | **PKSdf** | | **05 10 12.4** | **-2.2** |
| MNK | | | | *i* SKS | **SKSdf** | | **05 13 42.4** | **+4.4** |
| MNK | | | | *i* SKKS | SKKSac | | 05 15 08.9 | -29 | |
| MNK | | | | *i* SP | **SP** | | **05 18 51.6** | **+0.8** |
| MNK | | | | *i* PS | **PS** | | **05 19 03.6** | **-3.1** |
| MNK | | | | *i* SS | **SS** | | **05 26 07.8** | **-1.9** |
| MNK | | | | *i* LR | LR | | 05 51 43.2 | | |
| MNK | | | | *i* LRM | MLR | | 06 03 02.6 | | |
| | comp=E,109nm,21.0s | | | | | | | | |
| MNK | | | | *i* LRM | MLR | | 06 03 04.0 | | |
| | comp=Z,113nm,20.3s | | | | | | | | |
| MNK | | | | *i* LRM | MLR | | 06 03 27.6 | | |
| | comp=N,2μm,23.0s | | | | | | | | |
| **NACGM** | **Naroch** | **130.60** | **331** | *i* PKP | **PKiKP** | | **05 06 40.8** | **+1.0** |
| **NB2** | **NORSAR Subarra** | **131.61** | **345** | PKPdf | **PKPdf** | | **05 06 41.1** | **+0.4** |
| | comp=Z,1.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KHC | | | | *e*PKPDF | **PKPdf** | **05 06 58.0** | **+0.5** |
| **GERES** | **GERESS Array B** | **140.65** | **333** | PKhKP | PKPpre | 05 06 51.7 | |
| | comp=Z,3.0nm,1.0s,baz=1.7,slow=4.4,SNR=7.3 | | | | | | |
| GERES | | | | PKP | **PKPdf** | **05 06 57.4** | **-0.5** |
| | comp=Z,4.7nm,0.8s,baz=348,slow=1.9,SNR=14 | | | | | | |
| GERES | | | | SKPbc | **SKPbc** | **05 10 23.5** | **+0.7** |
| | comp=Z,1.7nm,1.1s,baz=341,slow=2.8,SNR=3.9 | | | | | | |
| **ARSA** | **Arzberg** | **140.96** | **330** | *i* P | **PKiKP** | **05 07 01.2** | **+0.1** |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **MOA** | **Molln** | **141.13** | **331** | *e*P | **PKiKP** | **05 07 01.3** | **-0.1** |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **141.47** | **308** | ⇓P | **PKPdf** | **05 07 00.4** | **+0.7** |
| **IDI** | **Anoyia** | **141.47** | **308** | PKPpre | PKPpre | 05 06 54.4 | |
| **SOKA** | **Soboth** | **141.60** | **329** | *i* P | **PKiKP** | **05 07 02.7** | **+0.2** |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **OBKA** | **Obir** | **141.96** | **330** | *e*P | **PKiKP** | **05 07 02.9** | **-0.4** |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **BTNL** | **Ternell** | **142.11** | **341** | *d*PKP | **PKPdf** | **05 07 00.0** | **-0.3** |
| **MEM** | **Membach** | **142.12** | **341** | *d*PKiKP | **PKiKP** | **05 07 03.1** | **-0.2** |
| **WTTA** | **Wattenberg** | **142.75** | **333** | *e*P | **PKiKP** | **05 07 05.2** | **+0.2** |
| | comp=Z,6.2nm,0.3s | | | | | | |
| **BMRD** | **Maredsous** | **142.78** | **342** | *d*PKP | **PKPdf** | **05 07 01.9** | **+0.4** |
| **WLF** | **Walferdange** | **142.90** | **340** | *d*PKP | **PKPdf** | **05 06 58.9** | **-2.8** |
| **MOTA** | **Moosalm** | **142.92** | **333** | *i* P | **PKPdf** | **05 06 59.5** | **-2.6** |
| | comp=Z,11nm,0.7s,SNR=9.6 | | | | | | |
| **DOU** | **Dourbes** | **143.01** | **342** | *d*PKP | PKPbc | 05 06 58.9 | -0.1 |
| **BFO** | **Black Forest** | **143.26** | **337** | PKiKP | PKPbc | 05 06 59.8 | 0.0 |
| **BFO** | **Black Forest** | **143.26** | **337** | | PKPbc | 05 06 59.8 | 0.0 |
| **FETA** | **Feichten** | **143.34** | **333** | *e*P | PKPbc | 05 07 00.6 | +0.4 |
| | comp=Z,26nm,0.9s,SNR=20 | | | | | | |
| **DAVA** | **Damuels** | **143.49** | **334** | *e*P | PKPbc | 05 07 00.8 | +0.1 |
| | comp=Z,16nm,1.0s,SNR=7.2 | | | | | | |
| **MATE** | **Matera** | **144.60** | **320** | ⇓P | PKPbc | 05 07 03.9 | -0.1 |
| **NRCA** | **Norcia** | **145.26** | **326** | | **PKPab** | **05 07 06.3** | **-0.1** |
| **TIP** | **Timpagrande** | **145.42** | **318** | ⇓P | **PKPab** | **05 07 08.1** | **+1.1** |
| **OSSC** | **Osservatorio P** | **145.74** | **329** | | **PKPdf** | **05 07 05.7** | **-1.1** |
| **RAFF** | **Raffo Rosso** | **148.09** | **317** | | **PKiKP** | **05 07 15.6** | **-0.4** |
| **KEST** | **Kesra** | **152.19** | **320** | PKPbc | **PKiKP** | **05 07 25.4** | **+0.7** |
| | comp=Z,30nm,0.4s,baz=158,slow=3.0,SNR=74 | | | | | | |
| **CMAH** | **Djebel Manchou** | **152.73** | **324** | P | **PKPbc** | **05 07 23.0** | **-2.5** |
| **ABSA** | **Djebel Ababsia** | **152.95** | **323** | P | **PKiKP** | **05 07 26.3** | **+0.1** |
| **CKFL** | **Kef-Lekhel** | **153.29** | **324** | P | **PKiKP** | **05 07 27.9** | **+0.9** |
| **PBRG** | **Braganca** | **153.49** | **351** | *e*PKPab | **PKPab** | **05 07 40.9** | **+1.3** |
| **CASM** | **Ain Smara** | **153.52** | **324** | P | **PKiKP** | **05 07 28.5** | **+1.2** |
| **DFRA** | **Djebel Bou Aff** | **153.65** | **326** | P | **PKiKP** | **05 07 29.7** | **+2.0** |
| **POLO** | **Lamas de Olo** | **154.06** | **352** | *e*PKPab | **PKPab** | **05 07 43.5** | **+1.4** |
| **PVRL** | **Vila Real** | **154.15** | **352** | *e*PKPab | **PKPab** | **05 07 43.6** | **+1.2** |
| **MVO** | **Moncorvo** | **154.16** | **351** | *e*PKPab | **PKPab** | **05 07 43.7** | **+1.2** |
| **PVIS** | **Viseu** | **154.72** | **352** | *e*PKPab | **PKPab** | **05 07 46.0** | **+1.1** |
| **ESDC** | **Sonseca Array** | **154.97** | **345** | PKPbc | **PKiKP** | **05 07 30.9** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=360,slow=2.0,SNR=11 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **05 07 46.7** | **+0.6** |
| | comp=Z,8.2nm,1.0s,baz=18,slow=3.5,SNR=21 | | | | | | |
| ESDC | | | | PP | **PP** | **05 11 18.0** | **-3.4** |
| | comp=Z,3.1nm,1.1s,baz=15,slow=6.0,SNR=7.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **154.97** | **345** | | **PKPbc** | **05 07 30.1** | **-0.1** |
| ESDC | | | | PKPab | **PKPab** | **05 07 45.4** | **-0.7** |
| **MTE** | **Manteigas** | **154.99** | **351** | *e*PKPab | **PKPab** | **05 07 47.6** | **+1.5** |
| **COI** | **Coimbra** | **155.29** | **353** | *e*PKPab | **PKPab** | **05 07 49.0** | **+1.8** |
| **PCBR** | **Castelo Branco** | **155.52** | **351** | *e*PKPab | **PKPab** | **05 07 49.3** | **+1.0** |
| **PESTR** | **Estremoz** | **156.49** | **351** | *e*PKPab | **PKPab** | **05 07 53.3** | **+0.8** |
| **EVO** | **Evora** | **156.89** | **351** | *e*PKPab | **PKPab** | **05 07 57.4** | **+3.2** |
| **PBAR** | **Barrancos** | **157.08** | **349** | *e*PKPab | **PKPab** | **05 07 56.1** | **+1.1** |
| **PBEJ** | **Beja** | **157.36** | **351** | *e*PKPab | **PKPab** | **05 07 58.0** | **+1.8** |
| **PNCL** | **Nicolau / Gran** | **157.37** | **352** | *e*PKPab | **PKPab** | **05 07 58.5** | **+2.3** |
| **PCVE** | **Castro Verde** | **157.77** | **351** | *e*PKPab | **PKPab** | **05 07 59.5** | **+1.5** |
| **PVAQ** | **Vaqueiros** | **157.95** | **350** | *e*PKPab | **PKPab** | **05 07 59.6** | **+0.8** |
| **MORF** | **Marmelete** | **158.18** | **352** | *e*PKPab | **PKPab** | **05 07 59.4** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **166.25** | **261** | PKP | **PKPdf** | **05 07 33.4** | **-0.9** |
| | comp=Z,1.9nm,0.7s,baz=11,slow=0.8,SNR=17 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **05 08 35.8** | **-0.2** |
| | comp=Z,4.0nm,0.9s,baz=86,slow=3.8,SNR=11 | | | | | | |
| TORD | | | | PP | **PP** | **05 12 21.5** | **-2.6** |
| | comp=Z,0.4nm,0.7s,baz=74,slow=1.4,SNR=4.5 | | | | | | |
| **KIC** | **Kosan Boka** | **168.19** | **219** | *e*PKIKP | **PKPdf** | **05 07 34.4** | **-1.3** |
| | comp=Z,14nm,1.0s | | | | | | |
| **KIC** | **Kosan Boka** | **168.19** | **219** | *e*P | **PKPab** | **05 08 41.0** | **-3.4** |
| | comp=Z,31nm,1.6s | | | | | | |
| **LIC** | **Lamto** | **168.26** | **218** | *e*PKIKP | **PKPdf** | **05 07 35.0** | **-0.8** |
| | comp=Z,31nm,1.2s | | | | | | |
| **LIC** | **Lamto** | **168.26** | **218** | *e*P | **PKPab** | **05 08 41.9** | **-2.8** |
| | comp=Z,64nm,1.4s | | | | | | |
| **TIC** | **Toumodi** | **168.59** | **219** | *e*PKIKP | **PKPdf** | **05 07 34.8** | **-1.2** |
| **TIC** | **Toumodi** | **168.59** | **219** | *e*P | **PKPab** | **05 08 40.0** | **-6.1** |

**ATH 26 05:04:40.2, 38°.69N×23°.38E, h15km±3km, ML1.2/3 Error ellipse: s-maj=4.2km s-min=1.1km az=330.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATAL** | **Atalanti** | **0.28** | **272** | P | Pg | 05 04 46.5 | +0.3 |
| ATAL | | | | S | Sg | 05 04 50.5 | +0.2 |
| ATAL | | | | AML | AML | 05 04 50.8 | |
| | comp=N,78μm,0.2s | | | | | | |
| ATAL | | | | AML | AML | 05 04 50.9 | |
| | comp=E,123μm,0.1s | | | | | | |
| **LKR** | **Lokris** | **0.30** | **264** | P | Pg | 05 04 46.3 | -0.3 |
| LKR | | | | S | Sg | 05 04 50.8 | 0.0 |
| LKR | | | | AML | AML | 05 04 51.2 | |
| | comp=N,171μm,0.1s | | | | | | |
| LKR | | | | AML | AML | 05 04 51.4 | |
| | comp=E,158μm,0.1s | | | | | | |
| **VIL2** | **Platees** | **0.48** | **190** | P | Pg | 05 04 49.7 | -0.1 |
| VIL2 | | | | S | Sb | 05 04 57.5 | +0.2 |
| VIL2 | | | | AML | AML | 05 04 57.9 | |
| | comp=N,58μm,0.3s | | | | | | |
| VIL2 | | | | AML | AML | 05 04 59.4 | |
| | comp=E,108μm,0.5s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **0.57** | **95** | P | Pg | 05 04 50.4 | -1.0 |
| KYMI | | | | S | Sg | 05 04 59.2 | +0.2 |
| **DION** | **Dionisos Attik** | **0.75** | **144** | P | Pb | 05 04 55.0 | +0.1 |
| DION | | | | S | Sb | 05 05 05.2 | +0.3 |

*SKHL **26** 05:20:40.6±0.5, 46°.00N×153°.30E, h30km±5km, mb4.7/7*
*MOS **26** 05:20:42.6±1.4, 46°.17N×153°.04E, h35km, mb4.3/1, Error ellipse: s-maj=16.8km s-min=11.8km az=77.5*
*IDC **26** 05:20:47.3±8.0, 46°.29N×152°.84E, h53km±67km, mb3.5/11, mb1 3.7/12, mb1mx3.5/34, mbtmp3.7/12, ML3.2/1, MS2.9/1, Ms1 2.9/1, ms1mx2.3/71, Error ellipse: s-maj=52.8km s-min=21.6km az=1.0*

**ISC 26 05:20:45.3±0.9, 46°.3N±0°.1×153°.08E±0°.09, h35km, n31, σ1§48/29, mb3.6/11, 1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.79** | **256** | *d* iPN | **Pn** | **05 21 40.3** | **-0.9** |
| KUR | | | | *i* S | **Sn** | **05 22 29.1** | **+4.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,340nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,62nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,129nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,258nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,87nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **3.79** | **256** | *i* P | **Pn** | **05 21 39.5** | **-1.7** |
| KUR | | | | AMB | AMB | 05 21 40.9 | |
| | comp=E,180nm,0.3s | | | | | | |
| KUR | | | | *i* S | **Sn** | **05 22 24.0** | **-0.6** |
| KUR | | | | A | A | 05 22 45.3 | |
| | comp=E,260nm,0.4s | | | | | | |
| KUR | | | | A | A | 05 22 45.3 | |
| | comp=E,90nm,0.4s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.87** | **23** | *e*PN | **Pn** | **05 21 55.6** | **-0.4** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,101nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.87** | **23** | *e*P | **Pn** | **05 21 55.5** | **-0.4** |
| SKR | | | | AMB | AMB | 05 21 59.3 | |
| | comp=Z,90nm,0.7s | | | | | | |
| SKR | | | | *e*S | **Sn** | **05 22 51.3** | **+0.3** |
| SKR | | | | A | A | 05 22 56.5 | |
| | comp=Z,40nm,0.3s | | | | | | |
| SKR | | | | A | A | 05 22 56.5 | |
| | comp=Z,40nm,0.3s | | | | | | |
| **PAU** | **Pauzhetka** | **5.76** | **24** | *e*PN | **Pn** | **05 22 08.1** | **-0.2** |
| PAU | | | | pmax | pmax | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **PAU** | **Pauzhetka** | **5.76** | **24** | *e*P | **Pn** | **05 22 08.1** | **-0.2** |
| PAU | | | | AMB | AMB | 05 22 10.4 | |
| | comp=Z,20nm,0.4s | | | | | | |
| PAU | | | | *e*S | **Sn** | **05 23 13.0** | **-0.1** |
| PAU | | | | A | A | 05 23 16.1 | |
| | comp=Z,40nm,0.2s | | | | | | |
| PAU | | | | A | A | 05 23 16.1 | |
| | comp=Z,70nm,0.2s | | | | | | |
| **AKK** | **Akkeshi** | **6.71** | **244** | *e*P | **Pn** | **05 22 18.7** | **-2.6** |
| AKK | | | | AMB | AMB | 05 22 20.0 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.15** | **279** | *e*P | **Pn** | **05 22 28.0** | **+0.7** |
| YSS | | | | AMB | AMB | 05 22 29.2 | |
| | comp=Z,10.0nm,0.2s | | | | | | |
| **ERM** | **Erimo** | **8.30** | **243** | *e*PN | **Pn** | **05 22 41.0** | **-2.1** |
| **TYV** | **Tymovskoe** | **8.31** | **307** | *e*PN | **Pn** | **05 22 45.6** | **+2.4** |
| **TYV** | **Tymovskoe** | **8.31** | **307** | *e*P | **Pn** | **05 22 44.5** | **+1.3** |
| TYV | | | | AMB | AMB | 05 22 45.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **14.65** | **289** | P | **Pn** | **05 24 10.3** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=19,SNR=3.5 | | | | | | |
| KLR | | | | LR | LR | 05 29 26.3 | |
| | comp=Z,48nm,19.2s,baz=46,slow=36 | | | | | | |
| **KLR** | **Kul'dur** | **14.65** | **289** | *e*P | **Pn** | **05 24 08.9** | **-1.0** |
| **H11N2** | **WAKE ISLAND Hy** | **28.79** | **152** | T | T | 05 58 11.7 | |
| | baz=340,slow=76,SNR=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.81** | **152** | T | T | 05 58 20.3 | |
| | baz=340,slow=76,SNR=7.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.81** | **152** | T | T | 05 58 19.7 | |
| | baz=340,slow=76,SNR=18 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.88** | **153** | T | T | 05 59 43.5 | |
| | baz=340,slow=76,SNR=29 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.88** | **153** | T | T | 05 59 46.1 | |
| | baz=340,slow=76,SNR=8.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.89** | **153** | T | T | 05 59 46.4 | |
| | baz=340,slow=76,SNR=18 | | | | | | |
| **ILAR** | **Eielson Array** | **36.95** | **38** | P | **P** | **05 27 50.8** | **+0.2** |
| | comp=Z,0.5nm,0.9s,baz=254,slow=8.2,SNR=3.1 | | | | | | |
| **INK** | **Inuvik** | **42.08** | **32** | P | **P** | **05 28 34.4** | **+1.1** |
| | comp=Z,0.5nm,0.5s,baz=323,slow=7.0,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.15** | **298** | P | **P** | **05 29 11.8** | **-2.2** |
| | comp=Z,0.3nm,0.4s,baz=62,slow=5.5,SNR=6.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.33** | **36** | P | **P** | **05 29 46.6** | **+0.9** |
| | comp=Z,0.2nm,0.6s,baz=294,slow=6.9,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.31** | **341** | P | **P** | **05 30 35.3** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=39,slow=6.2,SNR=4.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.68** | **62** | P | **P** | **05 31 07.5** | **+0.9** |
| | comp=Z,0.3nm,0.6s,baz=294,slow=7.0,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **64.48** | **335** | P | **P** | **05 31 16.7** | **-1.1** |
| | comp=Z,4.3nm,1.1s,baz=52,slow=9.0,SNR=2.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.69** | **341** | P | **P** | **05 31 44.4** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=29,slow=6.5,SNR=6.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.94** | **326** | P | **P** | **05 32 03.8** | **-1.0** |
| | comp=Z,0.8nm,0.5s,baz=36,slow=6.3,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **77.75** | **60** | P | **P** | **05 32 39.2** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=314,slow=5.8,SNR=5.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **78.73** | **317** | P | **P** | **05 32 44.8** | **+0.6** |
| | comp=Z,1.1nm,0.9s,baz=27,slow=5.8,SNR=4.2 | | | | | | |
| **PLCA** | **Paso Flores** | **148.18** | **96** | PKPbc | **PKPbc** | **05 40 26.9** | **-0.2** |
| | comp=Z,2.5nm,1.1s,baz=271,slow=2.1,SNR=4.2 | | | | | | |

**IDC 26 06:02:36.7±2.7, 54°.15N×86°.55E, h0km, mb1 3.0/2, mb1mx2.9/56, mbtmp3.0/2, ML2.8/2, Error ellipse: s-maj=22.9km s-min=13.3km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.04** | **260** | *i* | | 06 08 15.3 | |
| | baz=80,slow=340,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.04** | **260** | Pg | Pg | 06 02 55.1 | -1.5 |
| | 0.8nm,0.3s,baz=78,slow=17,SNR=9.8 | | | | | | |
| ZALV | | | | Lg | Lg | 06 03 11.8 | |
| | 1.4nm,0.3s,baz=75,slow=32,SNR=6.2 | | | | | | |
| ZALV | | | | Rg | Rg | 06 03 14.2 | |
| | 3.5nm,0.5s,baz=76,slow=31,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.05** | **238** | Pn | Pn | 06 04 08.7 | +1.4 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.85** | **202** | Pn | Pn | 06 04 33.0 | +1.0 |
| | 0.2nm,0.3s,baz=26,slow=14,SNR=17 | | | | | | |
| MKAR | | | | Lg | Lg | 06 06 43.6 | |
| | 0.1nm,0.3s,baz=24,slow=33,SNR=2.3 | | | | | | |

*IDC **26** 06:03:30.2±3.6, 25°.75S×179°.66E, h525km±40km, mb3.2/5, mb1 3.5/7, mb1mx3.1/46, mbtmp4.2/7, Error ellipse: s-maj=51.1km s-min=23.8km az=175.0*

**ISC 26 06:03:27.9±0.8, 25°.5S±0°.1×179°.8E±0°.1, h500km, n27, σ1§50/27, mb3.6/5, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **12.37** | **187** | P | **P** | **06 06 10.0** | **-0.2** |
| **RUGZ** | **Raukumara Rang** | **12.59** | **188** | P | **P** | **06 06 13.9** | **+1.3** |
| **DZM** | **Mont Dzumac** | **12.65** | **283** | P | **P** | **06 06 14.9** | **+1.3** |
| | 0.2nm,0.3s,baz=115,slow=15,SNR=4.1 | | | | | | |
| **TWGZ** | **Tauwhareparae** | **12.76** | **186** | P | **P** | **06 06 15.3** | **+0.9** |
| **URZ** | **Urewera** | **12.95** | **189** | P | **P** | **06 06 15.2** | **-1.1** |
| | 3.2nm,0.3s,baz=259,slow=2.1,SNR=19 | | | | | | |
| **URZ** | **Urewera** | **12.95** | **189** | P | **P** | **06 06 15.5** | **-0.8** |
| **MWZ** | **Matawai** | **12.97** | **188** | P | **P** | **06 06 18.3** | **+1.7** |
| **RTZ** | **Ruatahuna** | **13.32** | **189** | P | **P** | **06 06 19.8** | **-0.6** |
| **HIZ** | **Hauiti** | **13.63** | **197** | P | **P** | **06 06 28.1** | **+4.3** |
| **BKZ** | **Black Stump Fm** | **13.93** | **191** | P | **P** | **06 06 25.6** | **-1.2** |
| **NTVZ** | **North Tongarir** | **14.02** | **193** | P | **P** | **06 06 28.4** | **+0.6** |
| **TMVZ** | **Te Maari** | **14.03** | **193** | P | **P** | **06 06 28.7** | **+0.8** |
| **ETVZ** | **East Tongariro** | **14.05** | **193** | P | **P** | **06 06 28.5** | **+0.4** |
| **OTVZ** | **Oturere** | **14.09** | **193** | P | **P** | **06 06 27.6** | **-0.9** |
| **BHHZ** | **Black Hill Sta** | **14.32** | **192** | P | **P** | **06 06 29.4** | **-1.5** |
| **CTA** | **Charters Tower** | **31.30** | **273** | P | **P** | **06 09 07.2** | **+0.5** |
| | 1.3nm,0.5s,baz=100,slow=11,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **41.59** | **262** | P | **P** | **06 10 30.7** | **-1.1** |
| | 1.3nm,0.7s,baz=106,slow=7.9,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.51** | **267** | P | **P** | **06 11 39.5** | **-0.3** |
| | 1.3nm,0.5s,baz=97,slow=7.5,SNR=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.03** | **4** | P | **P** | **06 15 16.7** | **+1.3** |
| | 0.9nm,0.8s,baz=222,slow=8.1,SNR=9.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.44** | **58** | P | **P** | **06 15 42.4** | **+1.7** |
| | 0.4nm,0.6s,baz=242,slow=6.9,SNR=4.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.37** | **348** | PKP | **PKiKP** | **06 21 46.5** | **-0.9** |
| | 3.4nm,1.0s,baz=64,slow=2.7,SNR=9.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.59** | **351** | PKP | **PKPdf** | **06 22 02.9** | **-2.0** |
| | comp=Z,1.7nm,0.6s,baz=16,slow=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.59** | **351** | PKP | **PKPdf** | **06 22 02.5** | **-2.4** |
| | comp=Z,3.1nm,0.8s,baz=22,slow=3.8,SNR=14 | | | | | | |
| **HFS** | **Hagfors** | **144.03** | **348** | PKP | **PKPdf** | **06 22 04.0** | **-1.6** |
| | comp=Z,3.7nm,0.4s,baz=113,slow=2.3,SNR=26 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.15** | **326** | PKPbc | **PKPbc** | **06 22 10.6** | **-0.9** |
| | comp=Z,0.9nm,0.3s,baz=46,slow=4.1,SNR=6.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.12** | **292** | PKPbc | **PKiKP** | **06 22 18.2** | **-0.6** |
| | comp=Z,1.8nm,0.4s,baz=63,slow=11,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.32** | **305** | PKPbc | **PKPbc** | **06 22 17.1** | **-0.8** |
| | comp=Z,1.0nm,0.8s,baz=107,slow=2.2,SNR=4.6 | | | | | | |

*IDC **26** 06:08:09.0±1.0, 0°.32N×125°.96E, h0km, mb3.9/6, mb1 4.1/6, mb1mx3.8/43, mbtmp4.0/6, Error ellipse: s-maj=63.0km s-min=20.4km az=71.0*
*NEIC **26** 06:08:13.3±1.3, 0°.41N±0°.09×126°.12E±0°.06, h27km±5km, mb4.2/9, Error ellipse: s-maj=13.3km s-min=8.0km az=157.0*
*DJA **26** 06:08:15.6±1.7, 0°N±4°×12°6E±°, h25km±17km, M3.9/8, mb4.0/1, mB5.0/1, MLv3.8/8, Mw(mB)4.3/1*

**ISC 26 06:08:14.8±0.7, 0°.3N±0°.1×126°.09E±0°.05, h44km, n26, σ1§05/26, mb4.0/10, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.35** | **70** | Pn | **Pn** | **06 08 35.9** | **-1.4** |
| **TNTI** | **Ternate** | **1.35** | **70** | P | **Pn** | **06 08 39.8** | **+2.6** |
| **KMSI** | **Cibinong** | **2.13** | **277** | P | **Pn** | **06 08 47.9** | **0.0** |
| KMSI | | | | S | **Sn** | **06 09 12.9** | **-0.2** |
| **GTOI** | **Gorontalo** | **3.10** | **276** | P | **Pn** | **06 09 03.4** | **+2.2** |
| **LUWI** | **Luwuk** | **3.58** | **248** | Pn | **Pn** | **06 09 07.9** | **0.0** |
| **LUWI** | **Luwuk** | **3.58** | **248** | P | **Pn** | **06 09 08.9** | **+1.0** |
| **APSI** | **Ampana** | **4.61** | **255** | P | **Pn** | **06 09 23.6** | **+1.7** |
| **TOLI2** | **Tolitoli** | **5.37** | **279** | Pn | **Pn** | **06 09 31.5** | **-0.9** |
| **MPSI** | **Mapaga** | **6.20** | **270** | P | **Pn** | **06 09 44.4** | **+0.6** |
| **FAKI** | **Fak Fak** | **6.94** | **118** | Pn | **Pn** | **06 09 53.6** | **-0.4** |
| **WB0** | **Warramunga Arr** | **21.55** | **158** | P | **P** | **06 13 00.9** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 06 13 04.6 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.69** | **159** | P | **P** | **06 13 01.6** | **-0.4** |
| | comp=Z,5.7nm,0.8s,baz=337,slow=11,SNR=4.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **21.69** | **159** | P | **P** | **06 13 01.7** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 06 13 06.4 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **COEN** | **Coen** | **22.07** | **131** | P | **P** | **06 13 05.3** | **-0.9** |
| COEN | | | | IAmb | IAmb | 06 13 15.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **MNAI** | **Manna** | **23.58** | **258** | P | **P** | **06 13 22.2** | **+0.5** |
| **AS31** | **Alice Springs** | **25.01** | **163** | P | **P** | **06 13 36.2** | **+1.4** |
| **ASAR** | **Alice Springs** | **25.01** | **163** | P | **P** | **06 13 35.8** | **+0.9** |
| | comp=Z,0.6nm,0.3s,baz=348,slow=11,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **50.34** | **343** | P | **P** | **06 17 07.1** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=161,slow=7.6,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **50.34** | **343** | IAmb | IAmb | 06 17 18.7 | |
| | comp=Z,2.7nm,1.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.82** | **22** | P | **P** | **06 18 09.5** | **+0.8** |
| | comp=Z,3.6nm,0.8s,baz=197,slow=5.6,SNR=4.9 | | | | | | |
| **MK31** | **Makanchi Array** | **60.02** | **327** | P | **P** | **06 18 16.3** | **-0.8** |
| MK31 | | | | IAmb | IAmb | 06 18 22.6 | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.02** | **327** | P | **P** | **06 18 17.6** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=128,slow=8.4,SNR=6.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.35** | **334** | P | **P** | **06 18 38.7** | **-0.6** |
| **KURK** | **Kurchatov** | **64.29** | **329** | P | **P** | **06 18 45.1** | **-0.5** |
| **ABKAR** | **Akbulak array** | **74.40** | **322** | P | **P** | **06 19 47.8** | **-0.3** |
| **AKTO** | **Aktyubinsk** | **75.94** | **322** | P | **P** | **06 19 56.5** | **-0.6** |
| | comp=Z,0.8nm,0.6s,baz=111,slow=8.6,SNR=4.2 | | | | | | |

*IDC **26** 06:15:29.5±1.9, 1°.72N×126°.60E, h0km, mb3.6/3, mb1 3.8/4, mb1mx3.5/48, mbtmp3.6/4, ML3.4/1, MS3.0/1, Ms1 3.0/1, ms1mx2.3/67, Error ellipse: s-maj=120.2km s-min=24.6km az=68.0*
*DJA **26** 06:15:33.5±2.1, 2°N±5°×12°7E±°, h17km±19km, M3.3/4, MLv3.3/4*

**ISC 26 06:15:35.5±1.6, 1°.7N±0°.3×126°.7E±0°.4, h47km, n6, σ1§22/6, mb3.6/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.15** | **145** | P | **Pn** | **06 15 54.7** | **-0.5** |
| TNTI | | | | S | **Sn** | **06 16 10.3** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **19.72** | **183** | P | **P** | **06 20 00.5** | **-0.7** |
| | 0.1nm,0.3s,baz=19,slow=13,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.79** | **161** | P | **P** | **06 20 33.2** | **-1.1** |
| | 1.8nm,0.5s,baz=340,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **26.18** | **165** | P | **P** | **06 21 07.4** | **+1.5** |
| | 0.7nm,0.4s,baz=346,slow=12,SNR=14 | | | | | | |
| **PSI** | **Prapat** | **27.78** | **273** | LR | LR | 06 33 22.6 | |
| | comp=Z,37nm,21.7s,baz=116,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.19** | **326** | P | **P** | **06 25 31.9** | **0.0** |
| | 0.2nm,0.4s,baz=116,slow=7.4,SNR=5.2 | | | | | | |

*SOME **26** 06:33:37.0, 40°.97N×69°.82E, h0km*
*NNC **26** 06:33:38.6±1.4, 40°.97N×69°.77E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=9.2km s-min=4.9km az=34.0*
*KRNET **26** 06:33:38.5±0.1, 40°.97N×69°.83E, h14km, mb3.4*

**ISC 26 06:33:37.9±1.3, 40°.95N±0°.02×69°.45E±0°.04, h7km±11km, n51, σ2§75/85, 26C-9D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAS** | **Tashkent** | **0.39** | **343** | ⇓*i* P | **Pn** | **06 33 49.1** | **-1.0** |
| TAS | | | | ⇓*i* S | **Sb** | **06 33 57.0** | **+3.5** |
| | baz=12 | | | | | | |
| **IUG** | **luzhnay** | **1.27** | **20** | *e*P | **Pn** | **06 34 00.7** | **-1.6** |
| IUG | 311nm,0.6s | | | *e*S | **Sg** | **06 34 17.6** | **-1.3** |
| | 171nm,0.6s | | | | | | |
| **IUG** | **luzhnay** | **1.27** | **20** | P | **Pn** | **06 34 00.7** | **-1.6** |
| IUG | 910nm,0.3s | | | S | **Sg** | **06 34 17.6** | **-1.3** |
| | 171nm,0.6s | | | | | | |
| **IUG** | **luzhnay** | **1.27** | **20** | *e*P | **Pn** | **06 34 00.7** | **-1.6** |
| IUG | baz=7.0 | | | *e*S | **Sg** | **06 34 17.6** | **-1.3** |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SGDS** | **Sogindy** 4.9nm,0.9s | **4.59** | **55** | *e*P | **Pb** | **06 34 58.6** | **-0.2** |
| SGDS | 5.4nm,0.1s | | | *e*S | **Sb** | **06 35 55.7** | **+1.4** |
| **SGDS** | **Sogindy** 4.9nm,0.9s | **4.59** | **55** | Pg | **Pb** | **06 34 57.7** | **-1.1** |
| SGDS | 7.1nm,0.3s | | | Lg | Lg | 06 35 55.5 | |
| **TKM2** | **Tokmak 2** 3.2nm,0.7s | **4.99** | **65** | ⇑Pg | **Pb** | **06 35 04.8** | **-0.9** |
| TKM2 | 9.4nm,0.8s | | | ⇓Lg | Lg | 06 36 11.9 | |
| **TKM2** | **Tokmak 2** baz=64 | **4.99** | **65** | ⇑*e*P | **Pn** | **06 34 53.5** | **+0.1** |
| TKM2 | baz=64 | | | ⇑*i*S | **Sn** | **06 35 48.2** | **-3.3** |
| **DGS** | **Degeres** 3.0nm,0.6s | **5.23** | **62** | *e*P | **Pb** | **06 35 10.0** | **+0.2** |
| DGS | 5.5nm,0.7s | | | *e*S | **Sb** | **06 36 17.4** | **+4.6** |
| **DGS** | **Degeres** 3.0nm,0.6s | **5.23** | **62** | Pg | **Pb** | **06 35 09.2** | **-0.5** |
| DGS | 5.5nm,0.7s | | | Lg | Lg | 06 36 15.3 | |
| **BTLS** | **Baital** 3.6nm,0.5s | **5.30** | **38** | *e*P | **Pb** | **06 35 12.5** | **+1.6** |
| BTLS | 4.7nm,0.3s | | | *e*S | **Sb** | **06 36 20.9** | **+6.2** |
| **BTLS** | **Baital** 3.6nm,0.5s | **5.30** | **38** | Pg | **Pb** | **06 35 12.5** | **+1.6** |
| BTLS | 4.7nm,0.3s | | | Lg | Lg | 06 36 20.9 | |
| **KRBS** | **Karabastau** 2.4nm,0.7s | **5.37** | **57** | *e*P | **Pb** | **06 35 12.4** | **+0.3** |
| KRBS | 3.9nm,0.6s | | | *e*S | **Sb** | **06 36 20.9** | **+4.2** |
| **KRBS** | **Karabastau** 2.4nm,0.7s | **5.37** | **57** | Pg | **Pb** | **06 35 12.4** | **+0.3** |
| KRBS | 3.9nm,0.6s | | | Lg | Lg | 06 36 20.9 | |
| **MTBS** | **Maitube** 2.1nm,0.3s | **5.63** | **65** | *e*P | **Pb** | **06 35 17.2** | **+0.6** |
| MTBS | 5.4nm,0.4s | | | *e*S | **Sb** | **06 36 29.0** | **+4.6** |
| **MTBS** | **Maitube** 2.1nm,0.3s | **5.63** | **65** | Pg | **Pb** | **06 35 17.2** | **+0.6** |
| MTBS | 5.4nm,0.4s | | | Lg | Lg | 06 36 29.0 | |
| **KUU** | **Kurty** 2.9nm,0.8s | **5.88** | **58** | *e*P | **Pb** | **06 35 22.9** | **+2.1** |
| KUU | 5.7nm,0.3s | | | ⇑*i*S | **Sb** | **06 36 38.7** | **+7.2** |
| **KUU** | **Kurty** 2.9nm,0.8s | **5.88** | **58** | Pg | **Pb** | **06 35 22.9** | **+2.1** |
| KUU | 5.7nm,0.3s | | | Lg | Lg | 06 36 38.7 | |
| **TNSS** | **Tian-Shan** 1.5nm,0.4s | **5.96** | **67** | *e*P | **Pb** | **06 35 23.5** | **+1.1** |
| TNSS | 2.0nm,0.4s | | | *e*S | **Sb** | **06 36 39.8** | **+5.6** |
| **TNSS** | **Tian-Shan** 1.5nm,0.4s | **5.96** | **67** | Pg | **Pb** | **06 35 23.5** | **+1.1** |
| TNSS | 2.0nm,0.4s | | | Lg | Lg | 06 36 39.8 | |
| **KTBS** | **Karatobe** 1.5nm,0.3s | **6.03** | **60** | *e*P | **Pb** | **06 35 25.1** | **+1.8** |
| KTBS | 10nm,0.8s | | | *e*S | **Sb** | **06 36 42.5** | **+6.9** |
| **KTBS** | **Karatobe** 1.5nm,0.3s | **6.03** | **60** | Pg | **Pb** | **06 35 25.1** | **+1.8** |
| KTBS | 10nm,0.8s | | | Lg | Lg | 06 36 42.5 | |
| **KOTS** | **Kotyrbulak** 2.1nm,0.4s | **6.14** | **66** | *e*P | **Pb** | **06 35 26.6** | **+1.3** |
| KOTS | 4.8nm,0.5s | | | *e*S | **Sb** | **06 36 45.2** | **+6.2** |
| **KOTS** | **Kotyrbulak** 2.1nm,0.4s | **6.14** | **66** | Pg | **Pb** | **06 35 26.6** | **+1.3** |
| KOTS | 4.8nm,0.5s | | | Lg | Lg | 06 36 45.2 | |
| **CHKK** | **Chushkaly** 0.7nm,0.1s | **6.29** | **60** | *e*P | **Pb** | **06 35 30.1** | **+2.4** |
| CHKK | 3.4nm,0.3s | | | *e*S | **Sb** | **06 36 51.0** | **+7.8** |
| **CHKK** | **Chushkaly** 0.7nm,0.1s | **6.29** | **60** | Pg | **Pb** | **06 35 30.1** | **+2.4** |
| CHKK | 3.4nm,0.3s | | | Lg | Lg | 06 36 51.0 | |
| **ARXS** | **Arharly** 1.5nm,0.4s | **6.99** | **59** | *e*P | **Pb** | **06 35 42.9** | **+3.2** |
| ARXS | 5.2nm,0.5s | | | *e*S | Sb | 06 37 13.1 | +10 |
| **ARXS** | **Arharly** 1.5nm,0.4s | **6.99** | **59** | Pg | **Pb** | **06 35 42.9** | **+3.2** |
| ARXS | 5.2nm,0.5s | | | Lg | Lg | 06 37 13.1 | |

**IDC 26 06:45:53.1±3.0, 54°30N×85°97E, h0km, mb1 2.6/1, mb1mx2.6/33, mbtmp2.6/1, ML2.6/1, Error ellipse: s-maj=20.0km s-min=11.1km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.76** | **243** | *i* | | 06 50 30.0 | |
| | baz=61,slow=340,SNR=8.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.76** | **243** | Pg | Pg | 06 46 06.8 | -0.8 |
| | 0.5nm,0.3s,baz=61,slow=16,SNR=5.0 | | | | | | |
| ZALV | | | | Lg | Lg | 06 46 18.8 | |
| | 2.3nm,0.3s,baz=66,slow=29,SNR=15 | | | | | | |
| ZALV | | | | Rg | Rg | 06 46 21.9 | |
| | 4.6nm,0.3s,baz=62,slow=34,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **199** | Pn | Pn | 06 47 50.1 | +1.3 |
| | 0.1nm,0.3s,baz=20,slow=13,SNR=5.6 | | | | | | |
| MKAR | | | | Lg | Lg | 06 50 02.0 | |
| | 0.0nm,0.3s,baz=18,slow=34,SNR=2.9 | | | | | | |

**IDC 26 07:00:15.2±8.2, 49°01N×104°15E, h0km, Error ellipse: s-maj=46.7km s-min=30.4km az=129.0, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **1.90** | **127** | Pg | Pn | 07 00 49.1 | +0.1 |
| | 14nm,0.3s,baz=305,slow=17,SNR=49 | | | | | | |
| SONM | | | | Lg | Lg | 07 01 17.0 | |
| | 9.0nm,0.3s,baz=312,slow=30,SNR=16 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **1.93** | **128** | *i* | | 07 10 40.0 | |
| | baz=309,slow=326,SNR=2.4 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **19.66** | **94** | *i* | | 08 55 40.0 | |
| | baz=287,slow=340,SNR=2.9 | | | | | | |

*NNC **26** 07:02:01.5±1.5, 53°.76N×86°.82E, h0km, mb2.9, mpv2.7, Error ellipse: s-maj=13.5km s-min=6.4km az=37.0, Suspected Mining explosion.*
*IDC **26** 07:02:02.1±2.4, 53°.75N×86°.79E, h0km, mb1 3.2/2, mb1mx3.0/47, mbtmp3.2/2, ML2.9/2, Error ellipse: s-maj=22.1km s-min=13.3km az=65.0*

**ISC 26 07:02:00.2±4.0, 53°.9N±0°.2×86°.9E±0°.2, h0km, n7, σ1s30/9, 6C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.21** | **273** | *i* | | 07 08 40.0 | |
| | baz=99,slow=338,SNR=1.9 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.21** | **273** | ⇑P | **Pn** | **07 02 24.0** | **-0.4** |
| | 0.3nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **07 02 40.8** | **-0.6** |
| | 5.3nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.21** | **273** | Pg | **Pb** | **07 02 23.7** | **-0.2** |
| | 2.2nm,0.3s,baz=101,slow=17,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 07 02 41.3 | |
| | 1.3nm,0.3s,baz=99,slow=30,SNR=15 | | | | | | |
| ZALV | | | | Rg | Rg | 07 02 49.2 | |
| | 3.2nm,0.4s,baz=98,slow=29,SNR=8.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.08** | **241** | Pn | **Pn** | **07 03 32.5** | **+1.3** |
| | 0.2nm,0.3s,baz=57,slow=13,SNR=9.9 | | | | | | |
| KURBB | | | | Lg | Lg | 07 05 10.7 | |
| | 0.0nm,0.3s,baz=57,slow=31,SNR=3.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.08** | **241** | ⇓Pn | **Pn** | **07 03 32.2** | **+0.9** |
| | 1.3nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **07 04 42.1** | **+0.7** |
| | 2.0nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 05 11.8 | |
| | 6.0nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **7.69** | **204** | ⇑Pn | **Pn** | **07 03 54.1** | **+0.7** |
| | 0.7nm,0.6s,baz=25,slow=13,SNR=18 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **07 05 18.9** | **-2.3** |
| | 0.3nm,0.5s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 06 01.3 | |
| | 1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.69** | **204** | Pn | **Pn** | **07 03 54.2** | **+0.8** |
| | 0.4nm,0.3s,baz=24,slow=13,SNR=18 | | | | | | |

*IDC **26** 07:10:50.0±0.7, 37°.87N×144°.01E, h0km, mb3.8/12, mb1 4.1/14, mb1mx3.8/63, mbtmp3.8/14, ML3.8/2, MS2.6/1, Ms1 2.6/1, ms1mx2.2/92, Error ellipse: s-maj=23.8km s-min=16.3km az=113.0*
*NIED **26** 07:10:53.5, 38°.02N×143°.83E, h41km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=4.51; Mθθ0.03; Mφφ4.48; Mrθ-1.42; Mθφ0.23; Mφr3.68; Fault plane solution: M₀5.97000×10¹⁴ NP1: φs168.00000°, δ66.00000°, λ-102.00000°. NP2: φs16.00000°, δ27.00000°, λ-65.00000°.*
*JMA **26** 07:10:53.4±0.1, 38°.02N×143°.83E, h41km, M4.1*
*NEIC **26** 07:10:55.0±1.0, 37°.96N±0°.07×143°.8E±0°.1, h33km±6km, mb4.0/10, Error ellipse: s-maj=17.6km s-min=6.7km az=115.0*

**ISC 26 07:10:55.1±0.7, 38°02N±0°05×143°89E±0°06, h35km, n52, σ1s49/58, mb3.9/15, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **1.94** | **280** | P | **Pn** | **07 11 24.1** | **-1.4** |
| JIKH | | | | S | **Sn** | **07 11 46.1** | **-2.5** |
| **OFUJ** | **Ofunato** | **2.04** | **302** | P | **Pn** | **07 11 25.6** | **-1.4** |
| OFUJ | | | | *e*S | **Sn** | **07 11 50.0** | **-1.2** |
| **JIO** | **Ouri** | **2.05** | **283** | P | **Pn** | **07 11 25.9** | **-1.2** |
| JIO | | | | S | **Sn** | **07 11 49.2** | **-2.2** |
| **JKMT** | **Kesennumamotoy** | **2.06** | **293** | P | **Pn** | **07 11 25.9** | **-1.3** |
| JKMT | | | | *e*S | **Sn** | **07 11 50.1** | **-1.5** |
| **JMK** | **Ichinoseki** | **2.30** | **295** | P | **Pn** | **07 11 29.7** | **-0.7** |
| JMK | | | | *e*S | **Sn** | **07 11 56.4** | **-1.1** |
| **JMM** | **Marumori** | **2.45** | **267** | | **Pn** | **07 11 31.5** | **-1.1** |
| **JOM** | **Ohasama** | **2.50** | **306** | P | **Pn** | **07 11 32.4** | **-0.9** |
| JOM | | | | *e*S | **Sn** | **07 12 02.1** | **-0.4** |
| **JFT** | **Otama** | **2.86** | **261** | P | **Pn** | **07 11 37.7** | **-0.5** |
| JFT | | | | *e*S | **Sn** | **07 12 11.0** | **-0.5** |
| **JYK** | **Kaneyama** | **2.92** | **289** | P | **Pn** | **07 11 38.6** | **-0.4** |
| JYK | | | | *e*S | **Sn** | **07 12 12.9** | **+0.1** |
| **JANG** | **Nango** | **2.99** | **323** | *e*S | **Sn** | **07 12 12.2** | **-2.5** |
| **JYT** | **Yasato** | **3.45** | **240** | | **Pn** | **07 11 44.5** | **-1.8** |
| **JTM** | **Tenmabayashi** | **3.53** | **323** | Pn | **Pn** | **07 11 48.9** | **+1.5** |
| **JAW** | **Awa shima** | **3.68** | **278** | P | **Pn** | **07 11 49.6** | **+0.1** |
| **JOT** | **Ohata** | **4.01** | **328** | *e*S | **Sn** | **07 12 37.0** | **-2.9** |
| **ERM** | **Erimo** | **4.04** | **352** | Pn | **Pn** | **07 11 53.5** | **-0.9** |
| **BSO1** | **Boso 1** | **4.10** | **216** | P | **Pn** | **07 11 52.3** | **-2.4** |
| **JKB** | **Kayabe** | **4.45** | **331** | *e*S | **Sn** | **07 12 48.1** | **-2.4** |
| **JRY** | **Ryogami san** | **4.46** | **245** | P | **Pn** | **07 11 59.1** | **-1.2** |
| JRY | | | | *e*S | **Sn** | **07 12 47.5** | **-3.5** |
| **JCH** | **Churui** | **4.61** | **355** | P | **Pn** | **07 12 00.7** | **-1.6** |
| JCH | | | | *e*S | **Sn** | **07 12 50.5** | **-4.1** |
| **MJAR** | **Matsushiro Arr** | **4.76** | **254** | Pn | **Pn** | **07 12 04.3** | **-0.1** |
| | 1.3nm,0.3s,baz=77,slow=15,SNR=23 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.76** | **254** | | **Pn** | **07 12 03.7** | **-0.7** |
| **MAJO** | **Matsushiro** | **4.77** | **254** | | **Pn** | **07 12 03.3** | **-1.1** |
| **MAT** | **Matsushiro** | **4.77** | **254** | P | **Pn** | **07 12 05.1** | **+0.7** |
| MAT | | | | *e*S | **Sn** | **07 13 00.2** | **+1.7** |
| **MJB9** | **Matsu-Tunnel** | **4.77** | **254** | | **Pn** | **07 12 02.8** | **-1.7** |
| **JGF** | **Kuroka** | **5.77** | **247** | | **Pn** | **07 12 17.5** | **-0.8** |
| **JKA** | **Kamikawa-asahi** | **6.17** | **351** | | **Pn** | **07 12 23.8** | **+0.1** |
| **ASAJ** | **Asahikawa** | **6.17** | **351** | Pn | **Pn** | **07 12 23.8** | **0.0** |
| | 3.3nm,0.3s,baz=163,slow=16,SNR=3.6 | | | | | | |
| **JMN** | **Monobe** | **9.18** | **245** | Pn | **Pn** | **07 13 03.5** | **-1.6** |
| **KSRS** | **Korea Array** | **12.66** | **272** | LR | LR | 07 18 24.5 | |
| | comp=Z,24nm,19.4s,baz=105,slow=36 | | | | | | |
| **HIA** | **Hailar** | **20.69** | **311** | P | Pn | 07 15 33.7 | -0.8 |
| HIA | | | | IAmb | IAmb | 07 15 34.8 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **NACB** | **Ninganchiao** | **23.48** | **240** | P | **P** | **07 16 00.6** | **-1.0** |
| **TPUB** | **Ta-pu** | **24.72** | **240** | P | **P** | **07 16 12.1** | **-1.1** |
| **SEY** | **Seymchan** | **25.48** | **9** | P | **P** | **07 16 21.5** | **+1.8** |
| | comp=Z,2.6nm,0.9s,baz=200,slow=7.6,SNR=12 | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.47** | **302** | P | **P** | **07 16 47.5** | **+0.6** |
| ULN | | | | IAmb | IAmb | 07 16 53.5 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **28.91** | **302** | P | **P** | **07 16 52.9** | **+2.2** |
| | comp=Z,0.3nm,0.6s,baz=104,slow=9.0,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **28.91** | **302** | IAmb | IAmb | 07 16 59.9 | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| **KIWB** | **Kanaga Island** | **30.45** | **50** | P | **P** | **07 17 04.5** | **+0.3** |
| **MK31** | **Makanchi Array** | **45.27** | **302** | P | **P** | **07 19 09.0** | **-0.2** |
| MK31 | | | | IAmb | IAmb | 07 19 29.9 | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.27** | **302** | P | **P** | **07 19 10.6** | **+1.5** |
| | comp=Z,0.5nm,0.5s,baz=88,slow=9.8,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.27** | **302** | P | **P** | **07 19 08.5** | **-0.7** |
| **ILAR** | **Eielson Array** | **47.61** | **33** | P | **P** | **07 19 27.5** | **+0.3** |
| | comp=Z,1.3nm,0.7s,baz=265,slow=6.7,SNR=16 | | | | | | |
| **INK** | **Inuvik** | **52.61** | **28** | P | **P** | **07 20 06.3** | **+1.3** |
| | comp=Z,0.6nm,0.4s,baz=285,slow=8.0,SNR=5.0 | | | | | | |
| **INK** | **Inuvik** | **52.61** | **28** | IAmb | IAmb | 07 20 10.8 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **58.16** | **191** | P | **P** | **07 20 44.5** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 07 20 57.2 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.34** | **191** | P | **P** | **07 20 45.8** | **-1.0** |
| | comp=Z,3.1nm,0.7s,baz=12,slow=7.4,SNR=16 | | | | | | |
| **YKA** | **Yellowknife Ar** | **61.96** | **31** | P | **P** | **07 21 11.3** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=302,slow=6.7,SNR=9.9 | | | | | | |
| **ASAR** | **Alice Springs** | **62.07** | **190** | P | **P** | **07 21 11.6** | **-0.6** |
| | comp=Z,1.0nm,0.7s,baz=10,slow=7.2,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **68.85** | **333** | P | **P** | **07 21 56.3** | **+0.6** |
| | comp=Z,3.6nm,0.9s,baz=56,slow=8.5,SNR=3.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **72.82** | **55** | P | **P** | **07 22 21.6** | **+1.1** |
| | comp=Z,0.5nm,0.8s,baz=284,slow=6.0,SNR=4.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.71** | **323** | P | **P** | **07 22 31.3** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=44,slow=5.9,SNR=4.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.71** | **323** | IAmb | IAmb | 07 22 48.8 | |
| | comp=Z,1.5nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **75.57** | **47** | P | **P** | **07 22 36.9** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=286,slow=2.3,SNR=4.2 | | | | | | |

*NNC **26** 07:12:35.1±0.2, 50°.01N×78°.70E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=2.3km s-min=1.0km az=77.0, Suspected Mining explosion.*
*IDC **26** 07:12:36.4±1.1, 50°.06N×78°.75E, h0km, mb1 3.0/3, mb1mx2.9/54, mbtmp3.0/3, ML2.7/3, Error ellipse: s-maj=14.1km s-min=7.9km az=64.0*

**ISC 26 07:12:36.2±0.9, 50°18N±0°03×78°86E±0°04, h0km, n36, σ1s20/46, 23C-7D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.46** | **332** | ⇑P | **Pb** | **07 12 46.6** | **-0.5** |
| KUR07 | | | | ⇑S | **Sb** | **07 12 55.5** | **+1.0** |
| **KUR14** | **Kurchatov Arra** | **0.47** | **339** | ⇑P | **Pb** | **07 12 47.0** | **-0.3** |
| KUR14 | | | | ⇓S | **Sb** | **07 12 55.7** | **+0.9** |
| **KUR06** | **Kurchatov Arra** | **0.47** | **333** | ⇓P | **Pb** | **07 12 47.0** | **-0.4** |
| KUR06 | | | | ⇑S | **Sb** | **07 12 55.9** | **+1.0** |
| **KUR15** | **Kurchatov Arra** | **0.48** | **337** | ⇑P | **Pb** | **07 12 47.1** | **-0.3** |
| KUR15 | | | | ⇑S | **Sb** | **07 12 56.2** | **+1.1** |
| **KURBB** | **Kurchatov Arra** | **0.49** | **335** | Pg | **Pb** | **07 12 47.3** | **-0.4** |
| | 2.9nm,0.3s,baz=166,slow=19,SNR=104 | | | | | | |
| KURBB | | | | Lg | Lg | 07 12 56.0 | |
| | 3.6nm,0.3s,baz=166,slow=31,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.49** | **335** | ⇑P | **Pb** | **07 12 47.3** | **-0.4** |
| | 23nm,0.4s | | | | | | |
| KURBB | | | | ⇓S | **Sb** | **07 12 56.3** | **+0.9** |
| | 189nm,0.7s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.50** | **333** | ⇑P | **Pb** | **07 12 47.4** | **-0.5** |
| KUR16 | | | | ⇓S | **Sb** | **07 12 56.4** | **+0.6** |
| **KUR05** | **Kurchatov Arra** | **0.51** | **336** | ⇑P | **Pb** | **07 12 47.5** | **-0.4** |
| KUR05 | | | | ⇑S | **Sb** | **07 12 56.7** | **+0.8** |
| **KUR17** | **Kurchatov Arra** | **0.52** | **331** | ⇑P | **Pb** | **07 12 47.6** | **-0.5** |
| KUR17 | | | | ⇑S | **Sb** | **07 12 56.8** | **+0.6** |
| **KUR04** | **Kurchatov Arra** | **0.52** | **337** | ⇑P | **Pb** | **07 12 48.1** | **-0.2** |
| KUR04 | | | | ⇓S | **Sb** | **07 12 57.0** | **+0.6** |
| **KURK** | **Kurchatov** 9.8nm,0.4s | **0.56** | **344** | ⇑P | **Pb** | **07 12 48.7** | **-0.2** |
| KURK | 34nm,0.7s | | | ⇑S | **Sn** | **07 12 59.1** | **-2.2** |
| **SEM** | **Semipalatinsk** 4.5nm,0.1s | **0.92** | **75** | P | **Pn** | **07 12 55.4** | **-1.2** |
| SEM | 49nm,0.1s | | | S | **Sn** | **07 13 10.5** | **-0.1** |
| **MAKZ** | **Makanchi** 0.9nm,0.7s | **3.96** | **147** | ⇑Pn | **Pn** | **07 13 36.8** | **-1.3** |
| MAKZ | 2.1nm,0.7s | | | ⇑Pg | **Pb** | **07 13 46.1** | **-0.7** |
| MAKZ | 9.3nm,0.6s | | | ⇑Lg | Lg | 07 14 38.6 | |
| **BRZS** | **Berezniki** 4.9nm,0.1s | **3.99** | **270** | Pg | **Pb** | **07 13 46.3** | **-1.0** |
| BRZS | 5.7nm,0.4s | | | Lg | Lg | 07 14 37.6 | |
| **MK31** | **Makanchi Array** | **4.08** | **145** | ⇓Pn | **Pn** | **07 13 38.4** | **-1.5** |
| | 0.1nm,0.1s,baz=324,slow=10,SNR=24 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **07 13 47.3** | **-1.6** |
| | 0.6nm,0.3s,baz=322,slow=14,SNR=16 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 14 42.4 | |
| | 5.5nm,0.5s,baz=339,slow=24,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.08** | **145** | Pn | **Pn** | **07 13 39.7** | **-0.2** |
| | 0.3nm,0.3s,baz=322,slow=10,SNR=30 | | | | | | |
| MKAR | | | | Lg | Lg | 07 14 39.8 | |
| | 2.0nm,0.3s,baz=335,slow=23,SNR=16 | | | | | | |
| **OTUK** | **Ortayu** 1.1nm,0.3s | **4.69** | **248** | ⇑Pn | **Pn** | **07 13 45.9** | **-2.3** |
| OTUK | 4.1nm,0.5s | | | ⇑Lg | Lg | 07 14 59.3 | |
| **ZSN** | **Zaisan** 3.5nm,0.2s | **4.82** | **122** | Pg | **Pb** | **07 14 01.0** | **-0.4** |
| ZSN | 8.6nm,0.3s | | | Lg | Lg | 07 15 03.4 | |
| **KAPS** | **Kapalarasan** 1.9nm,0.3s | **4.91** | **176** | Pg | **Pb** | **07 14 01.0** | **-2.0** |
| KAPS | 14nm,0.4s | | | Lg | Lg | 07 15 02.9 | |
| **I46RU** | **ZALESOVO INFRA** | **5.27** | **42** | *i* | | 07 44 50.0 | |
| | baz=222,slow=322,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.27** | **42** | Pn | **Pn** | **07 13 59.8** | **+3.8** |
| | 1.0nm,0.3s,baz=231,slow=13,SNR=10 | | | | | | |
| **DJR** | **Jarkent** 1.9nm,0.2s | **5.88** | **173** | Pg | **Pb** | **07 14 19.4** | **-0.3** |
| DJR | 4.7nm,0.4s | | | Lg | Lg | 07 15 34.6 | |
| **BVAR** | **Borovoye Array** | **6.00** | **302** | Pn | **Pn** | **07 14 06.0** | **-0.1** |
| | 0.4nm,0.3s,baz=113,slow=12,SNR=3.6 | | | | | | |
| **ARXS** | **Arharly** 1.1nm,0.3s | **6.01** | **187** | Pg | **Pb** | **07 14 21.8** | **0.0** |
| ARXS | 11nm,0.4s | | | Lg | Lg | 07 15 39.0 | |
| **BTLS** | **Baital** 1.2nm,0.3s | **6.08** | **214** | Pg | **Pb** | **07 14 22.3** | **-0.7** |
| BTLS | 2.9nm,0.4s | | | Lg | Lg | 07 15 39.9 | |
| **BLB** | **Baldybastay** 2.7nm,0.1s | **6.09** | **183** | Pg | **Pb** | **07 14 23.5** | **+0.3** |
| BLB | 12nm,0.6s | | | Lg | Lg | 07 15 41.8 | |
| **KUU** | **Kurty** 0.5nm,0.3s | **6.52** | **196** | Pg | **Pb** | **07 14 31.0** | **+0.5** |
| KUU | 12nm,0.5s | | | Lg | Lg | 07 15 54.7 | |
| **KTBS** | **Karatobe** 0.9nm,0.3s | **6.64** | **194** | Pg | **Pb** | **07 14 33.1** | **+0.7** |
| KTBS | 10nm,0.4s | | | Lg | Lg | 07 15 58.2 | |
| **KRBS** | **Karabastau** 1.3nm,0.4s | **6.84** | **200** | Pg | **Pb** | **07 14 37.6** | **+1.7** |
| KRBS | 4.3nm,0.3s | | | Lg | Lg | 07 16 05.9 | |
| **PDGK** | **Podgornoye** 1.3nm,1.2s | **6.87** | **176** | Pg | **Pb** | **07 14 37.1** | **+0.7** |
| PDGK | 2.4nm,0.6s | | | Lg | Lg | 07 16 05.3 | |
| **PDGK** | **Podgornoye** 3.8nm,0.6s | **6.87** | **176** | ⇑Lg | Lg | 07 16 07.1 | |
| **UZB** | **Uzynbulak** 3.8nm,0.2s | **7.04** | **179** | Pg | **Pb** | **07 14 40.9** | **+1.6** |
| UZB | 4.6nm,0.5s | | | Lg | Lg | 07 16 11.3 | |
| **KOTS** | **Kotyrbulak** 1.5nm,0.3s | **7.05** | **190** | Pg | **Pb** | **07 14 41.3** | **+1.8** |
| KOTS | 13nm,0.4s | | | Lg | Lg | 07 16 12.3 | |
| **SATY** | **Saty** 0.9nm,0.2s | **7.13** | **183** | Pg | **Pb** | **07 14 42.6** | **+1.7** |
| SATY | 3.7nm,0.3s | | | Lg | Lg | 07 16 14.5 | |
| **MTBS** | **Maitube** 1.2nm,0.3s | **7.25** | **194** | Pg | **Pb** | **07 14 44.3** | **+1.5** |
| MTBS | 6.1nm,0.3s | | | Lg | Lg | 07 16 17.8 | |
| **TKM2** | **Tokmak 2** 2.5nm,0.6s | **7.60** | **198** | ⇑Lg | Lg | 07 16 31.2 | |

*IDC **26** 07:16:09.0±1.8, 1°.56N×125°.45E, h0km, mb3.6/3, mb1 3.8/4, mb1mx3.5/45, mbtmp3.6/4, ML3.5/1, MS3.4/1, Ms1 3.4/1, ms1mx2.4/67, Error ellipse: s-maj=128.7km s-min=23.0km az=67.0*
*DJA **26** 07:16:17.5±0.4, 2°N±4°×12°6E±°, h55km±17km, M4.0/9, mb4.2/2, MLv3.9/9*

**ISC 26 07:16:15.3±1.1, 1°68N±0°08×125°99E±0°08, h35km, n10, σ2s87/10, mb3.5/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.64** | **123** | P | **Pn** | **07 16 44.8** | **+3.1** |
| **SGSI** | **Sangihe** | **2.04** | **347** | P | **Pn** | **07 16 49.9** | **+2.7** |
| **KMSI** | **Cibinong** | **2.29** | **241** | P | **Pn** | **07 16 52.6** | **+1.9** |
| **GTOI** | **Gorontalo** | **3.16** | **251** | P | **Pn** | **07 17 05.9** | **+3.3** |
| **LUWI** | **Luwuk** | **4.21** | **230** | P | **Pn** | **07 17 19.4** | **+2.4** |
| **APSI** | **Ampana** | **5.05** | **239** | P | **Pn** | **07 17 30.8** | **+2.2** |
| **FITZ** | **Fitzroy Crossi** | **19.66** | **181** | P | **P** | **07 20 38.9** | **-2.4** |
| | 0.1nm,0.3s,baz=3.7,slow=9.9,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.00** | **160** | P | **P** | **07 21 15.2** | **-2.0** |
| | 0.5nm,0.3s,baz=335,slow=10,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **163** | P | **P** | **07 21 48.0** | **-0.2** |
| | 0.3nm,0.3s,baz=339,slow=8.9,SNR=5.0 | | | | | | |
| ASAR | | | | LR | LR | 07 32 34.6 | |
| | comp=Z,75nm,18.7s,baz=89,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.82** | **326** | P | **P** | **07 26 08.0** | **-2.3** |
| | 0.4nm,0.3s,baz=120,slow=7.2,SNR=11 | | | | | | |

*IDC **26** 07:17:45.8±0.9, 15°.35S×173°.23W, h0km, mb3.8/7, mb1 4.2/8, mb1mx3.9/41, mbtmp3.8/8, ML4.4/1, Error ellipse: s-maj=49.7km s-min=18.2km az=138.0*

**ISC 26 07:17:50.5±0.8, 15°25±0°2×173°2W±0°2, h29km, n29, σ1s38/24, mb3.8/8, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.92** | **48** | Pn | **Pn** | **07 18 21.4** | **+0.1** |
| | 132nm,0.3s,baz=207,slow=3.4,SNR=258 | | | | | | |
| AFI | | | | Sn | **Sn** | **07 18 43.1** | **-1.4** |
| | 241nm,0.3s,baz=54,slow=22,SNR=11 | | | | | | |
| **HAZ** | **Te Kaha** | **23.83** | **198** | P | **P** | **07 22 59.2** | **-1.8** |
| **PKGZ** | **Pakihiroa** | **23.86** | **197** | P | **P** | **07 23 01.5** | **0.0** |
| **RUGZ** | **Raukumara Rang** | **24.05** | **198** | P | **P** | **07 23 02.2** | **-1.1** |
| **MWZ** | **Matawai** | **24.44** | **198** | P | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **80.38** | **56** | P | | **P** | 07 29 59.5 | **-0.1** |
| | 0.7nm,0.9s,baz=212,slow=4.4,SNR=3.8 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.02** | **42** | P | | **P** | 07 30 08.3 | **0.0** |
| | 0.7nm,0.8s,baz=183,slow=3.0,SNR=6.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.23** | **11** | P | | **P** | 07 30 08.8 | **+0.3** |
| | 0.3nm,0.6s,baz=221,slow=6.1,SNR=5.4 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.86** | **23** | P | | **P** | 07 30 47.2 | **+1.0** |
| | 0.5nm,1.0s,baz=236,slow=4.8,SNR=6.9 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.10** | **321** | PKPbc | | **PKPbc** | 07 37 28.6 | **+0.3** |
| | 0.7nm,0.6s,baz=64,slow=4.4,SNR=3.9 | | | | | | | | |

**IDC 26 07:18:56.5±4.1, 7.°13S×75.°87W, h143km±45km, mb3.1/3, mb1 3.4/5, mb1mx3.3/29, mbtmp3.7/5, MS2.4/1, Ms1 2.4/1, ms1mx2.2/16, Error ellipse: s-maj=60.7km s-min=15.0km az=60.0, Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **2.51** | **270** | P | Pn | 07 19 37.9 | **+0.1** |
| | 27nm,0.3s,baz=65,slow=14,SNR=531 | | | | | | |
| ATAH | | | | S | Sn | 07 20 10.1 | **+0.5** |
| | 19nm,0.3s,baz=71,slow=14,SNR=4.0 | | | | | | |
| ATAH | | | | LR | LR | 07 20 27.8 | |
| | comp=Z,68nm,20.1s,baz=287,slow=36 | | | | | | |
| **NNA** | **Nana** | **4.93** | **191** | P | Pn | 07 20 10.8 | **+1.9** |
| | 3.9nm,0.3s,baz=4.8,slow=7.1,SNR=12 | | | | | | |
| NNA | | | | S | Sn | 07 21 04.9 | **-0.5** |
| | 16nm,0.3s,baz=198,slow=16,SNR=16 | | | | | | |
| **PDAR** | **Pinedale Array** | **58.35** | **331** | P | P | 07 28 37.2 | **+0.2** |
| | 0.2nm,0.5s,baz=122,slow=8.6,SNR=2.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.51** | **343** | P | P | 07 30 24.8 | **0.0** |
| | 0.3nm,0.5s,baz=140,slow=6.3,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.61** | **75** | P | P | 07 30 48.2 | **-0.4** |
| | 0.3nm,0.5s,baz=286,slow=4.4,SNR=2.6 | | | | | | |

*IDC **26** 07:19:18.8±1.9, 28.°91S×67.°62W, h98km±17km, mb4.0/8, mb1 3.9/13, mb1mx3.8/31, mbtmp4.2/13, MS3.1/2, Ms1 3.1/2, ms1mx2.6/56, Error ellipse: s-maj=20.5km s-min=15.9km az=109.0*

*VAO **26** 07:19:18.8±0.5, 28.°90S×67.°61W, h100km, mb4.2*

*SJA **26** 07:19:19.7±1.2, 28.°87S×67.°60W, h131km±5km, ML3.8, MW4.0*

*NEIC **26** 07:19:19.7±2.5, 28.°89S±0.°06×67.°57W±0.°08, h100km±5km, mb4.5/16, Md4.1(SJA), Error ellipse: s-maj=9.9km s-min=8.5km az=117.0*

**ISC 26 07:19:20.5±0.6, 28.°84S±0.°04×67.°62W±0.°04, h116km±6km, n137, σ1.°39/153, mb4.2/12, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VCA** | **Vinchina** | **0.53** | **282** | *i* P | **Pn** | **07 19 40.4** | **+2.1** |
| VCA | | | | *e*S | **Sn** | **07 19 55.1** | **+3.4** |
| **ACLC** | **CERRO LA CRUZ** | **0.82** | **135** | *e*P | **Pn** | 07 19 42.2 | **+1.6** |
| ACLC | | | | *e*S | **Sn** | **07 19 57.3** | **+1.4** |
| ACLC | | | | IAML | | 07 20 00.5 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **1.82** | **149** | *e*P | **Pn** | **07 19 52.5** | **+1.0** |
| APLL | | | | *e*S | **Sn** | **07 20 15.4** | **+0.2** |
| **ACDV** | **Cuesta del Vie** | **1.86** | **224** | *e*P | **Pn** | **07 19 53.0** | **+0.8** |
| ACDV | | | | *i* P | | 07 19 53.8 | |
| ACDV | | | | *e*S | **Sn** | **07 20 18.2** | **+1.9** |
| ACDV | | | | IAML | | 07 20 18.4 | |
| | comp=Z,580nm,1.0s | | | | | | |
| **AROD** | **Rodeo** | **2.09** | **230** | *e*P | **Pn** | **07 19 56.2** | **+1.0** |
| AROD | | | | *i* P | | 07 19 56.9 | |
| AROD | | | | *e*S | **Sn** | **07 20 23.9** | **+2.3** |
| **ACCO** | **Cerro Coronel** | **2.15** | **216** | *e*P | **Pn** | **07 19 57.0** | **+1.1** |
| ACCO | | | | *e*S | **Sn** | **07 20 25.3** | **+2.3** |
| **AC02** | **Maricunga** | **2.41** | **326** | Pn | **Pn** | **07 20 01.5** | **+2.1** |
| **RTLL** | **Cerro Villicun** | **2.59** | **196** | *e*P | **Pn** | **07 20 02.0** | **+0.7** |
| RTLL | | | | *e*S | **Sn** | **07 20 32.5** | **-0.1** |
| **GO03** | **Copiap** | **2.62** | **298** | Pn | **Pn** | **07 20 02.9** | **+1.1** |
| **GO03** | **Copiap** | **2.62** | **298** | *e*P | **Pn** | **07 20 03.0** | **+1.2** |
| GO03 | | | | *e*S | **Sn** | **07 20 33.9** | **+0.4** |
| **LCO** | **Las Campanas** | **2.71** | **266** | Pn | **Pn** | **07 20 03.8** | **+0.8** |
| **LCO** | **Las Campanas** | **2.71** | **266** | *e*P | **Pn** | **07 20 04.0** | **+0.9** |
| **AC06** | **Mina Casimiro** | **2.83** | **301** | | **Pn** | **07 20 04.6** | **+0.1** |
| **ZON** | **Zonda** | **2.85** | **199** | Pn | **Pn** | **07 20 05.1** | **+0.4** |
| **ZON** | **Zonda** | **2.85** | **199** | *e*P | **Pn** | **07 20 05.3** | **+0.7** |
| ZON | | | | *e*S | **Sn** | **07 20 37.7** | **-1.0** |
| ZON | | | | IAML | | 07 20 40.3 | |
| | comp=Z,262nm,0.3s | | | | | | |
| **AHML** | **Horco Molle** | **2.88** | **45** | *e*P | **Pn** | **07 20 06.6** | **+1.4** |
| AHML | | | | *e*S | **Sn** | **07 20 40.0** | **+0.4** |
| AHML | | | | IAML | | 07 20 42.0 | |
| | comp=Z,385nm,1.4s | | | | | | |
| **GO04** | **Tololo Observa** | **3.07** | **244** | | **Pn** | **07 20 08.1** | **+0.3** |
| **GO04** | **Tololo Observa** | **3.07** | **244** | *e*P | **Pn** | **07 20 08.4** | **+0.6** |
| GO04 | | | | *e*S | **Sn** | **07 20 45.5** | **+1.2** |
| **AC04** | **Llanos de Chal** | **3.10** | **281** | Pn | **Pn** | **07 20 08.2** | **+0.2** |
| **AC04** | **Llanos de Chal** | **3.10** | **281** | *e*P | **Pn** | **07 20 08.5** | **+0.5** |
| AC04 | | | | *e*S | **Sn** | **07 20 44.3** | **-0.5** |
| AC04 | | | | IAML | | 07 20 46.8 | |
| | comp=Z,194nm,0.5s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.11** | **195** | *e*P | **Pn** | **07 20 08.9** | **+0.7** |
| RTCV | | | | *e*S | **Sn** | **07 20 45.4** | **+0.4** |
| **CO03** | **El Pedregal** | **3.33** | **233** | | **Pn** | **07 20 11.4** | **+0.3** |
| **CO05** | **La Serena** | **3.33** | **250** | | **Pn** | **07 20 10.3** | **-0.8** |
| **AUSP** | **Uspallata** | **3.70** | **204** | *e*P | **Pn** | **07 20 16.6** | **+0.5** |
| AUSP | | | | *e*S | **Sn** | **07 21 00.6** | **+1.3** |
| **CO02** | **Combarbal** | **3.76** | **230** | | **Pn** | **07 20 16.1** | **-0.8** |
| **AC01** | **Pan de Azucar** | **3.77** | **315** | Pn | **Pn** | **07 20 17.4** | **+0.5** |
| **AC01** | **Pan de Azucar** | **3.77** | **315** | *e*P | **Pn** | **07 20 17.7** | **+0.8** |
| AC01 | | | | IAML | | 07 21 35.0 | |
| | comp=Z,62nm,1.5s | | | | | | |
| **ASAL** | **Salagasta** | **3.88** | **195** | *e*P | **Pn** | **07 20 19.0** | **+0.6** |
| ASAL | | | | *e*S | **Sn** | **07 21 02.3** | **-1.0** |
| **CO06** | **Fray Jorge** | **3.94** | **241** | | **Pn** | **07 20 17.7** | **-1.4** |
| **VA03** | **San Esteban** | **4.65** | **212** | | **Pn** | **07 20 28.5** | **-0.2** |
| **VA06** | **Catapilco** | **4.87** | **220** | | **Pn** | **07 20 30.1** | **-1.5** |
| **PEL** | **Peldehue** | **5.03** | **211** | | **Pn** | **07 20 32.0** | **-1.8** |
| **ROC1** | **El Roble** | **5.05** | **214** | | **Pn** | **07 20 30.9** | **-3.4** |
| **MT03** | **Universidad Ad** | **5.26** | **207** | Pn | **Pn** | **07 20 36.3** | **-0.6** |
| **MT05** | **Renca** | **5.26** | **210** | | **Pn** | **07 20 35.7** | **-1.3** |
| **MT02** | **Curacav** | **5.34** | **214** | | **Pn** | **07 20 36.8** | **-1.2** |
| **VA01** | **Torpederas** | **5.42** | **219** | Pn | **Pn** | **07 20 36.5** | **-2.4** |
| **LMEL** | **Las Melosas** | **5.46** | **203** | | **Pn** | **07 20 39.0** | **-0.7** |
| **MT09** | **Talagante** | **5.70** | **210** | | **Pn** | **07 20 40.9** | **-2.1** |
| **BO04** | **La Punta** | **5.73** | **206** | | **Pn** | **07 20 42.5** | **-0.8** |
| **MT01** | **Popeta** | **5.89** | **211** | | **Pn** | **07 20 42.8** | **-2.6** |
| **BO01** | **Tunca** | **6.27** | **207** | | **Pn** | **07 20 47.9** | **-2.6** |
| **LVC** | **Limon Verde** | **6.32** | **349** | P | **Pn** | **07 20 52.3** | **+0.8** |
| | comp=Z,7.8nm,0.3s,baz=183,slow=7.5,SNR=11 | | | | | | |
| LVC | | | | S | **Sn** | **07 21 59.9** | **-2.6** |
| | comp=Z,6.3nm,0.3s,baz=310,slow=22,SNR=11 | | | | | | |
| LVC | | | | LR | LR | 07 24 04.7 | |
| | comp=Z,57nm,19.8s,baz=181,slow=45 | | | | | | |
| **LVC** | **Limon Verde** | **6.32** | **349** | Pn | **Pn** | **07 20 51.9** | **+0.3** |
| **PB06** | **IPOC Station P** | **6.36** | **344** | | **Pn** | **07 20 51.6** | **-0.3** |
| **PB03** | **IPOC Station P** | **7.04** | **344** | | **Pn** | **07 20 59.7** | **-1.4** |
| **GO05** | **Huala** | **7.16** | **210** | | **Pn** | **07 20 59.0** | **-3.5** |
| **PB09** | **IPOC Station P** | **7.17** | **348** | | **Pn** | **07 21 02.5** | **-0.4** |
| **PB07** | **IPOC Station P** | **7.38** | **343** | | **Pn** | **07 21 04.1** | **-1.7** |
| **ML02** | **Panimavida** | **7.61** | **204** | | **Pn** | **07 21 05.0** | **-3.6** |
| **PB02** | **IPOC Station P** | **7.77** | **344** | | **Pn** | **07 21 09.3** | **-1.6** |
| **CPUP** | **Villa Florida** | **9.47** | **77** | P | **Pn** | **07 21 33.0** | **-0.8** |
| | comp=Z,0.5nm,0.3s,baz=263,slow=11,SNR=7.1 | | | | | | |
| **CPUP** | **Villa Florida** | **9.47** | **77** | | **Pn** | **07 21 32.9** | **-0.9** |
| **CPUP** | **Villa Florida** | **9.47** | **77** | *e*P | **Pn** | **07 21 32.9** | **-0.9** |
| **ITQB** | **Itaqui** | **9.64** | **98** | Pn | **Pn** | **07 21 35.3** | **-0.9** |
| **ITQB** | **Itaqui** | **9.64** | **98** | *e*P | **Pn** | **07 21 34.9** | **-1.2** |
| **H03N1** | **Juan Fernandez** | **10.70** | **242** | P | **Pn** | **07 21 48.2** | **-2.0** |
| | baz=156,slow=73,SNR=6.1 | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.72** | **242** | P | **Pn** | **07 21 48.4** | **-2.0** |
| | baz=156,slow=73,SNR=6.7 | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.72** | **242** | P | **Pn** | **07 21 48.4** | **-2.1** |
| | baz=156,slow=73,SNR=6.7 | | | | | | |
| **PLCA** | **Paso Flores** | **12.10** | **191** | P | **Pn** | **07 22 06.4** | **-2.8** |
| | comp=Z,0.2nm,0.3s,baz=21,slow=11,SNR=7.5 | | | | | | |
| **PLCA** | **Paso Flores** | **12.10** | **191** | Pn | **Pn** | **07 22 05.8** | **-3.4** |
| **PLCA** | **Paso Flores** | **12.10** | **191** | *e*P | **Pn** | **07 22 07.1** | **-2.1** |
| **CPSB** | **Cacapava Do Su** | **12.44** | **101** | *e*P | **Pn** | **07 22 11.7** | **-1.8** |
| **PLTB** | **Pedras Altas** | **12.46** | **107** | Pn | **Pn** | **07 22 11.9** | **-1.8** |
| **PLTB** | **Pedras Altas** | **12.46** | **107** | *e*P | **Pn** | **07 22 11.8** | **-2.0** |
| **LPAZ** | **La Paz** | **12.51** | **358** | P | **Pn** | **07 22 15.2** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=172,slow=12,SNR=3.9 | | | | | | |
| **LPAZ** | **La Paz** | **12.51** | **358** | *e*P | **Pn** | **07 22 15.5** | **+0.4** |
| **AQDB** | **Aquidauana** | **13.66** | **55** | | **Pn** | **07 22 27.8** | **-1.7** |
| **AQDB** | **Aquidauana** | **13.66** | **55** | *e*P | **Pn** | **07 22 28.8** | **-0.7** |
| **SIV** | **San Ignacio** | **14.14** | **27** | P | **Pn** | **07 22 34.0** | **-1.8** |
| | comp=Z,1.3nm,0.3s,baz=176,slow=8.8,SNR=9.7 | | | | | | |
| **PTGB** | **Pitanga** | **14.49** | **77** | *e*P | **Pn** | **07 22 40.1** | **0.0** |
| **PTLB** | **Pontes e Lacer** | **15.46** | **32** | *e*P | **Pn** | **07 22 51.9** | **-0.5** |
| **TER01** | **Tubaro-SC** | **16.23** | **93** | *e*P | **Pn** | **07 23 01.6** | **-0.2** |
| **PCMB** | **Pacaembu** | **16.45** | **68** | *e*P | **Pn** | **07 23 04.6** | **-0.1** |
| **SALV** | **Santo Antonio** | **16.94** | **43** | *e*P | **Pn** | **07 23 09.5** | **-1.1** |
| **TIJ01** | **Guaruva-PR** | **16.94** | **82** | *e*P | **Pn** | **07 23 08.8** | **-1.9** |
| **FRTB** | **Fartura** | **17.11** | **75** | *e*P | **Pn** | **07 23 12.7** | **0.0** |
| **VILB** | **Vilhena** | **17.25** | **25** | *e*P | **P** | **07 23 13.9** | **-0.3** |
| **ITRB** | **Iturama** | **18.16** | **64** | *e*P | **P** | **07 23 24.4** | **+0.4** |
| **PET01** | **Itanhaem-SP** | **18.75** | **81** | *e*P | **P** | **07 23 30.8** | **+0.3** |
| **BB19B** | **Bebedouro** | **18.95** | **70** | *e*P | **P** | **07 23 32.3** | **-0.5** |
| **ETMB** | **Extrema** | **18.97** | **4** | *e*P | **P** | **07 23 33.0** | **0.0** |
| **RCLB** | **Rio Claro- Sao** | **19.20** | **75** | *e*P | **P** | **07 23 35.0** | **-0.5** |
| **VAO** | **Valinhos** | **19.46** | **77** | *e*P | **P** | **07 23 38.0** | **-0.3** |
| **ARAG** | **Araguaiana, MT** | **19.59** | **51** | *e*P | **P** | **07 23 39.0** | **-0.7** |
| **PDRB** | **Porto dos Gac** | **19.93** | **33** | *e*P | **P** | **07 23 42.2** | **-1.2** |
| **GO08** | **Villa O'Higgin** | **19.96** | **190** | P | **P** | **07 23 42.9** | **-0.5** |
| GO08 | | | | IAmb | IAmb | 07 23 48.6 | |
| | comp=Z,63nm,1.8s | | | | | | |
| **PARB** | **Paraibuna** | **20.49** | **80** | *e*P | **P** | **07 23 48.3** | **-1.1** |
| **IPMB** | **Ipameri, GO** | **20.80** | **63** | *e*P | **P** | **07 23 51.7** | **-1.1** |
| **CLDB** | **Colider** | **21.02** | **34** | *e*P | **P** | **07 23 54.6** | **-0.5** |
| **BDFB** | **Brasilia** | **22.36** | **58** | P | **P** | **07 24 07.6** | **-1.7** |
| | comp=Z,3.3nm,0.4s,baz=226,slow=8.4,SNR=11 | | | | | | |
| BDFB | | | | LR | LR | 07 33 32.0 | |
| | comp=Z,122nm,20.2s,baz=172,slow=38 | | | | | | |
| **BDFB** | **Brasilia** | **22.36** | **58** | P | **P** | **07 24 07.3** | **-2.0** |
| **SNDB** | **Serra Nova Dou** | **22.66** | **46** | *e*P | **P** | **07 24 11.2** | **-1.0** |
| **DIAM** | **Diamantina, MG** | **24.29** | **70** | *e*P | **P** | **07 24 27.2** | **-0.2** |
| **PEXB** | **Peixe** | **24.53** | **51** | *e*P | **P** | **07 24 28.2** | **-1.2** |
| **NPGB** | **Novo Progresso** | **24.58** | **30** | *e*P | **P** | **07 24 30.3** | **+0.4** |
| **JANB** | **Januaria** | **25.54** | **62** | *e*P | **P** | **07 24 37.2** | **-1.4** |
| **MACA** | **Manacapuru-AM** | **26.38** | **16** | *e*P | **P** | **07 24 46.8** | **+0.7** |
| **SDBA** | **SAO DESIDERIO** | **26.74** | **57** | *e*P | **P** | **07 24 48.7** | **-0.8** |
| **ITTB** | **Itaituba** | **26.83** | **27** | *e*P | **P** | **07 24 50.0** | **-0.2** |
| **SMTB** | **Santa Maria do** | **27.38** | **47** | *e*P | **P** | **07 24 54.9** | **-0.3** |
| **PTGA** | **Pitinga** | **28.89** | **16** | P | **P** | **07 25 09.0** | **+0.4** |
| | comp=Z,4.7nm,0.4s,baz=338,slow=23,SNR=9.1 | | | | | | |
| **GDU01** | **Guandu, BA** | **30.05** | **66** | *e*P | **P** | **07 25 17.5** | **-1.3** |
| **NBPN** | **Novo Novo - B** | **31.27** | **61** | *e*P | **P** | **07 25 28.2** | **-1.4** |
| **BOAV** | **Boa Vista** | **31.80** | **14** | *e*P | **P** | **07 25 36.0** | **+1.8** |
| **NBMA** | **Muriti-CE** | **34.59** | **57** | *e*P | **P** | **07 25 57.9** | **-0.6** |
| **NBPS** | **Pedro II - PI** | **34.76** | **50** | *e*P | **P** | **07 26 00.9** | **+0.9** |
| **NBLV** | **Livramento - P** | **35.97** | **60** | *e*P | **P** | **07 26 10.2** | **-0.2** |
| **MTO3** | **Montecristo** | **47.85** | **331** | P | **P** | **07 27 48.0** | **+1.0** |
| **SNAA** | **Sanae** | **55.00** | **160** | P | **P** | **07 28 39.8** | **+0.2** |
| | comp=Z,2.0nm,0.6s,baz=306,slow=19,SNR=6.0 | | | | | | |
| **SNAA** | **Sanae** | **55.00** | **160** | P | **P** | **07 28 39.2** | **-0.3** |
| **QSPA** | **South Pole Qui** | **61.38** | **180** | P | **P** | **07 29 24.9** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 07 29 25.7 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **WVT** | **Waverly** | **67.37** | **342** | P | **P** | **07 30 03.3** | **+0.2** |
| WVT | | | | IAmb | IAmb | 07 30 03.7 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **68.70** | **340** | P | **P** | **07 30 12.0** | **+0.5** |
| PBMO | | | | IAmb | IAmb | 07 30 12.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **69.91** | **70** | P | **P** | **07 30 19.8** | **+0.3** |
| | comp=Z,4.1nm,0.8s,baz=256,slow=11,SNR=4.6 | | | | | | |
| **DBIC** | **Dimbokro** | **69.91** | **70** | P | **P** | **07 30 19.6** | **+0.1** |
| **KNB** | **Kanab** | **78.05** | **325** | P | **P** | **07 31 08.4** | **+1.9** |
| KNB | | | | IAmb | IAmb | 07 31 09.5 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **CCUT** | **Cedar City** | **78.73** | **325** | P | **P** | **07 31 12.7** | **+2.3** |
| **TORD** | **Torodi Ar. Bea** | **78.85** | **68** | P | **P** | **07 31 11.9** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=276,slow=6.1,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.85** | **68** | P | **P** | **07 31 11.8** | **+0.6** |
| **BOSA** | **Boshof** | **79.05** | **117** | P | **P** | **07 31 12.7** | **+0.3** |
| | comp=Z,2.5nm,0.8s,baz=262,slow=3.9,SNR=5.1 | | | | | | |
| **BOSA** | **Boshof** | **79.05** | **117** | P | **P** | **07 31 11.8** | **-0.6** |
| **PDAR** | **Pinedale Array** | **81.03** | **330** | P | **P** | **07 31 22.7** | **0.0** |
| | comp=Z,1.3nm,0.8s,baz=128,slow=6.5,SNR=8.7 | | | | | | |
| **PLID** | **Pearl Lake** | **85.75** | **328** | P | **P** | **07 31 47.0** | **+0.2** |
| PLID | | | | IAmb | IAmb | 07 31 48.6 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.46** | **340** | P | Pdif | 07 32 45.2 | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=143,slow=4.4,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **123.83** | **204** | PKP | **PKPdf** | **07 38 04.5** | **-0.9** |
| | comp=Z,1.0nm,0.6s,baz=133,slow=1.6,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **127.07** | **206** | PKP | **PKPdf** | **07 38 11.1** | **-0.6** |
| | comp=Z,1.8nm,0.5s,baz=158,slow=1.7,SNR=23 | | | | | | |
| **YAK** | **Yakutsk** | **144.90** | **346** | PKP | **PKPdf** | **07 38 43.0** | **-0.2** |
| | comp=Z,10.0nm,0.4s,baz=251,slow=1.7,SNR=4.6 | | | | | | |
| **YAK** | **Yakutsk** | **144.90** | **346** | | **PKPdf** | **07 38 43.0** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **146.52** | **40** | PKPbc | **PKPab** | **07 38 49.1** | **-0.1** |
| | comp=Z,2.8nm,0.5s,baz=300,slow=3.4,SNR=7.2 | | | | | | |
| **KURK** | **Kurchatov** | **146.53** | **40** | | **PKPab** | **07 38 49.1** | **-0.1** |
| **AAK** | **Ala-Archa** | **146.60** | **55** | PKPbc | **PKPbc** | **07 38 49.0** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=219,slow=2.8,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.87** | **31** | PKPbc | **PKiKP** | **07 38 52.5** | **-0.9** |
| | comp=Z,3.8nm,0.4s,baz=303,slow=2.8,SNR=5.0 | | | | | | |
| **KSH** | **Kashi** | **148.25** | **61** | PKPbc | **PKPbc** | **07 38 53.5** | **+0.2** |
| KSH | | | | SKS | **SKSdf** | **07 45 53.5** | **+5.8** |
| **MKAR** | **Makanchi Array** | **150.49** | **44** | PKPbc | **PKiKP** | **07 38 59.0** | **-0.2** |
| | comp=Z,3.4nm,0.8s,baz=300,slow=2.4,SNR=28 | | | | | | |
| **WMQ** | **Urumqi** | **155.25** | **46** | *e*P | **PKPdf** | **07 39 01.0** | **+0.9** |
| **PZH** | **PanZhiHua** | **170.29** | **101** | PKP | **PKPdf** | **07 39 16.0** | **+0.8** |

**IDC 26 07:36:23.6±2.6, 53.°99N×86.°54E, h0km, mb1 3.2/2, mb1mx3.0/37, mbtmp3.2/2, ML2.7/2, Error ellipse: s-maj=21.0km s-min=12.3km az=61.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.02** | **268** | *i* | | 07 42 10.0 | |
| | baz=89,slow=343,SNR=7.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.02** | **268** | Pg | Pg | 07 36 43.0 | **-0.1** |
| | 0.6nm,0.3s,baz=88,slow=17,SNR=9.2 | | | | | | |
| ZALV | | | | Lg | Lg | 07 36 56.6 | |
| | 0.8nm,0.3s,baz=85,slow=32,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.96** | **239** | Pn | Pn | 07 37 53.8 | **+0.8** |
| | 0.1nm,0.3s,baz=56,slow=13,SNR=2.4 | | | | | | |
| KURBB | | | | Lg | Lg | 07 39 35.4 | |
| | 0.1nm,0.3s,baz=51,slow=26,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70** | **202** | Pn | Pn | 07 38 17.9 | **+0.9** |
| | 0.2nm,0.3s,baz=23,slow=12,SNR=11 | | | | | | |
| MKAR | | | | Sn | Sn | 07 39 45.4 | **+0.6** |
| | 0.1nm,0.3s,baz=21,slow=26,SNR=2.3 | | | | | | |
| MKAR | | | | Lg | Lg | 07 40 27.3 | |
| | baz=22,slow=31,SNR=2.1 | | | | | | |

*IDC **26** 07:53:45.5±0.8, 34.°80S×16.°08W, h0km, mb4.2/9, mb1 4.3/9, mb1mx4.0/40, mbtmp4.2/9, MS3.7/25, Ms1 3.7/25, ms1mx3.5/58, Error ellipse: s-maj=26.8km s-min=20.4km az=16.0*

*NEIC **26** 07:53:47.7±1.2, 34.°7S±0.°1×16.°1W±0.°1, h10km±1km, mb4.8/32, Error ellipse: s-maj=19.8km s-min=17.1km az=143.0*

**ISC 26 07:53:47.1±0.4, 34.°74S±0.°08×16.°04W±0.°07, h10km, n109, σ0.°77/74, mb4.7/24, MS3.8/25, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H09N1** | **TRISTAN DA CUN** | **3.82** | **129** | Pn | **Pn** | **07 54 45.2** | **-0.8** |
| | SNR=95 | | | | | | |
| H09N1 | | | | T | T | 07 58 38.1 | |
| | SNR=94 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **3.82** | **129** | Pn | **Pn** | **07 54 45.1** | **-0.9** |
| | SNR=345 | | | | | | |
| H09W1 | | | | T | T | 07 58 39.2 | |
| | SNR=1705 | | | | | | |
| **SHEL** | **Horse Pasture** | **20.86** | **29** | P | **P** | **07 58 28.7** | **-0.7** |
| **HOPE** | **Hope Point** | **24.22** | **210** | P | **P** | **07 59 03.5** | **-0.3** |
| **H10S2** | **ASCENSION HYDR** | **25.69** | **3** | T | T | 08 26 06.5 | |
| | baz=38,slow=74,SNR=218 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **25.70** | **3** | T | T | 08 25 48.9 | |
| | baz=182,slow=74,SNR=320 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **26.80** | **3** | T | T | 08 27 13.7 | |
| | baz=190,slow=78,SNR=112 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **26.81** | **3** | T | T | 08 27 17.6 | |
| | baz=190,slow=78,SNR=321 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **26.82** | **3** | T | T | 08 27 18.7 | |
| | baz=190,slow=78,SNR=94 | | | | | | |
| **GUA01** | **Guaratinga, BA** | **27.91** | **304** | *e*P | **P** | **07 59 37.4** | **-0.1** |
| **GDU01** | **Guandu, BA** | **29.83** | **309** | *e*P | **P** | **07 59 54.9** | **+0.3** |
| **SUR** | **Sutherland** | **30.70** | **96** | P | **P** | **08 00 02.2** | **-0.2** |
| SUR | | | | IAmb | IAmb | 08 00 08.6 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **FRTB** | **Fartura** | **31.29** | **282** | *e*P | **P** | **08 00 08.2** | **+0.7** |
| **PLTB** | **Pedras Altas** | **31.43** | **265** | P | **P** | **08 00 07.8** | **-0.9** |
| PLTB | | | | IAmb | IAmb | 08 00 10.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PLTB** | **Pedras Altas** | **31.43** | **265** | *e*P | **P** | **08 00 09.5** | **+0.8** |
| **BB19B** | **Bebedouro** | **31.62** | **287** | *e*P | **P** | **08 00 10.6** | **+0.1** |
| **CPSB** | **Cacapava Do Su** | **31.69** | **267** | *e*P | **P** | **08 00 10.9** | **0.0** |
| **ITAB** | **Concordia** | **31.70** | **274** | | **P** | **08 00 10.7** | **-0.4** |
| **ORCD** | **Orcadas** | **31.90** | **207** | P | **P** | **08 00 13.2** | **+0.8** |
| **JANB** | **Januaria** | **32.09** | **301** | *e*P | **P** | **08 00 14.2** | **-0.4** |
| **NBPN** | **Ponto Novo - B** | **32.41** | **311** | *e*P | **P** | **08 00 16.6** | **-0.8** |
| **TSUM** | **Tsumeb** | **33.54** | **71** | LR | LR | 08 11 14.3 | |
| | comp=Z,71nm,20.6s,baz=171,slow=31 | | | | | | |
| **RCBR** | **Riachuelo** | **34.12** | **323** | LR | LR | 08 12 17.0 | |
| | comp=Z,40nm,18.1s,baz=300,slow=32 | | | | | | |
| **RCBR** | **Riachuelo** | **34.12** | **323** | P | **P** | **08 00 31.7** | **-0.6** |
| **SDBA** | **SAO DESIDERIO** | **34.34** | **303** | *e*P | **P** | **08 00 33.5** | **-0.7** |
| **BDFB** | **Brasilia** | **34.40** | **295** | P | **P** | **08 00 33.5** | **-1.3** |
| BDFB | | | | IAmb | IAmb | 08 00 34.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ITQB** | **Itaqui** | **34.54** | **267** | P | **P** | **08 00 36.0** | **+0.2** |
| **ITQB** | **Itaqui** | **34.54** | **267** | *e*P | **P** | **08 00 37.0** | **+1.2** |
| **BOSA** | **Boshof** | **35.49** | **92** | LR | LR | 08 12 22.4 | |
| | comp=Z,68nm,19.4s,baz=196,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **35.49** | **92** | P | **P** | **08 00 44.1** | **0.0** |
| BOSA | | | | IAmb | IAmb | 08 00 45.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **PEXB** | **Peixe** | **36.93** | **300** | *e*P | **P** | **08 00 56.3** | **-0.2** |
| **LBTB** | **Lobatse** | **37.16** | **86** | LR | LR | 08 12 58.9 | |
| | comp=Z,58nm,18.6s,baz=230,slow=31 | | | | | | |
| **ARAG** | **Araguaiana, MT** | **37.23** | **291** | *e*P | **P** | **08 00 59.7** | **+0.7** |
| **SNAA** | **Sanae** | **37.65** | **173** | LR | LR | 08 12 24.8 | |
| | comp=Z,245nm,20.9s,baz=8.0,slow=30 | | | | | | |
| **AQDB** | **Aquidauana** | **37.65** | **282** | P | **P** | **08 01 01.9** | **-0.7** |
| **AQDB** | **Aquidauana** | **37.65** | **282** | *e*P | **P** | **08 01 03.4** | **+0.8** |
| **NBPS** | **Pedro II - PI** | **38.28** | **316** | *e*P | **P** | **08 01 08.7** | **+0.7** |
| **SMTB** | **Santa Maria do** | **38.70** | **304** | *e*P | **P** | **08 01 11.5** | **0.0** |
| **SNDB** | **Serra Nova Dou** | **39.19** | **297** | *e*P | **P** | **08 01 15.9** | **+0.4** |
| **SALV** | **Santo Antonio** | **40.13** | **288** | *e*P | **P** | **08 01 24.1** | **+0.8** |
| **USHA** | **Ushuaia** | **41.11** | **224** | LR | LR | 08 16 22.8 | |
| | comp=Z,129nm,21.9s,baz=85,slow=33 | | | | | | |
| **PMSA** | **Palmer Station** | **41.53** | **209** | LR | LR | 08 15 51.7 | |
| | comp=Z,138nm,18.6s,baz=28,slow=32 | | | | | | |
| **MATP** | **Matopo** | **41.64** | **82** | P | **P** | **08 01 36.6** | **+0.6** |
| | comp=Z,1.2nm,0.4s,baz=245,slow=13,SNR=3.5 | | | | | | |
| **LIC** | **Lamto** | **42.05** | **16** | *e*P | **P** | **08 01 38.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.3nm,0.7s,baz=136,slow=2.0,SNR=5.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **124.01** | **326** | PKP | | **PKPdf** | **08 12 43.6** | **-1.2** |
| | comp=Z,0.7nm,0.7s,baz=99,slow=2.1,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **138.02** | **331** | PKP | | **PKPdf** | **08 13 11.1** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=0.9,slow=2.1,SNR=6.5 | | | | | | | |
| **SEY** | **Seymchan** | **150.87** | **11** | PKPbc | | **PKiKP** | **08 13 39.8** | **+0.1** |
| | comp=Z,4.4nm,0.8s,baz=34,slow=3.0,SNR=25 | | | | | | | |
| **KLR** | **Kul'dur** | **152.27** | **49** | PKPbc | | **PKPbc** | **08 13 42.5** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=282,slow=4.1,SNR=3.7 | | | | | | | |

*NEIC **26** 07:55:19.1±1.4, 14.87N±0.04×93.79W±0.03, h25km±10km, mb4.2/6, Md4.1/20(MEX), Error ellipse: s-maj=5.8km s-min=4.4km az=195.0*
*MEX **26** 07:55:20.7±0.7, 14.73N×93.83W, h30km, MD4.1*
**ISC 26 07:55:16.4±3.1, 14.70N±0.06×93.85W±0.04, h16km±23km, n33, σ1§49/49, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.17** | **32** | | | **Pn** | **07 55 38.5** | **+0.3** |
| PCIG | | | | | | **Sb** | **07 55 52.1** | **-1.1** |
| **PCIG** | | **1.17** | **32** | *i* | P | **Pn** | **07 55 38.5** | **+0.3** |
| PCIG | | | | *i* | S | **Sb** | **07 55 52.1** | **-1.1** |
| **THIG** | | **1.55** | **82** | | | **Pn** | **07 55 43.9** | **+0.5** |
| THIG | | | | | | **Sn** | **07 56 01.6** | **-1.7** |
| **THIG** | | **1.55** | **82** | *i* | P | **Pn** | **07 55 43.9** | **+0.5** |
| THIG | | | | *i* | S | **Sn** | **07 56 01.6** | **-1.7** |
| **PATR** | **El Naranjo** | **1.62** | **75** | *i* | P | **Pn** | **07 55 44.5** | **-0.1** |
| PATR | | | | *i* | S | **Sn** | **07 56 02.7** | **-2.6** |
| **PAVE** | **Pavencul** | **1.69** | **73** | *i* | P | **Pn** | **07 55 46.0** | **+0.4** |
| PAVE | | | | *i* | S | **Sn** | **07 56 06.4** | **-0.7** |
| **RTAL** | **Retalhuleu** | **2.10** | **95** | Pn | | **Pn** | **07 55 52.5** | **+1.5** |
| **TGIG** | | **2.18** | **19** | | | **Pb** | **07 55 54.9** | **-0.7** |
| TGIG | | | | | | **Sn** | **07 56 19.4** | **+0.5** |
| **TGIG** | | **2.18** | **19** | *i* | P | **Pb** | **07 55 54.9** | **-0.7** |
| TGIG | | | | *eS* | | **Sn** | **07 56 19.4** | **+0.5** |
| **CCIG** | **Comitan** | **2.28** | **46** | | | **Pb** | **07 55 57.1** | **-0.3** |
| CCIG | | | | | | **Sn** | **07 56 22.8** | **+1.2** |
| **CCIG** | **Comitan** | **2.28** | **46** | *i* | P | **Pb** | **07 55 57.1** | **-0.3** |
| CCIG | | | | *i* | S | **Sn** | **07 56 22.8** | **+1.2** |
| **HUEH** | **Huehuetenango** | **2.35** | **75** | | | **Pn** | **07 55 56.9** | **+2.2** |
| **HUIG** | **Huatulco** | **2.42** | **296** | | | **Pn** | **07 55 56.4** | **+0.9** |
| HUIG | | | | | | **Sn** | **07 56 24.1** | **-0.7** |
| **HUIG** | **Huatulco** | **2.42** | **296** | *e*P | | **Pn** | **07 55 56.4** | **+0.9** |
| HUIG | | | | *i* | S | **Sn** | **07 56 24.1** | **-0.7** |
| **CMIG** | **Matias Romero** | **2.57** | **337** | | | **Pn** | **07 55 58.8** | **+1.3** |
| CMIG | | | | | | **Sn** | **07 56 26.6** | **-2.0** |
| **CMIG** | **Matias Romero** | **2.57** | **337** | *i* | P | **Pn** | **07 55 58.8** | **+1.3** |
| CMIG | | | | *i* | S | **Sn** | **07 56 26.6** | **-2.0** |
| **UXUV** | **UXUV** | **2.62** | **354** | *i* | P | **Pb** | **07 56 01.5** | **-1.5** |
| UXUV | | | | *i* | S | **Sn** | **07 56 32.8** | **+3.2** |
| **NEUV** | **Arroyo Zacate** | **3.53** | **328** | *i* | P | **Pn** | **07 56 14.2** | **+3.5** |
| NEUV | | | | *i* | S | **Sn** | **07 56 51.5** | **-0.6** |
| **MTO3** | **Montecristo** | **4.36** | **93** | Pn | | **Pn** | **07 56 24.9** | **+2.5** |
| **ESQI** | **Esquipulas** | **4.37** | **91** | Pn | | **Pn** | **07 56 25.8** | **+3.5** |
| **PETF** | **Flores** | **4.42** | **60** | | | **Pn** | **07 56 24.9** | **+1.9** |
| **SNET** | **Serv Nac Est T** | **4.59** | **102** | Pn | | **Pn** | **07 56 26.6** | **+1.1** |
| **BOAB** | **BOACO BROADBAN** | **4.27** | **105** | Pn | | **Pn** | **07 57 16.8** | **+0.9** |
| **BRU2** | **Volcan** | **12.40** | **117** | Pn | | **Pn** | **07 58 13.8** | **+1.1** |
| **SOR** | **Soroa** | **13.04** | **50** | Pn | | **Pn** | **07 58 20.4** | **-0.8** |
| **735A** | **Kenedy** | **14.55** | **346** | Pn | | **Pn** | **07 58 41.0** | **-0.9** |
| **JCT** | **Junction City** | **16.63** | **342** | | | **Pn** | **07 59 07.7** | **-1.3** |
| **346A** | **Big Creek Wild** | **17.09** | **13** | P | | **Pn** | **07 59 15.1** | **+0.3** |
| 346A | | | | IAmb | | IAmb | 07 59 57.1 | |
| | comp=Z,132nm,1.8s | | | | | | | |
| **TX32** | **Lajitas Array** | **17.15** | **330** | P | | **Pn** | **07 59 16.5** | **+0.7** |
| TX32 | | | | IAmb | | IAmb | 08 00 14.4 | |
| | comp=Z,6.5nm,1.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **17.15** | **330** | P | | **Pn** | **07 59 16.7** | **+1.0** |
| **SLBS** | **Sierra La Lagu** | **17.62** | **303** | P | | **Pn** | **07 59 22.4** | **+0.8** |
| SLBS | | | | IAmb | | IAmb | 07 59 47.0 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **VBMS** | **Vicksburg** | **17.70** | **9** | P | | **Pn** | **07 59 22.7** | **+0.3** |
| VBMS | | | | IAmb | | IAmb | 07 59 25.0 | |
| | comp=Z,38nm,1.2s | | | | | | | |
| **656A** | **Willston** | **17.95** | **34** | P | | **Pn** | **07 59 24.3** | **-1.2** |

*IDC **26** 07:58:32.5±0.8, 51.46N×15.98E, h0km, mb1 3.4/7, mb1mx3.2/51, mbtmp3.2/7, ML2.7/7, Error ellipse: s-maj=15.1km s-min=7.8km az=106.0*
*PRU **26** 07:58:32.0±0.0, 51.47N×16.14E, h0km*
*VIE **26** 07:58:35.1±0.8, 51.27N×15.91E, h0km, mb2.5/3, ml2.8/3, Error ellipse: s-maj=7.6km s-min=4.9km az=26.0 78 km NE of Liberec Suspected Mining induced.*
**ISC 26 07:58:30.2±0.8, 51.53N±0.04×16.19E±0.03, h0km, n33, σ0§96/59, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.69** | **175** | *e*Pg | | **Pg** | **07 58 43.6** | **+0.2** |
| KSP | | | | *e*Sg | | **Sg** | **07 58 52.0** | **-0.3** |
| **CHVC** | **Chvalec** | **0.95** | **185** | *e*PG | | **Pg** | **07 58 48.6** | **+0.3** |
| CHVC | | | | *e*SG | | **Sg** | **07 59 00.0** | **-0.6** |
| **OSTC** | **Ostas** | **0.97** | **179** | *e*PG | | **Pg** | **07 58 49.3** | **+0.5** |
| OSTC | | | | *e*SG | | **Sg** | **07 59 01.3** | **-0.2** |
| | comp=Z,56nm,0.3s | | | | | | | |
| **UPC** | **Upice** | **1.03** | **186** | *e*PG | | **Pg** | **07 58 49.7** | **-0.2** |
| UPC | | | | *e*SG | | **Sg** | **07 59 02.7** | **-0.5** |
| | comp=Z,147nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **176** | *e*PG | | **Pg** | **07 58 52.5** | **-0.4** |
| DPC | | | | *e*SG | | **Sg** | **07 59 07.1** | **-1.1** |
| | comp=Z,58nm,0.5s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.44** | **226** | *e*PG | | **Pg** | **07 58 57.9** | **+0.2** |
| PVCC | | | | *e*SG | | **Sb** | **07 59 16.9** | **+0.3** |
| | comp=Z,161nm,0.3s | | | | | | | |
| **KRLC** | **Kraliky** | **1.50** | **165** | *e*PG | | **Pn** | **07 58 58.2** | **-0.2** |
| KRLC | | | | *e*SG | | **Sg** | **07 59 17.1** | **-1.3** |
| | comp=Z,29nm,0.3s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.56** | **246** | Pg | | **Pg** | **07 59 00.8** | **+0.8** |
| BRG | | | | Sg | | **Sg** | **07 59 20.9** | **+0.6** |
| BRG | | | | Amp | | | 07 59 21.4 | |
| | comp=Z,57nm,0.4s | | | | | | | |
| **PRU** | **Pruhonice** | **1.87** | **215** | *e*PG | | **Pb** | **07 59 05.0** | **-0.1** |
| PRU | | | | *e*SG | | **Sn** | **07 59 28.2** | **+0.6** |
| | comp=Z,48nm,0.6s | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.95** | **153** | *e*PN | | **Pn** | **07 59 04.2** | **-0.4** |
| MORC | | | | *e*SG | | **Sn** | **07 59 28.1** | **-1.8** |
| **CLL** | **Collm** | **2.01** | **265** | *e*Pn | | **Pn** | **07 59 05.0** | **-0.4** |
| CLL | | | | *e*Pg | | **Pg** | **07 59 09.0** | **+0.3** |
| CLL | | | | *e*Sg | | **Sg** | **07 59 35.0** | **+0.3** |
| | comp=Z,28nm,0.6s | | | | | | | |
| CLL | | | | LmH | | | 09 54 00.0 | |
| | comp=N,100nm,21.4s | | | | | | | |
| CLL | | | | LmH | | | 09 54 00.0 | |
| | comp=E,200nm,21.3s | | | | | | | |
| **VRAC** | **Vranov** | **2.24** | **173** | Pn | | **Pn** | **07 59 09.8** | **+1.2** |
| | comp=E,2.6nm,0.3s,baz=336,slow=14,SNR=6.3 | | | | | | | |
| VRAC | | | | Lg | | Lg | 07 59 40.0 | |
| | comp=E,4.1nm,0.3s,baz=251,slow=15,SNR=7.1 | | | | | | | |
| **VRAC** | **Vranov** | **2.24** | **173** | *e*PN | | **Pn** | **07 59 09.0** | **+0.5** |
| VRAC | | | | *e*SG | | **Sb** | **07 59 39.7** | **0.0** |
| **TREC** | **Trest** | **2.28** | **192** | *e*SG | | **Sb** | **07 59 41.3** | **+0.3** |
| **PBCC** | **Pribram** | **2.32** | **218** | *e*SG | | **Sb** | **07 59 42.7** | **+0.7** |
| | comp=E,13nm,0.4s | | | | | | | |
| **KRUC** | **Moravsky** | **2.47** | **177** | *e*PN | | **Pn** | **07 59 12.2** | **+0.5** |
| KRUC | | | | *e*SG | | **Sb** | **07 59 47.8** | **+1.3** |
| **OJC** | **Ojcow** | **2.63** | **118** | *e*Pg | | **Pg** | **07 59 20.6** | **0.0** |
| OJC | | | | *e*Sg | | **Sg** | **07 59 55.6** | **+0.8** |
| **NKC** | **Novy Kostel** | **2.71** | **243** | *e*PG | | **Pg** | **07 59 21.9** | **-0.1** |
| NKC | | | | *e*SG | | **Sg** | **07 59 57.6** | **+0.6** |
| | comp=E,35nm,0.4s | | | | | | | |
| **JAVC** | **Velka Javorina** | **2.84** | **160** | *e*PN | | **Pn** | **07 59 16.3** | **-0.5** |
| **KHC** | **Kasperske Hory** | **2.93** | **216** | *e*PN | | **Pn** | **07 59 17.8** | **-0.2** |
| KHC | | | | *e*PG | | **Pb** | **07 59 24.0** | **+0.7** |
| KHC | | | | *e*SN | | **Sn** | **07 59 53.1** | **-0.8** |
| KHC | | | | *e*SG | | **Sg** | **08 00 02.9** | **-1.3** |
| | comp=E,18nm,0.5s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.97** | **205** | *e*PN | | **Pn** | **07 59 18.9** | **+0.3** |
| CKRC | | | | *e*PG | | **Pb** | **07 59 25.1** | **+1.1** |
| CKRC | | | | *e*SG | | **Sb** | **08 00 02.5** | **+1.7** |
| | comp=E,21nm,0.6s | | | | | | | |
| **SMOL** | **Smolenice** | **3.12** | **165** | *e*SG | | **Sg** | **08 00 11.5** | **+1.1** |
| **GERES** | **GERESS Array B** | **3.13** | **212** | Pn | | **Pn** | **07 59 21.6** | **+0.8** |
| | comp=E,0.8nm,0.3s,baz=28,slow=16,SNR=14 | | | | | | | |
| GERES | | | | Pg | | **Pb** | **07 59 27.4** | **+0.7** |
| | comp=E,3.7nm,0.3s,baz=29,slow=17,SNR=24 | | | | | | | |
| GERES | | | | Lg | | Lg | 08 00 07.2 | |
| | comp=E,5.2nm,0.3s,baz=30,slow=32,SNR=10.0 | | | | | | | |
| **NIE** | **Niedzica** | **3.37** | **127** | *e*P | | **Pg** | **07 59 35.1** | **+0.4** |
| NIE | | | | *e*S | | **Sg** | **08 00 19.2** | **+0.9** |
| **VYHS** | **Vyhne** | **3.48** | **150** | *e*PG | | **Pg** | **07 59 36.2** | **-0.7** |
| VYHS | | | | *e*SG | | **Sg** | **08 00 25.0** | **+2.9** |
| **CONA** | **Conrad Observa** | **3.61** | **184** | *e*Pn | | **Pn** | **07 59 27.3** | **-0.2** |
| | comp=E,0.3nm,0.3s | | | | | | | |
| CONA | | | | Sg | | **Sg** | **08 00 25.3** | **-0.9** |
| | comp=E,12nm,0.5s | | | | | | | |
| **MOA** | **Molln** | **3.89** | **200** | *e*Pn | | **Pn** | **07 59 31.6** | **+0.3** |
| | comp=E,0.9nm,0.2s | | | | | | | |
| MOA | | | | Sg | | **Sg** | **08 00 32.9** | **-2.2** |
| | comp=E,7.3nm,0.5s | | | | | | | |
| **ARSA** | **Arzberg** | **4.31** | **186** | *e*Pn | | **Pn** | **07 59 39.3** | **+2.3** |
| | comp=E,0.7nm,0.2s | | | | | | | |
| **AKASG** | **Malin Array Be** | **8.24** | **91** | Pn | | **Pn** | **08 00 32.0** | **+1.0** |
| | comp=E,0.7nm,0.3s,baz=279,slow=12,SNR=4.5 | | | | | | | |
| **HFS** | **Hagfors** | **8.74** | **352** | Pn | | **Pn** | **08 00 37.9** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=167,slow=15,SNR=2.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **9.92** | **346** | Pn | | **Pn** | **08 00 53.5** | **-0.4** |
| | comp=E,0.0nm,0.3s,baz=154,slow=13,SNR=1.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **11.32** | **25** | Pn | | **Pn** | **08 01 12.7** | **-0.4** |
| | comp=E,0.1nm,0.3s,baz=210,slow=13,SNR=1.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.59** | **10** | Pn | | **P** | **08 02 46.4** | **-2.2** |
| | baz=196,slow=12,SNR=6.2 | | | | | | | |

*NNC **26** 08:04:30.1±1.6, 54.33N×87.55E, h0km, mb3.2, mpv3.0, Error ellipse: s-maj=15.1km s-min=8.9km az=10.0, Suspected Mining explosion.*
*IDC **26** 08:04:35.2±2.8, 54.18N×87.22E, h0km, mb1 3.0/2, mb1mx2.9/54, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=25.1km s-min=16.3km az=64.0*
**ISC 26 08:04:30.8±3.8, 54.3N±0.2×87.4E±0.2, h0km, n7, σ1§66/8, 4C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.57** | **257** | *i* | | | 08 14 50.0 | |
| | baz=81,slow=333,SNR=2.8 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.57** | **257** | ⇑P | | **Pb** | **08 04 59.7** | **-1.0** |
| ZAA0 | 1.0nm,0.6s | | | | | | | |
| | 3.9nm,0.9s | | | ⇓S | | **Sg** | **08 05 22.5** | **+1.1** |
| **ZALV** | **Zalesovo Beam** | **1.57** | **257** | Pg | | **Pg** | **08 04 59.9** | **-1.0** |
| | 1.2nm,0.3s,baz=80,slow=14,SNR=14 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 05 20.6 | |
| | 1.3nm,0.3s,baz=82,slow=28,SNR=4.3 | | | | | | | |
| ZALV | | | | Rg | | Rg | 08 05 28.9 | |
| | 9.4nm,0.9s,baz=80,slow=34,SNR=4.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **239** | Pn | | **Pn** | **08 06 11.4** | **+2.7** |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=9.2 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 07 58.5 | |
| | 0.0nm,0.3s,baz=56,slow=35,SNR=5.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **239** | ⇑Pn | | **Pn** | **08 06 09.1** | **+0.4** |
| | 2.1nm,0.5s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 08 07 59.8 | |
| | 8.2nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.23** | **205** | ⇑Pn | | **Pn** | **08 06 32.3** | **+0.9** |
| | 1.2nm,0.9s,baz=26,slow=14,SNR=12 | | | | | | | |
| MK31 | | | | ⇓Sn | | **Sn** | **08 08 05.3** | **+0.3** |
| | 1.7nm,0.9s,baz=26,slow=27,SNR=7.2 | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 08 08 52.7 | |
| | 3.6nm,1.1s,baz=26,slow=31,SNR=4.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.23** | **205** | Pn | | Pn | 08 06 34.9 | +3.5 |
| | 0.2nm,0.3s,baz=25,slow=14,SNR=9.5 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **08 08 03.6** | **-1.4** |
| | 0.1nm,0.3s,baz=26,slow=27,SNR=7.9 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 08 52.0 | |
| | 0.0nm,0.3s,baz=28,slow=31,SNR=7.2 | | | | | | | |

*OSPL **26** 08:05:59.8±1.3, 18.05N×68.70W, h194km±21km, ML2.5*
*RSPR **26** 08:06:02.9, 18.76N×68.65W, h144km±3km, MD3.7/13*
*NEIC **26** 08:06:04.5±1.1, 18.7N±0.3×68.71W±0.08, h102km±30km, Error ellipse: s-maj=51.6km s-min=5.2km az=190.0*
**ISC 26 08:06:01.6±1.3, 18.6N±0.2×68.77W±0.04, h150km, n45, σ0§84/48, 12C-1D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DR12** | **Loma Pena Alta** | **0.63** | **292** | ⇓*e*P | | **Pn** | **08 06 22.0** | **-1.7** |
| **DR12** | **Loma Pena Alta** | **0.63** | **292** | | | **Pn** | **08 06 22.2** | **-1.5** |
| **IDE** | **Isla Desecheo** | **1.24** | **98** | ⇑*e*P | | **Pn** | **08 06 28.7** | **+0.2** |
| **BANI** | **BANI** | **1.52** | **264** | Pn | | **Pn** | **08 06 32.1** | **+0.6** |
| **PRSN** | **Puerto Rico Se** | **1.58** | **102** | Pn | | **Pn** | **08 06 32.1** | **+0.1** |
| PRSN | | | | IAML | | | 08 07 02.0 | |
| | comp=E,152nm,0.2s | | | | | | | |
| **LSP** | **Las Mesas** | **1.64** | **103** | ⇑*e*P | | **Pn** | **08 06 33.5** | **+0.8** |
| **LSP** | **Las Mesas** | **1.64** | **103** | *e*S | | **Sn** | **08 06 57.3** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **1.67** | **109** | ⇓*e*P | | **Pn** | **08 06 32.4** | **-0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.67** | **109** | | | **Pn** | **08 06 32.4** | **-0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.67** | **109** | *i* | P | **Pn** | **08 06 32.5** | **-0.5** |
| CRPR | | | | *e*S | | **Sn** | **08 06 54.8** | **-2.1** |
| CRPR | | | | IAML | | | 08 07 00.6 | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.74** | **109** | ⇓*e*P | | **Pn** | **08 06 33.4** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **1.74** | **109** | *e*S | | **Sn** | **08 06 58.7** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **1.74** | **109** | | | **Pn** | **08 06 33.4** | **-0.4** |
| MLPR | | | | | | **Sn** | **08 06 58.7** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.92** | **96** | ⇑*e*P | | **Pn** | **08 06 36.6** | **+0.8** |
| **AOPR** | **Arecibo Observ** | **1.92** | **96** | *e*S | | **Sn** | **08 07 01.9** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **1.92** | **96** | | | **Pn** | **08 06 36.6** | **+0.8** |
| AOPR | | | | | | **Sn** | **08 07 01.9** | **-0.2** |
| **EMPR** | **Esperanza - Ma** | **2.12** | **92** | ⇑*e*P | | **Pn** | **08 06 38.4** | **+0.3** |
| **EMPR** | **Esperanza - Ma** | **2.12** | **92** | *e*S | | **Sn** | **08 07 05.6** | **-0.7** |
| **EMPR** | **Esperanza - Ma** | **2.12** | **92** | | | **Pn** | **08 06 38.4** | **+0.3** |
| EMPR | | | | | | **Sn** | **08 07 05.6** | **-0.7** |
| **CELP** | **Cerrillos** | **2.13** | **103** | ⇑*e*P | | **Pn** | **08 06 38.8** | **+0.5** |
| **CELP** | **Cerrillos** | **2.13** | **103** | *e*S | | **Sn** | **08 07 07.1** | **+0.6** |
| **CELP** | **Cerrillos** | **2.13** | **103** | | | **Pn** | **08 06 38.8** | **+0.5** |
| CELP | | | | | | **Sn** | **08 07 07.1** | **+0.6** |
| **CELP** | **Cerrillos** | **2.13** | **103** | IAML | | | 08 07 11.1 | |
| | comp=E,46nm,0.7s | | | | | | | |
| CELP | | | | IAML | | | 08 07 11.8 | |
| | comp=N,49nm,0.4s | | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.26** | **258** | *i* | P | **Pn** | **08 06 38.8** | **-1.0** |
| **SDDR** | **Presa de Saban** | **2.43** | **280** | | | **Pn** | **08 06 42.7** | **+0.9** |
| SDDR | | | | IAML | | | 08 07 17.0 | |
| | comp=N,25nm,2.0s | | | | | | | |
| SDDR | | | | IAML | | | 08 07 17.1 | |
| | comp=N,25nm,0.8s | | | | | | | |
| **SDDR** | **Presa de Saban** | **2.43** | **280** | *i* | P | **Pn** | **08 06 42.7** | **+0.9** |
| SDDR | | | | IAML | | | 08 07 19.0 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **LONE2** | **Loma La Sidra** | **2.57** | **270** | *i* | P | **Pn** | **08 06 44.0** | **+0.4** |
| LONE2 | | | | IAML | | | 08 07 12.6 | |
| | comp=Z,24nm,5.3s | | | | | | | |
| LONE2 | | | | *e*S | | **Sn** | **08 07 17.1** | **+1.0** |
| **IGPR** | **InterUniversit** | **2.59** | **103** | ⇑*e*P | | **Pn** | **08 06 44.4** | **+0.6** |
| **IGPR** | **InterUniversit** | **2.59** | **103** | *e*S | | **Sn** | **08 07 16.7** | **+0.3** |
| **CBYP** | **Canovanas** | **2.78** | **95** | ⇑*e*P | | **Pn** | **08 06 46.6** | **+0.4** |
| **CBYP** | **Canovanas** | **2.78** | **95** | *e*S | | **Sn** | **08 07 19.5** | **-1.1** |
| **CBYP** | **Canovanas** | **2.78** | **95** | | | **Pn** | **08 06 46.6** | **+0.4** |
| CBYP | | | | | | **Sn** | **08 07 19.5** | **-1.1** |
| **HUMP** | **Col San Antoni** | **2.80** | **98** | ⇑*e*P | | **Pn** | **08 06 46.7** | **+0.3** |
| **HUMP** | **Col San Antoni** | **2.80** | **98** | *e*S | | **Sn** | **08 07 19.8** | **-1.2** |
| **HUMP** | **Col San Antoni** | **2.80** | **98** | | | **Pn** | **08 06 46.7** | **+0.3** |
| HUMP | | | | | | **Sn** | **08 07 19.8** | **-1.2** |
| **HUMP** | **Col San Antoni** | **2.80** | **98** | IAML | | | 08 07 24.9 | |
| | comp=N,38nm,0.2s | | | | | | | |
| **MTP** | **Monte Pirata** | **3.09** | **98** | ⇑*e*P | | **Pn** | **08 06 51.3** | **+1.3** |
| **MTP** | **Monte Pirata** | **3.09** | **98** | *e*S | | **Sn** | **08 07 26.9** | **-0.6** |
| **MTP** | **Monte Pirata** | **3.09** | **98** | | | **Pn** | **08 06 51.3** | **+1.3** |
| **MTP** | **Monte Pirata** | **3.09** | **98** | | | **Sn** | **08 07 26.9** | **-0.6** |
| **MTP** | **Monte Pirata** | **3.09** | **98** | IAML | | | 08 07 16.0 | |
| | comp=N,22nm,2.2s | | | | | | | |
| **MTP** | **Monte Pirata** | **3.09** | **98** | IAML | | | 08 07 31.9 | |
| | comp=E,22nm,1.6s | | | | | | | |
| **CUPR** | **Culebra, Puert** | **3.32** | **94** | ⇑*e*P | | **Pn** | **08 06 53.8** | **+0.8** |
| **CUPR** | **Culebra, Puert** | **3.32** | **94** | | | **Pn** | **08 06 53.8** | **+0.8** |
| **CUPR** | **Culebra, Puert** | **3.32** | **94** | IAML | | | 08 07 30.8 | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| CUPR | | | | IAML | | | 08 07 39.7 | |
| | comp=E,9.0nm,0.8s | | | | | | | |

**JMA 26 08:43:04.9, 27.89N×141.20E, h188km, M3.9, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.18** | **132** | P | | Pn | 08 43 34.9 | +0.1 |
| CBIJ | | | | S | | Sn | 08 43 58.0 | +0.1 |
| **JHH2** | **Haha-jima-NKT2** | **1.52** | **145** | P | | Pn | 08 43 37.9 | +0.1 |
| JHH2 | | | | S | | Sn | 08 44 03.2 | -0.1 |
| **BSO1** | **Boso 1** | **6.75** | **358** | P | | Pn | 08 44 42.7 | +1.6 |
| **BSO3** | **Boso 3** | **6.92** | **355** | P | | Pn | 08 44 44.4 | +0.8 |
| BSO3 | | | | S | | Sn | 08 46 02.7 | +0.8 |
| **JOD2** | **Odawara 2** | **7.57** | **347** | P | | Pn | 08 44 53.6 | +1.1 |
| **JRY** | **Ryogami san** | **8.33** | **347** | P | | Pn | 08 45 02.8 | +0.3 |

*IDC **26** 08:52:48.0±0.4, 31.71S×67.61W, h22km±2km, mb4.8/19, mb1 4.8/23, mb1mx4.8/27, mbtmp4.9/23, ML4.5/4, MS4.4/44, Ms1 4.4/44, ms1mx4.3/57, Error ellipse: s-maj=14.2km s-min=11.7km az=75.0*
*SJA **26** 08:52:47.3±0.6, 31.69S×67.70W, h13km, ML5.1, MW5.1*
*NEIC **26** 08:52:48.3±1.8, 31.73S±0.05×67.56W±0.05, h26km±2km, mb5.4/124, Ms_20 4.8/18, Mwr4.9/48, Mww4.9, Md5.1(SJA), Error ellipse: s-maj=7.8km s-min=6.6km az=170.0*
*NEIC **26** 08:52:48, 31.71S×67.54W, h32km, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr 1.39; Mθθ 1.36; Mϕϕ -2.75; Mrθ -1.45; Mϕr -0.97; Mθr 0.94; Fault plane solution: M₀ 3.10000×10¹⁶ NP1: φs 228.60000°, δ53.37000°, λ151.69000°. NP2: φs 336.41000°, δ67.63000°, λ40.18000°. Principal axes: T 3.1317, Plg44.0000°, Azm198.0000°; N -0.0712, Plg45.0000°, Azm1.0000°; P -3.0605, Plg9.0000°, Azm100.0000°;*
*MOS **26** 08:52:48.5±0.9, 31.59S×67.58W, h33km, mb5.4/27 Error ellipse: s-maj=12.6km s-min=7.3km az=95.5*
*NEIC **26** 08:52:49, 31.71S×67.55W, h24km, Moment Tensor Solution. Duration: 2§0 Moment tensor: Scale 10¹⁶Nm; Mrr 1.27; Mθθ -0.01; Mϕϕ -1.26; Mrθ -1.28; Mϕθ -0.97; Mϕr 2.42; Fault plane solution: M₀ 3.17000×10¹⁶ NP1: φs 232.00000°, δ26.00000°, λ154.00000°. NP2: φs 345.00000°, δ79.00000°, λ66.00000°. Principal axes: T 3.4763, Plg50.0000°, Azm229.0000°; N -0.7338, Plg23.0000°, Azm350.0000°; P -2.7425, Plg30.0000°, Azm95.0000°;*
*VAO **26** 08:52:49.8±0.3, 31.67S×67.49W, h32km, mb5.2*
*GCMT **26** 08:52:52.3±0.2, 31.75S±0.01×67.54W±0.02, h35km±1km, MW5.0/89, Moment Tensor Solution. s43, c49; s89, c113; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr 2.14±.18; Mθθ 1.33±.12; Mϕϕ -3.47±.13; Mrθ -1.72±.17; Mϕθ -1.59±.10; Mϕr 2.17±.21; Best double couple: M₀ 4.40300×10¹⁶ NP1: φs 231.00000°, δ44.00000°, λ151.00000°. NP2: φs 343.00000°, δ70.00000°, λ50.00000°. Principal axes: T 4.4180, Plg48.0000°, Azm209.0000°; N -0.0300, Plg38.0000°, Azm359.0000°; P -4.3880, Plg15.0000°, Azm101.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BJI **26** 08:52:52.0±0.0, 31.70S×67.50W, h35km, mB5.2/13, Ms5.2/7, Ms7 4.9/10*
**ISC 26 08:52:47.5±0.3, 31.75S±0.02×67.62W±0.02, h22km±2km, h22km:pP-P, n715, σ1§38/764, mb5.4/91, MS4.5/54, 13C-3D, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ACAN** | **Cantantal** | **0.64** | **145** | *e*P | | **Pn** | **08 53 01.9** | **+0.6** |
| ACAN | | | | *e*S | | **Sn** | **08 53 14.2** | **+3.4** |
| ACAN | | | | IAML | | | 08 53 21.0 | |
| | comp=Z,1.0nm,1.3s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **0.79** | **262** | *e*P | | **Pb** | **08 53 01.7** | **-0.8** |
| RTCV | | | | *e*S | | **Sb** | **08 53 12.8** | **0.0** |
| RTCV | | | | IAML | | | 08 53 20.8 | |
| | comp=Z,694nm,1.6s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **0.84** | **300** | ⇓*i*P | | **Pb** | **08 53 02.1** | **-1.3** |
| RTLL | | | | *i* S | | **Sb** | **08 53 13.4** | **-0.9** |
| **RTLL** | **Cerro Villicun** | **0.84** | **300** | *e*P | | **Pb** | **08 53 02.0** | **-1.3** |
| RTLL | | | | *e*S | | **Sb** | **08 53 13.5** | **-0.7** |
| **ZON** | **Zonda** | **0.92** | **282** | Pn | | **Pb** | **08 53 03.4** | **-1.4** |
| ZON | | | | Sn | | **Sb** | **08 53 15.8** | **-0.8** |
| **ZON** | **Zonda** | **0.92** | **282** | *e*P | | **Pb** | **08 53 03.6** | **-1.2** |
| ZON | | | | *e*S | | **Sb** | **08 53 15.4** | **-1.3** |
| ZON | | | | IAML | | | 08 53 17.0 | |
| | comp=Z,32μm,0.5s | | | | | | | |
| **ASAL** | **Salagasta** | **1.33** | **230** | *e*P | | **Pb** | **08 53 12.2** | **+0.5** |
| ASAL | | | | IAML | | | 08 54 54.1 | |
| | comp=Z,2μm,1.1s | | | | | | | |
|

MT05 IAML 08 54 28.4
comp=Z,16µm,0.8s
**ROCH El Roble 3.11 246** *eP* **Pb 08 53 38.3 -4.0**
ROCH *eP* **Pn 08 53 36.8 +1.3**
ROCH *eS* **Sn 08 54 15.8 +3.7**
ROCH *i S* **Sb 08 54 16.3 -3.7**
ROCH IAML 08 54 25.2
comp=E,39µm,0.7s
**ROC1 El Roble 3.12 246 Pn 08 53 36.8 +1.2**
**ROC1 El Roble 3.12 246** *eP* **Pn 08 53 36.8 +1.2**
ROC1 *eS* **Sb 08 54 18.6 -1.5**
**GO04 Tololo Observa 3.15 299** *eP* **Pn 08 53 38.6 +2.6**
GO04 *eS* **Sn 08 54 17.2 +4.2**
**GO04 Tololo Observa 3.15 299** *eP* **Pn 08 53 38.8 +2.9**
GO04 *eS* **Sb 08 54 20.3 -0.6**
**VA06 Catapilco 3.22 254 Pn 08 53 38.6 +1.9**
**VA06 Catapilco 3.22 254** *eP* **Pn 08 53 38.3 +1.6**
VA06 *eS* **Sn 08 54 18.1 +3.7**
**MT02 Curacav 3.33 242 Pn 08 53 40.5 +2.2**
**MT02 Curacav 3.33 242** *eP* **Pn 08 53 39.8 +1.5**
MT02 *eS* **Sn 08 54 20.5 +3.4**
MT02 IAML 08 54 33.5
comp=N,8µm,0.5s
**MT02 Curacav 3.33 242** *eP* **Pn 08 53 40.9 +2.6**
MT02 *eS* **Sb 08 54 24.5 -1.4**
MT02 IAML 08 54 30.8
comp=Z,13µm,0.8s
**MT09 Talagante 3.48 234 Pn 08 53 43.0 +2.6**
**MT09 Talagante 3.48 234** *eP* **Pn 08 53 42.9 +2.4**
MT09 *eS* **Sn 08 54 24.7 +3.6**
**CO06 Fray Jorge 3.60 286 Pn 08 53 42.7 +0.7**
**CO06 Fray Jorge 3.60 286** *eP* **Pn 08 53 42.9 +1.0**
CO06 *eS* **Sn 08 54 23.5 -0.3**
**CO05 La Serena 3.60 299**‖ *eP* **Pn 08 53 43.6 +1.6**
CO05 *eS* **Sn 08 54 25.7 +1.8**
**VA01 Torpederas 3.63 248 Pn 08 53 43.5 +1.1**
**VA01 Torpederas 3.63 248** *eP* **Pn 08 53 44.7 +2.3**
VA01 *eS* **Sn 08 54 26.5 +1.9**
**VA01 Torpederas 3.63 248** *eP* **Pn 08 53 43.7 +1.3**
VA01 *eS* **Sb 08 54 32.5 -2.1**
VA01 IAML 08 54 42.3
comp=Z,18µm,0.7s
**MT01 Popeta 3.71 234** *eP* **Pn 08 53 45.7 +2.2**
MT01 *eS* **Sb 08 54 32.6 -4.2**
MT01 IAML 08 54 45.9
comp=Z,10µm,0.6s
**LCO Las Campanas 3.81 315** P **Pn 08 53 47.0 +1.9**
**LCO Las Campanas 3.81 315** Pn **Pn 08 53 47.0 +1.9**
**LCO Las Campanas 3.81 315** *eP* **Pn 08 53 47.8 +2.6**
LCO *eS* **Sb 08 54 41.2 +1.3**
LCO IAML 08 54 47.4
comp=Z,79µm,0.8s
**VA05 Santo Domingo 3.86 239 Pn 08 53 47.4 +1.8**
**VA05 Santo Domingo 3.86 239** *eP* **Pn 08 53 47.5 +1.9**
VA05 *eS* **Sn 08 54 32.4 +2.1**
**BO01 Tunca 3.92 227** *eP* **Pn 08 53 43.5 -2.9**
BO01 *eP* **Pb** 08 53 49.2 -6.7
BO01 *eS* **Sn 08 54 34.5 +2.8**
BO01 IAML 08 54 54.2
comp=Z,4µm,1.2s
**BO02 Sierra Bellavi 4.03 220 Pn 08 53 51.5 +3.6**
**BO02 Sierra Bellavi 4.03 220** *eP* **Pn 08 53 51.0 +3.1**
BO02 *eS* **Sb 08 54 43.0 -3.0**
BO02 IAML 08 54 56.0
comp=Z,4µm,0.6s
**EDS3 Malargue 4.27 200** *eP* **Pn 08 53 54.2 +2.9**
EDS3 *eS* **Sb 08 54 58.0 +4.8**
EDS3 *eS* Sb 08 55 06.2 +13
**AC04 Llanos de Chal 4.63 319** Pn **Pn 08 53 57.5 +1.4**
**AC04 Llanos de Chal 4.63 319** *eP* **Pn 08 53 57.7 +1.6**
AC04 *eS* **Sb 08 55 00.5 -2.8**
AC04 *eS* **Sb 08 55 11.5 +8.2**
AC04 IAML 08 55 17.3
comp=Z,4µm,0.7s
**GO03 Copiap 4.72 331** Pn **Pn 08 53 59.0 +1.5**
**GO03 Copiap 4.72 331** *eP* **Pn 08 54 00.5 +3.0**
GO03 *eS* **Sn 08 54 57.1 +5.5**
**GO05 Huala 4.85 227** Pn **Pn 08 54 01.9 +2.7**
**GO05 Huala 4.85 227** *eP* **Pn 08 54 00.8 +1.6**
GO05 *eS* **Sn 08 54 56.8 +2.1**
**AC06 Mina Casimiro 4.98 331** Pn **Pn 08 54 02.5 +1.5**
**AC02 Maricunga 5.07 345** Pn **Pn 08 54 05.5 +2.9**
**AC02 Maricunga 5.07 345** *eP* **Pn 08 54 00.5 -2.1**
AC02 *eP* **Pb** 08 54 06.2 -10
AC02 *eS* **Sn 08 54 59.7 -1.1**
AC02 IAML 08 56 22.3
comp=Z,893nm,0.8s
**ML02 Panimavida 5.10 217** Pn **Pn 08 54 06.0 +3.5**
**AHML Horco Molle 5.34 23** *eP* **Pn 08 54 02.0 -3.9**
AHML *eP* **Pn 08 54 07.5 +1.6**
AHML *eS* **Sb 08 55 30.0 +6.3**
AHML IAML 08 55 40.2
comp=Z,3µm,1.6s
**FSA Cafayete 5.80 15** *eP* **Pn 08 54 15.0 +2.6**
FSA *eS* **Sn 08 55 21.6 +3.2**
**AC01 Pan de Azucar 6.16 334** *eP* Pn 08 54 09.2 -8.0
AC01 *eS* **Sb 08 55 43.5 -3.9**
AC01 IAML 08 56 08.3
comp=Z,2µm,0.8s
**CANA Caviahue 6.74 204** *eP* Pn 08 54 30.4 +5.0
**BI05 Punta Hualpn 6.79 221 Pn 08 54 24.7 -1.1**
**PB14 IPOC Station P 7.51 340 Pn 08 54 36.4 +0.4**
**PB14 IPOC Station P 7.51 340** *eP* **Pn 08 54 37.0 +1.0**
PB14 *eS* **Sn 08 56 03.9 +3.3**
PB14 IAML 08 56 54.7
comp=Z,1µm,1.0s
**LC01 Cunco 7.93 205 Pn 08 54 42.6 +1.1**
**LC01 Cunco 7.93 205** *eP* **Pn 08 54 43.1 +1.7**
**PB10 IPOC Station P 8.61 342 Pn 08 54 50.2 -0.6**
**PB15 IPOC Station P 8.66 349 Pn 08 54 51.9 +0.1**
**PB15 IPOC Station P 8.66 349** *eP* **Pn 08 54 54.5 +2.7**
PB15 *eS* **Sn 08 56 36.6 +7.7**
**HJA Humahuaca 8.73 14** *eP* **Pn 08 54 56.3 +3.5**
**LR03 Panguipulli 8.75 205 Pn 08 54 52.2 -0.5**
**PB06 IPOC Station P 9.17 349 Pn 08 54 58.8 +0.2**
**PB06 IPOC Station P 9.17 349** *eP* **Pn 08 55 00.5 +1.8**
PB06 *eS* Sn 08 56 52.0 +11
**LVC Limon Verde 9.18 353** Pn **Pn 08 54 59.3 +0.4**
comp=Z,2.5nm,0.3s,baz=163,slow=12,SNR=19
LVC LR LR 08 59 00.3
comp=Z,7µm,18.7s,baz=192,slow=41
**LVC Limon Verde 9.18 353** *eP* **Pn 08 54 59.7 +0.8**
**LVC Limon Verde 9.18 353** *eP* **Pn 08 54 59.2 +0.3**
**PLCA Paso Flores 9.27 194** Pn **Pn 08 55 03.6 +3.7**
comp=Z,4.0nm,0.3s,baz=15,slow=11,SNR=122
PLCA Lg Lg 08 57 40.0
comp=Z,9.8nm,0.3s,baz=285,slow=16,SNR=3.6
PLCA LR LR 08 58 57.3
comp=Z,4µm,19.6s,baz=8.0,slow=40
**PLCA Paso Flores 9.27 194** P **Pn 08 55 03.4 +3.5**
**PLCA Paso Flores 9.27 194 Pn 08 55 03.4 +3.5**
**PLCA Paso Flores 9.27 194** *eP* **Pn 08 55 03.6 +3.7**
**H03N1 Juan Fernandez 9.67 257** Pn **Pn 08 55 07.4 +2.4**
baz=121,slow=20,SNR=16
H03N1 T T 09 02 36.6
baz=86,slow=73,SNR=689
**H03N3 Juan Fernandez 9.68 257** Pn **Pn 08 55 07.6 +2.3**
baz=121,slow=20,SNR=13
H03N3 T T 09 02 27.5
baz=86,slow=73,SNR=759
**H03N2 Juan Fernandez 9.69 257** Pn **Pn 08 55 07.4 +2.1**
baz=121,slow=20,SNR=12
H03N2 T T 09 02 30.2
baz=86,slow=73,SNR=608
**ITQB Itaqui 9.69 81 Pn 08 55 06.2 +0.6**
**ITQB Itaqui 9.69 81** *eP* **Pn 08 55 06.2 +0.6**
**PB03 IPOC Station P 9.85 348 Pn 08 55 06.0 -1.9**
**PB03 IPOC Station P 9.85 348** *eP* **Pn 08 55 06.8 -1.2**
**LL04 Puerto Octay 9.92 202 Pn 08 55 07.9 -0.8**
**PB09 IPOC Station P 10.02 351** *eP* **Pn 08 55 10.2 -0.1**
**LL03 Petrohue 10.13 201 Pn 08 55 12.0 +0.5**
**PB07 IPOC Station P 10.19 348 Pn 08 55 11.1 -1.5**
**CPUP Villa Florida 10.50 62** Pn **Pn 08 55 16.2 -0.5**
comp=Z,3.1nm,0.3s,baz=245,slow=13,SNR=62
CPUP Lg Lg 08 58 23.0
comp=Z,6.2nm,0.3s,baz=294,slow=19,SNR=1.8
CPUP LR LR 09 00 10.1
comp=Z,2µm,21.1s,baz=242,slow=42
**CPUP Villa Florida 10.50 62** P **Pn 08 55 15.9 -0.8**
**CPUP Villa Florida 10.50 62 Pn 08 55 15.9 -0.8**
**CPUP Villa Florida 10.50 62** *eP* **Pn 08 55 16.3 -0.5**
**PB01 IPOC Station P 10.79 351** Pn **Pn 08 55 19.3 -1.5**

**PATCX Punta Patache 11.12 348 Pn 08 55 22.8 -2.4**
**LL01 San Ignacio de 11.27 198 Pn 08 55 27.3 +0.1**
**LL02 Futaleuf 11.90 195 Pn 08 55 35.8 0.0**
**PLTB Pedras Altas 11.94 94 Pn 08 55 35.4 -1.0**
**PLTB Pedras Altas 11.94 94** *eP* **Pn 08 55 34.7 -1.7**
**CPSB Cacapava Do Su 12.23 87** *eP* **Pn 08 55 39.2 -1.2**
**GO07 Milladeo Hill, 12.31 201 Pn 08 55 39.2 -2.2**
**ITAB Concordia 14.22 76 Pn 08 56 07.0 -0.6**
**ITAB Concordia 14.22 76** *eP* **Pn 08 56 06.5 -1.0**
**COYC Coyhaique 14.23 193 Pn 08 56 07.3 -0.3**
**PTGB Pitanga 15.39 67** *eP* **Pn 08 56 22.8 -0.6**
**LPAZ La Paz 15.40 358** Pn **Pn 08 56 24.1 0.0**
comp=Z,0.3nm,0.3s,baz=158,slow=9.2,SNR=6.4
LPAZ LR LR 09 03 02.4
comp=Z,3µm,18.8s,baz=220,slow=40
**LPAZ La Paz 15.40 358** Pn **Pn 08 56 22.8 -1.3**
LPAZ IAmb IAmb 08 56 49.1
comp=Z,108nm,0.8s
**LPAZ La Paz 15.40 358** *eP* **Pn 08 56 24.4 +0.4**
**AQDB Aquidauana 15.50 46 Pn 08 56 25.0 +0.2**
**AQDB Aquidauana 15.50 46** *eP* **Pn 08 56 25.2 +0.5**
**TER01 Tubaro-SC 16.32 83** *eP* **Pn 08 56 34.8 -0.5**
**SIV San Ignacio 16.79 22** Pn **Pn 08 56 42.0 +0.7**
comp=Z,1.7nm,0.3s,baz=207,slow=9.7,SNR=31
SIV LR LR 09 04 33.9
comp=Z,2µm,18.5s,baz=199,slow=42
**GO08 Villa O'Higgin 17.11 191** Pn **Pn 08 56 45.6 +0.5**
**PCMB Pacaembu 17.75 59** *eP* **Pn 08 56 53.1 -0.2**
**PTLB Pontes e Lacer 17.98 27** *eP* **P 08 56 56.5 0.0**
**FRTB Fartura 18.05 67** *eP* **P 08 56 57.7 +0.3**
**PP1B Ponte de Pedra 18.21 42** *eP* **P 08 56 59.4 +0.3**
**SALV Santo Antonio 19.16 37** *eP* **P 08 57 09.7 +0.2**
**PET01 Itanhaem-SP 19.42 73** *eP* **P 08 57 12.6 +0.2**
**ITRB Iturama 19.61 56** *eP* **P 08 57 14.3 -0.1**
**VILB Vilhena 19.91 22** *eP* **P 08 57 16.8 -1.0**
**BB19B Bebedouro 20.11 63** *eP* **P 08 57 19.1 -0.8**
**RCLB Rio Claro- Sao 20.13 67** *eP* **P 08 57 19.9 -0.3**
**MG05 Puerto Natales 20.23 189** P **P 08 57 21.2 +0.3**
**VAO Valinhos 20.29 70** *eP* **P 08 57 22.0 +0.2**
**EFI East Falkland 21.11 163** *ceP* **P 08 57 29.7 -0.8**
EFI pmax pmax
comp=Z,65nm,0.9s
**EFI East Falkland 21.11 163** P **P 08 57 30.4 -0.1**
EFI IAmb IAmb 08 57 35.6
comp=Z,107nm,0.9s
**PARB Paraibuna 21.20 72** *eP* **P 08 57 31.8 0.0**
**MG04 Isla Riesco 21.29 187** P **P 08 57 32.7 +0.4**
MG04 IAmb IAmb 08 57 34.5
comp=Z,207nm,0.9s
**NNA Nana 21.43 335** P **P 08 57 35.1 +0.9**
comp=Z,16nm,0.8s,baz=202,slow=9.2,SNR=7.6
NNA LR LR 09 04 41.8
comp=Z,937nm,21.3s,baz=165,slow=33
**NNA Nana 21.43 335** P **P 08 57 35.0 +0.9**
NNA pmax pmax
comp=Z,61nm,0.9s
**NNA Nana 21.43 335** P **P 08 57 35.0 +0.9**
**ARAG Araguaiana, MT 21.51 46** *eP* **P 08 57 34.4 -0.6**
**ETMB Extrema 21.86 4** *eP* **P 08 57 39.5 +0.7**
**MG03 Isla Dawson 22.18 184** P **P 08 57 42.1 +0.2**
MG03 IAmb IAmb 08 57 43.3
comp=Z,167nm,0.9s
**DSPA Despedida 22.20 181** P **P 08 57 42.5 +0.5**
**IPMB Ipameri, GO 22.27 57** *eP* **P 08 57 42.4 -0.8**
**PDRB Porto dos Gac 22.42 29** *eP* **P 08 57 44.1 -0.7**
**MAN01 Angra dos Reis 22.77 73** *eP* **P 08 57 48.0 -0.6**
**BSCB Bom Sucesso 23.06 68** *eP* **P 08 57 52.0 +0.4**
**USHA Ushuaia 23.08 181** P **P 08 57 51.6 +0.2**
comp=Z,38nm,0.7s,baz=6.5,slow=9.8,SNR=47
USHA LR LR 09 07 31.4
comp=Z,891nm,21.4s,baz=355,slow=38
**MG01 Puerto William 23.17 180** P **P 08 57 52.7 +0.4**
MG01 IAmb IAmb 08 57 54.6
comp=Z,210nm,1.2s
**VAS01 Vassouras-RJ 23.47 72** *eP* **P 08 57 56.2 +0.5**
**BDFB Brasilia 24.01 53** P **P 08 57 59.2 -1.7**
comp=Z,12nm,0.5s,baz=224,slow=9.0,SNR=27
BDFB LR LR 09 08 41.0
comp=Z,3µm,19.8s,baz=229,slow=40
**BDFB Brasilia 24.01 53** P **P 08 57 59.5 -1.4**
BDFB pmax pmax
comp=Z,39nm,0.8s
**BDFB Brasilia 24.01 53** P **P 08 57 59.5 -1.4**
**CZSB Cruzeiro do Su 24.36 348** *eP* **P 08 58 04.2 +0.1**
**DUB01 Friburgo-RJ 24.44 73** *eP* **P 08 58 04.6 -0.2**
**SNDB Serra Nova Dou 24.78 41** *eP* **P 08 58 06.8 -1.0**
**DIAM Diamantina, MG 25.43 64** *eP* **P 08 58 13.5 -0.5**
**PEXB Peixe 26.44 47** *eP* **P 08 58 21.9 -1.0**
**ATAH Atahualpa 26.47 335** P **P 08 58 25.4 +1.8**
comp=Z,7.7nm,0.9s,baz=143,slow=5.3,SNR=5.2
**ALF01 Guarapari-ES 26.49 72** *eP* **P 08 58 24.1 +0.8**
**JANB Januaria 27.00 57** *eP* **P 08 58 27.6 -0.4**
**NPGB Novo Progresso 27.12 28** *eP* **P 08 58 28.3 -0.7**
**RIB01 Linhares ES 27.43 70** *eP* **P 08 58 31.9 +0.1**
**TBTG Tabatinga, AM 27.50 355** *eP* **P 08 58 32.3 -0.1**
**SDBA SAO DESIDERIO 28.42 52** *eP* **P 08 58 39.4 -1.3**
**NAN01 Guarapari, ES 28.45 67** *eP* **P 08 58 40.4 -0.5**
**MACA Manacapuru-AM 29.18 14** *eP* **P 08 58 47.3 0.0**
**SMTB Santa Maria do 29.41 44** *eP* **P 08 58 49.1 -0.4**
**GUA01 Guaratinga, BA 29.42 66** *eP* **P 08 58 49.3 -0.3**
**ITTB Itaituba 29.44 25** *eP* **P 08 58 49.7 +0.1**
**CMC01 Camacan, BA 30.37 64** *eP* **P 08 58 57.5 -0.5**
**PRPB Parauapebas 30.41 37** *eP* **P 08 58 57.6 -0.8**
**NBIT Itapeh - BA 30.69 63** *eP* **P 08 59 00.7 -0.1**
**GDU01 Guandu, BA 31.34 61** *eP* **P 08 59 05.6 -1.0**
**MALB Monte Alegre 32.30 26** *eP* **P 08 59 15.0 +0.1**
**ESPZ Base Esperanza 32.38 171** P **P 08 59 15.0 -0.1**
ESPZ IAmb IAmb 08 59 17.7
comp=Z,30nm,0.9s
**ORCD Orcadas 32.68 159** P **P 08 59 18.2 +0.4**
**NBPN Ponto Novo - B 32.78 57** *eP* **P 08 59 17.9 -1.3**
**PMSA Palmer Station 33.12 177** P **P 08 59 22.7 +1.1**
comp=Z,40nm,1.1s,baz=14,slow=8.2,SNR=3.7
PMSA LR LR 09 13 11.0
comp=Z,1µm,20.3s,baz=326,slow=37
**PMSA Palmer Station 33.12 177** P **P 08 59 22.3 +0.7**
**PMSA Palmer Station 33.12 177** *eP* **P 08 59 22.8 +1.2**
**CMBC Cumbal 33.92 342** *eP* **P 08 59 30.8 +1.2**
**FLOC Florencia 34.01 346** *eP* **P 08 59 29.8 -0.1**
**NBLA Lagarto - SE 34.43 60** *eP* **P 08 59 33.3 -0.3**
**MCPB Macapa, AP 34.52 28** *eP* **P 08 59 34.4 +0.1**
**TMAB Tom-Àu,PA,Br 34.54 36** *eP* **P 08 59 34.6 +0.2**
**GARC Garzon, Huila 34.57 346** *eP* **P 08 59 34.6 -0.4**
**BOAV Boa Vista 34.62 13** *eP* **P 08 59 35.3 +0.2**
**SOTA Rioblanco 34.76 344** *eP* **P 08 59 38.9 +2.0**
**BBAC Balboa, Cauca 34.81 343** *eP* **P 08 59 38.4 +1.4**
BBAC *eP* **P 08 59 38.4 +1.4**
**PCON Cinco Dias 34.90 345** *eP* **P 08 59 41.2 +3.0**
**BETC Betania 35.04 346** *eP* **P 08 59 35.5 -3.3**
**POPC Popayan, Colom 35.17 344** *eP* **P 08 59 43.1 +3.0**
**MARP Paez Belalcaza 35.30 345** *eP* **P 08 59 44.1 +2.7**
**ORTC Ortega, Tolima 36.20 347** *eP* **P 08 59 47.9 -0.9**
**NBMA Muriti-CE 36.22 54** *eP* **P 08 59 48.1 -0.9**
**ROSB Rosrio 36.24 42** *eP* **P 08 59 49.7 +0.6**
**NBAN Anadia - AL 36.42 60** *eP* **P 08 59 49.7 -1.0**
**RPN Rapa Nui 36.46 266** LR LR 09 11 07.4
comp=Z,460nm,18.1s,baz=115,slow=30
**YOTC Yotoco, Valle 36.49 345** *eP* **P 08 59 51.6 +0.3**
**CHIC Chingaza 36.64 350** *eP* **P 08 59 51.7 -1.3**
**NBPS Pedro II - PI 36.66 47** *eP* **P 08 59 52.2 -0.6**
**ANIL Santa Ana 36.79 347** *eP* **P 08 59 52.6 -1.5**
**ROSC El Rosal 36.94 349** P **P 08 59 56.8 +1.3**
comp=Z,13nm,0.5s,baz=27,slow=19,SNR=5.1
ROSC LR LR 09 16 44.9
comp=Z,757nm,19.0s,baz=192,slow=39
**ROSC El Rosal 36.94 349** P **P 08 59 54.6 -0.9**
ROSC pmax pmax
comp=Z,23nm,0.8s
**ROSC El Rosal 36.94 349** P **P 08 59 54.6 -0.9**
**NBPB Pedra_Branca-C 36.99 51** *eP* **P 08 59 55.2 -0.4**
**PLMC San Jos del P 37.37 346** *eP* **P 08 59 56.4 -2.4**
**GUY2C Guyana, Caldas 37.50 347** *eP* **P 09 00 03.1 +2.8**
**NBLV Livramento - P 37.52 56** *eP* **P 08 59 59.4 -0.7**
**NORC Norcasia 37.74 348** *eP* **P 08 59 59.3 -2.6**
**RUSC La Rusia 37.79 351** *eP* **P 09 00 02.1 -0.7**
**NBRF Rio Formoso - 37.91 60** *eP* **P 09 00 03.3 -0.1**
**TAMC Tame, Arauca 38.18 353** *eP* **P 09 00 02.1 -3.4**
**CBOC Ciudad Bolivar 38.25 346** *eP* **P 09 00 06.9 +0.6**
**NBMO Morrinhos-CE 38.38 48** *eP* **P 09 00 06.3 -1.0**
**PTBC PUERTO BERRIO, 38.63 349** *eP* **P 09 00 06.9 -2.4**
**NBCL Cascavel-CE 38.83 51** *eP* **P 09 00 10.8 -0.2**
**RCBR Riachuelo 39.31 56** LR LR 09 17 13.1
comp=Z,1µm,21.6s,baz=5.0,slow=37
**RCBR Riachuelo 39.31 56** *eP* **P 09 00 15.3 +0.2**
**NBPV Pedro Velho 39.33 57** *eP* **P 09 00 15.4 +0.2**
**MDP Montagnes des 39.33 24** LR LR 09 18 52.0
comp=Z,833nm,18.8s,baz=216,slow=40
**UREC San Jos de Ur 40.00 348** *eP* **P 09 00 19.5 -1.2**
**SDV Santo Domingo 40.51 355** LR LR 09 18 48.6
comp=Z,669nm,18.6s,baz=176,slow=39
**SDV Santo Domingo 40.51 355** P **P 09 00 23.6 -1.6**
**SDV Santo Domingo 40.51 355** *eP* **P 09 00 23.8 -1.3**
**JTS Las Juntas de 44.98 335** *i P* **P 09 01 00.4 -0.8**
JTS pmax pmax
comp=Z,30nm,1.6s
**JTS Las Juntas de 44.98 335** P **P 09 01 01.4 +0.1**
**ORTG Ortega, Santa 45.22 335** P **P 09 01 02.9 -0.4**
ORTG IAmb IAmb 09 01 16.3
comp=Z,32nm,1.0s
**BIM Bigot 46.43 9** P **P 09 01 12.3 -0.4**
**FDF Fort de France 46.63 9** P **P 09 01 13.6 -0.7**
FDF pmax pmax
comp=Z,155nm,0.8s
**FDF Fort de France 46.63 9** P **P 09 01 13.6 -0.7**
**BELA Belgrano 2 48.48 171** P **P 09 01 27.9 -0.1**
**TGUH Tegucigalpa,Un 49.29 335** P **P 09 01 34.2 -0.8**
**CRPR Cabo Rojo, PR 49.47 1** P **P 09 01 34.9 -1.3**
**CELP Cerrillos 49.55 1** P **P 09 01 35.4 -1.3**
**SJG San Juan 49.60 2** LR LR 09 25 36.0
comp=Z,440nm,19.5s,baz=184,slow=40
**GCPR Guaynabo City 49.79 2** P **P 09 01 38.2 -0.4**
GCPR IAmb IAmb 09 01 46.6
comp=Z,27nm,0.7s
**CUPR Culebra, Puert 49.82 3** P **P 09 01 38.7 -0.1**
CUPR IAmb IAmb 09 03 08.6
comp=Z,18nm,0.7s
**BANI BANI 49.92 357** P **P 09 01 39.5 -0.3**
**VNA3 Neumayer Olymp 50.08 159** P **P 09 01 41.1 +0.8**
**VNA1 Neumayer--Stat 50.33 158** P **P 09 01 43.2 +1.1**
**ESQI Esquipulas 50.54 332** P **P 09 01 44.7 +0.2**
ESQI IAmb IAmb 09 02 04.1
comp=Z,55nm,1.1s
**SDDR Presa de Saban 50.56 356** P **P 09 01 43.6 -0.9**
SDDR IAmb IAmb 09 01 56.5
comp=Z,73nm,1.4s
**VNA2 Neumayer--Watz 50.68 158** P **P 09 01 45.7 +0.8**
baz=285,slow=8.6
**APG El Apazote 51.39 331** LR LR 09 20 05.0
comp=Z,185nm,21.2s,baz=85,slow=32
**HUEH Huehuetenango 52.10 330** P **P 09 01 56.2 -0.2**
**SNAA Sanae 52.30 159** P **P 09 01 57.7 +0.7**
**SNAA Sanae 52.30 159** LR LR 09 23 01.8
comp=Z,149nm,20.6s,baz=348,slow=35
**SNAA Sanae 52.30 159** *ceP* **P 09 01 57.2 +0.2**
SNAA pmax pmax
comp=Z,46nm,1.1s
**SNAA Sanae 52.30 159** P **P 09 01 57.1 +0.2**
**CCIG Comitan 53.23 330** P **P 09 02 04.0 -0.7**
**SOR Soroa 56.20 343** P **P 09 02 25.6 -0.2**
SOR pmax pmax
comp=Z,51nm,1.1s
**SOR Soroa 56.20 343** P **P 09 02 25.6 -0.2**
SOR IAmb IAmb 09 02 26.1
comp=Z,51nm,1.1s
**NVL N'lazarevskaya 56.93 157** *eP* P 09 02 37.9 +7.4
NVL pmax pmax
comp=Z,54nm,0.9s
**QSPA South Pole Qui 58.48 180** LR LR 09 27 53.2
comp=Z,245nm,18.8s,baz=186,slow=36
**QSPA South Pole Qui 58.48 180** P **P 09 02 42.1 +0.4**
**MOIG Morelia 60.42 323** P **P 09 02 56.4 +0.7**
**ZAIG Zacatecas 63.70 324** P **P 09 03 18.5 +0.8**
**KVTX Kingsville 65.64 331** P **P 09 03 30.7 +0.8**
**GOGA Godfrey 66.51 346** P **P 09 03 34.4 -1.0**
baz=165
**344A Westbrook Farm 66.56 339** P **P 09 03 36.8 +1.0**
344A IAmb IAmb 09 03 37.1
comp=Z,39nm,1.0s
**SYO Syowa Base 66.57 158**‖ *eP* **P 09 03 35.8 +0.4**
**SYO Syowa Base 66.57 158**‖ *epP* pP 09 03 41.4 -1.2
**SYO Syowa Base 66.57 158**‖ *esP* sP 09 03 43.8 -1.5
**735A Kenedy 66.76 331** P **P 09 03 37.5 +0.4**
735A IAmb IAmb 09 03 50.0
comp=Z,49nm,1.0s
**X58A Rowland 66.87 350** P **P 09 03 37.4 -0.2**
X58A IAmb IAmb 09 03 47.1
comp=Z,41nm,0.9s
**833A Chaparral WMA, 66.96 330** P **P 09 03 38.9 +0.5**
**833A Chaparral WMA, 66.96 330** P **P 09 03 39.1 +0.7**
baz=151,SNR=26
**LRAL Lakeview Retre 66.98 342** P **P 09 03 37.6 -0.8**
baz=162
**342A Flagon Creek P 67.00 337** P **P 09 03 38.3 -0.3**
**VNDA Vanda 67.00 190** P **P 09 03 39.8 +1.7**
comp=Z,15nm,0.9s,baz=127,slow=6.0,SNR=17
VNDA LR LR 09 32 43.6
comp=Z,140nm,18.4s,baz=143,slow=36
**VNDA Vanda 67.00 190** P **P 09 03 39.8 +1.7**
VNDA pmax pmax
comp=Z,21nm,1.0s
**VNDA Vanda 67.00 190** IAmb IAmb 09 03 40.9
comp=Z,21nm,0.9s
**Y52A Lilburn 67.08 345** P **P 09 03 38.3 -0.7**
Y52A IAmb IAmb 09 03 47.5
comp=Z,25nm,0.9s
**CNNC Cliffs of the 67.33 351** P **P 09 03 40.8 +0.3**
baz=170
**KMSC Kings Mountain 67.78 348** P **P 09 03 43.2 -0.2**
baz=167
**X51A Calhoun 67.93 345** P **P 09 03 43.5 -0.9**
**143A Socs Landing, 67.93 338** P **P 09 03 44.2 -0.2**
**NATX Nacogdoches 68.15 335** P **P 09 03 46.5 +0.6**
baz=155
**435B Jarrell 68.37 332** P **P 09 03 47.8 +0.5**
baz=153
**V53A Saluda 68.56 347** P **P 09 03 47.4 -1.0**
V53A IAmb IAmb 09 03 59.5
comp=Z,18nm,0.9s
**CPCT Cooper Cave 68.70 345** P **P 09 03 48.2 -1.1**
CPCT IAmb IAmb 09 03 48.9
comp=Z,16nm,0.9s
**HPIG 68.71 324** P **P 09 03 49.7 0.0**
HPIG IAmb IAmb 09 04 02.2
comp=Z,20nm,0.9s
**TKL Tuckaleechee C 68.75 346** LR LR 09 38 40.3
comp=Z,104nm,18.4s,baz=160,slow=40
**237A Washetta, Mont 68.79 335** P **P 09 03 50.1 +0.3**
237A IAmb IAmb 09 03 51.3
comp=Z,35nm,0.9s
**Z41A Richland Creek 68.89 338** P **P 09 03 50.9 +0.5**
baz=157
**LPIG La Paz 68.92 318** LR LR 09 28 22.7
comp=Z,191nm,18.1s,baz=166,slow=31
**JCT Junction City 69.01 330** P **P 09 03 51.1 -0.2**
JCT pmax pmax
comp=Z,80nm,1.6s
**JCT Junction City 69.01 330** P **P 09 03 51.1 -0.2**
JCT IAmb IAmb 09 03 52.5
comp=Z,80nm,1.6s
**JCT Junction City 69.01 330** P **P 09 03 51.2 -0.2**
baz=151,SNR=9.6
**OXF Oxford 69.03 341** P **P 09 03 50.2 -1.1**
baz=160
**V48A Smith Brothers 69.51 343** P **P 09 03 53.3 -0.9**
V48A IAmb IAmb 09 03 54.4
comp=Z,26nm,0.7s
**TZTN Tazewell 69.56 346** P **P 09 03 53.4 -1.1**
baz=166
**Z38A Mt. Pleasant 69.63 336** P **P 09 03 55.3 +0.3**
**TXAR Lajitas Array 69.74 327** P **P 09 03 56.1 +0.2**
comp=Z,6.3nm,0.8s,baz=148,slow=8.1,SNR=48
**TXAR Lajitas Array 69.74 327** P **P 09 03 55.8 -0.2**
**TX31 Lajitas Ar. Si 69.74 327** P **P 09 03 55.6 -0.3**
**TX32 Lajitas Array 69.74 327** P **P 09 03 55.9 0.0**
TX32 IAmb IAmb 09 04 08.2
comp=Z,66nm,1.9s
**JSRW J. Sargeant Re 69.75 351** P **P 09 03 55.6 0.0**
**X40A Basin Creek Fa 70.03 338** P **P 09 03 56.7 -0.7**
baz=157
**WVT Waverly 70.13 343** P **P 09 03 57.0 -1.0**
WVT pmax pmax
comp=Z,48nm,0.7s
**WVT Waverly 70.13 343** P **P 09 03 57.0 -1.0**
**WVT Waverly 70.13 343** P **P 09 03 57.2 -0.9**
baz=162
**MIAR Mount Ida 70.32 337** P **P 09 03 58.9 -0.4**
baz=157

**S54A** **Dingess, Beckl** 70.36 349 P **P** 09 03 58.8 -0.7
S54A IAmb IAmb 09 04 08.5
comp=Z,32nm,0.8s
**W41B** **Gary Mavity, V** 70.48 339 P **P** 09 03 59.7 -0.4
baz=158
**Z35A** **Perchaven, San** 70.51 334 P **P** 09 03 59.9 -0.6
**LIC** **Lamto** 70.52 69 *e*P **P** 09 04 01.8 +0.8
comp=Z,93nm,0.8s
**TAOE** **Nuku Hiva Isla** 70.55 272 *e*LR LR 09 25 39.9
comp=Z,231nm,23.7s
**TIC** **Toumodi** 70.78 69 *e*P **P** 09 04 02.7 +0.1
**ABTX** **Abilene, Hawle** 70.82 332 P **P** 09 04 01.6 -0.8
ABTX IAmb IAmb 09 04 03.3
comp=Z,31nm,1.1s
**ABTX** **Abilene, Hawle** 70.82 332 P **P** 09 04 02.1 -0.3
baz=152,SNR=13
**KIC** **Kosan Boka** 70.83 69 *e*P **P** 09 04 03.2 +0.3
comp=Z,77nm,0.8s
**DBIC** **Dimbokro** 70.92 69 P **P** 09 04 03.6 +0.3
comp=Z,8.0nm,0.8s,baz=255,slow=6.0,SNR=11
DBIC pP **pP** 09 04 12.2 +1.5
comp=Z,38nm,0.8s,baz=238,slow=7.3,SNR=22
DBIC LR LR 09 31 24.9
comp=Z,427nm,21.6s,baz=238,slow=33
**DBIC** **Dimbokro** 70.92 69 *e*P **P** 09 04 03.7 +0.3
**DBIC** **Dimbokro** 70.92 69 P **P** 09 04 02.9 -0.5
DBIC IAmb IAmb 09 04 13.7
comp=Z,47nm,0.9s
**LCAR** **Lake Charles** 70.98 340 P **P** 09 04 02.5 -0.7
LCAR IAmb IAmb 09 04 14.6
comp=Z,27nm,0.8s
**W39A** **Magazine** 70.99 338 P **P** 09 04 02.9 -0.4
W39A IAmb IAmb 09 04 12.8
comp=Z,30nm,1.0s
**W39A** **Magazine** 70.99 338 P **P** 09 04 03.5 +0.2
baz=157,SNR=8.8
**PARMO** **Parma** 71.14 341 P **P** 09 04 03.6 -0.5
**TBI** **Tubuai** 71.48 254 *e*LQ LQ 09 22 51.0
comp=Z,2μm,41.8s
TBI *e*LR LR 09 26 01.9
comp=Z,839nm,26.0s
**U40A** **Yellville** 71.76 339 P **P** 09 04 07.4 -0.6
baz=158,SNR=8.1
**WCI** **Wyandotte Cave** 71.76 345 P **P** 09 04 06.6 -1.3
baz=163
**Q51A** **Peebles** 71.92 347 P **P** 09 04 08.1 -0.7
Q51A IAmb IAmb 09 04 08.9
comp=Z,26nm,0.9s
**MCWV** **Mont Chateau** 71.95 350 P **P** 09 04 08.6 -0.4
baz=169
**CVNA** **Calvinia** 72.22 116 *e*P **P** 09 04 12.5 +1.2
CVNA IAmb IAmb 09 04 21.9
comp=Z,76nm,0.9s
**P52A** **Corning** 72.29 348 P **P** 09 04 10.2 -0.8
baz=167
**TUL1** **Leonard** 72.31 336 P **P** 09 04 10.5 -0.7
baz=155,SNR=6.1
**WMOK** **Wichita Mounta** 72.34 333 P **P** 09 04 10.6 -0.9
baz=152,SNR=6.3
**O56A** **Blue Knob Stat** 72.37 351 P **P** 09 04 10.5 -1.1
baz=170
**MNTX** **Cornudas Mount** 72.52 327 P **P** 09 04 11.6 -1.0
MNTX IAmb IAmb 09 04 23.9
comp=Z,16nm,0.7s
**MNTX** **Cornudas Mount** 72.52 327 P **P** 09 04 11.8 -0.9
baz=147,SNR=25
**FVM** **French Village** 72.56 341 P **P** 09 04 12.0 -0.7
FVM pmax pmax
comp=Z,25nm,0.8s
**FVM** **French Village** 72.56 341 P **P** 09 04 12.0 -0.7
FVM IAmb IAmb 09 04 13.0
comp=Z,25nm,0.8s
**SUR** **Sutherland** 72.62 118 LR LR 09 33 48.6
comp=Z,251nm,18.1s,baz=213,slow=34
**SUR** **Sutherland** 72.62 118 P **P** 09 04 11.6 -2.1
SUR IAmb IAmb 09 04 24.7
comp=Z,58nm,0.9s
**P49A** **Miami Univ. Ec** 72.68 346 P **P** 09 04 12.3 -1.0
baz=165
**CCM** **Cathedral Cave** 72.86 341 P **P** 09 04 13.8 -0.6
baz=159
**ACSO** **Alum Creek Sta** 73.02 348 P **P** 09 04 14.5 -0.9
baz=166
**N54A** **Moraine State** 73.25 350 P **P** 09 04 16.1 -0.6
baz=169
**MSTX** **Muleshoe** 73.28 330 P **P** 09 04 16.5 -0.7
MSTX IAmb IAmb 09 04 17.9
comp=Z,36nm,0.9s
**MSTX** **Muleshoe** 73.28 330 P **P** 09 04 17.0 -0.2
baz=149,SNR=13
**O48B** **Farmland** 73.46 346 P **P** 09 04 16.8 -1.2
baz=164,SNR=5.5
**AMTX** **Amarillo** 73.61 331 P **P** 09 04 18.9 -0.2
baz=150
**GRAN** **Grantham** 73.68 118 *e*P **P** 09 04 21.0 +1.2
GRAN IAmb IAmb 09 04 30.3
comp=Z,54nm,0.8s
**M54A** **Oil Creek Stat** 73.74 351 P **P** 09 04 19.0 -0.6
baz=169
**U32A** **Winter Ranch,** 73.88 334 P **P** 09 04 20.2 -0.3
U32A IAmb IAmb 09 04 30.2
comp=Z,28nm,0.8s
**AUGR** **Augrabies** 73.98 114 *e*P **P** 09 04 20.6 -1.0
AUGR IAmb IAmb 09 04 31.8
comp=Z,56nm,1.0s
**SFIN** **Lafayette** 74.00 345 P **P** 09 04 20.2 -0.9
baz=163
**319A** **Douglas** 74.15 324 P **P** 09 04 22.5 +0.1
319A IAmb IAmb 09 04 24.4
comp=Z,39nm,0.8s
**MAW** **Mawson** 74.23 162 P **P** 09 04 23.1 +0.9
comp=Z,49nm,0.7s,baz=193,slow=5.9,SNR=9.8
MAW LR LR 09 38 12.9
comp=Z,218nm,19.9s,baz=238,slow=37
**MAW** **Mawson** 74.23 162 P **P** 09 04 23.1 +0.9
MAW pmax pmax
comp=Z,14nm,0.9s
**MAW** **Mawson** 74.23 162 IAmb IAmb 09 04 23.8
comp=Z,14nm,0.9s
**PPT2** **Papeete2** 74.27 259 *e*LR LR 09 27 22.1
comp=Z,248nm,23.8s
**PPT** **Papeete** 74.28 259 LR LR 09 31 30.4
comp=Z,172nm,18.1s,baz=208,slow=31
**121A** **Cookes Peak, D** 74.35 326 P **P** 09 04 24.4 +0.8
baz=145,SNR=20
**KEIM** **Keimoes** 74.42 114 *e*P **P** 09 04 25.1 +0.9
KEIM IAmb IAmb 09 04 34.4
comp=Z,51nm,1.2s
**HDIL** **Hopedale** 74.69 343 P **P** 09 04 24.1 -1.0
baz=161
**UPI** **Upington** 74.80 114 *e*P **P** 09 04 27.4 +1.0
UPI IAmb IAmb 09 04 36.6
comp=Z,25nm,1.0s
**N41A** **Harden Midland** 75.23 342 P **P** 09 04 27.0 -1.3
N41A IAmb IAmb 09 04 36.5
comp=Z,59nm,1.1s
**LENM** **Lemitar** 75.31 327 P **P** 09 04 28.8 -0.4
**KSU1** **Kansas State U** 75.47 337 P **P** 09 04 29.0 -0.7
KSU1 IAmb IAmb 09 04 41.2
comp=Z,36nm,1.4s
**KSU1** **Kansas State U** 75.47 337 P **P** 09 04 29.2 -0.5
baz=155
**R32A** **Long Quarter,** 75.58 335 P **P** 09 04 29.8 -0.6
R32A IAmb IAmb 09 04 31.4
comp=Z,35nm,1.1s
**TUC** **Tucson** 75.66 323 P **P** 09 04 30.8 -0.2
TUC pmax pmax
comp=Z,5.0nm,1.0s
**TUC** **Tucson** 75.66 323 P **P** 09 04 30.8 -0.2
**TUC** **Tucson** 75.66 323 P **P** 09 04 31.3 +0.3
baz=143
**ANMO** **Albuquerque** 75.72 328⇑ *i*P **P** 09 04 31.8 +0.3
ANMO pmax pmax
comp=Z,19nm,1.2s
**ANMO** **Albuquerque** 75.72 328 P **P** 09 04 31.7 +0.2
**ANMO** **Albuquerque** 75.72 328 P **P** 09 04 32.1 +0.6
baz=147
**N38A** **Joes South For** 75.97 340 P **P** 09 04 31.4 -1.1
N38A IAmb IAmb 09 04 40.5
comp=Z,25nm,0.9s
**TSUM** **Tsumeb** 76.20 104 LR LR 09 33 37.5
comp=Z,438nm,20.0s,baz=290,slow=32
**TSUM** **Tsumeb** 76.20 104 *e*P **P** 09 04 35.9 +1.3
**CBKS** **Cedar Bluff** 76.30 335 P **P** 09 04 33.6 -0.9
CBKS pmax pmax
comp=Z,34nm,1.0s
**CBKS** **Cedar Bluff** 76.30 335 P **P** 09 04 33.6 -0.9
CBKS IAmb IAmb 09 04 35.7
comp=Z,34nm,1.0s
**CBKS** **Cedar Bluff** 76.30 335 P **P** 09 04 34.6 +0.1
baz=152
**214A** **Organ Pipe Nat** 76.43 322 P **P** 09 04 34.8 -0.6
**214A** **Organ Pipe Nat** 76.43 322 P **P** 09 04 36.2 +0.8
baz=142,SNR=11
**PKME** **Peaks-Kenny Pk** 76.67 359 P **P** 09 04 36.4 +0.1
baz=178
**T25A** **Trinidad** 76.68 331 P **P** 09 04 37.6 +0.8
baz=148,SNR=15
**N35A** **Tabor** 76.75 339 P **P** 09 04 35.9 -1.0
**SFX** **San Felipe** 76.82 320 P **P** 09 04 37.4 -0.1
**SADO** **Sadowa** 76.88 352 LR LR 09 40 21.5
comp=Z,200nm,21.2s,baz=172,slow=37
**HVD** **Gariep Dam** 76.98 118 *e*P **P** 09 04 39.2 +0.3
HVD IAmb IAmb 09 04 49.2
comp=Z,57nm,1.1s
**SCIA** **State Center** 76.99 341 P **P** 09 04 37.8 -0.4
baz=156
**JFWS** **Jewell Farm** 77.15 343 P **P** 09 04 38.6 -0.5
baz=160
**W18A** **Petrified Fore** 77.40 326 P **P** 09 04 41.6 +0.6
baz=144,SNR=12
**KSCO** **Kaye Shedlock'** 77.56 333 P **P** 09 04 42.1 +0.4
baz=150
**SDCO** **Great Sand Dun** 77.65 330 P **P** 09 04 42.9 +0.5
baz=148,SNR=9.4
**BOSA** **Boshof** 77.77 116 P **P** 09 04 43.7 +0.3
comp=Z,14nm,0.8s,baz=238,slow=5.1,SNR=22
BOSA LR LR 09 34 50.7
comp=Z,197nm,19.0s,baz=208,slow=32
**BOSA** **Boshof** 77.77 116 *e*P **P** 09 04 43.5 +0.1
BOSA IAmb IAmb 09 05 01.3
comp=Z,28nm,0.8s
**BGNE** **Belgrade** 78.06 337 P **P** 09 04 44.8 +0.5
baz=154
**S22A** **4UR Ranch, Cre** 78.22 329 P **P** 09 04 45.9 +0.3
baz=147,SNR=9.3
**GLA** **Glamis** 78.35 321 P **P** 09 04 46.8 +0.7
baz=140
**WUAZ** **Wupatki** 78.51 325 P **P** 09 04 48.0 +0.9
baz=143,SNR=11
**MVCO** **Mesa Verde** 78.52 328 P **P** 09 04 47.7 +0.5
baz=145,SNR=11
**SWZ** **Schweizer** 78.53 115 *e*P **P** 09 04 46.9 -0.7
SWZ IAmb IAmb 09 04 56.8
comp=Z,41nm,0.8s
**Q24A** **Divide** 78.53 331 P **P** 09 04 47.9 +0.6
baz=148,SNR=19
**RMX** **La Rumorosa** 78.69 320 P **P** 09 04 47.3 -0.8
**BLYC** **Blythe** 78.73 322 P **P** 09 04 47.7 -0.4
**IKP** **In-Ko-Pah, Jac** 78.74 320 P **P** 09 04 49.0 +0.7
baz=140
**SWSC** **Sam W. Stewart** 78.80 320 P **P** 09 04 49.3 +0.8
baz=140,SNR=5.7
**PDMCI** **Parker Dam,Lak** 78.96 322 P **P** 09 04 49.8 +0.5
baz=141
**OGNE** **Ogallala** 79.01 334 P **P** 09 04 49.8 +0.1
baz=151
**MONP2** **Monument Peak** 79.10 320 P **P** 09 04 51.3 +0.8
baz=139
**BC3** **Big Chuckawall** 79.15 321 P **P** 09 04 51.3 +0.7
baz=140,SNR=9.9
**K31A** **O'Neill** 79.34 337 P **P** 09 04 51.0 -0.3
**IRM** **Iron Mountain** 79.37 322 P **P** 09 04 52.4 +0.7
baz=140,SNR=10.0
**ISCO** **Idaho Springs** 79.43 331 P **P** 09 04 51.9 -0.3
ISCO pmax pmax
comp=Z,13nm,1.0s
**ISCO** **Idaho Springs** 79.43 331 P **P** 09 04 51.9 -0.3
**ISCO** **Idaho Springs** 79.43 331 P **P** 09 04 52.7 +0.4
baz=148,SNR=12
**TPFO** **Pinon Flats** 79.66 320 P **P** 09 04 54.2 +0.8
baz=139,SNR=9.6
**ECSD** **EROS Data Cent** 79.66 339 P **P** 09 04 52.3 -0.7
ECSD IAmb IAmb 09 05 04.5
comp=Z,22nm,0.8s
**ECSD** **EROS Data Cent** 79.66 339 P **P** 09 04 52.4 -0.6
baz=155,SNR=14
**PFO** **Pinyon Flats O** 79.66 320 P **P** 09 04 54.3 +0.8
baz=139,SNR=9.8
**U15A** **North Rim** 79.69 325 P **P** 09 04 53.9 +0.3
**BELC** **Belle Mtn. Jos** 79.71 321 P **P** 09 04 54.3 +0.6
baz=140
**LBTB** **Lobatse** 79.82 113 LR LR 09 35 20.9
comp=Z,412nm,20.6s,baz=226,slow=32
**LBTB** **Lobatse** 79.82 113 *e*P **P** 09 04 54.1 -0.5
LBTB IAmb IAmb 09 05 04.1
comp=Z,45nm,0.8s
**SNKL** **Senekal, Frees** 79.86 117 *e*P **P** 09 04 55.5 +0.6
SNKL IAmb IAmb 09 05 04.5
comp=Z,80nm,1.2s
**TORD** **Torodi Ar. Bea** 79.94 68 P **P** 09 04 55.6 +0.5
comp=Z,10nm,0.7s,baz=262,slow=5.0,SNR=56
TORD pP **PcP** 09 05 02.4 -0.3
comp=Z,120nm,0.7s,baz=262,slow=4.7,SNR=70
**TORD** **Torodi Ar. Bea** 79.94 68 P **P** 09 04 54.8 -0.4
**SPMN** **Marine on St.** 79.96 342 P **P** 09 04 53.7 -0.9
baz=158
**MURC** **Murrieta** 80.06 320 P **P** 09 04 56.3 +0.8
baz=139,SNR=5.5
**GMRC** **Granite Mounta** 80.12 322 P **P** 09 04 56.8 +0.9
baz=140
**PRYS** **Parys** 80.22 116 *e*P **P** 09 04 55.8 -1.1
PRYS IAmb IAmb 09 05 06.0
comp=Z,44nm,0.8s
**BBRC** **Big Bear Solar** 80.41 320 P **P** 09 04 58.4 +0.9
baz=139
**KNB** **Kanab** 80.41 325 P **P** 09 04 57.4 0.0
KNB pmax pmax
comp=Z,32nm,1.0s
**KNB** **Kanab** 80.41 325 P **P** 09 04 57.4 0.0
KNB IAmb IAmb 09 04 59.6
comp=Z,32nm,1.0s
**KSR** **Koster** 80.41 114 *e*P **P** 09 04 58.5 +0.6
KSR IAmb IAmb 09 05 07.4
comp=Z,21nm,0.9s
**N23A** **Red Feather La** 80.49 332 P **P** 09 04 58.5 +0.6
baz=148,SNR=7.4
**HEC** **Hector,Ludlow** 80.52 321 P **P** 09 04 59.0 +1.1
baz=140,SNR=14
**CIS** **Catalina Islan** 80.58 319 P **P** 09 04 59.2 +0.9
baz=138
**TUQ** **Turquoise Moun** 80.76 322 P **P** 09 05 00.2 +0.9
baz=140,SNR=6.6
**O20A** **White River Ci** 80.82 330 P **P** 09 05 00.1 +0.6
baz=146,SNR=7.4
**RAR** **Rarotonga** 80.88 251 LR LR 09 33 11.0
comp=Z,112nm,20.2s,baz=187,slow=30
**GSC** **Goldstone, Bar** 81.13 321 P **P** 09 05 01.9 +0.7
baz=139,SNR=7.1
**DECC** **Green Verdugo** 81.17 320 P **P** 09 05 02.0 +0.6
baz=138
**MSU** **Marysvale** 81.28 326 P **P** 09 05 02.4 +0.2
**MSU** **Marysvale** 81.28 326 P **P** 09 05 02.4 +0.2
**EDW2** **Edwards Air Fo** 81.45 320 P **P** 09 05 03.2 +0.3
baz=138,SNR=8.0
**SLR** **Silverton** 81.54 115 *e*P **P** 09 05 03.7 -0.2
SLR IAmb IAmb 09 05 13.1
comp=Z,42nm,0.9s
**OSI** **Osito Audit: C** 81.66 320 P **P** 09 05 04.8 +0.9
baz=138
**QSM** **Queen of Sheba** 81.66 322 P **P** 09 05 03.8 -0.1
**RWWY** **Rawlins** 81.67 331 P **P** 09 05 04.1 -0.1
RWWY IAmb IAmb 09 05 05.7
comp=Z,39nm,0.9s
**LRMC** **Laurel Mtn Rad** 81.73 321 P **P** 09 05 04.9 +0.4
baz=139,SNR=9.8
**PRN** **Pahroc Range** 81.83 324 P **P** 09 05 05.7 +0.8
**FURC** **Furnace Creek,** 82.04 322 P **P** 09 05 06.7 +0.9
baz=139,SNR=7.7
**MPMC** **Manual Prospec** 82.06 321 P **P** 09 05 06.6 +0.3
baz=139,SNR=9.3
**TPNV** **Topopah Spring** 82.09 323 P **P** 09 05 07.2 +0.8
baz=140,SNR=13
**EYMN** **Ely** 82.18 344 P **P** 09 05 05.3 -1.0
baz=160
**K22A** **Casper** 82.20 332 P **P** 09 05 06.6 -0.2
K22A IAmb IAmb 09 05 08.4
comp=Z,28nm,1.0s
**K22A** **Casper** 82.20 332 P **P** 09 05 07.1 +0.3
baz=147,SNR=12
**CASY** **Casey** 82.28 179 P **P** 09 05 06.9 +0.1
CASY IAmb IAmb 09 05 08.5
comp=Z,43nm,0.9s
**BCW** **Bitter Crk WRg** 82.28 319 P **P** 09 05 07.4 +0.1
BCW IAmb IAmb 09 05 09.5
comp=Z,37nm,1.1s
**ISA** **Isabella, Lake** 82.30 320 P **P** 09 05 07.6 +0.3
ISA pmax pmax
comp=Z,13nm,1.1s
**ISA** **Isabella, Lake** 82.30 320 P **P** 09 05 07.6 +0.3
**ISA** **Isabella, Lake** 82.30 320 P **P** 09 05 08.2 +0.9
baz=138,SNR=5.3
**PKM** **Meteron Peak** 82.46 319 P **P** 09 05 09.4 +1.0
baz=137,SNR=12
**RSSD** **Black Hills** 82.50 334 P **P** 09 05 08.0 -0.4
baz=149
**CWC** **Cottonwood Cre** 82.66 321 P **P** 09 05 09.9 +0.6
baz=139
**GRAC** **Grapevine Rang** 82.70 322 P **P** 09 05 10.0 +0.6
baz=139,SNR=6.4
**VES** **Vestal, Richgr** 82.76 320 P **P** 09 05 10.1 +0.5
baz=138,SNR=12
**R11A** **Troy Canyon, C** 82.82 324 P **P** 09 05 10.6 +0.4
**R11A** **Troy Canyon, C** 82.82 324 P **P** 09 05 10.8 +0.7
baz=140,SNR=17
**SMMC** **Simmler** 82.88 319 P **P** 09 05 11.5 +1.1
baz=137,SNR=6.6
**DUG** **Dugway, Tooele** 82.92 327 P **P** 09 05 11.0 +0.5
baz=142,SNR=12
**BW06** **Boulder Array** 83.55 330 P **P** 09 05 13.3 -0.6
**BW06** **Boulder Array** 83.55 330 P **P** 09 05 13.4 -0.5
baz=145,SNR=10
**PD31** **Pinedale Array** 83.55 330 P **P** 09 05 13.4 -0.4
**PDAR** **Pinedale Array** 83.55 330 P **P** 09 05 13.4 -0.4
comp=Z,5.0nm,0.7s,baz=133,slow=6.4,SNR=43
PDAR LR LR 09 38 51.8
comp=Z,75nm,21.4s,baz=259,slow=33
**AGMN** **Agassiz Nation** 83.61 341 P **P** 09 05 13.1 -0.6
baz=156,SNR=7.9
**MLAC** **Mammoth, Mammo** 83.95 322 P **P** 09 05 16.5 +0.4
baz=138
**HVU** **Hansel Valley** 84.16 328 P **P** 09 05 16.4 -0.5
HVU pmax pmax
comp=Z,10.0nm,0.8s
**HVU** **Hansel Valley** 84.16 328 P **P** 09 05 16.4 -0.5
**LHV** **Little Huntoon** 84.24 322 P **P** 09 05 17.6 +0.4
LHV IAmb IAmb 09 05 42.7
comp=Z,18nm,1.1s
**NVAR** **Mina Array Bea** 84.27 322 P **P** 09 05 17.8 +0.2
comp=Z,5.9nm,0.8s,baz=159,slow=5.5,SNR=49
NVAR pP **pP** 09 05 25.4 +0.4
comp=Z,7.2nm,0.8s,baz=167,slow=6.7,SNR=9.1
NVAR PKKPbc **PKKPbc** 09 23 31.6 +0.1
comp=Z,0.3nm,0.5s,baz=267,slow=4.5,SNR=4.0
**MDND** **Maddock** 84.28 339 P **P** 09 05 16.8 -0.3
**MDND** **Maddock** 84.28 339 P **P** 09 05 17.0 -0.2
baz=153
**MATP** **Matopo** 84.47 110 LR LR 09 40 30.3
comp=Z,208nm,18.7s,baz=239,slow=34
**ELK** **Elko** 84.50 326 P **P** 09 05 18.8 0.0
comp=Z,11nm,0.8s,baz=143,slow=2.4,SNR=44
ELK LR LR 09 39 03.6
comp=Z,174nm,20.9s,baz=160,slow=33
**RYN** **Ryan** 84.53 322 P **P** 09 05 18.9 0.0
**MSNA** **Messina** 84.67 113 *e*P **P** 09 05 20.3 +0.4
MSNA IAmb IAmb 09 05 30.2
comp=Z,42nm,0.9s
**BLWY** **Bulawayo** 84.70 110⇑ *i*P **P** 09 05 20.7 +0.4
BLWY IAmb IAmb 09 05 30.0
comp=Z,195nm,0.9s
**MOPA** **Mopani** 85.12 115 *e*P **P** 09 05 21.8 -0.4
MOPA IAmb IAmb 09 05 31.9
comp=Z,24nm,0.9s
**H17A** **Grant Village** 85.30 331 P **P** 09 05 23.4 +0.7
baz=144
**RLMT** **Red Lodge** 85.36 332 P **P** 09 05 22.9 0.0
baz=145,SNR=10
**ULM** **Lac du Bonnet** 85.39 342 P **P** 09 05 21.9 -0.8
comp=Z,15nm,0.8s,baz=156,slow=4.2,SNR=16
ULM LR LR 09 44 12.4
comp=Z,92nm,21.4s,baz=152,slow=36
**LAO** **LASA Array** 85.50 334 P **P** 09 05 23.1 -0.3
baz=148,SNR=5.2
**SCHQ** **Schefferville** 86.23 0 P **P** 09 05 26.2 -0.6
comp=Z,11nm,0.9s,baz=185,slow=6.6,SNR=6.7
SCHQ LR LR 09 44 12.7
comp=Z,129nm,21.3s,baz=188,slow=36
**DGMT** **Dagmar** 86.30 337 P **P** 09 05 27.4 +0.1
baz=149,SNR=7.7
**HLID** **Hailey** 86.31 328 P **P** 09 05 28.0 +0.4
baz=142,SNR=27
**BCYI** **Bear Canyon** 86.45 329 P **P** 09 05 28.9 +0.5
**MCMT** **McKenzie Canyo** 86.61 330 P **P** 09 05 29.1 -0.1
**BOZ** **Bozeman (W)** 86.71 331 P **P** 09 05 29.2 -0.4
baz=144,SNR=7.4
**LSZ** **Lusaka** 86.91 106 LR LR 09 41 31.3
comp=Z,369nm,19.0s,baz=256,slow=34
**LRM** **Limekiln Ridge** 87.24 330 P **P** 09 05 32.1 -0.1
**O03E** **Paynes Creek** 87.48 322 P **P** 09 05 32.5 -0.8
baz=136,SNR=8.1
**MDT** **Midelt** 87.53 49 LR LR 09 44 18.5
comp=Z,349nm,19.8s,baz=240,slow=35
**HRY** **Holter Researc** 87.69 331 P **P** 09 05 33.8 -0.5
**URZ** **Urewera** 87.90 225 LR LR 09 36 16.9
comp=Z,172nm,20.5s,baz=174,slow=30
**O02D** **Mt. Diablo Mer** 87.92 321 P **P** 09 05 35.2 -0.2
baz=136
**EGMT** **Eagleton** 87.94 333 P **P** 09 05 34.7 -0.6
baz=145,SNR=8.7
**N02D** **Trinity Center** 88.44 322 P **P** 09 05 37.4 -0.5
baz=136
**M04C** **Macdoel** 88.57 323 P **P** 09 05 38.5 0.0
baz=136,SNR=9.3
**MSO** **Missoula** 88.67 330 P **P** 09 05 39.0 +0.2
baz=142
**K05A** **Summer Lake** 88.77 324 P **P** 09 05 40.0 +0.5
**M02C** **Callahan** 88.82 322 P **P** 09 05 39.4 -0.3
baz=136
**QRZ** **Quartz Range** 88.90 221 P **P** 09 05 39.2 -1.0
**YBH** **Yreka Blue Hor** 88.99 322 P **P** 09 05 39.9 -0.5
comp=Z,4.5nm,0.7s,baz=97,slow=3.8,SNR=19
**I07A** **Izee** 89.08 325 P **P** 09 05 41.1 +0.2
**L04D** **Klamath Falls** 89.12 323 P **P** 09 05 40.9 -0.3
baz=136,SNR=5.5
**J05D** **Fort Rock, OR** 89.35 324 P **P** 09 05 42.7 +0.5
baz=137,SNR=12
**J04D** **Umpqua Nationa** 89.76 323 P **P** 09 05 44.3 +0.1
J04D IAmb IAmb 09 05 45.5
comp=Z,24nm,0.8s
**J04D** **Umpqua Nationa** 89.76 323 P **P** 09 05 44.5 +0.3
baz=136,SNR=5.4
**I05D** **Terrebonne, OR** 90.17 325 P **P** 09 05 46.6 +0.8
baz=137,SNR=11
**K02D** **Willamette Mer** 90.17 322 P **P** 09 05 46.3 +0.3
baz=135
**I04A** **Tendick Farm,** 90.31 324 P **P** 09 05 46.2 -0.3
baz=136
**I03D** **Drain, OR** 90.72 323 P **P** 09 05 48.7 +0.4
baz=135
**G05D** **Wamic, OR** 90.81 325 P **P** 09 05 49.4 +0.6
baz=137
**H04A** **Detroit Lake** 90.84 324 P **P** 09 05 48.4 -0.5
H04A IAmb IAmb 09 05 49.7
comp=Z,12nm,0.9s
**C09A** **Chrisman Ranch** 91.29 329 P **P** 09 05 50.8 -0.2
C09A IAmb IAmb 09 05 51.8
comp=Z,11nm,0.9s
**LTY** **Liberty** 91.98 327 P **P** 09 05 53.7 -0.5
**ESDC** **Sonseca Array** 92.36 44 P **P** 09 05 56.3 +0.1
comp=Z,1.1nm,0.8s,baz=249,slow=3.4,SNR=4.6
ESDC pP **pP** 09 06 03.4 -0.2
comp=Z,3.0nm,0.7s,baz=244,slow=4.1,SNR=9.8
ESDC LR LR 09 46 54.5
comp=Z,173nm,18.7s,baz=233,slow=35
**CART** **Cartagena** 92.84 47 IAMs_20 IAMs_20 09 46 41.0
comp=Z,255nm,21.0s
**D03D** **Eldon** 93.32 326 P **P** 09 06 00.9 +0.6
baz=135
**A04D** **Lummi Island** 93.98 327 P **P** 09 06 03.6 +0.3
baz=136
**AFI** **Afiamalu** 94.43 251 LR LR 09 40 12.8
comp=Z,157nm,18.5s,baz=167,slow=30
**FRB** **Frobisher Bay** 95.17 360 LR LR 09 50 25.9
comp=Z,106nm,21.7s,baz=184,slow=36
**MBAR** **Mbarara** 96.80 95 LR LR 09 48 16.4
comp=Z,195nm,18.3s,baz=234,slow=34
**MBAR** **Mbarara** 96.80 95 IAMs_20 IAMs_20 09 48 50.1
comp=Z,256nm,18.0s
**KEST** **Kesra** 98.52 53 LR LR 09 53 19.5
comp=Z,535nm,19.0s,baz=192,slow=37

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SFJD** | **Kangerlussuaq** | **99.28** | **7** | LR | LR | 09 53 31.4 | | | |
| | comp=Z,89nm,18.8s,baz=218,slow=37 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **101.18** | **340** | P | **Pdif** | **09 06 34.7** | **-0.8** | | |
| | comp=Z,1.2nm,0.6s,baz=142,slow=4.3,SNR=33 | | | | | | | | |
| YKA | | | | pP | **pPdif** | **09 06 41.7** | **-1.2** | | |
| | comp=Z,2.0nm,0.7s,baz=140,slow=4.4,SNR=12 | | | | | | | | |
| **KIBK** | **Kibwezi** | **102.05** | **100** | IAMs_20 | IAMs_20 | 09 48 58.5 | | | |
| | comp=Z,334nm,20.0s | | | | | | | | |
| **CEL** | **Celeste** | **104.31** | **54** | IAMs_20 | IAMs_20 | 09 54 37.9 | | | |
| | comp=Z,402nm,21.0s | | | | | | | | |
| **TIP** | **Timpagrande** | **105.35** | **53** | IAMs_20 | IAMs_20 | 09 55 23.3 | | | |
| | comp=Z,400nm,20.0s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **105.55** | **231** | *e*LR | LR | 09 41 47.4 | | | |
| | comp=Z,228nm,22.4s | | | | | | | | |
| **GERES** | **GERESS Array B** | **107.95** | **43** | PKKPbc | PKKPbc | 09 22 26.6 | -0.1 | | |
| | comp=Z,0.6nm,0.6s,baz=323,slow=2.0,SNR=5.1 | | | | | | | | |
| GERES | | | | PKKP | **PKKPdf** | **09 22 40.1** | **-1.0** | | |
| | comp=Z,0.6nm,0.4s,baz=30,slow=6.2,SNR=6.9 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **108.65** | **331** | P | **PKiKP** | **09 11 14.6** | **+0.4** | | |
| | baz=122 | | | | | | | | |
| **C36M** | **Paulatuk** | **108.82** | **342** | P | **PKiKP** | **09 11 14.7** | **+0.7** | | |
| | baz=131 | | | | | | | | |
| **YUK3** | **Moose Creek** | **109.95** | **331** | P | **PKiKP** | **09 11 17.3** | **+0.7** | | |
| | baz=120 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **112.16** | **31** | PKKPab | PKKPab | 09 22 19.4 | +1.2 | | |
| | comp=Z,2.3nm,0.8s,baz=65,slow=4.5,SNR=7.9 | | | | | | | | |
| **RIDG** | **Independent Ri** | **112.65** | **332** | P | **PKiKP** | **09 11 22.2** | **+0.7** | | |
| | baz=116 | | | | | | | | |
| **ISP** | **Isparta** | **114.54** | **60** | IAMs_20 | IAMs_20 | 10 00 51.8 | | | |
| | comp=Z,284nm,20.0s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **114.77** | **331** | P | PKPdf | 09 11 25.5 | -0.2 | | |
| | baz=111 | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **115.01** | **333** | P | **PKiKP** | **09 11 25.9** | **0.0** | | |
| | baz=112 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **115.29** | **331** | P | **PKiKP** | **09 11 26.4** | **-0.1** | | |
| | baz=111 | | | | | | | | |
| **CAST** | **Castle Rocks** | **115.51** | **330** | P | **PKPdf** | **09 11 26.5** | **-0.4** | | |
| | baz=110 | | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **115.92** | **68** | IAMs_20 | IAMs_20 | 10 04 12.7 | | | |
| | comp=Z,294nm,20.0s | | | | | | | | |
| **I21K** | **Tanana** | **116.06** | **332** | P | **PKiKP** | **09 11 28.0** | **+0.1** | | |
| | baz=109 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **116.33** | **336** | P | **PKiKP** | **09 11 28.7** | **+0.3** | | |
| | baz=110 | | | | | | | | |
| **CHNA** | **Chernabura Isl** | **116.36** | **320** | P | **PKPdf** | **09 11 28.5** | **-0.2** | | |
| | baz=108 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **116.54** | **333** | P | **PKiKP** | **09 11 29.3** | **+0.5** | | |
| | baz=108 | | | | | | | | |
| **ANTO** | **Ankara** | **116.93** | **58** | IAMs_20 | IAMs_20 | 10 01 08.0 | | | |
| | comp=Z,197nm,19.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **117.50** | **59** | PKP | **PKPdf** | **09 11 31.6** | **0.0** | | |
| | comp=Z,1.3nm,0.8s,baz=247,slow=3.0,SNR=5.9 | | | | | | | | |
| BRTR | | | | pPKP | **pPKPdf** | **09 11 38.7** | **-0.5** | | |
| | comp=Z,2.4nm,0.8s,baz=189,slow=2.2,SNR=9.6 | | | | | | | | |
| **NACGM** | **Naroch** | **117.73** | **41** | *i* PKP | **PKPdf** | **09 11 28.6** | **-2.8** | | |
| **AKASG** | **Malin Array Be** | **117.95** | **46** | PKP | **PKPdf** | **09 11 31.2** | **-0.7** | | |
| | comp=Z,1.3nm,0.6s,baz=257,slow=2.6,SNR=9.8 | | | | | | | | |
| AKASG | | | | pPKP | **pPKPdf** | **09 11 38.2** | **-1.4** | | |
| | comp=Z,2.8nm,0.5s,baz=259,slow=2.6,SNR=9.0 | | | | | | | | |
| AKASG | | | | PKKPbc | **PKKPbc** | **09 21 52.2** | **-0.5** | | |
| | comp=Z,1.3nm,0.7s,baz=65,slow=4.4,SNR=5.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **119.06** | **33** | PKP | **PKPdf** | **09 11 33.7** | **0.0** | | |
| | comp=Z,3.9nm,0.9s,baz=146,slow=1.4,SNR=8.2 | | | | | | | | |
| FINES | | | | pPKP | **pPKPdf** | **09 11 41.9** | **+0.6** | | |
| | comp=Z,4.1nm,0.6s,baz=168,slow=1.5,SNR=4.4 | | | | | | | | |
| FINES | | | | PKKPbc | **PKKPbc** | **09 21 48.7** | **-0.3** | | |
| | comp=Z,1.7nm,0.8s,baz=64,slow=4.8,SNR=8.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.44** | **24** | PKP | **PKiKP** | **09 11 36.3** | **0.0** | | |
| | comp=Z,3.3nm,1.0s,baz=256,slow=2.7,SNR=4.1 | | | | | | | | |
| ARCES | | | | PKKPab | **PKKPab** | **09 21 41.7** | **+0.1** | | |
| | comp=Z,2.3nm,0.9s,baz=97,slow=3.7,SNR=3.6 | | | | | | | | |
| **RDOG** | **Red Dog Mine** | **120.98** | **334** | P | **PKiKP** | **09 11 37.5** | **+0.1** | | |
| | baz=98 | | | | | | | | |
| **ASAR** | **Alice Springs** | **121.17** | **203** | PKP | **PKPdf** | **09 11 38.1** | **-1.1** | | |
| | comp=Z,6.0nm,0.7s,baz=134,slow=1.8,SNR=87 | | | | | | | | |
| ASAR | | | | PKKPab | **PKKPab** | **09 21 49.3** | **+4.7** | | |
| | comp=Z,0.8nm,0.5s,baz=341,slow=3.6,SNR=8.8 | | | | | | | | |
| **ANM** | **Nome** | **121.46** | **330** | P | **PKiKP** | **09 11 38.7** | **+0.2** | | |
| | baz=98 | | | | | | | | |
| **TNA** | **Tin City** | **122.65** | **331** | P | **PKiKP** | **09 11 41.0** | **+0.3** | | |
| | baz=95 | | | | | | | | |
| **OBN** | **Obninsk** | **123.27** | **42** | ⇑*i*PKIKP | **PKiKP** | **09 11 42.5** | **+0.3** | | |
| OBN | | | | *i* | | 09 11 50.7 | | | |
| OBN | | | | *e* | | 09 11 58.0 | | | |
| OBN | | | | *e* | | 09 16 10.2 | | | |
| OBN | | | | | | 09 18 50.0 | | | |
| OBN | | | | SS | SS | 09 30 10.0 | +2.5 | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,136nm,20.0s | | | | | | | | |
| **VSR** | **Storozhevoye** | **124.19** | **47** | *e*PKIKP | **PKPdf** | **09 11 42.6** | **-1.3** | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| **VORD** | **Divnogorie** | **124.22** | **47** | *e*PKIKP | **PKPdf** | **09 11 42.5** | **-1.4** | | |
| VORD | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **124.26** | **45** | *e*PKIKP | **PKPdf** | **09 11 42.5** | **-1.5** | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.45** | **205** | PKP | **PKPdf** | **09 11 44.9** | **-0.6** | | |
| | comp=Z,19nm,0.6s,baz=155,slow=1.7,SNR=250 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **124.46** | **205** | *i* PKIKP | **PKPdf** | **09 11 44.6** | **-0.9** | | |
| **KIV** | **Kislovodsk** | **125.15** | **56** | *i* PKIKP | **PKPdf** | **09 11 45.7** | **-0.4** | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| KIV | | | | MLR | MLR | | | | |
| | comp=Z,87nm,23.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **125.25** | **56** | PKP | **PKiKP** | **09 11 47.1** | **+0.6** | | |
| | comp=Z,2.6nm,0.7s,baz=182,slow=5.9,SNR=6.4 | | | | | | | | |
| **KBZ** | **Khabaz** | **125.25** | **56** | *i* PKIKP | **PKPdf** | **09 11 46.2** | **0.0** | | |
| **KLMR** | **Klimovskoe** | **125.42** | **35** | *e*PKIKP | **PKPdf** | **09 11 44.9** | **-1.0** | | |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **125.42** | **35** | *e*PKPdf | **PKPdf** | **09 11 44.9** | **-1.0** | | |
| KLMR | | | | AMP | | 09 11 55.6 | | | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **PYA1** | **Pyatigorsk** | **125.47** | **56** | *i* PKIKP | **PKPdf** | **09 11 46.8** | **+0.1** | | |
| **ZEI** | **Tsey** | **125.77** | **58** | *i* PKIKP | **PKPdf** | **09 11 47.2** | **-0.3** | | |
| ZEI | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **125.77** | **47** | *e*PKIKP | **PKPdf** | **09 11 45.7** | **-1.2** | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| **GNI** | **Garni** | **125.79** | **61** | *i* PKIKP | **PKPdf** | **09 11 46.3** | **-1.3** | | |
| **PMG** | **Port Moresby** | **127.26** | **225** | *i* PKIKP | **PKPdf** | **09 11 50.5** | **-0.5** | | |
| **PRGR** | **Permogore** | **128.37** | **34** | *e*PKIKP | **PKiKP** | **09 11 51.9** | **-0.3** | | |
| PRGR | | | | pmax | pmax | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **128.83** | **196** | PKP | **PKPdf** | **09 11 53.6** | **-0.3** | | |
| | comp=Z,9.8nm,0.8s,baz=201,slow=5.7,SNR=16 | | | | | | | | |
| **KIRV** | **Kirov** | **130.46** | **38** | *i* PKIKP | **PKiKP** | **09 11 56.6** | **+0.2** | | |
| **BILL** | **Bilibino** | **132.38** | **336** | *d i*PKIKP | **PKPdf** | **09 11 59.2** | **+0.2** | | |
| BILL | | | | *e* | | 09 12 08.8 | | | |
| BILL | | | | | | 09 14 32.0 | | | |
| BILL | | | | PPP | PPP | 09 17 18.0 | | | |
| BILL | | | | PS | **PS** | **09 24 35.0** | **-3.7** | | |
| BILL | | | | SSS | SSS | 09 36 54.0 | | | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| BILL | | | | MLR | MLR | | | | |
| | comp=Z,72nm,20.0s | | | | | | | | |
| **ARU** | **Arti** | **135.63** | **40** | *i* PKIKP | **PKPdf** | **09 12 05.3** | **-0.1** | | |
| ARU | | | | | | 09 14 40.1 | | | |
| **AKTO** | **Aktyubinsk** | **136.06** | **48** | PKP | **PKPdf** | **09 12 06.7** | **+0.2** | | |
| | comp=Z,3.9nm,0.9s,baz=359,slow=0.5,SNR=10 | | | | | | | | |
| **AB31** | **Akbulak array** | **137.38** | **50** | *i* PKIKP | **PKPdf** | **09 12 05.0** | **-3.9** | | |
| **TIXI** | **Tiksi** | **139.06** | **352** | *i* PKIKP | **PKPdf** | **09 12 10.3** | **-1.0** | | |
| **NRIK** | **Noril'sk** | **139.82** | **13** | *i* PKIKP | **PKPdf** | **09 12 13.2** | **+0.4** | | |
| **SEY** | **Seymchan** | **139.83** | **333** | *i* PKIKP | **PKPdf** | **09 12 13.7** | **+0.7** | | |
| **PETK** | **Petropavlovsk-** | **141.16** | **317** | PKP | **PKPdf** | **09 12 15.1** | **-0.7** | | |
| | comp=Z,4.8nm,0.9s,baz=181,slow=7.2,SNR=4.1 | | | | | | | | |
| **MA2** | **Magadan** | **142.24** | **329** | *i* PKIKP | **PKPdf** | **09 12 17.1** | **-0.3** | | |
| **SIJI** | **Sorong** | **142.95** | **212** | PKhKP | PKPpre | 09 12 16.8 | | | |
| | comp=Z,40nm,0.9s,baz=62,slow=4.7,SNR=11 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **143.11** | **42** | PKP | PKPbc | 09 12 17.7 | +1.5 | | |
| | comp=Z,2.7nm,0.7s,baz=53,slow=5.7,SNR=7.2 | | | | | | | | |
| **CHGR** | **Chuyangaron** | **144.28** | **67** | | **PKPab** | **09 12 19.9** | **+0.1** | | |
| **BRLS** | **Borolday** | **144.72** | **59** | *e*PKIKP | **PKPdf** | **09 12 22.8** | **+0.4** | | |
| **BRLS** | **Borolday** | **144.72** | **59** | *e*PKP | **PKPdf** | **09 12 22.8** | **+0.4** | | |
| | baz=60 | | | | | | | | |
| **IUG** | **luzhnay** | **144.92** | **61** | *e*PKIKP | **PKPab** | **09 12 21.1** | **-1.0** | | |
| **IUG** | **luzhnay** | **144.92** | **61** | *e*PKP | **PKPab** | **09 12 21.1** | **-1.0** | | |
| | baz=61 | | | | | | | | |
| **KLRI** | **Killari** | **144.98** | **104** | *e*PKPbc | **PKPab** | **09 12 22.7** | **-0.1** | | |
| **SKHT** | **Srikalahasti** | **145.14** | **113** | *e*PKPdf | **PKPdf** | **09 12 23.9** | **+0.1** | | |
| **GUMO** | **Guam** | **145.18** | **246** | PKPbc | **PKPbc** | **09 12 23.5** | **0.0** | | |
| | comp=Z,208nm,0.9s,baz=163,slow=14,SNR=4.4 | | | | | | | | |
| **GAR** | **Garm** | **145.19** | **66** | | **PKPbc** | **09 12 22.8** | **-0.3** | | |
| **KKAR** | **Karatay Array** | **145.21** | **59** | PKP2 | **PKPbc** | **09 12 22.0** | **-0.9** | | |
| **KKAR** | **Karatay Array** | **145.21** | **59** | | **PKPbc** | **09 12 22.0** | **-0.9** | | |
| **BRZS** | **Berezniki** | **145.40** | **47** | *e*PKIKP | **PKPbc** | **09 12 22.3** | **-0.9** | | |
| **BRZS** | **Berezniki** | **145.40** | **47** | *e*PKP | **PKPbc** | **09 12 22.3** | **-0.9** | | |
| | baz=47 | | | | | | | | |
| **RCLA** | **Racherla** | **145.52** | **110** | *e*PKPab | **PKPab** | **09 12 24.9** | **+0.1** | | |
| **OTUK** | **Ortayu** | **145.64** | **50** | PKP2 | **PKPab** | **09 12 24.5** | **+0.1** | | |
| **DZA** | **Taraz** | **145.82** | **59** | *e*PKP2 | **PKPbc** | **09 12 24.7** | **-0.1** | | |
| **DZA** | **Taraz** | **145.82** | **59** | *e*PKP | **PKPbc** | **09 12 24.8** | **-0.1** | | |
| | baz=59 | | | | | | | | |
| **SRLM** | **Srisailam** | **145.83** | **109** | *e*PKPbc | **PKPbc** | **09 12 25.6** | **+0.1** | | |
| **HYBB** | **Hyderabad (bro** | **146.25** | **107** | *e*PKPab | **PKPab** | **09 12 27.7** | **+0.1** | | |
| **NJS** | **Nagarjunasagar** | **146.41** | **109** | *e*PKPbc | **PKPbc** | **09 12 27.3** | **0.0** | | |
| **CUPL** | **Choutuppal** | **146.49** | **107** | *e*PKPbc | **PKPbc** | **09 12 27.6** | **+0.1** | | |
| **ADKI** | **Addanki** | **146.55** | **111** | *e*PKPbc | **PKPbc** | **09 12 28.1** | **+0.4** | | |
| **SRSP** | **Sriramsagar** | **146.84** | **104** | *e*PKPbc | **PKPbc** | **09 12 28.7** | **+0.2** | | |
| **BTLS** | **Baital** | **147.47** | **55** | *e*PKIKP | **PKPdf** | **09 12 27.0** | **+0.1** | | |
| **BTLS** | **Baital** | **147.47** | **55** | *e*PKP | **PKPdf** | **09 12 27.1** | **+0.1** | | |
| | baz=55 | | | | | | | | |
| BTLS | | | | *e*PKPbc | **PKPbc** | **09 12 29.7** | **+0.2** | | |
| | baz=55 | | | | | | | | |
| BTLS | | | | *e*PKPab | **PKiKP** | **09 12 31.8** | **+0.1** | | |
| | baz=55 | | | | | | | | |
| **MYLAV** | **Mylavaram** | **147.58** | **110** | *e*PKPbc | **PKPbc** | **09 12 31.3** | **+0.7** | | |
| **AML** | **Almayashu** | **147.64** | **60** | P | **PKPdf** | **09 12 29.2** | **+1.3** | | |
| | SNR=18 | | | | | | | | |
| **YAK** | **Yakutsk** | **147.70** | **345** | *c i*PKP2 | **PKPbc** | **09 12 28.7** | **-0.9** | | |
| YAK | | | | *e* | | 09 15 59.5 | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,85nm,0.9s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=N,10.0nm,1.0s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=E,5.0nm,0.9s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,252nm,5.4s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=N,120nm,4.8s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=E,149nm,4.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **147.70** | **345** | | **PKPdf** | **09 12 27.6** | **+0.8** | | |
| **USP** | **Ospenovka** | **148.09** | **58** | P | **PKiKP** | **09 12 32.4** | **-0.7** | | |
| | SNR=17 | | | | | | | | |
| **SGDS** | **Sogindy** | **148.15** | **58** | *e*PKP | **PKPdf** | **09 12 28.0** | **-0.2** | | |
| | baz=58 | | | | | | | | |
| **AAK** | **Ala-Archa** | **148.17** | **59** | PKPbc | **PKiKP** | **09 12 32.7** | **-0.7** | | |
| | comp=E,14nm,0.8s,baz=225,slow=2.9,SNR=33 | | | | | | | | |
| **AAK** | **Ala-Archa** | **148.17** | **59** | P | **PKiKP** | **09 12 32.9** | **-0.5** | | |
| | SNR=13 | | | | | | | | |
| **AAK** | **Ala-Archa** | **148.17** | **59** | *i* PKIKP | **PKPdf** | **09 12 26.9** | **-1.5** | | |
| **UCH** | **Uchtor** | **148.23** | **60** | P | **PKiKP** | **09 12 33.8** | **-0.2** | | |
| | SNR=34 | | | | | | | | |
| **CHMS** | **Chumysh** | **148.31** | **58** | P | **PKiKP** | **09 12 32.8** | **-0.7** | | |
| | SNR=7.4 | | | | | | | | |
| **KBK** | **Karagaybulak** | **148.50** | **59** | P | **PKiKP** | **09 12 33.7** | **-0.4** | | |
| | SNR=8.5 | | | | | | | | |
| **TOLI2** | **Tolitoli** | **148.51** | **196** | PKPbc | **PKPbc** | **09 12 32.0** | **-1.2** | | |
| **PVM** | **Polavaram** | **148.64** | **110** | *e*PKPdf | **PKPdf** | **09 12 30.1** | **+0.5** | | |
| **KURBB** | **Kurchatov Arra** | **148.69** | **43** | PKP | **PKPdf** | **09 12 29.5** | **+0.7** | | |
| | comp=E,42nm,0.7s,baz=298,slow=3.2,SNR=56 | | | | | | | | |
| KURBB | | | | PKPbc | **PKiKP** | **09 12 33.3** | **-0.7** | | |
| | comp=E,41nm,0.7s,baz=299,slow=3.3,SNR=59 | | | | | | | | |
| KURBB | | | | pPKPbc | **pPKPbc** | **09 12 40.3** | **+0.1** | | |
| | comp=E,99nm,0.7s,baz=296,slow=3.2,SNR=34 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **148.69** | **43** | PKP2 | **PKPbc** | **09 12 32.1** | **-0.4** | | |
| **KURK** | **Kurchatov** | **148.71** | **43** | *i* PKIKP | **PKPdf** | **09 12 28.9** | **+0.1** | | |
| **KURK** | **Kurchatov** | **148.71** | **43** | | **PKPdf** | **09 12 29.4** | **+0.6** | | |
| KURK | | | | PKPbc | **PKPbc** | **09 12 33.3** | **+0.7** | | |
| **TKM2** | **Tokmak 2** | **148.93** | **58** | P | **PKPdf** | **09 12 30.9** | **+1.1** | | |
| | SNR=23 | | | | | | | | |
| **KUU** | **Kurty** | **149.30** | **56** | *e*PKHKP | PKPpre | 09 12 29.6 | | | |
| **KUU** | **Kurty** | **149.30** | **56** | *e*PKP | **PKPdf** | **09 12 29.7** | **-0.4** | | |
| | baz=56 | | | | | | | | |
| KUU | | | | *e*PKPbc | **PKPbc** | **09 12 34.4** | **+0.1** | | |
| | baz=56 | | | | | | | | |
| **ULHL** | **Ulahol** | **149.50** | **60** | P | **PKiKP** | **09 12 36.0** | **-0.2** | | |
| | SNR=49 | | | | | | | | |
| **KSH** | **Kashi** | **149.57** | **65** | PKPbc | **PKPdf** | **09 12 32.3** | **+1.6** | | |
| KSH | | | | pPKP | pPKPbc | 09 12 43.3 | +0.4 | | |
| KSH | | | | sPKP | | 09 12 45.3 | | | |
| KSH | | | | PKS | **PP** | **09 16 11.0** | **+2.2** | | |
| KSH | | | | PP | PP | 09 16 14.0 | +5.2 | | |
| **CHKK** | **Chushkaly** | **149.77** | **56** | *e*PKPbc | **PKPbc** | **09 12 35.7** | **+0.2** | | |
| | baz=56 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **149.78** | **43** | *e*PKHKP | PKPpre | 09 12 30.7 | | | |
| **SEM** | **Semipalatinsk** | **149.78** | **43** | *e*PKP | **PKPdf** | **09 12 30.8** | **0.0** | | |
| | baz=43 | | | | | | | | |
| SEM | | | | *i* PKPbc | **PKPbc** | **09 12 35.6** | **0.0** | | |
| | baz=43 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **149.89** | **58** | *e*PKPab | **PKPab** | **09 12 40.5** | **-1.5** | | |
| | baz=58 | | | | | | | | |
| **MDOK** | **Medeo** | **149.94** | **58** | *e*PKHKP | PKPpre | 09 12 30.9 | | | |
| **MDOK** | **Medeo** | **149.94** | **58** | *e*PKP | **PKPdf** | **09 12 30.9** | **-0.3** | | |
| | baz=58 | | | | | | | | |
| MDOK | | | | *e*PKPbc | **PKPbc** | **09 12 36.4** | **+0.3** | | |
| | baz=58 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **150.32** | **34** | | **PKPbc** | **09 12 36.6** | **+0.1** | | |
| **ZALV** | **Zalesovo Beam** | **150.32** | **34** | PKP | **PKPdf** | **09 12 31.2** | **0.0** | | |
| | comp=E,2.6nm,0.8s,baz=298,slow=3.2,SNR=9.6 | | | | | | | | |
| ZALV | | | | PKPbc | **PKPbc** | **09 12 36.8** | **+0.3** | | |
| | comp=E,60nm,0.7s,baz=298,slow=3.1,SNR=170 | | | | | | | | |
| ZALV | | | | pPKPbc | **pPKPbc** | **09 12 44.2** | **+0.1** | | |
| | comp=E,88nm,0.6s,baz=318,slow=2.7,SNR=31 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.32** | **34** | | **PKPbc** | **09 12 36.4** | **0.0** | | |
| **ZHN** | **Zhinishke** | **150.94** | **57** | *e*PKIKP | **PKPbc** | **09 12 38.0** | **-0.4** | | |
| **ZHN** | **Zhinishke** | **150.94** | **57** | *e*PKPbc | **PKPbc** | **09 12 38.1** | **-0.4** | | |
| | baz=57 | | | | | | | | |
| **SATY** | **Saty** | **150.94** | **57** | *e*PKIKP | **PKPbc** | **09 12 38.4** | **0.0** | | |
| **SATY** | **Saty** | **150.94** | **57** | *e*PKPbc | **PKPbc** | **09 12 38.5** | **0.0** | | |
| | baz=58 | | | | | | | | |
| **KPKS** | **Kokpek** | **151.05** | **57** | *e*PKIKP | **PKPdf** | **09 12 32.7** | **-0.2** | | |
| **KPKS** | **Kokpek** | **151.05** | **57** | *e*PKP | **PKPdf** | **09 12 32.7** | **-0.2** | | |
| | baz=57 | | | | | | | | |
| KPKS | | | | *e*PKPbc | **PKPbc** | **09 12 38.8** | **+0.1** | | |
| | baz=57 | | | | | | | | |
| **CHLP** | **Challavanipeta** | **151.27** | **111** | *e*PKPbc | **PKiKP** | **09 12 40.5** | **+0.2** | | |
| **PDGK** | **Podgornoye** | **151.65** | **57** | PKIKP | **PKPbc** | **09 12 39.8** | **-0.3** | | |
| **UGL** | **Uglegorsk** | **151.78** | **316** | *e*PKIKP | **PKPbc** | **09 12 39.7** | **-0.3** | | |
| UGL | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **152.25** | **312** | ⇑*i*PKIKP | **PKPbc** | **09 12 40.8** | **-0.3** | | |
| YSS | | | | *e* | | 09 12 48.4 | | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,50nm,0.7s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **152.25** | **312** | PKPdf | **PKPdf** | **09 12 33.2** | **-1.2** | | |
| YSS | | | | | **PKPbc** | **09 12 40.5** | **-0.6** | | |
| **MAKZ** | **Makanchi** | **152.29** | **48** | PKIKP | **PKPbc** | **09 12 41.3** | **0.0** | | |
| **MK31** | **Makanchi Array** | **152.49** | **48** | PKIKP | **PKPbc** | **09 12 41.6** | **-0.2** | | |
| **MK31** | **Makanchi Array** | **152.49** | **48** | PKPbc | **PKPbc** | **09 12 41.6** | **-0.2** | | |
| **MKAR** | **Makanchi Array** | **152.49** | **48** | PKP | **PKPdf** | **09 12 34.7** | **-0.1** | | |
| | comp=Z,2.1nm,0.9s,baz=279,slow=1.6,SNR=18 | | | | | | | | |
| MKAR | | | | PKPbc | **PKiKP** | **09 12 42.0** | **0.0** | | |
| | comp=Z,20nm,0.7s,baz=299,slow=2.1,SNR=146 | | | | | | | | |
| MKAR | | | | pPKPbc | **pPKPbc** | **09 12 49.4** | **0.0** | | |
| | comp=Z,45nm,0.7s,baz=273,slow=1.8,SNR=36 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **153.31** | **306** | | **PKPbc** | **09 12 40.4** | **-3.2** | | |
| **ASAJ** | **Asahikawa** | **153.31** | **306** | PKP | **PKPdf** | **09 12 36.4** | **+0.3** | | |
| | comp=Z,2.9nm,0.3s,baz=239,slow=3.9,SNR=3.8 | | | | | | | | |
| ASAJ | | | | PKPbc | **PKiKP** | **09 12 43.9** | **+0.1** | | |
| | comp=Z,19nm,0.9s,baz=245,slow=8.1,SNR=7.1 | | | | | | | | |
| **ZSN** | **Zaisan** | **153.82** | **45** | *e*PKIKP | **PKiKP** | **09 12 45.0** | **+0.3** | | |
| **ZSN** | **Zaisan** | **153.82** | **45** | *e*PKPbc | **PKiKP** | **09 12 45.0** | **+0.3** | | |
| | baz=45 | | | | | | | | |
| **BOD** | **Bodaibo** | **153.91** | **358** | *e*PKIKP | **PKPdf** | **09 12 35.8** | **-0.7** | | |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.7s | | | | | | | | |
| **WMQ** | **Urumqi** | **157.17** | **51** | *e*PKP | **PKPdf** | **09 12 41.0** | **-0.4** | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,270nm,16.9s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,280nm,23.7s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,180nm,18.7s | | | | | | | | |
| **KLR** | **Kul'dur** | **157.26** | **326** | PKP | **PKPdf** | **09 12 40.7** | **-0.6** | | |
| | comp=Z,3.8nm,0.9s,baz=33,slow=3.0,SNR=4.9 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **158.12** | **290** | PKP | **PKPdf** | **09 12 42.5** | **-0.3** | | |
| | comp=Z,4.9nm,1.0s,baz=46,slow=0.7,SNR=5.0 | | | | | | | | |
| MJAR | | | | PKPab | **PKPab** | **09 13 16.5** | **-0.1** | | |
| | comp=Z,10.0nm,0.7s,baz=113,slow=2.0,SNR=12 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **158.12** | **290** | PKP2 | **PKPab** | **09 13 16.3** | **-0.3** | | |
| MJAR | | | | | | 10 12 42.2 | | | |
| **MJAR** | **Matsushiro Arr** | **158.12** | **290** | PKPdf | **PKPdf** | **09 12 42.2** | **-0.6** | | |
| MJAR | | | | | **PKPab** | **09 13 16.3** | **-0.3** | | |
| **MOY** | **Mondy** | **158.41** | **20** | *e*PKIKP | **PKPdf** | **09 12 43.8** | **+1.0** | | |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,36nm,2.9s | | | | | | | | |
| **ZAK** | **Zakamensk** | **160.19** | **17** | *e*PKIKP | **PKPdf** | **09 12 44.1** | **-0.8** | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **160.22** | **314** | PKPab | **PKPab** | **09 13 25.6** | **+0.2** | | |
| | comp=Z,3.9nm,0.7s,baz=49,slow=8.8,SNR=5.3 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **162.05** | **134** | PKP | **PKPdf** | **09 12 48.1** | **+0.4** | | |
| | comp=Z,2.5nm,0.5s,baz=257,slow=3.2,SNR=16 | | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **09 13 34.2** | **+0.2** | | |
| | comp=Z,1.9nm,0.4s,baz=79,slow=22,SNR=1.8 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **162.32** | **134** | PKP2 | **PKPab** | **09 13 34.2** | **-0.9** | | |
| **CHTO** | **Chiang Mai** | **162.32** | **134** | | **PKPab** | **09 13 34.2** | **-0.9** | | |
| **SONM** | **Songino Array** | **163.30** | **14** | PKP | **PKPdf** | **09 12 48.1** | **-0.1** | | |
| | comp=Z,1.3nm,0.8s,baz=273,slow=0.8,SNR=11 | | | | | | | | |
| SONM | | | | PKPab | **PKPab** | **09 13 39.3** | **+0.6** | | |
| | comp=Z,3.2nm,0.8s,baz=321,slow=4.4,SNR=9.2 | | | | | | | | |
| SONM | | | | pPKPab | **pPKPab** | **09 13 46.0** | **-0.2** | | |
| | comp=Z,5.8nm,0.7s,baz=325,slow=4.0,SNR=9.2 | | | | | | | | |
| **SONM** | **Songino Array** | **163.30** | **14** | PKIKP | **PKPdf** | **09 12 47.3** | **-0.9** | | |
| SONM | | | | | | 09 13 38.8 | | | |
| **SONM** | **Songino Array** | **163.30** | **14** | | **PKPdf** | **09 12 47.3** | **-0.9** | | |
| SONM | | | | | **PKPab** | **09 13 38.8** | **0.0** | | |
| **GOMU** | **GeErMu** | **164.77** | **68** | PKP | **PKPdf** | **09 12 51.5** | **+1.3** | | |
| GOMU | | | | PKPab | **pPKPab** | **09 13 52.5** | **-1.1** | | |
| GOMU | | | | AMB | AMB | | | | |
| | comp=Z,65nm,3.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **165.99** | **298** | PKP | **PKPdf** | **09 12 49.9** | **-0.8** | | |
| | comp=Z,4.3nm,0.9s,baz=106,slow=0.4,SNR=15 | | | | | | | | |
| KSRS | | | | pPKP | **pPKPdf** | **09 12 57.3** | **-1.1** | | |
| | comp=Z,3.3nm,0.9s,baz=164,slow=1.5,SNR=5.3

*TUL* ***26*** *09:52:44.6±1.5, 35°.67N±0°.01×97°.41W±0°.02, h7km±5km, ML3.3, mb_Lg3.0/64(NEIC), Error ellipse: s-maj=2.4km s-min=1.9km az=102.0*

**NEIC 26 09:52:44.8±1.3, 35°.69N±0°.01×97°.42W±0°.02, h9km±1km, Error ellipse: s-maj=2.3km s-min=2.0km az=81.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.10** | **180** | Pg | Pg | 09 52 47.0 | -0.4 |
| OK009 | | | | Sg | Sg | 09 52 48.9 | -0.2 |
| **OK001** | **Jones High Sch** | **0.17** | **139** | Pg | Pg | 09 52 48.1 | -0.2 |
| OK001 | | | | Sg | Sg | 09 52 50.7 | 0.0 |
| **OK005** | **Luther M Schoo** | **0.19** | **99** | Pg | Pg | 09 52 48.8 | 0.0 |
| OK005 | | | | Sg | Sg | 09 52 51.9 | +0.4 |
| **OKCFA** | **Oklahoma City** | **0.27** | **185** | | Pg | 09 52 50.1 | -0.2 |
| OKCFA | | | | Sg | Sg | 09 52 54.2 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **183** | Pg | Pg | 09 52 50.2 | -0.2 |
| OKCSW | | | | Sg | Sg | 09 52 54.6 | +0.4 |
| **FNO** | **Franklin** | **0.43** | **178** | Pg | Pg | 09 52 52.9 | -0.3 |
| FNO | | | | Sg | Sg | 09 52 59.2 | +0.3 |
| **W35A** | **Tecumseh** | **0.70** | **140** | Pg | Pg | 09 52 57.7 | -0.6 |
| W35A | | | | Sg | Sg | 09 53 07.2 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.13** | **197** | Pg | Pg | 09 53 06.1 | -0.5 |
| X34A | | | | | Sn | 09 53 22.2 | -0.5 |
| **TUL1** | **Leonard** | **1.34** | **80** | Pn | Pn | 09 53 08.9 | -1.0 |
| **T35A** | **Sooner Cattle** | **1.43** | **31** | | Pn | 09 53 11.9 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.45** | **299** | | Pn | 09 53 11.5 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.46** | **230** | | Pn | 09 53 11.0 | -0.4 |
| **X37A** | **Clayton** | **2.01** | **122** | | Pn | 09 53 19.5 | +0.6 |
| **Z35A** | **Perchaven, San** | **2.35** | **177** | Pn | Pn | 09 53 24.6 | +0.9 |
| **HHAR** | **Hobbs** | **2.89** | **77** | Pn | Pn | 09 53 31.3 | +0.2 |
| HHAR | comp=Z,30nm,0.9s | | | lAmb_Lg | | 09 54 22.6 | |
| **W39A** | **Magazine** | **3.01** | **98** | Pn | Pn | 09 53 33.4 | +0.6 |
| W39A | comp=Z,72nm,0.9s | | | lAmb_Lg | | 09 54 23.9 | |
| **MIAR** | **Mount Ida** | **3.35** | **109** | Pn | Pn | 09 53 39.0 | +1.5 |
| **KSU1** | **Kansas State U** | **3.47** | **11** | Pn | Pn | 09 53 39.0 | 0.0 |
| KSU1 | comp=Z,28nm,0.7s | | | lAmb_Lg | | 09 54 42.3 | |
| **ABTX** | **Abilene, Hawle** | **3.57** | **212** | lAmb_Lg | | 09 54 43.1 | |
| **AMTX** | comp=Z,26nm,0.8s<br>**Amarillo** | **3.57** | **258** | Pn | Pn | 09 53 42.0 | +1.4 |
| AMTX | comp=Z,28nm,0.8s | | | lAmb_Lg | | 09 54 41.5 | |
| **CBKS** | **Cedar Bluff** | **3.63** | **330** | lAmb_Lg | | 09 54 42.8 | |
| **WHTX** | comp=Z,34nm,0.9s<br>**Lake Whitney,** | **3.69** | **180** | Pn | Pn | 09 53 41.8 | -0.3 |
| **U40A** | **Yellville** | **3.76** | **78** | Pn | Pn | 09 53 43.0 | -0.1 |
| **S39A** | **Bolivar** | **3.85** | **58** | Pn | Pn | 09 53 44.6 | +0.2 |
| S39A | comp=Z,19nm,0.7s | | | lAmb_Lg | | 09 54 47.8 | |
| **237A** | **Washetta, Mont** | **3.91** | **159** | Pn | Pn | 09 53 44.9 | -0.3 |
| 237A | comp=Z,28nm,0.8s | | | lAmb_Lg | | 09 54 59.1 | |
| **X40A** | **Basin Creek Fa** | **3.95** | **106** | Pn | Pn | 09 53 46.4 | +0.8 |
| **WLAR** | **White Oak Lake** | **4.07** | **118** | lAmb_Lg | | 09 54 53.0 | |
| **WHAR** | comp=Z,25nm,0.8s<br>**Wooly Hollow** | **4.21** | **94** | Pn | Pn | 09 53 49.1 | -0.1 |
| WHAR | comp=Z,32nm,0.9s | | | lAmb_Lg | | 09 55 00.3 | |
| **W41B** | **Gary Mavity, V** | **4.26** | **95** | Pn | Pn | 09 53 49.7 | -0.1 |
| W41B | comp=Z,40nm,1.1s | | | lAmb_Lg | | 09 55 04.2 | |
| **FCAR** | **Ozark Folk Cen** | **4.31** | **86** | Pn | Pn | 09 53 51.0 | +0.4 |
| FCAR | comp=Z,34nm,0.8s | | | lAmb_Lg | | 09 55 09.0 | |
| **MGMO** | **Mountain Grove** | **4.41** | **69** | Pn | Pn | 09 53 52.8 | +0.8 |
| MGMO | comp=Z,27nm,0.8s | | | lAmb_Lg | | 09 55 05.7 | |
| **Z41A** | **Richland Creek** | **4.52** | **121** | lAmb_Lg | | 09 55 13.9 | |
| **MSTX** | comp=Z,22nm,0.8s<br>**Muleshoe** | **4.72** | **250** | Pn | Pn | 09 53 54.5 | -1.9 |
| MSTX | comp=Z,27nm,1.2s | | | lAmb_Lg | | 09 55 21.5 | |
| **R40A** | **Maddies Statio** | **4.88** | **56** | lAmb_Lg | | 09 55 28.4 | |
| **P38A** | comp=Z,27nm,1.0s<br>**Dawn** | **5.00** | **37** | Pn | Pn | 09 53 56.6 | -3.5 |
| **N33A** | **J Bar K, Exete** | **5.04** | **360** | Pn | Pn | 09 53 58.0 | -2.7 |
| **LCAR** | **Lake Charles** | **5.10** | **84** | lAmb_Lg | | 09 55 36.1 | |
| **T42A** | comp=Z,16nm,0.7s<br>**Van Buren** | **5.28** | **73** | lAmb_Lg | | 09 55 41.0 | |
| **KSCO** | comp=Z,29nm,1.1s<br>**Kaye Shedlock'** | **5.31** | **310** | lAmb_Lg | | 09 55 45.8 | |
| **CCM** | comp=Z,18nm,0.8s<br>**Cathedral Cave** | **5.49** | **63** | lAmb_Lg | | 09 55 46.6 | |
| **PBMO** | comp=Z,22nm,0.8s<br>**Poplar Bluff** | **5.76** | **77** | lAmb_Lg | | 09 55 54.8 | |
| **143A** | comp=Z,35nm,0.7s<br>**Socs Landing,** | **5.81** | **119** | lAmb_Lg | | 09 55 53.3 | |
| **T25A** | comp=Z,30nm,1.1s<br>**Trinidad** | **5.82** | **286** | lAmb_Lg | | 09 55 53.2 | |
| **FVM** | comp=Z,30nm,0.8s<br>**French Village** | **6.06** | **66** | lAmb_Lg | | 09 55 58.5 | |
| **OGNE** | comp=Z,19nm,1.0s<br>**Ogallala** | **6.38** | **327** | Pn | Pn | 09 54 19.9 | +0.8 |
| OGNE | comp=Z,20nm,0.8s | | | lAmb_Lg | | 09 56 22.9 | |
| **SDCO** | **Great Sand Dun** | **6.81** | **290** | Pn | Pn | 09 54 25.9 | +0.7 |
| **Q24A** | **Divide** | **6.97** | **300** | lAmb_Lg | | 09 56 29.0 | |
| **SCIA** | comp=Z,12nm,0.7s<br>**State Center** | **7.03** | **27** | lAmb_Lg | | 09 56 48.7 | |
| **P43A** | comp=Z,22nm,0.8s<br>**Skaggs, Pawnee** | **7.41** | **55** | lAmb_Lg | | 09 56 44.8 | |
| **833A** | comp=Z,22nm,0.8s<br>**Chaparral WMA,** | **7.53** | **193** | lAmb_Lg | | 09 56 53.5 | |
| **ISCO** | comp=Z,16nm,0.9s<br>**Idaho Springs** | **7.68** | **305** | Pn | Pn | 09 54 36.2 | -1.0 |
| **MNTX** | **Cornudas Mount** | **7.73** | **241** | Pn | Pn | 09 54 35.1 | -2.5 |
| **L40A** | **Anamosa** | **7.99** | **35** | Pn | Pn | 09 54 40.5 | -0.7 |
| **ECSD** | **EROS Data Cent** | **8.06** | **4** | Pn | Pn | 09 54 40.1 | -2.0 |
| **TX31** | **Lajitas Ar. Si** | **8.24** | **222** | Pn | Pn | 09 54 44.1 | -0.6 |
| **TXAR** | **Lajitas Array** | **8.24** | **222** | Pn | Pn | 09 54 44.0 | -0.7 |
| **PHWY** | **Pilot Hill** | **8.43** | **314** | Pn | Pn | 09 54 45.8 | -1.7 |
| **N23A** | **Red Feather La** | **8.48** | **310** | Pn | Pn | 09 54 46.8 | -1.3 |
| **L42A** | **Oliver, Polo** | **8.74** | **41** | Pn | Pn | 09 54 51.6 | +0.2 |

*DJA* ***26*** *10:08:00.9±0.3, 9°.5S×4°×12°.7E±°, h124km±11km, M4.4/8, mB5.1/1, mb4.4/8, MLv4.4/7, Mw(mB)4.5/1*

*IDC* ***26*** *10:08:03.4±4.8, 9°.41S×127°.30E, h97km±51km, mb3.6/3, mb1 3.9/7, mb1mx3.5/35, mbtmp4.1/7, Error ellipse: s-maj=49.8km s-min=14.8km az=37.0*

**ISC 26 10:08:03.3±0.9, 9°.36S±0°.08×127°.24E±0°.07, h100km, n23, σ1°.43/25, mb3.9/3, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.96** | **262** | P | **Pn** | **10 08 47.3** | **-1.3** |
| **SOEI** | **Soe** | **2.96** | **262** | P | **Pn** | **10 08 47.4** | **-1.2** |
| **BATI** | **Baumata** | **3.63** | **256** | P | **Pn** | **10 08 56.8** | **-0.6** |
| BATI | 8.9nm,0.3s,baz=117,slow=6.8,SNR=5.4 | | | S | **Sn** | **10 09 41.6** | **+2.1** |
| **BATI** | 22nm,0.3s,baz=150,slow=24,SNR=8.3<br>**Baumata** | **3.63** | **256** | P | **Pn** | **10 08 56.7** | **-0.8** |
| **DRS** | **Darwin Rock St** | **4.71** | **131** | P | **Pn** | **10 09 13.9** | **+1.8** |
| **MTN** | **Manton Dam** | **5.15** | **133** | P | **Pn** | **10 09 20.7** | **+2.6** |
| **KDU** | **Kakadu** | **6.11** | **123** | P | **Pn** | **10 09 31.2** | **+0.2** |
| **KNRA** | **Kununurra** | **6.45** | **167** | P | **Pn** | **10 09 37.8** | **+2.1** |
| **FAKI** | **Fak Fak** | **8.11** | **38** | P | Pn | 10 09 53.7 | -4.6 |
| **BKSI** | 0.1nm19nm,1.5s<br>**Bulukumba** | **8.12** | **299** | P | Pn | 10 09 53.6 | -4.9 |
| **FITZ** | 0.1nm19nm,1.1s<br>**Fitzroy Crossi** | **8.82** | **190** | P | **Pn** | **10 10 08.2** | **+0.2** |
| FITZ | 2.7nm,0.3s,baz=15,slow=9.7,SNR=44 | | | S | **Sn** | **10 11 45.7** | **0.0** |
| **FITZ** | 4.4nm,0.3s,baz=321,slow=23,SNR=7.3<br>**Fitzroy Crossi** | **8.82** | **190** | P | **Pn** | **10 10 08.3** | **+0.3** |
| **PLAI** | **Plampang** | **9.36** | **272** | P | **Pn** | **10 10 12.1** | **-3.3** |
| **PLAI** | 28nm,0.6s<br>**Plampang** | **9.36** | **272** | P | **Pn** | **10 10 13.9** | **-1.5** |
| **WRAB** | **Tennant Creek** | **12.55** | **148** | P | **Pn** | **10 10 58.2** | **-0.2** |
| **WRA** | **Warramunga Arr** | **12.56** | **148** | P | **Pn** | **10 10 56.9** | **-1.5** |
| WRA | 2.7nm,0.3s,baz=320,slow=14,SNR=81 | | | S | **Sn** | **10 13 15.6** | **-1.0** |
| **ASAR** | 1.0nm,0.3s,baz=322,slow=24,SNR=6.8<br>**Alice Springs** | **15.59** | **157** | P | **Pn** | **10 11 36.7** | **-0.8** |
| ASAR | 0.9nm,0.3s,baz=332,slow=9.2,SNR=71 | | | S | **Sn** | **10 14 29.8** | **-0.1** |
| **WRKA** | 0.4nm,0.3s,baz=319,slow=19,SNR=7.0<br>**Warakurna** | **15.62** | **176** | P | **Pn** | **10 11 38.9** | **+1.0** |
| **COEN** | **Coen** | **16.25** | **108** | P | **Pn** | **10 11 45.3** | **-0.6** |
| **QIS** | **Mount Isa** | **16.31** | **134** | P | **Pn** | **10 11 47.3** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **39.30** | **315** | P | **P** | **10 15 23.2** | **+0.5** |
| **MKAR** | 1.4nm,0.6s,baz=143,slow=6.6,SNR=7.5<br>**Makanchi Array** | **68.75** | **329** | P | **P** | **10 18 58.0** | **+1.5** |
| **ZALV** | 0.8nm,0.7s,baz=122,slow=8.3,SNR=8.2<br>**Zalesovo Beam** | **72.53** | **335** | P | **P** | **10 19 19.7** | **+0.6** |
| | 1.4nm,0.6s,baz=153,slow=5.0,SNR=6.7 | | | | | | |

*JMA* ***26*** *10:22:05.9±0.1, 24°.81N×122°.43E, h4km±2km, M2.6*

*TAP* ***26*** *10:22:06.8, 24°.86N×122°.37E, h11km, ML2.7, C*

**ISC 26 10:22:06.1±1.1, 24°.85N±0°.04×122°.45E±0°.02, h7km±10km, n33, σ0°.49/65, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.45** | **291** | P | **Pg** | **10 22 15.0** | **+0.2** |
| TWB1 | baz=294 | | | S | **Sg** | **10 22 21.0** | **+0.4** |
| **SXI1** | baz=294<br>**Grass Mountain** | **0.57** | **295** | *i* P | **Pb** | **10 22 17.8** | **-0.7** |
| SXI1 | baz=292 | | | S | **Sb** | **10 22 25.8** | **-1.1** |
| **TIPB** | baz=292<br>**Shuangxi** | **0.58** | **282** | P | **Pg** | **10 22 17.6** | **+0.3** |
| TIPB | baz=283 | | | S | **Sg** | **10 22 25.2** | **+0.3** |
| **TWC** | baz=283<br>**Suao** | **0.60** | **246** | P | **Pg** | **10 22 17.4** | **-0.2** |
| TWC | baz=249 | | | S | **Sg** | **10 22 25.1** | **-0.3** |
| **JYNG** | baz=249<br>**Yonagunijimaku** | **0.60** | **131** | P | **Pg** | **10 22 17.5** | **-0.2** |
| JYNG | | | | S | **Sg** | **10 22 25.6** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.64** | **127** | P | **Pg** | **10 22 18.2** | **-0.2** |
| YOJ | | | | S | **Sg** | **10 22 26.5** | **-0.3** |
| **NWF** | **Wu-fen Shan** | **0.65** | **290** | P | **Pb** | **10 22 19.1** | **-0.6** |
| NWF | baz=292 | | | S | **Sb** | **10 22 28.0** | **-0.9** |
| **WFSB** | baz=292<br>**Wu-fen Shan** | **0.65** | **290** | P | **Pb** | **10 22 19.0** | **-0.7** |
| WFSB | baz=292 | | | S | **Sb** | **10 22 27.9** | **-0.9** |
| **TNOU** | **National Taiwa** | **0.68** | **296** | P | **Pb** | **10 22 19.9** | **-0.4** |
| TNOU | baz=298 | | | S | **Sg** | **10 22 28.6** | **+0.5** |
| **TWE** | **Neicheng** | **0.72** | **260** | P | **Pg** | **10 22 20.1** | **+0.1** |
| TWE | baz=257 | | | *e*S | **Sg** | **10 22 29.1** | **-0.3** |
| **ENA** | baz=257<br>**Nanau** | **0.77** | **237** | *e*P | **Pg** | **10 22 20.6** | **-0.3** |
| ENA | baz=232 | | | *e*S | **Sg** | **10 22 31.8** | **+0.9** |
| **FUSB** | baz=232<br>**Fushanzhiwuyua** | **0.79** | **264** | *e*P | **Pb** | **10 22 21.7** | **-0.5** |
| FUSB | baz=262 | | | *e*S | **Sg** | **10 22 31.8** | **+0.3** |
| **TWA** | baz=262<br>**Mucha** | **0.80** | **280** | *e*P | **Pb** | **10 22 22.3** | **0.0** |
| TWA | baz=280 | | | S | **Sb** | **10 22 32.4** | **-0.8** |
| **ENTT** | baz=280<br>**Nioudou** | **0.83** | **256** | P | **Pb** | **10 22 22.4** | **-0.4** |
| ENTT | baz=253 | | | *e*S | **Sg** | **10 22 33.2** | **+0.4** |
| **TWY** | baz=253<br>**Chenhua** | **0.88** | **299** | P | **Pb** | **10 22 23.8** | **+0.1** |
| TWY | baz=301 | | | *e*S | **Sb** | **10 22 35.6** | **0.0** |
| **LATG** | baz=301<br>**Datong** | **0.90** | **250** | P | **Pg** | **10 22 23.2** | **0.0** |
| LATG | baz=247 | | | S | **Sg** | **10 22 35.1** | **+0.1** |
| **TWS1** | baz=247<br>**Kuangyinshan** | **0.97** | **285** | *e*P | **Pb** | **10 22 25.6** | **+0.4** |
| TWS1 | baz=286 | | | *e*S | **Sb** | **10 22 37.8** | **-0.4** |
| **YHNB** | baz=286<br>**Yeheng** | **0.99** | **260** | *e*P | **Pg** | **10 22 24.9** | **-0.2** |
| YHNB | baz=258 | | | *e*S | **Sg** | **10 22 38.0** | **0.0** |
| **NSK** | baz=258<br>**Sanguang** | **1.01** | **260** | P | **Pg** | **10 22 25.4** | **0.0** |
| NSK | baz=258 | | | *e*S | **Sg** | **10 22 38.3** | **-0.2** |
| **NACB** | **Ninganchiao** | **1.03** | **229** | *e*P | **Pg** | **10 22 25.1** | **-0.7** |
| NACB | baz=236 | | | *e*S | **Sg** | **10 22 38.7** | **-0.5** |
| **NNSB** | baz=236<br>**Datong** | **1.06** | **247** | *e*P | **Pg** | **10 22 25.9** | **-0.5** |
| NNSB | baz=244 | | | *e*S | **Sg** | **10 22 40.2** | **+0.1** |
| **IRIF** | baz=244<br>**Iriomote-Funau** | **1.27** | **113** | P | **Pg** | **10 22 30.1** | **-0.4** |
| IRIF | | | | S | **Sg** | **10 22 46.3** | **-0.8** |
| **WHF** | **Hehuan Shan** | **1.29** | **237** | *e*P | **Pg** | **10 22 30.4** | **-0.4** |
| WHF | baz=234 | | | *e*S | **Sg** | **10 22 47.5** | **0.0** |
| **TDCB** | baz=234<br>**Techi** | **1.32** | **243** | *e*P | **Pb** | **10 22 31.9** | **+0.7** |
| TDCB | baz=229 | | | *e*S | **Sg** | **10 22 48.3** | **-0.1** |
| **LIOB** | baz=229<br>**Emei** | **1.32** | **261** | *e*P | **Pb** | **10 22 31.6** | **+0.5** |
| **NSTT** | baz=261<br>**Nanjuang** | **1.33** | **261** | *e*P | **Pb** | **10 22 32.9** | **+1.5** |
| NSTT | baz=259 | | | *e*S | **Sg** | **10 22 48.6** | **-0.4** |
| **CHGB** | baz=259<br>**Renai** | **1.40** | **236** | *e*P | **Pn** | **10 22 32.3** | **0.0** |
| CHGB | baz=233 | | | *e*S | **Sg** | **10 22 51.2** | **0.0** |
| **HATJ** | baz=233<br>**Hateruma jima** | **1.47** | **122** | P | **Pn** | **10 22 33.6** | **+0.7** |
| HATJ | | | | *e*S | **Sb** | **10 22 52.3** | **-0.2** |
| **WUSB** | **Renai** | **1.48** | **235** | P | **Pb** | **10 22 34.0** | **0.0** |
| WUSB | baz=232 | | | *e*S | **Sb** | **10 22 53.1** | **0.0** |
| **JKRS** | baz=232<br>**Kuro-shima** | **1.55** | **113** | P | **Pn** | **10 22 34.2** | **+0.2** |
| JKRS | | | | *e*S | **Sb** | **10 22 55.3** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **1.62** | **107** | P | **Pn** | **10 22 35.4** | **+0.4** |
| JIJ | | | | *e*S | **Sb** | **10 22 57.0** | **+0.2** |
| **VWDT** | **VWDT** | **1.62** | **228** | *e*P | **Pn** | **10 22 35.2** | **+0.2** |
| VWDT | baz=229 | | | *e*S | **Sn** | **10 22 56.4** | **+0.3** |
| **SSLB** | baz=229<br>**Suanglung** | **1.73** | **233** | *e*P | **Pn** | **10 22 37.1** | **+0.6** |
| SSLB | baz=237 | | | *e*S | **Sg** | **10 23 01.3** | **-0.2** |

*IDC* ***26*** *10:24:39.8±4.3, 21°.11N×147°.03E, h0km, mb3.9/7, mb1 4.0/7, mb1mx3.6/60, mbtmp3.9/7, Error ellipse: s-maj=100.9km s-min=83.6km az=56.0*

*NEIC* ***26*** *10:24:44.2±1.7, 21°.63N±0°.10×147°.2E±0°.2, h10km±2km, mb4.3/6, Error ellipse: s-maj=28.5km s-min=9.7km az=60.0*

**ISC 26 10:24:42.7±1.8, 21°.6N±0°.1×147°.5E±0°.4, h10km, n16, σ0°.96/16, mb4.3/11, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **7.28** | **319** | Pn | **Pn** | **10 26 29.5** | **+0.4** |
| **JHJ2** | **Mitsune** | **13.30** | **331** | Pn | **Pn** | **10 27 50.2** | **-1.5** |
| **KSRS** | **Korea Array** | **23.13** | **317** | P | **P** | **10 29 49.2** | **+0.2** |
| **USRK** | 1.5nm,0.6s,baz=146,slow=9.6,SNR=6.7<br>**Ussuriysk Ar.** | **25.91** | **334** | P | **P** | **10 30 15.8** | **+0.9** |
| **KLR** | 1.1nm,0.8s,baz=165,slow=12,SNR=2.6<br>**Kul'dur** | **30.25** | **339** | P | **P** | **10 30 55.3** | **+1.6** |
| **WR0** | 0.6nm,0.4s,baz=136,slow=2.1,SNR=4.2<br>**Warramunga Arr** | **43.23** | **198** | P | **P** | **10 32 42.7** | **-1.7** |
| **WRAB** | **Tennant Creek** | **43.27** | **198** | P | **P** | **10 32 44.9** | **+0.3** |
| WRAB | comp=Z,4.2nm,0.8s | | | lAmb | lAmb | 10 32 46.4 | |
| **WB2** | **Warramunga Arr** | **43.27** | **198** | P | **P** | **10 32 45.2** | **+0.4** |
| WB2 | comp=Z,7.6nm,1.3s | | | lAmb | lAmb | 10 32 59.2 | |
| **FITZ** | **Fitzroy Crossi** | **44.91** | **210** | P | **P** | **10 32 58.6** | **+0.7** |
| **ZAA0** | **Zalesovo Array** | **56.76** | **321** | P | **P** | **10 34 26.7** | **-0.1** |
| ZAA0 | comp=Z,2.0nm,0.7s | | | lAmb | lAmb | 10 34 26.8 | |
| **ZALV** | **Zalesovo Beam** | **56.76** | **321** | P | **P** | **10 34 26.2** | **-0.6** |
| | comp=Z,1.9nm,0.5s,baz=112,slow=7.8,SNR=7.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.69** | **312** | P | **P** | **10 34 32.5** | **-1.0** |
| | comp=Z,0.3nm,0.5s,baz=102,slow=8.5,SNR=4.5 | | | | | | |
| **KURK** | **Kurchatov** | **60.25** | **317** | P | **P** | **10 34 50.9** | **-0.3** |
| KURK | | | | lAmb | lAmb | 10 34 51.3 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.31** | **317** | P | **P** | **10 34 50.9** | **-0.7** |
| | comp=Z,1.8nm,0.5s,baz=91,slow=7.7,SNR=22 | | | | | | |
| **ABKAR** | **Akbulak array** | **72.36** | **317** | P | **P** | **10 36 08.5** | **-0.4** |
| **FINES** | **FINESS Array B** | **84.93** | **336** | P | **P** | **10 37 18.2** | **+0.4** |
| | comp=Z,1.6nm,0.5s,baz=58,slow=4.3,SNR=14 | | | | | | |

*EAF* ***26*** *10:27:10.9±2.0, 25°.77S×30°.24E, h10km, MD3.5*

**BUL 26 10:27:12.5±0.8, 25°.73S×30°.11E, h10km, MD3.7, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **2.50** | **28** | *i* P | Pn | 10 27 51.3 | -2.0 |
| MOPA | | | | *i* S | Sn | 10 28 17.9 | -5.9 |
| **MOPA** | **Mopani** | **2.50** | **28** | *i* P | Pn | 10 27 51.3 | -2.0 |
| MOPA | | | | *i* S | Sn | 10 28 17.9 | -5.9 |
| **MSNA** | **Messina** | **3.37** | **359** | *i* P | Pn | 10 28 05.5 | +0.2 |
| MSNA | | | | *i* S | Sn | 10 28 43.1 | -2.4 |
| **MSNA** | **Messina** | **3.37** | **359** | *i* P | Pn | 10 28 05.5 | +0.2 |
| MSNA | | | | *i* S | Sn | 10 28 43.1 | -2.4 |
| **LBTB** | **Lobatse** | **4.14** | **279** | *i* P | Pn | 10 28 15.6 | -0.3 |
| LBTB | | | | *i* S | Sn | 10 29 01.0 | -3.5 |
| **LBTB** | **Lobatse** | **4.14** | **279** | *i* P | Pn | 10 28 15.6 | -0.3 |
| LBTB | | | | *i* S | Sn | 10 29 01.0 | -3.5 |
| **BOSA** | **Boshof** | **5.19** | **235** | *i* P | Pn | 10 28 29.2 | -1.1 |
| BOSA | | | | *i* S | Sn | 10 29 26.1 | -4.2 |
| **BOSA** | **Boshof** | **5.19** | **235** | *i* P | Pn | 10 28 29.2 | -1.1 |
| BOSA | | | | *i* S | Sn | 10 29 26.1 | -4.2 |
| **MATP** | **Matopo** | **5.49** | **344** | *i* P | Pn | 10 28 33.5 | -1.0 |
| MATP | | | | *i* S | Sn | 10 29 33.2 | -4.5 |
| **MATP** | **Matopo** | **5.49** | **344** | *i* P | Pn | 10 28 33.5 | -1.0 |
| MATP | | | | *i* S | Sn | 10 29 33.2 | -4.5 |
| **BLWY** | **Bulawayo** | **5.74** | **346** | *i* P | Pn | 10 28 36.5 | -1.4 |
| BLWY | | | | *i* S | Sn | 10 29 38.9 | -5.0 |
| **BLWY** | **Bulawayo** | **5.74** | **346** | *i* P | Pn | 10 28 36.5 | -1.4 |
| BLWY | | | | *i* S | Sn | 10 29 38.9 | -5.0 |

*TUL* ***26*** *10:30:49.4±1.8, 36°.13N±0°.01×98°.81W±0°.04, h7km±7km, ML3.4, mb_Lg2.9/44(NEIC), Error ellipse: s-maj=4.8km s-min=1.0km az=70.0*

**NEIC 26 10:30:50.3±1.8, 36°.14N±0°.02×98°.73W±0°.03, h5km±2km, Error ellipse: s-maj=4.8km s-min=3.1km az=245.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.32** | **318** | Pg | Pg | 10 30 55.5 | -1.1 |
| **OKCFA** | **Oklahoma City** | **1.27** | **124** | | Pg | 10 31 13.7 | -0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **1.28** | **124** | | Pg | 10 31 13.9 | -1.0 |
| **FNO** | **Franklin** | **1.40** | **129** | Pn | Pn | 10 31 15.9 | -0.6 |
| **X34A** | **Smith Ranch, M** | **1.70** | **154** | Pn | Pn | 10 31 21.0 | +0.3 |
| **W35A** | **Tecumseh** | **1.81** | **122** | | Pn | 10 31 22.5 | +0.4 |
| **T35A** | **Sooner Cattle** | **1.95** | **66** | | Pn | 10 31 25.0 | +0.9 |
| T35A | comp=Z,78nm,1.0s | | | lAmb_Lg | | 10 31 53.4 | |
| **R32A** | **Long Quarter,** | **2.28** | **0** | Pn | Pn | 10 31 28.9 | +0.2 |
| **TUL1** | **Leonard** | **2.40** | **95** | | Pn | 10 31 31.4 | +1.2 |
| **AMTX** | **Amarillo** | **2.71** | **243** | Pn | Pn | 10 31 34.8 | -0.2 |
| **CBKS** | **Cedar Bluff** | **2.79** | **344** | Pn | Pn | 10 31 35.0 | -0.6 |
| **Z35A** | **Perchaven, San** | **3.06** | **156** | | Pn | 10 31 39.9 | +0.6 |
| **X37A** | **Clayton** | **3.15** | **118** | Pn | Pn | 10 31 39.7 | -0.9 |
| **KSU1** | **Kansas State U** | **3.40** | **29** | Pn | Pn | 10 31 43.3 | -0.8 |
| KSU1 | comp=Z,33nm,0.9s | | | lAmb_Lg | | 10 32 40.4 | |
| **ABTX** | **Abilene, Hawle** | **3.59** | **192** | | Pn | 10 31 48.0 | +1.3 |
| **MSTX** | **Muleshoe** | **3.96** | **238** | Pn | Pn | 10 31 53.9 | +2.1 |
| **W39A** | **Magazine** | **4.14** | **102** | Pn | Pn | 10 31 55.5 | +1.3 |
| **KSCO** | **Kaye Shedlock'** | **4.22** | **314** | Pn | Pn | 10 31 54.4 | -1.0 |
| KSCO | comp=Z,22nm,0.8s | | | lAmb_Lg | | 10 33 12.6 | |
| **Z38A** | **Mt. Pleasant** | **4.22** | **132** | Pn | Pn | 10 31 55.7 | +0.4 |
| Z38A | comp=Z,24nm,0.8s | | | lAmb_Lg | | 10 33 13.3 | |
| **WHTX** | **Lake Whitney,** | **4.27** | **165** | Pn | Pn | 10 31 56.3 | +0.3 |
| WHTX | comp=Z,20nm,1.2s | | | lAmb_Lg | | 10 33 07.3 | |
| **MIAR** | **Mount Ida** | **4.50** | **109** | | Pn | 10 32 00.4 | +1.2 |
| MIAR | comp=Z,22nm,0.7s | | | lAmb_Lg | | 10 33 25.3 | |
| **S39A** | **Bolivar** | **4.60** | **69** | Pn | Pn | 10 32 02.6 | +2.0 |
| S39A | comp=Z,27nm,1.2s | | | lAmb_Lg | | 10 33 14.6 | |
| **T25A** | **Trinidad** | **4.67** | **284** | Pn | Pn | 10 32 01.1 | -0.6 |
| **N33A** | **J Bar K, Exete** | **4.70** | **12** | lAmb_Lg | | 10 33 31.2 | |
| **U40A** | comp=Z,29nm,0.7s<br>**Yellville** | **4.76** | **86** | | Pn | 10 32 03.5 | +0.8 |
| **X40A** | **Basin Creek Fa** | **5.10** | **107** | lAmb_Lg | | 10 33 44.6 | |
| **MGMO** | comp=Z,24nm,0.8s<br>**Mountain Grove** | **5.30** | **77** | lAmb_Lg | | 10 33 52.1 | |
| **WHAR** | comp=Z,19nm,0.9s<br>**Wooly Hollow** | **5.31** | **97** | lAmb_Lg | | 10 33 43.0 | |
| **FCAR** | comp=Z,17nm,0.8s<br>**Ozark Folk Cen** | **5.36** | **91** | lAmb_Lg | | 10 33 42.9 | |
| **435B** | comp=Z,16nm,0.9s<br>**Jarrell** | **5.43** | **169** | lAmb_Lg | | 10 33 47.8 | |
| **OGNE** | comp=Z,31nm,1.1s<br>**Ogallala** | **5.45** | **333** | Pn | Pn | 10 32 12.4 | +0.1 |
| **SDCO** | **Great Sand Dun** | **5.65** | **288** | Pn | Pn | 10 32 16.3 | +1.0 |
| **Z41A** | **Richland Creek** | **5.67** | **119** | lAmb_Lg | | 10 34 00.3 | |
| **JCT** | comp=Z,26nm,1.0s<br>**Junction City** | **5.71** | **189** | lAmb_Lg | | 10 34 02.8 | |
| **Q24A** | comp=Z,18nm,0.7s<br>**Divide** | **5.82** | **301** | lAmb_Lg | | 10 33 53.0 | |
| **T42A** | comp=Z,20nm,0.8s<br>**Van Buren** | **6.21** | **80** | lAmb_Lg | | 10 34 08.2 | |
| **P40A** | comp=Z,20nm,0.9s<br>**Paris** | **6.28** | **55** | lAmb_Lg | | 10 34 09.0 | |
| **PBMO** | comp=Z,19nm,0.9s<br>**Poplar Bluff** | **6.72** | **82** | lAmb_Lg | | 10 34 24.3 | |
| **N23A** | comp=Z,20nm,0.8s<br>**Red Feather La** | **7.38** | **312** | lAmb_Lg | | 10 34 47.9 | |
| **N41A** | comp=Z,12nm,0.8s<br>**Harden Midland** | **7.68** | **51** | lAmb_Lg | | 10 34 55.9 | |
| **833A** | comp=Z,19nm,0.9s<br>**Chaparral WMA,** | **7.81** | **184** | lAmb_Lg | | 10 35 06.9 | |
| **TX31** | comp=Z,11nm,0.8s<br>**Lajitas Ar. Si** | **7.96** | **213** | Pn | Pn | 10 32 45.5 | -1.2 |

*JMA* ***26*** *10:31:18.9, 39°.64N×140°.92E, h104km±1km, M3.5*

*NEIC* ***26*** *10:31:19.1±1.4, 39°.68N±0°.04×141°.0E±0°.1, h106km±7km, mb4.1/10, Error ellipse: s-maj=11.9km s-min=5.3km az=82.0*

*IDC* ***26*** *10:31:20.2±1.9, 39°.65N×140°.85E, h120km±18km, mb3.5/10, mb1 3.5/13, mb1mx3.3/49, mbtmp3.8/13, Error ell

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JSD** | **Sado** | **2.67** | **234** | Pn | | **Pn** | **10 32 00.5** | **+0.3** |
| **ERM** | **Erimo** | **2.87** | **34** | Pn | | **Pn** | **10 32 03.2** | **+0.3** |
| **JEW** | **Eniwo** | **3.20** | **6** | Pn | | **Pn** | **10 32 07.9** | **+0.7** |
| **MJB9** | **Matsu-Tunnel** | **3.80** | **216** | Pn | | **Pn** | **10 32 16.6** | **+1.3** |
| **MAJO** | **Matsushiro** | **3.80** | **216** | Pn | | **Pn** | **10 32 16.6** | **+1.3** |
| **MAT** | **Matsushiro** | **3.80** | **216** | P | | **Pn** | **10 32 16.8** | **+1.5** |
| MAT | | | | *e*S | | **Sn** | **10 33 01.2** | **+2.0** |
| **MJAR** | **Matsushiro Arr** | **3.80** | **216** | P | | **Pn** | **10 32 16.7** | **+1.3** |
| | 0.3nm,0.3s,baz=29,slow=16,SNR=12 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.80** | **216** | | | **Pn** | **10 32 16.4** | **+1.1** |
| **ASAJ** | **Asahikawa** | **4.62** | **14** | P | | **Pn** | **10 32 27.3** | **+1.1** |
| | 3.1nm,0.3s,baz=183,slow=15,SNR=18 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **4.62** | **15** | | | **Pn** | **10 32 26.9** | **+0.7** |
| **JGF** | **Kuroka** | **4.97** | **217** | Pn | | **Pn** | **10 32 31.9** | **+0.8** |
| **INU** | **Inuyama** | **5.33** | **218** | Pn | | **Pn** | **10 32 38.5** | **+2.5** |
| **USA0B** | **Ussuriysk Arra** | **8.10** | **307** | Pn | | **Pn** | **10 33 13.2** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **8.10** | **307** | P | | **Pn** | **10 33 14.7** | **+1.2** |
| | baz=101,slow=15,SNR=9.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.10** | **307** | | | **Pn** | **10 33 14.6** | **+1.1** |
| **MA2** | **Magadan** | **20.88** | **14** | P | | **P** | **10 35 51.9** | **-0.3** |
| | 1.1nm,0.3s,baz=195,slow=9.6,SNR=4.5 | | | | | | | |
| **MA2** | **Magadan** | **20.88** | **14** | IAmb | | IAmb | 10 36 03.8 | |
| | comp=Z,8.3nm,1.5s | | | | | | | |
| **SEY** | **Seymchan** | **24.30** | **13** | P | | **P** | **10 36 27.4** | **+1.4** |
| | comp=Z,2.2nm,0.8s,baz=205,slow=7.5,SNR=9.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.83** | **124** | T | | T | 11 08 09.5 | |
| | baz=317,slow=75,SNR=81 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.84** | **124** | T | | T | 11 08 02.3 | |
| | baz=317,slow=75,SNR=57 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.85** | **124** | T | | T | 11 08 11.7 | |
| | baz=317,slow=75,SNR=50 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.61** | **126** | T | | T | 11 08 58.9 | |
| | baz=318,slow=75,SNR=14 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.61** | **126** | T | | T | 11 09 06.5 | |
| | baz=318,slow=75,SNR=21 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.63** | **126** | T | | T | 11 08 59.7 | |
| | baz=318,slow=75,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.94** | **310** | P | | **P** | **10 38 41.6** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=89,slow=7.9,SNR=6.3 | | | | | | | |
| **MK31** | **Makanchi Array** | **42.49** | **300** | P | | **P** | **10 39 02.6** | **-0.8** |
| **MKAR** | **Makanchi Array** | **42.49** | **300** | P | | **P** | **10 39 02.3** | **-1.1** |
| | comp=Z,0.7nm,0.8s,baz=87,slow=10,SNR=6.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.49** | **300** | P | | **P** | **10 39 03.1** | **-0.4** |
| **KURK** | **Kurchatov** | **44.09** | **306** | P | | **P** | **10 39 15.3** | **-0.9** |
| KURK | | | | IAmb | | IAmb | 10 39 17.6 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.17** | **306** | P | | **P** | **10 39 15.7** | **-1.1** |
| | comp=Z,1.8nm,0.5s,baz=80,slow=8.5,SNR=18 | | | | | | | |
| **IMAR** | **Indian Mountai** | **44.59** | **32** | P | | **P** | **10 39 21.1** | **+1.1** |
| **KKAR** | **Karatay Array** | **51.56** | **298** | P | | **P** | **10 40 13.1** | **-0.9** |
| **ABKAR** | **Akbulak array** | **56.02** | **309** | P | | **P** | **10 40 45.8** | **-0.5** |
| ABKAR | | | | IAmb | | IAmb | 10 40 46.2 | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **56.21** | **194** | P | | **P** | **10 40 48.4** | **+0.5** |
| **WB0** | **Warramunga Arr** | **59.43** | **187** | P | | **P** | **10 41 09.8** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | 10 41 17.8 | |
| | comp=Z,2.7nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **59.61** | **187** | P | | **P** | **10 41 11.1** | **-0.5** |
| **WB2** | **Warramunga Arr** | **59.61** | **187** | P | | **P** | **10 41 11.2** | **-0.4** |
| WB2 | | | | IAmb | | IAmb | 10 41 34.7 | |
| | comp=Z,6.9nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.61** | **187** | P | | **P** | **10 41 10.8** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=2.6,slow=7.3,SNR=8.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **63.34** | **187** | P | | **P** | **10 41 36.5** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=0.1,slow=6.9,SNR=19 | | | | | | | |
| **NOA** | **NORSAR Array B** | **71.65** | **337** | P | | **P** | **10 42 28.3** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=40,slow=5.9,SNR=1.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.03** | **322** | P | | **P** | **10 42 30.2** | **-0.8** |
| | comp=Z,0.6nm,0.4s,baz=46,slow=6.1,SNR=5.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.03** | **322** | IAmb | | IAmb | 10 42 44.8 | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.07** | **46** | P | | **P** | **10 42 55.7** | **+0.7** |
| | comp=Z,0.3nm,0.6s,baz=222,slow=2.0,SNR=3.8 | | | | | | | |

*PRU* ***26*** *10:59:41.2±0.0,51°.47N×16°.19E, h0km*
*VIE* ***26*** *10:59:41.4±0.6,51°.43N×16°.44E, h0km, mb2.4/4, ml2.8/3, Error ellipse: s-maj=5.1km s-min=3.4km az=80.0 55 km NW of Wroclaw Suspected Mining induced.*
*MCSM* ***26*** *10:59:43.1±0.6,51°.N±4°×1°.6E±°, h2km±3km, ML3.2/2, MLv3.0/5*

**ISC 26 10:59:39.0±1.3, 51°.56N±0°.05×16°.28E±0°.03, h0km, n26, σ0s82/51, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.72** | **179** | *e*Pg | **Pg** | **10 59 53.2** | **+0.4** |
| KSP | | | | *e*Sg | **Sg** | **11 00 01.4** | **-0.7** |
| **CHVC** | **Chvalec** | **0.99** | **188** | *e*PG | **Pg** | **10 59 58.1** | **+0.2** |
| CHVC | | | | *e*SG | **Sg** | **11 00 09.9** | **-0.8** |
| | comp=Z,50nm,0.4s | | | | | | |
| **OSTC** | **Ostas** | **1.01** | **182** | *e*PG | **Pb** | **10 59 58.8** | **-0.6** |
| OSTC | | | | *e*SG | **Sg** | **11 00 10.9** | **-0.5** |
| | comp=Z,60nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.07** | **189** | *e*PG | **Pg** | **10 59 59.5** | **0.0** |
| UPC | | | | *e*SG | **Sg** | **11 00 12.4** | **-1.0** |
| | comp=Z,135nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.07** | **189** | Pg | **Pb** | **11 00 00.2** | **-0.2** |
| **DPC** | **Dobruska-Polom** | **1.22** | **179** | *e*PG | **Pg** | **11 00 02.1** | **-0.2** |
| DPC | | | | *e*SG | **Sg** | **11 00 16.7** | **-1.3** |
| | comp=Z,44nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.22** | **179** | Pg | **Pg** | **11 00 02.1** | **-0.2** |
| **PVCC** | **Panska Ves** | **1.50** | **227** | *e*PG | **Pb** | **11 00 07.2** | **-0.5** |
| PVCC | | | | *e*SG | **Sg** | **11 00 26.8** | **-0.2** |
| | comp=Z,95nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.50** | **227** | Pn | **Pg** | **11 00 07.6** | **-0.1** |
| PVCC | | | | Sn | **Sg** | **11 00 26.4** | **-0.6** |
| **KRLC** | **Kraliky** | **1.52** | **168** | *e*PG | **Pg** | **11 00 08.1** | **-0.1** |
| KRLC | | | | *e*SG | **Sg** | **11 00 26.7** | **-1.2** |
| | comp=Z,35nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.62** | **246** | Pg | **Pg** | **11 00 10.4** | **+0.3** |
| BRG | | | | Sg | **Sb** | **11 00 30.4** | **-0.4** |
| BRG | | | | Amp | | 11 00 31.0 | |
| | comp=Z,30nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.93** | **216** | *e*PG | **Pb** | **11 00 14.5** | **-0.5** |
| PRU | | | | *e*SG | **Sn** | **11 00 38.2** | **+0.3** |
| | comp=Z,27nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.93** | **216** | Pn | **Pb** | **11 00 14.4** | **-0.5** |
| PRU | | | | Sn | **Sn** | **11 00 37.7** | **-0.2** |
| **MORC** | **Moravsky Berou** | **1.96** | **155** | *e*PN | **Pn** | **11 00 13.9** | **+0.3** |
| MORC | | | | *e*SG | **Sb** | **11 00 40.0** | **-0.6** |
| **CLL** | **Collm** | **2.07** | **264** | *i* Pg | **Pg** | **11 00 18.9** | **+0.3** |
| CLL | | | | *i* x | x | 11 00 22.0 | |
| CLL | | | | *e*Sg | **Sb** | **11 00 44.0** | **+0.4** |
| | comp=Z,19nm,0.7s | | | | | | |
| **VRAC** | **Vranov** | **2.27** | **175** | *e*PN | **Pn** | **11 00 18.8** | **+1.1** |
| VRAC | | | | *e*SG | **Sb** | **11 00 49.9** | **+0.5** |
| **TREC** | **Trest** | **2.33** | **193** | *e*SG | **Sb** | **11 00 51.1** | **0.0** |
| **KRUC** | **Moravsky** | **2.51** | **178** | *e*PN | **Pn** | **11 00 21.7** | **+0.7** |
| KRUC | | | | *e*SG | **Sb** | **11 00 57.4** | **+1.2** |
| **OJC** | **Ojcow** | **2.60** | **120** | *e*Pn | **Pn** | **11 00 21.2** | **-1.1** |
| OJC | | | | *e*Pg | **Pg** | **11 00 28.9** | **0.0** |
| OJC | | | | *e*Sg | **Sg** | **11 01 03.7** | **+1.1** |
| **NKC** | **Novy Kostel** | **2.77** | **243** | *e*PN | **Pn** | **11 00 25.4** | **+0.8** |
| NKC | | | | *e*PG | **Pg** | **11 00 31.7** | **-0.3** |
| NKC | | | | *e*SG | **Sg** | **11 01 06.3** | **-1.6** |
| | comp=Z,22nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.99** | **216** | *e*PN | **Pn** | **11 00 28.2** | **+0.5** |
| KHC | | | | *e*PG | **Pb** | **11 00 33.7** | **+0.6** |
| KHC | | | | *e*SN | **Sn** | **11 01 02.6** | **-1.6** |
| KHC | | | | *e*SG | **Sb** | **11 01 11.8** | **+1.7** |
| | comp=Z,8.4nm,0.3s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.02** | **206** | *e*PG | **Pg** | **11 00 35.4** | **-1.5** |
| CKRC | | | | *e*SG | **Sb** | **11 01 12.3** | **+1.1** |
| | comp=Z,12nm,0.6s | | | | | | |
| **VYHS** | **Vyhne** | **3.49** | **151** | *e*SG | **Sg** | **11 01 31.0** | **0.0** |
| **CONA** | **Conrad Observa** | **3.65** | **184** | Pn | **Pn** | **11 00 38.0** | **+1.2** |
| | comp=Z,0.2nm,0.2s | | | | | | |
| CONA | | | | Sg | **Sg** | **11 01 36.7** | **+0.5** |
| | comp=Z,11nm,0.4s | | | | | | |
| **MOA** | **Molln** | **3.94** | **200** | *e*Pn | **Pn** | **11 00 41.3** | **+0.6** |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **ARSA** | **Arzberg** | **4.34** | **187** | *e*Pn | **Pn** | **11 00 48.0** | **+1.7** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| ARSA | | | | Sg | **Sg** | **11 01 59.3** | **+0.8** |
| | comp=Z,4.2nm,0.5s | | | | | | |

**IDC 26 11:00:23.2±434.0, 57°.35N×31°.58E, h0km, Error ellipse: s-maj=188.8km s-min=74.0km az=94.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **3.14** | **99** | *i* | | 11 21 40.0 | |
| | baz=283,slow=310,SNR=0.2 | | | | | | |
| **I37NO** | **I37NO** | **13.09** | **339** | *i* | | 12 10 40.0 | |
| | baz=140,slow=333,SNR=1.6 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.59** | **74** | *i* | | 13 58 20.0 | |
| | baz=305,slow=324,SNR=1.9 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **37.08** | **339** | *i* | | 14 48 20.0 | |
| | baz=62,slow=336,SNR=1.0 | | | | | | |

*IDC* ***26*** *11:22:53.5±2.0, 47°.34S×165°.27E, h0km, mb4.0/3, mb1 4.2/4, mb1mx3.7/28, mbtmp4.0/4, ML3.5/1, Error ellipse: s-maj=70.6km s-min=34.4km az=1.0*
*NEIC* ***26*** *11:22:55.4±1.5, 47°.2S±0°.1×165°.6E±0°.2, h10km±1km, mb4.2/7, Error ellipse: s-maj=18.9km s-min=17.7km az=124.0*
*WEL* ***26*** *11:22:59.2±1.5, 47°.S±13°×16°.6E±°, h12km, M4.5/14, mB5.2/7, ML4.6/21, MLv4.4/14, Mw(mB)4.6/7, Error ellipse: s-maj=0.0km s-min=0.0km az=5.9*

**ISC 26 11:22:56.1±0.8, 47°.34S±0°.08×165°.66E±0°.07, h14km, n66, σ1s92/66, mb4.2/7, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **1.36** | **31** | | **Pn** | **11 23 20.0** | **-0.7** |
| **PYZ** | **Puysegur Point** | **1.36** | **31** | P | **Pn** | **11 23 20.4** | **-0.3** |
| **APZ** | **The Paps** | **1.67** | **73** | P | **Pn** | **11 23 23.8** | **-1.1** |
| APZ | | | | S | **Sn** | **11 23 45.2** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **2.14** | **48** | | **Pn** | **11 23 30.4** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **2.14** | **48** | P | **Pn** | **11 23 30.7** | **-0.6** |
| WHZ | | | | S | **Sn** | **11 23 56.9** | **-0.8** |
| **DCZ** | **Deep Cove** | **2.14** | **29** | | **Pn** | **11 23 30.4** | **-0.9** |
| **DCZ** | **Deep Cove** | **2.14** | **29** | P | **Pn** | **11 23 31.3** | **0.0** |
| **SYZ** | **Scrubby Hill** | **2.51** | **73** | P | **Pn** | **11 23 36.9** | **+0.4** |
| SYZ | | | | S | **Sn** | **11 24 08.3** | **+1.5** |
| **MLZ** | **Mavora Lakes** | **2.60** | **42** | | **Pn** | **11 23 37.4** | **-0.4** |
| **MLZ** | **Mavora Lakes** | **2.60** | **42** | P | **Pn** | **11 23 38.1** | **+0.4** |
| **TUZ** | **Tuapeka** | **3.06** | **65** | P | **Pn** | **11 23 43.9** | **-0.2** |
| TUZ | | | | S | **Sn** | **11 24 21.4** | **+1.0** |
| **MSZ** | **Milford Sound** | **3.10** | **31** | P | **Pb** | **11 23 51.3** | **+0.5** |
| **EAZ** | **Earnscleugh** | **3.29** | **52** | P | **Pn** | **11 23 47.3** | **+0.2** |
| **WKZ** | **Wanaka** | **3.43** | **44** | | **Pn** | **11 23 47.9** | **-1.3** |
| **WKZ** | **Wanaka** | **3.43** | **44** | P | **Pn** | **11 23 50.1** | **+1.0** |
| **HHSZ** | **Highcliff Hill** | **3.70** | **69** | P | **Pn** | **11 23 53.0** | **+0.2** |
| **JCZ** | **Jackson Bay** | **3.93** | **35** | P | **Pb** | **11 24 02.9** | **-2.2** |
| **ODZ** | **Otahua Downs** | **4.15** | **58** | | **Pn** | **11 23 57.1** | **-1.9** |
| **ODZ** | **Otahua Downs** | **4.15** | **58** | P | **Pn** | **11 23 57.0** | **-2.0** |
| **LBZ** | **Lake Benmore** | **4.32** | **49** | Pn | **Pn** | **11 24 00.9** | **-0.5** |
| **LBZ** | **Lake Benmore** | **4.32** | **49** | P | **Pn** | **11 24 00.9** | **-0.5** |
| **TMZ** | **Timaru** | **4.76** | **54** | P | **Pn** | **11 24 11.7** | **+4.3** |
| **FOZ** | **Fox Glacier** | **4.80** | **39** | Pn | **Pn** | **11 24 09.9** | **+2.0** |
| **FOZ** | **Fox Glacier** | **4.80** | **39** | P | **Pn** | **11 24 11.6** | **+3.7** |
| **ARCZ** | **Arundel** | **5.14** | **51** | P | Pn | 11 24 18.9 | +6.2 |
| **GCSZ** | **Gaunt Creek Bo** | **5.19** | **41** | P | **Pn** | **11 24 14.9** | **+1.6** |
| **RPZ** | **Rata Peaks** | **5.24** | **48** | Pn | **Pn** | **11 24 15.8** | **+1.8** |
| | 1.4nm,0.3s,baz=28,slow=19,SNR=2.2 | | | | | | |
| RPZ | | | | Sn | **Sn** | **11 25 14.0** | **-0.2** |
| | 5.6nm,0.3s,baz=46,slow=18,SNR=2.3 | | | | | | |
| **RPZ** | **Rata Peaks** | **5.24** | **48** | Pn | **Pn** | **11 24 13.4** | **-0.6** |
| **RPZ** | **Rata Peaks** | **5.24** | **48** | P | **Pn** | **11 24 15.9** | **+1.9** |
| **WVZ** | **Waitaha Valley** | **5.57** | **42** | P | **Pn** | **11 24 22.9** | **+4.5** |
| **OXZ** | **Oxford** | **6.02** | **51** | Pn | **Pn** | **11 24 23.9** | **-0.8** |
| **MQZ** | **McQueen's Vall** | **6.11** | **56** | Pn | **Pn** | **11 24 24.6** | **-1.3** |
| **MQZ** | **McQueen's Vall** | **6.11** | **56** | P | **Pn** | **11 24 24.5** | **-1.3** |
| **INZ** | **Inchbonnie** | **6.17** | **44** | P | **Pn** | **11 24 28.4** | **+1.7** |
| **LTZ** | **Lake Taylor** | **6.53** | **48** | Pn | **Pn** | **11 24 33.0** | **+1.3** |
| **LTZ** | **Lake Taylor** | **6.53** | **48** | P | **Pn** | **11 24 33.7** | **+2.0** |
| **DSZ** | **Denniston Nort** | **7.11** | **40** | P | **Pn** | **11 24 40.1** | **+0.5** |
| **KHZ** | **Kahutara** | **7.45** | **52** | Pn | **Pn** | **11 24 44.0** | **-0.3** |
| **THZ** | **Tophouse** | **7.60** | **45** | P | **Pn** | **11 24 48.5** | **+2.0** |
| **QRZ** | **Quartz Range** | **8.17** | **40** | Pn | **Pn** | **11 24 52.6** | **-1.5** |
| **QRZ** | **Quartz Range** | **8.17** | **40** | P | **Pn** | **11 24 56.5** | **+2.3** |
| **TUWZ** | **Tuamarina** | **8.37** | **48** | P | Pn | 11 25 03.0 | +6.1 |
| **TRWZ** | **Traveller** | **9.31** | **54** | P | **Pn** | **11 25 09.1** | **-0.8** |
| **HOWZ** | **Holdsworth Sta** | **9.57** | **51** | P | **Pn** | **11 25 17.1** | **+3.7** |
| **PKE** | **Pukeiti** | **10.15** | **40** | P | **Pn** | **11 25 23.4** | **+2.1** |
| **HIZ** | **Hauiti** | **11.09** | **41** | Pn | **Pn** | **11 25 33.6** | **-0.6** |
| **MUGZ** | **Murupara** | **12.02** | **47** | P | **Pn** | **11 25 48.8** | **+1.8** |
| **TOZ** | **Tahuroa Road** | **12.02** | **41** | P | **Pn** | **11 25 50.4** | **+3.5** |
| **CASY** | **Casey** | **34.13** | **216** | P | **P** | **11 29 40.8** | **+0.8** |
| **AS31** | **Alice Springs** | **34.63** | **302** | P | **P** | **11 29 43.0** | **-1.9** |
| AS31 | | | | IAmb | IAmb | 11 29 49.9 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **34.63** | **302** | P | **P** | **11 29 42.5** | **-2.3** |
| | comp=Z,2.0nm,0.6s,baz=133,slow=8.3,SNR=52 | | | | | | |
| **ASAR** | **Alice Springs** | **34.63** | **302** | P | **P** | **11 29 42.6** | **-2.2** |
| **WR0** | **Warramunga Arr** | **37.20** | **306** | P | **P** | **11 30 04.0** | **-2.9** |
| WR0 | | | | IAmb | IAmb | 11 30 32.4 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **37.32** | **306** | P | **P** | **11 30 05.8** | **-2.2** |
| WB2 | | | | IAmb | IAmb | 11 30 23.9 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.33** | **306** | P | **P** | **11 30 04.9** | **-3.1** |
| | comp=Z,0.5nm,0.6s,baz=143,slow=7.9,SNR=4.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.33** | **306** | P | **P** | **11 30 04.8** | **-3.2** |
| WRAB | | | | IAmb | IAmb | 11 30 13.4 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.05** | **269** | T | T | 12 12 43.7 | |
| | baz=124,slow=75,SNR=42 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.06** | **269** | T | T | 12 12 41.4 | |
| | baz=124,slow=75,SNR=36 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.07** | **269** | T | T | 12 12 45.1 | |
| | baz=124,slow=75,SNR=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **42.79** | **180** | P | **P** | **11 30 53.8** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **43.80** | **298** | P | **P** | **11 30 59.6** | **-1.8** |
| | comp=Z,2.4nm,0.9s,baz=117,slow=4.5,SNR=2.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.80** | **298** | P | **P** | **11 30 59.7** | **-1.8** |
| FITZ | | | | IAmb | IAmb | 11 31 08.2 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.86** | **275** | PKP | **PKPab** | **11 42 30.4** | **-1.1** |
| | comp=Z,1.1nm,0.6s,baz=135,slow=4.8,SNR=6.9 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **146.92** | **349** | PKPbc | **PKPdf** | **11 42 35.3** | **+0.8** |
| | comp=Z,12nm,1.0s,baz=86,slow=7.4,SNR=2.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **150.45** | **333** | PKPbc | **PKPbc** | **11 42 45.5** | **-0.3** |
| | comp=Z,1.9nm,0.8s,baz=40,slow=4.7,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.54** | **293** | PKPbc | **PKPdf** | **11 42 47.5** | **+4.9** |
| | comp=Z,1.2nm,0.6s,baz=72,slow=2.3,SNR=5.5 | | | | | | |

*IDC* ***26*** *11:25:23.1±0.9, 47°.24S×165°.33E, h0km, mb4.3/5, mb1 4.5/6, mb1mx4.1/28, mbtmp4.3/6, ML3.7/1, MS3.8/17, Ms1 3.8/17, ms1mx3.6/39, Error ellipse: s-maj=34.1km s-min=24.9km az=48.0*
*NEIC* ***26*** *11:25:24.3±2.6, 47°.4S±0°.1×165°.5E±0°.1, h10km±1km, mb4.4/11, Error ellipse: s-maj=19.7km s-min=12.4km az=153.0*

**ISC 26 11:25:24.4±0.7, 47°.41S±0°.08×165°.54E±0°.06, h14km, n97, σ1s34/77, mb4.4/11, MS3.8/18, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **1.47** | **33** | Pn | **Pn** | **11 25 49.8** | **-0.6** |
| **APZ** | **The Paps** | **1.77** | **72** | P | **Pn** | **11 25 53.4** | **-1.1** |
| **DCZ** | **Deep Cove** | **2.24** | **30** | Pn | **Pn** | **11 26 00.3** | **-0.7** |
| **WHZ** | **Wether Hill Ro** | **2.24** | **48** | Pn | **Pn** | **11 26 00.1** | **-1.0** |
| **WHZ** | **Wether Hill Ro** | **2.24** | **48** | P | **Pn** | **11 26 00.3** | **-0.8** |
| WHZ | | | | S | **Sn** | **11 26 28.4** | **-0.2** |
| **SYZ** | **Scrubby Hill** | **2.61** | **72** | P | **Pn** | **11 26 06.3** | **+0.2** |
| SYZ | | | | S | **Sn** | **11 26 38.8** | **+1.2** |
| **MLZ** | **Mavora Lakes** | **2.71** | **42** | Pn | **Pn** | **11 26 07.8** | **+0.3** |
| **MLZ** | **Mavora Lakes** | **2.71** | **42** | P | **Pn** | **11 26 07.8** | **+0.3** |
| MLZ | | | | S | **Sn** | **11 26 42.8** | **+2.7** |
| **TUZ** | **Tuapeka** | **3.17** | **64** | P | **Pn** | **11 26 13.5** | **-0.3** |
| TUZ | | | | S | **Sn** | **11 26 51.3** | **0.0** |
| **MSZ** | **Milford Sound** | **3.20** | **32** | P | **Pb** | **11 26 19.0** | **-1.9** |
| **EAZ** | **Earnscleugh** | **3.40** | **52** | P | **Pn** | **11 26 17.5** | **+0.5** |
| EAZ | | | | S | **Sn** | **11 26 57.3** | **+0.3** |
| **WKZ** | **Wanaka** | **3.53** | **44** | Pn | **Pn** | **11 26 19.6** | **+0.8** |
| **WKZ** | **Wanaka** | **3.53** | **44** | P | **Pn** | **11 26 21.1** | **+2.2** |
| **HHSZ** | **Highcliff Hill** | **3.80** | **68** | P | **Pn** | **11 26 22.6** | **+0.1** |
| **JCZ** | **Jackson Bay** | **4.03** | **35** | P | **Pn** | **11 26 28.8** | **+3.0** |
| **ODZ** | **Otahua Downs** | **4.26** | **58** | Pn | **Pn** | **11 26 28.0** | **-0.7** |
| **ODZ** | **Otahua Downs** | **4.26** | **58** | P | **Pn** | **11 26 26.7** | **-2.0** |
| **LBZ** | **Lake Benmore** | **4.43** | **49** | Pn | **Pn** | **11 26 30.0** | **-1.1** |
| **LBZ** | **Lake Benmore** | **4.43** | **49** | P | **Pn** | **11 26 30.5** | **-0.7** |
| **FOZ** | **Fox Glacier** | **4.90** | **39** | Pn | **Pn** | **11 26 38.6** | **+1.0** |
| **FOZ** | **Fox Glacier** | **4.90** | **39** | P | **Pn** | **11 26 39.8** | **+2.2** |
| **ARCZ** | **Arundel** | **5.25** | **51** | P | **Pn** | **11 26 43.3** | **+0.9** |
| **GCSZ** | **Gaunt Creek Bo** | **5.30** | **41** | P | **Pn** | **11 26 43.8** | **+0.8** |
| **RPZ** | **Rata Peaks** | **5.35** | **48** | Pn | **Pn** | **11 26 44.5** | **+0.8** |
| | 2.2nm,0.3s,baz=180,slow=21,SNR=0.8 | | | | | | |
| RPZ | | | | Sn | **Sn** | **11 27 42.9** | **-2.2** |
| | 7.9nm,0.3s,baz=50,slow=21,SNR=4.9 | | | | | | |
| **RPZ** | **Rata Peaks** | **5.35** | **48** | P | **Pn** | **11 26 45.7** | **+1.9** |
| **WACZ** | **Wakanui South** | **5.61** | **54** | P | **Pn** | **11 26 46.4** | **-0.9** |
| **WVZ** | **Waitaha Valley** | **5.67** | **42** | P | **Pn** | **11 26 50.4** | **+2.2** |
| **OXZ** | **Oxford** | **6.13** | **51** | Pn | **Pn** | **11 26 55.9** | **+1.4** |
| **MQZ** | **McQueen's Vall** | **6.21** | **56** | Pn | **Pn** | **11 26 56.0** | **+0.4** |
| **INZ** | **Inchbonnie** | **6.27** | **44** | P | **Pn** | **11 26 57.9** | **+1.4** |
| **LTZ** | **Lake Taylor** | **6.64** | **48** | Pn | **Pn** | **11 27 02.4** | **+0.9** |
| **LTZ** | **Lake Taylor** | **6.64** | **48** | P | **Pn** | **11 27 03.0** | **+1.5** |
| **DSZ** | **Denniston Nort** | **7.21** | **41** | P | **Pn** | **11 27 09.4** | **0.0** |
| **KHZ** | **Kahutara** | **7.55** | **52** | P | Pn | 11 27 19.8 | +5.8 |
| **THZ** | **Tophouse** | **7.71** | **46** | Pn | **Pn** | **11 27 17.8** | **+1.6** |
| **THZ** | **Tophouse** | **7.71** | **46** | P | **Pn** | **11 27 18.6** | **+2.4** |
| **MRNZ** | **Matariki Terra** | **7.92** | **43** | P | **Pn** | **11 27 20.4** | **+1.4** |
| **QRZ** | **Quartz Range** | **8.28** | **40** | Pn | **Pn** | **11 27 24.7** | **+0.8** |
| **QRZ** | **Quartz Range** | **8.28** | **40** | P | **Pn** | **11 27 23.9** | **0.0** |
| **TKNZ** | **Takaka Hill** | **8.30** | **43** | P | **Pn** | **11 27 26.7** | **+2.4** |
| **CMWZ** | **Cape Campbell** | **8.38** | **51** | P | Pn | 11 27 31.5 | +6.1 |
| **HIZ** | **Hauiti** | **11.20** | **41** | Pn | **Pn** | **11 28 04.0** | **0.0** |
| **BKZ** | **Black Stump Fm** | **11.46** | **48** | Pn | **Pn** | **11 28 09.2** | **+1.6** |
| **URZ** | **Urewera** | **12.46** | **47** | LR | LR | 11 33 56.2 | |
| | comp=Z,937nm,18.4s,baz=234,slow=41 | | | | | | |
| **TAU** | **Tasmania Unive** | **13.62** | **283** | Pn | **Pn** | **11 28 36.2** | **-0.7** |
| **TOO** | **Toolangi** | **17.71** | **296** | Pn | **Pn** | **11 29 28.3** | **-2.2** |
| TOO | | | | IAmb | IAmb | 11 29 39.0 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **RAO** | **Raoul Island** | **22.21** | **41** | LR | LR | 11 39 51.3 | |
| | comp=Z,388nm,20.1s,baz=110,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **23.96** | **302** | LR | LR | 11 38 55.7 | |
| | comp=Z,192nm,18.3s,baz=192,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **23.96** | **302** | P | **P** | **11 30 36.7** | **-1.4** |
| **DZM** | **Mont Dzumac** | **25.29** | **2** | P | **P** | **11 30 52.4** | **+2.0** |
| | comp=Z,16nm,1.0s,baz=140,slow=8.1,SNR=4.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **25.29** | **2** | *e*P | **P** | **11 30 51.7** | **+1.3** |
| | comp=Z,5nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **25.29** | **2** | P | **P** | **11 30 52.2** | **+1.8** |
| **VNDA** | **Vanda** | **30.26** | **182** | LR | LR | 11 41 27.1 | |
| | comp=Z,99nm,19.5s,baz=21,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **31.44** | **323** | LR | LR | 11 43 18.1 | |
| | comp=Z,106nm,19.3s,baz=118,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **34.60** | **302** | P | **P** | **11 32 12.1** | **-0.8** |
| | comp=Z,6.6nm,0.7s,baz=133,slow=8.2,SNR=51 | | | | | | |
| ASAR | | | | LR | LR

| | | | | | |
|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **23.37** | **75** | *i* | 14 24 00.0 |
| | baz=294,slow=318,SNR=1.7 | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **12.16** | **343** | *i* | 16 26 50.0 |
| | baz=54,slow=334,SNR=0.9 | | | | |
| **I45RU** | **USSURIYSK INFR** | **54.37** | **62** | *i* | 17 26 20.0 |
| | baz=306,slow=337,SNR=2.3 | | | | |

*KRNET **26** 12:14:52.3±0.1, 41.°65N×79.°62E, h15km, mb3.2*
*SOME **26** 12:14:53.0, 41.°72N×79.°62E, h10km*
*NNC **26** 12:14:54.1±0.8, 41.°74N×79.°60E, h0km, mb3.7, mpv3.6,*
*Error ellipse: s-maj=5.0km s-min=3.4km az=153.0*

**ISC 26 12:14:55.8**±1.6, **41.°80N**±0.°07×**79.°52E**±0.°05, **h10**km, **n63,**
σ1§**43**/98, **19C-9D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRZ** | **Przheval'sk** | **1.08** | **310** | ⇑*e*P | **Pg** | **12 15 16.0** | **-0.5** |
| | baz=14 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sn** | **12 15 33.1** | **+0.9** |
| | baz=14 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.28** | **268** | ⇑*i*P | **Pb** | **12 15 18.2** | **-2.0** |
| | baz=74 | | | | | | |
| TARG | | | | ⇑*i*S | **Sn** | **12 15 37.3** | **-0.3** |
| | baz=74 | | | | | | |
| **UZB** | **Uzynbulak** | **1.40** | **345** | *e*P | **Pn** | **12 15 21.3** | **-0.2** |
| | 9.7nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sg** | **12 15 41.8** | **+1.0** |
| | 249nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.40** | **345** | P | **Pn** | **12 15 21.4** | **-0.2** |
| | 32nm,0.2s | | | | | | |
| UZB | | | | S | **Sg** | **12 15 41.8** | **+1.0** |
| | 249nm,0.3s | | | | | | |
| **SATY** | **Saty** | **1.51** | **327** | *e*P | **Pb** | **12 15 23.7** | **-0.3** |
| | 7.0nm,0.4s | | | | | | |
| SATY | | | | *e*S | **Sg** | **12 15 45.5** | **+1.3** |
| | 168nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.51** | **327** | P | **Pb** | **12 15 23.6** | **-0.3** |
| | 8.5nm,0.1s | | | | | | |
| SATY | | | | S | **Sg** | **12 15 45.6** | **+1.3** |
| | 168nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.53** | **359** | P | **Pn** | **12 15 23.2** | **-0.1** |
| | 9.2nm,0.2s | | | | | | |
| PDGK | | | | S | **Sg** | **12 15 44.9** | **-0.1** |
| | 158nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **1.53** | **359** | ⇑P | **Pn** | **12 15 23.1** | **-0.1** |
| | 8.7nm,0.5s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **12 15 44.9** | **-0.1** |
| | 181nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **1.59** | **330** | *e*P | **Pb** | **12 15 25.2** | **0.0** |
| | 40nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **12 15 48.3** | **+1.5** |
| | 232nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.59** | **330** | P | **Pb** | **12 15 25.2** | **0.0** |
| | 40nm,0.2s | | | | | | |
| ZHN | | | | S | **Sg** | **12 15 48.3** | **+1.5** |
| | 232nm,0.2s | | | | | | |
| **ANVS** | **Anan'yevo** | **1.69** | **306** | ⇑*i*P | **Pb** | **12 15 27.0** | **-0.1** |
| | baz=9.0 | | | | | | |
| ANVS | | | | ⇑*i*S | **Sg** | **12 15 52.1** | **+2.0** |
| | baz=9.0 | | | | | | |
| **KTMS** | **Ketmen** | **1.76** | **20** | *e*P | **Pn** | **12 15 26.0** | **-0.5** |
| | 26nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **12 15 49.5** | **+0.5** |
| | 93nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **1.76** | **20** | P | **Pn** | **12 15 26.0** | **-0.5** |
| | 26nm,0.1s | | | | | | |
| KTMS | | | | S | **Sn** | **12 15 49.5** | **+0.5** |
| | 93nm,0.4s | | | | | | |
| **KDJ** | **Kajisay** | **1.77** | **282** | ⇓*i*P | **Pn** | **12 15 27.4** | **+0.7** |
| | baz=86 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sg** | **12 15 52.8** | **0.0** |
| | baz=86 | | | | | | |
| **KPKS** | **Kokpek** | **1.78** | **340** | *e*P | **Pb** | **12 15 28.3** | **-0.2** |
| | 36nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **12 15 53.8** | **+0.8** |
| | 278nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **1.96** | **330** | *e*P | **Pb** | **12 15 32.0** | **+0.4** |
| | 10nm,0.1s | | | | | | |
| KURS | | | | *e*S | **Sg** | **12 16 00.1** | **+1.2** |
| | 43nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **1.96** | **330** | Pg | **Pb** | **12 15 32.0** | **+0.4** |
| | 10nm,0.1s | | | | | | |
| KURS | | | | Lg | Lg | 12 16 00.0 | |
| | 43nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.27** | **304** | *e*P | **Pb** | **12 15 37.4** | **+0.3** |
| | 13nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **12 16 09.3** | **+0.5** |
| | 46nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.27** | **304** | Pg | **Pb** | **12 15 37.4** | **+0.3** |
| | 13nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 12 16 09.3 | |
| | 46nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **2.28** | **308** | *e*P | **Pb** | **12 15 37.4** | **+0.3** |
| | 15nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **12 16 09.2** | **+0.2** |
| | 200nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **2.28** | **308** | ⇑Pg | **Pb** | **12 15 36.5** | **-0.6** |
| | 9.3nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 12 16 09.1 | |
| | 148nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **2.28** | **308** | Pg | **Pb** | **12 15 37.4** | **+0.3** |
| | 15nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 12 16 09.2 | |
| | 200nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.29** | **310** | *e*P | **Pb** | **12 15 37.2** | **0.0** |
| | 23nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **12 16 08.9** | **-0.3** |
| | 90nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.29** | **310** | Pg | **Pb** | **12 15 37.2** | **0.0** |
| | 23nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 12 16 08.9 | |
| | 90nm,0.2s | | | | | | |
| **KNDC** | **Almaty** | **2.36** | **308** | ⇑Lg | Lg | 12 16 12.0 | |
| | 214nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **2.39** | **307** | *e*P | **Pg** | **12 15 40.1** | **-1.4** |
| | 39nm,0.1s | | | | | | |
| AAA | | | | *e*S | **Sg** | **12 16 13.9** | **+1.4** |
| | 400nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **2.39** | **307** | Pg | **Pg** | **12 15 40.1** | **-1.4** |
| | 39nm,0.1s | | | | | | |
| AAA | | | | Lg | Lg | 12 16 13.9 | |
| | 400nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **2.42** | **342** | *e*P | **Pb** | **12 15 39.6** | **+0.1** |
| | 40nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sg** | **12 16 12.9** | **-0.7** |
| | 70nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.42** | **342** | Pg | **Pb** | **12 15 39.6** | **+0.1** |
| | 40nm,0.1s | | | | | | |
| BLB | | | | Lg | Lg | 12 16 12.9 | |
| | 70nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **2.48** | **282** | ⇑*i*P | **Pn** | **12 15 37.7** | **+1.3** |
| | baz=84 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **12 16 10.9** | **-0.3** |
| | baz=84 | | | | | | |
| **DJR** | **Jarkent** | **2.54** | **4** | *e*P | **Pb** | **12 15 41.4** | **-0.2** |
| | 5.7nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **12 16 16.2** | **-1.3** |
| | 50nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **2.54** | **4** | Pg | **Pb** | **12 15 41.4** | **-0.2** |
| | 5.7nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 12 16 16.2 | |
| | 50nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **2.65** | **301** | *e*P | **Pb** | **12 15 44.0** | **+0.8** |
| | 8.7nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **12 16 20.7** | **-0.1** |
| | 46nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **2.65** | **301** | Pg | **Pb** | **12 15 44.0** | **+0.8** |
| | 8.7nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 12 16 20.7 | |
| | 46nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **2.71** | **333** | *e*P | **Pb** | **12 15 44.6** | **+0.1** |
| | 3.8nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **12 16 21.6** | **-1.4** |
| | 56nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.71** | **333** | Pg | **Pb** | **12 15 44.6** | **+0.1** |
| | 3.8nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 12 16 21.6 | |
| | 56nm,0.3s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.75** | **286** | ⇓*e*P | **Pn** | **12 15 41.3** | **+1.2** |
| | baz=88 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sb** | **12 16 17.4** | **-1.5** |
| | baz=88 | | | | | | |
| **CHKK** | **Chushkaly** | **2.77** | **319** | *e*P | **Pb** | **12 15 46.2** | **+0.8** |
| | 8.1nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **12 16 24.2** | **-0.6** |
| | 110nm,0.4s | | | | | | |
| **CHKK** | **Chushkaly** | **2.77** | **319** | Pg | **Pb** | **12 15 46.2** | **+0.8** |
| | 8.1nm,0.2s | | | | | | |
| CHKK | | | | Lg | Lg | 12 16 24.2 | |
| | 110nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **2.83** | **313** | *e*P | **Pb** | **12 15 47.0** | **+0.5** |
| | 9.3nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **12 16 25.5** | **-1.2** |
| | 162nm,0.1s | | | | | | |
| **KTBS** | **Karatobe** | **2.83** | **313** | Pg | **Pb** | **12 15 47.0** | **+0.5** |
| | 9.3nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 12 16 25.5 | |
| | 162nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.12** | **292** | ⇓Pn | **Pn** | **12 15 47.2** | **+2.1** |
| | 4.2nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 12 16 34.4 | |
| | 38nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.12** | **292** | ⇑*i*P | **Pn** | **12 15 47.0** | **+1.9** |
| | baz=94 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **12 16 26.8** | **-2.7** |
| | baz=94 | | | | | | |
| **DGS** | **Degeres** | **3.12** | **299** | *e*P | **Pb** | **12 15 51.7** | **+0.2** |
| | 11nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sg** | **12 16 33.7** | **-2.4** |
| | 29nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **3.12** | **299** | Pg | **Pb** | **12 15 51.7** | **+0.2** |
| | 11nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 12 16 33.7 | |
| | 29nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **3.14** | **313** | *e*P | **Pb** | **12 15 52.1** | **+0.5** |
| | 4.0nm,0.1s | | | | | | |
| KUU | | | | *e*S | **Sg** | **12 16 34.7** | **-1.8** |
| | 57nm,0.2s | | | | | | |
| **KUU** | **Kurty** | **3.14** | **313** | Pg | **Pb** | **12 15 52.2** | **+0.5** |
| | 4.0nm,0.1s | | | | | | |
| KUU | | | | Lg | Lg | 12 16 34.7 | |
| | 57nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **3.41** | **305** | *e*P | **Pb** | **12 15 57.1** | **+0.9** |
| | 3.4nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **12 16 43.1** | **-2.1** |
| | 36nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **3.41** | **305** | Pg | **Pb** | **12 15 57.1** | **+0.9** |
| | 3.4nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 12 16 43.1 | |
| | 36nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.49** | **358** | *e*P | **Pb** | **12 15 57.9** | **+0.2** |
| | 2.1nm,0.3s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **12 16 44.4** | **-3.5** |
| | 13nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.49** | **358** | Pg | **Pb** | **12 15 57.9** | **+0.2** |
| | 2.1nm,0.3s | | | | | | |
| KAPS | | | | Lg | Lg | 12 16 44.4 | |
| | 13nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **3.82** | **284** | ⇑Pg | **Pb** | **12 16 04.5** | **+1.1** |
| | 1.9nm,0.3s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 12 16 56.9 | |
| | 9.5nm,0.7s | | | | | | |
| **SGDS** | **Sogindy** | **3.97** | **296** | *e*P | **Pb** | **12 16 06.5** | **+0.7** |
| | 4.2nm,0.2s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **12 16 59.2** | **-3.9** |
| | 11nm,0.4s | | | | | | |
| **SGDS** | **Sogindy** | **3.97** | **296** | Pg | **Pb** | **12 16 06.5** | **+0.7** |
| | 4.2nm,0.2s | | | | | | |
| SGDS | | | | Lg | Lg | 12 16 59.2 | |
| | 11nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **4.76** | **284** | *e*P | **Pb** | **12 16 21.4** | **+2.1** |
| | 3.6nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **12 17 24.8** | **-3.8** |
| | 7.0nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **4.76** | **284** | Pg | **Pb** | **12 16 21.4** | **+2.1** |
| | 3.6nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 12 17 24.8 | |
| | 7.0nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **5.14** | **311** | *e*P | **Pb** | **12 16 28.3** | **+2.6** |
| | 2.1nm,0.4s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **12 17 36.6** | **-4.0** |
| | 4.1nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **5.14** | **311** | Pg | **Pb** | **12 16 28.3** | **+2.6** |
| | 2.1nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 12 17 36.6 | |
| | 4.1nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **5.31** | **19** | ⇓Pn | **Pn** | **12 16 16.9** | **+1.7** |
| | 0.9nm,0.7s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | **12 17 18.7** | **+2.3** |
| | 4.5nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **5.38** | **21** | Pn | **Pn** | **12 16 16.6** | **+0.6** |
| | 0.1nm,0.2s,baz=200,slow=13,SNR=62 | | | | | | |
| MK31 | | | | Sn | **Sn** | **12 17 20.0** | **+2.0** |
| | 1.5nm,0.4s,baz=192,slow=18,SNR=19 | | | | | | |
| **KK02** | **Karatay Array** | **6.79** | **284** | ⇑Pg | **Pb** | **12 16 58.6** | **+4.7** |
| | 1.0nm,0.8s | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 12 18 30.8 | |
| | 1.2nm,0.4s | | | | | | |
| **OTUK** | **Ortayu** | **8.21** | **324** | ⇑Lg | Lg | 12 19 16.2 | |
| | 6.2nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **8.94** | **356** | ⇓Lg | Lg | 12 19 40.2 | |
| | 3.6nm,0.8s | | | | | | |

*IDC **26** 12:27:06.6±11.0, 1.°78N×127.°67E, h81km±109km, mb4.1/4,*
*mb1 4.3/6, mb1mx3.6/44, mbtmp4.4/6, ML4.4/2, Error*
*ellipse: s-maj=109.7km s-min=19.0km az=60.0*
*DJA **26** 12:27:10.1±0.4, 2.°N±4.°×12.°7E±.°, h116km±4km, M4.4/10,*
*mb4.7/10, mB5.0/6, MLv4.4/10, Mw(mB)4.3/6*
*NEIC **26** 12:27:12.3±0.7, 1.°6N±0.°1×127.°3E±0.°1, h128km±9km,*
*mb4.3/14, Error ellipse: s-maj=21.0km s-min=13.3km*
*az=58.0*

**ISC 26 12:27:11.9**±0.9, **1.°61N**±0.°09×**127.°3E**±0.°1, **h128**km, **n52,**
σ0§**85**/53, **mb4.3**/10, **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.83** | **177** | Pn | **Pn** | **12 27 33.1** | **-0.1** |
| **TNTI** | **Ternate** | **0.83** | **177** | P | **Pn** | **12 27 32.1** | **-1.1** |
| TNTI | | | | S | **Sn** | **12 27 48.6** | **-0.6** |
| **TNTI** | **Ternate** | **0.83** | **177** | P | **Pn** | **12 27 33.3** | **+0.1** |
| **KMSI** | **Cibinong** | **3.49** | **253** | P | **Pn** | **12 28 04.6** | **-0.3** |
| **SANI** | **Sanana** | **3.87** | **200** | P | **Pn** | **12 28 09.0** | **-0.9** |
| **SANI** | **Sanana** | **3.87** | **200** | P | **Pn** | **12 28 08.9** | **-0.9** |
| **GTOI** | **Gorontalo** | **4.41** | **257** | P | **Pn** | **12 28 17.9** | **+0.8** |
| **LUWI** | **Luwuk** | **5.25** | **240** | Pn | **Pn** | **12 28 27.5** | **-0.9** |
| **LUWI** | **Luwuk** | **5.25** | **240** | P | **Pn** | **12 28 28.3** | **-0.1** |
| | 0.9nm3µm95nm,1.0s | | | | | | |
| **MRSI** | **Marisa** | **5.49** | **258** | P | **Pn** | **12 28 30.7** | **-0.9** |
| | 0.4nm1µm100nm,0.8s | | | | | | |
| **APSI** | **Ampana** | **6.19** | **246** | P | **Pn** | **12 28 41.1** | **0.0** |
| | 0.3nm1µm56nm,0.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **6.55** | **266** | Pn | **Pn** | **12 28 45.1** | **-0.7** |
| **TOLI2** | **Tolitoli** | **6.55** | **266** | P | **Pn** | **12 28 45.2** | **-0.7** |
| **FAKI** | **Fak Fak** | **6.67** | **132** | P | **Pn** | **12 28 50.0** | **+2.5** |
| **TTSI** | **Tana Toraja** | **8.80** | **238** | P | **Pn** | **12 29 15.4** | **-0.9** |
| | 83nm,0.7s | | | | | | |
| **BNSI** | **Bone** | **9.35** | **230** | P | **Pn** | **12 29 23.8** | **+0.1** |
| | 51nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.35** | **234** | P | **Pn** | **12 29 24.4** | **+0.7** |
| | 2µm140nm,0.6s | | | | | | |
| **MYLDM** | **Lahad Datu** | **9.49** | **292** | Pn | **Pn** | **12 29 25.5** | **0.0** |
| **BKSI** | **Bulukumba** | **9.95** | **226** | P | **Pn** | **12 29 32.4** | **+0.7** |
| | 904nm36nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **10.02** | **229** | P | **Pn** | **12 29 34.1** | **+1.5** |
| | 9.9nm,0.3s,baz=35,slow=4.9,SNR=14 | | | | | | |
| **KAPI** | **Kappang** | **10.02** | **229** | | **Pn** | **12 29 34.6** | **+2.0** |
| **KAPI** | **Kappang** | **10.02** | **229** | P | **Pn** | **12 29 34.8** | **+2.2** |
| **SOEI** | **Soe** | **11.69** | **195** | Pn | **Pn** | **12 29 54.5** | **-0.5** |
| **DRS** | **Darwin Rock St** | **14.39** | **166** | P | **Pn** | **12 30 29.8** | **0.0** |
| **MTN** | **Manton Dam** | **14.85** | **165** | Pn | **Pn** | **12 30 34.4** | **-1.1** |
| **KDU** | **Kakadu** | **15.09** | **160** | P | **P** | **12 30 42.0** | **+1.2** |
| **KNRA** | **Kununurra** | **17.23** | **175** | | **Pn** | **12 31 04.9** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 12 31 17.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **17.23** | **175** | P | **Pn** | **12 31 04.8** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **19.65** | **185** | P | **P** | **12 31 30.2** | **-0.6** |
| | comp=Z,0.4nm,0.3s,baz=21,slow=11,SNR=13 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.65** | **185** | P | **P** | **12 31 31.1** | **+0.3** |
| **COEN** | **Coen** | **22.05** | **135** | | **P** | **12 31 55.3** | **-1.2** |
| COEN | | | | IAmb | IAmb | 12 32 19.8 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **COEN** | **Coen** | **22.05** | **135** | P | **P** | **12 31 56.9** | **+0.4** |
| **WB0** | **Warramunga Arr** | **22.35** | **162** | P | **P** | **12 31 58.9** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 12 31 59.6 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.49** | **162** | P | **P** | **12 32 00.5** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 12 32 01.1 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.50** | **163** | P | **P** | **12 32 00.5** | **-0.5** |
| | comp=Z,9.4nm,0.4s,baz=343,slow=12,SNR=63 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.50** | **163** | P | **P** | **12 32 00.0** | **-1.0** |
| **WB2** | **Warramunga Arr** | **22.50** | **162** | P | **P** | **12 32 00.3** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 12 32 01.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **TPUB** | **Ta-pu** | **22.52** | **344** | P | **P** | **12 32 01.3** | **+0.1** |
| **WR0** | **Warramunga Arr** | **22.57** | **162** | P | **P** | **12 32 01.4** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 12 32 01.6 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **QIS** | **Mount Isa** | **25.10** | **152** | P | **P** | **12 32 25.5** | **+0.5** |
| **AS31** | **Alice Springs** | **25.92** | **166** | P | **P** | **12 32 31.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **25.92** | **166** | P | **P** | **12 32 31.7** | **-0.7** |
| | comp=Z,1.5nm,0.4s,baz=343,slow=7.8,SNR=64 | | | | | | |
| **ASAR** | **Alice Springs** | **25.92** | **166** | P | **P** | **12 32 31.6** | **-0.8** |
| **WRKA** | **Warakurna** | **26.50** | **178** | P | **P** | **12 32 37.6** | **0.0** |
| **FORT** | **Forrest** | **32.21** | **179** | P | **P** | **12 33 27.6** | **-0.4** |
| **BBOO** | **Buckleboo** | **35.21** | **167** | P | **P** | **12 33 53.8** | **-0.2** |
| **STKA** | **Stephens Creek** | **35.95** | **159** | P | **P** | **12 34 00.4** | **+0.1** |
| | comp=Z,10nm,0.6s,baz=339,slow=8.4,SNR=29 | | | | | | |
| **STKA** | **Stephens Creek** | **35.95** | **159** | P | **P** | **12 34 00.4** | **+0.1** |
| STKA | | | | IAmb | IAmb | 12 34 01.6 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **39.38** | **146** | P | **P** | **12 34 30.5** | **+1.1** |
| **MK31** | **Makanchi Array** | **59.63** | **326** | P | **P** | **12 37 02.1** | **-0.4** |
| **MKAR** | **Makanchi Array** | **59.63** | **326** | P | **P** | **12 37 02.5** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=119,slow=7.9,SNR=21 | | | | | | |
| **KURK** | **Kurchatov** | **63.84** | **328** | P | **P** | **12 37 30.6** | **0.0** |
| KURK | | | | IAmb | IAmb | 12 37 34.0 | |
| | comp=Z,3.7nm,0.9s | | | | | | |

**TAP 26 12:31:57.9**, **24.°62N**×**121.°89E**, **h56**km±1km, **ML2.0, C,**
**Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWC** | **Suao** | **0.04** | **253** | *e*P | **Pn** | **12 32 06.9** | **+0.6** |
| | baz=244 | | | | | | |
| TWC | | | | *e*S | Sn | **12 32 13.8** | **+1.4** |
| | baz=244 | | | | | | |
| **TWE** | **Neicheng** | **0.23** | **296** | P | **Pn** | **12 32 08.0** | **+0.9** |
| | baz=296 | | | | | | |
| **ENTT** | **Nioudou** | **0.30** | **274** | P | **Pn** | **12 32 08.5** | **+0.8** |
| | baz=278 | | | | | | |
| ENTT | | | | *e*S | Sn | **12 32 16.5** | **+1.9** |
| | baz=278 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.31** | **296** | P | **Pn** | **12 32 08.4** | **+0.6** |
| | baz=296 | | | | | | |
| **LATG** | **Datong** | **0.35** | **256** | *i* P | **Pn** | **12 32 08.9** | **+0.7** |
| | baz=251 | | | | | | |
| LATG | | | | S | Sn | **12 32 17.0** | **+1.4** |
| | baz=251 | | | | | | |
| **TIPB** | **Shuangxi** | **0.35** | **350** | *e*P | **Pn** | **12 32 08.3** | **+0.2** |
| | baz=340 | | | | | | |
| TIPB | | | | *e*S | Sn | **12 32 16.0** | **+0.5** |
| | baz=340 | | | | | | |
| **YHNB** | **Yeheng** | **0.47** | **276** | *i* P | **Pn** | **12 32 09.9** | **+0.5** |
| | baz=270 | | | | | | |
| YHNB | | | | S | Sn | **12 32 18.5** | **+0.9** |
| | baz=270 | | | | | | |
| **YHNB** | **Yeheng** | **0.47** | **276** | P | **Pn** | **12 32 10.0** | **+0.6** |
| **NSK** | **Sanguang** | **0.49** | **276** | P | **Pn** | **12 32 10.0** | **+0.5** |
| | baz=276 | | | | | | |
| NSK | | | | *e*S | Sn | **12 32 18.7** | **+0.7** |
| | baz=276 | | | | | | |
| **NNSB** | **Datong** | **0.50** | **248** | P | **Pn** | **12 32 10.7** | **+1.0** |
| | baz=242 | | | | | | |
| NNSB | | | | *e*S | Sn | **12 32 19.4** | **+1.1** |
| | baz=242 | | | | | | |
| **NNS** | **Nan Shan** | **0.51** | **249** | *e*P | **Pn** | **12 32 10.7** | **+0.9** |
| | baz=243 | | | | | | |
| NNS | | | | *e*S | Sn | **12 32 19.6** | **+1.2** |
| | baz=243 | | | | | | |
| **NACB** | **Ninganchiao** | **0.52** | **212** | *e*P | **Pn** | **12 32 11.1** | **+1.2** |
| | baz=211 | | | | | | |
| **LIOB** | **Emei** | **0.80** | **272** | *e*P | **Pn** | **12 32 14.3** | **+1.1** |
| | baz=271 | | | | | | |
| LIOB | | | | *e*S | Sn | **12 32 25.9** | **+1.4** |
| | baz=271 | | | | | | |
| **CHGB** | **Renai** | **0.86** | **230** | *e*P | **Pn** | **12 32 15.1** | **+0.9** |
| | baz=224 | | | | | | |
| **WUSB** | **Renai** | **0.95** | **229** | *e*P | **Pn** | **12 32 16.1** | **+0.8** |
| | baz=228 | | | | | | |
| **SSLB** | **Suanglung** | **1.20** | **226** | *e*P | **Pn** | **12 32 20.3** | **+1.9** |
| | baz=225 | | | | | | |

*IDC **26** 12:42:41.1±0.9, 6.°95N×73.°14W, h161km±21km, mb3.0/1,*
*mb1 3.3/3, mb1mx3.0/30, mbtmp3.6/3, Error ellipse:*
*s-maj=65.9km s-min=8.1km az=132.0*
*RSNC **26** 12:42:41.5±1.1, 6.°84N×73.°15W, h150km±5km, ML3.2,*
*Mw3.6*

**ISC 26 12:42:40.1**±1.0, **6.°85N**±0.°03×**73.°13W**±0.°04, **h159**km±7km,
**n31,** σ1§**51**/60, **1C-3D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.26** | **191** | ⇓*i*P | **Pn** | **12 43 01.9** | **-0.1** |
| BARC | | | | *e*S | **Sn** | **12 43 17.3** | **-1.3** |
| BARC | | | | *i* | | 12 43 19.4 | |
| | comp=Z,338nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.65** | **41** | ⇑*e*P | **Pn** | **12 43 04.7** | **+0.9** |
| PAMC | | | | *e*S | **Sn** | **12 43 22.1** | **+0.1** |
| PAMC | | | | *i* | | 12 43 24.2 | |
| | comp=Z,338nm,0.6s | | | | | | |
| **RUSC** | **La Rusia** | **0.95** | **177** | ⇓*i*P | **Pn** | **12 43 05.7** | **-0.3** |
| RUSC | | | | *e*S | **Sn** | **12 43 24.4** | **-1.3** |
| RUSC | | | | *i* | | 12 43 26.1 | |
| | comp=Z,108nm,0.2s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.35** | **257** | *e*P | **Pn** | **12 43 08.5** | **-0.4** |
| PTBC | | | | *e*S | **Sn** | **12 43 30.2** | **-0.8** |
| PTBC | | | | *i* | | 12 43 37.2 | |
| | comp=Z,321nm,0.3s | | | | | | |
| **OCAC** | **Ocana** | **1.39** | **352** | *e*P | **Pn** | **12 43 09.9** | **+0.5** |
| OCAC | | | | *e*S | **Sn** | **12 43 32.5** | **+0.5** |
| OCAC | | | | *i* | | 12 43 37.8 | |
| | comp=Z,481nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.39** | **107** | ⇓*i*P | **Pn** | **12 43 10.0** | **+0.7** |
| TAMC | | | | *i* | | 12 43 30.9 | |
| | comp=Z,69nm,0.4s | | | | | | |
| TAMC | | | | *e*S | **Sn** | **12 43 31.5** | **-0.2** |
| **SPBC** | **San Pablo de B** | **1.52** | **218** | *e*P | **Pn** | **12 43 10.7** | **0.0** |
| SPBC | | | | *e*S | **Sn** | **12 43 33.3** | **-0.8** |
| SPBC | | | | *i* | | 12 43 40.0 | |
| | comp=Z,316nm,0.3s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **290** | *e*P | **Pn** | **12 43 14.5** | **+0.6** |
| ZARC | | | | *e*S | **Sn** | **12 43 40.0** | **+0.2** |
| ZARC | | | | *i* | | 12 43 45.8 | |
| | comp=Z,191nm,0.5s | | | | | | |
| **NORC** | **Norcasia** | **2.15** | **234** | *e*P | **Pn** | **12 43 17.7** | **+0.1** |
| NORC | | | | *e*S | **Sn** | **12 43 45.0** | **-1.5** |
| NORC | | | | *i* | | 12 43 50.5 | |
| | comp=Z,113nm,0.2s | | | | | | |
| **CHIC** | **Chingaza** | **2.29** | **195** | *e*P | **Pn** | **12 43 19.5** | **0.0** |
| C

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,31nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **251** | *e*P | | **Pn** | **12 43 29.5** | **+1.1** |
| CBOC | | | | *e*S | | **Sn** | **12 44 04.1** | **-1.6** |
| CBOC | | | | *i* | | | 12 44 22.2 | |
| | comp=Z,32nm,0.6s | | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.16** | **307** | *e*P | | **Pn** | **12 43 29.1** | **-0.8** |
| MOTC | | | | *e*S | | **Sn** | **12 44 08.1** | **-0.3** |
| MOTC | | | | *i* | | | 12 44 09.9 | |
| | comp=Z,48nm,0.7s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.19** | **51** | P | | **Pn** | **12 43 31.7** | **+1.3** |
| | comp=Z,3.2nm,0.3s,baz=245,slow=4.5,SNR=9.5 | | | | | | | | |
| SDV | | | | S | | **Sn** | **12 44 09.7** | **+0.1** |
| | comp=Z,2.8nm,0.3s,baz=247,slow=18,SNR=13 | | | | | | | | |
| **ANIL** | **Santa Ana** | **3.26** | **224** | *e*P | | **Pn** | **12 43 32.7** | **+1.3** |
| ANIL | | | | *e*S | | **Sn** | **12 44 10.0** | **-1.2** |
| ANIL | | | | *i* | | | 12 44 18.0 | |
| | comp=Z,144nm,0.4s | | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.60** | **216** | *e*P | | **Pn** | **12 43 36.8** | **+1.2** |
| ORTC | | | | *e*S | | **Sn** | **12 44 19.2** | **+0.5** |
| ORTC | | | | *i* | | | 12 44 25.5 | |
| | comp=Z,46nm,0.4s | | | | | | | | |
| **CVALL** | **Valledupar, Ce** | **3.63** | **358** | *e*P | | **Pn** | **12 43 36.0** | **+0.1** |
| CVALL | | | | *e*S | | **Sn** | **12 44 19.2** | **-0.2** |
| **SJCC** | **San Jacinto, C** | **3.64** | **326** | *e*P | | **Pn** | **12 43 35.9** | **-0.2** |
| SJCC | | | | *e*S | | **Sn** | **12 44 17.4** | **-2.2** |
| SJCC | | | | *i* | | | 12 44 21.9 | |
| | comp=Z,39nm,0.5s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.68** | **238** | *e*P | | **Pn** | **12 43 37.5** | **+0.9** |
| PLMC | | | | *e*S | | **Sn** | **12 44 17.7** | **-2.8** |
| PLMC | | | | *i* | | | 12 44 27.7 | |
| | comp=Z,20nm,0.3s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.15** | **3** | *e*P | | **Pn** | **12 43 42.0** | **-0.7** |
| CRJC | | | | *e*S | | **Sn** | **12 44 28.4** | **-3.0** |
| CRJC | | | | *i* | | | 12 44 35.5 | |
| | comp=Z,38nm,0.3s | | | | | | | | |
| **SMRC** | **Santa Marta, M** | **4.42** | **346** | *e*P | | **Pn** | **12 43 47.0** | **+1.0** |
| SMRC | | | | *e*S | | **Sn** | **12 44 34.6** | **-3.0** |
| SMRC | | | | *i* | | | 12 44 37.7 | |
| | comp=Z,21nm,0.3s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.23** | **340** | P | | **P** | **12 52 51.8** | **+0.5** |
| | comp=Z,0.3nm,0.5s,baz=131,slow=6.6,SNR=6.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | | **PKPbc** | **13 02 10.1** | **-0.5** |
| | comp=Z,0.5nm,1.0s,baz=111,slow=4.0,SNR=2.4 | | | | | | | | |

*SOME **26** 13:02:16.1,40˚.80N×70˚.15E,h15km*
*NNC **26** 13:02:16.8±1.5,40˚.87N×70˚.22E,h0km,mb3.1,mpv2.9, Error ellipse: s-maj=10.6km s-min=5.2km az=26.0*
*KRNET **26** 13:02:23.1±0.1,40˚.95N×70˚.32E,mb2.5*

**ISC 26 13:02:18.8±1.9,41˚.01N±0˚.06×70˚.23E±0˚.05,h7km±11km, n22,σ2§02/37,20C-4D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRKS** | **Terek-Say** | **0.86** | **53** | ⇑*i*P | **Pg** | **13 02 33.7** | **-1.6** |
| | baz=76 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **13 02 47.2** | **+0.8** |
| | baz=76 | | | | | | |
| **TRKS** | **Terek-Say** | **0.86** | **53** | ⇑*i*P | **Pn** | **13 02 39.1** | **+1.6** |
| | baz=51 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sn** | **13 02 50.9** | **+0.5** |
| | baz=51 | | | | | | |
| **BTK** | **Batken** | **1.05** | **155** | ⇑*i*P | **Pn** | **13 02 40.6** | **+0.5** |
| | baz=49 | | | | | | |
| BTK | | | | ⇑*i*S | Sn | 13 02 59.2 | +4.1 |
| | baz=49 | | | | | | |
| **IUG** | **Iuzhnay** | **1.14** | **352** | *e*P | **Pg** | **13 02 42.4** | **+1.6** |
| | 100nm,0.4s | | | | | | |
| IUG | | | | *e*S | **Sn** | **13 03 00.6** | **+3.3** |
| | 79nm,0.8s | | | | | | |
| **IUG** | **Iuzhnay** | **1.14** | **352** | P | **Pn** | **13 02 41.1** | **-0.2** |
| | 70nm,0.4s | | | | | | |
| IUG | | | | S | **Sn** | **13 02 59.6** | **+2.3** |
| | 79nm,0.6s | | | | | | |
| **ARK** | **Arkit** | **1.52** | **58** | ⇑*i*P | **Pn** | **13 02 45.7** | **-0.8** |
| | baz=69 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **13 03 07.8** | **+0.9** |
| | baz=69 | | | | | | |
| **BRLS** | **Borolday** | **2.04** | **352** | *e*P | **Pn** | **13 02 51.5** | **-2.1** |
| | 2.1nm,0.2s | | | | | | |
| BRLS | | | | *e*S | **Sn** | **13 03 16.8** | **-2.5** |
| | 6.6nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **2.04** | **352** | P | **Pn** | **13 02 51.4** | **-2.1** |
| | 2.7nm,0.3s | | | | | | |
| BRLS | | | | S | **Sn** | **13 03 16.7** | **-2.6** |
| | 5.5nm,0.5s | | | | | | |
| **KK02** | **Karatay Array** | **2.10** | **6** | ⇑Pg | **Pb** | **13 02 57.1** | **-0.1** |
| | 2.1nm,0.3s,baz=184,slow=14 | | | | | | |
| KK02 | | | | ⇓Lg | Lg | 13 03 28.5 | |
| | 5.8nm,0.7s,baz=186,slow=25 | | | | | | |
| **MNAS** | **Manas** | **2.25** | **48** | ⇑*i*P | **Pn** | **13 02 56.3** | **-0.3** |
| | baz=56 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sn** | **13 03 26.0** | **+1.3** |
| | baz=56 | | | | | | |
| **MNAS** | **Manas** | **2.25** | **48** | ⇑*e*P | **Pg** | **13 03 04.0** | **+2.1** |
| | baz=46 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **13 03 33.6** | **+2.6** |
| | baz=46 | | | | | | |
| **MRKS** | **Merke** | **2.83** | **51** | *e*P | **Pb** | **13 03 11.0** | **+1.3** |
| | 2.6nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **13 03 50.4** | **+0.8** |
| | 4.8nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **2.83** | **51** | Pg | **Pb** | **13 03 10.5** | **+0.8** |
| | 2.6nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 13 03 49.0 | |
| | 4.8nm,0.4s | | | | | | |
| **ARLS** | **Aral** | **3.19** | **73** | ⇑*i*P | **Pn** | **13 03 10.6** | **+1.1** |
| | baz=78 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **13 03 51.1** | **-3.9** |
| | baz=78 | | | | | | |
| **UCH** | **Uchtor** | **3.43** | **68** | ⇓*i*P | **Pn** | **13 03 13.6** | **+0.5** |
| | baz=72 | | | | | | |
| UCH | | | | ⇓*i*S | **Sn** | **13 03 55.5** | **+1.2** |
| | baz=72 | | | | | | |
| **UCH** | **Uchtor** | **3.43** | **68** | ⇑*i*P | **Pb** | **13 03 19.9** | **-0.3** |
| | baz=67 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **13 04 01.2** | **-1.0** |
| | baz=67 | | | | | | |
| **AAK** | **Ala-Archa** | **3.58** | **62** | ⇑Pg | **Pg** | **13 03 24.3** | **-2.9** |
| | 0.8nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 13 04 12.7 | |
| | 2.5nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.43** | **63** | ⇑Pg | **Pb** | **13 03 38.1** | **+1.1** |
| | 0.1nm,0.2s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 13 04 39.2 | |
| | 2.7nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.68** | **60** | *e*P | **Pg** | **13 03 46.5** | **-1.9** |
| | 0.8nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **13 04 50.5** | **+1.4** |
| | 1.9nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.68** | **60** | Pg | **Pg** | **13 03 45.4** | **-3.0** |
| | 0.7nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 13 04 48.9 | |
| | 1.9nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.84** | **55** | *e*P | **Pb** | **13 03 46.7** | **+2.7** |
| | 1.6nm,0.5s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **13 04 50.8** | **-3.5** |
| | 1.2nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **4.84** | **55** | Pg | **Pb** | **13 03 46.7** | **+2.7** |
| | 1.6nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 13 04 50.8 | |
| | 1.2nm,0.8s | | | | | | |

*ARE **26** 13:09:52±2.3,4˚.9S±0˚.1×81˚.0W±0˚.1,h47km±5km, Error ellipse: s-maj=17.4km s-min=11.0km az=225.0*
*IDC **26** 13:09:54.0±1.1,4˚.82S×80˚.90W,h35km±6km,mb3.7/8, mb1 4.0/9,mb1mx3.8/40,mbtmp3.9/9,ML4.2/1,MS3.4/8, Ms1 3.4/8,ms1mx3.1/64,Error ellipse: s-maj=39.2km s-min=17.3km az=40.0*
*NEIC **26** 13:09:57.1±1.8,4˚.7S±0˚.1×80˚.7W±0˚.1,h50km±7km, mb4.5/33,ML4.3(ARE),Error ellipse: s-maj=18.0km s-min=11.2km az=45.0*

**ISC 26 13:09:54.6±0.5,4.7S±0˚.1×80.8W±0˚.1,h35km,n65, σ1§20/59,mb4.4/23,MS3.3/6,Peru-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **3.38** | **136** | Pn | **Pn** | **13 10 46.4** | **+1.1** |
| | 25nm,0.3s,baz=343,slow=6.9,SNR=126 | | | | | | |
| ATAH | | | | Lg | Lg | 13 11 38.7 | |
| | 41nm,0.3s,baz=122,slow=24,SNR=6.0 | | | | | | |
| ATAH | | | | LR | LR | 13 12 11.0 | |
| | comp=Z,477nm,18.9s,baz=298,slow=40 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NNA** | **Nana** | **8.21** | **152** | Pn | | **Pn** | **13 11 52.9** | **+1.5** |
| **PAYG** | **Puerto Ayora** | **10.31** | **293** | Pn | | **Pn** | **13 12 22.1** | **+1.8** |
| **ROSC** | **El Rosal** | **11.46** | **34** | LR | | LR | 13 17 43.0 | |
| | comp=Z,207nm,20.0s,baz=163,slow=40 | | | | | | | | |
| **PB11** | **IPOC Station P** | **18.47** | **145** | P | | **Pn** | **13 14 08.9** | **+0.8** |
| **PTGA** | **Pitinga** | **21.14** | **80** | P | | **P** | **13 14 37.1** | **+0.3** |
| | 5.4nm,0.6s,baz=262,slow=12,SNR=16 | | | | | | | | |
| PTGA | | | | LR | | LR | 13 24 02.7 | | |
| | comp=Z,92nm,18.1s,baz=267,slow=40 | | | | | | | | |
| **LVC** | **Limon Verde** | **21.18** | **148** | P | | **P** | **13 14 38.6** | **+1.2** |
| **SIV** | **San Ignacio** | **22.36** | **122** | P | | **P** | **13 14 49.6** | **-0.3** |
| | 2.4nm,0.5s,baz=305,slow=12,SNR=13 | | | | | | | | |
| **CMIG** | **Matias Romero** | **25.76** | **328** | LR | | LR | 13 23 16.6 | | |
| | comp=Z,76nm,21.3s,baz=272,slow=31 | | | | | | | | |
| **SJG** | **San Juan** | **26.86** | **32** | LR | | LR | 13 27 54.3 | | |
| | comp=Z,43nm,19.0s,baz=307,slow=40 | | | | | | | | |
| **MDP** | **Montagnes des** | **29.73** | **71** | LR | | LR | 13 28 43.5 | | |
| | comp=Z,93nm,18.8s,baz=212,slow=38 | | | | | | | | |
| **ITQB** | **Itaqui** | **33.73** | **140** | P | | **P** | **13 16 34.2** | **+1.3** |
| **RPN** | **Rapa Nui** | **35.21** | **228** | LR | | LR | 13 27 47.1 | | |
| | comp=Z,58nm,20.6s,baz=24,slow=31 | | | | | | | | |
| **U40A** | **Yellville** | **42.38** | **345** | P | | **P** | **13 17 47.1** | **+1.4** |
| U40A | | | | IAmb | | IAmb | 13 17 59.9 | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **FNO** | **Franklin** | **42.71** | **340** | P | | **P** | **13 17 49.2** | **+0.8** |
| **U38A** | **Gravette** | **42.87** | **344** | P | | **P** | **13 17 49.5** | **-0.1** |
| U38A | | | | IAmb | | IAmb | 13 17 50.3 | | |
| | comp=Z,6.3nm,0.5s | | | | | | | | |
| **S39A** | **Bolivar** | **43.77** | **346** | P | | **P** | **13 17 57.9** | **+1.0** |
| S39A | | | | IAmb | | IAmb | 13 18 10.6 | | |
| | comp=Z,8.6nm,1.0s | | | | | | | | |
| **RCBR** | **Riachuelo** | **44.68** | **94** | LR | | LR | 13 39 03.6 | | |
| | comp=Z,62nm,19.4s,baz=52,slow=39 | | | | | | | | |
| **ANMO** | **Albuquerque** | **46.26** | **330** | P | | **P** | **13 18 18.4** | **+1.5** |
| ANMO | | | | IAmb | | IAmb | 13 18 19.0 | | |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **48.09** | **334** | P | | **P** | **13 18 31.8** | **+0.5** |
| SDCO | | | | IAmb | | IAmb | 13 18 32.9 | | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **Y14A** | **Wickenburg** | **49.03** | **324** | P | | **P** | **13 18 39.8** | **+1.5** |
| **PV13** | **Radium Mtn., P** | **49.96** | **331** | P | | **P** | **13 18 46.7** | **+1.1** |
| PV13 | | | | IAmb | | IAmb | 13 18 47.4 | | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **W13A** | **Hualapai Mount** | **50.37** | **324** | P | | **P** | **13 18 49.2** | **+0.5** |
| **SRU** | **San Rafael Swe** | **51.54** | **330** | P | | **P** | **13 18 57.6** | **+0.2** |
| **CCUT** | **Cedar City** | **51.83** | **327** | P | | **P** | **13 19 01.4** | **+1.7** |
| CCUT | | | | IAmb | | IAmb | 13 19 02.2 | | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **53.97** | **332** | P | | **P** | **13 19 15.4** | **+0.1** |
| **PD31** | **Pinedale Array** | **53.98** | **334** | P | | **P** | **13 19 15.2** | **-0.1** |
| **PDAR** | **Pinedale Array** | **53.98** | **334** | P | | **P** | **13 19 15.3** | **-0.1** |
| | comp=Z,1.0nm,0.8s,baz=130,slow=9.8,SNR=11 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **53.98** | **334** | P | | **P** | **13 19 15.6** | **+0.2** |
| **REDW** | **Red Top Meadow** | **55.02** | **333** | P | | **P** | **13 19 24.1** | **+1.1** |
| REDW | | | | IAmb | | IAmb | 13 19 25.2 | | |
| | comp=Z,5.6nm,1.1s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.23** | **324** | P | | **P** | **13 19 25.2** | **+0.6** |
| | comp=Z,1.4nm,0.6s,baz=127,slow=7.3,SNR=18 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.23** | **324** | P | | **P** | **13 19 25.1** | **+0.5** |
| **HLID** | **Hailey** | **56.82** | **331** | P | | **P** | **13 19 37.0** | **+1.2** |
| HLID | | | | IAmb | | IAmb | 13 19 37.6 | | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **BCYI** | **Bear Canyon** | **56.92** | **332** | P | | **P** | **13 19 37.2** | **+0.7** |
| **MFID** | **Camas Ranch** | **57.40** | **330** | P | | **P** | **13 19 41.1** | **+1.2** |
| MFID | | | | IAmb | | IAmb | 13 19 41.7 | | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **58.15** | **328** | P | | **P** | **13 19 45.6** | **+0.5** |
| **MOD** | **Modoc Plateau** | **58.69** | **326** | P | | **P** | **13 19 49.6** | **+0.6** |
| **G08A** | **Pilot Rock** | **60.31** | **330** | P | | **P** | **13 20 01.0** | **+1.0** |
| G08A | | | | IAmb | | IAmb | 13 20 01.6 | | |
| | comp=Z,5.2nm,0.9s | | | | | | | | |
| **HUMO** | **Hull Mountain** | **60.64** | **325** | P | | **P** | **13 20 03.2** | **+0.9** |
| HUMO | | | | IAmb | | IAmb | 13 20 28.3 | | |
| | comp=Z,3.5nm,1.1s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **71.81** | **344** | P | | **P** | **13 21 12.3** | **-1.0** |
| | comp=Z,0.6nm,0.9s,baz=137,slow=5.4,SNR=7.2 | | | | | | | | |
| YKA | | | | pP | | **pP** | **13 21 24.3** | **0.0** |
| | comp=Z,0.4nm,0.8s,baz=138,slow=5.6,SNR=4.1 | | | | | | | | |
| **DLBC** | **Dease Lake** | **74.16** | **336** | P | | **P** | **13 21 27.7** | **+0.2** |
| DLBC | | | | IAmb | | IAmb | 13 21 29.2 | | |
| | comp=Z,8.8nm,1.3s | | | | | | | | |
| **INK** | **Inuvik** | **81.45** | **343** | P | | **P** | **13 22 07.3** | **-0.4** |
| | comp=Z,2.4nm,1.1s,baz=71,slow=1.1,SNR=4.1 | | | | | | | | |
| **INK** | **Inuvik** | **81.45** | **343** | P | | **P** | **13 22 07.5** | **-0.2** |
| INK | | | | IAmb | | IAmb | 13 22 11.5 | | |
| | comp=Z,7.6nm,1.4s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **81.52** | **336** | P | | **P** | **13 22 08.6** | **+0.3** |
| **A36M** | **Sachs Harbour** | **81.73** | **347** | P | | **P** | **13 22 08.3** | **-0.8** |
| A36M | | | | IAmb | | IAmb | 13 22 09.1 | | |
| | comp=Z,6.7nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **81.77** | **162** | P | | **P** | **13 22 06.7** | **-2.8** |
| **EGAK** | **Eagle** | **82.10** | **338** | P | | **P** | **13 22 11.4** | **+0.2** |
| EGAK | | | | IAmb | | IAmb | 13 22 37.7 | | |
| | comp=Z,7.5nm,1.4s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.74** | **76** | P | | **P** | **13 22 22.4** | **+1.6** |
| | comp=Z,0.5nm,0.7s,baz=285,slow=5.9,SNR=3.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.74** | **76** | P | | **P** | **13 22 21.8** | **+0.9** |
| **ILAR** | **Eielson Array** | **84.30** | **337** | P | | **P** | **13 22 21.6** | **-1.0** |
| | comp=Z,0.3nm,0.9s,baz=161,slow=3.9,SNR=4.8 | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.30** | **337** | P | | **P** | **13 22 22.1** | **-0.5** |
| **BMAR** | **Burnt Mountain** | **84.57** | **340** | P | | **P** | **13 22 24.3** | **+0.3** |
| **QSPA** | **South Pole Qui** | **85.38** | **180** | P | | **P** | **13 22 26.2** | **-2.0** |
| **IMAR** | **Indian Mountai** | **87.42** | **337** | P | | **P** | **13 22 37.8** | **-0.2** |
| **VNDA** | **Vanda** | **91.16** | **191** | P | | **P** | **13 22 57.3** | **+1.8** |
| **BRG** | **Berggiesshubel** | **96.59** | **39** | *ex* | | | **13 23 20.0** | **-0.9** |
| BRG | | | | Amp | | | 13 23 21.5 | | |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **12.83** | **288** | T | | T | 15 30 35.9 | | |
| | baz=85,slow=75,SNR=7.5 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **12.84** | **288** | T | | T | 15 30 31.8 | | |
| | baz=85,slow=75,SNR=7.8 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **12.85** | **288** | T | | T | 15 30 28.1 | | |
| | baz=85,slow=75,SNR=3.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **129.51** | **11** | PKP | | **PKPdf** | **13 28 58.5** | **-1.2** |
| | comp=Z,0.8nm,0.5s,baz=329,slow=1.7,SNR=5.3 | | | | | | | | |
| ZALV | | | | pPKP | | **pPKPdf** | **13 29 10.3** | **-1.0** |
| | comp=Z,2.8nm,0.9s,baz=270,slow=3.0,SNR=4.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **135.58** | **17** | PKP | | **PKPdf** | **13 29 09.3** | **-2.2** |
| | comp=Z,0.6nm,0.9s,baz=336,slow=3.1,SNR=4.2 | | | | | | | | |
| MKAR | | | | pPKP | | **pPKPdf** | **13 29 21.6** | **-1.3** |
| | comp=Z,0.7nm,0.8s,baz=360,slow=1.7,SNR=6.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **135.58** | **17** | | | **PKPdf** | **13 29 10.0** | **-1.4** |
| **ASAR** | **Alice Springs** | **135.98** | **229** | PKP | | **PKPdf** | **13 29 10.2** | **-2.6** |
| | comp=Z,0.9nm,0.8s,baz=117,slow=3.2,SNR=7.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **135.98** | **229** | | | **PKPdf** | **13 29 11.0** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **145.48** | **228** | PKPbc | | **PKPbc** | **13 29 27.9** | **-2.1** |
| | comp=Z,13nm,0.8s,baz=131,slow=3.1,SNR=26 | | | | | | | | |

*NIED **26** 13:16:30.7,40˚.02N×144˚.59E,h41km,MW3.6,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-2.17; Mθθ0.10; Mϕϕ2.07; Mrθ-0.06; Mθϕ-0.08; Mϕr1.28; Fault plane solution: M0.2.48000×10¹⁴ NP1: ϕs178.00000°,δ61.00000°,λ-90.00000°. NP2: ϕs358.00000°,δ29.00000°,λ-90.00000°.*

**JMA 26 13:16:30.7±0.2,40.02N×144.59E,h41km,M3.5,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTH** | **Tanohata** | **2.10** | **269** | P | Pn | 13 17 04.2 | +0.9 |
| JTH | | | | *e*S | Sn | 13 17 29.2 | +1.1 |
| **MIYJ** | **Miyakonagasawa** | **2.18** | **259** | P | Pn | 13 17 05.6 | +1.2 |
| MIYJ | | | | *e*S | Sn | 13 17 31.5 | +1.3 |
| **JKEN** | **Kujiedanarisaw** | **2.22** | **276** | P | Pn | 13 17 06.0 | +1.1 |
| JKEN | | | | *e*S | Sn | 13 17 32.0 | +0.9 |
| **JEM** | **Erimo** | **2.27** | **332** | *e*S | Sn | 13 17 34.5 | +2.1 |
| **JANG** | **Nango** | **2.38** | **280** | P | Pn | 13 17 08.5 | +1.3 |
| JANG | | | | *e*S | Sn | 13 17 36.3 | +1.1 |
| **JOM** | **Ohasama** | **2.60** | **259** | P | Pn | 13 17 12.1 | +1.9 |
| JOM | | | | *e*S | Sn | 13 17 42.9 | +2.3 |
| **JNBK** | **Urakawa-nobuka** | **2.65** | **329** | P | Pn | 13 17 13.1 | +2.2 |
| JNBK | | | | *e*S | Sn | 13 17 44.4 | +2.6 |
| **JCH** | **Churui** | **2.75** | **341** | P | Pn | 13 17 13.3 | +1.0 |
| JCH | | | | *e*S | Sn | 13 17 45.4 | +1.1 |
| **JMK** | **Ichinoseki** | **2.82** | **249** | P | Pn | 13 17 14.6 | +1.4 |
| JMK | | | | *e*S | Sn | 13 17 46.9 | +1.0 |
| **JAK** | **Akkeshi** | **2.98** | **2** | P | Pn | 13 17 14.9 | -0.4 |
| JAK | | | | *e*S | Sn | 13 17 50.2 | +0.4 |
| **JOT** | **Ohata** | **3.02** | **298** | P | Pn | 13 17 18.3 | +2.4 |
| JOT | | | | *e*S | Sn | 13 17 53.2 | +2.4 |
| **JKB** | **Kayabe** | **3.28** | **306** | P | Pn | 13 17 21.9 | +2.4 |
| **JAR** | **Ashorobuto** | **3.33** | **350** | P | Pn | 13 17 20.5 | +0.2 |
| JAR | | | | *e*S | Sn | 13 17 58.5 | -0.1 |
| **NEM2** | **Nemuro 2** | **3.45** | **14** | P | Pn | 13 17 20.6 | -1.3 |
| NEM2 | | | | *e*S | Sn | 13 17 58.6 | -2.9 |
| **JYK** | **Kaneyama** | **3.46** | **253** | P | Pn | 13 17 24.2 | +2.2 |
| JYK | | | | *e*S | Sn | 13 18 03.9 | +2.3 |
| **JFR** | **Furan** | **3.48** | **335** | P | Pn | 13 17 24.5 | +2.2 |
| JFR | | | | *e*S | Sn | 13 18 04.4 | +2.2 |
| **JEW** | **Eniwo** | **3.68** | **321** | *e*S | Sn | 13 18 10.7 | +3.6 |
| **JTKR** | **Abashiri--Toko** | **3.98** | **353** | P | Pn | 13 17 30.1 | +0.9 |
| JTKR | | | | *e*S | Sn | 13 18 15.2 | +0.7 |

*IDC **26** 13:20:30.5±2.9,31˚.59S×178˚.13W,h0km,mb4.4/2, mb1 4.5/4,mb1mx4.0/30,mbtmp4.3/4,ML3.8/2,Error ellipse: s-maj=68.5km s-min=26.2km az=115.0*
*NEIC **26** 13:20:36.9±0.7,31˚.35S±0˚.08×178˚.2W±0˚.1,h36km±8km, mb4.7/15,Error ellipse: s-maj=18.1km s-min=10.7km az=99.0*

**ISC 26 13:20:37.0±0.8,31˚.37S±0˚.08×178˚.4W±0˚.2,h35km,n25, σ1§14/23,mb4.6/11,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.15** | **11** | Pn | **Pn** | **13 21 11.4** | **+1.1** |
| | 122nm,0.3s,baz=77,slow=20,SNR=2.1 | | | | | | |
| RAO | | | | Sn | **Sn** | **13 21 35.9** | **+0.2** |
| | 154nm,0.3s,baz=98,slow=23,SNR=5.9 | | | | | | |
| **RAO** | **Raoul Island** | **2.15** | **11** | | **Pn** | **13 21 09.5** | **-0.8** |
| **URZ** | **Urewera** | **7.81** | **207** | Pn | Pn | 13 22 24.4 | -3.7 |
| | 0.3nm,0.3s,baz=277,slow=4.6,SNR=9.1 | | | | | | |
| URZ | | | | Sn | **Sn** | **13 23 52.3** | **-2.9** |
| | 4.5nm,0.3s,baz=82,slow=23,SNR=14 | | | | | | |
| **URZ** | **Urewera** | **7.81** | **207** | | **Pn** | **13 22 28.8** | **+0.7** |
| **ARMA** | **Armidale** | **25.73** | **264** | P | **P** | **13 26 05.3** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 13 26 20.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **COEN** | **Coen** | **39.24** | **287** | P | **P** | **13 28 02.2** | **-0.1** |
| COEN | | | | IAmb | IAmb | 13 28 19.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **42.75** | **268** | P | **P** | **13 28 31.5** | **+0.4** |
| **ASAR** | **Alice Springs** | **42.75** | **268** | P | **P** | **13 28 31.5** | **+0.3** |
| | comp=Z,1.2nm,0.4s,baz=104,slow=7.1,SNR=84 | | | | | | |
| **WR0** | **Warramunga Arr** | **43.64** | **273** | P | **P** | **13 28 39.1** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 13 28 40.5 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.81** | **273** | P | **P** | **13 28 40.3** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 13 28 41.4 | |
| | comp=Z,8.8nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.82** | **273** | P | **P** | **13 28 40.2** | **+0.4** |
| WRAB | | | | IAmb | IAmb | 13 28 40.7 | |
| | comp=Z,9.6nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.82** | **273** | P | **P** | **13 28 40.3** | **+0.4** |
| | comp=Z,3.6nm,0.3s,baz=112,slow=7.9,SNR=108 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.82** | **273** | P | **P** | **13 28 40.3** | **+0.4** |
| **WB0** | **Warramunga Arr** | **43.85** | **274** | P | **P** | **13 28 40.7** | **+0.7** |
| WB0 | | | | IAmb | IAmb | 13 28 41.1 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.47** | **275** | P | **P** | **13 29 32.0** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 13 29 33.1 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **CASY** | **Casey** | **54.14** | **208** | P | **P** | **13 29 58.4** | **+0.2** |
| **SOEI** | **Soe** | **57.18** | **279** | P | **P** | **13 30 21.4** | **+0.4** |
| **QSPA** | **South Pole Qui** | **58.74** | **180** | P | **P** | **13 30 32.1** | **+1.0** |
| **MAW** | **Mawson** | **71.29** | **201** | P | **P** | **13 31 53.7** | **+1.3** |
| MAW | | | | IAmb | IAmb | 13 32 08.9 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **77.20** | **179** | P | **P** | **13 32 26.8** | **-0.2** |
| SNAA | | | | IAmb | IAmb | 13 32 28.1 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.40** | **123** | T | T | 15 01 41.6 | |
| | baz=241,slow=72,SNR=5.3 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.40** | **123** | T | T | 15 01 51.9 | |
| | baz=241,slow=72,SNR=3.9 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.41** | **123** | T | T | 15 01 41.0 | |
| | baz=241,slow=72,SNR=8.5 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **86.67** | **346** | P | **P** | **13 33 13.6** | **-3.0** |
| **FINES** | **FINESS Array B** | **145.94** | **339** | PKPbc | **PKPdf** | **13 40 10.7** | **-0.7** |
| | comp=Z,2.3nm,0.8s,baz=53,slow=7.4,SNR=5.5 | | | | | | |

*ARE **26** 13:20:47.3±3.8,13˚.51S±0˚.09×76˚.6W±0˚.2,h18km±8km, Error ellipse: s-maj=0.0km s-min=0.0km az=155.0*
*IDC **26** 13:20:50.0±3.2,13˚.23S×76˚.05W,h0km,mb3.6/2, mb1 3.8/3,mb1mx3.5/33,mbtmp3.7/3,ML3.8/1,MS3.0/4, Ms1 3.0/4,ms1mx2.8/45,Error ellipse: s-maj=134.2km s-min=18.1km az=50.0*
*NEIC **26** 13:20:52.0±1.7,13˚.40S±0˚.04×76˚.3W±0˚.1,h59km±21km, ML4.1(ARE),Error ellipse: s-maj=16.8km s-min=5.9km az=96.0*

**ISC 26 13:20:52.5±1.8,13˚.5S±0˚.3×76˚

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **10.72 180** | P | | **P** | **14 33 56.0** | **+0.2** |
| | 0.5nm,0.3s,baz=5.6,slow=10,SNR=21 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.72 180** | P | | **P** | **14 33 56.1** | **+0.2** |
| **WRA** | **Warramunga Arr** | **15.14 147** | P | | **P** | **14 34 41.6** | **-1.1** |
| | 0.2nm,0.3s,baz=324,slow=11,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.10 155** | P | | **P** | **14 35 12.8** | **+0.5** |
| | 0.1nm,0.3s,baz=338,slow=11,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.17 329** | P | | **P** | **14 41 28.5** | **0.0** |
| | 0.1nm,0.5s,baz=130,slow=6.2,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.01 336** | P | | **P** | **14 41 50.9** | **-0.6** |
| | 0.3nm,0.3s,baz=176,slow=4.3,SNR=1.9 | | | | | | |

**MAN 26 14:37:38.9, 13.12N×122.58E, h3km, mb4.1, ML2.9, MS2.6, 6C-4D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GQP** | **Guinayangan** | **0.79** | **350** | *eP* | Pb | 14 37 55.0 | -0.4 |
| GQP | | | | *eS* | Sb | 14 38 07.7 | +1.2 |
| **BOAC** | **Boac** | **0.80** | **295** | *iP* | Pg | 14 37 54.4 | +0.2 |
| **JCNP** | **Jose Panganiba** | **1.17** | **51** | *eP* | Pn | 14 38 02.2 | 0.0 |
| **LQP** | **Lukban** | **1.42** | **314** | *eP* | Pn | 14 38 05.0 | -0.8 |
| LQP | | | | *i* S | Sn | 14 38 25.4 | +0.4 |
| **RCP** | **Roxas** | **1.56** | **174** | *eP* | Pn | 14 38 06.9 | -0.6 |
| **SJMP** | **San Jose** | **1.57** | **246** | *eP* | Pn | 14 38 08.0 | +0.3 |
| **PVCP** | **Virac** | **1.60** | **73** | *eP* | Pn | 14 38 07.8 | -0.3 |
| **PGP** | **Puerto Galera** | **1.63** | **284** | *eP* | Pn | 14 38 08.0 | -0.6 |
| PGP | | | | *eS* | Sn | 14 38 28.0 | -2.2 |
| **MACP** | **Maragondon, Ca** | **2.14** | **302** | *eP* | Pn | 14 38 16.4 | +0.9 |
| **LUBP** | **Lubang** | **2.35** | **285** | *eP* | Pn | 14 38 18.3 | -0.2 |

*IDC **26** 14:42:49.8±9.4, 15°.31S×175°.94W, h293km±244km, mb3.5/3, mb1 3.6/4, mb1mx3.2/27, mbtmp4.2/4, Error ellipse: s-maj=232.6km s-min=112.2km az=84.0*
*NEIC **26** 14:42:51.3±1.1, 15°.9S±0°.2×175°.5W±0°.2, h326km±9km, mb4.2/19, Error ellipse: s-maj=26.1km s-min=17.3km az=133.0*

**ISC 26 14:42:49.4±0.6, 15°.9S±0°.1×175°.7W±0°.1, h300km, n27, σ0§63/28, mb4.2/14, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **4.24** | **63** | P | **Pn** | **14 43 59.4** | **+1.0** |
| | 7.8nm,0.3s,baz=270,slow=10,SNR=12 | | | | | | |
| AFI | | | | S | **S** | **14 44 53.8** | **+0.1** |
| | 5.0nm,0.3s,baz=270,slow=23,SNR=2.0 | | | | | | |
| **AFI** | **Afiamalu** | **4.24** | **63** | | **Pn** | **14 43 59.2** | **+0.8** |
| **OUZ** | **Omahuta** | **21.55** | **205** | P | **P** | **14 47 15.3** | **+0.1** |
| **ARMA** | **Armidale** | **33.23** | **238** | P | **P** | **14 48 59.7** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 14 49 21.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **37.02** | **232** | P | **P** | **14 49 30.7** | **-0.5** |
| CAN | | | | IAmb | IAmb | 14 49 51.7 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **TOO** | **Toolangi** | **40.48** | **230** | P | **P** | **14 49 59.9** | **+0.2** |
| TOO | | | | IAmb | IAmb | 14 50 00.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **41.91** | **240** | P | **P** | **14 50 11.6** | **+0.3** |
| | comp=Z,2.9nm,0.9s,baz=80,slow=12,SNR=3.6 | | | | | | |
| **STKA** | **Stephens Creek** | **41.91** | **240** | P | **P** | **14 50 11.9** | **+0.7** |
| **WR0** | **Warramunga Arr** | **47.41** | **257** | P | **P** | **14 50 55.3** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 14 50 55.8 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **47.56** | **258** | P | **P** | **14 50 56.8** | **+1.0** |
| **WB2** | **Warramunga Arr** | **47.59** | **257** | P | **P** | **14 50 56.0** | **0.0** |
| WB2 | | | | IAmb | IAmb | 14 50 59.7 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.60** | **257** | P | **P** | **14 50 56.5** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=94,slow=7.2,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.60** | **257** | P | **P** | **14 50 56.1** | **0.0** |
| **AS31** | **Alice Springs** | **47.88** | **252** | P | **P** | **14 50 58.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **47.88** | **252** | P | **P** | **14 50 58.5** | **+0.3** |
| | comp=Z,3.6nm,0.5s,baz=90,slow=7.6,SNR=115 | | | | | | |
| **ASAR** | **Alice Springs** | **47.88** | **252** | P | **P** | **14 50 58.2** | **-0.1** |
| **KNRA** | **Kununurra** | **53.33** | **262** | P | **P** | **14 51 38.9** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 14 51 46.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.97** | **259** | P | **P** | **14 51 56.7** | **-0.8** |
| FITZ | | | | IAmb | IAmb | 14 52 07.8 | |
| | comp=Z,6.6nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **60.97** | **254** | P | **P** | **14 52 32.0** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 14 52 54.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **62.71** | **185** | P | **P** | **14 52 43.2** | **+0.8** |
| VNDA | | | | IAmb | IAmb | 14 52 56.6 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **63.70** | **245** | P | **P** | **14 52 50.1** | **+0.3** |
| MORW | | | | IAmb | IAmb | 14 53 03.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **68.73** | **267** | P | **P** | **14 53 20.9** | **-0.9** |
| **QSPA** | **South Pole Qui** | **74.19** | **180** | P | **P** | **14 53 52.9** | **-0.6** |
| **KS19** | **Wonju Array Si** | **75.02** | **317** | P | **P** | **14 53 58.9** | **+0.5** |
| KS19 | | | | IAmb | IAmb | 14 54 06.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.14** | **43** | P | **P** | **14 54 03.7** | **-1.3** |
| **PWL** | **Port Wells** | **79.53** | **13** | P | **P** | **14 54 22.6** | **-0.2** |
| **SNAA** | **Sanae** | **92.56** | **178** | P | **P** | **14 55 25.8** | **-0.9** |

*AEIC **26** 14:43:34±0.8, 51°.9N±0°.1×172°.69W±0°.07, h33km±6km, Error ellipse: s-maj=18.7km s-min=5.5km az=171.0*
**NEIC 26 14:43:37.2±1.3, 52°.1N±0°.2×172°.82W±0°.08, h39km±52km, ML3.7/6, ML3.1**(AEIC), **Error ellipse: s-maj=22.5km s-min=6.6km az=169.0, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOFP** | **Korovin Flat P** | **0.80** | **282** | | Pn | 14 43 52.5 | +0.5 |
| **ATKA** | **Atka Island** | **0.85** | **276** | | Pn | 14 43 52.1 | -0.5 |
| ATKA | | | | | Sn | 14 44 04.6 | +0.7 |
| **KOKL** | **Mount Kliuchef** | **0.87** | **284** | | Pn | 14 43 53.6 | +0.5 |
| **GSTR** | **Great Sitkin T** | **2.00** | **270** | | Pn | 14 44 08.6 | +0.2 |
| **GSMY** | **Great Sitkin M** | **2.00** | **269** | | Pn | 14 44 08.4 | 0.0 |
| **GSTD** | **Great Sitkin T** | **2.05** | **269** | | Pn | 14 44 09.3 | +0.1 |
| GSTD | | | | | Sn | 14 44 34.9 | +1.3 |
| **GSCK** | **Great Sitkin C** | **2.07** | **268** | | Pn | 14 44 09.1 | -0.2 |
| **ADK** | **Adak** | **2.40** | **266** | | Pn | 14 44 13.5 | -0.4 |
| ADK | | | | | Sn | 14 44 43.1 | +1.1 |
| **ADK** | **Adak** | **2.40** | **266** | IAML | | 14 44 52.6 | |
| | 256nm,0.4s | | | | | | |
| **NIKH** | **Nikolski High** | **2.56** | **69** | | Pn | 14 44 15.0 | -1.1 |
| NIKH | | | | | Sn | 14 44 46.5 | +0.4 |
| **KIWB** | **Kanaga Island** | **2.69** | **266** | | Pn | 14 44 17.8 | -0.1 |
| **KIMD** | **Kanaga Island** | **2.76** | **264** | | Pn | 14 44 18.8 | 0.0 |
| **OKWE** | **Okmok W'ng Wal** | **3.09** | **62** | | Pn | 14 44 23.2 | -0.2 |
| **OKTU** | **Okmok Mt. Tuli** | **3.17** | **65** | | Pn | 14 44 24.1 | -0.3 |
| **TAFP** | **Tanaga Falls P** | **3.20** | **268** | | Pn | 14 44 25.2 | +0.3 |
| **TASE** | **Tanaga Southea** | **3.24** | **267** | | Pn | 14 44 25.6 | +0.1 |
| **MSW** | **Makushin Switc** | **4.06** | **61** | | Pn | 14 44 36.4 | -0.4 |
| **UNV** | **Unalaska Valle** | **4.19** | **63** | | Pn | 14 44 37.7 | -0.7 |
| **AKUT** | **Akutan** | **4.70** | **62** | Pn | Pn | 14 44 47.0 | +1.5 |
| AKUT | | | | IAML | | 14 45 59.4 | |
| | comp=N,133nm,4.3s | | | | | | |
| **SPIA** | **Saint Paul Isl** | **5.28** | **15** | Pn | Pn | 14 44 53.9 | +0.5 |
| **FALS** | **False Pass** | **6.24** | **60** | Pn | Pn | 14 45 06.4 | -0.2 |

*NEIC **26** 14:50:26.2±1.4, 18°.2S±0°.2×178°.4W±0°.1, h597km±10km, mb4.4/23, Error ellipse: s-maj=24.3km s-min=19.9km az=158.0*
*IDC **26** 14:50:28.5±1.9, 17°.72S×178°.68W, h612km±21km, mb3.3/9, mb1 3.5/11, mb1mx3.3/28, mbtmp4.2/11, Error ellipse: s-maj=54.3km s-min=15.3km az=152.0*

**ISC 26 14:50:26.6±0.6, 18°.1S±0°.1×178°.4W±0°.1, h600km, n44, σ0§67/44, mb4.2/21, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.36** | **275** | P | **P** | **14 51 49.2** | **+1.2** |
| | 5.9nm,0.3s,baz=128,slow=6.5,SNR=15 | | | | | | |
| **MSVF** | **Nonsavu** | **3.36** | **275** | P | **P** | **14 51 48.9** | **+0.9** |
| **DZM** | **Mont Dzumac** | **14.74** | **252** | P | **P** | **14 53 32.9** | **+0.4** |
| | 0.3nm,0.3s,baz=66,slow=18,SNR=1.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.74** | **252** | P | **P** | **14 53 31.9** | **-0.6** |
| **HNR** | **Honiara** | **22.66** | **289** | P | **P** | **14 54 43.7** | **-0.6** |
| **RABL** | **Rabaul** | **31.90** | **292** | P | **P** | **14 56 05.2** | **+0.4** |
| **PMG** | **Port Moresby** | **34.46** | **280** | P | **P** | **14 56 26.0** | **-0.2** |
| | 13nm,0.8s,baz=70,slow=7.4,SNR=5.8 | | | | | | |
| **PMG** | **Port Moresby** | **34.46** | **280** | P | **P** | **14 56 26.4** | **+0.2** |
| PMG | | | | IAmb | IAmb | 14 56 28.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.07** | **271** | P | **P** | **14 56 48.6** | **+0.9** |
| COEN | | | | IAmb | IAmb | 14 56 49.3 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.52** | **241** | P | **P** | **14 57 00.3** | **+1.1** |
| | comp=Z,2.0nm,0.5s,baz=95,slow=13,SNR=7.2 | | | | | | |
| **STKA** | **Stephens Creek** | **38.52** | **241** | P | **P** | **14 56 59.9** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.29** | **241** | P | **P** | **14 57 37.6** | **+0.7** |
| BBOO | | | | IAmb | IAmb | 14 57 51.5 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.38** | **260** | P | **P** | **14 57 44.9** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 14 58 07.8 | |
| | comp=Z,9.8nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.53** | **260** | P | **P** | **14 57 46.5** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 14 57 46.9 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.56** | **260** | P | **P** | **14 57 46.8** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 14 57 47.4 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.56** | **260** | P | **P** | **14 57 46.4** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 14 57 47.7 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **260** | P | **P** | **14 57 46.3** | **-0.7** |
| | comp=Z,2.4nm,0.5s,baz=96,slow=7.3,SNR=55 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **260** | P | **P** | **14 57 46.6** | **-0.4** |
| **AS31** | **Alice Springs** | **44.71** | **254** | P | **P** | **14 57 48.6** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 14 57 49.2 | |
| | comp=Z,4.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | **P** | **14 57 48.2** | **+0.2** |
| | comp=Z,15nm,0.7s,baz=87,slow=8.7,SNR=304 | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | **P** | **14 57 48.4** | **+0.4** |
| **MTN** | **Manton Dam** | **48.76** | **269** | P | **P** | **14 58 17.8** | **-0.7** |
| MTN | | | | IAmb | IAmb | 14 58 35.0 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **49.90** | **245** | P | **P** | **14 58 26.6** | **0.0** |
| **KNRA** | **Kununurra** | **50.44** | **264** | P | **P** | **14 58 30.3** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 14 58 32.9 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **50.58** | **281** | P | **P** | **14 58 31.1** | **-0.7** |
| FAKI | | | | IAmb | IAmb | 14 58 58.5 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.97** | **261** | P | **P** | **14 58 48.2** | **-0.6** |
| **SOEI** | **Soe** | **56.04** | **270** | P | **P** | **14 59 11.3** | **+0.8** |
| SOEI | | | | IAmb | IAmb | 14 59 14.0 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.83** | **256** | P | **P** | **14 59 22.0** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 14 59 44.9 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **60.27** | **185** | P | **P** | **14 59 37.3** | **-0.4** |
| **UGM** | **Wanagama** | **69.61** | **268** | P | **P** | **15 00 36.8** | **-0.6** |
| **QSPA** | **South Pole Qui** | **71.97** | **180** | P | **P** | **15 00 49.5** | **-0.9** |
| **NVAR** | **Mina Array Bea** | **79.57** | **44** | P | **P** | **15 01 33.5** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=224,slow=9.0,SNR=9.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.57** | **44** | P | **P** | **15 01 33.0** | **+0.1** |
| **IMAR** | **Indian Mountai** | **85.86** | **10** | P | **P** | **15 02 03.3** | **0.0** |
| **ILAR** | **Eielson Array** | **86.07** | **13** | P | **P** | **15 02 03.0** | **-1.4** |
| | comp=Z,0.5nm,0.4s,baz=222,slow=5.1,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **86.07** | **13** | P | **P** | **15 02 03.6** | **-0.7** |
| **TXAR** | **Lajitas Array** | **86.12** | **58** | P | **P** | **15 02 07.0** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=213,slow=6.2,SNR=13 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.12** | **58** | P | **P** | **15 02 06.5** | **+1.0** |
| **DAWY** | **Dawson** | **87.27** | **16** | P | **P** | **15 02 09.9** | **-0.1** |
| **PDAR** | **Pinedale Array** | **87.50** | **43** | P | **P** | **15 02 11.9** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=214,slow=4.4,SNR=8.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.50** | **43** | | **P** | **15 02 11.7** | **-0.2** |
| **BMAR** | **Burnt Mountain** | **88.84** | **12** | P | **P** | **15 02 17.1** | **-0.3** |
| **SNAA** | **Sanae** | **90.42** | **179** | P | **P** | **15 02 25.0** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **94.51** | **25** | P | **P** | **15 02 42.5** | **-0.8** |
| | comp=Z,0.2nm,0.5s,baz=243,slow=4.4,SNR=3.6 | | | | | | |

**IDC 26 15:21:03.9±2.9, 21.13S×179.85E, h0km, mb3.9/4, mb1 4.2/4, mb1mx3.8/30, mbtmp3.9/4, Error ellipse: s-maj=286.6km s-min=33.3km az=162.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **42.41** | **258** | P | P | 15 28 59.8 | -0.9 |
| | 1.4nm,0.9s,baz=99,slow=7.3,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.52** | **263** | P | P | 15 29 02.3 | +0.8 |
| | 2.3nm,0.7s,baz=96,slow=8.4,SNR=17 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.95** | **263** | P | P | 15 30 07.1 | -0.4 |
| | 2.3nm,1.0s,baz=92,slow=7.4,SNR=1.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.09** | **58** | P | P | 15 34 01.6 | 0.0 |
| | 0.2nm,0.6s,baz=224,slow=5.9,SNR=4.5 | | | | | | |

*IDC **26** 15:30:00.7±3.1, 3°.86S×141°.43E, h26km±18km, mb3.8/6, mb1 4.1/8, mb1mx3.8/30, mbtmp4.1/8, ML4.3/1, MS3.5/2, Ms1 3.5/2, ms1mx2.8/57, Error ellipse: s-maj=38.1km s-min=16.0km az=81.0*
*DJA **26** 15:30:01.5±0.3, 4°.S±3°×14°.2E±°, h10km, M4.5/16, mb4.5/16, mB5.2/5, MLv4.5/6, Mw(mB)4.6/5, MwMwp4.7/1, Mwp5.0/1*
*NEIC **26** 15:30:05.3±2.6, 4°.0S±0°.1×141°.5E±0°.1, h79km±10km, mb4.2/16, Error ellipse: s-maj=20.7km s-min=14.9km az=76.0*

**ISC 26 15:30:03.5±0.6, 3°.95S±0°.06×141°.55E±0°.08, h54km, n60, σ1§64/59, mb4.0/9, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **1.66** | **329** | Pg | **Pn** | **15 30 29.1** | **-1.2** |
| | 44nm,0.3s,baz=156,slow=9.5,SNR=156 | | | | | | |
| JAY | | | | Lg | Lg | 15 30 49.3 | |
| | 120nm,0.3s,baz=283,slow=21,SNR=17 | | | | | | |
| JAY | | | | LR | LR | 15 31 08.5 | |
| | comp=Z,226nm,18.6s,baz=207,slow=44 | | | | | | |
| **JAY** | **Jayapura** | **1.66** | **329** | P | **Pn** | **15 30 29.0** | **-1.2** |
| JAY | | | | S | **Sn** | **15 30 52.5** | **+2.1** |
| **GENI** | **Genyem** | **1.93** | **314** | P | **Pn** | **15 30 33.6** | **-0.3** |
| GENI | | | | S | **Sn** | **15 30 58.4** | **+1.4** |
| **GENI** | **Genyem** | **1.93** | **314** | P | **Pn** | **15 30 33.5** | **-0.3** |
| **SMPI** | **Sarmi** | **3.44** | **304** | P | **Pn** | **15 30 56.3** | **+1.7** |
| **MMPI** | **Merauke** | **4.64** | **194** | P | **Pn** | **15 31 12.9** | **+1.9** |
| **PMG** | **Port Moresby** | **7.77** | **135** | Pn | **Pn** | **15 31 54.7** | **+0.7** |
| | 1.7nm,0.3s,baz=318,slow=11,SNR=14 | | | | | | |
| **PMG** | **Port Moresby** | **7.77** | **135** | | **Pn** | **15 31 54.8** | **+0.8** |
| **PMG** | **Port Moresby** | **7.77** | **135** | P | **Pn** | **15 31 55.7** | **+1.7** |
| **FAKI** | **Fak Fak** | **9.34** | **276** | Pn | **Pn** | **15 32 16.6** | **+1.0** |
| **FAKI** | **Fak Fak** | **9.34** | **276** | P | **Pn** | **15 32 19.5** | **+3.9** |
| **COEN** | **Coen** | **10.07** | **171** | | **Pn** | **15 32 25.6** | **+0.1** |
| **COEN** | **Coen** | **10.07** | **171** | P | **Pn** | **15 32 25.2** | **-0.4** |
| **SIJI** | **Sorong** | **10.72** | **286** | Pn | **Pn** | **15 32 36.0** | **+1.6** |
| | 2.3nm,0.3s,baz=66,slow=13,SNR=11 | | | | | | |
| **MSAI** | **Masohi** | **12.61** | **272** | P | **Pn** | **15 33 00.0** | **-0.3** |
| | 979nm3.5nm,0.6s | | | | | | |
| **AAI** | **Ambon** | **13.33** | **271** | P | **Pn** | **15 33 10.6** | **+0.5** |
| | 17nm,1.3s | | | | | | |
| **MTN** | **Manton Dam** | **13.57** | **229** | Pn | **Pn** | **15 33 11.8** | **-1.5** |
| **MTSU** | **Mount Surprise** | **14.36** | **169** | P | **Pn** | **15 33 25.2** | **+1.3** |
| **SANI** | **Sanana** | **15.65** | **276** | P | **P** | **15 33 42.5** | **-1.5** |
| | 863nm13nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **16.62** | **186** | P | **P** | **15 33 54.8** | **+0.2** |
| | 14nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **17.15** | **226** | | **Pn** | **15 33 58.6** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 15 34 13.2 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **17.15** | **226** | P | **Pn** | **15 33 58.5** | **-1.0** |
| **WB0** | **Warramunga Arr** | **17.20** | **203** | | **Pn** | **15 34 00.0** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 15 34 05.1 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **17.32** | **203** | Pn | **Pn** | **15 33 58.7** | **-2.9** |
| WR0 | | | | IAmb | IAmb | 15 34 06.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **17.37** | **203** | | **Pn** | **15 34 02.4** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 15 34 06.1 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **17.37** | **203** | P | **Pn** | **15 34 02.2** | **-0.1** |
| **WB2** | **Warramunga Arr** | **17.38** | **203** | Pn | **Pn** | **15 33 59.2** | **-3.2** |
| WB2 | | | | IAmb | IAmb | 15 34 05.9 | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.38** | **203** | P | **Pn** | **15 34 01.5** | **-1.0** |
| | comp=Z,1.0nm,0.3s,baz=27,slow=12,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.38** | **203** | | **Pn** | **15 34 01.3** | **-1.1** |
| **SOEI** | **Soe** | **18.10** | **251** | P | **Pn** | **15 34 12.9** | **+1.6** |
| **SOEI** | **Soe** | **18.10** | **251** | P | **Pn** | **15 34 13.8** | **+2.5** |
| | comp=Z,53nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **18.10** | **251** | P | **Pn** | **15 34 13.0** | **+1.6** |
| **BATI** | **Baumata** | **18.80** | **250** | P | **Pn** | **15 34 19.5** | **-0.2** |
| | comp=Z,10nm,0.3s,baz=153,slow=4.6,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **18.80** | **250** | P | **Pn** | **15 34 22.5** | **+2.8** |
| | comp=Z,26nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **19.08** | **283** | P | **Pn** | **15 34 24.8** | **+1.8** |
| | comp=Z,400nmcomp=Z,35nm,1.0s | | | | | | |
| **MRSI** | **Marisa** | **20.08** | **282** | P | **P** | **15 34 33.7** | **+1.0** |
| | comp=Z,19nm,0.7s | | | | | | |
| **APSI** | **Ampana** | **20.11** | **278** | P | Pn | 15 34 37.9 | +2.6 |
| **AS31** | **Alice Springs** | **20.95** | **200** | P | **P** | **15 34 41.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **20.95** | **200** | P | **P** | **15 34 41.7** | **-0.3** |
| | comp=Z,3.9nm,0.5s,baz=30,slow=10,SNR=81 | | | | | | |
| **ASAR** | **Alice Springs** | **20.95** | **200** | P | **P** | **15 34 41.9** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **20.99** | **227** | P | **P** | **15 34 42.3** | **-0.2** |
| | comp=Z,2.9nm,0.5s,baz=50,slow=8.1,SNR=14 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.99** | **227** | P | **P** | **15 34 42.4** | **-0.1** |
| **BNSI** | **Bone** | **21.39** | **268** | P | **P** | **15 34 51.3** | **+4.4** |
| **BKSI** | **Bulukumba** | **21.40** | **266** | P | **P** | **15 34 50.6** | **+3.6** |
| | comp=Z,32nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **22.71** | **254** | P | **P** | **15 35 00.8** | **-0.3** |
| **RMQ** | **Roma** | **23.45** | **164** | P | **P** | **15 35 11.0** | **+2.8** |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **33.66** | **174** | P | **P** | **15 36 37.5** | **-1.7** |
| TOO | | | | IAmb | IAmb | 15 36 48.2 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **33.91** | **324** | P | **P** | **15 36 39.2** | **-2.4** |
| **MORW** | **Morawa** | **34.79** | **221** | P | **P** | **15 36 47.5** | **-1.6** |
| **MJAR** | **Matsushiro Arr** | **40.40** | **356** | LR | LR | 15 52 42.0 | |
| | comp=Z,69nm,19.8s,baz=185,slow=34 | | | | | | |
| **MAJO** | **Matsushiro** | **40.40** | **356** | P | **P** | **15 37 34.2** | **-2.2** |
| **SONM** | **Songino Array** | **60.06** | **333** | P | **P** | **15 40 05.4** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=157,slow=7.7,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **60.06** | **333** | P | **P** | **15 40 05.2** | **+0.1** |
| **MK31** | **Makanchi Array** | **72.50** | **322** | P | **P** | **15 41 23.3** | **-1.3** |
| MK31 | | | | IAmb | IAmb | 15 41 25.7 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **72.50** | **322** | P | **P** | **15 41 24.7** | **0.0** |
| | comp=Z,1.9nm,0.9s,baz=96,slow=8.9,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **72.50** | **322** | P | **P** | **15 41 24.2** | **-0.4** |
| **MAKZ** | **Makanchi** | **72.70** | **322** | P | **P** | **15 41 25.5** | **-0.3** |
| MAKZ | | | | IAmb | IAmb | 15 41 26.7 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **74.44** | **329** | P | **P** | **15 41 35.0** | **-0.8** |
| | comp=Z,1.3nm,0.7s,baz=108,slow=4.8,SNR=5.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **81.95** | **325** | P | **P** | **15 42 17.3** | **-0.1** |
| | comp=Z,2.1nm,0.5s,baz=70,slow=18,SNR=10 | | | | | | |
| **WSAR** | **Wadi Sarin** | **85.05** | **294** | LR | LR | 16 25 30.1 | |
| | comp=Z,22nm,18.5s,baz=100,slow=39 | | | | | | |

*IDC **26** 15:32:31.6±0.8, 2°.34S×134°.41E, h0km, mb4.3/11, mb1 4.5/15, mb1mx4.3/36, mbtmp4.4/15, ML4.1/4, MS3.6/9, Ms1 3.6/9, ms1mx3.1/63, Error ellipse: s-maj=30.1km s-min=16.2km az=76.0*
*DJA **26** 15:32:34.3±0.5, 2°.S±5°×13°.4E±°, h76km±8km, M4.7/8, mb4.7/8, mB4.8/4, MLv4.8/7, Mw(mB)4.1/4*
*NEIC **26** 15:32:35.8±2.3, 2°.58S±0°.10×134°.3E±0°.1, h36km±6km, mb4.4/17, Error ellipse: s-maj=19.7km s-min=12.0km az=58.0*

**ISC 26 15:32:36.2±0.5, 2°.39S±0°.06×134°.30E±0°.07, h30km, n84, σ1§61/79, mb4.4/27, MS3.5/7, 2D, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.11** | **256** | | **Pn** | **15 33 08.8** | **-0.8** |
| **FAKI** | **Fak Fak** | **2.11** | **256** | P | **Pn** | **15 33 09.5** | **0.0** |
| FAKI | | | | S | **Sb** | **15 33 42.2** | **+2.4** |
| **FAKI** | **Fak Fak** | **2.11** | **256** | P | Pn | **15 33 09.6** | **0.0** |
| **SIJI** | **Sorong** | **3.39** | **296** | Pn | **Pn** | **15 33 27.3** | **+0.2** |
| | 14nm,0.3s,baz=259,slow=22,SNR=117 | | | | | | |
| **MSAI** | **Masohi** | **5.45** | **260** | P | **Pn** | **15 33 57.1** | **+1.7** |
| | 0.1nm26nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **6.23** | **258** | P | **Pn** | **15 34 06.3** | **+0.1** |
| | 0.4nm813nm60nm,0.8s | | | | | | |
| **SAUI** | **Saumlaki** | **6.31** | **208** | P | **Pn** | **15 34 08.2** | **+0.9** |
| **SANI** | **Sanana** | **8.31** | **272** | P | **Pn** | **15 34 33.6** | **-1.2** |
| | 117nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **8.31** | **272** | P | **Pn** | **15 34 33.4** | **-1.4** |
| **MMPI** | **Merauke** | **8.55** | **135** | P | **Pn** | **15 34 39.3** | **+1.2** |
| | 276nm,1.1s | | | | | | |
| **KDU** | **Kakadu** | **10.39** | **190** | P | **Pn** | **15 35 03.4** | **+0.1** |
| **MTN** | **Manton Dam** | **10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,4.0nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **52.95** | **138** | LR | LR | 16 03 18.0 | |
| | comp=Z,71nm,22.0s,baz=355,slow=35 | | | | | | |
| **CHLP** | **Challavanipeta** | **53.61** | **295** | *eP* | **P** | **15 41 54.9** | **-0.3** |
| **PVM** | **Polavaram** | **55.48** | **293** | *eP* | **P** | **15 42 06.8** | **-2.0** |
| **SONM** | **Songino Array** | **55.65** | **338** | P | **P** | **15 42 10.1** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=153,slow=7.7,SNR=7.6 | | | | | | |
| SONM | | | | PcP | **PcP** | **15 43 09.3** | **+0.4** |
| | comp=Z,0.7nm,0.9s,baz=123,slow=3.9,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **55.65** | **338** | P | **P** | **15 42 09.4** | **-0.2** |
| **MYLAV** | **Mylavaram** | **56.27** | **292** | *eP* | **P** | **15 42 13.2** | **-1.2** |
| **NJS** | **Nagarjunasagar** | **57.45** | **291** | *eP* | **P** | **15 42 22.5** | **-0.4** |
| **RCLA** | **Racherla** | **57.53** | **290** | *eP* | **P** | **15 42 22.8** | **-0.6** |
| **SRLM** | **Srisailam** | **57.73** | **291** | *eP* | **P** | **15 42 24.5** | **-0.4** |
| **CUPL** | **Choutuppal** | **57.99** | **292** | *eP* | **P** | **15 42 25.8** | **-0.9** |
| **RPR** | **Rampur** | **58.04** | **294** | *eP* | **P** | **15 42 26.6** | **-0.4** |
| **HYBB** | **Hyderabad (bro** | **58.36** | **292** | *eP* | **P** | **15 42 28.2** | **-1.1** |
| **SRSP** | **Sriramsagar** | **58.93** | **294** | *eP* | **P** | **15 42 32.4** | **-0.8** |
| **URV** | **Uravakonda** | **59.01** | **289** | *eP* | **P** | **15 42 33.1** | **-0.7** |
| **WMQ** | **Urumqi** | **62.08** | **323** | *eP* | **P** | **15 42 55.5** | **+1.2** |
| WMQ | | | | pP | sP | 15 43 05.0 | -2.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **66.89** | **324** | P | **P** | **15 43 26.1** | **+0.4** |
| MK31 | | | | IAmb | IAmb | 15 43 26.7 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.89** | **324** | P | **P** | **15 43 26.1** | **+0.4** |
| | comp=Z,2.5nm,0.6s,baz=113,slow=8.1,SNR=31 | | | | | | |
| **MAKZ** | **Makanchi** | **67.08** | **324** | P | **P** | **15 43 26.8** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 15 43 27.8 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **67.69** | **315** | P | **P** | **15 43 33.3** | **+2.2** |
| KSH | | | | PcP | **PcP** | **15 43 59.5** | **+1.6** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.49** | **331** | P | **P** | **15 43 41.0** | **-0.8** |
| | comp=Z,1.1nm,0.6s,baz=122,slow=5.4,SNR=6.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.49** | **331** | P | **P** | **15 43 40.2** | **-1.6** |
| **BVAR** | **Borovoye Array** | **76.56** | **326** | P | **P** | **15 44 23.4** | **-0.3** |
| | comp=Z,3.2nm,1.0s,baz=64,slow=17,SNR=5.7 | | | | | | |
| **BRVK** | **Borovoye** | **76.63** | **326** | P | **P** | **15 44 21.4** | **-2.7** |
| BRVK | | | | IAmb | IAmb | 15 44 24.7 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **NRIK** | **Noril'sk** | **78.21** | **345** | P | **P** | **15 44 32.5** | **-0.1** |
| | comp=Z,1.0nm,0.4s,baz=125,slow=4.7,SNR=4.5 | | | | | | |
| **GEYT** | **Alibeck** | **80.60** | **309** | P | **P** | **15 44 47.0** | **+0.7** |
| | comp=Z,3.3nm,0.8s,baz=61,slow=12,SNR=4.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **81.65** | **320** | P | **P** | **15 44 50.2** | **-1.4** |
| **ARU** | **Arti** | **84.13** | **327** | P | **P** | **15 45 04.3** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=36,slow=7.1,SNR=4.7 | | | | | | |
| **RND** | **Reindeer** | **86.25** | **26** | P | **P** | **15 45 13.3** | **-1.6** |
| **I23K** | **Minto, Yukon-K** | **86.44** | **24** | P | **P** | **15 45 15.9** | **+0.3** |
| **COLD** | **Coldfoot** | **86.60** | **22** | P | **P** | **15 45 16.8** | **+0.4** |
| COLD | | | | IAmb | IAmb | 15 45 19.1 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **87.38** | **25** | P | **P** | **15 45 19.6** | **-0.7** |
| | comp=Z,2.4nm,0.9s,baz=249,slow=4.8,SNR=14 | | | | | | |
| **QSPA** | **South Pole Qui** | **87.56** | **180** | LR | LR | 16 24 53.9 | |
| | comp=Z,90nm,19.1s,baz=348,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **151.09** | **131** | PKPbc | **PKiKP** | **15 52 29.8** | **+0.9** |
| | comp=Z,3.9nm,0.9s,baz=155,slow=1.2,SNR=7.2 | | | | | | |

*CNRM **26** 15:34:13.3, 35°.71N × 3°.65W, h28km, ml2.5*
*SFS **26** 15:34:13.0, 35°.64N × 3°.62W, h25km, ML2.3, ALBORAN S.*
**ISC 26 15:34:10.9**±1.0, **35°.78N**±0°.05 × **3°.59W**±0°.05, **h8km, n12,**
**σ1§10/21, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALE** | **Palemas** | **0.63** | **207** | P | **Pb** | **15 34 24.5** | **+0.4** |
| PALE | | | | S | **Sb** | **15 34 33.5** | **+0.4** |
| **GOG** | **Mont Gurugu** | **0.74** | **139** | P | **Pg** | **15 34 26.4** | **+1.3** |
| GOG | | | | S | **Sb** | **15 34 36.6** | **+0.3** |
| **CHAS** | **Isla Isabel II** | **1.12** | **122** | S | **Sg** | **15 34 46.2** | **-0.6** |
| **EMAL** | **Malaga-Limoner** | **1.19** | **326** | P | Pb | 15 34 28.5 | -5.3 |
| EMAL | | | | S | **Sg** | **15 34 47.4** | **-2.0** |
| **TAF** | **Taforalt** | **1.36** | **135** | P | **Pg** | **15 34 37.9** | **+0.9** |
| TAF | | | | S | **Sb** | **15 34 55.2** | **+1.0** |
| **JBK** | **JBK** | **1.67** | **149** | P | **Pn** | **15 34 39.7** | **-0.8** |
| JBK | | | | S | **Sn** | **15 35 00.2** | **-2.0** |
| **MD31** | **MD31** | **3.06** | **199** | P | **Pn** | **15 34 59.4** | **-0.3** |
| MD31 | | | | S | **Sn** | **15 35 34.9** | **-1.6** |
| **MDT** | **Midelt** | **3.07** | **196** | P | **Pn** | **15 35 00.4** | **+0.6** |
| MDT | | | | S | **Sn** | **15 35 35.9** | **-0.9** |
| **ZHG** | **ZHG** | **3.42** | **228** | P | **Pn** | **15 35 04.4** | **-0.3** |
| ZHG | | | | S | **Sn** | **15 35 45.1** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.70** | **297** | *e*Pn | **Pn** | **15 35 09.3** | **+1.0** |
| PVAQ | | | | *e*Sn | **Sn** | **15 35 51.0** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.70** | **297** | P | **Pn** | **15 35 09.4** | **+1.0** |
| PVAQ | | | | S | **Sn** | **15 35 51.2** | **-0.9** |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **294** | *e*Sn | **Sn** | **15 35 53.5** | **-0.9** |

*FUNV **26** 15:40:21.8, 10°.53N × 62°.50W, h88km, MW4.1*
*TRN **26** 15:40:23.0, 10°.60N × 62°.44W, h75km, MD3.8*
**ISC 26 15:40:19.7**±1.3, **10°.53N**±0°.04 × **62°.54W**±0°.04,
**h101km**±12km, **n42,** σ1§**82/63, 1C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRUV** | **Carupano** | **0.70** | **282** | *e*P | **Pn** | **15 40 37.8** | **+0.6** |
| CRUV | | | | *e*S | **Sn** | **15 40 49.6** | **-0.8** |
| **TPP** | **Pointe-a-Pierr** | **1.09** | **101** | *e*P | **Pn** | **15 40 43.0** | **+1.8** |
| TPP | | | | *e*S | **Sn** | **15 40 56.6** | **-0.8** |
| **TRN** | **Trinidad (W)** | **1.12** | **84** | ⇑*i*P | **Pn** | **15 40 42.7** | **+1.2** |
| TRN | | | | *e*S | **Sn** | **15 40 56.6** | **-1.4** |
| **COAV** | **Cumanacoa** | **1.32** | **254** | *e*P | **Pn** | **15 40 45.5** | **+1.5** |
| **CUMV** | **Cumana_UDO** | **1.63** | **267** | *e*P | **Pn** | **15 40 49.3** | **+1.7** |
| CUMV | | | | *e*S | **Sn** | **15 41 09.2** | **+0.3** |
| **GRFF** | **Grenada Fort F** | **1.70** | **27** | *e*P | **Pn** | **15 40 49.0** | **+0.4** |
| GRFF | | | | *e*S | **Sn** | **15 41 08.5** | **-2.1** |
| **GRGR** | **Grenville** | **1.81** | **28** | *e*P | **Pn** | **15 40 50.6** | **+0.6** |
| GRGR | | | | *e*S | **Sn** | **15 41 11.6** | **-1.5** |
| **PCRV** | **Puerto La Cruz** | **2.10** | **261** | *e*P | **Pn** | **15 40 54.4** | **+0.8** |
| PCRV | | | | *e*S | **Sn** | **15 41 18.9** | **-0.6** |
| **TOSP** | **Speyside** | **2.11** | **68** | *e*P | **Pn** | **15 40 54.3** | **+0.6** |
| TOSP | | | | *e*S | **Sn** | **15 41 18.3** | **-1.4** |
| **GCMP** | **Grenada, Carri** | **2.23** | **29** | *e*P | **Pn** | **15 40 56.0** | **+0.7** |
| GCMP | | | | *e*S | **Sn** | **15 41 22.1** | **-0.5** |
| **PRGV** | **PARIAGUAN** | **2.72** | **230** | *e*P | **Pn** | **15 41 03.1** | **+1.3** |
| PRGV | | | | *e*S | **Sn** | **15 41 34.2** | **+0.1** |
| **SVB** | **Belmont** | **3.00** | **25** | *e*P | **Pn** | **15 41 06.8** | **+1.3** |
| SVB | | | | *e*S | **Sn** | **15 41 39.7** | **-1.2** |
| **SVV** | **Soufriere Volc** | **3.06** | **25** | *e*P | **Pn** | **15 41 08.5** | **+2.2** |
| SVV | | | | *e*S | **Sn** | **15 41 42.1** | **-0.1** |
| **MCLT** | **Moule a Chique** | **3.53** | **26** | *e*P | **Pn** | **15 41 14.5** | **+1.9** |
| MCLT | | | | *e*S | **Sn** | **15 41 52.1** | **-1.4** |
| **BIRV** | **Birongo** | **3.67** | **270** | *e*P | **Pn** | **15 41 16.1** | **+1.6** |
| BIRV | | | | *e*S | **Sn** | **15 41 55.8** | **-1.2** |
| **SLBI** | **Saint Lucia, B** | **3.80** | **24** | *e*P | **Pn** | **15 41 17.3** | **+1.2** |
| SLBI | | | | *e*S | **Sn** | **15 41 58.1** | **-1.7** |
| **MERV** | **Las Mercedes** | **3.92** | **251** | *e*P | **Pn** | **15 41 18.9** | **+1.1** |
| MERV | | | | *e*S | **Sn** | **15 42 00.7** | **-2.1** |
| **BIM** | **Bigot** | **4.22** | **20** | *e*P | **Pn** | **15 41 24.0** | **+2.2** |
| BIM | | | | *e*S | **Sn** | **15 42 08.5** | **-1.6** |
| **MPOM** | **Morne Pois Mar** | **4.22** | **23** | *e*P | **Pn** | **15 41 23.3** | **+1.4** |
| MPOM | | | | *e*S | **Sn** | **15 42 07.9** | **-2.4** |
| **TRMF** | **Trois Ilets** | **4.24** | **20** | *e*P | **Pn** | **15 41 23.5** | **+1.3** |
| **ZAM** | **Aeronautique** | **4.28** | **20** | *e*P | **Pn** | **15 41 24.4** | **+1.6** |
| **LPMF** | **Morne Lapointe** | **4.31** | **21** | *e*P | **Pn** | **15 41 25.1** | **+2.0** |
| **MVM** | **Montagne Vaucl** | **4.31** | **22** | *e*P | **Pn** | **15 41 25.3** | **+2.1** |
| **PCM** | **Pelee Case Pet** | **4.46** | **17** | *e*P | **Pn** | **15 41 26.3** | **+1.3** |
| **LUEV** | **Luepa** | **4.77** | **167** | *e*P | **Pn** | **15 41 30.3** | **+0.8** |
| LUEV | | | | *e*S | **Sn** | **15 42 20.3** | **-3.5** |
| **CACV** | **CAICARA DEL OR** | **4.93** | **234** | *e*P | Pn | 15 41 27.4 | -4.1 |
| CACV | | | | *e*S | Sn | 15 42 15.4 | -12 |
| **DSLB** | **Salisbury** | **5.00** | **12** | *e*P | **Pn** | **15 41 34.7** | **+2.2** |
| **DSLB** | **Salisbury** | **5.00** | **12** | *e*S | **Sn** | **15 42 27.8** | **-1.4** |
| **BENV** | **Beln** | **5.01** | **264** | *e*P | **Pn** | **15 41 33.5** | **+0.8** |
| BENV | | | | *e*S | **Sn** | **15 42 26.7** | **-2.8** |
| **TURV** | **Turiamo** | **5.22** | **270** | *e*P | **Pn** | **15 41 36.5** | **+1.1** |
| TURV | | | | *e*S | **Sn** | **15 42 31.8** | **-2.5** |
| **TDBA** | **Terre de Bas,** | **5.36** | **9** | *e*P | **Pn** | **15 41 40.0** | **+2.6** |
| **TDBA** | **Terre de Bas,** | **5.36** | **9** | *e*S | **Sn** | **15 42 36.6** | **-1.3** |
| **TBG** | **Guadaloupe-3** | **5.37** | **9** | *e*P | **Pn** | **15 41 40.1** | **+2.7** |
| **MAGL** | **Barre de l'ile** | **5.53** | **13** | *e*P | **Pn** | **15 41 42.9** | **+3.3** |
| **MAGL** | **Barre de l'ile** | **5.53** | **13** | *e*S | **Sn** | **15 42 40.3** | **-1.6** |
| **CBE** | **Ff, Capester** | **5.58** | **9** | *e*P | **Pn** | **15 41 43.8** | **+3.5** |
| **CBE** | **Ff, Capester** | **5.58** | **9** | *e*S | **Sn** | **15 42 41.3** | **-2.0** |
| **MAPV** | **Macapo** | **5.87** | **264** | *e*P | **Pn** | **15 41 45.3** | **+1.0** |
| MAPV | | | | *e*S | **Sn** | **15 42 46.6** | **-3.7** |
| **ABD** | **La Joyeuse, An** | **6.00** | **10** | *e*S | **Sn** | **15 42 51.6** | **-1.8** |
| **ANBD** | **Bethesda, Anti** | **6.53** | **6** | *e*P | **Pn** | **15 41 55.8** | **+2.7** |
| **ANBD** | **Bethesda, Anti** | **6.53** | **6** | *e*S | **Sn** | **15 43 03.7** | **-2.4** |
| **PAYV** | **Puerto Ayacuch** | **7.17** | **225** | *e*P | **Pn** | **15 42 02.3** | **+0.4** |
| PAYV | | | | *e*S | Sn | 15 43 16.5 | -5.5 |

**IDC 26 15:42:34.9**±11.0, **57°.62N** × **32°.30E, h0km, Error ellipse:**
**s-maj=176.2km s-min=86.9km az=98.0, Baltic**
**States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **2.83** | **107** | *i* | | 16 00 40.0 | |
| | baz=289,slow=296,SNR=1.8 | | | | | | |
| **I37NO** | **I37NO** | **12.98** | **338** | *i* | | 16 50 30.0 | |
| | baz=141,slow=331,SNR=1.7 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **16.68** | **105** | *i* | | 17 24 20.0 | |
| | baz=309,slow=310,SNR=1.0 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.14** | **74** | *i* | | 18 40 10.0 | |
| | baz=305,slow=324,SNR=0.3 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **36.97** | **339** | *i* | | 19 30 00.0 | |
| | baz=63,slow=336,SNR=1.4 | | | | | | |

*IDC **26** 15:56:40.2±1.6, 21°.14S × 179°.34W, h639km±18km,*
*mb3.3/14, mb1 3.4/15, mb1mx3.2/40, mbtmp4.4/15, Error*
*ellipse: s-maj=20.5km s-min=13.9km az=136.0*
**ISC 26 15:56:39.4**±0.7, **21°.45S**±0°.07 × **179°.1W**±0°.1, **h650km, n37,**
**σ2§28/44, mb3.9/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.58** | **323** | P | **P** | **15 58 08.5** | **-4.2** |
| | 39nm,0.3s,baz=161,slow=4.2,SNR=54 | | | | | | |
| **GLKZ** | **Green Lake** | **7.85** | **173** | P | **P** | **15 58 37.8** | **-1.3** |
| GLKZ | | | | S | **S** | **16 00 15.0** | **-2.0** |
| **PINNC** | **Pines Island,** | **12.55** | **262** | P | P | 15 59 27.9 | +4.8 |
| | 92nm,1.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **13.46** | **265** | P | P | 15 59 40.4 | +8.7 |
| **OUZ** | **Omahuta** | **15.15** | **204** | P | **P** | **15 59 50.7** | **+3.9** |
| **WCZ** | **Waipu Caves** | **15.53** | **200** | P | **P** | **15 59 54.1** | **+3.7** |
| **KUZ** | **Kuaotunu** | **15.89** | **195** | P | **P** | **15 59 56.6** | **+2.9** |
| **HAZ** | **Te Kaha** | **16.47** | **189** | P | **P** | **15 59 58.8** | **-0.1** |
| HAZ | | | | S | **S** | **16 02 37.4** | **-3.5** |
| **TWGZ** | **Tauwhareparae** | **16.86** | **188** | P | **P** | **16 00 04.6** | **+2.1** |
| TWGZ | | | | S | **S** | **16 02 47.6** | **+0.3** |
| **TOZ** | **Tahuroa Road** | **16.89** | **195** | P | **P** | **16 00 05.4** | **+2.7** |
| **URZ** | **Urewera** | **17.07** | **190** | P | **P** | **16 00 03.6** | **-0.8** |
| URZ | | | | S | **S** | **16 02 47.0** | **-3.6** |
| **MWZ** | **Matawai** | **17.08** | **189** | P | **P** | **16 00 04.4** | **-0.1** |
| MWZ | | | | S | **S** | **16 02 47.8** | **-3.0** |
| **TKGZ** | **Te Karaka** | **17.14** | **188** | P | **P** | **16 00 05.8** | **+0.8** |
| **MUGZ** | **Murupara** | **17.34** | **191** | P | **P** | **16 00 02.7** | **-4.1** |
| **WPRZ** | **Whakapapatarin** | **17.50** | **192** | P | **P** | **16 00 09.8** | **+1.6** |
| **HIZ** | **Hauiti** | **17.79** | **196** | P | **P** | **16 00 14.5** | **+3.6** |
| **BKZ** | **Black Stump Fm** | **18.06** | **191** | P | **P** | **16 00 12.8** | **-0.6** |
| BKZ | | | | S | **S** | **16 03 05.7** | **-0.9** |
| **MCHZ** | **McNeill Hill** | **18.29** | **190** | P | **P** | **16 00 15.5** | **0.0** |
| MCHZ | | | | S | **S** | **16 03 07.6** | **-2.6** |
| **BHHZ** | **Black Hill Sta** | **18.45** | **192** | P | **P** | **16 00 16.6** | **-0.4** |
| BHHZ | | | | S | **S** | **16 03 12.5** | **-0.4** |
| **CTA** | **Charters Tower** | **32.40** | **266** | P | **P** | **16 02 18.5** | **-0.7** |
| | 3.9nm,0.7s,baz=85,slow=9.7,SNR=5.3 | | | | | | |
| **PMG** | **Port Moresby** | **34.59** | **285** | P | **P** | **16 02 37.3** | **-0.1** |
| | 4.0nm,0.8s,baz=173,slow=15,SNR=5.1 | | | | | | |
| **STKA** | **Stephens Creek** | **36.47** | **245** | P | **P** | **16 02 53.8** | **+1.3** |
| | 1.2nm,0.4s,baz=99,slow=15,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.32** | **258** | P | **P** | **16 03 47.1** | **+0.1** |
| | 0.3nm,0.4s,baz=94,slow=7.5,SNR=15 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 08 17.7** | **+6.4** |
| | 0.3nm,0.6s,baz=112,slow=4.7,SNR=5.3 | | | | | | |
| ASAR | | | | S | **S** | **16 09 29.2** | **-0.8** |
| | 1.3nm,0.7s,baz=94,slow=16,SNR=12 | | | | | | |
| **JAY** | **Jayapura** | **43.40** | **290** | P | **P** | **16 03 46.8** | **-0.9** |
| | 10nm,0.6s,baz=73,slow=4.0,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.47** | **263** | P | **P** | **16 03 47.6** | **-0.6** |
| | 1.1nm,0.7s,baz=96,slow=7.4,SNR=13 | | | | | | |
| **SIJI** | **Sorong** | **52.52** | **286** | P | **P** | **16 04 54.8** | **-0.3** |
| | 16nm,0.6s,baz=81,slow=6.2,SNR=10 | | | | | | |
| **VNDA** | **Vanda** | **56.88** | **185** | P | **P** | **16 05 28.1** | **+3.9** |
| | 1.4nm,0.5s,baz=4.7,slow=6.5,SNR=7.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.38** | **325** | P | **P** | **16 06 49.9** | **-0.4** |
| | 2.0nm,0.4s,baz=162,slow=5.6,SNR=6.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **74.09** | **332** | P | **P** | **16 07 13.1** | **+1.8** |
| | 6.2nm,0.8s,baz=186,slow=13,SNR=3.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.94** | **346** | P | **P** | **16 07 26.6** | **-0.1** |
| | 4.9nm,0.8s,baz=170,slow=4.5,SNR=8.0 | | | | | | |
| **KLR** | **Kul'dur** | **82.84** | **330** | P | **P** | **16 07 57.8** | **+0.3** |
| | 1.0nm,0.8s,baz=191,slow=5.2,SNR=4.5 | | | | | | |
| **MA2** | **Magadan** | **84.44** | **345** | P | **P** | **16 08 05.0** | **0.0** |
| | 1.1nm,0.2s,baz=180,slow=9.6,SNR=4.5 | | | | | | |
| **SEY** | **Seymchan** | **87.07** | **347** | P | **P** | **16 08 18.1** | **+0.6** |
| | 2.0nm,0.8s,baz=141,slow=5.3,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **89.47** | **13** | P | **P** | **16 08 28.4** | **-0.2** |
| | 0.5nm,0.4s,baz=215,slow=5.1,SNR=18 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.66** | **349** | PKP | **PKiKP** | **16 14 36.5** | **-0.1** |
| | 3.8nm,0.9s,baz=351,slow=6.4,SNR=3.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.34** | **330** | PKP | PKPab | 16 14 60.0 | -0.1 |
| | 1.0nm,0.5s,baz=43,slow=4.4,SNR=27 | | | | | | |
| **GERES** | **GERESS Array B** | **150.82** | **343** | PKPbc | **PKiKP** | **16 15 21.2** | **+0.6** |
| | 0.1nm,0.3s,baz=26,slow=3.4,SNR=3.7 | | | | | | |

*NNC **26** 16:13:00.6±0.3, 44°.17N × 79°.50E, h1km±3km, mb2.5,*
*mpv2.5, Error ellipse: s-maj=3.1km s-min=2.0km az=113.0*
*SOME **26** 16:13:01.4, 44°.17N × 79°.50E, h15km*
**ISC 26 16:13:01.0**±1.1, **44°.16N**±0°.02 × **79°.47E**±0°.03, **h5km**±10km,
**n33,** σ0§**65/60, 5C-2D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **0.29** | **54** | *e*P | **Pg** | **16 13 06.8** | **+0.2** |
| | 4.4nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | **16 13 10.7** | **+0.4** |
| | 94nm,0.1s | | | | | | |
| **DJR** | **Jarkent** | **0.29** | **54** | P | **Pg** | **16 13 06.7** | **+0.2** |
| | 4.4nm,0.1s | | | | | | |
| DJR | | | | S | **Sg** | **16 13 10.7** | **+0.4** |
| | 94nm,0.1s | | | | | | |
| **BLB** | **Baldybastay** | **0.71** | **265** | *e*P | **Pb** | **16 13 15.7** | **-0.3** |
| | 4.8nm,0.1s | | | | | | |
| BLB | | | | *e*S | **Sb** | **16 13 26.3** | **+0.1** |
| | 15nm,0.1s | | | | | | |
| **BLB** | **Baldybastay** | **0.71** | **265** | P | **Pb** | **16 13 15.7** | **-0.3** |
| | 4.8nm,0.1s | | | | | | |
| BLB | | | | S | **Sb** | **16 13 26.3** | **+0.1** |
| | 15nm,0.1s | | | | | | |
| **PDGK** | **Podgornoye** | **0.83** | **179** | P | **Pg** | **16 13 17.0** | **0.0** |
| | 1.3nm,0.1s | | | | | | |
| PDGK | | | | S | **Sb** | **16 13 28.8** | **-0.9** |
| | 18nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **0.83** | **179** | ⇑P | **Pg** | **16 13 16.8** | **-0.1** |
| | 0.9nm,0.3s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **16 13 28.7** | **-0.9** |
| | 11nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **0.90** | **219** | *e*P | **Pg** | **16 13 18.6** | **+0.4** |
| | 4.1nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **16 13 31.3** | **-0.1** |
| | 34nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **0.96** | **138** | *e*P | **Pg** | **16 13 18.8** | **-0.6** |
| | 2.2nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **16 13 31.2** | **-0.6** |
| | 16nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **1.12** | **356** | *e*P | **Pg** | **16 13 21.7** | **-0.8** |
| | 3.1nm,0.1s | | | | | | |
| KAPS | | | | *e*S | **Sg** | **16 13 36.1** | **-1.0** |
| | 8.2nm,0.1s | | | | | | |
| **KAPS** | **Kapalarasan** | **1.12** | **356** | P | **Pg** | **16 13 21.7** | **-0.8** |
| | 3.1nm,0.1s | | | | | | |
| KAPS | | | | S | **Sg** | **16 13 36.1** | **-1.0** |
| | 8.2nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **1.16** | **235** | *e*P | Pn | **16 13 23.8** | **-0.1** |
| | 0.5nm,0.2s | | | | | | |
| KURS | | | | *e*S | **Sn** | **16 13 39.8** | **-0.4** |
| | 4.8nm,0.3s | | | | | | |
| **KURS** | **Kuram** | **1.16** | **235** | P | Pn | **16 13 23.8** | **-0.1** |
| | 0.5nm,0.2s | | | | | | |
| KURS | | | | S | **Sn** | **16 13 39.8** | **-0.4** |
| | 4.8nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **1.18** | **273** | *e*P | **Pb** | **16 13 23.8** | **-0.1** |
| | 0.4nm,0.1s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **16 13 39.9** | **+0.4** |
| | 9.1nm,0.1s | | | | | | |
| **ARXS** | **Arharly** | **1.18** | **273** | P | **Pb** | **16 13 23.8** | **-0.1** |
| | 0.4nm,0.1s | | | | | | |
| ARXS | | | | S | **Sb** | **16 13 39.9** | **+0.4** |
| | 9.1nm,0.1s | | | | | | |
| **ZHN** | **Zhinishke** | **1.25** | **217** | *e*P | Pn | **16 13 24.4** | **-0.8** |
| | 3.7nm,0.3s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **16 13 41.3** | **-0.2** |
| | 31nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.35** | **215** | *e*P | Pn | **16 13 26.5** | **-0.1** |
| | 1.8nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **16 13 44.9** | **+0.7** |
| | 18nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.35** | **215** | P | Pn | **16 13 26.5** | **-0.1** |
| | 1.8nm,0.1s | | | | | | |
| SATY | | | | S | **Sg** | **16 13 44.9** | **+0.7** |
| | 18nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.81** | **261** | *e*P | **Pb** | **16 13 34.7** | **0.0** |
| | 0.5nm,0.1s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **16 13 58.6** | **+0.8** |
| | 11nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **1.81** | **261** | P | **Pb** | **16 13 34.7** | **0.0** |
| | 0.5nm,0.1s | | | | | | |
| CHKK | | | | S | **Sb** | **16 13 58.6** | **+0.8** |
| | 11nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.94** | **242** | *e*P | **Pb** | **16 13 36.6** | **-0.4** |
| | 0.4nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **16 14 01.8** | **+0.2** |
| | 4.8nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.94** | **242** | P | **Pb** | **16 13 36.6** | **-0.4** |
| | 0.4nm,0.2s | | | | | | |
| KOTS | | | | S | **Sb** | **16 14 01.8** | **+0.2** |
| | 4.8nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.02** | **241** | *e*P | **Pb** | **16 13 38.5** | **+0.3** |
| | 0.8nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **16 14 05.0** | **+1.3** |
| | 2.8nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **2.02** | **241** | Pg | **Pb** | **16 13 38.6** | **+0.3** |
| | 0.8nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 16 14 05.1 | |
| | 2.8nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **2.06** | **258** | *e*P | Pb | **16 13 39.0** | **+0.1** |
| | 0.3nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **16 14 05.9** | **+1.1** |
| | 4.4nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **2.06** | **258** | Pg | Pb | **16 13 39.1** | **+0.1** |
| | 0.3nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 16 14 05.9 | |
| | 4.4nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.15** | **239** | *e*P | Pb | **16 13 40.5** | **-0.1** |
| | 0.4nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **16 14 08.4** | **+0.7** |
| | 1.7nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.15** | **239** | Pg | Pb | **16 13 40.5** | **-0.1** |
| | 0.4nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 16 14 08.4 | |
| | 1.7nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.44** | **246** | *e*P | Pb | **16 13 45.9** | **+0.6** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **16 14 17.6** | **+2.0** |
| | 3.4nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **2.44** | **246** | Pg | Pb | **16 13 45.9** | **+0.6** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | Lg | Lg | 16 14 17.6 | |
| | 3.4nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **2.78** | **262** | *e*P | Pb | **16 13 52.3** | **+1.1** |
| | 0.6nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **16 14 28.7** | **-1.5** |
| | 1.1nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **2.78** | **262** | Pg | Pb | **16 13 52.3** | **+1.1** |
| | 0.6nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 16 14 28.7 | |
| | 1.1nm,0.2s | | | | | | |
| **MAKZ** | **Makanchi** | **3.18** | **33** | ⇓Lg | Lg | 16 14 39.0 | |
| | 0.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **3.30** | **36** | ⇓Pn | Pn | **16 13 53.8** | **+0.5** |
| | baz=218,slow=13,SNR=3.7 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | **16 14 00.7** | **+0.8** |
| | 0.3nm,0.6s,baz=209,slow=15,SNR=4.4 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **16 14 32.9** | **0.0** |
| | 0.1nm,0.4s,baz=240,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PKE** | **Pukeiti** | **11.15 210** | P | **P** | **16 25 52.7** | **+4.0** |
| **CMWZ** | **Cape Campbell** | **13.25 203** | P | Pn | 16 26 20.2 | +7.3 |
| **DZM** | **Mont Dzumac** | **15.32 296** | P | **P** | **16 26 35.9** | **+1.0** |
| | 0.6nm,0.3s,baz=176,slow=20,SNR=8.6 | | | | | |
| **ASAR** | **Alice Springs** | **42.47 267** | P | **P** | **16 30 36.5** | **-2.2** |
| | 0.6nm,0.6s,baz=101,slow=6.5,SNR=17 | | | | | |
| **WRA** | **Warramunga Arr** | **43.40 272** | P | **P** | **16 30 43.8** | **-2.3** |
| | 1.2nm,0.6s,baz=108,slow=8.5,SNR=10 | | | | | |
| **FINES** | **FINESS Array B** | **144.30 340** | PKP | **PKPab** | **16 42 07.8** | **-1.9** |
| | 1.7nm,0.4s,baz=42,slow=3.8,SNR=9.6 | | | | | |

*BJI* **26** *16:32:17.9±0.0,50˚.21N×91˚.44E,h7km,mb4.0/23, mB4.6/13,ML4.7/4,Ms4.3/20,Ms7 4.0/19*
*IDC* **26** *16:32:19.6±0.6,49˚.92N×91˚.62E,h0km,mb4.0/20, mb1 4.1/27,mb1mx4.0/57,mbtmp4.0/27,ML3.7/7,MS3.6/37, Ms1 3.6/37,ms1mx3.4/99,Error ellipse: s-maj=12.9km s-min=8.7km az=1.0*
*MOS* **26** *16:32:19.6±1.2,49˚.85N×91˚.56E,h14km,mb4.6/15,Error ellipse: s-maj=7.5km s-min=6.2km az=14.8*
*NEIC* **26** *16:32:22.4±1.5,49˚.99N±0˚.08×91˚.6E±0˚.1,h17km±5km, mb4.4/26,Error ellipse: s-maj=12.8km s-min=7.8km az=140.0*
*NNC* **26** *16:32:23.9±1.9,50˚.12N×91˚.26E,h18km±8km,mb4.4, mpv4.3,Error ellipse: s-maj=13.8km s-min=6.7km az=95.0*
*ASRS* **26** *16:32:24.4±0.3,50˚N±2˚×9˚1E±˚,h10km,MLh5.0/13,Error ellipse: s-maj=4.4km s-min=2.3km az=145.8,confirmed*

**ISC 26 16:32:21.6±0.6,50.04N±0.03×91.51E±0.02,h12km±3km, n247,σ1§96/269,mb4.4/60,MS3.5/35,40C-20D, Tuva-Buryatia-Mongolia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CUR** | **Chagan-Uzun** | **2.04** | **273** | Pg | **Pb** | **16 32 58.1** | **-0.5** |
| CUR | | | | Sg | **Sg** | **16 33 27.4** | **+0.3** |
| **ULGR** | **Ulagan, Altay** | **2.35** | **286** | Pn | **Pb** | **16 33 04.2** | **+0.3** |
| ULGR | | | | Pg | **Pg** | **16 33 07.0** | **+0.4** |
| ULGR | | | | Sg | **Sg** | **16 33 38.2** | **+1.2** |
| **KZLR** | **Kyzyl** | **2.50** | **47** | Pn | **Pb** | **16 33 04.8** | **-1.6** |
| KZLR | | | | Pg | **Pg** | **16 33 06.9** | **-2.5** |
| KZLR | | | | Sg | **Sg** | **16 33 40.5** | **-1.2** |
| **AKAR** | **Aktash** | **2.52** | **278** | Pn | **Pb** | **16 33 04.9** | **-1.9** |
| AKAR | | | | Pg | **Pg** | **16 33 08.8** | **-1.0** |
| AKAR | | | | Sg | **Sg** | **16 33 42.4** | **0.0** |
| **CHBI** | **Chibit, Altay** | **2.59** | **278** | Pn | **Pb** | **16 33 06.9** | **-1.1** |
| CHBI | | | | Pg | **Pg** | **16 33 10.5** | **-0.7** |
| CHBI | | | | Sg | **Sg** | **16 33 46.1** | **+1.3** |
| **DGZ** | **Jazzator, Alta** | **2.66** | **264** | *c i* PN | **Pn** | **16 33 06.4** | **+1.9** |
| **DGZ** | **Jazzator, Alta** | **2.66** | **264** | Pn | **Pn** | **16 33 06.6** | **+2.1** |
| DGZ | | | | Pg | **Pb** | **16 33 10.8** | **+1.5** |
| DGZ | | | | Sg | **Sg** | **16 33 46.5** | **-0.6** |
| **DJO** | **Djoy, Khakassi** | **2.75** | **356** | Pn | **Pb** | **16 33 09.0** | **-1.7** |
| DJO | | | | Pg | **Pg** | **16 33 12.8** | **-1.4** |
| DJO | | | | Sg | **Sg** | **16 33 49.8** | **-0.1** |
| **DJOS** | **Djoyskaya Sosn** | **2.76** | **359** | Pn | **Pb** | **16 33 10.7** | **-0.1** |
| DJOS | | | | Pg | **Pg** | **16 33 14.5** | **+0.1** |
| DJOS | | | | Sg | **Sg** | **16 33 51.7** | **+1.6** |
| **CERR** | **Cheremushki** | **2.82** | **359** | Pn | **Pb** | **16 33 10.7** | **-1.1** |
| CERR | | | | Pg | **Pg** | **16 33 14.8** | **-0.7** |
| CERR | | | | Sg | **Sg** | **16 33 55.5** | **+3.5** |
| **ARTR** | **Artybash** | **3.20** | **305** | Pn | **Pn** | **16 33 14.9** | **+3.1** |
| ARTR | | | | Pg | **Pg** | **16 33 21.1** | **-1.8** |
| ARTR | | | | Sg | **Sg** | **16 34 03.6** | **-0.8** |
| **TASR** | **Tashtagol** | **3.55** | **321** | Pn | **Pb** | **16 33 19.6** | **+3.2** |
| TASR | | | | Pg | **Pg** | **16 33 27.2** | **-2.3** |
| TASR | | | | Sg | **Sg** | **16 34 12.9** | **-2.5** |
| **ABNR** | **Abakan** | **3.69** | **359** | Pg | **Pg** | **16 33 30.4** | **-1.7** |
| **ABNR** | **Abakan** | **3.69** | **359** | Sg | **Sg** | **16 34 19.1** | **-0.8** |
| **KNGR** | **Kungurtug, Tuv** | **3.89** | **79** | Pn | **Pn** | **16 33 23.8** | **+2.5** |
| KNGR | | | | Pg | **Pb** | **16 33 31.3** | **+1.2** |
| KNGR | | | | Sg | **Sg** | **16 34 25.4** | **-1.0** |
| **LUZB** | **Luzhba, Kemero** | **3.97** | **337** | Pn | **Pb** | **16 33 28.0** | **-3.4** |
| LUZB | | | | Pg | **Pg** | **16 33 35.6** | **-2.0** |
| LUZB | | | | Sg | **Sg** | **16 34 28.8** | **-0.1** |
| **UKR** | **Ust'-Kan** | **4.40** | **284** | Pn | **Pn** | **16 33 30.9** | **+2.7** |
| UKR | | | | Pg | **Pg** | **16 33 43.1** | **-2.6** |
| UKR | | | | Sg | **Sg** | **16 34 41.6** | **-1.0** |
| **SHRR** | **Shira** | **4.53** | **350** | Sg | **Sg** | **16 34 46.5** | **-0.5** |
| **SHRR** | **Shira** | **4.53** | **350** | Pg | **Pg** | **16 33 45.4** | **-2.9** |
| **ELT** | **Eltsovka** | **4.60** | **316** | Pn | **Pn** | **16 33 32.9** | **+2.0** |
| ELT | | | | Pg | **Pg** | **16 33 46.5** | **-3.1** |
| ELT | | | | Sg | **Sg** | **16 34 46.4** | **-2.8** |
| **ZSN** | **Zaisan** | **5.11** | **242** | *e*PN | **Pn** | **16 33 37.0** | **-0.9** |
| ZSN | | | | *e* | | 16 33 53.3 | |
| **ZSN** | **Zaisan** | **5.11** | **242** | *e*Pn | **Pn** | **16 33 37.0** | **-0.9** |
| | baz=244 | | | | | | |
| ZSN | | | | *e*Pg | **Pb** | **16 33 53.3** | **+2.5** |
| | baz=244 | | | | | | |
| **MINR** | **Mina** | **5.13** | **18** | Pn | **Pn** | **16 33 41.4** | **+3.1** |
| MINR | | | | Pg | **Pg** | **16 33 57.7** | **-2.1** |
| MINR | | | | Sg | **Sg** | **16 35 06.4** | **+0.1** |
| **SALR** | **Pechorkino, Sa** | **5.65** | **323** | Pn | **Pn** | **16 33 48.3** | **+3.0** |
| SALR | | | | Pg | **Pg** | **16 34 08.2** | **-1.4** |
| SALR | | | | Sg | **Sg** | **16 35 19.1** | **-3.7** |
| **ZAL0** | **Zalesovo Array** | **5.69** | **316** | | **Pn** | **16 33 46.7** | **+0.8** |
| **ZAA0** | **Zalesovo Array** | **5.69** | **316** | ⇓Pn | **Pn** | **16 33 45.8** | **-0.1** |
| | 1.6nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑Pg | **Pb** | **16 34 04.6** | **+3.8** |
| | 7.3nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑Lg | Lg | 16 35 19.0 | |
| | 164nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.69** | **316** | Pn | **Pn** | **16 33 47.1** | **+1.2** |
| | 3.2nm,0.3s,baz=133,slow=13,SNR=47 | | | | | | |
| ZALV | | | | Pg | Pg | 16 34 05.7 | -4.7 |
| | 13nm,0.3s,baz=132,slow=15,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 16 35 21.8 | |
| | 22nm,0.3s,baz=126,slow=29,SNR=8.9 | | | | | | |
| ZALV | | | | LR | LR | 16 36 07.8 | |
| | comp=Z,585nm,18.1s,baz=136,slow=39 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.69** | **316** | | **Pn** | **16 33 46.4** | **+0.5** |
| **BRCR** | **Berchikul'** | **5.93** | **342** | Pn | **Pn** | **16 33 52.2** | **+3.0** |
| BRCR | | | | Pg | Pg | 16 34 10.0 | -5.0 |
| BRCR | | | | Sg | **Sg** | **16 35 27.2** | **-4.6** |
| **MOY** | **Mondy** | **6.22** | **71** | *e*PN | **Pb** | **16 34 08.4** | **-1.4** |
| MOY | | | | *i* | | 16 34 17.2 | |
| MOY | | | | *e* | | 16 35 33.0 | |
| **KEM** | **Kemerovo** | **6.25** | **330** | Sg | **Sg** | **16 35 36.4** | **-5.6** |
| **MK31** | **Makanchi Array** | **6.95** | **246** | *i* PN | **Pn** | **16 34 04.0** | **+0.8** |
| **MK31** | **Makanchi Array** | **6.95** | **246** | | **Pn** | **16 34 02.5** | **-0.6** |
| **MK31** | **Makanchi Array** | **6.95** | **246** | ⇑Pn | **Pn** | **16 34 03.9** | **+0.7** |
| | 7.3nm,0.5s,baz=80,slow=10.0,SNR=252 | | | | | | |
| MK31 | | | | ⇓Pg | Pb | 16 34 28.5 | +6.4 |
| | 37nm,0.6s,baz=73,slow=15,SNR=13 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 16 36 01.0 | |
| | 120nm,0.6s,baz=69,slow=32,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.95** | **246** | Pn | **Pn** | **16 34 04.3** | **+1.2** |
| | 2.5nm,0.3s,baz=70,slow=13,SNR=184 | | | | | | |
| MKAR | | | | Lg | Lg | 16 35 59.8 | |
| | 16nm,0.3s,baz=64,slow=24,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.95** | **246** | Sg | **Sg** | **16 36 00.7** | **-3.6** |
| **MKAR** | **Makanchi Array** | **6.95** | **246** | Pn | **Pn** | **16 34 04.2** | **+1.0** |
| **NVSII** | **Novosibirsk** | **6.97** | **317** | Sg | **Sg** | **16 36 01.8** | **-3.5** |
| **BSTK** | **Bystrovka, Nov** | **7.07** | **313** | Sg | **Sg** | **16 36 06.1** | **-2.2** |
| **MAKZ** | **Makanchi** | **7.12** | **247** | PN | **Pn** | **16 34 06.4** | **+0.8** |
| **MAKZ** | **Makanchi** | **7.12** | **247** | Pn | **Pn** | **16 34 06.4** | **+0.8** |
| **MAKZ** | **Makanchi** | **7.12** | **247** | ⇑Pn | **Pn** | **16 34 06.1** | **+0.5** |
| | 5.3nm,0.4s | | | | | | |
| MAKZ | | | | ⇓Pg | Pb | 16 34 31.0 | +5.8 |
| | 23nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 16 36 06.8 | |
| | 175nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **7.12** | **247** | Pn | **Pn** | **16 34 06.8** | **+1.2** |
| MAKZ | | | | Sg | **Sg** | **16 36 06.8** | **-3.2** |
| **SEM** | **Semipalatinsk** | **7.24** | **277** | *e*P | **Pn** | **16 34 06.8** | **-0.5** |
| **SEM** | **Semipalatinsk** | **7.24** | **277** | *e*P | **Pn** | **16 34 06.9** | **-0.5** |
| | baz=278 | | | | | | |
| **ZAK** | **Zakamensk** | **7.56** | **83** | *e*P | Pn | 16 34 22.1 | +10 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **8.27** | **280** | *d i*P | **Pn** | **16 34 21.5** | **+0.2** |
| **KURK** | **Kurchatov** | **8.27** | **280** | Pn | **Pn** | **16 34 21.2** | **-0.1** |
| **KURK** | **Kurchatov** | **8.27** | **280** | ⇑Pn | **Pn** | **16 34 20.8** | **-0.5** |
| | comp=Z,18nm,0.6s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 16 36 40.6 | |
| | comp=Z,257nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.33** | **279** | Pn | **Pn** | **16 34 22.2** | **+0.1** |
| | comp=Z,2.6nm,0.3s,baz=91,slow=14,SNR=283 | | | | | | |
| KURBB | | | | Lg | Lg | 16 36 44.8 | |
| | comp=Z,3.0nm,0.3s,baz=84,slow=33,SNR=6.5 | | | | | | |
| KURBB | | | | LR | LR | 16 37 43.9 | |
| | comp=Z,270nm,19.3s,baz=50,slow=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.33** | **279** | ⇓Pn | **Pn** | **16 34 22.1** | **+0.1** |
| | comp=Z,47nm,0.5s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 16 36 43.1 | |
| | comp=Z,446nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **10.04** | **97** | Pn | **Pn** | **16 34 44.8** | **-0.8** |
| | comp=Z,0.5nm,0.3s,baz=280,slow=14,SNR=21 | | | | | | |
| SONM | | | | Pg | | 16 35 23.5 | |
| | comp=Z,1.3nm,0.3s,baz=286,slow=17,SNR=10 | | | | | | |
| SONM | | | | Lg | Lg | 16 37 35.1 | |
| | comp=Z,3.5nm,0.3s,baz=274,slow=31,SNR=9.8 | | | | | | |
| SONM | | | | LR | LR | 16 38 44.4 | |
| | comp=Z,306nm,19.8s,baz=262,slow=39 | | | | | | |
| **PDGK** | **Podgornoye** | **10.64** | **235** | P | **Pn** | **16 34 51.9** | **-2.0** |
| **PDGK** | **Podgornoye** | **10.64** | **235** | ⇑Pn | **Pn** | **16 34 52.7** | **-1.2** |
| | comp=Z,6.9nm,0.6s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 16 38 00.5 | |
| | comp=Z,170nm,1.4s | | | | | | |
| **KPKS** | **Kokpek** | **10.98** | **238** | *e*P | **Pn** | **16 34 56.9** | **-1.6** |
| **KPKS** | **Kokpek** | **10.98** | **238** | *e*P | **Pn** | **16 34 57.0** | **-1.6** |
| | baz=239 | | | | | | |
| **SATY** | **Saty** | **11.40** | **237** | *e*P | **Pn** | **16 35 02.3** | **-2.0** |
| **SATY** | **Saty** | **11.40** | **237** | *e*P | **Pn** | **16 35 02.4** | **-2.0** |
| | baz=238 | | | | | | |
| **KUU** | **Kurty** | **12.04** | **245** | *e*P | **Pn** | **16 35 12.2** | **-0.8** |
| **KUU** | **Kurty** | **12.04** | **245** | *e*P | **Pn** | **16 35 12.3** | **-0.8** |
| | baz=246 | | | | | | |
| **MDOK** | **Medeo** | **12.09** | **241** | *e*P | **Pn** | **16 35 12.9** | **-0.8** |
| **MDOK** | **Medeo** | **12.09** | **241** | *e*P | **Pn** | **16 35 13.0** | **-0.8** |
| | baz=241 | | | | | | |
| **MDOK** | **Medeo** | **12.09** | **241** | ⇓Pn | **Pn** | **16 35 13.8** | **+0.2** |
| | comp=Z,2.8nm,0.4s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 16 38 44.3 | |
| | comp=Z,110nm,1.7s | | | | | | |
| **BRZS** | **Berezniki** | **12.12** | **277** | *e*P | **Pn** | **16 35 14.7** | **+0.7** |
| **BRZS** | **Berezniki** | **12.12** | **277** | *e*P | **Pn** | **16 35 14.8** | **+0.7** |
| | baz=278 | | | | | | |
| **GTA** | **Gaotai** | **12.15** | **148** | *e*P | **Pn** | **16 35 13.8** | **-0.8** |
| GTA | | | | pP | P | 16 35 16.8 | -10 |
| GTA | | | | sP | | 16 35 20.0 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,70nm,5.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,530nm,9.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,370nm,10.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,600nm,10.5s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **12.65** | **234** | | **Pn** | **16 35 23.0** | **+1.4** |
| **OTUK** | **Ortayu** | **12.69** | **269** | P | **Pn** | **16 35 19.6** | **-2.1** |
| **OTUK** | **Ortayu** | **12.69** | **269** | ⇑Pn | **Pn** | **16 35 19.6** | **-2.1** |
| | comp=Z,5.7nm,0.7s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 16 39 01.3 | |
| | comp=Z,171nm,1.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **13.06** | **243** | ⇑Pn | **Pn** | **16 35 27.5** | **+0.4** |
| | comp=Z,3.7nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 16 39 14.9 | |
| | comp=Z,83nm,1.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **13.48** | **291** | Pn | **Pn** | **16 35 32.2** | **-0.3** |
| | comp=Z,1.0nm,0.3s,baz=350,slow=21,SNR=12 | | | | | | |
| **BRVK** | **Borovoye** | **13.54** | **291** | P | **Pn** | **16 35 35.7** | **+2.3** |
| BRVK | | | | | | 16 38 01.5 | |
| **BRVK** | **Borovoye** | **13.54** | **291** | Pn | **Pn** | **16 35 35.0** | **+1.6** |
| **BRVK** | **Borovoye** | **13.54** | **291** | ⇓Pn | **Pn** | **16 35 31.7** | **-1.6** |
| | comp=Z,4.3nm,0.6s | | | | | | |
| BRVK | | | | ⇑Sn | **Sn** | **16 38 01.5** | **-2.1** |
| | comp=Z,10nm,0.8s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 16 39 29.5 | |
| | comp=Z,43nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **13.88** | **244** | Pn | **Pn** | **16 35 38.2** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=130,slow=10,SNR=4.4 | | | | | | |
| AAK | | | | LR | LR | 16 41 14.5 | |
| | comp=Z,319nm,18.4s,baz=47,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **13.88** | **244** | ⇑Pn | **Pn** | **16 35 39.7** | **+1.6** |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **GOMU** | **GeErMu** | **14.04** | **169** | P | **Pn** | **16 35 43.8** | **+3.1** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,84nm,5.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,440nm,11.9s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,370nm,11.9s | | | | | | |
| **KSH** | **Kashi** | **15.22** | **232** | P | **P** | **16 36 03.5** | **+2.2** |
| KSH | | | | sP | sP | 16 36 09.8 | +2.9 |
| KSH | | | | S | **S** | **16 38 59.0** | **-2.7** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,400nm,6.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,310nm,6.7s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,290nm,8.6s | | | | | | |
| **BOD** | **Bodaibo** | **15.31** | **51** | *e*P | **P** | **16 36 02.4** | **+0.3** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| **BRLS** | **Borolday** | **16.45** | **253** | *e*P | **P** | **16 36 15.0** | **+0.1** |
| **BRLS** | **Borolday** | **16.45** | **253** | *e*P | **P** | **16 36 15.0** | **+0.1** |
| | baz=253 | | | | | | |
| **LZH** | **Lanzhou** | **16.57** | **143** | *e*P | **P** | **16 36 16.0** | **-0.4** |
| LZH | | | | pP | pP | 16 36 21.5 | +1.2 |
| LZH | | | | sP | sP | 16 36 26.0 | +4.1 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,630nm,14.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,520nm,10.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,780nm,16.0s | | | | | | |
| **IUG** | **luzhnay** | **16.82** | **250** | *e*P | **Pn** | **16 36 15.6** | **-1.3** |
| **IUG** | **luzhnay** | **16.82** | **250** | *e*P | **Pn** | **16 36 15.7** | **-1.3** |
| | baz=251 | | | | | | |
| **GAR** | **Garm** | **18.65** | **242** | P | **Pn** | **16 36 39.6** | **0.0** |
| GAR | | | | IAmb | IAmb | 16 37 07.8 | |
| | comp=Z,43nm,1.5s | | | | | | |
| **NRIK** | **Noril'sk** | **19.45** | **356** | P | **Pn** | **16 36 48.9** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=65,slow=9.7,SNR=3.9 | | | | | | |
| NRIK | | | | LR | LR | 16 44 38.1 | |
| | comp=Z,204nm,19.3s,baz=156,slow=38 | | | | | | |
| **NRIK** | **Noril'sk** | **19.45** | **356** | *ce*P | **Pn** | **16 36 49.2** | **+0.3** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.4s | | | | | | |
| **NRIK** | **Noril'sk** | **19.45** | **356** | P | **Pn** | **16 36 48.7** | **-0.2** |
| **SVE** | **Sverdlovsk** | **19.48** | **302** | *e*P | **Pn** | **16 36 50.1** | **+0.7** |
| SVE | | | | *e*S | **S** | **16 40 34.8** | **+6.8** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron** | **19.54** | **243** | P | **P** | **16 36 48.2** | **-0.8** |
| CHGR | | | | IAmb | IAmb | 16 36 59.5 | |
| | comp=Z,18nm,0.5s | | | | | | |
| **LSA** | **Lhasa** | **20.32** | **181** | P | **P** | **16 36 56.8** | **-1.2** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **AB31** | **Akbulak array** | **20.38** | **280** | ⇓Pn | **P** | **16 36 58.7** | **+0.6** |
| | comp=Z,0.8nm,0.3s,baz=76,slow=10,SNR=54 | | | | | | |
| **ABKAR** | **Akbulak array** | **20.38** | **280** | P | **P** | **16 36 58.1** | **+0.1** |
| **ABKAR** | **Akbulak array** | **20.38** | **280** | P | **P** | **16 36 58.6** | **+0.6** |
| **ARU** | **Arti** | **20.59** | **301** | P | Pn | 16 37 02.0 | -0.4 |
| | comp=Z,1.9nm,0.4s,baz=115,slow=5.6,SNR=11 | | | | | | |
| ARU | | | | LR | LR | 16 45 39.2 | |
| | comp=Z,190nm,19.0s,baz=102,slow=39 | | | | | | |
| **ARU** | **Arti** | **20.59** | **301** | *c i*P | Pn | 16 37 01.7 | -0.7 |
| ARU | | | | | | 16 37 16.8 | |
| ARU | | | | S | Sn | 16 40 56.0 | +1.8 |
| ARU | | | | SS | **SnSn** | **16 41 17.1** | **+8.5** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,159nm,14.0s | | | | | | |
| **ARU** | **Arti** | **20.59** | **301** | P | Pn | 16 37 01.6 | -0.8 |
| ARU | | | | IAmb | IAmb | 16 37 10.4 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.33** | **284** | P | **P** | **16 37 08.7** | **+0.4** |
| | comp=Z,2.2nm,0.5s,baz=83,slow=7.9,SNR=7.4 | | | | | | |
| AKTO | | | | LR | LR | 16 45 49.6 | |
| | comp=Z,155nm,19.9s,baz=64,slow=38 | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.33** | **284** | ⇑Pn | **P** | **16 37 09.2** | **+1.0** |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **ZEA** | **Zeya** | **22.21** | **67** | *e*P | **P** | **16 37 19.4** | **+1.7** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| **DANN** | **Dangsing** | **22.46** | **198** | *e*P | **P** | **16 37 19.8** | **-1.0** |
| | comp=Z,27nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **22.52** | **193** | *e*P | **P** | **16 37 20.9** | **-0.6** |
| | comp=Z,35nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **22.63** | **196** | *e*P | **P** | **16 37 21.6** | **-0.9** |
| | comp=Z,37nm,0.6s | | | | | | |
| **JIRN** | **Jiri** | **22.72** | **192** | *e*P | **P** | **16 37 22.8** | **-0.9** |
| | comp=Z,34nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **22.73** | **194** | *e*P | **P** | **16 37 22.3** | **-1.3** |
| | comp=Z,19nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **22.85** | **189** | *e*P | **P** | **16 37 24.2** | **-0.7** |
| | comp=Z,35nm,0.7s | | | | | | |
| **PYUN** | **Piuthan** | **22.86** | **200** | *e*P | **P** | **16 37 23.6** | **-1.4** |
| | comp=Z,25nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **22.92** | **194** | *e*P | **P** | **16 37 24.4** | **-1.2** |
| | comp=Z,16nm,0.6s | | | | | | |
| **PKI** | **Pulchoki** | **22.92** | **194** | *e*P | **P** | **16 37 24.6** | **-1.2** |
| | comp=Z,17nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **23.05** | **198** | *e*P | **P** | **16 37 25.8** | **-1.2** |
| **ODAN** | **Odare** | **23.36** | **189** | *e*P | **P** | **16 37 29.9** | **-0.3** |
| | comp=Z,25nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **23.37** | **191** | *e*P | **P** | **16 37 29.2** | **-1.0** |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **CN2** | **Changchun** | **23.86** | **92** | *e*P | **P** | **16 37 29.5** | **-5.1** |
| CN2 | | | | *e*S | **S** | **16 41 40.5** | **-10** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,200nm,4.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,11.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,11.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,400nm,12.0s | | | | | | |
| **YAK** | **Yakutsk** | **24.06** | **46** | *e*P | **P** | **16 37 37.5** | **+1.1** |
| YAK | | | | *e* | | 16 38 06.9 | |
| YAK | | | | *e*S | **S** | **16 41 57.0** | **+3.8** |
| YAK | | | | *e*SS | **SnSn** | **16 42 41.1** | **+7.4** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,1.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,106nm,4.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,57nm,3.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,50nm,3.7s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,77nm,4.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,66nm,3.9s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,106nm,15.0s | | | | | | |
| **KIRV** | **Kirov** | **25.61** | **306** | LR | LR | 16 49 00.7 | |
| | comp=Z,332nm,18.0s,baz=91,slow=39 | | | | | | |
| **KIRV** | **Kirov** | **25.61** | **306** | *ce*P | **P** | **16 37 50.5** | **0.0** |
| **KLR** | **Kul'dur** | **25.86** | **76** | LR | LR | 16 48 53.0 | |
| | comp=Z,137nm,19.0s,baz=268,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **25.86** | **76** | *i* P | **P** | **16 37 52.4** | **-0.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.2s | | | | | | |
| **GEYT** | **Alibeck** | **26.68** | **256** | LR | LR | 16 49 48.4 | |
| | comp=Z,132nm,18.2s,baz=82,slow=39 | | | | | | |
| **BELG** | **Belogornoye** | **27.28** | **292** | LR | LR | 16 49 23.4 | |
| | comp=Z,109nm,19.4s,baz=154,slow=37 | | | | | | |
| **TIXI** | **Tiksi** | **27.45** | **25** | P | **P** | **16 38 07.5** | **+0.6** |
| | comp=Z,3.0nm,0.9s,baz=88,slow=23,SNR=8.5 | | | | | | |
| **TIXI** | **Tiksi** | **27.45** | **25** | *ce*P | **P** | **16 38 07.1** | **+0.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| **TIXI** | **Tiksi** | **27.45** | **25** | P | **P** | **16 38 08.1** | **+1.1** |
| **PRGR** | **Permogore** | **27.64** | **312** | *e*P | **P** | **16 38 05.5** | **-3.2** |
| PRGR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **27.89** | **86** | P | **P** | **16 38 08.8** | **-2.4** |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **27.89** | **86** | P | **P** | **16 38 08.8** | **-2.4** |
| USA0B | | | | IAmb | IAmb | 16 38 11.9 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **27.89** | **86** | P | **P** | **16 38 11.2** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=294,slow=5.4,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **28.86** | **102** | P | **P** | **16 38 20.0** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=307,slow=7.6,SNR=4.8 | | | | | | |
| KSRS | | | | LR | LR | 16 50 57.4 | |
| | comp=Z,90nm,18.2s,baz=305,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **28.86** | **102** | P | **P** | **16 38 20.0** | **+0.2** |
| **KLMR** | **Klimovskoe** | **30.59** | **311** | *e*P | **P** | **16 38 34.6** | **-0.3** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KLMR** | **Klimovskoe** | **30.59** | **311** | *e*P | **P** | **16 38 34.7** | **-0.2** |
| KLMR | | | | AMP | | 16 38 41.1 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **MAK** | **Makhachkala** | **30.74** | **274** | *e*P | P | 16 38 31.5 | -4.9 |
| MAK | | | | *e*S | **S** | **16 43 33.6** | **-5.5** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,107nm,1.3s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,133nm,15.0s | | | | | | |
| **VRH** | **Novokhopyorsk** | **31.13** | **292** | *e*P | **P** | **16 38 40.2** | **+0.5** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.07** | **167** | P | **P** | **16 38 47.2** | **-1.2** |
| | comp=Z,0.4nm,0.5s,baz=192,slow=30,SNR=4.3 | | | | | | |
| CMAR | | | | LR | LR | 

AKBB IAmb IAmb 16 39 45.9
comp=Z,4.4nm,0.7s
**PETK Petropavlovsk- 39.93 59** LR LR 16 56 00.6
comp=Z,89nm,20.0s,baz=119,slow=36
**BR131 Keskin Array S 41.32 278** i P **P 16 40 08.8 +1.7**
**BR131 Keskin Array S 41.32 278** P **P 16 40 07.8 +0.7**
BR131 IAmb IAmb 16 40 09.6
comp=Z,7.2nm,0.8s
**BRTR Keskin Array B 41.32 278** P **P 16 40 07.9 +0.7**
comp=Z,4.6nm,0.9s,baz=80,slow=7.2,SNR=19
BRTR LR LR 17 00 27.9
comp=Z,57nm,18.4s,baz=24,slow=41
**BRTR Keskin Array B 41.32 278** *ce*P **P 16 40 08.1 +0.9**
BRTR pmax pmax
comp=Z,5.0nm,0.9s
**BRTR Keskin Array B 41.32 278** P **P 16 40 08.1 +0.9**
**TUDR 41.94 289** ⇓P P 16 40 20.5 +8.6
**TESR Tescani 42.10 291** ⇑P **P 16 40 14.7 +1.4**
**VRI Vrincioaia 42.38 290** ⇓P **P 16 40 16.9 +1.4**
**VRI Vrincioaia 42.38 290** ⇓P **P 16 40 16.9 +1.4**
**BUR08 Bucovina Ar. S 42.41 293** P **P 16 40 15.4 -0.5**
BUR08 IAmb IAmb 16 40 17.9
comp=Z,4.7nm,0.7s
**BURAR Bucovina Array 42.42 293** ⇑P **P 16 40 16.8 +0.8**
**BURAR Bucovina Array 42.42 293** ⇑P **P 16 40 16.8 +0.8**
**BURAR Bucovina Array 42.42 293** P **P 16 40 16.1 +0.1**
BURAR IAmb IAmb 16 40 18.1
comp=Z,5.6nm,0.8s
**MLR Muntele Rosu 43.04 290** ⇑P **P 16 40 21.9 +0.9**
**MLR Muntele Rosu 43.04 290** ⇑P **P 16 40 21.9 +0.9**
**HFS Hagfors 43.13 314** LR LR 17 00 20.3
comp=Z,100nm,19.9s,baz=47,slow=39
**DOPR Dopca 43.13 291** ⇓P **P 16 40 23.8 +2.2**
**PALK Pallekele 43.58 196** LR LR 17 01 23.1
comp=Z,60nm,18.6s,baz=136,slow=40
**NC405 NORSAR Array S 43.64 316** P **P 16 40 26.1 +0.5**
NC405 IAmb IAmb 16 40 31.0
comp=Z,10nm,0.9s
**TRPA Tarpa 43.74 295** ⇑P **P 16 40 27.9 +1.4**
**NC602 NORSAR Array S 43.87 316** P **P 16 40 27.8 +0.4**
**NB2 NORSAR Subarra 43.89 316** P **P 16 40 27.9 +0.3**
comp=Z,2.4nm,0.6s,baz=63,slow=7.9
**NOA NORSAR Array B 43.89 316** P **P 16 40 27.9 +0.3**
comp=Z,1.4nm,0.6s,baz=68,slow=9.2,SNR=13
NOA LR LR 16 59 44.9
comp=Z,74nm,18.3s,baz=75,slow=37
**ARR Arges 43.89 291** ⇑P **P 16 40 30.4 +2.5**
**CRVS Cervenica-Dubn 43.99 297** *e*P **P 16 40 29.7 +1.2**
**CRVS Cervenica-Dubn 43.99 297** *e*P **P 16 40 29.7 +1.2**
**CEI Carei 44.01 295** ⇓P **P 16 40 32.0 +3.4**
**CEI Carei 44.01 295** ⇓P **P 16 40 32.0 +3.4**
**NAO01 NORSAR Array S 44.12 316** P **P 16 40 29.6 +0.1**
**OJC Ojcow 44.29 299** P **P 16 40 31.4 +0.4**
OJC pmax pmax
comp=Z,7.0nm,0.6s
**OJC Ojcow 44.29 299** P **P 16 40 31.4 +0.4**
OJC IAmb IAmb 16 40 32.7
comp=Z,6.9nm,0.6s
**DRGR 44.31 294** ⇑P **P 16 40 33.3 +2.1**
**DRGR 44.31 294** ⇑P **P 16 40 33.3 +2.1**
**RAYN Ar Rayn 44.41 251** ⇑P **P 16 40 31.6 -0.6**
**RAYN Ar Rayn 44.41 251** P **P 16 40 31.1 -1.1**
**GZR Gura Zlata 45.00 292** ⇑P **P 16 40 38.8 +2.1**
**GZR Gura Zlata 45.00 292** ⇑P **P 16 40 38.8 +2.1**
**SIRR Siria 45.20 293** ⇓P **P 16 40 40.3 +2.0**
**VYHS Vyhne 45.70 297** *e*P **P 16 40 43.9 +1.8**
**VYHS Vyhne 45.70 297** *e*P **P 16 40 43.9 +1.8**
**MORC Moravsky Berou 45.78 300** ⇑P **P 16 40 44.6 +1.8**
**MORC Moravsky Berou 45.78 300** ⇑P **P 16 40 44.6 +1.8**
**MORC Moravsky Berou 45.78 300** *e*P **P 16 40 44.0 +1.2**
**OSTC Ostas 46.13 301** *e*P **P 16 40 49.7 +4.2**
OSTC *e*pP **sP 16 40 54.9 +3.5**
**DPC Dobruska-Polom 46.17 301** *e*P **P 16 40 47.9 +2.0**
DPC *e* 16 40 52.1
**DPC Dobruska-Polom 46.17 301** *e*P **P 16 40 47.9 +2.0**
DPC *e*pP **sP 16 40 52.1 +0.4**
**JAVC Velka Javorina 46.17 298** *e*P **P 16 40 47.0 +1.1**
**SMOL Smolenice 46.49 298** *e*P **P 16 40 50.5 +2.1**
**SMOL Smolenice 46.49 298** *e*P **P 16 40 50.5 +2.1**
**VRAC Vranov 46.55 299** LR LR 17 01 42.7
comp=Z,104nm,19.6s,baz=59,slow=38
**VRAC Vranov 46.55 299** *e*P **P 16 40 49.9 +1.1**
**JMIC Jan Mayen 46.73 334** LR LR 17 02 42.3
comp=Z,79nm,18.2s,baz=48,slow=39
**KRUC Moravsky 46.79 299** *e*P **P 16 40 52.5 +1.8**
**MORH Mrgy, Hungar 47.01 295** ⇓P **P 16 40 53.9 +1.5**
**PSI Prapat 47.49 170** LR LR 17 02 25.7
comp=Z,88nm,18.7s,baz=28,slow=38
**CLL Collm 47.49 303** *i* P **P 16 40 57.2 +1.1**
CLL *e* 16 41 02.0
CLL pmax pmax
comp=Z,8.0nm,0.9s
**CLL Collm 47.49 303** *i* P **P 16 40 57.2 +1.1**
comp=Z,8.0nm,0.9s
CLL *e*pP **sP 16 41 02.0 0.0**
**CLL Collm 47.49 303** P **P 16 40 55.9 -0.2**
**CONA Conrad Observa 47.69 298** *e*P **P 16 41 00.2 +2.4**
comp=Z,7.2nm,0.6s
**CKRC Cesky Krumlov 48.09 300** *e*P **P 16 41 02.7 +1.9**
CKRC *ex* x 16 41 06.2
**KHC Kasperske Hory 48.33 301** *e*P **P 16 41 04.2 +1.5**
KHC *e* 16 41 09.6
**KHC Kasperske Hory 48.33 301** *e*P **P 16 41 04.2 +1.5**
KHC *e*pP **sP 16 41 09.6 +1.0**
**GERES GERESS Array B 48.41 300** P **P 16 41 04.7 +1.3**
comp=Z,0.8nm,0.8s,baz=41,slow=9.0,SNR=6.3
**SOKA Soboth 48.84 297** *e*P **P 16 41 07.9 +1.2**
comp=Z,2.1nm,0.6s
**OBKA Obir 49.22 297** *i* P **P 16 41 10.9 +1.2**
comp=Z,3.8nm,0.6s
**IDI Anoyia 49.54 279** ⇑P **P 16 41 12.4 +0.2**
**IDI Anoyia 49.54 279** LR LR 17 06 27.9
comp=Z,32nm,18.4s,baz=94,slow=41
**KBA Koelnbreinsper 49.58 299** *i* P **P 16 41 13.8 +1.3**
comp=Z,8.2nm,0.8s
**A21K Barrow 49.74 23** P **P 16 41 13.9 +0.8**
**EUNU Eureka 50.15 360** P **P 16 41 16.6 +0.3**
EUNU IAmb IAmb 16 41 18.5
comp=Z,4.5nm,0.8s
**ABTA Abfaltersbach 50.24 299** *e*P **P 16 41 19.9 +2.5**
comp=Z,5.0nm,1.0s
**MOTA Moosalm 50.69 300** *e*P **P 16 41 22.7 +1.8**
comp=Z,6.5nm,0.9s
**FETA Feichten 51.09 300** *i* P **P 16 41 25.1 +1.2**
comp=Z,7.5nm,1.0s
**DAVA Damuels 51.41 300** *i* P **P 16 41 28.1 +1.9**
comp=Z,10.0nm,0.8s
**DAVOX Davos/Dischmat 51.70 300** LR LR 17 05 05.5
comp=Z,112nm,19.6s,baz=62,slow=38
**COLD Coldfoot 54.19 25** P **P 16 41 46.1 -0.3**
COLD IAmb IAmb 16 41 55.7
comp=Z,4.1nm,1.0s
**BORG Borgarnes 54.33 331** LR LR 17 10 00.7
comp=Z,34nm,18.1s,baz=326,slow=42
**ILAR Eielson Array 56.92 26** P **P 16 42 06.5 +0.5**
comp=Z,1.2nm,0.9s,baz=302,slow=3.5,SNR=12
**INK Inuvik 57.30 18** P **P 16 42 09.4 +0.8**
comp=Z,4.9nm,0.8s,baz=348,slow=8.4,SNR=14
**SFJD Kangerlussuaq 59.81 344** LR LR 17 11 25.5
comp=Z,69nm,19.7s,baz=303,slow=39
**ESDC Sonseca Array 63.99 301** P **P 16 42 55.0 +0.2**
comp=Z,1.1nm,0.5s,baz=38,slow=6.5,SNR=6.6
**YKA Yellowknife Ar 65.91 13** P **P 16 43 07.0 +0.2**
comp=Z,0.9nm,0.9s,baz=342,slow=6.7,SNR=8.9
**YKA Yellowknife Ar 65.91 13** P **P 16 43 07.0 +0.2**
**WRAB Tennant Creek 79.30 139** *ce*P **P 16 44 24.7 -2.2**
WRAB pmax pmax
comp=Z,8.0nm,1.7s
**WRA Warramunga Arr 79.30 139** P **P 16 44 25.1 -1.8**
comp=Z,1.6nm,0.8s,baz=341,slow=5.8,SNR=5.7
**WRA Warramunga Arr 79.30 139** *i* P **P 16 44 26.2 -0.7**
WRA pmax pmax
comp=Z,2.0nm,0.8s
**TORD Torodi Ar. Bea 79.94 278** P **P 16 44 30.3 -0.3**
comp=Z,0.7nm,0.8s,baz=29,slow=4.7,SNR=3.1
**ASAR Alice Springs 82.44 141** P **P 16 44 41.7 -1.9**
comp=Z,0.5nm,0.6s,baz=333,slow=5.1,SNR=20
**HNR Honiara 83.72 113** LR LR 17 21 01.1
comp=Z,53nm,19.8s,baz=330,slow=35

**IDC 26 16:33:55.7**±0.9, **22°.71N**×**142°.71E, h0**km, **mb3.9**/7, **mb1 4.1**/7, **mb1mx3.6**/44, **mbtmp3.9**/7, **Error ellipse: s-maj=70.1km s-min=19.3km az=105.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.18** | **192** | P | P | 16 41 59.0 | +0.5 |
| | 0.7nm,0.5s,baz=17,slow=9.1,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **46.89** | **191** | P | P | 16 42 27.8 | -0.2 |
| | 0.2nm,0.4s,baz=13,slow=6.9,SNR=20 | | | | | | |
| **STKA** | **Stephens Creek** | **54.29** | **181** | P | P | 16 43 23.0 | -0.8 |
| | 0.8nm,0.4s,baz=22,slow=6.0,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **61.34** | **27** | P | P | 16 44 13.2 | +0.2 |
| | 0.4nm,0.7s,baz=266,slow=5.2,SNR=4.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.77** | **28** | P | P | 16 45 43.5 | +0.3 |
| | 0.8nm,0.4s,baz=291,slow=5.6,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **82.08** | **334** | P | P | 16 46 17.5 | -0.3 |
| | 2.5nm,0.9s,baz=72,slow=4.5,SNR=4.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.86** | **51** | P | P | 16 46 22.3 | -0.4 |
| | 0.6nm,0.6s,baz=284,slow=5.5,SNR=4.5 | | | | | | |

**ATH 26 16:38:38.6**, **39°.21N**×**22°.33E, h14**km±5km, **ML1.6**/4, **Error ellipse: s-maj=5.3km s-min=1.0km az=189.0, Greece region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AGG** | **Agios Georgios** | **0.19** | **180** | P | Pg | 16 38 42.5 | -0.5 |
| AGG | | | | S | Sg | 16 38 46.1 | +0.2 |
| AGG | | | | AML | AML | 16 38 46.9 | |
| | comp=N,786μm,0.4s | | | | | | |
| AGG | | | | AML | AML | 16 38 47.5 | |
| | comp=E,513μm,0.2s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.25** | **218** | P | Pg | 16 38 43.8 | -0.2 |
| MAKR | | | | S | Sg | 16 38 48.3 | +0.7 |
| MAKR | | | | AML | AML | 16 38 51.8 | |
| | comp=N,320μm,0.3s | | | | | | |
| MAKR | | | | AML | AML | 16 38 51.9 | |
| | comp=E,388μm,0.4s | | | | | | |
| **THL** | **Klokotos Trika** | **0.43** | **325** | P | Pg | 16 38 46.7 | -0.5 |
| THL | | | | S | Sg | 16 38 53.5 | +0.5 |
| THL | | | | AML | AML | 16 38 55.2 | |
| | comp=E,144μm,0.3s | | | | | | |
| THL | | | | AML | AML | 16 38 56.2 | |
| | comp=N,154μm,0.5s | | | | | | |
| **EVR** | **Evrytania** | **0.50** | **234** | P | Pg | 16 38 48.5 | -0.1 |
| EVR | | | | S | Sb | 16 38 56.0 | -0.6 |
| **XOR** | **Xorichti** | **0.69** | **77** | P | Pg | 16 38 51.8 | -0.2 |
| XOR | | | | S | Sb | 16 39 01.9 | +0.1 |
| XOR | | | | AML | AML | 16 39 06.4 | |
| | comp=E,102μm,0.5s | | | | | | |
| XOR | | | | AML | AML | 16 39 06.7 | |
| | comp=N,232μm,0.3s | | | | | | |
| **ANX** | **Ano Chora** | **0.69** | **208** | P | Pg | 16 38 51.9 | -0.3 |
| **EFP** | **Efpalio** | **0.85** | **203** | P | Pg | 16 38 55.0 | -0.1 |
| **LIT** | **Litokhoron** | **0.90** | **8** | P | Pg | 16 38 55.6 | -0.4 |

*VAO **26** 16:48:24.8±0.5, 24°.46S×67°.57W, h243km, mb4.1*
*IDC **26** 16:48:28.9±1.7, 23°.89S×66°.91W, h193km±17km, mb3.3/1, mb1 3.8/6, mb1mx3.4/30, mbtmp4.1/6, Error ellipse: s-maj=26.8km s-min=18.6km az=141.0*
*GUC **26** 16:48:28.7±0.6, 23°.96S×67°.25W, h233km±8km, ML4.4*
*NEIC **26** 16:48:29.0±1.6, 24°.03S±0°.05×67°.2W±0°.2, h212km±13km, Error ellipse: s-maj=21.0km s-min=6.9km az=85.0*

**ISC 26 16:48:27.5**±0.7, **24°.06S**±0°.05×**67°.06W**±0°.08, **h205**km±10km, **n82**, σ1°.**20**/98, **12C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **2.23** | **310** | P | **Pn** | **16 49 10.2** | **+1.0** |
| | 33nm,0.3s,baz=118,slow=8.3,SNR=730 | | | | | | |
| LVC | | | | S | **S** | **16 49 41.8** | **+0.7** |
| | 82nm,0.3s,baz=326,slow=18,SNR=40 | | | | | | |
| **LVC** | **Limon Verde** | **2.23** | **310** | *e*P | **Pn** | **16 49 10.0** | **+0.8** |
| LVC | | | | *i* S | **S** | **16 49 41.8** | **+0.7** |
| **LVC** | **Limon Verde** | **2.23** | **310** | *e*P | **Pn** | **16 49 10.3** | **+1.0** |
| **PB15** | **IPOC Station P** | **2.36** | **290** | | **Pn** | **16 49 11.5** | **+1.0** |
| **PB15** | **IPOC Station P** | **2.36** | **290** | ⇑*i*P | **Pn** | **16 49 11.6** | **+1.1** |
| PB15 | | | | *i* S | **S** | **16 49 43.9** | **+0.6** |
| **PB06** | **IPOC Station P** | **2.67** | **300** | | **Pn** | **16 49 14.6** | **+0.7** |
| **PB06** | **IPOC Station P** | **2.67** | **300** | ⇑*i*P | **Pn** | **16 49 14.9** | **+1.1** |
| PB06 | | | | *i* S | **S** | **16 49 47.7** | **+0.3** |
| PB06 | | | | IAML | | 16 49 53.1 | |
| | comp=N,1μm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **3.02** | **318** | | **Pn** | **16 49 19.2** | **+1.3** |
| **PB09** | **IPOC Station P** | **3.02** | **318** | ⇑*i*P | **Pn** | **16 49 19.1** | **+1.3** |
| PB09 | | | | *i* S | **S** | **16 49 57.6** | **+1.0** |
| PB09 | | | | IAML | | 16 49 59.3 | |
| | comp=N,364nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **3.10** | **259** | | **Pn** | **16 49 18.8** | **-0.1** |
| **PB14** | **IPOC Station P** | **3.10** | **259** | *e*P | **Pn** | **16 49 19.1** | **+0.2** |
| PB14 | | | | *i* S | **S** | **16 49 57.5** | **-1.0** |
| **PB10** | **IPOC Station P** | **3.24** | **279** | Pn | **Pn** | **16 49 20.6** | **+0.3** |
| **PB10** | **IPOC Station P** | **3.24** | **279** | ⇑*i*P | **Pn** | **16 49 21.2** | **+0.9** |
| PB10 | | | | *i* S | **S** | **16 50 00.9** | **-0.1** |
| **PB04** | **IPOC Station P** | **3.32** | **301** | | **Pn** | **16 49 21.7** | **+0.3** |
| **PB04** | **IPOC Station P** | **3.32** | **301** | ⇑*i*P | **Pn** | **16 49 22.0** | **+0.6** |
| PB04 | | | | *i* S | **S** | **16 50 02.5** | **-0.5** |
| **AC02** | **Maricunga** | **3.34** | **214** | Pn | **Pn** | **16 49 22.1** | **+0.2** |
| **AC02** | **Maricunga** | **3.34** | **214** | ⇑*i*P | **Pn** | **16 49 22.1** | **+0.2** |
| **PB07** | **IPOC Station P** | **3.49** | **311** | | **Pn** | **16 49 23.9** | **+0.4** |
| **PB07** | **IPOC Station P** | **3.49** | **311** | ⇑*i*P | **Pn** | **16 49 24.0** | **+0.6** |
| PB07 | | | | *i* S | **S** | **16 50 05.5** | **-1.2** |
| **PB01** | **IPOC Station P** | **3.74** | **323** | | **Pn** | **16 49 26.7** | **+0.2** |
| **PB01** | **IPOC Station P** | **3.74** | **323** | ⇑*i*P | **Pn** | **16 49 26.8** | **+0.2** |
| PB01 | | | | *i* S | **S** | **16 50 11.2** | **-1.0** |
| **PB02** | **IPOC Station P** | **3.78** | **316** | | **Pn** | **16 49 27.1** | **+0.2** |
| **PB02** | **IPOC Station P** | **3.78** | **316** | ⇑*i*P | **Pn** | **16 49 27.1** | **+0.2** |
| PB02 | | | | *i* S | **S** | **16 50 11.4** | **-1.5** |
| **AC01** | **Pan de Azucar** | **3.82** | **236** | Pn | **Pn** | **16 49 26.3** | **-0.9** |
| **AC01** | **Pan de Azucar** | **3.82** | **236** | ⇑*i*P | **Pn** | **16 49 26.4** | **-0.9** |
| AC01 | | | | *i* S | **S** | **16 50 11.2** | **-2.5** |
| **PATCX** | **Punta Patache** | **4.31** | **318** | | **Pn** | **16 49 33.0** | **-0.4** |
| **PATCX** | **Punta Patache** | **4.31** | **318** | *e*P | **Pn** | **16 49 33.0** | **-0.4** |
| PATCX | | | | *i* S | **S** | **16 50 23.3** | **-1.5** |
| **PB08** | **IPOC Station P** | **4.35** | **333** | | **Pn** | **16 49 35.2** | **+0.9** |
| **PB08** | **IPOC Station P** | **4.35** | **333** | ⇑*i*P | **Pn** | **16 49 35.3** | **+0.9** |
| PB08 | | | | *i* S | **S** | **16 50 26.7** | **+0.4** |
| **AC06** | **Mina Casimiro** | **4.43** | **221** | | **Pn** | **16 49 33.7** | **-1.1** |
| **AC06** | **Mina Casimiro** | **4.43** | **221** | *e*P | **Pn** | **16 49 33.8** | **-1.1** |
| **TA01** | **Diego Aracena** | **4.52** | **320** | Pn | **Pn** | **16 49 35.7** | **-0.3** |
| **TA01** | **Diego Aracena** | **4.52** | **320** | *e*P | **Pn** | **16 49 35.7** | **-0.3** |
| TA01 | | | | *i* S | **S** | **16 50 27.5** | **-1.9** |
| **HMBC** | **Humberstone** | **4.58** | **325** | ⇑*i*P | **Pn** | **16 49 36.0** | **-0.9** |
| HMBC | | | | *i* S | **S** | **16 50 27.9** | **-3.3** |
| **GO01** | **Chusmiza** | **4.79** | **335** | | **Pn** | **16 49 40.5** | **+0.5** |
| **PB11** | **IPOC Station P** | **4.91** | **330** | Pn | **Pn** | **16 49 40.5** | **-0.6** |
| **PB16** | **IPOC Station P** | **6.13** | **338** | | **Pn** | **16 49 57.5** | **+0.3** |
| **CO06** | **Fray Jorge** | **7.74** | **211** | Pn | **Pn** | **16 50 14.6** | **-2.8** |
| **LPAZ** | **La Paz** | **7.79** | **352** | P | **Pn** | **16 50 19.9** | **+1.1** |
| | comp=N,1.0nm,0.3s,baz=133,slow=3.4,SNR=21 | | | | | | |
| LPAZ | | | | S | **S** | **16 51 45.3** | **-2.0** |
| | comp=N,0.3nm,0.3s,baz=330,slow=19,SNR=1.6 | | | | | | |
| **LPAZ** | **La Paz** | **7.79** | **352** | Pn | **Pn** | **16 50 19.7** | **+1.0** |
| **LPAZ** | **La Paz** | **7.79** | **352** | *e*P | **Pn** | **16 50 19.9** | **+1.1** |
| **ROC1** | **El Roble** | **9.54** | **200** | Pn | **Pn** | **16 50 37.6** | **-3.4** |
| **SIV** | **San Ignacio** | **9.80** | **36** | P | **Pn** | **16 50 42.1** | **-2.2** |
| | comp=N,0.7nm,0.3s,baz=205,slow=12,SNR=12 | | | | | | |
| **MT09** | **Talagante** | **10.27** | **199** | Pn | **Pn** | **16 50 49.1** | **-1.2** |
| **PTLB** | **Pontes e Lacer** | **11.36** | **42** | *e*P | **P** | **16 51 08.3** | **-1.4** |
| **PTGB** | **Pitanga** | **13.69** | **96** | *e*P | **Pn** | **16 51 34.2** | **+0.7** |
| **PCMB** | **Pacaembu** | **14.77** | **84** | *e*P | **P** | **16 51 48.8** | **+1.1** |
| **LC01** | **Cunco** | **15.35** | **194** | | **Pn** | **16 51 52.9** | **-0.8** |
| **ITRB** | **Iturama** | **16.10** | **78** | *e*P | **Pn** | **16 52 04.0** | **+1.1** |
| **ARAG** | **Araguaiana, MT** | **16.57** | **63** | *e*P | **Pn** | **16 52 09.1** | **+0.6** |
| **TER01** | **Tubaro-SC** | **16.69** | **109** | *e*P | **P** | **16 52 07.9** | **-0.8** |
| **PLCA** | **Paso Flores** | **16.88** | **189** | P | **Pn** | **16 52 16.2** | **+4.1** |
| | comp=N,0.3nm,0.3s,baz=22,slow=8.9,SNR=7.5 | | | | | | |
| **PLCA** | **Paso Flores** | **16.88** | **189** | P | **Pn** | **16 52 11.8** | **-0.4** |
| **CLDB** | **Colider** | **16.94** | **41** | *e*P | **P** | **16 52 11.6** | **0.0** |
| **LL04** | **Puerto Octay** | **17.39** | **194** | | **Pn** | **16 52 17.3** | **-0.8** |
| LL04 | | | | IAmb | IAmb | 16 52 19.6 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **PET01** | **Itanhaem-SP** | **18.06** | **95** | *e*P | **P** | **16 52 23.3** | **-0.4** |
| **VAO** | **Valinhos** | **18.46** | **91** | *e*P | **P** | **16 52 27.4** | **-0.8** |
| **IPMB** | **Ipameri, GO** | **18.60** | **75** | *e*P | **P** | **16 52 29.8** | **+0.1** |
| **SNDB** | **Serra Nova Dou** | **19.19** | **54** | *e*P | **P** | **16 52 35.8** | **-0.2** |
| **LL02** | **Futaleuf** | **19.49** | **191** | P | **Pn** | **16 52 41.1** | **-1.6** |
| LL02 | | | | IAmb | IAmb | 16 52 43.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **PARB** | **Paraibuna** | **19.65** | **92** | *e*P | **P** | **16 52 40.2** | **-0.8** |
| **BDFB** | **Brasilia** | **19.76** | **68** | P | **P** | **16 52 42.3** | **0.0** |
| | comp=Z,1.3nm,0.3s,baz=242,slow=9.9,SNR=13 | | | | | | |
| **BDFB** | **Brasilia** | **19.76** | **68** | P | **P** | **16 52 42.0** | **-0.3** |
| BDFB | | | | IAmb | IAmb | 16 52 43.1 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **PEXB** | **Peixe** | **21.40** | **60** | *e*P | **P** | **16 52 58.4** | **-1.2** |
| **ITTB** | **Itaituba** | **22.42** | **31** | *e*P | **P** | **16 53 08.6** | **-0.8** |
| **DIAM** | **Diamantina, MG** | **22.54** | **80** | *e*P | **P** | **16 53 10.5** | **-0.1** |
| **DUB01** | **Friburgo-RJ** | **22.80** | **90** | *e*P | **P** | **16 53 11.5** | **-1.2** |
| **JANB** | **Januaria** | **23.21** | **71** | *e*P | **P** | **16 53 15.7** | **-0.8** |
| **SMTB** | **Santa Maria do** | **23.97** | **54** | *e*P | **P** | **16 53 23.3** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **23.98** | **65** | *e*P | **P** | **16 53 23.0** | **-0.7** |
| **PRPB** | **Parauapebas** | **24.31** | **46** | *e*P | **P** | **16 53 26.4** | **-0.1** |
| **GUA01** | **Guaratinga, BA** | **26.59** | **79** | *e*P | **P** | **16 53 46.2** | **-0.8** |
| **NBIT** | **Itapeh - BA** | **27.54** | **76** | *e*P | **P** | **16 53 54.9** | **-0.6** |
| **GDU01** | **Guandu, BA** | **27.91** | **73** | *e*P | **P** | **16 53 57.6** | **-1.3** |
| **NBPN** | **Ponto Novo - B** | **28.73** | **67** | *e*P | **P** | **16 54 05.3** | **-0.8** |
| **NBPS** | **Pedro II - PI** | **31.49** | **56** | *e*P | **P** | **16 54 29.9** | **-0.5** |
| **PMSA** | **Palmer Station** | **40.76** | **178** | *e*P | **P** | 16 55 37.1 | -11 |
| **QSPA** | **South Pole Qui** | **66.15** | **180** | P | **P** | **16 58 55.3** | **+2.5** |
| **YKA** | **Yellowknife Ar** | **94.16** | **340** | P | **P** | **17 01 24.8** | **+2.4** |
| | comp=Z,0.2nm,0.5s,baz=132,slow=4.3,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **128.38** | **205** | PKP | **PKiKP** | **17 07 12.4** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=126,slow=1.8,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.55** | **207** | PKP | **PKiKP** | **17 07 18.7** | **+1.2** |
| | comp=Z,0.2nm,0.7s,baz=157,slow=1.8,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.61** | **40** | PKPbc | **PKiKP** | **17 07 47.0** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=291,slow=4.4,SNR=5.6 | | | | | | |

*IPEC **26** 16:55:50.6±0.3, 51°.55N×16°.20E, h0km, ML2.7/3, Error ellipse: s-maj=3.0km s-min=1.5km az=55.0*
*VIE **26** 16:55:52.2±0.9, 51°.42N×16°.13E, h0km, mb2.9/6, ml3.0/5, Error ellipse: s-maj=10.5km s-min=3.5km az=48.0 71 km WNW of Wroclaw Suspected Mining induced.*
*IDC **26** 16:55:52.8±0.7, 51°.45N×15°.94E, h0km, mb1 3.3/7, mb1mx3.1/49, mbtmp3.2/7, ML2.9/7, Error ellipse: s-maj=13.6km s-min=6.6km az=104.0*
*DNK **26** 16:55:52.1±2.2, 51°.43N×15°.65E, h15km±70km, ML2.4*
*PRU **26** 16:55:52.1±0.0, 51°.48N×16°.11E, h0km*
*BGR **26** 16:55:53.5±0.6, 51°.48N×16°.07E, h1km, ML3.3/8, Error ellipse: s-maj=10.0km s-min=6.7km az=15.0*
*UPP **26** 16:55:56.6±3.1, 51°.79N×15°.67E, h0km, ML2.1, Suspected explosion*

**ISC 26 16:55:49.8**±0.7, **51°.56N**±0°.03×**16°.12E**±0°.02, **h0**km, **n75,** σ1°**52**/128, **Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.73** | **171** | *e*Pg | **Pg** | **16 56 04.5** | **+0.7** |
| KSP | | | | *e*Sg | **Sg** | **16 56 13.0** | **-0.2** |
| **CHVC** | **Chvalec** | **0.98** | **182** | *e*PG | **Pb** | **16 56 09.2** | **-0.4** |
| CHVC | | | | *e*SG | **Sg** | **16 56 20.6** | **-0.6** |
| | comp=Z,79nm,0.4s | | | | | | |
| **OSTC** | **Ostas** | **1.01** | **176** | *e*PG | **Pb** | **16 56 09.8** | **-0.4** |
| OSTC | | | | *e*SG | **Sg** | **16 56 21.6** | **-0.6** |
| | comp=Z,78nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.06** | **184** | *e*PG | **Pg** | **16 56 10.5** | **+0.4** |
| UPC | | | | *e*SG | **Sg** | **16 56 23.2** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **1.22** | **174** | *e*PG | **Pg** | **16 56 13.4** | **+0.2** |
| DPC | | | | *e*SG | **Sg** | **16 56 27.6** | **-1.4** |
| | comp=Z,71nm,0.6s | | | | | | |
| **PVCC** | **Panska Ves** | **1.42** | **224** | *e*PG | **Pb** | **16 56 17.7** | **+0.5** |
| PVCC | | | | *e*SG | **Sb** | **16 56 35.9** | **0.0** |
| | comp=Z,270nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.53** | **244** | Pn | **Pb** | **16 56 18.8** | **-0.3** |
| BRG | | | | Pg | **Pg** | **16 56 20.4** | **+1.2** |
| BRG | | | | Sg | **Sn** | **16 56 40.3** | **+1.3** |
| BRG | | | | Amp | | 16 56 40.8 | |
| | comp=Z,81nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.87** | **213** | *e*PN | **Pn** | **16 56 23.3** | **+0.3** |
| PRU | | | | *e*PG | **Pb** | **16 56 24.9** | **+0.1** |
| PRU | | | | *e*SG | **Sb** | **16 56 49.0** | **+0.3** |
| | comp=Z,50nm,0.5s | | | | | | |
| **CLL** | **Collm** | **1.97** | **264** | *e*Pn | **Pn** | **16 56 25.0** | **+0.6** |
| CLL | | | | *e*Pg | **Pg** | **16 56 28.0** | **+0.5** |
| CLL | | | | *ex* | x | 16 56 33.0 | |
| CLL | | | | *ex* | x | 16 56 43.0 | |
| CLL | | | | *e*Sg | **Sg** | **16 56 54.0** | **+1.1** |
| | comp=Z,31nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **2.01** | **153** | *e*Pn | **Pn** | **16 56 25.1** | **+0.1** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **16 56 52.4** | **-0.3** |
| | comp=Z,51nm,0.5s,baz=335 | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.16** | **142** | *e*PG | **Pg** | **16 56 30.6** | **-0.6** |
| OKC | | | | *e*SG | **Sb** | **16 56 56.7** | **-0.3** |
| | comp=Z,62nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **2.28** | **172** | Pn | **Pn** | **16 56 29.4** | **+0.7** |
| | comp=Z,3.3nm,0.3s,baz=341,slow=14,SNR=17 | | | | | | |
| VRAC | | | | Lg | Lg | 16 57 01.2 | |
| | comp=Z,6.1nm,0.3s,baz=76,slow=23,SNR=11 | | | | | | |
| **VRAC** | **Vranov** | **2.28** | **172** | *e*Pn | **Pn** | **16 56 29.1** | **+0.4** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **16 57 01.1** | **+0.6** |
| | comp=Z,38nm,0.5s,baz=354 | | | | | | |
| **TREC** | **Trest** | **2.31** | **190** | *e*SG | **Sb** | **16 57 02.2** | **+0.9** |
| **KRUC** | **Moravsky** | **2.51** | **176** | *e*Pn | **Pn** | **16 56 32.2** | **+0.4** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **16 57 08.5** | **+1.4** |
| | comp=Z,40nm,0.5s,baz=357 | | | | | | |
| **KRUC** | **Moravsky** | **2.51** | **176** | *e*PN | **Pn** | **16 56 32.3** | **+0.4** |
| KRUC | | | | *e*SG | **Sb** | **16 57 08.6** | **+1.4** |
| **NKC** | **Novy Kostel** | **2.68** | **242** | *e*PN | **Pn** | **16 56 35.7** | **+1.5** |
| NKC | | | | *e*PG | **Pg** | **16 56 41.9** | **+0.8** |
| NKC | | | | *e*SG | **Sg** | **16 57 17.0** | **+1.2** |
| | comp=Z,64nm,0.3s | | | | | | |
| **OJC** | **Ojcow** | **2.69** | **119** | *e*Pn | **Pn** | **16 56 34

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MILB** | **Miltenberg** | **4.67** | **251** | *e*Pn | | **Pn** | **16 57 02.8** | **+1.2** |
| MILB | | | | *e*Sg | | **Sg** | **16 58 21.1** | **+1.2** |
| **BLEU** | **Blekinge** | **4.75** | **358** | P | | **Pn** | **16 57 05.0** | **+2.4** |
| BLEU | | | | *i* P | | **Pn** | **16 57 05.7** | **+3.1** |
| BLEU | | | | *e*S | | **Sn** | **16 57 54.8** | **-3.6** |
| **BLEU** | **Blekinge** | **4.75** | **358** | P | | **Pn** | **16 57 05.0** | **+2.4** |
| **TNS** | **Taunus Mts** | **5.04** | **258** | *e*Sg | | **Sg** | **16 58 31.7** | **+0.1** |
| **DEL** | **Delary** | **5.09** | **346** | *i* P | | **Pn** | **16 57 08.0** | **+0.7** |
| DEL | | | | P | | **Pn** | **16 57 08.8** | **+1.5** |
| DEL | | | | *e*S | | **Sn** | **16 58 04.3** | **-2.4** |
| DEL | | | | S | | **Sn** | **16 58 05.9** | **-0.8** |
| **DEL** | **Delary** | **5.09** | **346** | P | | **Pn** | **16 57 08.8** | **+1.5** |
| DEL | | | | S | | **Sn** | **16 58 05.9** | **-0.8** |
| **WTTA** | **Wattenberg** | **5.20** | **216** | *e*Pn | | **Pn** | **16 57 11.1** | **+2.1** |
| **MOTA** | **Moosalm** | **5.34** | **220** | *i* Pn | | **Pn** | **16 57 12.0** | **+1.2** |
| | comp=Z,1.3nm,0.2s | | | | | | | |
| **VXJU** | **Vaexsjoe** | **5.41** | **353** | P | | **Pn** | **16 57 13.8** | **+2.1** |
| **VXJU** | **Vaexsjoe** | **5.41** | **353** | P | | **Pn** | **16 57 13.8** | **+2.1** |
| **BYXU** | **Byxelkrok** | **5.76** | **5** | P | | **Pn** | **16 57 19.2** | **+2.7** |
| BYXU | | | | S | | **Sn** | **16 58 22.4** | **-0.8** |
| **BYXU** | **Byxelkrok** | **5.76** | **5** | P | | **Pn** | **16 57 19.2** | **+2.7** |
| BYXU | | | | S | | **Sn** | **16 58 22.4** | **-0.8** |
| **FABU** | **Falkenberg** | **5.80** | **341** | *i* P | | **Pn** | **16 57 17.7** | **+0.7** |
| FABU | | | | P | | **Pn** | **16 57 18.7** | **+1.6** |
| **FABU** | **Falkenberg** | **5.80** | **341** | P | | **Pn** | **16 57 18.7** | **+1.6** |
| **GNOU** | **Gnosjoe** | **5.90** | **347** | P | | **Pn** | **16 57 20.4** | **+2.0** |
| **GNOU** | **Gnosjoe** | **5.90** | **347** | P | | **Pn** | **16 57 20.4** | **+2.0** |
| **BFO** | **Black Forest** | **5.98** | **240** | *e*Sg | | **Sg** | **16 59 01.9** | **+0.2** |
| **EKSU** | **Eksjoe** | **6.04** | **356** | P | | **Pn** | **16 57 22.6** | **+2.3** |
| **EKSU** | **Eksjoe** | **6.04** | **356** | P | | **Pn** | **16 57 22.6** | **+2.3** |
| **VSTU** | **Vaestervik** | **6.12** | **2** | P | | **Pn** | **16 57 24.0** | **+2.7** |
| **VSTU** | **Vaestervik** | **6.12** | **2** | P | | **Pn** | **16 57 24.0** | **+2.7** |
| **BERGE** | **Lenzkirch (DE)** | **6.33** | **237** | *e*Sg | | **Sg** | **16 59 13.2** | **0.0** |
| **SULZ** | **Cheisacher** | **6.59** | **235** | *e*Sg | | **Sg** | **16 59 23.3** | **+1.9** |
| **LNKU** | **Linkoeping** | **6.68** | **357** | P | | **Pn** | **16 57 30.8** | **+1.7** |
| **LNKU** | **Linkoeping** | **6.68** | **357** | P | | **Pn** | **16 57 30.8** | **+1.7** |
| **ECH** | **Echery** | **6.69** | **243** | *e*Sg | | **Sg** | **16 59 20.8** | **-3.7** |
| **FKPU** | **Falk** | **6.75** | **349** | P | | **Pn** | **16 57 32.3** | **+2.2** |
| **FKPU** | **Falk** | **6.75** | **349** | P | | **Pn** | **16 57 32.3** | **+2.2** |
| **VIKU** | **Vikbolandet** | **6.96** | **3** | P | | **Pn** | **16 57 35.5** | **+2.5** |
| **VIKU** | **Vikbolandet** | **6.96** | **3** | P | | **Pn** | **16 57 35.5** | **+2.5** |
| **ESKU** | **Eskilstuna** | **7.69** | **1** | P | | **Pn** | **16 57 45.2** | **+2.3** |
| **ESKU** | **Eskilstuna** | **7.69** | **1** | P | | **Pn** | **16 57 45.2** | **+2.3** |
| **AKASG** | **Malin Array Be** | **8.29** | **91** | Pn | | **Pn** | **16 57 52.6** | **+1.4** |
| | comp=Z,1.0nm,0.3s,baz=277,slow=12,SNR=6.3 | | | | | | | |
| **HFS** | **Hagfors** | **8.70** | **352** | Pn | | **Pn** | **16 57 57.9** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=172,slow=15,SNR=8.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **9.88** | **346** | Pn | | **Pn** | **16 58 14.2** | **+1.2** |
| | comp=Z,0.0nm,0.3s,baz=168,slow=12,SNR=5.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **11.31** | **25** | Pn | | **Pn** | **16 58 33.4** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=205,slow=12,SNR=11 | | | | | | | |
| FINES | | | | S | | **Sn** | **17 00 37.4** | **-2.1** |
| | comp=Z,0.1nm,0.3s,baz=213,slow=20,SNR=4.1 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.09** | **296** | Pn | | **Pn** | **16 58 40.2** | **-3.0** |
| | baz=102,slow=13,SNR=1.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.57** | **10** | Pn | | **P** | **17 00 06.5** | **-1.5** |
| | baz=195,slow=11,SNR=12 | | | | | | | |

*NEIC* ***26*** *17:01:42.3±2.9,24˚.10S±0˚.05×66˚.94W±0˚.08,h181km±7km, mb4.6/74,Md4.7(SJA),ML5.1(GUC),Error ellipse: s-maj=10.2km s-min=7.9km az=88.0*
*IDC* ***26*** *17:01:43.6±1.0,24˚.00S×66˚.95W,h171km±8km,mb4.0/11, mb1 4.2/17,mb1mx4.1/33,mbtmp4.6/17,MS3.3/2, Ms1 3.3/2,ms1mx2.7/60,Error ellipse: s-maj=14.8km s-min=11.2km az=15.0*
*VAO* ***26*** *17:01:43.8±0.3,24˚.06S×67˚.02W,h181km,mb4.8*
*SJA* ***26*** *17:01:45.2±0.9,24˚.18S×67˚.20W,h170km,ML4.4,MW4.4*
*GUC* ***26*** *17:01:45.6±0.6,24˚.05S×67˚.48W,h215km±8km,ML5.1*
**ISC 26 17:01:42.8**±0.6**,24˚.13S**±0˚.03×**67˚.18W**±0˚.04**,h180**km±5km**, n245,**σ1$^{s}$56/283**,mb4.5**/40**,9C,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HJA** | **Humahuaca** | **1.87** | **61** | *e*P | | **Pn** | **17 02 20.5** | **+1.6** |
| HJA | | | | *e*S | | **Sn** | **17 02 50.0** | **+3.2** |
| HJA | | | | IAML | | | 17 02 50.9 | |
| | comp=Z,308nm,0.6s | | | | | | | |
| **LVC** | **Limon Verde** | **2.19** | **313** | P | | **Pn** | **17 02 24.5** | **+2.2** |
| | comp=Z,222nm,0.3s,baz=134,slow=8.8,SNR=1747 | | | | | | | |
| LVC | | | | S | | **Sn** | **17 02 54.2** | **+1.2** |
| | comp=Z,393nm,0.3s,baz=12,slow=23,SNR=45 | | | | | | | |
| **LVC** | **Limon Verde** | **2.19** | **313** | | | **Pn** | **17 02 24.0** | **+1.6** |
| LVC | | | | | Sn | **Sn** | **17 02 53.8** | **+0.7** |
| **LVC** | **Limon Verde** | **2.19** | **313** | *e*P | | **Pn** | **17 02 24.6** | **+2.2** |
| LVC | | | | *i* S | | **Sn** | **17 02 54.2** | **+1.2** |
| **LVC** | **Limon Verde** | **2.19** | **313** | *e*P | | **Pn** | **17 02 24.6** | **+2.2** |
| **LVC** | **Limon Verde** | **2.19** | **313** | *e*P | | **Pn** | **17 02 24.6** | **+2.2** |
| LVC | | | | *e*S | | **Sn** | **17 02 55.0** | **+2.0** |
| LVC | | | | IAML | | | 17 02 56.0 | |
| | comp=Z,879nm,0.5s | | | | | | | |
| **FSA** | **Cafayete** | **2.26** | **151** | *e*P | | **Pn** | **17 02 25.2** | **+2.3** |
| **PB15** | **IPOC Station P** | **2.29** | **293** | | | **Pn** | **17 02 25.2** | **+1.9** |
| PB15 | | | | | Sn | **Sn** | **17 02 55.9** | **+1.1** |
| **PB15** | **IPOC Station P** | **2.29** | **293** | *i* P | | **Pn** | **17 02 25.8** | **+2.4** |
| PB15 | | | | *i* S | | **Sn** | **17 02 56.0** | **+1.3** |
| **PB15** | **IPOC Station P** | **2.29** | **293** | *e*P | | **Pn** | **17 02 25.8** | **+2.4** |
| PB15 | | | | *e*S | | **Sn** | **17 02 56.5** | **+1.8** |
| PB15 | | | | IAML | | | 17 02 58.7 | |
| | comp=Z,19µm,0.2s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.61** | **302** | Pn | | **Pn** | **17 02 28.5** | **+1.5** |
| PB06 | | | | Sn | | **Sn** | **17 03 01.2** | **-0.1** |
| **PB06** | **IPOC Station P** | **2.61** | **302** | *i* P | | **Pn** | **17 02 29.1** | **+2.1** |
| PB06 | | | | *i* S | | **Sn** | **17 03 01.9** | **+0.6** |
| PB06 | | | | IAML | | | 17 03 04.5 | |
| | comp=E,9µm,0.3s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.61** | **302** | *e*P | | **Pn** | **17 02 29.2** | **+2.1** |
| PB06 | | | | *e*S | | **Sn** | **17 03 02.9** | **+1.5** |
| PB06 | | | | IAML | | | 17 03 06.0 | |
| | comp=Z,3µm,0.3s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.98** | **260** | | | **Pn** | **17 02 33.5** | **+2.0** |
| PB14 | | | | | Sn | **Sn** | **17 03 09.7** | **+0.3** |
| **PB14** | **IPOC Station P** | **2.98** | **260** | *i* P | | **Pn** | **17 02 33.5** | **+2.0** |
| PB14 | | | | *i* S | | **Sn** | **17 03 09.8** | **+0.4** |
| **PB14** | **IPOC Station P** | **2.98** | **260** | *e*P | | **Pn** | **17 02 33.6** | **+2.1** |
| PB14 | | | | *e*S | | **Sn** | **17 03 10.2** | **+0.7** |
| PB14 | | | | IAML | | | 17 03 13.6 | |
| | comp=Z,1µm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **3.00** | **320** | | | **Pn** | **17 02 33.5** | **+1.8** |
| PB09 | | | | | Sn | **Sn** | **17 03 09.7** | **0.0** |
| **PB09** | **IPOC Station P** | **3.00** | **320** | *i* P | | **Pn** | **17 02 33.7** | **+2.1** |
| PB09 | | | | *i* S | | **Sn** | **17 03 10.3** | **+0.7** |
| PB09 | | | | IAML | | | 17 03 11.8 | |
| | comp=N,2µm,0.5s | | | | | | | |
| **PB09** | **IPOC Station P** | **3.00** | **320** | *e*P | | **Pn** | **17 02 33.8** | **+2.1** |
| PB09 | | | | *e*S | | **Sn** | **17 03 10.7** | **+1.0** |
| PB09 | | | | IAML | | | 17 03 16.0 | |
| | comp=Z,2µm,0.6s | | | | | | | |
| **AHML** | **Horco Molle** | **3.13** | **148** | *e*P | | **Pn** | **17 02 35.0** | **+1.9** |
| AHML | | | | *e*S | | **Sn** | **17 03 13.6** | **+1.2** |
| AHML | | | | IAML | | | 17 03 19.5 | |
| | comp=Z,67nm,1.9s | | | | | | | |
| **PB10** | **IPOC Station P** | **3.15** | **280** | | | **Pn** | **17 02 35.3** | **+2.0** |
| **PB10** | **IPOC Station P** | **3.15** | **280** | *e*P | | **Pn** | **17 02 35.0** | **+1.7** |
| PB10 | | | | *i* S | | **Sn** | **17 03 11.8** | **-0.8** |
| PB10 | | | | IAML | | | 17 03 18.1 | |
| | comp=E,2µm,0.4s | | | | | | | |
| **PB10** | **IPOC Station P** | **3.15** | **280** | *e*P | | **Pn** | **17 02 35.4** | **+2.0** |
| PB10 | | | | *e*S | | **Sn** | **17 03 13.4** | **+0.8** |
| PB10 | | | | IAML | | | 17 03 17.6 | |
| | comp=Z,1µm,0.5s | | | | | | | |
| **AC02** | **Maricunga** | **3.22** | **213** | | | **Pn** | **17 02 37.5** | **+2.9** |
| AC02 | | | | | Sn | **Sn** | **17 03 18.2** | **+3.1** |
| **AC02** | **Maricunga** | **3.22** | **213** | *i* P | | **Pn** | **17 02 37.5** | **+2.9** |
| AC02 | | | | *i* S | | **Sn** | **17 03 18.4** | **+3.3** |
| **AC02** | **Maricunga** | **3.22** | **213** | *e*P | | **Pn** | **17 02 37.3** | **+2.7** |
| AC02 | | | | *e*S | | **Sn** | **17 03 12.7** | **-2.4** |
| AC02 | | | | IAML | | | 17 03 21.5 | |
| | comp=Z,368nm,0.8s | | | | | | | |
| **PB04** | **IPOC Station P** | **3.26** | **303** | | | **Pn** | **17 02 36.2** | **+1.4** |
| PB04 | | | | | Sn | **Sn** | **17 03 13.9** | **-1.4** |
| **PB04** | **IPOC Station P** | **3.26** | **303** | *i* P | | **Pn** | **17 02 36.3** | **+1.4** |
| PB04 | | | | *i* S | | **Sn** | **17 03 14.3** | **-1.1** |
| PB04 | | | | IAML | | | 17 03 20.9 | |
| | comp=N,4µm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **3.45** | **313** | | | **Pn** | **17 02 38.1** | **+0.9** |
| PB07 | | | | | Sn | **Sn** | **17 03 18.1** | **-1.6** |
| **PB07** | **IPOC Station P** | **3.45** | **313** | *i* P | | **Pn** | **17 02 38.5** | **+1.2** |
| PB07 | | | | *i* S | | **Sn** | **17 03 18.2** | **-1.5** |
| **AC01** | **Pan de Azucar** | **3.69** | **236** | | | **Pn** | **17 02 41.2** | **+1.2** |
| AC01 | | | | | Sn | **Sn** | **17 03 24.2** | **-0.6** |
| **AC01** | **Pan de Azucar** | **3.69** | **236** | *i* P | | **Pn** | **17 02 41.2** | **+1.2** |
| AC01 | | | | *i* S | | **Sn** | **17 03 24.4** | **-0.5** |
| **AC01** | **Pan de Azucar** | **3.69** | **236** | *e*P | | **Pn** | **17 02 41.2** | **+1.2** |
| AC01 | | | | *e*S | | **Sn** | **17 03 24.5** | **-0.3** |
| AC01 | | | | IAML | | | 17 03 30.5 | |
| | comp=Z,1µm,0.3s | | | | | | | |
| **PB01** | **IPOC Station P** | **3.73** | **325** | | | **Pn** | **17 02 41.4** | **+0.7** |
| PB01 | | | | | Sn | **Sn** | **17 03 24.0** | **-1.9** |
| **PB01** | **IPOC Station P** | **3.73** | **325** | *i* P | | **Pn** | **17 02 41.4** | **+0.7** |
| PB01 | | | | *i* S | | **Sn** | **17 03 24.3** | **-1.7** |
| **PB02** | **IPOC Station P** | **3.75** | **318** | | | **Pn** | **17 02 41.5** | **+0.6** |
| **PB02** | **IPOC Station P** | **3.75** | **318** | *e*P | | **Pn** | **17 02 41.5** | **+0.6** |
| PB02 | | | | *i* S | | **Sn** | **17 03 24.5** | **-1.8** |
| **PATCX** | **Punta Patache** | **4.29** | **320** | | | **Pn** | **17 02 47.6** | **-0.1** |
| **PATCX** | **Punta Patache** | **4.29** | **320** | *e*P | | **Pn** | **17 02 47.6** | **-0.1** |
| PATCX | | | | *i* S | | **Sn** | **17 03 36.4** | **-2.1** |
| **AC06** | **Mina Casimiro** | **4.30** | **221** | | | **Pn** | **17 02 48.7** | **+0.9** |
| **AC06** | **Mina Casimiro** | **4.30** | **221** | *e*P | | **Pn** | **17 02 48.7** | **+0.9** |
| AC06 | | | | *i* S | | **Sn** | **17 03 39.0** | **+0.2** |
| **PB08** | **IPOC Station P** | **4.37** | **335** | | | **Pn** | **17 02 49.9** | **+0.9** |
| **PB08** | **IPOC Station P** | **4.37** | **335** | *e*P | | **Pn** | **17 02 50.3** | **+1.3** |
| PB08 | | | | *i* S | | **Sn** | **17 03 39.8** | **-1.0** |
| **TA01** | **Diego Aracena** | **4.50** | **321** | | | **Pn** | **17 02 50.0** | **-0.4** |
| **TA02** | **Huaiquique** | **4.71** | **324** | | | **Pn** | **17 02 52.2** | **-0.9** |
| **GO01** | **Chusmiza** | **4.81** | **337** | | | **Pn** | **17 02 54.8** | **-0.1** |
| **GO01** | **Chusmiza** | **4.81** | **337** | *e*P | | **Pn** | **17 02 55.8** | **+0.9** |
| GO01 | | | | *i* S | | **Sn** | **17 03 51.5** | **+0.2** |
| **PB11** | **IPOC Station P** | **4.91** | **332** | | | **Pn** | **17 02 55.4** | **-0.5** |
| **AC04** | **Llanos de Chal** | **5.36** | **220** | | | **Pn** | **17 03 01.1** | **-0.3** |
| **LCO** | **Las Campanas** | **5.80** | **212** | | | **Pn** | **17 03 06.9** | **-0.5** |
| **PB12** | **IPOC Station P** | **6.22** | **331** | Pn | | **Pn** | **17 03 11.0** | **-1.8** |
| **AP01** | **Chacalluta** | **6.44** | **332** | Pn | | **Pn** | **17 03 14.2** | **-1.4** |
| **CO05** | **La Serena** | **6.81** | **211** | | | **Pn** | **17 03 19.9** | **-0.5** |
| **GO04** | **Tololo Observa** | **6.83** | **207** | | | **Pn** | **17 03 20.1** | **-0.8** |
| **CO03** | **El Pedregal** | **7.38** | **204** | | | **Pn** | **17 03 27.2** | **-0.7** |
| **ZON** | **Zonda** | **7.51** | **190** | Pn | | **Pn** | **17 03 29.5** | **-0.2** |
| **CO06** | **Fray Jorge** | **7.63** | **210** | | | **Pn** | **17 03 29.6** | **-1.5** |
| CO06 | | | | | | **Sn** | **17 04 53.2** | **-3.8** |
| **CO02** | **Combarbal** | **7.82** | **205** | | | **Pn** | **17 03 32.9** | **-0.9** |
| **LPAZ** | **La Paz** | **7.85** | **353** | P | | **Pn** | **17 03 35.7** | **+1.0** |
| | comp=Z,8.3nm,0.3s,baz=159,slow=6.8,SNR=101 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **17 05 01.5** | **-1.8** |
| | comp=Z,0.6nm,0.3s,baz=330,slow=18,SNR=6.6 | | | | | | | |
| **LPAZ** | **La Paz** | **7.85** | **353** | Pn | | **Pn** | **17 03 35.1** | **+0.3** |
| **LPAZ** | **La Paz** | **7.85** | **353** | *e*P | | **Pn** | **17 03 35.8** | **+1.0** |
| **LPAZ** | **La Paz** | **7.85** | **353** | *i* P | | **Pn** | **17 03 36.0** | **+1.2** |
| **VA03** | **San Esteban** | **9.10** | **198** | | | **Pn** | **17 03 48.8** | **-1.8** |
| **VA06** | **Catapilco** | **9.15** | **202** | Pn | | **Pn** | **17 03 48.9** | **-2.3** |
| **CPUP** | **Villa Florida** | **9.15** | **106** | P | | **Pn** | **17 03 50.5** | **-1.2** |
| | comp=Z,0.8nm,0.3s,baz=297,slow=13,SNR=11 | | | | | | | |
| CPUP | | | | LR | | LR | 17 08 06.1 | |
| | comp=Z,96nm,18.8s,baz=212,slow=42 | | | | | | | |
| **CPUP** | **Villa Florida** | **9.19** | **106** | Pn | | **Pn** | **17 03 47.8** | **-4.0** |
| **CPUP** | **Villa Florida** | **9.19** | **106** | *e*P | | **Pn** | **17 03 50.2** | **-1.5** |
| **ROC1** | **El Roble** | **9.44** | **200** | Pn | | **Pn** | **17 03 52.2** | **-3.0** |
| **MT02** | **Curacav** | **9.74** | **200** | Pn | | **Pn** | **17 03 56.7** | **-2.2** |
| **SIV** | **San Ignacio** | **9.92** | **36** | P | | **Pn** | **17 03 59.0** | **-2.5** |
| | comp=Z,4.1nm,0.3s,baz=214,slow=12,SNR=116 | | | | | | | |
| SIV | | | | S | | Sn | 17 05 35.9 | -16 |
| | comp=Z,0.4nm,0.3s,baz=216,slow=16,SNR=6.7 | | | | | | | |
| **LMEL** | **Las Melosas** | **10.04** | **195** | | | **Pn** | **17 04 00.9** | **-2.1** |
| **MT09** | **Talagante** | **10.18** | **198** | Pn | | **Pn** | **17 04 02.4** | **-2.3** |
| **BO04** | **La Punta** | **10.27** | **196** | | | **Pn** | **17 04 03.3** | **-2.6** |
| **MT01** | **Popeta** | **10.34** | **199** | | | **Pn** | **17 04 04.0** | **-2.6** |
| **BO01** | **Tunca** | **10.78** | **198** | | | **Pn** | **17 04 10.7** | **-1.8** |
| **ITQB** | **Itaqui** | **10.92** | **123** | Pn | | **Pn** | **17 04 11.1** | **-3.2** |
| **ITQB** | **Itaqui** | **10.92** | **123** | *e*P | | **Pn** | **17 04 13.6** | **-0.7** |
| **BO02** | **Sierra Bellavi** | **11.08** | **196** | | | **Pn** | **17 04 16.0** | **-0.4** |
| **AQDB** | **Aquidauana** | **11.23** | **73** | Pn | | **Pn** | **17 04 14.2** | **-4.2** |
| **AQDB** | **Aquidauana** | **11.23** | **73** | *e*P | | **Pn** | **17 04 16.6** | **-1.8** |
| **PTLP** | **Pontes e Lacer** | **11.48** | **43** | *e*P | | **Pn** | **17 04 19.9** | **-1.7** |
| **GO05** | **Huasi** | **11.60** | **200** | Pn | | **Pn** | **17 04 19.9** | **-3.2** |
| **ML02** | **Panimavida** | **12.16** | **197** | Pn | | **Pn** | **17 04 30.2** | **0.0** |
| **VILB** | **Vilhena** | **12.93** | **32** | *e*P | | **Pn** | **17 04 40.5** | **+0.3** |
| **PP1B** | **Ponte de Pedra** | **13.20** | **63** | *e*P | | **Pn** | **17 04 41.7** | **-1.9** |
| **SALV** | **Santo Antonio** | **13.54** | **55** | *e*P | | **Pn** | **17 04 46.3** | **-1.6** |
| **BI05** | **Punta Hualpn** | **13.60** | **201** | Pn | | **Pn** | **17 04 46.5** | **-1.9** |
| **CPSB** | **Cacapava Do Su** | **13.73** | **120** | *e*P | | **Pn** | **17 04 49.2** | **-0.8** |
| **PTGB** | **Pitanga** | **13.79** | **96** | *e*P | | **Pn** | **17 04 51.9** | **+0.9** |
| **ITAB** | **Concordia** | **13.92** | **106** | Pn | | **Pn** | **17 04 48.5** | **-4.0** |
| **ITAB** | **Concordia** | **13.92** | **106** | *e*P | | **Pn** | **17 04 52.9** | **+0.4** |
| **PLTB** | **Pedras Altas** | **14.20** | **125** | Pn | | **Pn** | **17 04 52.5** | **-3.5** |
| **PLTB** | **Pedras Altas** | **14.20** | **125** | *e*P | | **Pn** | **17 04 55.2** | **-0.8** |
| **ETMB** | **Extrema** | **14.26** | **4** | *e*P | | **Pn** | **17 04 55.5** | **-1.3** |
| **PCMB** | **Pacaembu** | **14.89** | **83** | *e*P | | **Pn** | **17 05 03.2** | **-1.4** |
| **LC01** | **Cunco** | **15.26** | **194** | | | **Pn** | **17 05 08.2** | **-0.8** |
| LC01 | | | | | IAmb | IAmb | 17 05 13.3 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **PDRB** | **Porto dos Gac** | **15.92** | **40** | *e*P | | **Pn** | **17 05 16.1** | **-1.1** |
| **FRTB** | **Fartura** | **16.16** | **91** | *e*P | | **Pn** | **17 05 20.1** | **0.0** |
| **ITRB** | **Iturama** | **16.22** | **78** | *e*P | | **P** | **17 05 20.4** | **-0.1** |
| **TIJ01** | **Guaruva-PR** | **16.56** | **98** | *e*P | | **Pn** | **17 05 25.1** | **+0.1** |
| **LR04** | **Corral** | **16.57** | **197** | | | **P** | **17 05 24.3** | **+0.2** |
| LR04 | | | | | IAmb | IAmb | 17 05 28.9 | |
| | comp=Z,43nm,0.6s | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **16.69** | **63** | *e*P | | **Pn** | **17 05 26.0** | **-0.5** |
| **TER01** | **Tubaro-SC** | **16.77** | **109** | *e*P | | **Pn** | **17 05 26.9** | **-0.5** |
| **PLCA** | **Paso Flores** | **16.80** | **189** | P | | **Pn** | **17 05 29.7** | **+2.0** |
| | comp=Z,0.9nm,0.3s,baz=19,slow=10,SNR=16 | | | | | | | |
| **PLCA** | **Paso Flores** | **16.80** | **189** | P | | **P** | **17 05 26.9** | **+0.1** |
| PLCA | | | | | IAmb | IAmb | 17 05 37.4 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **PLCA** | **Paso Flores** | **16.80** | **189** | *e*P | | **Pn** | **17 05 29.2** | **+1.5** |
| **CLDB** | **Colider** | **17.06** | **41** | *e*P | | **P** | **17 05 29.2** | **-0.6** |
| **CZSB** | **Cruzeiro do Su** | **17.14** | **341** | *e*P | | **Pn** | **17 05 33.3** | **+1.5** |
| **LL04** | **Puerto Octay** | **17.30** | **193** | P | | **P** | **17 05 31.7** | **-0.5** |
| **BB19B** | **Bebedouro** | **17.49** | **84** | *e*P | | **P** | **17 05 35.0** | **+0.4** |
| **LL03** | **Petrohue** | **17.52** | **193** | P | | **P** | **17 05 32.2** | **-2.4** |
| **LL05** | **Los Muermos** | **18.02** | **195** | P | | **P** | **17 05 37.2** | **-2.8** |
| **RCLB** | **Rio Claro- Sao** | **18.14** | **89** | *e*P | | **P** | **17 05 41.6** | **0.0** |
| **PET01** | **Itanhaem-SP** | **18.16** | **95** | *e*P | | **P** | **17 05 41.9** | **+0.2** |
| **VAO** | **Valinhos** | **18.57** | **91** | *e*P | | **P** | **17 05 46.2** | **-0.1** |
| **LL01** | **San Ignacio de** | **18.71** | **192** | P | | **P** | **17 05 47.9** | **+0.3** |
| **IPMB** | **Ipameri, GO** | **18.72** | **75** | *e*P | | **P** | **17 05 47.9** | **-0.1** |
| **SNDB** | **Serra Nova Dou** | **19.32** | **54** | *e*P | | **P** | **17 05 53.9** | **-0.6** |
| **LL07** | **Hotel Espejo d** | **19.37** | **194** | P | | **P** | **17 05 52.4** | **-2.2** |
| **LL02** | **Futaleuf** | **19.40** | **190** | P | | **P** | **17 05 52.0** | **-3.0** |
| **PARB** | **Paraibuna** | **19.76** | **92** | *e*P | | **P** | **17 05 58.8** | **-0.4** |
| **BDFB** | **Brasilia** | **19.89** | **68** | P | | **P** | **17 06 00.2** | **-0.4** |
| | comp=Z,19nm,0.3s,baz=243,slow=11,SNR=253 | | | | | | | |
| **BDFB** | **Brasilia** | **19.89** | **68** | P | | **P** | **17 05 55.2** | **-5.5** |
| **TBTG** | **Tabatinga, AM** | **20.00** | **352** | *e*P | | **Pn** | 17 06 03.9 | -1.7 |
| **NPGB** | **Novo Progresso** | **20.42** | **36** | *e*P | | **P** | **17 06 04.0** | **-2.2** |
| **BSCB** | **Bom Sucesso** | **20.93** | **86** | *e*P | | **P** | **17 06 11.2** | **-0.4** |
| **MAN01** | **Angra dos Reis** | **21.33** | **91** | *e*P | | **P** | **17 06 14.9** | **-1.0** |
| **PEXB** | **Peixe** | **21.53** | **60** | *e*P | | **P** | **17 06 16.2** | **-1.8** |
| **COYC** | **Coyhaique** | **21.76** | **189** | P | | **P** | **17 06 18.3** | **-1.8** |
| COYC | | | | | IAmb | IAmb | 17 06 22.9 | |
| | comp=Z,50nm,1.0s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **21.77** | **18** | *e*P | | **P** | **17 06 18.9** | **-1.5** |
| **VAS01** | **Vassouras-RJ** | **21.89** | **90** | *e*P | | **P** | **17 06 21.4** | **-0.2** |
| **ITTB** | **Itaituba** | **22.53** | **31** | *e*P | | **P** | **17 06 25.8** | **-1.9** |
| **DIAM** | **Diamantina, MG** | **22.66** | **80** | *e*P | | **P** | **17 06 28.7** | **-0.3** |
| **DUB01** | **Friburgo-RJ** | **22.90** | **90** | *e*P | | **P** | **17 06 31.0** | **-0.2** |
| **JANB** | **Januaria** | **23.33** | **71** | *e*P | | **P** | **17 06 34.0** | **-1.1** |
| **CAM01** | **Campos-RJ** | **23.60** | **90** | *e*P | | **P** | **17 06 37.1** | **-0.3** |
| **SMTB** | **Santa Maria do** | **24.10** | **54** | *e*P | | **P** | **17 06 41.2** | **-0.8** |
| **SDBA** | **SAO DESIDERIO** | **24.11** | **65** | *e*P | | **P** | **17 06 41.0** | **-1.2** |
| **PTGA** | **Pitinga** | **24.29** | **18** | P | | **P** | **17 06 43.3** | **-0.4** |
| | comp=Z,5.3nm,0.4s,baz=183,slow=9.8,SNR=13 | | | | | | | |
| **PRPB** | **Parauapebas** | **24.43** | **46** | *e*P | | **P** | **17 06 43.6** | **-1.5** |
| **GO08** | **Villa O'Higgin** | **24.66** | **189** | P | | **P** | **17 06 43.7** | **-3.0** |
| GO08 | | | | | IAmb | IAmb | 17 06 53.0 | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **ALF01** | **Guarapari-ES** | **24.70** | **87** | *e*P | | **P** | **17 06 47.2** | **-0.2** |
| **SJMB** | **Sao Joao De Ma** | **24.78** | **82** | *e*P | | **P** | **17 06 47.5** | **-0.7** |
| **RIB01** | **Linhares ES** | **25.32** | **84** | *e*P | | **P** | **17 06 52.6** | **-0.5** |
| **MALB** | **Monte Alegre** | **25.43** | **31** | *e*P | | **P** | **17 06 53.0** | **-1.0** |
| **NAN01** | **Guarapari, ES** | **26.00** | **81** | *e*P | | **P** | **17 06 58.3** | **-0.9** |
| **GUA01** | **Guaratinga, BA** | **26.71** | **79** | *e*P | | **P** | **17 07 04.9** | **-0.6** |
| **BOAV** | **Boa Vista** | **27.15** | **15** | *e*P | | **P** | **17 07 09.3** | **-0.1** |
| **CMC01** | **Camacan, BA** | **27.42** | **77** | *e*P | | **P** | **17 07 11.1** | **-0.8** |
| **NBIT** | **Itapeh - BA** | **27.66** | **76** | *e*P | | **P** | **17 07 13.5** | **-0.6** |
| **MCPB** | **Macapa, AP** | **27.81** | **34** | *e*P | | **P** | **17 07 15.3** | **0.0** |
| **MG05** | **Puerto Natales** | **27.81** | **187** | P | | **P** | **17 07 13.7** | **-1.2** |
| MG05 | | | | | IAmb | IAmb | 17 07 18.0 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **GDU01** | **Guandu, BA** | **28.04** | **73** | *e*P | | **P** | **17 07 16.3** | **-1.1** |
| **EFI** | **East Falkland** | **28.39** | **168** | P | | **P** | **17 07 19.6** | **-0.4** |
| **NBPN** | **Ponto Novo - B** | **28.86** | **67** | *e*P | | **P** | **17 07 23.4** | **-1.3** |
| **MG04** | **Isla Riesco** | **28.88** | **186** | P | | **P** | **17 07 22.8** | **-1.6** |
| **GO10** | **Punta Arenas** | **29.14** | **185** | P | | **P** | **17 07 25.6** | **-1.1** |
| **MG03** | **Isla Dawson** | **29.79** | **184** | P | | **P** | **17 07 31.4** | **-1.0** |
| MG03 | | | | | IAmb | IAmb | 17 07 35.6 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **ROSB** | **Rosrio** | **30.68** | **50** | *e*P | | **P** | **17 07 40.0** | **-0.8** |
| **USHA** | **Ushuaia** | **30.68** | **181** | LR | | LR | 17 22 42.2 | |
| | comp=Z,107nm,18.5s,baz=286,slow=41 | | | | | | | |
| **NBLA** | **Lagarto - SE** | **30.84** | **70** | *e*P | | **P** | **17 07 40.0** | **-2.1** |
| **NBPS** | **Pedro II - PI** | **31.62** | **56** | *e*P | | **P** | **17 07 47.6** | **-1.4** |
| **NBMA** | **Muriti-CE** | **31.92** | **63** | *e*P | | **P** | **17 07 51.4** | **-0.2** |
| **PAYG** | **Puerto Ayora** | **32.32** | **313** | P | | **P** | **17 07 56.4** | **+1.3** |
| PAYG | | | | | IAmb | IAmb | 17 08 09.9 | |
| | comp=Z,46nm,1.4s | | | | | | | |
| **MDP** | **Montagnes des** | **32.32** | **28** | P | | **P** | **17 07 54.5** | **-0.5** |
| | comp=Z,8.3nm,0.4s,baz=194,slow=11,SNR=13 | | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **32.33** | **60** | *e*P | | **P** | **17 07 53.9** | **-1.3** |
| **NBAN** | **Anadia - AL** | **32.78** | **69** | *e*P | | **P** | **17 07 58.0** | **-1.1** |
| **SDV** | **Santo Domingo** | **32.98** | **354** | *e*P | | **P** | **17 08 01.9** | **+0.9** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **145.41** | **55** | PKPbc | **PKPab** | 17 21 01.5 | **+1.3** |
| KSH | | | | pPKP | pPKPab | 17 21 44.0 | -3.5 |
| KSH | | | | sPKP | | 17 21 59.5 | |
| KSH | | | | PP | **PP** | **17 24 24.8** | **+3.3** |
| **MKAR** | **Makanchi Array** | **146.73** | **40** | PKPbc | **PKPbc** | 17 21 03.4 | **0.0** |
| | comp=Z,3.1nm,0.7s,baz=301,slow=3.4,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.73** | **40** | | **PKPdf** | **17 21 00.1** | **-1.3** |
| **SIJI** | **Sorong** | **149.37** | **218** | PKPbc | **PKiKP** | **17 21 13.9** | **+1.6** |
| | comp=Z,19nm,0.7s,baz=350,slow=13,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **165.90** | **111** | PKPab | **PKPab** | **17 22 29.0** | **+1.4** |
| | comp=Z,0.5nm,0.3s,baz=255,slow=5.1,SNR=11 | | | | | | |
| **PZH** | **PanZhiHua** | **169.71** | **74** | PKP | **PKPdf** | **17 21 29.0** | **-0.3** |

*IDC **26** 17:11:39.4±0.8,5.°04S×151.°16E,h162km±14km, mb3.3/4, mb1 3.5/5, mb1mx3.2/29, mbtmp3.8/5, Error ellipse: s-maj=52.2km s-min=14.3km az=125.0*
*NEIC **26** 17:11:39.2±1.0,5.°2S±0.°1×151.°5E±0.°2, h173km±10km, mb4.1/7, Error ellipse: s-maj=24.2km s-min=13.8km az=114.0*

**ISC 26 17:11:39.1**±1.0,**5.°1S**±0.°2×**151.°6E**±0.°2,**h200**km,**n19,** σ1§**87**/**21**,**mb3.9**/**8**,**New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **0.93** | **28** | P | **Pn** | **17 12 06.4** | **-2.0** |
| KRVT | | | | S | **Sn** | **17 12 27.2** | **-4.0** |
| **RABL** | **Rabaul** | **1.10** | **31** | | **Pn** | **17 12 07.6** | **-2.0** |
| **PMG** | **Port Moresby** | **6.11** | **226** | P | **Pn** | **17 13 06.2** | **-1.6** |
| | 3.9nm,0.3s,baz=32,slow=8.2,SNR=24 | | | | | | |
| PMG | | | | S | **Sn** | **17 14 13.9** | **-4.1** |
| | 6.7nm,0.3s,baz=134,slow=23,SNR=11 | | | | | | |
| **PMG** | **Port Moresby** | **6.11** | **226** | | **Pn** | **17 13 06.0** | **-1.8** |
| PMG | | | | | **Sn** | **17 14 15.6** | **-2.4** |
| **COEN** | **Coen** | **12.07** | **223** | Pn | **Pn** | **17 14 25.7** | **+0.8** |
| **WB0** | **Warramunga Arr** | **22.18** | **228** | P | **P** | **17 16 19.7** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 17 16 22.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.32** | **227** | P | **P** | **17 16 20.9** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 17 16 40.0 | |
| | comp=Z,9.3nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.33** | **227** | P | **P** | **17 16 21.0** | **+0.5** |
| | comp=Z,0.6nm,0.4s,baz=51,slow=10,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.33** | **227** | P | **P** | **17 16 20.7** | **+0.2** |
| **KNRA** | **Kununurra** | **24.75** | **243** | P | **P** | **17 16 43.1** | **+0.6** |
| KNRA | | | | IAmb | IAmb | 17 16 45.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **25.10** | **221** | P | **P** | **17 16 46.4** | **+0.8** |
| AS31 | | | | IAmb | IAmb | 17 16 52.5 | |
| | comp=Z,1.1nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **25.10** | **221** | P | **P** | **17 16 47.2** | **+1.6** |
| | comp=Z,0.3nm,0.4s,baz=52,slow=9.0,SNR=29 | | | | | | |
| **ASAR** | **Alice Springs** | **25.10** | **221** | P | **P** | **17 16 45.9** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **28.44** | **241** | P | **P** | **17 17 15.8** | **+0.3** |
| | comp=Z,1.6nm,0.8s,baz=60,slow=5.3,SNR=2.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.44** | **241** | P | **P** | **17 17 15.7** | **+0.2** |
| FITZ | | | | IAmb | IAmb | 17 17 26.0 | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **31.12** | **206** | P | **P** | **17 17 40.2** | **+1.3** |
| **CMAR** | **Chiang Mai Arr** | **56.93** | **296** | P | **P** | **17 21 05.5** | **+1.6** |
| | comp=Z,0.5nm,0.3s,baz=108,slow=5.9,SNR=5.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.62** | **325** | eP | P | 17 21 22.5 | +7.1 |
| **TORD** | **Torodi Ar. Bea** | **149.26** | **287** | | **PKPdf** | **17 31 01.6** | **+1.0** |

*MEX **26** 17:37:58.3±0.6, 14.°68N×93.°82W, h22km±40km, MD4.1*
*IDC **26** 17:38:01.3±1.6, 15.°79N×93.°24W, h0km, mb3.8/3, mb1 4.0/5, mb1mx3.6/38, mbtmp3.7/5, ML3.1/2, Error ellipse: s-maj=54.7km s-min=14.5km az=31.0*

**ISC 26 17:37:57.6**±3.8,**14.°89N**±0.°09×**93.°72W**±0.°06,**h14**km±24km, **n12,** σ1§**06**/**19**,**mb3.7**/**3**,**Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.94** | **30** | *eP* | **Pn** | **17 38 16.5** | **0.0** |
| PCIG | | | | *i* S | **Sn** | **17 38 30.3** | **+0.5** |
| **CARR** | **Arriaga** | **1.37** | **352** | *eP* | **Pn** | **17 38 21.5** | **-0.8** |
| CARR | | | | *eS* | **Sn** | **17 38 40.7** | **+0.4** |
| **PATR** | **El Naranjo** | **1.45** | **81** | *eP* | **Pn** | **17 38 22.4** | **-1.2** |
| PATR | | | | *eS* | **Sn** | **17 38 41.5** | **-1.1** |
| **PAVE** | **Pavencul** | **1.52** | **78** | *eP* | **Pn** | **17 38 23.9** | **-0.7** |
| PAVE | | | | *eS* | **Sn** | **17 38 42.9** | **-1.4** |
| **TGIG** | | **1.96** | **17** | *eP* | **Pb** | **17 38 32.8** | **-0.5** |
| TGIG | | | | *eS* | **Sb** | **17 38 58.7** | **+1.0** |
| **CCIG** | **Comitan** | **2.06** | **47** | *eP* | **Pb** | **17 38 35.0** | **0.0** |
| CCIG | | | | *eS* | **Sb** | **17 39 00.4** | **-0.1** |
| **CMIG** | **Matias Romero** | **2.46** | **333** | Pn | **Pn** | **17 38 36.9** | **-0.5** |
| | 5.6nm,0.3s,baz=152,slow=13,SNR=42 | | | | | | |
| CMIG | | | | Sn | **Sn** | **17 39 05.9** | **-1.5** |
| | 26nm,0.3s,baz=147,slow=15,SNR=8.8 | | | | | | |
| **CMIG** | **Matias Romero** | **2.46** | **333** | *eP* | **Pn** | **17 38 36.9** | **-0.5** |
| CMIG | | | | *eS* | **Sn** | **17 39 05.9** | **-1.5** |
| **APG** | **El Apazote** | **3.14** | **87** | Pn | **Pn** | **17 38 47.9** | **+0.9** |
| | 3.6nm,0.3s,baz=307,slow=13,SNR=22 | | | | | | |
| APG | | | | Lg | Lg | 17 39 30.0 | |
| | 5.1nm,0.3s,baz=189,slow=15,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **31.95** | **322** | P | **P** | **17 44 25.3** | **+1.8** |
| | 0.2nm,0.3s,baz=128,slow=9.4,SNR=2.9 | | | | | | |
| **LPAZ** | **La Paz** | **39.97** | **140** | P | P | 17 45 41.8 | +9.0 |
| | 1.2nm,0.3s,baz=309,slow=6.5,SNR=3.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.80** | **347** | P | **P** | **17 46 49.4** | **-0.3** |
| | 0.5nm,0.6s,baz=153,slow=7.4,SNR=8.2 | | | | | | |

**IDC 26 17:56:41.0**±413.0,**57.°62N**×**32.°41E**,**h0**km,**Error ellipse: s-maj=177.0km s-min=93.8km az=97.0**,**Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **2.77** | **107** | *i* | | 18 15 05.0 | |
| | baz=289,slow=302,SNR=3.9 | | | | | | |
| **I37NO** | **I37NO** | **13.01** | **338** | *i* | | 19 03 30.0 | |
| | baz=140,slow=333,SNR=1.1 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **16.62** | **105** | *i* | | 19 36 20.0 | |
| | baz=308,slow=312,SNR=1.1 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **29.08** | **74** | *i* | | 20 53 30.0 | |
| | baz=302,slow=327,SNR=1.4 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **86.99** | **339** | *i* | | 21 44 00.0 | |
| | baz=63,slow=337,SNR=0.7 | | | | | | |

**KRSC 26 18:13:15.8**±2.7,**49.°25N**×**157.°21E**,**h29**km±30km,**ML3.7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **2.24** | **354** | *eP* | Pn | 18 13 52.6 | +1.8 |
| PAU | | | | *eS* | Sn | 18 14 19.9 | +2.5 |
| **KDTR** | **Khodutka, Kamc** | **2.62** | **12** | *eP* | Pb | 18 13 59.7 | -2.3 |
| **MTVR** | **Mutnovka** | **3.30** | **10** | *eP* | Pn | 18 14 08.2 | +2.7 |
| MTVR | | | | *eS* | Sn | 18 14 46.4 | +2.7 |
| **GRL** | **Gorelyy** | **3.35** | **9** | *eP* | Pn | 18 14 09.3 | +3.1 |
| **KRMR** | **Karymshinskiy** | **3.63** | **9** | *eP* | Pn | 18 14 13.9 | +3.9 |
| **DALK** | **Dalny** | **3.91** | **14** | *eP* | Pn | 18 14 17.1 | +3.3 |
| **UGLR** | **Uglovaya** | **4.09** | **14** | *eP* | Pn | 18 14 21.0 | +4.6 |
| **AVH** | **Avacha** | **4.13** | **13** | *eP* | Pb | 18 14 22.9 | -4.9 |
| **SMAR** | **Somma** | **4.14** | **13** | *eP* | Pn | 18 14 21.7 | +4.5 |
| **KOK** | **Koryaka** | **4.15** | **12** | *eP* | Pn | 18 14 21.9 | +4.8 |
| **SDLR** | **Sedlovina** | **4.17** | **14** | *eP* | Pn | 18 14 20.7 | +3.2 |
| **KRER** | **Koryakskii** | **4.17** | **13** | *eP* | Pb | 18 14 23.9 | -4.6 |
| **SPN** | **Mys Shipunski** | **4.24** | **24** | *eP* | Pb | 18 14 24.3 | -5.2 |
| SPN | | | | *eS* | Sn | 18 15 13.2 | +6.4 |
| **MKZ** | **Mys Kozlova** | **6.00** | **26** | *eP* | Pn | 18 14 45.6 | +3.1 |
| **KBTR** | **Krutoberegovo** | **7.75** | **24** | *eP* | Pn | 18 15 10.2 | +3.7 |

*IDC **26** 18:17:47.9±1.3,6.°32S×104.°41E, h0km, mb3.6/6, mb1 3.9/8, mb1mx3.5/59, mbtmp3.8/8, ML4.3/2, MS2.8/2, Ms1 2.8/2, ms1mx2.4/76, Error ellipse: s-maj=53.6km s-min=17.7km az=40.0*
*DJA **26** 18:17:52.4±0.4,6.°S±3.°×10.°5E±.°, h10km, M3.9/13, MLv3.9/13*
*NEIC **26** 18:17:54.0±2.5,6.°5S±0.°1×104.°5E±0.°1, h53km±11km, mb4.3/6, Error ellipse: s-maj=24.2km s-min=9.5km az=215.0*

**ISC 26 18:17:51.0**±0.7,**6.°28S**±0.°05×**104.°72E**±0.°05,**h22**km±4km, **n45,** σ1§**72**/**44**,**mb4.0**/**10**,**Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KASI** | **Kota Agung** | **0.79** | **344** | P | **Pn** | **18 18 06.3** | **-0.5** |
| KASI | | | | S | **Sn** | **18 18 16.7** | **-1.2** |
| **CGJI** | **Cibinong** | **1.03** | **109** | P | **Pn** | **18 18 09.7** | **-0.4** |
| CGJI | | | | S | **Sb** | **18 18 22.2** | **-0.9** |
| **BLSI** | **Bandar Lampung** | **1.05** | **30** | P | **Pb** | **18 18 09.7** | **-0.8** |
| BLSI | | | | S | **Sb** | **18 18 21.9** | **-2.0** |
| **LWLI** | **Liwa** | **1.42** | **333** | P | **Pb** | **18 18 18.2** | **+1.4** |
| LWLI | | | | S | **Sb** | **18 18 37.2** | **+2.7** |
| **KLI** | **Kotabumi** | **1.42** | **6** | P | **Pb** | **18 18 16.7** | **-0.1** |
| KLI | | | | S | **Sb** | **18 18 35.8** | **+1.4** |
| **KLSI** | | **1.58** | **1** | P | **Pb** | **18 18 19.6** | **0.0** |
| **TNG** | **Tangerang** | **1.92** | **87** | P | **Pn** | **18 18 20.5** | **-2.0** |
| TNG | | | | P | **Pb** | **18 18 23.0** | **-2.4** |
| **SKJI** | **Sukabumi** | **1.96** | **112** | P | **Pn** | **18 18 24.6** | **+1.5** |
| **DBJI** | **Dramaga** | **2.04** | **98** | P | **Pn** | **18 18 24.8** | **+0.7** |
| **CBJI** | **Citeko** | **2.13** | **94** | P | **Pb** | **18 18 28.0** | **-0.9** |
| **MNAI** | **Manna** | **2.59** | **317** | Pn | **Pb** | **18 18 34.4** | **-2.4** |
| **MNAI** | **Manna** | **2.59** | **317** | P | **Pb** | **18 18 35.1** | **-1.7** |
| **CNJI** | **Cibinong** | **2.61** | **113** | P | **Pn** | **18 18 33.4** | **+1.5** |
| **LHSI** | **Lahat** | **2.71** | **334** | P | **Pb** | **18 18 35.9** | **-3.0** |
| **LEM** | **Lembang** | **2.93** | **101** | Pn | **Pn** | **18 18 40.2** | **+3.7** |
| | 8.5nm,0.3s,baz=195,slow=22,SNR=6.8 | | | | | | |
| LEM | | | | Sn | **Sb** | **18 19 21.6** | **+3.3** |
| | 3.3nm,0.3s,baz=106,slow=24,SNR=3.1 | | | | | | |
| LEM | | | | LR | LR | 18 20 14.7 | |
| | comp=Z,119nm,21.8s,baz=346,slow=45 | | | | | | |
| **LEM** | **Lembang** | **2.93** | **101** | P | **Pn** | **18 18 37.3** | **+0.8** |
| **KSI** | **Kapahiang** | **3.36** | **321** | P | **Pn** | **18 18 45.3** | **+3.0** |
| **XMIS** | **Christmas Isla** | **4.27** | **168** | Pn | **Pn** | **18 18 53.8** | **-1.0** |
| **KPJI** | **Karang Pucung** | **4.32** | **104** | P | **Pn** | **18 18 56.9** | **+1.5** |
| **PPBI** | **Pangkal Pinang** | **4.33** | **19** | P | **Pn** | **18 18 56.3** | **+0.7** |
| **PSI** | **Prapat** | **10.72** | **327** | LR | LR | 18 25 12.0 | |
| | comp=Z,70nm,18.3s,baz=132,slow=42 | | | | | | |
| **BATI** | **Baumata** | **19.15** | **103** | P | **Pn** | **18 22 16.2** | **+2.1** |
| | 2.9nm,0.3s,baz=248,slow=5.4,SNR=4.9 | | | | | | |
| **SOEI** | **Soe** | **19.66** | **101** | P | **P** | **18 22 18.6** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **25.23** | **347** | P | **P** | **18 23 14.0** | **-1.6** |
| | 0.5nm,0.8s,baz=179,slow=12,SNR=2.8 | | | | | | |
| **KNRA** | **Kununurra** | **25.36** | **114** | P | **P** | **18 23 17.0** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 18 23 26.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **29.76** | **164** | T | T | 18 55 04.7 | |
| | baz=342,slow=76,SNR=59 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.77** | **164** | T | T | 18 55 10.4 | |
| | baz=342,slow=76,SNR=58 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.77** | **164** | T | T | 18 55 06.0 | |
| | baz=342,slow=76,SNR=63 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.81** | **118** | P | **P** | **18 24 16.0** | **+1.6** |
| | comp=Z,0.2nm,0.4s,baz=288,slow=7.2,SNR=1.9 | | | | | | |
| **WB2** | **Warramunga Arr** | **31.82** | **118** | P | **P** | **18 24 15.0** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 18 24 26.0 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **32.01** | **266** | T | T | 18 57 56.3 | |
| | baz=89,slow=75,SNR=18 | | | | | | |
| **H08S3** | **Diego Garcia H** | **32.02** | **266** | T | T | 18 57 58.6 | |
| | baz=89,slow=75,SNR=17 | | | | | | |
| **H08S1** | **Diego Garcia H** | **32.03** | **266** | T | T | 18 57 58.6 | |
| | baz=89,slow=75,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **32.95** | **125** | P | **P** | **18 24 26.2** | **+1.8** |
| | comp=Z,0.9nm,0.9s,baz=300,slow=7.2,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **32.95** | **125** | P | **P** | **18 24 23.5** | **-1.0** |
| **STKA** | **Stephens Creek** | **42.81** | **131** | P | **P** | **18 25 49.0** | **+1.5** |
| | comp=Z,3.4nm,0.9s,baz=317,slow=11,SNR=4.7 | | | | | | |
| **STKA** | **Stephens Creek** | **42.81** | **131** | IAmb | IAmb | 18 25 50.5 | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **56.47** | **342** | P | **P** | **18 27 29.6** | **-1.7** |
| MK31 | | | | IAmb | IAmb | 18 27 35.4 | |
| | comp=Z,3.7nm,1.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.47** | **342** | P | **P** | **18 27 30.4** | **-0.9** |
| | comp=Z,12nm,0.5s,baz=150,slow=9.6,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.47** | **342** | P | **P** | **18 27 29.2** | **-2.1** |
| **ABKAR** | **Akbulak array** | **67.65** | **330** | P | **P** | **18 28 45.3** | **-1.0** |
| ABKAR | | | | IAmb | IAmb | 18 28 47.5 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **67.65** | **330** | P | **P** | **18 28 45.0** | **-1.3** |
| **BRTR** | **Keskin Array B** | **79.66** | **312** | P | **P** | **18 29 58.5** | **+1.2** |
| | comp=Z,0.8nm,0.8s,baz=125,slow=7.7,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **79.66** | **312** | P | **P** | **18 29 57.5** | **+0.2** |
| **TXAR** | **Lajitas Array** | **144.75** | **46** | PKPbc | **PKPdf** | **18 37 27.5** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=320,slow=2.1,SNR=8.1 | | | | | | |

*IDC **26** 18:18:30.5±4.5,2.°33S×139.°41E, h33km±42km, mb3.4/5, mb1 3.6/6, mb1mx3.3/47, mbtmp3.6/6, ML3.7/1, MS3.2/4, Ms1 3.2/4, ms1mx2.7/35, Error ellipse: s-maj=40.7km s-min=23.3km az=114.0*

**ISC 26 18:18:29.8**±0.9,**2.°3S**±0.°1×**139.°4E**±0.°1,**h27**km,**n10,** σ0§**76**/**7**,**mb3.5**/**5**,**Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **1.36** | **98** | Pg | **Pb** | **18 18 54.8** | **+0.2** |
| | 14nm,0.3s,baz=235,slow=9.5,SNR=45 | | | | | | |
| JAY | | | | Lg | Lg | 18 19 13.3 | |
| | 42nm,0.3s,baz=110,slow=20,SNR=8.5 | | | | | | |
| **SIJI** | **Sorong** | **8.22** | **280** | LR | LR | 18 23 59.6 | |
| | comp=Z,63nm,19.8s,baz=100,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **10.47** | **133** | LR | LR | 18 26 27.8 | |
| | comp=Z,105nm,20.9s,baz=38,slow=46 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.19** | **195** | P | **Pn** | **18 22 40.6** | **0.0** |
| | 0.2nm,0.3s,baz=19,slow=12,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 18 30 20.5 | |
| | comp=Z,91nm,19.7s,baz=70,slow=39 | | | | | | |
| **ASAR** | **Alice Springs** | **21.87** | **194** | P | **P** | **18 23 20.8** | **0.0** |
| | 0.8nm,0.4s,baz=27,slow=11,SNR=24 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.81** | **299** | P | **P** | **18 26 41.5** | **-0.4** |
| | 0.4nm,0.7s,baz=128,slow=6.1,SNR=4.9 | | | | | | |
| **URZ** | **Urewera** | **49.70** | **141** | LR | LR | 18 48 38.5 | |
| | comp=Z,59nm,19.6s,baz=168,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **57.65** | **334** | P | **P** | **18 28 18.9** | **+1.0** |
| | 0.2nm,0.4s,baz=171,slow=4.7,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.89** | **322** | P | **P** | **18 29 38.6** | **+0.2** |
| | 0.9nm,0.7s,baz=113,slow=7.7,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **85.21** | **24** | P | **P** | **18 31 02.6** | **-1.1** |
| | 1.0nm,0.9s,baz=250,slow=5.2,SNR=8.0 | | | | | | |

*NOU **26** 18:21:22.8, 14.°29S×170.°09E, h645km, mb4.3/33, Vanuatu Islands Region*
*IDC **26** 18:21:23.7±2.1, 14.°48S×170.°01E, h631km±20km, mb3.4/11, mb1 3.5/12, mb1mx3.1/46, mbtmp4.4/12, Error ellipse: s-maj=37.0km s-min=18.2km az=127.0*
*NEIC **26** 18:21:24.5±1.7, 14.°5S±0.°1×170.°0E±0.°1, h638km±10km, mb4.5/35, Error ellipse: s-maj=18.2km s-min=17.1km az=111.0*

**ISC 26 18:21:25.2**±0.8,**14.°58S**±0.°08×**169.°9E**±0.°1,**h650**km,**n87,** σ1§**12**/**88**,**mb4.5**/**30**,**Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANVU** | **Saraoutou** | **2.75** | **251** | P | **P** | **18 22 45.4** | **-1.8** |
| **DVP** | **Devils Point** | **3.53** | **208** | P | **P** | **18 22 50.5** | **-0.9** |
| **LIFNC** | **LIFOU** | **6.66** | **202** | P | **P** | **18 23 13.4** | **-1.0** |
| **LIFNC** | **LIFOU** | **6.66** | **202** | P | **P** | **18 23 14.2** | **-0.2** |
| **YATNC** | **Mamie plateau,** | **7.97** | **201** | P | **P** | **18 23 26.1** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **8.00** | **221** | P | **P** | **18 23 26.8** | **+0.6** |
| **DZM** | **Mont Dzumac** | **8.14** | **203** | P | **P** | **18 23 28.4** | **+0.8** |
| | 0.6nm,0.3s,baz=21,slow=22,SNR=8.3 | | | | | | |
| DZM | | | | S | **S** | **18 25 01.9** | **-6.0** |
| | baz=117,slow=12,SNR=1.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **8.14** | **203** | P | **P** | **18 23 28.2** | **+0.6** |
| **DZM** | **Mont Dzumac** | **8.14** | **203** | P | **P** | **18 23 28.5** | **+0.9** |
| **NOUC** | **Port Laguerre** | **8.22** | **204** | P | **P** | **18 23 29.4** | **+1.2** |
| **OUENC** | **Ouen Island, N** | **8.32** | **200** | | **P** | **18 23 29.9** | **+0.8** |
| **OUENC** | **Ouen Island, N** | **8.32** | **200** | P | **P** | **18 23 30.2** | **+1.1** |
| **PINNC** | **Pines Island,** | **8.32** | **196** | P | **P** | **18 23 29.3** | **-0.4** |
| **PINNC** | **Pines Island,** | **8.32** | **196** | P | **P** | **18 23 29.8** | **+0.7** |
| **ONTNC** | **Ouen Toro** | **8.35** | **203** | P | **P** | **18 23 30.2** | **+0.7** |
| **ONTNC** | **Ouen Toro** | **8.35** | **203** | P | **P** | **18 23 30.6** | **+1.2** |
| **RABL** | **Rabaul** | **20.30** | **299** | P | **P** | **18 25 17.6** | **-2.1** |
| RABL | | | | IAmb | IAmb | 18 25 23.0 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **EIDS** | **Eidsvold** | **20.66** | **236** | P | **P** | **18 25 22.6** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 18 25 22.7 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **22.83** | **280** | P | **P** | **18 25 42.3** | **+0.2** |
| **RMQ** | **Roma** | **23.03** | **236** | P | **P** | **18 25 44.3** | **+0.5** |
| | comp=Z,16nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **23.04** | **224** | P | **P** | **18 25 44.9** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 18 25 46.7 | |
| | comp=Z,33nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **23.04** | **224** | P | **P** | **18 25 45.1** | **+1.2** |
| **CTA** | **Charters Tower** | **23.22** | **253** | P | **P** | **18 25 46.3** | **+0.8** |
| | comp=Z,5.4nm,0.6s,baz=81,slow=10,SNR=16 | | | | | | |
| **MTSU** | **Mount Surprise** | **24.80** | **258** | P | **P** | **18 26 00.7** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **25.17** | **168** | P | **P** | **18 26 01.6** | **-0.8** |
| **COEN** | **Coen** | **25.91** | **268** | P | **P** | **18 26 09.2** | **0.0** |
| **QRZ** | **Quartz Range** | **26.25** | **175** | P | **P** | **18 26 12.9** | **+1.1** |
| **QLP** | **Quilpie** | **26.77** | **239** | P | **P** | **18 26 17.2** | **+0.6** |
| **THZ** | **Tophouse** | **27.21** | **175** | P | **P** | **18 26 20.2** | **0.0** |
| **CNB** | **Canberra Magne** | **27.70** | **218** | P | **P** | **18 26 25.6** | **+1.0** |
| **CMSA** | **Cobar Meteorol** | **27.85** | **229** | P | **P** | **18 26 26.7** | **+0.8** |
| **CAN** | **Canberra** | **27.92** | **219** | P | **P** | **18 26 26.8** | **+0.3** |
| **QIS** | **Mount Isa** | **29.46** | **254** | P | **P** | **18 26 40.5** | **+0.5** |
| **STKA** | **Stephens Creek** | **31.05** | **231** | P | **P** | **18 26 54.4** | **+1.1** |
| | comp=Z,8.1nm,0.4s,baz=57,slow=8.5,SNR=27 | | | | | | |
| STKA | | | | ScP | **ScP** | **18 32 13.1** | **+2.6** |
| | comp=Z,2.1nm,0.9s,baz=26,slow=3.6,SNR=3.6 | | | | | | |
| **STKA** | **Stephens Creek** | **31.05** | **231** | P | **P** | **18 26 54.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **31.05** | **231** | P | **P** | **18 26 54.5** | **+1.1** |
| **TOO** | **Toolangi** | **31.52** | **219** | P | **P** | **18 26 58.2** | **+1.0** |
| TOO | | | | IAmb | IAmb | 18 26 59.0 | |
| | comp=Z,26nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **31.52** | **219** | P | **P** | **18 26 58.4** | **+1.2** |
| **LCRK** | **Leigh Creek** | **33.11** | **236** | P | **P** | **18 27 11.3** | **+0.7** |
| **HTT** | **Hallett** | **33.77** | **231** | P | **P** | **18 27 17.1** | **+1.0** |
| **WR0** | **Warramunga Arr** | **34.15** | **256** | P | **P** | **18 27 19.0** | **-0.5** |
| **NAPP** | **Napperby** | **34.24** | **232** | P | **P** | **18 27 21.9** | **+1.9** |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **34.28** | **256** | P | **P** | **18 27 20.0** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 18 27 20.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **34.32** | **256** | P | **P** | **18 27 20.3** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 18 27 21.1 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **34.33** | **256** | P | **P** | **18 27 20.6** | **-0.3** |
| **WRA** | **Warramunga Arr** | **34.34** | **256** | P | **P** | **18 27 20.4** | **-0.6** |
| | comp=Z,3.1nm,0.3s,baz=80,slow=5.9,SNR=66 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.34** | **256** | P | **P** | **18 27 19.2** | **-1.8** |
| **OOD** | **Oodnadatta** | **34.38** | **242** | P | **P** | **18 27 21.8** | **+0.6** |
| **AS31** | **Alice Springs** | **35.11** | **250** | P | **P** | **18 27 27.3** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 18 27 27.7 | |
| | comp=Z,6.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **35.11** | **250** | P | **P** | **18 27 27.1** | **-0.3** |
| | comp=Z,9.7nm,0.4s,baz=74,slow=9.6,SNR=380 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 32 27.2** | **+2.2** |
| | comp=Z,1.1nm,0.7s,baz=89,slow=3.8,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **35.11** | **250** | P | **P** | **18 27 26.5** | **-0.9** |
| **BBOO** | **Buckleboo** | **35.70** | **233** | P | **P** | **18 27 32.8** | **+0.8** |
| BBOO | | | | IAmb | IAmb | 18 27 33.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **35.70** | **233** | P | **P** | **18 27 32.6** | **+0.6** |
| **KDU** | **Kakadu** | **36.40** | **268** | P | **P** | **18 27 38.1** | **+0.1** |
| **MULG** | **Mulgathing** | **36.45** | **239** | P | **P** | **18 27 38.5** | **+0.3** |
| **MTN** | **Manton Dam** | **37.68** | **268** | P | **P** | **18 27 48.4** | **+0.1** |
| MTN | | | | IAmb | IAmb | 18 27 59.4 | |
| | comp=Z,32nm,1.6s | | | | | | |
| **MTN** | **Manton Dam** | **37.68** | **268** | P | **P** | **18 27 48.5** | **+0.1** |
| **DRS** | **Darwin Rock St** | **37.96** | **268** | P | **P** | **18 27 50.8** | **+0.2** |
| **FAKI** | **Fak Fak** | **38.91** | **284** | P | **P** | **18 27 58.4** | **+0.2** |
| FAKI | | | | IAmb | IAmb | 18 28 00.1 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **39.69** | **263** | P | **P** | **18 28 04.2** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 18 28 04.7 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **39.69** | **263** | P | **P** | **18 28 04.4** | **0.0** |
| **WRKA** | **Warakurna** | **40.36** | **248** | P | **P** | **18 28 10.1** | **+0.4** |
| **SIJI** | **Sorong** | **40.54** | **286** | P | **P** | **18 28 11.6** | **+0.3** |
| | comp=Z,3.6nm,0.5s,baz=346,slow=23,SNR=5.9 | | | | | | |
| **FORT** | **Forrest** | **41.57** | **240** | P | **P** | **18 28 19.3** | **+0.3** |
| FORT | | | | IAmb | IAmb | 18 28 19.6 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **41.57** | **240** | P | **P** | **18 28 19.4** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **42.55** | **259** | P |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,31842µm,0.4s | | | | | | | |
| NIS1 | **Nisyros Isl.** | 0.58 | 217 | | PG | **Pg** | **18 32 28.2** | **-0.3** |
| MRSB | **Marmaris-Mugla** | 0.58 | 126 | | PG | **Pg** | **18 32 28.2** | **-0.4** |
| TURN | **Turunc** | 0.58 | 119 | | PG | **Pg** | **18 32 28.2** | **-0.4** |
| TURN | **Turunc** | 0.58 | 119 | | P | **Pg** | **18 32 28.1** | **-0.5** |
| TURN | | | | | S | **Sb** | **18 32 37.0** | **-0.3** |
| TURN | | | | | *i* AML | AML | 18 32 41.0 | |
| | comp=N,3µm,0.3s | | | | | | | |
| TURN | | | | | *i* AML | AML | 18 32 41.0 | |
| | comp=N,3µm,0.5s | | | | | | | |
| MULA | **Mugla, Merkez-** | 0.60 | 71 | | P | **Pg** | **18 32 28.5** | **-0.4** |
| MULA | | | | | *i* AML | AML | 18 32 42.0 | |
| | comp=N,1µm,0.8s | | | | | | | |
| MULA | | | | | *i* AML | AML | 18 32 43.0 | |
| | comp=N,1µm,0.4s | | | | | | | |
| NISR | **Nisiros** | 0.60 | 221 | | P | **Pg** | **18 32 28.5** | **-0.4** |
| NISR | | | | | AML | AML | 18 32 40.5 | |
| | comp=E,9198µm,0.4s | | | | | | | |
| NISR | | | | | AML | AML | 18 32 43.5 | |
| | comp=N,7457µm,0.6s | | | | | | | |
| KOSK | **Kos Island** | 0.60 | 239 | | P | **Pg** | **18 32 28.6** | **-0.3** |
| KOSK | | | | | S | **Sb** | **18 32 39.3** | **+1.6** |
| | comp=N,13µm,0.5s | | | | | | | |
| KOSK | **Kos Island** | 0.60 | 239 | | PG | **Pg** | **18 32 28.6** | **-0.3** |
| AYDN | **Tasoluk** | 0.63 | 19 | | P | **Pg** | **18 32 29.4** | **-0.1** |
| AYDN | | | | | S | **Sg** | **18 32 38.1** | **+0.1** |
| AYDN | | | | | *i* AML | AML | 18 32 39.0 | |
| | comp=N,6µm,0.5s | | | | | | | |
| AYDN | | | | | *i* AML | AML | 18 32 39.0 | |
| | comp=N,4µm,0.2s | | | | | | | |
| GCAM | **G?zelcami?** | 0.70 | 335 | | PG | **Pg** | **18 32 30.9** | **0.0** |
| GCAM | **G?zelcami?** | 0.70 | 335 | | P | **Pg** | **18 32 30.5** | **-0.3** |
| GCAM | | | | | S | **Sg** | **18 32 40.6** | **+0.4** |
| GCAM | | | | | *i* AML | AML | 18 32 44.0 | |
| | comp=N,2µm,0.3s | | | | | | | |
| GCAM | | | | | *i* AML | AML | 18 32 46.0 | |
| | comp=N,2µm,0.5s | | | | | | | |
| DALY | **Dalyan (Mula)** | 0.87 | 106 | | PG | **Pg** | **18 32 33.7** | **-0.3** |
| SMG | **Samos** | 0.89 | 316 | | P | **Pg** | **18 32 33.7** | **-0.8** |
| SMG | | | | | S | **Sb** | **18 32 46.6** | **+0.3** |
| SMG | **Samos** | 0.89 | 316 | | P | **Pg** | **18 32 33.7** | **-0.8** |
| SMG | | | | | AML | AML | 18 32 52.5 | |
| | comp=E,6419µm,0.3s | | | | | | | |
| SMG | | | | | AML | AML | 18 32 52.5 | |
| | comp=N,5976µm,0.5s | | | | | | | |
| ARG | **Arkhangelos** | 0.94 | 154 | | P | **Pg** | **18 32 35.0** | **-0.3** |
| ARG | | | | | S | **Sn** | **18 32 48.7** | **-0.6** |
| | comp=N,3µm,0.4s | | | | | | | |
| ARG | **Arkhangelos** | 0.94 | 154 | | P | **Pg** | **18 32 35.1** | **-0.3** |
| ARG | | | | | S | **Sn** | **18 32 49.3** | **+0.1** |
| ARG | | | | | AML | AML | 18 32 51.5 | |
| | comp=E,4014µm,0.3s | | | | | | | |
| ARG | | | | | AML | AML | 18 32 52.1 | |
| | comp=N,7936µm,0.5s | | | | | | | |
| ARG | **Arkhangelos** | 0.94 | 154 | | PG | **Pg** | **18 32 35.2** | **-0.2** |
| TAVA | **DENIZLI_Tavas** | 1.11 | 68 | | P | **Pb** | **18 32 37.6** | **-0.7** |
| TAVA | | | | | S | **Sn** | **18 32 55.5** | **+1.9** |
| TAVA | | | | | *i* AML | AML | 18 33 00.0 | |
| | comp=N,688nm,0.8s | | | | | | | |
| TAVA | | | | | *i* AML | AML | 18 33 01.0 | |
| | comp=N,641nm,0.6s | | | | | | | |
| DGB | **zmir** | 1.15 | 330 | | P | **Pb** | **18 32 38.2** | **-0.6** |
| DGB | | | | | S | **Sn** | **18 32 55.1** | **+0.8** |
| DGB | | | | | *i* AML | AML | 18 32 59.0 | |
| | comp=N,334nm,0.5s | | | | | | | |
| DGB | | | | | *i* AML | AML | 18 32 59.0 | |
| | comp=N,464nm,0.5s | | | | | | | |
| GMLD | **Gumuldur** | 1.15 | 331 | | PN | **Pn** | **18 32 39.2** | **+0.3** |
| FETY | **Fethiye** | 1.25 | 110 | | PN | **Pb** | **18 32 40.9** | **+0.3** |
| FETY | **Fethiye** | 1.25 | 110 | | P | **Pb** | **18 32 40.5** | **-0.1** |
| FETY | | | | | S | **Sg** | **18 32 58.9** | **+1.2** |
| FETY | | | | | *i* AML | AML | 18 33 04.0 | |
| | comp=N,426nm,0.5s | | | | | | | |
| FETY | | | | | *i* AML | AML | 18 33 04.0 | |
| | comp=N,612nm,0.5s | | | | | | | |
| CAME | **Cameli-Denizli** | 1.36 | 95 | | PN | **Pb** | **18 32 42.8** | **+0.3** |
| CAEL | **Denizli, Camel** | 1.36 | 87 | | P | **Pg** | **18 32 43.6** | **+0.2** |
| CAEL | | | | | S | **Sg** | **18 33 03.8** | **+2.5** |
| CAEL | | | | | *i* AML | AML | 18 33 13.0 | |
| | comp=N,1µm,0.8s | | | | | | | |
| CAEL | | | | | *i* AML | AML | 18 33 19.0 | |
| | comp=N,1µm,1.0s | | | | | | | |
| ZEYE | **Izmir, Urla-Ze** | 1.47 | 323 | | P | **Pn** | **18 32 43.2** | **-0.1** |
| ZEYE | | | | | *i* AML | AML | 18 33 10.0 | |
| | comp=N,349nm,0.4s | | | | | | | |
| ZEYE | | | | | *i* AML | AML | 18 33 16.0 | |
| | comp=N,169nm,0.8s | | | | | | | |
| URLA | **Izmir** | 1.53 | 328 | | PN | **Pb** | **18 32 45.3** | **0.0** |
| URLA | **Izmir** | 1.53 | 328 | | P | **Pn** | **18 32 44.2** | **+0.1** |
| URLA | | | | | *i* AML | AML | 18 33 12.0 | |
| | comp=N,386nm,0.6s | | | | | | | |
| URLA | | | | | *i* AML | AML | 18 33 14.0 | |
| | comp=N,580nm,0.7s | | | | | | | |
| KARP | **Karpathos** | 1.56 | 194 | | PN | **Pb** | **18 32 45.7** | **-0.1** |
| KARP | **Karpathos** | 1.56 | 194 | | | **Pn** | **18 32 43.8** | **-0.7** |
| GOLH | **Golhisar** | 1.56 | 83 | | P | **Pb** | **18 32 46.5** | **+0.4** |
| GOLH | | | | | S | **Sg** | **18 33 09.4** | **+1.8** |
| GOLH | | | | | *i* AML | AML | 18 33 23.0 | |
| | comp=N,431nm,0.7s | | | | | | | |
| GOLH | | | | | *i* AML | AML | 18 33 24.0 | |
| | comp=N,579nm,0.7s | | | | | | | |
| GOMA | **Golmarmara-Man** | 1.66 | 8 | | PN | **Pb** | **18 32 47.2** | **-0.3** |
| KULA | **Kula-Manisa** | 1.67 | 29 | | P | **Pn** | **18 32 46.0** | **-0.1** |
| KULA | | | | | S | **Sn** | **18 32 58.8** | **-8.6** |
| FOCM | **Foa** | 1.79 | 337 | | PN | **Pb** | **18 32 49.1** | **-0.6** |
| AKAS | **Kas** | 1.80 | 117 | | P | **Pb** | **18 32 49.4** | **-0.7** |
| AKAS | | | | | *i* AML | AML | 18 33 25.0 | |
| | comp=N,502nm,0.5s | | | | | | | |
| AKAS | | | | | *i* AML | AML | 18 33 33.0 | |
| | comp=N,818nm,0.8s | | | | | | | |
| CHOS | **Chios island** | 1.81 | 317 | | P | **Pn** | **18 32 47.9** | **-0.2** |
| CHOS | **Chios island** | 1.81 | 317 | | PN | **Pn** | **18 32 48.3** | **+0.3** |
| AKHS | **Akhisar** | 1.82 | 5 | | P | **Pn** | **18 32 47.6** | **-0.5** |
| AKHS | | | | | *i* AML | AML | 18 33 10.0 | |
| | comp=N,1.6nm,2.4s | | | | | | | |
| AKHS | | | | | S | **Sn** | **18 33 11.4** | **+0.4** |
| AKHS | | | | | *i* AML | AML | 18 33 23.0 | |
| | comp=N,361nm,0.5s | | | | | | | |
| SANT | **Santorini** | 1.86 | 249 | | P | **Pn** | **18 32 48.9** | **+0.1** |
| SANT | **Santorini** | 1.86 | 249 | | P | **Pn** | **18 32 48.8** | **0.0** |
| SANT | **Santorini** | 1.86 | 249 | | PN | **Pn** | **18 32 50.0** | **+1.2** |
| SANT | **Santorini** | 1.86 | 249 | | Pn | **Pb** | **18 32 51.3** | **+0.2** |
| ELL | **Elmali** | 1.87 | 99 | | Pn | **Pb** | **18 32 51.5** | **+0.4** |
| SNT5 | **Nea Kammeni, S** | 1.90 | 250 | | P | **Pn** | **18 32 49.3** | **+0.1** |
| ZEDA | **zmir-Bergama** | 1.95 | 348 | | P | **Pn** | **18 32 49.9** | **+0.1** |
| ZEDA | | | | | *i* AML | AML | 18 33 24.0 | |
| | comp=N,183nm,0.7s | | | | | | | |
| ZEDA | | | | | *i* AML | AML | 18 33 27.0 | |
| | comp=N,193nm,0.6s | | | | | | | |
| PASA | **Karahalli, USA** | 1.96 | 49 | | P | **Pn** | **18 32 50.5** | **+0.4** |
| PASA | | | | | *i* AML | AML | 18 33 29.0 | |
| | comp=N,76nm,0.4s | | | | | | | |
| PASA | | | | | *i* AML | AML | 18 33 31.0 | |
| | comp=N,76nm,0.9s | | | | | | | |
| USAK | **Uak-Merkez** | 1.99 | 34 | | P | **Pn** | **18 32 50.8** | **+0.3** |
| USAK | | | | | *i* AML | AML | 18 33 26.0 | |
| | comp=N,88nm,0.9s | | | | | | | |
| USAK | | | | | *i* AML | AML | 18 33 33.0 | |
| | comp=N,103nm,0.9s | | | | | | | |
| BRDR | **BURDUR-Merkez** | 2.05 | 71 | | P | **Pb** | **18 32 52.9** | **-1.3** |
| BRDR | | | | | *i* AML | AML | 18 33 34.0 | |
| | comp=N,144nm,0.6s | | | | | | | |
| BRDR | | | | | *i* AML | AML | 18 33 37.0 | |
| | comp=N,161nm,0.8s | | | | | | | |
| DEMI | **Demirci** | 2.16 | 23 | | P | **Pn** | **18 32 50.6** | **-2.3** |
| DEMI | | | | | S | **Sn** | **18 33 19.3** | **-0.2** |
| KORT | **Korkueli** | 2.19 | 91 | | P | **Pb** | **18 32 56.2** | **-0.5** |
| KORT | | | | | *i* AML | AML | 18 33 36.0 | |
| | comp=N,190nm,0.7s | | | | | | | |
| KORT | | | | | *i* AML | AML | 18 33 48.0 | |
| | comp=N,278nm,0.6s | | | | | | | |
| STEP | **BALIKESIR_Sava** | 2.31 | 2 | | P | **Pn** | **18 32 54.2** | **-0.7** |
| STEP | | | | | *i* AML | AML | 18 33 37.0 | |
| | comp=N,262nm,0.7s | | | | | | | |
| STEP | | | | | *i* AML | AML | 18 33 40.0 | |
| | comp=N,381nm,0.9s | | | | | | | |
| AKUM | **Antalya-Kumluc** | 2.31 | 108 | | P | **Pb** | **18 32 58.3** | **-0.4** |
| AKUM | | | | | S | **Sb** | **18 33 28.9** | **+1.7** |
| AKUM | | | | | *i* AML | AML | 18 33 39.0 | |
| | comp=N,184nm,0.8s | | | | | | | |
| AKUM | | | | | *i* AML | AML | 18 33 43.0 | |
| | comp=N,169nm,0.4s | | | | | | | |
| KZIL | **AFYON_Kizioren** | 2.33 | 59 | | P | **Pn** | **18 32 56.8** | **+1.5** |
| KZIL | | | | | *i* AML | AML | 18 33 47.0 | |
| | comp=N,94nm,0.9s | | | | | | | |
| KZIL | | | | | *i* AML | AML | 18 33 47.0 | |
| | comp=N,93nm,0.9s | | | | | | | |
| BUCA | **Burdur, Bucak-** | 2.37 | 83 | | P | **Pb** | **18 32 58.2** | **-1.5** |
| BUCA | | | | | *i* AML | AML | 18 33 37.0 | |
| | comp=N,107nm,1.5s | | | | | | | |
| BUCA | | | | | *i* AML | AML | 18 33 51.0 | |
| | comp=N,121nm,1.2s | | | | | | | |
| ISP | **Isparta** | 2.44 | 71 | | Pn | **Pn** | **18 32 57.5** | **+0.8** |
| BUHA | **Balikesir, Bur** | 2.47 | 350 | | P | **Pn** | **18 32 57.2** | **+0.1** |
| BUHA | | | | | *i* AML | AML | 18 33 44.0 | |
| | comp=N,203nm,1.1s | | | | | | | |
| BUHA | | | | | *i* AML | AML | 18 33 48.0 | |
| | comp=N,148nm,0.8s | | | | | | | |
| SIGR | **SIGRI** | 2.55 | 328 | | P | **Pn** | **18 32 58.2** | **0.0** |
| DURS | **Dursunbey** | 2.62 | 15 | | P | **Pn** | **18 32 58.9** | **-0.4** |
| DURS | | | | | *i* AML | AML | 18 33 52.0 | |
| | comp=N,99nm,0.8s | | | | | | | |
| DURS | | | | | *i* AML | AML | 18 33 59.0 | |
| | comp=N,78nm,0.6s | | | | | | | |
| BALY | **Balya** | 2.67 | 0 | | P | **Pn** | **18 32 59.6** | **-0.3** |
| BALY | | | | | *i* AML | AML | 18 33 49.0 | |
| | comp=N,169nm,0.8s | | | | | | | |
| BALY | | | | | *i* AML | AML | 18 33 50.0 | |
| | comp=N,82nm,0.6s | | | | | | | |
| KOCA | **Canakkale, Ayv** | 2.70 | 335 | | P | **Pn** | **18 33 00.7** | **+0.5** |
| KOCA | | | | | *i* AML | AML | 18 33 54.0 | |
| | comp=N,74nm,0.6s | | | | | | | |
| KOCA | | | | | *i* AML | AML | 18 34 01.0 | |
| | comp=N,92nm,0.8s | | | | | | | |
| BAYC | **CANAKKALE_Bayr** | 2.80 | 343 | | P | **Pn** | **18 33 01.9** | **+0.3** |
| BAYC | | | | | *i* AML | AML | 18 33 51.0 | |
| | comp=N,46nm,0.5s | | | | | | | |
| BAYC | | | | | *i* AML | AML | 18 33 52.0 | |
| | comp=N,41nm,0.5s | | | | | | | |
| IDI | **Anoyia** | 2.83 | 232 | | Pn | **Pn** | **18 33 02.2** | **+0.2** |
| | comp=N,2.6nm,0.3s,baz=43,slow=11,SNR=22 | | | | | | | |
| IDI | | | | | LR | LR | 18 34 17.6 | |
| | comp=N,81nm,19.8s,baz=328,slow=43 | | | | | | | |
| IDI | **Anoyia** | 2.83 | 232 | | | **Pn** | **18 33 03.6** | **+1.6** |
| ALN | **Alexandroupoli** | 4.02 | 343 | | Pn | **Pn** | **18 33 17.9** | **-0.4** |
| MDUB | **Mudurnu** | 4.41 | 38 | | Pn | **Pn** | **18 33 24.3** | **+0.6** |
| AGG | **Agios Georgios** | 4.61 | 297 | | Pn | **Pn** | **18 33 26.7** | **+0.3** |
| BR231 | **Keskin MP Arra** | 4.91 | 54 | | | **Pn** | **18 33 31.0** | **+0.3** |
| ANTO | **Ankara** | 4.94 | 54 | | Pn | **Pn** | **18 33 31.7** | **+0.6** |
| LIT | **Litokhoron** | 5.03 | 309 | | Pn | **Pn** | **18 33 32.3** | **0.0** |
| CSS | **Mathiatis** | 5.09 | 113 | | Pn | **Pn** | **18 33 33.9** | **+0.8** |
| BR131 | **Keskin Array S** | 5.43 | 59 | | | **Pn** | **18 33 38.7** | **+0.9** |
| BRTR | **Keskin Array B** | 5.43 | 59 | | Pn | **Pn** | **18 33 38.8** | **+1.0** |
| | comp=N,2.3nm,0.3s,baz=241,slow=16,SNR=65 | | | | | | | |
| BRTR | | | | | LR | LR | 18 36 28.4 | |
| | comp=N,47nm,19.0s,baz=277,slow=47 | | | | | | | |
| BRTR | **Keskin Array B** | 5.43 | 59 | | Pn | **Pn** | **18 33 38.5** | **+0.7** |
| FNA | **Florina** | 6.12 | 309 | | Pn | **Pn** | **18 33 45.1** | **-2.2** |
| VTS | **Vitosha** | 6.49 | 330 | | Pn | **Pn** | **18 33 50.4** | **-2.0** |
| HNTI | **Hanita** | 7.36 | 120 | | Pn | **Pn** | **18 34 04.7** | **+0.4** |
| HNTI | | | | | Sn | **Sn** | **18 35 24.9** | **-2.7** |
| OFRI | **`Ofer** | 7.51 | 124 | | Pn | **Pn** | **18 34 07.0** | **+0.7** |
| OFRI | | | | | Sn | **Sn** | **18 35 28.8** | **-2.5** |
| MMA0B | **Mount Meron ar** | 7.56 | 120 | | Pn | **Pn** | **18 34 07.3** | **+0.3** |
| MMA0B | | | | | Sn | **Sn** | **18 35 29.5** | **-3.1** |
| MMAI | **Mount Meron Ar** | 7.56 | 120 | | Pn | **Pn** | **18 34 07.0** | **0.0** |
| | comp=N,7.0nm,0.3s,baz=311,slow=14,SNR=26 | | | | | | | |
| MMAI | | | | | Sn | **Sn** | **18 35 29.3** | **-3.3** |
| | comp=N,7.9nm,0.3s,baz=306,slow=11,SNR=11 | | | | | | | |
| GEM | **Giv'at Ha'Em** | 7.63 | 118 | | Pn | **Pn** | **18 34 08.3** | **+0.3** |
| GEM | | | | | Sn | **Sn** | **18 35 31.1** | **-3.2** |
| MMLI | **Mount Malkishu** | 7.91 | 123 | | Pn | **Pn** | **18 34 12.9** | **+1.1** |
| MMLI | | | | | Sn | **Sn** | **18 35 37.9** | **-3.3** |
| HMDT | **Nahal Hemdat** | 8.09 | 124 | | Pn | **Pn** | **18 34 15.1** | **+0.8** |
| HMDT | | | | | Sn | **Sn** | **18 35 43.0** | **-2.6** |
| KZIT | **Kziot** | 8.33 | 136 | | Pn | **Pn** | **18 34 16.5** | **-1.1** |
| KZIT | | | | | Sn | **Sn** | **18 35 46.9** | **-4.6** |
| DSI | **Dead Sea** | 8.44 | 128 | | Pn | **Pn** | **18 34 19.5** | **+0.4** |
| GHAJ | **Ghor Haditha** | 8.74 | 129 | | Pn | **Pn** | **18 34 24.8** | **+1.6** |
| TIP | **Timpagrande** | 8.81 | 287 | | Pn | **Pn** | **18 34 25.8** | **+1.5** |
| PRNI | **Paran** | 9.09 | 135 | | Pn | **Pn** | **18 34 27.5** | **-0.5** |
| PRNI | | | | | Sn | **Sn** | **18 36 05.5** | **-4.7** |
| HRFI | **Mount Harif** | 9.35 | 136 | | Pn | **Pn** | **18 34 32.2** | **+0.6** |
| HRFI | | | | | Sn | **Sn** | **18 36 12.6** | **-4.0** |
| EIL | **Elat** | 9.59 | 138 | | Pn | **Pn** | **18 34 36.0** | **+1.1** |
| | comp=N,0.2nm,0.3s,baz=329,slow=18,SNR=1.9 | | | | | | | |
| EIL | | | | | Sn | **Sn** | **18 36 16.6** | **-5.8** |
| | comp=N,0.6nm,0.3s,baz=107,slow=16,SNR=2.8 | | | | | | | |
| ESDC | **Sonseca Array** | 24.83 | 286 | | P | **P** | **18 37 40.1** | **+1.0** |
| | comp=N,1.5nm,0.8s,baz=83,slow=9.7,SNR=9.7 | | | | | | | |
| TORD | **Torodi Ar. Bea** | 33.23 | 231 | | P | **P** | **18 38 54.1** | **+0.1** |
| | comp=N,1.9nm,0.5s,baz=35,slow=8.8,SNR=17 | | | | | | | |
| TORD | **Torodi Ar. Bea** | 33.23 | 231 | | P | **P** | **18 38 54.3** | **+0.4** |
| MKAR | **Makanchi Array** | 41.08 | 59 | | P | **P** | **18 40 01.4** | **+1.1** |
| | comp=N,0.3nm,0.7s,baz=286,slow=6.2,SNR=2.9 | | | | | | | |
| MKAR | **Makanchi Array** | 41.08 | 59 | | P | **P** | **18 40 01.8** | **+1.4** |
| ZALV | **Zalesovo Beam** | 42.26 | 48 | | P | **P** | **18 40 10.4** | **+0.5** |
| | comp=N,0.8nm,0.6s,baz=281,slow=8.9,SNR=4.3 | | | | | | | |

**WEL 26 18:39:05.5±1.9, 46°S±10′×16°6E±1°, 0, h8km±8km, M4.0/10, ML4.2/12, MLv4.0/10, Error ellipse: s-maj=0.0km s-min=0.0km az=42.5, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PYZ | **Puysegur Point** | 0.70 | 92 | P | Pb | 18 39 19.8 | -0.3 |
| PYZ | | | | S | Sb | 18 39 29.7 | -0.1 |
| DCZ | **Deep Cove** | 1.24 | 57 | P | Pn | 18 39 27.0 | -2.1 |
| WHZ | **Wether Hill Ro** | 1.61 | 82 | P | Pn | 18 39 33.7 | -0.5 |
| APZ | **The Paps** | 1.75 | 114 | P | Pn | 18 39 35.8 | -0.3 |
| MLZ | **Mavora Lakes** | 1.88 | 67 | P | Pn | 18 39 38.2 | +0.2 |
| MLZ | | | | S | Sn | 18 40 02.4 | +0.5 |
| MSZ | **Milford Sound** | 2.16 | 48 | P | Pn | 18 39 42.1 | +0.3 |
| SYZ | **Scrubby Hill** | 2.44 | 101 | P | Pn | 18 39 45.6 | 0.0 |
| WKZ | **Wanaka** | 2.70 | 62 | P | Pn | 18 39 50.3 | +1.1 |
| EAZ | **Earnscleugh** | 2.71 | 72 | P | Pn | 18 39 50.0 | +0.7 |
| TUZ | **Tuapeka** | 2.77 | 88 | P | Pn | 18 39 50.5 | +0.4 |
| JCZ | **Jackson Bay** | 3.02 | 48 | P | Pn | 18 39 54.8 | +1.1 |
| HHSZ | **Highcliff Hill** | 3.44 | 87 | P | Pn | 18 39 59.2 | -0.3 |
| LBZ | **Lake Benmore** | 3.64 | 63 | P | Pn | 18 40 01.6 | -0.6 |
| ODZ | **Otahua Downs** | 3.66 | 74 | P | Pn | 18 40 01.1 | -1.3 |
| FOZ | **Fox Glacier** | 3.94 | 50 | P | Pn | 18 40 06.1 | -0.1 |
| TMZ | **Timaru** | 4.16 | 67 | P | Pn | 18 40 08.1 | -1.1 |
| ARCZ | **Arundel** | 4.48 | 63 | P | Pn | 18 40 12.0 | -1.6 |
| RPZ | **Rata Peaks** | 4.53 | 60 | P | Pn | 18 40 13.1 | -1.3 |
| WACZ | **Wakanui South** | 4.89 | 66 | P | Pn | 18 40 18.3 | -1.0 |
| OXZ | **Oxford** | 5.34 | 60 | P | Pn | 18 40 23.4 | -2.1 |
| INZ | **Inchbonnie** | 5.36 | 52 | P | Pn | 18 40 24.7 | -1.1 |
| LTZ | **Lake Taylor** | 5.80 | 57 | P | Pn | 18 40 30.1 | -1.7 |
| DSZ | **Denniston Nort** | 6.24 | 47 | P | Pn | 18 40 37.1 | -0.8 |
| THZ | **Tophouse** | 6.81 | 53 | P | Pn | 18 40 45.4 | -0.4 |
| MRNZ | **Matariki Terra** | 6.98 | 50 | P | Pn | 18 40 47.8 | -0.3 |
| QRZ | **Quartz Range** | 7.29 | 46 | P | Pn | 18 40 51.1 | -1.1 |
| TKNZ | **Takaka Hill** | 7.35 | 49 | P | Pn | 18 40 53.1 | 0.0 |
| DUWZ | **D'Urville Isla** | 8.03 | 51 | P | Pn | 18 41 03.0 | +0.6 |
| PKE | **Pukeiti** | 9.26 | 44 | P | Pn | 18 41 18.7 | -0.6 |
| VRZ | **Vera Road** | 9.69 | 47 | P | Pn | 18 41 29.5 | +4.3 |
| OTVZ | **Oturere** | 10.13 | 50 | P | Pn | 18 41 31.9 | +0.5 |

**NNC 26 18:49:51.5±9.0, 37.71N×71.74E, h0km, mb3.5, mpv3.1, 3C-2D, Error ellipse: s-maj=73.9km s-min=62.9km az=155.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | **Ala-Archa** | 5.35 | 22 | ⇑P | Pn | 18 51 13.1 | +0.2 |
| | 1.7nm,0.6s | | | | | | |
| AAK | | | | ⇓S | Sn | 18 52 15.8 | +0.5 |
| | 5.0nm,0.6s | | | | | | |
| KK02 | **Karatay Array** | 5.47 | 351 | ⇑P | Pn | 18 51 16.0 | +1.7 |
| | 1.0nm,0.4s | | | | | | |
| KK02 | | | | ⇓S | Sn | 18 52 19.4 | +1.5 |
| | 2.1nm,0.4s | | | | | | |
| AB31 | **Akbulak array** | 14.35 | 327 | ⇑P | Pn | 18 53 11.6 | -4.2 |
| | 0.6nm,0.7s,baz=144,slow=12,SNR=5.5 | | | | | | |

*DJA **26** 19:04:49.1±0.9, 9°S±7°×12°4E±°, h41km±36km, M3.2/7, MLv3.2/7*

**ISC 26 19:04:48.6±1.5, 9°3S±0°.1×124°21E±0°.09, h35km, n10, σ1°73/10, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | **Soe** | 0.51 | 174 | P | **Pn** | **19 05 02.5** | **+3.0** |
| BATI | **Baumata** | 1.10 | 210 | P | **Pn** | **19 05 08.7** | **+1.2** |
| MMRI | **Maumere** | 2.05 | 287 | P | **Pn** | **19 05 20.1** | **-0.5** |
| BASI | **Baing, Sumba** | 3.71 | 255 | P | **Pn** | **19 05 43.8** | **+0.3** |
| BBSI | **Bau Bau** | 4.08 | 336 | P | **Pn** | **19 05 47.7** | **-0.8** |
| WBSI | **Waikabubak, Su** | 4.78 | 265 | P | **Pn** | **19 05 58.4** | **+0.3** |
| DRS | **Darwin Rock St** | 7.29 | 116 | P | **Pn** | **19 06 31.3** | **-1.3** |
| MTN | **Manton Dam** | 7.67 | 118 | P | **Pn** | **19 06 37.0** | **-0.9** |
| KDU | **Kakadu** | 8.80 | 114 | P | **Pn** | **19 06 52.5** | **-0.9** |
| FITZ | **Fitzroy Crossi** | 8.90 | 171 | P | **Pn** | **19 06 52.4** | **-2.4** |

*JMA **26** 19:17:23.3±0.1, 24.81N×121.89E, h109km±2km, M2.7*
*TAP **26** 19:17:23.7, 24.86N×121.90E, h108km, ML3.1, B*

**ISC 26 19:17:23.5±1.4, 24°90N±0°.04×121°91E±0°.03, h110km±6km, n87, σ0°53/151, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TIPB | **Shuangxi** | 0.10 | 315 | P | **Pn** | **19 17 38.7** | **-0.1** |
| | baz=325 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **19 17 49.4** | **-0.8** |
| | baz=325 | | | | | | |
| TWB1 | **Santiao Chiao** | 0.13 | 34 | *e*P | **Pn** | **19 17 38.8** | **0.0** |
| | baz=35 | | | | | | |
| TWB1 | | | | *i* S | **Sn** | **19 17 49.7** | **-0.5** |
| | baz=35 | | | | | | |
| ILA | **Ilan** | 0.20 | 227 | *e*P | **Pn** | **19 17 38.9** | **0.0** |
| | baz=221 | | | | | | |
| ILA | | | | *e*S | **Sn** | **19 17 51.1** | **+0.7** |
| | baz=221 | | | | | | |
| SXI1 | **Grass Mountain** | 0.20 | 352 | *e*P | **Pn** | **19 17 38.9** | **-0.1** |
| | baz=355 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **19 17 50.3** | **-0.3** |
| | baz=355 | | | | | | |
| NWF | **Wu-fen Shan** | 0.20 | 326 | *e*P | **Pn** | **19 17 38.9** | **-0.1** |
| | baz=336 | | | | | | |
| NWF | | | | *e*S | **Sn** | **19 17 50.1** | **-0.6** |
| | baz=336 | | | | | | |
| TWE | **Neicheng** | 0.28 | 231 | P | **Pn** | **19 17 39.6** | **+0.5** |
| | baz=229 | | | | | | |
| TWE | | | | S | **Sn** | **19 17 51.4** | **+0.5** |
| | baz=229 | | | | | | |
| TWC | **Suao** | 0.29 | 190 | *e*P | **Pn** | **19 17 39.3** | **+0.1** |
| | baz=186 | | | | | | |
| TWC | | | | *e*S | **Sn** | **19 17 50.6** | **-0.5** |
| | baz=186 | | | | | | |
| TWA | **Mucha** | 0.30 | 285 | P | **Pn** | **19 17 39.7** | **+0.5** |
| | baz=292 | | | | | | |
| TWA | | | | *e*S | **Sn** | **19 17 51.1** | **-0.1** |
| | baz=292 | | | | | | |
| FUSB | **Fushanzhiwuyua** | 0.32 | 244 | P | **Pn** | **19 17 39.4** | **0.0** |
| | baz=261 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **19 17 51.2** | **-0.2** |
| | baz=261 | | | | | | |
| NHY | **Taipei** | 0.34 | 295 | *e*P | **Pn** | **19 17 39.9** | **+0.5** |
| | baz=301 | | | | | | |
| NHY | | | | *e*S | **Sn** | **19 17 51.6** | **+0.3** |
| | baz=301 | | | | | | |
| TATO | **Taipei** | 0.39 | 281 | P | **Pn** | **19 17 39.8** | **+0.1** |
| | baz=286 | | | | | | |
| TATO | | | | S | **Sn** | **19 17 51.9** | **+0.1** |
| | baz=286 | | | | | | |
| TAP | **Taipei** | 0.39 | 291 | P | **Pn** | **19 17 39.9** | **+0.3** |
| | baz=300 | | | | | | |
| TAP | | | | *e*S | **Sn** | **19 17 51.8** | **0.0** |
| | baz=300 | | | | | | |
| ENTT | **Nioudou** | 0.40 | 230 | P | **Pn** | **19 17 40.0** | **+0.2** |
| | baz=243 | | | | | | |
| YM08 | **YM08** | 0.41 | 315 | *e*P | **Pn** | **19 17 39.9** | **+0.1** |
| | baz=329 | | | | | | |
| YM08 | | | | *e*S | **Sn** | **19 17 52.0** | **-0.1** |
| | baz=329 | | | | | | |
| ANP | **Anpu** | 0.45 | 309 | *e*P | **Pn** | **19 17 40.1** | **0.0** |
| | baz=320 | | | | | | |
| ANP | | | | *e*S | **Sn** | **19 17 52.6** | **-0.1** |
| | baz=320 | | | | | | |
| TWY | **Chenhua** | 0.47 | 323 | *e*P | **Pn** | **19 17 40.6** | **+0.5** |
| | baz=335 | | | | | | |
| TWY | | | | *e*S | **Sn** | **19 17 53.9** | **+1.3** |
| | baz=335 | | | | | | |
| TWS1 | **Kuangyinshan** | 0.49 | 294 | P | **Pn** | **19 17 40.6** | **+0.4** |
| | baz=288 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **19 17 53.4** | **+0.5** |
| | baz=288 | | | | | | |
| ENA | **Nanau** | 0.49 | 198 | *i* P | **Pn** | **19 17 40.7** | **+0.4** |
| | baz=189 | | | | | | |
| ENA | | | | *e*S | **Sn** | **19 17 53.4** | **+0.5** |
| | baz=189 | | | | | | |
| LATG | **Datong** | 0.50 | 224 | *e*P | **Pn** | **19 17 40.8** | **+0.3** |
| | baz=233 | | | | | | |
| LATG | | | | *e*S | **Sn** | **19 17 53.6** | **+0.3** |
| | baz=233 | | | | | | |
| YHNB | **Yeheng** | 0.53 | 245 | P | **Pn** | **19 17 40.3** | **-0.4** |
| | baz=236 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **19 17 52.8** | **-0.8** |
| | baz=236 | | | | | | |
| NSK | **Sanguang** | 0.55 | 246 | P | **Pn** | **19 17 40.5** | **-0.3** |
| | baz=238 | | | | | | |
| NSK | | | | *e*S | **Sn** | **19 17 52.4** | **-1.3** |
| | baz=238 | | | | | | |
| NCU | **National Centr** | 0.66 | 276 | P | **Pn** | **19 17 41.8** | **+0.3** |
| | baz=278 | | | | | | |
| NCU | | | | S | **Sn** | **19 17 55.4** | **+0.3** |
| | baz=278 | | | | | | |
| NNS | **Nan Shan** | 0.67 | 227 | P | **Pn** | **19 17 41.8** | **0.0** |
| | baz=220 | | | | | | |
| NNS | | | | *e*S | **Sn** | **19 17 55.3** | **-0.1** |
| | baz=220 | | | | | | |
| NNSB | **Datong** | 0.67 | 226 | P | **Pn** | **19 17 41.7** | **0.0** |
| | baz=224 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **19 17 55.5** | **0.0** |
| | baz=224 | | | | | | |
| NJD | **Zhudong** | 0.76 | 258 | P | **Pn** | **19 17 42.6** | **+0.2** |
| | baz=252 | | | | | | |
| NJD | | | | *e*S | **Sn** | **19 17 56.6** | **0.0** |
| | baz=252 | | | | | | |
| NACB | **Ninganchiao** | 0.78 | 202 | P |

| | | | | | | |
|---|---|---|---|---|---|---|
| CHGB | | | S | | **Sn** | **19 18 03.1 +0.7** |
| | baz=221 | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09 113** | P | | **Pn** | **19 17 45.6 0.0** |
| YOJ | | | *e*S | | **Sn** | **19 18 02.3 -0.1** |
| **YOJ** | **Yonaguni jima** | **1.09 113** | P | | **Pn** | **19 17 45.5 -0.2** |
| | baz=115 | | | | | |
| YOJ | | | *e*S | | **Sn** | **19 18 02.5 +0.1** |
| | baz=115 | | | | | |
| **NSY** | **Sanyi** | **1.15 245** | P | | **Pn** | **19 17 46.5 +0.2** |
| | baz=244 | | | | | |
| NSY | | | *e*S | | **Sn** | **19 18 04.0 +0.5** |
| | baz=244 | | | | | |
| **WUSB** | **Renai** | **1.16 219** | P | | **Pn** | **19 17 47.0 +0.6** |
| | baz=219 | | | | | |
| **ESL** | **Shilin** | **1.16 202** | *e*P | | **Pn** | **19 17 45.1 -1.4** |
| | baz=197 | | | | | |
| **WPL** | **Puli Township** | **1.24 225** | *i* P | | **Pn** | **19 17 47.6 +0.4** |
| | baz=232 | | | | | |
| **VWDT** | **VWDT** | **1.34 212** | P | | **Pn** | **19 17 48.8 +0.4** |
| | baz=205 | | | | | |
| VWDT | | | *e*S | | **Sn** | **19 18 08.2 +1.0** |
| | baz=205 | | | | | |
| **TCU** | **Taichung** | **1.35 237** | *e*P | | **Pn** | **19 17 48.3 -0.2** |
| | baz=245 | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.37 222** | P | | **Pn** | **19 17 49.1 +0.3** |
| | baz=227 | | | | | |
| SMLT | | | *e*S | | **Sn** | **19 18 08.8 +0.8** |
| | baz=227 | | | | | |
| **TYC** | **Yuchr** | **1.38 224** | P | | **Pn** | **19 17 49.0 +0.1** |
| | baz=230 | | | | | |
| TYC | | | *e*S | | **Sn** | **19 18 08.5 +0.4** |
| | baz=230 | | | | | |
| **WWF** | **Wufeng** | **1.39 232** | *i* P | | **Pn** | **19 17 49.4 +0.3** |
| | baz=226 | | | | | |
| **SSLB** | **Suanglung** | **1.41 218** | *e*P | | **Pn** | **19 17 49.4 +0.2** |
| | baz=224 | | | | | |
| SSLB | | | *e*S | | **Sn** | **19 18 08.9 +0.2** |
| | baz=224 | | | | | |
| **HGSD** | **Ruisui** | **1.47 198** | *e*P | | **Pn** | **19 17 49.8 -0.1** |
| | baz=196 | | | | | |
| HGSD | | | *e*S | | **Sn** | **19 18 10.4 +0.4** |
| | baz=196 | | | | | |
| **EHY** | **Hungye** | **1.49 201** | *e*P | | **Pn** | **19 17 50.1 -0.1** |
| | baz=196 | | | | | |
| **WNT1** | **Nantou City** | **1.49 229** | *i* P | | **Pn** | **19 17 50.6 +0.4** |
| | baz=229 | | | | | |
| **WNT** | **Mingjian** | **1.51 228** | *e*P | | **Pn** | **19 17 50.6 +0.2** |
| | baz=233 | | | | | |
| WNT | | | *e*S | | **Sn** | **19 18 10.9 +0.1** |
| | baz=233 | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.53 233** | *e*P | | **Pn** | **19 17 50.7 +0.1** |
| | baz=238 | | | | | |
| WYL | | | *e*S | | **Sn** | **19 18 11.0 -0.2** |
| | baz=238 | | | | | |
| **YULB** | **Yu-li** | **1.60 200** | *e*P | | **Pn** | **19 17 50.1 -1.5** |
| | baz=197 | | | | | |
| **ECBN** | **Changbin** | **1.63 195** | *e*P | | **Pn** | **19 17 51.9 0.0** |
| | baz=197 | | | | | |
| ECBN | | | *e*S | | **Sn** | **19 18 13.2 -0.3** |
| | baz=197 | | | | | |
| **YUS** | **Yu-Shan** | **1.65 212** | *e*P | | **Pn** | **19 17 53.8 +1.1** |
| | baz=201 | | | | | |
| YUS | | | *e*S | | **Sn** | **19 18 15.7 +1.0** |
| | baz=201 | | | | | |
| **ALS** | **Alishan** | **1.71 216** | P | | **Pn** | **19 17 53.5 +0.3** |
| | baz=212 | | | | | |
| ALS | | | *e*S | | **Sn** | **19 18 15.9 +0.2** |
| | baz=212 | | | | | |
| **WGK** | **Gukeng** | **1.72 226** | *i* P | | **Pn** | **19 17 53.4 +0.4** |
| | baz=234 | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.75 108** | P | | **Pn** | **19 17 53.2 -0.1** |
| IRIF | | | S | | **Sn** | **19 18 16.0 -0.1** |
| **FULB** | **Fuli** | **1.78 198** | *e*P | | **Pn** | **19 17 54.3 +0.5** |
| | baz=200 | | | | | |
| FULB | | | *e*S | | **Sn** | **19 18 17.2 +0.4** |
| | baz=200 | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.81 236** | *e*P | | **Pn** | **19 17 53.9 -0.1** |
| | baz=232 | | | | | |
| WTCT | | | *e*S | | **Sn** | **19 18 16.6 -0.6** |
| | baz=232 | | | | | |
| **ELDTW** | **Lidau** | **1.89 206** | *e*P | | **Pn** | **19 17 55.5 +0.3** |
| | baz=199 | | | | | |
| **HATJ** | **Hateruma jima** | **1.92 115** | P | | **Pn** | **19 17 55.8 +0.3** |
| **TPUB** | **Ta-pu** | **1.97 217** | *e*P | | **Pn** | **19 17 56.2 0.0** |
| | baz=215 | | | | | |
| **WSF** | **Szhu** | **1.98 231** | *e*P | | **Pn** | **19 17 55.9 -0.3** |
| | baz=227 | | | | | |
| WSF | | | *e*S | | **Sn** | **19 18 21.4 +0.1** |
| | baz=227 | | | | | |
| **JKRS** | **Kuro-shima** | **2.02 109** | P | | **Pn** | **19 17 56.9 +0.2** |
| JKRS | | | S | | **Sn** | **19 18 22.3 +0.1** |
| **WTP** | **Ta-pu** | **2.03 216** | *e*P | | **Pn** | **19 17 57.2 +0.3** |
| | baz=212 | | | | | |
| WTP | | | *e*S | | **Sn** | **19 18 21.6 -0.7** |
| | baz=212 | | | | | |
| **TWK** | **Hsinying** | **2.08 219** | *e*P | | **Pn** | **19 17 58.0 +0.4** |
| | baz=217 | | | | | |
| **JIJ** | **Ishigaki jima** | **2.10 104** | P | | **Pn** | **19 17 57.5 -0.3** |
| JIJ | | | S | | **Sn** | **19 18 22.6 -1.4** |
| **CHN1** | **Nanshi** | **2.12 217** | *e*P | | **Pn** | **19 17 57.9 -0.2** |
| | baz=212 | | | | | |
| CHN1 | | | *e*S | | **Sn** | **19 18 24.6 +0.1** |
| | baz=212 | | | | | |
| **MATB** | **Ma-tsu** | **2.17 306** | *e*P | | **Pn** | **19 17 58.1 -0.4** |
| | baz=306 | | | | | |
| **SGST** | **Jiashian** | **2.18 214** | *e*P | | **Pn** | **19 17 58.8 0.0** |
| | baz=216 | | | | | |
| SGST | | | *e*S | | **Sn** | **19 18 25.4 -0.3** |
| | baz=216 | | | | | |
| **JISG** | **Ishigakijimahi** | **2.21 98** | P | | **Pn** | **19 17 59.3 +0.2** |
| **SSD** | **Sandimen** | **2.44 209** | *e*P | | **Pn** | **19 18 02.7 +0.6** |
| | baz=207 | | | | | |
| **ECL** | **Taimali** | **2.45 201** | *e*P | | **Pn** | **19 18 02.7 +0.4** |
| | baz=196 | | | | | |
| ECL | | | *e*S | | **Sn** | **19 18 31.7 -0.4** |
| | baz=196 | | | | | |
| **PNG** | **Penghu** | **2.52 239** | *e*P | | **Pn** | **19 18 02.3 -0.8** |
| | baz=230 | | | | | |
| **PHUB** | **P'eng-hu** | **2.54 238** | *e*P | | **Pn** | **19 18 02.5 -0.9** |
| | baz=229 | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.54 311** | *e*P | | **Pn** | **19 18 03.1 -0.3** |
| | baz=311 | | | | | |
| **XPSS** | **Dashiqiu** | **2.54 323** | *e*P | | **Pn** | **19 18 03.2 -0.3** |
| | baz=323 | | | | | |
| **JTJ** | **Tarama** | **2.55 95** | P | | **Pn** | **19 18 04.0 +0.4** |
| JTJ | | | *e*S | | **Sn** | **19 18 34.2 -0.2** |
| **MASBT** | **Mashibuluo** | **2.56 207** | *e*P | | **Pn** | **19 18 04.1 +0.4** |
| | baz=202 | | | | | |
| MASBT | | | *e*S | | **Sn** | **19 18 34.3 -0.3** |
| | baz=202 | | | | | |
| **EAST** | **Anshuo** | **2.69 201** | *e*P | | **Pn** | **19 18 05.9 +0.5** |
| | baz=195 | | | | | |
| **JIRB** | **Irabujima** | **2.97 91** | P | | **Pn** | **19 18 09.8 +0.8** |
| JIRB | | | *e*S | | **Sn** | **19 18 44.8 +0.7** |

**ASRS 26 19:43:58.7±0.4, 53°N±2°×9°9E±°, *h*5km, MLh3.8/7, 1C, Error ellipse: s-maj=4.9km s-min=2.4km az=36.8, confirmed, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOY** | **Mondy** | **2.33 140** | ⇑ | Pg | Pg | 19 44 44.8 | +1.4 |
| MOY | | | | Sg | Sg | 19 45 15.1 | +1.6 |
| **MINR** | **Mina** | **2.95 301** | | Pg | Pg | 19 44 57.3 | +2.1 |
| MINR | | | | Sg | Sg | 19 45 40.1 | +6.8 |
| **KNGR** | **Kungurtug, Tuv** | **2.95 193** | | Pg | Pg | 19 44 59.4 | +4.2 |
| KNGR | | | | Sg | Sg | 19 45 38.6 | +5.1 |
| **KZLR** | **Kyzyl** | **3.08 237** | | Pg | Pg | 19 44 59.7 | +1.9 |
| KZLR | | | | Sg | Sg | 19 45 40.6 | +2.8 |
| **ERNS** | **Erzin** | **3.86 215** | | Sg | Sg | 19 46 03.3 | +0.7 |
| **GZL** | **Zheleznogorsk** | **4.04 316** | | Sg | Sg | 19 46 13.8 | +5.5 |
| **ZAK** | **Zakamensk** | **4.25 135** | | Pg | Pg | 19 45 18.3 | -1.7 |
| ZAK | | | | Sg | Sg | 19 46 15.5 | +0.6 |
| **ABNR** | **Abakan** | **4.27 276** | | Sg | Sg | 19 46 19.9 | +4.1 |
| **CERR** | **Cheremushki** | **4.36 265** | | Pg | Pg | 19 45 26.8 | +4.5 |
| CERR | | | | Sg | Sg | 19 46 23.1 | +4.3 |
| **DJOS** | **Djoyskaya Sosn** | **4.38 264** | | Sg | Sg | 19 46 23.6 | +4.1 |
| **DJO** | **Djoy, Khakassi** | **4.50 264** | | Pg | Pg | 19 45 25.4 | +0.7 |
| DJO | | | | Sg | Sg | 19 46 26.7 | +3.0 |
| **SHRR** | **Shira** | **5.08 285** | | Pg | Pg | 19 45 34.7 | -1.3 |
| **LUZB** | **Luzhba, Kemero** | **5.78 276** | | Sg | Sg | 19 47 04.8 | +0.6 |
| **BRCR** | **Berchikul'** | **6.36 294** | | Pg | Pg | 19 45 58.9 | -1.5 |
| BRCR | | | | Sg | Sg | 19 47 25.3 | +2.6 |
| **TASR** | **Tashtagol** | **6.49 268** | | Sg | Sg | 19 47 31.7 | +4.8 |
| **ARTR** | **Artybash** | **7.09 261** | | Pg | Pg | 19 46 11.8 | -2.6 |
| ARTR | | | | Sg | Sg | 19 47 51.1 | +5.0 |
| **ULGR** | **Ulagan, Altay** | **7.15 251** | | Pg | Pg | 19 46 18.9 | +3.3 |
| ULGR | | | | Sg | Sg | 19 47 53.8 | +5.6 |
| **CUR** | **Chagan-Uzun** | **7.20 246** | | Sg | Sg | 19 47 50.9 | +1.3 |
| **ELT** | **Eltsovka** | **7.40 273** | | Sg | Sg | 19 47 56.4 | +0.5 |
| **AKAR** | **Aktash** | **7.49 249** | | Pn | Pn | 19 45 55.3 | +6.7 |
| AKAR | | | | Sg | Sg | 19 48 02.5 | +3.5 |
| **CHBI** | **Chibit, Altay** | **7.56 250** | | Pn | Pn | 19 45 55.7 | +6.2 |
| CHBI | | | | Sg | Sg | 19 48 08.5 | +7.4 |
| **SALR** | **Pechorkino, Sa** | **7.67 282** | | Sg | Sg | 19 48 08.9 | +4.3 |

*IDC **26** 19:51:02.5±1.1, 7°.22N×126°.78E, h87km±9km, mb4.1/26, mb1 4.2/27, mb1mx4.0/54, mbtmp4.4/27, MS3.3/18, Ms1 3.3/18, ms1mx3.1/72, Error ellipse: s-maj=15.3km s-min=8.9km az=62.0*

*DJA **26** 19:51:02.4±0.5, 7°N±4°×12°7E±°, h74km±4km, M4.8/53, mb5.1/53, mB5.3/25, MLv5.3/6, Mw(mB)4.7/25*

*NEIC **26** 19:51:03.6±2.2, 7°.09N±0°.07×126°.63E±0°.07, h90km±6km, mb4.8/71, Error ellipse: s-maj=12.0km s-min=8.3km az=216.0*

*MAN **26** 19:51:03.7, 7°.19N×126°.60E, h49km, mb5.4, ML4.4, MS4.6*

**ISC 26 19:51:02.6±0.6, 7°.08N±0°.03×126°.67E±0°.05, h84km±5km, n256, σ1°§62/264, mb4.6/85, 8C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.43 252** | ⇓ | *e*P | **Pn** | **19 51 15.1** | **-1.0** |
| **DAV** | **Davao City (W)** | **1.08 270** | | P | **Pn** | **19 51 24.0** | **+1.1** |
| | 932nm,0.3s,baz=80,slow=2.6,SNR=218 | | | | | | |
| DAV | | | | S | **Sn** | **19 51 41.2** | **+3.2** |
| | 792nm,0.3s,baz=216,slow=20,SNR=6.6 | | | | | | |
| DAV | | | | LR | LR | 19 51 45.7 | |
| | comp=Z,1μm,18.0s,baz=77,slow=36 | | | | | | |
| **DAV** | **Davao City (W)** | **1.08 270** | | | **Pn** | **19 51 23.8** | **+1.0** |
| **DAV** | **Davao City (W)** | **1.08 270** | | P | **Pn** | **19 51 24.3** | **+1.5** |
| **BIPH** | **Bislig** | **1.14 345** | ⇓ | *i*P | Pn | 19 51 28.6 | +5.0 |
| BIPH | | | | *i* S | **Sn** | **19 51 42.2** | **+3.0** |
| **DDMP** | **Don Marcelino,** | **1.36 225** | ⇑ | *e*P | **Pn** | **19 51 26.8** | **+0.5** |
| **KCP** | **Kidapawan** | **1.57 268** | ⇑ | *i*P | **Pn** | **19 51 29.5** | **+0.5** |
| KCP | | | | *i* S | **Sn** | **19 51 49.0** | **0.0** |
| **GSPH** | **General Santos** | **1.97 240** | ⇑ | *e*P | **Pn** | **19 51 33.9** | **-0.5** |
| GSPH | | | | *i* S | **Sn** | **19 51 59.1** | **+0.5** |
| **BUTP** | **Butuan** | **2.15 331** | ⇑ | *e*P | **Pn** | **19 51 37.8** | **+1.2** |
| **CTBH** | **Cotabato--PC H** | **2.41 274** | ⇑ | *i*P | **Pn** | **19 51 40.5** | **+0.5** |
| CTBH | | | | *i* S | **Sn** | **19 52 08.5** | **-0.2** |
| **GLSP** | **General Luna,** | **2.74 349** | ⇑ | *i*P | **Pn** | **19 51 43.4** | **-1.1** |
| **SCPH** | **Surigao** | **2.93 337** | | *e*P | **Pn** | **19 51 47.9** | **+0.8** |
| SCPH | | | | *e*S | **Sn** | **19 52 23.3** | **+2.0** |
| **PAGZ** | **Pagadian** | **3.35 283** | | *e*P | **Pn** | **19 51 53.4** | **+0.7** |
| **MSLP** | **Maasin** | **3.52 330** | | *e*P | **Pn** | **19 51 55.0** | **-0.2** |
| **SGSI** | **Sangihe** | **3.56 199** | | P | **Pn** | **19 51 58.0** | **+2.4** |
| **TBP** | **Tagbilaran** | **3.80 313** | | *e*P | **Pn** | **19 51 59.5** | **+0.6** |
| TBP | | | | *i* S | **Sn** | **19 52 42.0** | **-0.5** |
| **LLP** | **Lapu-Lapu** | **4.18 320** | ⇓ | *i*P | **Pn** | **19 52 05.4** | **+1.4** |
| LLP | | | | *i* S | **Sn** | **19 52 53.3** | **+1.5** |
| **ZCP** | **Zamboanga City** | **4.56 268** | ⇑ | *i*P | **Pn** | **19 52 10.5** | **+1.3** |
| ZCP | | | | *i* S | **Sn** | **19 53 01.9** | **+0.9** |
| **CNOP** | **Candoni, Negro** | **4.83 305** | ⇑ | *i*P | **Pn** | **19 52 13.4** | **+0.5** |
| **RCP** | **Roxas** | **5.90 319** | ⇓ | *e*P | **Pn** | **19 52 29.0** | **+1.6** |
| **TNTI** | **Ternate** | **6.30 174** | | Pn | **Pn** | **19 52 34.1** | **+1.1** |
| TNTI | | | | Sn | **Sn** | **19 53 42.5** | **-1.2** |
| **TNTI** | **Ternate** | **6.30 174** | | P | **Pn** | **19 52 35.3** | **+2.3** |
| | 0.5nm2μm102nm,0.7s | | | | | | |
| **TNTI** | **Ternate** | **6.30 174** | | P | **Pn** | **19 52 32.9** | **-0.1** |
| **KMSI** | **Cibinong** | **7.00 203** | | P | **Pn** | **19 52 45.5** | **+3.1** |
| | 1.4nm3μm365nm,0.6s | | | | | | |
| **GTOI** | **Gerontalo** | **7.37 210** | | P | **Pn** | **19 52 48.7** | **+1.2** |
| | 1.9nm6μm534nm,0.6s | | | | | | |
| **I39PW** | **PALAU INFRASON** | **7.83 86** | *i* | | | 20 44 30.0 | |
| | baz=270,slow=291,SNR=0.7 | | | | | | |
| **MRSI** | **Marisa** | **8.08 216** | | P | **Pn** | **19 52 58.8** | **+1.6** |
| | 6μm702nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.34 257** | | Pn | **Pn** | **19 53 00.3** | **-0.4** |
| **TOLI2** | **Tolitoli** | **8.34 225** | | Pn | **Pn** | **19 53 00.0** | **-0.8** |
| TOLI2 | | | | Sn | **Sn** | **19 54 29.4** | **-4.1** |
| **TOLI2** | **Tolitoli** | **8.34 225** | | P | **Pn** | **19 53 00.3** | **-0.5** |
| **LUWI** | **Luwuk** | **8.96 206** | | | **Pn** | **19 53 10.5** | **+1.3** |
| **LUWI** | **Luwuk** | **8.96 206** | | P | **Pn** | **19 53 11.9** | **+2.7** |
| | 4μm514nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **9.09 184** | | P | **Pn** | **19 53 09.1** | **-2.0** |
| **SANI** | **Sanana** | **9.09 184** | | P | **Pn** | **19 53 09.0** | **-2.0** |
| **SIJI** | **Sorong** | **9.13 150** | | P | **Pn** | **19 53 11.4** | **-0.3** |
| | 50nm,0.3s,baz=338,slow=12,SNR=102 | | | | | | |
| SIJI | | | | S | **Sn** | **19 54 48.4** | **-4.4** |
| | 7.3nm,0.3s,baz=198,slow=23,SNR=7.0 | | | | | | |
| SIJI | | | | LR | LR | 19 56 42.4 | |
| | comp=Z,117nm,21.8s,baz=30,slow=37 | | | | | | |
| **APSI** | **Ampana** | **9.38 212** | | P | **Pn** | **19 53 17.7** | **+2.6** |
| | 2μm266nm,1.1s | | | | | | |
| **MPSI** | **Mapaga** | **9.51 226** | | P | **Pn** | **19 53 19.3** | **+2.5** |
| | 22nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **10.44 265** | | Pn | **Pn** | **19 53 31.5** | **+2.0** |
| **AAI** | **Ambon** | **10.80 172** | | P | **Pn** | **19 53 36.6** | **+2.2** |
| | 687nm38nm,0.5s | | | | | | |
| **FAKI** | **Fak Fak** | **11.39 151** | | Pn | **Pn** | **19 53 43.2** | **+0.9** |
| **FAKI** | **Fak Fak** | **11.39 151** | | P | **Pn** | **19 53 43.4** | **+1.1** |
| | 120nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **11.39 151** | | P | **Pn** | **19 53 43.5** | **+1.1** |
| **TTSI** | **Tana Toraja** | **12.16 214** | | P | **Pn** | **19 53 56.2** | **+3.4** |
| | 1μm108nm,0.8s | | | | | | |
| **SPSI** | **Sidrap Palu** | **12.95 212** | | P | **Pn** | **19 54 06.2** | **+2.7** |
| | 50nm,1.1s | | | | | | |
| **BNSI** | **Bone** | **13.15 210** | | P | **Pn** | **19 54 07.7** | **+1.6** |
| | 65nm,1.2s | | | | | | |
| **KAPI** | **Kappang** | **13.86 210** | | P | **Pn** | **19 54 16.4** | **+1.0** |
| | 0.9nm,0.3s,baz=50,slow=14,SNR=5.9 | | | | | | |
| KAPI | | | | LR | LR | 20 00 10.8 | |
| | comp=Z,33nm,18.5s,baz=44,slow=39 | | | | | | |
| **KAPI** | **Kappang** | **13.86 210** | | Pn | **Pn** | **19 54 16.2** | **+0.9** |
| **MTKI** | **Muara Teweh, K** | **14.19 236** | | P | **P** | **19 54 22.9** | **-1.8** |
| | 26nm,0.9s | | | | | | |
| **KBKI** | **Kotabaru** | **14.70 226** | | P | **P** | **19 54 30.6** | **+0.3** |
| | 726nm77nm,1.3s | | | | | | |
| **SBUM** | **Sibu** | **15.11 253** | | | **P** | **19 54 33.7** | **-1.1** |
| **MMRI** | **Maumere** | **16.22 196** | | P | **Pn** | **19 54 46.7** | **+1.1** |
| MMRI | | | | IAmb | IAmb | 19 54 51.8 | |
| | comp=Z,128nm,1.2s | | | | | | |
| **MMRI** | **Maumere** | **16.22 196** | | P | **P** | **19 54 50.1** | **+2.9** |
| | comp=Z,72nm,0.8s | | | | | | |
| **GENI** | **Genyem** | **16.55 125** | | P | **P** | **19 54 54.2** | **+3.4** |
| **TWG** | **Pinlang** | **16.55 342** | | | **P** | **19 54 52.9** | **+2.1** |
| **STKI** | **Sintang** | **16.68 246** | | P | **P** | **19 54 54.7** | **+2.4** |
| | comp=Z,48nm,1.2s | | | | | | |
| **SOEI** | **Soe** | **16.89 188** | | P | **P** | **19 54 55.2** | **+0.4** |
| SOEI | | | | IAmb | IAmb | 19 55 21.7 | |
| | comp=Z,74nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **16.89 188** | | P | **P** | **19 54 56.8** | **+2.1** |
| | comp=Z,1μmcomp=Z,96nm,0.7s | | | | | | |
| **JAY** | **Jayapura** | **16.94 124** | | P | **Pn** | **19 54 54.4** | **-0.2** |
| | comp=Z,28nm,1.0s | | | | | | |
| **KSM** | **Kuching** | **17.23 252** | | | **Pn** | **19 54 57.0** | **-1.1** |
| KSM | | | | IAmb | IAmb | 19 55 01.7 | |
| | comp=Z,63nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **17.23 252** | | P | **P** | **19 55 01.0** | **+2.6** |
| **BATI** | **Baumata** | **17.43 190** | | P | **P** | **19 55 01.7** | **+1.2** |
| | comp=Z,17nm,0.3s,baz=12,slow=1.5,SNR=51 | | | | | | |
| BATI | | | | LR | LR | 20 02 16.3 | |
| | comp=Z,115nm,18.5s,baz=50,slow=38 | | | | | | |
| **BATI** | **Baumata** | **17.43 190** | | P | **P** | **19 55 02.0** | **+1.4** |
| | comp=Z,957nmcomp=Z,105nm,0.7s | | | | | | |
| **PLAI** | **Plampang** | **18.12 209** | | P | **P** | **19 55 08.7** | **+0.6** |
| | comp=Z,1000nmcomp=Z,92nm,0.8s | | | | | | |
| **PLAI** | **Plampang** | **18.12 209** | | P | **P** | **19 55 08.8** | **+0.6** |
| **GUMO** | **Guam** | **19.03 69** | | LR | LR | 20 01 11.1 | |
| | comp=Z,92nm,20.4s,baz=181,slow=32 | | | | | | |
| **ABJI** | **Asem Bagus** | **19.29 220** | | P | **Pn** | **19 55 24.0** | **+1.2** |
| | comp=Z,52nm,1.1s | | | | | | |
| **IGBI** | **Denpasar** | **19.53 216** | | P | **P** | **19 55 24.6** | **+1.1** |
| | comp=Z,2μmcomp=Z,103nm,0.7s | | | | | | |
| **JOW** | **Kunigami** | **19.70 4** | | P | **Pn** | **19 55 26.5** | **-1.0** |
| JOW | | | | IAmb | IAmb | 19 55 56.9 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **19.83 168** | | P | **Pn** | **19 55 28.7** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **19.86 219** | | | **P** | **19 55 25.8** | **-1.4** |
| JAGI | | | | IAmb | IAmb | 19 55 31.1 | |
| | comp=Z,61nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **19.86 219** | | P | **Pn** | **19 55 29.6** | **+0.1** |
| | comp=Z,29nm,1.0s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **19.86 219** | | P | **Pn** | **19 55 29.8** | **+0.3** |
| **GMJI** | **Gumukmas** | **20.16 221** | | P | Pn | 19 55 32.2 | -0.8 |
| | comp=Z,56nm,0.7s | | | | | | |
| **QIZ** | **Qiongzhong** | **20.22 308** | | P | Pn | 19 55 35.9 | +2.3 |
| | comp=Z,57nm,2.2s | | | | | | |
| **MTN** | **Manton Dam** | **20.28 167** | | P | **P** | **19 55 31.8** | **0.0** |
| MTN | | | | IAmb | IAmb | 19 55 48.2 | |
| | comp=Z,22nm,0.6s | | | | | | |
| **KDU** | **Kakadu** | **20.47 164** | | P | **P** | **19 55 34.8** | **+1.1** |
| **PCJI** | **Pacitan** | **21.65 226** | | P | **P** | **19 55 49.8** | **+3.4** |
| | comp=Z,52nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **21.93 228** | | P | **P** | **19 55 49.2** | **-0.2** |
| UGM | | | | IAmb | IAmb | 19 56 00.7 | |
| | comp=Z,67nm,0.9s | | | | | | |
| **UGM** | **Wanagama** | **21.93 228** | | P | **P** | **19 55 51.0** | **+1.6** |
| **UBPT** | **Khong Chiam** | **22.32 293** | | P | **P** | **19 55 53.9** | **+0.3** |
| UBPT | | | | IAmb | IAmb | 19 55 54.9 | |
| | comp=Z,62nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **22.70 175** | | P | **P** | **19 55 57.6** | **0.0** |
| KNRA | | | | IAmb | IAmb | 19 56 04.7 | |
| | comp=Z,42nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **22.70 175** | | P | **P** | **19 55 58.6** | **+1.0** |
| **KPJI** | **Karang Pucung** | **22.76 231** | | P | **P** | **19 55 59.9** | **+1.7** |
| | comp=Z,65nm,0.8s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **23.34 258** | | P | **P** | **19 56 04.0** | **+0.1** |
| MYKOM | | | | IAmb | IAmb | 19 56 06.4 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **LEM** | **Lembang** | **23.49 234** | | P | **P** | **19 56 06.8** | **+1.4** |
| | comp=Z,35nm,0.7s,baz=61,slow=6.8,SNR=13 | | | | | | |
| LEM | | | | LR | LR | 20 08 01.2 | |
| | comp=Z,65nm,18.3s,baz=62,slow=43 | | | | | | |
| **CBJI** | **Citeko** | **23.89 236** | | P | **P** | **19 56 12.5** | **+3.7** |
| | comp=Z,56nm,0.8s | | | | | | |
| **PMBI** | **Palembang** | **24.01 246** | | P | **P** | **19 56 11.0** | **+1.2** |
| **JMBI** | **JAMBI** | **24.55 250** | | P | **P** | **19 56 16.6** | **+1.8** |
| | comp=Z,70nm,0.8s | | | | | | |
| **JSU** | **Suzuyama** | **24.56 8** | | P | **P** | **19 56 18.6** | **+4.0** |
| **BLSI** | **Bandar Lampung** | **24.70 241** | | P | **P** | **19 56 18.9** | **+2.8** |
| | comp=Z,64nm,0.7s | | | | | | |
| **KLI** | **Kotabumi** | **24.79 242** | | P | **P** | **19 56 17.6** | **+0.6** |
| | comp=Z,142nm,0.9s | | | | | | |
| **KLSI** | | **24.82 243** | | P | **P** | **19 56 19.1** | **+1.9** |
| | comp=Z,277nmcomp=Z,17nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.04 182** | | P | **P** | **19 56 19.7** | **+0.5** |
| | comp=Z,26nm,0.5s,baz=30,slow=8.7,SNR=74 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.04 182** | | P | **P** | **19 56 19.6** | **+0.5** |
| FITZ | | | | IAmb | IAmb | 19 56 22.8 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **MDSI** | **Maura Dua** | **25.22 244** | | P | **P** | **19 56 22.1** | **+1.3** |
| | comp=Z,374nmcomp=Z,23nm,0.9s | | | | | | |
| **KASI** | **Kota Agung** | **25.42 241** | | P | **P** | **19 56 28.4** | **+5.7** |
| | comp=Z,20nm,0.7s | | | | | | |
| **LWLI** | **Liwa** | **25.56 243** | | P | **P** | **19 56 27.1** | **+3.0** |
| | comp=Z,57nm,0.7s | | | | | | |
| **IPM** | **Ipoh** | **25.64 266** | | P | **P** | **19 56 25.3** | **+0.6** |
| IPM | | | | IAmb | IAmb | 19 56 35.0 | |
| | comp=Z,45nm,1.6s | | | | | | |
| **NJ2** | **Nanjing** | **25.89 345** | | *e*P | **P** | **19 56 27.8** | **+1.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **KULM** | **Kulim** | **25.93 268** | | P | **P** | **19 56 28.5** | **+1.2** |
| KULM | | | | IAmb | IAmb | 19 56 52.9 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **WHN** | **Wuhan** | **26.05 335** | | P | **P** | **19 56 34.8** | **+6.7** |
| **PMG** | **Port Moresby** | **26.17 128** | | P | **P** | **19 56 29.8** | **+0.3** |
| | comp=Z,32nm,0.8s,baz=331,slow=8.1,SNR=18 | | | | | | |
| PMG | | | | LR | LR | 20 09 42.7 | |
| | comp=Z,44nm,18.1s,baz=270,slow=43 | | | | | | |
| **PMG** | **Port Moresby** | **26.17 128** | | P | **P** | **19 56 29.7** | **+0.2** |
| PMG | | | | IAmb | IAmb | 19 56 31.1 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **MNAI** | **Manna** | **26.25 245** | | P | **P** | **19 56 29.4** | **-0.8** |
| **MNAI** | **Manna** | **26.25 245** | | P | **P** | **19 56 31.9** | **+1.7** |
| | comp=Z,116nm,0.9s | | | | | | |
| **MASI** | **Maura Aman, Be** | **26.41 248** | | P | **P** | **19 56 36.6** | **+4.9** |
| | comp=Z,61nm,0.8s | | | | | | |
| **COEN** | **Coen** | **26.56 142** | | P | **P** | **19 56 33.3** | **+0.4** |
| **COEN** | **Coen** | **26.56 142** | | P | **P** | **19 56 33.8** | **+0.9** |
| **MNSI** | **Mandailing Nat** | **27.72 258** | | P | **P** | 19 56 56.2 | +13 |
| **WB0** | **Warramunga Arr** | **27.74 164** | | P | **P** | **19 56 43.5** | **0.0** |
| WB0 | | | | IAmb | IAmb | 19 57 10.8 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **RABL** | **Rabaul** | **27.80 113** | | P | **P** | **19 56 44.9** | **+0.8** |
| RABL | | | | IAmb | IAmb | 19 56 48.6 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.89 164** | | P | **P** | **19 56 45.4** | **+0.6** |
| **WRA** | **Warramunga Arr** | **27.89 164** | | P | **P** | **19 56 44.5** | **-0.3** |
| | comp=Z,3.6nm,0.5s,baz=344,slow=11,SNR=18 | | | | | | |
| WRA | | | | ScP | **ScP** | **20 03 31.9** | **-0.4** |
| | comp=Z,3.0nm,0.7s,baz=340,slow=3.4,SNR=7.6 | | | | | | |
| WRA | | | | LR | LR | 20 11 37.2 | |
| | comp=Z,73nm,18.2s,baz=27,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.89 164** | | P | **P** | **19 56 44.3** | **-0.6** |
| **WB2** | **Warramunga Arr** | **27.90 164** | | P | **P** | **19 56 44.5** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 19 57 23.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **PSI** | **Prapat** | **27.96 263** | | P | **P** | **19 56 46.5** | **+0.9** |
| | comp=Z,2.8nm,0.3s,baz=100,slow=4.6,SNR=4.4 | | | | | | |
| PSI | | | | LR | LR | 20 11 29.1 | |
| | comp=Z,64nm,18.2s,baz=62,slow=44 | | | | | | |
| **WR0** | **Warramunga Arr** | **27.96 164** | | P | **P** | **19 56 45.2** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 19 57 23.7 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **ENH** | **Enshi** | **28.15 327** | | P | **P** | **19 56 42.5** | **-4.6** |
| ENH | | | | IAm

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HHC | **Hu-ho-hao-te** | **36.23** | **340** | *e*P | | **P** | | **19 58 01.3** | **+3.6** |
| HHC | | | | pmax | | pmax | | | |
| | comp=E,16nm,1.1s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=E,85nm,4.7s | | | | | | | | |
| **MORW** | **Morawa** | **37.37** | **195** | P | | **P** | | **19 58 07.5** | **+0.2** |
| **MORW** | **Morawa** | **37.37** | **195** | P | | **P** | | **19 58 08.1** | **+0.8** |
| **FORT** | **Forrest** | **37.67** | **178** | | | **P** | | **19 58 09.3** | **-0.5** |
| **FORT** | **Forrest** | **37.67** | **178** | P | | **P** | | **19 58 10.9** | **+1.1** |
| **MULG** | **Mulgathing** | **37.82** | **170** | P | | **P** | | **19 58 12.2** | **+1.1** |
| **SHL** | **Shillong** | **37.93** | **303** | P | | **P** | | **19 58 11.3** | **-1.0** |
| SHL | | | | IAmb | | IAmb | | 19 58 42.1 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **BLDU** | **Ballidu** | **38.68** | **194** | P | | **P** | | **19 58 19.1** | **+0.8** |
| **LCRK** | **Leigh Creek** | **38.92** | **164** | P | | **P** | | **19 58 22.5** | **+2.2** |
| **KLBR** | **Kellerberrin** | **39.38** | **192** | P | | **P** | | **19 58 24.9** | **+0.7** |
| | comp=Z,88nm,0.8s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **39.44** | **18** | LR | | LR | | 20 13 01.8 | |
| | comp=Z,50nm,20.7s,baz=192,slow=34 | | | | | | | | |
| **MUN** | **Mundaring** | **40.10** | **194** | P | | **P** | | **19 58 31.3** | **+1.2** |
| **GTA** | **Gaotai** | **40.24** | **327** | *e*P | | **P** | | **19 58 30.8** | **-0.6** |
| GTA | | | | PcP | | **PcP** | | **20 00 34.5** | **+0.6** |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,27nm,5.0s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,71nm,15.6s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,270nm,19.3s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,82nm,15.6s | | | | | | | | |
| **BBOO** | **Buckleboo** | **40.66** | **168** | P | | **P** | | **19 58 35.3** | **+0.6** |
| **BBOO** | **Buckleboo** | **40.66** | **168** | P | | **P** | | **19 58 35.8** | **+1.0** |
| **H11N1** | **WAKE ISLAND Hy** | **40.98** | **68** | T | | T | | 20 42 53.3 | |
| | baz=265,slow=74,SNR=17 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.99** | **68** | T | | T | | 20 42 59.8 | |
| | baz=265,slow=74,SNR=6.5 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.99** | **68** | T | | T | | 20 43 04.8 | |
| | baz=265,slow=74,SNR=15 | | | | | | | | |
| **GOMU** | **GeErMu** | **41.07** | **319** | P | | **P** | | **19 58 37.8** | **-0.8** |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.4s | | | | | | | | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,66nm,6.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **41.28** | **161** | P | | **P** | | **19 58 40.5** | **+0.7** |
| | comp=Z,6.0nm,0.7s,baz=342,slow=9.7,SNR=14 | | | | | | | | |
| STKA | | | | LR | | LR | | 20 17 47.9 | |
| | comp=Z,48nm,21.3s,baz=24,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | **41.28** | **161** | P | | **P** | | **19 58 40.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **41.28** | **161** | P | | **P** | | **19 58 41.9** | **+2.1** |
| **HTT** | **Hallett** | **41.93** | **165** | P | | **P** | | **19 58 47.1** | **+1.9** |
| **TAPN** | **Taplejung** | **42.06** | **303** | *e*P | | **P** | | **19 58 47.0** | **+0.3** |
| | comp=Z,7.3nm,0.4s | | | | | | | | |
| **ODAN** | **Odare** | **42.16** | **303** | *e*P | | **P** | | **19 58 48.0** | **+0.6** |
| **RKGY** | **Rocky Gully** | **42.46** | **192** | P | | **P** | | **19 58 51.8** | **+2.4** |
| **RAMN** | **Ramite** | **42.85** | **302** | *e*P | | **P** | | **19 58 53.7** | **+0.6** |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| **CHLP** | **Challavanipeta** | **42.97** | **290** | *e*P | | **P** | | **19 58 54.3** | **+0.5** |
| **TWOA** | **Tennyson Woods** | **43.37** | **166** | P | | **P** | | **19 58 59.2** | **+2.5** |
| **JIRN** | **Jiri** | **43.44** | **303** | *e*P | | **P** | | **19 58 57.5** | **-0.4** |
| | comp=Z,8.1nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **43.78** | **303** | *e*P | | **P** | | **19 58 59.9** | **-0.8** |
| | comp=Z,12nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **44.05** | **303** | *e*P | | **P** | | **19 59 02.3** | **-0.6** |
| | comp=Z,4.7nm,0.5s | | | | | | | | |
| **PKIN** | **Phulchoki** | **44.07** | **303** | *e*P | | **P** | | **19 59 02.2** | **-0.7** |
| | comp=Z,5.8nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **44.13** | **340** | P | | **P** | | **19 59 01.5** | **-1.4** |
| | comp=Z,0.3nm,0.6s,baz=158,slow=8.2,SNR=3.0 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **20 00 46.0** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=162,slow=5.1,SNR=4.3 | | | | | | | | |
| SONM | | | | LR | | LR | | 20 17 28.6 | |
| | comp=Z,63nm,19.5s,baz=34,slow=36 | | | | | | | | |
| **KKN** | **Kakani** | **44.24** | **303** | *e*P | | **P** | | **19 59 03.3** | **-0.9** |
| | comp=Z,5.3nm,0.5s | | | | | | | | |
| **ARMA** | **Armidale** | **44.31** | **149** | P | | **P** | | **19 59 05.7** | **+1.2** |
| ARMA | | | | IAmb | | IAmb | | 19 59 09.3 | |
| | comp=Z,39nm,1.5s | | | | | | | | |
| **ARMA** | **Armidale** | **44.31** | **149** | P | | **P** | | **19 59 06.4** | **+1.9** |
| | comp=Z,22nm,1.6s | | | | | | | | |
| **GKN** | **Gorkha** | **44.84** | **303** | *e*P | | **P** | | **19 59 07.7** | **-1.2** |
| | comp=Z,5.6nm,0.5s | | | | | | | | |
| **PALK** | **Pallekele** | **45.59** | **273** | LR | | LR | | 20 19 29.9 | |
| | comp=Z,31nm,19.7s,baz=190,slow=37 | | | | | | | | |
| **KOLN** | **Koldanda** | **45.64** | **302** | *e*P | | **P** | | **19 59 14.7** | **-0.6** |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **DANN** | **Dangsing** | **45.69** | **303** | *e*P | | **P** | | **19 59 15.0** | **-0.8** |
| | comp=Z,22nm,0.6s | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **45.88** | **163** | P | | **P** | | **19 59 19.1** | **+2.4** |
| **PYUN** | **Piuthan** | **46.25** | **302** | *e*P | | **P** | | **19 59 19.3** | **-0.8** |
| | comp=Z,7.5nm,0.4s | | | | | | | | |
| **ADKI** | **Addanki** | **46.50** | **285** | *e*P | | **P** | | **19 59 22.3** | **+0.4** |
| **SKHT** | **Srikalahasti** | **46.59** | **282** | *e*P | | **P** | | **19 59 22.7** | **0.0** |
| **CAN** | **Canberra** | **47.13** | **155** | P | | **P** | | **19 59 28.2** | **+1.6** |
| **NJS** | **Nagarjunasagar** | **47.20** | **286** | *e*P | | **P** | | **19 59 27.0** | **-0.4** |
| **RCLA** | **Racherla** | **47.44** | **284** | *e*P | | **P** | | **19 59 29.0** | **-0.3** |
| **RPR** | **Rampur** | **47.48** | **289** | *e*P | | **P** | | **19 59 29.3** | **-0.2** |
| **CUPL** | **Choutuppal** | **47.65** | **287** | *e*P | | **P** | | **19 59 30.6** | **-0.3** |
| **HYBB** | **Hyderabad (bro** | **48.01** | **287** | *e*P | | **P** | | **19 59 33.4** | **-0.3** |
| **SRSP** | **Sriramsagar** | **48.38** | **289** | *e*P | | **P** | | **19 59 36.1** | **-0.5** |
| **LIFNC** | **LIFOU** | **48.53** | **126** | P | | **P** | | **19 59 38.5** | **+1.0** |
| **DZM** | **Mont Dzumac** | **48.56** | **128** | P | | **P** | | **19 59 38.9** | **+0.9** |
| **KLRI** | **Killari** | **49.93** | **288** | *e*P | | **P** | | **19 59 47.7** | **-0.7** |
| **WMQ** | **Urumqi** | **49.99** | **324** | *e*P | | **P** | | **19 59 51.0** | **+2.5** |
| **PETK** | **Petropavlovsk-** | **52.38** | **23** | P | | **P** | | **20 00 07.4** | **+1.3** |
| **MK31** | **Makanchi Array** | **54.81** | **324** | P | | **P** | | **20 00 23.7** | **-0.4** |
| MK31 | | | | IAmb | | IAmb | | 20 00 58.2 | |
| | comp=Z,3.4nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.81** | **324** | P | | **P** | | **20 00 23.5** | **-0.5** |
| | comp=Z,2.5nm,0.4s,baz=114,slow=7.3,SNR=94 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **20 01 25.1** | **-0.4** |
| | comp=Z,3.5nm,0.7s,baz=116,slow=5.5,SNR=6.4 | | | | | | | | |
| MKAR | | | | ScP | | **ScP** | | **20 05 13.7** | **-2.9** |
| | comp=Z,0.5nm,0.8s,baz=95,slow=5.6,SNR=4.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.81** | **324** | P | | **P** | | **20 00 23.7** | **-0.3** |
| **MAKZ** | **Makanchi** | **55.00** | **324** | P | | **P** | | **20 00 23.6** | **-1.8** |
| MAKZ | | | | IAmb | | IAmb | | 20 00 59.2 | |
| | comp=Z,4.3nm,0.7s | | | | | | | | |
| MAKZ | | | | PcP | | **PcP** | | **20 01 25.5** | **-0.7** |
| **MA2** | **Magadan** | **55.50** | **15** | LR | | LR | | 20 27 15.5 | |
| | comp=Z,23nm,18.0s,baz=159,slow=39 | | | | | | | | |
| **KSH** | **Kashi** | **55.67** | **314** | P | | **P** | | **20 00 31.8** | **+1.3** |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **NIL** | **Nilore** | **55.88** | **306** | P | | **P** | | **20 00 31.4** | **-0.6** |
| **ULHL** | **Ulahol** | **56.53** | **317** | P | | **P** | | **20 00 36.7** | **+0.1** |
| | SNR=5.6 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **57.24** | **317** | P | | **P** | | **20 00 41.6** | **-0.1** |
| | SNR=5.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.60** | **332** | P | | **P** | | **20 00 42.3** | **-1.5** |
| | comp=Z,1.0nm,0.3s,baz=122,slow=7.1,SNR=7.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.60** | **332** | P | | **P** | | **20 00 42.6** | **-1.1** |
| **UCH** | **Uchtor** | **57.71** | **316** | P | | **P** | | **20 00 45.9** | **+0.6** |
| | SNR=10 | | | | | | | | |
| **AAK** | **Ala-Archa** | **57.88** | **317** | P | | **P** | | **20 00 45.8** | **-0.3** |
| **USP** | **Ospenovka** | **58.11** | **317** | P | | **P** | | **20 00 47.4** | **-0.2** |
| | SNR=5.5 | | | | | | | | |
| **AML** | **Almayashu** | **58.24** | **316** | P | | **P** | | **20 00 49.0** | **+0.1** |
| | SNR=7.8 | | | | | | | | |
| **KURK** | **Kurchatov** | **58.92** | **326** | P | | **P** | | **20 00 52.2** | **-0.7** |
| KURK | | | | IAmb | | IAmb | | 20 01 24.2 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.92** | **326** | P | | **P** | | **20 00 51.9** | **-1.1** |
| | comp=Z,2.4nm,0.6s,baz=125,slow=7.3 | | | | | | | | |
| **KBL** | **Kabul** | **59.48** | **306** | P | | **P** | | **20 00 56.5** | **-0.9** |
| KBL | | | | IAmb | | IAmb | | 20 00 57.4 | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **GAR** | **Garm** | **59.65** | **311** | P | | **P** | | **20 00 57.8** | **-0.6** |
| **CHGR** | **Chuyangaron** | **60.42** | **311** | P | | **P** | | **20 01 02.5** | **-1.2** |
| CHGR | | | | IAmb | | IAmb | | 20 01 04.7 | |
| | comp=Z,7.1nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **60.78** | **316** | P | | **P** | | **20 01 05.1** | **-0.8** |
| **BVAR** | **Borovoye Array** | **64.51** | **326** | P | | **P** | | **20 01 29.4** | **-1.1** |
| | comp=Z,1.1nm,0.4s,baz=328,slow=24,SNR=7.8 | | | | | | | | |
| **TIXI** | **Tiksi** | **64.52** | **1** | P | | **P** | | **20 01 28.6** | **-1.6** |
| | comp=Z,0.6nm,0.5s,baz=293,slow=13,SNR=5.2 | | | | | | | | |
| **BRVK** | **Borovoye** | **64.58** | **326** | P | | **P** | | **20 01 29.1** | **-1.8** |
| **HRA** | **Herat** | **64.97** | **305** | P | | **P** | | **20 01 32.4** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **65.12** | **139** | P | | **P** | | **20 01 34.8** | **+0.1** |
| BKZ | | | | IAmb | | IAmb | | 20 02 02.0 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **67.08** | **292** | LR | | LR | | 20 34 05.4 | |
| | comp=Z,16nm,20.3s,baz=62,slow=38 | | | | | | | | |
| **GEYT** | **Alibeck** | **68.78** | **308** | P | | **P** | | **20 01 56.4** | **-1.6** |
| **ABKAR** | **Akbulak array** | **69.55** | **320** | P | | **P** | | **20 02 01.5** | **-1.0** |
| **ABKAR** | **Akbulak array** | **69.55** | **320** | P | | **P** | | **20 02 01.8** | **-0.7** |
| **AKTO** | **Aktyubinsk** | **71.02** | **321** | P | | **P** | | **20 02 10.9** | **-0.6** |
| | comp=Z,3.5nm,0.8s,baz=98,slow=8.2,SNR=12 | | | | | | | | |
| **ARU** | **Arti** | **72.10** | **327** | P | | **P** | | **20 02 16.4** | **-1.4** |
| | comp=Z,2.5nm,0.5s,baz=94,slow=6.3,SNR=14 | | | | | | | | |
| **ARU** | **Arti** | **72.10** | **327** | P | | **P** | | **20 02 16.6** | **-1.2** |
| ARU | | | | IAmb | | IAmb | | 20 02 17.8 | |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| **BELG** | **Belogornoye** | **77.74** | **322** | P | | **P** | | **20 02 50.0** | **-0.4** |
| | comp=Z,15nm,0.7s,baz=144,slow=8.0,SNR=3.9 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **79.14** | **293** | P | | **P** | | **20 02 57.8** | **-1.0** |
| RAYN | | | | IAmb | | IAmb | | 20 02 58.7 | |
| | comp=Z,21nm,1.5s | | | | | | | | |
| **KBZ** | **Khabaz** | **80.65** | **313** | P | | **P** | | **20 03 06.0** | **-0.5** |
| | comp=Z,1.9nm,0.9s,baz=88,slow=4.4,SNR=4.3 | | | | | | | | |
| **KIV** | **Kislovodsk** | **80.80** | **313** | P | | **P** | | **20 03 06.9** | **-0.5** |
| **GURO** | **Guroymak-BITLI** | **81.45** | **308** | P | | **P** | | **20 03 11.7** | **+0.7** |
| GURO | | | | IAmb | | IAmb | | 20 03 12.5 | |
| | comp=Z,8.5nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.13** | **26** | P | | **P** | | **20 03 12.9** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=244,slow=5.5,SNR=10 | | | | | | | | |
| ILAR | | | | pP | | **pP** | | **20 03 31.9** | **-3.3** |
| | comp=Z,1.9nm,0.9s,baz=239,slow=5.5,SNR=7.0 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **82.48** | **330** | *e*P | | **P** | | **20 03 12.9** | **-2.8** |
| KLMR | | | | AMP | | | | 20 03 26.0 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **BNN** | **Bunyan** | **86.25** | **309** | P | | **P** | | **20 03 34.7** | **-0.8** |
| **VNDA** | **Vanda** | **86.73** | **173** | P | | **P** | | **20 03 37.5** | **+0.7** |
| | comp=Z,3.2nm,1.0s,baz=314,slow=7.1,SNR=6.3 | | | | | | | | |
| **VNDA** | **Vanda** | **86.73** | **173** | IAmb | | IAmb | | 20 04 19.4 | |
| | comp=Z,25nm,1.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.30** | **340** | P | | **P** | | **20 03 38.1** | **-1.7** |
| | comp=Z,5.3nm,1.0s,baz=70,slow=4.0,SNR=8.2 | | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **87.31** | **301** | P | | **P** | | **20 03 39.1** | **-1.5** |
| **BR131** | **Keskin Array S** | **87.85** | **310** | P | | **P** | | **20 03 41.5** | **-1.8** |
| BR131 | | | | IAmb | | IAmb | | 20 04 11.4 | |
| | comp=Z,5.3nm,1.2s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **87.85** | **310** | P | | **P** | | **20 03 41.7** | **-1.5** |
| | comp=Z,2.1nm,0.9s,baz=128,slow=3.4,SNR=7.7 | | | | | | | | |
| **CSS** | **Mathiatis** | **88.72** | **305** | P | | **P** | | **20 03 46.3** | **-0.9** |
| CSS | | | | IAmb | | IAmb | | 20 03 47.9 | |
| | comp=Z,8.1nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **88.87** | **332** | P | | **P** | | **20 03 46.9** | **-0.5** |
| | comp=Z,1.8nm,0.5s,baz=76,slow=5.2,SNR=20 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **89.27** | **321** | P | | **P** | | **20 03 47.8** | **-1.6** |
| | comp=Z,1.1nm,0.4s,baz=66,slow=4.8,SNR=7.1 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.56** | **269** | P | | **P** | | **20 03 51.4** | **-0.5** |
| | comp=Z,0.9nm,0.7s,baz=67,slow=7.4,SNR=3.8 | | | | | | | | |
| **MBAR** | **Mbarara** | **95.96** | **270** | LR | | LR | | 20 49 39.5 | |
| | comp=Z,28nm,19.2s,baz=94,slow=37 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.49** | **24** | P | | **P** | | **20 04 21.9** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=299,slow=4.7,SNR=3.0 | | | | | | | | |
| YKA | | | | pP | | **pP** | | **20 04 40.2** | **-3.8** |
| | comp=Z,0.6nm,0.8s,baz=298,slow=4.4,SNR=5.3 | | | | | | | | |
| **VRAC** | **Vranov** | **97.49** | **322** | LR | | LR | | 20 50 41.2 | |
| | comp=Z,37nm,18.7s,baz=348,slow=37 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **119.57** | **51** | PKKPbc | | PKKPbc | | 20 19 55.8 | +0.4 |
| | comp=Z,0.4nm,0.7s,baz=108,slow=4.1,SNR=5.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.77** | **290** | PKP | | **PKPdf** | | **20 09 47.3** | **-0.7** |
| | comp=Z,0.8nm,0.4s,baz=61,slow=2.0,SNR=13 | | | | | | | | |
| **DBIC** | **Dimbokro** | **129.75** | **285** | PKP | | **PKPdf** | | **20 10 03.6** | **+0.3** |
| | comp=Z,1.9nm,0.6s,baz=319,slow=0.2,SNR=3.7 | | | | | | | | |

*BJI* ***26*** *19:58:13.0±0.0, 37.°63N×142.°29E, h12km, mb4.4/47, mB4.7/25, Ms4.1/12, Ms7 3.8/11*

*MOS* ***26*** *19:58:16.8±1.1, 37.°70N×142.°14E, h28km, mb4.7/22, Error ellipse: s-maj=8.5km s-min=5.1km az=90.8*

*NEIC* ***26*** *19:58:17.5±1.7, 37.°60N±0.°05×142.°02E±0.°07, h19km±4km, mb4.8/116, Error ellipse: s-maj=7.8km s-min=7.2km az=92.0*

*NIED* ***26*** *19:58:17.4, 37.°63N×142.°04E, h31km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr=2.43; Mθθ1.21; Mφφ 1.22; Mrθ-0.10; Mθφ-1.24; Mφr-0.51; Fault plane solution: M0 2.50000×10^15 NP1: φs=325.00000°, δ=49.00000°, λ=-77.00000°. NP2: φs=125.00000°, δ=42.00000°, λ=-105.00000°.*

*JMA* ***26*** *19:58:17.4±0.1, 37.°63N×142.°04E, h31km±2km, M4.4*

*JMA Felt I J1.*

*IDC* ***26*** *19:58:19.5±5.1, 37.°63N×142.°03E, h30km±37km, mb4.1/32, mb1 4.2/35, mb1mx4.1/61, mbtmp4.3/35, ML3.7/3, MS3.3/5, Ms1 3.3/5, ms1mx2.8/88, Error ellipse: s-maj=14.5km s-min=10.8km az=103.0*

**ISC 26 19:58:17.3±0.3, 37.°61N±0.°03×142.°14E±0.°04, h24km, n297, σ1=52/311, mb4.7/112, MS3.6/6, 19C-9D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.88** | **323** | ⇓P | | **Pb** | | **19 58 32.4** | **-1.5** |
| JIKH | | | | *e*S | | **Sb** | | **19 58 42.7** | **-2.6** |
| **JMST** | **Minamisoumatoc** | **1.00** | **277** | ⇑P | | **Pn** | | **19 58 33.9** | **-1.9** |
| JMST | | | | *e*S | | **Sb** | | **19 58 45.7** | **-3.0** |
| **JFK** | **Kawauchi** | **1.03** | **257** | ⇑P | | **Pn** | | **19 58 34.7** | **-1.6** |
| **JIO** | **Ouri** | **1.05** | **324** | ⇓P | | **Pn** | | **19 58 35.1** | **-1.4** |
| JIO | | | | S | | **Sb** | | **19 58 47.8** | **-2.4** |
| **JMM** | **Marumori** | **1.10** | **284** | ⇑P | | **Pn** | | **19 58 35.6** | **-1.6** |
| JMM | | | | *e*S | | **Sb** | | **19 58 48.4** | **-3.1** |
| **JMM** | **Marumori** | **1.10** | **284** | | | **Pn** | | **19 58 35.5** | **-1.6** |
| JMM | | | | | Sn | **Sb** | | **19 58 48.7** | **-2.8** |
| **ONAJ** | **Iwakimizuishiy** | **1.18** | **245** | ⇑P | | **Pn** | | **19 58 36.8** | **-1.6** |
| ONAJ | | | | S | | **Sn** | | **19 58 50.8** | **-2.9** |
| **JOU** | **Okura** | **1.39** | **304** | P | | **Pn** | | **19 58 40.7** | **-0.5** |
| JOU | | | | *e*S | | **Sn** | | **19 58 57.3** | **-1.5** |
| **JFT** | **Otama** | **1.44** | **267** | ⇑P | | **Pn** | | **19 58 41.4** | **-0.4** |
| JFT | | | | *e*S | | **Sn** | | **19 58 58.3** | **-1.6** |
| **JMK** | **Ichinoseki** | **1.53** | **332** | P | | **Pn** | | **19 58 42.6** | **-0.5** |
| JMK | | | | *e*S | | **Sn** | | **19 59 00.4** | **-1.7** |
| **JYK** | **Kaneyama** | **1.92** | **314** | P | | **Pn** | | **19 58 48.1** | **-0.4** |
| **JFY** | **Yanaizu** | **1.95** | **265** | P | | **Pn** | | **19 58 48.9** | **+0.1** |
| JFY | | | | *e*S | | **Sn** | | **19 59 12.5** | **0.0** |
| **JOM** | **Ohasama** | **1.98** | **341** | ⇑P | | **Pn** | | **19 58 49.2** | **-0.1** |
| **JYT** | **Yasato** | **2.08** | **229** | | | **Pn** | | **19 58 49.0** | **-1.7** |
| **JSD** | **Sado** | **3.10** | **279** | Pn | | **Pn** | | **19 59 04.6** | **-0.1** |
| **JTM** | **Tenmabayashi** | **3.28** | **346** | Pn | | **Pn** | | **19 59 08.4** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **3.32** | **253** | Pn | | **Pn** | | **19 59 08.7** | **+0.9** |
| | 2.1nm,0.3s,baz=81,slow=17,SNR=80 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.32** | **253** | Pn | | **Pn** | | **19 59 07.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **3.32** | **253** | *c* P | | **Pn** | | **19 59 08.5** | **+0.8** |
| **MAJO** | **Matsushiro** | **3.32** | **253** | Pn | | **Pn** | | **19 59 07.7** | **0.0** |
| **MAT** | **Matsushiro** | **3.32** | **253** | P | | **Pn** | | **19 59 08.6** | **+0.9** |
| MAT | | | | *e*S | | **Sn** | | **19 59 46.5** | **+0.1** |
| **MJB9** | **Matsu-Tunnel** | **3.32** | **253** | | | **Pn** | | **19 59 07.3** | **-0.4** |
| **JGF** | **Kuroka** | **4.34** | **244** | | | **Pn** | | **19 59 21.6** | **-0.1** |
| **ERM** | **Erimo** | **4.47** | **10** | *c*eP | | **Pn** | | **19 59 23.3** | **-0.2** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.3s | | | | | | | | |
| **ERM** | **Erimo** | **4.47** | **10** | Pn | | **Pn** | | **19 59 23.7** | **+0.2** |
| **INU** | **Inuyama** | **4.70** | **243** | Pn | | **Pn** | | **19 59 26.5** | **-0.2** |
| **JHJ2** | **Mitsune** | **4.87** | **204** | Pn | | **Pn** | | **19 59 28.9** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **4.87** | **204** | Pn | | **Pn** | | **19 59 29.6** | **+0.6** |
| | comp=Z,96nm,0.3s,baz=226,slow=21,SNR=16 | | | | | | | | |
| JHJ | | | | | Sn | **Sn** | | **20 00 22.8** | **-1.9** |
| | comp=Z,85nm,0.3s,baz=88,slow=22,SNR=8.4 | | | | | | | | |
| **JEW** | **Eniwo** | **5.25** | **354** | Pn | | **Pn** | | **19 59 35.8** | **+1.5** |
| **NMR** | **Nemuro--Hokkai** | **6.37** | **24** | ⇓*i* P | | **Pn** | | **19 59 48.0** | **-1.6** |
| NMR | | | | *i* S | | **Sn** | | **20 00 55.4** | **-6.2** |
| **ASAJ** | **Asahikawa** | **6.51** | **3** | Pn | | **Pn** | | **19 59 52.6** | **+1.0** |
| | comp=Z,1.2nm,0.3s,baz=220,slow=9.4,SNR=2.9 | | | | | | | | |
| ASAJ | | | | LR | | LR | | 20 02 56.2 | |
| | comp=Z,174nm,18.1s,baz=212,slow=43 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **6.51** | **3** | Pn | | **Pn** | | **19 59 52.2** | **+0.6** |
| **GLVR** | **Golovnino** | **6.64** | **22** | *e*P | | **Pn** | | **19 59 51.2** | **-2.1** |
| GLVR | | | | *e*S | | **Sn** | | **20 01 02.8** | **-5.4** |
| GLVR | | | | pmax | | pmax | | | |
| | comp=Z,64nm,0.1s | | | | | | | | |
| **RUSJ** | **Misakicho** | **6.91** | **19** | *e*P | | **Pn** | | **19 59 55.9** | **-1.1** |
| RUSJ | | | | *e*S | | **Sn** | | **20 01 09.4** | **-5.3** |
| **YUK** | **Yuzh-Kuril'sk** | **7.01** | **23** | *e*P | | **Pn** | | **19 59 56.9** | **-1.5** |
| YUK | | | | *e*S | | **Sn** | | **20 01 10.9** | **-6.5** |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,70nm,0.3s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=N,25nm,0.2s | | | | | | | | |
| **JHS** | **Saijyo** | **7.73** | **253** | Pn | | **Pn** | | **20 00 07.2** | **-1.2** |
| **JMN** | **Monobe** | **7.75** | **243** | Pn | | **Pn** | | **20 00 08.0** | **-0.7** |
| **KUR** | **Kuril'sk** | **8.75** | **28** | *e*P | | **Pn** | | **20 00 21.6** | **-0.6** |
| KUR | | | | *e*S | | **Sn** | | **20 01 54.3** | **-5.7** |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,44nm,0.5s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=E,11nm,0.6s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=N,19nm,0.5s | | | | | | | | |
| KUR | | | | smax | | smax | | | |
| | comp=N,76nm,0.4s | | | | | | | | |
| KUR | | | | smax | | smax | | | |
| | comp=E,33nm,0.3s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.35** | **3** | *e*P | | **Pn** | | **20 00 31.4** | **+0.9** |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| YSS | | | | MLR | | MLR | | | |
| | comp=Z,200nm,13.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.35** | **3** | Pn | | **Pn** | | **20 00 29.9** | **-0.6** |
| **USA0B** | **Ussuriysk Arra** | **10.12** | **314** | *i* P | | **Pn** | | **20 00 38.6** | **-2.4** |
| **USRK** | **Ussuriysk Ar.** | **10.12** | **314** | Pn | | **Pn** | | **20 00 43.9** | **+2.9** |
| | baz=120,slow=14,SNR=4.6 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.12** | **314** | P | | **Pn** | | **20 00 38.3** | **-2.7** |
| **USRK** | **Ussuriysk Ar.** | **10.12** | **314** | Pn | | **Pn** | | **20 00 38.3** | **-2.7** |
| **JNU** | **Nakatsue** | **10.22** | **247** | Pn | | **Pn** | | **20 00 40.6** | **-2.0** |
| **JCJ** | **Chichijima** | **10.48** | **180** | Pn | | **Pn** | | **20 00 43.5** | **-2.5** |
| **KSAR** | **Wonju Array Be** | **11.32** | **274** | P | | **Pn** | | **20 00 56.1** | **-1.4** |
| **KSAR** | **Wonju Array Be** | **11.32** | **274** | Pn | | **Pn** | | **20 00 56.1** | **-1.4** |
| **KS19** | **Wonju Array Si** | **11.33** | **274** | Pn | | **Pn** | | **20 00 54.2** | **-3.4** |
| **JSU** | **Suzuyama** | **11.39** | **241** | Pn | | **Pn** | | **20 00 54.7** | **-3.8** |
| **MDJ** | **Mudanjiang** | **11.77** | **310** | Pn | | **Pn** | | **20 01 02.2** | **-1.3** |
| **GRNR** | **Gornyy** | **13.78** | **345** | *e*P | | Pn | | 20 01 18.6 | -12 |
| GRNR | | | | MLR | | MLR | | | |
| | comp=E,110nm,14.0s | | | | | | | | |
| GRNR | | | | MLR | | MLR | | | |
| | comp=N,90nm,13.0s | | | | | | | | |
| GRNR | | | | MLR | | MLR | | | |
| | comp=Z,140nm,17.0s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **18.90** | **30** | P | | **P** | | **20 02 31.9** | **-4.1** |
| PEA0B | | | | pmax | | pmax | | | |
| | comp=Z,78nm,1.5s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **18.90** | **30** | P | | **P** | | **20 02 31.9** | **-4.1** |
| PEA0B | | | | IAmb | | IAmb | | 20 03 07.3 | |
| | comp=Z,78nm,1.4s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **18.90** | **30** | LR | | LR | | 20 10 58.6 | |
| | comp=Z,59nm,18.8s,baz=167,slow=40 | | | | | | | | |
| **ZEA** | **Zeya** | **19.13** | **332** | *e*P | | **P** | | **20 02 38.6** | **+0.1** |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,0.5s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **19.88** | **261** | *e*P | | **P** | | **20 02 48.0** | **+1.2** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| **TIA** | **Tai'an** | **20.04** | **274** | P | | Pn | | 20 02 51.0 | +0.6 |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.67** |

**PZH PanZhiHua 35.74 264 P P 20 05 15.3 +0.9**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,60nm,3.8s
**NIKH Nikolski High 36.97 49 P P 20 05 24.2 -0.1**
**GOMU GeErMu 37.56 283 P P 20 05 30.8 +0.7**
GOMU pP pP 20 05 35.5 -1.7
GOMU pmax pmax
comp=Z,4.0nm,0.7s
**DGZ Jazzator, Alta 40.53 305***d* iP P **P 20 05 56.1 +1.6**
DGZ pmax pmax
comp=Z,18nm,0.8s
**WMQ Urumqi 41.10 296** *e*P **P 20 06 00.3 +1.1**
WMQ sP sP 20 06 08.8 -0.4
WMQ pmax pmax
comp=Z,11nm,0.9s
**FAKI Fak Fak 41.35 195 P P 20 05 59.8 -1.6**
FAKI IAmb IAmb 20 06 29.7
comp=Z,40nm,1.2s
**ZAA0 Zalesovo Array 41.96 312 P P 20 06 04.7 -1.3**
ZAA0 PcP **PcP 20 07 59.0 -2.0**
**ZALV Zalesovo Beam 41.96 312 P P 20 06 06.5 +0.5**
comp=Z,4.4nm,0.7s,baz=89,slow=7.2,SNR=20
ZALV PcP **PcP 20 08 01.9 +0.9**
comp=Z,1.8nm,0.7s,baz=90,slow=2.1,SNR=4.5
**ZALV Zalesovo Beam 41.96 312** *i* P **P 20 06 06.8 +0.8**
ZALV pmax pmax
comp=Z,4.0nm,0.7s
**ZALV Zalesovo Beam 41.96 312 P P 20 06 06.0 0.0**
ZALV **PcP 20 07 58.7 -2.3**
**SDPT Sand Point 41.99 46 P P 20 06 04.3 -1.9**
**CHTO Chiang Mai 41.99 256 P P 20 06 06.0 -0.7**
CHTO pmax pmax
comp=Z,15nm,1.8s
**CHTO Chiang Mai 41.99 256 P P 20 06 06.0 -0.7**
**CMAR Chiang Mai Arr 42.20 255 P P 20 06 10.3 +1.9**
comp=Z,0.3nm,0.4s,baz=47,slow=7.9,SNR=5.0
**NRIK Noril'sk 42.99 335***ce*P **P 20 06 14.4 +0.2**
NRIK pmax pmax
comp=Z,8.0nm,2.2s
**NRIK Noril'sk 42.99 335 P P 20 06 13.7 -0.5**
**SHL Shillong 43.99 269 P P 20 06 22.7 -0.3**
SHL pmax pmax
comp=Z,4.0nm,0.8s
**SHL Shillong 43.99 269 P P 20 06 22.7 -0.3**
**MK31 Makanchi Array 44.31 302***d* iP **P 20 06 25.6 +0.4**
**MK31 Makanchi Array 44.31 302 P P 20 06 24.9 -0.2**
**MKAR Makanchi Array 44.31 302 P P 20 06 25.8 +0.6**
comp=Z,2.5nm,0.7s,baz=86,slow=9.7,SNR=24
**MKAR Makanchi Array 44.31 302 P P 20 06 25.4 +0.2**
**MAKZ Makanchi 44.52 302 P P 20 06 26.6 -0.2**
MAKZ pmax pmax
comp=Z,7.0nm,0.9s
**MAKZ Makanchi 44.52 302 P P 20 06 26.6 -0.2**
MAKZ IAmb IAmb 20 06 36.7
comp=Z,7.1nm,0.9s
**OHAK Old Harbor 45.94 43 P P 20 06 39.1 +1.2**
**KURK Kurchatov 46.04 308***ce*P **P 20 06 39.0 +0.2**
KURK pmax pmax
comp=Z,12nm,0.7s
**KURK Kurchatov 46.04 308 P P 20 06 39.1 +0.3**
KURK IAmb IAmb 20 06 40.1
comp=Z,12nm,0.8s
**KURBB Kurchatov Arra 46.11 308 P P 20 06 39.7 +0.4**
comp=Z,8.7nm,0.7s,baz=83,slow=8.1,SNR=66
**H21K Melozitna Rive 46.23 31 P P 20 06 42.4 +2.4**
**KDAK Kodiak Island 46.29 42 P P 20 06 41.7 +1.1**
KDAK pmax pmax
comp=Z,180nm,1.6s
**KDAK Kodiak Island 46.29 42 P P 20 06 41.7 +1.1**
**TAPN Taplejung 46.48 274** *e*P **P 20 06 43.3 +0.4**
comp=Z,4.2nm,0.5s
**KTH Kantishna Hill 46.95 34 P P 20 06 46.1 +0.2**
KTH IAmb IAmb 20 07 00.3
comp=Z,22nm,1.6s
**ODAN Odare 46.95 273** *e*P **P 20 06 47.6 +1.0**
**BRLK Bradley Lake 47.05 40 P P 20 06 46.7 +0.1**
**KAPI Kappang 47.25 211** LR LR 20 26 47.7
comp=Z,20nm,19.8s,baz=58,slow=36
**RAMN Ramite 47.54 274** *e*P **P 20 06 52.1 +0.9**
comp=Z,1.1nm,0.4s
**JIRN Jiri 47.54 275** *e*P **P 20 06 52.7 +1.4**
**GUN Gumba 47.67 276** *e*P **P 20 06 53.5 +1.2**
**TOLK Toolik Lake Re 47.70 27 P P 20 06 52.6 +1.0**
**RND Reindeer 47.88 35 P P 20 06 53.4 +0.3**
RND pmax pmax
comp=Z,10.0nm,1.2s
**RND Reindeer 47.88 35 P P 20 06 53.4 +0.3**
RND IAmb IAmb 20 07 14.2
comp=Z,10nm,1.2s
**MDM Murphy Dome 48.12 32 P P 20 06 56.9 +2.0**
**PKI Pulchoki 48.20 275** *e*P **P 20 06 57.1 +0.7**
**KKN Kakani 48.20 276** *e*P **P 20 06 57.3 +1.0**
comp=Z,24nm,0.8s
**PKIN Phulchoki 48.21 275** *e*P **P 20 06 57.0 +0.7**
comp=Z,1.8nm,0.3s
**PWL Port Wells 48.25 38 P P 20 06 54.1 -1.8**
**H24K Noodor Dome 48.27 31 P P 20 06 55.8 -0.2**
**DMN Daman 48.42 276** *e*P **P 20 06 59.0 +1.0**
**POKR Poker Plat Res 48.46 32 P P 20 07 00.6 +3.1**
POKR IAmb IAmb 20 07 06.3
comp=Z,7.2nm,0.9s
**DHY Denali Highway 48.56 35 P P 20 06 59.3 +0.8**
DHY IAmb IAmb 20 07 40.5
comp=Z,31nm,1.8s
**GKN Gorkha 48.62 276** *e*P **P 20 07 00.0 +0.6**
comp=Z,45nm,0.8s
**SCM Sheep Creek Mo 48.66 37 P P 20 06 56.9 -2.3**
SCM pmax pmax
comp=Z,75nm,1.8s
**SCM Sheep Creek Mo 48.66 37 P P 20 06 56.9 -2.3**
**TARG Taragay, Kyrgy 48.67 296 P P 20 07 01.4 +1.5**
TARG IAmb IAmb 20 07 10.2
comp=Z,8.5nm,0.9s
**IL31 48.70 33 P P 20 07 00.4 +1.1**
IL31 IAmb IAmb 20 07 40.8
comp=Z,14nm,1.7s
**ILAR Eielson Array 48.70 33 P P 20 07 00.9 +1.6**
comp=Z,1.2nm,0.7s,baz=265,slow=6.4,SNR=11
**ILAR Eielson Array 48.70 33 P P 20 07 00.8 +1.5**
**DANN Dangsing 49.15 277** *e*P **P 20 07 04.6 +1.0**
comp=Z,76nm,0.7s
**KOLN Koldanda 49.54 277** *e*P **P 20 07 07.6 +1.1**
**BMAR Burnt Mountain 49.55 29 P P 20 07 07.9 +2.0**
**PYUN Piuthan 49.87 277** *e*P **P 20 07 09.8 +0.8**
**N25K Chitina, Valde 49.98 37 P P 20 07 10.5 +1.3**
N25K IAmb IAmb 20 07 26.4
comp=Z,27nm,1.4s
**SOEI Soe 50.00 203 P P 20 07 08.2 -1.7**
**BMRM Bremner River 50.05 38 P P 20 07 10.2 +0.4**
**SUCK Suckling Hills 50.58 39 P P 20 07 14.6 +0.8**
**BVAR Borovoye Array 50.62 312 P P 20 07 14.7 +0.6**
comp=Z,1.6nm,0.8s,baz=79,slow=16,SNR=4.4
BVAR PcP **PcP 20 08 32.5 +1.1**
comp=Z,0.7nm,0.7s,baz=71,slow=14,SNR=4.2
**BRVK Borovoye 50.67 312***ce*P **P 20 07 14.6 +0.1**
BRVK pmax pmax
comp=Z,6.0nm,2.5s
**BRVK Borovoye 50.67 312 P P 20 07 13.8 -0.7**
**KSH Kashi 50.70 294 P P 20 07 20.5 +5.4**
KSH sP sP 20 07 28.3 +3.1
KSH pmax pmax
comp=Z,4.0nm,0.9s
**AAK Ala-Archa 50.73 298***ce*P **P 20 07 15.7 +0.4**
AAK pmax pmax
comp=Z,4.0nm,1.7s
**AAK Ala-Archa 50.73 298 P P 20 07 14.9 -0.3**
AAK IAmb IAmb 20 07 26.4
comp=Z,5.4nm,0.7s
**WAX Waxell Ridge 50.98 38 P P 20 07 17.8 +1.0**
**SNH Sunshine Point 51.03 38 P P 20 07 17.8 +0.7**
**L27K Beaver Creek, 51.08 35 P P 20 07 18.8 +1.3**
L27K IAmb IAmb 20 08 01.8
comp=Z,19nm,1.8s
**BCAR Beaver Creek A 51.10 35 P P 20 07 19.6 +1.9**
**M27K Edge Creek, AK 51.15 36 P P 20 07 18.1 0.0**
M27K IAmb IAmb 20 07 20.2
comp=Z,20nm,1.6s
**MTN Manton Dam 51.23 194 P P 20 07 19.8 +0.8**
MTN IAmb IAmb 20 07 43.2
comp=Z,7.9nm,0.9s
**COEN Coen 51.30 179 P P 20 07 18.7 -0.8**
COEN IAmb IAmb 20 07 28.3
comp=Z,18nm,1.4s
**DAWY Dawson 52.01 33 P 20 07 26.5 +2.1**
**EPYK Eagle Plains 52.74 30** P **P 20 07 32.1 +2.3**
EPYK IAmb IAmb 20 07 39.8
comp=Z,16nm,1.4s
**KKAR Karatay Array 53.34 300 P P 20 07 34.6 0.0**
**KKAR Karatay Array 53.34 300 P P 20 07 34.5 0.0**
**M30M Minto, Yukon 53.44 35 P P 20 07 35.7 +0.8**
M30M IAmb IAmb 20 08 14.2
comp=Z,13nm,1.6s
**INK Inuvik 53.61 27** P **P 20 07 38.1 +2.0**
comp=Z,0.8nm,0.5s,baz=307,slow=7.3,SNR=3.1
**INK Inuvik 53.61 27 P P 20 07 37.4 +1.3**
**UGM Wanagama 54.06 220 P P 20 07 39.4 -0.7**
**KNRA Kununurra 54.47 196 P P 20 07 43.1 +0.3**
KNRA IAmb IAmb 20 07 47.8
comp=Z,20nm,1.4s
**GAR Garm 54.98 295 P P 20 07 46.3 -0.3**
GAR IAmb IAmb 20 07 55.8
comp=Z,14nm,1.0s
**NIL Nilore 54.99 288 P P 20 07 47.8 +1.1**
NIL pmax pmax
comp=Z,4.0nm,0.8s
**NIL Nilore 54.99 288 P P 20 07 47.8 +1.1**
NIL IAmb IAmb 20 07 58.9
comp=Z,4.4nm,0.8s
**CHGR Chuyangaron 55.94 295 P P 20 07 53.0 -0.6**
**ARU Arti 56.32 318 P P 20 07 56.4 +0.5**
comp=Z,3.3nm,0.7s,baz=60,slow=5.2,SNR=14
**ARU Arti 56.32 318***d* iP **P 20 07 56.3 +0.5**
ARU *PP **pP 20 08 03.5 +0.3**
ARU 20 08 51.4
ARU 20 10 01.3
ARU S **S 20 15 46.6 +2.2**
ARU SS **SS 20 19 28.9 -1.8**
ARU pmax pmax
comp=Z,11nm,0.9s
**ARU Arti 56.32 318 P P 20 07 55.8 0.0**
ARU IAmb IAmb 20 08 05.0
comp=Z,12nm,0.7s
**WB0 Warramunga Arr 57.53 189 P P 20 08 04.9 +0.2**
WB0 IAmb IAmb 20 08 06.3
comp=Z,14nm,0.7s
**FITZ Fitzroy Crossi 57.54 199 P P 20 08 06.7 +1.9**
comp=Z,2.2nm,0.6s,baz=25,slow=7.7,SNR=17
**FITZ Fitzroy Crossi 57.54 199 P P 20 08 06.5 +1.7**
**WRAB Tennant Creek 57.70 189***ce*P **P 20 08 06.3 +0.4**
WRAB pmax pmax
comp=Z,6.0nm,0.6s
**WRAB Tennant Creek 57.70 189 P P 20 08 05.8 -0.1**
WRAB IAmb IAmb 20 08 07.5
comp=Z,11nm,0.8s
**WR0 Warramunga Arr 57.70 188 P P 20 08 06.0 0.0**
**WB2 Warramunga Arr 57.71 189 P P 20 08 06.2 +0.2**
WB2 IAmb IAmb 20 08 07.6
comp=Z,13nm,0.7s
**WRA Warramunga Arr 57.71 189 P P 20 08 06.7 +0.7**
comp=Z,9.9nm,0.7s,baz=6.1,slow=7.1,SNR=48
**WRA Warramunga Arr 57.71 189** *i* P **P 20 08 06.6 +0.6**
WRA pmax pmax
comp=Z,10.0nm,0.7s
**WRA Warramunga Arr 57.71 189 P P 20 08 05.6 -0.4**
**KBL Kabul 57.75 291 P P 20 08 06.8 +0.2**
KBL pmax pmax
comp=Z,9.0nm,1.0s
**KBL Kabul 57.75 291 P P 20 08 06.8 +0.2**
KBL IAmb IAmb 20 08 15.8
comp=Z,9.3nm,0.9s
**ABKAR Akbulak array 58.01 310 P P 20 08 07.9 0.0**
ABKAR IAmb IAmb 20 08 16.8
comp=Z,4.9nm,0.7s
**AKTO Aktyubinsk 58.72 312 P P 20 08 13.2 +0.3**
comp=Z,2.9nm,0.8s,baz=72,slow=12,SNR=9.4
**EUNU Eureka 59.54 9 P P 20 08 18.8 +0.7**
EUNU IAmb IAmb 20 08 27.7
comp=Z,6.2nm,1.1s
**KIRV Kirov 60.14 323 P P 20 08 23.7 +1.3**
comp=Z,8.1nm,0.7s,baz=244,slow=22,SNR=5.9
**KIRV Kirov 60.14 323***ce*P **P 20 08 23.3 +0.8**
**PRGR Permogore 60.60 327** *e*P **P 20 08 23.2 -2.4**
PRGR pmax pmax
comp=Z,8.0nm,1.3s
**AS31 Alice Springs 61.43 189 P P 20 08 32.0 +0.4**
**ASAR Alice Springs 61.44 189 P P 20 08 32.6 +0.9**
comp=Z,7.3nm,0.7s,baz=11,slow=6.5,SNR=93
**ASAR Alice Springs 61.44 189 P P 20 08 32.0 +0.4**
**RES Resolute Bay 61.90 15 P P 20 08 35.3 +1.1**
comp=Z,2.2nm,0.5s,baz=316,slow=5.5,SNR=10.0
**RES Resolute Bay 61.90 15 P P 20 08 34.9 +0.7**
RES IAmb IAmb 20 08 36.1
comp=Z,7.0nm,1.1s
**PSA00 Pilbara Seismi 62.49 203 P P 20 08 38.4 -0.4**
PSA00 IAmb IAmb 20 08 42.4
comp=Z,10nm,0.9s
**PSA00 Pilbara Seismi 62.49 203 P P 20 08 38.1 -0.7**
PSA00 IAmb IAmb 20 08 40.6
comp=Z,3.0nm,0.8s
**HRA Herat 62.82 294 P P 20 08 42.1 +0.8**
HRA IAmb IAmb 20 08 51.1
comp=Z,5.6nm,1.4s
**YKA Yellowknife Ar 63.02 30 P P 20 08 43.1 +1.2**
comp=Z,1.2nm,0.7s,baz=304,slow=6.5,SNR=17
YKA LR LR 20 36 37.6
comp=Z,68nm,20.3s,baz=262,slow=36
**YKA Yellowknife Ar 63.02 30** *i* P **P 20 08 43.2 +1.3**
YKA pmax pmax
comp=Z,1.0nm,0.6s
**OUENC Ouen Island, N 64.07 155 P P 20 08 50.1 +0.8**
**TULEG Thule 64.46 8 P P 20 08 51.4 +0.2**
TULEG IAmb IAmb 20 08 59.2
comp=Z,4.0nm,0.7s
**GIRL Giralia 65.43 208 P P 20 08 59.5 +1.5**
**OBN Obninsk 67.98 323**⇓ *e*P **P 20 09 15.1 +1.1**
OBN *e* 20 09 28.9
OBN 20 09 42.0
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,58nm,16.0s
**FIA1 FINESS Array S 68.58 332 P P 20 09 18.0 +0.3**
**FINES FINESS Array B 68.58 332 P P 20 09 18.2 +0.5**
comp=Z,4.7nm,0.8s,baz=88,slow=6.5,SNR=10
**FINES FINESS Array B 68.58 332** *i* P **P 20 09 17.3 -0.4**
FINES pmax pmax
comp=Z,5.0nm,0.8s
**FINES FINESS Array B 68.58 332 P P 20 09 18.5 +0.8**
**STKA Stephens Creek 69.13 180 P P 20 09 22.8 +1.5**
comp=Z,1.0nm,0.7s,baz=347,slow=8.3,SNR=3.1
**STKA Stephens Creek 69.13 180 P P 20 09 22.3 +1.0**
**FORT Forrest 69.29 193 P P 20 09 23.7 +1.3**
**SUMG Summit 70.11 0 P P 20 09 29.1 +1.6**
SUMG pmax pmax
comp=Z,24nm,1.4s
**SUMG Summit 70.11 0** *i* P **P 20 09 28.0 +0.5**
**SUMG Summit 70.11 0 P P 20 09 29.1 +1.6**
SUMG IAmb IAmb 20 09 30.1
comp=Z,24nm,1.4s
**BBOO Buckleboo 70.28 185 P P 20 09 29.3 +0.9**
**O03E Paynes Creek 70.89 54 P P 20 09 32.7 +0.2**
O03E IAmb IAmb 20 09 45.4
comp=Z,9.6nm,1.4s
**MOD Modoc Plateau 70.95 52 P P 20 09 33.2 +0.3**
MOD IAmb IAmb 20 09 55.7
comp=Z,14nm,1.8s
**KBZ Khabaz 70.97 311 P P 20 09 34.1 +1.4**
comp=Z,2.9nm,0.8s,baz=39,slow=5.7,SNR=10
**KBZ Khabaz 70.97 311***ce*P **P 20 09 32.8 +0.1**
KBZ pmax pmax
comp=Z,7.0nm,0.9s
**KIV Kislovodsk 70.97 311** *e*P **P 20 09 33.1 +0.2**
KIV pmax pmax
comp=Z,15nm,1.0s
**KIV Kislovodsk 70.97 311 P P 20 09 32.7 -0.2**
KIV IAmb IAmb 20 09 43.5
comp=Z,12nm,0.9s
**ONI Oni 71.27 310 P P 20 09 35.4 +0.7**
ONI pmax pmax
comp=Z,4.0nm,0.9s
**ONI Oni 71.27 310 P P 20 09 35.4 +0.7**
ONI IAmb IAmb 20 09 45.0
comp=Z,4.1nm,0.9s
**PLID Pearl Lake 71.75 47 P P 20 09 38.1 +0.4**
**GNI Garni 71.83 307** *i* P **P 20 09 38.1 -0.1**
GNI pmax pmax
comp=Z,10.0nm,1.7s
**GNI Garni 71.83 307 P P 20 09 38.6 +0.4**
GNI IAmb IAmb 20 09 54.9
comp=Z,13nm,1.5s
**UOSS Minazif 72.18 288 P P 20 09 40.6 +0.3**
UOSS IAmb IAmb 20 09 49.4
comp=Z,12nm,0.9s
**FFC Flin Flon 72.91 33 P P 20 09 45.7 +1.5**
FFC pmax pmax
comp=Z,11nm,1.5s
**FFC Flin Flon 72.91 33 P P 20 09 45.7 +1.5**
FFC IAmb IAmb 20 09 54.0
comp=Z,11nm,1.5s
**FCC Fort Churchill 73.23 27 P P 20 09 47.2 +1.2**
FCC pmax pmax
comp=Z,15nm,1.6s
**FCC Fort Churchill 73.23 27 P P 20 09 47.2 +1.2**
FCC IAmb IAmb 20 09 48.4
comp=Z,15nm,1.6s
**LRM Limekiln Ridge 73.33 45 P P 20 09 48.8 +1.6**
**EGMT Eagleton 73.46 42 P P 20 09 48.7 +1.0**
EGMT IAmb IAmb 20 09 57.5
comp=Z,9.9nm,0.9s
**ANN Anapa 73.55 314** *i* P **P 20 09 46.4 -1.7**
ANN *e* 20 12 31.3
ANN *e*PPP PPP 20 14 13.1
ANN *e*S **S 20 19 14.6 -1.9**
ANN pmax pmax
comp=Z,33nm,0.8s
**NC405 NORSAR Array S 73.67 337 P P 20 09 49.6 +1.0**
**NC303 NORSAR Array S 73.69 338 P P 20 09 49.5 +0.8**
NC303 IAmb IAmb 20 10 00.6
comp=Z,25nm,1.5s
**HFS Hagfors 73.80 336 P P 20 09 50.3 +1.0**
comp=Z,3.7nm,0.7s,baz=90,slow=4.3,SNR=10.0
**NC204 NORSAR Array S 73.83 338 P P 20 09 50.3 +0.7**
**NB201 NORSAR Array S 73.85 337 P P 20 09 50.1 +0.5**
**NB2 NORSAR Subarra 73.88 337 P P 20 09 50.5 +0.6**
comp=Z,3.3nm,0.7s,baz=39,slow=6.2
**NOA NORSAR Array B 73.88 337 P P 20 09 50.4 +0.6**
comp=Z,2.4nm,0.7s,baz=39,slow=5.8,SNR=17
**NAO01 NORSAR Array S 74.14 337 P P 20 09 51.6 +0.3**
**NVAR Mina Array Bea 74.18 54 P P 20 09 54.3 +2.0**
comp=Z,0.8nm,0.8s,baz=295,slow=5.7,SNR=5.0
**AKASG Malin Array Be 74.20 323 P P 20 09 52.3 +0.5**
comp=Z,1.7nm,0.5s,baz=45,slow=6.2,SNR=16
**AKBB Malin Array Si 74.20 323 P P 20 09 52.5 +0.7**
AKBB pmax pmax
comp=Z,16nm,1.6s
**AKBB Malin Array Si 74.20 323 P P 20 09 52.5 +0.7**
AKBB IAmb IAmb 20 09 53.1
comp=Z,16nm,1.6s
**GURO Guroymak-BITLI 74.46 307 P P 20 09 53.2 -0.6**
**QSM Queen of Sheba 76.56 55 P P 20 10 06.6 +0.9**
QSM IAmb IAmb 20 10 18.9
comp=Z,7.7nm,1.3s
**BW06 Boulder Array 76.85 46 P P 20 10 09.6 +2.1**
**PDAR Pinedale Array 76.85 46 P P 20 10 09.1 +1.5**
comp=Z,1.3nm,0.6s,baz=278,slow=2.0,SNR=15
**PDAR Pinedale Array 76.85 46 P P 20 10 09.2 +1.7**
**BUR08 Bucovina Ar. S 78.21 322 P P 20 10 15.7 +0.9**
BUR08 IAmb IAmb 20 10 32.7
comp=Z,10nm,1.4s
**BURAR Bucovina Array 78.22 322 P P 20 10 16.1 +1.2**
**RDMU Red Mountain 78.24 48 P P 20 10 16.3 +1.0**
RDMU IAmb IAmb 20 10 25.4
comp=Z,6.8nm,1.1s
**SRU San Rafael Swe 78.60 49 P P 20 10 18.1 +0.8**
SRU pmax pmax
comp=Z,7.0nm,1.3s
**SRU San Rafael Swe 78.60 49 P P 20 10 18.1 +0.8**
SRU IAmb IAmb 20 10 29.8
comp=Z,7.2nm,1.3s
**ULM Lac du Bonnet 78.71 34 P P 20 10 18.7 +1.3**
comp=Z,2.0nm,0.5s,baz=336,slow=6.3,SNR=3.0
**BRTR Keskin Array B 78.90 312 P P 20 10 19.8 +0.9**
comp=Z,0.8nm,0.8s,baz=50,slow=1.9,SNR=5.2
**BRTR Keskin Array B 78.90 312** *i* P **P 20 10 19.3 +0.4**
BRTR pmax pmax
comp=Z,1.0nm,0.9s
**PV23 Carpenter Ridg 79.93 49 P P 20 10 26.4 +1.7**
PV23 IAmb IAmb 20 10 44.1
comp=Z,5.6nm,0.9s
**PV13 Radium Mtn., P 80.23 49 P P 20 10 27.7 +1.5**
PV13 IAmb IAmb 20 10 29.5
comp=Z,5.9nm,0.9s
**DPC Dobruska-Polom 80.28 328** *e*P **P 20 10 27.4 +1.4**
**DPC Dobruska-Polom 80.28 328** *e*P **P 20 10 27.4 +1.4**
**KRLC Kraliky 80.29 328** *e*P **P 20 10 27.5 +1.4**
**KRLC Kraliky 80.29 328** *e*P **P 20 10 27.5 +1.4**
**CLL Collm 80.89 330**⇓ *i*P **P 20 10 29.9 +0.7**
comp=Z,7.0nm,0.9s
CLL *i* (PcP) **pP 20 10 37.6 +0.8**
**RAYN Ar Rayn 80.97 293** P **P 20 10 29.4 -0.8**
RAYN pmax pmax
comp=Z,3.0nm,1.0s
**RAYN Ar Rayn 80.97 293 P P 20 10 29.4 -0.8**
**PRU Pruhonice 81.30 329** *e*P **P 20 10 33.4 +2.0**
**PRU Pruhonice 81.30 329** *e*P **P 20 10 33.4 +2.0**
**CKRC Cesky Krumlov 82.30 328** *e*P **P 20 10 38.0 +1.3**
**KHC Kasperske Hory 82.36 329** *e*P **P 20 10 38.5 +1.5**
KHC *e* 20 10 48.3
**KHC Kasperske Hory 82.36 329** *e*P **P 20 10 38.5 +1.5**
KHC *ex* x 20 10 48.3
**KHC Kasperske Hory 82.36 329 P P 20 10 38.0 +1.0**
**GERES GERESS Array B 82.53 329 P P 20 10 38.9 +0.9**
comp=Z,1.1nm,0.8s,baz=2.9,slow=5.3,SNR=7.2
**ANMO Albuquerque 83.78 50 P P 20 10 44.9 0.0**
ANMO pmax pmax
comp=Z,5.0nm,1.2s
**ANMO Albuquerque 83.78 50 P P 20 10 44.9 0.0**
ANMO IAmb IAmb 20 10 48.5
comp=Z,4.8nm,1.2s
**TXAR Lajitas Array 89.31 53 P P 20 11 13.8 +1.9**
comp=Z,1.3nm,0.6s,baz=299,slow=3.3,SNR=16
**U40A Yellville 90.53 41 P P 20 11 18.3 +0.9**
U40A IAmb IAmb 20 11 19.3
comp=Z,8.2nm,0.8s
**P57A Homestead Farm 94.87 30 P P 20 11 37.3 0.0**
**H03N2 Juan Fernandez 146.50 95** T T 23 01 42.7
baz=291,slow=76,SNR=6.0
**H03N3 Juan Fernandez 146.52 95** T T 23 01 45.1
baz=291,slow=76,SNR=6.8
**H03N1 Juan Fernandez 146.52 95** T T 23 01 46.2
baz=291,slow=76,SNR=3.5

**IDC 26 20:05:27.8**±19.0**,**2°09N×96°23E**,h0**km**,mb3.7/3,**
**mb1 3.6/4,mb1mx3.3/37,mbtmpg3.6/4,ML2.8/1,Error**
**ellipse: s-maj=398.7km s-min=39.1km az=17.0,**
**Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **2.78** | **75** | | Pn | Pn | 20 06 13.3 | -0.4 |
| | 1.6nm,0.3s,baz=287,slow=16,SNR=11 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.58** | **248** | | T | T | 20 37 16.5 | |
| | baz=67,slow=75,SNR=14 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.58** | **248** | | T | T | 20 37 22.8 | |
| | baz=67,slow=75,SNR=13 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.60** | **248** | | T | T | 20 37 17.4 | |
| | baz=67,slow=75,SNR=4.5 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.43** | **157** | | T | T | 20 56 50.8 | |
| | baz=332,slow=76,SNR=11 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.44** | **157** | | T | T | 20 56 49.3 | |
| | baz=332,slow=76,SNR=13 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.44** | **157** | | T | T | 20 56 52.1 | |
| | baz=332,slow=76,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.16** | **347** | | P | P | 20 13 54.0 | -0.2 |
| | 0.6nm,0.5s,baz=163,slow=9.1,SNR=11 | | | | | | | |
| **SONM** | **Songino Array** | **46.41** | **9** | | P | P | 20 13 56.2 | -0.1 |
| | 0.5nm,0.6s,baz=187,slow=8.5,SNR=6.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.54** | **352** | | P | P | 20 14 42.8 | 0.0 |
| | 0.7nm,0.5s,baz=182,slow=8.8,SNR=5.0 | | | | | | | |

**GUC 26 20:19:16.8**±0.3**,**36°46S×74°91W**,h20**km**,ML4.7,Off**
**coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BI05** | **Punta Hualpn** | **1.41** | **102** | *e*P | Pn | Pn | 20 19 40.3 | -1.0 |
| BI05 | | | | *i* S | Sn | Sn | 20 19 58.3 | -1.0 |
| **BO03** | **Pichilemu** | **3.10** | **52** | *e*P | Pn | Pn | 20 20 05.3 | +0.7 |
| BO03 | | | | *i* S | Sn | Sn | 20 20 41.9 | +0.8 |
| **LR04** | **Corral** | **3.61** | **162** | *e*P | Pn | Pn | 20 20 07.6 | -4.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LR04 | | | | | *i* S | | Sn | 20 20 43.6 | -10 |
| LR04 | | | | | IAML | | | 20 20 46.5 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **LR03** | **Panguipulli** | **3.76** | **148** | *i* P | | | Pn | 20 20 11.5 | -2.1 |
| LR03 | | | | *i* S | | | Sn | 20 20 49.9 | -7.4 |
| LR03 | | | | IAML | | | | 20 20 55.4 | |
| | comp=N,480nm,0.7s | | | | | | | | |
| **MT01** | **Popeta** | **3.96** | **50** | *e*P | | | Pn | 20 20 17.0 | +0.6 |
| MT01 | | | | *i* S | | | Sn | 20 21 02.4 | +0.2 |
| **MT09** | **Talagante** | **4.18** | **51** | *e*P | | | Pn | 20 20 20.7 | +1.2 |
| MT09 | | | | *i* S | | | Sn | 20 21 09.0 | +1.1 |
| **LMEL** | **Las Melosas** | **4.65** | **57** | *e*P | | | Pn | 20 20 28.6 | +2.5 |
| **ROCH** | **El Roble** | **4.73** | **44** | *e*P | | | Pn | 20 20 28.0 | +0.8 |
| ROCH | | | | *i* S | | | Sn | 20 21 22.9 | +1.3 |
| **LL04** | **Puerto Octay** | **4.86** | **157** | *i* S | | | Sn | 20 21 13.8 | -10 |
| **VA03** | **San Esteban** | **5.14** | **46** | *e*P | | | Pn | 20 20 34.2 | +1.4 |
| VA03 | | | | *i* S | | | Sn | 20 21 32.9 | +1.2 |

*NIED* ***26*** *20:24:57.1,39˚.14N×142˚.39E, h32km, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-1.35; Mθθ0.05; Mϕϕ1.31; Mrθ-0.22; Mθϕ-0.60; Mϕr2.56; Fault plane solution: M0 2.95000×10¹⁴ NP1: ϕs173.00000°,δ76.00000°,λ-81.00000°. NP2: ϕs322.00000°,δ17.00000°,λ-120.00000°.*
*JMA* ***26*** *20:24:57.0±0.1,39˚.14N×142˚.39E, h32km±1km, M3.9*
*JMA Felt I J1.*
*IDC* ***26*** *20:24:59.8±2.7,39˚.06N×142˚.36E, h50km±26km, mb3.3/9, mb1 3.5/11,mb1mx3.3/52,mbtmp3.5/11,ML3.1/2,MS2.7/3, Ms1 2.7/3,ms1mx2.4/38, Error ellipse: s-maj=29.6km s-min=16.5km az=109.0*
**ISC 26 20:24:58.1±1.7, 39˚.11N±0˚.04×142˚.29E±0˚.09, h29km±11km, n31,σ1°43/33, mb3.5/9, 4C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OFUJ** | **Ofunato** | **0.48** | **267** | ⇓P | **Pb** | **20 25 08.4** | **+0.2** |
| OFUJ | | | | S | **Sb** | **20 25 16.0** | **+0.9** |
| **MIYJ** | **Miyakonagasawa** | **0.60** | **322** | ⇓P | **Pb** | **20 25 09.1** | **-0.9** |
| MIYJ | | | | S | **Sb** | **20 25 17.1** | **-1.1** |
| **JKMT** | **Kesennumamotoy** | **0.70** | **245** | ⇑P | **Pb** | **20 25 11.5** | **-0.3** |
| JKMT | | | | S | **Sb** | **20 25 21.5** | **+0.4** |
| **JMK** | **Ichinoseki** | **0.85** | **260** | ⇑P | **Pn** | **20 25 13.9** | **-0.1** |
| JMK | | | | S | **Sb** | **20 25 25.8** | **+0.5** |
| **JOM** | **Ohasama** | **0.86** | **296** | ⇑P | **Pn** | **20 25 14.0** | **-0.2** |
| JOM | | | | S | **Sb** | **20 25 26.0** | **+0.5** |
| **JTH** | **Tanohata** | **0.90** | **338** | P | **Pn** | **20 25 13.1** | **-1.6** |
| JTH | | | | S | **Sb** | **20 25 25.1** | **-1.5** |
| **JIO** | **Ouri** | **0.98** | **229** | ⇑P | **Pn** | **20 25 15.1** | **-0.8** |
| JIO | | | | S | **Sn** | **20 25 27.8** | **-1.0** |
| **JKZ** | **Kuzumaki** | **1.15** | **320** | ⇓P | **Pn** | **20 25 18.0** | **-0.2** |
| JKZ | | | | S | **Sn** | **20 25 32.9** | **-0.1** |
| **JRG** | **Rokugo** | **1.32** | **283** | P | **Pn** | **20 25 21.3** | **+0.8** |
| JRG | | | | S | **Sb** | **20 25 39.6** | **+0.9** |
| **JANG** | **Nango** | **1.40** | **335** | P | **Pn** | **20 25 21.0** | **-0.6** |
| **MAT** | **Matsushiro** | **4.12** | **233** | P | **Pn** | **20 26 00.9** | **+1.8** |
| MAT | | | | *e*S | **Sn** | **20 26 47.3** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **4.12** | **233** | P | **Pn** | **20 26 00.2** | **+1.1** |
| | 0.4nm,0.3s,baz=42,slow=11,SNR=19 | | | | | | |
| MJAR | | | | LR | LR | 20 27 51.7 | |
| | comp=Z,51nm,20.6s,baz=132,slow=42 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.01** | **3** | P | **Pn** | **20 26 13.2** | **+2.0** |
| | 0.9nm,0.3s,baz=208,slow=11,SNR=9.4 | | | | | | |
| ASAJ | | | | S | **Sn** | **20 27 14.0** | **+5.9** |
| | 0.5nm,0.3s,baz=330,slow=22,SNR=1.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.24** | **307** | LR | LR | 20 29 48.9 | |
| | comp=Z,56nm,20.4s,baz=162,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **11.41** | **266** | P | Pn | 20 27 44.4 | +5.3 |
| | 0.1nm,0.3s,baz=79,slow=12,SNR=1.4 | | | | | | |
| **MA2** | **Magadan** | **21.19** | **12** | P | **P** | **20 29 40.3** | **-0.5** |
| | 0.8nm,0.4s,baz=192,slow=5.2,SNR=4.6 | | | | | | |
| **SEY** | **Seymchan** | **24.63** | **11** | P | **P** | **20 30 15.8** | **+0.2** |
| | 0.2nm,0.3s,baz=158,slow=22,SNR=1.9 | | | | | | |
| **GUMO** | **Guam** | **25.52** | **174** | LR | LR | 20 44 10.4 | |
| | comp=Z,32nm,18.0s,baz=82,slow=45 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.69** | **125** | T | T | 21 01 12.2 | |
| | baz=318,slow=75,SNR=76 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.70** | **125** | T | T | 21 01 13.8 | |
| | baz=318,slow=75,SNR=64 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.71** | **125** | T | T | 21 01 21.7 | |
| | baz=318,slow=75,SNR=52 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.48** | **127** | T | T | 21 02 20.3 | |
| | baz=319,slow=76,SNR=8.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.48** | **127** | T | T | 21 02 23.0 | |
| | baz=319,slow=76,SNR=9.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.50** | **127** | T | T | 21 02 14.3 | |
| | baz=319,slow=76,SNR=9.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.06** | **311** | P | **P** | **20 32 38.4** | **-0.3** |
| | 0.6nm,0.5s,baz=95,slow=6.4,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.72** | **254** | P | **P** | **20 32 53.3** | **+0.6** |
| | 0.5nm,0.8s,baz=34,slow=8.7,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.64** | **300** | P | **P** | **20 32 59.6** | **-0.2** |
| | 0.7nm,0.8s,baz=83,slow=8.9,SNR=5.8 | | | | | | |
| **ILAR** | **Eielson Array** | **47.38** | **33** | P | **P** | **20 33 28.9** | **-0.2** |
| | 0.4nm,0.6s,baz=272,slow=5.9,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **59.21** | **189** | P | **P** | **20 34 55.2** | **-1.3** |
| | 0.5nm,0.4s,baz=6.4,slow=7.1,SNR=9.6 | | | | | | |
| **ASAR** | **Alice Springs** | **62.94** | **189** | P | **P** | **20 35 20.8** | **-0.9** |
| | 0.2nm,0.5s,baz=11,slow=8.9,SNR=2.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.08** | **322** | P | **P** | **20 36 24.6** | **-0.6** |
| | 0.3nm,0.4s,baz=44,slow=6.3,SNR=5.8 | | | | | | |

*ISK* ***26*** *20:31:37.9,37˚.89N×43˚.51E, h5km, ML3.8/8*
*DDA* ***26*** *20:31:38.0±0.0,37˚.91N×43˚.52E, h3km±7km, MW3.8*
*TEH* ***26*** *20:31:38.8,37˚.86N×43˚.46E, h9km, ML3.6*
*AZER* ***26*** *20:31:41.0±0.5,38˚.07N×43˚.72E, h3km, Error ellipse: s-maj=9.6km s-min=7.8km az=339.0*
**ISC 26 20:31:38.7±1.0, 37˚.92N±0˚.02×43˚.52E±0˚.02, h8km±9km, n88,σ2°29/125, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAKT** | **HAKKARI** | **0.39** | **157** | *e*Pg | **Pg** | **20 31 46.1** | **-0.3** |
| **HAKT** | **HAKKARI** | **0.39** | **157** | P | **Pg** | **20 31 46.1** | **-0.3** |
| HAKT | | | | S | **Sb** | **20 31 53.0** | **-1.3** |
| HAKT | | | | *i* AML | AML | 20 31 56.0 | |
| | comp=N,4μm,0.4s | | | | | | |
| HAKT | | | | *i* AML | AML | 20 31 57.0 | |
| | comp=E,8μm,0.4s | | | | | | |
| **AKDM** | **Akdamar-Van** | **0.59** | **314** | PG | **Pb** | **20 31 50.5** | **-0.9** |
| AKDM | | | | SG | **Sb** | **20 31 59.9** | **0.0** |
| **AKDM** | **Akdamar-Van** | **0.59** | **314** | *e*Pg | **Pg** | **20 31 50.0** | **-0.2** |
| **CUKT** | **Cukurca** | **0.67** | **174** | PG | **Pb** | **20 31 51.4** | **-1.4** |
| CUKT | | | | SG | **Sb** | **20 32 01.6** | **-0.7** |
| **CUKT** | **Cukurca** | **0.67** | **174** | *e*Pg | **Pb** | **20 31 51.2** | **-1.6** |
| **CUKT** | **Cukurca** | **0.67** | **174** | P | **Pb** | **20 31 51.3** | **-1.4** |
| CUKT | | | | S | **Sb** | **20 32 02.6** | **+0.4** |
| CUKT | | | | *i* AML | AML | 20 32 07.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| CUKT | | | | *i* AML | AML | 20 32 10.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| **VANB** | **Van** | **0.68** | **352** | PG | **Pg** | **20 31 50.9** | **-1.0** |
| VANB | | | | SG | **Sg** | **20 32 00.8** | **-0.1** |
| **VANB** | **Van** | **0.68** | **352** | *e*Pg | **Pg** | **20 31 50.2** | **-1.7** |
| **PERV** | **Siirt/Pervari-** | **0.77** | **272** | P | **Pb** | **20 31 54.3** | **-0.1** |
| PERV | | | | S | **Sn** | **20 32 08.5** | **+0.7** |
| PERV | | | | *i* AML | AML | 20 32 10.0 | |
| | comp=N,4μm,0.4s | | | | | | |
| PERV | | | | *i* AML | AML | 20 32 13.0 | |
| | comp=E,3μm,0.6s | | | | | | |
| **OZAP** | **Van, Ozalp-Mer** | **0.83** | **27** | P | **Pg** | **20 31 54.5** | **-0.3** |
| OZAP | | | | S | **Sb** | **20 32 06.8** | **-0.2** |
| OZAP | | | | *i* AML | AML | 20 32 19.0 | |
| | comp=N,1μm,0.8s | | | | | | |
| OZAP | | | | *i* AML | AML | 20 32 22.0 | |
| | comp=E,857nm,0.6s | | | | | | |
| **ADCV** | **BITLIS_Adilcev** | **1.08** | **325** | *e*Pg | **Pn** | **20 32 00.0** | **-0.4** |
| **ADCV** | **BITLIS_Adilcev** | **1.08** | **325** | P | **Pn** | **20 32 00.0** | **-0.4** |
| ADCV | | | | S | **Sn** | **20 32 16.2** | **+0.5** |
| ADCV | | | | *i* AML | AML | 20 32 19.0 | |
| | comp=N,665nm,0.9s | | | | | | |
| ADCV | | | | *i* AML | AML | 20 32 31.0 | |
| | comp=E,323nm,0.8s | | | | | | |
| **BLIS** | **Bitlis-Merkez** | **1.21** | **295** | *e*Pg | **Pn** | **20 32 01.6** | **-0.5** |
| **BLIS** | **Bitlis-Merkez** | **1.21** | **295** | P | **Pn** | **20 32 01.6** | **-0.5** |
| BLIS | | | | S | **Sn** | **20 32 22.3** | **+3.6** |
| BLIS | | | | *i* AML | AML | 20 32 26.0 | |
| | comp=E,558nm,0.5s | | | | | | |
| BLIS | | | | *i* AML | AML | 20 32 29.0 | |
| | comp=N,584nm,0.6s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CLDR** | **Caldiran** | **1.26** | **14** | PN | | | **Pn** | **20 32 03.6** | **+0.7** |
| CLDR | | | | SN | | | **Sn** | **20 32 22.7** | **+2.6** |
| **CLDR** | **Caldiran** | **1.26** | **14** | *e*Pn | | | **Pn** | **20 32 02.9** | **0.0** |
| **CLDR** | **Caldiran** | **1.26** | **14** | P | | | **Pn** | **20 32 03.0** | **+0.2** |
| CLDR | | | | S | | | **Sn** | **20 32 24.8** | **+4.7** |
| CLDR | | | | *i* AML | | AML | AML | 20 32 25.0 | |
| | comp=N,1μm,0.8s | | | | | | | | |
| CLDR | | | | *i* AML | | AML | AML | 20 32 30.0 | |
| | comp=E,1μm,0.8s | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **1.33** | **299** | PN | | | **Pb** | **20 32 04.3** | **+0.3** |
| GURO | | | | SN | | | **Sn** | **20 32 23.9** | **+2.3** |
| **GURO** | **Guroymak-BITLI** | **1.33** | **299** | *e*Pn | | | **Pb** | **20 32 04.0** | **0.0** |
| **MLAZ** | **Malazgirt-MUS** | **1.44** | **328** | PN | | | **Pg** | **20 32 06.3** | **0.0** |
| MLAZ | | | | SN | | | **Sg** | **20 32 27.4** | **+2.4** |
| **MLAZ** | **Malazgirt-MUS** | **1.44** | **328** | *e*Pn | | | **Pb** | **20 32 05.7** | **-0.1** |
| **ISHB** | **Shabestar** | **1.70** | **77** | *e*Pn | | | **Pn** | **20 32 08.5** | **-0.3** |
| **MIDY** | **Mardin/Midyat-** | **1.76** | **254** | P | | | **Pg** | **20 32 11.2** | **-1.2** |
| MIDY | | | | *i* AML | | AML | AML | 20 32 37.0 | |
| | comp=E,426nm,0.7s | | | | | | | | |
| MIDY | | | | S | | | **Sg** | **20 32 37.4** | **+2.2** |
| MIDY | | | | *i* AML | | AML | AML | 20 32 43.0 | |
| | comp=N,478nm,0.6s | | | | | | | | |
| **MUSM** | **Mu-Merkez** | **1.77** | **298** | *e*Pn | | | **Pg** | **20 32 11.7** | **-0.9** |
| **MUSM** | **Mu-Merkez** | **1.77** | **298** | P | | | **Pg** | **20 32 11.8** | **-0.9** |
| MUSM | | | | S | | | **Sg** | **20 32 37.2** | **+1.6** |
| MUSM | | | | *i* AML | | AML | AML | 20 32 40.0 | |
| | comp=E,195nm,0.7s | | | | | | | | |
| MUSM | | | | *i* AML | | AML | AML | 20 32 41.0 | |
| | comp=N,276nm,0.7s | | | | | | | | |
| **BTMN** | **Batman** | **1.78** | **270** | P | | | **Pg** | **20 32 12.4** | **-0.4** |
| BTMN | | | | S | | | **Sg** | **20 32 38.7** | **+2.9** |
| BTMN | | | | *i* AML | | AML | AML | 20 32 39.0 | |
| | comp=N,913nm,0.6s | | | | | | | | |
| BTMN | | | | *i* AML | | AML | AML | 20 32 40.0 | |
| | comp=E,838nm,1.1s | | | | | | | | |
| **SVAN** | **Silvan-Diyarba** | **1.84** | **278** | PN | | | **Pb** | **20 32 12.3** | **-0.4** |
| SVAN | | | | SN | | | **Sg** | **20 32 36.8** | **-1.2** |
| **SVAN** | **Silvan-Diyarba** | **1.84** | **278** | *e*Pn | | | **Pb** | **20 32 11.2** | **-1.5** |
| **SVAN** | **Silvan-Diyarba** | **1.84** | **278** | P | | | **Pg** | **20 32 12.8** | **-1.3** |
| SVAN | | | | S | | | **Sg** | **20 32 40.3** | **+2.3** |
| SVAN | | | | *i* AML | | AML | AML | 20 32 45.0 | |
| | comp=N,250nm,0.6s | | | | | | | | |
| SVAN | | | | *i* AML | | AML | AML | 20 32 49.0 | |
| | comp=E,139nm,0.6s | | | | | | | | |
| **IMRD** | **Marand** | **1.89** | **65** | *e*Pn | | | **Pb** | **20 32 12.9** | **-0.7** |
| IMRD | | | | *e* | | | | 20 32 46.0 | |
| | comp=Z,8μm,0.5s | | | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **1.90** | **353** | P | | | **Pb** | **20 32 14.1** | **+0.4** |
| KOTA | | | | *i* AML | | AML | AML | 20 32 49.0 | |
| | comp=Z,88nm,1.5s | | | | | | | | |
| KOTA | | | | *i* AML | | AML | AML | 20 32 56.0 | |
| | comp=Z,74nm,0.7s | | | | | | | | |
| **IAZR** | **Azarshahr** | **1.97** | **96** | *e*Pn | | | **Pb** | **20 32 14.4** | **-0.5** |
| IAZR | | | | *e* | | | | 20 32 56.4 | |
| | comp=Z,6μm,0.7s | | | | | | | | |
| **NAX** | **Nakhchivan** | **2.00** | **50** | *e*Pn | | | **Pg** | **20 32 16.2** | **-0.7** |
| **NAX** | **Nakhchivan** | **2.00** | **50** | P | | | **Pg** | **20 32 16.2** | **-0.7** |
| | SNR=24 | | | | | | | | |
| NAX | | | | S | | | **Sg** | **20 32 46.4** | **+3.5** |
| **IGDI** | **IGDIR** | **2.00** | **13** | *e*Pn | | | **Pg** | **20 32 16.0** | **-1.0** |
| **IGDI** | **IGDIR** | **2.00** | **13** | P | | | **Pg** | **20 32 16.0** | **-1.0** |
| IGDI | | | | *i* AML | | AML | AML | 20 32 52.0 | |
| | comp=Z,120nm,0.6s | | | | | | | | |
| IGDI | | | | *i* AML | | AML | AML | 20 32 53.0 | |
| | comp=Z,194nm,1.0s | | | | | | | | |
| **VRTB** | **Varto-Mus** | **2.04** | **308** | PN | | | **Pb** | **20 32 15.6** | **-0.4** |
| **VRTB** | **Varto-Mus** | **2.04** | **308** | *e*Pn | | | **Pg** | **20 32 17.7** | **0.0** |
| **VRTB** | **Varto-Mus** | **2.04** | **308** | P | | | **Pg** | **20 32 17.8** | **0.0** |
| **HYR** | **Heyderabad** | **2.08** | **30** | *e*Pn | | | **Pg** | **20 32 17.7** | **-0.9** |
| **HYR** | **Heyderabad** | **2.08** | **30** | P | | | **Pg** | **20 32 17.7** | **-0.9** |
| | SNR=30 | | | | | | | | |
| HYR | | | | S | | | **Sg** | **20 32 49.2** | **+3.6** |
| **MAHB** | **Mahabad** | **2.09** | **123** | *e*Pn | | | **Pb** | **20 32 16.7** | **-0.2** |
| MAHB | | | | *e*Sg | | | **Sg** | **20 32 47.0** | **+1.2** |
| **EATA** | **Eleskirt** | **2.10** | **338** | *e*Pn | | | **Pg** | **20 32 18.3** | **-0.7** |
| **EATA** | **Eleskirt** | **2.10** | **338** | P | | | **Pg** | **20 32 18.4** | **-0.7** |
| EATA | | | | *i* AML | | AML | AML | 20 32 55.0 | |
| | comp=Z,111nm,0.8s | | | | | | | | |
| EATA | | | | *i* AML | | AML | AML | 20 32 59.0 | |
| | comp=Z,93nm,0.7s | | | | | | | | |
| **ITBZ** | **Tabriz** | **2.10** | **81** | *e*Pn | | | **Pb** | **20 32 15.9** | **-1.2** |
| **TASB** | **TASBURUN-IGDIR** | **2.14** | **15** | *e*Pn | | | **Pb** | **20 32 18.5** | **+0.8** |
| **SBZ** | **Shahbuz** | **2.17** | **47** | *e*Pn | | | **Pb** | **20 32 18.9** | **+0.6** |
| **SBZ** | **Shahbuz** | **2.17** | **47** | P | | | **Pb** | **20 32 19.0** | **+0.6** |
| | SNR=16 | | | | | | | | |
| SBZ | | | | S | | | **Sg** | **20 32 50.8** | **+2.3** |
| **ORD** | **Ordubad** | **2.19** | **62** | *e*Pn | | | **Pb** | **20 32 18.7** | **+0.1** |
| **ORD** | **Ordubad** | **2.19** | **62** | P | | | **Pb** | **20 32 18.7** | **+0.1** |
| | SNR=7.7 | | | | | | | | |
| ORD | | | | S | | | **Sg** | **20 32 51.6** | **+2.4** |
| **SLHN** | **Bingol, Solhan** | **2.22** | **299** | P | | | **Pg** | **20 32 21.3** | **+0.1** |
| **TVRZ** | **Varzaqan** | **2.55** | **76** | *e* | | | | 20 33 29.4 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| **IBST** | **Bostanabad** | **2.68** | **94** | *e*Pn | | | **Pb** | **20 32 25.0** | **-2.1** |
| **IHRS** | **Heris** | **2.81** | **81** | *e*Pn | | | **Pb** | **20 32 26.7** | **-2.5** |
| **ISRB** | **Sarab** | **3.29** | **90** | *e*Pn | | | **Pn** | **20 32 33.1** | **+2.5** |
| **GDB** | **GEDABAY** | **3.29** | **31** | *e*Pn | | | **Pb** | **20 32 34.1** | **-3.4** |
| **GDB** | **GEDABAY** | **3.29** | **31** | P | | | **Pb** | **20 32 34.1** | **-3.4** |
| | SNR=18 | | | | | | | | |
| GDB | | | | S | | | **Sb** | **20 33 19.4** | **+1.6** |
| **QRD** | **Qoradiz** | **3.35** | **61** | P | | | **Pn** | **20 32 34.6** | **+3.2** |
| | SNR=23 | | | | | | | | |
| QRD | | | | S | | | **Sb** | **20 33 22.4** | **+3.2** |
| **QZX** | **Qazax, Azerbai** | **3.45** | **24** | P | | | **Pn** | **20 32 36.0** | **+3.2** |
| QZX | | | | S | | | **Sb** | **20 33 22.4** | **+0.3** |
| **GANJ** | **Ganja** | **3.49** | **38** | P | | | **Pb** | **20 32 37.2** | **-3.5** |
| | SNR=15 | | | | | | | | |
| GANJ | | | | S | | | **Sb** | **20 33 24.0** | **+0.8** |
| **AGDM** | **Agdam** | **3.55** | **51** | P | | | **Pn** | **20 32 37.2** | **+3.1** |
| | SNR=9.2 | | | | | | | | |
| AGDM | | | | S | | | **Sb** | **20 33 26.8** | **+1.8** |
| **BLQ** | **Beylaqan** | **3.63** | **59** | P | | | **Pn** | **20 32 38.9** | **+3.7** |
| | SNR=8.2 | | | | | | | | |
| BLQ | | | | S | | | **Sb** | **20 33 26.6** | **-0.8** |
| **YRD** | **Yardimli** | **3.84** | **74** | P | | | Pb | 20 32 42.4 | -4.4 |
| | SNR=13 | | | | | | | | |
| YRD | | | | S | | | **Sb** | **20 33 31.4** | **-2.1** |
| **LRK** | **Lerik** | **3.86** | **78** | P | | | **Pn** | **20 32 42.4** | **+3.8** |
| | SNR=18 | | | | | | | | |
| LRK | | | | S | | | **Sb** | **20 33 32.8** | **-1.4** |
| **IDHR** | **Dehrash** | **3.96** | **143** | *e*Pn | | | **Pn** | **20 32 42.0** | **+2.1** |
| IDHR | | | | *e* | | | | 20 33 56.8 | |
| | comp=Z,1μm,0.8s | | | | | | | | |
| **ZRD** | **Zardab** | **4.01** | **53** | P | | | **Pn** | **20 32 44.2** | **+3.8** |
| ZRD | | | | S | | | **Sb** | **20 33 36.8** | **-1.3** |
| **GLBA** | **Clilabad** | **4.04** | **69** | P | | | **Pn** | **20 32 44.3** | **+3.5** |
| | SNR=5.6 | | | | | | | | |
| GLBA | | | | S | | | **Sb** | **20 33 36.9** | **-2.3** |
| **ASTR** | **Astara** | **4.20** | **80** | P | | | **Pn** | **20 32 47.2** | **+4.2** |
| | SNR=9.8 | | | | | | | | |
| ASTR | | | | S | | | **Sb** | **20 33 45.4** | **+1.7** |
| **LKRN** | **Lenkeran, Azer** | **4.21** | **78** | P | | | **Pn** | **20 32 46.2** | **+3.0** |
| | SNR=7.0 | | | | | | | | |
| LKRN | | | | S | | | **Sb** | **20 33 44.0** | **-0.1** |
| **SEKA** | **Sheki** | **4.35** | **40** | P | | | Pb | 20 32 50.8 | -4.5 |
| | SNR=5.2 | | | | | | | | |
| **IGHG** | **Ghaleghazi** | **4.35** | **144** | *e* | | | | 20 34 23.3 | |
| | comp=Z,1μm,1.2s | | | | | | | | |
| **ZKTA** | **Zakatala** | **4.42** | **32** | P | | | Pb | 20 32 51.7 | -4.9 |
| | SNR=7.2 | | | | | | | | |
| ZKTA | | | | S | | | **Sb** | **20 33 46.3** | **-3.7** |
| **QBL** | **Gabala** | **4.51** | **47** | P | | | Pn | 20 32 52.5 | +5.2 |
| | SNR=5.5 | | | | | | | | |
| QBL | | | | S | | | **Sb** | **20 33 49.2** | **-3.5** |
| **IML** | **Ismayilli** | **4.62** | **50** | P | | | **Pn** | **20 32 52.8** | **+4.0** |
| IML | | | | S | | | **Sb** | **20 33 55.2** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **4.62** | **141** | *e* | | | | 20 34 23.1 | |
| | comp=Z,647nm,0.9s | | | | | | | | |
| **XNQ** | **Khinaliq** | **4.83** | **46** | P | | | **Pn** | **20 32 55.6** | **+3.7** |
| XNQ | | | | S | | | **Sb** | **20 33 58.7** | **-3.3** |
| **PQL** | **Pirkuli** | **4.87** | **52** | P | | | **Pn** | **20 32 55.9** | **+3.6** |
| | SNR=5.0 | | | | | | | | |
| PQL | | | | S | | | **Sb** | **20 33 58.1** | **-5.0** |
| **IBZA** | **Bozab** | **4.92** | **133** | *e*Pn | | | **Pn** | **20 32 55.3** | **+2.2** |
| **GBS** | **Qobustan** | **4.96** | **57** | P | | | **Pn** | **20 32 57.1** | **+3.6** |
| GBS | | | | S | | | **Sb** | **20 34 01.5** | **-4.0** |
| **ATGJ** | **Altiaghaj** | **5.13** | **53** | P | | | **Pn** | **20 32 58.5** | **+2.6** |
| ATGJ | | | | S | | | **Sb** | **20 34 05.5** | **-4.9** |
| **QSAR** | **Qusar** | **5.13** | **44** | P | | | **Pn** | **20 32 59.4** | **+3.6** |
| QSAR | | | | S | | | **Sb** | **20 34 04.1** | **-6.3** |
| **QUBA** | **Quba, Azerbaij** | **5.15** | **47** | P | | | **Pn** | **20 32 59.4** | **+3.2** |
| QUBA | | | | S | | | **Sb** | **20 34 06.3** | **-4.8** |
| **SIZA** | **Siyzn** | **5.22** | **51** | P | | | **Pn** | **20 33 00.2** | **+3.0** |
| | SNR=3.0 | | | | | | | | |
| **QABG** | **Abgarm-Qazvin** | **5.34** | **113** | *e*Pn | | | **Pn** | **20 33 00.9** | **+2.0** |
| **IDOB** | **Doab** | **5.59** | **136** | *e*Pn | | | **Pn** | **20 33 04.3** | **+1.9** |
| **IKFM** | **Kafar-mosalman** | **5.62** | **140** | *e* | | | | 20 33 12.7 | |
| | comp=Z,339nm,0.4s | | | | | | | | |
| IKFM | | | | *e*Pn | | | **Pn** | **20 33 04.4** | **+1.9** |
| **QALM** | **Alamut, Qazvin** | **5.88** | **102** | *e*Pn | | | **Pn** | **20 33 09.5** | **+3.1** |

**WEL 26 20:33:48.4,41˚S±3˚×17˚3E±˚, h8km±3km, M3.2/33, ML3.5/43, MLv3.2/33, Error ellipse: s-maj=0.0km s-min=0.0km az=84.7, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TKNZ** | **Takaka Hill** | **0.20** | **91** | P | Pg | 20 33 53.6 | +1.0 |
| TKNZ | | | | S | Sg | 20 33 56.5 | +1.1 |
| **QRZ** | **Quartz Range** | **0.24** | **329** | P | Pg | 20 33 54.0 | +0.9 |
| QRZ | | | | S | Sg | 20 33 57.1 | +0.8 |
| **MRNZ** | **Matariki Terra** | **0.37** | **172** | P | Pb | 20 33 56.7 | -0.6 |
| **NNZ** | **Nelson** | **0.55** | **110** | P | Pb | 20 33 59.9 | -0.5 |
| **THZ** | **Tophouse** | **0.75** | **168** | P | Pg | 20 34 03.2 | +0.4 |
| THZ | | | | S | Sb | 20 34 14.1 | -0.2 |
| **DUWZ** | **D'Urville Isla** | **0.96** | **77** | P | Pb | 20 34 07.2 | -0.1 |
| DUWZ | | | | S | Sb | 20 34 20.0 | -0.2 |
| **DSZ** | **Denniston Nort** | **0.98** | **223** | P | Pb | 20 34 07.7 | +0.1 |
| DSZ | | | | S | Sb | 20 34 21.2 | +0.5 |
| **TUWZ** | **Tuamarina** | **1.03** | **113** | P | Pg | 20 34 08.2 | +0.1 |
| **BSWZ** | **Blackbirch Sta** | **1.12** | **128** | P | Pn | 20 34 10.8 | +0.3 |
| **TCW** | **Tory Channel** | **1.21** | **99** | P | Pn | 20 34 11.7 | 0.0 |
| **CMWZ** | **Cape Campbell** | **1.35** | **123** | P | Pn | 20 34 08.3 | -5.3 |
| **KHZ** | **Kahutara** | **1.52** | **156** | P | Pg | 20 34 18.5 | +0.9 |
| **WEL** | **Wellington** | **1.59** | **100** | P | Pg | 20 34 18.8 | -0.1 |
| **BHW** | **Baring Head** | **1.69** | **104** | P | Pg | 20 34 20.2 | -0.5 |
| **KIW** | **Kapiti Island** | **1.69** | **85** | P | Pg | 20 34 20.5 | -0.2 |
| **LTZ** | **Lake Taylor** | **1.78** | **190** | P | Pb | 20 34 20.9 | -0.4 |
| **CAW** | **Cannon Point** | **1.80** | **93** | P | Pg | 20 34 22.4 | -0.4 |
| **OGWZ** | **Otaki Gorge** | **1.89** | **84** | P | Pg | 20 34 24.1 | -0.6 |
| **INZ** | **Inchbonnie** | **1.93** | **208** | P | Pn | 20 34 22.4 | +0.8 |
| **GVZ** | **Greta Valley S** | **1.95** | **173** | P | Pb | 20 34 24.9 | +0.7 |
| **MSWZ** | **Moikau Station** | **1.97** | **102** | P | Pb | 20 34 24.6 | +0.1 |
| **NBEZ** | **Newall Road No** | **1.98** | **28** | P | Pb | 20 34 23.9 | -0.8 |
| **PLWZ** | **Palliser** | **2.01** | **106** | P | Pb | 20 34 24.6 | -0.6 |
| **KHEZ** | **Kahui Hut** | **2.01** | **31** | P | Pb | 20 34 24.7 | -0.6 |
| **LREZ** | **Lake Rotokare** | **2.04** | **40** | P | Pg | 20 34 28.2 | +0.7 |
| **NEZ** | **North Egmont** | **2.06** | **32** | P | Pb | 20 34 25.6 | -0.5 |
| **PKE** | **Pukeiti** | **2.09** | **29** | P | Pb | 20 34 25.5 | -1.0 |
| **PAWZ** | **Paruwai Farm** | **2.10** | **101** | P | Pb | 20 34 26.1 | -0.6 |
| **MTW** | **Mount Morrison** | **2.13** | **94** | P | Pb | 20 34 26.9 | -0.3 |
| **HOWZ** | **Holdsworth Sta** | **2.14** | **87** | P | Pb | 20 34 27.3 | -0.2 |
| **AMCZ** | **Amberley** | **2.15** | **181** | P | Pg | 20 34 29.2 | -0.3 |
| **WAZ** | **Wanganui** | **2.17** | **55** | P | Pb | 20 34 27.7 | -0.2 |
| **MRZ** | **Mangatainoka R** | **2.22** | **81** | P | Pb | 20 34 29.4 | +0.6 |
| **OXZ** | **Oxford** | **2.34** | **192** | P | Pn | 20 34 29.1 | +1.8 |
| **TMWZ** | **Te Maipa** | **2.42** | **93** | P | Pb | 20 34 31.5 | -0.8 |
| **VRZ** | **Vera Road** | **2.48** | **41** | P | Pn | 20 34 30.9 | +1.9 |
| **WVZ** | **Waitaha Valley** | **2.51** | **215** | P | Pn | 20 34 31.1 | +1.7 |
| **MHCZ** | **Mount Hutt** | **2.63** | **198** | P | Pn | 20 34 31.4 | +0.1 |
| **MQZ** | **McQueen's Vall** | **2.67** | **181** | P | Pn | 20 34 33.8 | +2.0 |
| **TSZ** | **Takapi Road** | **2.67** | **70** | P | Pb | 20 34 35.1 | -1.5 |
| **PKVZ** | **Pokaka** | **2.68** | **50** | P | Pb | 20 34 34.4 | -2.2 |
| **WNVZ** | **Wahianoa** | **2.80** | **54** | P | Pb | 20 34 37.6 | -1.2 |
| **FWVZ** | **Far West T-bar** | **2.82** | **52** | P | Pb | 20 34 36.8 | -2.3 |
| **MOVZ** | **Moawhango** | **2.85** | **56** | P | Pb | 20 34 38.3 | -1.3 |
| **TUVZ** | **Tukino** | **2.87** | **53** | P | Pb | 20 34 38.7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KRBS | | | | | *e*S | | **Sg** | **20 35 43.0** | **+0.1** |
| | 5.9nm,0.2s | | | | | | | | |
| **KRBS** | **Karabastau** | **0.61** | **51** | | P | | **Pg** | **20 35 34.7** | **-0.1** |
| | 3.3nm,0.1s | | | | | | | | |
| KRBS | | | | | S | | **Sg** | **20 35 43.0** | **+0.1** |
| | 5.9nm,0.2s | | | | | | | | |
| **KBK** | **Karagaybulak** | **0.66** | **184** | | ⇓P | | **Pg** | **20 35 35.9** | **+0.1** |
| | 2.1nm,0.1s,SNR=9.2 | | | | | | | | |
| KBK | | | | | ⇓S | | **Sb** | **20 35 45.1** | **-0.9** |
| | 12nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.78** | **210** | | P | | **Pg** | **20 35 37.7** | **-0.2** |
| | 2.6nm,0.1s,SNR=9.1 | | | | | | | | |
| AAK | | | | | ⇓S | | **Sg** | **20 35 48.5** | **+0.4** |
| | 1.5nm,0.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.78** | **210** | | ⇓P | | **Pg** | **20 35 37.6** | **-0.3** |
| AAK | 0.4nm,0.2s | | | | | | | | |
| | 2.1nm,0.5s | | | | ⇑S | | **Sg** | **20 35 48.4** | **+0.2** |
| **MTBS** | **Maitube** | **1.05** | **100** | | *e*P | | **Pg** | **20 35 42.5** | **-0.6** |
| | 1.0nm,0.2s | | | | | | | | |
| MTBS | | | | | *e*S | | **Sg** | **20 35 56.5** | **-0.2** |
| | 4.0nm,0.2s | | | | | | | | |
| **MTBS** | **Maitube** | **1.05** | **100** | | P | | **Pg** | **20 35 42.5** | **-0.6** |
| | 1.0nm,0.2s | | | | | | | | |
| MTBS | | | | | S | | **Sg** | **20 35 56.5** | **-0.2** |
| | 4.0nm,0.2s | | | | | | | | |
| **KUU** | **Kurty** | **1.12** | **59** | | *e*P | | **Pb** | **20 35 43.6** | **-0.8** |
| | 0.4nm,0.2s | | | | | | | | |
| KUU | | | | | *e*S | | **Sg** | **20 35 58.6** | **-0.5** |
| | 4.5nm,0.1s | | | | | | | | |
| **KUU** | **Kurty** | **1.12** | **59** | | P | | **Pb** | **20 35 43.6** | **-0.8** |
| | 0.4nm,0.2s | | | | | | | | |
| KUU | | | | | S | | **Sg** | **20 35 58.6** | **-0.5** |
| | 4.5nm,0.1s | | | | | | | | |
| **UCH** | **Uchtor** | **1.15** | **199** | | ⇑P | | **Pg** | **20 35 44.4** | **-0.6** |
| | 0.6nm,0.1s,SNR=5.6 | | | | | | | | |
| UCH | | | | | ⇓S | | **Sg** | **20 35 59.9** | **-0.1** |
| | 1.7nm,0.1s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.27** | **71** | | *e*P | | **Pn** | **20 35 46.5** | **-0.4** |
| | 0.4nm,0.2s | | | | | | | | |
| KTBS | | | | | *e*S | | **Sb** | **20 36 03.4** | **-0.2** |
| | 7.8nm,0.2s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.27** | **71** | | P | | **Pn** | **20 35 46.5** | **-0.4** |
| | 0.4nm,0.2s | | | | | | | | |
| KTBS | | | | | S | | **Sb** | **20 36 03.4** | **-0.2** |
| | 7.8nm,0.2s | | | | | | | | |
| **MRKS** | **Merke** | **1.43** | **247** | | *e*P | | **Pg** | **20 35 50.3** | **0.0** |
| | 0.8nm,0.3s | | | | | | | | |
| MRKS | | | | | *e*S | | **Sg** | **20 36 09.4** | **+0.4** |
| | 7.7nm,0.4s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.44** | **100** | | *e*P | | **Pn** | **20 35 49.5** | **+0.1** |
| | 0.8nm,0.1s | | | | | | | | |
| TNSS | | | | | *e*S | | **Sn** | **20 36 08.5** | **-0.2** |
| | 1.7nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.44** | **100** | | P | | **Pn** | **20 35 49.5** | **+0.1** |
| | 0.8nm,0.1s | | | | | | | | |
| TNSS | | | | | S | | **Sn** | **20 36 08.5** | **-0.2** |
| | 1.7nm,0.3s | | | | | | | | |
| **MDOK** | **Medeo** | **1.49** | **95** | | *e*P | | **Pb** | **20 35 50.7** | **-0.2** |
| | 1.5nm,0.1s | | | | | | | | |
| MDOK | | | | | *e*S | | **Sb** | **20 36 10.4** | **+0.4** |
| | 3.4nm,0.2s | | | | | | | | |
| **MDOK** | **Medeo** | **1.49** | **95** | | P | | **Pn** | **20 35 50.3** | **+0.4** |
| | 0.8nm,0.5s | | | | | | | | |
| MDOK | | | | | S | | **Sb** | **20 36 10.5** | **+0.5** |
| | 0.8nm,0.2s | | | | | | | | |
| **MDOK** | **Medeo** | **1.49** | **95** | | Pg | | **Pb** | **20 35 50.7** | **-0.2** |
| | 1.5nm,0.1s | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 20 36 10.4 | |
| | 3.4nm,0.2s | | | | | | | | |
| **CHKK** | **Chushkaly** | **1.53** | **69** | | *e*P | | **Pb** | **20 35 51.2** | **-0.2** |
| | 0.7nm,0.1s | | | | | | | | |
| CHKK | | | | | *e*S | | **Sb** | **20 36 11.3** | **+0.4** |
| | 8.3nm,0.2s | | | | | | | | |
| **CHKK** | **Chushkaly** | **1.53** | **69** | | P | | **Pb** | **20 35 51.2** | **-0.2** |
| | 0.7nm,0.1s | | | | | | | | |
| CHKK | | | | | S | | **Sb** | **20 36 11.3** | **+0.4** |
| | 8.3nm,0.2s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.53** | **92** | | *e*P | | **Pb** | **20 35 51.8** | **+0.2** |
| | 0.6nm,0.2s | | | | | | | | |
| KOTS | | | | | *e*S | | **Sg** | **20 36 12.2** | **0.0** |
| | 4.8nm,0.3s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.53** | **92** | | P | | **Pb** | **20 35 51.8** | **+0.2** |
| | 0.6nm,0.2s | | | | | | | | |
| KOTS | | | | | S | | **Sg** | **20 36 12.2** | **0.0** |
| | 4.8nm,0.3s | | | | | | | | |
| **BTLS** | **Baital** | **1.86** | **338** | | *e*P | | **Pb** | **20 35 56.9** | **-0.1** |
| | 1.1nm,0.4s | | | | | | | | |
| BTLS | | | | | *e*S | | **Sb** | **20 36 20.8** | **+0.4** |
| | 4.4nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.23** | **65** | | *e*P | | **Pb** | **20 36 03.4** | **+0.1** |
| | 0.5nm,0.3s | | | | | | | | |
| ARXS | | | | | *e*S | | **Sb** | **20 36 32.2** | **+1.2** |
| | 4.4nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **2.23** | **65** | | Pg | | **Pb** | **20 36 03.4** | **+0.1** |
| | 0.5nm,0.3s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 20 36 32.2 | |
| | 4.4nm,0.4s | | | | | | | | |
| **KURS** | **Kuram** | **2.31** | **85** | | *e*P | | **Pb** | **20 36 04.8** | **+0.2** |
| | 0.4nm,0.3s | | | | | | | | |
| KURS | | | | | *e*S | | **Sb** | **20 36 34.6** | **+1.4** |
| | 1.0nm,0.5s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.63** | **72** | | *e*P | | **Pb** | **20 36 10.4** | **+0.2** |
| | 0.9nm,0.1s | | | | | | | | |
| BLB | | | | | *e*S | | **Sb** | **20 36 44.2** | **+1.6** |
| | 3.8nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **2.63** | **72** | | Pg | | **Pb** | **20 36 10.4** | **+0.2** |
| | 0.9nm,0.1s | | | | | | | | |
| BLB | | | | | Lg | | Lg | 20 36 44.2 | |
| | 3.8nm,0.3s | | | | | | | | |

*DJA **26** 21:12:01.9±1.1,8˚S±5˝×10˚9E±˚,h15km±9km,M4.5/25, mb4.5/7,mB5.3/5,MLv4.4/25,Mw(mB)4.7/5*
*NEIC **26** 21:12:01.9±1.8,8.02S±0.06×108.81E±0.05,h53km±6km, mb4.2/17,Error ellipse: s-maj=8.3km s-min=7.2km az=163.0*
*IDC **26** 21:12:07.0±1.2,7˚.88S×109˚.18E,h101km±11km,mb3.8/13, mb1 3.9/15,mb1mx3.7/40,mbtmp4.1/15,MS3.0/3, Ms1 3.1/3,ms1mx2.6/76,Error ellipse: s-maj=28.5km s-min=10.5km az=42.0*

**ISC 26 21:12:02.4±0.5,8˚39S±0˙.06×108˚.98E±0˙.04,h50km,n79, σ1ᵎ76/69,mb4.1/18,Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMJI** | **Cimerak** | **0.80** | **319** | P | **Pn** | **21 12 18.6** | **+1.2** |
| **KPJI** | **Karang Pucung** | **1.05** | **357** | P | **Pn** | **21 12 21.7** | **+0.9** |
| **YOGI** | **Yogyakarta** | **1.42** | **67** | P | **Pn** | **21 12 26.1** | **+0.2** |
| **UGM** | **Wanagama** | **1.60** | **73** | | **Pn** | **21 12 29.2** | **+0.9** |
| UGM | | | | Sn | **Sn** | **21 12 46.9** | **-1.0** |
| **UGM** | **Wanagama** | **1.60** | **73** | P | **Pn** | **21 12 28.9** | **+0.6** |
| **UGM** | **Wanagama** | **1.60** | **73** | P | **Pn** | **21 12 29.3** | **+0.9** |
| **SMRI** | **Semarang** | **1.97** | **48** | Pn | **Pn** | **21 12 34.4** | **+1.0** |
| **SMRI** | **Semarang** | **1.97** | **48** | P | **Pn** | **21 12 34.8** | **+1.4** |
| **SMRI** | **Semarang** | **1.97** | **48** | P | **Pn** | **21 12 35.1** | **+1.7** |
| **LEM** | **Lembang** | **2.06** | **319** | P | **Pn** | **21 12 38.0** | **+3.3** |
| | 39nm,0.3s,baz=71,slow=11,SNR=40 | | | | | | |
| LEM | | | | S | **Sn** | **21 13 02.2** | **+2.9** |
| | 81nm,0.3s,baz=348,slow=19,SNR=12 | | | | | | |
| LEM | | | | LR | LR | 21 13 20.0 | |
| | comp=Z,234nm,18.8s,baz=330,slow=39 | | | | | | |
| **LEM** | **Lembang** | **2.06** | **319** | P | **Pn** | **21 12 37.3** | **+2.6** |
| **CNJI** | **Cibinong** | **2.12** | **300** | P | **Pn** | **21 12 36.6** | **+1.2** |
| **PCJI** | **Pacitan** | **2.19** | **85** | P | **Pn** | **21 12 37.6** | **+1.3** |
| **UWJI** | **Ujung Watu** | **2.77** | **45** | P | **Pn** | **21 12 44.7** | **+0.4** |
| **SKJI** | **Sukabumi** | **2.77** | **300** | P | **Pn** | **21 12 46.7** | **+2.4** |
| **PWJI** | **Pagerwojo** | **2.82** | **83** | P | **Pn** | **21 12 46.0** | **+1.0** |
| **DBJI** | **Dramaga** | **2.87** | **309** | P | **Pn** | **21 12 48.0** | **+2.3** |
| **TBJI** | **Tambak Boyo** | **3.25** | **61** | P | **Pn** | **21 12 51.5** | **+0.7** |
| **CGJI** | **Cibinong** | **3.70** | **298** | P | **Pn** | **21 12 58.5** | **+1.4** |
| **GRJI** | **Gresik** | **3.77** | **67** | P | **Pn** | **21 12 59.3** | **+1.3** |
| **XMI** | **Christmas Isla** | **3.84** | **237** | P | **Pn** | **21 13 00.7** | **+1.7** |
| **XMIS** | **Christmas Isla** | **3.88** | **237** | | **Pn** | **21 13 00.5** | **+0.9** |
| XMIS | | | | Sn | **Sn** | **21 13 42.8** | **-1.2** |
| **XMIS** | **Christmas Isla** | **3.88** | **237** | P | **Pn** | **21 13 01.0** | **+1.4** |
| **GMJI** | **Gumukmas** | **4.42** | **89** | P | **Pn** | **21 13 08.1** | **+1.1** |
| **BLJI** | **Banyuglugur** | **4.62** | **82** | P | **Pn** | **21 13 11.2** | **+1.5** |
| **BLSI** | **Bandar Lampung** | **4.77** | **309** | P | **Pn** | **21 13 14.1** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** | **5.12** | **91** | Pn | **Pn** | **21 13 18.4** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **5.12** | **91** | P | **Pn** | **21 13 18.1** | **+1.5** |
| | 0.5nm2µm68nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.12** | **91** | P | **Pn** | **21 13 19.6** | **+3.0** |
| **ABJI** | **Asem Bagus** | **5.24** | **84** | P | **Pn** | **21 13 19.2** | **+1.0** |
| | 0.4nm59nm,0.5s | | | | | | |
| **KASI** | **Kota Agung** | **5.28** | **302** | P | **Pn** | **21 13 20.6** | **+1.8** |
| | 0.2nm582nm32nm,0.7s | | | | | | |
| **KLSI** | | **5.60** | **311** | P | **Pn** | **21 13 25.4** | **+2.3** |
| | 0.1nm12nm,0.8s | | | | | | |
| **LWLI** | **Liwa** | **5.92** | **304** | P | **Pn** | **21 13 30.1** | **+2.4** |
| | 1.2nm50nm,0.7s | | | | | | |
| **MDSI** | **Maura Dua** | **6.15** | **309** | P | **Pn** | **21 13 32.6** | **+1.9** |
| | 0.1nm11nm,1.2s | | | | | | |
| **PBKI** | **Pangkalan Bun** | **6.25** | **26** | P | **Pn** | **21 13 34.0** | **+1.9** |
| | 0.3nm1µm76nm,0.8s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.80** | **335** | P | **Pn** | **21 13 40.9** | **+1.2** |
| **MNAI** | **Manna** | **7.20** | **303** | P | **Pn** | **21 13 48.7** | **+3.5** |
| **PLAI** | **Plampang** | **8.71** | **94** | P | **Pn** | **21 14 08.5** | **+2.6** |
| | 26nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **11.21** | **73** | LR | LR | 21 19 02.7 | |
| | comp=Z,25nm,20.7s,baz=262,slow=38 | | | | | | |
| **BATI** | **Baumata** | **14.61** | **98** | P | **Pn** | **21 15 26.9** | **+0.7** |
| | 1.5nm,0.3s,baz=282,slow=9.3,SNR=1.9 | | | | | | |
| **SOEI** | **Soe** | **15.16** | **96** | | **Pn** | **21 15 34.5** | **+0.9** |
| SOEI | | | | IAmb | IAmb | 21 15 47.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **KULM** | **Kulim** | **15.93** | **328** | | **Pn** | **21 15 39.5** | **-3.8** |
| KULM | | | | IAmb | IAmb | 21 15 55.3 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.78** | **143** | Pn | **P** | **21 15 57.0** | **+1.4** |
| PSA00 | | | | IAmb | IAmb | 21 16 15.9 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.86** | **122** | P | **Pn** | **21 16 20.4** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=283,slow=4.9,SNR=5.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.86** | **122** | P | **Pn** | **21 16 20.8** | **+1.2** |
| **KNRA** | **Kununurra** | **20.65** | **112** | P | **P** | **21 16 38.9** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 21 16 41.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **27.08** | **117** | P | **P** | **21 17 41.4** | **+0.8** |
| WB0 | | | | IAmb | IAmb | 21 17 41.6 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.09** | **118** | P | **P** | **21 17 40.2** | **-0.6** |
| | comp=Z,2.4nm,0.7s,baz=291,slow=11,SNR=9.8 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 20 59.3** | **-1.6** |
| | comp=Z,0.8nm,0.7s,baz=293,slow=2.0,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.09** | **118** | P | **P** | **21 17 42.1** | **+1.3** |
| **WB2** | **Warramunga Arr** | **27.10** | **118** | P | **P** | **21 17 41.4** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 21 17 41.8 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **27.28** | **118** | P | **P** | **21 17 42.9** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 21 17 46.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **28.29** | **125** | P | **P** | **21 17 52.5** | **+1.1** |
| **ASAR** | **Alice Springs** | **28.29** | **125** | P | **P** | **21 17 52.5** | **+1.1** |
| | comp=Z,1.9nm,0.6s,baz=305,slow=9.4,SNR=33 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 21 02.7** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=312,slow=2.6,SNR=7.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.45** | **340** | P | P | 21 17 49.6 | -3.2 |
| | comp=Z,0.4nm,0.4s,baz=173,slow=7.9,SNR=5.0 | | | | | | |
| CMAR | | | | LR | LR | 21 29 25.5 | |
| | comp=Z,27nm,18.8s,baz=190,slow=37 | | | | | | |
| **H08S2** | **Diego Garcia H** | **36.13** | **269** | T | T | 21 57 21.4 | |
| | baz=94,slow=75,SNR=92 | | | | | | |
| **H08S3** | **Diego Garcia H** | **36.14** | **269** | T | T | 21 57 27.5 | |
| | baz=94,slow=75,SNR=115 | | | | | | |
| **H08S1** | **Diego Garcia H** | **36.15** | **269** | T | T | 21 57 18.8 | |
| | baz=94,slow=75,SNR=17 | | | | | | |
| **STKA** | **Stephens Creek** | **38.26** | **132** | P | **P** | **21 19 19.6** | **+1.6** |
| | comp=Z,2.6nm,0.6s,baz=308,slow=8.2,SNR=12 | | | | | | |
| STKA | | | | PcP | **PcP** | **21 21 30.5** | **-1.0** |
| | comp=Z,1.4nm,0.4s,baz=314,slow=4.6,SNR=3.9 | | | | | | |
| **JSU** | **Suzuyama** | **44.68** | **26** | P | P | 21 20 07.0 | -3.6 |
| **MJAR** | **Matsushiro Arr** | **52.45** | **30** | P | P | 21 21 04.7 | -5.5 |
| | comp=Z,1.2nm,0.6s,baz=216,slow=7.8,SNR=3.2 | | | | | | |
| **NIL** | **Nilore** | **53.84** | **323** | P | P | 21 21 14.5 | -6.0 |
| NIL | | | | IAmb | IAmb | 21 21 14.9 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **56.02** | **358** | P | P | 21 21 32.3 | -3.8 |
| | comp=Z,0.4nm,0.6s,baz=174,slow=8.0,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **56.02** | **358** | IAmb | IAmb | 21 21 41.3 | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.86** | **339** | P | P | 21 21 58.1 | -4.8 |
| | comp=Z,0.8nm,0.5s,baz=144,slow=7.5,SNR=13 | | | | | | |
| MKAR | | | | PcP | **PcP** | **21 22 47.0** | **-1.9** |
| | comp=Z,1.0nm,0.6s,baz=141,slow=6.6,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **65.37** | **345** | P | P | 21 22 35.7 | -3.8 |
| | comp=Z,0.4nm,0.3s,baz=142,slow=5.3,SNR=3.2 | | | | | | |
| **MAW** | **Mawson** | **66.62** | **198** | P | **P** | **21 22 48.4** | **+1.1** |
| **ABKAR** | **Akbulak array** | **71.61** | **329** | P | **P** | 21 23 14.9 | -3.6 |
| **KBZ** | **Khabaz** | **78.99** | **318** | P | **P** | **21 23 58.9** | **-2.1** |
| | comp=Z,3.1nm,0.9s,baz=132,slow=3.6,SNR=9.2 | | | | | | |
| **BOSA** | **Boshof** | **80.55** | **242** | P | **P** | **21 24 10.6** | **+0.5** |
| | comp=Z,3.1nm,1.0s,baz=117,slow=6.8,SNR=1.8 | | | | | | |
| **BOSA** | **Boshof** | **80.55** | **242** | P | **P** | **21 24 10.1** | **0.0** |
| **TIXI** | **Tiksi** | **80.95** | **6** | P | P | 21 24 06.9 | -4.2 |
| TIXI | | | | IAmb | IAmb | 21 24 07.8 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **84.03** | **238** | LR | LR | 21 54 28.4 | |
| | comp=Z,30nm,21.2s,baz=170,slow=30 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.21** | **311** | P | **P** | **21 24 26.1** | **-2.8** |
| | comp=Z,2.4nm,0.8s,baz=144,slow=7.1,SNR=13 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.21** | **311** | P | **P** | **21 24 26.6** | **-2.3** |
| **AKASG** | **Malin Array Be** | **90.00** | **321** | P | P | 21 24 51.9 | -4.6 |
| | comp=Z,0.6nm,0.5s,baz=87,slow=4.2,SNR=4.8 | | | | | | |
| **FINES** | **FINESS Array B** | **93.32** | **331** | P | **P** | **21 25 12.5** | **-1.9** |
| | comp=Z,6.7nm,1.1s,baz=349,slow=1.9,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **117.46** | **21** | PKP | **PKPdf** | **21 30 39.8** | **-2.5** |
| | comp=Z,0.2nm,0.6s,baz=307,slow=1.9,SNR=4.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **142.95** | **51** | PKhKP | PKPpre | 21 31 25.7 | |
| | comp=Z,0.1nm,0.5s,baz=298,slow=1.9,SNR=1.9 | | | | | | |
| **TKL** | **Tuckaleechee C** | **150.46** | **21** | PKPbc | **PKPdf** | **21 31 46.6** | **+2.9** |
| | comp=Z,3.6nm,0.6s,baz=114,slow=7.0,SNR=5.5 | | | | | | |

**IDC 26 21:15:50.1±33.0,23˚.06S×176˚.76W,h0km,mb3.9/4, mb1 4.1/4,mb1mx3.6/35,mbtmp3.9/4,Error ellipse: s-maj=631.8km s-min=168.2km az=92.0,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **37.79** | **247** | P | P | 21 23 08.5 | +0.2 |
| | 1.0nm,0.5s,baz=92,slow=9.4,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **45.11** | **259** | P | P | 21 24 08.2 | -0.3 |
| | 0.8nm,0.8s,baz=91,slow=7.3,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.44** | **264** | P | P | 21 24 10.6 | -0.6 |
| | 0.7nm,0.4s,baz=105,slow=8.1,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.87** | **264** | P | P | 21 25 15.9 | +0.5 |
| | 1.5nm,1.0s,baz=95,slow=5.4,SNR=1.7 | | | | | | |

*KRNET **26** 21:50:03.3±0.1,40˚.02N×70˚.92E,h22km,mb3.4*
*NNC **26** 21:50:05.6±1.2,40˚.18N×70˚.96E,h0km,mb3.7,mpv3.4, Error ellipse: s-maj=9.8km s-min=5.2km az=15.0*
*SOME **26** 21:50:05.6,40˚.22N×70˚.97E,h10km*

**ISC 26 21:50:01.5±1.2,40˚.02N±0˙.03×71˚.07E±0˙.03,h6km±10km, n42,σ1ᵎ72/68,23C-3D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.20** | **281** | ⇑*i*P | **Pg** | **21 50 06.3** | **+0.8** |
| | baz=95 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **21 50 08.7** | **+0.5** |
| | baz=95 | | | | | | |
| **DRK** | **Karamyk** | **0.78** | **134** | ⇑*i*P | **Pn** | **21 50 19.6** | **+0.2** |
| | baz=28 | | | | | | |
| DRK | | | | ⇑*i*S | **Sn** | **21 50 31.5** | **-0.1** |
| | baz=28 | | | | | | |
| **GAR** | **Garm** | **1.18** | **210** | ⇑*i*P | **Pn** | **21 50 24.2** | **-0.5** |
| | baz=5.0 | | | | | | |
| GAR | | | | ⇑*i*S | **Sb** | **21 50 38.9** | **-1.0** |
| | baz=5.0 | | | | | | |
| **OHH** | **Osh** | **1.40** | **68** | ⇑*i*P | **Pg** | **21 50 31.1** | **+2.7** |
| | baz=70 | | | | | | |
| OHH | | | | ⇑*i*S | **Sg** | **21 50 51.1** | **+4.5** |
| | baz=70 | | | | | | |
| **TRKS** | **Terek-Say** | **1.51** | **2** | ⇑*i*P | **Pb** | **21 50 30.0** | **-0.1** |
| | baz=8.0 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sb** | **21 50 49.4** | **-0.2** |
| | baz=8.0 | | | | | | |
| **TAS** | **Tashkent** | **1.88** | **315** | ⇑*i*P | **Pb** | **21 50 36.0** | **-0.3** |
| | baz=17 | | | | | | |
| TAS | | | | ⇑*i*S | **Sb** | **21 50 59.9** | **-0.1** |
| | baz=17 | | | | | | |
| **ARK** | **Arkit** | **1.90** | **21** | ⇑*i*P | **Pg** | **21 50 38.1** | **+0.2** |
| | baz=24 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **21 51 03.1** | **+0.5** |
| | baz=24 | | | | | | |
| **IUG** | **Iuzhnay** | **2.27** | **340** | *e*P | **Pb** | **21 50 43.7** | **+0.7** |
| | 1µm,0.5s | | | | | | |
| IUG | | | | *e*S | **Sb** | **21 51 10.7** | **-0.6** |
| | 135nm,0.6s | | | | | | |
| **IUG** | **Iuzhnay** | **2.27** | **340** | Pg | **Pb** | **21 50 43.7** | **+0.7** |
| | 1µm,0.5s | | | | | | |
| IUG | | | | Lg | Lg | 21 51 11.1 | |
| | 107nm,0.5s | | | | | | |
| **DZA** | **Taraz** | **2.88** | **4** | *e*P | **Pg** | **21 50 57.2** | **+0.6** |
| | 22nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **21 51 33.4** | **-0.5** |
| | 125nm,0.4s | | | | | | |
| **DZA** | **Taraz** | **2.88** | **4** | Pg | **Pg** | **21 50 57.2** | **+0.6** |
| | 22nm,0.1s | | | | | | |
| DZA | | | | Lg | Lg | 21 51 33.4 | |
| | 67nm,0.2s | | | | | | |
| **ARLS** | **Aral** | **3.07** | **52** | ⇑*i*P | **Pb** | **21 50 55.1** | **-1.6** |
| | baz=54 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **21 51 32.4** | **-2.2** |
| | baz=54 | | | | | | |
| **KK02** | **Karatay Array** | **3.11** | **352** | ⇓Pn | **Pn** | **21 50 52.6** | **+1.4** |
| | 0.8nm,0.4s | | | | | | |
| KK02 | | | | ⇑Pg | **Pg** | **21 50 59.3** | **-1.8** |
| | 5.3nm,0.3s | | | | | | |
| KK02 | | | | ⇑Lg | Lg | 21 51 40.5 | |
| | 20nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **3.15** | **343** | *e*P | **Pb** | **21 50 57.1** | **-0.8** |
| | 4.5nm,0.1s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **21 51 33.5** | **-3.0** |
| | 22nm,0.2s | | | | | | |
| **BRLS** | **Borolday** | **3.15** | **343** | Pg | **Pb** | **21 50 57.1** | **-0.8** |
| | 4.5nm,0.1s | | | | | | |
| BRLS | | | | Lg | Lg | 21 51 33.6 | |
| | 22nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **3.17** | **30** | *e*P | **Pg** | **21 51 03.3** | **+1.0** |
| | 21nm,0.7s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **21 51 44.3** | **+1.1** |
| | 23nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **3.17** | **30** | Pg | **Pg** | **21 51 03.1** | **+0.9** |
| | 22nm,0.5s | | | | | | |
| MRKS | | | | Lg | Lg | 21 51 44.3 | |
| | 23nm,0.4s | | | | | | |
| **UCH** | **Uchtor** | **3.41** | **49** | ⇑*e*P | **Pb** | **21 51 00.0** | **-2.6** |
| | baz=50 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **21 51 40.7** | **-3.8** |
| | baz=50 | | | | | | |
| **AAK** | **Ala-Archa** | **3.67** | **43** | ⇑Pn | **Pn** | **21 51 02.4** | **+3.3** |
| | 1.0nm,0.6s | | | | | | |
| AAK | | | | ⇓Pg | **Pg** | **21 51 10.1** | **-1.7** |
| | 3.7nm,0.5s | | | | | | |
| AAK | | | | Lg | Lg | 21 52 00.0 | |
| | 4.4nm,0.3s | | | | | | |
| **KBK** | **Karagaybulak** | **3.93** | **47** | ⇑*e*P | **Pb** | **21 51 07.0** | **-4.4** |
| | baz=48 | | | | | | |
| KBK | | | | ⇑*i*S | **Sn** | **21 51 53.0** | **+3.8** |
| | baz=48 | | | | | | |
| **SGDS** | **Sogindy** | **4.34** | **37** | *e*P | **Pg** | **21 51 24.3** | **-0.3** |
| | 3.0nm,0.5s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **21 52 20.2** | **-0.7** |
| | 6.3nm,0.5s | | | | | | |
| **SGDS** | **Sogindy** | **4.34** | **37** | Pg | **Pg** | **21 51 24.3** | **-0.3** |
| | 3.0nm,0.5s | | | | | | |
| SGDS | | | | Lg | Lg | 21 52 20.2 | |
| | 6.3nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.47** | **48** | Pn | **Pn** | **21 51 12.9** | **+2.9** |
| TKM2 | | | | ⇓Lg | Lg | 21 52 25.3 | |
| | 4.0nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.77** | **46** | *e*P | **Pg** | **21 51 32.7** | **-0.2** |
| | 1.4nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **21 52 34.4** | **-0.3** |
| | 4.7nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **4.77** | **46** | Pg | **Pg** | **21 51 32.7** | **-0.2** |
| | 1.4nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 21 52 34.4 | |
| | 4.7nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **5.03** | **42** | *e*P | **Pg** | **21 51 37.2** | **-0.6** |
| | 1.0nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **21 52 42.0** | **-1.0** |
| | 3.3nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **5.03** | **42** | Pg | **Pg** | **21 51 37.2** | **-0.6** |
| | 1.0nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 21 52 42.0 | |
| | 3.3nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **5.08** | **51** | *e*P | **Pg** | **21 51 39.3** | **+0.5** |
| | 0.9nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **21 52 45.3** | **+0.7** |
| | 3.0nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **5.08** | **51** | Pg | **Pg** | **21 51 39.3** | **+0.5** |
| | 0.9nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 21 52 45.3 | |
| | 3.0nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.34** | **54** | *e*P | **Pg** | **21 51 44.8** | **+1.0** |
| | 1.1nm,0.6s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **21 52 55.0** | **+2.0** |
| | 1.7nm,0.7s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.34** | **54** | Pg | **Pg** | **21 51 44.8** | **+1.0** |
| | 1.1nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 21 52 55.0 | |
| | 1.7nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **5.47** | **53** | Pn | **Pn** | **21 51 26.8** | **+3.1** |
| | 2.9nm,1.0s | | | | | | |
| MDOK | | | | Lg | Lg | 21 52 58.2 | |
| | 3.3nm,0.6s | | | | | | |
| **BTLS** | **Baital** | **5.48** | **23** | *e*P | **Pg** | **21 51 44.3** | **-2.1** |
| | 3.7nm,0.3s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **21 52 54.0** | **-3.3** |
| | 3.3nm,0.3s | | | | | | |
| **BTLS** | **Ba

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KIBS | | | | *i* AML | AML | 21 53 17.0 | |
| | comp=N,66nm,0.9s | | | | | | |
| KIBS | | | | *i* AML | AML | 21 53 21.0 | |
| | comp=E,103nm,0.9s | | | | | | |
| **KAGI** | **orum-Kargı** | **1.17** | **46** | P | **Pg** | **21 52 51.4** | **-1.3** |
| KAGI | | | | S | **Sn** | **21 53 09.1** | **-0.5** |
| KAGI | | | | *i* AML | AML | 21 53 16.0 | |
| | comp=N,114nm,0.3s | | | | | | |
| **KKUL** | **Konya-Kulu** | **1.21** | **197** | P | **Pn** | **21 52 53.1** | **-0.8** |
| KKUL | | | | S | **Sn** | **21 53 12.4** | **+1.8** |
| KKUL | | | | *i* AML | AML | 21 53 19.0 | |
| | comp=N,118nm,0.6s | | | | | | |
| **SERE** | **Sereflikochisa** | **1.39** | **174** | PN | **Pg** | **21 52 57.0** | **+0.2** |
| **BTIN** | **Bartın** | **1.56** | **327** | P | **Pb** | **21 52 58.7** | **-0.9** |
| BTIN | | | | S | **Sg** | **21 53 21.8** | **+1.4** |
| BTIN | | | | *i* AML | AML | 21 53 23.0 | |
| | comp=E,58nm,0.8s | | | | | | |
| BTIN | | | | *i* AML | AML | 21 53 26.0 | |
| | comp=N,72nm,0.7s | | | | | | |
| **YIGI** | **Dzce** | **1.59** | **294** | P | **Pg** | **21 53 00.2** | **-0.6** |
| YIGI | | | | S | **Sg** | **21 53 22.4** | **+0.9** |
| **KOZK** | **Kozakli-Nevseh** | **1.60** | **134** | PN | **Pb** | **21 52 59.8** | **-0.6** |
| **AUSIV** | **SIVRIHISAR** | **1.66** | **238** | PN | **Pb** | **21 53 00.8** | **-0.6** |
| **MDUB** | **Mudurnu** | **1.67** | **276** | PN | **Pg** | **21 53 01.3** | **-0.9** |
| **SVRH** | **Sivrihisar-ESK** | **1.67** | **239** | PN | **Pb** | **21 53 01.1** | **-0.4** |
| **SIRC** | **Yozgat** | **1.69** | **125** | P | **Pg** | **21 53 01.6** | **-1.0** |
| SIRC | | | | S | **Sg** | **21 53 27.0** | **+2.5** |
| SIRC | | | | *i* AML | AML | 21 53 29.0 | |
| | comp=N,73nm,0.7s | | | | | | |
| SIRC | | | | *i* AML | AML | 21 53 32.0 | |
| | comp=E,46nm,0.6s | | | | | | |
| **BZK** | **Bozkurt** | **1.70** | **16** | PN | **Pb** | **21 53 01.8** | **-0.2** |
| **CHBY** | **Cihanbeyli** | **1.78** | **192** | PN | **Pb** | **21 53 02.4** | **-1.0** |
| **KIZT** | **Kizilcal** | **1.85** | **219** | PN | **Pb** | **21 53 03.6** | **-1.0** |
| **KVT** | **Kavak** | **2.17** | **69** | PN | **Pn** | **21 53 07.6** | **+0.5** |
| **SNOP** | **Sinop** | **2.19** | **39** | PN | **Pb** | **21 53 08.7** | **-1.6** |
| **TOKT** | **Tokat** | **2.43** | **89** | PN | **Pn** | **21 53 11.8** | **+1.2** |

*IDC **26** 22:03:39.7±1.9, 43.37N×105.19W, h0km, mb4.0/2, mb1 3.9/6, mb1mx3.5/57, mbtmp3.6/6, ML2.9/3, Error ellipse: s-maj=46.7km s-min=8.9km az=152.0*
*NEIC **26** 22:03:42.9±1.4, 43.73N±0.04×105.35W±0.07, h0km±2km, ML3.4/68, Error ellipse: s-maj=8.7km s-min=7.0km az=70.0*

**ISC 26 22:03:41.7**±0.7, **43.77N**±0.04×**105.30W**±0.03, **h0km, n80, σ1s27/87, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RSSD** | **Black Hills** | **0.98** | **68** | | **Pb** | **22 04 01.4** | **-0.3** |
| **K22A** | **Casper** | **1.43** | **219** | Pn | **Pn** | **22 04 06.9** | **-2.2** |
| K22A | | | | IAML | | 22 04 29.4 | |
| | comp=E,516nm,0.9s | | | | | | |
| K22A | | | | IAML | | 22 04 31.3 | |
| | comp=N,454nm,0.4s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.47** | **183** | | **Pn** | **22 04 22.9** | **-0.6** |
| PHWY | | | | IAML | | 22 04 58.9 | |
| | comp=N,119nm,0.6s | | | | | | |
| **RWWY** | **Rawlins** | **2.51** | **215** | | **Pn** | **22 04 23.3** | **-0.7** |
| **N23A** | **Red Feather La** | **2.91** | **190** | Pn | **Pn** | **22 04 29.8** | **+0.2** |
| N23A | | | | IAML | | 22 05 14.1 | |
| | comp=N,190nm,0.7s | | | | | | |
| N23A | | | | IAML | | 22 05 14.3 | |
| | comp=E,175nm,0.7s | | | | | | |
| **LAO** | **LASA Array** | **2.99** | **348** | Pn | **Pn** | **22 04 29.6** | **-0.9** |
| LAO | | | | IAML | | 22 05 18.4 | |
| | comp=E,154nm,0.8s | | | | | | |
| LAO | | | | IAML | | 22 05 39.9 | |
| | comp=E,115nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **3.15** | **297** | Pn | **Pn** | **22 04 33.0** | **+0.2** |
| RLMT | | | | IAML | | 22 05 29.1 | |
| | comp=E,60nm,0.9s | | | | | | |
| **PD31** | **Pinedale Array** | **3.27** | **254** | | **Pn** | **22 04 34.6** | **+0.3** |
| **PDAR** | **Pinedale Array** | **3.27** | **254** | Pn | **Pn** | **22 04 34.9** | **+0.5** |
| | comp=E,4.8nm,0.3s,baz=72,slow=14,SNR=34 | | | | | | |
| PDAR | | | | Lg | Lg | 22 05 21.3 | |
| | comp=E,20nm,0.3s,baz=62,slow=35,SNR=5.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.27** | **254** | | **Pn** | **22 04 34.8** | **+0.3** |
| **YMP** | **Mirror Lake Pl** | **3.62** | **287** | Pn | **Pn** | **22 04 40.6** | **+1.2** |
| YMP | | | | IAML | | 22 05 40.0 | |
| | comp=N,74nm,0.7s | | | | | | |
| YMP | | | | IAML | | 22 05 46.0 | |
| | comp=E,70nm,0.5s | | | | | | |
| **GCMT** | **Greycliff** | **3.71** | **305** | Pn | **Pn** | **22 04 41.8** | **+1.4** |
| **OGNE** | **Ogallala** | **3.71** | **138** | Pn | **Pn** | **22 04 40.8** | **+0.3** |
| OGNE | | | | Pb | **Pb** | **22 04 49.8** | **+1.6** |
| **LKWY** | **Lake** | **3.76** | **284** | | **Pn** | **22 04 41.5** | **+0.3** |
| LKWY | | | | IAML | | 22 05 12.9 | |
| | comp=E,44nm,1.4s | | | | | | |
| **LOHW** | **Long Hollow** | **3.85** | **270** | | **Pn** | **22 04 43.2** | **+0.8** |
| **H17A** | **Grant Village** | **3.85** | **281** | | **Pn** | **22 04 42.9** | **+0.4** |
| H17A | | | | IAML | | 22 05 45.7 | |
| | comp=N,36nm,0.6s | | | | | | |
| H17A | | | | IAML | | 22 05 46.1 | |
| | comp=E,39nm,0.6s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.92** | **276** | IAML | | 22 05 56.8 | |
| | comp=E,55nm,1.2s | | | | | | |
| FLWY | | | | IAML | | 22 06 05.9 | |
| | comp=E,42nm,1.5s | | | | | | |
| **MOOW** | **Moose Ponds** | **3.95** | **272** | | **Pn** | **22 04 44.6** | **+0.8** |
| **ISCO** | **Idaho Springs** | **3.97** | **184** | | **Pn** | **22 04 43.4** | **-0.8** |
| ISCO | | | | IAML | | 22 05 53.9 | |
| | comp=E,32nm,0.8s | | | | | | |
| **SNOW** | **Snow King Moun** | **3.98** | **267** | | **Pb** | **22 04 53.8** | **+1.0** |
| SNOW | | | | IAML | | 22 06 01.1 | |
| | comp=E,75nm,1.0s | | | | | | |
| SNOW | | | | IAML | | 22 06 01.4 | |
| | comp=E,75nm,1.0s | | | | | | |
| **YNR** | **Norris Junctio** | **3.98** | **286** | | **Pg** | **22 04 55.8** | **-2.2** |
| **REDW** | **Red Top Meadow** | **4.06** | **266** | | **Pn** | **22 04 45.6** | **+0.3** |
| REDW | | | | IAML | | 22 06 00.1 | |
| | comp=E,63nm,1.2s | | | | | | |
| **TPAW** | **Teton Pass** | **4.11** | **268** | IAML | | 22 06 15.2 | |
| | comp=E,38nm,0.8s | | | | | | |
| **YHH** | **Holmes Hill** | **4.12** | **286** | Pn | **Pn** | **22 04 46.9** | **+0.7** |
| **YMR** | **Madison River** | **4.17** | **284** | Pn | **Pn** | **22 04 47.4** | **+0.5** |
| YMR | | | | | **Pg** | **22 04 59.7** | **-2.0** |
| YMR | | | | IAML | | 22 06 01.6 | |
| | comp=E,45nm,0.9s | | | | | | |
| YMR | | | | IAML | | 22 06 14.7 | |
| | comp=N,54nm,1.0s | | | | | | |
| **O20A** | **White River Ci** | **4.24** | **212** | | **Pn** | **22 04 48.0** | **+0.2** |
| O20A | | | | IAML | | 22 06 04.4 | |
| | comp=E,67nm,0.8s | | | | | | |
| O20A | | | | IAML | | 22 06 06.6 | |
| | comp=N,45nm,1.0s | | | | | | |
| **E28A** | **Huff** | **4.30** | **48** | | **Pn** | **22 04 50.3** | **+1.9** |
| E28A | | | | | **Pb** | **22 05 00.5** | **+2.3** |
| **AHID** | **Auburn Hatcher** | **4.35** | **259** | | **Pn** | **22 04 49.2** | **-0.2** |
| AHID | | | | Pg | **Pb** | **22 05 02.0** | **+2.8** |
| AHID | | | | IAML | | 22 06 03.6 | |
| | comp=N,49nm,1.0s | | | | | | |
| AHID | | | | IAML | | 22 06 10.5 | |
| | comp=N,45nm,0.9s | | | | | | |
| **ECR** | **Eagle Creek** | **4.48** | **263** | Pn | **Pn** | **22 04 52.5** | **+1.4** |
| **RDMU** | **Red Mountain** | **4.50** | **226** | Pn | **Pn** | **22 04 52.7** | **+1.3** |
| RDMU | | | | IAML | | 22 06 03.3 | |
| | comp=N,34nm,1.1s | | | | | | |
| RDMU | | | | IAML | | 22 06 07.2 | |
| | comp=E,39nm,0.7s | | | | | | |
| **QLMT** | **Earthquake Lak** | **4.53** | **286** | Pn | **Pn** | **22 04 52.3** | **+0.5** |
| **SUSD** | **Miller** | **4.62** | **79** | Pn | **Pn** | **22 04 54.0** | **+1.2** |
| SUSD | | | | Pg | **Pg** | **22 05 11.8** | **+1.6** |
| **SMCO** | **Snowmass** | **4.75** | **196** | | **Pn** | **22 04 54.9** | **-0.2** |
| SMCO | | | | IAML | | 22 06 20.0 | |
| | comp=E,31nm,1.1s | | | | | | |
| SMCO | | | | IAML | | 22 06 21.5 | |
| | comp=E,22nm,1.0s | | | | | | |
| **DGMT** | **Dagmar** | **4.77** | **9** | Pn | **Pn** | **22 04 56.7** | **+1.9** |
| **Q24A** | **Divide** | **4.80** | **179** | Pn | **Pn** | **22 04 55.1** | **-0.5** |
| Q24A | | | | IAML | | 22 06 12.3 | |
| | comp=E,44nm,0.7s | | | | | | |
| Q24A | | | | IAML | | 22 06 12.5 | |
| | comp=N,19nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.87** | **294** | | **Pn** | **22 04 57.0** | **+0.5** |
| **K31A** | **O'Neill** | **4.92** | **101** | | **Pg** | **22 05 14.2** | **-1.7** |
| **HWUT** | **Hardware Ranch** | **5.10** | **247** | | **Pn** | **22 04 59.8** | **+0.2** |
| HWUT | | | | IAML | | 22 06 23.5 | |
| | comp=N,34nm,1.0s | | | | | | |
| HWUT | | | | IAML | | 22 06 31.6 | |
| | comp=N,30nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.16** | **156** | Pn | **Pn** | **22 04 59.8** | **-0.5** |
| KSCO | | | | Pb | **Pb** | **22 05 14.8** | **+1.9** |
| **EGMT** | **Eagleton** | **5.27** | **325** | | **Pn** | **22 05 01.2** | **-0.7** |
| EGMT | | | | Pb | **Pb** | **22 05 16.5** | **+1.7** |
| **DLMT** | **Dillon** | **5.45** | **290** | Pn | **Pn** | **22 05 05.4** | **+1.1** |
| DLMT | | | | | **Pg** | **22 05 23.7** | **-2.5** |
| **HRY** | **Holter Researc** | **5.47** | **305** | Pn | **Pn** | **22 05 06.6** | **+2.0** |
| HRY | | | | Pg | **Pg** | **22 05 24.7** | **-1.9** |
| **LRM** | **Limekiln Ridge** | **5.49** | **294** | Pn | **Pn** | **22 05 07.1** | **+2.1** |
| **MCMT** | **McKenzie Canyo** | **5.52** | **284** | Pn | **Pn** | **22 05 06.6** | **+1.2** |
| **P18A** | **Preston Nutter** | **5.55** | **224** | | **Pn** | **22 05 05.8** | **-0.1** |
| **JLU** | **Jordanelle** | **5.56** | **237** | Pn | **Pn** | **22 05 06.1** | **+0.1** |
| **MDND** | **Maddock** | **5.70** | **42** | Pn | **Pn** | **22 05 09.3** | **+1.7** |
| **BGNE** | **Belgrade** | **5.78** | **112** | Pn | **Pn** | **22 05 09.9** | **+1.2** |
| **HVU** | **Hansel Valley** | **5.85** | **253** | Pn | **Pn** | **22 05 10.5** | **+0.7** |
| **BCYI** | **Bear Canyon** | **5.87** | **278** | Pn | **Pn** | **22 05 12.5** | **+2.3** |
| **PV07** | **Paradox Valley** | **5.89** | **207** | Pn | **Pn** | **22 05 10.4** | **-0.1** |
| **P17A** | **Butcher Ranch,** | **5.92** | **225** | | **Pn** | **22 05 11.8** | **+1.0** |
| **PV15** | **Paradox Valley** | **5.93** | **205** | | **Pn** | **22 05 11.3** | **+0.2** |
| **PV23** | **Carpenter Ridg** | **6.00** | **209** | | **Pn** | **22 05 12.7** | **+0.6** |
| **SDCO** | **Great Sand Dun** | **6.02** | **182** | Pn | **Pn** | **22 05 13.0** | **+0.7** |
| **MPU** | **Maple Canyon** | **6.03** | **234** | Pn | **Pn** | **22 05 13.1** | **+0.7** |
| **PV10** | **Paradox Valley** | **6.08** | **209** | Pn | **Pn** | **22 05 14.2** | **+1.0** |
| **SRU** | **San Rafael Swe** | **6.09** | **222** | | **Pn** | **22 05 12.8** | **-0.3** |
| **PV11** | **David Mesa, Pa** | **6.09** | **208** | | **Pn** | **22 05 13.5** | **+0.2** |
| **S22A** | **4UR Ranch, Cre** | **6.13** | **191** | Pn | **Pn** | **22 05 14.3** | **+0.5** |
| **PV13** | **Radium Mtn., P** | **6.20** | **207** | | **Pn** | **22 05 14.6** | **-0.2** |
| **ECSD** | **EROS Data Cent** | **6.29** | **87** | Pn | **Pn** | **22 05 17.8** | **+2.0** |
| **TMUT** | **Trail Mountain** | **6.29** | **227** | | **Pn** | **22 05 16.4** | **+0.3** |
| **NLU** | **North Lily Min** | **6.33** | **235** | Pn | **Pn** | **22 05 17.1** | **+0.5** |
| **BGU** | **Big Grassy Mou** | **6.39** | **246** | Pn | **Pn** | **22 05 17.3** | **0.0** |
| **CBKS** | **Cedar Bluff** | **6.48** | **138** | Pn | **Pn** | **22 05 19.1** | **+0.7** |
| **Q16A** | **Castle Valley** | **6.56** | **224** | | **Pn** | **22 05 19.6** | **0.0** |
| **HLID** | **Hailey** | **6.62** | **271** | | **Pn** | **22 05 20.9** | **+0.6** |
| **DUG** | **Dugway, Tooele** | **6.64** | **240** | Pn | **Pn** | **22 05 20.4** | **-0.3** |
| **T25A** | **Trinidad** | **6.66** | **174** | Pn | **Pn** | **22 05 22.0** | **+1.0** |
| T25A | | | | Pb | **Pb** | **22 05 41.9** | **+3.4** |
| **MSU** | **Marysvale** | **7.38** | **227** | | **Pn** | **22 05 31.1** | **+0.2** |
| MSU | | | | Pg | **Pg** | **22 05 59.6** | **-3.5** |
| **I10CA** | **LAC DU BONNET** | **9.03** | **41** | *i* | | 23 05 40.0 | |
| | baz=222,slow=320,SNR=10 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.13** | **41** | Pn | **Pn** | **22 05 53.7** | **-1.0** |
| | comp=N,1.6nm,0.3s,baz=233,slow=11,SNR=8.5 | | | | | | |
| ULM | | | | Lg | Lg | 22 08 33.0 | |
| | comp=N,0.5nm,0.3s,baz=147,slow=15,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.16** | **246** | Pn | **Pn** | **22 06 23.8** | **+1.1** |
| | comp=N,0.1nm,0.3s,baz=68,slow=9.8,SNR=2.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.16** | **246** | | **Pn** | **22 06 21.8** | **-1.0** |
| **FFC** | **Flin Flon** | **11.18** | **10** | Pn | **Pn** | **22 06 23.2** | **+0.5** |
| **TXAR** | **Lajitas Array** | **14.46** | **174** | Pg | Pg | 22 08 01.3 | |
| | comp=N,0.1nm,0.3s,baz=25,slow=15,SNR=1.4 | | | | | | |
| TXAR | | | | Lg | Lg | 22 11 01.0 | |
| | comp=N,0.0nm,0.3s,baz=26,slow=19,SNR=2.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.53** | **347** | P | **Pn** | **22 08 12.4** | **+0.7** |
| | comp=N,0.1nm,0.3s,baz=158,slow=9.3,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.40** | **18** | P | **P** | **22 13 58.1** | **-1.0** |
| | comp=N,5.3nm,1.1s,baz=335,slow=5.4,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **89.57** | **355** | P | **P** | **22 16 41.4** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=40,slow=2.5,SNR=5.2 | | | | | | |

*IDC **26** 22:10:09.0±0.9, 2.46S×140.11E, h0km, mb3.8/5, mb1 4.1/7, mb1mx3.7/50, mbtmp4.0/7, ML4.2/2, MS3.2/3, Ms1 3.2/3, ms1mx2.6/64, Error ellipse: s-maj=21.8km s-min=8.3km az=4.0*
*NEIC **26** 22:10:10.8±2.0, 2.50S±0.09×140.19E±0.04, h10km±1km, mb4.4/24, Error ellipse: s-maj=14.8km s-min=7.4km az=183.0*

**ISC 26 22:10:09.5**±0.6, **2.54S**±0.08×**140.36E**±0.09, **h10km, n47, σ0s81/38, mb4.2/15, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **0.35** | **87** | Pg | **Pn** | **22 10 21.1** | **+0.4** |
| | 288nm,0.3s,baz=257,slow=16,SNR=1106 | | | | | | |
| JAY | | | | Lg | Lg | 22 10 28.3 | |
| | 853nm,0.3s,baz=116,slow=17,SNR=32 | | | | | | |
| **MANU** | **Manus Island** | **7.02** | **86** | Pn | **Pn** | **22 11 50.5** | **-2.0** |
| **PMG** | **Port Moresby** | **9.61** | **136** | Pn | **Pn** | **22 12 28.8** | **+0.9** |
| **GUMO** | **Guam** | **16.63** | **16** | Pn | **Pn** | **22 14 03.4** | **+0.4** |
| **KNRA** | **Kununurra** | **17.35** | **220** | | **P** | **22 14 13.0** | **-0.3** |
| **SOEI** | **Soe** | **17.52** | **245** | | **Pn** | **22 14 14.2** | **-0.1** |
| SOEI | | | | IAmb | IAmb | 22 14 29.1 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **18.09** | **198** | | **P** | **22 14 21.9** | **+0.4** |
| **WR0** | **Warramunga Arr** | **18.23** | **198** | P | **P** | **22 14 23.9** | **+1.0** |
| **BATI** | **Baumata** | **18.25** | **245** | P | **Pn** | **22 14 23.1** | **0.0** |
| | comp=Z,1.7nm,0.3s,baz=85,slow=11,SNR=2.0 | | | | | | |
| BATI | | | | LR | LR | 22 23 12.4 | |
| | comp=Z,55nm,18.3s,baz=146,slow=43 | | | | | | |
| **WB2** | **Warramunga Arr** | **18.27** | **198** | P | **P** | **22 14 24.0** | **+0.6** |
| **WRA** | **Warramunga Arr** | **18.27** | **198** | P | **P** | **22 14 24.1** | **+0.6** |
| | comp=Z,0.5nm,0.3s,baz=18,slow=12,SNR=9.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.27** | **198** | IAmb | IAmb | 22 14 28.5 | |
| | comp=Z,0.4nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.15** | **222** | P | **P** | **22 14 54.5** | **-0.4** |
| | comp=Z,2.6nm,0.6s,baz=52,slow=5.3,SNR=6.4 | | | | | | |
| FITZ | | | | LR | LR | 22 24 30.0 | |
| | comp=Z,48nm,18.2s,baz=52,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.15** | **222** | P | **P** | **22 14 55.4** | **+0.5** |
| FITZ | | | | IAmb | IAmb | 22 14 56.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **21.91** | **196** | P | **P** | **22 15 04.3** | **+1.1** |
| **ASAR** | **Alice Springs** | **21.91** | **196** | P | **P** | **22 15 03.8** | **+0.6** |
| | comp=Z,3.3nm,0.7s,baz=29,slow=10.0,SNR=54 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **33.30** | **50** | T | T | 22 51 52.6 | |
| | baz=231,slow=75,SNR=41 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **33.31** | **50** | T | T | 22 51 55.5 | |
| | baz=231,slow=75,SNR=24 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **33.31** | **50** | T | T | 22 51 54.0 | |
| | baz=231,slow=75,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.18** | **49** | T | T | 22 52 57.5 | |
| | baz=233,slow=75,SNR=24 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.19** | **49** | T | T | 22 53 02.2 | |
| | baz=233,slow=75,SNR=23 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.19** | **49** | T | T | 22 53 00.9 | |
| | baz=233,slow=75,SNR=13 | | | | | | |
| **MORW** | **Morawa** | **35.09** | **219** | P | **P** | **22 17 03.1** | **0.0** |
| MORW | | | | IAmb | IAmb | 22 17 17.6 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **JSU** | **Suzuyama** | **35.14** | **345** | P | **P** | **22 17 04.0** | **+0.5** |
| JSU | | | | IAmb | IAmb | 22 17 15.9 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **INU** | **Inuyama** | **37.82** | **356** | P | **P** | **22 17 27.5** | **+1.3** |
| INU | | | | IAmb | IAmb | 22 17 38.4 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **49.09** | **143** | P | **P** | **22 18 58.1** | **+0.8** |
| BKZ | | | | IAmb | IAmb | 22 19 08.2 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **MLZ** | **Mavora Lakes** | **49.13** | **154** | P | **P** | **22 18 58.0** | **+0.5** |
| MLZ | | | | IAmb | IAmb | 22 19 11.4 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **49.22** | **151** | LR | LR | 22 39 40.5 | |
| | comp=Z,51nm,18.8s,baz=268,slow=36 | | | | | | |
| **CMWZ** | **Cape Campbell** | **49.46** | **147** | P | **P** | **22 18 59.1** | **-0.9** |
| **BHW** | **Baring Head** | **49.60** | **146** | P | **P** | **22 19 01.2** | **+0.2** |
| **MSWZ** | **Moikau Station** | **49.81** | **146** | P | **P** | **22 19 01.2** | **-1.5** |
| **SONM** | **Songino Array** | **58.28** | **334** | P | **P** | **22 20 02.8** | **-1.7** |
| **ADK** | **Adak** | **65.25** | **28** | P | **P** | **22 20 52.3** | **+1.0** |
| **MKAR** | **Makanchi Array** | **70.66** | **322** | P | **P** | **22 21 25.6** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=99,slow=9.0,SNR=9.0 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **71.61** | **316** | P | **P** | **22 21 32.0** | **+0.2** |
| TARG | | | | IAmb | IAmb | 22 21 42.8 | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **72.62** | **329** | P | **P** | **22 21 37.4** | **+0.3** |
| ZAA0 | | | | IAmb | IAmb | 22 21 37.8 | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.62** | **329** | P | **P** | **22 21 36.6** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=108,slow=4.7,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.62** | **329** | P | **P** | **22 21 36.0** | **-1.1** |
| **KURK** | **Kurchatov** | **74.53** | **324** | P | **P** | **22 21 48.5** | **+0.1** |
| **KURK** | **Kurchatov** | **74.53** | **324** | IAmb | IAmb | 22 21 49.0 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **74.54** | **324** | P | **P** | **22 21 48.5** | **0.0** |
| | comp=Z,0.3nm,0.2s,baz=104,slow=7.2,SNR=4.1 | | | | | | |
| **KDAK** | **Kodiak Island** | **80.13** | **30** | P | **P** | **22 22 19.9** | **+0.3** |
| KDAK | | | | IAmb | IAmb | 22 22 23.4 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **CNPM** | **China Poot** | **81.40** | **29** | P | **P** | **22 22 27.0** | **+0.5** |
| **O22K** | **Cooper Landing** | **82.43** | **28** | P | **P** | **22 22 31.6** | **-0.2** |
| **KNK** | **Knik Glacier** | **83.31** | **27** | P | **P** | **22 22 37.2** | **+0.7** |
| KNK | | | | IAmb | IAmb | 22 22 48.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **GLI** | **Glacier Island** | **83.79** | **28** | P | **P** | **22 22 38.1** | **-0.8** |
| **DBIC** | **Dimbokro** | **145.09** | **278** | PKP | **PKPbc** | **22 29 47.0** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=88,slow=1.8,SNR=1.7 | | | | | | |

**NEIC 26 22:29:05.1**±0.6, **36.554N**±0.010×**99.04W**±0.02, **h5km**±1**km, ML2.3/24, Error ellipse: s-maj=3.0km s-min=2.8km az=98.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.18** | **170** | Pg | Pg | 22 29 09.2 | +0.5 |
| U32A | | | | Sg | Sg | 22 29 11.4 | +0.4 |
| **R32A** | **Long Quarter,** | **1.88** | **8** | Pn | Pn | 22 29 37.7 | -0.3 |
| **T35A** | **Sooner Cattle** | **2.06** | **79** | | Pg | 22 29 44.9 | +0.2 |
| **X34A** | **Smith Ranch, M** | **2.18** | **153** | Pn | Pn | 22 29 42.4 | +0.2 |

*DJA **26** 22:30:47.2±0.3, 10.5S×114.9E, h10km, M4.2/19, mb4.4/6, mB5.1/2, MLv4.2/19, Mw(mB)4.5/2*
*IDC **26** 22:30:48.0±3.5, 9.92S×118.74E, h47km±33km, mb3.8/4, mb1 3.9/9, mb1mx3.5/37, mbtmp4.0/9, ML3.9/5, MS3.0/3, Ms1 3.0/3, ms1mx2.6/72, Error ellipse: s-maj=37.2km s-min=20.2km az=57.0*
*NEIC **26** 22:30:49.4±2.0, 9.85S±0.05×118.77E±0.04, h55km±9km, mb4.0/13, Error ellipse: s-maj=9.4km s-min=2.3km az=145.0*

**ISC 26 22:30:46.9**±0.5, **9.89S**±0.05×**118.80E**±0.04, **h33km, n61, σ1s97/59, mb4.1/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.63** | **67** | P | **Pn** | **22 30 57.6** | **-2.0** |
| **PLAI** | **Plampang** | **1.46** | **316** | P | **Pn** | **22 31 11.0** | **+0.1** |
| **PLAI** | **Plampang** | **1.46** | **316** | P | **Pb** | **22 31 12.2** | **-1.3** |
| **BASI** | **Baing, Sumba** | **1.78** | **101** | P | **Pb** | **22 31 18.7** | **-0.3** |
| **MMRI** | **Maumere** | **3.62** | **70** | Pn | **Pn** | **22 31 43.0** | **+2.4** |
| **MMRI** | **Maumere** | **3.62** | **70** | P | **Pn** | **22 31 44.8** | **+4.2** |
| **IGBI** | **Denpasar** | **3.76** | **286** | P | **Pn** | **22 31 44.7** | **+2.1** |
| **BSSI** | **Bau Bau, Buton** | **4.08** | **24** | P | **Pn** | **22 31 47.5** | **+0.5** |
| **BKSI** | **Bulukumba** | **4.72** | **16** | P | **Pn** | **22 31 56.6** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **4.80** | **287** | | **Pn** | **22 31 58.4** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **4.80** | **287** | P | **Pn** | **22 31 58.5** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **4.80** | **287** | P | **Pn** | **22 31 59.2** | **+2.3** |
| **BATI** | **Baumata** | **4.80** | **94** | P | **Pn** | **22 31 59.8** | **+2.8** |
| | 20nm,0.3s,baz=309,slow=3.6,SNR=16 | | | | | | |
| BATI | | | | S | **Sn** | **22 32 54.1** | **+2.6** |
| | 18nm,0.3s,baz=204,slow=22,SNR=6.6 | | | | | | |
| **BATI** | **Baumata** | **4.80** | **94** | P | **Pn** | **22 32 00.0** | **+3.0** |
| **KAPI** | **Kappang** | **4.93** | **11** | P | **Pn** | **22 32 01.4** | **+2.7** |
| | 3.4nm,0.3s,baz=200,slow=14,SNR=5.6 | | | | | | |
| KAPI | | | | S | **Sn** | **22 32 55.2** | **+0.5** |
| | 5.1nm,0.3s,baz=17,slow=24,SNR=6.0 | | | | | | |
| KAPI | | | | LR | LR | 22 34 08.8 | |
| | comp=Z,143nm,18.9s,baz=183,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **4.93** | **11** | Pn | **Pn** | **22 32 00.3** | **+1.5** |
| **ABJI** | **Asem Bagus** | **4.97** | **294** | P | **Pn** | **22 32 01.4** | **+2.2** |
| **SOEI** | **Soe** | **5.39** | **89** | | **Pn** | **22 32 08.4** | **+3.2** |
| **SOEI** | **Soe** | **5.39** | **89** | P | **Pn** | **22 32 07.6** | **+2.4** |
| | 0.3nm55nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **5.39** | **89** | P | **Pn** | **22 32 08.8** | **+3.6** |
| | 56nm,0.9s | | | | | | |
| **GMJI** | **Gumukmas** | **5.53** | **286** | P | **Pn** | **22 32 09.2** | **+2.3** |
| | 0.1nm27nm,1.0s | | | | | | |
| **BLJI** | **Banyuglugur** | **5.57** | **292** | P | **Pn** | **22 32 10.0** | **+2.5** |
| | 0.1nm1μm27nm,0.7s | | | | | | |
| **BNSI** | **Bone** | **5.60** | **13** | P | **Pn** | **22 32 08.2** | **+0.2** |
| | 0.2nm41nm,1.0s | | | | | | |
| **BBSI** | **Bau Bau** | **5.75** | **41** | P | **Pn** | **22 32 11.0** | **+1.0** |
| | 0.0nm6.8nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.96** | **9** | P | **Pn** | **22 32 13.6** | **+0.7** |
| | 0.1nm24nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.52** | **142** | P | **Pn** | **22 33 14.9** | **-0.5** |
| | 1.1nm,0.3s,baz=339,slow=8.3,SNR=27 | | | | | | |
| FITZ | | | | S | **Sn** | **22 35 07.0** | **-5.2** |
| | 1.0nm,0.3s,baz=188,slow=22,SNR=10 | | | | | | |
| FITZ | | | | LR | LR | 22 37 30.7 | |
| | comp=Z,66nm,21.5s,baz=334,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.52** | **142** | | **Pn** | **22 33 15.5** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **10.52** | **142** | P | **Pn** | **22 33 16.4** | **+1.0** |
| **KNRA** | **Kununurra** | **11.29** | **122** | | **Pn** | **22 33 26.9** | **+0.9** |
| **KNRA** | **Kununurra** | **11.29** | **122** | P

*Azm34.0000°; P -1.2063, Plg19.0000°, Azm175.0000°;*
*NEIC **26** 23:00:39.5±2.4, 43°.50N±0°.02×110°.38W±0°.06, h5km, 6km, mb4.1/12, ML4.1/72, Mwr4.0/35, ML4.2/25(BUT) Error ellipse: s-maj=6.0km s-min=2.8km az=75.0*

**ISC 26 23:00:39.9±0.5, 43°.54N±0°.02×110°.38W±0°.02, h10km, n172, σ1§49/178, mb3.7/3, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LOHW** | **Long Hollow** | **0.18** | **295** | | **Pg** | **23 00 42.9** | **-1.0** |
| LOHW | | | | Sg | **Sg** | **23 00 45.8** | **-0.8** |
| **SNOW** | **Snow King Moun** | **0.28** | **255** | | **Pg** | **23 00 44.9** | **-0.8** |
| SNOW | | | | Sg | **Sg** | **23 00 49.3** | **-0.2** |
| SNOW | | | | IAML | | 23 00 52.5 | |
| | 47μm,0.8s | | | | | | |
| **MOOW** | **Moose Ponds** | **0.34** | **309** | Pg | **Pg** | **23 00 45.6** | **-1.1** |
| MOOW | | | | Sg | **Sg** | **23 00 50.2** | **-1.0** |
| **REDW** | **Red Top Meadow** | **0.38** | **243** | Pg | **Pg** | **23 00 46.5** | **-1.0** |
| REDW | | | | Sg | **Sg** | **23 00 52.1** | **-0.5** |
| REDW | | | | IAML | | 23 00 54.4 | |
| | 32μm,0.7s | | | | | | |
| REDW | | | | IAML | | 23 00 55.5 | |
| | 42μm,0.6s | | | | | | |
| **TPAW** | **Teton Pass** | **0.42** | **264** | Pg | **Pg** | **23 00 46.1** | **-2.0** |
| TPAW | | | | Sg | **Sg** | **23 00 52.6** | **-1.1** |
| TPAW | | | | IAML | | 23 00 57.3 | |
| | 11μm,0.5s | | | | | | |
| TPAW | | | | IAML | | 23 00 59.7 | |
| | 18μm,0.7s | | | | | | |
| **FLWY** | **Flagg Ranch** | **0.59** | **337** | | **Pg** | **23 00 50.1** | **-1.3** |
| FLWY | | | | IAML | | 23 01 03.3 | |
| | 6μm,0.8s | | | | | | |
| FLWY | | | | IAML | | 23 01 05.0 | |
| | 6μm,0.8s | | | | | | |
| **YMS** | **Mount Sheridan** | **0.73** | **352** | | **Pg** | **23 00 53.5** | **-0.7** |
| **YTP** | **The Promontory** | **0.86** | **5** | | **Pg** | **23 00 54.8** | **-1.7** |
| **ECR** | **Eagle Creek** | **0.87** | **237** | Pg | **Pg** | **23 00 55.0** | **-1.6** |
| **H17A** | **Grant Village** | **0.87** | **351** | Pg | **Pg** | **23 00 55.4** | **-1.3** |
| H17A | | | | Sg | **Sg** | **23 01 06.8** | **-1.3** |
| H17A | | | | IAML | | 23 01 08.3 | |
| | comp=N,4μm,0.4s | | | | | | |
| **H17A** | **Grant Village** | **0.87** | **351** | P | **Pg** | **23 00 55.4** | **-1.3** |
| | baz=171,SNR=1000 | | | | | | |
| H17A | | | | S | **Sg** | **23 01 06.8** | **-1.3** |
| | baz=171 | | | | | | |
| **MCID** | **Moose Creek** | **0.87** | **319** | | **Pg** | **23 00 55.6** | **-1.1** |
| **YLT** | **Little Thumb C** | **0.91** | **351** | | **Pg** | **23 00 56.3** | **-1.2** |
| **AHID** | **Auburn Hatcher** | **0.93** | **215** | | **Pg** | **23 00 56.1** | **-1.7** |
| AHID | | | | IAML | | 23 01 10.2 | |
| | comp=N,15μm,0.2s | | | | | | |
| **BW06** | **Boulder Array** | **0.98** | **142** | Pg | **Pg** | **23 00 57.2** | **-1.5** |
| BW06 | | | | IAML | | 23 01 10.0 | |
| | comp=N,7μm,0.5s | | | | | | |
| BW06 | | | | IAML | | 23 01 10.7 | |
| | comp=N,4μm,0.7s | | | | | | |
| **BW06** | **Boulder Array** | **0.98** | **142** | S | **Sg** | **23 01 08.9** | **-2.5** |
| | baz=321 | | | | | | |
| **PD31** | **Pinedale Array** | **0.98** | **142** | | **Pg** | **23 00 56.5** | **-2.2** |
| **PDAR** | **Pinedale Array** | **0.98** | **142** | Pg | **Pg** | **23 00 56.1** | **-2.6** |
| | comp=N,259nm,0.3s,baz=334,slow=16,SNR=2458 | | | | | | |
| PDAR | | | | Lg | Lg | 23 01 09.0 | |
| | comp=N,2μm,0.3s,baz=327,slow=28,SNR=72 | | | | | | |
| **LKWY** | **Lake** | **1.03** | **359** | | **Pg** | **23 00 58.2** | **-1.5** |
| **LKWY** | **Lake** | **1.03** | **359** | IAML | | 23 01 02.6 | |
| | comp=N,2μm,0.5s | | | | | | |
| LKWY | | | | IAML | | 23 01 04.8 | |
| | comp=N,3μm,0.5s | | | | | | |
| **YPPC** | **Pelican Cone** | **1.12** | **7** | | **Pg** | **23 01 00.0** | **-1.4** |
| **YPM** | **Purple Mountai** | **1.17** | **343** | | **Pb** | **23 01 01.2** | **-1.2** |
| **YUF** | **Upper Falls** | **1.18** | **356** | | **Pn** | **23 01 02.6** | **-0.1** |
| **YPWB** | **West Boundary** | **1.19** | **334** | | **Pb** | **23 01 01.1** | **-1.5** |
| **YNR** | **Norris Junctio** | **1.20** | **350** | | **Pb** | **23 01 01.4** | **-1.4** |
| **YMR** | **Madison River** | **1.21** | **340** | | **Pb** | **23 01 01.3** | **-1.6** |
| **YMR** | **Madison River** | **1.21** | **340** | IAML | | 23 01 24.6 | |
| | comp=N,5μm,0.7s | | | | | | |
| YMR | | | | IAML | | 23 01 26.7 | |
| | comp=E,2μm,0.8s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **1.22** | **8** | | **Pb** | **23 01 02.5** | **-0.7** |
| **YMP** | **Mirror Lake Pl** | **1.22** | **8** | IAML | | 23 01 07.5 | |
| | comp=N,1μm,0.7s | | | | | | |
| YMP | | | | IAML | | 23 01 07.6 | |
| | comp=E,1μm,0.7s | | | | | | |
| **YHH** | **Holmes Hill** | **1.30** | **345** | | **Pn** | **23 01 02.6** | **-1.8** |
| **YMC** | **Maple Creek** | **1.30** | **340** | | **Pn** | **23 01 02.8** | **-1.5** |
| **YPDC** | **Denny Creek** | **1.33** | **333** | | **Pn** | **23 01 03.2** | **-1.4** |
| **CMI** | **Centennial Mou** | **1.33** | **318** | | **Pn** | **23 01 03.3** | **-1.5** |
| **YHB** | **Horse Butte** | **1.35** | **335** | | **Pn** | **23 01 03.5** | **-1.5** |
| **YPSB** | **Soda Butte** | **1.36** | **7** | | **Pn** | **23 01 03.6** | **-1.5** |
| **GCR** | **Grayling Creek** | **1.36** | **338** | | **Pn** | **23 01 04.0** | **-1.1** |
| **YMV** | **Mammoth Vault** | **1.45** | **351** | | **Pn** | **23 01 05.4** | **-1.0** |
| **QLMT** | **Earthquake Lak** | **1.50** | **330** | Pn | **Pn** | **23 01 05.9** | **-1.2** |
| **RLMT** | **Red Lodge** | **1.78** | **26** | | **Pn** | **23 01 10.3** | **-0.5** |
| **RLMT** | **Red Lodge** | **1.78** | **26** | IAML | | 23 01 35.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| RLMT | | | | IAML | | 23 01 36.0 | |
| | comp=E,974nm,0.6s | | | | | | |
| **RLMT** | **Red Lodge** | **1.78** | **26** | P | **Pn** | **23 01 10.4** | **-0.5** |
| | baz=206,SNR=220 | | | | | | |
| RLMT | | | | S | **Sn** | **23 01 33.2** | **-0.4** |
| | baz=206 | | | | | | |
| **EMI** | **Eightmile Cany** | **1.92** | **287** | | **Pn** | **23 01 12.4** | **-0.4** |
| **ICI** | **Italian Canyon** | **2.01** | **294** | | **Pn** | **23 01 14.0** | **-0.1** |
| **HWUT** | **Hardware Ranch** | **2.12** | **205** | | **Pn** | **23 01 15.2** | **-0.3** |
| **HWUT** | **Hardware Ranch** | **2.12** | **205** | IAML | | 23 01 48.0 | |
| | comp=E,2μm,1.1s | | | | | | |
| HWUT | | | | IAML | | 23 01 53.7 | |
| | comp=E,2μm,1.1s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **2.19** | **307** | | **Pn** | **23 01 17.4** | **+0.8** |
| **BOZ** | **Bozeman (W)** | **2.25** | **337** | Pn | **Pb** | **23 01 18.6** | **-2.0** |
| **BOZ** | **Bozeman (W)** | **2.25** | **337** | P | **Pn** | **23 01 18.5** | **+1.3** |
| | baz=156,SNR=171 | | | | | | |
| BOZ | | | | S | **Sb** | **23 01 46.5** | **-2.0** |
| | baz=156 | | | | | | |
| **GCMT** | **Greycliff** | **2.31** | **12** | Pn | **Pb** | **23 01 20.1** | **-1.7** |
| **BCYI** | **Bear Canyon** | **2.32** | **291** | Pn | **Pn** | **23 01 18.4** | **+0.1** |
| **DLMT** | **Dillon** | **2.42** | **320** | Pn | **Pb** | **23 01 22.2** | **-1.4** |
| DLMT | | | | IAML | | 23 01 55.1 | |
| | comp=E,2μm,1.0s | | | | | | |
| DLMT | | | | IAML | | 23 01 55.2 | |
| | comp=E,910nm,0.9s | | | | | | |
| **HVU** | **Hansel Valley** | **2.49** | **226** | Pn | **Pn** | **23 01 20.1** | **-0.5** |
| HVU | | | | IAML | | 23 01 57.5 | |
| | comp=E,3μm,0.9s | | | | | | |
| HVU | | | | IAML | | 23 01 57.5 | |
| | comp=N,2μm,0.8s | | | | | | |
| **LRM** | **Limekiln Ridge** | **2.72** | **328** | Pn | **Pb** | **23 01 26.1** | **-2.7** |
| **HLID** | **Hailey** | **2.93** | **272** | | **Pn** | **23 01 26.9** | **+0.2** |
| **HLID** | **Hailey** | **2.93** | **272** | P | **Pn** | **23 01 27.0** | **+0.2** |
| | baz=90,SNR=1000 | | | | | | |
| **K22A** | **Casper** | **2.96** | **106** | Pn | **Pn** | **23 01 27.7** | **+0.6** |
| **K22A** | **Casper** | **2.96** | **106** | P | **Pn** | **23 01 27.4** | **+0.3** |
| | baz=288,SNR=212 | | | | | | |
| **RWWY** | **Rawlins** | **2.98** | **127** | | **Pn** | **23 01 26.9** | **-0.6** |
| **RDMU** | **Red Mountain** | **3.02** | **168** | Pn | **Pn** | **23 01 27.5** | **-0.6** |
| **BGU** | **Big Grassy Mou** | **3.27** | **218** | Pn | **Pn** | **23 01 30.9** | **-0.3** |
| **HRY** | **Holter Researc** | **3.34** | **343** | Pn | **Pn** | **23 01 33.2** | **+1.0** |
| **O20A** | **White River Ci** | **3.76** | **154** | Pn | **Pn** | **23 01 38.7** | **+0.7** |
| **O20A** | **White River Ci** | **3.76** | **154** | P | **Pn** | **23 01 38.2** | **+0.2** |
| | baz=335,SNR=110 | | | | | | |
| O20A | | | | Sb | **Sb** | **23 02 34.1** | **+2.0** |
| | baz=335 | | | | | | |
| **NLU** | **North Lily Min** | **3.80** | **200** | Pn | **Pn** | **23 01 37.5** | **-1.2** |
| **DUG** | **Dugway, Tooele** | **3.80** | **209** | Pn | **Pn** | **23 01 38.2** | **-0.4** |
| DUG | | | | IAML | | 23 02 47.0 | |
| | comp=N,256nm,0.5s | | | | | | |
| DUG | | | | IAML | | 23 02 49.0 | |
| | comp=N,178nm,0.7s | | | | | | |
| **DUG** | **Dugway, Tooele** | **3.80** | **209** | P | **Pn** | **23 01 38.0** | **-0.6** |
| | baz=28,SNR=61 | | | | | | |
| DUG | | | | Sb | **Sb** | **23 02 36.2** | **+2.9** |
| | baz=28 | | | | | | |
| **MFID** | **Camas Ranch** | **3.96** | **270** | | **Pn** | **23 01 44.8** | **+3.9** |
| **MFID** | **Camas Ranch** | **3.96** | **270** | IAML | | 23 02 50.5 | |
| | comp=N,216nm,1.0s | | | | | | |
| MFID | | | | IAML | | 23 02 53.5 | |
| | comp=N,173nm,0.9s | | | | | | |
| **MSO** | **Missoula** | **4.14** | **324** | Pn | **Pn** | **23 01 45.7** | **+2.4** |
| MSO | | | | IAML | | 23 02 49.9 | |
| | comp=N,328nm,0.9s | | | | | | |
| MSO | | | | IAML | | 23 02 53.8 | |
| | comp=N,297nm,0.7s | | | | | | |
| **MSO** | **Missoula** | **4.14** | **324** | | **Pb** | **23 01 54.4** | **+1.5** |
| **MSO** | **Missoula** | **4.14** | **324** | P | **Pn** | **23 01 44.9** | **+1.6** |
| | baz=142,SNR=12 | | | | | | |
| MSO | | | | Sb | **Sb** | **23 02 46.4** | **+3.3** |
| | baz=142 | | | | | | |
| **N23A** | **Red Feather La** | **4.22** | **127** | Pn | **Pn** | **23 01 45.0** | **+0.4** |
| **N23A** | **Red Feather La** | **4.22** | **127** | P | **Pn** | **23 01 44.9** | **+0.4** |
| | baz=310,SNR=136 | | | | | | |
| **PHWY** | **Pilot Hill** | **4.28** | **120** | Pn | **Pn** | **23 01 46.1** | **+0.8** |
| **LAO** | **LASA Array** | **4.31** | **42** | | **Pn** | **23 01 45.3** | **-0.2** |
| **LAO** | **LASA Array** | **4.31** | **42** | P | **Pn** | **23 01 45.9** | **+0.3** |
| | baz=224,SNR=6.5 | | | | | | |
| LAO | | | | Sb | **Sb** | **23 02 49.9** | **+2.0** |
| | baz=224 | | | | | | |
| **PLID** | **Pearl Lake** | **4.32** | **293** | | **Pn** | **23 01 48.1** | **+2.3** |
| **PLID** | **Pearl Lake** | **4.32** | **293** | IAML | | 23 02 54.9 | |
| | comp=N,176nm,0.8s | | | | | | |
| PLID | | | | IAML | | 23 02 56.2 | |
| | comp=N,161nm,0.7s | | | | | | |
| **SRU** | **San Rafael Swe** | **4.42** | **181** | | **Pn** | **23 01 47.1** | **-0.1** |
| **EGMT** | **Eagleton** | **4.51** | **5** | | **Pn** | **23 01 50.3** | **+2.0** |
| **EGMT** | **Eagleton** | **4.51** | **5** | IAML | | 23 03 07.7 | |
| | comp=N,201nm,0.9s | | | | | | |
| EGMT | | | | IAML | | 23 03 10.6 | |
| | comp=N,206nm,1.0s | | | | | | |
| **EGMT** | **Eagleton** | **4.51** | **5** | P | **Pn** | **23 01 48.8** | **+0.5** |
| | baz=186,SNR=15 | | | | | | |
| **ELK** | **Elko** | **4.56** | **234** | Pn | **Pn** | **23 01 50.3** | **+1.1** |
| | comp=N,1.6nm,0.3s,baz=36,slow=14,SNR=26 | | | | | | |
| ELK | | | | Lg | Lg | 23 03 01.3 | |
| | comp=N,7.3nm,0.3s,baz=182,slow=16,SNR=5.9 | | | | | | |
| **ELK** | **Elko** | **4.56** | **234** | Pn | **Pn** | **23 01 49.6** | **+0.5** |
| **RSSD** | **Black Hills** | **4.63** | **81** | | **Pn** | **23 01 50.7** | **+0.6** |
| **RSSD** | **Black Hills** | **4.63** | **81** | IAML | | 23 03 04.9 | |
| | comp=N,278nm,1.4s | | | | | | |
| **RSSD** | **Black Hills** | **4.63** | **81** | P | **Pn** | **23 01 49.5** | **-0.6** |
| | baz=264 | | | | | | |
| RSSD | | | | Sb | **Sb** | **23 02 60.0** | **+2.8** |
| | baz=264 | | | | | | |
| **Q16A** | **Castle Valley** | **4.65** | **188** | | **Pn** | **23 01 49.8** | **-0.6** |
| **JTMT** | **Jette** | **5.02** | **328** | Pn | **Pn** | **23 01 57.2** | **+1.9** |
| **BMO** | **Blue Mountains** | **5.15** | **287** | Pn | **Pn** | **23 01 57.8** | **+0.7** |
| BMO | | | | IAML | | 23 03 25.0 | |
| | comp=N,61nm,1.1s | | | | | | |
| **ISCO** | **Idaho Springs** | **5.17** | **135** | Pn | **Pn** | **23 01 57.5** | **-0.1** |
| ISCO | | | | IAML | | 23 03 21.2 | |
| | comp=N,221nm,0.7s | | | | | | |
| ISCO | | | | IAML | | 23 03 24.9 | |
| | comp=N,196nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **5.17** | **135** | P | **Pn** | **23 01 57.3** | **-0.2** |
| | baz=318,SNR=22 | | | | | | |
| ISCO | | | | Sb | **Sb** | **23 03 16.4** | **+3.7** |
| | baz=318 | | | | | | |
| **PV10** | **Paradox Valley** | **5.25** | **168** | Pn | **Pn** | **23 01 59.9** | **+1.2** |
| **PV07** | **Paradox Valley** | **5.26** | **165** | Pn | **Pn** | **23 01 58.5** | **-0.2** |
| **PSUT** | **Pine Spring** | **5.64** | **209** | Pn | **Pn** | **23 02 04.5** | **+0.5** |
| **J08A** | **Circle Bar Ran** | **5.89** | **271** | Pn | **Pn** | **23 02 10.4** | **+3.1** |
| **BMN** | **Battle Mountai** | **5.97** | **241** | Pn | **Pn** | **23 02 09.7** | **+1.3** |
| **Q24A** | **Divide** | **6.03** | **137** | | **Pn** | **23 02 09.1** | **-0.4** |
| **Q24A** | **Divide** | **6.03** | **137** | P | **Pn** | **23 02 08.6** | **-0.9** |
| | baz=321 | | | | | | |
| Q24A | | | | Sb | **Sb** | **23 03 43.0** | **+5.3** |
| | baz=321 | | | | | | |
| **LNOR** | **Lincton Mounta** | **6.10** | **295** | | Pn | 23 02 15.6 | +5.6 |
| **PKCU** | **Pink Cliffs** | **6.26** | **194** | | **Pn** | **23 02 13.2** | **+0.6** |
| **S22A** | **4UR Ranch, Cre** | **6.38** | **154** | P | **Pn** | **23 02 13.9** | **-0.3** |
| | baz=336,SNR=11 | | | | | | |
| **CCUT** | **Cedar City** | **6.39** | **202** | Pn | **Pn** | **23 02 14.9** | **+0.5** |
| **MVCO** | **Mesa Verde** | **6.48** | **167** | P | **Pn** | **23 02 14.7** | **-0.9** |
| | baz=348,SNR=36 | | | | | | |
| **R11A** | **Troy Canyon, C** | **6.51** | **219** | P | **Pn** | **23 02 16.8** | **+1.0** |
| | baz=36 | | | | | | |
| **DGMT** | **Dagmar** | **6.55** | **39** | | **Pn** | **23 02 18.1** | **+1.9** |
| **DGMT** | **Dagmar** | **6.55** | **39** | Sb | **Sb** | **23 03 56.0** | **+3.8** |
| | baz=223 | | | | | | |
| **NEW** | **Newport** | **6.67** | **318** | Pn | **Pn** | **23 02 20.7** | **+2.8** |
| | comp=N,1.6nm,0.3s,baz=138,slow=13,SNR=11 | | | | | | |
| NEW | | | | Lg | Lg | 23 04 06.5 | |
| | comp=N,3.8nm,0.3s,baz=236,slow=23,SNR=12 | | | | | | |
| NEW | | | | LR | LR | 23 05 03.8 | |
| | comp=N,231nm,18.0s,baz=289,slow=39 | | | | | | |
| **NEW** | **Newport** | **6.67** | **318** | | **Pn** | **23 02 20.6** | **+2.7** |
| **NEW** | **Newport** | **6.67** | **318** | P | **Pn** | **23 02 18.0** | **+0.1** |
| | baz=133 | | | | | | |
| **OGNE** | **Ogallala** | **6.71** | **110** | P | **Pn** | **23 02 18.2** | **-0.4** |
| | baz=295,SNR=11 | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.87** | **146** | P | **Pn** | **23 02 20.3** | **-0.6** |
| | baz=329,SNR=8.7 | | | | | | |
| **C09A** | **Chrisman Ranch** | **6.98** | **310** | | **Pn** | **23 02 24.2** | **+2.1** |
| **OD2** | **Odessa Site #2** | **7.01** | **306** | | **Pn** | **23 02 24.6** | **+2.0** |
| **KSCO** | **Kaye Shedlock'** | **7.38** | **125** | P | **Pn** | **23 02 27.2** | **-0.6** |
| | baz=310 | | | | | | |
| **PINE** | **Pine Mountain** | **7.66** | **276** | | **Pb** | **23 02 49.2** | **-3.7** |
| **T25A** | **Trinidad** | **7.85** | **142** | Pn | **Pn** | **23 02 35.1** | **+0.8** |
| T25A | | | | | **Pg** | **23 03 07.8** | **-2.3** |
| **T25A** | **Trinidad** | **7.85** | **142** | P | **Pn** | **23 02 34.3** | **+0.1** |
| | baz=326 | | | | | | |
| **RYN** | **Ryan** | **7.86** | **234** | Pn | **Pn** | **23 02 35.4** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **7.87** | **232** | Pn | **Pn** | **23 02 37.0** | **+2.5** |
| | comp=N,0.5nm,0.3s,baz=52,slow=11,SNR=20 | | | | | | |
| NVAR | | | | Lg | Lg | 23 04 46.1 | |
| | comp=N,1.4nm,0.3s,baz=29,slow=31,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **7.87** | **232** | | **Pn** | **23 02 36.3** | **+1.7** |
| **B08A** | **Colville Reser** | **7.88** | **311** | Pn | **Pn** | **23 02 35.2** | **+0.7** |
| **SHPR** | **Sheep Range** | **7.92** | **209** | Pn | **Pn** | **23 02 35.3** | **+0.1** |
| **TPNV** | **Topopah Spring** | **7.96** | **216** | Pn | **Pn** | **23 02 35.4** | **-0.4** |
| **TPNV** | **Topopah Spring** | **7.96** | **216** | P | **Pn** | **23 02 37.2** | **+1.4** |
| | baz=32 | | | | | | |
| **WUAZ** | **Wupatki** | **8.04** | **186** | P | **Pn** | **23 02 36.1** | **-0.8** |
| | baz=5.2,SNR=23 | | | | | | |
| **YERR** | **Yerington** | **8.07** | **239** | Pn | **Pn** | **23 02 38.5** | **+1.1** |
| **LHV** | **Little Huntoon** | **8.10** | **232** | Pn | **Pn** | **23 02 38.3** | **+0.7** |
| **LTY** | **Liberty** | **8.14** | **301** | Pn | **Pn** | **23 02 39.9** | **+1.8** |
| **PNT** | **Penticton** | **8.61** | **315** | | Pn | 23 02 49.5 | +5.1 |
| **EMB** | **Emerald Bay** | **8.62** | **241** | Pn | **Pn** | **23 02 44.2** | **-0.7** |
| **GWY** | **Greenwater Val** | **8.79** | **215** | Pn | **Pn** | **23 02 47.5** | **+0.4** |
| **OMMB** | **Old Mammoth Mi** | **8.83** | **231** | Pn | **Pn** | **23 02 46.1** | **-1.7** |
| **W13A** | **Hualapai Mount** | **8.85** | **199** | Pn | **Pn** | **23 02 48.1** | **+0.1** |
| **L04D** | **Klamath Falls** | **8.86** | **266** | Pn | **Pn** | **23 02 48.0** | **0.0** |
| **X18A** | **Snowflake** | **9.00** | **178** | | **Pn** | **23 02 49.4** | **-0.7** |
| **QSM** | **Queen of Sheba** | **9.06** | **216** | Pn | **Pn** | **23 02 50.9** | **+0.2** |
| **ANMO** | **Albuquerque** | **9.10** | **159** | Pn | **Pn** | **23 02 51.1** | **-0.3** |
| | comp=N,0.5nm,0.3s,baz=328,slow=12,SNR=8.9 | | | | | | |
| ANMO | | | | Lg | Lg | 23 05 20.2 | |
| | comp=N,0.8nm,0.3s,baz=254,slow=23,SNR=4.0 | | | | | | |
| **ANMO** | **Albuquerque** | **9.10** | **159** | Pn | **Pn** | **23 02 51.4** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **9.27** | **263** | Pn | **Pn** | **23 02 58.1** | **+4.6** |
| | comp=N,0.1nm,0.3s,baz=19,slow=15,SNR=2.0 | | | | | | |
| **CBKS** | **Cedar Bluff** | **9.31** | **117** | Pn | **Pn** | **23 02 54.6** | **+0.5** |
| **ECSD** | **EROS Data Cent** | **9.99** | **84** | Pn | **Pn** | **23 03 03.0** | **-0.4** |
| **ECSD** | **EROS Data Cent** | **9.99** | **84** | P | **Pn** | **23 03 02.4** | **-1.0** |
| | baz=273,SNR=8.2 | | | | | | |
| **AGMN** | **Agassiz Nation** | **11.18** | **60** | Pn | **Pn** | **23 03 20.9** | **+1.3** |
| **ULM** | **Lac du Bonnet** | **11.97** | **51** | Pn | **Pn** | **23 03 30.2** | **-0.2** |
| | comp=N,1.2nm,0.3s,baz=236,slow=12,SNR=6.9 | | | | | | |
| ULM | | | | Lg | Lg | 23 06 48.5 | |
| | comp=N,0.6nm,0.3s,baz=144,slow=21,SNR=3.8 | | | | | | |
| **F36A** | **Milaca** | **12.22** | **73** | Pn | **Pn** | **23 03 33.6** | **-0.3** |
| **I37A** | **Lemond, Waseca** | **12.29** | **82** | Pn | **Pn** | **23 03 35.4** | **+0.5** |
| **MNTX** | **Cornudas Mount** | **12.46** | **160** | Pn | **Pn** | **23 03 38.0** | **+0.8** |
| **FFC** | **Flin Flon** | **12.46** | **23** | Pn | **Pn** | **23 03 36.7** | **-0.5** |
| **WMOK** | **Wichita Mounta** | **12.57** | **130** | Pn | **Pn** | **23 03 37.9** | **-0.9** |
| **SCIA** | **State Center** | **12.73** | **91** | | **Pn** | **23 03 41.4** | **+0.5** |
| **W35A** | **Tecumseh** | **13.38** | **124** | | **Pn** | **23 03 47.7** | **-2.0** |
| **R40A** | **Maddies Statio** | **14.66** | **105** | | **Pn** | **23 04 06.5** | **-0.7** |
| **BBB** | **Bella Bella** | **14.68** | **312** | Pn | **Pn** | **23 04 08.0** | **+0.5** |
| | comp=N,0.3nm,0.3s,baz=154,slow=4.5,SNR=3.2 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **15.16** | **157** | | **Pn** | **23 04 13.8** | **-0.4** |
| TX31 | | | | IAmb | IAmb | 23 04 26.3 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **TX32** | **Lajitas Array** | **15.16** | **157** | Pn | **Pn** | **23 04 13.8** | **-0.3** |
| **TXAR** | **Lajitas Array** | **15.16** | **157** | Pn | **Pn** | **23 04 13.3** | **-0.9** |
| | comp=Z,0.0nm,0.3s,baz=345,slow=9.1,SNR=7.4 | | | | | | |
| TXAR | | | | Lg | Lg | 23 08 32.0 | |
| | baz=324,slow=21,SNR=2.0 | | | | | | |
| **CCM** | **Cathedral Cave** | **15.48** | **104** | | **Pn** | **23 04 16.4** | **-1.8** |
| CCM | | | | IAmb | IAmb | 23 04 30.8 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **I42A** | **Draeger Farm,** | **15.53** | **81** | Pn | **Pn** | **23 04 17.2** | **-1.6** |
| I42A | | | | IAmb | IAmb | 23 04 30.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **HDIL** | **Hopedale** | **15.94** | **94** | | **Pn** | **23 04 23.1** | **-1.0** |
| **FVM** | **French Village** | **16.09** | **103** | | **Pn** | **23 04 25.7** | **-0.4** |
| FVM | | | | IAmb | IAmb | 23 04 32.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **K43A** | **Burlington** | **16.12** | **85** | Pn | **Pn** | **23 04 26.2** | **-0.2** |
| **PBMO** | **Poplar Bluff** | **16.66** | **107** | Pn | **Pn** | **23 04 33.0** | **-0.3** |
| **Q44A** | **Meyer Farm, Va** | **16.72** | **99** | Pn | **Pn** | **23 04 33.0** | **-1.0** |
| **E43A** | **Lone Tree Farm** | **16.78** | **72** | Pn | **Pn** | **23 04 33.3** | **-1.6** |
| E43A | | | | IAmb | IAmb | 23 04 38.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WVT** | **Waverly** | **18.80** | **106** | P | **P** | **23 04 58.3** | **-1.1** |
| WVT | | | | IAmb | IAmb | 23 05 05.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.15** | **354** | P | **Pn** | **23 05 03.9** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=168,slow=11,SNR=16 | | | | | | |
| YKA | | | | Lg | Lg | 23 10 32.9 | |
| | comp=Z,0.0nm,0.3s,baz=174,slow=27,SNR=1.4 | | | | | | |
| **SWET** | **Sewanee** | **20.59** | **106** | P | **P** | **23 05 18.9** | **-0.1** |
| **ILAR** | **Eielson Array** | **29.46** | **329** | P | **P** | **23 06 45.9** | **+2.3** |
| | comp=Z,1.6nm,1.2s,baz=128,slow=1.7,SNR=3.1 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.89** | **330** | *eP* | **P** | **23 13 28.0** | **-1.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,78nm,4.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **89.36** | **351** | P | **P** | **23 13 36.4** | **-0.1** |
| | comp=Z,0.3nm,0.8s,baz=354,slow=4.7,SNR=3.0 | | | | | | |
| **WMQ** | **Urumqi** | **91.54** | **347** | *eP* | **P** | **23 13 48.3** | **+1.6** |

*NNC **26** 23:18:41.7±1.2, 42°.24N×69°.27E, h0km, mb2.8, mpv3.0, Error ellipse: s-maj=7.1km s-min=3.7km az=62.0*
*SOME **26** 23:18:41.5, 42°.20N×69°.25E, h10km*
*KRNET **26** 23:18:43.1±0.1, 42°.12N×69°.05E, mb2.8*

**ISC 26 23:18:34.4±2.3, 42°.33N±0°.04×68°.79E±0°.09, h2km±12km, n21, σ2§46/31, 10C-6D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHM** | **Chimkent** | **0.60** | **90** | *eP* | **Pg** | **23 18 47.6** | **+1.6** |
| | 76nm,0.1s | | | | | | |
| CHM | | | | *eS* | **Sg** | **23 18 52.0** | **-1.8** |
| | 2μm,0.3s | | | | | | |
| **IUG** | **luzhnay** | **0.94** | **100** | *eP* | **Pg** | **23 18 52.8** | **+0.3** |
| | 479nm,0.1s | | | | | | |
| IUG | | | | *eS* | **Sg** | **23 19 01.4** | **-3.2** |
| | 143nm,0.2s | | | | | | |
| **IUG** | **luzhnay** | **0.94** | **100** | P | **Pg** | **23 18 52.7** | **+0.3** |
| | 479nm,0.1s | | | | | | |
| IUG | | | | S | **Sg** | **23 19 01.4** | **-3.2** |
| | 143nm,0.2s | | | | | | |
| **BRLS** | **Borolday** | **1.04** | **47** | *eP* | **Pb** | **23 18 54.3** | **-1.0** |
| | 3.3nm,0.2s | | | | | | |
| BRLS | | | | *eS* | **Sb** | **23 19 03.6** | **-5.8** |
| | 46nm,0.1s | | | | | | |
| **BRLS** | **Borolday** | **1.04** | **47** | P | **Pb** | **23 18 54.2** | **-1.0** |
| | 3.3nm,0.2s | | | | | | |
| BRLS | | | | S | **Sb** | **23 19 03.6** | **-5.8** |
| | 46nm,0.1s | | | | | | |
| **TAS** | **Tashkent** | **1.07** | **159** | ⇓*i*P | **Pn** | **23 18 58.6** | **+2.2** |
| | baz=66 | | | | | | |
| TAS | | | | ⇓*i*S | **Sn** | **23 19 10.4** | **-1.5** |
| | baz=66 | | | | | | |
| **KK02** | **Karatay Array** | **1.49** | **58** | ⇓P | **Pg** | **23 19 05.5** | **+2.6** |
| | 0.5nm,0.2s,baz=229,slow=16 | | | | | | |
| KK02 | | | | ⇑S | **Sg** | **23 19 22.6** | **+0.4** |
| | 3.9nm,0.3s,baz=228,slow=28 | | | | | | |
| **TRKS** | **Terek-Say** | **1.93** | **114** | ⇓*i*P | **Pg** | **23 19 12.9** | **+1.6** |
| | baz=12 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sb** | **23 19 33.8** | **-1.1** |
| | baz=12 | | | | | | |
| **DZA** | **Taraz** | **1.96** | **72** | *eP* | **Pg** | **23 19 13.2** | **+1.2** |
| | 9.9nm,0.1s | | | | | | |
| DZA | | | | *eS* | **Sb** | **23 19 36.0** | **+0.3** |
| | 51nm,0.2s | | | | | | |
| **ARK** | **Arkit** | **2.42** | **101** | ⇑*i*P | **Pb** | **23 19 19.4** | **+0.6** |
| | baz=97 | | | | | | |
| ARK | | | | ⇑*i*S | **Sn** | **23 19 45.4** | **0.0** |
| | baz=97 | | | | | | |
| **BTK** | **Batken** | **2.73** | **145** | ⇑*e*P | **Pb** | **23 19 22.4** | **-1.7** |
| | baz=46 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **23 19 52.0** | **-1.1** |
| | baz=46 | | | | | | |
| **MRKS** | **Merke** | **3.31** | **81** | *eP* | **Pb** | **23 19 35.7** | **+1.8** |
| | 1.7nm,0.4s | | | | | | |
| MRKS | | | | *eS* | **Sb** | **23 20 15.0** | **+0.4** |
| | 5.8nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **3.31** | **81** | Pg | **Pb** | **23 19 35.7** | **+1.8** |
| | 1.7nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 23 20 15.0 | |
| | 5.8nm,0.4s | | | | | | |
| **OHH** | **Osh** | **3.50** | **120** | ⇑*e*P | **Pn** | **23 19 33.4** | **+3.4** |
| | baz=18 | | | | | | |
| OH

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.97** | **163** | Pn | | **Pn** | **23 35 44.0** | **-2.1** |
| | 1.5nm,0.3s,baz=348,slow=9.4,SNR=26 | | | | | | | |
| WRA | | | | Sn | | Sn | 23 38 11.2 | -10 |
| | 3.7nm,0.3s,baz=343,slow=23,SNR=10.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.97** | **163** | | | **Pn** | **23 35 47.6** | **+1.4** |
| **WB2** | **Warramunga Arr** | **13.97** | **163** | | | **Pn** | **23 35 45.3** | **-0.9** |
| **WR0** | **Warramunga Arr** | **14.04** | **162** | P | | **Pn** | **23 35 46.8** | **-0.3** |
| **COEN** | **Coen** | **14.89** | **121** | | | **Pn** | **23 35 58.2** | **+0.5** |
| **COEN** | **Coen** | **14.89** | **121** | P | | **P** | **23 36 02.2** | **+2.4** |
| | 29nm,0.9s | | | | | | | |
| **QIS** | **Mount Isa** | **16.75** | **147** | P | | **Pn** | **23 36 24.1** | **+3.5** |
| | 6.6nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **17.43** | **168** | Pn | | **Pn** | **23 36 29.4** | **+0.6** |
| AS31 | | | | IAmb | | IAmb | 23 36 47.7 | |
| | comp=Z,3.4nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.43** | **168** | P | | **Pn** | **23 36 29.2** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=339,slow=9.5,SNR=59 | | | | | | | |
| ASAR | | | | S | | **S** | **23 39 37.5** | **-4.5** |
| | comp=Z,1.3nm,0.3s,baz=355,slow=26,SNR=8.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.43** | **168** | | | **Pn** | **23 36 29.4** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **17.89** | **212** | P | | **P** | **23 36 32.5** | **-0.4** |
| PSA00 | | | | IAmb | | IAmb | 23 36 34.2 | |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.89** | **212** | P | | **P** | **23 36 33.4** | **+0.4** |
| PSA00 | | | | IAmb | | IAmb | 23 36 33.9 | |
| | comp=Z,28nm,0.5s | | | | | | | |
| **MTSU** | **Mount Surprise** | **18.09** | **131** | P | | **Pn** | **23 36 40.3** | **+3.7** |
| | comp=Z,4.1nm,0.5s | | | | | | | |
| **WRKA** | **Warakurna** | **18.47** | **185** | P | | **Pn** | **23 36 41.9** | **+0.8** |
| | comp=Z,12nm,2.6s | | | | | | | |
| **GIRL** | **Giralia** | **22.09** | **222** | P | | **P** | **23 37 17.5** | **-0.4** |
| **FORT** | **Forrest** | **24.18** | **184** | P | | **P** | **23 37 36.9** | **-0.4** |
| FORT | | | | IAmb | | IAmb | 23 37 51.3 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.43** | **158** | P | | **P** | **23 38 07.1** | **+0.5** |
| | comp=Z,0.5nm,0.3s,baz=324,slow=16,SNR=1.9 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.43** | **158** | P | | **P** | **23 38 06.8** | **+0.2** |
| **EIDS** | **Eidsvold** | **27.50** | **135** | P | | **P** | **23 38 05.7** | **-1.6** |
| EIDS | | | | IAmb | | IAmb | 23 38 07.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **SANVU** | **Saraoutou** | **37.50** | **107** | P | | **P** | **23 39 33.2** | **-1.2** |
| SANVU | | | | IAmb | | IAmb | 23 39 34.5 | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **42.79** | **321** | P | | **P** | **23 40 18.5** | **+0.5** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,70nm,4.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.12** | **342** | *e*P | | **P** | **23 41 16.5** | **+1.6** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,180nm,4.9s | | | | | | | |
| **KHZ** | **Kahutara** | **52.44** | **140** | P | | **P** | **23 41 29.3** | **-2.7** |
| KHZ | | | | IAmb | | IAmb | 23 41 35.5 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SNZO** | **South Karori** | **52.65** | **138** | P | | **P** | **23 41 32.2** | **-1.4** |
| **WMQ** | **Urumqi** | **63.02** | **327** | *e*P | | **P** | **23 42 46.8** | **+0.8** |
| **MK31** | **Makanchi Array** | **67.86** | **327** | P | | **P** | **23 43 15.4** | **-1.6** |
| **MKAR** | **Makanchi Array** | **67.86** | **327** | P | | **P** | **23 43 15.9** | **-1.0** |
| | comp=Z,1.5nm,0.5s,baz=113,slow=8.8,SNR=54 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.86** | **327** | P | | **P** | **23 43 16.0** | **-1.0** |
| **MAKZ** | **Makanchi** | **68.04** | **327** | P | | **P** | **23 43 16.9** | **-1.3** |
| MAKZ | | | | IAmb | | IAmb | 23 43 17.6 | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **70.21** | **320** | P | | **P** | **23 43 30.9** | **-0.9** |
| **GAR** | **Garm** | **71.36** | **315** | P | | **P** | **23 43 37.2** | **-1.6** |
| GAR | | | | IAmb | | IAmb | 23 43 38.1 | |
| | comp=Z,3.2nm,0.9s | | | | | | | |

*NEIC* ***26*** *23:34:06.5±1.8,30.85S±0.05×72.73W±0.01, h4km±5km, mb4.0/6, Mwr3.7/18, ML3.7(GUC), Error ellipse: s-maj=6.8km s-min=1.1km az=171.0*

*IDC* ***26*** *23:34:07.5±1.4,30.96S×72.60W, h0km, mb3.8/4, mb1 4.0/7, mb1mx3.9/20, mbtmp3.8/7, ML3.8/3, MS3.1/2, Ms1 3.1/2, ms1mx2.5/53, Error ellipse: s-maj=36.5km s-min=33.0km az=77.0*

*NEIC* ***26*** *23:34:08.6,30.88S×72.64W, h5km, Moment Tensor Solution. Moment tensor: Scale 1014Nm; Mrr=4.74; Mθθ=0.34; Mφφ 5.08; Mrθ=0.07; Mrφ=0.45; Mθφ=0.49; Fault plane solution: M0=4.97000×1014 NP1:φs=173.94000°, δ42.19000°, λ=-92.04000°. NP2:φs=356.68000°, δ47.84000°, λ=-88.16000°. Principal axes: T 5.1441, Plg3.0000°, Azm85.0000°; N -0.3782, Plg1.0000°, Azm175.0000°; P -4.7658, Plg87.0000°, Azm291.0000°;*

*GUC* ***26*** *23:34:09.8±0.6,30.84S×72.58W, h46km±4km, ML3.7*

**ISC 26 23:34:06.1±1.8,30.91S±0.03×72.61W±0.05, h0km±11km, n67,σ1°s42/81, mb3.9/4,7C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.87** | **75** | | **Pn** | **23 34 25.3** | **-0.2** |
| CO06 | | | | | **Sn** | **23 34 37.4** | **-1.5** |
| **CO06** | **Fray Jorge** | **0.87** | **75** | ⇑*i*P | **Pn** | **23 34 25.3** | **-0.2** |
| CO06 | | | | *i* S | **Sn** | **23 34 37.2** | **-1.6** |
| CO06 | | | | IAML | | 23 34 37.8 | |
| | comp=N,5μm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **1.41** | **103** | | **Pg** | **23 34 34.0** | **+0.8** |
| CO02 | | | | | **Sg** | **23 34 52.2** | **+0.7** |
| **CO02** | **Combarbal** | **1.41** | **103** | ⇑*i*P | **Pg** | **23 34 34.1** | **+0.9** |
| CO02 | | | | *i* S | **Sg** | **23 34 52.2** | **+0.7** |
| CO02 | | | | IAML | | 23 34 54.3 | |
| | comp=N,4μm,0.3s | | | | | | |
| **CO05** | **La Serena** | **1.54** | **51** | | **Pb** | **23 34 34.8** | **-0.7** |
| CO05 | | | | | **Sn** | **23 34 53.8** | **-1.6** |
| **CO05** | **La Serena** | **1.54** | **51** | *e*P | **Pb** | **23 34 34.7** | **-0.7** |
| CO05 | | | | *i* S | **Sn** | **23 34 53.8** | **-1.6** |
| CO05 | | | | IAML | | 23 34 56.8 | |
| | comp=N,703nm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **1.65** | **88** | | **Pb** | **23 34 37.5** | **+0.1** |
| CO03 | | | | Sn | **Sb** | **23 34 58.2** | **-0.6** |
| **CO03** | **El Pedregal** | **1.65** | **88** | ⇑*i*P | **Pb** | **23 34 37.5** | **+0.1** |
| CO03 | | | | *i* S | **Sb** | **23 34 58.2** | **-0.6** |
| CO03 | | | | IAML | | 23 35 00.4 | |
| | comp=N,1μm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **1.73** | **65** | | **Pb** | **23 34 38.2** | **-0.5** |
| GO04 | | | | Sn | **Sb** | **23 34 59.6** | **-1.4** |
| **GO04** | **Tololo Observa** | **1.73** | **65** | ⇑*i*P | **Pb** | **23 34 38.3** | **-0.5** |
| GO04 | | | | *i* S | **Sb** | **23 34 59.8** | **-1.3** |
| **VA06** | **Catapilco** | **1.99** | **146** | | **Pb** | **23 34 41.9** | **-1.3** |
| **VA06** | **Catapilco** | **1.99** | **146** | *e*P | **Pb** | **23 34 41.8** | **-1.3** |
| VA06 | | | | *i* S | **Sn** | **23 35 04.3** | **-2.3** |
| VA06 | | | | IAML | | 23 35 06.8 | |
| | comp=E,1μm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **2.26** | **159** | Pn | **Pn** | **23 34 45.5** | **+0.8** |
| **VA01** | **Torpederas** | **2.26** | **159** | IAML | | 23 35 13.1 | |
| | comp=N,240nm,0.2s | | | | | | |
| **ROCH** | **El Roble** | **2.47** | **147** | *e*P | **Pb** | **23 34 48.7** | **-2.7** |
| ROCH | | | | ⇑*i*P | **Pn** | **23 34 47.4** | **-0.3** |
| ROCH | | | | *i* S | **Sn** | **23 35 18.1** | **-0.6** |
| ROCH | | | | IAML | | 23 35 20.1 | |
| | comp=E,347nm,0.5s | | | | | | |
| ROCH | | | | IAML | | 23 35 21.6 | |
| | comp=E,381nm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **2.47** | **147** | | **Pn** | **23 34 47.8** | **+0.1** |
| **LCO** | **Las Campanas** | **2.51** | **42** | | **Pn** | **23 34 48.8** | **+0.4** |
| **LCO** | **Las Campanas** | **2.51** | **42** | ⇑*i*P | **Pn** | **23 34 48.8** | **+0.4** |
| LCO | | | | *i* S | **Sn** | **23 35 18.7** | **-1.1** |
| **VA03** | **San Esteban** | **2.55** | **137** | | **Pb** | **23 34 50.6** | **-2.1** |
| **VA03** | **San Esteban** | **2.55** | **137** | ⇑*i*P | **Pb** | **23 34 50.6** | **-2.1** |
| VA03 | | | | *i* S | **Sn** | **23 35 20.2** | **-0.3** |
| VA03 | | | | IAML | | 23 35 26.7 | |
| | comp=E,668nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **2.66** | **152** | | **Pn** | **23 34 51.5** | **+1.3** |
| **MT02** | **Curacav** | **2.66** | **152** | IAML | | 23 35 23.0 | |
| | comp=N,187nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **2.77** | **144** | | **Pn** | **23 34 53.2** | **+1.6** |
| **PEL** | **Peldehue** | **2.77** | **144** | *e*P | **Pn** | **23 34 52.3** | **+0.6** |
| PEL | | | | *i* S | **Sn** | **23 35 25.2** | **-0.5** |
| PEL | | | | IAML | | 23 35 28.2 | |
| | comp=E,244nm,0.2s | | | | | | |
| **VA05** | **Santo Domingo** | **2.87** | **163** | | **Pn** | **23 34 53.3** | **+0.2** |
| **MT05** | **Renca** | **2.94** | **148** | Pn | **Pn** | **23 34 56.0** | **+1.9** |
| **MT05** | **Renca** | **2.94** | **148** | IAML | | 23 35 32.6 | |
| | comp=E,292nm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.01** | **27** | Pn | **Pn** | **23 34 53.9** | **-1.0** |
| **AC04** | **Llanos de Chal** | **3.01** | **27** | *e*P | **Pn** | **23 34 54.0** | **-1.0** |
| AC04 | | | | IAML | | 23 35 28.9 | |
| | comp=E,160nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **3.13** | **146** | | **Pn** | **23 34 58.2** | **+1.5** |
| **MT03** | **Universidad Ad** | **3.13** | **146** | *e*P | **Pn** | **23 34 58.6** | **+1.8** |
| MT03 | | | | *i* S | **Sn** | **23 35 35.0** | **0.0** |
| MT03 | | | | IAML | | 23 35 37.7 | |
| | comp=E,256nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **3.17** | **159** | | **Pn** | **23 34 58.1** | **+1.0** |
| **MT01** | **Popeta** | **3.17** | **159** | *e*P | **Pn** | **23 34 57.7** | **+0.6** |
| MT01 | | | | IAML | | 23 35 38.5 | |
| | comp=E,91nm,0.4s | | | | | | |
| **MT09** | **Talagante** | **3.17** | **155** | *e*P | **Pn** | **23 34 59.1** | **+1.8** |
| MT09 | | | | *i* S | **Sn** | **23 35 35.6** | **-0.3** |
| MT09 | | | | IAML | | 23 35 38.4 | |
| | comp=N,216nm,0.1s | | | | | | |
| **ZON** | **Zonda** | **3.43** | **102** | | **Pb** | **23 35 04.3** | **-3.4** |
| **LMEL** | **Las Melosas** | **3.57** | **146** | | **Pn** | **23 35 04.8** | **+1.9** |
| **LMEL** | **Las Melosas** | **3.57** | **146** | *e*P | **Pn** | **23 35 05.2** | **+2.3** |
| LMEL | | | | *i* S | **Sn** | **23 35 45.7** | **-0.1** |
| LMEL | | | | IAML | | 23 35 51.2 | |
| | comp=N,140nm,0.3s | | | | | | |
| **BO01** | **Tunca** | **3.71** | **160** | | **Pn** | **23 35 06.2** | **+1.7** |
| **AC06** | **Mina Casimiro** | **4.05** | **30** | | **Pn** | **23 35 09.0** | **-0.2** |
| **GO05** | **Huala** | **4.13** | **172** | Pn | **Pn** | **23 35 11.5** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **4.17** | **159** | | **Pn** | **23 35 12.0** | **+1.0** |
| **AC01** | **Pan de Azucar** | **5.06** | **21** | Pn | **Pn** | **23 35 21.4** | **-1.7** |
| **AC02** | **Maricunga** | **5.08** | **38** | | **Pn** | **23 35 24.8** | **+0.9** |
| **BI05** | **Punta Hualpn** | **5.85** | **185** | Pn | **Pn** | **23 35 32.9** | **-1.0** |
| **H03N1** | **Juan Fernandez** | **5.91** | **243** | Pn | **Pn** | **23 35 32.7** | **-1.8** |
| | baz=47,slow=15,SNR=5.7 | | | | | | |
| H03N1 | | | | Sn | Sn | 23 36 30.5 | -12 |
| H03N1 | | | | T | T | 23 41 39.1 | |
| | baz=70,slow=71,SNR=10 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.92** | **243** | Pn | **Pn** | **23 35 32.9** | **-1.8** |
| | SNR=6.8 | | | | | | |
| H03N2 | | | | Sn | Sn | 23 36 30.3 | -13 |
| | baz=221,slow=74,SNR=5.1 | | | | | | |
| H03N2 | | | | T | T | 23 41 37.8 | |
| | baz=70,slow=71,SNR=7.6 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.92** | **243** | Pn | **Pn** | **23 35 33.0** | **-1.8** |
| | SNR=10.0 | | | | | | |
| H03N3 | | | | Sn | Sn | 23 36 29.2 | -14 |
| | baz=286,slow=74,SNR=4.6 | | | | | | |
| H03N3 | | | | T | T | 23 41 38.2 | |
| | baz=70,slow=71,SNR=15 | | | | | | |
| **PB14** | **IPOC Station P** | **6.55** | **18** | Pn | **Pn** | **23 35 41.2** | **-2.8** |
| **LC01** | **Cunco** | **8.00** | **176** | | **Pn** | **23 36 03.7** | **+0.3** |
| **PLCA** | **Paso Flores** | **9.95** | **171** | Pn | **Pn** | **23 36 31.6** | **+1.3** |
| | comp=N,0.2nm,0.3s,baz=322,slow=13,SNR=4.1 | | | | | | |
| **PLCA** | **Paso Flores** | **9.95** | **171** | | **Pn** | **23 36 31.4** | **+1.1** |
| **CPUP** | **Villa Florida** | **14.17** | **75** | LR | LR | 23 42 39.8 | |
| | comp=N,45nm,20.2s,baz=233,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **15.12** | **17** | Pn | **P** | **23 37 44.0** | **-2.9** |
| | comp=N,0.1nm,0.3s,baz=191,slow=7.9,SNR=5.4 | | | | | | |
| **LPAZ** | **La Paz** | **15.12** | **17** | | **Pn** | **23 37 41.4** | **-0.1** |
| **PLTB** | **Pedras Altas** | **16.27** | **98** | Pn | **P** | **23 37 56.8** | **-2.3** |
| PLTB | | | | IAmb | IAmb | 23 38 12.3 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **GO08** | **Villa O'Higgin** | **17.54** | **180** | | **P** | **23 38 12.1** | **-0.9** |
| GO08 | | | | IAmb | IAmb | 23 38 13.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SIV** | **San Ignacio** | **18.21** | **38** | P | **P** | **23 38 22.7** | **+2.0** |
| | comp=Z,0.4nm,0.3s,baz=227,slow=12,SNR=14 | | | | | | |
| **BDFB** | **Brasilia** | **27.14** | **62** | P | **P** | **23 39 52.8** | **+1.7** |
| | comp=Z,2.2nm,0.6s,baz=216,slow=8.7,SNR=3.5 | | | | | | |
| **BDFB** | **Brasilia** | **27.14** | **62** | P | **P** | **23 39 51.3** | **+0.2** |
| BDFB | | | | IAmb | IAmb | 23 39 55.6 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **RCBR** | **Riachuelo** | **42.52** | **62** | P | **P** | **23 42 03.1** | **-0.4** |
| **TXAR** | **Lajitas Array** | **66.81** | **331** | P | **P** | **23 45 01.0** | **+1.4** |
| | comp=Z,5nm,0.7s,baz=156,slow=6.9,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.81** | **331** | P | **P** | **23 44 59.1** | **-0.5** |
| **PDAR** | **Pinedale Array** | **80.79** | **333** | P | **P** | **23 46 24.5** | **+2.9** |
| | comp=Z,0.4nm,0.9s,baz=130,slow=2.8,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.63** | **71** | P | **P** | **23 46 38.4** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=278,slow=4.7,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.63** | **71** | P | **P** | **23 46 37.4** | **+0.6** |
| TORD | | | | IAmb | IAmb | 23 46 51.3 | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **LSZ** | **Lusaka** | **91.24** | **109** | LR | LR | 00 24 43.9 | |
| | comp=Z,16nm,21.2s,baz=222,slow=33 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.81** | **29** | PKPbc | **PKiKP** | **23 54 03.1** | **+0.5** |
| | comp=Z,2.5nm,0.6s,baz=300,slow=2.9,SNR=13 | | | | | | |

*NEIC* ***26*** *23:41:02.0±1.5,6.39S±0.07×127.90E±0.07, h358km±8km, mb4.2/38, Error ellipse: s-maj=10.7km s-min=9.9km az=124.0*

*IDC* ***26*** *23:41:02.4±1.3,6.46S×127.97E, h365km±15km, mb3.8/13, mb1 3.9/18, mb1mx3.7/37, mbtmp4.6/18, Error ellipse: s-maj=19.3km s-min=8.3km az=74.0*

*DJA* ***26*** *23:41:02.7±0.2,6°S×3°×12°8E±°, h345km±4km, M4.3/20, mb4.5/20, mB4.8/13, MLv4.8/19, Mw(mB)4.1/13*

**ISC 26 23:41:01.4±0.4,6.46S±0.04×127.96E±0.06, h353km, n129, σ1°s18/135, mb4.2/37, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **2.77** | **5** | P | **Pn** | **23 42 00.7** | **+1.7** |
| **MSAI** | **Masohi** | **3.24** | **17** | P | **Pn** | **23 42 04.7** | **+1.4** |
| **SAUI** | **Saumlaki** | **3.65** | **115** | Pn | **Pn** | **23 42 09.2** | **+2.2** |
| SAUI | | | | Sn | **S** | **23 42 59.3** | **-0.6** |
| **SAUI** | **Saumlaki** | **3.65** | **115** | P | **Pn** | **23 42 07.7** | **+0.6** |
| **SAUI** | **Saumlaki** | **3.65** | **115** | P | **Pn** | **23 42 09.8** | **+2.7** |
| **SANI** | **Sanana** | **4.80** | **336** | P | **Pn** | **23 42 19.5** | **+0.4** |
| **SANI** | **Sanana** | **4.80** | **336** | P | **Pn** | **23 42 19.8** | **+0.7** |
| **SOEI** | **Soe** | **4.90** | **228** | Pn | **Pn** | **23 42 21.0** | **+0.7** |
| **SOEI** | **Soe** | **4.90** | **228** | P | **Pn** | **23 42 20.8** | **+0.5** |
| **SOEI** | **Soe** | **4.90** | **228** | P | **Pn** | **23 42 21.2** | **+0.9** |
| **BBSI** | **Bau Bau** | **5.44** | **280** | P | **Pn** | **23 42 27.6** | **+1.5** |
| | 0.1nm466nm21nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **5.54** | **51** | Pn | **Pn** | **23 42 27.9** | **+0.8** |
| **FAKI** | **Fak Fak** | **5.54** | **51** | P | **Pn** | **23 42 28.0** | **+0.8** |
| | 0.9nm5μm143nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **5.54** | **51** | P | **Pn** | **23 42 28.0** | **+0.8** |
| **BATI** | **Baumata** | **5.65** | **229** | P | **Pn** | **23 42 29.2** | **+0.8** |
| | 323nm,0.3s,baz=85,slow=1.3,SNR=243 | | | | | | |
| BATI | | | | S | **S** | **23 43 37.4** | **-1.5** |
| | 28nm,0.3s,baz=292,slow=21,SNR=8.5 | | | | | | |
| **BATI** | **Baumata** | **5.65** | **229** | P | **Pn** | **23 42 28.7** | **+0.3** |
| | 3.3nm11μm725nm,0.6s | | | | | | |
| **MMRI** | **Maumere** | **6.07** | **249** | | **Pn** | **23 42 33.4** | **+0.2** |
| **MMRI** | **Maumere** | **6.07** | **249** | P | **Pn** | **23 42 34.5** | **+1.3** |
| | 0.4nm46nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **6.46** | **31** | P | **Pn** | **23 42 37.5** | **-0.3** |
| | 12nm,0.3s,baz=247,slow=23,SNR=26 | | | | | | |
| SIJI | | | | S | **S** | **23 43 51.3** | **-4.6** |
| | 13nm,0.3s,baz=59,slow=23,SNR=13 | | | | | | |
| **DRS** | **Darwin Rock St** | **6.60** | **154** | P | **P** | **23 42 42.2** | **+1.6** |
| **MTN** | **Manton Dam** | **7.07** | **154** | Pn | **P** | **23 42 46.4** | **+0.3** |
| **MTN** | **Manton Dam** | **7.07** | **154** | P | **P** | **23 42 46.8** | **+0.7** |
| **LUWI** | **Luwuk** | **7.47** | **316** | P | **P** | **23 42 51.4** | **+0.7** |
| | 0.9nm10μm138nm,0.4s | | | | | | |
| **KDU** | **Kakadu** | **7.62** | **145** | P | **P** | **23 42 53.1** | **+0.7** |
| **BKSI** | **Bukukumba** | **7.88** | **278** | P | **P** | **23 42 56.2** | **+0.8** |
| | 0.2nm45nm,0.7s | | | | | | |
| **BNSI** | **Bone** | **8.08** | **284** | P | **P** | **23 42 59.3** | **-0.1** |
| | 0.2nm74nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **8.29** | **280** | P | **P** | **23 43 02.0** | **+0.2** |
| | 2.4nm,0.3s,baz=162,slow=9.3,SNR=9.9 | | | | | | |
| **KAPI** | **Kappang** | **8.29** | **280** | Pn | **Pn** | **23 42 59.8** | **+0.6** |
| **APSI** | **Ampana** | **8.37** | **311** | P | **P** | **23 43 03.0** | **+0.3** |
| | 0.2nm49nm,0.9s | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.52** | **287** | P | **Pn** | **23 43 03.2** | **+1.3** |
| | 0.3nm1μm74nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **8.61** | **325** | P | **P** | **23 43 06.4** | **+1.1** |
| | 0.1nm379nm34nm,0.6s | | | | | | |
| **TTSI** | **Tana Toraja** | **8.79** | **292** | P | **P** | **23 43 07.9** | **+0.5** |
| | 0.2nm36nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **9.05** | **249** | P | **Pn** | **23 43 07.6** | **-0.6** |
| **MRSI** | **Marisa** | **9.14** | **319** | P | **Pn** | **23 43 10.2** | **+1.0** |
| | 1μm107nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **9.19** | **175** | Pn | **Pn** | **23 43 10.9** | **+1.1** |
| **KNRA** | **Kununurra** | **9.19** | **175** | P | **Pn** | **23 43 11.0** | **+1.2** |
| **PLAI** | **Plampang** | **10.36** | **256** | P | **Pn** | **23 43 23.9** | **+0.1** |
| | 866nm22nm,0.5s | | | | | | |
| **PLAI** | **Plampang** | **10.36** | **256** | P | **Pn** | **23 43 22.5** | **-1.3** |
| **TOLI2** | **Tolitoli** | **10.39** | **316** | P | **Pn** | **23 43 23.2** | **-0.9** |
| **MPSI** | **Mapaga** | **10.50** | **310** | P | **P** | **23 43 29.2** | **+2.8** |
| | 20nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.79** | **191** | P | **P** | **23 43 40.8** | **+0.2** |
| | 1.8nm,0.3s,baz=28,slow=11,SNR=14 | | | | | | |
| FITZ | | | | S | **S** | **23 45 48.5** | **-3.4** |
| | 0.7nm,0.3s,baz=44,slow=7.7,SNR=3.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.79** | **191** | P | **P** | **23 43 41.1** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **11.79** | **191** | P | **Pn** | **23 43 41.5** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **13.83** | **261** | P | **P** | **23 44 02.0** | **-1.3** |
| **WB0** | **Warramunga Arr** | **14.63** | **155** | P | **P** | **23 44 12.6** | **+0.6** |
| **WRAB** | **Tennant Creek** | **14.76** | **156** | | **P** | **23 44 13.3** | **-0.1** |
| **WRAB** | **Tennant Creek** | **14.76** | **156** | P | **P** | **23 44 14.1** | **+0.7** |
| **WRA** | **Warramunga Arr** | **14.77** | **156** | P | **P** | **23 44 12.6** | **-0.9** |
| | 6.1nm,0.3s,baz=336,slow=12,SNR=68 | | | | | | |
| WRA | | | | S | **S** | **23 46 50.5** | **-2.1** |
| | 0.2nm,0.3s,baz=343,slow=17,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.77** | **156** | P | **P** | **23 44 12.9** | **-0.5** |
| **WB2** | **Warramunga Arr** | **14.77** | **156** | P | **P** | **23 44 14.1** | **+0.6** |
| **WR0** | **Warramunga Arr** | **14.86** | **155** | P | **P** | **23 44 14.8** | **+0.3** |
| **COEN** | **Coen** | **16.72** | **118** | P | **P** | **23 44 35.8** | **+1.1** |
| **COEN** | **Coen** | **16.72** | **118** | P | **P** | **23 44 36.3** | **+1.6** |
| **PSA00** | **Pilbara Seismi** | **16.95** | **207** | P | **P** | **23 44 37.1** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **16.95** | **207** | P | **P** | **23 44 36.4** | **-0.6** |
| | 25nm,1.0s | | | | | | |
| **QIS** | **Mount Isa** | **18.00** | **142** | P | **P** | **23 44 49.2** | **+0.9** |
| **AS31** | **Alice Springs** | **18.04** | **162** | P | **P** | **23 44 49.3** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 23 44 50.1 | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **18.04** | **162** | P | **P** | **23 44 49.4** | **+0.6** |
| | comp=Z,3.8nm,0.3s,baz=344,slow=12,SNR=75 | | | | | | |
| ASAR | | | | S | **S** | **23 47 56.5** | **-0.6** |
| | comp=Z,0.5nm,0.3s,baz=336,slow=15,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **18.04** | **162** | P | **P** | **23 44 49.2** | **+0.5** |
| **WRKA** | **Warakurna** | **18.47** | **179** | P | **P** | **23 44 54.2** | **+0.9** |
| **GIRL** | **Giralia** | **20.83** | **218** | P | **P** | **23 45 17.1** | **+0.3** |
| **CTA** | **Charters Tower** | **22.34** | **129** | P | **P** | **23 45 31.6** | **+1.0** |
| | comp=Z,4.8nm,0.8s,baz=307,slow=10,SNR=5.9 | | | | | | |
| **OOD** | **Oodnadatta** | **22.45** | **162** | P | **P** | **23 45 31.7** | **+0.2** |
| **MULG** | **Mulgathing** | **24.38** | **167** | P | **P** | **23 45 49.5** | **+0.5** |
| **LCRK** | **Leigh Creek** | **25.73** | **159** | P | **P** | **23 46 01.5** | **+0.4** |
| | comp=Z,20nm,2.1s | | | | | | |
| **BBOO** | **Buckleboo** | **27.28** | **165** | P | **P** | **23 46 15.1** | **+0.4** |
| BBOO | | | | IAmb | IAmb | 23 46 18.8 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **27.28** | **165** | P | **P** | **23 46 14.5** | **-0.3** |
| | comp=Z,12nm,0.5s | | | | | | |
| **NAPP** | **Napperby** | **28.22** | **162** | P | **P** | **23 46 23.1** | **0.0** |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **28.32** | **155** | P | **P** | **23 46 24.4** | **+0.4** |
| | comp=Z,6.5nm,0.5s,baz=332,slow=8.7,SNR=16 | | | | | | |
| **STKA** | **Stephens Creek** | **28.32** | **155** | P | **P** | **23 46 24.3** | **+0.4** |
| **STKA** | **Stephens Creek** | **28.32** | **155** | P | **P** | **23 46 24.1** | **+0.2** |
| **HTT** | **Hallett** | **28.70** | **161** | P | **P** | **23 46 28.3** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **29.96** | **149** | P | **P** | **23 46 39.5** | **+1.1** |
| **ARMA** | **Armidale** | **32.59** | **140** | P | **P** | **23 47 02.4** | **+0.9** |
| **ARPS** | **Mount Arapiles** | **32.73** | **159** | P | **P** | **23 47 03.6** | **+1.3** |
| **JOW** | **Kunigami** | **33.10** | **1** | P | **P** | **23 47 05.8** | **+0.2** |
| **JOW** | **Kunigami** | **33.10** | **1** | P | **P** | **23 47 05.1** | **-0.5** |
| **CAN** | **Canberra** | **34.63** | **149** | P | **P** | **23 47 19.9** | **+1.2** |
| CAN | | | | IAmb | IAmb | 23 47 21.1 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| **CAN** | **Canberra** | **34.63** | **149** | P | **P** | **23 47 19.2** | **+0.5** |
| **TOO** | **Toolangi** | **34.84** | **155** | P | **P** | **23 47 21.9** | **+1.5** |
| **SANVU** | **Saraoutou** | **39.49** | **106** | P | **P** | **23 47 59.8** | **+0.4** |
| SANVU | | | | IAmb | IAmb | 23 48 05.2 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **40.24** | **117** | P | **P** | **23 48 04.6** | **-1.0** |
| **JMN** | **Monobe** | **40.36** | **8** | P | **P** | **23 48 05.5** | **-0.8** |
| JMN | | | | IAmb | IAmb | 23 48 06.5 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **PINNC** | **Pines Island,** | **41.29** | **117** | P | **P** | **23 48 14.6** | **+0.7** |
| **PZH** | **PanZhiHua** | **41.47** | **323** | P | **P** | **23 48 19.3** | **+3.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **JHS** | **Saijyo** | **41.52** | **6** | P | **P** | **23 48 15.0** | **-0.5** |
| JHS | | | | IAmb | IAmb | 23 48 24.8 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **KSRS

*IDC **26** 23:42:27.8±1.8, 7.˚47S×30.˚48E, h0km, mb3.6/3, mb1 3.8/4, mb1mx3.5/32, mbtmp3.7/4, ML3.7/1, Error ellipse: s-maj=43.3km s-min=25.4km az=126.0*

**ISC 26 23:42:28.9±1.0, 7.˚74S±0.˚07×30.˚7E±0.˚1, h18km, n9, σ1§66/15, mb3.6/3, 2D, Lake Tanganyika region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSMZ** | **Kasama** | **2.48** | **167** | *i* P | **Pn** | **23 43 06.3** | **-2.3** |
| KSMZ | baz=13,slow=16 | | | *i* | | 23 43 06.4 | |
| KSMZ | | | | *i* S | **Sn** | **23 43 38.1** | **-0.4** |
| **KSMZ** | **Kasama** | **2.48** | **167** | *i* P | **Pn** | **23 43 06.3** | **-2.3** |
| KSMZ | baz=13,slow=16 | | | *i* | | 23 43 06.4 | |
| KSMZ | | | | *i* S | **Sn** | **23 43 38.1** | **-0.4** |
| **SINGT** | **Singida** | **4.99** | **55** | *i* P | **Pn** | **23 43 43.6** | **+0.5** |
| SINGT | | | | ⇓*i* S | **Sn** | **23 44 40.3** | **-0.1** |
| **KOND** | **Kondoa** | **5.82** | **61** | *i* P | **Pn** | **23 43 55.7** | **+1.2** |
| KOND | | | | ⇓*i* S | **Sn** | **23 45 01.3** | **+0.4** |
| **BBAT** | **Babati** | **6.16** | **56** | *i* P | **Pn** | **23 43 59.5** | **+0.3** |
| BBAT | | | | *i* S | **Sn** | **23 45 08.0** | **-1.4** |
| **KMBO** | **Kilima Mbogo** | **9.29** | **45** | Pn | **Pn** | **23 44 41.8** | **-0.4** |
| KMBO | 0.8nm,0.3s,baz=217,slow=18,SNR=14 | | | Sn | **Sn** | **23 46 25.4** | **-1.0** |
| KMBO | 0.9nm,0.3s,baz=342,slow=20,SNR=3.7 | | | Lg | Lg | 23 47 22.5 | |
| **BOSA** | **Boshof** | **21.39** | **193** | P | **P** | **23 47 19.7** | **+3.9** |
| **TORD** | 9.1nm,1.3s,baz=26,slow=16,SNR=1.9<br>**Torodi Ar. Bea** | **35.48** | **306** | P | **P** | **23 49 23.6** | **-1.1** |
| **BRTR** | 0.4nm,0.9s,baz=101,slow=6.9,SNR=2.5<br>**Keskin Array B** | **47.30** | **3** | P | **P** | **23 51 01.4** | **-0.2** |
| | 0.5nm,0.8s,baz=157,slow=4.1,SNR=3.1 | | | | | | |

**KRSC 26 23:44:11.3±1.1, 53.˚73N×165.˚70E, h32km±17km, ML3.6, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **1.48** | **6** | *eP* | Pb | 23 44 37.4 | -0.9 |
| BKI | | | | *eS* | Sn | 23 44 54.9 | +0.9 |
| **MKZ** | **Mys Kozlova** | **2.48** | **291** | *eP* | Pb | 23 44 53.0 | -2.1 |
| MKZ | | | | *eS* | Sn | 23 45 19.9 | +1.4 |
| **KBTR** | **Krutoberegovo** | **2.99** | **327** | *eP* | Pn | 23 44 58.9 | +2.5 |
| **TUMD** | **Tumrok D** | **3.43** | **298** | *eP* | Pn | 23 45 06.5 | +4.0 |
| **SPN** | **Mys Shipunski** | **3.46** | **262** | *eP* | Pn | 23 45 06.4 | +3.6 |
| **TUMR** | **Tumrok** | **3.59** | **298** | *eP* | Pn | 23 45 09.4 | +4.6 |
| **ZLN** | **Zelenaya** | **3.64** | **311** | *eP* | Pb | 23 45 10.3 | -4.7 |
| ZLN | | | | *eS* | Sn | 23 45 52.1 | +4.8 |
| **BZGR** | **Bezymyannyi-Gr** | **3.64** | **309** | *eS* | Sn | 23 45 52.6 | +5.2 |
| **KMNR** | **Kamenistaya** | **3.76** | **305** | *eP* | Pn | 23 45 12.0 | +4.9 |
| **NLC** | **Nalytchevo** | **3.84** | **264** | *eP* | Pn | 23 45 12.1 | +4.0 |
| **KRSR** | **Krestovskiy** | **3.87** | **312** | *eS* | Sn | 23 45 58.6 | +5.7 |
| **SDLR** | **Sedlovina** | **4.10** | **266** | *eP* | Pn | 23 45 16.1 | +4.4 |
| **UGLR** | **Uglovaya** | **4.14** | **266** | *eP* | Pn | 23 45 16.9 | +4.5 |
| **SMAR** | **Somma** | **4.15** | **266** | *eP* | Pn | 23 45 16.9 | +4.4 |
| **KRER** | **Koryakskii** | **4.17** | **267** | *eP* | Pn | 23 45 17.5 | +4.6 |
| **AVH** | **Avacha** | **4.18** | **266** | *eP* | Pn | 23 45 17.7 | +4.8 |
| **DALK** | **Dalny** | **4.22** | **263** | *eP* | Pn | 23 45 17.7 | +4.4 |
| **KOK** | **Koryaka** | **4.24** | **267** | *eP* | Pn | 23 45 18.2 | +4.5 |
| **GNL** | **Ganaly** | **4.61** | **273** | *eP* | Pn | 23 45 24.0 | +5.2 |
| **KRMR** | **Karymshinskiy** | **4.63** | **262** | *eP* | Pn | 23 45 23.7 | +4.7 |
| **MTVR** | **Mutnovka** | **4.70** | **258** | *eP* | Pn | 23 45 24.1 | +4.0 |
| **GRL** | **Gorelyy** | **4.74** | **259** | *eP* | Pn | 23 45 25.5 | +4.9 |

*KRNET **27** 00:10:04.5±0.1, 40.˚35N×73.˚19E, h18km, mb2.9*
*SOME **27** 00:10:05.0, 40.˚42N×73.˚20E, h10km*
*NNC **27** 00:10:06.2±1.6, 40.˚46N×73.˚20E, h0km, mb3.5, mpv3.3, Error ellipse: s-maj=12.9km s-min=5.5km az=170.0*

**ISC 27 00:10:01.8±1.2, 40.˚34N±0.˚04×73.˚28E±0.˚03, h15km±12km, n31, σ1§42/50, 14C-11D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **0.42** | **297** | ⇓*i* P | **Pb** | **00 10 11.6** | **+0.6** |
| OHH | baz=99 | | | ⇓*e* S | **Sb** | **00 10 16.7** | **-0.5** |
| **SALK** | **Salom-Alik** | **0.68** | **37** | ⇑*e* P | **Pn** | **00 10 18.3** | **+1.2** |
| SALK | baz=42 | | | ⇑*e* S | **Sn** | **00 10 28.4** | **+0.9** |
| **DRK** | **Karamyk** | **1.42** | **233** | ⇑*i* P | **Pg** | **00 10 29.9** | **+0.7** |
| DRK | baz=31 | | | ⇑*i* S | **Sg** | **00 10 48.5** | **+0.7** |
| **ARLS** | **Aral** | **1.71** | **27** | ⇑*i* P | **Pg** | **00 10 36.0** | **+1.2** |
| ARLS | baz=29 | | | ⇑*i* S | **Sg** | **00 10 59.2** | **+2.1** |
| **ARK** | **Arkit** | **1.77** | **326** | ⇓*i* P | **Pg** | **00 10 35.9** | **+0.2** |
| ARK | baz=28 | | | ⇓*i* S | **Sg** | **00 10 59.0** | **+0.3** |
| **BTK** | **Batken** | **1.90** | **262** | ⇓*i* P | **Pg** | **00 10 37.8** | **-0.6** |
| BTK | baz=62 | | | ⇓*i* S | **Sg** | **00 11 02.4** | **-0.7** |
| **TRKS** | **Terek-Say** | **2.01** | **307** | ⇓*i* P | **Pb** | **00 10 38.8** | **+0.7** |
| TRKS | baz=7.0 | | | ⇓*i* S | **Sb** | **00 11 03.7** | **+0.7** |
| **UCH** | **Uchtor** | **2.11** | **26** | ⇑*i* P | **Pg** | **00 10 41.8** | **-0.5** |
| UCH | baz=28 | | | ⇑*i* S | **Sg** | **00 11 09.5** | **-0.2** |
| **MRKS** | **Merke** | **2.41** | **359** | *eP* | **Pg** | **00 10 49.3** | **+1.3** |
| MRKS | 5.6nm,0.4s | | | *eS* | **Sg** | **00 11 20.4** | **+1.3** |
| **MRKS** | 14nm,0.2s<br>**Merke** | **2.41** | **359** | Pg | **Pg** | **00 10 49.3** | **+1.3** |
| MRKS | 5.6nm,0.4s | | | Lg | Lg | 00 11 21.0 | |
| **AAK** | 14nm,0.2s<br>**Ala-Archa** | **2.47** | **21** | ⇑Pg | **Pg** | **00 10 49.4** | **+0.1** |
| AAK | 4.0nm,0.5s | | | Lg | Lg | 00 11 20.4 | |
| **BOOM** | 7.9nm,0.5s<br>**Boomskoye usch** | **2.94** | **42** | ⇓*i* P | **Pb** | **00 10 53.7** | **-0.3** |
| BOOM | baz=43 | | | ⇓*i* S | **Sb** | **00 11 29.2** | **-0.6** |
| **DZA** | baz=43<br>**Taraz** | **2.94** | **331** | *eP* | **Pg** | **00 10 57.9** | **-0.3** |
| DZA | 19nm,0.1s | | | *eS* | **Sg** | **00 11 35.6** | **-0.7** |
| **DZA** | 46nm,0.2s<br>**Taraz** | **2.94** | **331** | Pg | **Pg** | **00 10 57.9** | **-0.3** |
| DZA | 19nm,0.1s | | | Lg | Lg | 00 11 35.6 | |
| **IUG** | 46nm,0.2s<br>**Iuzhnay** | **3.04** | **308** | *eP* | **Pg** | **00 10 59.7** | **-0.5** |
| IUG | 197nm,0.4s | | | *eS* | **Sg** | **00 11 38.2** | **-1.4** |
| **IUG** | 22nm,0.5s<br>**Iuzhnay** | **3.04** | **308** | Pg | **Pg** | **00 10 59.7** | **-0.5** |
| IUG | 197nm,0.4s | | | Lg | Lg | 00 11 38.2 | |
| **TKM2** | 22nm,0.5s<br>**Tokmak 2** | **3.11** | **33** | ⇓Pg | **Pg** | **00 11 02.9** | **+1.4** |
| TKM2 | 1.0nm,0.5s | | | ⇑Lg | Lg | 00 11 42.1 | |
| **SGDS** | 2.1nm,0.5s<br>**Sogindy** | **3.27** | **18** | *eP* | **Pg** | **00 11 05.1** | **+0.5** |
| SGDS | 1.5nm,0.3s | | | *eS* | **Sg** | **00 11 47.4** | **+0.5** |
| **SGDS** | 3.2nm,0.3s<br>**Sogindy** | **3.27** | **18** | Pg | **Pg** | **00 11 05.1** | **+0.5** |
| SGDS | 1.5nm,0.3s | | | Lg | Lg | 00 11 47.4 | |
| **KDJ** | 3.2nm,0.3s<br>**Kajisay** | **3.45** | **57** | ⇑*i* P | **Pb** | **00 11 01.6** | **-1.0** |
| KDJ | baz=58 | | | ⇑*i* S | **Sb** | **00 11 41.9** | **-2.5** |
| **KK08** | baz=58<br>**Karatay Array** | **3.46** | **324** | ⇑Pg | **Pb** | **00 11 05.0** | **+2.1** |
| KK08 | 1.7nm,0.3s,baz=144,slow=14 | | | ⇑Lg | Lg | 00 11 49.6 | |
| **BRLS** | 4.0nm,0.5s,baz=142,slow=28<br>**Boroldav** | **3.72** | **317** | *eP* | **Pg** | **00 11 10.4** | **-2.8** |
| BRLS | 5.1nm,0.3s | | | *eS* | **Sg** | **00 11 56.8** | **-4.6** |
| **BRLS** | 5.7nm,0.3s<br>**Boroldav** | **3.72** | **317** | Pg | **Pg** | **00 11 10.4** | **-2.8** |
| BRLS | 5.1nm,0.3s | | | Lg | Lg | 00 11 57.1 | |
| **TNSS** | 5.7nm,0.3s<br>**Tian-Shan** | **3.85** | **44** | *eP* | **Pg** | **00 11 15.4** | **-0.2** |
| TNSS | 0.8nm,0.2s | | | *eS* | **Sg** | **00 12 05.2** | **-0.3** |
| **TNSS** | 1.6nm,0.4s<br>**Tian-Shan** | **3.85** | **44** | Pg | **Pg** | **00 11 15.4** | **-0.2** |
| TNSS | 0.8nm,0.2s | | | Lg | Lg | 00 12 05.2 | |
| **MDOK** | 1.6nm,0.4s<br>**Medeo** | **3.99** | **44** | *eP* | **Pg** | **00 11 18.0** | **-0.2** |
| MDOK | 1.0nm,0.4s | | | *eS* | **Sg** | **00 12 09.8** | **-0.2** |
| **MDOK** | 2.3nm,0.7s<br>**Medeo** | **3.99** | **44** | Pg | **Pg** | **00 11 18.0** | **-0.2** |
| MDOK | 1.0nm,0.4s | | | Lg | Lg | 00 12 10.5 | |
| **KUU** | 2.3nm,0.7s<br>**Kurty** | **4.22** | **32** | *eP* | **Pg** | **00 11 22.6** | **0.0** |
| KUU | 0.9nm,0.4s | | | *eS* | **Sg** | **00 12 17.5** | **+0.2** |
| **KUU** | 1.4nm,0.1s<br>**Kurty** | **4.22** | **32** | Pg | **Pg** | **00 11 22.6** | **0.0** |
| KUU | 0.9nm,0.4s | | | Lg | Lg | 00 12 17.5 | |
| **CHKK** | 1.4nm,0.1s<br>**Chushkaly** | **4.47** | **37** | *eP* | **Pg** | **00 11 25.1** | **-2.3** |
| CHKK | 1.1nm,0.1s | | | *eS* | **Sg** | **00 12 22.1** | **-3.2** |
| **CHKK** | 2.1nm,0.1s<br>**Chushkaly** | **4.47** | **37** | Pg | **Pg** | **00 11 25.1** | **-2.3** |
| CHKK | 1.1nm,0.1s | | | Lg | Lg | 00 12 22.1 | |
| | 2.1nm,0.1s | | | | | | |

*NEIC **27** 00:17:29.7±1.5, 56.˚09N±0.˚09×150.˚1W±0.˚1, h10km±2km, Error ellipse: s-maj=16.0km s-min=10.5km az=162.0*

**AEIC 27 00:17:33±1.8, 56.˚02N±0.˚10×150.˚0W±0.˚1, h10km±2km, ML3.4/42, ML3.6/28(NEIC), Error ellipse: s-maj=18.4km s-min=10.8km az=148.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.17** | **305** | | Pn | 00 18 04.2 | -4.9 |
| OHAK | | | | | Sn | 00 18 28.5 | -7.5 |
| **KDAK** | **Kodiak Island** | **2.26** | **322** | Pn | Pn | 00 18 05.8 | -4.5 |
| **SII** | **Sitkinak Islan** | **2.38** | **285** | | Pn | 00 18 10.4 | -1.7 |
| SII | comp=E,227nm,3.7s | | | IAML | | 00 18 29.9 | |
| SII | comp=N,235nm,3.2s | | | IAML | | 00 19 08.9 | |
| **CHIR** | **Chirikof Islan** | **3.16** | **269** | | Pn | 00 18 18.2 | -4.6 |
| CHIR | comp=E,247nm,3.0s | | | IAML | | 00 18 52.1 | |
| **KJL** | **Kejulik** | **3.65** | **306** | | Pn | 00 18 25.9 | -3.6 |
| **HOM** | **Homer** | **3.75** | **347** | Pn | Pn | 00 18 30.0 | -0.8 |
| **BRSE** | **Bradley Lake S** | **3.75** | **354** | | Pn | 00 18 25.3 | -5.6 |
| BRSE | | | | | Sn | 00 18 06.9 | -8.2 |
| **BRLK** | **Bradley Lake** | **3.78** | **353** | | Pn | 00 18 25.7 | -5.6 |
| BRLK | comp=E,66nm,4.0s | | | IAML | | 00 19 10.3 | |
| **PLK1** | **Peulik 1** | **4.03** | **299** | | Pn | 00 18 31.2 | -3.4 |
| **P18K** | **Big Mountain,** | **4.38** | **323** | | Pn | 00 18 35.1 | -4.5 |
| P18K | comp=N,44nm,3.4s | | | IAML | | 00 21 15.7 | |
| **RSO** | **Redoubt South** | **4.68** | **343** | Pn | Pn | 00 18 38.6 | -5.2 |
| **CHGN** | **Chignik** | **4.70** | **277** | Pn | Pn | 00 18 41.4 | -2.5 |
| CHGN | comp=N,50nm,2.8s | | | IAML | | 00 20 13.0 | |
| **O18K** | **Koktuh Hills** | **4.73** | **326** | | Pn | 00 18 39.7 | -4.6 |
| **O18K** | **Koktuh Hills** | **4.73** | **326** | IAML | | 00 19 52.3 | |
| O18K | comp=N,38nm,3.5s | | | IAML | | 00 20 17.0 | |
| **PWL** | comp=E,40nm,2.9s<br>**Port Wells** | **4.93** | **10** | | Pn | 00 18 46.3 | -0.8 |
| PWL | comp=N,52nm,2.5s | | | IAML | | 00 19 57.2 | |
| PWL | comp=E,51nm,3.1s | | | IAML | | 00 21 00.6 | |
| **EYAK** | **Cordova Ski Ar** | **5.07** | **25** | | Pn | 00 18 44.7 | -4.2 |
| **EYAK** | **Cordova Ski Ar** | **5.07** | **25** | | Sn | 00 19 38.3 | -9.1 |
| **FID** | **Port Fidalgo** | **5.09** | **20** | | Pn | 00 18 46.3 | -3.0 |
| FID | comp=N,47nm,4.3s | | | IAML | | 00 21 50.0 | |
| **HMT** | **Hamilton** | **5.29** | **33** | Pn | Pn | 00 18 48.6 | -3.4 |
| **N19K** | **Bonanza Creek** | **5.34** | **336** | Pn | Pn | 00 18 51.2 | -1.6 |
| N19K | comp=E,24nm,4.2s | | | IAML | | 00 20 09.0 | |
| N19K | comp=N,30nm,3.3s | | | IAML | | 00 21 17.9 | |
| **GOAT** | **Goat Mountain** | **5.35** | **29** | | Pn | 00 18 48.5 | -4.4 |
| GOAT | | | | | Sn | 00 19 46.4 | -8.2 |
| **BERG** | **Berg Lake** | **5.51** | **35** | Pn | Pn | 00 18 50.8 | -4.2 |
| **CNBA** | **Chernabura Isl** | **5.58** | **261** | Pn | Pn | 00 18 51.9 | -4.1 |
| **DIV** | **Divide** | **5.58** | **22** | Pn | Pn | 00 18 54.3 | -1.7 |
| **SNH** | **Sunshine Point** | **5.64** | **39** | Pn | Pn | 00 18 53.5 | -3.4 |
| **KHIT** | **Khitrov Hills** | **5.69** | **36** | | Pn | 00 18 53.0 | -4.6 |
| **BMRM** | **Bremner River** | **5.71** | **28** | | Pn | 00 18 53.7 | -4.1 |
| **WAX** | **Waxell Ridge** | **5.83** | **37** | | Pn | 00 18 55.1 | -4.4 |
| **SVW2** | **Sparrevohn** | **5.86** | **333** | Pn | Pn | 00 18 54.7 | -5.2 |
| **SML** | **Sawmill** | **5.87** | **8** | Pn | Pn | 00 18 55.9 | -4.0 |
| **KLU** | **Klutina** | **5.88** | **20** | | Pn | 00 18 56.1 | -4.1 |
| **SDPT** | **Sand Point** | **5.96** | **268** | Pn | Pn | 00 18 57.0 | -4.0 |
| **MESA** | **MESA** | **5.97** | **42** | Pn | Pn | 00 18 58.3 | -3.2 |
| **SCM** | **Sheep Creek Mo** | **5.99** | **12** | Pn | Pn | 00 18 59.1 | -2.6 |
| **ISLE** | **Juniper Island** | **6.12** | **38** | Pn | Pn | 00 18 59.8 | -3.7 |
| **BAGL** | **Bagley Icefiel** | **6.13** | **40** | | Pn | 00 18 59.1 | -4.3 |
| **YAH** | **Yahtse** | **6.17** | **42** | | Pn | 00 19 00.1 | -4.1 |
| **VRDI** | **Verde Repeater** | **6.24** | **31** | | Pn | 00 19 00.9 | -4.3 |
| **N25K** | **Chitina, Valde** | **6.27** | **24** | | Pn | 00 19 02.4 | -3.0 |
| **GLB** | **Gilahina Butte** | **6.32** | **28** | Pn | Pn | 00 19 02.3 | -3.8 |
| **KIAG** | **Kiagna River** | **6.34** | **36** | | Pn | 00 19 01.9 | -4.7 |
| **GRNC** | **Granite Creek** | **6.42** | **39** | Pn | Pn | 00 19 08.5 | +0.8 |
| **M24K** | **Tolsona, Glenn** | **6.42** | **16** | Pn | Pn | 00 19 05.6 | -1.9 |
| **TABL** | **Table Mountain** | **6.45** | **43** | | Pn | 00 19 03.8 | -4.2 |
| **MCARA** | **McCarthy VSAT** | **6.49** | **31** | Pn | Pn | 00 19 04.8 | -3.7 |
| **PCA** | **Pinnacle** | **6.59** | **48** | | Pn | 00 19 06.8 | -3.1 |
| **L19K** | **White Mountain** | **6.66** | **340** | | Pn | 00 19 06.8 | -4.0 |
| **BARN** | **Barnard Glacie** | **6.68** | **37** | | Pn | 00 19 06.9 | -4.3 |
| **CTGM** | **Chitina Glacie** | **6.72** | **39** | | Pn | 00 19 08.0 | -3.8 |
| **PNL** | **Peninsula** | **6.74** | **53** | | Pn | 00 19 07.9 | -4.0 |
| **LOGN** | **Logan Glacier** | **6.75** | **41** | Pn | Pn | 00 19 08.1 | -4.1 |
| **L20K** | **Farewell, AK** | **6.77** | **345** | | Pn | 00 19 07.4 | -4.9 |

**NEIC 27 00:29:27.6±0.6, 36.˚340N±0.˚010×97.˚67W±0.˚01, h4km±7km, mb_Lg2.5/17, Error ellipse: s-maj=1.9km s-min=1.3km az=52.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.94** | **169** | | Pg | 00 29 45.4 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.95** | **168** | Pg | Pg | 00 29 45.8 | 0.0 |
| **U32A** | **Winter Ranch,** | **1.07** | **273** | | Pg | 00 29 47.8 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.10** | **58** | | Pg | 00 29 48.5 | -0.1 |
| **FNO** | **Franklin** | **1.10** | **168** | | Pg | 00 29 48.3 | -0.4 |
| **W35A** | **Tecumseh** | **1.35** | **151** | | Pn | 00 29 52.4 | -0.8 |
| **TUL1** | **Leonard** | **1.58** | **105** | Pn | Pn | 00 29 55.8 | -0.6 |
| TUL1 | comp=Z,20nm,0.8s | | | IAmb_Lg | | 00 30 21.5 | |
| **X34A** | **Smith Ranch, M** | **1.74** | **184** | | Pb | 00 29 59.4 | -0.7 |
| X34A | comp=Z,36nm,0.8s | | | IAmb_Lg | | 00 30 25.9 | |
| **WMOK** | **Wichita Mounta** | **1.84** | **210** | Pn | Pn | 00 29 59.9 | -0.1 |
| **R32A** | **Long Quarter,** | **2.24** | **339** | Pn | Pn | 00 30 05.8 | +0.3 |
| **X37A** | **Clayton** | **2.56** | **132** | Pn | Pn | 00 30 10.4 | +0.5 |
| **KSU1** | **Kansas State U** | **2.88** | **17** | | Pn | 00 30 13.5 | -0.8 |
| **CBKS** | **Cedar Bluff** | **2.96** | **327** | Pn | Pn | 00 30 16.0 | +0.5 |
| **HHAR** | **Hobbs** | **3.02** | **90** | | Pn | 00 30 15.9 | -0.2 |
| **W39A** | **Magazine** | **3.36** | **109** | | Pn | 00 30 20.9 | +0.1 |
| **AMTX** | **Amarillo** | **3.57** | **247** | IAmb_Lg | | 00 31 29.2 | |
| **S39A** | comp=Z,13nm,0.8s<br>**Bolivar** | **3.73** | **68** | IAmb_Lg | | 00 31 32.8 | |
| **MIAR** | comp=Z,11nm,1.0s<br>**Mount Ida** | **3.79** | **117** | Pn | Pn | 00 30 26.9 | +0.1 |
| **U40A** | **Yellville** | **3.89** | **88** | | Pn | 00 30 27.8 | -0.4 |
| U40A | comp=Z,11nm,0.8s | | | IAmb_Lg | | 00 31 34.6 | |
| **ABTX** | **Abilene, Hawle** | **4.05** | **204** | Pn | Pn | 00 30 30.8 | +0.4 |
| **WHTX** | **Lake Whitney,** | **4.34** | **178** | Pn | Pn | 00 30 34.5 | +0.2 |
| **X40A** | **Basin Creek Fa** | **4.36** | **114** | Pn | Pn | 00 30 34.1 | -0.5 |
| **FCAR** | **Ozark Folk Cen** | **4.51** | **94** | IAmb_Lg | | 00 31 50.3 | |
| **P38A** | comp=Z,7.5nm,0.9s<br>**Dawn** | **4.63** | **44** | Pn | Pn | 00 30 37.9 | -0.5 |
| P38A | | | | | Pg | 00 30 54.4 | -1.9 |
| **CCM** | **Cathedral Cave** | **5.41** | **70** | IAmb_Lg | | 00 32 27.4 | |
| **P40A** | comp=Z,10.0nm,0.8s<br>**Paris** | **5.47** | **53** | IAmb_Lg | | 00 32 25.7 | |
| **T25A** | comp=Z,7.2nm,0.8s<br>**Trinidad** | **5.47** | **280** | IAmb_Lg | | 00 32 30.9 | |
| | comp=Z,6.6nm,1.1s | | | | | | |

*NEIC **27** 00:29:46.3±1.2, 57.˚64N±0.˚04×155.˚5W±0.˚1, h71km±19km, Error ellipse: s-maj=9.8km s-min=5.1km az=111.0*
*AEIC **27** 00:29:47±1.3, 57.˚62N±0.˚03×155.˚5W±0.˚1, h74km±8km, ML2.3, ML3.0/42(NEIC), Error ellipse: s-maj=10.6km s-min=4.2km az=106.0*
*IDC **27** 00:29:48.9±2.5, 58.˚03N×155.˚27W, h80km±39km, mb2.3/1, mb1 2.8/2, mb1mx2.7/33, mbtmp2.8/2, Error ellipse: s-maj=31.3km s-min=26.3km az=108.0*

**ISC 27 00:29:46.8±1.1, 57.˚65N±0.˚05×155.˚38W±0.˚06, h92km, n42, σ1§29/45, Alaska Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **1.21** | **110** | Pn | **Pn** | **00 30 08.2** | **-0.8** |
| **SII** | **Sitkinak Islan** | **1.28** | **149** | Pn | **Pn** | **00 30 08.7** | **-1.1** |
| SII | comp=E,306nm,3.3s | | | IAML | | 00 30 37.3 | |
| SII | comp=N,244nm,2.8s | | | IAML | | 00 30 40.2 | |
| **KDAK** | **Kodiak Island** | **1.51** | **84** | P | **Pn** | **00 30 12.6** | **0.0** |
| KDAK | comp=N,3.6nm,0.3s,baz=209,slow=2.4,SNR=32 | | | S | **Sn** | **00 30 32.2** | **0.0** |
| **KDAK** | comp=N,3.5nm,0.3s,baz=245,slow=21,SNR=29<br>**Kodiak Island** | **1.51** | **84** | | **Pn** | **00 30 12.7** | **0.0** |
| **Q19K** | **Cape Douglas,** | **1.57** | **35** | Pn | **Pn** | **00 30 13.6** | **+0.1** |
| Q19K | | | | Sn | **Sn** | **00 30 34.3** | **+0.5** |
| Q19K | comp=E,229nm,2.2s | | | IAML | | 00 30 36.3 | |
| Q19K | comp=N,198nm,1.0s | | | IAML | | 00 30 37.5 | |
| **P18K** | **Big Mountain,** | **1.75** | **3** | Pn | **Pn** | **00 30 14.6** | **-1.2** |
| **CHIR** | **Chirikof Islan** | **1.84** | **184** | Pn | **Pn** | **00 30 16.6** | **-0.3** |
| CHIR | comp=E,217nm,3.0s | | | IAML | | 00 30 27.4 | |
| CHIR | comp=N,224nm,3.2s | | | IAML | | 00 30 29.0 | |
| **CHGN** | **Chignik** | **2.14** | **232** | Pn | **Pn** | **00 30 18.9** | **-1.9** |
| CHGN | comp=N,67nm,3.6s | | | IAML | | 00 31 25.5 | |
| **O18K** | **Koktuh Hills** | **2.21** | **2** | Pn | **Pn** | **00 30 21.1** | **-0.6** |
| O18K | | | | Sn | **Sn** | **00 30 47.2** | **-1.3** |
| **O19K** | **Port Alsworth** | **2.61** | **12** | Pn | **Pn** | **00 30 26.4** | **-0.6** |
| O19K | comp=E,35nm,3.7s | | | IAML | | 00 31 28.0 | |
| **CNPM** | **China Poot** | **2.87** | **47** | | **Pn** | **00 30 31.2** | **+0.6** |
| CNPM | comp=N,67nm,3.0s | | | IAML | | 00 32 09.6 | |
| CNPM | | | | IAML | | 00 32 18.0 | |
| **RSO** | comp=N,80nm,3.3s<br>**Redoubt South** | **3.13** | **25** | Pn | **Pn** | **00 30 34.9** | **+0.7** |
| **BRLK** | **Bradley Lake** | **3.16** | **46** | Pn | **Pn** | **00 30 33.8** | **-0.6** |
| BRLK | comp=E,76nm,4.5s | | | IAML | | 00 31 26.3 | |
| BRLK | comp=N,65nm,3.3s | | | IAML | | 00 32 14.9 | |
| **N19K** | **Bonanza Creek** | **3.20** | **8** | Pn | **Pn** | **00 30 34.7** | **-0.4** |
| N19K | comp=N,30nm,4.0s | | | IAML | | 00 31 18.6 | |
| N19K | comp=E,29nm,3.7s | | | IAML | | 00 32 08.4 | |
| **SVW2** | **Sparrevohn** | **3.46** | **358** | Pn | **Pn** | **00 30 37.6** | **-0.8** |
| SVW2 | comp=E,24nm,3.4s | | | IAML | | 00 31 26.9 | |
| SVW2 | comp=N,20nm,4.3s | | | IAML | | 00 31 38.3 | |
| **SDPT** | **Sand Point** | **3.65** | **233** | Pn | **Pn** | **00 30 39.4** | **-1.5** |
| **CNBA** | **Chernabura Isl** | **3.69** | **221** | Pn | **Pn** | **00 30 39.1** | **-2.3** |
| **M19K** | **Big River Lodg** | **4.29** | **6** | Pn | **Pn** | **00 30 49.5** | **-0.2** |
| M19K | comp=N,20nm,3.5s | | | IAML | | 00 31 51.1 | |
| M19K | comp=E,19nm,4.3s | | | IAML | | 00 33 42.4 | |
| **L19K** | **White Mountain** | **4.55** | **3** | Pn | **Pn** | **00 30 53.1** | **-0.1** |
| L19K | comp=E,26nm,4.2s | | | IAML | | 00 31 40.8 | |
| L19K | comp=N,28nm,4.0s | | | IAML | | 00 32 05.9 | |
| **PWL** | **Port Wells** | **4.84** | **45** | Pn | **Pn** | **00 30 57.3** | **+0.2** |
| **GHO** | **Glory Hole Cre** | **5.27** | **36** | Pn | **Pn** | **00 31 03.2** | **+0.2** |
| **TTA** | **Tatalina** | **5.30** | **357** | Pn | **Pn** | **00 31 03.8** | **+0.3** |
| **PPLA** | **Purkeypile** | **5.49** | **15** | Pn | **Pn** | **00 31 07.5** | **+1.4** |
| **FID** | **Port Fidalgo** | **5.53** | **52** | Pn | **Pn** | **00 31 05.6** | **-0.8** |
| **K20K** | **Telida** | **5.76** | **6** | Pn | **Pn** | **00 31 09.7** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **5.84** | **41** | Pn | **Pn** | **00 31 11.4** | **+0.6** |
| **CAST** | **Castle Rocks** | **6.01** | **14** | Pn | **Pn** | **00 31 13.9** | **+0.9** |
| **KLU** | **Klutina** | **6.16** | **47** | Pn | **Pn** | **00 31 15.7** | **+0.7** |
| **KTH** | **Kantishna Hill** | **6.31** | **18** | Pn | **Pn** | **00 31 16.4** | **-0.8** |
| **J20K** | **Nowinta River** | **6.57** | **5** | Pn | **Pn** | **00 31 21.5** | **+0.8** |
| **RND** | **Reindeer** | **6.61** | **26** | Pn | **Pn** | **00 31 20.6** | **-0.6** |
| **DHY** | **Denali Highway** | **6.73** | **33** | Pn | **Pn** | **00 31 22.6** | **-0.3** |
| **N25K** | **Chitina, Valde** | **6.75** | **50** | Pn | **Pn** | **00 31 23.3** | **+0.1** |
| **MCK** | **McKinley** | **6.87** | **25** | Pn | **Pn** | **00 31 24.6** | **-0.1** |
| **GLB** | **Gilahina Butte** | **7.00** | **52** | Pn | **Pn** | **00 31 26.2** | **-0.2** |
| **WAX** | **Waxell Ridge** | **7.04** | **61** | Pn | **Pn** | **00 31 26.6** | **-0.5** |
| **VRDI** | **Verde Repeater** | **7.06** | **54** | Pn | **Pn** | **00 31 27.3** | **-0.1** |
| **MCARA** | **McCarthy VSAT** | **7.31** | **54** | Pn | **Pn** | **00 31 30.8** | **+0.1** |
| **GRNC** | **Granite Creek** | **7.65** | **60** | Pn | **Pn** | **00 31 35.6** | **+0.2** |
| **ILAR** | **Eielson Array** | **8.23** | **26** | P | Pn | 00 31 39.5 | -3.7 |
| ILAR | comp=N,0.1nm,0.3s,baz=216,slow=13,SNR=4.4 | | | S | **Sn** | **00 33 08.6** | **-5.6** |
| **YKA** | comp=N,0.1nm,0.3s,baz=203,slow=16,SNR=1.7<br>**Yellowknife Ar** | **20.64** | **59** | P | **P** | **00 34 18.9** | **+0.5** |
| **PETK** | comp=N,0.1nm,0.4s,baz=273,slow=9.8,SNR=4.5<br>**Petropavlovsk-** | **26.61** | **281** | P | **P** | **00 35 19.5** | **+3.4** |
| | comp=N,5.9nm,0.5s,baz=72,slow=9.3,SNR=6.3 | | | | | | |

*NDI **27** 00:31:00.7±3.8, 13.˚17N×94.˚05E, h100km, mb4.9, ML4.8, mb4.5(NEIC)*
*BJI **27** 00:31:03.5±0.0, 13.˚38N×93.˚84E, h110km, mb4.5/41, mB4.6/23*
*DJA **27** 00:31:03.7±0.5, 14.˚N±4.˚×9.˚4E±.˚, h95km±9km, M4.7/10, mb4.9/10, mB5.1/7, MLv4.9/1, Mw(mB)4.5/7*
*NEIC **27** 00:31:05.1±1.6, 13.˚48N±0.˚06×93.˚92E±0.˚07, h99km±6km, mb4.5/57, Error ellipse: s-maj=11.7km s-min=6.1km az=135.0*
*IDC **27** 00:31:05.5±1.4, 13.˚39N×94.˚03E, h114km±12km, mb4.0/20, mb1 4.1/23, mb1mx3.9/38, mbtmp4.3/23, MS3.1/10, Ms1 3.1/10, ms1mx2.8/92, Error ellipse: s-maj=15.8km s-min=10.1km az=59.0*

**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RPSI | Rantau Prapat | 11.79 | 155 | | Pn | | Pn | 00 33 50.1 | +0.9 |
| RPSI | Rantau Prapat | 11.79 | 155 | | | | Pn | 00 33 48.3 | -1.0 |
| KOHI | KOHIMA | 12.17 | 1 | *e*P | | | Pn | 00 33 52.4 | -2.0 |
| KOHI | | | | *e*S | | | Sn | 00 36 01.6 | -6.7 |
| KOHI | | | | IAML | | | | 00 36 10.4 | |
| | comp=N,284nm,0.6s | | | | | | | | |
| KOHI | | | | IAML | | | | 00 36 11.4 | |
| | comp=E,193nm,0.5s | | | | | | | | |
| SHL | Shillong | 12.18 | 351 | | Pn | | Pn | 00 33 53.9 | -0.6 |
| TURI | Tura | 12.48 | 345 | *e*P | | | Pn | 00 33 56.5 | -1.9 |
| TURI | | | | *e*S | | | Sn | 00 36 04.7 | -11 |
| TURI | | | | IAML | | | | 00 36 11.0 | |
| | comp=E,426nm,0.4s | | | | | | | | |
| GSI | Gunungsitoli | 12.62 | 163 | | Pn | | Pn | 00 34 01.5 | +1.2 |
| MOKO | MOKOČHONG | 12.78 | 2 | *e*P | | | Pn | 00 34 03.0 | +0.5 |
| MOKO | | | | *e*S | | | Sn | 00 36 12.9 | -10 |
| MOKO | | | | IAML | | | | 00 36 27.8 | |
| | comp=N,153nm,0.6s | | | | | | | | |
| GUWA | GUWAHATI | 12.82 | 351 | *e*P | | | Pn | 00 33 59.0 | -3.8 |
| GUWA | | | | *e*S | | | Sn | 00 36 13.5 | -10 |
| ITAN | ITANAGAR | 13.59 | 359 | *e*P | | | Pn | 00 34 13.1 | +0.1 |
| ITAN | | | | *e*S | | | Sn | 00 36 32.4 | -10 |
| ITAN | | | | IAML | | | | 00 36 45.0 | |
| | comp=E,387nm,0.6s | | | | | | | | |
| ITAN | | | | IAML | | | | 00 36 46.1 | |
| | comp=N,303nm,0.6s | | | | | | | | |
| MNSI | Mandailing Nat | 13.78 | 156 | P | | | P | 00 34 18.2 | -2.4 |
| | comp=N,1µmcomp=N,50nm,0.6s | | | | | | | | |
| KMI | Kunming | 14.23 | 34 | ‖P | | | P | 00 34 28.3 | +2.6 |
| KMI | | | | pmax | | pmax | | | |
| | comp=N,15nm,0.8s | | | | | | | | |
| PALK | Pallekele | 14.43 | 246 | P | | | Pn | 00 34 24.4 | +0.6 |
| | comp=N,0.6nm,0.3s,baz=252,slow=9.8,SNR=2.4 | | | | | | | | |
| PALK | | | | S | | | Sn | 00 36 47.7 | -15 |
| | comp=N,1.0nm,0.3s,baz=176,slow=9.1,SNR=2.8 | | | | | | | | |
| PALK | | | | LR | | | LR | 00 39 45.8 | |
| | comp=N,39nm,18.3s,baz=159,slow=36 | | | | | | | | |
| PALK | Pallekele | 14.43 | 246 | Pn | | | Pn | 00 34 23.6 | -0.3 |
| GTK | Tadong | 14.65 | 341 | *e*P | | | Pn | 00 34 28.4 | +1.7 |
| GTK | | | | IAmb | | IAmb | | 00 34 31.9 | |
| | comp=Z,55nm,0.8s | | | | | | | | |
| GTK | | | | *e*S | | | Sn | 00 36 59.6 | -8.7 |
| ODAN | Odare | 14.66 | 336 | *e*P | | | Pn | 00 34 27.6 | +0.6 |
| | comp=Z,254nm,0.4s | | | | | | | | |
| PZH | PanZhiHua | 14.86 | 28 | P | | | P | 00 34 34.5 | +1.8 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,180nm,5.1s | | | | | | | | |
| TAPN | Taplejung | 14.98 | 338 | *e*P | | | Pn | 00 34 32.6 | +1.5 |
| | comp=Z,217nm,0.3s | | | | | | | | |
| RAMN | Ramite | 15.06 | 334 | *e*P | | | Pn | 00 34 31.7 | -0.4 |
| | comp=Z,34nm,0.3s | | | | | | | | |
| JIRN | Jiri | 15.86 | 334 | *e*P | | | Pn | 00 34 42.9 | +0.7 |
| | comp=Z,163nm,0.3s | | | | | | | | |
| PKI | Pulchoki | 16.13 | 332 | *e*P | | | Pn | 00 34 45.4 | -0.1 |
| | comp=Z,74nm,0.3s | | | | | | | | |
| PKIN | Phulchoki | 16.14 | 332 | *e*P | | | Pn | 00 34 45.8 | +0.2 |
| | comp=Z,112nm,0.3s | | | | | | | | |
| GUN | Gumba | 16.21 | 334 | *e*P | | | Pn | 00 34 47.5 | +0.9 |
| | comp=Z,79nm,0.4s | | | | | | | | |
| DMN | Daman | 16.30 | 331 | *e*P | | | Pn | 00 34 47.8 | +0.2 |
| | comp=Z,41nm,0.2s | | | | | | | | |
| LSA | Lhasa | 16.34 | 351 | P | | | Pn | 00 34 49.5 | +1.2 |
| KKN | Kakani | 16.38 | 332 | *e*P | | | Pn | 00 34 49.3 | +0.8 |
| | comp=Z,4.1nm,0.2s | | | | | | | | |
| JBP | Jabalpur | 16.38 | 308‖ | *e*P | | | P | 00 34 51.7 | +2.3 |
| GKN | Gorkha | 16.86 | 330 | *e*P | | | P | 00 34 55.7 | +0.9 |
| | comp=Z,77nm,0.2s | | | | | | | | |
| KOLN | Koldanda | 17.19 | 327 | *e*P | | | Pn | 00 34 59.3 | +0.9 |
| | comp=Z,35nm,0.2s | | | | | | | | |
| DANN | Dangsing | 17.58 | 329 | *e*P | | | Pn | 00 35 04.5 | +1.3 |
| | comp=Z,67nm,0.4s | | | | | | | | |
| PYUN | Piuthan | 17.77 | 327 | *e*P | | | Pn | 00 35 07.7 | +2.1 |
| | comp=Z,51nm,0.3s | | | | | | | | |
| MASI | Maura Aman, Be | 18.45 | 153 | P | | | Pn | 00 35 14.6 | +1.0 |
| | comp=Z,1µmcomp=Z,98nm,0.5s | | | | | | | | |
| CD2 | Chengdu | 19.55 | 26 | *e*P | | | Pn | 00 35 26.0 | -0.4 |
| PPBI | Pangkal Pinang | 19.69 | 141 | P | | | Pn | 00 35 27.1 | -1.0 |
| | comp=Z,11µmcomp=Z,68nm,0.9s | | | | | | | | |
| MDSI | Maura Dua | 20.54 | 150 | P | | | P | 00 35 34.8 | -0.1 |
| ENH | Enshi | 22.01 | 38 | P | | | P | 00 35 50.3 | -0.4 |
| ENH | | | | IAmb | | IAmb | | 00 35 51.4 | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| GOMU | GeErMu | 22.63 | 2 | P | | | P | 00 35 58.0 | +0.7 |
| GOMU | | | | pP | | pP | | 00 36 18.3 | +1.5 |
| GOMU | | | | sP | | sP | | 00 36 30.8 | +1.6 |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,110nm,5.1s | | | | | | | | |
| LZH | Lanzhou | 24.19 | 20 | *e*P | | | P | 00 36 13.0 | +1.3 |
| LZH | | | | pP | | pP | | 00 36 33.3 | 0.0 |
| LZH | | | | sP | | sP | | 00 36 44.5 | -0.8 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,60nm,1.1s | | | | | | | | |
| LEM | Lembang | 24.32 | 145 | LR | | LR | | 00 45 09.7 | |
| | comp=Z,52nm,19.8s,baz=344,slow=35 | | | | | | | | |
| XAN | Xi'an | 24.56 | 31 | P | | | P | 00 36 14.3 | -0.6 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,89nm,8.2s | | | | | | | | |
| MYLDM | Lahad Datu | 25.56 | 107 | P | | | P | 00 36 25.7 | +1.6 |
| MYLDM | | | | IAmb | | IAmb | | 00 36 28.7 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| GTA | Gaotai | 26.33 | 10 | ‖P | | | P | 00 36 32.8 | +1.8 |
| GTA | | | | pP | | pP | | 00 36 51.5 | -1.5 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,87nm,5.7s | | | | | | | | |
| NJ2 | Nanjing | 29.34 | 47 | *e*P | | | P | 00 36 58.8 | +1.0 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| KSH | Kashi | 30.39 | 332 | P | | | P | 00 37 07.0 | -0.1 |
| KSH | | | | pP | | pP | | 00 37 31.3 | +2.0 |
| KSH | | | | sP | | sP | | 00 37 45.5 | +4.7 |
| KSH | | | | ScP | | ScP | | 00 43 39.3 | +1.1 |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| WMQ | Urumqi | 30.70 | 351 | *e*P | | | P | 00 37 12.0 | +2.3 |
| WMQ | | | | pP | | pP | | 00 37 32.8 | +1.0 |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,180nm,5.7s | | | | | | | | |
| HHC | Hu-ho-hao-te | 31.31 | 26 | *e*P | | | P | 00 37 19.0 | +3.9 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,83nm,8.1s | | | | | | | | |
| KAPI | Kappang | 31.52 | 124 | LR | | LR | | 00 51 58.1 | |
| | comp=Z,19nm,18.3s,baz=340,slow=40 | | | | | | | | |
| GAR | Garm | 32.90 | 325 | P | | | P | 00 37 30.0 | +0.8 |
| GAR | | | | IAmb | | IAmb | | 00 37 30.5 | |
| | comp=Z,9.5nm,1.2s | | | | | | | | |
| CHGR | Chuyangaron | 33.33 | 323 | P | | | P | 00 37 33.3 | +0.5 |
| AAK | Ala-Archa | 33.57 | 334 | LR | | LR | | 00 53 31.9 | |
| | comp=Z,41nm,18.0s,baz=112,slow=40 | | | | | | | | |
| MK31 | Makanchi Array | 34.62 | 346 | P | | | P | 00 37 45.0 | +1.2 |
| MK31 | | | | IAmb | | IAmb | | 00 37 45.9 | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| MKAR | Makanchi Array | 34.62 | 346 | P | | | P | 00 37 44.8 | +1.0 |
| | comp=Z,3.0nm,0.5s,baz=185,slow=6.3,SNR=84 | | | | | | | | |
| MKAR | | | | PcP | | | PcP | 00 40 16.4 | +0.3 |
| | comp=Z,0.2nm,0.4s,baz=216,slow=3.1,SNR=1.5 | | | | | | | | |
| MKAR | | | | ScP | | | ScP | 00 43 50.8 | -1.6 |
| | comp=Z,0.1nm,0.3s,baz=149,slow=5.0,SNR=4.0 | | | | | | | | |
| MAKZ | Makanchi | 34.71 | 345 | P | | | P | 00 37 45.5 | +0.9 |
| MAKZ | | | | IAmb | | IAmb | | 00 37 46.3 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| WSAR | Wadi Sarin | 34.82 | 291 | LR | | LR | | 00 53 14.6 | |
| | comp=Z,16nm,18.1s,baz=17,slow=38 | | | | | | | | |
| HRA | Herat | 35.45 | 311 | P | | | P | 00 37 52.1 | +0.7 |
| SONM | Songino Array | 35.78 | 14 | P | | | P | 00 37 54.9 | +1.1 |
| | comp=Z,2.8nm,0.3s,baz=195,slow=7.9,SNR=27 | | | | | | | | |
| SONM | Songino Array | 35.78 | 14 | P | | | P | 00 37 55.5 | +1.6 |
| SONM | | | | IAmb | | IAmb | | 00 37 56.1 | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| ULN | Ulaanbaatar | 35.97 | 15 | P | | | P | 00 37 56.4 | +0.9 |
| ULN | | | | IAmb | | IAmb | | 00 37 56.8 | |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| KSRS | Korea Array | 38.52 | 46 | P | | | P | 00 38 16.5 | -0.5 |
| | comp=Z,0.9nm,0.5s,baz=240,slow=8.7,SNR=4.0 | | | | | | | | |
| KSRS | | | | LR | | LR | | 00 55 06.8 | |
| | comp=Z,15nm,21.9s,baz=335,slow=37 | | | | | | | | |
| KURK | Kurchatov | 39.17 | 345 | P | | | P | 00 38 23.1 | +0.9 |
| KURK | | | | IAmb | | IAmb | | 00 38 24.9 | |
| | comp=Z,9.9nm,1.1s | | | | | | | | |
| GEYT | Alibeck | 40.06 | 314 | P | | | P | 00 38 31.9 | +2.0 |
| | comp=Z,8.0nm,0.8s,baz=157,slow=8.0,SNR=9.5 | | | | | | | | |
| GEYT | Alibeck | 40.06 | 314 | P | | | P | 00 38 30.4 | +0.5 |
| GEYT | | | | IAmb | | IAmb | | 00 38 32.7 | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| ZAA0 | Zalesovo Array | 41.01 | 352 | P | | | P | 00 38 38.2 | +0.9 |
| ZALV | Zalesovo Beam | 41.01 | 352 | P | | | P | 00 38 38.4 | +1.0 |
| | comp=Z,11nm,0.5s,baz=174,slow=8.7,SNR=76 | | | | | | | | |
| ZALV | | | | ScP | | | ScP | 00 44 13.9 | -2.4 |
| | comp=Z,0.3nm,0.5s,baz=160,slow=4.6,SNR=2.3 | | | | | | | | |
| ZALV | | | | LR | | | LR | 00 57 46.7 | |
| | comp=Z,38nm,18.4s,baz=57,slow=39 | | | | | | | | |
| GIRL | Giralia | 41.03 | 151 | P | | | P | 00 38 38.0 | 0.0 |
| PSA00 | Pilbara Seismi | 43.12 | 144 | P | | | P | 00 39 00.3 | +5.3 |
| FITZ | Fitzroy Crossi | 44.29 | 134 | P | | | P | 00 39 03.0 | -1.4 |
| | comp=Z,2.5nm,0.4s,baz=323,slow=6.6,SNR=28 | | | | | | | | |
| FITZ | Fitzroy Crossi | 44.29 | 134 | P | | | P | 00 39 03.4 | -1.0 |
| ABKAR | Akbulak array | 45.30 | 329 | P | | | P | 00 39 12.6 | +0.5 |
| ABKAR | Akbulak array | 45.30 | 329 | IAmb | | IAmb | | 00 39 13.2 | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| AKTO | Aktyubinsk | 47.02 | 329 | LR | | LR | | 01 01 48.0 | |
| | comp=Z,32nm,18.1s,baz=27,slow=39 | | | | | | | | |
| GNI | Garni | 50.52 | 311 | P | | | P | 00 39 53.9 | +1.3 |
| GNI | | | | IAmb | | IAmb | | 00 39 56.2 | |
| | comp=Z,6.5nm,1.1s | | | | | | | | |
| WRA | Warramunga Arr | 51.79 | 129 | P | | | P | 00 40 01.1 | -1.1 |
| | comp=Z,1.8nm,0.6s,baz=302,slow=10,SNR=19 | | | | | | | | |
| WRA | | | | ScP | | | ScP | 00 44 58.1 | -3.8 |
| | comp=Z,0.6nm,0.7s,baz=320,slow=3.8,SNR=4.8 | | | | | | | | |
| GURO | Guroymak-BITLI | 52.11 | 309 | P | | | P | 00 40 06.3 | +1.8 |
| GURO | | | | IAmb | | IAmb | | 00 40 07.0 | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| KIV | Kislovodsk | 53.15 | 315 | P | | | P | 00 40 12.9 | +0.9 |
| KIV | | | | IAmb | | IAmb | | 00 40 13.9 | |
| | comp=Z,5.6nm,0.9s | | | | | | | | |
| AS31 | Alice Springs | 53.75 | 133 | P | | | P | 00 40 15.4 | -1.2 |
| AS31 | | | | IAmb | | IAmb | | 00 40 16.2 | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| ASAR | Alice Springs | 53.75 | 133 | P | | | P | 00 40 15.7 | -1.0 |
| | comp=Z,3.6nm,0.6s,baz=310,slow=6.8,SNR=54 | | | | | | | | |
| ASAR | | | | ScP | | | ScP | 00 45 06.8 | -3.6 |
| | comp=Z,0.4nm,0.6s,baz=315,slow=5.3,SNR=6.0 | | | | | | | | |
| ASAR | Alice Springs | 53.75 | 133 | P | | | P | 00 40 15.4 | -1.2 |
| COEN | Coen | 55.85 | 117 | P | | | P | 00 40 31.3 | -0.6 |
| COEN | | | | IAmb | | IAmb | | 00 40 31.3 | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| NRIK | Noril'sk | 55.96 | 357 | P | | | P | 00 40 32.1 | +0.3 |
| | comp=Z,2.0nm,0.4s,baz=154,slow=7.5,SNR=7.9 | | | | | | | | |
| NRIK | Noril'sk | 55.96 | 357 | P | | | P | 00 40 32.7 | +0.9 |
| NRIK | | | | IAmb | | IAmb | | 00 40 33.0 | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| GHAJ | Ghor Haditha | 56.21 | 299 | P | | | P | 00 40 34.5 | +0.3 |
| GHAJ | | | | IAmb | | IAmb | | 00 40 36.2 | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| ABPO | Ambohimpanom | 56.24 | 236 | P | | | P | 00 40 34.9 | +0.1 |
| ABPO | | | | IAmb | | IAmb | | 00 40 35.9 | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| VOI | Vohitsoka | 58.12 | 233 | P | | | P | 00 40 47.9 | 0.0 |
| CSS | Mathiatis | 58.40 | 303 | P | | | P | 00 40 48.6 | -1.0 |
| CSS | | | | IAmb | | IAmb | | 00 40 49.8 | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| BRTR | Keskin Array B | 58.74 | 308 | P | | | P | 00 40 51.8 | -0.2 |
| | comp=Z,1.9nm,0.6s,baz=119,slow=8.1,SNR=16 | | | | | | | | |
| BRTR | | | | ScP | | | ScP | 00 45 31.5 | -0.8 |
| | comp=Z,0.4nm,0.7s,baz=37,slow=7.4,SNR=3.5 | | | | | | | | |
| BRTR | Keskin Array B | 58.74 | 308 | P | | | P | 00 40 51.4 | -0.6 |
| BR131 | Keskin Array S | 58.74 | 308 | IAmb | | IAmb | | 00 40 52.7 | |
| | comp=Z,3.2nm,0.8s | | | | | | | | |
| BBOO | Buckleboo | 61.13 | 140 | P | | | P | 00 41 07.2 | -1.0 |
| ELL | Elmali | 61.32 | 305 | P | | | P | 00 41 09.4 | -0.3 |
| TIXI | Tiksi | 61.80 | 12 | P | | | P | 00 41 11.8 | -0.3 |
| MA2 | Magadan | 61.93 | 29 | P | | | P | 00 41 13.2 | 0.0 |
| | comp=Z,7.5nm,0.7s,baz=237,slow=6.2,SNR=9.2 | | | | | | | | |
| MA2 | Magadan | 61.93 | 29 | P | | | P | 00 41 13.4 | +0.1 |
| SEY | Seymchan | 63.95 | 26 | P | | | P | 00 41 26.3 | -0.3 |
| | comp=Z,0.8nm,0.3s,baz=209,slow=7.0,SNR=6.7 | | | | | | | | |
| STKA | Stephens Creek | 64.16 | 136 | P | | | P | 00 41 27.7 | -0.7 |
| | comp=Z,1.1nm,0.7s,baz=320,slow=11,SNR=3.5 | | | | | | | | |
| MLR | Muntele Rosu | 65.11 | 314 | P | | | P | 00 41 35.1 | +0.4 |
| MLR | | | | IAmb | | IAmb | | 00 41 36.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | | | |
| IDI | Anoyia | 65.32 | 303 | LR | | LR | | 01 16 44.9 | |
| | comp=Z,16nm,18.2s,baz=258,slow=42 | | | | | | | | |
| BURAR | Bucovina Array | 65.84 | 316 | P | | | P | 00 41 39.7 | +0.4 |
| BUR08 | Bucovina Ar. S | 65.86 | 316 | P | | | P | 00 41 39.9 | +0.5 |
| FINES | FINESS Array B | 67.72 | 331 | P | | | P | 00 41 50.9 | +0.1 |
| | comp=Z,1.8nm,0.5s,baz=103,slow=6.2,SNR=17 | | | | | | | | |
| CRVS | Cervenica-Dubn | 68.46 | 317 | *e*P | | | P | 00 41 56.8 | +1.1 |
| KEV | Kevo | 69.52 | 340 | P | | | P | 00 42 03.0 | +1.1 |
| OJC | Ojcow | 69.63 | 319 | P | | | P | 00 42 03.0 | +0.1 |
| ARCES | ARCESS Array B | 69.97 | 340 | P | | | P | 00 42 05.2 | +0.6 |
| | comp=Z,3.5nm,0.5s,baz=103,slow=7.1,SNR=44 | | | | | | | | |
| ARCES | ARCESS Array B | 69.97 | 340 | P | | | P | 00 42 05.7 | +1.1 |
| TOO | Toolangi | 70.11 | 139 | P | | | P | 00 42 06.2 | +0.2 |
| TOO | | | | IAmb | | IAmb | | 00 42 17.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| VYHS | Vyhne | 70.17 | 317 | *e*P | | | P | 00 42 06.2 | -0.1 |
| MORC | Moravsky Berou | 71.06 | 318 | P | | | P | 00 42 11.5 | -0.2 |
| CAN | Canberra | 71.19 | 135 | P | | | P | 00 42 12.5 | -0.1 |
| SGRT | San Giovanni R | 72.40 | 310 | P | | | P | 00 42 17.3 | -2.6 |
| SGRT | | | | IAmb | | IAmb | | 00 42 21.6 | |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| GEC2 | GERESS Array S | 73.58 | 317 | P | | | P | 00 42 27.1 | +0.4 |
| GEC2 | | | | IAmb | | IAmb | | 00 42 27.7 | |
| | comp=Z,3.6nm,0.8s | | | | | | | | |
| GERES | GERESS Array B | 73.58 | 317 | P | | | P | 00 42 26.8 | +0.1 |
| | comp=Z,1.5nm,0.6s,baz=60,slow=8.1,SNR=13 | | | | | | | | |
| CLL | Collm | 73.96 | 320 | *e*P | | | P | 00 42 29.0 | +0.2 |
| SPB2 | Spitsbergen Ar | 74.34 | 348 | P | | | P | 00 42 31.2 | +0.7 |
| STAL | STALIGIÁL | 74.36 | 315 | P | | | P | 00 42 31.1 | -0.2 |
| STAL | | | | IAmb | | IAmb | | 00 42 31.3 | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| NC405 | NORSAR Array S | 74.55 | 330 | P | | | P | 00 42 32.1 | +0.1 |
| NC405 | | | | IAmb | | IAmb | | 00 42 42.2 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| NC602 | NORSAR Array S | 74.64 | 330 | P | | | P | 00 42 32.0 | -0.5 |
| NC602 | | | | IAmb | | IAmb | | 00 42 48.7 | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| NC303 | NORSAR Array S | 74.72 | 330 | P | | | P | 00 42 33.1 | +0.1 |
| NC303 | | | | IAmb | | IAmb | | 00 42 47.6 | |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| NB201 | NORSAR Array S | 74.76 | 330 | P | | | P | 00 42 34.1 | +0.9 |
| NB2 | NORSAR Subarra | 74.80 | 330 | P | | | P | 00 42 33.3 | -0.2 |
| | comp=Z,0.5nm,0.6s,baz=90,slow=5.9 | | | | | | | | |
| NOA | NORSAR Array B | 74.80 | 330 | P | | | P | 00 42 33.3 | -0.2 |
| | comp=Z,0.9nm,0.7s,baz=90,slow=5.7,SNR=5.2 | | | | | | | | |
| CTI | Castel Tesino | 75.11 | 314 | P | | | P | 00 42 35.7 | 0.0 |
| LBTB | Lobatse | 76.82 | 240 | P | | | P | 00 42 45.9 | +0.1 |
| LBTB | | | | IAmb | | IAmb | | 00 42 55.4 | |
| | comp=Z,7.1nm,1.1s | | | | | | | | |
| SANVU | Saraoutou | 77.93 | 109 | P | | | P | 00 42 52.6 | +0.7 |
| BOSA | Boshof | 78.45 | 237 | P | | | P | 00 42 54.3 | -0.4 |
| | comp=Z,1.8nm,0.5s,baz=62,slow=4.6,SNR=7.8 | | | | | | | | |
| BOSA | Boshof | 78.45 | 237 | P | | | P | 00 42 54.4 | -0.4 |
| SUR | Sutherland | 83.39 | 235 | P | | | P | 00 43 21.7 | +0.7 |
| TORD | Torodi Ar. Bea | 89.15 | 283 | P | | | P | 00 43 48.8 | -0.6 |
| | comp=Z,0.4nm,0.7s,baz=96,slow=4.7,SNR=2.9 | | | | | | | | |
| ILAR | Eielson Array | 89.64 | 22 | P | | | P | 00 43 49.6 | -1.1 |
| | comp=Z,0.9nm,0.7s,baz=280,slow=4.0,SNR=8.9 | | | | | | | | |
| ILAR | Eielson Array | 89.64 | 22 | P | | | P | 00 43 50.2 | -0.5 |
| TXAR | Lajitas Array | 134.15 | 22 | PKP | | | PKiKP | 00 50 12.2 | -0.2 |
| | comp=Z,0.1nm,0.4s,baz=355,slow=4.8,SNR=3.7 | | | | | | | | |
| TXAR | | | | SKPbc | | | SKPbc | 00 53 29.0 | -2.5 |
| | comp=Z,0.4nm,0.8s,baz=349,slow=1.8,SNR=3.2 | | | | | | | | |
| PLCA | Paso Flores | 149.66 | 204 | PKPbc | | | PKPbc | 00 50 42.8 | +0.1 |
| | comp=Z,2.3nm,0.8s,baz=42,slow=1.4,SNR=5.6 | | | | | | | | |

*SKHL* ***27*** *00:47:06.9±0.5, 48.80N×155.20E, h78km±5km, mb4.8/8*
*MOS* ***27*** *00:47:07.3±0.9, 48.88N×154.97E, h70km, mb4.2/7, Error ellipse: s-maj=12.3km s-min=4.4km az=72.6*
*KRSC* ***27*** *00:47:08.8±2.1, 48.85N×156.57E, h30km±26km, ML4.6*
*IDC* ***27*** *00:47:10.8±2.3, 48.97N×154.83E, h82km±20km, mb3.5/17, mb1 3.8/20, mb1mx3.7/33, mbtmp3.9/20, MS3.1/8, Ms1 3.1/8, ms1mx2.8/87, Error ellipse: s-maj=20.3km s-min=11.3km az=136.0*
*NEIC* ***27*** *00:47:12.5±2.4, 49.07N±0.09×154.9E±0.2, h95km±5km, mb4.3/20, Error ellipse: s-maj=16.6km s-min=10.0km az=125.0*

**ISC 27 00:47:07.3±0.6, 48.77N±0.07×155.18E±0.07, h55km, n144, σ1.54/147, mb4.1/31, MS3.3/6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | Severo-Kuril's | 2.00 | 17 | PN | Pn | 00 47 38.3 | -0.4 |
| SKR | | | | S | Sn | 00 48 01.4 | -1.2 |
| SKR | Severo-Kuril's | 2.00 | 17 | *e*P | Pn | 00 47 38.3 | -0.4 |
| SKR | | | | *e*S | Sn | 00 48 01.4 | -1.2 |
| SKR | Severo-Kuril's | 2.00 | 17 | *i*P | Pn | 00 47 38.3 | -0.4 |
| SKR | | | | AMB | AMB | 00 47 39.7 | |
| | 90nm,0.3s | | | | | | |
| SKR | | | | *i*S | Sn | 00 48 01.4 | -1.2 |
| SKR | | | | A | A | 00 48 05.2 | |
| | 480nm,0.2s | | | | | | |
| SKR | | | | A | A | 00 48 05.2 | |
| | 740nm,0.2s | | | | | | |
| PAU | Pauzhetka | 2.89 | 21 | PN | Pn | 00 47 51.2 | +0.4 |
| PAU | | | | S | Sn | 00 48 24.2 | -0.2 |
| PAU | Pauzhetka | 2.89 | 21 | *e*P | Pn | 00 47 51.2 | +0.4 |
| PAU | | | | *e*S | Sn | 00 48 24.2 | -0.2 |
| PAU | Pauzhetka | 2.89 | 21 | *i*P | Pn | 00 47 51.1 | +0.3 |
| PAU | | | | AMB | AMB | 00 47 51.7 | |
| | 50nm,0.3s | | | | | | |
| PAU | | | | *i*S | Sn | 00 48 24.5 | +0.1 |
| PAU | | | | A | A | 00 48 30.5 | |
| | 430nm,0.3s | | | | | | |
| PAU | | | | A | A | 00 48 30.5 | |
| | 570nm,0.3s | | | | | | |
| MTVR | Mutnovka | 4.17 | 26 | PN | Pn | 00 48 09.7 | +1.1 |
| MTVR | Mutnovka | 4.17 | 26 | *e*P | Pn | 00 48 09.7 | +1.1 |
| GRL | Gorelyy | 4.21 | 25 | PN | Pn | 00 48 10.3 | +1.4 |
| GRL | Gorelyy | 4.21 | 25 | *e*P | Pn | 00 48 10.3 | +1.4 |
| RUS | Russkaya | 4.23 | 29 | PN | Pn | 00 48 09.1 | -0.1 |
| RUS | | | | S | Sn | 00 48 55.3 | -2.0 |
| RUS | Russkaya | 4.23 | 29 | *e*P | Pn | 00 48 09.1 | -0.1 |
| RUS | | | | *e*S | Sn | 00 48 55.3 | -2.0 |
| RUS | Russkaya | 4.23 | 29 | *e*P | Pn | 00 48 09.1 | -0.1 |
| APC | Apacha | 4.34 | 16 | PN | Pn | 00 48 14.0 | +3.3 |
| APC | Apacha | 4.34 | 16 | *e*P | Pn | 00 48 14.0 | +3.3 |
| PEA0B | Petropavlovsk- | 4.62 | 19 | *i*PN | Pn | 00 48 16.6 | +2.1 |
| PEA0B | Petropavlovsk- | 4.62 | 19 | Pn | Pn | 00 48 16.9 | +2.4 |
| PETK | Petropavlovsk- | 4.62 | 19 | P | Pn | 00 48 16.1 | +1.5 |
| | 3.1nm,0.3s,baz=181,slow=9.0,SNR=41 | | | | | | |
| PETK | | | | S | Sn | 00 49 09.1 | +2.3 |
| | baz=159,slow=8.9,SNR=1.6 | | | | | | |
| PETK | | | | LR | LR | 00 50 17.6 | |
| | comp=Z,108nm,20.6s,baz=190,slow=41 | | | | | | |
| PETK | Petropavlovsk- | 4.62 | 19 | Pn | Pn | 00 48 16.2 | +1.6 |
| PET | Petropavlovsk | 4.79 | 26 | *e*PN | Pn | 00 48 17.6 | +0.8 |
| PET | | | | *e*S | Sn | 00 49 12.2 | +1.3 |
| PET | | | | smax | smax | | |
| | comp=E,201nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,235nm,0.9s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,100nm,16.0s | | | | | | |
| PET | Petropavlovsk | 4.79 | 26 | Pn | Pn | 00 48 17.7 | +0.8 |
| PET | Petropavlovsk | 4.79 | 26 | *e*P | Pn | 00 48 17.7 | +0.9 |
| PET | | | | *e*S | Sn | 00 49 10.1 | -0.8 |
| PET | Petropavlovsk | 4.79 | 26 | *i*P | Pn | 00 48 17.5 | +0.8 |
| PET | | | | AMB | AMB | 00 48 19.5 | |
| | comp=Z,20nm,0.4s | | | | | | |
| PET | | | | *e*S | Sn | 00 49 10.6 | -0.3 |
| PET | | | | A | A | 00 49 15.3 | |
| | comp=Z,200nm,0.5s | | | | | | |
| PET | | | | A | A | 00 49 15.3 | |
| | comp=Z,490nm,0.5s | | | | | | |
| UGLR | Uglovaya | 5.00 | 26 | PN | Pn | 00 48 21.4 | +1.6 |
| UGLR | Uglovaya | 5.00 | 26 | *e*P | Pn | 00 48 21.4 | +1.6 |
| KOK | Koryaka | 5.02 | 24 | PN | Pn | 00 48 22.3 | +2.2 |
| KOK | Koryaka | 5.02 | 24 | *e*P | Pn | 00 48 22.3 | +2.2 |
| AVH | Avacha | 5.03 | 25 | PN | Pn | 00 48 22.1 | +2.0 |
| AVH | Avacha | 5.03 | 25 | *e*P | Pn | 00 48 22.1 | +2.0 |
| SMAR | Somma | 5.04 | 26 | PN | Pn | 00 48 21.9 | +1.4 |
| SMAR | Somma | 5.04 | 26 | *e*P | Pn | 00 48 21.9 | +1.4 |
| KRER | Koryakskii | 5.06 | 25 | PN | Pn | 00 48 22.6 | +1.8 |
| KRER | Koryakskii | 5.06 | 25 | *e*P | Pn | 00 48 22.6 | +1.8 |
| SDLR | Sedlovina | 5.08 | 26 | PN | Pn | 00 48 21.7 | +0.8 |
| SDLR | Sedlovina | 5.08 | 26 | *e*P | Pn | 00 48 21.7 | +0.8 |
| SPN | Mys Shipunski | 5.30 | 33 | PN | Pn | 00 48 24.0 | +0.2 |
| SPN | Mys Shipunski | 5.30 | 33 | *e*P | Pn | 00 48 24.0 | +0.2 |
| KUR | Kuril'sk | 6.13 | 237 | PN | Pn | 00 48 37.7 | +2.5 |
| KUR | | | | S | Sn | 00 49 46.7 | +2.8 |
| KUR | Kuril'sk | 6.13 | 237 | *e*P | Pn | 00 48 35.7 | +0.5 |
| KUR | | | | *e*S | Sn | 00 49 42.7 | -1.2 |
| MKZ | Mys Kozlova | 7.08 | 33 | PN | Pn | 00 48 46.5 | -1.6 |
| MKZ | Mys Kozlova | 7.08 | 33 | *e*P | Pn | 00 48 46.5 | -1.6 |
| MKZ | | | | *e*S | Sn | 00 50 01.2 | -5.8 |
| TUMD | Tumrok D | 7.20 | 25 | *e*P | Pn | 00 48 52.1 | +2.3 |
| T

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TIXI** | **Tiksi** | **25.96** | **341** | P | | **P** | | **00 52 32.2** | **-1.9** |
| | comp=Z,1.3nm,0.5s,baz=268,slow=23,SNR=6.3 | | | | | | | | |
| **TIXI** | **Tiksi** | **25.96** | **341** | *i* P | | **P** | | **00 52 32.0** | **-2.1** |
| TIXI | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **TIXI** | **Tiksi** | **25.96** | **341** | *i* P | | **P** | | **00 52 32.0** | **-2.1** |
| **H11N2** | **WAKE ISLAND Hy** | **30.47** | **158** | T | | T | | 01 25 40.9 | |
| | baz=345,slow=76,SNR=33 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.49** | **158** | T | | T | | 01 25 43.6 | |
| | baz=345,slow=76,SNR=33 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.49** | **158** | T | | T | | 01 25 44.5 | |
| | baz=345,slow=76,SNR=24 | | | | | | | | |
| **J20K** | **Nowinta River** | **30.93** | **41** | P | | **P** | | **00 53 19.3** | **+0.8** |
| **IMAR** | **Indian Mountai** | **31.31** | **38** | P | | **P** | | **00 53 23.0** | **+1.2** |
| **H11S1** | **WAKE ISLAND Hy** | **31.60** | **159** | T | | T | | 01 27 04.2 | |
| | baz=346,slow=76,SNR=822 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.61** | **159** | T | | T | | 01 26 58.0 | |
| | baz=346,slow=76,SNR=814 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.62** | **159** | T | | T | | 01 27 05.6 | |
| | baz=346,slow=76,SNR=589 | | | | | | | | |
| **H21K** | **Melozitna Rive** | **31.65** | **38** | P | | **P** | | **00 53 25.5** | **+0.6** |
| **SPU** | **Mount Spurr** | **31.79** | **47** | | | sP | | 00 53 55.4 | +9.2 |
| **SONM** | **Songino Array** | **32.03** | **287** | LR | | LR | | 01 07 13.0 | |
| | comp=Z,40nm,19.6s,baz=241,slow=38 | | | | | | | | |
| **SEW** | **Seward** | **33.13** | **49** | P | | **P** | | **00 53 41.0** | **+3.2** |
| **MDM** | **Murphy Dome** | **33.52** | **40** | P | | **P** | | **00 53 42.9** | **+1.7** |
| MDM | | | | IAmb | | IAmb | | 00 53 49.3 | |
| | comp=Z,4.6nm,1.2s | | | | | | | | |
| **SML** | **Sawmill** | **33.55** | **46** | P | | **P** | | **00 53 42.4** | **+0.9** |
| **COLA** | **College** | **33.69** | **40** | *i* P | | **P** | | **00 53 42.7** | **+0.1** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **34.02** | **46** | P | | **P** | | **00 53 46.9** | **+1.3** |
| SCM | | | | pmax | | pmax | | | |
| | comp=Z,27nm,1.2s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **34.02** | **46** | P | | **P** | | **00 53 46.9** | **+1.3** |
| **ILAR** | **Eielson Array** | **34.10** | **40** | P | | **P** | | **00 53 46.2** | **0.0** |
| | comp=Z,0.6nm,1.1s,baz=270,slow=12,SNR=4.5 | | | | | | | | |
| **BMRM** | **Bremner River** | **35.42** | **47** | P | | **P** | | **00 53 57.4** | **-0.3** |
| **MENT** | **Mentasta** | **35.60** | **43** | P | | **P** | | **00 53 57.9** | **-1.2** |
| MENT | | | | IAmb | | IAmb | | 00 54 12.9 | |
| | comp=Z,4.9nm,1.2s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **36.44** | **43** | P | | **P** | | **00 54 08.2** | **+1.8** |
| L27K | | | | IAmb | | IAmb | | 00 54 13.2 | |
| | comp=Z,2.5nm,1.0s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **36.46** | **43** | P | | **P** | | **00 54 08.2** | **+1.6** |
| **BARN** | **Barnard Glacie** | **36.82** | **46** | P | | **P** | | **00 54 10.5** | **+0.7** |
| **INK** | **Inuvik** | **39.19** | **34** | P | | **P** | | **00 54 30.6** | **+1.2** |
| | comp=Z,1.1nm,0.6s,baz=292,slow=5.8,SNR=4.8 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **41.41** | **28** | P | | **P** | | **00 54 49.2** | **+1.5** |
| A36M | | | | IAmb | | IAmb | | 00 54 50.3 | |
| | comp=Z,6.1nm,0.9s | | | | | | | | |
| **C36M** | **Paulatuk** | **42.36** | **31** | P | | **P** | | **00 54 56.5** | **+1.0** |
| C36M | | | | IAmb | | IAmb | | 00 55 10.4 | |
| | comp=Z,6.6nm,1.1s | | | | | | | | |
| **EUNU** | **Eureka** | **46.86** | **12** | P | | **P** | | **00 55 31.5** | **+0.3** |
| EUNU | | | | IAmb | | IAmb | | 00 55 32.4 | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **MK31** | **Makanchi Array** | **47.27** | **297** | P | | **P** | | **00 55 33.1** | **-1.7** |
| **MK31** | **Makanchi Array** | **47.27** | **297** | P | | **P** | | **00 55 33.1** | **-1.7** |
| **MKAR** | **Makanchi Array** | **47.27** | **297** | P | | **P** | | **00 55 32.9** | **-2.0** |
| | comp=Z,0.3nm,0.5s,baz=71,slow=9.6,SNR=8.5 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **00 57 04.8** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=72,slow=4.7,SNR=1.7 | | | | | | | | |
| **KURK** | **Kurchatov** | **47.42** | **303** | *i* P | | **P** | | **00 55 35.9** | **0.0** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **47.42** | **303** | *i* P | | **P** | | **00 55 35.9** | **0.0** |
| **MAKZ** | **Makanchi** | **47.45** | **297** | P | | **P** | | **00 55 34.7** | **-1.5** |
| MAKZ | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,1.2s | | | | | | | | |
| **MAKZ** | **Makanchi** | **47.45** | **297** | P | | **P** | | **00 55 34.7** | **-1.5** |
| **YKA** | **Yellowknife Ar** | **48.47** | **38** | P | | **P** | | **00 55 45.2** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=298,slow=7.5,SNR=12 | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **52.74** | **293** | P | | **P** | | **00 56 14.8** | **-2.0** |
| TARG | | | | IAmb | | IAmb | | 00 56 16.6 | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **54.20** | **257** | P | | **P** | | **00 56 27.1** | **-0.2** |
| | comp=Z,1.7nm,0.4s,baz=34,slow=7.2,SNR=9.4 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.40** | **341** | P | | **P** | | **00 56 41.2** | **-1.2** |
| | comp=Z,3.0nm,0.9s,baz=36,slow=6.7,SNR=1.7 | | | | | | | | |
| **PLID** | **Pearl Lake** | **57.39** | **57** | P | | **P** | | **00 56 50.2** | **+0.2** |
| PLID | | | | IAmb | | IAmb | | 00 56 52.5 | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **SUMG** | **Summit** | **58.57** | **5** | P | | **P** | | **00 56 57.9** | **-0.2** |
| SUMG | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **SUMG** | **Summit** | **58.57** | **5** | P | | **P** | | **00 56 57.9** | **-0.2** |
| SUMG | | | | IAmb | | IAmb | | 00 56 59.4 | |
| | comp=Z,5.4nm,1.1s | | | | | | | | |
| **FCC** | **Fort Churchill** | **58.80** | **35** | P | | **P** | | **00 57 00.1** | **+0.7** |
| **FCC** | **Fort Churchill** | **58.80** | **35** | P | | **P** | | **00 57 00.1** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **60.28** | **65** | P | | **P** | | **00 57 11.6** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=280,slow=10.0,SNR=2.6 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **62.44** | **56** | P | | **P** | | **00 57 25.6** | **+0.9** |
| | comp=Z,1.2nm,1.0s,baz=321,slow=1.9,SNR=5.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | **70.80** | **335** | P | | **P** | | **00 57 24.9** | **-1.6** |
| | comp=Z,1.5nm,0.8s,baz=38,slow=9.6,SNR=6.5 | | | | | | | | |
| **OBN** | **Obninsk** | **64.42** | **326** | *e*P | | **P** | | **00 57 36.9** | **-0.4** |
| OBN | | | | *e* | | | | 00 58 10.5 | |
| OBN | | | | *e* | | | | 01 00 00.2 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,35nm,14.0s | | | | | | | | |
| **OBN** | **Obninsk** | **64.42** | **326** | *e*P | | **P** | | **00 57 36.9** | **-0.4** |
| **NB2** | **NORSAR Subarra** | **66.75** | **342** | P | | **P** | | **00 57 51.9** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=29,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.75** | **342** | P | | **P** | | **00 57 50.8** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=25,slow=6.4,SNR=3.7 | | | | | | | | |
| NOA | | | | LR | | LR | | 01 30 33.1 | |
| | comp=Z,14nm,18.2s,baz=310,slow=39 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.63** | **327** | P | | **P** | | **00 58 15.5** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=33,slow=5.5,SNR=2.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.89** | **201** | P | | **P** | | **00 58 18.6** | **+0.2** |
| | comp=Z,0.9nm,0.7s,baz=19,slow=6.8,SNR=4.5 | | | | | | | | |
| **SCHQ** | **Schefferville** | **70.89** | **24** | P | | **P** | | **00 58 17.9** | **-0.3** |
| | comp=Z,1.6nm,0.8s,baz=339,slow=8.6,SNR=6.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **74.58** | **200** | P | | **P** | | **00 58 41.4** | **+1.1** |
| | comp=Z,0.8nm,0.5s,baz=14,slow=5.7,SNR=18 | | | | | | | | |
| ASAR | | | | LR | | LR | | 01 31 00.3 | |
| | comp=Z,27nm,20.0s,baz=78,slow=35 | | | | | | | | |
| **BURAR** | **Bucovina Array** | **74.65** | **327** | P | | **P** | | **00 58 39.3** | **-1.3** |
| **TXAR** | **Lajitas Array** | **75.30** | **62** | P | | **P** | | **00 58 45.5** | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=306,slow=4.2,SNR=9.4 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **77.01** | **290** | LR | | LR | | 01 36 43.7 | |
| | comp=Z,23nm,21.5s,baz=156,slow=39 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.85** | **318** | P | | **P** | | **00 58 58.8** | **-0.2** |
| **BRTR** | **Keskin Array B** | **77.85** | **318** | P | | **P** | | **00 58 58.8** | **-0.2** |

*SOME **27** 01:06:55.7, 41.78N×77.62E, h10km*
*KRNET **27** 01:06:55.3±0.1, 41.68N×77.61E, h16km, mb3.2*
*NNC **27** 01:06:57.7±1.0, 41.79N×77.61E, h0km, mb3.5, mpv3.4,*
*Error ellipse: s-maj=6.8km s-min=4.1km az=171.0*
**ISC 27 01:06:56.2±1.0, 41.72N±0.04×77.67E±0.03, h8km±8km, n67, σ1.9°02/117, 23C-19D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TARG** | **Taragay, Kyrgy** | **0.10** | **86** | ⇑*i*P | | **Pg** | **01 06 59.1** | **+0.1** |
| TARG | baz=70 | | | ⇑*i*S | | **Sg** | **01 07 01.5** | **+0.5** |
| | baz=70 | | | | | | | |
| **KDJ** | **Kajisay** | **0.55** | **318** | ⇓*i*P | | **Pg** | **01 07 06.0** | **-0.8** |
| KDJ | baz=26 | | | ⇓*i*S | | **Sg** | **01 07 13.4** | **-0.6** |
| | baz=26 | | | | | | | |
| **PRZ** | **Przheval'sk** | **0.94** | **35** | ⇓*i*P | | **Pb** | **01 07 13.7** | **-1.0** |
| PRZ | baz=35 | | | ⇓*e*S | | **Sb** | **01 07 27.3** | **-0.1** |
| | baz=35 | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.06** | **360** | ⇑*e*P | | **Pg** | **01 07 15.8** | **-0.7** |
| ANVS | baz=2.0 | | | ⇑*i*S | | **Sg** | **01 07 30.7** | **+0.4** |
| | baz=2.0 | | | | | | | |
| **ULHL** | **Ulahol** | **1.19** | **297** | ⇓*i*P | | **Pn** | **01 07 16.9** | **-2.3** |
| ULHL | baz=0.0 | | | ⇓*i*S | | **Sg** | **01 07 32.7** | **-1.6** |
| | baz=0.0 | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **338** | ⇑*e*P | | **Pn** | **01 07 22.1** | **-0.5** |
| TNSS | 23nm,0.2s | | | *e*S | | **Sn** | **01 07 41.2** | **-0.4** |
| | 27nm,0.1s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.42** | **338** | ⇑*e*P | | **Pn** | **01 07 22.1** | **-0.5** |
| | baz=40 | | | | | | | |
| TNSS | | | | ⇑*e*S | | **Sn** | **01 07 41.2** | **-0.4** |
| | baz=40 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.50** | **301** | ⇑*i*P | | **Pn** | **01 07 22.7** | **-0.8** |
| | baz=4.0 | | | | | | | |
| BOOM | | | | ⇑*i*S | | **Sn** | **01 07 42.5** | **-0.7** |
| | baz=4.0 | | | | | | | |
| **MDOK** | **Medeo** | **1.51** | **343** | ⇑*e*P | | **Pn** | **01 07 23.8** | **+0.2** |
| | 24nm,0.2s | | | | | | | |
| MDOK | | | | *e*S | | **Sn** | **01 07 44.1** | **+0.5** |
| | 16nm,0.1s | | | | | | | |
| **MDOK** | **Medeo** | **1.51** | **343** | Pn | | **Pn** | **01 07 23.8** | **+0.2** |
| | 11nm,0.4s | | | | | | | |
| MDOK | | | | Sn | | **Sn** | **01 07 44.1** | **+0.5** |
| | 17nm,0.5s | | | | | | | |
| **MDOK** | **Medeo** | **1.51** | **343** | Pg | | **Pn** | **01 07 23.8** | **+0.2** |
| | 24nm,0.2s | | | | | | | |
| MDOK | | | | Lg | | Lg | 01 07 44.1 | |
| | 16nm,0.1s | | | | | | | |
| **MDOK** | **Medeo** | **1.51** | **343** | ⇑*e*P | | **Pn** | **01 07 23.8** | **+0.2** |
| | baz=45 | | | | | | | |
| MDOK | | | | ⇑*e*S | | **Sn** | **01 07 44.1** | **+0.5** |
| | baz=45 | | | | | | | |
| **ZHN** | **Zhinishke** | **1.55** | **21** | *e*P | | **Pg** | **01 07 25.1** | **-0.9** |
| | 11nm,0.1s | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **01 07 45.7** | **-0.4** |
| | 102nm,0.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **1.55** | **21** | P | | **Pg** | **01 07 25.2** | **-0.8** |
| | 11nm,0.1s | | | | | | | |
| ZHN | | | | S | | **Sg** | **01 07 46.1** | **0.0** |
| | 102nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.56** | **345** | ⇓*e*P | | **Pb** | **01 07 25.0** | **-0.4** |
| | 33nm,0.2s | | | | | | | |
| KOTS | | | | *e*S | | **Sb** | **01 07 46.0** | **+0.5** |
| | 75nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.56** | **345** | P | | **Pb** | **01 07 25.1** | **-0.4** |
| | 33nm,0.2s | | | | | | | |
| KOTS | | | | S | | **Sb** | **01 07 46.6** | **+1.1** |
| | 75nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.56** | **345** | ⇓*e*P | | **Pb** | **01 07 25.0** | **-0.4** |
| | baz=47 | | | | | | | |
| KOTS | | | | ⇓*e*S | | **Sb** | **01 07 46.0** | **+0.5** |
| | baz=47 | | | | | | | |
| **KNDC** | **Almaty** | **1.58** | **341** | ⇓Pn | | **Pb** | **01 07 25.0** | **-0.6** |
| | 33nm,0.3s | | | | | | | |
| KNDC | | | | ⇓Sn | | **Sg** | **01 07 48.0** | **+1.0** |
| | 38nm,0.3s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.59** | **340** | *e*P | | **Pb** | **01 07 25.7** | **0.0** |
| | 122nm,0.1s | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **01 07 47.6** | **+0.4** |
| | 57nm,0.2s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.59** | **340** | P | | **Pb** | **01 07 25.8** | **+0.1** |
| | 122nm,0.1s | | | | | | | |
| AAA | | | | S | | **Sg** | **01 07 47.6** | **+0.4** |
| | 57nm,0.2s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.59** | **340** | *e*P | | **Pb** | **01 07 25.7** | **0.0** |
| | baz=42 | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **01 07 47.6** | **+0.4** |
| | baz=42 | | | | | | | |
| **MTBS** | **Maitube** | **1.68** | **327** | *e*P | | **Pn** | **01 07 26.4** | **+0.5** |
| | 15nm,0.2s | | | | | | | |
| MTBS | | | | *e*S | | **Sn** | **01 07 48.6** | **+1.0** |
| | 35nm,0.1s | | | | | | | |
| **MTBS** | **Maitube** | **1.68** | **327** | P | | **Pn** | **01 07 26.5** | **+0.5** |
| | 15nm,0.2s | | | | | | | |
| MTBS | | | | S | | **Sn** | **01 07 48.7** | **+1.0** |
| | 35nm,0.1s | | | | | | | |
| **MTBS** | **Maitube** | **1.68** | **327** | *e*P | | **Pn** | **01 07 26.4** | **+0.5** |
| | baz=29 | | | | | | | |
| MTBS | | | | *e*S | | **Sn** | **01 07 48.7** | **+1.0** |
| | baz=29 | | | | | | | |
| **UZB** | **Uzunbulak** | **1.74** | **35** | *e*P | | **Pg** | **01 07 28.6** | **-1.0** |
| | 5.3nm,0.2s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **01 07 52.2** | **+0.1** |
| | 19nm,0.1s | | | | | | | |
| **UZB** | **Uzunbulak** | **1.74** | **35** | P | | **Pg** | **01 07 28.6** | **-1.0** |
| | 5.3nm,0.2s | | | | | | | |
| UZB | | | | S | | **Sg** | **01 07 52.9** | **+0.8** |
| | 19nm,0.1s | | | | | | | |
| **UZB** | **Uzunbulak** | **1.74** | **35** | *e*P | | **Pg** | **01 07 28.6** | **-1.0** |
| | baz=35 | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **01 07 52.3** | **+0.1** |
| | baz=35 | | | | | | | |
| **KURS** | **Kuram** | **1.80** | **12** | *e*P | | **Pb** | **01 07 29.4** | **0.0** |
| | 4.6nm,0.3s | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **01 07 53.4** | **-0.7** |
| | 12nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **1.80** | **12** | P | | **Pb** | **01 07 29.4** | **0.0** |
| | 4.6nm,0.3s | | | | | | | |
| KURS | | | | S | | **Sg** | **01 07 53.4** | **-0.7** |
| | 12nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **1.80** | **12** | *e*P | | **Pb** | **01 07 29.4** | **0.0** |
| | baz=13 | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **01 07 53.4** | **-0.7** |
| | baz=13 | | | | | | | |
| **KPKS** | **Kokpek** | **1.90** | **23** | *e*P | | **Pb** | **01 07 31.0** | **-0.1** |
| | 10nm,0.1s | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **01 07 56.7** | **-0.5** |
| | 36nm,0.3s | | | | | | | |
| **KPKS** | **Kokpek** | **1.90** | **23** | *e*P | | **Pb** | **01 07 31.0** | **-0.1** |
| | baz=24 | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **01 07 56.6** | **-0.5** |
| | baz=24 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.95** | **309** | ⇑Pn | | **Pb** | **01 07 31.0** | **-1.0** |
| | 6.2nm,0.3s | | | | | | | |
| TKM2 | | | | ⇓Sn | | **Sb** | **01 07 57.2** | **+0.7** |
| | 15nm,0.3s | | | | | | | |
| **DGS** | **Degeres** | **2.07** | **318** | *e*P | | **Pb** | **01 07 33.4** | **-0.6** |
| | 5.5nm,0.3s | | | | | | | |
| DGS | | | | *e*S | | **Sb** | **01 08 00.4** | **+0.6** |
| | 34nm,0.3s | | | | | | | |
| **DGS** | **Degeres** | **2.07** | **318** | Pg | | **Pb** | **01 07 33.4** | **-0.6** |
| | 5.5nm,0.3s | | | | | | | |
| DGS | | | | Lg | | Lg | 01 08 00.4 | |
| | 34nm,0.3s | | | | | | | |
| **PDGK** | **Podgornoye** | **2.10** | **39** | Pg | | **Pg** | **01 07 34.7** | **-1.7** |
| | 2.2nm,0.2s | | | | | | | |
| PDGK | | | | Lg | | Lg | 01 08 02.9 | |
| | 15nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **2.10** | **39** | ⇑Pn | | **Pg** | **01 07 34.9** | **-1.5** |
| | 2.1nm,0.4s | | | | | | | |
| PDGK | | | | ⇓Sn | | **Sg** | **01 08 03.1** | **-0.4** |
| | 18nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **2.12** | **340** | ⇓*e*P | | **Pb** | **01 07 34.5** | **-0.3** |
| | 10.0nm,0.2s | | | | | | | |
| KTBS | | | | *e*S | | **Sb** | **01 08 02.7** | **+1.4** |
| | 77nm,0.2s | | | | | | | |
| **KTBS** | **Karatobe** | **2.12** | **340** | Pg | | **Pb** | **01 07 34.4** | **-0.3** |
| | 10.0nm,0.2s | | | | | | | |
| KTBS | | | | Lg | | Lg | 01 08 02.7 | |
| | 77nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **2.19** | **347** | *e*P | | **Pb** | **01 07 35.8** | **-0.2** |
| | 16nm,0.2s | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | **01 08 05.0** | **+1.7** |
| | 67nm,0.4s | | | | | | | |
| **CHKK** | **Chushkaly** | **2.19** | **347** | Pg | | **Pb** | **01 07 35.8** | **-0.2** |
| | 16nm,0.2s | | | | | | | |
| CHKK | | | | Lg | | Lg | 01 08 05.1 | |
| | 67nm,0.4s | | | | | | | |
| **KBK** | **Karagaybulak** | **2.23** | **296** | ⇑*i*P | | **Pn** | **01 07 33.9** | **+0.4** |
| | baz=97 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sn** | **01 08 01.8** | **+0.6** |
| | baz=97 | | | | | | | |
| **KUU** | **Kurty** | **2.38** | **336** | *e*P | | **Pb** | **01 07 38.6** | **-0.7** |
| | 4.5nm,0.3s | | | | | | | |
| KUU | | | | *e*S | | **Sb** | **01 08 09.3** | **+0.6** |
| | 27nm,0.2s | | | | | | | |
| **KUU** | **Kurty** | **2.38** | **336** | Pg | | **Pb** | **01 07 38.6** | **-0.7** |
| | 4.5nm,0.3s | | | | | | | |
| KUU | | | | Lg | | Lg | 01 08 09.3 | |
| | 27nm,0.2s | | | | | | | |
| **UCH** | **Uchtor** | **2.41** | **283** | ⇑*i*P | | **Pn** | **01 07 36.3** | **+0.1** |
| | baz=84 | | | | | | | |
| UCH | | | | ⇑*i*S | | **Sn** | **01 08 06.2** | **+0.2** |
| | baz=84 | | | | | | | |
| **BLB** | **Baldybastay** | **2.45** | **14** | *e*P | | **Pb** | **01 07 40.7** | **+0.2** |
| | 32nm,0.2s | | | | | | | |
| BLB | | | | *e*S | | **Sg** | **01 08 12.9** | **-1.9** |
| | 123nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **2.45** | **14** | Pg | | **Pb** | **01 07 40.7** | **+0.2** |
| | 32nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 01 08 12.9 | |
| | 123nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.49** | **3** | *e*P | | **Pb** | **01 07 41.5** | **+0.3** |
| | 13nm,0.4s | | | | | | | |
| ARXS | | | | *e*S | | **Sb** | **01 08 14.3** | **+2.3** |
| | 52nm,0.2s | | | | | | | |
| **ARXS** | **Arharly** | **2.49** | **3** | Pg | | **Pb** | **01 07 41.5** | **+0.3** |
| | 13nm,0.4s | | | | | | | |
| ARXS | | | | Lg | | Lg | 01 08 14.3 | |
| | 52nm,0.2s | | | | | | | |
| **ARLS** | **Aral** | **2.50** | **274** | ⇓*i*P | | **Pn** | **01 07 37.3** | **0.0** |
| | baz=75 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **01 08 08.0** | **-0.1** |
| | baz=75 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.53** | **292** | ⇓Pn | | **Pb** | **01 07 41.6** | **-0.3** |
| | 1.6nm,0.3s | | | | | | | |
| AAK | | | | ⇓Sn | | **Sb** | **01 08 14.3** | **+1.1** |
| | 11nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.53** | **292** | ⇑*e*P | | **Pn** | **01 07 37.9** | **+0.3** |
| | baz=94 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sn** | **01 08 08.9** | **+0.2** |
| | baz=94 | | | | | | | |
| **KTMS** | **Ketmen** | **2.63** | **48** | *e*P | | **Pg** | **01 07 44.5** | **-2.0** |
| KTMS | | | | *e*S | | **Sg** | **01 08 19.4** | **-1.2** |
| **USP** | **Ospenovka** | **2.81** | **304** | ⇑*i*P | | **Pn** | **01 07 42.0** | **+0.7** |
| | baz=6.0 | | | | | | | |
| USP | | | | ⇑*i*S | | **Sn** | **01 08 15.8** | **+0.5** |
| | baz=6.0 | | | | | | | |
| **SGDS** | **Sogindy** | **2.83** | **309** | *e*P | | **Pb** | **01 07 46.0** | **-1.0** |
| | 1.7nm,0.2s | | | | | | | |
| SGDS | | | | *e*S | | **Sb** | **01 08 22.2** | **+0.4** |
| | 19nm,0.3s | | | | | | | |
| **SGDS** | **Sogindy** | **2.83** | **309** | Pg | | **Pb** | **01 07 45.9** | **-1.0** |
| | 1.7nm,0.2s | | | | | | | |
| SGDS | | | | Lg | | Lg | 01 08 22.2 | |
| | 19nm,0.3s | | | | | | | |
| **DJR** | **Jarkent** | **3.04** | **30** | *e*P | | **Pb** | **01 07 50.6** | **+0.1** |
| | 1.4nm,0.2s | | | | | | | |
| DJR | | | | *e*S | | **Sb** | **01 08 29.9** | **+2.2** |
| | 14nm,0.3s | | | | | | | |
| **DJR** | **Jarkent** | **3.04** | **30** | Pg | | **Pb** | **01 07 50.6** | **+0.1** |
| | 1.4nm,0.2s | | | | | | | |
| DJR | | | | Lg | | Lg | 01 08 29.9 | |
| | 14nm,0.3s | | | | | | | |
| **MRKS** | **Merke** | **3.45** | **289** | *e*P | | **Pb** | **01 07 59.4** | **+1.8** |
| | 1.9nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **01 08 45.1** | **-1.9** |
| | 12nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **3.45** | **289** | Pg | | **Pb** | **01 07 59.4** | **+1.8** |
| | 1.9nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 01 08 45.1 | |
| | 12nm,0.2s | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.77** | **18** | *e*P | | **Pb** | **01 08 03.9** | **+1.0** |
| | 0.8nm,0.2s | | | | | | | |
| KAPS | | | | *e*S | | **Sg** | **01 08 52.7** | **-4.4** |
| | 3.0nm,0.4s | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.77** | **18** | Pg | | **Pb** | **01 08 03.9** | **+1.0** |
| | 0.8nm,0.2s | | | | | | | |
| KAPS | | | | Lg | | Lg | 01 08 52.7 | |
| | 3.0nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **4.24** | **323** | *e*P | | **Pb** | **01 08 11.9** | **+1.0** |
| | 1.1nm,0.3s | | | | | | | |
| BTLS | | | | *e*S | | **Sb** | **01 09 06.3** | **+4.1** |
| | 1.1nm,0.2s | | | | | | | |
| **BTLS** | **Baital** | **4.24** | **323** | Pg | | **Pb** | **01 08 11.9** | **+1.0** |
| | 1.1nm,0.3s | | | | | | | |
| BTLS | | | | Lg | | Lg | 01 09 06.3 | |
| | 1.1nm,0.2s | | | | | | | |
| **KK08** | **Karatay Array** | **5.49** | **287** | ⇓Lg | | Lg | 01 09 48.1 | |
| | 1.0nm,0.5s,baz=87,slow=27 | | | | | | | |
| **MK31** | **Makanchi Array** | **6.06** | **32** | ⇑Lg | | Lg | 01 10 03.8 | |
| | 0.2nm,0.3s,baz=209,slow=28,SNR=4.7 | | | | | | | |

*IDC **27** 01:34:18.2±1.6, 59.77N×153.38W, h91km±18km, mb3.2/5, mb1 3.6/10, mb1mx3.2/49, mbtmp3.6/10, Error ellipse: s-maj=21.5km s-min=15.0km az=89.0*
*NEIC **27** 01:34:19.2±1.1, 59.80N±0.02×153.06W±0.06, h109km±4km, Error ellipse: s-maj=5.3km s-min=2.0km az=121.0*
*AEIC **27** 01:34:20±1.4, 59.78N±0.03×153.05W±0.07, h104km±4km, ML3.3, ML3.5/102(NEIC), Error ellipse: s-maj=5.3km s-min=4.7km az=98.0*
**ISC 27 01:34:19.8±0.8, 59.80N±0.04×153.03W±0.04, h108km±5km, n202, σ0.93/192, mb3.3/5, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **O20K** | **Slope Mountain** | **0.34** | **36** | | | **Pn** | **01 34 35.2** | **-0.4** |
| O20K | | | | | | **Sn** | **01 34 47.2** | **-0.2** |
| **O20K** | **Slope Mountain** | **0.34** | **36** | P | | **Pn** | **01 34 35.2** | **-0.4** |
| | baz=215 | | | | | | | |
| O20K | | | | S | | **Sn** | **01 34 47.2** | **-0.2** |
| | baz=215 | | | | | | | |
| **AUL** | **Augustine Lava** | **0.47** | **206** | | | **Pn** | **01 34 35.8** | **-0.4** |
| AUL | | | | | | **Sn** | **01 34 48.1** | **-0.4** |
| **AUW** | **Augustine West** | **0.49** | **208** | | | **Pn** | **01 34 36.0** | **-0.3** |
| **AUQ** | **Augustine Qik'** | **0.49** | **204** | | | **Pn** | **01 34 36.0** | **-0.4** |
| **RSO** | **Redoubt South** | **0.68** | **12** | | | **Pn** | **01 34 37.5** | **-0.4** |
| **RDWB** | **Redoubt West** | **0.69** | **8** | | | **Pn** | **01 34 37.4** | **-0.6** |
| RDWB | | | | | | **Sn** | **01 34 50.8** | **-1.0** |
| **HOM** | **Homer** | **0.72** | **101** | | | **Pn** | **01 34 37.9** | **-0.1** |
| HOM | | | | | | **Sn** | **01 34 51.9** | **+0.1** |
| **HOM** | **Homer** | **0.72** | **101** | IAML | | | 01 34 52.9 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **HOM** | **Homer** | **0.72** | **101** | P | | **Pn** | **01 34 37.8** | **-0.1** |
| | baz=280 | | | | | | | |
| HOM | | | | S | | **Sn** | **01 34 51.9** | **+0.1** |
| | baz=280 | | | | | | | |
| **O19K** | **Port Alsworth** | **0.76** | **302** | | | **Pn** | **01 34 37.9** | **-0.4** |
| O19K | | | | | | **Sn** | **01 34 51.5** | **-0.9** |
| **O19K** | **Port Alsworth** | **0.76** | **302** | P | | **Pn** | **01 34 37.9** | **-0.4** |
| | baz=123 | | | | | | | |
| O19K | | | | S | | **Sn** | **01 34 51.5** | **-0.9** |
| | baz=123 | | | | | | | |
| **NCT** | **North Crescent** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KDAK | **Kodiak Island** | 2.04 | 173 | P | | Pn | 01 34 52.0 | -1.1 | |
| | comp=N,64nm,0.3s,baz=36,slow=8.1,SNR=366 | | | | | | | | |
| KDAK | | | | S | | Sn | 01 35 16.0 | -2.5 | |
| | comp=N,23nm,0.3s,baz=210,slow=22,SNR=16 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **2.04** | **173** | | | **Pn** | **01 34 52.0** | **-1.1** | |
| KDAK | | | | IAML | | | 01 35 18.7 | | |
| | comp=N,352nm,0.7s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.08** | **50** | | | **Pn** | **01 34 53.2** | **-0.4** | |
| **RC01** | **Rabbit Creek A** | **2.08** | **50** | P | | **Pn** | **01 34 53.2** | **-0.4** | |
| | baz=233 | | | | | | | | |
| **M19K** | **Big River Lodg** | **2.21** | **343** | | | **Pn** | **01 34 55.1** | **-0.2** | |
| **M22K** | **Willow** | **2.42** | **35** | | | **Pn** | **01 34 58.3** | **+0.3** | |
| **M22K** | **Willow** | **2.42** | **35** | P | | **Pn** | **01 34 58.3** | **+0.3** | |
| | baz=217 | | | | | | | | |
| **L19K** | **White Mountain** | **2.55** | **340** | | | **Pn** | **01 34 59.3** | **-0.4** | |
| **L19K** | **White Mountain** | **2.55** | **340** | P | | **Pn** | **01 34 59.3** | **-0.4** | |
| | baz=159 | | | | | | | | |
| **PWL** | **Port Wells** | **2.56** | **64** | | | **Pn** | **01 34 58.7** | **-1.2** | |
| **PWL** | **Port Wells** | **2.56** | **64** | IAML | | | 01 35 31.4 | | |
| | comp=E,292nm,0.4s | | | | | | | | |
| **OHAK** | **Old Harbor** | **2.59** | **183** | | | **Pn** | **01 34 58.7** | **-1.6** | |
| **OHAK** | **Old Harbor** | **2.59** | **183** | IAML | | | 01 35 30.1 | | |
| | comp=N,313nm,0.3s | | | | | | | | |
| OHAK | | | | IAML | | | 01 35 30.2 | | |
| | comp=E,239nm,0.2s | | | | | | | | |
| **OHAK** | **Old Harbor** | **2.59** | **183** | P | | **Pn** | **01 34 58.7** | **-1.6** | |
| | baz=2.7 | | | | | | | | |
| **PMR** | **Palmer** | **2.62** | **45** | | | **Pn** | **01 34 59.5** | **-1.1** | |
| **PMR** | **Palmer** | **2.62** | **45** | IAML | | | 01 35 32.2 | | |
| | comp=N,229nm,0.2s | | | | | | | | |
| PMR | | | | IAML | | | 01 35 32.2 | | |
| | comp=E,198nm,0.2s | | | | | | | | |
| **PMR** | **Palmer** | **2.62** | **45** | P | | **Pn** | **01 34 59.5** | **-1.1** | |
| | baz=228 | | | | | | | | |
| **L20K** | **Farewell, AK** | **2.72** | **352** | | | **Pn** | **01 35 01.9** | **0.0** | |
| **L20K** | **Farewell, AK** | **2.72** | **352** | P | | **Pn** | **01 35 01.9** | **0.0** | |
| | baz=171 | | | | | | | | |
| **KNK** | **Knik Glacier** | **2.77** | **52** | | | **Pn** | **01 35 01.5** | **-1.1** | |
| **KNK** | **Knik Glacier** | **2.77** | **52** | P | | **Pn** | **01 35 01.5** | **-1.1** | |
| | baz=236 | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **2.82** | **44** | | | **Pn** | **01 35 02.5** | **-0.8** | |
| GHO | | | | IAML | | | 01 35 37.6 | | |
| | comp=E,257nm,0.4s | | | | | | | | |
| GHO | | | | IAML | | | 01 35 37.8 | | |
| | comp=N,239nm,0.4s | | | | | | | | |
| **CUT** | **Chulitna** | **2.93** | **26** | | | **Pn** | **01 35 05.6** | **+0.9** | |
| **CUT** | **Chulitna** | **2.93** | **26** | IAML | | | 01 35 40.3 | | |
| | comp=N,213nm,0.5s | | | | | | | | |
| CUT | | | | IAML | | | 01 35 47.2 | | |
| | comp=E,259nm,0.6s | | | | | | | | |
| **CUT** | **Chulitna** | **2.93** | **26** | P | | **Pn** | **01 35 05.6** | **+0.9** | |
| | baz=208 | | | | | | | | |
| **SML** | **Sawmill** | **3.06** | **47** | | | **Pn** | **01 35 05.3** | **-1.1** | |
| **SML** | **Sawmill** | **3.06** | **47** | IAML | | | 01 35 42.4 | | |
| | comp=N,154nm,0.3s | | | | | | | | |
| SML | | | | IAML | | | 01 35 52.0 | | |
| | comp=E,150nm,1.1s | | | | | | | | |
| **SML** | **Sawmill** | **3.06** | **47** | P | | **Pn** | **01 35 05.3** | **-1.1** | |
| | baz=231 | | | | | | | | |
| **PPLA** | **Purkeypile** | **3.13** | **7** | | | **Pn** | **01 35 08.5** | **+1.0** | |
| **PPLA** | **Purkeypile** | **3.13** | **7** | P | | **Pn** | **01 35 08.5** | **+1.0** | |
| | baz=186 | | | | | | | | |
| **GLI** | **Glacier Island** | **3.14** | **67** | Pn | | **Pn** | **01 35 06.5** | **-1.0** | |
| GLI | | | | IAML | | | 01 35 42.4 | | |
| | comp=E,200nm,0.5s | | | | | | | | |
| GLI | | | | IAML | | | 01 35 44.5 | | |
| | comp=N,101nm,0.4s | | | | | | | | |
| **SII** | **Sitkinak Islan** | **3.31** | **191** | | | **Pn** | **01 35 08.0** | **-1.8** | |
| **SII** | **Sitkinak Islan** | **3.31** | **191** | P | | **Pn** | **01 35 08.0** | **-1.8** | |
| | baz=10.0 | | | | | | | | |
| **FID** | **Port Fidalgo** | **3.40** | **71** | Pn | | **Pn** | **01 35 09.6** | **-1.3** | |
| FID | | | | IAML | | | 01 35 47.8 | | |
| | comp=E,164nm,0.7s | | | | | | | | |
| FID | | | | IAML | | | 01 35 49.1 | | |
| | comp=N,189nm,0.2s | | | | | | | | |
| **JPK** | **Jack Peak** | **3.42** | **66** | | | **Pn** | **01 35 10.5** | **-0.8** | |
| **TT01** | **Tatalina** | **3.43** | **336** | | | **Pn** | **01 35 10.8** | **-0.5** | |
| **TTA** | **Tatalina** | **3.45** | **337** | | | **Pn** | **01 35 10.9** | **-0.8** | |
| **TTA** | **Tatalina** | **3.45** | **337** | P | | **Pn** | **01 35 10.9** | **-0.8** | |
| | baz=154 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | | | **Pn** | **01 35 10.6** | **-1.1** | |
| **SCM** | **Sheep Creek Mo** | **3.46** | **51** | IAML | | | 01 35 52.0 | | |
| | comp=E,166nm,1.0s | | | | | | | | |
| SCM | | | | IAML | | | 01 35 57.0 | | |
| | comp=N,121nm,0.8s | | | | | | | | |
| **K20K** | **Telida** | **3.60** | **352** | | | **Pn** | **01 35 13.7** | **0.0** | |
| **CAST** | **Castle Rocks** | **3.66** | **7** | | | **Pn** | **01 35 14.0** | **-0.4** | |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **75** | | | **Pn** | **01 35 13.6** | **-1.4** | |
| **EYAK** | **Cordova Ski Ar** | **3.71** | **75** | P | | **Pn** | **01 35 13.6** | **-1.4** | |
| | baz=261 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **3.78** | **40** | | | **Pn** | **01 35 15.4** | **-0.8** | |
| **WAT6** | **Susitna Watana** | **3.78** | **40** | P | | **Pn** | **01 35 15.4** | **-0.8** | |
| | baz=225 | | | | | | | | |
| **DIV** | **Divide** | **3.83** | **67** | | | **Pn** | **01 35 15.5** | **-1.2** | |
| **DIV** | **Divide** | **3.83** | **67** | | | **Sn** | **01 35 59.5** | **-1.4** | |
| **KLU** | **Klutina** | **3.89** | **61** | | | **Pn** | **01 35 16.3** | **-1.2** | |
| **KLU** | **Klutina** | **3.89** | **61** | IAML | | | 01 36 03.4 | | |
| | comp=E,108nm,0.5s | | | | | | | | |
| **KLU** | **Klutina** | **3.89** | **61** | P | | **Pn** | **01 35 16.3** | **-1.2** | |
| | baz=247 | | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.89** | **18** | | | **Pn** | **01 35 17.4** | **-0.2** | |
| **TRF** | **Thorofare Moun** | **3.89** | **18** | IAML | | | 01 36 04.5 | | |
| | comp=N,83nm,0.6s | | | | | | | | |
| TRF | | | | IAML | | | 01 36 32.6 | | |
| | comp=E,43nm,2.8s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **3.89** | **18** | P | | **Pn** | **01 35 17.4** | **-0.2** | |
| | baz=201 | | | | | | | | |
| **KTH** | **Kantishna Hill** | **3.90** | **14** | | | **Pn** | **01 35 17.1** | **-0.5** | |
| **KTH** | **Kantishna Hill** | **3.90** | **14** | IAML | | | 01 36 02.5 | | |
| | comp=E,46nm,0.8s | | | | | | | | |
| KTH | | | | IAML | | | 01 36 03.0 | | |
| | comp=N,44nm,0.9s | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.06** | **52** | | | **Pn** | **01 35 19.1** | **-0.7** | |
| **M24K** | **Tolsona, Glenn** | **4.06** | **52** | IAML | | | 01 36 22.2 | | |
| | comp=E,103nm,1.8s | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **4.06** | **52** | P | | **Pn** | **01 35 19.1** | **-0.7** | |
| | baz=238 | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.11** | **4** | | | **Pn** | **01 35 20.7** | **+0.3** | |
| **CHUM** | **Lake Minchumin** | **4.11** | **4** | P | | **Pn** | **01 35 20.7** | **+0.3** | |
| | baz=185 | | | | | | | | |
| **RND** | **Reindeer** | **4.13** | **27** | | | **Pn** | **01 35 20.3** | **-0.4** | |
| **RND** | **Reindeer** | **4.13** | **27** | IAML | | | 01 36 11.7 | | |
| | comp=E,46nm,0.7s | | | | | | | | |
| **DHY** | **Denali Highway** | **4.26** | **37** | | | **Pn** | **01 35 21.8** | **-0.7** | |
| **DHY** | **Denali Highway** | **4.26** | **37** | IAML | | | 01 36 13.1 | | |
| | comp=E,63nm,0.8s | | | | | | | | |
| DHY | | | | IAML | | | 01 36 14.0 | | |
| | comp=N,60nm,0.5s | | | | | | | | |
| **DHY** | **Denali Highway** | **4.26** | **37** | P | | **Pn** | **01 35 21.8** | **-0.7** | |
| | baz=222 | | | | | | | | |
| **PS11** | **TAPS Pump St11** | **4.33** | **55** | | | **Pn** | **01 35 22.8** | **-0.6** | |
| **BMRM** | **Bremner River** | **4.34** | **71** | | | **Pn** | **01 35 21.8** | **-1.8** | |
| **BMRM** | **Bremner River** | **4.34** | **71** | IAML | | | 01 36 11.9 | | |
| | comp=N,58nm,3.8s | | | | | | | | |
| BMRM | | | | IAML | | | 01 36 14.3 | | |
| | comp=E,52nm,0.6s | | | | | | | | |
| **BMRM** | **Bremner River** | **4.34** | **71** | P | | **Pn** | **01 35 21.8** | **-1.8** | |
| | baz=258 | | | | | | | | |
| **MCK** | **McKinley** | **4.40** | **24** | | | **Pn** | **01 35 24.4** | **+0.1** | |
| **MCK** | **McKinley** | **4.40** | **24** | IAML | | | 01 36 19.3 | | |
| | comp=N,30nm,0.7s | | | | | | | | |
| MCK | | | | IAML | | | 01 36 28.0 | | |
| | comp=E,38nm,2.2s | | | | | | | | |
| **MCK** | **McKinley** | **4.40** | **24** | P | | **Pn** | **01 35 24.4** | **+0.1** | |
| | baz=208 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.42** | **12** | | | **Pn** | **01 35 23.6** | **-1.0** | |
| **BPAW** | **Bear Paw Mtn.** | **4.42** | **12** | P | | **Pn** | **01 35 23.6** | **-1.0** | |
| | baz=194 | | | | | | | | |
| **J20K** | **Nowinta River** | **4.42** | **354** | Pn | | **Pn** | **01 35 24.6** | **0.0** | |
| **HMT** | **Hamilton** | **4.42** | **79** | Pn | | **Pn** | **01 35 24.2** | **-0.5** | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | | | **Pn** | **01 35 24.9** | **-1.1** | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | IAML | | | 01 36 18.4 | | |
| | comp=N,45nm,0.9s | | | | | | | | |
| N25K | | | | IAML | | | 01 36 20.6 | | |
| | comp=E,34nm,1.6s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **4.52** | **63** | P | | **Pn** | **01 35 24.9** | **-1.1** | |
| | baz=250 | | | | | | | | |
| **HARP** | **HAARP** | **4.62** | **52** | | | **Pn** | **01 35 26.6** | **-0.7** | |
| **HARP** | **HAARP** | **4.62** | **52** | P | | **Pn** | **01 35 26.6** | **-0.7** | |
| | baz=239 | | | | | | | | |
| **BERG** | **Berg Lake** | **4.71** | **79** | Pn | | **Pn** | **01 35 27.2** | **-1.3** | |
| **PAX** | **Paxson** | **4.83** | **46** | | | **Pn** | **01 35 29.4** | **-0.8** | |
| **PAX** | **Paxson** | **4.83** | **46** | P | | **Pn** | **01 35 29.4** | **-0.8** | |
| | baz=232 | | | | | | | | |
| **GLB** | **Gilahina Butte** | **4.83** | **66** | | | **Pn** | **01 35 28.9** | **-1.3** | |
| **GLB** | **Gilahina Butte** | **4.83** | **66** | IAML | | | 01 36 25.4 | | |
| | comp=E,50nm,0.8s | | | | | | | | |
| **KHIT** | **Khitrov Hills** | **4.93** | **78** | | | **Pn** | **01 35 30.0** | **-1.6** | |
| **VRDI** | **Verde Repeater** | **4.94** | **69** | | | **Pn** | **01 35 30.4** | **-1.4** | |
| **VRDI** | **Verde Repeater** | **4.94** | **69** | IAML | | | 01 36 42.9 | | |
| | comp=E,26nm,3.9s | | | | | | | | |
| VRDI | | | | IAML | | | 01 36 57.6 | | |
| | comp=N,42nm,3.8s | | | | | | | | |
| **PS10** | **TAPS Pump St10** | **5.02** | **41** | | | **Pn** | **01 35 32.9** | **+0.2** | |
| **WAX** | **Waxell Ridge** | **5.13** | **78** | Pn | | **Pn** | **01 35 33.2** | **-1.1** | |
| **NEA2** | **Nenana** | **5.15** | **19** | | | **Pn** | **01 35 34.5** | **+0.1** | |
| NEA2 | | | | IAML | | | 01 36 56.5 | | |
| | comp=E,16nm,3.5s | | | | | | | | |
| NEA2 | | | | IAML | | | 01 38 33.3 | | |
| | comp=N,17nm,3.9s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **5.18** | **68** | | | **Pn** | **01 35 33.9** | **-0.9** | |
| **MCARA** | **McCarthy VSAT** | **5.18** | **68** | IAML | | | 01 36 37.1 | | |
| | comp=N,47nm,2.3s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **5.18** | **68** | P | | **Pn** | **01 35 33.9** | **-0.9** | |
| | baz=256 | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.22** | **24** | | | **Pn** | **01 35 34.8** | **-0.7** | |
| **WRH** | **Wood River Hil** | **5.22** | **24** | IAML | | | 01 37 02.1 | | |
| | comp=E,26nm,4.2s | | | | | | | | |
| WRH | | | | IAML | | | 01 37 59.0 | | |
| | comp=N,19nm,4.5s | | | | | | | | |
| **MLY** | **Manley** | **5.35** | **10** | | | **Pn** | **01 35 37.4** | **+0.1** | |
| **ISLE** | **Juniper Island** | **5.39** | **77** | | | **Pn** | **01 35 37.5** | **-0.4** | |
| **PTPK** | **Patty Peak** | **5.40** | **71** | | | **Pn** | **01 35 37.1** | **-0.9** | |
| **KIAG** | **Kiagna River** | **5.41** | **73** | | | **Pn** | **01 35 38.0** | **-0.1** | |
| **I21K** | **Tanana** | **5.42** | **5** | | | **Pn** | **01 35 38.5** | **+0.5** | |
| **HDA** | **Harding Lake** | **5.43** | **29** | | | **Pn** | **01 35 38.1** | **-0.2** | |
| **BALM** | **Baldy** | **5.43** | **72** | | | **Pn** | **01 35 37.2** | **-1.2** | |
| **CCB** | **Clear Creek Bu** | **5.44** | **24** | | | **Pn** | **01 35 37.2** | **-1.1** | |
| **MENT** | **Mentasta** | **5.47** | **51** | Pn | | **Pn** | **01 35 39.5** | **+0.7** | |
| **BAGL** | **Bagley Icefiel** | **5.51** | **78** | | | **Pn** | **01 35 38.9** | **-0.4** | |
| **M26K** | **Nabesna, AK** | **5.52** | **58** | | | **Pn** | **01 35 39.9** | **+0.4** | |
| **RIDG** | **Independent Ri** | **5.54** | **41** | | | **Pn** | **01 35 39.3** | **-0.4** | |
| **RIDG** | **Independent Ri** | **5.54** | **41** | P | | **Pn** | **01 35 39.3** | **-0.4** | |
| | baz=228 | | | | | | | | |
| **MESA** | **MESA** | **5.57** | **81** | | | **Pn** | **01 35 40.0** | **-0.4** | |
| **MESA** | **MESA** | **5.57** | **81** | P | | **Pn** | **01 35 40.0** | **-0.4** | |
| | baz=271 | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **5.63** | **16** | | | **Pn** | **01 35 40.5** | **-0.3** | |
| **I23K** | **Minto, Yukon-K** | **5.63** | **16** | P | | **Pn** | **01 35 40.5** | **-0.3** | |
| | baz=199 | | | | | | | | |
| **COLA** | **College** | **5.63** | **23** | Pn | | **Pn** | **01 35 40.1** | **-0.8** | |
| **MDM** | **Murphy Dome** | **5.63** | **21** | | | **Pn** | **01 35 40.4** | **-0.6** | |
| **L26K** | **Log Cabin Wild** | **5.66** | **51** | | | **Pn** | **01 35 40.8** | **-0.6** | |
| **L26K** | **Log Cabin Wild** | **5.66** | **51** | P | | **Pn** | **01 35 40.8** | **-0.6** | |
| | baz=239 | | | | | | | | |
| **YAH** | **Yahtse** | **5.68** | **79** | | | **Pn** | **01 35 42.0** | **+0.2** | |
| **GRNC** | **Granite Creek** | **5.69** | **76** | | | **Pn** | **01 35 42.1** | **+0.2** | |
| **DOT** | **Dot Lake** | **5.75** | **44** | Pn | | **Pn** | **01 35 42.2** | **-0.3** | |
| **IL31** | | **5.75** | **27** | | | **Pn** | **01 35 42.0** | **-0.4** | |
| **ILAR** | **Eielson Array** | **5.75** | **27** | P | | **Pn** | **01 35 41.7** | **-0.8** | |
| | comp=N,1.4nm,0.3s,baz=216,slow=13,SNR=103 | | | | | | | | |
| ILAR | | | | S | | **Sn** | **01 36 41.4** | **-5.7** | |
| | comp=N,0.9nm,0.3s,baz=188,slow=19,SNR=4.8 | | | | | | | | |
| **ILAR** | **Eielson Array** | **5.75** | **27** | | | **Pn** | **01 35 42.1** | **-0.5** | |
| **BARN** | **Barnard Glacie** | **5.77** | **72** | | | **Pn** | **01 35 43.1** | **+0.1** | |
| **H21K** | **Melozitna Rive** | **5.88** | **1** | | | **Pn** | **01 35 44.4** | **+0.1** | |
| **CTG** | **Chitna Glacier** | **5.91** | **74** | P | | **Pn** | **01 35 45.1** | **+0.2** | |
| | baz=264 | | | | | | | | |
| **CTGM** | **Chitina Glacie** | **5.92** | **74** | | | **Pn** | **01 35 45.1** | **+0.1** | |
| **POKR** | **Poker Plat Res** | **5.93** | **24** | | | **Pn** | **01 35 44.8** | **-0.2** | |
| **POKR** | **Poker Plat Res** | **5.93** | **24** | P | | **Pn** | **01 35 44.8** | **-0.2** | |
| | baz=208 | | | | | | | | |
| **TABL** | **Table Mountain** | **5.98** | **79** | | | **Pn** | **01 35 44.9** | **-1.0** | |
| **SCRK** | **Sand Creek** | **5.98** | **42** | | | **Pn** | **01 35 44.4** | **-1.4** | |
| **SCRK** | **Sand Creek** | **5.98** | **42** | P | | **Pn** | **01 35 44.4** | **-1.4** | |
| | baz=230 | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **5.99** | **60** | | | **Pn** | **01 35 46.5** | **+0.6** | |
| **J25K** | **Salcha River,** | **6.01** | **33** | | | **Pn** | **01 35 45.3** | **-0.8** | |
| **J25K** | **Salcha River,** | **6.01** | **33** | P | | **Pn** | **01 35 45.3** | **-0.8** | |
| | baz=220 | | | | | | | | |
| **LOGN** | **Logan Glacier** | **6.06** | **75** | | | **Pn** | **01 35 46.9** | **-0.1** | |
| **IM03** | | **6.21** | **357** | | | **Pn** | **01 35 49.0** | **+0.3** | |
| **IMAR** | **Indian Mountai** | **6.21** | **357** | Pn | | **Pn** | **01 35 48.4** | **-0.4** | |
| **L27K** | **Beaver Creek,** | **6.29** | **54** | | | **Pn** | **01 35 49.4** | **-0.4** | |
| **YUK2** | **White River** | **6.29** | **66** | | | **Pn** | **01 35 49.3** | **-0.6** | |
| **BCAR** | **Beaver Creek A** | **6.30** | **54** | Pn | | **Pn** | **01 35 49.0** | **-1.1** | |
| **PCA** | **Pinnacle** | **6.42** | **82** | Pn | | **Pn** | **01 35 51.6** | **-0.2** | |
| **H24K** | **Noodor Dome** | **6.50** | **19** | | | **Pn** | **01 35 52.7** | **0.0** | |
| **PRP** | **Porcupine Dome** | **6.69** | **28** | Pn | | **Pn** | **01 35 55.1** | **-0.3** | |
| **EGAK** | **Eagle** | **7.44** | **43** | Pn | | **Pn** | **01 36 04.2** | **-1.2** | |
| **FYU** | **Fort Yukon** | **7.64** | **24** | Pn | | **Pn** | **01 36 06.9** | **-1.2** | |
| **DAWY** | **Dawson** | **7.71** | **51** | Pn | | **Pn** | **01 36 09.0** | **-0.2** | |
| **HYT** | **Haines Junctio** | **7.78** | **76** | Pn | | **Pn** | **01 36 09.9** | **-0.2** | |
| **BMAR** | **Burnt Mountain** | **8.52** | **23** | Pn | | **Pn** | **01 36 18.9** | **-1.2** | |
| **DLBC** | **Dease Lake** | **11.88** | **87** | P | | **Pn** | **01 37 07.3** | **+1.8** | |
| | comp=N,0.3nm,0.3s,baz=301,slow=5.7,SNR=6.1 | | | | | | | | |
| **INK** | **Inuvik** | **12.00** | **37** | P | | **Pn** | **01 37 08.2** | **+1.3** | |
| | comp=N,0.1nm,0.3s,baz=231,slow=14,SNR=0.9 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **16.43** | **31** | | | **P** | **01 38 04.1** | **-0.3** | |
| **YKA** | **Yellowknife Ar** | **18.55** | **65** | P | | **P** | **01 38 28.2** | **+0.6** | |
| | comp=N,0.4nm,0.3s,baz=276,slow=9.9,SNR=40 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **30.64** | **119** | P | | **P** | **01 40 24.8** | **+1.0** | |
| | comp=N,0.4nm,0.6s,baz=331,slow=7.2,SNR=3.5 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **31.36** | **103** | P | | **P** | **01 40 32.0** | **+1.9** | |
| | comp=N,0.1nm,0.5s,baz=324,slow=6.0,SNR=2.6 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **44.92** | **110** | P | | **P** | **01 42 25.1** | **+1.4** | |
| | comp=N,0.2nm,0.7s,baz=336,slow=4.2,SNR=2.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.52** | **324** | P | | **P** | **01 43 57.1** | **-0.1** | |
| | comp=N,1.1nm,0.5s,baz=30,slow=6.3,SNR=6.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.58** | **321** | P | | **P** | **01 44 44.3** | **-0.7** | |
| | comp=N,0.4nm,0.8s,baz=34,slow=6.8,SNR=4.8 | | | | | | | | |

**IDC 27 01:34:57.3±1.7, 2°.64N×127°.71E, h0km, mb3.3/4, mb1 3.6/5, mb1mx3.4/42, mbtmp3.5/5, ML3.6/1, Error ellipse: s-maj=69.8km s-min=24.0km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **SIJI** | **Sorong** | **4.98** | **134** | Pn | | Pn | 01 36 13.0 | | -0.4 |
| | 2.2nn,0.3s,baz=288,slow=23,SNR=9.5 | | | | | | | | |
| SIJI | | | | Sn | | Sn | 01 37 04.8 | | -6.9 |
| | 2.2nn,0.3s,baz=191,slow=23,SNR=2.0 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.70** | **186** | P | | P | 01 39 40.2 | | +1.0 |
| | 1.1nn,0.9s,baz=350,slow=12,SNR=1.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.36** | **164** | P | | P | 01 40 06.8 | | -0.9 |
| | 1.1nn,0.6s,baz=343,slow=11,SNR=11 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.83** | **167** | P | | P | 01 40 39.8 | | +0.2 |
| | 0.5nn,0.9s,baz=331,slow=6.9,SNR=4.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.01** | **325** | P | | P | 01 44 59.1 | | +0.2 |
| | 0.2nn,0.6s,baz=117,slow=8.3,SNR=4.9 | | | | | | | | |

*WEL* ***27*** *02:16:15.5±0.6, 34°.5±.5°×17°.8W±1°.2, h33km, M4.6/49, mB5.2/35, ML5.2/54, MLv4.9/49, Mw(mB)4.6/35, Error ellipse: s-maj=0.0km s-min=0.0km az=112.2*

*NEIC* ***27*** *02:16:20.6±1.8, 33°.4S±0°.1×179°.3W±0°.1, h67km±5km, mb4.6/12, Error ellipse: s-maj=17.6km s-min=16.1km az=153.0*

*IDC* ***27*** *02:16:21.4±2.9, 32°.96S×179°.34W, h81km±25km, mb4.1/6, mb1 4.3/7, mb1mx4.0/30, mbtmp4.4/7, MS3.4/5, Ms1 3.4/5, ms1mx3.0/58, Error ellipse: s-maj=21.1km s-min=19.3km az=109.0*

**ISC 27 02:16:16.8±0.5, 33°.37S±0°.06×178°.85W±0°.10, h48km, n132, σ2°.04/148, mb4.5/10, MS3.4/4, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **GLKZ** | **Green Lake** | **4.17** | **11** | P | | **Pn** | **02 17 16.5** | | **-1.4** |
| GLKZ | | | | S | | **Sn** | **02 18 02.3** | | **-3.0** |
| **RAO** | **Raoul Island** | **4.18** | **11** | P | | **Pn** | **02 17 18.1** | | **+0.1** |
| | 22nn,0.3s,baz=68,slow=23,SNR=1.2 | | | | | | | | |
| RAO | | | | S | | **Sn** | **02 18 03.7** | | **-1.9** |
| | 81nn,0.3s,baz=348,slow=22,SNR=1.5 | | | | | | | | |
| **MXZ** | **Matakaoa Point** | **4.79** | **208** | | | **Pn** | **02 17 27.5** | | **+1.2** |
| **MXZ** | **Matakaoa Point** | **4.79** | **208** | P | | **Pn** | **02 17 25.5** | | **-0.8** |
| MXZ | | | | S | | **Sn** | **02 18 18.1** | | **-2.3** |
| **PKGZ** | **Pakihiroa** | **5.16** | **208** | P | | **Pn** | **02 17 31.0** | | **-0.5** |
| **HAZ** | **Te Kaha** | **5.17** | **211** | P | | **Pn** | **02 17 31.9** | | **+0.4** |
| HAZ | | | | S | | **Sn** | **02 18 29.2** | | **-0.6** |
| **PUZ** | **Puketiti** | **5.25** | **206** | P | | **Pn** | **02 17 32.0** | | **-0.7** |
| PUZ | | | | S | | **Sn** | **02 18 32.7** | | **+0.8** |
| **RUGZ** | **Raukumara Rang** | **5.39** | **211** | P | | **Pn** | **02 17 34.6** | | **-0.1** |
| **TWGZ** | **Tauwhareparae** | **5.45** | **207** | P | | **Pn** | **02 17 35.6** | | **+0.2** |
| TWGZ | | | | S | | **Sn** | **02 18 39.1** | | **+2.4** |
| **GRZ** | **Great Barrier** | **5.50** | **237** | P | | **Pn** | **02 17 37.7** | | **+1.7** |
| **KUZ** | **Kuaotunu** | **5.58** | **231** | P | | **Pn** | **02 17 39.1** | | **+1.9** |
| **WHRZ** | **Whale Island** | **5.62** | **216** | P | | **Pn** | **02 17 42.1** | | **+4.3** |
| **CNGZ** | **Carnagh Statio** | **5.63** | **204** | P | | **Pn** | **02 17 37.8** | | **-0.1** |
| **TKGZ** | **Te Karaka** | **5.72** | **207** | P | | **Pn** | **02 17 37.8** | | **-1.4** |
| TKGZ | | | | S | | **Sn** | **02 18 41.8** | | **-1.8** |
| **MWZ** | **Matawai** | **5.76** | **210** | P | | **Pn** | **02 17 38.6** | | **-1.1** |
| MWZ | | | | S | | **Sn** | **02 18 42.1** | | **-2.4** |
| **OPRZ** | **Ohinepanea** | **5.83** | **219** | P | | **Pn** | **02 17 41.8** | | **+1.3** |
| OPRZ | | | | S | | **Sn** | **02 18 47.2** | | **+1.2** |
| **MARZ** | **Manawahe** | **5.87** | **217** | P | | **Pn** | **02 17 43.3** | | **+2.0** |
| **URZ** | **Urewera** | **5.88** | **213** | P | | **Pn** | **02 17 40.7** | | **-0.6** |
| | 14nn,0.3s,baz=207,slow=2.1,SNR=31 | | | | | | | | |
| URZ | | | | S | | **Sn** | **02 18 45.7** | | **-1.7** |
| | 34nn,0.3s,baz=147,slow=18,SNR=8.8 | | | | | | | | |
| **URZ** | **Urewera** | **5.88** | **213** | Pn | | **Pn** | **02 17 41.9** | | **+0.6** |
| **URZ** | **Urewera** | **5.88** | **213** | P | | **Pn** | **02 17 40.7** | | **-0.6** |
| URZ | | | | S | | **Sn** | **02 18 46.6** | | **-0.8** |
| **URZ** | **Urewera** | **5.88** | **213** | P | | **Sn** | **02 18 49.5** | | **+2.2** |
| **TGRZ** | **Tauranga** | **5.90** | **221** | P | | **Pn** | **02 17 43.5** | | **+1.9** |
| **EDRZ** | **Edgecumbe** | **5.93** | **216** | P | | **Pn** | **02 17 44.4** | | **+2.3** |
| **RAGZ** | **Rawiri** | **5.95** | **210** | P | | **Pn** | **02 17 42.1** | | **-0.2** |
| RAGZ | | | | S | | **Sn** | **02 18 47.2** | | **-1.9** |
| **RIGZ** | **Rimuhau** | **5.99** | **206** | P | | **Pn** | **02 17 42.0** | | **-0.9** |
| RIGZ | | | | S | | **Sn** | **02 18 51.5** | | **+1.4** |
| **OMRZ** | **Omania** | **6.12** | **218** | P | | **Pn** | **02 17 46.3** | | **+1.7** |
| **KARZ** | **Kaharoa** | **6.12** | **219** | P | | **Pn** | **02 17 46.9** | | **+2.3** |
| **PRGZ** | **Paritu Road** | **6.14** | **205** | P | | **Pn** | **02 17 43.4** | | **-1.5** |
| PRGZ | | | | S | | **Sn** | **02 18 52.4** | | **-1.4** |
| **TARZ** | **Mount Tarawera** | **6.15** | **217** | P | | **Pn** | **02 17 49.1** | | **+4.0** |
| **KMRZ** | **Kaimai** | **6.16** | **222** | P | | **Pn** | **02 17 48.0** | | **+2.8** |
| **MUGZ** | **Murupara** | **6.21** | **214** | P | | **Pn** | **02 17 46.4** | | **+0.6** |
| MUGZ | | | | S | | **Sn** | **02 18 54.8** | | **-0.7** |
| **SNGZ** | **Shannon Statio** | **6.22** | **209** | P | | **Pn** | **02 17 45.7** | | **-0.3** |
| SNGZ | | | | S | | **Sn** | **02 18 53.4** | | **-2.4** |
| **RRRZ** | **Republican Roa** | **6.23** | **216** | P | | **Pn** | **02 17 48.3** | | **+2.3** |
| **RTZ** | **Ruatahuna** | **6.23** | **212** | P | | **Pn** | **02 17 47.1** | | **+1.0** |
| **KNZ** | **Kokohu** | **6.30** | **205** | P | | **Pn** | **02 17 45.5** | | **-1.5** |
| KNZ | | | | S | | **Sn** | **02 18 56.9** | | **-0.8** |
| **MHGZ** | **Mahia Peninsul** | **6.34** | **203** | P | | **Pn** | **02 17 45.7** | | **-1.9** |
| MHGZ | | | | S | | **Sn** | **02 18 54.6** | | **-4.1** |
| **RAHZ** | **Arahi** | **6.44** | **210** | P | | **Pn** | **02 17 49.3** | | **+0.3** |
| **ALRZ** | **Allen Road** | **6.48** | **216** | P | | **Pn** | **02 17 51.1** | | **+1.5** |
| ALRZ | | | | S | | **Sn** | **02 19 02.5** | | **+0.2** |
| **MTHZ** | **Maungataniwha** | **6.49** | **211** | P | | **Pn** | **02 17 49.9** | | **+0.2** |
| MTHZ | | | | S | | **Sn** | **02 19 02.4** | | **0.0** |
| **WHHZ** | **Waihua** | **6.52** | **208** | P | | **Pn** | **02 17 52.5** | | **+2.5** |
| WHHZ | | | | S | | **Sn** | **02 19 04.2** | | **+1.2** |
| **MRHZ** | **Matea Rd** | **6.66** | **214** | P | | **Pn** | **02 17 51.7** | | **-0.4** |
| **KUTZ** | **Kaahu Road** | **6.69** | **219** | P | | **Pn** | **02 17 54.4** | | **+2.0** |
| **NMHZ** | **Naumai**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARCES | **ARCESS Array B** | 141.31 | 347 | | | **PKiKP** | 02 35 44.4 | +0.5 |
| KBZ | **Khabaz** | 146.07 | 300 | PKPbc | | **PKPdf** | 02 35 50.0 | -0.2 |
| | comp=Z,1.2nm,0.6s,baz=112,slow=5.0,SNR=5.2 | | | | | | | |
| GURO | **Guroymak-BITLI** | 146.71 | 291 | PKPbc | | **PKPbc** | 02 35 52.9 | -0.6 |
| FINES | **FINESS Array B** | 147.65 | 338 | PKPbc | | **PKPbc** | 02 35 54.1 | -0.9 |
| | comp=Z,6.5nm,0.5s,baz=41,slow=4.0,SNR=82 | | | | | | | |
| FINES | **FINESS Array B** | 147.65 | 338 | PKPbc | | **PKPbc** | 02 35 54.5 | -0.6 |
| NB2 | **NORSAR Subarra** | 151.55 | 350 | PKP | | **PKPbc** | 02 36 04.8 | 0.0 |
| | comp=Z,3.4nm,0.6s,baz=17,slow=2.6 | | | | | | | |
| NOA | **NORSAR Array B** | 151.55 | 350 | PKPbc | | **PKPbc** | 02 36 03.9 | -0.9 |
| | comp=Z,2.3nm,0.7s,baz=17,slow=4.6,SNR=37 | | | | | | | |
| DBIC | **Dimbokro** | 152.85 | 167 | PKPbc | | **PKiKP** | 02 36 10.9 | +1.6 |
| | comp=Z,1.6nm,0.6s,baz=145,slow=3.3,SNR=4.7 | | | | | | | |
| AKASG | **Malin Array Be** | 153.13 | 319 | PKPbc | | **PKPbc** | 02 36 06.0 | -2.6 |
| | comp=Z,0.9nm,0.5s,baz=48,slow=2.3,SNR=5.6 | | | | | | | |
| AKASG | **Malin Array Be** | 153.13 | 319 | | | **PKPbc** | 02 36 08.2 | -0.4 |
| BRTR | **Keskin Array B** | 153.24 | 293 | PKPbc | | **PKPbc** | 02 36 08.0 | -1.5 |
| | comp=Z,1.1nm,0.7s,baz=148,slow=4.2,SNR=7.9 | | | | | | | |
| TORD | **Torodi Ar. Bea** | 159.87 | 182 | PKP | | **PKPdf** | 02 36 13.5 | +2.4 |
| | comp=Z,0.6nm,0.9s,baz=327,slow=0.8,SNR=4.0 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | 02 36 51.9 | +1.8 |
| | comp=Z,3.3nm,0.7s,baz=173,slow=4.1,SNR=17 | | | | | | | |

**IDC 27 02:21:45.3±6.9, 19°11S×179°05W, h550km±44km, mb2.7/3, mb1 3.0/4, mb1mx2.8/32, mbtmp3.6/4, Error ellipse: s-maj=258.4km s-min=31.8km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.08** | **296** | P | | P | 02 23 00.9 | -0.1 |
| | 7.4nm,0.3s,baz=130,slow=7.8,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.83** | **261** | P | | P | 02 29 03.4 | +0.1 |
| | 0.4nm,0.5s,baz=94,slow=8.0,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.89** | **255** | P | | P | 02 29 03.5 | -0.3 |
| | 0.8nm,0.5s,baz=98,slow=8.1,SNR=9.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.64** | **44** | P | | P | 02 33 40.3 | -0.1 |
| | 0.3nm,0.9s,baz=174,slow=3.6,SNR=2.2 | | | | | | | |

*IDC **27** 02:32:26.1±4.9, 6°19S×149°16E, h70km±42km, mb3.8/4, mb1 4.2/6, mb1mx3.5/38, mbtmp4.2/6, ML2.1/1, MS3.2/1, Ms1 3.2/1, ms1mx2.5/58, Error ellipse: s-maj=55.8km s-min=30.9km az=126.0*

*NEIC **27** 02:32:27.3±0.8, 6.1S±0.1°×149.0E±0.2°, h71km±9km, mb4.2/11, Error ellipse: s-maj=26.5km s-min=11.9km az=131.0*

**ISC 27 02:32:25.9±0.8, 6.1S±0.1°×149.0E±0.2°, h60km, n22, σ1s92°/20, mb4.0/7, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **3.67** | **60** | Pn | | **Pn** | **02 33 21.5** | **+1.3** |
| **PMG** | **Port Moresby** | **3.78** | **209** | P | | **Pn** | **02 33 23.0** | **+1.3** |
| | 12nm,0.3s,baz=14,slow=7.8,SNR=20 | | | | | | | |
| PMG | | | | S | | **Sn** | **02 34 05.0** | **+0.1** |
| | 86nm,0.3s,baz=304,slow=22,SNR=17 | | | | | | | |
| **PMG** | **Port Moresby** | **3.78** | **209** | | | **Pn** | **02 33 23.3** | **+1.6** |
| **COEN** | **Coen** | **9.71** | **216** | Pn | | **Pn** | **02 34 43.4** | **+0.6** |
| **CTA** | **Charters Tower** | **14.19** | **191** | LR | | LR | 02 40 04.7 | |
| | comp=Z,91nm,18.2s,baz=81,slow=32 | | | | | | | |
| **EIDS** | **Eidsvold** | **19.30** | **174** | P | | **Pn** | **02 36 46.1** | **-1.4** |
| EIDS | | | | IAmb | | IAmb | 02 36 57.9 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **19.67** | **225** | P | | **P** | **02 36 50.8** | **+0.7** |
| WB0 | | | | IAmb | | IAmb | 02 36 51.5 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **19.81** | **225** | P | | **P** | **02 36 51.9** | **+0.2** |
| **WRA** | **Warramunga Arr** | **19.82** | **225** | P | | **P** | **02 36 51.2** | **-0.5** |
| | comp=Z,3.5nm,0.3s,baz=51,slow=11,SNR=89 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.82** | **225** | P | | **P** | **02 36 51.6** | **-0.2** |
| **KNRA** | **Kununurra** | **22.02** | **243** | P | | **P** | **02 37 15.2** | **-0.3** |
| KNRA | | | | IAmb | | IAmb | 02 37 56.8 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **AS31** | **Alice Springs** | **22.73** | **218** | P | | **P** | **02 37 22.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.73** | **218** | P | | **P** | **02 37 23.1** | **0.0** |
| | comp=Z,3.3nm,0.4s,baz=52,slow=9.6,SNR=68 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.73** | **240** | P | | **P** | **02 37 51.4** | **+0.5** |
| | comp=Z,2.3nm,0.5s,baz=60,slow=9.5,SNR=24 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **25.73** | **240** | IAmb | | IAmb | 02 38 27.1 | |
| | comp=Z,39nm,1.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.59** | **194** | P | | **P** | **02 37 57.5** | **-1.1** |
| | comp=Z,2.9nm,0.8s,baz=34,slow=9.1,SNR=5.3 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.59** | **194** | IAmb | | IAmb | 02 38 24.6 | |
| | comp=Z,8.0nm,2.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **78.82** | **320** | P | | **P** | **02 44 22.2** | **-0.2** |
| MK31 | | | | IAmb | | IAmb | 02 46 25.6 | |
| | comp=Z,2.7nm,1.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **79.02** | **320** | P | | **P** | **02 44 22.1** | **-1.5** |
| MAKZ | | | | IAmb | | IAmb | 02 44 34.8 | |
| | comp=Z,3.1nm,1.4s | | | | | | | |
| **IL31** | | **84.77** | **23** | P | | **P** | **02 44 54.6** | **+1.4** |
| **ILAR** | **Eielson Array** | **84.77** | **23** | P | | **P** | **02 44 52.1** | **-1.2** |
| | comp=Z,0.5nm,0.7s,baz=246,slow=5.7,SNR=5.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.02** | **285** | PKPbc | | **PKPdf** | **02 52 01.9** | **+1.1** |
| | comp=Z,0.6nm,0.9s,baz=52,slow=3.2,SNR=0.9 | | | | | | | |

*IDC **27** 02:40:18.9±3.1, 18°10S×174°59W, h75km±27km, mb4.1/12, mb1 4.3/13, mb1mx4.0/41, mbtmp4.4/13, Error ellipse: s-maj=32.6km s-min=13.6km az=138.0*

*NEIC **27** 02:40:19.0±1.1, 18°2S±0°1×174°46W±0°10, h78km±6km, mb4.7/17, Error ellipse: s-maj=16.6km s-min=11.9km az=143.0*

*NOU **27** 02:40:22.0, 18°25S×174°18W, h92km, mb5.1/12, Tonga Islands*

**ISC 27 02:40:20.7±0.5, 18°30S±0°08×174°49W±0°08, h100km, n63, σ1s89/64, mb4.6/22, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.39** | **101** | Pn | | **Pn** | **02 41 23.0** | **-2.1** |
| **NIUE** | **Niue** | **4.39** | **101** | P | | **Pn** | **02 41 23.3** | **-1.9** |
| **AFI** | **Afiamalu** | **5.08** | **31** | P | | **Pn** | **02 41 31.8** | **-2.9** |
| | 62nm,0.3s,baz=126,slow=1.3,SNR=18 | | | | | | | |
| AFI | | | | S | | Sn | 02 42 18.0 | -14 |
| | 76nm,0.3s,baz=159,slow=20,SNR=9.4 | | | | | | | |
| **AFI** | **Afiamalu** | **5.08** | **31** | Pn | | **Pn** | **02 41 31.7** | **-3.0** |
| **MSVF** | **Nonsavu** | **12.73** | **273** | P | | Pn | 02 42 12.2 | +10 |
| | 2.6nm,0.3s,baz=107,slow=14,SNR=9.3 | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.29** | **255** | P | | **Pn** | **02 44 31.7** | **+3.6** |
| | 0.2nm,0.3s,baz=86,slow=17,SNR=4.6 | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.29** | **255** | P | | **P** | **02 44 26.5** | **-0.5** |
| **OUZ** | **Omahuta** | **19.90** | **210** | P | | **P** | **02 44 45.1** | **+0.9** |
| OUZ | | | | IAmb | | IAmb | 02 45 04.8 | |
| | comp=Z,40nm,1.5s | | | | | | | |
| **URZ** | **Urewera** | **21.20** | **199** | P | | **P** | **02 44 59.0** | **+0.9** |
| | comp=Z,22nm,0.4s,baz=353,slow=3.0,SNR=32 | | | | | | | |
| URZ | | | | S | | **S** | **02 48 40.9** | **-7.3** |
| | comp=Z,9.4nm,1.1s,baz=116,slow=17,SNR=2.1 | | | | | | | |
| **URZ** | **Urewera** | **21.20** | **199** | P | | **P** | **02 45 00.7** | **+2.5** |
| **HIZ** | **Hauiti** | **22.18** | **203** | P | | **P** | **02 45 12.2** | **+3.6** |
| **BKZ** | **Black Stump Fm** | **22.22** | **199** | P | | **P** | **02 45 11.1** | **+2.0** |
| **QRZ** | **Quartz Range** | **25.07** | **204** | P | | **P** | **02 45 39.6** | **+3.8** |
| **KHZ** | **Kahutara** | **26.11** | **200** | P | | **P** | **02 45 50.1** | **+5.0** |
| | comp=Z,39nm,1.9s | | | | | | | |
| **RPZ** | **Rata Peaks** | **28.11** | **203** | P | | **P** | **02 46 06.2** | **+3.0** |
| | comp=Z,7.1nm,0.6s,baz=16,slow=7.8,SNR=2.7 | | | | | | | |
| **EIDS** | **Eidsvold** | **32.66** | **251** | P | | **P** | **02 46 43.0** | **-0.4** |
| EIDS | | | | IAmb | | IAmb | 02 46 58.1 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **ARMA** | **Armidale** | **33.01** | **242** | P | | **P** | **02 46 46.5** | **-0.1** |
| **TOO** | **Toolangi** | **39.86** | **233** | P | | **P** | **02 47 44.2** | **-0.5** |
| TOO | | | | IAmb | | IAmb | 02 47 45.6 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **41.73** | **242** | P | | **P** | **02 48 00.2** | **+0.2** |
| | comp=Z,2.0nm,0.7s,baz=80,slow=8.4,SNR=4.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **41.73** | **242** | P | | **P** | **02 48 00.6** | **+0.5** |
| **BBOO** | **Buckleboo** | **46.50** | **242** | P | | **P** | **02 48 37.9** | **-0.2** |
| BBOO | | | | IAmb | | IAmb | 02 48 48.0 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **48.22** | **259** | P | | **P** | **02 48 50.6** | **-1.0** |
| **WRA** | **Warramunga Arr** | **48.23** | **259** | P | | **P** | **02 48 51.7** | **0.0** |
| | comp=Z,7.3nm,0.6s,baz=97,slow=6.3,SNR=92 | | | | | | | |
| WRA | | | | S | | **S** | **02 55 39.6** | **-4.4** |
| | comp=Z,0.3nm,0.7s,baz=93,slow=15,SNR=2.3 | | | | | | | |
| **AS31** | **Alice Springs** | **48.28** | **254** | P | | **P** | **02 48 52.5** | **+0.4** |
| AS31 | | | | IAmb | | IAmb | 02 48 54.1 | |
| | comp=Z,9.6nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.28** | **254** | P | | **P** | **02 48 52.5** | **+0.4** |
| | comp=Z,20nm,0.7s,baz=91,slow=7.4,SNR=67 | | | | | | | |
| ASAR | | | | S | | **S** | **02 55 40.2** | **-4.4** |
| | comp=Z,0.6nm,0.9s,baz=90,slow=16,SNR=4.8 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **48.28** | **254** | P | | **P** | **02 48 52.3** | **+0.2** |
| MTN | **Manton Dam** | **52.51** | **268** | P | | **P** | **02 49 24.0** | **0.0** |
| KNRA | **Kununurra** | **54.16** | **264** | P | | **P** | **02 49 35.8** | **-0.3** |
| FITZ | **Fitzroy Crossi** | **56.64** | **260** | P | | **P** | **02 49 54.6** | **+0.7** |
| | comp=Z,1.6nm,0.3s,baz=76,slow=7.0,SNR=26 | | | | | | | |
| FITZ | **Fitzroy Crossi** | **56.64** | **260** | P | | **P** | **02 49 54.0** | **+0.1** |
| FITZ | | | | IAmb | | IAmb | 02 49 55.8 | |
| | comp=Z,7.1nm,1.3s | | | | | | | |
| PSA00 | **Pilbara Seismi** | **61.42** | **255** | P | | **P** | **02 50 27.1** | **+0.2** |
| QSPA | **South Pole Qui** | **71.77** | **180** | P | | **P** | **02 51 32.3** | **+0.3** |
| NVAR | **Mina Array Bea** | **77.17** | **42** | P | | **P** | **02 52 04.5** | **+0.6** |
| | comp=Z,2.0nm,0.8s,baz=226,slow=9.4,SNR=12 | | | | | | | |
| NJ2 | **Nanjing** | **81.10** | **308** | *e*P | | **P** | **02 52 26.5** | **+1.4** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| TXAR | **Lajitas Array** | **83.08** | **56** | P | | **P** | **02 52 37.2** | **+1.5** |
| | comp=Z,1.0nm,0.9s,baz=216,slow=4.5,SNR=9.6 | | | | | | | |
| SEY | **Seymchan** | **85.04** | **345** | P | | **P** | **02 52 44.1** | **-0.6** |
| | comp=Z,0.8nm,0.4s,baz=96,slow=4.8,SNR=4.6 | | | | | | | |
| PDAR | **Pinedale Array** | **85.11** | **42** | P | | **P** | **02 52 45.8** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=208,slow=3.3,SNR=5.9 | | | | | | | |
| PDAR | **Pinedale Array** | **85.11** | **42** | P | | **P** | **02 52 45.9** | **0.0** |
| HDA | **Harding Lake** | **85.14** | **12** | P | | **P** | **02 52 44.8** | **-0.4** |
| HDA | | | | IAmb | | IAmb | 02 52 47.7 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| CCB | **Clear Creek Bu** | **85.19** | **11** | P | | **P** | **02 52 45.5** | **+0.1** |
| CCB | | | | IAmb | | IAmb | 02 52 45.9 | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| ILAR | **Eielson Array** | **85.48** | **11** | P | | **P** | **02 52 46.5** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=228,slow=5.9,SNR=32 | | | | | | | |
| HHC | **Hu-ho-hao-te** | **90.24** | **313** | *e*P | | **P** | **02 53 11.8** | **+1.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,55nm,8.0s | | | | | | | |
| INK | **Inuvik** | **91.32** | **14** | P | | **P** | **02 53 14.8** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=170,slow=3.8,SNR=3.5 | | | | | | | |
| INK | **Inuvik** | **91.32** | **14** | IAmb | | IAmb | 02 53 35.6 | |
| | comp=Z,5.1nm,1.5s | | | | | | | |
| PZH | **PanZhiHua** | **92.65** | **297** | P | | **P** | **02 53 22.3** | **+0.4** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,90nm,5.7s | | | | | | | |
| ARCES | **ARCESS Array B** | **127.31** | **351** | PKP | | **PKPdf** | **02 59 12.9** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=6.9,slow=1.3,SNR=12 | | | | | | | |
| FINES | **FINESS Array B** | **134.52** | **346** | PKP | | **PKPdf** | **02 59 26.2** | **-0.6** |
| | comp=Z,2.3nm,0.9s,baz=8.8,slow=4.5,SNR=8.3 | | | | | | | |
| CLL | **Collm** | **146.54** | **351** | *i* PKPbc | | **PKiKP** | **02 59 52.2** | **-0.9** |
| | comp=Z,9.0nm,1.3s | | | | | | | |
| BRTR | **Keskin Array B** | **147.66** | **317** | PKPbc | | **PKPbc** | **02 59 54.8** | **+0.7** |
| | comp=Z,1.1nm,0.8s,baz=137,slow=3.5,SNR=6.6 | | | | | | | |
| GERES | **GERESS Array B** | **148.82** | **350** | PKPbc | | **PKiKP** | **02 59 57.4** | **-0.7** |
| | comp=Z,0.7nm,0.5s,baz=26,slow=6.5,SNR=8.2 | | | | | | | |
| CONA | **Conrad Observa** | **149.27** | **346** | *e*P | | **PKiKP** | **02 59 59.0** | **0.0** |
| | comp=Z,3.6nm,1.4s | | | | | | | |
| MMAI | **Mount Meron Ar** | **149.47** | **305** | PKPbc | | **PKiKP** | **02 59 59.9** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=74,slow=11,SNR=4.8 | | | | | | | |
| MOA | **Molln** | **149.67** | **348** | *e*P | | **PKPbc** | **02 59 57.9** | **-0.9** |
| | comp=Z,6.7nm,1.7s | | | | | | | |
| KBA | **Koelnbreinsper** | **150.59** | **349** | *e*P | | **PKPbc** | **03 00 01.2** | **0.0** |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| WATA | **Walderalm** | **150.62** | **352** | *i* P | | **PKiKP** | **03 00 01.7** | **-0.2** |
| | comp=Z,2.4nm,0.4s,SNR=4.5 | | | | | | | |
| MOTA | **Moosalm** | **150.67** | **352** | *i* P | | **PKiKP** | **03 00 01.8** | **-0.2** |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| WTTA | **Wattenberg** | **150.68** | **351** | *e*P | | **PKiKP** | **03 00 02.1** | **+0.1** |
| | comp=Z,5.2nm,0.4s,SNR=17 | | | | | | | |
| DAVA | **Davos** | **150.87** | **354** | *i* P | | **PKiKP** | **03 00 02.9** | **+0.4** |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| EIL | **Elat** | **150.91** | **298** | PKPbc | | **PKiKP** | **03 00 03.2** | **+0.4** |
| | comp=Z,3.2nm,0.8s,baz=50,slow=3.5,SNR=5.9 | | | | | | | |
| MYKA | **Terra Mystica** | **150.96** | **348** | *e*P | | **PKPbc** | **03 00 01.9** | **-0.1** |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| FETA | **Feichten** | **151.04** | **353** | *i* P | | **PKiKP** | **03 00 03.1** | **+0.3** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| ABTA | **Abfaltersbach** | **151.05** | **350** | *i* P | | **PKPbc** | **03 00 02.3** | **+0.1** |
| | comp=Z,4.6nm,0.5s | | | | | | | |
| DAVOX | **Davos/Dischmat** | **151.37** | **354** | PKPbc | | **PKiKP** | **03 00 03.6** | **+0.1** |
| | baz=247,slow=2.4 | | | | | | | |

*IDC **27** 02:41:43.3±0.3, 4.6°1N×32.7°4W, h0km, mb4.8/47, mb1 4.8/49, mb1mx4.8/53, mbtmp4.8/49, ML4.1/2, MS4.9/77, Ms1 4.9/77, ms1mx4.9/80, Error ellipse: s-maj=12.5km s-min=8.5km az=149.0*

*MOS **27** 02:41:43.7±1.0, 4.5°9N×32.7°1W, h10km, mb5.6/72, MS4.8/19, Error ellipse: s-maj=9.1km s-min=5.4km az=53.6*

*NEIC **27** 02:41:46.2±1.5, 4.5°4N±0.0°8×32.6°7W±0.0°8, h10km±1km, mb5.5/515, Ms_20 5.1/191, Mwc5.4(GCMT), Error ellipse: s-maj=15.9km s-min=11.7km az=310.0*

*GCMT **27** 02:41:47.2±0.1, 4.6°4N±0.0°1×32.5°9W, h12km, MW5.4/149, Moment Tensor Solution. s115,c183; s149,c311; Duration: 1s2 Moment tensor: Scale 10^17 Nm; Mrr-1.61±.02; Mθθ 0.06±.02; Mφφ 1.55±.01; Mrθ 0.19±.05; Mθφ 0.04±.01; Mφr 0.05±.04; Best double couple: M0 1.59200×10^17 NP1:φs355.00000°,δ44.00000°, λ-99.00000°. NP2:φs188.00000°,δ46.00000°, λ-81.00000°. Principal axes: T 1.5520, Plg1.0000°, Azm272.0000°; N 0.0800, Plg6.0000°, Azm2.0000°; P -1.6320, Plg84.0000°, Azm172.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **27** 02:41:48, 4.58N×32.61W, h12km, Moment Tensor Solution. Duration: 2s4 Moment tensor: Scale 10^17 Nm; Mrr-1.69; Mθθ 0.06; Mφφ 1.63; Mrθ -0.02; Mθφ -0.06; Mφr -0.05; Fault plane solution: M0 1.66000×10^17 NP1: φs177.00000°,δ44.00000°,λ-91.00000°. NP2: φs359.00000°,δ46.00000°,λ-89.00000°. Principal axes: T 1.6345, Plg1.0000°, Azm88.0000°; N 0.0549, Plg1.0000°, Azm178.0000°; P -1.6894, Plg89.0000°, Azm303.0000°;*

**ISC 27 02:41:45.4±0.5, 4.54N±0.05×32.61W±0.04, h12km±2km, h14km:pP-P,n1005,σ1s33/802, mb5.5/362, MS5.0/195, 20C-21D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NBCL** | **Cascavel-CE** | **10.39** | **213** | *e*P | | **Pn** | **02 44 12.9** | **-1.5** |
| **NBMO** | **Morrinhos-CE** | **10.77** | **224** | *e*P | | **Pn** | **02 44 16.8** | **-2.8** |
| **RCBR** | **Riachuelo** | **10.81** | **198** | Pn | | **Pn** | **02 44 18.0** | **-2.3** |
| | 1.2nm,0.3s,baz=148,slow=16,SNR=9.0 | | | | | | | |
| RCBR | | | | Sn | | Sn | 02 46 09.9 | -11 |
| | 1.0nm,0.3s,baz=198,slow=13,SNR=6.2 | | | | | | | |
| RCBR | | | | LR | | LR | 02 47 26.9 | |
| | comp=Z,7μm,21.8s,baz=156,slow=32 | | | | | | | |
| **RCBR** | **Riachuelo** | **10.81** | **198** | Pn | | **Pn** | **02 44 17.9** | **-2.4** |
| **NBPB** | **Pedra_Branca-C** | **12.20** | **215** | *e*P | | **Pn** | **02 44 37.5** | **-1.7** |
| **NBPS** | **Pedro II - PI** | **12.52** | **225** | *e*P | | **Pn** | **02 44 44.2** | **+0.6** |
| **NBLV** | **Livramento - P** | **12.58** | **200** | *e*P | | **Pn** | **02 44 43.6** | **-0.8** |
| **NBMA** | **Muriti-CE** | **13.33** | **207** | *e*P | | **Pn** | **02 44 53.7** | **-0.9** |
| **SACV** | **Santiago Islan** | **13.63** | **40** | Pn | | **Pn** | **02 44 56.5** | **-2.3** |
| **ROSB** | **Rosrio** | **13.67** | **237** | *e*P | | **Pn** | **02 44 58.1** | **-1.3** |
| **NBAN** | **Anadia - AL** | **14.58** | **194** | *e*P | | **Pn** | **02 45 13.2** | **+1.4** |
| **NBLA** | **Lagarto - SE** | **16.27** | **198** | *e*P | | **Pn** | **02 45 35.1** | **+1.1** |
| **TMAB** | **Tom-Au,PA,Br** | **16.93** | **246** | *e*P | | **Pn** | **02 45 43.0** | **+0.6** |
| **NBPN** | **Ponto Novo - B** | **17.05** | **206** | *e*P | | **P** | **02 45 44.9** | **-0.9** |
| **MBO** | **M'Bour** | **18.27** | **57** | Pn | | **Pn** | **02 45 55.6** | **-3.3** |
| **GDU01** | **Guandu, BA** | **19.42** | **201** | *e*P | | **P** | **02 46 11.8** | **+0.1** |
| **MDP** | **Montagnes des** | **19.97** | **272** | P | | **P** | **02 46 14.8** | **-3.0** |
| | 0.6nm,0.3s,baz=80,slow=8.0,SNR=4.9 | | | | | | | |
| MDP | | | | LR | | LR | 02 52 20.6 | |
| | comp=Z,4μm,21.1s,baz=100,slow=32 | | | | | | | |
| **MDP** | **Montagnes des** | **19.97** | **272** | P | | **P** | **02 46 14.8** | **-3.0** |
| **SMTB** | **Santa Maria do** | **20.01** | **228** | *e*P | | **P** | **02 46 18.2** | **-0.1** |
| **MCPB** | **Macapa, AP** | **20.03** | **256** | *e*P | | **P** | **02 46 18.4** | **-0.1** |
| **PRPB** | **Parauapebas** | **20.21** | **238** | *e*P | | **P** | **02 46 20.0** | **-0.5** |
| **NBIT** | **Itapeh - BA** | **20.50** | **199** | *e*P | | **P** | **02 46 24.4** | **+0.9** |
| **SDBA** | **SAO DESIDERIO** | **20.81** | **216** | *e*P | | **P** | **02 46 26.3** | **-0.6** |
| **CMC01** | **Camacan, BA** | **20.93** | **199** | *e*P | | Pn | 02 46 29.5 | -1.2 |
| **H10N3** | **ASCENSION HYDR** | **21.86** | **124** | T | | T | 03 09 17.5 | |
| | baz=303,slow=75,SNR=86 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.86** | **124** | T | | T | 03 09 17.9 | |
| | baz=303,slow=75,SNR=296 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.88** | **124** | T | | T | 03 09 19.0 | |
| | baz=303,slow=75,SNR=313 | | | | | | | |
| **ASCN** | **Ascension** | **22.02** | **124** | IAMs_20 | | IAMs_20 | 02 52 33.1 | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.16** | **199** | *e*P | | **P** | **02 46 42.2** | **+0.7** |
| **H10S3** | **ASCENSION HYDR** | **22.36** | **127** | T | | T | 03 09 53.7 | |
| | baz=304,slow=74,SNR=361 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.38** | **127** | T | | T | 03 09 55.0 | |
| | baz=276,slow=74,SNR=189 | | | | | | | |
| **MALB** | **Monte Alegre** | **22.55** | **254** | *e*P | | **P** | **02 46 45.9** | **+0.3** |
| **JANB** | **Januaria** | **22.66** | **211** | *e*P | | **P** | **02 46 47.3** | **+0.4** |
| **PEXB** | **Peixe** | **22.74** | **223** | *e*P | | **P** | **02 46 46.6** | **-1.0** |
| **NAN01** | **Guarapari, ES** | **23.45** | **198** | *e*P | | **P** | **02 46 55.1** | **+0.2** |
| **SJMB** | **Sao Joao De Ma** | **24.60** | **200** | *e*P | | **P** | **02 47 05.8** | **+0.1** |
| **ITTB** | **Itaituba** | **24.74** | **249** | *e*P | | **P** | **02 47 06.5** | **-0.6** |
| **SNDB** | **Serra Nova Dou** | **24.79** | **228** | *e*P | | **P** | **02 47 07.7** | **+0.2** |
| **RIB01** | **Linhares ES** | **24.91** | **198** | *e*P | | **P** | **02 47 09.2** | **+0.7** |
| **DIAM** | **Diamantina, MG** | **25.18** | **205** | *e*P | | **P** | **02 47 12.0** | **+0.9** |
| **BDFB** | **Brasilia** | **25.19** | **217** | P | | **P** | **02 47 10.0** | **-1.3** |
| | comp=Z,9.0nm,0.9s,baz=36,slow=17,SNR=9.4 | | | | | | | |
| BDFB | | | | LR | | LR | 02 55 58.7 | |
| | comp=Z,4μm,21.1s,baz=29,slow=34 | | | | | | | |
| **BDFB** | **Brasilia** | **25.19** | **217** | P | | **P** | **02 47 10.7** | **-0.6** |
| BDFB | | | | pmax | | pmax | | |
| | comp=Z,287nm,2.0s | | | | | | | |
| **BDFB** | **Brasilia** | **25.19** | **217** | P | | **P** | **02 47 10.7** | **-0.6** |
| BDFB | | | | IAmb | | IAmb | 02 47 24.9 | |
| | comp=Z,287nm,2.0s | | | | | | | |
| **NPGB** | **Novo Progresso** | **25.45** | **243** | *e*P | | **P** | **02 47 13.3** | **-0.3** |
| **ALF01** | **Guarapari-ES** | **26.24** | **197** | *e*P | | **P** | **02 47 21.3** | **+0.7** |
| **IPMB** | **Ipameri, GO** | **27.16** | **214** | *e*P | | **P** | **02 47 28.9** | **-0.1** |
| **LIC** | **Lamto** | **27.51** | **85** | *e*PKiKP | | **P** | **02 47 31.5** | **-0.7** |
| | comp=Z,317nm,1.5s | | | | | | | |
| **TIC** | **Toumodi** | **27.54** | **84** | *e*PKiKP | | **P** | **02 47 31.6** | **-0.8** |
| **ARAG** | **Araguaiana, MT** | **27.68** | **223** | *e*P | | **P** | **02 47 34.7** | **+1.1** |
| **CLDB** | **Colíder** | **27.70** | **236** | *e*P | | **P** | **02 47 33.8** | **0.0** |
| **DBIC** | **Dimbokro** | **27.70** | **84** | P | | **P** | **02 47 33.3** | **-0.5** |
| | comp=Z,20nm,1.0s,baz=271,slow=10,SNR=26 | | | | | | | |
| DBIC | | | | PcP | | **PcP** | **02 50 50.5** | **-0.4** |
| | comp=Z,4.5nm,0.9s,baz=340,slow=3.4,SNR=2.4 | | | | | | | |
| DBIC | | | | LR | | LR | 02 56 31.9 | |
| | comp=Z,4μm,18.0s,baz=282,slow=32 | | | | | | | |
| **DBIC** | **Dimbokro** | **27.70** | **84** | P | | **P** | **02 47 32.3** | **-1.6** |
| DBIC | | | | pmax | | pmax | | |
| | comp=Z,80nm,1.2s | | | | | | | |
| **DBIC** | **Dimbokro** | **27.70** | **84** | P | | **P** | **02 47 32.3** | **-1.6** |
| DBIC | | | | IAmb | | IAmb | 02 47 40.0 | |
| | comp=Z,80nm,1.1s | | | | | | | |
| **KIC** | **Kosan Boka** | **27.80** | **85** | *e*PKiKP | | **P** | **02 47 31.4** | **-3.4** |
| | comp=Z,69nm,1.3s | | | | | | | |
| **PTGA** | **Pitinga** | **27.80** | **260** | P | | **P** | **02 47 33.3** | **-1.7** |
| PTGA | | | | LR | | LR | 02 57 35.6 | |
| | comp=Z,13nm,0.9s,baz=92,slow=12,SNR=17 | | | | | | | |
| **PTGA** | **Pitinga** | **27.83** | **260** | P | | **P** | **02 47 33.3** | **-1.7** |
| | comp=Z,6μm,19.7s,baz=68,slow=34 | | | | | | | |
| **BBGH** | **Gun Hill** | **27.94** | **290** | IAMs_20 | | IAMs_20 | 02 59 44.6 | |
| | comp=Z,3μm,18.0s | | | | | | | |
| **BOAV** | **Boa Vista** | **27.94** | **267** | *e*P | | **P** | **02 47 35.3** | **-0.7** |
| **DUB01** | **Friburgo-RJ** | **28.13** | **199** | *e*P | | **P** | **02 47 37.4** | **-0.2** |
| **VAS01** | **Vassouras-RJ** | **28.69** | **201** | *e*P | | **P** | **02 47 42.8** | **+0.3** |
| **PDRB** | **Porto dos Gac** | **28.87** | **236** | *e*P | | **P** | **02 47 44.5** | **+0.2** |
| **MACA** | **Manacapuru-AM** | **29.07** | **255** | *e*P | | **P** | **02 47 47.1** | **+1.0** |
| **MAN01** | **Angra dos Reis** | **29.41** | **202** | *e*P |

**LPAZ La Paz** 40.77 239 P **P** 02 49 27.0 -0.6
**LPAZ La Paz** 40.77 239 *e*P **P** 02 49 27.7 +0.2
**PBAR Barrancos** 40.78 31 *e*P **P** 02 49 28.1 +1.4
comp=Z,94nm,2.1s
**PMTG Montargil** 40.87 29 *e*P **P** 02 49 31.0 +3.6
comp=Z,118nm,2.0s
**ITQB Itaqui** 41.08 213 P **P** 02 49 28.9 -0.4
ITQB IAmb IAmb 02 49 41.4
comp=Z,102nm,1.2s
**ITQB Itaqui** 41.08 213 *e*P **P** 02 49 29.9 +0.7
**PLTB Pedras Altas** 41.27 208 P **P** 02 49 30.8 0.0
PLTB IAmb IAmb 02 49 44.8
comp=Z,126nm,1.7s
**PLTB Pedras Altas** 41.27 208 *e*P **P** 02 49 31.4 +0.7
**PMRV Marv??o** 41.56 30 *e*P **P** 02 49 35.1 +2.0
comp=Z,133nm,1.8s
**PMRV Marv??o** 41.56 30 *e*LR LR 03 00 51.9
comp=Z,1µm,20.0s
**ROSC El Rosal** 41.57 272 P **P** 02 49 33.1 -0.8
comp=Z,24nm,0.7s,baz=84,slow=4.1,SNR=25
ROSC LR LR 03 07 45.6
comp=Z,5µm,18.4s,baz=100,slow=38
**ROSC El Rosal** 41.57 272 P **P** 02 49 34.3 +0.4
ROSC pmax pmax
comp=Z,158nm,1.4s
**ROSC El Rosal** 41.57 272 P **P** 02 49 34.3 +0.4
ROSC IAmb IAmb 02 49 36.7
comp=Z,158nm,1.4s
**COI Coimbra** 41.67 28 IAMs_20 IAMs_20 03 02 32.0
comp=Z,2µm,22.0s
**CZSB Cruzeiro do Su** 41.82 253 *e*P **P** 02 49 35.4 -0.2
**MTE Manteigas** 42.23 29 *e*LR LR 03 01 17.5
comp=Z,2µm,20.0s
**MTE Manteigas** 42.23 29 P **P** 02 49 38.6 0.0
MTE IAmb IAmb 02 49 46.3
comp=Z,213nm,1.9s
**MVO Moncorvo** 43.07 29 *e*LQ LQ 02 59 32.8
MVO *e*LR LR 03 01 38.8
comp=Z,1µm,20.0s
**PAB San Pablo** 43.21 32 P **P** 02 49 47.3 +0.7
PAB pmax pmax
comp=Z,77nm,1.6s
**PAB San Pablo** 43.21 32 P **P** 02 49 47.3 +0.7
**PB08 IPOC Station P** 43.48 234 P **P** 02 49 47.7 -1.6
**ESDC Sonseca Array** 43.51 33 P **P** 02 49 49.1 +0.2
comp=Z,10nm,1.0s,baz=228,slow=8.9,SNR=20
ESDC LR LR 03 06 27.1
comp=Z,751nm,18.5s,baz=202,slow=34
**ESDC Sonseca Array** 43.51 33 P **P** 02 49 48.8 -0.2
**ESBB Sonseca Array** 43.51 33 P **P** 02 49 49.2 +0.2
ESBB IAmb IAmb 02 49 56.9
comp=Z,125nm,1.8s
**PB09 IPOC Station P** 44.40 232 P **P** 02 49 55.9 -0.7
**LVC Limon Verde** 44.57 231 LR LR 03 08 53.5
comp=Z,2µm,21.5s,baz=56,slow=37
**LVC Limon Verde** 44.57 231 P **P** 02 49 56.0 -2.1
LVC pmax pmax
comp=Z,37nm,1.8s
LVC MLR MLR
comp=Z,2µm,20.0s
**LVC Limon Verde** 44.57 231 P **P** 02 49 56.0 -2.1
**LVC Limon Verde** 44.57 231 IAMs_20 IAMs_20 03 08 51.2
comp=Z,2µm,20.0s
**PB02 IPOC Station P** 44.68 233 P **P** 02 49 57.6 -1.1
**PB06 IPOC Station P** 45.14 232 P **P** 02 50 00.8 -1.6
**H09N1 TRISTAN DA CUN** 45.52 157 T T 03 38 51.3
SNR=25
**H09W1 TRISTAN DA CUN** 45.54 157 T T 03 38 50.6
SNR=13
**NNA Nana** 46.95 249 LR LR 03 09 49.2
comp=Z,3µm,19.0s,baz=80,slow=36
**NNA Nana** 46.95 249 IAMs_20 IAMs_20 03 09 45.4
comp=Z,3µm,18.0s
**ATAH Atahualpa** 47.14 256 LR LR 03 10 40.0
comp=Z,6µm,18.1s,baz=65,slow=37
**KEST Kesra** 49.54 46 P **P** 02 50 38.1 +1.7
comp=Z,17nm,1.1s,baz=138,slow=6.0,SNR=7.0
KEST LR LR 03 11 37.0
comp=Z,4µm,19.3s,baz=212,slow=36
**KEST Kesra** 49.54 46 P **P** 02 50 37.1 +0.7
KEST IAmb IAmb 02 50 53.8
comp=Z,75nm,1.2s
**KEST Kesra** 49.54 46 P **P** 02 50 38.5 +2.1
KEST P **P** 02 50 38.5 +2.1
**BRU2 Volcan** 49.89 278 P **P** 02 50 39.6 +0.1
**RIMA Rio Macho** 51.08 279 P **P** 02 50 47.5 -1.0
RIMA IAmb IAmb 02 50 51.3
comp=Z,115nm,1.7s
**HRV Adam Dziewonsk** 51.22 323 P **P** 02 50 50.9 +2.0
baz=127
**BATG Bathurst New B** 51.39 331 P **P** 02 50 50.5 +0.3
BATG IAmb IAmb 02 50 57.2
comp=Z,63nm,1.2s
**VSL Villasalto** 51.45 41 IAMs_20 IAMs_20 03 10 04.0
comp=Z,1µm,20.0s
**CNNC Cliffs of the** 51.73 312 IAMs_20 IAMs_20 03 08 33.4
comp=Z,1µm,19.0s
**PAL Palisades** 51.81 321 P **P** 02 50 54.9 +1.5
baz=123
**PEL Peldehue** 52.01 221 IAMs_20 IAMs_20 03 13 00.6
comp=Z,1µm,20.0s
**LBNH Lisbon** 52.48 325 P **P** 02 51 00.3 +2.0
baz=127
**MT09 Talagante** 52.60 221 IAmb IAmb 02 51 05.4
comp=Z,144nm,1.9s
**CLF Chambon-Foret** 52.60 29 P **P** 02 51 00.1 +1.0
CLF IAmb IAmb 02 51 07.0
comp=Z,80nm,1.1s
**NHSC New Hope** 52.60 309 IAMs_20 IAMs_20 03 07 32.5
comp=Z,3µm,22.0s
**CBN Corbin Frederi** 52.69 316 IAMs_20 IAMs_20 03 08 25.9
comp=Z,1µm,20.0s
**D62A Allapoint, All** 52.73 329 IAmb IAmb 02 51 02.6
comp=Z,128nm,1.4s
**MVL Millersville** 52.87 318 IAmb IAmb 02 51 03.8
comp=Z,89nm,1.5s
**N59A State Game Lan** 52.96 319 IAmb IAmb 02 51 08.8
comp=Z,106nm,1.6s
**N59A State Game Lan** 52.96 319 P **P** 02 51 03.7 +1.8
baz=122
**BNI Bardonecchia** 52.96 34 IAmb IAmb 02 51 10.5
comp=Z,56nm,1.2s
BNI IAMs_20 IAMs_20 03 11 02.7
comp=Z,1µm,21.0s
**BOAB BOACO BROADBA** 52.98 282 IAMs_20 IAMs_20 03 14 32.1
comp=Z,2µm,19.0s
**Y57A Sumter** 53.11 310 IAmb IAmb 02 51 15.5
comp=Z,72nm,1.4s
**CLTB Caltabellotta** 53.15 45 P **P** 02 51 05.0 +1.5
CLTB IAmb IAmb 02 51 12.5
comp=Z,148nm,1.8s
**BIRD Birdtown, Kers** 53.41 310 P **P** 02 51 06.0 +0.7
BIRD IAmb IAmb 02 51 07.9
comp=Z,52nm,1.2s
**S57A Dark Hollow, R** 53.60 315 P **P** 02 51 06.4 -0.3
S57A IAmb IAmb 02 51 14.5
comp=Z,123nm,1.9s
**BINY Binghamton** 53.77 321 P **P** 02 51 10.0 +2.1
baz=122
**J58A Remsen** 53.96 322 P **P** 02 51 10.7 +1.4
J58A IAmb IAmb 02 51 17.0
comp=Z,50nm,1.1s
**VAE Valguarnera** 53.96 46 P **P** 02 51 10.3 +0.9
comp=Z,2.5nm,0.4s,baz=1.9,slow=17,SNR=6.4
VAE LR LR 03 13 32.5
comp=Z,2µm,21.3s,baz=203,slow=35
**SENIN Lac Senin/Sane** 54.10 33 P **P** 02 51 10.9 +0.4
SENIN IAMs_20 IAMs_20 03 13 41.1
comp=Z,1µm,19.0s
**ML02 Panimavida** 54.12 219 P **P** 02 51 10.2 -0.4
**MSSA Maissana** 54.16 36 P **P** 02 51 11.3 +0.6
MSSA IAmb IAmb 02 51 18.4
comp=Z,86nm,1.2s
**SSPA Standing Stone** 54.20 318 P **P** 02 51 10.8 -0.3
**SSPA Standing Stone** 54.20 318 P **P** 02 51 12.6 +1.5
baz=119
**KMSC Kings Mountain** 54.26 311 P **P** 02 51 12.9 +1.3
baz=113
**Q56A Snyder Ridge,** 54.34 316 P **P** 02 51 12.0 0.0
Q56A IAmb IAmb 02 51 14.9
comp=Z,54nm,1.2s
**K57A Scipio Center** 54.38 321 P **P** 02 51 12.7 +0.4
**BLA Blacksburg** 54.42 313 P **P** 02 51 12.7 0.0
BLA pmax pmax
comp=Z,43nm,1.0s
**BLA Blacksburg** 54.42 313 P **P** 02 51 12.7 0.0
BLA IAmb IAmb 02 51 15.4
comp=Z,43nm,1.0s
BLA IAMs_20 IAMs_20 03 09 37.5
comp=Z,2µm,20.0s
**BLA Blacksburg** 54.42 313 P **P** 02 51 14.8 +2.1
baz=115,SNR=6.7
**V55A Taylorsville** 54.45 311 IAmb IAmb 02 51 15.7
comp=Z,64nm,1.4s
**O56A Blue Knob Stat** 54.48 317 P **P** 02 51 15.0 +1.9
baz=118
**VLC Villacollemand** 54.59 37 P **P** 02 51 14.5 +0.7
**HODGE Hodges** 54.63 309 IAmb IAmb 02 51 16.8
comp=Z,48nm,1.3s
**TGUH Tegucigalpa,Un** 54.65 284 IAMs_20 IAMs_20 03 14 20.3
comp=Z,1µm,20.0s
**TSUM Tsumeb** 54.73 117 LR LR 03 09 14.9
comp=Z,3µm,21.0s,baz=289,slow=30
**TSUM Tsumeb** 54.73 117 P **P** 02 51 15.0 -0.4
TSUM IAmb IAmb 02 51 23.0
comp=Z,66nm,1.2s
**L56A Greenwood** 54.73 320 P **P** 02 51 14.6 -0.4
L56A IAmb IAmb 02 51 22.3
comp=Z,43nm,1.1s
**OSSC Osservatorio P** 54.77 38 P **P** 02 51 14.0 -1.1
OSSC IAmb IAmb 02 51 20.4
comp=Z,92nm,1.6s
**PRMA PARMA** 54.88 36 P **P** 02 51 16.6 +0.7
PRMA IAmb IAmb 02 51 23.7
comp=Z,49nm,0.9s
**ZCCA Zocca** 55.05 37 P **P** 02 51 17.8 +0.6
ZCCA IAmb IAmb 02 51 25.8
comp=Z,72nm,1.1s
**DOU Dourbes** 55.14 28 *d*P **P** 02 51 18.2 +0.6
comp=Z,32nm,1.1s
**TRQ Mont Tremblant** 55.15 326 P **P** 02 51 17.6 -0.3
TRQ IAmb IAmb 02 51 19.9
comp=Z,64nm,1.3s
**U54A Nelsons Funny** 55.16 312 P **P** 02 51 18.3 +0.1
U54A IAmb IAmb 02 51 20.8
comp=Z,45nm,1.1s
**ECH Echery** 55.18 31 P **P** 02 51 18.6 +0.5
ECH pmax pmax
comp=Z,55nm,1.4s
**ECH Echery** 55.18 31 P **P** 02 51 18.6 +0.5
ECH IAmb IAmb 02 51 25.4
comp=Z,55nm,1.4s
ECH IAMs_20 IAMs_20 03 13 15.6
comp=Z,1µm,18.0s
**M55A Ridgway** 55.19 319 P **P** 02 51 18.6 +0.4
M55A IAmb IAmb 02 51 25.8
comp=Z,69nm,1.2s
**SNF Seneffe** 55.28 28 *d*P **P** 02 51 19.6 +0.9
comp=Z,24nm,1.0s
**GOGA Godfrey** 55.28 308 P **P** 02 51 20.3 +1.3
baz=110
**TUE Stuetta** 55.30 34 IAMs_20 IAMs_20 03 15 24.8
comp=Z,1µm,18.0s
**S54A Dingess, Beckl** 55.30 314 IAmb IAmb 02 51 22.3
comp=Z,52nm,1.2s
**CEL Celeste** 55.35 46 P **P** 02 51 19.8 +0.3
CEL IAMs_20 IAMs_20 03 17 51.5
comp=Z,1µm,18.0s
**BMRD Maredsous** 55.36 28 *d*P **P** 02 51 20.6 +1.3
comp=Z,9.5nm,1.2s
**BG3 Lake Jocassee** 55.42 310 P **P** 02 51 19.9 -0.2
BG3 IAmb IAmb 02 51 23.0
comp=Z,61nm,1.2s
**MURB Monte Urbino** 55.43 39 P **P** 02 51 19.8 -0.2
MURB IAmb IAmb 02 51 28.4
comp=Z,50nm,1.2s
**Q54A Coxs Mills** 55.46 315 IAmb IAmb 02 51 27.8
comp=Z,40nm,1.0s
**RCHB Rochefort** 55.48 29 *d*P **P** 02 51 20.7 +0.6
comp=Z,11nm,1.2s
**SALO Salr** 55.48 36 P **P** 02 51 20.6 +0.3
**UCC Uccle** 55.51 28 *d*P **P** 02 51 21.4 +1.1
comp=Z,6.6nm,0.8s
**AQU L'Aquila** 55.53 40 P **P** 02 51 21.3 +0.6
AQU pmax pmax
comp=Z,79nm,1.3s
AQU MLR MLR
comp=Z,900nm,19.0s
**AQU L'Aquila** 55.53 40 P **P** 02 51 21.3 +0.6
AQU IAmb IAmb 02 53 02.9
comp=Z,79nm,1.3s
**WVNY West Valley, N** 55.54 320 P **P** 02 51 20.9 +0.2
WVNY IAmb IAmb 02 51 28.4
comp=Z,84nm,1.1s
**BGES Gesves** 55.57 28 *d*P **P** 02 51 22.0 +1.2
comp=Z,9.8nm,1.1s
**V53A Saluda** 55.58 311 P **P** 02 51 21.1 -0.1
V53A IAmb IAmb 02 51 33.5
comp=Z,54nm,1.4s
**NRCA Norcia** 55.58 40 IAmb IAmb 02 51 38.0
comp=Z,59nm,1.4s
**WLF Walferdange** 55.60 30 IAMs_20 IAMs_20 03 14 00.7
comp=Z,2µm,18.0s
**PAOL Paolisi** 55.66 42 P **P** 02 51 22.7 +1.1
PAOL IAmb IAmb 02 52 54.2
comp=Z,41nm,1.1s
**BCLA Clavier** 55.70 28 *d*P **P** 02 51 22.5 +0.9
comp=Z,15nm,1.3s
**N54A Moraine State** 55.76 318 IAmb IAmb 02 51 29.8
comp=Z,45nm,1.0s
**N54A Moraine State** 55.76 318 P **P** 02 51 22.4 +0.1
baz=118
**DAVOX Davos/Dischmat** 55.78 34 P **P** 02 51 21.8 -0.8
comp=Z,7.4nm,0.8s,baz=225,slow=11,SNR=13
DAVOX LR LR 03 11 55.2
comp=Z,838nm,21.7s,baz=246,slow=32
**M54A Oil Creek Stat** 55.80 318 IAmb IAmb 02 51 25.0
comp=Z,41nm,1.0s
**M54A Oil Creek Stat** 55.80 318 P **P** 02 51 22.5 -0.2
baz=118,SNR=5.8
**BFO Black Forest** 55.87 32 P **P** 02 51 23.6 +0.6
BFO pmax pmax
comp=Z,58nm,1.4s
**BFO Black Forest** 55.87 32 P **P** 02 51 23.6 +0.6
BFO IAmb IAmb 02 51 30.4
comp=Z,58nm,1.4s
BFO IAMs_20 IAMs_20 03 12 24.6
comp=Z,1µm,20.0s
**EKA Eskdalemuir Ar** 55.90 20 P **P** 02 51 21.6 -1.4
comp=Z,3.4nm,0.8s,baz=214,slow=6.9,SNR=7.6
EKA LR LR 03 11 50.1
comp=Z,1µm,19.2s,baz=220,slow=32
**Y52A Lilburn** 55.91 308 IAmb IAmb 02 51 26.3
comp=Z,65nm,1.4s
**BSTI Sart Tilman** 55.93 28 *d*P **P** 02 51 24.6 +1.3
comp=Z,4.8nm,1.1s
**BHOU Houvegnez** 55.99 29 *d*P **P** 02 51 25.1 +1.3
**DELO Deloro Mine** 56.00 322 P **P** 02 51 24.9 +0.9
DELO IAmb IAmb 02 51 26.2
comp=Z,68nm,1.4s
**P53A Whipple** 56.07 315 IAmb IAmb 02 51 32.0
comp=Z,42nm,1.0s
**DAVA Damuels** 56.08 34 *e*P **P** 02 51 25.4 +0.8
comp=Z,26nm,1.3s
DAVA *e*P **PP** 02 53 31.7 +1.9
comp=Z,17nm,1.8s
**BEBN Eben Emael** 56.12 28 *d*P **P** 02 51 25.9 +1.2
**MEM Membach** 56.16 29 *d*P **P** 02 51 25.7 +0.8
comp=Z,27nm,1.0s
**ALLY Alegheny Colle** 56.19 318 P **P** 02 51 26.2 +0.8
ALLY IAmb IAmb 02 51 27.6
comp=Z,66nm,1.2s
**BTNL Ternell** 56.20 29 *d*P **P** 02 51 26.4 +1.1
comp=Z,24nm,1.1s
**N53A Lisbon** 56.27 317 IAmb IAmb 02 51 28.5
comp=Z,76nm,1.2s
**O53A New Philadelph** 56.28 316 P **P** 02 51 26.3 +0.2
O53A IAmb IAmb 02 51 33.5
comp=Z,52nm,1.1s
O53A IAMs_20 IAMs_20 03 09 57.0
comp=Z,2µm,22.0s
**O53A New Philadelph** 56.28 316 P **P** 02 51 26.1 0.0
baz=116,SNR=6.5
**TKL Tuckaleechee C** 56.30 310 LR LR 03 10 19.8
comp=Z,2µm,21.6s,baz=116,slow=31
**TIP Timpagrande** 56.35 45 IAmb IAmb 02 51 28.3
comp=Z,95nm,1.7s
**CTI Castel Tesino** 56.38 36 P **P** 02 51 28.4 +1.6
CTI pmax pmax
comp=Z,28nm,0.9s
**CTI Castel Tesino** 56.38 36 P **P** 02 51 28.4 +1.6
**FETA Feichten** 56.40 34 *i* P **P** 02 51 27.3 +0.3
comp=Z,29nm,1.0s,SNR=9.4
**LC01 Cunco** 56.42 216 IAmb IAmb 02 51 38.1
comp=Z,57nm,1.5s
**M53A WI Miller and** 56.44 318 IAmb IAmb 02 51 29.3
comp=Z,59nm,1.1s
**M53A WI Miller and** 56.44 318 P **P** 02 51 28.7 +1.5
baz=117,SNR=5.4
**TZTN Tazewell** 56.46 311 IAmb IAmb 02 51 35.1
comp=Z,63nm,1.3s
TZTN IAMs_20 IAMs_20 03 10 04.8
comp=Z,1µm,21.0s
**TZTN Tazewell** 56.46 311 P **P** 02 51 28.9 +1.5
baz=112,SNR=6.3
**Q52A Bidwell** 56.47 315 IAmb IAmb 02 51 34.7
comp=Z,64nm,1.1s
**STU Stuttgart** 56.59 32 IAMs_20 IAMs_20 03 13 04.8
comp=Z,988nm,20.0s
**O52A Adamsville** 56.65 316 IAmb IAmb 02 51 36.1
comp=Z,58nm,1.0s
**P52A Corning** 56.65 315 IAmb IAmb 02 51 30.8
comp=Z,52nm,1.1s
P52A IAMs_20 IAMs_20 03 10 39.9
comp=Z,1µm,19.0s
**P52A Corning** 56.65 315 P **P** 02 51 30.4 +1.7
baz=115,SNR=7.3
**RETA Reutte** 56.68 34 *e*P **P** 02 51 29.0 +0.1
comp=Z,27nm,1.4s,SNR=6.6
RETA *e*P **PP** 02 53 35.9 +0.9
comp=Z,18nm,1.5s
**MOTA Moosalm** 56.79 34 *i* P **P** 02 51 29.8 0.0
comp=Z,23nm,1.4s,SNR=6.0
MOTA *e*P **PP** 02 53 39.0 +3.0
comp=Z,15nm,1.4s
**PLCA Paso Flores** 56.88 214 P **P** 02 51 29.9 -0.5
comp=Z,11nm,1.2s,baz=48,slow=7.8,SNR=6.3
PLCA LR LR 03 15 40.4
comp=Z,2µm,21.0s,baz=49,slow=36
**PLCA Paso Flores** 56.88 214 P **P** 02 51 31.1 +0.7
PLCA pmax pmax
comp=Z,61nm,1.6s
**PLCA Paso Flores** 56.88 214 P **P** 02 51 31.1 +0.7
PLCA IAmb IAmb 02 51 43.2
comp=Z,61nm,1.6s
**PLCA Paso Flores** 56.88 214 *e*P **P** 02 51 31.2 +0.7
**BRJN Brijuni** 57.03 38 *e*Pn **P** 02 51 34.8 +3.6
**WTTA Wattenberg** 57.05 34 *e*P **P** 02 51 31.8 +0.2
comp=Z,31nm,1.7s,SNR=8.8
**WATA Walderalm** 57.05 34 *e*P **P** 02 51 31.6 0.0
comp=Z,30nm,1.2s,SNR=6.6
WATA *e*P **PP** 02 53 36.7 -1.7
comp=Z,4.7nm,0.6s
**SADO Sadowa** 57.06 322 LR LR 03 11 59.3
comp=Z,646nm,19.9s,baz=164,slow=32
**250A Grady** 57.08 305 IAmb IAmb 02 51 34.3
comp=Z,74nm,1.4s
**P51A Williamsport** 57.24 315 IAmb IAmb 02 51 40.2
comp=Z,53nm,1.1s
**SCHQ Schefferville** 57.24 337 P **P** 02 51 32.2 -0.4
comp=Z,14nm,0.9s,baz=108,slow=7.1,SNR=12
SCHQ LR LR 03 13 49.8
comp=Z,535nm,18.6s,baz=126,slow=34
**SCHQ Schefferville** 57.24 337 P **P** 02 51 32.6 0.0
SCHQ IAmb IAmb 02 51 39.6
comp=Z,51nm,1.1s
**ABTA Abfaltersbach** 57.26 35 *i* P **P** 02 51 34.0 +1.0
comp=Z,48nm,1.3s,SNR=14
**Q51A Peebles** 57.26 314 IAmb IAmb 02 51 40.5
comp=Z,39nm,0.9s
**FPAL Fort Paine** 57.34 308 IAmb IAmb 02 51 36.4
comp=Z,56nm,1.3s
**N51A Ashland** 57.36 317 IAmb IAmb 02 51 41.0
comp=Z,45nm,1.1s
**PETF Flores** 57.39 287 P **P** 02 51 33.5 -0.8
**BRAL Brewton** 57.49 304 IAMs_20 IAMs_20 03 11 19.0
comp=Z,2µm,21.0s
**ACSO Alum Creek Sta** 57.49 316 IAmb IAmb 02 51 42.0
comp=Z,48nm,0.9s
ACSO IAMs_20 IAMs_20 03 11 06.2
comp=Z,1µm,20.0s
**ACSO Alum Creek Sta** 57.49 316 P **P** 02 51 36.5 +1.8
baz=115,SNR=6.3
**T50A Nancy** 57.60 311 P **P** 02 51 35.1 -0.3
**R50A Paris** 57.68 313 IAmb IAmb 02 51 43.8
comp=Z,46nm,1.1s
**APG El Apazote** 57.80 285 LR LR 03 17 15.8
comp=Z,727nm,19.7s,baz=102,slow=37
**SWET Sewanee** 57.81 309 P **P** 02 51 37.9 +0.8
SWET IAmb IAmb 02 51 39.5
comp=Z,58nm,1.2s
**MYKA Terra Mystica** 57.85 36 *i* P **P** 02 51 38.5 +1.4
comp=Z,58nm,1.7s,SNR=11
**KBA Koelnbreinsper** 57.92 35 *i* P **P** 02 51 38.3 +0.5
comp=Z,22nm,1.5s,SNR=8.0
**LRAL Lakeview Retre** 57.97 306 IAMs_20 IAMs_20 03 11 19.9
comp=Z,2µm,21.0s
**LRAL Lakeview Retre** 57.97 306 P **P** 02 51 40.1 +1.9
baz=107,SNR=5.5
**M50A Fremont** 58.02 317 IAmb IAmb 02 51 45.6
comp=Z,45nm,0.9s
**LL04 Puerto Octay** 58.05 215 IAmb IAmb 02 51 39.1
comp=Z,51nm,1.4s
**GRFO Grafenberg** 58.21 32 P **P** 02 51 41.0 +1.5
GRFO pmax pmax
comp=Z,145nm,1.5s
**GRFO Grafenberg** 58.21 32 P **P** 02 51 41.0 +1.5
GRFO IAMs_20 IAMs_20 03 14 57.5
comp=Z,1µm,19.0s
**GRA1 Grafenberg Arr** 58.21 32 IAMs_20 IAMs_20 03 14 57.6
comp=Z,1µm,19.0s
**R49A Shelbyville** 58.30 313 IAmb IAmb 02 51 47.9
comp=Z,39nm,1.1s
**OBKA Obir** 58.33 37 *i* P **P** 02 51 41.9 +1.4
comp=Z,39nm,1.8s,SNR=9.4
**K50A Casco** 58.34 318 IAmb IAmb 02 51 47.5
comp=Z,60nm,1.1s
**CLTN Cedars of Leba** 58.40 310 IAmb IAmb 02 51 54.3
comp=Z,86nm,1.7s
**O49A Covington** 58.42 315 IAmb IAmb 02 51 48.1
comp=Z,38nm,1.0s
**P49A Miami Univ. Ec** 58.44 314 IAmb IAmb 02 51 48.4
comp=Z,71nm,1.3s
P49A IAMs_20 IAMs_20 03 12 06.2
comp=Z,1µm,21.0s
**P49A Miami Univ. Ec** 58.44 314 P **P** 02 51 42.8 +1.5
baz=113,SNR=7.4
**N49A Columbus Grove** 58.61 316 IAmb IAmb 02 51 44.4
comp=Z,57nm,1.4s
**V48A Smith Brothers** 58.67 309 IAmb IAmb 02 51 45.2
comp=Z,53nm,1.2s
**SOKA Soboth** 58.70 37 *i* P **P** 02 51 44.2 +1.1
comp=Z,43nm,1.6s,SNR=14
**AAM Ann Arbor** 58.82 318 P **P** 02 51 43.9 0.0
AAM pmax pmax
comp=Z,65nm,0.9s
**AAM Ann Arbor** 58.82 318 P **P** 02 51 43.9 0.0
AAM IAMs_20 IAMs_20 03 11 27.4
comp=Z,1µm,21.0s
**MOA Molln** 58.86 35 *i* P **P** 02 51 44.5 +0.4
comp=Z,19nm,1.8s,SNR=5.8
**P48A Milroy** 58.92 314 IAmb IAmb 02 51 46.2
comp=Z,70nm,1.4s
**O48B Farmland** 59.03 315 P **P** 02 51 46.3 +0.9
baz=113,SNR=6.0
**GEC2 GERESS Array S** 59.07 34 P **P** 02 51 46.3 +0.6
GEC2 IAmb IAmb 02 51 52.7
comp=Z,37nm,1.2s
**GERES GERESS Array B** 59.07 34 P **P** 02 51 45.3 -0.4
comp=Z,9.5nm,1.1s,baz=248,slow=7.1,SNR=36
**WCI Wyandotte Cave** 59.10 312 P **P** 02 51 46.4 +0.4
WCI pmax pmax
comp=Z,35nm,1.1s
**WCI Wyandotte Cave** 59.10 312 P **P** 02 51 46.4 +0.4
WCI IAmb IAmb 02 51 48.4
comp=Z,35nm,1.1s
**WCI Wyandotte Cave** 59.10 312 IAMs_20 IAMs_20 03 11 40.8
comp=Z,1µm,22.0s
**WCI Wyandotte Cave** 59.10 312 P **P** 02 51 47.5 +1.6
baz=111
**KHC Kasperske Hory** 59.16 34 *e*P **P** 02 51 46.7 +0.5
KHC *e**PP **sP** 02 51 51.4 +1.4
KHC *e*S **S** 02 59 53.2 -0.3
KHC MLR MLR
comp=Z,900nm,14.6s
**KHC Kasperske Hory** 59.16 34 *e*P **P** 02 51 46.7 +0.5
KHC *e*pP **sP** 02 51 51.4 +1.4
KHC *e*S **S** 02 59 53.2 -0.3
KHC AMS AMS 03 13 50.0
comp=Z,900nm,14.6s

KHC Kasperske Hory 59.16 34 IAmb IAmb 02 51 53.3
comp=Z,47nm,1.3s
NKC Novy Kostel 59.17 32 eP P 02 51 47.9 +1.7
NKC e*PP pwP 02 51 52.8 -1.2
NKC MLR MLR
comp=Z,1µm,17.9s
NKC Novy Kostel 59.17 32 eP P 02 51 47.9 +1.7
NKC epP pwP 02 51 52.8 -1.2
NKC AMS AMS 03 15 10.0
comp=Z,1µm,17.9s
L48A N Adams 59.20 317 IAmb IAmb 02 51 53.6
comp=Z,49nm,1.0s
ARSA Arzberg 59.28 36 i P P 02 51 47.4 +0.4
comp=Z,11nm,1.2s,SNR=9.9
T47A Sharon Grove 59.29 311 IAmb IAmb 02 51 54.5
comp=Z,48nm,1.0s
CKRC Cesky Krumlov 59.40 34 eP P 02 51 48.6 +0.8
CKRC eS S 02 59 59.9 +3.3
CKRC AMS AMS 03 17 00.0
comp=Z,700nm,17.5s
WVT Waverly 59.56 310 P P 02 51 49.5 +0.3
WVT pmax pmax
comp=Z,36nm,1.3s
WVT Waverly 59.56 310 P P 02 51 49.5 +0.3
WVT Waverly 59.56 310 IAMs_20 IAMs_20 03 12 18.0
comp=Z,2µm,21.0s
WVT Waverly 59.56 310 P P 02 51 50.0 +0.9
baz=108
BLO Bloomington 59.60 313 IAmb IAmb 02 51 51.8
comp=Z,45nm,1.1s
N47A Urbana 59.65 315 IAmb IAmb 02 51 51.5
comp=Z,57nm,1.1s
PBCC Pribram 59.69 33 eP P 02 51 50.2 +0.4
PBCC epP pwP 02 51 55.7 -2.0
CONA Conrad Observa 59.82 36 i P P 02 51 51.5 +0.7
comp=Z,26nm,1.7s,SNR=9.1
USIN University of 60.03 312 IAmb IAmb 02 51 55.2
comp=Z,59nm,1.2s
CLL Collm 60.07 31 i P P 02 51 52.1 -0.2
CLL i 02 51 58.5
CLL eS S 03 00 10.0 +4.9
CLL pmax pmax
comp=Z,72nm,1.9s
CLL Collm 60.07 31 i P P 02 51 52.1 -0.2
comp=Z,72nm,1.9s
CLL i sP pwP 02 51 58.5 -1.7
CLL ex x 02 52 32.0
CLL ePPP PPP 02 55 32.0
CLL eS S 03 00 10.0 +4.9
comp=N,400nm,24.1s
CLL eS S 03 00 10.0 +4.9
comp=E,500nm,20.7s
CLL eSS SS 03 04 00.0 -2.0
CLL LmH 03 14 00.0
comp=N,700nm,19.5s
CLL LmH 03 14 00.0
comp=E,300nm,21.0s
CLL LmV 03 17 00.0
comp=Z,700nm,18.5s
CLL Collm 60.07 31 P P 02 51 52.7 +0.4
CLL IAmb IAmb 02 51 55.0
comp=Z,59nm,1.8s
SOP Sopron 60.10 36 PN P 02 51 53.9 +1.2
PRU Pruhonice 60.15 33 eP P 02 51 53.5 +0.5
PRU e*PP pwP 02 51 59.3 -1.5
PRU eS S 03 00 06.8 +0.6
PRU MLR MLR
comp=Z,1µm,22.3s
PRU Pruhonice 60.15 33 eP P 02 51 53.5 +0.5
PRU epP pwP 02 51 59.3 -1.5
PRU eS S 03 00 06.8 +0.6
PRU AMS AMS 03 14 00.0
comp=Z,1µm,22.3s
Y45A Yeager Farm, C 60.25 307 IAmb IAmb 02 52 00.9
comp=Z,58nm,1.2s
TREC Trest 60.31 34 AMS AMS 03 14 40.0
comp=Z,900nm,21.1s
BRG Berggiesshubel 60.31 32 eP P 02 51 55.2 +1.2
BRG Amp 02 51 57.5
comp=Z,97nm,1.9s
BRG ex x 02 52 00.1
BRG Amp 02 52 01.7
comp=Z,39nm,1.4s
BRG Amp 03 16 19.0
comp=Z,0.9nm,20.7s
BRG Berggiesshubel 60.31 32 eP P 02 51 55.2 +1.2
BRG e 02 52 00.0
BRG pmax pmax
comp=Z,97nm,1.9s
BRG pmax pmax
comp=Z,39nm,1.4s
OXF Oxford 60.32 307 P P 02 51 54.6 +0.2
baz=106
SFIN Lafayette 60.45 314 IAmb IAmb 02 51 57.2
comp=Z,49nm,0.9s
SFIN Lafayette 60.45 314 P P 02 51 56.6 +1.4
baz=111,SNR=7.7
PVCC Panska Ves 60.46 33 AMS AMS 03 13 50.0
comp=Z,1µm,24.1s
GLMI Grayling 60.53 320 P P 02 51 57.3 +1.7
baz=116
BORG Borgarnes 60.63 6 P P 02 51 55.7 -0.2
comp=Z,16nm,1.0s,baz=91,slow=5.7,SNR=3.2
BORG LR LR 03 12 28.5
comp=Z,254nm,20.8s,baz=190,slow=30
BORG Borgarnes 60.63 6 P P 02 51 55.7 -0.2
BORG pmax pmax
comp=Z,213nm,1.6s
BORG Borgarnes 60.63 6 P P 02 51 55.7 -0.2
BORG Borgarnes 60.63 6 IAmb IAmb 02 52 03.7
comp=Z,213nm,1.6s
ZST Bratislava 60.67 36 eP P 02 51 57.7 +1.1
ZST pmax pmax
comp=Z,384nm,1.9s
ZST Bratislava 60.67 36 eP P 02 51 57.7 +1.1
KRUC Moravsky 60.70 35 eP P 02 51 55.9 -0.8
VRAC Vranov 60.94 35 P P 02 51 58.5 +0.1
comp=Z,9.2nm,1.0s,baz=230,slow=8.4,SNR=16
VRAC LR LR 03 16 02.3
comp=Z,511nm,19.9s,baz=240,slow=34
VRAC Vranov 60.94 35 eP P 02 51 58.2 -0.1
COYC Coyhaique 61.02 211 IAMs_20 IAMs_20 03 18 27.6
comp=Z,1µm,19.0s
SMOL Smolenice 61.02 36 eP P 02 51 59.4 +0.5
SMOL pmax pmax
comp=Z,26nm,1.8s
SMOL Smolenice 61.02 36 eP P 02 51 59.4 +0.5
IDI Anoyia 61.09 52 P P 02 52 00.6 +0.9
comp=Z,35nm,1.1s,baz=266,slow=8.3,SNR=10
IDI LR LR 03 18 47.2
comp=Z,1µm,21.4s,baz=256,slow=36
IDI Anoyia 61.09 52 P P 02 52 00.7 +0.9
IDI IAMs_20 IAMs_20 03 20 43.4
comp=Z,2µm,18.0s
SIUC Southern Illin 61.12 311 IAmb IAmb 02 52 06.5
comp=Z,44nm,1.1s
S44A Carbondale 61.14 311 IAmb IAmb 02 52 01.5
comp=Z,68nm,1.4s
SRO Srobarova 61.20 37 eP P 02 52 01.9 +1.7
SRO pmax pmax
comp=Z,84nm,1.5s
SRO Srobarova 61.20 37 eP P 02 52 01.9 +1.7
UPC Upice 61.23 33 eP P 02 52 01.6 +1.3
UPC e*PP pwP 02 52 06.8 -1.3
UPC MLR MLR
comp=Z,1µm,22.1s
UPC Upice 61.23 33 eP P 02 52 01.6 +1.3
UPC epP pwP 02 52 06.8 -1.3
UPC AMS AMS 03 14 20.0
comp=Z,1µm,22.1s
CHVC Chvalec 61.29 33 eP P 02 52 02.0 +1.2
CHVC epP pwP 02 52 07.0 -1.6
CHVC AMS AMS 03 14 30.0
comp=Z,800nm,17.4s
DPC Dobruska-Polom 61.32 33 eP P 02 52 01.9 +0.9
DPC e*PP pwP 02 52 07.1 -1.7
DPC eS S 03 00 23.2 +2.0
DPC MLR MLR
comp=Z,800nm,20.6s
DPC Dobruska-Polom 61.32 33 eP P 02 52 01.9 +0.9
DPC epP pwP 02 52 07.1 -1.7
DPC eS S 03 00 23.2 +2.0
DPC AMS AMS 03 14 40.0
comp=Z,800nm,20.6s
JAVC Velka Javorina 61.33 35 eP P 02 52 00.9 -0.2
OSTC Ostas 61.37 33 eP P 02 52 02.6 +1.4
OSTC epP pwP 02 52 07.7 -1.4
OSTC AMS AMS 03 14 30.0
comp=Z,800nm,20.8s
KRLC Kraliky 61.43 34 eP P 02 52 03.1 +1.4
KRLC e*PP pwP 02 52 07.6 -2.0
KRLC MLR MLR
comp=Z,800nm,23.5s
KRLC Kraliky 61.43 34 eP P 02 52 03.1 +1.4
KRLC epP pwP 02 52 07.6 -2.0
KRLC AMS AMS 03 15 10.0
comp=Z,800nm,23.5s
KSP Ksiaz 61.56 33 eP P 02 52 03.7 +1.2
KSP esP sP 02 52 08.2 +1.9
KOLL Kolacno 61.62 36 eP P 02 52 04.6 +1.6
L44A Lake County Fo 61.68 316 IAMs_20 IAMs_20 03 13 13.9
comp=Z,2µm,21.0s
L44A Lake County Fo 61.68 316 P P 02 52 04.8 +1.3
baz=112
MORC Moravsky Berou 61.70 34 P P 02 52 04.0 +0.4
MORC pmax pmax
comp=Z,188nm,2.0s
MORC Moravsky Berou 61.70 34 P P 02 52 04.0 +0.4
MORC Moravsky Berou 61.70 34 eP P 02 52 03.7 +0.1
PBMO Poplar Bluff 61.76 310 IAmb IAmb 02 52 04.8
comp=Z,42nm,1.6s
VYHS Vyhne 61.83 36 eP P 02 52 05.2 +0.8
VYHS pmax pmax
comp=Z,127nm,2.1s
VYHS Vyhne 61.83 36 eP P 02 52 05.2 +0.8
SANT Santorini 61.84 51 IAMs_20 IAMs_20 03 17 49.1
comp=Z,2µm,22.0s
OKC Ostrava-Krasne 62.08 35 AMS AMS 03 18 10.0
comp=Z,600nm,15.2s
HDIL Hopedale 62.09 314 IAmb IAmb 02 52 07.5
comp=Z,49nm,1.1s
HDIL IAMs_20 IAMs_20 03 13 36.7
comp=Z,1µm,21.0s
HDIL Hopedale 62.09 314 P P 02 52 07.1 +0.9
baz=110,SNR=6.3
LCAR Lake Charles 62.12 309 IAmb IAmb 02 52 07.6
comp=Z,36nm,1.4s
CMIG Matias Romero 62.19 287 LR LR 03 21 23.0
comp=Z,596nm,18.3s,baz=94,slow=38
IZAB Izabela 62.38 36 eP P 02 52 09.6 +1.5
IZAB pmax pmax
comp=Z,34nm,1.7s
DY2G Dye2 62.55 354 i P P 02 52 08.5 -0.7
DY2G IAmb IAmb 02 52 11.8
comp=Z,408nm,2.4s
SUR Sutherland 62.57 130 LR LR 03 13 15.0
comp=Z,1µm,21.0s,baz=298,slow=30
SUR Sutherland 62.57 130 P P 02 52 10.4 +0.5
SUR Sutherland 62.57 130 P P 02 52 11.8 +1.9
SUR P P 02 52 11.8 +1.9
W41B Gary Mavity, V 62.75 307 IAmb IAmb 02 52 17.1
comp=Z,31nm,1.2s
W41B Gary Mavity, V 62.75 307 P P 02 52 11.4 +0.6
baz=105,SNR=8.8
CCM Cathedral Cave 62.75 311 P P 02 52 10.0 -0.8
CCM pmax pmax
comp=Z,42nm,1.1s
CCM Cathedral Cave 62.75 311 P P 02 52 10.0 -0.8
CCM IAmb IAmb 02 52 16.9
comp=Z,42nm,1.1s
CCM Cathedral Cave 62.75 311 IAMs_20 IAMs_20 03 13 14.3
comp=Z,2µm,22.0s
CCM Cathedral Cave 62.75 311 P P 02 52 11.2 +0.5
baz=107
WHAR Wooly Hollow 62.81 307 IAmb IAmb 02 52 12.3
comp=Z,63nm,1.5s
L42A Oliver, Polo 62.84 315 IAmb IAmb 02 52 22.6
comp=Z,44nm,1.1s
KARP Karpathos 62.95 52 IAMs_20 IAMs_20 03 19 56.6
comp=Z,1µm,21.0s
X40A Basin Creek Fa 63.05 306 P P 02 52 13.1 +0.3
baz=104
NIE Niedzica 63.12 36 eP P 02 52 15.3 +2.3
OJC Ojcow 63.20 35 eP P 02 52 14.7 +1.2
MGMO Mountain Grove 63.28 309 IAmb IAmb 02 52 15.6
comp=Z,57nm,1.2s
GKP Gorka Klasztor 63.32 31 eP P 02 52 15.5 +1.3
GKP esP pwP 02 52 20.4 -1.6
LSZ Lusaka 63.33 109 LR LR 03 14 02.1
comp=Z,900nm,21.8s,baz=289,slow=30
LSZ Lusaka 63.33 109 P P 02 52 16.0 +0.8
LSZ pmax pmax
comp=Z,56nm,1.6s
LSZ Lusaka 63.33 109 P P 02 52 16.0 +0.8
LSZ IAmb IAmb 02 52 16.9
comp=Z,56nm,1.6s
LSZ Lusaka 63.33 109 IAMs_20 IAMs_20 03 15 04.9
comp=Z,886nm,20.0s
MBAR Mbarara 63.49 93 LR LR 03 17 06.5
comp=Z,2µm,18.9s,baz=285,slow=33
MBAR Mbarara 63.49 93 ceP P 02 52 19.0 +2.7
MBAR pmax pmax
comp=Z,37nm,1.7s
MBAR Mbarara 63.49 93 P P 02 52 16.8 +0.5
MBAR IAmb IAmb 02 52 24.5
comp=Z,34nm,1.2s
MBAR Mbarara 63.49 93 P P 02 52 17.6 +1.3
MBAR P P 02 52 17.6 +1.3
MBAR Mbarara 63.49 93 eP P 02 52 14.2 -2.1
U40A Yellville 63.52 308 IAmb IAmb 02 52 16.8
comp=Z,38nm,1.3s
U40A Yellville 63.52 308 P P 02 52 16.1 +0.2
baz=105,SNR=9.1
JFWS Jewell Farm 63.55 316 IAmb IAmb 02 52 22.4
comp=Z,44nm,0.9s
JFWS Jewell Farm 63.55 316 IAMs_20 IAMs_20 03 14 42.5
comp=Z,2µm,21.0s
JFWS Jewell Farm 63.55 316 P P 02 52 15.4 -0.6
baz=110,SNR=8.7
CRVS Cervenica-Dubn 63.57 37 eP P 02 52 18.0 +2.0
CRVS Cenica-Dubn 63.57 37 eP P 02 52 18.0 +2.0
SFJD Kangerlussuaq 63.58 352 P P 02 52 14.5 -1.2
comp=Z,10nm,1.0s,baz=154,slow=9.8,SNR=3.8
SFJD LR LR 03 13 59.9
comp=Z,683nm,21.0s,baz=158,slow=30
SFJD Kangerlussuaq 63.58 352 P P 02 52 14.5 -1.2
SFJD pmax pmax
comp=Z,41nm,1.4s
SFJD Kangerlussuaq 63.58 352 P P 02 52 14.5 -1.2
SFJD Kangerlussuaq 63.58 352 IAmb IAmb 02 52 43.0
comp=Z,41nm,1.4s
R40A Maddies Statio 63.59 311 IAmb IAmb 02 52 22.5
comp=Z,31nm,1.0s
MIAR Mount Ida 63.65 306 IAmb IAmb 02 52 47.2
comp=Z,63nm,1.9s
MIAR Mount Ida 63.65 306 P P 02 52 17.4 +0.6
baz=104
LBTB Lobatse 63.68 121 LR LR 03 14 50.3
comp=Z,2µm,20.2s,baz=286,slow=31
LBTB Lobatse 63.68 121 P P 02 52 17.2 -0.1
LBTB pmax pmax
comp=Z,57nm,1.2s
LBTB Lobatse 63.68 121 P P 02 52 17.2 -0.1
LBTB IAmb IAmb 02 52 23.2
comp=Z,56nm,1.2s
P40A Paris 63.77 312 IAmb IAmb 02 52 23.6
comp=Z,44nm,0.9s
NATX Nacogdoches 63.95 303 IAMs_20 IAMs_20 03 16 04.0
comp=Z,2µm,20.0s
NATX Nacogdoches 63.95 303 P P 02 52 20.1 +1.3
baz=102
L40A Anamosa 63.95 315 IAmb IAmb 02 52 24.7
comp=Z,37nm,0.9s
UZH Uzhgorod 63.95 37 eP P 02 52 18.2 -0.3
UZH e 02 52 22.9
COWI Conover 63.95 320 IAmb IAmb 02 52 20.1
comp=Z,54nm,1.4s
W39A Magazine 63.97 307 IAmb IAmb 02 52 20.7
comp=Z,48nm,1.4s
W39A Magazine 63.97 307 P P 02 52 20.0 +1.1
baz=104,SNR=7.7
I40A Norwalk 64.14 317 IAmb IAmb 02 52 31.2
comp=Z,50nm,1.2s
S39A Bolivar 64.23 310 IAmb IAmb 02 52 21.7
comp=Z,38nm,1.2s
FRB Frobisher Bay 64.57 343 LR LR 03 18 10.7
comp=Z,228nm,18.1s,baz=168,slow=34
MRWI Hamdab 64.58 72 i P P 02 52 23.5 +0.3
BOSA Boshof 64.61 125 P P 02 52 23.2 -0.2
comp=Z,36nm,1.1s,baz=294,slow=6.1,SNR=15
BOSA LR LR 03 14 46.5
comp=Z,2µm,21.3s,baz=290,slow=31
BOSA Boshof 64.61 125 P P 02 52 23.5 +0.1
BOSA pmax pmax
comp=Z,138nm,1.4s
BOSA Boshof 64.61 125 P P 02 52 23.5 +0.1
ICESG Greenland Ices 64.62 357 i P P 02 52 21.5 -1.4
ICESG IAmb IAmb 02 52 24.7
comp=Z,129nm,1.5s
KWP Kalwaria Pacla 64.62 36 eP P 02 52 24.2 +1.3
JAWL J.Aulia 64.81 75 i P P 02 52 25.6 +0.9
MATP Matopo 64.89 115 LR LR 03 15 28.3
comp=Z,870nm,21.1s,baz=288,slow=31
P38A Dawn 64.90 312 IAmb IAmb 02 52 26.0
comp=Z,44nm,1.3s
MLR Muntele Rosu 65.06 41 P P 02 52 25.0 -1.0
comp=Z,69nm,1.0s,baz=242,slow=3.5,SNR=73
MLR LR LR 03 19 01.1
comp=Z,1µm,21.6s,baz=255,slow=34
MLR Muntele Rosu 65.06 41 IAMs_20 IAMs_20 03 19 01.1
comp=Z,1µm,20.0s
K38A Parkersburg 65.22 315 P P 02 52 27.2 +0.3
K38A IAmb IAmb 02 52 32.5
comp=Z,52nm,1.2s
NB2 NORSAR Subarra 65.24 22 P P 02 52 26.2 -0.6
comp=Z,170nm,2.0s,baz=229,slow=6.5
NB2 NORSAR Subarra 65.24 22 P P 02 52 26.2 -0.6
baz=229,slow=6.5
NOA NORSAR Array B 65.24 22 P P 02 52 25.9 -0.8
comp=Z,9.2nm,1.1s,baz=226,slow=7.2,SNR=22
NOA LR LR 03 18 48.0
comp=Z,606nm,18.7s,baz=235,slow=34
NOA NORSAR Array B 65.24 22 P P 02 52 25.9 -0.8
ISR Istrita 65.33 42 ⇑P P 02 52 28.6 +0.9
ELL Elmali 65.39 52 P P 02 52 29.9 +1.6
ELL pmax pmax
comp=Z,469nm,1.1s
ELL Elmali 65.39 52 P P 02 52 29.9 +1.6
LVV L'vov 65.48 36 eP P 02 52 28.0 -0.5
LVV eS S 03 01 16.2 +3.1
LVV eSS SS 03 05 20.8 -5.9
LVV MLR MLR
comp=Z,300nm,19.0s
HFS Hagfors 65.62 23 P P 02 52 28.0 -1.2
comp=Z,3.4nm,0.7s,baz=179,slow=8.9,SNR=6.0
HFS LR LR 03 18 51.8
comp=Z,297nm,18.9s,baz=228,slow=34
PLOR Plostina 65.64 41 ⇓P P 02 52 30.7 +1.0
TUL1 Leonard 65.73 307 IAmb IAmb 02 52 31.5
comp=Z,50nm,1.2s
TUL1 IAMs_20 IAMs_20 03 16 19.2
comp=Z,2µm,20.0s
TUL1 Leonard 65.73 307 P P 02 52 30.9 +0.5
baz=103,SNR=6.9
ILULI Ilulissat 65.73 353 IAMs_20 IAMs_20 03 17 05.2
comp=Z,1µm,18.0s
TESR Tescani 65.87 41 ⇓P P 02 52 30.6 -0.4
SPMN Marine on St. 66.05 318 IAmb IAmb 02 52 38.3
comp=Z,45nm,0.9s
SPMN Marine on St. 66.05 318 P P 02 52 30.9 -1.3
baz=109,SNR=11
ISP Isparta 66.12 51 i P P 02 52 34.7 +1.7
ISP pmax pmax
comp=Z,26nm,1.0s
ISP Isparta 66.12 51 P P 02 52 33.9 +0.9
ISP IAmb IAmb 02 52 35.9
comp=Z,42nm,1.0s
ISP IAMs_20 IAMs_20 03 21 27.4
comp=Z,2µm,22.0s
USHA Ushuaia 66.20 202 LR LR 03 19 02.4
comp=Z,478nm,21.5s,baz=28,slow=34
SCO Scoresbysund 66.21 4 P P 02 52 34.4 +1.6
SCO pmax pmax
comp=Z,32nm,1.1s
SCO Scoresbysund 66.21 4 P P 02 52 34.4 +1.6
SCO IAmb IAmb 02 52 39.8
comp=Z,32nm,1.1s
MG03 Isla Dawson 66.23 203 P P 02 52 33.1 -0.1
435B Jarrell 66.23 302 IAMs_20 IAMs_20 03 17 02.6
comp=Z,1µm,19.0s
WHTX Lake Whitney, 66.33 303 IAmb IAmb 02 52 35.5
comp=Z,62nm,1.6s
WHTX Lake Whitney, 66.33 303 P P 02 52 35.0 +0.7
baz=100
TIRR Tirgusor 66.37 43 P P 02 52 35.7 +1.4
TIRR pmax pmax
comp=Z,105nm,1.1s
TIRR MLR MLR
comp=Z,1µm,18.0s
TIRR Tirgusor 66.37 43 P P 02 52 35.7 +1.4
TIRR IAMs_20 IAMs_20 03 25 56.0
comp=Z,1µm,18.0s
Z35A Perchaven, San 66.39 304 IAmb IAmb 02 52 36.0
comp=Z,50nm,1.1s
CFR Carcaliu 66.41 42 ⇓P P 02 52 35.4 +0.9
T35A Sooner Cattle 66.51 308 IAmb IAmb 02 52 41.7
comp=Z,52nm,1.2s
SUW Suwalki 66.78 32 eP P 02 52 37.1 +0.4
SUW esP pwP 02 52 42.5 -2.0
SUW Suwalki 66.78 32 eP P 02 52 37.6 +0.9
TLCR 66.87 42 ⇓P P 02 52 37.9 +0.5
FNO Franklin 66.88 306 P P 02 52 37.5 -0.3
FNO IAmb IAmb 02 52 50.3
comp=Z,78nm,1.8s
UPP Uppsala 67.06 25 eP P 02 52 39.3 +1.0
KSU1 Kansas State U 67.08 311 IAmb IAmb 02 52 44.5
comp=Z,29nm,0.8s
KSU1 Kansas State U 67.08 311 IAMs_20 IAMs_20 03 15 49.3
comp=Z,1µm,22.0s
KSU1 Kansas State U 67.08 311 P P 02 52 38.7 -0.3
baz=104
MDUB Mudurnu 67.26 48 P P 02 52 41.1 +0.9
MILM Milestii Mici 67.41 41 ePP PP 02 55 04.0 -5.5
MILM eS S 03 01 34.0 -2.6
KIS Kishinev 67.44 41 LRM MLR 03 30 10.0
comp=Z,200nm,16.5s
KIS Kishinev 67.44 41 c iP P 02 52 40.0 -1.0
KIS i 02 52 46.0
KIS eS S 03 01 30.0 -6.9
KIS pmax pmax
comp=Z,140nm,1.7s
KIS Kishinev 67.44 41 ⇑i P P 02 52 40.0 -1.0
comp=Z,140nm,1.7s
KIS Kishinev 67.44 41 eS S 03 01 30.0 -6.9
833A Chaparral WMA, 67.44 299 IAmb IAmb 02 52 43.4
comp=Z,71nm,1.4s
833A Chaparral WMA, 67.44 299 P P 02 52 41.5 0.0
baz=97
B35A Bob, Littlefor 67.68 321 IAmb IAmb 02 52 48.3
comp=Z,40nm,1.1s
CSS Mathiatis 67.75 54 P P 02 52 44.1 +0.8
LODK Lodwar 67.80 88 P P 02 52 44.5 +0.5
LODK IAmb IAmb 02 52 52.4
comp=Z,78nm,1.6s
LODK Lodwar 67.80 88 P P 02 52 45.6 +1.6
SNR=26
LODK Lodwar 67.80 88 eP P 02 52 40.5 -3.5
PABE Paberze 67.85 31 IAMs_20 IAMs_20 03 19 33.5
comp=Z,1µm,20.0s
PABE Paberze 67.85 31 eP P 02 52 44.8 +1.3
WMOK Wichita Mounta 67.89 306 P P 02 52 44.2 0.0
baz=100,SNR=6.7
SUMG Summit 68.05 358 P P 02 52 45.0 +0.1
SUMG pmax pmax
comp=Z,65nm,1.2s
SUMG Summit 68.05 358 i P P 02 52 44.0 -0.9
SUMG IAmb IAmb 02 52 46.8
comp=Z,100nm,1.6s
SUMG Summit 68.05 358 P P 02 52 45.0 +0.1
JCT Junction City 68.08 301 IAmb IAmb 02 52 47.0
comp=Z,72nm,1.6s
JCT IAMs_20 IAMs_20 03 22 05.0
comp=Z,865nm,20.0s
JCT Junction City 68.08 301 P P 02 52 46.3 +0.8
baz=98,SNR=6.5
JMIC Jan Mayen 68.12 8 LR LR 03 17 04.6
comp=Z,290nm,19.8s,baz=265,slow=31
ECSD EROS Data Cent 68.23 315 IAMs_20 IAMs_20 03 17 37.3
comp=Z,1µm,19.0s
ECSD EROS Data Cent 68.23 315 P P 02 52 44.8 -1.3
baz=105,SNR=17
ABTX Abilene, Hawle 68.25 303 IAmb IAmb 02 52 47.8
comp=Z,48nm,1.4s
ABTX Abilene, Hawle 68.25 303 P P 02 52 44.8 -1.7
baz=99,SNR=8.6
EIL Elat 68.29 60 P P 02 52 47.8 +1.0
comp=Z,36nm,1.4s,baz=254,slow=5.0,SNR=30

EIL LR LR 03 23 37.7
comp=Z,3µm,18.1s,baz=272,slow=37
**ANTO Ankara 68.31 49** P **P 02 52 47.9 +1.1**
ANTO pmax pmax
comp=Z,90nm,1.2s
ANTO MLR MLR
comp=Z,600nm,19.0s
**ANTO Ankara 68.31 49** P **P 02 52 47.9 +1.1**
**BGNE Belgrade 68.76 313** P **P 02 52 48.5 -1.0**
baz=103,SNR=16
**AKASG Malin Array Be 68.90 37** P **P 02 52 49.6 -0.5**
comp=Z,8.6nm,0.8s,baz=247,slow=7.3,SNR=71
AKASG LR LR 03 22 55.5
comp=Z,416nm,19.1s,baz=237,slow=36
**AKBB Malin Array Si 68.90 37***ce*P **P 02 52 50.3 +0.1**
**BR131 Keskin Array S 68.92 49** *i* P **P 02 52 52.1 +1.4**
**BR131 Keskin Array S 68.92 49** P **P 02 52 51.7 +1.0**
SNR=27
BR131 P **P 02 52 51.7 +1.0**
SNR=27
**BRTR Keskin Array B 68.92 49** P **P 02 52 51.1 +0.4**
comp=Z,19nm,1.0s,baz=245,slow=4.5,SNR=84
BRTR PP **PP 02 55 21.0 -1.9**
comp=Z,3.6nm,1.3s,baz=231,slow=9.1,SNR=3.4
BRTR LR LR 03 24 58.2
comp=Z,668nm,18.9s,baz=254,slow=38
**BRTR Keskin Array B 68.92 49** PP 02 55 21.0 -1.9
**IIGN Ignalina 68.95 32** *eP* **P 02 52 52.2 +1.9**
**AGMN Agassiz Nation 69.01 320** P **P 02 52 50.5 -0.5**
AGMN IAmb IAmb 02 52 51.8
comp=Z,40nm,1.1s
**AGMN Agassiz Nation 69.01 320** P **P 02 52 49.4 -1.5**
baz=108,SNR=11
**GHAJ Ghor Haditha 69.03 58** P **P 02 52 53.0 +1.7**
GHAJ IAMs_20 IAMs_20 03 24 11.8
comp=Z,1µm,19.0s
**NACGM Naroch 69.06 32** *i* P **P 02 52 50.4 -0.7**
**MMAI Mount Meron Ar 69.13 56** P **P 02 52 53.0 +0.9**
comp=Z,54nm,1.3s,baz=38,slow=6.9,SNR=24
MMAI LR LR 03 26 33.3
comp=Z,510nm,18.8s,baz=61,slow=39
**IDID Didziasalis 69.20 32** *eP* **P 02 52 53.9 +2.0**
**MTSE Matsula 69.22 28** *eP* **P 02 52 52.6 +0.7**
**MQOL MQOL 69.39 70** *i* P **P 02 52 53.8 +0.1**
MQOL *i* 02 53 00.8
baz=208,slow=18
**CBKS Cedar Bluff 69.40 310** P **P 02 52 53.9 +0.3**
baz=101,SNR=10
**QRWL Qaraoun 69.44 56** *eP* **P 02 52 54.8 +0.8**
**BHL Bhannes 69.47 56** *eP* **P 02 52 54.2 0.0**
**K31A O'Neill 69.47 314** IAmb IAmb 02 53 00.1
comp=Z,52nm,0.9s
**MNK Minsk 69.50 33** *i* P **P 02 52 53.2 -0.6**
MNK *i* 02 55 26.7
MNK *i* PPP PPP 02 57 08.2
MNK *i* S **S 03 02 01.1 0.0**
MNK *i* SS **SS 03 06 28.2 -0.4**
MNK pmax pmax
comp=Z,23nm,1.1s
MNK pmax pmax
comp=E,4.0nm,1.7s
MNK pmax pmax
comp=N,17nm,1.1s
MNK MLR MLR
comp=N,105nm,16.0s
MNK MLR MLR
comp=E,37nm,21.0s
MNK MLR MLR
comp=Z,348nm,20.0s
**MNK Minsk 69.50 33** *i* P **P 02 52 53.2 -0.5**
comp=E,4.0nm,1.7s
MNK *i* P **P 02 52 53.2 -0.5**
comp=N,17nm,1.1s
MNK *i* P **P 02 52 53.2 -0.5**
comp=Z,23nm,1.1s,baz=248
MNK *i* PP **PP 02 55 26.8 -0.6**
MNK *i* PPP PPP 02 57 08.3
MNK *i* S **S 03 02 01.2 0.0**
MNK *i* SS **SS 03 06 28.3 -0.4**
MNK *i* SSS SSS 03 09 49.0
MNK *i* LQ LQ 03 17 34.6
MNK *i* LR LR 03 22 54.6
MNK *i* LRM MLR 03 27 12.0
comp=N,105nm,16.4s
MNK *i* LRM MLR 03 27 17.9
comp=E,37nm,21.0s
MNK *i* LRM MLR 03 27 25.2
comp=Z,348nm,19.7s
**ULM Lac du Bonnet 69.62 322** P **P 02 52 52.5 -2.1**
comp=Z,7.3nm,0.6s,baz=99,slow=5.0,SNR=12
ULM LR LR 03 17 34.4
comp=Z,403nm,21.8s,baz=111,slow=31
**ULM Lac du Bonnet 69.62 322** P **P 02 52 52.8 -1.8**
ULM pmax pmax
comp=Z,83nm,1.5s
**ULM Lac du Bonnet 69.62 322** P **P 02 52 52.8 -1.8**
ULM IAmb IAmb 02 52 55.2
comp=Z,83nm,1.5s
**UPNV Upernavik 69.68 353** *eP* **P 02 52 56.4 +1.8**
UPNV IAmb IAmb 02 53 00.7
comp=Z,37nm,1.2s
**ZAIG Zacatecas 69.78 292** P **P 02 52 57.5 +1.0**
**KMBO Kilima Mbogo 70.03 93** P **P 02 53 00.6 +2.5**
comp=Z,15nm,1.3s,baz=266,slow=6.4,SNR=30
KMBO LR LR 03 21 08.2
comp=Z,2µm,18.9s,baz=275,slow=34
**KMBO Kilima Mbogo 70.03 93** P **P 02 52 59.3 +1.2**
**KMBO Kilima Mbogo 70.03 93** *eP* **P 02 52 58.0 -0.1**
**KMBO Kilima Mbogo 70.03 93** *i* P **P 02 52 59.0 +0.9**
SNR=13
**SUSD Miller 70.04 316** IAmb IAmb 02 53 03.1
comp=Z,46nm,1.0s
**DBG Daneborg 70.08 4** *i* P **P 02 52 58.4 +1.4**
DBG IAmb IAmb 02 53 04.4
comp=Z,219nm,2.4s
**ASF Jabal al Asfar 70.27 58** P **P 02 53 00.8 +1.7**
comp=Z,40nm,1.2s,baz=269,slow=2.0,SNR=34
**AMTX Amarillo 70.27 305** P **P 02 52 59.8 +0.7**
baz=99
**SIM Simferopol' 70.42 44** *eP* **P 02 52 58.4 -1.3**
SIM pmax pmax
comp=Z,28nm,1.0s
**VSU Vasula 70.48 29** *eP* **P 02 53 01.5 +1.8**
**DILA Dilla 70.55 85** *eP* **P 02 53 01.4 +0.1**
**FURI Furi 70.85 82** P **P 02 53 04.6 +1.4**
**FURI Furi 70.85 82** IAMs_20 IAMs_20 03 21 01.2
comp=Z,1µm,20.0s
**FURI Furi 70.85 82** *eP* **P 02 53 03.7 +0.5**
**AAE Adis Abeba 70.93 82** *eP* **P 02 53 02.2 -1.5**
**KIBK Kibwezi 70.93 94** P **P 02 53 04.8 +1.3**
KIBK IAmb IAmb 02 53 12.3
comp=Z,56nm,1.6s
**KIBK Kibwezi 70.93 94** P **P 02 53 05.7 +2.2**
SNR=9.6
**MSTX Muleshoe 71.04 304** P **P 02 53 04.7 +0.9**
baz=98,SNR=10
**TXAR Lajitas Array 71.28 299** P **P 02 53 04.7 -0.7**
comp=Z,1.5nm,0.8s,baz=111,slow=6.9,SNR=13
TXAR LR LR 03 24 05.1
comp=Z,185nm,20.6s,baz=70,slow=36
**TXAR Lajitas Array 71.28 299** P **P 02 53 05.1 -0.3**
**TXAR Lajitas Array 71.28 299** P **P 02 53 05.1 -0.3**
**FINES FINESS Array B 71.46 26** P **P 02 53 05.6 0.0**
comp=Z,5.0nm,0.8s,baz=198,slow=2.6,SNR=8.8
FINES LR LR 03 23 16.1
comp=Z,176nm,18.5s,baz=238,slow=35
**OGNE Ogallala 71.53 312** P **P 02 53 06.6 0.0**
OGNE IAMs_20 IAMs_20 03 18 52.8
comp=Z,1µm,22.0s
**OGNE Ogallala 71.53 312** P **P 02 53 08.0 +1.4**
baz=100
**FCC Fort Churchill 71.62 331** P **P 02 53 06.3 -0.4**
FCC pmax pmax
comp=Z,27nm,0.9s
**FCC Fort Churchill 71.62 331** P **P 02 53 06.3 -0.4**
FCC IAmb IAmb 02 53 13.0
comp=Z,27nm,0.8s
**KSCO Kaye Shedlock' 71.65 310** IAmb IAmb 02 53 09.7
comp=Z,79nm,1.2s
**KSCO Kaye Shedlock' 71.65 310** P **P 02 53 08.9 +1.5**
baz=99,SNR=6.2
**DESE Dese 71.73 80** *eP* **P 02 53 10.7 +2.1**
**ANKE Ethiopia-Afar 71.87 81** *eP* **P 02 53 08.1 -1.4**
**DAG Danmarks Havn 72.58 3** *i* P **P 02 53 12.0 -0.1**
DAG IAmb IAmb 02 53 12.8
comp=Z,48nm,1.6s

**ANN Anapa 72.69 45** *eP* **P 02 53 11.3 -2.0**
ANN pmax pmax
comp=Z,156nm,1.5s
**T25A Trinidad 72.78 307** IAmb IAmb 02 53 17.0
comp=Z,44nm,1.3s
**T25A Trinidad 72.78 307** P **P 02 53 16.0 +1.6**
baz=98,SNR=10
**HPIG 72.85 297** P **P 02 53 15.5 +0.5**
**MNTX Cornudas Mount 72.97 302** P **P 02 53 16.1 +0.8**
baz=95,SNR=7.5
**NEEM North Greenlan 73.52 356** *i* P **P 02 53 17.3 -0.8**
NEEM IAmb IAmb 02 53 20.7
comp=Z,260nm,1.9s
**RSSD Black Hills 73.54 315** P **P 02 53 18.6 -0.1**
RSSD pmax pmax
comp=Z,30nm,1.9s
**RSSD Black Hills 73.54 315** P **P 02 53 18.6 -0.1**
**RSSD Black Hills 73.54 315** IAMs_20 IAMs_20 03 20 29.0
comp=Z,1µm,21.0s
**Q24A Divide 73.59 309** IAmb IAmb 02 53 22.0
comp=Z,77nm,1.2s
**Q24A Divide 73.59 309** P **P 02 53 21.5 +2.2**
baz=98,SNR=12
**SDCO Great Sand Dun 73.71 308** P **P 02 53 20.4 +0.4**
baz=97,SNR=20
**EPT El Paso 73.93 302** IAMs_20 IAMs_20 03 24 04.4
comp=Z,1µm,19.0s
**ISCO Idaho Springs 74.06 310** IAmb IAmb 02 53 24.9
comp=Z,51nm,1.2s
**ISCO Idaho Springs 74.06 310** P **P 02 53 22.6 +0.6**
baz=98,SNR=26
**SOC Sochi 74.10 46***d i*P **P 02 53 20.7 -1.0**
SOC *e* 02 56 03.2
SOC *e*PPP PPP 02 57 52.2
SOC *e*S **S 03 02 54.4 -0.2**
SOC *e*SS **SS 03 07 39.9 +0.2**
SOC pmax pmax
comp=Z,51nm,0.9s
SOC MLR MLR
comp=Z,411nm,21.0s
**PHWY Pilot Hill 74.14 312** IAmb IAmb 02 53 29.8
comp=Z,85nm,1.9s
**ANMO Albuquerque 74.17 305** LR LR 03 22 07.5
comp=Z,3µm,20.9s,baz=93,slow=33
**ANMO Albuquerque 74.17 305***ce*P **P 02 53 22.7 +0.1**
ANMO pmax pmax
comp=Z,39nm,1.6s
**ANMO Albuquerque 74.17 305** P **P 02 53 23.1 +0.5**
ANMO IAmb IAmb 02 53 35.3
comp=Z,65nm,1.6s
**ANMO Albuquerque 74.17 305** P **P 02 53 23.5 +0.9**
baz=96
**DGMT Dagmar 74.44 319** P **P 02 53 23.9 +0.3**
baz=101,SNR=28
**N23A Red Feather La 74.45 311** IAmb IAmb 02 53 27.6
comp=Z,59nm,1.1s
**N23A Red Feather La 74.45 311** P **P 02 53 25.0 +0.8**
baz=98,SNR=30
**OBN Obninsk 74.46 34** P **P 02 53 23.8 +0.3**
comp=Z,1.7nm,0.4s,baz=344,slow=2.1,SNR=8.9
**OBN Obninsk 74.46 34** *eP* **P 02 53 23.7 +0.3**
OBN *e**PP **sP 02 53 27.6 +0.3**
OBN *e**SP **pwP 02 53 30.6 -0.7**
OBN *e* 02 53 39.2
OBN *e* 02 56 07.6
OBN pmax pmax
comp=Z,87nm,2.1s
OBN MLR MLR
comp=Z,329nm,18.0s
**OBN Obninsk 74.46 34** P **P 02 53 23.8 +0.3**
**OBN Obninsk 74.46 34** IAmb IAmb 02 53 30.6
comp=Z,74nm,1.5s
OBN IAMs_20 IAMs_20 03 23 38.4
comp=Z,534nm,21.0s
**FFC Flin Flon 74.46 326** P **P 02 53 23.8 +0.2**
FFC pmax pmax
comp=Z,57nm,1.1s
**FFC Flin Flon 74.46 326** P **P 02 53 23.8 +0.2**
FFC IAmb IAmb 02 53 30.3
comp=Z,57nm,1.1s
**TULEG Thule 74.64 352** *i* P **P 02 53 23.3 -0.9**
TULEG IAmb IAmb 02 53 25.4
comp=Z,111nm,1.6s
**TULEG Thule 74.64 352** IAmb IAmb 02 53 30.9
comp=Z,91nm,1.5s
TULEG IAMs_20 IAMs_20 03 22 43.4
comp=Z,725nm,19.0s
**S22A 4UR Ranch, Cre 74.76 308** P **P 02 53 28.1 +2.0**
baz=96,SNR=15
**ATD Arta Tunnel 74.87 79** LR LR 03 23 41.1
comp=Z,808nm,21.6s,baz=266,slow=34
**ATD Arta Tunnel 74.87 79** P **P 02 53 28.2 +1.4**
ATD IAMs_20 IAMs_20 03 24 00.9
comp=Z,750nm,20.0s
**ATD Arta Tunnel 74.87 79** *eP* **P 02 53 26.8 0.0**
**ARCES ARCESS Array B 75.00 18** P **P 02 53 25.7 -0.7**
comp=Z,8.5nm,1.0s,baz=308,slow=2.8,SNR=8.1
ARCES LR LR 03 23 00.7
comp=Z,206nm,19.2s,baz=235,slow=33
**SMCO Snowmass 75.03 309** IAmb IAmb 02 53 30.5
comp=Z,60nm,1.4s
**121A Cooks Peak, D 75.07 302** P **P 02 53 30.0 +2.2**
baz=94,SNR=12
**VSR Storozhevoye 75.09 38** *eP* **P 02 53 26.8 -0.5**
VSR pmax pmax
comp=Z,90nm,1.9s
VSR MLR MLR
comp=Z,510nm,19.0s
**K22A Casper 75.11 313** IAmb IAmb 02 53 34.6
comp=Z,73nm,1.6s
**K22A Casper 75.11 313** P **P 02 53 28.5 +0.6**
baz=98,SNR=8.3
**VORD Divnogorie 75.12 38** *eP* **P 02 53 28.7 +1.3**
VORD pmax pmax
comp=Z,20nm,0.8s
**GURO Guroymak-BITLI 75.18 51** P **P 02 53 29.6 +1.3**
GURO IAmb IAmb 02 53 36.8
comp=Z,69nm,1.4s
**MOS Moscow 75.19 33** *eP* **P 02 53 25.5 -2.3**
MOS *e* 02 53 43.3
MOS pmax pmax
comp=Z,90nm,1.6s
MOS pmax pmax
comp=Z,400nm,2.4s
MOS MLR MLR
comp=Z,600nm,18.0s
**VORR Voronezh 75.21 38** *eP* **P 02 53 28.9 +0.9**
VORR pmax pmax
comp=Z,207nm,2.2s
**LPSR Galich'ya Gora 75.23 37** *eP* **P 02 53 27.3 -0.8**
LPSR pmax pmax
comp=Z,30nm,1.7s
**LAO LASA Array 75.48 317** IAmb IAmb 02 53 37.4
comp=Z,73nm,1.1s
**LAO LASA Array 75.48 317** P **P 02 53 30.3 +0.6**
baz=99,SNR=23
**RWWY Rawlins 75.50 312** IAmb IAmb 02 53 31.8
comp=Z,92nm,1.5s
**MVCO Mesa Verde 76.03 307** IAmb IAmb 02 53 46.2
comp=Z,80nm,1.6s
**MVCO Mesa Verde 76.03 307** P **P 02 53 33.6 +0.3**
baz=95,SNR=10.0
**O20A White River Ci 76.10 310** IAmb IAmb 02 53 41.3
comp=Z,54nm,1.1s
**O20A White River Ci 76.10 310** P **P 02 53 34.2 +0.6**
baz=96,SNR=17
**PV15 Paradox Valley 76.11 308** IAmb IAmb 02 53 45.7
comp=Z,64nm,1.8s
**NEY Neytrino 76.22 47**⇑ *i*P **P 02 53 37.1 +2.9**
NEY pmax pmax
comp=Z,6.0nm,1.3s
**PV07 Paradox Valley 76.25 308** IAmb IAmb 02 53 47.1
comp=Z,74nm,2.0s
**KIV Kislovodsk 76.28 46** *eP* **P 02 53 35.0 +0.6**
KIV *e* 02 56 26.2
KIV *e*S **S 03 03 20.4 +1.3**
KIV *e*SS **SS 03 08 15.1 +2.1**
KIV pmax pmax
comp=Z,31nm,1.1s
**KIV Kislovodsk 76.28 46** P **P 02 53 36.0 +1.6**
**KIV Kislovodsk 76.28 46** P **P 02 53 35.0 +0.6**
**KIV Kislovodsk 76.28 46** P **P 02 53 33.9 -0.5**
**KBZ Khabaz 76.41 46** P **P 02 53 34.9 0.0**
comp=Z,7.3nm,1.1s,baz=273,slow=4.9,SNR=20
KBZ LR LR 03 29 28.0
comp=Z,292nm,20.9s,baz=272,slow=38

**KBZ Khabaz 76.41 46***ce*P **P 02 53 36.2 +1.3**
KBZ pmax pmax
comp=Z,5.0nm,1.0s
**PV10 Paradox Valley 76.56 308** IAmb IAmb 02 53 39.2
comp=Z,91nm,1.4s
**SLBS Sierra La Lagu 76.59 293** IAMs_20 IAMs_20 03 31 13.0
comp=Z,1µm,19.0s
**GOF Gofitskoye 76.67 45**⇑ *i*P **P 02 53 36.9 +0.5**
GOF pmax pmax
comp=Z,88nm,1.5s
**VRH Novokhopyorsk 76.67 38** *eP* **P 02 53 35.9 -0.4**
VRH pmax pmax
comp=Z,30nm,1.4s
VRH MLR MLR
comp=Z,560nm,23.0s
**ONI Oni 76.68 47** IAmb IAmb 02 53 44.5
comp=Z,100nm,1.6s
**APA Apatity 76.81 21**⇓ *i*P **P 02 53 40.2 +3.4**
APA *i* 02 53 54.1
APA pmax pmax
comp=Z,15nm,0.9s
**NCK Nalchik 76.88 47**⇓ *i*P **P 02 53 39.9 +2.2**
NCK pmax pmax
comp=Z,35nm,1.7s
**LPIG La Paz 76.93 294** LR LR 03 29 25.1
comp=Z,269nm,18.2s,baz=89,slow=37
**X18A Snowflake 77.01 304** IAmb IAmb 02 53 41.8
comp=Z,58nm,1.6s
**ZEI Tsey 77.03 47** *eP* **P 02 53 39.6 +0.8**
ZEI pmax pmax
comp=Z,37nm,1.8s
**RDMU Red Mountain 77.15 310** IAmb IAmb 02 53 51.8
comp=Z,65nm,1.4s
**RAYN Ar Rayn 77.31 67** P **P 02 53 41.3 +0.7**
RAYN pmax pmax
comp=Z,135nm,1.9s
RAYN MLR MLR
comp=Z,3µm,20.0s
**RAYN Ar Rayn 77.31 67** P **P 02 53 41.3 +0.7**
**RAYN Ar Rayn 77.31 67** P **P 02 53 42.4 +1.8**
**RAYN Ar Rayn 77.31 67** *i* P **P 02 53 40.7 +0.2**
SNR=23
**BW06 Boulder Array 77.35 313** IAmb IAmb 02 53 52.4
comp=Z,63nm,1.7s
BW06 IAMs_20 IAMs_20 03 22 20.7
comp=Z,1µm,21.0s
**BW06 Boulder Array 77.35 313** P **P 02 53 40.1 -0.6**
baz=96,SNR=14
**PD31 Pinedale Array 77.35 313** IAmb IAmb 02 53 52.4
comp=Z,56nm,1.7s
**PDAR Pinedale Array 77.35 313** P **P 02 53 39.9 -0.8**
comp=Z,7.1nm,1.1s,baz=108,slow=5.8,SNR=18
PDAR LR LR 03 23 52.0
comp=Z,833nm,21.3s,baz=118,slow=33
**NOR Nord 77.36 2** *i* P **P 02 53 40.2 +0.6**
NOR IAmb IAmb 02 53 41.4
comp=Z,70nm,1.6s
**LVZ Lovozero 77.37 21** P **P 02 53 41.1 +1.1**
LVZ pmax pmax
comp=Z,96nm,1.5s
**LVZ Lovozero 77.37 21** P **P 02 53 41.1 +1.1**
LVZ IAmb IAmb 02 53 42.7
comp=Z,96nm,1.5s
**RLMT Red Lodge 77.38 315** IAmb IAmb 02 53 52.9
comp=Z,52nm,1.2s
**KLMR Klimovskoe 77.39 29** *eP* **P 02 53 38.9 -1.2**
KLMR pmax pmax
comp=Z,61nm,1.3s
**KLMR Klimovskoe 77.39 29** *eP* **P 02 53 39.0 -1.2**
KLMR AMP 02 53 42.4
comp=Z,61nm,1.3s
KLMR SSS SSS 03 11 56.5
KLMR SSS SSS 03 11 56.5
KLMR LQ LQ 03 21 20.6
KLMR LQ LQ 03 21 20.6
KLMR LR LR 03 23 32.9
**GNI Garni 77.42 50** P **P 02 53 42.6 +1.6**
comp=Z,7.6nm,0.9s,baz=161,slow=0.6,SNR=20
GNI LR LR 03 31 01.6
comp=Z,512nm,18.7s,baz=264,slow=38
**GNI Garni 77.42 50***ce*P **P 02 53 42.4 +1.4**
GNI pmax pmax
comp=Z,90nm,1.6s
**GNI Garni 77.42 50** P **P 02 53 41.9 +0.9**
**GNI Garni 77.42 50** IAMs_20 IAMs_20 03 30 50.5
comp=Z,579nm,19.0s
**GNI Garni 77.42 50** P **P 02 53 42.4 +1.4**
GNI P **P 02 53 42.4 +1.4**
**P18A Preston Nutter 77.59 309** IAmb IAmb 02 53 44.9
comp=Z,76nm,1.4s
**TUC Tucson 77.59 302** P **P 02 53 42.2 +0.2**
TUC pmax pmax
comp=Z,30nm,1.4s
**TUC Tucson 77.59 302** P **P 02 53 42.2 +0.2**
**TUC Tucson 77.59 302** IAMs_20 IAMs_20 03 19 54.3
comp=Z,911nm,19.0s
**TUC Tucson 77.59 302** P **P 02 53 42.2 +0.2**
baz=93
**KBS Kingsbay 77.61 8** P **P 02 53 42.0 +0.9**
KBS pmax pmax
comp=Z,67nm,1.4s
**KBS Kingsbay 77.61 8** P **P 02 53 42.0 +0.9**
KBS IAmb IAmb 02 53 49.3
comp=Z,66nm,1.4s
**SPITS Spitsbergen Ar 77.77 9** LR LR 03 21 06.0
comp=Z,304nm,20.1s,baz=72,slow=30
**SRU San Rafael Swe 77.77 309** IAmb IAmb 02 53 55.5
comp=Z,66nm,1.5s
**P17A Butcher Ranch, 77.96 309** IAmb IAmb 02 53 56.4
comp=Z,69nm,1.6s
**YMP Mirror Lake Pl 77.97 315** IAmb IAmb 02 54 02.0
comp=Z,64nm,1.4s
**EGMT Eagleton 78.04 318** P **P 02 53 43.6 -0.6**
baz=97,SNR=11
**LKWY Lake 78.13 314** IAmb IAmb 02 53 58.1
comp=Z,88nm,1.5s
**LOHW Long Hollow 78.19 313** IAmb IAmb 02 53 57.3
comp=Z,74nm,1.4s
**WUAZ Wupatki 78.23 305** P **P 02 53 46.8 +1.1**
WUAZ IAmb IAmb 02 53 58.6
comp=Z,45nm,1.2s
**WUAZ Wupatki 78.23 305** P **P 02 53 47.8 +2.2**
baz=93,SNR=14
**X16A Lo Mia Camp, P 78.23 304** IAmb IAmb 02 53 59.0
comp=Z,58nm,1.6s
**H17A Grant Village 78.24 314** P **P 02 53 46.8 +1.2**
baz=95,SNR=11
**SNOW Snow King Moun 78.28 313** IAmb IAmb 02 53 58.0
comp=Z,78nm,1.4s
**FLWY Flagg Ranch 78.30 314** IAmb IAmb 02 53 48.5
comp=Z,92nm,1.4s
**TMUT Trail Mountain 78.31 309** IAmb IAmb 02 53 48.8
comp=Z,96nm,1.8s
**YNR Norris Junctio 78.34 315** IAmb IAmb 02 54 01.3
comp=Z,63nm,1.7s
**REDW Red Top Meadow 78.35 313** IAmb IAmb 02 53 58.2
comp=Z,97nm,1.6s
**TPAW Teton Pass 78.43 313** IAmb IAmb 02 53 57.8
comp=Z,79nm,1.6s
**GROC Groznyy 78.45 47** *eP* **P 02 53 45.2 -1.3**
GROC *e* 02 53 53.1
GROC *e* 02 56 46.9
GROC pmax pmax
comp=Z,33nm,1.7s
**AHID Auburn Hatcher 78.48 313** IAmb IAmb 02 53 58.7
comp=Z,78nm,1.6s
**SNAA Sanae 78.51 171** LR LR 03 22 35.7
comp=Z,135nm,18.7s,baz=306,slow=31
**SNAA Sanae 78.51 171***ce*P **P 02 53 45.9 -0.3**
SNAA pmax pmax
comp=Z,14nm,1.0s
**RES Resolute Bay 78.52 346** P **P 02 53 46.2 0.0**
comp=Z,16nm,1.1s,baz=103,slow=6.7,SNR=20
**RES Resolute Bay 78.52 346** P **P 02 53 46.4 +0.2**
RES pmax pmax
comp=Z,57nm,1.3s
**RES Resolute Bay 78.52 346** P **P 02 53 46.4 +0.2**
RES IAmb IAmb 02 53 53.4
comp=Z,57nm,1.2s
**HWUT Hardware Ranch 78.74 311** IAmb IAmb 02 53 55.5
comp=Z,35nm,0.9s
**MTPU Mount Pierson 79.00 308** IAmb IAmb 02 54 03.1
comp=Z,105nm,1.5s
**U15A North Rim 79.02 306** IAmb IAmb 02 54 03.2
comp=Z,70nm,1.8s
**PKCU Pink Cliffs 79.08 307** IAmb IAmb 02 54 44.3

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|---|---|---|---|---|---|---|---|---|
| SONM | | | | PP | **PP** | **03 01 33.6** | **-3.3** | |
| | comp=Z,1.8nm,1.1s,baz=288,slow=5.5,SNR=7.0 | | | | | | | |
| **SONM** | **Songino Array** | **116.67** | **30** | PKIKP | **PKPdf** | **03 00 29.9** | **-0.1** | |
| **SONM** | **Songino Array** | **116.67** | **30** | | **PKPdf** | **03 00 29.9** | **-0.1** | |
| **ULN** | **Ulaanbaatar** | **116.97** | **29** | IAMs_20 | IAMs_20 | 03 52 04.0 | | |
| | comp=Z,608nm,20.0s | | | | | | | |
| **PPT2** | **Papeete2** | **117.05** | **253** | *e*PS | PS | 03 11 25.7 | +0.4 | |
| | comp=Z,268nm,28.5s | | | | | | | |
| PPT2 | | | | *e*SS | SS | 03 17 52.5 | +2.2 | |
| | comp=Z,545nm,27.8s | | | | | | | |
| **PPT2** | **Papeete2** | **117.05** | **253** | *e*LR | LR | 03 35 56.0 | | |
| | comp=Z,659nm,21.8s | | | | | | | |
| **GTA** | **Gaotai** | **118.12** | **40** | *e*PKP | **PKiKP** | **03 00 33.5** | **+0.4** | |
| GTA | | | | PP | PP | 03 01 57.0 | +10 | |
| GTA | | | | AMB | AMB | | | |
| | comp=Z,150nm,8.0s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,260nm,22.2s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,480nm,22.5s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,370nm,22.2s | | | | | | | |
| **SHL** | **Shillong** | **118.43** | **58** | PKIKP | **PKPdf** | **03 00 32.2** | **-1.9** | |
| **SHL** | **Shillong** | **118.43** | **58** | PKPdf | **PKPdf** | **03 00 32.2** | **-1.9** | |
| **HIA** | **Hailar** | **121.27** | **21** | PKIKP | **PKiKP** | **03 00 39.0** | **+0.2** | |
| HIA | | | | MLR | MLR | | | |
| | comp=Z,300nm,20.0s | | | | | | | |
| **HIA** | **Hailar** | **121.27** | **21** | PKPdf | **PKiKP** | **03 00 39.0** | **+0.2** | |
| **HIA** | **Hailar** | **121.27** | **21** | IAMs_20 | IAMs_20 | 03 52 53.6 | | |
| | comp=Z,288nm,20.0s | | | | | | | |
| **LZH** | **Lanzhou** | **122.63** | **41** | *e*PKP | **PKiKP** | **03 00 42.5** | **+0.5** | |
| LZH | | | | LR | LR | | | |
| | comp=Z,210nm,15.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,480nm,15.8s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,390nm,17.3s | | | | | | | |
| **BTO** | **Baotou** | **123.52** | **34** | *e*PKP | **PKPdf** | **03 00 40.0** | **-3.4** | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2μm,20.4s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2μm,17.7s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **124.15** | **27** | *e*PKP | **PKiKP** | **03 00 50.0** | **+5.3** | |
| XLT | | | | PP | PP | 03 02 38.0 | +10 | |
| **HHC** | **Hu-ho-hao-te** | **124.19** | **32** | *e*PKP | **PKPdf** | **03 00 41.5** | **-3.1** | |
| **KLR** | **Kul'dur** | **124.74** | **12** | PKP | **PKPdf** | **03 00 44.4** | **-0.9** | |
| | comp=Z,2.2nm,0.9s,baz=286,slow=5.4,SNR=5.5 | | | | | | | |
| **KLR** | **Kul'dur** | **124.74** | **12** | *c i*PKIKP | **PKiKP** | **03 00 45.8** | **+0.2** | |
| **CD2** | **Chengdu** | **125.45** | **47** | PKP | **PKPdf** | **03 00 47.0** | **-0.3** | |
| CD2 | | | | sPKP | | 03 00 53.0 | | |
| CD2 | | | | SKKS | | 03 09 34.8 | | |
| CD2 | | | | AMB | AMB | | | |
| | comp=Z,130nm,6.0s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,280nm,15.7s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,280nm,11.3s | | | | | | | |
| **PZH** | **PanZhiHua** | **126.13** | **52** | PKP | **PKPdf** | **03 00 48.5** | **-0.3** | |
| PZH | | | | sPKP | | 03 00 54.0 | | |
| PZH | | | | PP | **PP** | **03 02 44.5** | **+2.2** | |
| PZH | | | | SS | SS | 03 19 44.3 | -0.8 | |
| PZH | | | | AMB | AMB | | | |
| | comp=Z,140nm,4.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,290nm,19.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,250nm,18.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,290nm,20.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **126.95** | **62** | IAMs_20 | IAMs_20 | 04 01 13.1 | | |
| | comp=Z,471nm,21.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.08** | **63** | PKP | **PKPdf** | **03 00 50.4** | **-0.2** | |
| | comp=Z,2.2nm,0.3s,baz=297,slow=3.4,SNR=15 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **127.08** | **63** | PKIKP | **PKPdf** | **03 00 50.3** | **-0.3** | |
| **CMAR** | **Chiang Mai Arr** | **127.08** | **63** | PKPdf | **PKPdf** | **03 00 50.3** | **-0.3** | |
| **KMI** | **Kunming** | **127.57** | **53** | ⇑PKP | **PKPdf** | **03 00 51.5** | **-0.2** | |
| KMI | | | | sPKP | | 03 00 56.5 | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,350nm,22.2s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,330nm,24.4s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,510nm,24.4s | | | | | | | |
| **CN2** | **Changchun** | **127.97** | **20** | *e*PKP | **PKPdf** | **03 00 49.3** | **-2.3** | |
| CN2 | | | | PP | **PP** | **03 02 55.0** | **+1.9** | |
| CN2 | | | | AMB | AMB | | | |
| | comp=Z,100nm,6.2s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,300nm,18.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,200nm,18.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,200nm,19.2s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **128.56** | | 4*c i*PKIKP | **PKiKP** | **03 00 54.0** | **+0.7** | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **129.54** | **14** | PKIKP | **PKiKP** | **03 00 56.9** | **+1.6** | |
| **USA0B** | **Ussuriysk Arra** | **129.54** | **14** | PKPdf | **PKiKP** | **03 00 56.9** | **+1.6** | |
| **ENH** | **Enshi** | **129.87** | **44** | PKPdf | **PKiKP** | **03 00 57.1** | **+0.6** | |
| ENH | | | | IAMs_20 | IAMs_20 | 04 06 35.2 | | |
| | comp=Z,542nm,18.0s | | | | | | | |
| **GYA** | **Guiyang** | **129.97** | **50** | ⇑PKP | **PKiKP** | **03 00 57.0** | **+0.1** | |
| GYA | | | | LR | LR | | | |
| | comp=Z,360nm,20.5s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,410nm,26.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,620nm,24.4s | | | | | | | |
| **PSI** | **Prapat** | **131.03** | **82** | PKP | **PKPdf** | **03 00 58.4** | **0.0** | |
| | comp=Z,2.6nm,0.7s,baz=253,slow=7.9,SNR=7.9 | | | | | | | |
| **RPSI** | **Rantau Prapat** | **131.04** | **82** | PKPdf | **PKPdf** | **03 00 58.5** | **+0.2** | |
| RPSI | | | | IAMs_20 | IAMs_20 | 03 53 16.7 | | |
| | comp=Z,451nm,21.0s | | | | | | | |
| **MNSI** | **Mandailing Nat** | **131.94** | **85** | PKP | **PKPdf** | **03 01 00.5** | **+0.5** | |
| **KULM** | **Kulim** | **132.31** | **79** | IAMs_20 | IAMs_20 | 03 53 13.1 | | |
| | comp=Z,529nm,22.0s | | | | | | | |
| **BKNI** | **Bangkinang** | **133.44** | **85** | IAMs_20 | IAMs_20 | 03 53 03.4 | | |
| | comp=Z,422nm,21.0s | | | | | | | |
| **NJ2** | **Nanjing** | **134.60** | **35** | *e*PKP | **PKPdf** | **03 01 04.3** | **-0.2** | |
| **MYKOM** | **Kota Tinggi** | **136.04** | **83** | IAMs_20 | IAMs_20 | 04 02 35.2 | | |
| | comp=Z,425nm,20.0s | | | | | | | |
| **QIZ** | **Qiongzhong** | **136.24** | **56** | PKP | **PKPdf** | **03 01 07.3** | **-0.6** | |
| QIZ | | | | SS | SS | 03 21 54.3 | +5.4 | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,380nm,24.0s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,470nm,23.0s | | | | | | | |
| **PMBI** | **Palembang** | **137.45** | **89** | IAMs_20 | IAMs_20 | 03 52 43.5 | | |
| | comp=Z,414nm,20.0s | | | | | | | |
| **KSM** | **Kuching** | **142.47** | **82** | IAMs_20 | IAMs_20 | 04 00 13.7 | | |
| | comp=Z,364nm,18.0s | | | | | | | |
| **JOW** | **Kunigami** | **143.74** | **30** | PKhKP | PKPpre | 03 01 17.4 | | |
| | comp=Z,30nm,1.2s,baz=23,slow=1.3,SNR=3.7 | | | | | | | |
| **SBUM** | **Sibu** | **144.18** | **80** | PKPdf | PKPbc | 03 01 21.0 | +0.4 | |
| **TOO** | **Toolangi** | **147.08** | **177** | PKP2 | **PKPbc** | **03 01 28.5** | **-0.4** | |
| **TOO** | **Toolangi** | **147.08** | **177** | | **PKPbc** | **03 01 28.4** | **-0.4** | |
| **KKM** | **Kota Kinabalu** | **147.14** | **72** | | **PKPbc** | **03 01 29.5** | **-0.2** | |
| **FORT** | **Forrest** | **148.18** | **147** | PKPbc | **PKiKP** | **03 01 33.2** | **-0.5** | |
| **PSA00** | **Pilbara Seismi** | **148.38** | **125** | PKPbc | **PKPbc** | **03 01 32.8** | **+0.1** | |
| **CAN** | **Canberra** | **149.34** | **183** | PKP2 | **PKPbc** | **03 01 34.3** | **-0.6** | |
| **CAN** | **Canberra** | **149.34** | **183** | PKPbc | **PKPbc** | **03 01 34.3** | **-0.6** | |
| **BBOO** | **Buckleboo** | **149.95** | **161** | PKPbc | **PKPbc** | **03 01 36.1** | **-0.4** | |
| **STKA** | **Stephens Creek** | **152.27** | **169** | PKP | **PKPdf** | **03 01 34.0** | **-1.2** | |
| | comp=Z,6.1nm,1.0s,baz=226,slow=2.6,SNR=5.5 | | | | | | | |
| STKA | | | | PKPbc | **PKPbc** | **03 01 40.9** | **-0.9** | |
| | comp=Z,15nm,1.2s,baz=166,slow=3.8,SNR=8.1 | | | | | | | |
| **STKA** | **Stephens Creek** | **152.27** | **169** | PKIKP | **PKPdf** | **03 01 36.7** | **+1.6** | |
| **STKA** | **Stephens Creek** | **152.27** | **169** | | **PKPdf** | **03 01 36.7** | **+1.6** | |
| **KAPI** | **Kappang** | **152.46** | **92** | PKPbc | **PKiKP** | **03 01 43.4** | **+0.4** | |
| | comp=Z,11nm,0.6s,baz=322,slow=12,SNR=3.3 | | | | | | | |
| **KAPI** | **Kappang** | **152.46** | **92** | IAMs_20 | IAMs_20 | 04 03 43.2 | | |
| | comp=Z,380nm,21.0s | | | | | | | |
| **TOLI2** | **Tolitoli** | **152.83** | **79** | IAMs_20 | IAMs_20 | 04 07 01.0 | | |
| | comp=Z,333nm,21.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **154.62** | **225** | *e*LR | LR | 03 53 26.3 | | |
| | comp=Z,402nm,23.1s | | | | | | | |
| **MMRI** | **Maumere** | **154.69** | **101** | IAMs_20 | IAMs_20 | 03 57 13.2 | | |
| | comp=Z,272nm,20.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **156.96** | **147** | PKP | **PKPdf** | **03 01 41.9** | **0.0** | |
| | comp=Z,7.1nm,1.2s,baz=203,slow=1.4,SNR=20 | | | | | | | |
| ASAR | | | | PKPab | **PKPab** | **03 02 11.8** | **0.0** | |
| | comp=Z,6.0nm,1.1s,baz=216,slow=3.9,SNR=8.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **156.96** | **147** | PKIKP | **PKPdf** | **03 01 40.9** | **-1.0** | |
| **ASAR** | **Alice Springs** | **156.96** | **147** | PKPdf | **PKPdf** | **03 01 40.9** | **-1.0** | |
| **WRA** | **Warramunga Arr** | **160.10** | **141** | PKP | **PKPdf** | **03 01 44.5** | **-1.2** | |
| | comp=Z,3.1nm,1.1s,baz=263,slow=1.3,SNR=10 | | | | | | | |
| WRA | | | | PKPab | **PKPab** | **03 02 25.5** | **0.0** | |
| | comp=Z,13nm,1.3s,baz=218,slow=3.3,SNR=11 | | | | | | | |
| WRA | | | | PP | **PP** | **03 06 03.4** | **-3.2** | |
| | comp=Z,1.5nm,1.1s,baz=215,slow=3.4,SNR=2.9 | | | | | | | |
| **WB0** | **Warramunga Arr** | **160.27** | **141** | | **PKPdf** | **03 01 44.5** | **-1.4** | |
| **SIJI** | **Sorong** | **163.49** | **78** | PKP | **PKPdf** | **03 01 48.1** | **-1.3** | |
| | comp=Z,8.5nm,0.3s,baz=114,slow=8.4,SNR=4.2 | | | | | | | |
| SIJI | | | | PKPab | **PKPab** | **03 02 39.1** | **-1.6** | |
| | comp=Z,6.7nm,0.7s,baz=240,slow=22,SNR=1.4 | | | | | | | |
| **COEN** | **Coen** | **169.76** | **156** | PKPdf | **PKPdf** | **03 01 54.5** | **+0.4** | |
| COEN | | | | PKPab | **PKPab** | **03 03 06.7** | **-1.2** | |

*IDC* ***27*** *02:50:29.2s2.3, 42°.46N×18°.44E, h0km, mb3.8/3, mb1 3.6/10,mb1mx3.5/62,mbtmp3.6/10,ML2.9/7,Error ellipse: s-maj=48.1km s-min=15.5km az=46.0*
*PRU* ***27*** *02:50:31.2s0.0, 42°.37N×18°.53E, h0km*
*PDG* ***27*** *02:50:31.8s0.5, 42°.52N×18°.41E, h2km, MD3.4/10, ML3.2/13,Error ellipse: s-maj=0.5km s-min=0.9km az=0.0*
*THE* ***27*** *02:50:32.7, 42°.49N×18°.12E, h20km±38km, ML3.2/3,Error ellipse: s-maj=45.3km s-min=3.0km az=310.0*
*RHSSO* ***27*** *02:50:32.2s0.2, 42°.49N×18°.41E, h2km±1km, ML3.3/18*
*BEO* ***27*** *02:50:32.2s0.4, 42°.48N×18°.38E, h3km±1km, ML3.3/18*
*NEIC* ***27*** *02:50:32.3s1.2, 42°.56N±0°.05×18°.48E±0°.05, h10km±1km, Error ellipse: s-maj=8.4km s-min=6.5km az=343.0*
**ISC 27 02:50:31.3±0.8, 42°.49N±0°.02×18°.37E±0°.01, h10km±5km, n179,σ1°71/261, mb3.6/3, 24C-31D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HCY** | **Herceg Novi** | **0.10** | **115** | | **Pg** | **02 50 33.8** | **0.0** |
| **HCY** | **Herceg Novi** | **0.10** | **115** | ⇑*i*Pg | **Pg** | **02 50 33.8** | **0.0** |
| HCY | | | | *e*Sg | **Sg** | **02 50 35.4** | **-0.2** |
| **HCY** | **Herceg Novi** | **0.10** | **115** | ⇑*i*Pg | **Pg** | **02 50 33.8** | **0.0** |
| HCY | | | | *i* Sg | **Sg** | **02 50 35.4** | **-0.2** |
| **TREB** | **Trebinje** | **0.23** | **356** | *e*Pg | **Pg** | **02 50 36.0** | **+0.1** |
| TREB | | | | *e*Sg | **Sg** | **02 50 39.7** | **+0.6** |
| **TREB** | **Trebinje** | **0.23** | **356** | | **Pg** | **02 50 36.1** | **+0.1** |
| **TREB** | **Trebinje** | **0.23** | **356** | ⇓*i*Pg | **Pg** | **02 50 36.0** | **+0.1** |
| TREB | | | | *e*Sg | **Sg** | **02 50 39.8** | **+0.6** |
| **DBRK** | **Dubrovnik** | **0.25** | **317** | *e*Pg | **Pg** | **02 50 36.6** | **+0.3** |
| DBRK | | | | Sg | **Sg** | **02 50 38.9** | **-0.8** |
| **CEME** | **Cevo** | **0.41** | **82** | | **Pg** | **02 50 39.2** | **-0.1** |
| **CEME** | **Cevo** | **0.41** | **82** | ⇓*i*Pg | **Pg** | **02 50 38.6** | **-0.7** |
| CEME | | | | *i* Sg | **Sg** | **02 50 44.6** | **0.0** |
| **BUM** | **Brajici-Budva** | **0.43** | **116** | ⇓*i*Pg | **Pg** | **02 50 39.7** | **0.0** |
| BUM | | | | *i* Sg | **Sg** | **02 50 46.1** | **+0.8** |
| **BRY** | **Bratogost** | **0.43** | **16** | | **Pg** | **02 50 39.1** | **-0.7** |
| **BRY** | **Bratogost** | **0.43** | **16** | ⇓*i*Pg | **Pg** | **02 50 39.0** | **-0.7** |
| BRY | | | | *e*Sg | **Sg** | **02 50 46.4** | **+1.0** |
| **BRY** | **Bratogost** | **0.43** | **16** | ⇓*i*Pg | **Pg** | **02 50 39.1** | **-0.7** |
| BRY | | | | *i* Sg | **Sg** | **02 50 45.4** | **0.0** |
| **NKME** | **Niksic** | **0.51** | **57** | ⇓*i*Pg | **Pg** | **02 50 40.2** | **-1.0** |
| NKME | | | | *i* Sg | **Sg** | **02 50 47.9** | **0.0** |
| **NKY** | **Niksic** | **0.56** | **54** | ⇓*i*Pg | **Pg** | **02 50 41.2** | **-1.0** |
| NKY | | | | *i* Sg | **Sg** | **02 50 49.3** | **-0.3** |
| **STON** | **Ston** | **0.63** | **308** | *e*Pg | **Pg** | **02 50 43.2** | **-0.1** |
| STON | | | | *e*Sg | **Sb** | **02 50 53.4** | **+0.2** |
| **STON** | **Ston** | **0.63** | **308** | *e*Pg | **Pg** | **02 50 43.3** | **-0.1** |
| STON | | | | *e*Sg | **Sb** | **02 50 52.8** | **-0.4** |
| **STON** | **Ston** | **0.63** | **308** | *e*Pg | **Pg** | **02 50 43.0** | **-0.4** |
| STON | | | | Sg | **Sb** | **02 50 52.9** | **-0.2** |
| **PDG** | **Podgorica** | **0.66** | **95** | *e*Pg | **Pg** | **02 50 43.4** | **-0.5** |
| PDG | | | | *e*Sg | **Sg** | **02 50 52.9** | **+0.4** |
| **PDG** | **Podgorica** | **0.66** | **95** | | **Pg** | **02 50 43.2** | **-0.7** |
| **PDG** | **Podgorica** | **0.66** | **95** | IAML | | 02 50 55.2 | |
| | comp=N,1μm,0.5s | | | | | | |
| PDG | | | | IAML | | 02 50 56.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **PDG** | **Podgorica** | **0.66** | **95** | *e*Pg | **Pg** | **02 50 43.0** | **-0.9** |
| PDG | | | | *e*Sg | **Sg** | **02 50 52.8** | **+0.3** |
| **TTG** | **Podgorica** | **0.66** | **95** | ⇓*i*Pg | **Pg** | **02 50 43.0** | **-0.9** |
| TTG | | | | *i* Sg | **Sg** | **02 50 53.3** | **+0.8** |
| **DRME** | **Dracevica, Mon** | **0.67** | **116** | *e*Pg | **Pg** | **02 50 43.8** | **-0.4** |
| DRME | | | | *e*Sg | **Sb** | **02 50 53.9** | **-0.6** |
| **DRME** | **Dracevica, Mon** | **0.67** | **116** | ⇑*i*Pg | **Pg** | **02 50 44.1** | **-0.1** |
| DRME | | | | *i* Sg | **Sb** | **02 50 54.2** | **-0.3** |
| **UPM** | **Unac-Piva** | **0.81** | **29** | ⇑*i*Pg | **Pg** | **02 50 46.0** | **-1.0** |
| UPM | | | | *e*Sg | **Sg** | **02 50 58.3** | **+0.7** |
| **UPM** | **Unac-Piva** | **0.81** | **29** | ⇓*i*Pg | **Pg** | **02 50 45.5** | **-1.5** |
| UPM | | | | *i* Sg | **Sg** | **02 50 58.3** | **+0.7** |
| **ULC** | **Ulcinj** | **0.83** | **129** | ⇑*i*Pg | **Pg** | **02 50 46.8** | **-0.5** |
| ULC | | | | *i* Sg | **Sb** | **02 51 00.1** | **+1.0** |
| **KOME** | **Kolasin** | **0.92** | **66** | ⇓*i*Pg | **Pg** | **02 50 47.5** | **-1.4** |
| KOME | | | | *i* Sg | **Sb** | **02 51 01.8** | **+0.2** |
| **PLE** | **Pljevlja** | **1.12** | **41** | ⇑*i*Pg | **Pg** | **02 50 51.6** | **-1.3** |
| PLE | | | | *i* Sg | **Sn** | **02 51 08.7** | **-0.1** |
| **LSTV** | **Lastovo** | **1.13** | **285** | *e*Pg | **Pb** | **02 50 52.0** | **-0.9** |
| LSTV | | | | Sg | **Sn** | **02 51 09.2** | **+0.4** |
| **PVY** | **Plav** | **1.18** | **84** | ⇓*i*Pg | **Pb** | **02 50 53.2** | **-0.6** |
| PVY | | | | *i* Sg | **Sn** | **02 51 10.8** | **+0.7** |
| **IVA** | **Berane** | **1.18** | **71** | ⇑*i*Pg | **Pb** | **02 50 52.9** | **-1.0** |
| IVA | | | | *i* Sg | **Sn** | **02 51 10.9** | **+0.7** |
| **RUDO** | **Rudo** | **1.34** | **33** | *e*Pg | **Pn** | **02 50 55.0** | **-1.1** |
| RUDO | | | | *e*Sg | **Sb** | **02 51 13.8** | **-0.1** |
| **SJES** | **Sjenica** | **1.41** | **56** | *e*Pg | **Pb** | **02 50 57.5** | **-0.2** |
| SJES | | | | *e*Sg | **Sg** | **02 51 18.3** | **+1.8** |
| **BBLS** | **Lazići** | **1.57** | **28** | *e*Pn | **Pg** | **02 51 01.0** | **-0.4** |
| BBLS | | | | *e*Sn | **Sg** | **02 51 23.8** | **+2.1** |
| **BBLS** | **Lazići** | **1.57** | **28** | *e*Pn | **Pb** | **02 51 00.3** | **-0.2** |
| BBLS | | | | *e*Sn | **Sg** | **02 51 22.1** | **+0.4** |
| **HVAR** | **Hvar** | **1.57** | **297** | *e*Pn | **Pb** | **02 51 00.1** | **-0.4** |
| HVAR | | | | Sg | **Sg** | **02 51 22.0** | **+0.1** |
| **TIR** | **Tirane** | **1.59** | **135** | ⇓P | **Pg** | **02 51 01.9** | **+0.1** |
| TIR | | | | ⇑S | **Sg** | **02 51 22.3** | **+0.3** |
| **TIR** | **Tirane** | **1.59** | **135** | P | **Pg** | **02 51 01.5** | **-0.3** |
| TIR | | | | S | **Sg** | **02 51 23.8** | **+1.3** |
| | comp=E,535nm,0.7s | | | | | | |
| **TIR** | **Tirane** | **1.59** | **135** | | **Pg** | **02 51 01.7** | **-0.1** |
| **IVAS** | **Ivanjica** | **1.70** | **50** | *e*Pn | **Pn** | **02 51 01.8** | **+0.7** |
| IVAS | | | | *e*Sn | **Sg** | **02 51 25.1** | **-0.7** |
| **PHP** | **Peshkopia** | **1.74** | **117** | P | **Pb** | **02 51 03.1** | **-0.2** |
| PHP | | | | S | **Sg** | **02 51 27.8** | **+0.8** |
| **DIVS** | **Divibare** | **2.00** | **36** | *e*Pn | **Pb** | **02 51 07.4** | **-0.3** |
| DIVS | | | | *e*Sn | **Sn** | **02 51 31.3** | **+1.0** |
| **DIVS** | **Divibare** | **2.00** | **36** | Pn | **Pn** | **02 51 05.9** | **+0.7** |
| **DIVS** | **Divibare** | **2.00** | **36** | ⇑*i*Pn | **Pb** | **02 51 06.9** | **-0.8** |
| DIVS | | | | *e*Sn | **Sb** | **02 51 32.3** | **-0.4** |
| **KIJV** | **Kijevo** | **2.09** | **317** | *e*Pn | **Pb** | **02 51 08.6** | **-0.7** |
| **SGRT** | **San Giovanni R** | **2.09** | **250** | Pn | **Pb** | **02 51 09.0** | **-0.3** |
| **MGRS** | **Mrkonjic Grad** | **2.14** | **334** | *e*Pn | **Pb** | **02 51 08.8** | **-1.4** |
| MGRS | | | | *e*Sn | **Sb** | **02 51 36.1** | **-0.8** |
| **SELS** | **Selova** | **2.15** | **69** | *e*Pn | **Pb** | **02 51 08.9** | **-1.4** |
| SELS | | | | *e*Sn | **Sb** | **02 51 35.7** | **-1.3** |
| **VLO** | **Vlora** | **2.19** | **157** | P | **Pn** | **02 51 09.2** | **+1.5** |
| **VLO** | **Vlora** | **2.19** | **157** | Pn | **Pn** | **02 51 08.9** | **+1.3** |
| **GRUS** | **Gruza** | **2.21** | **50** | *e*Pn | **Pb** | **02 51 10.0** | **-1.3** |
| **MATE** | **Matera** | **2.22** | **215** | ⇑P | **Pn** | **02 51 08.7** | **+0.5** |
| **DOB** | **Doboj** | **2.25** | **355** | *e*Pn | **Pb** | **02 51 10.7** | **-1.3** |
| DOB | | | | *e*Sn | **Sb** | **02 51 38.5** | **-1.5** |
| **OHR** | **Ohrid** | **2.28** | **126** | *i* Pn | **Pb** | **02 51 12.4** | **-0.1** |
| **TRUS** | **Trudelj** | **2.28** | **40** | *e*Pn | **Pb** | **02 51 10.9** | **-1.6** |
| TRUS | | | | *e*Sn | **Sb** | **02 51 40.0** | **-0.8** |
| **ZIRJ** | **Zirje** | **2.31** | **301** | *e*Pn | **Pn** | **02 51 11.1** | **+1.6** |
| ZIRJ | | | | Sn | **Sb** | **02 51 40.2** | **-1.5** |
| **SKO** | **Skopje** | **2.33** | **102** | *i* Pn | **Pb** | **02 51 12.9** | **-0.6** |
| **BLJ** | **Bijeljina** | **2.38** | **15** | *e*Pn | **Pn** | **02 51 11.0** | **+0.6** |
| BLJ | | | | *e*Sn | **Sn** | **02 51 40.9** | **+1.2** |
| **MORI** | **Morici** | **2.39** | **306** | *e*Pn | **Pb** | **02 51 12.7** | **-1.7** |
| MORI | | | | Sn | **Sb** | **02 51 44.4** | **+0.6** |
| **SCTE** | **Santa Cesarea** | **2.42** | **178** | Pn | **Pb** | **02 51 13.9** | **-0.9** |
| SCTE | | | | IAML | | 02 51 41.6 | |
| | comp=E,124nm,0.4s | | | | | | |
| SCTE | | | | IAML | | 02 52 07.2 | |
| | comp=N,151nm,1.0s | | | | | | |
| **BLY** | **Banja Luka** | **2.42** | **339** | *e*Pn | **Pb** | **02 51 13.9** | **-1.0** |
| **BLY** | **Banja Luka** | **2.42** | **339** | ⇑*i*Pn | **Pb** | **02 51 13.3** | **-1.6** |
| BLY | | | | *e*Sn | **Sb** | **02 51 43.1** | **-1.7** |
| **BARS** | **Barje** | **2.56** | **81** | *e*Pn | **Pb** | **02 51 15.3** | **-2.0** |
| **BARS** | **Barje** | **2.56** | **81** | *e*Pn | **Pg** | **02 51 21.4** | **+1.1** |
| BARS | | | | *e*Sn | **Sn** | **02 51 45.2** | **+1.1** |
| BARS | | | | *e*Sn | **Sg** | **02 51 58.4** | **+4.9** |
| **KBN** | **Korca** | **2.60** | **135** | P | **Pn** | **02 51 15.6** | **+2.2** |
| **KBN** | **Korca** | **2.60** | **135** | Pn | **Pn** | **02 51 14.1** | **+0.6** |
| KBN | | | | IAML | | 02 52 06.1 | |
| | comp=E,108nm,0.9s | | | | | | |
| KBN | | | | IAML | | 02 52 12.9 | |
| | comp=N,107nm,0.8s | | | | | | |
| **BOVS** | **Bovan** | **2.70** | **64** | ⇓P | | **Pn** | **02 51 16.3** | **+1.6** |
| BOVS | | | | ⇑S | | **Sb** | **02 51 50.6** | **-2.2** |
| **SVIS** | **Svilajnac** | **2.73** | **48** | *e*Pn | | **Pn** | **02 51 16.9** | **+1.8** |
| SVIS | | | | *e*Sn | | **Sb** | **02 51 51.1** | **-2.6** |
| **MRAK** | **Mrakovica** | **2.74** | **338** | ⇑*i*Pn | | **Pn** | **02 51 17.7** | **+2.3** |
| MRAK | | | | *e*Sn | | **Sn** | **02 51 51.3** | **+2.7** |
| **PRIJ** | **Prijedor** | **2.76** | **335** | *e*Pn | | **Pn** | **02 51 17.6** | **+2.0** |
| PRIJ | | | | *e*Sn | | **Sn** | **02 51 51.4** | **+2.4** |
| **UDBI** | **Udbina** | **2.79** | **318** | *e*Pn | | **Pn** | **02 51 18.4** | **+2.4** |
| UDBI | | | | Sn | | **Sb** | **02 51 54.7** | **-0.7** |
| **FNA** | **Florina** | **2.82** | **126** | P | | **Pn** | **02 51 18.9** | **+2.4** |
| FNA | | | | S | | **Sn** | **02 51 52.9** | **+2.3** |
| | comp=N,318nm,0.8s | | | | | | | |
| **FNA** | **Florina** | **2.82** | **126** | | | **Pn** | **02 51 17.8** | **+1.3** |
| FNA | | | | IAML | | | 02 52 10.4 | |
| | comp=E,138nm,0.5s | | | | | | | |
| **DUGI** | **Dugi Otok** | **2.85** | **303** | *e*Pn | | **Pn** | **02 51 18.0** | **+1.1** |
| DUGI | | | | Sn | | **Sb** | **02 51 54.8** | **-2.4** |
| **FRGS** | **Fruska Gora** | **2.86** | **21** | ⇓P | | **Pn** | **02 51 17.8** | **+0.7** |
| FRGS | | | | ⇑S | | **Sn** | **02 51 53.8** | **+2.2** |
| **FRGS** | **Fruska Gora** | **2.86** | **21** | *e*Pn | | **Pn** | **02 51 17.1** | **+0.1** |
| FRGS | | | | *e*Sn | | **Sn** | **02 51 53.2** | **+1.6** |
| **SRN** | **Sarande** | **2.88** | **154** | P | | **Pn** | **02 51 18.1** | **+0.9** |
| **NEST** | **Nestorio** | **2.89** | **135** | P | | **Pn** | **02 51 20.0** | **+2.6** |
| **STIP** | **Stip** | **2.95** | **104** | *i* Pn | | **Pb** | **02 51 22.6** | **-1.3** |
| **A252A** | **Venje** | **2.97** | **353** | *e*Pn | | **Pn** | **02 51 20.3** | **+1.8** |
| A252A | | | | Sn | | **Sb** | **02 51 58.0** | **-2.6** |
| **KEK** | **Kerkira** | **2.98** | **158** | P | | **Pn** | **02 51 19.1** | **+0.6** |
| **BOSS** | **Bosilegrad** | **3.04** | **88** | *e*Pn | | **Pn** | **02 51 22.0** | **+2.6** |
| BOSS | | | | *e*Sn | | **Sn** | **02 51 58.4** | **+2.5** |
| **KUBS** | **Kucevo** | **3.08** | **50** | *e*Pn | | **Pn** | **02 51 20.9** | **+0.9** |
| KUBS | | | | *e*Sn | | **Sn** | **02 51 58.5** | **+1.6** |
| **PLIT** | **Plitvice** | **3.11** | **321** | *e*Pn | | **Pn** | **02 51 23.0** | **+2.5** |
| **ZAGS** | **Zajecar** | **3.12** | **64** | *e*Pn | | **Pn** | **02 51 22.2** | **+1.7** |
| ZAGS | | | | *e*Sn | | **Sn** | **02 51 59.2** | **+1.4** |
| **ZAPS** | **Zavoj** | **3.23** | **74** | *e*Pn | | **Pn** | **02 51 24.6** | **+2.5** |
| ZAPS | | | | *e*Sn | | **Sn** | **02 52 02.4** | **+1.8** |
| **NVLJ** | **Novalja** | **3.29** | **310** | *e*Pn | | **Pn** | **02 51 24.4** | **+1.7** |
| NVLJ | | | | Sn | | **Sn** | **02 52 05.2** | **+3.3** |
| **IGT** | **Igoumenitsa** | **3.30** | **153** | P | | **Pn** | **02 51 24.0** | **+0.9** |
| **MDVR** | **Moldovita** | **3.33** | **45** | ⇓P | | **Pn** | **02 51 25.3** | **+1.8** |
| **MOSL** | **Moslavina** | **3.33** | **340** | *e*Pn | | **Pn** | **02 51 25.4** | **+1.9** |
| **VAY** | **Valandovo** | **3.34** | **109** | *i* Pn | | **Pg** | **02 51 33.4** | **-1.8** |
| **BLKB** | **Belogradchik** | **3.35** | **69** | ⇓S | | **Sn** | **02 52 05.8** | **+2.2** |
| **GRG** | **Griva** | **3.38** | **116** | P | | **Pn** | **02 51 26.4** | **+2.2** |
| **KPPO** | **Kipourio** | **3.39** | **137** | P | | **Pn** | **02 51 26.6** | **+2.5** |
| **RABC** | **Rab** | **3.45** | **312** | *e*Pn | | **Pn** | **02 51 26.4** | **+1.3** |
| **BANR** | **Banloc** | **3.51** | **34** | ⇑P | | **Pn** | **02 51 28.5** | **+2.6** |
| BANR | | | | ⇓S | | **Sn** | **02 52 10.4** | **+2.9** |
| **TIP

comp=N,0.6nm,0.3s,baz=269,slow=19,SNR=6.5
**MMAI Mount Meron Ar 16.43 120** Pn **Pn 02 54 21.9 -0.1**
comp=N,0.1nm,0.3s,baz=352,slow=17,SNR=0.8
**HFS Hagfors 17.90 352** P **Pn 02 54 40.2 0.0**
comp=N,0.2nm,0.3s,baz=161,slow=9.2,SNR=1.9
**NOA NORSAR Array B 19.08 349** P **P 02 54 53.0 -0.7**
comp=N,0.0nm,0.3s,baz=158,slow=11,SNR=2.0
**FINES FINESS Array B 19.54 11** P **P 02 54 58.6 -0.1**
comp=N,0.2nm,0.3s,baz=185,slow=11,SNR=5.5
**ARCES ARCESS Array B 27.36 5** P **P 02 56 14.8 -1.4**
comp=N,1.3nm,0.6s,baz=343,slow=3.8,SNR=4.7
**ZALV Zalesovo Beam 44.15 51** P **P 02 58 38.3 -1.5**
comp=N,0.5nm,0.5s,baz=310,slow=6.8,SNR=1.9
**MKAR Makanchi Array 44.57 62** P **P 02 58 43.2 -0.1**
comp=N,0.4nm,0.5s,baz=270,slow=5.4,SNR=7.7

*IDC **27** 02:54:20.8±0.5,4˚.57N×32˚.66W,h0km,mb4.1/27, mb1 4.2/28,mb1mx4.1/49,mbtmp4.1/28,ML3.7/1,MS4.2/13, Ms1 4.2/13,ms1mx3.8/87,Error ellipse: s-maj=19.2km s-min=11.5km az=149.0*
*NEIC **27** 02:54:23.6±1.3,4˚.6N±0˚.1×32˚.6W±0˚.1,h10km±1km, mb4.7/32,Error ellipse: s-maj=24.5km s-min=15.9km az=128.0*
*GCMT **27** 02:54:25.6±0.3,4˚.74N±0˚.04×32˚.66W±0˚.02,h13km±1km, MW4.9/95,Moment Tensor Solution. s5,c5; s95,c127; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.19±.21; Mθθ0.22±.11; Mϕϕ1.97±.14; Mrθ1.70±.44; Mϕθ-0.12±.06; Mϕr1.27±.33; Best double couple: M₀2.86800×10¹⁶ NP1:ϕs343.00000°,δ31.00000°,λ-132.00000°. NP2: ϕs209.00000°,δ67.00000°,λ-68.00000°. Principal axes: T 2.4010, Plg19.0000°, Azm283.0000°; N 0.9330, Plg20.0000°, Azm20.0000°; P -3.3350, Plg61.0000°, Azm153.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 27 02:54:23.2±0.4,4˚.67N±0˚.08×32˚.63W±0˚.08,h11km,n103, σθ98/84,mb4.3/36,MS4.3/11,Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NBMO** | **Morrinhos-CE** | **10.85** | **223** | *eP* | | **Pn** | **02 56 59.3** | **+0.7** |
| **RCBR** | **Riachuelo** | **10.93** | **197** | Pn | | Pn | 02 56 56.1 | -3.6 |
| | 0.6nm,0.3s,baz=172,slow=14,SNR=2.4 | | | | | | | |
| RCBR | | | | LR | | LR | 03 00 03.6 | |
| | comp=Z,970nm,19.8s,baz=120,slow=32 | | | | | | | |
| **RCBR** | **Riachuelo** | **10.93** | **197** | *eP* | | **Pn** | **02 57 00.1** | **+0.4** |
| **TMAB** | **Tom-Au,PA,Br** | **16.96** | **246** | *eP* | | **Pn** | **02 58 21.0** | **+0.3** |
| **NBPN** | **Ponto Novo - B** | **17.16** | **206** | *eP* | | **Pn** | **02 58 25.6** | **+2.4** |
| **GDU01** | **Guandu, BA** | **19.53** | **201** | *eP* | | **P** | **02 58 51.7** | **+0.8** |
| **MDP** | **Montagnes des** | **19.94** | **272** | LR | | LR | 03 05 09.9 | |
| | comp=Z,368nm,21.8s,baz=60,slow=33 | | | | | | | |
| **MCPB** | **Macapa, AP** | **20.04** | **256** | *eP* | | **P** | **02 58 56.7** | **+0.2** |
| **SMTB** | **Santa Maria do** | **20.08** | **228** | *eP* | | **P** | **02 58 56.3** | **-0.6** |
| **PRPB** | **Parauapebas** | **20.26** | **238** | *eP* | | **P** | **02 58 57.7** | **-1.2** |
| **NBIT** | **Itapeh - BA** | **20.61** | **199** | *eP* | | **P** | **02 59 03.9** | **+1.2** |
| **SDBA** | **SAO DESIDERIO** | **20.90** | **216** | *eP* | | **P** | **02 59 02.9** | **-3.0** |
| **CMC01** | **Camacan, BA** | **21.04** | **199** | *eP* | | **P** | **02 59 08.5** | **+1.2** |
| **H10N3** | **ASCENSION HYDR** | **21.95** | **124** | T | | T | 03 21 52.5 | |
| | baz=303,slow=75,SNR=37 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.95** | **124** | T | | T | 03 21 53.8 | |
| | baz=303,slow=75,SNR=50 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.97** | **124** | T | | T | 03 21 52.4 | |
| | baz=303,slow=75,SNR=40 | | | | | | | |
| **GUA01** | **Guaratinga, BA** | **22.28** | **198** | *eP* | | **P** | **02 59 21.7** | **+1.1** |
| **H10S3** | **ASCENSION HYDR** | **22.45** | **127** | T | | T | 03 22 30.5 | |
| | baz=304,slow=74,SNR=60 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.47** | **127** | T | | T | 03 22 31.8 | |
| | baz=276,slow=74,SNR=56 | | | | | | | |
| **MALB** | **Monte Alegre** | **22.56** | **254** | *eP* | | **P** | **02 59 23.6** | **-0.1** |
| **JANB** | **Januaria** | **22.76** | **210** | *eP* | | **P** | **02 59 23.9** | **-2.0** |
| **PEXB** | **Peixe** | **22.81** | **223** | *eP* | | **P** | **02 59 26.4** | **0.0** |
| **NAN01** | **Guarapari, ES** | **23.56** | **198** | *eP* | | **P** | **02 59 33.7** | **-0.2** |
| **ITTB** | **Itaituba** | **24.76** | **249** | *eP* | | **P** | **02 59 45.2** | **0.0** |
| **SNDB** | **Serra Nova Dou** | **24.86** | **228** | *eP* | | **P** | **02 59 46.3** | **+0.3** |
| **RIB01** | **Linhares ES** | **25.03** | **198** | *eP* | | **P** | **02 59 47.7** | **+0.2** |
| **BDFB** | **Brasilia** | **25.28** | **217** | P | | **P** | **02 59 47.8** | **-2.2** |
| | 0.9nm,0.4s,baz=27,slow=19,SNR=1.8 | | | | | | | |
| BDFB | | | | LR | | LR | 03 07 58.2 | |
| | comp=Z,624nm,18.6s,baz=7,slow=32 | | | | | | | |
| **DIAM** | **Diamantina, MG** | **25.29** | **205** | *eP* | | **P** | **02 59 49.8** | **-0.2** |
| **NPGB** | **Novo Progresso** | **25.49** | **243** | *eP* | | **P** | **02 59 51.2** | **-0.6** |
| **IPMB** | **Ipameri, GO** | **27.26** | **214** | *eP* | | **P** | **03 00 08.9** | **+1.1** |
| **DBIC** | **Dimbokro** | **27.71** | **85** | P | | **P** | **03 00 09.8** | **-2.1** |
| | 2.1nm,0.9s,baz=206,slow=12,SNR=1.5 | | | | | | | |
| DBIC | | | | LR | | LR | 03 08 54.2 | |
| | comp=Z,378nm,18.9s,baz=273,slow=32 | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **27.76** | **223** | *eP* | | **P** | **03 00 14.1** | **+1.8** |
| **PTGA** | **Pitinga** | **27.83** | **260** | P | | **P** | **03 00 11.5** | **-1.5** |
| | 2.4nm,0.7s,baz=146,slow=23,SNR=4.1 | | | | | | | |
| PTGA | | | | LR | | LR | 03 09 30.4 | |
| | comp=Z,621nm,20.5s,baz=44,slow=33 | | | | | | | |
| **BOAV** | **Boa Vista** | **27.93** | **266** | *eP* | | **P** | **03 00 15.2** | **+1.4** |
| **DUB01** | **Friburgo-RJ** | **28.25** | **199** | *eP* | | **P** | **03 00 17.4** | **+0.9** |
| **H05S1** | **Guadeloupe/Mar** | **29.42** | **291** | T | | T | 03 31 23.7 | |
| | SNR=7.9 | | | | | | | |
| **KOWA** | **Kowa** | **29.82** | **69** | P | | **P** | **03 00 30.1** | **-0.6** |
| KOWA | | | | IAmb | | IAmb | 03 00 32.6 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.20** | **295** | T | | T | 03 32 23.0 | |
| | SNR=5.0 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **32.99** | **232** | *eP* | | **P** | **03 00 58.9** | **+0.4** |
| **SIV** | **San Ignacio** | **34.83** | **233** | P | | **P** | **03 01 14.2** | **-0.4** |
| | comp=Z,5.3nm,0.8s,baz=82,slow=8.7,SNR=23 | | | | | | | |
| SIV | | | | LR | | LR | 03 14 49.6 | |
| | comp=Z,857nm,19.4s,baz=68,slow=35 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **74** | P | | **P** | **03 01 14.0** | **-1.2** |
| | comp=Z,3.2nm,0.8s,baz=262,slow=9.0,SNR=14 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.91** | **74** | P | | **P** | **03 01 14.6** | **-0.6** |
| **SJG** | **San Juan** | **35.38** | **295** | LR | | LR | 03 13 30.1 | |
| | comp=Z,266nm,19.0s,baz=102,slow=32 | | | | | | | |
| **ETMB** | **Extrema** | **36.42** | **247** | *eP* | | **P** | **03 01 28.6** | **+0.4** |
| **TER01** | **Tubaro-SC** | **36.63** | **205** | *eP* | | **P** | **03 01 30.1** | **+0.3** |
| **SDV** | **Santo Domingo** | **37.95** | **278** | P | | **P** | **03 01 40.0** | **-1.5** |
| | comp=Z,2.1nm,0.8s,baz=100,slow=8.5,SNR=2.2 | | | | | | | |
| **SDV** | **Santo Domingo** | **37.95** | **278** | *eP* | | **P** | **03 01 40.9** | **-0.6** |
| **MDT** | **Midelt** | **38.32** | **40** | LR | | LR | 03 16 29.7 | |
| | comp=Z,408nm,18.6s,baz=350,slow=35 | | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | P | | **P** | **03 01 49.3** | **-0.7** |
| | comp=Z,1.6nm,0.4s,baz=64,slow=4.8,SNR=2.9 | | | | | | | |
| CPUP | | | | LR | | LR | 03 16 31.8 | |
| | comp=Z,677nm,18.9s,baz=354,slow=34 | | | | | | | |
| **LPAZ** | **La Paz** | **40.82** | **239** | P | | **P** | **03 02 05.1** | **-0.8** |
| | comp=Z,3.2nm,0.8s,baz=69,slow=6.7,SNR=12 | | | | | | | |
| **LPAZ** | **La Paz** | **40.82** | **239** | P | | **P** | **03 02 05.9** | **+0.1** |
| LPAZ | | | | IAmb | | IAmb | 03 02 19.8 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **40.82** | **239** | *eP* | | **P** | **03 02 06.0** | **+0.1** |
| **ROSC** | **El Rosal** | **41.54** | **272** | P | | **P** | **03 02 10.8** | **-0.9** |
| | comp=Z,5.7nm,0.4s,baz=114,slow=16,SNR=3.7 | | | | | | | |
| **ROSC** | **El Rosal** | **41.54** | **272** | IAmb | | IAmb | 03 02 25.2 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **41.83** | **253** | *eP* | | **P** | **03 02 13.3** | **-0.3** |
| **H09N1** | **TRISTAN DA CUN** | **45.65** | **157** | T | | T | 03 51 26.8 | |
| **H09W1** | **TRISTAN DA CUN** | **45.66** | **157** | T | | T | 03 51 25.4 | |
| **KEST** | **Kesra** | **49.47** | **46** | P | | **P** | **03 03 14.9** | **+1.1** |
| | comp=Z,2.6nm,0.7s,baz=254,slow=17,SNR=2.0 | | | | | | | |
| **MT01** | **Popeta** | **52.91** | **221** | P | | **P** | **03 03 38.1** | **-1.5** |
| **BO02** | **Sierra Bellavi** | **53.19** | **219** | P | | **P** | **03 03 43.1** | **+1.4** |
| **TSUM** | **Tsumeb** | **54.81** | **117** | LR | | LR | 03 21 41.6 | |
| | comp=Z,310nm,19.9s,baz=320,slow=30 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.79** | **20** | P | | **P** | **03 03 59.9** | **-0.3** |
| | comp=Z,3.0nm,1.0s,baz=225,slow=7.2,SNR=4.8 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.21** | **310** | LR | | LR | 03 24 02.2 | |
| | comp=Z,201nm,20.6s,baz=150,slow=32 | | | | | | | |
| **SCHQ** | **Schefferville** | **57.12** | **337** | P | | **P** | **03 04 10.2** | **+0.5** |
| | comp=Z,3.6nm,0.9s,baz=174,slow=5.7,SNR=4.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **58.98** | **34** | P | | **P** | **03 04 23.4** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=274,slow=5.2,SNR=4.3 | | | | | | | |
| **PSZ** | **Piszkesteto** | **62.11** | **37** | P | | **P** | **03 04 45.2** | **+0.8** |
| **VTS** | **Vitosha** | **62.13** | **44** | P | | **P** | **03 04 45.3** | **+0.6** |
| VTS | | | | IAmb | | IAmb | 03 04 53.1 | |
| | comp=Z,5.2nm,1.3s | | | | | | | |
| **OJC** | **Ojcow** | **63.10** | **35** | P | | **P** | **03 04 51.8** | **+1.0** |
| **LBTB** | **Lobatse** | **63.76** | **121** | LR | | LR | 03 27 27.0 | |
| | comp=Z,202nm,20.1s,baz=327,slow=31 | | | | | | | |
| **BOSA** | **Boshof** | **64.70** | **125** | P | | **P** | **03 04 59.6** | **-2.3** |
| | comp=Z,6.3nm,1.1s,baz=301,slow=5.9,SNR=2.5 | | | | | | | |
| BOSA | | | | LR | | LR | 03 26 50.0 | |
| | comp=Z,237nm,21.6s,baz=336,slow=30 | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.97** | **41** | P | | **P** | **03 05 04.0** | **+0.6** |
| **NB2** | **NORSAR Subarra** | **65.13** | **22** | P | | **P** | **03 05 04.3** | **+0.3** |
| | comp=Z,0.5nm,0.6s,baz=230,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.13** | **22** | P | | **P** | **03 05 03.6** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=230,slow=6.4,SNR=5.5 | | | | | | | |
| **BURAR** | **Bucovina Array** | **65.27** | **39** | P | | **P** | **03 05 06.2** | **+1.0** |
| **HFS** | **Hagfors** | **65.51** | **23** | P | | **P** | **03 05 06.9** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=181,slow=13,SNR=1.1 | | | | | | | |
| **BGNE** | **Belgrade** | **68.65** | **313** | P | | **P** | **03 05 27.5** | **+0.7** |
| **AKASG** | **Malin Array Be** | **68.81** | **37** | P | | **P** | **03 05 27.6** | **+0.1** |
| | comp=Z,1.8nm,0.7s,baz=250,slow=6.7,SNR=10 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.81** | **37** | IAmb | | IAmb | 03 05 45.1 | |
| | comp=Z,5.5nm,1.4s | | | | | | | |
| **BR131** | **Keskin Array S** | **68.85** | **49** | P | | **P** | **03 05 28.5** | **+0.2** |
| BR131 | | | | IAmb | | IAmb | 03 05 31.2 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.85** | **49** | P | | **P** | **03 05 29.2** | **+1.0** |
| | comp=Z,2.3nm,0.8s,baz=228,slow=5.3,SNR=15 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.85** | **49** | P | | **P** | **03 05 28.6** | **+0.4** |
| **GHAJ** | **Ghor Haditha** | **68.98** | **58** | P | | **P** | **03 05 29.4** | **+0.4** |
| GHAJ | | | | IAmb | | IAmb | 03 05 46.0 | |
| | comp=Z,9.8nm,1.2s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.06** | **93** | P | | **P** | **03 05 37.5** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=283,slow=5.9,SNR=4.6 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **70.22** | **58** | P | | **P** | **03 05 36.8** | **0.0** |
| | comp=Z,2.6nm,0.8s,baz=50,slow=3.4,SNR=3.8 | | | | | | | |
| **BNN** | **Bunyan** | **70.36** | **50** | P | | **P** | **03 05 38.2** | **+0.6** |
| **TXAR** | **Lajitas Array** | **71.20** | **299** | P | | **P** | **03 05 41.9** | **-0.9** |
| | comp=Z,0.3nm,0.8s,baz=117,slow=7.2,SNR=3.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **71.36** | **26** | P | | **P** | **03 05 42.6** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=272,slow=36,SNR=2.4 | | | | | | | |
| **FCC** | **Fort Churchill** | **71.50** | **331** | P | | **P** | **03 05 43.9** | **0.0** |
| FCC | | | | IAmb | | IAmb | 03 05 58.0 | |
| | comp=Z,9.5nm,1.2s | | | | | | | |
| **PMSA** | **Palmer Station** | **73.06** | **194** | *eP* | | **P** | **03 05 53.6** | **+0.6** |
| **ANMO** | **Albuquerque** | **74.08** | **305** | P | | **P** | **03 05 59.7** | **-0.3** |
| **DGMT** | **Dagmar** | **74.33** | **319** | P | | **P** | **03 06 01.5** | **+0.6** |
| **FFC** | **Flin Flon** | **74.34** | **326** | P | | **P** | **03 06 01.2** | **+0.3** |
| FFC | | | | IAmb | | IAmb | 03 06 15.3 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.88** | **18** | P | | **P** | **03 06 03.5** | **-0.2** |
| | comp=Z,2.9nm,1.0s,baz=27,slow=3.0,SNR=4.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.88** | **18** | IAmb | | IAmb | 03 06 13.1 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **75.11** | **51** | P | | **P** | **03 06 06.5** | **+0.7** |
| GURO | | | | IAmb | | IAmb | 03 06 09.8 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.25** | **313** | P | | **P** | **03 06 17.2** | **-0.8** |
| | comp=Z,0.4nm,0.7s,baz=101,slow=7.7,SNR=4.6 | | | | | | | |
| **YNR** | **Norris Junctio** | **78.23** | **315** | P | | **P** | **03 06 23.4** | **-0.1** |
| YNR | | | | IAmb | | IAmb | 03 06 45.5 | |
| | comp=Z,5.1nm,1.2s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.64** | **311** | P | | **P** | **03 06 26.1** | **+0.4** |
| **EUNU** | **Eureka** | **79.51** | **352** | P | | **P** | **03 06 30.9** | **+1.3** |
| EUNU | | | | IAmb | | IAmb | 03 06 38.8 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **EDM** | **Edmonton** | **80.72** | **323** | P | | **P** | **03 06 37.3** | **+0.7** |
| EDM | | | | IAmb | | IAmb | 03 06 44.6 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.17** | **332** | P | | **P** | **03 06 43.3** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=100,slow=5.3,SNR=25 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.73** | **308** | P | | **P** | **03 06 52.5** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=172,slow=27,SNR=1.7 | | | | | | | |
| **ILAR** | **Eilson Array** | **95.88** | **337** | P | | **P** | **03 07 49.9** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=54,slow=3.8,SNR=7.7 | | | | | | | |

*JMA **27** 02:59:51.8±0.2,22˚.40N×121˚.21E,h0km,M4.5*
*NIED **27** 02:59:51.9,22˚.40N×121˚.21E,h0km,MW4.4,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.51; Mθθ-5.09; Mϕϕ4.58; Mrθ0.90; Mϕθ0.27; Mϕr0.23; Fault plane solution: M₀4.92000×10¹⁵ NP1: ϕs226.00000°,δ86.00000°,λ-9.00000°. NP2:ϕs317.00000°, δ81.00000°,λ-176.00000°.*
*BJI **27** 02:59:52.9±0.0,22˚.32N×121˚.08E,h15km,mb4.3/39, mB4.6/20,ML3.9/7,Ms4.4/45,Ms7 4.2/42*
*NEIC **27** 02:59:52.9±1.8,22˚.32N±0˚.03×121˚.19E±0˚.06,h13km±3km, mb4.5/33,Mwr4.4/21,Error ellipse: s-maj=8.4km s-min=4.5km az=82.0*
*NEIC **27** 02:59:53.1,22˚.31N×121˚.12E,h19km,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr-0.80; Mθθ0.94; Mϕϕ-0.13; Mrθ3.04; Mϕθ1.54; Mϕr3.57; Fault plane solution: M₀5.01000×10¹⁵ NP1:ϕs90.95000°, δ12.30000°,λ-38.42000°. NP2:ϕs218.72000°,δ82.39000°, λ-99.69000°. Principal axes: T 5.4483, Plg37.0000°, Azm317.0000°; N -1.0294, Plg10.0000°, Azm220.0000°; P -4.4189, Plg52.0000°, Azm118.0000°;*
*ASIES **27** 02:59:53.9,22˚.38N×121˚.06E,h22km,MW4.4*
*TAP **27** 02:59:53.1,22˚.33N×121˚.03E,h13km,ML4.8,C*
*IDC **27** 02:59:56.6±2.9,22˚.27N×121˚.26E,h49km±29km,mb3.8/24, mb1 4.0/26,mb1mx3.9/45,mbtmp4.1/26,ML4.1/1,MS3.8/13, Ms1 3.9/13,ms1mx3.4/91,Error ellipse: s-maj=18.6km s-min=11.7km az=65.0*
**ISC 27 02:59:52.9±0.7,22˚.33N±0˚.02×121˚.15E±0˚.02,h14km±4km, n242,σ1§44/321,mb4.3/48,MS4.1/19,35C-16D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TAW** | **Tawu** | **0.24** | **277** | ⇓*iP* | | **Pg** | **02 59 56.9** | **-1.3** |
| | baz=282 | | | | | | | |
| TAW | | | | *i* S | | **Sg** | **02 59 59.4** | **-2.3** |
| | baz=282 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.25** | **273** | ⇓*iP* | | **Pg** | **02 59 57.0** | **-1.2** |
| | baz=273 | | | | | | | |
| TAWH | | | | *i* S | | **Sg** | **02 59 59.5** | **-2.3** |
| | baz=273 | | | | | | | |
| **EAST** | **Anshuo** | **0.29** | **281** | ⇓*iP* | | **Pg** | **02 59 57.6** | **-1.3** |
| | baz=287 | | | | | | | |
| EAST | | | | *i* S | | **Sg** | **03 00 00.9** | **-2.3** |
| | baz=287 | | | | | | | |
| **ECL** | **Taimali** | **0.33** | **326** | ⇓*iP* | | **Pg** | **02 59 59.0** | **-0.7** |
| | baz=347 | | | | | | | |
| ECL | | | | S | | **Sg** | **03 00 03.8** | **-0.4** |
| | baz=347 | | | | | | | |
| **SLIU** | **Shizi** | **0.35** | **252** | ⇓*iP* | | **Pg** | **02 59 59.0** | **-1.0** |
| | baz=241 | | | | | | | |
| SLIU | | | | *i* S | | **Sg** | **03 00 02.7** | **-2.1** |
| | baz=241 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.42** | **224** | ⇑*iP* | | **Pg** | **03 00 01.6** | **+0.2** |
| | baz=210 | | | | | | | |
| SMST | | | | *i* S | | **Sg** | **03 00 07.3** | **+0.2** |
| | baz=210 | | | | | | | |
| **TTN** | **Taitung** | **0.42** | **359** | ⇑P | | **Pb** | **03 00 03.1** | **+1.0** |
| | baz=16 | | | | | | | |
| TTN | | | | *e*S | | **Sn** | **03 00 11.2** | **-1.0** |
| | baz=16 | | | | | | | |
| **LDUT** | **Ludao** | **0.45** | **40** | ⇓*iP* | | **Pn** | **03 00 04.0** | **-0.9** |
| | baz=50 | | | | | | | |
| LDUT | | | | S | | **Sn** | **03 00 12.1** | **-0.7** |
| | baz=50 | | | | | | | |
| **LAY** | **Lan-yu** | **0.47** | **128** | ⇓*iP* | | **Pn** | **03 00 04.1** | **-1.0** |
| | baz=121 | | | | | | | |
| LAY | | | | *e*S | | **Sn** | **03 00 11.7** | **-1.5** |
| | baz=121 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **0.49** | **209** | ⇓*iP* | | **Pb** | **03 00 03.8** | **+0.6** |
| | baz=200 | | | | | | | |
| TSEB | | | | *e*S | | **Sb** | **03 00 11.7** | **+1.5** |
| | baz=200 | | | | | | | |
| **TWGBT** | **Beinan** | **0.49** | **352** | ⇑*iP* | | **Pg** | **03 00 02.6** | **-0.1** |
| | baz=6.0 | | | | | | | |
| TWGBT | | | | *e*S | | **Sb** | **03 00 09.9** | **-0.5** |
| | baz=6.0 | | | | | | | |
| **SCZT** | **Fangliau** | **0.50** | **275** | ⇓*iP* | | **Pg** | **03 00 01.4** | **-1.3** |
| | baz=276 | | | | | | | |
| SCZT | | | | *i* S | | **Sg** | **03 00 07.0** | **-2.4** |
| | baz=276 | | | | | | | |
| **TWG** | **Pinlang** | **0.50** | **351** | Pg | | **Pg** | **03 00 02.4** | **-0.4** |
| TWG | | | | Sg | | **Sg** | **03 00 09.6** | **+0.1** |
| **TWG** | **Pinlang** | **0.50** | **351** | ⇑*iP* | | **Pg** | **03 00 02.6** | **-0.2** |
| | baz=6.0 | | | | | | | |
| TWG | | | | *e*S | | **Sg** | **03 00 09.9** | **+0.5** |
| | baz=6.0 | | | | | | | |
| **TWKBT** | **Hengchun** | **0.50** | **220** | ⇑*iP* | | **Pg** | **03 00 03.1** | **+0.4** |
| | baz=207 | | | | | | | |
| TWKBT | | | | *e*S | | **Sg** | **03 00 10.1** | **+0.7** |
| | baz=207 | | | | | | | |
| **TWK1** | **Hengchun** | **0.50** | **220** | ⇑*iP* | | **Pg** | **03 00 03.1** | **+0.4** |
| | baz=207 | | | | | | | |
| TWK1 | | | | *e*S | | **Sb** | **03 00 10.2** | **-0.3** |
| | baz=207 | | | | | | | |
| **HEN** | **Hengchun** | **0.50** | **230** | ⇑*iP* | | **Pg** | **03 00 03.0** | **+0.2** |
| | baz=219 | | | | | | | |
| HEN | | | | *e*S | | **Sg** | **03 00 09.8** | **+0.3** |
| | baz=219 | | | | | | | |
| **LYUB** | **Lan-yu** | **0.51** | **129** | ⇓*iP* | | **Pb** | **03 00 03.6** | **-0.1** |
| | baz=123 | | | | | | | |
| LYUB | | | | *e*S | | **Sb** | **03 00 11.2** | **+0.3** |
| | baz=123 | | | | | | | |
| **SNW** | **Nanwan** | **0.52** | **226** | *eP* | | **Pb** | **03 00 04.1** | **+0.3** |
| | baz=215 | | | | | | | |
| SNW | | | | *e*S | | **Sb** | **03 00 11.6** | **+0.4** |
| | baz=215 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.56** | **301** | ⇓*iP* | | **Pg** | **03 00 02.6** | **-1.3** |
| | baz=307 | | | | | | | |
| MASBT | | | | *e*S | | **Sg** | **03 00 08.7** | **-2.7** |
| | baz=307 | | | | | | | |
| **SSPT** | **Xinbi** | **0.56** | **286** | *eP* | | **Pg** | **03 00 03.2** | **-0.8** |
| | baz=289 | | | | | | | |
| SSPT | | | | *e*S | | **Sg** | **03 00 10.3** | **-1.2** |
| | baz=289 | | | | | | | |
| **LONT** | **Longtian** | **0.58** | **358** | ⇑*iP* | | **Pg** | **03 00 04.0** | **-0.3** |
| | baz=9.0 | | | | | | | |
| LONT | | | | *e*S | | **Sg** | **03 00 11.8** | **-0.1** |
| | baz=9.0 | | | | | | | |
| **TSMG** | **Majia** | **0.60** | **309** | ⇓*iP* | | **Pg** | **03 00 03.4** | **-1.3** |
| | baz=316 | | | | | | | |
| TSMG | | | | *e*S | | **Sg** | **03 00 10.5** | **-2.3** |
| | baz=316 | | | | | | | |
| **SSD** | **Sandimen** | **0.64** | **311** | ⇓*iP* | | **Pg** | **03 00 04.0** | **-1.4** |
| | baz=319 | | | | | | | |
| SSD | | | | *e*S | | **Sg** | **03 00 11.3** | **-2.6** |
| | baz=319 | | | | | | | |
| **EDH** | **Donghe** | **0.66** | **12** | ⇑*iP* | | **Pg** | **03 00 05.8** | **+0.1** |
| | baz=22 | | | | | | | |
| EDH | | | | *e*S | | **Sb** | **03 00 15.7** | **+0.6** |
| | baz=22 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.70** | **300** | *eP* | | **Pg** | **03 00 05.8** | **-0.7** |
| | baz=305 | | | | | | | |
| TSPT | | | | *e*S | | **Sg** | **03 00 16.0** | **+0.1** |
| | baz=305 | | | | | | | |
| **WLCH** | **Liuqiu** | **0.72** | **272** | *eP* | | **Pn** | **03 00 08.2** | **-0.3** |
| | baz=272 | | | | | | | |
| WLCH | | | | *e*S | | **Sn** | **03 00 22.0** | **+2.6** |
| | baz=272 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.73** | **272** | P | | **Pn** | **03 00 08.6** | **-0.2** |
| | baz=271 | | | | | | | |
| TWP | | | | *e*S | | **Sn** | **03 00 21.3** | **+1.6** |
| | baz=271 | | | | | | | |
| **ECS** | **Chishang** | **0.77** | **4** | *eP* | | **Pg** | **03 00 06.9** | **-1.0** |
| | baz=13 | | | | | | | |
| **CHKT** | **Chengkung** | **0.79** | **14** | ⇑*eP* | | **Pg** | **03 00 07.9** | **-0.4** |
| | baz=23 | | | | | | | |
| CHKT | | | | *e*S | | **Sb** | **03 00 18.9** | **-0.1** |
| | baz=23 | | | | | | | |
| **SLGT** | **Liugui** | **0.81** | **325** | P | | **Pg** | **03 00 07.7** | **-1.0** |
| | baz=332 | | | | | | | |
| SLGT | | | | *e*S | | **Sg** | **03 00 16.9** | **-2.5** |
| | baz=332 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.82** | **287** | ⇑*eP* | | **Pn** | **03 00 10.3** | **+0.3** |
| | baz=289 | | | | | | | |
| KAU | | | | *e*S | | **Sn** | **03 00 24.7** | **+2.8** |
| | baz=289 | | | | | | | |
| **SCST** | **Cishan** | **0.82** | **312** | ⇓P | | **Pg** | **03 00 08.7** | **-0.2** |
| | baz=318 | | | | | | | |
| SCST | | | | *e*S | | **Sg** | **03 00 18.8** | **-1.0** |
| | baz=318 | | | | | | | |
| **TWM1** | **Shoushan** | **0.84** | **306** | ⇓P | | **Pb** | **03 00 09.3** | **+0.1** |
| | baz=311 | | | | | | | |
| TWM1 | | | | *e*S | | **Sn** | **03 00 21.7** | **-0.6** |
| | baz=311 | | | | | | | |
| **ELDTW** | **Lidau** | **0.87** | **352** | ⇑P | | **Pg** | **03 00 08.3** | **-1.5** |
| | baz=360 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.87** | **299** | ⇑*eP* | | **Pn** | **03 00 10.9** | **+0.3** |
| | baz=303 | | | | | | | |
| **FULB** | **Fuli** | **0.88** | **8** | ⇑P | | **Pb** | **03 00 09.0** | **-0.9** |
| | baz=16 | | | | | | | |
| FULB | | | | *e*S | | **Sg** | **03 00 18.6** | **-2.9** |
| | baz=16 | | | | | | | |
| **STYH** | **Taoyuan** | **0.91** | **337** | ⇑P | | **Pb** | **03 00 09.9** | **-0.5** |
| | baz=345 | | | | | | | |
| STYH | | | | *e*S | | **Sn** | **03 00 24.6** | **+0.5** |
| | baz=345 | | | | | | | |
| **STYT** | **Tauyuan** | **0.91** | **336** | ⇑P | | **Pb** | **03 00 09.9** | **-0.6** |
| | baz=344 | | | | | | | |
| **SGST** | **Jiashian** | **0.92** | **325** | ⇓P | | **Pb** | **03 00 09.4** | **-1.2** |
| | baz=332 | | | | | | | |
| SGST | | | | *e*S | | **Sb** | **03 00 22.4** | **-0.2** |
| | baz=332 | | | | | | | |
| **SHHT** | **Tainan City** | **1.02** | **313** | ⇑P | | **Pn** | **03 00 13.4** | **+0.7** |
| | baz=318 | | | | | | | |
| SHHT | | | | *e*S | | **Sn** | **03 00 28.8** | **+2.1** |
| | baz=318 | | | | | | | |
| **ECBN** | **Changbin** | **1.02** | **16** | *eP* | | **Pb** | **03 00 11.5** | **-0.9** |
| | baz=22 | | | | | | | |
| ECBN | | | | *e*S | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WDLH** | **Douliu** | **1.47** | **337** | *eP* | | **Pb** | **03 00 19.7** | **-0.3** |
| | baz=342 | | | | | | | | |
| WDLH | | | | *eS* | | **Sg** | **03 00 40.6** | **+0.3** |
| | baz=342 | | | | | | | | |
| **ESL** | **Shilin** | **1.50** | **10** | *eP* | | **Pn** | **03 00 18.9** | **-0.5** |
| | baz=14 | | | | | | | | |
| **WTK** | **Tuku** | **1.53** | **333** | *eP* | | **Pn** | **03 00 19.9** | **+0.2** |
| | baz=336 | | | | | | | | |
| WTK | | | | *eS* | | **Sb** | **03 00 40.5** | **+0.3** |
| | baz=336 | | | | | | | | |
| **WJS** | **Zhushan** | **1.54** | **345⇑** | *eP* | | **Pb** | **03 00 21.2** | **+0.1** |
| | baz=349 | | | | | | | | |
| WJS | | | | *eS* | | **Sb** | **03 00 41.2** | **+0.7** |
| | baz=349 | | | | | | | | |
| **WSF** | **Szhu** | **1.56** | **327** | *eP* | | **Pn** | **03 00 20.1** | **-0.1** |
| | baz=330 | | | | | | | | |
| WSF | | | | *eS* | | **Sn** | **03 00 36.7** | **-3.5** |
| | baz=330 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.57** | **351** | *eP* | | **Pb** | **03 00 21.6** | **-0.1** |
| | baz=356 | | | | | | | | |
| SMLT | | | | *eS* | | **Sg** | **03 00 44.2** | **+0.8** |
| | baz=356 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.59** | **15** | *eP* | | **Pn** | **03 00 21.0** | **+0.5** |
| | baz=19 | | | | | | | | |
| **TYC** | **Yuchr** | **1.59** | **350⇑** | *eP* | | **Pb** | **03 00 22.1** | **0.0** |
| | baz=355 | | | | | | | | |
| TYC | | | | *eS* | | **Sg** | **03 00 45.0** | **+0.7** |
| | baz=355 | | | | | | | | |
| **WNT** | **Mingjian** | **1.60** | **344** | *eP* | | **Pb** | **03 00 22.0** | **-0.3** |
| | baz=349 | | | | | | | | |
| WNT | | | | *eS* | | **Sg** | **03 00 44.5** | **-0.1** |
| | baz=349 | | | | | | | | |
| **WUSB** | **Renai** | **1.66** | **359** | *eP* | | **Pn** | **03 00 21.6** | **0.0** |
| | baz=3.0 | | | | | | | | |
| WUSB | | | | *eS* | | **Sg** | **03 00 46.9** | **+0.5** |
| | baz=3.0 | | | | | | | | |
| **ETM** | **Tongmen** | **1.66** | **11** | *eP* | | **Pn** | **03 00 20.4** | **-1.2** |
| | baz=15 | | | | | | | | |
| **WDGT** | **Dungji** | **1.66** | **304** | *eP* | | **Pn** | **03 00 19.9** | **-1.7** |
| | baz=306 | | | | | | | | |
| WDGT | | | | *eS* | | **Sn** | **03 00 41.4** | **-1.3** |
| | baz=306 | | | | | | | | |
| **WPL** | **Puli Township** | **1.69** | **354** | *eP* | | **Pb** | **03 00 23.0** | **-0.7** |
| | baz=358 | | | | | | | | |
| **HWA** | **Hwalien** | **1.69** | **14** | *eP* | | **Pb** | **03 00 24.5** | **+0.7** |
| | baz=18 | | | | | | | | |
| **DPDB** | **Guoxing** | **1.71** | **353** | *eP* | | **Pb** | **03 00 24.2** | **+0.1** |
| | baz=357 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.72** | **336** | *eP* | | **Pn** | **03 00 22.6** | **+0.2** |
| | baz=339 | | | | | | | | |
| **CHGB** | **Renai** | **1.73** | **1** | *eP* | | **Pn** | **03 00 22.4** | **-0.2** |
| | baz=4.0 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.74** | **353** | *eP* | | **Pb** | **03 00 24.2** | **-0.4** |
| | baz=356 | | | | | | | | |
| **WWF** | **Wufeng** | **1.76** | **346** | *eP* | | **Pb** | **03 00 24.5** | **-0.4** |
| | baz=350 | | | | | | | | |
| **TWD** | **Chiawan** | **1.79** | **13** | *eP* | | **Pn** | **03 00 23.8** | **+0.4** |
| | baz=17 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.81** | **3** | *eP* | | **Pn** | **03 00 23.1** | **-0.9** |
| | baz=7.0 | | | | | | | | |
| **VCHM** | **Qimei** | **1.82** | **299⇑** | *eP* | | **Pn** | **03 00 22.0** | **-1.7** |
| | baz=301 | | | | | | | | |
| VCHM | | | | *eS* | | **Sn** | **03 00 43.7** | **-2.8** |
| | baz=301 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.83** | **343** | *eP* | | **Pn** | **03 00 24.7** | **+0.9** |
| | baz=346 | | | | | | | | |
| **TCU** | **Taichung** | **1.86** | **346** | *eP* | | **Pb** | **03 00 26.0** | **-0.8** |
| | baz=350 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.88** | **309⇑** | *eP* | | **Pn** | **03 00 22.9** | **-1.6** |
| | baz=311 | | | | | | | | |
| PHUB | | | | *eS* | | **Sn** | **03 00 45.8** | **-2.1** |
| | baz=311 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.88** | **12** | | | **Pn** | **03 00 22.4** | **-2.2** |
| **NACB** | **Ninganchiao** | **1.88** | **12** | *eP* | | **Pn** | **03 00 24.7** | **+0.1** |
| | baz=16 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.90** | **9** | *eP* | | **Pn** | **03 00 23.8** | **-1.1** |
| | baz=13 | | | | | | | | |
| **FUSS** | **Fushou** | **1.91** | **2** | *eP* | | **Pn** | **03 00 25.1** | **-0.2** |
| | baz=6.0 | | | | | | | | |
| **TDCB** | **Techi** | **1.92** | **0** | *eP* | | **Pb** | **03 00 27.7** | **-0.1** |
| | baz=4.0 | | | | | | | | |
| **PNG** | **Penghu** | **1.92** | **310** | *eP* | | **Pn** | **03 00 23.8** | **-1.4** |
| | baz=312 | | | | | | | | |
| **WHP** | **Taichung City** | **1.95** | **354⇑** | *eP* | | **Pb** | **03 00 27.8** | **-0.5** |
| | baz=358 | | | | | | | | |
| WHP | | | | *eS* | | **Sb** | **03 00 53.3** | **+0.8** |
| | baz=358 | | | | | | | | |
| **TWQ1** | **Liyutan** | **2.04** | **350** | *eP* | | **Pb** | **03 00 28.4** | **-1.4** |
| | baz=353 | | | | | | | | |
| TWQ1 | | | | *eS* | | **Sb** | **03 00 55.5** | **+0.5** |
| | baz=353 | | | | | | | | |
| **WDJ** | **Dajia District** | **2.07** | **347** | *eP* | | **Pb** | **03 00 29.7** | **-0.4** |
| | baz=350 | | | | | | | | |
| **NNSB** | **Datong** | **2.10** | **6** | *eP* | | **Pb** | **03 00 29.8** | **-1.0** |
| | baz=9.0 | | | | | | | | |
| **NSY** | **Sanyi** | **2.11** | **350** | *eP* | | **Pb** | **03 00 29.5** | **-1.4** |
| | baz=353 | | | | | | | | |
| **NNS** | **Nan Shan** | **2.11** | **5** | *eP* | | **Pn** | **03 00 28.7** | **+0.8** |
| | baz=9.0 | | | | | | | | |
| **LATG** | **Datong** | **2.23** | **9** | *eP* | | **Pn** | **03 00 30.5** | **+1.1** |
| | baz=12 | | | | | | | | |
| **NMLH** | **Miaoli** | **2.23** | **351** | *eP* | | **Pb** | **03 00 32.0** | **-0.8** |
| | baz=354 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.29** | **359** | *eP* | | **Pb** | **03 00 32.4** | **-1.7** |
| | baz=2.0 | | | | | | | | |
| **NSTT** | **Nanjuang** | **2.30** | **357** | *eP* | | **Pn** | **03 00 31.9** | **+1.6** |
| | baz=360 | | | | | | | | |
| **LIOB** | **Emei** | **2.31** | **357** | *eP* | | **Pb** | **03 00 33.8** | **-0.5** |
| | baz=360 | | | | | | | | |
| **ENTT** | **Nioudou** | **2.33** | **9** | *eP* | | **Pn** | **03 00 30.9** | **0.0** |
| | baz=12 | | | | | | | | |
| **YHNB** | **Yeheng** | **2.34** | **5** | | | **Pn** | **03 00 31.3** | **+0.3** |
| **YHNB** | **Yeheng** | **2.34** | **5** | *eP* | | **Pn** | **03 00 31.3** | **+0.3** |
| | baz=8.0 | | | | | | | | |
| **NSK** | **Sanguang** | **2.35** | **5** | *eP* | | **Pn** | **03 00 31.4** | **+0.4** |
| | baz=8.0 | | | | | | | | |
| **NDS** | **Dongshan** | **2.35** | **13** | *eP* | | **Pb** | **03 00 33.2** | **-1.9** |
| | baz=15 | | | | | | | | |
| **TWC** | **Suao** | **2.36** | **16** | *eP* | | **Pn** | **03 00 32.8** | **+1.7** |
| | baz=19 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.45** | **9** | *eP* | | **Pn** | **03 00 33.7** | **+1.2** |
| | baz=12 | | | | | | | | |
| **NWLT** | **Wulai** | **2.46** | **7** | *eP* | | **Pn** | **03 00 33.8** | **+1.2** |
| | baz=10.0 | | | | | | | | |
| **TATO** | **Taipei** | **2.65** | **7** | Pn | | **Pn** | **03 00 36.2** | **+0.9** |
| **JYNG** | **Yonagunijimaku** | **2.68** | **38** | P | | **Pn** | **03 00 36.4** | **+0.8** |
| JYNG | | | | *eS* | | **Sn** | **03 01 08.6** | **+0.8** |
| **TIPB** | **Shuangxi** | **2.70** | **13** | *eP* | | **Pn** | **03 00 37.4** | **+1.5** |
| | baz=16 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.73** | **38** | P | | **Pn** | **03 00 37.0** | **+0.8** |
| YOJ | | | | S | | **Sn** | **03 01 09.6** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **2.73** | **38** | | | **Pn** | **03 00 37.2** | **+1.0** |
| **YOJ** | **Yonaguni jima** | **2.73** | **38** | *eP* | | **Pn** | **03 00 37.2** | **+1.0** |
| | baz=40 | | | | | | | | |
| YOJ | | | | *eS* | | **Sn** | **03 01 10.2** | **+1.3** |
| | baz=40 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.99** | **54** | P | | **Pn** | **03 00 41.1** | **+1.3** |
| HATJ | | | | S | | **Sn** | **03 01 15.8** | **+0.4** |
| **IRIF** | **Iriomote-Funau** | **3.10** | **49** | P | | **Pn** | **03 00 42.2** | **+0.9** |
| IRIF | | | | S | | **Sn** | **03 01 19.1** | **+1.0** |
| **JKRS** | **Kuro-shima** | **3.24** | **54** | P | | **Pn** | **03 00 44.6** | **+1.3** |
| JKRS | | | | S | | **Sn** | **03 01 22.6** | **+0.9** |
| **KNMB** | **Chin-men Tao** | **3.31** | **310** | Pn | | **Pn** | **03 00 41.9** | **-2.4** |
| **KNMB** | **Chin-men Tao** | **3.31** | **310** | *eP* | | **Pn** | **03 00 41.8** | **-2.5** |
| | baz=311 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.41** | **53** | P | | **Pn** | **03 00 47.1** | **+1.4** |
| JIJ | | | | S | | **Sn** | **03 01 25.6** | **-0.3** |
| **QZH** | **Quanzhou** | **3.51** | **318** | Pn | | **Pn** | **03 00 46.0** | **-0.9** |
| QZH | | | | Sn | | **Sn** | **03 01 26.3** | **-1.9** |
| QZH | | | | smax | smax | | | | |
| | comp=N,210nm,0.9s | | | | | | | | |
| QZH | | | | smax | smax | | | | |
| | comp=E,210nm,0.9s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=N,2μm,8.8s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=E,1μm,12.0s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,2μm,11.2s | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.67** | **52** | P | | **Pn** | **03 00 49.8** | **+0.6** |
| JISG | | | | S | | **Sn** | **03 01 32.9** | **+0.7** |
| **JTJ** | **Tarama** | **3.99** | **54** | P | | **Pn** | **03 00 54.8** | **+1.2** |
| JTJ | | | | S | | **Sn** | **03 01 41.1** | **+1.0** |
| **MHZQ** | **Yeshan** | **4.23** | **333** | *eP* | | **Pn** | **03 00 56.8** | **-0.1** |
| | baz=334 | | | | | | | | |
| **JIRB** | **Irabujima** | **4.45** | **55** | P | | **Pn** | **03 01 01.0** | **+1.1** |
| JIRB | | | | S | | **Sn** | **03 01 50.8** | **-0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JMJ2** | **Miyako jima3** | **4.52** | **57** | P | | **Pn** | **03 01 02.5** | **+1.6** |
| JMJ2 | | | | S | | **Sn** | **03 01 53.6** | **+0.3** |
| **JIKM** | **Ikemajima** | **4.56** | **55** | P | | **Pn** | **03 01 02.9** | **+1.5** |
| JIKM | | | | S | | **Sn** | **03 01 54.9** | **+0.7** |
| **JOGS** | **Gusukube** | **4.59** | **57** | P | | **Pn** | **03 01 03.3** | **+1.4** |
| JOGS | | | | S | | **Sn** | **03 01 56.3** | **+1.3** |
| **HKPS** | **Hong Kong Po S** | **6.49** | **271** | | | **Pn** | **03 01 27.4** | **-0.7** |
| **GZH** | **Guangzhou** | **7.25** | **277** | Pn | | **Pn** | **03 01 34.8** | **-3.6** |
| GZH | | | | Sn | | **Sn** | **03 02 56.5** | **-4.0** |
| GZH | | | | smax | smax | | | |
| | comp=N,120nm,0.9s | | | | | | | |
| GZH | | | | smax | smax | | | |
| | comp=E,150nm,0.8s | | | | | | | |
| **JOW** | **Kunigami** | **7.88** | **54** | P | | **Pn** | **03 01 46.5** | **-0.5** |
| | 6.3nm,0.3s,baz=194,slow=12,SNR=11 | | | | | | | |
| JOW | | | | S | | **Sn** | **03 03 13.1** | **-3.0** |
| | 0.9nm,0.3s,baz=114,slow=8.4,SNR=1.4 | | | | | | | |
| **NJ2** | **Nanjing** | **9.90** | **349** | *eP* | | **Pn** | **03 02 15.0** | **+0.3** |
| NJ2 | | | | pP | | | 03 02 18.3 | |
| NJ2 | | | | sP | | | 03 02 20.5 | |
| NJ2 | | | | PP | | **PnPn** | **03 02 23.8** | **+1.1** |
| NJ2 | | | | S | | **Sn** | **03 04 04.5** | **-1.2** |
| NJ2 | | | | sS | | | 03 04 14.5 | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.6s | | | | | | | |
| NJ2 | | | | smax | smax | | | |
| | comp=N,67nm,0.8s | | | | | | | |
| NJ2 | | | | smax | smax | | | |
| | comp=E,49nm,0.8s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=N,3μm,11.3s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=E,980nm,6.2s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,3μm,13.7s | | | | | | | |
| **WHN** | **Wuhan** | **10.20** | **325** | ⇑P | | **Pn** | **03 02 18.3** | **-0.6** |
| WHN | | | | S | | **Sn** | **03 04 14.5** | **+1.4** |
| WHN | | | | LR | LR | | | |
| | comp=N,3μm,8.3s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=E,1μm,9.9s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,4μm,12.6s | | | | | | | |
| **GULI** | **GuiLin** | **10.31** | **289** | ⇑P | | **Pn** | **03 02 18.3** | **-2.1** |
| GULI | | | | S | | **Sn** | **03 04 11.8** | **-3.9** |
| GULI | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=N,800nm,12.2s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=E,920nm,12.3s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=Z,1μm,13.6s | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.08** | **255** | P | | **Pn** | **03 02 33.0** | **+2.0** |
| QIZ | | | | S | | **Sn** | **03 04 36.5** | **+1.7** |
| QIZ | | | | LR | LR | | | |
| | comp=N,1μm,12.6s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=E,750nm,12.9s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,950nm,11.9s | | | | | | | |
| **GYA** | **Guiyang** | **13.83** | **290** | ⇑P | | **Pn** | **03 03 10.3** | **+1.7** |
| GYA | | | | S | | **Sn** | **03 05 44.3** | **+2.2** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=N,490nm,10.4s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=E,1μm,14.6s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,1μm,14.8s | | | | | | | |
| **HNS** | **HongShan** | **16.02** | **341** | ⇑P | | **P** | **03 03 40.0** | **-1.1** |
| HNS | | | | S | | **Sn** | **03 06 40.8** | **+5.7** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=N,1μm,13.2s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,1μm,12.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,1μm,13.1s | | | | | | | |
| **KSRS** | **Korea Array** | **16.17** | **20** | P | | **Pn** | **03 03 41.0** | **+1.4** |
| | baz=201,slow=12,SNR=2.6 | | | | | | | |
| KSRS | | | | LR | LR | | 03 10 29.6 | |
| | comp=Z,154nm,19.2s,baz=200,slow=39 | | | | | | | |
| **PZH** | **PanZhiHua** | **18.16** | **287** | P | | **P** | **03 04 06.8** | **+1.7** |
| PZH | | | | S | | **S** | **03 07 33.3** | **+0.5** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.1s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,430nm,13.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,440nm,12.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,620nm,15.1s | | | | | | | |
| **BJI** | **Beijing** | **18.16** | **348** | P | | **P** | **03 04 06.5** | **+1.7** |
| BJI | | | | sP | | **sP** | **03 04 13.0** | **+2.7** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=N,830nm,14.6s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=E,320nm,16.3s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,1μm,14.4s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **20.17** | **338** | *eP* | | Pn | 03 04 30.0 | +1.2 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,1μm,9.9s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,290nm,9.1s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,1μm,12.6s | | | | | | | |
| **LZH** | **Lanzhou** | **20.36** | **316** | *eP* | | Pn | 03 04 32.0 | +0.8 |
| LZH | | | | pP | | sP | 03 04 36.3 | +1.5 |
| LZH | | | | sP | | pP | 03 04 40.0 | +7.0 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,400nm,14.6s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,700nm,14.6s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,870nm,15.7s | | | | | | | |
| **MAT** | **Matsushiro** | **20.48** | **42** | P | | Pn | 03 04 31.8 | -0.6 |
| MAT | | | | *eS* | | **S** | **03 08 15.4** | **-3.7** |
| **MJAR** | **Matsushiro Arr** | **20.48** | **42** | P | | **P** | **03 04 31.2** | **+0.9** |
| | 5.8nm,0.9s,baz=237,slow=8.8,SNR=5.1 | | | | | | | |
| MJAR | | | | LR | LR | | 03 12 51.0 | |
| | comp=Z,85nm,19.8s,baz=210,slow=38 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.48** | **42** | P | | **P** | **03 04 31.1** | **+0.8** |
| **BTO** | **Baotou** | **20.52** | **335** | *eP* | | Pn | 03 04 36.8 | +3.9 |
| BTO | | | | LR | LR | | | |
| | comp=N,3μm,14.9s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=E,1μm,14.1s | | | | | | | |
| **TOLI2** | **Tolitoli** | **21.09** | **181** | P | | **P** | **03 04 36.9** | **-0.1** |
| TOLI2 | | | | lAmb | lAmb | | 03 04 42.2 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.17** | **264** | P | | **P** | **03 04 39.1** | **+1.2** |
| | comp=Z,3.3nm,0.4s,baz=72,slow=9.4,SNR=12 | | | | | | | |
| CMAR | | | | LR | LR | | 03 13 55.6 | |
| | comp=Z,265nm,18.6s,baz=70,slow=40 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.17** | **264** | P | | **P** | **03 04 38.0** | **+0.1** |
| **SBUM** | **Sibu** | **21.58** | **205** | P | | **P** | **03 04 44.0** | **+1.8** |
| **GTOI** | **Gorontalo** | **21.64** | **175** | P | | **P** | **03 04 43.0** | **+0.2** |
| | comp=Z,10nm,1.0s | | | | | | | |
| **CN2** | **Changchun** | **21.71** | **8** | *eP* | | **P** | **03 04 43.0** | **-0.4** |
| CN2 | | | | *eS* | | **S** | **03 08 39.3** | **-4.0** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,500nm,17.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,700nm,17.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,500nm,18.0s | | | | | | | |
| **MRSI** | **Marisa** | **21.73** | **178** | P | | **P** | **03 04 47.2** | **+3.3** |
| | comp=Z,56nm,0.6s | | | | | | | |
| **MPSI** | **Mapaga** | **21.89** | **183** | P | | **P** | **03 04 48.7** | **+3.1** |
| | comp=Z,11nm,0.7s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **XLT** | **XiLinHaoTe** | **21.92** | **350⇑** | *iP* | | **P** | **03 04 51.0** | **+5.2** |
| XLT | | | | pP | | sP | 03 04 53.5 | +2.1 |
| XLT | | | | sP | | pP | 03 04 57.3 | +7.6 |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,82nm,3.6s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,76nm,13.3s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,220nm,17.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,760nm,12.3s | | | | | | | |
| **APSI** | **Ampana** | **23.10** | **179** | P | | **P** | **03 04 59.8** | **+1.4** |
| | comp=Z,30nm,1.1s | | | | | | | |
| **LUWI** | **Luwuk** | **23.28** | **176** | P | | **P** | **03 05 00.3** | **0.0** |
| **LUWI** | **Luwuk** | **23.28** | **176** | P | | **P** | **03 05 05.7** | **+5.5** |
| | comp=Z,57nm,0.6s | | | | | | | |
| **USRK** | **Usuriysk Ar.** | **23.58** | **20** | P | | **P** | **03 05 03.9** | **+0.9** |
| | comp=Z,1.6nm,0.6s,baz=212,slow=12,SNR=2.4 | | | | | | | |
| **GUMO** | **Guam** | **24.15** | **107** | LR | | LR | 03 14 11.7 | |
| | comp=Z,119nm,19.5s,baz=106,slow=36 | | | | | | | |
| **GTA** | **Gaotai** | **24.91** | **318** | *eP* | | **P** | **03 05 16.5** | **+0.9** |
| GTA | | | | pP | | sP | 03 05 21.5 | +0.1 |
| GTA | | | | sP | | pP | 03 05 24.5 | +4.8 |
| GTA | | | | sS | | sS | 03 09 50.8 | +5.5 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,83nm,4.6s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,300nm,11.6s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,260nm,14.9s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,430nm,14.5s | | | | | | | |
| **GOMU** | **GeErMu** | **26.71** | **307** | P | | **P** | **03 05 32.8** | **+0.6** |
| GOMU | | | | S | | **S** | **03 10 12.0** | **+4.4** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,85nm,5.6s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,250nm,12.1s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,470nm,14.9s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,520nm,14.1s | | | | | | | |
| **SHL** | **Shillong** | **26.92** | **283** | P | | **P** | **03 05 32.9** | **-1.1** |
| SHL | | | | lAmb | lAmb | | 03 05 37.9 | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **KAPI** | **Kappang** | **27.21** | **183** | LR | | LR | 03 18 19.3 | |
| | comp=Z,48nm,18.4s,baz=38,slow=41 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.88** | **339** | P | | **P** | **03 05 41.1** | **-1.2** |
| ULN | | | | lAmb | lAmb | | 03 05 47.8 | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **ASAJ** | **Asahikawa** | **28.02** | **34** | P | | **P** | **03 05 44.7** | **+1.3** |
| | comp=Z,4.2nm,0.6s,baz=68,slow=34,SNR=2.1 | | | | | | | |
| ASAJ | | | | LR | | LR | 03 17 13.4 | |
| | comp=Z,131nm,21.3s,baz=0.5,slow=37 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **28.02** | **34** | P | | **P** | **03 05 44.7** | **+1.3** |
| **SONM** | **Songino Array** | **28.07** | **339** | P | | **P** | **03 05 44.6** | **+0.6** |
| | comp=Z,2.0nm,0.7s,baz=150,slow=8.7,SNR=15 | | | | | | | |
| SONM | | | | LR | | LR | 03 18 31.0 | |
| | comp=Z,490nm,18.4s,baz=159,slow=40 | | | | | | | |
| **SONM** | **Songino Array** | **28.07** | **339** | P | | **P** | **03 05 43.5** | **-0.5** |
| **KLR** | **Kul'dur** | **28.13** | **15** | P | | **P** | **03 05 47.3** | **+3.0** |
| | comp=Z,0.6nm,0.5s,baz=225,slow=17,SNR=2.1 | | | | | | | |
| **JAY** | **Jayapura** | **31.21** | **140** | LR | | LR | 03 16 39.5 | |
| | comp=Z,170nm,20.9s,baz=340,slow=32 | | | | | | | |
| **WMQ** | **Urumqi** | **34.94** | **316** | *eP* | | **P** | **03 06 47.0** | **+2.6** |
| **KNRA** | **Kununurra** | **38.50** | **168** | P | | **P** | **03 07 12.7** | **-2.1** |
| KNRA | | | | lAmb | lAmb | | 03 07 19.8 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **39.66** | **318** | P | | **P** | **03 07 24.7** | **+0.3** |
| MK31 | | | | lAmb | lAmb | | 03 07 26.2 | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.66** | **318** | P | | **P** | **03 07 25.2** | **+0.9** |
| | comp=Z,6.1nm,0.8s,baz=114,slow=10,SNR=62 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **03 09 30.7** | **-0.4** |
| | comp=Z,1.3nm,0.8s,baz=94,slow=3.6,SNR=5.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.66** | **318** | P | | **P** | **03 07 24.8** | **+0.4** |
| **MAKZ** | **Makanchi** | **39.87** | **317** | P | | **P** | **03 07 26.5** | **+0.4** |
| MAKZ | | | | lAmb | lAmb | | 03 07 28.0 | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **41.42** | **33** | LR | | LR | 03 24 58.7 | |
| | comp=Z,90nm,20.6s,baz=194,slow=36 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.79** | **328** | P | | **P** | **03 07 41.9** | **+0.1** |
| ZAA0 | | | | lAmb | lAmb | | 03 07 43.0 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.79** | **328** | P | | **P** | **03 07 41.7** | **0.0** |
| | comp=Z,4.4nm,0.5s,baz=117,slow=8.5,SNR=16 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.79** | **328** | P | | **P** | **03 07 41.5** | **-0.3** |
| **KSH** | **Kashi** | **41.91** | **305** | P | | **P** | **03 07 47.3** | **+4.2** |
| KSH | | | | sP | | sP | 03 07 53.8 | +4.8 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **42.03** | **147** | P | | **P** | **03 07 42.8** | **-1.3** |
| **H11N1** | **WAKE ISLAND Hy** | **42.65** | **85** | T | | T | 03 53 36.7 | |
| | baz=282,slow=74,SNR=88 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.65** | **85** | T | | T | 03 53 36.9 | |
| | baz=282,slow=74,SNR=137 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.67** | **85** | T | | T | 03 53 38.0 | |
| | baz=282,slow=74,SNR=128 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.73** | **87** | T | | T | 03 53 41.4 | |
| | baz=284,slow=74,SNR=93 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.73** | **87** | T | | T | 03 53 40.5 | |
| | baz=284,slow=74,SNR=59 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.74** | **87** | T | | T | 03 53 40.9 | |
| | baz=284,slow=74,SNR=42 | | | | | | | |
| **KURK** | **Kurchatov** | **43.51** | **321** | P | | **P** | **03 07 56.0** | **+0.3** |
| KURK | | | | lAmb | lAmb | | 03 07 57.5 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **43.63** | **309** | P | | **P** | **03 07 57.4** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **43.65** | **182** | P | | **P** | **03 07 55.9** | **-1.3** |
| **WB0** | **Warramunga Arr** | **43.79** | **162** | P | | **P** | **03 07 56.4** | **-2.0** |
| WB0 | | | | lAmb | lAmb | | 03 07 57.2 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.94** | **162** | P | | **P** | **03 07 57.7** | **-1.8** |
| | comp=Z,3.5nm,0.7s,baz=346,slow=8.8,SNR=17 | | | | | | | |
| **GIRL** | **Giralia** | **45.20** | **189** | P | | **P** | **03 08 09.2** | **-0.3** |
| **GAR** | **Garm** | **46.18** | **303** | P | | **P** | **03 08 17.8** | **+0.4** |
| **KKAR** | **Karatay Array** | **46.59** | **309** | P | | **P** | **03 08 20.4** | **-0.1** |
| **KBL** | **Kabul** | **46.95** | **297** | P | | **P** | **03 08 23.5** | **-0.2** |
| KBL | | | | lAmb | lAmb | | 03 08 26.9 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **47.37** | **164** | P | | **P** | **03 08 25.8** | **-0.9** |
| AS31 | | | | lAmb | lAmb | | 03 08 30.9 | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.37** | **164** | P | | **P** | **03 08 25.5** | **-1.2** |
| | comp=Z,1.4nm,0.5s,baz=343,slow=7.0,SNR=26 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **03 09 56.0** | **-1.3** |
| | comp=

comp=Z,2.8nm,0.7s,baz=356,slow=8.3,SNR=7.2
**STKA Stephens Creek 57.34 159 P P 03 09 39.6 -0.9**
**KBZ Khabaz 66.62 309 P P 03 10 42.7 -0.2**
comp=Z,1.8nm,0.8s,baz=221,slow=7.7,SNR=4.1
**KLMR Klimovskoe 66.72 328** *eP* **P 03 10 42.4 -0.8**
KLMR AMP 03 10 45.7
comp=Z,11nm,1.3s
**ILAR Eielson Array 70.87 27 P P 03 11 07.4 -1.7**
comp=Z,0.3nm,0.5s,baz=286,slow=5.2,SNR=2.6
**ARCES ARCESS Array B 71.25 338 P P 03 11 09.0 -2.3**
comp=Z,3.7nm,0.9s,baz=70,slow=7.8,SNR=5.3
**FINES FINESS Array B 73.03 330 P P 03 11 22.4 +0.4**
comp=Z,2.5nm,0.8s,baz=3.8,slow=8.6,SNR=7.1
**AKASG Malin Array Be 74.24 319 P P 03 11 28.6 -0.7**
comp=Z,0.6nm,0.6s,baz=59,slow=6.4,SNR=4.1
**BRTR Keskin Array B 74.25 307 P P 03 11 29.4 -0.5**
comp=Z,1.0nm,0.9s,baz=100,slow=5.8,SNR=6.3
**HFS Hagfors 79.17 331** LR LR 03 50 26.0
comp=Z,222nm,18.4s,baz=152,slow=38
**NB2 NORSAR Subarra 79.85 332 P P 03 12 00.4 -0.4**
comp=Z,0.5nm,0.7s,baz=61,slow=5.3
**NOA NORSAR Array B 79.85 332 P P 03 12 00.3 -0.5**
comp=Z,1.3nm,0.8s,baz=67,slow=5.0,SNR=5.0
NOA LR LR 03 50 47.6
comp=Z,226nm,18.9s,baz=65,slow=38
**GERES GERESS Array B 84.25 321 P P 03 12 24.6 +0.3**
comp=Z,0.7nm,0.7s,baz=36,slow=5.0,SNR=6.4
**SUMG Summit 84.34 354** *i* P **P 03 12 24.0 -0.6**
**YKA Yellowknife Ar 84.69 23 P P 03 12 24.8 -1.2**
comp=Z,2.3nm,1.1s,baz=315,slow=4.5,SNR=14
**RAR Rarotonga 88.40 114** LR LR 03 49 29.8
comp=Z,156nm,19.9s,baz=93,slow=34
**SDV Santo Domingo 146.90 22** PKPbc **PKPdf 03 19 34.0 -0.1**
comp=Z,12nm,0.8s,baz=252,slow=1.6,SNR=17

**IDC 27 03:01:43.2±6.1, 4.75N×32.50W, h0km, mb3.6/5, mb1 3.8/5, mb1mx3.6/39, mbtmp3.6/5, Error ellipse: s-maj=174.4km s-min=45.3km az=10.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.88** | **125** | T | T | 03 29 06.8 | |
| | baz=305 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.89** | **125** | T | T | 03 29 03.2 | |
| | baz=305 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.90** | **125** | T | T | 03 29 04.0 | |
| | baz=305 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.39** | **127** | T | T | 03 29 52.9 | |
| | baz=278 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.41** | **127** | T | T | 03 29 49.8 | |
| | baz=302 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.75** | **74** | P | P | 03 08 35.4 | -0.3 |
| | 0.8nm,0.7s,baz=264,slow=8.9,SNR=5.6 | | | | | | |
| **GERES** | **GERESS Array B** | **58.84** | **34** | P | P | 03 11 43.7 | -0.1 |
| | 0.1nm,0.2s,baz=224,slow=9.7,SNR=3.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.67** | **37** | P | P | 03 12 48.2 | -0.3 |
| | 0.2nm,0.4s,baz=254,slow=6.0,SNR=1.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.69** | **49** | P | P | 03 12 49.6 | +0.6 |
| | 0.9nm,0.8s,baz=241,slow=6.8,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.16** | **332** | P | P | 03 14 05.8 | 0.0 |
| | 0.5nm,1.0s,baz=97,slow=5.4,SNR=4.4 | | | | | | |

*ATH **27** 03:02:24.9, 38.54N×26.46E, h31km±1km, ML2.6/5, Error ellipse: s-maj=2.5km s-min=1.1km az=260.0*
*DDA **27** 03:02:25.3±0.0, 38.55N×26.42E, h7km±3km, ML2.4*
*ISK **27** 03:02:25.1, 38.56N×26.43E, h15km, ML2.6/24*
*THE **27** 03:02:26.3, 38.51N×26.37E, h22km±3km, ML2.6/4, Error ellipse: s-maj=4.8km s-min=0.8km az=264.0*
**ISC 27 03:02:25.5±0.9, 38.55N±0.02×26.46E±0.02, h15km±8km, n49, σ0967/74, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URLA** | **Izmir** | **0.22** | **150** | PG | **Pb** | **03 02 30.6** | **-0.6** |
| URLA | | | | SG | **Sb** | **03 02 34.6** | **-0.3** |
| **URLA** | **Izmir** | **0.22** | **150** | P | **Pb** | **03 02 30.6** | **-0.6** |
| URLA | | | | *i* AML | AML | 03 02 34.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| URLA | | | | *i* AML | AML | 03 02 34.0 | |
| | comp=N,687nm,0.4s | | | | | | |
| URLA | | | | S | **Sb** | **03 02 34.6** | **-0.3** |
| **FOCM** | **Foa** | **0.27** | **52** | PG | **Pb** | **03 02 31.6** | **-0.5** |
| FOCM | | | | SG | **Sb** | **03 02 36.0** | **-0.5** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.31** | **173** | P | **Pg** | **03 02 32.0** | **+0.1** |
| **CHOS** | **Chios island** | **0.35** | **243** | P | **Pg** | **03 02 33.1** | **+0.3** |
| CHOS | | | | S | **Sg** | **03 02 37.7** | **-0.1** |
| | 1μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.35** | **243** | P | **Pg** | **03 02 33.1** | **+0.3** |
| CHOS | | | | AML | AML | 03 02 38.8 | |
| | comp=N,2934μm,0.2s | | | | | | |
| CHOS | | | | AML | AML | 03 02 39.6 | |
| | comp=E,3251μm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.35** | **243** | PG | **Pg** | **03 02 33.1** | **+0.3** |
| CHOS | | | | SG | **Sg** | **03 02 38.0** | **+0.2** |
| **CAND** | **Candarli** | **0.49** | **34** | PG | **Pb** | **03 02 35.6** | **-0.2** |
| CAND | | | | SG | **Sb** | **03 02 42.8** | **0.0** |
| **DGB** | **zmir** | **0.60** | **146** | P | **Pb** | **03 02 37.1** | **-0.5** |
| DGB | | | | S | **Sb** | **03 02 45.7** | **-0.1** |
| DGB | | | | *i* AML | AML | 03 02 46.0 | |
| | comp=E,129nm,0.3s | | | | | | |
| DGB | | | | *i* AML | AML | 03 02 46.0 | |
| | comp=E,113nm,0.4s | | | | | | |
| **DKL** | **Dikili** | **0.63** | **34** | PG | **Pb** | **03 02 37.7** | **-0.5** |
| DKL | | | | SG | **Sb** | **03 02 47.4** | **+0.6** |
| **ZEDA** | **zmir-Bergama** | **0.64** | **49** | P | **Pb** | **03 02 38.1** | **-0.3** |
| ZEDA | | | | S | **Sb** | **03 02 47.9** | **+0.7** |
| ZEDA | | | | *i* AML | AML | 03 02 50.0 | |
| | comp=E,183nm,0.4s | | | | | | |
| ZEDA | | | | *i* AML | AML | 03 02 50.0 | |
| | comp=E,151nm,0.3s | | | | | | |
| **PSRA** | **Psara** | **0.70** | **270** | P | **Pg** | **03 02 39.2** | **0.0** |
| PSRA | | | | S | **Sb** | **03 02 50.0** | **+1.2** |
| **PRK** | **Paraskevi** | **0.71** | **348** | P | **Pb** | **03 02 40.1** | **+0.5** |
| PRK | | | | S | **Sn** | **03 02 51.1** | **-0.6** |
| | comp=E,630nm,0.3s | | | | | | |
| **PRK** | **Paraskevi** | **0.71** | **348** | P | **Pb** | **03 02 39.4** | **-0.2** |
| PRK | | | | S | **Sb** | **03 02 49.9** | **+0.7** |
| PRK | | | | AML | AML | 03 02 51.9 | |
| | comp=N,1344μm,0.3s | | | | | | |
| PRK | | | | AML | AML | 03 02 52.1 | |
| | comp=E,1161μm,0.4s | | | | | | |
| **AYVA** | **Ayvalik** | **0.78** | **13** | P | **Pg** | **03 02 40.2** | **-0.5** |
| AYVA | | | | S | **Sn** | **03 02 52.8** | **-0.6** |
| AYVA | | | | *i* AML | AML | 03 02 53.0 | |
| | comp=E,104nm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.81** | **325** | P | **Pg** | **03 02 40.5** | **-0.8** |
| SIGR | | | | S | **Sb** | **03 02 52.3** | **+0.2** |
| | comp=E,400nm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.81** | **325** | P | **Pb** | **03 02 41.5** | **+0.2** |
| SIGR | | | | S | **Sb** | **03 02 52.9** | **+0.8** |
| SIGR | | | | AML | AML | 03 02 53.2 | |
| | comp=N,823μm,0.3s | | | | | | |
| SIGR | | | | AML | AML | 03 02 53.6 | |
| | comp=E,764μm,0.5s | | | | | | |
| **SIGR** | **SIGRI** | **0.81** | **325** | PG | **Pg** | **03 02 40.6** | **-0.8** |
| SIGR | | | | SG | **Sb** | **03 02 52.7** | **+0.6** |
| **SMG** | **Samos** | **0.89** | **160** | P | **Pb** | **03 02 42.1** | **-0.5** |
| SMG | | | | S | **Sg** | **03 02 54.9** | **+0.5** |
| | comp=E,428nm,0.4s | | | | | | |
| **SMG** | **Samos** | **0.89** | **160** | P | **Pb** | **03 02 42.3** | **-0.3** |
| SMG | | | | S | **Sn** | **03 02 55.1** | **-1.0** |
| SMG | | | | AML | AML | 03 02 57.0 | |
| | comp=E,900μm,0.4s | | | | | | |
| SMG | | | | AML | AML | 03 02 57.8 | |
| | comp=N,812μm,0.4s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.94** | **345** | PG | **Pb** | **03 02 43.4** | **-0.1** |
| GPNR | | | | SG | **Sn** | **03 02 57.2** | **-0.2** |
| **KOCA** | **Canakkale, Ayv** | **0.99** | **346** | P | **Pb** | **03 02 44.1** | **-0.2** |
| KOCA | | | | *i* AML | AML | 03 02 57.0 | |
| | comp=N,100nm,0.3s | | | | | | |
| KOCA | | | | S | **Sg** | **03 02 57.4** | **-0.1** |
| KOCA | | | | *i* AML | AML | 03 02 58.0 | |
| | comp=N,128nm,0.4s | | | | | | |
| **GCAM** | **G?zelcaml?** | **1.04** | **144** | PG | **Pn** | **03 02 45.5** | **-0.1** |
| GCAM | | | | SG | **Sn** | **03 03 01.3** | **+1.5** |
| **GCAM** | **G?zelcaml?** | **1.04** | **144** | P | **Pn** | **03 02 45.5** | **-0.1** |
| GCAM | | | | S | **Sn** | **03 02 59.4** | **-0.4** |
| GCAM | | | | *i* AML | AML | 03 03 01.0 | |
| | comp=N,182nm,0.5s | | | | | | |
| GCAM | | | | *i* AML | AML | 03 03 02.0 | |
| | comp=N,80nm,0.4s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **1.07** | **27** | P | **Pb** | **03 02 45.3** | **-0.4** |
| BUHA | | | | S | **Sn** | **03 03 01.3** | **+0.8** |
| BUHA | | | | *i* AML | AML | 03 03 04.0 | |
| | comp=N,119nm,0.5s | | | | | | |
| BUHA | | | | *i* AML | AML | 03 03 06.0 | |
| | comp=N,96nm,0.3s | | | | | | |
| **AKHS** | **Akhisar** | **1.11** | **72** | P | **Pg** | **03 02 47.0** | **0.0** |
| AKHS | | | | S | **Sn** | **03 03 03.7** | **+2.0** |
| AKHS | | | | *i* AML | AML | 03 03 04.0 | |
| | comp=N,117nm,0.5s | | | | | | |
| **AKS** | **Akhisar** | **1.11** | **72** | PN | **Pg** | **03 02 47.5** | **+0.5** |
| AKS | | | | SN | **Sn** | **03 03 03.2** | **+1.6** |
| **EZN** | **Ezine** | **1.28** | **355** | P | **Pn** | **03 02 48.0** | **-0.8** |
| **EZN** | **Ezine** | **1.28** | **355** | PN | **Pn** | **03 02 48.0** | **-0.8** |
| **BOZC** | **Bozcaada** | **1.33** | **346** | PN | **Pn** | **03 02 48.5** | **-1.0** |
| **MLSB** | **Milas** | **1.63** | **140** | PN | **Pb** | **03 02 54.6** | **-0.6** |
| **BODT** | **Bodrum** | **1.63** | **155** | PN | **Pn** | **03 02 53.7** | **0.0** |
| **LIA** | **Limnos Island** | **1.67** | **324** | P | **Pn** | **03 02 54.0** | **-0.2** |
| **LIA** | **Limnos Island** | **1.67** | **324** | P | **Pn** | **03 02 54.0** | **-0.2** |
| LIA | | | | AML | AML | 03 03 20.9 | |
| | comp=E,105μm,0.6s | | | | | | |
| LIA | | | | AML | AML | 03 03 22.7 | |
| | comp=N,90μm,0.5s | | | | | | |
| **GADA** | **Gvkgeada** | **1.70** | **345** | P | **Pn** | **03 02 54.1** | **-0.5** |
| **GADA** | **Gvkgeada** | **1.70** | **345** | PN | **Pn** | **03 02 54.1** | **-0.5** |
| **KULA** | **Kula-Manisa** | **1.73** | **90** | PN | **Pb** | **03 02 56.1** | **-0.9** |
| **GELI** | **Tayfur-Gelibol** | **1.85** | **0** | PN | **Pn** | **03 02 56.5** | **-0.2** |
| **KYMI** | **Kymi, Euboea I** | **1.85** | **273** | P | **Pn** | **03 02 56.2** | **-0.5** |
| **SIMA** | **Simav-Kutahya** | **2.04** | **74** | PN | **Pb** | **03 03 00.4** | **-2.0** |
| **SMTH** | **Samothraki Isl** | **2.05** | **340** | P | **Pn** | **03 02 59.1** | **-0.4** |
| **EDC** | **Edincik** | **2.10** | **31** | PN | **Pn** | **03 03 00.4** | **+0.2** |
| **ERIK** | **Erikli-Kesan** | **2.12** | **1** | PN | **Pn** | **03 03 00.2** | **-0.2** |
| **ENEZ** | **Enez** | **2.20** | **354** | PN | **Pn** | **03 03 01.9** | **+0.4** |
| **RKY** | **Sarkoy-Tekirda** | **2.21** | **14** | PN | **Pn** | **03 03 02.4** | **+0.7** |
| **MAR6** | **Marsite Statio** | **2.24** | **16** | PN | **Pn** | **03 03 02.7** | **+0.6** |
| **MAR3** | **Marsite Statio** | **2.29** | **16** | PN | **Pn** | **03 03 02.9** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.37** | **352** | PN | **Pn** | **03 03 04.0** | **+0.2** |
| **TVSB** | **Tavsanli** | **2.51** | **68** | PN | **Pn** | **03 03 07.0** | **+1.2** |

*IDC **27** 03:02:43.5±1.1, 4.78N×32.67W, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.7/37, mbtmp3.7/7, Error ellipse: s-maj=44.1km s-min=22.8km az=143.0*
**ISC 27 03:02:45.2±0.9, 4.8N±0.2×32.6W±0.2, h11km, n12, σ1822/7, mb3.8/7, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **22.00** | **125** | T | T | 03 30 16.3 | |
| | baz=303,slow=75,SNR=7.5 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.00** | **125** | T | T | 03 30 16.6 | |
| | baz=303,slow=75,SNR=7.1 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.02** | **125** | T | T | 03 30 17.9 | |
| | baz=303,slow=75,SNR=10 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.51** | **127** | T | T | 03 30 54.7 | |
| | baz=304,slow=74 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.53** | **127** | T | T | 03 30 53.1 | |
| | baz=276,slow=74,SNR=4.1 | | | | | | |
| **BDFB** | **Brasilia** | **25.35** | **217** | P | **P** | **03 08 12.1** | **-0.5** |
| | 1.4nm,0.4s,baz=227,slow=2.3,SNR=3.0 | | | | | | |
| **SIV** | **San Ignacio** | **34.88** | **233** | P | **P** | **03 09 37.5** | **+0.5** |
| | 0.9nm,0.7s,baz=189,slow=10.0,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.89** | **74** | P | **P** | **03 09 36.1** | **-0.9** |
| | 0.9nm,0.8s,baz=277,slow=6.9,SNR=4.6 | | | | | | |
| **GERES** | **GERESS Array B** | **58.91** | **34** | P | **P** | **03 12 43.9** | **-0.6** |
| | 0.9nm,0.9s,baz=7.1,slow=5.4,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.80** | **49** | P | **P** | **03 13 51.9** | **+2.0** |
| | 0.8nm,0.9s,baz=219,slow=9.6,SNR=4.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.18** | **153** | P | **P** | **03 14 39.3** | **-0.3** |
| | 0.2nm,0.6s,baz=103,slow=11,SNR=1.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.09** | **332** | P | **P** | **03 15 05.2** | **-0.3** |
| | 0.6nm,0.8s,baz=95,slow=5.7,SNR=5.9 | | | | | | |

**IDC 27 03:09:55.0±4.8, 5.82S×147.77E, h196km±53km, mb3.0/2, mb1 3.2/4, mb1mx3.0/36, mbtmp3.6/4, Error ellipse: s-maj=104.0km s-min=32.3km az=130.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.61** | **190** | P | Pn | 03 10 52.8 | +0.9 |
| | 5.1nm,0.3s,baz=40,slow=5.1,SNR=6.0 | | | | | | |
| PMG | | | | S | Sn | 03 11 36.8 | +0.3 |
| | 7.6nm,0.3s,baz=221,slow=20,SNR=9.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.17** | **222** | P | P | 03 14 03.9 | -0.1 |
| | 0.3nm,0.3s,baz=48,slow=11,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **22.20** | **216** | P | P | 03 14 36.2 | +0.6 |
| | 0.8nm,0.9s,baz=54,slow=9.5,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **85.02** | **23** | P | P | 03 22 08.1 | -0.1 |
| | 0.3nm,0.6s,baz=248,slow=4.8,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.79** | **285** | PKPbc | PKPdf | 03 29 10.6 | -0.8 |
| | 0.3nm,0.6s,baz=62,slow=4.3,SNR=1.1 | | | | | | |

*JMA **27** 03:10:27.6±0.1, 43.05N×144.88E, h62km±1km, M3.0*
*SKHL **27** 03:10:28.0±0.2, 43.00N×145.00E, h62km±2km, mb4.1/6*
**ISC 27 03:10:27.0±1.7, 43.02N±0.07×144.91E±0.04, h65km±10km, n15, σ0953/29, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKK** | **Akkeshi** | **0.05** | **266** | *eP* | **Pn** | **03 10 36.8** | **+0.3** |
| AKK | | | | AMB | AMB | 03 10 37.1 | |
| | 250nm,0.3s | | | | | | |
| AKK | | | | *e*S | **Sn** | **03 10 43.4** | **0.0** |
| AKK | | | | A | A | 03 10 43.6 | |
| | 760nm,0.3s | | | | | | |
| AKK | | | | A | A | 03 10 43.6 | |
| | 3μm,0.3s | | | | | | |
| **JAK** | **Akkeshi** | **0.16** | **261** | P | **Pn** | **03 10 37.0** | **+0.2** |
| JAK | | | | *e*S | **Sn** | **03 10 44.0** | **+0.1** |
| **JKHN** | **Kushirohamanak** | **0.19** | **71** | P | **Pn** | **03 10 37.6** | **+0.7** |
| **JNK** | **Nakash** | **0.58** | **346** | P | **Pn** | **03 10 39.7** | **-0.5** |
| JNK | | | | *e*S | **Sn** | **03 10 48.7** | **-1.2** |
| **NMR** | **Nemuro--Hokkai** | **0.69** | **59** | *i* P | **Pn** | **03 10 41.5** | **+0.1** |
| NMR | | | | AMB | AMB | 03 10 43.8 | |
| | 40nm,0.2s | | | | | | |
| NMR | | | | *i* S | **Sn** | **03 10 51.4** | **-0.6** |
| NMR | | | | A | A | 03 10 52.0 | |
| | 390nm,0.2s | | | | | | |
| NMR | | | | A | A | 03 10 52.0 | |
| | 280nm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **0.70** | **60** | P | **Pn** | **03 10 41.5** | **0.0** |
| NEM2 | | | | *e*S | **Sn** | **03 10 51.4** | **-0.7** |
| **JOB** | **Onbets** | **0.80** | **262** | P | **Pn** | **03 10 43.1** | **+0.4** |
| JOB | | | | *e*S | **Sn** | **03 10 54.3** | **0.0** |
| **GLVR** | **Golovnino** | **0.84** | **32** | *eP* | **Pn** | **03 10 43.7** | **+0.5** |
| GLVR | | | | AMB | AMB | 03 10 44.0 | |
| | 140nm,0.2s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **03 10 55.5** | **+0.3** |
| GLVR | | | | A | A | 03 10 58.6 | |
| | 580nm,0.2s | | | | | | |
| GLVR | | | | A | A | 03 10 58.6 | |
| | 340nm,0.2s | | | | | | |
| **JAR** | **Ashorobuto** | **0.88** | **289** | P | **Pn** | **03 10 43.9** | **+0.2** |
| JAR | | | | *e*S | **Sn** | **03 10 55.6** | **-0.5** |
| **JRA** | **Rausu** | **0.93** | **9** | P | **Pn** | **03 10 44.6** | **+0.3** |
| JRA | | | | *e*S | **Sn** | **03 10 57.1** | **0.0** |
| **JTKR** | **Abashiri--Toko** | **1.20** | **323** | P | **Pn** | **03 10 48.2** | **+0.4** |
| JTKR | | | | *e*S | **Sn** | **03 11 03.4** | **+0.1** |
| **JCH** | **Churui** | **1.21** | **251** | P | **Pn** | **03 10 48.0** | **+0.1** |
| JCH | | | | *e*S | **Sn** | **03 11 02.9** | **-0.7** |
| **YUK** | **Yuzh-Kuril'sk** | **1.23** | **34** | *eP* | **Pn** | **03 10 48.8** | **+0.7** |
| YUK | | | | AMB | AMB | 03 10 50.1 | |
| | 60nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **03 11 04.5** | **+0.5** |
| YUK | | | | A | A | 03 11 05.8 | |
| | 270nm,0.2s | | | | | | |
| YUK | | | | A | A | 03 11 05.8 | |
| | 200nm,0.2s | | | | | | |
| **JMP** | **Maruseppu** | **1.50** | **312** | P | **Pn** | **03 10 52.2** | **+0.4** |
| JMP | | | | *e*S | **Sn** | **03 11 10.1** | **-0.4** |
| **SHO** | **Shikotan** | **1.64** | **58** | *eP* | **Pn** | **03 10 53.9** | **+0.3** |
| SHO | | | | AMB | AMB | 03 10 54.7 | |
| | 30nm,0.2s | | | | | | |
| SHO | | | | *i* S | **Sn** | **03 11 12.5** | **-1.2** |
| SHO | | | | A | A | 03 11 17.6 | |
| | 120nm,0.2s | | | | | | |
| SHO | | | | A | A | 03 11 17.6 | |
| | 200nm,0.2s | | | | | | |

**IDC 27 03:19:21.5±9.3, 4.04N×32.63W, h0km, mb3.6/4, mb1 3.9/4, mb1mx3.5/65, mbtmp3.6/4, Error ellipse: s-maj=284.9km s-min=50.1km az=9.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **21.59** | **123** | T | T | 03 46 47.1 | |
| | baz=305 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.60** | **123** | T | T | 03 46 48.9 | |
| | baz=305 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.61** | **123** | T | T | 03 46 47.2 | |
| | baz=305 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.08** | **73** | P | P | 03 26 16.4 | -0.3 |
| | 0.4nm,0.7s,baz=267,slow=10,SNR=2.4 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.44** | **41** | P | P | 03 30 06.5 | -0.1 |
| | 1.9nm,0.9s,baz=258,slow=15,SNR=4.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.26** | **49** | P | P | 03 30 31.2 | +0.3 |
| | 0.5nm,0.8s,baz=251,slow=3.8,SNR=3.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.73** | **332** | P | P | 03 31 47.0 | -0.1 |
| | 0.1nm,0.4s,baz=94,slow=5.7,SNR=2.2 | | | | | | |

*IDC **27** 03:20:47.6±0.6, 4.52N×32.60W, h0km, mb4.1/22, mb1 4.2/23, mb1mx4.0/65, mbtmp4.1/23, ML3.5/1, MS3.9/8, Ms1 3.9/8, ms1mx3.4/59, Error ellipse: s-maj=21.3km s-min=12.3km az=155.0*
*NEIC **27** 03:20:50.5±1.2, 4.5N±0.1×32.6W±0.1, h10km±1km, mb4.8/91, Error ellipse: s-maj=19.2km s-min=15.7km az=129.0*
*GCMT **27** 03:20:50.5±0.4, 4.78N±0.06×32.68W±0.03, h18km±1km, MW4.8/72, Moment Tensor Solution. s18,c18; s72,c87; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-1.71±.18; Mθθ0.27±.12; Mθφ1.44±.12; Mrθ1.18±.38; Mφφ0.01±.08; Mrφ1.20±.25; Best double couple: Mo2.25700×10^16 NP1:ϕs351.00000°, δ26.00000°, λ-125.00000°. NP2: ϕs209.00000°, δ69.00000°, λ-74.00000°. Principal axes: T 1.9530, Plg22.0000°, Azm287.0000°; N 0.6030, Plg15.0000°, Azm23.0000°; P -2.5600, Plg63.0000°, Azm144.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 27 03:20:49.9±0.4, 4.66N±0.08×32.62W±0.08, h11km, n140, σ1927/104, mb4.7/69, MS3.8/7, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBMO** | **Morrinhos-CE** | **10.84** | **223** | *eP* | **Pn** | **03 23 22.4** | **-2.9** |
| **RCBR** | **Riachuelo** | **10.92** | **197** | Pn | **Pn** | **03 23 23.2** | **-3.0** |
| | 0.4nm,0.3s,baz=174,slow=17,SNR=1.8 | | | | | | |
| RCBR | | | | Sn | Sn | 03 25 16.5 | -12 |
| | 0.2nm,0.3s,baz=293,slow=23,SNR=1.4 | | | | | | |
| **NBPV** | **Pedro Velho** | **11.32** | **194** | *eP* | **Pn** | **03 23 34.0** | **+2.3** |
| **NBPB** | **Pedra_Branca-C** | **12.29** | **215** | *eP* | **Pn** | **03 23 43.0** | **-2.0** |
| **NBMA** | **Muriti-CE** | **13.42** | **207** | *eP* | **Pn** | **03 23 60.0** | **-0.6** |
| **NBLA** | **Lagarto - SE** | **16.37** | **198** | *eP* | **Pn** | **03 24 40.6** | **+0.7** |
| **NBPN** | **Ponto Novo - B** | **17.15** | **206** | *eP* | **P** | **03 24 51.1** | **-0.3** |
| **GDU01** | **Guandu, BA** | **19.52** | **201** | *eP* | **Pn** | **03 25 20.2** | **+1.5** |
| **MDP** | **Montagnes des** | **19.95** | **272** | LR | LR | 03 32 58.3 | |
| | comp=Z,253nm,18.1s,baz=134,slow=37 | | | | | | |
| **SMTB** | **Santa Maria do** | **20.07** | **228** | *eP* | **P** | **03 25 23.4** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **20.89** | **216** | *eP* | **P** | **03 25 31.2** | **-1.3** |
| **CMC01** | **Camacan, BA** | **21.03** | **199** | *eP* | **P** | **03 25 36.8** | **+2.9** |
| **H10N3** | **ASCENSION HYDR** | **21.93** | **124** | T | T | 03 48 20.6 | |
| | baz=303,slow=75,SNR=63 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.93** | **124** | T | T | 03 48 20.8 | |
| | baz=303,slow=75,SNR=49 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.95** | **124** | T | T | 03 48 17.6 | |
| | baz=303,slow=75,SNR=52 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.43** | **127** | T | T | 03 48 58.1 | |
| | baz=304,slow=74,SNR=44 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.45** | **127** | T | T | 03 49 00.7 | |
| | baz=276,slow=74,SNR=30 | | | | | | |
| **JANB** | **Januaria** | **22.75** | **210** | *eP* | **P** | **03 25 52.0** | **-0.5** |
| **PEXB** | **Peixe** | **22.81** | **223** | *eP* | **P** | **03 25 53.8** | **+0.7** |
| **SJMB** | **Sao Joao De Ma** | **24.70** | **200** | *eP* | **P** | **03 26 15.2** | **+4.0** |
| **ITTB** | **Itaituba** | **24.77** | **249** | *eP* | **P** | **03 26 12.6** | **+0.6** |
| **SNDB** | **Serra Nova Dou** | **24.85** | **228** | *eP* | **P** | **03 26 12.5** | **-0.3** |
| **BDFB** | **Brasilia** | **25.28** | **217** | P | **P** | **03 26 14.4** | **-2.2** |
| | 3.4nm,1.0s,baz=83,slow=3.3,SNR=2.6 | | | | | | |
| BDFB | | | | LR | LR | 03 35 13.0 | |
| | comp=Z,281nm,18.3s,baz=334,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **25.28** | **217** | P | **P** | **03 26 16.1** | **-0.5** |
| **NPGB** | **Novo Progresso** | **25.50** | **243** | *eP* | **P** | **03 26 17.7** | **-0.9** |
| **DBIC** | **Dimbokro** | **27.70** | **85** | P | **P** | **03 26 37.1** | **-1.4** |
| | 2.9nm,0.9s,baz=273,slow=8.7,SNR=3.6 | | | | | | |
| **DBIC** | **Dimbokro** | **27.70** | **85** | P | **P** | **03 26 39.1** | **+0.6** |
| DBIC | | | | IAmb | IAmb | 03 26 44.4 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **27.84** | **260** | P | **P** | **03 26 37.8** | **-1.9** |
| | comp=Z,1.0nm,0.3s,baz=337,slow=22,SNR=1.2 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.43** | **291** | T | T | 03 57 46.0 | |
| | SNR=5.9 | | | | | | |
| **KOWA** | **Kowa** | **29.82** | **69** | P | **P** | **03 26 57.7** | **+0.4** |
| **H05N1** | **Guadeloupe/Mar** | **30.21** | **295** | T | T | 03 58 42.8 | |
| **PTLB** | **Pontes e Lacer** | **32.99** | **232** | *eP* | **P** | **03 27 24.6** | **-0.6** |
| **SIV** | **San Ignacio** | **34.83** | **233** | LR | LR | 03 41 26.9 | |
| | comp=Z,353nm,18.7s,baz=111,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.90** | **74** | P | **P** | **03 27 41.6** | **-0.3** |
| | comp=Z,2.9nm,0.9s,baz=260,slow=8.2,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.90** | **74** | P | **P** | **03 27 40.9** | **-1.0** |
| **SDV** | **Santo Domingo** | **37.96** | **278** | P | **P** | **03 28 08.7** | **+0.3** |
| | comp=Z,1.3nm,0.7s,baz=51,slow=14,SNR=1.9 | | | | | | |
| **SDV** | **Santo Domingo** | **37.96** | **278** | *eP* | **P** | **03 28 09.4** | **+1.1** |
| **MDT** | **Midelt** | **38.33** | **40** | LR | LR | 03 42 46.9 | |
| | comp=Z,152nm,18.8s,baz=158,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | P | **P** | **03 28 17.1** | **+0.4** |
| | comp=Z,1.5nm,0.9s,baz=356,slow=5.1,SNR=2.1 | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | IAmb | IAmb | 03 28 22.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **CPUP** | **Villa Florida** | **39.01** | **217** | *eP* | **P** | **03 28 19.8** | **+3.1** |
| **LPAZ** | **La Paz** | **40.82** | **239** | P | **P** | **03 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MLR** | **Muntele Rosu** | **64.98** | **41** | P | **P** | | **03 31 31.4** | **+1.3** |
| **NOA** | **NORSAR Array B** | **65.14** | **22** | P | **P** | | **03 31 31.7** | **+0.9** |
| | comp=Z,0.4nm,0.9s,baz=96,slow=17,SNR=4.8 | | | | | | | |
| **BURAR** | **Bucovina Array** | **65.27** | **39** | P | **P** | | **03 31 32.8** | **+0.8** |
| **CSS** | **Mathiatis** | **67.69** | **54** | P | **P** | | **03 31 48.7** | **+1.1** |
| **LODK** | **Lodwar** | **67.81** | **88** | P | **P** | | **03 31 49.3** | **+0.6** |
| LODK | | | | IAmb | IAmb | | 03 31 52.0 | |
| | comp=Z,7.3nm,1.5s | | | | | | | |
| **JCT** | **Junction City** | **68.01** | **301** | P | **P** | | **03 31 49.8** | **0.0** |
| JCT | | | | IAmb | IAmb | | 03 31 56.5 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **BR231** | **Keskin MP Arra** | **68.23** | **49** | P | **P** | | **03 31 52.0** | **+1.0** |
| **ANTO** | **Ankara** | **68.25** | **49** | P | **P** | | **03 31 51.9** | **+0.8** |
| **R32A** | **Long Quarter,** | **68.45** | **309** | P | **P** | | **03 31 52.3** | **-0.1** |
| **BGNE** | **Belgrade** | **68.67** | **313** | P | **P** | | **03 31 54.0** | **+0.3** |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | **P** | | **03 31 54.3** | **0.0** |
| | comp=Z,2.1nm,1.0s,baz=248,slow=7.3,SNR=15 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.82** | **37** | P | **P** | | **03 31 54.6** | **+0.3** |
| **AKBB** | **Malin Array Si** | **68.82** | **37** | P | **P** | | **03 31 54.7** | **+0.4** |
| AKBB | | | | IAmb | IAmb | | 03 31 55.8 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **BR131** | **Keskin Array S** | **68.85** | **49** | P | **P** | | **03 31 55.3** | **+0.4** |
| **BRTR** | **Keskin Array B** | **68.85** | **49** | P | **P** | | **03 31 56.1** | **+1.1** |
| | comp=Z,5.5nm,1.2s,baz=248,slow=4.9,SNR=15 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.85** | **49** | P | **P** | | **03 31 55.5** | **+0.5** |
| **GHAJ** | **Ghor Haditha** | **68.98** | **58** | P | **P** | | **03 31 55.9** | **+0.2** |
| GHAJ | | | | IAmb | IAmb | | 03 32 06.5 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **69.08** | **57** | P | **P** | | **03 31 55.4** | **-1.0** |
| | comp=Z,5.4nm,1.2s,baz=60,slow=12,SNR=5.7 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.04** | **93** | LR | LR | | 03 58 36.9 | |
| | comp=Z,125nm,20.4s,baz=94,slow=32 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **70.22** | **58** | P | **P** | | **03 32 01.6** | **-1.9** |
| | comp=Z,2.9nm,0.9s,baz=14,slow=5.4,SNR=2.8 | | | | | | | |
| **MSTX** | **Muleshoe** | **70.97** | **304** | P | **P** | | **03 32 08.3** | **+0.3** |
| MSTX | | | | IAmb | IAmb | | 03 32 21.0 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.22** | **299** | P | **P** | | **03 32 07.9** | **-1.7** |
| | comp=Z,0.3nm,0.7s,baz=120,slow=5.4,SNR=2.6 | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **71.57** | **309** | P | **P** | | **03 32 12.0** | **+0.4** |
| KSCO | | | | IAmb | IAmb | | 03 32 19.2 | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **Q24A** | **Divide** | **73.51** | **309** | P | **P** | | **03 32 23.8** | **+0.3** |
| Q24A | | | | IAmb | IAmb | | 03 32 36.4 | |
| | comp=Z,8.2nm,1.0s | | | | | | | |
| **ISCO** | **Idaho Springs** | **73.98** | **310** | P | **P** | | **03 32 26.6** | **+0.5** |
| ISCO | | | | IAmb | IAmb | | 03 32 40.1 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **ANMO** | **Albuquerque** | **74.10** | **305** | P | **P** | | **03 32 26.2** | **-0.7** |
| | comp=Z,0.9nm,0.8s,baz=107,slow=7.9,SNR=5.2 | | | | | | | |
| **ANMO** | **Albuquerque** | **74.10** | **305** | P | **P** | | **03 32 27.2** | **+0.4** |
| **DGMT** | **Dagmar** | **74.34** | **319** | P | **P** | | **03 32 28.4** | **+0.6** |
| **FFC** | **Flin Flon** | **74.36** | **326** | P | **P** | | **03 32 27.5** | **-0.2** |
| FFC | | | | IAmb | IAmb | | 03 32 29.6 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **N23A** | **Red Feather La** | **74.37** | **311** | P | **P** | | **03 32 29.4** | **+1.0** |
| N23A | | | | IAmb | IAmb | | 03 32 39.3 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **TULEG** | **Thule** | **74.52** | **352** | P | **P** | | **03 32 29.1** | **+0.9** |
| TULEG | | | | IAmb | IAmb | | 03 32 40.0 | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **SMCO** | **Snowmass** | **74.95** | **309** | P | **P** | | **03 32 32.6** | **+0.7** |
| SMCO | | | | IAmb | IAmb | | 03 32 34.8 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **75.12** | **51** | P | **P** | | **03 32 33.5** | **+0.9** |
| **O20A** | **White River Ci** | **76.02** | **310** | IAmb | IAmb | | 03 32 45.9 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **PV13** | **Radium Mtn., P** | **76.29** | **308** | IAmb | IAmb | | 03 32 41.7 | |
| | comp=Z,7.5nm,1.3s | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.26** | **313** | P | **P** | | **03 32 45.0** | **+0.2** |
| | comp=Z,0.6nm,0.8s,baz=97,slow=6.0,SNR=4.9 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.26** | **313** | P | **P** | | **03 32 45.3** | **+0.5** |
| **RAYN** | **Ar Rayn** | **77.28** | **67** | P | **P** | | **03 32 44.6** | **-0.5** |
| RAYN | | | | IAmb | IAmb | | 03 32 48.6 | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **KLMR** | **Klimovskoe** | **77.29** | **29** | P | **P** | | **03 32 41.0** | **-3.3** |
| KLMR | | | | AMP | | | 03 32 55.1 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **P18A** | **Preston Nutter** | **77.51** | **309** | IAmb | IAmb | | 03 32 48.5 | |
| | comp=Z,9.4nm,1.3s | | | | | | | |
| **TUC** | **Tucson** | **77.52** | **302** | P | **P** | | **03 32 48.0** | **+1.7** |
| **YMP** | **Mirror Lake PI** | **77.88** | **315** | IAmb | IAmb | | 03 32 50.1 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **EGMT** | **Eagleton** | **77.95** | **318** | IAmb | IAmb | | 03 32 50.2 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **LOHW** | **Long Hollow** | **78.10** | **313** | IAmb | IAmb | | 03 33 01.7 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **REDW** | **Red Top Meadow** | **78.26** | **313** | IAmb | IAmb | | 03 32 52.8 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **TPAW** | **Teton Pass** | **78.34** | **313** | P | **P** | | **03 32 50.2** | **-0.7** |
| TPAW | | | | IAmb | IAmb | | 03 33 02.2 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **RES** | **Resolute Bay** | **78.41** | **346** | IAmb | IAmb | | 03 32 51.9 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **YMR** | **Madison River** | **78.45** | **314** | IAmb | IAmb | | 03 33 00.2 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.66** | **311** | IAmb | IAmb | | 03 32 59.9 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **MTPU** | **Mount Pierson** | **78.93** | **308** | IAmb | IAmb | | 03 33 07.5 | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| **NLU** | **North Lily Min** | **78.94** | **310** | IAmb | IAmb | | 03 33 07.0 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **EUNU** | **Eureka** | **79.53** | **352** | P | **P** | | **03 32 57.6** | **+1.2** |
| EUNU | | | | IAmb | IAmb | | 03 33 10.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **BGU** | **Big Grassy Mou** | **79.72** | **311** | IAmb | IAmb | | 03 33 00.9 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **CCUT** | **Cedar City** | **79.84** | **307** | IAmb | IAmb | | 03 33 02.4 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **EDM** | **Edmonton** | **80.73** | **323** | P | **P** | | **03 33 03.9** | **+0.5** |
| **HLID** | **Hailey** | **80.86** | **313** | IAmb | IAmb | | 03 33 06.7 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| **JTMT** | **Jette** | **80.96** | **317** | IAmb | IAmb | | 03 33 06.2 | |
| | comp=Z,7.9nm,1.2s | | | | | | | |
| **PRN** | **Pahroc Range** | **81.18** | **307** | IAmb | IAmb | | 03 33 20.8 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.19** | **332** | P | **P** | | **03 33 10.6** | **-0.2** |
| | comp=Z,0.8nm,0.7s,baz=95,slow=5.4,SNR=13 | | | | | | | |
| **BELA** | **Belgrano 2** | **82.43** | **180** | P | **P** | | **03 33 11.1** | **-0.7** |
| **QSM** | **Queen of Sheba** | **82.63** | **306** | IAmb | IAmb | | 03 33 17.0 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **BMO** | **Blue Mountains** | **82.97** | **314** | IAmb | IAmb | | 03 33 18.0 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.75** | **308** | P | **P** | | **03 33 20.1** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=91,slow=7.4,SNR=5.4 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **83.94** | **312** | P | **P** | | **03 33 22.1** | **+1.6** |
| WVOR | | | | IAmb | IAmb | | 03 33 34.8 | |
| | comp=Z,6.8nm,1.3s | | | | | | | |
| **MOD** | **Modoc Plateau** | **85.19** | **312** | IAmb | IAmb | | 03 33 35.9 | |
| | comp=Z,8.8nm,1.2s | | | | | | | |
| **M04C** | **Macdoel** | **86.35** | **311** | P | **P** | | **03 33 32.9** | **+0.3** |
| **A36M** | **Sachs Harbour** | **86.42** | **342** | P | **P** | | **03 33 32.4** | **+0.2** |
| A36M | | | | IAmb | IAmb | | 03 33 33.4 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **ABKAR** | **Akbulak array** | **88.18** | **41** | P | **P** | | **03 33 41.2** | **0.0** |
| **BRVK** | **Borovoye** | **94.02** | **36** | P | **P** | | **03 34 06.1** | **-2.1** |
| **ILAR** | **Eielson Array** | **95.89** | **337** | P | **P** | | **03 34 16.6** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=46,slow=3.9,SNR=3.3 | | | | | | | |
| **CD2** | **Chengdu** | **125.38** | **47** | PKP | **PKPdf** | | **03 39 51.0** | **-0.8** |
| **PZH** | **PanZhiHua** | **126.07** | **52** | PKP | **PKPdf** | | **03 39 52.8** | **-0.5** |

*NEIC **27** 03:23:58.6±0.9,21.6°N±0.0°×143.8°E±0.1,h188km±7km, mb4.2/20,Error ellipse: s-maj=20.7km s-min=11.4km az=72.0*

*IDC **27** 03:24:03.2±2.7,21.6°N×143.58E,h232km±25km, mb3.6/33,mb1 3.7/36,mb1mx3.6/82,mbtmp4.2/36,Error ellipse: s-maj=14.5km s-min=9.2km az=87.0*

**ISC 27 03:23:59.2**±0.5,**21.66N**±0.07°×**143.8E**±0.1,**h200**km,**n72,** σ0**85**/69,**mb4.0**/44,**Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **5.59** | **346** | | **Pn** | **03 25 19.2** | **-2.0** |
| **JHJ** | **Hachijo jima 2** | **11.94** | **344** | P | **Pn** | **03 26 47.7** | **-0.4** |
| | 7.9nm,0.3s,baz=77,slow=10,SNR=2.1 | | | | | | |
| **JYT** | **Yasato** | **14.84** | **349** | | **Pn** | **03 27 18.5** | **-0.9** |
| **JMN** | **Monobe** | **14.85** | **326** | | **Pn** | **03 27 19.8** | **+0.2** |
| **JOW** | **Kunigami** | **15.02** | **293** | P | **P** | **03 27 23.5** | **+1.1** |
| | 0.4nm,0.3s,baz=67,slow=18,SNR=1.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.59** | **343** | P | **P** | **03 27 28.4** | **-0.1** |
| | 0.2nm,0.3s,baz=106,slow=31,SNR=6.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.59** | **343** | IAmb | IAmb | 03 27 32.1 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **15.60** | **343** | | **P** | **03 27 28.1** | **-0.5** |
| MJB9 | | | | IAmb | IAmb | 03 27 46.5 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **JMM** | **Marumori** | **16.35** | **352** | P | **P** | **03 27 37.3** | **+0.4** |
| **KSRS** | **Korea Array** | **20.86** | **322** | P | **P** | **03 28 27.0** | **+1.3** |
| | comp=Z,2.2nm,0.5s,baz=146,slow=8.3,SNR=13 | | | | | | |
| **SSLB** | **Suanglung** | **21.13** | **280** | P | **P** | **03 28 28.7** | **0.0** |
| **ASAJ** | **Asahikawa** | **22.41** | **358** | P | **P** | **03 28 42.8** | **+1.7** |
| | comp=Z,2.1nm,0.4s,baz=165,slow=19,SNR=4.5 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **24.50** | **339** | P | **P** | **03 28 58.8** | **-1.2** |
| USA0B | | | | IAmb | IAmb | 03 29 26.5 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **29.12** | **344** | P | **P** | **03 29 42.4** | **+1.2** |
| | comp=Z,1.9nm,0.6s,baz=162,slow=5.3,SNR=11 | | | | | | |
| **COEN** | **Coen** | **35.40** | **181** | P | **P** | **03 30 36.0** | **-0.2** |
| COEN | | | | IAmb | IAmb | 03 30 38.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **39.70** | **320** | P | **P** | **03 31 12.0** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=122,slow=6.4,SNR=7.7 | | | | | | |
| **SONM** | **Songino Array** | **39.70** | **320** | IAmb | IAmb | 03 31 17.3 | |
| | comp=Z,2.7nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **39.91** | **203** | P | **P** | **03 31 14.1** | **+0.1** |
| **SEY** | **Seymchan** | **41.66** | **6** | P | **P** | **03 31 29.1** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=215,slow=7.6,SNR=3.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.10** | **274** | P | **P** | **03 31 32.5** | **+0.6** |
| | comp=Z,1.6nm,0.3s,baz=57,slow=9.8,SNR=4.2 | | | | | | |
| **WB0** | **Warramunga Arr** | **42.18** | **193** | P | **P** | **03 31 32.3** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 03 31 53.6 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.36** | **193** | P | **P** | **03 31 33.4** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 03 31 57.8 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.36** | **193** | P | **P** | **03 31 33.8** | **-0.1** |
| | comp=Z,0.8nm,0.5s,baz=15,slow=9.0,SNR=14 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.31** | **206** | P | **P** | **03 31 41.9** | **+0.3** |
| | comp=Z,1.4nm,0.6s,baz=23,slow=8.1,SNR=8.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.31** | **206** | IAmb | IAmb | 03 31 55.6 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.06** | **193** | P | **P** | **03 32 03.0** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=13,slow=7.5,SNR=9.7 | | | | | | |
| **TAPN** | **Taplejung** | **50.96** | **288** | *eP* | **P** | **03 32 41.8** | **+0.8** |
| | comp=Z,7.7nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **51.99** | **288** | *eP* | **P** | **03 32 49.3** | **+0.7** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **52.26** | **289** | *eP* | **P** | **03 32 51.3** | **+0.6** |
| | comp=Z,18nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **52.50** | **289** | *eP* | **P** | **03 32 53.7** | **+1.2** |
| | comp=Z,13nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **53.27** | **182** | P | **P** | **03 32 55.9** | **-1.6** |
| | comp=Z,0.7nm,0.4s,baz=356,slow=14,SNR=3.6 | | | | | | |
| **DANN** | **Dangsing** | **54.31** | **290** | *eP* | **P** | **03 33 06.3** | **+0.8** |
| | comp=Z,56nm,0.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **54.57** | **322** | P | **P** | **03 33 04.7** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **54.57** | **322** | P | **P** | **03 33 06.5** | **-0.1** |
| | comp=Z,1.8nm,0.3s,baz=104,slow=6.3,SNR=6.4 | | | | | | |
| ZALV | | | | PcP | **PcP** | **03 34 06.8** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=101,slow=6.0,SNR=2.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.57** | **322** | P | **P** | **03 33 06.7** | **+0.2** |
| **MK31** | **Makanchi Array** | **55.11** | **313** | P | **P** | **03 33 11.0** | **+0.3** |
| **MKAR** | **Makanchi Array** | **55.11** | **313** | P | **P** | **03 33 11.3** | **+0.7** |
| | comp=Z,1.8nm,0.5s,baz=92,slow=9.0,SNR=27 | | | | | | |
| MKAR | | | | PcP | **PcP** | **03 34 09.5** | **+0.1** |
| | comp=Z,1.9nm,0.4s,baz=77,slow=3.5,SNR=21 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.11** | **313** | P | **P** | **03 33 11.0** | **+0.3** |
| **MAKZ** | **Makanchi** | **55.33** | **313** | P | **P** | **03 33 12.6** | **+0.3** |
| MAKZ | | | | IAmb | IAmb | 03 33 13.8 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **57.86** | **317** | P | **P** | **03 33 30.1** | **+0.2** |
| KURK | | | | IAmb | IAmb | 03 33 31.0 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.91** | **317** | P | **P** | **03 33 30.6** | **+0.4** |
| | comp=Z,10nm,0.7s,baz=92,slow=7.6,SNR=112 | | | | | | |
| **NRIK** | **Noril'sk** | **58.21** | **340** | P | **P** | **03 33 32.0** | **0.0** |
| | comp=Z,1.3nm,0.5s,baz=118,slow=12,SNR=1.9 | | | | | | |
| **NRIK** | **Noril'sk** | **58.21** | **340** | IAmb | IAmb | 03 33 33.0 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **60.61** | **308** | P | **P** | **03 33 49.8** | **+0.7** |
| | comp=Z,1.2nm,0.4s,baz=155,slow=7.5,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **61.83** | **27** | P | **P** | **03 33 57.6** | **+0.9** |
| | comp=Z,0.8nm,0.8s,baz=268,slow=5.6,SNR=7.3 | | | | | | |
| **NIL** | **Nilore** | **62.52** | **298** | P | **P** | **03 34 01.9** | **0.0** |
| **BVAR** | **Borovoye Array** | **63.04** | **320** | P | **P** | **03 34 05.6** | **+0.6** |
| | comp=Z,3.9nm,0.4s,baz=64,slow=20,SNR=27 | | | | | | |
| **BRVK** | **Borovoye** | **63.10** | **320** | P | **P** | **03 34 05.3** | **-0.1** |
| BRVK | | | | IAmb | IAmb | 03 34 06.8 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **63.49** | **308** | P | **P** | **03 34 08.2** | **+0.1** |
| **INK** | **Inuvik** | **67.39** | **24** | P | **P** | **03 34 34.0** | **+1.4** |
| | comp=Z,0.8nm,0.5s,baz=272,slow=2.8,SNR=4.3 | | | | | | |
| **INK** | **Inuvik** | **67.39** | **24** | IAmb | IAmb | 03 34 40.4 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **ARU** | **Arti** | **69.61** | **324** | P | **P** | **03 34 45.8** | **-0.8** |
| | comp=Z,0.7nm,0.3s,baz=116,slow=9.4,SNR=4.3 | | | | | | |
| **ABKAR** | **Akbulak array** | **69.94** | **316** | P | **P** | **03 34 48.9** | **+0.2** |
| **AKTO** | **Aktyubinsk** | **70.95** | **318** | P | **P** | **03 34 54.3** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=80,slow=8.5,SNR=3.7 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **75.96** | **350** | P | **P** | **03 35 22.7** | **-0.8** |
| | comp=Z,6.8nm,0.8s,baz=74,slow=11,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.24** | **28** | P | **P** | **03 35 26.6** | **+1.3** |
| | comp=Z,3.9nm,0.3s,baz=291,slow=5.6,SNR=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.24** | **28** | P | **P** | **03 35 25.6** | **+0.2** |
| **BELG** | **Belogornoye** | **76.75** | **321** | P | **P** | **03 35 29.0** | **+0.6** |
| | comp=Z,12nm,0.6s,baz=131,slow=0.3,SNR=5.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.12** | **342** | P | **P** | **03 35 41.4** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=79,slow=8.3,SNR=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.75** | **52** | P | **P** | **03 36 02.8** | **+1.5** |
| | comp=Z,1.8nm,0.7s,baz=275,slow=5.3,SNR=14 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.75** | **52** | P | **P** | **03 36 01.8** | **+0.5** |
| **KBZ** | **Khabaz** | **82.77** | **314** | P | **P** | **03 36 01.6** | **+0.7** |
| | comp=Z,5.4nm,0.8s,baz=97,slow=2.8,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **83.44** | **335** | P | **P** | **03 36 03.2** | **-0.8** |
| | comp=Z,1.6nm,0.4s,baz=62,slow=5.1,SNR=29 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.05** | **45** | P | **P** | **03 36 23.2** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=168,slow=0.8,SNR=5.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.84** | **325** | P | **P** | **03 36 24.7** | **-1.2** |
| | comp=Z,0.3nm,0.5s,baz=48,slow=5.5,SNR=4.5 | | | | | | |
| **HFS** | **Hagfors** | **88.96** | **337** | P | **P** | **03 36 29.4** | **-1.6** |
| | comp=Z,0.8nm,0.6s,baz=48,slow=2.1,SNR=4.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **89.17** | **339** | P | **P** | **03 36 30.6** | **-1.3** |
| | comp=Z,0.3nm,0.6s,baz=41,slow=4.7,SNR=1.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **90.75** | **314** | P | **P** | **03 36 38.5** | **-1.4** |
| | comp=Z,0.5nm,0.7s,baz=55,slow=5.1,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **97.65** | **54** | P | **P** | **03 37 10.7** | **-0.9** |
| | comp=Z,0.1nm,0.4s,baz=306,slow=3.1,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.17** | **309** | PKP | **PKPdf** | **03 42 44.6** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=45,slow=1.1,SNR=9.2 | | | | | | |
| **PLCA** | **Paso Flores** | **145.34** | **131** | PKPbc | **PKPab** | **03 43 15.1** | **+1.0** |
| | comp=Z,5.2nm,0.6s,baz=246,slow=3.5,SNR=34 | | | | | | |
| **LPAZ** | **La Paz** | **149.42** | **85** | PKPbc | **PKiKP** | **03 43 27.5** | **+0.4** |
| | comp=Z,2.1nm,0.5s,baz=295,slow=1.5,SNR=9.1 | | | | | | |

*IDC **27** 03:25:26.3±3.8,17.9°S×178.6°W,h562km±21km, mb3.0/5, mb1 3.2/7,mb1mx2.9/48,mbtmp4.0/7,Error ellipse: s-maj=111.2km s-min=24.2km az=136.0*

**ISC 27 03:25:23.7**±2.0,**18.3S**±0.4°×**178.3W**±0.4°,**h550**km,**n10,** σ1**11**/11,**mb3.7**/5,**1C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.50** | **279** | P | **P** | **03 26 43.8** | **+1.8** |
| | 5.7nm,0.3s,baz=119,slow=4.5,SNR=24 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.78** | **253** | P | **P** | **03 28 30.3** | **-0.8** |
| | 0.2nm,0.3s,baz=7.6,slow=20,SNR=2.0 | | | | | | |
| **STKA** | **Stephens Creek** | **38.51** | **242** | P | **P** | **03 31 58.3** | **-1.0** |
| | 0.5nm,0.2s,baz=58,slow=12,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **03 32 47.3** | **-0.6** |
| | 0.3nm,0.4s,baz=95,slow=7.3,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.76** | **255** | P | **P** | **03 32 49.5** | **+0.6** |
| | 2.9nm,0.6s,baz=88,slow=8.2,SNR=39 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 34 20.4** | **+1.2** |
| | 0.3nm,0.4s,baz=95,slow=5.1,SNR=1.9 | | | | | | |
| **SEY** | **Seymchan** | **84.18** | **347** | P | **P** | **03 36 55.8** | **-1.0** |
| | 1.6nm,0.6s,baz=139,slow=4.7,SNR=7.9 | | | | | | |
| **ILAR** | **Eielson Array** | **86.25** | **13** | P | **P** | **03 37 06.0** | **-0.8** |
| | 0.3nm,0.5s,baz=218,slow=5.7,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.12** | **314** | PKP | **PKPdf** | **03 44 00.1** | **+0.9** |
| | 0.8nm,0.7s,baz=31,slow=2.1,SNR=2.7 | | | | | | |
| **VOIR** | | **146.69** | **329** | P | **PKiKP** | **03 44 06.9** | **+0.6** |
| **GERES** | **GERESS Array B** | **148.01** | **345** | PKPbc | **PKPbc** | **03 44 07.7** | **+0.1** |
| | 0.3nm,0.6s,baz=26,slow=4.8,SNR=5.4 | | | | | | |

*IDC **27** 03:26:35.9±2.8,20.6°S×178.39W,h438km±27km, mb3.0/7, mb1 3.2/9,mb1mx3.0/43,mbtmp3.8/9,Error ellipse: s-maj=36.1km s-min=22.2km az=145.0*

**ISC 27 03:26:36.9**±0.9,**20.8S**±0.2°×**178.5W**±0.1,**h450**km,**n12,** σ1**39**/12,**mb3.5**/7,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.46** | **312** | P | **P** | **03 27 55.8** | **-0.5** |
| | 2.4nm,0.3s,baz=256,slow=21,SNR=4.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.10** | **262** | P | **P** | **03 29 37.6** | **-1.0** |
| | 0.2nm,0.3s,baz=105,slow=23,SNR=1.8 | | | | | | |
| **CTA** | **Charters Tower** | **33.02** | **265** | P | **P** | **03 32 35.0** | **+1.5** |
| | 1.2nm,0.3s,baz=90,slow=8.1,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **44.02** | **257** | P | **P** | **03 34 03.1** | **-0.3** |
| | 1.4nm,0.8s,baz=92,slow=7.9,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.12** | **262** | P | **P** | **03 34 03.4** | **-0.8** |
| | 0.6nm,1.0s,baz=96,slow=6.6,SNR=2.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.30** | **180** | P | **P** | **03 36 58.3** | **+0.7** |
| | 1.8nm,0.9s,baz=280,slow=3.7,SNR=3.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.53** | **44** | P | **P** | **03 38 06.0** | **-0.6** |
| | 0.5nm,0.9s,baz=246,slow=6.7,SNR=2.1 | | | | | | |
| **SEY** | **Seymchan** | **86.54** | **347** | P | **P** | **03 38 33.0** | **+2.5** |
| | 0.8nm,0.5s,baz=139,slow=11,SNR=6.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.58** | **58** | P | **P** | **03 38 35.7** | **-0.7** |
| | 0.2nm,0.7s,baz=243,slow=8.0,SNR=2.4 | | | | | | |
| **MATP** | **Matopo** | **131.29** | **214** | PKP | **PKPdf** | **03 44 57.9** | **0.0** |
| | 8.2nm,0.9s,baz=105,slow=0.1,SNR=7.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.03** | **331** | PKP | **PKPdf** | **03 45 16.0** | **-2.3** |
| | 0.5nm,0.5s,baz=44,slow=4.1,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.69** | **312** | PKPbc | **PKPbc** | **03 45 28.1** | **+0.4** |
| | 0.9nm,0.6s,baz=139,slow=4.3,SNR=6.2 | | | | | | |

*IDC **27** 03:26:47.4±4.6,36.1°N×71.1°E,h182km±37km,mb3.3/7, mb1 3.4/9,mb1mx3.0/75,mbtmp3.8/9,MS4.1/1,Ms1 4.1/1, ms1mx3.0/53,Error ellipse: s-maj=54.3km s-min=25.5km az=142.0*

**ISC 27 03:26:49.7**±2.0,**36.4N**±0.2°×**70.9E**±0.2°,**h188**km,**n12,** σ1**19**/12,**mb3.7**/6,**Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **6.83** | **23** | P | **Pn** | **03 28 28.5** | **+0.8** |
| | 0.6nm,0.3s,baz=182,slow=3.5,SNR=4.2 | | | | | | |
| AAK | | | | S | **Sn** | **03 29 43.3** | **-2.0** |
| | 0.6nm,0.3s,baz=145,slow=23,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.42** | **36** | P | **Pn** | **03 29 54.0** | **+1.2** |
| | 0.0nm,0.3s,baz=216,slow=11,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.26** | **19** | P | **Pn** | **03 30 15.8** | **+0.4** |
| | 0.0nm,0.3s,baz=208,slow=11,SNR=2.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.86** | **330** | P | **P** | **03 30 34.8** | **+1.1** |
| | 0.2nm,0.3s,baz=131,slow=10.0,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.05** | **24** | P | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **15.85** | **221** | | **P** | | **03 34 32.0** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **15.85** | **221** | P | **Pn** | | **03 34 33.8** | **-0.1** |
| | 3µm109nm,0.9s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.85** | **221** | P | **Pn** | | **03 34 33.7** | **-0.1** |
| | 101nm,0.9s | | | | | | | |
| **GMJI** | **Gumukmas** | **16.18** | **223** | P | **P** | | **03 34 36.2** | **+1.3** |
| | 68nm,0.8s | | | | | | | |
| **GENI** | **Genyem** | **16.86** | **111** | P | **Pn** | | **03 34 43.9** | **-1.6** |
| **PWJI** | **Pagerwojo** | **17.17** | **227** | P | **Pn** | | **03 34 47.5** | **-1.5** |
| | 34nm,0.7s | | | | | | | |
| **DRS** | **Darwin Rock St** | **17.21** | **158** | P | **Pn** | | **03 34 48.4** | **-1.0** |
| | 22nm,0.6s | | | | | | | |
| **JAY** | **Jayapura** | **17.33** | **110** | P | **P** | | **03 34 47.9** | **+0.5** |
| | 1.5nm,0.3s,baz=247,slow=5.2,SNR=5.8 | | | | | | | |
| **MTN** | **Manton Dam** | **17.67** | **158** | P | **P** | | **03 34 51.9** | **+0.9** |
| **MTN** | **Manton Dam** | **17.67** | **158** | P | **P** | | **03 34 52.7** | **+1.7** |
| **PCJI** | **Pacitan** | **17.75** | **228** | P | **P** | | **03 34 53.8** | **+2.0** |
| | 58nm,0.7s | | | | | | | |
| **UGM** | **Wanagama** | **18.06** | **230** | P | **P** | | **03 34 57.0** | **+1.8** |
| **KDU** | **Kakadu** | **18.07** | **154** | P | **P** | | **03 34 56.3** | **+1.1** |
| **KPJI** | **Karang Pucung** | **18.98** | **235** | P | **P** | | **03 35 07.0** | **+2.1** |
| | 50nm,1.0s | | | | | | | |
| **KNRA** | **Kununurra** | **19.67** | **168** | P | **P** | | **03 35 11.2** | **-1.1** |
| **KNRA** | **Kununurra** | **19.67** | **168** | P | **P** | | **03 35 14.3** | **+2.1** |
| **LEM** | **Lembang** | **19.80** | **238** | P | **P** | | **03 35 12.8** | **-1.1** |
| | 7.4nm,0.3s,baz=48,slow=6.7,SNR=12 | | | | | | | |
| **LEM** | **Lembang** | **19.80** | **238** | P | **P** | | **03 35 15.8** | **+1.9** |
| | 87nm,0.9s | | | | | | | |
| **SSLB** | **Suanglung** | **20.30** | **351** | P | **P** | | **03 35 21.3** | **+2.7** |
| SSLB | | | | IAmb | IAmb | | 03 35 37.0 | |
| | comp=Z,35nm,1.3s | | | | | | | |
| **DBJI** | **Dramaga** | **20.41** | **240** | P | **P** | | **03 35 21.4** | **+1.7** |
| | comp=Z,16µmcomp=Z,59nm,0.4s | | | | | | | |
| **YHNB** | **Yeheng** | **21.11** | **352** | P | **P** | | **03 35 26.6** | **+0.5** |
| **KLI** | **Kotabumi** | **21.36** | **247** | P | **P** | | **03 35 28.9** | **+0.4** |
| | comp=Z,4µmcomp=Z,233nm,1.0s | | | | | | | |
| **KLSI** | | **21.41** | **247** | P | **P** | | **03 35 29.5** | **+0.5** |
| | comp=Z,524nmcomp=Z,43nm,1.3s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.65** | **177** | P | **P** | | **03 35 31.1** | **+0.1** |
| | comp=Z,36nm,0.6s,baz=14,slow=8.7,SNR=262 | | | | | | | |
| FITZ | | | | ScP | **ScP** | | **03 42 25.1** | **-0.2** |
| | comp=Z,3.7nm,0.8s,baz=36,slow=3.6,SNR=3.0 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.65** | **177** | P | **P** | | **03 35 31.3** | **+0.3** |
| FITZ | | | | IAmb | IAmb | | 03 35 33.2 | |
| | comp=Z,32nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.65** | **177** | P | **P** | | **03 35 31.2** | **+0.1** |
| **MDSI** | **Maura Dua** | **21.84** | **248** | P | **P** | | **03 35 34.5** | **+1.6** |
| | comp=Z,328nmcomp=Z,26nm,1.2s | | | | | | | |
| **KASI** | **Kota Agung** | **21.95** | **246** | P | **P** | | **03 35 34.9** | **+1.0** |
| | comp=Z,5µmcomp=Z,567nmcomp=Z,64nm,0.8s | | | | | | | |
| **UBPT** | **Khong Chiam** | **22.00** | **303** | P | **P** | | **03 35 34.9** | **+0.6** |
| **LWLI** | **Liwa** | **22.15** | **247** | P | **P** | | **03 35 37.5** | **+1.7** |
| **KSI** | **Kapahiang** | **23.05** | **252** | P | **P** | | **03 35 45.2** | **+1.2** |
| **WB0** | **Warramunga Arr** | **25.23** | **158** | P | **P** | | **03 36 02.9** | **-0.5** |
| WB0 | | | | IAmb | IAmb | | 03 36 04.0 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **25.37** | **158** | P | **P** | | **03 36 04.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **25.37** | **158** | P | **P** | | **03 36 04.5** | **-0.3** |
| | comp=Z,15nm,0.6s,baz=338,slow=10,SNR=129 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **03 39 27.6** | **0.0** |
| | comp=Z,1.8nm,0.5s,baz=323,slow=2.5,SNR=6.2 | | | | | | | |
| WRA | | | | S | **S** | | **03 40 04.6** | **-2.1** |
| | comp=Z,2.8nm,0.7s,baz=329,slow=16,SNR=6.6 | | | | | | | |
| WRA | | | | ScP | **ScP** | | **03 42 35.7** | **+0.2** |
| | comp=Z,0.6nm,0.7s,baz=306,slow=3.6,SNR=2.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.37** | **158** | P | **P** | | **03 36 02.6** | **-2.1** |
| **WB2** | **Warramunga Arr** | **25.38** | **158** | P | **P** | | **03 36 04.5** | **-0.2** |
| WB2 | | | | IAmb | IAmb | | 03 36 05.8 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.48** | **190** | P | **P** | | **03 36 04.9** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **25.48** | **190** | P | **P** | | **03 36 04.6** | **-1.0** |
| PSA00 | | | | IAmb | IAmb | | 03 36 06.4 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.48** | **190** | P | **P** | | **03 36 05.9** | **+0.2** |
| **COEN** | **Coen** | **25.49** | **134** | P | **P** | | **03 36 05.2** | **-0.7** |
| **COEN** | **Coen** | **25.49** | **134** | P | **P** | | **03 36 07.7** | **+1.8** |
| **PSI** | **Prapat** | **25.54** | **269** | P | **P** | | **03 36 04.9** | **-1.5** |
| | comp=Z,9.0nm,0.6s,baz=86,slow=3.0,SNR=8.6 | | | | | | | |
| **PSI** | **Prapat** | **25.54** | **269** | P | **P** | | **03 36 07.1** | **+0.7** |
| | comp=Z,22nm,1.2s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **25.54** | **269** | P | **P** | | **03 36 05.8** | **-0.6** |
| RPSI | | | | IAmb | IAmb | | 03 36 09.3 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **GIRL** | **Giralia** | **27.99** | **201** | P | **P** | | **03 36 28.4** | **+0.5** |
| **AS31** | **Alice Springs** | **28.67** | **162** | P | **P** | | **03 36 34.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **28.67** | **162** | P | **P** | | **03 36 34.2** | **+0.3** |
| | comp=Z,4.2nm,0.4s,baz=344,slow=7.4,SNR=75 | | | | | | | |
| ASAR | | | | pP | **pP** | | **03 37 35.0** | **0.0** |
| | comp=Z,1.1nm,0.6s,baz=347,slow=10,SNR=2.1 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **03 39 34.6** | **-0.9** |
| | comp=Z,2.5nm,0.6s,baz=344,slow=2.5,SNR=9.8 | | | | | | | |
| ASAR | | | | S | **S** | | **03 40 56.2** | **-2.1** |
| | comp=Z,4.3nm,1.1s,baz=342,slow=15,SNR=11 | | | | | | | |
| ASAR | | | | ScP | **ScP** | | **03 42 45.0** | **-0.4** |
| | comp=Z,1.4nm,1.1s,baz=6.3,slow=4.2,SNR=2.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **28.67** | **162** | P | **P** | | **03 36 33.8** | **-0.1** |
| **NJ2** | **Nanjing** | **28.74** | **350** | *eP* | **P** | | **03 36 36.5** | **+2.1** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **WRKA** | **Warakurna** | **28.76** | **173** | P | **P** | | **03 36 35.3** | **+0.6** |
| **CM31** | **Chiang Mai Arr** | **29.00** | **302** | P | **P** | | **03 36 37.7** | **+0.8** |
| CM31 | | | | IAmb | IAmb | | 03 36 39.6 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **302** | P | **P** | | **03 36 37.5** | **+0.5** |
| | comp=Z,6.8nm,0.8s,baz=114,slow=6.5,SNR=31 | | | | | | | |
| CMAR | | | | PcP | **PcP** | | **03 39 37.2** | **+0.8** |
| | comp=Z,1.0nm,0.3s,baz=198,slow=1.5,SNR=5.8 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **302** | P | **P** | | **03 36 37.3** | **+0.4** |
| **CHTO** | **Chiang Mai** | **29.16** | **303** | P | **P** | | **03 36 39.0** | **+0.6** |
| CHTO | | | | IAmb | IAmb | | 03 36 40.2 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **29.16** | **303** | P | **P** | | **03 36 39.4** | **+1.0** |
| | comp=Z,18nm,1.0s | | | | | | | |
| **MEEK** | **Meekatharra** | **30.65** | **190** | P | **P** | | **03 36 52.0** | **+0.7** |
| **JMN** | **Monobe** | **31.18** | **15** | P | **P** | | **03 36 56.1** | **+0.3** |
| JMN | | | | IAmb | IAmb | | 03 36 57.2 | |
| | comp=Z,47nm,1.4s | | | | | | | |
| **PZH** | **PanZhiHua** | **31.47** | **318** | P | **P** | | **03 36 59.0** | **+0.4** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,5.0s | | | | | | | |
| **CTA** | **Charters Tower** | **31.84** | **139** | PcP | **PcP** | | **03 39 44.1** | **+0.2** |
| | comp=Z,1.9nm,0.7s,baz=351,slow=5.7,SNR=3.8 | | | | | | | |
| **OOD** | **Oodnadatta** | **33.08** | **162** | P | **P** | | **03 37 14.4** | **+2.1** |
| **XAN** | **Xi'an** | **33.53** | **336** | P | **P** | | **03 37 16.5** | **+0.4** |
| XAN | | | | pP | pwP | | 03 38 21.0 | -2.5 |
| XAN | | | | S | S | | 03 42 04.0 | -10 |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,200nm,5.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=N,240nm,18.1s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,500nm,17.7s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,460nm,24.0s | | | | | | | |
| **MORW** | **Morawa** | **33.53** | **193** | P | **P** | | **03 37 15.8** | **-0.4** |
| MORW | | | | IAmb | IAmb | | 03 37 16.4 | |
| | comp=Z,17nm,0.6s | | | | | | | |
| **KSRS** | **Korea Array** | **33.78** | **5** | P | **P** | | **03 37 16.3** | **-1.9** |
| | comp=Z,1.1nm,0.7s,baz=178,slow=10,SNR=2.6 | | | | | | | |
| KSRS | | | | PcP | **PcP** | | **03 39 50.0** | **+1.0** |
| | comp=Z,1.6nm,0.7s,baz=188,slow=3.7,SNR=4.5 | | | | | | | |
| KSRS | | | | ScP | **ScP** | | **03 43 02.0** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=215,slow=2.1,SNR=2.9 | | | | | | | |
| **FORT** | **Forrest** | **34.41** | **175** | P | **P** | | **03 37 23.9** | **+0.2** |
| **FORT** | **Forrest** | **34.41** | **175** | P | **P** | | **03 37 24.2** | **+0.6** |
| **BLDU** | **Ballidu** | **34.88** | **192** | P | **P** | | **03 37 27.8** | **+0.2** |
| **MAT** | **Matsushiro** | **35.08** | **19** | P | **P** | | **03 37 28.6** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **35.08** | **19** | P | **P** | | **03 37 28.8** | **-0.5** |
| | comp=Z,4.7nm,0.8s,baz=193,slow=8.9,SNR=8.6 | | | | | | | |
| MJAR | | | | PcP | **PcP** | | **03 39 53.6** | **+0.7** |
| | comp=Z,1.2nm,0.6s,baz=205,slow=2.9,SNR=2.4 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.08** | **19** | P | **P** | | **03 37 29.5** | **+0.2** |
| **KLBR** | **Kellerberrin** | **35.63** | **190** | P | **P** | | **03 37 34.2** | **+0.2** |
| **LCRK** | **Leigh Creek** | **36.36** | **160** | P | **P** | | **03 37 41.6** | **+1.4** |
| **BJI** | **Beijing** | **36.99** | **349** | P | **P** | | **03 37 46.0** | **+0.7** |
| BJI | | | | ScP | **ScP** | | **03 43 15.3** | **+1.4** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=N,280nm,18.6s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=E,130nm,19.0s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,470nm,19.8s | | | | | | | |
| **JMM** | **Marumori** | **37.17** | **22** | P | **P** | | **03 37 47.1** | **+0.2** |
| JMM | | | | IAmb | IAmb | | 03 37 49.9 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **LZH** | **Lanzhou** | **37.47** | **332** | *eP* | **P** | | **03 37 49.0** | **-0.6** |
| LZH | | | | pP | pP | | 03 38 50.5 | -1.7 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,190nm,14.9s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,480nm,17.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,480nm,18.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **37.89** | **164** | P | **P** | | **03 37 53.3** | **+0.4** |
| BBOO | | | | IAmb | IAmb | | 03 37 54.5 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **SHL** | **Shillong** | **38.14** | **308** | P | **P** | | **03 37 55.3** | **0.0** |
| SHL | | | | IAmb | IAmb | | 03 37 56.2 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **WHYH** | **Whyalla** | **38.54** | **162** | P | **P** | | **03 37 59.4** | **+1.2** |
| | comp=Z,36nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **38.81** | **344** | *eP* | **P** | | **03 38 03.8** | **+3.2** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,100nm,8.6s | | | | | | | |
| **NAPP** | **Napperby** | **38.85** | **162** | P | **P** | | **03 38 02.8** | **+2.0** |
| | comp=Z,17nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.90** | **157** | P | **P** | | **03 38 02.4** | **+1.1** |
| | comp=Z,19nm,0.7s,baz=328,slow=7.9,SNR=50 | | | | | | | |
| STKA | | | | S | **S** | | **03 43 35.1** | **+0.4** |
| | comp=Z,2.1nm,0.7s,baz=90,slow=22,SNR=4.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **38.90** | **157** | P | **P** | | **03 38 02.4** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.90** | **157** | P | **P** | | **03 38 03.0** | **+1.7** |
| **HTT** | **Hallett** | **39.33** | **161** | P | **P** | | **03 38 06.8** | **+2.0** |
| **JTM** | **Tenmabayashi** | **39.87** | **20** | P | **P** | | **03 38 09.5** | **+0.5** |
| **CMSA** | **Cobar Meteorol** | **40.41** | **152** | P | **P** | | **03 38 16.3** | **+2.7** |
| **TWOA** | **Tennyson Woods** | **40.70** | **162** | P | **P** | | **03 38 17.7** | **+1.8** |
| | comp=Z,48nm,0.7s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **40.76** | **351** | *eP* | **P** | | **03 38 16.8** | **+0.4** |
| XLT | | | | S | **S** | | **03 44 07.5** | **+5.5** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,130nm,4.8s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=N,26nm,17.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=E,300nm,18.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,600nm,16.5s | | | | | | | |
| **GTA** | **Gaotai** | **42.05** | **331** | ⇑P | **P** | | **03 38 28.0** | **+1.1** |
| GTA | | | | pP | pP | | 03 39 31.0 | +0.1 |
| GTA | | | | PcP | **PcP** | | **03 40 15.5** | **+0.5** |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **TAPN** | **Taplejung** | **42.27** | **308** | *eP* | **P** | | **03 38 29.4** | **+0.3** |
| | comp=Z,29nm,0.8s | | | | | | | |
| **ODAN** | **Odare** | **42.30** | **307** | *eP* | **P** | | **03 38 29.9** | **+0.6** |
| | comp=Z,7.0nm,0.3s | | | | | | | |
| **GOMU** | **GeErMu** | **42.38** | **324** | P | **P** | | **03 38 31.8** | **+1.9** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **42.67** | **144** | P | **P** | | **03 38 33.5** | **+1.6** |
| **RAMN** | **Ramite** | **42.98** | **306** | *eP* | **P** | | **03 38 35.5** | **+0.8** |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **ASAJ** | **Asahikawa** | **43.35** | **19** | P | **P** | | **03 38 37.9** | **+0.9** |
| | comp=Z,5.6nm,0.5s,baz=195,slow=6.2,SNR=7.5 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **43.35** | **19** | IAmb | IAmb | | 03 38 58.7 | |
| | comp=Z,34nm,1.3s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **43.35** | **160** | P | **P** | | **03 38 38.9** | **+1.8** |
| **JIRN** | **Jiri** | **43.62** | **307** | *eP* | **P** | | **03 38 40.4** | **+0.5** |
| | comp=Z,49nm,0.7s | | | | | | | |
| **GUN** | **Gumba** | **43.97** | **307** | *eP* | **P** | | **03 38 43.1** | **+0.5** |
| **PKI** | **Pulchoki** | **44.20** | **307** | *eP* | **P** | | **03 38 44.9** | **+0.5** |
| | comp=Z,14nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **45.08** | **151** | P | **P** | | **03 38 52.8** | **+2.0** |
| CAN | | | | IAmb | IAmb | | 03 38 54.1 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **TOO** | **Toolangi** | **45.43** | **156** | P | **P** | | **03 38 55.0** | **+1.6** |
| **TOO** | **Toolangi** | **45.43** | **156** | P | **P** | | **03 38 56.5** | **+3.0** |
| **KOLN** | **Koldanda** | **45.74** | **306** | *eP* | **P** | | **03 38 57.3** | **+1.0** |
| | comp=Z,95nm,0.6s | | | | | | | |
| **KLR** | **Kul'dur** | **45.83** | **7** | P | **P** | | **03 38 56.0** | **-0.4** |
| | comp=Z,1.6nm,0.5s,baz=200,slow=6.6,SNR=9.5 | | | | | | | |
| KLR | | | | PcP | **PcP** | | **03 40 27.6** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=276,slow=4.3,SNR=3.6 | | | | | | | |
| **DANN** | **Dangsing** | **45.85** | **307** | *eP* | **P** | | **03 38 58.0** | **+0.7** |
| | comp=Z,108nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.53** | **344** | P | **P** | | **03 39 02.6** | **+0.6** |
| **SONM** | **Songino Array** | **46.69** | **343** | P | **P** | | **03 39 03.3** | **+0.2** |
| | comp=Z,5.9nm,0.8s,baz=158,slow=8.8,SNR=28 | | | | | | | |
| SONM | | | | PcP | **PcP** | | **03 40 30.6** | **-0.3** |
| | comp=Z,2.3nm,0.7s,baz=175,slow=4.5,SNR=6.5 | | | | | | | |
| SONM | | | | ScP | **ScP** | | **03 43 52.0** | **-0.8** |
| | comp=Z,0.4nm,0.3s,baz=202,slow=3.3,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **46.69** | **343** | P | **P** | | **03 39 03.4** | **+0.2** |
| **MK31** | **Makanchi Array** | **56.36** | **326** | P | **P** | | **03 40 14.3** | **+0.2** |
| **MKAR** | **Makanchi Array** | **56.36** | **326** | P | **P** | | **03 40 14.3** | **+0.2** |
| | comp=Z,10nm,0.6s,baz=120,slow=8.3,SNR=150 | | | | | | | |
| MKAR | | | | PcP | **PcP** | | **03 41 06.8** | **-0.3** |
| | comp=Z,5.8nm,0.7s,baz=136,slow=3.5,SNR=13 | | | | | | | |
| MKAR | | | | ScP | **ScP** | | **03 44 33.2** | **-1.3** |
| | comp=Z,0.6nm,0.6s,baz=111,slow=4.9,SNR=4.5 | | | | | | | |
| MKAR | | | | S | **S** | | **03 47 37.0** | **-1.4** |
| | comp=Z,0.2nm,0.8s,baz=284,slow=15,SNR=2.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.36** | **326** | P | **P** | | **03 40 14.2** | **+0.2** |
| MKAR | | | | PcP | **PcP** | | **03 41 06.4** | **-0.7** |
| **PEA0B** | **Petropavlovsk-** | **56.36** | **23** | P | **P** | | **03 40 15.4** | **+1.4** |
| PEA0B | | | | IAmb | IAmb | | 03 40 17.0 | |
| | comp=Z,38nm,1.3s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **56.36** | **23** | P | **P** | | **03 40 14.9** | **+1.0** |
| | comp=Z,5.5nm,0.8s,baz=214,slow=4.7,SNR=9.3 | | | | | | | |
| PETK | | | | PcP | **PcP** | | **03 41 06.6** | **-0.3** |
| | comp=Z,1.4nm,0.6s,baz=252,slow=3.0,SNR=4.7 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **56.36** | **23** | P | **P** | | **03 40 14.7** | **+0.7** |
| **KSH** | **Kashi** | **56.53** | **316** | P | **P** | | **03 40 17.5** | **+1.9** |
| KSH | | | | PcP | **PcP** | | **03 41 09.5** | **+1.5** |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **MAKZ** | **Makanchi** | **56.54** | **326** | P | **P** | | **03 40 15.7** | **+0.3** |
| MAKZ | | | | IAmb | IAmb | | 03 40 16.5 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **ULHL** | **Ulahol** | **57.59** | **319** | P | **P** | | **03 40 24.1** | **+1.1** |
| | SNR=9.5 | | | | | | | |
| **TKM2** | **Tokmak 2** | **58.33** | **319** | P | **P** | | **03 40 28.8** | **+0.6** |
| | SNR=12 | | | | | | | |
| **KBK** | **Karagaybulak** | **58.63** | **319** | P | **P** | | **03 40 31.4** | **+1.2** |
| | SNR=6.9 | | | | | | | |
| **UCH** | **Uchtor** | **58.73** | **318** | P | **P** | | **03 40 32.2** | **+1.1** |
| | SNR=25 | | | | | | | |
| **AAK** | **Ala-Archa** | **58.92** | **319** | P | **P** | | **03 40 32.2** | **+0.1** |
| | comp=Z,5.0nm,0.7s,baz=111,slow=6.0,SNR=15 | | | | | | | |
| AAK | | | | PcP | **PcP** | | **03 41 17.5** | **0.0** |
| | comp=Z,2.5nm,0.7s,baz=174,slow=5.8,SNR=4.6 | | | | | | | |
| **AAK** | **Ala-Archa** | **58.92** | **319** | P | **P** | | **03 40 32.1** | **0.0** |
| **USP** | **Ospenovka** | **59.20** | **319** | P | **P** | | **03 40 34.3** | **+0.4** |
| | SNR=20 | | | | | | | |
| **AML** | **Almayashu** | **59.23** | **318** | P | **P** | | **03 40 35.3** | **+0.8** |
| | SNR=27 | | | | | | | |
| **MA2** | **Magadan** | **59.34** | **15** | P | **P** | | **03 40 35.8** | **+1.4** |
| **EKS2** | **Erkin-Say** | **59.41** | **318** | P | **P** | | **03 40 35.8** | **+0.4** |
| | SNR=18 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **59.66** | **334** | P | **P** | | **03 40 35.9** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **59.66** | **334** | P | **P** | | **03 40 35.8** | **-0.8** |
| | comp=Z,1.4nm,0.6s,baz=94,slow=6.5,SNR=7.0 | | | | | | | |
| **KBL** | **Kabul** | **59.80** | **308** | P | **P** | | **03 40 37.8** | **-0.5** |
| KBL | | | | IAmb | IAmb | | 03 40 39.1 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **60.34** | **313** | P | **P** | | **03 40 41.8** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **60.61** | **328** | P | **P** | | **03 40 42.8** | **-0.3** |
| | comp=Z,8.7nm,0.6s,baz=129,slow=6.3,SNR=79 | | | | | | | |
| KURBB | | | | pP | **pP** | | **03 41 51.3** | **-1.3** |
| | comp=Z,0.7nm,0.6s,baz=125,slow=6.1,SNR=0.9 | | | | | | | |
| **KURK** | **Kurchatov** | **60.62** | **328** | P | **P** | | **03 40 43.0** | **-0.1** |
| **KKAR** | **Karatay Array** | **61.77** | **318** | P | **P** | | **03 40 50.8** | **-0.3** |
| **RPZ** | **Rata Peaks** | **63.01** | **144** | P | **P** | | **03 40 59.4** | **+0.3** |
| | comp=Z,6.9nm,0.7s,baz=305,slow=21,SNR=2.4 | | | | | | | |
| **HRA** | **Herat** | **65.17** | **306** | P | **P** | | **03 41 12.8** | **-0.8** |
| HRA | | | | IAmb | IAmb | | 03 41 14.2 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **66.17** | **328** | P | **P** | | **03 41 19.0** | **-0.3** |
| | comp=Z,7.6nm,0.9s,baz=78,slow=14,SNR=24 | | | | | | | |
| **BRVK** | **Borovoye** | **66.25** | **328** | P | **P** | | **03 41 19.6** | **-0.1** |
| BRVK | | | | IAmb | IAmb | | 03 41 21.1 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **TIXI** | **Tiksi** | **67.96** | **1** | P | **P** | | **03 41 29.5** | **-0.6** |
| **GEYT** | **Alibeck** | **69.20** | **309** | P | **P** | | **03 41 38.3** | **-0.1** |
| | comp=Z,6.9nm,0.8s,baz=209,slow=10.0,SNR=7.8 | | | | | | | |
| **GEYT** | **Alibeck** | **69.20** | **309** | IAmb | IAmb | | 03 41 39.7 | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **69.20** | **309** | P | **P** | | **03 41 39.0** | **+0.6** |
| GYA0B | | | | IAmb | IAmb | | 03 41 39.7 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **NRIK** | **Noril'sk** | **69.98** | **347** | P | **P** | | **03 41 42.1** | **-0.3** |
| | comp=Z,13nm,0.6s,baz=119,slow=7.5,SNR=20 | | | | | | | |
| **NRIK** | **Noril'sk** | **69.98** | **347** | P | **P** | | **03 41 42.5** | **0.0** |
| NRIK | | | | IAmb | IAmb | | 03 41 44.5 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **70.80** | **321** | P | **P** | | **03 41 47.4** | **-0.4** |
| ABKAR | | | | IAmb | IAmb | | 03 41 48.9 | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **72.33** | **322** | P | **P** | | **03 41 56.3** | **-0.6** |
| | comp=Z,11nm,0.7s,baz=103,slow=8.6,SNR=39 | | | | | | | |
| **ARU** | **Arti** | **73.81** | **328** | P | **P** | | **03 42 04.1** | **-1.2** |
| **RAYN** | **Ar Rayn** | **78.45** | **293** | P | **P** | | **03 42 31.3** | **-0.8** |
| RAYN | | | | IAmb | IAmb | | 03 42 32.3 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **OPO** | **Ambohidratompo** | **79.16** | **250** | P | **P** | | **03 42 34.8** | **-1.3** |
| | comp=Z,4.6nm,0.8s,baz=52,slow=4.3,SNR=5.4 | | | | | | | |
| **ABPO** | **Ambohimpanom** | **79.18** | **250** | P | **P** | | **03 42 35.1** | **-1.1** |
| ABPO | | | | IAmb | IAmb | | 03 42 37.3 | |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| **VOI** | **Vohitsoka** | **79.98** | **247** | P | **P** | | **03 42 39.3** | **-1.1** |
| **KBZ** | **Khabaz** | **81.41** | **314** | P | **P** | | **03 42 46.3** | **-1.0** |
| | comp=Z,1.5nm,0.7s,baz=115,slow=7.7,SNR=5.4 | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **81.83** | **308** | P | **P** | | **03 42 50.2** | **+0.4** |
| GURO | | | | IAmb | IAmb | | 03 42 52.1 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **TTA** | **Tatalina** | **81.98** | **27** | P | **P** | | **03 42 51.0** | **+1.1** |
| TTA | | | | IAmb | IAmb | | 03 42 52.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **J20K** | **Nowinta River** | **82.96** | **26** | IAmb | IAmb | | 03 42 57.5 | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **KLMR** | **Klimovskoe** | **84.37** | **331** | *eP* | **P** | | **03 43 00.5** | **-1.5** |
| **KLMR** | **Klimovskoe** | **84.37** | **331** | AMP | | | 03 43 01.9 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **KLMR** | **Klimovskoe** | **84.37** | **331** | *eP* | pP | | 03 44 18.1 | +1.4 |
| **OBN** | **Obninsk** | **85.83** | **325** | P | **P** | | **03 43 08.8** | **-0.5** |
| **ASF** | **Jabal al Asfar** | **86.03** | **302** | P | **P** | | **03 43 10.4** | **-0.6** |
| | comp=Z,7.9nm,0.8s,baz=112,slow=3.4,SNR=14 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.13** | **25** | P | **P** | | **03 43 09.2** | **-1.3** |
| | comp=Z,0.6nm,0.5s,baz=251,slow=4.3,SNR=8.2 | | | | | | | |
| ILAR | | | | PKKPbc | **PKKPbc** | | **04 01 08.0** | **-2.9** |
| | comp=Z,0.3nm,0.8s,baz=63,slow=1.9,SNR=4.4 | | | | | | | |
| **KIBK** | **Kibwezi** | **86.60** | **267** | IAmb | IAmb | | 03 43 15.8 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **87.01** | **23** | P | **P** | | **03 43 15.9** | **+1.1** |
| **MMAI** | **Mount Meron Ar** | **87.26** | **303** | P | **P** | | **03 43 16.7** | **-0.1** |
| | comp=Z,1.9nm,0.7s,baz=81,slow=11,SNR=5.3 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **87.31** | **269** | P | **P** | | **03 43 17.6** | **0.0** |
| | comp=Z,3.1nm,0.8s,baz=60,slow=7.0,SNR=11 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **87.31** | **269** | P | **P** | | **03 43 17.7** | **+0.1** |
| KMBO | | | | IAmb | IAmb | | 03 43 19.5 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **EIL** | **Elat** | **87.81** | **299** | P | **P** | | **03 43 18.9** | **-0.4** |
| | comp=Z,5.7nm,0.8s,baz=50,slow=1.4,SNR=9.4 | | | | | | |

baz=303,slow=75,SNR=38
**H10N1 ASCENSION HYDR 22.06 124** T T 04 07 49.0
baz=303,slow=75,SNR=38
**H10S3 ASCENSION HYDR 22.55 127** T T 04 08 28.4
baz=304,slow=74,SNR=14
**H10S2 ASCENSION HYDR 22.57 127** T T 04 08 29.4
baz=276,slow=74,SNR=10
**BDFB Brasilia 25.31 217** LR LR 03 54 38.3
comp=Z,134nm,21.0s,baz=71,slow=34
**H05S1 Guadeloupe/Mar 29.33 291** T T 04 17 24.0
SNR=6.7
**H05N1 Guadeloupe/Mar 30.11 295** T T 04 18 26.1
SNR=3.1
**SIV San Ignacio 34.84 233** P P 03 47 16.8 +0.1
1.1nm,0.6s,baz=72,slow=9.2,SNR=6.4
**TORD Torodi Ar. Bea 34.94 74** P P 03 47 16.1 -1.5
1.0nm,0.8s,baz=264,slow=8.5,SNR=5.4
**BORG Borgarnes 60.43 6** LR LR 04 10 18.6
comp=Z,43nm,20.0s,baz=322,slow=30
**BRTR Keskin Array B 68.84 49** P P 03 51 32.3 +1.9
0.6nm,0.9s,baz=216,slow=7.1,SNR=3.7
**PDAR Pinedale Array 77.15 313** P P 03 52 19.5 -0.1
0.4nm,0.9s,baz=69,slow=6.9,SNR=2.3
**YKA Yellowknife Ar 82.07 332** P P 03 52 45.0 -0.7
0.3nm,0.7s,baz=101,slow=5.6,SNR=4.0

*IDC **27** 03:54:03.5±0.9, 4˚.61N×32˚.67W, h0km, mb4.0/14, mb1 4.2/14, mb1mx4.0/38, mbtmp4.0/14, MS3.7/36, Ms1 3.7/36, ms1mx3.5/85, Error ellipse: s-maj=29.6km s-min=17.0km az=146.0*
*NEIC **27** 03:54:05.5±1.4, 4˚.6N±0˚.1×32˚.6W±0˚.1, h10km±1km, mb4.7/33, Error ellipse: s-maj=22.9km s-min=15.4km az=124.0*
**ISC 27 03:54:05.0±0.6, 4˚.58N±0˚.10×32˚.6W±0˚.1, h11km, n83, σ0§85/43, mb4.6/27, MS3.8/35, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCBR** | **Riachuelo** | **10.85** | **198** | LR | LR | 03 59 06.5 | |
| | comp=Z,84nm,18.1s,baz=162,slow=28 | | | | | | |
| **RCBR** | **Riachuelo** | **10.85** | **198** | Pn | **Pn** | **03 56 40.0** | **-0.5** |
| **SACV** | **Santiago Islan** | **13.60** | **40** | Pn | **Pn** | **03 57 15.9** | **-2.0** |
| **H10N3** | **ASCENSION HYDR** | **21.87** | **124** | T | T | 04 21 55.4 | |
| | baz=303,slow=75,SNR=39 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.87** | **124** | T | T | 04 21 58.5 | |
| | baz=303,slow=75,SNR=32 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.89** | **124** | T | T | 04 21 59.7 | |
| | baz=303,slow=75,SNR=40 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.37** | **127** | T | T | 04 22 34.0 | |
| | baz=303,slow=74,SNR=35 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.39** | **127** | T | T | 04 22 34.5 | |
| | baz=277,slow=74,SNR=28 | | | | | | |
| **BDFB** | **Brasilia** | **25.23** | **217** | P | **P** | **03 59 31.1** | **-0.2** |
| | 1.1nm,0.5s,baz=222,slow=26,SNR=1.9 | | | | | | |
| **DBIC** | **Dimbokro** | **27.68** | **84** | LR | LR | 04 08 40.1 | |
| | comp=Z,224nm,20.5s,baz=270,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **27.85** | **260** | P | **P** | **03 59 54.2** | **-0.7** |
| | 2.0nm,0.7s,baz=53,slow=19,SNR=4.1 | | | | | | |
| PTGA | | | | LR | LR | 04 09 49.0 | |
| | comp=Z,244nm,21.8s,baz=68,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.48** | **291** | T | T | 04 31 04.6 | |
| | SNR=24 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.27** | **295** | T | T | 04 32 05.4 | |
| **STVI** | **Saint Thomas** | **34.45** | **296** | P | **P** | **04 00 53.4** | **+0.4** |
| **SIV** | **San Ignacio** | **34.81** | **233** | P | **P** | **04 00 56.6** | **+0.4** |
| | 3.1nm,0.8s,baz=90,slow=8.4,SNR=15 | | | | | | |
| SIV | | | | LR | LR | 04 14 46.5 | |
| | comp=Z,290nm,21.6s,baz=117,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.90** | **74** | P | **P** | **04 00 57.2** | **+0.2** |
| | 3.6nm,0.7s,baz=264,slow=9.2,SNR=23 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.90** | **74** | P | **P** | **04 00 57.0** | **+0.1** |
| **SJG** | **San Juan** | **35.45** | **295** | LR | LR | 04 12 34.5 | |
| | comp=Z,117nm,21.6s,baz=96,slow=31 | | | | | | |
| **SDV** | **Santo Domingo** | **38.00** | **279** | LR | LR | 04 17 43.2 | |
| | comp=Z,43nm,19.6s,baz=108,slow=37 | | | | | | |
| **MDT** | **Midelt** | **38.37** | **40** | LR | LR | 04 15 46.5 | |
| | comp=Z,182nm,21.3s,baz=324,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **38.97** | **217** | LR | LR | 04 17 51.9 | |
| | comp=Z,130nm,18.2s,baz=44,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **40.80** | **239** | P | **P** | **04 01 47.0** | **-0.6** |
| | 1.7nm,0.8s,baz=101,slow=6.8,SNR=5.6 | | | | | | |
| LPAZ | | | | LR | LR | 04 18 13.4 | |
| | comp=Z,87nm,20.7s,baz=54,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **40.80** | **239** | IAmb | IAmb | 04 01 49.2 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **BBSR** | **BB Station** | **40.81** | **317** | P | **P** | **04 01 46.8** | **+0.1** |
| **ROSC** | **El Rosal** | **41.58** | **272** | LR | LR | 04 19 29.0 | |
| | comp=Z,109nm,20.6s,baz=76,slow=37 | | | | | | |
| **LVC** | **Limon Verde** | **44.61** | **231** | LR | LR | 04 21 49.0 | |
| | comp=Z,92nm,20.1s,baz=48,slow=37 | | | | | | |
| **NNA** | **Nana** | **46.97** | **249** | LR | LR | 04 22 45.6 | |
| | comp=Z,86nm,18.4s,baz=54,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.50** | **46** | LR | LR | 04 24 43.0 | |
| | comp=Z,129nm,19.2s,baz=262,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **54.74** | **117** | LR | LR | 04 21 50.2 | |
| | comp=Z,127nm,21.8s,baz=286,slow=30 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.74** | **34** | LR | LR | 04 25 03.4 | |
| | comp=Z,45nm,20.5s,baz=266,slow=33 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.29** | **310** | LR | LR | 04 22 54.8 | |
| | comp=Z,101nm,21.2s,baz=84,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **56.92** | **214** | LR | LR | 04 28 35.3 | |
| | comp=Z,113nm,18.4s,baz=50,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **57.04** | **322** | LR | LR | 04 23 02.8 | |
| | comp=Z,66nm,19.7s,baz=201,slow=30 | | | | | | |
| **SCHQ** | **Schefferville** | **57.21** | **337** | P | **P** | **04 03 52.4** | **+0.3** |
| | comp=Z,3.8nm,0.7s,baz=91,slow=3.5,SNR=3.6 | | | | | | |
| **SCHQ** | **Schefferville** | **57.21** | **337** | IAmb | IAmb | 04 03 54.3 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **IDI** | **Anoyia** | **61.06** | **52** | LR | LR | 04 31 56.5 | |
| | comp=Z,64nm,20.8s,baz=272,slow=37 | | | | | | |
| **PSZ** | **Piszkesteto** | **62.16** | **37** | P | **P** | **04 04 28.8** | **+2.3** |
| PSZ | | | | IAmb | IAmb | 04 04 30.7 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **SUR** | **Sutherland** | **62.58** | **130** | LR | LR | 04 26 40.6 | |
| | comp=Z,51nm,18.7s,baz=301,slow=31 | | | | | | |
| **CCM** | **Cathedral Cave** | **62.73** | **311** | P | **P** | **04 04 29.6** | **-0.8** |
| CCM | | | | IAmb | IAmb | 04 04 32.0 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **MBAR** | **Mbarara** | **63.48** | **93** | LR | LR | 04 28 37.4 | |
| | comp=Z,93nm,20.1s,baz=286,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **63.69** | **121** | LR | LR | 04 27 05.4 | |
| | comp=Z,95nm,21.0s,baz=286,slow=31 | | | | | | |
| **P40A** | **Paris** | **63.76** | **312** | P | **P** | **04 04 36.7** | **-0.5** |
| **BOSA** | **Boshof** | **64.62** | **125** | LR | LR | 04 26 59.4 | |
| | comp=Z,83nm,21.0s,baz=337,slow=30 | | | | | | |
| **N38A** | **Joes South For** | **64.99** | **313** | P | **P** | **04 04 44.9** | **-0.3** |
| **MLR** | **Muntele Rosu** | **65.02** | **41** | P | **P** | **04 04 47.6** | **+2.1** |
| **NOA** | **NORSAR Array B** | **65.20** | **22** | LR | LR | 04 29 29.5 | |
| | comp=Z,23nm,20.8s,baz=105,slow=33 | | | | | | |
| **ECSD** | **EROS Data Cent** | **68.21** | **315** | P | **P** | **04 05 05.7** | **-0.1** |
| ECSD | | | | IAmb | IAmb | 04 05 06.2 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **EIL** | **Elat** | **68.26** | **60** | LR | LR | 04 35 26.5 | |
| | comp=Z,104nm,19.6s,baz=263,slow=36 | | | | | | |
| **BGNE** | **Belgrade** | **68.74** | **313** | P | **P** | **04 05 09.2** | **0.0** |
| **AKASG** | **Malin Array Be** | **68.86** | **37** | P | **P** | **04 05 09.9** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=253,slow=6.9,SNR=2.1 | | | | | | |
| AKASG | | | | LR | LR | 04 33 08.2 | |
| | comp=Z,45nm,20.5s,baz=356,slow=34 | | | | | | |
| **BR131** | **Keskin Array S** | **68.88** | **49** | P | **P** | **04 05 11.7** | **+1.4** |
| BR131 | | | | IAmb | IAmb | 04 05 13.3 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **68.88** | **49** | P | **P** | **04 05 11.3** | **+1.1** |
| | comp=Z,1.5nm,0.9s,baz=248,slow=3.8,SNR=7.5 | | | | | | |
| BRTR | | | | LR | LR | 04 35 57.5 | |
| | comp=Z,48nm,20.0s,baz=276,slow=36 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **69.10** | **57** | LR | LR | 04 35 07.6 | |
| | comp=Z,34nm,21.7s,baz=214,slow=36 | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.60** | **322** | P | **P** | **04 05 12.8** | **-1.4** |
| | comp=Z,5.1nm,1.1s,baz=133,slow=6.9,SNR=2.9 | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.60** | **322** | IAmb | IAmb | 04 05 15.7 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.01** | **93** | LR | LR | 04 32 40.5 | |
| | comp=Z,70nm,21.4s,baz=92,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.27** | **299** | P | **P** | **04 05 24.6** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=99,slow=5.8,SNR=2.9 | | | | | | |
| **FCC** | **Fort Churchill** | **71.60** | **331** | P | **P** | **04 05 26.6** | **+0.3** |
| FCC | | | | IAmb | IAmb | 04 05 27.1 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **74.04** | **310** | P | **P** | **04 05 42.5** | **+0.9** |
| **ANMO** | **Albuquerque** | **74.16** | **305** | LR | LR | 04 33 59.7 | |
| | comp=Z,96nm,21.7s,baz=79,slow=32 | | | | | | |
| **DGMT** | **Dagmar** | **74.42** | **319** | P | **P** | **04 05 44.3** | **+1.0** |
| **N23A** | **Red Feather La** | **74.44** | **311** | P | **P** | **04 05 44.3** | **+0.5** |
| N23A | | | | IAmb | IAmb | 04 05 46.8 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **FFC** | **Flin Flon** | **74.44** | **326** | P | **P** | **04 05 43.6** | **+0.5** |
| FFC | | | | IAmb | IAmb | 04 05 44.5 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **ATD** | **Arta Tunnel** | **74.85** | **79** | LR | LR | 04 36 48.9 | |
| | comp=Z,53nm,20.1s,baz=91,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.33** | **313** | P | **P** | **04 06 00.8** | **+0.4** |
| | comp=Z,0.7nm,0.7s,baz=117,slow=4,SNR=8.6 | | | | | | |
| **GNI** | **Garni** | **77.38** | **50** | LR | LR | 04 43 08.8 | |
| | comp=Z,40nm,19.9s,baz=303,slow=38 | | | | | | |
| **LOHW** | **Long Hollow** | **78.17** | **313** | P | **P** | **04 06 05.5** | **+0.6** |
| LOHW | | | | IAmb | IAmb | 04 06 06.2 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **YMR** | **Madison River** | **78.52** | **315** | P | **P** | **04 06 07.7** | **+0.8** |
| YMR | | | | IAmb | IAmb | 04 06 09.9 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.72** | **311** | P | **P** | **04 06 08.0** | **0.0** |
| HWUT | | | | IAmb | IAmb | 04 06 09.7 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **CCUT** | **Cedar City** | **79.90** | **307** | P | **P** | **04 06 14.9** | **+0.3** |
| **RPN** | **Rapa Nui** | **80.34** | **242** | LR | LR | 04 38 11.3 | |
| | comp=Z,40nm,19.9s,baz=21,slow=33 | | | | | | |
| **BELG** | **Belogornoye** | **80.42** | **38** | LR | LR | 04 42 15.9 | |
| | comp=Z,31nm,18.2s,baz=151,slow=36 | | | | | | |
| **EDM** | **Edmonton** | **80.81** | **323** | P | **P** | **04 06 19.1** | **+0.2** |
| **R11A** | **Troy Canyon, C** | **81.68** | **308** | P | **P** | **04 06 24.4** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **82.26** | **332** | P | **P** | **04 06 25.9** | **-0.4** |
| | comp=Z,0.9nm,0.6s,baz=97,slow=5.3,SNR=16 | | | | | | |
| **QSM** | **Queen of Sheba** | **82.70** | **306** | P | **P** | **04 06 30.0** | **+0.9** |
| QSM | | | | IAmb | IAmb | 04 06 31.9 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.81** | **308** | P | **P** | **04 06 35.7** | **+0.6** |
| | comp=Z,0.5nm,0.8s,baz=94,slow=4.4,SNR=3.9 | | | | | | |
| NVAR | | | | LR | LR | 04 44 10.2 | |
| | comp=Z,72nm,18.2s,baz=204,slow=36 | | | | | | |
| **A36M** | **Sachs Harbour** | **86.50** | **342** | P | **P** | **04 06 47.2** | **-0.4** |
| A36M | | | | IAmb | IAmb | 04 06 56.4 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **ARU** | **Arti** | **86.86** | **34** | LR | LR | 04 44 45.6 | |
| | comp=Z,54nm,18.8s,baz=202,slow=35 | | | | | | |
| **ABKAR** | **Akbulak array** | **88.22** | **41** | P | **P** | **04 06 55.3** | **-1.1** |
| **QSPA** | **South Pole Qui** | **94.62** | **180** | P | **P** | **04 07 26.3** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 04 07 28.9 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **IL31** | | **95.97** | **337** | P | **P** | **04 07 32.2** | **+0.3** |
| IL31 | | | | IAmb | IAmb | 04 07 33.0 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **95.97** | **337** | P | **P** | **04 07 32.4** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=58,slow=4.7,SNR=8.1 | | | | | | |

*IDC **27** 04:11:26.1±4.2, 4˚.34S×153˚.33E, h120km±25km, mb3.5/4, mb1 3.7/5, mb1mx3.4/40, mbtmp4.0/5, Error ellipse: s-maj=59.3km s-min=23.7km az=111.0*
**ISC 27 04:11:22.8±1.5, 4˚.4S±0˚.1×153˚.6E±0˚.2, h100km, n7, σ0§83/10, mb3.6/4, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **1.58** | **273** | P | **Pn** | **04 11 51.1** | **+1.0** |
| | baz=180,slow=20 | | | | | | |
| KRVT | | | | S | **Sn** | **04 12 10.3** | **-0.6** |
| | baz=219,slow=20 | | | | | | |
| **PMG** | **Port Moresby** | **8.12** | **232** | P | **Pn** | **04 13 19.2** | **+1.2** |
| | 7.1nm,0.3s,baz=56,slow=9.4,SNR=7.3 | | | | | | |
| PMG | | | | S | **Sn** | **04 14 47.8** | **-0.4** |
| | 2.1nm,0.3s,baz=137,slow=20,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.33** | **229** | P | **P** | **04 16 31.5** | **+0.1** |
| | 3.5nm,0.5s,baz=54,slow=10.0,SNR=32 | | | | | | |
| **ASAR** | **Alice Springs** | **27.00** | **223** | P | **P** | **04 16 55.1** | **-0.5** |
| | 0.3nm,0.5s,baz=53,slow=8.7,SNR=6.2 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 20 15.2** | **+0.3** |
| | 0.2nm,0.6s,baz=58,slow=3.5,SNR=1.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.57** | **241** | P | **P** | **04 17 26.2** | **-1.0** |
| | 1.8nm,0.5s,baz=66,slow=8.5,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.55** | **319** | P | **P** | **04 23 24.5** | **+0.3** |
| | 0.3nm,0.7s,baz=113,slow=6.5,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.94** | **289** | PKPbc | **PKPbc** | **04 31 04.5** | **-0.6** |
| | 1.1nm,0.7s,baz=49,slow=2.0,SNR=7.1 | | | | | | |

**IDC 27 04:20:03.5±7.6, 23˚.41S×175˚.10W, h0km, mb4.2/5, mb1 4.4/5, mb1mx3.8/37, mbtmp4.2/5, Error ellipse: s-maj=241.1km s-min=98.8km az=145.0, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **35.98** | **268** | P | P | 04 27 06.9 | +0.6 |
| | 2.2nm,0.4s,baz=106,slow=9.7,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **46.54** | **295** | P | | 04 28 33.0 | -0.3 |
| | 1.1nm,0.7s,baz=100,slow=6.6,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.92** | **264** | P | P | 04 28 35.4 | -0.9 |
| | 1.4nm,0.8s,baz=102,slow=7.8,SNR=26 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.35** | **264** | P | P | 04 29 39.9 | +0.3 |
| | 1.8nm,0.7s,baz=125,slow=6.0,SNR=5.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.60** | **288** | P | P | 04 33 22.2 | 0.0 |
| | 0.9nm,0.3s,baz=113,slow=2.3,SNR=4.3 | | | | | | |

*IDC **27** 04:34:32.8±4.4, 4˚.27N×32˚.62W, h0km, mb3.8/7, mb1 4.1/7, mb1mx3.8/28, mbtmp3.8/7, MS3.4/16, Ms1 3.4/16, ms1mx3.1/87, Error ellipse: s-maj=158.9km s-min=26.8km az=2.0*
**ISC 27 04:34:34.7±4.2, 4˚.N±1˚×32˚.6W±0˚.2, h11km, n29, σ1§04/7, mb4.0/7, MS3.4/15, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MDP** | **Montagnes des** | **19.99** | **273** | LR | LR | 04 44 56.8 | |
| | comp=Z,63nm,21.1s,baz=96,slow=31 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.71** | **124** | T | T | 05 02 06.2 | |
| | baz=304,slow=75,SNR=39 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.71** | **124** | T | T | 05 02 06.5 | |
| | baz=304,slow=75,SNR=36 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.73** | **124** | T | T | 05 02 09.7 | |
| | baz=304,slow=75,SNR=38 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.20** | **126** | T | T | 05 02 44.3 | |
| | baz=275,slow=74,SNR=19 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.22** | **126** | T | T | 05 02 44.2 | |
| | baz=305,slow=74,SNR=14 | | | | | | |
| **DBIC** | **Dimbokro** | **27.72** | **84** | LR | LR | 04 49 41.4 | |
| | comp=Z,29nm,18.4s,baz=342,slow=33 | | | | | | |
| **PTGA** | **Pitinga** | **27.79** | **260** | LR | LR | 04 50 13.9 | |
| | comp=Z,86nm,19.8s,baz=73,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.59** | **292** | T | T | 05 11 30.8 | |
| | SNR=14 | | | | | | |
| **SIV** | **San Ignacio** | **34.63** | **234** | LR | LR | 04 55 00.4 | |
| | comp=Z,144nm,19.5s,baz=120,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.98** | **73** | P | **P** | **04 41 26.9** | **-0.6** |
| | 2.5nm,0.9s,baz=264,slow=8.4,SNR=13 | | | | | | |
| **SJG** | **San Juan** | **35.57** | **295** | LR | LR | 04 53 29.3 | |
| | comp=Z,42nm,18.4s,baz=114,slow=32 | | | | | | |
| **SDV** | **Santo Domingo** | **38.04** | **279** | LR | LR | 04 57 25.6 | |
| | comp=Z,44nm,18.8s,baz=276,slow=36 | | | | | | |
| **MDT** | **Midelt** | **38.60** | **39** | LR | LR | 04 56 41.7 | |
| | comp=Z,57nm,18.5s,baz=349,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **38.72** | **217** | LR | LR | 04 55 50.1 | |
| | comp=Z,50nm,18.4s,baz=40,slow=33 | | | | | | |
| **LPAZ** | **La Paz** | **40.65** | **239** | LR | LR | 04 58 26.4 | |
| | comp=Z,63nm,18.6s,baz=60,slow=35 | | | | | | |
| **LVC** | **Limon Verde** | **44.42** | **231** | LR | LR | 05 02 04.3 | |
| | comp=Z,44nm,18.2s,baz=41,slow=37 | | | | | | |
| **NNA** | **Nana** | **46.86** | **249** | LR | LR | 05 02 37.9 | |
| | comp=Z,49nm,18.1s,baz=7.5,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.09** | **256** | LR | LR | 05 03 11.2 | |
| | comp=Z,77nm,18.6s,baz=63,slow=36 | | | | | | |
| **PLCA** | **Paso Flores** | **56.68** | **214** | LR | LR | 05 07 12.8 | |
| | comp=Z,71nm,18.0s,baz=90,slow=35 | | | | | | |
| **IDI** | **Anoyia** | **61.24** | **52** | LR | LR | 05 11 14.9 | |
| | comp=Z,23nm,20.2s,baz=308,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.48** | **22** | LR | LR | 05 12 05.6 | |
| | comp=Z,9.0nm,18.0s,baz=290,slow=34 | | | | | | |
| **EIL** | **Elat** | **68.41** | **60** | LR | LR | 05 14 25.6 | |
| | comp=Z,33nm,21.3s,baz=226,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.08** | **49** | P | **P** | **04 45 41.8** | **+0.6** |
| | 1.0nm,0.8s,baz=261,slow=7.2,SNR=6.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **69.10** | **37** | P | **P** | **04 45 41.7** | **+0.8** |
| | 0.3nm,0.2s,baz=258,slow=6.1,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.41** | **299** | P | **P** | **04 45 56.8** | **+1.2** |
| | 0.3nm,0.8s,baz=111,slow=7.0,SNR=2.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.53** | **313** | P | **P** | **04 46 30.5** | **-0.6** |
| | 0.4nm,0.7s,baz=115,slow=6.4,SNR=4.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.52** | **332** | P | **P** | **04 46 56.7** | **-0.6** |
| | 0.6nm,0.7s,baz=99,slow=5.3,SNR=8.1 | | | | | | |
| **ILAR** | **Eielson Array** | **96.24** | **337** | P | **P** | **04 48 02.1** | **-0.8** |
| | 0.7nm,0.9s,baz=34,slow=4.1,SNR=4.6 | | | | | | |

*WEL **27** 04:42:36.6±1.6, 47˚.S±14˚×16˚.6E±1˚.1, h12km, M4.3/6, ML4.4/7, MLv4.3/6, Error ellipse: s-maj=0.0km s-min=0.0km az=160.1*
*IDC **27** 04:42:39.5±2.1, 46˚.11S×165˚.06E, h0km, mb3.7/2, mb1 3.9/2, mb1mx3.6/28, mbtmp3.7/2, Error ellipse: s-maj=74.9km s-min=27.5km az=176.0*
**ISC 27 04:42:36.2±1.3, 46.8S±0.1×165.55E±0.07, h15km, n20, σ1§85/19, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DCZ** | **Deep Cove** | **1.76** | **40** | P | **Pg** | **04 43 10.0** | **+0.1** |
| **WHZ** | **Wether Hill Ro** | **1.91** | **61** | P | **Pb** | **04 43 09.7** | **-0.9** |
| WHZ | | | | S | **Sg** | **04 43 36.0** | **-1.4** |
| **MLZ** | **Mavora Lakes** | **2.31** | **52** | P | **Pb** | **04 43 18.0** | **+0.5** |
| **SYZ** | **Scrubby Hill** | **2.49** | **85** | P | **Pn** | **04 43 15.8** | **-0.2** |
| SYZ | | | | S | **Sn** | **04 43 46.2** | **+0.1** |
| **TUZ** | **Tuapeka** | **2.96** | **74** | P | **Pn** | **04 43 22.8** | **+0.3** |
| TUZ | | | | S | **Sn** | **04 43 59.7** | **+2.1** |
| **EAZ** | **Earnscleugh** | **3.07** | **60** | P | **Pn** | **04 43 26.3** | **+2.2** |
| EAZ | | | | S | **Sb** | **04 44 06.4** | **-1.2** |
| **WKZ** | **Wanaka** | **3.14** | **52** | P | **Pb** | **04 43 29.9** | **-1.8** |
| **JCZ** | **Jackson Bay** | **3.57** | **41** | P | **Pb** | **04 43 37.9** | **-1.2** |
| **HHSZ** | **Highcliff Hill** | **3.62** | **77** | P | **Pn** | **04 43 32.7** | **+1.0** |
| **ODZ** | **Otahua Downs** | **3.98** | **65** | P | **Pn** | **04 43 36.0** | **-0.5** |
| **RPZ** | **Rata Peaks** | **4.98** | **53** | Pn | Pn | 04 43 55.5 | +5.2 |
| | baz=292,slow=3.9 | | | | | | |
| RPZ | | | | Sn | **Sn** | **04 44 49.9** | **+2.3** |
| | 0.7nm,0.3s,baz=241,slow=19,SNR=1.1 | | | | | | |
| **ASAR** | **Alice Springs** | **34.30** | **301** | P | **P** | **04 49 21.6** | **-0.3** |
| | 1.2nm,0.8s,baz=139,slow=9.0,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.97** | **306** | P | **P** | **04 49 44.8** | **0.0** |
| | 0.4nm,0.9s,baz=138,slow=7.8,SNR=2.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.99** | **268** | T | T | 05 32 16.8 | |
| | baz=124,slow=75,SNR=43 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.00** | **268** | T | T | 05 32 17.6 | |
| | baz=124,slow=75,SNR=37 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.01** | **268** | T | T | 05 32 18.1 | |
| | baz=124,slow=75,SNR=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **125.99** | **34** | PKP | **PKiKP** | **05 01 40.9** | **+4.2** |
| | 0.2nm,0.6s,baz=210,slow=1.9,SNR=2.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **143.78** | **207** | PKhKP | PKPpre | 05 02 11.1 | |
| | 1.0nm,0.9s,baz=208,slow=1.5,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.74** | **276** | PKhKP | PKPpre | 05 02 09.0 | |
| | 0.9nm,0.8s,baz=135,slow=2.7,SNR=5.0 | | | | | | |
| BRTR | | | | PKP | pPKPdf | 05 02 15.9 | -0.9 |
| | 3.8nm,0.9s,baz=140,slow=3.6,SNR=16 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.27** | **294** | PKPbc | **PKPab** | **05 02 32.8** | **-3.5** |
| | 1.5nm,0.7s,baz=74,slow=2.6,SNR=5.0 | | | | | | |

**IDC 27 04:43:04.3±1.6, 9.10S×159.84E, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.6/42, mbtmp3.7/4, ML3.8/1, Error ellipse: s-maj=54.1km s-min=30.2km az=132.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.37** | **155** | Pn | Pn | 04 46 29.5 | +0.3 |
| | 0.5nm,0.3s,baz=352,slow=17,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.90** | **244** | P | P | 04 48 47.3 | 0.0 |
| | 0.7nm,0.7s,baz=72,slow=9.5,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **28.72** | **237** | P | P | 04 49 03.6 | 0.0 |
| | 0.3nm,0.9s,baz=67,slow=8.3,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.62** | **20** | P | P | 04 55 34.3 | 0.0 |
| | 0.8nm,1.0s,baz=243,slow=4.9,SNR=13 | | | | | | |

*TIF **27** 04:50:13.1, 42˚.45N×43˚.78E, h13km±1km*
*NORS **27** 04:50:13.1±0.0, 42˚.48N×43˚.75E, h15km, MPVA3.7*
*AZER **27** 04:50:13.5±0.8, 42˚.23N×43˚.14E, h34km±534km, Error ellipse: s-maj=780.5km s-min=10.1km az=293.0*
**ISC 27 04:50:13.4±1.0, 42.40N±0.02×43.77E±0.02, h9km±9km, n29, σ1§13/56, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONI** | **Oni** | **0.30** | **309** | P | **Pg** | **04 50 19.5** | **0.0** |
| ONI | | | | S | **Sg** | **04 50 23.8** | **+0.3** |
| **ONI** | **Oni** | **0.30** | **309** | *i* Pg | **Pg** | **04 50 19.5** | **0.0** |
| ONI | | | | *e*Sg | **Sg** | **04 50 23.9** | **+0.3** |
| **ZEI** | **Tsey** | **0.40** | **14** | *i* Pg | **Pg** | **04 50 21.1** | **-0.2** |
| ZEI | | | | *e*Sg | **Sg** | **04 50 26.9** | **+0.2** |
| **DIGR** | **Digorskoe uzhe** | **0.52** | **344** | *i* Pg | **Pg** | **04 50 23.1** | **-0.4** |
| DIGR | | | | *e*Sg | **Sg** | **04 50 30.0** | **-0.4** |
| **GUDG** | **Gudauri** | **0.53** | **83** | P | **Pg** | **04 50 23.6** | **0.0** |
| GUDG | | | | S | **Sg** | **04 50 31.2** | **+0.6** |
| **LACR** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| UKR | | | | | Sg | **Sg** | **04 54 49.1** | **+2.8** |
| **CUR** | **Chagan-Uzun** | **2.20** | **55** | | Pg | **Pb** | **04 54 17.0** | **-0.6** |
| CUR | | | | | Sg | **Sn** | **04 54 43.4** | **+1.9** |
| **ULGR** | **Ulagan, Altay** | **2.35** | **41** | ⇓ | Pg | **Pb** | **04 54 21.2** | **+1.0** |
| ULGR | | | | | Sg | **Sb** | **04 54 49.4** | **+0.3** |
| **MK31** | **Makanchi Array** | **3.02** | **228** | ⇑ | Pn | **Pb** | **04 54 31.2** | **-0.4** |
| | 0.3nm,0.2s,baz=57,slow=14,SNR=40 | | | | | | | |
| MK31 | | | | ⇓ | Lg | Lg | 04 55 16.7 | |
| | 0.8nm,0.2s,baz=44,slow=32,SNR=3.6 | | | | | | | |
| **ARTR** | **Artybash** | **3.14** | **20** | | Pg | **Pb** | **04 54 34.4** | **+1.0** |
| ARTR | | | | | Sg | **Sb** | **04 55 13.9** | **+2.3** |
| **MAKZ** | **Makanchi** | **3.17** | **231** | ⇑ | Pn | **Pb** | **04 54 33.0** | **-1.1** |
| | 0.7nm,0.4s | | | | | | | |
| MAKZ | | | | ⇑ | Lg | Lg | 04 55 20.1 | |
| | 1.4nm,0.2s | | | | | | | |
| **MAKZ** | **Makanchi** | **3.17** | **231** | | Pn | **Pb** | **04 54 34.3** | **+0.3** |
| MAKZ | | | | | Pg | **Pg** | **04 54 34.7** | **-3.9** |
| MAKZ | | | | | Sg | **Sg** | **04 55 21.2** | **+1.6** |
| **SEM** | **Semipalatinsk** | **3.78** | **296** | | Pg | **Pg** | **04 54 50.3** | **+0.2** |
| | 5.4nm,0.3s | | | | | | | |
| SEM | | | | | Lg | Lg | 04 55 41.6 | |
| | 16nm,0.1s | | | | | | | |
| **ELT** | **Eltsovka** | **4.42** | **5** | | Sg | **Sg** | **04 55 57.0** | **-2.7** |
| **KURK** | **Kurchatov** | **4.86** | **295** | ⇓ | Lg | Lg | 04 56 16.8 | |
| | 13nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **4.88** | **294** | ⇓ | Lg | Lg | 04 56 18.6 | |
| | 19nm,0.5s | | | | | | | |
| **LUZB** | **Luzhba, Kemero** | **5.24** | **22** | | Sg | **Sg** | **04 56 22.0** | **-3.9** |
| **DJO** | **Djoy, Khakassi** | **5.31** | **40** | | Sg | **Sb** | **04 56 21.3** | **+7.1** |
| **KAPS** | **Kapalarasan** | **5.55** | **232** | | Pg | **Pg** | **04 55 22.6** | **-1.4** |
| | 0.9nm,0.2s | | | | | | | |
| KAPS | | | | | Lg | Lg | 04 56 36.9 | |
| | 1.9nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **7.07** | **232** | | Pg | **Pg** | **04 55 52.6** | **-0.5** |
| | 0.7nm,0.3s | | | | | | | |
| ARXS | | | | | Lg | Lg | 04 57 28.4 | |
| | 4.4nm,0.7s | | | | | | | |

*TUL* ***27*** *05:05:49.3±0.9, 36°29'N±0'02×97°52'W±0'03, h6km±6km, ML3.8, mb3.8/7(NEIC), mb_Lg4.0/122(NEIC), Mwr3.8/53(NEIC), Error ellipse: s-maj=3.5km s-min=2.3km az=65.0*

*ANF* ***27*** *05:05:49.7±0.2, 36°29'N×97°51'W, h5km, ML4.8/17, Error ellipse: s-maj=2.9km s-min=2.4km az=178.0*

*NEIC* ***27*** *05:05:49.2±0.7, 36°29'N±0'02×97°53'W±0'03, h3km±6km, Error ellipse: s-maj=3.6km s-min=2.3km az=65.0*

*NEIC* ***27*** *05:05:49.3, 36°29'N×97°52'W, h6km, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.69; Mθθ=5.44; Mϕϕ=-4.75; Mrθ=0.81; Mrϕ=-1.10; Mθϕ=-0.17; Fault plane solution: M0=5.31000×10¹⁴ NP1:ϕs=141.29000°, δ85.59000°, λ,6.05000°. NP2:ϕs=50.82000°, δ83.97000°, λ175.56000°. Principal axes: T 5.6661, Plg7.0000°, Azm6.0000°; N -0.7966, Plg83.0000°, Azm177.0000°; P -4.8695, Plg1.0000°, Azm276.0000°;*

*IDC* ***27*** *05:05:50.4±0.8, 36°42'N×97°66'W, h0km, mb3.4/2, mb1 3.8/8, mb1mx3.5/52, mbtmp3.5/8, ML3.4/6, MS3.4/3, Ms1 3.3/3, ms1mx2.8/49 Error ellipse: s-maj=11.0km s-min=9.3km az=172.0*

**ISC 27 05:05:49.5±0.5, 36°31'N±0'04×97°48'W±0'03, h10km, n137, σ1°39/110, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.70** | **160** | | **Pg** | **05 06 02.6** | **-0.4** |
| **OK009** | **Oakdale Elemen** | **0.73** | **176** | | **Pg** | **05 06 03.0** | **-0.6** |
| **OKCFA** | **Oklahoma City** | **0.89** | **178** | | **Pg** | **05 06 05.9** | **-0.9** |
| **OKCSW** | **OKLAHOMA CITY** | **0.90** | **178** | Pg | **Pg** | **05 06 06.0** | **-1.0** |
| **T35A** | **Sooner Cattle** | **0.99** | **52** | | **Pb** | **05 06 09.3** | **+0.5** |
| **FNO** | **Franklin** | **1.05** | **176** | Pg | **Pg** | **05 06 08.6** | **-1.2** |
| **U32A** | **Winter Ranch,** | **1.23** | **274** | | **Pn** | **05 06 12.0** | **-0.8** |
| **TUL1** | **Leonard** | **1.43** | **106** | Pn | **Pn** | **05 06 15.7** | **+0.2** |
| TUL1 | comp=Z,833nm,1.0s | | | IAmb_Lg | | 05 06 37.2 | |
| **TUL1** | **Leonard** | **1.43** | **106** | P | **Pn** | **05 06 15.7** | **+0.2** |
| | baz=286,SNR=435 | | | | | | |
| TUL1 | | | | S | **Sg** | **05 06 35.5** | **+0.1** |
| | baz=286 | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.73** | **190** | IAmb_Lg | | 05 06 43.4 | |
| | comp=Z,541nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.89** | **214** | P | **Pn** | **05 06 21.9** | **0.0** |
| | baz=33,SNR=470 | | | | | | |
| WMOK | | | | S | **Sb** | **05 06 47.3** | **-0.6** |
| | baz=33 | | | | | | |
| **HHAR** | **Hobbs** | **2.86** | **90** | IAmb_Lg | | 05 07 22.3 | |
| | comp=Z,294nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.87** | **14** | P | **Pn** | **05 06 36.7** | **+1.3** |
| | baz=195,SNR=32 | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.08** | **325** | Pn | **Pn** | **05 06 39.1** | **+0.9** |
| **CBKS** | **Cedar Bluff** | **3.08** | **325** | P | **Pn** | **05 06 39.7** | **+1.5** |
| | baz=144,SNR=19 | | | | | | |
| CBKS | | | | Sb | **Sb** | **05 07 25.7** | **+3.7** |
| | baz=144 | | | | | | |
| **W39A** | **Magazine** | **3.21** | **109** | Pn | **Pn** | **05 06 41.2** | **+1.3** |
| W39A | | | | IAmb_Lg | | 05 07 36.5 | |
| | comp=Z,697nm,0.8s | | | | | | |
| **W39A** | **Magazine** | **3.21** | **109** | P | **Pn** | **05 06 41.3** | **+1.3** |
| | baz=291,SNR=58 | | | | | | |
| **S39A** | **Bolivar** | **3.60** | **66** | | **Pn** | **05 06 46.9** | **+1.5** |
| **MIAR** | **Mount Ida** | **3.64** | **118** | IAmb_Lg | | 05 07 55.0 | |
| | comp=Z,410nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.64** | **118** | P | **Pn** | **05 06 47.4** | **+1.4** |
| | baz=300,SNR=79 | | | | | | |
| MIAR | | | | S | **Sn** | **05 07 32.1** | **+3.0** |
| | baz=300 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.67** | **145** | | **Pn** | **05 06 47.3** | **+0.9** |
| **AMTX** | **Amarillo** | **3.71** | **249** | Pn | **Pn** | **05 06 47.3** | **+0.4** |
| AMTX | | | | IAmb_Lg | | 05 07 52.8 | |
| | comp=Z,550nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **3.71** | **249** | Pn | **Pn** | **05 06 47.4** | **+0.5** |
| | baz=66 | | | | | | |
| AMTX | | | | Pb | **Pb** | **05 06 53.7** | **-1.4** |
| | baz=66 | | | | | | |
| AMTX | | | | Sb | **Sb** | **05 07 43.1** | **+2.9** |
| | baz=66 | | | | | | |
| **U40A** | **Yellville** | **3.74** | **88** | Pn | **Pn** | **05 06 47.6** | **+0.3** |
| U40A | | | | IAmb_Lg | | 05 07 50.8 | |
| | comp=Z,455nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.74** | **88** | P | **Pn** | **05 06 49.1** | **+1.8** |
| | baz=270,SNR=38 | | | | | | |
| U40A | | | | Sb | **Sg** | **05 07 46.9** | **-2.7** |
| | baz=270 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.09** | **207** | IAmb_Lg | | 05 07 59.1 | |
| | comp=Z,236nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.09** | **207** | P | **Pn** | **05 06 53.9** | **+1.7** |
| | baz=25,SNR=52 | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.21** | **114** | IAmb_Lg | | 05 08 06.8 | |
| | comp=Z,533nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.21** | **114** | P | **Pn** | **05 06 55.4** | **+1.6** |
| | baz=297,SNR=20 | | | | | | |
| **MGMO** | **Mountain Grove** | **4.27** | **77** | Pn | **Pn** | **05 06 55.6** | **+0.9** |
| MGMO | | | | IAmb_Lg | | 05 08 05.0 | |
| | comp=Z,352nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.31** | **180** | Pn | **Pn** | **05 06 55.5** | **+0.4** |
| | baz=359,SNR=12 | | | | | | |
| WHTX | | | | Pb | **Pb** | **05 07 06.0** | **+0.6** |
| | baz=359 | | | | | | |
| WHTX | | | | Sb | **Sb** | **05 08 02.2** | **+4.8** |
| | baz=359 | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.34** | **102** | Pn | **Pn** | **05 06 57.0** | **+1.4** |
| WHAR | | | | IAmb_Lg | | 05 08 11.6 | |
| | comp=Z,261nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.36** | **94** | IAmb_Lg | | 05 08 07.2 | |
| | comp=Z,194nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.41** | **103** | Pn | **Pn** | **05 06 56.9** | **+0.4** |
| W41B | | | | IAmb_Lg | | 05 08 12.4 | |
| | comp=Z,165nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.41** | **103** | P | **Pn** | **05 06 57.5** | **+1.0** |
| | baz=286,SNR=12 | | | | | | |
| W41B | | | | Sb | **Sg** | **05 08 07.6** | **-3.4** |
| | baz=286 | | | | | | |
| **WLAR** | **White Oak Lake** | **4.44** | **125** | Pn | **Pn** | **05 06 57.7** | **+0.8** |
| WLAR | | | | IAmb_Lg | | 05 08 19.0 | |
| | comp=Z,380nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **4.52** | **162** | Pn | **Pn** | **05 06 58.2** | **+0.2** |
| 237A | | | | IAmb_Lg | | 05 08 22.8 | |
| | comp=Z,278nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.55** | **42** | | **Pn** | **05 06 59.6** | **+1.2** |
| P38A | | | | IAmb_Lg | | 05 08 25.7 | |
| | comp=Z,160nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.60** | **63** | | **Pn** | **05 07 00.2** | **+1.0** |
| **N35A** | **Tabor** | **4.77** | **17** | | **Pn** | **05 07 02.2** | **+0.8** |
| N35A | | | | IAmb_Lg | | 05 08 25.1 | |
| | comp=Z,326nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.89** | **305** | | **Pn** | **05 07 04.0** | **+0.7** |
| KSCO | | | | IAmb_Lg | | 05 08 33.7 | |
| | comp=Z,134nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.89** | **305** | P | **Pn** | **05 07 04.9** | **+1.7** |
| | baz=122,SNR=23 | | | | | | |
| **Z41A** | **Richland Creek** | **4.91** | **127** | | **Pn** | **05 07 03.9** | **+0.5** |
| **Z41A** | **Richland Creek** | **4.91** | **127** | P | **Pn** | **05 07 04.2** | **+0.8** |
| | baz=309,SNR=14 | | | | | | |
| Z41A | | | | S | **Sn** | **05 08 00.4** | **+0.2** |
| | baz=309 | | | | | | |
| **MSTX** | **Muleshoe** | **4.92** | **243** | | **Pn** | **05 07 03.3** | **-0.4** |
| **MSTX** | **Muleshoe** | **4.92** | **243** | P | **Pn** | **05 07 05.0** | **+1.3** |
| | baz=60,SNR=9.1 | | | | | | |
| **NATX** | **Nacogdoches** | **5.11** | **152** | IAmb_Lg | | 05 08 45.6 | |
| | comp=Z,261nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.12** | **354** | Pn | **Pn** | **05 07 06.5** | **+0.2** |
| BGNE | | | | IAmb_Lg | | 05 08 36.2 | |
| | comp=Z,176nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **5.12** | **354** | P | **Pn** | **05 07 06.4** | **+0.2** |
| | baz=174 | | | | | | |
| **LCAR** | **Lake Charles** | **5.12** | **91** | | **Pn** | **05 07 07.8** | **+1.5** |
| LCAR | | | | IAmb_Lg | | 05 08 33.8 | |
| | comp=Z,150nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **5.19** | **80** | | **Pn** | **05 07 08.3** | **+1.1** |
| T42A | | | | IAmb_Lg | | 05 08 40.0 | |
| | comp=Z,332nm,1.1s | | | | | | |
| **CCAR** | **Cane Creek** | **5.25** | **115** | Pn | **Pn** | **05 07 08.8** | **+0.7** |
| CCAR | | | | IAmb_Lg | | 05 08 44.0 | |
| | comp=Z,342nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.28** | **69** | IAmb_Lg | | 05 08 35.8 | |
| | comp=Z,260nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.28** | **69** | P | **Pn** | **05 07 09.5** | **+1.1** |
| | baz=252 | | | | | | |
| **P40A** | **Paris** | **5.37** | **52** | IAmb_Lg | | 05 08 45.5 | |
| | comp=Z,283nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.51** | **181** | | **Pn** | **05 07 11.6** | **-0.1** |
| 435B | | | | IAmb_Lg | | 05 08 55.3 | |
| | comp=Z,250nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **5.51** | **181** | P | **Pn** | **05 07 11.6** | **-0.1** |
| | baz=0.6 | | | | | | |
| **N38A** | **Joes South For** | **5.58** | **35** | | **Pn** | **05 07 13.4** | **+0.8** |
| N38A | | | | IAmb_Lg | | 05 08 49.3 | |
| | comp=Z,260nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.63** | **281** | P | **Pn** | **05 07 13.8** | **+0.3** |
| | baz=97,SNR=5.3 | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.71** | **8** | IAmb_Lg | | 05 09 03.6 | |
| | comp=Z,229nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.84** | **324** | IAmb_Lg | | 05 09 00.8 | |
| | comp=Z,150nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.84** | **324** | P | **Pn** | **05 07 17.8** | **+1.6** |
| | baz=141 | | | | | | |
| **FVM** | **French Village** | **5.88** | **71** | IAmb_Lg | | 05 08 59.3 | |
| | comp=Z,312nm,0.8s | | | | | | |
| **GNAR** | **Gosnell** | **6.05** | **91** | IAmb_Lg | | 05 09 15.1 | |
| | comp=Z,334nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.13** | **199** | Pn | **Pn** | **05 07 20.2** | **-0.1** |
| **JCT** | **Junction City** | **6.13** | **199** | P | **Pn** | **05 07 20.1** | **-0.1** |
| | baz=18 | | | | | | |
| **143A** | **Socs Landing,** | **6.17** | **124** | IAmb_Lg | | 05 09 10.9 | |
| | comp=Z,321nm,0.8s | | | | | | |
| **MET** | **Memphis--Engin** | **6.25** | **99** | IAmb_Lg | | 05 09 20.1 | |
| | comp=Z,208nm,0.8s | | | | | | |
| **PVMO** | **Portageville** | **6.28** | **87** | IAmb_Lg | | 05 09 21.6 | |
| | comp=Z,263nm,0.9s | | | | | | |
| **K31A** | **O'Neill** | **6.38** | **352** | IAmb_Lg | | 05 09 24.0 | |
| | comp=Z,282nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **6.50** | **29** | Pn | **Pn** | **05 07 26.0** | **+0.8** |
| **SCIA** | **State Center** | **6.50** | **29** | P | **Pn** | **05 07 26.2** | **+0.9** |
| | baz=212 | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.57** | **285** | P | **Pn** | **05 07 27.5** | **+1.0** |
| | baz=100,SNR=23 | | | | | | |
| **HALT** | **Halls** | **6.60** | **91** | IAmb_Lg | | 05 09 36.1 | |
| | comp=Z,238nm,1.0s | | | | | | |
| **Q24A** | **Divide** | **6.63** | **296** | IAmb_Lg | | 05 09 27.6 | |
| | comp=Z,103nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **6.63** | **296** | P | **Pn** | **05 07 27.9** | **+0.5** |
| | baz=112 | | | | | | |
| **S44A** | **Carbondale** | **6.73** | **76** | | **Pn** | **05 07 28.9** | **+0.5** |
| **SIUC** | **Southern Illin** | **6.76** | **76** | | **Pn** | **05 07 29.2** | **+0.4** |
| **OXF** | **Oxford** | **6.83** | **103** | Pn | **Pn** | **05 07 29.4** | **-0.4** |
| OXF | | | | IAmb_Lg | | 05 09 36.8 | |
| | comp=Z,185nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **6.83** | **103** | P | **Pn** | **05 07 30.7** | **+0.9** |
| | baz=287,SNR=8.2 | | | | | | |
| **W45A** | **Hickory Valley** | **6.85** | **97** | IAmb_Lg | | 05 09 36.9 | |
| | comp=Z,235nm,1.1s | | | | | | |
| **Y45A** | **Yeager Farm, C** | **6.95** | **108** | IAmb_Lg | | 05 09 33.7 | |
| | comp=Z,108nm,0.7s | | | | | | |
| **VBMS** | **Vicksburg** | **7.06** | **123** | IAmb_Lg | | 05 09 50.9 | |
| | comp=Z,107nm,0.9s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.11** | **60** | Pn | **Pn** | **05 07 34.1** | **+0.4** |
| **ISCO** | **Idaho Springs** | **7.30** | **301** | Pn | **Pn** | **05 07 36.8** | **+0.3** |
| **ISCO** | **Idaho Springs** | **7.30** | **301** | P | **Pn** | **05 07 37.7** | **+1.2** |
| | baz=116 | | | | | | |
| **K38A** | **Parkersburg** | **7.30** | **28** | IAmb_Lg | | 05 09 56.0 | |
| | comp=Z,280nm,1.0s | | | | | | |
| **344A** | **Westbrook Farm** | **7.41** | **129** | IAmb_Lg | | 05 10 06.0 | |
| | comp=Z,133nm,1.3s | | | | | | |
| **ANMO** | **Albuquerque** | **7.43** | **262** | Pn | **Pn** | **05 07 39.2** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=80,slow=11,SNR=1.9 | | | | | | |
| ANMO | | | | Pg | Pb | 05 08 04.4 | +5.7 |
| | comp=Z,1.8nm,0.3s,baz=80,slow=18,SNR=16 | | | | | | |
| ANMO | | | | Lg | Lg | 05 09 41.3 | |
| | comp=Z,4.0nm,0.3s,baz=1.7,slow=16,SNR=9.2 | | | | | | |
| ANMO | | | | LR | LR | 05 10 40.3 | |
| | comp=Z,146nm,21.8s,baz=356,slow=40 | | | | | | |
| **735A** | **Kenedy** | **7.44** | **182** | IAmb_Lg | | 05 09 57.6 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.45** | **5** | Pn | **Pn** | **05 07 37.9** | **-0.4** |
| **ECSD** | **EROS Data Cent** | **7.45** | **5** | P | **Pn** | **05 07 38.0** | **-0.2** |
| | baz=186,SNR=5.3 | | | | | | |
| **L40A** | **Anamosa** | **7.52** | **38** | IAmb_Lg | | 05 09 54.4 | |
| | comp=Z,158nm,1.0s | | | | | | |
| **HDIL** | **Hopedale** | **7.70** | **54** | | **Pn** | **05 07 42.1** | **+0.4** |
| **HDIL** | **Hopedale** | **7.70** | **54** | P | **Pn** | **05 07 43.3** | **+1.6** |
| | baz=239 | | | | | | |
| **PLAL** | **Pickwick Lake** | **7.77** | **97** | IAmb_Lg | | 05 09 58.7 | |
| | comp=Z,82nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.01** | **237** | Pn | **Pn** | **05 07 45.5** | **-0.5** |
| **MNTX** | **Cornudas Mount** | **8.01** | **237** | P | **Pn** | **05 07 45.5** | **-0.5** |
| | baz=53,SNR=5.9 | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **8.04** | **257** | IAmb_Lg | | 05 10 11.9 | |
| | comp=Z,186nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.05** | **307** | IAmb_Lg | | 05 10 13.8 | |
| | comp=Z,133nm,1.1s | | | | | | |
| **N23A** | **Red Feather La** | **8.05** | **307** | P | **Pn** | **05 07 48.0** | **+1.3** |
| | baz=122 | | | | | | |
| **O44A** | **Mansfield** | **8.06** | **59** | IAmb_Lg | | 05 10 06.4 | |
| | comp=Z,190nm,0.8s | | | | | | |
| **833A** | **Chaparral WMA,** | **8.13** | **192** | IAmb_Lg | | 05 10 20.7 | |
| | comp=Z,106nm,0.9s | | | | | | |
| **833A** | **Chaparral WMA,** | **8.13** | **192** | P | **Pn** | **05 07 49.3** | **+1.7** |
| | baz=11 | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.30** | **21** | IAmb_Lg | | 05 10 21.5 | |
| | comp=Z,131nm,1.1s | | | | | | |
| **Z47A** | **Carrollton** | **8.35** | **109** | IAmb_Lg | | 05 10 26.0 | |
| | comp=Z,71nm,1.2s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.64** | **38** | IAmb_Lg | | 05 10 23.8 | |
| | comp=Z,100nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.64** | **38** | P | **Pn** | **05 07 54.4** | **-0.2** |
| | baz=223,SNR=7.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **8.69** | **219** | Pn | **Pn** | **05 07 55.5** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=45,slow=11,SNR=26 | | | | | | |
| TXAR | | | | Pg | Pg | 05 08 21.8 | -14 |
| | comp=Z,1.1nm,0.3s,baz=60,slow=15,SNR=6.6 | | | | | | |
| TXAR | | | | Lg | Lg | 05 10 19.2 | |
| | comp=Z,4.0nm,0.3s,baz=40,slow=30,SNR=11 | | | | | | |
| **M44A** | **Midewin, Midew** | **8.94** | **53** | IAmb_Lg | | 05 10 41.8 | |
| | comp=Z,139nm,1.0s | | | | | | |
| **SFIN** | **Lafayette** | **9.11** | **60** | P | **Pn** | **05 08 02.8** | **+1.7** |
| | baz=247 | | | | | | |
| **WCI** | **Wyandotte Cave** | **9.12** | **75** | P | **Pn** | **05 08 03.5** | **+2.2** |
| | baz=261 | | | | | | |
| **I40A** | **Norwalk** | **9.22** | **33** | Pn | **Pn** | **05 08 01.8** | **-0.7** |
| I40A | | | | IAmb_Lg | | 05 10 41.5 | |
| | comp=Z,97nm,1.1s | | | | | | |
| **LRAL** | **Lakeview Retre** | **9.23** | **108** | | **Pn** | **05 08 02.6** | **-0.1** |
| **LRAL** | **Lakeview Retre** | **9.23** | **108** | P | **Pn** | **05 08 02.4** | **-0.4** |
| | baz=294 | | | | | | |
| **K22A** | **Casper** | **9.43** | **315** | IAmb_Lg | | 05 11 13.7 | |
| | comp=Z,144nm,1.3s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.56** | **5** | IAmb_Lg | | 05 11 01.0 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **SPMN** | **Marine on St.** | **9.58** | **20** | IAmb_Lg | | 05 11 00.2 | |
| | comp=Z,74nm,1.1s | | | | | | |
| **SPMN** | **Marine on St.** | **9.58** | **20** | P | **Pn** | **05 08 08.0** | **+0.5** |
| | baz=203,SNR=7.7 | | | | | | |
| **TKL** | **Tuckaleechee C** | **11.13** | **89** | Pn | **Pn** | **05 08 31.8** | **+3.1** |
| | comp=Z,0.4nm,0.3s,baz=275,slow=9.0,SNR=5.3 | | | | | | |
| TKL | | | | Sn | **Sn** | **05 10 36.2** | **+2.9** |
| | comp=Z,0.6nm,0.3s,baz=203,slow=18,SNR=3.8 | | | | | | |
| TKL | | | | Lg | Lg | 05 11 38.6 | |
| | comp=Z,2.4nm,0.3s,baz=68,slow=11,SNR=4.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **11.33** | **308** | Pn | **Pn** | **05 08 31.1** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=121,slow=16,SNR=6.1 | | | | | | |
| PDAR | | | | Pg | | 05 09 13.1 | |
| | comp=Z,0.4nm,0.3s,baz=119,slow=15,SNR=5.2 | | | | | | |
| PDAR | | | | Sn | **Sn** | **05 10 36.5** | **-1.9** |
| | comp=Z,0.5nm,0.3s,baz=117,slow=22,SNR=1.9 | | | | | | |
| PDAR | | | | Lg | Lg | 05 11 36.3 | |
| | comp=Z,0.4nm,0.3s,baz=122,slow=26,SNR=1.4 | | | | | | |
| **P52A** | **Corning** | **12.56** | **70** | P | **Pn** | **05 08 48.4** | **+0.1** |
| | baz=259 | | | | | | |
| **ULM** | **Lac du Bonnet** | **13.98** | **4** | Pn | **Pn** | **05 09 03.4** | **-4.2** |
| | comp=Z,0.6nm,0.3s,baz=182,slow=12,SNR=2.3 | | | | | | |
| ULM | | | | Sn | Sn | 05 11 30.9 | -12 |
| | comp=Z,1.2nm,0.3s,baz=90,slow=20,SNR=2.4 | | | | | | |
| ULM | | | | Lg | Lg | 05 12 58.7 | |
| | comp=Z,0.8nm,0.3s,baz=102,slow=19,SNR=1.9 | | | | | | |
| ULM | | | | LR | LR | 05 14 36.4 | |
| | comp=Z,165nm,19.1s,baz=166,slow=38 | | | | | | |
| **SADO** | **Sadowa** | **16.28** | **53** | Lg | Lg | 05 14 14.9 | |
| | comp=Z,0.6nm,0.3s,baz=302,slow=5.7,SNR=6.3 | | | | | | |
| **KVN** | **Kaiserville** | **16.55** | **286** | P | **P** | **05 09 44.0** | **-0.5** |
| KVN | | | | IAmb | IAmb | 05 09 50.0 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.69** | **284** | Pn | **Pn** | **05 09 45.0** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=100,slow=10,SNR=3.4 | | | | | | |
| **LHV** | **Little Huntoon** | **16.84** | **283** | P | **P** | **05 09 48.1** | **+0.7** |
| **YERR** | **Yerington** | **17.43** | **285** | P | **P** | **05 09 54.2** | **0.0** |
| YERR | | | | IAmb | IAmb | 05 10 01.2 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **WUPA** | **West Chester U** | **17.58** | **72** | Pn | **Pn** | **05 09 54.2** | **-0.4** |
| WUPA | | | | IAmb | IAmb | 05 09 58.5 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **KSPA** | **Keystone Colle** | **17.67** | **66** | Pn | **Pn** | **05 09 53.8** | **-2.0** |
| KSPA | | | | IAmb | IAmb | 05 10 14.4 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **L59A** | **Walton** | **18.32** | **64** | | **Pn** | **05 10 02.9** | **-0.9** |
| L59A | | | | IAmb | IAmb | 05 10 03.8 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **ODNJ** | **Ogdensburg** | **18.47** | **68** | P | **P** | **05 10 04.2** | **-1.2** |
| **YKA** | **Yellowknife Ar** | **28.29** | **343** | P | **P** | **05 11 44.9** | **+2.0** |
| | comp=Z,0.3nm,0.8s,baz=145,slow=8.7,SNR=3.6 | | | | | | |
| **INK** | **Inuvik** | **37.80** | **339** | LR | LR | 05 28 07.9 | |
| | comp=Z,80nm,20.7s,baz=184,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **40.72** | **330** | P | **P** | **05 13 31.5** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=105,slow=6.1,SNR=8.6 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **98.72** | **338** | *eP* | **P** | **05 19 27.8** | **-1.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,57nm,7.5s | | | | | | |
| **PZH** | **PanZhiHua** | **114.94** | **341** | PKP | **PKiKP** | **05 24 31.0** | **-0.2** |

*TUL* ***27*** *05:07:16.4±1.1, 36°288N±0'010×97°52W±0'01, h7km±6km, ML3.9, mb3.6/3(NEIC), mb_Lg3.4/17(NEIC), Mwr3.5/20(NEIC), Error ellipse: s-maj=1.5km s-min=1.3km az=124.0*

*NEIC* ***27*** *05:07:16.1±0.8, 36°297N±0'009×97°53W±0'01, h5km±7km, Error ellipse: s-maj=1.7km s-min=1.2km az=104.0*

*NEIC* ***27*** *05:07:16.4, 36°29N×97°52W, h5km, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.09; Mθθ=1.96; Mϕϕ=-2.06; Mrθ=-0.07; Mrϕ=-0.15; Mθϕ=-0.52; Fault plane solution: M0=2.08000×10¹⁴ NP1:ϕs=316.38000°, δ79.71000°, λ-8.05000°. NP2:ϕs=47.83000°, δ82.09000°, λ-169.61000°. Principal axes: T 1.9690, Plg2.0000°, Azm182.0000°; N 0.2123, Plg77.0000°, Azm85.0000°; P -2.1813, Plg13.0000°, Azm272.0000°;*

**ISC 27 05:07:16.0±0.9, 36°31'N±0'04×97°54'W±0'06, h10km, n14, σ0°68/14, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK005** | **Luther M Schoo** | **0.71** | **157** | Pg | **Pg** | **05 07 29.7** | **-0.2** |
| OK005 | | | | Sg | **Sg** | **05 07 38.9** | **-0.3** |
| **OKCFA** | **Oklahoma City** | **0.90** | **175** | Pg | **Pg** | **05 07 32.9** | **-0.5** |
| **OKCSW** | **OKLAHOMA CITY** | **0.91** | **175** | Pg | **Pg** | **05 07 33.2** | **-0.4** |
| **T35A** | **Sooner Cattle** | **1.02** | **54** | Pg | **Pg** | **05 07 35.7** | **-0.1** |
| T35A | | | | IAmb_Lg | | 05 07 50.3 | |
| | comp=Z,295nm,0.7s | | | | | | |
| **FNO** | **Franklin** | **1.06** | **174** | Pg | **Pg** | **05 07 35.7** | **-0.7** |
| **U32A** | **Winter Ranch,** | **1.18** | **274** | Pn | **Pb** | **05 07 38.1** | **-0.5** |
| **TUL1** | **Leonard** | **1.47** | **105** | Pn | **Pn** | **05 07 42.6** | **-0.1** |
| TUL1 | | | | IAmb_Lg | | 05 08 04.7 | |
| | comp=Z,769nm,1.1s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.72** | **188** | Pn | **Pn** | **05 07 46.6** | **+0.5** |
| X34A | | | | IAmb_Lg | | 05 08 11.2 | |
| | comp=Z,246nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.87** | **213** | Pn | **Pn** | **05 07 47.7** | **-0.4** |
| **KSU1** | **Kansas State U** | **2.88** | **15** | Pg | **Pg** | **05 08 10.3** | **-0.9** |
| **HHAR** | **Hobbs** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,101nm,18.1s,baz=77,slow=37 | | | | | | | |
| **TSUM** | **Tsumeb** | **54.79** | **117** | LR | LR | 05 42 37.9 | | |
| | comp=Z,61nm,20.2s,baz=336,slow=30 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.23** | **310** | LR | LR | 05 47 00.7 | | |
| | comp=Z,46nm,19.1s,baz=321,slow=34 | | | | | | | |
| **PLCA** | **Paso Flores** | **56.96** | **214** | LR | LR | 05 49 02.9 | | |
| | comp=Z,42nm,21.8s,baz=32,slow=36 | | | | | | | |
| **GERES** | **GERESS Array B** | **58.99** | **34** | P | **P** | **05 25 19.6** | **+0.1** | |
| | 0.2nm,0.4s,baz=299,slow=6.0,SNR=3.5 | | | | | | | |
| **VRAC** | **Vranov** | **60.86** | **35** | LR | LR | 05 49 47.2 | | |
| | comp=Z,30nm,20.7s,baz=334,slow=34 | | | | | | | |
| **LSZ** | **Lusaka** | **63.38** | **110** | LR | LR | 05 49 35.3 | | |
| | comp=Z,30nm,18.9s,baz=200,slow=32 | | | | | | | |
| **MBAR** | **Mbarara** | **63.51** | **93** | LR | LR | 05 50 43.4 | | |
| | comp=Z,46nm,19.0s,baz=235,slow=34 | | | | | | | |
| **LBTB** | **Lobatse** | **63.74** | **121** | LR | LR | 05 48 25.6 | | |
| | comp=Z,38nm,20.5s,baz=248,slow=31 | | | | | | | |
| **BOSA** | **Boshof** | **64.69** | **125** | P | **P** | **05 25 58.4** | **+0.2** | |
| | 5.3nm,1.0s,baz=331,slow=7.2,SNR=3.2 | | | | | | | |
| BOSA | | | | LR | LR | 05 48 23.2 | | |
| | comp=Z,52nm,21.3s,baz=206,slow=31 | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.99** | **41** | LR | LR | 05 54 43.8 | | |
| | comp=Z,56nm,18.6s,baz=320,slow=36 | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.15** | **22** | LR | LR | 05 50 28.6 | | |
| | comp=Z,12nm,20.6s,baz=25,slow=32 | | | | | | | |
| **AKASG** | **Malin Array Be** | **68.83** | **37** | P | **P** | **05 26 24.3** | **+0.2** | |
| | 0.5nm,0.5s,baz=245,slow=7.2,SNR=4.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.86** | **49** | P | **P** | **05 26 25.1** | **+0.4** | |
| | 1.4nm,0.9s,baz=252,slow=6.2,SNR=7.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.22** | **299** | P | **P** | **05 26 39.5** | **+0.1** | |
| | 0.1nm,0.5s,baz=115,slow=6.4,SNR=1.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **71.38** | **26** | P | **P** | **05 26 39.8** | **+0.3** | |
| | 0.9nm,0.9s,baz=225,slow=2.2,SNR=3.3 | | | | | | | |
| **ANMO** | **Albuquerque** | **74.10** | **305** | LR | LR | 05 57 09.1 | | |
| | comp=Z,50nm,20.4s,baz=292,slow=34 | | | | | | | |
| **LPIG** | **La Paz** | **76.88** | **294** | LR | LR | 05 59 50.4 | | |
| | comp=Z,64nm,20.2s,baz=325,slow=35 | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.27** | **313** | P | **P** | **05 27 14.3** | **-0.3** | |
| | 0.6nm,0.7s,baz=98,slow=6.1,SNR=6.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.19** | **332** | P | **P** | **05 27 40.2** | **-0.3** | |
| | 0.7nm,0.6s,baz=99,slow=5.4,SNR=12 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.75** | **308** | LR | LR | 06 01 03.3 | | |
| | comp=Z,99nm,21.1s,baz=196,slow=33 | | | | | | | |

*IDC **27** 05:26:41.6±1.1, 13.°71N×144.°98E, h125km±4km, mb3.2/5, mb1 3.4/5, mb1mx3.1/53, mbtmp3.6/5, Error ellipse: s-maj=50.6km s-min=19.5km az=104.0*
*NEIC **27** 05:26:42.7±1.0, 13.°67N±0.°08×144.°9E±0.°2, h125km±4km, mb4.4/11, Error ellipse: s-maj=25.2km s-min=9.2km az=110.0*
**ISC 27 05:26:42.2±0.8, 13.°7N±0.°1×145.°0E±0.°2, h129km±6km, n18, σ0983/18, mb4.1/11, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.12** | **225** | P | | | **Pn** | **05 27 00.2** | **+0.3** |
| | 824nm,0.3s,baz=18,slow=3.2,SNR=249 | | | | | | | | |
| GUMO | | | | S | | | **Sn** | **05 27 12.8** | **-0.2** |
| | 546nm,0.3s,baz=264,slow=23,SNR=63 | | | | | | | | |
| **GUMO** | **Guam** | **0.12** | **225** | | | | **Pn** | **05 27 00.1** | **+0.3** |
| GUMO | | | | | Sn | | **Sn** | **05 27 12.4** | **-0.6** |
| **COEN** | **Coen** | **27.51** | **184** | P | | | **P** | **05 32 17.1** | **+0.3** |
| COEN | | | | | IAmb | IAmb | IAmb | 05 32 32.3 | |
| | comp=Z,4.3nm,1.2s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **34.96** | **197** | P | | | **P** | **05 33 22.2** | **+0.1** |
| WR0 | | | | | IAmb | IAmb | IAmb | 05 33 46.7 | |
| | comp=Z,5.8nm,1.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.01** | **198** | P | | | **P** | **05 33 22.3** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=18,slow=8.4,SNR=9.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.01** | **198** | | IAmb | | IAmb | 05 33 30.3 | |
| | comp=Z,0.2nm,1.3s | | | | | | | | |
| **ENH** | **Enshi** | **36.61** | **303** | P | | | **P** | **05 33 36.4** | **+0.1** |
| ENH | | | | | IAmb | IAmb | IAmb | 05 33 56.3 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **36.88** | **212** | P | | | **P** | **05 33 38.6** | **+0.1** |
| | comp=Z,0.7nm,0.3s,baz=31,slow=9.6,SNR=12 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **36.88** | **212** | | IAmb | | IAmb | 05 33 48.3 | |
| | comp=Z,5.8nm,1.4s | | | | | | | | |
| **AS31** | **Alice Springs** | **38.66** | **196** | P | | | **P** | **05 33 51.9** | **-1.6** |
| **ASAR** | **Alice Springs** | **38.66** | **196** | P | | | **P** | **05 33 53.1** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=23,slow=12,SNR=10 | | | | | | | | |
| **PET** | **Petropavlovsk** | **40.74** | **13** | P | | | **P** | **05 34 10.0** | **-0.2** |
| PET | | | | | IAmb | IAmb | IAmb | 05 34 30.5 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.31** | **149** | P | | | **P** | **05 34 15.5** | **+0.1** |
| DZM | | | | | IAmb | IAmb | IAmb | 05 34 27.6 | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **ARMA** | **Armidale** | **44.31** | **172** | P | | | **P** | **05 34 39.6** | **+0.1** |
| **MKAR** | **Makanchi Array** | **61.49** | **316** | P | | | **P** | **05 36 45.5** | **+0.1** |
| | comp=Z,0.2nm,0.8s,baz=102,slow=6.8,SNR=1.9 | | | | | | | | |
| **IL31** | | **68.45** | **25** | P | | | **P** | **05 37 29.1** | **-0.9** |
| IL31 | | | | | IAmb | IAmb | IAmb | 05 37 58.1 | |
| | comp=Z,6.6nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **68.45** | **25** | P | | | **P** | **05 37 28.5** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=250,slow=5.8,SNR=4.1 | | | | | | | | |
| **SNH** | **Sunshine Point** | **69.39** | **31** | P | | | **P** | **05 37 37.7** | **+1.7** |

**IDC 27 05:31:51.3±5.5, 22.°81S×178.°03W, h0km, mb3.9/4, mb1 4.1/4, mb1mx3.8/32, mbtmp3.9/4, Error ellipse: s-maj=197.6km s-min=56.1km az=142.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.81** | **247** | P | | | P | 05 39 01.9 | +0.8 |
| | 1.4nm,0.4s,baz=108,slow=6.4,SNR=3.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.01** | **259** | P | | | P | 05 40 00.5 | -0.4 |
| | 0.9nm,0.5s,baz=101,slow=7.0,SNR=15 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.30** | **264** | P | | | P | 05 40 02.8 | -0.4 |
| | 0.5nm,0.3s,baz=102,slow=8.3,SNR=22 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.73** | **264** | P | | | P | 05 41 07.3 | -0.9 |
| | 1.0nm,0.8s,baz=98,slow=7.1,SNR=1.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.00** | **329** | PKPbc | | | PKPbc | 05 51 29.1 | -0.5 |
| | 0.2nm,0.4s,baz=42,slow=3.6,SNR=4.2 | | | | | | | | |

*NIED **27** 05:32:17.1, 38.°72N×142.°27E, h39km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr2.04; Mθθ2.25; Mϕϕ-4.29; Mrθ4.09; Mθϕ-0.55; Mrϕ4.84; Fault plane solution: M₀7.36000×10¹⁴ NP1:ϕ₁38.00000°, δ81.00000°, λ114.00000°. NP2:ϕ₂148.00000°, δ26.00000°, λ22.00000°.*
*JMA **27** 05:32:17.0±0.1, 38.°72N×142.°26E, h39km±1km, M3.9 JMA Felt I J1.*
*IDC **27** 05:32:23.1±2.4, 39.°13N×141.°66E, h51km±21km, mb3.4/7, mb1 3.5/10, mb1mx3.4/46, mbtmp3.6/10, ML3.0/3, MS2.8/4, Ms1 2.8/4, ms1mx2.5/57, Error ellipse: s-maj=29.8km s-min=10.9km az=115.0*
**ISC 27 05:32:18.5±1.3, 38.°75N±0.°05×142.°21E±0.°09, h38km±3km, n30, σ1820/31, mb3.6/7, 8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OFUJ** | **Ofunato** | **0.54** | **308** | ⇓P | | | **Pn** | **05 32 29.0** | **-0.7** |
| OFUJ | | | | S | | | **Sn** | **05 32 37.2** | **-0.3** |
| **JKMT** | **Kesennumamotoy** | **0.58** | **276** | ⇓P | | | **Pn** | **05 32 29.4** | **-0.9** |
| JKMT | | | | *e*S | | | **Sn** | **05 32 38.1** | **-0.5** |
| **JIKH** | **Ishinomakikobu** | **0.73** | **233** | ⇓P | | | **Pn** | **05 32 31.0** | **-1.3** |
| JIKH | | | | S | | | **Sn** | **05 32 40.9** | **-1.3** |
| **JIO** | **Ouri** | **0.74** | **247** | ⇓P | | | **Pn** | **05 32 31.2** | **-1.2** |
| JIO | | | | S | | | **Sn** | **05 32 40.9** | **-1.4** |
| **JMK** | **Ichinoseki** | **0.80** | **285** | ⇓P | | | **Pn** | **05 32 32.7** | **-0.5** |
| JMK | | | | S | | | **Sn** | **05 32 43.8** | **-0.1** |
| **JOM** | **Ohasama** | **1.02** | **316** | P | | | **Pn** | **05 32 36.0** | **-0.2** |
| JOM | | | | S | | | **Sn** | **05 32 49.8** | **+0.6** |
| **JTH** | **Tanohata** | **1.22** | **347** | P | | | **Pn** | **05 32 38.6** | **-0.4** |
| JTH | | | | S | | | **Sn** | **05 32 54.2** | **0.0** |
| **JOU** | **Okura** | **1.27** | **253** | ⇓P | | | **Pn** | **05 32 39.2** | **-0.5** |
| JOU | | | | S | | | **Sn** | **05 32 56.3** | **+0.7** |
| **JRG** | **Rokugo** | **1.39** | **298** | ⇓P | | | **Pn** | **05 32 41.4** | **+0.1** |
| **JMM** | **Marumori** | **1.42** | **232** | P | | | **Pn** | **05 32 40.9** | **-0.9** |
| **JYK** | **Kaneyama** | **1.46** | **277** | ⇓P | | | **Pn** | **05 32 42.2** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **3.87** | **236** | P | | | **Pn** | **05 33 17.4** | **+2.0** |
| | 0.5nm,0.3s,baz=40,slow=11,SNR=19 | | | | | | | | |
| MJAR | | | | S | | | **Sn** | **05 34 01.9** | **+2.4** |
| | 0.3nm,0.3s,baz=78,slow=14,SNR=4.5 | | | | | | | | |
| MJAR | | | | LR | | | LR | 05 35 06.4 | |
| | comp=Z,81nm,18.4s,baz=132,slow=43 | | | | | | | | |
| **MAT** | **Matsushiro** | **3.87** | **236** | P | | | **Pn** | **05 33 16.8** | **+1.4** |
| MAT | | | | *e*S | | | **Sn** | **05 33 59.4** | **-0.2** |
| **ASAJ** | **Asahikawa** | **5.37** | **3** | P | | | **Pn** | **05 33 36.0** | **0.0** |
| | 0.8nm,0.3s,baz=244,slow=29,SNR=5.2 | | | | | | | | |
| ASAJ | | | | S | | | **Sn** | **05 34 33.9** | **-2.6** |
| | 0.6nm,0.3s,baz=288,slow=20,SNR=1.7 | | | | | | | | |
| ASAJ | | | | LR | | | LR | 05 36 11.1 | |
| | comp=Z,88nm,18.2s,baz=164,slow=45 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.40** | **309** | P | | | Pn | 05 34 36.5 | +5.2 |
| | baz=119,slow=14,SNR=8.7 | | | | | | | | |
| **KSRS** | **Korea Array** | **11.33** | **268** | P | | | **Pn** | **05 34 58.0** | **+0.2** |
| | 0.1nm,0.3s,baz=80,slow=14,SNR=1.7 | | | | | | | | |
| KSRS | | | | LR | | | LR | 05 39 15.5 | |
| | comp=Z,40nm,18.2s,baz=130,slow=38 | | | | | | | | |
| **KLR** | **Kul'dur** | **12.89** | **328** | LR | | | LR | 05 40 24.1 | |
| | comp=Z,58nm,18.8s,baz=104,slow=39 | | | | | | | | |
| **SEY** | **Seymchan** | **24.99** | **11** | P | | | **P** | **05 37 39.0** | **+0.8** |
| | 2.3nm,0.9s,baz=198,slow=6.4,SNR=10 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.54** | **125** | T | | | T | 06 08 29.0 | |
| | baz=316,slow=75,SNR=118 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.55** | **125** | T | | | T | 06 08 32.2 | |
| | baz=316,slow=75,SNR=105 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.56** | **125** | T | | | T | 06 08 32.9 | |
| | baz=316,slow=75,SNR=122 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.32** | **127** | T | | | T | 06 09 27.4 | |
| | baz=318,slow=76,SNR=21 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.32** | **127** | T | | | T | 06 09 31.4 | |
| | baz=318,slow=76,SNR=30 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.33** | **127** | T | | | T | 06 09 32.9 | |
| | baz=318,slow=76,SNR=18 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.25** | **311** | P | | | **P** | **05 39 58.7** | **-0.8** |
| | 1.4nm,0.7s,baz=87,slow=8.2,SNR=6.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.76** | **301** | P | | | **P** | **05 40 19.0** | **-1.2** |
| | 0.6nm,0.6s,baz=85,slow=10.0,SNR=7.1 | | | | | | | | |
| **ILAR** | **Eielson Array** | **47.71** | **33** | P | | | **P** | **05 40 53.1** | **+2.1** |
| | 0.3nm,0.8s,baz=253,slow=6.3,SNR=1.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **58.85** | **189** | P | | | P | 05 42 19.5 | +6.2 |
| | 0.9nm,0.6s,baz=8.6,slow=7.5,SNR=1.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **62.57** | **189** | P | | | P | 05 42 44.1 | +5.5 |
| | 0.3nm,0.7s,baz=5.7,slow=4.7,SNR=2.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.33** | **322** | P | | | **P** | **05 43 44.4** | **-1.6** |
| | 0.3nm,0.4s,baz=44,slow=6.4,SNR=2.0 | | | | | | | | |

*TIR **27** 05:42:01.2, 38.°50N×20.°52E, h23km±2km, Md3.7, Ml3.2*
*IASPEI **27** 05:42:04.1±0.8, 38.°64N±0.°02×20.°62E±0.°03, h10km±4km, Error ellipse: s-maj=4.0km s-min=2.3km az=92.7, GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*THE **27** 05:42:04.8, 38.°64N×20.°60E, h0km±2km, ML3.6/9, Error ellipse: s-maj=2.3km s-min=0.7km az=59.0*
*ATH **27** 05:42:04.2, 38.°64N×20.°64E, h11km±1km, ML3.3/5, Error ellipse: s-maj=2.0km s-min=0.6km az=82.0*
**ISC 27 05:42:04.2±0.8, 38.°64N±0.°01×20.°61E±0.°02, h9km±4km, n61, σ0978/89, Geneva**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EVGI** | **Lefkada island** | **0.04** | **112** | P | | | **Pg** | **05 42 05.9** | **0.0** |
| EVGI | | | | S | | | **Sg** | **05 42 07.2** | **+0.1** |
| | 166μm,0.3s | | | | | | | | |
| **EVGI** | **Lefkada island** | **0.04** | **112** | P | | | **Pg** | **05 42 06.2** | **+0.3** |
| EVGI | | | | S | | | **Sg** | **05 42 07.6** | **+0.5** |
| **DRAG** | **Dragano-Lefkad** | **0.06** | **330** | P | | | **Pg** | **05 42 05.7** | **-0.4** |
| DRAG | | | | S | | | **Sg** | **05 42 06.8** | **-0.7** |
| | 149μm,0.2s | | | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.10** | **41** | P | | | **Pg** | **05 42 06.7** | **0.0** |
| NYDR | | | | S | | | **Sg** | **05 42 08.7** | **+0.3** |
| **LKD2** | **Lefkada island** | **0.16** | **14** | P | | | **Pg** | **05 42 07.8** | **+0.2** |
| LKD2 | | | | S | | | **Sg** | **05 42 10.6** | **+0.7** |
| | 21μm,0.2s | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.16** | **14** | P | | | **Pg** | **05 42 07.8** | **+0.2** |
| LKD2 | | | | S | | | **Sg** | **05 42 09.9** | **0.0** |
| LKD2 | | | | AML | | | AML | 05 42 10.9 | |
| | comp=N,45346μm,0.3s | | | | | | | | |
| LKD2 | | | | AML | | | AML | 05 42 11.0 | |
| | comp=E,38328μm,0.3s | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.16** | **14** | P | | | **Pg** | **05 42 07.8** | **+0.2** |
| | baz=20 | | | | | | | | |
| LKD2 | | | | S | | | **Sg** | **05 42 10.7** | **+0.8** |
| | baz=20 | | | | | | | | |
| **FSK** | **Fiskardo** | **0.18** | **192** | P | | | **Pg** | **05 42 08.8** | **+0.9** |
| FSK | | | | S | | | **Sg** | **05 42 12.4** | **+2.0** |
| | comp=E,55μm,0.4s | | | | | | | | |
| **FSK** | **Fiskardo** | **0.18** | **192** | P | | | **Pg** | **05 42 08.8** | **+0.9** |
| FSK | | | | S | | | **Sg** | **05 42 11.1** | **+0.7** |
| FSK | | | | AML | | | AML | 05 42 13.0 | |
| | comp=N,85558μm,0.5s | | | | | | | | |
| FSK | | | | AML | | | AML | 05 42 13.1 | |
| **TSLK** | **Tsoukalades, L** | **0.19** | **10** | P | | | **Pg** | **05 42 08.6** | **+0.4** |
| TSLK | | | | S | | | **Sg** | **05 42 10.6** | **-0.3** |
| | comp=N,16μm,0.7s | | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.19** | **10** | P | | | **Pg** | **05 42 08.5** | **+0.4** |
| TSLK | | | | S | | | **Sg** | **05 42 10.8** | **-0.1** |
| **KEF4** | **Livadi, Kephal** | **0.40** | **201** | P | | | **Pb** | **05 42 12.8** | **-0.7** |
| KEF4 | | | | S | | | **Sb** | **05 42 18.9** | **-0.9** |
| | comp=N,27μm,0.2s | | | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.40** | **201** | P | | | **Pg** | **05 42 12.4** | **+0.3** |
| KEF4 | | | | S | | | **Sg** | **05 42 18.0** | **+0.7** |
| **DMLN** | **Damoulianata-K** | **0.44** | **205** | P | | | **Pg** | **05 42 12.8** | **+0.1** |
| **LXRA** | **Lixouri, Kepha** | **0.46** | **197** | P | | | **Pg** | **05 42 13.4** | **+0.4** |
| LXRA | | | | S | | | **Sg** | **05 42 19.5** | **+0.5** |
| **VLS** | **Valsamata** | **0.46** | **182** | P | | | **Pg** | **05 42 13.3** | **+0.2** |
| VLS | | | | S | | | **Sb** | **05 42 20.7** | **-0.7** |
| | comp=N,7μm,0.3s | | | | | | | | |
| **VLS** | **Valsamata** | **0.46** | **182** | P | | | **Pg** | **05 42 13.3** | **+0.2** |
| VLS | | | | S | | | **Sg** | **05 42 19.5** | **+0.5** |
| VLS | | | | AML | | | AML | 05 42 21.4 | |
| | comp=E,15741μm,0.2s | | | | | | | | |
| VLS | | | | AML | | | AML | 05 42 21.5 | |
| | comp=N,13525μm,0.3s | | | | | | | | |
| **ARGA** | **Argostoli. Kep** | **0.47** | **193** | P | | | **Pg** | **05 42 13.7** | **+0.4** |
| ARGA | | | | S | | | **Sb** | **05 42 20.7** | **-1.0** |
| **KEF3** | **Kipouria, Keph** | **0.48** | **206** | P | | | **Pg** | **05 42 13.6** | **+0.1** |
| KEF3 | | | | S | | | **Sg** | **05 42 20.5** | **+0.7** |
| | comp=N,12μm,0.3s | | | | | | | | |
| **KEF3** | **Kipouria, Keph** | **0.48** | **206** | P | | | **Pg** | **05 42 13.2** | **-0.3** |
| KEF3 | | | | S | | | **Sg** | **05 42 20.4** | **+0.7** |
| **PSDA** | **Pessada-Kefalo** | **0.52** | **182** | P | | | **Pg** | **05 42 14.3** | **+0.1** |
| PSDA | | | | S | | | **Sb** | **05 42 22.6** | **-0.5** |
| | comp=N,962nm,0.3s | | | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.52** | **182** | P | | | **Pg** | **05 42 14.4** | **+0.1** |
| PSDA | | | | S | | | **Sg** | **05 42 21.9** | **+0.8** |
| **RLS** | **Riolos of Patr** | **0.89** | **130** | P | | | **Pg** | **05 42 21.1** | **-0.1** |
| **RLS** | **Riolos of Patr** | **0.89** | **130** | P | | | **Pg** | **05 42 20.8** | **-0.4** |
| RLS | | | | S | | | **Sg** | **05 42 32.3** | **-0.4** |
| RLS | | | | AML | | | AML | 05 42 42.0 | |
| | comp=N,1632μm,0.5s | | | | | | | | |
| RLS | | | | AML | | | AML | 05 42 43.7 | |
| | comp=E,925μm,0.5s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.92** | **347** | P | | | **Pg** | **05 42 20.8** | **-1.1** |
| **IGT** | **Igoumenitsa** | **0.92** | **347** | P | | | **Pg** | **05 42 21.7** | **-0.2** |
| IGT | | | | S | | | **Sg** | **05 42 34.0** | **+0.1** |
| IGT | | | | AML | | | AML | 05 42 39.8 | |
| | comp=E,1293μm,0.7s | | | | | | | | |
| IGT | | | | AML | | | AML | 05 42 44.4 | |
| | comp=N,1044μm,0.5s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.92** | **347** | P | | | **Pg** | **05 42 21.2** | **-0.7** |
| | baz=352 | | | | | | | | |
| IGT | | | | S | | | **Sn** | **05 42 36.9** | **+0.1** |
| | baz=352 | | | | | | | | |
| **LTHK** | **Lithakia** | **0.94** | **169** | P | | | **Pg** | **05 42 21.7** | **-0.6** |
| **LTHK** | **Lithakia** | **0.94** | **169** | P | | | **Pg** | **05 42 22.1** | **-0.1** |
| **EVR** | **Evrytania** | **0.98** | **73** | P | | | **Pg** | **05 42 23.1** | **+0.1** |
| **ANX** | **Ano Chora** | **1.03** | **92** | P | | | **Pg** | **05 42 24.0** | **+0.1** |
| **EFP** | **Efpalio** | **1.04** | **101** | P | | | **Pb** | **05 42 23.8** | **-0.5** |
| **JAN** | **Janina** | **1.04** | **10** | P | | | **Pb** | **05 42 23.3** | **-1.1** |
| **JAN** | **Janina** | **1.04** | **10** | P | | | **Pb** | **05 42 23.8** | **-0.6** |
| **DRO** | **Drossia** | **1.10** | **128** | P | | | **Pb** | **05 42 24.9** | **-0.5** |
| **LAKA** | **Lakka** | **1.14** | **110** | P | | | **Pb** | **05 42 25.4** | **-0.8** |
| **TRIZ** | **Trizonia** | **1.18** | **103** | P | | | **Pb** | **05 42 26.1** | **-0.6** |
| **ALIK** | **Aliki, Aigiali** | **1.24** | **107** | P | | | **Pn** | **05 42 27.4** | **-0.3** |
| **MAKR** | **Makrakomi, Fth** | **1.25** | **72** | P | | | **Pb** | **05 42 28.0** | **+0.1** |
| **KEK** | **Kerkira** | **1.25** | **330** | P | | | **Pb** | **05 42 27.8** | **-0.1** |
| **KEK** | **Kerkira** | **1.25** | **330** | P | | | **Pb** | **05 42 27.6** | **-0.4** |
| **SRN** | **Sarande** | **1.33** | **339** | P | | | **Pg** | **05 42 29.7** | **0.0** |
| **SRN** | **Sarande** | **1.33** | **339** | P | | | **Pg** | **05 42 29.8** | **0.0** |
| | baz=344 | | | | | | | | |
| SRN | | | | S | | | **Sg** | **05 42 47.6** | **+0.6** |
| | baz=344 | | | | | | | | |
| SRN | | | | AMP | | | | | |
| | comp=N,0.5nm,0.6s,baz=344 | | | | | | | | |
| **KLV** | **Kalavryta, Ach** | **1.35** | **116** | P | | | **Pn** | **05 42 28.7** | **-0.6** |
| **AGG** | **Agios Georgios** | **1.40** | **73** | P | | | **Pb** | **05 42 30.6** | **+0.1** |
| **THL** | **Klokotos Trika** | **1.43** | **49** | P | | | **Pb** | **05 42 31.2** | **+0.1** |
| **KPRO** | **Kipourio** | **1.44** | **24** | P | | | **Pg** | **05 42 32.6** | **+0.8** |
| **LSK** | **Leskovik** | **1.51** | **360** | P | | | **Pg** | **05 42 34.0** | **+0.8** |
| | baz=2.0 | | | | | | | | |
| LSK | | | | S | | | **Sg** | **05 42 55.9** | **+3.0** |
| | baz=2.0 | | | | | | | | |
| LSK | | | | AMP | | | | | |
| | comp=E,1.1nm,0.8s,baz=2.0 | | | | | | | | |
| **PENT** | **Pentalofos** | **1.61** | **15** | P | | | **Pb** | **05 42 34.4** | **+0.2** |
| **ITM** | **Ithomi** | **1.79** | **144** | P | | | **Pb** | **05 42 37.2** | **+0.1** |
| **ATAL** | **Atalanti** | **1.89** | **88** | P | | | **Pg** | **05 42 40.3** | **-0.1** |
| **KZN** | **Kozani** | **1.90** | **28** | P | | | **Pb** | **05 42 39.6** | **+0.6** |
| **PYL** | **PYLOS** | **1.96** | **152** | P | | | **Pb** | **05 42 39.8** | **-0.2** |
| **KBN** | **Korca** | **1.99** | **4** | P | | | **Pb** | **05 42 40.5** | **-0.1** |
| | baz=5.0 | | | | | | | | |
| KBN | | | | S | | | **Sg** | **05 43 07.3** | **-0.9** |
| | baz=5.0 | | | | | | | | |
| KBN | | | | AMP | | | | | |
| | comp=N,0.5nm,0.6s,baz=5.0 | | | | | | | | |
| **LIT** | **Litokhoron** | **2.06** | **44** | P | | | **Pb** | **05 42 42.2** | **+0.3** |
| **XOR** | **Xorichti** | **2.14** | **69** | P | | | **Pb** | **05 42 43.7** | **+0.6** |
| **SCTE** | **Santa Cesarea** | **2.19** | **311** | P | | | **Pn** | **05 42 40.7** | **-0.2** |
| | baz=316 | | | | | | | | |
| SCTE | | | | AMP | | | | | |
| | comp=E,0.3nm,0.8s,baz=316 | | | | | | | | |
| **FNA** | **Florina** | **2.23** | **15** | P | | | **Pb** | **05 42 43.3** | **-1.3** |
| **FNA** | **Florina** | **2.23** | **15** | P | | | **Pb** | **05 42 42.9** | **-1.8** |
| | baz=15 | | | | | | | | |
| FNA | | | | S | | | **Sb** | **05 43 13.3** | **+1.0** |
| | baz=15 | | | | | | | | |
| **PHP** | **Peshkopia** | **3.05** | **358** | P | | | Pn | **05 42 54.4** | **+1.8** |
| | baz=359 | | | | | | | | |
| **STIP** | **Stip** | **3.29** | **21** | *i* Pn | | | **Pb** | **05 42 59.7** | **-3.0** |

*PDG **27** 06:00:42.7±0.1, 42.°53N×18.°42E, h0km, MD2.9/2, ML2.5/9, Error ellipse: s-maj=0.1km s-min=0.1km az=0.0*
*BEO **27** 06:00:43.4±0.5, 42.°50N×18.°35E, h4km±2km, ML2.6/16*
*RHSSO **27** 06:00:43.1±0.3, 42.°50N×18.°42E, h2km±1km, ML2.7/13*
**ISC 27 06:00:43.0±1.1, 42.°52N±0.°02×18.°40E±0.°02, h1km±9km, n71, σ0998/131, 27C-12D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HCY** | **Herceg Novi** | **0.10** | **135** | ⇑*i*Pg | | | **Pg** | **06 00 44.5** | **-0.3** |
| HCY | | | | *e*Sg | | | **Sg** | **06 00 46.2** | **+0.1** |
| **TREB** | **Trebinje** | **0.20** | **350** | *e*Pg | | | **Pg** | **06 00 47.1** | **+0.2** |
| TREB | | | | *e*Sg | | | **Sg** | **06 00 50.4** | **+0.9** |
| **TREB** | **Trebinje** | **0.20** | **350** | ⇓*i*Pg | | | **Pg** | **06 00 47.0** | **+0.2** |
| TREB | | | | *e*Sg | | | **Sg** | **06 00 50.4** | **+0.9** |
| **DBRK** | **Dubrovnik** | **0.24** | **309** | *e*Pg | | | **Pg** | **06 00 47.9** | **+0.3** |
| DBRK | | | | Sg | | | **Sg** | **06 00 50.5** | **-0.2** |
| **CEME** | **Cevo** | **0.38** | **86** | ⇓*i*Pg | | | **Pg** | **06 00 49.5** | **-0.8** |
| CEME | | | | *i* Sg | | | **Sg** | **06 00 55.4** | **+0.1** |
| **BRY** | **Bratogost** | **0.40** | **15** | ⇓*i*Pg | | | **Pg** | **06 00 50.0** | **-0.6** |
| BRY | | | | *e*Sg | | | **Sg** | **06 00 56.0** | **+0.2** |
| **BRY** | **Bratogost** | **0.40** | **15** | ⇓*i*Pg | | | **Pg** | **06 00 49.9** | **-0.6** |
| BRY | | | | *i* Sg | | | **Sg** | **06 00 55.9** | **+0.2** |
| **BUM** | **Brajici-Budva** | **0.42** | **121** | ⇑*i*Pg | | | **Pg** | **06 00 50.5** | **-0.6** |
| BUM | | | | *i* Sg | | | **Sg** | **06 00 57.0** | **+0.4** |
| **STON** | **Ston** | **0.63** | **305** | *e*Pg | | | **Pg** | **06 00 54.3** | **-0.6** |
| STON | | | | *e*Sg | | | **Sg** | **06 01 04.2** | **+1.1** |
| **STON** | **Ston** | **0.63** | **305** | *e*Pg | | | **Pg** | **06 00 54.3** | **-0.6** |
| STON | | | | *e*Sg | | | **Sg** | **06 01 04.1** | **+1.0** |
| **STON** | **Ston** | **0.63** | **305** | *e*Pg | | | **Pg** | **06 00 54.0** | **-1.0** |
| STON | | | | Sg | | | **Sg** | **06 01 03.8** | **+0.7** |
| **PDG** | **Podgorica** | **0.64** | **98** | ⇑S | | | **Sg** | **06 01 04.3** | **+0.8** |
| **PDG** | **Podgorica** | **0.64** | **98** | *e*Pg | | | **Pg** | **06 00 54.4** | **-0.8** |
| PDG | | | | *e*Sg | | | **Sb** | **06 01 05.6** | **-0.8** |
| **PDG** | **Podgorica** | **0.64** | **98** | *e*Pg | | | **Pg** | **06 00 54.1** | **-1.1**

| | | | | | |
|---|---|---|---|---|---|
| **BZS** | **Buzias** | **3.87** | **36** | ⇑P | **Pn** |
| BZS | | | | ⇑S | **Sn** |
| **CRES** | **Cresnjev** | **3.93** | **328** | ⇓*i*Pn | **Pn** |
| CRES | | | | *e*Sn | **Sn** |
| **BRJN** | **Brijuni** | **4.13** | **307** | *e*Pn | **Pn** |
| **GZR** | **Gura Zlata** | **4.27** | **46** | ⇑P | **Pn** |
| GZR | | | | ⇑S | **Sn** |
| **CEY** | **Cerknica** | **4.31** | **320** | ⇓*i*Pn | **Pn** |
| CEY | | | | *e*Sn | **Sn** |
| **SKDS** | **Skadanscina** | **4.38** | **315** | *e*Pn | **Pn** |
| SKDS | | | | *e*Sn | **Sn** |
| **SIRR** | **Siria** | **4.42** | **31** | ⇑P | **Pn** |
| SIRR | | | | ⇑S | **Sn** |
| **SOKA** | **Soboth** | **4.80** | **331** | *i* Pn | **Pn** |
| | 2.7nm,0.6s | | | | |
| SOKA | | | | *i* Sn | **Sn** |
| | 3.6nm,0.8s | | | | |
| **ARSA** | **Arzberg** | **5.15** | **338** | *i* Pn | **Pn** |
| | 2.4nm,0.4s | | | | |
| **MOA** | **Molln** | **6.08** | **333** | *i* Pn | **Pn** |
| | 0.6nm,0.3s | | | | |
| MOA | | | | *i* Sn | **Sn** |
| | 2.3nm,0.5s | | | | |

*NORS* ***27*** *06:08:15.1±0.0, 44°.19N×42°.52E, h13km, MPVA3.9*
**MOS 27 06:08:15.1±0.0, 44°.31N×42°.52E, h8km, MPVA3.9, 6C-11D, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BEYR** | **Belyy Ugol+** | **0.36** | **144** | ⇑*i*PG | Pg | 06 08 22.0 | -0.2 |
| BEYR | | | | *i* Sg | Sg | 06 08 27.2 | +0.3 |
| **BEYR** | **Belyy Ugol+** | **0.36** | **144** | *i* Pg | Pg | 06 08 22.0 | -0.2 |
| BEYR | | | | *i* Sg | Sg | 06 08 27.2 | +0.3 |
| **KIV** | **Kislovodsk** | **0.37** | **161** | ⇑*i*PG | Pg | 06 08 23.0 | +0.7 |
| KIV | | | | *i* S | Sg | 06 08 28.0 | +0.8 |
| **KIV** | **Kislovodsk** | **0.37** | **161** | *i* Pg | Pg | 06 08 23.0 | +0.6 |
| KIV | | | | *i* Sg | Sg | 06 08 28.0 | +0.8 |
| **PYA1** | **Pyatigorsk** | **0.48** | **120** | *d*iPG | Pg | 06 08 23.8 | -0.6 |
| **PYA1** | **Pyatigorsk** | **0.48** | **120** | *e*Pg | Pg | 06 08 23.8 | -0.5 |
| PYA1 | | | | *i* Sg | Sg | 06 08 30.1 | -0.5 |
| **ALER** | **Alexandrovskoy** | **0.54** | **31** | ⇓*i*PG | Pg | 06 08 24.9 | -0.6 |
| ALER | | | | *i* S | Sg | 06 08 32.8 | +0.3 |
| **ALER** | **Alexandrovskoy** | **0.54** | **31** | *i* Pg | Pg | 06 08 24.9 | -0.6 |
| ALER | | | | *i* Sg | Sg | 06 08 32.1 | -0.4 |
| **SHA1** | **Shidzhatmaz** | **0.57** | **170** | *i* PG | Pg | 06 08 26.3 | +0.1 |
| SHA1 | | | | *i* S | Sg | 06 08 34.5 | +0.7 |
| **SHA1** | **Shidzhatmaz** | **0.57** | **170** | *i* Pg | Pg | 06 08 26.3 | +0.1 |
| SHA1 | | | | *i* Sg | Sg | 06 08 34.5 | +0.7 |
| **KBZ** | **Khabaz** | **0.64** | **155** | ⇓*e*PG | Pg | 06 08 27.1 | -0.2 |
| KBZ | | | | *i* S | Sg | 06 08 36.5 | +0.9 |
| **KBZ** | **Khabaz** | **0.64** | **155** | *e*Pg | Pg | 06 08 27.1 | -0.3 |
| KBZ | | | | *i* Sg | Sg | 06 08 36.5 | +0.8 |
| **GOF** | **Gofitskoye** | **0.84** | **26** | ⇑*e*PG | Pg | 06 08 30.6 | -0.6 |
| GOF | | | | *i* S | Sb | 06 08 43.1 | -0.3 |
| **GOF** | **Gofitskoye** | **0.84** | **26** | *e*Pg | Pg | 06 08 30.6 | -0.6 |
| GOF | | | | *i* Sg | Sb | 06 08 43.1 | -0.3 |
| **NEY** | **Neytrino** | **1.07** | **172** | ⇓*e*PG | Pg | 06 08 35.3 | -0.3 |
| NEY | | | | *e*S | Sg | 06 08 49.4 | 0.0 |
| NEY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | |
| NEY | | | | smax | smax | | |
| | comp=Z,48nm,0.4s | | | | | | |
| **NEY** | **Neytrino** | **1.07** | **172** | *e*Pg | Pg | 06 08 35.3 | -0.3 |
| NEY | | | | *e*Sg | Sg | 06 08 49.3 | -0.1 |
| **AHMR** | **Akhmetovskaya** | **1.07** | **263** | ⇓*i*PG | Pb | 06 08 36.2 | +0.2 |
| AHMR | | | | *i* S | Sn | 06 08 51.4 | -0.3 |
| **AHMR** | **Akhmetovskaya** | **1.07** | **263** | *i* Pg | Pb | 06 08 36.2 | +0.3 |
| AHMR | | | | *i* Sg | Sn | 06 08 51.0 | -0.7 |
| **NCK** | **Nalchik** | **1.12** | **136** | ⇓*e*PG | Pg | 06 08 36.2 | -0.4 |
| NCK | | | | *i* S | Sb | 06 08 51.7 | +0.2 |
| NCK | | | | pmax | pmax | | |
| | comp=Z,86nm,0.2s | | | | | | |
| NCK | | | | smax | smax | | |
| | comp=Z,125nm,0.2s | | | | | | |
| **ARXR** | **Arkhyz** | **1.17** | **231** | ⇓*e*PG | Pg | 06 08 36.6 | -0.9 |
| ARXR | | | | *i* S | Sb | 06 08 53.5 | +0.5 |
| ARXR | | | | pmax | pmax | | |
| | comp=Z,145nm,0.7s | | | | | | |
| ARXR | | | | smax | smax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **ARXR** | **Arkhyz** | **1.17** | **231** | *i* Pg | Pg | 06 08 37.5 | 0.0 |
| ARXR | | | | *i* Sg | Sb | 06 08 53.3 | +0.3 |
| **DOMR** | **Dombai** | **1.20** | **213** | *i* PG | Pg | 06 08 38.1 | -0.1 |
| DOMR | | | | *i* S | Sg | 06 08 53.9 | +0.1 |
| **DOMR** | **Dombai** | **1.20** | **213** | *i* Pg | Pg | 06 08 38.2 | 0.0 |
| DOMR | | | | *i* Sg | Sg | 06 08 53.9 | +0.1 |
| **LABN** | **Labinsk** | **1.33** | **285** | *e*PG | Pg | 06 08 41.8 | +1.2 |
| LABN | | | | *e*S | Sn | 06 09 00.3 | +2.3 |
| **LABN** | **Labinsk** | **1.33** | **285** | *e*Pg | Pg | 06 08 41.8 | +1.2 |
| LABN | | | | *e*Sg | Sn | 06 09 00.3 | +2.3 |
| **PRTR** | **Priterechnaya** | **1.38** | **113** | *e*PG | Pg | 06 08 42.0 | +0.4 |
| PRTR | | | | *e*S | Sg | 06 09 01.8 | +2.2 |
| **PRTR** | **Priterechnaya** | **1.38** | **113** | *e*Pg | Pg | 06 08 42.0 | +0.4 |
| PRTR | | | | *e*Sg | Sg | 06 09 01.8 | +2.2 |
| **LSNR** | **Lesken** | **1.39** | **137** | *d*iPG | Pb | 06 08 41.6 | +0.2 |
| LSNR | | | | pmax | pmax | | |
| | comp=Z,46nm,0.3s | | | | | | |
| **LSNR** | **Lesken** | **1.39** | **137** | *i* Pg | Pb | 06 08 41.5 | 0.0 |
| LSNR | | | | *e*Sg | Sg | 06 09 01.5 | +1.6 |
| **STDR** | **Stavd-Durt** | **1.46** | **129** | *e*PG | Pg | 06 08 43.9 | +0.9 |
| STDR | | | | *e*S | Sg | 06 09 04.4 | +2.5 |
| **STDR** | **Stavd-Durt** | **1.46** | **129** | *e*Pg | Pg | 06 08 43.3 | +0.3 |
| STDR | | | | *e*Sg | Sg | 06 09 04.4 | +2.5 |
| **DIGR** | **Digorskoe uzhe** | **1.60** | **151** | *e*PG | Pb | 06 08 44.7 | -0.4 |
| DIGR | | | | *e*S | Sb | 06 09 05.3 | -0.2 |
| **DIGR** | **Digorskoe uzhe** | **1.60** | **151** | *e*Pg | Pb | 06 08 44.6 | -0.4 |
| DIGR | | | | *e*Sg | Sn | 06 09 04.7 | -0.3 |
| **KORR** | **Kora** | **1.66** | **137** | *e*PN | Pn | 06 08 45.0 | +0.5 |
| KORR | | | | *e*S | Sg | 06 09 09.1 | +0.8 |
| **KORR** | **Kora** | **1.66** | **137** | *e*Pg | Pn | 06 08 45.0 | +0.5 |
| KORR | | | | *e*Sg | Sg | 06 09 09.1 | +0.8 |
| **TRKR** | **Terskaya** | **1.70** | **109** | ⇓*e*PN | Pg | 06 08 48.2 | +0.6 |
| **ARNR** | **Ardon** | **1.70** | **131** | ⇑*e*PN | Pb | 06 08 46.3 | -0.3 |
| **RPOR** | **Krasnaya Polya** | **1.74** | **250** | *e*PN | Pb | 06 08 47.3 | 0.0 |
| RPOR | | | | *e*S | Sb | 06 09 08.7 | -0.6 |
| **RPOR** | **Krasnaya Polya** | **1.74** | **250** | *e*Pg | Pb | 06 08 47.3 | 0.0 |
| RPOR | | | | *e*Sg | Sn | 06 09 08.7 | +0.6 |
| **GUZR** | **Guzeripl'** | **1.76** | **261** | *e*PN | Pn | 06 08 46.4 | +0.4 |
| GUZR | | | | *e*S | Sb | 06 09 09.9 | 0.0 |
| **GUZR** | **Guzeripl'** | **1.76** | **261** | *e*Pg | Pn | 06 08 46.4 | +0.4 |
| GUZR | | | | *e*Sg | Sb | 06 09 09.9 | 0.0 |
| **ZEI** | **Tsey** | **1.82** | **146** | *e*PN | Pb | 06 08 48.6 | -0.2 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,26nm,0.2s | | | | | | |
| **ZEI** | **Tsey** | **1.82** | **146** | *e*Pg | Pb | 06 08 48.6 | -0.1 |
| ZEI | | | | *e*Sg | Sg | 06 09 12.9 | -0.6 |
| **ONI** | **Oni** | **1.84** | **158** | ⇓*e*PN | Pb | 06 08 49.6 | +0.5 |
| **ONI** | **Oni** | **1.84** | **158** | *e*Pg | Pn | 06 08 47.5 | +0.3 |
| ONI | | | | *e*Sg | Sb | 06 09 12.4 | +0.1 |
| **LACR** | **Lac** | **1.96** | **138** | *ce*PN | Pb | 06 08 51.6 | +0.5 |
| LACR | | | | pmax | pmax | | |
| | comp=Z,71nm,0.4s | | | | | | |
| **LACR** | **Lac** | **1.96** | **138** | *e*Pg | Pb | 06 08 51.3 | +0.2 |
| LACR | | | | *e*Sg | Sg | 06 09 17.1 | -1.0 |
| **VSLR** | **Vesyoloye** | **1.99** | **246** | *e*PN | Pn | 06 08 50.2 | +1.1 |
| **VSLR** | **Vesyoloye** | **1.99** | **246** | *e*Pg | Pn | 06 08 50.1 | +1.1 |
| VSLR | | | | *e*Sg | Sb | 06 09 16.1 | -0.4 |
| **LZRR** | **Lazarevskoye** | **2.29** | **262** | *e*PN | Pb | 06 08 55.1 | -1.6 |
| LZRR | | | | *e*S | Sn | 06 09 23.3 | +1.6 |
| **LZRR** | **Lazarevskoye** | **2.29** | **262** | *e*Pn | Pb | 06 08 55.1 | -1.6 |
| LZRR | | | | *e*Sn | Sn | 06 09 23.3 | +1.6 |
| **DVE** | **Vedeno** | **2.94** | **116** | ⇑*e*PN | Pn | 06 09 04.2 | +2.0 |
| **GNBR** | **Gunib** | **3.76** | **119** | ⇓*e*PN | Pn | 06 09 16.9 | +3.4 |

*IDC* ***27*** *06:12:01.6±1.3, 23°.16S×66°.80W, h196km±14km, mb3.6/3, mb1 3.6/8, mb1mx3.4/25, mbtmp4.0/8, Error ellipse: s-maj=23.4km s-min=15.1km az=132.0*
*GUC* ***27*** *06:12:01.8±0.7, 23°.21S×67°.07W, h198km±6km, ML4.1*
*VAO* ***27*** *06:12:09.7±1.1, 22°.94S×66°.54W, h262km, mb4.0*
**ISC 27 06:12:02.0±0.7, 23°.19S±0°.05×67°.00W±0°.05, h209km±8km, n57, σ1°15/76, mb3.7/3, 1C-1D, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **1.85** | **288** | P | **Pn** | **06 12 41.4** | **+1.2** |
| | 34nm,0.3s,baz=99,slow=6.0,SNR=291 | | | | | | |
| LVC | | | | S | **Sn** | **06 13 10.6** | **+0.8** |
| | 28nm,0.3s,baz=149,slow=1.1,SNR=52 | | | | | | |
| **LVC** | **Limon Verde** | **1.85** | **288** | *e*P | **Pn** | **06 12 40.0** | **-0.2** |
| LVC | | | | *e*S | **Sn** | **06 13 08.9** | **-0.9** |
| **SLA** | **San Lorenzo** | **2.05** | **138** | *e*P | **Pn** | **06 12 42.5** | **+0.6** |
| SLA | | | | *e*S | **Sn** | **06 13 13.3** | **+0.3** |
| **PB15** | **IPOC Station P** | **2.28** | **269** | *e*P | **Pn** | **06 12 44.0** | **-0.3** |
| PB15 | | | | *e*S | **Sn** | **06 13 16.5** | **-0.7** |
| **PB06** | **IPOC Station P** | **2.42** | **281** | *e*P | **Pn** | **06 12 46.0** | **+0.2** |
| PB06 | | | | *e*S | **Sn** | **06 13 19.1** | **-0.8** |
| PB06 | | | | IAML | | 06 13 21.4 | |
| | comp=N,481nm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **2.49** | **303** | *e*P | **Pn** | **06 12 47.5** | **+0.9** |
| PB09 | | | | *e*S | **Sn** | **06 13 21.0** | **-0.4** |
| PB09 | | | | IAML | | 06 13 24.3 | |
| | comp=E,243nm,0.7s | | | | | | |
| **PB04** | **IPOC Station P** | **3.03** | **286** | *e*P | **Pn** | **06 12 53.5** | **+0.8** |
| PB04 | | | | *e*S | **Sn** | **06 13 31.7** | **-0.6** |
| PB04 | | | | IAML | | 06 13 34.9 | |
| | comp=N,505nm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **3.04** | **298** | *e*P | **Pn** | **06 12 53.2** | **+0.4** |
| PB07 | | | | *i* S | **Sn** | **06 13 31.7** | **-0.8** |
| **PB01** | **IPOC Station P** | **3.14** | **312** | ⇓*e*P | **Pn** | **06 12 54.4** | **+0.5** |
| PB01 | | | | *e*S | **Sn** | **06 13 34.3** | **-0.2** |
| PB01 | | | | IAML | | 06 13 35.8 | |
| | comp=N,245nm,0.2s | | | | | | |
| **PB02** | **IPOC Station P** | **3.27** | **304** | *e*P | **Pn** | **06 12 55.9** | **+0.5** |
| PB02 | | | | *e*S | **Sn** | **06 13 35.9** | **-1.3** |
| PB02 | | | | IAML | | 06 13 40.8 | |
| | comp=E,328nm,0.4s | | | | | | |
| **PB10** | **IPOC Station P** | **3.29** | **264** | *e*P | **Pn** | **06 12 55.9** | **+0.5** |
| PB10 | | | | *e*S | **Sn** | **06 13 35.8** | **-1.6** |
| PB10 | | | | IAML | | 06 13 44.1 | |
| | comp=N,136nm,0.5s | | | | | | |
| **PB08** | **IPOC Station P** | **3.63** | **326** | *e*P | **Pn** | **06 13 01.5** | **+1.4** |
| PB08 | | | | *e*S | **Sn** | **06 13 46.6** | **+1.0** |
| **PATCX** | **Punta Patache** | **3.76** | **308** | ⇑*e*P | **Pn** | **06 13 00.9** | **-0.4** |
| PATCX | | | | *e*S | **Sn** | **06 13 47.0** | **-0.8** |
| **HMBC** | **Humberstone** | **3.95** | **317** | *e*P | **Pn** | **06 13 03.5** | **-0.2** |
| HMBC | | | | *e*S | **Sn** | **06 13 50.6** | **-1.5** |
| **GO01** | **Chusmiza** | **4.05** | **329** | *e*P | **Pn** | **06 13 06.7** | **+1.4** |
| GO01 | | | | *i* S | **Sn** | **06 13 56.2** | **+1.1** |
| **PB11** | **IPOC Station P** | **4.21** | **324** | *e*P | **Pn** | **06 13 07.2** | **+0.2** |
| PB11 | | | | *e*S | **Sn** | **06 13 56.5** | **-1.6** |
| **AC01** | **Pan de Azucar** | **4.41** | **227** | *e*P | **Pn** | **06 13 08.3** | **-0.8** |
| AC01 | | | | *e*S | **Sn** | **06 13 59.6** | **-2.6** |
| **LPAZ** | **La Paz** | **6.95** | **351** | P | **Pn** | **06 13 43.0** | **+0.8** |
| | comp=N,0.7nm,0.3s,baz=149,slow=7.0,SNR=14 | | | | | | |
| LPAZ | | | | S | **Sn** | **06 15 01.2** | **-0.6** |
| | comp=N,0.2nm,0.3s,baz=54,slow=14,SNR=2.8 | | | | | | |
| **SIV** | **San Ignacio** | **9.08** | **39** | P | **Pn** | **06 14 06.7** | **-2.6** |
| | comp=N,2.7nm,0.3s,baz=249,slow=7.5,SNR=38 | | | | | | |
| SIV | | | | S | **Sn** | **06 15 48.2** | **-3.2** |
| | comp=N,0.2nm,0.3s,baz=325,slow=23,SNR=2.3 | | | | | | |
| **CPUP** | **Villa Florida** | **9.33** | **112** | *e*P | **Pn** | **06 14 14.8** | **+2.3** |
| **AQDB** | **Aquidauana** | **10.84** | **78** | *e*P | **Pn** | **06 14 33.1** | **+1.3** |
| **VILB** | **Vilhena** | **12.05** | **34** | *e*P | **Pn** | **06 14 48.7** | **+1.2** |
| **SALV** | **Santo Antonio** | **12.88** | **58** | *e*P | **Pn** | **06 14 56.1** | **-1.7** |
| **ETMB** | **Extrema** | **13.32** | **3** | *e*P | **P** | **06 15 06.4** | **+0.7** |
| **PTGB** | **Pitanga** | **13.74** | **99** | *e*P | **P** | **06 15 10.5** | **0.0** |
| **ITAB** | **Concordia** | **14.05** | **110** | *e*P | **P** | **06 15 14.1** | **+0.4** |
| **PDRB** | **Porto dos Gac** | **15.11** | **42** | *e*P | **P** | **06 15 25.9** | **+0.3** |
| **ITRB** | **Iturama** | **15.87** | **81** | *e*P | **Pn** | **06 15 34.3** | **-0.2** |
| **ARAG** | **Araguaiana, MT** | **16.13** | **65** | *e*P | **P** | **06 15 35.9** | **-0.9** |
| **CLDB** | **Colider** | **16.25** | **43** | *e*P | **P** | **06 15 37.2** | **-1.1** |
| **BB19B** | **Bebedouro** | **17.24** | **87** | *e*P | **P** | **06 15 48.7** | **-0.5** |
| **PLCA** | **Paso Flores** | **17.75** | **189** | P | **P** | **06 15 55.5** | **+1.1** |
| | comp=N,0.2nm,0.3s,baz=13,slow=11,SNR=7.6 | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **17.97** | **91** | *e*P | **P** | **06 15 56.6** | **-0.4** |
| **IPMB** | **Ipameri, GO** | **18.33** | **77** | *e*P | **P** | **06 16 00.6** | **-0.4** |
| **VAO** | **Valinhos** | **18.43** | **93** | *e*P | **P** | **06 16 01.0** | **-1.1** |
| **SNDB** | **Serra Nova Dou** | **18.65** | **56** | *e*P | **P** | **06 16 03.2** | **-1.2** |
| **BDFB** | **Brasilia** | **19.40** | **71** | P | **P** | **06 16 11.6** | **-1.0** |
| | comp=N,0.6nm,0.3s,baz=239,slow=13,SNR=14 | | | | | | |
| **NPGB** | **Novo Progresso** | **19.57** | **37** | *e*P | **P** | **06 16 12.4** | **-1.9** |
| **PARB** | **Paraibuna** | **19.64** | **95** | *e*P | **P** | **06 16 15.2** | **+0.2** |
| **MACA** | **Manacapuru-AM** | **20.82** | **18** | *e*P | **P** | **06 16 26.4** | **-1.3** |
| **PEXB** | **Peixe** | **20.92** | **61** | *e*P | **P** | **06 16 27.3** | **-1.4** |
| **ITTB** | **Itaituba** | **21.65** | **32** | *e*P | **P** | **06 16 34.1** | **-2.0** |
| **DIAM** | **Diamantina, MG** | **22.34** | **82** | *e*P | **P** | **06 16 42.4** | **-0.5** |
| **JANB** | **Januaria** | **22.89** | **73** | *e*P | **P** | **06 16 46.7** | **-1.1** |
| **PTGA** | **Pitinga** | **23.34** | **18** | P | **P** | **06 16 51.5** | **-0.3** |
| | comp=N,1.8nm,0.3s,baz=181,slow=18,SNR=6.1 | | | | | | |
| **SMTB** | **Santa Maria do** | **23.43** | **56** | *e*P | **P** | **06 16 52.2** | **-0.4** |
| **SDBA** | **SAO DESIDERIO** | **23.58** | **67** | *e*P | **P** | **06 16 53.0** | **-1.0** |
| **PRPB** | **Paraupebas** | **23.67** | **47** | *e*P | **P** | **06 16 53.9** | **-0.9** |
| **MALB** | **Monte Alegre** | **24.54** | **32** | *e*P | **P** | **06 17 03.2** | **+0.5** |
| **NAN01** | **Guarapari, ES** | **25.70** | **83** | *e*P | **P** | **06 17 11.8** | **-1.4** |
| **BOAV** | **Boa Vista** | **26.20** | **15** | *e*P | **P** | **06 17 18.4** | **+0.8** |
| **GUA01** | **Guaratinga, BA** | **26.37** | **81** | *e*P | **P** | **06 17 18.0** | **-1.3** |
| **GDU01** | **Guandu, BA** | **27.62** | **75** | *e*P | **P** | **06 17 28.6** | **-1.7** |
| **NBMA** | **Muriti-CE** | **31.36** | **64** | *e*P | **P** | **06 18 02.8** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** | **76.28** | **69** | P | **P** | **06 23 27.5** | **-0.6** |
| | comp=N,0.4nm,0.3s,baz=260,slow=5.7,SNR=9.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.36** | **340** | P | **P** | **06 24 54.0** | **+1.3** |
| | comp=N,0.3nm,0.5s,baz=344,slow=4.7,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.90** | **39** | PKPbc | **PKPdf** | **06 31 17.1** | **+1.4** |
| | comp=N,0.8nm,0.8s,baz=310,slow=3.2,SNR=7.9 | | | | | | |

*IDC* ***27*** *06:17:15.1±2.4, 32°.83N×140°.85E, h0km, mb3.7/2, mb1 4.0/4, mb1mx3.4/37, mbtmp3.8/4, ML4.3/1, Error ellipse: s-maj=51.5km s-min=17.6km az=42.0*
*JMA* ***27*** *06:17:18.7±0.2, 33°.21N×140°.93E, h59km, M3.0*
**ISC 27 06:17:17.2±2.4, 33°.13N±0°.09×141°.00E±0°.10, h26km±15km, n12, σ1°23/18, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ2** | **Mitsune** | **0.99** | **269** | P | **Pb** | **06 17 36.1** | **+0.3** |
| JHJ2 | | | | S | **Sb** | **06 17 48.8** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **1.02** | **270** | Pn | **Pb** | **06 17 35.7** | **-0.6** |
| | 43nm,0.3s,baz=94,slow=15,SNR=20 | | | | | | |
| JHJ | | | | Sn | **Sb** | **06 17 48.4** | **-0.9** |
| | 96nm,0.3s,baz=94,slow=22,SNR=5.3 | | | | | | |
| **BSO1** | **Boso 1** | **1.52** | **359** | P | **Pn** | **06 17 43.2** | **+1.0** |
| **JTHY** | **Toshimahigashi** | **1.99** | **315** | P | **Pn** | **06 17 49.9** | **+0.7** |
| JTHY | | | | *e*S | **Sn** | **06 18 12.4** | **-0.9** |
| **JIM2** | **Oshima 3** | **2.05** | **321** | P | **Pn** | **06 17 50.5** | **+0.4** |
| JIM2 | | | | *e*S | **Sn** | **06 18 13.5** | **-1.3** |
| **JIZS** | **Izushimoda** | **2.37** | **312** | P | **Pn** | **06 17 55.3** | **+0.9** |
| **KTJ3** | **Kamata3** | **2.41** | **319** | P | **Pn** | **06 17 55.2** | **+0.3** |
| KTJ3 | | | | *e*S | **Sn** | **06 18 22.2** | **-1.4** |
| **JOD2** | **Odawara 2** | **2.65** | **324** | P | **Pn** | **06 17 58.7** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **4.10** | **327** | Pn | **Pn** | **06 18 20.7** | **+2.4** |
| | 0.2nm,0.3s,baz=151,slow=11,SNR=10 | | | | | | |
| **JNU** | **Nakatsue** | **8.49** | **273** | Pn | **Pn** | **06 19 18.6** | **0.0** |
| | 3.3nm,0.3s,baz=142,slow=19,SNR=6.9 | | | | | | |
| JNU | | | | Sn | **Sn** | **06 20 56.0** | **+2.5** |
| | 4.6nm,0.3s,baz=65,slow=15,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.16** | **188** | P | **P** | **06 26 32.3** | **-0.7** |
| | 0.8nm,0.5s,baz=4.3,slow=7.7,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **56.88** | **189** | P | **P** | **06 26 59.4** | **-0.5** |
| | 0.4nm,0.5s,baz=4.4,slow=7.7,SNR=8.7 | | | | | | |

**IDC 27 06:53:36.7±2.9, 6°.98S×130°.05E, h115km±40km, mb2.9/1, mb1 3.1/5, mb1mx2.9/32, mbtmp3.4/5, Error ellipse: s-maj=68.0km s-min=22.6km az=90.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.19** | **11** | P | Pn | 06 55 06.2 | +0.4 |
| | 1.4nm,0.3s,baz=156,slow=24,SNR=1.7 | | | | | | |
| SIJI | | | | S | Sn | 06 56 11.1 | -4.2 |
| | 1.3nm,0.3s,baz=309,slow=24,SNR=1.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.86** | **201** | P | Pn | 06 56 21.2 | -0.9 |
| | 0.2nm,0.3s,baz=34,slow=11,SNR=13 | | | | | | |
| FITZ | | | | S | Sn | 06 58 22.0 | -11 |
| | 0.3nm,0.3s,baz=153,slow=21,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.54** | **163** | P | Pn | 06 56 43.3 | -0.8 |
| | 0.4nm,0.3s,baz=347,slow=12,SNR=16 | | | | | | |
| WRA | | | | S | Sn | 06 59 05.4 | -8.0 |
| | 0.4nm,0.3s,baz=337,slow=22,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **17.00** | **168** | P | P | 06 57 29.1 | +1.5 |
| | 0.2nm,0.3s,baz=342,slow=8.6,SNR=12 | | | | | | |
| ASAR | | | | S | Sn | 07 00 28.4 | -8.4 |
| | 0.1nm,0.3s,baz=352,slow=24,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.24** | **327** | P | P | 07 04 24.9 | -0.1 |
| | 0.1nm,0.4s,baz=135,slow=6.9,SNR=2.6 | | | | | | |

*CNRM* ***27*** *06:59:43.0, 35°.51N×3°.53W, h111km, ml2.8*
**ISC 27 06:59:43.5±2.9, 35°.53N±0°.05×3°.69W±0°.07, h19km±10km, n6, σ1°47/12, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAF** | **Taforalt** | **1.27** | **124** | P | **Pn** | **07 00 07.1** | **+0.8** |
| TAF | | | | S | **Sn** | **07 00 23.1** | **+0.3** |
| **EMAL** | **Malaga-Limoner** | **1.36** | **334** | P | **Pn** | **07 00 07.5** | **0.0** |
| EMAL | | | | S | **Sn** | **07 00 22.5** | **-2.5** |
| **LCRM** | **LCR** | **2.08** | **208** | P | **Pn** | **07 00 19.4** | **+1.9** |
| LCRM | | | | S | **Sg** | **07 00 49.9** | **-0.6** |
| **MD31** | **MD31** | **2.80** | **199** | P | **Pn** | **07 00 26.3** | **-1.1** |
| MD31 | | | | S | **Sn** | **07 01 00.7** | **+0.1** |
| **MDT** | **Midelt** | **2.82** | **196** | P | **Pn** | **07 00 26.5** | **-1.1** |
| MDT | | | | S | **Sn** | **07 01 00.6** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **3.74** | **301** | P | **Pn** | **07 00 42.1** | **+1.9** |
| PVAQ | | | | S | **Sn** | **07 01 24.1** | **+0.4** |

*IDC* ***27*** *07:30:49.9±0.9, 29°.46N×142°.47E, h0km, mb3.5/8, mb1 3.8/10, mb1mx3.6/45, mbtmp3.6/10, ML3.3/2, MS3.1/2, Ms1 3.1/2, ms1mx2.4/60, Error ellipse: s-maj=30.6km s-min=20.0km az=82.0*
**ISC 27 07:30:53.8±1.0, 29°.5N±0°.1×142°.3E±0°.2, h24km, n13, σ0°84/13, mb3.6/8, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ** | **Hachijo jima 2** | **4.19** | **329** | Pn | **Pn** | **07 31 56.8** | **+0.6** |
| | 5.3nm,0.3s,baz=223,slow=11,SNR=1.3 | | | | | | |
| JHJ | | | | Sn | **Sn** | **07 32 43.0** | **-1.5** |
| | 7.0nm,0.3s,baz=51,slow=17,SNR=1.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.80** | **335** | Pn | **Pn** | **07 32 45.9** | **+0.1** |
| | 0.4nm,0.3s,baz=160,slow=11,SNR=13 | | | | | | |
| **MAT** | **Matsushiro** | **7.80** | **335** | P | **Pn** | **07 32 45.8** | **-0.1** |
| MAT | | | | *e*S | **Sn** | **07 34 12.7** | **-0.7** |
| **KLR** | **Kul'dur** | **21.27** | **341** | P | **P** | **07 35 39.6** | **+1.4** |
| | 0.8nm,0.6s,baz=159,slow=9.2,SNR=4.2 | | | | | | |
| **TIXI** | **Tiksi** | **42.81** | **354** | LR | LR | 08 00 12.3 | |
| | comp=Z,24nm,20.7s,baz=183,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.06** | **308** | P | **P** | **07 39 39.6** | **+0.7** |
| | 0.4nm,0.6s,baz=81,slow=9.2,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.78** | **190** | P | **P** | **07 39 43.7** | **-0.9** |
| | 0.5nm,0.5s,baz=12,slow=8.7,SNR=7.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.46** | **313** | P | **P** | **07 39 57.4** | **+0.4** |
| | 0.6nm,0.5s,baz=93,slow=6.8,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **53.51** | **190** | P | **P** | **07 40 12.4** | **0.0** |
| | 0.4nm,1.0s,baz=1.4,slow=5.4,SNR=2.3 | | | | | | |
| **ILAR** | **Eielson Array** | **55.53** | **29** | P | **P** | **07 40 26.9** | **+0.3** |
| | 0.4nm,0.7s,baz=262,slow=6.2,SNR=4.0 | | | | | | |
| **PALK** | **Pallekele** | **61.80** | **262** | LR | LR | 08 05 49.2 | |
| | comp=Z,14nm,21.7s,baz=202,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.95** | **29** | P | **P** | **07 42 02.0** | **-0.7** |
| | 0.4nm,0.7s,baz=294,slow=6.3,SNR=5.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.92** | **52** | P | **P** | **07 42 55.6** | **-0.1** |
| | 0.1nm,0.6s,baz=286,slow=5.5,SNR=3.6 | | | | | | |

*IDC* ***27*** *07:34:10.5±3.7, 36°.75N×75°.71E, h0km, mb3.3/1, mb1 3.5/4, mb1mx3.2/47, mbtmp3.4/4, ML3.1/3, MS3.4/1, Ms1 3.4/1, ms1mx2.3/54, Error ellipse: s-maj=78.2km s-min=40.7km az=77.0*
*SOME* ***27*** *07:34:35.8, 38°.82N×73°.60E, h10km*
*NNC* ***27*** *07:34:39.1±6.0, 38°.66N×75°.04E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=48.6km s-min=34.2km az=155.0*
**ISC 27 07:34:16.3±1.9, 37°.8N±0°.1×73°.5E±0°.1, h10km, n12, σ2°.9/06/15, 1C-3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **4.90** | **8** | Pn | **Pb** | **07 35 44.8** | **+2.6** |
| | 0.4nm,0.3s,baz=172,slow=11,SNR=3.9 | | | | | | |
| AAK | | | | Pg | Pg | 07 35 57.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OBIP** | **Obispado Ponce** | **2.02 239** | Pn | | **Pn** | **08 12 10.7** | **-2.3** |
| **MLPR** | **Magueyes Islan** | **2.42 243**⇑ | *e*P | | **Pn** | **08 12 16.9** | **-1.5** |
| **MLPR** | **Magueyes Islan** | **2.42 243** | | | **Pn** | **08 12 16.9** | **-1.5** |
| **MLPR** | **Magueyes Islan** | **2.42 243** | IAML | | | 08 12 53.1 | |
| | comp=N,28nm,1.2s | | | | | | |
| MLPR | | | IAML | | | 08 12 59.4 | |
| | comp=E,21nm,1.8s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.46 244**⇑ | *e*P | | **Pn** | **08 12 18.7** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.46 244** | | | **Pn** | **08 12 18.7** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.46 244** | IAML | | | 08 13 05.4 | |
| | comp=N,32nm,2.6s | | | | | | |
| **ANBD** | **Bethesda, Anti** | **3.52 125** | *e*P | | **Pn** | **08 12 33.2** | **-0.3** |

*SOME* ***27*** *08:16:15.2,40˙.92N×71˙.08E,h15km*
*KRNET* ***27*** *08:16:16.6±0.1,40˙.81N×71˙.35E,h35km,mb2.6*
*NNC* ***27*** *08:16:20.5±3.0,41˙.18N×71˙.17E,h0km,mb3.2,mpv2.8,*
*Error ellipse: s-maj=23.3km s-min=9.4km az=6.0*

**ISC 27 08:16:13.0±1.5,40.88N±0.04×71.16E±0.04,h10km±12km, n21,σ1°53/33,10C-8D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTK** | **Batken** | **0.87** | **198** | ⇑*i*P | **Pn** | **08 16 33.2** | **+1.8** |
| | baz=8.0 | | | | | | |
| BTK | | | | ⇑*i*S | **Sn** | **08 16 45.3** | **+1.2** |
| | baz=8.0 | | | | | | |
| **ARK** | **Arkit** | **1.09** | **33** | ⇓*i*P | **Pn** | **08 16 36.9** | **+2.3** |
| | baz=25 | | | | | | |
| ARK | | | | ⇓*i*S | **Sn** | **08 16 51.6** | **+1.8** |
| | baz=25 | | | | | | |
| **OHH** | **Osh** | **1.29** | **106** | ⇑*i*P | **Pb** | **08 16 37.3** | **-0.1** |
| | baz=4.0 | | | | | | |
| OHH | | | | ⇑*i*S | **Sb** | **08 16 52.6** | **-1.4** |
| | baz=4.0 | | | | | | |
| **DRK** | **Karamyk** | **1.49** | **161** | ⇑*i*P | **Pn** | **08 16 40.5** | **+0.4** |
| | baz=65 | | | | | | |
| DRK | | | | ⇑*i*S | **Sn** | **08 16 58.2** | **-1.5** |
| | baz=65 | | | | | | |
| **MNAS** | **Manas** | **1.89** | **32** | ⇓*i*P | **Pg** | **08 16 47.8** | **-1.5** |
| | baz=27 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sb** | **08 17 10.6** | **-0.9** |
| | baz=27 | | | | | | |
| **DZA** | **Taraz** | **2.01** | **4** | *e*P | **Pg** | **08 16 52.4** | **+0.9** |
| | 70nm,0.1s | | | | | | |
| DZA | | | | *e*S | **Sg** | **08 17 18.9** | **+1.3** |
| | 108nm,0.3s | | | | | | |
| **KK08** | **Karatay Array** | **2.27** | **347** | ⇑Pg | **Pg** | **08 16 55.0** | **-1.6** |
| | 2.0nm,0.3s,baz=165,slow=16 | | | | | | |
| KK08 | | | | ⇓Lg | Lg | 08 17 25.3 | |
| | 11nm,0.5s,baz=162,slow=27 | | | | | | |
| **BRLS** | **Boroldav** | **2.36** | **336** | *e*P | **Pb** | **08 16 55.2** | **-0.5** |
| | 1.8nm,0.2s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **08 17 24.0** | **-0.8** |
| | 40nm,0.3s | | | | | | |
| **BRLS** | **Boroldav** | **2.36** | **336** | Pg | **Pb** | **08 16 55.2** | **-0.5** |
| | 1.8nm,0.2s | | | | | | |
| BRLS | | | | Lg | Lg | 08 17 24.0 | |
| | 40nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **2.42** | **39** | *e*P | **Pg** | **08 17 00.5** | **+1.1** |
| | 1.9nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **08 17 32.7** | **+2.1** |
| | 9.4nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **2.42** | **39** | Pg | **Pg** | **08 17 00.5** | **+1.1** |
| | 1.9nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 08 17 32.7 | |
| | 9.4nm,0.3s | | | | | | |
| **ARLS** | **Aral** | **2.57** | **67** | ⇓*e*P | **Pn** | **08 16 55.7** | **+0.8** |
| | baz=64 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sn** | **08 17 24.5** | **-1.8** |
| | baz=64 | | | | | | |
| **AAK** | **Ala-Archa** | **3.05** | **54** | ⇑Pg | Pg | 08 17 16.5 | +5.1 |
| | 1.4nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 08 17 49.2 | |
| | 3.0nm,0.5s | | | | | | |
| **SGDS** | **Sogindy** | **3.64** | **44** | *e*P | **Pg** | **08 17 22.9** | **+0.2** |
| | 1.0nm,0.6s | | | | | | |
| SGDS | | | | *e*S | **Sg** | **08 18 11.4** | **+1.6** |
| | 2.2nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.89** | **57** | ⇓Pg | **Pg** | **08 17 30.0** | **+2.6** |
| | 2.0nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 08 18 17.2 | |
| | 3.6nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.16** | **54** | *e*P | **Pg** | **08 17 32.1** | **-0.7** |
| | 1.1nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **08 18 27.2** | **+0.5** |
| | 3.3nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.16** | **54** | Pg | **Pg** | **08 17 32.1** | **-0.7** |
| | 1.1nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 08 18 27.2 | |
| | 3.3nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **4.66** | **26** | *e*P | **Pg** | **08 18 41.1** | **-1.9** |
| | 0.4nm,0.3s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **08 18 41.1** | **-1.6** |
| | 3.7nm,0.6s | | | | | | |
| **BTLS** | **Baital** | **4.66** | **26** | Pg | **Pg** | **08 17 40.4** | **-1.9** |
| | 0.4nm,0.3s | | | | | | |
| BTLS | | | | Lg | Lg | 08 18 41.1 | |
| | 3.7nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **4.87** | **50** | *e*P | **Pg** | **08 17 44.2** | **-2.2** |
| | 1.1nm,0.3s | | | | | | |
| KUU | | | | *e*S | **Sg** | **08 18 48.3** | **-1.1** |
| | 2.8nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **4.87** | **50** | Pg | **Pg** | **08 17 44.2** | **-2.2** |
| | 1.1nm,0.3s | | | | | | |
| KUU | | | | Lg | Lg | 08 18 48.3 | |
| | 2.8nm,0.5s | | | | | | |

**IDC 27 08:32:53.1±4.3,18.42S×177.79W,h0km,mb3.4/3, mb1 3.7/3,mb1mx3.5/31,mbtmp3.4/3,Error ellipse: s-maj=300.6km s-min=34.0km az=153.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.12** | **260** | P | P | 08 41 12.1 | +0.4 |
| | 0.1nm,0.3s,baz=96,slow=7.5,SNR=8.8 | | | | | | |
| **ASAR** | **Alice Springs** | **45.22** | **255** | P | P | 08 41 11.8 | -0.6 |
| | 0.4nm,0.6s,baz=98,slow=8.1,SNR=8.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.39** | **44** | P | P | 08 45 01.5 | 0.0 |
| | 0.1nm,0.3s,baz=228,slow=5.3,SNR=1.5 | | | | | | |

*IDC* ***27*** *08:46:32.4±2.7,0˙.95S×127˙.05E,h82km±30km,mb3.1/3, mb1 3.4/6,mb1mx3.2/38,mbtmp3.6/6,MS2.5/2,Ms1 2.5/2, ms1mx2.2/20,Error ellipse: s-maj=23.4km s-min=20.5km az=159.0*

**ISC 27 08:46:28.1±1.4,0˙.9S±0˙.2×126˙.8E±0˙.1,h35km,n8,σ0°88/6, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.43** | **89** | P | **Pn** | **08 47 32.5** | **-0.4** |
| | 3.7nm,0.3s,baz=272,slow=11,SNR=3.8 | | | | | | |
| SIJI | | | | S | **Sn** | **08 48 24.0** | **+0.7** |
| | 1.1nm,0.3s,baz=233,slow=20,SNR=1.2 | | | | | | |
| **KAPI** | **Kappang** | **8.16** | **240** | P | Pn | 08 48 30.8 | +6.7 |
| | 1.3nm,0.3s,baz=22,slow=11,SNR=2.2 | | | | | | |
| **BATI** | **Baumata** | **9.75** | **199** | LR | LR | 08 53 14.2 | |
| | comp=Z,49nm,20.1s,baz=123,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.11** | **184** | P | **P** | **08 50 26.9** | **+0.9** |
| | 0.2nm,0.3s,baz=21,slow=8.6,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.28** | **159** | P | **P** | **08 51 00.4** | **-0.5** |
| | 0.4nm,0.4s,baz=340,slow=12,SNR=7.7 | | | | | | |
| **GUMO** | **Guam** | **22.97** | **50** | LR | LR | 08 59 39.0 | |
| | comp=Z,8.2nm,20.4s,baz=102,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **23.62** | **164** | P | **P** | **08 51 35.4** | **-0.8** |
| | 0.6nm,0.5s,baz=341,slow=7.6,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.45** | **327** | P | **P** | **08 56 41.2** | **+0.1** |
| | 0.4nm,0.5s,baz=109,slow=8.3,SNR=7.8 | | | | | | |

*NAO* ***27*** *08:49:05.9±1.0,76˙.94N×19˙.06E,h15km±9km,ML2.5*
*BER* ***27*** *08:49:08.2±2.7,76˙.94N×18˙.85E,h15km±26km,ML2.2, ML2.5(NAO),Confirmed Earthquake*
*IEPN* ***27*** *08:49:12.0,76˙.98N×19˙.30E,h10km*

**ISC 27 08:49:06.1±1.6,76.98N±0.04×19.10E±0.06,h11km±14km, n21,σ1°66/40,2D,Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HSPB** | **Hornsund (broa** | **0.81** | **273** | Pg | **Pg** | **08 49 21.3** | **-0.3** |
| HSPB | | | | Lg | Lg | 08 49 32.1 | |
| **HSPB** | **Hornsund (broa** | **0.81** | **273** | *e*P | **Pg** | **08 49 21.4** | **-0.2** |
| HSPB | | | | *e*S | **Sg** | **08 49 30.8** | **-1.3** |
| HSPB | | | | IAML | | 08 49 35.8 | |
| | comp=Z,39nm,0.3s | | | | | | |
| **HSPB** | **Hornsund (broa** | **0.81** | **273** | ⇓*i*P | **Pg** | **08 49 21.3** | **-0.3** |
| HSPB | | | | *i* S | **Sg** | **08 49 31.5** | **-0.6** |
| **SPA0** | **Spitsbergen Ar** | **1.34** | **335** | Pn | **Pn** | **08 49 30.3** | **-0.3** |
| | baz=148,slow=18 | | | | | | |
| SPA0 | | | | Pg | **Pb** | **08 49 31.1** | **0.0** |
| | baz=148,slow=22 | | | | | | |
| SPA0 | | | | Lg | Lg | 08 49 49.5 | |
| | baz=143,slow=37 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.34** | **335** | Pn | **Pn** | **08 49 30.3** | **-0.3** |
| | baz=148,slow=18 | | | | | | |
| SPA0 | | | | Pg | **Pb** | **08 49 31.1** | **0.0** |
| | baz=148,slow=22 | | | | | | |
| SPA0 | | | | Sg | **Sb** | **08 49 49.5** | **+1.2** |
| | baz=143,slow=37 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.34** | **335** | ⇓*i*P | **Pn** | **08 49 30.4** | **-0.3** |
| SPA0 | | | | *i* S | **Sb** | **08 49 48.7** | **+0.5** |
| **HOPEN** | **Hopen** | **1.44** | **106** | Pg | **Pn** | **08 49 33.9** | **+1.9** |
| HOPEN | | | | Lg | Lg | 08 49 51.6 | |
| **HOPEN** | **Hopen** | **1.44** | **106** | *e*P | **Pn** | **08 49 33.7** | **+1.7** |
| HOPEN | | | | *e*S | **Sn** | **08 49 51.9** | **+1.0** |
| HOPEN | | | | IAML | | 08 49 53.8 | |
| | comp=Z,136nm,0.3s | | | | | | |
| **HOPEN** | **Hopen** | **1.44** | **106** | *e*P | **Pn** | **08 49 33.2** | **+1.2** |
| HOPEN | | | | *e*S | **Sn** | **08 49 50.3** | **-0.5** |
| **BRBA** | **Barentsburg A** | **1.52** | **318** | Pn | **Pn** | **08 49 32.9** | **-0.2** |
| BRBA | | | | Pg | **Pn** | **08 49 34.4** | **+1.4** |
| BRBA | | | | Lg | Lg | 08 49 54.3 | |
| **BRBA** | **Barentsburg A** | **1.52** | **318** | *e*Pg | **Pn** | **08 49 34.4** | **+1.4** |
| BRBA | | | | *e*Sg | **Sb** | **08 49 54.3** | **+1.0** |
| BRBA | | | | IAML | | 08 49 55.8 | |
| | comp=Z,73nm,0.6s | | | | | | |
| **BRBB** | **Barentsburg B** | **1.54** | **319** | Pn | **Pn** | **08 49 33.2** | **-0.1** |
| BRBB | | | | Pg | **Pb** | **08 49 34.8** | **+0.3** |
| BRBB | | | | Lg | Lg | 08 49 54.6 | |
| **BRBB** | **Barentsburg B** | **1.54** | **319** | *e*Pg | **Pn** | **08 49 34.7** | **+1.3** |
| BRBB | | | | *e*Sg | **Sn** | **08 49 54.5** | **+1.2** |
| **KBS** | **Kingsbay** | **2.46** | **326** | Pn | **Pn** | **08 49 45.3** | **-0.8** |
| KBS | | | | Pg | **Pb** | **08 49 51.1** | **+0.8** |
| KBS | | | | Lg | Lg | 08 50 22.3 | |
| **KBS** | **Kingsbay** | **2.46** | **326** | *e*P | **Pn** | **08 49 45.2** | **-0.8** |
| KBS | | | | *e*Pg | **Pb** | **08 49 51.1** | **+0.8** |
| KBS | | | | *e*Sg | **Sb** | **08 50 21.8** | **+1.3** |
| KBS | | | | IAML | | 08 50 30.0 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **KBS** | **Kingsbay** | **2.46** | **326** | P | **Pb** | **08 49 51.9** | **+1.7** |
| KBS | | | | *i* S | **Sb** | **08 50 21.6** | **+1.1** |
| **BJO1** | **Bjornoya** | **2.49** | **181** | P | **Pb** | **08 49 51.1** | **+0.4** |
| BJO1 | | | | S | **Sb** | **08 50 20.8** | **-0.5** |
| **ZFI** | **Zemlya Franca-** | **6.63** | **42** | P | **Pn** | **08 50 45.5** | **+2.3** |
| ZFI | | | | *e*S | **Sn** | **08 51 53.4** | **-5.2** |
| | comp=Z,12nm,2.5s | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **6.63** | **42** | P | **Pn** | **08 50 46.4** | **+3.1** |
| ZFI2 | | | | *e*S | **Sn** | **08 51 53.7** | **-4.9** |
| **ARA0** | **ARCESS Array S** | **7.70** | **163** | Pn | **Pn** | **08 50 56.8** | **-1.2** |
| | baz=354,slow=10 | | | | | | |
| ARA0 | | | | Sn | Sn | 08 52 15.1 | -10 |
| | baz=360,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.70** | **163** | Pn | **Pn** | **08 50 56.8** | **-1.2** |
| | baz=354,slow=10 | | | | | | |
| ARA0 | | | | Sn | Sn | 08 52 15.1 | -10 |
| | baz=360,slow=22 | | | | | | |

*IDC* ***27*** *08:52:49.4±0.7,4˙.54N×32˙.59W,h0km,mb4.0/14, mb1 4.2/15,mb1mx4.1/37,mbtmp4.0/15,ML3.6/1,MS3.8/51, Ms1 3.8/51,ms1mx3.7/88,Error ellipse: s-maj=23.3km s-min=17.4km az=160.0*
*NEIC* ***27*** *08:52:51.5±1.4,4˙.6N±0˙.1×32˙.6W±0˙.1,h10km±1km, mb4.7/23,Error ellipse: s-maj=19.1km s-min=15.3km az=137.0*
*GCMT* ***27*** *08:52:52.5±0.3,4˙.50N±0˙.04×32˙.44W±0˙.02,h27km±1km, MW4.9/80,Moment Tensor Solution. s14,c14; s80,c98; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.30±.21; Mθθ0.18±.12; Mϕϕ2.12±.12; Mrθ-0.99±.25; Mθϕ-0.73±.09; Mϕr-0.93±.16; Best double couple: M₀2.67000×10¹⁶ NP1:φs141.00000°,δ42.00000°,λ-125.00000°. NP2: φs5.00000°,δ57.00000°,λ-62.00000°. Principal axes: T 2.4430, Plg8.0000°, Azm75.0000°; N 0.4520, Plg23.0000°, Azm169.0000°; P -2.8970, Plg66.0000°, Azm328.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 27 08:52:50.7±0.5,4.47N±0.09×32.53W±0.09,h11km,n92, σ0°93/40,mb4.3/22,MS3.8/50,2C,Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCBR** | **Riachuelo** | **10.77** | **198** | Pn | **Pn** | **08 55 24.9** | **-0.1** |
| | 0.4nm,0.3s,baz=333,slow=10,SNR=2.2 | | | | | | |
| RCBR | | | | LR | LR | 08 58 32.0 | |
| | comp=Z,444nm,21.4s,baz=163,slow=32 | | | | | | |
| **RCBR** | **Riachuelo** | **10.77** | **198** | Pn | **Pn** | **08 55 26.6** | **+1.6** |
| **SACV** | **Santiago Islan** | **13.64** | **39** | Pn | **Pn** | **08 56 03.0** | **-1.2** |
| **MBO** | **M'Bour** | **18.24** | **56** | P | **Pn** | **08 57 03.0** | **-0.9** |
| MBO | | | | IAmb | IAmb | 08 57 16.8 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **MDP** | **Montagnes des** | **20.05** | **273** | LR | LR | 09 03 26.8 | |
| | comp=Z,156nm,21.2s,baz=51,slow=32 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **21.75** | **124** | T | T | 09 20 13.1 | |
| | baz=304,slow=75,SNR=32 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.76** | **124** | T | T | 09 20 17.7 | |
| | baz=304,slow=75,SNR=34 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.77** | **124** | T | T | 09 20 14.6 | |
| | baz=304,slow=75,SNR=54 | | | | | | |
| **ASCN** | **Ascension** | **21.92** | **124** | P | **P** | **08 57 43.8** | **-0.5** |
| **H10S3** | **ASCENSION HYDR** | **22.25** | **127** | T | T | 09 20 58.5 | |
| | baz=304,slow=74,SNR=44 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.27** | **127** | T | T | 09 21 00.1 | |
| | baz=276,slow=74,SNR=30 | | | | | | |
| **BDFB** | **Brasilia** | **25.19** | **217** | LR | LR | 09 07 04.4 | |
| | comp=Z,259nm,20.5s,baz=0.3,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **25.19** | **217** | P | **P** | **08 58 15.1** | **-1.5** |
| **DBIC** | **Dimbokro** | **27.63** | **84** | P | **P** | **08 58 38.8** | **+0.2** |
| DBIC | | | | IAmb | IAmb | 08 58 44.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **27.90** | **260** | P | **P** | **08 58 40.9** | **-0.1** |
| | comp=Z,2.5nm,0.5s,baz=87,slow=17,SNR=7.8 | | | | | | |
| PTGA | | | | LR | LR | 09 08 41.6 | |
| | comp=Z,306nm,19.6s,baz=52,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.58** | **291** | T | T | 09 29 52.5 | |
| | SNR=12 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.37** | **295** | T | T | 09 30 42.6 | |
| **SIV** | **San Ignacio** | **34.80** | **234** | LR | LR | 09 13 07.6 | |
| | comp=Z,416nm,20.7s,baz=116,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.86** | **73** | P | **P** | **08 59 42.5** | **+0.2** |
| | comp=Z,3.2nm,0.8s,baz=270,slow=7.6,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.86** | **73** | P | **P** | **08 59 42.2** | **-0.2** |
| TORD | | | | IAmb | IAmb | 08 59 45.3 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **SJG** | **San Juan** | **35.56** | **295** | LR | LR | 09 10 56.0 | |
| | comp=Z,140nm,21.9s,baz=103,slow=31 | | | | | | |
| **EMPR** | **Esperanza - Ma** | **36.01** | **295** | P | **P** | **08 59 51.5** | **-0.7** |
| **SDV** | **Santo Domingo** | **38.08** | **279** | LR | LR | 09 16 12.4 | |
| | comp=Z,75nm,19.5s,baz=80,slow=37 | | | | | | |
| **MDT** | **Midelt** | **38.41** | **39** | LR | LR | 09 14 59.4 | |
| | comp=Z,180nm,19.3s,baz=348,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **38.92** | **217** | LR | LR | 09 15 40.2 | |
| | comp=Z,181nm,21.5s,baz=42,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **40.80** | **239** | P | **P** | **09 00 34.9** | **+1.6** |
| | comp=Z,1.5nm,0.8s,baz=79,slow=9.2,SNR=5.0 | | | | | | |
| LPAZ | | | | LR | LR | 09 16 43.2 | |
| | comp=Z,138nm,18.9s,baz=84,slow=35 | | | | | | |
| **ROSC** | **El Rosal** | **41.65** | **272** | LR | LR | 09 18 33.5 | |
| | comp=Z,194nm,18.3s,baz=82,slow=37 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.53** | **32** | LR | LR | 09 16 04.1 | |
| | comp=Z,76nm,18.2s,baz=218,slow=32 | | | | | | |
| **LVC** | **Limon Verde** | **44.59** | **231** | LR | LR | 09 20 21.1 | |
| | comp=Z,89nm,20.2s,baz=57,slow=37 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.42** | **157** | T | T | 09 50 04.3 | |
| | SNR=9.4 | | | | | | |
| **NNA** | **Nana** | **47.00** | **249** | LR | LR | 09 20 55.2 | |
| | comp=Z,145nm,18.4s,baz=74,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.20** | **256** | LR | LR | 09 21 46.2 | |
| | comp=Z,275nm,18.1s,baz=58,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.53** | **46** | LR | LR | 09 22 44.0 | |
| | comp=Z,202nm,19.0s,baz=255,slow=36 | | | | | | |
| **VAE** | **Valguarnera** | **53.95** | **46** | LR | LR | 09 25 00.9 | |
| | comp=Z,142nm,19.9s,baz=238,slow=36 | | | | | | |
| **TSUM** | **Tsumeb** | **54.63** | **117** | LR | LR | 09 20 51.6 | |
| | comp=Z,115nm,19.6s,baz=329,slow=31 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.80** | **34** | LR | LR | 09 23 03.2 | |
| | comp=Z,53nm,21.3s,baz=250,slow=32 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **55.94** | **20** | LR | LR | 09 21 58.1 | |
| | comp=Z,84nm,19.1s,baz=192,slow=31 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.41** | **310** | LR | LR | 09 21 04.8 | |
| | comp=Z,88nm,21.6s,baz=132,slow=30 | | | | | | |
| **PLCA** | **Paso Flores** | **56.87** | **214** | LR | LR | 09 26 45.9 | |
| | comp=Z,137nm,19.6s,baz=57,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **57.17** | **322** | LR | LR | 09 24 30.8 | |
| | comp=Z,70nm,18.5s,baz=336,slow=33 | | | | | | |
| **SCHQ** | **Schefferville** | **57.34** | **337** | P | **P** | **09 02 39.1** | **+0.4** |
| | comp=Z,3.9nm,0.9s,baz=97,slow=4.3,SNR=4.1 | | | | | | |
| **GERES** | **GERESS Array B** | **59.09** | **34** | P | **P** | **09 02 51.4** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=267,slow=12,SNR=4.3 | | | | | | |
| **VRAC** | **Vranov** | **60.95** | **34** | LR | LR | 09 26 09.3 | |
| | comp=Z,37nm,21.1s,baz=287,slow=33 | | | | | | |
| **IDI** | **Anoyia** | **61.07** | **52** | LR | LR | 09 29 54.0 | |
| | comp=Z,64nm,21.1s,baz=268,slow=36 | | | | | | |
| **SUR** | **Sutherland** | **62.46** | **130** | LR | LR | 09 24 51.4 | |
| | comp=Z,70nm,19.2s,baz=281,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **62.46** | **130** | P | **P** | **09 03 15.2** | **+0.7** |
| **LSZ** | **Lusaka** | **63.23** | **109** | LR | LR | 09 26 33.1 | |
| | comp=Z,52nm,19.0s,baz=310,slow=32 | | | | | | |
| **MBAR** | **Mbarara** | **63.41** | **93** | LR | LR | 09 28 04.3 | |
| | comp=Z,113nm,19.4s,baz=266,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **63.57** | **121** | LR | LR | 09 27 21.5 | |
| | comp=Z,69nm,18.1s,baz=272,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **63.57** | **121** | P | **P** | **09 03 21.5** | **-0.5** |
| LBTB | | | | IAmb | IAmb | 09 03 34.9 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **BOSA** | **Boshof** | **64.51** | **125** | P | **P** | **09 03 29.4** | **+1.3** |
| | comp=Z,3.8nm,0.9s,baz=310,slow=5.7,SNR=3.9 | | | | | | |
| BOSA | | | | LR | LR | 09 26 03.3 | |
| | comp=Z,73nm,19.8s,baz=338,slow=31 | | | | | | |
| **MATP** | **Matopo** | **64.78** | **115** | LR | LR | 09 27 34.1 | |
| | comp=Z,37nm,20.4s,baz=256,slow=32 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.06** | **41** | LR | LR | 09 30 18.4 | |
| | comp=Z,111nm,20.7s,baz=278,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.28** | **22** | P | **P** | **09 03 33.0** | **+0.6** |
| | comp=Z,1.1nm,1.0s,baz=230,slow=6.3,SNR=3.5 | | | | | | |
| NOA | | | | LR | LR | 09 30 13.7 | |
| | comp=Z,39nm,18.6s,baz=235,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **65.65** | **23** | LR | LR | 09 29 17.8 | |
| | comp=Z,32nm,19.3s,baz=264,slow=33 | | | | | | |
| **EIL** | **Elat** | **68.26** | **60** | LR | LR | 09 34 53.5 | |
| | comp=Z,171nm,18.0s,baz=278,slow=37 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.90** | **49** | P | **P** | **09 03 57.1** | **+1.1** |
| | comp=Z,1.4nm,0.9s,baz=246,slow=4.9,SNR=6.5 | | | | | | |
| BRTR | | | | LR | LR | 09 36 03.8 | |
| | comp=Z,40nm,18.8s,baz=286,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.91** | **37** | P | **P** | **09 03 56.7** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=249,slow=6.6,SNR=6.2 | | | | | | |
| AKASG | | | | LR | LR | 09 31 40.4 | |
| | comp=Z,38nm,20.5s,baz=248,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.91** | **37** | P | **P** | **09 03 56.4** | **+0.8** |
| AKASG | | | | IAmb | IAmb | 09 03 59.4 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **69.10** | **56** | LR | LR | 09 37 39.0 | |
| | comp=Z,26nm,18.3s,baz=54,slow=39 | | | | | | |
| **K31A** | **O'Neill** | **69.58** | **314** | P | **P** | **09 03 59.5** | **-0.5** |
| **BNN** | **Bunyan** | **70.41** | **50** | P | **P** | **09 04 07.4** | **+2.1** |
| **TXAR** | **Lajitas Array** | **71.39** | **299** | P | **P** | **09 04 11.5** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=131,slow=5.7,SNR=3.4 | | | | | | |
| **FINES** | **FINESS Array B** | **71.49** | **26** | LR | LR | 09 30 51.2 | |
| | comp=Z,63nm,21.9s,baz=313,slow=32 | | | | | | |
| **SDCO** | **Great Sand Dun** | **73.82** | **308** | P | **P** | **09 04 26.0** | **0.0** |
| **ISCO** | **Idaho Springs** | **74.16** | **310** | P | **P** | **09 04 28.0** | **0.0** |
| **ANMO** | **Albuquerque** | **74.28** | **305** | LR | LR | 09 33 24.8 | |
| | comp=Z,109nm,20.3s,baz=38,slow=33 | | | | | | |
| **DGMT** | **Dagmar** | **74.54** | **319** | P | **P** | **09 04 29.6** | **0.0** |
| DGMT | | | | IAmb | IAmb | 09 04 31.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **75.04** | **18** | LR | LR | 09 31 03.3 | |
| | comp=Z,51nm,21.2s,baz=307,slow=31 | | | | | | |
| **LAO** | **LASA Array** | **75.59** | **317** | P | **P** | **09 04 35.5** | **-0.3** |
| LAO | | | | IAmb | IAmb | 09 04 44.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **GNI** | **Garni** | **77.40** | **50** | LR | LR | 09 42 18.1 | |
| | comp=Z,36nm,18.4s,baz=270,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.45** | **313** | P | **P** | **09 04 45.9** | **-0.8** |
| | comp=Z,0.8nm,0.7s,baz=103,slow=6.4,SNR=7.1 | | | | | | |
| PDAR | | | | LR | LR | 09 37 08.7 | |
| | comp=Z,36nm,18.8s,baz=180,slow=34 | | | | | | |
| **LOHW** | **Long Hollow** | **78.29** | **313** | P | **P** | **09 04 51.5** | **+0.2** |
| LOHW | | | | IAmb | IAmb | 09 04 59.5 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **FLWY** | **Flagg Ranch** | **78.40** | **314** | P | **P** | **09 04 52.1** | **+0.3** |
| FLWY | | | | IAmb | IAmb | 09 04 58.4 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **YHH** | **Holmes Hill** | **78.57** | **315** | P | **P** | **09 04 53.3** | **+0.4** |
| **HWUT** | **Hardware Ranch** | **78.85** | **311** | P | **P** | **09 04 53.4** | **-0.9** |
| HWUT | | | | IAmb | IAmb | 09 04 55.7 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **BGU** | **Big Grassy Mou** | **79.91** | **311** | P | **P** | **09 04 59.6** | **-0.5** |
| **RPN** | **Rapa Nui** | **80.34** | **242** | LR | LR | 09 36 32.3 | |
| | comp=Z,36nm,20.7s,baz=50,slow=33 | | | | | | |
| **EDM** | **Edmonton** | **80.94** | **323** | P | **P** | **09 05 05.4** | **+0.2** |
| EDM | | | | IAmb | IAmb | 09 05 07.2 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **KIRV** | **Kirov** | **82.00** | **32** | LR | LR | 09 38 12.0 | |
| | comp=Z,42nm,21.3s,baz=320,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.39** | **332** | P | **P** | **09 05 11.6** | **-1.0** |
| | comp=Z,1.0nm,0.7s,baz=96,slow=5.0,SNR=14 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.94** | **308** | P | **P** | **09 05 22.2** | **+0.7** |
| | comp=Z,0.4nm,0.7s

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.20** | **331** | P | Pg | 09 04 45.0 | +0.6 |
| | baz=331 | | | | | | |
| STYH | | | | S | Sg | 09 04 48.0 | +0.9 |
| | baz=331 | | | | | | |
| **STYT** | **Tauyuan** | **0.21** | **326** | P | Pg | 09 04 44.9 | +0.5 |
| | baz=328 | | | | | | |
| STYT | | | | S | Sg | 09 04 47.9 | +0.6 |
| | baz=328 | | | | | | |
| **SLGT** | **Liugui** | **0.22** | **270** | P | Pg | 09 04 45.5 | +0.8 |
| | baz=270 | | | | | | |
| SLGT | | | | eS | Sg | 09 04 48.5 | +0.9 |
| | baz=270 | | | | | | |
| **ELDTW** | **Lidau** | **0.23** | **32** | eP | Pg | 09 04 45.2 | +0.2 |
| | baz=35 | | | | | | |
| ELDTW | | | | eS | Sg | 09 04 48.2 | +0.2 |
| | baz=35 | | | | | | |
| **LONT** | **Longtian** | **0.24** | **110** | eP | Pg | 09 04 46.0 | +0.8 |
| | baz=112 | | | | | | |
| LONT | | | | eS | Sg | 09 04 49.4 | +1.1 |
| | baz=112 | | | | | | |
| **TWG** | **Pinlang** | **0.24** | **134** | P | Pg | 09 04 46.2 | +1.1 |
| | baz=134 | | | | | | |
| TWG | | | | S | Sg | 09 04 49.9 | +1.5 |
| | baz=134 | | | | | | |
| **TWGBT** | **Beinan** | **0.25** | **134** | P | Pg | 09 04 46.2 | +1.0 |
| | baz=134 | | | | | | |
| TWGBT | | | | S | Sg | 09 04 49.9 | +1.3 |
| | baz=134 | | | | | | |
| **SGST** | **Jiashian** | **0.29** | **288** | P | Pg | 09 04 46.4 | +0.3 |
| | baz=293 | | | | | | |
| SGST | | | | eS | Sg | 09 04 51.0 | +1.1 |
| | baz=293 | | | | | | |
| **SSD** | **Sandimen** | **0.34** | **223** | P | Pg | 09 04 47.5 | +0.6 |
| | baz=217 | | | | | | |
| SSD | | | | eS | Sg | 09 04 52.2 | +0.8 |
| | baz=217 | | | | | | |
| **WTP** | **Ta-pu** | **0.35** | **316** | P | Pb | 09 04 48.5 | -0.7 |
| | baz=317 | | | | | | |
| WTP | | | | S | Sb | 09 04 54.0 | -1.1 |
| | baz=317 | | | | | | |
| **TSMG** | **Majia** | **0.36** | **218** | eP | Pg | 09 04 47.8 | +0.4 |
| | baz=216 | | | | | | |
| TSMG | | | | eS | Sg | 09 04 52.4 | +0.3 |
| | baz=216 | | | | | | |
| **SCST** | **Cishan** | **0.37** | **254** | P | Pb | 09 04 49.1 | -0.4 |
| | baz=253 | | | | | | |
| **CHN1** | **Nanshi** | **0.38** | **301** | P | Pb | 09 04 49.9 | +0.3 |
| | baz=308 | | | | | | |
| CHN1 | | | | S | Sb | 09 04 56.0 | +0.2 |
| | baz=308 | | | | | | |
| **TPUB** | **Ta-pu** | **0.39** | **323** | P | Pb | 09 04 49.2 | -0.6 |
| | baz=323 | | | | | | |
| TPUB | | | | eS | Sb | 09 04 54.5 | -1.5 |
| | baz=323 | | | | | | |
| **EDH** | **Donghe** | **0.39** | **93** | eP | Pb | 09 04 49.2 | -0.6 |
| | baz=87 | | | | | | |
| EDH | | | | eS | Sb | 09 04 55.0 | -1.0 |
| | baz=87 | | | | | | |
| **ECL** | **Taimali** | **0.40** | **171** | eP | Pg | 09 04 48.9 | +0.8 |
| | baz=168 | | | | | | |
| ECL | | | | eS | Sg | 09 04 54.0 | +0.6 |
| | baz=168 | | | | | | |
| **SNST** | **Tainan City** | **0.42** | **303** | eP | Pb | 09 04 50.5 | +0.2 |
| | baz=306 | | | | | | |
| SNST | | | | eS | Sb | 09 04 57.0 | 0.0 |
| | baz=306 | | | | | | |
| **FULB** | **Fuli** | **0.43** | **61** | P | Pb | 09 04 49.6 | -0.9 |
| | baz=63 | | | | | | |
| FULB | | | | eS | Sb | 09 04 55.8 | -1.5 |
| | baz=63 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.44** | **211** | P | Pg | 09 04 49.4 | +0.5 |
| | baz=206 | | | | | | |
| MASBT | | | | eS | Sg | 09 04 55.3 | +0.6 |
| | baz=206 | | | | | | |
| **TWK** | **Hsinying** | **0.46** | **307** | eP | Pb | 09 04 51.1 | +0.2 |
| | baz=314 | | | | | | |
| TWK | | | | eS | Sb | 09 04 58.5 | +0.5 |
| | baz=314 | | | | | | |
| **CHKT** | **Chengkung** | **0.46** | **76** | eP | Pb | 09 04 50.9 | 0.0 |
| | baz=79 | | | | | | |
| CHKT | | | | eS | Sb | 09 04 58.0 | 0.0 |
| | baz=79 | | | | | | |
| **SHHT** | **Tainan City** | **0.49** | **273** | eP | Pn | 09 04 53.1 | -0.9 |
| | baz=273 | | | | | | |
| SHHT | | | | eS | Sb | 09 05 02.1 | +3.1 |
| | baz=273 | | | | | | |
| **ALS** | **Alishan** | **0.52** | **352** | P | Pg | 09 04 51.1 | +0.6 |
| | baz=4.0 | | | | | | |
| ALS | | | | S | Sb | 09 04 58.9 | -1.2 |
| | baz=4.0 | | | | | | |
| **EYUL** | **Yuli** | **0.54** | **49** | eP | Pg | 09 04 50.5 | -0.1 |
| | baz=50 | | | | | | |
| EYUL | | | | eS | Sg | 09 04 57.8 | +0.2 |
| | baz=50 | | | | | | |
| **YULB** | **Yu-li** | **0.55** | **44** | eP | Pg | 09 04 50.7 | -0.3 |
| | baz=56 | | | | | | |
| YULB | | | | eS | Sg | 09 04 58.3 | 0.0 |
| | baz=56 | | | | | | |
| **SSPT** | **Xinbi** | **0.58** | **210** | eP | Pb | 09 04 52.5 | -0.6 |
| | baz=198 | | | | | | |
| SSPT | | | | eS | Sb | 09 05 01.5 | -0.1 |
| | baz=198 | | | | | | |
| **EAST** | **Anshuo** | **0.61** | **183** | eP | Pb | 09 04 52.9 | -0.6 |
| | baz=171 | | | | | | |
| EAST | | | | eS | Sg | 09 05 01.0 | +1.1 |
| | baz=171 | | | | | | |
| **LDUT** | **Ludao** | **0.63** | **120** | eP | Pg | 09 04 52.6 | +0.2 |
| | baz=121 | | | | | | |
| LDUT | | | | eS | Sb | 09 05 03.7 | +0.8 |
| | baz=121 | | | | | | |
| **TAWH** | **Dawu Township** | **0.65** | **180** | eP | Pb | 09 04 53.6 | -0.6 |
| | baz=179 | | | | | | |
| TAWH | | | | eS | Sg | 09 05 01.9 | +0.6 |
| | baz=179 | | | | | | |
| **EHY** | **Hungye** | **0.65** | **38** | eP | Pg | 09 04 53.1 | +0.2 |
| | baz=49 | | | | | | |
| EHY | | | | eS | Sg | 09 05 01.3 | -0.2 |
| | baz=49 | | | | | | |
| **CHY** | **Chiayi** | **0.66** | **320** | eP | Pb | 09 04 55.1 | +0.8 |
| | baz=321 | | | | | | |
| CHY | | | | eS | Sb | 09 05 05.4 | +1.6 |
| | baz=321 | | | | | | |
| **SCZT** | **Fangliau** | **0.66** | **202** | eP | Pg | 09 04 53.6 | +0.5 |
| | baz=190 | | | | | | |
| SCZT | | | | eS | Sg | 09 05 02.5 | +0.7 |
| | baz=190 | | | | | | |
| **ICHU** | **Yijhu** | **0.67** | **304** | eP | Pb | 09 04 54.6 | +0.1 |
| | baz=317 | | | | | | |
| ICHU | | | | eS | Sn | 09 05 06.5 | -0.8 |
| | baz=317 | | | | | | |
| **HGSD** | **Ruisui** | **0.70** | **45** | eP | Pb | 09 04 54.6 | -0.5 |
| | baz=37 | | | | | | |
| HGSD | | | | eS | Sb | 09 05 04.9 | -0.2 |
| | baz=37 | | | | | | |
| **WDLH** | **Douliu** | **0.76** | **336** | eP | Pn | 09 04 57.1 | -0.7 |
| | baz=336 | | | | | | |
| WDLH | | | | eS | Sn | 09 05 08.4 | -1.2 |
| | baz=336 | | | | | | |
| **SLIU** | **Shizi** | **0.78** | **186** | eP | Pg | 09 04 55.8 | +0.5 |
| | baz=176 | | | | | | |
| SLIU | | | | eS | Sb | 09 05 06.8 | -0.4 |
| | baz=176 | | | | | | |
| **WLCH** | **Liuqiu** | **0.79** | **216** | eP | Pn | 09 04 58.5 | +0.4 |
| | baz=216 | | | | | | |
| **VWDT** | **VWDT** | **0.79** | **17** | eP | Pg | 09 04 55.6 | -0.1 |
| | baz=14 | | | | | | |
| VWDT | | | | eS | Sb | 09 05 07.4 | -0.3 |
| | baz=14 | | | | | | |
| **SSLB** | **Suanglung** | **0.80** | **5** | eP | Pg | 09 04 55.5 | -0.2 |
| | baz=6.0 | | | | | | |
| SSLB | | | | eS | Sb | 09 05 07.0 | -0.8 |
| | baz=6.0 | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.80** | **311** | eP | Pn | 09 04 57.7 | -0.7 |
| | baz=312 | | | | | | |
| WSL | | | | eS | Sn | 09 05 09.8 | -0.8 |
| | baz=312 | | | | | | |
| **WTK** | **Tuku** | **0.83** | **327** | eS | Sn | 09 05 12.1 | +0.8 |
| | baz=328 | | | | | | |
| **WSF** | **Szhu** | **0.89** | **317** | eS | Sn | 09 05 12.8 | +0.2 |
| | baz=318 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.89** | **1** | eP | Pb | 09 04 58.6 | +0.3 |
| | baz=11 | | | | | | |
| SMLT | | | | eS | Sn | 09 05 11.9 | -1.0 |
| | baz=11 | | | | | | |
| **WNT** | **Mingjian** | **0.90** | **348** | eP | Pb | 09 04 59.1 | +0.6 |
| | baz=334 | | | | | | |
| WNT | | | | eS | Sn | 09 05 13.7 | +0.6 |
| | baz=334 | | | | | | |
| **TYC** | **Yuchr** | **0.91** | **358** | eP | Pb | 09 04 59.0 | +0.4 |
| | baz=7.0 | | | | | | |
| TYC | | | | eS | Sn | 09 05 12.8 | -0.5 |
| | baz=7.0 | | | | | | |
| **ESL** | **Shilin** | **0.96** | **32** | eP | Pb | 09 04 59.6 | 0.0 |
| | baz=40 | | | | | | |
| ESL | | | | eS | Sg | 09 05 11.6 | +0.2 |
| | baz=40 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.02** | **333** | eS | Sn | 09 05 15.6 | -0.4 |
| | baz=334 | | | | | | |
| **WUSB** | **Renai** | **1.02** | **12** | eP | Pg | 09 05 00.0 | 0.0 |
| | baz=13 | | | | | | |
| WUSB | | | | eS | Sn | 09 05 15.7 | -0.5 |
| | baz=13 | | | | | | |
| **TWK1** | **Hengchun** | **1.05** | **184** | eP | Pn | 09 05 02.0 | +0.4 |
| | baz=176 | | | | | | |
| TWK1 | | | | eS | Sn | 09 05 16.4 | -0.3 |
| | baz=176 | | | | | | |
| **TWKBT** | **Hengchun** | **1.05** | **184** | eP | Pn | 09 05 01.8 | +0.1 |
| | baz=183 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.06** | **1** | eP | Pb | 09 05 01.1 | -0.1 |
| | baz=11 | | | | | | |
| WCS | | | | eS | Sn | 09 05 16.9 | -0.1 |
| | baz=11 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.09** | **179** | eS | Sn | 09 05 18.3 | +0.7 |
| | baz=179 | | | | | | |
| **CHGB** | **Renai** | **1.10** | **14** | eP | Pn | 09 05 02.4 | -0.2 |
| | baz=15 | | | | | | |
| CHGB | | | | eS | Sn | 09 05 17.6 | -0.6 |
| | baz=15 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **17** | eP | Pg | 09 05 03.4 | -0.1 |
| | baz=18 | | | | | | |
| WHF | | | | eS | Sb | 09 05 20.4 | +0.6 |
| | baz=18 | | | | | | |
| **WHP** | **Taichung City** | **1.28** | **3** | eP | Pb | 09 05 06.5 | +1.5 |
| | baz=11 | | | | | | |
| WHP | | | | eS | Sn | 09 05 24.5 | +1.9 |
| | baz=11 | | | | | | |
| **FUSS** | **Fushou** | **1.29** | **15** | eP | Pb | 09 05 06.2 | +0.8 |
| | baz=15 | | | | | | |
| FUSS | | | | eS | Sn | 09 05 23.3 | +0.1 |
| | baz=15 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.31** | **294** | eP | Pn | 09 05 03.7 | -1.7 |
| | baz=294 | | | | | | |
| PHUB | | | | eS | Sg | 09 05 21.2 | -1.4 |
| | baz=294 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.33** | **24** | eS | Sn | 09 05 23.8 | +0.1 |
| | baz=13 | | | | | | |
| **PNG** | **Penghu** | **1.35** | **295** | eP | Pn | 09 05 05.5 | -0.3 |
| | baz=296 | | | | | | |
| PNG | | | | eS | Sg | 09 05 23.8 | +0.1 |
| | baz=296 | | | | | | |
| **WDJ** | **Dajia District** | **1.37** | **351** | eP | Pg | 09 05 06.7 | +0.1 |
| | baz=341 | | | | | | |
| WDJ | | | | eS | Sn | 09 05 26.4 | +1.7 |
| | baz=341 | | | | | | |
| **NNSB** | **Datong** | **1.50** | **18** | eP | Pb | 09 05 08.9 | 0.0 |
| | baz=18 | | | | | | |
| NNSB | | | | eS | Sg | 09 05 29.7 | +1.0 |
| | baz=18 | | | | | | |
| **NNS** | **Nan Shan** | **1.51** | **17** | eP | Pb | 09 05 08.9 | 0.0 |
| | baz=18 | | | | | | |
| NNS | | | | eS | Sg | 09 05 29.8 | +0.8 |
| | baz=18 | | | | | | |
| **ENA** | **Nanau** | **1.63** | **29** | eS | Sg | 09 05 32.5 | -0.4 |
| | baz=29 | | | | | | |
| **LATG** | **Datong** | **1.65** | **21** | eP | Pg | 09 05 11.7 | -0.3 |
| | baz=36 | | | | | | |
| LATG | | | | eS | Sg | 09 05 34.2 | +0.9 |
| | baz=36 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.65** | **7** | eP | Pg | 09 05 12.6 | +0.6 |
| | baz=9.0 | | | | | | |
| NFF | | | | eS | Sg | 09 05 34.5 | +1.2 |
| | baz=9.0 | | | | | | |
| **LIOB** | **Emei** | **1.65** | **4** | eP | Pg | 09 05 11.7 | -0.4 |
| | baz=5.0 | | | | | | |
| LIOB | | | | eS | Sg | 09 05 33.2 | -0.3 |
| | baz=5.0 | | | | | | |
| **EWUT** | **Wuta** | **1.66** | **29** | eS | Sg | 09 05 33.6 | -0.3 |
| | baz=29 | | | | | | |
| **YHNB** | **Yeheng** | **1.73** | **15** | eP | Pb | 09 05 12.8 | +0.1 |
| | baz=15 | | | | | | |
| YHNB | | | | eS | Sg | 09 05 36.1 | +0.1 |
| | baz=15 | | | | | | |
| **NSK** | **Sanguang** | **1.73** | **14** | eP | Pg | 09 05 13.5 | -0.1 |
| | baz=15 | | | | | | |
| NSK | | | | eS | Sg | 09 05 36.9 | +0.8 |
| | baz=15 | | | | | | |
| **ENTT** | **Nioudou** | **1.76** | **21** | eP | Pg | 09 05 13.9 | -0.2 |
| | baz=35 | | | | | | |
| ENTT | | | | eS | Sg | 09 05 37.4 | +0.5 |
| | baz=35 | | | | | | |
| **NDS** | **Dongshan** | **1.80** | **25** | eP | Pb | 09 05 13.7 | -0.2 |
| | baz=43 | | | | | | |
| NDS | | | | eS | Sb | 09 05 37.2 | +0.4 |
| | baz=43 | | | | | | |
| **NWLT** | **Wulai** | **1.86** | **18** | eP | Pg | 09 05 15.8 | -0.4 |
| | baz=17 | | | | | | |
| NWLT | | | | eS | Sg | 09 05 40.1 | -0.3 |
| | baz=17 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.87** | **20** | eP | Pg | 09 05 16.0 | -0.3 |
| | baz=33 | | | | | | |
| FUSB | | | | eS | Sg | 09 05 40.9 | +0.2 |
| | baz=33 | | | | | | |
| **ILA** | **Ilan** | **1.94** | **24** | eS | Sg | 09 05 41.8 | -0.8 |
| | baz=41 | | | | | | |
| **TIPB** | **Shuangxi** | **2.15** | **23** | eP | Pb | 09 05 19.4 | -0.4 |
| | baz=38 | | | | | | |
| TIPB | | | | eS | Sb | 09 05 46.2 | -0.7 |
| | baz=38 | | | | | | |

**TAP 27 09:05:02.4, 24°.14N × 121°.61E, h3 km, ML1.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETL** | **Fush Village** | **0.02** | **37** | eP | Pg | 09 05 03.3 | +0.2 |
| | baz=38 | | | | | | |
| ETL | | | | eS | Sg | 09 05 04.0 | +0.5 |
| | baz=38 | | | | | | |
| **NACB** | **Ninganchiao** | **0.03** | **338** | P | Pg | 09 05 03.7 | +0.5 |
| | baz=336 | | | | | | |
| NACB | | | | S | Sg | 09 05 04.5 | +0.7 |
| | baz=336 | | | | | | |
| **TWD** | **Chiawan** | **0.06** | **191** | P | Pg | 09 05 04.3 | +0.6 |
| | baz=183 | | | | | | |
| TWD | | | | S | Sg | 09 05 05.7 | +1.2 |
| | baz=183 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.13** | **299** | eP | Pg | 09 05 06.2 | +1.1 |
| | baz=298 | | | | | | |
| ETLH | | | | eS | Sg | 09 05 08.6 | +1.8 |
| | baz=298 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.13** | **299** | eP | Pg | 09 05 06.0 | +0.9 |
| | baz=13 | | | | | | |
| **HWA** | **Hwalien** | **0.16** | **181** | eP | Pg | 09 05 06.6 | +1.0 |
| | baz=178 | | | | | | |
| **EWUT** | **Wuta** | **0.34** | **27** | eP | Pb | 09 05 10.5 | -0.6 |
| | baz=27 | | | | | | |
| EWUT | | | | eS | Sb | 09 05 15.5 | -1.5 |
| | baz=27 | | | | | | |
| **EWUT** | **Wuta** | **0.34** | **27** | eP | Pb | 09 05 10.5 | -0.6 |
| | baz=29 | | | | | | |

*NEIC **27** 09:11:23.0±0.8, 17°.8S±0°.2×178°.5W±0°.1, h595 km±9 km, mb4.3/30, Error ellipse: s-maj=25.3km s-min=6.0km az=148.0*

*IDC **27** 09:11:23.8±1.5, 17°.61S×178°.67W, h598 km±15 km, mb3.3/8, mb1 3.6/11, mb1mx3.4/31, mbtmp4.2/11, Error ellipse: s-maj=69.8km s-min=13.0km az=151.0*

**ISC 27 09:11:23.0±0.6, 17°.9S±0°.2×178°.5W±0°.1, h600 km, n50, σ0°66/51, mb4.3/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.29** | **272** | P | **P** | **09 12 45.0** | **+1.0** |
| | 7.7nm,0.3s,baz=126,slow=2.0,SNR=20 | | | | | | |
| **MSVF** | **Nonsavu** | **3.29** | **272** | P | **P** | **09 12 44.1** | **+0.1** |
| **AFI** | **Afiamalu** | **7.56** | **60** | P | **P** | **09 13 17.4** | **-0.9** |
| | 3.6nm,0.3s,baz=170,slow=0.7,SNR=5.2 | | | | | | |
| **AFI** | **Afiamalu** | **7.56** | **60** | P | **P** | **09 13 17.1** | **-1.2** |
| AFI | | | | S | **S** | **09 14 51.0** | **-1.7** |
| **SANVU** | **Saraoutou** | **13.91** | **278** | P | **P** | **09 14 21.3** | **+0.2** |
| **PINNC** | **Pines Island,** | **14.02** | **248** | P | **P** | **09 14 22.2** | **+0.1** |
| **DZM** | **Mont Dzumac** | **14.77** | **251** | P | **P** | **09 14 28.7** | **-0.5** |
| | 0.5nm,0.3s,baz=120,slow=21,SNR=7.2 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EIDS** | **Eidsvold** | **29.21** | **250** | P | **P** | **09 16 38.1** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 09 16 42.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **29.90** | **240** | P | **P** | **09 16 43.8** | **-0.2** |
| ARMA | | | | IAmb | IAmb | 09 16 45.3 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.67** | **232** | P | **P** | **09 17 16.3** | **+0.4** |
| **PMG** | **Port Moresby** | **34.37** | **280** | P | **P** | **09 17 21.3** | **-0.6** |
| **COEN** | **Coen** | **37.02** | **270** | P | **P** | **09 17 42.9** | **-0.8** |
| **TOO** | **Toolangi** | **37.14** | **231** | P | **P** | **09 17 44.0** | **-0.4** |
| TOO | | | | IAmb | IAmb | 09 17 48.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.59** | **241** | P | **P** | **09 17 56.8** | **+0.6** |
| | comp=Z,4.6nm,0.6s,baz=84,slow=11,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **38.59** | **241** | P | **P** | **09 17 56.5** | **+0.3** |
| **BBOO** | **Buckleboo** | **43.36** | **241** | P | **P** | **09 18 33.8** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.37** | **259** | P | **P** | **09 18 41.2** | **-0.7** |
| **WB0** | **Warramunga Arr** | **44.53** | **260** | P | **P** | **09 18 42.8** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 09 18 43.3 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.55** | **259** | P | **P** | **09 18 42.8** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 09 18 43.6 | |
| | comp=Z,6.8nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.55** | **260** | P | **P** | **09 18 42.8** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 09 18 43.5 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **259** | P | **P** | **09 18 42.9** | **-0.4** |
| | comp=Z,3.7nm,0.5s,baz=95,slow=7.2,SNR=106 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **259** | P | **P** | **09 18 42.8** | **-0.5** |
| **AS31** | **Alice Springs** | **44.73** | **254** | P | **P** | **09 18 44.6** | **0.0** |
| AS31 | | | | IAmb | IAmb | 09 18 45.6 | |
| | comp=Z,7.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.73** | **254** | P | **P** | **09 18 44.5** | **0.0** |
| | comp=Z,26nm,0.7s,baz=87,slow=8.5,SNR=496 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 20 13.8** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=104,slow=3.3,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **44.73** | **254** | P | **P** | **09 18 44.9** | **+0.3** |
| **MTN** | **Manton Dam** | **48.72** | **268** | P | **P** | **09 19 13.6** | **-1.0** |
| MTN | | | | IAmb | IAmb | 09 19 15.3 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **49.96** | **245** | P | **P** | **09 19 23.1** | **-0.4** |
| FORT | | | | IAmb | IAmb | 09 19 23.3 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **50.41** | **264** | P | **P** | **09 19 27.1** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 09 19 27.5 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.96** | **261** | P | **P** | **09 19 45.2** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **57.84** | **255** | P | **P** | **09 20 18.8** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 09 20 18.9 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **60.43** | **246** | P | **P** | **09 20 35.5** | **-0.6** |
| **UGM** | **Wanagama** | **69.57** | **268** | P | **P** | **09 21 33.5** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.20** | **180** | P | **P** | **09 21 48.4** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **73.61** | **345** | P | **P** | **09 21 56.2** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **73.61** | **345** | P | **P** | **09 21 55.4** | **-0.6** |
| **SAO** | **San Andreas Ge** | **76.44** | **44** | P | **P** | **09 22 12.7** | **+0.4** |
| SAO | | | | IAmb | IAmb | 09 22 21.2 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.44** | **44** | P | **P** | **09 22 29.4** | **+0.9** |
| | comp=Z,1.2nm,0.8s,baz=226,slow=8.7,SNR=9.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.44** | **44** | P | **P** | **09 22 28.6** | **0.0** |
| **O18K** | **Koktuh Hills** | **79.72** | **12** | P | **P** | **09 22 29.8** | **+0.6** |
| O18K | | | | IAmb | IAmb | 09 22 46.5 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.19** | **14** | P | **P** | **09 22 47.4** | **+0.4** |
| **RND** | **Reindeer** | **84.23** | **13** | P | **P** | **09 22 53.2** | **+1.1** |
| RND | | | | IAmb | IAmb | 09 23 03.5 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **85.85** | **13** | P | **P** | **09 22 59.4** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=224,slow=5.0,SNR=11 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | **P** | **09 23 03.0** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=220,slow=6.1,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | **P** | **09 23 02.3** | **+0.8** |
| **J25K** | **Salcha River,** | **86.05** | **14** | P | **P** | **09 23 01.4** | **+0.6** |
| **M30M** | **Minto, Yukon** | **86.61** | **18** | P | **P** | **09 23 04.5** | **+1.0** |
| M30M | | | | IAmb | IAmb | 09 23 32.7 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| **DAWY** | **Dawson** | **87.06** | **16** | P | **P** | **09 23 06.4** | **+0.9** |
| DAWY | | | | IAmb | IAmb | 09 23 34.1 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.37** | **43** | P | **P** | **09 23 08.5** | **+0.8** |
| | comp=Z,0.6nm,0.6s,baz=223,slow=3.5,SNR=7.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.32** | **25** | P | **P** | **09 23 39.5** | **+0.5** |
| | comp=Z,0.2nm,0.6s,baz=273,slow=6.4,SNR=1.7 | | | | | | |
| **GO04** | **Tololo Observa** | **95.64** | **124** | | pP | 09 25 53.5 | -2.0 |

**NOU 27 09:20:03.0, 15°.33S × 167°.44E, h20 km, mb3.9/11, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.26** | **243** | P | Pn | 09 20 10.4 | -1.3 |
| **DVP** | **Devils Point** | **2.49** | **163** | P | Pn | 09 20 43.1 | +0.7 |
| **KOUNC** | **Koumac, New Ca** | **6.00** | **210** | P | Pn | 09 21 31.1 | +0.4 |
| **YATNC** | **Mamie plateau,** | **6.71** | **184** | P | Pn | 09 21 39.5 | -1.0 |
| **DZM** | **Mont Dzumac** | **6.77** | **188** | P | Pn | 09 21 41.4 | 0.0 |
| **OUENC** | **Ouen Island, N** | **7.07** | **185** | P | Pn | 09 21 45.2 | -0.2 |
| **PINNC** | **Pines Island,** | **7.24** | **180** | P | Pn | 09 21 48.1 | +0.3 |

*IDC **27** 09:22:14.8±2.4, 36°.38N × 71°.33E, h193 km±21 km, mb3.3/9, mb1 3.5/16, mb1mx3.2/47, mbtmp3.9/16, Error ellipse: s-maj=17.8km s-min=14.4km az=7.0*

*NNC **27** 09:22:24.2±5.7, 37°.04N × 71°.40E, h237 km±111 km, mb3.1, mpv4.5, Error ellipse: s-maj=67.1km s-min=31.8km az=8.0*

**ISC 27 09:22:20.0±0.7, 36°.57N±0°.06 × 71°.6E±0°.1, h250 km, n33, σ2°35/39, mb3.5/9, 3C-4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEP** | **Cherat** | **2.76** | **174** | P | **Pn** | **09 23 08.3** | **-1.9** |
| CEP | | | | S | **S** | **09 23 45.0** | **-4.8** |
| **CHCP** | **Chirah Chowk** | **3.23** | **154** | P | **Pn** | **09 23 14.9** | **-0.2** |
| **AML** | **Almayashu** | **5.79** | **16** | P | **Pn** | **09 23 44.6** | **-1.3** |
| | SNR=359 | | | | | | |
| **UCH** | **Uchtor** | **6.10** | **21** | P | **Pn** | **09 23 48.8** | **-0.9** |
| | SNR=123 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.32** | **15** | P | **Pn** | **09 23 51.2** | **-1.0** |
| | SNR=72 | | | | | | |
| **AAK** | **Ala-Archa** | **6.47** | **20** | P | **Pn** | **09 23 53.3** | **-0.7** |
| | 11nm,0.3s,baz=196,slow=6.3,SNR=128 | | | | | | |
| AAK | | | | S | **S** | **09 25 05.3** | **-4.2** |
| | 2.4nm,0.3s,baz=162,slow=19,SNR=7.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.47** | **20** | P | **Pn** | **09 23 53.5** | **-0.6** |
| | SNR=63 | | | | | | |
| **AAK** | **Ala-Archa** | **6.47** | **20** | ⇓P | **Pn** | **09 23 53.4** | **-0.7** |
| | 30nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **S** | **09 25 05.5** | **-3.9** |
| | 24nm,0.8s | | | | | | |
| **KK02** | **Karatay Array** | **6.57** | **353** | ⇑P | **Pn** | **09 23 52.8** | **-2.5** |
| | 11nm,0.7s,baz=176,slow=12 | | | | | | |
| KK02 | | | | ⇑S | **S** | **09 25 03.7** | **-7.9** |
| | 38nm,0.5s,baz=170,slow=22 | | | | | | |
| **KBK** | **Karagaybulak** | **6.62** | **22** | P | **Pn** | **09 23 55.8** | **-0.2** |
| | SNR=25 | | | | | | |
| **ULHL** | **Ulahol** | **6.73** | **31** | P | **Pn** | **09 23 56.5** | **-0.9** |
| | SNR=27 | | | | | | |
| **CHMS** | **Chumysh** | **6.88** | **20** | P | **Pn** | **09 23 58.3** | **-0.7** |
| | SNR=8.8 | | | | | | |
| **USP** | **Ospenovka** | **7.06** | **18** | P | **Pn** | **09 24 00.4** | **-1.0** |
| | SNR=27 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.07** | **25** | P | **Pn** | **09 24 01.1** | **-0.5** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.07** | **25** | ⇓P | **Pn** | **09 24 00.9** | **-0.7** |
| | 28nm,0.5s | | | | | | |
| TKM2 | | | | S | **S** | **09 25 19.2** | **-3.9** |
| **MDOK** | **Medeo** | **7.82** | **31** | ⇑P | **Pn** | **09 24 10.3** | **-0.8** |
| | 19nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **10.79** | **281** | P | Pn | 09 24 44.4 | -4.2 |
| | 0.5nm,0.3s,baz=34,slow=14,SNR=1.6 | | | | | | |
| GEYT | | | | S | S | 09 26 40.1 | -9.4 |
| | 0.6nm,0.3s,baz=72,slow=9.5,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.98** | **35** | P | **Pn** | **09 25 15.2** | **-0.3** |
| | 0.9nm,0.3s,baz=212,slow=12,SNR=55 | | | | | | |
| MKAR | | | | S | **S** | **09 27 41.0** | **+1.4** |
| | baz=203,slow=20,SNR=1.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.92** | **18** | P | **Pn** | **09 25 38.3** | **-0.7** |
| | 0.2nm,0.3s,baz=210,slow=8.5,SNR=18 | | | | | | |
| **AB31** | **Akbulak array** | **15.24** | **330** | ⇓P | **P** | **

1.0nm,0.3s,baz=144,slow=8.2,SNR=13
AKTO S **S** **09 29 08.8 +4.3**
0.1nm,0.3s,baz=196,slow=18,SNR=1.9
**ZALV Zalesovo Beam 19.67 24** P **P** **09 26 31.7 +1.4**
0.7nm,0.3s,baz=214,slow=10,SNR=7.9
**FINES FINESS Array B 37.67 326** P **P** **09 29 11.7 +0.6**
0.6nm,0.5s,baz=123,slow=10,SNR=8.1
**ARCES ARCESS Array B 41.25 337** P **P** **09 29 41.9 +1.5**
6.3nm,1.2s,baz=117,slow=8.7,SNR=13
**NB2 NORSAR Subarra 44.59 323** P **P** **09 30 07.3 0.0**
comp=Z,0.3nm,0.5s,baz=97,slow=7.9
**NOA NORSAR Array B 44.59 323** P **P** **09 30 07.3 0.0**
comp=Z,0.7nm,0.7s,baz=96,slow=7.7,SNR=4.7
**TORD Torodi Ar. Bea 66.16 269** P **P** **09 32 39.7 -1.5**
comp=Z,1.1nm,0.5s,baz=51,slow=6.2,SNR=10
**INK Inuvik 73.76 9** P **P** **09 33 28.9 +2.5**
comp=Z,0.4nm,0.5s,baz=347,slow=4.6,SNR=3.8
**ILAR Eielson Array 74.59 16** P **P** **09 33 33.3 +2.0**
comp=Z,0.1nm,0.3s,baz=330,slow=5.5,SNR=2.3
**YKA Yellowknife Ar 81.15 3** P **P** **09 34 09.2 +1.9**
comp=Z,0.4nm,0.6s,baz=350,slow=5.6,SNR=8.4
**WRA Warramunga Arr 81.65 122** P **P** **09 34 11.9 +1.3**
comp=Z,0.9nm,0.9s,baz=324,slow=4.8,SNR=8.1
**ASAR Alice Springs 83.93 125** P **P** **09 34 23.6 +1.4**
comp=Z,0.9nm,0.7s,baz=310,slow=5.0,SNR=18

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*IDC **27** 09:47:01.1±1.3,4˚.26S×128˚.63E,h0km,mb3.7/2,*
*mb1 4.0/6,mb1mx3.8/32,mbtmp3.9/6,ML3.7/4,MS3.2/2,*
*Ms1 3.2/2,ms1mx2.4/74,Error ellipse: s-maj=48.0km*
*s-min=23.4km az=82.0*
*DJA **27** 09:47:05.4±0.7,4˚S±6˚×12˚9E±˚,h10km,M3.6/7,MLv3.6/7*
**ISC 27 09:47:05.1**±0.9,**4˚.16S**±0˚.07×**128˚.69E**±0˚.06,**h35**km,**n10,**
σ1§**96**/**13**,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **0.68** | **314** | P | | **Pn** | | **09 47 17.5** | **-0.7** |
| AAI | | | | S | | **Sn** | | **09 47 26.2** | **-1.4** |
| **MSAI** | **Masohi** | **0.84** | **17** | P | | **Pn** | | **09 47 19.5** | **-1.0** |
| MSAI | | | | S | | **Sn** | | **09 47 29.4** | **-2.2** |
| **SANI** | **Sanana** | **3.41** | **308** | P | | **Pn** | | **09 47 58.2** | **+2.3** |
| **FAKI** | **Fak Fak** | **3.76** | **71** | P | | **Pn** | | **09 48 02.4** | **+1.7** |
| **SIJI** | **Sorong** | **4.16** | **38** | Pn | | **Pn** | | **09 48 07.3** | **+1.2** |
| | 15nm,0.3s,baz=235,slow=9.1,SNR=21 | | | | | | | | |
| SIJI | | | | Sn | | **Sn** | | **09 48 52.8** | **-0.8** |
| | 3.3nm,0.3s,baz=229,slow=19,SNR=6.9 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.17** | **192** | Pn | | **Pn** | | **09 50 21.4** | **-2.0** |
| | 0.1nm,0.3s,baz=22,slow=16,SNR=5.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.63** | **161** | Pn | | **Pn** | | **09 50 52.8** | **-2.9** |
| | 0.2nm,0.3s,baz=342,slow=12,SNR=10 | | | | | | | | |
| WRA | | | | LR | | LR | | 09 57 56.9 | |
| | comp=Z,48nm,20.2s,baz=46,slow=40 | | | | | | | | |
| **ASAR** | **Alice Springs** | **20.04** | **166** | P | | **P** | | **09 51 36.0** | **+0.7** |
| | 0.7nm,0.3s,baz=348,slow=11,SNR=61 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.15** | **327** | P | | **P** | | **09 57 44.3** | **+1.7** |
| | 0.3nm,0.6s,baz=121,slow=5.6,SNR=5.7 | | | | | | | | |
| MKAR | | | | LR | | LR | | 10 30 02.4 | |
| | comp=Z,26nm,18.2s,baz=78,slow=40 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.47** | **334** | P | | **P** | | **09 58 05.6** | **+2.0** |
| | 0.4nm,0.3s,baz=114,slow=3.6,SNR=2.4 | | | | | | | | |

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*JMA **27** 10:04:27.2±0.2,23˚.28N×121˚.73E,h9km±4km,M3.2*
*TAP **27** 10:04:27.9,23˚.21N×121˚.55E,h41km,ML3.4,C*
**ISC 27 10:04:27.7**±1.0,**23˚.19N**±0˚.02×**121˚.65E**±0˚.02,**h32**km±4km,
**n100,**σ1§**14**/187,**3C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ECBN** | **Changbin** | **0.22** | **304** | ⇑*i*P | | **Pb** | | **10 04 34.9** | **+0.5** |
| | baz=321 | | | | | | | | |
| ECBN | | | | *i*S | | **Sb** | | **10 04 39.8** | **+0.9** |
| | baz=321 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.27** | **250** | ⇑*i*P | | **Pb** | | **10 04 35.2** | **+0.2** |
| | baz=233 | | | | | | | | |
| CHKT | | | | *i*S | | **Sb** | | **10 04 40.6** | **+0.5** |
| | baz=233 | | | | | | | | |
| **FULB** | **Fuli** | **0.32** | **271** | P | | **Pb** | | **10 04 35.7** | **-0.1** |
| | baz=267 | | | | | | | | |
| FULB | | | | S | | **Sb** | | **10 04 42.2** | **+1.0** |
| | baz=267 | | | | | | | | |
| **EYUL** | **Yuli** | **0.34** | **297** | P | | **Pb** | | **10 04 36.2** | **+0.3** |
| | baz=305 | | | | | | | | |
| EYUL | | | | S | | **Sn** | | **10 04 43.6** | **+1.5** |
| | baz=305 | | | | | | | | |
| **TWF1** | **Yuli** | **0.36** | **296** | ⇑*i*P | | **Pb** | | **10 04 36.0** | **-0.2** |
| | baz=304 | | | | | | | | |
| TWF1 | | | | *e*S | | **Sb** | | **10 04 41.6** | **-0.3** |
| | baz=304 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.36** | **326** | P | | **Pb** | | **10 04 35.7** | **-0.5** |
| | baz=341 | | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | | **10 04 44.8** | **+2.1** |
| | baz=341 | | | | | | | | |
| **YULB** | **Yu-li** | **0.38** | **302** | P | | **Pb** | | **10 04 36.1** | **-0.4** |
| | baz=309 | | | | | | | | |
| YULB | | | | S | | **Sb** | | **10 04 41.1** | **-1.2** |
| | baz=309 | | | | | | | | |
| **EDH** | **Donghe** | **0.38** | **235** | P | | **Pb** | | **10 04 36.8** | **+0.3** |
| | baz=217 | | | | | | | | |
| EDH | | | | S | | **Sb** | | **10 04 43.2** | **+0.7** |
| | baz=217 | | | | | | | | |
| **ECS** | **Chishang** | **0.40** | **256** | P | | **Pb** | | **10 04 37.3** | **+0.5** |
| | baz=249 | | | | | | | | |
| **EHY** | **Hungye** | **0.43** | **316** | P | | **Pb** | | **10 04 36.6** | **-0.6** |
| | baz=314 | | | | | | | | |
| EHY | | | | S | | **Sb** | | **10 04 42.7** | **-1.0** |
| | baz=314 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.52** | **349** | *e*P | | **Pb** | | **10 04 38.6** | **0.0** |
| | baz=6.0 | | | | | | | | |
| TEGC | | | | *e*S | | **Sb** | | **10 04 46.1** | **0.0** |
| | baz=6.0 | | | | | | | | |
| **LDUT** | **Ludao** | **0.54** | **197** | *e*P | | **Pb** | | **10 04 38.7** | **-0.2** |
| | baz=186 | | | | | | | | |
| LDUT | | | | S | | **Sb** | | **10 04 46.8** | **+0.2** |
| | baz=186 | | | | | | | | |
| **LONT** | **Longtian** | **0.55** | **239** | *e*P | | **Pb** | | **10 04 38.6** | **-0.5** |
| | baz=241 | | | | | | | | |
| LONT | | | | S | | **Sb** | | **10 04 46.1** | **-0.9** |
| | baz=241 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.58** | **270** | P | | **Pb** | | **10 04 38.5** | **-1.1** |
| | baz=261 | | | | | | | | |
| ELDTW | | | | S | | **Sb** | | **10 04 45.4** | **-2.4** |
| | baz=261 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.64** | **234** | P | | **Pb** | | **10 04 39.5** | **-1.0** |
| | baz=237 | | | | | | | | |
| TWGBT | | | | S | | **Sb** | | **10 04 47.9** | **-1.4** |
| | baz=237 | | | | | | | | |
| **TWG** | **Pinlang** | **0.65** | **235** | P | | **Pb** | | **10 04 39.6** | **-1.0** |
| | baz=238 | | | | | | | | |
| TWG | | | | S | | **Sb** | | **10 04 47.9** | **-1.5** |
| | baz=238 | | | | | | | | |
| **ESL** | **Shilin** | **0.65** | **343** | P | | **Pb** | | **10 04 39.9** | **-0.8** |
| | baz=343 | | | | | | | | |
| ESL | | | | S | | **Sb** | | **10 04 47.7** | **-1.8** |
| | baz=343 | | | | | | | | |
| **VWDT** | **VWDT** | **0.72** | **320** | P | | **Pb** | | **10 04 41.0** | **-0.9** |
| | baz=326 | | | | | | | | |
| VWDT | | | | *e*S | | **Sb** | | **10 04 51.5** | **-0.1** |
| | baz=326 | | | | | | | | |
| **ETM** | **Tongmen** | **0.78** | **350** | *e*P | | **Pn** | | **10 04 41.4** | **-1.0** |
| | baz=346 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.80** | **268** | *e*P | | **Pn** | | **10 04 42.2** | **-0.5** |
| | baz=260 | | | | | | | | |
| STYH | | | | S | | **Sb** | | **10 04 51.9** | **-1.8** |
| | baz=260 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.82** | **268** | P | | **Pn** | | **10 04 42.5** | **-0.5** |
| | baz=260 | | | | | | | | |
| STYT | | | | S | | **Sb** | | **10 04 52.5** | **-1.8** |
| | baz=260 | | | | | | | | |
| **ALS** | **Alishan** | **0.83** | **292** | P | | **Pn** | | **10 04 43.2** | **-0.2** |
| | baz=294 | | | | | | | | |
| ALS | | | | S | | **Sb** | | **10 04 53.7** | **-1.3** |
| | baz=294 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.87** | **313** | P | | **Pn** | | **10 04 42.9** | **-0.8** |
| | baz=322 | | | | | | | | |
| SSLB | | | | S | | **Sb** | | **10 04 52.6** | **-3.0** |
| | baz=322 | | | | | | | | |
| **ECL** | **Taimali** | **0.87** | **227** | *e*P | | **Pn** | | **10 04 42.4** | **-1.3** |
| | baz=220 | | | | | | | | |
| ECL | | | | *e*S | | **Sb** | | **10 04 53.3** | **-2.4** |
| | baz=220 | | | | | | | | |
| **TWD** | **Chiawan** | **0.88** | **357** | *e*P | | **Pn** | | **10 04 43.2** | **-0.7** |
| | baz=352 | | | | | | | | |
| TWD | | | | *e*S | | **Sn** | | **10 04 54.6** | **-0.9** |
| | baz=352 | | | | | | | | |
| **WUSB** | **Renai** | **0.93** | **329** | *e*P | | **Pn** | | **10 04 44.0** | **-0.7** |
| | baz=335 | | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | | **10 04 53.7** | **-3.2** |
| | baz=335 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.94** | **277** | P | | **Pn** | | **10 04 44.9** | **+0.2** |
| | baz=276 | | | | | | | | |
| TPUB | | | | S | | **Sn** | | **10 04 57.3** | **+0.3** |
| | baz=276 | | | | | | | | |
| **SLGT** | **Liugui** | **0.94** | **258** | *e*P | | **Pn** | | **10 04 44.7** | **0.0** |
| | baz=255 | | | | | | | | |
| SLGT | | | | S | | **Sn** | | **10 04 56.8** | **-0.2** |
| | baz=255 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.95** | **273** | P | | **Pn** | | **10 04 45.1** | **+0.3** |
| | baz=272 | | | | | | | | |
| WTP | | | | S | | **Sn** | | **10 04 57.8** | **+0.5** |
| | baz=272 | | | | | | | | |
| **ETL** | **Fush Village** | **0.96** | **359** | *e*P | | **Pn** | | **10 04 44.2** | **-0.8** |
| | baz=355 | | | | | | | | |
| ETL | | | | *e*S | | **Sn** | | **10 04 56.7** | **-0.9** |
| | baz=355 | | | | | | | | |
| **CHGB** | **Renai** | **0.96** | **333** | *e*P | | **Pn** | | **10 04 44.6** | **-0.6** |
| | baz=346 | | | | | | | | |
| CHGB | | | | *e*S | | **Sn** | | **10 04 55.8** | **-2.1** |
| | baz=346 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.97** | **315** | *e*P | | **Pn** | | **10 04 44.9** | **-0.3** |
| | baz=322 | | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | | **10 04 56.1** | **-1.7** |
| | baz=322 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.98** | **357** | *e*P | | **Pn** | | **10 04 44.5** | **-0.7** |
| | baz=353 | | | | | | | | |
| NACB | | | | *e*S | | **Sn** | | **10 04 56.5** | **-1.4** |
| | baz=353 | | | | | | | | |
| **CHN4** | **Tsaushan** | **0.98** | **279** | P | | **Pn** | | **10 04 45.6** | **+0.4** |
| | baz=279 | | | | | | | | |
| CHN4 | | | | S | | **Sn** | | **10 04 58.0** | **+0.1** |
| | baz=279 | | | | | | | | |
| **SGST** | **Jiashian** | **0.98** | **264** | P | | **Pn** | | **10 04 44.7** | **-0.5** |
| | baz=261 | | | | | | | | |
| SGST | | | | S | | **Sn** | | **10 04 57.7** | **-0.4** |
| | baz=261 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.01** | **340** | *e*P | | **Pn** | | **10 04 45.0** | **-1.0** |
| | baz=356 | | | | | | | | |
| WHF | | | | *e*S | | **Sn** | | **10 04 57.4** | **-1.9** |
| | baz=356 | | | | | | | | |
| **TYC** | **Yuchr** | **1.01** | **315** | *e*P | | **Pn** | | **10 04 45.7** | **+0.1** |
| | baz=326 | | | | | | | | |
| TYC | | | | *e*S | | **Sn** | | **10 04 58.3** | **-0.4** |
| | baz=326 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.02** | **352** | *e*P | | **Pn** | | **10 04 44.8** | **-1.0** |
| | baz=358 | | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | | **10 04 56.3** | **-2.8** |
| | baz=358 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.03** | **270** | *e*P | | **Pn** | | **10 04 46.8** | **+1.0** |
| | baz=268 | | | | | | | | |
| CHN1 | | | | S | | **Sn** | | **10 05 00.3** | **+1.1** |
| | baz=268 | | | | | | | | |
| **SSD** | **Sandimen** | **1.03** | **245** | P | | **Pn** | | **10 04 46.7** | **+0.8** |
| | baz=240 | | | | | | | | |
| SSD | | | | *e*S | | **Sn** | | **10 04 58.9** | **-0.4** |
| | baz=240 | | | | | | | | |
| **TSMG** | **Majia** | **1.04** | **242** | *e*P | | **Pn** | | **10 04 46.0** | **-0.1** |
| | baz=238 | | | | | | | | |
| TSMG | | | | *e*S | | **Sn** | | **10 04 59.5** | **0.0** |
| | baz=238 | | | | | | | | |
| **WJS** | **Zhushan** | **1.05** | **307** | *e*P | | **Pn** | | **10 04 46.7** | **+0.6** |
| | baz=310 | | | | | | | | |
| WJS | | | | *e*S | | **Sn** | | **10 04 59.4** | **-0.3** |
| | baz=310 | | | | | | | | |
| **SNST** | **Tainan City** | **1.06** | **272** | *e*P | | **Pn** | | **10 04 47.2** | **+1.0** |
| | baz=270 | | | | | | | | |
| SNST | | | | *e*S | | **Sb** | | **10 05 01.4** | **+0.4** |
| | baz=270 | | | | | | | | |
| **TWK** | **Hsinying** | **1.07** | **274** | *e*P | | **Pn** | | **10 04 46.9** | **+0.4** |
| | baz=273 | | | | | | | | |
| TWK | | | | *e*S | | **Sn** | | **10 05 00.6** | **+0.4** |
| | baz=273 | | | | | | | | |
| **TAW** | **Tawu** | **1.08** | **220** | *e*P | | **Pn** | | **10 04 43.0** | **-3.6** |
| | baz=214 | | | | | | | | |
| TAW | | | | *e*S | | **Sn** | | **10 04 58.7** | **-1.7** |
| | baz=214 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.09** | **322** | *e*P | | **Pn** | | **10 04 46.7** | **0.0** |
| | baz=332 | | | | | | | | |
| **EAST** | **Anshuo** | **1.09** | **222** | *e*P | | **Pn** | | **10 04 46.2** | **-0.6** |
| | baz=217 | | | | | | | | |
| EAST | | | | *e*S | | **Sn** | | **10 04 59.8** | **-0.9** |
| | baz=217 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.10** | **238** | *e*P | | **Pn** | | **10 04 46.7** | **-0.1** |
| | baz=231 | | | | | | | | |
| MASBT | | | | *e*S | | **Sn** | | **10 04 59.7** | **-1.2** |
| | baz=231 | | | | | | | | |
| **TAWH** | **Dawu Township** | **1.10** | **220** | *e*P | | **Pn** | | **10 04 46.7** | **-0.1** |
| | baz=214 | | | | | | | | |
| TAWH | | | | *e*S | | **Sn** | | **10 04 59.2** | **-1.7** |
| | baz=214 | | | | | | | | |
| **SCST** | **Cishan** | **1.10** | **254** | *e*P | | **Pb** | | **10 04 48.8** | **+0.6** |
| | baz=251 | | | | | | | | |
| SCST | | | | *e*S | | **Sb** | | **10 05 02.9** | **+0.6** |
| | baz=251 | | | | | | | | |
| **FUSS** | **Fushou** | **1.11** | **341** | *e*P | | **Pn** | | **10 04 46.8** | **-0.5** |
| | baz=355 | | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | | **10 05 00.5** | **-1.1** |
| | baz=355 | | | | | | | | |
| **WNT** | **Mingjian** | **1.11** | **308** | *e*P | | **Pn** | | **10 04 47.9** | **+0.9** |
| | baz=312 | | | | | | | | |
| WNT | | | | *e*S | | **Sn** | | **10 05 01.8** | **+0.6** |
| | baz=312 | | | | | | | | |
| **WDLH** | **Douliu** | **1.13** | **296** | *e*P | | **Pn** | | **10 04 48.0** | **+0.8** |
| | baz=308 | | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | | **10 05 02.4** | **+0.7** |
| | baz=308 | | | | | | | | |
| **TDCB** | **Techi** | **1.15** | **337** | *e*P | | **Pn** | | **10 04 47.0** | **-0.6** |
| | baz=333 | | | | | | | | |
| **LAY** | **Lan-yu** | **1.15** | **184** | *e*P | | **Pn** | | **10 04 47.4** | **-0.2** |
| | baz=172 | | | | | | | | |
| LAY | | | | *e*S | | **Sn** | | **10 05 01.8** | **-0.5** |
| | baz=172 | | | | | | | | |
| **CHY** | **Chiayi** | **1.16** | **285** | *e*P | | **Pn** | | **10 04 47.6** | **-0.1** |
| | baz=285 | | | | | | | | |
| CHY | | | | *e*S | | **Sn** | | **10 05 02.6** | **+0.2** |
| | baz=285 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.18** | **265** | *e*P | | **Pn** | | **10 04 50.6** | **+1.0** |
| | baz=263 | | | | | | | | |
| CHN3 | | | | *e*S | | **Sb** | | **10 05 07.1** | **+2.5** |
| | baz=263 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.19** | **252** | *e*P | | **Pn** | | **10 04 50.3** | **+0.7** |
| | baz=249 | | | | | | | | |
| TWM1 | | | | *e*S | | **Sb** | | **10 05 07.3** | **+2.6** |
| | baz=249 | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.19** | **183** | *e*P | | **Pn** | | **10 04 47.6** | **-0.5** |
| | baz=171 | | | | | | | | |
| LYUB | | | | *e*S | | **Sn** | | **10 05 01.3** | **-1.8** |
| | baz=171 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.21** | **262** | *e*P | | **Pb** | | **10 04 50.5** | **+0.5** |
| | baz=259 | | | | | | | | |
| SHHT | | | | *e*S | | **Sb** | | **10 05 08.9** | **+3.7** |
| | baz=259 | | | | | | | | |
| **ENA** | **Nanau** | **1.23** | **4** | *e*P | | **Pn** | | **10 04 48.7** | **0.0** |
| | baz=20 | | | | | | | | |
| ENA | | | | *e*S | | **Sn** | | **10 05 03.3** | **-0.8** |
| | baz=20 | | | | | | | | |
| **SLIU** | **Shizi** | **1.25** | **219** | *e*P | | **Pn** | | **10 04 50.0** | **+1.1** |
| | baz=203 | | | | | | | | |
| **SCZT** | **Fangliau** | **1.25** | **229** | *e*P | | **Pn** | | **10 04 50.0** | **+1.1** |
| | baz=225 | | | | | | | | |
| **SSHA** | **Shanhua** | **1.25** | **268** | *e*P | | **Pn** | | **10 04 48.5** | **-0.4** |
| | baz=265 | | | | | | | | |
| SSHA | | | | *e*S | | **Sb** | | **10 05 06.8** | **+0.2** |
| | baz=265 | | | | | | | | |
| **EWUT** | **Wuta** | **1.25** | **6** | *e*S | | **Sn** | | **10 05 03.8** | **-0.9** |
| | baz=21 | | | | | | | | |
| **NNSB** | **Datong** | **1.25** | **349** | *e*P | | **Pn** | | **10 04 48.9** | **-0.1** |
| | baz=3.0 | | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | | **10 05 03.1** | **-1.8** |
| | baz=3.0 | | | | | | | | |
| **WTK** | **Tuku** | **1.25** | **293** | *e*P | | **Pn** | | **10 04 49.4** | **+0.5** |
| | baz=294 | | | | | | | | |
| WTK | | | | *e*S | | **Sn** | | **10 05 04.3** | **-0.4** |
| | baz=294 | | | | | | | | |
| **WHP** | **Taichung City** | **1.25** | **329** | *e*P | | **Pn** | | **10 04 50.0** | **+1.0** |
| | baz=334 | | | | | | | | |
| WHP | | | | *e*S | | **Sn** | | **10 05 05.8** | **+0.9** |
| | baz=334 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.27** | **349** | *e*P | | **Pn** | | **10 04 50.5** | **+1.3** |
| | baz=3.0 | | | | | | | | |
| NNS | | | | *e*S | | **Sn** | | **10 05 03.5** | **-1.7** |
| | baz=3.0 | | | | | | | | |
| **ICHU** | **Yijhu** | **1.27** | **278** | *e*P | | **Pn** | | **10 04 49.6** | **+0.4** |
| | baz=277 | | | | | | | | |
| ICHU | | | | *e*S | | **Sn** | | **10 05 05.4** | **+0.4** |
| | baz=277 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **1.28** | **250** | *e*P | | **Pb** | | **10 04 51.3** | **0.0** |
| | baz=247 | | | | | | | | |
| SNJT | | | | *e*S | | **Sb** | | **10 05 10.2** | **+2.7** |
| | baz=247 | | | | | | | | |
| **TCU** | **Taichung** | **1.30** | **317** | *e*P | | **Pn** | | **10 04 50.9** | **+1.3** |
| | baz=309 | | | | | | | | |
| TCU | | | | *e*S | | **Sn** | | **10 05 07.2** | **+1.4** |
| | baz=309 | | | | | | | | |
| **CHN8** | **Yiju** | **1.33** | **277** | *e*P | | **Pn** | | **10 04 50.3** | **+0.3** |
| | baz=276 | | | | | | | | |
| CHN8 | | | | *e*S | | **Sn** | | **10 05 07.4** | **+0.9** |
| | baz=276 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.33** | **312** | *e*P | | **Pn** | | **10 04 50.6** | **+0.6** |
| | baz=315 | | | | | | | | |
| WCHH | | | | *e*S | | **Sn** | | **10 05 07.2** | **+0.6** |
| | baz=315 | | | | | | | | |
| **SCLT** | **Jiali** | **1.33** | **269** | *e*P | | **Pn** | | **10 04 50.4** | **+0.4** |
| | baz=268 | | | | | | | | |
| SCLT | | | | *e*S | | **Sn** | | **10 05 08.1** | **+1.4** |
| | baz=268 | | | | | | | | |
| **LATG** | **Datong** | **1.34** | **355** | *e*P | | **Pn** | | **10 04 50.1** | **-0.2** |
| | baz=1.0 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.34** | **284** | *e*P | | **Pn** | | **10 04 50.5** | **+0.3** |
| | baz=284 | | | | | | | | |
| WSL | | | | *e*S | | **Sn** | | **10 05 06.2** | **-0.7** |
| | baz=284 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.36** | **301** | *e*P | | **Pn** | | **10 04 50.5** | **+0.1** |
| | baz=304 | | | | | | | | |
| WRL | | | | *e*S | | **Sn** | | **10 05 07.0** | **-0.3** |
| | baz=304 | | | | | | | | |
| **WSF** | **Szhu** | **1.38** | **289** | *e*S | | **Sn** | | **10 05 08.4** | **+0.6** |
| | baz=289 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.39** | **213** | *e*S | | **Sn** | | **10 05 07.1** | **-0.8** |
| | baz=197 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.40** | **325** | *e*P | | **Pn** | | **10 04 52.5** | **+1.5** |
| | baz=330 | | | | | | | | |
| TWQ1 | | | | *e*S | | **Sn** | | **10 05 09.7** | **+1.4** |
| | baz=330 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.41** | **355** | *e*P | | **Pn** | | **10 04 52.3** | **+1.2** |
| | baz=1.0 | | | | | | | | |
| NDT | | | | *e*S | | **Sn** | | **10 05 10.0** | **+1.5** |
| | baz=1.0 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.44** | **357** | *e*P | | **Pn** | | **10 04 52.8** | **+1.2** |
| | baz=3.0 | | | | | | | | |
| ENTT | | | | *e*S | | **Sn** | | **10 05 09.1** | **-0.3** |
| | baz=3.0 | | | | | | | | |
| **HEN** | **Hengchun** | **1.45** | **215** | *e*S | | **Sn** | | **10 05 09.0** | **-0.6** |
| | baz=200 | | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.46** | **208** | *e*S | | **Sn** | | **10 05 10.5** | **+0.7** |
| | baz=196 | | | | | | | | |
| **NSY** | **Sanyi** | **1.46** | **327** | *e*P | | **Pn** | | **10 04 53.4** | **+1.5** |
| | baz=331 | | | | | | | | |
| NSY | | | | *e*S | | **Sn** | | **10 05 11.6** | **+1.7** |
| | baz=331 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.47** | **212** | *e*P | | **Pn** | | **10 04 51.4** | **-0.5** |
| | baz=197 | | | | | | | | |
| TWKBT | | | | *e*S | | **Sn** | | **10 05 10.3** | **+0.3** |
| | baz=197 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.47** | **212** | *e*P | | **Pn** | | **10 04 52.3** | **+0.4** |
| | baz=197 | | | | | | | | |
| TWK1 | | | | *e*S | | **Sn** | | **10 05 10.3** | **+0.3** |
| | baz=197 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.47** | **321** | *e*P | | **Pn** | | **10 04 53.7** | **+1.7** |
| | baz=326 | | | | | | | | |
| WDJ | | | | *e*S | | **Sn** | | **10 05 12.1** | **+2.0** |
| | baz=326 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.49** | **351** | *e*P | | **Pn** | | **10 04 52.3** | **0.0** |
| | baz=356 | | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | | **10 05 09.0** | **-1.7** |
| | baz=356 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.51** | **341** | *e*P | | **Pn** | | **10 04 54.1** | **+1.6** |
| | baz=352 | | | | | | | | |
| NFF | | | | *e*S | | **Sn** | | **10 05 10.6** | **-0.6** |
| | baz=352 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.55** | **330** | *e*P | | **Pn** | | **10 04 53.9** | **+0.9** |
| | baz=334 | | | | | | | | |
| NMLH | | | | *e*S | | **Sn** | | **10 05 13.2** | **+1.2** |
| | baz=334 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.78** | **44** | P | | **Pn** | | **10 04 57.0** | **+0.9** |
| YOJ | | | | *e*S | | **Sn** | | **10 05 18.9** | **+1.3** |
| **HATJ** | **Hateruma jima** | **2.16** | **66** | P | | **Pn** | | **10 05 02.4** | **+1.0** |
| HATJ | | | | S | | **Sn** | | **10 05 27.9** | **+0.8** |
| **IRIF** | **Iriomote-Funau** | **2.22** | **59** | P | | **Pn** | | **10 05 03.5** | **+1.2** |
| IRIF | | | | *e*S | | **Sn** | | **10 05 30.0** | **+1.4** |
| **JKRS** | **Kuro-shima** | **2.40** | **64** | P | | **Pn** | | **10 05 06.0** | **+1.2** |
| JKRS | | | | *e*S | | **Sn** | | **10 05 34.3** | **+1.2** |
| **JIJ** | **Ishigaki jima** | **2.57** | **63** | P | | **Pn** | | **10 05 07.8** | **+0.8** |
| JIJ | | | | *e*S | | **Sn** | | **10 05 36.7** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **2.81** | **60** | P | | **Pn** | | **10 05 10.9** | **+0.6** |
| JISG | | | | *e*S | | **Sn** | | **10 05 42.9** | **-0.1** |
| **JTJ** | **Tarama** | **3.15** | **62** | P | | **Pn** | | **10 05 16.0** | **+1.0** |
| JTJ | | | | *e*S | | **Sn** | | **10 05 52.1** | **+0.7** |
| **JIRB** | **Irabujima** | **3.61** | **63** | P | | **Pn** | | **10 05 22.2** | **+0.8** |

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*IDC **27** 10:28:01.6±1.2,67˚.97S×170˚.09W,h0km,mb4.0/5,*
*mb1 4.2/6,mb1mx4.1/21,mbtmp4.1/6,ML4.1/1,MS3.5/4,*
*Ms1 3.5/4,ms1mx3.0/47,Error ellipse: s-maj=40.6km*
*s-min=27.5km az=61.0*
**ISC 27 10:28:02.8**±1.0,**67˚.9S**±0˚.2×**170˚.1W**±0˚.2,**h10**km,**n17,**
σ1§**12**/10,**mb3.9**/5,**MS3.6**/3,**Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **12.50** | **208** | P | | **Pn** | | **10 31 00.2** | **-0.2** |
| | 1.1nm,0.3s,baz=63,slow=18,SNR=17 | | | | | | | | |
| VNDA | | | | Sn | | Sn | | 10 33 09.7 | -10 |
| | 0.4nm,0.3s,baz=84,slow=15,SNR=2.8 | | | | | | | | |
| VNDA | | | | LR | | LR | | 10 34 46.3 | |
| | comp=Z,190nm,19.1s,baz=30,slow=32 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **22.14** | **180** | P | | **P** | | **10 32 59.6** | **+1.2** |
| | 7.0nm,0.9s,baz=63,slow=1.4,SNR=19 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.25** | **328** | LR | | LR | | 10 41 49.1 | |
| | comp=Z,92nm,18.1s,baz=46,slow=32 | | | | | | | | |
| **PPT** | **Papeete** | **52.04** | **25** | LR | | LR | | 10 54 54.3 | |
| | comp=Z,64nm,19.9s,baz=150,slow=31 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **52.85** | **268** | T | | T | | 11 34 40.9 | |
| | baz=152,slow=76,SNR=19 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **52.85** | **268** | T | | T | | 11 34 40.8 | |
| | baz=152,slow=76,SNR=20 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **52.87** | **268** | T | | T | | 11 34 41.7 | |
| | baz=152,slow=76,SNR=16 | | | | | | | | |
| **ASAR** | **Alice Springs** | **55.71** | **293** | P | | **P** | | **10 37 39.7** | **+0.5** |
| | 0.5nm,0.5s,baz=158,slow=7.2,SNR=5.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.00** | **295** | P | | **P** | | **10 38 03.3** | **+0.9** |
| | 0.7nm,0.8s,baz=153,slow=5.6,SNR=1.5 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **59.56** | **105** | T | | T | | 11 43 12.1 | |
| | baz=203 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **59.56** | **105** | T | | T | | 11 43 12.8 | |
| | baz=203 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **59.58** | **105** | T | | T | | 11 43 12.4 | |
| | baz=

76nm,0.3s,baz=70,slow=19,SNR=11
**CBIJ Chichi jima 3.21 168** P **Pb** 10 40 25.1 -2.3
CBIJ S **Sb** 10 41 04.4 -1.7
**JMKN Mikurajimanish 3.95 337** P **Pn** 10 40 30.7 +0.9
JMKN S **Sn** 10 41 14.2 -1.0
**BSO1 Boso 1 4.40 355** P **Pn** 10 40 36.4 +1.0
**BSO4 Boso 4 4.81 349** P **Pn** 10 40 42.2 +0.8
BSO4 S **Sn** 10 41 34.7 -1.5
**TTO1 TONANKAI O.B.S 5.20 311** P **Pn** 10 40 49.9 +3.4
**JOD2 Odawara 2 5.37 339** P **Pn** 10 40 51.0 +1.7
**JHU Hanno 5.87 342** P **Pn** 10 40 57.5 +1.4
JHU S **Sn** 10 42 01.5 -0.9
**JYT Yasato 6.05 350** P **Pn** 10 40 58.7 +0.2
**JRY Ryogami san 6.13 340** P **Pn** 10 41 01.3 +1.6
**JAG Ashikaga 6.37 345** P **Pn** 10 41 03.6 +0.6
**JHO Hitachi 6.38 354** P **Pn** 10 41 03.1 0.0
**MJAR Matsushiro Arr 6.83 337** Pn **Pn** 10 41 08.8 -0.5
0.3nm,0.3s,baz=162,slow=12,SNR=3.0
MJAR Sn **Sn** 10 42 24.6 -1.5
0.1nm,0.3s,baz=122,slow=17,SNR=1.4
**KSRS Korea Array 13.33 306** Pn **Pn** 10 42 39.1 +0.8
0.1nm,0.3s,baz=114,slow=13,SNR=1.7
**ASAJ Asahikawa 13.86 3** Pn **Pn** 10 42 43.8 -1.7
0.4nm,0.3s,baz=242,slow=14,SNR=6.6
**USRK Ussuriysk Ar. 15.81 334** Pn **Pn** 10 43 08.7 -2.8
baz=116,slow=13,SNR=1.6
**KLR Kul'dur 20.33 341** P **P** 10 44 05.1 +0.2
0.7nm,0.6s,baz=132,slow=12,SNR=2.0
**SONM Songino Array 32.04 313** P **P** 10 45 53.7 -1.5
0.3nm,0.5s,baz=90,slow=8.6,SNR=1.6
**ZALV Zalesovo Beam 46.71 317** PcP **PcP** 10 49 30.1 -0.3
0.9nm,0.6s,baz=101,slow=2.3,SNR=4.3
**MKAR Makanchi Array 48.01 307** P **P** 10 48 05.7 -1.7
0.2nm,0.5s,baz=93,slow=9.1,SNR=2.6
**WRA Warramunga Arr 50.38 189** P **P** 10 48 26.9 +1.1
0.3nm,0.4s,baz=6.9,slow=7.7,SNR=15
WRA PcP **PcP** 10 49 45.7 +1.6
0.6nm,0.7s,baz=360,slow=3.7,SNR=5.3
**KURBB Kurchatov Arra 50.40 313** P **P** 10 48 25.8 +0.2
0.6nm,0.2s,baz=100,slow=6.5,SNR=2.4
**KDAK Kodiak Island 52.26 38** P **P** 10 48 40.2 +0.8
14nm,1.1s,baz=301,slow=2.4,SNR=1.7
**ASAR Alice Springs 54.10 189** P **P** 10 48 54.4 +1.0
0.3nm,0.4s,baz=2.7,slow=4.7,SNR=14
**ILAR Eielson Array 55.27 30** P **P** 10 49 01.2 -0.2
1.0nm,0.9s,baz=264,slow=6.1,SNR=6.6
**INK Inuvik 60.44 25** P **P** 10 49 38.5 +0.9
0.6nm,0.9s,baz=243,slow=2.3,SNR=1.6
**YKA Yellowknife Ar 69.68 29** P **P** 10 50 37.9 +0.2
0.1nm,0.3s,baz=290,slow=6.3,SNR=4.3
**ARCES ARCESS Array B 70.36 340** P **P** 10 50 42.1 +0.3
1.6nm,0.8s,baz=23,slow=6.7,SNR=3.7
**FINES FINESS Array B 74.84 333** P **P** 10 51 08.7 +0.2
1.0nm,0.4s,baz=59,slow=5.2,SNR=16
**NVAR Mina Array Bea 79.08 52** P **P** 10 51 34.9 +1.8
0.2nm,0.5s,baz=290,slow=5.6,SNR=2.0
**NOA NORSAR Array B 80.45 338** P **P** 10 51 39.7 -0.1
0.3nm,0.6s,baz=40,slow=4.9,SNR=2.1
**PDAR Pinedale Array 82.42 45** P **P** 10 51 52.5 +1.5
0.2nm,0.6s,baz=304,slow=12,SNR=2.1
**BRTR Keskin Array B 83.40 312** P **P** 10 51 55.9 -0.1
1.2nm,0.8s,baz=91,slow=4.9,SNR=5.8
**TXAR Lajitas Array 94.22 53** P **P** 10 52 49.6 +1.7
1.0nm,0.7s,baz=302,slow=2.7,SNR=13

*IDC **27** 10:48:37.1±0.5, 18°.34N×145°.65E, h146km±4km, mb3.8/26, mb1 3.9/28, mb1mx3.8/50, mbtmp4.2/28, MS3.1/2, Ms1 3.1/2, ms1mx2.4/84, Error ellipse: s-maj=15.1km s-min=7.6km az=99.0*
*NEIC **27** 10:48:38.2±1.5, 18°.33N±0°.07×145°.9E±0°.1, h139km±7km, mb4.5/61, Error ellipse: s-maj=19.4km s-min=10.1km az=92.0*
**ISC 27 10:48:37.9**±0.4, **18°.31N**±0°.05×**145°.83E**±0°.10, **h145**km, **n118**, σ1§**36**/122, **mb4.4**/59, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.78** | **191** | P | **Pn** | **10 49 48.9** | **+0.5** |
| GUMO | 22nm,0.3s,baz=291,slow=1.6,SNR=8.1 | | | S | **Sn** | **10 50 42.7** | **-0.6** |
| | 93nm,0.3s,baz=322,slow=22,SNR=8.7 | | | | | | |
| **GUMO** | **Guam** | **4.78** | **191** | Pn | **Pn** | **10 49 49.5** | **+1.1** |
| **JCJ** | **Chichijima** | **9.37** | **340** | Pn | **Pn** | **10 50 49.4** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **19.37** | **341** | P | **P** | **10 52 48.6** | **-3.8** |
| | 0.0nm,0.3s,baz=175,slow=10,SNR=1.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.37** | **341** | P | **P** | **10 52 52.0** | **-0.4** |
| **MAJO** | **Matsushiro** | **19.37** | **341** | P | **P** | **10 52 52.6** | **+0.2** |
| **MAT** | **Matsushiro** | **19.37** | **341** | P | **P** | **10 52 52.5** | **+0.1** |
| **H11S3** | **WAKE ISLAND Hy** | **19.79** | **86** | T | T | 11 13 56.3 | |
| | baz=274,slow=74,SNR=7.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.80** | **86** | T | T | 11 13 57.7 | |
| | baz=274,slow=74,SNR=6.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.81** | **86** | T | T | 11 14 04.6 | |
| | baz=274,slow=74,SNR=6.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.96** | **83** | T | T | 11 14 14.7 | |
| | baz=267,slow=74,SNR=5.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.96** | **83** | T | T | 11 14 15.5 | |
| | baz=267,slow=74,SNR=5.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.98** | **83** | T | T | 11 14 09.8 | |
| | baz=267,slow=74,SNR=5.1 | | | | | | |
| **JMM** | **Marumori** | **19.98** | **348** | P | **P** | **10 52 59.9** | **+0.9** |
| JMM | | | | IAmb | IAmb | 10 53 03.3 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **DAV** | **Davao City (W)** | **22.67** | **243** | LR | LR | 11 01 37.2 | |
| | comp=Z,21nm,20.5s,baz=38,slow=35 | | | | | | |
| **JTM** | **Tenmabayashi** | **22.77** | **351** | P | **P** | **10 53 29.5** | **+1.6** |
| **SIJI** | **Sorong** | **23.84** | **218** | P | **P** | **10 53 37.3** | **-0.7** |
| | comp=Z,21nm,0.8s,baz=15,slow=10,SNR=8.5 | | | | | | |
| **KSRS** | **Korea Array** | **24.71** | **324** | P | **P** | **10 53 44.4** | **-1.1** |
| | comp=Z,0.3nm,0.5s,baz=151,slow=8.5,SNR=1.6 | | | | | | |
| **FAKI** | **Fak Fak** | **24.98** | **214** | P | **P** | **10 53 53.0** | **+4.7** |
| **ASAJ** | **Asahikawa** | **25.87** | **355** | P | **P** | **10 53 54.0** | **-2.1** |
| | comp=Z,3.8nm,0.7s,baz=131,slow=20,SNR=2.1 | | | | | | |
| **PMG** | **Port Moresby** | **27.57** | **177** | P | **P** | **10 54 10.3** | **-1.2** |
| | comp=Z,12nm,0.7s,baz=8.7,slow=7.5,SNR=7.9 | | | | | | |
| **PMG** | **Port Moresby** | **27.57** | **177** | P | **P** | **10 54 11.2** | **-0.3** |
| **NJ2** | **Nanjing** | **27.89** | **305** | *eP* | **P** | **10 54 16.8** | **+2.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **CN2** | **Changchun** | **30.67** | **330** | *eP* | **P** | **10 54 42.5** | **+3.8** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **COEN** | **Coen** | **32.17** | **185** | P | **P** | **10 54 52.0** | **-0.1** |
| COEN | | | | IAmb | IAmb | 10 55 02.4 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **32.88** | **343** | P | **P** | **10 54 57.5** | **-0.4** |
| | comp=Z,1.4nm,0.5s,baz=163,slow=10,SNR=7.8 | | | | | | |
| KLR | | | | pP | **pP** | **10 55 26.4** | **-1.8** |
| | comp=Z,2.1nm,0.6s,baz=139,slow=8.4,SNR=4.6 | | | | | | |
| **MTN** | **Manton Dam** | **34.18** | **206** | P | **P** | **10 55 10.4** | **+0.8** |
| MTN | | | | IAmb | IAmb | 10 55 10.5 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **35.80** | **219** | LR | LR | 11 10 15.7 | |
| | comp=Z,52nm,18.2s,baz=84,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.94** | **12** | P | **P** | **10 55 23.8** | **-0.5** |
| | comp=Z,1.8nm,0.6s,baz=187,slow=8.7,SNR=2.5 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **36.96** | **315** | *eP* | **P** | **10 55 35.5** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,84nm,7.6s | | | | | | |
| **KNRA** | **Kununurra** | **37.73** | **208** | P | **P** | **10 55 40.7** | **+1.0** |
| **WB0** | **Warramunga Arr** | **39.47** | **197** | P | **P** | **10 55 54.2** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 10 55 57.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **39.61** | **197** | P | **P** | **10 55 55.7** | **+0.3** |
| WR0 | | | | IAmb | IAmb | 10 55 58.5 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **39.64** | **197** | P | **P** | **10 55 55.8** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 10 55 58.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **39.65** | **197** | P | **P** | **10 55 56.0** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 10 55 59.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.65** | **197** | P | **P** | **10 55 54.6** | **-1.2** |
| | comp=Z,7.4nm,0.8s,baz=17,slow=8.3,SNR=40 | | | | | | |
| WRA | | | | ScP | **ScP** | **11 01 33.4** | **-1.8** |
| | comp=Z,0.7nm,0.8s,baz=16,slow=4.2,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.65** | **197** | P | **P** | **10 55 55.9** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **41.27** | **210** | P | **P** | **10 56 10.5** | **+1.4** |
| FITZ | | | | IAmb | IAmb | 10 56 11.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **41.37** | **4** | P | **P** | **10 56 08.0** | **-1.4** |
| | comp=Z,3.2nm,0.5s,baz=158,slow=11,SNR=7.9 | | | | | | |
| **MA2** | **Magadan** | **41.37** | **4** | P | **P** | **10 56 09.8** | **+0.4** |
| **PZH** | **PanZhiHua** | **41.41** | **289** | P | **P** | **10 56 10.5** | **+0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.3s | | | | | | |
| **AS31** | **Alice Springs** | **43.31** | **196** | P | **P** | **10 56 27.1** | **+1.5** |
| **ASAR** | **Alice Springs** | **43.31** | **196** | P | **P** | **10 56 24.2** | **-1.4** |
| | comp=Z,1.6nm,0.6s,baz=18,slow=13,SNR=16 | | | | | | |
| ASAR | | | | PP | **PP** | **10 58 06.0** | **-3.4** |
| | comp=Z,0.3nm,0.6s,baz=82,slow=6.8,SNR=4.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **11 01 48.4** | **-1.5** |
| | comp=Z,0.2nm,0.4s,baz=8.4,slow=4.0,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **43.31** | **196** | P | **P** | **10 56 26.7** | **+1.0** |
| **SONM** | **Songino Array** | **43.53** | **322** | P | **P** | **10 56 23.7** | **-3.5** |
| | comp=Z,0.2nm,0.3s,baz=190,slow=7.2,SNR=2.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.40** | **278** | P | **P** | **10 56 30.6** | **-3.8** |
| | comp=Z,0.6nm,0.3s,baz=132,slow=15,SNR=1.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.40** | **278** | P | **P** | **10 56 36.1** | **+1.7** |
| **SEY** | **Seymchan** | **44.81** | **4** | P | **P** | **10 56 35.3** | **-1.7** |
| | comp=Z,2.4nm,0.6s,baz=187,slow=7.0,SNR=17 | | | | | | |
| **DZM** | **Mont Dzumac** | **44.91** | **152** | P | **P** | **10 56 38.9** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **47.10** | **214** | P | **P** | **10 56 56.6** | **+1.1** |
| **STKA** | **Stephens Creek** | **50.06** | **185** | P | **P** | **10 57 16.4** | **-1.6** |
| | comp=Z,1.0nm,0.4s,baz=348,slow=8.6,SNR=4.7 | | | | | | |
| **STKA** | **Stephens Creek** | **50.06** | **185** | P | **P** | **10 57 17.2** | **-0.8** |
| **BBOO** | **Buckleboo** | **51.68** | **190** | P | **P** | **10 57 30.2** | **+0.2** |
| **FORT** | **Forrest** | **51.71** | **200** | P | **P** | **10 57 30.6** | **+0.3** |
| FORT | | | | IAmb | IAmb | 10 57 58.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **53.42** | **177** | P | **P** | **10 57 43.4** | **+0.5** |
| CAN | | | | IAmb | IAmb | 10 58 01.4 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WMQ** | **Urumqi** | **54.66** | **311** | *eP* | **P** | **10 57 55.0** | **+3.1** |
| WMQ | | | | LR | LR | | |
| | comp=N,130nm,24.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,930nm,29.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,95nm,29.0s | | | | | | |
| **SDPT** | **Sand Point** | **54.72** | **34** | P | **P** | **10 57 51.9** | **-0.1** |
| **MORW** | **Morawa** | **55.19** | **212** | P | **P** | **10 57 55.6** | **-0.2** |
| **ANM** | **Nome** | **56.50** | **23** | P | **P** | **10 58 05.6** | **+1.0** |
| ANM | | | | IAmb | IAmb | 10 58 06.0 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.40** | **323** | P | **P** | **10 58 16.4** | **-1.7** |
| | comp=Z,0.8nm,0.7s,baz=119,slow=12,SNR=2.9 | | | | | | |
| ZALV | | | | pP | **pP** | **10 58 50.3** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=140,slow=7.8,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.82** | **314** | P | **P** | **10 58 20.3** | **-0.9** |
| | comp=Z,0.5nm,0.7s,baz=82,slow=9.1,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.82** | **314** | P | **P** | **10 58 22.0** | **+0.8** |
| **MAKZ** | **Makanchi** | **59.04** | **314** | P | **P** | **10 58 23.7** | **+1.0** |
| **TTA** | **Tatalina** | **59.54** | **27** | P | **P** | **10 58 26.3** | **+0.5** |
| TTA | | | | IAmb | IAmb | 10 58 40.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **K20K** | **Telida** | **60.51** | **27** | P | **P** | **10 58 33.6** | **+1.1** |
| **J20K** | **Nowinta River** | **60.75** | **26** | P | **P** | **10 58 34.8** | **+0.8** |
| **BRLK** | **Bradley Lake** | **60.96** | **31** | P | **P** | **10 58 34.9** | **-0.7** |
| **CAST** | **Castle Rocks** | **61.38** | **27** | P | **P** | **10 58 38.9** | **+0.6** |
| **IMAR** | **Indian Mountai** | **61.52** | **24** | P | **P** | **10 58 39.9** | **+0.7** |
| **KURK** | **Kurchatov** | **61.65** | **318** | P | **P** | **10 58 41.0** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **61.69** | **318** | P | **P** | **10 58 39.5** | **-1.0** |
| | comp=Z,1.8nm,0.2s,baz=95,slow=7.3,SNR=5.4 | | | | | | |
| **H21K** | **Melozitna Rive** | **61.78** | **24** | P | **P** | **10 58 40.9** | **-0.1** |
| H21K | | | | IAmb | IAmb | 10 58 42.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **I21K** | **Tanana** | **61.95** | **25** | P | **P** | **10 58 42.4** | **+0.4** |
| I21K | | | | IAmb | IAmb | 10 58 43.6 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **NRIK** | **Noril'sk** | **62.02** | **340** | P | **P** | **10 58 42.2** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=120,slow=10,SNR=3.8 | | | | | | |
| **MLY** | **Manley** | **62.41** | **25** | P | **P** | **10 58 45.2** | **0.0** |
| MLY | | | | IAmb | IAmb | 10 58 46.3 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **63.26** | **23** | P | **P** | **10 58 51.8** | **+1.1** |
| COLD | | | | IAmb | IAmb | 10 58 51.8 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **63.91** | **22** | P | **P** | **10 58 56.0** | **+1.0** |
| **ILAR** | **Eielson Array** | **63.94** | **26** | P | **P** | **10 58 53.6** | **-1.6** |
| | comp=Z,3.5nm,0.7s,baz=260,slow=5.0,SNR=14 | | | | | | |
| ILAR | | | | pP | **PcP** | **10 59 29.6** | **+0.1** |
| | comp=Z,1.4nm,0.9s,baz=254,slow=5.1,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **63.94** | **26** | P | **P** | **10 58 54.2** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **63.97** | **154** | P | **P** | **10 58 55.0** | **-0.8** |
| **BMAR** | **Burnt Mountain** | **65.42** | **23** | P | **P** | **10 59 06.0** | **+1.2** |
| **DAWY** | **Dawson** | **67.04** | **27** | P | **P** | **10 59 15.7** | **+0.5** |
| **HYT** | **Haines Junctio** | **67.69** | **31** | P | **P** | **10 59 20.8** | **+1.4** |
| HYT | | | | IAmb | IAmb | 10 59 21.3 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **M30M** | **Minto, Yukon** | **68.11** | **29** | P | **P** | **10 59 22.6** | **+0.7** |
| **INK** | **Inuvik** | **69.68** | **23** | P | **P** | **10 59 31.1** | **-0.3** |
| | comp=Z,3.6nm,0.7s,baz=263,slow=7.4,SNR=19 | | | | | | |
| INK | | | | pP | **pP** | **11 00 06.5** | **+1.0** |
| | comp=Z,2.0nm,0.7s,baz=274,slow=6.9,SNR=4.6 | | | | | | |
| **INK** | **Inuvik** | **69.68** | **23** | P | **P** | **10 59 31.2** | **-0.2** |
| INK | | | | IAmb | IAmb | 10 59 31.9 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **71.54** | **33** | P | **P** | **10 59 43.3** | **+0.3** |
| | comp=Z,6.4nm,0.9s,baz=272,slow=5.5,SNR=9.5 | | | | | | |
| **DLBC** | **Dease Lake** | **71.54** | **33** | P | **P** | **10 59 44.3** | **+1.3** |
| DLBC | | | | IAmb | IAmb | 10 59 44.4 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **A36M** | **Sachs Harbour** | **72.40** | **19** | P | **P** | **10 59 48.2** | **+0.4** |
| A36M | | | | IAmb | IAmb | 10 59 49.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **C36M** | **Paulatuk** | **73.06** | **22** | P | **P** | **10 59 51.1** | **-0.6** |
| C36M | | | | IAmb | IAmb | 10 59 52.2 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **BBB** | **Bella Bella** | **73.36** | **40** | P | **P** | **10 59 53.1** | **-0.7** |
| | comp=Z,32nm,1.0s,baz=239,slow=5.9,SNR=4.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **73.71** | **317** | P | **P** | **10 59 56.0** | **0.0** |
| **PGC** | **Sidney** | **76.95** | **43** | P | **P** | **11 00 15.1** | **+0.7** |
| PGC | | | | IAmb | IAmb | 11 00 15.6 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **NLWA** | **Neilton Lookou** | **76.95** | **44** | P | **P** | **11 00 16.1** | **+1.5** |
| **EUNU** | **Eureka** | **78.09** | **8** | P | **P** | **11 00 20.7** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **78.27** | **28** | P | **P** | **11 00 21.0** | **-0.5** |
| | comp=Z,2.8nm,0.7s,baz=287,slow=5.4,SNR=34 | | | | | | |
| YKA | | | | pP | **pP** | **11 00 57.3** | **+1.1** |
| | comp=Z,1.3nm,0.7s,baz=291,slow=5.2,SNR=6.5 | | | | | | |
| **LTY** | **Liberty** | **79.10** | **44** | P | **P** | **11 00 26.8** | **+0.4** |
| LTY | | | | IAmb | IAmb | 11 00 34.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **79.11** | **50** | P | **P** | **11 00 26.9** | **+0.2** |
| | comp=Z,2.2nm,0.9s,baz=344,slow=4.1,SNR=6.3 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **79.11** | **50** | P | **P** | **11 00 27.7** | **+1.0** |
| **B08A** | **Colville Reser** | **79.67** | **42** | P | **P** | **11 00 29.8** | **+0.3** |
| B08A | | | | IAmb | IAmb | 11 00 30.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **RES** | **Resolute Bay** | **79.77** | **14** | P | **P** | **11 00 30.0** | **+0.6** |
| **PINE** | **Pine Mountain** | **79.83** | **47** | P | **P** | **11 00 31.6** | **+0.9** |
| PINE | | | | IAmb | IAmb | 11 00 32.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **K05A** | **Summer Lake** | **80.15** | **48** | P | **P** | **11 00 33.3** | **+1.0** |
| K05A | | | | IAmb | IAmb | 11 00 33.4 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **KEV** | **Kevo** | **82.34** | **342** | P | **P** | **11 00 44.0** | **+0.9** |
| KEV | | | | IAmb | IAmb | 11 01 01.3 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.90** | **342** | P | **P** | **11 00 45.5** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=61,slow=7.6,SNR=8.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.90** | **342** | P | **P** | **11 00 47.1** | **+1.1** |
| ARCES | | | | IAmb | IAmb | 11 01 11.7 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.28** | **52** | P | **P** | **11 00 49.0** | **+0.1** |
| | comp=Z,3.4nm,0.8s,baz=266,slow=6.5,SNR=9.8 | | | | | | |
| NVAR | | | | pP | **pP** | **11 01 25.9** | **+1.9** |
| | comp=Z,0.9nm,0.7s,baz=268,slow=5.8,SNR=3.6 | | | | | | |
| **HRY** | **Holter Researc** | **85.01** | **42** | P | **P** | **11 00 57.8** | **+0.4** |
| **GCMT** | **Greycliff** | **86.75** | **43** | P | **P** | **11 01 06.0** | **0.0** |
| **RLMT** | **Red Lodge** | **87.27** | **43** | P | **P** | **11 01 10.5** | **+1.9** |
| RLMT | | | | IAmb | IAmb | 11 01 21.4 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **FINES** | **FINESS Array B** | **87.29** | **335** | P | **P** | **11 01 05.8** | **-2.3** |
| | comp=Z,1.1nm,0.5s,baz=60,slow=5.6,SNR=12 | | | | | | |
| FINES | | | | pP | **pwP** | **11 01 45.3** | **-1.4** |
| | comp=Z,1.9nm,0.8s,baz=90,slow=3.8,SNR=1.7 | | | | | | |
| FINES | | | | sP | **sP** | **11 01 57.6** | **-1.5** |
| | comp=Z,0.9nm,0.8s,baz=55,slow=7.2,SNR=1.3 | | | | | | |
| **FINES** | **FINESS Array B** | **87.29** | **335** | P | **P** | **11 01 06.2** | **-1.8** |
| **PDAR** | **Pinedale Array** | **88.00** | **45** | P | **P** | **11 01 10.4** | **-1.8** |
| | comp=Z,0.4nm,0.7s,baz=247,slow=1.1,SNR=4.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **88.00** | **45** | P | **P** | **11 01 11.4** | **-0.8** |
| **SRU** | **San Rafael Swe** | **88.75** | **49** | P | **P** | **11 01 15.9** | **+0.3** |
| SRU | | | | IAmb | IAmb | 11 01 16.2 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **PV11** | **David Mesa, Pa** | **90.25** | **49** | P | **P** | **11 01 23.1** | **+0.4** |
| PV11 | | | | IAmb | IAmb | 11 01 24.6 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **92.79** | **338** | P | **P** | **11 01 31.5** | **-2.3** |
| | comp=Z,1.0nm,0.6s,baz=56,slow=3.6,SNR=1.9 | | | | | | |
| **LPAZ** | **La Paz** | **147.54** | **92** | PKPbc | **PKPbc** | **11 08 06.9** | **+0.2** |
| | comp=Z,1.1nm,0.5s,baz=0.0,slow=6.1,SNR=4.5 | | | | | | |

*WEL **27** 10:50:41.6±0.2, 41°.S±2°×17°.6E±°, h21km±2km, M3.7/33, ML4.0/33, MLv3.7/33, Error ellipse: s-maj=0.0km s-min=0.0km az=124.5*
*NOU **27** 10:50:41.2, 40°.87S×175°.74E, h56km, MLv4.0/7, North Island, New Zealand*
**ISC 27 10:50:41.9**±1.0, **40°.78S**±0°.03×**175°.58E**±0°.03, **h32**km±6km, **n130**, σ1§**15**/132, **North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRZ** | **Mangatainoka R** | **0.12** | **360** | P | **Pb** | **10 50 46.9** | **-0.7** |
| MRZ | | | | S | **Sb** | **10 50 50.8** | **-0.7** |
| **HOWZ** | **Holdsworth Sta** | **0.13** | **203** | P | **Pb** | **10 50 48.7** | **+0.5** |
| HOWZ | | | | S | **Sb** | **10 50 52.7** | **+1.1** |
| **TIWZ** | **Tintock** | **0.23** | **89** | P | **Pn** | **10 50 49.5** | **+0.3** |
| **OGWZ** | **Otaki Gorge** | **0.31** | **263** | P | **Pb** | **10 50 49.1** | **-0.6** |
| OGWZ | | | | S | **Sb** | **10 50 53.8** | **-1.1** |
| **PRWZ** | **Pori Road** | **0.37** | **53** | P | **Pb** | **10 50 50.7** | **+0.2** |
| PRWZ | | | | S | **Sb** | **10 50 57.4** | **+1.0** |
| **MTW** | **Mount Morrison** | **0.38** | **189** | P | **Pn** | **10 50 51.8** | **+0.5** |
| **TMWZ** | **Te Maipa** | **0.40** | **144** | P | **Pn** | **10 50 52.7** | **+1.1** |
| TMWZ | | | | S | **Sn** | **10 51 01.2** | **+3.1** |
| **POWZ** | **Post Office Ro** | **0.41** | **20** | P | **Pb** | **10 50 50.1** | **-1.0** |
| **CPWZ** | **Castlepoint** | **0.49** | **106** | P | **Pn** | **10 50 54.2** | **+1.5** |
| **CAW** | **Cannon Point** | **0.51** | **230** | P | **Pn** | **10 50 52.9** | **-0.1** |
| **KIW** | **Kapiti Island** | **0.52** | **261** | P | **Pb** | **10 50 52.3** | **-0.4** |
| **BFZ** | **Birch Farm** | **0.52** | **79** | P | **Pn** | **10 50 53.5** | **+0.5** |
| **BFZ** | **Birch Farm** | **0.52** | **79** | P | **Pn** | **10 50 53.6** | **+0.5** |
| **OHWZ** | **Ohakea** | **0.61** | **341** | P | **Pb** | **10 50 53.1** | **-1.0** |
| **PAWZ** | **Paruwai Farm** | **0.61** | **191** | P | **Pn** | **10 50 55.0** | **+0.5** |
| **TRWZ** | **Traveller** | **0.62** | **172** | P | **Pn** | **10 50 55.9** | **+1.3** |
| **DVHZ** | **Dannevirke** | **0.66** | **43** | P | **Pn** | **10 50 54.6** | **-0.4** |
| **MSWZ** | **Moikau Station** | **0.68** | **201** | P | **Pn** | **10 50 55.7** | **+0.3** |
| **ANWZ** | **Angora Road** | **0.75** | **65** | P | **Pn** | **10 50 56.6** | **+0.3** |
| **TSZ** | **Takapari Road** | **0.78** | **22** | P | **Pn** | **10 50 55.9** | **-0.9** |
| **WEL** | **Wellington** | **0.79** | **230** | P | **Pn** | **10 50 57.2** | **+0.3** |
| **BHW** | **Baring Head** | **0.82** | **220** | P | **Pb** | **10 50 57.7** | **-0.1** |
| **PLWZ** | **Palliser** | **0.83** | **197** | P | **Pb** | **10 50 57.6** | **-0.2** |
| **SNZO** | **South Karori** | **0.85** | **231** | P | **Pb** | **10 50 58.2** | **+0.1** |
| **PRHZ** | **Porangahau** | **0.95** | **58** | P | **Pn** | **10 50 58.9** | **-0.3** |
| **PNHZ** | **Pukenui** | **0.99** | **29** | P | **Pn** | **10 50 59.3** | **-0.3** |
| **TCW** | **Tory Channel** | **1.08** | **246** | P | **Pb** | **10 51 00.8** | **-1.2** |
| **WAZ** | **Wanganui** | **1.12** | **336** | P | **Pn** | **10 51 01.8** | **+0.4** |
| **PXZ** | **Pawanui** | **1.23** | **53** | P | **Pn** | **10 51 02.4** | **-0.6** |
| **DUWZ** | **D'Urville Isla** | **1.26** | **268** | P | **Pn** | **10 51 03.0** | **-0.3** |
| **KRHZ** | **Kereru** | **1.29** | **28** | P | **Pn** | **10 51 03.2** | **-0.5** |
| **BHHZ** | **Black Hill Sta** | **1.34** | **16** | P | **Pn** | **10 51 04.2** | **-0.3** |
| **MOVZ** | **Moawhango** | **1.38** | **6** | P | **Pn** | **10 51 04.9** | **-0.2** |
| **MTWZ** | **Mangateitei** | **1.40** | **357** | P | **Pn** | **10 51 05.3** | **+0.6** |
| **TUWZ** | **Tuamarina** | **1.40** | **242** | P | **Pn** | **10 51 04.8** | **-0.4** |
| **KAHZ** | **Kahuranaki** | **1.40** | **46** | P | **Pn** | **10 51 04.7** | **-0.6** |
| **CMWZ** | **Cape Campbell** | **1.41** | **226** | P | **Pb** | **10 51 06.6** | **-1.1** |
| **WNVZ** | **Wahianoa** | **1.45** | **1** | P | **Pn** | **10 51 06.4** | **+0.2** |
| **TRVZ** | **Turoa** | **1.48** | **359** | P | **Pn** | **10 51 07.0** | **+0.4** |
| **WHVZ** | **Whangaehu Hut** | **1.50** | **0** | P | **Pn** | **10 51 07.4** | **+0.6** |
| **PKVZ** | **Pokaka** | **1.50** | **353** | P | **Pn** | **10 51 07.1** | **+0.4** |
| **KWHZ** | **Kaweka Forest** | **1.50** | **26** | P |

**ML2.4**/72, **Error ellipse: s-maj=1.6km s-min=1.2km az=127.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.87** | **176** | | Pg | 11 02 55.0 | -0.2 |
| OKCFA | | | | Sg | Sg | 11 03 06.8 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **0.88** | **176** | | Pg | 11 02 55.3 | -0.1 |
| OKCSW | | | | Sg | Sg | 11 03 06.1 | -0.7 |
| **T35A** | **Sooner Cattle** | **1.03** | **52** | | Pg | 11 02 58.1 | -0.2 |
| T35A | | | | Sg | Sg | 11 03 11.3 | -0.3 |
| T35A | | | | IAML | | 11 03 12.4 | |
| | comp=E,106nm,0.2s | | | | | | |
| **TUL1** | **Leonard** | **1.45** | **104** | Pn | Pn | 11 03 04.6 | -0.9 |
| **X34A** | **Smith Ranch, M** | **1.70** | **189** | | Pb | 11 03 10.1 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.85** | **214** | | Pn | 11 03 11.9 | +0.9 |
| **R32A** | **Long Quarter,** | **2.34** | **336** | | Pn | 11 03 18.3 | +0.6 |
| **X37A** | **Clayton** | **2.44** | **133** | | Pn | 11 03 19.6 | +0.6 |
| **HHAR** | **Hobbs** | **2.89** | **89** | | Pn | 11 03 24.6 | -0.7 |
| **KSU1** | **Kansas State U** | **2.90** | **14** | | Pn | 11 03 25.6 | +0.2 |
| **W39A** | **Magazine** | **3.23** | **109** | | Pn | 11 03 29.1 | -0.8 |
| **S39A** | **Bolivar** | **3.64** | **66** | Pn | Pn | 11 03 34.8 | -0.9 |
| **MIAR** | **Mount Ida** | **3.66** | **117** | | Pn | 11 03 36.5 | +0.7 |
| **AMTX** | **Amarillo** | **3.67** | **249** | Pn | Pn | 11 03 35.2 | -0.9 |
| **Z38A** | **Mt. Pleasant** | **3.67** | **145** | Pn | Pn | 11 03 35.0 | -0.9 |
| **U40A** | **Yellville** | **3.77** | **88** | Pn | Pn | 11 03 38.2 | +0.8 |
| **ABTX** | **Abilene, Hawle** | **4.05** | **206** | | Pn | 11 03 41.7 | +0.5 |
| **X40A** | **Basin Creek Fa** | **4.23** | **114** | | Pn | 11 03 43.7 | +0.1 |
| **MGMO** | **Mountain Grove** | **4.31** | **77** | Pn | Pn | 11 03 45.4 | +0.6 |
| **WHAR** | **Wooly Hollow** | **4.37** | **102** | Pn | Pn | 11 03 47.6 | +2.0 |
| **FCAR** | **Ozark Folk Cen** | **4.39** | **94** | Pn | Pn | 11 03 46.0 | +0.2 |
| **W41B** | **Gary Mavity, V** | **4.43** | **103** | Pn | Pn | 11 03 47.4 | +1.0 |
| **R40A** | **Maddies Statio** | **4.64** | **63** | Pn | Pn | 11 03 49.6 | +0.2 |
| **T42A** | **Van Buren** | **5.22** | **80** | Pn | Pn | 11 03 57.7 | +0.4 |
| **CCM** | **Cathedral Cave** | **5.32** | **69** | | Pn | 11 03 59.9 | +1.3 |
| **P40A** | **Paris** | **5.41** | **52** | Pn | Pn | 11 04 00.5 | +0.7 |
| **T25A** | **Trinidad** | **5.60** | **281** | Pn | Pn | 11 04 03.3 | +0.6 |
| **FVM** | **French Village** | **5.92** | **71** | Pn | Pn | 11 04 06.0 | -0.9 |
| **N41A** | **Harden Midland** | **6.84** | **48** | Pn | Pn | 11 04 20.2 | +0.7 |
| **ISCO** | **Idaho Springs** | **7.29** | **301** | Pn | Pn | 11 04 24.2 | -1.7 |

*JMA **27** 11:05:11.8±0.1, 38°.54N×141°.72E, h54km±1km, M3.6 Broadband fault plane solution: P waves. NP1: ϕs207.00000°, δ29.00000°, λ104.00000°. NP2: ϕs11.00000°, δ62.00000°, λ82.00000°. Principal axes: T Plg72.0000°, Azm264.0000°; N Plg7.0000°, Azm15.0000°; P Plg17.0000°, Azm107.0000°;*
*JMA Felt I J1.*
*IDC **27** 11:05:12.1±2.9, 38°.49N×141°.85E, h62km±24km, mb3.5/5, mb1 3.5/9, mb1mx3.2/49, mbtmp3.6/9, ML2.8/4 Error ellipse: s-maj=36.3km s-min=16.0km az=110.0*

**ISC 27 11:05:11.5±1.1, 38°.51N±0°.05×141°.80E±0°.08, h51km±7km, n28, σ0s88/34, mb3.7/5, 2C-8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.33** | **233** | ↑P | **Pn** | **11 05 21.2** | **+0.2** |
| JIKH | | | | S | Sn | 11 05 27.7 | 0.0 |
| **JIO** | **Ouri** | **0.35** | **261** | ↓P | **Pn** | **11 05 21.2** | **0.0** |
| JIO | | | | S | Sn | 11 05 27.7 | -0.5 |
| **JKMT** | **Kesennumamotoy** | **0.39** | **320** | ↓P | **Pn** | **11 05 21.7** | **+0.1** |
| JKMT | | | | S | Sn | 11 05 28.3 | -0.6 |
| **OFUJ** | **Ofunato** | **0.58** | **350** | ↑P | **Pn** | **11 05 23.8** | **0.0** |
| OFUJ | | | | S | Sn | 11 05 32.0 | -0.6 |
| **JMK** | **Ichinoseki** | **0.63** | **315** | ↓P | **Pn** | **11 05 24.3** | **-0.1** |
| JMK | | | | S | Sn | 11 05 33.0 | -0.8 |
| **JOU** | **Okura** | **0.90** | **261** | ↓P | **Pn** | **11 05 27.4** | **-0.5** |
| JOU | | | | S | Sn | 11 05 39.2 | -0.8 |
| **JMM** | **Marumori** | **1.02** | **231** | ↓P | **Pn** | **11 05 28.9** | **-0.6** |
| JMM | | | | S | Sn | 11 05 41.8 | -1.0 |
| **JOM** | **Ohasama** | **1.04** | **338** | ↓P | **Pn** | **11 05 29.6** | **-0.2** |
| JOM | | | | S | Sn | 11 05 42.8 | -0.5 |
| **JYK** | **Kaneyama** | **1.20** | **290** | ↓P | **Pn** | **11 05 31.5** | **-0.4** |
| **JRG** | **Rokugo** | **1.27** | **315** | ↓P | **Pn** | **11 05 32.5** | **-0.4** |
| **JFK** | **Kawauchi** | **1.35** | **213** | P | **Pn** | **11 05 33.9** | **-0.2** |
| JFK | | | | S | Sn | 11 05 50.1 | -0.9 |
| **JYS** | **Shirataka** | **1.39** | **259** | P | **Pn** | **11 05 34.4** | **-0.1** |
| JYS | | | | S | Sn | 11 05 51.7 | -0.1 |
| **MJAR** | **Matsushiro Arr** | **3.46** | **237** | P | **Pn** | **11 06 04.6** | **+1.7** |
| | 0.3nm,0.3s,baz=36,slow=13,SNR=19 | | | | | | |
| **MAT** | **Matsushiro** | **3.46** | **237** | P | **Pn** | **11 06 04.3** | **+1.4** |
| MAT | | | | eS | Sn | 11 06 44.7 | +2.0 |
| **ASAJ** | **Asahikawa** | **5.63** | **6** | P | **Pn** | **11 06 32.6** | **0.0** |
| | 0.7nm,0.3s,baz=221,slow=11,SNR=7.3 | | | | | | |
| ASAJ | | | | S | Sn | 11 07 37.0 | +1.0 |
| | 0.4nm,0.3s,baz=252,slow=20,SNR=1.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.31** | **311** | P | **Pn** | **11 07 23.2** | **+0.3** |
| | baz=131,slow=18,SNR=2.6 | | | | | | |
| **KSRS** | **Korea Array** | **11.00** | **269** | P | **Pn** | **11 07 48.4** | **+2.2** |
| | 0.1nm,0.3s,baz=148,slow=27,SNR=2.1 | | | | | | |
| **MA2** | **Magadan** | **21.85** | **12** | P | **P** | **11 10 00.2** | **+0.8** |
| | 0.9nm,0.3s,baz=184,slow=8.3,SNR=4.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.68** | **124** | T | T | 11 41 22.9 | |
| | baz=316,slow=75,SNR=37 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.69** | **124** | T | T | 11 41 22.6 | |
| | baz=316,slow=75,SNR=51 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.70** | **124** | T | T | 11 41 24.2 | |
| | baz=316,slow=75,SNR=42 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.44** | **126** | T | T | 11 42 16.1 | |
| | baz=318,slow=76,SNR=36 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.44** | **126** | T | T | 11 42 16.5 | |
| | baz=318,slow=76,SNR=55 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.45** | **126** | T | T | 11 42 18.9 | |
| | baz=318,slow=76,SNR=33 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.16** | **311** | P | **P** | **11 12 50.0** | **-0.5** |
| | 0.6nm,0.4s,baz=126,slow=3.9,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.61** | **301** | P | **P** | **11 13 09.8** | **-0.8** |
| | 0.4nm,0.6s,baz=84,slow=9.5,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.56** | **188** | P | **P** | **11 15 01.6** | **-1.3** |
| | 0.3nm,0.6s,baz=4.6,slow=7.0,SNR=5.1 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **59.14** | **349** | P | **P** | **11 15 06.4** | **+0.1** |
| | 3.7nm,0.8s,baz=1.8,slow=9.4,SNR=8.7 | | | | | | |

*NOU **27** 11:16:58.4, 38°.47S×175°.52E, h206km, MLv3.6/6, North Island, New Zealand*
*WEL **27** 11:17:05.1, 39°.5±5°×17°.6E±°, h150km±11km, M2.8/62, ML2.1/8, MLv2.8/62, Error ellipse: s-maj=0.0km s-min=0.0km az=102.4*

**ISC 27 11:17:00.4±1.6, 38°.58S±0°.06×175°.53E±0°.05, h186km, n123, σ0s97/123, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUTZ** | **Kaahu Road** | **0.24** | **69** | P | **Pn** | **11 17 25.8** | **+0.7** |
| **TLZ** | **Tolley Road** | **0.25** | **1** | P | **Pn** | **11 17 25.8** | **+0.6** |
| **RATZ** | **Rangitukua** | **0.34** | **147** | P | **Pn** | **11 17 25.9** | **+0.5** |
| **WPRZ** | **Whakapapatarin** | **0.50** | **83** | P | **Pn** | **11 17 26.3** | **+0.4** |
| **TWVZ** | **Taurewa** | **0.50** | **189** | P | **Pn** | **11 17 26.8** | **+0.8** |
| **NTVZ** | **North Tongarir** | **0.53** | **168** | P | **Pn** | **11 17 27.2** | **+1.1** |
| **HATZ** | **Hinemaiaia** | **0.54** | **126** | P | **Pn** | **11 17 26.3** | **+0.3** |
| **HIZ** | **Hauiti** | **0.54** | **277** | P | **Pn** | **11 17 27.0** | **+1.0** |
| **HIZ** | **Hauiti** | **0.54** | **277** | P | **Pn** | **11 17 27.1** | **+1.1** |
| **WTVZ** | **West Tongariro** | **0.54** | **175** | P | **Pn** | **11 17 27.1** | **+1.0** |
| **TMVZ** | **Te Maari** | **0.55** | **166** | P | **Pn** | **11 17 27.5** | **+1.3** |
| **NNVZ** | **North Ngauruho** | **0.56** | **173** | P | **Pn** | **11 17 27.4** | **+1.1** |
| **ETVZ** | **East Tongariro** | **0.57** | **166** | P | **Pn** | **11 17 27.4** | **+1.0** |
| **OTVZ** | **Oturere** | **0.59** | **170** | P | **Pn** | **11 17 27.8** | **+1.3** |
| **NGZ** | **Ngauruhoe** | **0.60** | **175** | P | **Pn** | **11 17 27.7** | **+1.2** |
| **SNVZ** | **South Ngauruho** | **0.61** | **172** | P | **Pn** | **11 17 27.8** | **+1.2** |
| **HRRZ** | **Handcock Road** | **0.62** | **73** | P | **Pn** | **11 17 26.8** | **+0.3** |
| **HSRZ** | **Hossack Road** | **0.62** | **65** | P | **Pn** | **11 17 26.8** | **+0.4** |
| **ALRZ** | **Allen Road** | **0.63** | **89** | P | **Pn** | **11 17 25.6** | **-0.9** |
| **FWVZ** | **Far West T-bar** | **0.68** | **179** | P | **Pn** | **11 17 28.0** | **+1.0** |
| **PRRZ** | **Plateau Road** | **0.68** | **84** | P | **Pn** | **11 17 27.0** | **+0.3** |
| **TUVZ** | **Tukino** | **0.69** | **172** | P | **Pn** | **11 17 29.0** | **+2.0** |
| **NGRZ** | **Ngongotaha** | **0.70** | **47** | P | **Pn** | **11 17 27.4** | **+0.5** |
| **HLRZ** | **Highlands Stat** | **0.72** | **63** | P | **Pn** | **11 17 27.7** | **+0.6** |
| **PKVZ** | **Pokaka** | **0.72** | **192** | P | **Pn** | **11 17 28.0** | **+1.0** |
| **MRHZ** | **Matea Rd** | **0.74** | **111** | P | **Pn** | **11 17 27.2** | **+0.2** |
| **WNVZ** | **Wahianoa** | **0.75** | **176** | P | **Pn** | **11 17 28.5** | **+1.2** |
| **KARZ** | **Kaharoa** | **0.79** | **45** | P | **Pn** | **11 17 27.8** | **+0.4** |
| **KMRZ** | **Kaimai** | **0.80** | **24** | P | **Pn** | **11 17 28.0** | **+0.5** |
| **RRRZ** | **Republican Roa** | **0.81** | **73** | P | **Pn** | **11 17 26.2** | **-1.3** |
| **OMRZ** | **Omania** | **0.81** | **55** | P | **Pn** | **11 17 27.9** | **+0.3** |
| **VRZ** | **Vera Road** | **0.81** | **228** | P | **Pn** | **11 17 28.7** | **+1.2** |
| **TARZ** | **Mount Tarawera** | **0.84** | **66** | P | **Pn** | **11 17 28.2** | **+0.5** |
| **MOVZ** | **Moawhango** | **0.84** | **168** | P | **Pn** | **11 17 28.5** | **+0.8** |
| **TOZ** | **Tahuroa Road** | **0.85** | **358** | P | **Pn** | **11 17 28.5** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **0.95** | **128** | P | **Pn** | **11 17 29.0** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **0.95** | **128** | P | **Pn** | **11 17 29.0** | **+0.6** |
| **MUGZ** | **Murupara** | **0.97** | **84** | P | **Pn** | **11 17 28.4** | **-0.1** |
| **BHHZ** | **Black Hill Sta** | **1.00** | **156** | P | **Pn** | **11 17 29.4** | **+0.7** |
| **TGRZ** | **Tauranga** | **1.02** | **34** | P | **Pn** | **11 17 29.4** | **+0.5** |
| **MTHZ** | **Maungataniwha** | **1.06** | **105** | P | **Pn** | **11 17 29.7** | **+0.5** |
| **MHEZ** | **Mangahewa** | **1.07** | **242** | P | **Pn** | **11 17 31.1** | **+1.9** |
| **MARZ** | **Manawahe** | **1.08** | **57** | P | **Pn** | **11 17 27.6** | **-1.8** |
| **OPRZ** | **Ohinepanea** | **1.09** | **48** | P | **Pn** | **11 17 29.6** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **1.09** | **141** | P | **Pn** | **11 17 30.6** | **+1.1** |
| **NMHZ** | **Naumai** | **1.12** | **118** | P | **Pn** | **11 17 31.1** | **+1.4** |
| **RTZ** | **Ruatahuna** | **1.13** | **92** | P | **Pn** | **11 17 30.2** | **+0.3** |
| **DREZ** | **Durham Road** | **1.21** | **239** | P | **Pn** | **11 17 31.9** | **+1.7** |
| **KRHZ** | **Kereru** | **1.25** | **149** | P | **Pn** | **11 17 31.7** | **+1.1** |
| **LREZ** | **Lake Rotokare** | **1.25** | **225** | P | **Pn** | **11 17 32.4** | **+1.9** |
| **WAZ** | **Wanganui** | **1.25** | **200** | P | **Pn** | **11 17 32.1** | **+1.5** |
| **MCHZ** | **McNeill Hill** | **1.25** | **134** | P | **Pn** | **11 17 32.3** | **+1.6** |
| **RAHZ** | **Arahi** | **1.26** | **106** | P | **Pn** | **11 17 31.8** | **+1.1** |
| **URZ** | **Urewera** | **1.28** | **76** | P | **Pn** | **11 17 30.6** | **-0.3** |
| **URZ** | **Urewera** | **1.28** | **76** | P | **Pn** | **11 17 30.8** | **-0.1** |
| **PREZ** | **Palmer Road** | **1.32** | **234** | P | **Pn** | **11 17 33.1** | **+1.9** |
| **NEZ** | **North Egmont** | **1.32** | **238** | P | **Pn** | **11 17 33.1** | **+1.8** |
| **ARHZ** | **Aropaoanui** | **1.33** | **121** | P | **Pn** | **11 17 32.5** | **+1.2** |
| **PKE** | **Pukeiti** | **1.35** | **243** | P | **Pn** | **11 17 33.3** | **+1.7** |
| **KHEZ** | **Kahui Hut** | **1.38** | **238** | P | **Pn** | **11 17 33.7** | **+1.8** |
| **WHHZ** | **Waihua** | **1.42** | **111** | P | **Pn** | **11 17 35.3** | **+3.2** |
| **SNGZ** | **Shannon Statio** | **1.43** | **99** | P | **Pn** | **11 17 33.1** | **+0.8** |
| **PNHZ** | **Pukenui** | **1.43** | **159** | P | **Pn** | **11 17 33.3** | **+1.0** |
| **NBEZ** | **Newall Road No** | **1.47** | **242** | P | **Pn** | **11 17 34.4** | **+1.9** |
| **RAGZ** | **Rawiri** | **1.48** | **87** | P | **Pn** | **11 17 33.1** | **+0.4** |
| **TSZ** | **Takapari Road** | **1.52** | **168** | P | **Pn** | **11 17 34.1** | **+1.1** |
| **NMEZ** | **Namu Road** | **1.54** | **237** | P | **Pn** | **11 17 34.1** | **+1.8** |
| **MWZ** | **Mimi** | **1.58** | **82** | P | **Pn** | **11 17 33.8** | **+0.1** |
| **KAHZ** | **Kahuranaki** | **1.60** | **140** | P | **Pn** | **11 17 35.2** | **+1.3** |
| **CKHZ** | **Cape Kidnapper** | **1.61** | **132** | P | **Pn** | **11 17 35.2** | **+1.3** |
| **KNZ** | **Kokohu** | **1.73** | **105** | P | **Pn** | **11 17 35.6** | **+0.6** |
| **RIGZ** | **Rimuhau** | **1.75** | **95** | P | **Pn** | **11 17 35.9** | **+0.6** |
| **DVHZ** | **Dannevirke** | **1.79** | **164** | P | **Pn** | **11 17 36.6** | **+0.9** |
| **RUGZ** | **Raukumara Rang** | **1.79** | **71** | P | **Pn** | **11 17 35.1** | **-0.8** |
| **TKGZ** | **Te Karaka** | **1.82** | **86** | P | **Pn** | **11 17 36.8** | **+0.8** |
| **PRGZ** | **Paritu Road** | **1.87** | **101** | P | **Pn** | **11 17 37.2** | **+0.6** |
| **PRHZ** | **Porangahau** | **1.89** | **154** | P | **Pn** | **11 17 37.8** | **+1.1** |
| **MHGZ** | **Mahia Peninsul** | **1.94** | **108** | P | **Pn** | **11 17 38.2** | **+1.0** |
| **HAZ** | **Te Kaha** | **1.95** | **66** | P | **Pn** | **11 17 36.9** | **-0.5** |
| **TWGZ** | **Tauwhareparae** | **1.96** | **79** | P | **Pn** | **11 17 38.2** | **+0.6** |
| **PRWZ** | **Pori Road** | **2.00** | **170** | P | **Pn** | **11 17 38.9** | **+1.0** |
| **ANWZ** | **Angora Road** | **2.02** | **159** | P | **Pn** | **11 17 39.2** | **+1.2** |
| **MRZ** | **Mangatainoka R** | **2.08** | **179** | P | **Pn** | **11 17 39.2** | **+0.5** |
| **CNGZ** | **Carnagh Statio** | **2.10** | **88** | P | **Pn** | **11 17 39.5** | **+0.6** |
| **PKGZ** | **Pakihiroa** | **2.12** | **72** | P | **Pn** | **11 17 39.4** | **+0.2** |
| **BFZ** | **Birch Farm** | **2.17** | **166** | P | **Pn** | **11 17 40.3** | **+0.6** |
| **PUZ** | **Puketiti** | **2.20** | **78** | P | **Pn** | **11 17 40.0** | **-0.1** |
| **OGWZ** | **Otaki Gorge** | **2.25** | **187** | P | **Pn** | **11 17 41.2** | **+0.7** |
| **HOWZ** | **Holdsworth Sta** | **2.32** | **180** | P | **Pn** | **11 17 41.6** | **+0.2** |
| **KIW** | **Kapiti Island** | **2.33** | **192** | P | **Pn** | **11 17 41.8** | **+0.3** |
| **TMWZ** | **Te Maipa** | **2.54** | **174** | P | **Pn** | **11 17 44.2** | **+0.3** |
| **DUWZ** | **D'Urville Isla** | **2.54** | **209** | P | **Pn** | **11 17 44.1** | **+0.2** |
| **CAW** | **Cannon Point** | **2.55** | **188** | P | **Pn** | **11 17 44.3** | **+0.4** |
| **MTW** | **Mount Morrison** | **2.58** | **181** | P | **Pn** | **11 17 44.3** | **0.0** |
| **WEL** | **Wellington** | **2.77** | **192** | P | **Pn** | **11 17 46.7** | **+0.3** |
| **PAWZ** | **Paruwai Farm** | **2.80** | **182** | P | **Pn** | **11 17 46.9** | **0.0** |
| **TCW** | **Tory Channel** | **2.80** | **200** | P | **Pn** | **11 17 47.1** | **+0.2** |
| **SNZO** | **South Karori** | **2.80** | **193** | P | **Pn** | **11 17 47.1** | **+0.2** |
| **TRWZ** | **Traveller** | **2.82** | **178** | P | **Pn** | **11 17 47.2** | **0.0** |
| **MSWZ** | **Moikau Station** | **2.84** | **184** | P | **Pn** | **11 17 47.3** | **-0.1** |
| **BHW** | **Baring Head** | **2.87** | **190** | P | **Pn** | **11 17 47.6** | **-0.1** |
| **PLWZ** | **Palliser** | **3.00** | **184** | P | **Pn** | **11 17 48.0** | **-0.3** |
| **TUWZ** | **Tuamarina** | **3.10** | **203** | P | **Pn** | **11 17 50.4** | **+1.0** |
| **NNZ** | **Nelson** | **3.11** | **211** | P | **Pn** | **11 17 50.4** | **-0.2** |
| **TKNZ** | **Takaka Hill** | **3.15** | **218** | P | **Pn** | **11 17 50.5** | **-0.6** |
| **QRZ** | **Quartz Range** | **3.23** | **225** | P | **Pn** | **11 17 51.4** | **-0.6** |
| **QRZ** | **Quartz Range** | **3.23** | **225** | P | **Pn** | **11 17 51.7** | **-0.3** |
| **CMWZ** | **Cape Campbell** | **3.32** | **197** | P | **Pn** | **11 17 54.0** | **+0.8** |
| **BSWZ** | **Blackbirch Sta** | **3.38** | **202** | P | **Pn** | **11 17 53.9** | **0.0** |
| **MRNZ** | **Matariki Terra** | **3.53** | **216** | P | **Pn** | **11 17 55.3** | **-0.5** |
| **THZ** | **Tophouse** | **3.76** | **212** | P | **Pn** | **11 17 58.4** | **-0.4** |
| **KHZ** | **Kahutara** | **4.12** | **201** | P | **Pn** | **11 18 03.0** | **-0.1** |
| **KHZ** | **Kahutara** | **4.12** | **201** | P | **Pn** | **11 18 03.2** | **0.0** |
| **DSZ** | **Denniston Nort** | **4.26** | **221** | P | **Pn** | **11 18 04.2** | **-0.8** |
| **GVZ** | **Greta Valley S** | **4.78** | **203** | P | **Pn** | **11 18 10.9** | **-0.7** |
| **LTZ** | **Lake Taylor** | **4.88** | **210** | P | **Pn** | **11 18 12.0** | **-0.8** |
| **INZ** | **Inchbonnie** | **5.18** | **216** | P | **Pn** | **11 18 15.3** | **-1.4** |
| **OKCZ** | **Okains Bay** | **5.47** | **199** | P | **Pn** | **11 18 19.5** | **-1.0** |
| **WACZ** | **Wakanui South** | **6.04** | **206** | P | **Pn** | **11 18 26.6** | **-1.2** |
| **RPZ** | **Rata Peaks** | **6.14** | **212** | P | **Pn** | **11 18 28.0** | **-1.0** |
| **ARCZ** | **Arundel** | **6.29** | **210** | P | **Pn** | **11 18 30.3** | **-0.9** |
| **TMZ** | **Timaru** | **6.72** | **209** | P | **Pn** | **11 18 35.5** | **-1.3** |
| **ODZ** | **Otahua Downs** | **7.42** | **208** | P | **Pn** | **11 18 45.3** | **-0.6** |

*IDC **27** 11:45:00.9±1.3, 15°.42S×174°.09W, h180km±17km, mb3.4/6, mb1 3.6/7, mb1mx3.3/42, mbtmp3.9/7, Error ellipse: s-maj=39.0km s-min=16.7km az=140.0*
*NEIC **27** 11:45:01.9±2.5, 15°.52S±0°.10×174°.0W±0°.1, h184km±8km, mb4.4/19, Error ellipse: s-maj=17.4km s-min=13.7km az=81.0*

**ISC 27 11:45:02.4±0.6, 15°.47S±0°.09×173°.97W±0°.09, h200km, n32, σ1s03/33, mb4.0/16, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.63** | **54** | P | **Pn** | **11 45 47.3** | **-0.5** |
| | 21nm,0.3s,baz=239,slow=5.9,SNR=29 | | | | | | |
| AFI | | | | S | Sn | 11 46 20.9 | -2.4 |
| | 36nm,0.3s,baz=240,slow=20,SNR=8.3 | | | | | | |
| **AFI** | **Afiamalu** | **2.63** | **54** | | **Pn** | **11 45 47.2** | **-0.7** |
| **NIUE** | **Niue** | **5.27** | **133** | Pn | **Pn** | **11 46 20.3** | **+0.1** |
| **RAO** | **Raoul Island** | **14.19** | **194** | P | **P** | **11 48 16.1** | **-0.1** |
| | 465nm,0.3s,baz=30,slow=20,SNR=11 | | | | | | |
| **RAO** | **Raoul Island** | **14.19** | **194** | | **P** | **11 48 15.5** | **-0.7** |
| **URZ** | **Urewera** | **24.02** | **197** | P | **P** | **11 49 58.5** | **-0.5** |
| | 11nm,0.9s,baz=350,slow=17,SNR=2.3 | | | | | | |
| **URZ** | **Urewera** | **24.02** | **197** | P | **P** | **11 49 57.9** | **-1.1** |
| URZ | | | | IAmb | IAmb | 11 50 25.4 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **34.84** | **239** | P | **P** | **11 51 33.4** | **-1.2** |
| ARMA | | | | IAmb | IAmb | 11 51 47.5 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **COEN** | **Coen** | **41.43** | **266** | P | **P** | **11 52 30.7** | **+1.0** |
| COEN | | | | IAmb | IAmb | 11 52 32.1 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **43.53** | **240** | P | **P** | **11 52 46.0** | **-0.5** |
| | comp=Z,0.9nm,0.6s,baz=90,slow=5.1,SNR=1.7 | | | | | | |
| **BBOO** | **Buckleboo** | **48.30** | **240** | P | **P** | **11 53 22.6** | **-1.1** |
| BBOO | | | | IAmb | IAmb | 11 53 24.1 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **49.10** | **257** | P | **P** | **11 53 30.2** | **+0.2** |
| **WB0** | **Warramunga Arr** | **49.25** | **257** | P | **P** | **11 53 31.8** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 11 53 55.1 | |
| | comp=Z,7.5nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **49.28** | **257** | P | **P** | **11 53 31.8** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 11 53 32.6 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **49.28** | **257** | P | **P** | **11 53 31.7** | **+0.3** |
| **WRA** | **Warramunga Arr** | **49.29** | **257** | P | **P** | **11 53 31.2** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=94,slow=7.1,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.29** | **257** | P | **P** | **11 53 31.9** | **+0.4** |
| **AS31** | **Alice Springs** | **49.57** | **252** | P | **P** | **11 53 32.8** | **-0.7** |
| **ASAR** | **Alice Springs** | **49.57** | **252** | P | **P** | **11 53 32.9** | **-0.6** |
| | comp=Z,2.9nm,0.7s,baz=88,slow=8.0,SNR=51 | | | | | | |
| **ASAR** | **Alice Springs** | **49.57** | **252** | P | **P** | **11 53 33.0** | **-0.5** |
| **MTN** | **Manton Dam** | **53.18** | **265** | P | **P** | **11 54 01.0** | **+0.6** |
| MTN | | | | IAmb | IAmb | 11 54 24.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **55.01** | **262** | P | **P** | **11 54 13.2** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 11 54 34.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.66** | **258** | P | **P** | **11 54 32.1** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **62.66** | **253** | P | **P** | **11 55 05.7** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 11 55 07.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **63.25** | **186** | P | **P** | **11 55 09.3** | **+0.2** |
| VNDA | | | | IAmb | IAmb | 11 55 09.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **LUWI** | **Luwuk** | **63.99** | **277** | P | **P** | **11 55 14.5** | **-0.5** |
| **QSPA** | **South Pole Qui** | **74.57** | **180** | P | **P** | **11 56 20.9** | **+1.7** |
| QSPA | | | | IAmb | IAmb | 11 56 24.3 | |
| | comp=Z,4.3nm,1.4s | | | | | | |
| **LOGN** | **Logan Glacier** | **80.49** | **16** | P | **P** | **11 56 51.8** | **0.0** |
| **TXAR** | **Lajitas Array** | **81.11** | **56** | P | **P** | **11 56 56.8** | **+1.0** |
| | comp=Z,0.2nm,0.8s,baz=224,slow=5.0,SNR=2.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **82.69** | **42** | P | **P** | **11 57 05.4** | **+1.5** |
| | comp=Z,0.3nm,0.5s,baz=191,slow=3.3,SNR=4.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **82.69** | **42** | P | **P** | **11 57 06.9** | **+3.0** |
| **SNAA** | **Sanae** | **92.86** | **177** | P | **P** | **11 57 51.1** | **-1.1** |

**IDC 27 11:58:18.2±4.0, 19°.27S×176°.20W, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.5/43, mbtmp3.6/2, Error ellipse: s-maj=252.3km s-min=80.5km az=163.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **46.46** | **255** | P | P | 12 06 47.2 | -0.1 |
| | 0.6nm,0.7s,baz=89,slow=8.4,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 12 08 20.8 | -1.4 |
| | 0.3nm,0.9s,baz=110,slow=3.8,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.46** | **260** | P | P | 12 06 47.5 | +0.1 |
| | 0.4nm,0.3s,baz=96,slow=7.5,SNR=33 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.73** | **333** | PKP | PKiKP | 12 17 55.2 | -1.2 |
| | 0.7nm,0.4s,baz=40,slow=4.1,SNR=5.2 | | | | | | |

*IDC **27** 12:20:03.2±0.9, 9°.26S×158°.48E, h0km, mb3.7/7, mb1 4.0/8, mb1mx3.8/37, mbtmp3.7/8, ML3.6/1, Error ellipse: s-maj=33.7km s-min=21.1km az=163.0*

**ISC 27 12:20:07.0±0.8, 9°.5S±0°.2×158°.61E±0°.08, h30km, n9, σ0s99/12, mb3.8/7, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.32** | **87** | Pn | **Pb** | **12 20 30.4** | **-0.8** |
| | 13nm,0.3s,baz=270,slow=4.0,SNR=5.3 | | | | | | |
| HNR | | | | Sn | **Sb** | **12 20 47.9** | **+0.1** |
| | 75nm,0.3s,baz=335,slow=17,SNR=8.8 | | | | | | |
| **CTA** | **Charters Tower** | **15.91** | **227** | Pn | **P** | **12 23 51.3** | **-1.0** |
| | 0.1nm,0.3s,baz=29,slow=7.9,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.63** | **243** | P | **P** | **12 25 33.9** | **-0.3** |
| | 0.7nm,0.8s,baz=70,slow=9.5,SNR=3.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 29 05.6** | **+1.0** |
| | 0.5nm,0.8s,baz=67,slow=3.0,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **27.48** | **236** | P | **P** | **12 25 51.6** | **+0.7** |
| | 1.7nm,1.3s,baz=61,slow=11,SNR=2.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 29 10.1** | **+1.1** |
| | 0.3nm,0.6s,baz=78,slow=2.7,SNR=8.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.08** | **295** | P | **P** | **12 30 45.2** | **0

comp=Z,0.4nm,0.4s,baz=204,slow=2.0,SNR=2.1
**FINES FINESS Array B 127.24 28** PKP **PKiKP 12 56 03.0 -0.5**
comp=Z,2.0nm,0.9s,baz=228,slow=15,SNR=2.2
**FRB Frobisher Bay 127.32 338** PKP **PKiKP 12 56 04.4 +0.9**
comp=Z,1.9nm,0.7s,baz=96,slow=2.5,SNR=4.1
**ARCES ARCESS Array B 134.04 22** PKP **PKiKP 12 56 16.3 -0.7**
comp=Z,2.3nm,1.0s,baz=234,slow=4.1,SNR=1.7
**MKAR Makanchi Array 137.24 74** PKP **PKiKP 12 56 24.4 +0.1**
comp=Z,0.2nm,0.7s,baz=248,slow=1.6,SNR=2.2
**YKA Yellowknife Ar 139.33 315** PKP **PKPdf 12 56 24.7 -0.9**
comp=Z,0.3nm,0.6s,baz=132,slow=2.3,SNR=5.1
**ZALV Zalesovo Beam 143.18 67** PKP **PKPdf 12 56 31.0 -1.8**
comp=Z,0.4nm,0.4s,baz=258,slow=3.1,SNR=2.6
**INK Inuvik 149.04 317** PKPbc **PKPbc 12 56 45.1 -1.4**
comp=Z,1.1nm,0.7s,baz=109,slow=8.4,SNR=4.9
**INK Inuvik 149.04 317** **PKPbc 12 56 45.5 -1.0**
**SONM Songino Array 150.03 92** PKPbc **PKiKP 12 56 50.2 -0.4**
comp=Z,1.3nm,0.8s,baz=272,slow=2.3,SNR=8.6
**SONM Songino Array 150.03 92** PKPdf **PKPdf 12 56 46.1 +1.4**
SONM **PKiKP 12 56 51.4 +0.8**
**KDAK Kodiak Island 152.94 289** PKPbc **PKPbc 12 56 54.3 -1.6**
comp=Z,5.5nm,0.7s,baz=135,slow=2.4,SNR=0.9
**KDAK Kodiak Island 152.94 289** **PKPdf 12 56 50.4 +1.9**
KDAK PKPbc **PKiKP 12 56 57.5 +1.5**
**ILAR Eielson Array 153.00 306** PKPbc **PKPbc 12 56 54.9 -1.0**
comp=Z,0.4nm,0.6s,baz=162,slow=0.3,SNR=8.7
**ILAR Eielson Array 153.00 306** **PKPbc 12 56 52.2 -3.6**
ILAR PKPbc **PKiKP 12 56 59.8 +3.7**

*KRSC **27** 12:38:26.7±2.6, 49°.58N×157°.27E, h50km±42km, ML4.7*
*MOS **27** 12:38:26.2±0.9, 49°.54N×156°.41E, h70km, mb4.4/19,*
*MS3.1/4, Error ellipse: s-maj=9.8km s-min=3.4km az=75.0*
*MOS Felt (II) at Severo-Kuril'sk.*
*NEIC **27** 12:38:28.4±1.2, 49°.57N±0°.09×156°.4E±0°.1, h70km±7km,*
*mb4.2/44, Error ellipse: s-maj=15.0km s-min=10.7km*
*az=132.0*
*IDC **27** 12:38:28.8±2.0, 49°.64N×156°.22E, h80km±18km, mb3.6/20,*
*mb1 3.9/26, mb1mx3.8/53, mbtmp4.0/26, MS2.7/5,*
*Ms1 2.7/5, ms1mx2.5/96, Error ellipse: s-maj=16.8km*
*s-min=9.9km az=147.0*

**ISC 27 12:38:26.2±0.5, 49°.50N±0°.06×156°.54E±0°.05, h57km, n208, σ1s65/227, mb4.2/51, 8C-8D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.21** | **347** | *i* | P | **Pn** | **12 38 48.4** | **+1.4** |
| SKR | | | | | *e*S | **Sn** | **12 39 03.5** | **+1.1** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,1μm,0.5s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=E,10μm,0.5s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=N,7μm,0.7s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **1.21** | **347** | *e* | P | **Pn** | **12 38 48.4** | **+1.4** |
| SKR | | | | | *e*S | **Sn** | **12 39 03.5** | **+1.1** |
| **PAU** | **Pauzhetka** | **1.98** | **5** | PN | P | **Pn** | **12 38 59.2** | **+1.9** |
| PAU | | | | | S | **Sn** | **12 39 22.2** | **+1.3** |
| **PAU** | **Pauzhetka** | **1.98** | **5** | *e* | P | **Pn** | **12 38 59.2** | **+1.9** |
| PAU | | | | | *e*S | **Sn** | **12 39 22.2** | **+1.3** |
| **KDTR** | **Khodutka, Kamc** | **2.51** | **22** | PN | P | **Pn** | **12 39 05.5** | **+1.0** |
| KDTR | | | | | S | **Sn** | **12 39 33.7** | **-0.2** |
| **KDTR** | **Khodutka, Kamc** | **2.51** | **22** | *e* | P | **Pn** | **12 39 05.5** | **+1.0** |
| KDTR | | | | | *e*S | **Sn** | **12 39 33.7** | **-0.2** |
| **MTVR** | **Mutnovka** | **3.16** | **19** | PN | P | **Pn** | **12 39 15.0** | **+1.4** |
| MTVR | | | | | S | **Sn** | **12 39 50.9** | **+0.8** |
| **MTVR** | **Mutnovka** | **3.16** | **19** | *e* | P | **Pn** | **12 39 15.0** | **+1.4** |
| MTVR | | | | | *e*S | **Sn** | **12 39 50.9** | **+0.8** |
| **RUS** | **Russkaya** | **3.19** | **22** | PN | P | **Pn** | **12 39 14.5** | **+0.7** |
| RUS | | | | | S | **Sn** | **12 39 49.6** | **-1.0** |
| **RUS** | **Russkaya** | **3.19** | **22** | *e* | P | **Pn** | **12 39 14.5** | **+0.7** |
| RUS | | | | | *e*S | **Sn** | **12 39 49.6** | **-1.0** |
| **GRL** | **Gorelyy** | **3.21** | **17** | PN | P | **Pn** | **12 39 16.2** | **+2.0** |
| GRL | | | | | S | **Sn** | **12 39 52.3** | **+1.1** |
| **GRL** | **Gorelyy** | **3.21** | **17** | *e* | P | **Pn** | **12 39 16.2** | **+2.0** |
| GRL | | | | | *e*S | **Sn** | **12 39 52.3** | **+1.1** |
| **APC** | **Apacha** | **3.45** | **6** | PN | P | **Pn** | **12 39 19.3** | **+1.9** |
| **APC** | **Apacha** | **3.45** | **6** | *e* | P | **Pn** | **12 39 19.3** | **+1.9** |
| **KRMR** | **Karymshinskiy** | **3.48** | **16** | PN | P | **Pn** | **12 39 19.9** | **+2.1** |
| KRMR | | | | | S | **Sn** | **12 39 59.3** | **+1.6** |
| **KRMR** | **Karymshinskiy** | **3.48** | **16** | *e* | P | **Pn** | **12 39 19.9** | **+2.1** |
| KRMR | | | | | S | **Sn** | **12 39 59.3** | **+1.6** |
| **PEA0B** | **Petropavlovsk-** | **3.69** | **11** | ⇓*e* | PN | **Pn** | **12 39 24.0** | **+3.4** |
| **PEA0B** | **Petropavlovsk-** | **3.69** | **11** | | | **Pn** | **12 39 22.8** | **+2.1** |
| **PETK** | **Petropavlovsk-** | **3.69** | **11** | P | | **Pn** | **12 39 21.7** | **+1.1** |
| | comp=N,5.0nm,0.3s,baz=180,slow=11,SNR=18 | | | | | | | |
| PETK | | | | | S | **Sn** | **12 40 08.8** | **+6.0** |
| | comp=N,3.2nm,0.3s,baz=198,slow=23,SNR=5.5 | | | | | | | |
| PETK | | | | | LR | LR | 12 41 15.4 | |
| | comp=N,64nm,19.3s,baz=184,slow=46 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.69** | **11** | PN | P | **Pn** | **12 39 22.2** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **3.69** | **11** | Pn | P | **Pn** | **12 39 22.1** | **+1.5** |
| **PET** | **Petropavlovsk** | **3.77** | **20** | *e* | PN | **Pn** | **12 39 23.1** | **+1.3** |
| PET | | | | | *e*S | **Sn** | **12 40 05.6** | **+0.8** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,42nm,0.5s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=E,260nm,0.6s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=N,236nm,0.4s | | | | | | | |
| **PET** | **Petropavlovsk** | **3.77** | **20** | Pn | | **Pn** | **12 39 23.1** | **+1.3** |
| **PET** | **Petropavlovsk** | **3.77** | **20** | *e* | P | **Pn** | **12 39 22.9** | **+1.1** |
| **DALK** | **Dalny** | **3.80** | **21** | PN | P | **Pn** | **12 39 23.2** | **+1.0** |
| DALK | | | | | S | **Sn** | **12 40 04.7** | **-0.8** |
| **DALK** | **Dalny** | **3.80** | **21** | *e* | P | **Pn** | **12 39 23.2** | **+1.0** |
| DALK | | | | | S | **Sn** | **12 40 04.7** | **-0.8** |
| **UGLR** | **Uglovaya** | **3.98** | **20** | PN | P | **Pn** | **12 39 26.7** | **+1.9** |
| **UGLR** | **Uglovaya** | **3.98** | **20** | *e* | P | **Pn** | **12 39 26.7** | **+1.9** |
| **AVH** | **Avacha** | **4.01** | **19** | PN | P | **Pn** | **12 39 27.5** | **+2.3** |
| AVH | | | | | S | **Sn** | **12 40 12.2** | **+1.3** |
| **AVH** | **Avacha** | **4.01** | **19** | P | P | **Pn** | **12 39 27.5** | **+2.3** |
| AVH | | | | | *e*S | **Sn** | **12 40 12.2** | **+1.3** |
| **KOK** | **Koryaka** | **4.02** | **18** | PN | P | **Pn** | **12 39 27.8** | **+2.5** |
| **KOK** | **Koryaka** | **4.02** | **18** | P | P | **Pn** | **12 39 27.8** | **+2.5** |
| **SMAR** | **Somma** | **4.03** | **20** | PN | P | **Pn** | **12 39 27.2** | **+1.7** |
| **SMAR** | **Somma** | **4.03** | **20** | *e* | P | **Pn** | **12 39 27.2** | **+1.7** |
| **KRER** | **Koryakskii** | **4.05** | **19** | PN | P | **Pn** | **12 39 28.1** | **+2.3** |
| **KRER** | **Koryakskii** | **4.05** | **19** | P | P | **Pn** | **12 39 28.1** | **+2.3** |
| **SDLR** | **Sedlovina** | **4.06** | **20** | PN | P | **Pn** | **12 39 27.1** | **+1.2** |
| **SDLR** | **Sedlovina** | **4.06** | **20** | *e* | P | **Pn** | **12 39 27.1** | **+1.2** |
| **SPN** | **Mys Shipunski** | **4.21** | **30** | PN | P | **Pn** | **12 39 28.9** | **+1.0** |
| SPN | | | | | S | **Sn** | **12 40 14.0** | **-1.7** |
| **SPN** | **Mys Shipunski** | **4.21** | **30** | *e* | P | **Pn** | **12 39 28.9** | **+1.0** |
| SPN | | | | | *e*S | **Sn** | **12 40 14.0** | **-1.7** |
| **GNL** | **Ganaly** | **4.29** | **11** | PN | P | **Pn** | **12 39 31.0** | **+2.0** |
| **GNL** | **Ganaly** | **4.29** | **11** | *e* | P | **Pn** | **12 39 31.0** | **+2.0** |
| **MKZ** | **Mys Kozlova** | **5.99** | **30** | PN | P | **Pn** | **12 39 51.8** | **-0.4** |
| **MKZ** | **Mys Kozlova** | **5.99** | **30** | *e* | P | **Pn** | **12 39 51.8** | **-0.4** |
| MKZ | | | | | *e*S | **Sn** | **12 40 54.6** | **-4.7** |
| **TUMD** | **Tumrok D** | **6.18** | **21** | *e* | P | **Pn** | **12 39 55.3** | **+0.5** |
| TUMD | | | | | *e*S | **Sn** | **12 41 01.5** | **-2.5** |
| **TUMR** | **Tumrok** | **6.20** | **19** | PN | P | **Pn** | **12 39 57.3** | **+2.2** |
| **TUMR** | **Tumrok** | **6.20** | **19** | *e* | P | **Pn** | **12 39 57.3** | **+2.2** |
| **KMNR** | **Kamenistaya** | **6.66** | **18** | PN | P | **Pn** | **12 40 04.2** | **+2.8** |
| **KMNR** | **Kamenistaya** | **6.66** | **18** | *e* | P | **Pn** | **12 40 04.2** | **+2.8** |
| **KPT** | **Kopyto** | **6.85** | **18** | PN | P | **Pn** | **12 40 05.2** | **+1.2** |
| **KPT** | **Kopyto** | **6.85** | **18** | *e* | P | **Pn** | **12 40 05.2** | **+1.2** |
| **KIRR** | **Kirishev** | **6.86** | **18** | PN | P | **Pn** | **12 40 06.3** | **+2.0** |
| **KIRR** | **Kirishev** | **6.86** | **18** | *e* | P | **Pn** | **12 40 06.3** | **+2.0** |
| **KOZ** | **Kozyrevsk** | **6.87** | **16** | PN | P | **Pn** | **12 40 06.6** | **+2.3** |
| **KOZ** | **Kozyrevsk** | **6.87** | **16** | *e* | P | **Pn** | **12 40 06.6** | **+2.3** |
| **BZGR** | **Bezymyannyi-Gr** | **6.92** | **20** | PN | P | **Pn** | **12 40 07.4** | **+2.3** |
| **BZGR** | **Bezymyannyi-Gr** | **6.92** | **20** | *e* | P | **Pn** | **12 40 07.4** | **+2.3** |
| **ZLN** | **Zelenaya** | **7.02** | **20** | PN | P | **Pn** | **12 40 08.7** | **+2.3** |
| **ZLN** | **Zelenaya** | **7.02** | **20** | *e* | P | **Pn** | **12 40 08.7** | **+2.3** |
| **LGNR** | **Loginova** | **7.06** | **19** | PN | P | **Pn** | **12 40 09.4** | **+2.4** |
| **LGNR** | **Loginova** | **7.06** | **19** | *e* | P | **Pn** | **12 40 09.4** | **+2.4** |
| **CIRR** | **Tsirk** | **7.10** | **19** | PN | P | **Pn** | **12 40 09.8** | **+2.3** |
| **CIRR** | **Tsirk** | **7.10** | **19** | *e* | P | **Pn** | **12 40 09.8** | **+2.3** |
| **KRSR** | **Krestovskiy** | **7.15** | **18** | PN | P | **Pn** | **12 40 10.8** | **+2.6** |
| **KRSR** | **Krestovskiy** | **7.15** | **18** | *e* | P | **Pn** | **12 40 10.8** | **+2.6** |
| **KLY** | **Klyuchi** | **7.26** | **18** | PN | P | **Pn** | **12 40 11.8** | **+2.2** |
| **KLY** | **Klyuchi** | **7.26** | **18** | *e* | P | **Pn** | **12 40 11.8** | **+2.2** |
| **KUR** | **Kuril'sk** | **7.27** | **237** | *e* | PN | **Pn** | **12 40 12.0** | **+2.3** |
| KUR | | | | | *e*S | **Sn** | **12 41 32.2** | **+1.4** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,37nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,11nm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,11nm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,27nm,0.5s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,6.0nm,0.3s | | | | | | | |
| **SMKR** | **Semkarok** | **7.69** | **21** | PN | P | **Pn** | **12 40 16.6** | **+1.1** |
| **SMKR** | **Semkarok** | **7.69** | **21** | *e* | P | **Pn** | **12 40 16.6** | **+1.1** |
| **KBTR** | **Krutoberegovo** | **7.72** | **27** | PN | P | **Pn** | **12 40 15.6** | **-0.2** |
| **KBTR** | **Krutoberegovo** | **7.72** | **27** | *e* | P | **Pn** | **12 40 15.6** | **-0.2** |
| **BKI** | **Bering** | **8.12** | **42** | *e* | S | Sn | 12 41 42.8 | -8.7 |
| **SHO** | **Shikotan** | **8.73** | **233** | *e* | PN | **Pn** | **12 40 29.9** | **+0.2** |
| **YUK** | **Yuzh-Kuril'sk** | **9.14** | **237** | ⇑*e* | PN | **Pn** | 12 40 41.3 | +6.0 |
| **UGL** | **Uglegorsk** | **9.47** | **273** | *e* | PN | Pn | 12 40 44.3 | +4.5 |
| UGL | | | | | S | **Sn** | **12 42 29.4** | **+4.8** |
| UGL | | | | | pmax | pmax | | |
| | comp=Z,54nm,1.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.55** | **260** | *e* | PN | **Pn** | **12 40 44.6** | **+3.7** |
| YSS | | | | | *e*S | **Sn** | **12 42 27.4** | **+0.9** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.55** | **260** | Pn | | **Pn** | **12 40 42.8** | **+1.9** |
| **MA2** | **Magadan** | **10.63** | **344** | P | | **Pn** | **12 40 56.6** | **+1.0** |
| | comp=Z,0.4nm,0.3s,baz=160,slow=6.9,SNR=9.5 | | | | | | | |
| MA2 | | | | | S | **Sn** | **12 42 47.9** | **-5.0** |
| | comp=Z,0.3nm,0.3s,baz=276,slow=22,SNR=1.7 | | | | | | | |
| MA2 | | | | | LR | LR | 12 45 38.2 | |
| | comp=Z,38nm,20.1s,baz=150,slow=41 | | | | | | | |
| **MA2** | **Magadan** | **10.63** | **344** | ⇑*e* | PN | **Pn** | **12 40 57.0** | **+1.4** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **MA2** | **Magadan** | **10.63** | **344** | Pn | | **Pn** | **12 40 57.5** | **+1.9** |
| **JKA** | **Kamikawa-asahi** | **10.96** | **246** | | | **Pn** | **12 41 01.1** | **+0.9** |
| **ASAJ** | **Asahikawa** | **10.96** | **246** | P | | **Pn** | **12 41 01.7** | **+1.5** |
| | comp=Z,0.5nm,0.3s,baz=79,slow=12,SNR=8.7 | | | | | | | |
| ASAJ | | | | | LR | LR | 12 44 47.9 | |
| | comp=Z,55nm,19.5s,baz=58,slow=35 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **11.50** | **67** | P | | **Pn** | **12 41 11.6** | **+4.1** |
| | comp=Z,13nm,0.3s,baz=76,slow=11,SNR=5.7 | | | | | | | |
| **SMY** | **Shemya** | **11.50** | **67** | PN | | **Pn** | **12 41 09.9** | **+2.4** |
| **SMY** | **Shemya** | **11.50** | **67** | Pn | | **Pn** | **12 41 09.9** | **+2.4** |
| **ERM** | **Erimo** | **11.96** | **236** | PN | | **Pn** | **12 41 14.1** | **+0.2** |
| **ERM** | **Erimo** | **11.96** | **236** | Pn | | **Pn** | **12 41 14.1** | **+0.2** |
| **KLR** | **Kul'dur** | **16.13** | **278** | P | | **Pn** | **12 42 07.7** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=48,slow=14,SNR=2.5 | | | | | | | |
| KLR | | | | | LR | LR | 12 48 36.3 | |
| | comp=Z,33nm,21.0s,baz=128,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **16.13** | **278** | ⇓*e* | P | **P** | **12 42 10.6** | **-0.8** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,11nm,3.1s | | | | | | | |
| KLR | | | | | MLR | MLR | | |
| | comp=Z,24nm,8.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.57** | **262** | P | | **P** | **12 42 27.8** | **+0.5** |
| | baz=54,slow=13,SNR=1.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.57** | **233** | P | | **P** | **12 42 37.5** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=52,slow=9.3,SNR=11 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.57** | **233** | P | | **P** | **12 42 38.5** | **+0.1** |
| MJAR | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.57** | **233** | P | | **P** | **12 42 38.5** | **+0.1** |
| **MJB9** | **Matsu-Tunnel** | **18.57** | **233** | P | | **P** | **12 42 39.4** | **+0.9** |
| **MAJO** | **Matsushiro** | **18.57** | **233** | P | | **P** | **12 42 38.9** | **+0.5** |
| MAJO | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **18.57** | **233** | P | | **P** | **12 42 38.9** | **+0.5** |
| **ZEA** | **Zeya** | **18.60** | **294** | *e* | P | **P** | **12 42 37.4** | **-1.2** |
| **MDJ** | **Mudanjiang** | **18.95** | **265** | | | **Pn** | **12 42 43.2** | **-0.4** |
| **BILL** | **Bilibino** | **19.22** | **11** | *e* | P | **P** | **12 42 45.5** | **+0.3** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,59nm,10.0s | | | | | | | |
| **BILL** | **Bilibino** | **19.22** | **11** | P | | **P** | **12 42 45.8** | **+0.5** |
| **YAK** | **Yakutsk** | **19.45** | **320** | LR | | LR | 12 49 55.3 | |
| | comp=Z,32nm,18.7s,baz=86,slow=36 | | | | | | | |
| **YAK** | **Yakutsk** | **19.45** | **320** | ⇓*e* | P | **P** | **12 42 45.7** | **-2.1** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **20.57** | **224** | P | | **P** | **12 42 58.8** | **-1.4** |
| | comp=Z,64nm,0.8s,baz=73,slow=20,SNR=1.6 | | | | | | | |
| **KSRS** | **Korea Array** | **23.85** | **251** | P | | **P** | **12 43 34.3** | **+0.3** |
| | comp=Z,4.3nm,0.8s,baz=45,slow=9.7,SNR=22 | | | | | | | |
| **KS19** | **Wonju Array Si** | **23.85** | **251** | P | | **P** | **12 43 35.0** | **+0.9** |
| KS19 | | | | | IAmb | IAmb | 12 43 36.0 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **23.88** | **251** | P | | **P** | **12 43 34.9** | **+0.6** |
| **KSAR** | **Wonju Array Be** | **23.88** | **251** | P | | **P** | **12 43 34.9** | **+0.6** |
| **TNA** | **Tin City** | **24.46** | **36** | P | | **P** | **12 43 42.0** | **+2.7** |
| TNA | | | | | IAmb | IAmb | 12 43 42.2 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **TJN** | **Taejon** | **24.88** | **249** | ⇑*e* | P | **P** | **12 43 44.7** | **+1.2** |
| **ANM** | **Nome** | **25.11** | **39** | P | | **P** | **12 43 45.8** | **+0.5** |
| ANM | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **ANM** | **Nome** | **25.11** | **39** | P | | **P** | **12 43 45.8** | **+0.5** |
| ANM | | | | | IAmb | IAmb | 12 43 49.0 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **TIXI** | **Tiksi** | **25.56** | **340** | P | | **P** | **12 43 46.5** | **-2.8** |
| | comp=Z,0.8nm,0.4s,baz=270,slow=20,SNR=9.8 | | | | | | | |
| **TIXI** | **Tiksi** | **25.56** | **340** | ⇑*i* | P | **P** | **12 43 47.9** | **-1.4** |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.1s | | | | | | | |
| TIXI | | | | | MLR | MLR | | |
| | comp=Z,39nm,19.0s | | | | | | | |
| **TIXI** | **Tiksi** | **25.56** | **340** | P | | **P** | **12 43 48.0** | **-1.4** |
| **IMAR** | **Indian Mountai** | **30.19** | **38** | P | | **P** | **12 44 31.1** | **+0.5** |
| **H11N2** | **WAKE ISLAND Hy** | **30.84** | **161** | T | | T | 13 17 47.2 | |
| | baz=346 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.86** | **161** | T | | T | 13 18 38.1 | |
| | baz=346,slow=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.86** | **161** | T | | T | 13 18 37.9 | |
| | baz=346,slow=74 | | | | | | | |
| **COLD** | **Coldfoot** | **31.76** | **36** | P | | **P** | **12 44 45.3** | **+0.8** |
| COLD | | | | | IAmb | IAmb | 12 44 45.8 | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **31.92** | **40** | P | | **P** | **12 44 46.5** | **+0.5** |
| I23K | | | | | IAmb | IAmb | 12 45 12.8 | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.98** | **162** | T | | T | 13 19 19.4 | |
| | baz=347,slow=76,SNR=232 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.99** | **162** | T | | T | 13 19 13.5 | |
| | baz=347,slow=76,SNR=210 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.00** | **162** | T | | T | 13 19 19.8 | |
| | baz=347,slow=76,SNR=144 | | | | | | | |
| **RND** | **Reindeer** | **32.11** | **44** | P | | **P** | **12 44 48.4** | **+0.7** |
| RND | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **RND** | **Reindeer** | **32.11** | **44** | P | | **P** | **12 44 48.4** | **+0.7** |
| RND | | | | | IAmb | IAmb | 12 44 48.6 | |
| | comp=Z,6.6nm,1.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **32.19** | **34** | P | | **P** | **12 44 49.2** | **+0.9** |
| **ULN** | **Ulaanbaatar** | **32.24** | **286** | ⇑*e* | P | **P** | **12 44 47.2** | **-1.9** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **MDM** | **Murphy Dome** | **32.39** | **41** | P | | **P** | **12 44 51.2** | **+1.1** |
| MDM | | | | | IAmb | IAmb | 12 44 52.1 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **COLA** | **College** | **32.55** | **41** | ⇓*e* | P | **P** | **12 44 52.5** | **+1.1** |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **32.57** | **41** | P | | **P** | **12 44 51.9** | **+0.3** |
| CCB | | | | | IAmb | IAmb | 12 45 11.9 | |
| | comp=Z,4.7nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **32.67** | **287** | P | | **P** | **12 44 49.2** | **-3.6** |
| | comp=Z,0.1nm,0.4s,baz=71,slow=8.3,SNR=2.1 | | | | | | | |
| **HDA** | **Harding Lake** | **32.94** | **42** | P | | **P** | **12 44 55.4** | **+0.5** |
| HDA | | | | | IAmb | IAmb | 12 44 55.8 | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **IL31** | | **32.97** | **41** | P | | **P** | **12 44 55.8** | **+0.8** |
| IL31 | | | | | IAmb | IAmb | 12 45 06.4 | |
| | comp=Z,7.5nm,1.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **32.97** | **41** | P | | **P** | **12 44 55.2** | **+0.1** |
| | comp=Z,1.4nm,0.8s,baz=248,slow=6.7,SNR=18 | | | | | | | |
| **ILAR** | **Eielson Array** | **32.97** | **41** | P | | **P** | **12 44 56.2** | **+1.2** |
| **J25K** | **Salcha River,** | **33.62** | **41** | P | | **P** | **12 45 00.7** | **-0.2** |
| J25K | | | | | IAmb | IAmb | 12 45 00.8 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **ZAK** | **Zakamensk** | **33.68** | **292** | *e* | P | **P** | **12 44 58.4** | **-3.1** |
| ZAK | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **33.95** | **36** | P | | **P** | **12 45 05.1** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **35.32** | **44** | P | | **P** | **12 45 17.4** | **+1.8** |
| **EGAK** | **Eagle** | **35.42** | **41** | P | | **P** | **12 45 16.6** | **+0.3** |
| **DAWY** | **Dawson** | **36.26** | **42** | P | | **P** | **12 45 24.0** | **+0.5** |
| DAWY | | | | | IAmb | IAmb | 12 45 27.3 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **38.09** | **34** | P | | **P** | **12 45 39.7** | **+0.8** |
| | comp=Z,3.4nm,0.8s,baz=286,slow=6.4,SNR=14 | | | | | | | |
| **INK** | **Inuvik** | **38.09** | **34** | P | | **P** | **12 45 40.0** | **+1.1** |
| **A36M** | **Sachs Harbour** | **40.35** | **28** | P | | **P** | **12 45 58.9** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **42.90** | **304** | P | | **P** | **12 46 16.7** | **-2.1** |
| | comp=Z,1.8nm,0.6s,baz=60,slow=6.4,SNR=10 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.90** | **304** | *i* | P | **P** | **12 46 17.0** | **-1.8** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.90** | **304** | P | | **P** | **12 46 17.2** | **-1.5** |
| **DGZ** | **Jazzator, Alta** | **43.31** | **298** | ⇓*i* | P | **P** | **12 46 21.6** | **-0.8** |
| DGZ | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **GOMU** | **GeErMu** | **45.92** | **277** | P | | **P** | **12 46 41.3** | **-2.2** |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **EUNU** | **Eureka** | **45.96** | **12** | P | | **P** | **12 46 43.3** | **+0.4** |
| EUNU | | | | | IAmb | IAmb | 12 46 44.0 | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.34** | **39** | P | | **P** | **12 46 54.8** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=297,slow=7.5,SNR=14 | | | | | | | |
| YKA | | | | PcP | | **PcP** | **12 48 23.1** | **-0.6** |
| | comp=Z,0.4nm,0.7s,baz=302,slow=3.7,SNR=4.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.34** | **39** | P | | **P** | **12 46 54.2** | **+0.4** |
| **RES** | **Resolute Bay** | **47.48** | **20** | P | | **P** | **12 46 55.6** | **+0.8** |
| RES | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **RES** | **Resolute Bay** | **47.48** | **20** | P | | **P** | **12 46 55.6** | **+0.8** |
| **MK31** | **Makanchi Array** | **47.73** | **297** | *d* | P | **P** | **12 46 55.0** | **-2.2** |
| **MK31** | **Makanchi Array** | **47.73** | **297** | P | | **P** | **12 46 56.4** | **-0.7** |
| MK31 | | | | | IAmb | IAmb | 12 46 56.5 | |
| | comp=Z,2.4nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.73** | **297** | P | | **P** | **12 46 54.9** | **-2.2** |
| | comp=Z,2.1nm,0.8s,baz=63,slow=7.5,SNR=20 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.73** | **297** | *i* | P | **P** | **12 46 55.7** | **-1.5** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.73** | **297** | P | | **P** | **12 46 56.4** | **-0.7** |
| **KURK** | **Kurchatov** | **47.77** | **303** | *d* | P | **P** | **12 46 55.9** | **-1.4** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **47.77** | **303** | P | | **P** | **12 46 56.2** | **-1.1** |
| **BRVK** | **Borovoye** | **50.93** | **309** | ⇑*e* | P | **P** | **12 47 20.0** | **-1.4** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **50.93** | **309** | P | | **P** | **12 47 21.4** | **0.0** |
| BRVK | | | | | IAmb | IAmb | 12 47 21.4 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **L04D** | **Klamath Falls** | **54.40** | **65** | P | | **P** | **12 47 49.3** | **+1.9** |
| **ARU** | **Arti** | **54.53** | **318** | ⇓*e* | P | **P** | **12 47 46.8** | **-1.1** |
| ARU | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.2s | | | | | | | |
| ARU | | | | | MLR | MLR | | |
| | comp=Z,39nm,16.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.23** | **257** | P | | **P** | **12 47 54.2** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=31,slow=6.6,SNR=8.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.23** | **257** | *i* | P | **P** | **12 47 55.2** | **+1.7** |
| CMAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.23** | **257** | P | | **P** | **12 47 53.0** | **-0.5** |
| **BMO** | **Blue Mountains** | **55.66** | **59** | P | | **P** | **12 47 57.6** | **+1.2** |
| BMO | | | | |

*MLv3.5/7*

**ISC 27 12:57:24.7±1.3, 1°.4N×0°.1×126°.02E±0°.07, h100km, n9, σ1§39/10, mb3.7/3, Northern Moluccas Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.47** | **113** | P | **Pn** | **12 57 52.2** | **+1.7** |
| **KMSI** | **Cibinong** | **2.17** | **249** | P | **Pn** | **12 58 00.0** | **+0.5** |
| **GTOI** | **Gorontalo** | **3.09** | **257** | P | **Pn** | **12 58 13.2** | **+1.6** |
| GTOI | | | | S | **Sn** | **12 58 49.8** | **+2.0** |
| **SANI** | **Sanana** | **3.37** | **180** | P | **Pn** | **12 58 15.2** | **-0.3** |
| **MRSI** | **Marisa** | **4.17** | **258** | P | **Pn** | **12 58 26.1** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **19.32** | **181** | P | **P** | **13 01 41.3** | **-0.9** |
| | 0.1nm,0.3s,baz=0.0,slow=11,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.68** | **159** | P | **P** | **13 02 17.6** | **-0.4** |
| | 1.3nm,0.3s,baz=334,slow=11,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **26.02** | **163** | P | **P** | **13 02 48.9** | **+0.3** |
| | 0.3nm,0.3s,baz=339,slow=7.1,SNR=7.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.12** | **326** | P | **P** | **13 07 13.1** | **-1.7** |
| | 0.4nm,0.5s,baz=125,slow=6.3,SNR=11 | | | | | | |

**IDC 27 12:58:05.8±1.9, 6°.17S×147°.95E, h0km, mb3.6/3, mb1 3.8/5, mb1mx3.5/35, mbtmp3.6/5, ML3.6/1, MS2.7/2, Ms1 2.7/2, ms1mx2.4/54, Error ellipse: s-maj=62.9km s-min=25.3km az=116.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.31** | **194** | Pn | Pn | 12 58 60.0 | +1.0 |
| | 4.9nm,0.3s,baz=297,slow=4.8,SNR=14 | | | | | | |
| PMG | | | | Sn | Sn | 12 59 39.1 | +0.1 |
| | 3.6nm,0.3s,baz=338,slow=18,SNR=4.6 | | | | | | |
| PMG | | | | LR | LR | 13 00 40.8 | |
| | comp=Z,78nm,18.7s,baz=15,slow=47 | | | | | | |
| **JAY** | **Jayapura** | **8.09** | **296** | LR | LR | 13 03 54.3 | |
| | comp=Z,71nm,18.4s,baz=22,slow=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.04** | **223** | P | Pn | 13 02 30.9 | +0.6 |
| | 0.2nm,0.3s,baz=49,slow=11,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **22.03** | **216** | P | P | 13 03 01.7 | -0.4 |
| | 1.0nm,0.5s,baz=52,slow=9.3,SNR=26 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.79** | **239** | P | P | 13 03 29.4 | -0.2 |
| | 2.0nm,0.6s,baz=52,slow=8.9,SNR=9.4 | | | | | | |
| **ILAR** | **Eielson Array** | **85.26** | **23** | P | P | 13 10 43.9 | -0.3 |
| | 0.6nm,1.1s,baz=250,slow=5.0,SNR=4.0 | | | | | | |

**IDC 27 13:00:27.7±3.9, 14°.42S×68°.07W, h87km±36km, mb3.6/4, mb1 3.7/4, mb1mx3.4/27, mbtmp3.9/4, Error ellipse: s-maj=48.1km s-min=34.7km az=110.0, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **1.86** | **182** | P | Pn | 13 00 58.4 | -0.2 |
| | 24nm,0.3s,baz=22,slow=11,SNR=348 | | | | | | |
| LPAZ | | | | S | Sn | 13 01 22.3 | +0.4 |
| | baz=342,slow=20 | | | | | | |
| **PLCA** | **Paso Flores** | **26.31** | **184** | P | P | 13 05 55.2 | 0.0 |
| | 1.3nm,0.8s,baz=310,slow=16,SNR=5.1 | | | | | | |
| **DBIC** | **Dimbokro** | **66.10** | **76** | P | P | 13 11 06.5 | +0.4 |
| | 2.3nm,0.6s,baz=263,slow=11,SNR=2.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.30** | **72** | P | P | 13 11 56.1 | -0.1 |
| | 1.4nm,0.6s,baz=259,slow=5.7,SNR=9.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.82** | **340** | P | P | 13 12 52.1 | 0.0 |
| | 0.2nm,0.5s,baz=135,slow=5.1,SNR=3.4 | | | | | | |

*IDC 27 13:16:53.1±1.3, 13°.08N×143°.80E, h149km±16km, mb2.9/6, mb1 3.2/6, mb1mx3.0/55, mbtmp3.4/6, Error ellipse: s-maj=38.2km s-min=20.4km az=97.0*

**ISC 27 13:16:53.2±0.9, 13°.1N×0°.2×143°.8E±0°.1, h150km, n7, σ0§55/8, mb3.1/6, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.18** | **64** | P | **Pn** | **13 17 19.9** | **+0.4** |
| | 13nm,0.3s,baz=231,slow=4.1,SNR=13 | | | | | | |
| GUMO | | | | S | **Sn** | **13 17 39.1** | **-0.6** |
| | 90nm,0.3s,baz=159,slow=21,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.09** | **196** | P | **P** | **13 23 23.5** | **-0.1** |
| | 0.3nm,0.8s,baz=18,slow=9.3,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **37.76** | **195** | P | **P** | **13 23 54.8** | **0.0** |
| | 0.1nm,0.4s,baz=17,slow=11,SNR=5.7 | | | | | | |
| **SONM** | **Songino Array** | **46.55** | **326** | P | **P** | **13 25 06.3** | **+0.4** |
| | 0.2nm,0.5s,baz=145,slow=6.8,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.13** | **316** | P | **P** | **13 26 51.3** | **-0.4** |
| | 0.3nm,0.6s,baz=93,slow=8.1,SNR=5.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.81** | **27** | P | **P** | **13 29 04.9** | **-0.5** |
| | 0.1nm,0.4s,baz=287,slow=5.4,SNR=2.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.07** | **51** | P | **P** | **13 29 27.9** | **+0.6** |
| | 0.3nm,0.6s,baz=292,slow=5.7,SNR=2.7 | | | | | | |

**MAN 27 13:18:53.4, 9°.76N×123°.21E, h58km, mb3.9, ML2.7, MS2.2, Negros**

*ATH 27 13:25:06.9, 37°.88N×21°.36E, h20km±3km, ML3.1/2, Error ellipse: s-maj=3.7km s-min=1.4km az=6.0*
*THE 27 13:25:07.5, 37°.87N×21°.38E, h14km±1km, ML2.8/9, Error ellipse: s-maj=1.8km s-min=0.7km az=138.0*

**ISC 27 13:25:07.2±1.0, 37°.88N±0°.03×21°.37E±0°.02, h16km±7km, n30, σ0§53/43, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RLS** | **Riolos of Patr** | **0.20** | **23** | P | **Pg** | **13 25 11.8** | **-0.1** |
| RLS | | | | S | **Sg** | **13 25 15.3** | **+0.3** |
| | 5µm,0.1s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.20** | **23** | P | **Pg** | **13 25 11.8** | **-0.1** |
| RLS | | | | S | **Sg** | **13 25 15.3** | **+0.3** |
| RLS | | | | AML | AML | 13 25 15.5 | |
| | comp=E,7002µm,0.1s | | | | | | |
| RLS | | | | AML | AML | 13 25 15.5 | |
| | comp=N,11419µm,0.2s | | | | | | |
| **DRO** | **Drossia** | **0.28** | **74** | P | **Pg** | **13 25 13.2** | **0.0** |
| DRO | | | | S | **Sb** | **13 25 18.3** | **-0.1** |
| | comp=N,8µm,0.2s | | | | | | |
| **DRO** | **Drossia** | **0.28** | **74** | P | **Pg** | **13 25 13.2** | **0.0** |
| DRO | | | | S | **Sb** | **13 25 18.3** | **-0.1** |
| DRO | | | | AML | AML | 13 25 19.0 | |
| | comp=N,13174µm,0.2s | | | | | | |
| DRO | | | | AML | AML | 13 25 19.2 | |
| | comp=E,19910µm,0.3s | | | | | | |
| **LTHK** | **Lithakia** | **0.46** | **249** | P | **Pg** | **13 25 16.3** | **-0.1** |
| LTHK | | | | S | **Sb** | **13 25 24.4** | **+0.9** |
| **LTHK** | **Lithakia** | **0.46** | **249** | P | **Pg** | **13 25 16.3** | **-0.1** |
| **UPR** | **University Cam** | **0.52** | **39** | P | **Pb** | **13 25 18.8** | **+0.7** |
| UPR | | | | S | **Sb** | **13 25 26.0** | **+0.6** |
| **LAKA** | **Lakka** | **0.60** | **53** | P | **Pg** | **13 25 18.4** | **-0.7** |
| LAKA | | | | S | **Sb** | **13 25 28.3** | **+0.6** |
| | comp=E,3µm,0.7s | | | | | | |
| **LAKA** | **Lakka** | **0.60** | **53** | P | **Pg** | **13 25 18.6** | **-0.5** |
| **KLV** | **Kalavryta, Ach** | **0.64** | **75** | P | **Pg** | **13 25 18.9** | **-0.9** |
| KLV | | | | S | **Sg** | **13 25 28.5** | **+0.2** |
| | comp=E,280nm,0.3s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **0.64** | **75** | P | **Pg** | **13 25 19.2** | **-0.6** |
| **EFP** | **Efpalio** | **0.69** | **37** | P | **Pg** | **13 25 20.6** | **-0.2** |
| EFP | | | | S | **Sb** | **13 25 30.3** | **0.0** |
| | comp=E,622nm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.69** | **37** | P | **Pg** | **13 25 20.5** | **-0.3** |
| **ALIK** | **Aliki, Aigiali** | **0.70** | **57** | P | **Pg** | **13 25 20.6** | **-0.3** |
| **TRIZ** | **Trizonia** | **0.74** | **48** | P | **Pb** | **13 25 21.5** | **-0.2** |
| **TRIZ** | **Trizonia** | **0.74** | **48** | P | **Pb** | **13 25 21.6** | **-0.2** |
| **ITM** | **Ithomi** | **0.82** | **147** | P | **Pg** | **13 25 23.2** | **-0.1** |
| **ITM** | **Ithomi** | **0.82** | **147** | P | **Pg** | **13 25 23.4** | **+0.1** |
| **ANX** | **Ano Chora** | **0.83** | **31** | P | **Pb** | **13 25 23.0** | **-0.5** |
| ANX | | | | S | **Sn** | **13 25 36.4** | **-0.2** |
| | comp=E,525nm,0.4s | | | | | | |
| **ANX** | **Ano Chora** | **0.83** | **31** | P | **Pb** | **13 25 23.0** | **-0.5** |
| **FSK** | **Fiskardo** | **0.86** | **313** | P | **Pb** | **13 25 23.5** | **-0.4** |
| FSK | | | | S | **Sn** | **13 25 37.1** | **0.0** |
| | comp=E,388nm,0.3s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.87** | **295** | P | **Pb** | **13 25 23.4** | **-0.6** |
| **KEF3** | **Kipouria, Keph** | **0.87** | **292** | P | **Pb** | **13 25 22.7** | **-1.3** |
| **EVGI** | **Lefkada island** | **0.93** | **323** | P | **Pb** | **13 25 24.4** | **-0.7** |
| EVGI | | | | S | **Sn** | **13 25 39.6** | **+0.8** |
| | comp=E,615nm,0.2s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.99** | **328** | P | **Pb** | **13 25 25.4** | **-0.6** |
| **DRAG** | **Dragano-Lefkad** | **1.02** | **322** | P | **Pb** | **13 25 25.9** | **-0.7** |
| DRAG | | | | S | **Sn** | **13 25 42.0** | **+1.0** |
| | comp=E,2µm,0.3s | | | | | | |
| **PYL** | **PYLOS** | **1.02** | **163** | P | **Pb** | **13 25 26.0** | **-0.6** |
| **TSLK** | **Tsoukalades, L** | **1.10** | **329** | P | **Pb** | **13 25 27.5** | **-0.4** |
| **LTK** | **Loutraki** | **1.27** | **83** | P | **Pb** | **13 25 30.6** | **-0.2** |
| **AGG** | **Agios Georgios** | **1.37** | **33** | P | **Pb** | **13 25 32.1** | **-0.4** |

*IDC 27 13:29:11.8±2.4, 12°.18N×145°.42E, h79km±20km, mb3.2/6, mb1 3.5/6, mb1mx3.2/45, mbtmp3.5/6, Error ellipse: s-maj=43.4km s-min=19.4km az=84.0*

**ISC 27 13:29:13.8±1.2, 12°.3N±0°.1×145°.4E±0°.3, h100km, n7, σ1§49/8, mb3.5/6, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.39** | **340** | P | **Pn** | **13 29 38.2** | **-0.5** |
| | 98nm,0.3s,baz=42,slow=3.8,SNR=78 | | | | | | |
| GUMO | | | | S | **Sn** | **13 29 55.9** | **-1.6** |
| | 107nm,0.3s,baz=314,slow=22,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.81** | **199** | P | **P** | **13 35 45.6** | **-0.9** |
| | 1.4nm,0.6s,baz=18,slow=9.3,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **37.44** | **197** | P | **P** | **13 36 17.0** | **-0.6** |
| | 0.7nm,0.6s,baz=20,slow=13,SNR=4.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.09** | **284** | P | **P** | **13 37 19.7** | **-0.6** |
| | 0.3nm,0.4s,baz=96,slow=9.4,SNR=1.6 | | | | | | |
| **SONM** | **Songino Array** | **48.08** | **325** | P | **P** | **13 37 44.3** | **+0.9** |
| | 0.3nm,0.5s,baz=102,slow=6.1,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.77** | **316** | P | **P** | **13 39 31.0** | **+2.4** |
| | 0.2nm,0.4s,baz=120,slow=5.2,SNR=5.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.36** | **51** | P | **P** | **13 41 49.9** | **-0.3** |
| | 0.3nm,0.6s,baz=291,slow=5.5,SNR=2.0 | | | | | | |

**IDC 27 13:32:33.4±3.0, 15°.32N×124°.31E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.3/40, mbtmp3.4/4, Error ellipse: s-maj=192.1km s-min=26.0km az=65.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **33.23** | **178** | P | P | 13 39 12.7 | +0.3 |
| | 1.3nm,0.9s,baz=0.0,slow=14,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.41** | **164** | P | P | 13 39 39.8 | -0.1 |
| | 0.1nm,0.3s,baz=346,slow=9.0,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **39.87** | **166** | P | P | 13 40 08.7 | -0.4 |
| | 0.2nm,0.7s,baz=341,slow=7.0,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.90** | **321** | P | P | 13 41 05.5 | -0.1 |
| | 0.1nm,0.3s,baz=98,slow=8.9,SNR=6.0 | | | | | | |

*IDC 27 13:58:05.5±2.0, 20°.2S×177°.49W, h546km±23km, mb3.1/10, mb1 3.3/14, mb1mx3.1/44, mbtmp4.1/14, Error ellipse: s-maj=27.8km s-min=15.6km az=150.0*

**ISC 27 13:58:05.4±0.7, 20°.2S±0°.2×177°.5W±0°.1, h550km, n19, σ1§65/23, mb3.5/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **8.26** | **42** | P | **P** | **14 00 06.2** | **+0.3** |
| | 3.9nm,0.3s,baz=178,slow=5.2,SNR=4.4 | | | | | | |
| AFI | | | | S | **S** | **14 01 40.8** | **-3.8** |
| | 6.2nm,0.3s,baz=34,slow=21,SNR=7.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.12** | **260** | P | **P** | **14 01 16.5** | **+0.2** |
| | 0.2nm,0.3s,baz=120,slow=20,SNR=0.9 | | | | | | |
| **RAR** | **Rarotonga** | **16.60** | **97** | P | **P** | **14 01 28.8** | **-1.8** |
| | 5.1nm,0.5s,baz=349,slow=10,SNR=1.6 | | | | | | |
| **URZ** | **Urewera** | **18.64** | **193** | P | **P** | **14 01 48.9** | **-0.1** |
| | 0.9nm,0.3s,baz=300,slow=8.1,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **256** | P | **P** | **14 05 33.4** | **+0.4** |
| | 2.2nm,0.5s,baz=86,slow=8.7,SNR=109 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 07 01.9** | **-0.1** |
| | 0.5nm,0.5s,baz=105,slow=3.8,SNR=6.9 | | | | | | |
| ASAR | | | | S | **S** | **14 11 28.9** | **-3.5** |
| | 0.6nm,0.8s,baz=91,slow=15,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.13** | **262** | P | **P** | **14 05 33.3** | **-0.2** |
| | 1.7nm,0.3s,baz=98,slow=7.3,SNR=108 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 07 02.1** | **-0.1** |
| | 0.2nm,0.9s,baz=91,slow=3.8,SNR=2.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.22** | **323** | P | **P** | **14 08 22.9** | **-0.6** |
| | 1.9nm,0.8s,baz=157,slow=5.7,SNR=2.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **73.66** | **331** | P | **P** | **14 08 44.5** | **+1.4** |
| | 4.3nm,0.8s,baz=126,slow=19,SNR=2.3 | | | | | | |
| **KSRS** | **Korea Array** | **76.95** | **319** | P | **P** | **14 09 03.6** | **+2.0** |
| | 0.8nm,0.9s,baz=111,slow=14,SNR=1.9 | | | | | | |
| **SEY** | **Seymchan** | **86.15** | **347** | P | **P** | **14 09 48.0** | **+0.1** |
| | 0.2nm,0.3s,baz=99,slow=6.1,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.46** | **57** | P | **P** | **14 09 52.7** | **+2.3** |
| | 0.1nm,0.6s,baz=201,slow=6.7,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **87.87** | **13** | P | **P** | **14 09 56.1** | **0.0** |
| | 0.5nm,0.7s,baz=213,slow=5.8,SNR=4.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **88.38** | **43** | P | **P** | **14 10 01.5** | **+2.2** |
| | 0.1nm,0.4s,baz=277,slow=2.4,SNR=1.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.46** | **289** | P | **P** | **14 10 09.9** | **+0.7** |
| | 0.5nm,0.7s,baz=104,slow=2.9,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.31** | **313** | PKiKP | **PKiKP** | **14 15 36.4** | **-0.7** |
| | 0.2nm,0.6s,baz=64,slow=3.4,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **135.58** | **344** | PKP | **PKiKP** | **14 16 25.0** | **+0.5** |
| | 1.7nm,0.9s,baz=133,slow=8.1,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.94** | **332** | PKP | **PKPdf** | **14 16 34.1** | **-2.4** |
| | 0.8nm,0.3s,baz=44,slow=4.6,SNR=11 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.97** | **313** | PKPbc | **PKPbc** | **14 16 46.5** | **-0.4** |
| | 0.9nm,0.5s,baz=138,slow=5.5,SNR=4.8 | | | | | | |
| **GERES** | **GERESS Array B** | **150.00** | **345** | PKPbc | **PKiKP** | **14 16 54.7** | **+0.1** |
| | 0.8nm,0.8s,baz=15,slow=5.5,SNR=6.2 | | | | | | |

*IDC 27 14:01:13.6±4.2, 37°.73N×71°.73E, h0km, mb3.7/4, mb1 3.6/8, mb1mx3.3/56, mbtmp3.4/8, ML2.8/4, MS3.8/2, Ms1 3.7/2, ms1mx2.5/90, Error ellipse: s-maj=80.2km s-min=26.8km az=153.0*
*NNC 27 14:01:34.2±16.0, 37°.18N×70°.13E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=168.0km s-min=117.6km az=131.0*

**ISC 27 14:01:16.0±1.0, 37°.67N±0°.07×71°.7E±0°.1, h10km, n24, σ1§75/22, mb3.7/4, 4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.40** | **22** | Pn | **Pn** | **14 02 37.6** | **+0.9** |
| | 0.9nm,0.3s,baz=207,slow=6.2,SNR=12 | | | | | | |
| AAK | | | | Sn | **Sn** | **14 03 38.1** | **-0.9** |
| | 0.3nm,0.3s,baz=313,slow=22,SNR=1.6 | | | | | | |
| AAK | | | | Lg | Lg | 14 03 57.7 | |
| | 0.2nm,0.3s,baz=310,slow=8.1,SNR=3.6 | | | | | | |
| **KK08** | **Karatay Array** | **5.51** | **351** | ⇓P | **Pg** | **14 03 04.6** | **+3.1** |
| | 1.2nm,0.2s,baz=171,slow=12 | | | | | | |
| KK08 | | | | ⇓S | **Sg** | **14 04 12.9** | **+0.1** |
| | 24nm,0.7s,baz=182,slow=23 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.01** | **37** | Pn | **Pn** | **14 04 07.1** | **-0.1** |
| | 0.0nm,0.3s,baz=234,slow=12,SNR=6.1 | | | | | | |
| **PYUN** | **Piuthan** | **13.44** | **132** | *eP* | **Pn** | **14 04 30.4** | **+3.4** |
| | 6.8nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.83** | **18** | Pn | **Pn** | **14 04 29.6** | **-2.4** |
| | 0.0nm,0.3s,baz=203,slow=11,SNR=3.3 | | | | | | |
| **AB31** | **Akbulak array** | **14.37** | **327** | ⇓P | P | 14 04 56.6 | +10 |
| | 1.3nm,0.6s,baz=169,slow=12,SNR=20 | | | | | | |
| **GKN** | **Gorkha** | **14.51** | **128** | *eP* | **P** | **14 04 45.8** | **-2.5** |
| | 9.8nm,0.3s | | | | | | |
| **KKN** | **Kanti** | **15.06** | **127** | *eP* | **P** | **14 04 53.2** | **-1.3** |
| **DMN** | **Daman** | **15.08** | **128** | *eP* | **P** | **14 04 53.0** | **-1.8** |
| | 3.9nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **15.29** | **127** | *eP* | **P** | **14 04 55.4** | **-1.7** |
| | 4.5nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **15.37** | **125** | *eP* | **P** | **14 04 57.3** | **-0.7** |
| | 17nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **15.74** | **125** | *eP* | **P** | **14 05 01.0** | **-1.2** |
| | 10nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.08** | **327** | Pn | **Pn** | **14 05 03.0** | **+0.9** |
| | 0.1nm,0.3s,baz=126,slow=9.2,SNR=2.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.08** | **327** | ⇓P | P | 14 05 14.8 | +9.4 |
| | 1.3nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **16.49** | **126** | *eP* | **P** | **14 05 09.1** | **-1.3** |
| | 2.7nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **16.94** | **123** | *eP* | **P** | **14 05 15.8** | **+0.3** |
| | 5.0nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.61** | **25** | P | **P** | **14 05 31.9** | **-1.5** |
| | 0.1nm,0.3s,baz=212,slow=22,SNR=2.3 | | | | | | |
| **FINES** | **FINESS Array B** | **36.84** | **325** | P | **P** | **14 08 22.8** | **-1.3** |
| | 3.0nm,1.0s,baz=126,slow=9.7,SNR=6.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.29** | **337** | P | **P** | **14 08 51.4** | **-1.6** |
| | 1.3nm,0.7s,baz=110,slow=9.2,SNR=4.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.80** | **322** | P | **P** | **14 09 23.0** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=101,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.80** | **322** | P | **P** | **14 09 20.4** | **-1.3** |
| | comp=Z,0.3nm,0.8s,baz=104,slow=7.1,SNR=4.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.00** | **70** | LR | LR | 14 35 30.8 | |
| | comp=Z,46nm,19.8s,baz=142,slow=40 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.05** | **3** | P | **P** | **14 13 24.3** | **-1.1** |
| | comp=Z,0.5nm,0.6s,baz=348,slow=5.4,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **95.03** | **127** | LR | LR | 15 06 13.3 | |
| | comp=Z,69nm,18.4s,baz=38,slow=41 | | | | | | |

*IDC 27 14:18:17.9±0.8, 19°.01N×121°.42E, h0km, mb3.8/13, mb1 3.9/15, mb1mx3.8/46, mbtmp3.9/15, ML3.8/2, MS3.1/8, Ms1 3.1/8, ms1mx2.8/87, Error ellipse: s-maj=23.3km s-min=16.0km az=81.0*
*MAN 27 14:18:24.7, 19°.19N×121°.14E, h27km, mb4.8, ML3.7, MS3.7*

**ISC 27 14:18:24.9±0.6, 19°.32N±0°.07×121°.4E±0°.1, h35km, n28, σ2§26/19, mb3.7/13, MS3.0/7, 3D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIPP** | **Brgy, Tapao** | **1.63** | **212** | ⇓*eP* | **Pn** | **14 18 49.5** | **-1.5** |
| SIPP | | | | *eS* | **Sn** | **14 19 13.9** | **+3.2** |
| **PCPH** | **Palayan** | **3.74** | **184** | ⇓*eP* | **Pn** | **14 19 21.3** | **+1.2** |
| PCPH | | | | *eS* | **Sn** | **14 20 07.5** | **+4.6** |
| **LQP** | **Lukban** | **5.18** | **178** | ⇓*eP* | Pn | 14 19 49.8 | +10 |
| **JOW** | **Kunigami** | **9.82** | **39** | Pn | **Pn** | **14 20 44.8** | **+1.2** |
| | 1.8nm,0.3s,baz=239,slow=18,SNR=2.3 | | | | | | |
| **KSRS** | **Korea Array** | **18.96** | **16** | P | **P** | **14 22 43.9** | **+0.8** |
| | 0.4nm,0.3s,baz=198,slow=11,SNR=19 | | | | | | |
| KSRS | | | | LR | LR | 14 30 25.7 | |
| | comp=Z,41nm,21.6s,baz=220,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.23** | **271** | P | **P** | **14 23 07.5** | **-0.4** |
| | 1.6nm,0.7s,baz=71,slow=9.5,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 14 30 46.9 | |
| | comp=Z,28nm,19.4s,baz=75,slow=35 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **21.45** | **46** | LR | LR | 14 30 23.1 | |
| | comp=Z,32nm,19.4s,baz=15,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.66** | **37** | P | **P** | **14 23 24.7** | **+1.6** |
| | 1.5nm,0.7s,baz=224,slow=11,SNR=2.1 | | | | | | |
| **KAPI** | **Kappang** | **24.23** | **184** | LR | LR | 14 33 41.5 | |
| | comp=Z,36nm,19.4s,baz=31,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **30.45** | **31** | P | **P** | **14 24 34.5** | **+0.3** |
| | 5.3nm,1.0s,baz=231,slow=6.5,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **30.94** | **340** | P | **P** | **14 24 39.3** | **+0.6** |
| | 0.7nm,0.8s,baz=159,slow=8.7,SNR=4.2 | | | | | | |
| SONM | | | | LR | LR | 14 38 28.5 | |
| | comp=Z,29nm,19.6s,baz=178,slow=39 | | | | | | |
| **KLR** | **Kul'dur** | **30.99** | **13** | P | **P** | **14 24 39.6** | **+0.8** |
| | 0.8nm,0.6s,baz=230,slow=6.6,SNR=4.6 | | | | | | |
| KLR | | | | LR | LR | 14 37 19.9 | |
| | comp=Z,45nm,18.9s,baz=174,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.04** | **161** | P | **P** | **14 26 00.3** | **-4.7** |
| | 0.5nm,0.3s,baz=353,slow=8.7,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.04** | **320** | P | **P** | **14 26 13.6** | **+0.5** |
| | 0.5nm,0.6s,baz=110,slow=10,SNR=8.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.80** | **83** | T | T | 15 11 59.2 | |
| | baz=277,slow=75,SNR=35 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.81** | **83** | T | T | 15 11 56.8 | |
| | baz=277,slow=75,SNR=26 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.82** | **83** | T | T | 15 11 57.3 | |
| | baz=277,slow=75,SNR=16 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.82** | **82** | T | T | 15 11 57.7 | |
| | baz=277,slow=75,SNR=28 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.82** | **82** | T | T | 15 11 57.9 | |
| | baz=277,slow=75,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.84** | **82** | T | T | 15 11 58.9 | |
| | baz=277,slow=75,SNR=21 | | | | | | |
| **YAK** | **Yakutsk** | **43.07** | **6** | LR | LR | 14 48 30.8 | |
| | comp=Z,39nm,19.1s,baz=88,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **44.44** | **163** | P | **P** | **14 26 28.6** | **-4.0** |
| | 0.8nm,0.3s,baz=344,slow=6.6,SNR=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.46** | **330** | P | **P** | **14 26 33.3** | **+0.8** |
| | 0.2nm,0.3s,baz=113,slow=10,SNR=2.1 | | | | | | |
| **AAK** | **Ala-Archa** | **45.70** | **311** | LR | LR | 14 49 22.7 | |
| | comp=Z,44nm,18.6s,baz=59,slow=41 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.00** | **323** | P | **P** | **14 26 44.8** | **+0.1** |
| | 0.7nm,0.7s,baz=123,slow=7.5,SNR=4.4 | | | | | | |
| **NRIK** | **Nerikʼsk** | **54.13** | **346** | P | **P** | **14 27 46.4** | **+0.3** |
| | 4.2nm,0.9s,baz=131,slow=6.3,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **73.46** | **27** | P | **P** | **14 29 52.3** | **-1.2** |
| | 0.3nm,0.6s,baz=270,slow=4.7,SNR=4.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.10** | **339** | P | **P** | **14 29 56.6** | **-0.5** |
| | 1.4nm,0.8s,baz=54,slow=4.9,SNR=3.7 | | | | | | |

*IDC 27 14:37:39.7±1.1, 2°.48S×141°.09E, h0km, mb3.7/5, mb1 3.9/6, mb1mx3.6/38, mbtmp3.7/6, ML3.9/1, MS2.9/1, Ms1 2.9/1, ms1mx2.4/61, Error ellipse: s-maj=23.6km s-min=14.8km az=171.0*
*DJA 27 14:37:43.2±0.6, 2°.5S±4°×14°.0E±°, h10km, M3.8/3, mb4.2/1, MLv3.6/3*

**ISC 27 14:37:45.7±0.8, 2°.5S±0°.1×140°.31E±0°.05, h35km, n19, σ1§45/15, mb3.6/6, Near north coast of

| | | | | | | |
|---|---|---|---|---|---|---|
| BFZ | Birch Farm | 0.36 232 | P | Pn | 14 43 13.2 | +1.6 |
| BFZ | Birch Farm | 0.36 232 | P | Pn | 14 43 13.0 | +1.4 |
| DVHZ | Dannevirke | 0.38 295 | P | Pb | 14 43 10.5 | -0.8 |
| DVHZ | | | S | Sb | 14 43 15.0 | -2.2 |
| PRWZ | Pori Road | 0.50 259 | P | Pn | 14 43 14.4 | +0.9 |
| PRWZ | | | S | Sn | 14 43 21.9 | +0.8 |
| CPWZ | Castlepoint | 0.55 215 | P | Pn | 14 43 17.5 | +3.3 |
| PNHZ | Pukenui | 0.63 330 | P | Pb | 14 43 14.7 | -0.5 |
| PNHZ | | | S | Sb | 14 43 22.4 | -1.5 |
| TIWZ | Tintock | 0.64 240 | P | Pb | 14 43 17.4 | +1.9 |
| TSZ | Takapari Road | 0.64 309 | P | Pb | 14 43 14.7 | -0.7 |
| TSZ | | | S | Sb | 14 43 22.2 | -1.9 |
| POWZ | Post Office Ro | 0.65 276 | P | Pn | 14 43 15.9 | +0.3 |
| KAHZ | Kahuranaki | 0.70 17 | P | Pn | 14 43 17.9 | +1.6 |
| MRZ | Mangatainoka R | 0.81 255 | P | Pn | 14 43 19.1 | +0.8 |
| KRHZ | Kereru | 0.84 347 | P | Pb | 14 43 18.7 | 0.0 |
| TMWZ | Te Maipa | 0.85 220 | P | Pb | 14 43 20.6 | +1.7 |
| CKHZ | Cape Kidnapper | 0.88 24 | P | Pb | 14 43 20.2 | +0.8 |
| HOWZ | Holdsworth Sta | 0.94 242 | P | Pb | 14 43 21.3 | +0.8 |
| MCHZ | McNeill Hill | 1.02 4 | P | Pb | 14 43 22.4 | +0.7 |
| OHWZ | Ohakea | 1.02 284 | P | Pb | 14 43 22.7 | +0.9 |
| KWHZ | Kaweka Forest | 1.05 352 | P | Pb | 14 43 22.2 | 0.0 |
| BHHZ | Black Hill Sta | 1.06 336 | P | Pb | 14 43 22.1 | -0.3 |
| MTW | Mount Morrison | 1.09 230 | P | Pb | 14 43 23.2 | +0.2 |
| OGWZ | Otaki Gorge | 1.15 252 | P | Pb | 14 43 23.9 | 0.0 |
| TRWZ | Traveller | 1.17 217 | P | Pb | 14 43 24.6 | +0.3 |
| ARHZ | Aropaoanui | 1.23 14 | P | Pb | 14 43 24.1 | -1.2 |
| MOVZ | Moawhango | 1.24 328 | P | Pb | 14 43 25.1 | -0.5 |
| PAWZ | Paruwai Farm | 1.29 224 | P | Pb | 14 43 26.0 | -0.2 |
| BKZ | Black Stump Fm | 1.30 356 | | Pb | 14 43 25.7 | -0.7 |
| BKZ | Black Stump Fm | 1.30 356 | P | Pb | 14 43 25.7 | -0.7 |
| BKZ | Black Stump Fm | 1.30 356 | P | Pb | 14 43 25.7 | -0.7 |
| CAW | Cannon Point | 1.34 241 | P | Pb | 14 43 26.4 | -0.7 |
| KIW | Kapiti Island | 1.36 252 | P | Pb | 14 43 26.8 | -0.6 |
| NMHZ | Naumai | 1.37 6 | P | Pb | 14 43 27.4 | -0.3 |
| WNVZ | Wahianoa | 1.38 325 | P | Pb | 14 43 27.3 | -0.5 |
| MTVZ | Mangateitei | 1.39 320 | P | Pb | 14 43 27.5 | -0.5 |
| TUVZ | Tukino | 1.40 328 | P | Pb | 14 43 27.9 | -0.4 |
| MSWZ | Moikau Station | 1.41 227 | | Pb | 14 43 27.0 | -1.2 |
| MSWZ | Moikau Station | 1.41 227 | P | Pb | 14 43 27.2 | -1.0 |
| WHVZ | Whangaehu Hut | 1.42 326 | P | Pb | 14 43 28.0 | -0.5 |
| TRVZ | Turoa | 1.42 324 | P | Pb | 14 43 27.9 | -0.7 |
| DRZ | Dome Shelter | 1.43 325 | P | Pb | 14 43 28.4 | -0.5 |
| WAZ | Wanganui | 1.43 299 | P | Pb | 14 43 28.5 | -0.2 |
| FWVZ | Far West T-bar | 1.46 326 | P | Pb | 14 43 28.5 | -0.7 |
| WHHZ | Waihua | 1.46 19 | P | Pb | 14 43 30.6 | +1.4 |
| SNVZ | South Ngauruho | 1.48 329 | P | Pb | 14 43 28.7 | -0.9 |
| OTVZ | Oturere | 1.49 330 | P | Pb | 14 43 29.0 | -0.7 |
| ETVZ | East Tongariro | 1.50 332 | P | Pb | 14 43 28.8 | -1.0 |
| NGZ | Ngauruhoe | 1.50 328 | P | Pb | 14 43 29.0 | -1.0 |
| PLWZ | Palliser | 1.51 222 | Pn | Pb | 14 43 28.4 | -1.6 |
| PLWZ | Palliser | 1.51 222 | P | Pb | 14 43 28.6 | -1.5 |
| TMVZ | Te Maari | 1.52 332 | P | Pb | 14 43 29.1 | -1.1 |
| PKVZ | Pokaka | 1.52 320 | P | Pb | 14 43 29.2 | -1.0 |
| NNVZ | North Ngauruho | 1.53 330 | P | Pb | 14 43 29.4 | -1.1 |
| NTVZ | North Tongarir | 1.54 332 | P | Pn | 14 43 29.4 | +1.4 |
| KRVZ | Karewarewa | 1.56 331 | P | Pb | 14 43 30.7 | -0.1 |
| WTVZ | West Tongariro | 1.56 329 | P | Pn | 14 43 29.7 | +1.4 |
| RAHZ | Arahi | 1.58 13 | P | Pb | 14 43 30.2 | -1.1 |
| RITZ | Rihia Road | 1.59 338 | P | Pb | 14 43 30.4 | -1.0 |
| MTHZ | Maungataniwha | 1.62 6 | P | Pb | 14 43 30.2 | -1.6 |
| HATZ | Hinemaiaia | 1.62 345 | P | Pn | 14 43 30.4 | +1.4 |
| WEL | Wellington | 1.62 239 | P | Pn | 14 43 30.0 | +1.0 |
| BHW | Baring Head | 1.62 234 | | Pn | 14 43 29.9 | +0.9 |
| BHW | Baring Head | 1.62 234 | P | Pn | 14 43 29.9 | +0.9 |
| MRHZ | Matea Rd | 1.63 355 | P | Pb | 14 43 30.8 | -1.3 |
| KATZ | Kakaramea | 1.64 334 | P | Pb | 14 43 30.0 | -0.4 |
| MHGZ | Mahia Peninsul | 1.64 338 | P | Pb | 14 43 30.6 | -1.7 |
| KNZ | Kokohu | 1.65 30 | P | Pn | 14 43 30.3 | +0.8 |
| TWVZ | Taurewa | 1.66 327 | P | Pn | 14 43 30.9 | +1.3 |
| SNZO | South Karori | 1.68 239 | | Pn | 14 43 30.6 | +0.8 |
| SNZO | South Karori | 1.68 239 | P | Pn | 14 43 30.8 | +1.1 |
| RATZ | Rangitukua | 1.72 338 | P | Pb | 14 43 32.1 | -1.5 |
| SNGZ | Shannon Statio | 1.77 19 | P | Pb | 14 43 32.3 | -2.1 |
| PRGZ | Paritu Road | 1.82 33 | P | Pn | 14 43 32.7 | +0.9 |
| WHTZ | Whakaora | 1.86 344 | P | Pn | 14 43 33.9 | +1.5 |
| RTZ | Ruatahuna | 1.86 9 | P | Pn | 14 43 33.6 | +1.2 |
| WATZ | Wairara | 1.88 339 | P | Pn | 14 43 33.8 | +1.2 |
| ALRZ | Allen Road | 1.91 354 | P | Pn | 14 43 34.3 | +1.3 |
| TCW | Tory Channel | 1.92 246 | P | Pn | 14 43 34.0 | +0.8 |
| VRZ | Vera Road | 1.96 312 | P | Pn | 14 43 35.7 | +2.1 |
| RIGZ | Rimuhau | 1.96 27 | P | Pn | 14 43 34.6 | +0.8 |
| PRRZ | Plateau Road | 1.97 355 | P | Pn | 14 43 34.8 | +1.0 |
| WPRZ | Whakapapatarin | 1.97 350 | P | Pn | 14 43 34.8 | +0.9 |
| LRRZ | Lake Rotokare | 1.97 300 | P | Pn | 14 43 36.1 | -1.7 |
| MUGZ | Murupara | 1.98 4 | P | Pn | 14 43 34.9 | +0.9 |
| RAGZ | Rawiri | 2.06 18 | P | Pn | 14 43 36.3 | +1.2 |
| KUTZ | Kaahu Road | 2.06 343 | P | Pn | 14 43 36.2 | +1.1 |
| DUWZ | D'Urville Isla | 2.08 260 | P | Pn | 14 43 36.4 | +1.1 |
| HRRZ | Handcock Road | 2.08 353 | P | Pn | 14 43 36.8 | +1.4 |
| RRRZ | Republican Roa | 2.12 358 | P | Pn | 14 43 37.2 | +1.3 |
| GRRZ | Galatos Road | 2.14 349 | P | Pn | 14 43 37.7 | +1.5 |
| HSRZ | Hossack Road | 2.17 352 | P | Pn | 14 43 37.6 | +1.1 |
| PREZ | Palmer Road | 2.19 300 | P | Pb | 14 43 39.5 | -2.1 |
| HLRZ | Highlands Stat | 2.21 355 | P | Pn | 14 43 39.2 | +1.9 |
| CMWZ | Cape Campbell | 2.22 234 | | Pn | 14 43 38.3 | +1.0 |
| CMWZ | Cape Campbell | 2.22 234 | P | Pn | 14 43 38.4 | +1.1 |
| TARZ | Mount Tarawera | 2.22 358 | P | Pn | 14 43 38.5 | +1.1 |
| URZ | Urewera | 2.23 10 | Pn | Pn | 14 43 37.8 | +0.4 |
| | 12nm,0.3s,baz=232,slow=6.6,SNR=76 | | | | | |
| URZ | | | Sn | Sn | 14 44 02.8 | -1.1 |
| | 44nm,0.3s,baz=207,slow=16,SNR=10 | | | | | |
| URZ | | | LR | LR | 14 44 35.7 | |
| | comp=Z,62nm,19.6s,baz=240,slow=43 | | | | | |
| URZ | Urewera | 2.23 10 | Pn | Pn | 14 43 37.7 | +0.3 |
| URZ | Urewera | 2.23 10 | P | Pn | 14 43 38.0 | +0.6 |
| URZ | Urewera | 2.23 10 | P | Pn | 14 43 38.0 | +0.6 |
| TKGZ | Te Karaka | 2.23 26 | P | Pn | 14 43 38.1 | +0.6 |
| MWZ | Matawai | 2.24 19 | P | Pn | 14 43 38.1 | +0.6 |
| MHEZ | Mangahewa | 2.24 307 | P | Pb | 14 43 40.4 | -2.0 |
| TUWZ | Tuamarina | 2.24 244 | | Pn | 14 43 37.7 | +0.2 |
| TUWZ | Tuamarina | 2.24 244 | P | Pn | 14 43 37.8 | +0.3 |
| DREZ | Durham Road | 2.25 304 | P | Pn | 14 43 40.0 | +2.3 |
| NEZ | North Egmont | 2.27 301 | P | Pn | 14 43 40.5 | +2.5 |
| TLZ | Tolley Road | 2.27 338 | P | Pn | 14 43 39.2 | +0.8 |
| UTU | Utuhina | 2.30 352 | P | Pn | 14 43 40.0 | +1.6 |
| KHEZ | Kahui Hut | 2.31 299 | P | Pn | 14 43 41.1 | +2.4 |
| MKRZ | Makatiti | 2.32 357 | P | Pb | 14 43 44.5 | +0.7 |
| CNGZ | Carnagh Statio | 2.33 33 | P | Pn | 14 43 39.7 | +0.9 |
| NMEZ | Namu Road | 2.35 296 | P | Pn | 14 43 41.6 | +2.6 |
| EDRZ | Edgecumbe | 2.35 2 | P | Pb | 14 43 42.1 | -2.3 |
| OMRZ | Omania | 2.36 355 | P | Pb | 14 43 46.5 | +2.0 |
| HIZ | Hauiti | 2.37 324 | | Pb | 14 43 42.7 | -1.9 |
| HIZ | Hauiti | 2.37 324 | P | Pn | 14 43 41.1 | +1.7 |
| HIZ | Hauiti | 2.37 324 | P | Pn | 14 43 41.9 | +2.5 |
| NGRZ | Ngongotaha | 2.38 352 | P | Pn | 14 43 40.7 | +1.2 |
| PKE | Pukeiti | 2.38 301 | P | Pn | 14 43 42.3 | +2.8 |
| BSWZ | Blackbirch Sta | 2.42 238 | | Pn | 14 43 40.3 | +0.4 |
| BSWZ | Blackbirch Sta | 2.42 238 | P | Pn | 14 43 40.4 | +0.4 |
| NBEZ | Newall Road No | 2.42 299 | P | Pn | 14 43 42.6 | +2.6 |
| KARZ | Kaharoa | 2.45 353 | P | Pn | 14 43 41.7 | +1.2 |
| MARZ | Manawahe | 2.47 1 | P | Pb | 14 43 44.5 | -1.9 |
| TWRZ | Tauwhareparae | 2.52 25 | P | Pn | 14 43 42.1 | +0.8 |
| NNZ | Nelson | 2.57 252 | | Pn | 14 43 43.2 | +1.2 |
| NNZ | Nelson | 2.57 252 | P | Pn | 14 43 42.8 | +0.8 |
| OPRZ | Ohinepanea | 2.61 359 | P | Pn | 14 43 43.9 | +1.3 |
| RUGZ | Raukumara Rang | 2.63 19 | P | Pn | 14 43 43.7 | +0.8 |
| KMRZ | Kaimai | 2.66 348 | P | Pn | 14 43 44.2 | +0.9 |
| PUZ | Puketiti | 2.71 29 | P | Pn | 14 43 43.9 | -0.1 |
| TGRZ | Tauranga | 2.74 354 | P | Pn | 14 43 47.2 | +2.8 |
| TKNZ | Takaka Hill | 2.83 257 | P | Pn | 14 43 46.8 | +1.1 |
| HAZ | Te Kaha | 2.85 19 | P | Pn | 14 43 46.9 | +1.1 |
| TOZ | Tahuroa Road | 2.86 342 | P | Pn | 14 43 46.9 | +0.9 |
| KHZ | Kahutara | 3.03 229 | | Pn | 14 43 48.4 | +0.1 |
| KHZ | Kahutara | 3.03 229 | P | Pn | 14 43 48.1 | -0.2 |
| KHZ | Kahutara | 3.03 229 | P | Pn | 14 43 48.4 | +0.1 |
| MRNZ | Matariki Terra | 3.07 251 | P | Pn | 14 43 50.1 | +1.2 |
| THZ | Tophouse | 3.09 244 | Pn | Pn | 14 43 49.1 | -0.1 |
| THZ | Tophouse | 3.09 244 | P | Pn | 14 43 49.2 | -0.1 |
| QRZ | Quartz Range | 3.13 262 | | Pn | 14 43 50.5 | +0.8 |
| QRZ | Quartz Range | 3.13 262 | P | Pn | 14 43 50.3 | +0.5 |
| QRZ | Quartz Range | 3.13 262 | P | Pn | 14 43 50.6 | +0.8 |
| MXZ | Matakaoa Point | 3.18 25 | P | Pn | 14 43 51.3 | +0.8 |
| GVZ | Greta Valley S | 3.67 226 | P | Pn | 14 43 58.4 | +1.3 |
| AWAZ | Awhitu Peninsu | 3.73 335 | P | Pn | 14 43 59.9 | +1.9 |
| ETAZ | East Tamaki Re | 3.74 339 | P | Pn | 14 43 59.3 | +1.1 |
| KUZ | Kuaotunu | 3.77 349 | P | Pn | 14 43 59.7 | +1.1 |
| WIAZ | Waiheke Island | 3.84 342 | P | Pn | 14 44 01.2 | +1.7 |
| DSZ | Dennistoun Nort | 3.85 249 | P | Pn | 14 43 59.9 | +0.2 |
| WTAZ | Waiatarua | 3.87 335 | P | Pn | 14 44 01.8 | +1.9 |
| MBAZ | Motutapu North | 3.92 339 | P | Pn | 14 44 02.0 | +1.3 |
| LTZ | Lake Taylor | 4.00 233 | Pn | Pn | 14 44 01.0 | -0.7 |
| LTZ | Lake Taylor | 4.00 233 | P | Pn | 14 44 01.0 | -0.7 |
| AMCZ | Amberley | 4.01 226 | P | Pn | 14 44 02.7 | +0.8 |
| RVAZ | Riverhead Bore | 4.01 336 | P | Pn | 14 44 03.6 | +1.7 |
| OKCZ | Okains Bay | 4.20 218 | P | Pn | 14 44 04.4 | -0.1 |
| AKCZ | Akaroa Harbour | 4.38 218 | P | Pn | 14 44 06.7 | -0.3 |
| MQZ | McQueen's Vall | 4.38 221 | | Pn | 14 44 06.8 | -0.1 |
| MQZ | McQueen's Vall | 4.38 221 | P | Pn | 14 44 05.8 | -1.1 |
| OXZ | Oxford | 4.46 229 | | Pn | 14 44 06.6 | -1.4 |
| OXZ | Oxford | 4.46 229 | P | Pn | 14 44 07.9 | -0.1 |
| INZ | Inchbonnie | 4.49 238 | P | Pn | 14 44 07.6 | -0.7 |
| RACZ | Rakaia | 4.66 224 | P | Pn | 14 44 10.7 | 0.0 |
| MHCZ | Mount Hutt | 4.85 229 | P | Pn | 14 44 14.9 | +1.4 |
| WCZ | Waipu Caves | 4.86 338 | P | Pn | 14 44 15.3 | +1.8 |
| WACZ | Wakanui South | 4.97 224 | P | Pn | 14 44 14.9 | 0.0 |
| WVZ | Waitaha Valley | 5.11 237 | P | Pn | 14 44 16.7 | -0.3 |
| RPZ | Rata Peaks | 5.26 230 | Pn | Pn | 14 44 18.7 | -0.4 |
| RPZ | 2.3nm,0.3s,baz=188,slow=1.1,SNR=23 | | Sn | Sn | 14 45 14.4 | -4.1 |
| | 21nm,0.3s,baz=213,slow=4.1,SNR=20 | | | | | |
| RPZ | | | LR | LR | 14 46 27.5 | |
| | comp=Z,144nm,19.4s,baz=26,slow=40 | | | | | |
| RPZ | Rata Peaks | 5.26 230 | P | Pn | 14 44 19.0 | 0.0 |
| RPZ | Rata Peaks | 5.26 230 | P | Pn | 14 44 19.7 | +0.7 |
| ARCZ | Arundel | 5.33 227 | P | Pn | 14 44 20.1 | +0.1 |
| OUZ | Omahuta | 5.75 335 | P | Pn | 14 44 27.6 | +1.8 |
| ODZ | Otahua Downs | 6.34 222 | P | Pn | 14 44 33.8 | -0.1 |
| OUENC | Ouen Island, N | 19.80 332 | P | P | 14 47 30.6 | +0.2 |
| OUENC | | | IAmb | IAmb | 14 47 34.8 | |
| | comp=Z,33nm,1.3s | | | | | |
| DZM | Mont Dzumac | 20.26 332 | LR | LR | 14 54 51.0 | |
| | comp=Z,90nm,18.2s,baz=28,slow=35 | | | | | |
| TOO | Toolangi | 24.29 267 | P | P | 14 48 15.5 | -1.6 |
| TOO | | | IAmb | IAmb | 14 48 31.4 | |
| | comp=Z,16nm,1.4s | | | | | |
| STKA | Stephens Creek | 29.39 276 | P | P | 14 49 03.5 | +0.6 |
| | comp=Z,26nm,0.3s,baz=102,slow=10.0,SNR=4.0 | | | | | |
| STKA | Stephens Creek | 29.39 276 | P | P | 14 49 02.0 | -1.0 |
| COEN | Coen | 39.37 302 | P | P | 14 50 28.8 | -0.5 |
| AS31 | Alice Springs | 39.46 282 | P | P | 14 50 30.4 | +0.3 |
| ASAR | Alice Springs | 39.46 282 | P | P | 14 50 31.1 | +1.0 |
| | comp=Z,1.3nm,0.5s,baz=122,slow=6.1,SNR=29 | | | | | |
| ASAR | Alice Springs | 39.46 282 | P | P | 14 50 30.5 | +0.4 |
| PMG | Port Moresby | 40.49 312 | P | P | 14 50 39.5 | +0.9 |
| PMG | | | IAmb | IAmb | 14 50 56.4 | |
| | comp=Z,16nm,1.3s | | | | | |
| WR0 | Warramunga Arr | 41.23 287 | P | P | 14 50 45.4 | +0.7 |
| WR0 | | | IAmb | IAmb | 14 51 03.3 | |
| | comp=Z,10nm,1.4s | | | | | |
| WB2 | Warramunga Arr | 41.38 287 | P | P | 14 50 46.9 | +1.0 |
| WRAB | Tennant Creek | 41.38 287 | P | P | 14 50 45.2 | -0.8 |
| WRA | Warramunga Arr | 41.38 287 | P | P | 14 50 47.2 | +1.2 |
| | comp=Z,4.8nm,0.4s,baz=125,slow=8.3,SNR=64 | | | | | |
| WRA | | | LR | LR | 15 08 59.8 | |
| | comp=Z,81nm,18.4s,baz=92,slow=38 | | | | | |
| WRA | Warramunga Arr | 41.38 287 | P | P | 14 50 46.8 | +0.8 |
| WB0 | Warramunga Arr | 41.45 287 | P | P | 14 50 47.6 | +1.0 |
| WB0 | | | IAmb | IAmb | 14 50 47.9 | |
| | comp=Z,5.9nm,0.5s | | | | | |
| KNRA | Kununurra | 48.18 287 | P | P | 14 51 40.6 | +0.4 |
| MTN | Manton Dam | 48.35 291 | P | P | 14 51 41.1 | -0.3 |
| MTN | | | IAmb | IAmb | 14 51 46.5 | |
| | comp=Z,7.1nm,1.1s | | | | | |
| FITZ | Fitzroy Crossi | 48.96 282 | P | P | 14 51 46.8 | +0.7 |
| | comp=Z,1.3nm,0.4s,baz=117,slow=4.1,SNR=11 | | | | | |
| FITZ | | | LR | LR | 15 12 39.6 | |
| | comp=Z,57nm,19.1s,baz=112,slow=36 | | | | | |
| FITZ | Fitzroy Crossi | 48.96 282 | P | P | 14 51 47.2 | +1.1 |
| FITZ | | | IAmb | IAmb | 14 51 56.1 | |
| | comp=Z,6.4nm,1.1s | | | | | |
| QSPA | South Pole Qui | 49.67 180 | P | P | 14 51 48.8 | -2.3 |
| QSPA | | | IAmb | IAmb | 14 52 04.8 | |
| | comp=Z,3.9nm,0.9s | | | | | |
| MORW | Morawa | 50.16 263 | P | P | 14 51 54.5 | -0.8 |
| BATI | Baumata | 55.51 288 | LR | LR | 15 19 34.4 | |
| | comp=Z,94nm,18.1s,baz=179,slow=40 | | | | | |
| KAPI | Kappang | 61.86 289 | LR | LR | 15 20 16.5 | |
| | comp=Z,21nm,21.6s,baz=149,slow=36 | | | | | |
| PSI | Prapat | 82.47 280 | LR | LR | 15 35 44.7 | |
| | comp=Z,41nm,18.6s,baz=176,slow=38 | | | | | |
| KSRS | Korea Array | 89.46 323 | P | P | 14 55 59.0 | +2.9 |
| | comp=Z,0.6nm,0.7s,baz=151,slow=5.4,SNR=4.2 | | | | | |
| NJ2 | Nanjing | 89.75 314 | *e*P | P | 14 55 57.0 | -0.7 |
| NJ2 | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | |
| PZH | PanZhiHua | 96.23 300 | P | P | 14 56 27.8 | 0.0 |
| PZH | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | |
| PZH | | | pmax | pmax | | |
| | comp=Z,70nm,5.2s | | | | | |
| HHC | Hu-ho-hao-te | 100.19 316 | *e*P | Pdif | 14 56 46.5 | +1.2 |
| HHC | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | |
| HHC | | | pmax | pmax | | |
| | comp=Z,66nm,8.1s | | | | | |
| ARCES | ARCESS Array B | 147.15 342 | PKPbc | PKiKP | 15 02 43.3 | -0.4 |
| | comp=Z,2.1nm,0.7s,baz=43,slow=2.1,SNR=7.7 | | | | | |
| BRTR | Keskin Array B | 151.79 281 | PKPbc | PKPbc | 15 02 53.9 | -0.1 |
| | comp=Z,0.6nm,0.8s,baz=145,slow=5.3,SNR=3.3 | | | | | |
| BRTR | | | PKPab | PKPab | 15 03 03.2 | +0.1 |
| | comp=Z,1.1nm,0.9s,baz=101,slow=5.2,SNR=4.1 | | | | | |
| FINES | FINESS Array B | 152.39 329 | PKPbc | PKiKP | 15 02 56.1 | +1.5 |
| | comp=Z,1.3nm,0.9s,baz=45,slow=3.5,SNR=4.0 | | | | | |
| FINES | | | PKPab | pPKPbc | 15 03 03.6 | -1.0 |
| | comp=Z,1.2nm,0.6s,baz=35,slow=4.7,SNR=8.1 | | | | | |
| TORD | Torodi Ar. Bea | 152.43 191 | PKPbc | PKiKP | 15 02 58.9 | +2.7 |
| | comp=Z,0.2nm,0.4s,baz=179,slow=4.9,SNR=4.9 | | | | | |
| TORD | | | PKPab | PKPab | 15 03 06.2 | +0.2 |
| | comp=Z,0.3nm,0.4s,baz=192,slow=2.8,SNR=2.1 | | | | | |

*DJA **27** 14:43:07.4±4.5,8˚N±38˚×12˚5E±˚, h10km, M4.8/7, mb4.8/7, mB5.2/6, MLv4.9/6, Mw(mB)4.5/6*

*IDC **27** 14:43:22.9±1.1, 6˚36N×124˚67E, h0km, mb3.6/6, mb1 3.8/7, mb1mx3.5/48, mbtmp3.7/7, ML3.6/1, MS3.2/5, Ms1 3.3/5, ms1mx2.7/74, Error ellipse: s-maj=25.6km s-min=17.0km az=100.0*

*MAN **27** 14:43:25.9, 6˚44N×124˚81E, h11km, mb4.7, ML3.5, MS3.4*

*MAN INTENSITY III - T"BOLI, SOUTH COTABATO.*

**ISC 27 14:43:25.1±0.7, 6˚37N±0.05×124˚71E±0.05, h10km, n26, σ1s73/24, mb3.7/6, MS3.2/5, 7D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GSPH | General Santos | 0.37 | 139 | *i*P | Pn | 14 43 36.2 | -0.4 |
| GSPH | | | | *i* S | Sb | 14 43 44.8 | +5.1 |
| KCP | Kidapawan | 0.74 | 31 | *i*P | Pg | 14 43 39.0 | -0.5 |
| CTBH | Cotabato--PC H | 0.96 | 332 | *i*P | Pg | 14 43 43.7 | +0.1 |
| CTBH | | | | *i* S | Sg | 14 43 56.9 | +0.7 |
| DDMP | Don Marcelino, | 1.03 | 105 | *e*P | Pg | 14 43 43.4 | -1.6 |
| DAV | Davao City (W) | 1.11 | 51 | Pn | Pn | 14 43 46.4 | -0.4 |
| | 81nm,0.3s,baz=245,slow=5.3,SNR=9.4 | | | | | | |
| DAV | | | | Sn | Sn | 14 44 01.7 | -0.4 |
| | 240nm,0.3s,baz=274,slow=23,SNR=5.7 | | | | | | |
| DAV | | | | LR | LR | 14 44 11.4 | |
| | comp=Z,352nm,20.2s,baz=134,slow=42 | | | | | | |
| MATI | Mati | 1.64 | 69 | *e*P | Pn | 14 43 53.6 | -0.4 |
| PAGZ | Pagadian | 1.97 | 318 | *e*P | Pn | 14 43 59.4 | +0.9 |
| BUTP | Butuan | 2.74 | 19 | *e*P | Pn | 14 44 11.0 | +1.9 |
| SGSI | Sangihe | 2.79 | 163 | P | Pn | 14 44 09.8 | 0.0 |
| GTOI | Gorontalo | 5.94 | 197 | P | Pn | 14 44 50.3 | -2.9 |
| | 0.2nm554nm45nm,0.7s | | | | | | |
| MRSI | Marisa | 6.47 | 205 | P | Pn | 14 44 58.4 | -2.1 |
| | 0.4nm2µm64nm,0.5s | | | | | | |
| LUWI | Luwuk | 7.61 | 195 | P | Pn | 14 45 17.5 | +1.4 |
| | 61nm,1.1s | | | | | | |
| APSI | Ampana | 7.85 | 203 | P | Pn | 14 45 22.0 | +2.6 |
| | 627nm37nm,0.5s | | | | | | |
| SANI | Sanana | 8.46 | 171 | P | Pn | 14 45 27.0 | -0.8 |
| SIJI | Sorong | 9.72 | 137 | Pn | Pn | 14 45 46.5 | +1.4 |
| | 0.5nm,0.3s,baz=174,slow=3.4,SNR=3.5 | | | | | | |
| FITZ | Fitzroy Crossi | 24.33 | 178 | P | P | 14 48 41.8 | -1.4 |
| | 1.4nm,0.5s,baz=11,slow=7.6,SNR=8.8 | | | | | | |
| WRA | Warramunga Arr | 27.81 | 160 | P | P | 14 49 13.8 | -0.9 |
| | 0.8nm,0.8s,baz=332,slow=11,SNR=5.2 | | | | | | |
| CMAR | Chiang Mai Arr | 27.83 | 298 | LR | LR | 15 00 45.2 | |
| | comp=Z,18nm,18.9s,baz=105,slow=38 | | | | | | |
| ASAR | Alice Springs | 31.17 | 164 | P | P | 14 49 43.6 | -0.9 |
| | 0.6nm,0.7s,baz=346,slow=7.2,SNR=10 | | | | | | |
| MJAR | Matsushiro Arr | 32.48 | 20 | LR | LR | 15 02 17.4 | |
| | comp=Z,48nm,21.7s,baz=162,slow=35 | | | | | | |
| STKA | Stephens Creek | 41.30 | 158 | P | P | 14 51 11.1 | +0.1 |
| | 1.6nm,0.9s,baz=325,slow=18,SNR=2.3 | | | | | | |
| MKAR | Makanchi Array | 54.25 | 325 | P | P | 14 52 51.4 | +0.1 |
| | 0.3nm,0.7s,baz=128,slow=7.8,SNR=2.8 | | | | | | |
| AAK | Ala-Archa | 57.06 | 317 | LR | LR | 15 20 55.5 | |
| | comp=Z,32nm,18.5s,baz=90,slow=40 | | | | | | |
| ZALV | Zalesovo Beam | 57.34 | 333 | P | P | 14 53 12.2 | -1.0 |
| | 0.5nm,0.6s,baz=138,slow=11,SNR=1.9 | | | | | | |
| BRTR | Keskin Array B | 86.80 | 309 | LR | LR | 15 39 16.4 | |
| | comp=Z,24nm,19.4s,baz=336,slow=39 | | | | | | |
| NOA | NORSAR Array B | 95.54 | 333 | LR | LR | 15 41 45.8 | |
| | comp=Z,7.8nm,18.9s,baz=320,slow=37 | | | | | | |

*IDC **27** 15:03:25.9±2.2,24˚93S×179˚85W,h475km±24km, mb3.7/8, mb1 3.7/10, mb1mx3.4/40, mbtmp4.5/10, Error ellipse: s-maj=23.9km s-min=15.9km az=62.0*

*NEIC **27** 15:03:27.1±2.7,24˚92S±0˚07×179˚9W±0˚2, h490km±19km, mb4.1/17, Error ellipse: s-maj=31.4km s-min=6.7km az=76.0*

**ISC 27 15:03:25.3±0.8, 24˚83S±0˚08×179˚6W±0˚1, h500km, n54, σ1s13/55, mb4.2/15, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 7.39 | 343 | P | P | 15 05 15.8 | +0.2 |
| | 7.0nm,0.3s,baz=227,slow=22,SNR=17 | | | | | | |
| MSVF | Nonsavu | 7.39 | 343 | P | P | 15 05 15.7 | +0.1 |
| OUZ | Omahuta | 11.89 | 208 | P | P | 15 06 03.2 | +0.6 |
| OUENC | Ouen Island, N | 12.63 | 278 | P | P | 15 06 09.8 | -0.8 |
| AFI | Afiamalu | 13.15 | 36 | S | S | 15 08 35.2 | -1.9 |
| | 2.1nm,0.3s,baz=132,slow=17,SNR=2.9 | | | | | | |
| URZ | Urewera | 13.67 | 191 | P | P | 15 06 20.3 | -1.1 |
| | 0.7nm,0.3s,baz=17,slow=19,SNR=1.5 | | | | | | |
| URZ | | | | S | S | 15 08 44.0 | -2.5 |
| | 3.0nm,0.3s,baz=187,slow=22,SNR=23 | | | | | | |
| URZ | Urewera | 13.67 | 191 | P | P | 15 06 20.6 | -0.7 |
| BKZ | Black Stump Fm | 14.66 | 192 | P | P | 15 06 31.2 | -0.7 |
| WNVZ | Wahianoa | 15.00 | 194 | P | P | 15 06 36.1 | +0.5 |
| BHHZ | Black Hill Sta | 15.06 | 193 | P | P | 15 06 36.8 | +0.8 |
| KRHZ | Kereru | 15.15 | 192 | P | P | 15 06 39.1 | +2.3 |
| TSZ | Takapari Road | 15.63 | 193 | P | P | 15 06 42.4 | +0.5 |
| MRZ | Mangatainoka R | 16.29 | 193 | P | P | 15 06 47.4 | -1.4 |
| OGWZ | Otaki Gorge | 16.52 | 194 | P | P | 15 06 50.4 | -0.8 |
| KIW | Kapiti Island | 16.62 | 195 | P | P | 15 06 51.4 | -0.9 |
| MTW | Mount Morrison | 16.78 | 193 | P | P | 15 06 53.2 | -0.7 |
| CAW | Cannon Point | 16.82 | 194 | P | P | 15 06 52.9 | -1.4 |
| MSWZ | Moikau Station | 17.08 | 193 | P | P | 15 06 55.6 | -1.3 |
| PLWZ | Palliser | 17.23 | 193 | P | P | 15 06 56.7 | -1.6 |
| QRZ | Quartz Range | 17.24 | 200 | P | P | 15 06 57.7 | -0.8 |
| TKNZ | Takaka Hill | 17.30 | 199 | P | P | 15 06 57.9 | -1.1 |
| NNZ | Nelson | 17.35 | 198 | P | P | 15 06 58.9 | -0.5 |
| TUWZ | Tuamarina | 17.39 | 196 | P | P | 15 06 59.2 | -0.6 |
| MRNZ | Matariki Terra | 17.70 | 199 | P | P | 15 07 02.3 | -0.4 |
| RPZ | Rata Peaks | 20.32 | 200 | P | P | 15 07 26.2 | -0.5 |
| | 6.9nm,0.7s,baz=91,slow=15,SNR=5.5 | | | | | | |
| ARMA | Armidale | 26.02 | 251 | P | P | 15 08 16.0 | -2.0 |
| ARMA | | | | IAmb | IAmb | 15 08 16.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| CAN | Canberra | 28.98 | 241 | P | P | 15 08 44.4 | +0.6 |
| CAN | | | | IAmb | IAmb | 15 08 45.7 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| CTA | Charters Tower | 31.82 | 272 | P | P | 15 09 09.8 | +1.2 |
| | comp=Z,6.6nm,0.4s,baz=98,slow=9.9,SNR=23 | | | | | | |
| TOO | Toolangi | 32.23 | 238 | P | P | 15 09 10.7 | -1.1 |
| TOO | | | | IAmb | IAmb | 15 09 30.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| STKA | Stephens Creek | 34.70 | 249 | P | P | 15 09 33.6 | +0.9 |
| | comp=Z,3.0nm,0.4s,baz=92,slow=9.4,SNR=16 | | | | | | |
| STKA | Stephens Creek | 34.70 | 249 | P | P | 15 09 33.2 | +0.5 |
| COEN | Coen | 36.60 | 280 | P | P | 15 09 49.7 | +0.9 |
| BBOO | Buckleboo | 39.40 | 248 | P | P | 15 10 11.3 | 0.0 |
| AS31 | Alice Springs | 42

comp=Z,15nm,0.9s
**X40A Basin Creek Fa** 4.24 114 IAmb_Lg 15 18 43.5
comp=Z,15nm,0.8s
**MGMO Mountain Grove** 4.32 77 IAmb_Lg 15 18 45.9
comp=Z,17nm,0.7s
**WHAR Wooly Hollow** 4.38 102 IAmb_Lg 15 18 48.4
comp=Z,16nm,0.7s
**W41B Gary Mavity, V** 4.44 103 IAmb_Lg 15 18 55.7
comp=Z,18nm,1.1s
**N33A J Bar K, Exete** 4.45 1 IAmb_Lg 15 18 44.1
comp=Z,10.0nm,0.7s
**P38A Dawn** 4.59 42 IAmb_Lg 15 18 58.9
comp=Z,9.3nm,0.7s
**KSCO Kaye Shedlock'** 4.87 305 IAmb_Lg 15 19 09.8
comp=Z,13nm,0.9s
**BGNE Belgrade** 5.14 355 IAmb_Lg 15 19 20.4
comp=Z,12nm,0.7s
**P40A Paris** 5.41 52 IAmb_Lg 15 19 21.4
comp=Z,13nm,0.7s
**T25A Trinidad** 5.59 281 IAmb_Lg 15 19 24.9
comp=Z,10.0nm,1.0s
**N38A Joes South For** 5.62 36 IAmb_Lg 15 19 33.2
comp=Z,18nm,0.8s
**L34A Svendsen Farm,** 5.75 9 IAmb_Lg 15 19 38.6
comp=Z,17nm,0.7s
**FVM French Village** 5.92 71 IAmb_Lg 15 19 41.4
comp=Z,13nm,0.7s

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**PGC 27 15:22:03.5±0.6, 49.68°N×127.51°W, h10km, ML2.9/36, MLSn2.9/37, Mw3.5/37, 101km west of Gold R., Bc Vancouver Island, Canada Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EDB** | **Eliza Dome** | **0.32** | **52** | P | Pg | 15 22 10.4 | +0.4 |
| EDB | | | | S | Sg | 15 22 14.9 | +0.6 |
| **BPBC** | **Brooks Peninsu** | **0.51** | **341** | P | Pg | 15 22 13.5 | 0.0 |
| **ETB** | **Estevan Point** | **0.70** | **115** | P | Pg | 15 22 16.9 | -0.2 |
| **MAYB** | **Maynard** | **0.76** | **17** | P | Pg | 15 22 17.2 | -0.9 |
| MAYB | | | | S | Sg | 15 22 27.8 | -0.3 |
| **PACB** | **Port Alice, BC** | **0.76** | **1** | P | Pg | 15 22 17.2 | -1.0 |
| PACB | | | | S | Sg | 15 22 26.8 | -1.2 |
| **WOSB** | **Woss** | **0.78** | **51** | P | Pg | 15 22 17.7 | -0.8 |
| WOSB | | | | S | Sg | 15 22 27.9 | -0.8 |
| **GDR** | **Gold River** | **0.97** | **83** | P | Pg | 15 22 20.5 | -1.6 |
| GDR | | | | S | Sg | 15 22 33.2 | -1.5 |
| **PHC** | **Port Hardy** | **1.03** | **3** | P | Pg | 15 22 21.4 | -2.0 |
| PHC | | | | S | Sg | 15 22 34.2 | -2.5 |
| **HOLB** | **Holberg** | **1.04** | **338** | P | Pg | 15 22 21.3 | -2.3 |
| HOLB | | | | S | Sg | 15 22 34.0 | -3.1 |
| **NC89** | **ODP889** | **1.10** | **156** | P | Pb | 15 22 23.5 | -1.0 |
| NC89 | | | | S | Sb | 15 22 37.4 | -1.4 |
| **TOFB** | **Tofino** | **1.17** | **116** | P | Pb | 15 22 23.4 | -2.4 |
| **NCRB** | **Newcastle Ridg** | **1.19** | **52** | P | Pb | 15 22 24.0 | -2.2 |
| NCRB | | | | S | Sb | 15 22 39.0 | -2.7 |
| **SPLB** | **Strathcona Par** | **1.22** | **79** | P | Pn | 15 22 24.6 | -2.1 |
| SPLB | | | | S | Sb | 15 22 40.7 | -1.9 |
| **BTB** | **Buttle Lake** | **1.31** | **98** | P | Pn | 15 22 25.9 | -2.2 |
| BTB | | | | S | Sb | 15 22 44.5 | -0.8 |
| **CBB** | **Campbell River** | **1.43** | **75** | Pn | Pn | 15 22 27.7 | -1.9 |
| CBB | | | | Sn | Sn | 15 22 46.1 | -2.3 |
| **MWAB** | **Mount Washingt** | **1.44** | **87** | Pn | Pn | 15 22 28.0 | -1.7 |
| MWAB | | | | Sn | Sn | 15 22 46.4 | -2.3 |
| **B012** | **Ucluelet** | **1.49** | **120** | Pn | Pg | 15 22 32.6 | +0.5 |
| **BFSB** | **Bamfield** | **1.77** | **118** | Pn | Pn | 15 22 34.2 | 0.0 |
| BFSB | | | | Sn | Sg | 15 22 59.9 | -0.6 |
| **B928** | **Bamfield** | **1.77** | **118** | Pn | Pn | 15 22 34.5 | +0.3 |
| B928 | | | | Pg | Pg | 15 22 36.9 | -0.6 |
| **B927** | **Port Alberni** | **1.82** | **104** | Pn | Pn | 15 22 35.0 | +0.1 |
| **NC27** | **ODP1027** | **1.93** | **185** | Pn | Pn | 15 22 33.4 | -2.6 |
| **MGB** | **Mount Grey** | **1.96** | **109** | Pn | Pn | 15 22 35.7 | -1.3 |
| MGB | | | | Pg | Pb | 15 22 38.7 | -0.8 |
| **TXB** | **Texada** | **2.00** | **88** | Pn | Pn | 15 22 35.3 | -2.1 |
| TXB | | | | Sn | Sb | 15 23 03.8 | -1.1 |
| **GHNB** | **Nanoose** | **2.17** | **99** | Pn | Pn | 15 22 40.2 | +0.6 |
| GHNB | | | | Sn | Sb | 15 23 09.3 | -0.4 |
| **PFB** | **Port Renfrew** | **2.30** | **118** | Pn | Pn | 15 22 39.6 | -1.9 |
| PFB | | | | Sn | Sb | 15 23 15.5 | +1.9 |
| **NLLB** | **Nanaimo Lost L** | **2.34** | **100** | Pn | Pn | 15 22 39.6 | -2.5 |
| **OCP** | **Olym-Cheeka Pk** | **2.35** | **125** | Pn | Pn | 15 22 40.8 | -1.4 |
| **SHB** | **Sechelt** | **2.37** | **91** | Pn | Pn | 15 22 40.7 | -1.8 |
| SHB | | | | Sn | Sb | 15 23 14.2 | -1.3 |
| **B926** | **Mesachie Lake** | **2.38** | **110** | Pn | Pn | 15 22 42.5 | 0.0 |
| **CLRS** | **Cowichan Lake** | **2.38** | **110** | Pn | Pn | 15 22 42.4 | -0.1 |
| **BBB** | **Bella Bella** | **2.54** | **352** | Pn | Pn | 15 22 43.0 | -1.7 |
| BBB | | | | Sn | Sn | 15 23 12.1 | -3.6 |
| BBB | | | | Sg | Sb | 15 23 18.4 | -2.0 |
| **GOBB** | **Galiano Island** | **2.72** | **104** | Pn | Pn | 15 22 48.0 | +0.8 |
| **BIB** | **Bowen Island** | **2.75** | **94** | Pn | Pn | 15 22 48.7 | +1.0 |
| BIB | | | | Sn | Sb | 15 23 24.9 | -1.6 |
| **WPB** | **Watts Point** | **2.79** | **89** | Pn | Pn | 15 22 49.2 | +0.9 |
| **OBC** | **Olympics--Boni** | **2.80** | **125** | Pn | Pn | 15 22 48.7 | +0.3 |
| **B009** | **North Saanich** | **2.86** | **110** | Pn | Pn | 15 22 47.7 | -1.4 |
| **B010** | **North Saanich** | **2.86** | **110** | Pn | Pn | 15 22 49.0 | -0.1 |
| **PGC** | **Sidney** | **2.86** | **110** | Pn | Pn | 15 22 48.3 | -0.8 |
| **B011** | **North Saanich** | **2.86** | **110** | Pn | Pn | 15 22 48.4 | -0.7 |
| **STW** | **Striped Peak** | **2.96** | **120** | Pn | Pn | 15 22 50.6 | +0.1 |
| STW | | | | Pg | Pg | 15 22 58.9 | -1.3 |
| **SNB** | **Saturna Island** | **2.98** | **106** | Pn | Pn | 15 22 51.8 | +0.9 |
| **WSLR** | **Whistler** | **3.00** | **80** | Pg | Pn | 15 22 54.1 | +2.9 |
| WSLR | | | | Sg | Sb | 15 23 31.9 | -2.0 |
| **VGZ** | **Gonzales** | **3.03** | **113** | Pg | Pb | 15 22 58.9 | +1.3 |
| **OSD** | **Olympics--Snow** | **3.13** | **125** | Pg | Pg | 15 23 02.6 | -0.9 |
| **MCW** | **Mount Constitu** | **3.23** | **106** | Pn | Pn | 15 22 54.6 | +0.3 |
| **HNBB** | **Haney** | **3.24** | **95** | Pn | Pn | 15 22 55.0 | +0.5 |
| **BUTB** | **Butedale** | **3.44** | **350** | Pn | Pn | 15 22 54.7 | -2.6 |
| BUTB | | | | Sn | Sn | 15 23 33.0 | -5.2 |
| **VDB** | **Vedder Mountai** | **3.60** | **98** | Pn | Pn | 15 22 59.5 | +0.2 |
| **LLLB** | **Lillooet** | **3.74** | **73** | Pn | Pn | 15 23 01.6 | +0.3 |
| LLLB | | | | Pg | Pb | 15 23 10.2 | +0.6 |
| LLLB | | | | Sg | Sb | 15 23 57.5 | +2.5 |
| **GNW** | **Green Mountain** | **3.76** | **122** | Pg | Pg | 15 23 14.5 | -1.1 |
| **MBW** | **Mount Baker** | **3.79** | **102** | Pn | Pn | 15 23 02.4 | +0.3 |
| **UBRB** | **Upper Baezaeko** | **3.87** | **32** | Pn | Pn | 15 23 02.2 | -1.0 |
| UBRB | | | | Pg | Pb | 15 23 11.4 | -0.5 |
| **BNKB** | **Banks Island** | **3.95** | **339** | Pn | Pn | 15 23 02.1 | -2.1 |
| BNKB | | | | Sn | Sn | 15 23 45.0 | -5.5 |
| **RPW** | **Rockport** | **4.13** | **105** | Pg | Pb | 15 23 15.9 | -0.4 |
| **GRNB** | **Grenville Isla** | **4.44** | **341** | Pn | Pn | 15 23 09.1 | -1.9 |
| GRNB | | | | Sn | Sn | 15 23 57.3 | -5.4 |

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**NOU 27 15:26:13.9, 14.82S×167.38E, h102km, MLv4.8/14, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANVU** | **Saraoutou** | **0.65** | **195** | P | Pn | 15 26 31.9 | +0.8 |
| **DVP** | **Devils Point** | **2.99** | **165** | P | Pn | 15 26 59.6 | 0.0 |
| **LIFNC** | **LIFOU** | **5.93** | **181** | P | Pn | 15 27 38.7 | -0.5 |
| **KOUNC** | **Koumac, New Ca** | **6.42** | **207** | P | Pn | 15 27 45.6 | -0.3 |
| **YATNC** | **Mamie plateau,** | **7.21** | **184** | P | Pn | 15 27 56.1 | -0.6 |
| **YATNC** | **Mamie plateau,** | **7.21** | **184** | P | Pn | 15 27 56.0 | -0.7 |
| **DZM** | **Mont Dzumac** | **7.27** | **187** | P | Pn | 15 27 58.8 | +1.3 |
| **DZM** | **Mont Dzumac** | **7.27** | **187** | P | Pn | 15 27 58.0 | +0.5 |
| **NOUC** | **Port Laguerre** | **7.31** | **188** | P | Pn | 15 27 59.2 | +1.1 |
| **NOUC** | **Port Laguerre** | **7.31** | **188** | P | Pn | 15 27 58.2 | +0.1 |
| **ONTNC** | **Ouen Toro** | **7.50** | **187** | P | Pn | 15 28 01.4 | +0.8 |
| **OUENC** | **Ouen Island, N** | **7.58** | **184** | P | Pn | 15 28 01.8 | +0.2 |
| **PINNC** | **Pines Island,** | **7.75** | **180** | P | Pn | 15 28 03.7 | -0.3 |

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*NIED* ***27*** *15:37:28.5, 38.91N×142.85E, h11km, MW4.3, Moment Tensor Solution. s3 Moment tensor: Scale 10^15 Nm; Mrr-2.49; Mθθ2.56; Mϕϕ-0.07; Mrθ-0.42; Mθϕ-1.34; Mϕr-1.18; Fault plane solution: M0 3.12000×10^15 NP1: ϕs317.00000°, δ51.00000°, λ-55.00000°. NP2: ϕs89.00000°, δ50.00000°, λ-126.00000°.*

*JMA* ***27*** *15:37:28.4±0.1, 38.91N×142.85E, h11km±1km, M4.5*

*JMA Felt I J1.*

*BJI* ***27*** *15:37:29.3±0.0, 38.88N×142.72E, h19km, mb4.6/59, mB4.7/33, Ms4.0/27, Ms7 3.8/26*

*MOS* ***27*** *15:37:31.3±1.0, 38.98N×142.99E, h37km, mb5.0/28, Error ellipse: s-maj=7.4km s-min=4.6km az=106.1*

*NEIC* ***27*** *15:37:32.3±2.1, 38.91N±0.05×142.6E±0.1, h24km±4km, mb4.8/32, Error ellipse: s-maj=11.4km s-min=7.0km az=98.0*

*IDC* ***27*** *15:37:35.3±1.9, 38.91N×142.76E, h48km±17km, mb4.1/25, mb1 4.2/31, mb1mx4.2/49, mbtmp4.3/31, ML3.6/6, MS3.5/22, Ms1 3.5/22, ms1mx3.2/91, Error ellipse: s-maj=14.7km s-min=11.5km az=110.0*

**ISC 27 15:37:31.4±0.7, 38.94N±0.04×142.85E±0.04, h25km±4km, n287, σ1 80/304, mb4.7/101, MS3.8/28, 32C-42D, Fault plane solution: NP1:** ϕs291.71155°, δ27.30370°, λ-66.53454°. **NP2:** ϕs85.67494°, δ65.11667°, λ-101.61575°. **Principal axes:** T Plg19.3171°, Azm184.3521°; N Plg10.5245°, Azm90.6183°; P Plg67.7979°, Azm333.5408°; **Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OFUJ** | **Ofunato** | **0.93** | **279** | P | **Pb** | **15 37 46.2** | **-2.7** |
| OFUJ | | | | S | **Sb** | **15 37 59.3** | **-1.5** |
| **MIYJ** | **Miyakonagasawa** | **1.02** | **309** | P | **Pn** | **15 37 47.7** | **-2.5** |
| MIYJ | | | | eS | **Sb** | **15 38 01.6** | **-1.8** |
| **JKMT** | **Kesennumamotoy** | **1.08** | **264** | P | **Pn** | **15 37 48.5** | **-2.5** |
| JKMT | | | | S | **Sb** | **15 38 02.8** | **-2.3** |
| **JTH** | **Tanohata** | **1.25** | **323** | P | **Pn** | **15 37 52.3** | **-1.1** |
| JTH | | | | eS | **Sn** | **15 38 08.8** | **-0.7** |
| **JIO** | **Ouri** | **1.27** | **248** | P | **Pn** | **15 37 51.4** | **-2.2** |
| JIO | | | | S | **Sn** | **15 38 07.4** | **-2.4** |
| **JMK** | **Ichinoseki** | **1.27** | **271** | P | **Pn** | **15 37 51.7** | **-1.9** |
| JMK | | | | S | **Sb** | **15 38 08.6** | **-1.9** |
| **JOM** | **Ohasama** | **1.32** | **294** | P | **Pn** | **15 37 52.6** | **-1.7** |
| JOM | | | | S | **Sn** | **15 38 09.9** | **-1.2** |
| **JKZ** | **Kuzumaki** | **1.57** | **312** | P | **Pn** | **15 37 56.8** | **-1.0** |
| JKZ | | | | S | **Sb** | **15 38 17.8** | **-1.5** |
| **JANG** | **Nango** | **1.76** | **325** | P | **Pn** | **15 37 59.8** | **-0.6** |
| JANG | | | | S | **Sn** | **15 38 22.7** | **+0.7** |
| **JRG** | **Rokugo** | **1.78** | **285** | P | **Pn** | **15 38 00.4** | **-0.2** |
| **JOU** | **Okura** | **1.80** | **252** | P | **Pn** | **15 38 00.2** | **-0.8** |
| JOU | | | | S | **Sb** | **15 38 22.8** | **-3.1** |
| **JMM** | **Marumori** | **1.94** | **237** | P | **Pn** | **15 38 00.9** | **-1.9** |
| JMM | | | | eS | **Sn** | **15 38 24.4** | **-1.9** |
| **JMM** | **Marumori** | **1.94** | **237** | | **Pn** | **15 38 01.2** | **-1.6** |
| **JYK** | **Kaneyama** | **1.94** | **270** | P | **Pn** | **15 38 02.5** | **-0.3** |
| JYK | | | | eS | **Sb** | **15 38 27.7** | **-2.2** |
| **JTM** | **Tenmabayashi** | **2.30** | **324** | | **Pn** | **15 38 08.1** | **+0.4** |
| **ERM** | **Erimo** | **3.08** | **4** | ⇑*i*P | **Pn** | **15 38 18.5** | **0.0** |
| **ERM** | **Erimo** | **3.08** | **4** | | **Pn** | **15 38 18.7** | **+0.3** |
| **JYT** | **Yasato** | **3.43** | **219** | | **Pn** | **15 38 22.9** | **-0.4** |
| **JSD** | **Sado** | **3.71** | **257** | | **Pn** | **15 38 28.7** | **+1.5** |
| **JEW** | **Eniwo** | **4.04** | **345** | | **Pn** | **15 38 36.3** | **+4.7** |
| **MJAR** | **Matsushiro Arr** | **4.39** | **238** | P | **Pn** | **15 38 38.7** | **+2.2** |
| | 2.4nm,0.3s,baz=41,slow=10,SNR=157 | | | | | | |
| MJAR | | | | LR | LR | 15 40 20.3 | |
| | comp=Z,630nm,19.1s,baz=87,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.39** | **238** | | **Pn** | **15 38 37.5** | **+1.0** |
| **MAJO** | **Matsushiro** | **4.39** | **238** | *ce*P | **Pn** | **15 38 38.8** | **+2.3** |
| **MAJO** | **Matsushiro** | **4.39** | **238** | | **Pn** | **15 38 37.5** | **+1.0** |
| **MAT** | **Matsushiro** | **4.39** | **238** | P | **Pn** | **15 38 37.8** | **+1.3** |
| MAT | | | | eS | **Sn** | **15 39 26.1** | **-0.8** |
| **MJB9** | **Matsu-Tunnel** | **4.39** | **238** | | **Pn** | **15 38 37.5** | **+0.9** |
| **NMR** | **Nemuro--Hokkai** | **4.93** | **25** | ⇓*i*P | **Pn** | **15 38 42.3** | **-1.6** |
| NMR | | | | *i* S | **Sn** | **15 39 35.8** | **-4.3** |
| **JKA** | **Kamikawa-asahi** | **5.17** | **358** | | **Pn** | **15 38 49.2** | **+2.0** |
| **ASAJ** | **Asahikawa** | **5.17** | **358** | P | **Pn** | **15 38 49.2** | **+1.9** |
| | 2.1nm,0.3s,baz=207,slow=9.2,SNR=31 | | | | | | |
| ASAJ | | | | S | **Sn** | **15 39 45.8** | **-0.4** |
| | 2.7nm,0.3s,baz=186,slow=15,SNR=1.9 | | | | | | |
| **GLVR** | **Golovnino** | **5.20** | **22** | *e*P | **Pn** | **15 38 46.8** | **-0.7** |
| GLVR | | | | eS | **Sn** | **15 39 44.1** | **-2.6** |
| GLVR | | | | pmax | pmax | | |
| | comp=Z,140nm,0.4s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,578nm,0.4s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,609nm,0.3s | | | | | | |
| **RUSJ** | **Misakicho** | **5.46** | **18** | *e*P | **Pn** | **15 38 50.5** | **-0.7** |
| RUSJ | | | | eS | **Sn** | **15 39 50.5** | **-2.7** |
| **JGF** | **Kuroka** | **5.50** | **234** | | **Pn** | **15 38 53.5** | **+1.7** |
| **YUK** | **Yuzh-Kuril'sk** | **5.57** | **23** | *e*P | **Pn** | **15 38 50.7** | **-2.0** |
| YUK | | | | eS | **Sn** | **15 39 51.6** | **-4.2** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,118nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,113nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,87nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,906nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,881nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **5.76** | **30** | *e*P | **Pn** | **15 38 52.7** | **-2.6** |
| SHO | | | | eS | **Sn** | **15 39 55.1** | **-5.5** |
| SHO | | | | pmax | pmax | | |
| | comp=N,20nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,26nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,43nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,333nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,330nm,0.5s | | | | | | |
| **INU** | **Inuyama** | **5.88** | **234** | | **Pn** | **15 38 59.3** | **+2.4** |
| **JHJ** | **Hachijo jima 2** | **6.32** | **204** | P | **Pn** | **15 39 02.2** | **-0.8** |
| | comp=N,10nm,0.3s,baz=132,slow=23,SNR=12 | | | | | | |
| JHJ | | | | S | **Sn** | **15 40 10.4** | **-4.0** |
| | comp=N,26nm,0.3s,baz=52,slow=21,SNR=1.9 | | | | | | |
| JHJ | | | | LR | LR | 15 41 27.9 | |
| | comp=N,349nm,21.2s,baz=46,slow=37 | | | | | | |
| **KUR** | **Kuril'sk** | **7.31** | **29** | *e*P | **Pn** | **15 39 15.8** | **-0.7** |
| KUR | | | | *i* S | **Sn** | **15 40 35.0** | **-3.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,55nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,21nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,17nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,243nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,94nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.01** | **360** | *e*P | **Pn** | **15 39 28.5** | **+2.4** |
| YSS | | | | eS | **Sn** | **15 40 58.4** | **+2.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,300nm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,300nm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,300nm,12.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.01** | **360** | | **Pn** | **15 39 27.3** | **+1.1** |
| **JHS** | **Saijyo** | **8.72** | **246** | Pn | **Pn** | **15 39 35.5** | **-0.6** |
| **VLA** | **Vladivostok** | **9.28** | **300** | *de*P | Pn | 15 39 48.3 | +4.8 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,34nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.68** | **306** | P | **Pn** | **15 39 51.8** | **+2.7** |
| | baz=120,slow=16,SNR=12 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.68** | **306** | | **Pn** | **15 39 48.0** | **-1.1** |
| **USA0B** | **Ussuriysk Arra** | **9.68** | **306** | ⇑*e*P | **Pn** | **15 39 53.3** | **+4.2** |
| **USA0B** | **Ussuriysk Arra** | **9.68** | **306** | | **Pn** | **15 39 47.9** | **-1.3** |
| **JNU** | **Nakatsue** | **11.29** | **243** | P | **Pn** | **15 40 13.3** | **+2.0** |
| | comp=Z,0.9nm,0.3s,baz=12,slow=8.9,SNR=6.2 | | | | | | |
| **MDJ** | **Mudanjiang** | **11.40** | **304** | Pn | **Pn** | **15 40 10.8** | **-1.9** |
| **MDJ** | **Mudanjiang** | **11.40** | **304** | P | **Pn** | **15 40 11.3** | **-1.3** |
| MDJ | | | | pP | | 15 40 17.5 | |
| MDJ | | | | sP | | 15 40 20.8 | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,110nm,4.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,290nm,12.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,410nm,16.4s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,450nm,15.1s | | | | | | |
| **KSRS** | **Korea Array** | **11.84** | **267** | P | **Pn** | **15 40 22.2** | **+3.6** |
| | comp=Z,0.3nm,0.3s,baz=81,slow=14,SNR=19 | | | | | | |
| KSRS | | | | LR | LR | 15 44 17.8 | |
| | comp=Z,36nm,18.1s,baz=70,slow=34 | | | | | | |
| **TYV** | **Tymovskoe** | **11.92** | **359** | *e*P | **Pn** | **15 40 22.3** | **+2.6** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,200nm,5.1s | | | | | | |
| **KLR** | **Kul'dur** | **13.00** | **326** | P | **Pn** | **15 40 35.6** | **+1.1** |
| | comp=Z,0.3nm,0.3s,baz=129,slow=12,SNR=19 | | | | | | |
| **KLR** | **Kul'dur** | **13.00** | **326** | ⇓*e*P | **Pn** | **15 40 35.5** | **+1.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BNX** | **BinXian** | **13.28** | **306** | ⇓P | **Pn** | **15 40 41.3** | **+3.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,220nm,5.6s | | | | | | |
| **CN2** | **Changchun** | **13.94** | **296** | *e*P | **Pn** | **15 40 50.0** | **+2.8** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,13.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,100nm,13.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,100nm,13.0s | | | | | | |
| **NKL** | **Nikolayevsk** | **14.29** | **355** | *e*P | **Pn** | **15 40 47.8** | **-4.2** |
| NKL | | | | *e*S | **Sn** | **15 43 32.5** | **+2.9** |
| NKL | | | | pmax | pmax | | |
| | comp=N,324nm,0.7s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.5s | | | | | | |
| NKL | | | | smax | smax | | |
| | comp=N,879nm,1.9s | | | | | | |
| NKL | | | | smax | smax | | |
| | comp=E,3.0nm,1.9s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=E,65nm,20.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=N,6μm,12.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=Z,226nm,18.0s | | | | | | |
| **PET** | **Petropavlovsk** | **17.80** | **33** | *e*P | **Pn** | **15 41 33.6** | **-3.7** |
| PET | | | | *e*S | **Sn** | **15 44 47.5** | **-7.3** |
| PET | | | | MLR | MLR | | |
| | comp=Z,200nm,18.0s | | | | | | |
| **ZEA** | **Zeya** | **18.24** | **329** | *e*P | Pn | 15 41 35.3 | -7.4 |
| ZEA | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=N,100nm,14.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=E,100nm,14.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,100nm,17.0s | | | | | | |
| **HIA** | **Hailar** | **19.47** | **310** | P | **P** | **15 41 52.7** | **-3.6** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HIA** | **Hailar** | **19.47** | **310** | P | **P** | **15 41 52.7** | **-3.6** |
| **TIA** | **Tai'an** | **20.55** | **270** | ⇓P | **P** | **15 42 07.5** | **-0.6** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.63** | **293** | *e*P | **P** | **15 42 07.3** | **-1.8** |
| XLT | | | | sP | pP | 15 42 16.0 | +0.5 |
| XLT | | | | S | S | 15 45 44.8 | -14 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,84nm,5.5s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,220nm,10.4s | | | | | | |
| **NJ2** | **Nanjing** | **20.68** | **258** | *e*P | **P** | **15 42 08.5** | **-1.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **MA2** | **Magadan** | **21.26** | **11** | P | **P** | **15 42 15.2** | **-0.4** |
| | comp=Z,19nm,0.8s,baz=195,slow=9.5,SNR=39 | | | | | | |
| MA2 | | | | LR | LR | 15 50 34.3 | |
| | comp=Z,50nm,19.8s,baz=172,slow=37 | | | | | | |
| **MA2** | **Magadan** | **21.26** | **11** | ⇓*e*P | **P** | **15 42 16.2** | **+0.6** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **21.26** | **11** | | **P** | **15 42 17.1** | **+1.6** |
| MA2 | | | | IAmb | IAmb | 15 42 20.1 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **YHNB** | **Yeheng** | **23.06** | **238** | P | **P** | **15 42 32.2** | **-2.9** |
| YHNB | | | | IAmb | IAmb | 15 42 32.5 | |
| | comp=Z,81nm,1.6s | | | | | | |
| **SSLB** | **Suanglung** | **23.95** | **237** | | **P** | **15 42 40.7** | **-3.1** |
| SSLB | | | | IAmb | IAmb | 15 42 42.8 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **24.02** | **285** | *e*P | **P** | **15 42 43.8** | **-0.6** |
| HHC | | | | PP | **PnPn** | **15 43 17.3** | **+4.0** |
| HHC | | | | S | **S** | **15 46 57.3** | **-2.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,41nm,6.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,260nm,13.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,150nm,10.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,200nm,12.8s | | | | | | |
| **YAK** | **Yakutsk** | **24.49** | **345** | P | **P** | **15 42 48.8** | **+0.4** |
| | comp=Z,3.8nm,0.3s,baz=7.8,slow=3.4,SNR=9.1 | | | | | | |
| YAK | | | | LR | LR | 15 53 02.1 | |
| | comp=Z,152nm,18.8s,baz=102,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **24.49** | **345** | *e*P | **P** | **15 42 45.6** | **-2.7** |
| YAK | | | | *e**PP | **pP** | **15 42 53.6** | **-1.6** |
| YAK | | | | *e*PPP | PPP | 15 43 24.7 | |
| YAK | | | | *e* | | 15 46 25.1 | |
| YAK | | | | *e*S | **S** | **15 47 04.5** | **-2.5** |
| YAK | | | | *e**SS | **sS** | **15 47 21.1** | **+2.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,2.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,55nm,2.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,34nm,2.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,13nm,1.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,15nm,1.6s | | | | | | |
| **YAK** | **Yakutsk** | **24.49** | **345** | P | **P** | **15 42 47.3** | **-1.0** |
| YAK | | | | IAmb | IAmb | 15 42 55.9 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **LYN** | **LuoYang** | **24.68** | **269** | *e*P | **P** | **15 42 50.8** | **+0.5** |
| LYN | | | | S | **S** | **15 47 12.5** | **+2.0** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,70nm,4.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,290nm,15.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,170nm,11.4s | | | | | | |
| **SEY** | **Seymchan** | **24.71** | **10** | P | **P** | **15 42 52.6** | **+2.3** |
| | comp=Z,9.1nm,0.9s,baz=193,slow=7.2,SNR=44 | | | | | | |
| SEY | | | | LR | LR | 15 54 27.3 | |
| | comp=Z,47nm,18.0s,baz=16,slow=41 | | | | | | |
| **SEY** | **Seymchan** | **24.71** | **10** | ⇑*i*P | **P** | **15 42 53.0** | **+2.7** |
| **

comp=Z,4.8nm,0.8s,baz=94,slow=8.5,SNR=23
SONM LR LR 15 54 41.5
comp=Z,45nm,19.7s,baz=77,slow=37
**SONM Songino Array 27.73 301 P P 15 43 18.6 +0.7**
**H11N2 WAKE ISLAND Hy 28.24 126** T T 16 12 55.5
baz=318,slow=75,SNR=753
**H11N1 WAKE ISLAND Hy 28.25 126** T T 16 12 55.0
baz=318,slow=75,SNR=478
**H11N3 WAKE ISLAND Hy 28.26 126** T T 16 12 55.6
baz=318,slow=75,SNR=606
**H11S1 WAKE ISLAND Hy 29.04 128** T T 16 13 52.9
baz=320,slow=76,SNR=31
**H11S3 WAKE ISLAND Hy 29.04 128** T T 16 13 52.4
baz=320,slow=76,SNR=46
**H11S2 WAKE ISLAND Hy 29.05 128** T T 16 13 56.5
baz=320,slow=76,SNR=35
**ZAK Zakamensk 30.03 305** *eP* **P 15 43 38.5 +0.2**
ZAK pmax pmax
comp=Z,15nm,1.0s
**LZH Lanzhou 30.91 277** *e*P **P 15 43 43.3 -3.0**
LZH pP pP 15 43 51.3 -1.9
LZH sP sP 15 43 54.8 -1.3
LZH pmax pmax
comp=Z,9.0nm,1.2s
LZH LR LR
comp=Z,220nm,15.7s
LZH LR LR
comp=Z,130nm,11.3s
LZH LR LR
comp=Z,190nm,14.3s
**MOY Mondy 31.62 308** *e*P **P 15 43 53.3 +0.9**
**BILL Bilibino 31.88 16**⇓ *e*P **P 15 43 55.7 +1.4**
BILL *e* 15 45 00.5
BILL pmax pmax
comp=Z,27nm,4.7s
**GYA Guiyang 32.69 259**⇑ *i*P **P 15 44 02.0 +0.1**
GYA pP sP 15 44 11.5 -0.2
GYA pmax pmax
comp=Z,31nm,1.0s
**CD2 Chengdu 32.84 268** *e*P **P 15 44 01.3 -1.9**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
**GTA Gaotai 33.13 285** *e*P **P 15 44 07.0 +1.3**
GTA pP pP 15 44 13.0 +0.3
GTA sP sP 15 44 17.5 +2.0
GTA PcP **PcP 15 46 50.3 +1.9**
GTA pmax pmax
comp=Z,8.0nm,0.9s
GTA pmax pmax
comp=Z,36nm,6.1s
GTA LR LR
comp=Z,100nm,14.5s
GTA LR LR
comp=Z,180nm,17.8s
GTA LR LR
comp=Z,150nm,14.9s
**TIXI Tiksi 33.55 352** LR LR 15 59 04.7
comp=Z,60nm,19.5s,baz=181,slow=38
**TIXI Tiksi 33.55 352**⇑ *e*P **P 15 44 09.1 +0.3**
TIXI pmax pmax
comp=Z,1.0nm,0.8s
**KMI Kunming 36.39 260** ⇑P **P 15 44 35.0 +0.9**
KMI pP pP 15 44 39.3 -1.8
KMI sP sP 15 44 41.0 -3.0
KMI pmax pmax
comp=Z,33nm,0.9s
**PZH PanZhiHua 36.45 263** P **P 15 44 35.0 +0.5**
PZH S **S 15 50 08.5 -6.5**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.5s
PZH LR LR
comp=Z,220nm,13.5s
PZH LR LR
comp=Z,210nm,13.4s
PZH LR LR
comp=Z,190nm,11.0s
**GOMU GeErMu 37.83 281** P **P 15 44 47.5 +1.1**
GOMU pmax pmax
comp=Z,14nm,0.6s
GOMU pmax pmax
comp=Z,78nm,4.8s
**DGZ Jazzator, Alta 40.23 304** *d* *i*P **P 15 45 07.8 +1.7**
DGZ pmax pmax
comp=Z,18nm,0.7s
**SIJI Sorong 41.02 198** LR LR 15 59 07.9
comp=Z,70nm,19.9s,baz=250,slow=32
**WMQ Urumqi 41.02 295** *e*P **P 15 45 14.3 +1.7**
WMQ pP pP 15 45 19.5 -0.2
WMQ sP sP 15 45 26.0 +3.5
WMQ PP **PnPn 15 46 53.3 +1.6**
WMQ pmax pmax
comp=Z,20nm,1.3s
WMQ pmax pmax
comp=Z,93nm,4.3s
**ZAA0 Zalesovo Array 41.50 311** P **P 15 45 15.3 -0.9**
**ZALV Zalesovo Beam 41.50 311** P **P 15 45 17.2 +0.9**
comp=Z,9.3nm,0.8s,baz=86,slow=8.4,SNR=37
ZALV PcP **PcP 15 47 13.6 +0.2**
comp=Z,0.8nm,0.5s,baz=94,slow=3.2,SNR=2.1
ZALV LR LR 16 04 48.7
comp=Z,51nm,18.2s,baz=96,slow=39
**ZALV Zalesovo Beam 41.50 311** P **P 15 45 15.5 -0.7**
**NRIK Noril'sk 42.03 334** P **P 15 45 20.6 +0.1**
comp=Z,1.1nm,0.4s,baz=107,slow=7.7,SNR=3.8
**NRIK Noril'sk 42.03 334**⇑ *i*P **P 15 45 20.9 +0.5**
NRIK pmax pmax
comp=Z,7.0nm,1.5s
**ZSN Zaisan 42.24 301** *e*P **P 15 45 23.1 +0.7**
**ZSN Zaisan 42.24 301** *e*P **P 15 45 23.1 +0.7**
baz=301
**CMAR Chiang Mai Arr 43.09 254** P **P 15 45 30.5 +0.9**
comp=Z,1.6nm,0.8s,baz=45,slow=6.3,SNR=17
CMAR PcP **PcP 15 47 20.1 +0.8**
comp=Z,0.6nm,0.6s,baz=26,slow=2.8,SNR=4.4
CMAR LR LR 16 04 59.4
comp=Z,23nm,19.1s,baz=30,slow=38
**SANI Sanana 43.65 205** P **P 15 45 33.2 -0.9**
comp=Z,20nm,1.0s
**MK31 Makanchi Array 44.09 301** *d* *i*P **P 15 45 38.1 +0.6**
**MK31 Makanchi Array 44.09 301** P **P 15 45 38.2 +0.8**
MK31 IAmb IAmb 15 45 39.2
comp=Z,11nm,0.8s
**MKAR Makanchi Array 44.09 301** P **P 15 45 38.3 +0.8**
comp=Z,11nm,0.7s,baz=85,slow=9.7,SNR=140
**MKAR Makanchi Array 44.09 301** P **P 15 45 38.0 +0.5**
**APSI Ampana 44.18 211** P **P 15 45 38.3 -0.1**
comp=Z,16nm,1.3s
**MAKZ Makanchi 44.30 301** P **P 15 45 39.9 +0.8**
MAKZ pmax pmax
comp=Z,11nm,0.8s
**MAKZ Makanchi 44.30 301** P **P 15 45 39.9 +0.8**
MAKZ IAmb IAmb 15 45 40.9
comp=Z,11nm,0.8s
**SEM Semipalatinsk 44.71 306** *e*P **P 15 45 41.9 -0.6**
**SEM Semipalatinsk 44.71 306** *e*P **P 15 45 42.0 -0.6**
baz=306
**H21K Melozitna Rive 44.80 32** P **P 15 45 44.9 +2.1**
H21K IAmb IAmb 15 45 53.4
comp=Z,11nm,1.4s
**KURK Kurchatov 45.67 307** *d* *i*P **P 15 45 50.3 +0.4**
KURK pmax pmax
comp=Z,28nm,0.8s
**KURK Kurchatov 45.67 307** P **P 15 45 48.4 -1.5**
**KURBB Kurchatov Arra 45.75 307** P **P 15 45 51.2 +0.7**
comp=Z,30nm,0.7s,baz=81,slow=8.2,SNR=72
KURBB LR LR 16 05 09.4
comp=Z,40nm,20.3s,baz=83,slow=36
**PDGK Podgornoye 46.91 297** P **P 15 45 59.9 0.0**
**TAPN Taplejung 46.96 273** *e*P **P 15 46 01.4 +0.7**
comp=Z,6.4nm,0.5s
**MTKI Muara Teweh, K 47.27 220** P **P 15 46 03.3 +0.5**
**IL31 47.28 33** P **P 15 46 02.7 +0.4**
**ILAR Eielson Array 47.28 33** P **P 15 46 03.9 +1.6**
comp=Z,3.0nm,0.8s,baz=270,slow=6.5,SNR=32
**UZB Uzynbulak 47.29 297** *e*P **P 15 46 02.7 -0.2**
**UZB Uzynbulak 47.29 297** *e*P **P 15 46 02.7 -0.2**
baz=297
**KPKS Kokpek 47.43 297** *e*P **P 15 46 04.0 +0.1**
**KPKS Kokpek 47.43 297** *e*P **P 15 46 04.0 +0.1**
baz=297
**ODAN Odare 47.44 273** *e*P **P 15 46 04.9 +0.5**
**ZHN Zhinishke 47.69 297** *e*P **P 15 46 06.1 +0.1**
**ZHN Zhinishke 47.69 297** *e*P **P 15 46 06.2 +0.1**
baz=297

**SATY Saty 47.74 297** *e*P **P 15 46 06.1 -0.3**
**SATY Saty 47.74 297** *e*P **P 15 46 06.1 -0.3**
baz=297
**JIRN Jiri 47.99 274** *e*P **P 15 46 09.8 +1.0**
**RAMN Ramite 48.02 273** *e*P **P 15 46 09.6 +0.7**
comp=Z,6.3nm,0.4s
**GUN Gumba 48.11 275** *e*P **P 15 46 10.1 +0.4**
comp=Z,29nm,0.6s
**CHKK Chushkaly 48.48 298** *e*P **P 15 46 12.0 0.0**
baz=298
**KKN Kakani 48.64 275** *e*P **P 15 46 14.4 +0.8**
**PKI Pulchoki 48.64 275** *e*P **P 15 46 14.1 +0.3**
comp=Z,8.6nm,0.5s
**PKIN Phulchoki 48.65 275** *e*P **P 15 46 13.9 +0.1**
comp=Z,11nm,0.6s
**MDOK Medeo 48.66 297** *e*P **P 15 46 13.9 +0.4**
**MDOK Medeo 48.66 297** *e*P **P 15 46 14.0 +0.4**
baz=297
**AAA Alma-Ata 48.73 297** *e*P **P 15 46 14.8 +0.8**
**AAA Alma-Ata 48.73 297** *e*P **P 15 46 14.8 +0.8**
baz=297
**TNSS Tian-Shan 48.77 297** *e*P **P 15 46 14.7 +0.1**
baz=297
**KUU Kurty 48.91 298** *e*P **P 15 46 14.9 -0.4**
KUU pmax pmax
comp=Z,6.0nm,0.8s
**KUU Kurty 48.91 298** *e*P **P 15 46 14.9 -0.4**
comp=Z,6.1nm,0.8s,baz=298
**GKN Gorkha 49.03 276** *e*P **P 15 46 16.8 +0.2**
comp=Z,11nm,0.5s
**BRZS Berezniki 49.55 307** *e*P **P 15 46 19.8 -0.2**
**BRZS Berezniki 49.55 307** *e*P **P 15 46 19.9 -0.2**
baz=307
**DANN Dangsing 49.55 276** *e*P **P 15 46 21.6 +0.9**
comp=Z,103nm,0.6s
**TKM2 Tokmak 2 49.74 297** P **P 15 46 23.5 +1.6**
SNR=13
**TKM2 Tokmak 2 49.74 297** P **P 15 46 22.8 +0.9**
**KOLN Koldanda 49.95 276** *e*P **P 15 46 24.3 +0.7**
comp=Z,10nm,0.5s
**BTLS Baital 50.11 301** *e*P **P 15 46 24.0 -0.3**
**BTLS Baital 50.11 301** *e*P **P 15 46 24.0 -0.3**
baz=301
**BRVK Borovoye 50.20 311** *d* *i*P **P 15 46 25.4 +0.5**
BRVK pmax pmax
comp=Z,6.0nm,0.6s
**BRVK Borovoye 50.20 311** P **P 15 46 25.2 +0.3**
BRVK IAmb IAmb 15 46 26.8
comp=Z,11nm,1.1s
**SGDS Sogindy 50.23 298** *e*P **P 15 46 25.1 -0.3**
baz=298
**OTUK Ortayu 50.25 305** P **P 15 46 25.6 +0.2**
**PYUN Piuthan 50.27 277** *e*P **P 15 46 26.8 +0.8**
**KBK Karagaybulak 50.28 297** P **P 15 46 27.3 +1.4**
SNR=12
**USP Ospenovka 50.38 298** P **P 15 46 27.5 +1.0**
SNR=7.1
**AAK Ala-Archa 50.60 297**⇑ *i*P **P 15 46 28.8 +0.5**
AAK pmax pmax
comp=Z,5.0nm,1.7s
**AAK Ala-Archa 50.60 297** **P 15 46 28.6 +0.2**
**KSH Kashi 50.68 293** P **P 15 46 33.0 +4.1**
KSH pP pP 15 46 40.5 +1.5
KSH sP pP 15 46 44.3 +8.2
KSH pmax pmax
comp=Z,1.0nm,0.7s
**EKS2 Erkin-Say 51.09 298** P **P 15 46 32.9 +0.9**
SNR=6.8
**AML Almayashu 51.33 297** P **P 15 46 35.6 +1.5**
SNR=10
**INK Inuvik 52.17 28** P **P 15 46 41.8 +2.3**
comp=Z,2.0nm,0.6s,baz=299,slow=7.1,SNR=11
**INK Inuvik 52.17 28** P **P 15 46 41.8 +2.3**
**COEN Coen 52.62 180** P **P 15 46 43.5 +0.1**
COEN IAmb IAmb 15 46 45.1
comp=Z,6.5nm,0.8s
**DZA Taraz 52.69 299** *e*P **P 15 46 43.9 +0.2**
DZA pmax pmax
comp=Z,6.0nm,0.7s
**DZA Taraz 52.69 299** *e*P **P 15 46 44.0 +0.2**
comp=Z,6.2nm,0.7s,baz=299
**KKAR Karatay Array 53.17 299** P **P 15 46 48.2 +0.9**
**KKAR Karatay Array 53.17 299** P **P 15 46 48.2 +0.9**
**PSI Prapat 53.74 239** LR LR 16 12 42.3
comp=Z,31nm,19.2s,baz=67,slow=39
**IUG Iuzhnay 53.86 298** *e*P **P 15 46 52.8 +0.4**
**IUG Iuzhnay 53.86 298** *e*P **P 15 46 52.9 +0.4**
baz=298
**A36M Sachs Harbour 54.07 23** P **P 15 46 54.9 +1.5**
A36M IAmb IAmb 15 47 03.3
comp=Z,11nm,0.8s
**SVE Sverdlovsk 54.48 318** *e*P **P 15 46 58.1 +1.5**
SVE pmax pmax
comp=Z,17nm,0.9s
**PWJI Pagerwojo 54.91 219** P **P 15 46 59.8 -0.3**
comp=Z,36nm,1.8s
**GAR Garm 54.92 295** P **P 15 46 59.4 -0.9**
**C36M Paulatuk 55.22 26** P **P 15 47 03.5 +1.7**
C36M IAmb IAmb 15 47 10.4
comp=Z,8.9nm,0.9s
**ARU Arti 55.70 318** *d* *i*P **P 15 47 06.1 +0.7**
ARU pmax pmax
comp=Z,23nm,1.7s
**ARU Arti 55.70 318** P **P 15 47 06.2 +0.9**
ARU IAmb IAmb 15 47 07.2
comp=Z,14nm,0.9s
**GSI Gunungsitoli 55.75 239** P **P 15 47 06.4 +0.1**
comp=Z,3µmcomp=Z,16nm,1.8s
**CHGR Chuyangaron 55.88 295** P **P 15 47 07.7 +0.6**
**KLSI 55.90 228** P **P 15 47 07.5 +0.2**
comp=Z,6.8nm,1.5s
**KNRA Kununurra 55.91 196** P **P 15 47 07.4 +0.2**
KNRA IAmb IAmb 15 47 08.8
comp=Z,11nm,0.8s
**LEM Lembang 56.04 224** LR LR 16 13 08.7
comp=Z,27nm,18.9s,baz=238,slow=38
**ABKAR Akbulak array 57.59 310** P **P 15 47 19.3 +0.4**
**ABKAR Akbulak array 57.59 310** P **P 15 47 18.8 -0.2**
ABKAR IAmb IAmb 15 47 20.4
comp=Z,7.4nm,0.8s
**CTA Charters Tower 58.80 176** LR LR 16 11 25.9
comp=Z,43nm,21.9s,baz=74,slow=35
**WB0 Warramunga Arr 58.93 189** P **P 15 47 28.6 0.0**
**FITZ Fitzroy Crossi 58.98 199** LR LR 16 09 58.7
comp=Z,26nm,21.7s,baz=75,slow=33
**WRAB Tennant Creek 59.10 189** *de*P **P 15 47 29.5 -0.2**
WRAB pmax pmax
comp=Z,15nm,1.3s
**WRAB Tennant Creek 59.10 189** P **P 15 47 27.7 -2.0**
**WR0 Warramunga Arr 59.10 189** P **P 15 47 29.5 -0.2**
**WB2 Warramunga Arr 59.11 189** P **P 15 47 29.7 -0.1**
**WRA Warramunga Arr 59.11 189** P **P 15 47 29.7 -0.1**
comp=Z,11nm,0.6s,baz=7.2,slow=7.1,SNR=190
**WRA Warramunga Arr 59.11 189** P **P 15 47 28.7 -1.1**
**KIRV Kirov 59.42 323** *de*P **P 15 47 32.4 +0.9**
**PRGR Permogore 59.79 327** *e*P **P 15 47 32.1 -1.9**
PRGR pmax pmax
comp=Z,11nm,1.2s
**BBB Bella Bella 59.91 45** LR LR 16 18 17.3
comp=Z,51nm,18.2s,baz=248,slow=41
**RES Resolute Bay 60.47 15** P **P 15 47 38.9 +0.4**
RES pmax pmax
comp=Z,10.0nm,1.1s
**RES Resolute Bay 60.47 15** P **P 15 47 38.9 +0.4**
RES IAmb IAmb 15 47 46.6
comp=Z,9.7nm,1.1s
**YKA Yellowknife Ar 61.59 31** P **P 15 47 47.7 +1.4**
comp=Z,0.7nm,0.7s,baz=303,slow=6.7,SNR=12
**ARCES ARCESS Array B 62.61 339** P **P 15 47 54.2 +1.1**
comp=Z,1.8nm,0.8s,baz=50,slow=1.9,SNR=5.6
ARCES LR LR 16 21 05.3
comp=Z,73nm,18.0s,baz=348,slow=42
**KLMR Klimovskoe 62.75 328** *e*P **P 15 47 53.0 -1.1**
KLMR pmax pmax
comp=Z,15nm,1.4s
**KLMR Klimovskoe 62.75 328** *e*P **P 15 47 53.0 -1.1**
KLMR AMP 15 47 59.9
comp=Z,15nm,1.4s
**AS31 Alice Springs 62.84 189** P **P 15 47 55.4 +0.3**
**ASAR Alice Springs 62.84 189** P **P 15 47 55.3 +0.2**
comp=Z,3.9nm,0.7s,baz=355,slow=5.0,SNR=84
**GEYT Alibeck 63.91 299** P **P 15 48 02.4 +0.1**
comp=Z,3.6nm,0.6s,baz=337,slow=3.4,SNR=4.9
**OBN Obninsk 67.25 323** *e*P **P 15 48 24.6 +1.2**
OBN *e* 15 48 52.8
OBN *e* 15 50 52.2

OBN *e*PPP PPP 15 52 30.3
OBN pmax pmax
comp=Z,6.0nm,0.8s
**LPSR Galich'ya Gora 67.57 320** *e*P **P 15 48 24.6 -0.9**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
**FINES FINESS Array B 67.66 332** P **P 15 48 26.6 +0.7**
comp=Z,3.5nm,0.7s,baz=54,slow=9.7,SNR=15
**FINES FINESS Array B 67.66 332** P **P 15 48 26.5 +0.6**
**VSR Storozhevoye 68.25 319** *e*P **P 15 48 29.1 -0.7**
VSR pmax pmax
comp=Z,6.0nm,0.7s
**VORD Divnogorie 68.33 319** *e*P **P 15 48 30.0 -0.3**
VORD pmax pmax
comp=Z,5.0nm,0.5s
**NCK Nalchik 70.24 310**⇓ *e*P **P 15 48 44.4 +2.1**
NCK pmax pmax
comp=Z,11nm,0.5s
**ZEI Tsey 70.47 310** *e*P P 15 48 33.1 -11
ZEI pmax pmax
comp=Z,7.0nm,1.3s
**STKA Stephens Creek 70.47 181** P **P 15 48 44.5 +0.9**
comp=Z,2.7nm,0.8s,baz=357,slow=8.7,SNR=6.5
**KIV Kislovodsk 70.51 311**⇑P **P 15 48 46.3 +2.2**
**KIV Kislovodsk 70.51 311** *e*P **P 15 48 45.5 +1.4**
KIV pmax pmax
comp=Z,21nm,1.1s
**KBZ Khabaz 70.52 311** P **P 15 48 45.1 +1.2**
comp=Z,6.4nm,0.8s,baz=99,slow=3.9,SNR=12
**KBZ Khabaz 70.52 311** *d* *i*P **P 15 48 44.9 +0.9**
KBZ pmax pmax
comp=Z,9.0nm,0.9s
**AKH Akhalkalaki 71.51 309**⇑P **P 15 48 52.5 +2.2**
**MNK Minsk 71.55 326** *i*P P 15 48 42.9 -7.1
MNK *i*S S 15 57 56.7 -11
MNK *i*SSS SSS 16 05 50.5
MNK pmax pmax
comp=Z,5.0nm,0.7s
MNK pmax pmax
comp=N,9.0nm,0.7s
MNK pmax pmax
comp=E,2.0nm,0.9s
MNK MLR MLR
comp=N,76nm,18.0s
MNK MLR MLR
comp=E,6.0nm,16.0s
MNK MLR MLR
comp=Z,99nm,17.0s
**MNK Minsk 71.55 326** *i*P P 15 48 42.9 -7.1
comp=E,2.0nm,0.9s
MNK *i*P P 15 48 42.9 -7.1
comp=N,9.0nm,0.7s
MNK *i*P P 15 48 42.9 -7.1
comp=Z,5.0nm,0.7s,baz=47
MNK *i*PP PP 15 51 19.0 -9.4
MNK *i*PPP PPP 15 53 02.1
MNK *i*S S 15 57 56.8 -11
MNK *i*SS **SS 16 02 32.0 -10**
MNK *i*SSS SSS 16 05 50.6
MNK *i*LQ LQ 16 15 00.0
MNK *i*LR LR 16 20 23.6
MNK *i*LRM MLR 16 22 46.0
comp=N,76nm,18.1s
MNK *i*LRM MLR 16 22 52.5
comp=E,6.0nm,16.1s
MNK *i*LRM MLR 16 22 54.4
comp=Z,99nm,17.4s
**CHVG Ch'k'valeri 71.59 310**⇓P **P 15 48 52.7 +2.1**
**NACGM Naroch 71.75 327** *i*P **P 15 48 52.3 +1.0**
**HFS Hagfors 72.81 336** LR LR 16 24 19.9
comp=Z,53nm,19.0s,baz=34,slow=38
**NB2 NORSAR Subarra 72.86 338** P **P 15 48 58.6 +0.7**
comp=Z,2.3nm,0.7s,baz=39,slow=6.2
**NOA NORSAR Array B 72.86 339** P **P 15 48 58.5 +0.7**
comp=Z,3.0nm,0.7s,baz=39,slow=6.0,SNR=16
NOA LR LR 16 25 33.2
comp=Z,49nm,18.7s,baz=230,slow=40
**NVAR Mina Array Bea 72.95 54** P **P 15 49 00.7 +1.7**
comp=Z,1.1nm,0.8s,baz=274,slow=7.3,SNR=7.0
**AKASG Malin Array Be 73.48 323** P **P 15 49 02.3 +0.7**
comp=Z,2.8nm,0.5s,baz=44,slow=6.4,SNR=22
**AKBB Malin Array Si 73.48 323** *i*P **P 15 49 02.2 +0.6**
AKBB pmax pmax
comp=Z,9.0nm,1.1s
**KLNR Kaliningrad 74.67 329**⇑ *e*P **P 15 49 10.1 +1.7**
KLNR pmax pmax
comp=Z,49nm,0.4s
**PDAR Pinedale Array 75.53 46** P **P 15 49 15.5 +1.5**
comp=Z,0.9nm,0.6s,baz=286,slow=2.1,SNR=9.9
**SORM Soroca 75.63 321**⇑P **P 15 49 15.0 +0.9**
**BURAR Bucovina Array 77.51 322**⇑P **P 15 49 26.6 +1.7**
**BURAR Bucovina Array 77.51 322** P **P 15 49 25.9 +0.9**
BURAR IAmb IAmb 15 49 27.5
comp=Z,5.1nm,0.8s
**TESR Tescani 77.59 321**⇑P **P 15 49 26.7 +1.4**
**CFR Carcaliu 77.77 319**⇑P **P 15 49 27.5 +1.3**
**TPGR Topolog 77.84 319**⇑P **P 15 49 28.4 +1.7**
**VRI Vrincioaia 78.00 320**⇑P **P 15 49 29.6 +2.0**
**TIRR Tirgusor 78.12 318**⇑P **P 15 49 30.1 +1.9**
**TRPA Tarpa 78.40 324**⇑P **P 15 49 31.8 +2.0**
**BR131 Keskin Array S 78.43 312** *e*P **P 15 49 31.2 +1.0**
**BRTR Keskin Array B 78.43 312** P **P 15 49 31.4 +1.1**
comp=Z,1.2nm,0.6s,baz=90,slow=4.9,SNR=6.9
**BRTR Keskin Array B 78.43 312** P **P 15 49 29.9 -0.4**
**DOPR Dopca 78.59 321**⇑P **P 15 49 32.8 +1.9**
**ISR Istrita 78.62 320**⇓P **P 15 49 33.6 +2.6**
**MLR Muntele Rosu 78.66 320**⇑P **P 15 49 33.1 +1.7**
**ICOR Ion Corvin 78.67 318**⇓P **P 15 49 33.8 +2.5**
**VOIR 79.14 321**⇓P **P 15 49 36.2 +2.3**
**DRGR 79.29 323**⇑P **P 15 49 36.4 +1.6**
**MORC Moravsky Berou 79.37 327**⇑P **P 15 49 36.8 +1.7**
**ARR Arges 79.39 321**⇓P **P 15 49 37.4 +2.0**
**CLL Collm 80.00 331** *i*P **P 15 49 39.0 +0.6**
CLL *e* 15 49 45.0
CLL pmax pmax
comp=Z,3.0nm,0.8s
**CLL Collm 80.00 331** *i*P **P 15 49 39.0 +0.6**
comp=Z,3.0nm,0.8s
CLL *e*pP **pP 15 49 45.0 -0.9**
**GZR Gura Zlata 80.28 322**⇓P **P 15 49 41.1 +1.0**
**CKRC Cesky Krumlov 81.45 328** *e*P **P 15 49 46.9 +0.6**
**KHC Kasperske Hory 81.50 329**⇓ *e*P **P 15 49 47.7 +1.1**
KHC pmax pmax
comp=Z,18nm,1.7s
**KHC Kasperske Hory 81.50 329** *e*P **P 15 49 46.0 -0.6**
**CONA Conrad Observa 81.51 327** *e*P **P 15 49 48.8 +2.2**
comp=Z,3.7nm,0.9s
**GERES GERESS Array B 81.68 329** P **P 15 49 48.5 +0.9**
comp=Z,0.3nm,0.5s,baz=35,slow=9.8,SNR=4.5
**EKA Eskdalemuir Ar 81.71 341** LR LR 16 29 38.1
comp=Z,67nm,18.0s,baz=308,slow=38
**VTS Vitosha 82.08 320**⇑P **P 15 49 52.1 +2.2**
**ARSA Arzberg 82.18 327** *e*P **P 15 49 50.8 +0.6**
comp=Z,8.8nm,1.7s
**MOA Mollin 82.24 328** *i*P **P 15 49 51.7 +1.3**
comp=Z,5.2nm,1.1s
**ANMO Albuquerque 82.50 51**⇓ *e*P **P 15 49 55.1 +2.8**
ANMO pmax pmax
comp=Z,13nm,3.8s
**SOKA Soboth 82.83 327** *i*P **P 15 49 55.1 +1.5**
comp=Z,8.3nm,0.8s
**KBA Koelnbreinsper 83.23 328** *e*P **P 15 49 58.4 +2.6**
comp=Z,10.0nm,1.3s
**MYKA Terra Mystica 83.46 327** *i*P **P 15 49 57.7 +0.8**
comp=Z,4.8nm,0.9s
**WTTA Wattenberg 83.78 329** *e*P **P 15 49 59.0 +0.4**
comp=Z,9.3nm,1.5s
**MOTA Moosalm 83.92 329** *e*P **P 15 50 00.1 +0.8**
comp=Z,6.0nm,1.2s
**RETA Reutte 83.94 330** *e*P **P 15 50 01.0 +1.6**
comp=Z,8.2nm,0.9s
**DAVA Damuels 84.45 330** *e*P **P 15 50 03.3 +1.3**
comp=Z,7.8nm,0.8s
**TXAR Lajitas Array 88.07 53** P **P 15 50 21.5 +1.4**
comp=Z,0.8nm,0.6s,baz=303,slow=3.6,SNR=16
**SADO Sadowa 88.48 28** LR LR 16 32 19.9
comp=Z,82nm,18.1s,baz=0.5,slow=37
**LPAZ La Paz 144.75 59** PKP **PKPdf 15 57 07.3 +0.1**
comp=Z,1.7nm,0.7s,baz=354,slow=4.7,SNR=6.0

*IDC **27** 15:51:56.0±2.4, 18°.37S×178°.11W, h581km±21km, mb3.2/7, mb1 3.4/8, mb1mx3.1/30, mbtmp4.1/8 Error ellipse: s-maj=72.3km s-min=18.5km az=150.0*

**ISC 27 15:51:52.3±1.2, 18.7S±0.1×177.7W±0.2, h550km, n11, σ1§70/14, mb4.0/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.18** | **283** | P | **P** | **15 53 18.1** | **+2.5** |
| | 2.9nm,0.3s,baz=140,slow=12,SNR=9.3 | | | | | | |
| **AFI** | **Afiamalu** | **7.42** | **51** | P | **P** | **15 53 45.1** | **+0.7** |
| | 6.2nm,0.3s,baz=187,slow=3.1,SNR=8.1 | | | | | | |
| AFI | | | | S | **S** | **15 55 13.3** | **-3.0** |
| | 1.6nm,0.3s,baz=238,slow=21,SNR=2.0 | | | | | | |
| **CTA** | **Charters Tower** | **34.01** | **262** | P | **P** | **15 57 49.7** | **-1.3** |
| | 1.4nm,0.3s,baz=95,slow=11,SNR=2.6 | | | | | | |
| **STKA** | **Stephens Creek** | **38.85** | **242** | P | **P** | **15 58 31.1** | **+0.4** |
| | 2.3nm,0.3s,baz=84,slow=9.3,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.17** | **260** | P | **P** | **15 59 19.2** | **-1.4** |
| | 2.3nm,0.4s,baz=98,slow=6.9,SNR=56 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 00 48.3** | **-1.0** |
| | 0.6nm,0.8s,baz=100,slow=2.9,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **45.24** | **255** | P | **P** | **15 59 20.4** | **-0.8** |
| | 4.6nm,0.4s,baz=93,slow=7.5,SNR=144 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 00 48.8** | **-0.8** |
| | 0.8nm,0.5s,baz=103,slow=3.7,SNR=8.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.53** | **43** | P | **P** | **16 03 04.0** | **+1.4** |
| | 0.2nm,0.5s,baz=231,slow=9.1,SNR=1.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.85** | **57** | P | **P** | **16 03 36.5** | **+2.0** |
| | 0.6nm,0.7s,baz=230,slow=6.7,SNR=6.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.81** | **289** | P | **P** | **16 03 53.3** | **+0.2** |
| | 0.7nm,0.8s,baz=129,slow=4.0,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.23** | **350** | PKP | **PKPdf** | **16 09 52.3** | **-1.5** |
| | 1.5nm,0.9s,baz=287,slow=6.2,SNR=7.2 | | | | | | |
| **GERES** | **GERESS Array B** | **148.57** | **346** | PKPbc | **PKPbc** | **16 10 36.2** | **-1.3** |
| | 0.4nm,0.6s,baz=359,slow=5.6,SNR=3.9 | | | | | | |

**IDC 27 15:56:00.9±4.6, 16.90S×176.62W, h0km, mb4.6/4, mb1 4.7/4, mb1mx3.9/30, mbtmp4.6/4, Error ellipse: s-maj=151.2km s-min=57.2km az=135.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **35.31** | **259** | P | P | 16 02 59.5 | +1.5 |
| | 2.9nm,0.6s,baz=102,slow=12,SNR=5.6 | | | | | | |
| **STKA** | **Stephens Creek** | **40.61** | **241** | P | P | 16 03 43.3 | +0.6 |
| | 6.0nm,0.7s,baz=90,slow=9.4,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.50** | **258** | P | P | 16 04 29.1 | -1.3 |
| | 2.0nm,0.4s,baz=95,slow=7.2,SNR=87 | | | | | | |
| **ASAR** | **Alice Springs** | **46.71** | **253** | P | P | 16 04 31.0 | -1.0 |
| | 16nm,0.5s,baz=88,slow=8.5,SNR=459 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.25** | **317** | PKPbc | PKPbc | 16 15 40.2 | -0.6 |
| | 0.4nm,0.4s,baz=115,slow=4.1,SNR=4.3 | | | | | | |

*IDC **27** 15:59:13.2±1.3, 4.760N×32.764W, h0km, mb3.9/11, mb1 4.2/11, mb1mx3.9/56, mbtmp3.9/11, MS3.8/45, Ms1 3.8/45, ms1mx3.6/86, Error ellipse: s-maj=47.7km s-min=19.8km az=162.0*

*NEIC **27** 15:59:15.0±0.8, 4.7N±0.2×32.763W±0.07, h10km±1km, mb4.7/11, Error ellipse: s-maj=29.7km s-min=3.8km az=159.0*

**ISC 27 15:59:16.2±0.6, 5.0N±0.1×32.6W±0.1, h11km, n95, σ2§19/43, mb4.0/15, MS3.8/44, 4C-6D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TMAB** | **Tom-Au,PA,Br** | **17.14** | **245** | *eP* | **Pn** | **16 03 16.2** | **+0.3** |
| **NBPN** | **Ponto Novo - B** | **17.49** | **206** | *eP* | **P** | **16 03 23.5** | **+2.1** |
| **MDP** | **Montagnes des** | **19.97** | **271** | LR | LR | 16 10 00.3 | |
| | comp=Z,173nm,20.5s,baz=68,slow=32 | | | | | | |
| **SMTB** | **Santa Maria do** | **20.34** | **227** | *eP* | Pn | 16 03 53.2 | -1.6 |
| **SDBA** | **SAO DESIDERIO** | **21.20** | **215** | *eP* | **P** | **16 04 05.2** | **+3.0** |
| **CMC01** | **Camacan, BA** | **21.38** | **199** | *eP* | **P** | **16 04 08.7** | **+4.7** |
| **H10N3** | **ASCENSION HYDR** | **22.12** | **125** | T | T | 16 26 45.2 | |
| | baz=303,slow=75,SNR=45 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.12** | **125** | T | T | 16 26 45.9 | |
| | baz=303,slow=75,SNR=41 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.14** | **125** | T | T | 16 26 47.1 | |
| | baz=303,slow=75,SNR=44 | | | | | | |
| **ASCN** | **Ascension** | **22.28** | **125** | P | **P** | **16 04 09.2** | **-4.5** |
| **H10S3** | **ASCENSION HYDR** | **22.64** | **128** | T | T | 16 27 27.8 | |
| | baz=304,slow=74,SNR=58 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.65** | **128** | T | T | 16 27 28.6 | |
| | baz=276,slow=74,SNR=42 | | | | | | |
| **JANB** | **Januaria** | **23.09** | **210** | *eP* | **P** | **16 04 25.9** | **+3.7** |
| **SNDB** | **Serra Nova Dou** | **25.12** | **228** | *eP* | **P** | **16 04 43.2** | **+1.8** |
| **BDFB** | **Brasilia** | **25.59** | **216** | LR | LR | 16 13 27.8 | |
| | comp=Z,170nm,19.6s,baz=339,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **27.64** | **85** | LR | LR | 16 14 01.8 | |
| | comp=Z,179nm,18.2s,baz=286,slow=32 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.33** | **291** | T | T | 16 36 12.3 | |
| | SNR=13 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.09** | **294** | T | T | 16 37 02.8 | |
| | SNR=4.4 | | | | | | |
| **STVI** | **Saint Thomas** | **34.26** | **295** | P | **P** | **16 06 01.4** | **-1.2** |
| STVI | | | | IAmb | IAmb | 16 06 14.9 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.77** | **74** | P | **P** | **16 06 06.2** | **-0.8** |
| | comp=Z,2.2nm,0.9s,baz=265,slow=9.1,SNR=8.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.77** | **74** | P | **P** | **16 06 06.3** | **-0.7** |
| **SIV** | **San Ignacio** | **35.08** | **233** | LR | LR | 16 19 30.9 | |
| | comp=Z,322nm,20.2s,baz=128,slow=35 | | | | | | |
| **SJG** | **San Juan** | **35.27** | **294** | LR | LR | 16 17 39.5 | |
| | comp=Z,127nm,20.2s,baz=90,slow=31 | | | | | | |
| **ETMB** | **Extrema** | **36.60** | **246** | *eP* | **P** | **16 06 20.3** | **-2.4** |
| **SDV** | **Santo Domingo** | **37.94** | **278** | LR | LR | 16 22 25.9 | |
| | comp=Z,66nm,19.3s,baz=130,slow=37 | | | | | | |
| **MDT** | **Midelt** | **38.03** | **40** | LR | LR | 16 21 49.0 | |
| | comp=Z,130nm,18.3s,baz=345,slow=35 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **38.38** | **257** | *eP* | **P** | **16 06 37.1** | **-0.8** |
| **CPUP** | **Villa Florida** | **39.32** | **216** | LR | LR | 16 22 24.7 | |
| | comp=Z,142nm,18.4s,baz=136,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **39.32** | **216** | *eP* | **P** | **16 06 47.2** | **+1.7** |
| **LPAZ** | **La Paz** | **41.04** | **238** | P | **P** | **16 06 57.2** | **-3.5** |
| | comp=Z,1.8nm,0.8s,baz=252,slow=24,SNR=6.4 | | | | | | |
| **LPAZ** | **La Paz** | **41.04** | **238** | P | **P** | **16 06 57.5** | **-3.2** |
| **LPAZ** | **La Paz** | **41.04** | **238** | *eP* | **P** | **16 06 57.9** | **-2.7** |
| **ITQB** | **Itaqui** | **41.49** | **212** | *eP* | **P** | **16 07 05.4** | **+1.9** |
| **ROSC** | **El Rosal** | **41.57** | **272** | LR | LR | 16 25 05.9 | |
| | comp=Z,212nm,18.6s,baz=100,slow=37 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **41.97** | **253** | *eP* | **P** | **16 07 05.9** | **-1.9** |
| **ESDC** | **Sonseca Array** | **43.10** | **33** | LR | LR | 16 23 45.9 | |
| | comp=Z,52nm,18.2s,baz=327,slow=34 | | | | | | |
| **LVC** | **Limon Verde** | **44.89** | **231** | LR | LR | 16 26 22.6 | |
| | comp=Z,106nm,19.6s,baz=22,slow=36 | | | | | | |
| **PATCX** | **Punta Patache** | **44.92** | **234** | P | **P** | **16 07 27.3** | **-4.3** |
| PATCX | | | | IAmb | IAmb | 16 07 30.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **45.95** | **157** | T | T | 16 54 52.6 | |
| | SNR=4.6 | | | | | | |
| **NNA** | **Nana** | **47.13** | **249** | LR | LR | 16 27 19.1 | |
| | comp=Z,118nm,19.5s,baz=52,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **47.27** | **256** | LR | LR | 16 28 09.3 | |
| | comp=Z,242nm,18.1s,baz=56,slow=37 | | | | | | |
| **KEST** | **Kesra** | **49.20** | **46** | LR | LR | 16 29 45.5 | |
| | comp=Z,172nm,19.1s,baz=271,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **54.94** | **118** | LR | LR | 16 26 44.8 | |
| | comp=Z,119nm,21.3s,baz=328,slow=30 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.38** | **34** | LR | LR | 16 29 24.5 | |
| | comp=Z,51nm,21.4s,baz=261,slow=32 | | | | | | |
| **TKL** | **Tuckaleechee C** | **56.01** | **310** | LR | LR | 16 28 48.2 | |
| | comp=Z,68nm,19.6s,baz=116,slow=32 | | | | | | |
| **PLCA** | **Paso Flores** | **57.29** | **214** | LR | LR | 16 33 09.6 | |
| | comp=Z,102nm,19.3s,baz=44,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **58.67** | **34** | P | **P** | **16 09 15.4** | **+1.6** |
| | comp=Z,0.5nm,0.6s,baz=318,slow=1.8,SNR=4.7 | | | | | | |
| GERES | | | | LR | LR | 16 32 03.6 | |
| | comp=Z,46nm,19.8s,baz=298,slow=33 | | | | | | |
| **VRAC** | **Vranov** | **60.53** | **35** | LR | LR | 16 35 40.1 | |
| | comp=Z,28nm,18.1s,baz=340,slow=36 | | | | | | |
| **PSZ** | **Piszkesteto** | **61.81** | **37** | ⇓P | P | 16 09 45.2 | +10 |
| **CMIG** | **Matias Romero** | **62.07** | **287** | LR | LR | 16 38 43.7 | |
| | comp=Z,49nm,18.3s,baz=328,slow=38 | | | | | | |
| **GZR** | **Gura Zlata** | **62.57** | **41** | ⇑P | **P** | **16 09 42.8** | **+2.3** |
| **SUR** | **Sutherland** | **62.86** | **130** | LR | LR | 16 30 33.4 | |
| | comp=Z,69nm,20.7s,baz=300,slow=30 | | | | | | |
| **DRGR** | | **63.08** | **39** | ⇓P | **P** | **16 09 46.2** | **+2.4** |
| **LSZ** | **Lusaka** | **63.48** | **110** | LR | LR | 16 31 32.2 | |
| | comp=Z,45nm,21.1s,baz=284,slow=31 | | | | | | |
| **MBAR** | **Mbarara** | **63.50** | **93** | LR | LR | 16 34 35.9 | |
| | comp=Z,110nm,18.5s,baz=277,slow=33 | | | | | | |
| **ARR** | **Arges** | **63.78** | **41** | ⇓P | **P** | **16 09 51.2** | **+2.7** |
| **LBTB** | **Lobatse** | **63.91** | **121** | LR | LR | 16 33 44.4 | |
| | comp=Z,68nm,18.2s,baz=254,slow=32 | | | | | | |
| **VOIR** | | **64.08** | **41** | ⇑P | **P** | **16 09 52.6** | **+2.2** |
| **FRB** | **Frobisher Bay** | **64.11** | **343** | LR | LR | 16 35 18.4 | |
| | comp=Z,81nm,18.1s,baz=170,slow=34 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.69** | **42** | ⇓P | **P** | **16 09 56.7** | **+2.2** |
| **MLR** | **Muntele Rosu** | **64.69** | **42** | P | **P** | **16 09 56.2** | **+1.7** |
| | comp=Z,7.3nm,1.0s,baz=173,slow=3.2,SNR=8.8 | | | | | | |
| MLR | | | | LR | LR | 16 38 39.5 | |
| | comp=Z,77nm,18.5s,baz=296,slow=36 | | | | | | |
| **MLR** | **Muntele Rosu** | **64.69** | **42** | P | **P** | **16 09 55.9** | **+1.3** |
| MLR | | | | IAmb | IAmb | 16 09 57.0 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **64.79** | **22** | LR | LR | 16 36 09.2 | |
| | comp=Z,26nm,18.9s,baz=15,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **64.87** | **125** | LR | LR | 16 32 26.5 | |
| | comp=Z,81nm,20.4s,baz=231,slow=31 | | | | | | |
| **BURAR** | **Bucovina Array** | **64.97** | **39** | ⇑P | P | 16 10 05.4 | +9.1 |
| **VRI** | **Vrincioaia** | **65.33** | **41** | ⇓P | **P** | **16 10 01.0** | **+2.4** |
| **TESR** | **Tescani** | **65.50** | **41** | ⇓P | **P** | **16 10 01.7** | **+2.1** |
| **SORM** | **Soroca** | **67.13** | **39** | ⇑P | **P** | **16 10 10.7** | **+0.7** |
| **EIL** | **Elat** | **68.04** | **60** | LR | LR | 16 41 07.5 | |
| | comp=Z,118nm,18.1s,baz=276,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.51** | **37** | P | **P** | **16 10 19.6** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=251,slow=5.9,SNR=9.1 | | | | | | |
| **BR131** | **Keskin Array S** | **68.59** | **49** | P | **P** | **16 10 19.5** | **-0.1** |
| BR131 | | | | IAmb | IAmb | 16 10 22.1 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **68.59** | **49** | P | **P** | **16 10 20.6** | **+1.0** |
| | comp=Z,1.6nm,0.8s,baz=236,slow=5.7,SNR=11 | | | | | | |
| BRTR | | | | LR | LR | 16 42 18.6 | |
| | comp=Z,45nm,19.4s,baz=283,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.59** | **49** | P | **P** | **16 10 20.2** | **+0.6** |
| **MMAI** | **Mount Meron Ar** | **68.85** | **57** | LR | LR | 16 42 39.6 | |
| | comp=Z,29nm,19.1s,baz=49,slow=38 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.03** | **93** | LR | LR | 16 38 38.2 | |
| | comp=Z,89nm,18.5s,baz=86,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.06** | **299** | P | **P** | **16 10 35.9** | **+0.9** |
| | comp=Z,0.2nm,0.6s,baz=120,slow=7.4,SNR=2.3 | | | | | | |
| **ANMO** | **Albuquerque** | **73.92** | **305** | LR | LR | 16 39 15.0 | |
| | comp=Z,139nm,21.1s,baz=90,slow=32 | | | | | | |
| **FFC** | **Flin Flon** | **74.08** | **326** | P | **P** | **16 10 52.6** | **+0.4** |
| FFC | | | | IAmb | IAmb | 16 11 00.1 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **ATD** | **Arta Tunnel** | **74.77** | **79** | LR | LR | 16 42 54.8 | |
| | comp=Z,40nm,18.9s,baz=56,slow=35 | | | | | | |
| **KBZ** | **Khabaz** | **76.06** | **46** | LR | LR | 16 48 59.1 | |
| | comp=Z,30nm,18.4s,baz=0.5,slow=39 | | | | | | |
| **LPIG** | **La Paz** | **76.76** | **293** | LR | LR | 16 42 12.2 | |
| | comp=Z,74nm,21.2s,baz=333,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.04** | **313** | P | **P** | **16 11 09.2** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=64,slow=6.8,SNR=5.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **77.04** | **313** | P | **P** | **16 11 09.0** | **-0.8** |
| **GNI** | **Garni** | **77.10** | **50** | LR | LR | 16 48 40.2 | |
| | comp=Z,23nm,18.6s,baz=279,slow=38 | | | | | | |
| **P18A** | **Preston Nutter** | **77.30** | **309** | P | **P** | **16 11 10.3** | **-1.1** |
| **SNAA** | **Sanae** | **78.98** | **171** | LR | LR | 16 42 58.5 | |
| | comp=Z,78nm,18.2s,baz=208,slow=33 | | | | | | |
| **ELK** | **Elko** | **81.17** | **310** | LR | LR | 16 47 07.4 | |
| | comp=Z,72nm,18.1s,baz=206,slow=35 | | | | | | |
| **KIRV** | **Kirov** | **81.57** | **32** | LR | LR | 16 46 17.3 | |
| | comp=Z,54nm,19.9s,baz=342,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.88** | **332** | P | **P** | **16 11 35.5** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=98,slow=5.3,SNR=12 | | | | | | |
| **NEW** | **Newport** | **82.64** | **318** | LR | LR | 16 46 21.1 | |
| | comp=Z,66nm,18.8s,baz=210,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.55** | **308** | P | **P** | **16 11 45.4** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=189,slow=37,SNR=2.6 | | | | | | |
| NVAR | | | | LR | LR | 16 47 42.3 | |
| | comp=Z,86nm,18.6s,baz=145,slow=35 | | | | | | |
| **A36M** | **Sachs Harbour** | **86.08** | **342** | P | **P** | **16 11 57.4** | **+0.6** |
| A36M | | | | IAmb | IAmb | 16 12 04.7 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **ARU** | **Arti** | **86.49** | **34** | LR | LR | 16 51 56.1 | |
| | comp=Z,33nm,18.1s,baz=162,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **95.57** | **337** | P | **P** | **16 12 41.4** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=55,slow=4.1,SNR=6.0 | | | | | | |
| **AAK** | **Ala-Archa** | **99.05** | **46** | LR | LR | 17 03 33.7 | |
| | comp=Z,21nm,19.6s,baz=358,slow=39 | | | | | | |

*TUL **27** 16:03:28.8±0.6, 36.47N±0.01×98.75W±0.01, h7km, ML2.5, mb_Lg2.4/14(NEIC), Error ellipse: s-maj=1.8km s-min=1.4km az=149.0*

**NEIC 27 16:03:29.5±0.5, 36.46N±0.01×98.75W±0.01, h6km±1km, Error ellipse: s-maj=2.2km s-min=0.9km az=148.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.22** | **248** | Pg | Pg | 16 03 33.6 | -0.3 |
| U32A | | | | Sg | Sg | 16 03 37.2 | +0.5 |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | Pn | Pn | 16 03 59.2 | -0.9 |
| **T35A** | **Sooner Cattle** | **1.85** | **75** | | Pn | 16 04 01.8 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | Pn | Pn | 16 04 04.6 | +0.7 |
| **TUL1** | **Leonard** | **2.46** | **102** | Pn | Pn | 16 04 10.8 | +0.6 |
| TUL1 | | | | IAmb_Lg | | 16 04 46.0 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | IAmb_Lg | | 16 04 52.5 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.13** | **32** | IAmb_Lg | | 16 05 10.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.89** | **91** | IAmb_Lg | | 16 05 38.7 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | IAmb_Lg | | 16 05 34.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **N35A** | **Tabor** | **5.02** | **28** | IAmb_Lg | | 16 06 09.4 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.39** | **94** | IAmb_Lg | | 16 06 25.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.16** | **310** | IAmb_Lg | | 16 07 28.6 | |
| | comp=Z,7.0nm,0.8s | | | | | | |

**RSNC 27 16:05:04.0±1.0, 6.84N±4km, 73.16W, h142km±4km, ML3.5, Mw3.8, 5C-2D, Fault plane solution: NP1:ϕ§158.00000°, δ57.00000°, λ97.00000°., Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **186** | ⇑*i*P | Pn | 16 05 23.5 | -0.3 |
| BARC | | | | *e*S | Sn | 16 05 37.7 | -1.1 |
| BARC | | | | *i* | | 16 05 39.3 | |
| | comp=Z,894nm,0.3s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.67** | **42** | ⇑*e*P | Pn | 16 05 26.2 | +0.1 |
| PAMC | | | | *e*S | Sn | 16 05 43.4 | +0.5 |
| PAMC | | | | *i* | | 16 05 45.6 | |
| | comp=Z,804nm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **176** | ⇑*e*P | Pn | 16 05 27.4 | -0.7 |
| RUSC | | | | *e*S | Sn | 16 05 46.0 | -0.4 |
| RUSC | | | | *i* | | 16 05 47.6 | |
| | comp=Z,232nm,0.2s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.32** | **257** | ⇑*e*P | Pn | 16 05 29.9 | -1.2 |
| PTBC | | | | *e*S | Sn | 16 05 51.0 | -0.8 |
| PTBC | | | | *i* | | 16 05 56.4 | |
| | comp=Z,480nm,0.6s | | | | | | |
| **OCAC** | **Ocana** | **1.40** | **353** | *e*P | Pn | 16 05 31.4 | -0.7 |
| OCAC | | | | *e*S | Sn | 16 05 53.1 | -0.6 |
| OCAC | | | | *i* | | 16 05 57.5 | |
| | comp=Z,878nm,0.3s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.41** | **106** | ⇓*i*P | Pn | 16 05 32.0 | -0.2 |
| TAMC | | | | *e*S | Sn | 16 05 53.8 | +0.2 |
| TAMC | | | | *i* | | 16 05 54.2 | |
| | comp=Z,224nm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.49** | **218** | *e*P | Pn | 16 05 32.4 | -0.6 |
| SPBC | | | | *e*S | Sn | 16 05 54.5 | -0.6 |
| SPBC | | | | *i* | | 16 06 00.2 | |
| | comp=Z,285nm,0.2s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.81** | **291** | *e*P | Pn | 16 05 36.1 | -0.4 |
| ZARC | | | | *e*S | Sn | 16 06 01.6 | +0.3 |
| ZARC | | | | *i* | | 16 06 08.3 | |
| | comp=Z,536nm,0.4s | | | | | | |
| **NORC** | **Norcasia** | **2.12** | **233** | *e*P | Pn | 16 05 39.4 | -0.8 |
| NORC | | | | *e*S | Sn | 16 06 07.0 | -0.9 |
| NORC | | | | *i* | | 16 06 13.3 | |
| | comp=Z,266nm,0.2s | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **195** | *e*P | Pn | 16 05 42.0 | -0.3 |
| CHIC | | | | *e*S | Sn | 16 06 11.4 | -0.3 |
| CHIC | | | | *i* | | 16 06 15.9 | |
| | comp=Z,113nm,0.3s | | | | | | |
| **ROSC** | **El Rosal** | **2.30** | **210** | *e*P | Pn | 16 05 43.6 | +1.0 |
| ROSC | | | | *e*S | Sn | 16 06 12.9 | +0.6 |
| ROSC | | | | *i* | | 16 06 19.4 | |
| | comp=Z,162nm,0.3s | | | | | | |
| **HELC** | **Santa Helena** | **2.44** | **255** | *e*P | Pn | 16 05 44.1 | -0.3 |
| HELC | | | | *e*S | Sn | 16 06 16.1 | +0.6 |
| HELC | | | | *i* | | 16 06 21.8 | |
| | comp=Z,234nm,0.3s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.52** | **291** | *e*P | Pn | 16 05 43.5 | -1.6 |
| UREC | | | | *e*S | Sn | 16 06 14.8 | -2.0 |
| UREC | | | | *i* | | 16 06 18.9 | |
| | comp=Z,233nm,0.4s | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.71** | **352** | *e*P | Pn | 16 05 50.4 | +2.9 |
| LL1C | | | | *e*S | Sn | 16 06 23.1 | +2.1 |
| LL1C | | | | *i* | | 16 06 30.4 | |
| | comp=Z,413nm,0.4s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.72** | **234** | *e*P | Pn | 16 05 47.9 | -0.1 |
| GUY2C | | | | *e*S | Sn | 16 06 22.0 | +0.3 |
| GUY2C | | | | *i* | | 16 06 31.6 | |
| | comp=Z,188nm,0.5s | | | | | | |
| **VILC** | **Villavicencio,** | **2.76** | **191** | *e*P | Pn | 16 05 48.5 | +0.3 |
| VILC | | | | *e*S | Sn | 16 06 21.5 | -0.7 |
| **PTGC** | **Puerto Gaitan,** | **2.81** | **159** | *e*P | Pn | 16 05 46.7 | -2.0 |
| PTGC | | | | *e*S | Sn | 16 06 20.6 | -2.7 |
| PTGC | | | | *i* | | 16 06 22.3 | |
| | comp=Z,89nm,0.6s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.88** | **358** | *e*P | Pn | 16 05 48.6 | -1.0 |
| LL6C | | | | *e*S | Sn | 16 06 21.6 | -3.2 |
| **CBOC** | **Ciudad Bolivar** | **3.00** | **251** | *e*P | Pn | 16 05 51.3 | +0.1 |
| CBOC | | | | *e*S | Sn | 16 06 27.4 | -0.3 |
| CBOC | | | | *i* | | 16 06 36.0 | |
| | comp=Z,56nm,0.2s | | | | | | |
| **DBBC** | **Dabeiba** | **3.04** | **274** | ⇓*e*P | Pn | 16 05 51.1 | -0.5 |
| DBBC | | | | *e*S | Sn | 16 06 25.4 | -3.0 |
| **MOTC** | **Monteria, Cord** | **3.15** | **308** | ⇑*e*P | Pn | 16 05 50.7 | -2.2 |
| MOTC | | | | *e*S | Sn | 16 06 29.1 | -1.7 |
| MOTC | | | | *i* | | 16 06 44.2 | |
| | comp=Z,83nm,0.4s | | | | | | |
| **SDV** | **Santo Domingo** | **3.22** | **51** | *e*P | Pn | 16 05 52.8 | -1.3 |
| SDV | | | | *e*S | Sn | 16 06 29.4 | -3.5 |
| SDV | | | | *i* | | 16 06 32.4 | |
| | comp=Z,42nm,0.5s | | | | | | |
| **SDV** | **Santo Domingo** | **3.22** | **51** | *e*P | Sn | 16 06 29.5 | -3.4 |
| **ANIL** | **Santa Ana** | **3.23** | **224** | *e*P | Pn | 16 05 55.2 | +0.9 |
| ANIL | | | | *e*S | Sn | 16 06 35.8 | +2.6 |
| ANIL | | | | *i* | | 16 06 41.4 | |
| | comp=Z,286nm,0.4s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.58** | **216** | *e*P | Pn | 16 05 58.1 | -0.5 |
| ORTC | | | | *e*S | Sn | 16 06 40.2 | -0.7 |
| ORTC | | | | *i* | | 16 06 47.9 | |
| | comp=Z,84nm,0.5s | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.64** | **327** | *e*P | Pn | 16 05 57.2 | -2.2 |
| SJCC | | | | *e*S | Sn | 16 06 38.2 | -4.2 |
| SJCC | | | | *i* | | 16 06 42.9 | |
| | comp=Z,96nm,0.5s | | | | | | |
| **PLMC** | **San Jos del P** | **3.65** | **238** | *e*P | Pn | 16 05 59.3 | -0.4 |
| PLMC | | | | *e*S | Sn | 16 06 42.5 | -0.3 |
| PLMC | | | | *i* | | 16 06 49.7 | |
| | comp=Z,44nm,0.4s | | | | | | |
| **LCBC** | **Los crdobas,** | **3.76** | **302** | *e*P | Pn | 16 06 05.6 | +4.6 |
| LCBC | | | | *e*S | Sn | 16 06 45.9 | +0.8 |
| LCBC | | | | *i* | | 16 06 48.1 | |
| | comp=Z,64nm,0.6s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.16** | **4** | *e*P | Pn | 16 06 03.9 | -2.5 |
| CRJC | | | | *e*S | Sn | 16 06 49.2 | -5.6 |
| CRJC | | | | *i* | | 16 07 04.5 | |
| | comp=Z,46nm,0.2s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.26** | **228** | *e*P | Pn | 16 06 06.4 | -1.2 |
| **SMRC** | **Santa Marta, M** | **4.43** | **346** | *e*P | Pn | 16 06 09.0 | -0.7 |
| SMRC | | | | *e*S | Sn | 16 06 56.7 | -4.1 |
| SMRC | | | | *i* | | 16 07 02.0 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **MACC** | **Macarena, Meta** | **4.71** | **188** | *e*P | Pn | 16 06 11.0 | -2.6 |
| MACC | | | | *e*S | Sn | 16 07 02.6 | -5.0 |
| MACC | | | | *i* | | 16 07 22.4 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **PCON** | **Cinco Dias** | **5.52** | **216** | *e*P | Pn | 16 06 25.2 | +0.4 |
| **BBAC** | **Balboa, Cauca** | **6.29** | **221** | *e*P | Pn | 16 06 34.9 | +0.1 |
| BBAC | | | | *e*S | Sn | 16 07 42.8 | -2.8 |

*IDC **27** 16:19:44.6±2.0, 6.54S×130.02E, h151km±20km, mb3.8/4, mb1 4.0/9, mb1mx3.5/34, mbtmp4.4/9, Error ellipse: s-maj=28.9km s-min=13.1km az=74.0*

*DJA **27** 16:19:45.8±0.3, 7°S±3'×13'0E±°, h166km±7km, M4.5/7, mB5.4/4, mb4.3/7, MLv4.5/6, Mw(mB)4.8/4*

*NEIC **27** 16:19:45.8±2.2, 6.44S±0.08×130.0E±0.1, h165km±11km, mb4.2/8, Error ellipse: s-maj=15.0km s-min=11.9km az=86.0*

**ISC 27 16:19:44.3±0.5, 6.56S±0.05×130.02E±0.06, h150km, n67, σ1§99/70, mb4.2/10, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.91** | **138** | Pn | **Pn** | **16 20 22.4** | **+4.1** |
| **SAUI** | **Saumlaki** | **1.91** | **138** | P | **Pn** | **16 20 21.6** | **+3.3** |
| **SAUI** | **Saumlaki** | **1.91** | **138** | P | **Pn** | **16 20 22.5** | **+4.1** |
| **BNDI** | **Bandanaira** | **2.02** | **357** | P | **Pn** | **16 20 23.2** | **+3.4** |
| **MSAI

| | | | | | | |
|---|---|---|---|---|---|---|
| **RGRI** | **Rengat** | **28.30** | **281** | P | **P** | **16 25 25.6 +1.6** |
| **CMSA** | **Cobar Meteorol** | **28.86** | **151** | P | **P** | **16 25 29.7 +0.9** |
| **TWOA** | **Tennyson Woods** | **29.42** | **166** | P | **P** | **16 25 35.1 +1.4** |
| | comp=Z,6.7nm,0.8s | | | | | |
| **ARPS** | **Mount Arapiles** | **31.95** | **162** | P | **P** | **16 25 57.5 +1.5** |
| | comp=Z,11nm,0.8s | | | | | |
| **CAN** | **Canberra** | **33.53** | **151** | P | **P** | **16 26 09.3 -0.5** |
| **CMAR** | **Chiang Mai Arr** | **39.46** | **310** | P | **P** | **16 27 00.0 -0.2** |
| | comp=Z,0.6nm,0.5s,baz=136,slow=7.1,SNR=10 | | | | | |
| **CHTO** | **Chiang Mai** | **39.67** | **310** | P | **P** | **16 27 00.5 -1.5** |
| **SONM** | **Songino Array** | **58.03** | **341** | P | **P** | **16 29 21.6 +0.1** |
| | comp=Z,0.3nm,0.6s,baz=126,slow=4.1,SNR=2.7 | | | | | |
| **MK31** | **Makanchi Array** | **67.87** | **327** | P | **P** | **16 30 26.8 +0.3** |
| MK31 | | | | IAmb | IAmb | 16 30 27.4 |
| | comp=Z,2.2nm,0.8s | | | | | |
| **MKAR** | **Makanchi Array** | **67.87** | **327** | P | **P** | **16 30 26.6 +0.2** |
| | comp=Z,2.5nm,0.5s,baz=114,slow=8.7,SNR=47 | | | | | |
| **MAKZ** | **Makanchi** | **68.05** | **327** | P | **P** | **16 30 27.0 -0.6** |
| MAKZ | | | | IAmb | IAmb | 16 30 28.0 |
| | comp=Z,2.2nm,0.5s | | | | | |
| **VNDA** | **Vanda** | **72.88** | **173** | P | **P** | **16 30 56.7 +0.3** |
| | comp=Z,3.3nm,1.0s,baz=83,slow=7.1,SNR=3.1 | | | | | |
| **QSPA** | **South Pole Qui** | **83.42** | **180** | P | **P** | **16 31 54.4 -0.3** |
| | baz=299,slow=13 | | | | | |

**NOU 27 16:22:54.6, 19.19S×169.65E, h254km, MLv4.5/16, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.81** | **320** | P | Pn | 16 23 36.5 | +0.7 |
| **DVP** | **Devils Point** | **2.01** | **316** | P | Pn | 16 23 37.7 | +0.2 |
| **LIFNC** | **LIFOU** | **2.76** | **235** | P | Pn | 16 23 43.9 | -0.9 |
| **YATNC** | **Mamie plateau,** | **3.85** | **222** | P | Pn | 16 23 55.8 | -1.0 |
| **PINNC** | **Pines Island,** | **3.98** | **211** | P | Pn | 16 23 58.3 | 0.0 |
| **OUENC** | **Ouen Island, N** | **4.15** | **219** | P | Pn | 16 24 00.6 | +0.3 |
| **DZM** | **Mont Dzumac** | **4.15** | **226** | P | Pn | 16 24 00.6 | +0.2 |
| **NOUC** | **Port Laguerre** | **4.27** | **227** | P | Pn | 16 24 02.2 | +0.5 |
| **ONTNC** | **Ouen Toro** | **4.31** | **223** | P | Pn | 16 24 02.4 | +0.2 |
| **SANVU** | **Saraoutou** | **4.39** | **328** | P | Pn | 16 24 03.3 | 0.0 |
| **KOUNC** | **Koumac, New Ca** | **5.23** | **254** | P | Pn | 16 24 14.1 | +0.8 |

*CNRM **27** 16:31:54.8, 35.85N×3.46W, h24km, ml2.8*
*INMG **27** 16:31:56.2±1.4, 35.65N×3.66W, h9km±9km, ML2.4, Error ellipse: s-maj=6.3km s-min=4.7km az=131.0*
*SFS **27** 16:31:56.0, 35.70N×3.66W, h3km, ML2.9, ALBORAN S.*
**ISC 27 16:31:55.6±1.3, 35.75N±0.04×3.57W±0.05, h17km±11km, n15, σ1°41/27, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOG** | **Mont Gurugu** | **0.70** | **138** | P | **Pg** | **16 32 09.4** | **0.0** |
| GOG | | | | S | **Sg** | 16 32 18.4 | -0.3 |
| **EMAL** | **Malaga-Limoner** | **1.23** | **326** | P | **Pn** | 16 32 18.2 | +0.2 |
| EMAL | | | | S | **Sb** | 16 32 32.6 | -1.3 |
| **TAF** | **Taforalt** | **1.33** | **134** | P | **Pn** | 16 32 19.3 | -0.1 |
| TAF | | | | S | **Sb** | 16 32 35.4 | -1.4 |
| **SMIR** | **Smir Dam** | **1.47** | **268** | P | **Pn** | 16 32 20.2 | -1.1 |
| SMIR | | | | S | **Sb** | 16 32 40.6 | -0.3 |
| **CHEFC** | **Chefchaouen** | **1.58** | **247** | P | **Pb** | 16 32 23.8 | -0.5 |
| CHEFC | | | | S | **Sg** | 16 32 47.1 | +0.6 |
| **IFR** | **Ifrane** | **2.57** | **210** | P | **Pn** | 16 32 36.8 | +0.3 |
| IFR | | | | S | **Sn** | 16 33 06.2 | -1.2 |
| **MD31** | **MD31** | **3.03** | **199** | P | **Pn** | 16 32 43.8 | +0.9 |
| MD31 | | | | S | **Sn** | 16 33 19.1 | +0.3 |
| **MDT** | **Midelt** | **3.05** | **197** | P | **Pn** | 16 32 44.5 | +1.4 |
| MDT | | | | S | **Sn** | 16 33 22.3 | +3.1 |
| **PBAR** | **Barrancos** | **3.69** | **312** | *e*Pn | **Pn** | 16 32 52.9 | +1.1 |
| PBAR | | | | *e*Sn | **Sn** | 16 33 34.3 | -0.5 |
| PBAR | | | | A | A | 16 33 37.4 | |
| | 4.1nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **298** | *e*Pn | **Pn** | 16 32 53.9 | +1.6 |
| PVAQ | | | | *e*Sn | **Sn** | 16 33 35.0 | -0.8 |
| PVAQ | | | | A | A | 16 33 37.7 | |
| | 5.8nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.72** | **298** | P | **Pn** | 16 32 50.8 | -1.5 |
| PVAQ | | | | S | **Sn** | 16 33 35.3 | -0.4 |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **294** | *e*Pn | **Pn** | 16 32 54.4 | +0.8 |
| PBDV | | | | *e*Sn | **Sn** | 16 33 37.0 | -1.1 |
| PBDV | | | | A | A | 16 33 47.8 | |
| | 8.0nm,0.7s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.62** | **302** | *e*Pn | **Pn** | 16 33 05.8 | +1.2 |
| **PMRV** | **Marv??o** | **4.77** | **322** | *e*Pn | **Pn** | 16 33 09.3 | +2.7 |
| **PSBE** | **So Bento** | **5.60** | **314** | *e*Pn | **Pn** | 16 33 20.9 | +2.8 |

*IDC **27** 16:46:49.6±1.3, 2.85S×129.56E, h0km, mb3.5/2, mb1 3.8/4, mb1mx3.4/32, mbtmp3.6/4, ML3.6/2, Error ellipse: s-maj=33.2km s-min=12.1km az=124.0*
*DJA **27** 16:46:52.3±0.4, 3°S±4°×12°9E±°, h10km, M3.5/7, mb4.0/2, MLv3.3/7*
**ISC 27 16:46:51.2±0.9, 2.87S±0.09×129.50E±0.08, h10km, n9, σ0°60/11, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **0.73** | **230** | P | **Pn** | **16 47 07.2** | **-0.5** |
| **AAI** | **Ambon** | **1.53** | **238** | P | **Pg** | 16 47 20.8 | +0.2 |
| **SIJI** | **Sorong** | **2.67** | **42** | P | **Pn** | 16 47 34.8 | +0.6 |
| | 12nm,0.3s,baz=289,slow=23,SNR=22 | | | | | | |
| SIJI | | | | S | **Sn** | 16 48 06.5 | -0.2 |
| | 8.8nm,0.3s,baz=69,slow=21,SNR=9.7 | | | | | | |
| **FAKI** | **Fak Fak** | **2.75** | **91** | P | **Pn** | 16 47 36.6 | +1.2 |
| **SANI** | **Sanana** | **3.60** | **283** | P | **Pn** | 16 47 47.3 | +0.2 |
| **APSI** | **Ampana** | **8.08** | **284** | P | **Pn** | 16 48 49.4 | +0.7 |
| | 15nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.61** | **165** | P | **Pn** | 16 50 56.5 | -0.4 |
| | 0.2nm,0.3s,baz=349,slow=9.9,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **21.11** | **169** | P | **P** | 16 51 36.1 | 0.0 |
| | 1.9nm,0.6s,baz=353,slow=10,SNR=34 | | | | | | |
| ASAR | | | | PcP | **PcP** | 16 55 42.5 | -0.1 |
| | 0.2nm,0.5s,baz=2.5,slow=1.4,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.53** | **326** | P | **P** | **16 57 28.0** | **-0.5** |
| | 0.2nm,0.5s,baz=131,slow=5.5,SNR=4.5 | | | | | | |

**IDC 27 16:54:44.8±2.2, 7.55S×128.13E, h0km, mb3.1/1, mb1 3.7/5, mb1mx3.3/34, mbtmp3.5/5, ML3.6/4, Error ellipse: s-maj=50.5km s-min=29.7km az=76.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **5.14** | **239** | Pn | Pn | 16 56 01.1 | -2.1 |
| | 4.0nm,0.3s,baz=99,slow=2.0,SNR=6.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.76** | **193** | Pn | Pn | 16 57 21.4 | +1.1 |
| | 0.2nm,0.3s,baz=35,slow=12,SNR=8.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.71** | **155** | Pn | Pn | 16 57 59.8 | -0.8 |
| | 0.2nm,0.3s,baz=342,slow=13,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **16.95** | **162** | Pn | Pn | 16 58 44.2 | +0.6 |
| | 0.3nm,0.3s,baz=340,slow=9.4,SNR=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.69** | **328** | P | P | 17 05 44.3 | +0.4 |
| | 0.2nm,0.7s,baz=112,slow=7.9,SNR=2.1 | | | | | | |

**NEIC 27 16:57:02.2±0.5, 36.29N±0.01×97.54W±0.02, h5km±9km, mb_Lg2.6/27, Error ellipse: s-maj=2.0km s-min=1.5km az=94.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCFA** | **Oklahoma City** | **0.88** | **175** | | Pg | 16 57 18.4 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **0.89** | **175** | Pg | Pg | 16 57 19.1 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.03** | **53** | | Pg | 16 57 21.5 | -0.5 |
| **FNO** | **Franklin** | **1.04** | **174** | Pg | Pg | 16 57 21.7 | -0.4 |
| **U32A** | **Winter Ranch,** | **1.18** | **275** | Pg | Pg | 16 57 24.2 | -0.7 |
| **TUL1** | **Leonard** | **1.47** | **105** | | Pn | 16 57 28.7 | -0.6 |
| TUL1 | | | | IAmb_Lg | | 16 57 50.6 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.71** | **188** | | Pb | 16 57 33.7 | -0.3 |
| **WMOK** | **Wichita Mounta** | **1.85** | **213** | Pn | Pn | 16 57 34.9 | +0.3 |
| **S39A** | **Bolivar** | **3.65** | **66** | IAmb_Lg | | 16 58 57.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.66** | **249** | IAmb_Lg | | 16 59 00.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.25** | **114** | IAmb_Lg | | 16 59 18.6 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.38** | **102** | IAmb_Lg | | 16 59 29.4 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.41** | **94** | IAmb_Lg | | 16 59 21.5 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.65** | **63** | IAmb_Lg | | 16 59 29.4 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **Z41A** | **Richland Creek** | **4.94** | **126** | IAmb_Lg | | 16 59 48.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **LCAR** | **Lake Charles** | **5.17** | **91** | IAmb_Lg | | 16 59 53.9 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.41** | **52** | IAmb_Lg | | 16 59 58.3 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.62** | **36** | IAmb_Lg | | 17 00 11.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **FVM** | **French Village** | **5.93** | **71** | IAmb_Lg | | 17 00 15.1 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.95** | **311** | IAmb_Lg | | 17 01 14.6 | |
| | comp=Z,8.6nm,0.8s | | | | | | |

*UCR **27** 17:05:00.6±0.8, 13.1N×89.28W, h57km±5km, ML3.6*
*SNET **27** 17:05:00.4±0.8, 13.14N×89.25W, h58km±5km, ML3.6*
*INET **27** 17:05:01.2±0.8, 13.17N×89.26W, h58km±8km, ML3.1, MW3.0*
**ISC 27 17:05:00.5±2.6, 13.1N±0.1×89.28W±0.05, h55km±13km, n60, σ0°37/79, 2D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **0.39** | **354** | *e*P | **Pn** | **17 05 11.0** | **0.0** |
| LALI | | | | *e*S | **Sn** | 17 05 18.8 | +0.4 |
| **LALI** | **Alcalda de L** | **0.39** | **354** | *e*P | **Pn** | 17 05 11.0 | 0.0 |
| **LALI** | **Alcalda de L** | **0.39** | **354** | *e*P | **Pn** | 17 05 11.0 | 0.0 |
| LALI | | | | *e*S | **Sn** | 17 05 18.8 | +0.4 |
| **LFRS** | **El Faro** | **0.57** | **22** | *e*P | **Pn** | 17 05 12.6 | -0.4 |
| **LFRS** | **El Faro** | **0.57** | **22** | *e*P | **Pn** | 17 05 12.6 | -0.4 |
| **JAYA** | **Jayaque - finc** | **0.58** | **344** | *e*P | **Pn** | 17 05 12.8 | -0.3 |
| JAYA | | | | *e*S | **Sn** | 17 05 22.2 | -0.2 |
| JAYA | | | | IAML | | 17 05 24.0 | |
| | comp=Z,5μm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.58** | **344** | *e*P | **Pn** | 17 05 12.8 | -0.3 |
| JAYA | | | | *e*S | **Sn** | 17 05 22.2 | -0.2 |
| JAYA | | | | IAML | | 17 05 24.0 | |
| | comp=Z,5μm,0.2s | | | | | | |
| **SJTE** | **Alcalda de S** | **0.58** | **27** | *e*P | **Pn** | 17 05 12.6 | -0.5 |
| SJTE | | | | *e*S | **Sn** | 17 05 22.1 | -0.1 |
| SJTE | | | | IAML | | 17 05 23.0 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **SJTE** | **Alcalda de S** | **0.58** | **27** | *e*P | **Pn** | 17 05 12.6 | -0.5 |
| SJTE | | | | *e*S | **Sn** | 17 05 22.1 | -0.1 |
| SJTE | | | | IAML | | 17 05 23.0 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.59** | **5** | *e*P | **Pn** | 17 05 13.0 | -0.2 |
| SNET | | | | IAML | | 17 05 27.8 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.59** | **5** | *e*P | **Pn** | 17 05 13.1 | -0.1 |
| **SNET** | **Serv Nac Est T** | **0.59** | **5** | *e*P | **Pn** | 17 05 13.0 | -0.2 |
| SNET | | | | IAML | | 17 05 27.8 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **OPAM** | **Oficina de Pla** | **0.62** | **8** | *e*P | **Pn** | 17 05 13.6 | 0.0 |
| OPAM | | | | *e*S | **Sn** | 17 05 23.3 | +0.3 |
| OPAM | | | | IAML | | 17 05 27.6 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **OPAM** | **Oficina de Pla** | **0.62** | **8** | *e*P | **Pn** | 17 05 13.6 | 0.0 |
| OPAM | | | | *e*S | **Sn** | 17 05 23.3 | +0.3 |
| OPAM | | | | IAML | | 17 05 27.6 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **BOQS** | **Boqueron** | **0.64** | **0** | *e*P | **Pn** | 17 05 13.8 | -0.1 |
| **BOQS** | **Boqueron** | **0.64** | **0** | *e*P | **Pn** | 17 05 13.8 | -0.1 |
| **COEG** | **Centro de Oper** | **0.65** | **37** | *e*P | **Pn** | 17 05 13.4 | -0.5 |
| COEG | | | | *e* | | 17 05 13.4 | |
| COEG | | | | *e*S | **Sn** | 17 05 23.4 | -0.3 |
| COEG | | | | IAML | | 17 05 30.8 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **COEG** | **Centro de Oper** | **0.65** | **37** | *e*P | **Pn** | 17 05 13.4 | -0.5 |
| COEG | | | | *e* | | 17 05 13.4 | |
| COEG | | | | *e*S | **Sn** | 17 05 23.4 | -0.3 |
| COEG | | | | IAML | | 17 05 30.8 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.66** | **48** | *e*P | **Pn** | 17 05 13.4 | -0.5 |
| TECO | | | | *e*S | **Sn** | 17 05 23.3 | -0.4 |
| **TECO** | **Alcaldia de Te** | **0.66** | **48** | *e*P | **Pn** | 17 05 13.4 | -0.5 |
| TECO | | | | *e*S | **Sn** | 17 05 23.3 | -0.4 |
| **LFU** | **La Fuente** | **0.67** | **14** | *e*P | **Pn** | 17 05 14.2 | 0.0 |
| **LFU** | **La Fuente** | **0.67** | **14** | *e*P | **Pn** | 17 05 14.2 | 0.0 |
| **SNVI** | **San Vicente** | **0.67** | **40** | *e*P | **Pn** | 17 05 14.0 | -0.2 |
| **SNVI** | **San Vicente** | **0.67** | **40** | *e*P | **Pn** | 17 05 14.0 | -0.2 |
| **LBRS** | **Las Brisas** | **0.68** | **20** | *e*P | **Pn** | 17 05 14.4 | +0.1 |
| **LBRS** | **Las Brisas** | **0.68** | **20** | *e*P | **Pn** | 17 05 14.4 | +0.1 |
| **PAVA** | **Las Pavas** | **0.70** | **29** | *e*P | **Pn** | 17 05 14.4 | -0.2 |
| PAVA | | | | *e*S | **Sn** | 17 05 25.0 | +0.2 |
| PAVA | | | | IAML | | 17 05 26.2 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **PAVA** | **Las Pavas** | **0.70** | **29** | *e*P | **Pn** | 17 05 14.5 | -0.1 |
| **PAVA** | **Las Pavas** | **0.70** | **29** | *e*P | **Pn** | 17 05 14.4 | -0.2 |
| PAVA | | | | *e*S | **Sn** | 17 05 25.0 | +0.2 |
| PAVA | | | | IAML | | 17 05 26.2 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **CEDA** | **San Andres** | **0.71** | **351** | *e*P | **Pn** | 17 05 14.6 | 0.0 |
| CEDA | | | | *e*S | **Sn** | 17 05 25.4 | +0.5 |
| CEDA | | | | IAML | | 17 05 28.7 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **CEDA** | **San Andres** | **0.71** | **351** | *e*P | **Pn** | 17 05 14.7 | 0.0 |
| CEDA | | | | *e*S | **Sn** | 17 05 25.5 | +0.5 |
| CEDA | | | | IAML | | 17 05 27.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CEDA** | **San Andres** | **0.71** | **351** | *e*P | **Pn** | 17 05 14.6 | 0.0 |
| CEDA | | | | *e*S | **Sn** | 17 05 25.4 | +0.5 |
| CEDA | | | | IAML | | 17 05 28.7 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.80** | **335** | *e*P | **Pn** | 17 05 15.8 | -0.2 |
| CEVE | | | | IAML | | 17 05 31.9 | |
| | comp=Z,10μm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.80** | **335** | *e*P | **Pn** | 17 05 15.8 | -0.2 |
| CEVE | | | | IAML | | 17 05 31.9 | |
| | comp=Z,10μm,0.3s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.81** | **42** | ↓*i*P | **Pn** | 17 05 15.8 | -0.1 |
| SCLA | | | | IAML | | 17 05 16.6 | |
| | comp=Z,387nm,0.3s | | | | | | |
| SCLA | | | | *e*S | **Sn** | 17 05 28.2 | +1.1 |
| **SCLA** | **Alcaldia de Sa** | **0.81** | **42** | ↓*i*P | **Pn** | 17 05 15.8 | -0.1 |
| SCLA | | | | IAML | | 17 05 16.6 | |
| | comp=Z,387nm,0.3s | | | | | | |
| SCLA | | | | *e*S | **Sn** | 17 05 28.2 | +1.1 |
| **SNJE** | **San Jose** | **0.83** | **338** | *e*P | **Pn** | 17 05 16.0 | -0.3 |
| **SNJE** | **San Jose** | **0.83** | **338** | *e*P | **Pn** | 17 05 16.0 | -0.3 |
| **COEB** | **Comit de Eme** | **0.83** | **61** | *e*P | **Pn** | 17 05 16.3 | 0.0 |
| **COEB** | **Comit de Eme** | **0.83** | **61** | *e*P | **Pn** | 17 05 16.3 | 0.0 |
| **COEB** | **Comit de Eme** | **0.83** | **61** | *e*P | **Pn** | 17 05 16.3 | 0.0 |
| **RTR** | **El Retiro** | **0.87** | **336** | *e*P | **Pn** | 17 05 16.9 | 0.0 |
| **RTR** | **El Retiro** | **0.87** | **336** | *e*P | **Pn** | 17 05 16.9 | 0.0 |
| **TACO** | **Tacachico** | **0.87** | **355** | *e*P | **Pn** | 17 05 15.9 | -0.8 |
| TACO | | | | *e*S | **Sn** | 17 05 29.1 | +0.4 |
| **TACO** | **Tacachico** | **0.87** | **355** | *e*P | **Pn** | 17 05 15.9 | -0.8 |
| TACO | | | | *e*S | **Sn** | 17 05 29.1 | +0.4 |
| **PQSS** | **Presa 15 de Se** | **0.88** | **53** | *e*P | **Pn** | 17 05 16.6 | -0.2 |
| PQSS | | | | IAML | | 17 05 17.5 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.88** | **53** | *e*P | **Pn** | 17 05 16.6 | -0.2 |
| PQSS | | | | IAML | | 17 05 17.5 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **NUBE** | **Las Nubes** | **0.94** | **329** | *e*P | **Pn** | 17 05 17.5 | -0.2 |
| NUBE | | | | *e*S | **Sn** | 17 05 30.1 | -0.2 |
| NUBE | | | | IAML | | 17 05 32.0 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **NUBE** | **Las Nubes** | **0.94** | **329** | *e*P | **Pn** | 17 05 17.5 | -0.2 |
| NUBE | | | | *e*S | **Sn** | 17 05 30.1 | -0.2 |
| NUBE | | | | IAML | | 17 05 32.0 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **PACA** | **Pacayal** | **1.00** | **68** | IAML | | 17 05 34.8 | |
| | comp=Z,720nm,0.2s | | | | | | |
| **PACA** | **Pacayal** | **1.00** | **68** | IAML | | 17 05 34.8 | |
| | comp=Z,720nm,0.2s | | | | | | |
| **LCY** | **Lacayo** | **1.01** | **71** | IAML | | 17 05 37.6 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **LCY** | **Lacayo** | **1.01** | **71** | IAML | | 17 05 37.6 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **VSM** | **San Miguel** | **1.03** | **71** | *e*P | **Pn** | 17 05 19.1 | 0.0 |
| **VSM** | **San Miguel** | **1.03** | **71** | *e*P | **Pn** | 17 05 19.1 | 0.0 |
| **SLOZ** | **Alcaldia de Sa** | **1.05** | **332** | *e*S | **Sn** | 17 05 33.7 | +0.9 |
| **MTO3** | **Montecristo** | **1.30** | **357** | *e*P | **Pn** | 17 05 22.1 | -0.5 |
| **MTO3** | **Montecristo** | **1.30** | **357** | *e*P | **Pn** | 17 05 22.1 | -0.5 |
| **MTO3** | **Montecristo** | **1.30** | **357** | *e*P | **Pn** | 17 05 22.1 | -0.5 |
| **ESQI** | **Esquipulas** | **1.46** | **358** | *e*P | **Pn** | 17 05 24.4 | -0.2 |
| ESQI | | | | IAML | | 17 05 25.1 | |
| | comp=Z,150nm,0.2s | | | | | | |

**JMA 27 17:42:13.4, 36.83N×140.56E, h7km±1km, M3.7,7C Broadband fault plane solution: P waves. NP1: ϕs140.00000°, δ34.00000°, λ-61.00000°. NP2: ϕs287.00000°, δ61.00000°, λ-108.00000°. Principal axes: T Plg14.0000°, Azm30.0000°; N Plg15.0000°, Azm296.0000°; P Plg69.0000°, Azm160.0000°; Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.22** | **178** | ↑P | Pg | 17 42 17.7 | -0.1 |
| JHO | | | | S | Sg | 17 42 20.9 | +0.2 |
| **JFFD** | **Fukushimafurud** | **0.26** | **0** | ↑P | Pg | 17 42 18.7 | +0.1 |
| JFFD | | | | S | Sg | 17 42 22.3 | +0.2 |
| **ONAJ** | **Iwakimizuishiy** | **0.33** | **35** | ↑P | Pg | 17 42 20.0 | +0.1 |
| ONAJ | | | | S | Sg | 17 42 25.0 | +0.7 |
| **JSB** | **Shiboa** | **0.53** | **285** | ↑P | Pb | 17 42 24.4 | -0.7 |
| JSB | | | | S | Sg | 17 42 31.5 | +0.9 |
| **JFK** | **Kawauchi** | **0.59** | **25** | ↑P | Pg | 17 42 24.5 | -0.3 |
| **JYT** | **Yasato** | **0.67** | **206** | ↑P | Pg | 17 42 25.9 | -0.4 |
| JYT | | | | S | Sg | 17 42 35.0 | 0.0 |
| **JFT** | **Otama** | **0.71** | **346** | ↑P | Pg | 17 42 27.1 | 0.0 |
| JFT | | | | S | Sg | 17 42 36.9 | +0.6 |
| **MAT** | **Matsushiro** | **1.91** | **262** | P | Pn | 17 42 46.8 | +0.4 |
| MAT | | | | S | Sb | 17 43 11.9 | -0.8 |

*IDC **27** 17:47:19.9±1.5, 9.86S×121.41E, h0km, mb3.9/3, mb1 3.8/6, mb1mx3.4/38, mbtmp3.8/6, ML3.4/3, MS2.3/2, Ms1 2.3/2, ms1mx2.2/71 Error ellipse: s-maj=61.2km s-min=21.6km az=47.0*
*NEIC **27** 17:47:26.3±2.6, 9.83S±0.04×122.01E±0.08, h55km±9km, mb4.0/16, Error ellipse: s-maj=11.5km s-min=5.5km az=77.0*
*DJA **27** 17:47:28.0±0.3, 10°S±4°×12°2E±°, h60km±14km, M3.9/12, mb4.2/4, MLv3.8/12*
**ISC 27 17:47:25.5±0.5, 9.92S±0.05×122.01E±0.06, h50km, n55, σ2°29/56, mb4.1/8, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **1.30** | **10** | | **Pn** | **17 47 48.4** | **+1.1** |
| **MMRI** | **Maumere** | **1.30** | **10** | P | **Pn** | **17 47 49.1** | **+1.8** |
| MMRI | | | | S | **Sn** | **17 48 03.5** | **0.0** |
| **MMRI** | **Maumere** | **1.30** | **10** | P | **Pn** | **17 47 49.3** | **+2.0** |
| **BASI** | **Baing, Sumba** | **1.44** | **258** | P | **Pn** | **17 47 50.6** | **+1.4** |
| **BATI** | **Baumata** | **1.65** | **100** | Pn | Pn | 17 47 59.0 | +6.9 |
| | 34nm,0.3s,baz=48,slow=2.3,SNR=29 | | | | | | |
| BATI | | | | Sn | Sn | 17 48 22.8 | +11 |
| | 47nm,0.3s,baz=329,slow=18,SNR=5.3 | | | | | | |
| BATI | | | | LR | LR | 17 49 06.0 | |
| | comp=Z,71nm,21.1s,baz=74,slow=47 | | | | | | |
| **BATI** | **Baumata** | **1.65** | **100** | P | Pn | 17 47 58.0 | +5.8 |
| **SOEI** | **Soe** | **2.23** | **86** | | Pn | 17 48 07.4 | +7.2 |
| **SOEI** | **Soe** | **2.23** | **86** | P | Pn | 17 48 07.0 | +6.9 |
| **WBSI** | **Waikabubak, Su** | **2.60** | **276** | P | **Pn** | **17 48 05.3** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.04** | **338** | P | **Pn** | **17 48 25.9** | **+1.0** |
| **PLAI** | **Plampang** | **4.32** | **284** | P | **Pn** | **17 48 30.9** | **+2.2** |
| **PLAI** | **Plampang** | **4.32** | **284** | P | **Pn** | **17 48 31.4** | **+2.7** |
| **BBSI** | **Bau Bau** | **4.44** | **7** | P | **Pn** | **17 48 32.9** | **+2.5** |
| **BKSI** | **Bulukumba** | **4.94** | **338** | P | **Pn** | **17 48 38.5** | **+1.3** |
| **KAPI** | **Kappang** | **5.36** | **335** | LR | LR | 17 50 48.3 | |
| | comp=Z,31nm,20.8s,baz=210,slow=41 | | | | | | |
| **IGBI** | **Denpasar** | **6.86** | **279** | P | **Pn** | **17 49 02.8** | **-0.8** |
| | 0.2nm32nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.89** | **280** | Pn | **Pn** | **17 49 17.2** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **7.89** | **280** | P | **Pn** | **17 49 17.1** | **-0.6** |
| | 0.1nm11nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **8.72** | **132** | | **Pn** | **17 49 31.4** | **+2.2** |
| KNRA | | | | | **Sn** | **17 51 04.2** | **-1.9** |
| **KNRA** | **Kununurra** | **8.72** | **132** | P | **Pn** | **17 49 32.6** | **+3.5** |
| **LUWI** | **Luwuk** | **8.85** | **5** | | **Pn** | **17 49 28.8** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **8.86** | **157** | Pn | **Pn** | **17 49 34.0** | **+3.1** |
| | 0.1nm,0.3s,baz=294,slow=16,SNR=1.1 | | | | | | |
| FITZ | | | | Sn | **Sn** | **17 51 05.0** | **-4.4** |
| | 0.7nm,0.3s,baz=174,slow=24,SNR=8.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.86** | **157** | Sn | **Sn** | **17 51 06.6** | **-2.8** |
| **FITZ** | **Fitzroy Crossi** | **8.86** | **157** | P | **Pn** | **17 49 34.1** | **+3.1** |
| **DRS** | **Darwin Rock St** | **9.07** | **107** | P | **Pn** | **17 49 38.4** | **+4.5** |
| | 5.1nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **9.40** | **109** | | **Pn** | **17 49 40.2** | **+1.7** |
| MTN | | | | Sn | **Sn** | **17 51 21.4** | **-1.5** |
| **MTN** | **Manton Dam** | **9.40** | **109** | P | **Pn** | **17 49 41.8** | **+3.3** |
| **KDU** | **Kakadu** | **10.62** | **106** | P | **Pn** | **17 49 58.1** | **+3.0** |
| **TOLI2** | **Tolitoli** | **11.03** | **354** | Pn | **Pn** | **17 50 00.3** | **-0.3** |
| **UGM** | **Wanagama** | **11.52** | **279** | Pn | **Pn** | **17 50 06.6** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **11.77** | **190** | Pn | **Pn** | **17 50 12.2** | **+1.4** |
| **PSA00** | **Pilbara Seismi** | **11.77** | **190** | Pn | **Pn** | **17 50 13.0** | **+2.2** |
| **FAKI** | **Fak Fak** | **12.32** | **56** | Pn | **Pn** | **17 50 17.1** | **-1.3** |
| **GIRL** | **Giralia** | **14.68** | **210** | Pn | **Pn** | **17 50 49.7** | **-0.5** |
| **WB0** | **Warramunga Arr** | **15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| X37A | | | | IAmb_Lg | | | 17 56 06.7 | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.74** | **312** | Pn | Pn | | 17 55 06.6 | +1.8 |
| KSCO | | | | IAmb_Lg | | | 17 56 12.5 | |
| | comp=Z,27nm,0.7s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.96** | **187** | | Pn | | 17 55 06.1 | -1.7 |
| **MSTX** | **Muleshoe** | **4.00** | **231** | Pn | Pn | | 17 55 07.7 | -0.6 |
| **HHAR** | **Hobbs** | **4.13** | **92** | | Pn | | 17 55 08.9 | -1.1 |
| **T25A** | **Trinidad** | **4.34** | **279** | Pn | Pn | | 17 55 12.9 | -0.2 |
| T25A | | | | IAmb_Lg | | | 17 56 29.6 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **W39A** | **Magazine** | **4.48** | **106** | | Pn | | 17 55 13.6 | -1.2 |
| W39A | | | | IAmb_Lg | | | 17 56 34.9 | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.69** | **134** | Pn | Pn | | 17 55 15.1 | -2.5 |
| **S39A** | **Bolivar** | **4.71** | **74** | | Pn | | 17 55 18.9 | +1.0 |
| S39A | | | | IAmb_Lg | | | 17 56 33.1 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.75** | **163** | Pn | Pn | | 17 55 19.3 | +0.8 |
| **BGNE** | **Belgrade** | **4.88** | **8** | | Pn | | 17 55 20.8 | +0.4 |
| BGNE | | | | IAmb_Lg | | | 17 56 54.3 | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.89** | **113** | | Pn | | 17 55 21.0 | +0.6 |
| **OGNE** | **Ogallala** | **4.96** | **333** | Pn | Pn | | 17 55 20.1 | -1.3 |
| OGNE | | | | IAmb_Lg | | | 17 56 49.2 | |
| | comp=Z,29nm,0.7s | | | | | | | |
| **U40A** | **Yellville** | **4.99** | **91** | | Pn | | 17 55 20.2 | -1.7 |
| U40A | | | | IAmb_Lg | | | 17 56 57.9 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.29** | **285** | Pn | Pn | | 17 55 24.2 | -2.0 |
| **P38A** | **Dawn** | **5.31** | **53** | Pn | Pn | | 17 55 24.6 | -1.7 |
| P38A | | | | IAmb_Lg | | | 17 57 02.1 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **Q24A** | **Divide** | **5.40** | **298** | | Pn | | 17 55 27.1 | -0.6 |
| Q24A | | | | IAmb_Lg | | | 17 57 01.8 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **MGMO** | **Mountain Grove** | **5.46** | **82** | Pn | Pn | | 17 55 26.9 | -1.4 |
| MGMO | | | | IAmb_Lg | | | 17 57 01.6 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.47** | **110** | | Pn | | 17 55 24.8 | -3.6 |
| X40A | | | | IAmb_Lg | | | 17 57 04.7 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.63** | **101** | | Pn | | 17 55 30.2 | -0.4 |
| **FCAR** | **Ozark Folk Cen** | **5.63** | **95** | | Pn | | 17 55 29.7 | -1.0 |
| **R40A** | **Maddies Statio** | **5.66** | **70** | Pn | Pn | | 17 55 31.2 | +0.2 |
| **W41B** | **Gary Mavity, V** | **5.69** | **102** | | Pn | | 17 55 31.3 | -0.1 |
| **435B** | **Jarrell** | **5.89** | **168** | IAmb_Lg | | | 17 57 20.9 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **K31A** | **O'Neill** | **6.05** | **2** | IAmb_Lg | | | 17 57 31.9 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **ISCO** | **Idaho Springs** | **6.10** | **304** | Pn | Pn | | 17 55 39.4 | +2.1 |
| **ANMO** | **Albuquerque** | **6.24** | **257** | Pn | Pn | | 17 55 39.9 | +0.7 |
| **P40A** | **Paris** | **6.26** | **60** | Pn | Pn | | 17 55 39.3 | 0.0 |
| **CCM** | **Cathedral Cave** | **6.39** | **74** | Pn | Pn | | 17 55 39.8 | -1.3 |
| **PHWY** | **Pilot Hill** | **6.88** | **315** | IAmb_Lg | | | 17 57 52.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **N23A** | **Red Feather La** | **6.91** | **311** | IAmb_Lg | | | 17 57 54.9 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **FVM** | **French Village** | **7.02** | **76** | IAmb_Lg | | | 17 57 48.1 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **N41A** | **Harden Midland** | **7.63** | **55** | IAmb_Lg | | | 17 58 15.1 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **8.11** | **65** | Pn | Pn | | 17 56 05.6 | +0.9 |
| **TX32** | **Lajitas Array** | **8.19** | **210** | Pn | Pn | | 17 56 06.0 | +0.1 |
| **Q44A** | **Meyer Farm, Va** | **8.28** | **71** | IAmb_Lg | | | 17 58 40.2 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **K22A** | **Casper** | **8.38** | **319** | IAmb_Lg | | | 17 58 57.9 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **RSSD** | **Black Hills** | **8.45** | **335** | IAmb_Lg | | | 17 58 42.1 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |

*ISK **27** 17:56:52.9, 36°.37N×34°.59E, h21km, ML3.7/42*
*DDA **27** 17:56:54.8±0.0, 36°.41N×34°.52E, h29km±1km, MW3.6*
*NIC **27** 17:56:55.8±0.0, 36°.15N×34°.29E, h15km±15km, Ml3.7/9*
*GRAL **27** 17:56:56.4±0.4, 36°.25N×34°.25E, h34km±11km, MD3.5*
*GII **27** 17:56:58.3±0.0, 36°.21N×34°.77E, h30km, MD2.9/4, Mm3.1/2*

**ISC 27 17:56:54.2±0.9, 36°38N±0°.02×34°.57E±0°.02, h28km±8km, n123, σ1°33/175, 1C-2D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIZK** | **Mersin** | **0.36** | **287** | PG | **Pb** | **17 57 02.2** | **-0.2** |
| KIZK | | | | SG | **Sb** | **17 57 07.8** | **-0.2** |
| **KIZK** | **Mersin** | **0.36** | **287** | P | **Pb** | **17 57 02.6** | **+0.2** |
| KIZK | | | | S | **Sb** | **17 57 07.2** | **-0.7** |
| **MERS** | **Mersin** | **0.49** | **355** | PG | **Pb** | **17 57 03.6** | **-0.9** |
| MERS | | | | SG | **Sb** | **17 57 10.5** | **-1.0** |
| **SLFK** | **Silifke-Mersin** | **0.51** | **272** | PG | **Pb** | **17 57 04.2** | **-0.5** |
| **SILI** | **Silifke-Mersin** | **0.52** | **269** | PG | **Pb** | **17 57 05.2** | **+0.2** |
| SILI | | | | SG | **Sb** | **17 57 12.5** | **+0.2** |
| **DED** | **Mersin** | **0.61** | **17** | P | **Pb** | **17 57 05.6** | **-0.9** |
| DED | | | | S | **Sb** | **17 57 14.2** | **-0.6** |
| **KRTD** | **Karatas-Adana** | **0.71** | **72** | PG | **Pb** | **17 57 07.6** | **-0.5** |
| **KARG** | **Kargicak-Mersi** | **0.72** | **256** | PG | **Pb** | **17 57 08.3** | **+0.1** |
| KARG | | | | SG | **Sn** | **17 57 18.6** | **0.0** |
| **IKL** | **Isikli** | **0.73** | **259** | PG | **Pb** | **17 57 08.4** | **0.0** |
| IKL | | | | SG | **Sn** | **17 57 18.3** | **-0.6** |
| **TISA** | **Tisan-Mersin** | **0.75** | **254** | PG | **Pb** | **17 57 08.7** | **-0.1** |
| TISA | | | | SG | **Sn** | **17 57 18.8** | **+0.4** |
| **YESI** | **Yesilovacik-Me** | **0.77** | **257** | PG | **Pb** | **17 57 08.7** | **-0.4** |
| YESI | | | | SG | **Sn** | **17 57 19.6** | **-0.3** |
| **TEPK** | **Tepekoy-MERSIN** | **0.84** | **260** | PG | **Pn** | **17 57 09.5** | **-0.8** |
| **AKKU** | **Akkuyu-Mersin** | **0.85** | **255** | PG | **Pn** | **17 57 10.1** | **-0.3** |
| **GULN** | **MERSIN_Gulnar** | **0.85** | **257** | P | **Pn** | **17 57 10.0** | **-0.4** |
| GULN | | | | S | **Sb** | **17 57 20.9** | **-0.6** |
| **AKK2** | **Akkuyu-Mersin** | **0.86** | **254** | PG | **Pn** | **17 57 10.3** | **-0.1** |
| **AKK1** | **Akkuyu-Mersin** | **0.87** | **255** | PG | **Pn** | **17 57 10.4** | **-0.1** |
| **EREN** | **Erenkoy** | **0.91** | **201** | PG | **Pn** | **17 57 10.9** | **-0.2** |
| EREN | | | | SG | **Sn** | **17 57 23.9** | **+0.7** |
| **EREN** | **Erenkoy** | **0.91** | **201** | P | **Pn** | **17 57 11.7** | **+0.6** |
| EREN | | | | S | **Sb** | **17 57 24.2** | **+1.1** |
| **TEVE** | **Tevekalti-Mers** | **0.91** | **274** | PG | **Pn** | **17 57 11.2** | **-0.1** |
| **OREN** | **Orenkoy-Mersin** | **0.92** | **260** | PG | **Pn** | **17 57 10.7** | **-0.5** |
| **KARA** | **Karaisali** | **0.96** | **24** | PG | **Pn** | **17 57 11.5** | **-0.4** |
| **YURE** | **YUREGIR** | **0.96** | **62** | P | **Pn** | **17 57 11.3** | **-0.6** |
| **YORU** | **Yoruktepe-Mers** | **0.97** | **257** | PG | **Pn** | **17 57 11.8** | **-0.2** |
| **BERE** | **Bereket-Mersin** | **1.09** | **269** | PN | **Pn** | **17 57 13.9** | **+0.1** |
| BERE | | | | SN | **Sb** | **17 57 28.5** | **+0.1** |
| **KERG** | **Konya-Eregli** | **1.10** | **341** | P | **Pn** | **17 57 13.3** | **-0.5** |
| KERG | | | | S | **Sn** | **17 57 27.0** | **-1.1** |
| **CEYT** | **Ceyhan** | **1.14** | **56** | PN | **Pn** | **17 57 13.9** | **-0.3** |
| **TEKE** | **Tekeli-Mersin** | **1.20** | **259** | PN | **Pn** | **17 57 15.4** | **+0.3** |
| TEKE | | | | SN | **Sb** | **17 57 31.6** | **+0.1** |
| **YAYL** | **Yayladag** | **1.29** | **105** | PN | **Pn** | **17 57 16.2** | **-0.3** |
| **YAYL** | **Yayladag** | **1.29** | **105** | P | **Pn** | **17 57 17.5** | **+1.0** |
| YAYL | | | | S | **Sn** | **17 57 35.0** | **+2.2** |
| **AKO** | **Adana** | **1.29** | **33** | P | **Pn** | **17 57 16.2** | **-0.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.30** | **90** | PN | **Pn** | **17 57 16.6** | **+0.1** |
| **CMRD** | **Camardi-Nigde** | **1.32** | **14** | PN | **Pn** | **17 57 16.9** | **-0.1** |
| **ERMK** | **Ermenek** | **1.36** | **282** | P | **Pb** | **17 57 18.5** | **-0.7** |
| ERMK | | | | S | **Sb** | **17 57 37.0** | **+0.6** |
| **LFK** | **Lefkose** | **1.38** | **218** | PN | **Pn** | **17 57 16.8** | **-0.9** |
| **PARAL** | **Paralimni** | **1.45** | **198** | ⇑P | **Pn** | **17 57 17.4** | **-1.1** |
| PARAL | | | | S | **Sn** | **17 57 34.9** | **-1.6** |
| PARAL | | | | AMI | | 17 57 41.6 | |
| | 11nm,0.8s | | | | | | |
| PARAL | | | | AMI | | 17 57 41.6 | |
| | 11nm,0.8s | | | | | | |
| PARAL | | | | AMI | | 17 57 43.0 | |
| | 7.9nm,0.4s | | | | | | |
| PARAL | | | | AMI | | 17 57 43.0 | |
| | 7.9nm,0.4s | | | | | | |
| **KOZT** | **Kozan** | **1.49** | **42** | PN | **Pn** | **17 57 18.3** | **-0.9** |
| **KKBE** | **Karaman, Kazim** | **1.56** | **303** | P | **Pn** | **17 57 20.8** | **+0.7** |
| KKBE | | | | S | **Sn** | **17 57 37.9** | **-1.5** |
| **MVOU** | **Mavrovouni** | **1.56** | **210** | ⇓P | **Pn** | **17 57 18.3** | **-1.8** |
| MVOU | | | | S | **Sn** | **17 57 36.3** | **-3.1** |
| MVOU | | | | AMI | | 17 57 37.2 | |
| | 1.9nm,0.1s | | | | | | |
| MVOU | | | | AMI | | 17 57 37.2 | |
| | 1.9nm,0.1s | | | | | | |
| MVOU | | | | AMI | | 17 57 42.2 | |
| | 1.6nm,0.3s | | | | | | |
| MVOU | | | | AMI | | 17 57 42.2 | |
| | 1.6nm,0.3s | | | | | | |
| **ATHAL** | **Athalassa** | **1.56** | **218** | P | **Pn** | **17 57 18.9** | **-1.2** |
| ATHAL | | | | S | **Sn** | **17 57 35.5** | **-3.9** |
| ATHAL | | | | AMI | | 17 57 43.4 | |
| | 3.5nm,0.3s | | | | | | |
| ATHAL | | | | AMI | | 17 57 43.4 | |
| | 4.6nm,0.6s | | | | | | |
| ATHAL | | | | AMI | | 17 57 46.0 | |
| | 4.6nm,0.6s | | | | | | |
| **NIDE** | **Nigde/Merkez-G** | **1.63** | **6** | P | **Pn** | **17 57 22.0** | **+0.8** |
| NIDE | | | | S | **Sb** | **17 57 42.3** | **-1.6** |
| **AKDN** | **Akdeniz- Kıbrı** | **1.69** | **231** | PN | **Pn** | **17 57 22.5** | **+0.6** |
| **NIC** | **Nigde** | **1.73** | **1** | PN | **Pn** | **17 57 22.6** | **-0.1** |
| **CSS** | **Mathiatis** | **1.74** | **216** | PN | **Pn** | **17 57 22.3** | **-0.2** |
| **CSS** | **Mathiatis** | **1.74** | **216** | P | **Pn** | **17 57 20.6** | **-1.9** |
| CSS | | | | S | **Sn** | **17 57 40.5** | **-3.3** |
| CSS | | | | AMI | | 17 57 40.7 | |
| | 0.6nm,0.3s | | | | | | |
| CSS | | | | AMI | | 17 57 40.7 | |
| | 0.6nm,0.3s | | | | | | |
| **HDMB** | **Hadim** | **1.78** | **290** | PN | **Pn** | **17 57 23.8** | **+0.5** |
| **YAHY** | **KAYSERI_Yahyal** | **1.83** | **20** | P | **Pn** | **17 57 24.8** | **+1.0** |
| YAHY | | | | S | **Sn** | **17 57 47.3** | **+1.1** |
| **GAZI** | **Gazipasa** | **1.83** | **266** | PN | **Pn** | **17 57 24.3** | **+0.5** |
| **GAZI** | **Gazipasa** | **1.83** | **266** | P | **Pn** | **17 57 24.9** | **+1.1** |
| GAZI | | | | S | **Sb** | **17 57 47.8** | **-1.7** |
| **LEF** | **Lefka** | **1.86** | **228** | P | **Pn** | **17 57 23.1** | **-1.0** |
| LEF | | | | S | **Sn** | **17 57 44.3** | **-2.3** |
| **ANDN** | **Andirin** | **1.86** | **49** | P | **Pn** | **17 57 23.8** | **-0.5** |
| **KAMA** | **Osmaniye** | **1.87** | **64** | P | **Pn** | **17 57 24.9** | **+0.5** |
| KAMA | | | | S | **Sn** | **17 57 46.6** | **-0.5** |
| **ASGA** | **Asgata** | **1.92** | **215** | P | **Pn** | **17 57 25.0** | **0.0** |
| ASGA | | | | S | **Sb** | **17 57 51.3** | **-0.8** |
| ASGA | | | | AMI | | 17 57 55.6 | |
| | 2.0nm,0.5s | | | | | | |
| ASGA | | | | AMI | | 17 57 55.6 | |
| | 2.0nm,0.5s | | | | | | |
| ASGA | | | | AMI | | 17 57 56.2 | |
| | 1.9nm,0.5s | | | | | | |
| ASGA | | | | AMI | | 17 57 56.2 | |
| | 1.9nm,0.5s | | | | | | |
| **GULA** | **Gulagac** | **1.98** | **352** | PN | **Pn** | **17 57 26.5** | **+0.5** |
| **SAIM** | **ADANA** | **2.00** | **37** | P | **Pn** | **17 57 26.6** | **+0.3** |
| **ALFC** | **Alefka** | **2.02** | **233** | ⇓P | **Pn** | **17 57 24.6** | **-1.8** |
| ALFC | | | | S | **Sn** | **17 57 47.4** | **-3.3** |
| ALFC | | | | AMI | | 17 57 50.7 | |
| | 3.1nm,0.1s | | | | | | |
| ALFC | | | | AMI | | 17 57 50.7 | |
| | 3.1nm,0.1s | | | | | | |
| ALFC | | | | AMI | | 17 57 52.9 | |
| | 3.2nm,0.2s | | | | | | |
| ALFC | | | | AMI | | 17 57 52.9 | |
| | 3.2nm,0.2s | | | | | | |
| **KUZU** | **Kuzuini** | **2.05** | **78** | P | **Pn** | **17 57 27.7** | **+0.8** |
| KUZU | | | | S | **Sn** | **17 57 52.3** | **+0.7** |
| **SZAC** | **Souni** | **2.13** | **221** | P | **Pn** | **17 57 28.1** | **+0.2** |
| SZAC | | | | S | **Sb** | **17 57 59.5** | **+1.5** |
| SZAC | | | | AMI | | 17 58 01.6 | |
| | 2.3nm,0.5s | | | | | | |
| SZAC | | | | AMI | | 17 58 01.6 | |
| | 2.3nm,0.5s | | | | | | |
| SZAC | | | | AMI | | 17 58 01.9 | |
| | 4.9nm,0.5s | | | | | | |
| SZAC | | | | AMI | | 17 58 01.9 | |
| | 4.9nm,0.5s | | | | | | |
| **KAHM** | **Kahramanmaras,** | **2.24** | **59** | P | **Pn** | **17 57 29.1** | **-0.4** |
| KAHM | | | | S | **Sn** | **17 57 55.7** | **-0.6** |
| **KMER** | **Konya-Meram** | **2.24** | **309** | P | **Pb** | **17 57 32.0** | **-2.1** |
| **AKMS** | **Akamas** | **2.27** | **234** | P | **Pn** | **17 57 29.3** | **-0.6** |
| AKMS | | | | AMI | | 17 58 05.1 | |
| | 2.6nm,0.3s | | | | | | |
| AKMS | | | | AMI | | 17 58 06.8 | |
| | 2.0nm,0.5s | | | | | | |
| **NATA** | **Nata** | **2.28** | **226** | P | **Pn** | **17 57 31.9** | **+1.8** |
| NATA | | | | S | **Sb** | **17 58 02.6** | **0.0** |
| NATA | | | | AMI | | 17 58 10.2 | |
| | 3.4nm,0.7s | | | | | | |
| NATA | | | | AMI | | 17 58 10.2 | |
| | 3.4nm,0.7s | | | | | | |
| NATA | | | | AMI | | 17 58 10.6 | |
| | 5.1nm,0.6s | | | | | | |
| NATA | | | | AMI | | 17 58 10.6 | |
| | 5.1nm,0.6s | | | | | | |
| **KHMN** | **Narli-Kahraman** | **2.31** | **63** | PN | **Pn** | **17 57 30.9** | **+0.5** |
| **AKSY** | **AKSARAY - Alti** | **2.36** | **344** | P | **Pn** | **17 57 31.7** | **+0.5** |
| **KONT** | **Konya--Tatoy** | **2.36** | **312** | PN | **Pn** | **17 57 32.2** | **+1.1** |
| **KONT** | **Konya--Tatoy** | **2.36** | **312** | P | **Pb** | **17 57 34.0** | **-2.1** |
| **HWQ** | **Hawqa** | **2.38** | **151** | *eP* | **Pn** | **17 57 32.8** | **+1.4** |
| HWQ | | | | *eS* | **Sn** | **17 57 59.9** | **+0.2** |
| **SEYD** | **Seydisehir-KON** | **2.42** | **296** | PN | **Pn** | **17 57 32.7** | **+0.7** |
| **AVNS** | **Nevsehir-Avano** | **2.44** | **5** | P | **Pn** | **17 57 33.2** | **+0.9** |
| **KEPZ** | **Antalya-Kepez** | **2.44** | **283** | P | **Pn** | **17 57 34.5** | **+2.2** |
| **SARI** | **SarD1z-Kayseri** | **2.50** | **35** | PN | **Pn** | **17 57 33.8** | **+0.6** |
| **LADK** | **Ladik-KONYA** | **2.53** | **317** | PN | **Pn** | **17 57 34.4** | **+0.8** |
| **GZT** | **Gaziantep** | **2.59** | **67** | P | **Pn** | **17 57 34.6** | **+0.2** |
| **BHL** | **Bhannes** | **2.62** | **160** | *eP* | **Pn** | **17 57 35.8** | **+1.0** |
| **BNN** | **Bunyan** | **2.67** | **22** | PN | **Pn** | **17 57 36.3** | **+0.8** |
| **SERE** | **Sereflikochisa** | **2.69** | **343** | PN | **Pn** | **17 57 36.6** | **+0.9** |
| **DQAL** | **Deir Qamar** | **2.79** | **163** | *eP* | **Pn** | **17 57 37.6** | **+0.8** |
| **KIRS** | **Kirsehir-Merke** | **2.80** | **350** | P | **Pn** | **17 57 38.0** | **+0.8** |
| **KOZK** | **Kozakli-Nevseh** | **2.84** | **5** | PN | **Pn** | **17 57 38.8** | **+1.0** |
| **KDHN** | **Kadinhani** | **2.90** | **318** | P | **Pn** | **17 57 39.1** | **+0.6** |
| **QRWL** | **Qaraoun** | **2.97** | **162** | *eP* | **Pn** | **17 57 40.3** | **+0.8** |
| **SIRC** | **Yozgat** | **2.99** | **9** | P | **Pn** | **17 57 40.4** | **+0.6** |
| **RCY** | **Rachaya** | **3.06** | **160** | *eP* | **Pn** | **17 57 41.8** | **+1.0** |
| **KAMT** | **Kaman** | **3.06** | **347** | PN | **Pn** | **17 57 41.9** | **+1.0** |
| **SUTC** | **Sutluce-Ispart** | **3.07** | **292** | PN | **Pn** | **17 57 42.0** | **+1.1** |
| **KKUL** | **Konya-Kulu** | **3.08** | **335** | P | **Pn** | **17 57 42.7** | **+1.6** |
| **SHBL** | **Chebaa** | **3.17** | **162** | *eP* | **Pn** | **17 57 42.9** | **+0.5** |
| SHBL | | | | *eS* | **Sn** | **17 58 17.6** | **-1.8** |
| **CDAG** | **Cicekdag** | **3.25** | **357** | P | **Pn** | **17 57 44.3** | **+1.0** |
| **NATI** | **Neve Ativ** | **3.25** | **163** | Pn | **Pn** | **17 57 44.4** | **+1.1** |
| NATI | | | | Sn | **Sn** | **17 58 20.8** | **-0.3** |
| **YVAC** | **Isparta, Yalva** | **3.26** | **306** | P | **Pn** | **17 57 44.6** | **+1.0** |
| **GEM** | **Giv'at Ha'Em** | **3.28** | **164** | Pn | **Pn** | **17 57 44.8** | **+1.0** |
| GEM | | | | Sn | **Sn** | **17 58 21.3** | **-0.6** |
| **AKCD** | **Akcadag** | **3.29** | **53** | P | **Pn** | **17 57 45.9** | **+1.0** |
| **KIZT** | **Kizilcal** | **3.29** | **320** | PN | **Pn** | **17 57 45.2** | **+1.2** |
| **SURC** | **SANLIURFA_SURC** | **3.29** | **80** | P | **Pn** | **17 57 44.5** | **+0.6** |
| **CUSAR** | **Sarkisla-SIVAS** | **3.31** | **23** | P | **Pn** | **17 57 44.7** | **+0.4** |
| **HNTI** | **Hanita** | **3.32** | **171** | Pn | **Pn** | **17 57 45.2** | **+0.8** |
| HNTI | | | | Sn | **Sn** | **17 58 20.6** | **-2.3** |
| **BUCA** | **Burdur, Bucak-** | **3.35** | **288** | P | **Pn** | **17 57 48.5** | **+3.6** |
| **AKUM** | **Antalya-Kumluc** | **3.42** | **270** | P | **Pn** | **17 57 47.3** | **+1.8** |
| AKUM | | | | S | **Sn** | **17 58 28.8** | **+3.7** |
| **BRTR** | **Keskin Array B** | **3.42** | **348** | PN | **Pn** | **17 57 46.9** | **+1.1** |
| **MMA0B** | **Mount Meron ar** | **3.42** | **168** | Pn | **Pn** | **17 57 46.4** | **+0.6** |
| MMA0B | | | | Sn | **Sn** | **17 58 24.3** | **-1.2** |
| **BAGO** | **Egridir - ISPA** | **3.42** | **299** | P | **Pb** | **17 57 51.6** | **-2.6** |
| **HACI** | **Hacifakili, Ak** | **3.44** | **15** | P | **Pn** | **17 57 47.4** | **+1.3** |
| **KSHT** | **Keshet** | **3.54** | **163** | Pn | **Pn** | **17 57 48.7** | **+1.3** |
| **DELI** | **KIRIKKALE** | **3.65** | **352** | P | **Pn** | **17 57 50.2** | **+1.3** |
| **BLGI** | **Bet Lehem HaGe** | **3.67** | **172** | Pn | **Pn** | **17 57 50.2** | **+1.1** |
| BLGI | | | | Sn | **Sn** | **17 58 30.0** | **-1.5** |
| **OFRI** | **`Ofer** | **3.76** | **175** | Pn | **Pn** | **17 57 51.1** | **+0.7** |
| OFRI | | | | Sn | **Sn** | **17 58 32.7** | **-1.1** |
| **CORM** | **Corum** | **3.79** | **1** | PN | **Pn** | **17 57 52.2** | **+1.3** |
| **COAL** | **Corum-Alaca** | **3.88** | **5** | P | **Pn** | **17 57 53.5** | **+1.4** |
| **MMLI** | **Mount Malkishu** | **3.99** | **170** | P | **Pn** | **17 57 55.5** | **+1.9** |
| MMLI | | | | S | **Sn** | **17 58 38.9** | **-0.6** |
| **MMLI** | **Mount Malkishu** | **3.99** | **170** | Pn | **Pn** | **17 57 55.1** | **+1.5** |
| MMLI | | | | Sn | **Sn** | **17 58 39.4** | **-0.1** |
| **SLTI** | **Sal'it** | **4.14** | **175** | Pn | **Pn** | **17 57 57.5** | **+1.9** |
| SLTI | | | | Sn | **Sn** | **17 58 42.8** | **-0.4** |
| **HMDT** | **Nahal Hemdat** | **4.19** | **169** | Pn | **Pn** | **17 57 57.5** | **+1.3** |
| HMDT | | | | Sn | **Sn** | **17 58 44.2** | **0.0** |
| **CTAK** | **Corum_Osmancik** | **4.27** | **2** | P | **Pn** | **17 57 58.3** | **+0.8** |
| **CAEL** | **Denizli, Camel** | **4.28** | **282** | P | **Pn** | **17 58 02.3** | **+4.6** |
| CAEL | | | | S | **Sn** | **17 58 50.4** | **+3.6** |
| **FETY** | **Fethiye** | **4.43** | **275** | P | **Pn** | **17 58 00.6** | **+1.0** |
| FETY | | | | S | **Sn** | **17 58 50.4** | **+0.2** |
| **AMAZ** | **Amatzia** | **4.84** | **177** | Pn | **Pn** | **17 58 07.2** | **+2.0** |
| AMAZ | | | | Sn | **Sn** | **17 59 00.9** | **+0.5** |
| **DSI** | **Dead Sea** | **4.84** | **172** | Pn | **Pn** | **17 58 07.2** | **+2.0** |
| **YTIR** | **Yattir** | **5.02** | **175** | Pn | **Pn** | **17 58 09.4** | **+1.6** |
| YTIR | | | | Sn | **Sn** | **17 59 05.5** | **+0.6** |
| **KZIT** | **Kziot** | **5.46** | **182** | Pn | **Pn** | **17 58 15.3** | **+1.6** |
| **PRNI** | **Paran** | **6.02** | **176** | Pn | **Pn** | **17 58 22.7** | **+1.3** |
| **KRMI** | **Paran Flat** | **6.25** | **179** | Pn | **Pn** | **17 58 27.2** | **+2.7** |
| KRMI | | | | Sn | **Sn** | **17 59 35.5** | **+0.5** |
| **HRFI** | **Mount Harif** | **6.34** | **176** | Pn | **Pn** | **17 58 28.0** | **+2.2** |
| HRFI | | | | Sn | **Sn** | **17 59 37.8** | **+0.6** |
| **MBRI** | **Mt Berech** | **6.57** | **177** | Pn | **Pn** | **17 58 32.1** | **+3.0** |
| **EIL** | **Elat** | **6.70** | **177** | Pn | **Pn** | **17 58 33.0** | **+2.3** |

**IDC 27 18:09:59.9±2.6, 2°.97N×127°.65E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.2/44, mbtmp3.2/3, Error ellipse: s-maj=198.6km s-min=29.1km az=67.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.70** | **164** | P | P | 18 15 13.6 | 0.0 |
| | 0.5nm,0.6s,baz=344,slow=10,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **27.16** | **167** | P | P | 18 15 45.0 | -0.3 |
| | 0.2nm,0.8s,baz=342,slow=8.1,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.70** | **325** | P | P | 18 19 59.6 | +0.2 |
| | 0.2nm,0.4s,baz=117,slow=8.3,SNR=2.7 | | | | | | |

**IDC 27 18:12:23.2±3.5, 15°.99S×177°.99W, h451km±35km, mb3.0/3, mb1 3.2/4, mb1mx2.8/43, mbtmp3.7/4, Error ellipse: s-maj=305.9km s-min=33.1km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.17** | **245** | P | P | 18 13 40.0 | 0.0 |
| | 1.2nm,0.3s,baz=141,slow=12,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.41** | **258** | P | P | 18 19 59.5 | -1.0 |
| | 0.2nm,0.9s,baz=96,slow=7.2,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **45.73** | **252** | P | P | 18 20 03.2 | +0.3 |
| | 2.8nm,0.4s,baz=84,slow=8.5,SNR=145 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.69** | **43** | P | P | 18 24 13.6 | -0.1 |
| | 0.2nm,0.5s,baz=234,slow=4.6,SNR=1.8 | | | | | | |

*IDC **27** 18:16:40.5±1.3, 1°.32N×126°.92E, h0km, mb3.3/4, mb1 3.5/5, mb1mx3.3/44, mbtmp3.3/5, ML3.0/1, Error ellipse: s-maj=65.5km s-min=21.7km az=64.0*
*DJA **27** 18:16:46.5±0.7, 1°.N±3°×12°.7E±°, h17km±7km, M3.7/10, mb3.8/2, MLv3.6/10*

**ISC 27 18:16:42.4±1.1, 1°.45N±0°.09×127°.3E±0°.1, h10km, n12, σ1°70/13, mb3.3/4, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.67** | **175** | P | **Pn** | **18 16 59.4** | **+1.4** |
| TNTI | | | | S | **Sn** | **18 17 08.6** | **0.0** |
| **KMSI** | **Cibinong** | **3.44** | **255** | P | **Pn** | **18 17 36.8** | **+0.7** |
| **SANI** | **Sanana** | **3.71** | **201** | P | **Pn** | **18 17 39.2** | **-0.7** |
| **GTOI** | **Gorontalo** | **4.37** | **259** | P | **Pn** | **18 17 51.2** | **+2.3** |
| **SIJI** | **Sorong** | **4.58** | **120** | Pn | **Pn** | **18 17 55.4** | **+3.5** |
| | 0.6nm,0.3s,baz=156,slow=20,SNR=2.9 | | | | | | |
| **LUWI** | **Luwuk** | **5.16** | **241** | P | **Pn** | **18 17 59.8** | **0.0** |
| **APSI** | **Ampana** | **6.12** | **248** | P | **Pn** | **18 18 14.7** | **+1.7** |
| | 0.1nm13nm,1.0s | | | | | | |
| **BBSI** | **Bau Bau** | **8.35** | **214** | P | **Pn** | **18 18 45.1** | **+1.4** |
| **WRA** | **Warramunga Arr** | **22.35** | **162** | P | **P** | **18 21 39.4** | **-1.3** |
| | 0.5nm,0.5s,baz=341,slow=11,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.77** | **166** | P | **P** | **18 22 13.5** | **-0.2** |
| | 0.3nm,0.6s,baz=345,slow=11,SNR=9.0 | | | | | | |
| **SONM** | **Songino Array** | **49.63** | **342** | P | **P** | **18 25 33.8** | **-0.5** |
| | 0.2nm,0.5s,baz=147,slow=7.0,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.75** | **326** | P | **P** | **18 26 46.5** | **-1.1** |
| | 0.4nm,0.8s,baz=119,slow=7.4,SNR=3.7 | | | | | | |

*BER **27** 18:17:02.9±5.0, 80°.42N×0°.12W, h10km, ML2.5, ML3.2(NAO), Confirmed Earthquake*
*IEPN **27** 18:17:07.0, 80°.00N×0°.42E, h10km*

**ISC 27 18:16:59.6±0.9, 80°.12N±0°.05×0°.76W±0°.05, h10km, n29, σ3°07/55, 1C, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **2.61** | **111** | Pn | **Pn** | **18 17 44.0** | **+2.2** |
| KBS | | | | Sn | **Sn** | **18 18 11.3** | **-2.2** |
| **KBS** | **Kingsbay** | **2.61** | **111** | *eP* | **Pn** | **18 17 43.9** | **+2.2** |
| KBS | | | | *eS* | **Sn** | **18 18 11.2** | **-2.2** |
| KBS | | | | IAML | | 18 18 18.2 | |
| | comp=Z,36nm,0.4s | | | | | | |
| **KBS** | **Kingsbay** | **2.61** | **111** | *eP* | **Pn** | **18 17 43.6** | **+1.9** |
| KBS | | | | *eS* | **Sn** | **18

*Error ellipse: s-maj=14.2km s-min=11.9km az=130.4*
**ISC 27 18:20:44.3**s0.3,**18°00'S**±0'05,**178°41'W**±0'05,**h579**km, **n526,**σ1**f28/**544,**mb5.0**/133,**73C-114D,Fault plane solution: NP1:**$\phi_s$36.87299°,δ71.97591°,λ-116.49167°. **NP2:**$\phi_s$275.04013°,δ31.67083°,λ-36.10894°. **Principal axes:** T Plg22.5204°, Azm146.8386°; N Plg25.0986°, Azm45.6397°; P Plg55.1443°, Azm273.3755°; **Fault plane solution: NP1:**$\phi_s$254.88324°,δ24.83702°, λ-0.98280°. **NP2:**$\phi_s$345.77515°,δ89.58720°, λ-114.83381°. **Principal axes:** T Plg39.5395°, Azm98.4245°; N Plg24.8331°, Azm345.9662°; P Plg40.3006°, Azm232.8583°; **Fault plane solution: NP1:**$\phi_s$316.89117°,δ77.24767°,λ-83.27111°. **NP2:** $\phi_s$108.76662°,δ14.39267°,λ-117.37177°. **Principal axes:** T Plg31.9264°, Azm41.2890°; N Plg6.5622°, Azm135.3993°; P Plg57.2457°, Azm235.6999°; **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.38** | **274** | P | **P** | **18 22 06.4** | **+2.2** |
| | 8.5nm,0.3s,baz=122,slow=3.4,SNR=24 | | | | | | |
| MSVF | | | | S | **S** | **18 23 10.9** | **+1.7** |
| | baz=105,slow=17,SNR=1.0 | | | | | | |
| **MSVF** | **Nonsavu** | **3.38** | **274** | P | **P** | **18 22 03.3** | **-0.9** |
| **AFI** | **Afiamalu** | **7.57** | **58** | P | **P** | **18 22 38.2** | **-0.8** |
| | 15nm,0.3s,baz=229,slow=9.3,SNR=12 | | | | | | |
| AFI | | | | S | **S** | **18 24 08.1** | **-4.7** |
| | 9.6nm,0.3s,baz=32,slow=23,SNR=4.6 | | | | | | |
| **AFI** | **Afiamalu** | **7.57** | **58** | P | **P** | **18 22 35.5** | **-3.5** |
| AFI | | | | S | **S** | **18 24 08.1** | **-4.7** |
| **NIUE** | **Niue** | **8.12** | **99** | P | **P** | **18 22 46.6** | **+2.5** |
| | baz=8.0 | | | | | | |
| **NIUE** | **Niue** | **8.12** | **99** | P | **P** | **18 22 42.6** | **-1.5** |
| **FUNA** | **Funafuti** | **9.70** | **346** | P | **P** | **18 22 57.1** | **-2.7** |
| **GLKZ** | **Green Lake** | **11.22** | **178** | P | **P** | **18 23 12.5** | **-2.4** |
| **SANVU** | **Saraoutou** | **14.01** | **278** | P | **P** | **18 23 41.0** | **-2.6** |
| **DZM** | **Mont Dzumac** | **14.79** | **252** | P | **P** | **18 23 47.4** | **-4.0** |
| **ONTNC** | **Ouen Toro** | **14.84** | **251** | P | **P** | **18 23 47.7** | **-3.9** |
| **OUZ** | **Omahuta** | **18.57** | **201** | P | **P** | **18 24 27.2** | **+1.3** |
| OUZ | | | | IAmb | IAmb | 18 24 30.9 | |
| | comp=Z,50nm,0.6s | | | | | | |
| **OUZ** | **Omahuta** | **18.57** | **201** | P | **P** | **18 24 29.8** | **+3.9** |
| **WCZ** | **Waipu Caves** | **18.98** | **198** | P | **P** | **18 24 34.0** | **+4.4** |
| **KUZ** | **Kuaotunu** | **19.38** | **194** | P | **P** | **18 24 34.5** | **+1.2** |
| **WIAZ** | **Waiheke Island** | **19.57** | **196** | P | **P** | **18 24 37.4** | **+2.5** |
| **MXZ** | **Matakaoa Point** | **19.70** | **188** | P | **P** | **18 24 34.9** | **-1.3** |
| **HAZ** | **Te Kaha** | **19.96** | **189** | P | **P** | **18 24 38.9** | **+0.4** |
| HAZ | | | | S | **S** | **18 27 43.4** | **-4.6** |
| **RUGZ** | **Raukumara Rang** | **20.18** | **189** | P | **P** | **18 24 41.5** | **+0.9** |
| RUGZ | | | | S | **S** | **18 27 48.5** | **-3.2** |
| **TGRZ** | **Tauranga** | **20.20** | **192** | P | **P** | **18 24 44.1** | **+3.4** |
| **PUZ** | **Puketiti** | **20.21** | **188** | P | **P** | **18 24 42.0** | **+1.2** |
| PUZ | | | | S | **S** | **18 27 49.8** | **-2.2** |
| **TWGZ** | **Tauwhareparae** | **20.35** | **188** | P | **P** | **18 24 43.7** | **+1.6** |
| TWGZ | | | | S | **S** | **18 27 54.1** | **-0.1** |
| **KMRZ** | **Kaimai** | **20.38** | **193** | P | **P** | **18 24 45.3** | **+2.9** |
| **URZ** | **Urewera** | **20.56** | **190** | P | **P** | **18 24 43.0** | **-0.9** |
| | comp=Z,22nm,0.6s,baz=331,slow=1.6,SNR=16 | | | | | | |
| URZ | | | | S | **S** | **18 27 50.1** | **-7.4** |
| | comp=Z,17nm,1.3s,baz=110,slow=8.9,SNR=1.3 | | | | | | |
| **URZ** | **Urewera** | **20.56** | **190** | P | **P** | **18 24 42.7** | **-1.2** |
| URZ | | | | IAmb | IAmb | 18 24 51.2 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **20.56** | **190** | P | **P** | **18 24 43.0** | **-0.9** |
| URZ | | | | S | **S** | **18 27 52.9** | **-4.5** |
| **MWZ** | **Matawai** | **20.57** | **189** | P | **P** | **18 24 44.3** | **+0.2** |
| MWZ | | | | S | **S** | **18 27 53.8** | **-3.9** |
| **RIGZ** | **Rimuhau** | **20.90** | **188** | P | **P** | **18 24 47.3** | **+0.3** |
| RIGZ | | | | S | **S** | **18 28 00.3** | **-2.6** |
| **RTZ** | **Ruatahuna** | **20.93** | **190** | P | **P** | **18 24 47.8** | **+0.5** |
| **MTHZ** | **Maungataniwha** | **21.18** | **190** | P | **P** | **18 24 49.5** | **-0.1** |
| MTHZ | | | | S | **S** | **18 28 03.7** | **-3.7** |
| **RAHZ** | **Arahi** | **21.21** | **190** | P | **P** | **18 24 50.6** | **+0.9** |
| **HIZ** | **Hauiti** | **21.27** | **195** | P | **P** | **18 24 55.8** | **+5.5** |
| **NMHZ** | **Naumai** | **21.43** | **190** | P | **P** | **18 24 52.1** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **21.55** | **191** | P | **P** | **18 24 51.6** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **21.55** | **191** | P | **P** | **18 24 52.7** | **-0.2** |
| BKZ | | | | S | **S** | **18 28 10.7** | **-2.5** |
| **TMVZ** | **Te Maari** | **21.65** | **192** | P | **P** | **18 24 54.3** | **+0.4** |
| **ETVZ** | **East Tongariro** | **21.67** | **192** | P | **P** | **18 24 54.6** | **+0.5** |
| **OTVZ** | **Oturere** | **21.71** | **193** | P | **P** | **18 24 54.4** | **0.0** |
| **WNVZ** | **Wahianoa** | **21.88** | **193** | P | **P** | **18 24 55.8** | **-0.1** |
| **BHHZ** | **Black Hill Sta** | **21.94** | **192** | P | **P** | **18 24 55.7** | **-0.7** |
| **TSZ** | **Takapari Road** | **22.51** | **191** | P | **P** | **18 25 02.1** | **+0.7** |
| **HNR** | **Honiara** | **22.66** | **289** | P | **P** | **18 25 02.4** | **-0.7** |
| | comp=Z,38nm,0.5s,baz=178,slow=0.9,SNR=5.9 | | | | | | |
| **HNR** | **Honiara** | **22.66** | **289** | P | **P** | **18 25 00.3** | **-2.8** |
| HNR | | | | pmax | pmax | | |
| | comp=Z,52nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **22.66** | **289** | P | **P** | **18 25 00.3** | **-2.8** |
| HNR | | | | IAmb | IAmb | 18 25 06.5 | |
| | comp=Z,52nm,0.7s | | | | | | |
| **BFZ** | **Birch Farm** | **23.07** | **190** | | **P** | **18 25 04.1** | **-2.2** |
| BFZ | | | | IAmb | IAmb | 18 25 29.8 | |
| | comp=Z,69nm,1.5s | | | | | | |
| **BFZ** | **Birch Farm** | **23.07** | **190** | P | **P** | **18 25 07.9** | **+1.6** |
| **MRZ** | **Mangatainoka R** | **23.17** | **192** | P | **P** | **18 25 06.6** | **-0.6** |
| **MSWZ** | **Moikau Station** | **23.96** | **192** | P | **P** | **18 25 13.4** | **-0.9** |
| **SNZO** | **South Karori** | **23.97** | **193** | P | **P** | **18 25 13.8** | **-0.4** |
| SNZO | | | | IAmb | IAmb | 18 25 23.4 | |
| | comp=Z,101nm,1.4s | | | | | | |
| **BHW** | **Baring Head** | **24.03** | **192** | P | **P** | **18 25 13.8** | **-1.0** |
| **QRZ** | **Quartz Range** | **24.05** | **197** | P | **P** | **18 25 15.3** | **+0.3** |
| QRZ | | | | IAmb | IAmb | 18 25 41.5 | |
| | comp=Z,93nm,1.5s | | | | | | |
| **TUWZ** | **Tuamarina** | **24.25** | **194** | P | **P** | **18 25 16.7** | **-0.1** |
| **THZ** | **Tophouse** | **24.82** | **196** | P | **P** | **18 25 21.8** | **-0.1** |
| THZ | | | | IAmb | IAmb | 18 25 43.6 | |
| | comp=Z,82nm,1.7s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.94** | **196** | P | **P** | **18 25 30.7** | **-1.0** |
| LTZ | | | | IAmb | IAmb | 18 25 34.6 | |
| | comp=Z,81nm,1.7s | | | | | | |
| **OXZ** | **Oxford** | **26.51** | **196** | P | **P** | **18 25 36.2** | **-0.5** |
| OXZ | | | | IAmb | IAmb | 18 25 37.9 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.13** | **197** | P | **P** | **18 25 41.6** | **-0.6** |
| | comp=Z,4.2nm,0.5s,baz=198,slow=5.7,SNR=5.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **27.13** | **197** | IAmb | IAmb | 18 25 53.1 | |
| | comp=Z,109nm,2.0s | | | | | | |
| **LBZ** | **Lake Benmore** | **28.00** | **198** | P | **P** | **18 25 49.2** | **-0.4** |
| **WKZ** | **Wanaka** | **28.75** | **199** | P | **P** | **18 25 55.8** | **-0.4** |
| WKZ | | | | IAmb | IAmb | 18 26 28.5 | |
| | comp=Z,54nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **29.23** | **250** | P | **P** | **18 26 00.5** | **-0.1** |
| | baz=29,SNR=17 | | | | | | |
| **EIDS** | **Eidsvold** | **29.23** | **250** | P | **P** | **18 25 59.9** | **-0.8** |
| EIDS | | | | IAmb | IAmb | 18 26 01.8 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **29.89** | **240** | P | **P** | **18 26 08.0** | **+1.5** |
| | baz=30,SNR=56 | | | | | | |
| **ARMA** | **Armidale** | **29.89** | **240** | P | **P** | **18 26 07.9** | **+1.5** |
| ARMA | | | | IAmb | IAmb | 18 26 08.8 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.03** | **199** | P | **P** | **18 26 08.2** | **+0.9** |
| **MGCD** | **Mangrove Creek** | **31.24** | **235** | P | **P** | **18 26 19.6** | **+1.8** |
| | baz=31,SNR=30 | | | | | | |
| **RMQ** | **Roma** | **31.47** | **249** | P | **P** | **18 26 21.0** | **+1.2** |
| | baz=32,SNR=68 | | | | | | |
| **RABL** | **Rabaul** | **31.90** | **292** | P | **P** | **18 26 22.6** | **-1.0** |
| **CNB** | **Canberra Magne** | **33.37** | **232** | P | **P** | **18 26 37.6** | **+1.8** |
| | baz=34,SNR=120 | | | | | | |
| **CTA** | **Charters Tower** | **33.43** | **261** | P | **P** | **18 26 36.6** | **+0.1** |
| | comp=Z,35nm,0.6s,baz=87,slow=9.7,SNR=53 | | | | | | |
| CTA | | | | PcP | **PcP** | **18 29 00.2** | **-0.3** |
| | comp=Z,3.3nm,0.7s,baz=99,slow=5.1,SNR=3.6 | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **18 26 39.4** | **+1.2** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **18 26 39.4** | **+1.2** |
| CAN | | | | IAmb | IAmb | 18 26 40.5 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **MILA** | **Mila** | **34.22** | **230** | P | **P** | **18 26 44.6** | **+1.6** |
| | baz=34,SNR=5.2 | | | | | | |
| **PMG** | **Port Moresby** | **34.47** | **280** | P | **P** | **18 26 46.2** | **+0.9** |
| | comp=Z,117nm,0.8s,baz=78,slow=5.7,SNR=73 | | | | | | |
| **PMG** | **Port Moresby** | **34.47** | **280** | *d* iP | **P** | **18 26 45.9** | **+0.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,143nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **34.47** | **280** | P | **P** | **18 26 46.1** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **35.10** | **241** | P | **P** | **18 26 51.4** | **+1.1** |
| | baz=35,SNR=242 | | | | | | |
| **MTSU** | **Mount Surprise** | **35.40** | **264** | P | **P** | **18 26 53.0** | **+0.1** |
| | baz=36,SNR=69 | | | | | | |
| **QLP** | **Quilpie** | **35.50** | **249** | P | **P** | **18 26 54.2** | **+0.5** |
| | baz=36,SNR=103 | | | | | | |
| **COEN** | **Coen** | **37.10** | **271** | P | **P** | **18 27 07.7** | **+0.7** |
| COEN | | | | IAmb | IAmb | 18 27 08.6 | |
| | comp=Z,70nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.11** | **231** | P | **P** | **18 27 08.2** | **+1.4** |
| | baz=37,SNR=30 | | | | | | |
| **TOO** | **Toolangi** | **37.11** | **231** | P | **P** | **18 27 07.8** | **+1.0** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,61nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.11** | **231** | P | **P** | **18 27 07.8** | **+1.0** |
| TOO | | | | IAmb | IAmb | 18 27 09.2 | |
| | comp=Z,61nm,0.8s | | | | | | |
| **MANU** | **Manus Island** | **37.13** | **291** | P | **P** | **18 27 08.0** | **+0.8** |
| MANU | | | | IAmb | IAmb | 18 27 09.0 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **MOO** | **Moorlands** | **38.02** | **223** | P | **P** | **18 27 15.5** | **+1.4** |
| | baz=38,SNR=3.5 | | | | | | |
| **TAU** | **Tasmania Unive** | **38.17** | **222** | P | **P** | **18 27 16.5** | **+1.3** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,136nm,1.6s | | | | | | |
| **TAU** | **Tasmania Unive** | **38.17** | **222** | P | **P** | **18 27 16.5** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **18 27 20.3** | **+1.5** |
| | comp=Z,65nm,0.5s,baz=91,slow=10,SNR=274 | | | | | | |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **18 27 20.3** | **+1.5** |
| | baz=39,SNR=234 | | | | | | |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **18 27 19.7** | **+0.9** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **18 27 19.7** | **+0.9** |
| **ARPS** | **Mount Arapiles** | **39.59** | **234** | P | **P** | **18 27 27.8** | **+1.0** |
| | baz=40,SNR=24 | | | | | | |
| **QIS** | **Mount Isa** | **39.63** | **259** | P | **P** | **18 27 27.0** | **-0.4** |
| | baz=40,SNR=17 | | | | | | |
| **WAKE** | **Wake Island** | **39.85** | **338** | P | **P** | **18 27 28.7** | **-0.3** |
| **HTT** | **Hallett** | **41.10** | **240** | P | **P** | **18 27 40.1** | **+1.2** |
| | baz=41,SNR=62 | | | | | | |
| **JAY** | **Jayapura** | **42.93** | **286** | P | **P** | **18 27 54.2** | **+0.6** |
| | comp=Z,36nm,0.4s,baz=158,slow=5.7,SNR=27 | | | | | | |
| **JAY** | **Jayapura** | **42.93** | **286** | P | **P** | **18 27 54.4** | **+0.9** |
| | comp=Z,579nmcomp=Z,53nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **43.36** | **241** | P | **P** | **18 27 57.4** | **+0.9** |
| | baz=44,SNR=151 | | | | | | |
| **BBOO** | **Buckleboo** | **43.36** | **241** | P | **P** | **18 27 57.4** | **+0.9** |
| **GENI** | **Genyem** | **43.39** | **286** | P | **P** | **18 27 58.0** | **+1.0** |
| | comp=Z,173nm,0.8s | | | | | | |
| **AIN** | **Ainahou** | **43.45** | **32** | P | **P** | **18 27 59.0** | **+1.5** |
| **MLOA** | **Mauna Loa Obse** | **43.52** | **32** | P | **P** | **18 27 59.4** | **+1.0** |
| **MLH** | **Mauna Loa** | **43.58** | **32** | P | **P** | **18 28 00.1** | **+1.4** |
| **HMH** | **Humu'ula Sheep** | **43.63** | **32** | P | **P** | **18 28 00.2** | **+1.1** |
| **POHA** | **Pohakuloa** | **43.73** | **32** | P | **P** | **18 28 00.4** | **+0.6** |
| POHA | | | | IAmb | IAmb | 18 28 08.3 | |
| | comp=Z,71nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.42** | **260** | P | **P** | **18 28 04.3** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 18 28 05.7 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.58** | **260** | P | **P** | **18 28 05.8** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 18 28 06.7 | |
| | comp=Z,55nm,0.6s | | | | | | |
| **WC3** | **Warramunga Arr** | **44.58** | **260** | P | **P** | **18 28 05.7** | **-0.5** |
| | baz=45 | | | | | | |
| **WB2** | **Warramunga Arr** | **44.60** | **260** | P | **P** | **18 28 06.0** | **-0.3** |
| **WRAB** | **Tennant Creek** | **44.60** | **260** | *d* iP | **P** | **18 28 05.6** | **-0.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,84nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.60** | **260** | P | **P** | **18 28 05.8** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 18 28 06.8 | |
| | comp=Z,52nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **18 28 06.1** | **-0.3** |
| | comp=Z,34nm,0.4s,baz=95,slow=7.1,SNR=933 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 29 37.2** | **+0.7** |
| | comp=Z,4.9nm,0.4s,baz=93,slow=3.5,SNR=7.5 | | | | | | |
| WRA | | | | ScP | **ScP** | **18 32 35.6** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=94,slow=4.6,SNR=2.2 | | | | | | |
| WRA | | | | S | **S** | **18 33 55.6** | **-5.7** |
| | comp=Z,0.9nm,0.7s,baz=99,slow=13,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **18 28 04.7** | **-1.8** |
| **AS31** | **Alice Springs** | **44.76** | **254** | P | **P** | **18 28 07.9** | **+0.3** |
| **ASAR** | **Alice Springs** | **44.76** | **254** | P | **P** | **18 28 08.0** | **+0.4** |
| | comp=Z,310nm,0.6s,baz=88,slow=8.5,SNR=9495 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 29 37.6** | **+0.5** |
| | comp=Z,11nm,0.6s,baz=108,slow=3.9,SNR=6.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 32 35.1** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=100,slow=4.8,SNR=3.3 | | | | | | |
| ASAR | | | | S | **S** | **18 33 59.1** | **-4.3** |
| | comp=Z,1.9nm,0.9s,baz=86,slow=16,SNR=11 | | | | | | |
| ASAR | | | | PKiKP | **PKiKP** | **18 36 32.8** | **-1.3** |
| | comp=Z,0.3nm,0.4s,baz=101,slow=1.3,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.76** | **254** | P | **P** | **18 28 07.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **44.76** | **254** | P | **P** | **18 28 07.8** | **+0.2** |
| **SMPI** | **Sarmi** | **44.96** | **286** | P | **P** | **18 28 09.7** | **+0.5** |
| | comp=Z,45nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **47.55** | **269** | P | **P** | **18 28 28.5** | **-0.2** |
| | baz=48,SNR=74 | | | | | | |
| **MTN** | **Manton Dam** | **48.79** | **269** | P | **P** | **18 28 37.2** | **-0.7** |
| | baz=49,SNR=94 | | | | | | |
| **MTN** | **Manton Dam** | **48.79** | **269** | P | **P** | **18 28 37.5** | **-0.5** |
| MTN | | | | IAmb | IAmb | 18 28 38.2 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **WRKA** | **Warakurna** | **49.81** | **252** | P | **P** | **18 28 45.8** | **+0.4** |
| | baz=50,SNR=853 | | | | | | |
| **FORT** | **Forrest** | **49.97** | **245** | P | **P** | **18 28 46.4** | **0.0** |
| | baz=50,SNR=73 | | | | | | |
| **FORT** | **Forrest** | **49.97** | **245** | P | **P** | **18 28 46.3** | **0.0** |
| **KNRA** | **Kununurra** | **50.48** | **264** | P | **P** | **18 28 50.1** | **-0.1** |
| | baz=51,SNR=186 | | | | | | |
| **KNRA** | **Kununurra** | **50.48** | **264** | P | **P** | **18 28 50.1** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **53.01** | **261** | P | **P** | **18 29 08.8** | **+0.4** |
| | comp=Z,8.1nm,0.3s,baz=110,slow=6.2,SNR=158 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.01** | **261** | P | **P** | **18 29 08.5** | **+0.1** |
| | baz=53,SNR=110 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.01** | **261** | P | **P** | **18 29 08.8** | **+0.4** |
| **MSAI** | **Masohi** | **53.55** | **279** | P | **P** | **18 29 12.4** | **+0.1** |
| | comp=Z,316nmcomp=Z,11nm,0.5s | | | | | | |
| **AAI** | **Ambon** | **54.13** | **279** | P | **P** | **18 29 16.2** | **-0.2** |
| | comp=Z,2μmcomp=Z,123nm,0.5s | | | | | | |
| **SOEI** | **Soe** | **56.07** | **270** | P | **P** | **18 29 31.4** | **+1.4** |
| SOEI | | | | IAmb | IAmb | 18 29 32.5 | |
| | comp=Z,122nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **56.07** | **270** | P | **P** | **18 29 31.6** | **+1.6** |
| | comp=Z,2μmcomp=Z,185nm,0.8s | | | | | | |
| **TNTI** | **Ternate** | **56.48** | **283** | P | **P** | **18 29 33.2** | **+0.5** |
| TNTI | | | | IAmb | IAmb | 18 29 33.9 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **TNTI** | **Ternate** | **56.48** | **283** | P | **P** | **18 29 33.2** | **+0.5** |
| | comp=Z,60nm,1.0s | | | | | | |
| **BATI** | **Baumata** | **56.53** | **270** | P | **P** | **18 29 34.8** | **+1.7** |
| | comp=Z,60nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **56.76** | **280** | P | **P** | **18 29 34.4** | **-0.2** |
| | comp=Z,922nmcomp=Z,85nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.88** | **255** | P | **P** | **18 29 42.0** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 18 29 42.9 | |
| | comp=Z,63nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.88** | **255** | P | **P** | **18 29 41.5** | **-0.7** |
| PSA00 | | | | IAmb | IAmb | 18 29 43.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **58.30** | **271** | P | **P** | **18 29 44.7** | **-0.4** |
| MMRI | | | | IAmb | IAmb | 18 29 45.5 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **58.40** | **249** | P | **P** | **18 29 45.2** | **-0.4** |
| | baz=58,SNR=74 | | | | | | |
| **KLBR** | **Kellerberrin** | **58.79** | **244** | P | **P** | **18 29 48.1** | **0.0** |
| | baz=59,SNR=96 | | | | | | |
| **JCJ** | **Chichijima** | **58.91** | **319** | P | **P** | **18 29 48.6** | **-0.2** |
| **RKGY** | **Rocky Gully** | **59.32** | **240** | P | **P** | **18 29 52.6** | **+1.0** |
| | baz=59,SNR=9.3 | | | | | | |
| **KMSI** | **Cibinong** | **59.55** | **282** | P | **P** | **18 29 53.4** | **0.0** |
| | comp=Z,1μmcomp=Z,100nm,0.8s | | | | | | |
| **BLDU** | **Ballidu** | **59.74** | **245** | P | **P** | **18 29 54.3** | **-0.1** |
| | baz=60,SNR=25 | | | | | | |
| **MUN** | **Mundaring** | **60.08** | **243** | P | **P** | **18 29 57.4** | **+0.7** |
| | baz=60,SNR=13 | | | | | | |
| **LUWI** | **Luwuk** | **60.12** | **279** | P | **P** | **18 29 56.2** | **-1.0** |
| LUWI | | | | IAmb | IAmb | 18 29 58.8 | |
| | comp=Z,125nm,1.3s | | | | | | |
| **LUWI** | **Luwuk** | **60.12** | **279** | P | **P** | **18 29 58.1** | **+0.9** |
| **VNDA** | **Vanda** | **60.35** | **185** | P | **P** | **18 29 59.1** | **+1.4** |
| | comp=Z,4.4nm,1.0s,baz=14,slow=10,SNR=1.8 | | | | | | |
| **VNDA** | **Vanda** | **60.35** | **185** | P | **P** | **18 29 59.9** | **+2.2** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,102nm,2.0s | | | | | | |
| **VNDA** | **Vanda** | **60.35** | **185** | P | **P** | **18 29 59.9** | **+2.2** |
| VNDA | | | | IAmb | IAmb | 18 30 28.2 | |
| | comp=Z,102nm,2.0s | | | | | | |
| **MORW** | **Morawa** | **60.44** | **246** | P | **P** | **18 29 59.0** | **-0.1** |
| | baz=60,SNR=39 | | | | | | |
| **MORW** | **Morawa** | **60.44** | **246** | P | **P** | **18 29 59.0** | **-0.1** |
| **GTOI** | **Gorontalo** | **60.48** | **281** | P | **P** | **18 30 00.5** | **+0.9** |
| | comp=Z,20nm,0.9s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **60.74** | **269** | P | **P** | **18 30 01.2** | **-0.1** |
| | comp=Z,37nm,1.2s | | | | | | |
| **APSI** | **Ampana** | **61.22** | **279** | P | **P** | **18 30 05.7** | **+1.3** |
| | comp=Z,737nmcomp=Z,80nm,0.6s | | | | | | |
| **BKSI** | **Bulukumba** | **61.25** | **274** | P | **P** | **18 30 04.4** | **-0.2** |
| | comp=Z,18nm,0.7s | | | | | | |
| **MRSI** | **Marisa** | **61.42** | **281** | P | **P** | **18 30 05.1** | **-0.7** |
| | comp=Z,425nmcomp=Z,44nm,0.8s | | | | | | |
| **BNSI** | **Bone** | **61.55** | **275** | P | **P** | **18 30 07.2** | **+0.6** |
| | comp=Z,6μmcomp=Z,44nm,1.1s | | | | | | |
| **SPSI** | **Sidrap Palu** | **62.00** | **275** | P | **P** | **18 30 08.9** | **-0.6** |
| | comp=Z,27nm,1.2s | | | | | | |
| **PLAI** | **Plampang** | **62.49** | **269** | P | **P** | **18 30 12.7** | **0.0** |
| | comp=Z,80nm,0.6s | | | | | | |
| **TOLI2** | **Tolitoli** | **62.73** | **281** | P | **P** | **18 30 14.3** | **0.0** |
| **GIRL** | **Giralia** | **62.87** | **253** | P | **P** | **18 30 16.3** | **+1.4** |
| | baz=63,SNR=18 | | | | | | |
| **GIRL** | **Giralia** | **62.87** | **253** | P | **P** | **18 30 15.9** | **+0.9** |
| **MPSI** | **Mapaga** | **63.29** | **280** | P | **P** | **18 30 17.8** | **0.0** |
| | comp=Z,590nmcomp=Z,57nm,0.8s | | | | | | |
| **JHJ2** | **Mitsune** | **64.62** | **322** | P | **P** | **18 30 26.1** | **+0.3** |
| **IGBI** | **Denpasar** | **65.00** | **269** | P | **P** | **18 30 28.8** | **+0.2** |
| | comp=Z,112nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **66.04** | **269** | P | **P** | **18 30 34.1** | **-1.0** |
| JAGI | | | | IAmb | IAmb | 18 30 34.8 | |
| | comp=Z,71nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **66.04** | **269** | P | **P** | **18 30 34.1** | **-1.0** |
| | comp=Z,997nmcomp=Z,104nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **66.33** | **284** | P | **P** | **18 30 38.8** | **+1.9** |
| MYLDM | | | | IAmb | IAmb | 18 30 40.9 | |
| | comp=Z,55nm,1.4s | | | | | | |
| **JYT** | **Yasato** | **66.64** | **324** | P | **P** | **18 30 38.8** | **+0.5** |
| JYT | | | | IAmb | IAmb | 18 30 39.5 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **GMJI** | **Gumukmas** | **66.76** | **269** | P | **P** | **18 30 39.1** | **-0.5** |
| | comp=Z,67nm,0.5s | | | | | | |
| **BLJI** | **Banyuglugur** | **66.77** | **269** | P | **P** | **18 30 39.6** | **0.0** |
| | comp=Z,1μmcomp=Z,67nm,0.7s | | | | | | |
| **JGF** | **Kuroka** | **67.81** | **322** | P | **P** | **18 30 45.9** | **+0.3** |
| JGF | | | | IAmb | IAmb | 18 32 59.8 | |
| | comp=Z,86nm,1.8s | | | | | | |
| **INU** | **Inuyama** | **67.83** | **322** | P | **P** | **18 30 44.9** | **-0.8** |
| INU | | | | IAmb | IAmb | 18 31 06.6 | |
| | comp=Z,86nm,2.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.98** | **323** | P | **P** | **18 30 46.1** | **-0.5** |
| | comp=Z,8.3nm,0.6s,baz=160,slow=5.6,SNR=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.98** | **323** | P | **P** | **18 30 45.9** | **-0.7** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.98** | **323** | P | **P** | **18 30 45.9** | **-0.7** |
| **MAJO** | **Matsushiro** | **67.98** | **323** | *ce*P | **P** | **18 30 46.4** | **-0.2** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,33nm,2.1s | | | | | | |
| **MAJO** | **Matsushiro** | **67.98** | **323** | P | **P** | **18 30 46.4** | **-0.2** |
| **MAT** | **Matsushiro** | **67.98** | **323** | P | **P** | **18 30 46.2** | **-0.4** |
| **MJB9** | **Matsu-Tunnel** | **67.99** | **323** | P | **P** | **18 30 46.5** | **-0.1** |
| **JOW** | **Kunigami** | **68.28** | **310** | P | **P** | **18 30 49.1** | **+0.6** |
| | comp=Z,9.4nm,0.5s,baz=139,slow=27,SNR=2.2 | | | | | | |
| **JOW** | **Kunigami** | **68.28** | **310** | P | **P** | **18 30 48.9** | **+0.4** |
| **PWJI** | **Pagerwojo** | **68.39** | **268** | P | **P** | **18 30 49.6** | **+0.1** |
| | comp=Z,47nm,0.5s | | | | | | |
| **JMN** | **Monobe** | **68.66** | **319** | P | **P** | **18 30 51.6** | **+0.8** |
| JMN | | | | IAmb | IAmb | 18 32 11.4 | |
| | comp=Z,55nm,1.3s | | | | | | |
| **KKM** | **Kota Kinabalu** | **68.76** | **284** | P | **P** | **18 30 52.0** | **+0.1** |
| **PCJI** | **Pacitan** | **68.94** | **268** | P | **P** | **18 30 53.5** | **+0.7** |
| | comp=Z,2μmcomp=Z,250nm,0.8s | | | | | | |
| **JSD** | **Sado** | **69.01** | **325** | P | **P** | **18 30 53.3** | **+0.6** |
| **JEM** | **Erimo** | **69.47** | **330** | P | P | 18 31 08.6 | +13 |
| JEM | | | | IAmb | IAmb | 18 32 22.5 | |
| | comp=Z,140nm,1.8s | | | | | | |
| **JSU** | **Suzuyama** | **69.49** | **315** | P | **P** | **18 30 55.6** | **-0.2** |
| **UGM** | **Wanagama** | **69.64** | **268** | P | **P** | **18 30 57.1** | **0.0** |
| **UGM** | **Wanagama** | **69.64** | **268

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MDJ | **Mudanjiang** | **78.26** | **325** | P | **P** | | **18 31 46.0** | **+1.0** |
| MDJ | | | | S | **S** | | **18 41 00.5** | **+7.2** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,150nm,5.3s | | | | | | | |
| **J01E** | **Myrtle Point** | **78.74** | **37** | P | **P** | | **18 31 46.5** | **-1.1** |
| J01E | | | | IAmb | IAmb | | 18 34 06.1 | |
| | comp=Z,206nm,1.9s | | | | | | | |
| **MPK** | **Martis Peak** | **78.85** | **42** | P | **P** | | **18 31 49.9** | **+1.3** |
| **MYKOM** | **Kota Tinggi** | **78.90** | **276** | P | **P** | | **18 31 50.0** | **+0.8** |
| MYKOM | | | | IAmb | IAmb | | 18 31 56.5 | |
| | comp=Z,95nm,1.7s | | | | | | | |
| **BEKR** | **Beckworth** | **78.96** | **42** | P | **P** | | **18 31 49.8** | **+0.8** |
| **GRNR** | **Gornyy** | **79.12** | **333** | ⇓*i* P | **P** | | **18 31 50.5** | **+1.1** |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=E,40nm,10.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.49** | **44** | P | **P** | | **18 31 53.3** | **+1.3** |
| | comp=E,1.6nm,0.7s,baz=223,slow=8.7,SNR=14 | | | | | | | |
| **CN2** | **Changchun** | **80.09** | **322** | *e*P | **P** | | **18 31 55.0** | **+0.3** |
| CN2 | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.9s | | | | | | | |
| **BNX** | **BinXian** | **80.17** | **325** | ⇑P | **P** | | **18 31 55.5** | **+0.5** |
| BNX | | | | pmax | pmax | | | |
| | comp=E,26nm,0.8s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=E,200nm,5.2s | | | | | | | |
| **KLR** | **Kul'dur** | **80.19** | **329** | ⇑*e*P | **P** | | **18 31 54.9** | **-0.2** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **MA2** | **Magadan** | **81.28** | **345** | P | **P** | | **18 32 00.1** | **-0.3** |
| | comp=Z,2.4nm,0.5s,baz=129,slow=4.9,SNR=11 | | | | | | | |
| **MA2** | **Magadan** | **81.28** | **345** | ⇑*e*P | **P** | | **18 32 00.2** | **-0.3** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **82.07** | **173** | P | **P** | | **18 32 04.8** | **+0.4** |
| **IPM** | **Ipoh** | **82.43** | **277** | P | **P** | | **18 32 08.2** | **+0.8** |
| IPM | | | | IAmb | IAmb | | 18 32 09.1 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **U15A** | **North Rim** | **82.58** | **48** | P | **P** | | **18 32 09.9** | **+2.0** |
| **HNS** | **HongShan** | **83.58** | **313** | ⇓P | **P** | | **18 32 13.5** | **+1.0** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **CAST** | **Castle Rocks** | **83.72** | **12** | P | **P** | | **18 32 11.6** | **-1.1** |
| **BJI** | **Beijing** | **83.85** | **315** | P | **P** | | **18 32 14.5** | **+0.7** |
| BJI | | | | pP | **pP** | | **18 34 10.5** | **-7.1** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **83.86** | **275** | IAmb | IAmb | | 18 32 15.5 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **83.87** | **347** | P | **P** | | **18 32 13.5** | **+0.2** |
| | comp=Z,6.5nm,0.5s,baz=148,slow=5.7,SNR=71 | | | | | | | |
| **SEY** | **Seymchan** | **83.87** | **347** | ⇓*e*P | **P** | | **18 32 13.3** | **0.0** |
| **LYN** | **LuoYang** | **83.88** | **309** | ⇓P | **P** | | **18 32 15.3** | **+1.2** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,40nm,3.9s | | | | | | | |
| **PSI** | **Prapat** | **83.89** | **275** | P | **P** | | **18 32 14.2** | **-0.5** |
| | comp=Z,27nm,0.8s,baz=84,slow=3.2,SNR=21 | | | | | | | |
| **ENH** | **Enshi** | **84.32** | **304** | IAmb | IAmb | | 18 32 18.5 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **GSI** | **Gunungsitoli** | **84.70** | **273** | P | **P** | | **18 32 19.9** | **+1.3** |
| GSI | | | | IAmb | IAmb | | 18 32 21.0 | |
| | comp=Z,53nm,1.0s | | | | | | | |
| **GSI** | **Gunungsitoli** | **84.70** | **273** | P | **P** | | **18 32 20.1** | **+1.5** |
| | comp=Z,69nm,0.9s | | | | | | | |
| **GYA** | **Guiyang** | **85.08** | **300** | ⇑P | **P** | | **18 32 21.5** | **+1.2** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **ZEA** | **Zeya** | **85.27** | **331** | *e*P | **P** | | **18 32 21.3** | **+0.9** |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **85.82** | **319** | *e*P | **P** | | **18 32 24.3** | **+0.9** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,57nm,4.3s | | | | | | | |
| **IL31** | | **85.98** | **13** | P | **P** | | **18 32 23.2** | **-0.2** |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | **P** | | **18 32 23.3** | **-0.2** |
| | comp=Z,1.2nm,0.4s,baz=221,slow=5.1,SNR=56 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **86.05** | **58** | P | **P** | | **18 32 26.8** | **+2.0** |
| TX31 | | | | IAmb | IAmb | | 18 32 29.2 | |
| | comp=Z,36nm,1.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | **P** | | **18 32 27.2** | **+2.4** |
| | comp=Z,1.5nm,0.6s,baz=214,slow=5.6,SNR=25 | | | | | | | |
| **XAN** | **Xi'an** | **86.31** | **307** | P | **P** | | **18 32 27.3** | **+1.4** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,190nm,5.3s | | | | | | | |
| **BILL** | **Bilibino** | **86.52** | **354** | *de*P | **P** | | **18 32 25.8** | **-0.2** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,2.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.34** | **314** | *e*P | **P** | | **18 32 33.5** | **+2.9** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,62nm,7.2s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.42** | **43** | P | **P** | | **18 32 32.4** | **+1.2** |
| | comp=Z,1.2nm,0.6s,baz=211,slow=3.4,SNR=14 | | | | | | | |
| **KMI** | **Kunming** | **87.87** | **297** | ⇓P | **P** | | **18 32 35.3** | **+1.6** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **BTO** | **Baotou** | **88.28** | **314** | *e*P | **P** | | **18 32 37.5** | **+2.4** |
| **CMAR** | **Chiang Mai Arr** | **88.91** | **290** | P | **P** | | **18 32 39.9** | **+1.5** |
| | comp=Z,6.9nm,0.9s,baz=108,slow=2.8,SNR=55 | | | | | | | |
| **SYO** | **Syowa Base** | **89.06** | **193** | ⇑*i* P | **P** | | **18 32 39.0** | **+0.9** |
| **CD2** | **Chengdu** | **89.12** | **303** | P | **P** | | **18 32 41.5** | **+2.4** |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| **PZH** | **PanZhiHua** | **89.20** | **298** | P | **P** | | **18 32 40.8** | **+1.1** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,130nm,4.9s | | | | | | | |
| **YAK** | **Yakutsk** | **89.66** | **338** | ⇑*e*P | **P** | | **18 32 41.2** | **+0.4** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **179** | P | **P** | | **18 32 45.4** | **+0.6** |
| **SNAA** | **Sanae** | **90.50** | **179** | ⇓*e*P | **P** | | **18 32 45.2** | **+0.4** |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.65** | **176** | P | **P** | | **18 32 46.7** | **+1.3** |
| **LZH** | **Lanzhou** | **90.95** | **308** | *e*P | **P** | | **18 32 49.0** | **+1.4** |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.09** | **177** | P | **P** | | **18 32 48.2** | **+0.7** |
| | baz=195,slow=3.9 | | | | | | | |
| **PLCA** | **Paso Flores** | **91.27** | **134** | P | **P** | | **18 32 50.1** | **+1.1** |
| | comp=Z,1.9nm,1.0s,baz=150,slow=4.4,SNR=1.7 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.31** | **177** | P | **P** | | **18 32 49.8** | **+1.3** |
| **INK** | **Inuvik** | **91.97** | **15** | P | **P** | | **18 32 50.4** | **-1.0** |
| | comp=Z,1.4nm,0.6s,baz=240,slow=3.2,SNR=7.5 | | | | | | | |
| **INK** | **Inuvik** | **91.97** | **15** | IAmb | IAmb | | 18 36 10.8 | |
| | comp=Z,22nm,2.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **93.22** | **319** | ⇓*e*P | **P** | | **18 32 57.9** | **+0.1** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **93.22** | **319** | P | **P** | | **18 32 57.9** | **+0.1** |
| **SONM** | **Songino Array** | **93.62** | **319** | P | **P** | | **18 32 59.6** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=132,slow=4.3,SNR=10 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.42** | **25** | P | **P** | | **18 33 02.9** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=239,slow=4.5,SNR=8.9 | | | | | | | |
| YKA | | | | PKKPbc | **PKKPdf** | | **18 49 58.3** | **-2.1** |
| | comp=Z,0.2nm,0.4s,baz=48,slow=2.1,SNR=7.6 | | | | | | | |
| **GTA** | **Gaotai** | **95.09** | **310** | *e*P | **P** | | **18 33 06.5** | **+0.1** |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **TIXI** | **Tiksi** | **96.25** | **345** | ⇓*e*P | **P** | | **18 33 09.8** | **-0.8** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,2.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **108.31** | **322** | PKiKP | **PKiKP** | | **18 38 06.6** | **-0.5** |
| | comp=Z,1.6nm,0.6s,baz=150,slow=0.5,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.20** | **314** | Pdiff | **Pdif** | | **18 34 10.6** | **+1.7** |
| | comp=Z,0.2nm,0.5s,baz=73,slow=5.5,SNR=5.0 | | | | | | | |
| MKAR | | | | PKiKP | **PKiKP** | | **18 38 08.5** | **-0.6** |
| | comp=Z,2.0nm,0.5s,baz=166,slow=0.6,SNR=55 | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPbc** | | **18 49 18.0** | **-0.1** |
| | comp=Z,0.3nm,0.7s,baz=289,slow=3.7,SNR=4.4 | | | | | | | |
| **KURK** | **Kurchatov** | **111.89** | **318** | *c i* PKIKP | **PKiKP** | | **18 38 13.5** | **-0.5** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,2.5s | | | | | | | |
| **KSH** | **Kashi** | **113.13** | **306** | PKP | **PKiKP** | | **18 38 18.5** | **+1.5** |
| **AAK** | **Ala-Archa** | **114.44** | **309** | ⇑*i* PKIKP | PKPdf | | 18 38 19.4 | 0.0 |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.92** | **321** | PKP | **PKPdf** | | **18 38 23.5** | **-0.1** |
| | comp=Z,3.0nm,0.4s,baz=132,slow=15,SNR=60 | | | | | | | |
| **BRVK** | **Borovoye** | **116.98** | **321** | *d i* PKIKP | **PKPdf** | | **18 38 23.4** | **-0.4** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,2.5s | | | | | | | |
| **BRVK** | **Borovoye** | **116.98** | **321** | PKPdf | **PKPdf** | | **18 38 23.2** | **-0.6** |
| **GAR** | **Garm** | **117.49** | **305** | PKPdf | **PKPdf** | | **18 38 25.3** | **-0.1** |
| **ARU** | **Arti** | **122.93** | **326** | *i* PKIKP | **PKPdf** | | **18 38 35.2** | **+0.1** |
| ARU | | | | | | | 18 40 18.9 | |
| ARU | | | | | | | 18 44 55.4 | |
| **ARU** | **Arti** | **122.93** | **326** | PKPdf | **PKPdf** | | **18 38 34.7** | **-0.4** |
| **AKTO** | **Aktyubinsk** | **124.94** | **319** | PKP | **PKiKP** | | **18 38 39.5** | **0.0** |
| | comp=Z,2.7nm,0.7s,baz=95,slow=2.9,SNR=13 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.41** | **350** | PKP | **PKPdf** | | **18 38 41.6** | **+0.2** |
| | comp=Z,5.4nm,0.8s,baz=353,slow=0.8,SNR=19 | | | | | | | |
| **KIRV** | **Kirov** | **126.61** | **331** | *d i* PKIKP | **PKiKP** | | **18 38 42.8** | **+0.2** |
| **GEYT** | **Alibeck** | **127.09** | **304** | PKP | **PKPdf** | | **18 38 43.9** | **+0.2** |
| | comp=Z,2.4nm,0.5s,baz=65,slow=6.8,SNR=5.0 | | | | | | | |
| **BOSA** | **Boshof** | **128.32** | **207** | PKP | **PKPdf** | | **18 38 46.3** | **-0.3** |
| | comp=Z,5.4nm,1.0s,baz=75,slow=4.6,SNR=4.0 | | | | | | | |
| **KLMR** | **Klimovskoe** | **129.44** | **337** | *e*PKIKP | **PKPdf** | | **18 38 47.2** | **-0.2** |
| KLMR | | | | *e* | | | 18 41 04.1 | |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KLMR** | **Klimovskoe** | **129.44** | **337** | *e*PKPdf | **PKPdf** | | **18 38 47.2** | **-0.2** |
| KLMR | | | | AMP | | | 18 38 48.4 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| KLMR | | | | *e*PP | **PP** | | **18 41 04.2** | **-1.8** |
| **BELG** | **Belogornoye** | **130.36** | **325** | *ce*PKIKP | **PKiKP** | | **18 38 50.1** | **-0.2** |
| **FINES** | **FINESS Array B** | **133.28** | **344** | PKhKP | PKPpre | | 18 38 40.6 | |
| | comp=Z,2.1nm,0.8s,baz=342,slow=3.0,SNR=4.7 | | | | | | | |
| FINES | | | | PKP | **PKPdf** | | **18 38 54.2** | **-0.5** |
| | comp=Z,2.8nm,0.7s,baz=60,slow=2.5,SNR=9.1 | | | | | | | |
| FINES | | | | SKPbc | **SKPab** | | **18 41 30.9** | **-1.2** |
| | comp=Z,1.3nm,0.7s,baz=106,slow=3.0,SNR=4.6 | | | | | | | |
| **OBN** | **Obninsk** | **134.38** | **333** | *e*PKIKP | **PKPdf** | | **18 38 56.3** | **-0.5** |
| OBN | | | | *e* | | | 18 41 35.9 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **VORR** | **Voronezh** | **135.21** | **327** | *e*PKIKP | **PKPdf** | | **18 38 58.6** | **+0.1** |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **136.47** | **353** | PKP | PKPpre | | 18 38 52.7 | |
| | comp=Z,0.6nm,0.7s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **136.47** | **353** | PKhKP | PKPpre | | 18 38 49.1 | |
| | comp=Z,0.5nm,0.6s,baz=15,slow=2.4,SNR=5.2 | | | | | | | |
| NOA | | | | PKP | **PKPdf** | | **18 39 00.8** | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=13,slow=4.0,SNR=6.4 | | | | | | | |
| **NEY** | **Neytrino** | **137.18** | **315** | ⇓*i* PKIKP | **PKiKP** | | **18 39 04.4** | **-0.3** |
| **RAYN** | **Ar Rayn** | **138.69** | **285** | ⇓PKIKP | **PKiKP** | | **18 39 08.7** | **+0.5** |
| **KMBO** | **Kilima Mbogo** | **140.09** | **245** | PKhKP | PKPpre | | 18 39 03.5 | |
| | comp=Z,1.3nm,0.7s,baz=66,slow=6.9,SNR=5.0 | | | | | | | |
| KMBO | | | | PKP | **PKiKP** | | **18 39 11.2** | **-0.4** |
| | comp=Z,1.6nm,0.6s,baz=129,slow=1.8,SNR=3.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.64** | **332** | PKhKP | PKPpre | | 18 39 02.6 | |
| | comp=Z,0.9nm,0.3s,baz=45,slow=4.2,SNR=14 | | | | | | | |
| AKASG | | | | PKP | **PKiKP** | | **18 39 10.4** | **-0.9** |
| | comp=Z,2.5nm,0.4s,baz=39,slow=3.2,SNR=16 | | | | | | | |
| **SORM** | **Soroca** | **142.87** | **330** | ⇑P | **PKPdf** | | **18 39 10.1** | **-2.5** |
| **MILM** | **Milestii Mici** | **143.49** | **328** | ⇑P | PKPbc | | 18 39 12.5 | +0.1 |
| **MILM** | **Milestii Mici** | **143.49** | **328** | *e*PKP | PKPab | | 18 39 12.0 | -0.3 |
| | comp=Z,25nm,0.8s | | | | | | | |
| **MILM** | **Milestii Mici** | **143.49** | **328** | ⇑PKHKP | PKPbc | | 18 39 12.5 | 0.0 |
| **LVV** | **L'vov** | **143.49** | **335** | *e*PKHKP | PKPpre | | 18 39 10.4 | |
| **BZK** | **Bozkurt** | **143.50** | **318** | ⇑P | **PKPdf** | | **18 39 13.3** | **-0.6** |
| **BZK** | **Bozkurt** | **143.50** | **318** | PKPdf | PKPbc | | 18 39 13.0 | +0.4 |
| **BSEG** | **Bad Segeberg** | **143.50** | **351** | *e*PKPbc | **PKPdf** | | **18 39 12.9** | **-0.5** |
| | baz=15,slow=2.8 | | | | | | | |
| **HLG** | **Helgoland** | **143.56** | **354** | *e*PKPbc | **PKPdf** | | **18 39 13.0** | **-0.5** |
| | baz=15,slow=2.8 | | | | | | | |
| **LODK** | **Lodwar** | **143.89** | **250** | PKPdf | **PKPdf** | | **18 39 15.3** | **-0.2** |
| **LEOM** | **Leova** | **144.08** | **328** | ⇑P | **PKPdf** | | **18 39 15.2** | **+0.5** |
| **LEOM** | **Leova** | **144.08** | **328** | ⇑PKIKP | **PKPdf** | | **18 39 15.2** | **+0.5** |
| **VASR** | **Vaslui** | **144.19** | **329** | ⇑P | **PKPab** | | **18 39 15.5** | **+0.5** |
| **RUE** | **Ruedersdorf** | **144.28** | **347** | *e*PKPbc | **PKPab** | | **18 39 15.4** | **+0.3** |
| | baz=15,slow=2.8 | | | | | | | |
| **PRAR** | **RASCA** | **144.42** | **331** | ⇑P | **PKPab** | | **18 39 16.2** | **+0.3** |
| **VLDR** | **Vladesti** | **144.59** | **327** | ⇑P | **PKPab** | | **18 39 17.0** | **+0.5** |
| **TLCR** | | **144.65** | **326** | ⇑P | **PKPab** | | **18 39 17.0** | **+0.2** |
| **VARL** | **Varlezi** | **144.67** | **328** | ⇑P | **PKPab** | | **18 39 17.5** | **+0.6** |
| **BURAR** | **Bucovina Array** | **144.69** | **332** | ⇓P | **PKPab** | | **18 39 17.9** | **+0.8** |
| **BURAR** | **Bucovina Array** | **144.69** | **332** | ⇓PKIKP | **PKPab** | | **18 39 17.9** | **+0.8** |
| **OJC** | **Ojcow** | **144.70** | **340** | *e*PKP | **PKPab** | | **18 39 16.7** | **-0.2** |
| **SCTR** | **Scanteiesti** | **144.75** | **327** | ⇓P | **PKPab** | | **18 39 17.6** | **+0.4** |
| **TATR** | **Tatarca** | **144.77** | **327** | ⇑P | **PKPab** | | **18 39 17.7** | **+0.5** |
| **GHRR** | | **144.78** | **328** | ⇓P | **PKPab** | | **18 39 18.1** | **+0.8** |
| **TESR** | **Tescani** | **144.84** | **329** | ⇓P | **PKPab** | | **18 39 17.3** | **-0.2** |
| **BR131** | **Keskin Array S** | **144.85** | **315** | *d i* PKIKP | PKPbc | | 18 39 17.2 | +0.1 |
| **BRTR** | **Keskin Array B** | **144.85** | **315** | PKP | PKPbc | | 18 39 17.2 | +0.1 |
| | comp=Z,12nm,0.8s,baz=125,slow=4.4,SNR=66 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.85** | **315** | PKHKP | **PKPdf** | | **18 39 15.6** | **-0.9** |
| **BRTR** | **Keskin Array B** | **144.85** | **315** | PKPdf | **PKPdf** | | **18 39 15.6** | **-0.9** |
| **JURR** | **Jurilovca** | **144.89** | **325** | ⇑P | **PKPab** | | **18 39 17.7** | **-0.1** |
| **FLTG** | **Flechtingen** | **144.91** | **350** | *e*PKPbc | PKPbc | | 18 39 17.0 | +0.4 |
| | baz=15,slow=2.8 | | | | | | | |
| **SLCR** | **Slobozia Conac** | **144.92** | **327** | ⇑P | **PKiKP** | | **18 39 19.2** | **-1.1** |
| **NRDL** | **Niedersach Rie** | **144.94** | **351** | *e*PKPbc | **PKPab** | | **18 39 17.7** | **+0.1** |
| | baz=15,slow=2.8 | | | | | | | |
| **IZVR** | **Izvoarele** | **144.96** | **327** | ⇑P | **PKPab** | | **18 39 18.0** | **0.0** |
| **CFR** | **Carcaliu** | **145.01** | **327** | ⇑P | **PKPbc** | | **18 39 17.3** | **+0.1** |
| **CFR** | **Carcaliu** | **145.01** | **327** | ⇑PKIKP | **PKPbc** | | **18 39 17.3** | **+0.1** |
| **PANC** | **Panciu** | **145.04** | **328** | ⇑P | **PKPab** | | **18 39 18.0** | **-0.3** |
| **TPGR** | **Topolog** | **145.08** | **326** | ⇓P | **PKPab** | | **18 39 18.3** | **-0.2** |
| **UZH** | **Uzhgorod** | **145.12** | **336** | *e*PKIKP | **PKPbc** | | **18 39 17.4** | **0.0** |
| **ODBI** | **Odobesti** | **145.16** | **328** | ⇑P | **PKPab** | | **18 39 19.5** | **+0.7** |
| **KSP** | **Ksiaz** | **145.20** | **344** | *e*PKP | **PKPab** | | **18 39 18.7** | **-0.1** |
| **NIE** | **Niedzica** | **145.21** | **338** | *e*PKP | **PKPab** | | **18 39 19.6** | **+0.7** |
| **CRVS** | **Cervenica-Dubn** | **145.22** | **337** | *e*PKIKP | **PKPab** | | **18 39 18.7** | **-0.3** |
| **CRVS** | **Cervenica-Dubn** | **145.22** | **337** | *e*PKP | **PKPab** | | **18 39 18.7** | **-0.3** |
| **VRI** | **Vrincioaia** | **145.26** | **329** | ⇑P | **PKPab** | | **18 39 18.6** | **-0.6** |
| **VRI** | **Vrincioaia** | **145.26** | **329** | ⇑PKIKP | **PKPab** | | **18 39 18.6** | **-0.6** |
| **PLOR** | **Plostina** | **145.31** | **329** | ⇑P | **PKPab** | | **18 39 18.9** | **-0.5** |
| **PLOR** | **Plostina** | **145.31** | **329** | ⇑PKIKP | **PKPab** | | **18 39 18.9** | **-0.5** |
| **TIRR** | **Tirgusor** | **145.34** | **325** | ⇑P | **PKPab** | | **18 39 19.1** | **-0.4** |
| **TIRR** | **Tirgusor** | **145.34** | **325** | ⇑PKIKP | **PKPab** | | **18 39 19.1** | **-0.4** |
| **ANTO** | **Ankara** | **145.34** | **315** | PKIKP | **PKPdf** | | **18 39 17.8** | **+0.6** |
| **ANTO** | **Ankara** | **145.34** | **315** | PKPdf | **PKPdf** | | **18 39 17.8** | **+0.6** |
| **BMR** | **Baia Mare** | **145.40** | **334** | ⇑P | **PKPab** | | **18 39 19.1** | **-0.6** |
| **BMR** | **Baia Mare** | **145.40** | **334** | ⇑PKIKP | **PKPab** | | **18 39 19.1** | **-0.6** |
| **IBBN** | **Ibbenburen** | **145.43** | **353** | *e*PKPbc | **PKPab** | | **18 39 19.2** | **-0.4** |
| | baz=15,slow=2.8 | | | | | | | |
| **TRPA** | **Tarpa** | **145.43** | **335** | ⇓P | **PKPbc** | | **18 39 18.9** | **+0.5** |
| **HARR** | **Harsova** | **145.45** | **326** | ⇓P | **PKPab** | | **18 39 19.4** | **-0.6** |
| **HARR** | **Harsova** | **145.45** | **326** | ⇓PKIKP | **PKPab** | | **18 39 19.4** | **-0.6** |
| **OSTC** | **Ostas** | **145.48** | **343** | *e*PKP | **PKPbc** | | **18 39 18.0** | **-0.4** |
| **BISRR** | **Bisoca** | **145.49** | **328** | ⇓P | **PKPab** | | **18 39 20.2** | **0.0** |
| **CHVC** | **Chvalec** | **145.49** | **344** | *e*PKP | **PKPbc** | | **18 39 19.2** | **+0.7** |
| **CLZ** | **Clausthal** | **145.53** | **350** | *e*PKPbc | **PKPab** | | **18 39 19.6** | **-0.5** |
| | baz=15,slow=2.8 | | | | | | | |
| **OZUR** | | **145.55** | **330** | ⇑P | **PKPab** | | **18 39 20.1** | **-0.3** |
| **CLL** | **Collm** | **145.55** | **347** | ⇓*i* PKIKP | **PKPbc** | | **18 39 19.2** | **+0.6** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **145.55** | **347** | ⇓*i* PKPbc | **PKPbc** | | **18 39 19.2** | **+0.6** |
| | comp=Z,27nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **145.55** | **347** | *e*PKPbc | **PKPbc** | | **18 39 19.2** | **+0.6** |
| | baz=15,slow=2.8 | | | | | | | |
| **UPC** | **Upice** | **145.58** | **344** | *e*PKIKP | **PKPab** | | **18 39 19.7** | **-0.6** |
| **UPC** | **Upice** | **145.58** | **344** | *e*PKP | **PKPab** | | **18 39 19.7** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **145.64** | **343** | *e*PKIKP | **PKPab** | | **18 39 20.1** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **145.64** | **343** | *e*PKP | **PKPab** | | **18 39 20.1** | **-0.5** |
| **MANR** | **Mangalia** | **145.66** | **324** | ⇓P | **PKPab** | | **18 39 20.2** | **-0.7** |
| **BRG** | **Berggiesshubel** | **145.75** | **346** | *e*PKP | **PKPbc** | | **18 39 19.9** | **+0.7** |
| BRG | | | | Amp | | | 18 39 22.1 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| BRG | | | | *ex* | x | | 18 39 27.5 | |
| BRG | | | | Amp | | | 18 39 29.2 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.75** | **346** | *e*PKIKP | **PKPbc** | | **18 39 19.9** | **+0.7** |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.75** | **346** | *e*PKPbc | **PKPab** | | **18 39 20.3** | **-0.7** |
| | baz=15,slow=2.8 | | | | | | | |
| **KRLC** | **Kraliky** | **145.75** | **343** | *e*PKIKP | **PKPbc** | | **18 39 20.1** | **+0.8** |
| **KRLC** | **Kraliky** | **145.75** | **343** | *e*PKP | **PKPbc** | | **18 39 20.1** | **+0.8** |
| **NEHR** | **Nehoiu** | **145.78** | **328** | ⇓P | **PKPab** | | **18 39 20.5** | **-0.8** |
| **MORC** | **Moravsky Berou** | **145.80** | **342** | ⇑P | **PKPab** | | **18 39 20.5** | **-0.7** |
| **MORC** | **Moravsky Berou** | **145.80** | **342** | *e*PKP | **PKPbc** | | **18 39 20.2** | **+0.8** |
| **DOPR** | **Dopca** | **145.84** | **330** | ⇑P | **PKPab** | | **18 39 20.8** | **-0.7** |
| **FBE** | **Freiberg** | **145.84** | **347** | *e*PKPbc | **PKPab** | | **18 39 20.8** | **-0.4** |
| | baz=15,slow=2.8 | | | | | | | |
| **ISR** | **Istrita** | **145.87** | **328** | ⇑P | **PKPab** | | **18 39 20.8** | **-0.9** |
| **ISR** | **Istrita** | **145.87** | **328** | ⇑PKIKP | **PKPab** | | **18 39 20.8** | **-0.9** |
| **GTTG** | **Gottingen** | **145.88** | **351** | *e*PKPbc | **PKPab** | | **18 39 20.5** | **-0.9** |
| | baz=15,slow=2.8 | | | | | | | |
| **MBAR** | **Mbarara** | **145.88** | **240** | *c i* PKIKP | **PKPab** | | **18 39 22.4** | **-0.4** |
| MBAR | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **NEUB** | **Neuenburg** | **145.89** | **349** | *e*PKPbc | **PKPbc** | | **18 39 20.0** | **+0.5** |
| | baz=15,slow=2.8 | | | | | | | |
| **ICOR** | **Ion Corvin** | **145.90** | **325** | ⇑P | **PKPbc** | | **18 39 20.2** | **+0.4** |
| **MLR** | **Muntele Rosu** | **145.91** | **329** | ⇑P | **PKPbc** | | **18 39 19.2** | **-0.8** |
| **MLR** | **Muntele Rosu** | **145.91** | **329** | ⇑PKIKP | **PKPbc** | | **18 39 19.2** | **-0.8** |
| **PVCC** | **Panska Ves** | **145.93** | **345** | *e*PKIKP | **PKPbc** | | **18 39 20.0** | **+0.3** |
| **PVCC** | **Panska Ves** | **145.93** | **345** | *e*PKP | **PKPbc** | | **18 39 20.0** | **+0.3** |
| **PSN** | **Preselentsi** | **145.97** | **325** | P | **PKPbc** | | **18 39 20.9** | **+0.9** |
| **MESR** | **Meseseni** | **146.04** | **334** | ⇓P | **PKPab** | | **18 39 21.2** | **-1.0** |
| **MDUB** | **Mudurnu** | **146.08** | **318** | PKPdf | **PKPdf** | | **18 39 16.7** | **-1.7** |
| MDUB | | | | | **PKPbc** | | **18 39 21.0** | **+0.4** |
| **CJR** | **Cluj-Napoca** | **146.10** | **332** | ⇑P | **PKPbc** | | **18 39 21.2** | **+0.8** |
| **CJR** | **Cluj-Napoca** | **146.10** | **332** | ⇑PKIKP | **PKPbc** | | **18 39 21.2** | **+0.8** |
| **SECR** | | **146.17** | **328** | ⇑P | **PKPbc** | | **18 39 21.1** | **+0.5** |
| **LEHL** | **Lehliu** | **146.18** | **327** | ⇑P | **PKPab** | | **18 39 21.7** | **-1.1** |
| **LTVH** | **Ltavrtes, Hu** | **146.29** | **335** | ⇑P | **PKiKP** | | **18 39 22.4** | **-0.6** |
| **SULR** | | **146.33** | **328** | ⇓P | **PKPbc** | | **18 39 22.0** | **+1.0** |
| **VOIR** | | **146.38** | **330** | ⇓P | **PKPbc** | | **18 39 21.7** | **+0.5** |
| **VOIR** | | **146.38** | **330** | ⇓PKIKP | **PKPbc** | | **18 39 21.7** | **+0.5** |
| **DRGR** | | **146.42** | **333** | ⇓P | **PKPbc** | | **18 39 21.8** | **+0.5** |
| **DRGR** | | **146

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RICI** | **Ricice** | **151.39** | **336** | P | **PKPbc** | **18 39 33.1** | **-0.3** |
| **MORI** | **Morici** | **151.60** | **338** | P | **PKPbc** | **18 39 33.6** | **-0.2** |
| **STON** | **Ston** | **151.69** | **335** | P | **PKPbc** | **18 39 32.6** | **-1.5** |
| **AGG** | **Agios Georgios** | **152.36** | **324** | PKIKP | **PKPbc** | **18 39 35.0** | **-0.8** |
| **AGG** | **Agios Georgios** | **152.36** | **324** | | **PKPbc** | **18 39 35.0** | **-0.8** |
| **IDI** | **Anoyia** | **153.09** | **314** | ⇓P | **PKiKP** | **18 39 37.9** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **175.17** | **181** | PKP | **PKPdf** | **18 39 48.8** | **-0.5** |
| | comp=Z,2.0nm,0.9s,baz=341,slow=1.8,SNR=10 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **18 41 29.5** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=154,slow=3.7,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.17** | **181** | | **PKPdf** | **18 39 48.5** | **-0.8** |
| TORD | | | | PKPab | **PKPab** | **18 41 27.4** | **-1.7** |

*ANF **27** 18:45:27.4±0.6,32°.69N×115°.71W,h10km,ML2.8/13 Error ellipse: s-maj=5.4km s-min=3.4km az=170.0*
*NEIC **27** 18:45:28.9±2.4,32°.68N±0°.02×115°.78W±0°.02,h17km±5km, Error ellipse: s-maj=3.4km s-min=2.4km az=188.0*
*IASPEI **27** 18:45:28.5±0.8,32°.71N±0°.02×115°.76W±0°.01,h16km±5km, Error ellipse: s-maj=2.9km s-min=1.9km az=6.8,GT5 selection from ISC bulletin GT5 identified by Bondr and McLaughlin (2009) selection criteria Bondr and McLaughlin, A new ground truth data set for seismic studies, Seism. Res. Let., 80, 465-472, 2009*
*PAS **27** 18:45:29.3±2.5,32°.70N±0°.02×115°.75W±0°.02,h10km±3km, ML3.0/95,ML3.0/26(NEIC), Error ellipse: s-maj=2.7km s-min=2.1km az=186.0*
*ECX **27** 18:45:29.9±0.6,32°.69N×115°.77W,h4km±1km,MD2.8, ML3.0,Fault plane solution: NP1:φs61.00000°, δ44.00000°, λ-82.00000°.*
*MEX **27** 18:45:30.2±0.6,32°.67N×115°.73W,h49km±86km,MD3.1*

**ISC 27 18:45:29.2±0.8,32°69N±0°02×115°75W±0°01,h18km±4km, n96,σ1s54/152,18C-11D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **SGL** | **Mount Signal** | **0.04** | **158** | *i*P | | **Pg** | **18 45 31.1** | **-1.4** |
| SGL | | | | *i* S | | **Sg** | **18 45 32.5** | **-2.0** |
| **WESC** | **Westside Schoo** | **0.07** | **9** | ⇑*i*P | | **Pg** | **18 45 31.5** | **-1.1** |
| **CEA0** | **Mexicali** | **0.07** | **121** | ⇑*i*P | | **Pg** | **18 45 31.5** | **-1.1** |
| CEA0 | | | | *e*S | | **Sg** | **18 45 33.4** | **-1.5** |
| **YUH** | **Yuha Desert** | **0.16** | **254** | | | **Pg** | **18 45 32.3** | **-1.2** |
| YUH | | | | Sg | | **Sg** | **18 45 35.1** | **-1.4** |
| YUH | | | | IAML | | | 18 45 35.3 | |
| | comp=N,4μm,0.3s | | | | | | | |
| YUH | | | | IAML | | | 18 45 35.4 | |
| | comp=E,4μm,0.1s | | | | | | | |
| **YUH2** | **Yuha Desert** | **0.16** | **254** | ⇓*i*P | | **Pg** | **18 45 32.6** | **-0.8** |
| YUH2 | | | | *e*S | | **Sg** | **18 45 34.8** | **-1.6** |
| **ZC01** | **Zona Comercial** | **0.16** | **112** | ⇑*i*P | | **Pg** | **18 45 33.2** | **-0.3** |
| **COK2** | **Cook Ranch 2** | **0.16** | **5** | ⇑*i*P | | **Pg** | **18 45 33.0** | **-0.5** |
| COK2 | | | | *e*S | | **Sg** | **18 45 36.5** | **0.0** |
| **ICBC** | **Inst. de Cultu** | **0.23** | **96** | ⇓*e*P | | **Pg** | **18 45 34.6** | **0.0** |
| ICBC | | | | *e*S | | **Sg** | **18 45 38.9** | **+0.7** |
| **POTX** | **Potabilizadora** | **0.23** | **112** | ⇑*e*P | | **Pg** | **18 45 34.6** | **0.0** |
| **SWSC** | **Sam W. Stewart** | **0.26** | **350** | ⇑*i*P | | **Pg** | **18 45 34.3** | **-0.7** |
| SWSC | | | | *e*S | | **Sg** | **18 45 38.1** | **-1.0** |
| **SWSC** | **Sam W. Stewart** | **0.26** | **350** | P | | **Pg** | **18 45 34.3** | **-0.7** |
| | baz=169,SNR=248 | | | | | | | |
| SWSC | | | | S | | **Sg** | **18 45 38.2** | **-0.8** |
| | baz=169 | | | | | | | |
| **UABX** | **UABC, Campus M** | **0.26** | **103** | | | **Pg** | **18 45 35.3** | **+0.2** |
| UABX | | | | Sg | | **Sg** | **18 45 40.3** | **+1.2** |
| UABX | | | | IAML | | | 18 45 40.7 | |
| | comp=E,6μm,0.3s | | | | | | | |
| **UABX** | **UABC, Campus M** | **0.26** | **103** | ⇑*i*P | | **Pg** | **18 45 35.3** | **+0.2** |
| **CRR** | **Carrizo Plain** | **0.27** | **316** | ⇑*i*P | | **Pg** | **18 45 34.7** | **-0.6** |
| CRR | | | | *e*S | | **Sg** | **18 45 38.8** | **-0.6** |
| **SUP** | **Superstition M** | **0.27** | **346** | | | **Pg** | **18 45 34.7** | **-0.6** |
| SUP | | | | | | **Sg** | **18 45 38.6** | **-0.8** |
| **DREC** | **Desert Rsrch C** | **0.28** | **65** | ⇓*i*P | | **Pg** | **18 45 35.5** | **+0.2** |
| **RMX** | **La Rumorosa** | **0.29** | **253** | | | **Pg** | **18 45 34.9** | **-0.8** |
| RMX | | | | Sg | | **Sg** | **18 45 38.6** | **-1.6** |
| RMX | | | | IAML | | | 18 45 39.1 | |
| | comp=E,2μm,0.3s | | | | | | | |
| RMX | | | | IAML | | | 18 45 39.0 | |
| | comp=N,3μm,0.2s | | | | | | | |
| **RMX** | **La Rumorosa** | **0.29** | **253** | ⇓*i*P | | **Pg** | **18 45 34.9** | **-0.8** |
| RMX | | | | *e*S | | **Sg** | **18 45 38.8** | **-1.4** |
| RMX | | | | IAML | | | 18 45 39.0 | |
| | comp=N,3μm,0.1s | | | | | | | |
| RMX | | | | ⇑*e* | | | 18 45 39.2 | |
| RMX | | | | IAML | | | 18 45 39.2 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **0.31** | **263** | ⇓*e*P | | **Pg** | **18 45 35.5** | **-0.5** |
| IKP | | | | *e*S | | **Sg** | **18 45 39.8** | **-0.8** |
| **IKP** | **In-Ko-Pah, Jac** | **0.31** | **263** | P | | **Pg** | **18 45 35.5** | **-0.5** |
| | baz=82,SNR=440 | | | | | | | |
| IKP | | | | S | | **Sg** | **18 45 39.7** | **-0.8** |
| | baz=82 | | | | | | | |
| **POT2** | **Potabilizadora** | **0.31** | **101** | ⇓*e*P | | **Pg** | **18 45 35.4** | **-0.4** |
| POT2 | | | | ⇓*e*P | | **Pb** | **18 45 36.2** | **0.0** |
| POT2 | | | | *e*S | | **Sg** | **18 45 40.6** | **+0.2** |
| **ZC06** | **Zona comercial** | **0.31** | **107** | ⇑*i*P | | **Pg** | **18 45 36.2** | **+0.3** |
| ZC06 | | | | *e*S | | **Sg** | **18 45 41.8** | **+1.4** |
| **CPBX** | **Cerro Prieto** | **0.46** | **126** | | | **Pg** | **18 45 38.2** | **-0.3** |
| CPBX | | | | Sg | | **Sg** | **18 45 45.8** | **+1.0** |
| **CPBX** | **Cerro Prieto** | **0.46** | **126** | *e*P | | **Pg** | **18 45 38.3** | **-0.2** |
| CPBX | | | | ⇑*e* | | | 18 45 48.1 | |
| CPBX | | | | IAML | | | 18 45 48.1 | |
| | comp=N,5μm,0.1s | | | | | | | |
| CPBX | | | | ⇓*e* | | | 18 45 49.0 | |
| CPBX | | | | IAML | | | 18 45 49.0 | |
| | comp=E,5μm,0.2s | | | | | | | |
| **MBIG** | **Mexicali** | **0.54** | **121** | | | **Pg** | **18 45 39.2** | **-0.8** |
| MBIG | | | | | | **Sb** | **18 45 49.9** | **+2.3** |
| **MBIG** | **Mexicali** | **0.54** | **121** | *e*P | | **Pg** | **18 45 38.3** | **-1.7** |
| MBIG | | | | *i* P | | **Pb** | **18 45 39.7** | **-0.4** |
| MBIG | | | | *i* S | | **Sg** | **18 45 46.1** | **-1.1** |
| MBIG | | | | *e*S | | **Sb** | **18 45 48.1** | **+0.5** |
| **CTLX** | **Tlaxcala, TLX** | **0.55** | **113** | *e*P | | **Pg** | **18 45 41.1** | **+0.9** |
| CTLX | | | | *e*S | | **Sb** | **18 45 50.6** | **+2.8** |
| **YUCAX** | **Ej. Yucatįn** | **0.56** | **99** | *e*P | | **Pg** | **18 45 40.4** | **+0.1** |
| **SALX** | **Saltillo** | **0.58** | **117** | *e*P | | **Pg** | **18 45 41.0** | **+0.3** |
| **MONP2** | **Monument Peak** | **0.60** | **290** | ⇑*e*P | | **Pg** | **18 45 40.7** | **-0.6** |
| MONP2 | | | | *e*S | | **Sg** | **18 45 48.5** | **-1.0** |
| **MONP2** | **Monument Peak** | **0.60** | **290** | P | | **Pg** | **18 45 40.7** | **-0.6** |
| | baz=109,SNR=52 | | | | | | | |
| MONP2 | | | | S | | **Sg** | **18 45 48.4** | **-1.0** |
| | baz=109 | | | | | | | |
| **EMSC** | **East Mesa** | **0.64** | **85** | *e*P | | **Pg** | **18 45 41.4** | **-0.5** |
| EMSC | | | | *e*S | | **Sg** | **18 45 51.4** | **+0.9** |
| **SLH** | **Sleepy Hollow** | **0.66** | **320** | ⇑*e*P | | **Pg** | **18 45 41.7** | **-0.5** |
| **PESCX** | **Ej. Pescaderos** | **0.71** | **111** | *e*P | | **Pg** | **18 45 42.4** | **-0.7** |
| PESCX | | | | *e*S | | **Sg** | **18 45 53.1** | **+0.6** |
| **TKX** | **Tecate** | **0.74** | **261** | | | **Pg** | **18 45 43.0** | **-0.6** |
| TKX | | | | Sg | | **Sg** | **18 45 52.5** | **-1.0** |
| **TKX** | **Tecate** | **0.74** | **261** | *e*P | | **Pg** | **18 45 43.1** | **-0.6** |
| TKX | | | | *i* S | | **Sg** | **18 45 52.5** | **-1.0** |
| **BAR** | **Barrett** | **0.78** | **270** | | | **Pg** | **18 45 43.7** | **-0.7** |
| BAR | | | | Sg | | **Sg** | **18 45 53.7** | **-1.2** |
| BAR | | | | IAML | | | 18 45 54.1 | |
| | comp=E,1μm,0.1s | | | | | | | |
| **BAR** | **Barrett** | **0.78** | **270** | ⇑*e*P | | **Pg** | **18 45 43.8** | **-0.7** |
| BAR | | | | *e*S | | **Sg** | **18 45 53.7** | **-1.2** |
| BAR | | | | ⇑*e* | | | 18 45 54.1 | |
| BAR | | | | IAML | | | 18 45 54.1 | |
| | comp=E,1μm,0.1s | | | | | | | |
| **TJIG** | **Tijuana** | **0.83** | **252** | | | **Pg** | **18 45 44.4** | **-0.9** |
| TJIG | | | | | | **Sg** | **18 45 54.9** | **-1.3** |
| **TJIG** | **Tijuana** | **0.83** | **252** | *e*P | | **Pg** | **18 45 44.4** | **-0.9** |
| TJIG | | | | *i* S | | **Sg** | **18 45 55.0** | **-1.3** |
| **TJIG** | **Tijuana** | **0.83** | **252** | *e*P | | **Pg** | **18 45 44.4** | **-0.9** |
| TJIG | | | | *i* S | | **Sg** | **18 45 55.0** | **-1.3** |
| **GLA** | **Glamis** | **0.85** | **65** | | | **Pg** | **18 45 44.4** | **-1.5** |
| GLA | | | | Sg | | **Sg** | **18 45 54.5** | **-2.6** |
| GLA | | | | IAML | | | 18 45 55.9 | |
| | comp=N,820nm,0.4s | | | | | | | |
| GLA | | | | IAML | | | 18 45 56.9 | |
| | comp=E,520nm,0.5s | | | | | | | |
| **GLA** | **Glamis** | **0.85** | **65** | P | | **Pg** | **18 45 44.3** | **-1.5** |
| | baz=245,SNR=38 | | | | | | | |
| GLA | | | | S | | **Sg** | **18 45 55.3** | **-1.8** |
| | baz=245 | | | | | | | |
| **CBX** | **Cerro Bola** | **0.86** | **244** | | | **Pg** | **18 45 45.2** | **-0.8** |
| CBX | | | | Sg | | **Sg** | **18 45 56.0** | **-1.5** |
| **CBX** | **Cerro Bola** | **0.86** | **244** | *e*P | | **Pg** | **18 45 45.3** | **-0.8** |
| CBX | | | | *i* S | | **Sg** | **18 45 56.5** | **-1.0** |
| **CBX** | **Cerro Bola** | **0.86** | **244** | ⇓*e*P | | **Pg** | **18 45 45.4** | **-0.7** |
| CBX | | | | *e*S | | **Sg** | **18 45 56.4** | **-1.0** |
| CBX | | | | *e* | | | 18 45 58.5 | |
| CBX | | | | IAML | | | 18 45 58.5 | |
| | comp=N,284nm,0.5s | | | | | | | |
| **MATG** | **Mataguay Scout** | **0.91** | **304** | *e*P | | **Pg** | **18 45 45.8** | **-1.2** |
| **EML** | **El Monte Cty P** | **0.95** | **282** | ⇑*e*P | | **Pg** | **18 45 46.4** | **-1.2** |
| EML | | | | *e*S | | **Sg** | **18 45 58.8** | **-1.4** |
| **BC3** | **Big Chuckawall** | **0.99** | **14** | P | | **Pg** | **18 45 46.6** | **-1.9** |
| | baz=194,SNR=29 | | | | | | | |
| BC3 | | | | S | | **Sg** | **18 45 59.0** | **-2.6** |
| | baz=194 | | | | | | | |
| **OLP** | **Otay Lakes Par** | **1.00** | **266** | *e*P | | **Pg** | **18 45 47.6** | **-1.0** |
| OLP | | | | *e*S | | **Sg** | **18 46 00.4** | **-1.5** |
| **SDRC** | **San Diego Road** | **1.01** | **273** | ⇑*e*P | | **Pg** | **18 45 47.6** | **-1.2** |
| SDRC | | | | IAML | | | 18 46 01.4 | |
| | comp=N,451nm,0.1s | | | | | | | |
| SDRC | | | | ⇓*e* | | | 18 46 01.4 | |
| SDRC | | | | IAML | | | 18 46 02.1 | |
| | comp=E,434nm,0.1s | | | | | | | |
| SDRC | | | | ⇓*e* | | | 18 46 02.1 | |
| **PFO** | **Pinyon Flats O** | **1.10** | **327** | | | **Pg** | **18 45 48.1** | **-2.5** |
| PFO | | | | Sg | | **Sg** | **18 46 02.1** | **-2.8** |
| PFO | | | | IAML | | | 18 46 04.0 | |
| | comp=E,299nm,0.1s | | | | | | | |
| PFO | | | | IAML | | | 18 46 04.1 | |
| | comp=E,187nm,0.4s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.10** | **327** | P | | **Pg** | **18 45 48.0** | **-2.5** |
| | baz=147,SNR=27 | | | | | | | |
| PFO | | | | S | | **Sg** | **18 46 02.2** | **-2.8** |
| | baz=147 | | | | | | | |
| **CCX** | **Cicese** | **1.13** | **224** | | | **Pg** | **18 45 50.0** | **-1.1** |
| CCX | | | | Sg | | **Sg** | **18 46 04.4** | **-1.5** |
| **CCX** | **Cicese** | **1.13** | **224** | *e*S | | **Sg** | **18 46 05.0** | **-1.0** |
| **109C** | **Camp Elliot, M** | **1.16** | **280** | Pn | | **Pg** | **18 45 50.2** | **-1.5** |
| 109C | | | | Sg | | **Sg** | **18 46 04.9** | **-2.0** |
| 109C | | | | IAML | | | 18 46 05.2 | |
| | comp=N,593nm,0.2s | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.16** | **280** | P | | **Pg** | **18 45 50.1** | **-1.5** |
| | baz=99,SNR=22 | | | | | | | |
| 109C | | | | S | | **Sg** | **18 46 05.0** | **-2.0** |
| | baz=99 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **1.32** | **351** | P | | **Pg** | **18 45 51.5** | **-3.3** |
| | baz=171,SNR=23 | | | | | | | |
| **BLYC** | **Blythe** | **1.47** | **44** | | | **Pn** | **18 45 54.5** | **-0.3** |
| **MURC** | **Murrieta** | **1.52** | **307** | P | | **Pn** | **18 45 54.4** | **-1.1** |
| | baz=126,SNR=36 | | | | | | | |
| **IRM** | **Iron Mountain** | **1.55** | **19** | P | | **Pn** | **18 45 54.9** | **-1.0** |
| | baz=199,SNR=15 | | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.66** | **172** | | | **Pn** | **18 45 57.6** | **-0.1** |
| SPIG | | | | | | **Sn** | **18 46 20.8** | **+2.1** |
| **SPIG** | **San Pedro Mart** | **1.66** | **172** | *e*P | | **Pn** | **18 45 57.6** | **-0.1** |
| SPIG | | | | *e*S | | **Sn** | **18 46 14.6** | **-4.1** |
| **113A** | **Mohawk Valley,** | **1.67** | **87** | Pn | | **Pn** | **18 45 56.4** | **-1.1** |
| 113A | | | | Sn | | **Sn** | **18 46 16.1** | **-2.4** |
| **ELS** | **Elsinore Mount** | **1.70** | **305** | | | **Pn** | **18 45 57.0** | **-1.1** |
| ELS | | | | Sn | | **Sn** | **18 46 20.9** | **+1.4** |
| ELS | | | | IAML | | | 18 46 25.6 | |
| | comp=E,65nm,0.4s | | | | | | | |
| **SFX** | **San Felipe** | **1.81** | **155** | Pn | | **Pn** | **18 46 00.9** | **+1.4** |
| **BBRC** | **Big Bear Solar** | **1.85** | **328** | Pg | | **Pb** | **18 46 03.5** | **+0.8** |
| | baz=148 | | | | | | | |
| **CIS** | **Catalina Islan** | **2.35** | **288** | S | | **Sn** | **18 46 38.1** | **+2.7** |
| | baz=107 | | | | | | | |
| **PASC** | **Pasadena Art C** | **2.52** | **307** | Pn | | **Pn** | **18 46 09.8** | **+0.5** |
| **214A** | **Organ Pipe Nat** | **2.59** | **106** | | | **Pn** | **18 46 08.6** | **-1.7** |
| **214A** | **Organ Pipe Nat** | **2.59** | **106** | | | **Sn** | **18 46 36.8** | **-4.5** |
| **214A** | **Organ Pipe Nat** | **2.59** | **106** | *e*P | | **Pn** | **18 46 08.5** | **-1.7** |
| 214A | | | | *e*S | | **Sn** | **18 46 36.8** | **-4.5** |
| **214A** | **Organ Pipe Nat** | **2.59** | **106** | P | | **Pn** | **18 46 08.8** | **-1.4** |
| | baz=287 | | | | | | | |
| 214A | | | | S | | **Sn** | **18 46 38.5** | **-2.8** |
| | baz=287 | | | | | | | |
| **Y14A** | **Wickenburg** | **2.61** | **61** | Pn | | **Pn** | **18 46 08.9** | **-1.6** |
| **GSC** | **Goldstone, Bar** | **2.75** | **342** | Pn | | **Pn** | **18 46 11.7** | **-0.8** |
| **W13A** | **Hualapai Mount** | **2.86** | **32** | Pn | | **Pn** | **18 46 13.3** | **-0.8** |
| **EDW2** | **Edwards Air Fo** | **2.88** | **320** | Pg | | **Pb** | **18 46 21.4** | **+1.3** |
| | baz=139,SNR=9.4 | | | | | | | |
| EDW2 | | | | Sb | | **Sb** | **18 46 58.8** | **+3.8** |
| | baz=139 | | | | | | | |
| **CCAC** | **Calif City Air** | **3.10** | **323** | | | **Pn** | **18 46 16.8** | **-0.5** |
| **QSM** | **Queen of Sheba** | **3.40** | **344** | | | **Pn** | **18 46 21.9** | **+0.6** |
| **GWY** | **Greenwater Val** | **3.57** | **348** | | | **Pn** | **18 46 23.2** | **-0.6** |
| **MPMC** | **Manual Prospec** | **3.66** | **337** | Pg | | **Pb** | **18 46 37.0** | **+3.6** |
| | baz=156 | | | | | | | |
| MPMC | | | | Sb | | **Sb** | **18 47 22.7** | **+5.2** |
| | baz=156 | | | | | | | |
| **ISA** | **Isabella, Lake** | **3.73** | **323** | | | **Pn** | **18 46 26.5** | **+0.5** |
| **SHPR** | **Sheep Range** | **3.84** | **7** | Pn | | **Pn** | **18 46 26.4** | **-1.1** |
| **X16A** | **Lo Mia Camp, P** | **3.98** | **63** | Pn | | **Pn** | **18 46 28.7** | **-0.9** |
| **TUC** | **Tucson** | **4.21** | **94** | Pn | | **Pn** | **18 46 31.8** | **-0.7** |
| **TPNV** | **Topopah Spring** | **4.27** | **355** | Pn | | **Pn** | **18 46 35.7** | **+2.3** |
| **WUAZ** | **Wupatki** | **4.59** | **51** | Pn | | **Pn** | **18 46 37.3** | **-0.6** |
| **U15A** | **North Rim** | **4.69** | **36** | Pn | | **Pn** | **18 46 40.3** | **+0.9** |
| **LCMT** | **Little Creek M** | **4.78** | **25** | Pn | | **Pn** | **18 46 41.2** | **+0.8** |
| **LCH** | **Last Change Ra** | **4.79** | **342** | Pn | | **Pn** | **18 46 42.9** | **+2.2** |
| **KNB** | **Kanab** | **4.94** | **28** | Pn | | **Pn** | **18 46 42.5** | **-0.2** |
| **X18A** | **Snowflake** | **5.17** | **68** | Pn | | **Pn** | **18 46 46.5** | **+0.6** |
| **CCUT** | **Cedar City** | **5.23** | **21** | Pn | | **Pn** | **18 46 48.1** | **+1.4** |
| **SZCU** | **Shurtz Canyon** | **5.36** | **23** | Pn | | **Pn** | **18 46 50.0** | **+1.6** |
| **PKCU** | **Pink Cliffs** | **5.51** | **30** | Pn | | **Pn** | **18 46 52.6** | **+1.9** |
| **MSU** | **Marysvale** | **6.50** | **26** | Pn | | **Pn** | **18 47 04.4** | **+0.3** |

*IDC **27** 18:46:41.1±2.2,8°.64S×148°.16E,h110km±14km,mb3.5/9, mb1 3.7/10,mb1mx3.6/24,mbtmp3.9/10,Error ellipse: s-maj=37.3km s-min=19.6km az=103.0*
*NEIC **27** 18:46:41.2±1.6,8°.63S±0°.08×148°.18E±0°.06,h105km±6km, mb4.3/26,Error ellipse: s-maj=12.7km s-min=8.2km az=153.0*

**ISC 27 18:46:41.2±0.5,8°63S±0°07×148°17E±0°08,h109km,n55, σ0s90/57,mb4.0/16,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PMG** | **Port Moresby** | **1.26** | **232** | P | | **Pn** | **18 47 05.6** | **+0.5** |
| | 76nm,0.3s,baz=44,slow=6.6,SNR=335 | | | | | | | |
| PMG | | | | S | | **Sn** | **18 47 22.8** | **-0.5** |
| | 71nm,0.3s,baz=50,slow=13,SNR=5.7 | | | | | | | |
| **PMG** | **Port Moresby** | **1.26** | **232** | P | | **Pn** | **18 47 05.7** | **+0.5** |
| **RABL** | **Rabaul** | **5.94** | **42** | Pn | | **Pn** | **18 48 06.4** | **-0.4** |
| **MANU** | **Manus Island** | **6.59** | **353** | Pn | | **Pn** | **18 48 16.3** | **+0.6** |
| **COEN** | **Coen** | **7.21** | **222** | | | **Pn** | **18 48 24.7** | **+0.6** |
| **COEN** | **Coen** | **7.21** | **222** | P | | **Pn** | **18 48 24.8** | **+0.8** |
| **MTSU** | **Mount Surprise** | **10.16** | **201** | P | | **Pn** | **18 49 06.1** | **+2.0** |
| **HNR** | **Honiara** | **11.66** | **95** | Pn | | **Pn** | **18 49 22.8** | **-1.5** |
| **QIS** | **Mount Isa** | **14.46** | **214** | P | | **P** | **18 50 02.7** | **-1.7** |
| **WB0** | **Warramunga Arr** | **17.33** | **229** | P | | **P** | **18 50 35.4** | **-0.8** |
| WB0 | | | | | | IAmb | IAmb | 18 50 39.9 |
| | comp=Z,6.2nm,0.6s | | | | | | | |
| **WR0** | **Warramunga Arr** | **17.34** | **228** | P | | **P** | **18 50 35.7** | **-0.6** |
| **WRAB** | **Tennant Creek** | **17.46** | **228** | P | | **P** | **18 50 36.5** | **-1.2** |
| **WRAB** | **Tennant Creek** | **17.46** | **228** | P | | **P** | **18 50 37.0** | **-0.7** |
| **WB2** | **Warramunga Arr** | **17.47** | **228** | P | | **P** | **18 50 36.4** | **-1.4** |
| **WRA** | **Warramunga Arr** | **17.48** | **228** | P | | **P** | **18 50 37.4** | **-0.4** |
| | comp=Z,0.7nm,0.3s,baz=55,slow=12,SNR=23 | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **228** | P | | **P** | **18 50 35.6** | **-2.2** |
| **RMQ** | **Roma** | **17.77** | **178** | P | | **Pn** | **18 50 43.3** | **+1.6** |
| **KNRA** | **Kununurra** | **20.21** | **248** | P | | **P** | **18 51 06.5** | **-1.2** |
| KNRA | | | | | | IAmb | IAmb | 18 51 38.3 |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **20.21** | **248** | P | | **P** | **18 51 06.6** | **-1.1** |
| **AS31** | **Alice Springs** | **20.25** | **221** | P | | **P** | **18 51 07.2** | **-0.8** |
| **ASAR** | **Alice Springs** | **20.25** | **221** | P | | **P** | **18 51 08.0** | **-0.1** |
| | comp=Z,2.6nm,0.5s,baz=54,slow=8.9,SNR=41 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.25** | **221** | P | | **P** | **18 51 07.5** | **-0.6** |
| **OOD** | **Oodnadatta** | **22.41** | **210** | P | | **P** | **18 51 30.5** | **-0.4** |
| **CMSA** | **Cobar Meteorol** | **22.91** | **185** | P | | **P** | **18 51 35.7** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **23.82** | **244** | P | | **P** | **18 51 43.3** | **-1.2** |
| | comp=Z,3.9nm,0.5s,baz=63,slow=9.8,SNR=27 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.82** | **244** | P | | **P** | **18 51 43.1** | **-1.4** |
| FITZ | | | | | | IAmb | IAmb | 18 51 44.5 |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **23.92** | **194** | P | | **P** | **18 51 45.2** | **+0.1** |
| | comp=Z,1.8nm,0.4s,baz=3.9,slow=7.8,SNR=11 | | | | | | | |
| **STKA** | **Stephens Creek** | **23.92** | **194** | P | | **P** | **18 51 45.0** | **-0.2** |
| **CAN** | **Canberra** | **26.57** | **178** | P | | **P** | **18 52 09.3** | **+0.1** |
| CAN | | | | | | IAmb | IAmb | 18 52 17.6 |
| | comp=Z,44nm,1.6s | | | | | | | |
| **TOO** | **Toolangi** | **28.91** | **184** | P | | **P** | **18 52 30.8** | **+0.8** |
| TOO | | | | | | IAmb | IAmb | 18 52 47.8 |
| | comp=Z,18nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **28.95** | **218** | P | | **P** | **18 52 29.9** | **-0.4** |
| FORT | | | | | | IAmb | IAmb | 18 52 30.6 |
| | comp=Z,21nm,0.8s | | | | | | | |
| **KHZ** | **Kahutara** | **40.38** | **151** | P | | **P** | **18 54 08.6** | **+0.2** |
| **TPUB** | **Ta-pu** | **41.63** | **320** | P | | **P** | **18 54 18.7** | **-0.3** |
| **YHNB** | **Yeheng** | **42.17** | **322** | P | | **P** | **18 54 24.3** | **+0.8** |
| **KSRS** | **Korea Array** | **49.61** | **339** | P | | **P** | **18 55 21.1** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=159,slow=8.5,SNR=5.1 | | | | | | | |
| **GSI** | **Gununguitoli** | **51.38** | **279** | P | | **P** | **18 55 34.3** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **55.52** | **299** | P | | **P** | **18 56 06.0** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=124,slow=6.2,SNR=5.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.52** | **299** | P | | **P** | **18 56 05.3** | **-0.2** |
| **SONM** | **Songino Array** | **67.25** | **331** | P | | **P** | **18 57 24.6** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=141,slow=4.3,SNR=3.5 | | | | | | | |
| **SONM** | **Songino Array** | **67.25** | **331** | P | | **P** | **18 57 24.3** | **+0.2** |
| SONM | | | | | | IAmb | IAmb | 18 57 25.4 |
| | comp=Z,4.2nm,1.6s | | | | | | | |
| **VNDA** | **Vanda** | **69.23** | **177** | P | | **P** | **18 57 36.8** | **+0.9** |
| **MK31** | **Makanchi Array** | **80.25** | **320** | P | | **P** | **18 58 40.0** | **0.0** |
| MK31 | | | | | | IAmb | IAmb | 18 59 04.5 |
| | comp=Z,4.7nm,1.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.25** | **320** | P | | **P** | **18 58 39.9** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=101,slow=6.3,SNR=4.7 | | | | | | | |
| MKAR | | | | pP | | **pP** | **18 59 09.1** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=102,slow=7.1,SNR=3.7 | | | | | | | |
| **MAKZ** | **Makanchi** | **80.45** | **320** | P | | **P** | **18 58 41.0** | **0.0** |
| MAKZ | | | | | | IAmb | IAmb | 19 01 29.8 |
| | comp=Z,4.5nm,1.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.35** | **180** | P | | **P** | **18 58 45.7** | **0.0** |
| QSPA | | | | | | IAmb | IAmb | 19 01 44.4 |
| | comp=Z,34nm,1.9s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **81.38** | **315** | P | | **P** | **18 58 47.2** | **+0.6** |
| TARG | | | | | | IAmb | IAmb | 18 58 47.6 |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.84** | **328** | P | | **P** | **18 58 47.2** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=119,slow=5.7,SNR=4.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.84** | **328** | P | | **P** | **18 58 46.8** | **-1.4** |
| **L19K** | **White Mountain** | **83.04** | **23** | P | | **P** | **18 58 54.4** | **+0.1** |
| **K20K** | **Telida** | **83.99** | **23** | P | | **P** | **18 58 60.0** | **+0.9** |
| **J20K** | **Nowinta River** | **84.41** | **22** | P | | **P** | **18 59 02.4** | **+1.3** |
| J20K | | | | | | IAmb | IAmb | 19 01 11.7 |
| | comp=Z,18nm,1.6s | | | | | | | |
| **CAST** | **Castle Rocks** | **84.78** | **23** | P | | **P** | **18 59 03.4** | **+0.3** |
| **ILAR** | **Eielson Array** | **87.44** | **23** | P | | **P** | **18 59 15.2** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=252,slow=4.8,SNR=12 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.79** | **281** | PKPbc | | **PKPdf** | **19 06 10.7** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=90,slow=4.1,SNR=1.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.79** | **281** | | | **PKPdf** | **19 06 10.1** | **+0.3** |

**TAP 27 18:51:36.7,23°.21N×121°.30E,h33km,ML1.2,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **FULB** | **Fuli** | **0.01** | **214** | *e*P | | Pb | 18 51 42.0 | -0.2 |
| | baz=213 | | | | | | | |
| FULB | | | | *e*S | | Sb | 18 51 46.9 | +0.9 |
| | baz=213 | | | | | | | |
| **ECS** | **Chishang** | **0.13** | **214** | *e*P | | Pb | 18 51 42.7 | 0.0 |
| | baz=214 | | | | | | | |
| **EYUL** | **Yuli** | **0.14** | **7** | *e*P | | Pb | 18 51 42.7 | -0.1 |
| | baz=7.0 | | | | | | | |
| EYUL | | | | *e*S | | Sb | 18 51 47.7 | +0.8 |
| | baz=7.0 | | | | | | | |
| **TWF1** | **Yuli** | **0.14** | **359** | P | | Pb | 18 51 42.5 | -0.3 |
| | baz=2.0 | | | | | | | |
| TWF1 | | | | *e*S | | Sb | 18 51 47.1 | +0.1 |
| | baz=2.0 | | | | | | | |
| **YULB** | **Yu-li** | **0.18** | **359** | *i* P | | Pb | 18 51 43.0 | -0.2 |
| | baz=359 | | | | | | | |
| YULB | | | | S | | Sb | 18 51 47.4 | -0.3 |
| | baz=359 | | | | | | | |
| **ELDTW** | **Lidau** | **0.26** | **266** | *i* P | | P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YULB | | | | *e*S | Sb | 18 52 05.0 | -1.1 |
| | baz=51 | | | | | | | |
| **SSPT** | **Xinbi** | **0.60 203** | *e*P | | Pb | 18 51 58.2 | -0.2 |
| | baz=203 | | | | | | | |

*RSPR* ***27*** *19:22:58.5, 19.˙16N×64.˙84W, h67km±6km, MD3.4/5*
*NEIC* ***27*** *19:22:59.3±1.3, 19.˙19N±0.˙08×64.˙94W±0.˙07, h39km±55km, Error ellipse: s-maj=14.1km s-min=6.2km az=215.0*

**ISC 27 19:22:57.7±1.6, 19.18N±0.09×64.89W±0.04, h25km, n43, σ0$49/47, 7C-3D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TBVI** | **Tortola** | **0.80** | **161** | ⇓*i*P | | | **Pb** | **19 23 13.4** | **+0.4** |
| **TBVI** | **Tortola** | **0.80** | **161** | *e*S | | | **Sn** | **19 23 25.4** | **+0.8** |
| **STVI** | **Saint Thomas** | **0.83** | **184** | ⇓*i*P | | | **Pb** | **19 23 13.6** | **+0.2** |
| **STVI** | **Saint Thomas** | **0.83** | **184** | *e*S | | | **Sn** | **19 23 25.8** | **+0.6** |
| **STVI** | **Saint Thomas** | **0.83** | **184** | | | | **Pb** | **19 23 13.6** | **+0.2** |
| STVI | | | | | | | **Sn** | **19 23 25.8** | **+0.6** |
| **CUPR** | **Culebra, Puert** | **0.94** | **203** | ⇑*i*P | | | **Pb** | **19 23 15.3** | **-0.2** |
| **CUPR** | **Culebra, Puert** | **0.94** | **203** | *e*S | | | **Sn** | **19 23 27.6** | **-0.5** |
| **CUPR** | **Culebra, Puert** | **0.94** | **203** | | | | **Pb** | **19 23 15.3** | **-0.2** |
| CUPR | | | | | | | **Sn** | **19 23 27.6** | **-0.5** |
| **MTP** | **Monte Pirata** | **1.25** | **210** | ⇑*e*P | | | **Pn** | **19 23 19.8** | **+0.2** |
| **MTP** | **Monte Pirata** | **1.25** | **210** | *e*S | | | **Sb** | **19 23 36.1** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.25** | **210** | | | | **Pn** | **19 23 19.8** | **+0.2** |
| MTP | | | | | | | **Sb** | **19 23 36.1** | **-0.1** |
| **CBYP** | **Canovanas** | **1.29** | **225** | | | | **Pn** | **19 23 19.7** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.38** | **221** | ⇓*e*P | | | **Pn** | **19 23 21.6** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.38** | **221** | *e*S | | | **Sn** | **19 23 39.1** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.38** | **221** | | | | **Pn** | **19 23 21.6** | **+0.3** |
| HUMP | | | | | | | **Sn** | **19 23 39.1** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.38** | **221** | IAML | | | | 19 23 43.0 | |
| | comp=N,143nm,0.2s | | | | | | | | |
| **GCPR** | **Guaynabo City** | **1.42** | **233** | | | | **Sn** | **19 23 39.3** | **-0.6** |
| **CDVI** | **St. Croix** | **1.43** | **175** | | | | **Pb** | **19 23 23.4** | **-0.2** |
| **PDPR** | **Patillas Dam,** | **1.58** | **223** | | | | **Pn** | **19 23 24.0** | **-0.1** |
| PDPR | | | | IAML | | | | 19 24 01.8 | |
| | comp=E,57nm,0.8s | | | | | | | | |
| **SJG** | **San Juan** | **1.60** | **228** | | | | **Pn** | **19 23 23.7** | **-0.7** |
| **IGPR** | **InterUniversit** | **1.67** | **224** | ⇑*e*P | | | **Pn** | **19 23 25.6** | **+0.2** |
| **IGPR** | **InterUniversit** | **1.67** | **224** | *e*S | | | **Sn** | **19 23 45.7** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **1.70** | **246** | ⇑*e*P | | | **Pn** | **19 23 25.8** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **1.70** | **246** | *e*S | | | **Sn** | **19 23 47.1** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.70** | **246** | | | | **Pn** | **19 23 25.8** | **0.0** |
| EMPR | | | | | | | **Sn** | **19 23 47.1** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.70** | **246** | IAML | | | | 19 23 53.8 | |
| | comp=E,161nm,0.6s | | | | | | | | |
| EMPR | | | | IAML | | | | 19 23 57.3 | |
| | comp=N,105nm,0.5s | | | | | | | | |
| **CELP** | **Cerrillos** | **1.94** | **236** | ⇑*e*P | | | **Pn** | **19 23 28.9** | **-0.2** |
| **CELP** | **Cerrillos** | **1.94** | **236** | *e*S | | | **Sn** | **19 23 52.9** | **+0.1** |
| **CELP** | **Cerrillos** | **1.94** | **236** | | | | **Pn** | **19 23 28.9** | **-0.2** |
| CELP | | | | | | | **Sn** | **19 23 52.9** | **+0.1** |
| **CELP** | **Cerrillos** | **1.94** | **236** | IAML | | | | 19 23 57.8 | |
| | comp=N,43nm,0.4s | | | | | | | | |
| CELP | | | | IAML | | | | 19 23 57.8 | |
| | comp=E,37nm,0.5s | | | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.95** | **245** | ⇑*e*P | | | **Pn** | **19 23 29.7** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.95** | **245** | *e*S | | | **Sn** | **19 23 53.6** | **+0.6** |
| **AOPR** | **Arecibo Observ** | **1.95** | **245** | | | | **Pn** | **19 23 29.7** | **+0.4** |
| AOPR | | | | | | | **Sn** | **19 23 53.6** | **+0.6** |
| **AOPR** | **Arecibo Observ** | **1.95** | **245** | IAML | | | | 19 24 01.6 | |
| | comp=N,104nm,0.6s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.98** | **235** | ⇑*e*P | | | **Pn** | **19 23 29.4** | **-0.3** |
| **OBIP** | **Obispado Ponce** | **1.98** | **235** | *e*S | | | **Sn** | **19 23 53.4** | **-0.3** |
| **OBIP** | **Obispado Ponce** | **1.98** | **235** | | | | **Pn** | **19 23 28.9** | **-0.7** |
| **OBIP** | **Obispado Ponce** | **1.98** | **235** | | | | **Sn** | **19 23 53.4** | **-0.3** |
| **MLPR** | **Magueyes Islan** | **2.37** | **240** | Pn | | Pn | **Pn** | **19 23 33.6** | **-1.4** |
| MLPR | | | | IAML | | | | 19 24 10.5 | |
| | comp=E,27nm,1.0s | | | | | | | | |
| MLPR | | | | IAML | | | | 19 24 15.9 | |
| | comp=N,27nm,2.1s | | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.41** | **241** | ⇑*e*P | | | **Pn** | **19 23 36.9** | **+1.4** |
| **CRPR** | **Cabo Rojo, PR** | **2.41** | **241** | | | | **Pn** | **19 23 35.9** | **+0.4** |
| CRPR | | | | IAML | | | | 19 24 12.3 | |
| | comp=N,27nm,0.9s | | | | | | | | |
| **ANWB** | **Willy Bob** | **3.31** | **117** | *e* | | | **Pb** | **19 23 55.7** | **0.0** |
| **ANBD** | **Bethesda, Anti** | **3.65** | **125** | *e*P | | | **Sn** | **19 23 52.3** | **-0.3** |
| ANBD | | | | *e*S | | | **Sn** | **19 24 34.6** | **-0.3** |

*IDC* ***27*** *19:24:02.0±9.1, 21.˙56S×68.˙27W, h114km±64km, mb3.4/3, mb1 3.7/4, mb1mx3.4/22, mbtmp3.8/4, Error ellipse: s-maj=77.4km s-min=37.9km az=26.0*
*NEIC* ***27*** *19:24:02.9±1.1, 21.˙43S±0.˙05×68.˙52W±0.˙09, h134km±6km, mb3.9/4, ML4.0(GUC), Error ellipse: s-maj=12.0km s-min=6.3km az=102.0*
*GUC* ***27*** *19:24:03.6±0.7, 21.˙44S×68.˙40W, h120km±5km, ML4.0*

**ISC 27 19:24:03.3±0.8, 21.46S±0.04×68.51W±0.08, h127km±7km, n53, σ1$11/76, mb3.7/3, 9C-2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.76** | **244** | | | | **Pn** | **19 24 24.3** | **+0.3** |
| PB09 | | | | | | Sn | **Sn** | **19 24 40.8** | **+1.1** |
| **PB09** | **IPOC Station P** | **0.76** | **244** | ⇑*i*P | | | **Pn** | **19 24 24.5** | **+0.5** |
| PB09 | | | | *e*S | | | **Sn** | **19 24 40.8** | **+1.1** |
| **PB01** | **IPOC Station P** | **1.00** | **294** | | | | **Pn** | **19 24 25.8** | **-0.2** |
| PB01 | | | | | | Sn | **Sn** | **19 24 43.3** | **0.0** |
| **PB01** | **IPOC Station P** | **1.00** | **294** | ⇑*i*P | | | **Pn** | **19 24 25.9** | **-0.2** |
| PB01 | | | | *e*S | | | **Sn** | **19 24 43.0** | **-0.3** |
| PB01 | | | | IAML | | | | 19 24 45.5 | |
| | comp=N,2μm,0.4s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.21** | **198** | LR | | LR | | 19 25 04.1 | |
| | comp=N,63nm,21.8s,baz=226,slow=52 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.21** | **198** | | | | **Pn** | **19 24 28.7** | **+0.3** |
| **LVC** | **Limon Verde** | **1.21** | **198** | *e*P | | | **Pn** | **19 24 28.2** | **-0.2** |
| LVC | | | | *e*S | | | **Sn** | **19 24 47.7** | **+0.3** |
| **PB02** | **IPOC Station P** | **1.30** | **276** | | | | **Pn** | **19 24 29.2** | **+0.2** |
| PB02 | | | | | | Sn | **Sn** | **19 24 48.8** | **+0.1** |
| **PB02** | **IPOC Station P** | **1.30** | **276** | ⇑*i*P | | | **Pn** | **19 24 29.2** | **+0.2** |
| PB02 | | | | *e*S | | | **Sn** | **19 24 49.0** | **+0.3** |
| PB02 | | | | IAML | | | | 19 24 50.1 | |
| | comp=N,3μm,0.2s | | | | | | | | |
| **PB07** | **IPOC Station P** | **1.31** | **258** | | | | **Pn** | **19 24 29.5** | **+0.2** |
| PB07 | | | | | | Sn | **Sn** | **19 24 49.4** | **+0.4** |
| **PB07** | **IPOC Station P** | **1.31** | **258** | *e*P | | | **Pn** | **19 24 29.4** | **+0.2** |
| PB07 | | | | *e*S | | | **Sn** | **19 24 49.5** | **+0.5** |
| PB07 | | | | IAML | | | | 19 24 50.3 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **PB08** | **IPOC Station P** | **1.44** | **335** | | | | **Pn** | **19 24 31.2** | **+0.3** |
| PB08 | | | | | | Sn | **Sn** | **19 24 52.2** | **+0.3** |
| **PB08** | **IPOC Station P** | **1.44** | **335** | ⇑*i*P | | | **Pn** | **19 24 31.3** | **+0.3** |
| PB08 | | | | *e*S | | | **Sn** | **19 24 52.2** | **+0.3** |
| PB08 | | | | IAML | | | | 19 24 55.4 | |
| | comp=N,838nm,0.3s | | | | | | | | |
| **PB06** | **IPOC Station P** | **1.59** | **218** | | | | **Pn** | **19 24 32.7** | **+0.4** |
| PB06 | | | | | | Sn | **Sn** | **19 24 55.5** | **+1.0** |
| **PB06** | **IPOC Station P** | **1.59** | **218** | ⇑*i*P | | | **Pn** | **19 24 32.8** | **+0.4** |
| PB06 | | | | *e*S | | | **Sn** | **19 24 55.3** | **+0.8** |
| PB06 | | | | IAML | | | | 19 24 56.6 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **PATCX** | **Punta Patache** | **1.66** | **292** | | | | **Pn** | **19 24 33.5** | **+0.4** |
| PATCX | | | | | | Sn | **Sn** | **19 24 56.4** | **+0.5** |
| **PATCX** | **Punta Patache** | **1.66** | **292** | ⇓*i*P | | | **Pn** | **19 24 33.6** | **+0.4** |
| PATCX | | | | *e*S | | | **Sn** | **19 24 56.4** | **+0.5** |
| PATCX | | | | IAML | | | | 19 24 58.1 | |
| | comp=E,3μm,0.2s | | | | | | | | |
| **HMBC** | **Humberstone** | **1.74** | **312** | ⇑*i*P | | | **Pn** | **19 24 33.9** | **-0.3** |
| HMBC | | | | *e*S | | | **Sn** | **19 24 57.3** | **-0.3** |
| HMBC | | | | IAML | | | | 19 24 58.9 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.76** | **240** | Pn | | | **Pn** | **19 24 34.4** | **+0.1** |
| PB04 | | | | Sn | | | **Sn** | **19 24 58.6** | **+0.6** |
| **PB04** | **IPOC Station P** | **1.76** | **240** | *e*P | | | **Pn** | **19 24 34.1** | **-0.2** |
| PB04 | | | | *e*S | | | **Sn** | **19 24 58.9** | **+0.8** |
| PB04 | | | | IAML | | | | 19 25 05.0 | |
| | comp=N,641nm,0.1s | | | | | | | | |
| **TA01** | **Diego Aracena** | **1.80** | **299** | | | | **Pn** | **19 24 34.7** | **0.0** |
| TA01 | | | | | | Sn | **Sn** | **19 24 58.4** | **-0.1** |
| **TA01** | **Diego Aracena** | **1.80** | **299** | ⇓*i*P | | | **Pn** | **19 24 34.6** | **0.0** |
| TA01 | | | | *e*S | | | **Sn** | **19 24 58.5** | **0.0** |
| TA01 | | | | IAML | | | | 19 24 60.0 | |
| | comp=E,5μm,0.2s | | | | | | | | |
| **GO01** | **Chusmiza** | **1.89** | **340** | | | | **Pn** | **19 24 36.2** | **0.0** |
| **GO01** | **Chusmiza** | **1.89** | **340** | ⇑*i*P | | | **Pn** | **19 24 36.3** | **0.0** |
| GO01 | | | | *e*S | | | **Sn** | **19 25 00.7** | **-0.7** |
| GO01 | | | | IAML | | | | 19 25 06.2 | |
| | comp=N,1μm,0.1s | | | | | | | | |
| **TA02** | **Huaiquique** | **1.92** | **308** | | | | **Pn** | **19 24 35.8** | **-0.3** |
| **TA02** | **Huaiquique** | **1.92** | **308** | *e*P | | | **Pn** | **19 24 36.0** | **-0.2** |
| TA02 | | | | *e*S | | | **Sn** | **19 25 01.4** | **+0.1** |
| TA02 | | | | IAML | | | | 19 25 03.4 | |
| | comp=N,3μm,0.1s | | | | | | | | |
| **PB15** | **IPOC Station P** | **1.96** | **207** | | | | **Pn** | **19 24 37.4** | **+0.6** |
| **PB15** | **IPOC Station P** | **1.96** | **207** | ⇑*i*P | | | **Pn** | **19 24 37.4** | **+0.6** |
| PB15 | | | | *e*S | | | **Sn** | **19 25 03.3** | **+0.9** |
| **PB11** | **IPOC Station P** | **2.00** | **327** | | | | **Pn** | **19 24 36.9** | **-0.4** |
| **PB11** | **IPOC Station P** | **2.00** | **327** | ⇑*e*P | | | **Pn** | **19 24 36.9** | **-0.4** |
| PB11 | | | | *e*S | | | **Sn** | **19 25 02.5** | **-0.7** |
| PB11 | | | | IAML | | | | 19 25 05.0 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| **PB10** | **IPOC Station P** | **2.79** | **222** | | | | **Pn** | **19 24 47.8** | **+0.8** |
| **PB12** | **IPOC Station P** | **3.31** | **328** | | | | **Pn** | **19 24 52.4** | **-1.5** |
| **PB12** | **IPOC Station P** | **3.31** | **328** | *e*P | | | **Pn** | **19 24 52.1** | **-1.8** |
| PB12 | | | | IAML | | | | 19 25 34.1 | |
| | comp=E,277nm,0.3s | | | | | | | | |
| **AP01** | **Chacalluta** | **3.52** | **330** | Pn | | | **Pn** | **19 24 55.4** | **-1.2** |
| **PB14** | **IPOC Station P** | **3.61** | **209** | | | | **Pn** | **19 24 57.5** | **-0.5** |
| **AC01** | **Pan de Azucar** | **5.05** | **202** | | | | **Pn** | **19 25 15.0** | **-1.9** |
| **LPAZ** | **La Paz** | **5.15** | **4** | P | | | **Pn** | **19 25 18.9** | **-0.1** |
| | comp=E,3.9nm,0.3s,baz=197,slow=6.5,SNR=39 | | | | | | | | |
| LPAZ | | | | S | | | **Sn** | **19 26 19.1** | **+1.3** |
| | baz=240,slow=20,SNR=1.1 | | | | | | | | |
| **LPAZ** | **La Paz** | **5.15** | **4** | | | | **Pn** | **19 25 18.7** | **-0.3** |
| **AC02** | **Maricunga** | **5.38** | **186** | | | | **Pn** | **19 25 20.8** | **-1.2** |
| **AC06** | **Mina Casimiro** | **6.11** | **196** | | | | **Pn** | **19 25 28.7** | **-2.6** |
| **LCO** | **Las Campanas** | **7.78** | **194** | | | | **Pn** | **19 25 50.1** | **-3.9** |
| **GO04** | **Tololo Observa** | **8.92** | **193** | Pn | | | **Pn** | **19 26 06.2** | **-3.2** |
| **CO03** | **El Pedregal** | **9.55** | **191** | Pn | | | **Pn** | **19 26 13.3** | **-4.3** |
| **CO02** | **Combarbal** | **9.96** | **192** | Pn | | Pn | | 19 26 18.1 | -5.1 |
| **VA03** | **San Esteban** | **11.41** | **189** | Pn | | | **Pn** | **19 26 40.5** | **-2.0** |
| **MT02** | **Curacav** | **11.99** | **191** | Pn | | | **Pn** | **19 26 49.6** | **-0.4** |
| **MT09** | **Talagante** | **12.47** | **190** | Pn | | | **Pn** | **19 26 55.5** | **-0.9** |
| **PLCA** | **Paso Flores** | **19.30** | **185** | P | | P | **P** | **19 28 17.3** | **-1.0** |
| PLCA | | | | IAmb | | IAmb | | 19 28 28.8 | |
| | comp=E,6.1nm,1.3s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.81** | **325** | P | | P | **P** | **19 34 03.5** | **+1.3** |
| | comp=Z,0.1nm,0.6s,baz=138,slow=9.6,SNR=1.3 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.73** | **180** | P | | P | **P** | **19 34 54.5** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **76.99** | **70** | P | | P | **P** | **19 35 41.8** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=256,slow=5.4,SNR=9.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.99** | **70** | P | | P | **P** | **19 35 41.5** | **-1.0** |
| **YKA** | **Yellowknife Ar** | **91.27** | **340** | P | | P | **P** | **19 36 55.0** | **+1.2** |
| | comp=Z,0.6nm,0.5s,baz=132,slow=4.5,SNR=13 | | | | | | | | |

*IDC* ***27*** *19:35:36.0±8.5, 4.˙42S×153.˙52E, h115km±61km, mb3.2/5, mb1 3.5/6, mb1mx3.3/27, mbtmp3.7/6, Error ellipse: s-maj=80.7km s-min=29.7km az=95.0*

**ISC 27 19:35:33.9±1.6, 4.4S±0.2×153.7E±0.3, h100km, n7, σ0$80/8, mb3.2/5, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **8.13** | **232** | P | | P | **Pn** | **19 37 30.0** | **+0.7** |
| | 4.3nm,0.3s,baz=19,slow=2.3,SNR=21 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **19 38 58.8** | **-0.7** |
| | 2.2nm,0.3s,baz=134,slow=19,SNR=17 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.34** | **229** | P | | P | **P** | **19 40 43.0** | **+0.4** |
| | 1.9nm,0.5s,baz=53,slow=9.8,SNR=32 | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.01** | **223** | P | | P | **P** | **19 41 06.7** | **-0.1** |
| | 0.3nm,0.7s,baz=58,slow=8.8,SNR=10 | | | | | | | | |
| **STKA** | **Stephens Creek** | **29.57** | **201** | P | | P | **P** | **19 41 29.6** | **+0.1** |
| | 0.8nm,0.5s,baz=30,slow=13,SNR=3.3 | | | | | | | | |
| **SONM** | **Songino Array** | **66.45** | **327** | P | | P | **P** | **19 46 13.6** | **+0.8** |
| | 0.3nm,0.9s,baz=133,slow=6.1,SNR=2.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.59** | **319** | P | | | **P** | **19 47 34.9** | **-0.6** |
| | 0.3nm,0.8s,baz=90,slow=5.8,SNR=2.7 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.98** | **289** | PKPbc | | **PKPbc** | | **19 55 15.2** | **-1.0** |
| | 1.1nm,0.9s,baz=69,slow=1.7,SNR=6.1 | | | | | | | | |

*IDC* ***27*** *20:02:07.9±2.7, 10.˙03S×111.˙93E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.3/24, mbtmp3.3/4, Error ellipse: s-maj=141.1km s-min=22.8km az=47.0*
*DJA* ***27*** *20:02:09.1±1.4, 10.˙5S±14.˙1×11.˙2E±.˙1, h10km, M3.6/8, MLv3.6/8*

**ISC 27 20:02:07.8±1.4, 10.4S±0.2×111.48E±0.09, h10km, n13, σ0$61/10, mb3.2/4, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCJI** | **Pacitan** | **2.22** | **352** | P | | P | **Pn** | **20 02 44.5** | **-0.3** |
| **PWJI** | **Pagerwojo** | **2.39** | **8** | P | | P | **Pn** | **20 02 47.1** | **0.0** |
| **UGM** | **Wanagama** | **2.66** | **339** | P | | P | **Pn** | **20 02 50.6** | **-0.2** |
| **GMJI** | **Gumukmas** | **2.87** | **43** | P | | P | **Pn** | **20 02 53.5** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **3.27** | **54** | P | | P | **Pn** | **20 02 59.3** | **+0.2** |
| **CMJI** | **Cimerak** | **3.97** | **311** | P | | P | **Pn** | **20 03 08.7** | **-0.1** |
| **WRA** | **Warramunga Arr** | **23.98** | **116** | P | | P | **P** | **20 07 21.5** | **-1.3** |
| | 0.4nm,0.9s,baz=289,slow=12,SNR=2.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.12** | **125** | P | | P | **P** | **20 07 33.9** | **+0.7** |
| | 0.4nm,0.9s,baz=302,slow=9.1,SNR=10 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.24** | **337** | P | | P | **P** | **20 08 28.1** | **+0.3** |
| | 0.3nm,0.3s,baz=170,slow=7.6,SNR=2.0 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **38.59** | **271** | T | | T | | 20 50 36.2 | |
| | baz=92,slow=74,SNR=4.3 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **38.60** | **271** | T | | T | | 20 50 35.0 | |
| | baz=92,slow=74,SNR=6.7 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **38.60** | **271** | T | | T | | 20 50 34.5 | |
| | baz=92 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.64** | **338** | P | | P | **P** | **20 12 32.7** | **+0.2** |
| | 0.1nm,0.4s,baz=150,slow=7.5,SNR=7.3 | | | | | | | | |

*IDC* ***27*** *20:05:35.0±1.8, 6.˙86N×73.˙76W, h99km±22km, mb3.0/2, mb1 3.2/4, mb1mx3.0/35, mbtmp3.4/4, Error ellipse: s-maj=44.9km s-min=8.9km az=129.0*
*RSNC* ***27*** *20:05:36.9±1.0, 6.˙58N×73.˙53W, h111km±5km, ML2.9*

**ISC 27 20:05:36.1±1.0, 6.62N±0.04×73.55W±0.04, h112km±7km, n19, σ0$99/36, 2C-2D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.36** | **95** | ⇓*i*P | | | **Pn** | **20 05 53.0** | **+0.4** |
| BARC | | | | *i* | | | | 20 05 53.2 | |
| | comp=Z,485nm,0.3s | | | | | | | | |
| BARC | | | | *e*S | | | **Sn** | **20 06 05.5** | **+0.4** |
| **RUSC** | **La Rusia** | **0.86** | **148** | ⇓*e*P | | | **Pn** | **20 05 56.1** | **-0.6** |
| RUSC | | | | *e*S | | | **Sn** | **20 06 12.0** | **-0.1** |
| RUSC | | | | *i* | | | | 20 06 12.9 | |
| | comp=Z,55nm,0.4s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **0.91** | **265** | ⇑*i*P | | | **Pn** | **20 05 55.9** | **-0.7** |
| PTBC | | | | *e*S | | | **Sn** | **20 06 10.8** | **-1.3** |
| PTBC | | | | *i* | | | | 20 06 12.2 | |
| | comp=Z,229nm,0.2s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.10** | **209** | *e*P | | | **Pn** | **20 05 58.4** | **-0.2** |
| SPBC | | | | *e*S | | | **Sn** | **20 06 14.6** | **-1.0** |
| SPBC | | | | *i* | | | | 20 06 21.1 | |
| | comp=Z,183nm,0.1s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **1.10** | **50** | *e*P | | | **Pn** | **20 05 59.5** | **+0.4** |
| PAMC | | | | ⇑*i*P | | | | 20 06 59.5 | |
| PAMC | | | | *e*S | | | **Sn** | **20 06 17.5** | **+1.2** |
| PAMC | | | | *i* | | | | 20 06 18.5 | |
| | comp=Z,102nm,0.4s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.56** | **304** | *e*P | | | **Pn** | **20 06 04.8** | **+1.0** |
| ZARC | | | | *e*S | | | **Sn** | **20 06 26.2** | **+1.3** |
| ZARC | | | | *i* | | | | 20 06 28.9 | |
| | comp=Z,134nm,0.5s | | | | | | | | |
| **NORC** | **Norcasia** | **1.69** | **231** | *e*P | | | **Pn** | **20 06 04.8** | **-0.6** |
| NORC | | | | *e*S | | | **Sn** | **20 06 27.6** | **0.0** |
| NORC | | | | *i* | | | | 20 06 30.2 | |
| | comp=Z,149nm,0.2s | | | | | | | | |
| **ROSC** | **El Rosal** | **1.93** | **204** | P | | | **Pn** | **20 06 09.9** | **+1.2** |
| | comp=Z,4.5nm,0.3s,baz=342,slow=20,SNR=4.9 | | | | | | | | |
| ROSC | | | | S | | | **Sn** | **20 06 35.0** | **+1.5** |
| | comp=Z,10nm,0.3s,baz=17,slow=19,SNR=7.6 | | | | | | | | |
| **CHIC** | **Chingaza** | **1.99** | **185** | *e*P | | | **Pn** | **20 06 09.4** | **-0.1** |
| CHIC | | | | *e*S | | | **Sn** | **20 06 34.6** | **-0.2** |
| CHIC | | | | *i* | | | | 20 06 41.8 | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.02** | **258** | *e*P | | | **Pn** | **20 06 10.1** | **+0.4** |
| HELC | | | | *e*S | | | **Sn** | **20 06 36.6** | **+1.1** |
| HELC | | | | *i* | | | | 20 06 40.3 | |
| | comp=Z,49nm,0.3s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.27** | **300** | *e*P | | | **Pn** | **20 06 12.6** | **-0.1** |
| UREC | | | | *e*S | | | **Sn** | **20 06 41.8** | **+1.1** |
| UREC | | | | *i* | | | | 20 06 43.4 | |
| | comp=Z,91nm,0.3s | | | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.28** | **233** | *e*P | | | **Pn** | **20 06 13.8** | **+0.5** |
| GUY2C | | | | *e*S | | | **Sn** | **20 06 42.3** | **+0.6** |
| GUY2C | | | | *i* | | | | 20 06 48.6 | |
| | comp=Z,44nm,0.6s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **2.57** | **253** | *e*P | | | **Pn** | **20 06 17.6** | **+0.9** |
| CBOC | | | | *i* | | | | 20 06 18.9 | |
| | comp=Z,29nm,0.2s | | | | | | | | |
| CBOC | | | | *e*S | | | **Sn** | **20 06 45.0** | **-2.7** |
| **DBBC** | **Dabeiba** | **2.68** | **279** | *e*P | | | **Pn** | **20 06 18.7** | **+0.7** |
| DBBC | | | | *e*S | | | **Sn** | **20 06 50.1** | **-0.1** |
| DBBC | | | | *i* | | | | 20 07 04.9 | |
| | comp=Z,55nm,0.4s | | | | | | | | |
| **ANIL** | **Santa Ana** | **2.81** | **221** | *e*P | | | **Pn** | **20 06 20.7** | **+0.7** |
| ANIL | | | | *e*S | | | **Sn** | **20 06 53.9** | **+0.2** |
| ANIL | | | | *i* | | | | 20 07 03.3 | |
| | comp=Z,91nm,0.3s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.63** | **334** | *e*P | | | **Pn** | **20 06 30.7** | **0.0** |
| SJCC | | | | *e*S | | | **Sn** | **20 07 11.9** | **-1.0** |
| SJCC | | | | *i* | | | | 20 07 21.9 | |
| | comp=Z,10nm,0.3s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.66** | **52** | P | | | **Pn** | **20 06 30.8** | **-0.3** |
| | comp=Z,6.0nm,0.3s,baz=238,slow=9.5,SNR=7.1 | | | | | | | | |
| SDV | | | | S | | | **Sn** | **20 07 13.3** | **-0.4** |
| | comp=Z,8.0nm,0.3s,baz=273,slow=19,SNR=27 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.30** | **340** | P | | | **P** | **20 15 51.0** | **-1.8** |
| | comp=Z,0.2nm,0.5s,baz=132,slow=7.4,SNR=4.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.19** | **78** | P | | | **P** | **20 17 02.8** | **+1.4** |
| | comp=Z,0.2nm,0.6s,baz=265,slow=7.2,SNR=1.9 | | | | | | | | |

*IDC* ***27*** *20:08:47.3±0.7, 7.˙56N×82.˙34W, h0km, mb4.0/13, mb1 4.2/15, mb1mx4.0/35, mbtmp4.0/15, ML2.8/2, MS3.5/13, Ms1 3.5/13, ms1mx3.2/66, Error ellipse: s-maj=31.4km s-min=14.5km az=43.0*
*INET* ***27*** *20:08:48.6±0.3, 7.˙28N±82.˙67W, h5km±2km, ML4.4, MW3.8*
*NEIC* ***27*** *20:08:50.0±1.5, 7.˙50N±0.˙05×82.˙50W±0.˙06, h10km±1km, mb4.6/38, Error ellipse: s-maj=12.7km s-min=3.6km az=232.0*
*UCR* ***27*** *20:08:49.8±1.9, 7.˙39N×82.˙87W, h0km±16km, MW4.6*

**ISC 27 20:08:49.0±1.6, 7.53N±0.06×82.33W±0.04, h12km±9km, n167, σ1$34/159, mb4.5/28, MS3.6/10, 1C, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CDITO** | **Canoas** | **1.17** | **333** | Pn | | | **Pg** | **20 09 10.2** | **-1.3** |
| CDITO | | | | Sn | | | **Sn** | **20 09 27.3** | **+0.1** |
| **BRU2** | **Volcan** | **1.31** | **344** | Pn | | | **Pn** | **20 09 12.5** | **-1.1** |
| **PIRO** | **Carate, Puerto** | **1.32** | **311** | *e*P | | | **Pn** | **20 09 11.6** | **-1.7** |
| **EDSV** | **San Vito** | **1.43** | **334** | *e*P | | | **Pg** | **20 09 18.4** | **+1.8** |
| EDSV | | | | *e*S | | | **Sg** | **20 09 39.1** | **+3.9** |
| **CACAO** | **El Cacao, Vera** | **1.47** | **97** | ⇑*e*P | | | **Pn** | **20 09 13.6** | **-1.7** |
| CACAO | | | | *e*S | | | **Sn** | **20 09 32.7** | **-1.8** |
| **RIOS** | **Rincon, Osa** | **1.65** | **315** | Pn | | | **Pn** | **20 09 16.1** | **-1.7** |
| RIOS | | | | Sn | | | **Sn** | **20 09 38.3** | **-0.8** |
| **RIOS** | **Rincon, Osa** | **1.65** | **315** | *e*P | | | **Pn** | **20 09 16.6** | **-1.2** |
| RIOS | | | | *e*S | | | **Sn** | **20 09 38.2** | **-0.8** |
| RIOS | | | | IAML | | | | 20 09 39.7 | |
| | comp=Z,5μm,0.3s | | | | | | | | |
| **EDPN** | **Palmar Norte** | **1.81** | **322** | *e*P | | | **Pn** | **20 09 19.9** | **-0.1** |
| EDPN | | | | *e*S | | | **Sn** | **20 09 43.0** | **+0.1** |
| **EDBA** | **Buenos Aires** | **1.88** | **330** | *e*P | | | **Pn** | **20 09 21.7** | **+0.7** |
| **SRBA** | **San Rafael, Bu** | **1.98** | **329** | Pn | | | **Pn** | **20 09 22.1** | **-0.3** |
| **SRBA** | **San Rafael, Bu** | **1.98** | **329** | *e*P | | | **Pn** | **20 09 22.3** | **-0.2** |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| VILB | Vilhena | 29.96 | 133 | *e*P | P | **20 14 58.4** | **+0.9** |
| GO01 | Chusmiza | 29.96 | 155 | P | P | **20 14 59.0** | **+1.0** |
| GO01 | | | | IAmb | IAmb | 20 15 04.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| NPGB | Novo Progresso | 30.55 | 118 | *e*P | P | **20 15 03.0** | **+0.2** |
| SIV | San Ignacio | 31.45 | 138 | LR | LR | 20 29 01.3 | |
| | comp=Z,48nm,18.3s,baz=188,slow=39 | | | | | | |
| CLDB | Colider | 32.12 | 124 | *e*P | P | **20 15 16.3** | **-0.3** |
| PTLB | Pontes e Lacer | 32.39 | 135 | *e*P | P | **20 15 19.2** | **+0.3** |
| LVC | Limon Verde | 32.71 | 157 | *e*P | P | **20 15 23.2** | **+1.3** |
| ANMO | Albuquerque | 35.16 | 324 | LR | LR | 20 31 48.8 | |
| | comp=Z,111nm,18.3s,baz=240,slow=39 | | | | | | |
| 214A | Organ Pipe Nat | 37.36 | 315 | P | P | **20 16 01.7** | **0.0** |
| MVCO | Mesa Verde | 37.93 | 325 | P | P | **20 16 07.4** | **+0.7** |
| MVCO | | | | IAmb | IAmb | 20 16 13.5 | |
| | comp=Z,13nm,1.5s | | | | | | |
| ARAG | Araguaiana, MT | 38.03 | 127 | *e*P | P | **20 16 06.9** | **-0.6** |
| AQDB | Aquidauana | 38.21 | 137 | *e*P | P | **20 16 09.1** | **+0.2** |
| SMTB | Santa Maria do | 38.26 | 115 | *e*P | P | **20 16 09.9** | **+0.4** |
| 113A | Mohawk Valley, | 38.48 | 315 | P | P | **20 16 11.1** | **0.0** |
| PEXB | Peixe | 39.05 | 120 | *e*P | P | **20 16 16.1** | **-0.1** |
| GLA | Glamis | 39.38 | 315 | P | P | **20 16 18.7** | **-0.1** |
| W13A | Hualapai Mount | 39.89 | 318 | P | P | **20 16 22.7** | **-0.4** |
| H03N2 | Juan Fernandez | 40.87 | 176 | T | T | 20 59 56.6 | |
| | baz=354,slow=76,SNR=14 | | | | | | |
| H03N1 | Juan Fernandez | 40.87 | 176 | T | T | 20 59 57.0 | |
| | baz=354,slow=76,SNR=18 | | | | | | |
| H03N3 | Juan Fernandez | 40.88 | 176 | T | T | 20 59 56.0 | |
| | baz=354,slow=76,SNR=26 | | | | | | |
| BDFB | Brasilia | 41.05 | 124 | LR | LR | 20 34 01.9 | |
| | comp=Z,82nm,20.1s,baz=311,slow=37 | | | | | | |
| GSC | Goldstone, Bar | 41.98 | 316 | P | P | **20 16 40.3** | **+0.1** |
| GSC | | | | IAmb | IAmb | 20 16 47.7 | |
| | comp=Z,15nm,1.5s | | | | | | |
| SDBA | SAO DESIDERIO | 42.15 | 118 | *e*P | P | **20 16 42.0** | **+0.2** |
| IPMB | Ipameri, GO | 42.16 | 127 | *e*P | P | **20 16 41.6** | **-0.2** |
| QSM | Queen of Sheba | 42.38 | 317 | P | P | **20 16 44.3** | **+0.8** |
| QSM | | | | IAmb | IAmb | 20 16 48.2 | |
| | comp=Z,11nm,1.4s | | | | | | |
| PDAR | Pinedale Array | 42.50 | 330 | P | P | **20 16 43.7** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=116,slow=4.1,SNR=2.0 | | | | | | |
| PDAR | | | | PcP | PcP | **20 18 37.3** | **0.0** |
| | comp=Z,1.2nm,1.0s,baz=104,slow=3.8,SNR=3.8 | | | | | | |
| LCH | Last Change Ra | 43.60 | 318 | P | P | **20 16 53.4** | **-0.1** |
| LCH | | | | IAmb | IAmb | 20 17 00.3 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| ULM | Lac du Bonnet | 44.06 | 348 | P | P | **20 16 55.0** | **-1.7** |
| | comp=Z,3.9nm,0.8s,baz=144,slow=7.5,SNR=4.0 | | | | | | |
| NV11 | Mina Array Sit | 44.61 | 319 | P | P | **20 17 02.0** | **+0.5** |
| NV11 | | | | IAmb | IAmb | 20 17 08.5 | |
| | comp=Z,15nm,1.5s | | | | | | |
| NVAR | Mina Array Bea | 44.70 | 319 | P | P | **20 17 03.9** | **+1.5** |
| | comp=Z,1.4nm,0.6s,baz=125,slow=6.8,SNR=13 | | | | | | |
| NVAR | | | | PcP | PcP | **20 18 44.8** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=134,slow=6.4,SNR=1.6 | | | | | | |
| NVAR | Mina Array Bea | 44.70 | 319 | P | P | **20 17 02.8** | **+0.5** |
| OMMB | Old Mammoth Mi | 44.71 | 318 | P | P | **20 17 03.0** | **+0.5** |
| OMMB | | | | IAmb | IAmb | 20 17 09.5 | |
| | comp=Z,10nm,1.3s | | | | | | |
| BMN | Battle Mountai | 45.18 | 322 | P | P | **20 17 06.3** | **+0.3** |
| BMN | | | | IAmb | IAmb | 20 17 10.8 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| NBPN | Ponto Novo - B | 45.73 | 113 | *e*P | P | **20 17 10.2** | **-0.4** |
| CMB | Columbia Colle | 45.87 | 317 | P | P | **20 17 11.6** | **+0.2** |
| CMB | | | | IAmb | IAmb | 20 17 17.6 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| DIAM | Diamantina, MG | 45.97 | 124 | *e*P | P | **20 17 12.2** | **-0.4** |
| VAO | Valinhos | 46.02 | 132 | *e*P | P | **20 17 12.5** | **-0.3** |
| BSCB | Bom Sucesso | 46.52 | 128 | *e*P | P | **20 17 16.1** | **-0.7** |
| WVOR | Wild Horse Val | 47.24 | 323 | P | P | **20 17 22.7** | **+0.6** |
| ORV | Oroville | 47.41 | 318 | P | P | **20 17 23.8** | **+0.5** |
| NBIT | Itapeh - BA | 48.02 | 118 | *e*P | P | **20 17 28.8** | **+0.3** |
| TER01 | Tubaro-SC | 48.08 | 140 | *e*P | P | **20 17 29.3** | **+0.6** |
| CMC01 | Camacan, BA | 48.13 | 118 | *e*P | P | **20 17 28.9** | **-0.3** |
| SJMB | Sao Joao De Ma | 48.22 | 123 | *e*P | P | **20 17 29.9** | **-0.1** |
| SCHQ | Schefferville | 48.78 | 12 | LR | LR | 20 41 20.7 | |
| | comp=Z,49nm,18.0s,baz=204,slow=40 | | | | | | |
| NBAN | Anadia - AL | 48.95 | 110 | *e*P | P | **20 17 35.4** | **-0.3** |
| RIB01 | Linhares ES | 49.17 | 123 | *e*P | P | **20 17 34.6** | **-2.6** |
| PLCA | Paso Flores | 49.23 | 168 | P | P | **20 17 37.5** | **+0.1** |
| | comp=Z,4.6nm,1.2s,baz=329,slow=5.8,SNR=3.7 | | | | | | |
| PLCA | Paso Flores | 49.23 | 168 | P | P | **20 17 38.1** | **+0.6** |
| PLCA | | | | IAmb | IAmb | 20 17 45.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| YBH | Yreka Blue Hor | 49.34 | 320 | P | P | **20 17 38.1** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=97,slow=8.1,SNR=1.7 | | | | | | |
| L04D | Klamath Falls | 49.34 | 321 | P | P | **20 17 38.0** | **-0.4** |
| NEW | Newport | 50.14 | 330 | LR | LR | 20 40 48.2 | |
| | comp=Z,71nm,18.5s,baz=187,slow=38 | | | | | | |
| FRB | Frobisher Bay | 56.99 | 7 | LR | LR | 20 43 37.1 | |
| | comp=Z,87nm,18.1s,baz=172,slow=37 | | | | | | |
| YKA | Yellowknife Ar | 59.70 | 343 | P | P | **20 18 52.5** | **-0.6** |
| | comp=Z,1.7nm,0.9s,baz=137,slow=7.1,SNR=14 | | | | | | |
| INK | Inuvik | 69.40 | 342 | P | P | **20 19 57.5** | **+1.0** |
| INK | | | | IAmb | IAmb | 20 20 14.4 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| A36M | Sachs Harbour | 69.54 | 347 | P | P | **20 19 56.8** | **-0.5** |
| BCAR | Beaver Creek A | 69.80 | 335 | P | P | **20 20 00.4** | **+1.2** |
| L27K | Beaver Creek, | 69.81 | 335 | P | P | **20 20 00.2** | **+1.0** |
| SUMG | Summit | 70.16 | 13 | *i* P | P | **20 19 59.0** | **-2.6** |
| EGAK | Eagle | 70.28 | 337 | P | P | **20 20 02.8** | **+0.8** |
| SCRK | Sand Creek | 71.07 | 336 | P | P | **20 20 08.5** | **+1.5** |
| SCRK | | | | IAmb | IAmb | 20 20 42.2 | |
| | comp=Z,10nm,1.6s | | | | | | |
| NEEM | North Greenlan | 71.80 | 7 | *e*P | P | **20 20 08.8** | **-2.6** |
| ILAR | Eielson Array | 72.53 | 336 | P | P | **20 20 16.4** | **+0.8** |
| | comp=Z,1.5nm,0.9s,baz=106,slow=4.8,SNR=12 | | | | | | |
| ILAR | Eielson Array | 72.53 | 336 | P | P | **20 20 16.3** | **+0.7** |
| BMAR | Burnt Mountain | 72.65 | 339 | P | P | **20 20 16.8** | **+0.5** |
| IMAR | Indian Mountai | 75.64 | 336 | P | P | **20 20 34.0** | **+0.2** |
| ESDC | Sonseca Array | 76.29 | 51 | P | P | **20 20 39.1** | **+1.0** |
| | comp=Z,2.5nm,0.9s,baz=273,slow=4.9,SNR=7.8 | | | | | | |
| ESDC | | | | LR | LR | 20 49 13.5 | |
| | comp=Z,42nm,21.6s,baz=303,slow=32 | | | | | | |
| ESDC | Sonseca Array | 76.29 | 51 | P | P | **20 20 39.1** | **+1.0** |
| ESDC | | | | IAmb | IAmb | 20 20 40.2 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| DBIC | Dimbokro | 76.79 | 85 | P | P | **20 20 41.4** | **+0.1** |
| | comp=Z,4.6nm,1.0s,baz=285,slow=9.4,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 82.53 | 78 | P | P | **20 21 12.4** | **-0.1** |
| | comp=Z,1.5nm,0.9s,baz=284,slow=5.5,SNR=5.4 | | | | | | |
| TORD | Torodi Ar. Bea | 82.53 | 78 | P | P | **20 21 12.6** | **+0.1** |
| TORD | | | | IAmb | IAmb | 20 21 13.5 | |
| | comp=Z,3.7nm,1.2s | | | | | | |
| SPITS | Spitsbergen Ar | 84.47 | 12 | LR | LR | 21 01 55.9 | |
| | comp=Z,22nm,19.1s,baz=7.5,slow=38 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 107.19 | 292 | T | T | 22 22 59.7 | |
| | baz=77,slow=75,SNR=20 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 107.19 | 292 | T | T | 22 23 00.3 | |
| | baz=77,slow=75,SNR=18 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 107.21 | 292 | T | T | 22 23 00.8 | |
| | baz=77,slow=75,SNR=20 | | | | | | |
| SONM | Songino Array | 124.34 | 353 | PKP | **PKPdf** | **20 27 48.0** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=11,slow=2.0,SNR=4.9 | | | | | | |
| SONM | Songino Array | 124.34 | 353 | | **PKPdf** | **20 27 47.8** | **-0.5** |
| KSRS | Korea Array | 127.07 | 330 | PKP | **PKPdf** | **20 27 52.1** | **-1.6** |
| | comp=Z,0.8nm,0.7s,baz=29,slow=3.5,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 141.74 | 241 | PKhKP | PKPpre | 20 28 17.2 | |
| | comp=Z,0.5nm,0.8s,baz=117,slow=3.0,SNR=3.1 | | | | | | |
| WRA | Warramunga Arr | 142.40 | 247 | PKhKP | PKPpre | 20 28 18.0 | |
| | comp=Z,0.5nm,0.9s,baz=95,slow=2.8,SNR=4.8 | | | | | | |
| H01W1 | Cape Leeuwin H | 148.83 | 207 | T | T | 23 15 33.4 | |
| | baz=146,slow=76,SNR=82 | | | | | | |
| H01W2 | Cape Leeuwin H | 148.83 | 207 | T | T | 23 15 33.7 | |
| | baz=146,slow=76,SNR=94 | | | | | | |
| H01W3 | Cape Leeuwin H | 148.84 | 207 | T | T | 23 15 34.7 | |
| | baz=146,slow=76,SNR=88 | | | | | | |
| CMAR | Chiang Mai Arr | 154.15 | 357 | PKP | **PKPdf** | **20 28 41.0** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=318,slow=1.2,SNR=2.1 | | | | | | |
| CMAR | | | | PKPbc | **PKPbc** | **20 28 49.6** | **-0.3** |
| | comp=Z,1.0nm,0.7s,baz=339,slow=3.5,SNR=5.4 | | | | | | |
| CMAR | Chiang Mai Arr | 154.15 | 357 | PKPdf | **PKPdf** | **20 28 41.6** | **-0.1** |

*JMA* ***27*** *20:21:03.4±0.4, 46°.29N×140°.52E, h0km, M3.7*
*SKHL* ***27*** *20:21:03.1±0.1, 46°.10N×140°.60E, h8km±2km, mb4.5/5*
*NIED* ***27*** *20:21:03.4, 46°.29N×140°.52E, h0km, MW3.5, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=0.44; Mθθ1.66; Mϕϕ-1.23; Mrθ-1.11; Mθϕ0.08; Mrϕ0.40; Fault plane solution: M0 1.82000×10¹⁴ NP1: ϕs=127.00000°, δ85.00000°, λ-41.00000°. NP2: ϕs=222.00000°, δ49.00000°, λ-173.00000°.*
**ISC 27 20:21:06.3**±1.5, **46°.18N**±0°.06×**140°.70E**±0°.08, **h13**km±16km, **n8**, σ1§**97**/14, **Primorye**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JRBN** | **Rebuntou** | **0.80** | **161** | P | **Pn** | **20 21 21.5** | **-1.8** |
| JRBN | | | | *e*S | **Sn** | **20 21 34.1** | **-0.9** |
| **JRR** | **Rishiri** | **1.13** | **157** | P | **Pn** | **20 21 28.0** | **+0.2** |
| JRR | | | | *e*S | **Sn** | **20 21 45.7** | **+2.5** |
| **JWK2** | **Keihoku** | **1.21** | **136** | P | **Pb** | **20 21 29.4** | **+0.4** |
| JWK2 | | | | *e*S | **Sn** | **20 21 47.9** | **+2.8** |
| **KHLM** | **Kholmsk** | **1.28** | **46** | *i* P | **Pn** | **20 21 28.3** | **-1.5** |
| KHLM | | | | *e*S | **Sg** | **20 21 45.6** | **-1.8** |
| **YSS** | **Yuzh-Sakhalins** | **1.61** | **61** | *e*P | **Pn** | **20 21 33.5** | **-0.9** |
| YSS | | | | AMB | AMB | 20 21 34.5 | |
| | 20nm,0.4s | | | | | | |
| YSS | | | | *e*S | **Sn** | **20 21 54.4** | **-0.7** |
| YSS | | | | A | A | 20 21 55.5 | |
| | 260nm,0.5s | | | | | | |
| YSS | | | | A | A | 20 21 55.5 | |
| | 250nm,0.5s | | | | | | |
| **JSE** | **Soyaes** | **1.80** | **132** | P | **Pb** | **20 21 37.9** | **-1.2** |
| **UGL** | **Uglegorsk** | **3.04** | **17** | *e*Pg | **Pg** | **20 22 05.2** | **+0.7** |
| UGL | | | | AMB | AMB | 20 22 13.0 | |
| | 30nm,0.4s | | | | | | |
| UGL | | | | *e*Sg | **Sg** | **20 22 47.1** | **+3.2** |
| UGL | | | | A | A | 20 22 49.7 | |
| | 60nm,0.5s | | | | | | |
| UGL | | | | A | A | 20 22 49.7 | |
| | 130nm,0.5s | | | | | | |
| **TEY** | **Ternei** | **3.10** | **250** | *e*Sg | **Sg** | **20 22 45.0** | **-0.6** |

*SKHL* ***27*** *20:31:52.7±0.3, 44°.10N×149°.00E, h45km±4km, mb4.1/6*
*JMA* ***27*** *20:31:52.6±0.3, 44°.41N×148°.94E, h30km, M3.9*
**ISC 27 20:31:49.3**±3.6, **44°.00N**±0°.09×**149°.3E**±0°.2, **h38**km, **n22**, σ1§**99**/36, **East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.59** | **321** | *i* P | **Pn** | **20 32 14.9** | **0.0** |
| KUR | | | | AMB | AMB | 20 32 15.2 | |
| | 150nm,0.6s | | | | | | |
| KUR | | | | *i* S | **Sn** | **20 32 31.8** | **-2.4** |
| KUR | | | | A | A | 20 32 32.2 | |
| | 450nm,0.3s | | | | | | |
| KUR | | | | A | A | 20 32 32.2 | |
| | 290nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.77** | **267** | *i* P | **Pn** | **20 32 18.4** | **+1.1** |
| SHO | | | | AMB | AMB | 20 32 20.1 | |
| | 60nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **20 32 37.2** | **-1.3** |
| SHO | | | | A | A | 20 32 40.0 | |
| | 240nm,0.3s | | | | | | |
| SHO | | | | A | A | 20 32 40.0 | |
| | 390nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.46** | **272** | *e*P | **Pn** | **20 32 28.1** | **+1.3** |
| YUK | | | | AMB | AMB | 20 32 29.9 | |
| | 10.0nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 20 32 29.9 | |
| | 10.0nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 20 32 29.9 | |
| | 20nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **20 32 54.5** | **-1.1** |
| YUK | | | | A | A | 20 32 55.2 | |
| | 180nm,0.3s | | | | | | |
| YUK | | | | A | A | 20 32 55.2 | |
| | 150nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.64** | **257** | P | **Pn** | **20 32 30.6** | **+1.4** |
| NEM2 | | | | *e*S | **Sn** | **20 32 58.6** | **-1.3** |
| **NMR** | **Nemuro--Hokkai** | **2.65** | **257** | *i* P | **Pn** | **20 32 30.8** | **+1.4** |
| NMR | | | | *i* S | **Sn** | **20 32 58.8** | **-1.4** |
| **GLVR** | **Golovnino** | **2.73** | **266** | *e*P | **Pn** | **20 32 32.0** | **+1.5** |
| GLVR | | | | AMB | AMB | 20 32 33.8 | |
| | 10.0nm,0.2s | | | | | | |
| GLVR | | | | *e*S | **Sn** | **20 33 01.3** | **-0.8** |
| GLVR | | | | A | A | 20 33 02.7 | |
| | 250nm,0.5s | | | | | | |
| GLVR | | | | A | A | 20 33 02.7 | |
| | 240nm,0.5s | | | | | | |
| **JRA** | **Rausu** | **3.00** | **270** | P | **Pn** | **20 32 36.6** | **+2.4** |
| JRA | | | | *e*S | **Sn** | **20 33 09.0** | **+0.2** |
| **JNK** | **Nakash** | **3.32** | **264** | P | **Pn** | **20 32 40.5** | **+1.8** |
| JNK | | | | *e*S | **Sn** | **20 33 15.7** | **-1.2** |
| **AKK** | **Akkeshi** | **3.37** | **255** | *e*P | **Pn** | **20 32 40.9** | **+1.6** |
| AKK | | | | *e*S | **Sn** | **20 33 16.8** | **-1.2** |
| **JAK** | **Akkeshi** | **3.48** | **255** | P | **Pn** | **20 32 42.4** | **+1.6** |
| JAK | | | | *e*S | **Sn** | **20 33 19.2** | **-1.4** |
| **JTKR** | **Abashiri--Toko** | **3.87** | **271** | P | **Pn** | **20 32 48.4** | **+2.2** |
| **JAR** | **Ashorobuto** | **4.05** | **262** | P | **Pn** | **20 32 51.1** | **+2.4** |
| JAR | | | | *e*S | **Sn** | **20 33 34.7** | **-0.2** |
| **JOB** | **Onbets** | **4.11** | **256** | P | **Pn** | **20 32 51.4** | **+2.0** |
| JOB | | | | *e*S | **Sn** | **20 33 35.6** | **-0.6** |
| **JMP** | **Maruseppu** | **4.26** | **272** | P | **Pn** | **20 32 54.0** | **+2.3** |
| **JCH** | **Churui** | **4.53** | **254** | P | **Pn** | **20 32 56.8** | **+1.6** |
| JCH | | | | *e*S | **Sn** | **20 33 45.3** | **-1.3** |
| **JKK2** | **Kamakawa 2** | **4.71** | **271** | P | **Pn** | **20 33 00.4** | **+2.6** |
| **JNBK** | **Urakawa-nobuka** | **5.07** | **252** | P | **Pn** | **20 33 04.6** | **+1.9** |
| JNBK | | | | *e*S | **Sn** | **20 33 57.9** | **-2.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.45** | **305** | *e*P | **Pn** | **20 33 09.5** | **+1.6** |
| YSS | | | | AMB | AMB | 20 33 10.3 | |
| | 10.0nm,0.4s | | | | | | |
| **JNB** | **Noboribetsu** | **6.20** | **259** | P | **Pn** | **20 33 20.2** | **+1.9** |
| **JKB** | **Kayabe** | **6.40** | **254** | *e*S | **Sn** | **20 34 29.2** | **-3.5** |
| **JANG** | **Nango** | **6.80** | **240** | *e*S | **Sn** | **20 34 38.2** | **-4.4** |
| **JTM** | **Tenmabayashi** | **6.87** | **245** | *e*S | **Sn** | **20 34 40.6** | **-3.6** |

*SKHL* ***27*** *20:34:18.5±0.2, 46°.30N×140°.60E, h10km±5km, mb4.1/3*
*JMA* ***27*** *20:34:19.0±0.3, 46°.26N×140°.55E, h0km, M2.9*
**ISC 27 20:34:18.8**±2.9, **46°.30N**±0°.06×**140°.6E**±0°.2, **h6**km±12km, **n6**, σ0§**68**/15, **Primorye**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JRBN** | **Rebuntou** | **0.94** | **158** | P | **Pg** | **20 34 36.6** | **-0.3** |
| JRBN | | | | *e*S | **Sg** | **20 34 48.9** | **-0.1** |
| **JRR** | **Rishiri** | **1.27** | **156** | P | **Pn** | **20 34 43.1** | **0.0** |
| JRR | | | | *e*S | **Sn** | **20 35 00.7** | **+0.3** |
| **KHLM** | **Kholmsk** | **1.27** | **53** | *i* Pg | **Pn** | **20 34 43.2** | **+0.1** |
| KHLM | | | | *e*Sg | **Sn** | **20 35 00.6** | **+0.1** |
| **JWK2** | **Keihoku** | **1.35** | **136** | P | **Pg** | **20 34 44.3** | **-0.4** |
| JWK2 | | | | *e*S | **Sn** | **20 35 02.1** | **-0.3** |
| **YSS** | **Yuzh-Sakhalins** | **1.65** | **66** | *e*P | **Pn** | **20 34 48.2** | **0.0** |
| YSS | | | | P | **Pg** | **20 34 50.9** | **+0.5** |
| | 7.0nm,0.7s | | | | | | |
| YSS | | | | *e*S | **Sn** | **20 35 07.8** | **-1.9** |
| YSS | | | | S | **Sb** | **20 35 10.7** | **+0.2** |
| | 40nm,0.6s | | | | | | |
| YSS | | | | S | **Sb** | **20 35 10.7** | **+0.2** |
| | 30nm,0.6s | | | | | | |
| **JSE** | **Soyaes** | **1.95** | **133** | P | **Pn** | **20 34 53.1** | **+0.7** |
| JSE | | | | *e*S | **Sn** | **20 35 17.6** | **+0.5** |

*TUL* ***27*** *21:02:12.2±0.5, 36°.47N±0°.03×98°.75W±0°.05, h7km±5km, ML3.3, ML3.2/24(NEIC), Error ellipse: s-maj=5.8km s-min=3.8km az=109.0*
*NEIC* ***27*** *21:02:38.7±0.8, 36°.48N±0°.02×98°.75W±0°.02, h7km±1km, Error ellipse: s-maj=3.8km s-min=1.0km az=146.0*
**NEIC 27 21:02:13.0**±0.9, **36°.47N**±0°.03×**98°.70W**±0°.05, **h7**km±1km, **Error ellipse: s-maj=6.4km s-min=3.8km az=104.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.26** | **251** | Pg | Pg | 21 02 17.0 | -1.1 |
| U32A | | | | IAML | | 21 02 21.1 | |
| | comp=E,6μm,0.3s | | | | | | |
| **OKCFA** | **Oklahoma City** | **1.46** | **136** | | Pn | 21 02 39.2 | -0.6 |
| **FNO** | **Franklin** | **1.60** | **138** | | Pn | 21 02 41.6 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.73** | **182** | Pn | Pn | 21 02 42.1 | -1.4 |
| **T35A** | **Sooner Cattle** | **1.82** | **75** | | Pn | 21 02 44.4 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.82** | **75** | IAmb_Lg | | 21 03 37.0 | |
| | comp=Z,193nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **1.95** | **360** | | Pn | 21 02 47.0 | +0.3 |
| **X34A** | **Smith Ranch, M** | **1.99** | **159** | | Pn | 21 02 48.0 | +0.8 |
| **TUL1** | **Leonard** | **2.42** | **102** | | Pn | 21 02 52.4 | -0.6 |
| **TUL1** | **Leonard** | **2.42** | **102** | IAmb_Lg | | 21 03 55.4 | |
| | comp=Z,134nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.48** | **341** | | Pn | 21 02 53.8 | -0.2 |
| **AMTX** | **Amarillo** | **2.89** | **238** | | Pn | 21 02 58.8 | -0.8 |
| **KSU1** | **Kansas State U** | **3.11** | **32** | | Pn | 21 03 02.4 | -0.1 |
| **KSU1** | **Kansas State U** | **3.11** | **32** | IAmb_Lg | | 21 04 24.7 | |
| | comp=Z,96nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.30** | **124** | | Pn | 21 03 04.4 | -0.7 |
| **Z35A** | **Perchaven, San** | **3.35** | **159** | | Pn | 21 03 05.0 | -0.8 |
| **HHAR** | **Hobbs** | **3.85** | **91** | | Pn | 21 03 12.0 | -0.6 |
| **ABTX** | **Abilene, Hawle** | **3.91** | **192** | | Pn | 21 03 12.5 | -1.1 |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **310** | | Pn | 21 03 14.0 | -1.2 |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **310** | IAmb_Lg | | 21 04 50.5 | |
| | comp=Z,110nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.16** | **234** | | Pn | 21 03 16.2 | -0.8 |
| **MSTX** | **Muleshoe** | **4.16** | **234** | IAmb_Lg | | 21 04 50.8 | |
| | comp=E,85nm,0.9s | | | | | | |
| **W39A** | **Magazine** | **4.19** | **106** | | Pn | 21 03 16.0 | -1.4 |
| **W39A** | **Magazine** | **4.19** | **106** | IAmb_Lg | | 21 04 59.2 | |
| | comp=E,111nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.42** | **135** | IAmb_Lg | | 21 05 03.7 | |
| | comp=Z,72nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.47** | **73** | | Pn | 21 03 20.0 | -1.3 |
| **S39A** | **Bolivar** | **4.47** | **73** | IAmb_Lg | | 21 05 11.6 | |
| | comp=Z,62nm,1.1s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.58** | **167** | | Pn | 21 03 21.1 | -1.7 |
| **T25A** | **Trinidad** | **4.63** | **280** | | Pn | 21 03 23.0 | -0.7 |
| **T25A** | **Trinidad** | **4.63** | **280** | IAmb_Lg | | 21 05 13.7 | |
| | comp=E,58nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.72** | **90** | IAmb_Lg | | 21 05 08.2 | |
| | comp=Z,74nm,0.9s | | | | | | |
| **BGNE** | **Belgrade** | **4.96** | **5** | IAmb_Lg | | 21 05 12.8 | |
| | comp=Z,72nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **5.06** | **151** | IAmb_Lg | | 21 05 32.4 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.18** | **111** | IAmb_Lg | | 21 05 37.4 | |
| | comp=Z,46nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.21** | **81** | IAmb_Lg | | 21 05 25.2 | |
| | comp=Z,54nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.34** | **101** | IAmb_Lg | | 21 05 31.8 | |
| | comp=Z,63nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.35** | **94** | IAmb_Lg | | 21 05 29.2 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.36** | **120** | IAmb_Lg | | 21 05 34.3 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.40** | **102** | IAmb_Lg | | 21 05 31.6 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **5.44** | **68** | IAmb_Lg | | 21 05 39.7 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.58** | **285** | IAmb_Lg | | 21 05 42.9 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.69** | **298** | IAmb_Lg | | 21 05 37.2 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.74** | **170** | IAmb_Lg | | 21 05 47.6 | |
| | comp=Z,61nm,0.7s | | | | | | |
| **Z41A** | **Richland Creek** | **5.81** | **122** | IAmb_Lg | | 21 06 00.2 | |
| | comp=Z,55nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.04** | **189** | IAmb_Lg | | 21 05 59.8 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.15** | **360** | IAmb_Lg | | 21 06 09.8 | |
| | comp=Z,63nm,0.8s | | | | | | |
| **CCAR** | **Cane Creek** | **6.22** | **112** | IAmb_Lg | | 21 06 02.5 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.66** | **85** | IAmb_Lg | | 21 06 28.6 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.78** | **75** | IAmb_Lg | | 21 06 13.4 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **6.90** | **36** | IAmb_Lg | | 21 06 26.6 | |
| | comp=Z,63nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.19** | **310** | IAmb_Lg | | 21 06 40.0 | |
| | comp=Z,63nm,0.8s | | | | | | |
| **HALT** | **Halls** | **7.59** | **91** | IAmb_Lg | | 21 06 53.0 | |
| | comp=Z,45nm,0.9s | | | | | | |
| **735A** | **Kenedy** | **7.63** | **174** | IAmb_Lg | | 21 07 02.3 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.65** | **78** | IAmb_Lg | | 21 06 53.0 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **SIUC** | **Southern Illin** | **7.68** | **78** | IAmb_Lg | | 21 06 54.8 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **K38A** | **Parkersburg** | **7.69** | **35** | IAmb_Lg | | 21 07 01.5 | |
| | comp=Z,55nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **7.83** | **102** | IAmb_Lg | | 21 06 50.1 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **W45A** | **Hickory Valley** | **7.84** | **97** | IAmb_Lg | | 21 07 06.2 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.94** | **106** | IAmb_Lg | | 21 07 07.6 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **SUSD** | **Miller** | **7.97** | **359** | IAmb_Lg | | 21 06 52.9 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **RWWY** | **Rawlins** | **8.42** | **311** | IAmb_Lg | | 21 07 21.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.56** | **27** | IAmb_Lg | | 21 07 21.3 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **K22A** | **Casper** | **8.64** | **318** | IAmb_Lg | | 21 07 20.6 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **RSSD** | **Black Hills** | **8.66** | **334** | IAmb_Lg | | 21 07 18.2 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.16** | **43** | IAmb_Lg | | 21 07 40.7 | |
| | comp=Z,30nm,0.7s | | | | | | |

*TUL* ***27*** *21:08:04.2±1.1, 36°.48N±0°.03×98°.77W±0°.07, h8km±4km, 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SMTH | | | | AML | AML | 21 15 59.6 | |
| | comp=N,6330µm,0.6s | | | | | | |
| SMTH | | | | AML | AML | 21 16 00.2 | |
| | comp=E,6129µm,0.5s | | | | | | |
| **PLG** | **Polygyros** | **0.83** | **272** | P | **Pg** | **21 15 47.5** | **-0.2** |
| PLG | | | | S | **Sg** | **21 15 58.0** | **-0.5** |
| | comp=E,3µm,0.4s | | | | | | |
| **PLG** | **Polygyros** | **0.83** | **272** | P | **Pg** | **21 15 47.5** | **-0.2** |
| PLG | | | | S | **Sg** | **21 15 58.7** | **+0.2** |
| PLG | | | | AML | AML | 21 16 01.2 | |
| | comp=N,6102µm,0.5s | | | | | | |
| PLG | | | | AML | AML | 21 16 01.6 | |
| | comp=E,6156µm,0.3s | | | | | | |
| **EFSA** | **Agios Efstrati** | **0.88** | **156** | P | **Pg** | **21 15 49.3** | **+0.6** |
| EFSA | | | | AML | AML | 21 16 12.4 | |
| | comp=E,2007µm,0.6s | | | | | | |
| EFSA | | | | AML | AML | 21 16 13.7 | |
| | comp=N,3126µm,0.7s | | | | | | |
| **SOH** | **Sokhos** | **1.01** | **298** | P | **Pb** | **21 15 50.7** | **-0.5** |
| SOH | | | | S | **Sg** | **21 16 03.6** | **-0.7** |
| | comp=N,4µm,0.3s | | | | | | |
| **SOH** | **Sokhos** | **1.01** | **298** | P | **Pb** | **21 15 50.8** | **-0.4** |
| SOH | | | | S | **Sg** | **21 16 04.3** | **-0.1** |
| SOH | | | | AML | AML | 21 16 07.9 | |
| | comp=E,11160µm,0.4s | | | | | | |
| SOH | | | | AML | AML | 21 16 07.9 | |
| | comp=N,9794µm,0.3s | | | | | | |
| **SRS** | **Serrai** | **1.04** | **318** | P | **Pb** | **21 15 51.1** | **-0.7** |
| SRS | | | | S | **Sb** | **21 16 05.1** | **-0.3** |
| | comp=N,1µm,0.3s | | | | | | |
| **SRS** | **Serrai** | **1.04** | **318** | P | **Pb** | **21 15 51.4** | **-0.4** |
| SRS | | | | S | **Sb** | **21 16 05.4** | **-0.1** |
| SRS | | | | AML | AML | 21 16 06.7 | |
| | comp=E,3287µm,0.2s | | | | | | |
| SRS | | | | AML | AML | 21 16 07.8 | |
| | comp=N,2287µm,0.4s | | | | | | |
| **GADA** | **Gvkgeada** | **1.06** | **98** | P | **Pb** | **21 15 52.1** | **+0.1** |
| GADA | | | | S | **Sb** | **21 16 05.1** | **-0.8** |
| | comp=N,1µm,0.4s | | | | | | |
| **GADA** | **Gvkgeada** | **1.06** | **98** | PG | **Pb** | **21 15 52.2** | **+0.2** |
| GADA | | | | SG | **Sb** | **21 16 06.1** | **+0.2** |
| **GOKA** | **anakkale-Gk** | **1.07** | **98** | P | **Pb** | **21 15 52.0** | **-0.2** |
| GOKA | | | | S | **Sn** | **21 16 07.7** | **+0.4** |
| **RDO** | **Rodhopi** | **1.11** | **44** | P | **Pb** | **21 15 52.1** | **-0.7** |
| RDO | | | | S | **Sg** | **21 16 07.5** | **+0.1** |
| | comp=N,2µm,0.2s | | | | | | |
| **RDO** | **Rodhopi** | **1.11** | **44** | PN | **Pb** | **21 15 52.5** | **-0.3** |
| RDO | | | | SN | **Sn** | **21 16 07.9** | **-0.3** |
| **NVR** | **Nevrokopi** | **1.12** | **333** | P | **Pb** | **21 15 52.5** | **-0.6** |
| **NVR** | **Nevrokopi** | **1.12** | **333** | P | **Pb** | **21 15 52.7** | **-0.3** |
| NVR | | | | S | **Sb** | **21 16 07.5** | **-0.1** |
| NVR | | | | AML | AML | 21 16 09.0 | |
| | comp=N,1711µm,0.3s | | | | | | |
| NVR | | | | AML | AML | 21 16 12.8 | |
| | comp=E,1490µm,0.5s | | | | | | |
| **THE** | **Thessaloniki** | **1.22** | **284** | P | **Pn** | **21 15 54.0** | **-0.6** |
| **THE** | **Thessaloniki** | **1.22** | **284** | P | **Pn** | **21 15 54.2** | **-0.4** |
| **THE** | **Thessaloniki** | **1.22** | **284** | P | **Pn** | **21 15 54.0** | **-0.6** |
| | baz=283 | | | | | | |
| THE | | | | S | **Sb** | **21 16 09.5** | **-1.0** |
| | baz=283 | | | | | | |
| **BOZC** | **Bozcaada** | **1.28** | **113** | PN | **Pn** | **21 15 55.5** | **+0.1** |
| **BOZC** | **Bozcaada** | **1.28** | **113** | P | **Pn** | **21 15 55.3** | **-0.1** |
| **ALN** | **Alexandroupoli** | **1.28** | **64** | P | **Pn** | **21 15 55.0** | **-0.4** |
| ALN | | | | S | **Sb** | **21 16 11.9** | **-0.2** |
| | comp=E,710nm,0.5s | | | | | | |
| **ALN** | **Alexandroupoli** | **1.28** | **64** | P | **Pn** | **21 15 55.0** | **-0.4** |
| **ALN** | **Alexandroupoli** | **1.28** | **64** | PN | **Pn** | **21 15 55.6** | **+0.2** |
| **CAVK** | **Edirne/Enez-Ca** | **1.30** | **74** | P | **Pn** | **21 15 55.6** | **0.0** |
| CAVK | | | | S | **Sg** | **21 16 14.4** | **+0.9** |
| **ECEA** | **Canakkale, Ece** | **1.30** | **103** | P | **Pn** | **21 15 55.1** | **-0.5** |
| **ENEZ** | **Enez** | **1.30** | **72** | P | **Pn** | **21 15 55.2** | **-0.5** |
| ENEZ | | | | S | **Sb** | **21 16 11.5** | **-1.2** |
| | comp=E,1µm,0.5s | | | | | | |
| **ENEZ** | **Enez** | **1.30** | **72** | PN | **Pn** | **21 15 55.9** | **+0.2** |
| **RZN** | **Rozhen** | **1.34** | **6** | *i* P | **Pn** | **21 15 56.4** | **-0.1** |
| **MMB** | **Musomiste** | **1.38** | **334** | *i* P | **Pn** | **21 15 56.0** | **-0.8** |
| **XOR** | **Xorichti** | **1.42** | **227** | P | **Pn** | **21 15 56.6** | **-0.8** |
| XOR | | | | S | **Sn** | **21 16 13.9** | **-2.1** |
| | comp=E,598nm,0.5s | | | | | | |
| **NEO** | **Neokhori** | **1.45** | **224** | P | **Pn** | **21 15 56.8** | **-0.9** |
| NEO | | | | S | **Sn** | **21 16 14.3** | **-2.4** |
| | comp=E,628nm,0.3s | | | | | | |
| **KDZ** | **Kurdzhali** | **1.46** | **27** | P | **Pn** | **21 15 57.3** | **-0.7** |
| **SKY** | **Skiros Island** | **1.47** | **179** | P | **Pn** | **21 15 57.5** | **-0.5** |
| **EZN** | **Ezine** | **1.48** | **110** | P | **Pn** | **21 15 58.0** | **-0.1** |
| **EZN** | **Ezine** | **1.48** | **110** | PN | **Pn** | **21 15 58.0** | **-0.1** |
| **KNT** | **Kendrikon** | **1.48** | **304** | P | **Pn** | **21 15 58.1** | **-0.1** |
| KNT | | | | S | **Sn** | **21 16 15.3** | **-2.2** |
| | comp=E,2µm,0.5s | | | | | | |
| **KNT** | **Kendrikon** | **1.48** | **304** | PN | **Pn** | **21 15 58.4** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.49** | **87** | PN | **Pn** | **21 15 58.3** | **0.0** |
| **KOCA** | **Canakkale, Ayv** | **1.50** | **124** | P | **Pn** | **21 15 58.5** | **+0.4** |
| KOCA | | | | S | | **21 16 17.7** | **-0.3** |
| **SIGR** | **SIGRI** | **1.53** | **138** | P | **Pn** | **21 15 59.0** | **+0.2** |
| **SIGR** | **SIGRI** | **1.53** | **138** | P | **Pn** | **21 15 59.1** | **+0.2** |
| **SIGR** | **SIGRI** | **1.53** | **138** | PN | **Pn** | **21 15 59.4** | **+0.6** |
| **ERIK** | **Erikli-Kesan** | **1.55** | **77** | PN | **Pn** | **21 15 59.4** | **+0.3** |
| **LIT** | **Litokhoron** | **1.58** | **262** | P | **Pn** | **21 15 58.8** | **-0.8** |
| **BAYC** | **CANAKKALE_Bayr** | **1.67** | **111** | P | **Pn** | **21 16 01.0** | **+0.2** |
| BAYC | | | | S | **Sn** | **21 16 20.7** | **-1.4** |
| **KESN** | **Edirne-Kesan** | **1.71** | **73** | P | **Pn** | **21 16 01.4** | **-0.2** |
| KESN | | | | S | **Sn** | **21 16 21.6** | **-2.0** |
| **GRG** | **Griva** | **1.73** | **291** | P | **Pn** | **21 16 01.6** | **0.0** |
| **GRG** | **Griva** | **1.73** | **291** | PN | **Pn** | **21 16 02.6** | **+1.0** |
| **PRK** | **Paraskevi** | **1.74** | **129** | P | **Pn** | **21 16 02.5** | **+0.8** |
| **KYMI** | **Kymi, Euboea I** | **1.75** | **191** | P | **Pn** | **21 16 01.3** | **-0.5** |
| **PLD** | **Plovdiv** | **1.76** | **4** | PN | **Pn** | **21 16 02.8** | **+0.8** |
| **PLD** | **Plovdiv** | **1.76** | **4** | *i* P | **Pn** | **21 16 02.8** | **+0.8** |
| **PLD** | **Plovdiv** | **1.76** | **4** | Pg | **Pg** | **21 16 05.5** | **0.0** |
| **LRSO** | **Larissa Observ** | **1.77** | **248** | P | **Pn** | **21 16 02.2** | **0.0** |
| **VAY** | **Valandovo** | **1.77** | **304** | *i* Pn | **Pn** | **21 16 02.7** | **+0.5** |
| **UKOP** | **Uzunkopru-Edir** | **1.78** | **63** | PN | **Pn** | **21 16 03.1** | **+0.8** |
| **KTI** | **Kastanea** | **1.84** | **272** | P | **Pn** | **21 16 03.2** | **-0.1** |
| **DIM** | **Dimitrovgrad** | **1.86** | **24** | P | **Pn** | **21 16 03.6** | **+0.2** |
| **DIM** | **Dimitrovgrad** | **1.86** | **24** | Pg | **Pg** | **21 16 06.7** | **-0.7** |
| **KKB** | **Krupnik** | **1.87** | **325** | P | **Pn** | **21 16 03.3** | **-0.2** |
| **AYVA** | **Ayvalik** | **1.96** | **121** | P | **Pn** | **21 16 05.5** | **+0.7** |
| AYVA | | | | S | **Sn** | **21 16 25.4** | **-4.0** |
| **ATAL** | **Atalanti** | **2.02** | **216** | P | **Pn** | **21 16 05.3** | **-0.4** |
| **RKY** | **Sarkoy-Tekirda** | **2.05** | **80** | PN | **Pn** | **21 16 05.9** | **-0.2** |
| **SART** | **Tekirdag** | **2.05** | **80** | P | **Pn** | **21 16 05.8** | **-0.3** |
| **THL** | **Klokotos Trika** | **2.08** | **249** | P | **Pn** | **21 16 06.3** | **-0.2** |
| **KZN** | **Kozani** | **2.11** | **270** | P | **Pn** | **21 16 07.3** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **2.12** | **88** | PN | **Pn** | **21 16 06.9** | **0.0** |
| **MAR6** | **Marsite Statio** | **2.12** | **79** | PN | **Pn** | **21 16 07.7** | **+0.7** |
| **BUHA** | **Balikesir, Bur** | **2.14** | **113** | P | **Pn** | **21 16 08.1** | **+0.8** |
| BUHA | | | | S | **Sb** | **21 16 36.1** | **-0.7** |
| **MAR3** | **Marsite Statio** | **2.15** | **79** | PN | **Pn** | **21 16 07.9** | **+0.6** |
| **AGG** | **Agios Georgios** | **2.15** | **233** | P | **Pn** | **21 16 07.2** | **-0.2** |
| **AGG** | **Agios Georgios** | **2.15** | **233** | PN | **Pn** | **21 16 07.6** | **+0.2** |
| **PGB** | **Panagyurishte** | **2.22** | **353** | P | **Pn** | **21 16 08.5** | **+0.1** |
| **STIP** | **Stip** | **2.22** | **308** | *i* Pn | **Pn** | **21 16 07.1** | **-1.3** |
| **DKL** | **Dikili** | **2.23** | **124** | PN | **Pn** | **21 16 09.8** | **+1.3** |
| **CAND** | **Candarli** | **2.24** | **128** | PN | **Pn** | **21 16 09.9** | **+1.2** |
| **EDRB** | **Edirne** | **2.25** | **48** | P | **Pn** | **21 16 08.2** | **-0.5** |
| **EDRB** | **Edirne** | **2.25** | **48** | PN | **Pn** | **21 16 09.8** | **+1.1** |
| **MAKR** | **Makrakomi, Fth** | **2.28** | **235** | P | **Pn** | **21 16 09.7** | **+0.5** |
| **CHOS** | **Chios island** | **2.29** | **148** | P | **Pn** | **21 16 09.8** | **+0.4** |
| **CHOS** | **Chios island** | **2.29** | **148** | PN | **Pn** | **21 16 10.3** | **+0.9** |
| **KNL** | **Balıkesir** | **2.29** | **91** | P | **Pn** | **21 16 10.0** | **+0.6** |
| **DION** | **Dionisos Attik** | **2.31** | **192** | P | **Pn** | **21 16 09.3** | **-0.4** |
| **KARY** | **Karystos** | **2.31** | **182** | P | **Pn** | **21 16 09.4** | **-0.3** |
| **TKR** | **Tekirdag** | **2.38** | **73** | PN | **Pn** | **21 16 11.6** | **+1.1** |
| **VILL** | **Villia** | **2.38** | **204** | P | **Pn** | **21 16 09.6** | **-1.0** |
| **ZEDA** | **zmir-Bergama** | **2.41** | **124** | P | **Pn** | **21 16 11.5** | **+0.6** |
| **FNA** | **Florina** | **2.44** | **281** | P | **Pn** | **21 16 11.7** | **+0.3** |
| **FNA** | **Florina** | **2.44** | **281** | PN | **Pn** | **21 16 12.2** | **+0.8** |
| **FNA** | **Florina** | **2.44** | **281** | P | **Pn** | **21 16 12.2** | **+0.8** |
| | baz=281 | | | | | | |
| FNA | | | | S | **Sn** | **21 16 41.3** | **+0.1** |
| | baz=281 | | | | | | |
| **GONE** | **Gonen-Balikesi** | **2.44** | **96** | PN | **Pn** | **21 16 12.8** | **+1.4** |
| **BALY** | **Balya** | **2.45** | **103** | P | **Pn** | **21 16 12.3** | **+0.7** |
| **KPRO** | **Kipourio** | **2.46** | **262** | P | **Pn** | **21 16 12.2** | **+0.5** |
| **VTS** | **Vitosha** | **2.47** | **337** | ⇑P | **Pn** | **21 16 12.4** | **+0.5** |
| VTS | | | | ⇓S | **Sn** | **21 16 42.8** | **+0.8** |
| **VTS** | **Vitosha** | **2.47** | **337** | P | **Pn** | **21 16 12.2** | **+0.3** |
| **EDC** | **Edincik** | **2.55** | **89** | PN | **Pn** | **21 16 14.7** | **+1.8** |
| **URLA** | **Izmir** | **2.55** | **140** | PN | **Pn** | **21 16 13.1** | **+0.1** |
| **URLA** | **Izmir** | **2.55** | **140** | P | **Pn** | **21 16 13.6** | **+0.6** |
| **VLY** | **Voula,Athens** | **2.56** | **193** | P | **Pn** | **21 16 13.1** | **+0.1** |
| **ZEYE** | **Izmir, Urla-Ze** | **2.61** | **143** | P | **Pn** | **21 16 14.1** | **+0.4** |
| **STEP** | **BALIKESIR_Sava** | **2.64** | **111** | P | **Pn** | **21 16 15.1** | **+0.9** |
| **ANX** | **Ano Chora** | **2.67** | **230** | P | **Pn** | **21 16 14.9** | **+0.2** |
| **VIZE** | **Kirklareli, Vi** | **2.79** | **63** | P | **Pn** | **21 16 16.8** | **+0.6** |
| **SKO** | **Skopje** | **2.84** | **306** | *i* Pn | **Pn** | **21 16 17.9** | **+1.0** |
| **SLVT** | **Silivri** | **2.93** | **71** | PN | **Pn** | **21 16 19.1** | **+1.0** |
| **LSK** | **Leskovik** | **3.01** | **267** | P | **Pn** | **21 16 21.2** | **+1.9** |
| | baz=267 | | | | | | |
| LSK | | | | S | **Sn** | **21 16 56.7** | **+1.3** |
| | baz=267 | | | | | | |
| LSK | | | | AMP | | | |
| | comp=E,0.4nm,0.8s,baz=267 | | | | | | |
| **MPEP** | **Malo Peshtene** | **3.06** | **349** | P | **Pn** | **21 16 20.6** | **+0.7** |
| **CTYL** | **Yalikoy Yolu** | **3.06** | **67** | PN | **Pn** | **21 16 21.3** | **+1.3** |
| **SZH** | **Strazhica** | **3.10** | **19** | *i* P | **Pn** | **21 16 20.8** | **+0.3** |
| **CTKS** | **Kestanelik-??a** | **3.15** | **72** | PN | **Pn** | **21 16 22.7** | **+1.6** |
| **IGT** | **Igoumenitsa** | **3.33** | **257** | P | **Pn** | **21 16 26.1** | **+2.5** |
| | baz=256 | | | | | | |
| IGT | | | | S | **Sn** | **21 17 04.3** | **+1.2** |
| | baz=256 | | | | | | |
| **LKD2** | **Lefkada island** | **3.37** | **244** | P | **Pn** | **21 16 27.3** | **+3.1** |
| | baz=242 | | | | | | |
| LKD2 | | | | S | **Sn** | **21 17 03.9** | **-0.3** |
| | baz=242 | | | | | | |
| **SRN** | **Sarande** | **3.50** | **264** | P | **Pn** | **21 16 28.4** | **+2.4** |
| | baz=263 | | | | | | |
| SRN | | | | S | **Sn** | **21 17 09.1** | **+1.8** |
| | baz=263 | | | | | | |
| **ISK** | **Istanbul-Kandi** | **3.52** | **77** | PN | **Pn** | **21 16 27.8** | **+1.6** |
| **KAVV** | **Kandilli-Istan** | **3.52** | **77** | PN | **Pn** | **21 16 28.1** | **+1.9** |
| **RAZG** | **Razgrad** | **3.54** | **24** | ⇑P | **Pn** | **21 16 26.7** | **+0.2** |
| **KLYT** | **Kilyos** | **3.54** | **74** | PN | **Pn** | **21 16 27.9** | **+1.4** |
| **BLKB** | **Belogradchik** | **3.55** | **338** | ⇑S | **Sn** | **21 17 09.7** | **+1.1** |
| **TRML** | **Termal-Yalova** | **3.55** | **84** | PN | **Pn** | **21 16 28.1** | **+1.4** |
| **PRD** | **Provadia** | **3.57** | **36** | P | **Pn** | **21 16 26.8** | **-0.1** |
| **VLAD** | **Vladila** | **3.65** | **359** | ⇑P | **Pn** | **21 16 28.4** | **+0.4** |
| **KULA** | **Kula-Manisa** | **3.69** | **118** | PN | **Pn** | **21 16 30.4** | **+1.8** |
| **YLV** | **Yalova** | **3.70** | **85** | PN | **Pn** | **21 16 30.4** | **+1.6** |
| **TVSB** | **Tavsanli** | **3.90** | **102** | PN | **Pn** | **21 16 32.7** | **+1.1** |
| **BCI** | **Bajram Curri** | **3.91** | **302** | P | **Pn** | **21 16 33.0** | **+1.3** |
| | baz=303 | | | | | | |
| **BODT** | **Bodrum** | **3.94** | **146** | PN | **Pn** | **21 16 33.4** | **+1.4** |
| **MLSB** | **Milas** | **3.97** | **139** | PN | **Pn** | **21 16 33.6** | **+1.2** |
| **SILT** | **Sile** | **3.97** | **77** | PN | **Pn** | **21 16 33.0** | **+0.6** |
| **HUMR** | **Humele** | **4.19** | **4** | ⇑P | **Pn** | **21 16 35.6** | **+0.2** |
| **IVA** | **Berane** | **4.29** | **307** | *e*Pn | **Pn** | **21 16 37.7** | **+0.8** |
| **ULC** | **Ulcinj** | **4.30** | **294** | *e*Pn | **Pn** | **21 16 39.3** | **+2.3** |
| **SRE** | **Strehaia** | **4.42** | **348** | ⇑P | **Pn** | **21 16 39.8** | **+1.2** |
| **DRME** | **Dracevica, Mon** | **4.42** | **296** | *e*Pn | **Pn** | **21 16 41.3** | **+2.6** |
| DRME | | | | *e*Sn | Sn | 21 17 13.3 | -17 |
| **TTG** | **Podgorica** | **4.48** | **299** | *e*Pn | **Pn** | **21 16 41.8** | **+2.4** |
| TTG | | | | *e*Sn | Sn | 21 17 15.1 | -16 |
| **ICOR** | **Ion Corvin** | **4.48** | **32** | ⇑P | **Pn** | **21 16 39.7** | **+0.2** |
| **KOME** | **Kolasin** | **4.51** | **305** | *e*Pn | **Pn** | **21 16 41.0** | **+1.0** |
| KOME | | | | *e*Sn | Sn | 21 17 15.1 | -17 |
| **STFAR** | **Stefanesti-Arg** | **4.52** | **4** | ⇑P | **Pn** | **21 16 40.6** | **+0.6** |
| **BORA** | **Eskisehir** | **4.57** | **94** | PN | **Pn** | **21 16 41.5** | **+0.8** |
| **BUM** | **Brajici-Budva** | **4.67** | **297** | *e*Pn | **Pn** | **21 16 45.1** | **+3.0** |
| BUM | | | | *e*Sn | Sn | 21 17 19.5 | -17 |
| **CEME** | **Cevo** | **4.75** | **299** | *e*Pn | **Pn** | **21 16 45.8** | **+2.6** |
| CEME | | | | *e*Sn | Sn | 21 17 21.2 | -17 |
| **ISR** | **Istrita** | **4.99** | **17** | ⇑P | **Pn** | **21 16 47.5** | **+1.0** |
| **TIRR** | **Tirgusor** | **5.01** | **34** | ⇑P | **Pn** | **21 16 46.7** | **0.0** |
| **ARR** | **Arges** | **5.02** | **1** | ⇑P | **Pn** | **21 16 47.3** | **+0.4** |
| **IDI** | **Anoyia** | **5.06** | **177** | ⇑P | **Pn** | **21 16 50.1** | **+2.6** |
| **VOIR** | | **5.10** | **4** | ⇑P | **Pn** | **21 16 48.4** | **+0.4** |
| **LOT** | **Lotru** | **5.13** | **354** | ⇓P | **Pn** | **21 16 48.7** | **+0.3** |
| **GZR** | **Gura Zlata** | **5.20** | **346** | ⇓P | **Pn** | **21 16 49.3** | **-0.2** |
| **MLR** | **Muntele Rosu** | **5.24** | **11** | ⇑P | **Pn** | **21 16 51.3** | **+1.3** |
| **TPGR** | **Topolog** | **5.34** | **31** | ⇑P | **Pn** | **21 16 51.6** | **+0.3** |
| **CFR** | **Carcaliu** | **5.51** | **28** | ⇑P | **Pn** | **21 16 53.4** | **-0.1** |
| **DOPR** | **Dopca** | **5.65** | **6** | ⇑P | **Pn** | **21 16 56.9** | **+1.4** |
| **BZS** | **Buzias** | **5.68** | **339** | ⇑P | **Pn** | **21 16 55.9** | **0.0** |
| **TLCR** | | **5.77** | **32** | ⇑P | **Pn** | **21 16 57.7** | **+0.6** |
| **MDB** | **Medias** | **5.79** | **359** | ⇑P | **Pn** | **21 16 59.1** | **+1.6** |
| **OZUR** | | **5.82** | **9** | ⇑P | **Pn** | **21 16 59.0** | **+1.2** |
| **VLDR** | **Vladesti** | **6.08** | **24** | ⇓P | **Pn** | **21 17 02.5** | **+1.2** |
| **TESR** | **Tescani** | **6.35** | **13** | ⇑P | **Pn** | **21 17 06.3** | **+1.2** |
| **JOSR** | **Joseni** | **6.39** | **6** | ⇑P | **Pn** | **21 17 06.0** | **+0.2** |
| **BURAR** | **Bucovina Array** | **7.28** | **4** | ⇑P | **Pn** | **21 17 19.5** | **+1.5** |
| **SORM** | **Soroca** | **8.25** | **18** | ⇑P | **Pn** | **21 17 30.8** | **-0.4** |

*IDC* ***27*** *21:20:08.6±0.8, 46.˚14N×153.˚15E, h0km, mb3.7/13, mb1 3.8/19, mb1mx3.6/41, mbtmp3.7/19, ML3.2/5, MS3.0/2, Ms1 3.0/2, ms1mx2.4/96, Error ellipse: s-maj=21.6km s-min=16.6km az=116.0*

*JMA* ***27*** *21:20:10.8±0.8, 46.˚45N×152.˚99E, h30km, M4.3*

*SKHL* ***27*** *21:20:11.3±0.2, 45.˚80N×153.˚40E, h47km±3km, mb4.7/5*

*MOS* ***27*** *21:20:12.0±1.0, 46.˚06N×153.˚06E, h38km, mb4.1/5, Error ellipse: s-maj=11.4km s-min=7.6km az=68.6*

**ISC 27 21:20:12.0±0.7, 45.87N±0.˚08×153.˚25E±0.˚07, h31km, n75, σ1§50/82, mb3.6/15, 6C-3D, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.83** | **262** | *e* | PN | **Pn** | **Pn** | **21 21 10.4** | **+1.6** |
| KUR | | | | | *e*S | **Sn** | **Sn** | **21 21 54.4** | **+1.7** |
| KUR | | | | | pmax | pmax | pmax | | |
| | comp=Z,432nm,0.3s | | | | | | | | |
| KUR | | | | | pmax | pmax | pmax | | |
| | comp=N,165nm,0.2s | | | | | | | | |
| KUR | | | | | pmax | pmax | pmax | | |
| | comp=E,60nm,0.3s | | | | | | | | |
| KUR | | | | | smax | smax | smax | | |
| | comp=N,142nm,0.4s | | | | | | | | |
| KUR | | | | | smax | smax | smax | | |
| | comp=E,38nm,0.3s | | | | | | | | |
| **KUR** | **Kuril'sk** | **3.83** | **262** | *i* | P | **Pn** | **Pn** | **21 21 10.1** | **+1.3** |
| KUR | | | | | AMB | AMB | AMB | 21 21 10.9 | |
| | comp=E,100nm,0.4s | | | | | | | | |
| KUR | | | | *i* | S | **Sn** | **Sn** | **21 21 54.0** | **+1.3** |
| KUR | | | | | A | A | A | 21 21 59.8 | |
| | comp=E,140nm,0.3s | | | | | | | | |
| KUR | | | | | A | A | A | 21 21 59.8 | |
| | comp=E,40nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **4.98** | **249** | ⇓*e* | PN | **Pn** | **Pn** | **21 21 24.0** | **-0.6** |
| SHO | | | | | pmax | pmax | pmax | | |
| | comp=Z,85nm,0.4s | | | | | | | | |
| SHO | | | | | pmax | pmax | pmax | | |
| | comp=N,46nm,0.3s | | | | | | | | |
| SHO | | | | | pmax | pmax | pmax | | |
| | comp=E,63nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **4.98** | **249** | *i* | P | **Pn** | **Pn** | **21 21 24.2** | **-0.4** |
| SHO | | | | | AMB | AMB | AMB | 21 21 26.4 | |
| | comp=E,20nm,0.4s | | | | | | | | |
| SHO | | | | | *e*S | **Sn** | **Sn** | **21 22 20.6** | **-0.4** |
| SHO | | | | | A | A | A | 21 22 24.3 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| SHO | | | | | A | A | A | 21 22 24.3 | |
| | comp=E,50nm,0.3s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.18** | **21** | *e* | PN | **Pn** | **Pn** | **21 21 27.3** | **0.0** |
| SKR | | | | | pmax | pmax | pmax | | |
| | comp=Z,142nm,0.8s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.18** | **21** | *e* | P | **Pn** | **Pn** | **21 21 27.4** | **+0.1** |
| SKR | | | | | AMB | AMB | AMB | 21 21 28.7 | |
| | comp=Z,140nm,0.9s | | | | | | | | |
| SKR | | | | | *e*S | **Sn** | **Sn** | **21 22 24.6** | **-1.4** |
| SKR | | | | | A | A | A | 21 22 37.7 | |
| | comp=Z,200nm,0.9s | | | | | | | | |
| SKR | | | | | A | A | A | 21 22 37.7 | |
| | comp=Z,190nm,0.9s | | | | | | | | |
| **YUK** | **Yuzn-Kuril'sk** | **5.55** | **253** | *e* | PN | **Pn** | **Pn** | **21 21 33.6** | **+1.2** |
| YUK | | | | | *e*S | **Sn** | **Sn** | **21 22 36.3** | **+1.2** |
| YUK | | | | | pmax | pmax | pmax | | |
| | comp=Z,115nm,0.2s | | | | | | | | |
| YUK | | | | | pmax | pmax | pmax | | |
| | comp=E,29nm,0.1s | | | | | | | | |
| YUK | | | | | pmax | pmax | pmax | | |
| | comp=N,48nm,0.2s | | | | | | | | |
| YUK | | | | | smax | smax | smax | | |
| | comp=N,51nm,0.7s | | | | | | | | |
| YUK | | | | | smax | smax | smax | | |
| | comp=E,57nm,0.3s | | | | | | | | |
| **YUK** | **Yuzn-Kuril'sk** | **5.55** | **253** | *e* | P | **Pn** | **Pn** | **21 21 33.7** | **+1.3** |
| YUK | | | | | AMB | AMB | AMB | 21 21 35.3 | |
| | comp=E,60nm,0.5s | | | | | | | | |
| YUK | | | | *i* | S | **Sn** | **Sn** | **21 22 35.5** | **+0.4** |
| YUK | | | | | A | A | A | 21 22 41.1 | |
| | comp=E,70nm,0.5s | | | | | | | | |
| YUK | | | | | A | A | A | 21 22 41.1 | |
| | comp=E,70nm,0.5s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **5.91** | **248** | P | | **Pn** | **Pn** | **21 21 36.6** | **-0.8** |
| NEM2 | | | | *e*S | | **Sn** | **Sn** | **21 22 40.0** | **-4.0** |
| **NMR** | **Nemuro--Hokkai** | **5.92** | **248** | *e*PN | | **Pn** | **Pn** | **21 21 36.7** | **-0.8** |
| **NMR** | **Nemuro--Hokkai** | **5.92** | **248** | *e*P | | **Pn** | **Pn** | **21 21 37.0** | **-0.5** |
| NMR | | | | *e*S | | **Sn** | **Sn** | **21 22 42.8** | **-1.4** |
| **RUSJ** | **Misakicho** | **5.94** | **256** | *e*PN | | **Pn** | **Pn** | **21 21 39.0** | **+1.2** |
| RUSJ | | | | *e*S | | **Sn** | **Sn** | **21 22 46.2** | **+1.5** |
| **PAU** | **Pauzhetka** | **6.08** | **22** | *e*P | | **Pn** | **Pn** | **21 21 40.8** | **+1.2** |
| PAU | | | | AMB | | AMB | AMB | 21 21 43.1 | |
| | comp=E,60nm,0.8s | | | | | | | | |
| **JRA** | **Rausu** | **6.08** | **254** | P | | **Pn** | **Pn** | **21 21 41.1** | **+1.4** |
| **JNK** | **Nakash** | **6.49** | **252** | P | | **Pn** | **Pn** | **21 21 45.8** | **+0.5** |
| JNK | | | | *e*S | | **Sn** | **Sn** | **21 22 57.1** | **-1.1** |
| **JAK** | **Akkeshi** | **6.76** | **248** | P | | **Pn** | **Pn** | **21 21 48.3** | **-0.7** |
| **JTKR** | **Abashiri--Toko** | **6.89** | **257** | P | | **Pn** | **Pn** | **21 21 52.1** | **+1.2** |
| **JAR** | **Ashorobuto** | **7.24** | **253** | P | | **Pn** | **Pn** | **21 21 56.5** | **+0.9** |
| JAR | | | | *e*S | | **Sn** | **Sn** | **21 23 15.7** | **-1.0** |
| **JMP** | **Maruseppu** | **7.26** | **259** | P | | **Pn** | **Pn** | **21 21 57.1** | **+1.2** |
| **YSS** | **Yuzh-Sakhalins** | **7.33** | **282** | *e*P | | **Pn** | **Pn** | **21 21 59.3** | **+2.4** |
| YSS | | | | AMB | | AMB | AMB | 21 22 04.1 | |
| | comp=E,10.0nm,0.9s | | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **Sn** | **21 23 19.3** | **+0.3** |
| YSS | | | | A | | A | A | 21 23 25.5 | |
| | comp=E,20nm,0.7s | | | | | | | | |
| YSS | | | | A | | A | A | 21 23 25.5 | |
| | comp=E,30nm,0.7s | | | | | | | | |
| **JKK2** | **Kamakawa 2** | **7.72** | **259** | P | | **Pn** | **Pn** | **21 22 03.8** | **+1.6** |
| **JKA** | **Kamikawa-asahi** | **7.75** | **261** | *e*P | | **Pn** | **Pn** | **21 22 02.7** | **+0.1** |
| **ASAJ** | **Asahikawa** | **7.75** | **261** | Pn | | **Pn** | **Pn** | **21 22 02.7** | **+0.1** |
| | comp=E,1.6nm,0.3s,baz=180,slow=21,SNR=3.0 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **7.80** | **20** | ⇓*e* | PN | **Pn** | **Pn** | **21 22 03.0** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **7.80** | **20** | | Pn | **Pn** | **Pn** | **21 22 01.6** | **-1.8** |
| | comp=E,0.5nm,0.3s,baz=180,slow=12,SNR=8.7 | | | | | | | | |
| **JCH** | **Churui** | **7.81** | **249** | P | | **Pn** | **Pn** | **21 22 03.1** | **-0.3** |
| JCH | | | | *e*S | | **Sn** | **Sn** | **21 23 26.3** | **-4.3** |
| **PET** | **Petropavlovsk** | **7.98** | **24** | *e*S | | **Sn** | **Sn** | **21 23 31.6** | **-3.2** |
| PET | | | | A | | A | A | 21 23 45.1 | |
| | comp=E,10.0nm,0.6s | | | | | | | | |
| PET | | | | A | | A | A | 21 23 45.1 | |
| | comp=E,20nm,0.6s | | | | | | | | |
| **JFR** | **Furan** | **8.08** | **254** | P | | **Pn** | **Pn** | **21 22 09.3** | **+2.2** |
| **JNBK** | **Urakawa-nobuka** | **8.36** | **248** | P | | **Pn** | **Pn** | **21 22 10.1** | **-0.9** |
| **JBT2** | **Biratori 2** | **8.39** | **252** | P | | **Pn** | **Pn** | **21 22 11.5** | **+0.1** |
| **JNB** | **Noboribetsu** | **9.41** | **253** | P | | **Pn** | **Pn** | **21 22 25.2** | **-0.1** |
| JNB | | | | *e*S | | **Sn** | **Sn** | **21 24 06.4** | **-3.6** |
| **JKB** | **Kayabe** | **9.67** | **250** | P | | **Pn** | **Pn** | **21 22 28.1** | **-0.9** |
| **JYM2** | **Yakumo 2** | **10.01** | **253** | P | | **Pn** | **Pn** | **21 22 33.2** | **-0.3** |
| **JANG** | **Nango** | **10.18** | **241** | P | | **Pn** | **Pn** | **21 22 33.4** | **-2.5** |
| JANG | | | | *e*S | | Sn | Sn | 21 24 19.3 | -10 |
| **JOSM** | **Okushiri--Mats** | **10.62** | **254** | P | | **Pn** | **Pn** | **21 22 41.1** | **-0.8** |
| **MA2** | **Magadan** | **13.81** | **355** | Pn | | **Pn** | **P

*NEIC* ***27*** *21:29:43.6, 51°.79S×139°.60E, h5km, Moment Tension Solution. Moment tensor: Scale 10^18 Nm; Mrr 0.05; Mθθ 0.03; Mφφ -0.08; Mrθ 0.16; Mrφ -1.34; Mθφ -0.29; Fault plane solution: M0 1.39000×10^18 NP1: φs 88.10000°, δ 77.68000°, λ 173.19000°. NP2: φs 179.56000°, δ 83.35000°, λ 12.40000°. Principal axes: T 1.3935, Plg 13.0000°, Azm 44.0000°; N -0.0168, Plg 76.0000°, Azm 207.0000°; P -1.3767, Plg 4.0000°, Azm 313.0000°;*

*IDC* ***27*** *21:29:43.0±0.4, 51°.82S×139°.70E, h0km, mb 5.2/23, mb1 5.3/24, mb1mx5.1/30, mbtmp5.2/24, ML 5.2/1, MS5.8/47, Ms1 5.8/47, ms1mx5.8/49 Error ellipse: s-maj=15.4km s-min=11.9km az=79.0*

*NEIC* ***27*** *21:29:43.6±1.2, 51°.79S±0°.08×139°.6E±0°.1, h10km±1km, mb 5.9/140, Ms_20 6.0/427, Mwb 6.0/44, Mww 6.1, Error ellipse: s-maj=13.9km s-min=12.9km az=109.0*

*BJI* ***27*** *21:29:44.0±0.0, 51°.80S×139°.60E, h10km, mb 5.2/57, mB5.8/68, Ms5.9/87, Ms7 5.8/80*

*MOS* ***27*** *21:29:44.3±1.9, 51°.68S×140°.00E, h10km, mb 5.7/21, MS5.8/50, Error ellipse: s-maj=17.3km s-min=6.8km az=91.2*

*BGR* ***27*** *21:29:44.8±0.0, 52°.63S×141°.62E, h33km*

*GCMT* ***27*** *21:29:47.6±0.1, 51°.75S×139°.61E, h14km, MW 6.1/162, Moment Tensor Solution. s162, c378; s161, c569; Duration: 28 Moment tensor: Scale 10^18 Nm; Mrr 0.06±0.01; Mθθ 0.12±0.01; Mφφ -0.06±0.01; Mrθ -0.07±0.02; Mrφ -1.68±0.01; Mθφ -0.01±0.02; Best double couple: M0 1.68400×10^18 NP1: φs 358.00000°, δ 88.00000°, λ -1.00000°. NP2: φs 88.00000°, δ 89.00000°, λ -178.00000°. Principal axes: T 1.7120, Plg 1.0000°, Azm 223.0000°; N -0.0560, Plg 87.0000°, Azm 101.0000°; P -1.6560, Plg 2.0000°, Azm 314.0000°; nsta 1 refers to body waves, cutoff=40s. nsta 2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***27*** *21:29:48, 51°.78S×139°.56E, h22km, Moment Tensor Solution. Duration: 10s0 Moment tensor: Scale 10^18 Nm; Mrr 0.03; Mθθ -0.02; Mφφ -0.01; Mrθ 0.32; Mθφ -1.50; Mrφ 0.03; Fault plane solution: M0 1.53000×10^18 NP1: φs 180.00000°, δ 78.00000°, λ 0.00000°. NP2: φs 270.00000°, δ 89.00000°, λ -167.00000°. Principal axes: T 1.5120, Plg 8.0000°, Azm 44.0000°; N 0.0347, Plg 78.0000°, Azm 273.0000°; P -1.5467, Plg 9.0000°, Azm 136.0000°;*

**ISC 27 21:29:45.1±0.4, 51°.90S±0°.04×139°.64E±0°.05, h14km±2km, h13km: pP-P, n1263, σ1.986/1129, mb 5.7/203, MS5.9/310, 72C-76D, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAU** | **Tasmania Unive** | **10.38** | **33** | P | **Pn** | **21 32 11.8** | **-1.7** |
| **TAU** | **Tasmania Unive** | **10.38** | **33** | Pn | **Pn** | **21 32 11.8** | **-1.7** |
| **TAU** | **Tasmania Unive** | **10.38** | **33** | ⇑P | **Pn** | **21 32 13.0** | **-0.5** |
| **TAU** | **Tasmania Unive** | **10.38** | **33** | P | **Pn** | **21 32 13.5** | **0.0** |
| | 508nm,1.5s | | | | | | |
| **MOO** | **Moorlands** | **10.76** | **31** | P | **Pn** | **21 32 18.6** | **-0.1** |
| | baz=11,SNR=19 | | | | | | |
| **MOO** | **Moorlands** | **10.76** | **31** | P | **Pn** | **21 32 18.5** | **-0.1** |
| | 524nm,1.5s | | | | | | |
| **CORO** | **Coronation Par** | **11.64** | **29** | P | **Pn** | **21 32 31.1** | **+0.4** |
| | 243nm,1.3s | | | | | | |
| **MCQ** | **Macquarie Isla** | **11.87** | **110** | P | **Pn** | **21 32 32.4** | **-1.4** |
| **MCQ** | **Macquarie Isla** | **11.87** | **110** | Pn | **Pn** | **21 32 32.4** | **-1.4** |
| **GLAD** | **Gladstone** | **12.34** | **31** | P | **Pn** | **21 32 40.2** | **0.0** |
| | 170nm,1.4s | | | | | | |
| **GEXS** | **Deakin Univers** | **14.08** | **15** | P | **Pn** | **21 33 03.3** | **-0.7** |
| | 227nm,1.0s | | | | | | |
| **MLBS** | **Spotswood, Mel** | **14.54** | **17** | P | **Pn** | **21 33 09.6** | **-0.8** |
| | 290nm,1.1s | | | | | | |
| **BRAT** | **Ballarat** | **14.66** | **14** | P | **Pn** | **21 33 11.5** | **-0.5** |
| | 127nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **14.90** | **18** | P | **Pn** | **21 33 13.1** | **-2.2** |
| | baz=15,SNR=37 | | | | | | |
| **TOO** | **Toolangi** | **14.90** | **18** | P | **Pn** | **21 33 12.5** | **-2.9** |
| **TOO** | **Toolangi** | **14.90** | **18** | Pn | **Pn** | **21 33 12.5** | **-2.9** |
| **TOO** | **Toolangi** | **14.90** | **18** | ⇑P | **Pn** | **21 33 12.7** | **-2.7** |
| **TOO** | **Toolangi** | **14.90** | **18** | P | **Pn** | **21 33 14.9** | **-0.5** |
| | 435nm,1.1s | | | | | | |
| **ARPS** | **Mount Arapiles** | **15.20** | **7** | P | **Pn** | **21 33 17.6** | **-1.7** |
| | baz=15,SNR=30 | | | | | | |
| **ARPS** | **Mount Arapiles** | **15.20** | **7** | P | **Pn** | **21 33 18.4** | **-0.9** |
| | 465nm,1.2s | | | | | | |
| **MILA** | **Mila** | **16.30** | **28** | P | **Pn** | **21 33 32.3** | **-1.2** |
| | baz=16,SNR=15 | | | | | | |
| **MILA** | **Mila** | **16.30** | **28** | ⇑P | **Pn** | **21 33 31.6** | **-2.0** |
| **TWOA** | **Tennyson Woods** | **16.87** | **357** | P | **Pn** | **21 33 39.0** | **-1.8** |
| | 290nm,1.0s | | | | | | |
| **GHSS** | **Government Hou** | **16.98** | **357** | P | **Pn** | **21 33 40.9** | **-1.3** |
| | 380nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **17.87** | **26** | P | **Pn** | **21 33 50.0** | **-3.3** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,826nm,1.7s | | | | | | |
| **CAN** | **Canberra** | **17.87** | **26** | P | **Pn** | **21 33 50.0** | **-3.3** |
| **CAN** | **Canberra** | **17.87** | **26** | ⇑P | **Pn** | **21 33 51.8** | **-1.6** |
| **CAN** | **Canberra** | **17.87** | **26** | P | **Pn** | **21 33 53.2** | **-0.1** |
| | comp=Z,346nm,1.1s | | | | | | |
| **CNB** | **Canberra Magne** | **17.98** | **27** | P | **Pn** | **21 33 54.5** | **-0.1** |
| | baz=18,SNR=25 | | | | | | |
| **CNB** | **Canberra Magne** | **17.98** | **27** | P | **Pn** | **21 33 54.8** | **+0.2** |
| | comp=Z,256nm,1.3s | | | | | | |
| **HTT** | **Hallett** | **18.46** | **358** | P | **P** | **21 33 57.9** | **-2.5** |
| | baz=18,SNR=37 | | | | | | |
| **HTT** | **Hallett** | **18.46** | **358** | ⇑P | **P** | **21 33 58.0** | **-2.4** |
| **HTT** | **Hallett** | **18.46** | **358** | P | **P** | **21 33 58.3** | **-2.1** |
| | comp=Z,190nm,1.9s | | | | | | |
| **PYZ** | **Puysegur Point** | **18.57** | **83** | | **Pn** | **21 34 01.9** | **+0.2** |
| **NAPP** | **Napperby** | **18.73** | **356** | P | **P** | **21 34 01.9** | **-1.4** |
| | comp=Z,227nm,1.0s | | | | | | |
| **WHYH** | **Whyalla** | **18.91** | **355** | P | **P** | **21 34 04.5** | **-0.8** |
| | comp=Z,223nm,1.1s | | | | | | |
| **DCZ** | **Deep Cove** | **19.20** | **81** | | **P** | **21 34 07.2** | **-1.2** |
| **BBOO** | **Buckleboo** | **19.25** | **351** | P | **P** | **21 34 07.0** | **-2.0** |
| | baz=19,SNR=21 | | | | | | |
| **BBOO** | **Buckleboo** | **19.25** | **351** | | **P** | **21 34 05.6** | **-3.4** |
| **BBOO** | **Buckleboo** | **19.25** | **351** | P | **P** | **21 34 08.4** | **-0.6** |
| | comp=Z,266nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **19.48** | **83** | P | **P** | **21 34 09.3** | **-2.2** |
| **SYDH** | **Sydney Hard Ro** | **19.83** | **28** | P | **Pn** | **21 34 16.1** | **-0.8** |
| | comp=Z,98nm,1.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **19.84** | **82** | P | **P** | **21 34 13.7** | **-1.7** |
| MLZ | | | | IAmb | IAmb | 21 34 29.9 | |
| | comp=Z,651nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **20.05** | **5** | P | **P** | **21 34 16.6** | **-1.2** |
| | comp=Z,3.8nm,0.3s,baz=164,slow=12,SNR=84 | | | | | | |
| STKA | | | | LR | LR | 21 40 34.4 | |
| | comp=Z,23μm,20.9s,baz=183,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **20.05** | **5** | P | **P** | **21 34 16.7** | **-1.1** |
| | baz=20,SNR=100 | | | | | | |
| **STKA** | **Stephens Creek** | **20.05** | **5** | | **P** | **21 34 14.6** | **-3.2** |
| **STKA** | **Stephens Creek** | **20.05** | **5** | P | **P** | **21 34 17.1** | **-0.7** |
| | comp=Z,81nm,1.2s | | | | | | |
| **MGCD** | **Mangrove Creek** | **20.45** | **28** | P | **P** | **21 34 22.5** | **+0.4** |
| | baz=20,SNR=12 | | | | | | |
| **MGCD** | **Mangrove Creek** | **20.45** | **28** | P | **P** | **21 34 22.7** | **+0.6** |
| | comp=Z,188nm,1.7s | | | | | | |
| **CASY** | **Casey** | **20.48** | **214** | | **P** | **21 34 20.3** | **-1.8** |
| CASY | | | | IAmb | IAmb | 21 34 26.1 | |
| | comp=Z,2μm,1.8s | | | | | | |
| **CASY** | **Casey** | **20.48** | **214** | IAMs_20 | IAMs_20 | 21 40 29.2 | |
| | comp=Z,62μm,20.0s | | | | | | |
| **CASY** | **Casey** | **20.48** | **214** | ⇑P | **P** | **21 34 22.3** | **+0.2** |
| **WKZ** | **Wanaka** | **20.66** | **82** | | **P** | **21 34 23.1** | **-1.2** |
| WKZ | | | | IAmb | IAmb | 21 34 40.1 | |
| | comp=Z,1μm,1.6s | | | | | | |
| WKZ | | | | IAMs_20 | IAMs_20 | 21 39 53.6 | |
| | comp=Z,53μm,21.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **20.82** | **15** | P | **P** | **21 34 25.6** | **-0.5** |
| | baz=21,SNR=53 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **20.82** | **15** | P | **P** | **21 34 26.3** | **+0.2** |
| | comp=Z,280nm,2.0s | | | | | | |
| **NTLH** | **Newcastle Hard** | **20.92** | **30** | P | **P** | **21 34 27.9** | **+0.8** |
| | comp=Z,216nm,1.0s | | | | | | |
| **LCRK** | **Leigh Creek** | **21.45** | **357** | P | **P** | **21 34 31.7** | **-1.2** |
| | comp=Z,1μm,1.4s | | | | | | |
| **ODZ** | **Otahua Downs** | **21.55** | **84** | P | **P** | **21 34 32.8** | **-1.1** |
| ODZ | | | | IAMs_20 | IAMs_20 | 21 40 54.3 | |
| | comp=Z,41μm,18.0s | | | | | | |
| **ODZ** | **Otahua Downs** | **21.55** | **84** | ⇓P | **P** | **21 34 36.9** | **+3.0** |
| **LBZ** | **Lake Benmore** | **21.60** | **82** | P | **P** | **21 34 33.1** | **-1.3** |
| LBZ | | | | IAmb | IAmb | 21 34 49.3 | |
| | comp=Z,1μm,1.6s | | | | | | |
| LBZ | | | | IAMs_20 | IAMs_20 | 21 40 45.5 | |
| | comp=Z,54μm,18.0s | | | | | | |
| **FOZ** | **Fox Glacier** | **21.83** | **79** | P | **P** | **21 34 35.4** | **-1.5** |
| FOZ | | | | IAmb | IAmb | 21 34 50.1 | |
| | comp=Z,435nm,1.4s | | | | | | |
| **MULG** | **Mulgathing** | **21.99** | **347** | P | **P** | **21 34 37.7** | **-0.9** |
| | comp=Z,755nm,1.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **22.49** | **81** | P | **P** | **21 34 43.1** | **-0.9** |
| | comp=Z,188nm,1.2s,baz=183,slow=5.3,SNR=16 | | | | | | |
| RPZ | | | | LR | LR | 21 41 33.3 | |
| | comp=Z,53μm,20.3s,baz=241,slow=32 | | | | | | |
| **RPZ** | **Rata Peaks** | **22.49** | **81** | P | **P** | **21 34 43.0** | **-1.0** |
| RPZ | | | | IAmb | IAmb | 21 34 59.7 | |
| | comp=Z,781nm,1.2s | | | | | | |
| RPZ | | | | IAMs_20 | IAMs_20 | 21 41 21.9 | |
| | comp=Z,52μm,19.0s | | | | | | |
| **FORT** | **Forrest** | **22.76** | **333** | P | **P** | **21 34 45.8** | **-1.2** |
| | baz=23,SNR=35 | | | | | | |
| **FORT** | **Forrest** | **22.76** | **333** | P | **P** | **21 34 44.6** | **-2.3** |
| **FORT** | **Forrest** | **22.76** | **333** | ⇑P | **P** | **21 34 44.6** | **-2.3** |
| **FORT** | **Forrest** | **22.76** | **333** | P | **P** | **21 34 46.2** | **-0.7** |
| | comp=Z,827nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **23.22** | **27** | P | **P** | **21 34 52.0** | **+0.3** |
| | baz=23,SNR=36 | | | | | | |
| **ARMA** | **Armidale** | **23.22** | **27** | P | **P** | **21 34 49.4** | **-2.4** |
| **ARMA** | **Armidale** | **23.22** | **27** | ⇑P | **P** | **21 34 50.6** | **-1.2** |
| **ARMA** | **Armidale** | **23.22** | **27** | P | **P** | **21 34 51.7** | **-0.1** |
| | comp=Z,344nm,1.6s | | | | | | |
| **OXZ** | **Oxford** | **23.30** | **81** | P | **P** | **21 34 50.7** | **-1.7** |
| OXZ | | | | IAmb | IAmb | 21 35 17.0 | |
| | comp=Z,495nm,1.9s | | | | | | |
| **MQZ** | **McQueen's Vall** | **23.48** | **83** | P | **P** | **21 34 53.5** | **-0.6** |
| MQZ | | | | IAmb | IAmb | 21 35 07.6 | |
| | comp=Z,335nm,1.4s | | | | | | |
| MQZ | | | | IAMs_20 | IAMs_20 | 21 41 43.1 | |
| | comp=Z,48μm,18.0s | | | | | | |
| **RKGY** | **Rocky Gully** | **23.74** | **308** | P | **P** | **21 34 55.9** | **-0.9** |
| | baz=24,SNR=11 | | | | | | |
| **RKGY** | **Rocky Gully** | **23.74** | **308** | P | **P** | **21 34 56.6** | **-0.1** |
| | comp=Z,352nm,1.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **23.74** | **80** | P | **P** | **21 34 55.5** | **-1.3** |
| LTZ | | | | IAmb | IAmb | 21 35 10.0 | |
| | comp=Z,436nm,1.4s | | | | | | |
| **OOD** | **Oodnadatta** | **24.25** | **351** | P | **P** | **21 35 00.6** | **-1.0** |
| | comp=Z,223nm,1.3s | | | | | | |
| **KMBL** | **Kambalda** | **24.31** | **321** | P | **P** | **21 35 01.5** | **-0.6** |
| | comp=Z,0.7nm,1.0s | | | | | | |
| **THZ** | **Tophouse** | **24.71** | **79** | P | **P** | **21 35 03.5** | **-2.3** |
| THZ | | | | IAmb | IAmb | 21 35 21.9 | |
| | comp=Z,291nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **24.72** | **81** | P | **P** | **21 35 03.8** | **-2.0** |
| KHZ | | | | IAmb | IAmb | 21 35 20.2 | |
| | comp=Z,232nm,1.1s | | | | | | |
| **KHZ** | **Kahutara** | **24.72** | **81** | ⇑P | **P** | **21 35 06.1** | **+0.3** |
| **LHI** | **Lord Howe Isla** | **24.85** | **43** | P | **P** | **21 35 05.2** | **-1.9** |
| LHI | | | | IAmb | IAmb | 21 35 29.3 | |
| | comp=Z,282nm,1.2s | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **24.94** | **303** | P | **P** | **21 35 08.3** | **+0.7** |
| | baz=135,slow=11,SNR=6.6 | | | | | | |
| H01W1 | | | | T | T | 22 00 58.4 | |
| | baz=140,slow=75,SNR=2798 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **24.95** | **303** | P | **P** | **21 35 06.8** | **-0.8** |
| | baz=135,slow=11,SNR=5.6 | | | | | | |
| H01W2 | | | | T | T | 22 00 58.8 | |
| | baz=140,slow=75,SNR=2958 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **24.95** | **303** | P | **P** | **21 35 11.1** | **+3.5** |
| | baz=135,slow=11,SNR=5.1 | | | | | | |
| H01W3 | | | | T | T | 22 00 59.6 | |
| | baz=140,slow=75,SNR=2243 | | | | | | |
| **QRZ** | **Quartz Range** | **25.04** | **77** | P | **P** | **21 35 07.3** | **-1.4** |
| **NNZ** | **Nelson** | **25.32** | **78** | P | **P** | **21 35 10.0** | **-1.2** |
| **BSWZ** | **Blackbirch Sta** | **25.33** | **80** | P | **P** | **21 35 10.2** | **-1.1** |
| **CMWZ** | **Cape Campbell** | **25.52** | **80** | P | **P** | **21 35 11.8** | **-1.2** |
| **QLP** | **Quilpie** | **25.52** | **10** | P | **P** | **21 35 13.2** | **+0.2** |
| | baz=25,SNR=14 | | | | | | |
| **QLP** | **Quilpie** | **25.52** | **10** | ⇑P | **P** | **21 35 12.2** | **-0.9** |
| **QLP** | **Quilpie** | **25.52** | **10** | P | **P** | **21 35 12.3** | **-0.8** |
| | comp=Z,437nm,1.3s | | | | | | |
| **TUWZ** | **Tuamarina** | **25.54** | **79** | P | **P** | **21 35 12.4** | **-0.7** |
| **KLBR** | **Kellerberrin** | **25.86** | **313** | P | **P** | **21 35 14.2** | **-2.0** |
| | baz=26,SNR=26 | | | | | | |
| **KLBR** | **Kellerberrin** | **25.86** | **313** | P | **P** | **21 35 14.3** | **-1.9** |
| | comp=Z,246nm,0.9s | | | | | | |
| **SNZO** | **South Karori** | **26.07** | **80** | P | **P** | **21 35 17.9** | **-0.1** |
| SNZO | | | | IAmb | IAmb | 21 35 34.6 | |
| | comp=Z,196nm,1.0s | | | | | | |
| **SNZO** | **South Karori** | **26.07** | **80** | ⇑P | **P** | **21 35 18.2** | **+0.2** |
| **SNZO** | **South Karori** | **26.07** | **80** | P | **P** | **21 35 21.3** | **+3.3** |
| | comp=Z,241nm,1.1s | | | | | | |
| **BHW** | **Baring Head** | **26.12** | **80** | P | **P** | **21 35 17.8** | **-0.6** |
| **MUN** | **Mundaring** | **26.25** | **310** | P | **P** | **21 35 17.9** | **-1.8** |
| | baz=26,SNR=11 | | | | | | |
| **MUN** | **Mundaring** | **26.25** | **310** | P | **P** | **21 35 19.5** | **-0.2** |
| **PLWZ** | **Palliser** | **26.26** | **81** | P | **P** | **21 35 18.4** | **-1.3** |
| **RMQ** | **Roma** | **26.30** | **19** | P | **P** | **21 35 19.6** | **-0.6** |
| | baz=26,SNR=49 | | | | | | |
| **RMQ** | **Roma** | **26.30** | **19** | P | **P** | **21 35 19.8** | **-0.4** |
| | comp=Z,186nm,1.1s | | | | | | |
| **MSWZ** | **Moikau Station** | **26.34** | **81** | P | **P** | **21 35 19.2** | **-1.3** |
| **VNDA** | **Vanda** | **27.02** | **170** | P | **P** | **21 35 26.7** | **+0.4** |
| | comp=Z,43nm,1.0s,baz=322,slow=9.2,SNR=16 | | | | | | |
| VNDA | | | | LR | LR | 21 44 35.0 | |
| | comp=Z,16μm,19.6s,baz=337,slow=33 | | | | | | |
| **VNDA** | **Vanda** | **27.02** | **170** | P | **P** | **21 35 26.6** | **+0.3** |
| **BLDU** | **Ballidu** | **27.16** | **313** | P | **P** | **21 35 28.1** | **+0.1** |
| | baz=27,SNR=23 | | | | | | |
| **BFZ** | **Birch Farm** | **27.38** | **80** | P | **P** | **21 35 28.1** | **-1.7** |
| BFZ | | | | IAmb | IAmb | 21 35 44.1 | |
| | comp=Z,405nm,1.2s | | | | | | |
| **BFZ** | **Birch Farm** | **27.38** | **80** | P | **P** | **21 35 32.2** | **+2.3** |
| | comp=Z,292nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **27.89** | **23** | P | **P** | **21 35 34.8** | **+0.4** |
| | baz=28,SNR=7.2 | | | | | | |
| **EIDS** | **Eidsvold** | **27.89** | **23** | P | **P** | **21 35 31.5** | **-2.9** |
| **EIDS** | **Eidsvold** | **27.89** | **23** | ⇓P | **P** | **21 35 33.7** | **-0.7** |
| **EIDS** | **Eidsvold** | **27.89** | **23** | P | **P** | **21 35 34.3** | **-0.1** |
| | comp=Z,134nm,1.3s | | | | | | |
| **SBA** | **Scott Base** | **27.89** | **168** | P | **P** | **21 35 35.4** | **+1.4** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,510nm,1.9s | | | | | | |
| SBA | | | | MLR | MLR | | |
| | comp=Z,28μm,18.0s | | | | | | |
| **SBA** | **Scott Base** | **27.89** | **168** | P | **P** | **21 35 35.4** | **+1.4** |
| SBA | | | | IAmb | IAmb | 21 35 46.9 | |
| | comp=Z,510nm,1.9s | | | | | | |
| **SBA** | **Scott Base** | **27.89** | **168** | IAMs_20 | IAMs_20 | 21 44 45.7 | |
| | comp=Z,28μm,18.0s | | | | | | |
| **HIZ** | **Hauiti** | **27.89** | **75** | P | **P** | **21 35 33.6** | **-0.8** |
| **WRKA** | **Warakurna** | **28.18** | **338** | P | **P** | **21 35 35.0** | **-2.1** |
| | baz=28,SNR=30 | | | | | | |
| **WRKA** | **Warakurna** | **28.18** | **338** | ⇑P | **P** | **21 35 35.3** | **-1.9** |
| **WRKA** | **Warakurna** | **28.18** | **338** | P | **P** | **21 35 35.2** | **-1.9** |
| | comp=Z,197nm,2.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **28.46** | **78** | P | **P** | **21 35 37.3** | **-2.2** |
| BKZ | | | | IAMs_20 | IAMs_20 | 21 44 48.0 | |
| | comp=Z,35nm,19.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **28.46** | **78** | P | P | 21 35 44.9 | +5.3 |
| | comp=Z,168nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **28.53** | **349** | P | **P** | **21 35 38.0** | **-2.3** |
| | comp=Z,19nm,0.8s,baz=167,slow=10.0,SNR=142 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 38 49.1** | **-2.5** |
| | comp=Z,4.1nm,0.8s,baz=163,slow=2.3,SNR=2.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 42 34.8** | **+2.7** |
| | comp=Z,3.6nm,1.1s,baz=175,slow=4.6,SNR=4.0 | | | | | | |
| ASAR | | | | LR | LR | 21 45 25.7 | |
| | comp=Z,17μm,21.2s,baz=174,slow=33 | | | | | | |
| ASAR | | | | P3KPbc | | 22 07 52.9 | |
| | comp=Z,0.4nm,0.9s,baz=12,slow=5.7,SNR=2.2 | | | | | | |
| **AS31** | **Alice Springs** | **28.53** | **349** | P | **P** | **21 35 37.7** | **-2.6** |
| **MORW** | **Morawa** | **28.78** | **313** | P | **P** | **21 35 40.4** | **-2.0** |
| | baz=29,SNR=12 | | | | | | |
| **MORW** | **Morawa** | **28.78** | **313** | P | **P** | **21 35 40.0** | **-2.4** |
| **MORW** | **Morawa** | **28.78** | **313** | ⇑P | **P** | **21 35 40.7** | **-1.7** |
| **MORW** | **Morawa** | **28.78** | **313** | P | **P** | **21 35 41.0** | **-1.4** |
| | comp=Z,64nm,1.1s | | | | | | |
| **OUZ** | **Omahuta** | **29.37** | **69** | P | **P** | **21 35 45.2** | **-2.4** |
| OUZ | | | | IAMs_20 | IAMs_20 | 21 44 52.7 | |
| | comp=Z,32μm,19.0s | | | | | | |
| **URZ** | **Urewera** | **29.41** | **77** | P | **P** | **21 35 46.2** | **-1.7** |
| | comp=Z,75nm,0.8s,baz=238,slow=6.1,SNR=17 | | | | | | |
| URZ | | | | LR | LR | 21 46 47.4 | |
| | comp=Z,25μm,18.4s,baz=236,slow=35 | | | | | | |
| **URZ** | **Urewera** | **29.41** | **77** | P | **P** | **21 35 46.5** | **-1.4** |
| URZ | | | | IAmb | IAmb | 21 35 59.9 | |
| | comp=Z,209nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **29.41** | **77** | ⇑P | **P** | **21 35 46.3** | **-1.6** |
| **RK1H** | **Rockhampton Ha** | **29.66** | **20** | P | **P** | **21 35 51.0** | **+0.8** |
| | comp=Z,25nm,0.7s | | | | | | |
| **MEEK** | **Meekatharra** | **29.81** | **320** | P | **P** | **21 35 51.2** | **-0.3** |
| | baz=30,SNR=6.0 | | | | | | |
| **MEEK** | **Meekatharra** | **29.81** | **320** | P | **P** | **21 35 51.2** | **-0.3** |
| | comp=Z,92nm,1.4s | | | | | | |
| **MXZ** | **Matakaoa Point** | **30.58** | **77** | IAMs_20 | IAMs_20 | 21 47 43.0 | |
| | comp=Z,36μm,18.0s | | | | | | |
| **QIS** | **Mount Isa** | **31.28** | **360** | P | **P** | **21 36 02.8** | **-1.7** |
| | baz=31,SNR=99 | | | | | | |
| **QIS** | **Mount Isa** | **31.28** | **360** | P | **P** | **21 36 03.1** | **-1.5** |
| | comp=Z,255nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.12** | **351** | P | **P** | **21 36 09.7** | **-2.3** |
| **WB2** | **Warramunga Arr** | **32.16** | **351** | P | **P** | **21 36 09.6** | **-2.7** |
| **WRA** | **Warramunga Arr** | **32.16** | **351** | P | **P** | **21 36 10.9** | **-1.4** |
| | comp=Z,82nm,0.8s,baz=169,slow=7.6,SNR=393 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 38 59.8** | **-1.3** |
| | comp=Z,5.3nm,0.7s,baz=179,slow=2.5,SNR=3.0 | | | | | | |
| WRA | | | | LR | LR | 21 47 39.9 | |
| | comp=Z,12μm,21.4s,baz=170,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.16** | **351** | P | **P** | **21 36 09.5** | **-2.8** |
| **CTA** | **Charters Tower** | **32.16** | **12** | P | **P** | **21 36 11.2** | **-1.1** |
| | comp=Z,24nm,1.0s,baz=190,slow=9.5,SNR=19 | | | | | | |
| CTA | | | | PcP | **PcP** | **21 39 01.1** | **+0.1** |
| | comp=Z,3.2nm,0.6s,baz=213,slow=17,SNR=1.5 | | | | | | |
| CTA | | | | LR | LR | 21 48 36.0 | |
| | comp=Z,30μm,19.8s,baz=184,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **32.16** | **12** | P | **P** | **21 36 12.2** | **-0.1** |
| | comp=Z,65nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.17** | **351** | *c iP* | **P** | **21 36 10.9** | **-1.4** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,744nm,1.3s | | | | | | |
| WRAB | | | | MLR | MLR | | |
| | comp=Z,4μm,15.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.17** | **351** | P | **P** | **21 36 09.7** | **-2.6** |
| **WRAB** | **Tennant Creek** | **32.17** | **351** | ⇑P | **P** | **21 36 09.9** | **-2.5** |
| **WRAB** | **Tennant Creek** | **32.17** | **351** | P | **P** | **21 36 11.0** | **-1.4** |
| | comp=Z,583nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.33** | **351** | P | **P** | **21 36 10.7** | **-3.1** |
| **MTSU** | **Mount Surprise** | **33.89** | **8** | P | **P** | **21 36 26.5** | **-1.0** |
| | baz=34,SNR=29 | | | | | | |
| **MTSU** | **Mount Surprise** | **33.89** | **8** | P | **P** | **21 36 27.1** | **-0.4** |
| | comp=Z,33nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **33.94** | **326** | P | **P** | **21 36 24.5** | **-3.3** |
| **PSA00** | **Pilbara Seismi** | **33.94** | **326** | P | **P** | **21 36 25.4** | **-2.5** |
| PSA00 | | | | IAmb | IAmb | 21 36 39.7 | |
| | comp=Z,172nm,1.9s | | | | | | |
| **GIRL** | **Giralia** | **35.16** | **317** | P | **P** | **21 36 39.7** | **+1.3** |
| | baz=35,SNR=3.1 | | | | | | |
| **GIRL** | **Giralia** | **35.16** | **317** | P | **P** | **21 36 35.3** | **-3.1** |
| **FITZ** | **Fitzroy Crossi** | **35.49** | **337** | P | **P** | **21 36 40.1** | **-1.1** |
| | comp=Z,37nm,0.7s,baz=177,slow=9.2,SNR=82 | | | | | | |
| FITZ | | | | LR | LR | 21 49 57.1 | |
| | comp=Z,22μm,22.0s,baz=167,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.49** | **337** | P | **P** | **21 36 40.0** | **-1.2** |
| | baz=35,SNR=59 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.49** | **337** | P | **P** | **21 36 38.8** | **-2.5** |
| FITZ | | | | IAmb | IAmb | 21 36 48.4 | |
| | comp=Z,214nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **35.49** | **337** | ⇑P | **P** | **21 36 39.7** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **35.49** | **337** | P | **P** | **21 36 40.2** | **-1.1** |
| | comp=Z,117nm,2.0s | | | | | | |
| **ONTNC** | **Ouen Toro** | **36.06** | **45** | P | **P** | **21 36 43.9** | **-2.3** |
| ONTNC | | | | IAmb | IAmb | 21 37 14.6 | |
| | comp=Z,136nm,1.3s | | | | | | |
| **OUENC** | **Ouen Island, N** | **36.14** | **46** | P | **P** | **21 36 44.8** | **-2.0** |
| OUENC | | | | IAmb | IAmb | 21 36 55.6 | |
| | comp=Z,449nm,1.8s | | | | | | |
| **OUENC** | **Ouen Island, N** | **36.14** | **46** | P | **P** | **21 36 48.6** | **+1.8** |
| | comp=Z,132nm,2.1s | | | | | | |
| **NOUC** | **Port Laguerre** | **36.18** | **45** | P | **P** | **21 36 48.1** | **+1.0** |
| | comp=Z,63nm,2.3s | | | | | | |
| **PINNC** | **Pines Island,** | **36.24** | **47** | P | **P** | **21 36 46.5** | **-1.2** |
| PINNC | | | | IAmb | IAmb | 21 37 43.1 | |
| | comp=Z,181nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **36.27** | **45** | P | **P** | **21 36 47.6** | **-0.4** |
| | comp=Z,14nm,0.8s,baz=224,slow=10,SNR=8.5 | | | | | | |
| DZM | | | | LR | LR | 21 49 14.8 | |
| | comp=Z,34μm,18.6s,baz=193,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **36.27** | **45** | *e*P | **P** | **21 36 47.7** | **-0.4** |
| | comp=Z,158nm,1.4s | | | | | | |
| DZM | | | | *e*S | **S** | **21 42 27.0** | **-1.2** |
| | comp=Z,8μm,26.5s | | | | | | |
| DZM | | | | *e*LR | LR | 21 46 27.1 | |
| | comp=Z,77μm,25.8s,baz=206 | | | | | | |
| **DZM** | **Mont Dzumac** | **36.27** | **45** | P | **P** | **21 36 46.3** | **-1.7** |
| DZM | | | | IAmb | IAmb | 21 36 55.6 | |
| | comp=Z,326nm,1.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **36.27** | **45** | ⇓P | **P** | **21 36 48.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **36.27** | **45** | P | **P** | **21 36 48.5** | **+0.5** |
| | comp=Z,62nm,1.2s | | | | | | |
| **YATNC** | **Mamie plateau,** | **36.48** | **46** | P | **P** | **21 36 51.0** | **+1.3** |
| | comp=Z,114nm,1.9s | | |

comp=Z,2µmcomp=Z,2µmcomp=Z,263nm,0.9s
**SOEI Soe 43.85 338** P **P** 21 37 49.7 -1.3
SOEI IAmb IAmb 21 38 06.7
comp=Z,332nm,1.1s
**SOEI Soe 43.85 338** ⇑P **P** 21 37 51.7 +0.6
**SOEI Soe 43.85 338** P **P** 21 37 52.0 +1.0
comp=Z,5µmcomp=Z,5µmcomp=Z,315nm,1.2s
**SOEI Soe 43.85 338** P **P** 21 37 51.6 +0.6
comp=Z,315nm,1.2s
**SAUI Saumlaki 44.31 348** P **P** 21 37 52.9 -1.7
**SAUI Saumlaki 44.31 348** P **P** 21 37 53.1 -1.5
comp=Z,7µmcomp=Z,9µmcomp=Z,393nm,1.5s
**SAUI Saumlaki 44.31 348** P **P** 21 37 54.3 -0.3
comp=Z,389nm,1.5s
**BASI Baing, Sumba 44.37 333** P **P** 21 37 54.1 -0.9
comp=Z,2µmcomp=Z,2µmcomp=Z,122nm,1.0s
**AIS Amsterdam Isla 44.85 263** P **P** 21 37 57.7 -1.0
AIS IAmb IAmb 21 38 22.1
comp=Z,226nm,1.3s
**WBSI Waikabubak, Su 45.26 331** P **P** 21 38 04.0 +1.8
comp=Z,2µmcomp=Z,177nm,1.1s
**MMRI Maumere 45.43 335** P **P** 21 38 01.7 -1.7
**MMRI Maumere 45.43 335** P **P** 21 38 02.9 -0.6
comp=Z,4µmcomp=Z,8µmcomp=Z,494nm,1.8s
**MMRI Maumere 45.43 335** P **P** 21 38 03.3 -0.2
comp=Z,491nm,1.8s
**HNR Honiara 45.48 29** LR LR 21 55 36.4
comp=Z,7µm,19.0s,baz=188,slow=34
**HNR Honiara 45.48 29** P **P** 21 38 02.4 -1.4
HNR pmax pmax
comp=Z,148nm,1.1s
HNR MLR MLR
comp=Z,8µm,18.0s
**HNR Honiara 45.48 29** P **P** 21 38 02.4 -1.4
HNR IAmb IAmb 21 38 38.2
comp=Z,148nm,1.1s
**MSVF Nonsavu 45.54 56** P **P** 21 38 03.1 -1.4
comp=Z,2.8nm,0.2s,baz=131,slow=20,SNR=1.6
MSVF LR LR 21 54 00.2
comp=Z,18µm,18.7s,baz=202,slow=32
**MSVF Nonsavu 45.54 56** IAMs_20 IAMs_20 21 53 30.3
comp=Z,19µm,19.0s
**SYO Syowa Base 46.12 209**⇓*e*P **P** 21 38 08.4 +0.1
**SYO Syowa Base 46.12 209**⇓*i*pP pP 21 38 11.0 -0.6
**SYO Syowa Base 46.12 209**⇓*i*sP sP 21 38 13.2 +0.3
**PLAI Plampang 46.52 330** P **P** 21 38 11.7 -0.4
comp=Z,4µmcomp=Z,2µmcomp=Z,79nm,1.8s
**PLAI Plampang 46.52 330** P **P** 21 38 12.2 +0.1
comp=Z,79nm,1.5s
**IGBI Denpasar 47.40 326** P **P** 21 38 18.8 -0.1
comp=Z,3µmcomp=Z,2µmcomp=Z,85nm,1.5s
**BNDI Bandanaira 47.91 347** P **P** 21 38 22.4 -0.4
comp=Z,451nm,1.3s
**JAGI Jajag, Banyuwa 48.07 325** P **P** 21 38 21.9 -2.2
JAGI IAmb IAmb 21 39 07.1
comp=Z,90nm,1.2s
**JAGI Jajag, Banyuwa 48.07 325** ⇓P **P** 21 38 25.0 +0.8
**JAGI Jajag, Banyuwa 48.07 325** P **P** 21 38 23.4 -0.8
comp=Z,4µmcomp=Z,2µmcomp=Z,68nm,1.6s
**JAGI Jajag, Banyuwa 48.07 325** P **P** 21 38 23.6 -0.6
comp=Z,68nm,1.6s
**BSSI Bau Bau, Buton 48.28 334** P **P** 21 38 25.7 -0.1
comp=Z,3µmcomp=Z,2µmcomp=Z,114nm,2.7s
**BBSI Bau Bau 48.38 337** P **P** 21 38 25.6 -0.9
comp=Z,274nmcomp=Z,33nm,0.9s
**GMJI Gumukmas 48.51 324** P **P** 21 38 27.2 -0.3
comp=Z,2µmcomp=Z,52nm,1.3s
**ABJI Asem Bagus 48.67 326** P **P** 21 38 27.3 -1.5
comp=Z,6µmcomp=Z,3µmcomp=Z,147nm,2.2s
**RABL Rabaul 48.68 17** P **P** 21 38 26.7 -2.1
RABL IAmb IAmb 21 40 10.1
comp=Z,69nm,0.6s
**RABL Rabaul 48.68 17** P **P** 21 38 29.6 +0.8
comp=Z,63nm,0.8s
**BLJI Banyuglugur 48.94 325** P **P** 21 38 29.7 -1.2
comp=Z,1µmcomp=Z,34nm,2.1s
**AAI Ambon 48.99 345** P **P** 21 38 26.9 -4.3
comp=Z,2µmcomp=Z,85nm,1.9s
**GENI Genyem 49.13 1** ⇓P **P** 21 38 32.3 0.0
**GENI Genyem 49.13 1** P **P** 21 38 30.6 -1.7
comp=Z,5µmcomp=Z,284nm,1.1s
**GENI Genyem 49.13 1** P **P** 21 38 33.3 +1.0
comp=Z,285nm,1.1s
**BKSI Bulukumba 49.16 334** P **P** 21 38 30.8 -1.7
comp=Z,4µmcomp=Z,2µmcomp=Z,126nm,1.0s
**MSAI Masohi 49.20 346** P **P** 21 38 31.0 -1.9
comp=Z,545nmcomp=Z,11nm,0.8s
**JAY Jayapura 49.22 1** LR LR 22 01 16.0
comp=Z,15µm,18.3s,baz=142,slow=38
**JAY Jayapura 49.22 1** P **P** 21 38 30.4 -2.6
comp=Z,1µmcomp=Z,51nm,2.0s
**PWJI Pagerwojo 49.35 322** P **P** 21 38 33.8 -0.1
comp=Z,2µmcomp=Z,49nm,1.4s
**PCJI Pacitan 49.43 322** P **P** 21 38 33.4 -1.2
comp=Z,5µmcomp=Z,2µmcomp=Z,114nm,1.5s
**KAPI Kappang 49.56 334** P **P** 21 38 35.2 -0.3
comp=Z,70nm,0.9s,baz=185,slow=11,SNR=12
KAPI LR LR 21 58 52.7
comp=Z,8µm,20.1s,baz=184,slow=35
**KAPI Kappang 49.56 334** P **P** 21 38 32.6 -3.0
KAPI IAmb IAmb 21 38 48.2
comp=Z,148nm,0.8s
**KAPI Kappang 49.56 334** IAMs_20 IAMs_20 21 58 32.6
comp=Z,12µm,20.0s
**KAPI Kappang 49.56 334** ⇑P **P** 21 38 35.8 +0.3
**KAPI Kappang 49.56 334** P **P** 21 38 35.4 -0.2
comp=Z,237nm,1.2s
**XMIS Christmas Isla 49.67 314** P **P** 21 38 34.3 -2.2
XMIS IAmb IAmb 21 38 56.6
comp=Z,278nm,1.5s
**XMIS Christmas Isla 49.67 314** P **P** 21 38 35.3 -1.2
comp=Z,126nm,1.7s
**SMPI Sarmi 49.74 359** P **P** 21 38 35.7 -1.2
comp=Z,3µmcomp=Z,124nm,1.5s
**UGM Wanagama 49.94 321** P **P** 21 38 36.2 -2.3
**UGM Wanagama 49.94 321** P **P** 21 38 38.6 +0.1
comp=Z,4µmcomp=Z,3µmcomp=Z,118nm,2.0s
**BNSI Bone 50.05 334** P **P** 21 38 39.2 -0.1
comp=Z,3µmcomp=Z,117nm,1.8s
**MANU Manus Island 50.10 10** P **P** 21 38 37.6 -2.1
**BELA Belgrano 2 50.45 182** P **P** 21 38 41.1 -0.5
BELA IAmb IAmb 21 38 50.5
comp=Z,126nm,1.1s
**SPSI Sidrap Palu 50.56 334** P **P** 21 38 42.2 -0.9
comp=Z,3µmcomp=Z,3µmcomp=Z,132nm,1.3s
**SMRI Semarang 50.76 321** P **P** 21 38 41.6 -3.1
SMRI IAMs_20 IAMs_20 21 57 18.4
comp=Z,17µm,22.0s
**SANI Sanana 50.98 342** ⇓P **P** 21 38 45.1 -1.2
**SANI Sanana 50.98 342** P **P** 21 38 43.0 -3.3
comp=Z,3µmcomp=Z,1µmcomp=Z,45nm,2.0s
**SANI Sanana 50.98 342** P **P** 21 38 47.0 +0.7
comp=Z,69nm,1.4s
**KPJI Karang Pucung 51.10 319** P **P** 21 38 46.0 -1.2
comp=Z,3µmcomp=Z,120nm,1.6s
**SIJI Sorong 51.33 349** LR LR 22 01 55.4
comp=Z,2µm,21.4s,baz=144,slow=38
**TTSI Tana Toraja 51.42 334** P **P** 21 38 49.8 +0.2
comp=Z,3µmcomp=Z,2µmcomp=Z,81nm,1.2s
**CNJI Cibinong 51.86 317** P **P** 21 38 51.7 -1.2
comp=Z,2µmcomp=Z,105nm,1.6s
**NVL N'lazarevskaya 52.08 199**⇓*i*P P 21 39 03.6 +10
NVL *i* 21 48 40.2
NVL *i* SS **SS** **21 49 54.4 +1.3**
NVL pmax pmax
comp=Z,119nm,1.8s
NVL MLR MLR
comp=N,27µm,19.0s
NVL MLR MLR
comp=E,26µm,19.0s
NVL MLR MLR
comp=Z,40µm,19.0s
**LEM Lembang 52.09 318** P **P** 21 38 56.2 +1.4
comp=Z,43nm,0.8s,baz=95,slow=3.7,SNR=11
LEM LR LR 21 57 27.3
comp=Z,10µm,21.6s,baz=139,slow=32
**JCJI Jatiwangi 52.13 319** P **P** 21 38 51.9 -3.0
comp=Z,5µmcomp=Z,181nm,1.4s
**KBKI Kotabaru 52.24 330** P **P** 21 38 55.8 0.0
comp=Z,2µmcomp=Z,135nm,1.1s
**COCO West Island 52.47 303** P **P** 21 38 55.1 -2.4
COCO pmax pmax
comp=Z,180nm,1.5s
COCO MLR MLR
comp=Z,8µm,20.0s
**COCO West Island 52.47 303** P **P** 21 38 55.1 -2.4
COCO IAmb IAmb 21 39 17.4
comp=Z,180nm,1.5s
**LUWI Luwuk 52.62 339** P **P** 21 38 56.2 -2.4
LUWI IAmb IAmb 21 39 10.1
comp=Z,256nm,1.1s
LUWI IAMs_20 IAMs_20 22 00 42.7
comp=Z,14µm,20.0s
**LUWI Luwuk 52.62 339** ⇑P **P** 21 38 58.5 0.0
**LUWI Luwuk 52.62 339** P **P** 21 38 57.8 -0.8
comp=Z,4µmcomp=Z,5µmcomp=Z,220nm,1.1s
**LUWI Luwuk 52.62 339** P **P** 21 38 58.7 +0.1
comp=Z,223nm,1.4s
**DBJI Dramaga 52.70 317** P **P** 21 38 59.1 -0.1
comp=Z,148nm,1.5s
**APSI Ampana 53.01 337** P **P** 21 39 00.1 -1.3
comp=Z,2µmcomp=Z,121nm,1.9s
**TNTI Ternate 53.49 345** P **P** 21 39 02.8 -2.1
**TNTI Ternate 53.49 345** P **P** 21 39 03.9 -1.1
comp=Z,2µmcomp=Z,2µmcomp=Z,90nm,1.1s
**TNTI Ternate 53.49 345** P **P** 21 39 06.1 +1.1
comp=Z,90nm,1.2s
**SNAA Sanae 53.91 194** P **P** 21 39 07.6 +0.1
**SNAA Sanae 53.91 194** LR LR 22 01 32.3
comp=Z,28µm,19.7s,baz=150,slow=35
**SNAA Sanae 53.91 194***ce*P **P** 21 39 07.1 -0.4
SNAA pmax pmax
comp=Z,82nm,1.3s
SNAA MLR MLR
comp=Z,14µm,17.0s
**SNAA Sanae 53.91 194** P **P** 21 39 07.1 -0.4
SNAA IAmb IAmb 21 39 17.4
comp=Z,148nm,1.2s
**SNAA Sanae 53.91 194** ⇓P **P** 21 39 07.8 +0.2
**FUNA Funafuti 53.97 51** P **P** 21 39 06.8 -1.8
**AFI Afiamalu 54.16 64** LR LR 21 57 41.4
comp=Z,11µm,21.3s,baz=198,slow=31
**AFI Afiamalu 54.16 64** IAMs_20 IAMs_20 21 57 08.0
comp=Z,12µm,21.0s
**MRSI Marisa 54.28 338** P **P** 21 39 09.6 -1.1
comp=Z,3µmcomp=Z,89nm,1.5s
**PBKI Pangkalan Bun 54.30 325** P **P** 21 39 11.0 +0.1
comp=Z,3µmcomp=Z,230nm,1.1s
**CRZF Crozet Islands 54.31 238** IAMs_20 IAMs_20 21 59 10.1
comp=Z,11µm,18.0s
**KASI Kota Agung 54.59 315** P **P** 21 39 12.7 -0.3
comp=Z,4µmcomp=Z,2µmcomp=Z,95nm,1.1s
**MPSI Mapaga 54.65 336** P **P** 21 39 13.3 -0.1
comp=Z,3µmcomp=Z,2µmcomp=Z,86nm,2.4s
**MTKI Muara Teweh, K 54.86 329** P **P** 21 39 14.5 -0.5
comp=Z,2µmcomp=Z,2µmcomp=Z,146nm,1.2s
**TOLI2 Tolitoli 55.17 337** P **P** 21 39 14.8 -2.3
TOLI2 IAMs_20 IAMs_20 22 03 26.2
comp=Z,10µm,20.0s
**TOLI2 Tolitoli 55.17 337** P **P** 21 39 16.4 -0.8
comp=Z,254nm,1.1s
**VNA2 Neumayer--Watz 55.23 193** P **P** 21 39 16.7 -0.3
baz=154,slow=7.0
**VNA3 Neumayer Olymp 55.23 192** P **P** 21 39 16.1 -0.9
**KLSI 55.23 316** P **P** 21 39 16.7 -1.0
comp=Z,1µmcomp=Z,405nm,2.4s
**RAR Rarotonga 55.51 80** LR LR 22 00 03.4
comp=Z,5µm,18.7s,baz=222,slow=33
**VNA1 Neumayer--Stat 55.60 192** P **P** 21 39 19.8 +0.2
**MNAI Manna 56.30 314** P **P** 21 39 23.4 -2.0
**PMBI Palembang 56.80 317** P **P** 21 39 27.3 -1.6
PMBI IAMs_20 IAMs_20 21 59 30.9
comp=Z,14µm,22.0s
**STKI Sintang 56.95 326** P **P** 21 39 29.7 -0.2
comp=Z,2µmcomp=Z,102nm,1.2s
**KSI Kapatang 57.09 314** P **P** 21 39 30.0 -1.1
comp=Z,124nm,1.2s
**SMAI San Martin Ant 58.64 169** P **P** 21 39 42.2 +1.0
SMAI IAmb IAmb 21 39 50.6
comp=Z,97nm,0.9s
**KSM Kuching 58.67 325** P **P** 21 39 40.1 -1.9
KSM IAmb IAmb 21 39 53.3
comp=Z,209nm,1.4s
**KSM Kuching 58.67 325** ⇓P **P** 21 39 44.1 +2.1
**KSM Kuching 58.67 325** P **P** 21 39 45.0 +3.0
**KSM Kuching 58.67 325** P **P** 21 39 41.9 -0.1
comp=Z,111nm,1.4s
**SBUM Sibu 58.92 328** P **P** 21 39 41.3 -2.4
SBUM IAmb IAmb 21 39 51.5
comp=Z,99nm,1.6s
**SBUM Sibu 58.92 328** ⇓P **P** 21 39 45.1 +1.4
**SBUM Sibu 58.92 328** P **P** 21 39 46.0 +2.2
**MYLDM Lahad Datu 59.65 335** P **P** 21 39 46.0 -2.8
MYLDM IAmb IAmb 21 40 22.2
comp=Z,156nm,1.3s
MYLDM IAMs_20 IAMs_20 22 05 37.0
comp=Z,13µm,20.0s
**MYLDM Lahad Datu 59.65 335** ⇓P **P** 21 39 52.1 +3.3
**SPMM Sapulu 59.75 333** P **P** 21 39 53.0 +3.5
**DAV Davao City (W) 59.96 344** LR LR 22 07 16.0
comp=Z,3µm,19.7s,baz=149,slow=38
**DAV Davao City (W) 59.96 344** P **P** 21 39 48.9 -2.0
**TARA Tarawa 60.04 39** IAMs_20 IAMs_20 22 00 12.8
comp=Z,9µm,20.0s
**TBI Tubuai 60.29 91** *e*S **S** 21 48 10.0 +3.0
comp=Z,2µm,27.0s
TBI *e*LQ LQ 21 55 08.5
comp=Z,18µm,27.5s
TBI *e*LR LR 21 57 40.4
comp=Z,8µm,35.2s
**KKM Kota Kinabalu 61.09 333** P **P** 21 39 56.1 -2.6
KKM IAmb IAmb 21 40 05.4
comp=Z,168nm,1.6s
KKM IAMs_20 IAMs_20 22 06 11.3
comp=Z,11µm,22.0s
**BKNI Bangkinang 61.33 315** P **P** 21 39 57.6 -2.7
BKNI IAmb IAmb 21 40 56.9
comp=Z,115nm,1.2s
BKNI IAMs_20 IAMs_20 22 03 22.5
comp=Z,8µm,21.0s
**MYKOM Kota Tinggi 61.44 318** IAMs_20 IAMs_20 22 04 35.6
comp=Z,12µm,20.0s
**PMSA Palmer Station 62.23 169** LR LR 22 04 30.5
comp=Z,9µm,18.3s,baz=202,slow=34
**MNSI Mandailing Nat 62.39 313** P **P** 21 40 07.5 +0.1
comp=Z,2µmcomp=Z,92nm,1.0s
**GSI Gunungsitoli 63.76 312** ⇑P **P** 21 40 14.3 -2.3
**GSI Gunungsitoli 63.76 312** ⇑P **P** 21 40 17.3 +0.8
**GSI Gunungsitoli 63.76 312** P **P** 21 40 16.6 +0.1
comp=Z,81nm,1.5s
**ESPZ Base Esperanza 64.31 172** P **P** 21 40 19.3 -0.2
ESPZ IAmb IAmb 21 40 22.0
comp=Z,122nm,1.0s
**RPSI Rantau Prapat 64.37 314** P **P** 21 40 18.6 -2.0
RPSI IAmb IAmb 21 40 40.0
comp=Z,132nm,1.6s
RPSI IAMs_20 IAMs_20 22 03 57.3
comp=Z,10µm,21.0s
**PSI Prapat 64.47 314** P **P** 21 40 19.2 -2.1
comp=Z,6.7nm,0.4s,baz=178,slow=6.5,SNR=10.0
PSI LR LR 22 04 19.5
comp=Z,10µm,21.5s,baz=140,slow=32
**PSI Prapat 64.47 314** P **P** 21 40 22.1 +0.8
comp=Z,46nm,1.1s
**PPT2 Papeete2 64.52 86** *e*S **S** 21 49 01.1 +0.6
comp=Z,6µm,27.8s
PPT2 *e*LQ LQ 21 56 38.5
comp=Z,32µm,29.8s
PPT2 *e*LR LR 21 59 37.4
comp=Z,10µm,25.2s,baz=216
**PPT Papeete 64.53 86** LR LR 22 01 47.8
comp=Z,3µm,20.9s,baz=230,slow=30
**IPM Ipoh 65.05 317** P **P** 21 40 23.8 -1.2
IPM IAmb IAmb 21 40 45.2
comp=Z,198nm,1.6s
**IPM Ipoh 65.05 317** P **P** 21 40 25.0 0.0
**IPM Ipoh 65.05 317** P **P** 21 40 25.0 0.0
comp=Z,67nm,0.9s
**GUMO Guam 65.37 6** LR LR 22 06 45.7
comp=Z,5µm,21.4s,baz=186,slow=34
**KULM Kulim 65.94 317** P **P** 21 40 28.6 -2.1
KULM IAMs_20 IAMs_20 22 05 46.7
comp=Z,8µm,21.0s
**KULM Kulim 65.94 317** ⇓P **P** 21 40 30.3 -0.4
**KULM Kulim 65.94 317** P **P** 21 40 31.0 +0.3
**LHMI Lhok Sumawe 67.51 313** P **P** 21 40 41.1 +0.4
comp=Z,127nm,1.1s
**ORCD Orcadas 67.66 178** P **P** 21 40 41.0 -0.2
**TGY Tagaytay City 67.70 340** LR LR 22 10 28.0
comp=Z,4µm,21.7s,baz=174,slow=36
**DLV T Lat 69.05 327** P **P** 21 40 52.6 +2.1
comp=Z,89nm,1.4s
**SRIT Nakonsritamara 69.35 317** P **P** 21 40 50.3 -1.9
**H08S2 Diego Garcia H 69.98 284** T T 22 57 12.2
baz=142,slow=76,SNR=307
**H08S1 Diego Garcia H 70.00 284** T T 22 57 18.0
baz=142,slow=76,SNR=129
**H08S3 Diego Garcia H 70.00 284** T T 22 57 19.1
baz=142,slow=76,SNR=570
**DGAR Diego Garcia 70.19 284** P **P** 21 40 55.8 -1.7
DGAR pmax pmax
comp=Z,376nm,1.6s
DGAR MLR MLR
comp=Z,6µm,21.0s
**DGAR Diego Garcia 70.19 284** P **P** 21 40 55.8 -1.7
**USHA Ushuaia 71.11 163** LR LR 22 06 19.7
comp=Z,9µm,21.5s,baz=200,slow=31
**MG03 Isla Dawson 71.66 162** P **P** 21 41 05.3 -0.6
**MG04 Isla Riesco 72.38 161** P **P** 21 41 09.8 -0.4
**UBPT Khong Chiam 73.19 326** P **P** 21 41 14.2 -1.1
UBPT IAmb IAmb 21 41 36.2
comp=Z,222nm,1.6s
**UBPT Khong Chiam 73.19 326** ⇓P **P** 21 41 18.4 +3.1
**MG05 Puerto Natales 73.29 160** P **P** 21 41 15.0 -0.7
MG05 IAmb IAmb 21 41 53.0
comp=Z,123nm,1.4s
**HOPE Hope Point 74.14 182** P **P** 21 41 20.4 -0.1
HOPE pmax pmax
comp=Z,192nm,1.6s
HOPE MLR MLR
comp=Z,13µm,19.0s
**HOPE Hope Point 74.14 182** P **P** 21 41 20.4 -0.1
HOPE IAmb IAmb 21 41 31.7
comp=Z,192nm,1.6s
**WAKE Wake Island 74.70 26** P **P** 21 41 22.1 -2.0
WAKE IAmb IAmb 21 43 58.3
comp=Z,226nm,1.2s
**VOI Vohitsoka 74.78 254** P **P** 21 41 23.0 -2.0
**VOI Vohitsoka 74.78 254** ⇑P **P** 21 41 26.4 +1.4
**VOI Vohitsoka 74.78 254** P **P** 21 41 27.9 +3.0
**QIZ Qiongzhong 75.27 331** IAMs_20 IAMs_20 22 13 36.8
comp=Z,7µm,22.0s
**QIZ Qiongzhong 75.27 331** P **P** 21 41 29.0 +1.6
QIZ PP **PP** 21 44 14.5 -1.9
QIZ S **S** 21 51 07.5 +1.4
QIZ SS **SS** 21 55 59.5 +3.0
QIZ pmax pmax
comp=Z,800nm,6.2s
QIZ LR LR
comp=Z,3µm,23.0s
QIZ LR LR
comp=Z,2µm,21.1s
QIZ LR LR
comp=Z,5µm,23.9s
**QIZ Qiongzhong 75.27 331** P **P** 21 41 28.3 +0.9
comp=Z,63nm,2.6s
**EFI East Falkland 75.73 169***d*iP **P** 21 41 30.5 +0.7
EFI pmax pmax
comp=Z,112nm,1.3s
EFI MLR MLR
comp=Z,2µm,16.0s
**EFI East Falkland 75.73 169** P **P** 21 41 29.7 0.0
EFI IAmb IAmb 21 41 38.8
comp=Z,111nm,1.2s
**EFI East Falkland 75.73 169** ⇓P **P** 21 41 30.3 +0.5
**KAAM Kaadhehdhoo 76.18 289** IAMs_20 IAMs_20 22 11 25.5
comp=Z,6µm,18.0s
**DGPR DIGLIPUR 76.34 313** *e*P **P** 21 41 33.0 -0.6
DGPR IAmb IAmb 21 41 50.3
comp=Z,131nm,1.1s
**TPUB Ta-pu 76.71 342** P **P** 21 41 34.0 -1.6
**ABPO Ambohimpanom 76.73 256** P **P** 21 41 34.8 -1.4
ABPO pmax pmax
comp=Z,30nm,1.3s
ABPO MLR MLR
comp=Z,10µm,20.0s
**ABPO Ambohimpanom 76.73 256** P **P** 21 41 34.8 -1.4
**TAOE Nuku Hiva Isla 77.05 88** *e*LR LR 22 05 24.7
comp=Z,7µm,25.2s,baz=226
**OPO Ambohidratompo 77.10 256** P **P** 21 41 38.8 +0.6
comp=Z,6.6nm,0.9s,baz=233,slow=16,SNR=5.8
OPO LR LR 22 08 03.2
comp=Z,6µm,20.4s,baz=11,slow=30
**SSLB Suanglung 77.12 342** P **P** 21 41 36.6 -1.3
**SSLB Suanglung 77.12 342** P **P** 21 41 37.4 -0.5
comp=Z,48nm,1.2s
**NACB Ninganchiao 77.38 343** P **P** 21 41 37.5 -1.8
**PALK Pallekele 77.38 299** P **P** 21 41 39.7 +0.1
comp=Z,8.3nm,0.8s,baz=172,slow=8.9,SNR=3.6
PALK LR LR 22 09 16.8
comp=Z,12µm,20.5s,baz=256,slow=31
**PALK Pallekele 77.38 299** P **P** 21 41 38.4 -1.2
PALK IAmb IAmb 21 41 51.3
comp=Z,93nm,1.4s
**YHNB Yeheng 77.90 343** P **P** 21 41 42.8 +0.5
comp=Z,48nm,1.1s
**GZH Guangzhou 78.14 335** P **P** 21 41 48.0 +4.5
GZH S S 21 51 47.8 +11
GZH LR LR
comp=Z,5µm,26.7s
GZH LR LR
comp=Z,2µm,22.4s
**CM31 Chiang Mai Arr 78.52 321** P **P** 21 41 44.4 -1.5
CM31 IAmb IAmb 21 42 04.2
comp=Z,142nm,1.6s
**CMAR Chiang Mai Arr 78.52 321** P **P** 21 41 46.2 +0.4
comp=Z,5.7nm,0.9s,baz=173,slow=5.5,SNR=27
CMAR LR LR 22 16 02.1
comp=Z,6µm,19.8s,baz=160,slow=35
**CMAR Chiang Mai Arr 78.52 321** P **P** 21 41 44.1 -1.7
**QZH Quanzhou 78.71 341**⇑*i*P **P** 21 41 46.3 -0.3
QZH S **S** 21 51 44.5 +1.2
QZH pmax pmax
comp=Z,45nm,1.4s
QZH pmax pmax
comp=Z,590nm,4.5s
QZH LR LR
comp=Z,2µm,19.0s
QZH LR LR
comp=Z,590nm,19.4s
QZH LR LR
comp=Z,3µm,22.3s
**CHTO Chiang Mai 78.85 321** P **P** 21 41 45.7 -1.9
CHTO pmax pmax
comp=Z,114nm,1.5s
CHTO MLR MLR
comp=Z,6µm,20.0s
**CHTO Chiang Mai 78.85 321** P **P** 21 41 45.7 -1.9
CHTO IAmb IAmb 21 41 55.7
comp=Z,114nm,1.5s
CHTO IAMs_20 IAMs_20 22 15 49.8
comp=Z,6µm,20.0s
**CHTO Chiang Mai 78.85 321** ⇓P **P** 21 41 48.1 +0.6
**CHTO Chiang Mai 78.85 321** P **P** 21 41 49.1 +1.5
comp=Z,28nm,2.5s
**COYC Coyhaique 79.14 158** P **P** 21 41 49.1 +0.1
COYC IAmb IAmb 21 42 02.1
comp=Z,107nm,1.3s
**COYC Coyhaique 79.14 158** IAMs_20 IAMs_20 22 10 03.6
comp=Z,5µm,19.0s
**COYC Coyhaique 79.14 158** ⇓P **P** 21 41 50.4 +1.4
**SBV Sambava 79.37 262** P P 21 41 56.9 +6.2
**SUR Sutherland 80.47 229** LR LR 22 09 52.3
comp=Z,6µm,21.8s,baz=151,slow=30
**SUR Sutherland 80.47 229** P **P** 21 41 56.1 -0.6
**SUR Sutherland 80.47 229** IAMs_20 IAMs_20 22 14 30.9
comp=Z,6µm,18.0s
**RPN Rapa Nui 80.92 123** LR LR 22 10 16.5
comp=Z,3µm,21.2s,baz=214,slow=30
**GO07 Millado Hill, 81.07 156** P **P** 21 41 58.8 -0.6
GO07 IAmb IAmb 21 42 07.6
comp=Z,121nm,0.8s
**BOSA Boshof 81.43 234** P **P** 21 42 01.3 -0.5
comp=Z,11nm,1.1s,baz=165,slow=8.5,SNR=6.5
BOSA LR LR 22 10 46.3
comp=Z,11µm,21.2s,baz=144,slow=30
**BOSA Boshof 81.43 234** P **P** 21 42 00.8 -1.0
**LL02 Futaleuf 81.44 157** P **P** 21 42 01.2 -0.3
LL02 IAmb IAmb 21 42 16.3
comp=Z,126nm,1.4s
**KOD Kodaikanal 81.59 298** *e*P **P** 21 42 04.7 +1.8
**LL01 San Ignacio de 82.07 157** P **P** 21 42 04.1 -0.7
**SALM Salem 82.37 300** *e*P **P** 21 42 08.4 +1.8
SALM *e*S **S** 21 52 22.0 -0.2
**MSEY Mahe Island 82.74 272** P **P** 21 42 08.0 -0.7
MSEY pmax pmax
comp=Z,30nm,1.1s
MSEY MLR MLR
comp=Z,4µm,21.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSEY** | **Mahe Island** | **82.74 272** | | P | **P** | **21 42 08.0** | **-0.7** |
| **GYA** | **Guiyang** | **83.21 331** | ⇑ | P | **P** | **21 42 12.0** | **+1.2** |
| GYA | | | | sP | pwP | 21 42 18.0 | -0.8 |
| GYA | | | | PP | **PP** | **21 45 27.5** | **+4.8** |
| GYA | | | | S | **S** | **21 52 32.3** | **+1.8** |
| GYA | | | | SS | **SS** | **21 57 58.0** | **+2.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,590nm,4.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,3µm,18.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,2µm,17.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,4µm,20.9s | | | | | | |
| **KMI** | **Kunming** | **83.23 327** | ⇓ | P | **P** | **21 42 13.5** | **+2.4** |
| KMI | | | | pP | sP | 21 42 16.0 | +0.2 |
| KMI | | | | sP | pwP | 21 42 17.5 | -1.6 |
| KMI | | | | PP | **PP** | **21 45 24.0** | **+1.0** |
| KMI | | | | S | **S** | **21 52 33.0** | **+2.0** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,26nm,2.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,4µm,27.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,3µm,23.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,6µm,25.1s | | | | | | |
| **LL03** | **Petrohue** | **83.24 156** | | P | **P** | **21 42 10.5** | **-0.4** |
| **SKHT** | **Srikalahasti** | **83.31 302** | *e* | P | **P** | **21 42 11.1** | **-0.4** |
| SKHT | | | | IVmB_BB | | 21 42 18.9 | |
| | comp=Z,425nm,3.6s | | | | | | |
| SKHT | | | | IVMs_BB | IVMs_BB | 22 09 38.0 | |
| | comp=Z,920nm,25.4s | | | | | | |
| **LL04** | **Puerto Octay** | **83.46 156** | | P | **P** | **21 42 11.2** | **-0.8** |
| **PLCA** | **Paso Flores** | **84.08 157** | | P | **P** | **21 42 15.1** | **-0.2** |
| | comp=Z,9.3nm,1.1s,baz=197,slow=8.2,SNR=6.9 | | | | | | |
| PLCA | | | | LR | LR | 22 12 43.9 | |
| | comp=Z,5µm,21.2s,baz=198,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **84.08 157** | | P | **P** | **21 42 14.5** | **-0.8** |
| PLCA | | | | IAmb | IAmb | 21 42 28.2 | |
| | comp=Z,172nm,1.9s | | | | | | |
| **PLCA** | **Paso Flores** | **84.08 157** | *e* | P | **P** | **21 42 15.3** | **0.0** |
| **LBTB** | **Lobatse** | **84.20 236** | | LR | LR | 22 14 47.8 | |
| | comp=Z,9µm,18.1s,baz=152,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **84.20 236** | | P | **P** | **21 42 15.0** | **-1.2** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| **LBTB** | **Lobatse** | **84.20 236** | | P | **P** | **21 42 15.0** | **-1.2** |
| **SSE** | **Sheshan** | **84.21 344** | | P | **P** | **21 42 16.0** | **+0.4** |
| SSE | | | | S | **S** | **21 52 42.3** | **+2.2** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,300nm,4.8s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,800nm,22.9s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,470nm,20.0s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **84.65 0** | | LR | LR | 22 17 06.1 | |
| | comp=Z,5µm,21.9s,baz=186,slow=34 | | | | | | |
| **LR03** | **Panguipulli** | **84.68 156** | | P | **P** | **21 42 17.6** | **-0.6** |
| LR03 | | | | IAmb | IAmb | 21 42 40.4 | |
| | comp=Z,204nm,1.8s | | | | | | |
| **PZH** | **PanZhiHua** | **84.85 326** | | P | **P** | **21 42 20.8** | **+1.6** |
| PZH | | | | sP | **pwP** | **21 42 26.0** | **-1.2** |
| PZH | | | | PP | **PP** | **21 45 32.5** | **-3.6** |
| PZH | | | | SKS | **SKSac** | **21 52 38.5** | **-4.4** |
| PZH | | | | S | **S** | **21 52 46.0** | **-1.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,530nm,6.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,4µm,24.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2µm,23.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,6µm,24.3s | | | | | | |
| **ADKI** | **Addanki** | **84.94 303** | *e* | P | **P** | **21 42 19.4** | **-0.3** |
| ADKI | | | | IVmB_BB | | 21 42 27.5 | |
| | comp=Z,468nm,3.2s | | | | | | |
| ADKI | | | | IVMs_BB | IVMs_BB | 22 10 36.7 | |
| | comp=Z,951nm,30.1s | | | | | | |
| **JNU** | **Nakatsue** | **85.00 353** | | P | **P** | **21 42 20.8** | **+1.1** |
| | comp=Z,40nm,1.8s | | | | | | |
| **WHN** | **Wuhan** | **85.04 338** | ⇑ | P | **P** | **21 42 22.5** | **+2.7** |
| WHN | | | | S | **S** | **21 52 45.5** | **-2.9** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,120nm,1.4s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,5µm,18.8s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,2µm,16.1s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,8µm,23.8s | | | | | | |
| **CHLP** | **Challavanipeta** | **85.14 308** | *e* | P | **P** | **21 42 20.0** | **-0.6** |
| CHLP | | | | IVmB_BB | | 21 42 28.0 | |
| | comp=Z,554nm,2.3s | | | | | | |
| CHLP | | | | IVMs_BB | IVMs_BB | 22 13 05.8 | |
| | comp=Z,931nm,22.2s | | | | | | |
| **RCLA** | **Racherla** | **85.14 302** | *e* | P | **P** | **21 42 20.0** | **-0.7** |
| RCLA | | | | IVmBBB | | 21 42 28.2 | |
| | comp=Z,604nm,3.3s | | | | | | |
| RCLA | | | | IVMs_BB | IVMs_BB | 22 10 42.2 | |
| | comp=Z,2µm,25.6s | | | | | | |
| **PVM** | **Polavaram** | **85.28 306** | *e* | P | **P** | **21 42 19.9** | **-1.4** |
| PVM | | | | IVmB_BB | | 21 42 29.1 | |
| | comp=Z,455nm,3.9s | | | | | | |
| PVM | | | | IVMs_BB | IVMs_BB | 22 11 51.3 | |
| | comp=Z,1µm,26.4s | | | | | | |
| **MYLAV** | **Mylavaram** | **85.36 305** | *e* | P | **P** | **21 42 21.0** | **-0.8** |
| MYLAV | | | | IVmB_BB | | 21 42 29.7 | |
| | comp=Z,371nm,3.0s | | | | | | |
| MYLAV | | | | IVMs_BB | IVMs_BB | 22 11 53.9 | |
| | comp=Z,1µm,23.0s | | | | | | |
| **JMN** | **Monobe** | **85.41 355** | | P | **P** | **21 42 20.8** | **-0.9** |
| JMN | | | | IAmb | IAmb | 21 42 29.5 | |
| | comp=Z,103nm,1.2s | | | | | | |
| **LC01** | **Cunco** | **85.49 156** | | P | **P** | **21 42 21.7** | **-0.7** |
| LC01 | | | | IAmb | IAmb | 21 42 40.4 | |
| | comp=Z,65nm,1.1s | | | | | | |
| **NJ2** | **Nanjing** | **85.56 342** | ⇓ | *i* P | **P** | **21 42 23.0** | **+0.6** |
| NJ2 | | | | pP | **sP** | **21 42 28.5** | **+1.4** |
| NJ2 | | | | sP | **pwP** | **21 42 30.5** | **+0.1** |
| NJ2 | | | | PP | **PP** | **21 45 45.3** | **+3.7** |
| NJ2 | | | | S | **S** | **21 52 50.5** | **-2.9** |
| NJ2 | | | | sS | **ScS** | **21 53 05.8** | **+2.7** |
| NJ2 | | | | SS | **SS** | **21 58 29.8** | **-0.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,660nm,4.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2µm,21.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2µm,18.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2µm,23.7s | | | | | | |
| **URV** | **Uravakonda** | **85.61 301** | *e* | P | **P** | **21 42 22.1** | **-1.0** |
| URV | | | | IVmB_BB | | 21 42 30.3 | |
| | comp=Z,456nm,2.6s | | | | | | |
| URV | | | | IVMs_BB | IVMs_BB | 22 18 13.9 | |
| | comp=Z,687nm,21.1s | | | | | | |
| **NJS** | **Nagarjunasagar** | **85.88 303** | *e* | P | **P** | **21 42 24.0** | **-0.4** |
| NJS | | | | IVmB_BB | | 21 42 31.9 | |
| | comp=Z,445nm,2.5s | | | | | | |
| NJS | | | | IVMs_BB | IVMs_BB | 22 13 52.1 | |
| | comp=Z,876nm,17.3s | | | | | | |
| **ENH** | **Enshi** | **85.99 334** | | P | **P** | **21 42 23.5** | **-1.2** |
| ENH | | | | IAmb | IAmb | 21 42 40.4 | |
| | comp=Z,98nm,1.5s | | | | | | |
| **RAGD** | **RAYAGADA** | **86.06 308** | *e* | P | **P** | **21 42 23.5** | **-1.7** |
| **IMP** | **Imphal** | **86.24 319** | *e* | P | **P** | **21 42 25.9** | **-0.2** |
| IMP | | | | IAmb | IAmb | 21 42 33.5 | |
| | comp=Z,162nm,2.1s | | | | | | |
| **MATP** | **Matopo** | **86.41 241** | | LR | LR | 22 16 21.6 | |
| | comp=Z,5µm,18.0s,baz=146,slow=32 | | | | | | |
| **CUPL** | **Choutuppal** | **86.70 303** | *e* | P | **P** | **21 42 26.5** | **-1.9** |
| CUPL | | | | IVmB_BB | | 21 42 35.6 | |
| | comp=Z,358nm,3.2s | | | | | | |
| CUPL | | | | IVMs_BB | IVMs_BB | 22 15 05.1 | |
| | comp=Z,1µm,20.0s | | | | | | |
| **JHS** | **Saijyo** | **86.72 355** | | P | **P** | **21 42 27.0** | **-1.1** |
| **INU** | **Inuyama** | **86.91 358** | | P | **P** | **21 42 28.5** | **-0.5** |
| INU | | | | IAmb | IAmb | 21 42 37.3 | |
| | comp=Z,80nm,1.2s | | | | | | |
| **INU** | **Inuyama** | **86.91 358** | ⇑ | P | P | 21 42 35.4 | +6.4 |
| INU | | | ⇑ | P | pwP | 21 42 36.3 | -0.6 |
| **INU** | **Inuyama** | **86.91 358** | | P | **P** | **21 42 29.9** | **+0.9** |
| | comp=Z,64nm,1.9s | | | | | | |
| **KOHI** | **KOHIMA** | **86.97 320** | *e* | P | **P** | **21 42 28.7** | **-1.0** |
| KOHI | | | | IAmb | IAmb | 21 42 44.3 | |
| | comp=Z,51nm,0.9s | | | | | | |
| **HYB** | **Hyderabad** | **86.99 303** | *e* | P | **P** | **21 42 31.4** | **+1.5** |
| **HYBB** | **Hyderabad (bro** | **86.99 303** | *e* | P | **P** | **21 42 29.8** | **-0.1** |
| HYBB | | | | IVmB_BB | | 21 42 42.5 | |
| | comp=Z,335nm,3.1s | | | | | | |
| HYBB | | | | IVMs_BB | IVMs_BB | 22 11 49.7 | |
| | comp=Z,1µm,26.4s | | | | | | |
| **MOKO** | **MOKOCHONG** | **87.35 320** | *e* | P | **P** | **21 42 31.7** | **+0.2** |
| MOKO | | | | IAmb | IAmb | 21 42 47.6 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **LKP** | **Lekhapani** | **87.74 322** | *e* | P | **P** | **21 42 31.8** | **-1.4** |
| **SHL** | **Shillong** | **87.74 318** | | P | **P** | **21 42 32.4** | **-1.1** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,140nm,1.2s | | | | | | |
| **SHL** | **Shillong** | **87.74 318** | | P | **P** | **21 42 32.4** | **-1.1** |
| **SHL** | **Shillong** | **87.74 318** | *e* | P | **P** | **21 42 33.4** | **-0.2** |
| SHL | | | | IAmb | IAmb | 21 42 49.1 | |
| | comp=Z,206nm,1.6s | | | | | | |
| **RPR** | **Rampur** | **87.81 305** | *e* | P | **P** | **21 42 33.6** | **-0.2** |
| RPR | | | | IVmB_BB | | 21 42 41.1 | |
| | comp=Z,303nm,3.0s | | | | | | |
| RPR | | | | IVMs_BB | IVMs_BB | 22 13 19.2 | |
| | comp=Z,834nm,22.6s | | | | | | |
| **GOA** | **Goa** | **87.91 298** | *e* | P | **P** | **21 42 34.2** | **-0.1** |
| GOA | | | | IAmb | IAmb | 21 42 46.7 | |
| | comp=Z,43nm,1.2s | | | | | | |
| **JHSG** | **JHARSUGUGA** | **88.06 310** | *e* | P | **P** | **21 42 35.6** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **88.08 359** | | P | **P** | **21 42 34.9** | **+0.3** |
| | comp=Z,7.9nm,0.9s,baz=164,slow=5.3,SNR=11 | | | | | | |
| MJAR | | | | LR | LR | 22 22 05.4 | |
| | comp=Z,2µm,18.9s,baz=170,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **88.08 359** | | P | **P** | **21 42 33.5** | **-1.1** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,126nm,1.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **88.08 359** | | P | **P** | **21 42 33.5** | **-1.1** |
| MJAR | | | | IAmb | IAmb | 21 42 43.2 | |
| | comp=Z,126nm,1.7s | | | | | | |
| **MAJO** | **Matsushiro** | **88.08 359** | ⇑ | *e*P | **P** | **21 42 35.2** | **+0.6** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,110nm,1.6s | | | | | | |
| MAJO | | | | MLR | MLR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **MAJO** | **Matsushiro** | **88.08 359** | | P | **P** | **21 42 34.0** | **-0.7** |
| MAJO | | | | IAmb | IAmb | 21 42 42.5 | |
| | comp=Z,95nm,1.3s | | | | | | |
| **MAJO** | **Matsushiro** | **88.08 359** | ⇑ | P | **P** | **21 42 36.1** | **+1.5** |
| MAJO | | | ⇑ | P | **pwP** | **21 42 41.6** | **-1.0** |
| MAJO | | | ⇑ | P | **sP** | **21 42 41.7** | **+2.4** |
| **MAJO** | **Matsushiro** | **88.08 359** | | P | **P** | **21 42 35.5** | **+0.9** |
| | comp=Z,57nm,1.3s | | | | | | |
| **MAT** | **Matsushiro** | **88.08 359** | | P | **P** | **21 42 33.8** | **-0.8** |
| MAT | | | | S | **S** | **21 53 18.2** | **+0.5** |
| **MJB9** | **Matsu-Tunnel** | **88.08 359** | | P | **P** | **21 42 33.8** | **-0.8** |
| MJB9 | | | | IAmb | IAmb | 21 42 42.5 | |
| | comp=Z,94nm,1.3s | | | | | | |
| **H03S1** | **Juan Fernandez** | **88.18 149** | | T | T | 23 21 07.3 | |
| | baz=200 | | | | | | |
| **H03S2** | **Juan Fernandez** | **88.18 149** | | T | T | 23 21 06.0 | |
| | baz=200,SNR=201 | | | | | | |
| **H03S3** | **Juan Fernandez** | **88.20 149** | | T | T | 23 21 06.7 | |
| | baz=200,SNR=218 | | | | | | |
| **CD2** | **Chengdu** | **88.26 330** | | P | **P** | **21 42 36.8** | **+1.1** |
| CD2 | | | | sP | pwP | 21 42 42.3 | -1.4 |
| CD2 | | | | SKS | **SKSac** | **21 53 04.8** | **+1.1** |
| CD2 | | | | S | **S** | **21 53 22.3** | **+2.5** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,330nm,5.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,4µm,21.6s | | | | | | |
| **SRSP** | **Sriramsagar** | **88.36 304** | *e* | P | **P** | **21 42 35.7** | **-0.7** |
| **ITAN** | **ITANAGAR** | **88.40 320** | *e* | P | **P** | **21 42 37.6** | **+1.3** |
| ITAN | | | | IAmb | IAmb | 21 43 03.1 | |
| | comp=Z,220nm,1.2s | | | | | | |
| **H03N3** | **Juan Fernandez** | **88.53 149** | | T | T | 23 21 29.9 | |
| | baz=248,slow=74,SNR=18 | | | | | | |
| **H03N2** | **Juan Fernandez** | **88.55 149** | | T | T | 23 21 29.5 | |
| | baz=248,slow=74,SNR=34 | | | | | | |
| **H03N1** | **Juan Fernandez** | **88.55 149** | | T | T | 23 21 33.1 | |
| | baz=248,slow=74,SNR=20 | | | | | | |
| **KLRI** | **Killari** | **88.55 302** | *e* | P | **P** | **21 42 36.5** | **-0.8** |
| KLRI | | | | IVmBBB | | 21 42 44.2 | |
| | comp=Z,475nm,2.5s | | | | | | |
| KLRI | | | | IVMs_BB | IVMs_BB | 22 14 48.3 | |
| | comp=Z,2µm,20.2s | | | | | | |
| **TJN** | **Taejon** | **88.56 350** | ⇓ | *e*P | **P** | **21 42 38.6** | **+1.8** |
| **TJN** | **Taejon** | **88.56 350** | | P | **P** | **21 42 37.4** | **+0.6** |
| | comp=Z,225nm,1.4s | | | | | | |
| **ML02** | **Panimavida** | **88.57 155** | | P | **P** | **21 42 36.6** | **-0.8** |
| **DHUB** | **DHUBRI** | **88.93 317** | *e* | P | **P** | **21 42 38.7** | **-0.2** |
| DHUB | | | | IAmb | IAmb | 21 42 54.5 | |
| | comp=Z,92nm,1.2s | | | | | | |
| **GO05** | **Huala** | **89.15 155** | | P | **P** | **21 42 39.4** | **-0.7** |
| **KAD** | **Karad** | **89.21 300** | *e* | P | **P** | **21 42 39.2** | **-1.3** |
| **LYN** | **LuoYang** | **89.32 338** | *e* | P | **P** | **21 42 40.5** | **0.0** |
| LYN | | | | pP | sP | 21 42 44.8 | -0.4 |
| LYN | | | | sP | pwP | 21 42 47.0 | -1.5 |
| LYN | | | | PP | **PP** | **21 46 10.8** | **-1.1** |
| LYN | | | | S | **S** | **21 53 31.3** | **+1.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,300nm,7.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3µm,21.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,4µm,27.4s | | | | | | |
| **KSAR** | **Wonju Array Be** | **89.56 351** | | P | **P** | **21 42 41.1** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **89.56 351** | | P | **P** | **21 42 41.1** | **-0.4** |
| **KSRS** | **Korea Array** | **89.56 351** | | P | **P** | **21 42 42.5** | **+1.0** |
| | comp=Z,7.8nm,0.9s,baz=175,slow=4.7,SNR=14 | | | | | | |
| KSRS | | | | LR | LR | 22 22 11.3 | |
| | comp=Z,3µm,21.4s,baz=185,slow=35 | | | | | | |
| **KS19** | **Wonju Array Si** | **89.62 351** | | P | **P** | **21 42 40.6** | **-1.2** |
| **BO02** | **Sierra Bellavi** | **89.65 155** | | P | **P** | **21 42 41.5** | **-1.0** |
| **XAN** | **Xi'an** | **89.71 335** | | P | **P** | **21 42 43.3** | **+0.9** |
| XAN | | | | PP | **PP** | **21 46 15.3** | **+0.2** |
| XAN | | | | SS | SS | 21 59 27.5 | -3.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,27nm,1.7s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,640nm,5.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,3µm,18.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,5µm,19.1s | | | | | | |
| **INCN** | **Inchon** | **89.73 350** | | P | **P** | **21 42 41.1** | **-1.3** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| INCN | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **INCN** | **Inchon** | **89.73 350** | | P | **P** | **21 42 41.1** | **-1.3** |
| **INCN** | **Inchon** | **89.73 350** | ⇓ | P | **P** | **21 42 44.6** | **+2.2** |
| **INCN** | **Inchon** | **89.73 350** | | P | **P** | **21 42 43.9** | **+1.5** |
| | comp=Z,36nm,1.4s | | | | | | |
| **TIA** | **Tai'an** | **89.92 342** | ⇓ | P | **P** | **21 42 43.5** | **+0.2** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **BO01** | **Tunca** | **89.95 155** | | P | **P** | **21 42 42.9** | **-1.0** |
| BO01 | | | | IAmb | IAmb | 21 42 51.9 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **HJU** | **Haeju** | **90.39 349** | | P | **P** | **21 42 48.3** | **+2.9** |
| **POO** | **Poona** | **90.39 300** | *e* | P | **P** | **21 42 46.3** | **+0.4** |
| POO | | | | IAmb | IAmb | 21 42 58.0 | |
| | comp=Z,110nm,1.3s | | | | | | |
| **MT01** | **Popeta** | **90.41 155** | | P | **P** | **21 42 45.3** | **-0.7** |
| MT01 | | | | IAmb | IAmb | 21 42 58.0 | |
| | comp=Z,126nm,1.2s | | | | | | |
| **BO04** | **La Punta** | **90.46 155** | | P | **P** | **21 42 45.2** | **-1.1** |
| **MT09** | **Talagante** | **90.56 155** | | P | **P** | **21 42 45.5** | **-1.4** |
| MT09 | | | | IAmb | IAmb | 21 42 58.9 | |
| | comp=Z,122nm,1.3s | | | | | | |
| **GTK** | **Tadong** | **90.67 316** | *e* | P | **P** | **21 42 47.5** | **+0.4** |
| GTK | | | | IAmb | IAmb | 21 43 00.2 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **LSZ** | **Lusaka** | **90.76 244** | | LR | LR | 22 17 41.4 | |
| | comp=Z,15µm,19.7s,baz=148,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **90.76 244** | | P | **P** | **21 42 46.7** | **-1.3** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,28nm,1.1s | | | | | | |
| LSZ | | | | MLR | MLR | | |
| | comp=Z,16µm,20.0s | | | | | | |
| **LSZ** | **Lusaka** | **90.76 244** | | P | **P** | **21 42 46.7** | **-1.3** |
| **ODAN** | **Odare** | **90.79 315** | *e* | P | **P** | **21 42 47.6** | **-0.3** |
| **TAPN** | **Taplejung** | **91.08 316** | *e* | P | **P** | **21 42 49.6** | **+0.3** |
| | comp=Z,225nm,1.5s | | | | | | |
| **JBP** | **Jabalpur** | **91.08 307** | *e* | P | **P** | **21 42 47.8** | **-1.2** |
| JBP | | | | IAmb | IAmb | 21 42 55.4 | |
| | comp=Z,71nm,1.4s | | | | | | |
| JBP | | | *e* | S | **SKSac** | **21 53 17.9** | **-2.6** |
| **PYAG** | **Pyongyang** | **91.38 349** | | P | **P** | **21 42 53.1** | **+3.2** |
| PYAG | | | | sP | **pwP** | **21 42 58.3** | **+0.4** |
| PYAG | | | | S | **S** | **21 53 52.8** | **+4.6** |
| PYAG | | | | AmB | | | |
| | comp=Z,92nm,1.1s | | | | | | |
| PYAG | | | | AMS | AMS | | |
| | comp=N,248nm,2.9s | | | | | | |
| PYAG | | | | AMS | AMS | | |
| | comp=E,425nm,5.0s | | | | | | |
| PYAG | | | | AMS | AMS | | |
| | comp=Z,91nm,1.1s | | | | | | |
| **VAR** | **Varanasi** | **91.43 311** | *e* | P | **P** | **21 42 53.1** | **+2.5** |
| **HNS** | **HongShan** | **91.56 340** | ⇓ | P | **P** | **21 42 51.8** | **+1.0** |
| HNS | | | | SKS | **SKSac** | **21 53 25.5** | **+3.1** |
| HNS | | | | S | **S** | **21 53 51.0** | **+1.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,21nm,1.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,1µm,22.2s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2µm,19.8s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2µm,23.7s | | | | | | |
| **VA03** | **San Esteban** | **91.64 155** | | P | **P** | **21 42 51.4** | **-0.4** |
| VA03 | | | | IAmb | IAmb | 21 43 00.1 | |
| | comp=Z,76nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **91.69 319** | | P | **P** | **21 42 52.5** | **+0.2** |
| LSA | | | | LR | LR | | |
| | comp=Z,3µm,41.3s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,3µm,42.0s | | | | | | |
| **AAGR** | **Agrelo** | **91.77 156** | *i* | P | **P** | **21 42 53.2** | **+0.7** |
| **DL2** | **Dalian** | **91.78 346** | | P | **P** | **21 42 50.5** | **-1.3** |
| DL2 | | | | S | **S** | **21 53 48.0** | **-3.9** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,250nm,4.9s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,2µm,23.3s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,3µm,20.6s | | | | | | |
| **JIRN** | **Jiri** | **92.01 315** | *e* | P | **P** | **21 42 53.6** | **-0.1** |
| **HHU** | **Hamhung** | **92.05 351** | | P | **P** | **21 42 55.8** | **+2.7** |
| HHU | | | | pP | **pwP** | **21 43 01.1** | **+0.1** |
| HHU | | | | S | **S** | **21 54 02.7** | **+8.4** |
| HHU | | | | AmB | | | |
| | comp=Z,23nm,0.7s | | | | | | |
| HHU | | | | AMS | AMS | | |
| | comp=N,130nm,3.9s | | | | | | |
| HHU | | | | AMS | AMS | | |
| | comp=E,354nm,10.6s | | | | | | |
| HHU | | | | AMS | AMS | | |
| | comp=Z,85nm,2.5s | | | | | | |
| **ASAL** | **Salagasta** | **92.24 156** | *i* | P | **P** | **21 42 54.0** | **-0.6** |
| **PKI** | **Pulchoki** | **92.28 314** | *e* | P | **P** | **21 42 54.4** | **-0.5** |
| **PKIN** | **Phulchoki** | **92.29 314** | *e* | P | **P** | **21 42 54.4** | **-0.5** |
| **TIY** | **Taiyuan** | **92.35 339** | ⇓ | *i* P | **P** | **21 42 56.0** | **+1.4** |
| TIY | | | | S | **S** | **21 53 58.5** | **+1.3** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,320nm,4.6s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,1µm,25.4s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,920nm,16.5s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,2µm,24.0s | | | | | | |
| **GUN** | **Gumba** | **92.36 314** | *e* | P | **P** | **21 42 55.2** | **-0.1** |
| **BHPL** | **Bhopal** | **92.42 305** | *e* | P | **P** | **21 42 54.2** | **-1.1** |
| BHPL | | | | IAmb | IAmb | 21 43 02.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **AUSP** | **Uspallata** | **92.45 156** | *i* | P | **P** | **21 42 56.3** | **+0.4** |
| **DMN** | **Daman** | **92.45 314** | *e* | P | **P** | **21 42 55.4** | **-0.2** |
| | comp=Z,77nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **92.53 314** | *e* | P | **P** | **21 42 55.8** | **-0.1** |
| **SUJ** | **Sinuiju** | **92.57 348** | | P | **P** | **21 42 58.1** | **+2.7** |
| SUJ | | | | sP | **pwP** | **21 43 06.6** | **+3.3** |
| SUJ | | | | S | **S** | **21 53 59.3** | **+0.5** |
| SUJ | | | | AmB | | | |
| | comp=Z,179nm,1.9s | | | | | | |
| SUJ | | | | AMS | AMS | | |
| | comp=N,753nm,7.6s | | | | | | |
| SUJ | | | | AMS | AMS | | |
| | comp=E,407nm,4.1s | | | | | | |
| SUJ | | | | AMS | AMS | | |
| | comp=Z,662nm,6.7s | | | | | | |
| **VLK** | **Valmikinagar** | **92.76 313** | *e* | P | **P** | **21 42 58.6** | **+1.9** |
| **GKN** | **Gorkha** | **93.00 314** | *e* | P | **P** | **21 42 57.4** | **-0.6** |
| | comp=Z,123nm,1.1s | | | | | | |
| **LZH** | **Lanzhou** | **93.05 332** | *e* | P | **P** | **21 42 59.5** | **+1.5** |
| LZH | | | | pP | pwP | 21 43 08.3 | +2.3 |
| LZH | | | | PP | **PP** | **21 46 45.0** | **+3.4** |
| LZH | | | | SKS | **SKSac** | **21 53 33.5** | **+2.2** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,470nm,5.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,3µm,17.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,820nm,16.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,4µm,18.7s | | | | | | |
| **TSUM** | **Tsumeb** | **93.11 233** | | LR | LR | 22 17 38.3 | |
| | comp=Z,12µm,21.9s,baz=148,slow=31 | | | | | | |
| **MRA** | **San Martin** | **93.14 159** | *i* | P | **P** | **21 42 58.6** | **-0.3** |
| **KOLN** | **Koldanda** | **93.27 313** | *e* | P | **P** | **21 42 58.8** | **-0.5** |
| | comp=Z,83nm,0.9s | | | | | | |
| **CO03** | **El Pedregal** | **93.42 154** | | P | **P** | **21 42 58.9** | **-1.2** |
| CO03 | | | | IAmb | IAmb | 21 43 12.0 | |
| | comp=Z,67nm,1.2s | | | | | | |
| **DANN** | **Dangsing** | **93.69 313** | *e* | P | **P** | **21 43 00.7** | **-0.7** |
| | comp=Z,172nm,0.9s | | | | | | |
| **JHNI** | **Jhansi** | **93.72 308** | *e* | P | **P** | **21 43 01.0** | **-0.2** |
| **BJT** | **Baijiatuau** | **93.80 342** | | P | **P** | **21 42 59.5** | **-1.6** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,44nm,1.5s | | | | | | |
| BJT | | | | MLR | MLR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| **BJT** | **Baijiatuau** | **93.80 342** | | P | **P** | **21 42 59.5** | **-1.6** |
| **BJI** | **Beijing** | **93.82 342** | | P | **P** | **21 43 02.0** | **+0.8** |
| BJI | | | | sP | **sP** | **21 43 07.5** | **+1.6** |
| BJI | | | | SKS | **SKSac** | **21 53 37.0** | **+2.1** |
| BJI | | | | S | **S** | **21 54 10.0** | **+0.1** |
| BJI | | | | sS | **sS** | **21 54 15.5** | **-0.1** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,280nm,4.6s | | | | | | |
| **PYUN** | **Piuthan** | **93.83 312** | *e* | P | **P** | **21 43 01.1** | **-0.8** |
| | comp=Z,99nm,0.9s | | | | | | |
| **ACCO** | **Cerro Coronel** | **94.09 155** | *i* | P | **P** | **21 43 03.4** | **-0.1** |
| **AROD** | **Rodeo** | **94.38 155** | *i* | P | **P** | **21 43 06.0** | **+1.1** |
| **SNY** | **Shenyang** | **94.38 348** | ⇓ | P | **P** | **21 43 05.0** | **+1.3** |
| SNY | | | | SKS | **SKSac** | **21 53 36.3** | **-1.6** |
| SNY | | | | S | **S** | **21 54 12.0** | **-2.7** |
| SNY | | | | SS | **SS** | **22 00 34.8** | **-3.0** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,18nm,1.4s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,240nm,6.3s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,2µm,23.5s | | | | | | |
| SNY | | | | LR | L

SNY LR LR
comp=Z,4µm,23.7s
**MSHR Mys Shultsa 94.38 354⇓** *e*P **P** **21 43 07.1 +3.4**
MSHR pmax pmax
comp=Z,28nm,1.4s
**TCA Tanti 94.43 159** *i* P **P** **21 43 03.4 -1.4**
**HHC Hu-ho-hao-te 95.54 339** *e*P **P** **21 43 10.0 +0.7**
HHC PP **PP** **21 47 04.0 +3.0**
HHC S **S** **21 54 24.0 -1.2**
HHC SS **SS** **22 00 57.5 +2.8**
HHC pmax pmax
comp=Z,170nm,7.9s
HHC LR LR
comp=Z,2µm,20.0s
HHC LR LR
comp=Z,760nm,17.2s
HHC LR LR
comp=Z,3µm,20.0s
**BTO Baotou 95.66 338** *e*P **P** **21 43 12.5 +2.7**
BTO SKS **SKSac** **21 53 47.0 +1.9**
BTO S **ScS** **21 54 33.5 +6.5**
BTO LR LR
comp=Z,7µm,22.3s
BTO LR LR
comp=Z,11µm,20.8s
**ASAJ Asahikawa 95.67 2** LR LR 22 25 17.5
comp=Z,813nm,21.7s,baz=186,slow=35
**ACLC CERRO LA CRUZ 95.73 157** *i* P **P** **21 43 10.8 0.0**
**PLTB Pedras Altas 95.89 169** *e*P **P** **21 43 10.4 -0.9**
**USA0B Ussuriysk Arra 95.94 354⇓** *e*P **P** **21 43 12.7 +1.9**
**USRK Ussuriysk Ar. 95.94 354** P **P** **21 43 12.0 +1.1**
comp=Z,6.8nm,0.9s,baz=210,slow=8.0,SNR=8.4
USRK LR LR 22 27 38.4
comp=Z,1µm,18.1s,baz=166,slow=36
**USRK Ussuriysk Ar. 95.94 354** P **P** **21 43 09.6 -1.2**
**USRK Ussuriysk Ar. 95.94 354** P **P** **21 43 09.6 -1.2**
**GOMU GeErMu 96.08 325** P **P** **21 43 12.5 +0.3**
GOMU pP pP 21 43 15.0 -0.7
GOMU PP **PP** **21 47 05.3 -0.2**
GOMU SKS **SKSac** **21 53 47.0 -1.1**
GOMU S **S** **21 54 27.3 -3.4**
GOMU SS **SS** **22 01 03.5 +0.5**
GOMU pmax pmax
comp=Z,150nm,6.3s
GOMU LR LR
comp=Z,2µm,22.5s
GOMU LR LR
comp=Z,2µm,20.7s
GOMU LR LR
comp=Z,3µm,23.0s
**CN2 Changchun 96.11 350** *e*P **P** **21 43 11.5 -0.1**
CN2 S **S** **21 54 27.3 -2.4**
CN2 SS **SS** **22 01 03.5 +1.2**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
CN2 pmax pmax
comp=Z,200nm,8.0s
CN2 LR LR
comp=Z,2µm,22.0s
CN2 LR LR
comp=Z,1µm,22.0s
CN2 LR LR
comp=Z,2µm,22.0s
**MDJ Mudanjiang 96.52 353** P **P** **21 43 15.0 +1.5**
MDJ sP sP 21 43 19.5 +1.3
MDJ SKS **SKSac** **21 53 49.8 +0.7**
MDJ S **ScS** **21 54 35.5 +1.8**
MDJ sS sS 21 54 41.8 +2.8
MDJ SS **SS** **22 01 11.5 +3.3**
MDJ pmax pmax
comp=Z,4.0nm,0.9s
MDJ pmax pmax
comp=Z,390nm,7.4s
MDJ LR LR
comp=Z,1µm,16.7s
MDJ LR LR
comp=Z,2µm,24.2s
MDJ LR LR
comp=Z,4µm,23.3s
**MDJ Mudanjiang 96.52 353** P **P** **21 43 13.9 +0.4**
comp=Z,15nm,1.1s
**KMBO Kilima Mbogo 96.75 260** LR LR 22 17 53.8
comp=Z,6µm,21.6s,baz=122,slow=30
**KMBO Kilima Mbogo 96.75 260** IAMs_20 IAMs_20 22 18 57.2
comp=Z,5µm,21.0s
**KUR Kuril'sk 97.01 6** *e*P **P** **21 43 13.3 -2.3**
KUR *e* 21 47 09.2
KUR *e*PPP PPP 21 49 15.2
KUR MLR MLR
comp=Z,2µm,19.0s
**GTA Gaotai 97.33 330** *e*P Pdif 21 43 19.5 +1.9
GTA pP pwP 21 43 29.3 +3.8
GTA PP **PP** **21 47 20.3 +5.5**
GTA SKS **SKSac** **21 53 56.0 +2.1**
GTA S **ScS** **21 54 43.5 +2.5**
GTA SS **SS** **22 01 18.0 -2.1**
GTA pmax pmax
comp=Z,5.0nm,2.3s
GTA pmax pmax
comp=Z,230nm,7.8s
GTA LR LR
comp=Z,2µm,17.8s
GTA LR LR
comp=Z,2µm,19.6s
GTA LR LR
comp=Z,3µm,20.0s
**XLT XiLinHaoTe 97.57 343⇓** *i*P Pdif 21 43 22.8 +4.4
XLT sP pwP 21 43 31.5 +5.2
XLT PP **PP** **21 47 22.3 +5.8**
XLT SKS **SKSac** **21 53 56.3 +1.5**
XLT S **ScS** **21 54 42.3 -0.1**
XLT sS sS 21 54 57.0 +8.8
XLT pmax pmax
comp=Z,13nm,1.6s
XLT pmax pmax
comp=Z,170nm,5.6s
XLT LR LR
comp=Z,200nm,22.7s
XLT LR LR
comp=Z,2µm,22.9s
XLT LR LR
comp=Z,4µm,21.5s
**SMLA Simla 99.10 310** *e*P **Pdif** **21 43 25.6 +0.2**
SMLA IAmb IAmb 21 43 37.5
comp=Z,42nm,1.5s
**KLR Kul'dur 100.97 355⇑** *e*P **Pdif** **21 43 35.9 +2.6**
KLR pmax pmax
comp=Z,6.0nm,2.0s
**LVC Limon Verde 101.71 153** IAMs_20 IAMs_20 22 39 15.3
comp=Z,3µm,18.0s
**NIL Nilore 103.05 308** IAMs_20 IAMs_20 22 26 39.0
comp=Z,4µm,20.0s
**ATD Arta Tunnel 103.16 272** IAMs_20 IAMs_20 22 22 59.0
comp=Z,4µm,20.0s
**ULN Ulaanbaatar 103.22 338⇓** *i*P **Pdif** **21 43 48.1 +4.5**
**ULN Ulaanbaatar 103.22 338** IAMs_20 IAMs_20 22 34 50.9
comp=Z,4µm,20.0s
**SONM Songino Array 103.34 338** Pdiff **Pdif** **21 43 48.1 +4.1**
comp=Z,1.8nm,0.9s,baz=160,slow=3.6,SNR=12
SONM PP **PP** **21 47 53.9 -6.4**
comp=Z,2.4nm,1.1s,baz=146,slow=9.0,SNR=4.4
SONM PKKPbc **PKKPbc** **21 59 41.4 +3.2**
comp=Z,0.7nm,1.0s,baz=353,slow=3.5,SNR=3.4
**WMQ Urumqi 105.37 324** *e*Pdif **Pdif** **21 43 51.3 -1.8**
WMQ PP **PP** **21 48 17.0 +1.6**
WMQ SS SS 22 03 09.5 -2.0
WMQ AMB AMB
comp=Z,870nm,6.9s
WMQ LR LR
comp=Z,2µm,26.1s
WMQ LR LR
comp=Z,1µm,24.1s
WMQ LR LR
comp=Z,3µm,21.3s
**PETK Petropavlovsk- 105.72 11** Pdiff **Pdif** **21 43 59.4 +5.0**
comp=Z,3.3nm,0.9s,baz=235,slow=6.9,SNR=3.6
**ZAK Zakamensk 106.47 337** *e*P **Pdif** **21 43 55.5 -2.3**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**UZB Uzynbulak 108.20 318** *e*PKiKP **PKiKP** **21 48 14.1 +1.9**
baz=318
**KPKS Kokpek 108.60 318** *e*PP **PP** **21 48 40.5 +1.3**
baz=318
**TNSS Tian-Shan 108.98 316** *e*PKiKP **PKiKP** **21 48 15.0 +1.1**
baz=316

**NNA Nana 109.00 142** IAMs_20 IAMs_20 22 22 31.7
comp=Z,3µm,20.0s
**MDOK Medeo 109.04 317** *e*PP **PP** **21 48 43.8 +1.3**
baz=317
MDOK LR LR 22 36 32.3
comp=Z,1µm,20.2s,baz=317
**ZSN Zaisan 109.50 324** *e*PKiKP **PKiKP** **21 48 17.7 +3.4**
baz=324
ZSN *e*PP **PP** **21 48 47.5 +1.9**
baz=324
**AAK Ala-Archa 109.72 315⇓** *e*P **Pdif** **21 44 13.1 +0.5**
AAK MLR MLR
comp=Z,2µm,19.0s
**ADK Adak 109.76 27** IAMs_20 IAMs_20 22 30 40.1
comp=Z,4µm,21.0s
**MKAR Makanchi Array 109.91 322** Pdiff **Pdif** **21 44 17.8 +4.6**
comp=Z,0.5nm,0.9s,baz=144,slow=6.9,SNR=3.5
MKAR PKiKP **PKiKP** **21 48 15.5 +0.4**
comp=Z,0.5nm,0.5s,baz=130,slow=2.0,SNR=4.1
MKAR PP **PP** **21 48 46.2 -2.4**
comp=Z,5.4nm,1.1s,baz=141,slow=7.8,SNR=5.5
MKAR PKKPbc **PKKPbc** **21 59 20.6 +3.2**
comp=Z,0.5nm,0.8s,baz=327,slow=2.0,SNR=4.7
**MKAR Makanchi Array 109.91 322** *i* P **Pdif** **21 44 12.4 -0.8**
**MKAR Makanchi Array 109.91 322** **Pdif** **21 44 12.4 -0.8**
**KUU Kurty 109.94 317** *e*PKiKP **PKiKP** **21 48 15.9 +0.7**
baz=317
**SIV San Ignacio 110.03 159** PP **PP** **21 48 43.4 -5.1**
comp=Z,0.4nm,0.4s,baz=209,slow=11,SNR=3.2
**SGDS Sogindy 110.32 315** *e*PKiKP **PKiKP** **21 48 18.1 +2.1**
baz=315
SGDS *e*PP **PP** **21 48 53.0 +1.4**
baz=315
**DGZ Jazzator, Alta 110.51 327** *d i*PKIKP **PKiKP** **21 48 16.9 +0.6**
**RAYN Ar Rayn 110.64 282** IAMs_20 IAMs_20 22 27 40.9
comp=Z,4µm,19.0s
**PAYG Puerto Ayora 112.94 124** IAMs_20 IAMs_20 22 25 00.1
comp=Z,3µm,19.0s
**KURK Kurchatov 114.52 322⇓** *i*PKIKP **PKiKP** **21 48 27.4 +3.8**
KURK MLR MLR
comp=Z,4µm,24.0s
**SEY Seymchan 114.92 6⇓** *i*PKIKP **PKiKP** **21 48 26.5 +2.5**
**ZALV Zalesovo Beam 114.96 328** PKP **PKiKP** **21 48 25.1 +0.7**
comp=Z,0.9nm,0.7s,baz=211,slow=1.7,SNR=4.0
ZALV PP **PP** **21 49 26.7 +2.2**
comp=Z,3.9nm,1.0s,baz=123,slow=7.3,SNR=5.6
ZALV PKKPbc **PKKPab** **21 59 03.2 -0.2**
comp=Z,1.3nm,0.7s,baz=335,slow=6.6,SNR=6.6
**BRZS Berezniki 116.29 319** *e*PKIKP **PKiKP** **21 48 28.0 +0.9**
**BRZS Berezniki 116.29 319** *e*PKP **PKiKP** **21 48 28.0 +0.9**
baz=319
**ASCN Ascension 116.36 209** IAMs_20 IAMs_20 22 29 59.6
comp=Z,3µm,21.0s
**BRVK Borovoye 119.60 319⇓** *i*PKIKP **PKiKP** **21 48 34.5 +1.1**
BRVK MLR MLR
comp=Z,4µm,20.0s
**BRVK Borovoye 119.60 319** **PKPdf** **21 48 32.9 -0.5**
**BRVK Borovoye 119.60 319** IAMs_20 IAMs_20 22 40 58.0
comp=Z,4µm,20.0s
**BILL Bilibino 121.26 11⇓** *i*PKIKP **PKiKP** **21 48 36.9 +0.7**
BILL *e*PPP PPP 21 52 41.8
BILL *e* 21 55 49.8
BILL pmax pmax
comp=Z,16nm,1.4s
BILL MLR MLR
comp=Z,2µm,20.0s
**BILL Bilibino 121.26 11** **PKPdf** **21 48 35.3 -0.8**
**ABKAR Akbulak array 121.35 311** PKPdf **PKPdf** **21 48 35.7 -1.1**
**ABKAR Akbulak array 121.35 311** **PKPdf** **21 48 36.4 -0.5**
**GAMB Gambell 121.42 23** IAMs_20 IAMs_20 22 34 12.2
comp=Z,3µm,22.0s
**GAMB Gambell 121.42 23** P **PKiKP** **21 48 39.5 +2.9**
baz=213
**GHAJ Ghor Haditha 122.33 281** IAMs_20 IAMs_20 22 47 36.5
comp=Z,2µm,19.0s
**109C Camp Elliot, M 122.94 77** IAMs_20 IAMs_20 22 32 35.9
comp=Z,3µm,20.0s
**GNI Garni 123.00 294⇓** *i*PKIKP **PKiKP** **21 48 42.1 +1.3**
GNI MLR MLR
comp=Z,1µm,18.0s
**O18K Koktuh Hills 123.10 33** IAMs_20 IAMs_20 22 32 09.3
comp=Z,4µm,22.0s
**MCCM Marconi Confer 123.12 69** IAMs_20 IAMs_20 22 28 11.3
comp=Z,3µm,19.0s
**PASC Pasadena Art C 123.17 76** IAMs_20 IAMs_20 22 33 39.1
comp=Z,3µm,19.0s
**MAK Makhachkala 123.36 299** *e*P **Pdif** **21 45 07.7 -5.3**
MAK *i* 21 48 38.1
MAK *e* 21 55 37.3
MAK *e*PS **PS** **22 00 12.1 -6.5**
MAK *e*SSS SSS 22 11 40.1
MAK pmax pmax
comp=Z,265nm,1.0s
**TIXI Tiksi 123.48 356** ⇑PKIKP **PKPdf** **21 48 39.4 -0.8**
**TIXI Tiksi 123.48 356** PKPdf **PKPdf** **21 48 39.2 -1.0**
**ANM Nome 123.67 25** PKIKP **PKiKP** **21 48 41.2 +0.1**
ANM MLR MLR
comp=Z,3µm,21.0s
**ANM Nome 123.67 25** PKPdf **PKiKP** **21 48 41.2 +0.1**
ANM IAMs_20 IAMs_20 22 37 04.7
comp=Z,3µm,21.0s
**ANM Nome 123.67 25** P **PKiKP** **21 48 41.9 +0.8**
baz=218
**EDW2 Edwards Air Fo 123.77 75** P **PKiKP** **21 48 43.9 +1.5**
baz=227,SNR=6.5
**TNA Tin City 123.82 23** P **PKiKP** **21 48 43.1 +1.8**
baz=216
**ISA Isabella, Lake 124.02 74** P **PKiKP** **21 48 43.3 +0.5**
baz=227,SNR=5.5
**N19K Bonanza Creek 124.05 33** IAMs_20 IAMs_20 22 32 28.4
comp=Z,3µm,22.0s
**UNM Universidad Na 124.14 103** IAMs_20 IAMs_20 22 33 01.4
comp=Z,3µm,20.0s
**LRMC Laurel Mtn Rad 124.37 75** P **PKiKP** **21 48 45.0 +1.3**
baz=227,SNR=5.7
**BELC Belle Mtn. Jos 124.37 77** P **PKiKP** **21 48 44.4 +0.8**
baz=227
**GROC Groznyy 124.45 298** *i* PKIKP **PKiKP** **21 48 43.8 +0.5**
GROC *e* 21 50 30.5
GROC *e* 21 56 00.0
GROC pmax pmax
comp=Z,38nm,1.6s
**CMB Columbia Colle 124.49 71** IAMs_20 IAMs_20 22 32 27.8
comp=Z,4µm,20.0s
**O02D Mt. Diablo Mer 124.54 67** P **PKiKP** **21 48 47.6 +3.9**
baz=228,SNR=6.2
**BRLK Bradley Lake 124.54 35** IAMs_20 IAMs_20 22 35 59.0
comp=Z,4µm,21.0s
**HEC Hector,Ludlow 124.73 76** P **PKiKP** **21 48 44.8 +0.6**
baz=227
**GSC Goldstone, Bar 124.77 75** P **PKiKP** **21 48 46.9 +2.6**
baz=227,SNR=5.5
**CWC Cottonwood Cre 124.78 74** P **PKiKP** **21 48 45.8 +1.4**
baz=228
**ORV Oroville 124.86 69** PKIKP **PKPdf** **21 48 43.1 -0.9**
ORV MLR MLR
comp=Z,2µm,18.0s
**ORV Oroville 124.86 69** **PKPdf** **21 48 43.0 -0.9**
ORV IAMs_20 IAMs_20 22 41 09.4
comp=Z,2µm,18.0s
**MPMC Manual Prospec 124.88 74** P **PKiKP** **21 48 46.7 +2.0**
baz=227,SNR=5.4
**M19K Big River Lodg 124.88 32** IAMs_20 IAMs_20 22 33 50.2
comp=Z,3µm,22.0s
**M19K Big River Lodg 124.88 32** P **PKiKP** **21 48 48.1 +4.5**
baz=224
**L19K White Mountain 124.93 31** IAMs_20 IAMs_20 22 35 01.6
comp=Z,4µm,22.0s
**L19K White Mountain 124.93 31** P **PKiKP** **21 48 46.2 +2.5**
baz=224
**IRM Iron Mountain 125.00 78** P **PKiKP** **21 48 47.7 +3.0**
baz=227
**JTS Las Juntas de 125.00 122** IAMs_20 IAMs_20 22 30 36.8
comp=Z,3µm,21.0s
**PTGA Pitinga 125.01 156** PKP **PKiKP** **21 48 47.2 +1.8**
comp=Z,2.5nm,0.4s,baz=336,slow=23,SNR=2.2
**TIN Tinemaha, Big 125.11 73** P **PKiKP** **21 48 47.6 +2.7**
baz=228
**GMRC Granite Mounta 125.11 77** P **PKiKP** **21 48 47.9 +2.8**
baz=227
**N02D Trinity Center 125.11 67** **PKPdf** **21 48 42.8 -1.7**
**N02D Trinity Center 125.11 67** P **PKiKP** **21 48 46.0 +1.2**
baz=229
**TTA Tatalina 125.11 30** P **PKiKP** **21 48 49.3 +5.2**
baz=223,SNR=5.4
**O03E Paynes Creek 125.18 68** P **PKiKP** **21 48 47.9 +2.9**
baz=229

**HDC Heredia 125.19 124** IAMs_20 IAMs_20 22 31 10.9
comp=Z,3µm,20.0s
**ZEI Tsey 125.23 296** *i* PKIKP **PKPdf** **21 48 41.4 -3.4**
ZEI pmax pmax
comp=Z,10.0nm,1.3s
**SEW Seward 125.29 35** P **PKiKP** **21 48 49.7 +5.3**
baz=226
**M02C Callahan 125.30 66** P **PKiKP** **21 48 47.3 +2.1**
baz=229,SNR=5.8
**ROSC El Rosal 125.31 137** PKP **PKiKP** **21 48 47.8 +1.3**
comp=Z,5.5nm,0.3s,baz=237,slow=14,SNR=1.9
**TUQ Turquoise Moun 125.39 76** P **PKiKP** **21 48 49.6 +4.0**
baz=227,SNR=5.8
**O22K Cooper Landing 125.46 35** IAMs_20 IAMs_20 22 35 04.8
comp=Z,4µm,22.0s
**L20K Farewell, AK 125.46 32** P **PKiKP** **21 48 46.4 +1.7**
baz=224
**FURC Furnace Creek, 125.53 74** P **PKiKP** **21 48 48.8 +3.2**
baz=228
**PDMCI Parker Dam,Lak 125.70 78** P **PKiKP** **21 48 48.4 +2.3**
baz=227
**NCK Nalchik 125.86 297⇓** *i*PKIKP **PKiKP** **21 48 47.1 +1.0**
NCK MLR MLR
comp=Z,1µm,19.0s
**KIC Kosan Boka 125.95 226** *e*PKP1 **PKiKP** **21 48 50.8 +3.5**
comp=Z,12nm,0.9s
**LIC Lamto 125.95 225** *e*PKP1 **PKiKP** **21 48 49.9 +2.6**
comp=Z,50nm,1.1s
**NVAR Mina Array Bea 125.98 72** PKP **PKiKP** **21 48 47.7 +0.9**
comp=Z,6.1nm,0.8s,baz=212,slow=3.9,SNR=17
NVAR SKKPbc SKKPbc 22 02 18.4 +8.2
comp=Z,0.9nm,0.9s,baz=75,slow=1.7,SNR=3.9
**NVAR Mina Array Bea 125.98 72** PKPdf **PKPdf** **21 48 45.9 -0.5**
**K20K Telida 126.03 31** **PKPdf** **21 48 44.9 -0.6**
K20K IAMs_20 IAMs_20 22 35 58.6
comp=Z,4µm,22.0s
**K20K Telida 126.03 31** P **PKPdf** **21 48 44.5 -0.9**
baz=225
**HUMO Hull Mountain 126.04 65** PKPdf **PKPdf** **21 48 45.0 -1.1**
**M04C Macdoel 126.13 66** IAMs_20 IAMs_20 22 31 03.0
comp=Z,4µm,22.0s
**L04D Klamath Falls 126.15 66** IAMs_20 IAMs_20 22 31 34.4
comp=Z,4µm,22.0s
**L04D Klamath Falls 126.15 66** P **PKiKP** **21 48 52.6 +5.7**
baz=230
**SVE Sverdlovsk 126.20 318** *i* PKIKP **PKiKP** **21 48 47.1 +0.8**
SVE pmax pmax
comp=Z,31nm,1.5s
SVE MLR MLR
comp=Z,3µm,22.0s
SVE MLR MLR
comp=E,2µm,23.0s
SVE MLR MLR
comp=N,2µm,22.0s
**CSS Mathiatis 126.20 282** IAMs_20 IAMs_20 22 37 48.5
comp=Z,3µm,20.0s
**TPNV Topopah Spring 126.21 74** P **PKiKP** **21 48 50.5 +3.3**
baz=228,SNR=18
**PWL Port Wells 126.22 35** IAMs_20 IAMs_20 22 35 12.8
comp=Z,3µm,22.0s
**DBIC Dimbokro 126.27 226** PKP **PKPdf** **21 48 47.0 -0.4**
comp=Z,4.7nm,0.7s,baz=209,slow=1.9,SNR=3.7
**DBIC Dimbokro 126.27 226** ⇑PKIKP **PKPdf** **21 48 46.2 -1.2**
**PPLA Purkeypile 126.31 32** P **PKiKP** **21 48 50.3 +3.7**
baz=226
**TIC Toumodi 126.32 225** *e*PKP1 **PKiKP** **21 48 50.5 +2.5**
**TUC Tucson 126.39 82** IAMs_20 IAMs_20 22 33 59.6
comp=Z,3µm,20.0s
**TUC Tucson 126.39 82** P **PKiKP** **21 48 48.5 +0.8**
baz=226
**KBZ Khabaz 126.40 297** PKP **PKPdf** **21 48 46.7 0.0**
comp=Z,5.7nm,1.2s,baz=93,slow=4.2,SNR=5.7
KBZ PP **PP** **21 50 43.1 +0.3**
comp=Z,5.7nm,1.1s,baz=111,slow=11,SNR=3.9
**KBZ Khabaz 126.40 297** ⇑*i*PKIKP **PKiKP** **21 48 48.2 +1.1**
KBZ MLR MLR
comp=Z,2µm,18.0s
**PMR Palmer 126.44 34** P **PKiKP** **21 48 50.9 +4.2**
baz=227
**KNK Knik Glacier 126.55 35** IAMs_20 IAMs_20 22 43 53.6
comp=Z,2µm,20.0s
**KNK Knik Glacier 126.55 35** P **PKiKP** **21 48 52.4 +5.5**
baz=227
**J20K Nowinta River 126.59 30** IAMs_20 IAMs_20 22 37 00.4
comp=Z,3µm,21.0s
**J20K Nowinta River 126.59 30** P **PKiKP** **21 48 49.7 +2.8**
baz=225
**CUT Chulitna 126.61 33** IAMs_20 IAMs_20 22 38 08.0
comp=Z,3µm,22.0s
**CUT Chulitna 126.61 33** P **PKiKP** **21 48 51.3 +4.3**
baz=227
**KIV Kislovodsk 126.66 297** ⇑P **PKiKP** **21 48 47.9 +0.1**
**KIV Kislovodsk 126.66 297** *i* PKIKP **PKiKP** **21 48 49.4 +1.6**
KIV *e* 21 50 45.1
KIV *e* 21 55 54.9
KIV *e*PS **PS** **22 00 48.4 +0.5**
KIV *e*SS SS 22 07 51.5 +1.3
KIV *e*SSS SSS 22 12 31.6
KIV pmax pmax
comp=Z,22nm,1.1s
KIV MLR MLR
comp=Z,2µm,23.0s
**GLI Glacier Island 126.67 36** IAMs_20 IAMs_20 22 37 40.0
comp=Z,3µm,20.0s
**CAST Castle Rocks 126.71 31** IAMs_20 IAMs_20 22 36 06.6
comp=Z,3µm,21.0s
**CAST Castle Rocks 126.71 31** P **PKiKP** **21 48 49.3 +2.0**
baz=226,SNR=8.5
**NRIK Noril'sk 126.77 340** PKP **PKPdf** **21 48 45.7 -1.0**
comp=Z,0.9nm,0.3s,baz=168,slow=19,SNR=2.2
**NRIK Noril'sk 126.77 340** *c i*PKIKP **PKiKP** **21 48 49.5 +2.4**
NRIK MLR MLR
comp=Z,4µm,22.0s
**FID Port Fidalgo 126.81 36** IAMs_20 IAMs_20 22 35 41.1
comp=Z,3µm,21.0s
**ARU Arti 126.81 317⇓** *i*PKIKP **PKiKP** **21 48 48.5 +0.9**
ARU MLR MLR
comp=Z,3µm,20.0s
**ARU Arti 126.81 317** PKPdf **PKPdf** **21 48 46.9 -0.2**
ARU IAMs_20 IAMs_20 22 42 20.6
comp=Z,3µm,20.0s
**SML Sawmill 126.86 34** **PKPdf** **21 48 46.6 -0.5**
SML IAMs_20 IAMs_20 22 37 15.8
comp=Z,3µm,20.0s
**SML Sawmill 126.86 34** P **PKiKP** **21 48 52.3 +4.7**
baz=228
**J04D Umpqua Nationa 126.92 65** IAMs_20 IAMs_20 22 32 33.7
comp=Z,3µm,22.0s
**J04D Umpqua Nationa 126.92 65** P **PKiKP** **21 48 51.2 +2.7**
baz=230
**CHUM Lake Minchumin 126.96 31** P **PKiKP** **21 48 48.5 +0.9**
baz=226,SNR=8.1
**MOD Modoc Plateau 127.09 67** IAMs_20 IAMs_20 22 35 45.2
comp=Z,3µm,20.0s
**I04A Tendick Farm, 127.11 64** P **PKiKP** **21 48 51.0 +2.3**
baz=230
**GOF Gofitskoye 127.17 298** ⇑*e*PKIKP **PKiKP** **21 48 51.1 +2.4**
GOF pmax pmax
comp=Z,55nm,1.9s
**KTH Kantishna Hill 127.18 32** IAMs_20 IAMs_20 22 35 46.0
comp=Z,3µm,22.0s
**TRF Thorofare Moun 127.32 32** PKPdf **PKiKP** **21 48 48.4 -0.3**
TRF IAMs_20 IAMs_20 22 37 08.7
comp=Z,3µm,22.0s
**TRF Thorofare Moun 127.32 32** P **PKiKP** **21 48 49.3 +0.7**
baz=227,SNR=7.9
**H04D Lebanon 127.39 63** P **PKiKP** **21 48 50.4 +1.2**
baz=231
**J05D Fort Rock, OR 127.44 65** P **PKiKP** **21 48 51.0 +1.5**
baz=230
**KLU Klutina 127.51 36** IAMs_20 IAMs_20 22 37 45.0
comp=Z,3µm,20.0s
**R11A Troy Canyon, C 127.53 73** PKPdf **PKPdf** **21 48 48.8 -0.6**
**R11A Troy Canyon, C 127.53 73** P **PKPdf** **21 48 49.5 +0.2**
baz=229,SNR=14
**BPAW Bear Paw Mtn. 127.53 31** **PKPdf** **21 48 47.9 -0.4**
BPAW IAMs_20 IAMs_20 22 36 43.4
comp=Z,3µm,22.0s
**BPAW Bear Paw Mtn. 127.53 31** P **PKPdf** **21 48 47.8 -0.5**
baz=227,SNR=8.1
**WAT6 Susitna Watana 127.59 34** P **PKiKP** **21 48 49.7 +0.5**
baz=228
**BMRM Bremner River 127.65 37** IAMs_20 IAMs_20 22 37 45.7
comp=Z,3µm,21.0s
**BMRM Bremner River 127.65 37** P **PKiKP** **21 48 52.4 +3.2**
baz=229
**RND Reindeer 127.77 33** PKIKP **PKPdf** **21 48 48.3 -0.5**

RND MLR MLR
comp=Z,4µm,22.0s
**RND Reindeer 127.77 33** PKPdf **PKPdf 21 48 48.3 -0.5**
**MCK McKinley 127.96 32** PKIKP **PKiKP 21 48 49.4 -0.3**
MCK MLR MLR
comp=Z,4µm,22.0s
**MCK McKinley 127.96 32** PKPdf **PKiKP 21 48 49.4 -0.3**
MCK IAMs_20 IAMs_20 22 36 13.5
comp=Z,4µm,22.0s
**MCK McKinley 127.96 32** P **PKPdf 21 48 49.0 -0.1**
baz=228,SNR=6.7
**I21K Tanana 127.96 30** P **PKiKP 21 48 49.4 -0.2**
baz=227
**H21K Melozitna Rive 128.04 29** IAMs_20 IAMs_20 22 39 06.5
comp=Z,4µm,22.0s
**H21K Melozitna Rive 128.04 29** P **PKiKP 21 48 50.3 +0.5**
baz=227
**DHY Denali Highway 128.04 34** IAMs_20 IAMs_20 22 34 42.0
comp=Z,4µm,21.0s
**DHY Denali Highway 128.04 34** P **PKiKP 21 48 53.9 +3.9**
baz=229
**N25K Chitina, Valde 128.06 36** IAMs_20 IAMs_20 22 39 58.7
comp=Z,3µm,20.0s
**N25K Chitina, Valde 128.06 36** P **PKiKP 21 48 55.2 +5.1**
baz=230
**SOC Sochi 128.08 295** *e*PKIKP **PKiKP 21 48 51.6 +1.1**
SOC *e* 21 50 54.2
SOC *e*PPP PPP 21 53 39.6
SOC *e* 21 55 55.8
SOC *e*SS SS 22 08 03.3 -4.4
**WUAZ Wupatki 128.20 79** IAMs_20 IAMs_20 22 35 16.3
comp=Z,3µm,19.0s
**WUAZ Wupatki 128.20 79** P **PKiKP 21 48 53.3 +2.0**
baz=228
**VRDI Verde Repeater 128.24 37** IAMs_20 IAMs_20 22 42 57.4
comp=Z,2µm,19.0s
**MLY Manley 128.25 30** IAMs_20 IAMs_20 22 37 16.3
comp=Z,3µm,22.0s
**MLY Manley 128.25 30** P **PKiKP 21 48 52.1 +1.9**
baz=228
**WVOR Wild Horse Val 128.38 68** IAMs_20 IAMs_20 22 36 38.4
comp=Z,3µm,19.0s
**X18A Snowflake 128.41 81 PKiKP 21 48 51.5 -0.3**
**NEA2 Nenana 128.49 31 PKPdf 21 48 50.3 +0.2**
**NEA2 Nenana 128.49 31** P **PKiKP 21 48 51.1 +0.4**
baz=229,SNR=7.5
**MCARA McCarthy VSAT 128.50 37** IAMs_20 IAMs_20 22 43 14.3
comp=Z,2µm,19.0s
**MCARA McCarthy VSAT 128.50 37** P **PKiKP 21 48 55.0 +4.2**
baz=231
**NLWA Neilton Lookou 128.57 60** IAMs_20 IAMs_20 22 37 09.0
comp=Z,3µm,20.0s
**PAX Paxson 128.63 34** P **PKiKP 21 48 56.2 +5.0**
baz=230
**EPT El Paso 128.66 86** IAMs_20 IAMs_20 22 35 16.8
comp=Z,2µm,19.0s
**WRH Wood River Hil 128.72 32** IAMs_20 IAMs_20 22 36 13.8
comp=Z,3µm,20.0s
**TORD Torodi Ar. Bea 128.73 237** PKP **PKPdf 21 48 50.9 -1.1**
comp=Z,1.5nm,0.9s,baz=147,slow=2.8,SNR=7.1
TORD SKKPbc SKKPbc 22 01 59.8 +2.1
comp=Z,1.6nm,0.9s,baz=325,slow=5.6,SNR=5.0
**TORD Torodi Ar. Bea 128.73 237 PKPdf 21 48 51.4 -0.7**
**TXAR Lajitas Array 128.73 90** PKP **PKPdf 21 48 51.6 -0.1**
comp=Z,3.4nm,0.9s,baz=195,slow=5.5,SNR=14
**TXAR Lajitas Array 128.73 90** PKIKP **PKPdf 21 48 51.2 -0.6**
**TXAR Lajitas Array 128.73 90 PKPdf 21 48 51.2 -0.6**
**E04D Cinebar 128.76 61** IAMs_20 IAMs_20 22 32 55.0
comp=Z,2µm,20.0s
**I23K Minto, Yukon-K 128.76 31** P **PKiKP 21 48 58.8 +7.6**
baz=229
**CTG Chitna Glacier 128.87 38** P **PKiKP 21 48 57.3 +5.6**
baz=231
**CTGM Chitina Glacie 128.87 38** IAMs_20 IAMs_20 22 37 09.2
comp=Z,2µm,20.0s
**BCPM Bancas Point 128.90 40** IAMs_20 IAMs_20 22 39 43.1
comp=Z,3µm,19.0s
**LOGN Logan Glacier 128.91 38** IAMs_20 IAMs_20 22 37 20.2
comp=Z,4µm,21.0s
**CCB Clear Creek Bu 128.93 32 PKPdf 21 48 50.2 -0.6**
CCB IAMs_20 IAMs_20 22 48 05.3
comp=Z,3µm,18.0s
**W18A Petrified Fore 128.93 81** P **PKiKP 21 48 56.8 +4.1**
baz=228
**F05D White Salmon 128.95 63** IAMs_20 IAMs_20 22 34 55.2
comp=Z,3µm,20.0s
**HDA Harding Lake 129.06 32 PKPdf 21 48 50.8 -0.4**
**HDA Harding Lake 129.06 32** P **PKiKP 21 48 52.9 +1.1**
baz=230,SNR=17
**TCOL CIGO, UAF Yank 129.06 32** IAMs_20 IAMs_20 22 48 10.8
comp=Z,2µm,18.0s
**COLA College 129.07 32**⇓ *e*PKIKP **PKiKP 21 48 51.6 -0.2**
COLA *i* 21 48 56.0
**BR131 Keskin Array S 129.15 287**⇑ *i*PKIKP **PKiKP 21 48 53.5 +0.5**
**BRTR Keskin Array B 129.15 287** PKP **PKiKP 21 48 52.9 -0.1**
comp=Z,1.3nm,0.6s,baz=157,slow=4.4,SNR=14
BRTR PP **PP 21 51 00.3 -1.0**
comp=Z,3.4nm,1.1s,baz=146,slow=4.9,SNR=3.6
BRTR SKKPbc SKKPbc 22 02 01.1 +2.1
comp=Z,1.0nm,1.0s,baz=308,slow=4.1,SNR=3.7
**BRTR Keskin Array B 129.15 287** PKIKP **PKPdf 21 48 52.5 +0.2**
**BRTR Keskin Array B 129.15 287** PKPdf **PKPdf 21 48 52.5 +0.2**
**M26K Nabesna, AK 129.16 36** IAMs_20 IAMs_20 22 43 11.5
comp=Z,3µm,20.0s
**M26K Nabesna, AK 129.16 36** P **PKiKP 21 48 53.8 +1.7**
baz=231
**MNTX Cornudas Mount 129.31 87** P **PKiKP 21 48 53.8 +0.4**
baz=226
**BELG Belogornoye 129.31 308** *d*PKIKP **PKiKP 21 48 54.3 +1.6**
BELG MLR MLR
comp=Z,360nm,22.0s
**ILAR Eielson Array 129.31 32** PKP **PKPdf 21 48 51.0 -0.7**
comp=Z,0.7nm,0.4s,baz=248,slow=3.0,SNR=5.5
**ILAR Eielson Array 129.31 32** PKIKP **PKPdf 21 48 50.9 -0.7**
**ILAR Eielson Array 129.31 32 PKPdf 21 48 50.9 -0.7**
**RIDG Independent Ri 129.34 34** P **PKiKP 21 48 55.1 +2.6**
baz=231,SNR=5.5
**L26K Log Cabin Wild 129.42 35** IAMs_20 IAMs_20 22 38 58.5
comp=Z,3µm,20.0s
**L26K Log Cabin Wild 129.42 35** P **PKiKP 21 48 54.9 +2.3**
baz=232
**M27K Edge Creek, AK 129.54 36** IAMs_20 IAMs_20 22 42 04.6
comp=Z,3µm,21.0s
**H24K Noodor Dome 129.68 31** IAMs_20 IAMs_20 22 38 08.0
comp=Z,4µm,22.0s
**H24K Noodor Dome 129.68 31** P **PKiKP 21 48 58.7 +5.6**
baz=230
**YUK3 Moose Creek 129.71 37** P **PKiKP 21 48 56.3 +2.8**
baz=232
**J25K Salcha River, 129.72 33** IAMs_20 IAMs_20 22 36 30.2
comp=Z,4µm,22.0s
**J25K Salcha River, 129.72 33** P **PKiKP 21 48 54.6 +1.3**
baz=231,SNR=5.4
**SCRK Sand Creek 129.79 34** P **PKPdf 21 48 53.0 +0.3**
baz=232
**COLD Coldfoot 129.87 28** P **PKiKP 21 48 54.8 +1.4**
baz=230
**Y22D IRIS PASSCAL I 129.96 84** IAMs_20 IAMs_20 22 35 55.3
comp=Z,3µm,20.0s
**L27K Beaver Creek, 129.99 36** IAMs_20 IAMs_20 22 44 12.5
comp=Z,3µm,20.0s
**L27K Beaver Creek, 129.99 36** P **PKiKP 21 48 55.2 +1.4**
baz=232
**BCAR Beaver Creek A 130.00 36 PKPdf 21 48 53.4 +0.3**
**ANN Anapa 130.12 294** *i* PKIKP **PKiKP 21 48 54.5 -0.1**
ANN pmax pmax
comp=Z,50nm,1.0s
**J26L Joseph Creek 130.26 34** P **PKiKP 21 48 55.7 +1.3**
baz=232
**HAWA Hanford 130.32 63** IAMs_20 IAMs_20 22 41 59.5
comp=Z,3µm,19.0s
**SKAG Skagway 130.35 42** P **PKiKP 21 48 59.9 +5.4**
baz=234
**KARP Karpathos 130.35 279** IAMs_20 IAMs_20 22 49 05.5
comp=Z,3µm,21.0s
**DUG Dugway, Tooele 130.37 73** IAMs_20 IAMs_20 22 40 56.4
comp=Z,3µm,18.0s
**DUG Dugway, Tooele 130.37 73** P **PKiKP 21 48 56.8 +1.3**
baz=231
**SDV Santo Domingo 130.49 139** PKP **PKiKP 21 48 57.1 +0.6**
comp=Z,2.4nm,0.3s,baz=219,slow=3.1,SNR=3.2
**MFID Camas Ranch 130.60 68** IAMs_20 IAMs_20 22 41 11.4
comp=Z,2µm,19.0s
**833A Chaparral WMA, 130.66 95** P **PKiKP 21 48 57.0 +0.8**
baz=224
**ANMO Albuquerque 130.83 83**⇓ *i*PKIKP **PKiKP 21 48 58.6 +2.0**
ANMO MLR MLR
comp=Z,1µm,17.0s
**ANMO Albuquerque 130.83 83** IAMs_20 IAMs_20 22 37 22.2
comp=Z,4µm,20.0s
**ANMO Albuquerque 130.83 83** P **PKiKP 21 48 59.3 +2.7**
baz=228
**TOLK Toolik Lake Re 130.97 27** P **PKiKP 21 49 01.1 +5.5**
baz=231
**FYU Fort Yukon 130.98 31** IAMs_20 IAMs_20 22 40 17.3
comp=Z,3µm,22.0s
**KVTX Kingsville 131.03 97** IAMs_20 IAMs_20 22 39 25.8
comp=Z,3µm,19.0s
**MVCO Mesa Verde 131.06 79** IAMs_20 IAMs_20 22 35 14.1
comp=Z,3µm,22.0s
**MVCO Mesa Verde 131.06 79** P **PKiKP 21 48 57.8 +0.8**
baz=230
**EGAK Eagle 131.26 34** IAMs_20 IAMs_20 22 40 45.9
comp=Z,4µm,21.0s
**EGAK Eagle 131.26 34** P **PKiKP 21 48 56.6 +0.4**
baz=234
**N31M Braeburn, Yuko 131.34 40** IAMs_20 IAMs_20 22 41 28.6
comp=Z,3µm,19.0s
**DAWY Dawson 131.46 35** P **PKiKP 21 48 58.2 +1.5**
baz=235,SNR=6.8
**PV13 Radium Mtn., P 131.47 78 PKPdf 21 48 55.7 -1.2**
**HLID Hailey 131.51 69** IAMs_20 IAMs_20 22 45 26.4
comp=Z,3µm,19.0s
**PLID Pearl Lake 131.52 66** IAMs_20 IAMs_20 22 34 27.4
comp=Z,4µm,22.0s
**M30M Minto, Yukon 131.57 38** P **PKiKP 21 49 01.2 +4.2**
baz=236
**IDI Anoyia 131.58 277**⇑ P **PKiKP 21 48 58.8 +0.9**
**VRH Novokhopyorsk 131.59 304** *e*PKIKP **PKiKP 21 48 57.5 +0.2**
VRH pmax pmax
comp=Z,10.0nm,0.9s
VRH MLR MLR
comp=Z,2µm,21.0s
**P33M Teslin, Yukon 131.82 42** IAMs_20 IAMs_20 22 37 16.4
comp=Z,3µm,22.0s
**P33M Teslin, Yukon 131.82 42** P **PKiKP 21 49 02.4 +4.7**
baz=236
**JCT Junction City 131.92 92** IAMs_20 IAMs_20 22 38 43.4
comp=Z,2µm,21.0s
**JCT Junction City 131.92 92** P **PKiKP 21 49 01.0 +2.2**
baz=226
**HWUT Hardware Ranch 131.98 73** IAMs_20 IAMs_20 22 36 43.4
comp=Z,3µm,20.0s
**KIRV Kirov 132.06 315** *c i*PKIKP **PKiKP 21 48 59.3 +1.3**
**S22A 4UR Ranch, Cre 132.42 80** P **PKiKP 21 49 02.4 +2.5**
baz=230
**MSTX Muleshoe 132.46 87** P **PKiKP 21 48 59.8 0.0**
baz=228
**I29M Ogilvie Camp, 132.58 34** IAMs_20 IAMs_20 22 43 46.0
comp=Z,3µm,22.0s
**FARO Faro, Yukon 132.71 40** P **PKiKP 21 49 01.8 +2.4**
baz=238
**NEW Newport 132.75 62** IAMs_20 IAMs_20 22 43 36.6
comp=Z,3µm,20.0s
**NEW Newport 132.75 62** P **PKiKP 21 49 02.1 +2.2**
baz=235
**VSR Storozhevoye 132.93 302** *e*PKIKP **PKiKP 21 49 00.5 +0.5**
VSR pmax pmax
comp=Z,10.0nm,1.0s
VSR MLR MLR
comp=Z,1µm,22.0s
**AHID Auburn Hatcher 132.96 72** IAMs_20 IAMs_20 22 37 20.0
comp=Z,3µm,22.0s
**O20A White River Ci 133.06 76** P **PKiKP 21 49 04.5 +3.5**
baz=232
**VORR Voronezh 133.16 303** *e*PKIKP **PKiKP 21 49 02.3 +1.8**
VORR *e* 21 51 24.8
VORR pmax pmax
comp=Z,44nm,2.0s
VORR MLR MLR
comp=Z,1µm,17.0s
**SDCO Great Sand Dun 133.23 81** P **PKiKP 21 49 04.1 +2.6**
baz=230
**SMCO Snowmass 133.24 78** IAMs_20 IAMs_20 22 41 11.6
comp=Z,3µm,19.0s
**REDW Red Top Meadow 133.46 71** IAMs_20 IAMs_20 22 40 14.3
comp=Z,3µm,20.0s
**TPAW Teton Pass 133.48 71** IAMs_20 IAMs_20 22 40 23.7
comp=Z,3µm,20.0s
**ABTX Abilene, Hawle 133.49 90** P **PKiKP 21 49 03.4 +1.5**
baz=227
**SNOW Snow King Moun 133.58 71** IAMs_20 IAMs_20 22 40 28.3
comp=Z,3µm,21.0s
**DLMT Dillon 133.62 68** IAMs_20 IAMs_20 22 43 35.3
comp=Z,2µm,20.0s
**MSO Missoula 133.70 66** IAMs_20 IAMs_20 22 36 18.1
comp=Z,4µm,22.0s
**MSO Missoula 133.70 66** P **PKiKP 21 49 03.8 +1.9**
baz=235
**AMTX Amarillo 133.74 87** IAMs_20 IAMs_20 22 44 29.2
comp=Z,2µm,18.0s
**MMPY Sheldon Lake, 133.74 40** P **PKiKP 21 49 06.4 +5.0**
baz=239
**MOOW Moose Ponds 133.75 71** IAMs_20 IAMs_20 22 37 23.9
comp=Z,3µm,20.0s
**LPSR Galich'ya Gora 133.81 304** *e*PKIKP **PKiKP 21 49 02.2 +0.5**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR MLR MLR
comp=Z,860nm,20.0s
**BW06 Boulder Array 133.87 73** IAMs_20 IAMs_20 22 37 33.2
comp=Z,3µm,21.0s
**BW06 Boulder Array 133.87 73** P **PKiKP 21 49 07.4 +4.9**
baz=234
**PD31 Pinedale Array 133.87 73 PKPdf 21 49 00.0 -1.2**
**PDAR Pinedale Array 133.87 73** PKP **PKPdf 21 48 59.0 -2.3**
comp=Z,1.0nm,0.8s,baz=202,slow=2.2,SNR=6.7
PDAR SKKPbc SKKPbc 22 01 31.4 -11
comp=Z,0.4nm,0.7s,baz=77,slow=6.5,SNR=4.0
**PDAR Pinedale Array 133.87 73 PKPdf 21 48 59.2 -2.1**
**FLWY Flagg Ranch 133.98 71** IAMs_20 IAMs_20 22 37 49.8
comp=Z,3µm,21.0s
**YHL Hebgen Lake 134.14 69 PKPdf 21 49 00.2 -1.6**
**HATO Hato, Curacao 134.15 139** IAMs_20 IAMs_20 22 55 04.6
comp=Z,3µm,21.0s
**BOZ Bozeman (W) 134.31 68** IAMs_20 IAMs_20 22 41 32.6
comp=Z,2µm,20.0s
**BOZ Bozeman (W) 134.31 68** P **PKiKP 21 49 05.1 +1.8**
baz=235,SNR=5.8
**TGTN Hyland Airport 134.40 42** P **PKiKP 21 49 06.4 +3.6**
baz=240
**ISCO Idaho Springs 134.45 79** PKIKP **PKPdf 21 49 01.1 -1.5**
ISCO MLR MLR
comp=Z,2µm,19.0s
**ISCO Idaho Springs 134.45 79** PKPdf **PKPdf 21 49 01.1 -1.5**
ISCO IAMs_20 IAMs_20 22 41 52.7
comp=Z,2µm,19.0s
**RWWY Rawlins 134.63 75** IAMs_20 IAMs_20 22 43 33.3
comp=Z,3µm,19.0s
**PRGR Permogore 135.26 317** *e*PKIKP **PKPdf 21 48 59.2 -3.7**
PRGR pmax pmax
comp=Z,19nm,1.2s
**RLMT Red Lodge 135.41 70** IAMs_20 IAMs_20 22 38 30.8
comp=Z,2µm,20.0s
**WMOK Wichita Mounta 135.44 89** IAMs_20 IAMs_20 22 39 11.3
comp=Z,3µm,20.0s
**WMOK Wichita Mounta 135.44 89** P **PKiKP 21 49 07.3 +1.5**
baz=229
**PHWY Pilot Hill 135.45 77** IAMs_20 IAMs_20 22 41 31.2
comp=Z,2µm,20.0s
**MTDJ Mount Denham 135.50 125** IAMs_20 IAMs_20 22 39 19.1
comp=Z,3µm,21.0s
**HARR Harsova 135.53 289**⇑ P **PKPdf 21 49 04.1 +0.2**
**HARR Harsova 135.53 289**⇑ PKIKP **PKPdf 21 49 04.1 +0.2**
**CFR Carcaliu 135.68 290**⇑ P **PKPdf 21 49 02.0 -2.2**
**CFR Carcaliu 135.68 290**⇑ PKIKP **PKPdf 21 49 02.0 -2.2**
**INK Inuvik 135.72 32** PKIKP **PKPdf 21 49 04.2 +0.7**
**INK Inuvik 135.72 32** PKPdf **PKPdf 21 49 04.2 +0.7**
**INK Inuvik 135.72 32** P **PKiKP 21 49 05.5 +0.4**
baz=242
**MOS Moscow 136.07 307** *i* PKIKP **PKiKP 21 49 05.6 -0.6**
MOS *e* 21 51 42.9
MOS MLR MLR
comp=N,2µm,21.0s
MOS MLR MLR
comp=E,2µm,21.0s
MOS MLR MLR
comp=Z,3µm,21.0s
**MILM Milestii Mici 136.26 292** *e*PKP **PKPdf 21 49 06.0 +0.8**
comp=Z,180nm,3.0s
MILM *i* SKP 21 52 45.0
**MILM Milestii Mici 136.26 292** *e*PKS 21 52 48.0
MILM *e*L L 22 25 53.0
MILM *e*LR LR 22 34 36.0
comp=Z,900nm,21.0s
**MILM Milestii Mici 136.26 292** *e*PKIKP **PKPdf 21 49 06.0 +0.8**
MILM *e* 21 49 12.0
MILM pmax pmax
comp=Z,180nm,3.0s
MILM MLR MLR
comp=E,900nm,21.0s
MILM MLR MLR
comp=Z,1µm,21.0s
**OBN Obninsk 136.29 306** *i* PKIKP **PKiKP 21 49 07.4 +0.7**
OBN *e* 21 51 45.5
OBN *e*PPP PPP 21 54 43.8
OBN *e*SSS SSS 22 14 53.6
OBN pmax pmax
comp=Z,32nm,1.4s
OBN MLR MLR
comp=Z,2µm,21.0s
**ISR Istrita 136.58 289**⇓ P **PKiKP 21 49 09.5 +1.7**
**ISR Istrita 136.58 289**⇓ PKIKP **PKiKP 21 49 09.5 +1.7**
**GHRR 136.60 290**⇑ P PKPpre 21 48 57.9
**BISRR Bisoca 136.72 289**⇓ P **PKPdf 21 49 05.4 -0.9**
**EGMT Eagleton 136.73 66** PKPdf **PKPdf 21 49 04.7 -1.5**
EGMT IAMs_20 IAMs_20 22 48 53.3
comp=Z,3µm,18.0s
**EGMT Eagleton 136.73 66** P **PKiKP 21 49 12.1 +4.1**
baz=238
**VTS Vitosha 137.13 284**⇑ P **PKPdf 21 49 03.0 -4.2**
**VTS Vitosha 137.13 284**⇑ PKIKP **PKPdf 21 49 03.0 -4.2**
**MLR Muntele Rosu 137.14 289**⇑ P **PKPdf 21 49 02.8 -4.3**
**MLR Muntele Rosu 137.14 289**⇑ PKIKP **PKPdf 21 49 02.8 -4.3**
**MLR Muntele Rosu 137.14 289** PKPdf **PKPdf 21 49 05.6 -1.6**
MLR IAMs_20 IAMs_20 22 47 10.3
comp=Z,3µm,21.0s
**SORM Soroca 137.18 293**⇓ P PKPpre 21 48 59.1
**SORM Soroca 137.18 293**⇓ PKHKP PKPpre 21 48 59.1
**OGNE Ogallala 137.32 80** IAMs_20 IAMs_20 22 38 57.7
comp=Z,3µm,22.0s
**CBKS Cedar Bluff 137.44 84** IAMs_20 IAMs_20 22 44 26.1
comp=Z,3µm,20.0s
**X37A Clayton 137.45 92 PKPdf 21 49 05.5 -2.4**
**KLMR Klimovskoe 137.53 314** *e*PKIKP **PKPdf 21 49 08.0 +0.9**
KLMR *e* 21 51 55.7
KLMR *e*PPP PPP 21 54 56.0
KLMR *e*SSS SSS 22 15 12.2
KLMR pmax pmax
comp=Z,37nm,1.3s
**KLMR Klimovskoe 137.53 314** *e*PKPdf **PKPdf 21 49 08.1 +0.9**
KLMR AMP 21 49 21.8
comp=Z,37nm,1.3s
KLMR *e*PP **PP 21 51 55.7 +1.4**
KLMR *e*SKP 21 52 47.0
KLMR *e*PPP PPP 21 54 56.0
KLMR *e*SS SS 22 09 49.9 -12
KLMR *e*SS SS 22 09 49.9 -12
KLMR *e*SSS SSS 22 15 12.2
KLMR *e*SSS SSS 22 15 12.2
KLMR LQ LQ 22 39 28.3
KLMR LQ LQ 22 39 28.3
KLMR LR LR 22 49 45.8
KLMR AMP 22 52 30.9
comp=Z,2µm,19.7s
**DOPR Dopca 137.73 289**⇑ P **PKiKP 21 49 09.0 -1.0**
**ARR Arges 137.84 288**⇑ P **PKPdf 21 49 07.8 -0.5**
**RSSD Black Hills 137.94 74** IAMs_20 IAMs_20 22 48 26.9
comp=Z,2µm,19.0s
**RSSD Black Hills 137.94 74** P **PKPdf 21 49 03.3 -5.4**
baz=236
**AKASG Malin Array Be 138.00 297** PKP **PKPdf 21 49 06.4 -2.0**
comp=Z,0.8nm,0.6s,baz=87,slow=2.6,SNR=6.8
AKASG PP **PP 21 51 59.9 +2.5**
comp=Z,0.1nm,0.2s,baz=124,slow=3.3,SNR=5.6
**AKASG Malin Array Be 138.00 297** PKPdf **PKPdf 21 49 06.1 -2.2**
**AKBB Malin Array Si 138.00 297**⇓ *e*PKIKP **PKPdf 21 49 08.3 0.0**
**LAO LASA Array 138.05 70** IAMs_20 IAMs_20 22 46 46.5
comp=Z,3µm,18.0s
**MBO M'Bour 138.15 215** IAMs_20 IAMs_20 22 45 42.1
comp=Z,3µm,19.0s
**GTBY Guantanamo Bay 138.16 126** IAMs_20 IAMs_20 22 44 39.3
comp=Z,2µm,18.0s
**T35A Sooner Cattle 138.25 88 PKPdf 21 49 06.8 -2.5**
**WLAR White Oak Lake 138.25 95 PKPdf 21 49 07.3 -2.1**
**LOT Lotru 138.40 287**⇑ P **PKPdf 21 49 06.5 -2.9**
**BURAR Bucovina Array 138.70 291**⇑ P **PKPdf 21 49 09.0 -0.9**
**BURAR Bucovina Array 138.70 291**⇑ PKIKP **PKPdf 21 49 09.0 -0.9**
**BURAR Bucovina Array 138.70 291 PKPdf 21 49 07.3 -2.6**
**BUR08 Bucovina Ar. S 138.73 291** PKPdf **PKPdf 21 49 07.2 -2.8**
**W39A Magazine 138.83 92** P **PKiKP 21 49 15.7 +3.1**
baz=229
**GZR Gura Zlata 138.96 287**⇓ P **PKiKP 21 49 14.1 +1.5**
**GZR Gura Zlata 138.96 287**⇓ PKIKP **PKiKP 21 49 14.1 +1.5**
**TIP Timpagrande 139.05 275** IAMs_20 IAMs_20 22 53 50.5
comp=Z,3µm,21.0s
**BIM Bigot 139.19 148** IAMs_20 IAMs_20 22 54 10.8
comp=Z,2µm,20.0s
**C36M Paulatuk 139.28 33** IAMs_20 IAMs_20 22 55 21.9
comp=Z,2µm,19.0s
**C36M Paulatuk 139.28 33** P **PKPdf 21 49 05.5 -4.6**
baz=251
**FDF Fort de France 139.37 148** IAMs_20 IAMs_20 22 42 14.5
comp=Z,2µm,22.0s
**ILAM Ilet Lapin Mar 139.49 149** IAMs_20 IAMs_20 22 46 02.8
comp=Z,2µm,21.0s
**DRGR 139.74 289**⇑ P **PKiKP 21 49 14.0 -0.1**
**DRGR 139.74 289**⇑ PKIKP **PKiKP 21 49 14.0 -0.1**
**A36M Sachs Harbour 139.74 29** IAMs_20 IAMs_20 22 47 40.7
comp=Z,3µm,20.0s
**A36M Sachs Harbour 139.74 29** P **PKPdf 21 49 08.0 -2.8**
baz=253
**BZS Buzias 139.77 286**⇓ P **PKPdf 21 49 06.4 -5.4**
**BZS Buzias 139.77 286**⇓ PKHKP PKPpre 21 49 06.4
**W41B Gary Mavity, V 139.77 94** PKPdf **PKPdf 21 49 10.8 -1.3**
**W41B Gary Mavity, V 139.77 94** P **PKPdf 21 49 11.4 -0.7**
baz=229
**WHAR Wooly Hollow 139.82 94 PKPdf 21 49 11.8 -0.4**
**DGMT Dagmar 140.14 69** PKPdf **PKPdf 21 49 11.7 -0.7**
**DGMT Dagmar 140.14 69** IAMs_20 IAMs_20 22 41 56.8
comp=Z,3µm,20.0s
**DGMT Dagmar 140.14 69** P **PKPdf 21 49 11.7 -0.7**
baz=240
**U40A Yellville 140.16 92** PKPdf **PKPdf 21 49 11.0 -1.8**
**U40A Yellville 140.16 92** P **PKPdf 21 49 08.1 -4.7**
baz=230
**TDBA Terre de Bas, 140.25 147** IAMs_20 IAMs_20 22 57 14.0
comp=Z,2µm,20.0s
**CBE Ff, Capester 140.46 147** IAMs_20 IAMs_20 22 56 57.5
comp=Z,2µm,20.0s
**LVV L'vov 140.48 293** *e*PKIKP **PKPdf 21 49 12.5 -0.4**
LVV *e*SS SS 22 10 41.9 +4.8
**MNK Minsk 140.49 302** *i* PKIKP **PKPdf 21 49 13.7 +1.0**
MNK *i* 21 52 12.2
MNK *i* PPP PPP 21 55 16.8
MNK *i* 21 56 24.0
MNK *i* SS SS 22 10 34.9 -2.0
MNK *i* SSS SSS 22 15 56.7
MNK pmax pmax
comp=E,2.0nm,1.0s
MNK pmax pmax
comp=N,6.0nm,0.9s
MNK pmax pmax
comp=Z,23nm,0.8s
MNK MLR MLR
comp=Z,651nm,16.0s
MNK MLR MLR
comp=E,174nm,30.0s
MNK MLR MLR
comp=N,986nm,19.0s
**MNK Minsk 140.49 302** *i* PKP **PKPdf 21 49 13.7 +1.0**
comp=E,2.0nm,1.0s
MNK *i* PKP **PKPdf 21 49 13.7 +1.0**
comp=N,6.0nm,0.9s
MNK *i* PKP **PKPdf 21 49 13.7 +1.0**
comp=Z,23nm,0.8s,baz=115
MNK *i* PP **PP 21 52 12.2 -0.4**
MNK *i* SKP 21 52 47.9
MNK *i* PKS **PKSdf 21 52 49.8 +1.4**
MNK *i* PPP PPP 21 55 16.8
MNK *i* SKS **SKSdf 21 56 24.0 +2.0**
MNK *i* SKKS **SKSdf 22 05 41.5 -5.5**
MNK *i* SS **SS 22 10 34.9 -2.0**
MNK *i* SSS SSS 22 15 56.8
MNK *i* LR LR 22 47 14.8
MNK *i* LRM MLR 22 48 29.4
comp=Z,651nm,16.1s
MNK *i* LRM MLR 22 48 40.4

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,174nm,29.7s | | | | | | | | |
| MNK | | | | *i* | LRM | MLR | 22 48 44.7 | | |
| | comp=N,986nm,18.7s | | | | | | | | |
| **TRPA** | **Tarpa** | **140.52** | **290** | ⇑ | P | **PKPdf** | **21 49 09.8** | **-3.2** |
| **GDHS** | **Morne Mazeau,** | **140.59** | **146** | | IAMs_20 | IAMs_20 | 22 57 04.1 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **140.65** | **45** | | PKhKP | PKPpre | 21 49 07.2 | | |
| | comp=Z,2.5nm,0.7s,baz=246,slow=3.6,SNR=17 | | | | | | | | |
| YKA | | | | | PKP | **PKPdf** | **21 49 10.3** | **-2.5** | |
| | comp=Z,5.6nm,0.8s,baz=248,slow=3.8,SNR=24 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **140.65** | **45** | | PKPdf | **PKPdf** | **21 49 10.2** | **-2.6** | |
| **S39A** | **Bolivar** | **140.71** | **90** | | PKPdf | **PKPdf** | **21 49 12.2** | **-1.6** | |
| **UZH** | **Uzhgorod** | **140.91** | **291** | *i* | PKHKP | PKPpre | 21 49 07.5 | | |
| UZH | | | | *i* | | | 21 49 15.0 | | |
| UZH | | | | | MLR | MLR | | | |
| | comp=N,230nm,22.0s | | | | | | | | |
| UZH | | | | | MLR | MLR | | | |
| | comp=E,150nm,22.0s | | | | | | | | |
| UZH | | | | | MLR | MLR | | | |
| | comp=Z,110nm,22.0s | | | | | | | | |
| **NACGM** | **Naroch** | **141.24** | **302** | *i* | PKP | **PKiKP** | **21 49 19.0** | **+2.2** | |
| **SEUS** | **St. Eustatius** | **141.29** | **144** | | IAMs_20 | IAMs_20 | 22 55 48.7 | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **DWPF** | **Disney Wildern** | **141.31** | **112** | | IAMs_20 | IAMs_20 | 23 05 58.2 | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **IDID** | **Didziasalis** | **141.43** | **302** | *e* | P | **PKiKP** | **21 49 16.8** | **-0.4** | |
| **GRTK** | **Grand Turk** | **141.44** | **130** | | IAMs_20 | IAMs_20 | 22 43 07.1 | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **KEST** | **Kesra** | **141.48** | **265** | | PKhKP | PKPpre | 21 49 11.6 | | |
| | comp=Z,3.6nm,0.7s,baz=63,slow=2.3,SNR=2.0 | | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **141.52** | **291** | *e* | PKIKP | **PKiKP** | **21 49 17.6** | **-0.1** | |
| **CRVS** | **Cervenica-Dubn** | **141.52** | **291** | *e* | PKP | **PKiKP** | **21 49 17.6** | **-0.1** | |
| **LRAL** | **Lakeview Retre** | **141.56** | **101** | | | **PKPdf** | **21 49 13.9** | **-1.5** | |
| **LRAL** | **Lakeview Retre** | **141.56** | **101** | | P | **PKPdf** | **21 49 12.0** | **-3.4** | |
| | baz=226 | | | | | | | | |
| **IIGN** | **Ignalina** | **141.71** | **302** | *e* | P | **PKiKP** | **21 49 17.2** | **-0.6** | |
| **R40A** | **Maddies Statio** | **141.74** | **90** | | | **PKPdf** | **21 49 13.2** | **-2.4** | |
| **P38A** | **Dawn** | **141.76** | **87** | | PKPdf | **PKPdf** | **21 49 13.8** | **-1.8** | |
| **SMRT** | **St. Maarten** | **141.77** | **144** | | IAMs_20 | IAMs_20 | 22 54 06.4 | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **141.85** | **286** | ⇑ | P | **PKPdf** | **21 49 10.1** | **-5.4** | |
| **ANWB** | **Willy Bob** | **141.88** | **146** | | IAMs_20 | IAMs_20 | 22 56 22.3 | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **LVZ** | **Lovozero** | **141.92** | **324** | | IAMs_20 | IAMs_20 | 22 53 27.9 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **142.21** | **80** | | P | **PKPdf** | **21 49 10.9** | **-5.3** | |
| | baz=237 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **142.22** | **91** | | IAMs_20 | IAMs_20 | 22 43 56.1 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **142.22** | **91** | | P | **PKPdf** | **21 49 14.1** | **-2.3** | |
| | baz=232 | | | | | | | | |
| **APA** | **Apatity** | **142.30** | **323** | ⇓ | *i* PKIKP | **PKiKP** | **21 49 17.5** | **-1.1** | |
| APA | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| APA | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| APA | | | | | MLR | MLR | | | |
| | comp=Z,2µm,24.0s | | | | | | | | |
| **VSU** | **Vasula** | **142.60** | **307** | *c* | *i* PKIKP | **PKiKP** | **21 49 18.0** | **-1.5** | |
| VSU | | | | | MLR | MLR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| **VSU** | **Vasula** | **142.60** | **307** | | *e*P | **PKiKP** | **21 49 18.7** | **-0.8** | |
| **P40A** | **Paris** | **142.62** | **88** | | | **PKPdf** | **21 49 16.1** | **-1.0** | |
| **SUW** | **Suwalki** | **142.80** | **299** | | *e*P | **PKPdf** | **21 49 12.7** | **-4.2** | |
| **VYHS** | **Vyhne** | **142.86** | **289** | | *e*PKIKP | **PKiKP** | **21 49 19.2** | **-1.2** | |
| **VYHS** | **Vyhne** | **142.86** | **289** | | *e*PKP | **PKiKP** | **21 49 19.2** | **-1.2** | |
| **Z51A** | **Franklin** | **142.86** | **102** | | | **PKPdf** | **21 49 16.7** | **-1.0** | |
| **PABE** | **Paberze** | **142.96** | **302** | | IAMs_20 | IAMs_20 | 23 06 06.3 | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **PABE** | **Paberze** | **142.96** | **302** | | *e*P | **PKiKP** | **21 49 18.9** | **-1.4** | |
| **AQU** | **L'Aquila** | **142.97** | **277** | | IAMs_20 | IAMs_20 | 22 54 52.2 | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **WVT** | **Waverly** | **143.12** | **96** | | PKIKP | PKPbc | 21 49 14.5 | -0.5 | |
| WVT | | | | | MLR | MLR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **WVT** | **Waverly** | **143.12** | **96** | | PKPdf | PKPbc | 21 49 14.5 | -0.5 | |
| **WVT** | **Waverly** | **143.12** | **96** | | P | PKPab | 21 49 13.9 | +0.3 | |
| | baz=230 | | | | | | | | |
| **KOLL** | **Kolacno** | **143.15** | **289** | | *e*PKP | **PKiKP** | **21 49 19.6** | **-1.4** | |
| **S44A** | **Carbondale** | **143.23** | **93** | | | PKPbc | 21 49 16.4 | +1.1 | |
| **SIUC** | **Southern Illin** | **143.27** | **93** | | | PKPbc | 21 49 16.6 | +1.2 | |
| **F33A** | **5 Mile Ranch,** | **143.50** | **77** | | PKPdf | PKPbc | 21 49 16.3 | +0.5 | |
| **255A** | **Hazlehurst** | **143.51** | **107** | | | PKPbc | 21 49 17.4 | +1.2 | |
| **JAVC** | **Velka Javorina** | **143.71** | **289** | | *e*PKP | **PKPdf** | **21 49 19.0** | **+0.2** | |
| **FIA1** | **FINESS Array S** | **143.84** | **312** | | PKPdf | PKPbc | 21 49 17.3 | +1.0 | |
| **FINES** | **FINESS Array B** | **143.84** | **312** | | PKP | PKPbc | 21 49 17.1 | +0.8 | |
| | comp=Z,12nm,0.9s,baz=108,slow=4.9,SNR=16 | | | | | | | | |
| **FINES** | **FINESS Array B** | **143.84** | **312** | | PKPdf | **PKPdf** | **21 49 17.5** | **-1.0** | |
| **GOGA** | **Godfrey** | **143.96** | **104** | | P | PKPab | 21 49 17.0 | 0.0 | |
| | baz=226 | | | | | | | | |
| **K38A** | **Parkersburg** | **143.97** | **84** | | | PKPbc | 21 49 17.1 | -0.2 | |
| **W50A** | **Signal Mountai** | **144.05** | **100** | | | **PKPab** | **21 49 17.0** | **-0.4** | |
| **FFC** | **Flin Flon** | **144.11** | **61** | | PKIKP | **PKPab** | **21 49 17.1** | **+0.2** | |
| FFC | | | | | MLR | MLR | | | |
| | comp=Z,4µm,22.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **144.11** | **61** | | PKPdf | **PKPab** | **21 49 17.1** | **+0.2** | |
| **MTSE** | **Matsula** | **144.13** | **307** | | *e*P | **PKiKP** | **21 49 21.4** | **-1.3** | |
| **MORC** | **Moravsky Berou** | **144.20** | **290** | ⇑ | P | **PKPdf** | **21 49 19.4** | **-0.2** | |
| **MORC** | **Moravsky Berou** | **144.20** | **290** | ⇑ | PKIKP | **PKPdf** | **21 49 19.4** | **-0.2** | |
| **MORC** | **Moravsky Berou** | **144.20** | **290** | | PKPdf | PKPbc | 21 49 18.0 | +0.2 | |
| **MORC** | **Moravsky Berou** | **144.20** | **290** | | *e*PKP | **PKPdf** | **21 49 18.8** | **-0.8** | |
| **PBUR** | **Paburge** | **144.22** | **302** | | *e*P | **PKiKP** | **21 49 21.6** | **-1.3** | |
| **ARSA** | **Arzberg** | **144.23** | **285** | | *e*P | PKPbc | 21 49 18.3 | +0.4 | |
| | comp=Z,42nm,1.2s,SNR=19 | | | | | | | | |
| **SOKA** | **Soboth** | **144.24** | **284** | | *e*P | **PKPdf** | **21 49 19.7** | **-0.2** | |
| | comp=Z,68nm,1.1s,SNR=13 | | | | | | | | |
| **CONA** | **Conrad Observa** | **144.35** | **286** | | *i* P | PKPbc | 21 49 18.9 | +0.5 | |
| | comp=Z,36nm,1.1s,SNR=8.5 | | | | | | | | |
| **VRAC** | **Vranov** | **144.54** | **289** | ⇑ | P | **PKPab** | **21 49 18.4** | **-0.3** | |
| **VRAC** | **Vranov** | **144.54** | **289** | ⇑ | PKIKP | **PKPab** | **21 49 18.4** | **-0.3** | |
| **VRAC** | **Vranov** | **144.54** | **289** | | *e*PKP | **PKPdf** | **21 49 20.0** | **-0.2** | |
| **KRUC** | **Moravsky** | **144.55** | **288** | | *e*PKP | **PKPdf** | **21 49 20.3** | **+0.1** | |
| **OLIL** | **Olney** | **144.59** | **93** | | | **PKPab** | **21 49 18.4** | **-0.8** | |
| **KLNR** | **Kaliningrad** | **144.64** | **299** | *de* | PKIKP | PKPbc | 21 49 19.3 | +0.4 | |
| KLNR | | | | | MLR | MLR | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **CPCT** | **Cooper Cave** | **144.70** | **100** | | PKPdf | **PKPab** | **21 49 18.7** | **-1.0** | |
| **KRLC** | **Kraliky** | **144.77** | **290** | | *e*PKIKP | PKPbc | 21 49 19.6 | -0.1 | |
| **KRLC** | **Kraliky** | **144.77** | **290** | | *e*PKP | PKPbc | 21 49 19.6 | -0.1 | |
| **HDIL** | **Hopedale** | **144.93** | **89** | | | **PKPab** | **21 49 19.3** | **-1.1** | |
| HDIL | | | | | IAMs_20 | IAMs_20 | 22 45 16.8 | | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| **HDIL** | **Hopedale** | **144.93** | **89** | | P | **PKPab** | **21 49 19.7** | **-0.7** | |
| | baz=234 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **144.94** | **73** | | IAMs_20 | IAMs_20 | 22 47 17.2 | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **144.94** | **73** | | P | PKPbc | 21 49 20.4 | +0.2 | |
| | baz=243,SNR=17 | | | | | | | | |
| **KEV** | **Kevo** | **144.96** | **326** | | IAMs_20 | IAMs_20 | 22 55 37.9 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **145.06** | **283** | | *e*P | **PKPbc** | **21 49 19.8** | **-0.9** | |
| | comp=Z,202nm,1.5s,SNR=16 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.16** | **290** | | *e*PKP2 | **PKPbc** | **21 49 20.8** | **-0.1** | |
| **DPC** | **Dobruska-Polom** | **145.16** | **290** | | *e*PKP | **PKPbc** | **21 49 20.8** | **-0.1** | |
| **TREC** | **Trest** | **145.19** | **288** | | *e*PKP2 | **PKPbc** | **21 49 20.7** | **-0.3** | |
| **TREC** | **Trest** | **145.19** | **288** | | *e*PKP | **PKPbc** | **21 49 20.7** | **-0.3** | |
| **MOA** | **Molln** | **145.26** | **285** | | *e*P | **PKPbc** | **21 49 20.4** | **-0.8** | |
| | comp=Z,88nm,1.3s,SNR=19 | | | | | | | | |
| **OSTC** | **Ostas** | **145.30** | **291** | | *e*PKP | **PKPbc** | **21 49 20.9** | **-0.4** | |
| **SPMN** | **Marine on St.** | **145.31** | **80** | | P | **PKiKP** | **21 49 23.7** | **-1.8** | |
| | baz=240 | | | | | | | | |
| **KSP** | **Ksiaz** | **145.38** | **291** | | *e*PKP | **PKPab** | **21 49 23.2** | **+1.5** | |
| KSP | | | | | *e*L | L | 23 02 56.2 | | |
| | comp=Z,3µm,20.4s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.40** | **95** | | PKP2 | **PKPbc** | **21 49 20.1** | **-1.9** | |
| WCI | | | | | MLR | MLR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.40** | **95** | | | **PKPbc** | **21 49 20.1** | **-1.9** | |
| **WCI** | **Wyandotte Cave** | **145.40** | **95** | | IAMs_20 | IAMs_20 | 22 48 55.2 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.40** | **95** | | P | **PKPbc** | **21 49 20.9** | **-1.1** | |
| | baz=232 | | | | | | | | |
| **UPC** | **Upice** | **145.40** | **291** | | *e*PKIKP | **PKPab** | **21 49 22.8** | **+1.0** | |
| **UPC** | **Upice** | **145.40** | **291** | | *e*PKP | **PKPab** | **21 49 22.8** | **+1.0** | |
| **CHVC** | **Chvalec** | **145.41** | **291** | | *e*PKP | **PKPdf** | **21 49 21.7** | **0.0** | |
| **HOPEN** | **Hopen** | **145.44** | **338** | | *e*PKPbc | **PKPdf** | **21 49 19.7** | **-1.2** | |
| HOPEN | | | | | *e*SS | SS | 22 11 32.1 | -1.0 | |
| HOPEN | | | | | IVMs_BB | IVMs_BB | 22 50 06.1 | | |
| | comp=Z,816nm,3.0s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **145.45** | **284** | | *e*P | **PKPab** | **21 49 22.6** | **+0.3** | |
| | comp=Z,86nm,1.0s,SNR=21 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **145.47** | **326** | | *e*PKPbc | **PKPdf** | **21 49 20.0** | **-1.1** | |
| ARA0 | | | | | *e*SS | SS | 22 11 34.5 | +0.7 | |
| ARA0 | | | | | IVMs_BB | IVMs_BB | 22 45 39.2 | | |
| | comp=Z,754nm,5.2s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **145.47** | **326** | | PKPbc | **PKPdf** | **21 49 19.9** | **-1.3** | |
| | comp=Z,34nm,0.7s,baz=99,slow=4.3,SNR=55 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **145.47** | **326** | | | **PKPdf** | **21 49 19.2** | **-2.0** | |
| **T50A** | **Nancy** | **145.53** | **98** | | | **PKPdf** | **21 49 20.4** | **-1.8** | |
| **JFWS** | **Jewell Farm** | **145.67** | **85** | | P | **PKPbc** | **21 49 22.8** | **+0.1** | |
| | baz=237 | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **145.67** | **287** | | *e*PKP | **PKPbc** | **21 49 22.4** | **-0.1** | |
| **NHSC** | **New Hope** | **145.71** | **107** | | P | **PKPab** | **21 49 24.3** | **+0.8** | |
| | baz=225 | | | | | | | | |
| **GKP** | **Gorka Klasztor** | **145.79** | **296** | | *e*PKP | **PKiKP** | **21 49 24.8** | **-1.4** | |
| GKP | | | | | *e*L | L | 23 03 31.6 | | |
| | comp=Z,4µm,20.4s | | | | | | | | |
| **GKP** | **Gorka Klasztor** | **145.79** | **296** | | *e*P | **PKiKP** | **21 49 24.8** | **-1.4** | |
| **ULM** | **Lac du Bonnet** | **145.79** | **70** | | PKPbc | **PKPdf** | **21 49 21.8** | **-0.5** | |
| | comp=Z,47nm,1.0s,baz=258,slow=3.1,SNR=14 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **145.80** | **283** | | *e*P | **PKPbc** | **21 49 22.8** | **-0.3** | |
| | comp=Z,130nm,1.1s,SNR=18 | | | | | | | | |
| **VLC** | **Villacollemand** | **145.80** | **277** | | IAMs_20 | IAMs_20 | 22 54 20.5 | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **I40A** | **Norwalk** | **145.96** | **83** | | PKPdf | **PKPdf** | **21 49 21.7** | **-1.1** | |
| **TZTN** | **Tazewell** | **146.01** | **100** | | P | **PKPdf** | **21 49 23.3** | **+0.2** | |
| | baz=229 | | | | | | | | |
| **PRU** | **Pruhonice** | **146.04** | **289** | | *e*PKP2 | **PKPab** | **21 49 24.5** | **+0.3** | |
| **PRU** | **Pruhonice** | **146.04** | **289** | | *e*PKP | **PKPab** | **21 49 24.5** | **+0.3** | |
| **RJOB** | **Jochberg** | **146.09** | **284** | | *e*PKPbc | **PKPab** | **21 49 24.5** | **-0.1** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **HAMF** | **Hammerfest** | **146.14** | **327** | | *e*PKPab | **PKPbc** | **21 49 23.4** | **+0.2** | |
| HAMF | | | | | *e*SS | SS | 22 11 41.8 | +0.6 | |
| **SFIN** | **Lafayette** | **146.19** | **91** | | P | **PKPbc** | **21 49 24.2** | **-0.2** | |
| | baz=234 | | | | | | | | |
| **PBCC** | **Pribram** | **146.23** | **288** | | *e*PKP | **PKPab** | **21 49 25.2** | **+0.2** | |
| **KHC** | **Kasperske Hory** | **146.24** | **287** | ⇓ | *e*PKP2 | **PKPbc** | **21 49 24.6** | **+0.3** | |
| **KHC** | **Kasperske Hory** | **146.24** | **287** | | *e*PKP | **PKPab** | **21 49 24.7** | **-0.4** | |
| KHC | | | | | *ex* | x | 21 49 34.0 | | |
| **KTK1** | **Kautokeino** | **146.25** | **324** | | *e*PKPab | **PKPbc** | **21 49 23.8** | **+0.1** | |
| KTK1 | | | | | IVmB_BB | | 21 49 27.8 | | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| KTK1 | | | | | *e*SS | SS | 22 11 41.7 | -0.9 | |
| KTK1 | | | | | IVMs_BB | IVMs_BB | 22 45 20.9 | | |
| | comp=Z,1µm,4.5s | | | | | | | | |
| **PVCC** | **Panska Ves** | **146.25** | **290** | | *e*PKIKP | **PKPbc** | **21 49 23.9** | **-0.3** | |
| **PVCC** | **Panska Ves** | **146.25** | **290** | | *e*PKP | **PKPbc** | **21 49 23.9** | **-0.3** | |
| **KMSC** | **Kings Mountain** | **146.43** | **104** | | P | **PKPbc** | **21 49 24.7** | **-0.5** | |
| | baz=227,SNR=13 | | | | | | | | |
| **WTTA** | **Wattenberg** | **146.57** | **283** | | *i* P | **PKPbc** | **21 49 25.1** | **-0.4** | |
| | comp=Z,90nm,1.0s,SNR=20 | | | | | | | | |
| **WATA** | **Walderalm** | **146.64** | **283** | | *i* P | **PKPbc** | **21 49 25.0** | **-0.6** | |
| | comp=Z,84nm,1.1s,SNR=18 | | | | | | | | |
| **WET** | **Wettzell** | **146.66** | **287** | | *e*PKPbc | **PKPab** | **21 49 26.4** | **-0.3** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.75** | **290** | | *e*PKP | **PKPab** | **21 49 26.9** | **0.0** | |
| BRG | | | | | Amp | | 21 49 29.4 | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| BRG | | | | | *ex* | x | 21 49 33.0 | | |
| BRG | | | | | Amp | | 21 49 34.3 | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.75** | **290** | | PP | PP | 21 52 54.0 | +3.5 | |
| **BRG** | **Berggiesshubel** | **146.75** | **290** | | *e*PKP2 | **PKPab** | **21 49 26.8** | **0.0** | |
| BRG | | | | | *e* | | 21 52 54.0 | | |
| BRG | | | | | S | **SS** | **22 11 45.0** | **-4.3** | |
| BRG | | | | | pmax | pmax | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| BRG | | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| BRG | | | | | smax | smax | | | |
| | comp=Z,3µm,21.2s | | | | | | | | |
| BRG | | | | | MLR | MLR | | | |
| | comp=N,2µm,20.7s | | | | | | | | |
| BRG | | | | | MLR | MLR | | | |
| | comp=E,2µm,20.7s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.75** | **290** | | *e*PKPbc | **PKPab** | **21 49 27.0** | **0.0** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **G40A** | **Rib Lake** | **146.92** | **81** | | | **PKPdf** | **21 49 24.8** | **+0.4** | |
| **MOTA** | **Moosalm** | **146.93** | **283** | | *e*P | **PKPbc** | **21 49 26.9** | **+0.4** | |
| | comp=E,148nm,1.0s,SNR=19 | | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **146.94** | **342** | | *ep*PKPdf | **PKPab** | **21 49 26.3** | **-0.7** | |
| SPA0 | | | | | *e*SS | SS | 22 11 49.1 | -0.9 | |
| SPA0 | | | | | IVMs_BB | IVMs_BB | 22 52 19.5 | | |
| | comp=Z,970nm,28.1s | | | | | | | | |
| **FETA** | **Feichten** | **147.00** | **282** | | *e*P | **PKPab** | **21 49 27.5** | **-0.8** | |
| | comp=Z,246nm,1.1s,SNR=16 | | | | | | | | |
| **FBE** | **Freiberg** | **147.11** | **290** | | *e*PKPbc | **PKPab** | **21 49 28.1** | **-0.3** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **147.17** | **94** | | P | **PKPdf** | **21 49 25.7** | **+0.8** | |
| | baz=233 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **147.19** | **284** | | *e*PKPbc | **PKPab** | **21 49 28.0** | **-0.8** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **RETA** | **Reutte** | **147.20** | **283** | | *e*P | **PKPbc** | **21 49 26.6** | **-0.5** | |
| | comp=Z,70nm,1.3s,SNR=8.4 | | | | | | | | |
| **BJO1** | **Bjornoya** | **147.23** | **335** | | *e*PKPdf | **PKPdf** | **21 49 23.4** | **-0.6** | |
| BJO1 | | | | | IAmb | IAmb | 21 49 36.4 | | |
| | comp=Z,148nm,1.1s | | | | | | | | |
| BJO1 | | | | | *e*SS | SS | 22 11 51.2 | -2.2 | |
| BJO1 | | | | | IVMs_BB | IVMs_BB | 22 54 14.1 | | |
| | comp=Z,1µm,3.0s | | | | | | | | |
| **JETT** | **Jettan, Norway** | **147.26** | **325** | | *e*PKPab | **PKPab** | **21 49 27.7** | **-0.7** | |
| JETT | | | | | *e*SS | SS | 22 11 50.4 | -3.7 | |
| **ROTZ** | **Rotzenmuhle** | **147.32** | **288** | | *e*PKPbc | **PKPab** | **21 49 28.4** | **-0.8** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **O48B** | **Farmland** | **147.32** | **93** | | P | **PKPdf** | **21 49 26.3** | **+1.1** | |
| | baz=234 | | | | | | | | |
| **NKC** | **Novy Kostel** | **147.37** | **288** | | *e*PKP2 | **PKiKP** | **21 49 29.6** | **-0.1** | |
| **NKC** | **Novy Kostel** | **147.37** | **288** | | *e*PKP | **PKiKP** | **21 49 29.6** | **-0.1** | |
| **EYMN** | **Ely** | **147.40** | **76** | | IAMs_20 | IAMs_20 | 22 46 55.3 | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **EYMN** | **Ely** | **147.40** | **76** | | P | **PKPbc** | **21 49 28.4** | **+0.8** | |
| | baz=244,SNR=18 | | | | | | | | |
| **WERN** | **Wernitzgruen** | **147.44** | **288** | | *e*PKPbc | **PKPab** | **21 49 29.3** | **-0.4** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **147.44** | **289** | | *e*PKPbc | **PKPab** | **21 49 28.9** | **-0.9** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **RUE** | **Ruedersdorf** | **147.46** | **293** | | *e*P | **PKPab** | **21 49 28.8** | **-0.8** | |
| **RUE** | **Ruedersdorf** | **147.46** | **293** | | *e*PKPbc | **PKPbc** | **21 49 28.5** | **+1.0** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **CLL** | **Collm** | **147.47** | **291** | | *e*PKIKP | **PKPbc** | **21 49 27.0** | **-0.6** | |
| CLL | | | | | *e* | | 21 49 28.0 | | |
| CLL | | | | | pmax | pmax | | | |
| | comp=Z,105nm,1.9s | | | | | | | | |
| CLL | | | | | MLR | MLR | | | |
| | comp=Z,2µm,20.3s | | | | | | | | |
| **CLL** | **Collm** | **147.47** | **291** | | *e*PKPdf | **PKPdf** | **21 49 25.0** | **0.0** | |
| CLL | | | | | *e*PKPbc | **PKPbc** | **21 49 28.0** | **+0.4** | |
| | comp=Z,105nm,1.9s | | | | | | | | |
| CLL | | | | | *i* x | x | 21 49 33.3 | | |
| | comp=Z,51nm,1.1s | | | | | | | | |
| CLL | | | | | *i* x | x | 21 49 38.4 | | |
| | comp=Z,105nm,1.4s | | | | | | | | |
| CLL | | | | | *e*PKSdf | **PKSdf** | **21 53 04.0** | **+4.0** | |
| CLL | | | | | *e*SKSdf | **SKSdf** | **21 56 32.0** | **-0.8** | |
| CLL | | | | | *e*SKKSac | **SKKSac** | **21 59 49.0** | **+4.2** | |
| CLL | | | | | *e*(SKSP) | | 22 02 55.0 | | |
| CLL | | | | | *e*PPS | PPS | 22 05 38.0 | | |
| CLL | | | | | *ex* | x | 22 08 18.0 | | |
| CLL | | | | | *e*SS | **SS** | **22 11 53.0** | **-4.3** | |
| CLL | | | | | *e*PSS | PSS | 22 12 48.0 | | |
| CLL | | | | | *e*PSPS | | 22 13 07.0 | | |
| CLL | | | | | *ex* | x | 22 17 10.0 | | |
| CLL | | | | | *e*SSS | SSS | 22 17 32.0 | | |
| CLL | | | | | *e*(SSSS) | | 22 21 00.0 | | |
| CLL | | | | | Lm | MLR | 23 01 00.0 | | |
| | comp=Z,2µm,20.3s | | | | | | | | |
| **CLL** | **Collm** | **147.47** | **291** | | IAMs_20 | IAMs_20 | 23 01 55.4 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **MANZ** | **Manzenberg** | **147.47** | **288** | | *e*PKPbc | **PKPab** | **21 49 29.1** | **-0.8** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **HSPB** | **Hornsund (broa** | **147.47** | **340** | | *ep*PKPbc | **PKiKP** | **21 49 29.5** | **+0.4** | |
| HSPB | | | | | *e*SS | SS | 22 11 54.8 | -1.2 | |
| **KBS** | **Kingsbay** | **147.49** | **343** | *d* | *i* PKP2 | **PKiKP** | **21 49 28.9** | **-0.2** | |
| **KBS** | **Kingsbay** | **147.49** | **343** | | *e*P | **PKPab** | **21 49 29.4** | **+0.3** | |
| **KBS** | **Kingsbay** | **147.49** | **343** | | IAMs_20 | IAMs_20 | 22 57 33.1 | | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **147.49** | **343** | | *ep*PKPdf | **PKPbc** | **21 49 26.8** | **-0.2** | |
| **UPP** | **Uppsala** | **147.50** | **307** | | *e*P | **PKPab** | **21 49 29.6** | **+0.1** | |
| **WERD** | **Werda** | **147.54** | **289** | | *e*PKPbc | **PKiKP** | **21 49 29.1** | **-0.9** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **DAVA** | **Damuels** | **147.64** | **282** | | *e*P | **PKPbc** | **21 49 28.1** | **-0.3** | |
| | comp=Z,70nm,0.8s,SNR=8.8 | | | | | | | | |
| **PLN** | **Plauen** | **147.64** | **289** | | *e*PKPbc | **PKiKP** | **21 49 29.4** | **-0.8** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **VIKU** | **Vikbolandet** | **147.66** | **305** | | *e*P | **PKiKP** | **21 49 29.4** | **-0.5** | |
| **UBR** | **Ueberruh** | **147.68** | **283** | | *e*PKPbc | **PKiKP** | **21 49 29.4** | **-1.0** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **147.69** | **298** | | *i* P | **PKPbc** | **21 49 29.0** | **+0.9** | |
| **BSD** | **Bornholm Skovb** | **147.69** | **298** | | *e*P | **PKPbc** | **21 49 28.7** | **+0.6** | |
| **Q51A** | **Peebles** | **147.70** | **96** | | PKPdf | **PKPdf** | **21 49 25.9** | **0.0** | |
| **TRO** | **Tromso** | **147.78** | **326** | | *ep*PKPdf | **PKPbc** | **21 49 28.0** | **+0.1** | |
| TRO | | | | | IVmBBB | | 21 49 32.3 | | |
| | comp=Z,976nm,2.6s | | | | | | | | |
| TRO | | | | | *e*SS | SS | 22 11 57.8 | -2.0 | |
| TRO | | | | | IVMs_BB | IVMs_BB | 22 52 47.5 | | |
| | comp=Z,2µm,4.5s | | | | | | | | |
| **U56A** | **King** | **147.81** | **103** | | | **PKPbc** | **21 49 28.3** | **-0.8** | |
| **GRA1** | **Grafenberg Arr** | **147.88** | **287** | | | **PKPbc** | **21 49 29.3** | **+0.5** | |
| **GRF** | **Grafenberg Arr** | **147.88** | **287** | | PKP2 | **PKPbc** | **21 49 29.3** | **+0.5** | |
| GRF | | | | | MLR | MLR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **147.88** | **287** | | *e*PKPbc | **PKiKP** | **21 49 30.1** | **-0.6** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **GRFO** | **Grafenberg** | **147.88** | **287** | | PKP2 | **PKPbc** | **21 49 28.7** | **-0.1** | |
| GRFO | | | | | MLR | MLR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **GRFO** | **Grafenberg** | **147.88** | **287** | | | **PKPbc** | **21 49 28.7** | **-0.1** | |
| **EUNU** | **Eureka** | **147.96** | **14** | | | **PKPbc** | **21 49 28.5** | **+0.2** | |
| **MOX** | **Moxa** | **148.02** | **289** | | *e*PKPbc | **PKiKP** | **21 49 30.3** | **-0.6** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **NEUB** | **Neuenburg** | **148.15** | **290** | | *e*PKPbc | **PKiKP** | **21 49 30.4** | **-0.7** | |
| | baz=113,slow=2.5 | | | | | | | | |
| **BLA** | **Blacksburg** | **148.35** | **102** | | PKP2 | **PKPbc** | **21 49 29.8** | **-0.8** | |
| BLA | | | | | MLR | MLR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **148.35** | **102** | | | **PKPbc** | **21 49 29.8** | **-0.8** | |
| BLA | | | | | IAMs_20 | IAMs_20 | 23 05 37.6 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **148.35** | **102** | | P | **PKPbc** | **21 49 30.3** | **-0.2** | |
| | baz=230,SNR=18 | | | | | | | | |
| **RGN** | **Rugen** | **148.40** | **296** | | | **PKPbc** | **21 49 30.0** | **0.0** | |
| RGN | | | | | IAMs_20 | IAMs_20 | 23 04 38.6 | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **RGN** | **Rugen** | **148.40** | **296** | | *e*P | **PKPbc** | **21 49 30.2** | **+0.3** | |
| **RGN** | **Rugen** | **148.40** | **296** | | *e*PKPbc | **PKiKP** | **21 49 31.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **O56A** | **Blue Knob Stat** | **151.39** | **99** | P | | **PKPbc** | **21 49 35.4** | **-2.4** |
| | baz=233 | | | | | | | |
| **M54A** | **Oil Creek Stat** | **151.44** | **96** | P | | **PKPbc** | **21 49 37.3** | **-0.6** |
| | baz=235 | | | | | | | |
| **KONO** | **Kongsberg** | **151.47 306** | | ⇑PKIKP | | **PKiKP** | **21 49 38.2** | **+0.4** |
| **KONO** | **Kongsberg** | **151.47 306** | | IAMs_20 | IAMs_20 | | 23 03 44.2 | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **BSTI** | **Sart Tilman** | **151.58 286** | | *d*PKP | | **PKiKP** | **21 49 39.5** | **+1.2** |
| BSTI | | | | *d*PKPab | | **PKPab** | **21 49 44.9** | **-1.7** |
| **ERPA** | **Erie** | **151.58** | **94** | IAMs_20 | IAMs_20 | | 22 53 32.0 | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **ERPA** | **Erie** | **151.58** | **94** | P | | **PKPbc** | **21 49 37.2** | **-1.0** |
| | baz=236 | | | | | | | |
| **BEBN** | **Eben Emael** | **151.59 286** | | *d*PKPab | | **PKPab** | **21 49 45.2** | **-1.4** |
| **RCHB** | **Rochefort** | **151.63 285** | | *d*PKP | | **PKiKP** | **21 49 38.9** | **+0.5** |
| RCHB | | | | *d*PKPab | | **PKPab** | **21 49 45.4** | **-1.4** |
| **BCLA** | **Clavier** | **151.68 285** | | *d*PKP | | **PKiKP** | **21 49 39.3** | **+0.8** |
| BCLA | | | | *d*PKPab | | **PKPab** | **21 49 45.5** | **-1.4** |
| **HOMB** | **Homborsund** | **151.85 302** | | *e*pPKPdf | | **pPKPdf** | **21 49 34.5** | **-0.8** |
| HOMB | | | | *e*SKPdf | | **SKPdf** | **21 53 01.0** | **-3.4** |
| HOMB | | | | *e*SS | | **SS** | **22 12 45.7** | **-0.2** |
| **DOMB** | **Dombas** | **151.91 311** | | *e*PKPbc | | **PKPbc** | **21 49 38.2** | **-0.1** |
| DOMB | | | | *e*SS | | SS | 22 12 47.1 | +0.7 |
| DOMB | | | | IVMs_BB | IVMs_BB | | 22 51 00.6 | |
| | comp=Z,1μm,4.4s | | | | | | | |
| **BMRD** | **Maredsous** | **151.96 285** | | *d*PKP | | **PKiKP** | **21 49 40.1** | **+1.0** |
| BMRD | | | | *d*PKPab | | **PKPab** | **21 49 46.1** | **-2.1** |
| **DOU** | **Dourbes** | **151.99 284** | | *d*PKP | | **PKiKP** | **21 49 40.3** | **+1.2** |
| DOU | | | | *d*PKPab | | **PKPab** | **21 49 46.2** | **-2.1** |
| **SSPA** | **Standing Stone** | **152.03** | **99** | IAMs_20 | IAMs_20 | | 23 12 42.8 | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **SSPA** | **Standing Stone** | **152.03** | **99** | P | | **PKiKP** | **21 49 39.6** | **0.0** |
| | baz=234 | | | | | | | |
| **ESDC** | **Sonseca Array** | **152.13 258** | | PKPbc | | **PKiKP** | **21 49 40.3** | **+0.4** |
| | comp=Z,4.0nm,0.6s,baz=73,slow=1.1,SNR=22 | | | | | | | |
| **ESDC** | **Sonseca Array** | **152.13 258** | | | | **PKPbc** | **21 49 37.9** | **-1.7** |
| **SKAR** | **Skarslia** | **152.21 308** | | *e*PKPbc | | **PKPbc** | **21 49 38.2** | **-0.9** |
| SKAR | | | | *e*SS | | SS | 22 12 52.9 | +3.0 |
| SKAR | | | | IVMs_BB | IVMs_BB | | 22 49 43.9 | |
| | comp=Z,941nm,4.2s | | | | | | | |
| **PAB** | **San Pablo** | **152.29 258** | | PKIKP | | **PKPdf** | **21 49 36.3** | **+3.1** |
| PAB | | | | MLR | MLR | | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| **PAB** | **San Pablo** | **152.29 258** | | | | **PKPdf** | **21 49 36.3** | **+3.1** |
| **MOL** | **Molde** | **152.62 312** | | *e*pPKPbc | | pPKPbc | 21 49 42.2 | -1.1 |
| **AKN** | **Aaknes** | **152.88 311** | | *e*PKPab | | **PKPab** | **21 49 50.5** | **-1.2** |
| AKN | | | | IVMs_BB | IVMs_BB | | 22 43 54.9 | |
| | comp=Z,1μm,4.3s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **152.90 251** | | *e*PKPab | | **PKPab** | **21 49 49.5** | **-3.0** |
| **PVAQ** | **Vaqueiros** | **152.90 251** | | *e*SS | | SS | 22 13 05.5 | +7.7 |
| **PVAQ** | **Vaqueiros** | **152.90 251** | | *e*LR | | LR | 22 42 39.1 | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **152.92 250** | | *e*PKPab | | **PKPab** | **21 49 48.7** | **-3.9** |
| **PBDV** | **Barranco-do-Ve** | **152.92 250** | | *e*SS | | SS | 22 13 07.9 | +10 |
| **TULEG** | **Thule** | **152.96** | **14** | *i* P | | **PKiKP** | **21 49 45.3** | **+4.9** |
| **TULEG** | **Thule** | **152.96** | **14** | IAMs_20 | IAMs_20 | | 22 59 56.9 | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **PBAR** | **Barrancos** | **153.02 253** | | *e*PKPbc | | **PKPbc** | **21 49 41.4** | **-0.1** |
| **PBAR** | **Barrancos** | **153.02 253** | | *e*SS | | SS | 22 13 05.1 | +6.0 |
| **PCVE** | **Castro Verde** | **153.25 251** | | *e*SS | | SS | 22 13 10.8 | +9.3 |
| **HYA** | **Hoyanger** | **153.26 309** | | *e*PKPdf | | **PKPdf** | **21 49 32.7** | **-1.0** |
| **PFVI** | **Vila Bisbo** | **153.36 249** | | *e*SS | | SS | 22 13 13.7 | +11 |
| **N59A** | **State Game Lan** | **153.49 100** | | P | | **PKiKP** | **21 49 42.6** | **0.0** |
| | baz=234 | | | | | | | |
| **KMY** | **Karmoy** | **153.64 304** | | *e*PKPab | | **PKPab** | **21 49 53.8** | **-1.2** |
| **BER** | **Bergen** | **153.66 307** | | *e*SKPdf | | **SKPdf** | **21 53 05.1** | **-1.6** |
| BER | | | | *e*SS | | **SS** | **22 13 03.8** | **-1.8** |
| BER | | | | IVMs_BB | IVMs_BB | | 22 51 39.1 | |
| | comp=Z,824nm,4.1s | | | | | | | |
| **DAG** | **Danmarks Havn** | **153.68 349** | | *e*P | | **PKiKP** | **21 49 42.2** | **+0.4** |
| **PESTR** | **Estremoz** | **153.80 253** | | *e*SS | | SS | 22 13 16.5 | +8.8 |
| **PNCL** | **Nicolau / Gran** | **153.86 251** | | *e*SS | | SS | 22 13 28.2 | +20 |
| **SUE** | **Sulen** | **153.95 308** | | *e*PKPdf | | **PKPdf** | **21 49 34.3** | **-0.4** |
| SUE | | | | *e*SS | | SS | 22 13 06.3 | -2.4 |
| **NEEM** | **North Greenlan** | **154.03** | **5** | *i* P | | **PKiKP** | **21 49 44.4** | **+1.4** |
| **PMRV** | **Marv??o** | **154.04 254** | | *e*SS | | SS | 22 13 23.4 | +13 |
| **PMRV** | **Marv??o** | **154.04 254** | | *e*LR | | LR | 22 43 25.8 | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **BINY** | **Binghamton** | **154.10** | **98** | P | | **PKiKP** | **21 49 44.7** | **+0.9** |
| | baz=236 | | | | | | | |
| **PMTG** | **Montargil** | **154.31 253** | | *e*PKPab | | **PKPab** | **21 50 01.4** | **+3.0** |
| **PMTG** | **Montargil** | **154.31 253** | | *e*SS | | SS | 22 13 22.6 | +9.5 |
| **PMOZ** | **Porto Moniz, M** | **154.57 230** | | *e*PKPab | | **PKPab** | **21 49 55.7** | **-4.1** |
| **PMOZ** | **Porto Moniz, M** | **154.57 230** | | *e*LR | | LR | 22 44 13.3 | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **MTE** | **Manteigas** | **154.74 256** | | *e*SS | | SS | 22 13 24.0 | +5.9 |
| **MTE** | **Manteigas** | **154.74 256** | | *e*LR | | LR | 22 43 59.6 | |
| | comp=Z,4μm,22.0s | | | | | | | |
| **MVO** | **Moncorvo** | **154.90 258** | | *e*SS | | SS | 22 13 25.9 | +6.1 |
| **MVO** | **Moncorvo** | **154.90 258** | | *e*LR | | LR | 22 44 09.6 | |
| | comp=Z,4μm,22.0s | | | | | | | |
| **PBRG** | **Braganca** | **155.10 259** | | *e*PKPab | | **PKPab** | **21 50 08.5** | **+6.7** |
| **PBRG** | **Braganca** | **155.10 259** | | *e*SS | | SS | 22 13 34.0 | +12 |
| **PCAS** | **Casmilo, Conde** | **155.10 254** | | *e*SS | | SS | 22 13 28.4 | +6.6 |
| **SUMG** | **Summit** | **159.22 358** | | *i* P | | **PKPdf** | **21 49 47.0** | **+5.2** |
| **SUMG** | **Summit** | **159.22 358** | | IAMs_20 | IAMs_20 | | 23 14 56.0 | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **SCO** | **Scoresbysund** | **159.52 342** | | *e*P | | PKPdf | 21 49 51.3 | +10 |
| **SCO** | **Scoresbysund** | **159.52 342** | | IAMs_20 | IAMs_20 | | 23 16 41.9 | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **SCHQ** | **Schefferville** | **163.96** | **69** | PKPab | | **PKPab** | **21 50 41.0** | **+1.1** |
| | comp=Z,4.6nm,0.8s,baz=290,slow=2.9,SNR=2.0 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **164.02** | **15** | PKPab | | **PKPab** | **21 50 40.2** | **+0.5** |
| | comp=Z,7.4nm,0.7s,baz=77,slow=14,SNR=2.4 | | | | | | | |

*TUL* ***27*** *21:34:40.5±1.4, 36°.67N±0°.01×97°.74W±0°.02, h7km±6km, ML3.0, mb_Lg2.7/33(NEIC), Error ellipse: s-maj=2.4km s-min=0.9km az=137.0*

**NEIC 27 21:34:40.5±1.0, 36°.64N±0°.01×97°.72W±0°.02, h5km±7km, Error ellipse: s-maj=2.1km s-min=1.8km az=150.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.01** | **74** | Pg | Pg | 21 34 59.7 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.06** | **256** | | Pg | 21 35 00.2 | -0.7 |
| **OK009** | **Oakdale Elemen** | **1.08** | **167** | Pg | Pg | 21 35 01.3 | 0.0 |
| **OKCFA** | **Oklahoma City** | **1.24** | **170** | | Pg | 21 35 04.1 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.25** | **169** | Pn | Pg | 21 35 04.3 | -0.2 |
| **FNO** | **Franklin** | **1.40** | **169** | Pn | Pn | 21 35 06.7 | 0.0 |
| **TUL1** | **Leonard** | **1.72** | **114** | | Pn | 21 35 11.3 | +0.3 |
| **R32A** | **Long Quarter,** | **1.95** | **336** | | Pn | 21 35 14.6 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.04** | **183** | | Pn | 21 35 16.6 | +1.2 |
| **WMOK** | **Wichita Mounta** | **2.08** | **205** | Pn | Pn | 21 35 17.2 | +1.1 |
| WMOK | | | | IAmb_Lg | | 21 35 50.3 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **KSU1** | **Kansas State U** | **2.61** | **19** | IAmb_Lg | | 21 36 06.1 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **2.80** | **136** | | Pn | 21 35 27.0 | +1.1 |
| X37A | | | | IAmb_Lg | | 21 36 13.7 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.07** | **96** | | Pn | 21 35 30.5 | +0.8 |
| **W39A** | **Magazine** | **3.50** | **113** | | Pn | 21 35 36.6 | +1.0 |
| W39A | | | | IAmb_Lg | | 21 36 40.0 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.67** | **243** | IAmb_Lg | | 21 36 45.0 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.67** | **72** | | Pn | 21 35 38.5 | +0.6 |
| **U40A** | **Yellville** | **3.93** | **93** | | Pn | 21 35 41.8 | +0.3 |
| **MIAR** | **Mount Ida** | **3.97** | **121** | Pn | Pn | 21 35 42.5 | +0.4 |
| MIAR | | | | IAmb_Lg | | 21 36 49.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.05** | **146** | IAmb_Lg | | 21 36 57.4 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.40** | **82** | Pn | Pn | 21 35 48.0 | +0.1 |
| **P38A** | **Dawn** | **4.45** | **47** | IAmb_Lg | | 21 37 08.3 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.53** | **117** | | Pn | 21 35 50.7 | +1.0 |
| X40A | | | | IAmb_Lg | | 21 37 13.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.55** | **303** | IAmb_Lg | | 21 37 14.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.61** | **105** | IAmb_Lg | | 21 37 07.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.77** | **356** | IAmb_Lg | | 21 37 22.6 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.79** | **127** | IAmb_Lg | | 21 37 18.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **6.84** | **79** | IAmb_Lg | | 21 38 21.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **W45A** | **Hickory Valley** | **7.08** | **100** | IAmb_Lg | | 21 38 26.1 | |
| | comp=Z,14nm,0.7s | | | | | | |

*NEIC* ***27*** *22:09:26.6±1.3, 0°.40N×0°.07×120°.7E±0°.1, h77km±9km, mb4.0/14, Error ellipse: s-maj=17.5km s-min=8.7km az=67.0*

*DJA* ***27*** *22:09:27.9±0.5, 0°.N×3°×12°.1E±°, h39km±16km, M4.4/10, mb4.8/1, mB5.2/1, MLv4.2/10, Mw(mB)4.6/1*

*IDC* ***27*** *22:09:29.8±3.5, 0°.13N×120°.48E, h111km±30km, mb3.6/4, mb1 3.7/6, mb1mx3.3/39, mbtmp4.0/6, Error ellipse: s-maj=50.5km s-min=18.3km az=65.0*

**ISC 27 22:09:27.1±0.7, 0°.43N±0°.05×120°.65E±0°.04, h100km, n43, σ1°81/49, mb3.9/8, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TOLI2** | **Tolitoli** | **0.69** | **11** | | **Pn** | **22 09 42.2** | **-2.3** |
| TOLI2 | | | | Sn | **Sn** | **22 09 53.6** | **-3.9** |
| **TOLI2** | **Tolitoli** | **0.69** | **11** | P | **Pn** | **22 09 42.6** | **-1.9** |
| **MPSI** | **Mapaga** | **0.76** | **263** | P | **Pn** | **22 09 42.5** | **-2.5** |
| **MRSI** | **Marisa** | **1.29** | **88** | P | **Pn** | **22 09 49.7** | **-1.1** |
| MRSI | | | | S | **Sn** | **22 10 07.1** | **-1.7** |
| **APSI** | **Ampana** | **1.66** | **143** | P | **Pn** | **22 09 55.1** | **-0.3** |
| **GTOI** | **Gorontalo** | **2.37** | **85** | P | **Pn** | **22 10 02.6** | **-1.9** |
| GTOI | | | | S | **Sn** | **22 10 29.9** | **-3.3** |
| **LUWI** | **Luwuk** | **2.58** | **124** | | **Pn** | **22 10 06.7** | **-0.5** |
| **LUWI** | **Luwuk** | **2.58** | **124** | P | **Pn** | **22 10 06.9** | **-0.3** |
| **SGKI** | **Sangatta, Kali** | **3.19** | **253** | S | **Sn** | **22 10 48.4** | **-4.3** |
| **TTSI** | **Tana Toraja** | **3.54** | **194** | P | **Pn** | **22 10 20.4** | **+0.2** |
| **SMKI** | **Samarinda** | **3.55** | **256** | P | **Pn** | **22 10 19.9** | **-0.3** |
| **SPSI** | **Sidrap Palu** | **4.45** | **191** | P | **Pn** | **22 10 32.8** | **+0.4** |
| **MYLDM** | **Lahad Datu** | **5.19** | **336** | | **Pn** | **22 10 44.2** | **+1.8** |
| **KAPI** | **Kappang** | **5.48** | **189** | P | **Pn** | **22 10 44.7** | **-1.6** |
| | 2.3nm,0.3s,baz=24,slow=5.3,SNR=6.3 | | | | | | |
| KAPI | | | | S | **Sn** | **22 11 43.1** | **-4.9** |
| | 0.7nm,0.3s,baz=101,slow=18,SNR=1.5 | | | | | | |
| **KAPI** | **Kappang** | **5.48** | **189** | | **Pn** | **22 10 45.2** | **-1.1** |
| **KAPI** | **Kappang** | **5.48** | **189** | P | **Pn** | **22 10 46.2** | **-0.1** |
| **KBKI** | **Kotabaru** | **5.81** | **230** | P | **Pn** | **22 10 49.4** | **-1.4** |
| **SANI** | **Sanana** | **5.88** | **115** | P | **Pn** | **22 10 49.4** | **-2.4** |
| **KKM** | **Kota Kinabalu** | **7.12** | **322** | Pn | **Pn** | **22 11 08.1** | **-0.8** |
| **KKM** | **Kota Kinabalu** | **7.12** | **322** | P | **Pn** | **22 11 10.5** | **+1.7** |
| **MTN** | **Manton Dam** | **16.79** | **142** | | **Pn** | **22 13 15.5** | **-0.8** |
| MTN | | | | IAmb | IAmb | 22 13 20.5 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **16.79** | **142** | P | **P** | **22 13 17.9** | **+1.1** |
| | comp=Z,14nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **17.89** | **154** | P | **Pn** | **22 13 29.2** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 22 13 47.3 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **17.89** | **154** | P | **Pn** | **22 13 30.8** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **19.05** | **165** | P | **P** | **22 13 42.0** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=9.1,SNR=9.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.05** | **165** | P | **Pn** | **22 13 42.6** | **-0.8** |
| **KULM** | **Kulim** | **20.54** | **284** | P | **P** | **22 13 58.6** | **+0.8** |
| KULM | | | | IAmb | IAmb | 22 14 04.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **GSI** | **Gunungsitoli** | **23.09** | **272** | P | **P** | **22 14 25.9** | **+1.4** |
| **WB0** | **Warramunga Arr** | **24.17** | **147** | P | **P** | **22 14 34.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 22 14 35.0 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.28** | **147** | P | **P** | **22 14 34.9** | **-0.4** |
| | comp=Z,3.4nm,0.7s,baz=325,slow=10,SNR=23 | | | | | | |
| WRA | | | | pP | **pP** | **22 14 59.1** | **+2.3** |
| | comp=Z,0.7nm,0.5s,baz=326,slow=11,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.28** | **147** | P | **P** | **22 14 34.5** | **-0.8** |
| **WR0** | **Warramunga Arr** | **24.41** | **147** | P | **P** | **22 14 36.0** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 22 14 37.7 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **27.19** | **153** | P | **P** | **22 15 01.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **27.19** | **153** | P | **P** | **22 15 01.7** | **+0.1** |
| | comp=Z,1.8nm,0.7s,baz=342,slow=14,SNR=31 | | | | | | |
| ASAR | | | | ScP | **ScP** | **22 21 49.4** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=350,slow=4.9,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **27.19** | **153** | P | **P** | **22 15 01.4** | **-0.2** |
| **BBOO** | **Buckleboo** | **36.11** | **158** | P | **P** | **22 16 19.4** | **-0.2** |
| **STKA** | **Stephens Creek** | **37.75** | **150** | P | **P** | **22 16 34.2** | **+0.7** |
| | comp=Z,1.1nm,0.4s,baz=329,slow=10,SNR=6.1 | | | | | | |
| **STKA** | **Stephens Creek** | **37.75** | **150** | P | **P** | **22 16 34.0** | **+0.5** |
| STKA | | | | IAmb | IAmb | 22 16 35.4 | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **57.04** | **329** | P | **P** | **22 19 04.4** | **+1.7** |
| MK31 | | | | IAmb | IAmb | 22 19 06.8 | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.04** | **329** | P | **P** | **22 19 05.3** | **+2.6** |
| | comp=Z,0.5nm,0.5s,baz=124,slow=7.9,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.04** | **329** | P | **P** | **22 19 04.6** | **+2.0** |
| **MAKZ** | **Makanchi** | **57.21** | **329** | P | **P** | **22 19 06.2** | **+2.4** |
| MAKZ | | | | IAmb | IAmb | 22 19 32.1 | |
| | comp=Z,2.8nm,1.4s | | | | | | |
| **KURK** | **Kurchatov** | **61.45** | **331** | P | **P** | **22 19 35.0** | **+2.0** |

*IDC* ***27*** *22:15:08.4±4.9, 6°.94N×126°.81E, h131km±40km, mb3.0/3, mb1 3.3/3, mb1mx2.9/33, mbtmp3.4/3, Error ellipse: s-maj=103.0km s-min=25.5km az=63.0*

*MAN* ***27*** *22:15:11.9, 6°.43N×126°.14E, h119km, mb4.6, ML3.5, MS3.4*

**ISC 27 22:15:11.9±1.3, 6°.4N±0°.1×125°.9E±0°.2, h150km, n6, σ0°72/9, mb3.0/3, 2C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **0.69** | **336** | P | **Pn** | **22 15 34.0** | **-0.4** |
| | 61nm,0.3s,baz=356,slow=20,SNR=7.2 | | | | | | |
| DAV | | | | S | **Sn** | **22 15 52.8** | **+1.2** |
| | 156nm,0.3s,baz=172,slow=22,SNR=21 | | | | | | |
| **KCP** | **Kidapawan** | **0.95** | **307** | ⇑P | **Pn** | **22 15 36.8** | **+0.4** |
| KCP | | | | *i* S | **Sn** | **22 15 55.1** | **0.0** |
| **GSPH** | **General Santos** | **0.97** | **249** | *i* P | **Pn** | **22 15 36.8** | **+0.2** |
| GSPH | | | | *i* S | **Sn** | **22 15 55.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **27.51** | **163** | P | **P** | **22 20 45.4** | **+0.8** |
| | 0.8nm,1.1s,baz=348,slow=10,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **30.93** | **166** | P | **P** | **22 21 14.7** | **-0.2** |
| | 0.1nm,0.3s,baz=343,slow=7.9,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.86** | **325** | P | **P** | **22 24 26.1** | **-0.6** |
| | 0.1nm,0.4s,baz=103,slow=6.2,SNR=1.8 | | | | | | |

*UCR* ***27*** *22:16:14.0±0.7, 8°.40N×82°.91W, h33km±2km, MW3.7*

*UPA* ***27*** *22:16:15.0±0.7, 8°.43N×82°.92W, h22km±4km, MW3.5*

**ISC 27 22:16:14.6±1.1, 8°.43N±0°.05×82°.93W±0°.03, h29km±7km, n17, σ0°89/29, 2C-2D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CDITO** | **Canoas** | **0.15** | **22** | *e*P | **Pb** | **22 16 19.6** | **-0.6** |
| CDITO | | | | *e*S | **Sb** | **22 16 23.6** | **-0.4** |
| **PTPM** | **Petroterminale** | **0.23** | **167** | ⇑*i* P | **Pb** | **22 16 20.4** | **-0.6** |
| PTPM | | | | *e*S | **Sb** | **22 16 25.8** | **+0.3** |
| **PTJ1** | **Puerto Jimnez** | **0.38** | **286** | *e*P | **Pb** | **22 16 23.0** | **-0.1** |
| **EDSV** | **San Vito** | **0.39** | **354** | *e*P | **Pb** | **22 16 23.5** | **+0.2** |
| EDSV | | | | *e*S | **Sn** | **22 16 30.7** | **-0.2** |
| **PIRO** | **Carate, Puerto** | **0.40** | **266** | *e*P | **Pb** | **22 16 22.7** | **-0.7** |
| PIRO | | | | *e*S | **Sb** | **22 16 30.5** | **+1.0** |
| **PIRO** | **Carate, Puerto** | **0.40** | **266** | *e*P | **Pb** | **22 16 23.0** | **-0.4** |
| PIRO | | | | *e*S | **Sb** | **22 16 30.2** | **+0.7** |
| **BRU2** | **Volcan** | **0.43** | **33** | *e*P | **Pb** | **22 16 24.1** | **+0.1** |
| **BRU2** | **Volcan** | **0.43** | **33** | ||*i* P | **Pb** | **22 16 24.1** | **+0.1** |
| BRU2 | | | | *i* S | **Sn** | **22 16 31.7** | **-0.3** |
| **DVD** | **David** | **0.47** | **90** | ||*e*P | **Pb** | **22 16 24.3** | **-0.3** |
| DVD | | | | *e*S | **Sb** | **22 16 31.6** | **+0.3** |
| **BCO2** | **Palmira** | **0.49** | **54** | ||*i*P | **Pb** | **22 16 25.0** | **+0.1** |
| BCO2 | | | | *i* S | **Sn** | **22 16 33.2** | **-0.2** |
| **EDPN** | **Palmar Norte** | **0.74** | **315** | *e*P | **Pb** | **22 16 28.5** | **-0.5** |
| EDPN | | | | *e*S | **Sn** | **22 16 40.9** | **+1.4** |
| **DRK0** | **Durika** | **0.88** | **339** | *e*P | **Pn** | **22 16 30.9** | **-0.4** |
| **DRK0** | **Durika** | **0.88** | **339** | *e*P | **Pn** | **22 16 30.9** | **-0.4** |
| DRK0 | | | | *e*S | **Sb** | **22 16 43.6** | **+0.5** |
| **LCR2** | **La Lucha 2** | **1.68** | **321** | *e*P | **Pn** | **22 16 43.1** | **+0.8** |
| **HDC** | **Heredia** | **1.95** | **323** | *e*P | **Pb** | **22 16 49.4** | **-0.1** |
| HDC | | | | *e*S | **Sb** | **22 17 12.7** | **-0.8** |
| **ARE1** | **Arenal 1** | **2.68** | **319** | *e*P | **Pb** | **22 17 01.1** | **-0.9** |
| **JTS** | **Las Juntas de** | **2.72** | **313** | *e*P | **Pb** | **22 16 59.9** | **-2.7** |
| JTS | | | | *e*S | **Sn** | **22 17 30.4** | **+2.0** |

*MOS* ***27*** *22:37:03.3±1.0, 8°.72S×124°.15E, h93km, mb5.0/49, Error ellipse: s-maj=9.9km s-min=5.1km az=116.9*

*BJI* ***27*** *22:37:04.0±0.0, 9°.10S×124°.20E, h96km, mb4.8/64, mB5.2/22*

*IDC* ***27*** *22:37:04.1±0.9, 8°.80S×124°.17E, h85km±8km, mb4.5/28, mb1 4.5/31, mb1mx4.4/41, mbtmp4.7/31, MS4.2/12,*

*Ms1 4.2/12, ms1mx3.8/70, Error ellipse: s-maj=13.3km s-min=8.5km az=84.0*

*NEIC* ***27*** *22:37:05.1±2.3, 8°.94S×0°.05×124°.16E±0°.06, h94km±5km, mb5.0/85, Error ellipse: s-maj=9.8km s-min=5.9km az=56.0*

*DJA* ***27*** *22:37:05.5±0.2, 9°.S×2°×12°.4E±°, h67km±6km, M4.8/25, mB5.3/18, mb5.1/25, MLv5.1/19, Mw(mB)4.7/18*

*KLM* ***27*** *22:37:08, 9°.17S×124°.33E, h140km, mb5.2*

**ISC 27 22:37:05.1±0.2, 8°.94S±0°.04×124°.20E±0°.04, h100km, pP-P, n462, σ1°40/473, mb4.9/116, 62C-34D, Fault plane solution: NP1: φ≈99.72498°, δ43.97571°, λ13.63412°. NP2: φ≈359.82367°, δ80.57981°, λ133.15790°. Principal axes: T Plg38.6523°, Azm308.0912°; N Plg42.4376°, Azm171.0984°; P Plg23.1490°, Azm58.0867°; Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.82** | **175** | | **Pn** | **22 37 23.4** | **-0.5** |
| SOEI | | | | Sn | **Sn** | **22 37 37.5** | **-0.3** |
| **SOEI** | **Soe** | **0.82** | **175** | P | **Pn** | **22 37 23.3** | **-0.5** |
| **BATI** | **Baumata** | **1.37** | **202** | P | **Pn** | **22 37 29.9** | **+0.1** |
| | 789nm,0.3s,baz=46,slow=3.3,SNR=533 | | | | | | |
| BATI | | | | S | **Sn** | **22 37 48.5** | **0.0** |
| | 5μm,0.3s,baz=96,slow=10,SNR=16 | | | | | | |
| **BATI** | **Baumata** | **1.37** | **202** | P | **Pn** | **22 37 29.6** | **-0.2** |
| **MMRI** | **Maumere** | **1.96** | **279** | | **Pn** | **22 37 36.3** | **-0.9** |
| MMRI | | | | Sn | **Sn** | **22 38 01.6** | **0.0** |
| **MMRI** | **Maumere** | **1.96** | **279** | P | **Pn** | **22 37 36.6** | **-0.5** |
| **MMRI** | **Maumere** | **1.96** | **279** | P | **Pn** | **22 37 37.3** | **+0.2** |
| **BBSI** | **Bau Bau** | **3.79** | **335** | P | **Pn** | **22 38 02.2** | **+0.8** |
| **BASI** | **Baing, Sumba** | **3.79** | **250** | P | **Pn** | **22 38 01.0** | **-0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.60** | **307** | P | **Pn** | **22 38 14.0** | **+1.5** |
| **WBSI** | **Waikabubak, Su** | **4.79** | **261** | P | **Pn** | **22 38 13.4** | **-1.7** |
| **BKSI** | **Bulukumba** | **5.40** | **311** | P | **Pn** | **22 38 23.9** | **+0.6** |
| | 0.7nm2μm244nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **5.88** | **311** | P | **Pn** | **22 38 28.3** | **-1.5** |
| | 5.8nm,0.3s,baz=142,slow=19,SNR=2.6 | | | | | | |
| KAPI | | | | LR | LR | 22 40 54.7 | |
| | comp=Z,905nm,20.3s,baz=152,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **5.88** | **311** | P | **Pn** | **22 38 29.8** | **0.0** |
| **KAPI** | **Kappang** | **5.88** | **311** | Pn | **Pn** | **22 38 29.8** | **0.0** |
| **KAPI** | **Kappang** | **5.88** | **311** | P | **Pn** | **22 38 31.9** | **+2.1** |
| **BNSI** | **Bone** | **6.06** | **318** | P | **Pn** | **22 38 34.0** | **+1.7** |
| | 1.3nm4μm430nm,1.0s | | | | | | |
| **PLAI** | **Plampang** | **6.34** | **270** | P | **Pn** | **22 38 36.3** | **+0.2** |
| | 2.7nm4μm391nm,0.8s | | | | | | |
| **PLAI** | **Plampang** | **6.34** | **270** | P | **Pn** | **22 38 36.7** | **+0.6** |
| **AAI** | **Ambon** | **6.55** | **38** | P | **Pn** | **22 38 43.0** | **+4.0** |
| | 0.3nm78nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.61** | **318** | P | **Pn** | **22 38 42.0** | **+2.3** |
| | 0.5nm2μm104nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **7.07** | **15** | P | **Pn** | **22 38 47.6** | **+1.6** |
| | 0.7nm2μm178nm,1.4s | | | | | | |
| **SANI** | **Sanana** | **7.07** | **15** | P | **Pn** | **22 38 49.0** | **+3.0** |
| **SAUI** | **Saumlaki** | **7.09** | **83** | Pn | **Pn** | **22 38 46.4** | **+0.1** |
| **SAUI** | **Saumlaki** | **7.09** | **83** | P | **Pn** | **22 38 46.8** | **+0.5** |
| | 2.5nm305nm,0.7s | | | | | | |
| **SAUI** | **Saumlaki** | **7.09** | **83** | P | **Pn** | **22 38 46.4** | **+0.1** |
| **TTSI** | **Tana Toraja** | **7.29** | **323** | P | **P

**ASAR Alice Springs 17.35 149** P **P** **22 40 58.6 -2.3**
**XMI Christmas Isla 18.30 264** P **Pn** **22 41 13.9 +1.3**
**XMIS Christmas Isla 18.34 264** P **P** **22 41 11.8 -0.1**
XMIS IAmb IAmb 22 41 14.7
comp=Z,167nm,0.9s
**XMIS Christmas Isla 18.34 264** P **Pn** **22 41 14.6 +1.5**
**MEEK Meekatharra 18.39 196** P **Pn** **22 41 13.5 0.0**
**QIS Mount Isa 18.84 130** P **Pn** **22 41 18.8 -0.1**
baz=19,SNR=143
**QIS Mount Isa 18.84 130** P **Pn** **22 41 19.0 +0.1**
**COEN Coen 19.26 107** P **P** **22 41 22.9 +1.0**
COEN IAmb IAmb 22 41 28.5
comp=Z,56nm,1.1s
**COEN Coen 19.26 107** P **Pn** **22 41 23.8 -0.1**
**MORW Morawa 21.44 200** P **P** **22 41 45.7 +0.4**
baz=22,SNR=8.5
**MORW Morawa 21.44 200** P **P** **22 41 44.3 -1.0**
**MORW Morawa 21.44 200** P **P** **22 41 45.9 +0.6**
**MTSU Mount Surprise 21.57 117** P **P** **22 41 48.4 +1.6**
baz=22,SNR=105
**MTSU Mount Surprise 21.57 117** P **P** **22 41 48.7 +1.8**
**OOD Oodnadatta 21.67 151** P **P** **22 41 49.2 +1.5**
**FORT Forrest 22.03 171** P **P** **22 41 52.0 +0.5**
baz=22,SNR=31
**FORT Forrest 22.03 171** P **P** **22 41 51.3 -0.2**
**FORT Forrest 22.03 171** P **P** **22 41 52.5 +1.0**
**BLDU Ballidu 22.68 197** P **P** **22 41 58.3 +0.1**
baz=23,SNR=26
**BLDU Ballidu 22.68 197** P **P** **22 41 58.5 +0.3**
**PMG Port Moresby 22.68 93** P P 22 42 07.3 +8.9
comp=Z,95nm,0.7s,baz=273,slow=5.9,SNR=20
PMG LR LR 22 51 00.9
comp=Z,422nm,20.4s,baz=244,slow=37
**MYKOM Kota Tinggi 22.90 297** P **P** **22 42 00.4 -0.3**
**TGY Tagaytay City 23.11 352** P **P** **22 42 01.5 -1.2**
comp=Z,152nm,0.3s,baz=195,slow=12,SNR=3.4
**MULG Mulgathing 23.16 158** P **P** **22 42 04.1 +1.2**
**KLBR Kellerberrin 23.33 194** P **P** **22 42 05.0 +0.5**
baz=23,SNR=13
**KLBR Kellerberrin 23.33 194** P **P** **22 42 05.0 +0.5**
**CTA Charters Tower 24.03 120** P **P** **22 42 12.8 +1.8**
comp=Z,30nm,1.0s,baz=295,slow=9.8,SNR=22
**CTA Charters Tower 24.03 120** P **P** **22 42 13.2 +2.2**
**BKNI Bangkinang 24.83 291** P **P** **22 42 18.9 +0.6**
**BKNI Bangkinang 24.83 291** P **P** **22 42 21.1 +2.8**
comp=Z,118nm,1.2s
**JRMM Jerantut 25.12 300** P **P** **22 42 23.0 +2.1**
**QLP Quilpie 25.86 135** P **P** **22 42 29.8 +2.3**
baz=26,SNR=7.7
**QLP Quilpie 25.86 135** P **P** **22 42 29.2 +1.7**
**BBOO Buckleboo 26.17 157** P **P** **22 42 31.6 +1.4**
baz=26,SNR=64
**BBOO Buckleboo 26.17 157** P **P** **22 42 30.5 +0.2**
BBOO IAmb IAmb 22 42 32.5
comp=Z,52nm,0.7s
**BBOO Buckleboo 26.17 157** P **P** **22 42 31.4 +1.1**
**KULM Kulim 27.40 300** P **P** **22 42 41.5 0.0**
KULM IAmb IAmb 22 43 18.7
comp=Z,40nm,1.4s
**RPSI Rantau Prapat 27.71 294** P **P** **22 42 43.0 -1.2**
**PSI Prapat 27.76 294** P **P** **22 42 44.2 -0.6**
comp=Z,15nm,0.9s,baz=198,slow=6.0,SNR=7.0
**HTT Hallett 27.91 153** P **P** **22 42 47.9 +2.1**
baz=28,SNR=10.0
**HTT Hallett 27.91 153** P **P** **22 42 48.0 +2.1**
**STKA Stephens Creek 27.97 147** P **P** **22 42 47.4 +1.0**
comp=Z,12nm,0.8s,baz=317,slow=9.6,SNR=26
STKA LR LR 22 55 51.9
comp=Z,455nm,18.7s,baz=289,slow=40
**STKA Stephens Creek 27.97 147** P **P** **22 42 48.3 +2.0**
baz=28,SNR=16
**STKA Stephens Creek 27.97 147** P **P** **22 42 47.0 +0.6**
**STKA Stephens Creek 27.97 147** P **P** **22 42 49.0 +2.6**
**CMSA Cobar Meteorol 30.09 141** P **P** **22 43 07.6 +2.4**
baz=30,SNR=27
**CMSA Cobar Meteorol 30.09 141** P **P** **22 43 07.6 +2.4**
**ARPS Mount Arapiles 32.01 153** P **P** **22 43 24.7 +2.7**
baz=32,SNR=19
**ARPS Mount Arapiles 32.01 153** P **P** **22 43 24.9 +2.9**
**ARMA Armidale 33.36 134** P **P** **22 43 35.2 +1.2**
ARMA IAmb IAmb 22 43 43.4
comp=Z,38nm,1.4s
**TOO Toolangi 34.40 149** P **P** **22 43 46.5 +3.6**
baz=34,SNR=4.9
**TOO Toolangi 34.40 149** P **P** **22 43 44.4 +1.6**
TOO pmax pmax
comp=Z,24nm,1.1s
**TOO Toolangi 34.40 149** P **P** **22 43 44.4 +1.6**
TOO IAmb IAmb 22 43 47.4
comp=Z,24nm,1.1s
**CAN Canberra 34.69 143** P **P** **22 43 47.3 +1.9**
CAN pmax pmax
comp=Z,46nm,1.5s
**CAN Canberra 34.69 143** P **P** **22 43 47.3 +1.9**
CAN IAmb IAmb 22 44 38.9
comp=Z,46nm,1.5s
**CNB Canberra Magne 34.91 143** P **P** **22 43 50.4 +3.2**
baz=35,SNR=9.3
**CNB Canberra Magne 34.91 143** P **P** **22 43 50.3 +3.0**
**HNR Honiara 35.29 94** LR LR 22 58 37.6
comp=Z,340nm,18.1s,baz=290,slow=37
**CMAR Chiang Mai Arr 36.90 318** P **P** **22 44 05.5 +1.1**
comp=Z,15nm,0.9s,baz=141,slow=6.5,SNR=83
CMAR PcP **PcP** **22 46 25.5 +1.4**
comp=Z,1.3nm,0.5s,baz=179,slow=3.5,SNR=4.9
**CMAR Chiang Mai Arr 36.90 318** P **P** **22 44 04.1 -0.3**
**CHTO Chiang Mai 37.16 318** P **P** **22 44 06.9 +0.4**
CHTO pmax pmax
comp=Z,24nm,1.0s
**CHTO Chiang Mai 37.16 318** P **P** **22 44 06.9 +0.4**
CHTO IAmb IAmb 22 44 08.9
comp=Z,24nm,1.0s
**CHTO Chiang Mai 37.16 318** P **P** **22 44 07.3 +0.8**
**GYA Guiyang 39.09 335** ⇑P **P** **22 44 24.0 +1.2**
GYA pmax pmax
comp=Z,34nm,0.6s
**KMI Kunming 39.79 329** ⇓P **P** **22 44 30.3 +1.5**
KMI pP pP 22 44 54.5 +2.7
KMI sP sP 22 45 04.0 +0.8
KMI pmax pmax
comp=Z,32nm,1.0s
**WHN Wuhan 40.37 347** ⇓P **P** **22 44 33.5 +0.3**
WHN pmax pmax
comp=Z,60nm,1.1s
**NJ2 Nanjing 41.07 353** *e*P **P** **22 44 39.5 +0.6**
NJ2 pmax pmax
comp=Z,22nm,0.8s
**PZH PanZhiHua 41.43 329** P **P** **22 44 44.0 +1.9**
PZH pmax pmax
comp=Z,10.0nm,1.0s
**ENH Enshi 41.47 341** P **P** **22 44 41.8 -0.5**
**JMN Monobe 43.41 12** P **P** **22 44 58.6 +0.6**
JMN IAmb IAmb 22 44 59.6
comp=Z,36nm,0.9s
**CD2 Chengdu 44.20 335** P **P** **22 45 05.8 +1.4**
CD2 pmax pmax
comp=Z,20nm,0.8s
**JHS Saijyo 44.50 10** P **P** **22 45 07.4 +0.7**
JHS IAmb IAmb 22 45 12.1
comp=Z,57nm,1.2s
**LYN LuoYang 44.65 346** *e*P **P** **22 45 06.8 -1.0**
LYN pmax pmax
comp=Z,10.0nm,1.2s
**XAN Xi'an 45.13 342** P **P** **22 45 11.0 -0.7**
XAN pP pP 22 45 40.0 +4.7
XAN pmax pmax
comp=Z,20nm,0.9s
**PALK Pallekele 46.24 289** P **P** **22 45 19.2 -1.5**
comp=Z,9.7nm,0.8s,baz=346,slow=2.1,SNR=4.0
**PALK Pallekele 46.24 289** P **P** **22 45 19.4 -1.4**
PALK pmax pmax
comp=Z,43nm,1.4s
**PALK Pallekele 46.24 289** P **P** **22 45 19.4 -1.4**
PALK IAmb IAmb 22 46 07.4
comp=Z,43nm,1.4s
**PALK Pallekele 46.24 289** P **P** **22 45 20.0 -0.8**
**KSAR Wonju Array Be 46.26 4** P **P** **22 45 20.8 +0.3**
**KSAR Wonju Array Be 46.26 4** P **P** **22 45 20.8 +0.3**
**KSRS Korea Array 46.28 4** P **P** **22 45 19.8 -0.8**
comp=Z,4.0nm,0.9s,baz=180,slow=9.0,SNR=16
KSRS PcP **PcP** **22 46 54.5 +0.1**
comp=Z,0.4nm,0.3s,baz=194,slow=4.7,SNR=4.4
**SHL Shillong 46.53 318** P **P** **22 45 22.0 -1.0**
SHL pmax pmax
comp=Z,14nm,0.8s
**SHL Shillong 46.53 318** P **P** **22 45 22.0 -1.0**
SHL IAmb IAmb 22 45 23.5
comp=Z,14nm,0.8s
**SHL Shillong 46.53 318** P **P** **22 45 22.7 -0.3**
**HNS HongShan 46.94 350** ⇓P **P** **22 45 25.3 -0.5**
HNS pmax pmax
comp=Z,14nm,1.0s
**MJAR Matsushiro Arr 47.11 15** P **P** **22 45 26.4 -0.7**
comp=Z,12nm,0.8s,baz=197,slow=8.7,SNR=24
**MJAR Matsushiro Arr 47.11 15** P **P** **22 45 26.5 -0.7**
MJAR pmax pmax
comp=Z,11nm,1.1s
**MJAR Matsushiro Arr 47.11 15** P **P** **22 45 26.4 -0.7**
**MAJO Matsushiro 47.12 15** ⇓ *i*P **P** **22 45 26.2 -1.0**
MAJO pmax pmax
comp=Z,19nm,0.9s
**MAT Matsushiro 47.12 15** P **P** **22 45 25.9 -1.3**
**CHLP Challavanipeta 48.08 305** *e*P **P** **22 45 34.2 -0.8**
**JSD Sado 48.54 15** P **P** **22 45 38.3 +0.2**
**LZH Lanzhou 48.71 338** *e*P **P** **22 45 39.8 +0.1**
LZH pmax pmax
comp=Z,15nm,1.0s
**JMM Marumori 49.08 17** P **P** **22 45 43.2 +1.0**
**BJT Baijiatuau 49.27 352** P **P** **22 45 42.8 -0.9**
BJT pmax pmax
comp=Z,8.0nm,0.8s
**BJT Baijiatuau 49.27 352** P **P** **22 45 42.8 -0.9**
**BJI Beijing 49.29 352** P **P** **22 45 42.8 -1.0**
BJI sP **sP** **22 46 17.3 -1.7**
BJI pmax pmax
comp=Z,10.0nm,0.8s
BJI LR LR
comp=Z,340nm,14.6s
BJI LR LR
comp=Z,190nm,14.7s
BJI LR LR
comp=Z,350nm,16.6s
**PVM Polavaram 49.47 302** *e*P **P** **22 45 45.1 -0.5**
**SKHT Srikalahasti 49.57 297** *e*P **P** **22 45 45.7 -0.7**
**LSA Lhasa 49.87 322** P **P** **22 45 49.3 +0.3**
**MYLAV Mylavaram 50.08 301** *e*P **P** **22 45 49.7 -0.4**
**ADKI Addanki 50.24 299** *e*P **P** **22 45 50.8 -0.7**
**HHC Hu-ho-hao-te 50.89 348** *e*P **P** **22 46 00.5 +4.5**
HHC pmax pmax
comp=Z,6.0nm,0.9s
HHC pmax pmax
comp=Z,170nm,7.8s
**RCLA Racherla 50.95 298** *e*P **P** **22 45 55.4 -1.4**
**BTO Baotou 51.00 346** *e*P **P** **22 45 56.8 -0.1**
**NJS Nagarjunasagar 51.12 300** *e*P **P** **22 45 56.2 -1.8**
**DGAR Diego Garcia 51.21 268** *d i*P **P** **22 45 59.9 +1.1**
DGAR pmax pmax
comp=Z,77nm,1.7s
**DGAR Diego Garcia 51.21 268** P **P** **22 45 58.8 0.0**
**MSHR Mys Shultsa 51.66 7** ⇓ *e*P **P** **22 46 02.3 +0.7**
MSHR pmax pmax
comp=Z,27nm,0.9s
**CUPL Choutuppal 51.78 300** *e*P **P** **22 46 01.7 -1.3**
**JTM Tenmabayashi 51.87 16** P **P** **22 46 02.9 -0.3**
**HYBB Hyderabad (bro 52.15 300** *e*P **P** **22 46 04.3 -1.5**
**RPR Rampur 52.18 302** *e*P **P** **22 46 05.0 -1.0**
**URV Uravakonda 52.23 297** *e*P **P** **22 46 04.8 -1.5**
**VLA Vladivostok 52.28 7** ⇓ *e*P **P** **22 46 06.6 +0.4**
VLA pmax pmax
comp=Z,44nm,1.3s
**GOMU GeErMu 52.72 330** P **P** **22 46 13.5 +3.4**
**SRSP Sriramsagar 53.01 302** *e*P **P** **22 46 10.2 -1.8**
**XLT XiLinHaoTe 53.10 353** *e*P **P** **22 46 11.5 -0.9**
XLT pP pP 22 46 37.0 +0.4
XLT sP sP 22 46 45.8 -1.9
XLT pmax pmax
comp=Z,12nm,1.1s
XLT pmax pmax
comp=Z,390nm,10.4s
XLT LR LR
comp=Z,33nm,15.7s
XLT LR LR
comp=Z,260nm,16.1s
XLT LR LR
comp=Z,320nm,17.0s
**GTA Gaotai 53.16 336** ⇑P **P** **22 46 13.0 +0.1**
GTA pmax pmax
comp=Z,4.0nm,0.8s
**QRZ Quartz Range 53.21 135** P **P** **22 46 14.5 +1.3**
**USA0B Ussuriysk Arra 53.35 7** *c i*P **P** **22 46 13.8 -0.3**
**USA0B Ussuriysk Arra 53.35 7** **P** **22 46 14.8 +0.7**
USA0B IAmb IAmb 22 46 15.2
comp=Z,23nm,0.9s
**USRK Ussuriysk Ar. 53.35 7** P **P** **22 46 14.1 0.0**
comp=Z,15nm,0.8s,baz=192,slow=7.2,SNR=30
**USRK Ussuriysk Ar. 53.35 7** P **P** **22 46 14.3 +0.2**
**USRK Ussuriysk Ar. 53.35 7** P **P** **22 46 14.3 +0.2**
**RPZ Rata Peaks 53.41 139** P **P** **22 46 16.5 +1.8**
comp=Z,23nm,1.0s,baz=274,slow=3.4,SNR=6.5
**RPZ Rata Peaks 53.41 139** P **P** **22 46 16.2 +1.6**
RPZ IAmb IAmb 22 46 18.3
comp=Z,22nm,1.0s
**MDJ Mudanjiang 53.52 5** P **P** **22 46 15.1 -0.2**
**MDJ Mudanjiang 53.52 5** P **P** **22 46 15.5 +0.2**
MDJ pmax pmax
comp=Z,94nm,1.0s
**THZ Tophouse 53.83 136** P **P** **22 46 19.9 +2.0**
**KLRI Killari 54.11 300** *e*P **P** **22 46 18.5 -1.7**
**BNX BinXian 54.50 3** ⇓P **P** **22 46 21.8 -0.6**
BNX pmax pmax
comp=Z,39nm,1.1s
BNX pmax pmax
comp=Z,190nm,5.0s
**BKZ Black Stump Fm 55.47 132** P **P** **22 46 31.1 +1.3**
BKZ IAmb IAmb 22 48 26.7
comp=Z,25nm,1.5s
**YSS Yuzh-Sakhalins 58.05 15** *e*P **P** **22 46 47.6 0.0**
YSS pmax pmax
comp=Z,10.0nm,0.8s
**HIA Hailar 58.08 357** *c e*P **P** **22 46 47.8 -0.1**
HIA pmax pmax
comp=Z,14nm,1.0s
**HIA Hailar 58.08 357** P **P** **22 46 47.7 -0.2**
HIA IAmb IAmb 22 46 48.8
comp=Z,18nm,1.2s
**KLR Kul'dur 58.30 6** *d e*P **P** **22 46 49.2 -0.1**
KLR pmax pmax
comp=Z,8.0nm,1.0s
**ULN Ulaanbaatar 58.56 347** *c i*P **P** **22 46 50.8 -0.6**
ULN pmax pmax
comp=Z,8.0nm,0.9s
**ULN Ulaanbaatar 58.56 347** P **P** **22 46 51.2 -0.1**
ULN IAmb IAmb 22 46 54.2
comp=Z,8.6nm,0.9s
**ULN Ulaanbaatar 58.56 347** P **P** **22 46 51.5 +0.2**
**SONM Songino Array 58.68 346** P **P** **22 46 51.7 -0.5**
comp=Z,5.7nm,1.0s,baz=162,slow=8.3,SNR=24
**SONM Songino Array 58.68 346** P **P** **22 46 51.7 -0.5**
**ZAK Zakamensk 61.81 345** *e*P **P** **22 47 13.5 0.0**
ZAK *e* 22 47 52.1
ZAK pmax pmax
comp=Z,9.0nm,1.2s
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**WMQ Urumqi 62.07 331** *e*P **P** **22 47 15.8 +0.5**
WMQ pmax pmax
comp=Z,13nm,1.1s
**ZEA Zeya 62.48 2** *e*P **P** **22 47 18.6 +0.9**
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax
comp=N,10.0nm,1.2s
ZEA pmax pmax
comp=Z,20nm,1.1s
**MOY Mondy 63.59 344** *e*P **P** **22 47 25.6 +0.4**
MOY pmax pmax
comp=Z,22nm,1.8s
**NIL Nilore 64.27 314** P **P** **22 47 29.0 -1.0**
NIL pmax pmax
comp=Z,51nm,0.9s
**NIL Nilore 64.27 314** P **P** **22 47 29.0 -1.0**
**NIL Nilore 64.27 314** P **P** **22 47 29.7 -0.3**
**KSH Kashi 65.71 321** P **P** **22 47 39.8 +0.5**
KSH PcS 22 52 10.5
KSH S **S** **22 56 16.0 -1.8**
KSH ScS **SKSac** **22 57 22.3 -3.6**
KSH pmax pmax
comp=Z,22nm,0.9s
**TARG Taragay, Kyrgy 65.93 324** P **P** **22 47 41.0 0.0**
**ZSN Zaisan 66.08 332** *e*P **P** **22 47 40.2 -1.2**
**ZSN Zaisan 66.08 332** *e*P **P** **22 47 40.3 -1.2**
baz=332
**UZB Uzynbulak 66.13 325** *e*P **P** **22 47 41.8 -0.2**
**UZB Uzynbulak 66.13 325** *e*P **P** **22 47 41.8 -0.2**
baz=325
**SATY Saty 66.42 325** *e*P **P** **22 47 43.3 -0.5**
SATY pmax pmax
comp=Z,11nm,0.9s
**SATY Saty 66.42 325** *e*P **P** **22 47 43.4 -0.5**
comp=Z,11nm,0.9s,baz=325
**ZHN Zhinishke 66.47 325** *e*P **P** **22 47 43.8 -0.3**
**ZHN Zhinishke 66.47 325** *e*P **P** **22 47 43.8 -0.3**
baz=325
**KPKS Kokpek 66.53 326** *e*P **P** **22 47 43.5 -0.9**
KPKS pmax pmax
comp=Z,14nm,0.9s
**KPKS Kokpek 66.53 326** *e*P **P** **22 47 43.6 -0.9**
comp=Z,14nm,0.9s,baz=325
**DGZ Jazzator, Alta 66.63 335** *c i*P **P** **22 47 44.8 -0.3**
DGZ pmax pmax
comp=Z,14nm,0.9s
**RER Riviere de l'E 66.79 251** P **P** **22 47 48.1 +1.6**
**RER Riviere de l'E 66.79 251** P **P** **22 47 49.8 +3.3**
**MK31 Makanchi Array 66.85 330** *c i*P **P** **22 47 45.8 -0.5**
**MK31 Makanchi Array 66.85 330** P **P** **22 47 46.1 -0.2**
MK31 IAmb IAmb 22 47 47.6
comp=Z,18nm,0.9s
**MKAR Makanchi Array 66.85 330** P **P** **22 47 46.2 -0.1**
comp=Z,19nm,0.8s,baz=134,slow=7.9,SNR=176
**MKAR Makanchi Array 66.85 330** *i*P **P** **22 47 46.0 -0.3**
MKAR pmax pmax
comp=Z,19nm,0.8s
**MKAR Makanchi Array 66.85 330** P **P** **22 47 46.0 -0.3**
**MAKZ Makanchi 67.02 330** P **P** **22 47 46.6 -0.8**
MAKZ pmax pmax
comp=Z,13nm,0.9s
**MAKZ Makanchi 67.02 330** P **P** **22 47 46.6 -0.8**
MAKZ IAmb IAmb 22 47 48.0
comp=Z,12nm,0.9s
**BOD Bodaibo 67.04 354** *e*P **P** **22 47 47.3 +0.1**
BOD pmax pmax
comp=Z,29nm,1.4s
**TNSS Tian-Shan 67.24 324** *e*P **P** **22 47 49.3 0.0**
baz=324
**MDOK Medeo 67.26 324** *e*P **P** **22 47 47.4 -1.8**
**MDOK Medeo 67.26 324** *e*P **P** **22 47 47.5 -1.8**
baz=324
**AAA Alma-Ata 67.37 324** *e*P **P** **22 47 49.3 -0.4**
AAA pmax pmax
comp=Z,10.0nm,0.7s
**AAA Alma-Ata 67.37 324** *e*P **P** **22 47 49.4 -0.4**
comp=Z,10.0nm,0.7s,baz=324
**CHKK Chushkaly 67.72 325** *e*P **P** **22 47 50.9 -1.0**
baz=325
**KBL Kabul 67.73 313** P **P** **22 47 51.7 -0.7**
KBL pmax pmax
comp=Z,39nm,1.0s
**KBL Kabul 67.73 313** P **P** **22 47 51.7 -0.7**
KBL IAmb IAmb 22 47 53.2
comp=Z,39nm,1.0s
**TKM2 Tokmak 2 67.96 324** P **P** **22 47 53.6 0.0**
SNR=7.0
**TKM2 Tokmak 2 67.96 324** *i*P **P** **22 47 52.8 -0.8**
TKM2 pmax pmax
comp=Z,8.0nm,0.9s
**PEA0B Petropavlovsk- 68.06 21** ⇑ *e*P **P** **22 47 55.1 +1.3**
**PEA0B Petropavlovsk- 68.06 21** P **P** **22 47 54.5 +0.7**
**PETK Petropavlovsk- 68.06 21** P **P** **22 47 54.1 +0.3**
comp=Z,11nm,0.9s,baz=195,slow=5.2,SNR=7.5
**PETK Petropavlovsk- 68.06 21** P **P** **22 47 54.5 +0.7**
**PETK Petropavlovsk- 68.06 21** P **P** **22 47 54.5 +0.7**
**KUU Kurty 68.12 325** *e*P **P** **22 47 53.6 -0.8**
KUU pmax pmax
comp=Z,30nm,0.9s
**KUU Kurty 68.12 325** *e*P **P** **22 47 53.6 -0.8**
comp=Z,30nm,0.9s,baz=325
**KBK Karagaybulak SNR=11 68.18 323** P **P** **22 47 55.4 +0.4**
**UCH Uchtor SNR=14 68.19 322** P **P** **22 47 55.9 +0.5**
**PET Petropavlovsk 68.34 22** ⇓ *e*P **P** **22 47 56.2 +0.7**
PET pmax pmax
comp=Z,53nm,2.5s
**AAK Ala-Archa 68.44 323** *c i*P **P** **22 47 56.5 -0.1**
AAK pmax pmax
comp=Z,15nm,0.8s
**AAK Ala-Archa 68.44 323** P **P** **22 47 56.6 0.0**
AAK IAmb IAmb 22 47 57.9
comp=Z,13nm,0.8s
**AAK Ala-Archa 68.44 323** P **P** **22 47 57.1 +0.4**
**AAK Ala-Archa SNR=25 68.44 323** *i*P **P** **22 47 56.9 +0.3**
**CHMS Chumysh SNR=5.5 68.50 323** P **P** **22 47 56.2 -0.6**
**AML Almayashu SNR=24 68.63 322** P **P** **22 47 58.2 +0.1**
**AML Almayashu 68.63 322** P **P** **22 47 58.3 +0.1**
**AML Almayashu SNR=24 68.63 322** *i*P **P** **22 47 58.2 +0.1**
**USP Ospenovka SNR=18 68.81 323** P **P** **22 47 58.4 -0.3**
**SGDS Sogindy baz=324 68.84 324** *e*P **P** **22 47 57.7 -1.3**
**EKS2 Erkin-Say SNR=20 68.89 322** P **P** **22 47 59.7 +0.4**
**GAR Garm 69.08 318** P **P** **22 48 00.2 -0.3**
GAR IAmb IAmb 22 48 00.7
comp=Z,17nm,1.0s
**CHGR Chuyangaron 69.68 317** P **P** **22 48 03.4 -0.9**
**CHGR Chuyangaron 69.68 317** P **P** **22 48 03.4 -0.9**
**BTLS Baital 70.12 325** *e*P **P** **22 48 05.7 -1.0**
**BTLS Baital 70.12 325** *e*P **P** **22 48 05.7 -1.0**
baz=325
**SEM Semipalatinsk 70.33 332** *e*P **P** **22 48 06.0 -2.1**
**SEM Semipalatinsk 70.33 332** *e*P **P** **22 48 06.0 -2.1**
baz=332
**DZA Taraz 70.50 322** *e*P **P** **22 48 07.4 -1.7**
**DZA Taraz 70.50 322** *e*P **P** **22 48 07.4 -1.7**
baz=322
**JLN Jalan Bani Buh 70.59 297** P **P** **22 48 09.6 -0.4**
**YAK Yakutsk 70.88 3** *e*P **P** **22 48 10.3 -0.6**
YAK *e**PP **PcP** **22 48 32.4 +1.6**
YAK *e* 22 50 47.8
YAK *e*S **S** **22 57 18.1 +0.1**
YAK *e**SS **sS** **22 57 58.6 -0.6**
YAK *e* 22 58 10.3
YAK *e*SS **SS** **23 01 49.5 -3.3**
YAK pmax pmax
comp=Z,61nm,1.4s
YAK pmax pmax
comp=N,28nm,1.5s
YAK pmax pmax
comp=E,8.0nm,1.4s
YAK pmax pmax
comp=Z,61nm,3.4s
YAK pmax pmax
comp=N,66nm,3.5s
YAK pmax pmax
comp=E,50nm,3.4s
YAK smax smax
comp=N,73nm,4.5s
YAK smax smax
comp=E,120nm,4.5s
**YAK Yakutsk 70.88 3** P **P** **22 48 10.8 -0.1**
YAK IAmb IAmb 22 48 11.7
comp=Z,35nm,0.8s
**IUG Iuzhnay 70.91 320** *e*P **P** **22 48 10.5 -1.2**
**IUG Iuzhnay baz=320 70.91 320** *e*P **P** **22 48 10.6 -1.2**
**ZAA0 Zalesovo Array 70.91 337** P **P** **22 48 09.8 -1.5**
ZAA0 IAmb IAmb 22 48 11.0
comp=Z,16nm,0.9s
**ZALV Zalesovo Beam 70.91 337** P **P** **22 48 09.9 -1.4**
comp=Z,14nm,0.9s,baz=130,slow=4.6,SNR=49
**ZALV Zalesovo Beam 70.91 337** *i*P **P** **22 48 09.8 -1.5**
ZALV pmax pmax
comp=Z,14nm,0.9s
**ZALV Zalesovo Beam 70.91 337** P **P** **22 48 09.8 -1.5**
**TAS Tashkent 70.95 319** P **P** **22 48 11.5 -0.4**
TAS pmax pmax
comp=Z,42nm,1.0s
**TAS Tashkent 70.95 319** P **P** **22 48 11.4 -0.4**
TAS IAmb IAmb 22 48 12.9
comp=Z,42nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WBK | Wadi Bani Khal | 71.12 | 298 | P | P | 22 48 13.7 | +0.4 |
| | SNR=5.8 | | | | | | |
| KKAR | Karatay Array | 71.12 | 321 | P | P | 22 48 12.1 | -0.8 |
| KKAR | Karatay Array | 71.12 | 321 | P | P | 22 48 12.1 | -0.8 |
| VNDA | Vanda | 71.29 | 172 | P | P | 22 48 13.9 | +0.6 |
| | comp=Z,3.6nm,1.0s,baz=318,slow=5.3,SNR=2.0 | | | | | | |
| VNDA | | | | LR | LR | 23 17 06.5 | |
| | comp=Z,154nm,21.5s,baz=237,slow=34 | | | | | | |
| VNDA | Vanda | 71.29 | 172 | P | P | 22 48 14.1 | +0.8 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,118nm,2.0s | | | | | | |
| VNDA | Vanda | 71.29 | 172 | P | P | 22 48 14.1 | +0.8 |
| KURK | Kurchatov | 71.30 | 331 | *c i*P | P | 22 48 13.0 | -0.7 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| KURK | Kurchatov | 71.30 | 331 | P | P | 22 48 13.0 | -0.7 |
| KURK | | | | IAmb | IAmb | 22 48 14.2 | |
| | comp=Z,27nm,0.9s | | | | | | |
| KURK | Kurchatov | 71.30 | 331 | P | P | 22 48 13.4 | -0.3 |
| BRLS | Boroldav | 71.50 | 321 | *e*P | P | 22 48 13.6 | -1.5 |
| BRLS | Boroldav | 71.50 | 321 | *e*P | P | 22 48 13.7 | -1.5 |
| | baz=321 | | | | | | |
| MHTO | MHTO | 71.50 | 296 | P | P | 22 48 14.7 | -0.8 |
| MA2 | Magadan | 71.52 | 14 | *c i*P | P | 22 48 15.3 | +0.4 |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,28nm,1.3s | | | | | | |
| MA2 | Magadan | 71.52 | 14 | P | P | 22 48 15.2 | +0.4 |
| MA2 | | | | IAmb | IAmb | 22 48 16.6 | |
| | comp=Z,23nm,1.1s | | | | | | |
| DQM | DQM | 71.57 | 294 | P | P | 22 48 16.3 | +0.3 |
| JMDO | Jabal Madar | 71.80 | 297 | P | P | 22 48 17.9 | +0.5 |
| | SNR=6.5 | | | | | | |
| SMDO | Samad | 72.06 | 298 | P | P | 22 48 18.6 | -0.4 |
| BIDO | Bidbid | 72.14 | 298 | P | P | 22 48 20.0 | +0.6 |
| | SNR=10 | | | | | | |
| HRA | Herat | 72.69 | 310 | P | P | 22 48 22.0 | -0.7 |
| BSY | Bisya | 72.71 | 297 | P | P | 22 48 22.3 | -0.5 |
| SHAO | Shalim | 72.78 | 292 | P | P | 22 48 23.1 | -0.2 |
| SHAO | Shalim | 72.78 | 292 | P | P | 22 48 22.4 | -0.9 |
| SOCY | Socotra | 72.86 | 286 | P | P | 22 48 22.9 | -1.0 |
| SOCY | Socotra | 72.86 | 286 | P | P | 22 48 23.4 | -0.5 |
| HOQ | Hoqain | 72.87 | 298 | P | P | 22 48 23.8 | +0.1 |
| | SNR=5.4 | | | | | | |
| DMTO | DMTO | 73.32 | 291 | P | P | 22 48 25.9 | -0.5 |
| ARQ | Araqi | 73.49 | 298 | P | P | 22 48 26.8 | -0.6 |
| BRZS | Berezniki | 73.80 | 328 | *e*P | P | 22 48 27.7 | -0.8 |
| BRZS | Berezniki | 73.80 | 328 | *e*P | P | 22 48 27.8 | -0.8 |
| | baz=328 | | | | | | |
| RBK | Rabkut | 73.95 | 291 | P | P | 22 48 30.0 | -0.2 |
| UOSS | Minazif | 74.25 | 299 | P | P | 22 48 30.6 | -1.2 |
| UOSS | | | | IAmb | IAmb | 22 48 32.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| UOSS | Minazif | 74.25 | 299 | P | P | 22 48 31.4 | -0.4 |
| UOSS | Minazif | 74.25 | 299 | *i* P | P | 22 48 31.3 | -0.4 |
| | SNR=7.3 | | | | | | |
| HATD | Hatta, Dubai | 74.28 | 299 | P | P | 22 48 32.1 | +0.2 |
| | SNR=6.3 | | | | | | |
| HATD | Hatta, Dubai | 74.28 | 299 | *i* P | P | 22 48 31.8 | -0.1 |
| | SNR=7.9 | | | | | | |
| ASHO | Ashiyiah | 74.30 | 299 | P | P | 22 48 32.0 | -0.1 |
| | SNR=7.6 | | | | | | |
| ASHO | Ashiyiah | 74.30 | 299 | *i* P | P | 22 48 31.8 | -0.3 |
| | SNR=16 | | | | | | |
| DOK | Doka | 74.31 | 292 | P | P | 22 48 31.2 | -0.9 |
| | SNR=24 | | | | | | |
| ALNE | Al Ain | 74.38 | 298 | P | P | 22 48 32.4 | -0.1 |
| | SNR=5.7 | | | | | | |
| ALNE | Al Ain | 74.38 | 298 | *i* P | P | 22 48 32.4 | -0.1 |
| | SNR=5.5 | | | | | | |
| MSFE | Esma-Masafi | 74.42 | 299 | *i* P | P | 22 48 33.0 | +0.3 |
| | SNR=8.5 | | | | | | |
| MASF | Masafi | 74.42 | 299 | P | P | 22 48 33.4 | +0.6 |
| WHFO | Wadi Hawf | 74.45 | 291 | P | P | 22 48 32.0 | -1.1 |
| | SNR=8.8 | | | | | | |
| BANOM | Banah | 74.47 | 300 | P | P | 22 48 33.1 | +0.1 |
| BANOM | Banah | 74.47 | 300 | P | P | 22 48 33.3 | +0.3 |
| UMZA | Um Al Zommool | 74.50 | 297 | P | P | 22 48 32.7 | -0.6 |
| SHME | Shamm | 74.64 | 300 | P | P | 22 48 34.3 | +0.3 |
| FAQ | Al Faqa, Dubai | 74.72 | 299 | P | P | 22 48 33.9 | -0.5 |
| | SNR=8.1 | | | | | | |
| FAQ | Al Faqa, Dubai | 74.72 | 299 | *i* P | P | 22 48 34.0 | -0.5 |
| | SNR=20 | | | | | | |
| NAZ | Nazwa, Dubai | 74.73 | 299 | P | P | 22 48 34.3 | -0.2 |
| | SNR=5.2 | | | | | | |
| NAZ | Nazwa, Dubai | 74.73 | 299 | *i* P | P | 22 48 34.3 | -0.2 |
| | SNR=8.3 | | | | | | |
| ABTO | Aybut | 74.75 | 291 | P | P | 22 48 34.1 | -0.7 |
| | SNR=7.9 | | | | | | |
| SEY | Seymchan | 74.86 | 13 | ⇑*i*P | P | 22 48 34.8 | +0.4 |
| ABPO | Ambohimpanom | 74.88 | 253 | P | P | 22 48 36.7 | +0.9 |
| ABPO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| ABPO | Ambohimpanom | 74.88 | 253 | P | P | 22 48 36.7 | +0.9 |
| ASUD | Al Ashush, Dub | 74.91 | 298 | P | P | 22 48 35.4 | -0.1 |
| ASUD | Al Ashush, Dub | 74.91 | 298 | *i* P | P | 22 48 35.6 | 0.0 |
| | SNR=7.0 | | | | | | |
| OPO | Ambohidratompo | 74.96 | 253 | P | P | 22 48 38.0 | +1.8 |
| | comp=Z,12nm,0.8s,baz=73,slow=5.6,SNR=14 | | | | | | |
| VOI | Vohitsoka | 75.09 | 250 | P | P | 22 48 38.1 | +1.3 |
| VOI | | | | IAmb | IAmb | 22 48 39.8 | |
| | comp=Z,16nm,1.0s | | | | | | |
| MZWR | Madinat Zayed | 75.93 | 297 | P | P | 22 48 41.1 | -0.2 |
| MZR | Muzera | 76.07 | 296 | P | P | 22 48 42.3 | +0.1 |
| | SNR=6.2 | | | | | | |
| MZR | Muzera | 76.07 | 296 | *i* P | P | 22 48 42.1 | -0.2 |
| | SNR=14 | | | | | | |
| BRVK | Borovoye | 76.81 | 330 | *c i*P | P | 22 48 44.7 | -1.0 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| BRVK | Borovoye | 76.81 | 330 | P | P | 22 48 45.2 | -0.6 |
| BRVK | Borovoye | 76.81 | 330 | P | P | 22 48 45.4 | -0.3 |
| GEYT | Alibeck | 77.15 | 312 | P | P | 22 48 47.1 | -1.0 |
| | comp=Z,3.1nm,0.5s,baz=218,slow=18,SNR=7.2 | | | | | | |
| GEYT | Alibeck | 77.15 | 312 | P | P | 22 48 47.0 | -1.1 |
| GYA0B | ALIBECK ARRAY | 77.15 | 312 | P | P | 22 48 47.4 | -0.6 |
| SAKB | Bahrain | 79.45 | 299 | P | P | 22 49 00.6 | -0.4 |
| TIXI | Tiksi | 80.47 | 1 | ⇓*i*P | P | 22 49 04.8 | -0.6 |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| TIXI | Tiksi | 80.47 | 1 | P | P | 22 49 04.7 | -0.7 |
| TIXI | | | | IAmb | IAmb | 22 49 06.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 80.52 | 323 | P | P | 22 49 05.7 | -0.5 |
| ABKAR | Akbulak array | 80.52 | 323 | P | P | 22 49 05.7 | -0.5 |
| QSPA | South Pole Qui | 81.06 | 180 | P | P | 22 49 10.7 | +1.7 |
| | comp=Z,5.7nm,0.9s,baz=298,slow=1.0,SNR=12 | | | | | | |
| QSPA | South Pole Qui | 81.06 | 180 | P | P | 22 49 09.3 | +0.3 |
| NRIK | Noril'sk | 82.12 | 348 | P | P | 22 49 14.5 | +0.3 |
| | comp=Z,1.9nm,0.4s,baz=149,slow=5.4,SNR=11 | | | | | | |
| NRIK | | | | LR | LR | 23 27 01.6 | |
| | comp=Z,1μm,21.3s,baz=305,slow=37 | | | | | | |
| NRIK | Noril'sk | 82.12 | 348 | *c e*P | P | 22 49 14.1 | -0.1 |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| NRIK | Noril'sk | 82.12 | 348 | P | P | 22 49 14.4 | +0.2 |
| BILL | Bilibino | 82.36 | 15 | *e*P | P | 22 49 15.2 | -0.3 |
| BILL | | | | *e**PP | pP | 22 49 42.5 | +2.0 |
| BILL | | | | *e**SP | sP | 22 49 52.0 | +1.1 |
| BILL | | | | *e* | | 22 52 23.5 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.8s | | | | | | |
| RAYN | Ar Rayn | 83.30 | 295 | P | P | 22 49 21.5 | +0.1 |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| RAYN | Ar Rayn | 83.30 | 295 | P | P | 22 49 21.5 | +0.1 |
| RAYN | | | | IAmb | IAmb | 22 49 22.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| RAYN | Ar Rayn | 83.30 | 295 | P | P | 22 49 21.9 | +0.5 |
| RAYN | Ar Rayn | 83.30 | 295 | *i* P | P | 22 49 21.7 | +0.2 |
| | SNR=33 | | | | | | |
| ATD | Arta Tunnel | 83.39 | 283 | P | P | 22 49 23.0 | +0.9 |
| SVE | Sverdlovsk | 83.51 | 330 | *e*P | P | 22 49 21.7 | 0.0 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | |
| LKRN | Lenkeran, Azer | 84.34 | 310 | P | P | 22 49 26.5 | +0.2 |
| ARU | Arti | 84.37 | 329 | LR | LR | 23 32 23.9 | |
| | comp=Z,770nm,19.4s,baz=301,slow=39 | | | | | | |
| ARU | Arti | 84.37 | 329 | *de*P | P | 22 49 25.4 | -0.6 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| ARU | Arti | 84.37 | 329 | P | P | 22 49 25.1 | -0.9 |
| KIBK | Kibwezi | 85.84 | 268 | P | P | 22 49 34.5 | +0.1 |
| KIBK | | | | IAmb | IAmb | 22 49 36.9 | |
| | comp=Z,13nm,1.3s | | | | | | |
| KIBK | Kibwezi | 85.84 | 268 | P | P | 22 49 35.9 | +1.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MNGR | Mingechevir, A | 86.16 | 312 | P | P | 22 49 35.4 | +0.1 |
| SEKA | Sheki | 86.19 | 313 | P | P | 22 49 36.0 | +0.4 |
| GANJ | Ganja | 86.69 | 312 | P | P | 22 49 37.7 | -0.3 |
| KMBO | Kilima Mbogo | 86.81 | 269 | P | P | 22 49 40.0 | +0.6 |
| | comp=Z,5.1nm,1.0s,baz=34,slow=5.3,SNR=12 | | | | | | |
| KMBO | Kilima Mbogo | 86.81 | 269 | *i* P | P | 22 49 40.5 | +1.1 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| KMBO | Kilima Mbogo | 86.81 | 269 | P | P | 22 49 39.7 | +0.3 |
| KMBO | Kilima Mbogo | 86.81 | 269 | P | P | 22 49 40.8 | +1.4 |
| KMBO | Kilima Mbogo | 86.81 | 269 | *i* P | P | 22 49 40.8 | +1.4 |
| | SNR=8.6 | | | | | | |
| NAX | Nakhchivan | 86.94 | 310 | P | P | 22 49 38.8 | -0.5 |
| GROC | Groznyy | 87.70 | 314 | *e*P | P | 22 49 40.6 | -2.1 |
| GROC | | | | *e**PP | pP | 22 50 07.8 | -0.2 |
| GROC | | | | *e*S | SKSac | 22 59 58.5 | -3.3 |
| GROC | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| GNI | Garni | 87.73 | 311 | *de*P | P | 22 49 43.9 | +0.7 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,18nm,1.7s | | | | | | |
| GNI | Garni | 87.73 | 311 | P | P | 22 49 43.5 | +0.3 |
| GNI | | | | IAmb | IAmb | 22 49 47.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| GNI | Garni | 87.73 | 311 | P | P | 22 49 45.0 | +1.8 |
| GNI | Garni | 87.73 | 311 | P | P | 22 49 44.5 | +1.3 |
| BELG | Belogornoye | 88.93 | 323 | *c i*P | P | 22 49 47.4 | -0.9 |
| BELG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| ZEI | Tsey | 88.96 | 313 | *e*P | P | 22 49 48.8 | -0.2 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| NCK | Nalchik | 89.33 | 314 | ⇓*e*P | P | 22 49 50.9 | +0.4 |
| NCK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| LODK | Lodwar | 89.37 | 274 | P | P | 22 49 51.7 | +0.3 |
| LODK | | | | IAmb | IAmb | 22 49 53.8 | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| GURO | Guroymak-BITLI | 89.43 | 309 | P | P | 22 49 51.2 | 0.0 |
| GURO | | | | IAmb | IAmb | 22 49 53.4 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| KBZ | Khabaz | 89.88 | 314 | P | P | 22 49 52.9 | 0.0 |
| | comp=Z,4.2nm,0.8s,baz=133,slow=4.0,SNR=11 | | | | | | |
| KBZ | Khabaz | 89.88 | 314 | *ce*P | P | 22 49 52.4 | -0.5 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| NEY | Neytrino | 89.90 | 314 | ⇓*e*P | P | 22 49 53.3 | 0.0 |
| NEY | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| GOF | Gofitskoye | 90.06 | 316 | ⇑*e*P | P | 22 49 54.0 | +0.2 |
| MATP | Matopo | 92.20 | 249 | P | P | 22 50 05.7 | +1.2 |
| | comp=Z,1.0nm,0.4s,baz=55,slow=9.1,SNR=5.4 | | | | | | |
| VRH | Novokhopyorsk | 92.21 | 321 | *e*P | P | 22 50 00.8 | -2.8 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| SNAA | Sanae | 92.40 | 195 | P | P | 22 50 05.5 | +1.3 |
| | comp=Z,6.0nm,0.9s,baz=153,slow=4.2,SNR=6.4 | | | | | | |
| SNAA | Sanae | 92.40 | 195 | ⇑*e*P | P | 22 50 05.7 | +1.5 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,24nm,2.3s | | | | | | |
| SNAA | Sanae | 92.40 | 195 | P | P | 22 50 05.8 | +1.5 |
| BELA | Belgrano 2 | 92.52 | 184 | P | P | 22 50 06.5 | +1.9 |
| BELA | | | | IAmb | IAmb | 22 50 07.8 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| MBAR | Mbarara | 93.32 | 269 | P | P | 22 50 10.6 | +0.8 |
| | comp=Z,1.2nm,0.2s,baz=5.9,slow=9.3,SNR=4.4 | | | | | | |
| MBAR | Mbarara | 93.32 | 269 | *ce*P | P | 22 50 11.5 | +1.7 |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| MBAR | Mbarara | 93.32 | 269 | P | P | 22 50 10.1 | +0.2 |
| LSZ | Lusaka | 93.40 | 254 | P | P | 22 50 11.0 | +0.9 |
| | comp=Z,4.7nm,0.8s,baz=108,slow=3.4,SNR=14 | | | | | | |
| LSZ | Lusaka | 93.40 | 254 | P | P | 22 50 11.0 | +0.9 |
| LSZ | Lusaka | 93.40 | 254 | P | P | 22 50 10.5 | +0.4 |
| LSZ | | | | IAmb | IAmb | 22 50 12.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| BOSA | Boshof | 93.52 | 240 | P | P | 22 50 12.1 | +1.6 |
| | comp=Z,2.7nm,0.9s,baz=207,slow=10,SNR=3.2 | | | | | | |
| BOSA | Boshof | 93.52 | 240 | P | P | 22 50 11.5 | +1.1 |
| VORD | Divnogorie | 93.67 | 321 | *e*P | P | 22 50 08.5 | -1.8 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| VSR | Storozhevoye | 93.79 | 321 | *e*P | P | 22 50 08.3 | -2.6 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| VORR | Voronezh | 93.84 | 322 | *e*P | P | 22 50 08.8 | -2.3 |
| VORR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| LPSR | Galich'ya Gora | 94.16 | 322 | *e*P | P | 22 50 06.2 | -6.3 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KLMR | Klimovskoe | 95.14 | 331 | *e*P | P | 22 50 13.8 | -3.0 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| KLMR | Klimovskoe | 95.14 | 331 | *e*P | P | 22 50 13.8 | -3.0 |
| KLMR | | | | AMP | | 22 50 16.0 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| OBN | Obninsk | 95.90 | 325 | *e*P | P | 22 50 18.7 | -1.7 |
| OBN | | | | *e*PPP | PPP | 22 56 18.4 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,28nm,3.1s | | | | | | |
| BR131 | Keskin Array S | 96.06 | 309 | ⇓*e*P | P | 22 50 20.4 | -1.4 |
| BRTR | Keskin Array B | 96.06 | 309 | P | P | 22 50 19.9 | -1.8 |
| | comp=Z,0.8nm,1.0s,baz=134,slow=3.9,SNR=5.1 | | | | | | |
| BRTR | Keskin Array B | 96.06 | 309 | *i* P | P | 22 50 23.1 | +1.3 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| COLA | College | 97.15 | 25 | ⇓*e*P | Pdif | 22 50 26.5 | +0.6 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,16nm,2.6s | | | | | | |
| ILAR | Eielson Array | 97.55 | 26 | P | P | 22 50 25.9 | -1.7 |
| | comp=Z,0.8nm,0.6s,baz=243,slow=4.7,SNR=8.1 | | | | | | |
| ILAR | | | | LR | LR | 23 36 24.9 | |
| | comp=Z,1μm,18.6s,baz=76,slow=36 | | | | | | |
| ILAR | Eielson Array | 97.55 | 26 | P | P | 22 50 26.0 | -1.7 |
| AKSG | Malin Array Be | 99.99 | 320 | P | Pdif | 22 50 37.8 | -1.1 |
| | comp=Z,0.7nm,0.5s,baz=79,slow=4.5,SNR=8.4 | | | | | | |
| AKASG | | | | PP | PP | 22 54 46.4 | +1.1 |
| | comp=Z,2.8nm,0.9s,baz=79,slow=6.8,SNR=9.8 | | | | | | |
| AKASG | Malin Array Be | 99.99 | 320 | *i* P | Pdif | 22 50 37.7 | -1.2 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| AKBB | Malin Array Si | 99.99 | 320 | ⇑*e*P | Pdif | 22 50 37.4 | -1.5 |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 111.98 | 25 | Pdiff | Pdif | 22 51 29.8 | -2.2 |
| | comp=Z,1.0nm,0.8s,baz=265,slow=4.5,SNR=9.1 | | | | | | |
| YKA | | | | PKiKP | PKiKP | 22 55 28.9 | +0.7 |
| | comp=Z,0.2nm,0.5s,baz=306,slow=2.3,SNR=5.1 | | | | | | |
| PDAR | Pinedale Array | 122.32 | 45 | PKP | PKPdf | 22 55 47.6 | -1.4 |
| | comp=Z,0.5nm,0.8s,baz=45,slow=0.4,SNR=4.9 | | | | | | |
| TORD | Torodi Ar. Bea | 123.50 | 280 | PKP | PKiKP | 22 55 52.1 | +0.1 |
| | comp=Z,4.9nm,0.8s,baz=60,slow=2.0,SNR=32 | | | | | | |
| ESDC | Sonseca Array | 124.70 | 312 | PKP | PKPdf | 22 55 53.4 | -0.1 |
| | comp=Z,1.1nm,0.8s,baz=4.7,slow=4.6,SNR=4.4 | | | | | | |
| DBIC | Dimbokro | 129.50 | 271 | PKP | PKPdf | 22 56 03.5 | +0.2 |
| | comp=Z,3.4nm,0.8s,baz=127,slow=5.3,SNR=3.6 | | | | | | |
| DBIC | Dimbokro | 129.50 | 271 | | PKPdf | 22 56 03.0 | -0.2 |
| TXAR | Lajitas Array | 130.84 | 59 | PKP | PKiKP | 22 56 06.1 | -0.4 |
| | comp=Z,0.5nm,0.8s,baz=209,slow=3.2,SNR=5.9 | | | | | | |
| TXAR | | | | SKPbc | SKPab | 22 59 22.5 | +1.4 |
| | comp=Z,1.9nm,1.0s,baz=268,slow=3.4,SNR=12 | | | | | | |
| TXAR | Lajitas Array | 130.84 | 59 | PKiKP | PKPdf | 22 56 05.9 | +0.4 |
| TXAR | Lajitas Array | 130.84 | 59 | | PKPdf | 22 56 05.9 | +0.4 |
| SCHQ | Schefferville | 133.39 | 9 | PKP | PKPdf | 22 56 08.1 | -1.4 |
| | comp=Z,3.5nm,0.9s,baz=342,slow=3.2,SNR=2.7 | | | | | | |
| SCHQ | | | | SKPbc | SKPab | 22 59 30.1 | -0.9 |
| | comp=Z,4.4nm,1.0s,baz=41,slow=11,SNR=2.8 | | | | | | |
| SCHQ | Schefferville | 133.39 | 9 | | PKPdf | 22 56 09.0 | -0.5 |
| CPUP | Villa Florida | 144.91 | 178 | PKPbc | PKPdf | 22 56 32.7 | +1.4 |
| | comp=Z,13nm,0.8s,baz=166,slow=2.9,SNR=13 | | | | | | |
| PB11 | IPOC Station P | 148.39 | 155 | | PKPbc | 22 56 40.8 | -0.3 |
| LPAZ | La Paz | 152.13 | 154 | PKPbc | PKiKP | 22 56 52.0 | +1.0 |
| | comp=Z,2.5nm,0.7s,baz=131,slow=3.4,SNR=12 | | | | | | |

*IDC* ***27*** *22:58:21.8±3.4, 26°.22N×96°.74E, h184km±36km, mb3.0/11, mb1 3.1/12, mb1mx3.1/36, mbtmp3.5/12 Error ellipse: s-maj=37.1km s-min=14.8km az=59.0*

**ISC 27 22:58:18.9±0.8, 26°.3N±0°.1×96°.7E±0°.2, h150km, n12, σ1℠35/12, mb3.4/11, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 8.09 | 165 | P | Pn | 23 00 14.8 | +1.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0.5nm,0.3s,baz=326,slow=11,SNR=4.1 | | | | | | |
| SONM | Songino Array | 22.77 | 17 | P | P | 23 03 09.2 | +0.7 |
| | 0.3nm,0.5s,baz=197,slow=8.2,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 23.42 | 334 | P | P | 23 03 16.0 | +1.6 |
| | 2.4nm,0.7s,baz=140,slow=10,SNR=34 | | | | | | |
| AAK | Ala-Archa | 24.40 | 317 | P | P | 23 03 25.7 | +2.2 |
| | 0.7nm,0.7s,baz=118,slow=7.6,SNR=6.0 | | | | | | |
| KURBB | Kurchatov Arra | 27.98 | 335 | P | P | 23 03 55.2 | -0.2 |
| | 0.4nm,0.8s,baz=266,slow=18,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 28.97 | 345 | P | P | 23 04 03.7 | -0.3 |
| | 0.8nm,0.5s,baz=168,slow=7.6,SNR=4.6 | | | | | | |
| BRTR | Keskin Array B | 53.56 | 301 | P | P | 23 07 23.0 | -1.5 |
| | 0.2nm,0.6s,baz=105,slow=9.1,SNR=2.5 | | | | | | |
| AKASG | Malin Array Be | 56.03 | 315 | P | P | 23 07 41.0 | -0.8 |
| | 0.5nm,0.4s,baz=78,slow=6.2,SNR=4.7 | | | | | | |
| WRA | Warramunga Arr | 58.71 | 138 | P | P | 23 07 59.6 | -1.5 |
| | 0.3nm,0.6s,baz=328,slow=7.8,SNR=3.1 | | | | | | |
| ARCES | ARCESS Array B | 59.04 | 337 | P | P | 23 08 03.1 | +0.5 |
| | 0.9nm,0.7s,baz=69,slow=6.8,SNR=4.3 | | | | | | |
| ASAR | Alice Springs | 61.34 | 141 | P | P | 23 08 18.0 | -0.9 |
| | 0.1nm,0.5s,baz=329,slow=6.8,SNR=1.6 | | | | | | |
| NOA | NORSAR Array B | 65.20 | 328 | P | P | 23 08 44.6 | +0.7 |
| | 0.9nm,0.8s,baz=80,slow=6.2,SNR=3.6 | | | | | | |

*ECGS* ***27*** *23:05:13.6, 1°.18S±0°.04×29°.38E±0°.05, h1km±3km, ML3.0, Error ellipse: s-maj=10.4km s-min=3.3km az=122.2, smi:local/36620b64-3895-49de-9cb8-37316e23ec67 Note: Depth/Latitude/Longitude errors are calculated from covariance matrix as 1D marginal (Lon/Lat errors as great circle degrees) while OriginUncertainty min/max horizontal errors are calculated from 2D error ellipsoid and are therefore seemingly higher compared to 1D errors. Error estimates can be reconstructed from the following original NonLinLoc error statistics line:STATISTICS ExpectX 38.3817 Y 37.5006 Z 3.33977 CovXX 35.3095 XY -19.1765 XZ -4.3183 YY 16.9322 YZ 2.00274 ZZ 11.2604 EllAz1 32.847 Dip1 5.82576 Len1 4.11405 Az2 160.992 Dip2 80.62 Len2 6.15019 Len3 1.301584e+01*

**ISC 27 23:05:10.5±1.2, 1°.04S±0°.04×29°.28E±0°.05, h8km±13km, n16, σ0℠44/21, Lake Tanganyika region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TGO | Tongo | 0.16 | 181 | *i* P | Pg | 23 05 14.3 | +0.2 |
| TGO | | | | *i* S | Sg | 23 05 16.2 | -0.3 |
| KTSH | Kitshanga | 0.30 | 229 | *i* P | Pg | 23 05 16.8 | +0.2 |
| RGB | Rumangabo | 0.31 | 163 | *i* P | Pg | 23 05 17.2 | +0.3 |
| RGB | | | | *i* S | Sg | 23 05 20.6 | -0.4 |
| BUTK | Butaka | 0.51 | 167 | *i* P | Pg | 23 05 20.8 | +0.3 |
| BUTK | Butaka | 0.51 | 167 | *i* S | Sg | 23 05 26.9 | -0.2 |
| RSY | Rusayo | 0.54 | 190 | *i* P | Pb | 23 05 22.3 | -0.1 |
| SAHA | Sahara | 0.58 | 152 | *i* S | Sg | 23 05 28.5 | -0.9 |
| SAHA | Sahara | 0.58 | 152 | *i* P | Pg | 23 05 21.8 | 0.0 |
| GOM | Goma | 0.63 | 184 | *i* P | Pg | 23 05 23.6 | +0.7 |
| GOM | Goma | 0.63 | 184 | *i* S | Sg | 23 05 31.6 | +0.4 |
| BOBN | Bobandana | 0.71 | 202 | *i* P | Pg | 23 05 23.4 | -0.9 |
| IDJ | Idjwi | 1.03 | 192 | *i* P | Pg | 23 05 30.1 | -0.4 |
| LWI | Lwiro | 1.28 | 202 | *i* P | Pb | 23 05 35.2 | +0.2 |
| KIL | Kilembe | 1.44 | 31 | *e*P | Pg | 23 05 38.1 | -0.1 |
| KIL | | | | *e*S | Sg | 23 05 56.9 | +0.1 |
| MBAR | Mbarara | 1.53 | 73 | *i* P | Pg | 23 05 39.8 | -0.1 |
| MBAR | | | | *i* S | Sg | 23 05 59.6 | -0.1 |
| MBAR | Mbarara | 1.53 | 73 | *e*P | Pg | 23 05 39.8 | -0.1 |
| MBAR | | | | *e*S | Sb | 23 05 59.2 | +0.4 |

*SOME* ***27*** *23:07:09.2, 39°.58N×71°.00E, h15km*
*KRNET* ***27*** *23:07:15.2±0.1, 39°.78N×70°.12E, h11km, mb2.5*
*NNC* ***27*** *23:07:18.1±9.9, 39°.70N×70°.40E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=73.9km s-min=44.2km az=22.0*

**ISC 27 23:07:16.1±1.6, 39°.68N±0°.03×70°.30E±0°.05, h0km±12km, n16, σ1℠76/28, 12C-8D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BTK | Batken | 0.55 | 46 | ⇑*i* P | Pg | 23 07 27.0 | +0.3 |
| | baz=62 | | | | | | |
| BTK | | | | ⇑*i* S | Sb | 23 07 35.5 | -1.7 |
| | baz=62 | | | | | | |
| GAR | Garm | 0.68 | 179 | ⇑*i* P | Pg | 23 07 30.1 | +1.0 |
| | baz=69 | | | | | | |
| GAR | | | | ⇑*e* S | Sb | 23 07 41.7 | +0.9 |
| | baz=69 | | | | | | |
| DRK | Karamyk | 1.18 | 99 | ⇑*i* P | Pn | 23 07 40.6 | +0.5 |
| | baz=2.0 | | | | | | |
| DRK | | | | ⇑*i* S | Sn | 23 07 59.1 | +2.2 |
| | baz=2.0 | | | | | | |
| CHGR | Chuyangaron | 1.35 | 221 | ⇓*e*P | Pn | 23 07 40.6 | -1.7 |
| | baz=14 | | | | | | |
| CHGR | | | | ⇓*i* S | Sn | 23 07 59.1 | -1.8 |
| | baz=14 | | | | | | |
| TRKS | Terek-Say | 1.96 | 19 | ⇓*i* P | Pn | 23 07 49.6 | -1.1 |
| | baz=25 | | | | | | |
| TRKS | | | | ⇓*i* S | Sn | 23 08 15.8 | -0.2 |
| | baz=25 | | | | | | |
| OHH | Osh | 2.08 | 65 | ⇑*i* P | Pb | 23 07 54.1 | -0.7 |
| | baz=69 | | | | | | |
| OHH | | | | ⇑*i* S | Sg | 23 08 22.9 | -0.2 |
| | baz=69 | | | | | | |
| ARK | Arkit | 2.47 | 30 | ⇑*i* P | Pn | 23 07 58.5 | +0.9 |
| | baz=34 | | | | | | |
| ARK | | | | ⇑*i* S | Sb | 23 08 30.2 | -2.1 |
| | baz=34 | | | | | | |
| IUG | Iuzhnay | 2.48 | 355 | *e*P | Pn | 23 07 58.5 | +0.7 |
| | 88nm,0.3s | | | | | | |
| IUG | | | | *e*S | Sn | 23 08 29.1 | +0.4 |
| | 33nm,0.4s | | | | | | |
| IUG | Iuzhnay | 2.48 | 355 | Pg | Pn | 23 07 58.4 | +0.7 |
| | 88nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 23 08 29.1 | |
| | 33nm,0.4s | | | | | | |
| BRLS | Boroldav | 3.37 | 354 | *e*P | Pn | 23 08 12.1 | +2.1 |
| | 0.7nm,0.1s | | | | | | |
| BRLS | | | | *

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBVI** | **Tortola** | **0.86** | **163** | ‖*e*P | **Pn** | **23 11 38.7** | **-0.5** |
| **TBVI** | **Tortola** | **0.86** | **163** | *e*S | **Sn** | **23 11 52.0** | **+1.4** |
| **STVI** | **Saint Thomas** | **0.89** | **184** | ‖*e*P | **Pn** | **23 11 39.0** | **-0.7** |
| **STVI** | **Saint Thomas** | **0.89** | **184** | *e*S | **Sn** | **23 11 51.9** | **+0.6** |
| **STVI** | **Saint Thomas** | **0.89** | **184** | Pn | **Pn** | **23 11 38.9** | **-0.7** |
| **STVI** | **Saint Thomas** | **0.89** | **184** | | **Sn** | **23 11 51.9** | **+0.6** |
| **STVI** | **Saint Thomas** | **0.89** | **184** | IAML | | 23 11 52.8 | |
| | comp=N,32nm,0.2s | | | | | | |
| **CUPR** | **Culebra, Puert** | **1.01** | **202** | ‖*e*P | **Pn** | **23 11 40.5** | **-0.7** |
| **CUPR** | **Culebra, Puert** | **1.01** | **202** | *e*S | **Sn** | **23 11 54.3** | **+0.2** |
| **CUPR** | **Culebra, Puert** | **1.01** | **202** | | **Pn** | **23 11 40.5** | **-0.7** |
| CUPR | | | | | **Sn** | **23 11 54.3** | **+0.2** |
| **CUPR** | **Culebra, Puert** | **1.01** | **202** | IAML | | 23 11 58.5 | |
| | comp=N,42nm,0.4s | | | | | | |
| **MTP** | **Monte Pirata** | **1.30** | **209** | ‖*e*P | **Pn** | **23 11 45.1** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.30** | **209** | *e*S | **Sn** | **23 12 02.0** | **+0.5** |
| **MTP** | **Monte Pirata** | **1.30** | **209** | | **Pn** | **23 11 45.1** | **-0.1** |
| MTP | | | | | **Sn** | **23 12 02.0** | **+0.5** |
| **MTP** | **Monte Pirata** | **1.30** | **209** | IAML | | 23 12 05.2 | |
| | comp=N,21nm,0.4s | | | | | | |
| MTP | | | | IAML | | 23 12 06.5 | |
| | comp=E,30nm,0.2s | | | | | | |
| **CBYP** | **Canovanas** | **1.33** | **224** | Pn | **Pn** | **23 11 45.2** | **-0.6** |
| **HUMP** | **Col San Antoni** | **1.43** | **220** | ‖*e*P | **Pn** | **23 11 46.8** | **-0.2** |
| **HUMP** | **Col San Antoni** | **1.43** | **220** | *e*S | **Sn** | **23 12 04.3** | **-0.2** |
| **HUMP** | **Col San Antoni** | **1.43** | **220** | | **Pn** | **23 11 46.8** | **-0.2** |
| HUMP | | | | | **Sn** | **23 12 04.3** | **-0.2** |
| **HUMP** | **Col San Antoni** | **1.43** | **220** | IAML | | 23 12 10.0 | |
| | comp=N,21nm,0.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.47** | **231** | Pn | **Pn** | **23 11 46.5** | **-1.0** |
| **PDPR** | **Patillas Dam,** | **1.63** | **222** | Pn | **Pn** | **23 11 48.4** | **-1.3** |
| PDPR | | | | IAML | | 23 12 01.0 | |
| | comp=E,38nm,1.9s | | | | | | |
| **SJG** | **San Juan** | **1.64** | **227** | Pn | **Pn** | **23 11 50.5** | **+0.5** |
| SJG | | | | IAML | | 23 12 13.5 | |
| | comp=E,12nm,0.5s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.98** | **243** | Pn | **Pn** | **23 11 54.7** | **+0.1** |
| AOPR | | | | IAML | | 23 12 33.8 | |
| | comp=N,25nm,1.4s | | | | | | |
| **CELP** | **Cerrillos** | **1.98** | **234** | Pn | **Pn** | **23 11 54.3** | **-0.3** |
| CELP | | | | IAML | | 23 12 23.5 | |
| | comp=E,15nm,2.3s | | | | | | |
| CELP | | | | IAML | | 23 13 00.4 | |
| | comp=N,20nm,2.7s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.44** | **240** | Pn | **Pn** | **23 12 01.2** | **+0.3** |
| CRPR | | | | IAML | | 23 13 34.9 | |
| | comp=E,16nm,1.3s | | | | | | |
| **ANBD** | **Bethesda, Anti** | **3.69** | **126** | *e*P | **Pn** | **23 12 17.6** | **-0.4** |

**JMA 27 23:45:42.3±0.2, 24.88N×123.79E, h0km, M1.7, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.55** | **186** | P | Pg | 23 45 53.4 | +0.6 |
| IRIF | | | | *e*S | Sg | 23 46 01.2 | +1.4 |
| **JISG** | **Ishigakijimahi** | **0.56** | **122** | P | Pg | 23 45 53.6 | +0.6 |
| JISG | | | | S | Sb | 23 46 01.9 | -1.5 |
| **JIJ** | **Ishigaki jima** | **0.61** | **148** | P | Pg | 23 45 54.4 | +0.5 |
| JIJ | | | | S | Sg | 23 46 02.6 | +0.8 |
| **JKRS** | **Kuro-shima** | **0.67** | **163** | P | Pg | 23 45 56.0 | +0.9 |
| JKRS | | | | S | Sg | 23 46 04.9 | +1.1 |
| **HATJ** | **Hateruma jima** | **0.82** | **179** | P | Pg | 23 45 58.5 | +0.5 |
| HATJ | | | | S | Sb | 23 46 10.1 | -0.9 |

**TAP 27 23:46:02.1, 24.89N×122.01E, h18km, ML1.8, C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.12** | **352** | *i* P | Pg | 23 46 06.1 | +0.2 |
| | baz=353 | | | | | | |
| TWB1 | | | | *e*S | Sg | 23 46 08.5 | 0.0 |
| | baz=353 | | | | | | |
| **NTC** | **Toucheng** | **0.16** | **257** | *e*P | Pb | 23 46 05.9 | -0.3 |
| | baz=257 | | | | | | |
| **TIPB** | **Shuangxi** | **0.18** | **296** | *i* P | Pg | 23 46 06.9 | +0.1 |
| | baz=296 | | | | | | |
| TIPB | | | | S | Sg | 23 46 10.0 | 0.0 |
| | baz=296 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.23** | **330** | *i* P | Pb | 23 46 08.4 | +0.7 |
| | baz=329 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.27** | **311** | P | Pb | 23 46 09.0 | +0.6 |
| | baz=302 | | | | | | |
| **TWC** | **Suao** | **0.32** | **207** | *e*P | Pg | 23 46 08.6 | -0.2 |
| | baz=212 | | | | | | |
| TWC | | | | *e*S | Sg | 23 46 13.4 | -0.1 |
| | baz=212 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.40** | **251** | *e*P | Pg | 23 46 10.0 | -0.5 |
| | baz=252 | | | | | | |
| **NWLT** | **Wulai** | **0.47** | **256** | *e*P | Pg | 23 46 11.3 | -0.4 |
| | baz=257 | | | | | | |
| **YHNB** | **Yeheng** | **0.61** | **249** | *e*P | Pg | 23 46 13.7 | -0.6 |
| | baz=249 | | | | | | |
| **NACB** | **Ninganchiao** | **0.81** | **208** | *e*P | Pb | 23 46 17.5 | -0.1 |
| | baz=209 | | | | | | |

*CNRM **27** 23:58:25.5, 35.97N×3.18W, h10km, ml2.8*
*MDD **27** 23:58:26.2±0.3, 35.99N×3.17W, h0km, mb_Lg3.0/10, Error ellipse: s-maj=2.9km s-min=2.5km az=46.0*
*SFS **27** 23:58:26.0, 35.99N×3.12W, ML3.1, ALBORAN S.*
*INMG **27** 23:58:26.5±1.2, 36.00N×3.12W, h0km, ML2.4, Error ellipse: s-maj=3.9km s-min=1.7km az=66.0*
**ISC 27 23:58:24.6±1.3, 36.00N±0.02×3.19W±0.04, h2km±11km, n37, σ1s46/61, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.14** | **113** | Pg | **Pg** | **23 58 27.7** | **+0.5** |
| EALB | | | | Sg | **Sg** | **23 58 28.9** | **-0.2** |
| **EMEL** | **Melilla** | **0.72** | **165** | Pg | **Pb** | **23 58 39.8** | **0.0** |
| EMEL | | | | Sg | **Sg** | **23 58 48.9** | **+1.2** |
| **ELGU** | **Los Guajares,** | **0.94** | **338** | Pg | **Pb** | **23 58 43.9** | **+0.3** |
| ELGU | | | | Sg | **Sb** | **23 58 56.8** | **+0.2** |
| ELGU | | | | *i* Vmb_Lg | | 23 58 58.3 | |
| **EQUE** | **Quentar** | **1.22** | **351** | Pg | **Pn** | **23 58 49.2** | **+0.4** |
| EQUE | | | | Sg | **Sg** | **23 59 04.6** | **+0.7** |
| EQUE | | | | *i* Vmb_Lg | | 23 59 07.2 | |
| **ENIJ** | **Nijar** | **1.26** | **39** | Pg | **Pb** | **23 58 48.5** | **-0.5** |
| ENIJ | | | | Sg | **Sg** | **23 59 03.8** | **-1.1** |
| ENIJ | | | | *i* Vmb_Lg | | 23 59 11.3 | |
| **EGOR** | **Sierra Gorda,** | **1.34** | **327** | Sg | **Sn** | **23 59 09.8** | **+0.9** |
| EGOR | | | | *i* Vmb_Lg | | 23 59 15.5 | |
| **TAF** | **Taforalt** | **1.34** | **151** | P | **Pn** | **23 58 48.9** | **-1.5** |
| TAF | | | | S | **Sb** | **23 59 06.0** | **-2.0** |
| **EMIJ** | **Mijas** | **1.40** | **294** | Pg | **Pn** | **23 58 50.1** | **-1.0** |
| EMIJ | | | | Sg | **Sb** | **23 59 07.2** | **-2.6** |
| EMIJ | | | | *i* Vmb_Lg | | 23 59 13.9 | |
| **SMIR** | **Smir Dam** | **1.81** | **261** | P | **Pn** | **23 58 56.1** | **-0.6** |
| SMIR | | | | S | **Sn** | **23 59 18.6** | **-1.6** |
| **EJIF** | **Jimena Fronter** | **1.90** | **285** | Pn | **Pn** | **23 58 58.4** | **+0.5** |
| **ECAB** | **El Cabril** | **2.74** | **320** | Pn | **Pn** | **23 59 10.2** | **+0.7** |
| ECAB | | | | Sn | **Sn** | **23 59 42.8** | **-0.4** |
| ECAB | | | | *i* Vmb_Lg | | 23 59 56.6 | |
| **IFR** | **Ifrane** | **2.94** | **213** | P | **Pn** | **23 59 12.6** | **+0.1** |
| IFR | | | | S | **Sn** | **23 59 47.2** | **-1.2** |
| **ETOB** | **Tobarra** | **2.95** | **26** | Pn | **Pn** | **23 59 13.6** | **+1.1** |
| ETOB | | | | Sn | **Sn** | **23 59 48.1** | **-0.5** |
| **TDRA** | **Tendrara** | **3.10** | **162** | P | **Pn** | **23 59 15.3** | **+0.6** |
| TDRA | | | | S | **Sn** | **23 59 55.0** | **+2.6** |
| **MD31** | **MD31** | **3.38** | **203** | P | **Pn** | **23 59 19.3** | **+0.9** |
| **MDT** | **Midelt** | **3.38** | **201** | P | **Pn** | **23 59 19.3** | **+0.8** |
| MDT | | | | S | **Sn** | **00 00 00.2** | **+1.0** |
| **PAB** | **San Pablo** | **3.66** | **346** | Pn | **Pn** | **23 59 24.3** | **+2.0** |
| PAB | | | | Sn | **Sn** | **00 00 06.8** | **+0.7** |
| **ESDC** | **Sonseca Array** | **3.72** | **351** | Pn | **Pn** | **23 59 25.0** | **+1.9** |
| ESDC | | | | Sn | **Sn** | **00 00 05.6** | **-2.0** |
| **PVAQ** | **Vaqueiros** | **3.90** | **292** | *e*Pn | **Pn** | **23 59 27.8** | **+2.3** |
| PVAQ | | | | *e*Sn | **Sn** | **00 00 10.6** | **-1.2** |
| PVAQ | | | | A | A | 00 00 18.6 | |
| | 5.4nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.90** | **292** | P | **Pn** | **23 59 25.7** | **+0.2** |
| PVAQ | | | | S | **Sn** | **00 00 14.6** | **+2.7** |
| **PBDV** | **Barranco-do-Ve** | **4.01** | **289** | *e*Pn | **Pn** | **23 59 28.6** | **+1.5** |
| PBDV | | | | *e*Sn | **Sn** | **00 00 15.4** | **+0.8** |
| PBDV | | | | A | A | 00 00 16.6 | |
| | 6.5nm,0.7s | | | | | | |
| **EBAD** | **Badajoz** | **4.11** | **313** | Pn | **Pn** | **23 59 29.6** | **+1.3** |
| EBAD | | | | Sn | **Sn** | **00 00 16.7** | **-0.3** |
| EBAD | | | | *i* Vmb_Lg | | 00 00 21.2 | |
| **PCVE** | **Castro Verde** | **4.22** | **294** | *e*Sn | **Sn** | **00 00 20.6** | **+0.9** |
| PCVE | | | | A | A | 00 00 22.7 | |
| | 4.1nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.53** | **311** | *e*Pn | **Pn** | **23 59 36.0** | **+1.9** |
| PESTR | | | | *e*Sn | **Sn** | **00 00 26.7** | **-0.6** |
| PESTR | | | | A | A | 00 00 41.3 | |
| | 3.2nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **4.53** | **311** | P | **Pn** | **23 59 34.8** | **+0.7** |
| PESTR | | | | S | **Sn** | **00 00 28.2** | **+0.9** |
| **EVO** | **Evora** | **4.61** | **305** | *e*Sn | **Sn** | **00 00 28.6** | **-0.6** |
| EVO | | | | A | A | 00 00 30.5 | |
| | 4.6nm,0.5s | | | | | | |
| **EPLA** | **Plasencia** | **4.66** | **332** | Pn | **Pn** | **23 59 37.4** | **+1.4** |
| **GUD** | **Guadarrama** | **4.70** | **351** | Sg | **Sg** | **00 00 52.1** | **-3.6** |
| **PNCL** | **Nicolau / Gran** | **4.76** | **298** | *e*Pn | **Pn** | **23 59 39.5** | **+2.2** |
| PNCL | | | | *e*Sn | **Sn** | **00 00 33.4** | **+0.3** |
| PNCL | | | | A | A | 00 00 37.7 | |
| | 4.0nm,0.8s | | | | | | |
| **PMRV** | **Marv??o** | **4.78** | **317** | *e*Pn | **Pn** | **23 59 39.2** | **+1.6** |
| PMRV | | | | *e*Sn | **Sn** | **00 00 33.4** | **-0.1** |
| PMRV | | | | A | A | 00 01 02.7 | |
| | 6.9nm,1.1s | | | | | | |
| **ETOR** | **Torete** | **4.90** | **10** | Pn | **Pn** | **23 59 40.5** | **+1.2** |
| **PMTG** | **Montargil** | **5.04** | **309** | *e*Pn | **Pn** | **23 59 42.9** | **+1.7** |
| **PCBR** | **Castelo Branco** | **5.12** | **320** | *e*Pn | **Pn** | **23 59 44.1** | **+1.8** |
| PCBR | | | | *e*Sn | **Sn** | **00 00 40.3** | **-1.6** |
| PCBR | | | | A | A | 00 00 42.1 | |
| | 3.7nm,0.9s | | | | | | |
| **PSBE** | **So Bento** | **5.66** | **310** | *e*Pn | **Pn** | **23 59 52.1** | **+2.4** |
| **MVO** | **Moncorvo** | **5.97** | **331** | *e*Pn | **Pn** | **23 59 56.4** | **+2.4** |
| **PVIS** | **Viseu** | **5.99** | **323** | *e*Pn | **Pn** | **23 59 55.8** | **+1.6** |
| **POLO** | **Lamas de Olo** | **6.46** | **328** | *e*Pn | **Pn** | **00 00 02.6** | **+1.8** |

*NNC **28** 00:06:42.0±16.0, 37.72N×73.48E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=124.3km s-min=94.0km az=168.0*
*IDC **28** 00:06:53.5±3.4, 38.10N×75.29E, h113km±28km, mb3.3/9, mb1 3.4/14, mb1mx3.2/43, mbtmp3.7/14, MS4.2/1, Ms1 4.2/1, ms1mx2.8/52, Error ellipse: s-maj=24.4km s-min=20.3km az=15.0*
**ISC 28 00:06:58.6±0.7, 38.31N±0.07×74.82E±0.09, h150km, n24, σ2s76/26, mb3.3/10, 1C-7D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **4.33** | **357** | P | **Pn** | **00 08 02.2** | **-1.1** |
| | 2.0nm,0.3s,baz=139,slow=6.4,SNR=20 | | | | | | |
| AAK | | | | S | **Sn** | **00 08 52.5** | **-1.2** |
| | 4.4nm,0.3s,baz=13,slow=17,SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **357** | P | **Pn** | **00 07 59.8** | **-3.5** |
| | 1.3nm,0.3s | | | | | | |
| AAK | | | | S | **Sn** | **00 08 55.9** | **+2.2** |
| | 19nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.65** | **7** | ⇓P | **Pn** | **00 08 05.5** | **-2.0** |
| | 1.3nm,0.3s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **00 09 06.5** | **+5.2** |
| | 24nm,0.9s | | | | | | |
| **CHCP** | **Chirah Chowk** | **4.80** | **196** | P | **Pn** | **00 08 11.2** | **+1.7** |
| **CEP** | **Cherat** | **5.05** | **209** | P | **Pn** | **00 08 14.8** | **+1.9** |
| **MDOK** | **Medeo** | **5.14** | **19** | ⇓P | **Pn** | **00 08 13.2** | **-0.7** |
| | 3.1nm,1.0s | | | | | | |
| MDOK | | | | ⇓S | Sn | 00 09 22.6 | +10 |
| | 15nm,0.7s | | | | | | |
| **KK02** | **Karatay Array** | **5.80** | **327** | ⇑P | Pn | 00 08 14.0 | -8.6 |
| | 6.1nm,0.5s,baz=171,slow=16 | | | | | | |
| KK02 | | | | ⇓S | **Sn** | **00 09 22.4** | **-5.9** |
| | 20nm,0.6s,baz=177,slow=27 | | | | | | |
| **THW** | **Thamme Wali** | **6.04** | **205** | P | **Pn** | **00 08 26.4** | **+0.5** |
| **PDGK** | **Podgornoye** | **6.14** | **34** | ⇓P | **Pn** | **00 08 28.7** | **+1.4** |
| | 1.6nm,0.5s | | | | | | |
| PDGK | | | | ⇓S | Sn | 00 09 49.7 | +13 |
| | 18nm,0.5s | | | | | | |
| **GEYT** | **Alibeck** | **13.16** | **274** | P | **Pn** | **00 09 59.8** | **+0.1** |
| | 1.1nm,0.3s,baz=103,slow=12,SNR=8.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.04** | **350** | P | **P** | **00 10 24.2** | **-0.8** |
| | 0.1nm,0.3s,baz=144,slow=10.0,SNR=2.9 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.02** | **321** | P | **Pn** | **00 10 49.7** | **+2.3** |
| | 0.2nm,0.3s,baz=124,slow=14,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.09** | **20** | P | **P** | **00 10 44.0** | **-3.5** |
| | 0.3nm,0.3s,baz=213,slow=11,SNR=5.4 | | | | | | |
| **ARU** | **Arti** | **21.11** | **334** | P | **P** | **00 11 36.0** | **+4.9** |
| | 0.5nm,0.6s,baz=90,slow=20,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **24.81** | **57** | P | **P** | **00 12 04.5** | **-2.2** |
| | 0.3nm,0.7s,baz=255,slow=9.8,SNR=2.4 | | | | | | |
| **FINES** | **FINESS Array B** | **37.75** | **324** | P | **P** | **00 14 01.5** | **+2.0** |
| | 0.5nm,0.3s,baz=118,slow=7.6,SNR=5.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.69** | **336** | P | **P** | **00 14 25.5** | **+1.7** |
| | 1.2nm,0.6s,baz=106,slow=8.1,SNR=14 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.81** | **322** | P | **P** | **00 14 58.9** | **+1.7** |
| | 0.5nm,0.8s,baz=109,slow=7.1,SNR=1.9 | | | | | | |
| **JNU** | **Nakatsue** | **45.23** | **79** | LR | LR | 00 36 47.6 | |
| | comp=Z,263nm,19.2s,baz=346,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.77** | **270** | P | **P** | **00 17 47.9** | **+1.2** |
| | 0.5nm,0.4s,baz=49,slow=5.7,SNR=9.3 | | | | | | |
| **INK** | **Inuvik** | **71.60** | **11** | P | **P** | **00 18 02.6** | **-0.4** |
| | 0.5nm,0.5s,baz=333,slow=4.5,SNR=1.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.26** | **4** | P | **P** | **00 18 46.1** | **-0.6** |
| | 0.4nm,0.5s,baz=346,slow=5.0,SNR=7.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.44** | **125** | P | **P** | **00 18 50.5** | **-3.2** |
| | 0.3nm,0.6s,baz=313,slow=4.5,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **82.87** | **128** | P | **P** | **00 19 03.0** | **-3.4** |
| | 0.3nm,0.6s,baz=312,slow=5.4,SNR=5.5 | | | | | | |

*IDC **28** 00:27:54.5±0.9, 35.70N×3.56W, h0km, mb3.5/5, mb1 3.6/8, mb1mx3.4/50, mbtmp3.5/8, ML3.4/3, Error ellipse: s-maj=27.2km s-min=12.7km az=99.0*
*CNRM **28** 00:27:55.3, 35.67N×3.61W, h0km, ml3.0*
*MDD **28** 00:27:56.4±0.3, 35.68N×3.65W, h0km, mb_Lg3.4/9, Error ellipse: s-maj=2.8km s-min=2.2km az=170.0*
*SFS **28** 00:27:56.0, 35.68N×3.65W, ML3.1, ALBORAN SUR*
*INMG **28** 00:27:57.9±1.4, 35.69N×3.64W, h12km±6km, ML3.0, Error ellipse: s-maj=3.8km s-min=3.8km az=124.0*
**ISC 28 00:27:55.6±1.2, 35.68N±0.02×3.65W±0.02, h11km±9km, n68, σ1s42/123, mb3.7/5, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.56** | **63** | Pg | **Pb** | **00 28 07.4** | **-0.1** |
| EALB | | | | Sg | **Sb** | **00 28 15.5** | **-0.3** |
| EALB | | | | *i* Vmb_Lg | | 00 28 15.9 | |
| **EMEL** | **Melilla** | **0.68** | **124** | Pg | **Pb** | **00 28 09.3** | **-0.3** |
| EMEL | | | | Sg | **Sg** | **00 28 17.9** | **+0.1** |
| **ELGU** | **Los Guajares,** | **1.18** | **1** | Pg | **Pb** | **00 28 17.1** | **-1.0** |
| ELGU | | | | Sg | **Sn** | **00 28 34.0** | **-0.3** |
| **EMAL** | **Malaga-Limoner** | **1.25** | **330** | P | **Pn** | **00 28 18.5** | **-0.5** |
| EMAL | | | | S | **Sb** | **00 28 34.1** | **-1.2** |
| EMAL | | | | *e*Cod | | 00 29 28.2 | |
| **EMIJ** | **Mijas** | **1.26** | **314** | Pg | **Pn** | **00 28 18.4** | **-0.9** |
| EMIJ | | | | Sg | **Sb** | **00 28 34.6** | **-1.1** |
| **TAF** | **Taforalt** | **1.33** | **130** | P | **Pn** | **00 28 20.0** | **-0.2** |
| **TAF** | **Taforalt** | **1.33** | **130** | P | **Pn** | **00 28 19.5** | **-0.8** |
| TAF | | | | S | **Sb** | **00 28 35.8** | **-2.0** |
| **SMIR** | **Smir Dam** | **1.41** | **270** | P | **Pn** | **00 28 20.5** | **-0.7** |
| SMIR | | | | S | **Sg** | **00 28 41.1** | **+0.2** |
| **CEU** | **Ceuta** | **1.42** | **279** | P | **Pn** | **00 28 20.0** | **-1.3** |
| CEU | | | | S | **Sn** | **00 28 36.4** | **-3.5** |
| CEU | | | | *e*Cod | | 00 29 41.5 | |
| **EGOR** | **Sierra Gorda,** | **1.47** | **346** | Pn | **Pb** | **00 28 23.0** | **-0.1** |
| EGOR | | | | Sn | **Sg** | **00 28 42.5** | **-0.5** |
| **CHEFC** | **Chefchaouen** | **1.50** | **248** | P | **Pb** | **00 28 24.0** | **+0.5** |
| **CHEFC** | **Chefchaouen** | **1.50** | **248** | P | **Pg** | **00 28 24.5** | **+0.1** |
| CHEFC | | | | S | **Sg** | **00 28 44.8** | **+1.0** |
| **EQUE** | **Quentar** | **1.53** | **6** | Pn | **Pn** | **00 28 23.2** | **+0.2** |
| EQUE | | | | Sn | **Sn** | **00 28 42.9** | **0.0** |
| **EJIF** | **Jimena Fronter** | **1.66** | **298** | Pn | **Pn** | **00 28 25.2** | **+0.5** |
| EJIF | | | | Sn | **Sn** | **00 28 46.6** | **+0.6** |
| **ENIJ** | **Nijar** | **1.73** | **42** | Pn | **Pn** | **00 28 24.7** | **-1.1** |
| ENIJ | | | | Sn | **Sn** | **00 28 44.8** | **-3.1** |
| ENIJ | | | | *i* Vmb_Lg | | 00 28 54.8 | |
| **IFR** | **Ifrane** | **2.48** | **210** | P | **Pn** | **00 28 37.1** | **+0.9** |
| IFR | | | | S | **Sn** | **00 29 06.5** | **0.0** |
| **TLOR** | **Lorca, Murcia** | **2.52** | **38** | Pn | **Pn** | **00 28 37.5** | **+0.9** |
| TLOR | | | | Sn | **Sn** | **00 29 05.8** | **-1.5** |
| **ECAB** | **El Cabril** | **2.78** | **330** | Pn | **Pn** | **00 28 41.1** | **+1.0** |
| ECAB | | | | Sn | **Sn** | **00 29 14.7** | **+1.1** |
| **MD31** | **MD31** | **2.96** | **198** | P | **Pn** | **00 28 42.7** | **+0.1** |
| MD31 | | | | S | **Sn** | **00 29 17.2** | **-0.9** |
| **TDRA** | **Tendrara** | **2.96** | **153** | P | **Pn** | **00 28 43.3** | **+0.6** |
| TDRA | | | | S | **Sn** | **00 29 18.5** | **+0.2** |
| **MDT** | **Midelt** | **2.97** | **196** | Pn | **Pn** | **00 28 43.7** | **+0.9** |
| | 1.4nm,0.3s,baz=152,slow=9.3,SNR=67 | | | | | | |
| MDT | | | | Sn | **Sn** | **00 29 20.1** | **+1.6** |
| | 3.2nm,0.3s,baz=159,slow=21,SNR=2.0 | | | | | | |
| MDT | | | | Lg | Lg | 00 29 29.0 | |
| | 6.3nm,0.3s,baz=86,slow=8.4,SNR=3.0 | | | | | | |
| **MDT** | **Midelt** | **2.97** | **196** | P | **Pn** | **00 28 43.7** | **+0.9** |
| **MDT** | **Midelt** | **2.97** | **196** | P | **Pn** | **00 28 43.7** | **+0.9** |
| MDT | | | | S | **Sn** | **00 29 19.2** | **+0.7** |
| **ETOB** | **Tobarra** | **3.40** | **29** | Pn | **Pn** | **00 28 49.9** | **+1.2** |
| ETOB | | | | Sn | **Sn** | **00 29 28.6** | **-0.5** |
| ETOB | | | | *i* Vmb_Lg | | 00 30 18.3 | |
| **EGRO** | **El Granado** | **3.59** | **302** | Pn | **Pn** | **00 28 52.3** | **+1.0** |
| EGRO | | | | Sn | **Sn** | **00 29 33.3** | **-0.5** |
| EGRO | | | | *i* Vmb_Lg | | 00 29 39.4 | |
| **PBAR** | **Barrancos** | **3.68** | **313** | *e*Pn | **Pn** | **00 28 53.2** | **+0.7** |
| PBAR | | | | *e*Sn | **Sn** | **00 29 35.4** | **-0.5** |
| PBAR | | | | A | A | 00 29 41.6 | |
| | 19nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | *e*Pn | **Pn** | **00 28 53.3** | **+0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **00 29 35.2** | **-1.1** |
| PVAQ | | | | A | A | 00 29 46.4 | |
| | 33nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | P | **Pn** | **00 28 53.5** | **+0.8** |
| **PVAQ** | **Vaqueiros** | **3.70** | **299** | P | **Pn** | **00 28 53.5** | **+0.8** |
| PVAQ | | | | S | **Sn** | **00 29 37.4** | **+1.1** |
| **PBDV** | **Barranco-do-Ve** | **3.78** | **296** | *e*Pn | **Pn** | **00 28 54.6** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **00 29 37.2** | **-1.3** |
| PBDV | | | | A | A | 00 29 39.5 | |
| | 27nm,0.7s | | | | | | |
| **PAB** | **San Pablo** | **3.89** | **352** | Pn | **Pn** | **00 28 56.9** | **+1.4** |
| PAB | | | | Sn | **Sn** | **00 29 43.0** | **+1.7** |
| PAB | | | | *i* Vmb_Lg | | 00 30 04.0 | |
| **PAB** | **San Pablo** | **3.89** | **352** | P | **Pn** | **00 28 57.0** | **+1.5** |
| **AVE** | **Averroes** | **3.91** | **234** | P | **Pb** | **00 29 00.8** | **-3.8** |
| AVE | | | | S | **Sn** | **00 29 40.8** | **-0.9** |
| **AVE** | **Averroes** | **3.91** | **234** | P | **Pn** | **00 28 57.7** | **+2.0** |
| AVE | | | | S | **Sn** | **00 29 42.6** | **+1.0** |
| **ESDC** | **Sonseca Array** | **3.99** | **357** | Pn | **Pn** | **00 28 57.9** | **+1.1** |
| | 1.0nm,0.3s,baz=176,slow=12,SNR=51 | | | | | | |
| ESDC | | | | Sn | **Sn** | **00 29 44.5** | **+0.9** |
| | 0.8nm,0.3s,baz=175,slow=24,SNR=4.4 | | | | | | |
| ESDC | | | | Lg | Lg | 00 30 00.5 | |
| | 1.1nm,0.3s,baz=173,slow=28,SNR=5.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **3.99** | **357** | Pn | **Pn** | **00 28 58.3** | **+1.5** |
| ESDC | | | | Sn | **Sn** | **00 29 45.7** | **+2.0** |
| ESDC | | | | *i* Vmb_Lg | | 00 30 02.0 | |
| **PCVE** | **Castro Verde** | **4.03** | **300** | *e*Pn | **Pn** | **00 28 58.2** | **+0.9** |
| PCVE | | | | *e*Sn | **Sn** | **00 29 43.5** | **-0.9** |
| PCVE | | | | A | A | 00 29 51.7 | |
| | 37nm,0.4s | | | | | | |
| **FIGM** | **Figuig** | **4.06** | **150** | P | **Pn** | **00 28 58.3** | **+0.5** |
| FIGM | | | | S | **Sn** | **00 29 44.6** | **-0.9** |
| **EBAD** | **Badajoz** | **4.07** | **320** | Pn | **Pn** | **00 28 58.6** | **+0.7** |
| EBAD | | | | Sn | **Sn** | **00 29 44.5** | **-1.1** |
| EBAD | | | | *i* Vmb_Lg | | 00 29 46.9 | |
| **PBEJ** | **Beja** | **4.11** | **306** | *e*Pn | **Pn** | **00 28 59.7** | **+1.3** |
| PBEJ | | | | *e*Sn | **Sn** | **00 29 46.6** | **+0.1** |
| PBEJ | | | | A | A | 00 29 56.1 | |
| | 16nm,0.5s | | | | | | |
| **MORF** | **Marmelete** | **4.34** | **293** | *e*Pn | **Pn** | **00 29 04.5** | **+2.9** |
| MORF | | | | *e*Sn | **Sn** | **00 29 53.7** | **+1.4** |
| MORF | | | | A | A | 00 30 02.5 | |
| | 14nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.42** | **291** | *e*Pn | **Pn** | **00 29 04.2** | **+1.6** |
| PFVI | | | | *e*Sn | **Sn** | **00 29 52.5** | **-1.6** |
| PFVI | | | | A | A | 00 29 56.1 | |
| | 19nm,0.7s | | | | | | |
| **PESTR** | **Estremoz** | **4.47** | **316** | *e*Pn | **Pn** | **00 29 04.7** | **+1.4** |
| PESTR | | | | *e*Sn | **Sn** | **00 29 54.3** | **-1.0** |
| PESTR | | | | A | A | 00 29 56.9 | |
| | 12nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **4.47** | **316** | P | **Pn** | **00 29 06.1** | **+2.8** |
| PESTR | | | | S | **Sn** | **00 29 57.4** | **+2.1** |
| **PTEO** | **Sao Teotonio** | **4.48** | **296** | *e*Pn | **Pn** | **00 29 04.8** | **+1.3** |
| PTEO | | | | *e*Sn | **Sn** | **00 29 54.5** | **-1.2** |
| PTEO | | | | A | A | 00 30 05.4 | |
| | 26nm,0.9s | | | | | | |
| **EVO** | **Evora** | **4.50** | **310** | P | **Pn** | **00 29 04.7** | **+0.9** |
| EVO | | | | S | **Sn** | **00 29 54.1** | **-1.9** |
| **EVO** | **Evora** | **4.50** | **310** | *e*Pn | **Pn** | **00 29 05.2** | **+1.5** |
| EVO | | | | *e*Sn | **Sn** | **00 29 55.1** | **-0.9** |
| EVO | | | | A | A | 00 30 02.2 | |
| | 24nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **303** | *e*Pn | **Pn** | **00 29 06.0** | **+0.9** |
| PNCL | | | | *e*Sn | **Sn** | **00 29 57.1** | **-1.4** |
| PNCL | | | | A | A | 00 30 00.0 | |
| | 11nm,0.4s | | | | | | |
| **UCM** | **Universidad Co** | **4.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HDC3 | | | | | *e*S | | **Sn** | **00 38 18.8** | **-0.4** |
| HDC3 | | | | | IAML | | | 00 38 21.3 | | |
| | comp=Z,1μm,0.4s | | | | | | | | | |
| **ARE1** | **Arenal 1** | **1.00** | **11** | *e*P | | **Pb** | | **00 38 05.7** | **+0.1** |
| **EDDO** | **Dominical** | **1.05** | **102** | *e*P | | **Pg** | | **00 38 06.3** | **+0.1** |
| **RIMA** | **Rio Macho** | **1.07** | **74** | *e*P | | **Pg** | | **00 38 06.3** | **-0.4** |
| **CDM** | **Cerro de Muert** | **1.13** | **86** | *e*P | | **Pb** | | **00 38 08.2** | **+0.2** |
| CDM | | | | *e*S | | **Sn** | | **00 38 24.7** | **+0.5** |
| CDM | | | | IAML | | | | 00 38 25.1 | | |
| | comp=Z,875nm,0.5s | | | | | | | | | |
| **PEZE** | **Perez Zeledon,** | **1.22** | **94** | *e*P | | **Pg** | | **00 38 09.5** | **+0.1** |
| **HZTE** | **Horizontes, Gu** | **1.41** | **331** | *e*P | | **Pb** | | **00 38 12.7** | **+0.1** |
| HZTE | | | | IAML | | | | 00 39 13.5 | | |
| | comp=Z,252nm,1.6s | | | | | | | | | |

*IDC **28** 00:44:20.6±6.0,36˚.60N×70˚.59E,h104km±37km,mb3.2/1, mb1 3.3/5,mb1mx2.8/57,mbtmp3.7/5,Error ellipse: s-maj=74.2km s-min=19.5km az=154.0*
*NNC **28** 00:44:20.9±6.5,36˚.99N×70˚.47E,h0km,mb3.5,mpv3.2, Error ellipse: s-maj=52.1km s-min=40.6km az=167.0*
**ISC 28 00:44:21.9±1.9,36˚.7N±0˚.1×70˚.53E±0˚.09,h100km,n9, σ1°13/15,3C-5D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK09** | **Karatay Array** | **6.42** | **360** | ⇓P | **Pn** | **00 45 55.3** | **+1.5** |
| | 0.7nm,0.4s | | | | | | |
| KK09 | | | | ⇑S | **Sn** | **00 47 04.7** | **-0.9** |
| | 1.9nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **6.68** | **26** | P | **Pn** | **00 45 57.7** | **+0.3** |
| | 0.7nm,0.3s,baz=199,slow=10.0,SNR=14 | | | | | | |
| AAK | | | | S | **Sn** | **00 47 12.2** | **+0.1** |
| | 0.3nm,0.3s,baz=342,slow=23,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.68** | **26** | ⇓P | **Pn** | **00 45 57.1** | **-0.3** |
| | 2.2nm,0.9s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **00 47 11.9** | **-0.1** |
| | 3.9nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.34** | **31** | ⇓P | **Pn** | **00 46 04.4** | **-2.1** |
| | 1.1nm,0.7s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **00 47 29.9** | **+1.6** |
| | 1.1nm,0.8s | | | | | | |
| **GEYT** | **Alibeck** | **9.97** | **281** | P | **Pn** | **00 46 42.5** | **+0.4** |
| | 0.6nm,0.3s,baz=103,slow=14,SNR=5.0 | | | | | | |
| GEYT | | | | S | **Sn** | **00 48 31.5** | **-0.5** |
| | 0.4nm,0.3s,baz=34,slow=47,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.36** | **37** | P | **Pn** | **00 47 27.8** | **+0.4** |
| | 0.1nm,0.3s,baz=220,slow=12,SNR=6.0 | | | | | | |
| **AB31** | **Akbulak array** | **14.73** | **332** | ⇑P | **Pn** | **00 47 45.5** | **+0.5** |
| | 0.3nm,0.3s,baz=265,slow=36,SNR=32 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **00 50 26.1** | **-1.3** |
| | 0.4nm,0.6s,baz=166,slow=22,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.90** | **25** | P | **P** | **00 48 43.8** | **-1.4** |
| | 0.7nm,0.3s,baz=219,slow=11,SNR=24 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.00** | **323** | P | **P** | **00 52 18.3** | **-0.7** |
| | 0.8nm,1.0s,baz=97,slow=7.7,SNR=2.2 | | | | | | |

*NEIC **28** 00:45:34.7±1.5,57˚.8S±0˚.1×27˚.8W±0˚.2,h301km±6km, mb4.5/29,Error ellipse: s-maj=16.6km s-min=14.1km az=216.0*
*IDC **28** 00:45:35.2±1.5,57˚.72S×27˚.80W,h306km±14km,mb3.9/12, mb1 4.0/14,mb1mx3.7/32,mbtmp4.6/14,Error ellipse: s-maj=13.3km s-min=11.2km az=5.0*
**ISC 28 00:45:34.4±0.4,57˚.67S±0˚.07×27˚.83W±0˚.08,h300km,n81, σ0°89/86,mb4.4/23,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.93** | **301** | Pn | **Pn** | **00 47 03.2** | **+0.4** |
| **ESPZ** | **Base Esperanza** | **15.36** | **236** | P | **P** | **00 48 54.4** | **-0.5** |
| **VNA1** | **Neumayer--Stat** | **15.44** | **155** | P | **P** | **00 48 55.0** | **-0.8** |
| VNA1 | | | | S | **S** | **00 51 47.7** | **+4.7** |
| **VNA3** | **Neumayer Olymp** | **15.59** | **158** | P | **P** | **00 48 56.2** | **-1.4** |
| **VNA2** | **Neumayer--Watz** | **15.84** | **155** | P | **P** | **00 48 59.1** | **-1.1** |
| | baz=314,slow=13 | | | | | | |
| VNA2 | | | | S | S | 00 52 01.7 | +11 |
| **SNAA** | **Sanae** | **17.42** | **153** | P | **P** | **00 49 16.0** | **-1.4** |
| **SNAA** | **Sanae** | **17.42** | **153** | P | **P** | **00 49 16.1** | **-1.3** |
| | 3.7nm,0.3s,baz=306,slow=11,SNR=117 | | | | | | |
| **SNAA** | **Sanae** | **17.42** | **153** | P | **P** | **00 49 16.2** | **-1.2** |
| **EFI** | **East Falkland** | **18.38** | **276** | P | **P** | **00 49 28.0** | **+0.2** |
| EFI | | | | IAmb | IAmb | 00 49 33.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **PMSA** | **Palmer Station** | **18.60** | **233** | P | **P** | **00 49 30.4** | **+0.4** |
| | comp=Z,1.9nm,0.3s,baz=78,slow=9.3,SNR=1.4 | | | | | | |
| **PMSA** | **Palmer Station** | **18.60** | **233** | P | **P** | **00 49 30.2** | **+0.3** |
| **BELA** | **Belgrano 2** | **20.43** | **184** | P | **P** | **00 49 47.5** | **-1.6** |
| BELA | | | | IAmb | IAmb | 00 49 49.2 | |
| | comp=Z,62nm,1.5s | | | | | | |
| **PLTB** | **Pedras Altas** | **31.36** | **315** | P | **P** | **00 51 26.9** | **-0.7** |
| PLTB | | | | IAmb | IAmb | 00 51 44.6 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **PLCA** | **Paso Flores** | **31.99** | **283** | P | **P** | **00 51 34.1** | **+1.1** |
| | comp=Z,1.2nm,0.6s,baz=180,slow=4.0,SNR=6.1 | | | | | | |
| **PLCA** | **Paso Flores** | **31.99** | **283** | P | **P** | **00 51 33.7** | **+0.7** |
| **QSPA** | **South Pole Qui** | **32.57** | **180** | P | **P** | **00 51 38.0** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 00 51 38.7 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **LC01** | **Cunco** | **34.03** | **284** | P | **P** | **00 51 51.1** | **+0.6** |
| LC01 | | | | IAmb | IAmb | 00 52 12.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **GO05** | **Huala** | **37.02** | **288** | P | **P** | **00 52 15.8** | **0.0** |
| GO05 | | | | IAmb | IAmb | 00 52 42.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **MT09** | **Talagante** | **37.52** | **291** | P | **P** | **00 52 19.8** | **-0.4** |
| MT09 | | | | IAmb | IAmb | 00 52 41.2 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **SUR** | **Sutherland** | **41.42** | **74** | P | **P** | **00 52 53.2** | **+1.0** |
| | comp=Z,5.2nm,0.4s,baz=198,slow=8.2,SNR=20 | | | | | | |
| **SUR** | **Sutherland** | **41.42** | **74** | P | **P** | **00 52 53.0** | **+0.8** |
| **SBA** | **Scott Base** | **44.43** | **184** | P | **P** | **00 53 16.2** | **+0.8** |
| SBA | | | | IAmb | IAmb | 00 53 29.3 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **44.62** | **332** | P | **P** | **00 53 19.1** | **+1.4** |
| | comp=Z,1.8nm,0.4s,baz=160,slow=9.9,SNR=4.6 | | | | | | |
| **BDFB** | **Brasilia** | **44.62** | **332** | P | **P** | **00 53 18.3** | **+0.7** |
| **VNDA** | **Vanda** | **44.93** | **183** | P | **P** | **00 53 20.2** | **+0.9** |
| | comp=Z,6.5nm,0.6s,baz=182,slow=7.1,SNR=18 | | | | | | |
| **VNDA** | **Vanda** | **44.93** | **183** | P | **P** | **00 53 19.9** | **+0.6** |
| **LVC** | **Limon Verde** | **45.84** | **302** | P | **P** | **00 53 28.6** | **+1.1** |
| | comp=Z,1.4nm,0.4s,baz=149,slow=5.9,SNR=1.7 | | | | | | |
| **BOSA** | **Boshof** | **46.72** | **75** | P | **P** | **00 53 33.7** | **-0.3** |
| | comp=Z,10nm,0.4s,baz=216,slow=6.4,SNR=69 | | | | | | |
| **BOSA** | **Boshof** | **46.72** | **75** | P | **P** | **00 53 33.7** | **-0.3** |
| BOSA | | | | IAmb | IAmb | 00 53 34.1 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **46.72** | **75** | *i* P | **P** | **00 53 33.5** | **-0.4** |
| **BOSA** | **Boshof** | **46.72** | **75** | *i* P | **P** | **00 53 33.5** | **-0.4** |
| **SIV** | **San Ignacio** | **48.46** | **315** | P | **P** | **00 53 46.9** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=164,slow=7.3,SNR=12 | | | | | | |
| **LBTB** | **Lobatse** | **49.82** | **72** | P | **P** | **00 53 57.1** | **-0.4** |
| **LBTB** | **Lobatse** | **49.82** | **72** | *i* P | **P** | **00 53 57.2** | **-0.3** |
| **LBTB** | **Lobatse** | **49.82** | **72** | *i* P | **P** | **00 53 57.2** | **-0.3** |
| **TSUM** | **Tsumeb** | **50.79** | **60** | P | **P** | **00 54 05.0** | **+0.3** |
| | comp=Z,9.1nm,0.6s,baz=183,slow=7.0,SNR=11 | | | | | | |
| **TSUM** | **Tsumeb** | **50.79** | **60** | P | **P** | **00 54 04.9** | **+0.1** |
| TSUM | | | | IAmb | IAmb | 00 54 05.4 | |
| | comp=Z,8.3nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **51.05** | **307** | P | **P** | **00 54 07.5** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=162,slow=6.6,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **51.05** | **307** | P | **P** | **00 54 07.3** | **0.0** |
| **MATP** | **Matopo** | **55.11** | **72** | *i* P | **P** | **00 54 35.9** | **-0.3** |
| **MATP** | **Matopo** | **55.11** | **72** | *i* P | **P** | **00 54 35.9** | **-0.3** |
| **BLWY** | **Bulawayo** | **55.40** | **72** | *i* P | **P** | **00 54 37.6** | **-0.7** |
| **BLWY** | **Bulawayo** | **55.40** | **72** | *i* P | **P** | **00 54 37.6** | **-0.7** |
| **LSZ** | **Lusaka** | **59.29** | **69** | P | **P** | **00 55 05.2** | **0.0** |
| LSZ | | | | IAmb | IAmb | 00 55 05.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **LIC** | **Lamto** | **66.32** | **25** | *e*PKP1 | **P** | **00 55 51.6** | **+0.5** |
| | comp=Z,37nm,0.5s | | | | | | |
| **KIC** | **Kosan Boka** | **66.52** | **25** | *e*PKP1 | **P** | **00 55 52.6** | **+0.3** |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **TIC** | **Toumodi** | **66.73** | **25** | *e*PKP1 | **P** | **00 55 52.7** | **-0.9** |
| **DBIC** | **Dimbokro** | **66.79** | **25** | P | **P** | **00 55 54.6** | **+0.6** |
| | comp=Z,6.8nm,0.3s,baz=195,slow=5.3,SNR=31 | | | | | | |
| **DBIC** | **Dimbokro** | **66.79** | **25** | P | **P** | **00 55 54.6** | **+0.6** |
| **KOWA** | **Kowa** | **74.55** | **24** | P | **P** | **00 56 41.4** | **+0.9** |
| KOWA | | | | IAmb | IAmb | 00 56 45.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.64** | **30** | P | **P** | **00 56 42.1** | **+1.1** |
| | comp=Z,15nm,0.4s,baz=199,slow=6.3,SNR=343 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.64** | **30** | P | **P** | **00 56 42.0** | **+1.0** |
| TORD | | | | IAmb | IAmb | 00 56 42.7 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,17nm,0.9s | | | | | | | | | |
| **BIRV** | **Birongo** | **74.84** | **321** | P | | **P** | | **00 56 42.8** | **+0.6** |
| **QRZ** | **Quartz Range** | **80.39** | **196** | P | | **P** | | **00 57 11.0** | **-1.4** |
| **BKZ** | **Black Stump Fm** | **81.38** | **199** | P | | **P** | | **00 57 18.4** | **+0.7** |
| BKZ | | | | IAmb | | IAmb | | 00 57 36.0 | | |
| | comp=Z,7.6nm,1.3s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **97.54** | **163** | P | | **P** | | **00 58 34.0** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=186,slow=4.3,SNR=13 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **120.91** | **302** | PKP | | **PKPdf** | | **01 03 49.4** | **-1.1** |
| | comp=Z,0.2nm,0.4s,baz=100,slow=3.7,SNR=2.2 | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **121.71** | **293** | PKP | | **PKiKP** | | **01 03 52.9** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=120,slow=2.9,SNR=3.7 | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **121.71** | **293** | | | **PKiKP** | | **01 03 52.4** | **+0.1** |
| **NOA** | **NORSAR Array B** | **122.25** | **21** | PKP | | **PKPdf** | | **01 03 52.1** | **-0.1** |
| | comp=Z,0.5nm,0.9s,baz=168,slow=8.2,SNR=1.5 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **125.98** | **29** | PKP | | **PKPdf** | | **01 03 58.9** | **-0.3** |
| | comp=Z,2.0nm,0.5s,baz=158,slow=2.4,SNR=29 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **125.98** | **29** | | | **PKPdf** | | **01 03 58.6** | **-0.6** |
| **ABKAR** | **Akbulak array** | **128.57** | **57** | | | **PKPdf** | | **01 04 04.2** | **-0.4** |
| **ARCES** | **ARCESS Array B** | **132.58** | **23** | PKhKP | | PKPpre | | 01 04 03.3 | | |
| | comp=Z,1.1nm,0.8s,baz=180,slow=1.1,SNR=3.6 | | | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | | **01 04 11.4** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=240,slow=2.0,SNR=18 | | | | | | | | | |
| ARCES | | | | SKPbc | | **SKPbc** | | **01 07 08.6** | **-1.1** |
| | comp=Z,1.5nm,0.6s,baz=207,slow=2.4,SNR=9.1 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.58** | **23** | | | **PKPdf** | | **01 04 10.3** | **-1.3** |
| **BVAR** | **Borovoye Array** | **135.93** | **59** | PKP | | **PKPdf** | | **01 04 17.8** | **-0.5** |
| | comp=Z,1.0nm,0.5s,baz=304,slow=3.1,SNR=4.8 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **137.13** | **317** | PKP | | **PKPdf** | | **01 04 19.9** | **-0.3** |
| | comp=Z,0.9nm,0.4s,baz=129,slow=2.4,SNR=18 | | | | | | | | | |
| YKA | | | | SKPbc | | **SKPbc** | | **01 07 23.4** | **-0.8** |
| | comp=Z,1.4nm,0.7s,baz=130,slow=2.9,SNR=18 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **137.13** | **317** | | | **PKPdf** | | **01 04 19.5** | **-0.7** |
| **MKAR** | **Makanchi Array** | **137.71** | **74** | PKhKP | | PKPpre | | 01 04 11.6 | | |
| | comp=Z,0.2nm,0.7s,baz=206,slow=0.2,SNR=2.4 | | | | | | | | | |
| MKAR | | | | PKP | | **PKPdf** | | **01 04 22.5** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=222,slow=2.9,SNR=3.5 | | | | | | | | | |
| MKAR | | | | SKPbc | | **SKPbc** | | **01 07 25.2** | **-1.3** |
| | comp=Z,0.8nm,0.6s,baz=247,slow=2.3,SNR=9.3 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **138.29** | **67** | PKhKP | | PKPpre | | 01 04 14.2 | | |
| | comp=Z,0.4nm,0.3s,baz=69,slow=3.1,SNR=3.4 | | | | | | | | | |
| KURBB | | | | PKP | | **PKPdf** | | **01 04 22.0** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=236,slow=1.7,SNR=4.2 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.38** | **66** | PKP | | PKPab | | 01 04 29.1 | +0.3 | |
| | comp=Z,3.8nm,0.3s,baz=230,slow=4.6,SNR=29 | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **145.40** | **327** | | | **PKPbc** | | **01 04 35.5** | **+0.1** |
| **INK** | **Inuvik** | **146.82** | **319** | PKPbc | | **PKPbc** | | **01 04 39.1** | **-0.6** |
| | comp=Z,3.3nm,0.6s,baz=79,slow=3.1,SNR=14 | | | | | | | | | |
| **INK** | **Inuvik** | **146.82** | **319** | | | **PKPbc** | | **01 04 39.2** | **-0.4** |
| **NRIK** | **Noril'sk** | **150.49** | **41** | PKPbc | | **PKPbc** | | **01 04 48.8** | **0.0** |
| | comp=Z,1.1nm,0.4s,baz=294,slow=3.1,SNR=6.0 | | | | | | | | | |
| **IL31** | | **150.91** | **310** | | | **PKPbc** | | **01 04 49.8** | **-0.1** |
| **ILAR** | **Eielson Array** | **150.91** | **310** | PKPbc | | **PKPbc** | | **01 04 49.4** | **-0.6** |
| | comp=Z,1.4nm,0.4s,baz=129,slow=1.3,SNR=39 | | | | | | | | | |
| **SONM** | **Songino Array** | **151.13** | **90** | PKPbc | | **PKPbc** | | **01 04 50.8** | **-0.4** |
| | comp=Z,2.9nm,0.7s,baz=221,slow=3.0,SNR=17 | | | | | | | | | |
| SONM | | | | PKPab | | **PKPab** | | **01 05 00.2** | **-0.1** |
| | comp=Z,1.6nm,0.8s,baz=221,slow=2.6,SNR=7.6 | | | | | | | | | |
| **SONM** | **Songino Array** | **151.13** | **90** | | | **PKPbc** | | **01 04 50.5** | **-0.7** |
| SONM | | | | PKPab | | **PKPab** | | **01 05 00.8** | **+0.5** |
| **CCB** | **Clear Creek Bu** | **151.26** | **309** | | | **PKPbc** | | **01 04 50.2** | **-0.5** |
| **TOLK** | **Toolik Lake Re** | **152.66** | **317** | | | **PKiKP** | | **01 04 54.0** | **-0.1** |

*IDC **28** 01:09:15.5±1.6,0˚.68S×131˚.77E,h0km,mb3.3/2, mb1 3.5/4,mb1mx3.3/39,mbtmp3.3/4,ML3.4/2,Error ellipse: s-maj=19.4km s-min=11.2km az=173.0*
*DJA **28** 01:09:20.1±0.4,1˚.5S×13˚.1E±˚,h10km,M4.4/6,mb4.9/1, MLv4.1/6*
**ISC 28 01:09:19.3±1.4,0˚.9S±0˚.1×130˚.8E±0˚.1,h10km,n13, σ1°89/15,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **0.49** | **84** | Pg | **Pg** | **01 09 27.4** | **-1.5** |
| | 2μm,0.3s,baz=199,slow=23,SNR=125 | | | | | | |
| SIJI | | | | Lg | Lg | 01 09 32.2 | |
| | 11μm,0.3s,baz=259,slow=23,SNR=404 | | | | | | |
| **FAKI** | **Fak Fak** | **2.47** | **144** | P | **Pn** | **01 10 00.7** | **+1.1** |
| **FAKI** | **Fak Fak** | **2.47** | **144** | P | **Pn** | **01 10 00.8** | **+1.1** |
| **KDU** | **Kakadu** | **11.81** | **172** | P | **Pn** | **01 12 07.5** | **-0.5** |
| **MTN** | **Manton Dam** | **11.86** | **178** | P | **Pn** | **01 12 08.4** | **-0.2** |
| **KNRA** | **Kununurra** | **14.80** | **188** | P | **Pn** | **01 12 48.2** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **17.81** | **196** | P | **P** | **01 13 30.5** | **+2.4** |
| | 0.1nm,0.3s,baz=22,slow=12,SNR=1.8 | | | | | | |
| FITZ | | | | S | **Sn** | **01 16 41.1** | **-4.9** |
| | 0.1nm,0.3s,baz=31,slow=22,SNR=0.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.81** | **196** | P | **P** | **01 13 30.2** | **+2.1** |
| **COEN** | **Coen** | **17.84** | **137** | P | **P** | **01 13 29.6** | **+1.0** |
| **WRAB** | **Tennant Creek** | **19.22** | **170** | P | **Pn** | **01 13 46.1** | **+1.4** |
| **WRA** | **Warramunga Arr** | **19.23** | **170** | P | **P** | **01 13 43.8** | **-0.1** |
| | 0.2nm,0.3s,baz=350,slow=11,SNR=3.6 | | | | | | |
| WRA | | | | S | Sn | 01 17 02.4 | -18 |
| | 0.0nm,0.3s,baz=356,slow=23,SNR=1.1 | | | | | | |
| **ASAR** | **Alice Springs** | **22.82** | **173** | P | **P** | **01 14 22.8** | **+0.2** |
| | 0.3nm,0.4s,baz=354,slow=11,SNR=1.8 | | | | | | |
| ASAR | | | | S | **S** | **01 18 32.7** | **+0.6** |
| | 0.3nm,0.8s,baz=0.4,slow=27,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.66** | **325** | P | **P** | **01 19 50.2** | **-0.7** |
| | 0.3nm,0.6s,baz=120,slow=7.7,SNR=7.2 | | | | | | |

*SKHL **28** 01:15:19.9±0.2,43˚.20N×142˚.00E,h162km±16km,mb4.9/6, msha5.4/4*
*MOS **28** 01:15:19.3±0.9,43˚.17N×141˚.83E,h174km,mb4.3/13, Error ellipse: s-maj=9.0km s-min=6.2km az=95.0*
*JMA **28** 01:15:20.4±0.1,43˚.15N×141˚.84E,h164km±1km,M3.4*
*IDC **28** 01:15:20.3±0.8,43˚.23N×141˚.88E,h164km±4km,mb3.5/16, mb1 3.6/19,mb1mx3.4/42,mbtmp4.0/19,Error ellipse: s-maj=17.4km s-min=12.9km az=120.0*
*NEIC **28** 01:15:20.4±1.9,43˚.11N±0˚.05×141˚.74E±0˚.08, h170km±5km,mb4.1/26,Error ellipse: s-maj=8.5km s-min=7.0km az=79.0*
**ISC 28 01:15:19.6±0.5,43˚.10N±0˚.03×141˚.84E±0˚.03,h166km±3km, n148,σ1°33/201,mb4.1/36,13C-6D,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JISS** | **Ishikarishitsu** | **0.35** | **299** | P | **Pn** | **01 15 43.1** | **+0.9** |
| JISS | | | | *e*S | **Sn** | **01 16 00.0** | **+0.5** |
| **JEW** | **Eniwo** | **0.39** | **227** | P | **Pn** | **01 15 43.2** | **+0.9** |
| JEW | | | | *e*S | **Sn** | **01 16 00.1** | **+0.4** |
| **JEW** | **Eniwo** | **0.39** | **227** | P | **Pn** | **01 15 42.7** | **+0.4** |
| JEW | | | | Sn | **Sn** | **01 16 00.3** | **+0.7** |
| **JIAM** | **Iburiatsuma** | **0.48** | **173** | P | **Pn** | **01 15 43.8** | **+1.1** |
| JIAM | | | | *e*S | **Sn** | **01 16 01.9** | **+1.6** |
| **JAB** | **Ashibetsu** | **0.49** | **35** | P | **Pn** | **01 15 43.3** | **+0.6** |
| JAB | | | | *e*S | **Sn** | **01 16 00.2** | **-0.3** |
| **JFR** | **Furan** | **0.56** | **84** | P | **Pn** | **01 15 43.2** | **+0.2** |
| JFR | | | | *e*S | **Sn** | **01 16 01.2** | **+0.2** |
| **JHR** | **Hokuryu** | **0.64** | **353** | P | **Pn** | **01 15 44.3** | **+0.8** |
| JHR | | | | *e*S | **Sn** | **01 16 02.4** | **+0.5** |
| **JKK2** | **Kamakawa 2** | **1.01** | **40** | P | **Pn** | **01 15 46.5** | **+0.5** |
| JKK2 | | | | *e*S | **Sn** | **01 16 05.9** | **-0.5** |
| **JSK** | **Shakotan** | **1.03** | **284** | P | **Pn** | **01 15 46.5** | **+0.4** |
| JSK | | | | *e*S | **Sn** | **01 16 06.4** | **0.0** |
| **JNBK** | **Urakawa-nobuka** | **1.06** | **140** | P | **Pn** | **01 15 47.9** | **+1.5** |
| JNBK | | | | *e*S | **Sn** | **01 16 09.7** | **+2.7** |
| **ASAJ** | **Asahikawa** | **1.15** | **28** | P | **Pn** | **01 15 47.4** | **+0.2** |
| | 15nm,0.3s,baz=234,slow=9.4,SNR=72 | | | | | | |
| ASAJ | | | | S | **Sn** | **01 16 07.1** | **-1.3** |
| | 7.2nm,0.3s,baz=25,slow=29,SNR=24 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **1.15** | **28** | Pn | **Pn** | **01 15 47.2** | **0.0** |
| JKA | | | | | **Sn** | **01 16 07.3** | **-1.1** |
| **JKA** | **Kamikawa-asahi** | **1.15** | **28** | *e*P | **Pn** | **01 15 47.4** | **+0.3** |
| JKA | | | | *e*S | **Sn** | **01 16 07.1** | **-1.3** |
| **JCH** | **Churui** | **1.22** | **113** | P | **Pn** | **01 15 47.7** | **-0.1** |
| JCH | | | | *e*S | **Sn** | **01 16 08.0** | **-1.4** |
| **JKB** | **Kayabe** | **1.35** | **206** | P | **Pn** | **01 15 49.7** | **+0.7** |
| JKB | | | | *e*S | **Sn** | **01 16 12.0** | **+0.5** |
| **JYG** | **Yagishiri** | **1.36** | **347** | P | **Pn** | **01 15 49.0** | **+0.1** |
| **JAR** | **Ashorobuto** | **1.43** | **82** | P | **Pn** | **01 15 50.6** | **+1.0** |
| JAR | | | | *e*S | **Sn** | **01 16 13.4** | **+0.6** |
| **ERM** | **Erimo** | **1.46** | **138** | PN | **Pn** | **01 15 51.5** | **+1.5** |
| ERM | | | | | | 01 16 15.8 | |
| **ERM** | **Erimo** | **1.46** | **138** | Pn | **Pn** | **01 15 51.5** | **+1.5** |
| ERM | | | | Sn | **Sn** | **01 16 15.8** | **+2.4** |
| **JEM** | **Erimo** | **1.46** | **138** | | **Pn** | **01 15 50.8** | **+0.8** |
| **JTKR** | **Abashiri--Toko** | **1.74** | **59** | P | **Pn** | **01 15 53.8** | **+1.0** |
| JTKR | | | | *e*S | **Sn** | **01 16 18.9** | **+0.5** |
| **JOT** | **Ohata** | **1.82** | **199** | P | **Pn** | **01 15 54.5** | **+0.8** |
| JOT | | | | *e*S | **Sn** | **01 16 20.1** | **+0.1** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **JSE** | **Soyaes** | **1.93** | **16** | P | | **Pn** | | **01 15 55.3** | **+0.4** |
| JSE | | | | *e*S | | **Sn** | | **01 16 21.5** | **-0.8** |
| **JOSM** | **Okushiri--Mats** | **2.02** | **240** | P | | **Pn** | | **01 15 56.5** | **+0.6** |
| JOSM | | | | *e*S | | **Sn** | | **01 16 23.1** | **-0.9** |
| **JOMM** | **Oshimamatsumae** | **2.08** | **221** | P | | **Pn** | | **01 15 57.8** | **+1.2** |
| JOMM | | | | *e*S | | **Sn** | | **01 16 26.2** | **+1.0** |
| **JAK** | **Akkeshi** | **2.10** | **92** | P | | **Pn** | | **01 15 56.7** | **-0.1** |
| JAK | | | | *e*S | | **Sn** | | **01 16 24.4** | **-1.1** |
| **AKK** | **Akkeshi** | **2.20** | **91** | *i* P | | **Pn** | | **01 15 57.9** | **-0.1** |
| AKK | | | | *i* S | | **Sn** | | **01 16 26.3** | **-1.4** |
| **JWK2** | **Keihoku** | **2.21** | **1** | P | | **Pn** | | **01 15 58.8** | **+0.7** |
| **JRBN** | **Rebuntou** | **2.38** | **347** | P | | **Pn** | | **01 16 00.4** | **+0.3** |
| **JTM** | **Tenmabayashi** | **2.39** | **194** | Pn | | **Pn** | | **01 16 01.0** | **+0.8** |
| JTM | | | | Sn | | **Sn** | | **01 16 31.4** | **-0.2** |
| **RUSJ** | **Misakicho** | **2.67** | **67** | *e*PN | | **Pn** | | **01 16 05.1** | **+1.6** |
| RUSJ | | | | S | | **Sn** | | **01 16 39.0** | **+1.4** |
| **NMR** | **Nemuro--Hokkai** | **2.85** | **83** | *e*PN | | **Pn** | | **01 16 05.6** | **-0.2** |
| NMR | | | | *e*S | | **Sn** | | **01 16 38.9** | **-2.7** |
| **NMR** | **Nemuro--Hokkai** | **2.85** | **83** | *i* P | | **Pn** | | **01 16 05.5** | **-0.2** |
| NMR | | | | *i* S | | **Sn** | | **01 16 39.2** | **-2.4** |
| **YUK** | **Yuzh-Kuril'sk** | **3.07** | **71** | *e*PN | | **Pn** | | **01 16 09.8** | **+1.4** |
| YUK | | | | *e*S | | **Sn** | | **01 16 46.5** | **+0.2** |
| YUK | | | | pmax | pmax | | | | | |
| | comp=N,74nm,0.4s | | | | | | | | | |
| YUK | | | | pmax | pmax | | | | | |
| | comp=Z,178nm,0.4s | | | | | | | | | |
| YUK | | | | pmax | pmax | | | | | |
| | comp=E,60nm,0.3s | | | | | | | | | |
| YUK | | | | smax | smax | | | | | |
| | comp=N,219nm,0.4s | | | | | | | | | |
| YUK | | | | smax | smax | | | | | |
| | comp=E,250nm,0.4s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.07** | **71** | *e*P | | **Pn** | | **01 16 09.0** | **+0.6** |
| YUK | | | | AMB | AMB | 01 16 10.0 | | | | |
| | comp=E,70nm,0.4s | | | | | | | | | |
| YUK | | | | AMB | AMB | 01 16 10.0 | | | | |
| | comp=E,60nm,0.4s | | | | | | | | | |
| YUK | | | | AMB | AMB | 01 16 10.0 | | | | |
| | comp=E,180nm,0.4s | | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | | **01 16 46.0** | **-0.3** |
| YUK | | | | A | A | 01 16 54.0 | | | | |
| | comp=E,220nm,0.4s | | | | | | | | | |
| YUK | | | | A | A | 01 16 54.0 | | | | |
| | comp=E,250nm,0.4s | | | | | | | | | |
| **SHO** | **Shikotan** | **3.71** | **76** | *e*PN | | **Pn** | | **01 16 15.9** | **-0.6** |
| SHO | | | | *e*S | | **Sn** | | **01 16 57.3** | **-3.6** |
| SHO | | | | pmax | pmax | | | | | |
| | comp=N,26nm,0.3s | | | | | | | | | |
| SHO | | | | pmax | pmax | | | | | |
| | comp=Z,47nm,0.3s | | | | | | | | | |
| SHO | | | | pmax | pmax | | | | | |
| | comp=E,28nm,0.1s | | | | | | | | | |
| SHO | | | | smax | smax | | | | | |
| | comp=E,168nm,0.3s | | | | | | | | | |
| SHO | | | | smax | smax | | | | | |
| | comp=N,183nm,0.2s | | | | | | | | | |
| **SHO** | **Shikotan** | **3.71** | **76** | *e*P | | **Pn** | | **01 16 16.0** | **-0.6** |
| SHO | | | | AMB | AMB | 01 16 18.6 | | | | |
| | comp=N,30nm,0.3s | | | | | | | | | |
| SHO | | | | AMB | AM

comp=Z,11nm,0.3s,baz=53,slow=15,SNR=1.5
**JHJ2 Mitsune 10.10 190** Pn **Pn 01 17 39.9 -0.8**
**ZEA Zeya 14.36 323** *eP* **Pn 01 18 34.9 -0.2**
ZEA pmax pmax
comp=N,10.0nm,0.7s
ZEA pmax pmax
comp=Z,10.0nm,0.7s
**ZEA Zeya 14.36 323** *eP* **Pn 01 18 34.9 -0.2**
ZEA AMB AMB 01 18 37.4
comp=Z,10.0nm,0.7s
ZEA AMB AMB 01 18 37.4
comp=Z,10.0nm,0.7s
**PETK Petropavlovsk- 14.54 41** P **Pn 01 18 37.9 +0.4**
comp=Z,0.2nm,0.3s,baz=206,slow=9.6,SNR=1.7
**MA2 Magadan 17.38 15** P **P 01 19 09.7 -1.0**
comp=Z,0.4nm,0.3s,baz=192,slow=11,SNR=12
**MA2 Magadan 17.38 15** *deP* **Pn 01 19 12.0 +0.1**
MA2 pmax pmax
comp=Z,10.0nm,1.3s
**MA2 Magadan 17.38 15** P **P 01 19 10.9 +0.1**
MA2 IAmb IAmb 01 19 12.8
comp=Z,9.3nm,1.1s
**YAK Yakutsk 20.28 343** P **P 01 19 39.8 -2.3**
comp=Z,7.8nm,0.4s,baz=136,slow=5.1,SNR=4.7
**YAK Yakutsk 20.28 343** *ceP* **P 01 19 39.9 -2.1**
YAK pmax pmax
comp=Z,18nm,0.6s
**YAK Yakutsk 20.28 343** *eP* **P 01 19 39.9 -2.1**
**SEY Seymchan 20.80 14** P **P 01 19 46.6 -0.9**
comp=Z,1.4nm,0.3s,baz=189,slow=19,SNR=8.2
**SEY Seymchan 20.80 14** *|eP* **P 01 19 47.5 0.0**
**SEY Seymchan 20.80 14** *eP* **P 01 19 47.5 0.0**
**SONM Songino Array 25.16 293** P **P 01 20 30.7 +1.2**
comp=Z,0.9nm,0.4s,baz=80,slow=8.5,SNR=8.8
**SONM Songino Array 25.16 293** P **P 01 20 28.9 -0.6**
**WHN Wuhan 25.20 249** P **P 01 20 25.8 -4.1**
WHN sP **sP 01 21 17.5 -5.7**
**GOMU GeErMu 36.47 275** P **P 01 22 06.0 -3.0**
GOMU pmax pmax
comp=Z,86nm,5.1s
GOMU pmax pmax
comp=Z,2.0nm,0.9s
**DGZ Jazzator, Alta 37.38 300** *eP* **P 01 22 17.3 +1.0**
DGZ pmax pmax
comp=Z,3.0nm,0.8s
**NRIK Noril'sk 37.97 332** *|eP* **P 01 22 19.3 -1.5**
NRIK pmax pmax
comp=Z,3.0nm,1.4s
**ZAA0 Zalesovo Array 38.29 307** P **P 01 22 24.1 +0.5**
ZAA0 IAmb IAmb 01 22 26.9
comp=Z,2.4nm,0.6s
**ZALV Zalesovo Beam 38.29 307** P **P 01 22 24.4 +0.8**
comp=Z,2.5nm,0.4s,baz=94,slow=9.6,SNR=15
ZALV ScP **ScP 01 28 06.7 +0.6**
comp=Z,0.3nm,0.4s,baz=69,slow=4.8,SNR=3.7
**IMAR Indian Mountai 41.35 34** P **P 01 22 49.5 +0.8**
**MK31 Makanchi Array 41.43 296** *c iP* **P 01 22 50.3 +0.6**
**MK31 Makanchi Array 41.43 296** P **P 01 22 49.7 0.0**
MK31 IAmb IAmb 01 22 51.1
comp=Z,2.8nm,0.7s
**MKAR Makanchi Array 41.43 296** P **P 01 22 50.4 +0.6**
comp=Z,2.3nm,0.5s,baz=81,slow=10,SNR=60
MKAR PcP **PcP 01 24 45.1 +0.8**
comp=Z,0.1nm,0.3s,baz=72,slow=5.6,SNR=2.9
MKAR ScP **ScP 01 28 18.6 +0.1**
comp=Z,0.1nm,0.7s,baz=60,slow=3.5,SNR=2.0
**MKAR Makanchi Array 41.43 296** P **P 01 22 49.9 +0.2**
**MAKZ Makanchi 41.63 297** P **P 01 22 50.5 -0.8**
MAKZ pmax pmax
comp=Z,4.0nm,0.8s
**MAKZ Makanchi 41.63 297** P **P 01 22 50.5 -0.8**
MAKZ IAmb IAmb 01 22 52.8
comp=Z,3.7nm,0.8s
**KURK Kurchatov 42.66 303** *ceP* **P 01 22 59.9 +0.4**
KURK pmax pmax
comp=Z,3.0nm,0.6s
**KURK Kurchatov 42.66 303** P **P 01 22 59.7 +0.1**
KURK IAmb IAmb 01 23 02.9
comp=Z,7.1nm,1.0s
**KURK Kurchatov 42.66 303** *eP* **P 01 22 59.9 +0.4**
**TOLK Toolik Lake Re 42.99 30** P **P 01 23 02.5 +0.5**
**CMAR Chiang Mai Arr 43.65 249** *i P* **P 01 23 08.0 +0.1**
CMAR pmax pmax
comp=Z,4.0nm,0.3s
**WRH Wood River Hil 43.80 36** P **P 01 23 09.4 +1.0**
WRH IAmb IAmb 01 23 31.8
comp=Z,7.3nm,1.4s
**COLA College 43.86 35** *eP* **P 01 23 07.3 -1.6**
COLA pmax pmax
comp=Z,34nm,4.5s
**SML Sawmill 44.02 40** P **P 01 23 10.3 0.0**
**ILAR Eielson Array 44.28 36** P **P 01 23 12.6 +0.2**
comp=Z,0.4nm,0.9s,baz=260,slow=5.8,SNR=2.5
**BMAR Burnt Mountain 44.93 32** P **P 01 23 18.8 +1.4**
**J25K Salcha River, 44.95 36** P **P 01 23 19.6 +2.0**
**MCAR McCarthy VSAT 46.59 40** P **P 01 23 32.0 +1.6**
**EGAK Eagle 46.70 35** P **P 01 23 33.6 +2.3**
EGAK IAmb IAmb 01 24 02.6
comp=Z,9.4nm,1.4s
**BCAR Beaver Creek A 46.78 37** P **P 01 23 33.4 +1.3**
**M27K Edge Creek, AK 46.90 38** P **P 01 23 33.8 +0.8**
**BRVK Borovoye 46.94 308** *ceP* **P 01 23 34.1 +0.8**
BRVK pmax pmax
comp=Z,8.0nm,1.7s
**BRVK Borovoye 46.94 308** P **P 01 23 32.8 -0.6**
BRVK IAmb IAmb 01 23 36.8
comp=Z,7.9nm,1.4s
**BRVK Borovoye 46.94 308** *eP* **P 01 23 34.1 +0.8**
**AAK Ala-Archa 48.11 294** *eP* **P 01 23 43.3 +0.6**
AAK pmax pmax
comp=Z,1.0nm,0.6s
**AAK Ala-Archa 48.11 294** *eP* **P 01 23 43.3 +0.6**
**INK Inuvik 48.89 29** P **P 01 23 48.4 +0.4**
comp=Z,0.7nm,0.4s,baz=292,slow=3.3,SNR=6.1
**INK Inuvik 48.89 29** IAmb IAmb 01 23 54.2
comp=Z,4.6nm,1.4s
**A36M Sachs Harbour 50.54 24** P **P 01 24 01.7 +1.3**
A36M IAmb IAmb 01 24 03.0
comp=Z,2.7nm,0.6s
**KKAR Karatay Array 50.56 296** P **P 01 24 01.0 0.0**
**KKAR Karatay Array 50.56 296** P **P 01 24 01.0 0.0**
**C36M Paulatuk 51.83 27** P **P 01 24 10.6 +0.6**
**ARU Arti 52.14 316** *c iP* **P 01 24 12.9 +0.4**
ARU S **S 01 31 25.2 +1.6**
ARU SS **SS 01 35 00.8 -1.7**
ARU pmax pmax
comp=Z,5.0nm,0.8s
**ARU Arti 52.14 316** P **P 01 24 13.1 +0.5**
ARU IAmb IAmb 01 24 14.8
comp=Z,4.7nm,0.8s
**ARU Arti 52.14 316** *i P* **P 01 24 12.9 +0.4**
**EUNU Eureka 54.15 9** P **P 01 24 26.8 -0.2**
EUNU IAmb IAmb 01 24 33.8
comp=Z,2.9nm,1.1s
**ABKAR Akbulak array 54.41 307** P **P 01 24 30.0 +0.8**
**KIRV Kirov 55.68 321** *ceP* **P 01 24 38.3 +0.1**
**RES Resolute Bay 56.66 15** P **P 01 24 44.1 -0.7**
comp=Z,2.6nm,0.6s,baz=298,slow=8.0,SNR=14
**RES Resolute Bay 56.66 15** IAmb IAmb 01 24 46.2
comp=Z,2.7nm,0.7s
**YKA Yellowknife Ar 58.44 32** P **P 01 24 57.9 +0.4**
comp=Z,0.3nm,0.6s,baz=304,slow=6.6,SNR=4.9
**YKA Yellowknife Ar 58.44 32** *i P* **P 01 24 58.7 +1.2**
**ARCES ARCESS Array B 58.46 338** P **P 01 24 57.4 -0.1**
comp=Z,1.4nm,0.9s,baz=34,slow=8.8,SNR=4.9
**ARCES ARCESS Array B 58.46 338** IAmb IAmb 01 24 58.9
comp=Z,7.3nm,1.3s
**TULEG Thule 59.05 8** P **P 01 25 01.9 +0.4**
**BELG Belogornoye 59.66 315** *ceP* **P 01 25 06.4 +0.4**
BELG pmax pmax
comp=Z,1.0nm,0.6s
**WRA Warramunga Arr 63.11 188** P **P 01 25 30.5 +1.0**
comp=Z,0.2nm,0.6s,baz=8,slow=7.3,SNR=1.6
**OBN Obninsk 63.48 322** *eP* **P 01 25 31.0 -0.5**
OBN pmax pmax
comp=Z,27nm,2.8s
**OBN Obninsk 63.48 322** *eP* **P 01 25 31.0 -0.5**
**FINES FINESS Array B 63.63 331** P **P 01 25 32.2 -0.2**
comp=Z,3.5nm,0.5s,baz=55,slow=7.4,SNR=53
**VSU Vasula 65.42 328** *|eP* **P 01 25 44.4 +0.3**
VSU pmax pmax
comp=Z,61nm,1.1s
**ASAR Alice Springs 66.84 188** P **P 01 25 55.4 +1.9**
comp=Z,0.2nm,0.9s,baz=360,slow=5.4,SNR=4.8
**KIV Kislovodsk 67.24 309** *eP* **P 01 25 57.3 +1.2**
KIV pmax pmax
comp=Z,6.0nm,1.1s
**KIV Kislovodsk 67.24 309** P **P 01 25 56.7 +0.7**
**KIV Kislovodsk 67.24 309** *eP* **P 01 25 57.3 +1.2**
**KBZ Khabaz 67.27 309** P **P 01 25 57.7 +1.6**
comp=Z,1.7nm,0.8s,baz=48,slow=5.0,SNR=4.7
**MNK Minsk 67.69 325** *i P* **P 01 25 59.4 +0.9**
MNK *i* 01 26 25.1
MNK *i *PP* **pP 01 26 39.8 +1.8**
MNK *i* 01 28 30.4
MNK *i* PPP PPP 01 30 10.2
MNK *i* S **S 01 34 41.4 -0.8**
MNK *i* 01 35 41.1
MNK *i* SS **SS 01 39 07.8 +2.3**
MNK pmax pmax
comp=Z,4.0nm,0.8s
MNK pmax pmax
comp=N,16nm,1.2s
MNK pmax pmax
comp=E,1.0nm,0.9s
MNK MLR MLR
comp=Z,57nm,15.0s
MNK MLR MLR
comp=N,63nm,19.0s
MNK MLR MLR
comp=E,6.0nm,17.0s
**MNK Minsk 67.69 325** *i P* **P 01 25 59.5 +0.9**
comp=E,1.0nm,0.9s
MNK *i* P **P 01 25 59.5 +0.9**
comp=N,16nm,1.2s
MNK *i* P **P 01 25 59.5 +0.9**
comp=Z,4.0nm,0.8s,baz=226
MNK *i* pP **pP 01 26 39.8 +1.9**
MNK *i* PP **PP 01 28 30.4 +1.1**
MNK *i* PPP PPP 01 30 10.3
MNK *i* S **S 01 34 41.4 -0.8**
MNK *i* S **S 01 34 41.4 -0.8**
MNK *i* sS **sS 01 35 53.5 +3.5**
MNK *i* SS **SS 01 39 07.8 +2.4**
MNK *i* SSS SSS 01 42 25.7
MNK *i* LRM MLR 01 58 14.5
comp=Z,57nm,15.4s
MNK *i* LRM MLR 01 58 22.2
comp=N,63nm,18.7s
MNK *i* LRM MLR 01 58 40.3
comp=E,6.0nm,17.4s
**PABE Paberze 68.58 327** P **P 01 26 04.0 -0.1**
**NB2 NORSAR Subarra 68.73 337** P **P 01 26 04.8 -0.2**
comp=Z,0.5nm,0.4s,baz=35,slow=6.5
**NOA NORSAR Array B 68.73 337** P **P 01 26 05.0 0.0**
comp=Z,1.2nm,0.6s,baz=40,slow=7.5,SNR=9.8
**AKASG Malin Array Be 69.73 321** P **P 01 26 10.9 -0.4**
comp=Z,1.1nm,0.5s,baz=44,slow=6.7,SNR=7.3
**BURAR Bucovina Array 73.78 321** P **P 01 26 36.2 +0.6**
**RAYN Ar Rayn 78.69 292** P **P 01 27 03.7 0.0**
RAYN pmax pmax
comp=Z,2.0nm,1.2s
**RAYN Ar Rayn 78.69 292** P **P 01 27 03.7 0.0**
**DGAR Diego Garcia 80.30 250** *eP* **P 01 27 14.6 +2.3**
DGAR pmax pmax
comp=Z,76nm,1.3s

*TUL **28** 01:16:34.8±1.1, 36.97N±0.01×97.45W±0.02, h7km±5km, ML2.5, mb_Lg1.8/5(NEIC), Error ellipse: s-maj=2.3km s-min=1.6km az=59.0*
**NEIC 28 01:16:35.0±0.7, 36.958N±0.009×97.44W±0.02, h6km±5km, Error ellipse: s-maj=2.1km s-min=1.3km az=85.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **0.74** | **93** | Pg | Pg | 01 16 49.2 | -0.1 |
| **U32A** | **Winter Ranch,** | **1.39** | **246** | Pn | Pn | 01 17 00.1 | -0.8 |
| **OKCFA** | **Oklahoma City** | **1.54** | **180** | Pn | Pn | 01 17 03.4 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.55** | **180** | Pn | Pb | 01 17 03.7 | -0.5 |
| **TUL1** | **Leonard** | **1.69** | **128** | Pn | Pb | 01 17 05.9 | -0.5 |
| **FNO** | **Franklin** | **1.70** | **179** | Pn | Pb | 01 17 06.0 | -0.6 |
| **R32A** | **Long Quarter,** | **1.78** | **326** | | Pn | 01 17 06.8 | +0.5 |
| R32A | | | | IAmb_Lg | | 01 17 34.2 | |
| **WMOK** | **Wichita Mounta** | **2.47** | **207** | Pn | Pn | 01 17 16.5 | +0.6 |
| **HHAR** | **Hobbs** | **2.89** | **102** | Pn | Pn | 01 17 22.7 | +1.1 |
| HHAR | | | | IAmb_Lg | | 01 18 08.6 | |
| **X37A** | **Clayton** | **2.90** | **144** | Pn | Pn | 01 17 20.7 | -1.0 |
| **S39A** | **Bolivar** | **3.36** | **76** | Pn | Pn | 01 17 27.4 | -0.7 |
| **W39A** | **Magazine** | **3.44** | **120** | Pn | Pn | 01 17 29.1 | 0.0 |
| **U40A** | **Yellville** | **3.73** | **98** | Pn | Pn | 01 17 32.6 | -0.6 |
| **MGMO** | **Mountain Grove** | **4.14** | **86** | Pn | Pn | 01 17 37.8 | -0.9 |

**IDC 28 01:21:10.0±2.4, 4.61N×123.53E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/28, mbtmp3.5/3, MS3.0/1, Ms1 3.0/1, ms1mx2.5/51, Error ellipse: s-maj=311.8km s-min=25.7km az=63.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **26.62** | **157** | P | P | 01 26 50.6 | +0.2 |
| | 0.4nm,0.3s,baz=335,slow=9.7,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **29.88** | **161** | P | P | 01 27 19.3 | -0.2 |
| | 0.2nm,0.3s,baz=340,slow=7.8,SNR=7.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.52** | **21** | LR | LR | 01 42 25.5 | |
| | comp=Z,25nm,19.6s,baz=198,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.03** | **326** | P | P | 01 30 43.4 | -0.1 |
| | 0.2nm,0.3s,baz=123,slow=8.2,SNR=7.4 | | | | | | |

*ANF **28** 01:29:38.5±0.7, 44.62N×114.22W, h7km, ML3.6/10, Error ellipse: s-maj=10.8km s-min=4.7km az=111.0*
*NEIC **28** 01:29:38.6±1.0, 44.63N±0.03×114.12W±0.04, h1km±6km, Error ellipse: s-maj=5.9km s-min=3.0km az=220.0*
*BUT **28** 01:29:38.9±1.3, 44.62N±0.04×114.12W±0.04, h7km±6km, ML3.6/28, ML3.2/102(NEIC), Error ellipse: s-maj=5.4km s-min=3.8km az=177.0*
*UUSS **28** 01:29:38.0, 44.62N×114.12W, h7km*
*IDC **28** 01:29:40.1±1.6, 44.73N×113.98W, h0km, mb1 3.3/3, mb1mx3.2/35, mbtmp2.9/3, ML3.0/3, Error ellipse: s-maj=21.0km s-min=13.6km az=14.0*
**ISC 28 01:29:38.0±1.2, 44.64N±0.03×114.15W±0.02, h1km±10km, n89, σ1.9 15/102, Western Idaho**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BCYI** | **Bear Canyon** | **0.63** | **122** | | **Pg** | **01 29 50.0** | **0.0** |
| BCYI | | | | Sg | **Sg** | **01 29 57.8** | **-0.4** |
| **ICI** | **Italian Canyon** | **0.92** | **109** | | **Pg** | **01 29 55.8** | **+0.2** |
| **MCMT** | **McKenzie Canyo** | **0.94** | **78** | | **Pg** | **01 29 56.4** | **+0.3** |
| **EMI** | **Eightmile Cany** | **1.04** | **123** | | **Pg** | **01 29 57.8** | **-0.3** |
| **HLID** | **Hailey** | **1.10** | **190** | | **Pg** | **01 29 59.0** | **0.0** |
| HLID | | | | Sg | **Sb** | **01 30 13.4** | **-1.4** |
| **HLID** | **Hailey** | **1.10** | **190** | P | **Pg** | **01 29 59.1** | **0.0** |
| | baz=11 | | | | | | |
| HLID | | | | S | **Sg** | **01 30 13.1** | **-0.1** |
| | baz=11 | | | | | | |
| **DLMT** | **Dillon** | **1.31** | **56** | | **Pn** | **01 30 03.7** | **-0.1** |
| DLMT | | | | | **Sg** | **01 30 22.1** | **+1.8** |
| **PLID** | **Pearl Lake** | **1.39** | **289** | | **Pn** | **01 30 05.0** | **+0.2** |
| PLID | | | | | **Sg** | **01 30 23.9** | **+1.2** |
| PLID | | | | IAML | | 01 30 26.2 | |
| | 540nm,0.5s | | | | | | |
| **LRM** | **Limekiln Ridge** | **1.68** | **45** | | **Pn** | **01 30 08.8** | **0.0** |
| **MFID** | **Camas Ranch** | **1.73** | **225** | | **Pn** | **01 30 09.3** | **0.0** |
| **CMI** | **Centennial Mou** | **1.81** | **93** | | **Pn** | **01 30 10.8** | **+0.2** |
| **QLMT** | **Earthquake Lak** | **1.95** | **83** | | **Pn** | **01 30 12.9** | **+0.4** |
| QLMT | | | | Sg | **Sb** | **01 30 40.1** | **+0.8** |
| **BOZ** | **Bozeman (W)** | **2.02** | **61** | Pn | **Pn** | **01 30 12.8** | **-0.6** |
| BOZ | | | | IAML | | 01 30 44.0 | |
| | 262nm,0.3s | | | | | | |
| **BOZ** | **Bozeman (W)** | **2.02** | **61** | P | **Pn** | **01 30 13.6** | **+0.1** |
| | baz=242 | | | | | | |
| BOZ | | | | S | **Sn** | **01 30 40.8** | **+1.3** |
| | baz=242 | | | | | | |
| **YPDC** | **Denny Creek** | **2.08** | **87** | | **Pb** | **01 30 16.5** | **-0.2** |
| **YHB** | **Horse Butte** | **2.11** | **86** | | **Pb** | **01 30 17.1** | **-0.2** |
| **YHL** | **Hebgen Lake** | **2.12** | **83** | Pn | **Pn** | **01 30 14.8** | **-0.1** |
| **MCID** | **Moose Creek** | **2.17** | **101** | | **Pn** | **01 30 16.4** | **+0.8** |
| **GCR** | **Grayling Creek** | **2.17** | **85** | | **Pb** | **01 30 17.9** | **-0.5** |
| **YPWB** | **West Boundary** | **2.18** | **90** | | **Pb** | **01 30 18.6** | **+0.2** |
| **MSO** | **Missoula** | **2.19** | **4** | | **Pn** | **01 30 15.7** | **-0.1** |
| MSO | | | | IAML | | 01 30 51.0 | |
| | 224nm,0.5s | | | | | | |
| MSO | | | | IAML | | 01 30 53.1 | |
| | 206nm,0.6s | | | | | | |
| **MSO** | **Missoula** | **2.19** | **4** | P | **Pn** | **01 30 15.9** | **+0.1** |
| | baz=183 | | | | | | |
| MSO | | | | S | **Sn** | **01 30 44.3** | **+0.7** |
| | baz=183 | | | | | | |
| **YMC** | **Maple Creek** | **2.24** | **86** | | **Pb** | **01 30 19.3** | **-0.2** |
| **BMO** | **Blue Mountains** | **2.26** | **276** | | **Pn** | **01 30 16.6** | **-0.1** |
| **BMO** | **Blue Mountains** | **2.26** | **276** | IAML | | 01 30 52.6 | |
| | 174nm,0.3s | | | | | | |
| BMO | | | | IAML | | 01 30 54.9 | |
| | 136nm,0.3s | | | | | | |
| **YMR** | **Madison River** | **2.27** | **88** | | **Pn** | **01 30 18.0** | **+1.0** |
| **YPM** | **Purple Mountai** | **2.34** | **88** | | **Pb** | **01 30 21.6** | **+0.4** |
| **YHH** | **Holmes Hill** | **2.35** | **85** | | **Pb** | **01 30 21.2** | **-0.2** |
| **YHH** | **Holmes Hill** | **2.35** | **85** | IAML | | 01 30 52.6 | |
| | comp=N,168nm,0.7s | | | | | | |
| YHH | | | | IAML | | 01 30 55.0 | |
| | comp=E,92nm,0.4s | | | | | | |
| **YNR** | **Norris Junctio** | **2.48** | **87** | Pn | **Pn** | **01 30 21.8** | **+2.0** |
| YNR | | | | IAML | | 01 30 59.4 | |
| | comp=E,94nm,0.4s | | | | | | |
| YNR | | | | IAML | | 01 31 01.5 | |
| | comp=N,89nm,0.6s | | | | | | |
| **YMV** | **Mammoth Vault** | **2.48** | **81** | | **Pb** | **01 30 23.5** | **-0.1** |
| **FLWY** | **Flagg Ranch** | **2.54** | **102** | | **Pn** | **01 30 20.9** | **+0.3** |
| FLWY | | | | IAML | | 01 31 03.5 | |
| FLWY | comp=N,106nm,0.8s | | | IAML | | 01 31 05.4 | |
| | comp=N,78nm,0.8s | | | | | | |
| **F10A** | **Beach Ranch, E** | **2.55** | **303** | | **Pn** | **01 30 21.9** | **+1.3** |
| **YLT** | **Little Thumb C** | **2.55** | **93** | | **Pb** | **01 30 25.2** | **+0.4** |
| **ECR** | **Eagle Creek** | **2.56** | **127** | Pn | **Pn** | **01 30 20.9** | **0.0** |
| **H17A** | **Grant Village** | **2.57** | **94** | Pn | **Pn** | **01 30 22.5** | **+1.4** |
| **H17A** | **Grant Village** | **2.57** | **94** | P | **Pn** | **01 30 22.5** | **+1.4** |
| | baz=276 | | | | | | |
| H17A | | | | S | **Sn** | **01 30 54.7** | **+1.6** |
| | baz=276 | | | | | | |
| **TPAW** | **Teton Pass** | **2.58** | **115** | | **Pn** | **01 30 21.5** | **+0.3** |
| TPAW | | | | IAML | | 01 31 03.5 | |
| | comp=N,130nm,0.8s | | | | | | |
| **YUF** | **Upper Falls** | **2.59** | **87** | Pn | **Pn** | **01 30 21.1** | **-0.3** |
| **MOOW** | **Moose Ponds** | **2.60** | **109** | | **Pn** | **01 30 22.0** | **+0.5** |
| MOOW | | | | IAML | | 01 30 58.1 | |
| | comp=N,76nm,0.7s | | | | | | |
| **HRY** | **Holter Researc** | **2.63** | **37** | | **Pn** | **01 30 21.9** | **+0.1** |
| **LKWY** | **Lake** | **2.68** | **90** | | **Pn** | **01 30 21.7** | **-0.9** |
| **REDW** | **Red Top Meadow** | **2.70** | **117** | | **Pn** | **01 30 23.6** | **+0.7** |
| REDW | | | | IAML | | 01 31 06.7 | |
| | comp=N,112nm,0.8s | | | | | | |
| REDW | | | | IAML | | 01 31 16.8 | |
| | comp=N,141nm,0.7s | | | | | | |
| **SNOW** | **Snow King Moun** | **2.71** | **115** | | **Pn** | **01 30 22.2** | **-0.8** |
| SNOW | | | | IAML | | 01 31 04.6 | |
| | comp=N,100nm,0.8s | | | | | | |
| SNOW | | | | IAML | | 01 31 07.4 | |
| | comp=N,158nm,0.8s | | | | | | |
| **LOHW** | **Long Hollow** | **2.75** | **111** | | **Pn** | **01 30 24.1** | **+0.6** |
| LOHW | | | | IAML | | 01 31 11.2 | |
| | comp=N,91nm,0.6s | | | | | | |
| LOHW | | | | IAML | | 01 31 11.3 | |
| | comp=N,63nm,0.6s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.85** | **87** | | **Pn** | **01 30 24.9** | **-0.1** |
| **YPSB** | **Soda Butte** | **2.86** | **84** | | **Pb** | **01 30 31.1** | **+1.1** |
| **AHID** | **Auburn Hatcher** | **2.90** | **129** | | **Pn** | **01 30 25.9** | **+0.4** |
| AHID | | | | IAML | | 01 31 10.2 | |
| | comp=N,73nm,0.6s | | | | | | |
| AHID | | | | IAML | | 01 31 18.6 | |
| | comp=N,84nm,0.6s | | | | | | |
| **HVU** | **Hansel Valley** | **3.03** | **160** | | **Pn** | **01 30 27.5** | **+0.2** |
| **JTMT** | **Jette** | **3.11** | **358** | | **Pn** | **01 30 28.9** | **+0.6** |
| JTMT | | | | IAML | | 01 31 18.6 | |
| | comp=N,101nm,0.6s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **3.37** | **305** | | **Pn** | **01 30 32.3** | **+0.4** |
| E09A | | | | IAML | | 01 31 31.2 | |
| | comp=E,85nm,0.9s | | | | | | |
| E09A | | | | IAML | | 01 31 31.3 | |
| | comp=N,53nm,0.5s | | | | | | |
| **J08A** | **Circle Bar Ran** | **3.38** | **249** | | **Pn** | **01 30 32.8** | **+0.8** |
| J08A | | | | IAML | | 01 31 36.0 | |
| | comp=N,52nm,1.2s | | | | | | |
| J08A | | | | IAML | | 01 31 41.7 | |
| | comp=E,59nm,0.7s | | | | | | |
| **G08A** | **Pilot Rock** | **3.48** | **282** | | **Pn** | **01 30 34.1** | **+0.7** |
| G08A | | | | IAML | | 01 31 29.9 | |
| | comp=E,56nm,0.7s | | | | | | |
| G08A | | | | IAML | | 01 31 30.2 | |
| | comp=N,62nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **3.50** | **80** | | **Pn** | **01 30 33.7** | **-0.2** |
| RLMT | | | | IAML | | 01 31 35.7 | |
| | comp=N,67nm,0.6s | | | | | | |
| RLMT | | | | IAML | | 01 31 35.9 | |
| | comp=N,48nm,0.3s | | | | | | |
| **RLMT** | **Red Lodge** | **3.50** | **80** | P | **Pn** | **01 30 35.1** | **+1.2** |
| | baz=263 | | | | | | |
| RLMT | | | | S | **Sn** | **01 31 16.4** | **+0.4** |
| | baz=263 | | | | | | |
| **BGU** | **Big Grassy Mou** | **3.81** | **167** | | **Pn** | **01 30 38.0** | **0.0** |
| **BW06** | **Boulder Array** | **3.82** | **118** | | **Pn** | **01 30 38.4** | **+0.2** |
| **BW06** | **Boulder Array** | **3.82** | **118** | P | **Pn** | **01 30 38.1** | **-0.1** |
| | baz=301 | | | | | | |
| BW06 | | | | S | **Sn** | **01 31 24.7** | **+0.8** |
| | baz=301 | | | | | | |
| **PD31** | **Pinedale Array** | **3.82** | **118** | | **Pb** | **01 30 45.0** | **-1.4** |
| **PDAR** | **Pinedale Array** | **3.82** | **118** | Pn | **Pn** | **01 30 42.4** | **+4.2** |
| | comp=N,0.6nm,0.3s,baz=309,slow=12,SNR=15 | | | | | | |
| PDAR | | | | Pg | **Pb** | **01 30 48.5** | **+2.1** |
| | comp=N,1.6nm,0.3s,baz=303,slow=14,SNR=20 | | | | | | |
| PDAR | | | | Lg | Lg | 01 31 36.4 | |
| | comp=N,1.1nm,0.3s,baz=311,slow=18,SNR=2.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **3.82** | **118** | | **Pn** | **01 30 38.5** | **+0.3** |
| **I07A** | **Izee** | **3.88** | **264** | Pn | **Pn** | **01 30 39.6** | **+0.6** |
| I07A | | | | IAML | | 01 31 52.5 | |
| | comp=E,34nm,1.1s | | | | | | |
| I07A | | | | IAML | | 01 31 55.4 | |
| | comp=N,31nm,1.3s | | | | | | |
| **WVOR** | **Wild Horse Val** | **3.94** | **237** | | **Pn** | **01 30 40.3** | **+0.5** |
| **ELK** | **Elko** | **3.98** | **192** | Pn | **Pn** | **01 30 42.1** | **+1.7** |
| **D08A** | **Wollman Farm,** | **4.12** | **308** | Pn | **Pn** | **01 30 43.3** | **+1.2** |
| D08A | | | | IAML | | 01 31 54.5 | |
| | comp=N,28nm,1.3s | | | | | | |
| D08A | | | | IAML | | 01 31 55.0 | |
| | comp=E,34nm,1.1s | | | | | | |
| **NEW** | **Newport** | **4.17** | **331** | Pn | **Pn** | **01 30 43.4** | **+0.6** |
| NEW | | | | IAML | | 01 31 53.3 | |
| | comp=E,43nm,0.9s | | | | | | |
| **NEW** | **Newport** | **4.17** | **331** | P | **Pn** | **01 30 43.3** | **+0.5** |
| | baz=149 | | | | | | |
| NEW | | | | S | **Sn** | **01 31 32.6** | **+0.4** |
| | baz=149 | | | | | | |
| **HAWA** | **Hanford** | **4.17** | **297** | | **Pn** | **01 30 44.0** | **+1.1** |
| HAWA | | | | IAML | | 01 31 55.8 | |
| | comp=E,28nm,1.7s | | | | | | |
| **OD2** | **Odessa Site #2** | **4.20** | **312** | | **Pn** | **01 30 43.7** | **+0.4** |
| **C09A** | **Chrisman Ranch** | **4.26** | **319** | | **Pn** | **01 30 45.7** | **+1.6** |
| **F07A** | **Phinny Hill Vi** | **4.27** | **289** | Pn | **Pn** | **01 30 43.7** | **-0.5** |
| **WALA** | **Waterton Lakes** | **4.42** | **2** | Pn | **Pn** | **01 30 47.4** | **+1.0** |
| WALA | | | | IAML | | 01 32 05.9 | |
| | comp=N,27nm,0.7s | | | | | | |
| **E07A** | **Sunnyside** | **4.44** | **298** | | **Pn** | **01 30 47.7** | **+1.1** |
| **JLU** | **Jordanelle** | **4.50** | **153** | | **Pn** | **01 30 47.1** | **-0.5** |
| **EGMT** | **Eagleton** | **4.55** | **40** | P | **Pn** | **01 30 47.9** | **-0.2** |
| | baz=223 | | | | | | |
| EGMT | | | | S | **Sn** | **01 31 41.6** | **-0.1** |
| | baz=223 | | | | | | |
| **DUG** | **Dugway, Tooele** | **4.55** | **167** | Pn | **Pn** | **01 30 48.5** | **+0.3** |
| DUG | | | | IAML | | 01 32 12.8 | |
| | comp=N,17nm,1.0s | | | | | | |
| DUG | | | | IAML | | 01 32 13.3 | |
| | comp=N,23nm,0.9s | | | | | | |
| **DUG** | **Dugway, Tooele** | **4.55** | **167** | P | **Pn** | **01 30 49.5** | **+1.2** |
| | baz=348 | | | | | | |
| DUG | | | | S | **Sn** | **01 31 42.4** | **+0.5** |
| | baz=348 | | | | | | |
| **BMN** | **Battle Mountai** | **4.78** | **209** | Pn | **Pn** | **01 30 51.6** | **+0.2** |
| BMN | | | | IAML | | 01 32 17.3 | |
| | comp=E,16nm,0.9s | | | | | | |
| **NLU** | **North Lily Min** | **4.93** | **161** | | **Pn** | **01 30 52.9** | **-0.6** |
| **PINE** | **Pine Mountain** | **4.96** | **263** | Pn | **Pn** | **01 30 54.2** | **+0.4** |
| PINE | | | | IAML | | 01 31 55.1 | |
| | comp=E,22nm,4.8s | | | | | | |
| PINE | | | | IAML | | 01 33 15.8 | |
| | comp=N,23nm,4.6s | | | | | | |
| **B08A** | **Colville Reser** | **5.16** | **318** | Pn | **Pn** | **01 30 57.0** | **+0.6** |
| B08A | | | | IAML | | 01 32 23.1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=N,17nm,0.6s | | | | | | |
| **LTY** | **Liberty** | **5.25** | **302** | | **Pn** | **01 30 58.2** | **+0.5** |
| LTY | | | | IAML | | 01 32 43.9 | |
| | comp=E,18nm,2.4s | | | | | | |
| LTY | | | | IAML | | 01 32 53.8 | |
| | comp=N,14nm,5.0s | | | | | | |
| **K05A** | **Summer Lake** | **5.25** | **251** | Pn | **Pn** | **01 30 58.9** | **+1.0** |
| K05A | | | | IAML | | 01 33 03.1 | |
| | comp=E,14nm,4.1s | | | | | | |
| K05A | | | | IAML | | 01 33 20.2 | |
| | comp=N,19nm,4.6s | | | | | | |
| **MOD** | **Modoc Plateau** | **5.26** | **241** | Pn | **Pn** | **01 30 58.3** | **+0.3** |
| MOD | | | | IAML | | 01 32 26.4 | |
| | comp=E,12nm,3.8s | | | | | | |
| MOD | | | | IAML | | 01 32 58.6 | |
| | comp=N,11nm,2.8s | | | | | | |
| **RDMU** | **Red Mountain** | **5.29** | **139** | Pn | **Pn** | **01 30 58.7** | **+0.3** |
| **J05D** | **Fort Rock, OR** | **5.29** | **258** | P | **Pn** | **01 30 59.1** | **+0.7** |
| | baz=73 | | | | | | |
| **NVAR** | **Mina Array Bea** | **6.95** | **208** | Pn | Pn | 01 31 26.1 | +4.9 |
| | comp=N,0.1nm,0.3s,baz=27,slow=12,SNR=1.9 | | | | | | |
| NVAR | | | | Pg | **Pb** | **01 31 44.0** | **+4.4** |
| | comp=N,0.4nm,0.3s,baz=31,slow=16,SNR=6.2 | | | | | | |
| NVAR | | | | Lg | Lg | 01 33 15.8 | |
| | comp=N,0.3nm,0.3s,baz=45,slow=32,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **6.95** | **208** | | **Pg** | **01 31 46.6** | **-4.5** |
| **YKA** | **Yellowknife Ar** | **17.89** | **359** | Pn | **Pn** | **01 33 44.1** | **-3.8** |
| | comp=N,0.0nm,0.3s,baz=179,slow=12,SNR=4.8 | | | | | | |

*IDC* ***28*** *01:43:14.0±6.2, 30°.40S×179°.80W, h374km±51km, mb3.5/4, mb1 3.7/5, mb1mx3.3/22, mbtmp4.3/5, Error ellipse: s-maj=61.1km s-min=21.2km az=40.0*

*NEIC* ***28*** *01:43:17.1±1.0, 30°.8S±0°.1×180°.0W±0°.3, h387km±22km, mb3.8/11, Error ellipse: s-maj=44.9km s-min=7.9km az=71.0*

**ISC 28 01:43:17.0**±0.9**, 30°.82S**±0°.10×**179°.9W**±0°.2**, h400**km**, n23,** σ**1**§**48/24, mb3.7/9, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.32** | **48** | | **Pn** | **01 44 14.0** | **-1.1** |
| **URZ** | **Urewera** | **7.82** | **198** | P | **P** | **01 45 11.2** | **+1.0** |
| | 12nm,0.3s,baz=333,slow=4.7,SNR=51 | | | | | | |
| URZ | | | | S | **S** | **01 46 37.2** | **-4.9** |
| | 5.4nm,0.3s,baz=93,slow=22,SNR=19 | | | | | | |
| **URZ** | **Urewera** | **7.82** | **198** | | **Pn** | **01 45 10.9** | **+1.2** |
| **MSWZ** | **Moikau Station** | **11.27** | **199** | P | **P** | **01 45 49.8** | **+1.3** |
| **MQZ** | **McQueen's Vall** | **14.15** | **203** | P | **P** | **01 46 19.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **32.79** | **258** | P | **P** | **01 49 15.9** | **+1.0** |
| | 1.4nm,0.5s,baz=99,slow=12,SNR=5.7 | | | | | | |
| **STKA** | **Stephens Creek** | **32.79** | **258** | P | **P** | **01 49 16.0** | **+1.2** |
| STKA | | | | IAmb | IAmb | 01 49 17.2 | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **37.28** | **255** | P | **P** | **01 49 52.4** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 01 49 55.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.83** | **288** | P | **P** | **01 49 57.6** | **+0.2** |
| COEN | | | | IAmb | IAmb | 01 50 02.3 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **41.45** | **268** | P | **P** | **01 50 26.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **41.46** | **268** | P | **P** | **01 50 26.6** | **-0.4** |
| | comp=Z,1.3nm,0.4s,baz=105,slow=7.3,SNR=36 | | | | | | |
| **WB2** | **Warramunga Arr** | **42.47** | **274** | P | **P** | **01 50 34.8** | **-0.2** |
| **WRA** | **Warramunga Arr** | **42.48** | **274** | P | **P** | **01 50 34.6** | **-0.6** |
| | comp=Z,2.6nm,0.5s,baz=112,slow=7.7,SNR=56 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.48** | **274** | P | **P** | **01 50 34.9** | **-0.3** |
| **WB0** | **Warramunga Arr** | **42.51** | **274** | P | **P** | **01 50 35.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 01 50 35.5 | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **44.36** | **256** | P | **P** | **01 50 49.4** | **-0.3** |
| **KNRA** | **Kununurra** | **49.11** | **276** | P | **P** | **01 51 25.7** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 01 51 45.3 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.73** | **271** | P | **P** | **01 51 38.6** | **+0.4** |
| FITZ | | | | IAmb | IAmb | 01 51 39.4 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **59.29** | **180** | P | **P** | **01 52 40.2** | **+2.2** |
| | comp=Z,3.1nm,0.8s,baz=73,slow=4.6,SNR=12 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.29** | **180** | P | **P** | **01 52 40.2** | **+2.2** |
| QSPA | | | | IAmb | IAmb | 01 52 51.5 | |
| | comp=Z,3.8nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **116.79** | **310** | PKP | **PKiKP** | **02 01 13.5** | **-0.9** |
| | comp=Z,0.1nm,0.4s,baz=84,slow=2.0,SNR=1.4 | | | | | | |
| **FINES** | **FINESS Array B** | **144.96** | **338** | PKP | **PKPab** | **02 02 06.1** | **-1.2** |
| | comp=Z,1.4nm,0.7s,baz=67,slow=3.6,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.35** | **297** | PKPbc | **PKPbc** | **02 02 23.2** | **-1.0** |
| | comp=Z,0.4nm,0.6s,baz=111,slow=3.5,SNR=5.0 | | | | | | |

*SSNC* ***28*** *01:47:49.0±0.9, 17°.49N×71°.32W, h34km±999km, MD4.0, ML3.4, MW3.6*

*OSPL* ***28*** *01:47:53.7±2.5, 18°.07N×71°.52W, h12km±15km, ML3.3, Fault plane solution: NP1:*φ*s57.00000°, *δ*33.20000°, λ3.30000°.*

**ISC 28 01:47:50.7**±1.5**, 18°.02N**±0°.08×**71°.46W**±0°.05**, h10**km**, n9,** σ**0**§**86/16, 3C-3D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LOPE2** | **Hotel El Peder** | **0.27** | **274** | ASPG | | 01 47 57.3 | |
| | comp=Z,10μm,0.3s | | | | | | |
| LOPE2 | | | | ⇓*i*P | **Pb** | **01 47 57.7** | **+0.1** |
| LOPE2 | | | | ATPG | | 01 47 58.4 | |
| | comp=Z,35μm,0.3s | | | | | | |
| LOPE2 | | | | ASSG | | 01 48 02.0 | |
| | comp=Z,49μm,0.3s | | | | | | |
| LOPE2 | | | | *e*S | **Sb** | **01 48 02.4** | **+0.1** |
| LOPE2 | | | | ATSG | | 01 48 04.4 | |
| | comp=Z,163μm,0.3s | | | | | | |
| LOPE2 | | | | IAML | | 01 48 09.1 | |
| | comp=Z,6μm,0.8s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **0.36** | **79** | ⇑*i*P | **Pn** | **01 48 02.4** | **+0.5** |
| LOBA2 | | | | IAML | | 01 48 15.7 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **LONE2** | **Loma La Sidra** | **0.54** | **359** | ASPG | | 01 48 00.6 | |
| | comp=Z,2μm,0.3s | | | | | | |
| LONE2 | | | | ⇓*i*P | **Pg** | **01 48 01.0** | **-0.1** |
| LONE2 | | | | ATPG | | 01 48 02.5 | |
| | comp=Z,9μm,0.3s | | | | | | |
| LONE2 | | | | ASSG | | 01 48 09.7 | |
| | comp=Z,21μm,0.3s | | | | | | |
| LONE2 | | | | *e*S | **Sb** | **01 48 10.1** | **0.0** |
| LONE2 | | | | ATSG | | 01 48 10.8 | |
| | comp=Z,47μm,0.3s | | | | | | |
| LONE2 | | | | IAML | | 01 48 12.1 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **SDDR** | **Presa de Saban** | **0.98** | **10** | ⇓*i*P | **Pg** | **01 48 09.0** | **-0.5** |
| SDDR | | | | *e*S | **Sb** | **01 48 22.5** | **-0.3** |
| SDDR | | | | IAML | | 01 48 27.6 | |
| | comp=Z,562nm,0.6s | | | | | | |
| **JAKH** | **Jacmel** | **1.03** | **283** | ⇑*i*P | **Pg** | **01 48 09.3** | **-1.2** |
| **LGNH** | **Logne** | **1.19** | **295** | ⇑*i*P | **Pg** | **01 48 13.2** | **-0.5** |
| LGNH | | | | *e*S | **Sn** | **01 48 29.2** | **-0.5** |
| LGNH | | | | IAML | | 01 48 38.4 | |
| | comp=Z,220nm,1.1s | | | | | | |
| **LODA1** | **ITESIL, Dajabo** | **1.54** | **352** | *i* P | **Pn** | **01 48 17.9** | **-0.3** |
| LODA1 | | | | IAML | | 01 48 36.4 | |
| | comp=Z,1μm,3.3s | | | | | | |
| LODA1 | | | | *e*S | **Sn** | **01 48 37.5** | **-0.8** |
| **MASC** | **Masc** | **3.38** | **310** | *e*P | **Pn** | **01 48 45.3** | **+1.7** |
| MASC | | | | *e*S | **Sn** | **01 49 25.7** | **+1.9** |
| MASC | | | | IAML | | 01 49 30.2 | |
| | comp=E,33nm,0.3s | | | | | | |
| MASC | | | | IAML | | 01 49 44.3 | |
| | comp=N,22nm,0.5s | | | | | | |
| **RCC** | **Rio Carpintero** | **4.46** | **297** | *e*P | **Pn** | **01 48 58.4** | **0.0** |
| RCC | | | | *e*S | **Sn** | **01 49 50.2** | **-0.2** |
| RCC | | | | IAML | | 01 50 03.6 | |
| | comp=E,16nm,0.3s | | | | | | |
| RCC | | | | IAML | | 01 50 05.0 | |
| | comp=N,10nm,0.7s | | | | | | |

*IDC* ***28*** *02:04:26.5±3.1, 19°.94S×178°.04W, h482km±32km, mb3.1/5, mb1 3.5/7, mb1mx3.1/39, mbtmp4.1/7, Error ellipse: s-maj=94.4km s-min=18.2km az=151.0*

*NEIC* ***28*** *02:04:27.7±0.8, 20°.2S±0°.2×177°.7W±0°.1, h518km±12km, mb3.9/17, Error ellipse: s-maj=26.2km s-min=17.5km az=158.0*

**ISC 28 02:04:26.7**±0.6**, 20°.1S**±0°.1×**177°.5W**±0°.09**, h500**km**, n31,** σ**1**§**35/32, mb3.9/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.63** | **300** | P | **P** | **02 05 53.7** | **+3.1** |
| **NIUE** | **Niue** | **7.44** | **83** | P | **P** | **02 06 18.6** | **+1.2** |
| **AFI** | **Afiamalu** | **8.40** | **44** | P | **P** | **02 06 27.4** | **-0.1** |
| | 8.8nm,0.3s,baz=204,slow=1.4,SNR=7.4 | | | | | | |
| AFI | | | | S | **S** | **02 08 02.4** | **-4.1** |
| | 3.1nm,0.3s,baz=198,slow=22,SNR=3.4 | | | | | | |
| **AFI** | **Afiamalu** | **8.40** | **44** | P | **P** | **02 06 27.2** | **-0.3** |
| **OUENC** | **Ouen Island, N** | **14.55** | **258** | P | **P** | **02 07 33.6** | **+1.3** |
| **DZM** | **Mont Dzumac** | **14.89** | **260** | P | **P** | **02 07 34.2** | **-1.7** |
| | 0.2nm,0.3s,baz=119,slow=16,SNR=2.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.89** | **260** | P | **P** | **02 07 36.8** | **+0.9** |
| **OUZ** | **Omahuta** | **16.88** | **205** | P | **P** | **02 07 56.8** | **+0.5** |
| **EIDS** | **Eidsvold** | **29.18** | **254** | P | **P** | **02 09 46.7** | **-0.3** |
| **ARMA** | **Armidale** | **29.45** | **244** | P | **P** | **02 09 49.5** | **0.0** |
| **TOO** | **Toolangi** | **36.32** | **233** | P | **P** | **02 10 46.9** | **-0.7** |
| TOO | | | | IAmb | IAmb | 02 10 55.2 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **COEN** | **Coen** | **37.80** | **273** | P | **P** | **02 10 59.5** | **-0.5** |
| COEN | | | | IAmb | IAmb | 02 11 01.3 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.17** | **244** | P | **P** | **02 11 02.2** | **-0.7** |
| | comp=Z,2.1nm,0.6s,baz=73,slow=14,SNR=4.5 | | | | | | |
| **STKA** | **Stephens Creek** | **38.17** | **244** | IAmb | IAmb | 02 11 11.2 | |
| | comp=Z,0.4nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **42.94** | **243** | P | **P** | **02 11 40.1** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 02 11 49.1 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **44.84** | **256** | P | **P** | **02 11 55.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.84** | **256** | P | **P** | **02 11 55.2** | **-0.7** |
| | comp=Z,5.2nm,0.8s,baz=95,slow=8.0,SNR=61 | | | | | | |
| ASAR | | | | PcP | **pP** | **02 13 27.4** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=100,slow=3.9,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.84** | **256** | P | **P** | **02 11 55.0** | **-0.9** |
| **WB0** | **Warramunga Arr** | **44.87** | **262** | P | **P** | **02 11 55.2** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 02 11 55.3 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **262** | P | **P** | **02 11 55.4** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 02 11 56.0 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **262** | P | **P** | **02 11 55.4** | **-1.0** |
| | comp=Z,1.2nm,0.3s,baz=98,slow=8.6,SNR=47 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **262** | P | **P** | **02 11 55.3** | **-1.0** |
| **MTN** | **Manton Dam** | **49.40** | **270** | P | **P** | **02 12 29.5** | **-0.9** |
| MTN | | | | IAmb | IAmb | 02 12 30.8 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **49.67** | **246** | P | **P** | **02 12 31.5** | **-0.7** |
| **KNRA** | **Kununurra** | **50.92** | **266** | P | **P** | **02 12 41.1** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 02 12 46.7 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **262** | P | **P** | **02 12 58.9** | **0.0** |
| **MORW** | **Morawa** | **60.20** | **247** | P | **P** | **02 13 45.2** | **-0.9** |
| MORW | | | | IAmb | IAmb | 02 14 04.6 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.95** | **180** | P | **P** | **02 14 46.0** | **-1.1** |
| **KMRM** | **Mail Ridge** | **78.30** | **39** | P | **P** | **02 15 35.1** | **+0.5** |
| KMRM | | | | IAmb | IAmb | 02 15 48.4 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.64** | **57** | P | **P** | **02 16 19.8** | **+2.6** |
| | comp=Z,0.2nm,0.7s,baz=241,slow=5.6,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **87.88** | **13** | P | **P** | **02 16 22.7** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=214,slow=5.9,SNR=2.2 | | | | | | |

*MOS* ***28*** *02:06:26.3±0.8, 41°.94N×142°.43E, h78km, mb4.5/12, Error ellipse: s-maj=8.6km s-min=6.4km az=79.5*

*NEIC* ***28*** *02:06:26.8±1.5, 41°.87N±0°.05×142°.26E±0°.04, h61km±7km, mb4.3/18, Mwr4.3/11, Error ellipse: s-maj=7.4km s-min=4.0km az=192.0*

*NIED* ***28*** *02:06:26.4, 41°.92N×142°.32E, h69km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10*$^{15}$*Nm; Mrr1.52; Mθθ-0.40; Mφφ-1.11; Mrθ0.51; Mθφ-0.70; Mφr1.83; Fault plane solution: M*$_0$*2.44000×10*$^{15}$ *NP1:*φ*s19.00000°, δ71.00000°, λ82.00000°. NP2:*φ*s223.00000°, δ21.00000°, λ113.00000°.*

*JMA* ***28*** *02:06:26.4±0.2, 41°.92N×142°.32E, h69km±3km, M3.8 Broadband fault plane solution: P waves. NP1: *φ*s162.00000°, δ9.00000°, λ46.00000°. NP2:*φ*s27.00000°, δ83.00000°, λ96.00000°. Principal axes: T Plg51.0000°, Azm304.0000°; N Plg6.0000°, Azm206.0000°; P Plg38.0000°, Azm111.0000°;*

*JMA Felt I J1.*

*NEIC* ***28*** *02:06:27, 41°.91N×142°.27E, h69km, Moment Tensor Solution. Moment tensor: Scale 10*$^{15}$*Nm; Mrr2.13; Mθθ-0.76; Mφφ-1.37; Mrθ0.68; Mθφ-1.58; Mφr2.26; Fault plane solution: M*$_0$*3.40000×10*$^{15}$ *NP1:*φ*s22.40000°, δ68.21000°, λ74.16000°. NP2:*φ*s239.79000°, δ26.71000°, λ124.32000°. Principal axes: T 3.2370, Plg63.0000°, Azm267.0000°; N 0.2987, Plg15.0000°, Azm28.0000°; P -3.5357, Plg22.0000°, Azm124.0000°;*

*IDC* ***28*** *02:06:28.8±0.6, 42°.03N×142°.27E, h77km±5km, mb3.4/16, mb1 3.6/22, mb1mx3.5/41, mbtmp3.7/22, MS3.1/12, Ms1 3.1/12, ms1mx2.9/64 Error ellipse: s-maj=14.8km s-min=8.2km az=104.0*

**ISC 28 02:06:26.7**±0.5**, 41°.92N**±0°.03×**142°.32E**±0°.03**, h59**km±3km**, h59km:pP-P, n115,** σ**1**§**29/143, mb4.0/32, MS3.4/5, 13C-18D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNBK** | **Urakawa-nobuka** | **0.48** | **42** | ⇑P | **Pn** | **02 06 38.4** | **0.0** |
| JNBK | | | | *e*S | **Sn** | **02 06 47.6** | **+0.7** |
| **JSHD** | **Hidakashinhida** | **0.50** | **13** | ⇑P | **Pn** | **02 06 39.2** | **+0.6** |
| JSHD | | | | *e*S | **Sn** | **02 06 49.1** | **+1.9** |
| **ERM** | **Erimo** | **0.63** | **81** | *c* *i*P | **Pn** | **02 06 41.0** | **+0.9** |
| **ERM** | **Erimo** | **0.63** | **81** | | **Pn** | **02 06 41.0** | **+0.9** |
| ERM | | | | | **Sn** | **02 06 50.7** | **+0.8** |
| **JEM** | **Erimo** | **0.63** | **81** | ⇑P | **Pn** | **02 06 40.9** | **+0.8** |
| JEM | | | | *e*S | **Sn** | **02 06 51.5** | **+1.7** |
| **JIAM** | **Iburiatsuma** | **0.76** | **337** | ⇓P | **Pn** | **02 06 42.7** | **+1.1** |
| JIAM | | | | *e*S | **Sn** | **02 06 54.7** | **+2.2** |
| **JBT2** | **Biratori 2** | **0.85** | **2** | ⇓P | **Pn** | **02 06 42.9** | **0.0** |
| JBT2 | | | | *e*S | **Sn** | **02 06 55.2** | **+0.5** |
| **JKB** | **Kayabe** | **0.96** | **268** | ⇓P | **Pn** | **02 06 44.1** | **-0.1** |
| JKB | | | | *e*S | **Sn** | **02 06 57.6** | **+0.5** |
| **JCH** | **Churui** | **1.04** | **48** | ⇑P | **Pn** | **02 06 45.8** | **+0.6** |
| JCH | | | | *e*S | **Sn** | **02 07 00.2** | **+1.3** |
| **JOT** | **Ohata** | **1.09** | **241** | ⇓P | **Pn** | **02 06 46.1** | **+0.1** |
| JOT | | | | *e*S | **Sn** | **02 07 00.6** | **+0.4** |
| **JNB** | **Noboribetsu** | **1.09** | **300** | P | **Pn** | **02 06 45.5** | **-0.5** |
| JNB | | | | *e*S | **Sn** | **02 06 59.9** | **-0.3** |
| **JEW** | **Eniwo** | **1.12** | **325** | ⇓P | **Pn** | **02 06 46.6** | **+0.3** |
| **JEW** | **Eniwo** | **1.12** | **325** | Pn | **Pn** | **02 06 46.6** | **+0.3** |
| JEW | | | | | **Sn** | **02 07 01.5** | **+0.7** |
| **JFR** | **Furan** | **1.25** | **9** | ⇓P | **Pn** | **02 06 48.1** | **0.0** |
| **JYM2** | **Yakumo 2** | **1.46** | **278** | ⇓P | **Pn** | **02 06 50.7** | **-0.2** |
| **JSR** | **Shiriuchi** | **1.48** | **255** | P | **Pn** | **02 06 51.4** | **+0.4** |
| JSR | | | | *e*S | **Sn** | **02 07 10.1** | **+0.8** |
| **JTM** | **Tenmabayashi** | **1.48** | **220** | P | **Pn** | **02 06 51.7** | **+0.7** |
| **JTM** | **Tenmabayashi** | **1.48** | **220** | | **Pn** | **02 06 51.9** | **+0.8** |
| **JOB** | **Onbets** | **1.49** | **48** | P | **Pn** | **02 06 52.7** | **+1.5** |
| JOB | | | | *e*S | **Sn** | **02 07 12.3** | **+2.6** |
| **JISS** | **Ishikarishitsu** | **1.50** | **334** | ⇓P | **Pn** | **02 06 51.6** | **+0.2** |
| JISS | | | | *e*S | **Sn** | **02 07 10.3** | **+0.3** |
| **JAB** | **Ashibetsu** | **1.58** | **358** | P | **Pn** | **02 06 53.3** | **+0.8** |
| **JANG** | **Nango** | **1.66** | **202** | P | **Pn** | **02 06 54.4** | **+0.8** |
| JANG | | | | *e*S | **Sn** | **02 07 15.3** | **+1.4** |
| **JAR** | **Ashorobuto** | **1.74** | **38** | ⇑P | **Pn** | **02 06 55.1** | **+0.5** |
| **JOMM** | **Oshimamatsumae** | **1.77** | **258** | P | **Pn** | **02 06 55.3** | **+0.2** |
| JOMM | | | | *e*S | **Sn** | **02 07 16.7** | **+0.1** |
| **JHR** | **Hokuryu** | **1.87** | **347** | ⇓P | **Pn** | **02 06 57.4** | **+1.0** |
| **ASAJ** | **Asahikawa** | **2.20** | **5** | P | **Pn** | **02 07 02.1** | **+1.2** |
| | 12nm,0.3s,baz=210,slow=10.0,SNR=26 | | | | | | |
| ASAJ | | | | S | **Sn** | **02 07 27.2** | **+0.3** |
| | 20nm,0.3s,baz=348,slow=26,SNR=9.2 | | | | | | |
| ASAJ | | | | LR | LR | 02 07 59.8 | |
| | comp=Z,196nm,20.0s,baz=180,slow=43 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.20** | **5** | | **Pn** | **02 07 01.9** | **+1.0** |
| **NMR** | **Nemuro--Hokkai** | **2.90** | **59** | *e*P | **Pn** | **02 07 09.9** | **-0.5** |
| NMR | | | | *e*S | **Sn** | **02 07 42.3** | **-1.8** |
| **GLVR** | **Golovnino** | **2.97** | **51** | *e*P | **Pn** | **02 07 11.8** | **+0.4** |
| GLVR | | | | *e*S | **Sn** | **02 07 45.5** | **-0.3** |
| GLVR | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=E,2μm,0.5s | | | | | | |
| **RUSJ** | **Misakicho** | **3.06** | **44** | *e*P | **Pn** | **02 07 13.7** | **+1.1** |
| RUSJ | | | | *e*S | **Sn** | **02 07 49.0** | **+1.0** |
| **YUK** | **Yuzh-Kuril'sk** | **3.35** | **50** | P | **Pn** | **02 07 16.9** | **+0.4** |
| YUK | | | | *e*S | **Sn** | **02 07 54.6** | **-0.4** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,546nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,192nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,121nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,1μm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **3.84** | **58** | *e*P | **Pn** | **02 07 22.2** | **-1.1** |
| SHO | | | | *e*S | **Sn** | **02 08 04.2** | **-3.0** |
| SHO | | | | pmax | pmax | | |
| | comp=N,80nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,80nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,79nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,459nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,493nm,0.4s | | | | | | |
| **JMM** | **Marumori** | **4.22** | **197** | | **Pn** | **02 07 28.3** | **-0.2** |
| **JSD** | **Sado** | **4.98** | **220** | Pn | **Pn** | **02 07 38.6** | **-0.3** |
| **YSS** | **Yuzh-Sakhalins** | **5.04** | **3** | *e*P | **Pn** | **02 07 42.3** | **+2.6** |
| YSS | | | | *e*S | **Sn** | **02 08 39.0** | **+2.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,20nm,1.0s | | | | | | |
| **KUR** | **Kuril'sk** | **5.21** | **49** | *e*P | **Pn** | **02 07 43.1** | **+1.0** |
| KUR | | | | *e*S | **Sn** | **02 08 43.2** | **+2.4** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,101nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,51nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,57nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,144nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,101nm,0.7s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **6.25** | **212** | Pn | **Pn** | **02 07 56.6** | **+0.3** |
| **MAJO** | **Matsushiro** | **6.25** | **212** | ⇓*e*P | **Pn** | **02 07 59.0** | **+2.7** |
| **MAJO** | **Matsushiro** | **6.25** | **212** | Pn | **Pn** | **02 07 56.2** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **6.25** | **212** | P | **Pn** | **02 07 58.6** | **+2.3** |
| | comp=N,0.1nm,0.3s,baz=19,slow=15,SNR=3.1 | | | | | | |
| MJAR | | | | LR | LR | 02 11 11.4 | |
| | comp=N,47nm,20.8s,baz=54,slow=45 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.25** | **212** | Pn | **Pn** | **02 07 56.5** | **+0.2** |
| **INU** | **Inuyama** | **7.76** | **214** | Pn | **Pn** | **02 08 16.2** | **-0.9** |
| **USA0B** | **Ussuriysk Arra** | **7.90** | **290** | ⇑*e*P | **Pn** | **02 08 21.7** | **+2.9** |
| **USRK** | **Ussuriysk Ar.** | **7.90** | **290** | P | **Pn** | **02 08 21.3** | **+2.4** |
| | baz=92,slow=14,SNR=6.4 | | | | | | |
| USRK | | | | LR | LR | 02 11 25.3 | |
| | comp=N,62nm,20.0s,baz=107,slow=38 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.90** | **290** | Pn | **Pn** | **02 08 20.0** | **+1.2** |
| **KLR** | **Kul'dur** | **10.40** | **318** | P | **Pn** | **02 08 55.3** | **+2.3** |
| | comp=N,0.1nm,0.3s,baz=126,slow=14,SNR=16 | | | | | | |
| KLR | | | | LR | LR | 02 12 59.3 | |
| | comp=N,106nm,19.9s,baz=108,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **10.40** | **318** | ⇑*e*P | **Pn** | **02 08 55.4** | **+2.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **11.95** | **253** | P | **Pn** | **02 09 16.5** | **+2.2** |
| | comp=Z,0.2nm,0.3s,baz=62,slow=14,SNR=6.7 | | | | | | |
| KSRS | | | | LR | LR | 02 13 25.7 | |
| | comp=Z,65nm,21.3s,baz=55,slow=35 | | | | | | |
| **PETK** | **Petropavlovsk-** | **15.23** | **37** | LR | LR | 02 16 57.3 | |
| | comp=Z,47nm,20.1s,baz=172,slow=41 | | | | | | |
| **ZEA** | **Zeya** | **15.52** | **325** | *e*P | P | 02 10 16.0 | +11 |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **18.44** | **14** | P | **P** | **02 10 35.8** | **-1.4** |
| | comp=Z,0.4nm,0.3s,baz=207,slow=5.3,SNR=4.4 | | | | | | |
| **MA2** | **Magadan** | **18.44** | **14** | ⇓*e*P | **P** | **02 10 36.4** | **-0.7** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **JOW** | **Kunigami** | **18.96** | **222** | LR | LR | 02 18 03.5 | |
| | comp=Z,12nm,19.5s,baz=343,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **21.51** | **344** | LR | LR | 02 19 02.5 | |
| | comp=Z,42nm,18.5s,baz=90,slow=35 | | | | | | |
| **SEY** | **Seymchan** | **21.87** | **12** | P | **P** | **02 11 12.3** | **-2.0** |
| | comp=Z,0.7nm,0.4s,baz=199,slow=22,SNR=2.1 | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.52** | **296** | ⇓*e*P | **P** | **02 11 49.7** | **-0.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **295** | P | **P** | **02 11 53.9** | **+0.1** |
| | comp=Z,1.3nm,0.9s,baz=92,slow=8.6,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **295** | P | **P** | **02 11 53.0** | **-0.7** |
| **XAN** | **Xi'an** | **27.34** | **264** | P | **P** | **02 12 06.5** | **+0.3** |
| XAN | | | | pP | pP | 02 12 11.8 | -8.6 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **ENH** | **Enshi** | **28.79** | **257** | P | **P** | **02 12 18.8** | **-0.3** |
| **DGZ** | **Jazzator, Alta** | **38.28** | **301** | ⇓*i*P | **P** | **02 13 41.5** | **+0.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **NRIK** | **Noril'sk** | **39.18** | **333** | P | **P** | **02 13 47.3** | **-1.2** |
| | comp=Z,0.9nm,0.3s,baz=79,slow=10,SNR=2.2 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **39.29** | **308** | P | **P** | **02 13 47.9** | **-1.6** |
| ZAA0 | | | | IAmb | IAmb | 02 13 50.0 | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.29** | **308** | P | **P** | **02 13 48.9** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KKAR | Karatay Array | 51.40 | 297 | P | | P | 02 15 24.7 | -0.8 |
| KKAR | Karatay Array | 51.40 | 297 | P | | P | 02 15 24.7 | -0.8 |
| ARU | Arti | 53.23 | 316 | *d* | *i*P | P | 02 15 38.4 | -0.4 |
| ARU | | | | | *PP | pP | 02 15 56.6 | +2.5 |
| ARU | | | | | | | 02 17 35.3 | |
| ARU | | | | | S | S | 02 23 04.6 | -0.7 |
| ARU | | | | | SS | SKiKP | 02 26 48.6 | -1.5 |
| ARU | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| ARU | Arti | 53.23 | 316 | | P | P | 02 15 37.3 | -1.5 |
| ARU | | | | | IAmb | IAmb | 02 15 39.3 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| WRAK | Wrangell Islan | 54.05 | 43 | | P | P | 02 15 44.0 | -0.7 |
| ABKAR | Akbulak array | 55.41 | 308 | | P | P | 02 15 54.5 | -0.2 |
| ABKAR | | | | | IAmb | IAmb | 02 16 05.4 | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| KIRV | Kirov | 56.82 | 321 | ⇑ | *e*P | P | 02 16 04.8 | +0.2 |
| YKA | Yellowknife Ar | 59.26 | 32 | | P | P | 02 16 21.3 | -0.4 |
| | comp=Z,0.3nm,0.5s,baz=305,slow=6.8,SNR=8.7 | | | | | | | |
| YKA | | | | | pP | sP | 02 16 42.0 | -1.8 |
| | comp=Z,0.3nm,0.6s,baz=310,slow=7.0,SNR=3.5 | | | | | | | |
| WRA | Warramunga Arr | 61.99 | 189 | | P | P | 02 16 40.0 | -0.7 |
| | comp=Z,0.4nm,0.5s,baz=6.8,slow=6.9,SNR=3.0 | | | | | | | |
| WRA | | | | | pP | sP | 02 17 00.4 | -2.3 |
| | comp=Z,1.1nm,0.7s,baz=4.9,slow=7.0,SNR=5.5 | | | | | | | |
| FIA1 | FINESS Array S | 64.83 | 332 | | P | P | 02 16 58.2 | -0.8 |
| FIA1 | | | | | IAmb | IAmb | 02 17 14.6 | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| FINES | FINESS Array B | 64.83 | 332 | | P | P | 02 16 58.0 | -1.0 |
| | comp=Z,1.2nm,0.5s,baz=58,slow=7.2,SNR=16 | | | | | | | |
| FINES | | | | | pP | sP | 02 17 19.6 | -1.6 |
| | comp=Z,1.5nm,0.7s,baz=38,slow=9.6,SNR=2.4 | | | | | | | |
| FINES | | | | | LR | LR | 02 46 00.1 | |
| | comp=Z,45nm,19.4s,baz=50,slow=37 | | | | | | | |
| FINES | FINESS Array B | 64.83 | 332 | *ce* | P | P | 02 16 58.5 | -0.5 |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| ASAR | Alice Springs | 65.72 | 188 | | P | P | 02 17 06.1 | +0.9 |
| | comp=Z,0.3nm,0.8s,baz=129,slow=38,SNR=1.9 | | | | | | | |
| ASAR | | | | | pP | sP | 02 17 25.4 | -1.8 |
| | comp=Z,0.5nm,0.7s,baz=14,slow=7.9,SNR=4.3 | | | | | | | |
| KIV | Kislovodsk | 68.27 | 310 | *e* | P | P | 02 17 20.4 | -1.0 |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| GNI | Garni | 69.38 | 306 | ⇓ | *e*P | P | 02 17 30.8 | +2.3 |
| GNI | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| NOA | NORSAR Array B | 69.96 | 337 | | P | P | 02 17 30.3 | -1.2 |
| | comp=Z,0.9nm,0.9s,baz=36,slow=6.0,SNR=3.0 | | | | | | | |
| NOA | | | | | LR | LR | 02 52 19.6 | |
| | comp=Z,22nm,18.6s,baz=45,slow=39 | | | | | | | |
| AKASG | Malin Array Be | 70.88 | 322 | | P | P | 02 17 36.1 | -1.0 |
| | comp=Z,1.4nm,0.7s,baz=49,slow=5.8,SNR=6.3 | | | | | | | |
| PDAR | Pinedale Array | 73.78 | 47 | | P | P | 02 17 55.2 | +0.2 |
| | comp=Z,0.6nm,0.7s,baz=230,slow=0.7,SNR=5.5 | | | | | | | |
| PDAR | Pinedale Array | 73.78 | 47 | | P | P | 02 17 56.0 | +1.1 |
| BUR08 | Bucovina Ar. S | 74.91 | 321 | | P | P | 02 18 01.4 | +0.2 |
| BURAR | Bucovina Array | 74.92 | 321 | | P | P | 02 18 01.0 | -0.3 |
| BRTR | Keskin Array B | 76.15 | 311 | | P | P | 02 18 09.5 | +0.9 |
| | comp=Z,0.5nm,0.8s,baz=43,slow=6.5,SNR=4.1 | | | | | | | |
| BRTR | Keskin Array B | 76.15 | 311 | *ce* | P | P | 02 18 09.0 | +0.5 |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| CLL | Collm | 77.21 | 330 | *e* | P | P | 02 18 13.0 | -1.1 |
| CLL | Collm | 77.21 | 330 | *e* | P | P | 02 18 13.0 | -1.1 |
| ITM | Ithomi | 84.32 | 316 | | P | P | 02 18 51.9 | -0.4 |
| TXAR | Lajitas Array | 86.60 | 53 | | P | P | 02 19 04.9 | +1.0 |
| | comp=Z,0.3nm,0.7s,baz=289,slow=5.6,SNR=3.4 | | | | | | | |
| TXAR | | | | | pP | sP | 02 19 25.4 | -1.5 |
| | comp=Z,0.2nm,0.6s,baz=299,slow=3.7,SNR=2.7 | | | | | | | |

*RSNC **28** 02:15:31.7±1.1,6.°84N×73.°15W,h150km±4km,ML3.1, Mw3.6*
*IDC **28** 02:15:33.9±6.9,6.°35N×73.°28W,h208km±221km,mb2.7/3, mb1 3.2/3,mb1mx2.9/28,mbtmp3.3/3,Error ellipse: s-maj=376.9km s-min=82.6km az=1.0*
**ISC 28 02:15:30.7±0.9,6.°85N±0.°03×73.°14W±0.°04,h156km±6km, n34,σ1°§20/64,mb3.0/3,2C-3D,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| BARC | Barichara | 0.26 | 190 | ⇓ | *i*P | | Pn | 02 15 52.2 | 0.0 |
| BARC | | | | | *e*S | | Sn | 02 16 07.4 | -1.2 |
| BARC | | | | | *i* | | | 02 16 08.4 | |
| | comp=Z,294nm,0.3s | | | | | | | | |
| PAMC | Pamplona, Colo | 0.65 | 42 | ⇑ | *e*P | | Pn | 02 15 55.1 | +1.0 |
| PAMC | | | | | *e*S | | Sn | 02 16 12.2 | +0.2 |
| PAMC | | | | | *i* | | | 02 16 15.4 | |
| | comp=Z,187nm,0.5s | | | | | | | | |
| RUSC | La Rusia | 0.95 | 177 | ⇓ | *e*P | | Pn | 02 15 56.2 | -0.1 |
| RUSC | | | | | *e*S | | Sn | 02 16 15.1 | -0.7 |
| RUSC | | | | | *i* | | | 02 16 16.4 | |
| | comp=Z,103nm,0.4s | | | | | | | | |
| PTBC | PUERTO BERRIO, | 1.35 | 257 | | *e*P | | Pn | 02 15 58.8 | -0.4 |
| PTBC | | | | | *e*S | | Sn | 02 16 19.7 | -1.4 |
| PTBC | | | | | *i* | | | 02 16 22.5 | |
| | comp=Z,107nm,0.1s | | | | | | | | |
| OCAC | Ocana | 1.39 | 352 | | *e*P | | Pn | 02 16 00.3 | +0.5 |
| OCAC | | | | | *e*S | | Sn | 02 16 22.4 | +0.2 |
| OCAC | | | | | *i* | | | 02 16 30.5 | |
| | comp=Z,313nm,0.5s | | | | | | | | |
| TAMC | Tame, Arauca | 1.40 | 107 | ⇑ | *e*P | | Pn | 02 16 00.7 | +1.0 |
| TAMC | | | | | *e*S | | Sn | 02 16 21.4 | -0.5 |
| TAMC | | | | | *i* | | | 02 16 21.6 | |
| | comp=Z,135nm,0.4s | | | | | | | | |
| SPBC | San Pablo de B | 1.51 | 218 | | *e*P | | Pn | 02 16 01.1 | +0.2 |
| SPBC | | | | | *e*S | | Sn | 02 16 23.3 | -0.9 |
| SPBC | | | | | *i* | | | 02 16 27.9 | |
| | comp=Z,252nm,0.3s | | | | | | | | |
| ZARC | Zaragoza, Cauc | 1.82 | 291 | | *e*P | | Pn | 02 16 04.8 | +0.6 |
| ZARC | | | | | *e*S | | Sn | 02 16 30.1 | +0.1 |
| ZARC | | | | | *i* | | | 02 16 35.4 | |
| | comp=Z,168nm,0.4s | | | | | | | | |
| NORC | Norcasia | 2.15 | 234 | | *e*P | | Pn | 02 16 08.2 | +0.3 |
| NORC | | | | | *e*S | | Sn | 02 16 35.5 | -1.1 |
| NORC | | | | | *i* | | | 02 16 45.5 | |
| | comp=Z,84nm,0.5s | | | | | | | | |
| CHIC | Chingaza | 2.29 | 195 | | *e*P | | Pn | 02 16 10.2 | +0.3 |
| CHIC | | | | | *e*S | | Sn | 02 16 39.7 | -0.5 |
| CHIC | | | | | *i* | | | 02 16 45.0 | |
| | comp=Z,84nm,0.3s | | | | | | | | |
| ROSC | El Rosal | 2.32 | 211 | | P | | Pn | 02 16 12.1 | +1.7 |
| | comp=Z,19nm,0.3s,baz=93,slow=17,SNR=58 | | | | | | | | |
| ROSC | | | | | S | | Sn | 02 16 41.2 | +0.3 |
| | comp=Z,27nm,0.3s,baz=95,slow=19,SNR=7.4 | | | | | | | | |
| ROSC | El Rosal | 2.32 | 211 | | *e*P | | Pn | 02 16 12.0 | +1.7 |
| ROSC | | | | | *e*S | | Sn | 02 16 42.3 | +1.4 |
| ROSC | | | | | *i* | | | 02 16 46.9 | |
| | comp=Z,262nm,0.4s | | | | | | | | |
| HELC | Santa Helena | 2.47 | 255 | | *e*P | | Pn | 02 16 13.9 | +1.8 |
| HELC | | | | | *e*S | | Sn | 02 16 44.6 | +0.7 |
| HELC | | | | | *i* | | | 02 16 50.8 | |
| | comp=Z,78nm,0.3s | | | | | | | | |
| UREC | San Jos de Ur | 2.54 | 291 | | *e*P | | Pn | 02 16 12.2 | -0.5 |
| UREC | | | | | *e*S | | Sn | 02 16 42.1 | -2.9 |
| UREC | | | | | *i* | | | 02 16 53.9 | |
| | comp=Z,75nm,0.2s | | | | | | | | |
| GUY2C | Guyana, Caldas | 2.74 | 234 | | *e*P | | Pn | 02 16 16.4 | +0.8 |
| GUY2C | | | | | *e*S | | Sn | 02 16 49.6 | -0.6 |
| GUY2C | | | | | *i* | | | 02 16 58.6 | |
| | comp=Z,96nm,0.6s | | | | | | | | |
| VILC | Villavicencio, | 2.78 | 192 | | *e*P | | Pn | 02 16 15.9 | +0.3 |
| VILC | | | | | *e*S | | Sn | 02 16 50.2 | -0.2 |
| PTGC | Puerto Gaitan, | 2.82 | 159 | ⇓ | *e*P | | Pn | 02 16 15.4 | -0.6 |
| PTGC | | | | | *e*S | | Sn | 02 16 48.9 | -2.2 |
| PTGC | | | | | *i* | | | 02 16 51.7 | |
| | comp=Z,56nm,0.2s | | | | | | | | |
| LL6C | La Loma 6 Bece | 2.87 | 357 | | *e*P | | Pn | 02 16 16.8 | +0.2 |
| LL6C | | | | | *e*S | | Sn | 02 16 52.5 | +0.1 |
| LL6C | | | | | *i* | | | 02 16 59.4 | |
| | comp=Z,36nm,0.3s | | | | | | | | |
| CBOC | Ciudad Bolivar | 3.02 | 251 | | *e*P | | Pn | 02 16 19.9 | +1.1 |
| CBOC | | | | | *e*S | | Sn | 02 16 55.8 | -0.2 |
| CBOC | | | | | *i* | | | 02 17 02.1 | |
| | comp=Z,23nm,0.3s | | | | | | | | |
| MOTC | Monteria, Cord | 3.15 | 308 | | *e*P | | Pn | 02 16 19.5 | -0.8 |
| MOTC | | | | | *e*S | | Sn | 02 16 58.0 | -0.7 |
| MOTC | | | | | *i* | | | 02 16 60.0 | |
| | comp=Z,35nm,0.3s | | | | | | | | |
| SDV | Santo Domingo | 3.20 | 51 | | *e*P | | Pn | 02 16 21.8 | +0.8 |
| SDV | | | | | *e*S | | Sn | 02 17 00.2 | +0.3 |
| SDV | | | | | *i* | | | 02 17 02.5 | |
| | comp=Z,15nm,0.3s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ANIL | Santa Ana | 3.25 | 224 | | *e*P | Pn | 02 16 22.5 | +0.7 |
| ANIL | | | | | *e*S | Sn | 02 17 02.6 | +1.2 |
| ORTC | Ortega, Tolima | 3.60 | 216 | | *e*P | Pn | 02 16 26.4 | +0.5 |
| ORTC | | | | | *e*S | Sn | 02 17 09.0 | 0.0 |
| ORTC | | | | | *i* | | 02 17 13.0 | |
| | comp=Z,48nm,0.3s | | | | | | | |
| SJCC | San Jacinto, C | 3.64 | 326 | | *e*P | Pn | 02 16 26.4 | -0.1 |
| SJCC | | | | | *e*S | Sn | 02 17 07.5 | -2.4 |
| SJCC | | | | | *i* | | 02 17 22.0 | |
| | comp=Z,28nm,0.8s | | | | | | | |
| PLMC | San Jos del P | 3.68 | 238 | | *e*P | Pn | 02 16 27.7 | +0.7 |
| PLMC | | | | | *e*S | Sn | 02 17 09.8 | -1.0 |
| PLMC | | | | | *i* | | 02 17 15.7 | |
| | comp=Z,18nm,0.2s | | | | | | | |
| CRJC | Cerrejon, Guaj | 4.15 | 3 | | *e*P | Pn | 02 16 32.5 | -0.7 |
| CRJC | | | | | *e*S | Sn | 02 17 20.3 | -1.5 |
| CRJC | | | | | *i* | | 02 17 27.4 | |
| | comp=Z,37nm,0.3s | | | | | | | |
| YOTC | Yotoco, Valle | 4.28 | 228 | | *e*P | Pn | 02 16 34.6 | -0.3 |
| YOTC | | | | | *e*S | Sn | 02 17 26.4 | +1.5 |
| GUVC | San Jose del G | 4.31 | 173 | | *e*P | Pn | 02 16 34.9 | -0.2 |
| GUVC | | | | | *e*S | Sn | 02 17 22.8 | -2.6 |
| SMRC | Santa Marta, M | 4.42 | 346 | | *e*P | Pn | 02 16 36.9 | +0.3 |
| SMRC | | | | | *e*S | Sn | 02 17 25.3 | -2.7 |
| SMRC | | | | | *i* | | 02 17 33.0 | |
| | comp=Z,14nm,0.2s | | | | | | | |
| MARP | Paez Belalcaza | 4.87 | 215 | | *e*S | Sn | 02 17 36.9 | -2.2 |
| GARC | Garzon, Huila | 5.20 | 207 | | *e*P | Pn | 02 16 46.2 | -0.8 |
| GARC | | | | | *e*S | Sn | 02 17 43.4 | -3.3 |
| GARC | | | | | *i* | | 02 17 46.2 | |
| | comp=Z,18nm,0.3s | | | | | | | |
| TXAR | Lajitas Array | 36.43 | 312 | | P | P | 02 22 21.7 | +1.1 |
| | comp=Z,0.1nm,0.6s,baz=122,slow=10,SNR=2.0 | | | | | | | |
| PDAR | Pinedale Array | 48.05 | 324 | | P | P | 02 23 54.1 | -0.5 |
| | comp=Z,0.2nm,0.5s,baz=124,slow=9.1,SNR=2.0 | | | | | | | |
| YKA | Yellowknife Ar | 63.23 | 340 | | P | P | 02 25 42.7 | +0.5 |
| | comp=Z,0.4nm,0.5s,baz=133,slow=6.9,SNR=8.3 | | | | | | | |

*IDC **28** 02:26:33.6±0.7,55.°25S×27.°28W,h0km,mb4.3/8, mb1 4.3/9,mb1mx4.1/23,mbtmp4.3/9,ML3.9/1,MS3.6/8, Ms1 3.6/8,ms1mx3.2/45,Error ellipse: s-maj=23.9km s-min=19.6km az=84.0*
*NEIC **28** 02:26:36.1±1.4,55.°4S±0.°1×27.°3W±0.°2,h14km±4km, mb4.6/21,Error ellipse: s-maj=15.6km s-min=15.3km az=173.0*
**ISC 28 02:26:35.0±0.5,55.°33S±0.°09×27.°41W±0.°08,h10km,n51, σ0°§94/45,mb4.5/13,MS3.6/8,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| HOPE | Hope Point | 5.36 | 278 | | | Pn | Pn | 02 27 56.2 | +1.3 |
| HOPE | | | | | | Sn | Sn | 02 28 53.0 | -3.6 |
| ORCD | Orcadas | 10.65 | 232 | | | Pn | Pn | 02 29 06.7 | -0.7 |
| VNA3 | Neumayer Olymp | 17.71 | 161 | | | P | P | 02 30 43.1 | +0.8 |
| VNA2 | Neumayer--Watz | 17.91 | 159 | | | P | P | 02 30 44.7 | +0.3 |
| | baz=324,slow=13 | | | | | | | | |
| EFI | East Falkland | 18.52 | 269 | | | P | Pn | 02 30 53.7 | +2.3 |
| EFI | | | | | | IAmb | IAmb | 02 30 57.6 | |
| | comp=Z,59nm,1.4s | | | | | | | | |
| SNAA | Sanae | 19.45 | 157 | | | P | P | 02 31 01.1 | -0.3 |
| SNAA | Sanae | 19.45 | 157 | | | P | Pn | 02 31 02.4 | -0.2 |
| | comp=Z,0.4nm,0.3s,baz=295,slow=13,SNR=11 | | | | | | | | |
| SNAA | Sanae | 19.45 | 157 | | | P | P | 02 31 01.7 | +0.3 |
| BELA | Belgrano 2 | 22.79 | 184 | | | P | P | 02 31 36.7 | -0.6 |
| QSPA | South Pole Qui | 34.92 | 180 | | | P | P | 02 33 27.0 | +0.4 |
| | comp=Z,2.8nm,0.6s,baz=194,slow=3.2,SNR=24 | | | | | | | | |
| QSPA | | | | | | LR | LR | 02 47 58.3 | |
| | comp=Z,121nm,18.5s,baz=218,slow=37 | | | | | | | | |
| QSPA | South Pole Qui | 34.92 | 180 | | | P | P | 02 33 27.0 | +0.4 |
| CPUP | Villa Florida | 36.24 | 311 | | | LR | LR | 02 48 17.7 | |
| | comp=Z,35nm,18.1s,baz=171,slow=36 | | | | | | | | |
| GO05 | Huala | 36.57 | 285 | | | P | P | 02 33 40.8 | -0.1 |
| GO05 | | | | | | IAmb | IAmb | 02 33 55.9 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| BO04 | La Punta | 36.61 | 287 | | | P | P | 02 33 40.9 | -0.3 |
| BO04 | | | | | | IAmb | IAmb | 02 33 54.8 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| MT09 | Talagante | 36.97 | 287 | | | P | P | 02 33 45.3 | +0.9 |
| MT01 | Popeta | 37.05 | 287 | | | P | P | 02 33 45.7 | +0.8 |
| PEL | Peldehue | 37.29 | 288 | | | P | P | 02 33 47.5 | +0.5 |
| PEL | | | | | | IAmb | IAmb | 02 33 51.9 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| ZON | Zonda | 37.45 | 292 | | | P | P | 02 33 48.1 | -0.2 |
| MT02 | Curacav | 37.45 | 288 | | | P | P | 02 33 49.5 | +1.2 |
| ROC1 | El Roble | 37.59 | 288 | | | P | P | 02 33 49.1 | -0.7 |
| ROC1 | | | | | | IAmb | IAmb | 02 34 02.2 | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| SUR | Sutherland | 40.58 | 76 | | | LR | LR | 02 48 30.9 | |
| | comp=Z,62nm,19.1s,baz=190,slow=32 | | | | | | | | |
| LVC | Limon Verde | 44.83 | 300 | | | P | P | 02 34 48.6 | -0.9 |
| | comp=Z,3.8nm,0.6s,baz=350,slow=12,SNR=3.6 | | | | | | | | |
| LVC | Limon Verde | 44.83 | 300 | | | IAmb | IAmb | 02 34 55.8 | |
| | comp=Z,7.8nm,0.9s | | | | | | | | |
| BOSA | Boshof | 45.92 | 77 | | | P | P | 02 34 56.7 | -1.2 |
| | comp=Z,4.0nm,1.1s,baz=234,slow=5.9,SNR=4.1 | | | | | | | | |
| BOSA | | | | | | LR | LR | 02 51 27.9 | |
| | comp=Z,72nm,18.6s,baz=196,slow=33 | | | | | | | | |
| BOSA | Boshof | 45.92 | 77 | | | P | P | 02 34 57.1 | -0.7 |
| BOSA | | | | | | IAmb | IAmb | 02 35 01.6 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| PB01 | IPOC Station P | 46.44 | 300 | | | P | P | 02 35 02.0 | +0.1 |
| PB01 | | | | | | IAmb | IAmb | 02 35 17.2 | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| VNDA | Vanda | 47.29 | 183 | | | P | P | 02 35 08.6 | +0.7 |
| | comp=Z,4.5nm,0.8s,baz=150,slow=4.0,SNR=5.9 | | | | | | | | |
| LBTB | Lobatse | 48.92 | 74 | | | P | P | 02 35 19.6 | -1.6 |
| | comp=Z,2.0nm,0.6s,baz=234,slow=9.1,SNR=5.4 | | | | | | | | |
| LBTB | Lobatse | 48.92 | 74 | | | P | P | 02 35 20.4 | -0.8 |
| LBTB | | | | | | IAmb | IAmb | 02 35 47.7 | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| RCBR | Riachuelo | 49.83 | 349 | | | LR | LR | 02 53 14.2 | |
| | comp=Z,55nm,19.7s,baz=347,slow=32 | | | | | | | | |
| LPAZ | La Paz | 49.86 | 305 | | | P | P | 02 35 29.3 | +0.3 |
| | comp=Z,1.6nm,0.7s,baz=207,slow=5.4,SNR=5.8 | | | | | | | | |
| LPAZ | La Paz | 49.86 | 305 | | | P | P | 02 35 29.5 | +0.5 |
| PTGA | Pitinga | 60.53 | 322 | | | LR | LR | 03 03 35.6 | |
| | comp=Z,36nm,19.4s,baz=171,slow=37 | | | | | | | | |
| DBIC | Dimbokro | 64.56 | 25 | | | P | P | 02 37 11.7 | -0.5 |
| | comp=Z,1.3nm,0.6s,baz=123,slow=18,SNR=1.6 | | | | | | | | |
| DBIC | Dimbokro | 64.56 | 25 | | | P | P | 02 37 12.0 | -0.1 |
| MBAR | Mbarara | 71.93 | 63 | | | LR | LR | 03 04 25.3 | |
| | comp=Z,41nm,21.8s,baz=178,slow=32 | | | | | | | | |
| TORD | Torodi Ar. Bea | 72.49 | 30 | | | P | P | 02 38 01.8 | +0.1 |
| | comp=Z,3.4nm,0.6s,baz=202,slow=6.3,SNR=41 | | | | | | | | |
| TORD | Torodi Ar. Bea | 72.49 | 30 | | | P | P | 02 38 01.9 | +0.2 |
| TORD | | | | | | IAmb | IAmb | 02 38 02.5 | |
| | comp=Z,3.4nm,0.7s | | | | | | | | |
| MDT | Midelt | 89.94 | 19 | | | LR | LR | 03 16 20.4 | |
| | comp=Z,63nm,18.3s,baz=44,slow=33 | | | | | | | | |
| CMAR | Chiang Mai Arr | 125.43 | 110 | | PKP | | PKPdf | 02 45 36.3 | +0.2 |
| | comp=Z,1.1nm,0.3s,baz=223,slow=3.7,SNR=4.2 | | | | | | | | |
| YKA | Yellowknife Ar | 135.55 | 319 | | PKP | | PKPdf | 02 45 52.4 | -1.4 |
| | comp=Z,0.8nm,0.8s,baz=125,slow=2.0,SNR=7.6 | | | | | | | | |
| MKAR | Makanchi Array | 136.77 | 71 | | PKP | | PKiKP | 02 45 58.0 | -0.4 |
| | comp=Z,0.1nm,0.5s,baz=263,slow=7.1,SNR=1.9 | | | | | | | | |
| ZAA0 | Zalesovo Array | 142.16 | 63 | | PKPdf | | PKPdf | 02 46 06.0 | -0.2 |
| A36M | Sachs Harbour | 143.53 | 329 | | PKPdf | | PKPdf | 02 46 08.4 | +0.3 |
| INK | Inuvik | 145.16 | 321 | | PKPbc | | PKPdf | 02 46 11.8 | +0.8 |
| DAWY | Dawson | 146.21 | 313 | | PKPbc | | PKPab | 02 46 14.9 | 0.0 |
| BCAR | Beaver Creek A | 146.93 | 311 | | PKPbc | | PKPbc | 02 46 16.9 | +0.6 |
| SCRK | Sand Creek | 148.13 | 312 | | PKPbc | | PKPbc | 02 46 20.5 | +0.9 |
| RIDG | Independent Ri | 148.44 | 311 | | PKPbc | | PKiKP | 02 46 22.1 | +0.2 |
| ILAR | Eielson Array | 149.54 | 313 | | PKPbc | | PKPbc | 02 46 23.4 | +0.4 |
| | comp=Z,4.5nm,0.8s,baz=128,slow=2.3,SNR=37 | | | | | | | | |
| SONM | Songino Array | 150.80 | 85 | | PKPbc | | PKPbc | 02 46 26.7 | 0.0 |
| | comp=Z,2.5nm,0.9s,baz=223,slow=2.9,SNR=15 | | | | | | | | |

*DDA **28** 02:28:00.8±0.0,36.°38N×33.°91E,h8km±2km,ML1.8*
*ISK **28** 02:28:00.4,36.°41N×33.°93E,h10km±1km,ML2.6/12*
**ISC 28 02:28:01.0±0.9,36.°37N±0.°05×33.°94E±0.°04,h10km±5km, n24,σ0°§66/32,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SILI | Silifke-Mersin | 0.01 | 238 | | | PG | Pg | 02 28 02.8 | 0.0 |
| SILI | | | | | | SG | Sg | 02 28 03.9 | -0.1 |
| SLFK | Silifke-Mersin | 0.02 | 20 | | | PG | Pg | 02 28 02.3 | -0.5 |
| KIZK | Mersin | 0.20 | 57 | | | P | Pg | 02 28 05.6 | +0.5 |
| KIZK | | | | | | S | Sg | 02 28 08.6 | +0.6 |
| KIZK | | | | | | *i* AML | AML | 02 28 09.0 | |
| | comp=E,209nm,0.5s | | | | | | | | |
| KIZK | | | | | | *i* AML | AML | 02 28 09.0 | |
| | comp=N,227nm,0.2s | | | | | | | | |
| IKL | Isikli | 0.24 | 237 | | | PG | Pg | 02 28 06.3 | +0.3 |
| IKL | | | | | | SG | Sg | 02 28 10.4 | +1.0 |
| KARG | Kargicak-Mersi | 0.25 | 227 | | | PG | Pb | 02 28 06.6 | -1.1 |
| KARG | | | | | | SG | Sb | 02 28 10.8 | -1.3 |
| TISA | Tisan-Mersin | 0.30 | 225 | | | PG | Pg | 02 28 07.2 | +0.2 |
| YESI | Yesilovacik-Me | 0.30 | 233 | | | PG | Pg | 02 28 06.9 | -0.1 |
| YESI | | | | | | SG | Sg | 02 28 11.7 | +0.7 |
| TEPK | Tepekoy-MERSIN | 0.35 | 245 | | | PG | Pg | 02 28 07.6 | -0.4 |
| GULN | MERSIN_Gulnar | 0.37 | 239 | | | P | Pg | 02 28 08.1 | -0.2 |
| GULN | | | | | | S | Sg | 02 28 13.8 | +0.5 |
| GULN | | | | | | *i* AML | AML | 02 28 14.0 | |
| | comp=E,81nm,0.2s | | | | | | | | |
| AKKU | Akkuyu-Mersin | 0.38 | 236 | | | PG | Pb | 02 28 08.8 | -1.0 |
| AKK2 | Akkuyu-Mersin | 0.39 | 233 | | | PG | Pg | 02 28 08.8 | +0.1 |
| AKK1 | Akkuyu-Mersin | 0.40 | 235 | | | PG | Pg | 02 28 08.8 | 0.0 |
| TEVE | Tevekalti-Mers | 0.40 | 279 | | | PG | Pg | 02 28 08.9 | -0.1 |
| OREN | Orenkoy-Mersin | 0.42 | 247 | | | PG | Pg | 02 28 08.6 | -0.7 |
| BERE | Bereket-Mersin | 0.58 | 268 | | | PG | Pb | 02 28 12.9 | -0.4 |
| MERS | Mersin | 0.68 | 43 | | | PG | Pg | 02 28 13.6 | -0.6 |
| TEKE | Tekeli-Mersin | 0.70 | 251 | | | PG | Pg | 02 28 14.2 | -0.4 |
| ERMK | Ermenek | 0.87 | 288 | | | P | Pn | 02 28 21.0 | +1.6 |
| DED | Mersin | 0.91 | 49 | | | P | Pg | 02 28 17.9 | -0.6 |
| DED | | | | | | S | Sb | 02 28 30.9 | -0.1 |
| KERG | Konya-Eregli | 1.05 | 8 | | | P | Pb | 02 28 21.0 | -0.3 |
| KERG | | | | | | S | Sb | 02 28 35.0 | -0.3 |
| KERG | | | | | | *i* AML | AML | 02 28 36.0 | |
| | comp=E,40nm,0.3s | | | | | | | | |
| KERG | | | | | | *i* AML | AML | 02 28 37.0 | |
| | comp=N,26nm,0.3s | | | | | | | | |
| KKBE | Karaman, Kazim | 1.16 | 317 | | | P | Pn | 02 28 23.2 | -0.2 |
| GAZI | Gazipasa | 1.32 | 264 | | | P | Pg | 02 28 27.2 | +0.9 |
| NIDE | Nigde/Merkez-G | 1.75 | 22 | | | P | Pb | 02 28 32.9 | -0.5 |
| NIDE | | | | | | *i* AML | AML | 02 29 00.0 | |
| | comp=E,14nm,0.2s | | | | | | | | |
| YAYL | Yayladag | 1.79 | 100 | | | P | Pb | 02 28 34.0 | +0.1 |
| YAYL | | | | | | *i* AML | AML | 02 29 00.0 | |
| | comp=E,6.7nm,0.6s | | | | | | | | |
| YAYL | | | | | | *i* AML | AML | 02 29 00.0 | |
| | comp=N,8.0nm,0.3s | | | | | | | | |

*IDC **28** 02:30:03.8±7.2,48.°95N×156.°22E,h0km,mb3.4/4, mb1 3.8/5,mb1mx3.4/33,mbtmp3.4/5,ML2.6/1,Error ellipse: s-maj=157.3km s-min=55.5km az=75.0*
*KRSC **28** 02:30:10.4±2.3,49.°25N×156.°77E,h15km±37km,ML4.3*
*MOS **28** 02:30:10.3±2.4,49.°25N×156.°77E,h15km,mb4.0/1,Error ellipse: s-maj=23.4km s-min=5.0km az=79.1*
**ISC 28 02:30:08.5±1.6,49.°0N±0.°1×156.°0E±0.°1,h35km,n52, σ2°§01/60,mb3.6/4,1C-1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.69 | 3 | *e* | PN | P | Pn | 02 30 35.0 | -0.4 |
| SKR | | | | *e* | S | | Sn | 02 30 53.0 | -2.8 |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,76nm,0.3s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=N,470nm,0.4s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=E,563nm,0.3s | | | | | | | | |
| SKR | Severo-Kuril's | 1.69 | 3 | *e* | P | P | Pn | 02 30 35.4 | 0.0 |
| SKR | | | | *e* | S | | Sn | 02 30 54.0 | -1.8 |
| PAU | Pauzhetka | 2.53 | 12 | | PN | P | Pn | 02 30 48.3 | +1.3 |
| PAU | | | | | S | | Sn | 02 31 16.4 | -0.1 |
| PAU | Pauzhetka | 2.53 | 12 | *e* | P | P | Pn | 02 30 48.3 | +1.3 |
| PAU | | | | *e* | S | | Sn | 02 31 16.4 | -0.1 |
| KDTR | Khodutka, Kamc | 3.12 | 25 | | PN | P | Pn | 02 30 56.3 | +1.2 |
| KDTR | | | | | S | | Sn | 02 31 30.5 | -0.6 |
| KDTR | Khodutka, Kamc | 3.12 | 25 | *e* | P | P | Pn | 02 30 56.3 | +1.2 |
| KDTR | | | | *e* | S | | Sn | 02 31 30.5 | -0.6 |
| MTVR | Mutnovka | 3.76 | 21 | | PN | P | Pn | 02 31 06.0 | +1.9 |
| MTVR | | | | | S | | Sn | 02 31 47.4 | +0.2 |
| MTVR | Mutnovka | 3.76 | 21 | *e* | P | P | Pn | 02 31 06.0 | +1.9 |
| MTVR | | | | *e* | S | | Sn | 02 31 47.4 | +0.2 |
| GRL | Gorelyy | 3.80 | 20 | | PN | P | Pn | 02 31 06.8 | +2.2 |
| GRL | Gorelyy | 3.80 | 20 | *e* | P | P | Pn | 02 31 06.8 | +2.2 |
| RUS | Russkaya | 3.80 | 24 | | PN | P | Pn | 02 31 05.6 | +1.1 |
| RUS | | | | | S | | Sn | 02 31 47.1 | -0.8 |
| RUS | Russkaya | 3.80 | 24 | *e* | P | P | Pn | 02 31 05.6 | +1.1 |
| RUS | | | | *e* | S | | Sn | 02 31 47.1 | -0.8 |
| PEA0B | Petropavlovsk- | 4.26 | 14 | *ce* | PN | P | Pn | 02 31 13.0 | +2.2 |
| PETK | Petropavlovsk- | 4.26 | 14 | | Pn | Pn | Pn | 02 31 12.2 | +1.4 |
| | comp=E,1.8nm,0.3s,baz=186,slow=13,SNR=36 | | | | | | | | |
| PETK | | | | | Sn | Sn | Sn | 02 32 06.7 | +7.5 |
| | comp=E,0.4nm,0.3s,baz=146,slow=8.2,SNR=1.5 | | | | | | | | |
| PET | Petropavlovsk | 4.37 | 22 | *e* | PN | P | Pn | 02 31 16.7 | +4.4 |
|

| | | | | | | |
|---|---|---|---|---|---|---|
| EMAL | | | S | Sn | 02 44 49.0 | +1.6 |
| **PBAR** | **Barrancos** | **1.82 311** | *e*Pn | Pn | 02 44 51.9 | +0.6 |
| PBAR | | | *e*Sg | Sg | 02 45 20.4 | +2.0 |
| PBAR | | | A | A | 02 45 24.0 | |
| | 14nm,0.3s | | | | | |
| **PVAQ** | **Vaqueiros** | **1.98 282** | *e*Pn | Pn | 02 44 54.0 | +0.5 |
| PVAQ | | | *e*Sn | Sn | 02 45 17.0 | -1.4 |
| PVAQ | | | A | A | 02 45 28.4 | |
| | 19nm,0.2s | | | | | |
| **PVAQ** | **Vaqueiros** | **1.98 282** | P | Pn | 02 44 54.1 | +0.5 |
| PVAQ | | | S | Sg | 02 45 24.0 | +0.4 |
| **PBDV** | **Barranco-do-Ve** | **2.13 277** | *e*Pn | Pn | 02 44 56.2 | +0.6 |
| PBDV | | | *e*Sn | Sn | 02 45 21.1 | -1.0 |
| PBDV | | | A | A | 02 45 36.7 | |
| | 15nm,1.0s | | | | | |
| **PCVE** | **Castro Verde** | **2.28 287** | *e*Pn | Pn | 02 44 58.2 | +0.5 |
| PCVE | | | *e*Sg | Sb | 02 45 31.3 | +1.8 |
| PCVE | | | A | A | 02 45 38.1 | |
| | 13nm,0.3s | | | | | |
| **PBEJ** | **Beja** | **2.29 297** | *e*Pn | Pn | 02 44 58.4 | +0.6 |
| PBEJ | | | A | A | 02 45 36.8 | |
| | 9.3nm,0.6s | | | | | |
| **PESTR** | **Estremoz** | **2.60 316** | *e*Pn | Pn | 02 45 03.0 | +0.9 |
| PESTR | | | *e*Sg | Sg | 02 45 44.5 | +0.9 |
| PESTR | | | A | A | 02 45 50.8 | |
| | 9.0nm,0.3s | | | | | |
| **PESTR** | **Estremoz** | **2.60 316** | P | Pn | 02 45 03.0 | +0.9 |
| PESTR | | | S | Sb | 02 45 39.5 | +0.7 |
| **EVO** | **Evora** | **2.65 306** | P | Pn | 02 45 03.4 | +0.8 |
| EVO | | | S | Sn | 02 45 33.1 | -1.7 |
| **EVO** | **Evora** | **2.65 306** | *e*Pn | Pn | 02 45 03.4 | +0.8 |
| EVO | | | *e*Sn | Sn | 02 45 33.3 | -1.5 |
| EVO | | | A | A | 02 45 48.8 | |
| | 13nm,0.4s | | | | | |
| **MORF** | **Marmelete** | **2.71 277** | *e*P | Pn | 02 45 03.6 | +0.1 |
| **MORF** | **Marmelete** | **2.71 277** | *e*Pn | Pn | 02 45 04.3 | +0.8 |
| MORF | | | *e*Sg | Sg | 02 45 49.3 | +2.5 |
| MORF | | | A | A | 02 45 50.2 | |
| | 10nm,0.2s | | | | | |
| **PTEO** | **Sao Teotonio** | **2.80 282** | ⇑*i*Pn | Pn | 02 45 05.5 | +0.8 |
| PTEO | | | *e*Sn | Sn | 02 45 39.2 | +0.7 |
| PTEO | | | A | A | 02 45 58.5 | |
| | 21nm,0.9s | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.81 294** | *e*Pn | Pn | 02 45 05.5 | +0.7 |
| PNCL | | | *e*Sn | Sn | 02 45 38.5 | -0.2 |
| PNCL | | | A | A | 02 45 55.4 | |
| | 9.3nm,0.6s | | | | | |
| **PFVI** | **Vila Bisbo** | **2.84 274** | *e*Pn | Pn | 02 45 05.6 | +0.4 |
| PFVI | | | *e*Sn | Sn | 02 45 38.2 | -1.3 |
| PFVI | | | A | A | 02 45 39.4 | |
| | 14nm,0.3s | | | | | |
| **PFVI** | **Vila Bisbo** | **2.84 274** | P | Pn | 02 45 05.7 | +0.5 |
| PFVI | | | S | Sn | 02 45 38.9 | -0.5 |
| **PMRV** | **Marv??o** | **2.94 326** | *e*Pn | Pn | 02 45 07.4 | +0.8 |
| PMRV | | | *e*Sn | Sn | 02 45 41.1 | -0.9 |
| PMRV | | | *e*Sg | Sg | 02 45 53.5 | -0.7 |
| PMRV | | | A | A | 02 45 59.0 | |
| | 11nm,0.7s | | | | | |
| **PMTG** | **Montargil** | **3.10 313** | *e*Pn | Pn | 02 45 09.9 | +0.9 |
| PMTG | | | *e*Sg | Sg | 02 46 01.8 | +2.1 |
| PMTG | | | A | A | 02 46 09.8 | |
| | 6.6nm,0.6s | | | | | |
| **PCBR** | **Castelo Branco** | **3.31 329** | *e*Pn | Pn | 02 45 12.8 | +1.0 |
| PCBR | | | *e*Sn | Sn | 02 45 49.6 | -1.7 |
| PCBR | | | A | A | 02 46 16.9 | |
| | 5.5nm,0.7s | | | | | |
| **PMST** | **Lisbon--Monsan** | **3.54 300** | *e*Pn | Pn | 02 45 15.8 | +0.9 |
| **UCM** | **Universidad Co** | **3.67 25** | P | Pn | 02 45 19.3 | +2.6 |
| UCM | | | S | Sg | 02 46 17.9 | +0.3 |
| **PMAFR** | **Mafra** | **3.71 303** | *e*Pn | Pn | 02 45 18.1 | +0.8 |
| **PSBE** | **So Bento** | **3.73 313** | *e*Pn | Pn | 02 45 18.9 | +1.3 |
| **MTE** | **Manteigas** | **3.83 333** | *e*Pn | Pn | 02 45 20.6 | +1.7 |
| MTE | | | *e*Sn | Sn | 02 46 03.4 | -0.6 |
| MTE | | | A | A | 02 46 36.5 | |
| | 10nm,1.0s | | | | | |
| **MD31** | **MD31** | **4.15 174** | P | Pn | 02 45 24.5 | +1.1 |
| MD31 | | | S | Sn | 02 46 10.2 | -1.7 |
| **MDT** | **Midelt** | **4.22 172** | P | Pn | 02 45 25.6 | +1.3 |
| MDT | | | S | Sn | 02 46 12.9 | -0.8 |
| **PVIS** | **Viseu** | **4.23 332** | *e*Pn | Pn | 02 45 25.9 | +1.4 |
| PVIS | | | *e*Sn | Sn | 02 46 13.6 | -0.3 |
| PVIS | | | A | A | 02 46 46.2 | |
| | 5.2nm,0.3s | | | | | |
| **MVO** | **Moncorvo** | **4.37 342** | *e*Pn | Pn | 02 45 27.9 | +1.5 |
| MVO | | | *e*Sn | Sn | 02 46 16.2 | -1.3 |
| MVO | | | A | A | 02 46 42.4 | |
| | 7.7nm,0.5s | | | | | |
| **POLO** | **Lamas de Olo** | **4.78 337** | *e*Pn | Pn | 02 45 33.4 | +1.3 |
| POLO | | | *e*Sn | Sn | 02 46 26.6 | -1.0 |
| **PBRG** | **Braganca** | **4.93 347** | *e*Pn | Pn | 02 45 35.8 | +1.8 |
| **OUK** | **Oukaimeden** | **6.16 201** | P | Pn | 02 45 52.0 | +0.7 |
| OUK | | | S | Sn | 02 46 55.6 | -6.5 |
| **OUZM** | **OUZ** | **6.20 192** | P | Pn | 02 45 50.7 | -0.9 |
| OUZM | | | S | Sn | 02 46 59.1 | -3.5 |
| **TZRR** | **Tazzarine** | **6.21 182** | P | Pn | 02 45 52.5 | +0.8 |
| **SJPF** | **Ste Jean** | **6.85 26** | *e*Pn | Pn | 02 46 02.3 | +1.9 |
| **SJPF** | **Ste Jean** | **6.85 26** | *e*P | Pn | 02 46 06.4 | +6.0 |
| SJPF | | | *e*Sn | Sn | 02 47 15.6 | -2.9 |
| | 0.2nm,0.2s | | | | | |
| **ETSF** | **Etsaut** | **6.92 30** | *e*Pn | Pn | 02 46 03.6 | +2.2 |
| **ETSF** | **Etsaut** | **6.92 30** | *e*P | Pn | 02 46 08.5 | +7.1 |
| ETSF | | | *e*Sn | Sn | 02 47 18.2 | -2.0 |
| | 0.4nm,0.2s | | | | | |
| **TTIG** | **Tnine Tigouga,** | **6.95 203** | P | Pn | 02 45 59.9 | -2.1 |
| **EPF** | **Esparros** | **7.41 34** | *e*Pn | Pn | 02 46 10.4 | +2.3 |
| **EPF** | **Esparros** | **7.41 34** | *e*P | Pn | 02 46 13.8 | +5.7 |
| EPF | | | *e*Sn | Sn | 02 47 30.1 | -2.1 |
| | 0.3nm,0.2s | | | | | |

*ISK **28** 02:48:35.0,35°.81N×30°.74E,h16km, ML2.3/17*
*DDA **28** 02:48:35.0±0.0,35°.79N×30°.85E,h8km±3km,ML2.1*
*NIC **28** 02:48:37.7±0.0,35°.80N×30°.65E,h32km±41km, MI2.6/3*
**ISC 28 02:48:35.7**±1.2,**35°.83N**±0°.03×**30°.78E**±0°.03,**h19**km±3km,
**n35,**σ0**92/45,Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **AKUM** | **Antalya-Kumluc** | **0.60** | **325** | P | | **Pg** | **02 48 47.8** | **0.0** |
| AKUM | | | | S | | **Sn** | **02 48 58.2** | **-0.3** |
| AKUM | | | | *i* | AML | AML | 02 49 02.0 | |
| | comp=E,74nm,0.5s | | | | | | | |
| AKUM | | | | *i* | AML | AML | 02 49 05.0 | |
| | comp=N,93nm,0.7s | | | | | | | |
| **KSL** | **Kastellorizon** | **1.02** | **289** | P | | **Pb** | **02 48 54.4** | **-0.3** |
| **AKAS** | **Kas** | **1.03** | **293** | PG | | **Pn** | **02 48 55.4** | **+0.1** |
| AKAS | | | | SG | | **Sn** | **02 49 09.1** | **-0.1** |
| **AKAS** | **Kas** | **1.03** | **293** | P | | **Pg** | **02 48 55.8** | **0.0** |
| **ANTB** | **Antalya** | **1.07** | **355** | PN | | **Pg** | **02 48 56.7** | **+0.1** |
| ANTB | | | | SN | | **Sg** | **02 49 11.7** | **+1.0** |
| **ELL** | **Elmali** | **1.15** | **323** | PN | | **Pb** | **02 48 57.4** | **+0.2** |
| **ELL** | **Elmali** | **1.15** | **323** | P | | **Pb** | **02 48 57.3** | **+0.2** |
| **KORT** | **Korkueli** | **1.22** | **344** | PN | | **Pg** | **02 48 58.6** | **-0.8** |
| KORT | | | | SN | | **Sg** | **02 49 14.9** | **-0.5** |
| **KORT** | **Korkueli** | **1.22** | **344** | P | | **Pg** | **02 49 01.2** | **+1.9** |
| **KEPZ** | **Antalya-Kepez** | **1.26** | **32** | P | | **Pb** | **02 48 59.0** | **0.0** |
| **GAZI** | **Gazipasa** | **1.31** | **72** | PN | | **Pb** | **02 48 59.4** | **-0.4** |
| GAZI | | | | SN | | **Sg** | **02 49 17.1** | **-1.2** |
| **GAZI** | **Gazipasa** | **1.31** | **72** | P | | **Pn** | **02 48 59.1** | **+0.1** |
| GAZI | | | | S | | **Sb** | **02 49 16.6** | **+0.4** |
| GAZI | | | | *i* | AML | AML | 02 49 18.0 | |
| | comp=N,40nm,0.4s | | | | | | | |
| GAZI | | | | *i* | AML | AML | 02 49 21.0 | |
| | comp=E,26nm,0.3s | | | | | | | |
| **AKMS** | **Akamas** | **1.51** | **122** | P | | **Pb** | **02 49 03.6** | **+0.5** |
| AKMS | | | | S | | **Sg** | **02 49 23.4** | **-1.1** |
| AKMS | | | | | AMI | | 02 49 29.1 | |
| | 0.2nm,0.8s | | | | | | | |
| AKMS | | | | | AMI | | 02 49 29.1 | |
| | 0.2nm,0.8s | | | | | | | |
| AKMS | | | | | AMI | | 02 49 32.7 | |
| | 0.2nm,0.5s | | | | | | | |
| AKMS | | | | | AMI | | 02 49 32.7 | |
| | 0.2nm,0.5s | | | | | | | |
| **FETY** | **Fethiye** | **1.59** | **301** | PN | | **Pn** | **02 49 03.3** | **+0.5** |
| **FETY** | **Fethiye** | **1.59** | **301** | P | | **Pn** | **02 49 02.9** | **+0.1** |
| **CAME** | **Cameli-Denizli** | **1.63** | **314** | PN | | **Pn** | **02 49 04.0** | **+0.5** |
| **ALFC** | **Alefka** | **1.63** | **114** | P | | **Pb** | **02 49 04.7** | **-0.5** |
| ALFC | | | | S | | **Sb** | **02 49 26.2** | **+0.8** |
| ALFC | | | | | AMI | | 02 49 27.3 | |
| | 0.1nm,0.3s | | | | | | | |
| ALFC | | | | | AMI | | 02 49 27.3 | |
| | 0.1nm,0.3s | | | | | | | |
| ALFC | | | | | AMI | | 02 49 30.7 | |
| | 0.1nm,0.3s | | | | | | | |
| ALFC | | | | | AMI | | 02 49 30.7 | |
| | 0.1nm,0.3s | | | | | | | |
| **GOLH** | **Golhisar** | **1.71** | **326** | P | | **Pb** | **02 49 06.3** | **-0.3** |
| **HDMB** | **Hadim** | **1.79** | **50** | PN | | **Pb** | **02 49 07.0** | **-0.9** |
| **SEDI** | **Konya, Seydise** | **1.80** | **26** | P | | **Pb** | **02 49 07.6** | **-0.6** |
| SEDI | | | | S | | **Sb** | **02 49 30.5** | **+0.1** |
| **LEF** | **Lefka** | **1.87** | **112** | PN | | **Pn** | **02 49 07.2** | **+0.6** |
| **TEKE** | **Tekeli-Mersin** | **1.92** | **80** | PN | | **Pb** | **02 49 08.8** | **-1.3** |
| **DALY** | **Dalyan (Mula)** | **1.98** | **301** | PN | | **Pn** | **02 49 08.2** | **+0.1** |
| **SZAC** | **Souni** | **2.03** | **121** | P | | **Pb** | **02 49 11.5** | **-0.5** |
| **BERE** | **Bereket-Mersin** | **2.05** | **75** | PN | | **Pb** | **02 49 10.8** | **-1.6** |
| **ARG** | **Arkhangelos** | **2.18** | **281** | S | | **Sn** | **02 49 35.2** | **-2.2** |
| **TEVE** | **Tevekalti-Mers** | **2.24** | **74** | PN | | **Pn** | **02 49 12.9** | **+1.0** |
| **TURN** | **Turunc** | **2.25** | **296** | PN | | **Pn** | **02 49 12.8** | **+0.9** |
| **AKKU** | **Akkuyu-Mersin** | **2.27** | **81** | PN | | **Pn** | **02 49 13.7** | **+1.5** |
| **OSC1** | **CSNet OBS 1** | **2.36** | **170** | S | | **Sn** | **02 49 42.8** | **+1.0** |
| **IKL** | **Isikli** | **2.39** | **79** | PN | | **Pn** | **02 49 15.3** | **+1.4** |
| **KARP** | **Karpathos** | **2.96** | **266** | PN | | **Pn** | **02 49 22.1** | **+0.5** |
| **KARP** | **Karpathos** | **2.96** | **266** | P | | **Pn** | **02 49 21.5** | **-0.1** |
| KARP | | | | S | | **Sn** | **02 49 54.8** | **-1.8** |
| KARP | | | | | AMI | | 02 49 55.7 | |
| KARP | | | | | AMI | | 02 49 55.7 | |
| **BODT** | **Bodrum** | **3.05** | **295** | PN | | **Pn** | **02 49 23.9** | **+0.9** |
| **IDI** | **Anoyia** | **4.83** | **265** | PN | | **Pn** | **02 49 48.9** | **+1.5** |

*LDG **28** 03:12:15.9±0.5,36°.89N×5°.31W, h20km,Ml2.4/2, Error ellipse: s-maj=11.2km s-min=4.3km az=164.0*
*INMG **28** 03:12:15.6±1.4,36°.99N×5°.38W, h14km±4km, ML2.5, Error ellipse: s-maj=2.4km s-min=2.1km az=47.0*
*CNRM **28** 03:12:16.4,36°.86N×5°.38W, h105km, ml2.6*
*SFS **28** 03:12:16.0,36°.96N×5°.36W, h21km, ML2.7, OLVERA (CADIZ)*
**ISC 28 03:12:12.5**±1.8,**36°.98N**±0°.04×**5°.30W**±0°.04,**h11**km±13km,
**n36,**σ1**35/63,1C,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **EMAL** | **Malaga-Limoner** | **0.73** | **107** | P | | **Pn** | **03 12 29.7** | **+1.1** |
| EMAL | | | | S | | **Sn** | **03 12 40.3** | **+0.5** |
| **PBAR** | **Barrancos** | **1.83** | **311** | *e*Pn | | **Pn** | **03 12 44.5** | **+0.6** |
| PBAR | | | | *e*Sn | | **Sn** | **03 13 06.9** | **-0.1** |
| PBAR | | | | A | | A | 03 13 18.4 | |
| | 20nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.98** | **283** | *e*Pn | | **Pn** | **03 12 46.5** | **+0.6** |
| PVAQ | | | | A | | A | 03 13 20.9 | |
| | 24nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.98** | **283** | P | | **Pn** | **03 12 46.6** | **+0.7** |
| PVAQ | | | | S | | **Sb** | **03 13 15.0** | **+1.8** |
| **PBDV** | **Barranco-do-Ve** | **2.12** | **278** | *e*Pn | | **Pn** | **03 12 48.8** | **+0.9** |
| PBDV | | | | *e*Sn | | **Sn** | **03 13 14.3** | **0.0** |
| PBDV | | | | A | | A | 03 13 30.0 | |
| | 21nm,0.8s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.28** | **288** | *e*Pn | | **Pn** | **03 12 50.8** | **+0.7** |
| PCVE | | | | A | | A | 03 13 27.7 | |
| | 16nm,0.4s | | | | | | | |
| **PBEJ** | **Beja** | **2.30** | **298** | *e*Pn | | **Pn** | **03 12 51.0** | **+0.7** |
| **PESTR** | **Estremoz** | **2.62** | **317** | *e*Pn | | **Pn** | **03 12 55.8** | **+1.1** |
| PESTR | | | | *e*Sn | | **Sn** | **03 13 26.6** | **+0.1** |
| PESTR | | | | *e*Sg | | **Sg** | **03 13 38.1** | **+1.5** |
| PESTR | | | | A | | A | 03 13 43.4 | |
| | 15nm,0.3s | | | | | | | |
| **PESTR** | **Estremoz** | **2.62** | **317** | P | | **Pn** | **03 12 55.6** | **+0.9** |
| PESTR | | | | S | | **Sb** | **03 13 32.9** | **+1.3** |
| **EVO** | **Evora** | **2.66** | **307** | P | | **Pn** | **03 12 56.1** | **+0.8** |
| EVO | | | | S | | **Sn** | **03 13 25.6** | **-1.7** |
| **EVO** | **Evora** | **2.66** | **307** | *e*Pn | | **Pn** | **03 12 56.0** | **+0.8** |
| EVO | | | | *e*Sn | | **Sn** | **03 13 25.7** | **-1.7** |
| EVO | | | | *e*Sg | | **Sg** | **03 13 37.5** | **-0.3** |
| EVO | | | | A | | A | 03 13 41.5 | |
| | 16nm,0.3s | | | | | | | |
| **MORF** | **Marmelete** | **2.70** | **278** | *e*Pn | | **Pn** | **03 12 57.8** | **+1.9** |
| MORF | | | | *e*Sn | | **Sn** | **03 13 28.5** | **-0.1** |
| MORF | | | | A | | A | 03 13 44.9 | |
| | 11nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.79** | **283** | ⇑*i*Pn | | **Pn** | **03 12 58.1** | **+1.0** |
| PTEO | | | | *e*Sn | | **Sn** | **03 13 30.3** | **-0.5** |
| **PNCL** | **Nicolau / Gran** | **2.81** | **295** | *e*Pn | | **Pn** | **03 12 58.2** | **+0.9** |
| PNCL | | | | *e*Sn | | **Sn** | **03 13 31.1** | **-0.1** |
| PNCL | | | | A | | A | 03 13 49.2 | |
| | 13nm,0.5s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.83** | **274** | *e*Pn | | **Pn** | **03 12 58.6** | **+1.0** |
| PFVI | | | | *e*Sn | | **Sn** | **03 13 31.1** | **-0.6** |
| PFVI | | | | A | | A | 03 13 33.9 | |
| | 15nm,0.4s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.83** | **274** | P | | **Pn** | **03 12 57.9** | **+0.3** |
| PFVI | | | | S | | **Sn** | **03 13 30.6** | **-1.0** |
| **PMRV** | **Marv??o** | **2.95** | **327** | *e*Pn | | **Pn** | **03 13 00.1** | **+0.8** |
| PMRV | | | | *e*Sn | | **Sn** | **03 13 34.5** | **-0.3** |
| PMRV | | | | *e*Sg | | **Sg** | **03 13 46.3** | **-1.1** |
| PMRV | | | | A | | A | 03 13 52.0 | |
| | 16nm,0.9s | | | | | | | |
| **PMTG** | **Montargil** | **3.12** | **313** | *e*Pn | | **Pn** | **03 13 02.6** | **+1.0** |
| PMTG | | | | *e*Sn | | **Sn** | **03 13 38.6** | **-0.2** |
| PMTG | | | | A | | A | 03 13 59.6 | |
| | 11nm,0.8s | | | | | | | |
| **TAF** | **Taforalt** | **3.18** | **132** | P | | **Pb** | **03 13 07.2** | **-1.9** |
| TAF | | | | S | | **Sn** | **03 13 39.1** | **-1.4** |
| **PCBR** | **Castelo Branco** | **3.33** | **330** | *e*Pn | | **Pn** | **03 13 05.4** | **+0.9** |
| PCBR | | | | *e*Sn | | **Sn** | **03 13 42.2** | **-1.9** |
| PCBR | | | | A | | A | 03 14 07.0 | |
| | 9.4nm,0.9s | | | | | | | |
| **UCM** | **Universidad Co** | **3.69** | **25** | P | | **Pn** | **03 13 11.8** | **+2.3** |
| UCM | | | | S | | **Sg** | **03 14 10.2** | **-1.0** |
| **PMAFR** | **Mafra** | **3.72** | **303** | *e*Pn | | **Pn** | **03 13 11.1** | **+1.2** |
| PMAFR | | | | *e*Sn | | **Sn** | **03 13 52.6** | **-1.0** |
| **PSBE** | **So Bento** | **3.74** | **314** | *e*Pn | | **Pn** | **03 13 11.7** | **+1.5** |
| **MTE** | **Manteigas** | **3.84** | **333** | *e*Pn | | **Pn** | **03 13 14.3** | **+2.7** |
| MTE | | | | *e*Sn | | **Sn** | **03 13 56.4** | **-0.4** |
| MTE | | | | A | | A | 03 14 17.8 | |
| | 13nm,0.3s | | | | | | | |
| **MD31** | **MD31** | **4.12** | **174** | P | | **Pn** | **03 13 17.1** | **+1.6** |
| MD31 | | | | S | | **Sn** | **03 14 03.3** | **-0.5** |
| **MDT** | **Midelt** | **4.19** | **172** | P | | **Pn** | **03 13 18.3** | **+1.9** |
| MDT | | | | S | | **Sn** | **03 14 05.2** | **-0.2** |
| **PVIS** | **Viseu** | **4.25** | **332** | *e*Pn | | **Pn** | **03 13 18.7** | **+1.5** |
| PVIS | | | | *e*Sn | | **Sn** | **03 14 05.7** | **-1.1** |
| PVIS | | | | A | | A | 03 14 38.7 | |
| | 7.1nm,1.2s | | | | | | | |
| **MVO** | **Moncorvo** | **4.39** | **343** | *e*Pn | | **Pn** | **03 13 21.0** | **+1.8** |
| MVO | | | | *e*Sn | | **Sn** | **03 14 09.3** | **-1.1** |
| MVO | | | | A | | A | 03 14 35.3 | |
| | 12nm,0.4s | | | | | | | |
| **POLO** | **Lamas de Olo** | **4.80** | **337** | *e*Pn | | **Pn** | **03 13 26.1** | **+1.3** |
| POLO | | | | *e*Sn | | **Sn** | **03 14 19.2** | **-1.3** |
| POLO | | | | A | | A | 03 14 53.5 | |
| | 3.4nm,0.1s | | | | | | | |
| **PBRG** | **Braganca** | **4.95** | **347** | *e*Pn | | **Pn** | **03 13 28.6** | **+1.8** |
| **SJPF** | **Ste Jean** | **6.88** | **26** | *e*Pn | | **Pn** | **03 13 55.3** | **+2.0** |
| **SJPF** | **Ste Jean** | **6.88** | **26** | *e*P | | Pn | 03 13 58.7 | +5.4 |
| SJPF | | | | *e*Sn | | **Sn** | **03 15 08.4** | **-3.1** |
| | 0.4nm,0.2s | | | | | | | |
| **ETSF** | **Etsaut** | **6.94** | **30** | *e*Pn | | **Pn** | **03 13 56.2** | **+2.0** |
| **ETSF** | **Etsaut** | **6.94** | **30** | *e*P | | Pn | 03 14 00.7 | +6.5 |
| **EPF** | **Esparros** | **7.43** | **34** | *e*Pn | | **Pn** | **03 14 02.8** | **+1.9** |
| **EPF** | **Esparros** | **7.43** | **34** | *e*P | | Pn | 03 14 06.7 | +5.8 |
| EPF | | | | *e*Sn | | **Sn** | **03 15 22.8** | **-2.4** |
| | 0.3nm,0.2s | | | | | | | |

*NEIC **28** 03:22:11.9±1.2, 19°.30N±0°.08×64°.81W±0°.08, h40km±55km, Error ellipse: s-maj=16.1km s-min=3.2km az=137.0*
*RSPR **28** 03:22:13.2, 19°.30N×64°.80W, h53km±28km, MD3.4/6*
**ISC 28 03:22:11.7**±2.1,**19°.3N**±0°.1×**64°.82W**±0°.04,**h23**km,**n34,**
σ1**27/38,7C-3D,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **TBVI** | **Tortola** | **0.85** | **167** | ⇓*e*P | | **Pn** | **03 22 28.7** | **+0.4** |
| **TBVI** | **Tortola** | **0.85** | **167** | *e*S | | **Sn** | **03 22 41.8** | **+1.8** |
| **STVI** | **Saint Thomas** | **0.90** | **188** | ⇓*e*P | | **Pn** | **03 22 28.9** | **-0.1** |
| **STVI** | **Saint Thomas** | **0.90** | **188** | *e*S | | **Sn** | **03 22 41.6** | **+0.3** |
| **STVI** | **Saint Thomas** | **0.90** | **188** | Pn | | **Pn** | **03 22 29.1** | **+0.1** |
| STVI | | | | | IAML | | 03 22 42.7 | |
| | comp=N,128nm,0.2s | | | | | | | |
| **CUPR** | **Culebra, Puert** | **1.03** | **205** | ⇓*e*P | | **Pn** | **03 22 30.5** | **-0.4** |
| **CUPR** | **Culebra, Puert** | **1.03** | **205** | *e*S | | **Sb** | **03 22 44.1** | **-0.1** |
| **CUPR** | **Culebra, Puert** | **1.03** | **205** | Pn | | **Pn** | **03 22 29.8** | **-1.0** |
| CUPR | | | | | | **Sb** | **03 22 43.9** | **-0.2** |
| CUPR | | | | | IAML | | 03 22 48.6 | |
| | comp=N,173nm,0.4s | | | | | | | |
| CUPR | | | | | IAML | | 03 22 49.6 | |
| | comp=E,122nm,0.6s | | | | | | | |
| **MTP** | **Monte Pirata** | **1.34** | **211** | ⇑*e*P | | **Pn** | **03 22 35.0** | **-0.1** |
| **MTP** | **Monte Pirata** | **1.34** | **211** | *e*S | | **Sb** | **03 22 53.1** | **+0.1** |
| **MTP** | **Monte Pirata** | **1.34** | **211** | Pn | | **Pn** | **03 22 34.7** | **-0.4** |
| MTP | | | | | IAML | | 03 22 56.9 | |
| | comp=N,72nm,0.2s | | | | | | | |
| MTP | | | | | IAML | | 03 22 57.1 | |
| | comp=E,108nm,0.3s | | | | | | | |
| **CBYP** | **Canovanas** | **1.38** | **226** | ⇑*e*P | | **Pn** | **03 22 35.4** | **-0.3** |
| **CBYP** | **Canovanas** | **1.38** | **226** | Pn | | **Pn** | **03 22 35.0** | **-0.8** |
| **HUMP** | **Col San Antoni** | **1.47** | **222** | ⇑*e*P | | **Pn** | **03 22 37.1** | **+0.2** |
| **HUMP** | **Col San Antoni** | **1.47** | **222** | *e*S | | **Sn** | **03 22 55.9** | **+0.5** |
| **HUMP** | **Col San Antoni** | **1.47** | **222** | Pn | | **Pn** | **03 22 36.2** | **-0.7** |
| HUMP | | | | | | **Sn** | **03 22 55.6** | **+0.1** |
| HUMP | | | | | IAML | | 03 22 58.4 | |
| | comp=N,71nm,0.2s | | | | | | | |
| **GCPR** | **Guaynabo City** | **1.52** | **232** | | | **Pn** | **03 22 36.9** | **-0.6** |
| **PDPR** | **Patillas Dam,** | **1.68** | **223** | Pn | | **Pn** | **03 22 39.2** | **-0.4** |
| PDPR | | | | | | **Sn** | **03 22 59.3** | **-1.2** |
| **SJG** | **San Juan** | **1.70** | **228** | | | **Pn** | **03 22 39.4** | **-0.6** |
| **IGPR** | **InterUniversit** | **1.77** | **224** | ⇑*e*P | | **Pn** | **03 22 41.5** | **+0.6** |
| **IGPR** | **InterUniversit** | **1.77** | **224** | *e*S | | **Sn** | **03 23 02.6** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **1.79** | **245** | Pn | | **Pn** | **03 22 41.2** | **-0.1** |
| **CELP** | **Cerrillos** | **2.04** | **235** | ⇑*e*P | | **Pn** | **03 22 45.3** | **+0.6** |
| **CELP** | **Cerrillos** | **2.04** | **235** | | | **Pn** | **03 22 44.5** | **-0.2** |
| CELP | | | | | IAML | | 03 23 13.6 | |
| | comp=E,32nm,0.9s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.04** | **244** | Pn | | **Pn** | **03 22 44.9** | **+0.2** |
| AOPR | | | | | IAML | | 03 23 10.0 | |
| | comp=N,67nm,0.4s | | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.08** | **235** | Pn | | **Pn** | **03 22 44.4** | **-0.9** |
| OBIP | | | | | IAML | | 03 23 14.7 | |
| | comp=N,35nm,0.6s | | | | | | | |
| **LSP** | **Las Mesas** | **2.40** | **244** | ⇑*e*P | | **Pn** | **03 22 50.3** | **+0.6** |
| **MLPR** | **Magueyes Islan** | **2.47** | **239** | Pn | | **Pn** | **03 22 51.2** | **+0.7** |
| MLPR | | | | | IAML | | 03 23 15.2 | |
| | comp=N,20nm,3.0s | | | | | | | |
| MLPR | | | | | IAML | | 03 23 33.2 | |
| | comp=E,19nm,1.3s | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.50** | **241** | ⇑*e*P | | **Pn** | **03 22 51.5** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.50** | **241** | | | **Pn** | **03 22 51.2** | **+0.2** |
| CRPR | | | | | IAML | | 03 23 36.0 | |
| | comp=E,20nm,1.8s | | | | | | | |
| CRPR | | | | | IAML | | 03 23 44.9 | |
| | comp=N,28nm,2.3s | | | | | | | |
| **SKOC** | **St. Kitts, UWI** | **2.78** | **134** | *e*P | | **Pn** | **03 22 52.3** | **-2.5** |
| **SKOC** | **St. Kitts, UWI** | **2.78** | **134** | *e*S | | **Sb** | **03 23 39.1** | **+4.8** |
| **ANBD** | **Bethesda, Anti** | **3.63** | **127** | *e*P | | **Pn** | **03 23 07.7** | **+1.1** |
| ANBD | | | | *e*S | | **Sn** | **03 23 47.9** | **-1.0** |
| **CBE** | **Ff, Capester** | **4.40** | **135** | *e* | | **Sb** | **03 24 17.3** | **-3.8** |

*IDC **28** 03:24:22.7±0.9,2°.98N×128°.50E, h225km±8km, mb3.9/22, mb1 4.0/26, mb1mx3.9/42, mbtmp4.5/26, Error ellipse: s-maj=10.9km s-min=5.8km az=81.0*
*NEIC **28** 03:24:22.1±1.7,3°.04N±0°.07×128°.46E±0°.05, h211km±4km, mb4.6/101, Error ellipse: s-maj=10.3km s-min=7.4km az=177.0*
*DJA **28** 03:24:24.9±0.5,3°.N±5°.12°.8E±°, h189km±5km, M4.6/18, mB5.0/13, mb4.8/18, MLv4.8/13, Mw(mB)4.4/13*
**ISC 28 03:24:20.2**±0.3,**3°.05N**±0°.04×**128°.50E**±0°.05,**h200**km,**n241,**
σ1**31/255,mb4.6/82,11C-20D,Fault plane solution:**
**NP1:**φs19.92815°,δ66.02277°,λ-5.17170°. **NP2:**
φs112.03457°,δ85.27564°,λ-155.93587°. **Principal axes:** T Plg13.2447°, Azm243.5862°; N Plg65.5036°, Azm122.4844°; P Plg20.2177°, Azm338.5590°; **North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **TNTI** | **Ternate** | **2.52** | **207** | | | **Pn** | **03 25 06.8** | **+2.4** |
| TNTI | | | | Sn | | **Sn** | **03 25 43.8** | **+4.8** |
| **TNTI** | **Ternate** | **2.52** | **207** | P | | **Pn** | **03 25 07.0** | **+2.6** |
| **TNTI** | **Ternate** | **2.52** | **207** | P | | **Pn** | **03 25 07.5** | **+3.1** |
| **SGSI** | **Sangihe** | **3.03** | **282** | P | | **Pn** | **03 25 12.1** | **+1.9** |
| **MATI** | **Mati** | **4.47** | **330** | ⇓*e*P | | **Pn** | **03 25 30.5** | **+2.5** |
| **GSPH** | **General Santos** | **4.65** | **311** | ⇓*i*P | | **Pn** | **03 25 30.5** | **+0.2** |
| **SIJI** | **Sorong** | **4.77** | **145** | P | | **Pn** | **03 25 34.6** | **+2.8** |
| | 4.8nm,0.3s,baz=330,slow=15,SNR=10.0 | | | | | | | |
| SIJI | | | | S | | **Sn** | **03 26 30.3** | **+2.0** |
| | 1.2nm,0.3s,baz=170,slow=22,SNR=1.5 | | | | | | | |
| **KMSI** | **Cibinong** | **5.14** | **242** | P | | **Pn** | **03 25 38.5** | **+2.1** |
| **SANI** | **Sanana** | **5.65** | **206** | P | | **Pn** | **03 25 42.9** | **-0.1** |
| | 2.7nm10μm576nm,0.7s | | | | | | | |
| **SANI** | **Sanana** | **5.65** | **206** | P | | **Pn** | **03 25 43.0** | **-0.1** |
| **BUMP** | **Musuan** | **5.89** | **325** | ⇓*e*P | | **Pn** | **03 25 47.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TWG | | | | IAmb | IAmb | 03 28 58.5 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **UGM** | **Wanagama** | **20.98** | **239** | P | **P** | **03 28 48.9** | **+0.6** | |
| **UGM** | **Wanagama** | **20.98** | **239** | P | **P** | **03 28 50.4** | **+2.2** | |
| **FITZ** | **Fitzroy Crossi** | **21.20** | **188** | P | **P** | **03 28 49.6** | **-0.8** | |
| | comp=Z,4.7nm,0.5s,baz=11,slow=6.3,SNR=44 | | | | | | | |
| FITZ | | | | S | **S** | **03 32 29.9** | **-4.0** | |
| | comp=Z,3.0nm,0.8s,baz=199,slow=11,SNR=3.2 | | | | | | | |
| FITZ | | | | ScP | **ScP** | **03 36 02.9** | **-2.8** | |
| | comp=Z,0.9nm,0.5s,baz=335,slow=2.9,SNR=5.0 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.20** | **188** | P | **P** | **03 28 49.7** | **-0.8** | |
| **FITZ** | **Fitzroy Crossi** | **21.20** | **188** | P | **P** | **03 28 49.6** | **-0.8** | |
| **YULB** | **Yu-li** | **21.39** | **342** | P | **P** | **03 28 50.5** | **-2.0** | |
| YULB | | | | IAmb | IAmb | 03 29 04.1 | | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **COEN** | **Coen** | **22.30** | **140** | P | **P** | **03 29 00.6** | **-0.9** | |
| **COEN** | **Coen** | **22.30** | **140** | P | **P** | **03 29 01.2** | **-0.3** | |
| **YHNB** | **Yeheng** | **22.57** | **343** | P | **P** | **03 29 03.9** | **0.0** | |
| YHNB | | | | IAmb | IAmb | 03 29 16.2 | | |
| | comp=Z,41nm,1.4s | | | | | | | |
| **LEM** | **Lembang** | **23.03** | **245** | P | **P** | **03 29 09.4** | **+1.1** | |
| | comp=Z,148nm,0.8s,baz=28,slow=7.8,SNR=9.8 | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.40** | **166** | P | **P** | **03 29 10.7** | **-0.7** | |
| WB0 | | | | IAmb | IAmb | 03 29 12.8 | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.55** | **166** | P | **P** | **03 29 12.1** | **-0.7** | |
| WRAB | | | | IAmb | IAmb | 03 29 14.4 | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.55** | **166** | P | **P** | **03 29 12.4** | **-0.3** | |
| **WRA** | **Warramunga Arr** | **23.55** | **166** | P | **P** | **03 29 12.1** | **-0.7** | |
| | comp=Z,6.8nm,0.6s,baz=343,slow=10,SNR=73 | | | | | | | |
| WRA | | | | S | **S** | **03 33 08.0** | **-4.0** | |
| | comp=Z,1.5nm,0.8s,baz=326,slow=18,SNR=4.4 | | | | | | | |
| WRA | | | | ScP | **ScP** | **03 36 09.0** | **-2.8** | |
| | comp=Z,1.2nm,0.7s,baz=338,slow=3.1,SNR=9.0 | | | | | | | |
| **WB2** | **Warramunga Arr** | **23.56** | **166** | P | **P** | **03 29 12.3** | **-0.5** | |
| WB2 | | | | IAmb | IAmb | 03 29 14.5 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.62** | **166** | P | **P** | **03 29 13.9** | **+0.6** | |
| WR0 | | | | IAmb | IAmb | 03 29 16.5 | | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **UBPT** | **Khong Chiam** | **25.74** | **300** | P | **P** | **03 29 33.7** | **+1.1** | |
| **QIS** | **Mount Isa** | **25.86** | **156** | P | **P** | **03 29 33.5** | **-0.2** | |
| **PSA00** | **Pilbara Seismi** | **25.89** | **199** | P | **P** | **03 29 33.5** | **-0.4** | |
| PSA00 | | | | IAmb | IAmb | 03 29 36.3 | | |
| | comp=Z,7.6nm,0.6s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.89** | **199** | P | **P** | **03 29 33.5** | **-0.4** | |
| **XMIS** | **Christmas Isla** | **26.42** | **239** | P | **P** | **03 29 38.1** | **-0.6** | |
| **AS31** | **Alice Springs** | **27.07** | **169** | P | **P** | **03 29 43.6** | **-0.8** | |
| AS31 | | | | IAmb | IAmb | 03 29 46.4 | | |
| | comp=Z,4.8nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **27.07** | **169** | P | **P** | **03 29 44.0** | **-0.5** | |
| | comp=Z,6.2nm,0.5s,baz=354,slow=7.0,SNR=79 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 33 00.0** | **-0.4** | |
| | comp=Z,3.2nm,0.4s,baz=352,slow=2.1,SNR=18 | | | | | | | |
| ASAR | | | | S | **S** | **03 34 04.2** | **-3.4** | |
| | comp=Z,3.7nm,0.8s,baz=350,slow=18,SNR=14 | | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 36 19.7** | **-2.1** | |
| | comp=Z,2.2nm,0.8s,baz=342,slow=2.4,SNR=12 | | | | | | | |
| **KULM** | **Kulim** | **27.86** | **276** | P | **P** | **03 29 51.7** | **+0.1** | |
| KULM | | | | IAmb | IAmb | 03 29 53.2 | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **WRKA** | **Warakurna** | **27.92** | **180** | P | **P** | **03 29 52.0** | **0.0** | |
| **JSU** | **Suzuyama** | **28.37** | **4** | P | **P** | **03 29 56.2** | **+0.3** | |
| JSU | | | | IAmb | IAmb | 03 30 03.4 | | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **CTA** | **Charters Tower** | **28.85** | **144** | P | **P** | **03 30 01.3** | **+1.0** | |
| | comp=Z,2.4nm,0.7s,baz=347,slow=18,SNR=2.3 | | | | | | | |
| **GIRL** | **Giralia** | **29.08** | **208** | P | **P** | **03 30 03.0** | **+0.7** | |
| **GIRL** | **Giralia** | **29.08** | **208** | P | **P** | **03 30 02.7** | **+0.4** | |
| | comp=Z,64nm,1.9s | | | | | | | |
| **SRIT** | **Nakonsritamara** | **29.26** | **282** | P | **P** | **03 30 03.7** | **-0.2** | |
| **PSI** | **Prapat** | **29.53** | **270** | P | **P** | **03 30 07.0** | **+0.4** | |
| | comp=Z,17nm,0.9s,baz=86,slow=2.9,SNR=14 | | | | | | | |
| **NJ2** | **Nanjing** | **30.25** | **344** | *e*P | **P** | **03 30 15.3** | **+2.9** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **JMN** | **Monobe** | **30.94** | **9** | P | **P** | **03 30 17.6** | **-0.9** | |
| **GSI** | **Gunungsitoli** | **30.95** | **267** | P | **P** | **03 30 18.3** | **-0.5** | |
| **MEEK** | **Meekatharra** | **31.02** | **197** | P | **P** | **03 30 18.4** | **-0.9** | |
| **OOD** | **Oodnadatta** | **31.43** | **168** | P | **P** | **03 30 22.7** | **-0.2** | |
| **JHS** | **Saijyo** | **32.08** | **7** | P | **P** | **03 30 29.9** | **+1.4** | |
| JHS | | | | IAmb | IAmb | 03 30 57.4 | | |
| | comp=Z,35nm,1.5s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **32.74** | **300** | P | **P** | **03 30 35.5** | **+1.0** | |
| CM31 | | | | IAmb | IAmb | 03 30 37.1 | | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.74** | **300** | P | **P** | **03 30 36.0** | **+1.6** | |
| | comp=Z,4.7nm,0.5s,baz=112,slow=6.9,SNR=28 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.74** | **300** | P | **P** | **03 30 35.1** | **+0.7** | |
| **CHTO** | **Chiang Mai** | **32.88** | **301** | P | **P** | **03 30 36.4** | **+0.6** | |
| CHTO | | | | IAmb | IAmb | 03 30 38.0 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **INU** | **Inuyama** | **33.10** | **13** | P | **P** | **03 30 36.8** | **-0.6** | |
| INU | | | | IAmb | IAmb | 03 30 38.3 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **JGF** | **Kuroka** | **33.42** | **13** | P | **P** | **03 30 40.3** | **+0.2** | |
| JGF | | | | IAmb | IAmb | 03 30 53.5 | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| **MULG** | **Mulgathing** | **33.56** | **171** | P | **P** | **03 30 41.3** | **-0.1** | |
| **FORT** | **Forrest** | **33.64** | **181** | P | **P** | **03 30 41.6** | **-0.3** | |
| **FORT** | **Forrest** | **33.64** | **181** | P | **P** | **03 30 41.7** | **-0.3** | |
| **MORW** | **Morawa** | **34.09** | **200** | P | **P** | **03 30 45.0** | **-0.9** | |
| MORW | | | | IAmb | IAmb | 03 30 50.7 | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **MORW** | **Morawa** | **34.09** | **200** | P | **P** | **03 30 45.6** | **-0.4** | |
| **KSRS** | **Korea Array** | **34.25** | **359** | P | **P** | **03 30 47.6** | **+0.4** | |
| | comp=Z,3.2nm,0.7s,baz=177,slow=9.9,SNR=12 | | | | | | | |
| **KS19** | **Wonju Array Si** | **34.30** | **359** | P | **P** | **03 30 47.8** | **+0.2** | |
| KS19 | | | | IAmb | IAmb | 03 31 02.2 | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **MAJO** | **Matsushiro** | **34.52** | **14** | P | **P** | **03 30 48.7** | **-0.9** | |
| MAJO | | | | IAmb | IAmb | 03 30 50.4 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **MAT** | **Matsushiro** | **34.52** | **14** | P | **P** | **03 30 48.3** | **-1.2** | |
| **MJAR** | **Matsushiro Arr** | **34.52** | **14** | P | **P** | **03 30 48.5** | **-1.0** | |
| | comp=Z,17nm,0.8s,baz=187,slow=9.2,SNR=42 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.52** | **14** | P | **P** | **03 30 48.3** | **-1.3** | |
| **MJB9** | **Matsu-Tunnel** | **34.52** | **14** | P | **P** | **03 30 48.7** | **-0.9** | |
| MJB9 | | | | IAmb | IAmb | 03 30 50.3 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **LCRK** | **Leigh Creek** | **34.58** | **165** | P | **P** | **03 30 50.8** | **+0.7** | |
| **PZH** | **PanZhiHua** | **34.66** | **315** | P | **P** | **03 30 52.5** | **+1.4** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,170nm,4.3s | | | | | | | |
| **BLDU** | **Ballidu** | **35.31** | **198** | P | **P** | **03 30 56.0** | **-0.4** | |
| **EIDS** | **Eidsvold** | **35.74** | **144** | P | **P** | **03 30 59.0** | **-1.2** | |
| EIDS | | | | IAmb | IAmb | 03 31 22.8 | | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **KLBR** | **Kellerberrin** | **35.93** | **196** | P | **P** | **03 31 01.5** | **-0.2** | |
| **JSD** | **Sado** | **35.95** | **13** | P | **P** | **03 31 01.0** | **-0.7** | |
| JSD | | | | IAmb | IAmb | 03 31 14.5 | | |
| | comp=Z,48nm,1.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **36.37** | **169** | P | **P** | **03 31 05.0** | **-0.4** | |
| BBOO | | | | IAmb | IAmb | 03 31 05.8 | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **36.37** | **169** | P | **P** | **03 31 05.4** | **0.0** | |
| **JMM** | **Marumori** | **36.44** | **16** | P | **P** | **03 31 06.0** | **+0.2** | |
| **MUN** | **Mundaring** | **36.74** | **198** | P | **P** | **03 31 08.1** | **-0.4** | |
| **STKA** | **Stephens Creek** | **36.90** | **161** | P | **P** | **03 31 09.5** | **-0.3** | |
| | comp=Z,8.3nm,0.4s,baz=339,slow=8.9,SNR=34 | | | | | | | |
| STKA | | | | PcP | **PcP** | **03 33 27.0** | **0.0** | |
| | comp=Z,3.2nm,0.5s,baz=322,slow=6.1,SNR=4.4 | | | | | | | |
| STKA | | | | ScP | **ScP** | **03 36 53.0** | **-2.0** | |
| | comp=Z,1.4nm,0.7s,baz=127,slow=0.7,SNR=3.6 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.90** | **161** | P | **P** | **03 31 09.2** | **-0.6** | |
| **STKA** | **Stephens Creek** | **36.90** | **161** | P | **P** | **03 31 09.8** | **0.0** | |
| **NAPP** | **Napperby** | **37.17** | **167** | P | **P** | **03 31 12.2** | **+0.1** | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **HTT** | **Hallett** | **37.59** | **166** | P | **P** | **03 31 16.2** | **+0.5** | |
| **BJI** | **Beijing** | **38.48** | **345** | P | **P** | **03 31 23.5** | **+0.5** | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **TWOA** | **Tennyson Woods** | **39.04** | **167** | P | **P** | **03 31 28.7** | **+1.0** | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **JTM** | **Tenmabayashi** | **39.25** | **15** | P | **P** | **03 31 29.6** | **+0.3** | |
| JTM | | | | IAmb | IAmb | 03 31 30.2 | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **ARMA** | **Armidale** | **39.94** | **148** | P | **P** | **03 31 35.3** | **-0.1** | |
| ARMA | | | | IAmb | IAmb | 03 31 37.4 | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **39.94** | **148** | P | **P** | **03 31 35.8** | **+0.4** | |
| **LZH** | **Lanzhou** | **39.99** | **328** | *e*P | **P** | **03 31 38.3** | **+2.5** | |
| LZH | | | | pP | pP | 03 32 11.3 | -6.4 | |
| LZH | | | | sP | sP | 03 32 31.5 | -8.8 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.41** | **65** | T | T | 04 15 51.9 | | |
| | baz=252,slow=75,SNR=6.8 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.42** | **65** | T | T | 04 15 38.2 | | |
| | baz=252,slow=75,SNR=5.6 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.42** | **65** | T | T | 04 15 39.2 | | |
| | baz=252,slow=75,SNR=4.9 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **40.62** | **340** | *e*P | **P** | **03 31 42.3** | **+1.6** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.7s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.97** | **63** | T | T | 04 16 13.1 | | |
| | baz=250,slow=75,SNR=10 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.98** | **63** | T | T | 04 16 14.1 | | |
| | baz=250,slow=75,SNR=7.5 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.99** | **63** | T | T | 04 16 15.2 | | |
| | baz=250,slow=75,SNR=10 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.10** | **4** | P | **P** | **03 31 44.2** | **-0.3** | |
| | comp=Z,3.1nm,0.6s,baz=181,slow=10,SNR=5.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.10** | **4** | P | **P** | **03 31 45.1** | **+0.6** | |
| **ARPS** | **Mount Arapiles** | **41.52** | **164** | P | **P** | **03 31 48.9** | **+0.9** | |
| **SHL** | **Shillong** | **41.70** | **306** | P | **P** | **03 31 50.3** | **+0.4** | |
| SHL | | | | IAmb | IAmb | 03 31 51.4 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **42.14** | **347** | *e*P | **P** | **03 31 53.3** | **+0.2** | |
| XLT | | | | pP | pwP | 03 32 47.5 | +6.1 | |
| XLT | | | | sP | sP | 03 33 06.0 | +10 | |
| XLT | | | | PcP | **PcP** | **03 33 42.0** | **-1.7** | |
| XLT | | | | S | **S** | **03 37 54.5** | **-3.2** | |
| XLT | | | | sS | sS | 03 39 24.3 | +13 | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,73nm,5.4s | | | | | | | |
| **CAN** | **Canberra** | **42.73** | **155** | P | **P** | **03 31 58.3** | **+0.4** | |
| CAN | | | | IAmb | IAmb | 03 32 10.7 | | |
| | comp=Z,28nm,1.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **42.76** | **15** | P | **P** | **03 31 58.6** | **+0.7** | |
| | comp=Z,4.3nm,0.5s,baz=227,slow=8.1,SNR=7.3 | | | | | | | |
| **CNB** | **Canberra Magne** | **42.88** | **155** | P | **P** | **03 32 00.8** | **+1.7** | |
| **TOO** | **Toolangi** | **43.38** | **160** | P | **P** | **03 32 03.9** | **+0.9** | |
| TOO | | | | IAmb | IAmb | 03 32 05.4 | | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **TOO** | **Toolangi** | **43.38** | **160** | P | **P** | **03 32 04.6** | **+1.5** | |
| **GTA** | **Gaotai** | **44.60** | **328** | *e*P | **P** | **03 32 14.3** | **+1.5** | |
| GTA | | | | pP | pP | 03 33 02.3 | +6.5 | |
| GTA | | | | sP | sP | 03 33 30.0 | +12 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **44.71** | **126** | P | **P** | **03 32 14.6** | **+0.8** | |
| | comp=Z,7.2nm,0.5s,baz=258,slow=11,SNR=28 | | | | | | | |
| **DZM** | **Mont Dzumac** | **44.71** | **126** | P | **P** | **03 32 14.7** | **+0.8** | |
| DZM | | | | IAmb | IAmb | 03 32 30.7 | | |
| | comp=Z,41nm,1.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **44.71** | **126** | P | **P** | **03 32 15.2** | **+1.3** | |
| **YATNC** | **Mamie plateau,** | **45.06** | **126** | P | **P** | **03 32 18.1** | **+1.5** | |
| **OUENC** | **Ouen Island, N** | **45.20** | **126** | P | **P** | **03 32 17.5** | **-0.2** | |
| OUENC | | | | IAmb | IAmb | 03 32 33.2 | | |
| | comp=Z,65nm,1.4s | | | | | | | |
| **TAPN** | **Taplejung** | **45.84** | **306** | *e*P | **P** | **03 32 23.3** | **+0.3** | |
| **KLR** | **Kul'dur** | **46.10** | **3** | P | **P** | **03 32 24.4** | **+0.1** | |
| | comp=Z,2.6nm,0.8s,baz=188,slow=5.7,SNR=6.9 | | | | | | | |
| **RAMN** | **Ramite** | **46.58** | **305** | *e*P | **P** | **03 32 29.9** | **+1.2** | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **JIRN** | **Jiri** | **47.20** | **306** | *e*P | **P** | **03 32 34.5** | **+0.9** | |
| | comp=Z,9.0nm,0.4s | | | | | | | |
| **GLAD** | **Gladstone** | **47.30** | **160** | P | **P** | **03 32 34.2** | **+0.5** | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **GUN** | **Gumba** | **47.55** | **306** | *e*P | **P** | **03 32 37.1** | **+0.8** | |
| | comp=Z,16nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **48.52** | **340** | P | **P** | **03 32 43.5** | **+0.4** | |
| | comp=Z,1.3nm,0.7s,baz=153,slow=10,SNR=8.9 | | | | | | | |
| **SONM** | **Songino Array** | **48.52** | **340** | P | **P** | **03 32 43.5** | **+0.4** | |
| **KOLN** | **Koldanda** | **49.36** | **304** | *e*P | **P** | **03 32 50.9** | **+0.9** | |
| | comp=Z,5.5nm,0.4s | | | | | | | |
| **DANN** | **Dangsing** | **49.45** | **305** | *e*P | **P** | **03 32 51.4** | **+0.7** | |
| **PYUN** | **Piuthan** | **49.98** | **305** | *e*P | **P** | **03 32 55.6** | **+0.9** | |
| **MSVF** | **Nonsavu** | **53.03** | **115** | P | **P** | **03 33 17.9** | **+0.7** | |
| MSVF | | | | IAmb | IAmb | 03 33 19.8 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **WMQ** | **Urumqi** | **54.30** | **324** | *e*P | **P** | **03 33 28.5** | **+2.5** | |
| **PEA0B** | **Petropavlovsk-** | **55.41** | **21** | P | **P** | **03 33 34.3** | **+0.6** | |
| PEA0B | | | | IAmb | IAmb | 03 33 35.3 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.41** | **21** | P | **P** | **03 33 34.6** | **+0.9** | |
| | comp=Z,8.7nm,0.8s,baz=193,slow=5.5,SNR=13 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.41** | **21** | P | **P** | **03 33 34.4** | **+0.7** | |
| **OUZ** | **Omahuta** | **56.85** | **136** | P | **P** | **03 33 45.5** | **+1.3** | |
| OUZ | | | | IAmb | IAmb | 03 33 46.0 | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **MA2** | **Magadan** | **58.95** | **13** | P | **P** | **03 33 58.8** | **+0.4** | |
| | comp=Z,8.1nm,0.8s,baz=196,slow=6.4,SNR=19 | | | | | | | |
| **MA2** | **Magadan** | **58.95** | **13** | P | **P** | **03 33 59.1** | **+0.7** | |
| MA2 | | | | IAmb | IAmb | 03 34 00.1 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.12** | **325** | P | **P** | **03 34 00.1** | **+0.3** | |
| **MKAR** | **Makanchi Array** | **59.12** | **325** | P | **P** | **03 34 00.1** | **+0.2** | |
| | comp=Z,1.1nm,0.5s,baz=118,slow=8.3,SNR=34 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **03 34 46.6** | **+0.3** | |
| | comp=Z,1.0nm,0.6s,baz=126,slow=8.0,SNR=4.4 | | | | | | | |
| MKAR | | | | ScP | **ScP** | **03 38 24.4** | **-3.5** | |
| | comp=Z,0.9nm,0.8s,baz=122,slow=4.6,SNR=6.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.12** | **325** | P | **P** | **03 34 00.2** | **+0.4** | |
| **DCZ** | **Deep Cove** | **59.25** | **149** | P | **P** | **03 34 00.8** | **+0.2** | |
| **QRZ** | **Quartz Range** | **59.31** | **142** | P | **P** | **03 34 01.7** | **+0.5** | |
| **MAKZ** | **Makanchi** | **59.31** | **325** | P | **P** | **03 34 01.4** | **+0.2** | |
| **RPZ** | **Rata Peaks** | **60.20** | **146** | P | **P** | **03 34 07.6** | **+0.5** | |
| **LTZ** | **Lake Taylor** | **60.32** | **144** | P | **P** | **03 34 08.6** | **+0.6** | |
| LTZ | | | | IAmb | IAmb | 03 34 21.0 | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **BHW** | **Baring Head** | **61.09** | **142** | P | **P** | **03 34 12.1** | **-1.1** | |
| **BFZ** | **Birch Farm** | **61.55** | **140** | P | **P** | **03 34 16.4** | **+0.1** | |
| BFZ | | | | IAmb | IAmb | 03 34 18.0 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.00** | **332** | P | **P** | **03 34 18.0** | **-1.0** | |
| | comp=Z,0.8nm,0.4s,baz=111,slow=8.1,SNR=4.6 | | | | | | | |
| **KURK** | **Kurchatov** | **63.27** | **327** | P | **P** | **03 34 27.6** | **+0.1** | |
| **KKAR** | **Karatay Array** | **64.93** | **317** | P | **P** | **03 34 38.6** | **+0.1** | |
| **KIWB** | **Kanaga Island** | **66.27** | **33** | P | **P** | **03 34 46.5** | **-0.4** | |
| **ADK** | **Adak** | **66.55** | **34** | P | **P** | **03 34 48.9** | **+0.2** | |
| **GSTR** | **Great Sitkin T** | **66.98** | **34** | P | **P** | **03 34 52.0** | **+0.6** | |
| **TIXI** | **Tiksi** | **68.51** | **0** | P | **P** | **03 35 00.1** | **-0.4** | |
| **BRVK** | **Borovoye** | **68.92** | **327** | P | **P** | **03 35 03.0** | **-0.5** | |
| **CASY** | **Casey** | **70.36** | **188** | P | **P** | **03 35 09.9** | **-2.0** | |
| **UNV** | **Unalaska Valle** | **72.99** | **34** | P | **P** | **03 35 28.6** | **+0.7** | |
| **AKUT** | **Akutan** | **73.49** | **34** | P | **P** | **03 35 31.4** | **+0.6** | |
| **ABKAR** | **Akbulak array** | **73.79** | **321** | P | **P** | **03 35 31.8** | **-0.9** | |
| **SOCY** | **Socotra** | **74.22** | **282** | P | **P** | **03 35 34.6** | **-1.4** | |
| **SDPT** | **Sand Point** | **76.78** | **34** | P | **P** | **03 35 49.8** | **+0.3** | |
| **ANM** | **Nome** | **77.17** | **24** | P | **P** | **03 35 52.3** | **+0.7** | |
| **RDOG** | **Red Dog Mine** | **79.29** | **21** | P | **P** | **03 36 04.1** | **+0.9** | |
| **TTA** | **Tatalina** | **80.71** | **27** | P | **P** | **03 36 12.0** | **+1.0** | |
| **K20K** | **Telida** | **81.66** | **26** | P | **P** | **03 36 17.2** | **+1.4** | |
| **J20K** | **Nowinta River** | **81.77** | **26** | P | **P** | **03 36 17.9** | **+1.5** | |
| J20K | | | | IAmb | IAmb | 03 36 44.4 | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| **IMAR** | **Indian Mountai** | **82.25** | **24** | P | **P** | **03 36 19.9** | **+1.0** | |
| **PPLA** | **Purkeypile** | **82.43** | **27** | P | **P** | **03 36 21.1** | **+1.1** | |
| PPLA | | | | IAmb | IAmb | 03 36 40.3 | | |
| | comp=Z,31nm,1.5s | | | | | | | |
| **CNPM** | **China Poot** | **82.45** | **30** | P | **P** | **03 36 20.9** | **+0.9** | |
| **VNDA** | **Vanda** | **82.53** | **173** | P | **P** | **03 36 20.1** | **0.0** | |
| | comp=Z,2.3nm,0.4s,baz=318,slow=5.9,SNR=15 | | | | | | | |
| **VNDA** | **Vanda** | **82.53** | **173** | P | **P** | **03 36 20.2** | **+0.1** | |
| **CAST** | **Castle Rocks** | **82.55** | **26** | P | **P** | **03 36 21.8** | **+1.2** | |
| **ABPO** | **Ambohimpanom** | **82.74** | **251** | P | **P** | **03 36 21.8** | **-0.8** | |
| **KTH** | **Kantishna Hill** | **83.09** | **26** | P | **P** | **03 36 23.5** | **+0.2** | |
| KTH | | | | IAmb | IAmb | 03 36 45.8 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **MLY** | **Manley** | **83.35** | **25** | P | **P** | **03 36 25.6** | **+1.0** | |
| MLY | | | | IAmb | IAmb | 03 36 25.8 | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **TRF** | **Thorofare Moun** | **83.36** | **27** | P | **P** | **03 36 25.2** | **+0.3** | |
| TRF | | | | IAmb | IAmb | 03 36 46.9 | | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.36** | **29** | P | **P** | **03 36 24.6** | **-0.1** | |
| **SEW** | **Seward** | **83.41** | **30** | P | **P** | **03 36 25.4** | **+0.6** | |
| **VOI** | **Vohitsoka** | **83.44** | **248** | P | **P** | **03 36 25.8** | **-0.3** | |
| VOI | | | | IAmb | IAmb | 03 36 38.1 | | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **PMR** | **Palmer** | **83.70** | **28** | P | **P** | **03 36 26.6** | **+0.3** | |
| PMR | | | | IAmb | IAmb | 03 36 27.3 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **COLD** | **Coldfoot** | **83.83** | **23** | P | **P** | **03 36 28.2** | **+1.2** | |
| COLD | | | | IAmb | IAmb | 03 36 29.1 | | |
| | comp=Z,5.8nm,0.6s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **83.94** | **25** | P | **P** | **03 36 28.6** | **+1.1** | |
| **MCK** | **McKinley** | **83.99** | **26** | P | **P** | **03 36 27.9** | **0.0** | |
| MCK | | | | IAmb | IAmb | 03 36 50.4 | | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **RND** | **Reindeer** | **84.00** | **27** | P | **P** | **03 36 27.8** | **-0.2** | |
| RND | | | | IAmb | IAmb | 03 36 28.9 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **KNK** | **Knik Glacier** | **84.01** | **29** | P | **P** | **03 36 28.7** | **+0.7** | |
| KNK | | | | IAmb | IAmb | 03 36 29.5 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **SML** | **Sawmill** | **84.10** | **28** | P | **P** | **03 36 29.1** | **+0.6** | |
| **CCB** | **Clear Creek Bu** | **84.56** | **25** | P | **P** | **03 36 30.3** | **-0.3** | |
| **SCM** | **Sheep Creek Mo** | **84.58** | **28** | P | **P** | **03 36 31.8** | **+0.8** | |
| **H24K** | **Noodor Dome** | **84.62** | **24** | P | **P** | **03 36 31.6** | **+0.6** | |
| **DHY** | **Denali Highway** | **84.64** | **27** | P | **P** | **03 36 31.9** | **+0.6** | |
| DHY | | | | IAmb | IAmb | 03 36 44.8 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **FID** | **Port Fidalgo** | **84.92** | **29** | P | **P** | **03 36 32.9** | **+0.3** | |
| **ILAR** | **Eielson Array** | **84.96** | **25** | P | **P** | **03 36 31.9** | **-0.8** | |
| | comp=Z,0.6nm,0.5s,baz=243,slow=4.8,SNR=13 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **91.69** | **340** | P | **P** | **03 37 02.8** | **-1.7** | |
| | comp=Z,0.9nm,0.5s,baz=82,slow=6.6,SNR=15 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **91.69** | **340** | P | **P** | **03 37 03.7** | **-0.8** | |
| ARCES | | | | IAmb | IAmb | 03 37 06.5 | | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.38** | **25** | P | **Pdif** | **03 37 39.1** | **-0.4** | |
| | comp=Z,0.2nm,0.6s,baz=301,slow=4.7,SNR=5.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.61** | **53** | PKP | **PKPdf** | **03 42 48.6** | **-0.5** | |
| | comp=Z,0.3nm,0.6s,baz=84,slow=3.9,SNR=4.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.61** | **53** | | **PKPdf** | **03 42 48.1** | **-0.9** | |
| **TORD** | **Torodi Ar. Bea** | **124.81** | **288** | PKP | **PKPdf** | **03 42 56.0** | **-1.3** | |
| | comp=Z,0.4nm,0.4s,baz=68,slow=1.9,SNR=12 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.81** | **288** | | **PKPdf** | **03 42 55.0** | **-2.3** | |
| **PLCA** | **Paso Flores** | **138.73** | **158** | PKP | **PKPdf** | **03 43 23.2** | **+0.2** | |
| | comp=Z,1.1nm,0.7s,baz=287,slow=1.4,SNR=5.7 | | | | | | | |
| **LMEL** | **Las Melosas** | **144.73** | **152** | PKPdf | **PKPdf** | **03 43 34.3** | **+0.3** | |
| **CO02** | **Combarbal** | **146.49** | **149** | PKPbc | **PKPdf** | **03 43 36.9** | **-0.2** | |
| **ZON** | **Zonda** | **147.36** | **152** | PKPbc | **PKPdf** | **03 43 39.6** | **+1.2** | |
| **LPAZ** | **La Paz** | **159.01** | **130** | PKPab | **PKPab** | **03 44 34.1** | **+0.5** | |
| | comp=Z,1.8nm,1.0s,baz=212,slow=7.9,SNR=3.9 | | | | | | | |
| **LPAZ** | **La Paz** | **159.01** | **130** | PKPdf | **PKPdf** | **03 43 52.6** | **-3.5** | |

*RSPR **28** 03:36:15.4, 17.°97N×68.°73W, h102$^{km}_{\pm}$5$^{km}$, MD3.6/9*
*NEIC **28** 03:36:17.5±1.7, 18.°1N±0.°1×68.°67W±0.°04, h67$^{km}_{\pm}$27$^{km}$,*
*Error ellip

**SONM Songino Array 67.71 328** P **P** **03 57 23.1 0.0**
0.2nm,0.4s,baz=123,slow=5.3,SNR=2.1
**ILAR Eielson Array 83.49 22** P **P** **03 58 53.2 +0.3**
0.5nm,0.9s,baz=246,slow=3.8,SNR=5.2
**TORD Torodi Ar. Bea 150.93 286** PKPbc **PKPbc** **04 06 18.4 -0.8**
0.5nm,0.6s,baz=63,slow=3.9,SNR=3.8

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*NEIC* ***28*** *03:55:40.0±2.0, 7˚.48S±0˚.06×128˚.49E±0˚.06, h127km±5km, mb4.7/86, Error ellipse: s-maj=9.3km s-min=7.8km az=163.0*
*IDC* ***28*** *03:55:40.4±1.3, 7˚.36S×128˚.35E, h125km±11km, mb4.2/19, mb1 4.2/23, mb1mx4.0/40, mbtmp4.6/23, MS3.4/9, Ms1 3.4/9, ms1mx3.0/71, Error ellipse: s-maj=12.0km s-min=8.5km az=93.0*
*DJA* ***28*** *03:55:40.3±0.2, 8˚S±2˚×12˚9E±˚, h108km±4km, M4.8/29, mB5.3/12, mb4.8/29, MLv5.0/12, Mw(mB)4.7/12*
**ISC 28 03:55:39.8±0.3, 7˚.49S±0˚.04×128˚.47E±0˚.04, h127km, n243, σ1§30/252, mb4.7/87, 1C-4D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.84** | **100** | Pn | **Pn** | **03 56 25.9** | **+1.6** |
| SAUI | | | | Sn | **Sn** | **03 56 57.1** | **-1.4** |
| **SAUI** | **Saumlaki** | **2.84** | **100** | P | **Pn** | **03 56 26.2** | **+2.0** |
| **SAUI** | **Saumlaki** | **2.84** | **100** | P | **Pn** | **03 56 26.6** | **+2.4** |
| **BNDI** | **Bandanaira** | **3.28** | **26** | P | **Pn** | **03 56 30.9** | **+1.0** |
| **AAI** | **Ambon** | **3.79** | **356** | P | **Pn** | **03 56 37.4** | **+0.7** |
| **MSAI** | **Masohi** | **4.14** | **6** | P | **Pn** | **03 56 42.5** | **+1.1** |
| **SOEI** | **Soe** | **4.73** | **241** | Pn | **Pn** | **03 56 50.5** | **+1.2** |
| SOEI | | | | Sn | **Sn** | **03 57 43.8** | **+0.4** |
| **SOEI** | **Soe** | **4.73** | **241** | P | **Pn** | **03 56 50.7** | **+1.4** |
| **SOEI** | **Soe** | **4.73** | **241** | P | **Pn** | **03 56 51.5** | **+2.2** |
| **DRS** | **Darwin Rock St** | **5.46** | **154** | P | **Pn** | **03 56 59.7** | **+0.7** |
| | 405nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **5.46** | **240** | P | **Pn** | **03 57 00.1** | **+1.1** |
| | 50nm,0.3s,baz=117,slow=1.9,SNR=48 | | | | | | |
| BATI | | | | S | **Sn** | **03 58 00.5** | **-0.4** |
| | 89nm,0.3s,baz=278,slow=16,SNR=30 | | | | | | |
| **BATI** | **Baumata** | **5.46** | **240** | P | **Pn** | **03 56 59.8** | **+0.7** |
| | 2.3nm3µm303nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **5.90** | **40** | Pn | **Pn** | **03 57 04.3** | **-0.6** |
| FAKI | | | | Sn | **Sn** | **03 58 10.6** | **-0.8** |
| **FAKI** | **Fak Fak** | **5.90** | **40** | P | **Pn** | **03 57 04.4** | **-0.6** |
| | 1.8nm2µm110nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **5.90** | **40** | P | **Pn** | **03 57 04.6** | **-0.3** |
| | 110nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **5.92** | **154** | Pn | **Pn** | **03 57 05.8** | **+0.5** |
| **MTN** | **Manton Dam** | **5.92** | **154** | P | **Pn** | **03 57 06.2** | **+0.9** |
| | 840nm,0.4s | | | | | | |
| **SANI** | **Sanana** | **5.95** | **335** | P | **Pn** | **03 57 06.8** | **+1.2** |
| | 0.8nm2µm218nm,1.2s | | | | | | |
| **SANI** | **Sanana** | **5.95** | **335** | P | **Pn** | **03 57 07.8** | **+2.2** |
| | 219nm,1.2s | | | | | | |
| **BBSI** | **Bau Bau** | **6.20** | **288** | P | **Pn** | **03 57 11.3** | **+2.4** |
| | 0.1nm261nm18nm,0.9s | | | | | | |
| **KDU** | **Kakadu** | **6.49** | **143** | P | **Pn** | **03 57 13.1** | **+0.2** |
| | 847nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **7.15** | **23** | P | **Pn** | **03 57 21.6** | **-0.2** |
| | 8.9nm,0.3s,baz=238,slow=22,SNR=24 | | | | | | |
| SIJI | | | | S | **Sn** | **03 58 42.0** | **+0.4** |
| | 4.7nm,0.3s,baz=192,slow=21,SNR=20 | | | | | | |
| SIJI | | | | LR | LR | 04 00 33.4 | |
| | comp=Z,136nm,19.0s,baz=190,slow=41 | | | | | | |
| **KNRA** | **Kununurra** | **8.14** | **178** | Pn | **Pn** | **03 57 34.4** | **-0.7** |
| **KNRA** | **Kununurra** | **8.14** | **178** | P | **Pn** | **03 57 35.0** | **-0.1** |
| | 707nm,0.5s | | | | | | |
| **LUWI** | **Luwuk** | **8.57** | **318** | | **Pn** | **03 57 42.4** | **+1.5** |
| **LUWI** | **Luwuk** | **8.57** | **318** | P | **Pn** | **03 57 43.9** | **+3.0** |
| | 3µm242nm,1.2s | | | | | | |
| **BKSI** | **Bulukumba** | **8.57** | **284** | P | **Pn** | **03 57 41.9** | **+0.9** |
| | 27nm,0.9s | | | | | | |
| **BNSI** | **Bone** | **8.87** | **290** | P | **Pn** | **03 57 46.3** | **+1.3** |
| | 58nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **9.01** | **285** | P | **Pn** | **03 57 46.4** | **-0.5** |
| | 0.8nm,0.3s,baz=135,slow=5.4,SNR=5.6 | | | | | | |
| KAPI | | | | LR | LR | 04 02 07.1 | |
| | comp=Z,32nm,18.4s,baz=118,slow=44 | | | | | | |
| **KAPI** | **Kappang** | **9.01** | **285** | | **Pn** | **03 57 44.6** | **-2.3** |
| **KMSI** | **Cibinong** | **9.18** | **331** | P | **Pn** | **03 57 51.6** | **+2.4** |
| | 94nm,0.5s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **9.23** | **256** | P | **Pn** | **03 57 49.9** | **0.0** |
| | 61nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.34** | **292** | P | **Pn** | **03 57 52.5** | **+1.1** |
| | 36nm,1.1s | | | | | | |
| **APSI** | **Ampana** | **9.44** | **314** | P | **Pn** | **03 57 55.1** | **+2.5** |
| | 613nm65nm,0.9s | | | | | | |
| **TTSI** | **Tana Toraja** | **9.68** | **297** | P | Pn | 03 58 12.2 | +16 |
| **GTOI** | **Gorontalo** | **9.74** | **326** | P | Pn | 03 58 01.6 | +4.9 |
| | 20nm,0.8s | | | | | | |
| **MRSI** | **Marisa** | **10.25** | **320** | P | **Pn** | **03 58 06.0** | **+2.4** |
| **FITZ** | **Fitzroy Crossi** | **10.90** | **194** | P | **Pn** | **03 58 09.2** | **-3.0** |
| | 6.5nm,0.3s,baz=25,slow=9.8,SNR=153 | | | | | | |
| FITZ | | | | S | Sn | 04 00 03.3 | -9.0 |
| | 8.4nm,0.3s,baz=96,slow=21,SNR=12 | | | | | | |
| FITZ | | | | LR | LR | 04 03 13.1 | |
| | comp=Z,145nm,19.1s,baz=29,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.90** | **194** | Pn | **Pn** | **03 58 11.2** | **-1.0** |
| **TOLI2** | **Tolitoli** | **11.49** | **318** | Pn | **Pn** | **03 58 21.9** | **+1.8** |
| **TOLI2** | **Tolitoli** | **11.49** | **318** | P | **Pn** | **03 58 23.2** | **+3.1** |
| | 61nm,1.2s | | | | | | |
| **MPSI** | **Mapaga** | **11.56** | **312** | P | **Pn** | **03 58 23.0** | **+1.9** |
| **WB0** | **Warramunga Arr** | **13.48** | **155** | P | **Pn** | **03 58 43.8** | **-2.3** |
| **WRAB** | **Tennant Creek** | **13.62** | **156** | Pn | **Pn** | **03 58 46.0** | **-1.8** |
| **WRA** | **Warramunga Arr** | **13.62** | **156** | P | **Pn** | **03 58 45.4** | **-2.4** |
| | 12nm,0.3s,baz=346,slow=13,SNR=285 | | | | | | |
| WRA | | | | S | Sn | 04 01 07.9 | -10 |
| | 7.3nm,0.3s,baz=330,slow=23,SNR=6.1 | | | | | | |
| WRA | | | | LR | LR | 04 04 56.8 | |
| | comp=Z,251nm,18.9s,baz=28,slow=40 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.62** | **156** | Pn | **Pn** | **03 58 45.2** | **-2.7** |
| **WR0** | **Warramunga Arr** | **13.72** | **155** | Pn | **Pn** | **03 58 46.4** | **-2.7** |
| **JAGI** | **Jajag, Banyuwa** | **14.22** | **265** | Pn | **Pn** | **03 58 55.7** | **+0.2** |
| **MTKI** | **Muara Teweh, K** | **15.02** | **295** | P | P | **03 59 08.2** | **+0.3** |
| **COEN** | **Coen** | **15.80** | **115** | | **Pn** | **03 59 14.0** | **-1.4** |
| COEN | | | | IAmb | IAmb | 03 59 23.2 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **COEN** | **Coen** | **15.80** | **115** | P | **P** | **03 59 16.2** | **-0.4** |
| | comp=Z,38nm,1.1s | | | | | | |
| **MYLDM** | **Lahad Datu** | **16.05** | **321** | P | **Pn** | **03 59 18.8** | **+0.4** |
| MYLDM | | | | IAmb | IAmb | 03 59 35.7 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.29** | **210** | P | **Pn** | **03 59 20.5** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 03 59 26.7 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.29** | **210** | P | **Pn** | **03 59 21.2** | **-0.1** |
| | comp=Z,48nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **16.88** | **141** | P | **P** | **03 59 28.5** | **+0.1** |
| | comp=Z,69nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **16.90** | **163** | | **P** | **03 59 28.1** | **-0.6** |
| **ASAR** | **Alice Springs** | **16.91** | **163** | P | **P** | **03 59 28.1** | **-0.6** |
| | comp=Z,7.4nm,0.3s,baz=334,slow=8.7,SNR=269 | | | | | | |
| ASAR | | | | S | **Sn** | **04 02 29.9** | **-7.4** |
| | comp=Z,2.5nm,0.3s,baz=340,slow=21,SNR=6.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **04 07 31.1** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=343,slow=1.9,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **16.91** | **163** | | **P** | **03 59 28.5** | **-0.2** |
| **WRKA** | **Warakurna** | **17.45** | **181** | P | **P** | **03 59 35.1** | **+0.4** |
| | comp=Z,86nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **17.79** | **267** | P | **P** | **03 59 38.0** | **-0.6** |
| **STKI** | **Sintang** | **18.54** | **293** | P | **Pn** | **03 59 50.1** | **+1.7** |
| | comp=Z,70nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **18.58** | **97** | P | **Pn** | **03 59 49.1** | **+0.2** |
| | comp=Z,0.8nm,0.3s,baz=254,slow=17,SNR=2.1 | | | | | | |
| **PMG** | **Port Moresby** | **18.58** | **97** | P | **P** | **03 59 48.0** | **+0.8** |
| **SBUM** | **Sibu** | **18.99** | **301** | P | **P** | **03 59 50.0** | **-1.6** |
| **KSM** | **Kuching** | **20.19** | **295** | P | **P** | **04 00 05.6** | **+1.0** |
| **GIRL** | **Giralia** | **20.36** | **221** | P | **P** | **04 00 06.2** | **-0.2** |
| **GIRL** | **Giralia** | **20.36** | **221** | P | **P** | **04 00 08.4** | **+2.0** |
| | comp=Z,96nm,2.1s | | | | | | |
| **MEEK** | **Meekatharra** | **21.22** | **205** | P | **P** | **04 00 16.8** | **+1.2** |
| | comp=Z,18nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **21.30** | **128** | P | **P** | **04 00 17.9** | **+1.3** |
| | comp=Z,4.1nm,0.7s,baz=282,slow=11,SNR=8.9 | | | | | | |
| CTA | | | | LR | LR | 04 09 43.2 | |
| | comp=Z,165nm,20.2s,baz=308,slow=39 | | | | | | |
| **CTA** | **Charters Tower** | **21.30** | **128** | P | **P** | **04 00 18.8** | **+2.3** |
| | comp=Z,16nm,1.0s | | | | | | |
| **OOD** | **Oodnadatta** | **21.32** | **162** | P | **P** | **04 00 17.9** | **+1.3** |
| | comp=Z,191nm,0.6s | | | | | | |
| **TGY** | **Tagaytay City** | **22.72** | **341** | P | **P** | **04 00 30.9** | **-0.2** |
| | comp=Z,150nm,0.4s,baz=184,slow=8.1,SNR=4.4 | | | | | | |
| **FORT** | **Forrest** | **23.17** | **181** | | **P** | **04 00 36.9** | **+1.7** |
| **FORT** | **Forrest** | **23.17** | **181** | P | **P** | **04 00 37.6** | **+2.4** |
| | comp=Z,73nm,0.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MULG** | **Mulgathing** | **23.27** | **168** | P | **P** | **04 00 38.0** | **+1.9** |
| | comp=Z,58nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **24.19** | **144** | P | **P** | **04 00 46.7** | **+2.2** |
| | comp=Z,85nm,0.6s | | | | | | |
| **MORW** | **Morawa** | **24.45** | **207** | P | **P** | **04 00 47.5** | **+0.6** |
| MORW | | | | IAmb | IAmb | 04 00 54.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **24.45** | **207** | P | **P** | **04 00 49.4** | **+2.5** |
| | comp=Z,29nm,0.8s | | | | | | |
| **LCRK** | **Leigh Creek** | **24.59** | **159** | P | **P** | **04 00 50.2** | **+2.0** |
| | comp=Z,63nm,0.7s | | | | | | |
| **BLDU** | **Ballidu** | **25.51** | **204** | P | **P** | **04 00 57.9** | **+1.5** |
| | comp=Z,20nm,1.7s | | | | | | |
| **BBOO** | **Buckleboo** | **26.16** | **165** | P | **P** | **04 01 02.8** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 04 01 08.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **26.16** | **165** | P | **P** | **04 01 04.1** | **+1.8** |
| | comp=Z,26nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.17** | **155** | P | **P** | **04 01 12.9** | **+1.6** |
| | comp=Z,5.2nm,0.7s,baz=331,slow=9.0,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **27.17** | **155** | P | **P** | **04 01 12.1** | **+0.8** |
| **HTT** | **Hallett** | **27.56** | **161** | P | **P** | **04 01 16.2** | **+1.3** |
| | comp=Z,24nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.82** | **148** | P | **P** | **04 01 28.5** | **+2.5** |
| | comp=Z,29nm,2.1s | | | | | | |
| **RPSI** | **Rantau Prapat** | **31.17** | **288** | P | **P** | **04 01 46.3** | **-0.7** |
| RPSI | | | | IAmb | IAmb | 04 01 50.7 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **PSI** | **Prapat** | **31.21** | **288** | P | **P** | **04 01 46.8** | **-0.8** |
| | comp=Z,18nm,0.8s,baz=83,slow=7.4,SNR=7.6 | | | | | | |
| **YULB** | **Yu-li** | **31.49** | **347** | P | **P** | **04 01 48.6** | **-1.1** |
| YULB | | | | IAmb | IAmb | 04 01 55.8 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **TPUB** | **Ta-pu** | **31.55** | **346** | P | **P** | **04 01 49.2** | **-1.0** |
| TPUB | | | | IAmb | IAmb | 04 02 01.2 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.59** | **159** | P | **P** | **04 01 53.2** | **+2.8** |
| | comp=Z,36nm,0.8s | | | | | | |
| **UBPT** | **Khong Chiam** | **32.12** | **315** | P | **P** | **04 01 55.7** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **32.20** | **351** | P | **P** | **04 01 55.4** | **-0.5** |
| **YHNB** | **Yeheng** | **32.71** | **348** | P | **P** | **04 01 59.9** | **-0.5** |
| YHNB | | | | IAmb | IAmb | 04 02 01.1 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.49** | **149** | P | **P** | **04 02 07.5** | **+0.4** |
| CAN | | | | IAmb | IAmb | 04 02 10.9 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.49** | **149** | P | **P** | **04 02 10.1** | **+3.0** |
| **TOO** | **Toolangi** | **33.69** | **155** | P | **P** | **04 02 10.1** | **+1.3** |
| TOO | | | | IAmb | IAmb | 04 02 13.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **33.69** | **155** | P | **P** | **04 02 12.6** | **+3.8** |
| **JOW** | **Kunigami** | **34.12** | **360** | P | **P** | **04 02 12.6** | **0.0** |
| | comp=Z,16nm,0.6s,baz=196,slow=3.5,SNR=4.7 | | | | | | |
| **JOW** | **Kunigami** | **34.12** | **360** | P | **P** | **04 02 12.6** | **0.0** |
| **SANVU** | **Saraoutou** | **38.72** | **105** | P | **P** | **04 02 51.8** | **0.0** |
| **JSU** | **Suzuyama** | **38.83** | **3** | P | **P** | **04 02 50.9** | **-1.5** |
| JSU | | | | IAmb | IAmb | 04 02 53.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **38.91** | **312** | P | **P** | **04 02 53.1** | **-0.3** |
| CM31 | | | | IAmb | IAmb | 04 03 08.1 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.91** | **312** | P | **P** | **04 02 53.0** | **-0.3** |
| | comp=Z,2.2nm,0.5s,baz=142,slow=7.1,SNR=4.1 | | | | | | |
| CMAR | | | | PcP | **PcP** | **04 05 02.8** | **+1.1** |
| | comp=Z,1.8nm,0.6s,baz=162,slow=2.6,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.91** | **312** | P | **P** | **04 02 52.3** | **-1.1** |
| **DZM** | **Mont Dzumac** | **39.33** | **116** | LR | LR | 04 19 27.2 | |
| | comp=Z,108nm,19.1s,baz=22,slow=36 | | | | | | |
| **WHN** | **Wuhan** | **40.17** | **341** | ⇓P | P | 04 03 09.5 | +5.9 |
| **NJ2** | **Nanjing** | **40.38** | **347** | *eP* | **P** | **04 03 07.0** | **+1.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | |
| **KMI** | **Kunming** | **40.98** | **323** | ⇑P | **P** | **04 03 11.3** | **+0.7** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **JMN** | **Monobe** | **41.31** | **7** | P | **P** | **04 03 12.7** | **-0.3** |
| JMN | | | | IAmb | IAmb | 04 03 15.0 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **JHS** | **Saijyo** | **42.49** | **6** | P | **P** | **04 03 23.1** | **+0.6** |
| JHS | | | | IAmb | IAmb | 04 03 28.2 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **LYN** | **LuoYang** | **44.47** | **341** | *eP* | **P** | **04 03 38.5** | **+0.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **44.72** | **359** | P | **P** | **04 03 40.4** | **+0.1** |
| | comp=Z,3.0nm,0.6s,baz=174,slow=9.4,SNR=13 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.75** | **11** | P | **P** | **04 03 38.7** | **-1.8** |
| | comp=Z,2.3nm,0.5s,baz=80,slow=28,SNR=4.1 | | | | | | |
| **MAJO** | **Matsushiro** | **44.75** | **11** | P | **P** | **04 03 39.5** | **-1.1** |
| **MAT** | **Matsushiro** | **44.75** | **11** | P | **P** | **04 03 38.5** | **-2.0** |
| **MJB9** | **Matsu-Tunnel** | **44.75** | **11** | P | **P** | **04 03 39.5** | **-1.1** |
| **CD2** | **Chengdu** | **44.93** | **329** | P | **P** | **04 03 42.3** | **+0.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **45.27** | **337** | P | **P** | **04 03 43.0** | **-1.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **JSD** | **Sado** | **46.21** | **11** | P | **P** | **04 03 51.6** | **-0.4** |
| **HNS** | **HongShan** | **46.48** | **345** | ⇓P | **P** | **04 03 53.8** | **-0.3** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **46.57** | **13** | P | **P** | **04 03 54.1** | **-0.7** |
| JMM | | | | IAmb | IAmb | 04 04 10.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **48.43** | **314** | P | **P** | **04 04 09.4** | **-0.3** |
| SHL | | | | IAmb | IAmb | 04 04 12.3 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **BJT** | **Baijiatuan** | **48.62** | **347** | P | **P** | **04 04 10.1** | **-0.6** |
| BJT | | | | IAmb | IAmb | 04 04 11.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BJI** | **Beijing** | **48.64** | **347** | P | **P** | **04 04 10.3** | **-0.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **LZH** | **Lanzhou** | **49.15** | **333** | *eP* | **P** | **04 04 16.3** | **+1.4** |
| LZH | | | | pP | pwP | 04 04 52.0 | +3.8 |
| LZH | | | | sP | sP | 04 05 03.5 | +6.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **JTM** | **Tenmabayashi** | **49.42** | **13** | P | **P** | **04 04 15.8** | **-0.9** |
| JTM | | | | IAmb | IAmb | 04 04 19.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **49.85** | **286** | LR | LR | 04 24 51.9 | |
| | comp=Z,28nm,20.1s,baz=215,slow=35 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.56** | **343** | *eP* | **P** | **04 04 28.8** | **+3.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,98nm,6.0s | | | | | | |
| **FOZ** | **Fox Glacier** | **50.92** | **142** | P | **P** | **04 04 26.0** | **-2.1** |
| **QRZ** | **Quartz Range** | **51.31** | **137** | P | **P** | **04 04 32.0** | **+1.0** |
| QRZ | | | | IAmb | IAmb | 04 04 34.7 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **51.55** | **3** | P | **P** | **04 04 31.9** | **-0.7** |
| USA0B | | | | IAmb | IAmb | 04 04 35.7 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.55** | **3** | P | **P** | **04 04 32.0** | **-0.7** |
| | comp=Z,4.3nm,0.6s,baz=191,slow=7.5,SNR=9.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.55** | **3** | P | **P** | **04 04 32.7** | **+0.1** |
| **RPZ** | **Rata Peaks** | **51.78** | **141** | P | **P** | **04 04 35.4** | **+0.9** |
| RPZ | | | | IAmb | IAmb | 04 04 40.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LTZ** | **Lake Taylor** | **52.08** | **140** | P | **P** | **04 04 38.4** | **+1.7** |
| **ODZ** | **Otahua Downs** | **52.24** | **143** | P | **P** | **04 04 37.6** | **-0.3** |
| ODZ | | | | IAmb | IAmb | 04 04 42.9 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **XLT** | **XiLinHaoTe** | **52.37** | **349** | ⇓*i*P | **P** | **04 04 38.8** | **-0.1** |
| XLT | | | | ScP | **ScP** | **04 09 32.3** | **-1.3** |
| XLT | | | | sS | sS | 04 12 45.8 | +1.7 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,180nm,4.8s | | | | | | |
| **ODAN** | **Odare** | **52.45** | **312** | *eP* | **P** | **04 04 38.9** | **-1.1** |
| **TAPN** | **Taplejung** | **52.50** | **313** | *eP* | **P** | **04 04 39.6** | **-0.8** |
| | comp=Z,10nm,0.4s | | | | | | |
| **KHZ** | **Kahutara** | **52.72** | **139** | P | **P** | **04 04 40.7** | **-0.7** |
| **ASAJ** | **Asahikawa** | **52.94** | **13** | P | **P** | **04 04 42.1** | **-0.8** |
| | comp=Z,2.4nm,0.4s,baz=230,slow=8.3,SNR=7.9 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **52.94** | **13** | IAmb | IAmb | 04 04 44.0 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **53.08** | **312** | *eP* | **P** | **04 04 44.5** | **-0.1** |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **53.34** | **134** | P | **P** | **04 04 46.7** | **+0.6** |
| BKZ | | | | IAmb | IAmb | 04 04 55.1 | |
| | comp=Z,7.0nm,0.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **53.44** | **133** | P | **P** | **04 04 46.9** | **+0.2** |
| URZ | | | | IAmb | IAmb | 04 04 52.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **GTA** | **Gaotai** | **53.69** | **333** | *eP* | **P** | **04 04 49.0** | **+0.3** |
| GTA | | | | pP | pP | 04 05 19.0 | +1.6 |
| GTA | | | | ScP | **ScP** | **04 09 39.5** | **-0.1** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **BFZ** | **Birch Farm** | **53.78** | **136** | P | **P** | **04 04 47.1** | **-2.2** |
| **JIRN** | **Jiri** | **53.78** | **312** | *eP* | **P** | **04 04 49.5** | **-0.4** |
| **GUN** | **Gumba** | **54.15** | **312** | *eP* | **P** | **04 04 52.0** | **-0.5** |
| | comp=Z,13nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **54.32** | **312** | *eP* | **P** | **04 04 53.5** | **-0.2** |
| **KKN** | **Kakani** | **54.52** | **312** | *eP* | **P** | **04 04 54.7** | **-0.4** |
| **DMN** | **Daman** | **54.55** | **312** | *eP* | **P** | **04 04 54.9** | **-0.4** |
| **GKN** | **Gorkha** | **55.12** | **312** | *eP* | **P** | **04 04 58.7** | **-0.6** |
| | comp=Z,20nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **55.76** | **311** | *eP* | **P** | **04 05 03.7** | **-0.3** |
| **PYUN** | **Piuthan** | **56.40** | **311** | *eP* | **P** | **04 05 08.2** | **-0.3** |
| | comp=Z,57nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **56.56** | **3** | P | **P** | **04 05 08.9** | **0.0** |
| | comp=Z,3.3nm,1.0s,baz=185,slow=6.1,SNR=8.8 | | | | | | |
| **ULN** | **Ulaanbaatar** | **58.28** | **343** | P | **P** | **04 05 20.9** | **-0.4** |
| ULN | | | | IAmb | IAmb | 04 05 24.9 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **58.44** | **343** | P | **P** | **04 05 22.3** | **0.0** |
| | comp=Z,8.1nm,0.6s,baz=166,slow=6.2,SNR=64 | | | | | | |
| **SONM** | **Songino Array** | **58.44** | **343** | P | **P** | **04 05 23.0** | **+0.7** |
| **WMQ** | **Urumqi** | **62.99** | **328** | *eP* | **P** | **04 05 54.5** | **+1.3** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **65.27** | **19** | P | **P** | **04 06 08.1** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **65.27** | **19** | P | **P** | **04 06 08.6** | **+0.8** |
| | comp=Z,16nm,0.6s,baz=187,slow=5.0,SNR=39 | | | | | | |
| PETK | | | | PcP | **pP** | **04 06 38.4** | **+0.3** |
| | comp=Z,2.9nm,0.5s,baz=194,slow=2.0,SNR=5.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.27** | **19** | P | **P** | **04 06 08.3** | **+0.5** |
| **PET** | **Petropavlovsk** | **65.51** | **19** | P | **P** | **04 06 09.9** | **+0.6** |
| **NIL** | **Nilore** | **66.40** | **312** | P | **P** | **04 06 14.3** | **-1.2** |
| NIL | | | | IAmb | IAmb | 04 06 15.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **67.37** | **318** | P | **P** | **04 06 22.5** | **+0.9** |
| KSH | | | | PcS | | 04 10 49.0 | |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **67.39** | **321** | P | **P** | **04 06 22.0** | **0.0** |
| **MK31** | **Makanchi Array** | **67.82** | **328** | P | **P** | **04 06 24.1** | **0.0** |
| MK31 | | | | IAmb | IAmb | 04 06 26.4 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.82** | **328** | P | **P** | **04 06 23.9** | **-0.3** |
| | comp=Z,6.8nm,0.5s,baz=124,slow=7.8,SNR=72 | | | | | | |
| MKAR | | | | PcP | **PcP** | **04 06 50.6** | **+0.7** |
| | comp=Z,3.7nm,0.6s,baz=122,slow=6.7,SNR=7.6 | | | | | | |
| **MAKZ** | **Makanchi** | **67.99** | **327** | P | **P** | **04 06 25.1** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 04 06 27.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **69.18** | **12** | P | **P** | **04 06 31.4** | **-0.9** |
| MA2 | | | | IAmb | IAmb | 04 06 34.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **69.32** | **1** | P | **P** | **04 06 33.0** | **-0.1** |
| **KBL** | **Kabul** | **69.93** | **311** | P | **P** | **04 06 37.0** | **-0.7** |
| **AAK** | **Ala-Archa** | **69.95** | **321** | P | **P** | **04 06 37.6** | **0.0** |
| **GAR** | **Garm** | **70.95** | **316** | P | **P** | **04 06 43.4** | **-0.3** |
| **RER** | **Riviere de l'E** | **71.26** | **250** | P | **P** | **04 06 44.7** | **-1.2** |
| **ZAA0** | **Zalesovo Array** | **71.36** | **334** | IAmb | IAmb | 04 06 45.7 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.36** | **334** | P | **P** | **04 06 44.7** | **-1.0** |
| | comp=Z,4.7nm,0.5s,baz=108,slow=4.8,SNR=34 | | | | | | |
| **SMY** | **Shemya** | **71.41** | **27** | P | **P** | **04 06 45.7** | **-0.3** |
| **CHGR** | **Chuyangaron** | **71.60** | **315** | P | **P** | **04 06 46.5** | **-1.1** |
| CHGR | | | | IAmb | IAmb | 04 06 47.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **72.15** | **173** | P | **P** | **04 06 51.5** | **+1.4** |
| | comp=Z,1.9nm,0.6s,baz=327,slow=7.2,SNR=9.4 | | | | | | |
| **VNDA** | **Vanda** | **72.15** | **173** | P | **P** | **04 06 51.3**

comp=Z,3.1nm,0.6s,baz=273,slow=2.4,SNR=9.5
SCHQ SKPbc **SKPbc** **04 17 49.6 -0.5**
comp=Z,9.3nm,1.0s,baz=311,slow=2.7,SNR=7.2
**KIC Kosan Boka 133.56 272** *e*PKIKP **PKPdf** **04 14 42.5 +0.2**
comp=Z,7.0nm,0.7s
**DBIC Dimbokro 133.69 272** PKP **PKPdf** **04 14 42.8 +0.3**
comp=Z,3.1nm,0.6s,baz=149,slow=2.2,SNR=8.3
**LIC Lamto 133.83 271** *e*PKIKP **PKPdf** **04 14 42.9 +0.1**
comp=Z,24nm,1.0s
**TIC Toumodi 133.85 272** *e*PKIKP **PKPdf** **04 14 42.8 -0.1**
**LVC Limon Verde 145.58 151** PKPbc **PKPab** **04 15 06.8 +1.7**
comp=Z,4.7nm,0.5s,baz=240,slow=7.1,SNR=9.0
**CPUP Villa Florida 145.91 171** PKPbc **PKPbc** **04 15 05.6 +0.4**
comp=Z,7.2nm,0.8s,baz=158,slow=2.5,SNR=6.9
**NNA Nana 148.25 127** PKPbc **PKiKP** **04 15 13.4 -0.3**
comp=Z,24nm,1.0s,baz=269,slow=7.1,SNR=7.6
**ATAH Atahualpa 149.52 118** PKPbc **PKiKP** **04 15 18.6 +1.8**
comp=Z,18nm,0.7s,baz=225,slow=1.7,SNR=13
**LPAZ La Paz 151.22 145** PKPbc **PKiKP** **04 15 21.3 +0.8**
comp=Z,6.9nm,0.4s,baz=102,slow=1.9,SNR=7.9
LPAZ PKPab **PKPab** **04 15 30.9 +2.8**
comp=Z,8.2nm,0.5s,baz=259,slow=1.7,SNR=13
**LPAZ La Paz 151.22 145 PKiKP 04 15 21.7 +1.2**
**SIV San Ignacio 154.82 158** PKP **PKPdf** **04 15 19.3 +0.8**
comp=Z,1.6nm,0.8s,baz=126,slow=2.7,SNR=8.7
SIV PKPbc **PKiKP** **04 15 28.3 +1.1**
comp=Z,1.6nm,0.8s,baz=140,slow=1.6,SNR=6.6
SIV PKPab **PKPab** **04 15 43.9 +1.3**
comp=Z,2.0nm,0.5s,baz=234,slow=6.4,SNR=13
**BDFB Brasilia 156.75 189** PKP **PKPdf** **04 15 21.7 +0.5**
comp=Z,1.6nm,0.8s,baz=145,slow=13,SNR=3.5
**SDV Santo Domingo 161.04 84** PKP **PKPdf** **04 15 25.7 -0.6**
comp=Z,5.8nm,0.8s,baz=8.7,slow=3.9,SNR=7.7

*TUL **28** 04:27:54±1.0, 36°43N±0°01×97°72W±0°02, h6km±7km, ML3.0, mb_Lg2.9/59(NEIC), Error ellipse: s-maj=1.8km s-min=1.5km az=54.0*
**NEIC 28 04:27:54.0±0.8, 36°42N±0°01×97°72W±0°02, h1km±7km, Error ellipse: s-maj=1.9km s-min=1.5km az=59.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK009** | **Oakdale Elemen** | **0.87** | **164** | Pg | Pg | 04 28 10.8 | +0.1 |
| **OKCFA** | **Oklahoma City** | **1.03** | **168** | | Pg | 04 28 13.4 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.03** | **268** | Pg | Pg | 04 28 13.3 | -0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **1.04** | **167** | Pg | Pg | 04 28 13.6 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.09** | **63** | | Pg | 04 28 14.6 | -0.4 |
| **FNO** | **Franklin** | **1.19** | **167** | | Pg | 04 28 16.3 | -0.5 |
| **TUL1** | **Leonard** | **1.64** | **107** | Pn | Pn | 04 28 23.6 | -0.3 |
| TUL1 | | | | IAmb_Lg | | 04 28 47.5 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.82** | **183** | | Pn | 04 28 27.1 | +0.7 |
| **WMOK** | **Wichita Mounta** | **1.89** | **207** | Pn | Pn | 04 28 27.4 | +0.1 |
| WMOK | | | | IAmb_Lg | | 04 28 56.8 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **2.15** | **339** | | Pn | 04 28 32.1 | +1.1 |
| **X37A** | **Clayton** | **2.65** | **133** | | Pn | 04 28 38.2 | +0.4 |
| X37A | | | | IAmb_Lg | | 04 29 21.9 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **2.82** | **18** | | Pn | 04 28 39.5 | -0.6 |
| **HHAR** | **Hobbs** | **3.06** | **91** | | Pn | 04 28 44.0 | +0.5 |
| **Z35A** | **Perchaven, San** | **3.11** | **173** | Pn | Pn | 04 28 44.9 | +0.8 |
| **W39A** | **Magazine** | **3.43** | **110** | | Pn | 04 28 48.6 | +0.1 |
| W39A | | | | IAmb_Lg | | 04 29 52.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.57** | **246** | IAmb_Lg | | 04 29 48.1 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.87** | **118** | | Pn | 04 28 54.0 | -0.6 |
| MIAR | | | | IAmb_Lg | | 04 29 59.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.87** | **144** | Pn | Pn | 04 28 55.1 | +0.4 |
| **U40A** | **Yellville** | **3.93** | **89** | Pn | Pn | 04 28 55.8 | +0.3 |
| U40A | | | | IAmb_Lg | | 04 30 04.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.11** | **203** | Pn | Pn | 04 28 58.0 | +0.2 |
| ABTX | | | | | Pb | 04 29 08.2 | +1.1 |
| ABTX | | | | IAmb_Lg | | 04 30 10.8 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.32** | **3** | Pn | Pn | 04 28 59.9 | -0.9 |
| **X40A** | **Basin Creek Fa** | **4.43** | **114** | | Pn | 04 29 02.4 | 0.0 |
| **MGMO** | **Mountain Grove** | **4.44** | **79** | Pn | Pn | 04 29 03.5 | +1.0 |
| MGMO | | | | IAmb_Lg | | 04 30 23.7 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.56** | **103** | Pn | Pn | 04 29 03.6 | -0.5 |
| WHAR | | | | IAmb_Lg | | 04 30 19.1 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.56** | **95** | IAmb_Lg | | 04 30 29.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **4.60** | **45** | Pn | Pn | 04 29 03.4 | -1.2 |
| **W41B** | **Gary Mavity, V** | **4.62** | **104** | | Pn | 04 29 04.4 | -0.5 |
| W41B | | | | IAmb_Lg | | 04 30 31.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.66** | **124** | Pn | Pn | 04 29 04.8 | -0.7 |
| **KSCO** | **Kaye Shedlock'** | **4.67** | **305** | | Pn | 04 29 05.6 | -0.1 |
| **237A** | **Washetta, Mont** | **4.69** | **160** | Pn | Pn | 04 29 04.8 | -1.0 |
| **R40A** | **Maddies Statio** | **4.73** | **65** | Pn | Pn | 04 29 06.2 | -0.2 |
| R40A | | | | IAmb_Lg | | 04 30 25.0 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.99** | **356** | Pn | Pn | 04 29 09.6 | -0.5 |
| BGNE | | | | IAmb_Lg | | 04 30 42.0 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **LCAR** | **Lake Charles** | **5.32** | **92** | Pn | Pn | 04 29 13.2 | -1.3 |
| LCAR | | | | IAmb_Lg | | 04 30 48.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.42** | **280** | Pn | Pn | 04 29 15.0 | -1.0 |
| T25A | | | | IAmb_Lg | | 04 30 50.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.42** | **71** | Pn | Pn | 04 29 14.8 | -1.1 |
| CCM | | | | IAmb_Lg | | 04 30 57.3 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **P40A** | **Paris** | **5.45** | **54** | Pn | Pn | 04 29 16.3 | -0.1 |
| P40A | | | | IAmb_Lg | | 04 30 47.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.60** | **37** | IAmb_Lg | | 04 31 02.8 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **L34A** | **Svendsen Farm,** | **5.64** | **10** | IAmb_Lg | | 04 30 57.7 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.64** | **325** | IAmb_Lg | | 04 31 01.5 | |
| | comp=Z,27nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.88** | **84** | IAmb_Lg | | 04 31 02.5 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.17** | **197** | Pn | Pn | 04 29 26.6 | +0.3 |
| JCT | | | | IAmb_Lg | | 04 31 15.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.25** | **353** | Pn | Pn | 04 29 26.3 | -0.9 |
| **SLM** | **Saint Louis** | **6.35** | **67** | IAmb_Lg | | 04 31 14.0 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **SCIA** | **State Center** | **6.50** | **31** | IAmb_Lg | | 04 31 32.8 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **S44A** | **Carbondale** | **6.89** | **77** | IAmb_Lg | | 04 31 30.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.23** | **61** | IAmb_Lg | | 04 31 48.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.35** | **6** | IAmb_Lg | | 04 31 59.5 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **SUSD** | **Miller** | **8.07** | **354** | IAmb_Lg | | 04 32 20.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **O44A** | **Mansfield** | **8.18** | **60** | IAmb_Lg | | 04 32 22.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **K22A** | **Casper** | **9.21** | **315** | IAmb_Lg | | 04 33 05.9 | |
| | comp=Z,9.2nm,0.9s | | | | | | |

*IDC **28** 04:29:20.6±1.2, 33°10S×57°13E, h0km, mb4.1/4, mb1 4.3/5, mb1mx3.6/49, mbtmp4.0/5, ML3.8/1, MS3.3/3, Ms1 3.4/3, ms1mx2.8/69, Error ellipse: s-maj=40.6km s-min=30.5km az=66.0*
*NEIC **28** 04:29:22.0±1.8, 32°8S±0°1×57°1E±0°1, h10km±1km, mb4.7/22, Error ellipse: s-maj=19.8km s-min=14.5km az=173.0*
**ISC 28 04:29:21.8±0.6, 32°8S±0°1×57°2E±0°1, h10km, n40, σ1s03/32, mb4.6/14, MS3.3/3, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VOI** | **Vohitsoka** | **14.23** | **317** | Pn | Pn | **04 32 42.8** | **-0.9** |
| **OPO** | **Ambohidratompo** | **16.78** | **325** | Pn | P | **04 33 21.7** | **+2.3** |
| | 0.4nm,0.3s,baz=146,slow=7.2,SNR=2.4 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.82** | **33** | T | T | 05 05 51.1 | |
| | baz=207,slow=76,SNR=3.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.82** | **33** | T | T | 05 05 54.3 | |
| | baz=207,slow=76,SNR=3.1 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.84** | **33** | T | T | 05 05 58.0 | |
| | baz=207,slow=76,SNR=4.2 | | | | | | |
| **MAW** | **Mawson** | **34.98** | **176** | P | P | **04 36 14.9** | **+1.2** |
| MAW | | | | IAmb | IAmb | 04 36 32.1 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **TSUM** | **Tsumeb** | **37.83** | **281** | LR | LR | 04 50 04.4 | |
| | comp=Z,52nm,19.8s,baz=162,slow=33 | | | | | | |
| **MBAR** | **Mbarara** | **40.56** | **317** | LR | LR | 04 53 27.0 | |
| | comp=Z,44nm,18.2s,baz=136,slow=36 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **46.82** | **109** | T | T | 05 27 51.7 | |
| | baz=254,slow=75,SNR=6.2 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **46.82** | **109** | T | T | 05 27 51.5 | |
| | baz=254,slow=75,SNR=6.4 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **46.83** | **109** | T | T | 05 27 52.7 | |
| | baz=254,slow=75,SNR=6.4 | | | | | | |
| **IPM** | **Ipoh** | **55.72** | **57** | P | P | **04 38 57.7** | **-1.1** |
| IPM | | | | IAmb | IAmb | 04 39 09.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.34** | **180** | P | P | **04 39 08.4** | **-1.5** |
| | comp=Z,1.9nm,1.1s,baz=312,slow=3.3,SNR=5.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **57.34** | **180** | P | P | **04 39 08.7** | **-1.2** |
| QSPA | | | | IAmb | IAmb | 04 39 17.8 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **59.22** | **109** | P | P | **04 39 23.5** | **+0.1** |
| **SBA** | **Scott Base** | **62.13** | **167** | P | P | **04 39 44.4** | **+1.9** |
| SBA | | | | IAmb | IAmb | 04 39 44.5 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **SBUM** | **Sibu** | **62.70** | **67** | P | P | **04 39 47.9** | **+0.7** |
| SBUM | | | | IAmb | IAmb | 04 39 51.5 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **64.79** | **44** | P | P | **04 40 02.5** | **+1.7** |
| | comp=Z,1.0nm,0.3s,baz=230,slow=7.0,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 05 04 34.8 | |
| | comp=Z,17nm,19.8s,baz=215,slow=32 | | | | | | |
| **KNRA** | **Kununurra** | **66.38** | **94** | P | P | **04 40 09.9** | **-1.4** |
| KNRA | | | | IAmb | IAmb | 04 40 31.7 | |
| | comp=Z,8.5nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **66.91** | **104** | P | P | **04 40 14.8** | **+0.1** |
| | comp=Z,1.2nm,0.7s,baz=236,slow=5.9,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **66.91** | **104** | P | P | **04 40 14.2** | **-0.5** |
| **WRA** | **Warramunga Arr** | **68.99** | **101** | P | P | **04 40 28.2** | **+0.4** |
| | comp=Z,1.4nm,0.7s,baz=238,slow=5.4,SNR=12 | | | | | | |
| **WB2** | **Warramunga Arr** | **69.00** | **101** | P | P | **04 40 27.9** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 04 40 35.8 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **69.00** | **101** | P | P | **04 40 27.5** | **-0.4** |
| **WB0** | **Warramunga Arr** | **69.12** | **101** | P | P | **04 40 28.7** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 04 40 41.3 | |
| | comp=Z,4.2nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **69.34** | **115** | P | P | **04 40 29.7** | **-0.1** |
| **GNI** | **Garni** | **73.52** | **350** | P | P | **04 40 55.0** | **+0.3** |
| GNI | | | | IAmb | IAmb | 04 41 04.5 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **76.77** | **13** | P | P | **04 41 13.8** | **+0.3** |
| AAK | | | | IAmb | IAmb | 04 41 17.3 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **DCZ** | **Deep Cove** | **79.59** | **138** | P | P | **04 41 28.4** | **-0.8** |
| **TIRR** | **Tirgusor** | **81.25** | **340** | P | P | **04 41 37.0** | **-0.7** |
| **VTS** | **Vitosha** | **81.27** | **335** | P | P | **04 41 37.5** | **-0.6** |
| **TPUB** | **Ta-pu** | **82.34** | **56** | P | P | **04 41 43.5** | **-0.5** |
| **MK31** | **Makanchi Array** | **82.44** | **17** | P | P | **04 41 42.7** | **-1.3** |
| **MKAR** | **Makanchi Array** | **82.44** | **17** | P | P | **04 41 45.0** | **+1.0** |
| **PDG** | **Podgorica** | **82.58** | **333** | P | P | **04 41 43.8** | **-0.9** |
| **BURAR** | **Bucovina Array** | **85.06** | **339** | P | P | **04 41 57.0** | **-0.5** |
| **BJT** | **Baijiatuao** | **90.73** | **41** | P | P | **04 42 25.5** | **+0.7** |
| BJT | | | | IAmb | IAmb | 04 42 26.8 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **143.95** | **7** | PKP | **PKPdf** | **04 48 55.5** | **-1.0** |
| | comp=Z,0.8nm,0.9s,baz=306,slow=5.1,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **144.79** | **18** | PKPbc | **PKPdf** | **04 48 57.1** | **-1.0** |
| | comp=Z,0.4nm,0.7s,baz=307,slow=4.7,SNR=5.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **149.85** | **352** | PKPbc | **PKiKP** | **04 49 12.0** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=14,slow=2.5,SNR=4.7 | | | | | | |

*KRSC **28** 04:35:43.7±1.7, 48°00N×157°17E, h23km±37km, ML4.1*
*IDC **28** 04:35:43.3±1.7, 48°16N×156°36E, h0km, mb3.8/10, mb1 3.9/13, mb1mx3.7/51, mbtmp3.7/13, ML3.2/3, MS3.1/1, Ms1 3.1/1, ms1mx2.3/92, Error ellipse: s-maj=42.4km s-min=20.9km az=159.0*
*MOS **28** 04:35:43.9±0.8, 48°01N×156°39E, h26km, mb4.3/5, Error ellipse: s-maj=14.4km s-min=4.4km az=81.7*
*NEIC **28** 04:35:43.7±1.7, 47°99N±0°03×156°3E±0°2, h10km±1km, mb4.3/11, Error ellipse: s-maj=20.3km s-min=5.7km az=272.0*
*SKHL **28** 04:35:44.4±0.2, 48°00N×156°30E, h31km±5km, mb4.5/4*
**ISC 28 04:35:43.3±0.7, 47°99N±0°07×156°39E±0°08, h10km, n107, σ1s31/115, mb4.2/18, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.71** | **356** | *e*PN | **Pn** | **04 36 26.0** | **-0.8** |
| SKR | | | | *e*S | **Sn** | **04 36 57.5** | **-2.0** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,78nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,126nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,415nm,0.6s | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.71** | **356** | P | **Pn** | **04 36 26.5** | **-0.3** |
| **SKR** | **Severo-Kuril's** | **2.71** | **356** | *e*P | **Pn** | **04 36 25.8** | **-1.0** |
| SKR | | | | AMB | AMB | 04 36 27.7 | |
| | comp=N,80nm,0.4s | | | | | | |
| SKR | | | | *e*S | **Sn** | **04 36 57.0** | **-2.5** |
| SKR | | | | A | A | 04 37 03.1 | |
| | comp=N,420nm,0.5s | | | | | | |
| SKR | | | | A | A | 04 37 03.1 | |
| | comp=N,130nm,0.5s | | | | | | |
| **PAU** | **Pauzhetka** | **3.50** | **4** | PN | **Pn** | **04 36 38.0** | **+0.4** |
| PAU | | | | S | **Sn** | **04 37 18.2** | **-0.8** |
| **PAU** | **Pauzhetka** | **3.50** | **4** | *e*P | **Pn** | **04 36 38.0** | **+0.4** |
| PAU | | | | *e*S | **Sn** | **04 37 18.2** | **-0.8** |
| **PAU** | **Pauzhetka** | **3.50** | **4** | *e*P | **Pn** | **04 36 38.1** | **+0.4** |
| PAU | | | | AMB | AMB | 04 36 39.4 | |
| | comp=N,30nm,0.3s | | | | | | |
| PAU | | | | *e*S | **Sn** | **04 37 18.2** | **-0.8** |
| PAU | | | | A | A | 04 37 19.5 | |
| | comp=N,60nm,0.4s | | | | | | |
| PAU | | | | A | A | 04 37 19.5 | |
| | comp=N,160nm,0.4s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.98** | **15** | PN | **Pn** | **04 36 44.0** | **-0.3** |
| **KDTR** | **Khodutka, Kamc** | **3.98** | **15** | *e*P | **Pn** | **04 36 44.0** | **-0.3** |
| KDTR | | | | S | **Sn** | **04 37 08.6** | **-1.3** |
| **MTVR** | **Mutnovka** | **4.65** | **14** | PN | **Pn** | **04 36 54.0** | **+0.4** |
| MTVR | | | | S | **Sn** | **04 37 47.2** | **-0.4** |
| **MTVR** | **Mutnovka** | **4.65** | **14** | *e*P | **Pn** | **04 36 54.0** | **+0.4** |
| MTVR | | | | S | **Sn** | **04 37 47.2** | **-0.4** |
| **RUS** | **Russkaya** | **4.66** | **16** | PN | **Pn** | **04 36 53.1** | **-0.5** |
| **RUS** | **Russkaya** | **4.66** | **16** | *e*P | **Pn** | **04 36 53.1** | **-0.5** |
| RUS | | | | S | **Sn** | **04 37 45.5** | **-2.1** |
| **RUS** | **Russkaya** | **4.66** | **16** | *e*P | **Pn** | **04 36 53.1** | **-0.5** |
| **GRL** | **Gorelyy** | **4.70** | **13** | PN | **Pn** | **04 36 55.0** | **+0.7** |
| **GRL** | **Gorelyy** | **4.70** | **13** | *e*P | **Pn** | **04 36 55.0** | **+0.7** |
| **APC** | **Apacha** | **4.97** | **5** | PN | **Pn** | **04 36 59.3** | **+1.4** |
| **APC** | **Apacha** | **4.97** | **5** | *e*P | **Pn** | **04 36 59.3** | **+1.4** |
| **KRMR** | **Karymshinskiy** | **4.97** | **12** | PN | **Pn** | **04 36 58.9** | **+0.9** |
| **KRMR** | **Karymshinskiy** | **4.97** | **12** | *e*P | **Pn** | **04 36 58.9** | **+0.9** |
| **PEA0B** | **Petropavlovsk-** | **5.20** | **9** | PN | **Pn** | **04 37 00.8** | **-0.3** |
| **PEA0B** | **Petropavlovsk-** | **5.20** | **9** | Pn | **Pn** | **04 37 00.8** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **5.20** | **9** | Pn | **Pn** | **04 37 00.8** | **-0.3** |
| | comp=N,1.6nm,0.3s,baz=212,slow=11,SNR=23 | | | | | | |
| PETK | | | | Sn | **Sn** | **04 38 01.6** | **+0.6** |
| | baz=206,slow=16,SNR=0.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.20** | **9** | PN | **Pn** | **04 37 01.5** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **5.20** | **9** | | **Pn** | **04 37 01.5** | **+0.5** |
| **PET** | **Petropavlovsk** | **5.25** | **15** | PN | **Pn** | **04 37 01.8** | **+0.1** |
| **PET** | **Petropavlovsk** | **5.25** | **15** | Pn | **Pn** | **04 37 01.8** | **+0.1** |
| **PET** | **Petropavlovsk** | **5.25** | **15** | *e*P | **Pn** | **04 37 01.8** | **+0.1** |
| PET | | | | S | **Sn** | **04 38 01.1** | **-1.1** |
| **PET** | **Petropavlovsk** | **5.25** | **15** | *e*P | **Pn** | **04 37 02.0** | **+0.3** |
| PET | | | | AMB | AMB | 04 37 02.5 | |
| | comp=N,20nm,0.3s | | | | | | |
| PET | | | | *e*S | **Sn** | **04 38 01.2** | **-1.0** |
| PET | | | | A | A | 04 38 04.9 | |
| | comp=N,60nm,0.4s | | | | | | |
| PET | | | | A | A | 04 38 04.9 | |
| | comp=N,100nm,0.4s | | | | | | |
| **DALK** | **Dalny** | **5.27** | **16** | PN | **Pn** | **04 37 02.2** | **+0.2** |
| **DALK** | **Dalny** | **5.27** | **16** | *e*P | **Pn** | **04 37 02.2** | **+0.2** |
| DALK | | | | *e*S | **Sn** | **04 38 01.7** | **-1.1** |
| **UGLR** | **Uglovaya** | **5.45** | **16** | PN | **Pn** | **04 37 05.4** | **+0.7** |
| **UGLR** | **Uglovaya** | **5.45** | **16** | *e*P | **Pn** | **04 37 05.4** | **+0.7** |
| **AVH** | **Avacha** | **5.49** | **15** | PN | **Pn** | **04 37 06.4** | **+1.2** |
| **AVH** | **Avacha** | **5.49** | **15** | *e*P | **Pn** | **04 37 06.4** | **+1.2** |
| **KOK** | **Koryaka** | **5.50** | **14** | PN | **Pn** | **04 37 06.8** | **+1.5** |
| **KOK** | **Koryaka** | **5.50** | **14** | *e*P | **Pn** | **04 37 06.8** | **+1.5** |
| **KOK** | **Koryaka** | **5.50** | **14** | *e*P | **Pn** | **04 37 06.8** | **+1.5** |
| **SMAR** | **Somma** | **5.50** | **15** | PN | **Pn** | **04 37 06.7** | **+1.3** |
| **SMAR** | **Somma** | **5.50** | **15** | *e*P | **Pn** | **04 37 06.7** | **+1.3** |
| **SDLR** | **Sedlovina** | **5.53** | **16** | PN | **Pn** | **04 37 05.8** | **+0.1** |
| **SDLR** | **Sedlovina** | **5.53** | **16** | *e*P | **Pn** | **04 37 05.8** | **+0.1** |
| **KRER** | **Koryakskii** | **5.53** | **15** | PN | **Pn** | **04 37 06.8** | **+1.0** |
| **KRER** | **Koryakskii** | **5.53** | **15** | *e*P | **Pn** | **04 37 06.8** | **+1.0** |
| **SPN** | **Mys Shipunski** | **5.62** | **23** | PN | **Pn** | **04 37 07.3** | **+0.5** |
| **SPN** | **Mys Shipunski** | **5.62** | **23** | *e*P | **Pn** | **04 37 07.3** | **+0.5** |
| SPN | | | | S | **Sn** | **04 38 08.1** | **-3.2** |
| **SPN** | **Mys Shipunski** | **5.62** | **23** | *e*P | **Pn** | **04 37 07.3** | **+0.5** |
| **GNL** | **Ganaly** | **5.80** | **9** | PN | **Pn** | **04 37 10.9** | **+1.5** |
| **GNL** | **Ganaly** | **5.80** | **9** | *e*P | **Pn** | **04 37 10.9** | **+1.5** |
| **KUR** | **Kuril'sk** | **6.48** | **248** | *e*PN | **Pn** | **04 37 18.3** | **-0.4** |
| **KUR** | **Kuril'sk** | **6.48** | **248** | *e*P | **Pn** | **04 37 18.9** | **+0.2** |
| KUR | | | | AMB | AMB | 04 37 19.4 | |
| | comp=N,20nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **04 38 29.1** | **-3.6** |
| KUR | | | | A | A | 04 38 35.0 | |
| | comp=N,30nm,0.5s | | | | | | |
| KUR | | | | A | A | 04 38 35.0 | |
| | comp=N,40nm,0.5s | | | | | | |
| **MKZ** | **Mys Kozlova** | **7.38** | **25** | PN | **Pn** | **04 37 30.4** | **-0.6** |
| **MKZ** | **Mys Kozlova** | **7.38** | **25** | *e*P | **Pn** | **04 37 30.4** | **-0.6** |
| MKZ | | | | S | **Sn** | **04 38 49.3** | **-5.4** |
| **YUK** | **Yuzh-Kuril'sk** | **8.32** | **246** | *e*P | Pn | 04 37 36.7 | -7.2 |
| **KBTR** | **Krutoberegovo** | **9.13** | **23** | PN | **Pn** | **04 37 56.0** | **+1.0** |
| **KBTR** | **Krutoberegovo** | **9.13** | **23** | P | **Pn** | **04 37 56.0** | **+1.0** |
| **YSS** | **Yuzh-Sakhalins** | **9.29** | **269** | *e*P | **Pn** | **04 37 57.8** | **+0.6** |
| YSS | | | | AMB | AMB | 04 38 01.7 | |
| | comp=N,10.0nm,0.7s | | | | | | |
| **AKK** | **Akkeshi** | **9.51** | **243** | *e*P | **Pn** | **04 37 57.7** | **-2.4** |
| **JKA** | **Kamikawa-asahi** | **10.34** | **253** | *e*P | **Pn** | **04 38 13.9** | **+2.4** |
| **ASAJ** | **Asahikawa** | **10.34** | **253** | Pn | **Pn** | **04 38 13.9** | **+2.3** |
| | comp=N,0.3nm,0.3s,baz=310,slow=16,SNR=2.4 | | | | | | |
| **ERM** | **Erimo** | **11.10** | **242** | PN | **Pn** | **04 38 20.2** | **-1.8** |
| **ERM** | **Erimo** | **11.10** | **242** | Pn | **Pn** | **04 38 20.2** | **-1.8** |
| **MA2** | **Magadan** | **12.07** | **346** | LR | LR | 04 42 32.2 | |
| | comp=N,101nm,21.0s,baz=58,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **16.33** | **284** | Pn | **P** | **04 39 34.9** | **-0.5** |
| | comp=N,0.1nm,0.3s,baz=84,slow=9.3,SNR=5.0 | | | | | | |
| **KLR** | **Kul'dur** | **16.33** | **284** | *e*P | **Pn** | **04 39 27.4** | **-5.1** |
| **KSRS** | **Korea Array** | **23.29** | **254** | P | **P** | **04 40 53.2** | **+2.2** |
| | comp=N,0.9nm,0.6s,baz=59,slow=9.8,SNR=2.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.45** | **160** | T | T | 05 14 03.6 | |
| | baz=342 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.46** | **160** | T | T | 05 13 59.5 | |
| | baz=342 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.46** | **160** | T | T | 05 14 39.8 | |
| | baz=342 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.58** | **160** | T | T | 05 15 27.2 | |
| | baz=345,slow=76,SNR=9.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.59** | **161** | T | T | 05 15 21.5 | |
| | baz=345,slow=76,SNR=7.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.60** | **160** | T | T | 05 15 32.6 | |
| | baz=345,slow=76,SNR=7.0 | | | | | | |
| **SONM** | **Songino Array** | **33.03** | **289** | P | **P** | **04 42 20.6** | **+1.9** |
| | comp=N,0.1nm,0.4s,baz=64,slow=6.6,SNR=2.0 | | | | | | |
| **EUNU** | **Eureka** | **47.46** | **12** | P | **P** | **04 44 17.4** | **-0.2** |
| EUNU | | | | IAmb | IAmb | 04 44 25.7 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **48.34** | **298** | P | **P** | **04 44 24.2** | **-0.7** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **48.34** | **298** | P | **P** | **04 44 24.1** | **-0.7** |
| MK31 | | | | IAmb | IAmb | 04 44 40.5 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.34** | **298** | P | **P** | **04 44 24.1** | **-0.7** |
| | comp=Z,1.1nm,0.6s,baz=68,slow=8.3,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.34** | **298** | P | **P** | **04 44 24.3** | **-0.5** |
| **MKAR** | **Makanchi Array** | **48.34** | **298** | P | **P** | **04 44 24.3** | **-0.5** |
| **MKAR** | **Makanchi Array** | **48.34** | **298** | *e*P | **P** | **04 44 24.3** | **-0.5** |
| **MAKZ** | **Makanchi** | **48.52** | **298** | P | **P** | **04 44 25.3** | **-0.9** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **48.52** | **298** | P | **P** | **04 44 25.3** | **-0.9** |
| MAKZ | | | | IAmb | IAmb | 04 44 41.2 | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **48.52** | **304** | P | **P** | **04 44 25.3** | **-0.8** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KURK** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| KNRA | **Kununurra** | **12.01 204** | | **Pn** | **04 43 25.2** | **+2.6** |
| MRSI | **Marisa** | **12.80 293** | P | Pn | 04 43 40.4 | +6.9 |
| | 824nm26nm,0.7s | | | | | |
| COEN | **Coen** | **13.15 135** | | **Pn** | **04 43 36.1** | **-2.2** |
| TOLI2 | **Tolitoli** | **14.12 294** | Pn | **Pn** | **04 43 51.9** | **+0.4** |
| PMG | **Port Moresby** | **14.16 110** | LR | LR | 04 51 23.6 | |
| | comp=Z,138nm,19.1s,baz=107,slow=46 | | | | | |
| WB0 | **Warramunga Arr** | **15.06 178** | | **Pn** | **04 44 04.0** | **-0.4** |
| WB0 | | | IAmb | IAmb | 04 44 15.3 | |
| | comp=Z,7.1nm,0.9s | | | | | |
| WB2 | **Warramunga Arr** | **15.24 178** | | **Pn** | **04 44 06.4** | **-0.2** |
| WB2 | | | IAmb | IAmb | 04 44 18.2 | |
| | comp=Z,10nm,0.5s | | | | | |
| WRA | **Warramunga Arr** | **15.24 178** | Pn | **Pn** | **04 44 06.4** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=358,slow=13,SNR=24 | | | | | |
| WRA | | | Sn | **Sn** | **04 46 50.8** | **-4.8** |
| | comp=Z,0.2nm,0.3s,baz=357,slow=23,SNR=5.5 | | | | | |
| WRA | | | LR | LR | 04 51 17.9 | |
| | comp=Z,136nm,19.3s,baz=76,slow=42 | | | | | |
| WRA | **Warramunga Arr** | **15.24 178** | | **Pn** | **04 44 06.8** | **+0.2** |
| WR0 | **Warramunga Arr** | **15.26 177** | Pn | **Pn** | **04 44 08.5** | **+1.5** |
| WR0 | | | IAmb | IAmb | 04 44 27.7 | |
| | comp=Z,9.8nm,0.8s | | | | | |
| FITZ | **Fitzroy Crossi** | **15.54 210** | Pn | **Pn** | **04 44 10.8** | **+0.1** |
| | comp=Z,1.2nm,0.3s,baz=35,slow=10,SNR=46 | | | | | |
| FITZ | | | Sn | **Sn** | **04 46 58.1** | **-4.9** |
| | comp=Z,1.2nm,0.3s,baz=166,slow=11,SNR=13 | | | | | |
| FITZ | **Fitzroy Crossi** | **15.54 210** | | **Pn** | **04 44 12.4** | **+1.7** |
| AS31 | **Alice Springs** | **18.93 179** | P | **Pn** | **04 44 55.4** | **+2.3** |
| ASAR | **Alice Springs** | **18.93 179** | P | **Pn** | **04 44 55.3** | **+2.2** |
| | comp=Z,0.7nm,0.3s,baz=1.7,slow=10,SNR=42 | | | | | |
| ASAR | | | S | **Sn** | **04 48 19.4** | **-5.8** |
| | comp=Z,0.1nm,0.3s,baz=3.9,slow=29,SNR=6.0 | | | | | |
| ASAR | | | LR | LR | 04 51 40.7 | |
| | comp=Z,76nm,21.6s,baz=23,slow=35 | | | | | |
| ASAR | **Alice Springs** | **18.93 179** | P | **Pn** | **04 44 55.7** | **+2.6** |
| CTA | **Charters Tower** | **19.63 143** | P | **Pn** | **04 45 02.2** | **+0.7** |
| | comp=Z,0.2nm,0.3s,baz=337,slow=11,SNR=8.5 | | | | | |
| CTA | | | LR | LR | 04 53 55.3 | |
| | comp=Z,164nm,18.8s,baz=47,slow=41 | | | | | |
| PSA00 | **Pilbara Seismi** | **21.56 217** | | **P** | **04 45 24.6** | **+3.6** |
| FORT | **Forrest** | **26.55 191** | P | **P** | **04 46 11.2** | **+1.8** |
| BBOO | **Buckleboo** | **28.13 176** | P | **P** | **04 46 25.2** | **+1.7** |
| CMAR | **Chiang Mai Arr** | **41.23 305** | P | **P** | **04 48 17.5** | **+0.7** |
| | comp=Z,1.2nm,0.4s,baz=116,slow=6.1,SNR=2.3 | | | | | |
| CMAR | **Chiang Mai Arr** | **41.23 305** | P | **P** | **04 48 17.3** | **+0.5** |
| CHTO | **Chiang Mai** | **41.41 305** | P | **P** | **04 48 19.3** | **+1.0** |
| CHTO | | | IAmb | IAmb | 04 48 25.7 | |
| | comp=Z,8.0nm,1.4s | | | | | |
| KLR | **Kul'dur** | **53.66 358** | P | **P** | **04 49 53.2** | **+0.2** |
| | comp=Z,1.0nm,0.8s,baz=162,slow=8.0,SNR=3.8 | | | | | |
| SONM | **Songino Array** | **57.49 338** | P | **P** | **04 50 22.4** | **+1.7** |
| | comp=Z,0.4nm,0.8s,baz=154,slow=11,SNR=2.4 | | | | | |
| MK31 | **Makanchi Array** | **68.35 325** | P | **P** | **04 51 33.1** | **+0.1** |
| MK31 | | | IAmb | IAmb | 04 51 40.2 | |
| | comp=Z,1.2nm,1.0s | | | | | |
| MKAR | **Makanchi Array** | **68.35 325** | P | **P** | **04 51 33.1** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=112,slow=7.4,SNR=7.8 | | | | | |
| MKAR | **Makanchi Array** | **68.35 325** | P | **P** | **04 51 32.8** | **-0.2** |
| MAKZ | **Makanchi** | **68.54 325** | P | **P** | **04 51 34.0** | **-0.1** |
| MAKZ | | | IAmb | IAmb | 04 51 45.8 | |
| | comp=Z,2.6nm,1.1s | | | | | |
| ZALV | **Zalesovo Beam** | **71.17 332** | P | **P** | **04 51 52.7** | **+2.6** |
| | comp=Z,0.3nm,0.4s,baz=117,slow=5.5,SNR=2.4 | | | | | |
| KKAR | **Karatay Array** | **74.06 317** | P | **P** | **04 52 07.6** | **0.0** |

*JMA **28** 04:42:34.4±0.3,23.°90N×122.°28E,h15km±5km,M2.7*
*TAP **28** 04:42:35.1,24.°05N×122.°31E,h24km,ML3.0,D*
**ISC 28 04:42:34.7±1.1,23.°97N±0.°02×122.°29E±0.°02,h23km±13km,**
**n74,σ0.°76/111,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETL** | **Fush Village** | **0.64** | **287** | *eP* | **Pb** | **04 42 47.8** | **+0.6** |
| | baz=264 | | | | | | |
| ETL | | | | *eS* | **Sb** | **04 42 56.5** | **+0.8** |
| | baz=264 | | | | | | |
| **TWD** | **Chiawan** | **0.64** | **280** | *eP* | **Pb** | **04 42 47.5** | **+0.3** |
| | baz=273 | | | | | | |
| TWD | | | | *eS* | **Sb** | **04 42 57.0** | **+1.1** |
| | baz=273 | | | | | | |
| **EWUT** | **Wuta** | **0.66** | **315** | *eP* | **Pb** | **04 42 47.1** | **-0.5** |
| | baz=317 | | | | | | |
| EWUT | | | | *eS* | **Sb** | **04 42 56.6** | **+0.2** |
| | baz=317 | | | | | | |
| **NACB** | **Ninganchiao** | **0.66** | **288** | P | **Pb** | **04 42 47.9** | **+0.3** |
| | baz=265 | | | | | | |
| NACB | | | | *eS* | **Sb** | **04 42 57.3** | **+0.8** |
| | baz=265 | | | | | | |
| **ENA** | **Nanau** | **0.67** | **312** | P | **Pb** | **04 42 47.4** | **-0.4** |
| | baz=315 | | | | | | |
| ENA | | | | *eS* | **Sb** | **04 42 56.1** | **-0.7** |
| | baz=315 | | | | | | |
| **TWC** | **Suao** | **0.75** | **328** | P | **Pb** | **04 42 48.2** | **-0.9** |
| | baz=323 | | | | | | |
| TWC | | | | *eS* | **Sb** | **04 42 56.0** | **-2.9** |
| | baz=323 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.77** | **51** | P | **Pn** | **04 42 50.1** | **0.0** |
| JYNG | | | | *eS* | **Sn** | **04 43 01.2** | **+0.2** |
| **ETLH** | **Xiulin Townshi** | **0.77** | **288** | P | **Pb** | **04 42 49.4** | **-0.2** |
| | baz=269 | | | | | | |
| ETLH | | | | *eS* | **Sb** | **04 43 00.2** | **+0.6** |
| | baz=269 | | | | | | |
| **ESL** | **Shilin** | **0.80** | **259** | *eP* | **Pb** | **04 42 49.7** | **-0.2** |
| | baz=243 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.82** | **53** | P | **Pb** | **04 42 50.5** | **+0.2** |
| YOJ | | | | *eS* | **Sn** | **04 43 02.3** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.82** | **53** | P | **Pb** | **04 42 49.9** | **-0.4** |
| | baz=56 | | | | | | |
| YOJ | | | | *eS* | **Sb** | **04 43 01.2** | **+0.2** |
| | baz=56 | | | | | | |
| **NDS** | **Dongshan** | **0.84** | **322** | P | **Pb** | **04 42 50.4** | **-0.3** |
| | baz=322 | | | | | | |
| NDS | | | | *eS* | **Sb** | **04 43 00.8** | **-0.7** |
| | baz=322 | | | | | | |
| **LATG** | **Datong** | **0.89** | **309** | P | **Pb** | **04 42 51.6** | **0.0** |
| | baz=303 | | | | | | |
| LATG | | | | *eS* | **Sb** | **04 43 02.7** | **-0.4** |
| | baz=303 | | | | | | |
| **ENTT** | **Nioudou** | **0.94** | **315** | P | **Pb** | **04 42 52.1** | **-0.2** |
| | baz=321 | | | | | | |
| ENTT | | | | *eS* | **Sb** | **04 43 03.5** | **-0.8** |
| | baz=321 | | | | | | |
| **NNSB** | **Datong** | **0.94** | **299** | P | **Pb** | **04 42 52.5** | **0.0** |
| | baz=293 | | | | | | |
| NNSB | | | | *eS* | **Sb** | **04 43 05.2** | **+0.6** |
| | baz=293 | | | | | | |
| **NDT** | **Datong Townshi** | **0.94** | **312** | P | **Pn** | **04 42 52.9** | **+0.3** |
| | baz=317 | | | | | | |
| NDT | | | | *eS* | **Sb** | **04 43 03.7** | **-0.9** |
| | baz=317 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.95** | **281** | P | **Pb** | **04 42 52.9** | **+0.1** |
| | baz=263 | | | | | | |
| WHF | | | | *eS* | **Sb** | **04 43 04.5** | **-0.6** |
| | baz=263 | | | | | | |
| **NNS** | **Nan Shan** | **0.96** | **299** | P | **Pb** | **04 42 52.7** | **0.0** |
| | baz=294 | | | | | | |
| NNS | | | | *eS* | **Sn** | **04 43 05.8** | **-0.1** |
| | baz=294 | | | | | | |
| **NTC** | **Toucheng** | **0.97** | **335** | *eP* | **Pb** | **04 42 52.5** | **-0.4** |
| | baz=330 | | | | | | |
| NTC | | | | *eS* | **Sn** | **04 43 06.1** | **+0.1** |
| | baz=330 | | | | | | |
| **FUSS** | **Fushou** | **0.99** | **286** | P | **Pb** | **04 42 53.1** | **-0.3** |
| | baz=281 | | | | | | |
| FUSS | | | | *eS* | **Sb** | **04 43 05.2** | **-1.0** |
| | baz=281 | | | | | | |
| **EHY** | **Hungye** | **1.00** | **242** | *eP* | **Pn** | **04 42 53.5** | **+0.1** |
| | baz=240 | | | | | | |
| EHY | | | | *eS* | **Sb** | **04 43 06.4** | **+0.3** |
| | baz=240 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.01** | **321** | P | **Pn** | **04 42 53.7** | **+0.1** |
| | baz=316 | | | | | | |
| FUSB | | | | *eS* | **Sb** | **04 43 07.1** | **+0.6** |
| | baz=316 | | | | | | |
| **CHGB** | **Renai** | **1.02** | **275** | P | **Pn** | **04 42 53.5** | **-0.4** |
| | baz=259 | | | | | | |
| CHGB | | | | *eS* | **Sn** | **04 43 07.6** | **0.0** |
| | baz=259 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.07** | **345** | *eP* | **Pn** | **04 42 53.7** | **-0.6** |
| | baz=342 | | | | | | |
| **TDCB** | **Techi** | **1.07** | **285** | *eP* | **Pn** | **04 42 54.8** | **+0.3** |
| | baz=269 | | | | | | |
| **WUSB** | **Renai** | **1.07** | **271** | P | **Pn** | **04 42 54.4** | **0.0** |
| | baz=267 | | | | | | |
| **VWDT** | **VWDT** | **1.07** | **258** | P | **Pb** | **04 42 54.8** | **+0.2** |
| | baz=244 | | | | | | |
| VWDT | | | | *eS* | **Sn** | **04 43 08.8** | **+0.3** |
| | baz=244 | | | | | | |
| **NWLT** | **Wulai** | **1.07** | **318** | P | **Pn** | **04 42 54.6** | **+0.2** |
| | baz=323 | | | | | | |
| NWLT | | | | *eS* | **Sb** | **04 43 08.3** | **0.0** |
| | baz=323 | | | | | | |
| **YULB** | **Yu-li** | **1.08** | **238** | P | **Pn** | **04 42 54.2** | **-0.2** |
| | baz=252 | | | | | | |
| YULB | | | | *eS* | **Sb** | **04 43 07.9** | **-0.5** |
| | baz=252 | | | | | | |
| **TIPB** | **Shuangxi** | **1.08** | **337** | P | **Pn** | **04 42 54.2** | **-0.3** |
| | baz=333 | | | | | | |
| TIPB | | | | *eS* | **Sb** | **04 43 08.3** | **-0.2** |
| | baz=333 | | | | | | |
| **YHNB** | **Yeheng** | **1.08** | **310** | P | **Pn** | **04 42 54.5** | **-0.1** |
| | baz=305 | | | | | | |
| **EYUL** | **Yuli** | **1.08** | **235** | P | **Pn** | **04 42 54.7** | **+0.2** |
| | baz=221 | | | | | | |
| EYUL | | | | *eS* | **Sn** | **04 43 09.1** | **+0.2** |
| | baz=221 | | | | | | |
| **NSK** | **Sanguang** | **1.10** | **310** | P | **Pn** | **04 42 54.8** | **0.0** |
| | baz=305 | | | | | | |
| NSK | | | | *eS* | **Sb** | **04 43 07.9** | **-1.2** |
| | baz=305 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.18** | **341** | *eP* | **Pn** | **04 42 55.1** | **-0.8** |
| | baz=337 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.19** | **337** | *eP* | **Pn** | **04 42 56.3** | **+0.2** |
| | baz=332 | | | | | | |
| NWF | | | | *eS* | **Sn** | **04 43 10.9** | **-0.6** |
| | baz=332 | | | | | | |
| **TWA** | **Mucha** | **1.19** | **328** | *eP* | **Pb** | **04 42 57.2** | **+0.5** |
| | baz=324 | | | | | | |
| **FULB** | **Fuli** | **1.19** | **230** | *eP* | **Pn** | **04 42 55.6** | **-0.5** |
| | baz=216 | | | | | | |
| FULB | | | | *eS* | **Sb** | **04 43 12.1** | **+0.4** |
| | baz=216 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.21** | **325** | *eP* | **Pb** | **04 42 57.2** | **+0.3** |
| | baz=335 | | | | | | |
| **SSLB** | **Suanglung** | **1.23** | **262** | *eP* | **Pn** | **04 42 56.4** | **-0.3** |
| | baz=258 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.25** | **302** | *eP* | **Pb** | **04 42 58.1** | **+0.4** |
| | baz=297 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.26** | **274** | *eP* | **Pb** | **04 42 57.8** | **0.0** |
| | baz=270 | | | | | | |
| **WHP** | **Taichung City** | **1.26** | **284** | P | **Pb** | **04 42 58.8** | **+0.8** |
| | baz=269 | | | | | | |
| WHP | | | | *eS* | **Sb** | **04 43 15.6** | **+1.8** |
| | baz=269 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.27** | **266** | *eP* | **Pn** | **04 42 57.8** | **+0.6** |
| | baz=262 | | | | | | |
| **TYC** | **Yuchr** | **1.31** | **267** | *eP* | **Pb** | **04 43 00.2** | **+1.6** |
| | baz=264 | | | | | | |
| **LIOB** | **Emei** | **1.34** | **300** | P | **Pb** | **04 42 59.6** | **+0.4** |
| | baz=296 | | | | | | |
| LIOB | | | | *eS* | **Sb** | **04 43 16.5** | **+0.5** |
| | baz=296 | | | | | | |
| **NSTT** | **Nanjuang** | **1.34** | **299** | *eP* | **Pb** | **04 42 59.4** | **+0.2** |
| | baz=295 | | | | | | |
| **EDH** | **Donghe** | **1.34** | **222** | *eP* | **Pn** | **04 42 57.4** | **-0.7** |
| | baz=213 | | | | | | |
| EDH | | | | *eS* | **Sn** | **04 43 13.7** | **-1.6** |
| | baz=213 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.37** | **74** | P | **Pb** | **04 42 59.8** | **+0.2** |
| IRIF | | | | S | **Sb** | **04 43 18.0** | **+1.4** |
| **TWS1** | **Kuangyinshan** | **1.37** | **325** | *eP* | **Pb** | **04 42 59.5** | **-0.3** |
| | baz=321 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.39** | **86** | *eS* | **Sb** | **04 43 17.7** | **+0.4** |
| **ELDTW** | **Lidau** | **1.40** | **236** | *eP* | **Pb** | **04 42 59.9** | **-0.5** |
| | baz=234 | | | | | | |
| **TWQ1** | **Liyutan** | **1.43** | **285** | *eP* | **Pb** | **04 43 01.0** | **+0.2** |
| | baz=281 | | | | | | |
| **ALS** | **Alishan** | **1.44** | **252** | *eP* | **Pb** | **04 43 00.8** | **-0.2** |
| | baz=249 | | | | | | |
| **WJS** | **Zhushan** | **1.44** | **264** | *eP* | **Pb** | **04 43 03.0** | **+2.2** |
| | baz=261 | | | | | | |
| **TWY** | **Chenhua** | **1.44** | **334** | *eP* | **Pb** | **04 43 00.7** | **-0.2** |
| | baz=346 | | | | | | |
| **NSY** | **Sanyi** | **1.46** | **288** | *eP* | **Pb** | **04 43 01.8** | **+0.5** |
| | baz=284 | | | | | | |
| **LDUT** | **Ludao** | **1.50** | **210** | *eP* | **Pn** | **04 42 59.5** | **-0.7** |
| | baz=210 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.59** | **80** | P | **Pb** | **04 43 03.9** | **+0.4** |
| JKRS | | | | *eS* | **Sb** | **04 43 24.4** | **+1.2** |
| **TWGBT** | **Beinan** | **1.60** | **224** | *eP* | **Pn** | **04 42 60.0** | **-1.7** |
| | baz=223 | | | | | | |
| **STYH** | **Taoyuan** | **1.60** | **240** | *eP* | **Pb** | **04 43 04.8** | **+1.1** |
| | baz=227 | | | | | | |
| **TWG** | **Pinlang** | **1.60** | **224** | *eP* | **Pn** | **04 43 02.6** | **+1.0** |
| | baz=223 | | | | | | |
| **WDLH** | **Douliu** | **1.63** | **260** | *eP* | **Pb** | **04 43 03.9** | **-0.1** |
| | baz=258 | | | | | | |
| **TPUB** | **Ta-pu** | **1.66** | **247** | *eP* | **Pb** | **04 43 05.2** | **+0.5** |
| | baz=245 | | | | | | |
| **CHN4** | **Tsaushan** | **1.67** | **249** | *eP* | **Pb** | **04 43 06.6** | **+1.7** |
| | baz=247 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.74** | **77** | P | **Pn** | **04 43 04.2** | **+0.7** |
| JIJ | | | | *eS* | **Sb** | **04 43 26.5** | **-0.9** |
| **WTK** | **Tuku** | **1.76** | **261** | *eP* | **Pb** | **04 43 06.2** | **-0.1** |
| | baz=247 | | | | | | |
| **SLGT** | **Liugui** | **1.79** | **237** | *eP* | **Pb** | **04 43 06.0** | **-1.0** |
| | baz=226 | | | | | | |
| **SSD** | **Sandimen** | **1.95** | **232** | *eP* | **Pb** | **04 43 09.0** | **-0.6** |
| | baz=221 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.04** | **229** | *eP* | **Pb** | **04 43 10.0** | **-1.1** |
| | baz=219 | | | | | | |
| **EAST** | **Anshuo** | **2.06** | **220** | *eP* | **Pb** | **04 43 10.2** | **-1.4** |
| | baz=220 | | | | | | |
| **SLIU** | **Shizi** | **2.22** | **218** | *eP* | **Pb** | **04 43 12.8** | **-1.5** |
| | baz=218 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.53** | **260** | *eP* | **Pn** | **04 43 14.9** | **+0.5** |
| | baz=258 | | | | | | |
| PHUB | | | | *eS* | **Sn** | **04 43 45.7** | **+1.1** |
| | baz=258 | | | | | | |
| **PNG** | **Penghu** | **2.54** | **261** | *eP* | **Pn** | **04 43 15.4** | **+0.9** |
| | baz=260 | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.59** | **279** | *eP* | **Pn** | **04 43 29.4** | **+0.3** |
| | baz=276 | | | | | | |

*SOME **28** 05:05:09.8,42.°27N×79.°57E,h5km*
*KRNET **28** 05:05:09.7±0.1,42.°26N×79.°69E,h16km,mb2.5*
*NNC **28** 05:05:10.6±1.2,42.°31N×79.°65E,h0km,mb3.2,mpv3.0,*
*Error ellipse: s-maj=8.0km s-min=4.4km az=128.0*
**ISC 28 05:05:08.6±1.9,42.°23N±0.°06×79.°69E±0.°06,h1km±11km,**
**n44,σ1.°01/76,10C-7D,Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRZ** | **Przheval'sk** | **0.99** | **285** | ⇑*iP* | **Pg** | **05 05 28.1** | **+0.6** |
| | baz=84 | | | | | | |
| PRZ | | | | ⇑*iS* | **Sb** | **05 05 42.3** | **+0.2** |
| | baz=84 | | | | | | |
| **UZB** | **Uzynbulak** | **1.04** | **332** | *eP* | **Pg** | **05 05 29.0** | **+0.5** |
| | 4.1nm,0.1s | | | | | | |
| UZB | | | | *eS* | **Sb** | **05 05 42.7** | **-1.0** |
| | 13nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.04** | **332** | P | **Pg** | **05 05 29.0** | **+0.5** |
| | 4.4nm,0.2s | | | | | | |
| UZB | | | | S | **Sb** | **05 05 42.7** | **-1.0** |
| | 13nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.04** | **332** | *eP* | **Pg** | **05 05 29.0** | **+0.5** |
| | baz=31 | | | | | | |
| UZB | | | | *eS* | **Sb** | **05 05 42.7** | **-1.0** |
| | baz=31 | | | | | | |
| **PDGK** | **Podgornoye** | **1.11** | **353** | P | **Pg** | **05 05 30.2** | **+0.3** |
| | 2.1nm,0.2s | | | | | | |
| PDGK | | | | S | **Sg** | **05 05 44.5** | **+0.2** |
| | 9.6nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **1.11** | **353** | ⇑P | **Pg** | **05 05 30.1** | **+0.2** |
| | 0.7nm,0.2s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **05 05 44.3** | **0.0** |
| | 10nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **1.32** | **316** | *eP* | **Pb** | **05 05 34.2** | **0.0** |
| | 2.8nm,0.0s | | | | | | |
| ZHN | | | | *eS* | **Sn** | **05 05 51.3** | **-1.2** |
| | 13nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.32** | **316** | P | **Pb** | **05 05 34.2** | **0.0** |
| | 5.1nm,0.1s | | | | | | |
| ZHN | | | | S | **Sn** | **05 05 51.3** | **-1.2** |
| | 13nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.32** | **316** | *eP* | **Pb** | **05 05 34.2** | **0.0** |
| | baz=15 | | | | | | |
| ZHN | | | | *eS* | **Sn** | **05 05 51.3** | **-1.2** |
| | baz=15 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.49** | **251** | ⇓*iP* | **Pb** | **05 05 37.4** | **+0.2** |
| | baz=50 | | | | | | |
| TARG | | | | ⇓*iS* | **Sg** | **05 05 57.9** | **+1.5** |
| | baz=50 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.59** | **291** | ⇓*iP* | **Pb** | **05 05 39.2** | **+0.3** |
| | baz=90 | | | | | | |
| ANVS | | | | ⇓*iS* | **Sg** | **05 06 00.7** | **+1.0** |
| | baz=90 | | | | | | |
| **KURS** | **Kuram** | **1.68** | **319** | *eP* | **Pg** | **05 05 40.9** | **+0.1** |
| | 0.6nm,0.1s | | | | | | |
| KURS | | | | *eS* | **Sg** | **05 06 02.8** | **+0.2** |
| | 4.5nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.68** | **319** | P | **Pg** | **05 05 40.9** | **+0.1** |
| | 1.3nm,0.2s | | | | | | |
| KURS | | | | S | **Sg** | **05 06 02.8** | **+0.2** |
| | 4.5nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.68** | **319** | *eP* | **Pg** | **05 05 40.9** | **+0.1** |
| | baz=18 | | | | | | |
| KURS | | | | *eS* | **Sg** | **05 06 02.8** | **+0.2** |
| | baz=18 | | | | | | |
| **KDJ** | **Kajisay** | **1.86** | **268** | ⇑*iP* | **Pb** | **05 05 43.7** | **+0.2** |
| | baz=67 | | | | | | |
| KDJ | | | | ⇑*iS* | **Sg** | **05 06 09.2** | **+0.7** |
| | baz=67 | | | | | | |
| **BLB** | **Baldybastay** | **2.07** | **335** | *eP* | **Pb** | **05 05 47.5** | **+0.6** |
| | 9.8nm,0.2s | | | | | | |
| BLB | | | | *eS* | **Sg** | **05 06 14.4** | **-0.6** |
| | 36nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **2.07** | **335** | Pg | **Pb** | **05 05 47.5** | **+0.6** |
| | 9.8nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 05 06 14.4 | |
| | 36nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.10** | **2** | *eP* | **Pg** | **05 05 48.5** | **-0.4** |
| | 3.1nm,0.1s | | | | | | |
| DJR | | | | *eS* | **Sg** | **05 06 16.3** | **+0.1** |
| | 23nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.10** | **2** | Pg | **Pg** | **05 05 48.5** | **-0.4** |
| | 3.1nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 05 06 16.3 | |
| | 23nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **297** | *eP* | **Pb** | **05 05 48.8** | **+0.3** |
| | 5.2nm,0.3s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **05 06 16.9** | **-0.9** |
| | 3.5nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **297** | ⇓Pn | **Pb** | **05 05 47.5** | **-1.0** |
| | 2.2nm,0.4s | | | | | | |
| MDOK | | | | Sn | **Sb** | **05 06 16.6** | **+0.8** |
| | 5.3nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.16** | **297** | Pg | **Pb** | **05 05 48.8** | **+0.3** |
| | 5.2nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 05 06 16.9 | |
| | 3.5nm,0.6s | | | | | | |
| **KNOS** | **Konyrlen** | **2.16** | **350** | *eP* | **Pb** | **05 05 49.4** | **+0.8** |
| | 2.7nm,0.1s | | | | | | |
| KNOS | | | | *eS* | **Sg** | **05 06 17.4** | **-0.6** |
| | 20nm,0.1s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.18** | **293** | *eP* | **Pb** | **05 05 49.2** | **+0.2** |
| | 6.6nm,0.4s | | | | | | |
| TNSS | | | | *eS* | **Sb** | **05 06 17.4** | **+0.8** |
| | 1.4nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.18** | **293** | Pg | **Pb** | **05 05 49.2** | **+0.2** |
| | 6.6nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 05 06 17.4 | |
| | 1.4nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **2.41** | **326** | *eP* | **Pb** | **05 05 53.0** | **+0.3** |
| | 3.4nm,0.2s | | | | | | |
| ARXS | | | | *eS* | **Sb** | **05 06 24.1** | **+1.2** |
| | 13nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **2.41** | **326** | Pg | **Pb** | **05 05 53.0** | **+0.3** |
| | 3.4nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 05 06 24.1 | |
| | 13nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **2.41** | **291** | *eP* | **Pb** | **05 05 54.0** | **+1.2** |
| | 4.2nm,0.1s | | | | | | |
| IZV | | | | *eS* | **Sg** | **05 06 25.3** | **-0.6** |
| | 11nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **2.56** | **272** | ⇑*iP* | **Pb** | **05 05 54.1** | **-1.3** |
| | baz=71 | | | | | | |
| ULHL | | | | ⇑*iS* | **Sb** | **05 06 26.0** | **-1.4** |
| | baz=71 | | | | | | |
| **CHKK** | **Chushkaly** | **2.56** | **310** | *eP* | **Pb** | **05 05 56.4** | **+1.1** |
| | 3.5nm,0.1s | | | | | | |
| CHKK | | | | *eS* | **Sg** | **05 06 29.6** | **-1.2** |
| | 16nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **2.56** | **310** | Pg | **Pb** | **05 05 56.4** | **+1.1** |
| | 3.5nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 05 06 29.6 | |
| | 16nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.56** | **292** | *eP* | **Pb** | **05 05 55.5** | **0.0** |
| | 2.5nm,0.3s | | | | | | |
| MTBS | | | | *eS* | **Sb** | **05 06 27.8** | **+0.4** |
| | 4.3nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.56** | **292** | Pg | **Pb** | **05 05 55.5** | **0.0** |
| | 2.5nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 05 06 27.8 | |
| | 4.3nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **2.66** | **305** | *eP* | **Pb** | **05 05 58.0** | **+1.1** |
| | 5.5nm,0.3s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **05 06 32.7** | **-1.2** |
| | 8.8nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **2.66** | **305** | Pg | **Pb** | **05 05 58.0** | **+1.1** |
| | 5.5nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 05 06 32.7 | |
| | 8.8nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **2.96** | **305** | *eP* | **Pb** | **05 06 03.0** | **+0.8** |
| | 1.1nm,0.4s | | | | | | |
| KUU | | | | *eS* | **Sb** | **05 06 41.0** | **+2.1** |
| | 6.8nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **2.96** | **305** | Pg | **Pb** | **05 06 03.0** | **+0.8** |
| | 1.1nm,0.4s | | | | | | |
| KUU | | | | Lg | Lg | 05 06 41.0 | |
| | 6.8nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **3.06** | **291** | *eP* | **Pg** | **05 06 06.1** | **-1.0** |
| | 2.2nm,0.4s | | | | | | |
| DGS | | | | *eS* | **Sg** | **05 06 46.1** | **-0.7** |
| | 4.0nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.06** | **291** | Pg | **Pg** | **05 06 06.1** | **-1.0** |
| | 2.2nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 05 06 46.1 | |
| | 4.0nm,0.5s | | | | | | |
| **KAPS** | **Kapalarasan** | **3.07** | **356** | *eP* | **Pb** | **05 06 05.3** | **+1.3** |
| | 0.6nm,0.1s | | | | | | |
| KAPS | | | | *eS* | **Sg** | **05 06 44.6** | **-2.4** |
| | 6.9nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.10** | **284** | ⇓Pg | **Pb** | **05 06 02.5** | **-2.1** |
| | 1.2nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 06 46.2 | |
| | 1.5nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.10** | **284** | ⇑*eP* | **Pb** | **05 06 01.5** | **-3.1** |
| | baz=84 | | | | | | |
| TKM2 | | | | ⇑*iS* | **Sn** | **05 06 38.9** | **+2.4** |
| | baz=84 | | | | | | |
| **KRBS** | **Karabastau** | **3.29** | **298** | *eP* | **Pb** | **05 06 08.5** | **+0.8** |
| | 3.3nm,0.4s | | | | | | |
| KRBS | | | | *eS* | **Sb** | **05 06 50.3** | **+2.0** |
| | 2.6nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **3.29** | **298** | Pg | **Pb** | **05 06 08.5** | **+0.8** |
| | 3.3nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 05 06 50.3 | |
| | 2.3nm,0.5s | | | | | | |

*NIED **28** 05:08:47.4,41.°92N×142.°32E,h70km,MW4.0,Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$8.21; $M_{\theta\theta}$-1.78; $M_{\phi\phi}$-6.43; $M_{r\theta}$3.74; $M_{\theta\phi}$-1.73; $M_{\phi r}$5.20; Fault plane solution: $M

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNBK** | **Urakawa-nobuka** | **0.47** | **44** | ⇑P | **Pn** | **05 08 59.5** | **-2.0** |
| JNBK | | | | *e*S | **Sn** | **05 09 09.1** | **-1.6** |
| **JSHD** | **Hidakashinhida** | **0.48** | **14** | ⇑P | **Pn** | **05 09 00.2** | **-1.4** |
| JSHD | | | | *e*S | **Sn** | **05 09 10.1** | **-0.8** |
| **ERM** | **Erimo** | **0.64** | **83** | P | **Pn** | **05 09 02.1** | **-1.0** |
| ERM | | | | | | 05 09 13.1 | |
| **ERM** | **Erimo** | **0.64** | **83** | Pn | **Pn** | **05 09 02.1** | **-1.0** |
| ERM | | | | Sn | **Sn** | **05 09 13.1** | **-0.4** |
| **JEM** | **Erimo** | **0.64** | **83** | ⇑P | **Pn** | **05 09 01.9** | **-1.2** |
| JEM | | | | *e*S | **Sn** | **05 09 12.4** | **-1.2** |
| **JIAM** | **Iburiatsuma** | **0.74** | **337** | ⇓P | **Pn** | **05 09 03.8** | **-0.4** |
| JIAM | | | | *e*S | **Sn** | **05 09 15.8** | **+0.2** |
| **JBT2** | **Biratori 2** | **0.84** | **3** | ⇓P | **Pn** | **05 09 03.9** | **-1.5** |
| **JKB** | **Kayabe** | **0.95** | **267** | ⇓P | **Pn** | **05 09 05.2** | **-1.6** |
| JKB | | | | *e*S | **Sn** | **05 09 18.3** | **-1.8** |
| **JCH** | **Churui** | **1.03** | **49** | ⇑P | **Pn** | **05 09 06.8** | **-0.9** |
| JCH | | | | *e*S | **Sn** | **05 09 20.7** | **-1.1** |
| **JNB** | **Noboribetsu** | **1.08** | **300** | ⇓P | **Pn** | **05 09 06.5** | **-1.9** |
| JNB | | | | *e*S | **Sn** | **05 09 20.7** | **-2.3** |
| **JOT** | **Ohata** | **1.10** | **240** | ⇓P | **Pn** | **05 09 07.2** | **-1.4** |
| JOT | | | | *e*S | **Sn** | **05 09 20.9** | **-2.4** |
| **JEW** | **Eniwo** | **1.10** | **325** | ⇓P | **Pn** | **05 09 07.6** | **-1.1** |
| JEW | | | | *e*S | **Sn** | **05 09 22.5** | **-0.9** |
| **JEW** | **Eniwo** | **1.10** | **325** | Pn | **Pn** | **05 09 07.8** | **-0.9** |
| JEW | | | | Sn | **Sn** | **05 09 22.6** | **-0.9** |
| **JFR** | **Furan** | **1.24** | **10** | ⇓P | **Pn** | **05 09 09.1** | **-1.4** |
| **JYM2** | **Yakumo 2** | **1.46** | **278** | ⇓P | **Pn** | **05 09 11.7** | **-1.5** |
| JYM2 | | | | *e*S | **Sn** | **05 09 29.4** | **-2.2** |
| **JSR** | **Shiriuchi** | **1.47** | **255** | P | **Pn** | **05 09 12.6** | **-0.8** |
| JSR | | | | *e*S | **Sn** | **05 09 31.1** | **-0.9** |
| **JTM** | **Tenmabayashi** | **1.48** | **219** | Pn | **Pn** | **05 09 13.4** | **-0.1** |
| **JOB** | **Onbets** | **1.48** | **49** | P | **Pn** | **05 09 13.6** | **0.0** |
| JOB | | | | *e*S | **Sn** | **05 09 33.1** | **+0.9** |
| **JISS** | **Ishikarishitsu** | **1.49** | **334** | ⇓P | **Pn** | **05 09 12.6** | **-1.0** |
| JISS | | | | *e*S | **Sn** | **05 09 31.8** | **-0.5** |
| **JAB** | **Ashibetsu** | **1.57** | **358** | ⇓P | **Pn** | **05 09 14.2** | **-0.5** |
| JAB | | | | *e*S | **Sn** | **05 09 35.1** | **+0.9** |
| **JANG** | **Nango** | **1.68** | **201** | ⇑P | **Pn** | **05 09 15.3** | **-0.9** |
| JANG | | | | *e*S | **Sn** | **05 09 36.3** | **-0.5** |
| **JAR** | **Ashorobuto** | **1.73** | **38** | P | **Pn** | **05 09 16.1** | **-0.8** |
| JAR | | | | *e*S | **Sn** | **05 09 38.0** | **-0.2** |
| **JOMM** | **Oshimamatsumae** | **1.77** | **257** | ⇓P | **Pn** | **05 09 16.3** | **-1.1** |
| JOMM | | | | *e*S | **Sn** | **05 09 37.9** | **-1.2** |
| **JHR** | **Hokuryu** | **1.85** | **347** | ⇓P | **Pn** | **05 09 18.4** | **-0.1** |
| **ASAJ** | **Asahikawa** | **2.19** | **5** | P | **Pn** | **05 09 22.8** | **-0.2** |
| | 16nm,0.3s,baz=234,slow=11,SNR=89 | | | | | | |
| ASAJ | | | | S | **Sn** | **05 09 47.6** | **-1.5** |
| | 10nm,0.3s,baz=7.5,slow=22,SNR=8.5 | | | | | | |
| ASAJ | | | | LR | LR | 05 09 57.4 | |
| | comp=Z,44nm,20.7s,baz=264,slow=33 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.19** | **5** | Pn | **Pn** | **05 09 23.0** | **0.0** |
| **NMR** | **Nemuro--Hokkai** | **2.90** | **59** | ⇓*i*P | **Pn** | **05 09 30.8** | **-1.8** |
| NMR | | | | *e*S | **Sn** | **05 10 02.0** | **-4.3** |
| **GLVR** | **Golovnino** | **2.97** | **52** | *e*P | **Pn** | **05 09 33.0** | **-0.5** |
| GLVR | | | | *e*S | **Sn** | **05 10 06.0** | **-2.0** |
| GLVR | | | | smax | smax | | |
| | comp=E,694nm,0.6s | | | | | | |
| GLVR | | | | smax | smax | | |
| | comp=N,246nm,0.2s | | | | | | |
| **RUSJ** | **Misakicho** | **3.05** | **44** | ⇑*i*P | **Pn** | **05 09 36.0** | **+1.3** |
| RUSJ | | | | *e*S | **Sn** | **05 10 11.9** | **+1.8** |
| **YUK** | **Yuzh-Kuril'sk** | **3.34** | **50** | *e*P | **Pn** | **05 09 38.7** | **0.0** |
| YUK | | | | *e*S | **Sn** | **05 10 15.6** | **-1.6** |
| YUK | | | | pmax | pmax | | |
| | comp=N,43nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,52nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,239nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,553nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,226nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **3.84** | **58** | *e*P | **Pn** | **05 09 43.6** | **-1.8** |
| SHO | | | | *e*S | **Sn** | **05 10 24.9** | **-4.4** |
| SHO | | | | pmax | pmax | | |
| | comp=N,21nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,16nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,66nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,121nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,288nm,0.3s | | | | | | |
| **JMM** | **Marumori** | **4.23** | **196** | | **Pn** | **05 09 49.8** | **-1.1** |
| **JSD** | **Sado** | **4.99** | **220** | Pn | **Pn** | **05 10 02.7** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **5.02** | **3** | *e*P | **Pn** | **05 10 03.4** | **+1.8** |
| YSS | | | | *e*S | **Sn** | **05 11 00.2** | **+1.9** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,20nm,1.0s | | | | | | |
| **KUR** | **Kuril'sk** | **5.21** | **49** | *e*P | **Pn** | **05 10 03.7** | **-0.4** |
| KUR | | | | *e*S | **Sn** | **05 11 01.9** | **-0.9** |
| KUR | | | | smax | smax | | |
| | comp=E,77nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,27nm,0.8s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **6.26** | **212** | Pn | **Pn** | **05 10 20.3** | **+1.7** |
| **MAJO** | **Matsushiro** | **6.26** | **212** | ⇓*e*P | **Pn** | **05 10 21.7** | **+3.1** |
| **MAJO** | **Matsushiro** | **6.26** | **212** | Pn | **Pn** | **05 10 20.1** | **+1.6** |
| **MJAR** | **Matsushiro Arr** | **6.26** | **212** | P | **Pn** | **05 10 20.1** | **+1.6** |
| | comp=N,0.2nm,0.3s,baz=19,slow=14,SNR=6.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.26** | **212** | | **Pn** | **05 10 19.1** | **+0.5** |
| **JGF** | **Kuroka** | **7.42** | **213** | Pn | **Pn** | **05 10 33.5** | **-0.9** |
| **USA0B** | **Ussuriysk Arra** | **7.89** | **290** | ⇑*e*P | **Pn** | **05 10 41.3** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **7.89** | **290** | P | **Pn** | **05 10 41.2** | **+0.5** |
| | baz=97,slow=14,SNR=6.3 | | | | | | |
| USRK | | | | LR | LR | 05 14 09.3 | |
| | comp=N,40nm,18.8s,baz=160,slow=41 | | | | | | |
| **MDJ** | **Mudanjiang** | **9.65** | **290** | Pn | **Pn** | **05 11 01.6** | **-3.3** |
| **KLR** | **Kul'dur** | **10.38** | **318** | P | **Pn** | **05 11 15.5** | **+0.8** |
| | comp=N,0.1nm,0.3s,baz=121,slow=13,SNR=18 | | | | | | |
| KLR | | | | LR | LR | 05 15 20.0 | |
| | comp=N,66nm,20.0s,baz=168,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **10.38** | **318** | *ce*P | **Pn** | **05 11 16.8** | **+2.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,17nm,2.6s | | | | | | |
| **BNX** | **BinXian** | **11.41** | **294** | ⇑P | **Pn** | **05 11 30.8** | **+1.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,190nm,4.3s | | | | | | |
| **KSRS** | **Korea Array** | **11.95** | **253** | P | **Pn** | **05 11 38.2** | **+2.0** |
| | comp=Z,0.4nm,0.3s,baz=66,slow=14,SNR=6.3 | | | | | | |
| **ZEA** | **Zeya** | **15.50** | **325** | *e*P | P | 05 12 37.8 | +12 |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **18.42** | **14** | P | **P** | **05 12 57.2** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=187,slow=15,SNR=5.1 | | | | | | |
| **MA2** | **Magadan** | **18.42** | **14** | ⇓*e*P | **P** | **05 12 57.3** | **-1.0** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **MA2** | **Magadan** | **18.42** | **14** | P | **P** | **05 12 57.7** | **-0.6** |
| **YAK** | **Yakutsk** | **21.50** | **344** | ⇓*e*P | **P** | **05 13 32.9** | **+1.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **21.85** | **12** | P | **P** | **05 13 33.0** | **-2.2** |
| | comp=Z,0.7nm,0.3s,baz=261,slow=8.7,SNR=4.3 | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.51** | **296** | ⇑*e*P | **P** | **05 14 10.3** | **-0.4** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **25.95** | **295** | P | **P** | **05 14 14.4** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=79,slow=8.8,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **25.95** | **295** | P | **P** | **05 14 14.0** | **-0.7** |
| **H11N2** | **WAKE ISLAND Hy** | **30.40** | **129** | T | T | 05 46 38.9 | |
| | baz=323,slow=75,SNR=72 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.41** | **129** | T | T | 05 46 35.4 | |
| | baz=323,slow=75,SNR=56 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.41** | **129** | T | T | 05 46 37.5 | |
| | baz=323,slow=75,SNR=55 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.25** | **131** | T | T | 05 47 37.1 | |
| | baz=324,slow=76,SNR=79 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.26** | **131** | T | T | 05 47 32.1 | |
| | baz=324,slow=76,SNR=69 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.27** | **131** | T | T | 05 47 37.4 | |
| | baz=324,slow=76,SNR=70 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **38.27** | **301** | ⇓*i*P | **P** | **05 16 02.9** | **+0.7** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **NRIK** | **Noril'sk** | **39.17** | **333** | *ce*P | **P** | **05 16 09.2** | **-0.1** |
| **ZAA0** | **Zalesovo Array** | **39.28** | **308** | P | **P** | **05 16 09.9** | **-0.4** |
| ZAA0 | | | | IAmb | IAmb | 05 16 10.8 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.28** | **308** | P | **P** | **05 16 10.1** | **-0.3** |
| | comp=Z,1.9nm,0.7s,baz=89,slow=9.0,SNR=10 | | | | | | |
| **SVW2** | **Sparrevohn** | **41.27** | **41** | P | **P** | **05 16 27.2** | **+0.4** |
| **MK31** | **Makanchi Array** | **42.27** | **298** | *c*P | **P** | **05 16 34.6** | **-0.6** |
| **MK31** | **Makanchi Array** | **42.27** | **298** | P | **P** | **05 16 34.9** | **-0.2** |
| **MKAR** | **Makanchi Array** | **42.27** | **298** | P | **P** | **05 16 34.9** | **-0.3** |
| | comp=Z,2.5nm,0.8s,baz=83,slow=9.9,SNR=21 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.27** | **298** | P | **P** | **05 16 35.2** | **0.0** |
| **MKAR** | **Makanchi Array** | **42.27** | **298** | P | **P** | **05 16 35.2** | **0.0** |
| **MAKZ** | **Makanchi** | **42.48** | **298** | P | **P** | **05 16 36.3** | **-0.5** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **42.48** | **298** | P | **P** | **05 16 36.3** | **-0.5** |
| MAKZ | | | | IAmb | IAmb | 05 16 37.3 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **43.60** | **304** | *c*P | **P** | **05 16 44.8** | **-0.9** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **43.60** | **304** | P | **P** | **05 16 45.7** | **-0.1** |
| KURK | | | | IAmb | IAmb | 05 16 46.1 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.67** | **304** | P | **P** | **05 16 45.8** | **-0.6** |
| | comp=Z,3.6nm,0.7s,baz=77,slow=8.6,SNR=25 | | | | | | |
| **RND** | **Reindeer** | **44.29** | **37** | P | **P** | **05 16 51.1** | **-0.2** |
| RND | | | | pmax | pmax | | |
| | comp=Z,40nm,1.8s | | | | | | |
| **RND** | **Reindeer** | **44.29** | **37** | P | **P** | **05 16 51.0** | **-0.2** |
| **ILAR** | **Eielson Array** | **45.03** | **35** | P | **P** | **05 16 57.0** | **0.0** |
| | comp=Z,1.5nm,1.0s,baz=276,slow=7.1,SNR=9.7 | | | | | | |
| **ILAR** | **Eielson Array** | **45.03** | **35** | P | **P** | **05 16 57.0** | **0.0** |
| **BVAR** | **Borovoye Array** | **47.89** | **309** | P | **P** | **05 17 19.5** | **-0.1** |
| | comp=Z,1.1nm,0.5s,baz=129,slow=34,SNR=6.3 | | | | | | |
| **INK** | **Inuvik** | **49.73** | **29** | P | **P** | **05 17 32.8** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=280,slow=9.1,SNR=4.9 | | | | | | |
| **INK** | **Inuvik** | **49.73** | **29** | P | **P** | **05 17 33.3** | **-0.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.8s | | | | | | |
| **INK** | **Inuvik** | **49.73** | **29** | P | **P** | **05 17 33.3** | **-0.1** |
| **KKAR** | **Karatay Array** | **51.39** | **297** | P | **P** | **05 17 46.1** | **-0.2** |
| **KKAR** | **Karatay Array** | **51.39** | **297** | P | **P** | **05 17 46.1** | **-0.2** |
| **ARU** | **Arti** | **53.22** | **316** | P | **P** | **05 17 58.3** | **-1.3** |
| | comp=Z,0.5nm,0.3s,baz=174,slow=4.5,SNR=3.6 | | | | | | |
| **ARU** | **Arti** | **53.22** | **316** | *de*P | **P** | **05 17 59.5** | **-0.1** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.8s | | | | | | |
| **ARU** | **Arti** | **53.22** | **316** | P | **P** | **05 17 59.3** | **-0.3** |
| ARU | | | | IAmb | IAmb | 05 18 00.2 | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **55.39** | **308** | P | **P** | **05 18 15.1** | **-0.4** |
| ABKAR | | | | IAmb | IAmb | 05 18 16.3 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **55.39** | **308** | P | **P** | **05 18 14.8** | **-0.7** |
| **SPITS** | **Spitsbergen Ar** | **55.86** | **348** | P | **P** | **05 18 16.9** | **-1.6** |
| | comp=Z,14nm,1.1s,baz=120,slow=8.5,SNR=2.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **55.99** | **310** | P | **P** | **05 18 18.9** | **-0.8** |
| | comp=Z,0.6nm,0.5s,baz=78,slow=14,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.25** | **32** | P | **P** | **05 18 42.2** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=307,slow=6.4,SNR=15 | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.25** | **32** | *i* P | **P** | **05 18 42.4** | **0.0** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.67** | **339** | P | **P** | **05 18 44.4** | **-0.9** |
| | comp=Z,2.0nm,1.0s,baz=46,slow=8.0,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **62.01** | **188** | P | **P** | **05 19 01.2** | **-0.5** |
| | comp=Z,1.7nm,1.2s,baz=7.5,slow=6.9,SNR=2.8 | | | | | | |
| WRA | | | | pP | **pP** | **05 19 20.4** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=5.4,slow=6.8,SNR=3.1 | | | | | | |
| **FINES** | **FINESS Array B** | **64.82** | **332** | P | **P** | **05 19 19.2** | **-0.5** |
| | comp=Z,1.8nm,0.4s,baz=58,slow=6.8,SNR=52 | | | | | | |
| **ASAR** | **Alice Springs** | **65.74** | **188** | P | **P** | **05 19 26.3** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=14,slow=8.0,SNR=1.6 | | | | | | |
| ASAR | | | | pP | **pP** | **05 19 47.4** | **+3.1** |
| | comp=Z,0.4nm,0.6s,baz=13,slow=9.1,SNR=3.4 | | | | | | |
| **KIV** | **Kislovodsk** | **68.25** | **310** | *e*P | **P** | **05 19 44.0** | **+1.9** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **68.27** | **310** | P | **P** | **05 19 42.0** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=104,slow=3.3,SNR=3.9 | | | | | | |
| **KBZ** | **Khabaz** | **68.27** | **310** | P | **P** | **05 19 42.0** | **0.0** |
| **NEY** | **Neytrino** | **68.67** | **309** | ⇑*i*P | **P** | **05 19 43.9** | **-0.9** |
| NEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **HFS** | **Hagfors** | **69.92** | **335** | P | **P** | **05 19 51.5** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=90,slow=4.4,SNR=8.4 | | | | | | |
| HFS | | | | pP | **pP** | **05 20 11.5** | **+1.0** |
| | comp=Z,1.2nm,0.6s,baz=93,slow=7.4,SNR=2.2 | | | | | | |
| HFS | | | | LR | LR | 05 54 54.5 | |
| | comp=Z,51nm,18.9s,baz=260,slow=40 | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.94** | **337** | P | **P** | **05 19 51.4** | **-0.7** |
| | comp=Z,0.5nm,0.5s,baz=35,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.94** | **337** | P | **P** | **05 19 51.5** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=44,slow=7.5,SNR=6.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **70.86** | **322** | P | **P** | **05 19 57.1** | **-0.8** |
| | comp=Z,1.1nm,0.5s,baz=43,slow=6.2,SNR=9.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **70.86** | **322** | IAmb | IAmb | 05 20 21.9 | |
| | comp=Z,3.9nm,1.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **70.86** | **322** | *ce*P | **P** | **05 19 57.4** | **-0.5** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **71.54** | **55** | P | **P** | **05 20 04.1** | **+1.6** |
| | comp=Z,0.4nm,0.7s,baz=297,slow=5.8,SNR=4.9 | | | | | | |
| NVAR | | | | pP | **PcP** | **05 20 23.7** | **+2.1** |
| | comp=Z,0.3nm,0.6s,baz=294,slow=6.8,SNR=2.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **73.77** | **47** | P | **P** | **05 20 16.2** | **+0.6** |
| | comp=Z,0.7nm,0.6s,baz=273,slow=2.5,SNR=8.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.13** | **311** | P | **P** | **05 20 29.2** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=56,slow=4.6,SNR=5.1 | | | | | | |
| **CLL** | **Collm** | **77.19** | **330** | *e*P | **P** | **05 20 34.0** | **-0.8** |
| **TXAR** | **Lajitas Array** | **86.60** | **53** | P | **P** | **05 21 25.7** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=283,slow=3.6,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.60** | **53** | P | **P** | **05 21 24.8** | **+0.1** |
| **SIV** | **San Ignacio** | **147.24** | **45** | PKPbc | **PKPbc** | **05 28 24.6** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=310,slow=3.0,SNR=4.3 | | | | | | |
| **LVC** | **Limon Verde** | **147.58** | **63** | PKPbc | **PKPbc** | **05 28 26.0** | **+0.4** |
| | baz=170,slow=2.2 | | | | | | |

*IDC* ***28*** *05:28:12.0±0.6, 6.78N×72.98W, h154km±6km, mb3.8/13, mb1 4.0/19, mb1mx3.8/37, mbtmp4.3/19, MS2.7/1, Ms1 2.7/1, ms1mx2.3/64, Error ellipse: s-maj=11.9km s-min=7.0km az=132.0*

*VAO* ***28*** *05:28:11.3±1.3, 6.94N×73.16W, h157km, mb4.0*

*RSNC* ***28*** *05:28:12.9±1.1, 6.83N×73.13W, h150km±4km, ML4.2, Mw4.5*

*NEIC* ***28*** *05:28:13.3±1.8, 6.77N±0.07×72.96W±0.08, h155km±5km, mb4.6/177, Mwr4.3(RSNC), Error ellipse: s-maj=12.0km s-min=8.7km az=129.0*

**ISC 28 05:28:12.2**±0.6,**6.82N**±0.03×**73.08W**±0.03,**h154**km±5km, **n352**,σ1**35/375**,**mb4.6**/95,**48C-30D**,**Fault plane solution: NP1:**φ306.24298°,δ77.87231°,λ-104.95332°. **NP2:**φ178.05319°,δ19.16555°,λ-39.78726°. **Principal axes:** T Plg31.2892°, Azm48.5711°; N Plg14.6121°, Azm309.4545°; P Plg54.7331°, Azm197.8215°; **Fault plane solution: NP1:**φ64.82562°,δ88.73352°, λ77.10284°. **NP2:**φ329.31213°,δ12.95814°,λ174.34337°. **Principal axes:** T Plg44.8076°, Azm321.9723°; N Plg12.8939°, Azm65.1156°; P Plg42.3355°, Azm167.1536°; **Fault plane solution: NP1:** φ292.28510°,δ69.98300°,λ-12.88798°. **NP2:** φ26.76344°,δ77.90275°,λ-159.50822°. **Principal axes:** T Plg5.3853°, Azm158.4687°; N Plg66.3369°, Azm56.0459°; P Plg22.9689°, Azm250.7585°; **Fault plane solution: NP1:**φ128.48613°,δ80.07517°, λ67.24023°. **NP2:**φ16.15199°,δ24.72373°,λ155.66348°. **Principal axes:** T Plg49.8327°, Azm13.3921°; N Plg22.4005°, Azm132.6219°; P Plg31.3601°, Azm237.1707°; **Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.25** | **204** | ⇑*i*P | **Pn** | **05 28 33.5** | **0.0** |
| BARC | | | | *e*S | **Sn** | **05 28 48.5** | **-1.1** |
| BARC | | | | *i* | | 05 28 50.1 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.64** | **36** | ⇑*e*P | **Pn** | **05 28 36.3** | **+0.9** |
| PAMC | | | | *e*S | **Sn** | **05 28 53.4** | **+0.3** |
| PAMC | | | | *i* | | 05 28 55.5 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **RUSC** | **La Rusia** | **0.92** | **180** | ⇑*i*P | **Pn** | **05 28 37.4** | **0.0** |
| RUSC | | | | *e*S | **Sn** | **05 28 55.6** | **-0.9** |
| RUSC | | | | *i* | | 05 28 57.6 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.34** | **106** | ⇑*i*P | **Pn** | **05 28 41.9** | **+1.3** |
| TAMC | | | | *e*S | **Sn** | **05 29 01.9** | **-0.2** |
| TAMC | | | | *i* | | 05 29 04.0 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.39** | **259** | *e*P | **Pn** | **05 28 40.1** | **-1.0** |
| PTBC | | | | *e*S | **Sn** | **05 29 01.1** | **-2.0** |
| PTBC | | | | *i* | | 05 29 03.5 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **OCAC** | **Ocana** | **1.43** | **351** | ⇓*i*P | **Pn** | **05 28 41.7** | **+0.1** |
| OCAC | | | | *e*S | **Sn** | **05 29 02.7** | **-1.5** |
| OCAC | | | | *i* | | 05 29 08.2 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **SPBC** | **San Pablo de B** | **1.52** | **220** | *e*P | **Pn** | **05 28 42.5** | **0.0** |
| SPBC | | | | *e*S | **Sn** | **05 29 04.5** | **-1.1** |
| SPBC | | | | *i* | | 05 29 10.2 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.89** | **291** | *e*P | **Pn** | **05 28 45.9** | **-0.4** |
| ZARC | | | | *e*S | **Sn** | **05 29 12.0** | **-0.5** |
| ZARC | | | | *i* | | 05 29 17.4 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **NORC** | **Norcasia** | **2.17** | **235** | *e*P | **Pn** | **05 28 49.5** | **-0.2** |
| NORC | | | | *e*S | **Sn** | **05 29 17.3** | **-1.3** |
| NORC | | | | *i* | | 05 29 21.5 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **CHIC** | **Chingaza** | **2.27** | **197** | ⇑*e*P | **Pn** | **05 28 51.4** | **+0.2** |
| CHIC | | | | *e*S | **Sn** | **05 29 20.7** | **-0.5** |
| CHIC | | | | *i* | | 05 29 24.3 | |
| | comp=Z,766nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **212** | P | **Pn** | **05 28 53.5** | **+1.7** |
| | comp=Z,151nm,0.3s,baz=101,slow=21,SNR=22 | | | | | | |
| ROSC | | | | S | **Sn** | **05 29 22.4** | **+0.2** |
| | comp=Z,460nm,0.3s,baz=43,slow=22,SNR=16 | | | | | | |
| ROSC | | | | LR | LR | 05 29 32.5 | |
| | comp=Z,164nm,20.4s,baz=236,slow=34 | | | | | | |
| **ROSC** | **El Rosal** | **2.32** | **212** | Pn | **Pn** | **05 28 53.4** | **+1.6** |
| ROSC | | | | Sn | **Sn** | **05 29 20.1** | **-2.2** |
| **ROSC** | **El Rosal** | **2.32** | **212** | ⇑*e*P | **Pn** | **05 28 53.3** | **+1.6** |
| ROSC | | | | *e*S | **Sn** | **05 29 22.7** | **+0.4** |
| ROSC | | | | *i* | | 05 29 31.2 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **HELC** | **Santa Helena** | **2.51** | **256** | *e*P | **Pn** | **05 28 53.5** | **-0.5** |
| HELC | | | | *e*S | **Sn** | **05 29 24.9** | **-1.3** |
| HELC | | | | *i* | | 05 29 31.8 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **UREC** | **San Jos de Ur** | **2.60** | **291** | *e*P | **Pn** | **05 28 53.5** | **-1.4** |
| UREC | | | | *e*S | **Sn** | **05 29 25.1** | **-2.6** |
| UREC | | | | *i* | | 05 29 37.7 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.75** | **350** | *e*P | **Pn** | **05 28 58.4** | **+1.8** |
| LL1C | | | | *e*S | **Sn** | **05 29 32.7** | **+1.7** |
| **VILC** | **Villavicencio,** | **2.76** | **193** | *e*P | **Pn** | **05 28 56.8** | **-0.1** |
| VILC | | | | *e*S | **Sn** | **05 29 31.4** | **0.0** |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **160** | ⇑*i*P | **Pn** | **05 28 56.6** | **-0.3** |
| PTGC | | | | *e*S | **Sn** | **05 29 29.8** | **-1.6** |
| PTGC | | | | *i* | | 05 29 32.6 | |
| | comp=Z,642nm,0.6s | | | | | | |
| **GUY2C** | **Guyana, Caldas** | **2.77** | **235** | *e*P | **Pn** | **05 28 57.8** | **+0.4** |
| GUY2C | | | | *e*S | **Sn** | **05 29 31.9** | **-0.3** |
| GUY2C | | | | *i* | | 05 29 40.1 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.91** | **356** | *e*P | **Pn** | **05 28 58.1** | **-0.5** |
| LL6C | | | | *e*S | **Sn** | **05 29 33.7** | **-0.9** |
| LL6C | | | | *i* | | 05 29 40.8 | |
| | comp=Z,306nm,0.4s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.06** | **252** | ⇓*e*P | **Pn** | **05 29 01.1** | **+0.3** |
| CBOC | | | | *e*S | **Sn** | **05 29 37.8** | **-0.4** |
| CBOC | | | | *i* | | 05 29 50.2 | |
| | comp=Z,479nm,0.4s | | | | | | |
| **SDV** | **Santo Domingo** | **3.18** | **50** | P | **Pn** | **05 29 02.9** | **+0.7** |
| | comp=Z,268nm,0.3s,baz=151,slow=1.6,SNR=3404 | | | | | | |
| SDV | | | | S | **Sn** | **05 29 39.9** | **-1.0** |
| | comp=Z,132nm,0.3s,baz=68,slow=23,SNR=11 | | | | | | |
| **SDV** | **Santo Domingo** | **3.18** | **50** | ⇓*i*P | **Pn** | **05 29 02.9** | **+0.7** |
| SDV | | | | *e*S | **Sn** | **05 29 39.6** | **-1.3** |
| SDV | | | | *i* | | 05 29 45.3 | |
| | comp=Z,391nm,0.7s | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.22** | **307** | *e*P | **Pn** | **05 29 00.9** | **-1.6** |
| MOTC | | | | *e*S | **Sn** | **05 29 39.8** | **-1.7** |
| MOTC | | | | *i* | | 05 29 54.1 | |
| | comp=Z,527nm,0.7s | | | | | | |
| **ANIL** | **Santa Ana** | **3.27** | **225** | *e*P | **Pn** | **05 29 04.6** | **+1.1

CMBC **Cumbal** 7.51 219 *e*P P 05 30 00.5 +0.9
BIRV **Birongo** 7.65 61 Pn P 05 29 59.6 -1.4
CUSE **Cuicocha Este** 8.37 220 *e*P P 05 30 13.3 +2.3
PCRV **Puerto La Cruz** 8.99 68 P P 05 30 16.9 -2.0
comp=Z,2.4nm,0.3s,baz=229,slow=6.8,SNR=17
PLCV **Puerto La Cruz** 9.03 68 P 05 30 16.9 -2.5
CDITO **Canoas** 9.86 281 Pn P 05 30 31.6 +1.2
PEZE **Perez Zeledon,** 10.80 284 Pn P 05 30 45.4 +2.5
RIMA **Rio Macho** 11.06 286 Pn P 05 30 47.5 +1.0
BANI **BANI** 11.81 13 P 05 30 54.8 -1.3
MTDJ **Mount Denham** 12.14 339 Pn P 05 31 02.1 +1.7
SDDR **Presa de Saban** 12.22 8 P 05 31 00.5 -0.9
DR12 **Loma Pena Alta** 12.43 16 Pn P 05 31 02.7 -1.4
AOPR **Arecibo Observ** 13.01 28 Pn P 05 31 10.5 -1.1
PDPR **Patillas Dam,** 13.09 31 P 05 31 10.4 -2.1
SJG **San Juan** 13.10 30 P P 05 31 11.7 -0.9
comp=Z,3.6nm,0.3s,baz=199,slow=13,SNR=15
SJG **San Juan** 13.10 30 Pn P 05 31 11.9 -0.7
GTBY **Guantanamo Bay** 13.18 352 Pn P 05 31 16.5 +2.9
CUPR **Culebra, Puert** 13.72 33 Pn P 05 31 19.8 -0.7
PTGA **Pitinga** 15.08 119 P P 05 31 36.9 -0.7
comp=Z,0.6nm,0.3s,baz=127,slow=20,SNR=1.9
MACA **Manacapuru-AM** 15.86 128 *e*P P 05 31 46.8 -0.4
ETMB **Extrema** 17.89 157 *e*P P 05 32 10.2 +0.1
PAYG **Puerto Ayora** 18.71 247 P P 05 32 21.1 +2.0
PAYG IAmb IAmb 05 33 03.8
comp=Z,42nm,1.6s
APG **El Apazote** 18.90 297 P P 05 32 20.7 -0.7
comp=Z,0.4nm,0.3s,baz=187,slow=17,SNR=2.9
PETF **Flores** 19.23 303 P P 05 32 24.9 +0.2
PETF IAmb IAmb 05 32 31.6
comp=Z,43nm,1.5s
ITTB **Itaituba** 20.57 122 *e*P P 05 32 40.4 +1.2
MALB **Monte Alegre** 20.66 114 *e*P P 05 32 41.0 +0.8
CCIG **Comitan** 20.89 298 P P 05 32 43.5 +0.8
CCIG IAmb IAmb 05 32 46.7
comp=Z,9.9nm,0.7s
MCPB **Macapa, AP** 22.16 108 *e*P P 05 32 56.5 +0.6
NPGB **Novo Progresso** 22.41 128 *e*P P 05 32 58.3 -0.1
LPAZ **La Paz** 23.47 168 P P 05 33 08.3 -0.4
comp=Z,0.8nm,0.5s,baz=348,slow=4.6,SNR=3.1
LPAZ **La Paz** 23.47 168 P P 05 33 08.4 -0.4
LPAZ **La Paz** 23.47 168 *e*P P 05 33 08.3 -0.4
656A **Willston** 24.14 339 P P 05 33 15.2 +1.2
656A IAmb IAmb 05 33 17.0
comp=Z,20nm,0.6s
PDRB **Porto dos Gac** 24.49 138 *e*P P 05 33 17.3 -0.1
CLDB **Colider** 24.59 135 *e*P P 05 33 17.7 -0.7
PTLB **Pontes e Lacer** 26.08 148 *e*P P 05 33 31.1 -0.6
TMAB **Tom-Au,PA,Br** 26.56 109 *e*P P 05 33 36.5 +0.5
250A **Grady** 27.89 336 P P 05 33 49.4 +1.6
152A **Waverly Hall** 27.91 339 P P 05 33 49.7 +1.8
152A IAmb IAmb 05 33 50.7
comp=Z,12nm,0.8s
GOGA **Godfrey** 28.16 341 P P 05 33 51.9 +1.8
GOGA **Godfrey** 28.16 341 P P 05 33 52.1 +2.0
baz=158
JSC **Jenkinsville** 28.36 346 P P 05 33 53.3 +1.5
JSC IAmb IAmb 05 33 53.9
comp=Z,5.9nm,0.7s
HODGE **Hodges** 28.57 344 P P 05 33 55.6 +1.9
HODGE IAmb IAmb 05 33 56.5
comp=Z,28nm,1.7s
SNDB **Serra Nova Dou** 28.60 131 *e*P P 05 33 55.3 +1.0
Z51A **Franklin** 28.66 339 P P 05 33 56.8 +2.2
Y52A **Lilburn** 28.77 341 P P 05 33 57.5 +1.9
Y52A IAmb IAmb 05 33 58.2
comp=Z,6.4nm,0.8s
LRAL **Lakeview Retre** 29.11 335 P P 05 34 00.2 +1.6
LRAL IAmb IAmb 05 34 00.9
comp=Z,6.2nm,0.7s
LRAL **Lakeview Retre** 29.11 335 P P 05 34 00.5 +1.9
baz=150
KMSC **Kings Mountain** 29.19 346 P P 05 34 01.1 +1.8
baz=163
LVC **Limon Verde** 29.53 172 *e*P P 05 34 02.5 -0.3
Y49A **Blount Mountai** 29.60 337 P P 05 34 04.7 +1.8
Y49A IAmb IAmb 05 34 05.4
comp=Z,12nm,0.7s
Z47A **Carrollton** 29.71 334 P P 05 34 05.2 +1.3
Z47A IAmb IAmb 05 34 06.5
comp=Z,17nm,0.8s
SMTB **Santa Maria do** 29.80 121 *e*P P 05 34 04.1 -0.8
W52A **Murphy** 29.86 342 P P 05 34 06.1 +0.9
W52A IAmb IAmb 05 34 08.1
comp=Z,11nm,0.8s
FPAL **Fort Paine** 29.91 339 P P 05 34 07.0 +1.4
FPAL IAmb IAmb 05 34 07.7
comp=Z,6.6nm,0.5s
VBMS **Vicksburg** 30.05 330 P P 05 34 09.0 +2.2
baz=144
X48A **Hartselle** 30.37 337 P P 05 34 10.8 +1.1
X48A IAmb IAmb 05 34 12.2
comp=Z,15nm,0.8s
CPCT **Cooper Cave** 30.37 341 P P 05 34 11.3 +1.7
CPCT IAmb IAmb 05 34 12.5
comp=Z,7.4nm,0.8s
W50A **Signal Mountai** 30.41 340 IAmb IAmb 05 34 12.7
comp=Z,9.3nm,0.8s
U54A **Nelsons Funny** 30.62 346 P P 05 34 13.5 +1.5
U54A IAmb IAmb 05 34 14.8
comp=Z,16nm,0.8s
V51A **Loudon** 30.65 342 P P 05 34 13.3 +1.2
ARAG **Araguaiana, MT** 30.73 137 *e*P P 05 34 12.5 -0.6
Y45A **Yeager Farm, C** 30.93 333 P P 05 34 16.4 +1.9
PEXB **Peixe** 30.99 127 *e*P P 05 34 15.3 -0.2
TZTN **Tazewell** 31.10 344 P P 05 34 17.9 +1.9
TZTN IAmb IAmb 05 34 58.6
comp=Z,26nm,1.6s
TZTN **Tazewell** 31.10 344 P P 05 34 17.9 +1.9
baz=159
S57A **Dark Hollow, R** 31.26 351 P P 05 34 18.9 +1.4
S57A IAmb IAmb 05 34 19.6
comp=Z,6.9nm,0.8s
V48A **Smith Brothers** 31.43 338 P P 05 34 20.9 +2.0
CLTN **Cedars of Leba** 31.56 339 P P 05 34 21.9 +1.8
CLTN IAmb IAmb 05 34 22.6
comp=Z,16nm,1.3s
T50A **Nancy** 31.92 342 P P 05 34 24.8 +1.5
T50A IAmb IAmb 05 34 26.0
comp=Z,8.9nm,1.1s
AQDB **Aquidauana** 32.06 148 *e*P P 05 34 24.5 -0.2
WVT **Waverly** 32.15 337 P P 05 34 26.4 +1.2
WVT IAmb IAmb 05 34 27.2
comp=Z,18nm,1.1s
WVT **Waverly** 32.15 337 P P 05 34 26.6 +1.3
baz=152
T47A **Sharon Grove** 32.64 339 P P 05 34 30.8 +1.3
833A **Chaparral WMA,** 32.82 314 P P 05 34 31.1 -0.1
baz=126
X40A **Basin Creek Fa** 33.02 329 P P 05 34 33.4 +0.5
X40A IAmb IAmb 05 34 34.3
comp=Z,7.9nm,0.7s
X40A **Basin Creek Fa** 33.02 329 P P 05 34 33.9 +1.0
baz=142,SNR=7.3
435B **Jarrell** 33.10 319 IAmb IAmb 05 34 35.2
comp=Z,10.0nm,0.7s
435B **Jarrell** 33.10 319 P P 05 34 34.5 +0.8
baz=131
W41B **Gary Mavity, V** 33.27 331 P P 05 34 36.0 +1.0
baz=144
BDFB **Brasilia** 33.38 132 P P 05 34 36.2 -0.1
comp=Z,1.1nm,0.5s,baz=300,slow=9.8,SNR=4.1
BDFB **Brasilia** 33.38 132 P P 05 34 35.4 -1.0
BDFB IAmb IAmb 05 34 37.5
comp=Z,28nm,2.0s
WHAR **Wooly Hollow** 33.39 331 P P 05 34 37.0 +0.9
WHAR IAmb IAmb 05 34 37.5
comp=Z,11nm,0.9s
MIAR **Mount Ida** 33.45 328 P P 05 34 36.8 +0.2
baz=141
NBPS **Pedro II - PI** 33.48 109 *e*P P 05 34 37.1 -0.2
WCI **Wyandotte Cave** 33.48 341 P P 05 34 38.1 +1.3
WCI IAmb IAmb 05 34 39.0
comp=Z,14nm,0.7s
WCI **Wyandotte Cave** 33.48 341 P P 05 34 38.5 +1.7
baz=156
LCAR **Lake Charles** 33.49 333 P P 05 34 38.0 +1.1
LCAR IAmb IAmb 05 34 38.3
comp=Z,10nm,1.0s
P52A **Corning** 33.67 347 P P 05 34 39.8 +1.3
P52A **Corning** 33.67 347 P P 05 34 40.3 +1.8
baz=164,SNR=9.2
USIN **University of** 33.71 339 P P 05 34 40.1 +1.2

PBMO **Poplar Bluff** 33.77 334 P P 05 34 40.3 +1.0
FCAR **Ozark Folk Cen** 33.79 332 P P 05 34 40.0 +0.5
FCAR IAmb IAmb 05 34 40.8
comp=Z,18nm,1.0s
SDBA **SAO DESIDERIO** 33.90 124 *e*P P 05 34 40.5 -0.3
N59A **State Game Lan** 34.04 356 P P 05 34 43.6 +1.9
baz=175
W39A **Magazine** 34.06 329 P P 05 34 42.8 +0.9
W39A IAmb IAmb 05 34 43.6
comp=Z,13nm,0.7s
W39A **Magazine** 34.06 329 P P 05 34 43.1 +1.2
baz=141,SNR=8.6
SIUC **Southern Illin** 34.07 337 P P 05 34 43.1 +1.2
O53A **New Philadelph** 34.08 349 P P 05 34 43.9 +1.9
baz=165
BLO **Bloomington** 34.42 341 P P 05 34 46.4 +1.5
U40A **Yellville** 34.52 331 P P 05 34 46.8 +1.0
U40A **Yellville** 34.52 331 P P 05 34 46.8 +1.0
baz=144,SNR=24
OLIL **Olney** 34.55 339 P P 05 34 46.7 +0.7
N54A **Moraine State** 34.55 351 P P 05 34 48.1 +2.1
KSPA **Keystone Colle** 34.68 356 P P 05 34 48.5 +1.4
KSPA IAmb IAmb 05 34 49.6
comp=Z,11nm,0.7s
FVM **French Village** 34.79 336 P P 05 34 49.1 +1.0
M55A **Ridgway** 34.87 353 P P 05 34 50.6 +1.8
M55A IAmb IAmb 05 35 00.9
comp=Z,17nm,1.2s
MGMO **Mountain Grove** 34.89 333 P P 05 34 49.6 +0.6
MGMO IAmb IAmb 05 34 50.1
comp=Z,6.3nm,0.7s
HHAR **Hobbs** 34.99 330 P P 05 34 50.3 +0.4
HHAR IAmb IAmb 05 34 50.4
comp=Z,7.1nm,0.6s
Q44A **Meyer Farm, Va** 35.03 338 P P 05 34 51.2 +1.0
Q44A IAmb IAmb 05 34 52.2
comp=Z,7.7nm,0.8s
M54A **Oil Creek Stat** 35.04 351 P P 05 34 52.2 +2.0
baz=168
CCM **Cathedral Cave** 35.19 335 P P 05 34 52.7 +1.1
CCM **Cathedral Cave** 35.19 335 P P 05 34 52.5 +0.9
baz=148
BINY **Binghamton** 35.33 356 P P 05 34 54.7 +2.0
baz=175
NBPB **Pedra_Branca-C** 35.61 109 *e*P P 05 34 55.1 -0.4
TUL1 **Leonard** 35.66 327 P P 05 34 55.7 +0.1
baz=139
SFIN **Lafayette** 35.70 342 P P 05 34 57.0 +1.2
SFIN **Lafayette** 35.70 342 P P 05 34 56.9 +1.1
baz=156,SNR=11
WVNY **West Valley, N** 35.78 353 P P 05 34 58.2 +1.7
S39A **Bolivar** 35.81 332 P P 05 34 57.2 +0.3
S39A IAmb IAmb 05 34 58.3
comp=Z,34nm,1.6s
R40A **Maddies Statio** 35.83 334 P P 05 34 57.5 +0.5
R40A IAmb IAmb 05 34 57.8
comp=Z,11nm,0.6s
JANB **Januaria** 35.86 127 *e*P P 05 34 56.6 -0.9
TXAR **Lajitas Array** 36.49 312 P P 05 35 03.5 +0.6
comp=Z,2.4nm,0.4s,baz=125,slow=9.1,SNR=70
TXAR PcP PcP 05 37 24.8 +1.3
comp=Z,1.6nm,0.8s,baz=134,slow=5.7,SNR=10
TXAR **Lajitas Array** 36.49 312 P P 05 35 04.0 +1.1
TX31 **Lajitas Ar. Si** 36.49 312 P P 05 35 04.0 +1.1
TX31 IAmb IAmb 05 35 04.4
comp=Z,11nm,0.8s
TX32 **Lajitas Array** 36.49 312 P P 05 35 04.0 +1.1
WMOK **Wichita Mounta** 36.51 323 P P 05 35 02.5 -0.3
baz=134
AAM **Ann Arbor** 36.56 347 P P 05 35 05.5 +2.3
baz=162
HDIL **Hopedale** 36.59 339 P P 05 35 03.6 +0.2
baz=152
P40A **Paris** 36.77 335 P P 05 35 05.4 +0.4
T35A **Sooner Cattle** 36.80 328 P P 05 35 06.0 +0.7
T35A IAmb IAmb 05 35 06.0
comp=Z,8.6nm,0.6s
NBPN **Ponto Novo - B** 37.14 118 *e*P P 05 35 08.0 -0.5
P38A **Dawn** 37.48 334 P P 05 35 11.4 +0.4
J47A **Sunmer** 37.72 346 P P 05 35 14.2 +1.3
L42A **Oliver, Polo** 38.01 340 P P 05 35 15.3 0.0
L42A IAmb IAmb 05 35 15.8
comp=Z,16nm,1.0s
SADO **Sadowa** 38.17 353 P P 05 35 17.8 +1.1
SADO IAmb IAmb 05 36 31.8
comp=Z,21nm,1.2s
DIAM **Diamantina, MG** 38.27 131 *e*P P 05 35 17.6 -0.4
KSU1 **Kansas State U** 38.51 330 P P 05 35 19.4 -0.2
baz=140,SNR=6.2
MSTX **Muleshoe** 38.51 319 P P 05 35 20.4 +0.6
MSTX IAmb IAmb 05 35 21.5
comp=Z,7.1nm,0.7s
MSTX **Muleshoe** 38.51 319 P P 05 35 20.2 +0.4
baz=128
L40A **Anamosa** 38.61 338 P P 05 35 20.4 0.0
L40A IAmb IAmb 05 35 20.9
comp=Z,15nm,0.8s
MNTX **Cornudas Mount** 39.00 314 P P 05 35 25.0 +1.2
MNTX IAmb IAmb 05 35 26.2
comp=Z,9.2nm,0.8s
MNTX **Cornudas Mount** 39.00 314 P P 05 35 24.7 +0.9
baz=123,SNR=18
JFWS **Jewell Farm** 39.01 340 P P 05 35 24.0 +0.3
JFWS **Jewell Farm** 39.01 340 P P 05 35 24.0 +0.3
baz=152,SNR=8.1
GDU01 **Guandu, BA** 39.02 122 *e*P P 05 35 23.5 -0.7
SCIA **State Center** 39.25 336 P P 05 35 26.0 +0.3
baz=147
CMC01 **Camacan, BA** 39.89 124 *e*P P 05 35 30.8 -0.6
I40A **Norwalk** 40.00 340 P P 05 35 32.2 +0.3
I40A IAmb IAmb 05 35 32.8
comp=Z,15nm,0.9s
D62A **Allapoint, All** 40.27 4 P P 05 35 35.7 +1.7
D62A IAmb IAmb 05 35 55.2
comp=Z,34nm,1.5s
LMQ **La Malbaie** 40.65 3 P P 05 35 38.9 +1.7
BATG **Bathurst New B** 40.76 7 P P 05 35 39.4 +1.3
121A **Cookes Peak, D** 41.17 313 P P 05 35 43.9 +1.9
baz=121
T25A **Trinidad** 41.52 321 P P 05 35 46.4 +1.7
baz=129
ANMO **Albuquerque** 41.54 317 P P 05 35 44.7 -0.2
ANMO **Albuquerque** 41.54 317 P P 05 35 46.0 +1.1
baz=125
ECSD **EROS Data Cent** 42.17 334 P P 05 35 48.5 -1.2
ECSD **EROS Data Cent** 42.17 334 P P 05 35 49.8 +0.1
baz=144,SNR=9.2
SDCO **Great Sand Dun** 42.58 321 P P 05 35 54.9 +1.5
baz=128,SNR=11
TUC **Tucson** 43.28 311 P P 05 35 59.4 +0.5
TUC **Tucson** 43.28 311 P P 05 36 00.0 +1.1
baz=118
S22A **4UR Ranch, Cre** 43.41 320 P P 05 36 00.9 +0.8
S22A **4UR Ranch, Cre** 43.41 320 P P 05 36 01.7 +1.6
baz=127,SNR=7.2
SUSD **Miller** 43.76 333 P P 05 36 02.2 -0.2
SUSD **Miller** 43.76 333 P P 05 36 02.4 0.0
baz=141,SNR=8.7
EYMN **Ely** 43.88 342 P P 05 36 03.5 +0.2
baz=153
W18A **Petrified Fore** 43.90 315 IAmb IAmb 05 36 06.4
comp=Z,11nm,0.9s
W18A **Petrified Fore** 43.90 315 P P 05 36 05.8 +1.9
baz=121,SNR=6.0
ISCO **Idaho Springs** 43.93 323 P P 05 36 05.6 +1.4
baz=130,SNR=8.9
MVCO **Mesa Verde** 44.18 318 IAmb IAmb 05 36 08.4
comp=Z,12nm,1.4s
MVCO **Mesa Verde** 44.18 318 P P 05 36 07.5 +1.3
baz=124,SNR=5.1
214A **Organ Pipe Nat** 44.66 309 P P 05 36 11.4 +1.5
baz=116
PV15 **Paradox Valley** 44.82 320 IAmb IAmb 05 36 13.8
comp=Z,18nm,0.9s
N23A **Red Feather La** 44.83 324 P P 05 36 12.4 +1.1
baz=130
PV13 **Radium Mtn., P** 44.93 319 IAmb IAmb 05 36 14.3
comp=Z,12nm,0.8s
B35A **Bob, Littlefor** 44.96 341 IAmb IAmb 05 36 12.7
comp=Z,9.6nm,0.6s
WUAZ **Wupatki** 45.25 315 P P 05 36 16.2 +1.6
WUAZ IAmb IAmb 05 36 17.5
comp=Z,14nm,0.9s
WUAZ **Wupatki** 45.25 315 P P 05 36 16.2 +1.6
baz=120,SNR=13
AGMN **Agassiz Nation** 45.64 339 P P 05 36 17.5 +0.3

AGMN IAmb IAmb 05 36 18.1
comp=Z,10nm,0.6s
AGMN **Agassiz Nation** 45.64 339 P P 05 36 17.5 +0.3
baz=147,SNR=7.0
Y14A **Wickenburg** 45.68 312 P P 05 36 19.0 +1.1
Y14A IAmb IAmb 05 36 19.8
comp=Z,7.6nm,0.7s
O20A **White River Ci** 45.72 322 P P 05 36 19.5 +1.2
baz=127
RSSD **Black Hills** 45.96 329 P P 05 36 20.8 +0.7
RSSD **Black Hills** 45.96 329 P P 05 36 20.6 +0.5
baz=135
MDND **Maddock** 46.71 336 P P 05 36 26.1 +0.4
baz=142
RDMU **Red Mountain** 46.80 322 P P 05 36 27.2 +0.5
P17A **Butcher Ranch,** 46.91 320 P P 05 36 28.5 +1.0
P17A IAmb IAmb 05 36 29.5
comp=Z,8.6nm,0.9s
KNB **Kanab** 47.01 316 P P 05 36 29.7 +1.3
KNB IAmb IAmb 05 36 30.9
comp=Z,11nm,0.9s
LCMT **Little Creek M** 47.30 315 IAmb IAmb 05 36 33.0
comp=Z,8.5nm,0.9s
ULM **Lac du Bonnet** 47.30 340 P P 05 36 29.8 -0.4
comp=Z,16nm,0.5s,baz=143,slow=7.1,SNR=17
ULM **Lac du Bonnet** 47.30 340 IAmb IAmb 05 36 30.7
comp=Z,24nm,1.1s
IRM **Iron Mountain** 47.37 311 P P 05 36 32.4 +1.4
baz=115
SZCU **Shurtz Canyon** 47.48 316 IAmb IAmb 05 36 33.4
comp=Z,5.0nm,0.5s
TCRU **Three Creeks R** 47.56 318 IAmb IAmb 05 36 35.0
comp=Z,14nm,0.9s
BW06 **Boulder Array** 48.10 324 P P 05 36 37.2 +0.5
baz=128,SNR=6.1
PDAR **Pinedale Array** 48.10 324 P P 05 36 37.0 +0.3
comp=Z,2.7nm,0.6s,baz=126,slow=9.2,SNR=27
PDAR PcP PcP 05 38 01.6 -0.5
comp=Z,0.5nm,0.6s,baz=128,slow=5.8,SNR=2.7
SCHQ **Schefferville** 48.14 5 P P 05 36 36.7 +0.1
comp=Z,5.8nm,0.8s,baz=191,slow=6.9,SNR=14
SCHQ **Schefferville** 48.14 5 IAmb IAmb 05 36 38.2
comp=Z,8.4nm,1.0s
TUQ **Turquoise Moun** 48.50 312 P P 05 36 40.8 +1.1
baz=116,SNR=6.2
DUG **Dugway, Tooele** 48.64 319 P P 05 36 42.1 +1.2
baz=122,SNR=5.2
AHID **Auburn Hatcher** 49.01 323 IAmb IAmb 05 36 44.9
comp=Z,7.1nm,0.9s
GSC **Goldstone, Bar** 49.09 312 P P 05 36 44.9 +0.6
GSC **Goldstone, Bar** 49.09 312 P P 05 36 45.4 +1.2
baz=115
BGU **Big Grassy Mou** 49.17 320 P P 05 36 45.7 +0.8
BGU IAmb IAmb 05 36 46.4
comp=Z,9.9nm,0.6s
DGMT **Dagmar** 49.17 333 P P 05 36 45.8 +1.3
baz=137,SNR=20
REDW **Red Top Meadow** 49.22 324 IAmb IAmb 05 36 46.9
comp=Z,11nm,0.6s
SNOW **Snow King Moun** 49.22 324 IAmb IAmb 05 36 48.1
comp=Z,5.8nm,0.7s
LOHW **Long Hollow** 49.22 324 IAmb IAmb 05 36 46.9
comp=Z,6.0nm,0.6s
TPAW **Teton Pass** 49.35 324 P P 05 36 45.8 -0.5
TPAW IAmb IAmb 05 36 46.9
comp=Z,9.0nm,1.1s
MOOW **Moose Ponds** 49.39 324 P P 05 36 46.9 +0.4
TPNV **Topopah Spring** 49.40 314 P P 05 36 48.2 +1.5
baz=116,SNR=6.3
RLMT **Red Lodge** 49.41 327 P P 05 36 47.2 +0.6
baz=129,SNR=5.4
R11A **Troy Canyon, C** 49.57 316 P P 05 36 49.2 +1.2
baz=118,SNR=6.5
FURC **Furnace Creek,** 49.63 313 P P 05 36 50.2 +2.0
baz=116
LRMC **Laurel Mtn Rad** 49.82 311 P P 05 36 50.9 +1.1
baz=114
ELK **Elko** 50.51 319 IAmb IAmb 05 37 15.4
comp=Z,16nm,2.0s
BOZ **Bozeman (W)** 51.01 326 P P 05 36 59.5 +0.9
baz=127,SNR=7.3
DLMT **Dillon** 51.41 325 IAmb IAmb 05 37 03.1
comp=Z,22nm,1.9s
HLID **Hailey** 51.46 322 P P 05 37 03.2 +1.2
HLID **Hailey** 51.46 322 P P 05 37 02.8 +0.7
baz=123,SNR=8.9
NVAR **Mina Array Bea** 51.51 315 P P 05 37 03.5 +0.9
comp=Z,2.0nm,0.6s,baz=118,slow=7.4,SNR=21
NVAR PcP PcP 05 38 15.4 +0.8
comp=Z,1.0nm,0.6s,baz=133,slow=4.9,SNR=8.0
NVAR **Mina Array Bea** 51.51 315 P P 05 37 04.1 +1.5
EGMT **Eagleton** 51.53 329 P P 05 37 03.6 +1.2
EGMT IAmb IAmb 05 37 04.1
comp=Z,13nm,1.4s
EGMT **Eagleton** 51.53 329 P P 05 37 02.9 +0.5
baz=131
LRM **Limekiln Ridge** 51.60 326 P P 05 37 04.2 +1.0
BMN **Battle Mountai** 51.67 317 P P 05 37 04.5 +0.8
HRY **Holter Researc** 51.80 327 P P 05 37 05.6 +1.2
PAGB **Antelope Grade** 51.84 311 P P 05 37 06.3 +1.5
PAGB IAmb IAmb 05 37 53.9
comp=Z,24nm,1.4s
MFID **Camas Ranch** 52.26 321 P P 05 37 09.0 +1.2
MFID IAmb IAmb 05 37 10.3
comp=Z,7.7nm,0.7s
PAHR **Pah Rah Range** 52.82 316 P P 05 37 13.2 +1.1
MSO **Missoula** 53.03 326 P P 05 37 14.0 +0.5
baz=126
FFC **Flin Flon** 53.10 339 P P 05 37 13.5 -0.2
FFC IAmb IAmb 05 37 14.0
comp=Z,4.5nm,0.5s
PLID **Pearl Lake** 53.25 323 IAmb IAmb 05 37 16.6
comp=Z,5.8nm,1.0s
WVOR **Wild Horse Val** 53.56 319 IAmb IAmb 05 37 20.5
comp=Z,8.1nm,1.0s
FCC **Fort Churchill** 54.28 347 IAmb IAmb 05 37 22.8
comp=Z,9.6nm,1.1s
MOD **Modoc Plateau** 54.41 318 IAmb IAmb 05 38 12.4
comp=Z,16nm,1.8s
F10A **Beach Ranch, E** 54.45 323 IAmb IAmb 05 37 24.6
comp=Z,6.8nm,0.6s
O03E **Paynes Creek** 54.76 315 P P 05 37 26.0 -0.1
baz=114
G08A **Pilot Rock** 55.14 322 IAmb IAmb 05 37 30.3
comp=Z,9.0nm,0.7s
M04C **Macdoel** 55.40 317 P P 05 37 31.4 +0.7
baz=115
O02D **Mt. Diablo Mer** 55.40 315 P P 05 37 30.0 -0.7
baz=113
NEW **Newport** 55.62 326 P P 05 37 32.0 -0.1
baz=123
J05D **Fort Rock, OR** 55.64 319 P P 05 37 33.3 +0.9
baz=116,SNR=6.1
L04D **Klamath Falls** 55.89 317 P P 05 37 34.5 +0.3
baz=115
C09A **Chrisman Ranch** 56.02 325 IAmb IAmb 05 37 36.4
comp=Z,9.4nm,0.8s
H04A **Detroit Lake** 56.88 320 IAmb IAmb 05 37 44.6
comp=Z,12nm,0.9s
B08A **Colville Reser** 56.92 325 IAmb IAmb 05 37 42.3
comp=Z,5.0nm,0.8s
DY2G **Dye2** 62.37 12 *i* P P 05 38 16.8 -1.7
YKA **Yellowknife Ar** 63.28 340 P P 05 38 24.2 0.0
comp=Z,11nm,0.6s,baz=133,slow=6.6,SNR=89
DBIC **Dimbokro** 67.70 86 P P 05 38 52.2 -1.3
comp=Z,3.1nm,0.7s,baz=272,slow=8.1,SNR=5.2
DBIC **Dimbokro** 67.70 86 P P 05 38 52.0 -1.5
DBIC IAmb IAmb 05 40 49.8
comp=Z,25nm,1.7s
TGTN **Hyland Airport** 67.97 335 P P 05 38 55.8 +1.4
baz=118
RES **Resolute Bay** 68.98 354 P P 05 39 00.6 +0.2
RES IAmb IAmb 05 40 05.5
comp=Z,15nm,1.9s
SUMG **Summit** 68.98 11 *i* P P 05 39 00.0 -1.0
SUMG IAmb IAmb 05 39 02.1
comp=Z,17nm,1.1s
SUMG **Summit** 68.98 11 P P 05 39 01.3 +0.4
M31M **Drury Creek, Y** 70.87 334 P P 05 39 13.1 +0.9
baz=113
N31M **Braeburn, Yuko** 71.22 333 P P 05 39 15.7 +1.4
baz=111
NEEM **North Greenlan** 71.55 5 *i* P P 05 39 15.4 -1.0
NEEM IAmb IAmb 05 39 16.9
comp=Z,12nm,0.7s
M30M **Minto, Yukon** 72.05 334 P P 05 39 20.3 +1.0
baz=111

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **A36M** | **Sachs Harbour** | **72.45** | **345** | P | | **P** | | **05 39 21.7 +0.3** |
| | baz=125 | | | | | | | |
| **INK** | **Inuvik** | **73.05** | **340** | P | | **P** | | **05 39 25.5 +0.6** |
| **INK** | **Inuvik** | **73.05** | **340** | P | | **P** | | **05 39 25.4 +0.4** |
| | baz=115 | | | | | | | |
| **YUK3** | **Moose Creek** | **73.42** | **333** | P | | **P** | | **05 39 28.3 +0.7** |
| | baz=107 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.70** | **78** | P | | **P** | | **05 39 28.1 -1.7** |
| | comp=Z,0.2nm,0.3s,baz=285,slow=6.5,SNR=8.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.70** | **78** | P | | **P** | | **05 39 28.1 -1.7** |
| **M27K** | **Edge Creek, AK** | **74.23** | **333** | P | | **P** | | **05 39 33.9 +1.7** |
| | baz=106 | | | | | | | |
| **L27K** | **Beaver Creek,** | **74.40** | **334** | P | | **P** | | **05 39 34.3 +1.3** |
| | baz=106 | | | | | | | |
| **EGAK** | **Eagle** | **74.61** | **336** | P | | **P** | | **05 39 35.4 +1.2** |
| | baz=107 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **75.06** | **334** | P | | **P** | | **05 39 38.5 +1.6** |
| | baz=105 | | | | | | | |
| **DOT** | **Dot Lake** | **75.53** | **334** | P | | **P** | | **05 39 41.0 +1.5** |
| DOT | | | | IAmb | | IAmb | | 05 39 41.5 |
| | comp=Z,7.3nm,0.6s | | | | | | | |
| **DAG** | **Danmarks Havn** | **75.65** | **11** | *i* P | | **P** | | **05 39 37.9 -2.0** |
| DAG | | | | IAmb | | IAmb | | 05 39 40.3 |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **RIDG** | **Independent Ri** | **75.89** | **334** | P | | **P** | | **05 39 42.8 +1.2** |
| | baz=103 | | | | | | | |
| **PAX** | **Paxson** | **75.98** | **333** | P | | **P** | | **05 39 43.4 +1.2** |
| | baz=103 | | | | | | | |
| **J25K** | **Salcha River,** | **76.31** | **335** | P | | **P** | | **05 39 44.7 +0.7** |
| | baz=103 | | | | | | | |
| **HDA** | **Harding Lake** | **76.93** | **335** | P | | **P** | | **05 39 47.7 +0.3** |
| | baz=102 | | | | | | | |
| **ILAR** | **Eielson Array** | **76.98** | **335** | P | | **P** | | **05 39 47.8 +0.1** |
| | comp=Z,1.7nm,0.8s,baz=110,slow=4.7,SNR=16 | | | | | | | |
| **MLY** | **Manley** | **78.65** | **335** | P | | **P** | | **05 39 57.3 +0.4** |
| | baz=98 | | | | | | | |
| **PPLA** | **Purkeypile** | **79.00** | **333** | P | | **P** | | **05 39 59.5 +0.5** |
| | baz=96 | | | | | | | |
| **CAST** | **Castle Rocks** | **79.02** | **333** | IAmb | | IAmb | | 05 39 59.7 |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **CAST** | **Castle Rocks** | **79.02** | **333** | P | | **P** | | **05 39 59.1 +0.1** |
| | baz=97 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **79.17** | **334** | P | | **P** | | **05 40 00.2 +0.4** |
| | baz=97 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **79.32** | **329** | P | | **P** | | **05 40 03.5 +2.8** |
| | baz=94 | | | | | | | |
| **L20K** | **Farewell, AK** | **79.73** | **332** | P | | **P** | | **05 40 02.7 -0.2** |
| | baz=95 | | | | | | | |
| **K20K** | **Telida** | **79.90** | **333** | P | | **P** | | **05 40 03.7 0.0** |
| | baz=95 | | | | | | | |
| **J20K** | **Nowinta River** | **80.00** | **334** | P | | **P** | | **05 40 04.5 +0.3** |
| | baz=95 | | | | | | | |
| **L19K** | **White Mountain** | **80.17** | **332** | P | | **P** | | **05 40 05.0 -0.1** |
| | baz=94 | | | | | | | |
| **TTA** | **Tatalina** | **80.75** | **333** | P | | **P** | | **05 40 08.5 +0.2** |
| | baz=93 | | | | | | | |
| **NOA** | **NORSAR Array B** | **81.31** | **29** | P | | **P** | | **05 40 11.5 +0.3** |
| | comp=Z,0.3nm,0.7s,baz=270,slow=6.6,SNR=2.1 | | | | | | | |
| **UNV** | **Unalaska Valle** | **86.57** | **324** | P | | **P** | | **05 40 38.9 +0.9** |
| **ARCES** | **ARCESS Array B** | **86.66** | **20** | P | | **P** | | **05 40 37.9 -0.3** |
| | comp=Z,1.1nm,0.5s,baz=258,slow=3.6,SNR=6.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.66** | **20** | P | | **P** | | **05 40 38.1 -0.1** |
| **ZALV** | **Zalesovo Beam** | **116.66** | **14** | PKP | | **PKPdf** | | **05 46 37.2 -0.9** |
| | comp=Z,0.7nm,0.4s,baz=328,slow=1.8,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **116.66** | **14** | | | **PKPdf** | | **05 46 37.4 -0.7** |
| **MKAR** | **Makanchi Array** | **122.31** | **20** | PKP | | **PKPdf** | | **05 46 48.5 -0.8** |
| | comp=Z,0.6nm,0.4s,baz=298,slow=2.7,SNR=23 | | | | | | | |
| **MKAR** | **Makanchi Array** | **122.31** | **20** | | | **PKPdf** | | **05 46 48.7 -0.6** |
| **SONM** | **Songino Array** | **125.58** | **0** | PKP | | **PKPdf** | | **05 46 55.2 -0.4** |
| | comp=Z,0.3nm,0.4s,baz=2.5,slow=2.0,SNR=4.7 | | | | | | | |
| **SONM** | **Songino Array** | **125.58** | **0** | | | **PKPdf** | | **05 46 55.7 +0.1** |
| **LZH** | **Lanzhou** | **137.23** | **4** | *e*PKP | | **PKPdf** | | **05 47 19.0 +1.0** |
| **PZH** | **PanZhiHua** | **146.50** | **8** | PKPbc | | **PKPdf** | | **05 47 33.5 -1.2** |
| **ASAR** | **Alice Springs** | **149.14** | **234** | PKP | | **PKPdf** | | **05 47 38.6 -0.4** |
| | comp=Z,3.2nm,0.6s,baz=109,slow=1.5,SNR=14 | | | | | | | |
| ASAR | | | | PKPbc | | **PKPbc** | | **05 47 42.5 -0.8** |
| | comp=Z,3.8nm,0.5s,baz=116,slow=3.7,SNR=26 | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.37** | **241** | PKP | | **PKPdf** | | **05 47 40.0 -1.0** |
| | comp=Z,0.5nm,0.6s,baz=106,slow=2.8,SNR=11 | | | | | | | |
| WRA | | | | PKPbc | | **PKPbc** | | **05 47 45.4 -1.0** |
| | comp=Z,3.6nm,0.4s,baz=106,slow=2.8,SNR=30 | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.37** | **241** | PKPbc | | **PKPbc** | | **05 47 45.7 -0.7** |
| **CMAR** | **Chiang Mai Arr** | **153.68** | **17** | PKP | | **PKPdf** | | **05 47 46.0 0.0** |
| | comp=Z,0.7nm,0.3s,baz=325,slow=1.1,SNR=1.9 | | | | | | | |
| CMAR | | | | PKPbc | | **PKPbc** | | **05 47 53.7 -0.2** |
| | comp=Z,1.7nm,0.4s,baz=329,slow=3.6,SNR=6.9 | | | | | | | |

*BJI* ***28*** *06:00:38.2±0.0,4.°55S×153.°88E,h108km,mb4.8/45, mB4.9/21*
*IDC* ***28*** *06:00:40.9±1.2,4.°42S×153.°56E,h103km±9km,mb4.2/26, mb1 4.3/29,mb1mx4.3/44,mbtmp4.6/29,MS3.4/12, Ms1 3.4/12,ms1mx3.1/61,Error ellipse: s-maj=12.9km s-min=9.1km az=97.0*
*NEIC* ***28*** *06:00:41.1±0.9,4.°41S±0.°07×153.°59E±0.°06,h101km±5km, mb4.8/49,Error ellipse: s-maj=12.4km s-min=6.6km az=144.0*
*DJA* ***28*** *06:00:41.5±1.1,4.°5S±5.°15×15.°4E±1.°0,h110km±7km,M4.9/23, mB5.1/6,mb5.0/23,MLv5.0/1,Mw(mB)4.5/6*
**ISC 28 06:00:41.3±0.9,4.°42S±0.°05×153.°57E±0.°06,h107km±7km, n185,σ1°09/189,mb4.8/72,1C-2D,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.42** | **279** | | | **Pn** | **06 01 06.4** | **-0.6** |
| RABL | | | | | Sn | **Sn** | **06 01 26.0** | **-0.5** |
| **RABL** | **Rabaul** | **1.42** | **279** | P | | **Pn** | **06 01 06.5** | **-0.5** |
| **KRVT** | **Keravat (AS076** | **1.54** | **274** | P | | **Pn** | **06 01 08.1** | **-0.3** |
| | 39nm,0.3s,baz=351,slow=0.3,SNR=33 | | | | | | | |
| KRVT | | | | S | | **Sn** | **06 01 28.1** | **-1.0** |
| | 20nm,0.3s,baz=212,slow=24,SNR=20 | | | | | | | |
| **MANU** | **Manus Island** | **6.63** | **291** | Pn | | **Pn** | **06 02 14.8** | **-1.4** |
| **HNR** | **Honiara** | **8.05** | **129** | S | | **Sn** | **06 04 06.2** | **+1.2** |
| | 27nm,0.3s,baz=164,slow=14,SNR=1.9 | | | | | | | |
| **PMG** | **Port Moresby** | **8.06** | **232** | P | | **Pn** | **06 02 36.1** | **+0.4** |
| | 44nm,0.3s,baz=40,slow=5.6,SNR=63 | | | | | | | |
| PMG | | | | S | | **Sn** | **06 04 05.2** | **-0.1** |
| | 13nm,0.3s,baz=135,slow=23,SNR=21 | | | | | | | |
| PMG | | | | LR | | LR | 06 05 58.5 | |
| | comp=Z,175nm,20.6s,baz=30,slow=39 | | | | | | | |
| **PMG** | **Port Moresby** | **8.06** | **232** | Pn | | **Pn** | **06 02 35.7** | **0.0** |
| **PMG** | **Port Moresby** | **8.06** | **232** | P | | **Pn** | **06 02 36.7** | **+1.0** |
| **PATS** | **Pohnpei** | **12.14** | **23** | Pn | | **Pn** | **06 03 30.0** | **-0.8** |
| **JAY** | **Jayapura** | **12.98** | **278** | P | | **Pn** | **06 03 41.6** | **-0.2** |
| | 0.8nm,0.3s,baz=145,slow=16,SNR=2.2 | | | | | | | |
| **GENI** | **Genyem** | **13.50** | **277** | P | | Pn | 06 03 36.8 | -12 |
| **GENI** | **Genyem** | **13.50** | **277** | P | | **Pn** | **06 03 47.2** | **-1.4** |
| **COEN** | **Coen** | **13.96** | **227** | Pn | | **Pn** | **06 03 55.4** | **+0.9** |
| **COEN** | **Coen** | **13.96** | **227** | P | | **Pn** | **06 03 55.4** | **+0.9** |
| **SMPI** | **Sarmi** | **15.03** | **279** | P | | **P** | **06 04 14.4** | **+3.4** |
| **CTA** | **Charters Tower** | **17.13** | **204** | P | | **Pn** | **06 04 35.0** | **+0.9** |
| | 0.3nm,0.3s,baz=31,slow=11,SNR=8.9 | | | | | | | |
| CTA | | | | LR | | LR | 06 10 40.5 | |
| | comp=Z,105nm,18.5s,baz=44,slow=35 | | | | | | | |
| **RK1H** | **Rockhampton Ha** | **19.09** | **189** | P | | **Pn** | **06 04 57.3** | **-0.3** |
| **GUMO** | **Guam** | **19.87** | **334** | LR | | LR | 06 11 37.4 | |
| | comp=Z,28nm,22.0s,baz=108,slow=33 | | | | | | | |
| **EIDS** | **Eidsvold** | **20.97** | **186** | P | | **P** | **06 05 16.0** | **+0.1** |
| **EIDS** | **Eidsvold** | **20.97** | **186** | P | | **P** | **06 05 17.3** | **+1.4** |
| **QIS** | **Mount Isa** | **21.02** | **219** | P | | **P** | **06 05 16.7** | **+0.1** |
| **FAKI** | **Fak Fak** | **21.33** | **273** | P | | **P** | **06 05 19.8** | **-0.1** |
| **FAKI** | **Fak Fak** | **21.33** | **273** | P | | **P** | **06 05 19.6** | **-0.3** |
| **DZM** | **Mont Dzumac** | **21.53** | **146** | P | | **P** | **06 05 22.3** | **+0.2** |
| | 2.7nm,0.5s,baz=287,slow=8.8,SNR=12 | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.53** | **146** | P | | **P** | **06 05 21.5** | **-0.6** |
| DZM | | | | IAmb | | IAmb | 06 05 57.3 | |
| | comp=Z,48nm,1.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.53** | **146** | P | | **P** | **06 05 23.2** | **+1.1** |
| **KDU** | **Kakadu** | **22.40** | **247** | P | | **P** | **06 05 30.4** | **-0.8** |
| **RMQ** | **Roma** | **22.42** | **191** | P | | **P** | **06 05 32.3** | **+1.0** |
| **SIJI** | **Sorong** | **22.55** | **278** | P | | **P** | **06 05 32.7** | **-0.1** |
| | comp=Z,28nm,0.6s,baz=70,slow=11,SNR=12 | | | | | | | |
| **MTN** | **Manton Dam** | **23.69** | **248** | P | | **P** | **06 05 42.9** | **-0.6** |
| **DRS** | **Darwin Rock St** | **23.78** | **249** | P | | **P** | **06 05 44.1** | **-0.2** |
| **QLP** | **Quilpie** | **23.78** | **201** | P | | **P** | **06 05 44.6** | **+0.4** |
| **WB0** | **Warramunga Arr** | **24.12** | **229** | P | | **P** | **06 05 47.2** | **-0.2** |
| WB0 | | | | IAmb | | IAmb | 06 05 49.0 | |
| | comp=Z,48nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.26** | **229** | P | | **P** | **06 05 48.5** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 06 05 50.2 | |
| | comp=Z,43nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.26** | **229** | P | | **P** | **06 05 48.8** | **+0.2** |
| **WB2** | **Warramunga Arr** | **24.26** | **229** | P | | **P** | **06 05 48.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **24.27** | **229** | P | | **P** | **06 05 48.6** | **-0.1** |
| | comp=Z,34nm,0.5s,baz=54,slow=10.0,SNR=342 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **06 09 26.6** | **+0.3** |
| | comp=Z,3.4nm,0.8s,baz=49,slow=2.5,SNR=5.9 | | | | | | | |
| WRA | | | | | S | **S** | **06 10 02.9** | **+2.8** |
| | comp=Z,2.0nm,0.8s,baz=46,slow=16,SNR=6.8 | | | | | | | |
| WRA | | | | | LR | LR | 06 15 42.1 | |
| | comp=Z,104nm,18.6s,baz=40,slow=37 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.27** | **229** | P | | **P** | **06 05 47.8** | **-0.9** |
| **ARMA** | **Armidale** | **25.93** | **184** | P | | **P** | **06 06 04.4** | **+0.7** |
| ARMA | | | | | IAmb | IAmb | 06 06 05.4 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **25.93** | **184** | P | | **P** | **06 06 04.8** | **+1.1** |
| **KNRA** | **Kununurra** | **26.83** | **244** | P | | **P** | **06 06 11.6** | **-0.3** |
| KNRA | | | | | IAmb | IAmb | 06 06 16.0 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **26.83** | **244** | P | | **P** | **06 06 11.5** | **-0.3** |
| **AS31** | **Alice Springs** | **26.95** | **223** | P | | **P** | **06 06 12.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **26.95** | **223** | P | | **P** | **06 06 12.5** | **-0.4** |
| | comp=Z,4.8nm,0.8s,baz=57,slow=8.9,SNR=113 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **06 09 32.3** | **-0.1** |
| | comp=Z,2.6nm,0.7s,baz=54,slow=2.6,SNR=8.4 | | | | | | | |
| ASAR | | | | | S | **S** | **06 10 39.6** | **-2.8** |
| | comp=Z,0.6nm,0.9s,baz=31,slow=16,SNR=2.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.95** | **223** | P | | **P** | **06 06 12.2** | **-0.7** |
| **CMSA** | **Cobar Meteorol** | **27.97** | **194** | P | | **P** | **06 06 22.4** | **+0.5** |
| **OOD** | **Oodnadatta** | **28.82** | **214** | P | | **P** | **06 06 29.2** | **-0.3** |
| **STKA** | **Stephens Creek** | **29.54** | **201** | P | | **P** | **06 06 35.5** | **-0.3** |
| | comp=Z,14nm,0.6s,baz=18,slow=9.4,SNR=34 | | | | | | | |
| STKA | | | | | LR | LR | 06 18 11.8 | |
| | comp=Z,30nm,21.5s,baz=30,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.54** | **201** | P | | **P** | **06 06 35.6** | **-0.3** |
| **STKA** | **Stephens Creek** | **29.54** | **201** | P | | **P** | **06 06 35.7** | **-0.1** |
| **LCRK** | **Leigh Creek** | **29.67** | **208** | P | | **P** | **06 06 37.2** | **+0.2** |
| **BATI** | **Baumata** | **30.20** | **257** | P | | **P** | **06 06 41.2** | **-0.7** |
| | comp=Z,18nm,0.5s,baz=117,slow=7.1,SNR=1.8 | | | | | | | |
| BATI | | | | | LR | LR | 06 21 14.2 | |
| | comp=Z,73nm,19.7s,baz=80,slow=41 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.51** | **241** | P | | **P** | **06 06 43.8** | **-0.8** |
| | comp=Z,9.2nm,0.7s,baz=72,slow=5.9,SNR=23 | | | | | | | |
| FITZ | | | | | PcP | **PcP** | **06 09 41.2** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=114,slow=3.7,SNR=3.6 | | | | | | | |
| FITZ | | | | | LR | LR | 06 18 35.0 | |
| | comp=Z,68nm,20.1s,baz=92,slow=35 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.51** | **241** | P | | **P** | **06 06 44.1** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **30.51** | **241** | P | | **P** | **06 06 43.8** | **-0.8** |
| **GTOI** | **Gorontalo** | **30.94** | **279** | P | | **P** | **06 06 49.3** | **+0.9** |
| | comp=Z,192nmcomp=Z,25nm,0.6s | | | | | | | |
| **CNB** | **Canberra Magne** | **30.99** | **187** | P | | **P** | **06 06 49.8** | **+1.2** |
| **MULG** | **Mulgathing** | **31.64** | **213** | P | | **P** | **06 06 53.7** | **-0.6** |
| **WRKA** | **Warakurna** | **31.78** | **227** | P | | **P** | **06 06 54.9** | **-0.8** |
| **HTT** | **Hallett** | **31.93** | **204** | P | | **P** | **06 06 57.1** | **+0.2** |
| **BBOO** | **Buckleboo** | **32.65** | **208** | P | | **P** | **06 07 02.4** | **-0.8** |
| BBOO | | | | | IAmb | IAmb | 06 07 14.3 | |
| | comp=Z,71nm,1.9s | | | | | | | |
| **BBOO** | **Buckleboo** | **32.65** | **208** | P | | **P** | **06 07 02.5** | **-0.6** |
| **ARPS** | **Mount Arapiles** | **33.95** | **197** | P | | **P** | **06 07 15.3** | **+0.9** |
| **WBSI** | **Waikabubak, Su** | **34.30** | **259** | P | | **P** | **06 07 16.7** | **-1.1** |
| | comp=Z,88nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **35.57** | **220** | P | | **P** | **06 07 28.3** | **-0.1** |
| **FORT** | **Forrest** | **35.57** | **220** | P | | **P** | **06 07 28.1** | **-0.3** |
| **PLAI** | **Plampang** | **35.81** | **261** | P | | **P** | **06 07 28.6** | **-2.1** |
| **RAO** | **Raoul Island** | **36.60** | **136** | LR | | LR | 06 20 45.0 | |
| | comp=Z,247nm,18.0s,baz=114,slow=33 | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.88** | **239** | P | | **P** | **06 07 39.3** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **36.88** | **239** | P | | **P** | **06 07 39.0** | **-0.8** |
| **TAU** | **Tasmania Unive** | **38.73** | **187** | P | | **P** | **06 07 56.4** | **+1.5** |
| **URZ** | **Ururera** | **39.93** | **151** | LR | | LR | 06 23 39.1 | |
| | comp=Z,109nm,21.1s,baz=32,slow=34 | | | | | | | |
| **MEEK** | **Meekatharra** | **40.04** | **233** | P | | **P** | **06 08 05.6** | **-0.6** |
| **RPZ** | **Rata Peaks** | **42.07** | **161** | P | | **P** | **06 08 23.1** | **+0.6** |
| | comp=Z,9.7nm,0.6s,baz=312,slow=3.0,SNR=7.5 | | | | | | | |
| **RPZ** | **Rata Peaks** | **42.07** | **161** | P | | **P** | **06 08 23.2** | **+0.6** |
| **GIRL** | **Giralia** | **42.12** | **241** | P | | **P** | **06 08 23.4** | **+0.2** |
| **JNU** | **Nakatsue** | **43.09** | **332** | P | | **P** | **06 08 31.2** | **+0.3** |
| | comp=Z,5.7nm,0.5s,baz=100,slow=8.6,SNR=3.5 | | | | | | | |
| **KLBR** | **Kellerberrin** | **43.12** | **227** | P | | **P** | **06 08 30.0** | **-1.2** |
| **WHZ** | **Wether Hill Ro** | **43.17** | **165** | P | | **P** | **06 08 30.6** | **-0.7** |
| **MORW** | **Morawa** | **43.18** | **231** | P | | **P** | **06 08 30.9** | **-0.8** |
| MORW | | | | | IAmb | IAmb | 06 08 31.6 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **MORW** | **Morawa** | **43.18** | **231** | P | | **P** | **06 08 31.0** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **43.20** | **342** | P | | **P** | **06 08 30.9** | **-0.9** |
| | comp=Z,1.0nm,0.4s,baz=170,slow=9.5,SNR=4.5 | | | | | | | |
| MJAR | | | | | PcP | **PcP** | **06 10 19.5** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=194,slow=4.5,SNR=4.2 | | | | | | | |
| **MAT** | **Matsushiro** | **43.21** | **342** | P | | **P** | **06 08 29.9** | **-1.9** |
| **BLDU** | **Ballidu** | **43.40** | **229** | P | | **P** | **06 08 32.3** | **-1.2** |
| **RKGY** | **Rocky Gully** | **45.28** | **224** | P | | **P** | **06 08 48.7** | **+0.3** |
| **LEM** | **Lembang** | **45.78** | **265** | LR | | LR | 06 29 46.6 | |
| | comp=Z,26nm,21.9s,baz=26,slow=38 | | | | | | | |
| **KSRS** | **Korea Array** | **48.01** | **332** | P | | **P** | **06 09 10.1** | **+0.5** |
| | comp=Z,2.9nm,0.7s,baz=145,slow=8.4,SNR=9.6 | | | | | | | |
| **NJ2** | **Nanjing** | **49.04** | **320** | *e*P | | **P** | **06 09 20.3** | **+2.7** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **49.31** | **350** | P | | **P** | **06 09 21.1** | **+1.7** |
| | comp=Z,2.7nm,0.6s,baz=162,slow=3.8,SNR=6.7 | | | | | | | |
| ASAJ | | | | | LR | LR | 06 26 23.8 | |
| | comp=Z,42nm,21.2s,baz=141,slow=31 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.14** | **340** | P | | **P** | **06 09 41.0** | **+0.3** |
| | comp=Z,2.1nm,0.7s,baz=182,slow=4.0,SNR=2.7 | | | | | | | |
| **KULM** | **Kulim** | **53.73** | **280** | P | | **P** | **06 09 52.0** | **-0.9** |
| **MNSI** | **Mandailing Nat** | **54.19** | **274** | P | | **P** | **06 09 54.9** | **-1.4** |
| | comp=Z,6μmcomp=Z,26nm,0.7s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **55.06** | **276** | P | | **P** | **06 10 00.6** | **-2.0** |
| **PSI** | **Prapat** | **55.07** | **276** | P | | **P** | **06 10 00.6** | **-2.2** |
| | comp=Z,5.0nm,0.4s,baz=259,slow=16,SNR=4.7 | | | | | | | |
| **BNX** | **BinXian** | **55.10** | **338** | ↑P | | **P** | **06 10 02.8** | **+0.5** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,250nm,6.4s | | | | | | | |
| **GSI** | **Gunungsitoli** | **56.24** | **275** | P | | **P** | **06 10 09.9** | **-1.2** |
| **GSI** | **Gunungsitoli** | **56.24** | **275** | P | | **P** | **06 10 09.8** | **-1.2** |
| | comp=Z,24nm,0.7s | | | | | | | |
| **KLR** | **Kul'dur** | **56.70** | **343** | PcP | | **PcP** | **06 11 08.5** | **0.0** |
| | comp=Z,1.6nm,0.6s,baz=180,slow=4.0,SNR=3.1 | | | | | | | |
| **XAN** | **Xi'an** | **56.88** | **316** | P | | **P** | **06 10 14.3** | **-0.9** |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **57.41** | **303** | ↓P | | **P** | **06 10 21.5** | **+2.1** |
| KMI | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.42** | **3** | P | | **P** | **06 10 19.1** | **+0.5** |
| | comp=Z,6.4nm,1.0s,baz=155,slow=8.2,SNR=4.2 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.42** | **3** | P | | **P** | **06 10 18.7** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **58.41** | **295** | P | | **P** | **06 10 26.2** | **0.0** |
| | comp=Z,7.8nm,0.9s,baz=117,slow=3.2,SNR=4.8 | | | | | | | |
| **XLT** | **XiLinHaoTe** | **58.73** | **329** | *e*P | | **P** | **06 10 28.5** | **+0.4** |
| XLT | | | | | pP | pP | 06 10 54.0 | +0.8 |
| XLT | | | | | sP | sP | 06 11 04.3 | -0.4 |
| XLT | | | | | PcP | **PcP** | **06 11 17.3** | **+0.5** |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,100nm,5.1s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,370nm,23.6s | | | | | | | |
| **PZH** | **PanZhiHua** | **58.79** | **305** | P | | **P** | **06 10 29.3** | **+0.5** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,100nm,5.7s | | | | | | | |
| **CD2** | **Chengdu** | **59.08** | **310** | P | | **P** | **06 10 31.8** | **+1.2** |
| CD2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.19** | **324** | *e*P | | **P** | **06 10 34.5** | **+3.2** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,68nm,5.5s | | | | | | | |
| **LZH** | **Lanzhou** | **61.50** | **315** | *e*P | | **P** | **06 10 48.5** | **+1.3** |
| LZH | | | | | pP | pwP | 06 11 20.0 | +4.0 |
| LZH | | | | | sP | PcP | 06 11 29.5 | +1.4 |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| **MA2** | **Magadan** | **63.84** | **358** | P | | **P** | **06 11 02.0** | **-0.1** |
| MA2 | | | | | IAmb | IAmb | 06 11 03.4 | |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| **GTA** | **Gaotai** | **65.90** | **317** | *e*P | | **P** | **06 11 17.3** | **+1.3** |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **65.92** | **98** | P | | **P** | **06 11 13.8** | **-2.8** |
| **ULN** | **Ulaanbaatar** | **66.08** | **328** | P | | **P** | **06 11 17.5** | **+0.5** |
| **SONM** | **Songino Array** | **66.42** | **327** | P | | **P** | **06 11 19.8** | **+0.6** |
| | comp=Z,1.9nm,0.6s,baz=149,slow=5.7,SNR=13 | | | | | | | |
| **SONM** | **Songino Array** | **66.42** | **327** | P | | **P** | **06 11 19.4** | **+0.3** |
| **SHL** | **Shillong** | **66.78** | **300** | P | | **P** | **06 11 22.0** | **+0.1** |
| **GOMU** | **GeErMu** | **68.08** | **312** | P | | **P** | **06 11 29.0** | **-1.2** |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,83nm,4.0s | | | | | | | |
| **TAPN** | **Taplejung** | **70.87** | **301** | *e*P | | **P** | **06 11 48.3** | **+0.9** |
| | comp=Z,37nm,0.8s | | | | | | | |
| **JIRN** | **Jiri** | **72.25** | **301** | *e*P | | **P** | **06 11 56.7** | **+0.9** |
| | comp=Z,23nm,0.7s | | | | | | | |
| **GUN** | **Gumba** | **72.58** | **301** | *e*P | | **P** | **06 11 58.6** | **+0.8** |
| | comp=Z,71nm,0.7s | | | | | | | |
| **BILL** | **Bilibino** | **72.85** | **5** | P | | **P** | **06 11 58.6** | **+0.6** |
| BILL | | | | | IAmb | IAmb | 06 11 59.9 | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **72.90** | **300** | *e*P | | **P** | **06 12 00.1** | **+0.5** |
| **KKN** | **Kakani** | **73.07** | **301** | *e*P | | **P** | **06 12 01.1** | **+0.6** |
| **DMN** | **Daman** | **73.17** | **300** | *e*P | | **P** | **06 12 02.0** | **+0.9** |
| | comp=Z,90nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **73.18** | **178** | P | | **P** | **06 12 00.7** | **+0.8** |
| | comp=Z,5.3nm,0.7s,baz=330,slow=7.2,SNR=19 | | | | | | | |
| **VNDA** | **Vanda** | **73.18** | **178** | P | | **P** | **06 12 01.0** | **+1.1** |
| VNDA | | | | | IAmb | IAmb | 06 12 46.9 | |
| | comp=Z,61nm,1.9s | | | | | | | |
| **GKN** | **Gorkha** | **73.67** | **301** | *e*P | | **P** | **06 12 04.5** | **+0.6** |
| | comp=Z,65nm,0.9s | | | | | | | |
| **DANN** | **Dangsing** | **74.50** | **301** | *e*P | | **P** | **06 12 09.0** | **0.0** |
| | comp=Z,36nm,0.8s | | | | | | | |
| **KOLN** | **Koldanda** | **74.50** | **300** | *e*P | | **P** | **06 12 09.1** | **+0.2** |
| | comp=Z,51nm,1.0s | | | | | | | |
| **PYUN** | **Piuthan** | **75.11** | **300** | *e*P | | **P** | **06 12 12.4** | **+0.1** |
| | comp=Z,66nm,1.0s | | | | | | | |
| **WMQ** | **Urumqi** | **75.98** | **317** | *e*P | | **P** | **06 12 18.5** | **+1.7** |
| WMQ | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **L19K** | **White Mountain** | **77.11** | **22** | P | | **P** | **06 12 24.6** | **+1.9** |
| L19K | | | | | IAmb | IAmb | 06 14 53.1 | |
| | comp=Z,59nm,2.0s | | | | | | | |
| **RDOG** | **Red Dog Mine** | **78.41** | **15** | P | | **P** | **06 12 30.8** | **+1.0** |
| RDOG | | | | | IAmb | IAmb | 06 12 32.3 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **78.56** | **21** | IAmb | | IAmb | 06 15 13.4 | |
| | comp=Z,30nm,1.9s | | | | | | | |
| **IMAR** | **Indian Mountai** | **79.77** | **19** | P | | **P** | **06 12 38.0** | **+0.8** |
| **MCK** | **McKinley** | **80.22** | **22** | P | | **P** | **06 12 40.0** | **+0.2** |
| MCK | | | | | IAmb | IAmb | 06 13 58.2 | |
| | comp=Z,63nm,1.8s | | | | | | | |
| **MLY** | **Manley** | **80.26** | **21** | P | | **P** | **06 12 41.1** | **+1.2** |
| MLY | | | | | IAmb | IAmb | 06 13 06.7 | |
| | comp=Z,19nm,1.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **80.55** | **319** | P | | **P** | **06 12 42.5** | **+0.6** |
| **MKAR** | **Makanchi Array** | **80.55** | **319** | P | | **P** | **06 12 42.3** | **+0.4** |
| | comp=Z,3.9nm,0.8s,baz=96,slow=7.7,SNR=35 | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.55** | **319** | P | | **P** | **06 12 42.0** | **+0.2** |
| **MAKZ** | **Makanchi** | **80.76** | **319** | P | | **P** | **06 12 42.6** | **-0.4** |
| **ZAA0** | **Zalesovo Array** | **81.27** | **326** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | baz=296 | | | | | | | |
| ILA | | | | *e*S | | **Sn** | 06 11 47.2 | +0.4 | |
| | | baz=296 | | | | | | | |
| **NDS** | **Dongshan** | | **0.25** | **262** | ⇑*i* P | **Pn** | 06 11 39.1 | +0.3 | |
| | | baz=265 | | | | | | | |
| NDS | | | | | S | **Sn** | 06 11 46.9 | 0.0 | |
| | | baz=265 | | | | | | | |
| **EWUT** | **Wuta** | | **0.29** | **220** | *i* P | **Pn** | 06 11 39.0 | 0.0 | |
| | | baz=223 | | | | | | | |
| EWUT | | | | | S | **Sn** | 06 11 47.0 | -0.4 | |
| | | baz=223 | | | | | | | |
| **ENA** | **Nanau** | | **0.33** | **223** | *i* P | **Pn** | 06 11 39.2 | 0.0 | |
| | | baz=224 | | | | | | | |
| ENA | | | | | S | **Sn** | 06 11 47.5 | -0.3 | |
| | | baz=224 | | | | | | | |
| **TIPB** | **Shuangxi** | | **0.33** | **335** | P | **Pn** | 06 11 39.5 | +0.1 | |
| | | baz=334 | | | | | | | |
| TIPB | | | | | *e*S | **Sn** | 06 11 47.3 | -0.7 | |
| | | baz=334 | | | | | | | |
| **TWB1** | **Santiao Chiao** | | **0.34** | **1** | P | **Pn** | 06 11 39.3 | 0.0 | |
| TWB1 | | | | | S | **Sn** | 06 11 47.1 | -0.8 | |
| **FUSB** | **Fushanzhiwuyua** | | **0.37** | **284** | P | **Pn** | 06 11 40.1 | +0.4 | |
| | | baz=285 | | | | | | | |
| FUSB | | | | | S | **Sn** | 06 11 48.6 | +0.1 | |
| | | baz=285 | | | | | | | |
| **ENTT** | **Nioudou** | | **0.38** | **266** | P | **Pn** | 06 11 40.1 | +0.4 | |
| | | baz=267 | | | | | | | |
| ENTT | | | | | *e*S | **Sn** | 06 11 49.0 | +0.5 | |
| | | baz=267 | | | | | | | |
| **NDT** | **Datong Townshi** | | **0.43** | **261** | P | **Pn** | 06 11 40.5 | +0.3 | |
| | | baz=263 | | | | | | | |
| NDT | | | | | *e*S | **Sn** | 06 11 49.6 | +0.4 | |
| | | baz=263 | | | | | | | |
| **SXI1** | **Grass Mountain** | | **0.43** | **347** | *e*P | **Pn** | 06 11 40.2 | 0.0 | |
| | | baz=346 | | | | | | | |
| SXI1 | | | | | *e*S | **Sn** | 06 11 48.9 | -0.6 | |
| | | baz=346 | | | | | | | |
| **LATG** | **Datong** | | **0.44** | **252** | P | **Pn** | 06 11 40.5 | +0.2 | |
| | | baz=254 | | | | | | | |
| LATG | | | | | S | **Sn** | 06 11 49.5 | 0.0 | |
| | | baz=254 | | | | | | | |
| **NWF** | **Wu-fen Shan** | | **0.44** | **335** | *e*P | **Pn** | 06 11 40.5 | +0.2 | |
| | | baz=335 | | | | | | | |
| NWF | | | | | *e*S | **Sn** | 06 11 49.1 | -0.5 | |
| | | baz=335 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | | **0.44** | **335** | *e*P | **Pn** | 06 11 40.5 | +0.3 | |
| | | baz=335 | | | | | | | |
| WFSB | | | | | S | **Sn** | 06 11 49.2 | -0.2 | |
| | | baz=335 | | | | | | | |
| **NWLT** | **Wulai** | | **0.45** | **284** | P | **Pn** | 06 11 40.5 | +0.3 | |
| | | baz=285 | | | | | | | |
| NWLT | | | | | *e*S | **Sn** | 06 11 49.2 | -0.3 | |
| | | baz=285 | | | | | | | |
| **TWA** | **Mucha** | | **0.48** | **311** | P | **Pn** | 06 11 40.8 | +0.3 | |
| | | baz=311 | | | | | | | |
| TWA | | | | | S | **Sn** | 06 11 49.8 | -0.2 | |
| | | baz=311 | | | | | | | |
| **NHDH** | **Xindian Distri** | | **0.51** | **305** | P | **Pn** | 06 11 41.3 | +0.5 | |
| | | baz=305 | | | | | | | |
| NHDH | | | | | *e*S | **Sn** | 06 11 50.7 | +0.3 | |
| | | baz=305 | | | | | | | |
| **TNOU** | **National Taiwa** | | **0.52** | **338** | *e*P | **Pn** | 06 11 40.9 | 0.0 | |
| | | baz=338 | | | | | | | |
| TNOU | | | | | *e*S | **Sn** | 06 11 50.0 | -0.5 | |
| | | baz=338 | | | | | | | |
| **NHY** | **Taipei** | | **0.53** | **315** | *e*P | **Pn** | 06 11 38.5 | -2.5 | |
| | | baz=314 | | | | | | | |
| NHY | | | | | *e*S | **Sn** | 06 11 51.4 | +0.7 | |
| | | baz=314 | | | | | | | |
| **YHNB** | **Yeheng** | | **0.55** | **270** | P | **Pn** | 06 11 41.6 | +0.3 | |
| | | baz=271 | | | | | | | |
| YHNB | | | | | *e*S | **Sn** | 06 11 51.2 | -0.2 | |
| | | baz=271 | | | | | | | |
| **NSK** | **Sanguang** | | **0.57** | **271** | P | **Pn** | 06 11 41.6 | +0.2 | |
| | | baz=271 | | | | | | | |
| NSK | | | | | *e*S | **Sn** | 06 11 51.2 | -0.4 | |
| | | baz=271 | | | | | | | |
| **TAP** | **Taipei** | | **0.57** | **311** | *e*P | **Pn** | 06 11 41.7 | +0.3 | |
| | | baz=311 | | | | | | | |
| TAP | | | | | *e*S | **Sn** | 06 11 51.8 | +0.3 | |
| | | baz=311 | | | | | | | |
| **NNSB** | **Datong** | | **0.60** | **247** | P | **Pn** | 06 11 42.0 | +0.2 | |
| | | baz=248 | | | | | | | |
| NNSB | | | | | *e*S | **Sn** | 06 11 52.0 | -0.2 | |
| | | baz=248 | | | | | | | |
| **NNS** | **Nan Shan** | | **0.60** | **248** | P | **Pn** | 06 11 42.0 | +0.2 | |
| | | baz=248 | | | | | | | |
| NNS | | | | | S | **Sn** | 06 11 52.1 | -0.2 | |
| | | baz=248 | | | | | | | |
| **ETL** | **Fush Village** | | **0.60** | **213** | P | **Pn** | 06 11 41.3 | -0.5 | |
| | | baz=214 | | | | | | | |
| **NACB** | **Ninganchiao** | | **0.61** | **216** | P | **Pn** | 06 11 41.0 | -0.7 | |
| | | baz=217 | | | | | | | |
| NACB | | | | | *e*S | **Sn** | 06 11 51.8 | -0.4 | |
| | | baz=217 | | | | | | | |
| **YM08** | **YM08** | | **0.63** | **325** | *e*P | **Pn** | 06 11 42.6 | +0.6 | |
| | | baz=325 | | | | | | | |
| YM08 | | | | | *e*S | **Sn** | 06 11 51.3 | -1.3 | |
| | | baz=325 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | | **0.65** | **225** | *e*P | **Pn** | 06 11 41.9 | -0.4 | |
| | | baz=226 | | | | | | | |
| ETLH | | | | | *e*S | **Sn** | 06 11 53.0 | 0.0 | |
| | | baz=226 | | | | | | | |
| **ANP** | **Anpu** | | **0.67** | **321** | *e*P | **Pn** | 06 11 42.4 | 0.0 | |
| | | baz=321 | | | | | | | |
| ANP | | | | | *e*S | **Sn** | 06 11 53.9 | +0.5 | |
| | | baz=321 | | | | | | | |
| **TWS1** | **Kuangyinshan** | | **0.67** | **310** | P | **Pn** | 06 11 43.1 | +0.7 | |
| | | baz=310 | | | | | | | |
| TWS1 | | | | | *e*S | **Sn** | 06 11 54.5 | +1.2 | |
| | | baz=310 | | | | | | | |
| **TWD** | **Chiawan** | | **0.68** | **211** | *e*P | **Pn** | 06 11 42.1 | -0.5 | |
| | | baz=211 | | | | | | | |
| **NTST** | **Danshui** | | **0.69** | **316** | P | **Pn** | 06 11 43.3 | +0.6 | |
| | | baz=315 | | | | | | | |
| NTST | | | | | *e*S | **Sn** | 06 11 54.6 | +0.9 | |
| | | baz=315 | | | | | | | |
| **TWY** | **Chenhua** | | **0.70** | **330** | *e*S | **Sn** | 06 11 54.9 | +1.1 | |
| | | baz=330 | | | | | | | |
| **NTY** | **Taoyuan** | | **0.70** | **298** | *e*P | **Pn** | 06 11 43.3 | +0.5 | |
| | | baz=298 | | | | | | | |
| NTY | | | | | *e*S | **Sn** | 06 11 55.0 | +1.1 | |
| | | baz=298 | | | | | | | |
| **HWA** | **Hwalien** | | **0.77** | **207** | *e*P | **Pn** | 06 11 43.6 | 0.0 | |
| | | baz=207 | | | | | | | |
| **NCU** | **National Centr** | | **0.78** | **293** | *e*P | **Pn** | 06 11 44.2 | +0.5 | |
| | | baz=293 | | | | | | | |
| NCU | | | | | *e*S | **Sn** | 06 11 56.3 | +0.7 | |
| | | baz=293 | | | | | | | |
| **NCUH** | **Zhongli** | | **0.78** | **293** | *e*P | **Pn** | 06 11 45.0 | +1.3 | |
| | | baz=293 | | | | | | | |
| NCUH | | | | | *e*S | **Sn** | 06 11 56.5 | +0.9 | |
| | | baz=293 | | | | | | | |
| **NFF** | **Wufeng Townshi** | | **0.79** | **268** | *e*P | **Pn** | 06 11 44.0 | +0.2 | |
| | | baz=268 | | | | | | | |
| NFF | | | | | *e*S | **Sn** | 06 11 55.7 | -0.1 | |
| | | baz=268 | | | | | | | |
| **FUSS** | **Fushou** | | **0.79** | **238** | P | **Pn** | 06 11 44.4 | +0.3 | |
| | | baz=239 | | | | | | | |
| FUSS | | | | | S | **Sn** | 06 11 56.4 | +0.2 | |
| | | baz=239 | | | | | | | |
| **NJD** | **Zhudong** | | **0.82** | **275** | *e*S | **Sn** | 06 11 57.1 | +0.8 | |
| | | baz=275 | | | | | | | |
| **ETM** | **Tongmen** | | **0.83** | **213** | *e*P | **Pn** | 06 11 43.4 | -0.9 | |
| | | baz=213 | | | | | | | |
| **WHF** | **Hehuan Shan** | | **0.84** | **232** | *e*P | **Pn** | 06 11 44.7 | -0.1 | |
| | | baz=232 | | | | | | | |
| WHF | | | | | *e*S | **Sn** | 06 11 57.2 | -0.1 | |
| | | baz=232 | | | | | | | |
| **TDCB** | **Techi** | | **0.86** | **241** | *e*P | **Pn** | 06 11 45.2 | +0.5 | |
| | | baz=242 | | | | | | | |
| TDCB | | | | | *e*S | **Sn** | 06 11 57.2 | -0.1 | |
| | | baz=242 | | | | | | | |
| **TEYL** | **Yanliau Villag** | | **0.87** | **204** | P | **Pn** | 06 11 44.4 | -0.3 | |
| | | baz=205 | | | | | | | |
| TEYL | | | | | *e*S | **Sn** | 06 11 57.0 | -0.4 | |
| | | baz=205 | | | | | | | |
| **LIOB** | **Emei** | | **0.88** | **269** | *e*P | **Pn** | 06 11 45.3 | +0.4 | |
| | | baz=269 | | | | | | | |
| LIOB | | | | | *e*S | **Sn** | 06 11 58.1 | +0.5 | |
| | | baz=269 | | | | | | | |
| **HSN1** | **Hsinchu** | | **0.88** | **277** | *e*P | **Pn** | 06 11 45.5 | +0.6 | |
| | | baz=277 | | | | | | | |
| HSN1 | | | | | *e*S | **Sn** | 06 11 58.4 | +0.7 | |
| | | baz=277 | | | | | | | |
| **NSTT** | **Nanjuang** | | **0.89** | **268** | P | **Pn** | 06 11 45.5 | +0.6 | |
| | | baz=268 | | | | | | | |
| NSTT | | | | | *e*S | **Sn** | 06 11 57.9 | 0.0 | |
| | | baz=268 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | | **0.90** | **104** | P | **Pn** | 06 11 45.1 | 0.0 | |
| JYNG | | | | | *e*S | **Sn** | 06 11 57.7 | -0.3 | |
| **NHW** | **Xinwu Township** | | **0.91** | **292** | *e*P | **Pn** | 06 11 45.8 | +0.5 | |
| | | baz=292 | | | | | | | |
| NHW | | | | | *e*S | **Sn** | 06 11 59.3 | +1.0 | |
| | | baz=292 | | | | | | | |
| **SBCB** | **Hsinchu** | | **0.92** | **278** | *e*P | **Pn** | 06 11 45.6 | +0.4 | |
| | | baz=278 | | | | | | | |
| SBCB | | | | | *e*S | **Sn** | 06 11 59.0 | +0.7 | |
| | | baz=278 | | | | | | | |
| **HSN** | **Hsinchu** | | **0.93** | **278** | *e*P | **Pn** | 06 11 45.5 | 0.0 | |
| | | baz=281 | | | | | | | |
| HSN | | | | | *e*S | **Sn** | 06 11 58.2 | -0.4 | |
| | | baz=281 | | | | | | | |
| **CHGB** | **Renai** | | **0.95** | **231** | P | **Pn** | 06 11 46.3 | +0.3 | |
| | | baz=231 | | | | | | | |
| CHGB | | | | | *e*S | **Sn** | 06 11 59.1 | -0.4 | |
| | | baz=231 | | | | | | | |
| **YOJ** | **Yonaguni jima** | | **0.96** | **102** | P | **Pn** | 06 11 45.7 | 0.0 | |
| YOJ | | | | | *e*S | **Sn** | 06 11 58.9 | -0.3 | |
| **YOJ** | **Yonaguni jima** | | **0.96** | **102** | P | **Pn** | 06 11 45.7 | 0.0 | |
| | | baz=101 | | | | | | | |
| **PCYT** | **Pengchaiyu** | | **0.96** | **5** | *e*P | **Pn** | 06 11 46.4 | +0.5 | |
| | | baz=4.0 | | | | | | | |
| **ESL** | **Shilin** | | **0.99** | **211** | *e*P | **Pn** | 06 11 44.9 | -1.3 | |
| | | baz=210 | | | | | | | |
| **WHP** | **Taichung City** | | **1.02** | **248** | *e*P | **Pn** | 06 11 47.7 | +1.0 | |
| | | baz=248 | | | | | | | |
| WHP | | | | | *e*S | **Sn** | 06 12 01.4 | +0.7 | |
| | | baz=248 | | | | | | | |
| **WUSB** | **Renai** | | **1.04** | **230** | P | **Pn** | 06 11 47.3 | +0.4 | |
| | | baz=230 | | | | | | | |
| WUSB | | | | | S | **Sn** | 06 12 01.0 | -0.2 | |
| | | baz=230 | | | | | | | |
| **NMLH** | **Miaoli** | | **1.09** | **263** | *e*P | **Pn** | 06 11 48.0 | +0.5 | |
| | | baz=263 | | | | | | | |
| NMLH | | | | | *e*S | **Sn** | 06 12 02.3 | +0.1 | |
| | | baz=263 | | | | | | | |
| **NSY** | **Sanyi** | | **1.14** | **258** | *e*P | **Pn** | 06 11 48.7 | +0.6 | |
| | | baz=257 | | | | | | | |
| NSY | | | | | *e*S | **Sn** | 06 12 04.0 | +0.6 | |
| | | baz=257 | | | | | | | |
| **WPL** | **Puli Township** | | **1.14** | **235** | *e*P | **Pn** | 06 11 48.6 | +0.6 | |
| | | baz=236 | | | | | | | |
| WPL | | | | | *e*S | **Sn** | 06 12 03.4 | +0.1 | |
| | | baz=236 | | | | | | | |
| **TWQ1** | **Liyutan** | | **1.15** | **254** | *e*P | **Pn** | 06 11 49.0 | +0.8 | |
| | | baz=254 | | | | | | | |
| TWQ1 | | | | | *e*S | **Sn** | 06 12 03.6 | +0.1 | |
| | | baz=254 | | | | | | | |
| **WCS** | **Beigang Elemen** | | **1.15** | **238** | *e*P | **Pn** | 06 11 49.2 | +1.0 | |
| | | baz=238 | | | | | | | |
| WCS | | | | | *e*S | **Sn** | 06 12 04.0 | +0.5 | |
| | | baz=238 | | | | | | | |
| **VWDT** | **VWDT** | | **1.19** | **220** | *e*P | **Pn** | 06 11 49.0 | +0.3 | |
| | | baz=220 | | | | | | | |
| VWDT | | | | | *e*S | **Sn** | 06 12 05.0 | +0.6 | |
| | | baz=220 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | | **1.26** | **232** | *e*P | **Pn** | 06 11 50.9 | +1.2 | |
| | | baz=232 | | | | | | | |
| SMLT | | | | | *e*S | **Sn** | 06 12 06.7 | +0.5 | |
| | | baz=232 | | | | | | | |
| **WDJ** | **Dajia District** | | **1.26** | **256** | *e*P | **Pn** | 06 11 50.3 | +0.7 | |
| | | baz=256 | | | | | | | |
| WDJ | | | | | *e*S | **Sn** | 06 12 06.0 | -0.1 | |
| | | baz=256 | | | | | | | |
| **HGSD** | **Ruisui** | | **1.28** | **204** | *e*P | **Pn** | 06 11 49.5 | -0.3 | |
| | | baz=204 | | | | | | | |
| **TYC** | **Yuchr** | | **1.28** | **234** | *e*P | **Pn** | 06 11 50.7 | +0.9 | |
| | | baz=233 | | | | | | | |
| TYC | | | | | *e*S | **Sn** | 06 12 06.9 | +0.5 | |
| | | baz=233 | | | | | | | |
| **SSLB** | **Suanglung** | | **1.28** | **227** | *e*P | **Pn** | 06 11 50.2 | +0.2 | |
| | | baz=227 | | | | | | | |
| SSLB | | | | | *e*S | **Sn** | 06 12 08.2 | +1.5 | |
| | | baz=227 | | | | | | | |
| **TCU** | **Taichung** | | **1.30** | **247** | *e*P | **Pn** | 06 11 50.8 | +0.7 | |
| | | baz=247 | | | | | | | |
| **EHY** | **Hungye** | | **1.30** | **208** | *e*P | **Pn** | 06 11 48.8 | -1.4 | |
| | | baz=207 | | | | | | | |
| **WWF** | **Wufeng** | | **1.33** | **242** | *e*S | **Sn** | 06 12 08.5 | +1.0 | |
| | | baz=242 | | | | | | | |
| **WNT1** | **Nantou City** | | **1.41** | **238** | *e*S | **Sn** | 06 12 10.8 | +1.3 | |
| | | baz=238 | | | | | | | |
| **YULB** | **Yu-li** | | **1.42** | **206** | *e*P | **Pn** | 06 11 50.2 | -1.5 | |
| | | baz=206 | | | | | | | |
| **WJS** | **Zhushan** | | **1.42** | **234** | *e*P | **Pn** | 06 11 52.9 | +1.2 | |
| | | baz=234 | | | | | | | |
| WJS | | | | | *e*S | **Sn** | 06 12 10.6 | +0.8 | |
| | | baz=234 | | | | | | | |
| **WNT** | **Mingjian** | | **1.42** | **237** | *e*S | **Sn** | 06 12 10.8 | +1.0 | |
| | | baz=236 | | | | | | | |
| **WCHH** | **Zhanghua** | | **1.43** | **246** | *e*S | **Sn** | 06 12 09.7 | -0.1 | |
| | | baz=246 | | | | | | | |
| **EYUL** | **Yuli** | | **1.45** | **205** | *e*P | **Pn** | 06 11 52.4 | +0.3 | |
| | | baz=205 | | | | | | | |
| **YUS** | **Yu-Shan** | | **1.50** | **219** | *e*P | **Pn** | 06 11 53.7 | +0.4 | |
| | | baz=219 | | | | | | | |
| **ALS** | **Alishan** | | **1.58** | **223** | *e*P | **Pn** | 06 11 55.3 | +1.3 | |
| | | baz=223 | | | | | | | |
| ALS | | | | | *e*S | **Sn** | 06 12 15.5 | +1.6 | |
| | | baz=223 | | | | | | | |
| **FULB** | **Fuli** | | **1.59** | **203** | *e*P | **Pn** | 06 11 53.5 | -0.4 | |
| | | baz=203 | | | | | | | |
| **WGK** | **Gukeng** | | **1.62** | **233** | *e*P | **Pn** | 06 11 55.1 | +0.7 | |
| | | baz=233 | | | | | | | |
| WGK | | | | | *e*S | **Sn** | 06 12 15.1 | +0.6 | |
| | | baz=233 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | | **1.63** | **101** | P | **Pn** | 06 11 54.4 | 0.0 | |
| IRIF | | | | | S | **Sn** | 06 12 14.7 | +0.1 | |
| **WDLH** | **Douliu** | | **1.64** | **234** | *e*P | **Pn** | 06 11 55.4 | +0.8 | |
| | | baz=234 | | | | | | | |
| WDLH | | | | | *e*S | **Sn** | 06 12 16.0 | +1.0 | |
| | | baz=234 | | | | | | | |
| **WRL** | **Guolierlin Hig** | | **1.65** | **243** | *e*P | **Pn** | 06 11 54.7 | 0.0 | |
| | | baz=243 | | | | | | | |
| WRL | | | | | *e*S | **Sn** | 06 12 14.3 | -0.9 | |
| | | baz=243 | | | | | | | |
| **CHKT** | **Chengkung** | | **1.66** | **200** | *e*P | **Pn** | 06 11 53.7 | -1.2 | |
| | | baz=200 | | | | | | | |
| CHKT | | | | | *e*S | **Sn** | 06 12 13.3 | -2.1 | |
| | | baz=200 | | | | | | | |
| **WTK** | **Tuku** | | **1.75** | **236** | *e*P | **Pn** | 06 11 56.5 | +0.5 | |
| | | baz=236 | | | | | | | |
| WTK | | | | | *e*S | **Sn** | 06 12 17.4 | -0.2 | |
| | | baz=236 | | | | | | | |
| **HATJ** | **Hateruma jima** | | **1.77** | **110** | P | **Pn** | 06 11 57.0 | +0.7 | |
| **EDH** | **Donghe** | | **1.80** | **200** | *e*P | **Pn** | 06 11 55.8 | -0.9 | |
| | | baz=200 | | | | | | | |
| **TPUB** | **Ta-pu** | | **1.84** | **223** | *e*P | **Pn** | 06 11 58.3 | +1.0 | |
| | | baz=222 | | | | | | | |
| TPUB | | | | | *e*S | **Sn** | 06 12 20.4 | +0.7 | |
| | | baz=222 | | | | | | | |
| **CHY** | **Chiayi** | | **1.84** | **231** | *e*P | **Pn** | 06 11 58.1 | +0.9 | |
| | | baz=231 | | | | | | | |
| CHY | | | | | *e*S | **Sn** | 06 12 20.2 | +0.5 | |
| | | baz=231 | | | | | | | |
| **WTP** | **Ta-pu** | | **1.89** | **222** | *e*P | **Pn** | 06 11 59.2 | +1.3 | |
| | | baz=221 | | | | | | | |
| **JKRS** | **Kuro-shima** | | **1.90** | **103** | P | **Pn** | 06 11 58.5 | +0.5 | |
| JKRS | | | | | *e*S | **Sn** | 06 12 21.1 | +0.1 | |
| **WSF** | **Szhu** | | **1.91** | **238** | *e*S | **Sn** | 06 12 21.9 | +0.6 | |
| | | baz=237 | | | | | | | |
| **TWK** | **Hsinying** | | **1.95** | **225** | *e*P | **Pn** | 06 11 60.0 | +1.1 | |
| | | baz=224 | | | | | | | |
| **WSL** | **Shuilin Townsh** | | **1.97** | **235** | *e*P | **Pn** | 06 11 59.4 | +0.5 | |
| | | baz=235 | | | | | | | |
| WSL | | | | | *e*S | **Sn** | 06 12 22.6 | -0.1 | |
| | | baz=235 | | | | | | | |
| **CHN1** | **Nanshi** | | **1.99** | **222** | *e*P | **Pn** | 06 12 00.2 | +1.0 | |
| | | baz=222 | | | | | | | |
| **JIJ** | **Ishigaki jima** | | **1.99** | **98** | P | **Pn** | 06 11 59.4 | +0.2 | |
| JIJ | | | | | *e*S | **Sn** | 06 12 22.4 | -0.9 | |
| **TWGBT** | **Beinan** | | **2.02** | **204** | *e*P | **Pn** | 06 11 59.5 | -0.2 | |
| | | baz=204 | | | | | | | |
| **ICHU** | **Yijhu** | | **2.03** | **230** | *e*P | **Pn** | 06 12 00.6 | +0.8 | |
| | | baz=230 | | | | | | | |
| ICHU | | | | | *e*S | **Sn** | 06 12 24.9 | +0.6 | |
| | | baz=230 | | | | | | | |
| **LDUT** | **Ludao** | | **2.04** | **193** | *e*P | **Pn** | 06 11 58.4 | -1.5 | |
| | | baz=193 | | | | | | | |
| **SLGT** | **Liugui** | | **2.07** | **217** | *e*P | **Pn** | 06 12 00.9 | +0.6 | |
| | | baz=216 | | | | | | | |
| **CHN8** | **Yiju** | | **2.09** | **231** | *e*S | **Sn** | 06 12 25.8 | +0.2 | |
| | | baz=231 | | | | | | | |
| **JISG** | **Ishigakijimahi** | | **2.12** | **92** | P | **Pn** | 06 12 01.3 | +0.3 | |
| JISG | | | | | S | **Sn** | 06 12 26.4 | 0.0 | |
| **SSD** | **Sandimen** | | **2.28** | **213** | *e*P | **Pn** | 06 12 04.0 | +0.8 | |
| | | baz=213 | | | | | | | |
| **TSMG** | **Majia** | | **2.31** | **212** | *e*P | **Pn** | 06 12 05.3 | +1.8 | |
| | | baz=212 | | | | | | | |
| **MATB** | **Ma-tsu** | | **2.36** | **309** | *e*P | **Pn** | 06 12 04.1 | -0.2 | |
| | | baz=308 | | | | | | | |
| **MSUT** | **Lienchiang** | | **2.39** | **309** | P | **Pn** | 06 12 04.7 | +0.1 | |
| | | baz=308 | | | | | | | |
| **MASBT** | **Mashibuluo** | | **2.39** | **211** | *e*P | **Pn** | 06 12 05.7 | +1.0 | |
| | | baz=211 | | | | | | | |
| **JTJ** | **Tarama** | | **2.47** | **90** | *e*S | **Sn** | 06 12 36.6 | +1.6 | |
| **PHUB** | **P'eng-hu** | | **2.48** | **243** | *e*S | **Sn** | 06 12 31.7 | -3.5 | |
| | | baz=242 | | | | | | | |
| **EAST** | **Anshuo** | | **2.50** | **205** | *e*P | **Pn** | 06 12 08.4 | +2.2 | |
| | | baz=204 | | | | | | | |
| **SCZT** | **Fangliau** | | **2.61** | **209** | *e*P | **Pn** | 06 12 08.6 | +1.0 | |
| | | baz=208 | | | | | | | |
| **PTMZ** | **Houxiangcun** | | **2.63** | **279** | *e*P | **Pn** | 06 12 07.6 | -0.2 | |
| | | baz=278 | | | | | | | |
| PTMZ | | | | | *e*S | **Sn** | 06 12 35.7 | -2.9 | |
| | | baz=278 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | | **2.75** | **314** | *e*P | **Pn** | 06 12 09.5 | 0.0 | |
| | | baz=313 | | | | | | | |
| LYJJ | | | | | *e*S | **Sn** | 06 12 40.7 | -0.8 | |
| | | baz=313 | | | | | | | |
| **XPSS** | **Dashiqiu** | | **2.77** | **325** | *e*P | **Pn** | 06 12 09.8 | 0.0 | |
| | | baz=324 | | | | | | | |
| XPSS | | | | | *e*S | **Sn** | 06 12 41.2 | -1.0 | |
| | | baz=324 | | | | | | | |
| **JIRB** | **Irabujima** | | **2.90** | **86** | *e*S | **Sn** | 06 12 46.6 | +1.2 | |
| **MHZQ** | **Yeshan** | | **3.03** | **299** | *e*S | **Sn** | 06 12 48.2 | -0.2 | |
| | | baz=298 | | | | | | | |
| **KNM** | **Kinmen** | | **3.24** | **266** | *e*P | **Pn** | 06 12 17.3 | +1.1 | |
| | | baz=265 | | | | | | | |
| KNM | | | | | *e*S | **Sn** | 06 12 52.9 | -0.8 | |
| | | baz=265 | | | | | | | |
| **KNMB** | **Chin-men Tao** | | **3.28** | **267** | *e*P | **Pn** | 06 12 16.2 | -0.5 | |
| | | baz=266 | | | | | | | |
| KNMB | | | | | *e*S | **Sn** | 06 12 50.8 | -3.8 | |
| | | baz=266 | | | | | | | |
| **AXDP** | **Jialang** | | **3.66** | **274** | *e*P | **Pn** | 06 12 21.7 | -0.1 | |
| | | baz=273 | | | | | | | |
| AXDP | | | | | *e*S | **Sn** | 06 13 00.5 | -3.2 | |
| | | baz=273 | | | | | | | |

**TAP 28 06:11:36.1, 22.99N×120.96E, h9km±1km, ML1.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LONT** | **Longtian** | **0.18** | **117** | *i* P | | **Pg** | | 06 11 40.4 | +0.6 |
| | baz=117 | | | | | | | | |
| LONT | | | | *i* S | | **Sg** | | 06 11 43.1 | +0.8 |
| | baz=117 | | | | | | | | |
| **TWG** | **Pinlang** | **0.20** | **148** | P | | **Pg** | | 06 11 41.0 | +0.8 |
| | baz=147 | | | | | | | | |
| TWG | | | | S | | **Sg** | | 06 11 44.0 | +1.1 |
| | baz=147 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.20** | **147** | *e*P | | **Pg** | | 06 11 40.9 | +0.7 |
| | baz=147 | | | | | | | | |
| TWGBT | | | | S | | **Sg** | | 06 11 44.0 | +1.0 |
| | baz=147 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.21** | **15** | P | | **Pg** | | 06 11 40.8 | +0.3 |
| | baz=24 | | | | | | | | |
| ELDTW | | | | *e*S | | **Sg** | | 06 11 43.4 | 0.0 |
| | baz=24 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.25** | **317** | P | | **Pg** | | 06 11 41.7 | +0.5 |
| | baz=317 | | | | | | | | |
| STYH | | | | *e*S | | **Sg** | | 06 11 45.5 | +1.0 |
| | baz=317 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.26** | **313** | P | | **Pg** | | 06 11 41.7 | +0.4 |
| | baz=313 | | | | | | | | |
| STYT | | | | *e*S | | **Sg** | | 06 11 45.6 | +0.8 |
| | baz=313 | | | | | | | | |
| **SLGT** | **Liugui** | **0.29** | **271** | *e*P | | **Pg** | | 06 11 42.5 | +0.6 |
| | baz=270 | | | | | | | | |
| SLGT | | | | *e*S | | **Sg** | | 06 11 46.3 | +0.6 |
| | baz=270 | | | | | | | | |
| **SSD** | **Sandimen** | **0.39** | **232** | *e*P | | **Pg** | | 06 11 43.6 | -0.1 |
| | baz=230 | | | | | | | | |
| **ECL** | **Taimali** | **0.39** | **181** | *e*P | | **Pg** | | 06 11 44.1 | +0.4 |
| | baz=179 | | | | | | | | |
| ECL | | | | *e*S | | **Sg** | | 06 11 49.1 | +0.3 |
| | baz=179 | | | | | | | | |
| **EYUL** | **Yuli** | **0.49** | **43** | *e*P | | **Pg** | | 06 11 45.6 | 0.0 |
| | baz=45 | | | | | | | | |

*KRNET* ***28*** *06:46:35.5±0.1, 40.34N×73.26E, h13km, mb2.9*
*SOME* ***28*** *06:46:35.0, 40.47N×73.23E, h0km*
*NNC* ***28*** *06:46:37.8±2.5, 40.42N×73.30E, h0km, mb3.6, mpv3.2,*
*Error ellipse: s-maj=21.7km s-min=13.1km az=170.0*

**ISC 28 06:46:34.6±1.5, 40.41N±0.05×73.25E±0.03, h8km±13km, n36, σ1$49/59, 22C-6D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **0.37** | **289** | ⇑*i* P | | **Pb** | | 06 46 43.7 | +0.1 |
| | baz=97 | | | | | | | | |
| OHH | | | | ⇑*i* S | | **Sb** | | 06 46 49.2 | -0.4 |
| | baz=97 | | | | | | | | |
| **SALK** | **Salom-Alik** | **0.64** | **42** | ⇑*e* P | | **Pb** | | 06 46 48.8 | +0.6 |
| | baz=38 | | | | | | | | |
| SALK | | | | ⇑*e* S | | **Sn** | | 06 46 58.6 | -2.1 |
| | baz=38 | | | | | | | | |
| **DRK** | **Karamyk** | **1.45** | **231** | ⇑*i* P | | **Pn** | | 06 47 02.2 | +0.8 |
| | baz=33 | | | | | | | | |
| DRK | | | | ⇑*i* S | | **Sn** | | 06 47 21.5 | +0.8 |
| | baz=33 | | | | | | | | |
| **ARLS** | **Aral** | **1.67** | **29** | ⇓*i* P | | **Pg** | | 06 47 07.5 | +1.0 |
| | baz=28 | | | | | | | | |
| ARLS | | | | ⇓*i* S | | **Sg** | | 06 47 31.1 | +3.0 |
| | baz=28 | | | | | | | | |
| **ARK** | **Arkit** | **1.70** | **325** | ⇑*i* P | | **Pg** | | 06 47 07.9 | +0.8 |
| | baz=27 | | | | | | | | |
| ARK | | | | ⇑*i* S | | **Sg** | | 06 47 32.3 | +3.1 |
| | baz=27 | | | | | | | | |
| **BTK** | **Batken** | **1.89** | **260** | ⇑*i* P | | **Pb** | | 06 47 10.4 | +0.9 |
| | baz=62 | | | | | | | | |
| BTK | | | | ⇑*i* S | | **Sg** | | 06 47 36.1 | +0.7 |
| | baz=62 | | | | | | | | |
| **TRKS** | **Terek-Say** | **1.95** | **306** | ⇓*i* P | | **Pg** | | 06 47 11.3 | -0.7 |
| | baz=6.0 | | | | | | | | |
| TRKS | | | | ⇓*i* S | | **Sg** | | 06 47 37.6 | +0.2 |
| | baz=6.0 | | | | | | | | |
| **UCH** | **Uchtor** | **2.05** | **27** | ⇑*i* P | | **Pg** | | 06 47 14.1 | +0.1 |
| | baz=26 | | | | | | | | |
| UCH | | | | ⇑*i* S | | **Sg** | | 06 47 42.5 | +1.9 |
| | baz=26 | | | | | | | | |
| **MNAS** | **Manas** | **2.15** | **345** | ⇑*i* P | | **Pg** | | 06 47 14.9 | -1.0 |
| | baz=46 | | | | | | | | |
| MNAS | | | | ⇑*i* S | | **Sg** | | 06 47 44.6 | +0.8 |
| | baz=46 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.29** | **10** | ⇑*e* P | | **Pg** | | 06 47 17.4 | -1.0 |
| | baz=9.0 | | | | | | | | |
| EKS2 | | | | ⇑*i* S | | **Sg** | | 06 47 48.2 | +0.1 |
| | baz=9.0 | | | | | | | | |
| **MRKS** | **Merke** | **2.34** | **360** | *e*P | | **Pg** | | 06 47 19.8 | +0.4 |
| | 3.3nm,0.1s | | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | | 06 47 51.8 | +2.1 |
| | 34nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **2.34** | **360** | Pg | | **Pg** | | 06 47 19.8 | +0.4 |
| | 6.0nm,0.4s | | | | | | | | |
| MRKS | | | | Lg | | Lg | | 06 47 51.8 | |
| | 34nm,0.4s | | | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KK09 | | | | ⇑Lg | | Lg | 06 48 27.1 | |
| | 2.2nm,0.4s,baz=150,slow=28 | | | | | | | |
| **MTBS** | **Maitube** | **3.61** | **40** | *eP* | | **Pg** | **06 47 43.0** | **-0.8** |
| | 3.8nm,0.4s | | | | | | | |
| MTBS | | | | *eS* | | **Sg** | **06 48 30.9** | **+0.2** |
| | 9.7nm,0.6s | | | | | | | |
| **MTBS** | **Maitube** | **3.61** | **40** | Pg | | **Pg** | **06 47 43.1** | **-0.8** |
| | 3.8nm,0.4s | | | | | | | |
| MTBS | | | | Lg | | Lg | 06 48 30.9 | |
| | 9.7nm,0.6s | | | | | | | |
| **BRLS** | **Borolday** | **3.66** | **317** | *eP* | | **Pg** | **06 47 41.9** | **-2.9** |
| | 1.3nm,0.3s | | | | | | | |
| BRLS | | | | *eS* | | **Sg** | **06 48 28.6** | **-3.5** |
| | 11nm,0.4s | | | | | | | |
| **BRLS** | **Borolday** | **3.66** | **317** | Pg | | **Pg** | **06 47 41.9** | **-2.9** |
| | 1.3nm,0.3s | | | | | | | |
| BRLS | | | | Lg | | Lg | 06 48 28.7 | |
| | 11nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **3.75** | **28** | *eP* | | **Pg** | **06 47 44.6** | **-1.8** |
| | 1.1nm,0.2s | | | | | | | |
| KRBS | | | | *eS* | | **Sg** | **06 48 33.9** | **-1.2** |
| | 12nm,0.8s | | | | | | | |
| **KRBS** | **Karabastau** | **3.75** | **28** | Pg | | **Pg** | **06 47 44.6** | **-1.8** |
| | 2.3nm,0.3s | | | | | | | |
| KRBS | | | | Lg | | Lg | 06 48 33.9 | |
| | 12nm,0.8s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.82** | **45** | *eP* | | **Pg** | **06 47 46.6** | **-1.1** |
| | 4.6nm,0.4s | | | | | | | |
| TNSS | | | | *eS* | | **Sg** | **06 48 36.9** | **-0.3** |
| | 9.5nm,0.6s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.82** | **45** | Pg | | **Pg** | **06 47 46.6** | **-1.1** |
| | 4.6nm,0.4s | | | | | | | |
| TNSS | | | | Lg | | Lg | 06 48 36.9 | |
| | 9.5nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **3.96** | **45** | *eP* | | **Pg** | **06 47 48.9** | **-1.4** |
| | 4.2nm,0.4s | | | | | | | |
| MDOK | | | | *eS* | | **Sg** | **06 48 40.9** | **-0.7** |
| | 12nm,0.8s | | | | | | | |
| **MDOK** | **Medeo** | **3.96** | **45** | Pn | | **Pn** | **06 47 36.9** | **+1.1** |
| | 2.5nm,0.6s | | | | | | | |
| MDOK | | | | Pg | | **Pg** | **06 47 48.2** | **-2.1** |
| | 2.7nm,0.4s | | | | | | | |
| MDOK | | | | ⇑Lg | | Lg | 06 48 42.2 | |
| | 13nm,0.7s | | | | | | | |
| **MDOK** | **Medeo** | **3.96** | **45** | Pg | | **Pg** | **06 47 48.9** | **-1.4** |
| | 4.2nm,0.4s | | | | | | | |
| MDOK | | | | Lg | | Lg | 06 48 40.9 | |
| | 12nm,0.8s | | | | | | | |
| **KUU** | **Kurty** | **4.17** | **32** | *eP* | | **Pg** | **06 47 53.2** | **-1.3** |
| | 1.8nm,0.2s | | | | | | | |
| KUU | | | | *eS* | | **Sg** | **06 48 48.3** | **-0.2** |
| | 13nm,0.6s | | | | | | | |
| **KUU** | **Kurty** | **4.17** | **32** | Pg | | **Pg** | **06 47 53.2** | **-1.3** |
| | 1.8nm,0.2s | | | | | | | |
| KUU | | | | Lg | | Lg | 06 48 48.3 | |
| | 13nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **4.18** | **37** | *eP* | | **Pg** | **06 47 53.0** | **-1.6** |
| | 2.4nm,0.7s | | | | | | | |
| KTBS | | | | *eS* | | **Sg** | **06 48 48.0** | **-0.6** |
| | 13nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **4.18** | **37** | Pg | | **Pg** | **06 47 53.0** | **-1.6** |
| | 2.4nm,0.7s | | | | | | | |
| KTBS | | | | Lg | | Lg | 06 48 48.0 | |
| | 13nm,0.6s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.43** | **38** | *eP* | | **Pg** | **06 47 57.3** | **-2.1** |
| | 1.2nm,0.2s | | | | | | | |
| CHKK | | | | *eS* | | **Sg** | **06 48 55.9** | **-0.9** |
| | 8.2nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.43** | **38** | Pg | | **Pg** | **06 47 57.3** | **-2.1** |
| | 1.2nm,0.2s | | | | | | | |
| CHKK | | | | Lg | | Lg | 06 48 55.9 | |
| | 8.4nm,0.5s | | | | | | | |
| **PDGK** | **Podgornoye** | **5.50** | **56** | ⇑Pn | | **Pn** | **06 47 59.1** | **+2.2** |
| | 1.2nm,0.7s | | | | | | | |
| PDGK | | | | ⇓Pg | | **Pg** | **06 48 17.8** | **-2.1** |
| | 1.8nm,0.8s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 06 49 27.8 | |
| | 11nm,0.9s | | | | | | | |

*TRN **28** 06:54:56.2, 18°.53N×65°.05W, h32km, MD4.2, M3.4(RSPR)*
*RSPR **28** 06:54:58.7, 18°.63N×65°.03W, h20km, MD3.4/9*
*NEIC **28** 06:54:58.2±0.6, 18°.6N±0°.1×65°.06W±0°.06, h33km±11km,*
*Error ellipse: s-maj=18.8km s-min=3.4km az=156.0*
**ISC 28 06:54:57.6**±1.2, **18°.59N**±0°.08×**65°.06W**±0°.03, **h33**km±6km, **n50**, σ0**945**/67, **17C-7D**, **Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STVI** | **Saint Thomas** | **0.26** | **157** | ⇑*i* | P | | **Pb** | **06 55 04.8** | **0.0** |
| **STVI** | **Saint Thomas** | **0.26** | **157** | | | | **Pb** | **06 55 04.8** | **0.0** |
| STVI | | | | | | | **Sb** | **06 55 09.4** | **-0.2** |
| **STVI** | **Saint Thomas** | **0.26** | **157** | ⇑*i* | P | | **Pb** | **06 55 04.8** | **0.0** |
| STVI | | | | *eS* | | | **Sb** | **06 55 09.4** | **-0.2** |
| **CUPR** | **Culebra, Puert** | **0.35** | **217** | ⇑*i* | P | | **Pb** | **06 55 06.3** | **+0.2** |
| **CUPR** | **Culebra, Puert** | **0.35** | **217** | *eS* | | | **Sn** | **06 55 12.0** | **-0.3** |
| **CUPR** | **Culebra, Puert** | **0.35** | **217** | | | | **Pb** | **06 55 06.2** | **+0.2** |
| CUPR | | | | | | | **Sn** | **06 55 12.2** | **-0.1** |
| CUPR | | | | | IAML | | | 06 55 12.6 | |
| | comp=E,423nm,0.3s | | | | | | | | |
| CUPR | | | | | IAML | | | 06 55 12.6 | |
| | comp=N,345nm,0.4s | | | | | | | | |
| **TBVI** | **Tortola** | **0.45** | **112** | ⇓*i* | P | | **Pb** | **06 55 07.0** | **-0.4** |
| **TBVI** | **Tortola** | **0.45** | **112** | ⇓*i* | P | | **Pb** | **06 55 07.0** | **-0.4** |
| TBVI | | | | *eS* | | | **Sb** | **06 55 13.5** | **-0.6** |
| **MTP** | **Monte Pirata** | **0.68** | **224** | ⇑*e* | P | | **Pn** | **06 55 10.8** | **-0.1** |
| **MTP** | **Monte Pirata** | **0.68** | **224** | | | | **Pn** | **06 55 10.9** | **0.0** |
| MTP | | | | | | | **Sn** | **06 55 20.6** | **+0.2** |
| **MTP** | **Monte Pirata** | **0.68** | **224** | ⇑*e* | P | | **Pn** | **06 55 10.8** | **-0.1** |
| MTP | | | | *eS* | | | **Sn** | **06 55 20.6** | **+0.2** |
| **CBYP** | **Canovanas** | **0.82** | **248** | ⇓*e* | P | | **Pn** | **06 55 12.7** | **-0.3** |
| **CBYP** | **Canovanas** | **0.82** | **248** | | | | **Pn** | **06 55 12.7** | **-0.3** |
| CBYP | | | | | | | **Sn** | **06 55 24.1** | **+0.1** |
| **CBYP** | **Canovanas** | **0.82** | **248** | ⇓*e* | P | | **Pn** | **06 55 12.7** | **-0.3** |
| CBYP | | | | *eS* | | | **Sn** | **06 55 24.1** | **+0.1** |
| **HUMP** | **Col San Antoni** | **0.87** | **240** | ⇑*e* | P | | **Pn** | **06 55 13.7** | **+0.1** |
| **HUMP** | **Col San Antoni** | **0.87** | **240** | | | | **Pn** | **06 55 13.7** | **+0.1** |
| HUMP | | | | | | | **Sn** | **06 55 25.4** | **+0.2** |
| **HUMP** | **Col San Antoni** | **0.87** | **240** | ⇑*e* | P | | **Pn** | **06 55 13.7** | **+0.1** |
| HUMP | | | | *eS* | | | **Sn** | **06 55 25.4** | **+0.2** |
| **GCPR** | **Guaynabo City** | **1.01** | **254** | ⇑*e* | P | | **Pn** | **06 55 15.3** | **-0.3** |
| **GCPR** | **Guaynabo City** | **1.01** | **254** | *eS* | | | **Sn** | **06 55 28.3** | **-0.4** |
| **GCPR** | **Guaynabo City** | **1.01** | **254** | | | | **Pn** | **06 55 15.3** | **-0.3** |
| **PDPR** | **Patillas Dam,** | **1.08** | **238** | | | | **Pn** | **06 55 16.9** | **+0.5** |
| PDPR | | | | | IAML | | | 06 55 35.3 | |
| | comp=E,110nm,0.1s | | | | | | | | |
| **SJG** | **San Juan** | **1.14** | **246** | | | | **Pn** | **06 55 17.5** | **+0.2** |
| SJG | | | | | IAML | | | 06 55 38.4 | |
| | comp=E,77nm,0.2s | | | | | | | | |
| **IGPR** | **InterUniversit** | **1.17** | **238** | ⇑*e* | P | | **Pn** | **06 55 18.3** | **+0.5** |
| **IGPR** | **InterUniversit** | **1.17** | **238** | *eS* | | | **Sn** | **06 55 33.3** | **+0.7** |
| **EMPR** | **Esperanza - Ma** | **1.40** | **266** | ⇑*e* | P | | **Pn** | **06 55 21.2** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.40** | **266** | *eS* | | | **Sn** | **06 55 38.6** | **+0.4** |
| **EMPR** | **Esperanza - Ma** | **1.40** | **266** | | | | **Pn** | **06 55 21.2** | **+0.4** |
| EMPR | | | | | IAML | | | 06 55 47.9 | |
| | comp=E,76nm,0.5s | | | | | | | | |
| **CELP** | **Cerrillos** | **1.53** | **251** | Pn | | | **Pn** | **06 55 23.4** | **+0.7** |
| CELP | | | | | IAML | | | 06 55 42.4 | |
| | comp=E,40nm,0.4s | | | | | | | | |
| CELP | | | | | IAML | | | 06 55 42.5 | |
| | comp=N,43nm,0.5s | | | | | | | | |
| **ICMP** | **Isla Caja de M** | **1.56** | **244** | Pn | | | **Pb** | **06 55 25.0** | **-0.9** |
| ICMP | | | | | IAML | | | 06 55 50.3 | |
| | comp=N,51nm,0.8s | | | | | | | | |
| ICMP | | | | | IAML | | | 06 56 07.2 | |
| | comp=E,52nm,0.2s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.57** | **250** | ⇑*e* | P | | **Pn** | **06 55 23.0** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **1.57** | **250** | | | | **Pn** | **06 55 23.0** | **-0.2** |
| OBIP | | | | | IAML | | | 06 55 48.0 | |
| | comp=N,46nm,0.4s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.57** | **250** | ⇑*e* | P | | **Pn** | **06 55 23.0** | **-0.2** |
| OBIP | | | | *eS* | | | **Sn** | **06 55 42.2** | **-0.2** |
| **UUPR** | **Utuado, UPR, P** | **1.61** | **258** | ⇑*e* | P | | **Pn** | **06 55 24.1** | **+0.3** |
| **UUPR** | **Utuado, UPR, P** | **1.61** | **258** | *eS* | | | **Sn** | **06 55 43.3** | **-0.2** |
| **UUPR** | **Utuado, UPR, P** | **1.61** | **258** | | | | **Pn** | **06 55 24.1** | **+0.3** |
| UUPR | | | | | | | **Sn** | **06 55 43.3** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **1.63** | **262** | ⇑*e* | P | | **Pn** | **06 55 24.4** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.63** | **262** | Pn | | | **Pn** | **06 55 24.4** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **1.63** | **262** | ⇑*e* | P | | **Pn** | **06 55 24.4** | **+0.4** |
| AOPR | | | | *eS* | | | **Sn** | **06 55 43.7** | **-0.2** |
| **LSP** | **Las Mesas** | **1.97** | **258** | ⇓*e* | P | | **Pn** | **06 55 29.5** | **+0.7** |
| **LSP** | **Las Mesas** | **1.97** | **258** | ⇓*e* | P | | **Pn** | **06 55 29.5** | **+0.7** |
| LSP | | | | *eS* | | | **Sn** | **06 55 52.9** | **+0.6** |
| **MLPR** | **Magueyes Islan** | **1.99** | **252** | ⇓*e* | P | | **Pn** | **06 55 29.1** | **+0.2** |
| **MLPR** | **Magueyes Islan** | **1.99** | **252** | *eS* | | | **Sn** | **06 55 52.7** | **0.0** |
| **MLPR** | **Magueyes Islan** | **1.99** | **252** | ⇑*e* | P | | **Pn** | **06 55 29.1** | **+0.2** |
| **CRPR** | **Cabo Rojo, PR** | **2.03** | **254** | ⇑*e* | P | | **Pn** | **06 55 30.6** | **+1.0** |
| **CRPR** | **Cabo Rojo, PR** | **2.03** | **254** | | | | **Pn** | **06 55 30.7** | **+1.2** |
| CRPR | | | | | IAML | | | 06 55 49.4 | |
| | comp=N,26nm,2.2s | | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.03** | **254** | ⇑*e* | P | | **Pn** | **06 55 30.6** | **+1.0** |
| CRPR | | | | *eS* | | | **Sn** | **06 55 54.9** | **+1.1** |
| **IDE** | **Isla Desecheo** | **2.30** | **265** | ⇑*e* | P | | **Pn** | **06 55 33.6** | **+0.3** |
| **IDE** | **Isla Desecheo** | **2.30** | **265** | ⇑*e* | P | | **Pn** | **06 55 33.6** | **+0.3** |
| IDE | | | | *eS* | | | **Sn** | **06 56 00.2** | **-0.3** |
| **ANWB** | **Willy Bob** | **3.24** | **106** | *eP* | | | **Pn** | **06 55 47.0** | **+0.8** |
| **ANBD** | **Bethesda, Anti** | **3.49** | **116** | *eP* | | | **Pn** | **06 55 50.3** | **+0.6** |
| ANBD | | | | *eS* | | | **Sn** | **06 56 29.4** | **-0.5** |

*NNC **28** 07:56:00.1±2.3, 43°.93N×83°.74E, h0km, mb3.3, mpv3.0,*
*Error ellipse: s-maj=20.1km s-min=7.8km az=132.0*
*SOME **28** 07:56:02.4, 44°.17N×83°.63E, h5km*
**ISC 28 07:55:57.5**±2.2, **43°.85N**±0°.09×**84°.3E**±0°.1, **h10**km, **n29**, σ1**930**/47, **3C-5D**, **Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **2.87** | **263** | *eP* | | | **Pb** | **07 56 47.3** | **-1.5** |
| | 4.3nm,0.2s | | | | | | | | |
| KTMS | | | | *eS* | | | **Sn** | **07 57 19.0** | **+0.9** |
| | 18nm,0.3s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.26** | **335** | ⇓Pn | | | **Pn** | **07 56 48.8** | **+0.2** |
| | 0.1nm,0.3s,baz=155,slow=15,SNR=67 | | | | | | | | |
| MK31 | | | | | ⇑Pg | | **Pb** | **07 56 56.1** | **+0.8** |
| | 1.2nm,0.3s,baz=156,slow=18,SNR=41 | | | | | | | | |
| MK31 | | | | | ⇓Lg | | Lg | 07 57 37.6 | |
| | 1.0nm,0.2s,baz=153,slow=26,SNR=7.5 | | | | | | | | |
| **DJR** | **Jarkent** | **3.26** | **280** | *eP* | | | **Pb** | **07 56 55.6** | **+0.2** |
| | 4.7nm,0.4s | | | | | | | | |
| DJR | | | | *eS* | | | **Sb** | **07 57 33.3** | **-1.9** |
| | 35nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **3.26** | **280** | Pg | | | **Pb** | **07 56 55.6** | **+0.2** |
| | 6.7nm,0.3s | | | | | | | | |
| DJR | | | | Lg | | | Lg | 07 57 33.3 | |
| | 35nm,0.5s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.37** | **332** | ⇑Pn | | | **Pn** | **07 56 49.6** | **-0.6** |
| | 0.8nm,0.5s | | | | | | | | |
| MAKZ | | | | | ⇓Pg | | **Pb** | **07 56 57.3** | **+0.1** |
| | 1.6nm,0.5s | | | | | | | | |
| MAKZ | | | | | ⇑Lg | | Lg | 07 57 39.9 | |
| | 5.2nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.51** | **263** | Pg | | | **Pb** | **07 56 58.6** | **-1.1** |
| | 1.7nm,0.3s | | | | | | | | |
| PDGK | | | | Lg | | | Lg | 07 57 38.3 | |
| | 3.8nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.51** | **263** | ⇓Pg | | | **Pn** | **07 56 54.7** | **+2.5** |
| | 1.3nm,0.3s | | | | | | | | |
| PDGK | | | | ⇓Lg | | | Lg | 07 57 38.7 | |
| | 10nm,0.7s | | | | | | | | |
| **ZSN** | **Zaisan** | **3.62** | **6** | *eP* | | | **Pg** | **07 57 06.9** | **0.0** |
| | 4.2nm,0.3s | | | | | | | | |
| ZSN | | | | *eS* | | | **Sg** | **07 57 52.9** | **-0.9** |
| | 6.4nm,0.1s | | | | | | | | |
| **KNOS** | **Konyrlen** | **3.70** | **280** | *eP* | | | **Pb** | **07 57 03.6** | **+0.6** |
| | 3.9nm,0.1s | | | | | | | | |
| KNOS | | | | *eS* | | | **Sb** | **07 57 47.1** | **-0.8** |
| | 19nm,0.1s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.79** | **294** | *eP* | | | **Pb** | **07 57 05.1** | **+0.6** |
| | 3.5nm,1.1s | | | | | | | | |
| KAPS | | | | *eS* | | | **Sb** | **07 57 49.1** | **-1.3** |
| | 13nm,0.0s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.88** | **261** | *eP* | | | **Pb** | **07 57 05.4** | **-0.6** |
| | 3.6nm,0.1s | | | | | | | | |
| UZB | | | | *eS* | | | **Sb** | **07 57 49.9** | **-3.2** |
| | 5.8nm,0.2s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.88** | **261** | Pg | | | **Pb** | **07 57 05.4** | **-0.6** |
| | 3.4nm,0.3s | | | | | | | | |
| UZB | | | | Lg | | | Lg | 07 57 49.9 | |
| | 6.0nm,0.3s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.07** | **266** | *eP* | | | **Pb** | **07 57 09.4** | **+0.1** |
| | 2.2nm,0.2s | | | | | | | | |
| KPKS | | | | *eS* | | | **Sb** | **07 57 56.3** | **-2.2** |
| | 12nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.18** | **275** | *eP* | | | **Pb** | **07 57 11.8** | **+0.6** |
| | 7.0nm,0.1s | | | | | | | | |
| BLB | | | | *eS* | | | **Sb** | **07 58 01.1** | **-0.8** |
| | 15nm,0.3s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.18** | **275** | Pg | | | **Pb** | **07 57 11.8** | **+0.6** |
| | 7.1nm,0.4s | | | | | | | | |
| BLB | | | | Lg | | | Lg | 07 58 01.1 | |
| | 15nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.29** | **263** | *eP* | | | **Pb** | **07 57 12.6** | **-0.5** |
| | 4.3nm,0.2s | | | | | | | | |
| ZHN | | | | *eS* | | | **Sb** | **07 58 02.3** | **-2.7** |
| | 7.0nm,0.1s | | | | | | | | |
| **SATY** | **Saty** | **4.34** | **262** | *eP* | | | **Pb** | **07 57 13.7** | **-0.2** |
| | 2.0nm,0.2s | | | | | | | | |
| SATY | | | | *eS* | | | **Sb** | **07 58 03.7** | **-2.6** |
| | 4.4nm,0.1s | | | | | | | | |
| **SATY** | **Saty** | **4.34** | **262** | Pg | | | **Pb** | **07 57 13.7** | **-0.2** |
| | 2.0nm,0.2s | | | | | | | | |
| SATY | | | | Lg | | | Lg | 07 58 03.7 | |
| | 4.4nm,0.1s | | | | | | | | |
| **KURS** | **Kuram** | **4.44** | **267** | *eP* | | | **Pb** | **07 57 15.1** | **-0.4** |
| | 1.4nm,0.1s | | | | | | | | |
| KURS | | | | *eS* | | | **Sb** | **07 58 06.5** | **-2.5** |
| | 2.5nm,0.1s | | | | | | | | |
| **ARXS** | **Arharly** | **4.66** | **277** | *eP* | | | **Pb** | **07 57 19.5** | **+0.2** |
| | 2.1nm,0.1s | | | | | | | | |
| ARXS | | | | *eS* | | | **Sb** | **07 58 14.2** | **-1.2** |
| | 9.8nm,0.1s | | | | | | | | |
| **ARXS** | **Arharly** | **4.66** | **277** | Pg | | | **Pb** | **07 57 19.5** | **+0.2** |
| | 2.1nm,0.3s | | | | | | | | |
| ARXS | | | | Lg | | | Lg | 07 58 14.2 | |
| | 15nm,0.8s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.39** | **264** | *eP* | | | **Pb** | **07 57 32.6** | **+0.7** |
| | 0.6nm,0.1s | | | | | | | | |
| TNSS | | | | *eS* | | | **Sb** | **07 58 36.4** | **-0.4** |
| | 1.1nm,0.1s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.39** | **264** | Pg | | | **Pb** | **07 57 32.6** | **+0.7** |
| | 0.8nm,0.3s | | | | | | | | |
| TNSS | | | | Lg | | | Lg | 07 58 36.4 | |
| | 1.1nm,1.1s | | | | | | | | |
| **KTBS** | **Karatobe** | **5.49** | **271** | *eP* | | | **Pb** | **07 57 35.2** | **+1.8** |
| | 0.5nm,0.4s | | | | | | | | |
| KTBS | | | | *eS* | | | **Sb** | **07 58 41.0** | **+1.6** |
| | 10nm,0.2s | | | | | | | | |
| **KTBS** | **Karatobe** | **5.49** | **271** | Pg | | | **Pb** | **07 57 35.2** | **+1.8** |
| | 1.2nm,0.5s | | | | | | | | |
| KTBS | | | | Lg | | | Lg | 07 58 41.0 | |
| | 6.8nm,0.5s | | | | | | | | |
| **KUU** | **Kurty** | **5.73** | **273** | *eP* | | | **Pb** | **07 57 38.7** | **+1.2** |
| | 1.0nm,0.2s | | | | | | | | |
| KUU | | | | *eS* | | | **Sb** | **07 58 46.6** | **+0.4** |
| | 2.4nm,0.1s | | | | | | | | |
| **KUU** | **Kurty** | **5.73** | **273** | Pg | | | **Pb** | **07 57 38.7** | **+1.2** |
| | 1.0nm,0.4s | | | | | | | | |
| KUU | | | | Lg | | | Lg | 07 58 46.6 | |
| | 4.4nm,0.4s | | | | | | | | |
| **MTBS** | **Maitube** | **5.75** | **265** | *eP* | | | **Pb** | **07 57 38.8** | **+1.0** |
| | 0.9nm,0.0s | | | | | | | | |
| MTBS | | | | *eS* | | | **Sb** | **07 58 47.2** | **+0.5** |
| | 1.8nm,0.0s | | | | | | | | |
| **MTBS** | **Maitube** | **5.75** | **265** | Pg | | | **Pb** | **07 57 38.8** | **+1.0** |
| | 0.8nm,0.2s | | | | | | | | |
| MTBS | | | | Lg | | | Lg | 07 58 47.2 | |
| | 4.6nm,0.5s | | | | | | | | |

*GCG **28** 08:05:24.4±0.6, 15°.09N×89°.53W, h5km±2km, MD3.9*
*UCR **28** 08:05:28.8±1.7, 14°.86N×89°.58W, h10km, ML3.6*
*SNET **28** 08:05:28.7±1.6, 14°.86N×89°.58W, h10km, ML3.6*
**ISC 28 08:05:27.4**±2.0, **14°.87N**±0°.08×**89°.60W**±0°.04, **h2**km±13km, **n46**, σ0**942**/55, **1C-2D**, **Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MRL** | **Marmol** | **0.23** | **339** | ⇓*i* | P | | Pg | 08 05 28.8 | -3.0 |
| **ESQI** | **Esquipulas** | **0.40** | **141** | ⇑*i* | P | | **Pg** | **08 05 35.6** | **+0.6** |
| ESQI | | | | *eS* | | | **Sb** | **08 05 43.0** | **-0.8** |
| **MTO3** | **Montecristo** | **0.52** | **153** | *eP* | | | **Pg** | **08 05 37.9** | **+0.5** |
| MTO3 | | | | *eS* | | | **Sb** | **08 05 47.1** | **-0.3** |
| **MTO3** | **Montecristo** | **0.52** | **153** | *eP* | | | **Pg** | **08 05 37.9** | **+0.5** |
| MTO3 | | | | *eS* | | | **Sb** | **08 05 47.1** | **-0.3** |
| **NBG** | **Las Nubes** | **0.77** | **249** | *eP* | | | **Pg** | **08 05 42.5** | **+0.3** |
| **SLOZ** | **Alcaldia de Sa** | **0.86** | **192** | ⇓*i* | P | | **Pg** | **08 05 43.8** | **0.0** |
| SLOZ | | | | *eS* | | | **Sb** | **08 05 57.0** | **+0.1** |
| **TACO** | **Tacachico** | **0.93** | **165** | *eP* | | | **Pg** | **08 05 45.2** | **+0.1** |
| TACO | | | | *eS* | | | **Sb** | **08 05 59.3** | **+0.4** |
| **TACO** | **Tacachico** | **0.93** | **165** | *eP* | | | **Pg** | **08 05 45.2** | **+0.1** |
| TACO | | | | *eS* | | | **Sb** | **08 05 59.3** | **+0.4** |
| **RTR** | **El Retiro** | **0.97** | **183** | *eP* | | | **Pg** | **08 05 46.5** | **+0.6** |
| **RTR** | **El Retiro** | **0.97** | **183** | *eP* | | | **Pg** | **08 05 46.5** | **+0.6** |
| **NUBE** | **Las Nubes** | **0.98** | **190** | *i* | P | | **Pg** | **08 05 46.1** | **+0.1** |
| NUBE | | | | *eS* | | | **Sb** | **08 06 01.0** | **+0.5** |
| **NUBE** | **Las Nubes** | **0.98** | **190** | *i* | P | | **Pg** | **08 05 46.1** | **+0.1** |
| NUBE | | | | *eS* | | | **Sb** | **08 06 01.0** | **+0.5** |
| **SBLS** | **San Blas** | **1.02** | **181** | *eP* | | | **Pg** | **08 05 47.4** | **+0.3** |
| **SBLS** | **San Blas** | **1.02** | **181** | *eP* | | | **Pg** | **08 05 47.4** | **+0.3** |
| **CEVE** | **Cerro Verde** | **1.03** | **181** | *eP* | | | **Pg** | **08 05 47.5** | **+0.3** |
| **CEVE** | **Cerro Verde** | **1.03** | **181** | *eP* | | | **Pg** | **08 05 47.5** | **+0.3** |
| **CEDA** | **San Andres** | **1.08** | **169** | *eP* | | | **Pg** | **08 05 48.0** | **-0.1** |
| **CEDA** | **San Andres** | **1.08** | **169** | *eP* | | | **Pg** | **08 05 48.0** | **-0.1** |
| **PCG** | **Pacaya** | **1.08** | **244** | *eP* | | | **Pg** | **08 05 48.3** | **+0.1** |
| PCG | | | | *eS* | | | **Sn** | **08 06 06.4** | **+0.9** |
| **BOQS** | **Boqueron** | **1.17** | **164** | *eP* | | | **Pb** | **08 05 50.0** | **-0.4** |
| **BOQS** | **Boqueron** | **1.17** | **164** | *eP* | | | **Pb** | **08 05 50.0** | **-0.4** |
| **LFU** | **La Fuente** | **1.21** | **157** | *eP* | | | **Pb** | **08 05 50.8** | **-0.3** |
| **LFU** | **La Fuente** | **1.21** | **157** | *eP* | | | **Pb** | **08 05 50.8** | **-0.3** |
| **OPAM** | **Oficina de Pla** | **1.22** | **161** | *eP* | | | **Pb** | **08 05 51.0** | **-0.1** |
| **OPAM** | **Oficina de Pla** | **1.22** | **161** | *eP* | | | **Pb** | **08 05 51.0** | **-0.1** |
| **JAYA** | **Jayaque - finc** | **1.22** | **173** | *eP* | | | **Pb** | **08 05 50.2** | **-1.0** |
| JAYA | | | | | IAML | | | 08 06 10.3 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.22** | **173** | *eP* | | | **Pb** | **08 05 50.2** | **-1.0** |
| JAYA | | | | | IAML | | | 08 06 10.3 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.23** | **163** | *eP* | | | **Pb** | **08 05 50.9** | **-0.4** |
| **SNET** | **Serv Nac Est T** | **1.23** | **163** | *eP* | | | **Pb** | **08 05 50.9** | **-0.4** |
| **LBRS** | **Las Brisas** | **1.25** | **154** | *eP* | | | **Pn** | **08 05 51.6** | **-0.3** |
| **LBRS** | **Las Brisas** | **1.25** | **154** | *eP* | | | **Pn** | **08 05 51.6** | **-0.3** |
| **PAVA** | **Las Pavas** | **1.32** | **151** | *eP* | | | **Pn** | **08 05 52.4** | **-0.5** |
| **PAVA** | **Las Pavas** | **1.32** | **151** | *eP* | | | **Pn** | **08 05 52.4** | **-0.5** |
| **SJTE** | **Alcalda de S** | **1.37** | **155** | *eP* | | | **Pn** | **08 05 53.5** | **-0.2** |
| **SJTE** | **Alcalda de S** | **1.37** | **155** | *eP* | | | **Pn** | **08 05 53.5** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.43** | **151** | *eP* | | | **Pn** | **08 05 54.1** | **-0.3** |
| COEG | | | | | IAML | | | 08 06 22.8 | |
| | comp=Z,979nm,0.4s | | | | | | | | |
| **COEG** | **Centro de Oper** | **1.43** | **151** | *eP* | | | **Pn** | **08 05 54.1** | **-0.3** |
| COEG | | | | | IAML | | | 08 06 22.8 | |
| | comp=Z,979nm,0.4s | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.44** | **144** | *eP* | | | **Pn** | **08 05 54.2** | **-0.3** |
| **SCLA** | **Alcaldia de Sa** | **1.44** | **144** | *eP* | | | **Pn** | **08 05 54.2** | **-0.3** |
| **PQSS** | **Presa 15 de Se** | **1.60** | **141** | *eP* | | | **Pn** | **08 05 56.5** | **-0.1** |
| **PQSS** | **Presa 15 de Se** | **1.60** | **141** | *eP* | | | **Pn** | **08 05 56.5** | **-0.1** |
| **COEB** | **Comit de Eme** | **1.71** | **143** | *eP* | | | **Pn** | **08 05 58.5** | **+0.2** |
| **COEB** | **Comit de Eme** | **1.71** | **143** | *eP* | | | **Pn** | **08 05 58.5** | **+0.2** |
| **PACA** | **Pacayal** | **1.86** | **138** | *eP* | | | **Pb** | **08 06 02.0** | **-0.2** |
| **PACA** | **Pacayal** | **1.86** | **138** | *eP* | | | **Pb** | **08 06 02.0** | **-0.2** |
| **STG3** | **Santiaguito 3,** | **1.91** | **266** | *eP* | | | **Pn** | **08 06 00.7** | **-0.5** |
| STG3 | | | | *eS* | | | **Sn** | **08 06 26.4** | **+0.5** |

*SKHL **28** 08:06:12.2±0.4, 46°.30N×140°.50E, h8km±3km, mb4.4/4*
*JMA **28** 08:06:12.5±0.4, 46°.29N×140°.57E, h1km±5km, M3.3*
**ISC 28 08:06:13.5**±2.5, **46°.28N**±0°.06×**140°.7E**±0°.2, **h3**km±13km, **n9**, σ0**951**/18, **Primorye**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JRBN** | **Rebuntou** | **0.90** | **162** | P | | | **Pg** | **08 06 30.4** | **-0.3** |
| JRBN | | | | *eS* | | | **Sg** | **08 06 42.9** | **+0.6** |
| **KHLM** | **Kholmsk** | **1.22** | **50** | *i* | Pg | | **Pg** | **08 06 37.1** | **+0.1** |
| KHLM | | | | *eS* | g | | **Sb** | **08 06 54.2** | **+0.7** |
| **JRR** | **Rishiri** | **1.22** | **159** | P | | | **Pg** | **08 06 36.7** | **-0.3** |
| JRR | | | | *eS* | | | **Sn** | **08 06 54.2** | **-0.4** |
| **JWK2** | **Keihoku** | **1.28** | **138** | P | | | **Pn** | **08 06 38.0** | **-0.4** |
| JWK2 | | | | *eS* | | | **Sb** | **08 06 56.0** | **+0.7** |
| **YSS** | **Yuzh-Sakhalins** | **1.58** | **64** | *eP* | | | **Pn** | **08 06 42.4** | **-0.1** |
| YSS | | | | P | | | **Pb** | **08 06 42.8** | **-0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DSLB | Salisbury | 7.56 | 166 | *e*P | Pn | 08 27 32.6 | +1.7 |
| DSLB | Salisbury | 7.56 | 166 | *e*P | Pn | 08 27 32.7 | +1.8 |
| DSLB | Salisbury | 7.56 | 166 | *e*S | Sn | 08 28 57.5 | +0.8 |
| DSLB | | | | *e* | | 08 28 48.4 | |
| SC01 | Santiago de lo | 7.65 | 245 | Pn | Pn | 08 27 35.2 | +3.1 |
| BANI | BANI | 7.88 | 237 | | Pn | 08 27 38.3 | +2.8 |
| SVN | Savane Anatole | 8.19 | 165 | Pn | Pn | 08 27 41.3 | +1.7 |
| FDF | Fort de France | 8.30 | 165 | Pn | Pn | 08 27 42.6 | +1.5 |
| FDF | Fort de France | 8.30 | 165 | *e*P | Pn | 08 27 42.4 | +1.3 |
| FDF | Fort de France | 8.30 | 165 | *e*P | Pn | 08 27 42.4 | +1.3 |
| FDF | Fort de France | 8.30 | 165 | *e* | Sn | 08 29 13.3 | -1.7 |
| SDDR | Presa de Saban | 8.32 | 244 | Pn | Pn | 08 27 43.2 | +1.8 |
| SDDR | Presa de Saban | 8.32 | 244 | *e*P | Pn | 08 27 43.1 | +1.8 |
| SDDR | Presa de Saban | 8.32 | 244 | *e*S | Sn | 08 29 03.1 | -12 |
| SDDR | Presa de Saban | 8.32 | 244 | *i* P | Pn | 08 27 43.3 | +1.8 |
| SDDR | | | | IAML | | 08 29 12.4 | |
| | comp=Z,99nm,0.3s | | | | | | |
| ILAM | Ilet Lapin Mar | 8.33 | 163 | Pn | Pn | 08 27 43.1 | +1.6 |
| BIM | Bigot | 8.53 | 165 | Pn | Pn | 08 27 46.2 | +1.9 |
| BIM | Bigot | 8.53 | 165 | *e*P | Pn | 08 27 46.5 | +2.3 |
| LOBA2 | Hotel Casa Bon | 8.63 | 238 | *i* P | Pn | 08 27 49.0 | +3.4 |
| LOBA2 | | | | *e*S | Sn | 08 29 17.7 | -5.5 |
| LOBA2 | | | | IAML | | 08 29 26.4 | |
| | comp=Z,67nm,0.9s | | | | | | |
| MPOM | Morne Pois Mar | 8.65 | 164 | Pn | Pn | 08 27 47.3 | +1.4 |
| MPOM | Morne Pois Mar | 8.65 | 164 | *e*P | Pn | 08 27 47.1 | +1.2 |
| MPOM | Morne Pois Mar | 8.65 | 164 | *e*P | Pn | 08 27 47.2 | +1.4 |
| MPOM | Morne Pois Mar | 8.65 | 164 | *e*S | Sn | 08 29 22.1 | -1.4 |
| LONE2 | Loma La Sidra | 8.69 | 242 | *i* P | Pn | 08 27 49.3 | +2.9 |
| LONE2 | | | | IAML | | 08 29 19.8 | |
| | comp=Z,63nm,0.4s | | | | | | |
| SLBI | Saint Lucia, B | 9.03 | 165 | *e*P | Pn | 08 27 52.5 | +1.5 |
| SLBI | Saint Lucia, B | 9.03 | 165 | *e*P | Pn | 08 27 52.7 | +1.7 |
| SLBI | Saint Lucia, B | 9.03 | 165 | *e*S | Sn | 08 29 32.5 | -0.3 |
| SLCP | Castries, St. | 9.04 | 165 | *e*S | Sn | 08 29 34.0 | +0.9 |
| MCLT | Moule a Chique | 9.34 | 165 | Pn | Pn | 08 27 58.0 | +2.7 |
| MCLT | Moule a Chique | 9.34 | 165 | *e*P | Pn | 08 27 57.4 | +2.1 |
| JAKH | Jacmel | 9.70 | 244 | Pn | Pn | 08 28 03.1 | +2.8 |
| BBGH | Gun Hill | 10.27 | 159 | *e*P | Pn | 08 28 05.5 | -2.6 |
| MASC | Masc | 10.45 | 258 | *e*P | Pn | 08 28 08.7 | -1.8 |
| MASC | | | | *e*S | Sn | 08 29 53.4 | -14 |
| MASC | | | | IAML | | 08 29 59.8 | |
| | comp=E,29nm,0.2s | | | | | | |
| MASC | | | | IAML | | 08 30 00.5 | |
| | comp=N,38nm,0.3s | | | | | | |
| MOAC | Moa | 10.98 | 261 | *e*P | Pn | 08 28 14.6 | -3.2 |
| MOAC | | | | *e*S | Sn | 08 30 03.6 | -17 |
| RCC | Rio Carpintero | 11.82 | 259 | *e*P | Pn | 08 28 28.1 | -1.2 |
| RCC | | | | *e*S | Sn | 08 30 25.1 | -16 |
| HATO | Hato, Curacao | 11.83 | 208 | Pn | Pn | 08 28 32.5 | +2.9 |
| HLGC | Holguin | 11.94 | 263 | *e*P | Pn | 08 28 29.6 | -1.4 |
| HLGC | | | | *e*S | Sn | 08 30 30.2 | -14 |
| BIRV | Birongo | 12.57 | 193 | Pn | Pn | 08 28 40.6 | +1.0 |
| PCRV | Puerto La Cruz | 12.62 | 186 | Pn | Pn | 08 28 43.5 | +3.2 |
| | comp=N,1.3nm,0.3s,baz=324,slow=6.8,SNR=11 | | | | | | |
| PCRV | | | | Sn | Sn | 08 30 59.1 | -1.9 |
| | comp=N,0.2nm,0.3s,baz=295,slow=1.8,SNR=1.9 | | | | | | |
| LMGC | Las Mercedes | 12.99 | 260 | *e*P | Pn | 08 28 43.0 | -2.3 |
| LMGC | | | | *e*S | Sn | 08 30 53.6 | -16 |
| CCCC | Cccc | 13.45 | 266 | *e*P | Pn | 08 28 42.6 | -9.0 |
| CCCC | | | | *e*S | Sn | 08 30 53.3 | -28 |
| MGV | Manicaragua | 15.38 | 271 | *e*P | Pn | 08 29 14.2 | -3.5 |
| MGV | | | | *e*S | Sn | 08 31 46.0 | -22 |
| SDV | Santo Domingo | 15.50 | 208 | Pn | P | 08 29 23.4 | -0.6 |
| | comp=N,1.4nm,0.3s,baz=45,slow=8.5,SNR=11 | | | | | | |
| SDV | | | | Sn | Sn | 08 32 05.7 | -5.8 |
| | comp=N,0.3nm,0.3s,baz=321,slow=22,SNR=1.6 | | | | | | |
| SDV | | | | LR | LR | 08 35 57.6 | |
| | comp=N,53nm,21.8s,baz=78,slow=39 | | | | | | |
| SDV | Santo Domingo | 15.50 | 208 | | P | 08 29 22.5 | -1.5 |
| SDV | Santo Domingo | 15.50 | 208 | *e*P | P | 08 29 28.0 | +4.0 |
| DWPF | Disney Wildern | 17.14 | 292 | | Pn | 08 29 36.2 | -4.1 |
| Y60A | Bolivia | 17.16 | 314 | | Pn | 08 29 41.1 | +0.7 |
| Y60A | | | | IAmb | IAmb | 08 30 12.0 | |
| | comp=Z,71nm,1.3s | | | | | | |
| V61A | Roper | 17.30 | 321 | Pn | Pn | 08 29 41.4 | -0.8 |
| V61A | | | | IAmb | IAmb | 08 29 49.3 | |
| | comp=Z,60nm,0.8s | | | | | | |
| OCAC | Ocana | 17.36 | 215 | *e*P | P | 08 29 44.3 | -0.3 |
| Y59A | Loris | 17.59 | 313 | P | Pn | 08 29 45.4 | -0.4 |
| Y59A | | | | IAmb | IAmb | 08 29 46.1 | |
| | comp=Z,31nm,0.6s | | | | | | |
| PAMC | Pamplona, Colo | 17.81 | 212 | *e*P | P | 08 29 54.8 | +4.8 |
| NHSC | New Hope | 18.03 | 308 | P | Pn | 08 29 51.1 | -0.2 |
| NHSC | | | | IAmb | IAmb | 08 29 52.9 | |
| | comp=Z,35nm,0.6s | | | | | | |
| Y58A | Scranton | 18.09 | 311 | P | Pn | 08 29 51.4 | -0.6 |
| Y58A | | | | IAmb | IAmb | 08 29 52.2 | |
| | comp=Z,44nm,0.9s | | | | | | |
| TAMC | Tame, Arauca | 18.19 | 208 | *e*P | P | 08 29 58.6 | +4.9 |
| X58A | Rowland | 18.23 | 313 | P | Pn | 08 29 53.4 | -0.3 |
| T60A | Surry | 18.36 | 324 | P | P | 08 29 55.8 | +0.5 |
| T60A | | | | IAmb | IAmb | 08 30 17.1 | |
| | comp=Z,31nm,0.7s | | | | | | |
| U59A | Littleton | 18.40 | 320 | P | P | 08 29 55.8 | 0.0 |
| U59A | | | | IAmb | IAmb | 08 29 56.1 | |
| | comp=Z,22nm,0.6s | | | | | | |
| 656A | Willston | 18.40 | 295 | P | P | 08 29 55.2 | -0.7 |
| 656A | | | | IAmb | IAmb | 08 29 56.6 | |
| | comp=Z,82nm,1.2s | | | | | | |
| 456A | Hilliard | 18.41 | 299 | P | P | 08 29 55.9 | -0.1 |
| Y57A | Sumter | 18.65 | 311 | P | Pn | 08 29 59.0 | +0.1 |
| Y57A | | | | IAmb | IAmb | 08 29 59.7 | |
| | comp=Z,45nm,0.7s | | | | | | |
| T59A | Double "B" Far | 18.69 | 322 | | Pn | 08 29 59.3 | -0.1 |
| BARC | Barichara | 18.69 | 212 | *e*P | Pn | 08 30 02.4 | +2.7 |
| ZARC | Zaragoza, Cauc | 18.82 | 218 | *e*P | Pn | 08 30 01.5 | +0.4 |
| UREC | San Jos de Ur | 19.00 | 220 | *e*P | Pn | 08 30 07.2 | +3.9 |
| 255A | Hazlehurst | 19.23 | 302 | P | Pn | 08 30 06.6 | +0.7 |
| RUSC | La Rusia | 19.25 | 211 | *e*P | Pn | 08 30 12.9 | +6.1 |
| JSRW | J. Sargeant Re | 19.39 | 323 | P | Pn | 08 30 07.7 | 0.0 |
| PTBC | PUERTO BERRIO, | 19.39 | 215 | *e*P | Pn | 08 30 09.1 | +1.2 |
| JSC | Jenkinsville | 19.40 | 310 | P | Pn | 08 30 08.4 | +0.4 |
| JSC | | | | IAmb | IAmb | 08 30 09.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| CBN | Corbin Frederi | 19.48 | 325 | P | Pn | 08 30 09.1 | +0.2 |
| R58B | Mineral | 19.58 | 324 | P | Pn | 08 30 10.0 | -0.1 |
| R58B | | | | IAmb | IAmb | 08 30 11.3 | |
| | comp=Z,18nm,0.4s | | | | | | |
| T57A | Hurt | 19.70 | 319 | P | Pn | 08 30 11.7 | +0.1 |
| T57A | | | | IAmb | IAmb | 08 30 14.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| KMSC | Kings Mountain | 19.91 | 312 | P | Pn | 08 30 14.9 | +0.9 |
| KMSC | | | | IAmb | IAmb | 08 30 26.0 | |
| | comp=Z,28nm,1.2s | | | | | | |
| TIGA | Tifton | 19.92 | 300 | P | P | 08 30 13.4 | +0.8 |
| TIGA | | | | IAmb | IAmb | 08 30 25.7 | |
| | comp=Z,41nm,1.0s | | | | | | |
| SPBC | San Pablo de B | 19.94 | 213 | *e*P | Pn | 08 30 16.7 | +2.1 |
| 154A | Montrose | 19.99 | 304 | P | P | 08 30 12.8 | -0.5 |
| PAULI | Pauline | 20.07 | 311 | IAmb | IAmb | 08 30 20.9 | |
| | comp=Z,17nm,0.6s | | | | | | |
| PAL | Palisades | 20.20 | 336 | P | P | 08 30 15.1 | -0.4 |
| PAL | | | | IAmb | IAmb | 08 30 22.4 | |
| | comp=Z,37nm,1.1s | | | | | | |
| V55A | Taylorsville | 20.23 | 314 | P | P | 08 30 15.4 | -0.5 |
| BRYW | Bryant College | 20.25 | 342 | P | P | 08 30 14.7 | -1.3 |
| HELC | Santa Helena | 20.26 | 217 | *e*P | Pn | 08 30 23.4 | +4.8 |
| NORC | Norcasia | 20.43 | 215 | *e*P | Pn | 08 30 22.5 | +2.2 |
| MDP | Montagnes des | 20.43 | 148 | S | S | 08 33 58.7 | -8.3 |
| | comp=Z,11nm,0.8s,baz=244,slow=21,SNR=7.4 | | | | | | |
| TRNY | Table Rock, Ra | 20.44 | 336 | P | P | 08 30 18.4 | +0.3 |
| TRNY | | | | IAmb | IAmb | 08 30 57.8 | |
| | comp=Z,25nm,1.2s | | | | | | |
| ODNJ | Ogdensburg | 20.53 | 335 | P | P | 08 30 19.8 | +0.7 |
| BLA | Blacksburg | 20.55 | 318 | P | P | 08 30 19.3 | 0.0 |
| BLA | | | | IAmb | IAmb | 08 30 25.5 | |
| | comp=Z,39nm,0.7s | | | | | | |
| GOGA | Godfrey | 20.60 | 305 | P | P | 08 30 18.9 | -1.0 |
| CHIC | Chingaza | 20.66 | 211 | *e*P | P | 08 30 19.6 | -1.5 |
| PAGS | Pennsylvania G | 20.72 | 330 | P | P | 08 30 22.3 | +1.2 |
| PAGS | | | | IAmb | IAmb | 08 30 46.5 | |
| | comp=Z,29nm,0.8s | | | | | | |
| ROSC | El Rosal | 20.76 | 212 | P | Pn | 08 30 26.4 | +1.8 |
| | comp=Z,42nm,0.8s,baz=88,slow=7.7,SNR=19 | | | | | | |
| ROSC | | | | LR | LR | 08 41 42.1 | |
| | comp=Z,94nm,18.6s,baz=358,slow=46 | | | | | | |
| ROSC | El Rosal | 20.76 | 212 | | Pn | 08 30 25.0 | +0.4 |
| ROSC | El Rosal | 20.76 | 212 | *e*P | Pn | 08 30 26.3 | +1.7 |
| P57A | Homestead Farm | 20.77 | 327 | P | Pn | 08 30 23.9 | -0.2 |
| CBOC | Ciudad Bolivar | 20.80 | 218 | *e*P | Pn | 08 30 24.4 | -0.4 |
| HRV | Adam Dziewonsk | 20.80 | 343 | P | Pn | 08 30 24.5 | +0.1 |
| HRV | | | | IAmb | IAmb | 08 30 29.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| BG3 | Lake Jocassee | 20.95 | 310 | P | P | 08 30 23.1 | -0.6 |
| BG3 | | | | IAmb | IAmb | 08 30 33.1 | |
| | comp=Z,16nm,0.7s | | | | | | |
| GUY2C | Guyana, Caldas | 20.97 | 215 | *e*P | Pn | 08 30 29.1 | +2.0 |
| 352A | Blakely | 21.01 | 299 | P | P | 08 30 23.4 | -1.0 |
| U54A | Nelsons Funny | 21.02 | 315 | P | P | 08 30 22.8 | -1.7 |
| R55A | Marlinton | 21.07 | 321 | | P | 08 30 26.7 | +1.7 |
| R55A | | | | IAmb | IAmb | 08 30 40.8 | |
| | comp=Z,23nm,0.8s | | | | | | |
| Y52A | Lilburn | 21.25 | 306 | P | P | 08 30 27.4 | +0.5 |
| Y52A | | | | IAmb | IAmb | 08 30 44.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| 451A | Vernon | 21.43 | 296 | P | P | 08 30 30.9 | +2.1 |
| 451A | | | | IAmb | IAmb | 08 31 04.8 | |
| | comp=Z,40nm,1.0s | | | | | | |
| W52A | Murphy | 21.71 | 309 | P | P | 08 30 31.3 | -0.6 |
| PLMC | San Jos del P | 21.74 | 217 | *e*P | P | 08 30 36.8 | +4.4 |
| V52A | Sevierville | 21.85 | 311 | IAmb | IAmb | 08 30 44.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| Z51A | Franklin | 21.87 | 303 | P | P | 08 30 33.2 | -0.4 |
| TKL | Tuckaleechee C | 21.88 | 310 | P | P | 08 30 32.2 | -1.5 |
| | comp=Z,5.4nm,0.9s,baz=120,slow=7.9,SNR=6.1 | | | | | | |
| TKL | Tuckaleechee C | 21.88 | 310 | IAmb | IAmb | 08 30 45.2 | |
| | comp=Z,21nm,0.7s | | | | | | |
| Q54A | Coxs Mills | 21.95 | 321 | IAmb | IAmb | 08 30 44.6 | |
| | comp=Z,42nm,1.6s | | | | | | |
| ORTC | Ortega, Tolima | 22.03 | 213 | *e*P | P | 08 30 39.7 | +4.2 |
| TZTN | Tazewell | 22.18 | 313 | P | P | 08 30 36.2 | -0.7 |
| TZTN | | | | IAmb | IAmb | 08 30 49.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| 250A | Grady | 22.25 | 299 | P | P | 08 30 35.3 | -2.4 |
| V51A | Loudon | 22.36 | 310 | P | P | 08 30 37.2 | -1.7 |
| V51A | | | | IAmb | IAmb | 08 30 37.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| YOTC | Yotoco, Valle | 22.54 | 216 | *e*P | P | 08 30 42.5 | +1.5 |
| BRAL | Brewton | 22.66 | 297 | P | P | 08 30 40.2 | -1.8 |
| Q52A | Bidwell | 22.78 | 319 | P | P | 08 30 41.9 | -1.4 |
| Y49A | Blount Mountai | 23.03 | 304 | P | P | 08 30 46.2 | +0.3 |
| Y49A | | | | IAmb | IAmb | 08 31 21.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| LRAL | Lakeview Retre | 23.18 | 301 | P | P | 08 30 47.2 | -0.3 |
| LRAL | | | | IAmb | IAmb | 08 31 03.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| Q51A | Peebles | 23.48 | 318 | P | P | 08 30 50.6 | +0.2 |
| Q51A | | | | IAmb | IAmb | 08 31 05.8 | |
| | comp=Z,42nm,1.4s | | | | | | |
| PTGA | Pitinga | 23.63 | 171 | P | P | 08 30 53.3 | +1.3 |
| | comp=Z,1.7nm,0.3s,baz=100,slow=23,SNR=1.8 | | | | | | |
| GARC | Garzon, Huila | 23.64 | 212 | *e*P | P | 08 30 54.9 | +2.5 |
| SADO | Sadowa | 25.44 | 333 | S | S | 08 35 48.8 | +13 |
| | comp=Z,6.2nm,0.7s,baz=194,slow=0.9,SNR=3.1 | | | | | | |
| CMIG | Matias Romero | 30.13 | 265 | LR | LR | 08 44 04.1 | |
| | comp=Z,51nm,20.5s,baz=234,slow=37 | | | | | | |
| ATAH | Atalaipa | 33.19 | 208 | LR | LR | 08 48 33.7 | |
| | comp=Z,65nm,21.0s,baz=356,slow=41 | | | | | | |
| TXAR | Lajitas Array | 36.64 | 289 | P | P | 08 32 46.6 | -1.0 |
| | comp=Z,0.7nm,0.7s,baz=102,slow=7.5,SNR=10 | | | | | | |
| NNA | Nana | 37.01 | 202 | LR | LR | 08 50 33.8 | |
| | comp=Z,32nm,21.3s,baz=310,slow=40 | | | | | | |
| LPAZ | La Paz | 39.13 | 187 | P | P | 08 33 10.5 | +1.3 |
| | comp=Z,0.6nm,0.5s,baz=32,slow=9.5,SNR=2.2 | | | | | | |
| LPAZ | La Paz | 39.13 | 187 | P | P | 08 33 10.5 | +1.3 |
| ANMO | Albuquerque | 39.34 | 298 | LR | LR | 08 47 57.2 | |
| | comp=Z,49nm,21.2s,baz=201,slow=34 | | | | | | |
| PDAR | Pinedale Array | 43.02 | 309 | P | P | 08 33 39.7 | -0.9 |
| | comp=Z,0.3nm,0.4s,baz=120,slow=9.3,SNR=5.6 | | | | | | |
| NVAR | Mina Array Bea | 49.09 | 302 | P | P | 08 34 28.6 | 0.0 |
| | comp=Z,0.3nm,0.7s,baz=90,slow=7.2,SNR=2.9 | | | | | | |
| YKA | Yellowknife Ar | 52.44 | 333 | P | P | 08 34 50.7 | -2.4 |
| | comp=Z,0.1nm,0.6s,baz=106,slow=7.3,SNR=1.9 | | | | | | |
| ZON | Zonda | 54.28 | 186 | P | P | 08 35 09.3 | +2.2 |
| ZON | | | | IAmb | IAmb | 08 35 10.8 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| BTNL | Ternell | 59.80 | 44 | *d*P | P | 08 35 48.8 | +2.7 |
| TORD | Torodi Ar. Bea | 62.22 | 87 | P | P | 08 36 03.2 | +0.3 |
| | comp=Z,0.4nm,0.5s,baz=293,slow=6.6,SNR=2.8 | | | | | | |
| NOA | NORSAR Array B | 62.87 | 32 | LR | LR | 08 57 02.4 | |
| | comp=Z,7.4nm,21.6s,baz=200,slow=30 | | | | | | |
| PLCA | Paso Flores | 63.56 | 186 | P | P | 08 36 13.9 | +2.5 |
| | comp=Z,1.4nm,0.8s,baz=2.0,slow=8.2,SNR=5.0 | | | | | | |
| PLCA | Paso Flores | 63.56 | 186 | P | P | 08 36 14.5 | +3.1 |
| HFS | Hagfors | 64.08 | 33 | LR | LR | 09 02 02.6 | |
| | comp=Z,23nm,18.2s,baz=270,slow=34 | | | | | | |
| ILAR | Eielson Array | 66.87 | 332 | P | P | 08 36 31.2 | -1.3 |
| | comp=Z,0.5nm,0.7s,baz=97,slow=3.9,SNR=4.8 | | | | | | |
| ILAR | Eielson Array | 66.87 | 332 | P | P | 08 36 31.7 | -0.8 |
| BRTR | Keskin Array B | 80.88 | 51 | P | P | 08 37 55.8 | +0.5 |
| | comp=Z,0.4nm,0.4s,baz=270,slow=4.3,SNR=3.6 | | | | | | |

*IDC* ***28*** *08:49:22.9±4.6, 21.20S×169.00E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.7/22, mbtmp3.7/5, ML3.3/1, Error ellipse: s-maj=102.4km s-min=59.4km az=149.0*

*NOU* ***28*** *08:49:22.8, 22.06S×169.25E, h0km, MLv4.5/15, Southeast of Loyalty Islands*

**ISC 28 08:49:24.2±2.1, 22.0S±0.1×169.2E±0.2, h10km, n16, σ0.8 84/17, mb3.7/4, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PINNC | Pines Island, | 1.71 | 250 | P | Pn | 08 49 53.8 | -0.4 |
| YATNC | Mamie plateau, | 2.14 | 269 | P | Pn | 08 49 59.7 | -0.3 |
| OUENC | Ouen Island, N | 2.21 | 260 | P | Pn | 08 50 01.7 | +0.7 |
| LIFNC | LIFOU | 2.21 | 304 | P | Pn | 08 50 01.7 | +0.7 |
| DZM | Mont Dzumac | 2.55 | 269 | Pn | Pn | 08 50 05.8 | 0.0 |
| | 6.7nm,0.3s,baz=35,slow=12,SNR=756 | | | | | | |
| DZM | | | | Sn | Sn | 08 50 36.6 | -0.4 |
| | 35nm,0.3s,baz=205,slow=23,SNR=8.3 | | | | | | |
| DZM | Mont Dzumac | 2.55 | 269 | P | Pn | 08 50 06.4 | +0.6 |
| ONTNC | Ouen Toro | 2.55 | 264 | P | Pn | 08 50 06.2 | +0.5 |
| NOUC | Port Laguerre | 2.68 | 268 | P | Pn | 08 50 07.9 | +0.4 |
| RTV | Rentapao | 4.29 | 350 | P | Pn | 08 50 30.5 | +0.9 |
| DVP | Devils Point | 4.40 | 347 | P | Pn | 08 50 30.6 | -0.5 |
| KOUNC | Koumac, New Ca | 4.81 | 287 | P | Pn | 08 50 37.6 | +0.8 |
| SANVU | Saraoutou | 6.83 | 344 | P | Pn | 08 51 04.4 | -0.1 |
| CTA | Charters Tower | 21.49 | 271 | P | P | 08 54 12.1 | -1.3 |
| | 2.0nm,0.7s,baz=94,slow=13,SNR=4.4 | | | | | | |
| STKA | Stephens Creek | 26.41 | 242 | P | P | 08 55 03.2 | +2.0 |
| | 1.1nm,0.5s,baz=70,slow=15,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 32.51 | 260 | P | P | 08 55 55.0 | -0.5 |
| | 0.7nm,0.6s,baz=82,slow=9.0,SNR=18 | | | | | | |
| WRA | Warramunga Arr | 32.57 | 267 | P | P | 08 55 55.4 | -0.6 |
| | 0.3nm,0.4s,baz=98,slow=8.4,SNR=6.2 | | | | | | |

*BJI* ***28*** *09:06:20.8±0.0, 4.87N×125.48E, h187km, mb4.9/77, mB5.0/62*

*MOS* ***28*** *09:06:22.6±1.2, 5.28N×125.06E, h172km, mb5.3/67, MS4.3/5, Error ellipse: s-maj=7.7km s-min=4.1km az=111.5*

*DJA* ***28*** *09:06:25.8±0.3, 5.2°N×12.5°E, h180km±3km, M5.3/85, mb5.5/85, mB5.8/74, MLv6.1/13, Mw(mB)5.4/74, MwMwp5.2/42, Mwp5.4/42*

*NEIC* ***28*** *09:06:25.6±2.4, 5.28N±0.06×125.33E±0.07, h175km±4km, mb5.4/164, Mww5.5, Error ellipse: s-maj=10.6km s-min=8.7km az=82.0*

*MAN* ***28*** *09:06:25.6, 5.19N×125.41E, h178km, mb6.0, ML5.1, MS5.6*

*MAN INTENSITY II - GLAN & MALAPATAN, SARANGANI; GENERAL SANTOS CITY; DAVAO CITY.*

*GCMT* ***28*** *09:06:25.6±0.1, 5.27N±0.01×125.32E±0.01, h181km, MW5.5/152, Moment Tensor Solution. s127,c210; s152,c278; Duration: 1ᵗ4 Moment tensor: Scale 10¹⁷ Nm; Mr=1.20±.03; Mθθ0.49±.03; Mϕϕ0.71±.04; Mrθ0.78±.02; Mrϕ-0.67±.03; Mθϕ-2.17±.03; Best double couple: Mo2.61900×10¹⁷ NP1:ϕs123.00000°, δ16.00000°, λ-123.00000°. NP2:ϕs338.00000°, δ76.00000°, λ-81.00000°. Principal axes: T 2.5950, Plg31.0000°, Azm60.0000°; N 0.0500, Plg9.0000°, Azm155.0000°; P -2.6430, Plg58.0000°, Azm260.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*KLM* ***28*** *09:06:26, 5.25N×125.55E, h182km, mb6.0*

*IDC* ***28*** *09:06:26.7±0.5, 5.28N×125.28E, h195km±4km, mb4.7/49, mb1 4.8/52, mb1mx4.7/59, mbtmp5.2/52, MS4.2/35, Ms1 4.2/35, ms1mx4.0/82, Error ellipse: s-maj=7.2km s-min=4.9km az=71.0*

*NEIC* ***28*** *09:06:27, 5.19N×125.37E, h190km, Moment Tensor Solution. Duration: 2ᵗ0 Moment tensor: Scale 10¹⁷Nm; Mr=0.62; Mθθ0.58; Mϕϕ0.04; Mrθ1.15; Mθϕ-0.40; Mrϕ-1.96; Fault plane solution: Mo2.38000×10¹⁷ NP1:ϕs93.00000°, δ12.00000°, λ-143.00000°. NP2:ϕs328.00000°, δ83.00000°, λ-79.00000°. Principal axes: T 2.3398, Plg37.0000°, Azm49.0000°; N 0.0739, Plg10.0000°, Azm147.0000°; P -2.4137, Plg51.0000°, Azm249.0000°;*

**ISC 28 09:06:26.0±0.2, 5.29N±0.02×125.31E±0.03, h193km±1km, h193km:pP-P, n1036, σ1ᵗ73/1259, mb5.3/245, 67C-158D, Fault plane solution: NP1:ϕs342.37909°, δ64.56895°, λ-95.26459°. NP2:ϕs174.48970°, δ25.93471°, λ-79.07810°. Principal axes: T Plg19.4052°, Azm76.3235°; N Plg4.7532°, Azm344.6451°; P Plg69.9753°, Azm241.4570°; Fault plane solution: NP1:ϕs95.32940°, δ30.57156°, λ-128.81484°. NP2: ϕs318.38477°, δ66.65294°, λ-69.68182°. Principal axes: T Plg19.1831°, Azm33.3167°; N Plg18.5905°, Azm130.0368°; P Plg62.7530°, Azm260.8167°;**

**Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSPH | General Santos | 0.87 | 336 | *i* P | Pn | 09 06 53.7 | -0.5 |
| GSPH | | | | *i* S | Sn | 09 07 16.3 | +0.1 |
| KCP | Kidapawan | 1.72 | 353 | *i* P | Pn | 09 07 01.3 | +0.1 |
| KCP | | | | *i* S | Sn | 09 07 28.6 | -0.1 |
| DAV | Davao City (W) | 1.79 | 9 | P | Pn | 09 07 02.6 | +0.8 |
| | 331nm,0.3s,baz=161,slow=1.2,SNR=290 | | | | | | |
| DAV | | | | S | Sn | 09 07 31.5 | +1.7 |
| | 1μm,0.3s,baz=146,slow=10,SNR=8.9 | | | | | | |
| DAV | | | | LR | LR | 09 07 44.5 | |
| | comp=Z,12μm,19.9s,baz=134,slow=43 | | | | | | |
| DAV | Davao City (W) | 1.79 | 9 | | Pn | 09 07 02.1 | +0.2 |
| DAV | Davao City (W) | 1.79 | 9 | P | Pn | 09 07 02.5 | +0.6 |
| MATI | Mati | 1.90 | 30 | *e*P | Pn | 09 07 01.8 | -1.2 |
| CTBH | Cotabato--PC H | 2.19 | 331 | *i* P | Pn | 09 07 06.8 | +0.9 |
| CTBH | | | | *i* S | Sn | 09 07 38.4 | +1.3 |
| BUKP | Musuan | 2.58 | 355 | *e*P | Pn | 09 07 11.0 | +0.5 |
| BIPH | Bislig | 3.06 | 20 | *e*P | Pn | 09 07 16.8 | +0.8 |
| BIPH | | | | *i* S | Sn | 09 07 55.8 | +0.6 |
| PAGZ | Pagadian | 3.18 | 323 | *e*P | Pn | 09 07 18.1 | +0.7 |
| ZCP | Zamboanga City | 3.60 | 297 | *e*P | Pn | 09 07 24.0 | +1.4 |
| SCPH | Surigao | 4.47 | 2 | *e*P | Pn | 09 07 38.6 | +5.2 |
| GLSP | General Luna, | 4.54 | 10 | *e*P | Pn | 09 07 35.2 | +0.8 |
| TBP | Tagbilaran | 4.60 | 342 | *e*P | Pn | 09 07 30.7 | -4.5 |
| TBP | | | | *i* S | Sn | 09 08 33.6 | +4.1 |
| MSLP | Maasin | 4.83 | 355 | *i* P | Pn | 09 07 39.4 | +1.3 |
| MSLP | | | | *e*S | Sn | 09 08 48.3 | +13 |
| KMSI | Cibinong | 4.87 | 196 | P | Pn | 09 07 38.4 | -0.1 |
| TNTI | Ternate | 4.94 | 155 | Pn | Pn | 09 07 36.5 | -2.9 |
| TNTI | Ternate | 4.94 | 155 | P | Pn | 09 07 36.2 | -3.2 |
| TNTI | Ternate | 4.94 | 155 | P | Pn | 09 07 37.2 | -2.2 |
| GTOI | Gorontalo | 5.16 | 206 | P | Pn | 09 07 41.3 | -1.0 |
| | 8.2nm5μm19μm2μm,1.4s | | | | | | |
| LLP | Lapu-Lapu | 5.17 | 345 | *e*P | Pn | 09 07 44.6 | +2.2 |
| LLP | | | | *e*S | Sn | 09 08 46.2 | +3.6 |
| CNOP | Candoni, Negro | 5.23 | 330 | *i* P | Pn | 09 07 45.2 | +2.1 |
| OCLP | Ormoc | 5.77 | 353 | *e*P | Pn | 09 07 52.3 | +2.2 |
| MRSI | Marisa | 5.84 | 215 | P | Pn | 09 07 51.5 | +0.4 |
| | 7.4nm11μm23μm2μm,1.2s | | | | | | |
| TOLI2 | Tolitoli | 6.13 | 228 | Pn | Pn | 09 07 54.6 | -0.3 |
| TOLI2 | Tolitoli | 6.13 | 228 | P | Pn | 09 07 55.3 | +0.4 |
| | 2μm,1.3s | | | | | | |
| RCP | Roxas | 6.72 | 338 | *e*P | Pn | 09 08 05.5 | +2.9 |
| MYLDM | Lahad Datu | 6.78 | 269 | Pn | Pn | 09 08 07.0 | +3.7 |
| LUWI | Luwuk | 6.78 | 202 | | Pn | 09 08 04.2 | +0.9 |
| LUWI | Luwuk | 6.78 | 202 | P | Pn | 09 08 05.1 | +1.8 |
| | 9.9nm11μm23μm2μm,1.2s | | | | | | |
| LUWI | Luwuk | 6.78 | 202 | P | Pn | 09 08 05.1 | +1.8 |
| | 2μm,1.2s | | | | | | |
| CUYO | Cuyo Island | 6.97 | 323 | *e*P | Pn | 09 08 08.2 | +2.4 |
| APSI | Ampana | 7.16 | 211 | P | Pn | 09 08 10.5 | +2.2 |
| | 5.4nm7μm14μm2μm,1.2s | | | | | | |
| MPSI | Mapaga | 7.30 | 228 | P | Pn | 09 08 10.4 | +0.2 |
| | 1.1nm8μm5μm301nm,1.3s | | | | | | |
| SANI | Sanana | 7.32 | 175 | P | Pn | 09 08 06.8 | -3.6 |
| | 9.3nm9μm21μm1μm,0.6s | | | | | | |
| BATP | Bataraza | 8.22 | 295 | *e*P | Pn | 09 08 08.1 | -14 |
| SJMP | San Jose | 8.24 | 330 | *e*P | Pn | 09 08 19.0 | -3.3 |
| PVCP | Virac | 8.33 | 352 | *e*P | Pn | 09 08 26.0 | +2.4 |
| AUQP | San Andres | 8.39 | 342 | *e*P | Pn | 09 08 32.8 | +8.4 |
| SIJI | Sorong | 8.54 | 136 | P | Pn | 09 08 25.4 | -1.0 |
| | 26nm,0.3s,baz=329,slow=14,SNR=44 | | | | | | |
| SIJI | | | | S | Sn | 09 09 54.5 | -7.7 |
| | 17nm,0.3s,baz=115,slow=20,SNR=6.7 | | | | | | |
| SIJI | | | | LR | LR | 09 11 30.1 | |
| | comp=Z,2μm,21.4s,baz=316,slow=36 | | | | | | |
| SPMM | Sapulut | 8.82 | 267 | P | Pn | 09 08 33.0 | +2.9 |
| KKM | Kota Kinabalu | 9.08 | 275 | Pn | Pn | 09 08 35.4 | +1.9 |
| KKM | Kota Kinabalu | 9.08 | 275 | P | Pn | 09 08 36.4 | +2.9 |
| | 281nm,1.3s | | | | | | |
| PGP | Puerto Galera | 9.22 | 333 | P | Pn | 09 08 43.3 | +8.0 |
| MSAI | Masohi | 9.31 | 157 | P | Pn | 09 08 35.

**BATI Baumata 15.48 186** P **P** **09 09 55.9 +1.1**
150nm,0.3s,baz=335,slow=0.9,SNR=95
BATI S **Sn** **09 12 49.2 +1.2**
32nm,0.3s,baz=87,slow=13,SNR=6.4
**BATI Baumata 15.48 186** P **P** **09 09 55.5 +0.7**
2µm6µm723nm,0.7s
**PBKI Pangkalan Bun 15.77 240** P **Pn** **09 10 00.3 +2.3**
10µm966nm,1.1s
**PLAI Plampang 15.91 208** P **Pn** **09 10 00.5 +0.8**
5µm6µm511nm,0.9s
**PLAI Plampang 15.91 208** P **Pn** **09 10 00.4 +0.8**
517nm,0.9s
**WBSI Waikabubak, Su 15.96 202** P **P** **09 09 59.4 -0.7**
4µm198nm,1.0s
**BASI Baing, Sumba 16.11 197** P **P** **09 10 00.9 -0.8**
2µm3µm189nm,0.8s
**GENI Genyem 16.79 117** P **Pn** **09 10 10.6 +0.4**
9µm41µm5µm,1.2s
**GENI Genyem 16.79 117** P **Pn** **09 10 11.8 +1.6**
5µm,1.0s
**BWJI Bawean 16.79 229** P **Pn** **09 10 13.5 +3.2**
18µm1µm,1.5s
**ABJI Asem Bagus 17.06 220** P **Pn** **09 10 13.3 -0.1**
6µm4µm264nm,1.6s
**JAY Jayapura 17.23 116** P **Pn** **09 10 15.2 -0.3**
25nm,0.3s,baz=276,slow=7.2,SNR=156
JAY S **S** **09 13 23.9 +0.3**
0.2nm,0.3s,baz=332,slow=23,SNR=7.6
**JAY Jayapura 17.23 116** P **P** **09 10 15.0 +0.9**
7µm880nm,1.0s
**IGBI Denpasar 17.29 216** P **Pn** **09 10 15.7 -0.5**
3µm4µm242nm,0.7s
**BLJI Banyuglugur 17.44 222** P **Pn** **09 10 17.4 -0.5**
3µm151nm,1.0s
**JAGI Jajag, Banyuwa 17.62 219** P **P** **09 10 18.9 +0.6**
**JAGI Jajag, Banyuwa 17.62 219** P **P** **09 10 19.0 +0.6**
5µm4µm526nm,1.1s
**GRJI Gresik 17.63 227** P **Pn** **09 10 22.1 +1.9**
6µm600nm,1.2s
**DLV T Lat 17.89 293** P **Pn** **09 10 23.9 +0.5**
**TWG Pinlang 17.90 347** P **P** **09 10 20.6 -0.7**
TWG IAmb IAmb 09 10 21.9
comp=Z,80nm,0.6s
**GMJI Gumukmas 17.93 221** P **P** **09 10 21.9 +0.2**
comp=Z,4µmcomp=Z,315nm,1.7s
**YULB Yu-li 18.41 348** P **P** **09 10 25.4 -1.4**
**UWJI Ujung Watu 18.46 231** P **Pn** **09 10 30.9 +1.0**
comp=Z,8µmcomp=Z,567nm,0.8s
**TPUB Ta-pu 18.47 346** P **P** **09 10 27.1 -0.4**
**TPUB Ta-pu 18.47 346** P **P** **09 10 28.2 +0.8**
comp=Z,177nm,0.6s
**SSLB Suanglung 18.86 348** P **P** **09 10 30.8 -0.9**
**SSLB Suanglung 18.86 348** P **P** **09 10 32.6 +0.8**
comp=Z,59nm,0.6s
**PWJI Pagerwojo 18.87 226** P **Pn** **09 10 34.2 -0.6**
comp=Z,5µmcomp=Z,210nm,1.2s
**MTN Manton Dam 18.92 162** P **P** **09 10 32.3 -0.1**
baz=19,SNR=347
**MTN Manton Dam 18.92 162** P **P** **09 10 32.1 -0.4**
**NACB Ninganchiao 19.11 350** P **P** **09 10 33.6 -0.8**
**YOJ Yonaguni jima 19.19 354** P **P** **09 10 36.6 +1.4**
YOJ pmax pmax
comp=Z,97nm,0.9s
**YOJ Yonaguni jima 19.19 354** P **P** **09 10 36.6 +1.4**
YOJ IAmb IAmb 09 10 44.6
comp=Z,97nm,0.9s
**YOJ Yonaguni jima 19.19 354** P **Pn** **09 10 38.4 0.0**
comp=Z,129nm,1.0s
**KDU Kakadu 19.23 158** P **P** **09 10 35.8 +0.1**
baz=19,SNR=34
**SMRI Semarang 19.24 231** P **Pn** **09 10 39.8 +0.6**
**SMRI Semarang 19.24 231** P **Pn** **09 10 38.2 -1.0**
comp=Z,535nm,0.9s
**JMJ Miyako jima 2 19.41 360** P **Pn** **09 10 40.0 -1.1**
comp=Z,1µm,1.0s
**PCJI Pacitan 19.44 227** P **P** **09 10 39.3 +1.3**
comp=Z,6µmcomp=Z,4µmcomp=Z,296nm,1.9s
**YHNB Yeheng 19.64 349** P **P** **09 10 39.3 -0.8**
YHNB IAmb IAmb 09 10 44.7
comp=Z,56nm,0.5s
**YHNB Yeheng 19.64 349** P **P** **09 10 40.0 -0.1**
comp=Z,76nm,0.6s
**UGM Wanagama 19.73 228** P **P** **09 10 41.9 +0.6**
**UGM Wanagama 19.73 228** P **P** **09 10 43.0 +1.8**
comp=Z,7µmcomp=Z,7µmcomp=Z,590nm,1.4s
**UGM Wanagama 19.73 228** P **Pn** **09 10 44.9 -0.2**
comp=Z,590nm,1.4s
**YOGI Yogyakarta 19.84 229** P **Pn** **09 10 45.0 -1.4**
comp=Z,6µmcomp=Z,352nm,1.6s
**TATO Taipei 19.91 350** P **P** **09 10 43.2 +0.2**
TATO IAmb IAmb 09 10 58.4
comp=Z,157nm,1.5s
**HKPS Hong Kong Po S 20.05 328** P **P** **09 10 45.2 +0.7**
HKPS IAmb IAmb 09 10 48.4
comp=Z,69nm,0.8s
**KNMB Chin-men Tao 20.19 341** P **P** **09 10 46.6 +0.6**
KNMB IAmb IAmb 09 11 01.3
comp=Z,76nm,0.9s
**QIZ Qiongzhong 20.34 313** P **P** **09 10 49.7 +2.1**
QIZ IAmb IAmb 09 10 51.5
comp=Z,75nm,0.7s
**QIZ Qiongzhong 20.34 313** P **P** **09 10 49.8 +2.1**
QIZ S **S** **09 14 25.0 -0.1**
QIZ pmax pmax
comp=Z,70nm,0.7s
QIZ pmax pmax
comp=Z,850nm,3.7s
QIZ LR LR
comp=Z,3µm,17.3s
QIZ LR LR
comp=Z,2µm,17.3s
QIZ LR LR
comp=Z,800nm,10.7s
**QIZ Qiongzhong 20.34 313** P **P** **09 10 50.0 +2.3**
comp=Z,122nm,0.9s
**QIZ Qiongzhong 20.34 313** P **P** **09 10 49.1 +1.4**
**PPBI Pangkal Pinang 20.53 249** P **P** **09 10 50.9 +1.2**
comp=Z,463nm,1.3s
**QZH Quanzhou 20.58 342** ⇑*i*P **P** **09 10 52.3 +2.2**
QZH sP **sP** **09 11 48.0 +0.8**
QZH S **S** **09 14 26.0 -3.5**
**KPJI Karang Pucung 20.59 233** P Pn 09 10 53.6 -2.1
comp=Z,7µmcomp=Z,363nm,1.2s
**JCJI Jatiwangi 20.64 236** P Pn 09 10 56.5 +0.2
comp=Z,16µmcomp=Z,478nm,1.1s
**GUMO Guam 20.97 65** P **P** **09 10 55.5 +1.1**
comp=Z,298nm,0.3s,baz=300,slow=1.4,SNR=19
**GUMO Guam 20.97 65** P **P** **09 10 54.8 +0.4**
**GUMO Guam 20.97 65** P **P** **09 10 55.2 +0.8**
comp=Z,2µm,1.2s
**KNRA Kununurra 21.11 171** P **P** **09 10 54.7 -1.1**
baz=21,SNR=312
**KNRA Kununurra 21.11 171** P **P** **09 10 55.7 -0.1**
**KNRA Kununurra 21.11 171** P **P** **09 10 54.9 -0.9**
comp=Z,349nm,0.7s
**TPRI Tanjung Pinang 21.19 259** P **P** **09 10 58.7 +2.0**
comp=Z,12µmcomp=Z,770nm,1.2s
**CMJI Cimerak 21.25 232** P **P** **09 10 56.5 -0.8**
comp=Z,3µmcomp=Z,4µmcomp=Z,164nm,1.0s
**LEM Lembang 21.36 236** P **P** **09 11 00.6 +1.9**
comp=Z,297nm,0.9s,baz=36,slow=8.4,SNR=57
LEM LR LR 09 21 28.5
comp=Z,761nm,18.7s,baz=30,slow=42
**LEM Lembang 21.36 236** P **P** **09 10 59.9 +1.2**
comp=Z,4µmcomp=Z,7µmcomp=Z,368nm,2.2s
**DSRI Dabo 21.48 255** P **P** **09 11 01.1 +1.4**
comp=Z,4µmcomp=Z,9µmcomp=Z,711nm,1.3s
**JOW Kunigami 21.61 7** P **P** **09 11 02.2 +1.3**
comp=Z,209nm,0.8s,baz=200,slow=8.3,SNR=36
JOW S **S** **09 14 48.3 +0.8**
comp=Z,24nm,1.0s,baz=223,slow=19,SNR=2.2
**JOW Kunigami 21.61 7** P **P** **09 11 01.2 +0.3**
**JOW Kunigami 21.61 7** P **P** **09 11 02.5 +1.6**
comp=Z,320nm,0.9s
**MYKOM Kota Tinggi 21.69 262** P **P** **09 11 03.6 +1.7**
**MYKOM Kota Tinggi 21.69 262** P **P** **09 11 04.0 +2.1**
**CBJI Citeko 21.79 238** P **P** **09 11 06.7 +3.8**
comp=Z,17µmcomp=Z,1µm,1.1s
**UBPT Khong Chiam 21.87 298** P **P** **09 11 05.3 +1.5**
**DBJI Dramaga 21.94 238** P **P** **09 11 04.5 +0.1**
comp=Z,15µmcomp=Z,619nm,2.0s
**CNJI Cibinong 22.04 236** P **P** **09 11 06.5 +1.2**
comp=Z,6µmcomp=Z,8µmcomp=Z,598nm,1.1s
**PMBI Palembang 22.07 249** P **P** **09 11 07.8 +2.1**
**PMBI Palembang 22.07 249** P **P** **09 11 08.8 +3.1**
comp=Z,7µmcomp=Z,47µmcomp=Z,1µm,1.1s
**SKJI Sukabumi 22.34 237** P **P** **09 11 09.6 +1.4**
comp=Z,2µmcomp=Z,304nm,1.0s
**BLSI Bandar Lampung 22.66 242** P **P** **09 11 13.1 +2.0**
comp=Z,12µmcomp=Z,817nm,1.1s
**JMBI JAMBI 22.70 253** P **P** **09 11 15.3 +3.8**
comp=Z,7µmcomp=Z,344nm,0.9s
**KLI Kotabumi 22.78 244** P **P** **09 11 14.3 +2.2**
comp=Z,6µmcomp=Z,18µmcomp=Z,2µm,1.0s
**JRMM Jerantut 22.80 267** P **P** **09 11 15.0 +2.6**
**KLSI 22.82 245** P **P** **09 11 15.1 +2.6**
comp=Z,7µmcomp=Z,479nm,1.3s
**CGJI Cibinong 22.87 239** P **P** **09 11 12.5 -0.5**
comp=Z,5µmcomp=Z,276nm,1.1s
**MANU Manus Island 23.21 108** P **P** **09 11 17.1 +1.0**
**FITZ Fitzroy Crossi 23.24 179** P **P** **09 11 16.3 0.0**
comp=Z,119nm,0.4s,baz=6.3,slow=8.6,SNR=384
FITZ S **S** **09 15 11.8 -2.1**
comp=Z,17nm,0.9s,baz=86,slow=21,SNR=1.4
**FITZ Fitzroy Crossi 23.24 179** P **P** **09 11 15.9 -0.3**
baz=23,SNR=390
**FITZ Fitzroy Crossi 23.24 179** P **P** **09 11 15.8 -0.4**
**FITZ Fitzroy Crossi 23.24 179** P **P** **09 11 16.7 +0.5**
comp=Z,311nm,1.0s
**KASI Kota Agung 23.39 243** P **P** **09 11 19.3 +1.6**
comp=Z,5µmcomp=Z,4µmcomp=Z,327nm,1.1s
**IPM Ipoh 24.20 269** P **P** **09 11 26.9 +1.7**
**IPM Ipoh 24.20 269** P **P** **09 11 27.0 +1.8**
**IPM Ipoh 24.20 269** P **P** **09 11 28.5 +3.3**
comp=Z,328nm,1.4s
**MNAI Manna 24.29 247** P **P** **09 11 27.9 +1.9**
**MNAI Manna 24.29 247** P **P** **09 11 31.2 +5.2**
comp=Z,5µmcomp=Z,19µmcomp=Z,1µm,1.9s
**MNAI Manna 24.29 247** P **P** **09 11 27.9 +1.9**
comp=Z,1µm,1.3s
**GULI GuiLin 24.51 326** ⇑P **P** **09 11 28.3 +0.5**
GULI S **S** **09 15 31.0 -3.1**
GULI pmax pmax
comp=Z,10.0nm,0.6s
GULI LR LR
comp=Z,1µm,9.8s
GULI LR LR
comp=Z,1µm,10.8s
GULI LR LR
comp=Z,630nm,15.2s
**KULM Kulim 24.55 271** P **P** **09 11 29.5 +1.2**
**KULM Kulim 24.55 271** P **P** **09 11 31.0 +2.7**
**BKNI Bangkinang 24.73 259** P **P** **09 11 31.6 +1.8**
**BKNI Bangkinang 24.73 259** P **P** **09 11 32.6 +2.7**
comp=Z,4µmcomp=Z,9µmcomp=Z,643nm,1.2s
**XMIS Christmas Isla 25.07 231** P **P** **09 11 34.6 +1.6**
XMIS IAmb IAmb 09 11 38.2
comp=Z,214nm,1.4s
**PPI Padang Panjang 25.52 258** P **P** **09 11 38.8 +1.7**
**SRIT Nakonsritamara 25.72 279** P **P** **09 11 40.6 +1.8**
**SSE Sheshan 25.96 352** P **P** **09 11 44.3 +3.5**
SSE S **S** **09 15 57.8 +1.0**
SSE pmax pmax
comp=Z,23nm,0.7s
SSE LR LR
comp=Z,560nm,15.1s
SSE LR LR
comp=Z,830nm,7.9s
**COEN Coen 26.08 137** P **P** **09 11 42.1 +0.1**
COEN IAmb IAmb 09 11 53.5
comp=Z,80nm,0.9s
**COEN Coen 26.08 137** P **P** **09 11 42.2 +0.1**
comp=Z,105nm,0.9s
**PMG Port Moresby 26.22 124** P **P** **09 11 43.2 -0.1**
comp=Z,44nm,0.8s,baz=353,slow=4.6,SNR=9.9
PMG ScP **ScP** **09 18 27.4 +0.7**
comp=Z,54nm,1.1s,baz=240,slow=3.4,SNR=6.0
PMG LR LR 09 22 37.4
comp=Z,910nm,20.2s,baz=305,slow=37
**PMG Port Moresby 26.22 124***c i*P **P** **09 11 42.7 -0.6**
PMG pmax pmax
comp=Z,91nm,1.1s
**PMG Port Moresby 26.22 124** P **P** **09 11 43.1 -0.2**
PMG IAmb IAmb 09 11 44.5
comp=Z,90nm,1.1s
**PMG Port Moresby 26.22 124** P **P** **09 11 43.7 +0.4**
comp=Z,76nm,1.0s
**PMG Port Moresby 26.22 124** P **P** **09 11 43.8 +0.4**
comp=Z,76nm,1.0s
**PSI Prapat 26.43 266** P **P** **09 11 46.5 +1.1**
comp=Z,170nm,1.0s,baz=80,slow=4.0,SNR=84
**PSI Prapat 26.43 266** P **P** **09 11 46.7 +1.3**
PSI pmax pmax
comp=Z,358nm,1.2s
**PSI Prapat 26.43 266** P **P** **09 11 47.8 +2.4**
comp=Z,268nm,1.2s
**RPSI Rantau Prapat 26.44 265** P **P** **09 11 46.7 +1.4**
**WB0 Warramunga Arr 26.46 160** P **P** **09 11 44.4 -1.0**
WB0 IAmb IAmb 09 11 45.6
comp=Z,144nm,0.9s
**JSU Suzuyama 26.52 10** P **P** **09 11 46.4 +0.6**
JSU IAmb IAmb 09 11 47.4
comp=Z,52nm,1.1s
**WRAB Tennant Creek 26.60 161***d i*P **P** **09 11 45.8 -0.8**
WRAB pmax pmax
comp=Z,155nm,0.9s
**WRAB Tennant Creek 26.60 161** P **P** **09 11 45.9 -0.7**
WRAB IAmb IAmb 09 11 47.0
comp=Z,150nm,0.9s
**WRAB Tennant Creek 26.60 161** P **P** **09 11 45.8 -0.8**
comp=Z,162nm,1.3s
**WRAB Tennant Creek 26.60 161** P **P** **09 11 45.8 -0.8**
**WRA Warramunga Arr 26.60 161** P **P** **09 11 45.6 -1.1**
comp=Z,68nm,0.8s,baz=331,slow=11,SNR=138
WRA PcP **PcP** **09 15 06.2 +0.3**
comp=Z,6.9nm,0.6s,baz=338,slow=2.8,SNR=2.6
WRA S **S** **09 16 04.7 -2.5**
comp=Z,39nm,1.1s,baz=340,slow=16,SNR=9.1
WRA ScP **ScP** **09 18 27.1 -0.7**
comp=Z,28nm,0.9s,baz=344,slow=3.3,SNR=7.5
WRA ScS **ScS** **09 22 15.4 -3.4**
comp=Z,4.8nm,1.0s,baz=326,slow=3.8,SNR=7.1
WRA PKiKP **PKiKP** **09 22 43.7 -0.7**
comp=Z,0.5nm,0.6s,baz=304,slow=1.5,SNR=6.6
**WRA Warramunga Arr 26.60 161** P **P** **09 11 45.3 -1.4**
**WB2 Warramunga Arr 26.61 161** P **P** **09 11 46.0 -0.8**
WB2 IAmb IAmb 09 11 47.0
comp=Z,166nm,0.9s
**WR0 Warramunga Arr 26.68 160** P **P** **09 11 46.9 -0.5**
WR0 IAmb IAmb 09 11 47.8
comp=Z,151nm,1.1s
**TSI Tuntungan 26.72 267** P **P** **09 11 49.7 +1.9**
comp=Z,321nm,1.2s
**MBWA Marble Bar 26.85 192** P **P** **09 11 48.0 -0.8**
MBWA pP **pP** **09 12 27.4 +0.8**
**JCJ Chichijima 27.00 35** P **P** **09 11 50.0 -0.1**
**JCJ Chichijima 27.00 35** P **P** **09 11 50.4 +0.2**
comp=Z,567nm,0.9s
**WHN Wuhan 27.16 339** ⇑P **P** **09 11 53.0 +1.5**
WHN pP **pP** **09 12 29.5 -1.1**
WHN sP **sP** **09 12 47.5 -5.5**
WHN S **S** **09 16 16.5 +0.8**
WHN ScP **ScP** **09 18 28.3 -1.0**
WHN LR LR
comp=Z,1µm,10.2s
WHN LR LR
comp=Z,2µm,6.2s
**PSA00 Pilbara Seismi 27.23 191** P **P** **09 11 51.9 -0.3**
**PSA00 Pilbara Seismi 27.23 191** P **P** **09 11 51.9 -0.3**
comp=Z,493nm,1.0s
**NJ2 Nanjing 27.30 348** ⇑P **P** **09 11 57.5 +4.8**
NJ2 pP **pP** **09 12 32.5 +0.6**
NJ2 sP **sP** **09 12 54.5 +0.2**
NJ2 S **S** **09 16 20.5 +2.6**
NJ2 sS **sS** **09 17 29.3 +3.2**
NJ2 ScP **ScP** **09 18 29.8 +0.1**
NJ2 ScS **ScS** **09 22 20.5 -0.9**
NJ2 pmax pmax
comp=Z,15nm,0.5s
NJ2 pmax pmax
comp=Z,170nm,3.6s
NJ2 LR LR
comp=Z,450nm,7.5s
NJ2 LR LR
comp=Z,810nm,11.0s
NJ2 LR LR
comp=Z,570nm,10.8s
**GYA Guiyang 27.57 322** ⇑P **P** **09 11 58.0 +2.6**
GYA pP pP 09 12 38.0 +3.2
GYA PcP **PcP** **09 15 09.0 +0.7**
GYA S **S** **09 16 23.5 +0.9**
GYA sS sS 09 17 34.5 +3.7
GYA ScP **ScP** **09 18 30.5 -0.3**
GYA ScS **ScS** **09 22 22.8 -0.4**
GYA pmax pmax
comp=Z,250nm,3.9s
**GSI Gunungsitoli 27.96 263** P **P** **09 11 59.4 +0.5**
**GSI Gunungsitoli 27.96 263** P **P** **09 11 59.2 +0.3**
comp=Z,3µmcomp=Z,6µmcomp=Z,588nm,1.2s
**GSI Gunungsitoli 27.96 263** P **P** **09 12 01.0 +2.1**
comp=Z,582nm,1.2s
**JNU Nakatsue 28.18 10** P **P** **09 12 00.4 -0.2**
comp=Z,60nm,1.0s,baz=159,slow=4.6,SNR=11
JNU S **S** **09 16 31.7 -0.1**
comp=Z,8.2nm,0.8s,baz=73,slow=6.6,SNR=1.5
**JNU Nakatsue 28.18 10** P **P** **09 12 01.0 +0.4**
JNU IAmb IAmb 09 12 02.6
comp=Z,66nm,1.0s
**LHMI Lhok Sumawe 28.24 271** P **P** **09 12 03.1 +1.8**
**LHMI Lhok Sumawe 28.24 271** P **P** **09 12 05.2 +3.9**
comp=Z,5µmcomp=Z,223nm,1.4s
**KRVT Keravat (AS076 28.34 109** P **P** **09 12 02.5 +0.3**
KRVT S **S** **09 16 37.7 +3.0**
**RABL Rabaul 28.43 109** P **P** **09 12 04.5 +1.4**
**CM31 Chiang Mai Arr 28.87 299** P **P** **09 12 08.9 +2.0**
**CM31 Chiang Mai Arr 28.87 299** P **P** **09 12 09.4 +2.5**
SNR=53
**CMAR Chiang Mai Arr 28.87 299** P **P** **09 12 08.9 +2.0**
comp=Z,102nm,1.1s,baz=121,slow=7.3,SNR=221
CMAR S **S** **09 16 48.8 +5.8**
comp=Z,1.3nm,0.4s,baz=138,slow=30,SNR=1.4
CMAR ScP **ScP** **09 18 34.8 0.0**
comp=Z,5.9nm,0.9s,baz=148,slow=2.1,SNR=9.1
**CMAR Chiang Mai Arr 28.87 299** P **P** **09 12 08.4 +1.6**
**ENH Enshi 28.98 331** P **P** **09 12 08.2 +0.5**
ENH IAmb IAmb 09 12 10.7
comp=Z,47nm,0.8s
**CHTO Chiang Mai 29.01 300** P **P** **09 12 09.9 +1.8**
CHTO pmax pmax
comp=Z,439nm,1.5s
**CHTO Chiang Mai 29.01 300** P **P** **09 12 09.9 +1.8**
**CHTO Chiang Mai 29.01 300** P **P** **09 12 11.5 +3.4**
comp=Z,137nm,1.4s
**CHTO Chiang Mai 29.01 300** P **P** **09 12 10.1 +2.0**
**QIS Mount Isa 29.28 152** P **P** **09 12 10.5 +0.1**
baz=29,SNR=20
**QIS Mount Isa 29.28 152** P **P** **09 12 10.5 +0.1**
comp=Z,90nm,1.3s
**KMI Kunming 29.28 315** ⇓P **P** **09 12 12.8 +2.1**
KMI pP pP 09 12 54.0 +3.7
KMI S **S** **09 16 51.5 +1.8**
KMI sS sS 09 18 00.5 +2.5
KMI ScP **ScP** **09 18 36.0 -0.3**
KMI pmax pmax
comp=Z,57nm,1.6s
KMI pmax pmax
comp=Z,350nm,4.5s
KMI LR LR
comp=Z,500nm,11.3s
KMI LR LR
comp=Z,650nm,14.7s
KMI LR LR
comp=Z,720nm,12.1s
**JMN Monobe 29.40 15** P **P** **09 12 12.4 +1.0**
JMN IAmb IAmb 09 12 14.2
comp=Z,106nm,0.8s
**GIRL Giralia 29.80 201** P **P** **09 12 15.9 +1.0**
baz=30,SNR=10.0
**GIRL Giralia 29.80 201** P **P** **09 12 15.5 +0.5**
**GIRL Giralia 29.80 201** P **P** **09 12 15.9 +1.0**
comp=Z,381nm,1.1s
**MTSU Mount Surprise 29.89 142** P **P** **09 12 15.9 0.0**
baz=30,SNR=8.0
**AS31 Alice Springs 29.98 164** P **P** **09 12 16.1 -0.5**
**ASAR Alice Springs 29.98 164** P **P** **09 12 16.1 -0.5**
comp=Z,32nm,0.4s,baz=339,slow=7.6,SNR=278
ASAR PcP **PcP** **09 15 14.8 +0.5**
comp=Z,13nm,0.3s,baz=343,slow=2.4,SNR=9.3
ASAR S **S** **09 16 58.2 -2.1**
comp=Z,17nm,0.8s,baz=348,slow=18,SNR=7.5
ASAR ScP **ScP** **09 18 38.2 -0.1**
comp=Z,33nm,0.9s,baz=349,slow=3.1,SNR=16
**ASAR Alice Springs 29.98 164** P **P** **09 12 16.0 -0.6**
**WRKA Warakurna 30.28 175** P **P** **09 12 18.9 -0.4**
baz=30,SNR=138
**WRKA Warakurna 30.28 175** P **P** **09 12 19.2 -0.1**
comp=Z,112nm,1.3s
**JHS Saijyo 30.43 13** P **P** **09 12 21.6 +1.1**
JHS IAmb IAmb 09 12 26.7
comp=Z,103nm,1.3s
**JHJ Hachijo jima 2 30.80 24** LR LR 09 25 24.9
comp=Z,427nm,19.8s,baz=234,slow=37
**JHJ2 Mitsune 30.81 24** P **P** **09 12 23.6 -0.1**
comp=Z,235nm,2.2s
**PZH PanZhiHua 30.84 316** P **P** **09 12 25.5 +1.2**
PZH pP **pP** **09 13 02.3 -1.8**
PZH sP **sP** **09 13 26.0 -0.4**
PZH PP **PP** **09 13 37.3 -0.7**
PZH S **S** **09 17 14.0 +0.1**
PZH sS **sS** **09 18 20.5 -1.9**
PZH ScP **ScP** **09 18 41.5 +0.2**
PZH pmax pmax
comp=Z,30nm,1.2s
PZH pmax pmax
comp=Z,330nm,6.1s
PZH LR LR
comp=Z,900nm,16.7s
PZH LR LR
comp=Z,600nm,18.2s
PZH LR LR
comp=Z,490nm,19.2s
**TJN Taejon 31.00 3** *i*P **P** **09 12 26.0 +0.7**
**LYN LuoYang 31.45 339** ⇓P **P** **09 12 29.8 +0.4**
LYN pP pP 09 13 08.0 -1.0
LYN PP **PP** **09 13 45.5 +1.0**
LYN S **S** **09 17 22.0 -0.9**
LYN sS sS 09 18 36.5 +5.0
LYN ScP **ScP** **09 18 43.0 +0.1**
LYN SS **SnSn** **09 19 28.5 -4.2**
LYN ScS **ScS** **09 22 42.5 +1.5**
LYN pmax pmax
comp=Z,10.0nm,0.8s
LYN pmax pmax
comp=Z,90nm,5.6s
**TIA Tai'an 31.68 347** *e*P **P** **09 12 31.8 +0.4**
TIA S **S** **09 17 24.3 -2.2**
TIA pmax pmax
comp=Z,14nm,0.6s
TIA LR LR
comp=Z,570nm,6.5s
TIA LR LR
comp=Z,1µm,7.8s
TIA LR LR
comp=Z,540nm,17.8s
**INU Inuyama 31.81 18** P **P** **09 12 33.5 +1.0**
**INU Inuyama 31.81 18** P **P** **09 12 33.9 +1.4**
comp=Z,187nm,1.0s
**INU Inuyama 31.81 18** P **P** **09 12 33.1 +0.6**
**KSAR Wonju Array Be 32.09 4** P **P** **09 12 36.3 +1.4**
**KSAR Wonju Array Be 32.09 4** P **P** **09 12 36.3 +1.4**
**KSRS Korea Array 32.10 4** P **P** **09 12 36.5 +1.4**
comp=Z,18nm,0.7s,baz=177,slow=9.5,SNR=53
KSRS PcP **PcP** **09 15 20.7 +1.1**
comp=Z,2.8nm,0.6s,baz=182,slow=2.2,SNR=2.6
KSRS S **S** **09 17 34.0 +1.0**
comp=Z,0.7nm,0.7s,baz=257,slow=30,SNR=1.1
KSRS ScP **ScP** **09 18 45.5 +0.5**
comp=Z,7.5nm,1.0s,baz=192,slow=3.1,SNR=10
**JGF Kuroka 32.15 19** P **P** **09 12 35.9 +0.4**
**KS19 Wonju Array Si 32.15 4** P **P** **09 12 36.4 +1.0**
KS19 IAmb IAmb 09 12 42.1
comp=Z,81nm,1.5s
**MEEK Meekatharra 32.39 191** P **P** **09 12 36.8 -0.9**
baz=33,SNR=124
**MEEK Meekatharra 32.39 191** P **P** **09 12 37.2 -0.5**
comp=Z,244nm,0.8s
**XAN Xi'an 32.40 334** P **P** **09 12 37.8 +0.1**
XAN pP pP 09 13 15.3 -2.2
XAN S **S** **09 17 34.5 -3.3**
XAN pmax pmax
comp=Z,150nm,1.6s
XAN LR LR
comp=Z,310nm,11.0s
XAN LR LR
comp=Z,640nm,19.2s
XAN LR LR
comp=Z,860nm,15.7s
**XAN Xi'an 32.40 334** P **P** **09 12 38.0 +0.2**

XAN pP **pP** **09 13 14.7 -2.8**
**CD2 Chengdu 32.55 324** P **P** **09 12 40.8 +1.7**
CD2 pP pP 09 13 19.5 +0.4
CD2 S **S** **09 17 39.0 -1.3**
CD2 ScP **ScP** **09 18 46.5 -0.4**
CD2 sS sS 09 18 50.0 +1.0
CD2 pmax pmax
comp=Z,20nm,0.5s
CD2 pmax pmax
comp=Z,270nm,5.7s
CD2 LR LR
comp=Z,1μm,20.6s
CD2 LR LR
comp=Z,700nm,14.2s
**CTA Charters Tower 32.56 141** P **P** **09 12 40.6 +1.3**
comp=Z,24nm,1.0s,baz=328,slow=10,SNR=24
CTA S **S** **09 17 40.2 -0.3**
comp=Z,7.2nm,0.9s,baz=9.6,slow=11,SNR=2.2
CTA ScP **ScP** **09 18 47.7 +0.7**
comp=Z,46nm,1.1s,baz=286,slow=4.4,SNR=10
**CTAO Charters Tower 32.56 141** P **P** **09 12 40.2 +0.9**
CTAO pP **pP** **09 13 16.5 -1.6**
**PATS Pohnpei 32.85 86** P **P** **09 12 42.3 +0.4**
**MAJO Matsushiro 33.28 19***c i*P **P** **09 12 44.8 -0.5**
MAJO pmax pmax
comp=Z,101nm,1.1s
**MAJO Matsushiro 33.28 19** P **P** **09 12 45.1 -0.2**
MAJO IAmb IAmb 09 12 46.4
comp=Z,93nm,1.1s
**MAJO Matsushiro 33.28 19** P **P** **09 12 48.2 +2.9**
comp=Z,83nm,1.0s
**MAJO Matsushiro 33.28 19** P **P** **09 12 45.0 -0.3**
**MAT Matsushiro 33.28 19** P **P** **09 12 44.9 -0.4**
MAT S **S** **09 17 48.0 -3.3**
**MJAR Matsushiro Arr 33.28 19** P **P** **09 12 45.1 -0.2**
comp=Z,56nm,0.9s,baz=200,slow=8.9,SNR=108
MJAR S **S** **09 17 49.1 -2.3**
comp=Z,2.5nm,0.8s,baz=114,slow=6.4,SNR=5.6
MJAR ScP **ScP** **09 18 49.6 +0.3**
comp=Z,30nm,1.1s,baz=215,slow=4.0,SNR=15
**MJAR Matsushiro Arr 33.28 19** P **P** **09 12 44.4 -1.0**
MJAR IAmb IAmb 09 12 46.3
comp=Z,82nm,1.1s
**MJB9 Matsu-Tunnel 33.28 19** P **P** **09 12 45.3 -0.1**
MJB9 IAmb IAmb 09 12 46.3
comp=Z,92nm,1.1s
**HNS HongShan 33.40 345** ⇓P **P** **09 12 46.5 +0.3**
HNS pP **pP** **09 13 21.5 -4.7**
HNS S **S** **09 17 50.0 -2.9**
HNS pmax pmax
comp=Z,14nm,1.2s
HNS LR LR
comp=Z,580nm,14.1s
HNS LR LR
comp=Z,480nm,16.1s
**DL2 Dalian 33.63 355** P **P** **09 12 49.5 +1.3**
DL2 S **S** **09 17 54.0 -2.5**
DL2 pmax pmax
comp=Z,37nm,1.4s
**JYT Yasato 33.69 22** P **P** **09 12 47.5 -1.3**
JYT IAmb IAmb 09 12 48.2
comp=Z,77nm,1.0s
**TIY Taiyuan 34.34 342** P **P** **09 12 54.3 -0.2**
TIY pP **pP** **09 13 35.3 +0.7**
TIY PP **PnPn** **09 14 21.5 +4.8**
TIY S **S** **09 18 04.5 -3.2**
TIY sS **sS** **09 19 21.3 +4.5**
TIY pmax pmax
comp=Z,170nm,5.9s
TIY LR LR
comp=Z,430nm,9.2s
TIY LR LR
comp=Z,320nm,7.5s
TIY LR LR
comp=Z,380nm,17.6s
**OOD Oodnadatta 34.38 164** P **P** **09 12 54.9 0.0**
comp=Z,284nm,1.4s
**JSD Sado 34.67 18** P **P** **09 12 57.4 +0.2**
JSD IAmb IAmb 09 12 58.7
comp=Z,107nm,0.9s
**MORW Morawa 35.30 194** P **P** **09 13 02.2 -0.6**
baz=36,SNR=57
**MORW Morawa 35.30 194** P **P** **09 13 02.1 -0.6**
**MORW Morawa 35.30 194** P **P** **09 13 02.3 -0.4**
comp=Z,248nm,0.9s
**JMM Marumori 35.37 21** P **P** **09 13 04.2 +1.1**
**BJT Baijiatuan 35.54 348** P **P** **09 13 05.8 +1.1**
BJT pmax pmax
comp=Z,47nm,1.1s
**BJT Baijiatuan 35.54 348** P **P** **09 13 05.8 +1.1**
**BJT Baijiatuan 35.54 348** P **P** **09 13 06.1 +1.5**
BJT pP **pP** **09 13 38.2 -6.9**
**BJI Beijing 35.56 348** P **P** **09 13 05.5 +0.7**
BJI pP **pP** **09 13 40.5 -4.8**
BJI sP **sP** **09 14 03.0 -4.4**
BJI PP **PP** **09 14 27.3 -2.5**
BJI S **S** **09 18 24.0 -2.1**
BJI sS **sS** **09 19 39.0 +3.6**
BJI pmax pmax
comp=Z,19nm,0.5s
BJI pmax pmax
comp=Z,130nm,5.5s
**FORT Forrest 35.96 176** P **P** **09 13 08.1 -0.2**
baz=36,SNR=104
**FORT Forrest 35.96 176** P **P** **09 13 08.0 -0.3**
**FORT Forrest 35.96 176** P **P** **09 13 08.5 +0.2**
comp=Z,322nm,1.0s
**MULG Mulgathing 36.35 167** P **P** **09 13 11.9 +0.3**
comp=Z,171nm,1.7s
**SNY Shenyang 36.41 358** ⇑P **P** **09 13 13.0 +1.0**
SNY S **S** **09 18 38.0 -1.0**
SNY pmax pmax
comp=Z,22nm,0.6s
SNY pmax pmax
comp=Z,100nm,3.5s
SNY LR LR
comp=Z,740nm,17.3s
SNY LR LR
comp=Z,360nm,8.6s
SNY LR LR
comp=Z,860nm,16.3s
**LZH Lanzhou 36.45 330** ⇓P **P** **09 13 14.0 +1.4**
LZH pP pP 09 13 52.5 -0.6
LZH PP **PnPn** **09 14 42.0 -0.2**
LZH S **S** **09 18 40.8 +0.7**
LZH ScP **ScP** **09 19 00.5 -0.4**
LZH sS sS 09 19 51.3 +1.7
LZH SS **SS** **09 21 24.0 -4.1**
LZH pmax pmax
comp=Z,90nm,1.3s
LZH pmax pmax
comp=Z,420nm,5.8s
LZH LR LR
comp=Z,2μm,13.8s
LZH LR LR
comp=Z,2μm,13.8s
LZH LR LR
comp=Z,2μm,17.6s
**QLP Quilpie 36.61 151** P **P** **09 13 13.9 0.0**
baz=37,SNR=15
**QLP Quilpie 36.61 151** P **P** **09 13 14.3 +0.4**
comp=Z,142nm,1.3s
**BLDU Ballidu 36.64 192** P **P** **09 13 13.4 -0.7**
baz=37,SNR=227
**BLDU Ballidu 36.64 192** P **P** **09 13 13.4 -0.7**
comp=Z,299nm,0.8s
**KLBR Kellerberrin 37.38 191** P **P** **09 13 19.7 -0.5**
baz=38,SNR=176
**KLBR Kellerberrin 37.38 191** P **P** **09 13 20.0 -0.3**
comp=Z,613nm,1.1s
**HHC Hu-ho-hao-te 37.49 343** *e*P **P** **09 13 22.5 +1.2**
HHC pP pP 09 13 58.8 -3.0
HHC S **S** **09 18 55.3 -0.3**
HHC sS sS 09 20 12.0 +6.6
HHC ScS **ScS** **09 23 13.0 -0.4**
HHC pmax pmax
comp=Z,12nm,0.9s
HHC pmax pmax
comp=Z,130nm,4.9s
**HNR Honiara 37.49 113** P **P** **09 13 21.9 +0.4**
comp=Z,111nm,0.5s,baz=336,slow=20,SNR=2.0
HNR S **S** **09 18 56.1 0.0**
comp=Z,123nm,0.8s,baz=68,slow=11,SNR=1.8
**MSHR Mys Shultsa 37.50 7***ce*P **P** **09 13 22.4 +1.3**
MSHR pmax pmax
comp=Z,37nm,1.3s
**LCRK Leigh Creek 37.62 162** P **P** **09 13 23.1 +0.7**
comp=Z,398nm,1.1s
**RK1H Rockhampton Ha 37.65 140** P **P** **09 13 23.5 +0.9**
comp=Z,46nm,0.9s
**BTO Baotou 37.75 341** *e*P **P** **09 13 28.0 +4.6**
BTO S **S** **09 19 06.5 +7.0**
BTO LR LR
comp=Z,1μm,12.9s
BTO LR LR
comp=Z,1μm,19.1s
**SHL Shillong 37.81 306** P **P** **09 13 25.1 +0.8**
SHL pmax pmax
comp=Z,230nm,0.7s
**SHL Shillong 37.81 306** P **P** **09 13 25.1 +0.8**
**SHL Shillong 37.81 306** P **P** **09 13 25.4 +1.1**
SNR=95
**MUN Mundaring 38.06 193** P **P** **09 13 25.6 -0.4**
baz=38,SNR=55
**MUN Mundaring 38.06 193** P **P** **09 13 25.9 -0.1**
comp=Z,306nm,1.1s
**VLA Vladivostok 38.12 8** *i* P **P** **09 13 26.9 +0.6**
VLA pmax pmax
comp=Z,65nm,1.0s
**CN2 Changchun 38.35 0** *e*P **P** **09 13 26.3 -2.0**
CN2 pP pP 09 14 07.0 -2.0
CN2 S **S** **09 19 06.5 -1.8**
CN2 sS sS 09 20 17.8 -0.4
CN2 SS **SS** **09 21 57.8 -7.9**
CN2 ScS **ScS** **09 23 14.0 -4.0**
CN2 LR LR
comp=Z,300nm,16.0s
CN2 LR LR
comp=Z,300nm,16.0s
CN2 LR LR
comp=Z,280nm,18.0s
**NWAO Narrogin (SRO) 38.77 191** P **P** **09 13 32.0 +0.1**
**RMQ Roma 38.91 145** P **P** **09 13 33.4 +0.2**
baz=39,SNR=5.3
**USA0B Ussuriysk Arra 39.20 8** P **P** **09 13 36.6 +1.3**
USA0B pmax pmax
comp=Z,32nm,0.9s
**USA0B Ussuriysk Arra 39.20 8** P **P** **09 13 36.6 +1.3**
**USRK Ussuriysk Ar. 39.20 8** P **P** **09 13 36.9 +1.6**
comp=Z,35nm,0.9s,baz=200,slow=5.1,SNR=19
USRK ScP **ScP** **09 19 10.6 -0.3**
comp=Z,7.1nm,0.9s,baz=204,slow=3.2,SNR=5.8
**USRK Ussuriysk Ar. 39.20 8** P **P** **09 13 36.2 +0.9**
**BBOO Buckleboo 39.24 166** P **P** **09 13 35.7 -0.2**
baz=39,SNR=28
**BBOO Buckleboo 39.24 166** P **P** **09 13 35.6 -0.2**
**BBOO Buckleboo 39.24 166** P **P** **09 13 36.1 +0.3**
comp=Z,424nm,1.0s
**XLT XiLinHaoTe 39.30 349** *e*P **P** **09 13 36.8 +0.5**
XLT pP pP 09 14 17.8 +0.5
XLT PcP **PcP** **09 15 42.0 +1.0**
XLT ScP **ScP** **09 19 11.5 +0.1**
XLT S **S** **09 19 19.3 -3.4**
XLT sS sS 09 20 33.8 +0.9
XLT ScS **ScS** **09 23 22.5 -1.3**
XLT pmax pmax
comp=Z,16nm,1.2s
XLT pmax pmax
comp=Z,190nm,4.6s
**MDJ Mudanjiang 39.35 5** P **P** **09 13 38.0 +1.5**
MDJ IAmb IAmb 09 13 40.4
comp=Z,48nm,0.7s
**MDJ Mudanjiang 39.35 5** P **P** **09 13 38.5 +1.9**
MDJ PP **PnPn** **09 15 14.5 -1.5**
MDJ S **S** **09 19 24.3 +1.1**
MDJ ScS **ScS** **09 23 21.5 -2.3**
MDJ pmax pmax
comp=Z,33nm,0.7s
MDJ pmax pmax
comp=Z,230nm,8.3s
**MDJ Mudanjiang 39.35 5** P **P** **09 13 38.4 +1.9**
comp=Z,76nm,0.7s
**MDJ Mudanjiang 39.35 5** P **P** **09 13 38.1 +1.5**
MDJ pP pP 09 14 06.9 -10
**EIDS Eidsvold 39.45 142** P **P** **09 13 37.7 0.0**
baz=40,SNR=4.8
**EIDS Eidsvold 39.45 142** P **P** **09 13 37.3 -0.3**
**WHYH Whyalla 39.85 164** P **P** **09 13 40.9 +0.1**
comp=Z,264nm,0.8s
**ERM Erimo 39.88 21***ce*P **P** **09 13 42.1 +1.2**
ERM pmax pmax
comp=Z,10.0nm,0.4s
**ERM Erimo 39.88 21** P **P** **09 13 40.6 -0.3**
ERM IAmb IAmb 09 14 07.3
comp=Z,56nm,1.0s
**ERM Erimo 39.88 21** P **P** **09 13 43.6 +2.7**
comp=Z,79nm,1.1s
**JEW Eniwo 40.04 19** P **P** **09 13 43.5 +1.2**
JEW IAmb IAmb 09 13 46.9
comp=Z,205nm,1.2s
**STKA Stephens Creek 40.09 158** P **P** **09 13 43.2 +0.5**
comp=Z,104nm,0.8s,baz=331,slow=8.0,SNR=192
STKA ScP **ScP** **09 19 14.7 +0.1**
comp=Z,15nm,1.0s,baz=338,slow=5.4,SNR=4.8
STKA S **S** **09 19 32.9 -1.6**
comp=Z,9.5nm,0.8s,baz=98,slow=23,SNR=7.8
**STKA Stephens Creek 40.09 158** P **P** **09 13 43.3 +0.5**
baz=40,SNR=84
**STKA Stephens Creek 40.09 158** P **P** **09 13 43.3 +0.5**
**STKA Stephens Creek 40.09 158** P **P** **09 13 43.3 +0.5**
comp=Z,41nm,1.1s
**NAPP Napperby 40.16 163** P **P** **09 13 43.7 +0.4**
comp=Z,91nm,0.9s
**BNX BinXian 40.33 2** ⇑P **P** **09 13 46.3 +1.7**
BNX pP **pP** **09 14 24.8 -0.9**
BNX PP **PP** **09 15 23.0 +1.3**
BNX S **S** **09 19 37.0 -0.8**
BNX sS **sS** **09 20 54.0 +5.8**
BNX pmax pmax
comp=Z,23nm,0.9s
BNX pmax pmax
comp=Z,240nm,4.4s
BNX LR LR
comp=Z,220nm,6.0s
BNX LR LR
comp=Z,590nm,11.5s
BNX LR LR
comp=Z,930nm,12.3s
**LSA Lhasa 40.35 311** P **P** **09 13 47.0 +1.4**
LSA pmax pmax
comp=Z,74nm,0.9s
**RKGY Rocky Gully 40.45 191** P **P** **09 13 46.8 +1.0**
baz=41,SNR=168
**RKGY Rocky Gully 40.45 191** P **P** **09 13 46.8 +1.0**
comp=Z,875nm,0.9s
**HTT Hallett 40.61 162** P **P** **09 13 47.9 +0.7**
baz=41,SNR=71
**HTT Hallett 40.61 162** P **P** **09 13 47.9 +0.7**
comp=Z,211nm,1.6s
**TEY Ternei 40.80 12** ⇑*i*P **P** **09 13 50.3 +1.8**
TEY *e* 09 19 43.0
TEY pmax pmax
comp=N,100nm,1.2s
TEY pmax pmax
comp=Z,200nm,1.2s
TEY pmax pmax
comp=N,60nm,0.9s
TEY pmax pmax
comp=E,10.0nm,0.9s
TEY pmax pmax
comp=Z,110nm,0.9s
TEY pmax pmax
comp=E,100nm,4.4s
TEY pmax pmax
comp=N,100nm,7.5s
TEY pmax pmax
comp=Z,100nm,6.4s
**GTA Gaotai 41.04 329** ⇓P **P** **09 13 51.3 +0.6**
GTA pP pP 09 14 28.8 -3.3
GTA sP sP 09 14 51.5 -2.5
GTA ScP **ScP** **09 19 18.0 -0.4**
GTA S **S** **09 19 47.5 -1.2**
GTA sS sS 09 21 00.0 +0.7
GTA SS **SS** **09 22 55.5 -3.7**
GTA ScS **ScS** **09 23 31.5 -3.0**
GTA pmax pmax
comp=Z,19nm,1.2s
GTA pmax pmax
comp=Z,190nm,6.1s
GTA LR LR
comp=Z,330nm,16.7s
GTA LR LR
comp=Z,420nm,17.8s
GTA LR LR
comp=Z,630nm,17.8s
**CMSA Cobar Meteorol 41.47 153** P **P** **09 13 54.6 +0.6**
baz=42,SNR=44
**CMSA Cobar Meteorol 41.47 153** P **P** **09 13 55.0 +0.9**
comp=Z,76nm,1.0s
**ASAJ Asahikawa 41.55 19** P **P** **09 13 56.5 +1.9**
comp=Z,98nm,0.9s,baz=240,slow=9.4,SNR=75
ASAJ S **S** **09 19 59.2 +3.3**
comp=Z,18nm,1.1s,baz=229,slow=19,SNR=10
ASAJ LR LR 09 32 05.3
comp=Z,450nm,19.2s,baz=210,slow=37
**JKA Kamikawa-asahi 41.55 19** P **P** **09 13 55.8 +1.1**
JKA IAmb IAmb 09 13 57.9
comp=Z,133nm,1.1s
**GOMU GeErMu 41.59 322** P **P** **09 13 56.8 +1.3**
GOMU pP pP 09 14 36.3 -0.8
GOMU sP sP 09 14 59.5 +0.5
GOMU PcP **PcP** **09 15 52.3 +3.3**
GOMU S **S** **09 19 59.3 +1.9**
GOMU sS sS 09 21 10.8 +2.7
GOMU pmax pmax
comp=Z,17nm,1.3s
GOMU pmax pmax
comp=Z,200nm,8.9s
GOMU LR LR
comp=Z,330nm,15.9s
GOMU LR LR
comp=Z,340nm,19.5s
GOMU LR LR
comp=Z,300nm,19.0s
**TAPN Taplejung 41.96 306** *e*P **P** **09 13 59.1 +0.6**
comp=Z,63nm,0.4s
**TWOA Tennyson Woods 42.01 164** P **P** **09 13 59.0 +0.6**
comp=Z,291nm,0.8s
**ODAN Odare 42.02 305** *e*P **P** **09 14 00.0 +1.0**
comp=Z,83nm,0.5s
**CHLP Challavanipeta 42.32 292** *e*P **P** **09 14 03.2 +1.9**
CHLP IVmB_BB 09 14 03.9
comp=Z,815nm,2.6s
**H11S3 WAKE ISLAND Hy 42.45 68** T T 09 59 31.9
baz=264,slow=74
**H11S1 WAKE ISLAND Hy 42.46 68** T T 09 59 30.4
baz=264,slow=74
**H11S2 WAKE ISLAND Hy 42.46 68** T T 09 59 34.7
baz=264,slow=74
**YUK Yuzh-Kuril'sk 42.62 22** *i* P **P** **09 14 04.2 +1.0**
**RAMN Ramite 42.70 305** *e*P **P** **09 14 05.7 +1.2**
comp=Z,48nm,0.4s
**H11N1 WAKE ISLAND Hy 42.91 67** T T 10 00 44.8
baz=255,slow=75,SNR=43
**H11N2 WAKE ISLAND Hy 42.92 67** T T 10 00 23.8
baz=255,slow=75,SNR=22
**H11N3 WAKE ISLAND Hy 42.93 67** T T 10 00 23.3
baz=255,slow=75,SNR=13
**JIRN Jiri 43.31 305** *e*P **P** **09 14 10.5 +0.9**
comp=Z,129nm,0.5s
**ARMA Armidale 43.54 146** P **P** **09 14 12.3 +1.3**
baz=44,SNR=9.2
**ARMA Armidale 43.54 146** P **P** **09 14 12.0 +1.0**
ARMA IAmb IAmb 09 14 13.2
comp=Z,62nm,1.0s
**ARMA Armidale 43.54 146** P **P** **09 14 12.7 +1.7**
comp=Z,71nm,1.5s
**GUN Gumba 43.67 306** *e*P **P** **09 14 13.2 +0.9**
comp=Z,123nm,0.5s
**PKI Pulchoki 43.92 305** *e*P **P** **09 14 14.7 +0.4**
**HIA Hailar 44.08 355** P **P** **09 14 15.9 +1.0**
HIA pmax pmax
comp=Z,23nm,1.0s
**HIA Hailar 44.08 355** P **P** **09 14 15.9 +1.0**
**HIA Hailar 44.08 355** P **P** **09 14 15.1 +0.2**
HIA pP pP 09 14 48.1 -8.5
**KKN Kakani 44.11 305** *e*P **P** **09 14 16.7 +1.0**
comp=Z,30nm,0.3s
**KLR Kul'dur 44.13 6** P **P** **09 14 16.2 +1.0**
comp=Z,9.3nm,0.5s,baz=198,slow=5.9,SNR=50
KLR ScP **ScP** **09 19 30.6 +0.1**
comp=Z,3.5nm,0.6s,baz=192,slow=4.8,SNR=5.9
KLR S **S** **09 20 32.0 -1.2**
comp=Z,3.1nm,1.0s,baz=346,slow=20,SNR=8.9
**KLR Kul'dur 44.13 6***ce*P **P** **09 14 16.0 +0.8**
KLR pmax pmax
comp=Z,43nm,1.4s
**YSS Yuzh-Sakhalins 44.15 17***αe*P **P** **09 14 16.6 +1.2**
YSS *e**PP **pP** **09 14 55.1 -1.5**
YSS *e**SP **sP** **09 15 18.4 +0.3**
YSS *e*S **S** **09 20 32.8 -0.9**
YSS *e*SS **ScS** **09 23 47.0 -6.1**
YSS pmax pmax
comp=Z,200nm,3.3s
YSS pmax pmax
comp=Z,50nm,1.0s
YSS MLR MLR
comp=Z,300nm,14.0s
**YSS Yuzh-Sakhalins 44.15 17** P **P** **09 14 16.7 +1.2**
YSS IAmb IAmb 09 14 30.1
comp=Z,93nm,1.2s
**YSS Yuzh-Sakhalins 44.15 17** P **P** **09 14 17.7 +2.3**
comp=Z,62nm,1.2s
**YSS Yuzh-Sakhalins 44.15 17** P **P** **09 14 16.4 +1.0**
YSS pP **pP** **09 15 01.2 +4.6**
**DMN Daman 44.18 305** *e*P **P** **09 14 16.9 +0.6**
**PVM Polavaram 44.34 289** *e*P **P** **09 14 19.0 +1.5**
PVM IVmB_BB 09 14 19.6
comp=Z,490nm,2.9s
**PALK Pallekele 44.37 275** P **P** **09 14 19.3 +1.5**
comp=Z,48nm,1.1s,baz=194,slow=7.2,SNR=7.0
PALK LR LR 09 33 05.4
comp=Z,419nm,21.1s,baz=195,slow=36
**PALK Pallekele 44.37 275** P **P** **09 14 19.2 +1.5**
PALK IAmb IAmb 09 14 22.4
comp=Z,89nm,1.2s
**KUR Kuril'sk 44.39 23** *e*P **P** **09 14 18.8 +1.5**
KUR *e*S **S** **09 20 37.3 +0.2**
KUR pmax pmax
comp=Z,266nm,1.1s
**ARPS Mount Arapiles 44.61 161** P **P** **09 14 20.1 +0.9**
baz=45,SNR=92
**ARPS Mount Arapiles 44.61 161** P **P** **09 14 20.2 +1.0**
comp=Z,302nm,1.0s
**GKN Gorkha 44.71 305** *e*P **P** **09 14 20.7 +0.3**
**MYLAV Mylavaram 45.19 288** *e*P **P** **09 14 25.7 +1.6**
MYLAV IAmb IAmb 09 14 26.2
comp=Z,19nm,1.0s
**ULN Ulaanbaatar 45.21 343***ce*P **P** **09 14 24.6 +0.6**
ULN pmax pmax
comp=Z,12nm,1.0s
**ULN Ulaanbaatar 45.21 343** P **P** **09 14 24.8 +0.8**
**SONM Songino Array 45.38 342** P **P** **09 14 25.6 +0.3**
comp=Z,2.6nm,0.3s,baz=158,slow=7.9,SNR=32
SONM PcP **PcP** **09 16 00.8 -0.5**
comp=Z,15nm,1.0s,baz=152,slow=5.7,SNR=4.8
SONM ScP **ScP** **09 19 35.1 -0.7**
comp=Z,4.1nm,1.1s,baz=168,slow=2.7,SNR=3.7
SONM S **S** **09 20 46.2 -5.5**
comp=Z,0.3nm,0.5s,baz=134,slow=4.2,SNR=0.8
SONM LR LR 09 34 11.3
comp=Z,452nm,20.9s,baz=141,slow=37
**SONM Songino Array 45.38 342** P **P** **09 14 25.2 -0.1**
**MGCD Mangrove Creek 45.44 149** P **P** **09 14 27.9 +2.1**
baz=46,SNR=6.4
**MGCD Mangrove Creek 45.44 149** P **P** **09 14 26.7 +0.9**
comp=Z,26nm,1.1s
**KOLN Koldanda 45.48 304** *e*P **P** **09 14 27.4 +0.9**
comp=Z,155nm,0.4s
**DANN Dangsing 45.56 305** *e*P **P** **09 14 27.8 +0.5**
comp=Z,233nm,0.4s
**SKHT Srikalahasti 45.68 284** *e*P **P** **09 14 29.6 +1.7**
SKHT IVmB_BB 09 14 30.0
comp=Z,440nm,2.6s
**ADKI Addanki 45.69 287** *e*P **P** **09 14 29.8 +1.8**
ADKI IVmB_BB 09 14 30.2
comp=Z,385nm,3.2s
**UGL Uglegorsk 45.90 15** *e*P **P** **09 14 30.9 +1.8**
UGL *e*S **S** **09 21 00.5 +1.9**
UGL pmax pmax
comp=Z,160nm,0.8s
UGL smax smax
comp=E,1μm,4.7s
UGL smax smax
comp=N,2μm,5.5s
**BRAT Ballarat 46.02 159** P **P** **09 14 32.0 +1.8**
comp=N,60nm,1.0s

PYUN **Piuthan** 46.10 304 *e*P **P** 09 14 32.3 +0.9
comp=N,95nm,0.4s
CAN **Canberra** 46.13 153 P **P** 09 14 32.5 +1.2
CAN pmax pmax
comp=Z,144nm,0.9s
CAN **Canberra** 46.13 153 P **P** 09 14 32.5 +1.2
CAN IAmb IAmb 09 14 34.2
comp=Z,144nm,0.9s
CAN **Canberra** 46.13 153 P **P** 09 14 33.3 +2.0
comp=Z,271nm,1.2s
GRNR **Gornyy** 46.27 10⇧ *i*P **P** 09 14 34.1 +2.0
GRNR *e* 09 15 09.7
GRNR pmax pmax
comp=N,20nm,0.7s
GRNR pmax pmax
comp=Z,30nm,1.2s
GRNR MLR MLR
comp=E,70nm,14.0s
GRNR MLR MLR
comp=N,210nm,15.0s
GRNR MLR MLR
comp=Z,300nm,17.0s
CNB **Canberra Magne** 46.30 153 P **P** 09 14 33.4 +0.8
baz=46,SNR=22
CNB **Canberra Magne** 46.30 153 P **P** 09 14 34.8 +2.2
comp=Z,116nm,1.1s
SANVU **Saraoutou** 46.33 117 P **P** 09 14 33.3 +0.3
SANVU IAmb IAmb 09 14 35.4
comp=Z,106nm,1.1s
SANVU **Saraoutou** 46.33 117 P **P** 09 14 35.1 +2.1
comp=Z,81nm,1.1s
SANVU **Saraoutou** 46.33 117 P **P** 09 14 34.0 +1.0
NJS **Nagarjunasagar** 46.42 288 *e*P **P** 09 14 34.9 +1.2
NJS IAmb IAmb 09 14 35.2
comp=Z,41nm,1.5s
RCLA **Racherla** 46.60 286 *e*P **P** 09 14 36.1 +0.9
RCLA IAML 09 14 37.8
comp=Z,13nm,0.4s
TOO **Toolangi** 46.60 158 P **P** 09 14 35.9 +1.0
baz=47,SNR=54
TOO **Toolangi** 46.60 158 P **P** 09 14 36.7 +1.8
TOO pmax pmax
comp=Z,174nm,1.2s
TOO **Toolangi** 46.60 158 P **P** 09 14 36.7 +1.8
TOO IAmb IAmb 09 14 37.9
comp=Z,174nm,1.1s
TOO **Toolangi** 46.60 158 P **P** 09 14 36.7 +1.8
comp=Z,154nm,1.3s
RPR **Rampur** 46.81 291 *e*P **P** 09 14 38.3 +1.5
RPR IVmBBB 09 14 39.8
comp=Z,462nm,2.9s
CUPL **Choutuppal** 46.90 289 *e*P **P** 09 14 38.3 +0.8
CUPL IVmBBB 09 14 40.6
comp=Z,437nm,3.0s
HYBB **Hyderabad (bro** 47.26 289 *e*P **P** 09 14 40.9 +0.6
HYBB IVmB_BB 09 14 41.7
comp=Z,469nm,3.1s
TYV **Tymovskoe** 47.69 15 *e*P **P** 09 14 45.1 +2.1
TYV *e*S **S** 09 21 27.4 +3.4
TYV pmax pmax
comp=Z,26nm,1.1s
TYV pmax pmax
comp=Z,200nm,5.6s
TYV smax smax
comp=N,1μm,5.2s
TYV smax smax
comp=E,600nm,5.2s
TYV smax smax
comp=N,14nm,1.6s
TYV smax smax
comp=E,21nm,1.6s
SRSP **Sriramsagar** 47.71 291 *e*P **P** 09 14 44.4 +0.7
SRSP IVmB_BB 09 14 46.3
comp=Z,105nm,1.1s
URV **Uravakonda** 48.17 285 *e*P **P** 09 14 47.7 +0.4
URV IVmB_BB 09 14 48.4
comp=Z,354nm,3.3s
ZEA **Zeya** 48.33 2 *e*P **P** 09 14 48.6 +0.8
ZEA *e* 09 16 40.4
ZEA *e*S **S** 09 21 30.2 -2.7
ZEA pmax pmax
comp=N,10.0nm,1.1s
ZEA pmax pmax
comp=Z,20nm,0.9s
ZEA smax smax
comp=N,200nm,8.5s
ZEA MLR MLR
comp=E,200nm,16.0s
ZEA MLR MLR
comp=N,200nm,15.0s
ZEA MLR MLR
comp=Z,200nm,15.0s
DZM **Mont Dzumac** 48.59 126 P **P** 09 14 51.7 +1.2
comp=Z,17nm,0.7s,baz=259,slow=9.5,SNR=20
DZM **Mont Dzumac** 48.59 126 *e*P **P** 09 14 50.6 +0.1
comp=Z,120nm,1.1s
DZM *e*pP **pP** 09 15 32.0 +0.2
comp=Z,193nm,1.2s
DZM **Mont Dzumac** 48.59 126 *e*LR LR 09 28 56.6
comp=Z,479nm,26.5s
DZM **Mont Dzumac** 48.59 126 P **P** 09 14 51.8 +1.4
DZM **Mont Dzumac** 48.59 126 P **P** 09 14 52.2 +1.7
comp=Z,73nm,1.1s
ZAK **Zakamensk** 48.60 341 *e*P **P** 09 14 49.7 -0.4
ZAK pmax pmax
comp=Z,12nm,1.3s
LIFNC **LIFOU** 48.63 124 P **P** 09 14 51.9 +1.2
LIFNC **LIFOU** 48.63 124 P **P** 09 14 52.2 +1.5
comp=Z,346nm,1.1s
YATNC **Mamie plateau,** 48.95 125 P **P** 09 14 55.1 +2.0
comp=Z,98nm,1.2s
OUENC **Ouen Island, N** 49.08 126 P **P** 09 14 55.9 +1.8
comp=Z,52nm,1.2s
KLRI **Killari** 49.20 289 *e*P **P** 09 14 55.5 +0.3
KLRI IVmB_BB 09 14 56.1
comp=Z,600nm,3.2s
IRK **Irkutsk** 49.93 343 *e*P P 09 15 16.5 +16
IRK pmax pmax
comp=Z,37nm,1.8s
MOY **Mondy** 50.44 341 *e*P **P** 09 15 04.7 +0.6
MOY pmax pmax
comp=Z,27nm,1.6s
GLAD **Gladstone** 50.53 158 P **P** 09 15 05.4 +0.7
comp=Z,67nm,0.8s
WMQ **Urumqi** 50.64 325 P **P** 09 15 07.0 +1.4
WMQ pP pP 09 15 50.5 +1.7
WMQ sP sP 09 16 11.3 +1.0
WMQ PcP **PcP** **09 16 20.5 +0.2**
WMQ ScP **ScP** **09 19 52.8 -5.3**
WMQ S **S** **09 22 06.3 +0.7**
WMQ sS sS 09 23 22.0 +3.5
WMQ ScS **ScS** **09 24 32.3 -4.3**
WMQ pmax pmax
comp=Z,40nm,1.5s
WMQ pmax pmax
comp=Z,360nm,4.7s
WMQ LR LR
comp=Z,1μm,17.5s
WMQ LR LR
comp=Z,790nm,14.7s
WMQ LR LR
comp=Z,530nm,18.3s
WMQ **Urumqi** 50.64 325 P **P** 09 15 06.3 +0.7
KNGR **Kungurtug, Tuv** 50.81 337 *i*P **P** 09 15 07.8 +1.0
NDI **New Delhi** 51.08 303 *e*P **P** 09 15 08.0 -1.1
MOO **Moorlands** 51.51 159 P **P** 09 15 12.5 +0.6
comp=Z,50nm,1.3s
TAU **Tasmania Unive** 51.97 160 P **P** 09 15 17.1 +1.8
TAU pmax pmax
comp=Z,93nm,1.2s
TAU **Tasmania Unive** 51.97 160 P **P** 09 15 17.1 +1.8
TAU IAmb IAmb 09 15 18.0
comp=Z,93nm,1.1s
TAU **Tasmania Unive** 51.97 160 P **P** 09 15 17.0 +1.8
comp=Z,96nm,2.0s
KAAM **Kaadhehdhoo** 52.44 267 P **P** 09 15 19.8 +0.4
KAAM IAmb IAmb 09 15 22.0
comp=Z,164nm,1.0s
BOD **Bodaibo** 53.13 352 *e*P **P** 09 15 23.8 +0.1
BOD pmax pmax
comp=Z,25nm,1.5s
DGAR **Diego Garcia** 54.22 257 *i*P **P** 09 15 31.4 -0.9
DGAR pmax pmax
comp=Z,92nm,1.2s
ZSN **Zaisan** 54.43 327 *e*P **P** 09 15 32.0 -1.3
ZSN *e*S **S** 09 22 55.5 -1.3
baz=327
ZSN *e*S **S** 09 22 55.5 -1.3
baz=327
DGZ **Jazzator, Alta** 54.55 331 *d i*P **P** 09 15 34.0 -0.3
DGZ pmax pmax
comp=Z,23nm,1.1s
PEA0B **Petropavlovsk-** 54.55 23 *ce*P **P** 09 15 36.4 +2.4
PEA0B **Petropavlovsk-** 54.55 23 P **P** 09 15 35.4 +1.3
PEA0B IAmb IAmb 09 15 43.3
comp=Z,80nm,1.0s
PETK **Petropavlovsk-** 54.55 23 P **P** 09 15 35.8 +1.7
comp=Z,28nm,0.8s,baz=188,slow=3.8,SNR=43
PETK ScP **ScP** 09 20 15.0 +0.1
comp=Z,10nm,1.1s,baz=224,slow=6.2,SNR=3.7
PET **Petropavlovsk** 54.87 24 *e*P **P** 09 15 38.2 +1.9
PET *e*S **S** 09 23 04.5 +2.2
PET *e*SS **SS** 09 26 48.5 -0.1
PET pmax pmax
comp=Z,62nm,1.3s
PET MLR MLR
comp=Z,300nm,20.0s
PET **Petropavlovsk** 54.87 24 P **P** 09 15 37.6 +1.3
PET IAmb IAmb 09 15 45.4
comp=Z,68nm,1.2s
PET **Petropavlovsk** 54.87 24 P **P** 09 15 38.1 +1.8
comp=Z,191nm,1.4s
PDGK **Podgornoye** 55.31 320 P **P** 09 15 39.2 -0.7
MK31 **Makanchi Array** 55.47 325 *d i*P **P** 09 15 41.0 +0.2
MK31 **Makanchi Array** 55.47 325 P **P** 09 15 40.7 -0.1
MK31 IAmb IAmb 09 15 42.5
comp=Z,73nm,1.4s
MKAR **Makanchi Array** 55.47 325 P **P** 09 15 41.2 +0.4
comp=Z,30nm,0.5s,baz=119,slow=7.1,SNR=588
MKAR ScP **ScP** 09 20 17.2 -1.9
comp=Z,6.1nm,0.9s,baz=120,slow=7.2,SNR=3.6
MKAR S **S** 09 23 09.8 -0.9
comp=Z,0.7nm,1.0s,baz=129,slow=3.9,SNR=1.4
MKAR **Makanchi Array** 55.47 325 P **P** 09 15 41.5 +0.7
UZB **Uzynbulak** 55.52 320 *e*P **P** 09 15 40.1 -1.2
UZB *e*S **S** 09 23 10.6 -1.1
UZB pmax pmax
comp=Z,34nm,1.3s
UZB **Uzynbulak** 55.52 320 *e*P **P** 09 15 40.2 -1.2
comp=Z,34nm,1.3s,baz=320
UZB *e*S **S** 09 23 10.7 -1.1
baz=320
TARG **Taragay, Kyrgy** 55.65 318 P **P** 09 15 43.5 +0.9
MAKZ **Makanchi** 55.66 325 P **P** 09 15 41.8 -0.3
MAKZ pmax pmax
comp=Z,117nm,1.4s
MAKZ **Makanchi** 55.66 325 P **P** 09 15 41.8 -0.3
MAKZ IAmb IAmb 09 15 43.7
comp=Z,117nm,1.4s
MAKZ **Makanchi** 55.66 325 P **P** 09 15 42.2 0.0
MAKZ pP **pP** 09 16 21.4 -4.7
NIL **Nilore** 55.85 307 P **P** 09 15 44.1 +0.3
NIL pmax pmax
comp=Z,122nm,1.2s
NIL **Nilore** 55.85 307 P **P** 09 15 44.0 +0.3
NIL IAmb IAmb 09 15 46.7
comp=Z,122nm,1.2s
SATY **Saty** 55.88 320 *e*P **P** 09 15 42.1 -1.8
SATY *e*S **S** 09 23 14.6 -1.7
SATY **Saty** 55.88 320 *e*P **P** 09 15 42.1 -1.8
baz=320
SATY *e*S **S** 09 23 14.7 -1.7
baz=320
KPKS **Kokpek** 55.89 320 *e*P **P** 09 15 42.3 -1.6
KPKS *e*S **S** 09 23 15.0 -1.5
KPKS pmax pmax
comp=Z,39nm,1.3s
KPKS **Kokpek** 55.89 320 *e*P **P** 09 15 42.4 -1.6
comp=Z,39nm,1.3s,baz=320
KPKS *e*S **S** 09 23 15.0 -1.5
baz=320
ZHN **Zhinishke** 55.91 320 *e*P **P** 09 15 42.6 -1.5
ZHN *e*S **S** 09 23 15.2 -1.6
ZHN **Zhinishke** 55.91 320 *e*P **P** 09 15 42.6 -1.5
baz=320
ZHN *e*S **S** 09 23 15.2 -1.6
baz=320
KSH **Kashi** 55.94 315 P **P** 09 15 46.5 +2.1
KSH pP pP 09 16 32.0 +4.0
KSH PcP **PcP** **09 16 42.8 +2.2**
KSH sP sP 09 16 50.0 +0.8
KSH PP **PP** **09 17 58.3 +7.0**
KSH S **S** **09 23 16.8 -0.6**
KSH sS sS 09 24 38.8 +6.9
KSH pmax pmax
comp=Z,42nm,1.4s
KSH pmax pmax
comp=Z,340nm,3.6s
KSH LR LR
comp=Z,1μm,21.5s
KSH LR LR
comp=Z,610nm,21.5s
KSH LR LR
comp=Z,290nm,17.2s
YAK **Yakutsk** 56.71 2 S **S** 09 23 26.1 -0.2
comp=Z,4.5nm,0.4s,baz=144,slow=23,SNR=10
YAK **Yakutsk** 56.71 2 *e*P **P** 09 15 47.9 -1.3
YAK *e**PP **pP** **09 16 31.6 -1.5**
YAK *e* 09 16 41.9
YAK *e* 09 17 56.1
YAK *e*S **S** **09 23 24.1 -2.3**
YAK *e* 09 25 14.5
YAK pmax pmax
comp=Z,44nm,0.8s
YAK pmax pmax
comp=N,19nm,1.1s
YAK pmax pmax
comp=E,13nm,1.1s
YAK pmax pmax
comp=Z,73nm,1.5s
YAK pmax pmax
comp=N,44nm,1.2s
YAK smax smax
comp=E,345nm,2.8s
YAK smax smax
comp=N,502nm,2.7s
YAK **Yakutsk** 56.71 2 P **P** 09 15 49.1 -0.1
YAK IAmb IAmb 09 15 52.4
comp=Z,82nm,0.8s
YAK **Yakutsk** 56.71 2 P **P** 09 15 49.8 +0.6
YAK pP **pP** **09 16 30.7 -2.5**
ARXS **Arharly** 56.80 321 *e*P **P** 09 15 50.4 +0.1
MDOK **Medeo** 56.80 319 *e*P **P** 09 15 49.3 -1.2
MDOK *e*S **S** 09 23 27.4 -1.2
MDOK **Medeo** 56.80 319 *e*P **P** 09 15 49.4 -1.1
baz=319
MDOK *e*S **S** 09 23 27.5 -1.2
baz=319
TNSS **Tian-Shan** 56.81 319 *e*P **P** 09 15 50.4 -0.4
baz=319
MSVF **Nonsavu** 56.85 115 P **P** 09 15 52.0 +0.9
comp=Z,14nm,0.9s,baz=208,slow=22,SNR=2.8
MSVF **Nonsavu** 56.85 115 P **P** 09 15 52.0 +0.9
AAA **Alma-Ata** 56.91 319 *e*P **P** 09 15 51.4 +0.3
AAA *e*S **S** 09 23 30.2 +0.4
AAA pmax pmax
comp=Z,46nm,1.2s
AAA **Alma-Ata** 56.91 319 *e*P **P** 09 15 51.5 +0.3
comp=Z,46nm,1.2s,baz=319
AAA *e*S **S** 09 23 30.2 +0.4
baz=319
ULHL **Ulahol** 56.92 318 P **P** 09 15 52.6 +1.3
SNR=30
CHKK **Chushkaly** 57.16 320 *e*P **P** 09 15 51.2 -1.6
baz=320
CHKK *e*S **S** 09 23 31.4 -1.6
baz=320
MA2 **Magadan** 57.56 15 ScP **ScP** 09 20 28.3 +0.3
comp=Z,6.9nm,0.7s,baz=185,slow=4.8,SNR=7.0
MA2 S **S** 09 23 37.6 0.0
comp=Z,0.7nm,0.3s,baz=316,slow=22,SNR=1.1
MA2 ScS **ScS** 09 25 24.3 -0.8
comp=Z,2.4nm,0.7s,baz=50,slow=22,SNR=6.0
MA2 LR LR 09 41 16.7
comp=Z,94nm,20.2s,baz=194,slow=36
MA2 **Magadan** 57.56 15 *ce*P **P** 09 15 56.9 +1.7
MA2 pmax pmax
comp=Z,75nm,1.3s
MA2 **Magadan** 57.56 15 P **P** 09 15 56.2 +0.9
MA2 IAmb IAmb 09 15 58.8
comp=Z,67nm,1.1s
MA2 **Magadan** 57.56 15 P **P** 09 15 57.0 +1.7
MA2 pP **pP** **09 16 41.8 +2.4**
KUU **Kurty** 57.59 320 *e*P **P** 09 15 54.3 -1.5
KUU *e*S **S** 09 23 37.3 -1.4
KUU **Kurty** 57.59 320 *e*P **P** 09 15 54.4 -1.5
baz=320
KUU *e*S **S** 09 23 37.3 -1.4
baz=320
TKM2 **Tokmak 2** 57.64 318 P **P** 09 15 57.0 +0.5
SNR=26
KBK **Karagaybulak** 57.96 318 P **P** 09 16 00.0 +1.4
SNR=22
CHMS **Chumysh** 58.24 318 P **P** 09 16 00.8 +0.4
SNR=11
AAK **Ala-Archa** 58.26 318 P **P** 09 16 01.8 +1.2
comp=Z,4.0nm,0.4s,baz=117,slow=6.4,SNR=32
AAK **Ala-Archa** 58.26 318 *ce*P **P** 09 16 00.9 +0.3
AAK pmax pmax
comp=Z,55nm,1.7s
AAK **Ala-Archa** 58.26 318 P **P** 09 16 01.4 +0.7
AAK IAmb IAmb 09 16 03.1
comp=Z,62nm,1.5s
AAK **Ala-Archa** 58.26 318 P **P** 09 16 01.2 +0.6
AAK pP **pP** **09 16 42.0 -2.7**
AAK **Ala-Archa** 58.26 318 *i*P **P** 09 16 01.2 +0.6
SNR=25
SGDS **Sogindy** 58.51 319 *e*P **P** 09 16 02.2 -0.1
SGDS **Sogindy** 58.51 319 *e*P **P** 09 16 00.7 -1.6
baz=319
SGDS *e*S **S** 09 23 48.6 -2.1
baz=319
USP **Ospenovka** 58.52 318 P **P** 09 16 02.6 +0.3
SNR=43
ZAA0 **Zalesovo Array** 58.56 333 P **P** 09 16 02.1 -0.2
ZALV **Zalesovo Beam** 58.56 333 P **P** 09 16 01.5 -0.8
comp=Z,7.3nm,0.4s,baz=129,slow=6.7,SNR=28
ZALV S **S** 09 23 48.7 -2.1
comp=Z,0.4nm,0.4s,baz=28,slow=23,SNR=2.5
ZALV **Zalesovo Beam** 58.56 333 P **P** 09 16 01.9 -0.4
ZALV **Zalesovo Beam** 58.56 333 P **P** 09 16 01.9 -0.4
AML **Almayashu** 58.59 317 P **P** 09 15 59.7 -3.5
SNR=6.2
AML **Almayashu** 58.59 317 *i*P **P** 09 16 04.2 +1.0
SNR=15
SEM **Semipalatinsk** 58.63 328 *e*P **P** 09 16 00.7 -2.4
SEM *e*S **S** 09 23 49.9 -2.4
SEM **Semipalatinsk** 58.63 328 *e*P **P** 09 16 00.8 -2.4
baz=328
SEM *e*S **S** 09 23 50.0 -2.4
baz=328
EKS2 **Erkin-Say** 58.75 318 P **P** 09 16 05.1 +1.1
SNR=28
KBL **Kabul** 59.45 307 P **P** 09 16 09.0 0.0
KBL pmax pmax
comp=Z,38nm,1.0s
KBL **Kabul** 59.45 307 P **P** 09 16 09.0 0.0
KBL IAmb IAmb 09 16 10.7
comp=Z,38nm,0.9s
KBL **Kabul** 59.45 307 P **P** 09 16 09.1 0.0
SNR=26
KBL P **P** 09 16 09.1 0.0
SNR=26
BTLS **Baital** 59.58 320 *e*P **P** 09 16 07.1 -2.3
BTLS *e*S **S** 09 24 01.9 -2.3
BTLS pmax pmax
comp=Z,21nm,1.2s
BTLS **Baital** 59.58 320 *e*P **P** 09 16 07.2 -2.3
comp=Z,21nm,1.2s,baz=320
BTLS *e*S **S** 09 24 01.1 -3.1
baz=320
KURBB **Kurchatov Arra** 59.67 327 P **P** 09 16 08.5 -1.4
KURK **Kurchatov** 59.67 328 *ce*P **P** 09 16 09.7 -0.2
KURK pmax pmax
comp=Z,125nm,1.3s
KURK **Kurchatov** 59.67 328 P **P** 09 16 09.8 -0.2
KURK IAmb IAmb 09 16 11.9
comp=Z,193nm,1.5s
KURK **Kurchatov** 59.67 328 P **P** 09 16 09.7 -0.2
GAR **Garm** 59.83 312 P **P** 09 16 11.9 +0.5
DZA **Taraz** 60.49 317 *e*P **P** 09 16 14.4 -1.4
DZA *e*S **S** 09 24 14.6 -1.4
DZA pmax pmax
comp=Z,43nm,1.6s
DZA **Taraz** 60.49 317 *e*P **P** 09 16 14.4 -1.4
comp=Z,43nm,1.6s,baz=317
DZA *e*S **S** 09 24 14.6 -1.4
baz=317
CHGR **Chuyangaron** 60.58 312 P **P** 09 16 17.1 +0.6
CHGR **Chuyangaron** 60.58 312 P **P** 09 16 17.1 +0.6
CHGR IAmb IAmb 09 16 20.4
comp=Z,42nm,0.6s
SEY **Seymchan** 60.85 14 S **S** 09 24 24.4 +4.6
comp=Z,0.9nm,0.8s,baz=0.0,slow=20,SNR=7.3
SEY LR LR 09 43 16.8
comp=Z,146nm,19.6s,baz=261,slow=36
SEY **Seymchan** 60.85 14 *i*P **P** 09 16 18.6 +0.9
KKAR **Karatay Array** 61.13 317 P **P** 09 16 19.7 -0.3
KKAR **Karatay Array** 61.13 317 P **P** 09 16 19.7 -0.3
BRLS **Boroldaу** 61.56 317 *e*P **P** 09 16 22.0 -0.9
BRLS *e*S **S** 09 24 28.4 -1.1
BRLS **Boroldaу** 61.56 317 *e*P **P** 09 16 22.0 -0.9
baz=316
BRLS *e*S **S** 09 24 28.4 -1.1
baz=316
SHEM **Shemya Is, Ala** 61.86 31 LR LR 09 41 11.7
comp=Z,125nm,20.1s,baz=280,slow=34
OTUK **Ortayu** 62.03 323 P **P** 09 16 24.1 -1.9
BRZS **Berezniki** 62.60 325 *e*P **P** 09 16 27.8 -1.9
BRZS *e*S **S** 09 24 40.6 -1.6
BRZS pmax pmax
comp=Z,31nm,1.4s
BRZS **Berezniki** 62.60 325 *e*P **P** 09 16 27.9 -1.9
comp=Z,30nm,1.4s,baz=325
BRZS *e*S **S** 09 24 40.7 -1.6
baz=325
LBZ **Lake Benmore** 63.76 146 P **P** 09 16 38.1 +0.7
RPZ **Rata Peaks** 63.85 145 P **P** 09 16 38.1 +0.1
comp=Z,28nm,0.8s,baz=168,slow=4.5,SNR=5.7
RPZ LR LR 09 44 57.0
comp=Z,180nm,19.8s,baz=308,slow=36
TUWZ **Tuamarina** 64.25 141 P **P** 09 16 41.0 +0.4
URZ **Urewera** 64.64 137 P **P** 09 16 43.8 +0.6
comp=Z,12nm,0.8s,baz=238,slow=3.5,SNR=16
URZ LR LR 09 44 57.2
comp=Z,228nm,20.7s,baz=333,slow=36
HRA **Herat** 64.88 305 P **P** 09 16 45.4 +0.3
HRA IAmb IAmb 09 16 46.4
comp=Z,41nm,1.1s
BVAR **Borovoye Array** 65.25 327 S **S** 09 25 12.7 -2.0
comp=Z,1.4nm,0.7s,baz=211,slow=26,SNR=4.5
BRVK **Borovoye** 65.32 327 *ce*P **P** 09 16 47.3 0.0
BRVK pmax pmax
comp=Z,75nm,1.3s
BRVK **Borovoye** 65.32 327 P **P** 09 16 47.4 +0.1
BRVK IAmb IAmb 09 16 49.2
comp=Z,37nm,0.8s
BRVK **Borovoye** 65.32 327 P **P** 09 16 46.9 -0.4
BRVK pP **pP** **09 17 27.1 -5.5**
JLN **Jalan Bani Buh** 65.71 292 P **P** 09 16 51.0 +0.5
SNR=9.1
WBK **Wadi Bani Khal** 66.15 292 P **P** 09 16 54.0 +0.7
SNR=9.6
KIWB **Kanaga Island** 66.22 35 P **P** 09 16 53.7 +0.6
TIXI **Tiksi** 66.32 1 *de*P **P** 09 16 52.5 -0.8
TIXI pmax pmax
comp=Z,52nm,1.1s
TIXI **Tiksi** 66.32 1 P **P** 09 16 53.6 +0.3
TIXI IAmb IAmb 09 16 54.3
comp=Z,41nm,1.0s
TIXI **Tiksi** 66.32 1 P **P** 09 16 52.8 -0.5
TIXI pP **pP** **09 17 41.1 +2.6**
JMDO **Jabal Madar** 66.93 292 P **P** 09 16 58.0 -0.3
SNR=9.5
JMDO P **P** 09 16 58.0 -0.3
SNR=9.5
MHTO **MHTO** 66.97 290 P **P** 09 16 59.0 +0.5
SNR=17
MHTO P **P** 09 16 59.0 +0.5
SNR=17
BIDO **Bidbid** 66.99 293 P **P** 09 16 59.0 +0.4
SNR=13
SMDO **Samad** 67.03 293 P **P** 09 16 60.0 +1.0
SNR=5.2
DQM **DQM** 67.32 289 P **P** 09 17 02.0 +1.3
SNR=11
HOQ **Hoqain** 67.74 293 P **P** 09 17 04.0 +0.7

SNR=9.9
HOQ P P 09 17 04.0 +0.7
SNR=9.9
**BSY Bisya** 67.79 292 P P 09 17 05.0 +1.3
SNR=7.0
**BILL Bilibino** 68.43 15 *i* P P 09 17 07.4 +0.7
BILL *i* 09 17 32.4
BILL *i* 09 19 36.5
BILL *i* SS SS 09 30 18.4 -1.4
BILL pmax pmax
comp=Z,13nm,1.1s
**BILL Bilibino** 68.43 15 P P 09 17 08.0 +1.3
**BILL Bilibino** 68.43 15 P P 09 17 08.3 +1.6
**ARQ Araqi** 68.45 293 P P 09 17 09.0 +1.3
SNR=6.1
**SOHO SOHO** 68.49 294 *i* P P 09 17 06.4 -1.5
SNR=8.5
**NRIK Noril'sk** 68.59 347 P P 09 17 07.4 -0.2
comp=Z,11nm,0.5s,baz=129,slow=6.2,SNR=24
**NRIK Noril'sk** 68.59 347 *de*P P 09 17 07.5 -0.2
NRIK pmax pmax
comp=Z,28nm,1.4s
**NRIK Noril'sk** 68.59 347 P P 09 17 08.1 +0.4
NRIK IAmb IAmb 09 17 26.0
comp=Z,54nm,1.1s
**GEYT Alibeck** 68.82 309 P P 09 17 10.2 +0.5
comp=Z,28nm,1.0s,baz=180,slow=7.4,SNR=36
GEYT LR LR 09 50 04.4
comp=Z,148nm,18.9s,baz=105,slow=38
**GEYT Alibeck** 68.82 309 P P 09 17 10.2 +0.5
GEYT IAmb IAmb 09 17 11.8
comp=Z,69nm,1.2s
**GYA0B ALIBECK ARRAY** 68.82 309 P P 09 17 10.3 +0.6
GYA0B IAmb IAmb 09 17 11.7
comp=Z,83nm,1.2s
**BANOM Banah** 68.83 296 *i* P P 09 17 10.4 +0.3
SNR=5.5
**UOSS Minazif** 68.85 295 P P 09 17 09.9 -0.2
**UOSS Minazif** 68.85 295 *i* P P 09 17 09.4 -0.7
SNR=5.8
**HATD Hatta, Dubai** 68.90 294 P P 09 17 11.0 +0.5
SNR=8.1
**HATD Hatta, Dubai** 68.90 294 *i* P P 09 17 10.4 0.0
SNR=7.0
**MSFE Esma-Masafi** 68.92 295 P P 09 17 11.2 +0.7
**ASHO Ashiyiah** 68.96 294 P P 09 17 12.0 +1.1
SNR=8.0
**ASHO Ashiyiah** 68.96 294 *i* P P 09 17 10.4 -0.4
SNR=6.0
**SHAO Shalim** 69.07 287 P P 09 17 13.0 +1.4
SNR=8.8
SHAO P P 09 17 13.0 +1.4
SNR=8.8
**SHAO Shalim** 69.07 287 *i* P P 09 17 11.7 +0.1
SNR=13
**ALNE Al Ain** 69.20 294 P P 09 17 12.2 -0.1
SNR=17
**ALNE Al Ain** 69.20 294 *i* P P 09 17 12.4 +0.1
SNR=13
**NAZ Nazwa, Dubai** 69.34 295 P P 09 17 14.1 +0.9
SNR=5.0
**NAZ Nazwa, Dubai** 69.34 295 P P 09 17 12.6 -0.6
**UMQ Umm Al-Quwin** 69.38 295 P P 09 17 13.9 +0.6
**FAQ Al Faqa, Dubai** 69.39 294 P P 09 17 12.9 -0.6
**ASUD Al Ashush, Dub** 69.62 294 P P 09 17 17.0 +2.1
SNR=6.1
**ASUD Al Ashush, Dub** 69.62 294 *i* P P 09 17 15.4 +0.5
SNR=6.5
**DMTO DMTO** 69.71 287 P P 09 17 17.0 +1.5
SNR=5.4
**AJN Ajban** 69.93 294 *i* P P 09 17 16.7 0.0
SNR=7.0
**AB31 Akbulak array** 70.05 321 *i* P P 09 17 16.6 -0.4
**ABKAR Akbulak array** 70.05 321 P P 09 17 16.9 -0.1
ABKAR IAmb IAmb 09 17 18.1
comp=Z,96nm,1.4s
**ABKAR Akbulak array** 70.05 321 P P 09 17 16.7 -0.3
**RBK Rabkut** 70.42 287 P P 09 17 20.1 +0.2
SNR=12
**MSEY Mahe Island** 70.43 263 P P 09 17 19.8 -0.3
MSEY pmax pmax
comp=Z,99nm,1.3s
**MSEY Mahe Island** 70.43 263 P P 09 17 19.8 -0.3
MSEY IAmb IAmb 09 17 20.8
comp=Z,99nm,1.3s
**MSEY Mahe Island** 70.43 263 P P 09 17 19.3 -0.7
**MSEY Mahe Island** 70.43 263 *i* P P 09 17 19.6 -0.5
SNR=7.5
**DOK Doka** 70.50 288 P P 09 17 20.0 -0.3
SNR=19
**SOCY Socotra** 70.67 281 P P 09 17 20.5 -1.0
SOCY IAmb IAmb 09 17 22.1
comp=Z,135nm,1.2s
**SOCY Socotra** 70.67 281 P P 09 17 20.2 -1.3
SNR=14
**WHFO Wadi Hawf** 70.83 287 P P 09 17 22.1 -0.3
SNR=12
**MZR Muzera** 71.23 292 P P 09 17 25.6 +1.0
SNR=12
**MZR Muzera** 71.23 292 *i* P P 09 17 24.8 +0.1
SNR=14
**ABTO Aybut** 71.28 286 P P 09 17 26.0 +0.9
SNR=12
**AKTO Aktyubinsk** 71.56 322 S S 09 26 26.5 -2.8
comp=Z,0.6nm,0.6s,baz=193,slow=23,SNR=13
**SVE Sverdlovsk** 71.90 328 *e*P P 09 17 27.2 -0.7
SVE *e*S S 09 26 29.8 -3.1
SVE pmax pmax
comp=Z,78nm,1.5s
**ARU Arti** 72.87 328 S S 09 26 42.3 -1.7
comp=Z,0.5nm,0.4s,baz=352,slow=23,SNR=9.1
ARU LR LR 09 50 46.7
comp=Z,124nm,19.3s,baz=122,slow=36
**ARU Arti** 72.87 328 *d i*P P 09 17 32.5 -1.2
ARU 09 17 50.6
ARU *P P 09 18 17.5 -2.3
ARU 09 20 18.0
ARU S S 09 26 41.8 -2.1
ARU 09 27 17.5
ARU pmax pmax
comp=Z,24nm,0.6s
**ARU Arti** 72.87 328 P P 09 17 33.4 -0.3
ARU IAmb IAmb 09 17 35.7
comp=Z,27nm,0.6s
**ARU Arti** 72.87 328 P P 09 17 32.7 -1.0
**UNV Unalaska Valle** 72.96 35 P P 09 17 35.8 +1.5
baz=255
**GAMB Gambell** 73.56 24 P P 09 17 39.4 +1.8
baz=248
**FALS False Pass** 74.96 35 P P 09 17 46.7 +0.9
baz=258
**KIP Kipapa** 75.70 69 *i* P P 09 17 53.7 +3.0
KIP pmax pmax
comp=Z,43nm,1.0s
**TNA Tin City** 75.72 23 P P 09 17 51.3 +1.4
baz=251
**ANM Nome** 76.44 25 P P 09 17 56.4 +2.3
ANM pmax pmax
comp=Z,12nm,1.0s
**ANM Nome** 76.44 25 P P 09 17 56.4 +2.3
**ANM Nome** 76.44 25 P P 09 17 55.2 +1.2
baz=253
**SDPT Sand Point** 76.71 34 P P 09 17 56.1 +0.4
SDPT IAmb IAmb 09 17 57.7
comp=Z,104nm,0.9s
**SBV Sambava** 77.10 255 P P 09 17 59.0 +0.3
SNR=14
**SBV Sambava** 77.10 255 P P 09 17 58.7 +0.1
**MAK Makhachkala** 77.49 313 *e*P P 09 17 54.9 -5.4
MAK *e**PP pP 09 18 37.2 -8.4
MAK *e**SS sS 09 28 44.4 -9.5
MAK *e*SSS SSS 09 35 49.9
MAK pmax pmax
comp=Z,155nm,1.3s
MAK MLR MLR
comp=Z,204nm,16.0s
**KIRV Kirov** 78.16 329 S S 09 27 35.0 -6.9
comp=Z,5.8nm,0.5s,baz=227,slow=21,SNR=8.5
KIRV LR LR 09 56 56.6
comp=Z,122nm,18.2s,baz=93,slow=39
**KIRV Kirov** 78.16 329 *ce*P P 09 18 02.9 -0.8
**BELG Belogornoye** 78.31 322 LR LR 09 56 03.2
comp=Z,122nm,21.4s,baz=150,slow=38
**BELG Belogornoye** 78.31 322 *i* P P 09 18 03.8 -0.9
BELG pmax pmax
comp=Z,24nm,1.0s

**RDOG Red Dog Mine** 78.36 21 P P 09 18 05.0 +0.4
**RDOG Red Dog Mine** 78.36 21 P P 09 18 06.1 +1.4
baz=255
**RAYN Ar Rayn** 78.57 293 P P 09 18 06.6 -0.2
RAYN pmax pmax
comp=Z,52nm,1.0s
**RAYN Ar Rayn** 78.57 293 P P 09 18 06.6 -0.2
RAYN IAmb IAmb 09 18 07.5
comp=Z,52nm,1.0s
**RAYN Ar Rayn** 78.57 293 P P 09 18 06.1 -0.6
RAYN pP pP 09 18 51.0 -0.8
**RAYN Ar Rayn** 78.57 293 *i* P P 09 18 06.2 -0.6
SNR=36
**GROC Groznyy** 78.75 313 *e*P P 09 18 06.7 -0.6
GROC *e* 09 18 15.0
GROC *e*S S 09 27 47.9 -1.0
GROC *e* 09 28 44.2
GROC pmax pmax
comp=Z,82nm,1.3s
**GNI Garni** 79.40 310 P P 09 18 12.0 +0.9
comp=Z,2.5nm,0.3s,baz=164,slow=7.9,SNR=15
GNI S S 09 27 55.8 -0.4
comp=Z,3.9nm,0.5s,baz=357,slow=2.5,SNR=1.9
**GNI Garni** 79.40 310 *de*P P 09 18 11.4 +0.3
GNI pmax pmax
comp=Z,73nm,1.7s
**GNI Garni** 79.40 310 P P 09 18 12.1 +1.0
**GCSA Galena City Sc** 80.05 25 P P 09 18 15.9 +2.1
baz=261
**ZEI Tsey** 80.12 312 *e*P P 09 18 13.0 -2.0
ZEI pmax pmax
comp=Z,40nm,1.4s
**SVW2 Sparrevohn** 80.13 29 P P 09 18 15.4 +1.0
**TTA Tatalina** 80.16 27 P P 09 18 16.6 +1.9
baz=262
**O18K Koktuh Hills** 80.17 30 P P 09 18 16.9 +2.3
O18K IAmb IAmb 09 18 26.1
comp=Z,64nm,1.2s
**O18K Koktuh Hills** 80.17 30 P P 09 18 16.9 +2.3
baz=264
**CCD Concordia, Ant** 80.27 181 P P 09 18 16.1 +0.8
CCD pP pP 09 19 01.3 0.0
**ONI Oni** 80.45 312 P P 09 18 17.5 +1.0
ONI pmax pmax
comp=Z,35nm,1.3s
**ONI Oni** 80.45 312 P P 09 18 17.5 +1.0
**PRGR Permogore** 80.46 332 *e*P P 09 18 14.0 -2.1
PRGR *PP pP 09 19 00.2 -2.9
PRGR *SP sP 09 19 20.0 -3.5
PRGR *e*S S 09 28 03.1 -3.0
PRGR pmax pmax
comp=Z,294nm,1.8s
**ABPO Ambohimpanom** 80.50 250 P P 09 18 17.2 -0.2
ABPO pmax pmax
comp=Z,90nm,1.5s
**ABPO Ambohimpanom** 80.50 250 P P 09 18 17.2 -0.2
ABPO IAmb IAmb 09 18 19.3
comp=Z,90nm,1.4s
**ABPO Ambohimpanom** 80.50 250 P P 09 18 16.4 -1.0
ABPO pP pP 09 19 03.2 +0.7
**L19K White Mountain** 80.60 28 P P 09 18 19.2 +2.2
baz=263
**N19K Bonanza Creek** 80.63 29 P P 09 18 19.5 +2.3
**N19K Bonanza Creek** 80.63 29 P P 09 18 19.2 +2.0
baz=264
**KARS Kars** 80.68 310 P P 09 18 19.3 +1.3
KARS pmax pmax
comp=Z,105nm,1.0s
**KARS Kars** 80.68 310 P P 09 18 19.3 +1.3
KARS IAmb IAmb 09 18 26.2
comp=Z,105nm,1.0s
**M19K Big River Lodg** 80.79 28 P P 09 18 20.1 +2.2
**M19K Big River Lodg** 80.79 28 P P 09 18 20.1 +2.2
baz=264
**GOF Gofitskoye** 80.81 315⅄ *e*P P 09 18 17.9 -0.5
**KBZ Khabaz** 80.88 313 P P 09 18 18.7 0.0
comp=Z,4.5nm,0.8s,baz=111,slow=3.5,SNR=14
KBZ S S 09 28 09.0 -2.1
comp=Z,0.5nm,0.6s,baz=58,slow=24,SNR=7.6
KBZ LR LR 09 59 27.0
comp=Z,120nm,18.7s,baz=51,slow=39
**KBZ Khabaz** 80.88 313 *de*P P 09 18 17.6 -1.1
KBZ pmax pmax
comp=Z,25nm,1.5s
**OHAK Old Harbor** 80.92 33 P P 09 18 20.2 +1.6
baz=266
**KIV Kislovodsk** 81.04 314 *e*P P 09 18 19.0 -0.7
KIV *e*S S 09 28 11.8 -1.2
KIV pmax pmax
comp=Z,15nm,1.0s
**KIV Kislovodsk** 81.04 314 P P 09 18 19.8 +0.1
**KIV Kislovodsk** 81.04 314 P P 09 18 19.1 -0.6
**KIV Kislovodsk** 81.04 314 *i* P P 09 18 19.4 -0.4
SNR=5.1
**L20K Farewell, AK** 81.09 28 P P 09 18 21.1 +1.6
baz=264
**K20K Telida** 81.09 27 P P 09 18 21.6 +2.1
baz=264
**J20K Nowinta River** 81.14 26 P P 09 18 22.0 +2.3
**J20K Nowinta River** 81.14 26 P P 09 18 21.8 +2.1
baz=264
**KDAK Kodiak Island** 81.34 32 LR LR 09 51 17.8
comp=Z,166nm,21.3s,baz=265,slow=33
**KDAK Kodiak Island** 81.34 32 P P 09 18 22.5 +1.7
baz=266
**VOI Vohitsoka** 81.36 247 P P 09 18 21.1 -0.7
**VOI Vohitsoka** 81.36 247 P P 09 18 20.9 -0.9
SNR=6.9
**VOI Vohitsoka** 81.36 247 P P 09 18 21.3 -0.6
**IMAR Indian Mountai** 81.51 24 P P 09 18 23.2 +1.6
**ATD Arta Tunnel** 81.59 281 P P 09 18 24.2 +1.1
comp=Z,27nm,0.9s,baz=93,slow=4.6,SNR=8.4
ATD LR LR 09 53 36.0
comp=Z,57nm,19.9s,baz=50,slow=35
**ATD Arta Tunnel** 81.59 281 P P 09 18 24.3 +1.2
ATD IAmb IAmb 09 18 25.4
comp=Z,63nm,1.1s
**SPCR Spurr Chakacha** 81.77 29 P P 09 18 25.1 +2.0
baz=266
**SPU Mount Spurr** 81.84 29 P P 09 18 24.9 +1.4
**H21K Melozitna Rive** 81.86 24 P P 09 18 25.3 +1.8
baz=265
**VRH Novokhopyorsk** 81.88 321 *e*P P 09 18 22.4 -1.4
VRH *e*S S 09 28 15.0 -6.1
VRH pmax pmax
comp=Z,50nm,0.6s
VRH smax smax
comp=N,180nm,1.4s
**PPLA Purkeypile** 81.90 27 P P 09 18 24.7 +0.8
baz=266
**CHUM Lake Minchumin** 81.92 26 P P 09 18 25.8 +2.0
baz=266,SNR=8.4
**CAST Castle Rocks** 81.99 27 P P 09 18 25.9 +1.7
baz=266,SNR=16
**I21K Tanana** 82.16 25 P P 09 18 27.3 +2.3
baz=266
**BRSE Bradley Lake S** 82.41 31 P P 09 18 27.4 +0.9
baz=267
**BPAW Bear Paw Mtn.** 82.52 26 P P 09 18 28.6 +1.7
baz=267
**MLY Manley** 82.68 25 P P 09 18 29.3 +1.6
baz=267
**CUT Chulitna** 82.76 28 P P 09 18 29.6 +1.5
baz=268
**TRF Thorofare Moun** 82.80 27 P P 09 18 29.6 +1.0
baz=267,SNR=10
**M22K Willow** 82.80 29 P P 09 18 29.4 +1.1
baz=268,SNR=12
**O22K Cooper Landing** 82.95 30 P P 09 18 30.5 +1.4
baz=268
**RC01 Rabbit Creek A** 82.96 29 P P 09 18 30.1 +0.9
baz=268
**COLD Coldfoot** 83.02 23 P P 09 18 31.4 +2.0
COLD IAmb IAmb 09 18 46.8
comp=Z,44nm,1.0s
**COLD Coldfoot** 83.02 23 P P 09 18 31.5 +2.1
baz=267,SNR=27
**SEW Seward** 83.07 30 P P 09 18 31.1 +1.4
baz=268
**PMR Palmer** 83.27 29 P P 09 18 31.1 +0.4
baz=269
**I23K Minto, Yukon-K** 83.27 25 P P 09 18 32.4 +1.8
baz=268,SNR=18
**TOLK Toolik Lake Re** 83.33 22 P P 09 18 32.6 +1.6
**TOLK Toolik Lake Re** 83.33 22 P P 09 18 33.0 +2.0
baz=267,SNR=11

**KLMR Klimovskoe** 83.36 331 *e*P P 09 18 27.3 -3.9
KLMR *e**PP pP 09 19 14.1 -4.0
KLMR *e*S S 09 28 27.5 -8.1
KLMR pmax pmax
comp=Z,55nm,0.8s
**KLMR Klimovskoe** 83.36 331 *e*P P 09 18 27.3 -3.9
KLMR AMP 09 18 31.5
comp=Z,55nm,0.8s
KLMR *e*pP pP 09 19 14.2 -3.9
KLMR *e*S S 09 28 27.6 -8.1
KLMR *e*S S 09 28 27.6 -8.1
**NEA2 Nenana** 83.38 26 P P 09 18 32.8 +1.5
baz=268,SNR=12
**MCK McKinley** 83.41 27 P P 09 18 32.5 +1.0
baz=268,SNR=18
**VORR Voronezh** 83.46 321 *e*P P 09 18 31.6 -0.3
VORR *e*S S 09 28 31.3 -5.8
VORR pmax pmax
comp=Z,105nm,1.8s
**VSR Storozhevoye** 83.49 321 *e*P P 09 18 30.4 -1.7
VSR *e*S S 09 28 30.5 -6.9
VSR pmax pmax
comp=Z,40nm,0.8s
VSR smax smax
comp=E,70nm,1.4s
**KNK Knik Glacier** 83.58 29 P P 09 18 33.9 +1.5
baz=269,SNR=6.9
**LPSR Galich'ya Gora** 83.63 322 *e*P P 09 18 32.0 -0.8
LPSR *e*S S 09 28 31.1 -7.6
LPSR pmax pmax
comp=Z,30nm,0.8s
LPSR smax smax
comp=N,90nm,1.6s
**PWL Port Wells** 83.64 29 P P 09 18 34.0 +1.3
baz=269,SNR=7.7
**SML Sawmill** 83.65 28 P P 09 18 34.1 +1.3
baz=269
**TCOL CIGO, UAF Yank** 83.90 25 P P 09 18 34.8 +0.9
**TCOL CIGO, UAF Yank** 83.90 25 P P 09 18 34.4 +0.6
baz=269
**COLA College** 83.90 25 ⇓P P 09 18 34.2 +0.3
**H24K Noodor Dome** 83.90 24 P P 09 18 35.6 +1.6
baz=269
**WAT6 Susitna Watana** 83.94 28 P P 09 18 35.4 +1.0
baz=270,SNR=8.4
**POKR Poker Plat Res** 84.08 25 P P 09 18 36.9 +2.1
baz=270
**DHY Denali Highway** 84.10 27 P P 09 18 37.0 +1.8
**DHY Denali Highway** 84.10 27 P P 09 18 37.0 +1.8
baz=270
**SCM Sheep Creek Mo** 84.13 28 P P 09 18 36.0 +0.8
baz=270
**GLI Glacier Island** 84.25 29 P P 09 18 37.4 +1.6
baz=270
**HDA Harding Lake** 84.29 26 P P 09 18 36.4 +0.5
baz=270,SNR=14
**IL31** 84.31 25 P P 09 18 36.2 +0.3
**ILAR Eielson Array** 84.31 25 P P 09 18 35.9 -0.1
comp=N,5.6nm,0.6s,baz=253,slow=4.6,SNR=116
ILAR PKKPbc PKKPbc 09 36 47.6 -2.6
comp=N,1.1nm,0.9s,baz=116,slow=1.7,SNR=6.1
ILAR LR LR 09 56 21.6
comp=N,58nm,21.5s,baz=252,slow=36
**ILAR Eielson Array** 84.31 25 P P 09 18 36.8 +0.8
**ILAR Eielson Array** 84.31 25 P P 09 18 36.8 +0.8
**MOS Moscow** 84.36 325 *e*P P 09 18 33.5 -2.9
MOS *e**PP pP 09 19 17.4 -6.1
MOS *e* 09 21 49.3
MOS *e*S S 09 28 38.2 -7.6
MOS pmax pmax
comp=Z,94nm,1.3s
MOS smax smax
comp=N,200nm,1.4s
**M24K Tolsona, Glenn** 84.67 28 P P 09 18 39.7 +1.7
baz=271
**MAW Mawson** 84.72 200 P P 09 18 38.6 +0.7
comp=N,112nm,1.2s,baz=63,slow=2.4,SNR=4.2
**MAW Mawson** 84.72 200 P P 09 18 39.2 +1.3
**MAW Mawson** 84.72 200 P P 09 18 39.2 +1.3
MAW IAmb IAmb 09 18 39.6
comp=Z,66nm,1.4s
**ANN Anapa** 84.80 314 *d i*P P 09 18 37.1 -1.7
ANN *e**PP pP 09 19 23.6 -1.8
ANN *e* 09 21 55.7
ANN *e*S SKSac 09 28 41.5 -3.4
ANN *e* 09 28 48.1
ANN pmax pmax
comp=Z,61nm,0.8s
**KLU Klutina** 84.80 29 P P 09 18 40.1 +1.5
baz=271
**J25K Salcha River,** 84.97 26 P P 09 18 39.6 +0.2
baz=272,SNR=11
**PAX Paxson** 84.97 27 P P 09 18 40.9 +1.4
baz=272
**OBN Obninsk** 84.98 325 *d i*P P 09 18 38.2 -1.3
OBN *i* 09 19 25.0
OBN *i* S SKSac 09 28 42.8 -2.8
OBN pmax pmax
comp=Z,118nm,1.5s
**OBN Obninsk** 84.98 325 P P 09 18 39.3 -0.2
OBN IAmb IAmb 09 18 41.5
comp=Z,58nm,0.9s
**VNDA Vanda** 85.14 173 P P 09 18 39.9 0.0
comp=Z,7.4nm,0.3s,baz=317,slow=6.2,SNR=55
VNDA LR LR 09 56 15.2
comp=Z,80nm,19.1s,baz=328,slow=35
**VNDA Vanda** 85.14 173 P P 09 18 40.6 +0.8
VNDA pmax pmax
comp=Z,43nm,1.2s
**VNDA Vanda** 85.14 173 P P 09 18 40.6 +0.8
**BMAR Burnt Mountain** 85.20 23 P P 09 18 42.3 +1.8
**RIDG Independent Ri** 85.23 27 P P 09 18 41.6 +0.9
baz=272
**N25K Chitina, Valde** 85.43 29 P P 09 18 42.9 +1.1
baz=273
**SCRK Sand Creek** 85.60 26 P P 09 18 43.9 +1.3
baz=273
**J26L Joseph Creek** 85.75 26 P P 09 18 44.1 +0.8
baz=273
**ASF Jabal al Asfar** 85.87 302 P P 09 18 45.4 +0.8
comp=Z,30nm,1.1s,baz=24,slow=16,SNR=7.2
**APA Apatity** 85.88 337 ⇓*i*P P 09 18 41.0 -2.7
APA *i**PP pP 09 19 41.0 +10
APA pmax pmax
comp=Z,11nm,1.1s
**L26K Log Cabin Wild** 85.94 27 P P 09 18 45.3 +1.1
baz=274
**M26K Nabesna, AK** 86.14 28 P P 09 18 46.5 +1.3
baz=274
**BNN Bunyan** 86.30 309 P P 09 18 46.5 -0.1
BNN IAmb IAmb 09 18 51.5
comp=Z,48nm,1.2s
**L27K Beaver Creek,** 86.63 27 P P 09 18 49.1 +1.5
baz=275
**BCAR Beaver Creek A** 86.65 27 P P 09 18 48.9 +1.3
**M27K Edge Creek, AK** 86.67 28 P P 09 18 49.4 +1.5
baz=275
**EGAK Eagle** 86.77 25 P P 09 18 49.0 +0.8
**EGAK Eagle** 86.77 25 P P 09 18 48.9 +0.8
baz=275
**PPT Papeete** 86.94 108 LR LR 09 48 48.0
comp=Z,98nm,21.7s,baz=26,slow=29
**CTG Chitna Glacier** 87.05 29 P P 09 18 51.2 +1.4
baz=276
**CTGM Chitina Glacie** 87.05 29 P P 09 18 51.5 +1.7
CTGM IAmb IAmb 09 19 04.7
comp=Z,34nm,0.9s
**MMAI Mount Meron Ar** 87.07 303 P P 09 18 50.2 -0.2
comp=Z,1.8nm,0.4s,baz=67,slow=11,SNR=14
MMAI LR LR 10 06 15.6
comp=Z,43nm,18.0s,baz=236,slow=41
**BVCY Beaver Creek** 87.13 28 P P 09 18 51.6 +1.6
baz=276
**KIBK Kibwezi** 87.48 267 P P 09 18 52.8 +0.1
KIBK IAmb IAmb 09 18 54.4
comp=Z,91nm,1.3s
**KIBK Kibwezi** 87.48 267 P P 09 18 53.2 +0.5
SNR=22
**DAWY Dawson** 87.61 26 P P 09 18 53.4 +1.1
**DAWY Dawson** 87.61 26 P P 09 18 53.3 +1.1
baz=277
**TBI Tubuai** 87.71 114 *e*LR LR 09 47 04.4
comp=Z,266nm,35.0s
**EIL Elat** 87.72 299 P P 09 18 53.8 +0.3
comp=Z,10nm,1.0s,baz=99,slow=6.9
EIL LR LR 10 02 28.9

comp=Z,70nm,21.5s,baz=84,slow=38
**I29M Ogilvie Camp, 87.90 25** P **P** **09 18 54.5 +0.9**
baz=278
**BR131 Keskin Array S 87.94 310** P **P** **09 18 53.2 -1.2**
BR131 pmax pmax
comp=Z,8.0nm,1.0s
**BR131 Keskin Array S 87.94 310** P **P** **09 18 53.2 -1.2**
**BRTR Keskin Array B 87.94 310** P **P** **09 18 53.0 -1.4**
comp=Z,2.5nm,0.5s,baz=138,slow=4.5,SNR=18
BRTR LR LR 10 06 22.7
comp=Z,72nm,18.8s,baz=89,slow=41
**BRTR Keskin Array B 87.94 310** P **P** **09 18 53.7 -0.7**
**BRTR Keskin Array B 87.94 310** P **P** **09 18 53.7 -0.7**
**PUL Pulkovo 87.98 330** *i* P **P** **09 18 54.3 +0.3**
PUL pmax pmax
comp=Z,47nm,0.8s
**J29M Klondike Camp 88.06 26** P **P** **09 18 56.9 +2.5**
baz=278
**KMBO Kilima Mbogo 88.16 269** P **P** **09 18 56.4 +0.3**
comp=Z,35nm,1.1s,baz=60,slow=5.1,SNR=63
KMBO LR LR 09 57 59.2
comp=Z,76nm,18.9s,baz=94,slow=35
**KMBO Kilima Mbogo 88.16 269** *i* P **P** **09 18 57.0 +0.9**
KMBO pmax pmax
comp=Z,35nm,1.1s
**KMBO Kilima Mbogo 88.16 269** P **P** **09 18 56.2 +0.1**
KMBO IAmb IAmb 09 18 57.9
comp=Z,87nm,1.3s
**KMBO Kilima Mbogo 88.16 269** P **P** **09 18 56.0 -0.1**
**KMBO Kilima Mbogo 88.16 269** *i* P **P** **09 18 56.2 +0.1**
SNR=48
**EPYK Eagle Plains 88.39 24** P **P** **09 18 56.6 +0.7**
EPYK IAmb IAmb 09 19 08.6
comp=Z,31nm,1.1s
**EPYK Eagle Plains 88.39 24** P **P** **09 18 56.5 +0.7**
baz=279
**ARA0 ARCESS Array S 88.50 340** *e*P **P** **09 18 54.9 -1.4**
**ARCES ARCESS Array B 88.50 340** P **P** **09 18 55.1 -1.1**
comp=Z,6.8nm,0.6s,baz=82,slow=5.7,SNR=28
ARCES PKiKP **PKiKP** **09 23 55.8 +0.1**
comp=Z,1.8nm,0.7s,baz=99,slow=1.0,SNR=7.6
ARCES PKKPbc **PKKPbc** **09 36 37.3 -3.1**
comp=Z,2.0nm,1.0s,baz=266,slow=3.2,SNR=9.4
**ARCES ARCESS Array B 88.50 340** P **P** **09 18 56.3 0.0**
ARCES pmax pmax
comp=Z,42nm,1.4s
**ARCES ARCESS Array B 88.50 340** P **P** **09 18 56.3 0.0**
ARCES IAmb IAmb 09 19 13.9
comp=Z,42nm,1.4s
**SPA0 Spitsbergen Ar 88.68 349** *e*P **P** **09 18 56.7 -0.3**
**HAMF Hammerfest 88.89 341** *e*P **P** **09 18 56.1 -1.9**
**HYT Haines Junctio 88.93 29** P **P** **09 18 59.7 +1.1**
baz=279
**M30M Minto, Yukon 88.98 27** P **P** **09 19 00.2 +1.5**
baz=279
**MAYO Mayo, Yukon 89.21 26** P **P** **09 19 02.1 +2.4**
baz=280
**INK Inuvik 89.24 21** P **P** **09 19 00.3 +0.6**
INK pmax pmax
comp=Z,7.0nm,1.0s
**INK Inuvik 89.24 21** P **P** **09 19 00.3 +0.6**
**INK Inuvik 89.24 21** P **P** **09 18 60.0 +0.3**
baz=282
**KTK1 Kautokeino 89.40 339** *e*P **P** **09 18 59.0 -1.5**
**LODK Lodwar 89.63 273** P **P** **09 19 03.1 +0.3**
**LODK Lodwar 89.63 273** P **P** **09 19 03.5 +0.7**
SNR=11
**N31M Braeburn, Yuko 89.64 28** P **P** **09 19 03.1 +1.3**
baz=280
**MDUB Mudurnu 89.72 310** P **P** **09 19 02.7 0.0**
MDUB IAmb IAmb 09 19 03.3
comp=Z,24nm,0.6s
**AKASG Malin Array Be 89.79 321** P **P** **09 19 01.2 -1.4**
comp=Z,1.2nm,0.5s,baz=68,slow=4.4,SNR=11
AKASG LR LR 10 02 51.5
comp=Z,110nm,18.3s,baz=78,slow=38
**AKASG Malin Array Be 89.79 321** P **P** **09 19 01.0 -1.7**
**FIA1 FINESS Array S 89.79 332** P **P** **09 19 01.6 -0.8**
FIA1 IAmb IAmb 09 19 19.9
comp=Z,36nm,1.2s
**FINES FINESS Array B 89.80 332** P **P** **09 19 01.0 -1.4**
comp=Z,7.0nm,0.4s,baz=71,slow=4.4,SNR=75
FINES PKiKP **PKiKP** **09 23 58.0 0.0**
comp=Z,1.0nm,0.5s,baz=118,slow=2.8,SNR=4.6
**FINES FINESS Array B 89.80 332** P **P** **09 19 01.4 -1.0**
**FINES FINESS Array B 89.80 332** P **P** **09 19 01.4 -1.0**
**VSU Vasula 90.00 329** *i* P **P** **09 19 03.8 +0.3**
VSU pmax pmax
comp=Z,135nm,3.0s
**MNK Minsk 90.04 325** *i* P **P** **09 19 04.4 +0.7**
MNK *i* *PP **pP** **09 19 51.5 +0.7**
MNK *i* 09 22 39.8
MNK *i* PPP PPP 09 24 37.8
MNK *i* S **SKSac** **09 29 16.3 +0.1**
MNK *i* *SS **pS** **09 30 42.7 +1.5**
MNK *i* SS **SS** **09 35 44.5 +1.7**
MNK *i* SSS SSS 09 39 22.0
MNK pmax pmax
comp=Z,25nm,0.8s
MNK pmax pmax
comp=N,9.0nm,0.8s
MNK pmax pmax
comp=E,3.0nm,1.0s
MNK MLR MLR
comp=E,23nm,19.0s
MNK MLR MLR
comp=N,336nm,26.0s
MNK MLR MLR
comp=Z,221nm,26.0s
**MNK Minsk 90.04 325** *i* P **P** **09 19 04.4 +0.7**
comp=E,3.0nm,1.0s
MNK *i* P **P** **09 19 04.4 +0.7**
comp=N,9.0nm,0.8s
MNK *i* P **P** **09 19 04.4 +0.7**
comp=Z,25nm,0.8s,baz=80
MNK *i* pP **pP** **09 19 51.5 +0.7**
MNK *i* PP **PP** **09 22 39.8 +0.4**
MNK *i* PPP PPP 09 24 37.8
MNK *i* S **SKSac** **09 29 16.3 +0.1**
MNK *i* sS **pS** **09 30 42.8 +1.6**
MNK *i* SS **SS** **09 35 44.5 +1.7**
MNK *i* SSS SSS 09 39 22.1
MNK *i* LRM MLR 10 00 49.7
comp=E,23nm,19.0s
MNK *i* LRM MLR 10 01 17.7
comp=N,336nm,25.6s
MNK *i* LRM MLR 10 01 30.2
comp=Z,221nm,25.6s
**M31M Drury Creek, Y 90.15 27** P **P** **09 19 05.3 +1.1**
baz=282
**SKAG Skagway 90.23 30** P **P** **09 19 07.1 +2.6**
baz=281
**JETT Jettan, Norway 90.24 340** *e*P **P** **09 19 04.7 +0.3**
**IDID Didziasalis 90.55 326** *e*P **P** **09 19 06.4 +0.3**
**NACGM Naroch 90.60 325** *i* P **P** **09 19 04.4 -1.9**
**FARO Faro, Yukon 90.62 27** P **P** **09 19 07.7 +1.3**
baz=282
**TRO Tromso 90.72 340** *e*P **P** **09 19 05.1 -1.4**
**SORM Soroca 90.73 318** ⇓P **P** **09 19 05.0 -2.1**
**SORM Soroca 90.73 318** ⇓P **P** **09 19 05.0 -2.1**
**IIGN Ignalina 90.84 326** *e*P **P** **09 19 07.4 -0.1**
**A36M Sachs Harbour 90.92 17** P **P** **09 19 09.3 +1.8**
baz=290
**NOR Nord 91.42 355** *i* P **P** **09 19 07.5 -2.2**
NOR IAmb IAmb 09 19 10.7
comp=Z,84nm,1.7s
**MMPY Sheldon Lake, 91.48 27** P **P** **09 19 11.8 +1.5**
baz=284
**PABE Paberze 92.07 326** *e*P **P** **09 19 12.2 -0.9**
**TESR Tescani 92.14 317** ⇑P **P** **09 19 12.1 -1.6**
**VRI Vrincioaia 92.19 316** ⇑P **P** **09 19 13.2 -0.7**
**VRI Vrincioaia 92.19 316** ⇑P **P** **09 19 13.2 -0.7**
**C36M Paulatuk 92.22 19** P **P** **09 19 13.9 +0.3**
baz=291
**PLOR Plostina 92.25 316** ⇓P **P** **09 19 13.4 -0.9**
**PLOR Plostina 92.25 316** ⇓P **P** **09 19 13.4 -0.9**
**STEI Steigen 92.54 339** *e*P **P** **09 19 13.4 -1.6**
**NEHR Nehoiu 92.57 316** ⇑P **P** **09 19 15.9 +0.2**
**FAUS Fauske 92.72 339** *e*P **P** **09 19 13.1 -2.8**
**MLR Muntele Rosu 92.80 316** ⇑P **P** **09 19 15.7 -1.2**
**MLR Muntele Rosu 92.80 316** P **P** **09 19 15.9 -1.0**
comp=Z,3.0nm,0.6s,baz=271,slow=4.2,SNR=9.0
**MLR Muntele Rosu 92.80 316** ⇑P **P** **09 19 15.7 -1.2**
**SUW Suwalki 92.84 325** *e*P **P** **09 19 15.6 -1.0**
**SUW Suwalki 92.84 325** *e*P **P** **09 19 15.0 -1.7**

**BURAR Bucovina Array 92.90 318** ⇓P **P** **09 19 16.0 -1.3**
**BURAR Bucovina Array 92.90 318** ⇓P **P** **09 19 16.0 -1.3**
**BURAR Bucovina Array 92.90 318** P **P** **09 19 17.2 -0.1**
**BUR08 Bucovina Ar. S 92.91 318** P **P** **09 19 16.9 -0.4**
**TGTN Hyland Airport 93.13 27** P **P** **09 19 19.5 +1.5**
baz=287
**SYO Syowa Base 93.36 201** ⇓*e*P **P** **09 19 20.2 +1.5**
**SYO Syowa Base 93.36 201** ⇓*i*pP pP 09 20 07.0 +1.9
**VOIR 93.43 316** ⇓P **P** **09 19 19.2 -0.5**
**VOIR 93.43 316** ⇓P **P** **09 19 19.2 -0.5**
**MOR8 Moi Rana 93.46 338** *e*P **P** **09 19 16.1 -3.3**
**ARR Arges 93.73 316** ⇓P **P** **09 19 20.3 -0.8**
**LOT Lotru 94.31 316** ⇑P **P** **09 19 23.0 -0.8**
**UZH Uzhgorod 94.60 320** *e*P **P** **09 19 26.2 +1.3**
**MBAR Mbarara 94.60 270** LR LR 10 02 53.8
comp=Z,131nm,19.1s,baz=68,slow=36
**DRGR 94.74 318** ⇑P **P** **09 19 24.4 -1.3**
**DRGR 94.74 318** ⇑P **P** **09 19 24.4 -1.3**
**NSS Namsos 95.05 337** *e*P **P** **09 19 25.1 -1.5**
**CRVS Cervenica-Dubn 95.07 320** *e*P **P** **09 19 27.4 +0.3**
**CRVS Cervenica-Dubn 95.07 320** *e*PDIFF **P** **09 19 27.4 +0.3**
**QSPA South Pole Qui 95.19 180** LR LR 10 02 41.4
comp=Z,143nm,19.9s,baz=331,slow=36
**QSPA South Pole Qui 95.19 180** P **P** **09 19 27.9 +0.6**
QSPA IAmb IAmb 09 19 29.0
comp=Z,40nm,1.2s
**QSPA South Pole Qui 95.19 180** P **P** **09 19 27.7 +0.4**
QSPA pP **pP** **09 20 13.6 -0.9**
**IDI Anoyia 95.43 306** P **P** **09 19 28.5 -0.7**
comp=Z,2.9nm,0.6s,baz=46,slow=12,SNR=1.6
**DAG Danmarks Havn 95.53 352** *i* P **P** **09 19 27.0 -1.6**
DAG IAmb IAmb 09 19 28.5
comp=Z,34nm,1.1s
**HFS Hagfors 95.98 332** LR LR 10 07 50.8
comp=Z,170nm,18.2s,baz=55,slow=38
**RES Resolute Bay 96.54 10** PP **PP** **09 23 30.6 +1.2**
comp=Z,2.0nm,0.9s,baz=310,slow=7.2,SNR=3.8
RES LR LR 10 06 29.1
comp=Z,58nm,19.4s,baz=271,slow=37
**RES Resolute Bay 96.54 10** P **P** **09 19 33.7 +0.5**
RES pmax pmax
comp=Z,12nm,1.2s
**RES Resolute Bay 96.54 10** P **P** **09 19 33.7 +0.5**
RES IAmb IAmb 09 19 34.9
comp=Z,12nm,1.2s
**NB2 NORSAR Subarra 96.77 333** P **P** **09 19 32.3 -2.3**
comp=Z,6.2nm,1.0s,baz=68,slow=4.6
**NB2 NORSAR Subarra 96.77 333** P **P** **09 19 32.3 -2.3**
baz=68,slow=4.6
**NOA NORSAR Array B 96.77 333** P **P** **09 19 33.0 -1.6**
comp=Z,5.4nm,1.0s,baz=67,slow=4.6,SNR=15
NOA LR LR 10 08 56.3
comp=Z,135nm,18.1s,baz=65,slow=39
**NOA NORSAR Array B 96.77 333** P **P** **09 19 33.0 -1.6**
**DOMB Dombas 97.28 335** *e*P P 09 19 31.6 -5.3
**NEEM North Greenlan 97.36 359** *i* P **P** **09 19 35.4 -1.9**
NEEM IAmb IAmb 09 19 38.0
comp=Z,44nm,1.4s
**DBG Daneborg 97.78 351** *i* P **P** **09 19 37.4 -1.4**
DBG IAmb IAmb 09 19 39.1
comp=Z,20nm,1.2s
**JMIC Jan Mayen 98.01 346** LR LR 10 12 36.6
comp=Z,48nm,18.6s,baz=68,slow=40
**VRAC Vranov 98.04 321** P Pdif 09 19 41.2 +0.6
comp=Z,1.7nm,0.7s,baz=71,slow=4.6,SNR=1.6
VRAC LR LR 10 10 11.4
comp=Z,107nm,18.2s,baz=65,slow=39
**AKN Aaknes 98.09 335** *e*Pdif Pdif 09 19 41.3 +0.8
**LSZ Lusaka 98.22 255** LR LR 10 03 19.2
comp=Z,106nm,18.6s,baz=123,slow=35
**YKA Yellowknife Ar 98.67 24** P Pdif 09 19 43.4 +0.5
comp=Z,2.5nm,0.9s,baz=299,slow=4.8,SNR=24
YKA PKiKP **PKiKP** **09 24 14.7 +1.3**
comp=Z,0.3nm,0.4s,baz=302,slow=1.8,SNR=5.9
YKA PKKPbc **PKKPbc** **09 36 10.0 -3.6**
comp=Z,1.1nm,0.3s,baz=122,slow=3.6,SNR=23
**YKA Yellowknife Ar 98.67 24** P Pdif 09 19 43.1 +0.1
**RUE Ruedersdorf 98.69 325** *e*P Pdif 09 19 43.8 +0.6
**BRG Berggiesshubel 99.15 323** *e*P **Pdif** **09 19 42.6 -2.8**
BRG Amp 09 19 47.7
comp=Z,3.7nm,1.0s
BRG *ex* x 09 19 58.3
BRG Amp 09 20 03.9
comp=Z,16nm,1.5s
**BRG Berggiesshubel 99.15 323** *e*P **Pdif** **09 19 42.6 -2.8**
BRG pmax pmax
comp=Z,4.0nm,1.0s
BRG pmax pmax
comp=Z,16nm,1.5s
**CLL Collm 99.55 324** *e*P **Pdif** **09 19 46.0 -1.2**
CLL *e* 09 23 53.0
CLL *e*S **ScS** **09 31 02.0 -1.0**
**CLL Collm 99.55 324** *e*(Pdif) 09 19 46.0
CLL *e*PP **PP** **09 23 53.0 -0.1**
CLL *e*PKiKP **PKiKP** **09 24 17.0 +1.7**
CLL *e*PPP PPP 09 26 12.0
CLL *e*SKSac **SKSac** **09 30 15.0 +7.8**
CLL *e*Sdif **ScS** **09 31 02.0 -1.0**
CLL *es*Sdif pS 09 32 17.0 +11
CLL *e*PS **PS** **09 32 52.0 -3.5**
CLL *e*PPS PPS 09 33 41.0
CLL *es*PPS 09 34 26.0
CLL *ex* x 09 35 34.0
CLL *e*SS **SS** **09 37 56.0 -1.6**
CLL *es*SS 09 39 05.0
CLL *ex* x 09 43 30.0
CLL *e*SSSS 09 45 06.0
CLL LmH 10 02 00.0
comp=N,200nm,21.7s
CLL LmH 10 02 00.0
comp=E,200nm,21.1s
CLL LmV 10 07 00.0
comp=Z,200nm,20.4s
**EKA Eskdalemuir Ar 106.19 332** PKKPbc PKKPbc 09 35 50.3 -1.1
comp=Z,6.2nm,0.3s,baz=240,slow=2.5,SNR=7.6
**NVAR Mina Array Bea 106.92 47** Pdiff **Pdif** **09 20 21.6 +1.1**
comp=Z,0.6nm,0.7s,baz=287,slow=5.4,SNR=4.6
NVAR PKiKP **PKiKP** **09 24 30.2 +0.8**
comp=Z,0.6nm,0.7s,baz=267,slow=1.8,SNR=1.7
NVAR PKKPbc **PKKPbc** **09 35 48.4 -0.4**
comp=Z,2.5nm,0.9s,baz=171,slow=3.2,SNR=12
NVAR PKKPab **PKKPab** **09 36 03.4 -1.1**
comp=Z,3.0nm,0.9s,baz=130,slow=5.6,SNR=13
**ELK Elko 108.21 44** PKiKP **PKiKP** **09 24 33.2 +1.4**
comp=Z,0.6nm,0.3s,baz=286,slow=3.0,SNR=2.2
ELK PKKPbc **PKKPbc** **09 35 44.6 -0.3**
comp=Z,1.4nm,0.5s,baz=122,slow=2.2,SNR=7.4
ELK PKKP **PKKPdf** **09 35 57.2 -1.0**
comp=Z,4.2nm,1.0s,baz=87,slow=1.9,SNR=7.0
**FRB Frobisher Bay 110.36 7** PKiKP **PKiKP** **09 24 35.4 +0.6**
comp=Z,1.2nm,0.7s,baz=326,slow=0.8,SNR=3.2
**PDAR Pinedale Array 111.11 40** PKiKP **PKiKP** **09 24 37.8 +0.5**
comp=Z,0.6nm,0.7s,baz=282,slow=2.9,SNR=4.3
PDAR PKKPbc **PKKPbc** **09 35 33.5 -2.2**
comp=Z,4.5nm,1.1s,baz=116,slow=5.1,SNR=16
PDAR PKKPab **PKKPab** **09 35 43.7 -2.2**
comp=Z,4.1nm,0.7s,baz=116,slow=6.1,SNR=20
**WUAZ Wupatki 113.16 48** PKiKP **PKiKP** **09 24 43.1 +1.9**
baz=295
**ANMO Albuquerque 117.01 46** PKP **PKiKP** **09 24 50.0 +1.3**
comp=Z,3.4nm,0.9s,baz=315,slow=5.7,SNR=11
**ANMO Albuquerque 117.01 46** PKiKP **PKiKP** **09 24 50.0 +1.3**
**ANMO Albuquerque 117.01 46** **PKiKP** **09 24 49.2 +0.5**
**ANMO Albuquerque 117.01 46** P **PKiKP** **09 24 50.3 +1.6**
baz=299
**T25A Trinidad 117.35 43** **PKiKP** **09 24 49.9 +0.6**
**T25A Trinidad 117.35 43** P **PKiKP** **09 24 50.5 +1.1**
baz=301
**ECSD EROS Data Cent 118.30 33** **PKPdf** **09 24 50.6 -0.1**
**ECSD EROS Data Cent 118.30 33** P **PKiKP** **09 24 50.9 +0.2**
baz=311,SNR=5.3
**SCHQ Schefferville 119.25 8** PKP **PKiKP** **09 24 52.4 +0.1**
comp=Z,3.8nm,0.6s,baz=1.7,slow=2.9,SNR=10
**SCHQ Schefferville 119.25 8** **PKiKP** **09 24 52.7 +0.5**
**SPMN Marine on St. 119.27 30** **PKiKP** **09 24 52.9 +0.4**
**SPMN Marine on St. 119.27 30** P **PKiKP** **09 24 53.1 +0.6**
baz=315
**MNTX Cornudas Mount 119.33 49** **PKiKP** **09 24 54.1 +1.0**
**MNTX Cornudas Mount 119.33 49** P **PKiKP** **09 24 54.4 +1.3**
baz=298
**MSTX Muleshoe 120.13 46** **PKiKP** **09 24 55.5 +0.8**
**MSTX Muleshoe 120.13 46** P **PKiKP** **09 24 56.0 +1.3**
baz=301
**TORD Torodi Ar. Bea 121.08 289** PKP **PKPdf** **09 24 56.4 -0.4**
comp=Z,8.1nm,0.9s,baz=79,slow=1.5,SNR=32

TORD PKKPbc **PKKPab** **09 35 01.5 +0.1**
comp=Z,0.4nm,0.5s,baz=264,slow=2.9,SNR=2.4
**TORD Torodi Ar. Bea 121.08 289** **PKPdf** **09 24 56.1 -0.6**
**KSU1 Kansas State U 121.27 37** P **PKPdf** **09 24 56.5 0.0**
baz=309
**TX31 Lajitas Ar. Si 121.74 51** **PKiKP** **09 24 58.1 +0.1**
**TX32 Lajitas Array 121.74 51** **PKiKP** **09 24 58.5 +0.5**
**TXAR Lajitas Array 121.75 51** PKP **PKiKP** **09 24 58.5 +0.5**
comp=Z,2.1nm,0.6s,baz=82,slow=0.1,SNR=36
TXAR SKP 09 28 15.6
comp=Z,1.9nm,1.0s,baz=316,slow=3.5,SNR=4.0
TXAR PKKPbc **PKKPbc** **09 34 56.4 -1.4**
comp=Z,2.5nm,0.9s,baz=130,slow=5.9,SNR=17
**TXAR Lajitas Array 121.75 51** **PKiKP** **09 24 58.1 +0.1**
**JFWS Jewell Farm 122.21 30** P **PKPdf** **09 24 57.9 -0.3**
baz=317
**JCT Junction City 124.09 48** P **PKiKP** **09 25 03.0 +0.5**
baz=302,SNR=21
**CCM Cathedral Cave 125.12 35** P **PKiKP** **09 25 04.3 0.0**
baz=314
**U40A Yellville 125.31 38** P **PKiKP** **09 25 04.9 +0.1**
baz=311,SNR=8.8
**W39A Magazine 125.48 39** P **PKiKP** **09 25 05.3 +0.2**
baz=310
**833A Chaparral WMA, 125.51 50** P **PKiKP** **09 25 06.5 +1.1**
baz=301
**435B Jarrell 125.54 46** P **PKiKP** **09 25 05.9 +0.6**
baz=304
**SADO Sadowa 125.55 21** PKP **PKiKP** **09 25 05.0 +0.1**
comp=Z,10nm,0.9s,baz=360,slow=1.2,SNR=4.1
**SFIN Lafayette 125.67 30** P **PKiKP** **09 25 05.4 +0.1**
baz=319
**T42A Van Buren 125.91 36** **PKiKP** **09 25 06.3 +0.5**
**MIAR Mount Ida 126.03 40** PKIKP **PKiKP** **09 25 06.1 -0.1**
**MIAR Mount Ida 126.03 40** **PKiKP** **09 25 06.1 -0.1**
**MIAR Mount Ida 126.03 40** P **PKiKP** **09 25 06.7 +0.5**
baz=310,SNR=9.5
**KOWA Kowa 126.04 292** **PKPdf** **09 25 06.1 -0.2**
**W41B Gary Mavity, V 126.46 38** P **PKPdf** **09 25 06.2 -0.4**
baz=311
**LCAR Lake Charles 126.53 37** **PKiKP** **09 25 07.0 -0.1**
**BATG Bathurst New B 126.70 10** **PKiKP** **09 25 07.0 -0.2**
**O48B Farmland 126.72 29** P **PKPdf** **09 25 07.3 +0.3**
baz=321
**P48A Milroy 127.21 30** **PKiKP** **09 25 08.4 0.0**
**P49A Miami Univ. Ec 127.50 29** P **PKiKP** **09 25 08.9 -0.1**
baz=321
**WCI Wyandotte Cave 127.70 31** P **PKiKP** **09 25 09.9 +0.5**
baz=319
**ACSO Alum Creek Sta 127.76 27** P **PKiKP** **09 25 09.7 +0.2**
baz=323,SNR=6.5
**M53A WI Miller and 127.78 25** P **PKiKP** **09 25 09.6 +0.1**
baz=327
**M54A Oil Creek Stat 128.14 24** P **PKiKP** **09 25 10.3 0.0**
baz=328
**WVT Waverly 128.41 34** P **PKiKP** **09 25 11.2 +0.3**
baz=316
**N54A Moraine State 128.47 24** P **PKiKP** **09 25 11.0 +0.1**
baz=327
**O53A New Philadelph 128.54 26** P **PKPdf** **09 25 10.6 +0.2**
baz=325
**OXF Oxford 128.63 37** P **PKiKP** **09 25 11.4 0.0**
baz=314
**P52A Corning 128.63 27** P **PKiKP** **09 25 11.2 -0.1**
baz=324,SNR=6.1
**KIC Kosan Boka 128.81 282** *e*PKIKP **PKPdf** **09 25 11.5 -0.1**
comp=Z,17nm,0.8s
**DBIC Dimbokro 128.86 283** PKP **PKPdf** **09 25 11.9 +0.2**
comp=Z,20nm,1.1s,baz=67,slow=2.4,SNR=7.6
**DBIC Dimbokro 128.86 283** **PKPdf** **09 25 11.3 -0.3**
**BINY Binghamton 128.91 20** P **PKiKP** **09 25 12.2 +0.4**
baz=332
**TIC Toumodi 129.02 283** *e*PKIKP **PKPdf** **09 25 11.8 -0.2**
**LIC Lamto 129.12 282** *e*PKIKP **PKPdf** **09 25 12.0 -0.2**
comp=Z,113nm,1.4s
**USHA Ushuaia 129.37 170** PKP **PKiKP** **09 25 12.2 0.0**
comp=Z,12nm,1.0s,baz=331,slow=5.2,SNR=3.5
USHA SKPbc SKPbc 09 28 16.3 +1.4
comp=Z,22nm,1.0s,baz=276,slow=3.5,SNR=5.2
**SSPA Standing Stone 129.58 23** P **PKiKP** **09 25 13.4 +0.2**
baz=330
**O56A Blue Knob Stat 129.63 24** P **PKiKP** **09 25 13.5 +0.2**
baz=328
**N59A State Game Lan 130.12 21** P **PKiKP** **09 25 14.7 +0.5**
baz=332
**TKL Tuckaleechee C 130.96 32** PKP **PKiKP** **09 25 16.5 +0.4**
comp=Z,6.7nm,0.4s,baz=141,slow=4.9,SNR=25
TKL SKPbc **SKPab** **09 28 22.0 +0.1**
comp=Z,21nm,0.9s,baz=31,slow=2.6,SNR=15
**TKL Tuckaleechee C 130.96 32** **PKiKP** **09 25 16.2 +0.1**
**LRAL Lakeview Retre 131.10 37** P **PKiKP** **09 25 17.3 +0.9**
baz=315
**CMIG Matias Romero 134.49 60** SKPbc **SKPbc** **09 28 34.0 -0.2**
comp=Z,20nm,0.9s,baz=27,slow=9.8,SNR=6.4
**COYC Coyhaique 137.11 162** **PKPdf** **09 25 26.9 +0.6**
**LL02 Futaleuf 139.32 161** **PKPdf** **09 25 30.9 +0.5**
**PLCA Paso Flores 141.95 160** PKhKP PKPpre 09 25 31.1
comp=Z,8.9nm,1.0s,baz=323,slow=3.4,SNR=21
PLCA PKP **PKPdf** **09 25 34.1 -1.3**
comp=Z,8.9nm,1.0s,baz=289,slow=1.6,SNR=9.5
PLCA SKPbc **SKPbc** **09 28 54.3 -0.5**
comp=Z,16nm,1.1s,baz=240,slow=2.5,SNR=6.5
**PLCA Paso Flores 141.95 160** PKiKP **PKPdf** **09 25 36.7 +1.3**
**PLCA Paso Flores 141.95 160** **PKPdf** **09 25 36.7 +1.3**
**BI05 Punta Hualpn 144.40 154** **PKPdf** **09 25 39.3 -0.4**
**ML02 Panimavida 145.99 155** **PKPab** **09 25 44.6 +0.3**
**GO05 Huala 146.41 154** **PKPbc** **09 25 45.6 +0.7**
**BO02 Sierra Bellavi 147.09 155** **PKPdf** **09 25 45.2 +0.7**
**RIMA Rio Macho 147.31 63** **PKPbc** **09 25 49.1 +1.0**
**PEZE Perez Zeledon, 147.65 63** **PKPbc** **09 25 47.6 -1.4**
**PRVC Isla de Provid 147.67 55** *e*P **PKPbc** **09 25 47.8 -1.0**
**MT01 Popeta 147.68 154** **PKPbc** **09 25 47.5 -0.9**
**MT09 Talagante 147.87 154** **PKPbc** **09 25 48.6 -0.4**
**LMEL Las Melosas 148.14 155** **PKPbc** **09 25 50.4 +0.6**
**PEL Peldehue 148.53 154** PKP2 **PKPbc** **09 25 50.8 +0.1**
**PEL Peldehue 148.53 154** **PKPdf** **09 25 45.4 -1.4**
PEL PKPbc **PKPbc** **09 25 50.8 +0.1**
**CDITO Canoas 148.71 64** **PKPdf** **09 25 49.5 +1.9**
**PTAC Punta Ardita, 153.84 62** *e*P **PKPdf** **09 25 54.5 -0.9**
**SJG San Juan 154.15 26** PKPbc **PKiKP** **09 26 04.2 +0.2**
comp=Z,5.5nm,0.6s,baz=310,slow=14,SNR=5.2
**SJG San Juan 154.15 26** PKP2 **PKPab** **09 26 19.1 +0.9**
SJG 10 25 54.4
**SJG San Juan 154.15 26** **PKPdf** **09 25 54.4 -1.3**
SJG PKPbc **PKiKP** **09 26 04.7 +0.7**
SJG PKPab **PKPab** **09 26 19.1 +0.9**
**AC02 Maricunga 154.53 149** PKPdf **PKPbc** **09 25 56.0 -0.7**
AC02 **PKiKP** **09 26 05.6 +0.4**
AC02 PKPab **PKPab** **09 26 20.8 +0.5**
**SJCC San Jacinto, C 154.62 54** *e*P **PKPdf** **09 25 56.4 -0.1**
**URCC San Jos de Ur 155.51 58** *e*P **PKPdf** **09 25 57.3 -0.4**
**ITQB Itaqui 155.68 176** PKPdf **PKPdf** **09 25 57.6 +0.1**
ITQB **PKPab** **09 26 24.8 +0.4**
**ZARC Zaragoza, Cauc 156.21 58** *e*P **PKPdf** **09 25 59.2 +0.6**
**HELC Santa Helena 156.28 62** *e*P **PKPdf** **09 25 59.2 +0.1**
**BBAC Balboa, Cauca 156.33 73** *e*P **PKPdf** **09 25 58.3 -0.8**
**ATAH Atahualpa 156.37 96** PKP **PKPdf** **09 26 00.9 +1.6**
comp=Z,14nm,1.0s,baz=256,slow=0.6,SNR=16
**GCUF Volcan Galeras 156.47 75** *e*P **PKPdf** **09 26 00.2 +0.6**
**YOTC Yotoco, Valle 156.50 67** *e*P **PKPdf** **09 25 58.3 -0.9**
**POPC Popayan, Colom 156.71 71** *e*P **PKPdf** **09 25 58.3 -1.3**
**GUY2C Guyana, Caldas 156.87 63** *e*P **PKPdf** **09 25 57.3 -2.7**
**SOTA Rioblanco 156.90 72** *e*P **PKPdf** **09 26 00.2 +0.1**
**PCON Cinco Lajas 157.04 71** *e*P **PKPdf** **09 26 01.2 +0.8**
**PTBC PUERTO BERRIO 157.04 59** *e*P **PKPdf** **09 25 59.2 -0.5**
**OCAC Ocana 157.07 54** *e*P **PKPdf** **09 25 55.4 -4.5**
**NNA Nana 157.13 108** PKP **PKPdf** **09 26 01.2 +1.4**
comp=Z,14nm,1.1s,baz=321,slow=3.7,SNR=4.0
**ORTC Ortega, Tolima 157.53 66** *e*P **PKPdf** **09 26 00.2 -0.2**
**SPBC San Pablo de B 157.81 61** *e*P **PKPdf** **09 26 01.2 +0.4**
**GARC Garzon, Huila 157.94 71** *e*P **PKPdf** **09 26 00.2 -0.9**
**ROSC El Rosal 157.97 63** PKP **PKPdf** **09 26 02.4 +1.1**
comp=Z,11nm,0.7s,baz=39,slow=1.8,SNR=9.5
**ROSC El Rosal 157.97 63** *e*P **PKPdf** **09 25 59.2 -2.1**
**LVC Limon Verde 157.97 143** PKP **PKPdf** **09 26 02.7 +1.7**
comp=Z,4.0nm,0.9s,baz=211,slow=3.2,SNR=4.8
**FLOC Florencia 157.98 72** *e*P **PKPdf** **09 25 59.2 -1.7**
**PAMC Pamplona, Colo 158.09 55** *e*P **PKPdf** **09 26 00.2 -1.4**
**BARC Barichara 158.09 58** *e*P **PKPdf** **09 26 01.2 -0.1**
**RUSC La Rusia 158.54 59** *e*P **PKPdf** **09 26 00.2 -1.9**
**CHIC Chingaza 158.59 63** *e*P **PKPdf** **09 26 02.1 0.0**
**SDV Santo Domingo 158.77 49** PKP **PKPdf** **09 26 02.7 +0.7**
comp=Z,20nm,1.1s,baz=284,slow=1.6,SNR=13
**SDV Santo Domingo 158.77 49** *e*P **PKPdf** **09 26 01.2 -0.9**
**CPUP Villa Florida 158.93 173** PKP **PKPdf** **09 26 02.5 +0.9**

comp=Z,7.3nm,1.0s,baz=174,slow=3.5,SNR=4.8

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|---|---|---|---|---|---|---|---|
| **PTLC** | **Puerto Leguiza** | **159.21** | **75** | *e*P | **PKPdf** | **09 26 00.2** | **-2.1** |
| **MACC** | **Macarena, Meta** | **159.49** | **69**⇑ | *e*P | **PKPdf** | **09 26 01.2** | **-1.5** |
| **PTGC** | **Puerto Gaitan,** | **160.19** | **62** | *e*P | **PKPdf** | **09 26 01.2** | **-2.3** |
| **NBIT** | **Itapeh - BA** | **162.20** | **236** | *e*P | **PKPdf** | **09 26 06.3** | **+0.9** |
| **LPAZ** | **La Paz** | **162.88** | **131** | PKP | **PKPdf** | **09 26 08.1** | **+1.2** |

comp=Z,16nm,1.2s,baz=263,slow=1.9,SNR=24

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|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **162.88** | **131** | *e*P | **PKPdf** | **09 26 05.0** | **-1.9** |
| **LPAZ** | **La Paz** | **162.88** | **131** | *e*P | **PKPdf** | **09 26 06.5** | **-0.4** |
| **TBTG** | **Tabatinga, AM** | **164.80** | **87** | *e*P | **PKPdf** | **09 26 07.9** | **-0.1** |
| **AQDB** | **Aquidauana** | **164.87** | **176** | PKPdf | **PKPdf** | **09 26 07.3** | **-0.5** |
| AQDB | | | | PKPab | **PKPab** | **09 27 04.3** | **-0.4** |
| **SIV** | **San Ignacio** | **167.66** | **150** | PKP | **PKPdf** | **09 26 10.8** | **+0.7** |

comp=Z,9.0nm,1.0s,baz=214,slow=0.6,SNR=23

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|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **167.80** | **212** | PKP | **PKPdf** | **09 26 10.2** | **-0.2** |

comp=Z,11nm,1.1s,baz=177,slow=3.2,SNR=9.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **167.80** | **212** | PKP2 | **PKPab** | **09 27 17.9** | **0.0** |
| BDFB | | | | | | 10 26 09.8 | |
| **BDFB** | **Brasilia** | **167.80** | **212** | PKPdf | **PKPdf** | **09 26 09.8** | **-0.6** |
| BDFB | | | | | **PKPab** | **09 27 17.9** | **0.0** |
| **ARAG** | **Araguaiana, MT** | **169.27** | **195** | *e*P | **PKPdf** | **09 26 11.5** | **+0.3** |
| **VILB** | **Vilhena** | **170.65** | **145** | *e*P | **PKPdf** | **09 26 12.6** | **+0.6** |

*GCG* ***28*** *09:25:33.5±0.5, 15˚.14'N×89˚.61'W, h10km, MD3.4*
*SNET* ***28*** *09:25:35.9±0.8, 14˚.92'N×89˚.62'W, h10km, ML3.0*

**ISC 28 09:25:32.2±1.7, 15°.07'N±0°.08×89°.52'W±0°.06, h16km±9km, n14, σ0°78/19, 2D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRL** | **Marmol** | **0.16** | **276** | *i*P | **Pb** | **09 25 37.1** | **+0.2** |
| MRL | | | | *i* S | **Sg** | **09 25 40.0** | **+0.5** |
| **NBG** | **Las Nubes** | **0.93** | **239** | *e*P | **Pn** | **09 25 50.6** | **-0.3** |
| NBG | | | | *e*S | **Sg** | **09 26 01.7** | **-0.8** |
| **SLOZ** | **Alcaldia de Sa** | **1.06** | **194** | *e*P | **Pn** | **09 25 52.1** | **-0.4** |
| SLOZ | | | | *e*S | **Sb** | **09 26 06.1** | **+0.1** |
| SLOZ | | | | IAML | | 09 26 12.1 | |

comp=Z,203nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TACO** | **Tacachico** | **1.10** | **171** | *e*P | **Pg** | **09 25 53.3** | **-0.2** |
| TACO | | | | *e*S | **Sb** | **09 26 07.3** | **+0.3** |
| **NUBE** | **Las Nubes** | **1.18** | **192** | *i*P | **Pg** | **09 25 54.4** | **-0.7** |
| **CEVE** | **Cerro Verde** | **1.23** | **185** | *e*P | **Pg** | **09 25 55.8** | **-0.3** |
| **PCG** | **Pacaya** | **1.25** | **238** | *e*P | **Pg** | **09 25 56.4** | **+0.1** |
| PCG | | | | *e*S | **Sg** | **09 26 13.7** | **+1.1** |
| **JAYA** | **Jayaque - finc** | **1.40** | **177** | *e*P | **Pg** | **09 25 58.6** | **-0.7** |
| **PAVA** | **Las Pavas** | **1.46** | **157** | *e*P | **Pg** | **09 26 00.3** | **0.0** |
| **SCLA** | **Alcaldia de Sa** | **1.56** | **150** | *e*P | **Pg** | **09 26 02.4** | **+0.2** |
| **COEG** | **Centro de Oper** | **1.56** | **157** | IAML | | 09 26 26.1 | |

comp=Z,480nm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PQSS** | **Presa 15 de Se** | **1.71** | **147** | *e*P | **Pg** | **09 26 04.6** | **-0.4** |
| **COEB** | **Comit de Eme** | **1.83** | **148** | *e*P | **Pg** | **09 26 06.9** | **-0.5** |
| **STG3** | **Santiaguito 3,** | **2.01** | **260** | *e*P | **Pg** | **09 26 09.5** | **-1.4** |
| STG3 | | | | *e*S | **Sb** | **09 26 35.2** | **+1.7** |

*EAF* ***28*** *09:38:17.5±1.4, 23˚.81'S×27˚.46'E, h10km, MD3.5*

**BUL 28 09:38:17.5±1.4, 23°.81'S×27°.46'E, h10km, MD3.6, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBTB** | **Lobatse** | **2.08** | **234** | *i*P | Pn | 09 38 50.9 | -1.7 |
| LBTB | | | | *i* S | Sn | 09 39 17.7 | -1.0 |
| **LBTB** | **Lobatse** | **2.08** | **234** | *i*P | Pn | 09 38 50.9 | -1.7 |
| LBTB | | | | *i* S | Sn | 09 39 17.7 | -1.0 |
| **MSNA** | **Messina** | **2.77** | **59** | *i*P | Pn | 09 39 00.4 | -1.6 |
| MSNA | | | | *i* S | Sn | 09 39 33.3 | -2.3 |
| **MSNA** | **Messina** | **2.77** | **59** | *i*P | Pn | 09 39 00.4 | -1.6 |
| MSNA | | | | *i* S | Sn | 09 39 33.3 | -2.3 |
| **MATP** | **Matopo** | **3.50** | **16** | *i*P | Pn | 09 39 11.6 | -0.5 |
| MATP | | | | *i* S | Sn | 09 39 51.8 | -2.0 |
| **MATP** | **Matopo** | **3.50** | **16** | *i*P | Pn | 09 39 11.6 | -0.5 |
| MATP | | | | *i* S | Sn | 09 39 51.8 | -2.0 |
| **BLWY** | **Bulawayo** | **3.80** | **16** | *i*P | Pn | 09 39 16.6 | +0.3 |
| BLWY | | | | *i* S | Sn | 09 39 59.0 | -2.2 |
| **BLWY** | **Bulawayo** | **3.80** | **16** | *i*P | Pn | 09 39 16.6 | +0.3 |
| BLWY | | | | *i* S | Sn | 09 39 59.0 | -2.2 |
| **CNG** | **Changalane** | **4.95** | **121** | *i*P | Pn | 09 39 31.3 | -0.6 |
| CNG | | | | *i* S | Sn | 09 40 25.7 | -3.5 |
| **CNG** | **Changalane** | **4.95** | **121** | *i*P | Pn | 09 39 31.3 | -0.6 |
| CNG | | | | *i* S | Sn | 09 40 25.7 | -3.5 |
| **BOSA** | **Boshof** | **5.18** | **202** | *i*P | Pn | 09 39 35.2 | 0.0 |
| BOSA | | | | *i* S | Sn | 09 40 31.1 | -4.0 |
| **BOSA** | **Boshof** | **5.18** | **202** | *i*P | Pn | 09 39 35.2 | 0.0 |
| BOSA | | | | *i* S | Sn | 09 40 31.1 | -4.0 |

*GCG* ***28*** *09:49:20.6±2.2, 14˚.55'N×90˚.65'W, h19km, MD3.8*
*NEIC* ***28*** *09:49:22.0±1.5, 14˚.56'N±0˚.05×90˚.64'W±0˚.04, h28km±15km, ML3.5/14, Error ellipse: s-maj=8.4km s-min=4.3km az=212.0*
*SNET* ***28*** *09:49:23.0±0.7, 14˚.45'N×90˚.55'W, h14km±4km, ML2.5*

**ISC 28 09:49:21.0±1.2, 14°.55'N±0°.05×90°.64'W±0°.03, h19km±3km, n28, σ1s01/32, 3C, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **0.16** | **167** | *i*P | **Pb** | **09 49 24.6** | **+0.2** |
| **FUG** | **Fuego 3** | **0.21** | **243**⇑ | *e*P | **Pg** | **09 49 26.0** | **-0.4** |
| **NBG** | **Las Nubes** | **0.29** | **82**⇑ | *e*P | **Pg** | **09 49 27.1** | **-0.6** |
| **STG3** | **Santiaguito 3,** | **0.91** | **281**⇑ | *e*P | **Pg** | **09 49 38.7** | **-0.1** |
| **SLOZ** | **Alcaldia de Sa** | **0.98** | **122** | *e*P | **Pb** | **09 49 38.1** | **-1.4** |
| SLOZ | | | | *e*S | **Sb** | **09 49 50.7** | **-1.3** |
| SLOZ | | | | IAML | | 09 50 00.8 | |

comp=Z,173nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RTAL** | **Retalhuleu** | **1.02** | **269** | Pn | **Pn** | **09 49 40.4** | **+0.1** |
| RTAL | | | | IAML | | 09 49 56.0 | |

comp=N,2μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RTAL | | | | IAML | | 09 49 56.2 | |

comp=E,1μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NUBE** | **Las Nubes** | **1.05** | **127** | *e*P | **Pb** | **09 49 39.7** | **-1.0** |
| NUBE | | | | *e*S | **Sb** | **09 49 52.5** | **-1.7** |
| **MRL** | **Marmol** | **1.07** | **60** | *e*P | **Pb** | **09 49 40.9** | **-0.2** |
| MRL | | | | *e*S | **Sg** | **09 49 58.7** | **+2.6** |
| **HUEH** | **Huehuetenango** | **1.13** | **313** | Pn | **Pn** | **09 49 41.9** | **-0.2** |
| HUEH | | | | IAML | | 09 50 05.2 | |

comp=N,2μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CEVE** | **Cerro Verde** | **1.22** | **126** | *e*P | **Pn** | **09 49 43.2** | **-0.1** |
| **MTO3** | **Montecristo** | **1.25** | **97** | Pn | **Pn** | **09 49 43.5** | **-0.3** |
| **ESQI** | **Esquipulas** | **1.26** | **89** | Pn | **Pn** | **09 49 43.7** | **0.0** |
| ESQI | | | | IAML | | 09 50 07.6 | |

comp=E,839nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TACO** | **Tacachico** | **1.38** | **114** | *e*P | **Pn** | **09 49 45.0** | **-0.2** |
| **JAYA** | **Jayaque - finc** | **1.46** | **127** | *e*P | **Pn** | **09 49 46.3** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **1.61** | **122** | Pn | **Pn** | **09 49 49.5** | **+0.9** |
| **SJTE** | **Alcalda de S** | **1.84** | **120** | *e*P | **Pn** | **09 49 52.7** | **+1.1** |
| **SCLA** | **Alcaldia de Sa** | **2.04** | **114** | *e*P | **Pn** | **09 49 55.1** | **+0.7** |
| SCLA | | | | *e*S | **Sn** | **09 50 20.6** | **+1.2** |
| **TECO** | **Alcaldia de Te** | **2.07** | **119** | *e*P | **Pn** | **09 49 55.1** | **+0.4** |
| **PQSS** | **Presa 15 de Se** | **2.22** | **114** | *e*P | **Pn** | **09 49 57.5** | **+0.7** |
| **CCIG** | **Comitan** | **2.25** | **320** | Pn | **Pn** | **09 49 57.6** | **+0.2** |
| CCIG | | | | IAML | | 09 50 36.8 | |

comp=N,250nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CCIG | | | | IAML | | 09 50 40.6 | |

comp=E,316nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PETF** | **Flores** | **2.47** | **18** | | **Pn** | **09 50 01.0** | **+0.6** |
| **TGUH** | **Tegucigalpa,Un** | **3.30** | **98** | Pn | **Pn** | **09 50 11.2** | **-0.7** |
| TGUH | | | | IAML | | 09 51 12.2 | |

comp=E,115nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HZTE** | **Horizontes, Gu** | **6.23** | **127** | Pn | **Pn** | **09 50 54.1** | **+2.1** |
| **ORTG** | **Ortega, Santa** | **6.55** | **129** | Pn | **Pn** | **09 50 55.9** | **-0.6** |
| **ESPN** | **Las Esperanzas** | **6.60** | **110** | Pn | **Pn** | **09 50 57.0** | **-0.1** |
| **DUNO** | **Dulce Nombre,** | **6.71** | **131** | Pn | **Pn** | **09 51 00.1** | **+1.4** |
| **JTS** | **Las Juntas de** | **6.98** | **127** | Pn | **Pn** | **09 51 01.7** | **-0.7** |
| **JACO** | **JACO, Garabito** | **7.60** | **129** | Pn | **Pn** | **09 51 10.4** | **-0.5** |

*IDC* ***28*** *10:21:35.2±7.2, 7˚.67'S×128˚.33'E, h169km±77km, mb2.7/1, mb1 3.4/5, mb1mx3.0/31, mbtmp3.8/5, Error ellipse: s-maj=74.0km s-min=23.8km az=37.0*
*DJA* ***28*** *10:21:37.1±1.4, 8˚.S±14˚×12˚.8E±˚, h10km, M4.2/6, mb4.2/3, MLv4.2/6*

**ISC 28 10:21:42.7±2.4, 8°.4S±0°.2×128°.27E±0°.08, h100km, n13, σ2s44/16, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **4.18** | **251** | P | **Pn** | **10 22 43.8** | **-0.7** |
| **SOEI** | **Soe** | **4.18** | **251** | P | **Pn** | **10 22 43.5** | **-1.0** |
| **DRS** | **Darwin Rock St** | **4.79** | **148** | P | **Pn** | **10 22 56.0** | **+3.4** |
| **BATI** | **Baumata** | **4.89** | **248** | P | **Pn** | **10 22 51.9** | **-2.1** |

8.8nm,0.3s,baz=294,slow=4.8,SNR=14

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BATI | | | | S | **Sn** | **10 23 54.0** | **+4.5** |

14nm,0.3s,baz=334,slow=18,SNR=13

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **4.89** | **248** | P | **Pn** | **10 22 52.9** | **-1.1** |

0.2nm19nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **5.26** | **148** | P | **Pn** | **10 23 01.8** | **+2.8** |
| **KDU** | **Kakadu** | **5.95** | **136** | P | **Pn** | **10 23 09.3** | **+0.9** |
| **KNRA** | **Kununurra** | **7.27** | **176** | P | **Pn** | **10 23 28.4** | **+2.1** |
| **FITZ** | **Fitzroy Crossi** | **10.00** | **195** | P | **Pn** | **10 24 02.8** | **-0.6** |

0.7nm,0.3s,baz=9.2,slow=14,SNR=22

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FITZ | | | | S | **Sn** | **10 25 56.2** | **+2.5** |

0.9nm,0.3s,baz=139,slow=18,SNR=7.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **10.00** | **195** | P | **Pn** | **10 24 02.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **12.91** | **154** | P | **Pn** | **10 24 39.6** | **-3.0** |

0.3nm,0.3s,baz=332,slow=12,SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRA | | | | S | **Sn** | **10 27 02.2** | **-2.4** |

1.1nm,0.3s,baz=331,slow=22,SNR=12

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **16.14** | **161** | P | **Pn** | **10 25 21.9** | **-1.9** |

0.5nm,0.3s,baz=341,slow=11,SNR=94

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | | | | S | **Sn** | **10 28 22.3** | **-0.3** |

0.4nm,0.3s,baz=326,slow=22,SNR=7.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **68.45** | **328** | P | P | 10 32 15.5 | -19 |

0.1nm,0.3s,baz=115,slow=7.3,SNR=5.8

*IDC* ***28*** *10:45:20.8±1.1, 43˚.13'N×140˚.24'E, h176km±12km, mb3.1/10, mb1 3.3/13, mb1mx3.1/37, mbtmp3.7/13, Error ellipse: s-maj=22.6km s-min=13.0km az=113.0*
*JMA* ***28*** *10:45:21.1±0.1, 43˚.08'N×140˚.29'E, h173km±1km, M2.8*

**ISC 28 10:45:20.7±0.7, 43°.06'N±0°.06×140°.33'E±0°.06, h179km±6km, n32, σ0s81/43, mb3.1/10, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSK** | **Shakotan** | **0.31** | **20** | P | **Pn** | **10 45 44.5** | **-0.2** |
| JSK | | | | *e*S | **Sn** | **10 46 02.3** | **-0.9** |
| **JSH** | **Shimam** | **0.46** | **207** | P | **Pn** | **10 45 45.1** | **-0.1** |
| JSH | | | | *e*S | **Sn** | **10 46 03.2** | **-0.8** |
| **JHST** | **Hiyamasetana** | **0.72** | **208** | P | **Pn** | **10 45 46.5** | **+0.1** |
| JHST | | | | *e*S | **Sn** | **10 46 05.7** | **-0.4** |
| **JNB** | **Noboribetsu** | **0.79** | **138** | P | **Pn** | **10 45 46.8** | **0.0** |
| JNB | | | | *e*S | **Sn** | **10 46 06.7** | **-0.2** |
| **JISS** | **Ishikarishitsu** | **0.82** | **74** | P | **Pn** | **10 45 47.5** | **+0.5** |
| **JEW** | **Eniwo** | **0.85** | **104** | P | **Pn** | **10 45 47.8** | **+0.6** |
| JEW | | | | *e*S | **Sn** | **10 46 08.8** | **+1.2** |
| **JYM2** | **Yakumo 2** | **0.94** | **178** | P | **Pn** | **10 45 47.9** | **0.0** |
| **JOSM** | **Okushiri--Mats** | **1.16** | **213** | P | **Pn** | **10 45 49.6** | **+0.1** |
| JOSM | | | | *e*S | **Sn** | **10 46 11.1** | **-0.6** |
| **JHR** | **Hokuryu** | **1.23** | **55** | P | **Pn** | **10 45 50.8** | **+0.8** |
| **JKB** | **Kayabe** | **1.28** | **156** | P | **Pn** | **10 45 50.6** | **+0.1** |
| **JOMM** | **Oshimamatsumae** | **1.55** | **189** | P | **Pn** | **10 45 53.5** | **+0.5** |
| **JFR** | **Furan** | **1.66** | **86** | P | **Pn** | **10 45 54.4** | **+0.3** |
| JFR | | | | *e*S | **Sn** | **10 46 20.3** | **+0.3** |
| **JOT** | **Ohata** | **1.76** | **162** | P | **Pn** | **10 45 54.9** | **-0.2** |
| **JKK2** | **Kamakawa 2** | **1.94** | **64** | P | **Pn** | **10 45 57.7** | **+0.7** |
| JKK2 | | | | *e*S | **Sn** | **10 46 25.7** | **+0.5** |
| **JNBK** | **Urakawa-nobuka** | **1.95** | **113** | P | **Pn** | **10 45 56.9** | **-0.2** |
| **ASAJ** | **Asahikawa** | **1.96** | **56** | P | **Pn** | **10 45 57.5** | **+0.4** |

1.7nm,0.3s,baz=258,slow=9.1,SNR=24

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAJ | | | | S | **Sn** | **10 46 25.7** | **+0.2** |

0.7nm,0.3s,baz=251,slow=32,SNR=6.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JCH** | **Churui** | **2.27** | **100** | P | **Pn** | **10 45 59.7** | **-1.0** |
| JCH | | | | *e*S | **Sn** | **10 46 29.5** | **-2.2** |
| **JRBN** | **Rebuntou** | **2.42** | **12** | P | **Pn** | **10 46 02.2** | **-0.2** |
| **JAR** | **Ashorobuto** | **2.53** | **83** | P | **Pn** | **10 46 03.6** | **0.0** |
| JAR | | | | *e*S | **Sn** | **10 46 36.6** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **6.71** | **195** | P | **Pn** | **10 46 58.1** | **+1.0** |

0.1nm,0.3s,baz=16,slow=13,SNR=4.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JNU** | **Nakatsue** | **12.39** | **220** | P | **Pn** | **10 48 13.2** | **+1.9** |

1.5nm,0.3s,baz=115,slow=0.5,SNR=4.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MA2** | **Magadan** | **17.74** | **18** | P | **P** | **10 49 14.0** | **-0.8** |

0.1nm,0.3s,baz=209,slow=12,SNR=4.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SEY** | **Seymchan** | **21.12** | **15** | P | **P** | **10 49 49.2** | **-2.0** |

0.3nm,0.4s,baz=255,slow=23,SNR=4.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **37.44** | **307** | P | **P** | **10 52 15.6** | **-0.8** |

0.7nm,0.3s,baz=80,slow=9.5,SNR=4.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **40.46** | **296** | P | **P** | **10 52 41.1** | **-0.6** |

0.3nm,0.6s,baz=82,slow=8.9,SNR=3.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **44.96** | **35** | P | **P** | **10 53 18.9** | **+1.4** |

0.3nm,0.6s,baz=285,slow=6.8,SNR=5.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ARCES** | **ARCESS Array B** | **58.09** | **338** | P | **P** | **10 54 54.8** | **+0.1** |

2.4nm,1.0s,baz=45,slow=8.7,SNR=5.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **59.07** | **32** | P | **P** | **10 55 01.8** | **+0.3** |

0.1nm,0.4s,baz=304,slow=6.4,SNR=4.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **62.93** | **186** | P | **P** | **10 55 27.7** | **-0.3** |

0.4nm,0.9s,baz=20,slow=7.1,SNR=1.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **63.13** | **331** | P | **P** | **10 55 28.4** | **-0.6** |

1.9nm,0.9s,baz=38,slow=9.6,SNR=4.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **66.65** | **186** | P | **P** | **10 55 52.6** | **+0.5** |

0.2nm,0.7s,baz=15,slow=13,SNR=4.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **68.33** | **336** | P | **P** | **10 56 01.6** | **-0.7** |

0.1nm,0.4s,baz=53,slow=7.4,SNR=1.4

**IDC 28 10:59:24.1±1.8, 6°.88S×122°.83E, h508km±27km, mb2.8/2, mb1 2.8/6, mb1mx2.5/43, mbtmp3.5/6, Error ellipse: s-maj=140.8km s-min=19.8km az=57.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **3.40** | **166** | P | P | 11 00 39.6 | +0.9 |

9.6nm,0.3s,baz=70,slow=7.2,SNR=7.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BATI | | | | S | S | 11 01 39.4 | +0.2 |

9.3nm,0.3s,baz=48,slow=0.7,SNR=6.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **11.48** | **166** | P | P | 11 01 56.0 | -1.2 |

0.3nm,0.3s,baz=351,slow=7.2,SNR=6.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.13** | **140** | P | P | 11 02 55.8 | -0.3 |

0.2nm,0.3s,baz=319,slow=10,SNR=5.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **19.79** | **149** | P | P | 11 03 20.9 | +0.4 |

0.1nm,0.3s,baz=326,slow=8.9,SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **64.41** | **330** | P | P | 11 09 10.4 | +0.6 |

0.2nm,0.5s,baz=128,slow=8.0,SNR=4.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **68.51** | **337** | P | P | 11 09 34.1 | -0.9 |

0.5nm,0.4s,baz=120,slow=6.3,SNR=2.6

*IDC* ***28*** *11:03:15.9±1.1, 35˚.63'N×3˚.68'W, h0km, mb3.8/6, mb1 3.9/9, mb1mx3.6/55, mbtmp3.7/9, ML3.8/3, MS2.5/1, Ms1 2.5/1, ms1mx2.2/95, Error ellipse: s-maj=37.1km s-min=19.6km az=94.0*
*SFS* ***28*** *11:03:17.0, 35˚.65'N×3˚.69'W, h1km, ML3.6, ALBORAN SUR*
*INMG* ***28*** *11:03:17.0±2.3, 35˚.70'N×3˚.66'W, h4km±8km, ML3.4, Error ellipse: s-maj=6.5km s-min=5.1km az=33.0*
*NEIC* ***28*** *11:03:17.6±1.1, 35˚.6'N±0˚.1×3˚.57'W±0˚.03, h12km±7km, mb4.3/4, Error ellipse: s-maj=16.1km s-min=2.8km az=188.0*
*MDD* ***28*** *11:03:17.3±0.4, 35˚.66'N×3˚.63'W, h0km±3km, mb_Lg3.8/10, Error ellipse: s-maj=2.9km s-min=2.2km az=164.0*
*LDG* ***28*** *11:03:18.6±0.3, 35˚.50'N×3˚.71'W, h2km, Ml3.0/3, Error ellipse: s-maj=7.3km s-min=2.5km az=164.0*
*CNRM* ***28*** *11:03:18.4, 35˚.69'N×3˚.55'W, h32km, ml3.8*
*IGIL* ***28*** *11:03:19.3, 35˚.70'N×3˚.72'W, h0km, ML3.3*

**ISC 28 11:03:18.0±1.2, 35°.65N±0°.03×3°.62W±0°.03, h16km±8km, n113, σ1s80/169, mb4.2/7, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.56** | **59** | Pg | **Pg** | **11 03 28.8** | **-0.3** |
| EALB | | | | Sg | **Sg** | **11 03 37.0** | **+0.4** |
| **EMEL** | **Melilla** | **0.65** | **123** | Pg | **Pg** | **11 03 30.2** | **-0.6** |
| EMEL | | | | Sg | **Sg** | **11 03 38.3** | **-1.0** |
| **GOG** | **Mont Gurugu** | **0.67** | **130** | P | **Pg** | **11 03 31.1** | **0.0** |
| GOG | | | | S | **Sg** | **11 03 40.5** | **+0.5** |
| **ELGU** | **Los Guajares,** | **1.22** | **360** | Pg | **Pn** | **11 03 38.7** | **-1.8** |
| ELGU | | | | Sg | **Sb** | **11 03 54.7** | **-1.4** |
| ELGU | | | | *i* Vmb_Lg | | 11 03 58.6 | |
| **EMAL** | **Malaga-Limoner** | **1.29** | **330** | P | **Pn** | **11 03 39.8** | **-1.6** |
| EMAL | | | | S | **Sb** | **11 03 56.2** | **-2.0** |
| **TAF** | **Taforalt** | **1.29** | **130** | P | **Pn** | **11 03 40.0** | **-1.5** |
| TAF | | | | S | **Sb** | **11 03 56.2** | **-2.2** |
| **EMIJ** | **Mijas** | **1.30** | **315** | Pg | **Pn** | **11 03 39.8** | **-1.8** |
| EMIJ | | | | Sg | **Sn** | **11 03 56.3** | **-2.5** |
| **SMIR** | **Smir Dam** | **1.43** | **272** | P | **Pn** | **11 03 43.9** | **+0.5** |
| SMIR | | | | S | **Sn** | **11 04 01.7** | **-0.1** |
| **CEU** | **Ceuta** | **1.45** | **280** | P | **Pn** | **11 03 41.0** | **-2.5** |
| CEU | | | | S | **Sn** | **11 03 56.9** | **-5.2** |
| **CHEFC** | **Chefchaouen** | **1.51** | **249** | P | **Pn** | **11 03 44.5** | **0.0** |
| CHEFC | | | | S | **Sn** | **11 04 04.3** | **+0.5** |
| **EGOR** | **Sierra Gorda,** | **1.51** | **345** | Pn | **Pn** | **11 03 44.0** | **-0.5** |
| EGOR | | | | Sn | **Sn** | **11 04 04.3** | **+0.3** |
| **EQUE** | **Quentar** | **1.56** | **5** | Pn | **Pn** | **11 03 44.5** | **-0.7** |
| EQUE | | | | Sn | **Sn** | **11 04 03.8** | **-1.3** |
| **EJIF** | **Jimena Fronter** | **1.70** | **299** | Pn | **Pn** | **11 03 46.4** | **-0.6** |
| **ENIJ** | **Nijar** | **1.75** | **40** | Pn | **Pn** | **11 03 45.5** | **-2.2** |
| ENIJ | | | | Sn | **Sn** | **11 04 07.7** | **-1.9** |
| ENIJ | | | | *i* Vmb_Lg | | 11 04 08.2 | |
| **IFR** | **Ifrane** | **2.46** | **211** | P | **Pn** | **11 03 57.6** | **-0.1** |
| IFR | | | | S | Sg | 11 04 50.1 | +13 |
| **ECAB** | **El Cabril** | **2.82** | **330** | Pn | **Pn** | **11 04 02.9** | **+0.5** |
| ECAB | | | | Sn | **Sn** | **11 04 37.1** | **+1.1** |
| **CART** | **Cartagena** | **2.86** | **47** | P | Pn | 11 03 59.3 | -3.6 |
| CART | | | | S | **Sn** | **11 04 32.3** | **-4.7** |
| **CART** | **Cartagena** | **2.86** | **47** | Pn | **Pn** | **11 04 01.1** | **-1.9** |
| **CART** | **Cartagena** | **2.86** | **47** | P | **Pn** | **11 04 04.1** | **-1.5** |
| CART | | | | S | **Sn** | **11 04 33.6** | **-3.4** |
| **CZD** | **Col de Zad** | **2.86** | **205** | P | **Pn** | **11 04 04.2** | **+0.9** |
| **TDRA** | **Tendrara** | **2.92** | **153** | P | **Pn** | **11 04 04.1** | **+0.2** |
| TDRA | | | | S | **Sn** | **11 04 37.6** | **-1.1** |
| **MD31** | **MD31** | **2.93** | **199** | P | **Pn** | **11 04 04.2** | **+0.1** |
| MD31 | | | | S | **Sn** | **11 04 40.1** | **+1.1** |
| **MDT** | **Midelt** | **2.94** | **196** | Pn | **Pn** | **11 04 04.4** | **+0.2** |

4.1nm,0.3s,baz=317,slow=3.6,SNR=56

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MDT | | | | Sn | **Sn** | **11 04 37.9** | **-1.4** |

8.9nm,0.3s,baz=211,slow=18,SNR=3.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MDT** | **Midelt** | **2.94** | **196** | P | **Pn** | **11 04 04.5** | **+0.3** |
| **ZHG** | **ZHG** | **3.32** | **229** | P | **Pn** | **11 04 09.2** | **-0.2** |
| **ETOB** | **Tobarra** | **3.42** | **28** | Pn | **Pn** | **11 04 11.9** | **+1.2** |
| ETOB | | | | Sn | **Sn** | **11 04 49.7** | **-1.2** |
| ETOB | | | | *i* Vmb_Lg | | 11 05 15.1 | |
| **EGRO** | **El Granado** | **3.63** | **302** | Pn | **Pn** | **11 04 13.5** | **-0.1** |
| EGRO | | | | Sn | **Sn** | **11 04 54.6** | **-1.5** |
| EGRO | | | | *i* Vmb_Lg | | 11 04 57.3 | |
| **PBAR** | **Barrancos** | **3.72** | **314** | *e*Pn | **Pn** | **11 04 14.6** | **-0.2** |
| PBAR | | | | *e*Sn | **Sn** | **11 04 56.1** | **-2.2** |
| PBAR | | | | A | A | 11 04 59.2 | |

45nm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PVAQ** | **Vaqueiros** | **3.73** | **299** | *e*Pn | **Pn** | **11 04 14.6** | **-0.3** |
| PVAQ | | | | *e*Sn | **Sn** | **11 04 55.6** | **-3.0** |
| PVAQ | | | | A | A | 11 05 01.6 | |

48nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PVAQ** | **Vaqueiros** | **3.73** | **299** | | **Pn** | **11 04 14.7** | **-0.3** |
| **PVAQ** | **Vaqueiros** | **3.73** | **299** | P | **Pn** | **11 04 14.4** | **-0.6** |
| **PBDV** | **Barranco-do-Ve** | **3.82** | **296** | *e*Pn | **Pn** | **11 04 15.9** | **-0.3** |
| PBDV | | | | *e*Sn | **Sn** | **11 04

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MVO | | | | | *e*Sn | **Sn** | **11 05 54.3** | **-3.2** |
| MVO | | | | | A | A | 11 06 39.8 | |
| | comp=N,25nm,0.4s | | | | | | | |
| **EAH** | **EAH** | **6.38** | **233** | | P | **Pn** | **11 04 50.7** | **-0.6** |
| **PVRL** | **Vila Real** | **6.47** | **331** | | *e*Pn | **Pn** | **11 04 53.1** | **+0.5** |
| PVRL | | | | | *e*Sn | **Sn** | **11 06 01.7** | **-4.4** |
| PVRL | | | | | A | A | 11 06 09.6 | |
| | comp=N,32nm,0.6s | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.58** | **331** | | *e*Pn | **Pn** | **11 04 54.7** | **+0.5** |
| POLO | | | | | *e*Sn | **Sn** | **11 06 04.9** | **-4.1** |
| POLO | | | | | A | A | 11 06 11.5 | |
| | comp=N,8.7nm,0.3s | | | | | | | |
| **PBRG** | **Braganca** | **6.61** | **339** | | *e*Pn | **Pn** | **11 04 54.7** | **+0.1** |
| PBRG | | | | | *e*Sn | **Sn** | **11 06 07.1** | **-2.5** |
| PBRG | | | | | A | A | 11 06 46.5 | |
| | comp=N,17nm,0.5s | | | | | | | |
| **PTO** | **Porto** | **6.73** | **326** | | *e*Pn | **Pn** | **11 04 56.8** | **+0.7** |
| PTO | | | | | *e*Sn | **Sn** | **11 06 08.1** | **-4.3** |
| **PCAB** | **Cabril** | **6.96** | **332** | | *e*Pn | **Pn** | **11 05 00.3** | **+0.9** |
| PCAB | | | | | *e*Sn | **Sn** | **11 06 15.0** | **-3.2** |
| PCAB | | | | | A | A | 11 06 19.0 | |
| | comp=N,17nm,0.7s | | | | | | | |
| **ELOB** | **Lobios** | **7.11** | **332** | | Pn | **Pn** | **11 05 02.2** | **+0.8** |
| ELOB | | | | | Sn | **Sn** | **11 06 18.3** | **-3.7** |
| ELOB | | | | | *i* Vmb_Lg | | 11 07 21.1 | |
| **PGAV** | **Gavieira, Arco** | **7.28** | **331** | | *e*Pn | **Pn** | **11 05 04.6** | **+0.9** |
| PGAV | | | | | *e*Sn | **Sn** | **11 06 21.3** | **-4.7** |
| PGAV | | | | | A | A | 11 06 26.8 | |
| | comp=N,17nm,0.6s | | | | | | | |
| **ETSF** | **Etsaut** | **7.62** | **17** | | *e*Pn | **Pn** | **11 05 10.6** | **+2.2** |
| **ETSF** | **Etsaut** | **7.62** | **17** | | *e*P | Pn | 11 05 16.1 | +7.7 |
| ETSF | | | | | *e*Sn | **Sn** | **11 06 34.5** | **+0.1** |
| | comp=N,1.6nm,0.3s | | | | | | | |
| **SJPF** | **Ste Jean** | **7.68** | **13** | | *e*Pn | **Pn** | **11 05 10.8** | **+1.6** |
| **SJPF** | **Ste Jean** | **7.68** | **13** | | *e*P | Pn | 11 05 16.9 | +7.7 |
| SJPF | | | | | *e*Sn | **Sn** | **11 06 36.2** | **+0.4** |
| **EPF** | **Esparros** | **7.98** | **21** | | *e*Pn | **Pn** | **11 05 16.3** | **+2.9** |
| **EPF** | **Esparros** | **7.98** | **21** | | *e*P | Pn | 11 05 22.2 | +8.8 |
| EPF | | | | | *e*Sn | **Sn** | **11 06 42.2** | **-1.1** |
| | comp=N,1.1nm,0.3s | | | | | | | |
| **MTLF** | **Montolieu** | **8.91** | **29** | | *e*Pn | **Pn** | **11 05 27.9** | **+1.9** |
| **LFF** | **La Frestale** | **9.86** | **18** | | *e*P | Pn | 11 05 47.0 | +8.0 |
| **CAF** | **Calviac** | **10.23** | **23** | | *e*Pn | **Pn** | **11 05 45.7** | **+1.6** |
| **CAF** | **Calviac** | **10.23** | **23** | | *e*P | Pn | 11 05 51.8 | +7.7 |
| **KEST** | **Kesra** | **10.55** | **86** | | Pn | **Pn** | **11 05 48.1** | **-0.5** |
| **ESK** | **Eskdalemuir** | **19.67** | **1** | | P | **P** | **11 07 46.7** | **+0.6** |
| ESK | | | | | IAmb | IAmb | 11 08 08.7 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **19.69** | **1** | | P | **P** | **11 07 47.2** | **+1.0** |
| | baz=179,slow=11,SNR=5.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.91** | **167** | | P | **P** | **11 08 21.6** | **+0.3** |
| | comp=Z,2.6nm,1.0s,baz=343,slow=8.9,SNR=4.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.91** | **167** | | P | **P** | **11 08 21.0** | **-0.3** |
| **HFS** | **Hagfors** | **26.94** | **19** | | P | **P** | **11 08 59.0** | **+0.7** |
| | comp=Z,1.2nm,0.7s,baz=185,slow=14,SNR=1.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **31.92** | **27** | | P | **P** | **11 09 44.5** | **+2.1** |
| | comp=Z,3.5nm,1.1s,baz=201,slow=11,SNR=4.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **31.92** | **27** | | P | **P** | **11 09 42.9** | **+0.4** |
| **ARCES** | **ARCESS Array B** | **37.50** | **16** | | P | **P** | **11 10 31.9** | **+1.3** |
| **ABKAR** | **Akbulak array** | **47.48** | **53** | | P | **P** | **11 11 52.4** | **+0.4** |
| **EUNU** | **Eureka** | **53.90** | **348** | | P | **P** | **11 12 41.3** | **+1.3** |
| EUNU | | | | | IAmb | IAmb | 11 12 42.9 | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.52** | **51** | | P | **P** | **11 13 40.8** | **0.0** |
| | comp=Z,1.1nm,0.6s,baz=284,slow=5.6,SNR=6.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.76** | **332** | | P | **P** | **11 14 15.0** | **+0.5** |
| | comp=Z,1.3nm,0.6s,baz=59,slow=6.4,SNR=19 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.76** | **332** | | P | **P** | **11 14 15.7** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **76.10** | **342** | | P | **P** | **11 15 05.2** | **+0.7** |
| **PDAR** | **Pinedale Array** | **76.83** | **313** | | P | **P** | **11 15 09.3** | **-0.1** |
| | comp=Z,0.2nm,0.5s,baz=49,slow=9.7,SNR=2.3 | | | | | | | |

*IDC* ***28*** *11:13:48.7±1.0,52.˚82N×167.˚62W, h0km, mb3.6/8, mb1 3.9/10,mb1mx3.6/51,mbtmp3.6/10, ML3.4/2, MS3.3/3, Ms1 3.3/3, ms1mx2.7/81, Error ellipse: s-maj=30.9km s-min=18.9km az=158.0*

*AEIC* ***28*** *11:13:53±2.0, 52.˚92N±0.˚09×167.˚36W±0.˚07, h26km±9km, Error ellipse: s-maj=13.2km s-min=6.1km az=172.0*

*NEIC* ***28*** *11:13:54.5±1.5, 53.˚0N±0.˚1×167.˚35W±0.˚07, h25km±19km, ML4.1/6, ML3.4(AEIC), Error ellipse: s-maj=16.2km s-min=5.5km az=168.0*

**ISC 28 11:13:55.1±0.8, 53.˚0N±0.˚1×167.˚49W±0.˚07, h42km, n45, σ1§18/37, mb3.5/7, MS3.4/3, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **OKFG** | **Magazine Ridge** | **0.48** | **328** | | | **Pn** | **11 14 05.9** | **+0.1** |
| **OKSP** | **Okmok Steeple** | **0.55** | **298** | | | **Pn** | **11 14 06.0** | **-0.6** |
| **OKER** | **Okmok East Rim** | **0.57** | **324** | | | **Pn** | **11 14 07.4** | **+0.4** |
| **OKRE** | **Okmok R'deer P** | **0.66** | **322** | | | **Pn** | **11 14 08.3** | **+0.2** |
| **MREP** | **Makushin Rep't** | **0.93** | **28** | | | **Pn** | **11 14 11.2** | **-0.5** |
| **MSW** | **Makushin Switc** | **1.01** | **24** | | | **Pn** | **11 14 12.5** | **-0.3** |
| **UNV** | **Unalaska Valle** | **1.03** | **34** | | | **Pn** | **11 14 12.1** | **-1.0** |
| **MTBL** | **Makushin Table** | **1.08** | **26** | | | **Pn** | **11 14 13.9** | **0.0** |
| **AKMO** | **Akutan Morgan** | **1.41** | **38** | | | **Pn** | **11 14 18.0** | **-0.2** |
| **AKBA** | **Akutan Broad B** | **1.44** | **40** | | | **Pn** | **11 14 18.1** | **-0.6** |
| **AKGG** | **Akutan Green G** | **1.50** | **36** | | | **Pn** | **11 14 19.6** | **+0.1** |
| **AKUT** | **Akutan** | **1.53** | **41** | | | **Pn** | **11 14 19.2** | **-0.7** |
| **AKUT** | **Akutan** | **1.53** | **41** | IAML | | | 11 14 48.2 | |
| | comp=E,539nm,0.6s | | | | | | | |
| **AKSA** | **Akutan Strait** | **1.56** | **42** | | | **Pn** | **11 14 19.3** | **-1.1** |
| **WECS** | **Westdahl Cape** | **2.22** | **45** | | | **Pn** | **11 14 29.6** | **+0.1** |
| **WESE** | **West Dahl East** | **2.27** | **48** | | | **Pn** | **11 14 29.9** | **-0.3** |
| **SSLN** | **Shishaldin Nor** | **2.75** | **47** | | | **Pn** | **11 14 37.4** | **+0.7** |
| **ISLZ** | **Isanotski Laza** | **2.83** | **51** | | | **Pn** | **11 14 38.1** | **+0.4** |
| **FALS** | **False Pass** | **3.04** | **51** | | | **Pn** | **11 14 40.9** | **+0.2** |
| **ATKA** | **Atka Island** | **4.17** | **262** | | | **Pn** | **11 14 57.5** | **+1.3** |
| **SPIA** | **Saint Paul Isl** | **4.47** | **340** | | | **Pn** | **11 15 02.2** | **+1.8** |
| **SDPT** | **Sand Point** | **4.74** | **57** | Pn | | **Pn** | **11 15 01.5** | **-2.5** |
| SDPT | | | | IAML | | | 11 16 16.8 | |
| | comp=E,240nm,4.4s | | | | | | | |
| SDPT | | | | IAML | | | 11 16 42.1 | |
| | comp=N,180nm,3.5s | | | | | | | |
| **CNBA** | **Chernabura Isl** | **5.01** | **66** | Pn | | **Pn** | **11 15 06.2** | **-1.6** |
| CNBA | | | | IAML | | | 11 17 56.4 | |
| | comp=N,175nm,4.4s | | | | | | | |
| **GSTR** | **Great Sitkin T** | **5.31** | **264** | Pn | | **Pn** | **11 15 12.9** | **+1.1** |
| **ADK** | **Adak** | **5.74** | **262** | Pn | | **Pn** | **11 15 19.6** | **+2.0** |
| **KIWB** | **Kanaga Island** | **6.02** | **263** | Pn | | **Pn** | **11 15 24.7** | **+3.1** |
| **KDAK** | **Kodiak Island** | **9.73** | **55** | Pn | | **Pn** | **11 16 14.2** | **+1.9** |
| | comp=N,0.6nm,0.3s,baz=275,slow=12,SNR=1.5 | | | | | | | |
| **KDAK** | **Kodiak Island** | **9.73** | **55** | Pn | | **Pn** | **11 16 13.8** | **+1.5** |
| **ILAR** | **Eielson Array** | **15.79** | **34** | Pn | | **Pn** | **11 17 35.0** | **+0.9** |
| | comp=N,0.1nm,0.3s,baz=217,slow=9.9,SNR=5.0 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.81** | **284** | P | | **P** | **11 18 31.0** | **-1.6** |
| | comp=N,2.6nm,0.9s,baz=88,slow=12,SNR=1.8 | | | | | | | |
| PETK | | | | LR | | LR | 11 25 25.3 | |
| | comp=N,56nm,21.0s,baz=107,slow=34 | | | | | | | |
| **INK** | **Inuvik** | **22.19** | **33** | P | | **P** | **11 18 48.9** | **+1.6** |
| | comp=N,0.8nm,0.4s,baz=247,slow=11,SNR=6.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.96** | **50** | P | | **P** | **11 19 50.1** | **0.0** |
| | comp=N,0.3nm,0.4s,baz=276,slow=7.7,SNR=5.9 | | | | | | | |
| YKA | | | | PcP | | **PcP** | **11 22 58.0** | **+0.2** |
| | comp=N,0.2nm,0.5s,baz=277,slow=3.1,SNR=3.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **36.54** | **93** | P | | **P** | **11 20 56.4** | **-0.4** |
| | comp=N,0.5nm,0.8s,baz=316,slow=6.2,SNR=3.8 | | | | | | | |
| **ELK** | **Elko** | **36.95** | **88** | LR | | LR | 11 35 00.8 | |
| | comp=N,74nm,18.3s,baz=203,slow=34 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **38.67** | **221** | T | | T | 12 02 46.7 | |
| | baz=24,slow=76,SNR=114 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **38.68** | **221** | T | | T | 12 02 34.2 | |
| | baz=24,slow=76,SNR=162 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **38.69** | **221** | T | | T | 12 02 46.4 | |
| | baz=24,slow=76,SNR=104 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.85** | **220** | T | | T | 12 04 16.3 | |
| | baz=24,slow=76,SNR=152 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.87** | **220** | T | | T | 12 04 17.4 | |
| | baz=24,slow=76,SNR=98 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.87** | **220** | T | | T | 12 04 13.5 | |
| | baz=24,slow=76,SNR=70 | | | | | | | |
| **TXAR** | **Lajitas Array** | **51.60** | **91** | P | | **P** | **11 22 57.5** | **+0.2** |
| | comp=N,0.8nm,0.6s,baz=302,slow=5.4,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.19** | **314** | P | | **P** | **11 24 24.2** | **-1.0** |
| | comp=N,0.2nm,0.6s,baz=30,slow=3.7,SNR=2.2 | | | | | | | |
| **HFS** | **Hagfors** | **67.21** | **359** | LR | | LR | 11 55 57.6 | |
| | comp=N,19nm,18.1s,baz=261,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **88.30** | **233** | P | | **P** | **11 26 41.3** | **-0.7** |
| | comp=N,0.3nm,0.6s,baz=32,slow=5.4,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **91.68** | **232** | P | | **P** | **11 26 57.4** | **-0.4** |
| | comp=N,0.3nm,0.8s,baz=44,slow=4.3,SNR=3.0 | | | | | | | |

*SKO* ***28*** *11:17:06.9,41.˚52N×22.˚88E, h15km*

*SOF* ***28*** *11:17:16.9,41.˚46N×22.˚84E, h12km, MD4.1*

*IDC* ***28*** *11:17:16.3±0.7,41.˚34N×22.˚83E, h0km, mb3.9/14, mb1 4.0/21,mb1mx3.9/46,mbtmp3.9/21,ML3.6/7, MS3.1/11, Ms1 3.1/11,ms1mx2.8/95, Error ellipse: s-maj=12.8km s-min=11.9km az=36.0*

*BEO* ***28*** *11:17:18.4±0.6,41.˚48N×22.˚91E, h11km±2km, ML4.1/13*

*ATH* ***28*** *11:17:18.7,41.˚49N×22.˚91E, h10km±2km, ML3.9/10, Error ellipse: s-maj=3.1km s-min=1.2km az=161.0*

*PDG* ***28*** *11:17:18.4±1.3,41.˚49N×22.˚91E, h11km±2km, ML3.7/10, Error ellipse: s-maj=1.0km s-min=1.3km az=0.0*

*THE* ***28*** *11:17:19.4,41.˚45N×22.˚94E, h10km, ML3.8/19, Error ellipse: s-maj=1.4km s-min=0.6km az=168.0*

*NEIC* ***28*** *11:17:19.5±1.8, 41.˚50N±0.˚04×22.˚92E±0.˚03, h10km±1km, mb4.4/19, Error ellipse: s-maj=8.2km s-min=2.9km az=202.0*

*TIR* ***28*** *11:17:19.1,41.˚44N×22.˚85E, h20km±1km, Md4.0, Ml4.4*

*PRU* ***28*** *11:17:21.4±0.0, 41.˚53N×23.˚23E, h0km, M4.4*

*VIE* ***28*** *11:17:22.6,41.˚32N×22.˚92E, h33km, mb3.7/11, ML3.5/2 56 km WNW of Serres*

**ISC 28 11:17:18.1±1.0, 41.˚50N±0.˚01×22.˚89E±0.˚01, h6km±6km, n348, σ1§39/419, mb4.2/19, MS3.1/6, 30C-33D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **VAY** | **Valandovo** | **0.30** | **233** | *e*Pg | | **Pb** | **11 17 25.2** | **-0.7** |
| VAY | | | | *e*Sg | | **Sb** | **11 17 29.8** | **-1.4** |
| **VAY** | **Valandovo** | **0.30** | **233** | *i* Pg | | **Pg** | **11 17 25.0** | **+1.0** |
| VAY | | | | *i* Sg | | **Sb** | **11 17 30.1** | **-1.1** |
| VAY | | | | *e*Lg | | Lg | 11 17 30.2 | |
| | comp=N,15μm,0.5s | | | | | | | |
| **KNT** | **Kendrikon** | **0.34** | **179** | P | | **Pg** | **11 17 25.5** | **+0.8** |
| KNT | | | | S | | **Sg** | **11 17 29.9** | **+0.7** |
| | comp=N,45μm,0.2s | | | | | | | |
| **KNT** | **Kendrikon** | **0.34** | **179** | P | | **Pg** | **11 17 25.5** | **+0.8** |
| KNT | | | | S | | **Sg** | **11 17 30.1** | **+0.9** |
| **KKB** | **Krupnik** | **0.39** | **22** | *i* Pg | | **Pg** | **11 17 25.9** | **+0.1** |
| **STIP** | **Stip** | **0.56** | **290** | *i* Pg | | **Pg** | **11 17 26.7** | **-2.2** |
| STIP | | | | *i* Sg | | **Sg** | **11 17 33.2** | **-3.0** |
| **MMB** | **Musomiste** | **0.64** | **82** | Pg | | **Pg** | **11 17 30.6** | **+0.2** |
| **SRS** | **Serrai** | **0.65** | **126** | P | | **Pg** | **11 17 30.6** | **-0.1** |
| SRS | | | | S | | **Sg** | **11 17 39.4** | **+0.2** |
| | comp=N,9μm,0.5s | | | | | | | |
| **SRS** | **Serrai** | **0.65** | **126** | P | | **Pg** | **11 17 30.6** | **-0.1** |
| SRS | | | | S | | **Sg** | **11 17 39.9** | **+0.7** |
| SRS | | | | AML | | AML | 11 17 40.1 | |
| | comp=E,11117μm,0.3s | | | | | | | |
| SRS | | | | AML | | AML | 11 17 43.9 | |
| | comp=N,19271μm,0.5s | | | | | | | |
| **GRG** | **Griva** | **0.66** | **214** | P | | **Pg** | **11 17 31.4** | **+0.6** |
| GRG | | | | S | | **Sg** | **11 17 40.3** | **+1.0** |
| | comp=N,27μm,0.7s | | | | | | | |
| **NVR** | **Nevrokopi** | **0.75** | **101** | P | | **Pg** | **11 17 32.5** | **+0.1** |
| NVR | | | | S | | **Sg** | **11 17 42.3** | **+0.1** |
| | comp=N,6μm,0.5s | | | | | | | |
| **NVR** | **Nevrokopi** | **0.75** | **101** | P | | **Pg** | **11 17 32.6** | **+0.1** |
| NVR | | | | S | | **Sg** | **11 17 42.3** | **+0.1** |
| NVR | | | | AML | | AML | 11 17 43.4 | |
| | comp=N,15506μm,0.5s | | | | | | | |
| NVR | | | | AML | | AML | 11 17 51.0 | |
| | comp=E,10309μm,0.4s | | | | | | | |
| **SOH** | **Sokhos** | **0.76** | **153** | P | | **Pg** | **11 17 32.6** | **-0.2** |
| **SOH** | **Sokhos** | **0.76** | **153** | P | | **Pg** | **11 17 32.9** | **+0.1** |
| SOH | | | | S | | **Sg** | **11 17 42.6** | **-0.1** |
| SOH | | | | AML | | AML | 11 17 48.2 | |
| | comp=E,33865μm,0.5s | | | | | | | |
| SOH | | | | AML | | AML | 11 17 49.1 | |
| | comp=N,31979μm,0.3s | | | | | | | |
| **THE** | **Thessaloniki** | **0.87** | **176** | P | | **Pg** | **11 17 34.9** | **+0.1** |
| THE | | | | S | | **Sg** | **11 17 46.5** | **+0.4** |
| | comp=N,6μm,0.6s | | | | | | | |
| **THE** | **Thessaloniki** | **0.87** | **176** | P | | **Pg** | **11 17 34.9** | **+0.1** |
| THE | | | | S | | **Sb** | **11 17 46.8** | **-0.7** |
| THE | | | | AML | | AML | 11 17 51.1 | |
| | comp=E,12551μm,0.8s | | | | | | | |
| THE | | | | AML | | AML | 11 17 51.9 | |
| | comp=N,10686μm,0.5s | | | | | | | |
| **THE** | **Thessaloniki** | **0.87** | **176** | P | | **Pg** | **11 17 35.0** | **+0.1** |
| | baz=173 | | | | | | | |
| THE | | | | S | | **Sb** | **11 17 46.8** | **-0.7** |
| | baz=173 | | | | | | | |
| **BOSS** | **Bosilegrad** | **1.04** | **343** | *e*Pg | | **Pg** | **11 17 37.9** | **-0.2** |
| **BOSS** | | | | *e*Sg | | **Sg** | **11 17 52.1** | **+0.5** |
| **KOKK** | **Kokkinochori,** | **1.08** | **129** | P | | **Pg** | **11 17 38.4** | **-0.5** |
| KOKK | | | | S | | **Sb** | **11 17 53.1** | **-0.5** |
| | comp=N,16μm,0.7s | | | | | | | |
| **KOKK** | **Kokkinochori,** | **1.08** | **129** | P | | **Pg** | **11 17 38.4** | **-0.5** |
| KOKK | | | | S | | **Sb** | **11 17 53.8** | **+0.1** |
| **VTS** | **Vitosha** | **1.15** | **13** | *e*Pg | | **Pg** | **11 17 39.5** | **-0.7** |
| VTS | | | | *e*Sg | | **Sg** | **11 17 54.8** | **-0.2** |
| **VTS** | **Vitosha** | **1.15** | **13** | | | **Pg** | **11 17 39.5** | **-0.7** |
| **VTS** | **Vitosha** | **1.15** | **13** | *i* Pg | | **Pg** | **11 17 39.7** | **-0.4** |
| VTS | | | | *i* Sg | | **Sg** | **11 17 54.3** | **-0.7** |
| **VTS** | **Vitosha** | **1.15** | **13** | P | | **Pg** | **11 17 39.4** | **-0.7** |
| **SKO** | **Skopje** | **1.18** | **294** | *i* Pg | | **Pb** | **11 17 41.3** | **+0.3** |
| SKO | | | | *i* Sg | | **Sb** | **11 17 57.0** | **+0.4** |
| **PLG** | **Polygyros** | **1.20** | **159** | P | | **Pb** | **11 17 40.3** | **-1.1** |
| PLG | | | | S | | **Sb** | **11 17 57.2** | **0.0** |
| | comp=N,3μm,0.4s | | | | | | | |
| **PLG** | **Polygyros** | **1.20** | **159** | P | | **Pb** | **11 17 40.7** | **-0.7** |
| PLG | | | | AML | | AML | 11 18 00.8 | |
| | comp=E,5678μm,0.3s | | | | | | | |
| PLG | | | | AML | | AML | 11 18 02.1 | |
| | comp=N,7218μm,0.3s | | | | | | | |
| **KTI** | **Kastanea** | **1.25** | **208** | P | | **Pb** | **11 17 41.2** | **-1.1** |
| **KVLA** | **Kavala** | **1.26** | **116** | P | | **Pn** | **11 17 42.0** | **-0.3** |
| KVLA | | | | AML | | AML | 11 18 00.7 | |
| | comp=N,27416μm,0.8s | | | | | | | |
| KVLA | | | | AML | | AML | 11 18 00.9 | |
| | comp=E,16279μm,0.7s | | | | | | | |
| **KAVA** | **Kavala** | **1.32** | **112** | P | | **Pn** | **11 17 42.5** | **-0.7** |
| KAVA | | | | S | | **Sg** | **11 18 00.6** | **-0.1** |
| | comp=E,11μm,0.8s | | | | | | | |
| **KAVA** | **Kavala** | **1.32** | **112** | P | | **Pn** | **11 17 42.8** | **-0.4** |
| KAVA | | | | AML | | AML | 11 18 03.1 | |
| | comp=E,23836μm,0.5s | | | | | | | |
| KAVA | | | | AML | | AML | 11 18 03.2 | |
| | comp=N,28440μm,0.6s | | | | | | | |
| **FNA** | **Florina** | **1.35** | **238** | P | | **Pn** | **11 17 43.8** | **+0.2** |
| FNA | | | | S | | **Sb** | **11 18 00.5** | **-0.9** |
| | comp=N,5μm,0.5s | | | | | | | |
| **FNA** | **Florina** | **1.35** | **238** | P | | **Pn** | **11 17 43.8** | **+0.2** |
| FNA | | | | AML | | AML | 11 18 08.4 | |
| | comp=N,13330μm,0.5s | | | | | | | |
| FNA | | | | AML | | AML | 11 18 08.7 | |
| | comp=E,7321μm,1.0s | | | | | | | |
| **FNA** | **Florina** | **1.35** | **238** | Pn | | **Pn** | **11 17 43.7** | **+0.2** |
| **FNA** | **Florina** | **1.35** | **238** | P | | **Pn** | **11 17 43.9** | **+0.2** |
| | baz=240 | | | | | | | |
| FNA | | | | S | | **Sb** | **11 18 01.5** | **+0.1** |
| | baz=240 | | | | | | | |
| **RZN** | **Rozhen** | **1.38** | **82** | P | | **Pb** | **11 17 44.4** | **-0.1** |
| **PGB** | **Panagyurishte** | **1.42** | **42** | P | | **Pn** | **11 17 44.2** | **-0.3** |
| **LIT** | **Litokhoron** | **1.43** | **192** | P | | **Pn** | **11 17 44.0** | **-0.7** |
| **LIT** | **Litokhoron** | **1.43** | **192** | P | | **Pn** | **11 17 44.0** | **-0.7** |
| **LIT** | **Litokhoron** | **1.43** | **192** | Pn | | **Pn** | **11 17 44.1** | **-0.6** |
| **KZN** | **Kozani** | **1.46** | **216** | P | | **Pn** | **11 17 44.8** | **-0.4** |
| KZN | | | | S | | **Sb** | **11 18 04.8** | **+0.1** |
| | comp=E,2μm,0.6s | | | | | | | |
| **KZN** | **Kozani** | **1.46** | **216** | P | | **Pn** | **11 17 45.3** | **+0.1** |
| KZN | | | | AML | | AML | 11 18 13.8 | |
| | comp=N,3901μm,0.6s | | | | | | | |
| KZN | | | | AML | | AML | 11 18 15.4 | |
| | comp=E,3754μm,0.5s | | | | | | | |
| **PLD** | **Plovdiv** | **1.48** | **65** | *i* Pg | | **Pb** | **11 17 46.5** | **+0.3** |
| PLD | | | | *i* Sg | | **Sg** | **11 18 08.1** | **+2.3** |
| **PLD** | **Plovdiv** | **1.48** | **65** | P | | **Pb** | **11 17 46.4** | **+0.3** |
| **BARS** | **Barje** | **1.54** | **329** | *e*Pn | | **Pn** | **11 17 46.4** | **+0.2** |
| **BARS** | **Barje** | **1.54** | **329** | *e*Pn | | Pg | 11 18 00.2 | +13 |
| BARS | | | | *e*Sn | | **Sn** | **11 18 06.7** | **+0.2** |
| BARS | | | | *e*Sn | | Sg | 11 18 34.6 | +27 |
| **BARS** | **Barje** | **1.54** | **329** | *i* Pg | | **Pn** | **11 17 46.1** | **-0.1** |
| BARS | | | | *i* Sg | | **Sg** | **11 18 08.1** | **+0.5** |
| **OHR** | **Ohrid** | **1.62** | **257** | *e*Pg | | **Pn** | **11 17 47.4** | **0.0** |
| OHR | | | | *e*Sg | | **Sg** | **11 18 10.3** | **0.0** |
| **OHR** | **Ohrid** | **1.62** | **257** | *i* Pn | | **Pn** | **11 17 47.7** | **+0.4** |
| **THAS** | **Thassos island** | **1.65** | **122** | P | | **Pn** | **11 17 47.0** | **-0.6** |
| THAS | | | | S | | **Sn** | **11 18 06.9** | **-2.2** |
| | comp=E,3μm,0.3s | | | | | | | |
| **PAIG** | **Paliouri** | **1.68** | **159** | P | | **Pn** | **11 17 47.9** | **-0.3** |
| PAIG | | | | S | | **Sn** | **11 18 08.9** | **-1.1** |
| | comp=E,2μm,0.8s | | | | | | | |
| **PAIG** | **Paliouri** | **1.68** | **159** | P | | **Pn** | **11 17 47.8** | **-0.3** |
| **NEST** | **Nestorio** | **1.77** | **233** | P | | **Pn** | **11 17 50.1** | **+0.7** |
| NEST | | | | S | | **Sg** | **11 18 14.5** | **-0.4** |
| | comp=E,2μm,0.9s | | | | | | | |
| **NEST** | **Nestorio** | **1.77** | **233** | P | | **Pb** | **11 17 50.4** | **-0.7** |
| NEST | | | | AML | | AML | 11 18 26.0 | |
| | comp=N,5032μm,0.8s | | | | | | | |
| NEST | | | | AML | | AML | 11 18 29.9 | |
| | comp=E,3768μm,1.1s | | | | | | | |
| **ZAPS** | **Zavoj** | **1.78** | **354** | *e*Pn | | **Pn** | **11 17 50.3** | **+0.8** |
| ZAPS | | | | *e*Sn | | **Sn** | **11 18 12.9** | **+0.4** |
| **KBN** | **Korca** | **1.82** | **242** | P | | **Pn** | **11 17 50.7** | **+0.7** |
| KBN | | | | S | | **Sn** | **11 18 11.1** | **-2.3** |
| | comp=E,2μm,1.0s | | | | | | | |
| **KBN** | **Korca** | **1.82** | **242** | | | **Pn** | **11 17 50.8** | **+0.8** |
| **KBN** | **Korca** | **1.82** | **242** | P | | **Pn** | **11 17 50.3** | **+0.3** |
| | baz=243 | | | | | | | |
| KBN | | | | S | | **Sg** | **11 18 16.4** | **-0.1** |
| | baz=243 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=E,6.6nm,1.1s,baz=243 | | | | | | | |
| **PHP** | **Peshkopia** | **1.85** | **276** | P | | **Pn** | **11 17 51.4** | **+1.0** |
| PHP | | | | S | | **Sn** | **11 18 14.3** | **+0.2** |
| **PHP** | **Peshkopia** | **1.85** | **276** | P | | **Pn** | **11 17 51.6** | **+1.2** |
| | baz=279 | | | | | | | |
| PHP | | | | S | | **Sg** | **11 18 17.4** | **0.0** |
| | baz=279 | | | | | | | |
| PHP | | | | AMP | | | | |
| | comp=N,6.7nm,0.9s,baz=279 | | | | | | | |
| **KDZ** | **Kurdzhali** | **1.90** | **85** | P | | **Pn** | **11 17 50.2** | **-1.0** |
| **KPRO** | **Kipourio** | **1.93** | **217** | P | | **Pn** | **11 17 52.2** | **+0.6** |
| **KPRO** | **Kipourio** | **1.93** | **217** | P | | **Pn** | **11 17 52.3** | **+0.6** |
| **MPEP** | **Malo Peshtene** | **1.96** | **18** | P | | **Pb** | **11 17 55.1** | **+0.9** |
| **RDO** | **Rodhopi** | **2.02** | **99** | P | | **Pn** | **11 17 52.6** | **-0.2** |
| **THL** | **Klokotos Trika** | **2.05** | **199** | P | | **Pn** | **11 17 53.2** | **+0.1** |
| **BLKB** | **Belogradchik** | **2.13** | **356** | ⇓P | | **Pn** | **11 17 54.8** | **+0.5** |
| **XOR** | **Xorichti** | **2.15** | **174** | P | | **Pn** | **11 17 54.5** | **0.0** |
| **SELS** | **Selova** | **2.16** | **323** | *e*Pn | | **Pn** | **11 17 54.5** | **-0.2** |
| SELS | | | | *e*Sn | | **Sn** | **11 18 22.5** | **+0.6** |
| **LSK** | **Leskovik** | **2.20** | **233** | P | | **Pb** | **11 17 57.1** | **-1.3** |
| **LSK** | **Leskovik** | **2.20** | **233** | P | | **Pb** | **11 17 56.9** | **-1.5** |
| | baz=234 | | | | | | | |
| LSK | | | | S | | **Sb** | **11 18 26.2** | **+0.2** |
| | baz=234 | | | | | | | |
| LSK | | | | AMP | | | | |
| | comp=E,7.0nm,0.9s,baz=234 | | | | | | | |
| **NEO** | **Neokhori** | **2.21** | **173** | P | | **Pn** | **11 17 55.3** | **-0.1** |
| NEO | | | | S | | **Sn** | **11 18 21.6** | **-1.4** |
| | comp=E,1μm,0.5s | | | | | | | |
| **SMTH** | **Samothraki Isl** | **2.25** | **116** | P | | **Pn** | **11 17 55.3** | **-0.6** |
| **BCI** | **Bajram Curri** | **2.28** | **293** | P | | **Pn** | **11 17 57.3** | **+1.0** |
| | baz=295 | | | | | | | |
| BCI | | | | S | | **Sb** | **11 18 29.5** | **+1.4** |
| | baz=295 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=N,6.8nm,1.3s,baz=295 | | | | | | | |
| **TIR** | **Tirane** | **2.28** | **267** | | | **Pb** | **11 17 59.2** | **-0.5** |
| **TIR** | **Tirane** | **2.28** | **267** | *i* Pn | | **Pb** | **11 17 59.2** | **-0.5** |
| **TIR** | **Tirane** | **2.28** | **267** | P | | **Pb** | **11 17 59.1** | **-0.6** |
| | baz=269 | | | | | | | |
| **BOVS** | **Bovan** | **2.31** | **338** | *e*Pn | | **Pn** | **11 17 58.6** | **+1.9** |
| BOVS | | | | *e*Sn | | **Sn** | **11 18 25.3** | **-0.1** |
| **ZAGS** | **Zajecar** | **2.36** | **348** | *e*Pn | | **Pn** | **11 17 57.1** | **-0.3** |
| ZAGS | | | | *e*Sn | | **Sn** | **11 18 26.7** | **0.0** |
| **LIA** | **Limnos Island** | **2.37** | **132** | P | | **Pn** | **11 17 57.2** | **-0.3** |
| LIA | | | | S | | **Sg** | **11 18 32.9** | **-1.3** |
| | comp=N,1μm,0.5s | | | | | | | |
| **JAN** | **Janina** | **2.41** | **221** | P | | **Pb** | **11 18 00.6** | **-1.3** |
| **ALN** | **Alexandroupoli** | **2.46** | **103** | P | | **Pn** | **11 17 58.5** | **-0.2** |
| ALN | | | | S | | **Sb** | **11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRY | Bratogost | 3.52 | 295 | *e*Pn | | Pn | 11 18 15.9 | +2.3 |
| BRY | Bratogost | 3.52 | 295 | *e*Pn | | Pn | 11 18 14.7 | +1.1 |
| BRY | | | | *e*Sn | | Sn | 11 18 58.2 | +2.6 |
| SGRR | Singureni | 3.54 | 39 | ⇑P | | Pn | 11 18 15.9 | +2.3 |
| TREB | Trebinje | 3.59 | 291 | *e*Pn | | Pn | 11 18 16.1 | +1.8 |
| BUC1 | Bucharest | 3.66 | 38 | ⇓P | | Pn | 11 18 17.4 | +2.1 |
| BUC1 | | | | ⇓S | | Sb | 11 19 08.4 | +0.5 |
| KARY | Karystos | 3.66 | 161 | P | | Pn | 11 18 15.6 | +0.2 |
| STFAR | Stefanesti-Arg | 3.69 | 24 | ⇓P | | Pn | 11 18 17.8 | +2.1 |
| DBRK | Dubrovnik | 3.72 | 290 | P | | Pn | 11 18 17.2 | +1.1 |
| GZR | Gura Zlata | 3.89 | 359 | ⇓P | | Pn | 11 18 18.2 | -0.3 |
| CHOS | Chios island | 3.95 | 141 | P | | Pn | 11 18 20.0 | +0.6 |
| LOT | Lotru | 4.00 | 9 | ⇓P | | Pn | 11 18 19.8 | -0.2 |
| SUR | | 4.02 | 37 | ⇓P | | Pn | 11 18 21.5 | +1.6 |
| ARR | Arges | 4.07 | 18 | ⇑P | | Pn | 11 18 20.8 | -0.1 |
| BANR | Banloc | 4.08 | 342 | ⇑P | | Pn | 11 18 20.2 | -0.9 |
| STON | Ston | 4.09 | 291 | *e*Pn | | Pn | 11 18 22.8 | +1.6 |
| STON | Ston | 4.09 | 291 | P | | Pn | 11 18 22.4 | +1.2 |
| LEHL | Lehliu | 4.14 | 43 | ⇓P | | Pn | 11 18 23.4 | +1.5 |
| BZS | Buzias | 4.22 | 348 | ⇑P | | Pn | 11 18 22.1 | -0.9 |
| BLJ | Bijeljina | 4.22 | 322 | *e*Pn | | Pn | 11 18 22.3 | -0.6 |
| SECR | | 4.23 | 32 | ⇑P | | Pn | 11 18 24.7 | +1.6 |
| VOIR | | 4.24 | 21 | ⇑P | | Pn | 11 18 23.9 | +0.6 |
| FRGS | Fruska Gora | 4.29 | 329 | ⇑P | | Pn | 11 18 21.3 | -2.7 |
| FRGS | Fruska Gora | 4.29 | 329 | *e*Pn | | Pn | 11 18 22.6 | -1.4 |
| FRGS | Fruska Gora | 4.29 | 329 | *e*Pn | | Pn | 11 18 22.1 | -1.9 |
| DEV | Deva | 4.38 | 0 | ⇑P | | Pn | 11 18 27.1 | +1.9 |
| ITM | Ithomi | 4.38 | 190 | | | Pn | 11 18 28.1 | +2.8 |
| ICOR | Ion Corvin | 4.46 | 52 | ⇓P | | Pn | 11 18 28.3 | +2.0 |
| ISR | Istrita | 4.49 | 35 | ⇓P | | Pn | 11 18 28.2 | +1.4 |
| AMRR | Amara | 4.50 | 45 | ⇓P | | Pn | 11 18 27.8 | +1.0 |
| KALB | Balgarevo | 4.51 | 63 | ⇓P | | Pn | 11 18 27.8 | +0.9 |
| MLR | Muntele Rosu | 4.56 | 28 | ⇓P | | Pn | 11 18 30.2 | +2.3 |
| MLR | Muntele Rosu | 4.56 | 28 | Pn | | Pn | 11 18 29.5 | +1.6 |
| | comp=N,7.0nm,0.3s,baz=181,slow=6.8,SNR=24 | | | | | | | |
| MLR | | | | Lg | | Lg | 11 19 47.2 | |
| | comp=N,7.4nm,0.3s,baz=107,slow=14,SNR=7.3 | | | | | | | |
| MLR | Muntele Rosu | 4.56 | 28 | Pn | | Pn | 11 18 28.4 | +0.5 |
| NEHR | Nehoiu | 4.64 | 31 | ⇓P | | Pn | 11 18 30.4 | +1.6 |
| MAKA | Makarska | 4.70 | 294 | P | | Pn | 11 18 31.3 | +1.7 |
| RICI | Ricice | 4.70 | 297 | P | | Pn | 11 18 31.4 | +1.8 |
| MDB | Medias | 4.76 | 13 | ⇑P | | Pn | 11 18 30.8 | +0.3 |
| DOB | Doboj | 4.77 | 314 | *e*Pn | | Pn | 11 18 30.0 | -0.5 |
| MANR | Mangalia | 4.80 | 59 | ⇓P | | Pn | 11 18 31.8 | +0.9 |
| DOPR | Dopca | 4.82 | 21 | ⇓P | | Pn | 11 18 32.4 | +1.2 |
| SIRR | Siria | 4.85 | 350 | ⇑P | | Pn | 11 18 31.2 | -0.5 |
| HARR | Harsova | 4.88 | 48 | ⇑P | | Pn | 11 18 32.8 | +0.8 |
| GRER | | 4.89 | 36 | ⇓P | | Pn | 11 18 34.3 | +2.2 |
| BISRR | Bisoca | 4.91 | 33 | ⇑P | | Pn | 11 18 34.6 | +2.1 |
| TIRR | Tirgusor | 5.01 | 52 | ⇑P | | Pn | 11 18 34.4 | +0.6 |
| TIRR | Tirgusor | 5.01 | 52 | Pn | | Pn | 11 18 33.9 | 0.0 |
| OZUR | | 5.05 | 24 | ⇓P | | Pn | 11 18 35.7 | +1.3 |
| HVAR | Hvar | 5.06 | 291 | P | | Pn | 11 18 33.5 | -1.0 |
| PLOR | Plostina | 5.13 | 31 | ⇓P | | Pn | 11 18 37.3 | +1.7 |
| MGRS | Mrkonjic Grad | 5.16 | 306 | *e*Pn | | Pn | 11 18 37.4 | +1.4 |
| VRI | Vrincioaia | 5.17 | 31 | ⇓P | | Pn | 11 18 38.0 | +1.9 |
| ODBI | Odobesti | 5.22 | 34 | ⇓P | | Pn | 11 18 38.9 | +2.1 |
| TPGR | Topolog | 5.25 | 48 | ⇑P | | Pn | 11 18 37.4 | +0.2 |
| BLY | Banja Luka | 5.29 | 310 | *e*Pn | | Pn | 11 18 38.7 | +1.0 |
| DRGR | | 5.29 | 359 | ⇑P | | Pn | 11 18 37.3 | -0.4 |
| CFR | Carcaliu | 5.30 | 44 | ⇓P | | Pn | 11 18 38.4 | +0.5 |
| SGRT | San Giovanni R | 5.36 | 275 | Pn | | Pn | 11 18 38.7 | -0.1 |
| IZVR | Izvoarele | 5.38 | 40 | ⇓P | | Pn | 11 18 40.4 | +1.6 |
| A252A | Venje | 5.38 | 319 | P | | Pn | 11 18 38.8 | -0.2 |
| KIJV | Kijevo | 5.39 | 300 | P | | Pn | 11 18 41.1 | +2.0 |
| MRAK | Mrakovica | 5.61 | 311 | *e*Pn | | Pn | 11 18 42.9 | +0.8 |
| GHRR | | 5.61 | 34 | ⇓P | | Pn | 11 18 44.0 | +1.9 |
| MORH | Mrgy, Hungar | 5.62 | 328 | *e*Pn | | Pn | 11 18 41.8 | -0.5 |
| MORH | Mrgy, Hungar | 5.62 | 328 | PN | | Pn | 11 18 42.0 | -0.3 |
| MORH | | | | SN | | Sn | 11 19 46.5 | -0.6 |
| MESR | Meseseni | 5.65 | 0 | ⇓P | | Pn | 11 18 41.3 | -1.3 |
| TLCR | | 5.68 | 48 | ⇓P | | Pn | 11 18 44.1 | +1.1 |
| TESR | Tescani | 5.70 | 27 | ⇓P | | Pn | 11 18 45.2 | +1.9 |
| KOVH | Kovagotottos | 5.75 | 325 | PN | | Pn | 11 18 44.2 | +0.3 |
| KOVH | | | | SN | | Sn | 11 19 50.6 | +0.4 |
| MORI | Morici | 5.80 | 296 | P | | Pn | 11 18 45.8 | +1.1 |
| BORA | Eskisehir | 5.97 | 103 | | | Pn | 11 18 47.2 | 0.0 |
| MOSL | Moslavina | 6.06 | 315 | P | | Pn | 11 18 48.5 | +0.2 |
| DUGI | Dugi Otok | 6.28 | 296 | P | | Pn | 11 18 52.1 | +0.8 |
| PAOL | Paolisi | 6.29 | 268 | Pn | | Pn | 11 18 52.7 | +1.2 |
| PLIT | Plitvice | 6.29 | 305 | P | | Pn | 11 18 53.5 | +2.0 |
| BURAR | Bucovina Array | 6.33 | 14 | ⇑P | | Pn | 11 18 52.9 | +0.7 |
| BURAR | Bucovina Array | 6.33 | 14 | Pn | | Pn | 11 18 52.8 | +0.7 |
| BUR08 | Bucovina Ar. S | 6.36 | 14 | | | Pn | 11 18 52.8 | +0.3 |
| MDUB | Mudurnu | 6.37 | 97 | | | Pn | 11 18 53.6 | +0.9 |
| IDI | Anoyia | 6.40 | 165 | Pn | | Pn | 11 18 51.2 | -1.8 |
| | comp=N,0.4nm,0.3s,baz=312,slow=14,SNR=1.2 | | | | | | | |
| IDI | | | | LR | | LR | 11 21 44.9 | |
| | comp=N,194nm,20.5s,baz=300,slow=43 | | | | | | | |
| IDI | Anoyia | 6.40 | 165 | | | Pn | 11 18 55.4 | +2.4 |
| TIH | Tihany | 6.48 | 328 | PN | | Pn | 11 18 53.9 | -0.1 |
| KALN | Kalnik | 6.56 | 317 | P | | Pn | 11 18 54.7 | -0.5 |
| BUD | Budapest | 6.59 | 337 | PN | | Pn | 11 18 58.9 | +3.4 |
| ZAG | Zagreb | 6.61 | 313 | *e*Pn | | Pn | 11 19 01.4 | +5.5 |
| NVLJ | Novalja | 6.62 | 300 | P | | Pn | 11 18 55.6 | +0.8 |
| TRPA | Tarpa | 6.63 | 358 | PN | | Pn | 11 18 57.8 | +1.7 |
| PTJ | Puntijarka | 6.67 | 314 | P | | Pn | 11 18 56.4 | -0.4 |
| PSZ | Piszkesteto | 6.76 | 343 | ⇑P | | Pn | 11 18 56.3 | -1.7 |
| PSZ | Piszkesteto | 6.76 | 343 | Pn | | Pn | 11 18 58.7 | +0.7 |
| PSZ | Piszkesteto | 6.76 | 343 | PN | | Pn | 11 18 59.4 | +1.4 |
| LOBO | Lobor | 6.78 | 316 | P | | Pn | 11 18 57.8 | -0.3 |
| OZLJ | Ozalj | 6.78 | 310 | P | | Pn | 11 18 58.9 | +0.8 |
| KARP | Karpathos | 6.82 | 149 | Pn | | Pn | 11 19 01.4 | +2.7 |
| A250A | Rusevo Krmpots | 6.83 | 304 | P | | Pn | 11 19 01.1 | +2.2 |
| MPLH | Magyarpolny | 6.84 | 328 | PN | | Pn | 11 19 00.2 | +1.2 |
| MPLH | | | | SN | | Sn | 11 20 17.7 | +0.5 |
| MILM | Milestii Mici | 6.89 | 36 | ⇑P | | Pn | 11 19 02.0 | +2.4 |
| MILM | Milestii Mici | 6.89 | 36 | *e* | | Pn | 11 19 05.0 | +5.4 |
| MILM | | | | LRM | | MLR | 11 22 45.0 | |
| | comp=N,550nm,8.0s | | | | | | | |
| CRES | Cresnjev | 6.91 | 311 | *e*Pn | | Pn | 11 18 59.6 | -0.3 |
| CRES | Cresnjev | 6.91 | 311 | *e*Pn | | Pn | 11 19 00.6 | +0.7 |
| EGYH | Egyhazaskeszo | 7.12 | 328 | PN | | Pn | 11 19 04.9 | +2.0 |
| EGYH | | | | SN | | Sn | 11 20 26.7 | +2.6 |
| AQU | L'Aquila | 7.13 | 280 | *e*Pn | | Pn | 11 19 03.9 | +0.9 |
| KECS | Kecovo | 7.19 | 347 | *e*PN | | Pn | 11 19 06.1 | +2.4 |
| RIY | Rijeka | 7.21 | 305 | *e*Pn | | Pn | 11 19 04.8 | +0.7 |
| SMRN | Sveta Marina | 7.29 | 302 | P | | Pn | 11 19 05.3 | +0.2 |
| PDKS | Podkum | 7.30 | 311 | *e*Pn | | Pn | 11 19 06.6 | +1.2 |
| NRCA | Norcia | 7.38 | 284 | | | Pn | 11 19 06.8 | +0.3 |
| CEY | Cerknica | 7.46 | 307 | *e*Pn | | Pn | 11 19 08.4 | +0.9 |
| VYHS | Vyhne | 7.56 | 339 | *e*PN | | Pn | 11 19 10.2 | +1.4 |
| VYHS | | | | *e*SN | | Sn | 11 20 37.3 | +2.5 |
| LJU | Ljubljana | 7.56 | 310 | *e*Pn | | Pn | 11 19 09.5 | +0.6 |
| PERS | Pernice | 7.59 | 315 | *e*Pn | | Pn | 11 19 10.5 | +1.1 |
| PERS | | | | *e*Sn | | Sn | 11 20 29.0 | -6.7 |
| SKDS | Skadanscina | 7.61 | 305 | *e*Pn | | Pn | 11 19 09.6 | 0.0 |
| SOP | Sopron | 7.65 | 326 | PN | | Pn | 11 19 10.6 | +0.5 |
| SOP | | | | SN | | Sn | 11 20 38.5 | +1.4 |
| SOKA | Soboth | 7.66 | 315 | *e*Pn | | Pn | 11 19 11.6 | +1.3 |
| | comp=N,2.2nm,0.4s | | | | | | | |
| SOKA | | | | *e*Sn | | Sn | 11 20 40.5 | +3.0 |
| | comp=N,17nm,0.7s | | | | | | | |
| ARSA | Arzberg | 7.80 | 320 | *e*Pn | | Pn | 11 19 12.9 | +0.8 |
| | comp=N,2.2nm,0.4s,SNR=8.6 | | | | | | | |
| ARSA | | | | *e*Sn | | Sn | 11 20 43.0 | +2.2 |
| | comp=N,14nm,0.5s | | | | | | | |
| OBKA | Obir | 7.82 | 313 | *e*Pn | | Pn | 11 19 14.0 | +1.4 |
| | comp=N,5.3nm,0.4s,SNR=6.1 | | | | | | | |
| ZST | Bratislava | 7.85 | 330 | *e*PN | | Pn | 11 19 14.2 | +1.3 |
| ZST | | | | *e*SN | | Sn | 11 20 40.5 | -1.5 |
| RAFF | Raffo Rosso | 7.87 | 240 | Pn | | Pn | 11 19 13.4 | +0.3 |
| MURB | Monte Urbino | 7.87 | 286 | | | Pn | 11 19 13.8 | +0.6 |
| SMOL | Smolenice | 8.01 | 333 | *e*PN | | Pn | 11 19 19.6 | +4.6 |
| CONA | Conrad Observa | 8.14 | 324 | *e*Pn | | Pn | 11 19 17.9 | +1.0 |
| | comp=N,1.2nm,0.3s,SNR=5.9 | | | | | | | |
| CONA | | | | *e*Sn | | Sn | 11 20 51.5 | +2.2 |
| | comp=N,9.0nm,0.7s | | | | | | | |
| JAVC | Velka Javorina | 8.23 | 335 | *e*PN | | Pn | 11 19 21.7 | +3.6 |
| BR131 | Keskin Array S | 8.37 | 99 | | | Pn | 11 19 20.6 | +0.5 |
| BRTR | Keskin Array B | 8.37 | 99 | Pn | | Pn | 11 19 20.8 | +0.7 |
| | comp=N,0.4nm,0.3s,baz=273,slow=12,SNR=11 | | | | | | | |
| BRTR | Keskin Array B | 8.37 | 99 | Pn | | Pn | 11 19 21.0 | +0.9 |
| MYKA | Terra Mystica | 8.40 | 311 | *e*Pn | | Pn | 11 19 23.0 | +2.6 |
| | comp=N,4.7nm,0.4s | | | | | | | |
| STAL | STALIGIAL | 8.75 | 306 | Pn | | Pn | 11 19 24.6 | -0.6 |
| KBA | Koelnbreinsper | 8.82 | 312 | *e*Pn | | Pn | 11 19 28.3 | +2.0 |
| | comp=N,1.9nm,0.5s | | | | | | | |
| MOA | Molln | 8.83 | 319 | *e*Pn | | Pn | 11 19 28.1 | +1.8 |
| | comp=N,5.8nm,0.8s | | | | | | | |
| MOA | | | | *e*Sn | | Sn | 11 21 08.7 | +2.6 |
| | comp=N,15nm,0.6s | | | | | | | |
| KRUC | Moravsky | 8.84 | 331 | *e*PN | | Pn | 11 19 27.7 | +1.4 |
| VRAC | Vranov | 8.97 | 333 | Pn | | Pn | 11 19 31.1 | +2.8 |
| | comp=N,0.3nm,0.3s,baz=152,slow=10.0,SNR=7.2 | | | | | | | |
| VRAC | | | | LR | | LR | 11 22 59.0 | |
| | comp=N,23nm,19.0s,baz=119,slow=38 | | | | | | | |
| VRAC | Vranov | 8.97 | 333 | *e*PN | | Pn | 11 19 29.8 | +1.6 |
| TEOL | Teolo | 9.03 | 299 | Pn | | Pn | 11 19 29.2 | +0.2 |
| MORC | Moravsky Berou | 9.08 | 337 | Pn | | Pn | 11 19 33.1 | +3.4 |
| MORC | Moravsky Berou | 9.08 | 337 | *e*PN | | Pn | 11 19 30.2 | +0.4 |
| ABTA | Abfaltersbach | 9.12 | 309 | *e*Pn | | Pn | 11 19 31.8 | +1.5 |
| | comp=N,2.7nm,0.5s,SNR=6.0 | | | | | | | |
| ZCCA | Zocca | 9.19 | 292 | Pn | | Pn | 11 19 34.0 | +2.7 |
| CTI | Castel Tesino | 9.31 | 303 | | | Pn | 11 19 32.6 | -0.4 |
| CKRC | Cesky Krumlov | 9.50 | 323 | *e*PN | | Pn | 11 19 40.4 | +5.0 |
| WTTA | Wattenberg | 9.90 | 309 | *e*Pn | | Pn | 11 19 43.5 | +2.4 |
| | comp=N,8.8nm,0.5s,SNR=8.8 | | | | | | | |
| DPC | Dobruska-Polom | 9.96 | 335 | *e*PN | | Pn | 11 19 44.9 | +3.1 |
| WATA | Walderalm | 9.97 | 310 | *e*Pn | | Pn | 11 19 44.0 | +1.9 |
| | comp=N,4.5nm,0.5s | | | | | | | |
| KHC | Kasperske Hory | 10.05 | 322 | *e*PN | | Pn | 11 19 46.9 | +3.8 |
| KHC | | | | *e*SN | | Sn | 11 21 37.2 | +1.0 |
| KHC | Kasperske Hory | 10.05 | 322 | Pn | | Pn | 11 19 46.7 | +3.6 |
| OSTC | Ostas | 10.17 | 335 | *e*PN | | Pn | 11 19 49.1 | +4.4 |
| AKASG | Malin Array Be | 10.19 | 23 | Pn | | Pn | 11 19 47.2 | +2.3 |
| | comp=N,0.9nm,0.3s,baz=211,slow=11,SNR=8.2 | | | | | | | |
| AKASG | | | | LR | | LR | 11 23 44.2 | |
| | comp=N,73nm,19.6s,baz=297,slow=37 | | | | | | | |
| AKASG | Malin Array Be | 10.19 | 23 | | | Pn | 11 19 46.8 | +1.9 |
| AKBB | Malin Array Si | 10.19 | 23 | | | Pn | 11 19 49.2 | +4.3 |
| MSSA | Maissana | 10.21 | 290 | Pn | | Pn | 11 19 46.0 | +0.8 |
| MOTA | Moosalm | 10.25 | 309 | *e*Pn | | Pn | 11 19 48.0 | +2.1 |
| | comp=N,5.6nm,0.5s | | | | | | | |
| FETA | Feichten | 10.32 | 306 | *e*P | | Pn | 11 19 48.9 | +2.1 |
| | comp=N,4.0nm,0.9s,SNR=6.1 | | | | | | | |
| DAVOX | Davos/Dischmat | 10.73 | 304 | Pn | | Pn | 11 19 53.3 | +0.8 |
| | comp=N,0.5nm,0.3s,baz=144,slow=16,SNR=9.8 | | | | | | | |
| DAVOX | | | | LR | | LR | 11 24 49.0 | |
| | comp=N,257nm,19.0s,baz=68,slow=42 | | | | | | | |
| TUE | Stuetta | 10.95 | 302 | Pn | | Pn | 11 19 57.2 | +1.7 |
| CLL | Collm | 11.94 | 329 | *i* Pn | | Pn | 11 20 08.7 | -0.1 |
| CLL | | | | *ex* | | x | 11 20 24.0 | |
| CLL | | | | *e*Pg | | | 11 21 05.0 | |
| CLL | | | | *ex* | | x | 11 21 22.0 | |
| CLL | | | | *ex* | | x | 11 21 30.0 | |
| CLL | | | | *e*Sn | | Sn | 11 21 55.0 | -27 |
| CLL | | | | *e*Sb | | | 11 22 49.0 | |
| CLL | | | | *e*Sglp | | | 11 23 20.0 | |
| CLL | | | | *e*Sg | | | 11 23 51.0 | |
| SENIN | Lac Senin/Sane | 12.24 | 299 | | | Pn | 11 20 14.1 | +0.9 |
| BNI | Bardonecchia | 12.34 | 292 | Pn | | Pn | 11 20 16.2 | +1.8 |
| BFO | Black Forest | 12.36 | 308 | | | Pn | 11 20 16.6 | +2.0 |
| ECH | Echery | 13.01 | 306 | Pn | | Pn | 11 20 25.5 | +2.0 |
| HFS | Hagfors | 19.50 | 346 | P | | P | 11 21 46.1 | +0.3 |
| | comp=N,0.2nm,0.3s,baz=162,slow=15,SNR=1.9 | | | | | | | |
| HFS | | | | LR | | LR | 11 29 51.4 | |
| | comp=N,52nm,19.2s,baz=214,slow=38 | | | | | | | |
| KONO | Kongsberg | 19.96 | 340 | P | | P | 11 21 50.4 | -0.4 |
| KONO | | | | IAmb | | IAmb | 11 22 05.1 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| FINES | FINESS Array B | 20.07 | 4 | P | | P | 11 21 51.0 | -0.9 |
| | comp=Z,2.8nm,0.8s,baz=175,slow=9.2,SNR=5.1 | | | | | | | |
| FINES | | | | LR | | LR | 11 30 24.0 | |
| | comp=Z,100nm,21.7s,baz=171,slow=39 | | | | | | | |
| ESDC | Sonseca Array | 20.45 | 274 | P | | P | 11 21 55.6 | -0.8 |
| | comp=Z,1.5nm,0.8s,baz=77,slow=9.9,SNR=6.5 | | | | | | | |
| ESDC | Sonseca Array | 20.45 | 274 | P | | Pn | 11 21 59.9 | +1.4 |
| NC602 | NORSAR Array S | 20.48 | 344 | P | | P | 11 21 55.8 | -0.6 |
| NC602 | | | | IAmb | | IAmb | 11 22 19.8 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| NAO01 | NORSAR Array S | 20.71 | 343 | P | | P | 11 21 59.2 | +0.2 |
| NB201 | NORSAR Array S | 20.81 | 344 | P | | P | 11 22 00.3 | +0.2 |
| NB201 | | | | IAmb | | IAmb | 11 22 07.1 | |
| | comp=Z,34nm,1.2s | | | | | | | |
| NB2 | NORSAR Subarra | 20.82 | 344 | P | | P | 11 21 59.4 | -0.8 |
| | comp=Z,3.2nm,0.7s,baz=151,slow=11 | | | | | | | |
| NOA | NORSAR Array B | 20.82 | 344 | P | | P | 11 21 59.9 | -0.3 |
| | comp=Z,2.7nm,0.8s,baz=154,slow=7.5,SNR=9.4 | | | | | | | |
| NOA | | | | LR | | LR | 11 29 57.4 | |
| | comp=Z,23nm,19.8s,baz=170,slow=36 | | | | | | | |
| NC204 | NORSAR Array S | 21.13 | 344 | P | | P | 11 22 03.0 | -0.5 |
| NC204 | | | | IAmb | | IAmb | 11 22 03.4 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| KLMR | Klimovskoe | 21.88 | 22 | *e* | | P | 11 22 09.6 | -1.9 |
| KLMR | | | | AMP | | | 11 22 16.3 | |
| | comp=Z,44nm,1.1s | | | | | | | |
| EKA | Eskdalemuir Ar | 21.97 | 318 | P | | P | 11 22 11.3 | -1.3 |
| | comp=Z,3.2nm,0.8s,baz=114,slow=10,SNR=7.6 | | | | | | | |
| EKA | | | | LR | | LR | 11 32 20.0 | |
| | comp=Z,93nm,19.0s,baz=24,slow=41 | | | | | | | |
| ABKAR | Akbulak array | 26.94 | 61 | P | | P | 11 23 00.2 | +0.1 |
| ARU | Arti | 27.39 | 45 | LR | | LR | 11 33 49.6 | |
| | comp=Z,44nm,18.1s,baz=12,slow=36 | | | | | | | |
| ARCES | ARCESS Array B | 28.13 | 2 | P | | P | 11 23 09.8 | -0.8 |
| | comp=Z,2.5nm,0.8s,baz=186,slow=9.8,SNR=6.0 | | | | | | | |
| ARCES | | | | LR | | LR | 11 35 05.2 | |
| | comp=Z,49nm,20.1s,baz=183,slow=38 | | | | | | | |
| ARCES | ARCESS Array B | 28.13 | 2 | P | | P | 11 23 09.8 | -0.8 |
| TORD | Torodi Ar. Bea | 33.76 | 219 | P | | P | 11 23 58.1 | -2.5 |
| | comp=Z,2.4nm,0.6s,baz=30,slow=8.9,SNR=15 | | | | | | | |
| TORD | Torodi Ar. Bea | 33.76 | 219 | P | | P | 11 24 00.1 | -0.6 |
| KKAR | Karatay Array | 34.89 | 71 | P | | P | 11 24 10.9 | +0.6 |
| CHGR | Chuyangaron | 35.19 | 79 | P | | P | 11 24 13.3 | +0.2 |
| GAR | Garm | 35.93 | 78 | P | | P | 11 24 21.3 | +1.8 |
| GAR | | | | IAmb | | IAmb | 11 24 25.5 | |
| | comp=Z,7.8nm,0.9s | | | | | | | |
| KURBB | Kurchatov Arra | 38.84 | 57 | LR | | LR | 11 44 49.7 | |
| | comp=Z,33nm,19.1s,baz=58,slow=42 | | | | | | | |
| LODK | Lodwar | 39.53 | 160 | P | | P | 11 24 50.2 | +0.2 |
| KSH | Kashi | 39.88 | 75 | P | | P | 11 24 55.5 | +2.7 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| SOCY | Socotra | 39.88 | 128 | P | | P | 11 24 50.3 | -2.6 |
| SOCY | | | | IAmb | | IAmb | 11 24 51.5 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| MK31 | Makanchi Array | 42.07 | 62 | P | | P | 11 25 11.4 | +0.8 |
| MKAR | Makanchi Array | 42.07 | 62 | P | | P | 11 25 10.2 | -0.4 |
| | comp=Z,1.2nm,0.6s,baz=286,slow=7.3,SNR=12 | | | | | | | |
| MKAR | Makanchi Array | 42.07 | 62 | P | | P | 11 25 11.2 | +0.6 |
| ZAA0 | Zalesovo Array | 42.15 | 51 | P | | P | 11 25 11.0 | -0.1 |
| ZAA0 | | | | IAmb | | IAmb | 11 25 12.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| ZALV | Zalesovo Beam | 42.15 | 51 | P | | P | 11 25 11.2 | +0.1 |
| | comp=Z,2.7nm,0.6s,baz=283,slow=9.6,SNR=10 | | | | | | | |
| DBIC | Dimbokro | 42.57 | 223 | P | | P | 11 25 14.3 | -0.6 |
| DBIC | | | | IAmb | | IAmb | 11 25 15.3 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| EUNU | Eureka | 52.63 | 348 | P | | P | 11 26 33.3 | +0.8 |
| EUNU | | | | IAmb | | IAmb | 11 26 39.7 | |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| TIXI | Tiksi | 55.90 | 22 | P | | P | 11 26 57.6 | +1.4 |
| TIXI | | | | IAmb | | IAmb | 11 27 03.6 | |
| | comp=Z,5.2nm,1.4s | | | | | | | |
| SONM | Songino Array | 56.97 | 53 | P | | P | 11 27 05.4 | +1.0 |
| | comp=Z,0.9nm,0.8s,baz=278,slow=10,SNR=7.3 | | | | | | | |
| SONM | Songino Array | 56.97 | 53 | P | | P | 11 27 05.6 | +1.2 |
| SONM | | | | IAmb | | IAmb | 11 27 09.7 | |
| | comp=Z,5.3nm,1.5s | | | | | | | |
| CMAR | Chiang Mai Arr | 67.69 | 85 | P | | P | 11 28 16.3 | -0.2 |
| | comp=Z,0.7nm,0.4s,baz=305,slow=7.6,SNR=6.0 | | | | | | | |
| SEY | Seymchan | 68.38 | 22 | P | | P | 11 28 19.5 | -0.6 |
| | comp=Z,0.7nm,0.5s,baz=277,slow=9.8,SNR=6.5 | | | | | | | |
| MA2 | Magadan | 70.52 | 25 | P | | P | 11 28 33.5 | +0.1 |
| | comp=Z,2.2nm,0.6s,baz=307,slow=6.6,SNR=7.0 | | | | | | | |
| YKA | Yellowknife Ar | 70.88 | 341 | P | | P | 11 28 35.0 | -0.6 |
| | comp=Z,1.0nm,0.8s,baz=38,slow=5.5,SNR=14 | | | | | | | |
| YKA | Yellowknife Ar | 70.88 | 341 | P | | P | 11 28 36.3 | +0.8 |
| Q56A | Snyder Ridge, | 73.04 | 307 | P | | P | 11 28 49.6 | +0.7 |
| BCAR | Beaver Creek A | 75.06 | 353 | P | | P | 11 29 01.5 | +1.1 |
| TXAR | Lajitas Array | 93.95 | 315 | P | | P | 11 30 37.1 | -0.1 |
| | comp=Z,0.3nm,0.8s,baz=57,slow=4.6,SNR=3.9 | | | | | | | |
| ASAR | Alice Springs | 120.69 | 96 | PKP | | PKPdf | 11 36 08.9 | -2.3 |
| | comp=Z,0.3nm,0.8s,baz=327,slow=1.5,SNR=2.3 | | | | | | | |

*NOU **28** 11:32:07.2, 18°.67S×177°.73W, h455km, mb4.6/60, Fiji Islands Region*
*NEIC **28** 11:32:08.3±1.8, 18°.7S±0°.1×177°.9W±0°.1, h447km±6km, mb4.5/59, Error ellipse: s-maj=16.2km s-min=13.5km az=132.0*
*IDC **28** 11:32:08.2±1.5, 18°.86S×177°.94W, h451km±17km, mb3.9/15, mb1 4.1/19, mb1mx3.9/32, mbtmp4.7/19, Error ellipse: s-maj=15.0km s-min=12.0km az=147.0*

*BGR **28** 11:32:09.0±0.0, 18°.61S×177°.44W, h450km*
**ISC 28 11:32:08.3±0.3, 18°.78S±0°.07×177°.89W±0°.06, h450km, n256, σ0s95/251, mb4.5/50, 14C-15D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.99 | 284 | P | P | 11 33 24.6 | +1.1 |
| | 100nm,0.3s,baz=190,slow=4.6,SNR=184 | | | | | | |
| MSVF | Nonsavu | 3.99 | 284 | P | P | 11 33 24.8 | +1.3 |
| MSVF | Nonsavu | 3.99 | 284 | P | P | 11 33 25.1 | +1.6 |
| NIUE | Niue | 7.55 | 94 | P | P | 11 33 58.4 | -0.5 |
| NIUE | Niue | 7.55 | 94 | P | P | 11 33 58.2 | -0.7 |
| AFI | Afiamalu | 7.61 | 51 | P | P | 11 33 55.1 | -4.6 |
| | 18nm,0.3s,baz=178,slow=2.1,SNR=18 | | | | | | |
| AFI | | | | S | S | 11 35 20.9 | -10 |
| | 30nm,0.3s,baz=14,slow=20,SNR=11 | | | | | | |
| AFI | Afiamalu | 7.61 | 51 | P | P | 11 33 55.7 | -4.0 |
| AFI | Afiamalu | 7.61 | 51 | P | P | 11 33 55.6 | -4.1 |
| FUNA | Funafuti | 10.58 | 344 | P | P | 11 34 31.8 | 0.0 |
| RTV | Rentapao | 13.03 | 272 | P | P | 11 34 59.6 | +1.2 |
| DVP | Devils Point | 13.27 | 272 | P | P | 11 35 01.8 | +0.9 |
| LIFNC | LIFOU | 14.13 | 259 | P | P | 11 35 09.4 | -0.8 |
| LIFNC | LIFOU | 14.13 | 259 | P | P | 11 35 09.4 | -0.8 |
| PINNC | Pines Island, | 14.24 | 252 | P | P | 11 35 12.2 | +0.8 |
| PINNC | Pines Island, | 14.24 | 252 | P | P | 11 35 12.1 | +0.8 |
| SANVU | Saraoutou | 14.63 | 281 | P | P | 11 35 15.5 | -0.1 |
| YATNC | Mamie plateau, | 14.63 | 255 | P | P | 11 35 14.6 | -1.0 |
| OUENC | Ouen Island, N | 14.74 | 253 | P | P | 11 35 16.9 | +0.1 |
| DZM | Mont Dzumac | 15.04 | 255 | P | P | 11 35 19.2 | -0.8 |
| | 3.5nm,0.3s,baz=86,slow=21,SNR=21 | | | | | | |
| DZM | Mont Dzumac | 15.04 | 255 | P | P | 11 35 19.6 | -0.4 |
| ONTNC | Ouen Toro | 15.07 | 254 | P | P | 11 35 22.1 | +1.8 |
| ONTNC | Ouen Toro | 15.07 | 254 | P | P | 11 35 19.9 | -0.4 |
| NOUC | Port Laguerre | 15.18 | 255 | P | P | 11 35 20.6 | -0.8 |
| NFK | Norfolk Island | 16.48 | 229 | P | P | 11 35 37.5 | +2.4 |
| RAR | Rarotonga | 17.20 | 101 | P | P | 11 35 41.8 | -1.0 |
| | 2.6nm,0.3s,baz=292,slow=10.0,SNR=3.1 | | | | | | |
| OUZ | Omahuta | 18.03 | 203 | P | P | 11 35 52.3 | +1.1 |
| OUZ | | | | IAmb | IAmb | 11 35 54.9 | |
| | comp=Z,28nm,1.3s | | | | | | |
| OUZ | Omahuta | 18.03 | 203 | P | P | 11 35 51.5 | +0.3 |
| URZ | Urewera | 19.89 | 192 | P | P | 11 36 06.6 | -1.9 |
| | comp=Z,3.9nm,0.3s,baz=212,slow=2.6,SNR=20 | | | | | | |
| URZ | Urewera | 19.89 | 192 | P | P | 11 36 06.1 | -2.5 |
| HIZ | Hauiti | 20.65 | 196 | P | P | 11 36 17.5 | +2.0 |
| BKZ | Black Stump Fm | 20.89 | 192 | P | P | 11 36 17.7 | 0.0 |
| BKZ | | | | IAmb | IAmb | 11 36 39.7 | |
| | comp=Z,39nm,1.4s | | | | | | |
| BKZ | Black Stump Fm | 20.89 | 192 | P | P | 11 36 15.3 | -2.4 |
| TARA | Tarawa | 21.95 | 335 | P | P | 11 36 27.4 | -0.2 |
| QRZ | Quartz Range | 23.46 | 198 | P | P | 11 36 40.7 | -0.2 |
| TUWZ | Tuamarina | 23.63 | 195 | P | P | 11 36 43.2 | +0.9 |
| KHZ | Kahutara | 24.66 | 195 | P | P | 11 36 49.6 | -1.9 |
| RPZ

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ADK | Adak | 70.37 | 1 | P | | P | | 11 42 35.0 | -0.3 |
| JHS | Saijyo | 70.87 | 319 | P | | P | | 11 42 40.6 | +1.8 |
| QSPA | South Pole Qui | 71.28 | 180 | P | | P | | 11 42 41.3 | +0.4 |
| QSPA | | | | IAmb | | IAmb | | 11 42 43.7 | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| SSLB | Suanglung | 73.12 | 303 | P | | P | | 11 42 52.4 | +0.2 |
| SSLB | | | | IAmb | | IAmb | | 11 42 53.2 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| PET | Petropavlovsk | 74.33 | 346 | P | | P | | 11 42 58.4 | 0.0 |
| PEA0B | Petropavlovsk- | 74.64 | 345 | P | | P | | 11 43 01.0 | +0.8 |
| PETK | Petropavlovsk- | 74.64 | 345 | P | | P | | 11 42 60.0 | -0.2 |
| | comp=Z,9.7nm,0.6s,baz=122,slow=8.5,SNR=18 | | | | | | | | |
| PETK | Petropavlovsk- | 74.64 | 345 | P | | P | | 11 42 59.7 | -0.5 |
| KSRS | Korea Array | 75.67 | 318 | P | | P | | 11 43 07.7 | +1.4 |
| | comp=Z,2.9nm,0.8s,baz=129,slow=6.6,SNR=10 | | | | | | | | |
| OHAK | Old Harbor | 78.46 | 13 | P | | P | | 11 43 20.8 | -0.3 |
| NJ2 | Nanjing | 78.87 | 309 | *e*P | | P | | 11 43 24.8 | +0.9 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| MPK | Martis Peak | 79.09 | 42 | P | | P | | 11 43 26.3 | +1.0 |
| MPK | | | | IAmb | | IAmb | | 11 43 27.1 | |
| | comp=Z,9.7nm,1.2s | | | | | | | | |
| YERR | Yerington | 79.42 | 43 | P | | P | | 11 43 27.2 | +0.3 |
| NVAR | Mina Array Bea | 79.71 | 44 | P | | P | | 11 43 29.4 | +0.8 |
| | comp=Z,1.4nm,0.6s,baz=225,slow=8.2,SNR=18 | | | | | | | | |
| NVAR | Mina Array Bea | 79.71 | 44 | P | | P | | 11 43 29.6 | +1.0 |
| CN2 | Changchun | 81.00 | 322 | *e*P | | P | | 11 43 34.5 | -0.4 |
| BNX | BinXian | 81.08 | 325 | ⇑P | | P | | 11 43 36.5 | +1.2 |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,50nm,1.1s | | | | | | | | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,310nm,3.8s | | | | | | | | |
| BELA | Belgrano 2 | 81.24 | 173 | P | | P | | 11 43 36.4 | +0.7 |
| WVOR | Wild Horse Val | 81.75 | 40 | P | | P | | 11 43 39.6 | +0.6 |
| I07A | Izee | 82.18 | 38 | P | | P | | 11 43 42.4 | +1.3 |
| I07A | | | | IAmb | | IAmb | | 11 43 42.5 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| L19K | White Mountain | 82.74 | 11 | P | | P | | 11 43 43.8 | +0.4 |
| L19K | | | | IAmb | | IAmb | | 11 43 58.5 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| K20K | Telida | 83.97 | 11 | P | | P | | 11 43 49.5 | 0.0 |
| K20K | | | | IAmb | | IAmb | | 11 43 51.0 | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| CAST | Castle Rocks | 84.38 | 11 | P | | P | | 11 43 50.1 | -1.5 |
| CAST | | | | IAmb | | IAmb | | 11 43 51.9 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| N25K | Chitina, Valde | 84.41 | 15 | P | | P | | 11 43 51.9 | 0.0 |
| F10A | Beach Ranch, E | 84.58 | 38 | P | | P | | 11 43 53.1 | 0.0 |
| BJI | Beijing | 84.75 | 315 | P | | P | | 11 43 55.5 | +1.6 |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| RND | Reindeer | 85.01 | 13 | P | | P | | 11 43 54.8 | 0.0 |
| RND | | | | IAmb | | IAmb | | 11 43 55.9 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| MCK | McKinley | 85.28 | 12 | P | | P | | 11 43 55.8 | -0.2 |
| MCK | | | | IAmb | | IAmb | | 11 43 56.9 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| M26K | Nabesna, AK | 85.48 | 16 | P | | P | | 11 43 57.0 | -0.1 |
| M26K | | | | IAmb | | IAmb | | 11 43 58.5 | |
| | comp=Z,8.5nm,1.1s | | | | | | | | |
| TX31 | Lajitas Ar. Si | 86.05 | 57 | P | | P | | 11 44 01.9 | +1.2 |
| TX31 | | | | IAmb | | IAmb | | 11 44 22.5 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| TX32 | Lajitas Array | 86.05 | 57 | P | | P | | 11 44 02.1 | +1.4 |
| TXAR | Lajitas Array | 86.05 | 57 | P | | P | | 11 44 01.8 | +1.2 |
| | comp=Z,1.2nm,0.8s,baz=219,slow=6.9,SNR=15 | | | | | | | | |
| TXAR | Lajitas Array | 86.05 | 57 | P | | P | | 11 44 02.5 | +1.9 |
| BCAR | Beaver Creek A | 86.35 | 16 | P | | P | | 11 44 01.7 | +0.5 |
| IMAR | Indian Mountai | 86.45 | 10 | P | | P | | 11 44 01.5 | -0.1 |
| MCMT | McKenzie Canyo | 86.58 | 40 | P | | P | | 11 44 03.5 | +0.5 |
| IL31 | | 86.62 | 13 | P | | P | | 11 44 01.5 | -0.9 |
| IL31 | | | | IAmb | | IAmb | | 11 44 04.4 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| ILAR | Eielson Array | 86.62 | 13 | P | | P | | 11 44 01.2 | -1.2 |
| | comp=Z,1.8nm,0.4s,baz=222,slow=4.5,SNR=38 | | | | | | | | |
| ILAR | Eielson Array | 86.62 | 13 | P | | P | | 11 44 01.9 | -0.5 |
| XLT | XiLinHaoTe | 86.72 | 319 | *e*P | | P | | 11 44 05.0 | +1.5 |
| XLT | | | | pP | | pP | | 11 45 46.3 | +1.6 |
| XLT | | | | sP | | sP | | 11 46 29.5 | -1.4 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,110nm,4.9s | | | | | | | | |
| XAN | Xi'an | 87.17 | 307 | P | | P | | 11 44 08.5 | +2.7 |
| XAN | | | | pP | | PcP | | 11 44 19.0 | +12 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,61nm,4.2s | | | | | | | | |
| PDAR | Pinedale Array | 87.65 | 43 | P | | P | | 11 44 08.3 | +0.2 |
| | comp=Z,0.8nm,0.6s,baz=204,slow=3.0,SNR=7.4 | | | | | | | | |
| PDAR | Pinedale Array | 87.65 | 43 | P | | P | | 11 44 07.3 | -0.8 |
| DAWY | Dawson | 87.78 | 16 | P | | P | | 11 44 07.3 | -0.7 |
| DAWY | | | | IAmb | | IAmb | | 11 44 09.8 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| HHC | Hu-ho-hao-te | 88.23 | 314 | *e*P | | P | | 11 44 11.0 | +0.3 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,78nm,4.5s | | | | | | | | |
| BMAR | Burnt Mountain | 89.40 | 12 | P | | P | | 11 44 15.9 | +0.5 |
| TOLK | Toolik Lake Re | 89.55 | 10 | P | | P | | 11 44 15.3 | -0.8 |
| SNAA | Sanae | 89.72 | 178 | P | | P | | 11 44 17.3 | +0.2 |
| SNAA | | | | IAmb | | IAmb | | 11 44 21.8 | |
| | comp=Z,9.7nm,1.2s | | | | | | | | |
| VNA3 | Neumayer Olymp | 89.84 | 176 | P | | P | | 11 44 18.1 | +0.5 |
| PZH | PanZhiHua | 90.00 | 298 | P | | P | | 11 44 14.5 | -4.8 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,90nm,4.0s | | | | | | | | |
| VNA2 | Neumayer--Watz | 90.29 | 177 | P | | P | | 11 44 20.2 | +0.6 |
| | baz=193,slow=2.7 | | | | | | | | |
| EDM | Edmonton | 90.62 | 33 | P | | P | | 11 44 21.0 | -0.4 |
| SONM | Songino Array | 94.53 | 319 | P | | P | | 11 44 40.4 | +0.8 |
| | comp=Z,0.7nm,0.7s,baz=120,slow=4.1,SNR=3.9 | | | | | | | | |
| YKA | Yellowknife Ar | 94.92 | 25 | P | | P | | 11 44 40.3 | -0.5 |
| | comp=Z,1.4nm,0.9s,baz=244,slow=4.2,SNR=12 | | | | | | | | |
| MKAR | Makanchi Array | 110.09 | 314 | PKiKP | | PKiKP | | 11 49 47.2 | -0.7 |
| | comp=Z,0.3nm,0.5s,baz=242,slow=0.8,SNR=8.9 | | | | | | | | |
| ARCES | ARCESS Array B | 127.25 | 350 | PKP | | PKPdf | | 11 50 19.9 | -0.1 |
| | comp=Z,1.3nm,0.5s,baz=342,slow=2.7,SNR=12 | | | | | | | | |
| ARCES | ARCESS Array B | 127.25 | 350 | | | PKiKP | | 11 50 20.6 | 0.0 |
| NB2 | NORSAR Subarra | 137.29 | 353 | PKP | | PKiKP | | 11 50 40.8 | -0.4 |
| | comp=Z,0.8nm,0.6s,baz=13,slow=4.0 | | | | | | | | |
| NOA | NORSAR Array B | 137.29 | 353 | PKP | | PKPdf | | 11 50 40.0 | +0.7 |
| | comp=Z,0.2nm,0.6s,baz=9.7,slow=3.2,SNR=3.8 | | | | | | | | |
| AKASG | Malin Array Be | 141.55 | 332 | PKhKP | | PKPpre | | 11 50 42.1 | |
| | comp=Z,0.6nm,0.3s,baz=40,slow=3.8,SNR=7.4 | | | | | | | | |
| AKASG | Malin Array Be | 141.55 | 332 | | | PKPdf | | 11 50 48.3 | +1.1 |
| BSEG | Bad Segeberg | 144.34 | 352 | *e*PKPbc | | PKPdf | | 11 50 52.0 | +0.1 |
| | baz=16,slow=2.7 | | | | | | | | |
| HLG | Helgoland | 144.38 | 354 | *e*PKPbc | | PKPdf | | 11 50 52.8 | +0.8 |
| | baz=16,slow=2.7 | | | | | | | | |
| RUE | Ruedersdorf | 145.15 | 347 | *e*PKPbc | | PKPab | | 11 50 54.6 | -0.1 |
| | baz=16,slow=2.7 | | | | | | | | |
| VLDR | Vladesti | 145.51 | 327 | ⇑P | | PKiKP | | 11 50 57.8 | -0.7 |
| TLCR | | 145.56 | 326 | ⇑P | | PKPbc | | 11 50 55.5 | 0.0 |
| BUR08 | Bucovina Ar. S | 145.59 | 332 | PKPab | | PKPab | | 11 50 57.0 | +0.2 |
| BURAR | Bucovina Array | 145.61 | 332 | ⇓P | | PKPab | | 11 50 56.8 | -0.1 |
| BURAR | Bucovina Array | 145.61 | 332 | PKPab | | PKPab | | 11 50 57.5 | +0.6 |
| BRTR | Keskin Array B | 145.74 | 314 | PKPbc | | PKPbc | | 11 50 56.5 | +0.1 |
| | comp=Z,2.3nm,0.6s,baz=70,slow=2.4,SNR=14 | | | | | | | | |
| TESR | Tescani | 145.75 | 329 | ⇑P | | PKPab | | 11 50 57.4 | +0.1 |
| FLTG | Flechtingen | 145.76 | 350 | *e*PKPbc | | PKPbc | | 11 50 56.2 | +0.4 |
| | baz=16,slow=2.7 | | | | | | | | |
| NRDL | Niedersach Rie | 145.78 | 351 | *e*PKPbc | | PKPbc | | 11 50 56.5 | +0.7 |
| | baz=16,slow=2.7 | | | | | | | | |
| CFR | Carcaliu | 145.93 | 326 | ⇓P | | PKPbc | | 11 50 57.3 | +0.7 |
| TPGR | Topolog | 145.99 | 326 | ⇓P | | PKPbc | | 11 50 57.2 | +0.4 |
| ASSE | Asse, Remlinge | 146.04 | 351 | *e*PKPbc | | PKPbc | | 11 50 57.2 | +0.6 |
| | baz=16,slow=2.7 | | | | | | | | |
| CRVS | Cervenica-Dubn | 146.12 | 337 | *e*PKP | | PKPbc | | 11 50 57.7 | +0.6 |
| VRI | Vrincioaia | 146.17 | 328 | ⇓P | | PKPbc | | 11 50 57.4 | +0.1 |
| PLOR | Plostina | 146.22 | 329 | ⇑P | | PKPab | | 11 50 58.9 | -0.5 |
| IBBN | Ibbenburen | 146.25 | 354 | *e*PKPbc | | PKPab | | 11 50 59.2 | +0.1 |
| | baz=16,slow=2.7 | | | | | | | | |
| TRPA | Tarpa | 146.34 | 335 | ⇑P | | PKPbc | | 11 50 57.1 | -0.6 |
| OSTC | Ostas | 146.36 | 344 | *e*PKP | | PKPbc | | 11 50 57.4 | -0.3 |
| HARR | Harsova | 146.36 | 326 | ⇓P | | PKiKP | | 11 51 00.4 | +0.1 |
| CLZ | Clausthal | 146.37 | 351 | *e*PKPbc | | PKPbc | | 11 50 58.7 | +1.0 |
| | baz=16,slow=2.7 | | | | | | | | |
| CHVC | Chvalec | 146.37 | 344 | *e*PKP | | PKPbc | | 11 50 57.6 | -0.1 |
| CLL | Collm | 146.41 | 348 | *e*SKPdf | | SKPdf | | 11 53 47.0 | +0.5 |
| CLL | Collm | 146.41 | 348 | | | PKPbc | | 11 50 57.4 | -0.3 |
| CLL | Collm | 146.41 | 348 | *e*PKPbc | | PKPbc | | 11 50 58.5 | +0.7 |
| | baz=16,slow=2.7 | | | | | | | | |
| CLL | Collm | 146.41 | 348 | ⇓*i*PKPbc | | PKPbc | | 11 50 58.1 | +0.3 |
| | comp=Z,26nm,0.8s | | | | | | | | |
| CLL | Collm | 146.41 | 348 | *i* PKPab | | PKPab | | 11 51 00.0 | +0.2 |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| UPC | Upice | 146.46 | 344 | *e*PKP | | PKPbc | | 11 50 58.4 | +0.5 |
| OZUR | | 146.47 | 330 | ⇓P | | PKiKP | | 11 51 05.2 | +4.7 |
| DPC | Dobruska-Polom | 146.52 | 343 | *e*PKP | | PKPbc | | 11 50 58.9 | +0.7 |
| BRG | Berggiesshubel | 146.62 | 346 | Amp | | | | 11 51 01.9 | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| BRG | Berggiesshubel | 146.62 | 346 | *e*PKPbc | | PKPbc | | 11 50 59.2 | +0.8 |
| | baz=16,slow=2.7 | | | | | | | | |
| BRG | Berggiesshubel | 146.62 | 346 | *i* PKP | | PKPbc | | 11 50 59.0 | +0.6 |
| BRG | Berggiesshubel | 146.62 | 346 | Amp | | | | 11 50 59.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | | | |
| BRG | Berggiesshubel | 146.62 | 346 | *i* x | | x | | 11 51 01.1 | |
| MORC | Moravsky Berou | 146.69 | 342 | ⇑P | | PKPbc | | 11 50 59.6 | +0.9 |
| MORC | Moravsky Berou | 146.69 | 342 | PKPdf | | PKPdf | | 11 50 54.2 | -2.0 |
| MORC | | | | | | PKPab | | 11 51 02.2 | +1.1 |
| MORC | Moravsky Berou | 146.69 | 342 | *e*PKP | | PKPbc | | 11 50 59.4 | +0.8 |
| FBE | Freiberg | 146.71 | 347 | *e*PKPbc | | PKiKP | | 11 50 59.8 | -0.9 |
| | baz=16,slow=2.7 | | | | | | | | |
| GTTG | Gottingen | 146.72 | 351 | *e*PKPbc | | PKPbc | | 11 50 59.5 | +0.9 |
| | baz=16,slow=2.7 | | | | | | | | |
| NEUB | Neuenburg | 146.75 | 349 | *e*PKPbc | | PKPbc | | 11 50 59.5 | +0.8 |
| | baz=16,slow=2.7 | | | | | | | | |
| ISR | Istrita | 146.79 | 328 | ⇑P | | PKPab | | 11 51 01.8 | +0.2 |
| MLR | Muntele Rosu | 146.83 | 329 | ⇓P | | PKPbc | | 11 51 00.3 | +1.0 |
| MLR | Muntele Rosu | 146.83 | 329 | | | PKPdf | | 11 50 54.6 | -2.0 |
| MLR | | | | | PKPab | | | 11 51 03.6 | +1.8 |
| BUG | Bochum--Univer | 147.15 | 354 | *e*PKPbc | | PKPbc | | 11 51 00.3 | +0.5 |
| | baz=16,slow=2.7 | | | | | | | | |
| KASTN | Kahler Asten | 147.26 | 353 | *e*PKPbc | | PKPbc | | 11 51 00.7 | +0.6 |
| | baz=16,slow=2.7 | | | | | | | | |
| VOIR | | 147.30 | 329 | ⇓P | | PKiKP | | 11 51 01.5 | -0.8 |
| PRU | Pruhonice | 147.31 | 345 | *e*PKP | | PKPbc | | 11 51 00.5 | +0.3 |
| MOX | Moxa | 147.32 | 349 | *e*PKPbc | | PKPbc | | 11 51 00.9 | +0.6 |
| | baz=16,slow=2.7 | | | | | | | | |
| DRGR | | 147.33 | 333 | ⇑P | | PKPbc | | 11 51 00.5 | 0.0 |
| TANN | Tannenbergstha | 147.37 | 348 | *e*PKPbc | | PKPbc | | 11 51 01.1 | +0.7 |
| | baz=16,slow=2.7 | | | | | | | | |
| WERD | Werda | 147.37 | 348 | *e*PKPbc | | PKPbc | | 11 51 01.1 | +0.6 |
| | baz=16,slow=2.7 | | | | | | | | |
| VRAC | Vranov | 147.38 | 342 | ⇓P | | PKPbc | | 11 51 01.1 | +0.6 |
| VRAC | Vranov | 147.38 | 342 | *e*PKP | | PKPbc | | 11 51 01.2 | +0.7 |
| VYHS | Vyhne | 147.40 | 339 | *e*PKP | | PKiKP | | 11 51 01.6 | -0.7 |
| JAVC | Velka Javorina | 147.46 | 341 | *e*PKP | | PKiKP | | 11 51 02.8 | +0.3 |
| WERN | Wernitzgruen | 147.51 | 348 | *e*PKPbc | | PKiKP | | 11 51 01.8 | -0.7 |
| | baz=16,slow=2.7 | | | | | | | | |
| ARR | Arges | 147.55 | 330 | ⇑P | | PKiKP | | 11 51 02.3 | -0.4 |
| KRUC | Moravsky | 147.66 | 342 | *e*PKP | | PKPbc | | 11 51 01.9 | +0.7 |
| MANZ | Manzenberg | 147.85 | 348 | *e*PKPbc | | PKPbc | | 11 51 02.6 | +0.9 |
| | baz=16,slow=2.7 | | | | | | | | |
| ROTZ | Rotzenmuhle | 148.04 | 348 | *e*PKPbc | | PKiKP | | 11 51 03.1 | -0.5 |
| | baz=16,slow=2.7 | | | | | | | | |
| MEM | Membach | 148.09 | 355 | *d*PKiKP | | PKPbc | | 11 51 02.6 | +0.4 |
| BTNL | Ternell | 148.10 | 355 | *d*PKiKP | | PKPbc | | 11 51 02.8 | +0.5 |
| BSTI | Sart Tilman | 148.15 | 356 | *d*PKiKP | | PKPbc | | 11 51 03.1 | +0.7 |
| TNS | Taunus Mts | 148.22 | 352 | *e*PKPbc | | PKPbc | | 11 51 03.2 | +0.6 |
| | baz=16,slow=2.7 | | | | | | | | |
| KHC | Kasperske Hory | 148.34 | 346 | *e*PKP | | PKPbc | | 11 51 03.2 | +0.2 |
| CKRC | Cesky Krumlov | 148.45 | 345 | *e*PKP | | PKPbc | | 11 51 03.3 | +0.1 |
| DOU | Dourbes | 148.69 | 357 | *d*PKiKP | | PKPbc | | 11 51 04.0 | +0.3 |
| BZS | Buzias | 148.73 | 333 | ⇓P | | PKPbc | | 11 51 04.5 | +0.6 |
| CONA | Conrad Observa | 148.84 | 342 | *e*P | | PKiKP | | 11 51 05.2 | -0.2 |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| HERR | Heme | 148.95 | 331 | ⇑P | | PKPbc | | 11 51 04.5 | 0.0 |
| WLF | Walferdange | 149.02 | 355 | *e*PKPbc | | PKiKP | | 11 51 06.0 | +0.4 |
| | baz=16,slow=2.7 | | | | | | | | |
| BANR | Banloc | 149.12 | 333 | ⇑P | | PKiKP | | 11 51 05.9 | 0.0 |
| MDVR | Moldovita | 149.34 | 332 | ⇑P | | PKPbc | | 11 51 03.8 | -1.8 |
| MORH | Mrgy, Hungar | 149.42 | 337 | ⇑P | | PKPbc | | 11 51 05.4 | -0.2 |
| FUR | Furstenfeldbru | 149.75 | 348 | *e*PKPbc | | PKiKP | | 11 51 07.3 | +0.1 |
| | baz=16,slow=2.7 | | | | | | | | |
| RJOB | Jochberg | 149.83 | 346 | *e*PKPbc | | PKPbc | | 11 51 07.0 | +0.4 |
| | baz=16,slow=2.7 | | | | | | | | |
| BFO | Black Forest | 150.09 | 352 | *e*PKPbc | | PKiKP | | 11 51 07.9 | 0.0 |
| | baz=16,slow=2.7 | | | | | | | | |
| KBA | Koelnbreinsper | 150.31 | 344 | *e*P | | PKPbc | | 11 51 08.4 | +0.4 |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| UBR | Ueberruh | 150.44 | 349 | *e*PKPbc | | PKiKP | | 11 51 08.6 | -0.1 |
| | baz=16,slow=2.7 | | | | | | | | |
| WATA | Walderalm | 150.48 | 347 | *i* P | | PKPbc | | 11 51 08.5 | +0.1 |
| | comp=Z,1.1nm,0.3s | | | | | | | | |
| WTTA | Wattenberg | 150.53 | 347 | *e*P | | PKPbc | | 11 51 08.8 | +0.3 |
| | comp=Z,5.6nm,0.6s,SNR=8.8 | | | | | | | | |
| MOTA | Moosalm | 150.57 | 348 | *i* P | | PKPbc | | 11 51 08.5 | -0.1 |
| | comp=Z,2.1nm,0.5s,SNR=4.3 | | | | | | | | |
| ABTA | Abfaltersbach | 150.82 | 345 | *e*P | | PKPbc | | 11 51 08.9 | -0.2 |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| FETA | Feichten | 150.96 | 348 | *e*P | | PKiKP | | 11 51 09.9 | 0.0 |
| | comp=Z,1.8nm,0.6s | | | | | | | | |

*IDC **28** 11:34:18.4±5.8, 36°.35N×70°.26E, h176km±55km, mb3.3/5, mb1 3.2/8, mb1mx2.9/45, mbtmp3.6/8, Error ellipse: s-maj=63.4km s-min=41.9km az=130.0*

**ISC 28 11:34:21.7±1.0, 36°.53N±0°.10×70°.3E±0°.1, h204km, n15, σ1§43/16, mb3.4/4, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 6.91 | 27 | P | | Pn | 11 36 01.4 | +0.6 |
| | 0.8nm,0.3s,baz=180,slow=6.0,SNR=8.0 | | | | | | | |
| AAK | | | | S | | S | 11 37 17.5 | -2.0 |
| | 0.7nm,0.3s,baz=317,slow=15,SNR=9.0 | | | | | | | |
| MKAR | Makanchi Array | 13.61 | 37 | P | | Pn | 11 37 26.9 | +0.3 |
| | 0.1nm,0.3s,baz=208,slow=12,SNR=8.2 | | | | | | | |
| PYUN | Piuthan | 13.64 | 124 | *e*P | | Pn | 11 37 24.4 | -2.9 |
| DANN | Dangsing | 14.00 | 122 | *e*P | | Pn | 11 37 30.8 | -1.0 |
| KURBB | Kurchatov Arra | 15.29 | 20 | P | | Pn | 11 37 46.5 | -0.5 |
| | 0.0nm,0.3s,baz=211,slow=10,SNR=3.1 | | | | | | | |
| KKN | Kakani | 15.39 | 120 | *e*P | | P | 11 37 50.1 | +1.1 |
| | 13nm,0.2s | | | | | | | |
| PKIN | Phulchoki | 15.61 | 121 | *e*P | | Pn | 11 37 52.7 | +1.3 |
| PKI | Pulchoki | 15.62 | 121 | *e*P | | Pn | 11 37 53.1 | +1.5 |
| | 24nm,0.5s | | | | | | | |
| GUN | Gumba | 15.74 | 119 | *e*P | | Pn | 11 37 54.4 | +1.3 |
| JIRN | Jiri | 16.11 | 119 | *e*P | | Pn | 11 37 59.1 | +1.5 |
| | 36nm,0.6s | | | | | | | |
| ZALV | Zalesovo Beam | 20.13 | 26 | P | | P | 11 38 40.3 | +0.4 |
| | 1.3nm,0.3s,baz=213,slow=10,SNR=11 | | | | | | | |
| FINES | FINESS Array B | 37.13 | 326 | P | | P | 11 41 12.8 | +0.5 |
| | 1.3nm,0.7s,baz=99,slow=7.5,SNR=4.1 | | | | | | | |
| ARCES | ARCESS Array B | 40.89 | 338 | P | | P | 11 41 44.4 | +0.9 |
| | 4.6nm,1.1s,baz=110,slow=7.1,SNR=8.9 | | | | | | | |
| NOA | NORSAR Array B | 44.00 | 323 | P | | P | 11 42 09.3 | +0.7 |
| | 0.7nm,0.9s,baz=102,slow=8.5,SNR=2.1 | | | | | | | |
| TORD | Tordi Ar. Bea | 65.14 | 268 | P | | P | 11 44 39.6 | -1.5 |
| | 0.2nm,0.6s,baz=54,slow=6.1,SNR=1.4 | | | | | | | |

*IDC **28** 11:37:43.8±1.4, 14°.39S×167°.33E, h156km±11km, mb4.2/22, mb1 4.3/23, mb1mx4.3/32, mbtmp4.6/23, MS3.0/2, Ms1 3.0/2, ms1mx2.6/61, Error ellipse: s-maj=13.1km s-min=11.5km az=123.0*

*BJI **28** 11:37:45.3±0.0, 13°.99S×167°.53E, h174km, mb4.5/31, mB4.8/18*

*NEIC **28** 11:37:46.6±2.2, 14°.52S±0°.09×167°.4E±0°.1, h177km±6km, mb4.5/59, Error ellipse: s-maj=15.5km s-min=13.1km az=70.0*

*NOU **28** 11:37:48.2, 14°.52S×167°.23E, h167km, mb4.7/25, Vanuatu Islands*

**ISC 28 11:37:45.3±0.3, 14°.45S±0°.05×167°.35E±0°.07, h170km, n199, σ1§31/212, mb4.5/58, 9C-11D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SANVU | Saraoutou | 1.01 | 188 | Pn | | Pn | 11 38 13.8 | +1.7 |
| SANVU | Saraoutou | 1.01 | 188 | P | | Pn | 11 38 14.4 | +2.4 |
| DVP | Devils Point | 3.36 | 166 | P | | Pn | 11 38 39.6 | +1.7 |
| LIFNC | LIFOU | 6.30 | 181 | Pn | | Pn | 11 39 16.2 | +0.1 |
| LIFNC | LIFOU | 6.30 | 181 | P | | Pn | 11 39 17.1 | +1.0 |
| KOUNC | Koumac, New Ca | 6.74 | 205 | P | | Pn | 11 39 24.2 | +2.3 |
| YATNC | Mamie plateau, | 7.58 | 183 | P | | Pn | 11 39 35.7 | +2.6 |
| DZM | Mont Dzumac | 7.63 | 186 | P | | Pn | 11 39 34.8 | +1.0 |
| | 7.7nm,0.3s,baz=352,slow=7.8,SNR=89 | | | | | | | |
| DZM | | | | S | | Sn | 11 41 01.1 | +1.5 |
| | 0.9nm,0.3s,baz=129,slow=22,SNR=1.0 | | | | | | | |
| DZM | Mont Dzumac | 7.63 | 186 | Pn | | Pn | 11 39 36.2 | +2.4 |
| DZM | Mont Dzumac | 7.63 | 186 | P | | Pn | 11 39 35.8 | +1.9 |
| NOUC | Port Laguerre | 7.68 | 187 | P | | Pn | 11 39 36.6 | +2.2 |
| ONTNC | Ouen Toro | 7.87 | 186 | Pn | | Pn | 11 39 37.9 | +1.1 |
| ONTNC | Ouen Toro | 7.87 | 186 | P | | Pn | 11 39 38.7 | +1.9 |
| OUENC | Ouen Island, N | 7.94 | 183 | Pn | | Pn | 11 39 39.4 | +1.5 |
| OUENC | Ouen Island, N | 7.94 | 183 | P | | Pn | 11 39 40.0 | +2.1 |
| PINNC | Pines Island, | 8.12 | 179 | | | Pn | 11 39 42.8 | +2.5 |
| PINNC | Pines Island, | 8.12 | 179 | P | | Pn | 11 39 42.5 | +2.2 |
| HNR | Honiara | 8.79 | 304 | LR | | LR | 11 42 29.7 | |
| | comp=Z,81nm,20.1s,baz=124,slow=33 | | | | | | | |
| HNR | Honiara | 8.79 | 304 | Pn | | Pn | 11 39 53.6 | +4.4 |
| RK1H | Rockhampton Ha | 18.25 | 238 | P | | Pn | 11 41 48.6 | +0.7 |
| EIDS | Eidsvold | 18.74 | 232 | P | | Pn | 11 41 53.9 | +0.2 |
| EIDS | Eidsvold | 18.74 | 232 | P | | Pn | 11 41 53.9 | +0.2 |
| AFI | Afiamalu | 20.25 | 91 | P | | P | 11 42 08.7 | +1.1 |
| | 137nm,0.9s,baz=44,slow=4.4,SNR=10 | | | | | | | |
| AFI | Afiamalu | 20.25 | 91 | P | | Pn | 11 42 11.9 | +0.2 |
| AFI | Afiamalu | 20.25 | 91 | P | | Pn | 11 42 12.9 | +1.2 |
| PMG | Port Moresby | 20.38 | 282 | P | | Pn | 11 42 12.9 | -0.4 |
| PMG | | | | IAmb | | IAmb | 11 42 13.5 | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| CTA | Charters Tower | 20.91 | 251 | P | | P | 11 42 14.7 | +0.1 |
| | comp=Z,6.4nm,0.7s,baz=86,slow=9.2,SNR=9.7 | | | | | | | |
| CTA | Charters Tower | 20.91 | 251 | P | | P | 11 42 15.8 | +1.2 |
| RMQ | Roma | 21.11 | 233 | P | | P | 11 42 18.7 | +2.0 |
| ARMA | Armidale | 21.50 | 220 | P | | P | 11 42 21.9 | +1.0 |
| ARMA | | | | IAmb | | IAmb | 11 42 23.5 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| NIUE | Niue | 22.23 | 105 | P | | P | 11 42 29.5 | +1.2 |
| MTSU | Mount Surprise | 22.41 | 257 | P | | P | 11 42 31.1 | +1.1 |
| COEN | Coen | 23.44 | 268 | P | | P | 11 42 40.7 | +1.2 |
| COEN | | | | IAmb | | IAmb | 11 42 41.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| COEN | Coen | 23.44 | 268 | P | | P | 11 42 40.7 | +1.2 |
| QLP | Quilpie | 24.74 | 237 | P | | P | 11 42 52.5 | +1.3 |
| URZ | Urewera | 25.25 | 162 | P | | P | 11 42 55.9 | +0.3 |
| | comp=Z,3.1nm,0.5s,baz=335,slow=0.6,SNR=5.6 | | | | | | | |
| URZ | Urewera | 25.25 | 162 | P | | P | 11 42 56.4 | +0.8 |
| BKZ | Black Stump Fm | 25.91 | 164 | P | | P | 11 43 01.6 | 0.0 |
| BKZ | | | | IAmb | | IAmb | 11 43 15.6 | |
| | comp=Z,5.4nm,0.5s | | | | | | | |
| CMSA | Cobar Meteorol | 26.12 | 226 | P | | P | 11 43 05.6 | +2.0 |
| STKA | Stephens Creek | 29.24 | 229 | P | | P | 11 43 32.7 | +1.4 |
| | comp=Z,6.7nm,0.4s,baz=49,slow=9.5,SNR=24 | | | | | | | |
| STKA | | | | PcP | | PcP | 11 46 34.4 | +0.2 |
| | comp=Z,7.9nm,0.7s,baz=56,slow=1.2,SNR=12 | | | | | | | |
| STKA | Stephens Creek | 29.24 | 229 | P | | P | 11 43 32.7 | +1.4 |
| STKA | Stephens Creek | 29.24 | 229 | P | | P | 11 43 33.0 | +1.7 |
| RPZ | Rata Peaks | 29.34 | 175 | P | | P | 11 43 31.8 | -0.3 |
| | comp=Z,4.5nm,0.5s,baz=327,slow=3.2,SNR=6.3 | | | | | | | |
| TOO | Toolangi | 30.12 | 216 | P | | P | 11 43 40.7 | +1.6 |
| TOO | | | | IAmb | | IAmb | 11 43 52.5 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| WR0 | Warramunga Arr | 31.78 | 255 | P | | P | 11 43 53.1 | -0.8 |
| WB0 | Warramunga Arr | 31.91 | 256 | P | | P | 11 43 54.2 | -0.8 |
| WB0 | | | | IAmb | | IAmb | 11 43 54.6 | |
| | comp=Z,6.9nm,0.6s | | | | | | | |
| WB2 | Warramunga Arr | 31.96 | 255 | P | | P | 11 43 54.6 | -0.8 |
| WB2 | | | | IAmb | | IAmb | 11 43 56.0 | |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 31.96 | 255 | P | | P | 11 43 54.5 | -1.0 |
| WRAB | | | | IAmb | | IAmb | 11 44 10.9 | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| WRA | Warramunga Arr | 31.97 | 255 | P | | P | 11 43 53.9 | -1.6 |
| | comp=Z,2.9nm,0.6s,baz=86,slow

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,130nm,5.3s | | | | | | | |
| **LZH** | **Lanzhou** | **78.19** | **312** | ⇑P | **P** | **P** | 11 49 27.0 | +0.7 |
| LZH | | | | pP | pwP | | 11 50 12.0 | +2.2 |
| LZH | | | | sP | sP | | 11 50 32.5 | +7.4 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **ANM** | **Nome** | **81.47** | **12** | P | **P** | **P** | 11 49 43.5 | +0.4 |
| ANM | | | | IAmb | IAmb | | 11 50 11.4 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **L19K** | **White Mountain** | **81.94** | **17** | P | **P** | **P** | 11 49 46.4 | +0.8 |
| L19K | | | | IAmb | IAmb | | 11 50 00.4 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **81.95** | **324** | P | **P** | **P** | 11 49 46.8 | +0.6 |
| ULN | | | | IAmb | IAmb | | 11 49 47.8 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **82.32** | **324** | P | **P** | **P** | 11 49 47.7 | -0.3 |
| | comp=Z,1.8nm,0.6s,baz=145,slow=6.8,SNR=13 | | | | | | | |
| **SONM** | **Songino Array** | **82.32** | **324** | P | **P** | **P** | 11 49 48.8 | +0.7 |
| **GTA** | **Gaotai** | **82.53** | **314** | *e*P | **P** | **P** | 11 49 50.5 | +1.2 |
| GTA | | | | pP | pwP | | 11 50 33.8 | +0.6 |
| GTA | | | | sP | sP | | 11 50 47.8 | -0.6 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **82.64** | **19** | P | **P** | **P** | 11 49 49.3 | +0.1 |
| RC01 | | | | IAmb | IAmb | | 11 49 58.5 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **CAST** | **Castle Rocks** | **83.70** | **17** | P | **P** | **P** | 11 49 53.9 | -0.7 |
| CAST | | | | IAmb | IAmb | | 11 49 54.5 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **HOPS** | **Hopland Field** | **83.80** | **47** | P | **P** | **P** | 11 49 55.8 | +0.1 |
| **KMRM** | **Mail Ridge** | **83.85** | **46** | P | **P** | **P** | 11 49 56.7 | +0.6 |
| **O02D** | **Mt. Diablo Mer** | **84.48** | **46** | P | **P** | **P** | 11 50 00.7 | +1.5 |
| O02D | | | | IAmb | IAmb | | 11 50 01.2 | |
| | comp=Z,8.8nm,0.7s | | | | | | | |
| **ORV** | **Oroville** | **85.14** | **47** | P | **P** | **P** | 11 50 02.6 | +0.2 |
| **YBH** | **Yreka Blue Hor** | **85.16** | **45** | P | **P** | **P** | 11 50 03.3 | +0.7 |
| YBH | | | | IAmb | IAmb | | 11 50 28.5 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **H21K** | **Melozitna Rive** | **85.25** | **15** | P | **P** | **P** | 11 50 03.0 | +0.6 |
| **IMAR** | **Indian Mountai** | **85.27** | **15** | P | **P** | **P** | 11 50 03.1 | +0.6 |
| **CMB** | **Columbia Colle** | **85.36** | **49** | P | **P** | **P** | 11 50 03.8 | +0.2 |
| **IL31** | | **86.23** | **18** | P | **P** | **P** | 11 50 07.2 | 0.0 |
| IL31 | | | | IAmb | IAmb | | 11 50 07.6 | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.23** | **18** | P | **P** | **P** | 11 50 05.8 | -1.4 |
| | comp=Z,6.8nm,0.7s,baz=238,slow=4.9,SNR=69 | | | | | | | |
| ILAR | | | | PKKPbc | **PKKPdf** | | 12 08 03.8 | +2.8 |
| | comp=Z,0.3nm,0.4s,baz=358,slow=1.3,SNR=6.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.23** | **18** | P | **P** | **P** | 11 50 06.7 | -0.5 |
| **J25K** | **Salcha River,** | **86.58** | **18** | P | **P** | **P** | 11 50 09.1 | +0.1 |
| J25K | | | | IAmb | IAmb | | 11 50 09.2 | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **86.69** | **21** | P | **P** | **P** | 11 50 09.2 | -0.4 |
| **K05A** | **Summer Lake** | **86.80** | **45** | P | **P** | **P** | 11 50 10.9 | +0.2 |
| K05A | | | | IAmb | IAmb | | 11 50 12.1 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **87.00** | **175** | P | **P** | **P** | 11 50 09.8 | -1.1 |
| BELA | | | | IAmb | IAmb | | 11 50 11.1 | |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.03** | **49** | P | **P** | **P** | 11 50 12.3 | +0.3 |
| | comp=Z,2.3nm,0.8s,baz=229,slow=6.7,SNR=14 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.03** | **49** | P | **P** | | 11 50 12.4 | +0.4 |
| **NV11** | **Mina Array Sit** | **87.14** | **49** | P | **P** | | 11 50 12.7 | +0.3 |
| **EGAK** | **Eagle** | **88.02** | **20** | P | **P** | **P** | 11 50 15.9 | +0.2 |
| EGAK | | | | IAmb | IAmb | | 11 50 18.8 | |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.04** | **51** | P | **P** | **P** | 11 50 17.0 | +0.3 |
| **TOLK** | **Toolik Lake Re** | **88.36** | **14** | P | **P** | **P** | 11 50 17.1 | -0.3 |
| **BMAR** | **Burnt Mountain** | **88.78** | **17** | P | **P** | **P** | 11 50 20.4 | +1.0 |
| **TIXI** | **Tiksi** | **89.71** | **349** | P | **P** | **P** | 11 50 22.8 | -0.7 |
| TIXI | | | | IAmb | IAmb | | 11 50 24.0 | |
| | comp=Z,9.9nm,1.2s | | | | | | | |
| **U15A** | **North Rim** | **90.90** | **53** | | | **P** | 11 50 31.0 | +0.7 |
| U15A | | | | IAmb | IAmb | | 11 50 31.9 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **WMQ** | **Urumqi** | **92.59** | **315** | *e*P | **P** | **P** | 11 50 38.3 | +0.7 |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **92.99** | **45** | P | **P** | **P** | 11 50 40.7 | +1.0 |
| **SNAA** | **Sanae** | **93.83** | **183** | P | **P** | **P** | 11 50 41.9 | -1.0 |
| **SNAA** | **Sanae** | **93.83** | **183** | P | **P** | **P** | 11 50 41.7 | -1.2 |
| **VNA3** | **Neumayer Olymp** | **94.50** | **181** | P | **P** | **P** | 11 50 44.8 | -1.1 |
| **PDAR** | **Pinedale Array** | **94.70** | **47** | P | **P** | **P** | 11 50 46.8 | -0.7 |
| | comp=Z,0.4nm,0.6s,baz=216,slow=4.5,SNR=4.0 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **94.76** | **182** | P | **P** | **P** | 11 50 46.3 | -0.8 |
| | baz=182,slow=4.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **96.07** | **61** | P | **P** | **P** | 11 50 53.4 | -0.6 |
| | comp=Z,0.2nm,0.6s,baz=217,slow=5.6,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **97.05** | **316** | P | | Pdif | 11 50 58.3 | +0.3 |
| | comp=Z,4.5nm,0.7s,baz=93,slow=6.3,SNR=51 | | | | | | | |
| MKAR | | | | PKiKP | **PKiKP** | | 11 55 32.5 | -0.4 |
| | comp=Z,0.3nm,0.5s,baz=172,slow=0.7,SNR=9.7 | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPbc** | | 12 07 37.4 | -2.1 |
| | comp=Z,0.3nm,0.5s,baz=254,slow=4.0,SNR=6.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **97.05** | **316** | | **PKiKP** | | 11 55 32.2 | -0.8 |
| **ZALV** | **Zalesovo Beam** | **97.21** | **324** | P | **P** | | 11 50 57.6 | -0.8 |
| | comp=Z,3.9nm,0.7s,baz=113,slow=4.2,SNR=20 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.26** | **27** | P | | **P** | 11 50 57.6 | -0.7 |
| | comp=Z,1.4nm,0.7s,baz=254,slow=4.6,SNR=18 | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | | 12 07 36.2 | -3.2 |
| | comp=Z,0.2nm,0.5s,baz=75,slow=2.5,SNR=6.4 | | | | | | | |
| **NRIK** | **Noril'sk** | **99.84** | **339** | P | | **Pdif** | 11 51 08.2 | -1.6 |
| | comp=Z,1.6nm,0.3s,baz=133,slow=1.4,SNR=5.4 | | | | | | | |
| **HAMF** | **Hammerfest** | **119.60** | **347** | *e*P | | **PKPdf** | 11 56 13.5 | -0.7 |
| **ARA0** | **ARCESS Array S** | **120.00** | **345** | *e*P | | **PKPdf** | 11 56 14.8 | -0.3 |
| **ARCES** | **ARCESS Array B** | **120.00** | **345** | PKP | | **PKPdf** | 11 56 14.9 | -0.2 |
| | comp=Z,5.1nm,0.3s,baz=73,slow=1.9,SNR=224 | | | | | | | |
| **KLMR** | **Klimovskoe** | **120.47** | **333** | *e*PKPdf | | **PKPdf** | 11 56 14.4 | -1.7 |
| KLMR | | | | AMP | | | 11 56 16.4 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **KTK1** | **Kautokeino** | **120.93** | **346** | *e*P | | **PKPdf** | 11 56 16.1 | -0.7 |
| **JETT** | **Jettan, Norway** | **121.16** | **347** | *e*P | | **PKiKP** | 11 56 17.7 | +0.3 |
| **TRO** | **Tromso** | **121.41** | **348** | *e*P | | **PKPdf** | 11 56 17.1 | -0.6 |
| **STEI** | **Steigen** | **123.58** | **348** | *e*P | | **PKPdf** | 11 56 21.8 | -0.1 |
| **BOSA** | **Boshof** | **123.64** | **220** | PKP | | **PKPdf** | 11 56 22.6 | -1.0 |
| | comp=Z,2.7nm,0.7s,baz=24,slow=1.2,SNR=8.5 | | | | | | | |
| **FAUS** | **Fauske** | **124.03** | **347** | *e*P | | **PKPdf** | 11 56 22.5 | -0.3 |
| **KBZ** | **Khabaz** | **124.62** | **313** | PKP | | **PKiKP** | 11 56 24.8 | -0.1 |
| | comp=Z,2.1nm,0.7s,baz=134,slow=6.6,SNR=7.5 | | | | | | | |
| **MOR8** | **Moi Rana** | **125.23** | **347** | *e*P | | **PKPdf** | 11 56 24.0 | -1.2 |
| **KONS** | **Konsvik** | **125.24** | **348** | *e*P | | **PKPdf** | 11 56 25.1 | 0.0 |
| **FINES** | **FINESS Array B** | **125.49** | **338** | PKP | | **PKPdf** | 11 56 25.7 | -0.1 |
| | comp=Z,4.6nm,0.6s,baz=42,slow=2.3,SNR=7.0 | | | | | | | |
| **NSS** | **Namsos** | **127.18** | **347** | *e*P | | **PKiKP** | 11 56 29.8 | +0.3 |
| **LSZ** | **Lusaka** | **129.98** | **235** | PKP | | **PKPdf** | 11 56 35.8 | -0.1 |
| | comp=Z,3.8nm,0.7s,baz=113,slow=2.0,SNR=8.6 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **130.37** | **345** | PKPdf | | **PKiKP** | 11 56 35.5 | -0.5 |
| | comp=Z,0.7nm,0.5s,baz=31,slow=1.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **130.37** | **345** | PKP | | **PKPdf** | 11 56 34.5 | -0.6 |
| | comp=Z,2.4nm,0.7s,baz=34,slow=2.0,SNR=16 | | | | | | | |
| NOA | | | | SKPbc | | **SKPbc** | 11 59 43.4 | +0.7 |
| | comp=Z,1.4nm,0.8s,baz=32,slow=2.9,SNR=8.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **130.55** | **326** | PKP | | **PKPdf** | 11 56 35.1 | -0.7 |
| | comp=Z,1.2nm,0.4s,baz=47,slow=2.6,SNR=13 | | | | | | | |
| AKASG | | | | SKPbc | | **SKPab** | 11 59 44.4 | +0.7 |
| | comp=Z,1.7nm,0.6s,baz=47,slow=4.3,SNR=12 | | | | | | | |
| **AKASG** | **Malin Array Be** | **130.55** | **326** | PKPdf | | **PKiKP** | 11 56 36.5 | -0.1 |
| **BZK** | **Bozkurt** | **131.38** | **314** | ⇓P | | **PKiKP** | 11 56 42.1 | +3.5 |
| **ASK** | **Askoy** | **132.22** | **348** | ⇑*e*Pdif | | **Pdif** | 11 53 33.2 | -0.8 |
| **BER** | **Bergen** | **132.29** | **348** | *e*Pdif | | **Pdif** | 11 53 33.3 | -1.0 |
| **BRTR** | **Keskin Array B** | **132.38** | **311** | PKP | | **PKPdf** | 11 56 39.6 | -0.2 |
| | comp=Z,1.6nm,0.6s,baz=144,slow=4.1,SNR=8.5 | | | | | | | |
| BRTR | | | | SKPbc | | **SKPab** | 11 59 52.3 | +0.1 |
| | comp=Z,1.0nm,0.8s,baz=72,slow=4.0,SNR=6.7 | | | | | | | |
| **TLCR** | | **133.53** | **320** | ⇑P | | **PKPdf** | 11 56 41.9 | +0.4 |
| **CFR** | **Carcaliu** | **133.95** | **320** | ⇓P | | **PKiKP** | 11 56 43.3 | -0.4 |
| **TIRR** | **Tirgusor** | **134.12** | **319** | ⇓P | | **PKPdf** | 11 56 42.1 | -0.6 |
| **TLBR** | **Topalu** | **134.31** | **319** | ⇓P | | **PKiKP** | 11 56 44.6 | +0.2 |
| **BURAR** | **Bucovina Array** | **134.43** | **324** | ⇑P | | **PKiKP** | 11 56 45.1 | +0.4 |
| **VRI** | **Vrincioaia** | **134.47** | **322** | ⇑P | | **PKPdf** | 11 56 42.8 | -0.6 |
| **NEHR** | **Nehoiu** | **134.96** | **321** | ⇓P | | **PKPdf** | 11 56 43.6 | -0.7 |
| **MLR** | **Muntele Rosu** | **135.14** | **322** | ⇑P | | **PKPdf** | 11 56 42.6 | -2.2 |
| **CRVS** | **Cervenica-Dubn** | **135.69** | **328** | *e*PKP | | **PKiKP** | 11 56 48.7 | +1.6 |
| **VOIR** | | **135.70** | **322** | ⇓P | | **PKiKP** | 11 56 47.0 | -0.4 |
| **ARR** | **Arges** | **135.95** | **322** | ⇑P | | **PKiKP** | 11 56 47.3 | -0.6 |
| **HUMR** | **Humele** | **136.22** | **321** | ⇓P | | **PKPdf** | 11 56 46.6 | 0.0 |
| **DRGR** | | **136.30** | **325** | ⇓P | | **PKPdf** | 11 56 47.2 | +0.4 |
| **MORC** | **Moravsky Berou** | **137.02** | **331** | *e*PKP | | **PKiKP** | 11 56 49.8 | -0.1 |
| **OSTC** | **Ostas** | **137.06** | **333** | *e*PKPDF | | **PKPdf** | 11 56 48.4 | +0.4 |
| **GZR** | **Gura Zlata** | **137.07** | **323** | ⇓P | | **PKPdf** | 11 56 48.5 | +0.3 |
| **DPC** | **Dobruska-Polom** | **137.16** | **333** | *e*PKPDF | | **PKPdf** | 11 56 49.1 | +0.8 |
| **VYHS** | **Vyhne** | **137.28** | **329** | *e*PKP | | **PKiKP** | 11 56 49.9 | -0.5 |
| **BRG** | **Berggiesshubel** | **137.79** | **335** | *e*PKP | | **PKPdf** | 11 56 50.2 | +0.9 |
| BRG | | | | Amp | | | 11 56 53.2 | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **CLL** | **Collm** | **137.83** | **336** | ⇓*i*PKiKP | | **PKiKP** | 11 56 51.6 | +0.2 |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **KRUC** | **Moravsky** | **138.06** | **331** | *e*PKP | | **PKiKP** | 11 56 52.4 | +0.5 |
| **PRU** | **Pruhonice** | **138.21** | **334** | *e*PKPDF | | **PKPdf** | 11 56 50.1 | 0.0 |
| **VTS** | **Vitosha** | **138.30** | **319** | ⇑P | | **PKPdf** | 11 56 51.4 | +0.6 |
| **PBCC** | **Pribram** | **138.67** | **334** | *e*PKPDF | | **PKiKP** | 11 56 53.1 | -0.1 |
| **MORH** | **Mrgy, Hungar** | **138.87** | **327** | ⇓P | | **PKPdf** | 11 56 50.7 | -0.7 |
| **CONA** | **Conrad Observa** | **139.11** | **331** | *e*P | | **PKiKP** | 11 56 54.6 | +0.3 |
| | comp=Z,1.8nm,0.4s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **139.18** | **333** | *e*PKPDF | | **PKPdf** | 11 56 51.8 | -0.2 |
| **KHC** | **Kasperske Hory** | **139.27** | **334** | *e*PKPDF | | **PKiKP** | 11 56 54.1 | -0.4 |
| **MOA** | **Molln** | **139.91** | **332** | *i* P | | **PKiKP** | 11 56 55.5 | -0.3 |
| | comp=Z,2.7nm,0.5s | | | | | | | |
| **WATA** | **Walderalm** | **141.50** | **333** | *e*P | | **PKiKP** | 11 56 59.2 | -0.1 |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **141.53** | **333** | *e*P | | **PKPdf** | 11 56 53.2 | -3.3 |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| WTTA | | | | *i* P | | **PKiKP** | 11 56 59.4 | +0.1 |
| | comp=Z,2.6nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **141.53** | **332** | *i* P | | **PKiKP** | 11 56 58.1 | -1.2 |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **MOTA** | **Moosalm** | **141.70** | **334** | *e*P | | **PKiKP** | 11 56 59.6 | -0.1 |
| | comp=Z,3.4nm,0.4s | | | | | | | |
| **RETA** | **Reutte** | **141.73** | **334** | *i* P | | **PKPdf** | 11 56 53.7 | -3.0 |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **142.11** | **334** | *e*P | | **PKPdf** | 11 56 54.0 | -3.5 |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **KEST** | **Kesra** | **151.04** | **321** | PKPbc | | **PKiKP** | 11 57 19.4 | +0.2 |
| | comp=Z,28nm,0.6s,baz=287,slow=0.7,SNR=30 | | | | | | | |
| **ESDC** | **Sonseca Array** | **153.74** | **345** | PKPbc | | **PKiKP** | 11 57 24.5 | -0.1 |
| | comp=Z,1.4nm,0.7s,baz=24,slow=3.5,SNR=7.4 | | | | | | | |
| ESDC | | | | PKPab | | **PKPab** | 11 57 38.4 | +0.5 |
| | comp=Z,2.7nm,0.8s,baz=8.7,slow=5.4,SNR=8.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.01** | **266** | PKP | | **PKPdf** | 11 57 29.6 | -1.3 |
| | comp=Z,0.7nm,0.6s,baz=350,slow=1.0,SNR=5.3 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | 11 58 32.4 | +0.3 |
| | comp=Z,1.6nm,0.8s,baz=103,slow=4.0,SNR=7.8 | | | | | | | |

**ZUR 28 11:49:13.9, 46.85N×8.81E, *h*2km±2km, MLh0.1/6, 1C, Error ellipse: s-maj=4.4km s-min=0.8km az=353.0, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LLS** | **Linth-Limmern** | **0.14** | **89** | Sg | Sg | 11 49 19.0 | +0.4 |
| **PANIX** | **Pigniu (Panix)** | **0.21** | **95** | Pg | Pg | 11 49 18.3 | +0.3 |
| PANIX | | | | Sg | Sg | 11 49 21.2 | +0.4 |
| **NALPS** | **Val Nalps** | **0.25** | **189** | ⇑Pg | Pg | 11 49 19.4 | +0.6 |
| **BNALP** | **Bannalp** | **0.26** | **276** | Pg | Pg | 11 49 19.5 | +0.5 |
| BNALP | | | | Sg | Sg | 11 49 23.2 | +0.8 |
| **PLONS** | **Plons/SG** | **0.44** | **62** | Sg | Sg | 11 49 29.0 | +0.8 |

*IDC **28** 11:49:58.9±2.4, 15.96S×178.53W, h0km, mb3.8/3, mb1 4.2/3, mb1mx3.5/36, mbtmp3.8/3, Error ellipse: s-maj=282.2km s-min=32.0km az=158.0*
*NEIC **28** 11:51:04.8±2.2, 19.0S±0.1×179.9W±0.2, h552km±16km, mb4.1/16, Error ellipse: s-maj=38.5km s-min=9.4km az=59.0*

**ISC 28 11:51:04.6±1.9, 18.9S±0.2×179.9W±0.3, h550km, n22, σ1s21/21, mb4.0/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.29** | **301** | P | **P** | **11 52 16.1** | **+0.3** |
| **URZ** | **Urewera** | **19.43** | **187** | P | **P** | **11 54 52.8** | **-2.5** |
| **QRZ** | **Quartz Range** | **22.76** | **195** | P | **P** | **11 55 25.4** | **+0.1** |
| **TOO** | **Toolangi** | **35.43** | **231** | P | **P** | **11 57 16.3** | **+1.4** |
| TOO | | | | IAmb | IAmb | 11 57 34.0 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **41.67** | **242** | P | **P** | **11 58 05.8** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 11 58 13.3 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.87** | **261** | P | **P** | **11 58 14.2** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 11 58 31.5 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.03** | **261** | P | **P** | **11 58 14.5** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 11 58 19.0 | |
| | comp=Z,6.2nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.05** | **261** | P | **P** | **11 58 14.9** | **-1.6** |
| **WRA** | **Warramunga Arr** | **43.06** | **261** | P | **P** | **11 58 16.0** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=91,slow=7.7,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.06** | **261** | P | **P** | **11 58 15.4** | **-1.2** |
| **AS31** | **Alice Springs** | **43.16** | **255** | P | **P** | **11 58 17.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.16** | **255** | P | **P** | **11 58 17.9** | **+0.6** |
| | comp=Z,2.7nm,0.5s,baz=88,slow=8.6,SNR=80 | | | | | | |
| **ASAR** | **Alice Springs** | **43.16** | **255** | P | **P** | **11 58 17.1** | **-0.3** |
| **MTN** | **Manton Dam** | **47.37** | **270** | P | **P** | **11 58 48.5** | **-1.1** |
| MTN | | | | IAmb | IAmb | 11 59 13.6 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **48.99** | **265** | P | **P** | **11 59 00.7** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 11 59 09.9 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **49.41** | **283** | P | **P** | **11 59 04.1** | **-0.6** |
| FAKI | | | | IAmb | IAmb | 11 59 05.2 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.47** | **262** | P | **P** | **11 59 17.9** | **-1.8** |
| **MMRI** | **Maumere** | **56.91** | **272** | P | **P** | **11 59 59.1** | **+1.1** |
| **VNDA** | **Vanda** | **59.31** | **185** | P | **P** | **12 00 14.1** | **+0.9** |
| **QSPA** | **South Pole Qui** | **71.12** | **180** | P | **P** | **12 01 26.8** | **-0.8** |
| QSPA | | | | IAmb | IAmb | 12 01 32.3 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.74** | **58** | P | P | 12 02 37.0 | -19 |
| | comp=Z,0.4nm,0.7s,baz=224,slow=5.9,SNR=5.4 | | | | | | |
| **SNAA** | **Sanae** | **89.60** | **179** | P | **P** | **12 03 04.3** | **+0.8** |

**IDC 28 12:08:19.9±999.0, 24.55N×44.94E, h0km, Error ellipse: s-maj=1379.0km s-min=318.7km az=12.0, Western Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **27.75** | **18** | *i* | | 14 56 20.0 | |
| | baz=206,slow=318,SNR=1.0 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **62.63** | **352** | *i* | | 15 30 00.0 | |
| | baz=169,slow=329,SNR=1.2 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **41.73** | **35** | *i* | | 16 23 30.0 | |
| | baz=243,slow=324,SNR=1.1 | | | | | | |

**NEIC 28 12:46:09.0±1.2, 37.07N±0.01×97.74W±0.01, h4km±4km, mb_Lg2.5/3, Error ellipse: s-maj=2.0km s-min=0.9km az=222.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **0.99** | **99** | | Pg | 12 46 27.4 | -0.6 |
| T35A | | | | Sg | Sg | 12 46 40.6 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.23** | **236** | Pg | Pn | 12 46 33.4 | +0.4 |
| U32A | | | | Sg | Sg | 12 46 47.0 | -1.6 |
| **R32A** | **Long Quarter,** | **1.55** | **330** | Pn | Pn | 12 46 37.4 | -0.1 |
| **OKCFA** | **Oklahoma City** | **1.67** | **172** | Pn | Pn | 12 46 38.9 | -0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.68** | **172** | | Pb | 12 46 39.9 | -0.6 |
| **FNO** | **Franklin** | **1.83** | **171** | Pn | Pn | 12 46 41.4 | 0.0 |
| **TUL1** | **Leonard** | **1.95** | **126** | Pn | Pn | 12 46 43.9 | +0.9 |
| **KSU1** | **Kansas State U** | **2.21** | **23** | Pn | Pn | 12 46 47.1 | +0.6 |
| **CBKS** | **Cedar Bluff** | **2.35** | **318** | Pn | Pn | 12 46 48.6 | +0.1 |
| **X34A** | **Smith Ranch, M** | **2.47** | **182** | Pn | Pn | 12 46 50.3 | +0.2 |
| **X37A** | **Clayton** | **3.14** | **142** | Pn | Pn | 12 46 58.6 | -0.6 |
| **HHAR** | **Hobbs** | **3.15** | **103** | Pn | Pn | 12 46 59.2 | -0.2 |
| **S39A** | **Bolivar** | **3.57** | **79** | Pn | Pn | 12 47 05.9 | +0.7 |
| **U40A** | **Yellville** | **3.99** | **99** | Pn | Pn | 12 47 11.9 | +1.0 |
| **MIAR** | **Mount Ida** | **4.22** | **126** | Pn | Pn | 12 47 14.0 | -0.1 |
| **MGMO** | **Mountain Grove** | **4.37** | **87** | Pn | Pn | 12 47 16.5 | +0.3 |
| **Z38A** | **Mt. Pleasant** | **4.42** | **149** | Pn | Pn | 12 47 17.3 | +0.4 |
| **R40A** | **Maddies Statio** | **4.50** | **73** | Pn | Pn | 12 47 18.4 | +0.4 |
| **FCAR** | **Ozark Folk Cen** | **4.67** | **103** | Pn | Pn | 12 47 21.2 | +0.9 |
| **X40A** | **Basin Creek Fa** | **4.75** | **121** | Pn | Pn | 12 47 21.4 | +0.1 |
| **WHAR** | **Wooly Hollow** | **4.75** | **110** | Pn | Pn | 12 47 22.5 | +1.1 |
| **W41B** | **Gary Mavity, V** | **4.83** | **111** | Pn | Pn | 12 47 22.2 | -0.3 |
| **CCM** | **Cathedral Cave** | **5.25** | **77** | Pn | Pn | 12 47 28.7 | +0.4 |
| CCM | | | | IAmb_Lg | | 12 48 51.8 | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **LCAR** | **Lake Charles** | **5.39** | **99** | Pn | Pn | 12 47 30.1 | -0.1 |
| **HDBT** | **Hernando Brdge** | **6.50** | **105** | IAmb_Lg | | 12 49 38.1 | |
| | comp=Z,389nm,0.8s | | | | | | |

*CNRM **28** 13:14:15.9, 35.53N×3.69W, h8km, ml2.7*
*MDD **28** 13:14:20.7±0.8, 35.46N×3.76W, h11km±5km, mb_Lg2.8/8, Error ellipse: s-maj=4.2km s-min=3.2km az=172.0*
*SFS **28** 13:14:21.0, 35.45N×3.74W, h22km, ML3.0, ALBORAN SUR*
*INMG **28** 13:14:21.9±1.3, 35.49N×3.73W, h18km±5km, ML2.5, Error ellipse: s-maj=3.4km s-min=3.1km az=16.0*

**ISC 28 13:14:18.5±1.2, 35.45N±0.03×3.78W±0.03, h15km±9km, n28, σ1s54/50, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOG** | **Mont Gurugu** | **0.68** | **109** | P | Pg | 13 14 25.2 | -6.5 |
| GOG | | | | S | **Sg** | **13 14 39.0** | **-1.7** |
| **EMEL** | **Melilla** | **0.69** | **102** | Pg | **Pn** | **13 14 34.1** | **+0.5** |
| EMEL | | | | Sg | **Sb** | **13 14 42.3** | **+0.9** |
| **EALB** | **Alboran** | **0.78** | **51** | Pg | **Pn** | **13 14 34.6** | **-0.3** |
| EALB | | | | Sg | **Sb** | **13 14 44.8** | **+0.8** |
| **TAF** | **Taforalt** | **1.28** | **119** | P | **Pn** | **13 14 41.1** | **-0.8** |
| **CHEFC** | **Chefchaouen** | **1.32** | **256** | P | **Pn** | **13 14 42.5** | **0.0** |
| **SMIR** | **Smir Dam** | **1.33** | **281** | P | **Pg** | **13 14 44.5** | **+0.5** |
| SMIR | | | | S | **Sg** | **13 15 00.8** | **-0.5** |
| **CEU** | **Ceuta** | **1.37** | **290** | P | **Pn** | **13 14 41.9** | **-1.2** |
| CEU | | | | S | **Sb** | **13 14 56.5** | **-4.7** |
| **EMIJ** | **Mijas** | **1.38** | **324** | Pn | **Pb** | **13 14 43.6** | **-0.3** |
| EMIJ | | | | Pg | **Pg** | **13 14 46.6** | **+1.6** |
| EMIJ | | | | Sn | **Sg** | **13 15 01.8** | **-1.0** |
| **EMAL** | **Malaga-Limoner** | **1.41** | **338** | P | **Pb** | **13 14 44.4** | **-0.1** |
| EMAL | | | | S | **Sg** | **13 15 03.3** | **-0.7** |
| **ELGU** | **Los Guajares,** | **1.42** | **5** | Pn | **Pn** | **13 14 44.1** | **+0.3** |
| ELGU | | | | Sn | **Sn** | **13 15 01.7** | **-0.6** |
| **EGOR** | **Sierra Gorda,** | **1.68** | **351** | Pn | **Pb** | **13 14 48.7** | **-0.5** |
| EGOR | | | | Sn | **Sn** | **13 15 09.1** | **+0.3** |
| EGOR | | | | *i* Vmb_Lg | | 13 15 14.7 | |
| **EQUE** | **Quentar** | **1.77** | **9** | Pn | **Pb** | **13 14 50.6** | **-0.2** |
| EQUE | | | | Sn | **Sb** | **13 15 12.1** | **-0.8** |
| EQUE | | | | *i* Vmb_Lg | | 13 15 18.9 | |
| **ENIJ** | **Nijar** | **1.98** | **39** | Pn | **Pb** | **13 14 53.5** | **-0.7** |
| ENIJ | | | | Sn | **Sn** | **13 15 14.0** | **-2.0** |
| ENIJ | | | | *i* Vmb_Lg | | 13 15 16.2 | |
| **IFR** | **Ifrane** | **2.23** | **210** | P | **Pn** | **13 14 56.6** | **+1.7** |
| IFR | | | | S | **Sn** | **13 15 22.9** | **+0.6** |
| **MD31** | **MD31** | **2.70** | **198** | P | **Pn** | **13 15 02.0** | **+0.5** |
| MD31 | | | | S | **Sn** | **13 15 34.8** | **+0.9** |
| **ECAB** | **El Cabril** | **2.93** | **334** | Pn | **Pn** | **13 15 06.8** | **+2.2** |
| ECAB | | | | Sn | **Sn** | **13 15 40.1** | **+0.5** |
| **EGRO** | **El Granado** | **3.64** | **306** | *i* Vmb_Lg | | 13 15 12.9 | |
| EGRO | | | | Pn | **Pn** | **13 15 14.8** | **+0.6** |
| E

SPNN **North Nagishla** 1.04 247 Pn 13 49 09.8 +0.5
SPNN Sn 13 49 24.5 +1.2
CAPN **Captain Cook N** 1.05 192 Pn 13 49 11.2 +1.9
CAPN **Captain Cook N** 1.05 192 P Pn 13 49 11.3 +2.1
baz=12
SML **Sawmill** 1.13 88 Pn 13 49 10.5 +0.1
SML **Sawmill** 1.13 88 Sn 13 49 25.8 +0.4
SML **Sawmill** 1.13 88 IAML 13 49 29.4
comp=E,12µm,0.8s
SML IAML 13 49 29.5
comp=N,9µm,0.8s
SML **Sawmill** 1.13 88 P Pn 13 49 10.5 +0.1
baz=270
SML S Sn 13 49 25.7 +0.4
baz=270
KNK **Knik Glacier** 1.15 109 Pn 13 49 10.8 +0.3
KNK IAML 13 49 27.8
comp=E,15µm,0.5s
KNK **Knik Glacier** 1.15 109 P Pn 13 49 10.9 +0.4
baz=290
KNK S Sn 13 49 26.8 +1.3
baz=290
PPLA **Purkeypile** 1.30 329 Pn 13 49 13.2 +0.4
PPLA **Purkeypile** 1.30 329 Sn 13 49 29.7 +0.3
PPLA **Purkeypile** 1.30 329 P Pn 13 49 13.2 +0.4
baz=147
PPLA S Sn 13 49 29.7 +0.3
baz=147
SLKM **Skilak Lake** 1.31 169 Pn 13 49 12.5 -0.3
O22K **Cooper Landing** 1.40 159 Pn 13 49 13.9 0.0
O22K **Cooper Landing** 1.40 159 P Pn 13 49 13.7 -0.2
baz=341
RDT **Redoubt** 1.47 214 Pn 13 49 15.4 +0.5
PWL **Port Wells** 1.48 128 Pn 13 49 14.6 -0.5
PWL IAML 13 49 39.9
comp=N,7µm,0.4s
PWL IAML 13 49 40.1
comp=E,6µm,0.7s
RDJH **Redoubt Jeurge** 1.57 221 Pn 13 49 17.0 +0.6
WAT6 **Susitna Watana** 1.60 59 Pn 13 49 17.2 +0.4
WAT6 **Susitna Watana** 1.60 59 P Pn 13 49 17.2 +0.4
baz=241
SCM **Sheep Creek Mo** 1.61 87 P Pn 13 49 16.9 +0.1
SCM **Sheep Creek Mo** 1.61 87 Pn 13 49 16.9 +0.1
SCM IAML 13 49 38.4
comp=N,8µm,0.7s
SCM IAML 13 49 40.8
comp=E,7µm,0.8s
L20K **Farewell, AK** 1.64 296 Pn 13 49 17.7 +0.6
L20K **Farewell, AK** 1.64 296 P Pn 13 49 17.7 +0.6
baz=114
NCT **North Crescent** 1.64 222 Pn 13 49 17.9 +0.7
RSO **Redoubt South** 1.66 217 Pn 13 49 18.1 +0.4
RDWB **Redoubt West** 1.67 219 Pn 13 49 18.4 +0.8
TRF **Thorofare Moun** 1.67 7 Pn 13 49 18.5 +0.8
TRF IAML 13 49 41.4
comp=E,6µm,0.6s
TRF **Thorofare Moun** 1.67 7 P Pn 13 49 18.5 +0.8
baz=186
RED **Redoubt Volcan** 1.70 217 Pn 13 49 18.8 +0.7
M19K **Big River Lodg** 1.75 275 Pn 13 49 19.1 +0.6
M19K **Big River Lodg** 1.75 275 IAML 13 49 41.3
comp=N,6µm,0.5s
M19K IAML 13 49 41.5
comp=E,5µm,0.5s
M19K **Big River Lodg** 1.75 275 P Pn 13 49 19.1 +0.6
baz=92
CAST **Castle Rocks** 1.75 339 Pn 13 49 19.3 +0.7
CAST IAML 13 49 42.0
comp=E,4µm,0.5s
CAST **Castle Rocks** 1.75 339 Sn 13 49 40.4 +0.5
CAST **Castle Rocks** 1.75 339 P Pn 13 49 19.4 +0.8
baz=158
CAST S Sn 13 49 40.4 +0.5
baz=158
KTH **Kantishna Hill** 1.77 357 Pn 13 49 19.8 +0.9
SEW **Seward** 1.81 159 Pn 13 49 19.2 -0.1
SEW **Seward** 1.81 159 P Pn 13 49 19.5 +0.2
baz=341
RND **Reindeer** 1.83 27 P Pn 13 49 20.2 +0.4
RND **Reindeer** 1.83 27 Pn 13 49 20.2 +0.4
O20K **Slope Mountain** 1.96 209 Pn 13 49 22.6 +1.2
O20K **Slope Mountain** 1.96 209 P Pn 13 49 22.6 +1.2
baz=28
GLI **Glacier Island** 1.97 116 Pn 13 49 20.8 -0.8
GLI **Glacier Island** 1.97 116 IAML 13 49 55.9
comp=E,4µm,0.6s
GLI IAML 13 49 58.2
comp=N,3µm,0.7s
GLI **Glacier Island** 1.97 116 P Pn 13 49 20.8 -0.8
baz=299
L19K **White Mountain** 1.99 283 Pn 13 49 22.6 +0.8
L19K **White Mountain** 1.99 283 IAML 13 49 47.3
comp=N,5µm,0.6s
L19K IAML 13 49 47.6
comp=E,3µm,0.6s
L19K **White Mountain** 1.99 283 P Pn 13 49 22.7 +0.8
baz=100
DHY **Denali Highway** 2.02 49 Pn 13 49 22.8 +0.5
DHY **Denali Highway** 2.02 49 P Pn 13 49 22.8 +0.5
baz=231
BRLK **Bradley Lake** 2.04 182 Pn 13 49 22.6 +0.1
BRLK **Bradley Lake** 2.04 182 IAML 13 49 53.5
comp=N,5µm,0.3s
BRLK IAML 13 49 53.6
comp=E,4µm,0.2s
BRSE **Bradley Lake S** 2.06 180 Pn 13 49 23.5 +0.7
BRSE **Bradley Lake S** 2.06 180 P Pn 13 49 23.5 +0.7
baz=0.7
N19K **Bonanza Creek** 2.07 243 Pn 13 49 23.5 +0.5
N19K **Bonanza Creek** 2.07 243 P Pn 13 49 23.5 +0.5
baz=60
MCK **McKinley** 2.11 22 P Pn 13 49 24.3 +0.8
MCK **McKinley** 2.11 22 Pn 13 49 24.3 +0.8
MCK **McKinley** 2.11 22 P Pn 13 49 24.3 +0.8
baz=203
JPK **Jack Peak** 2.11 109 Pn 13 49 23.0 -0.6
M24K **Tolsona, Glenn** 2.17 80 Pn 13 49 25.4 +1.1
M24K **Tolsona, Glenn** 2.17 80 P Pn 13 49 25.4 +1.1
baz=263
HOM **Homer** 2.19 192 Pn 13 49 25.4 +0.9
HOM **Homer** 2.19 192 P Pn 13 49 25.8 +1.3
baz=12
K20K **Telida** 2.21 317 Pn 13 49 25.4 +0.6
K20K **Telida** 2.21 317 P Pn 13 49 25.4 +0.6
baz=134
CHUM **Lake Minchumin** 2.22 341 Pn 13 49 25.8 +0.9
CHUM **Lake Minchumin** 2.22 341 P Pn 13 49 25.8 +0.9
baz=160
CNPM **China Poot** 2.29 187 Pn 13 49 25.7 -0.3
CNPM **China Poot** 2.29 187 IAML 13 50 00.1
comp=E,4µm,0.4s
FID **Port Fidalgo** 2.30 115 Pn 13 49 24.7 -1.4
FID **Port Fidalgo** 2.30 115 IAML 13 50 02.4
comp=N,3µm,0.5s
FID IAML 13 50 04.2
comp=E,3µm,0.4s
KLU **Klutina** 2.31 95 Pn 13 49 25.9 -0.3
KLU **Klutina** 2.31 95 IAML 13 50 06.5
comp=N,2µm,0.6s
KLU **Klutina** 2.31 95 P Pn 13 49 25.9 -0.3
baz=279
BPAW **Bear Paw Mtn.** 2.32 357 Pn 13 49 26.6 +0.4
BPAW **Bear Paw Mtn.** 2.32 357 IAML 13 49 55.0
comp=E,4µm,0.4s
BPAW IAML 13 49 55.1
comp=N,3µm,0.7s
BPAW **Bear Paw Mtn.** 2.32 357 P Pn 13 49 26.6 +0.4
baz=176
O19K **Port Alsworth** 2.38 229 Pn 13 49 27.4 +0.3
O19K **Port Alsworth** 2.38 229 IAML 13 50 07.8
comp=E,3µm,0.5s
O19K IAML 13 50 23.0
comp=N,2µm,0.5s
O19K **Port Alsworth** 2.38 229 P Pn 13 49 27.4 +0.3
baz=46
SVW2 **Sparrevohn** 2.44 255 Pn 13 49 28.0 0.0
SVW2 **Sparrevohn** 2.44 255 IAML 13 49 58.6
comp=E,1µm,0.4s
BWN **Browne** 2.45 13 Pn 13 49 28.8 +0.7
BWN IAML 13 50 03.7
comp=N,3µm,0.7s
BWN IAML 13 50 04.7
comp=E,3µm,0.9s
DIV **Divide** 2.47 104 Pn 13 49 27.5 -0.9

OPT **Oil Point** 2.48 211 Pn 13 49 29.6 +1.1
OPT **Oil Point** 2.48 211 P Pn 13 49 29.6 +1.1
baz=29
PS11 **TAPS Pump St11** 2.50 81 Pn 13 49 29.8 +1.1
HARP **HAARP** 2.68 75 Pn 13 49 32.3 +1.1
HARP **HAARP** 2.68 75 P Pn 13 49 32.3 +1.1
baz=259
EYAK **Cordova Ski Ar** 2.71 115 Pn 13 49 30.5 -1.1
EYAK **Cordova Ski Ar** 2.71 115 P Pn 13 49 30.5 -1.1
baz=300
TT01 **Tatalina** 2.71 297 Pn 13 49 32.2 +0.6
PAX **Paxson** 2.71 62 P Pn 13 49 32.5 +0.8
PAX **Paxson** 2.71 62 Pn 13 49 32.5 +0.8
PAX **Paxson** 2.71 62 P Pn 13 49 32.5 +0.8
baz=246
TTA **Tatalina** 2.72 297 P Pn 13 49 32.2 +0.4
TTA **Tatalina** 2.72 297 Pn 13 49 32.2 +0.4
TTA **Tatalina** 2.72 297 P Pn 13 49 32.2 +0.4
baz=113
AUL **Augustine Lava** 2.77 210 Pn 13 49 34.2 +1.8
AUQ **Augustine Qik'** 2.79 210 Pn 13 49 34.3 +1.6
PS10 **TAPS Pump St10** 2.81 52 Pn 13 49 34.7 +1.7
J20K **Nowinta River** 2.86 328 Pn 13 49 34.3 +0.7
J20K **Nowinta River** 2.86 328 P Pn 13 49 34.3 +0.7
baz=145
NEA2 **Nenana** 2.91 14 Pn 13 49 34.2 0.0
NEA2 **Nenana** 2.91 14 IAML 13 50 08.0
comp=E,972nm,0.8s
NEA2 IAML 13 50 08.4
comp=N,969nm,0.8s
NEA2 **Nenana** 2.91 14 P Pn 13 49 34.2 0.0
baz=195
N25K **Chitina, Valde** 2.92 91 Pn 13 49 34.4 -0.2
N25K **Chitina, Valde** 2.92 91 IAML 13 50 19.6
comp=N,2µm,0.5s
N25K **Chitina, Valde** 2.92 91 P Pn 13 49 34.4 -0.2
baz=276
O18K **Koktuh Hills** 2.94 230 Pn 13 49 34.9 +0.2
O18K **Koktuh Hills** 2.94 230 P Pn 13 49 35.1 +0.4
baz=47
WRH **Wood River Hil** 2.94 23 Pn Pn 13 49 34.9 +0.2
BMRM **Bremner River** 3.06 103 Pn 13 49 35.0 -1.4
BMRM **Bremner River** 3.06 103 IAML 13 50 31.1
comp=N,1µm,0.7s
BMRM IAML 13 50 32.7
comp=E,1µm,0.6s
BMRM **Bremner River** 3.06 103 P Pn 13 49 35.0 -1.4
baz=288
HDA **Harding Lake** 3.13 31 Pn 13 49 38.0 +0.6
HDA **Harding Lake** 3.13 31 P Pn 13 49 38.0 +0.6
baz=214
GOAT **Goat Mountain** 3.15 110 Pn 13 49 36.4 -1.2
CCB **Clear Creek Bu** 3.15 23 Pn 13 49 37.6 0.0
CCB IAML 13 50 33.9
comp=E,790nm,0.9s
Q23K **Middleton Isla** 3.20 136 Pn Pn 13 49 39.1 +0.8
MID **Middleton Isla** 3.21 136 P Pn 13 49 39.2 +0.8
MID **Middleton Isla** 3.21 136 Pn Pn 13 49 39.2 +0.8
MID IAML 13 50 37.5
comp=E,749nm,1.0s
MID IAML 13 50 45.6
comp=N,780nm,1.3s
Q19K **Cape Douglas,** 3.22 208 Pn 13 49 39.1 +0.5
Q19K **Cape Douglas,** 3.22 208 IAML 13 50 56.4
comp=N,2µm,0.8s
Q19K **Cape Douglas,** 3.22 208 P Pn 13 49 39.1 +0.5
baz=26
MLY **Manley** 3.25 360 Pn 13 49 39.3 +0.3
MLY **Manley** 3.25 360 IAML 13 50 18.6
comp=E,1µm,0.5s
MLY **Manley** 3.25 360 P Pn 13 49 39.3 +0.3
baz=180
RAGM **Ragged Mountai** 3.26 113 Pn Pn 13 49 38.0 -1.1
PS08 **TAPS Pump Stn8** 3.27 31 Pn 13 49 39.9 +0.6
P18K **Big Mountain,** 3.28 225 Pn 13 49 39.6 +0.2
P18K **Big Mountain,** 3.28 225 P Pn 13 49 39.6 +0.2
baz=41
GLB **Gilahina Butte** 3.32 93 Pn 13 49 39.5 -0.4
GLB **Gilahina Butte** 3.32 93 IAML 13 50 36.0
comp=N,1µm,0.8s
GLB IAML 13 50 36.9
comp=E,804nm,0.6s
RIDG **Independent Ri** 3.33 52 Pn 13 49 41.3 +1.2
RIDG **Independent Ri** 3.33 52 IAML 13 50 31.7
comp=E,2µm,0.7s
RIDG IAML 13 50 42.5
comp=N,1µm,0.9s
RIDG **Independent Ri** 3.33 52 P Pn 13 49 41.3 +1.2
baz=236
TCOL **CIGO, UAF Yank** 3.35 21 Pn 13 49 40.7 +0.4
TCOL **CIGO, UAF Yank** 3.35 21 P Pn 13 49 40.7 +0.4
baz=204
COLA **College** 3.35 21 *c i* P Pn 13 49 39.7 -0.6
COLA **College** 3.35 21 Pn 13 49 40.6 +0.4
MDM **Murphy Dome** 3.37 18 Pn 13 49 40.8 +0.2
I23K **Minto, Yukon-K** 3.42 10 Pn 13 49 41.4 +0.1
I23K IAML 13 50 36.4
comp=N,748nm,0.8s
I23K **Minto, Yukon-K** 3.42 10 P Pn 13 49 41.7 +0.5
baz=191
I21K **Tanana** 3.45 351 Pn 13 49 42.3 +0.7
I21K **Tanana** 3.45 351 IAML 13 50 22.6
comp=N,2µm,0.8s
I21K IAML 13 50 22.8
comp=E,1µm,0.5s
I21K **Tanana** 3.45 351 P Pn 13 49 42.3 +0.7
baz=170
IL31 3.45 28 Pn 13 49 41.8 +0.1
ILAR **Eielson Array** 3.45 28 P Pn 13 49 41.2 -0.5
comp=E,34nm,0.3s,baz=216,slow=14,SNR=1033
ILAR S Sn 13 50 21.0 -0.4
comp=E,43nm,0.3s,baz=216,slow=16,SNR=2.7
ILAR **Eielson Array** 3.45 28 P Pn 13 49 42.1 +0.4
ILAR **Eielson Array** 3.45 28 Pn Pn 13 49 42.1 +0.4
MENT **Mentasta** 3.46 68 Pn 13 49 42.1 +0.3
HMT **Hamilton** 3.46 112 Pn 13 49 40.2 -1.7
VRDI **Verde Repeater** 3.53 96 Pn 13 49 41.8 -1.2
VRDI **Verde Repeater** 3.53 96 IAML 13 50 37.4
comp=N,836nm,0.6s
DOT **Dot Lake** 3.58 56 Pn 13 49 44.3 +0.7
L26K **Log Cabin Wild** 3.64 67 Pn 13 49 45.4 +1.1
L26K **Log Cabin Wild** 3.64 67 IAML 13 50 49.2
comp=E,767nm,0.9s
L26K IAML 13 51 00.2
comp=N,816nm,0.7s
L26K **Log Cabin Wild** 3.64 67 P Pn 13 49 45.4 +1.1
baz=253
POKR **Poker Plat Res** 3.65 22 Pn 13 49 44.8 +0.5
POKR **Poker Plat Res** 3.65 22 P Pn 13 49 44.8 +0.5
baz=205
M26K **Nabesna, AK** 3.68 77 Pn 13 49 45.1 +0.3
M26K **Nabesna, AK** 3.68 77 IAML 13 50 45.9
comp=N,674nm,1.2s
M26K IAML 13 50 53.2
comp=E,725nm,0.8s
M26K **Nabesna, AK** 3.68 77 P Pn 13 49 45.1 +0.3
baz=264
BERG **Berg Lake** 3.69 109 Pn 13 49 44.0 -0.9
PS07 **TAPS Pump Stn7** 3.69 16 Pn 13 49 45.6 +0.6
MCARA **McCarthy VSAT** 3.70 93 Pn 13 49 45.4 +0.3
MCARA **McCarthy VSAT** 3.70 93 P Pn 13 49 45.4 +0.3
baz=280
J25K **Salcha River,** 3.72 38 Pn 13 49 45.8 +0.3
J25K **Salcha River,** 3.72 38 IAML 13 50 34.5
comp=N,544nm,0.8s
J25K **Salcha River,** 3.72 38 P Pn 13 49 45.8 +0.3
baz=223
SCRK **Sand Creek** 3.78 52 Pn 13 49 46.9 +0.6
SCRK **Sand Creek** 3.78 52 IAML 13 50 51.8
comp=E,553nm,0.8s
SCRK IAML 13 50 56.2
comp=N,468nm,0.8s
SCRK **Sand Creek** 3.78 52 P Pn 13 49 46.9 +0.6
baz=237
SUCK **Suckling Hills** 3.80 114 Pn Pn 13 49 46.1 -0.4
SUCK IAML 13 50 49.9
comp=N,525nm,0.6s
H21K **Melozitna Rive** 3.99 347 Pn 13 49 49.6 +0.6
H21K IAML 13 50 36.6
comp=N,500nm,0.6s
H21K IAML 13 50 51.0
comp=E,415nm,0.5s
H21K **Melozitna Rive** 3.99 347 P Pn 13 49 49.3 +0.3
baz=165
PTPK **Patty Peak** 4.00 95 Pn 13 49 49.4 0.0

GCSA **Galena City Sc** 4.06 319 Pn 13 49 50.9 +0.8
GCSA **Galena City Sc** 4.06 319 P Pn 13 49 50.9 +0.8
baz=134
BALM **Baldy** 4.09 97 Pn 13 49 49.8 -0.8
PS06 **TAPS Pump Stn6** 4.10 6 Pn 13 49 51.4 +0.8
KIAG **Kiagna River** 4.12 99 Pn 13 49 49.9 -1.1
KDAK **Kodiak Island** 4.13 194 P Pn 13 49 50.2 -0.9
comp=E,13nm,0.3s,baz=71,slow=7.2,SNR=86
KDAK S Sn 13 50 47.5 +9.4
comp=E,71nm,0.3s,baz=238,slow=14,SNR=8.4
KDAK LR LR 13 51 39.7
comp=E,240nm,18.7s,baz=74,slow=40
KDAK **Kodiak Island** 4.13 194 Pn 13 49 50.1 -0.9
KDAK IAML 13 50 54.4
comp=E,526nm,0.9s
KDAK IAML 13 50 54.8
comp=E,519nm,0.7s
SNH **Sunshine Point** 4.17 109 Pn Pn 13 49 50.6 -0.9
SNH IAML 13 51 02.9
comp=N,415nm,1.2s
SNH IAML 13 51 11.7
comp=E,414nm,1.7s
M27K **Edge Creek, AK** 4.20 78 Pn 13 49 53.0 +1.0
M27K **Edge Creek, AK** 4.20 78 IAML 13 51 04.8
comp=N,420nm,0.9s
M27K **Edge Creek, AK** 4.20 78 P Pn 13 49 53.0 +1.0
baz=266
KELA **Mount Kelaz** 4.20 219 Pn 13 49 52.7 +0.7
J26L **Joseph Creek** 4.23 47 P Pn 13 49 53.4 +1.0
baz=233
H24K **Noodor Dome** 4.25 16 Pn 13 49 53.6 +1.0
H24K **Noodor Dome** 4.25 16 IAML 13 50 42.8
comp=N,341nm,0.7s
H24K IAML 13 50 43.7
comp=E,466nm,0.5s
H24K **Noodor Dome** 4.25 16 P Pn 13 49 53.6 +1.0
baz=198
L27K **Beaver Creek,** 4.32 69 Pn 13 49 53.8 +0.1
L27K **Beaver Creek,** 4.32 69 IAML 13 51 09.2
comp=N,322nm,2.1s
L27K **Beaver Creek,** 4.32 69 P Pn 13 49 53.8 +0.1
baz=257
BC03 4.34 69 Pn 13 49 54.1 +0.3
BCAR **Beaver Creek A** 4.34 69 Pn 13 49 54.3 +0.3
PRP **Porcupine Dome** 4.39 29 Pn 13 49 56.5 +1.8
PRP **Porcupine Dome** 4.39 29 IAML 13 51 14.4
comp=E,351nm,0.9s
PRP IAML 13 51 17.0
comp=N,402nm,0.8s
PRP **Porcupine Dome** 4.39 29 P Pn 13 49 56.5 +1.8
baz=214
BARN **Barnard Glacie** 4.41 96 Pn 13 49 54.9 -0.1
BARN **Barnard Glacie** 4.41 96 IAML 13 51 07.8
comp=E,685nm,0.9s
IM03 4.41 344 Pn 13 49 55.4 +0.6
IMAR **Indian Mountai** 4.41 344 Pn 13 49 55.5 +0.7
MESA **MESA** 4.57 107 Pn 13 49 56.6 -0.5
MESA IAML 13 51 17.5
comp=N,645nm,0.6s
MESA **MESA** 4.57 107 P Pn 13 49 55.8 -1.4
baz=294
CTG **Chitna Glacier** 4.59 96 P Pn 13 49 57.1 -0.2
baz=284
CTGM **Chitina Glacie** 4.59 96 Pn 13 49 57.7 +0.3
CTGM IAML 13 51 10.8
comp=E,356nm,1.2s
CTGM IAML 13 51 11.4
comp=N,608nm,0.8s
BVCY **Beaver Creek** 4.67 78 Pn 13 49 59.3 +0.9
BVCY **Beaver Creek** 4.67 78 P Pn 13 49 59.3 +0.9
baz=266
YUK2 **White River** 4.69 86 Pn 13 49 58.8 +0.1
OHAK **Old Harbor** 4.77 197 Pn 13 49 59.4 -0.4
OHAK IAML 13 51 07.8
comp=N,265nm,0.6s
OHAK IAML 13 51 11.6
comp=E,342nm,0.8s
OHAK **Old Harbor** 4.77 197 P Pn 13 49 58.1 -1.6
baz=15
LOGN **Logan Glacier** 4.78 97 Pn 13 49 59.3 -0.7
LOGN **Logan Glacier** 4.78 97 IAML 13 51 18.7
comp=N,399nm,0.8s
LOGN IAML 13 51 19.3
comp=E,403nm,1.2s
TABL **Table Mountain** 4.84 102 Pn 13 50 00.5 -0.3
TABL **Table Mountain** 4.84 102 IAML 13 51 23.9
comp=E,404nm,0.7s
TABL IAML 13 51 29.1
comp=N,398nm,1.1s
YUK3 **Moose Creek** 4.87 86 Pn 13 50 01.4 +0.1
YUK3 **Moose Creek** 4.87 86 P Pn 13 50 01.4 +0.1
baz=275
PS05 **TAPS Pump Stn5** 5.04 0 Pn 13 50 04.6 +1.3
EGAK **Eagle** 5.25 51 Pn 13 50 06.2 0.0
EGAK **Eagle** 5.25 51 IAML 13 51 29.7
comp=N,376nm,0.8s
EGAK **Eagle** 5.25 51 P Pn 13 50 06.2 0.0
baz=239
FYU **Fort Yukon** 5.36 24 Pn 13 50 08.2 +0.5
FYU IAML 13 51 51.4
comp=E,268nm,1.4s
FYU IAML 13 52 00.1
comp=N,234nm,1.4s
PCA **Pinnacle** 5.38 104 Pn 13 50 08.0 -0.1
COLD **Coldfoot** 5.46 2 Pn 13 50 09.9 +0.8
COLD **Coldfoot** 5.46 2 P Pn 13 50 09.9 +0.8
baz=182
SII **Sitkinak Islan** 5.54 200 Pn 13 50 10.6 +0.2
DAWY **Dawson** 5.65 61 Pn 13 50 12.2 +0.4
DAWY **Dawson** 5.65 61 P Pn 13 50 12.2 +0.4
baz=251
BCPM **Bancas Point** 5.72 104 Pn Pn 13 50 12.9 +0.2
YUK4 **Talbot Arm** 5.79 89 P Pn 13 50 14.0 +0.2
baz=279
BMAR **Burnt Mountain** 6.24 22 Pn Pn 13 50 20.4 +0.6
HYT **Haines Munctio** 6.44 93 Pn 13 50 22.3 -0.4
HYT **Haines Junctio** 6.44 93 P Pn 13 50 22.2 -0.4
baz=284
CHIR **Chirikof Islan** 6.51 205 Pn Pn 13 50 23.7 +0.2
M30M **Minto, Yukon** 6.56 77 Pn Pn 13 50 24.1 -0.2
I29M **Ogilvie Camp,** 6.59 52 Pn 13 50 24.7 +0.1
CHGN **Chignik** 6.79 219 Pn Pn 13 50 28.0 +0.8
N31M **Braeburn, Yuko** 7.12 86 Pn 13 50 31.3 -0.6
ANM **Nome** 7.19 299 P Pn 13 50 33.5 +0.8
ANM **Nome** 7.19 299 Pn 13 50 33.5 +0.8
EPYK **Eagle Plains** 7.65 47 Pn 13 50 38.9 -0.2
M31M **Drury Creek, Y** 7.70 80 Pn 13 50 39.8 0.0
SKAG **Skagway** 7.92 100 Pn Pn 13 50 42.5 -0.2
RDOG **Red Dog Mine** 8.13 326 Pn 13 50 47.5 +1.9
SDPT **Sand Point** 8.22 223 Pn Pn 13 50 48.1 +1.2
TNA **Tin City** 8.52 304 Pn Pn 13 50 52.2 +1.3
BESE **Bessie Mountai** 8.53 105 Pn Pn 13 50 50.7 -0.4
P33M **Teslin, Yukon** 8.84 92 Pn Pn 13 50 54.5 -0.8
JIS **Juneau Island** 8.90 106 Pn Pn 13 50 55.0 -1.0
SIT **Sitka** 9.16 114 P Pn 13 50 58.0 -1.7
SIT **Sitka** 9.16 114 Pn Pn 13 50 58.0 -1.7
INK **Inuvik** 9.73 41 P Pn 13 51 05.3 -2.1
comp=N,1.1nm,0.3s,baz=237,slow=15,SNR=32
INK S Sn 13 52 58.3 +3.3
comp=N,1.1nm,0.3s,baz=77,slow=27,SNR=3.7
INK LR LR 13 55 19.5
comp=N,102nm,18.9s,baz=236,slow=40
INK **Inuvik** 9.73 41 P Pn 13 51 07.2 -0.2
INK **Inuvik** 9.73 41 Pn Pn 13 51 07.2 -0.2
GAMB **Gambell** 9.80 291 Pn Pn 13 51 09.6 +1.1
A21K **Barrow** 9.85 349 Pn Pn 13 51 09.3 +0.4
DLBC **Dease Lake** 10.84 99 P Pn 13 51 22.0 -0.7
comp=N,0.3nm,0.3s,baz=283,slow=9.1,SNR=8.9
DLBC LR LR 13 56 01.3
comp=N,141nm,18.8s,baz=215,slow=40
CRAG **Craig** 11.12 117 Pn Pn 13 51 24.9 -1.5
C36M **Paulatuk** 13.26 44 Pn Pn 13 51 51.6 -3.8
A36M **Sachs Harbour** 14.14 33 P P 13 52 13.4 +0.6
YKA **Yellowknife Ar** 16.75 72 P Pn 13 52 38.9 -1.6
comp=N,0.7nm,0.3s,baz=280,slow=10,SNR=27
YKA ScP ScP 14 00 54.0 +0.2
comp=N,0.1nm,0.3s,baz=289,slow=2.3,SNR=6.8
BILL **Bilibino** 18.92 308 *i* P P 13 53 04.9 -0.7
BILL pmax pmax
comp=Z,3.0nm,0.9s
BILL **Bilibino** 18.92 308 P P 13 53 05.2 -0.4
SHEM **Shemya Is, Ala** 20.83 260 LR LR 14 01 29.4
comp=Z,68nm,19.8s,baz=26,slow=36
EDM **Edmonton** 21.54 96 P P 13 53 35.0 +0.9
EDM pmax pmax

comp=Z,30nm,1.1s
**EDM Edmonton 21.54 96 P P 13 53 35.0 +0.9**
EDM IAmb IAmb 13 53 38.8
comp=Z,30nm,1.1s
**RES Resolute Bay 23.19 34 P P 13 53 49.7 -1.4**
comp=Z,1.9nm,0.4s,baz=257,slow=14,SNR=17
RES LR LR 14 05 08.1
comp=Z,38nm,19.5s,baz=90,slow=42
**RES Resolute Bay 23.19 34** P P **13 53 50.8 -0.4**
RES pmax pmax
comp=Z,9.0nm,1.2s
**RES Resolute Bay 23.19 34 P P 13 53 50.8 -0.4**
**NEW Newport 23.20 110** LR LR 14 02 43.1
comp=Z,122nm,18.5s,baz=254,slow=36
**WALA Waterton Lakes 24.08 105 P P 13 53 59.4 -0.3**
**EUNU Eureka 25.53 21 P P 13 54 13.0 +0.4**
**SEY Seymchan 25.69 298 P P 13 54 13.3 -0.8**
comp=Z,1.7nm,0.7s,baz=65,slow=10,SNR=12
**SEY Seymchan 25.69 298** *i* P **P 13 54 13.7 -0.3**
**EGMT Eagleton 26.74 102 P P 13 54 24.6 +0.9**
EGMT IAmb IAmb 13 54 25.4
comp=Z,6.4nm,0.7s
**LRM Limekiln Ridge 27.14 108 P P 13 54 29.0 +1.4**
**FCC Fort Churchill 27.48 71 P P 13 54 30.6 +0.5**
FCC pmax pmax
comp=Z,10.0nm,0.6s
**FCC Fort Churchill 27.48 71 P P 13 54 30.6 +0.5**
FCC IAmb IAmb 13 54 31.4
comp=Z,10nm,0.6s
**BCYI Bear Canyon 27.89 112 P P 13 54 35.4 +1.1**
**MA2 Magadan 27.90 292** LR LR 14 06 49.8
comp=Z,33nm,21.8s,baz=95,slow=39
**MA2 Magadan 27.90 292** *i* P **P 13 54 33.5 -0.5**
MA2 pmax pmax
comp=Z,6.0nm,1.8s
**PET Petropavlovsk 27.96 275** *i* P **P 13 54 34.0 -0.5**
PET pmax pmax
comp=Z,7.0nm,1.1s
**HLID Hailey 28.04 114 P P 13 54 36.8 +1.2**
**BEKR Beckworth 28.68 126 P P 13 54 43.1 +1.8**
**RLMT Red Lodge 29.12 106 P P 13 54 47.3 +2.1**
RLMT IAmb IAmb 13 55 12.2
comp=Z,14nm,1.4s
**EMB Emerald Bay 29.55 126 P P 13 54 50.4 +1.3**
**TPAW Teton Pass 29.63 110 P P 13 54 51.1 +1.3**
**LOHW Long Hollow 29.69 109 P P 13 54 51.3 +1.1**
**REDW Red Top Meadow 29.77 110 P P 13 54 52.6 +1.6**
**HVU Hansel Valley 30.20 114 P P 13 54 55.6 +1.0**
HVU pmax pmax
comp=Z,9.0nm,1.5s
**HVU Hansel Valley 30.20 114 P P 13 54 55.6 +1.0**
HVU IAmb IAmb 13 55 20.6
comp=Z,8.7nm,1.5s
**KVN Kaiserville 30.26 124 P P 13 54 57.5 +2.2**
KVN pmax pmax
comp=Z,5.0nm,1.2s
**KVN Kaiserville 30.26 124 P P 13 54 57.5 +2.2**
**RYN Ryan 30.46 125 P P 13 54 59.2 +2.2**
**NVAR Mina Array Bea 30.72 125 P P 13 55 01.2 +1.8**
comp=Z,0.7nm,0.6s,baz=308,slow=8.1,SNR=10
**TIXI Tiksi 30.72 322** *i* P **P 13 54 57.0 -1.7**
TIXI pmax pmax
comp=Z,5.0nm,2.1s
**NV11 Mina Array Sit 30.78 124 P P 13 55 01.9 +2.1**
**BW06 Boulder Array 30.83 109 P P 13 55 01.6 +1.3**
**PD31 Pinedale Array 30.83 109 P P 13 55 01.7 +1.5**
**PDAR Pinedale Array 30.83 109 P P 13 55 01.2 +1.0**
comp=Z,0.7nm,0.5s,baz=323,slow=4.1,SNR=13
PDAR LR LR 14 06 48.8
comp=Z,86nm,19.1s,baz=233,slow=35
**PDAR Pinedale Array 30.83 109 P P 13 55 00.9 +0.7**
**ULM Lac du Bonnet 31.76 86** LR LR 14 07 45.8
comp=Z,97nm,19.0s,baz=282,slow=36
**RSSD Black Hills 32.30 101 P P 13 55 14.6 +1.4**
RSSD pmax pmax
comp=Z,6.0nm,0.5s
**RSSD Black Hills 32.30 101 P P 13 55 14.6 +1.4**
RSSD IAmb IAmb 13 55 15.3
comp=Z,6.4nm,0.5s
**NEEM North Greenlan 32.73 24** *i* P **P 13 55 16.6 -0.2**
NEEM IAmb IAmb 13 55 17.4
comp=Z,7.9nm,0.8s
**TPNV Topopah Spring 32.81 123 P P 13 55 19.5 +1.8**
TPNV pmax pmax
comp=Z,3.0nm,1.3s
**TPNV Topopah Spring 32.81 123 P P 13 55 19.5 +1.8**
**P18A Preston Nutter 33.06 113 P P 13 55 21.5 +1.5**
**MSU Marysvale 33.16 117 P P 13 55 23.4 +2.7**
**MSU Marysvale 33.16 117 P P 13 55 23.4 +2.7**
**SRU San Rafael Swe 33.37 114 P P 13 55 23.8 +1.3**
SRU pmax pmax
comp=Z,7.0nm,0.9s
**SRU San Rafael Swe 33.37 114 P P 13 55 23.8 +1.3**
SRU IAmb IAmb 13 55 48.2
comp=Z,6.6nm,0.9s
**QSM Queen of Sheba 33.43 125 P P 13 55 25.1 +2.3**
QSM IAmb IAmb 13 55 43.5
comp=Z,6.6nm,1.1s
**CCUT Cedar City 33.47 119 P P 13 55 25.5 +2.1**
**O20A White River Ci 33.53 110 P P 13 55 26.1 +2.2**
O20A IAmb IAmb 13 55 48.8
comp=Z,4.1nm,0.9s
**SZCU Shurtz Canyon 33.55 119 P P 13 55 25.9 +1.7**
**LCMT Little Creek M 33.98 119 P P 13 55 29.6 +1.8**
**B35A Bob, Littlefor 34.08 86 P P 13 55 28.6 +0.3**
B35A IAmb IAmb 13 55 41.6
comp=Z,11nm,1.1s
**NOR Nord 34.73 11** *i* P **P 13 55 34.5 +0.8**
**PV13 Radium Mtn., P 34.90 113 P P 13 55 36.9 +1.1**
PV13 IAmb IAmb 13 55 54.8
comp=Z,4.4nm,0.8s
**FRB Frobisher Bay 35.22 50** LR LR 14 10 20.5
comp=Z,68nm,18.6s,baz=206,slow=37
**YAK Yakutsk 35.27 307 P P 13 55 37.6 -0.8**
comp=Z,3.7nm,0.3s,baz=168,slow=1.6,SNR=5.5
YAK LR LR 14 11 19.7
comp=Z,36nm,18.3s,baz=147,slow=38
**YAK Yakutsk 35.27 307** *ce* P **P 13 55 37.2 -1.2**
YAK pmax pmax
comp=Z,10.0nm,0.7s
**YAK Yakutsk 35.27 307** IAmb IAmb 13 55 38.2
comp=Z,12nm,0.6s
**EYMN Ely 35.43 85 P P 13 55 40.5 +0.5**
EYMN IAmb IAmb 13 56 03.6
comp=Z,14nm,1.0s
**F36A Milaca 35.97 89 P P 13 55 45.4 +0.7**
F36A IAmb IAmb 13 56 03.6
comp=Z,12nm,1.4s
**ECSD EROS Data Cent 36.09 95 P P 13 55 46.1 +0.4**
**G40A Rib Lake 37.99 87 P P 13 56 02.4 +0.6**
G40A IAmb IAmb 13 56 05.4
comp=Z,23nm,1.5s
**SUMG Summit 38.30 27 P P 13 56 04.8 +0.3**
SUMG pmax pmax
comp=Z,4.0nm,0.8s
**SUMG Summit 38.30 27** *i* P **P 13 56 03.0 -1.5**
**SUMG Summit 38.30 27 P P 13 56 04.8 +0.3**
SUMG IAmb IAmb 13 56 11.9
comp=Z,3.6nm,0.8s
**DAG Danmarks Havn 38.47 16** *i* P **P 13 56 04.0 -1.4**
DAG IAmb IAmb 13 56 05.7
comp=Z,8.8nm,0.6s
**SFJD Kangerlussuaq 39.07 38 P P 13 56 11.5 +1.0**
SFJD pmax pmax
comp=Z,31nm,1.5s
**SFJD Kangerlussuaq 39.07 38 P P 13 56 11.5 +1.0**
**KSU1 Kansas State U 39.70 99 P P 13 56 16.3 +0.2**
**JFWS Jewell Farm 39.73 90 P P 13 56 16.7 +0.3**
JFWS pmax pmax
comp=Z,8.0nm,0.6s
**JFWS Jewell Farm 39.73 90 P P 13 56 16.7 +0.3**
JFWS IAmb IAmb 13 56 16.9
comp=Z,7.9nm,0.6s
**L40A Anamosa 39.92 91 P P 13 56 18.1 +0.2**
L40A IAmb IAmb 13 56 40.2
comp=Z,15nm,1.2s
**E46A Sault Ste Mari 39.96 81 P P 13 56 18.5 +0.3**
**SPITS Spitsbergen Ar 40.05 4 P P 13 56 18.0 -0.6**
SPITS pmax pmax
comp=Z,56nm,1.5s
**SPB2 Spitsbergen Ar 40.05 4 P P 13 56 17.8 -0.8**
**DBG Daneborg 40.29 19** *i* P **P 13 56 19.4 -1.3**
DBG IAmb IAmb 13 56 21.2
comp=Z,6.7nm,0.5s
**SCHQ Schefferville 41.67 60 P P 13 56 31.5 -0.7**
comp=Z,2.8nm,0.5s,baz=290,slow=4.7,SNR=6.8
**SCHQ Schefferville 41.67 60 P P 13 56 32.3 +0.2**
SCHQ IAmb IAmb 13 56 41.0
comp=Z,16nm,1.4s
**NRIK Noril'sk 42.78 334 P P 13 56 40.6 -0.4**
comp=Z,4.2nm,0.6s,baz=58,slow=7.2,SNR=7.5
**NRIK Noril'sk 42.78 334** IAmb IAmb 13 56 41.2
comp=Z,3.7nm,0.5s
**KLR Kul'dur 42.97 290** *i* P **P 13 56 41.2 -1.6**
KLR pmax pmax
comp=Z,7.0nm,1.6s
**T42A Van Buren 43.95 96 P P 13 56 49.9 -0.9**
**N49A Columbus Grove 44.15 86 P P 13 56 52.0 -0.3**
N49A IAmb IAmb 13 56 55.5
comp=Z,14nm,1.1s
**PBMO Poplar Bluff 44.47 95 P P 13 56 54.6 -0.3**
**TRQ Mont Tremblant 44.59 74 P P 13 56 56.0 +0.1**
TRQ IAmb IAmb 13 57 17.6
comp=Z,14nm,1.3s
**TXAR Lajitas Array 44.64 115 P P 13 56 58.1 +1.6**
comp=Z,0.5nm,0.7s,baz=318,slow=5.5,SNR=6.5
**TXAR Lajitas Array 44.64 115 P P 13 56 57.8 +1.3**
**TXAR Lajitas Array 44.64 115 P P 13 56 57.8 +1.3**
**LCAR Lake Charles 44.70 97 P P 13 56 56.1 -0.7**
**M53A WI Miller and 45.41 83 P P 13 57 03.1 +0.8**
**WVNY West Valley, N 45.63 80 P P 13 57 04.5 +0.4**
WVNY IAmb IAmb 13 57 05.0
comp=Z,12nm,0.8s
**M54A Oil Creek Stat 45.83 82 P P 13 57 06.2 +0.6**
**FRNY Flat Rock 46.08 74 P P 13 57 06.9 -0.8**
FRNY IAmb IAmb 13 57 18.3
comp=Z,15nm,1.4s
**M55A Ridgway 46.28 81 P P 13 57 09.7 +0.5**
M55A IAmb IAmb 13 57 10.6
comp=Z,10nm,1.1s
**D62A Allapoint, All 46.41 69 P P 13 57 10.6 +0.4**
D62A IAmb IAmb 13 57 11.3
comp=Z,7.4nm,0.8s
**O54A Avella 46.53 84 P P 13 57 11.3 +0.1**
**J59A Piesco 46.72 76 P P 13 57 13.9 +1.2**
J59A IAmb IAmb 13 57 26.2
comp=Z,20nm,1.4s
**U49A Red Boiling Sp 46.89 91 P P 13 57 14.6 +0.6**
U49A IAmb IAmb 13 57 15.3
comp=Z,9.2nm,1.1s
**F62A Pittston Farm, 46.91 71 P P 13 57 14.6 +0.5**
**T50A Nancy 46.93 90 P P 13 57 14.6 +0.3**
T50A IAmb IAmb 13 57 15.6
comp=Z,6.6nm,0.9s
**BINY Binghamton 47.01 79 P P 13 57 15.2 +0.2**
BINY IAmb IAmb 13 57 23.0
comp=Z,10.0nm,1.2s
**S51A Beattyville 47.02 89 P P 13 57 14.7 -0.4**
S51A IAmb IAmb 13 57 15.7
comp=Z,4.3nm,0.7s
**G62A West of Eustis 47.18 72 P P 13 57 16.5 +0.3**
**SSPA Standing Stone 47.34 81 P P 13 57 17.9 +0.4**
SSPA IAmb IAmb 13 57 37.6
comp=Z,13nm,1.4s
**F63A Nahmakanta, Br 47.45 70 P P 13 57 18.2 -0.1**
**BATG Bathurst New B 47.58 67 P P 13 57 19.1 -0.2**
**F64A Sherman 47.66 70 P P 13 57 19.9 0.0**
F64A IAmb IAmb 13 57 20.7
comp=Z,11nm,0.8s
**N58A Sunbury 47.73 80 P P 13 57 20.7 +0.1**
N58A IAmb IAmb 13 57 21.8
comp=Z,9.5nm,1.0s
**X48A Hartselle 47.96 94 P P 13 57 22.1 -0.3**
X48A IAmb IAmb 13 57 23.1
comp=Z,3.1nm,0.7s
**S54A Dingess, Beckl 47.98 87 P P 13 57 21.7 -0.8**
S54A IAmb IAmb 13 57 47.9
comp=Z,7.2nm,1.1s
**Q56A Snyder Ridge, 47.99 84 P P 13 57 22.7 +0.1**
Q56A IAmb IAmb 13 57 44.9
comp=Z,7.0nm,1.0s
**I63A Otisfield 48.06 73 P P 13 57 23.4 +0.4**
**N59A State Game Lan 48.12 79 P P 13 57 23.9 +0.4**
N59A IAmb IAmb 13 57 39.0
comp=Z,17nm,1.5s
**P57A Homestead Farm 48.20 82 P P 13 57 24.7 +0.6**
P57A IAmb IAmb 13 57 25.6
comp=Z,10.0nm,1.0s
**CPCT Cooper Cave 48.34 91 P P 13 57 25.8 +0.5**
CPCT IAmb IAmb 13 57 47.6
comp=Z,8.4nm,1.5s
**K62A Royalston 48.38 75 P P 13 57 25.6 0.0**
**V52A Sevierville 48.47 90 P P 13 57 26.2 -0.1**
V52A IAmb IAmb 13 57 54.2
comp=Z,9.4nm,1.2s
**Z47A Carrollton 48.50 96 P P 13 57 26.9 +0.3**
**ODNJ Ogdensburg 48.53 78 P P 13 57 26.4 -0.2**
ODNJ IAmb IAmb 13 57 27.3
comp=Z,8.5nm,0.7s
**TKL Tuckaleechee C 48.53 90 P P 13 57 27.1 +0.3**
TKL pmax pmax
comp=Z,5.0nm,0.9s
**TKL Tuckaleechee C 48.53 90 P P 13 57 27.1 +0.3**
TKL IAmb IAmb 13 57 32.8
comp=Z,4.5nm,0.9s
**LUPA Lehigh Univers 48.55 79 P P 13 57 26.9 +0.1**
**U54A Nelsons Funny 48.76 88 P P 13 57 28.9 +0.2**
U54A IAmb IAmb 13 57 29.6
comp=Z,5.3nm,0.7s
**BRNJ Basking Ridge 48.86 79 P P 13 57 28.6 -0.6**
**BLA Blacksburg 48.87 86 P P 13 57 28.7 -0.7**
BLA pmax pmax
comp=Z,21nm,1.5s
**BLA Blacksburg 48.87 86 P P 13 57 28.7 -0.7**
**GGN Saint George 48.91 69 P P 13 57 29.2 -0.3**
**ARCES ARCESS Array B 48.93 2 P P 13 57 28.8 -0.6**
comp=Z,2.2nm,0.9s,baz=349,slow=5.7,SNR=5.5
**WUPA West Chester U 48.97 80 P P 13 57 30.4 +0.4**
WUPA IAmb IAmb 13 57 31.2
comp=Z,4.7nm,0.7s
**WES Weston 49.02 75 P P 13 57 30.6 +0.2**
WES pmax pmax
comp=Z,47nm,1.4s
**WES Weston 49.02 75 P P 13 57 30.6 +0.2**
**LMN Caledonia Moun 49.23 67 P P 13 57 31.9 0.0**
**JSRW J. Sargeant Re 49.69 84 P P 13 57 36.2 +0.7**
**Y52A Lilburn 49.86 92 P P 13 57 37.9 +1.0**
Y52A IAmb IAmb 13 57 38.5
comp=Z,6.9nm,0.6s
**250A Grady 50.36 95 P P 13 57 40.5 -0.2**
250A IAmb IAmb 13 57 41.3
comp=Z,7.4nm,0.7s
**HODGE Hodges 50.41 90 P P 13 57 41.4 +0.3**
HODGE IAmb IAmb 13 57 42.1
comp=Z,5.9nm,0.7s
**W57A Gilead 50.74 87 P P 13 57 43.4 -0.1**
W57A IAmb IAmb 13 57 44.9
comp=Z,13nm,1.4s
**JSC Jenkinsville 50.85 89 P P 13 57 44.3 0.0**
JSC pmax pmax
comp=Z,4.0nm,0.7s
**JSC Jenkinsville 50.85 89 P P 13 57 44.3 0.0**
JSC IAmb IAmb 13 57 45.4
comp=Z,4.2nm,0.7s
**255A Hazlehurst 52.20 92 P P 13 57 54.4 -0.1**
**KRAR Krasnoyarsk 52.45 321** *i* P **P 13 57 55.6 -0.4**
**XLT XiLinHaoTe 53.93 297** *eP* **P 13 58 09.0 +1.9**
XLT pP pP 13 58 27.0 +3.2
XLT sP sP 13 58 33.3 +2.2
XLT PcP PcP 13 59 21.5 +10
XLT pmax pmax
comp=Z,5.0nm,1.2s
XLT pmax pmax
comp=Z,100nm,5.1s
**ULN Ulaanbaatar 54.35 306** *ce* P **P 13 58 10.4 +0.1**
ULN pmax pmax
comp=Z,4.0nm,1.0s
**ULN Ulaanbaatar 54.35 306** P **P 13 58 10.1 -0.1**
ULN IAmb IAmb 13 58 11.2
comp=Z,4.9nm,0.6s
**SONM Songino Array 54.63 306** P **P 13 58 13.1 +0.8**
comp=Z,5.5nm,0.7s,baz=39,slow=7.7,SNR=34
**SONM Songino Array 54.63 306** P **P 13 58 12.5 +0.2**
SONM pmax pmax
comp=Z,5.0nm,0.8s
**SONM Songino Array 54.63 306** P **P 13 58 12.4 +0.2**
SONM IAmb IAmb 13 58 13.7
comp=Z,5.0nm,0.8s
**KNGR Kungurtug, Tuv 55.54 314** *i* P **P 13 58 18.8 +0.1**
**ZAA0 Zalesovo Array 56.58 324 P P 13 58 25.0 -0.9**
ZAA0 IAmb IAmb 13 58 25.7
comp=Z,4.0nm,0.8s
**ZALV Zalesovo Beam 56.58 324 P P 13 58 25.3 -0.6**
comp=Z,2.9nm,0.3s,baz=36,slow=6.5,SNR=19
**ZALV Zalesovo Beam 56.58 324 P P 13 58 24.7 -1.2**
**NC405 NORSAR Array S 56.68 10 P P 13 58 25.8 -0.8**
NC405 IAmb IAmb 13 58 38.7
comp=Z,12nm,1.2s
**NB201 NORSAR Array S 56.71 10 P P 13 58 26.2 -0.6**
**NB2 NORSAR Subarra 56.71 10 P P 13 58 25.7 -1.1**
comp=Z,0.4nm,0.5s,baz=349,slow=7.4
**NOA NORSAR Array B 56.71 10 P P 13 58 25.9 -1.0**
comp=Z,0.6nm,0.6s,baz=350,slow=7.2,SNR=7.3
**FINES FINESS Array B 57.06 2 P P 13 58 28.5 -0.7**
comp=Z,1.1nm,0.5s,baz=7.1,slow=7.7,SNR=12
**FINES FINESS Array B 57.06 2 P P 13 58 28.4 -0.8**
**KLMR Klimovskoe 57.42 354** *eP* **P 13 58 31.3 -0.5**
KLMR pmax pmax
comp=Z,12nm,1.2s
**KLMR Klimovskoe 57.42 354** *eP* **P 13 58 31.4 -0.4**
KLMR AMP 13 58 46.8
comp=Z,12nm,1.2s
**JSU Suzuyama 57.57 277 P P 13 58 32.7 -0.6**
**HHC Hu-ho-hao-te 58.34 298** *eP* **P 13 58 41.5 +2.9**
HHC pmax pmax
comp=Z,6.0nm,0.9s
HHC pmax pmax
comp=Z,67nm,6.9s
**ARU Arti 59.91 342** *d i* P **P 13 58 48.0 -1.1**
ARU S **S 14 06 56.8 +1.1**
ARU SS **SS 14 10 51.3 -0.5**
ARU pmax pmax
comp=Z,6.0nm,0.6s
**ARU Arti 59.91 342 P P 13 58 48.5 -0.6**
ARU IAmb IAmb 13 58 49.0
comp=Z,7.0nm,0.7s
**BRVK Borovoye 60.98 333** *ce* P **P 13 58 54.9 -1.5**
BRVK pmax pmax
comp=Z,9.0nm,2.5s
**KURK Kurchatov 61.16 327 P P 13 58 56.9 -0.8**
KURK pmax pmax
comp=Z,2.0nm,0.4s
**KURK Kurchatov 61.16 327 P P 13 58 56.9 -0.8**
KURK IAmb IAmb 13 58 57.5
comp=Z,2.1nm,0.4s
**NJ2 Nanjing 62.50 287** *eP* **P 13 59 06.8 -0.2**
NJ2 pmax pmax
comp=Z,11nm,0.5s
**OBN Obninsk 63.29 355** *i* P **P 13 59 09.4 -2.4**
OBN pmax pmax
comp=Z,4.0nm,0.9s
**MK31 Makanchi Array 63.71 322** *i* P **P 13 59 13.9 -0.9**
**MK31 Makanchi Array 63.71 322 P P 13 59 13.6 -1.2**
**MKAR Makanchi Array 63.71 322** P **P 13 59 13.9 -0.9**
comp=Z,1.2nm,0.4s,baz=34,slow=6.9,SNR=47
**MKAR Makanchi Array 63.71 322** *ce* P **P 13 59 13.8 -1.0**
MKAR pmax pmax
comp=Z,1.0nm,0.4s
**MKAR Makanchi Array 63.71 322 P P 13 59 13.4 -1.4**
**MAKZ Makanchi 63.79 322 P P 13 59 14.3 -1.0**
MAKZ pmax pmax
comp=Z,2.0nm,1.0s
**MAKZ Makanchi 63.79 322 P P 13 59 14.3 -1.0**
**GTA Gaotai 64.30 306** *eP* **P 13 59 18.8 -0.1**
GTA pP pP 13 59 34.0 -2.0
GTA sP sP 13 59 40.8 -2.4
GTA pmax pmax
comp=Z,3.0nm,1.2s
**WMQ Urumqi 64.72 317** *eP* **P 13 59 25.0 +3.5**
**MTDJ Mount Denham 66.16 96 P P 13 59 31.6 +0.4**
**ABKAR Akbulak array 66.61 339 P P 13 59 32.4 -1.1**
**AKASG Malin Array Be 67.85 0 P P 13 59 40.9 -0.4**
comp=Z,2.6nm,0.4s,baz=2.4,slow=6.2,SNR=24
**AKASG Malin Array Be 67.85 0 P P 13 59 40.5 -0.8**
AKASG pmax pmax
comp=Z,1.0nm,1.1s
**AKASG Malin Array Be 67.85 0 P P 13 59 40.5 -0.8**
**AKBB Malin Array Si 67.85 0 P P 13 59 40.4 -0.9**
AKBB pmax pmax
comp=Z,4.0nm,0.5s
**AKBB Malin Array Si 67.85 0 P P 13 59 40.4 -0.9**
AKBB IAmb IAmb 13 59 47.0
comp=Z,3.9nm,0.5s
**KHC Kasperske Hory 68.71 11 P P 13 59 47.3 +0.5**
KHC pmax pmax
comp=Z,2.0nm,0.8s
**KHC Kasperske Hory 68.71 11 P P 13 59 47.3 +0.5**
**GOMU GeErMu 69.01 308 P P 13 59 46.5 -2.8**
GOMU pP pP 14 00 02.8 -3.7
GOMU sP PcP 14 00 09.5 -3.6
GOMU pmax pmax
comp=Z,2.0nm,0.8s
**AAK Ala-Archa 69.70 326** *i* P **P 13 59 50.6 -2.6**
AAK pmax pmax
comp=Z,4.0nm,1.7s
**KKAR Karatay Array 70.28 329 P P 13 59 55.3 -1.2**
**KKAR Karatay Array 70.28 329 P P 13 59 55.3 -1.2**
**BURAR Bucovina Array 70.89 3 P P 14 00 00.0 -0.3**
**TUE Stuetta 70.90 14 P P 14 00 01.1 +0.7**
TUE IAmb IAmb 14 00 08.5
comp=Z,18nm,1.5s
**KSH Kashi 72.21 324 P P 14 00 13.0 +4.6**
KSH pP PcP 14 00 29.5 +3.2
KSH sP sP 14 00 37.0 +4.2
KSH pmax pmax
comp=Z,2.0nm,0.9s
**KIV Kislovodsk 74.05 350** *eP* **P 14 00 18.7 -0.4**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**KBZ Khabaz 74.25 350 P P 14 00 19.3 -0.8**
comp=Z,1.9nm,0.9s,baz=262,slow=10,SNR=5.3
**PZH PanZhiHua 74.80 298 P P 14 00 26.0 +2.3**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
**BRTR Keskin Array B 78.77 357 P P 14 00 45.3 -0.6**
comp=Z,0.9nm,0.8s,baz=35,slow=6.6,SNR=5.7
**BRTR Keskin Array B 78.77 357** *ce* P **P 14 00 46.2 +0.3**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**CMAR Chiang Mai Arr 83.10 296 P P 14 01 08.3 -0.8**
comp=Z,0.9nm,0.8s,baz=6.5,slow=6.0,SNR=7.5
**BOSA Boshof 146.71 6 PKPbc PKPdf 14 08 24.1 +1.3**
comp=Z,2.3nm,0.8s,baz=333,slow=2.3,SNR=4.4

*IDC **28** 14:14:19.2±2.7,26°.43N×141°.44E,h0km,mb4.1/2, mb1 4.3/2,mb1mx3.4/35,mbtmp4.1/2 Error ellipse: s-maj=1.33.7km s-min=29.8km az=79.0*
*NEIC **28** 14:14:24.8±0.8,26°.49N±0°.09×141°.8E±0°.2,h42km±5km, mb4.5/12,Error ellipse: s-maj=24.5km s-min=9.6km az=110.0*

**ISC 28 14:14:23.3±0.8,26°.43N±0°.09×141°.6E±0°.1,h35km,n17, σ1s22/17,mb4.3/8,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JCJ** | **Chichijima** | **0.84** | **39** | | | **Pn** | **14 14 38.4** | **-0.3** |
| JCJ | | | | | | **Sn** | **14 14 48.0** | **-1.9** |
| **JMM** | **Marumori** | **11.42** | **357** | | Pn | **Pn** | **14 17 05.9** | **+2.0** |
| **INCN** | **Inchon** | **16.79** | **315** | | Pn | **Pn** | **14 18 13.6** | **-2.1** |
| INCN | | | | | IAmb | IAmb | 14 18 15.6 | |
| **UBPT** | **Khong Chiam** | **35.42** | **259** | | P | **P** | **14 21 14.5** | **-1.7** |
| **SMY** | **Shemya** | **35.77** | **34** | | P | **P** | **14 21 18.8** | **0.0** |
| **PMG** | **Port Moresby** | **36.03** | **171** | | P | **P** | **14 21 20.9** | **-0.5** |
| PMG | | | | | IAmb | IAmb | 14 21 41.4 | |
| **MTN** | **Manton Dam** | **40.34** | **196** | | P | **P** | **14 21 58.2** | **+0.6** |
| MTN | | | | | IAmb | IAmb | 14 22 11.2 | |
| **WB0** | **Warramunga Arr** | **46.45** | **189** | | P | **P** | **14 22 47.5** | **+0.6** |
| **WR0** | **Warramunga Arr** | **46.62** | **189** | | P | **P** | **14 22 49.1** | **+0.9** |
| WR0 | | | | | IAmb | IAmb | 14 23 10.6 | |
| **WRAB** | **Tennant Creek** | **46.62** | **189** | | P | **P** | **14 22 48.9** | **+0.6** |
| WRAB | | | | | IAmb | IAmb | 14 23 11.9 | |
| **WB2** | **Warramunga Arr** | **46.63** | **189** | | P | **P** | **14 22 48.9** | **+0.6** |
| WB2 | | | | | IAmb | IAmb | 14 22 55.3 | |
| **WRA** | **Warramunga Arr** | **46.63** | **189** | | P | **P** | **14 22 49.2** | **+0.8** |

comp=Z,1.0nm,0.4s,baz=11,slow=8.8,SNR=20
**WRA Warramunga Arr 46.63 189** IAmb IAmb 14 22 52.1
comp=Z,0.3nm,1.2s
**MKAR Makanchi Array 50.49 310** P **P** **14 23 17.8 -0.1**
comp=Z,0.1nm,0.4s,baz=104,slow=6.1,SNR=1.1
**ABKAR Akbulak array 65.18 314** P **P** **14 25 01.3 +0.5**
**FINES FINESS Array B 78.31 334** P **P** **14 26 20.6 +1.2**
comp=Z,0.9nm,0.4s,baz=78,slow=4.8,SNR=13
**NC204 NORSAR Array S 84.00 338** P **P** **14 26 51.0 +1.1**

*SKHL **28** 14:17:19.7±0.5, 44.˚40N× 148.˚20E, h92km±5km, mb4.5/3, msha5.3/4*
*JMA **28** 14:17:21.1±0.6, 44.˚14N× 148.˚11E, h95km, M3.5*
**ISC 28 14:17:17.0**±3.2, **44.˚32N**±0.˚10×**148.˚3E**±0.˚2, **h107**km±17km, **n21**, σ1§**97**/31, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.97** | **340** | *i* P | | | **Pn** | **14 17 37.7** | **0.0** |
| KUR | | | | | AMB | | AMB | 14 17 38.1 | |
| | 70nm,0.4s | | | | | | | | |
| KUR | | | | | AMB | | AMB | 14 17 38.1 | |
| | 70nm,0.4s | | | | | | | | |
| KUR | | | | | AMB | | AMB | 14 17 38.1 | |
| | 320nm,0.4s | | | | | | | | |
| KUR | | | | *i* S | | | **Sn** | **14 17 51.7** | **-1.6** |
| KUR | | | | A | | | A | 14 17 52.3 | |
| | 280nm,0.4s | | | | | | | | |
| KUR | | | | A | | | A | 14 17 52.3 | |
| | 460nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **1.17** | **248** | *i* P | | | **Pn** | **14 17 41.2** | **+1.4** |
| SHO | | | | | AMB | | AMB | 14 17 43.9 | |
| | 50nm,0.2s | | | | | | | | |
| SHO | | | | *i* S | | | **Sn** | **14 17 56.4** | **-0.7** |
| SHO | | | | A | | | A | 14 17 57.5 | |
| | 490nm,0.4s | | | | | | | | |
| SHO | | | | A | | | A | 14 17 57.5 | |
| | 700nm,0.4s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.80** | **262** | *i* P | | | **Pn** | **14 17 48.6** | **+1.3** |
| YUK | | | | | AMB | | AMB | 14 17 49.8 | |
| | 70nm,0.2s | | | | | | | | |
| YUK | | | | *e*S | | | **Sn** | **14 18 10.1** | **-0.3** |
| YUK | | | | A | | | A | 14 18 11.5 | |
| | 380nm,0.4s | | | | | | | | |
| YUK | | | | A | | | A | 14 18 11.5 | |
| | 480nm,0.4s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.10** | **244** | P | | | **Pn** | **14 17 52.2** | **+1.1** |
| NEM2 | | | | *e*S | | | **Sn** | **14 18 16.5** | **-0.8** |
| **NMR** | **Nemuro--Hokkai** | **2.11** | **244** | *i* P | | | **Pn** | **14 17 52.4** | **+1.2** |
| NMR | | | | *e*S | | | **Sn** | **14 18 16.8** | **-0.6** |
| **GLVR** | **Golovnino** | **2.11** | **255** | *e*P | | | **Pn** | **14 17 52.5** | **+1.3** |
| GLVR | | | | *e*S | | | **Sn** | **14 18 17.2** | **-0.3** |
| GLVR | | | | A | | | A | 14 18 18.8 | |
| | 370nm,0.5s | | | | | | | | |
| GLVR | | | | A | | | A | 14 18 18.8 | |
| | 310nm,0.5s | | | | | | | | |
| **JRA** | **Rausu** | **2.34** | **262** | P | | | **Pn** | **14 17 56.7** | **+2.5** |
| **JNSB** | **Nemuroshibetsu** | **2.46** | **258** | P | | | **Pn** | **14 17 58.0** | **+2.2** |
| **JKHN** | **Kushirohamanak** | **2.61** | **243** | P | | | **Pn** | **14 17 59.2** | **+1.4** |
| **JNK** | **Nakash** | **2.71** | **256** | P | | | **Pn** | **14 18 00.7** | **+1.6** |
| **AKK** | **Akkeshi** | **2.85** | **244** | *e*P | | | **Pn** | **14 18 02.1** | **+1.2** |
| AKK | | | | *e*S | | | **Sn** | **14 18 33.5** | **-1.2** |
| **JAK** | **Akkeshi** | **2.95** | **245** | P | | | **Pn** | **14 18 03.4** | **+1.2** |
| JAK | | | | *e*S | | | **Sn** | **14 18 36.0** | **-1.1** |
| **JTKR** | **Abashiri--Toko** | **3.21** | **265** | P | | | **Pn** | **14 18 07.0** | **+1.4** |
| **JAR** | **Ashorobuto** | **3.46** | **254** | P | | | **Pn** | **14 18 11.2** | **+2.2** |
| **JCH** | **Churui** | **4.00** | **247** | P | | | **Pn** | **14 18 17.4** | **+1.1** |
| JCH | | | | *e*S | | | **Sn** | **14 19 00.2** | **-2.0** |
| **JKK2** | **Kamakawa 2** | **4.05** | **266** | P | | | **Pn** | **14 18 19.1** | **+2.2** |
| **JEM** | **Erimo** | **4.43** | **241** | Pn | | | **Pn** | **14 18 25.4** | **+3.3** |
| **JNBK** | **Urakawa-nobuka** | **4.56** | **245** | P | | | **Pn** | **14 18 24.5** | **+0.8** |
| **YSS** | **Yuzh-Sakhalins** | **4.72** | **306** | *e*P | | | **Pn** | **14 18 27.7** | **+1.8** |
| YSS | | | | | AMB | | AMB | 14 18 31.2 | |
| | 10.0nm,0.8s | | | | | | | | |
| **JKB** | **Kayabe** | **5.87** | **248** | P | | | **Pn** | **14 18 42.5** | **+1.0** |
| JKB | | | | *e*S | | | **Sn** | **14 19 43.8** | **-3.6** |
| **JOT** | **Ohata** | **6.11** | **244** | *e*S | | | **Sn** | **14 19 48.0** | **-5.2** |

*IDC **28** 14:29:50.1±0.7, 6.˚79N× 73.˚00W, h158km±11km, mb3.4/4, mb1 3.8/7, mb1mx3.3/43, mbtmp4.0/7, MS3.6/1, Ms1 3.6/1, ms1mx2.4/42, Error ellipse: s-maj=30.3km s-min=7.5km az=133.0*
*NEIC **28** 14:29:50.6±1.4, 6.˚70N±0.˚08× 73.˚0W±0.˚1, h165km±8km, mb4.1/25, Error ellipse: s-maj=15.7km s-min=9.4km az=117.0*
*RSNC **28** 14:29:51.6±1.0, 6.˚82N× 73.˚16W, h146km±4km, ML3.7, Mw4.0*
**ISC 28 14:29:49.8**±0.6, **6.˚84N**±0.˚03× **73.˚08W**±0.˚03, **h154**km±5km, **n78**, σ1§**52**/115, **mb4.1**/16, **9C-2D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.27** | **202** | ⇓*i* P | | | **Pn** | **14 30 11.5** | **+0.4** |
| BARC | | | | | *e*S | | **Sn** | **14 30 26.3** | **-0.9** |
| BARC | | | | | *i* | | | 14 30 27.4 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.62** | **38** | ⇓*i* P | | | **Pn** | **14 30 14.3** | **+1.4** |
| PAMC | | | | | *e*S | | **Sn** | **14 30 31.5** | **+1.0** |
| PAMC | | | | | *i* | | | 14 30 31.9 | |
| | comp=Z,575nm,0.2s | | | | | | | | |
| **RUSC** | **La Rusia** | **0.94** | **180** | *e*P | | | **Pn** | **14 30 15.4** | **+0.3** |
| RUSC | | | | *e*S | | | **Sn** | **14 30 34.1** | **-0.3** |
| RUSC | | | | *i* | | | | 14 30 36.5 | |
| | comp=Z,382nm,0.2s | | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.34** | **107** | ⇑*e*P | | | **Pn** | **14 30 19.9** | **+1.7** |
| TAMC | | | | *e*S | | | **Sn** | **14 30 41.5** | **+1.7** |
| TAMC | | | | *i* | | | | 14 30 42.1 | |
| | comp=Z,499nm,0.3s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.40** | **258** | *e*P | | | **Pn** | **14 30 17.8** | **-0.8** |
| PTBC | | | | *e*S | | | **Sn** | **14 30 39.0** | **-1.7** |
| PTBC | | | | *i* | | | | 14 30 43.9 | |
| | comp=Z,759nm,0.5s | | | | | | | | |
| **OCAC** | **Ocana** | **1.41** | **350** | ⇑*i* P | | | **Pn** | **14 30 19.7** | **+0.7** |
| OCAC | | | | *e*S | | | **Sn** | **14 30 42.0** | **+0.7** |
| OCAC | | | | *i* | | | | 14 30 49.1 | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.54** | **220** | ⇑*e*P | | | **Pn** | **14 30 20.2** | **0.0** |
| SPBC | | | | *e*S | | | **Sn** | **14 30 42.8** | **-0.7** |
| SPBC | | | | *i* | | | | 14 30 50.8 | |
| | comp=Z,921nm,0.3s | | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.88** | **290** | *e*P | | | **Pn** | **14 30 23.9** | **+0.1** |
| ZARC | | | | *e*S | | | **Sn** | **14 30 48.8** | **-1.1** |
| ZARC | | | | *i* | | | | 14 30 55.5 | |
| | comp=Z,659nm,0.3s | | | | | | | | |
| **NORC** | **Norcasia** | **2.18** | **235** | *e*P | | | **Pn** | **14 30 27.1** | **-0.3** |
| NORC | | | | *e*S | | | **Sn** | **14 30 55.6** | **-0.7** |
| NORC | | | | *i* | | | | 14 31 00.2 | |
| | comp=Z,411nm,0.2s | | | | | | | | |
| **CHIC** | **Chingaza** | **2.29** | **196** | ⇑*e*P | | | **Pn** | **14 30 29.7** | **+0.6** |
| CHIC | | | | *e*S | | | **Sn** | **14 30 58.6** | **-0.6** |
| **ROSC** | **El Rosal** | **2.34** | **212** | P | | | **Pn** | **14 30 31.1** | **+1.6** |
| | comp=Z,72nm,0.3s,baz=282,slow=19,SNR=142 | | | | | | | | |
| ROSC | | | | | S | | **Sn** | **14 31 01.2** | **+1.0** |
| | comp=Z,282nm,0.3s,baz=191,slow=24,SNR=20 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.34** | **212** | | | | **Pn** | **14 30 30.1** | **+0.5** |
| **ROSC** | **El Rosal** | **2.34** | **212** | *e*P | | | **Pn** | **14 30 31.2** | **+1.6** |
| ROSC | | | | *e*S | | | **Sn** | **14 31 02.3** | **+2.1** |
| ROSC | | | | *i* | | | | 14 31 05.8 | |
| | comp=Z,885nm,0.5s | | | | | | | | |
| **HELC** | **Santa Helena** | **2.51** | **255** | *e*P | | | **Pn** | **14 30 31.3** | **-0.4** |
| HELC | | | | *e*S | | | **Sn** | **14 31 04.4** | **+0.5** |
| HELC | | | | *i* | | | | 14 31 09.6 | |
| | comp=Z,390nm,0.3s | | | | | | | | |
| **UREC** | **San Jos de Ur** | **2.59** | **291** | *e*P | | | **Pn** | **14 30 31.0** | **-1.3** |
| UREC | | | | *e*S | | | **Sn** | **14 31 02.9** | **-2.2** |
| UREC | | | | *i* | | | | 14 31 13.3 | |
| | comp=Z,580nm,0.2s | | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.73** | **350** | *e*P | | | **Pn** | **14 30 36.4** | **+2.5** |
| LL1C | | | | *e*S | | | **Sn** | **14 31 11.8** | **+3.7** |
| **VILC** | **Villavicencio,** | **2.78** | **193** | *e*P | | | **Pn** | **14 30 34.6** | **-0.1** |
| VILC | | | | *e*S | | | **Sn** | **14 31 09.0** | **-0.5** |
| **GUY2C** | **Guyana, Caldas** | **2.78** | **235** | *e*P | | | **Pn** | **14 30 35.4** | **+0.3** |
| GUY2C | | | | *e*S | | | **Sn** | **14 31 13.7** | **+3.8** |
| GUY2C | | | | *i* | | | | 14 31 17.3 | |
| | comp=Z,315nm,0.6s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **160** | *e*P | | | **Pn** | **14 30 34.6** | **-0.2** |
| PTGC | | | | *e*S | | | **Sn** | **14 31 08.0** | **-1.6** |
| PTGC | | | | *i* | | | | 14 31 10.7 | |
| | comp=Z,216nm,0.2s | | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.88** | **356** | *e*P | | | **Pn** | **14 30 36.8** | **+0.9** |
| LL6C | | | | *e*S | | | **Sn** | **14 31 11.0** | **-0.6** |
| LL6C | | | | *i* | | | | 14 31 13.9 | |
| | comp=Z,101nm,0.3s | | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.07** | **252** | *e*P | | | **Pn** | **14 30 38.8** | **+0.4** |
| CBOC | | | | *e*S | | | **Sn** | **14 31 16.1** | **+0.1** |
| CBOC | | | | *i* | | | | 14 31 31.9 | |
| | comp=Z,90nm,0.4s | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.17** | **50** | P | | | **Pn** | **14 30 41.1** | **+1.4** |
| | comp=Z,55nm,0.3s,baz=196,slow=2.0,SNR=142 | | | | | | | | |
| SDV | | | | | S | | **Sn** | **14 31 18.0** | **-0.2** |
| | comp=Z,34nm,0.3s,baz=33,slow=10,SNR=12 | | | | | | | | |
| **SDV** | **Santo Domingo** | **3.17** | **50** | | | | **Pn** | **14 30 40.6** | **+1.0** |
| **SDV** | **Santo Domingo** | **3.17** | **50** | ⇑*e*P | | | **Pn** | **14 30 40.9** | **+1.2** |
| SDV | | | | *e*S | | | **Sn** | **14 31 17.6** | **-0.7** |
| SDV | | | | *i* | | | | 14 31 21.5 | |
| | comp=Z,81nm,0.3s | | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.20** | **307** | *e*P | | | **Pn** | **14 30 38.4** | **-1.5** |
| MOTC | | | | *e*S | | | **Sn** | **14 31 17.1** | **-1.6** |
| MOTC | | | | *i* | | | | 14 31 18.8 | |
| | comp=Z,191nm,0.3s | | | | | | | | |
| **ANIL** | **Santa Ana** | **3.28** | **225** | *e*P | | | **Pn** | **14 30 41.7** | **+0.5** |
| ANIL | | | | *e*S | | | **Sn** | **14 31 22.9** | **+1.9** |
| **ELOV** | **Elorza** | **3.58** | **87** | ⇑*e*P | | | **Pn** | **14 30 45.8** | **+1.0** |
| ELOV | | | | *e*S | | | **Sn** | **14 31 26.3** | **-1.0** |
| **ORTC** | **Ortega, Tolima** | **3.62** | **217** | ⇑*e*P | | | **Pn** | **14 30 45.3** | **-0.1** |
| ORTC | | | | *e*S | | | **Sn** | **14 31 28.4** | **-0.1** |
| ORTC | | | | *i* | | | | 14 31 35.1 | |
| | comp=Z,154nm,0.3s | | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.68** | **326** | *e*P | | | **Pn** | **14 30 45.4** | **-0.7** |
| SJCC | | | | *e*S | | | **Sn** | **14 31 26.1** | **-3.7** |
| SJCC | | | | *i* | | | | 14 31 30.3 | |
| | comp=Z,95nm,0.3s | | | | | | | | |
| **PLMC** | **San Jos del P** | **3.72** | **239** | ⇑*e*P | | | **Pn** | **14 30 46.8** | **+0.2** |
| PLMC | | | | *e*S | | | **Sn** | **14 31 30.0** | **-0.7** |
| PLMC | | | | *i* | | | | 14 31 34.4 | |
| | comp=Z,56nm,0.5s | | | | | | | | |
| **LCBC** | **Los crdobas,** | **3.82** | **302** | *e*P | | | **Pn** | **14 30 48.8** | **+0.9** |
| LCBC | | | | *e*S | | | **Sn** | **14 31 33.5** | **+0.5** |
| LCBC | | | | *i* | | | | 14 31 36.9 | |
| | comp=Z,170nm,0.2s | | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.16** | **3** | ⇑*e*P | | | **Pn** | **14 30 51.8** | **-0.6** |
| CRJC | | | | *e*S | | | **Sn** | **14 31 39.7** | **-1.3** |
| CRJC | | | | *i* | | | | 14 31 46.1 | |
| | comp=Z,121nm,0.2s | | | | | | | | |
| **GUVC** | **San Jose del G** | **4.29** | **174** | *e*P | | | **Pn** | **14 30 54.1** | **+0.1** |
| GUVC | | | | *e*S | | | **Sn** | **14 31 41.8** | **-2.3** |
| GUVC | | | | *i* | | | | 14 31 47.8 | |
| | comp=Z,136nm,0.2s | | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.31** | **229** | *e*P | | | **Pn** | **14 30 53.9** | **-0.5** |
| YOTC | | | | *e*S | | | **Sn** | **14 31 48.1** | **+3.4** |
| **SMRC** | **Santa Marta, M** | **4.44** | **345** | *e*P | | | **Pn** | **14 30 56.3** | **+0.4** |
| SMRC | | | | *e*S | | | **Sn** | **14 31 43.7** | **-3.9** |
| SMRC | | | | *i* | | | | 14 31 48.2 | |
| | comp=Z,57nm,0.3s | | | | | | | | |
| **DABV** | **Dabajuro** | **4.72** | **31** | *e*P | | | **Pn** | **14 31 00.4** | **+0.7** |
| DABV | | | | *e*S | | | **Sn** | **14 31 52.2** | **-2.0** |
| **MACC** | **Macarena, Meta** | **4.73** | **189** | *e*P | | | **Pn** | **14 30 58.3** | **-1.5** |
| MACC | | | | *e*S | | | **Sn** | **14 31 49.5** | **-4.9** |
| MACC | | | | *i* | | | | 14 31 56.0 | |
| | comp=Z,44nm,0.3s | | | | | | | | |
| **MARP** | **Paez Belalcaza** | **4.89** | **216** | *e*P | | | **Pn** | **14 31 02.2** | **0.0** |
| MARP | | | | *e*S | | | **Sn** | **14 31 56.2** | **-2.5** |
| **URIC** | **Uribia, Colomb** | **4.95** | **12** | *e*P | | | **Pn** | **14 30 59.6** | **-3.1** |
| URIC | | | | *e*S | | | **Sn** | **14 31 56.5** | **-3.0** |
| URIC | | | | *i* | | | | 14 32 03.8 | |
| | comp=Z,22nm,0.5s | | | | | | | | |
| **GARC** | **Garzon, Huila** | **5.21** | **208** | *e*P | | | **Pn** | **14 31 05.7** | **-0.7** |
| GARC | | | | *e*S | | | **Sn** | **14 32 01.6** | **-4.5** |
| GARC | | | | *i* | | | | 14 32 07.3 | |
| | comp=Z,95nm,0.3s | | | | | | | | |
| **POPC** | **Popayan, Colom** | **5.57** | **220** | *e*P | | | **Pn** | **14 31 10.9** | **-0.2** |
| POPC | | | | *e*S | | | **Sn** | **14 32 13.8** | **-0.9** |
| **BIRV** | **Birongo** | **7.64** | **61** | Pn | | | **Pn** | **14 31 37.1** | **-1.4** |
| **PCRV** | **Puerto La Cruz** | **8.99** | **68** | P | | | **Pn** | **14 31 57.4** | **+0.9** |
| | comp=Z,1.2nm,0.3s,baz=292,slow=1.8,SNR=6.7 | | | | | | | | |
| **PLCV** | **Puerto La Cruz** | **9.03** | **68** | | | | **Pn** | **14 31 57.4** | **+0.4** |
| **SRBA** | **San Rafael, Bu** | **10.45** | **284** | Pn | | | **Pn** | **14 32 16.4** | **+0.5** |
| **MTDJ** | **Mount Denham** | **12.12** | **339** | Pn | | | **Pn** | **14 32 40.6** | **+2.9** |
| **GTBY** | **Guantanamo Bay** | **13.16** | **352** | P | | | **P** | **14 32 55.1** | **-0.3** |
| **Y58A** | **Scranton** | **27.61** | **348** | P | | | **P** | **14 35 21.4** | **-1.5** |
| **WHAR** | **Wooly Hollow** | **33.37** | **331** | P | | | **P** | **14 36 14.2** | **+0.7** |
| WHAR | | | | | IAmb | | IAmb | 14 36 41.5 | |
| | comp=Z,4.1nm,1.1s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **35.17** | **335** | P | | | **P** | **14 36 29.1** | **+0.1** |
| CCM | | | | | IAmb | | IAmb | 14 36 30.6 | |
| | comp=Z,5.1nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.48** | **312** | P | | | **P** | **14 36 41.3** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=127,slow=9.4,SNR=10 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **36.48** | **312** | P | | | **P** | **14 36 41.1** | **+0.8** |
| TX31 | | | | | IAmb | | IAmb | 14 36 48.9 | |
| | comp=Z,9.4nm,1.4s | | | | | | | | |
| **TX32** | **Lajitas Array** | **36.48** | **312** | P | | | **P** | **14 36 41.0** | **+0.7** |
| **MNTX** | **Cornudas Mount** | **38.98** | **314** | P | | | **P** | **14 37 02.3** | **+0.9** |
| **JFWS** | **Jewell Farm** | **38.99** | **340** | P | | | **P** | **14 37 01.4** | **+0.3** |
| **LPIG** | **La Paz** | **39.59** | **300** | LR | | | LR | 14 56 07.6 | |
| | comp=Z,80nm,20.3s,baz=225,slow=40 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **42.15** | **334** | P | | | **P** | **14 37 27.2** | **+0.1** |
| **EYMN** | **Ely** | **43.86** | **342** | P | | | **P** | **14 37 40.7** | **0.0** |
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | | | **P** | **14 38 07.2** | **-0.4** |
| | comp=Z,2.4nm,0.5s,baz=137,slow=1.0,SNR=3.3 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | | IAmb | | IAmb | 14 38 34.6 | |
| | comp=Z,8.4nm,1.4s | | | | | | | | |
| **PLCA** | **Paso Flores** | **47.40** | **177** | P | | | **P** | **14 38 05.1** | **-3.5** |
| PLCA | | | | | IAmb | | IAmb | 14 38 23.3 | |
| | comp=Z,6.5nm,1.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.08** | **324** | P | | | **P** | **14 38 14.9** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=123,slow=5.5,SNR=3.9 | | | | | | | | |
| **SCHQ** | **Schefferville** | **48.12** | **5** | P | | | **P** | **14 38 14.8** | **+0.8** |
| **DGMT** | **Dagmar** | **49.15** | **333** | P | | | **P** | **14 38 23.3** | **+1.3** |
| **BGU** | **Big Grassy Mou** | **49.15** | **320** | P | | | **P** | **14 38 23.2** | **+0.9** |
| **REDW** | **Red Top Meadow** | **49.20** | **324** | P | | | **P** | **14 38 23.6** | **+0.9** |
| **GWY** | **Greenwater Val** | **49.35** | **313** | P | | | **P** | **14 38 23.2** | **-0.7** |
| GWY | | | | | IAmb | | IAmb | 14 38 51.0 | |
| | comp=Z,3.7nm,1.2s | | | | | | | | |
| **I07A** | **Izee** | **54.88** | **320** | P | | | **P** | **14 39 05.2** | **+0.7** |
| I07A | | | | | IAmb | | IAmb | 14 39 09.1 | |
| | comp=Z,8.2nm,1.4s | | | | | | | | |
| **EDM** | **Edmonton** | **56.62** | **332** | P | | | **P** | **14 39 16.5** | **-0.2** |
| EDM | | | | | IAmb | | IAmb | 14 39 16.9 | |
| | comp=Z,2.2nm,0.4s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | | | **P** | **14 40 01.9** | **+0.2** |
| | comp=Z,1.3nm,0.5s,baz=132,slow=6.7,SNR=30 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **72.43** | **345** | P | | | **P** | **14 40 59.0** | **+0.1** |
| A36M | | | | | IAmb | | IAmb | 14 40 59.9 | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **73.03** | **340** | P | | | **P** | **14 41 03.0** | **+0.5** |
| INK | | | | | IAmb | | IAmb | 14 41 20.1 | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| **DOT** | **Dot Lake** | **75.50** | **334** | P | | | **P** | **14 41 18.0** | **+1.0** |
| DOT | | | | | IAmb | | IAmb | 14 41 32.4 | |
| | comp=Z,4.8nm,1.4s | | | | | | | | |
| **RND** | **Reindeer** | **77.55** | **333** | P | | | **P** | **14 41 29.9** | **+1.3** |
| RND | | | | | IAmb | | IAmb | 14 41 46.4 | |
| | comp=Z,7.3nm,1.3s | | | | | | | | |
| **PPLA** | **Purkeypile** | **78.98** | **333** | P | | | **P** | **14 41 36.9** | **+0.4** |
| **J20K** | **Nowinta River** | **79.98** | **334** | P | | | **P** | **14 41 42.3** | **+0.6** |
| J20K | | | | | IAmb | | IAmb | 14 41 48.3 | |
| | comp=Z,7.2nm,1.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **122.29** | **20** | PKP | | | **PKPdf** | **14 48 26.3** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=288,slow=2.9,SNR=6.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.15** | **234** | PKPbc | | | **PKPbc** | **14 49 20.1** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=110,slow=3.6,SNR=5.1 | | | | | | | | |

*IDC **28** 14:31:41.0±2.1, 5.˚24N× 125.˚85E, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/54, mbtmp3.6/4, Error ellipse: s-maj=122.1km s-min=27.2km az=69.0*
*MAN **28** 14:32:00.8, 5.˚04N× 125.˚91E, h188km, mb4.4, ML3.3, MS3.1*
**ISC 28 14:32:01.7**±1.0, **5.˚2N**±0.˚1× **125.˚6E**±0.˚2, **h200**km, **n7**, σ1§**79**/8, **mb3.6**/4, **1C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.16** | **324** | ⇑*i* P | | | **Pn** | **14 32 32.5** | **-0.3** |
| GSPH | | | | *i* S | | | **Sn** | **14 32 53.7** | **-3.2** |
| **MATI** | **Mati** | **1.89** | **19** | ⇓*e*P | | | **Pn** | **14 32 38.8** | **-0.3** |
| **KCP** | **Kidapawan** | **1.93** | **344** | ⇓*e*P | | | **Pn** | **14 32 40.0** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **23.10** | **180** | P | | | **P** | **14 36 50.3** | **+0.3** |
| | 1.5nm,0.4s,baz=4.2,slow=7.7,SNR=19 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.36** | **161** | P | | | **P** | **14 37 19.1** | **-0.5** |
| | 0.3nm,0.2s,baz=339,slow=10,SNR=10 | | | | | | | | |
| **ASAR** | **Alice Springs** | **29.75** | **165** | P | | | **P** | **14 37 49.3** | **-0.4** |
| | 0.4nm,0.3s,baz=344,slow=7.6,SNR=10.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.78** | **325** | P | | | **P** | **14 41 20.2** | **+2.2** |
| | 0.2nm,0.6s,baz=114,slow=7.5,SNR=2.6 | | | | | | | | |

*WEL **28** 14:32:00, 43.˚57S× 172.˚62E, h4km, ML4.3, Mw4.1, Moment Tensor Solution. s14 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=0.14; $M_{\theta\theta}$=1.25; $M_{\phi\phi}$=-1.11; $M_{r\theta}$=0.49; $M_{r\phi}$=-0.97; $M_{\theta\phi}$=-0.20; Fault plane solution: $M_0$1.60000×$10^{15}$ NP1: φs=64.00000°, δ78.00000°, λ.169.00000°. NP2: φs=156.00000°, δ80.00000°, λ.12.00000°. Principal axes: T 174.8000, Plg16.0000°, Azm20.0000°; N -145.6000, Plg74.0000°, Azm194.0000°; P -29.2000, Plg1.0000°, Azm290.0000°;*
*NEIC **28** 14:32:40.6±1.4, 43.˚58S±0.˚03× 172.˚80E±0.˚06, h10km±1km, mb4.3/6 Error ellipse: s-maj=7.3km s-min=4.1km az=295.0*
*IDC **28** 14:32:41.8±1.7, 43.˚30S× 172.˚49E, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.6/33, mbtmp3.6/3, ML3.6/1, MS3.5/6, Ms1 3.5/6, ms1mx3.2/33, Error ellipse: s-maj=50.9km s-min=13.6km az=151.0*
*NOU **28** 14:32:41.9, 43.˚45S× 172.˚63E, h4km, MLv4.7/8, South Island, New Zealand*
**ISC 28 14:32:40.8**±0.6, **43.˚53S**±0.˚04× **172.˚73E**±0.˚04, **h10**km, **n52**, σ1§**02**/52, **mb4.2**/7, **MS3.5**/5, **South Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MQZ** | **McQueen's Vall** | **0.18** | **198** | Pg | | | **Pg** | **14 32 45.2** | **+0.5** |
| MQZ | | | | | Sg | | **Sg** | **14 32 47.4** | **+0.1** |
| **OXZ** | **Oxford** | **0.55** | **292** | Pg | | | **Pg** | **14 32 51.6** | **+0.2** |
| OXZ | | | | | Sg | | **Sg** | **14 32 58.7** | **+0.1** |
| **LTZ** | **Lake Taylor** | **0.82** | **336** | Pg | | | **Pn** | **14 32 58.2** | **-0.2** |
| LTZ | | | | | Sg | | **Sb** | **14 33 09.1** | **+0.8** |
| **RPZ** | **Rata Peaks** | **1.23** | **261** | Pg | | | **Pn** | **14 33 03.2** | **-0.8** |
| | 264nm,0.3s,baz=128,slow=0.9,SNR=547 | | | | | | | | |
| RPZ | | | | | LR | | LR | 14 33 17.5 | |
| | comp=Z,269nm,18.8s,baz=187,slow=32 | | | | | | | | |
| RPZ | | | | | Lg | | Lg | 14 33 18.2 | |
| | 253nm,0.3s,baz=162,slow=21,SNR=31 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **1.23** | **261** | | | | **Pn** | **14 33 03.1** | **-1.0** |
| **RPZ** | **Rata Peaks** | **1.23** | **261** | P | | | **Pn** | **14 33 03.4** | **-0.7** |
| **KHZ** | **Kahutara** | **1.26** | **28** | | | | **Pn** | **14 33 04.7** | **+0.3** |
| **KHZ** | **Kahutara** | **1.26** | **28** | P | | | **Pg** | **14 33 05.3** | **+0.3** |
| **THZ** | **Tophouse** | **1.77** | **4** | Pn | | | **Pn** | **14 33 12.0** | **+0.5** |
| **BSWZ** | **Blackbirch Sta** | **2.00** | **25** | | | | **Pn** | **14 33 15.4** | **+0.8** |
| **LBZ** | **Lake Benmore** | **2.03** | **244** | Pn | | | **Pn** | **14 33 16.1** | **+1.1** |
| **FOZ** | **Fox Glacier** | **2.12** | **269** | Pn | | | **Pn** | **14 33 16.5** | **+0.3** |
| **ODZ** | **Otahua Downs** | **2.13** | **224** | Pn | | | **Pn** | **14 33 16.4** | **0.0** |
| **ODZ** | **Otahua Downs** | **2.13** | **224** | P | | | **Pb** | **14 33 16.7** | **-0.7** |
| **TUWZ** | **Tuamarina** | **2.28** | **24** | | | | **Pn** | **14 33 17.8** | **-0.7** |
| **NNZ** | **Nelson** | **2.36** | **12** | | | | **Pn** | **14 33 20.4** | **+0.9** |
| **BHW** | **Baring Head** | **2.65** | **37** | | | | **Pn** | **14 33 23.5** | **+0.1** |
| **SNZO** | **South Karori** | **2.66** | **34** | Pn | | | **Pn** | **14 33 23.9** | **+0.3** |
| **SNZO** | **South Karori** | **2.66** | **34** | P | | | **Pn** | **14 33 24.4** | **+0.8** |
| **PLWZ** | **Palliser** | **2.71** | **44** | Pn | | | **Pn** | **14 33 24.1** | **-0.2** |
| **QRZ** | **Quartz Range** | **2.71** | **357** | | | | **Pn** | **14 33 24.9** | **+0.5** |
| **QRZ** | **Quartz Range** | **2.71** | **357** | P | | | **Pn** | **14 33 25.4** | **+1.1** |
| **MSWZ** | **Moikau Station** | **2.82** | **42** | Pn | | | **Pn** | **14 33 25.7** | **-0.1** |
| **WKZ** | **Wanaka** | **2.97** | **243** | Pn | | | **Pn** | **14 33 28.0** | **0.0** |
| **MLZ** | **Mavora Lakes** | **3.78** | **239** | Pn | | | **Pn** | **14 33 38.8** | **-0.3** |
| **BFZ** | **Birch Farm** | **3.87** | **44** | Pn | | | **Pn** | **14 33 40.0** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **4.15** | **234** | Pn | | | **Pn** | **14 33 44.8** | **+0.7** |
| **DCZ** | **Deep Cove** | **4.43** | **242** | Pn | | | **Pn** | **14 33 47.7** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **5.20** | **34** | Pn | | | **Pn** | **14 33 57.4** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **5.20** | **34** | P | | | **Pn** | **14 33 59.5** | **+0.9** |
| **HIZ** | **Hauiti** | **5.26** | **18** | Pn | | | **Pn** | **14 33 59.7** | **+0.2** |
| **HIZ** | **Hauiti** | **5.26** | **18** | P | | | **Pn** | **14 34 00.5** | **+1.0** |
| **URZ** | **Urewera** | **6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HELC | | | | *eS* | | **Sn** | **14 40 49.5 +2.0** |
| **SJCC** | **San Jacinto, C** | **2.77** | **51** | *eP* | | **Pn** | **14 40 14.3 -1.5** |
| SJCC | | | | *eS* | | **Sn** | **14 40 47.2 -2.1** |
| SJCC | | | | *i* | | | 14 40 48.6 |
| | comp=Z,16nm,0.3s | | | | | | |
| **AZU** | **Azuero** | **2.89** | **263** | *eP* | | **Pn** | **14 40 17.8 +0.5** |
| AZU | | | | *eS* | | **Sn** | **14 40 49.9 -2.1** |
| AZU | | | | *i* | | | 14 40 51.8 |
| | comp=Z,58nm,0.5s | | | | | | |
| **AZU** | **Azuero** | **2.89** | **263** | *eP* | | **Pn** | **14 40 18.3 +1.0** |
| AZU | | | | *eS* | | **Sn** | **14 40 51.1 -0.9** |
| **CHIT3** | **Chitre** | **3.02** | **266** | *eP* | | **Pn** | **14 40 19.3 +0.3** |
| CHIT3 | | | | *eS* | | **Sn** | **14 40 53.6 -1.5** |
| **PTBC** | **PUERTO BERRIO,** | **3.32** | **119** | *eP* | | **Pn** | **14 40 23.6 +0.3** |
| PTBC | | | | *eS* | | **Sn** | **14 41 01.7 -0.9** |
| PTBC | | | | *i* | | | 14 41 04.6 |
| | comp=Z,33nm,0.3s | | | | | | |
| **PLMC** | **San Jos del P** | **3.41** | **161** | *eP* | | **Pn** | **14 40 23.3 -1.3** |
| **NORC** | **Norcasia** | **3.59** | **136** | *eP* | | **Pn** | **14 40 29.3 +2.3** |
| NORC | | | | *i* | | | 14 41 19.8 |
| | comp=Z,11nm,0.5s | | | | | | |
| **OCAC** | **Ocana** | **4.02** | **89** | *eP* | | **Pn** | **14 40 33.0 0.0** |
| OCAC | | | | *eS* | | **Sn** | **14 41 18.2 -1.9** |
| **SPBC** | **San Pablo de B** | **4.12** | **127** | *eP* | | **Pn** | **14 40 35.2 +0.8** |
| **LL6C** | **La Loma 6 Bece** | **4.35** | **69** | *eP* | | **Pn** | **14 40 36.6 -0.8** |
| LL6C | | | | *eS* | | **Sn** | **14 41 24.8 -3.3** |
| LL6C | | | | *i* | | | 14 41 26.2 |
| | comp=Z,15nm,0.2s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **4.71** | **100** | *eP* | | **Pn** | **14 40 44.1 +1.3** |
| PAMC | | | | *eS* | | **Sn** | **14 41 36.0 -1.6** |
| PAMC | | | | *i* | | | 14 41 39.5 |
| | comp=Z,22nm,0.4s | | | | | | |
| **RUSC** | **La Rusia** | **4.82** | **118** | *eP* | | **Pn** | **14 40 45.2 +0.9** |
| RUSC | | | | *eS* | | **Sn** | **14 41 40.1 -0.3** |
| RUSC | | | | *i* | | | 14 41 54.9 |
| | comp=Z,10nm,0.4s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **5.27** | **57** | *eP* | | Pn | 14 40 47.4 -2.7 |
| CRJC | | | | *eS* | | Sn | 14 41 42.4 -6.6 |
| CRJC | | | | *i* | | | 14 41 47.0 |
| | comp=Z,25nm,0.2s | | | | | | |

**MAN 28 14:40:30.4, 13°.67N × 120°.64E, h109km, mb3.8, ML2.6, MS2.1, 1C-4D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.35** | **119** | *eP* | Pn | 14 40 47.1 | +0.8 |
| PGP | | | | *i* S | Sn | 14 41 00.5 | +2.2 |
| **LUBP** | **Lubang** | **0.38** | **279** | *eP* | Pn | 14 40 48.3 | +1.9 |
| **MACP** | **Maragondon, Ca** | **0.59** | **8** | *eP* | Pn | 14 40 49.2 | +1.4 |
| **LQP** | **Lukban** | **0.98** | **63** | *eP* | Pn | 14 40 52.9 | +1.4 |
| **SJMP** | **San Jose** | **1.29** | **159** | *eP* | Pn | 14 40 55.2 | +0.5 |

*IDC **28** 14:42:38.6±2.5, 6°.52S × 130°.04E, h139km±35km, mb3.3/1, mb1 3.1/5, mb1mx2.8/50, mbtmp3.5/5, Error ellipse: s-maj=67.3km s-min=16.2km az=91.0*

**ISC 28 14:42:46.4±1.4, 7°.1S±0°.1 × 129°.9E±0°.1, h150km, n16, σ1°.9 40/16, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRS** | **Darwin Rock St** | **5.34** | **170** | P | **Pn** | **14 44 05.8** | **+1.5** |
| **KDU** | **Kakadu** | **6.05** | **156** | P | **Pn** | **14 44 15.1** | **+1.4** |
| **SOEI** | **Soe** | **6.19** | **245** | P | **Pn** | **14 44 17.6** | **+1.9** |
| **SIJI** | **Sorong** | **6.37** | **12** | P | Pn | 14 44 03.5 | -15 |
| | 0.7nm,0.3s,baz=230,slow=23,SNR=11 | | | | | | |
| SIJI | | | | S | Sn | 14 45 06.3 | -24 |
| | 2.2nm,0.3s,baz=268,slow=23,SNR=9.3 | | | | | | |
| **KNRA** | **Kununurra** | **8.56** | **188** | P | **Pn** | **14 44 48.3** | **+1.0** |
| **LUWI** | **Luwuk** | **9.37** | **310** | P | **Pn** | **14 44 57.0** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **11.67** | **201** | P | **Pn** | **14 45 28.7** | **+0.3** |
| | 0.1nm,0.3s,baz=34,slow=10,SNR=7.5 | | | | | | |
| FITZ | | | | S | **Sn** | **14 47 34.8** | **-2.7** |
| | 0.4nm,0.3s,baz=172,slow=16,SNR=8.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.67** | **201** | P | **Pn** | **14 45 30.2** | **+1.8** |
| **WRAB** | **Tennant Creek** | **13.42** | **162** | P | **Pn** | **14 45 51.2** | **+0.3** |
| **WRA** | **Warramunga Arr** | **13.42** | **162** | P | **Pn** | **14 45 49.7** | **-1.3** |
| | 0.2nm,0.3s,baz=346,slow=13,SNR=12 | | | | | | |
| WRA | | | | S | **Sn** | **14 48 18.5** | **-1.2** |
| | 0.4nm,0.3s,baz=332,slow=25,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **16.87** | **167** | P | **P** | **14 46 33.4** | **+0.1** |
| | 0.2nm,0.3s,baz=342,slow=9.9,SNR=14 | | | | | | |
| **WRKA** | **Warakurna** | **17.87** | **185** | P | **Pn** | **14 46 45.4** | **-0.3** |
| **OOD** | **Oodnadatta** | **21.25** | **166** | P | **P** | **14 47 21.0** | **+0.3** |
| **MULG** | **Mulgathing** | **23.34** | **171** | P | **P** | **14 47 41.9** | **+0.6** |
| **MNAI** | **Manna** | **26.99** | **274** | P | **P** | **14 48 15.6** | **+1.1** |
| | 104nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.31** | **327** | P | P | 14 53 21.9 | -9.4 |
| | 0.4nm,0.5s,baz=116,slow=8.2,SNR=8.7 | | | | | | |

*NEIC **28** 14:50:50.6±2.8, 15°.80S±0°.08 × 71°.87W±0°.09, h6km±5km, Error ellipse: s-maj=13.4km s-min=9.8km az=56.0*
*ARE **28** 14:50:51±2.5, 15°.78S±0°.07 × 71°.77W±0°.09, h12km±4km, ML4.3, mb4.3/3(NEIC), Error ellipse: s-maj=12.8km s-min=9.4km az=60.0*
*IDC **28** 14:50:59.6±2.2, 15°.76S × 71°.50W, h59km±22km, mb3.6/4, mb1 3.8/8, mb1mx3.6/31, mbtmp3.8/8, ML3.3/4, MS3.4/9, Ms1 3.4/9, ms1mx3.2/45, Error ellipse: s-maj=27.4km s-min=18.1km az=62.0*

**ISC 28 14:50:51.3±0.8, 15°.81S±0°.06 × 71°.77W±0°.08, h10km, n50, σ1°.91/45, mb3.9/4, MS3.3/4, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AP01** | **Chacalluta** | **2.90** | **152** | Pn | **Pn** | **14 51 36.1** | **-1.4** |
| **AP01** | **Chacalluta** | **2.90** | **152** | *eP* | **Pb** | **14 51 41.4** | **-1.7** |
| AP01 | | | | *i* S | **Sb** | **14 52 18.1** | **-0.5** |
| AP01 | | | | IAML | | 14 52 27.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| **PB12** | **IPOC Station P** | **3.12** | **154** | Pn | **Pb** | **14 51 44.0** | **-3.0** |
| **PB12** | **IPOC Station P** | **3.12** | **154** | *eP* | **Pb** | **14 51 44.4** | **-2.6** |
| PB12 | | | | *eS* | **Sb** | **14 52 22.9** | **-2.2** |
| PB12 | | | | IAML | | 14 52 36.7 | |
| | comp=N,500nm,0.5s | | | | | | |
| **PB16** | **IPOC Station P** | **3.32** | **140** | | **Pb** | **14 51 48.6** | **-2.1** |
| **PB16** | **IPOC Station P** | **3.32** | **140** | *eP* | **Pb** | **14 51 49.1** | **-1.6** |
| PB16 | | | | *i* S | **Sb** | **14 52 30.9** | **-0.5** |
| **LPAZ** | **La Paz** | **3.54** | **98** | P | **Pb** | **14 51 51.0** | **-3.4** |
| | comp=N,0.6nm,0.3s,baz=278,slow=11,SNR=31 | | | | | | |
| **LPAZ** | **La Paz** | **3.54** | **98** | Pn | **Pn** | **14 51 46.0** | **-0.9** |
| **LPAZ** | **La Paz** | **3.54** | **98** | *eP* | **Pb** | **14 51 53.6** | **-0.8** |
| **PB11** | **IPOC Station P** | **4.42** | **153** | Pn | **Pn** | **14 52 01.8** | **+3.2** |
| **PB11** | **IPOC Station P** | **4.42** | **153** | *eP* | **Pn** | **14 52 01.9** | **+3.2** |
| **GO01** | **Chusmiza** | **4.56** | **148** | | **Pn** | **14 51 59.8** | **-1.1** |
| **GO01** | **Chusmiza** | **4.56** | **148** | *eP* | Pb | 14 52 05.7 | -6.1 |
| GO01 | | | | *i* S | **Sb** | **14 53 09.2** | **+2.1** |
| **TA02** | **Huaiquique** | **4.71** | **161** | | **Pn** | **14 52 01.9** | **-0.5** |
| **HMBC** | **Humberstone** | **4.80** | **158** | *eP* | **Pn** | **14 52 06.5** | **+2.6** |
| **TA01** | **Diego Aracena** | **4.97** | **163** | Pn | **Pn** | **14 52 05.7** | **-0.4** |
| **PATCX** | **Punta Patache** | **5.22** | **163** | | **Pn** | **14 52 08.0** | **-1.6** |
| **PB01** | **IPOC Station P** | **5.64** | **158** | | **Pn** | **14 52 13.8** | **-1.6** |
| **PB02** | **IPOC Station P** | **5.77** | **162** | Pn | **Pn** | **14 52 16.7** | **-0.4** |
| **PB07** | **IPOC Station P** | **6.16** | **163** | | **Pn** | **14 52 21.8** | **-0.7** |
| **NNA** | **Nana** | **6.21** | **307** | P | Pn | 14 52 30.8 | +7.6 |
| | comp=N,1.0nm,0.3s,baz=173,slow=12,SNR=2.2 | | | | | | |
| NNA | | | | LR | LR | 14 55 02.0 | |
| | comp=N,337nm,18.4s,baz=145,slow=38 | | | | | | |
| **NNA** | **Nana** | **6.21** | **307** | | **Pn** | **14 52 23.6** | **+0.4** |
| **PB09** | **IPOC Station P** | **6.42** | **158** | Pn | **Pn** | **14 52 24.7** | **-1.5** |
| **PB04** | **IPOC Station P** | **6.67** | **167** | | **Pn** | **14 52 28.7** | **-1.0** |
| **PB06** | **IPOC Station P** | **7.17** | **163** | Pn | **Pn** | **14 52 38.2** | **+1.7** |
| **LVC** | **Limon Verde** | **7.29** | **159** | P | **Pn** | **14 52 41.5** | **+3.3** |
| | comp=N,2.6nm,0.3s,baz=314,slow=8.7,SNR=20 | | | | | | |
| LVC | | | | S | **Sn** | **14 54 04.5** | **+3.2** |
| | comp=N,1.8nm,0.3s,baz=184,slow=11,SNR=6.2 | | | | | | |
| LVC | | | | LR | LR | 14 55 51.2 | |
| | comp=N,274nm,20.7s,baz=328,slow=40 | | | | | | |
| **LVC** | **Limon Verde** | **7.29** | **159** | Pn | **Pn** | **14 52 40.8** | **+2.5** |
| **PB15** | **IPOC Station P** | **7.68** | **164** | | **Pn** | **14 52 43.2** | **-0.3** |
| **PB10** | **IPOC Station P** | **7.75** | **172** | Pn | **Pn** | **14 52 44.3** | **-0.1** |
| **SIV** | **San Ignacio** | **10.30** | **92** | P | **Pn** | **14 53 20.7** | **+1.4** |
| | comp=N,0.5nm,0.3s,baz=273,slow=13,SNR=10 | | | | | | |
| **AC01** | **Pan de Azucar** | **10.35** | **174** | Pn | **Pn** | **14 53 18.9** | **-1.0** |
| **ATAH** | **Atahualpa** | **10.78** | **322** | LR | LR | 14 57 53.4 | |
| | comp=N,400nm,18.3s,baz=162,slow=38 | | | | | | |
| **AC06** | **Mina Casimiro** | **11.57** | **174** | Pn | **Pn** | **14 53 36.3** | **-0.4** |
| **CO02** | **Combarbal** | **15.35** | **177** | Pn | **Pn** | **14 54 28.0** | **-0.2** |
| CO02 | | | | IAmb | IAmb | 14 54 40.6 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CPUP** | **Villa Florida** | **17.05** | **130** | LR | LR | 15 03 01.5 | |
| | comp=Z,56nm,20.4s,baz=322,slow=43 | | | | | | |
| **PTGA** | **Pitinga** | **18.98** | **39** | LR | LR | 15 03 08.1 | |
| | comp=Z,127nm,18.1s,baz=76,slow=39 | | | | | | |
| **ROSC** | **El Rosal** | **20.67** | **353** | LR | LR | 15 04 06.5 | |
| | comp=Z,157nm,19.5s,baz=268,slow=38 | | | | | | |
| **SDV** | **Santo Domingo** | **24.56** | **3** | LR | LR | 15 06 32.8 | |
| | comp=Z,90nm,20.4s,baz=260,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **24.86** | **178** | P | | **P** | **14 56 17.7 +3.5** |
| | comp=Z,4.8nm,1.1s,baz=352,slow=11,SNR=5.9 | | | | | | |
| **PLCA** | **Paso Flores** | **24.86** | **178** | P | | **P** | **14 56 13.0 -1.2** |
| PLCA | | | | IAmb | IAmb | | 14 56 22.6 |
| | comp=Z,11nm,1.4s | | | | | | |
| **MDP** | **Montagnes des** | **28.11** | **44** | LR | LR | 15 08 30.4 | |
| | comp=Z,119nm,18.6s,baz=96,slow=38 | | | | | | |
| **SJG** | **San Juan** | **34.16** | **10** | LR | LR | 15 11 24.2 | |
| | comp=Z,31nm,20.9s,baz=212,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.43** | **325** | P | | **P** | **15 00 21.8 +2.7** |
| | comp=Z,0.5nm,0.7s,baz=152,slow=8.6,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.43** | **325** | P | | **P** | **15 00 16.8 -2.3** |
| **TORD** | **Torodi Ar. Bea** | **78.13** | **73** | P | | **P** | **15 02 50.7 -0.7** |
| | comp=Z,1.5nm,0.9s,baz=271,slow=5.7,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.13** | **73** | IAmb | IAmb | | 15 02 54.5 |
| | comp=Z,1.8nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.95** | **342** | P | | **P** | **15 03 28.2 +1.9** |
| | comp=Z,0.4nm,0.6s,baz=135,slow=5.0,SNR=8.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.95** | **342** | P | | **P** | **15 03 26.5 +0.1** |
| **KSH** | **Kashi** | **143.25** | **44** | PKP | | **PKPdf** | **15 10 26.3 -0.1** |
| **SONM** | **Songino Array** | **148.03** | **2** | PKPbc | | **PKiKP** | **15 10 38.5 -0.7** |
| | comp=Z,0.7nm,0.8s,baz=325,slow=1.8,SNR=4.8 | | | | | | |

*IDC **28** 14:53:13.7±1.9, 0°.36S × 124°.73E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/33, mbtmp3.3/3, MS3.2/1, Ms1 3.2/1, ms1mx2.3/28, Error ellipse: s-maj=161.3km s-min=28.1km az=63.0*
*DJA **28** 14:53:14.1±0.4, 1°.N±4° × 12°.7E±°, h47km±12km, M3.6/7, mb4.1/3, MLv3.4/7*

**ISC 28 14:53:17.1±1.3, 1°.0N±0°.1 × 126°.88E±0°.08, h35km, n11, σ2°.64/12, mb3.4/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.55** | **117** | P | **Pn** | **14 53 28.9** | **+0.4** |
| TNTI | | | | S | **Sn** | **14 53 40.1** | **+3.7** |
| **KMSI** | **Cibinong** | **2.93** | **261** | P | **Pn** | **14 54 00.6** | **-0.7** |
| **SANI** | **Sanana** | **3.18** | **196** | P | **Pn** | **14 54 04.2** | **-0.5** |
| SANI | | | | S | **Sn** | **14 54 43.6** | **+2.1** |
| **GTOI** | **Gorontalo** | **3.89** | **264** | P | **Pn** | **14 54 13.7** | **-0.8** |
| **BNSI** | **Bone** | **8.65** | **231** | P | **Pn** | **14 55 19.7** | **-0.2** |
| | 11nm,0.9s | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.66** | **235** | P | **Pn** | **14 55 21.4** | **+1.3** |
| | 11nm,1.0s | | | | | | |
| **BKSI** | **Bulukumba** | **9.24** | **227** | P | **Pn** | **14 55 30.1** | **+2.2** |
| **WRA** | **Warramunga Arr** | **22.08** | **161** | P | **P** | **14 58 05.1** | **-4.3** |
| | 0.7nm,0.4s,baz=332,slow=11,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **25.48** | **165** | P | **P** | **14 58 38.2** | **-4.0** |
| | 0.4nm,0.4s,baz=351,slow=14,SNR=8.8 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **34.15** | **20** | LR | LR | 15 15 47.0 | |
| | comp=Z,41nm,20.5s,baz=67,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.86** | **326** | P | **P** | **15 03 20.9** | **+1.5** |
| | 0.1nm,0.5s,baz=130,slow=6.4,SNR=2.0 | | | | | | |

*JMA **28** 14:59:21.3±0.5, 21°.70N × 123°.14E, h56km, M2.7*
*TAP **28** 14:59:23.6, 21°.63N × 122°.75E, h91km±1km, ML2.8, D*

**ISC 28 14:59:18.6±2.4, 21°.5N±0°.1 × 123°.03E±0°.06, h100km, n41, σ2°.05/59, Southeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAY** | **Lan-yu** | **1.46** | **290** | *eS* | **Sn** | **15 00 01.5** | **-2.4** |
| | baz=290 | | | | | | |
| **LDUT** | **Ludao** | **1.84** | **308** | *eS* | **Sn** | **15 00 08.7** | **-3.5** |
| | baz=318 | | | | | | |
| **EDH** | **Donghe** | **2.14** | **312** | P | **Pn** | **14 59 54.8** | **+1.8** |
| | baz=311 | | | | | | |
| EDH | | | | S | **Sn** | **15 00 17.1** | **-2.3** |
| | baz=311 | | | | | | |
| **TAWH** | **Dawu Township** | **2.14** | **292** | *eS* | **Sn** | **15 00 17.4** | **-1.9** |
| | baz=292 | | | | | | |
| **SLIU** | **Shizi** | **2.18** | **288** | *eP* | **Pn** | **14 59 55.0** | **+1.5** |
| | baz=288 | | | | | | |
| SLIU | | | | *eS* | **Sn** | **15 00 18.0** | **-2.2** |
| | baz=288 | | | | | | |
| **CHKT** | **Chengkung** | **2.19** | **316** | *eP* | **Pn** | **14 59 53.3** | **-0.3** |
| | baz=324 | | | | | | |
| CHKT | | | | *eS* | **Sn** | **15 00 17.9** | **-2.5** |
| | baz=324 | | | | | | |
| **EAST** | **Anshuo** | **2.19** | **293** | *eP* | **Pn** | **14 59 54.1** | **+0.5** |
| | baz=293 | | | | | | |
| EAST | | | | *eS* | **Sn** | **15 00 18.1** | **-2.4** |
| | baz=293 | | | | | | |
| **ECL** | **Taimali** | **2.19** | **299** | *eS* | **Sn** | **15 00 19.6** | **-0.9** |
| | baz=292 | | | | | | |
| **TWGBT** | **Beinan** | **2.21** | **306** | *eS* | **Sn** | **15 00 19.6** | **-1.3** |
| | baz=297 | | | | | | |
| **TWG** | **Pinlang** | **2.22** | **305** | *eS* | **Sn** | **15 00 20.0** | **-1.1** |
| | baz=297 | | | | | | |
| **LONT** | **Longtian** | **2.23** | **308** | *eP* | **Pn** | **14 59 56.2** | **+2.1** |
| | baz=313 | | | | | | |
| LONT | | | | *eS* | **Sn** | **15 00 18.9** | **-2.3** |
| | baz=313 | | | | | | |
| **FULB** | **Fuli** | **2.31** | **316** | *eP* | **Pn** | **14 59 54.9** | **-0.3** |
| | baz=319 | | | | | | |
| FULB | | | | *eS* | **Sn** | **15 00 20.6** | **-2.6** |
| | baz=319 | | | | | | |
| **SCZT** | **Fangliau** | **2.39** | **291** | *eP* | **Pn** | **14 59 59.0** | **+2.9** |
| | baz=291 | | | | | | |
| **EYUL** | **Yuli** | **2.40** | **319** | *eP* | **Pn** | **14 59 56.5** | **+0.2** |
| | baz=328 | | | | | | |
| **YULB** | **Yu-li** | **2.44** | **319** | *eP* | **Pn** | **14 59 57.1** | **+0.1** |
| | baz=328 | | | | | | |
| YULB | | | | *eS* | **Sn** | **15 00 24.9** | **-1.5** |
| | baz=328 | | | | | | |
| **HGSD** | **Ruisui** | **2.45** | **323** | *eP* | **Pn** | **14 59 56.6** | **-0.4** |
| | baz=333 | | | | | | |
| HGSD | | | | *eS* | **Sn** | **15 00 23.9** | **-2.5** |
| | baz=333 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.47** | **296** | *eP* | **Pn** | **14 59 58.6** | **+1.4** |
| | baz=292 | | | | | | |
| **ELDTW** | **Lidau** | **2.48** | **312** | *eS* | **Sn** | **15 00 25.6** | **-1.9** |
| | baz=308 | | | | | | |
| **EHY** | **Hunye** | **2.52** | **321** | *eP* | **Pn** | **14 59 59.0** | **+1.0** |
| | baz=328 | | | | | | |
| EHY | | | | *eS* | **Sn** | **15 00 26.7** | **-1.4** |
| | baz=328 | | | | | | |
| **HATJ** | **Hateruma jima** | **2.61** | **16** | P | **Pn** | **14 59 59.6** | **+0.5** |
| HATJ | | | | *eS* | **Sn** | **15 00 28.2** | **-2.0** |
| **ESL** | **Shilin** | **2.70** | **327** | P | **Pn** | **15 00 01.1** | **+0.7** |
| | baz=337 | | | | | | |
| ESL | | | | *eS* | **Sn** | **15 00 31.2** | **-1.4** |
| | baz=337 | | | | | | |
| **VWDT** | **VWDT** | **2.81** | **322** | *eP* | **Pn** | **15 00 03.7** | **+1.9** |
| | baz=331 | | | | | | |
| VWDT | | | | *eS* | **Sn** | **15 00 33.4** | **-1.7** |
| | baz=331 | | | | | | |
| **TPUB** | **Ta-pu** | **2.83** | **309** | *eP* | **Pn** | **15 00 05.3** | **+3.2** |
| | baz=303 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.83** | **18** | P | **Pn** | **15 00 03.0** | **+0.9** |
| JKRS | | | | *eS* | **Sn** | **15 00 34.3** | **-1.3** |
| **IRIF** | **Iriomote-Funau** | **2.86** | **13** | P | **Pn** | **15 00 03.4** | **+1.0** |
| IRIF | | | | *eS* | **Sn** | **15 00 35.0** | **-1.2** |
| **NACB** | **Ninganchiao** | **2.94** | **333** | *eP* | **Pn** | **15 00 04.8** | **+1.3** |
| | baz=343 | | | | | | |
| NACB | | | | *eS* | **Sn** | **15 00 37.7** | **-0.4** |
| | baz=343 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.99** | **20** | P | Pn | 15 00 04.5 | +0.3 |
| JIJ | | | | S | **Sn** | **15 00 36.9** | **-2.5** |
| **WUSB** | **Renai** | **3.01** | **325** | *eP* | **Pn** | **15 00 06.5** | **+1.9** |
| | baz=333 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **3.02** | **332** | *eP* | **Pn** | **15 00 06.1** | **+1.5** |
| | baz=341 | | | | | | |
| ETLH | | | | *eS* | **Sn** | **15 00 39.7** | **-0.4** |
| | baz=341 | | | | | | |
| **CHGB** | **Renai** | **3.04** | **326** | *eP* | **Pn** | **15 00 07.1** | **+2.0** |
| | baz=334 | | | | | | |
| **FUSS** | **Fushou** | **3.16** | **329** | *eP* | **Pn** | **15 00 08.8** | **+2.1** |
| | baz=338 | | | | | | |
| **NNSB** | **Datong** | **3.25** | **332** | *eP* | **Pn** | **15 00 10.1** | **+2.3** |
| | baz=341 | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.26** | **21** | P | **Pn** | **15 00 08.2** | **+0.5** |
| JISG | | | | *eS* | **Sn** | **15 00 43.8** | **-1.9** |
| **LATG** | **Datong** | **3.29** | **335** | *eP* | **Pn** | **15 00 11.0** | **+2.7** |
| | baz=344 | | | | | | |
| **NDS** | **Dongshan** | **3.31** | **339** | *eP* | **Pn** | **15 00 11.5** | **+3.0** |
| | baz=342 | | | | | | |
| **WHP** | **Taichung City** | **3.33** | **325** | *eP* | **Pn** | **15 00 12.9** | **+4.0** |
| | baz=330 | | | | | | |
| **ENTT** | **Nioudou** | **3.37** | **337** | *eP* | **Pn** | **15 00 12.5** | **+3.2** |
| | baz=345 | | | | | | |
| **JTJ** | **Tarama** | **3.45** | **26** | P | **Pn** | **15 00 11.9** | **+1.6** |
| JTJ | | | | S | **Sn** | **15 00 49.4** | **-1.0** |
| **YHNB** | **Yeheng** | **3.47** | **334** | *eP* | **Pn** | **15 00 13.8** | **+3.1** |
| | baz=343 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **3.47** | **338** | *eP* | **Pn** | **15 00 14.0** | **+3.3** |
| | baz=341 | | | | | | |
| **NWLT** | **Wulai** | **3.52** | **337** | *eP* | **Pn** | **15 00 14.8** | **+3.5** |
| | baz=346 | | | | | | |

*IDC **28** 15:04:35.0±3.6, 3°.99S × 102°.44E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.3/40, mbtmp3.3/4, MS3.9/2, Ms1 3.9/2, ms1mx2.8/32, Error ellipse: s-maj=157.8km s-min=26.1km az=55.0*

**ISC 28 15:04:38.7±3.3, 4°.3S±0°.6 × 102°.0E±0°.8, h37km, n10, σ0°.31/5, mb3.4/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **29.55** | **262** | T | T | 15 40 54.5 | |
| | baz=85,slow=76,SNR=9.9 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.56** | **262** | T | T | 15 40 56.0 | |
| | baz=85,slow=76,SNR=12 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.57** | **262** | T | T | 15 40 56.7 | |
| | baz=85,slow=76,SNR=8.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.09** | **119** | P | **P** | **15 11 29.0** | **+0.2** |
| | 0.2nm,0.5s,baz=302,slow=8.2,SNR=1.1 | | | | | | |
| **ASAR** | **Alice Springs** | **36.27** | **125** | P | **P** | **15 11 38.5** | **-0.3** |
| | 0.3nm,0.6s,baz=300,slow=7.7,SNR=2.7 | | | | | | |
| **JNU** | **Nakatsue** | **46.19** | **34** | LR | LR | 15 33 04.9 | |
| | comp=Z,357nm,20.9s,baz=42,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **52.08** | **4** | P | **P** | **15 13 44.9** | **-0.1** |
| | 0.4nm,0.6s,baz=192,slow=12,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.80** | **343** | P | **P** | **15 13 57.8** | **+0.1** |
| | 0.2nm,0.4s,baz=152,slow=8.9,SNR=9.2 | | | | | | |
| **KLR** | **Kul'dur** | **59.26** | **22** | LR | LR | 15 40 34.3 | |
| | comp=Z,35nm,19.6s,baz=158,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.20** | **42** | PKP | **PKPdf** | **15 24 13.5** | **+0.2** |
| | 0.2nm,0.6s,baz=317,slow=1.9,SNR=3.7 | | | | | | |

*IDC **28** 15:06:50.9±2.0, 0°.89N × 125°.58E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.3/33, mbtmp3.4/3, Error ellipse: s-maj=202.1km s-min=25.3km az=64.0*
*DJA **28** 15:06:55.1±0.7, 1°.N±4° × 12°.6E±°, h21km±12km, M3.8/8, mb4.2/1, MLv3.5/8*

**ISC 28 15:06:55.9±1.2, 1°.2N±0°.1 × 126°.40E±0°.07, h35km, n8, σ1°.19/9, mb3.4/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.05** | **113** | P | **Pn** | **15 07 14.4** | **+0.3** |
| TNTI | | | | S | **Sn** | **15 07 28.8** | **+1.3** |
| **KMSI** | **Cibinong** | **2.49** | **256** | P | **Pn** | **15 07 34.4** | **+0.4** |
| **SANI** | **Sanana** | **3.23** | **187** | P | **Pn** | **15 07 44.2** | **0.0** |
| **GTOI** | **Gorontalo** | **3.43** | **261** | P | **Pn** | **15 07 48.8** | **+1.9** |
| **APSI** | **Ampana** | **5.19** | **246** | P | **Pn** | **15 08 10.7** | **-0.3** |
| **WRA** | **Warramunga Arr** | **22.39** | **160** | P | **P** | **15 11 50.5** | **-0.9** |
| | 0.5nm,0.3s,baz=336,slow=11,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **25.75** | **164** | P | **P** | **15 12 24.0** | **+0.5** |
| | 0.2nm,0.4s,baz=345,slow=11,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.47** | **326** | P | **P** | **15 16 54.1** | **-1.3** |
| | 0.3nm,0.5s,baz=126,slow=7.3,SNR=8.7 | | | | | | |

*IDC **28** 15:11:44.2±0.5, 4°.60N × 32°.66W, h0km, mb4.3/21, mb1 4.4/22, mb1mx4.3/38, mbtmp4.2/22, ML3.6/1, MS3.9/57, Ms1 3.9/57, ms1mx3.8/82, Error ellipse: s-maj=17.8km s-min=12.2km az=154.0*
*NEIC **28** 15:11:46.5±1.3, 4°.51N±0°.10 × 32°.60W±0°.10, h10km±1km, mb4.8/170, Error ellipse: s-maj=17.7km s-min=15.2km az=132.0*
*GCMT **28** 15:11:48.5±0.3, 4°.75N±0°.05 × 32°.49W±0°.03, h17km±1km, MW4.9/78, Moment Tensor Solution. s18,c19; s78,c92; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~2.03±.16; Mθθ 0.33±.12; Mϕϕ 1.71±.12; Mrθ 1.87±.45; Mϕθ 0.20±.07; Mϕr~0.54±.31; Best double couple: Mo 2.46200 × 10^16 NP1: ϕs 203.00000°, δ 41.00000°, λ -47.00000°. NP2: ϕs 331.00000°, δ 62.00000°, λ -121.00000°. Principal axes: T 1.7950, Plg11.0000°, Azm83.0000°; N 1.3400, Plg27.0000°, Azm347.0000°; P -3.1290, Plg61.0000°, Azm194.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 28 15:11:45.9±0.3, 4°.56N±0°.07 × 32°.58W±0°.06, h11km, n306, σ0°.96/257, mb4.8/104, MS4.0/56, 16C-5D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NBMO** | **Morrinhos-CE** | **10.80** | **224** | *eP* | **Pn** | **15 14 20.1** | **-0.5** |
| **RCBR** | **Riachuelo** | **10.84** | **198** | Pn | **Pn** | **15 14 20.7** | **-0.4** |
| | 0.5nm,0.3s,baz=148,slow=18,SNR=2.4 | | | | | | |
| RCBR | | | | LR | LR | 15 17 37.9 | |
| | comp=Z,245nm,20.4s,baz=156,slow=33 | | | | | | |
| **RCBR** | **Riachuelo** | **10.84** | **198** | Pn | **Pn** | **15 14 20.6** | **-0.6** |
| **NBPB** | **Pedra_Branca-

**TORD Torodi Ar. Bea 34.89 74** P **P** **15 18 37.7 -0.1**
comp=Z,4.3nm,0.9s,baz=265,slow=8.9,SNR=17
**TORD Torodi Ar. Bea 34.89 74** P **P** **15 18 37.2 -0.6**
**MTP Monte Pirata 34.93 295** P **P** **15 18 37.5 -0.6**
**HUMP Col San Antoni 35.21 295** P **P** **15 18 40.9 +0.4**
**SJG San Juan 35.47 295** P **P** **15 18 42.0 -0.7**
comp=Z,4.2nm,0.7s,baz=128,slow=12,SNR=1.8
SJG LR LR 15 30 00.9
comp=Z,207nm,21.4s,baz=100,slow=31
**ETMB Extrema 36.42 247** *eP* **P** **15 18 51.4 +0.4**
**ITAB Concordia 36.82 210** *eP* **P** **15 18 55.7 +1.5**
**SDV Santo Domingo 38.02 279** LR LR 15 35 05.7
comp=Z,130nm,18.6s,baz=112,slow=37
**CPUP Villa Florida 38.95 217** LR LR 15 34 56.5
comp=Z,197nm,19.2s,baz=42,slow=36
**CPUP Villa Florida 38.95 217** P **P** **15 19 10.2 -2.0**
**PFVI Vila Bisbo 39.05 31** P **P** **15 19 14.6 +1.8**
**LPAZ La Paz 40.80 239** P **P** **15 19 29.2 +0.7**
comp=Z,2.1nm,0.8s,baz=46,slow=8.6,SNR=8.2
LPAZ LR LR 15 35 37.8
comp=Z,195nm,18.7s,baz=66,slow=35
**LPAZ La Paz 40.80 239** P **P** **15 19 28.2 -0.2**
**LPAZ La Paz 40.80 239** *eP* **P** **15 19 28.8 +0.3**
**ITQB Itaqui 41.11 213** *eP* **P** **15 19 30.7 +0.6**
**ROSC El Rosal 41.59 272** P **P** **15 19 34.9 +0.1**
comp=Z,5.6nm,0.4s,baz=106,slow=6.4,SNR=7.7
ROSC LR LR 15 37 46.3
comp=Z,340nm,18.4s,baz=104,slow=38
**ROSC El Rosal 41.59 272** P **P** **15 19 34.9 +0.1**
ROSC IAmb IAmb 15 19 37.4
comp=Z,44nm,1.4s
**CZSB Cruzeiro do Su 41.85 253** *eP* **P** **15 19 36.6 +0.1**
**PB16 IPOC Station P 42.92 237** P **P** **15 19 44.5 -1.2**
**ESDC Sonseca Array 43.48 32** P **P** **15 19 50.1 +0.7**
comp=Z,2.7nm,1.0s,baz=230,slow=9.9,SNR=5.9
**ESDC Sonseca Array 43.48 32** P **P** **15 19 50.5 +1.1**
**LVC Limon Verde 44.60 231** LR LR 15 39 04.7
comp=Z,130nm,20.3s,baz=38,slow=37
**PB04 IPOC Station P 45.43 232** P **P** **15 20 04.0 -1.3**
**NNA Nana 46.98 249** LR LR 15 39 50.1
comp=Z,187nm,19.3s,baz=82,slow=36
**ATAH Atahualpa 47.17 256** LR LR 15 40 40.6
comp=Z,441nm,18.1s,baz=58,slow=37
**AC04 Llanos de Chal 49.34 226** P **P** **15 20 35.0 -0.5**
**KEST Kesra 49.51 46** LR LR 15 41 37.2
comp=Z,246nm,19.0s,baz=219,slow=36
**RIMA Rio Macho 51.10 279** P **P** **15 20 50.3 +0.9**
RIMA IAmb IAmb 15 20 53.2
comp=Z,11nm,1.1s
**TRNY Table Rock, Ra 52.09 321** P **P** **15 20 57.4 +1.3**
TRNY IAmb IAmb 15 20 58.6
comp=Z,12nm,1.0s
**WUPA West Chester U 52.35 318** P **P** **15 20 58.0 0.0**
**SDMD Soldier's Deli 52.91 317** P **P** **15 21 02.3 +0.1**
**W57A Gilead 53.27 311** P **P** **15 21 05.6 +0.7**
W57A IAmb IAmb 15 21 23.9
comp=Z,16nm,1.5s
**BIRD Birdtown, Kers 53.42 310** P **P** **15 21 07.5 +1.5**
BIRD IAmb IAmb 15 21 08.4
comp=Z,15nm,1.2s
**M57A Sunshine Farm, 54.06 319** P **P** **15 21 10.8 +0.2**
M57A IAmb IAmb 15 21 39.7
comp=Z,24nm,1.5s
**BLA Blacksburg 54.43 313** P **P** **15 21 14.8 +1.4**
BLA IAmb IAmb 15 21 16.0
comp=Z,17nm,1.1s
**R55A Marlinton 54.66 315** P **P** **15 21 14.8 -0.4**
R55A IAmb IAmb 15 21 17.6
comp=Z,21nm,1.4s
**TSUM Tsumeb 54.72 117** LR LR 15 39 26.0
comp=Z,215nm,20.4s,baz=332,slow=30
**TSUM Tsumeb 54.72 117** P **P** **15 21 17.0 +1.1**
TSUM IAmb IAmb 15 21 23.4
comp=Z,13nm,1.2s
**TRQ Mont Tremblant 55.15 326** P **P** **15 21 19.2 +0.7**
TRQ IAmb IAmb 15 21 20.4
comp=Z,15nm,1.2s
**MURB Monte Urbino 55.40 39** P **P** **15 21 19.8 -0.6**
**BG3 Lake Jocassee 55.44 310** P **P** **15 21 22.6 +1.8**
BG3 IAmb IAmb 15 21 24.1
comp=Z,10nm,1.1s
**V53A Saluda 55.59 311** P **P** **15 21 21.9 0.0**
**DAVOX Davos/Dischmat 55.75 34** LR LR 15 41 55.0
comp=Z,58nm,20.5s,baz=266,slow=32
**EKA Eskdalemuir Ar 55.88 20** LR LR 15 41 41.0
comp=Z,57nm,19.9s,baz=246,slow=32
**P53A Whipple 56.08 315** P **P** **15 21 26.0 +0.7**
**V52A Sevierville 56.25 311** P **P** **15 21 26.1 -0.4**
V52A IAmb IAmb 15 21 28.7
comp=Z,17nm,1.5s
**TKL Tuckaleechee C 56.32 310** LR LR 15 40 09.7
comp=Z,135nm,21.7s,baz=130,slow=30
**FETA Feichten 56.37 34** *eP* **P** **15 21 29.0 +1.6**
comp=Z,5.5nm,1.0s
**TZTN Tazewell 56.47 311** P **P** **15 21 27.6 -0.6**
TZTN IAmb IAmb 15 21 30.6
comp=Z,15nm,1.2s
**O52A Adamsville 56.66 316** P **P** **15 21 30.0 +0.6**
**V51A Loudon 56.81 310** P **P** **15 21 29.1 -1.4**
V51A IAmb IAmb 15 21 32.7
comp=Z,13nm,1.4s
**S51A Beattyville 56.91 313** P **P** **15 21 31.2 -0.1**
S51A IAmb IAmb 15 21 33.7
comp=Z,12nm,1.1s
**PLCA Paso Flores 56.91 214** P **P** **15 21 30.1 -1.1**
comp=Z,3.1nm,1.2s,baz=53,slow=16,SNR=2.8
PLCA LR LR 15 45 41.6
comp=Z,164nm,20.5s,baz=48,slow=36
**PLCA Paso Flores 56.91 214** *eP* **P** **15 21 31.3 0.0**
**SADO Sadowa 57.07 322** LR LR 15 42 10.2
comp=Z,62nm,19.9s,baz=306,slow=32
**ABTA Abfaltersbach 57.23 35** *eP* **P** **15 21 33.9 +0.5**
comp=Z,16nm,1.4s
**SCHQ Schefferville 57.24 337** LR LR 15 43 02.2
comp=Z,47nm,20.5s,baz=242,slow=33
**ACSO Alum Creek Sta 57.50 316** P **P** **15 21 35.8 +0.4**
ACSO IAmb IAmb 15 21 38.0
comp=Z,14nm,0.9s
**R50A Paris 57.69 313** P **P** **15 21 37.0 +0.2**
R50A IAmb IAmb 15 21 39.9
comp=Z,17nm,1.2s
**Y49A Blount Mountai 57.77 307** P **P** **15 21 37.6 +0.2**
**SWET Sewanee 57.82 309** P **P** **15 21 37.5 -0.2**
SWET IAmb IAmb 15 21 40.1
comp=Z,12nm,1.2s
**U49A Red Boiling Sp 58.14 311** P **P** **15 21 40.1 +0.2**
U49A IAmb IAmb 15 21 42.2
comp=Z,12nm,1.2s
**R49A Shelbyville 58.31 313** P **P** **15 21 41.6 +0.5**
**CLTN Cedars of Leba 58.41 310** P **P** **15 21 42.7 +0.9**
CLTN IAmb IAmb 15 21 44.0
comp=Z,8.3nm,1.2s
**X48A Hartselle 58.45 308** P **P** **15 21 41.8 -0.3**
X48A IAmb IAmb 15 21 59.9
comp=Z,11nm,1.5s
**P49A Miami Univ. Ec 58.45 314** P **P** **15 21 41.1 -0.9**
P49A IAmb IAmb 15 21 44.0
comp=Z,16nm,1.1s
**SOKA Soboth 58.67 37** *eP* **P** **15 21 45.0 +1.4**
comp=Z,11nm,1.3s
**V48A Smith Brothers 58.68 309** P **P** **15 21 43.7 0.0**
V48A IAmb IAmb 15 21 45.8
comp=Z,14nm,1.3s
**KHC Kasperske Hory 59.13 34** *eP* **P** **15 21 46.7 +0.1**
KHC *ep*P **pwP** **15 21 52.0 -0.7**
**KHC Kasperske Hory 59.13 34** P **P** **15 21 46.9 +0.3**
KHC IAmb IAmb 15 21 53.8
comp=Z,12nm,1.3s
**T47A Sharon Grove 59.30 311** P **P** **15 21 47.6 -0.4**
**CKRC Cesky Krumlov 59.37 34** *eP* **P** **15 21 48.4 +0.1**
CKRC *ex* x 15 21 54.7
**PLAL Pickwick Lake 59.42 308** P **P** **15 21 48.8 0.0**
PLAL IAmb IAmb 15 22 00.3
comp=Z,6.2nm,0.8s
**CLL Collm 60.04 31** *eP* **P** **15 21 53.0 +0.2**
CLL Lm MLR 15 44 00.0
comp=Z,100nm,18.2s
**P46A Rosedale 60.27 314** P **P** **15 21 55.4 +0.8**
**344A Westbrook Farm 60.62 304** P **P** **15 21 57.9 +0.8**
**VRAC Vranov 60.91 35** LR LR 15 45 51.8
comp=Z,38nm,20.0s,baz=268,slow=34
**IDI Anoyia 61.06 52** LR LR 15 48 58.4
comp=Z,94nm,20.9s,baz=262,slow=37
**UPC Upice 61.20 33** *eP* **P** **15 22 02.7 +1.9**
**DPC Dobruska-Polom 61.29 33** *eP* **P** **15 22 02.9 +1.5**

**OSTC Ostas 61.34 33** *eP* **P** **15 22 01.1 -0.6**
OSTC *ex* x 15 22 08.3
**MORC Moravsky Berou 61.68 34** P **P** **15 22 04.4 +0.4**
MORC IAmb IAmb 15 22 07.0
comp=Z,12nm,1.5s
**FVM French Village 62.12 311** P **P** **15 22 06.6 -0.6**
FVM IAmb IAmb 15 22 08.3
comp=Z,13nm,1.4s
**LCAR Lake Charles 62.13 309** P **P** **15 22 06.1 -1.2**
LCAR IAmb IAmb 15 22 18.1
comp=Z,14nm,1.5s
**PSZ Piszkesteto 62.17 37** ⇑P **P** **15 22 10.1 +2.6**
**PSZ Piszkesteto 62.17 37** P **P** **15 22 08.3 +0.9**
**SLM Saint Louis 62.17 312** P **P** **15 22 07.1 -0.4**
**VTS Vitosha 62.18 44** ⇑P P 15 22 29.4 +22
**VTS Vitosha 62.18 44** P **P** **15 22 08.7 +1.0**
VTS IAmb IAmb 15 22 10.4
comp=Z,12nm,1.4s
**CMIG Matias Romero 62.21 287** LR LR 15 51 25.2
comp=Z,51nm,18.1s,baz=184,slow=38
**BZS Buzias 62.26 40** ⇑P **P** **15 22 09.7 +1.8**
**SUR Sutherland 62.55 130** LR LR 15 43 15.1
comp=Z,97nm,20.9s,baz=288,slow=31
**CCM Cathedral Cave 62.76 311** P **P** **15 22 11.0 -0.4**
CCM IAmb IAmb 15 22 12.9
comp=Z,6.2nm,0.9s
**OJC Ojcow 63.17 35** P **P** **15 22 15.6 +1.6**
OJC IAmb IAmb 15 22 16.9
comp=Z,12nm,1.2s
**MGMO Mountain Grove 63.29 309** P **P** **15 22 14.8 -0.2**
**LSZ Lusaka 63.31 109** LR LR 15 44 14.1
comp=Z,97nm,20.9s,baz=288,slow=31
**DRGR 63.43 39** ⇑P **P** **15 22 17.7 +1.9**
**MBAR Mbarara 63.47 93** LR LR 15 47 07.0
comp=Z,194nm,19.1s,baz=278,slow=33
**SFJD Kangerlussuaq 63.57 352** LR LR 15 44 39.2
comp=Z,46nm,20.2s,baz=162,slow=31
**R40A Maddies Statio 63.60 311** P **P** **15 22 16.8 -0.3**
**LBTB Lobatse 63.66 121** LR LR 15 44 41.5
comp=Z,167nm,20.2s,baz=252,slow=31
**P40A Paris 63.78 312** P **P** **15 22 16.9 -1.4**
**TRPA Tarpa 63.87 38** ⇑P **P** **15 22 19.2 +0.6**
**ARR Arges 64.12 41** ⇑P **P** **15 22 22.4 +2.0**
**BMR Baia Mare 64.27 39** ⇓P **P** **15 22 20.1 -1.2**
**G40A Rib Lake 64.35 319** P **P** **15 22 22.8 +1.0**
**VOIR 64.42 41** ⇑P **P** **15 22 24.1 +1.7**
**ARCR ARCALIA 64.58 39** ⇑P **P** **15 22 25.6 +2.3**
**BOSA Boshof 64.60 125** P **P** **15 22 23.7 -0.3**
comp=Z,9.1nm,1.1s,baz=300,slow=8.3,SNR=5.8
BOSA LR LR 15 44 25.5
comp=Z,141nm,21.4s,baz=273,slow=30
**BOSA Boshof 64.60 125** P **P** **15 22 23.5 -0.4**
**DOPR Dopca 64.83 41** ⇓P **P** **15 22 26.8 +1.8**
**MATP Matopo 64.87 115** LR LR 15 45 27.7
comp=Z,61nm,20.9s,baz=250,slow=31
**MLR Muntele Rosu 65.03 41** ⇓P **P** **15 22 28.0 +1.6**
**MLR Muntele Rosu 65.03 41** LR LR 15 49 12.6
comp=Z,111nm,21.4s,baz=242,slow=35
**MLR Muntele Rosu 65.03 41** P **P** **15 22 26.9 +0.5**
**OZUR 65.13 41** ⇑P **P** **15 22 28.8 +1.8**
**NB2 NORSAR Subarra 65.22 22** P **P** **15 22 27.8 +0.5**
comp=Z,12nm,1.4s,baz=228,slow=6.5
**NOA NORSAR Array B 65.22 22** P **P** **15 22 25.8 -1.4**
comp=Z,2.7nm,1.0s,baz=230,slow=6.4,SNR=6.3
NOA LR LR 15 47 03.7
comp=Z,38nm,21.0s,baz=335,slow=32
**ISR Istrita 65.30 42** ⇓P **P** **15 22 29.5 +1.4**
**BUR08 Bucovina Ar. S 65.32 39** P **P** **15 22 29.1 +0.8**
BUR08 IAmb IAmb 15 22 36.5
comp=Z,12nm,1.5s
**BURAR Bucovina Array 65.32 39** ⇑P **P** **15 22 30.0 +1.7**
**BURAR Bucovina Array 65.32 39** P **P** **15 22 29.4 +1.1**
**NC405 NORSAR Array S 65.45 22** P **P** **15 22 28.8 0.0**
**HFS Hagfors 65.59 23** LR LR 15 45 31.6
comp=Z,33nm,21.0s,baz=248,slow=31
**PLOR Plostina 65.61 41** ⇓P P 15 22 35.2 +5.1
**VRI Vrincioaia 65.67 41** ⇑P **P** **15 22 31.6 +1.1**
**TUL1 Leonard 65.74 307** P **P** **15 22 30.6 -0.5**
TUL1 IAmb IAmb 15 22 42.7
comp=Z,12nm,1.2s
**TESR Tescani 65.84 41** ⇑P **P** **15 22 33.5 +2.0**
**HARR Harsova 66.09 43** ⇑P **P** **15 22 34.1 +1.0**
**IZVR Izvoarele 66.25 42** ⇑P **P** **15 22 35.7 +1.5**
**TIRR Tirgusor 66.34 43** ⇑P **P** **15 22 35.3 +0.5**
**TIRR Tirgusor 66.34 43** P **P** **15 22 34.8 +0.1**
**CFR Carcaliu 66.38 42** ⇑P **P** **15 22 34.4 -0.6**
**Z35A Perchaven, San 66.41 304** P **P** **15 22 34.3 -1.1**
**BORA Eskisehir 66.53 48** P **P** **15 22 36.5 +0.3**
**MDUB Mudurnu 67.23 48** P **P** **15 22 42.0 +1.3**
**ECSD EROS Data Cent 68.23 315** P **P** **15 22 45.8 -1.0**
ECSD IAmb IAmb 15 22 46.9
comp=Z,7.0nm,0.9s
**EIL Elat 68.26 60** LR LR 15 53 38.0
comp=Z,204nm,18.0s,baz=278,slow=37
**ANTO Ankara 68.28 49** P **P** **15 22 48.0 +0.7**
**R32A Long Quarter, 68.55 309** P **P** **15 22 49.2 +0.3**
**AKASG Malin Array Be 68.88 37** P **P** **15 22 51.2 +0.6**
comp=Z,1.5nm,0.6s,baz=250,slow=6.9,SNR=17
AKASG LR LR 15 50 25.4
comp=Z,44nm,20.8s,baz=208,slow=34
**AKASG Malin Array Be 68.88 37** P **P** **15 22 50.8 +0.2**
AKASG IAmb IAmb 15 22 57.4
comp=Z,12nm,1.4s
**AKBB Malin Array Si 68.88 37** P **P** **15 22 50.8 +0.2**
**BR131 Keskin Array S 68.89 49** P **P** **15 22 51.6 +0.5**
**BRTR Keskin Array B 68.89 49** P **P** **15 22 52.9 +1.7**
comp=Z,6.3nm,1.0s,baz=235,slow=4.4,SNR=28
BRTR LR LR 15 54 48.9
comp=Z,58nm,19.1s,baz=254,slow=38
**BRTR Keskin Array B 68.89 49** P **P** **15 22 51.2 0.0**
**NACGM Naroch 69.03 32** *i* P P 15 22 42.8 -8.7
**MMAI Mount Meron Ar 69.10 56** LR LR 15 54 40.4
comp=Z,40nm,19.5s,baz=50,slow=37
**ILGA Ilgaz 69.23 48** P **P** **15 22 54.2 +0.8**
**ULM Lac du Bonnet 69.62 322** LR LR 15 48 54.8
comp=Z,52nm,20.7s,baz=148,slow=32
**ULM Lac du Bonnet 69.62 322** P **P** **15 22 54.3 -1.0**
ULM IAmb IAmb 15 23 00.9
comp=Z,10nm,1.2s
**KMBO Kilima Mbogo 70.00 93** P **P** **15 23 00.1 +1.5**
comp=Z,0.9nm,0.3s,baz=259,slow=8.9,SNR=3.4
**BNN Bunyan 70.40 50** P **P** **15 23 00.9 +0.5**
**TX31 Lajitas Ar. Si 71.30 299** P **P** **15 23 05.6 -0.5**
TX31 IAmb IAmb 15 23 23.0
comp=Z,12nm,1.5s
**TX32 Lajitas Array 71.30 299** P **P** **15 23 06.3 +0.2**
**TXAR Lajitas Array 71.30 299** P **P** **15 23 05.7 -0.4**
comp=Z,0.2nm,0.7s,baz=97,slow=10,SNR=5.5
TXAR LR LR 15 55 56.1
comp=Z,55nm,19.2s,baz=192,slow=37
**TXAR Lajitas Array 71.30 299** P **P** **15 23 05.0 -1.1**
**FINES FINESS Array B 71.44 26** P **P** **15 23 05.3 -0.8**
comp=Z,2.4nm,0.9s,baz=306,slow=6.6,SNR=4.2
**FCC Fort Churchill 71.62 331** P **P** **15 23 06.1 -1.2**
FCC IAmb IAmb 15 23 08.6
comp=Z,15nm,1.4s
**T25A Trinidad 72.79 307** P **P** **15 23 15.2 +0.1**
T25A IAmb IAmb 15 23 17.6
comp=Z,10nm,1.2s
**MNTX Cornudas Mount 72.99 302** P **P** **15 23 15.0 -1.1**
**Q24A Divide 73.60 309** P **P** **15 23 20.8 +0.8**
Q24A IAmb IAmb 15 23 22.6
comp=Z,18nm,1.2s
**SDCO Great Sand Dun 73.72 308** P **P** **15 23 20.9 +0.2**
**MARD Mardin 74.03 53** P **P** **15 23 23.3 +1.1**
MARD IAmb IAmb 15 23 30.1
comp=Z,20nm,1.2s
**ISCO Idaho Springs 74.07 310** P **P** **15 23 22.6 0.0**
ISCO IAmb IAmb 15 23 25.5
comp=Z,8.8nm,1.1s
**ANMO Albuquerque 74.19 305** LR LR 15 52 07.9
comp=Z,195nm,20.9s,baz=112,slow=33
**ANMO Albuquerque 74.19 305** P **P** **15 23 23.0 -0.3**
**DGMT Dagmar 74.44 319** P **P** **15 23 24.3 0.0**
**N23A Red Feather La 74.46 311** P **P** **15 23 24.8 -0.1**
**FFC Flin Flon 74.47 326** P **P** **15 23 23.9 -0.4**
FFC IAmb IAmb 15 23 25.8
comp=Z,18nm,1.2s
**S22A 4UR Ranch, Cre 74.77 308** P **P** **15 23 27.3 +0.5**
**ATD Arta Tunnel 74.84 79** LR LR 15 53 30.3
comp=Z,17nm,21.6s,baz=32,slow=34
**ARCES ARCESS Array B 74.98 18** LR LR 15 50 06.4
comp=Z,34nm,20.7s,baz=292,slow=31
**LAO LASA Array 75.49 317** P **P** **15 23 31.0 +0.6**

LAO IAmb IAmb 15 23 32.9
comp=Z,15nm,1.1s
**RWWY Rawlins 75.51 312** P **P** **15 23 31.0 +0.1**
RWWY IAmb IAmb 15 23 31.5
comp=Z,14nm,1.4s
**O20A White River Ci 76.11 310** P **P** **15 23 34.8 +0.5**
O20A IAmb IAmb 15 23 36.8
comp=Z,11nm,1.1s
**KIV Kislovodsk 76.25 46** P **P** **15 23 35.3 +0.4**
KIV IAmb IAmb 15 23 37.9
comp=Z,17nm,1.4s
**PV02 Paradox Valley 76.32 308** P **P** **15 23 36.0 +0.4**
**KBZ Khabaz 76.38 46** LR LR 15 58 34.5
comp=Z,30nm,21.3s,baz=342,slow=37
**PV13 Radium Mtn., P 76.38 308** P **P** **15 23 36.0 +0.1**
**PV03 Paradox Valley 76.41 308** P **P** **15 23 36.4 +0.3**
**PV18 Skein Mesa, Pa 76.45 308** P **P** **15 23 36.2 -0.1**
PV18 IAmb IAmb 15 23 39.0
comp=Z,12nm,1.3s
**PV16 Nyswonger Mesa 76.47 308** P **P** **15 23 36.5 +0.2**
PV16 IAmb IAmb 15 23 39.1
comp=Z,10.0nm,1.3s
**PV17 East Wray Mesa 76.50 308** P **P** **15 23 36.6 0.0**
PV17 IAmb IAmb 15 23 39.2
comp=Z,7.9nm,1.1s
**PV20 West Nyswonger 76.51 308** P **P** **15 23 36.8 +0.2**
PV20 IAmb IAmb 15 23 39.2
comp=Z,16nm,1.5s
**PV19 Morning Glory 76.52 308** P **P** **15 23 36.4 -0.3**
PV19 IAmb IAmb 15 23 39.5
comp=Z,16nm,1.4s
**PV05 Paradox Valley 76.59 308** P **P** **15 23 36.8 -0.3**
PV05 IAmb IAmb 15 23 39.3
comp=Z,11nm,1.2s
**ONI Oni 76.65 47** P **P** **15 23 38.1 +1.0**
ONI IAmb IAmb 15 23 40.0
comp=Z,11nm,1.4s
**X18A Snowflake 77.02 304** P **P** **15 23 40.2 +0.7**
**RDMU Red Mountain 77.17 310** P **P** **15 23 40.9 +0.7**
RDMU IAmb IAmb 15 23 52.3
comp=Z,12nm,1.4s
**RAYN Ar Rayn 77.28 67** P **P** **15 23 41.9 +0.9**
**BW06 Boulder Array 77.36 313** P **P** **15 23 40.0 -1.4**
**PDAR Pinedale Array 77.36 313** P **P** **15 23 39.8 -1.6**
comp=Z,0.9nm,0.9s,baz=94,slow=7.7,SNR=6.4
PDAR LR LR 15 53 53.3
comp=Z,60nm,21.3s,baz=141,slow=33
**PDAR Pinedale Array 77.36 313** P **P** **15 23 40.3 -1.1**
**KLMR Klimovskoe 77.36 29** *eP* **P** **15 23 39.2 -1.4**
KLMR AMP 15 23 42.9
comp=Z,20nm,1.4s
**GNI Garni 77.39 50** LR LR 16 01 11.0
comp=Z,32nm,18.8s,baz=254,slow=38
**RLMT Red Lodge 77.39 315** P **P** **15 23 41.4 -0.1**
RLMT IAmb IAmb 15 23 43.6
comp=Z,9.1nm,1.2s
**P18A Preston Nutter 77.61 309** P **P** **15 23 42.7 -0.2**
**TUC Tucson 77.61 302** P **P** **15 23 42.8 0.0**
**SRU San Rafael Swe 77.78 309** P **P** **15 23 43.5 -0.2**
SRU IAmb IAmb 15 23 46.2
comp=Z,10nm,1.3s
**P17A Butcher Ranch, 77.97 309** P **P** **15 23 44.4 -0.3**
P17A IAmb IAmb 15 23 47.8
comp=Z,12nm,1.5s
**EGMT Eagleton 78.05 318** P **P** **15 23 45.5 +0.6**
EGMT IAmb IAmb 15 23 46.5
comp=Z,10nm,1.2s
**LKWY Lake 78.14 314** P **P** **15 23 46.4 +0.7**
LKWY IAmb IAmb 15 23 48.8
comp=Z,17nm,1.4s
**LOHW Long Hollow 78.20 313** P **P** **15 23 46.6 +0.6**
LOHW IAmb IAmb 15 23 48.0
comp=Z,11nm,1.2s
**WUAZ Wupatki 78.24 305** P **P** **15 23 47.2 +0.9**
WUAZ IAmb IAmb 15 23 49.3
comp=Z,9.3nm,1.1s
**X16A Lo Mia Camp, P 78.25 304** P **P** **15 23 47.1 +0.7**
**SNOW Snow King Moun 78.29 313** P **P** **15 23 47.4 +0.8**
SNOW IAmb IAmb 15 23 48.8
comp=Z,5.7nm,0.8s
**FLWY Flagg Ranch 78.31 314** P **P** **15 23 46.8 +0.2**
**MOOW Moose Ponds 78.31 314** P **P** **15 23 46.2 -0.4**
**TMUT Trail Mountain 78.33 309** P **P** **15 23 46.2 -0.7**
**REDW Red Top Meadow 78.36 313** P **P** **15 23 46.9 0.0**
REDW IAmb IAmb 15 23 48.8
comp=Z,12nm,1.2s
**TPAW Teton Pass 78.44 313** P **P** **15 23 46.6 -0.8**
TPAW IAmb IAmb 15 23 48.6
comp=Z,9.8nm,1.2s
**YHH Holmes Hill 78.48 315** P **P** **15 23 48.0 +0.4**
**AHID Auburn Hatcher 78.49 313** P **P** **15 23 48.5 +0.9**
AHID IAmb IAmb 15 23 49.4
comp=Z,11nm,1.4s
**RES Resolute Bay 78.51 346** P **P** **15 23 47.0 +0.2**
**YMR Madison River 78.55 315** P **P** **15 23 48.1 +0.2**
YMR IAmb IAmb 15 23 50.7
comp=Z,14nm,1.1s
**JLU Jordanelle 78.59 310** P **P** **15 23 48.5 +0.2**
JLU IAmb IAmb 15 23 58.1
comp=Z,12nm,1.5s
**QLMT Earthquake Lak 78.89 315** P **P** **15 23 50.6 +0.8**
**MTPU Mount Pierson 79.02 308** P **P** **15 23 51.4 +0.6**
MTPU IAmb IAmb 15 23 53.7
comp=Z,12nm,1.2s
**U15A North Rim 79.03 306** P **P** **15 23 51.7 +0.9**
**MSU Marysvale 79.03 308** P **P** **15 23 51.2 +0.4**
**214A Organ Pipe Nat 79.31 302** P **P** **15 23 52.9 +0.8**
**DUG Dugway, Tooele 79.61 310** P **P** **15 23 53.4 -0.3**
DUG IAmb IAmb 15 23 56.2
comp=Z,16nm,1.5s
**EUNU Eureka 79.63 352** P **P** **15 23 53.0 +0.1**
EUNU IAmb IAmb 15 23 55.4
comp=Z,17nm,1.2s
**HVU Hansel Valley 79.66 311** P **P** **15 23 53.5 -0.6**
**LRM Limekiln Ridge 79.68 316** P **P** **15 23 53.0 -1.1**
**SZCU Shurtz Canyon 79.71 307** P **P** **15 23 54.7 +0.3**
**DLMT Dillon 79.75 315** P **P** **15 23 55.1 +0.7**
**BGU Big Grassy Mou 79.81 311** P **P** **15 23 54.7 -0.1**
BGU IAmb IAmb 15 23 57.0
comp=Z,15nm,1.4s
**CCUT Cedar City 79.93 307** P **P** **15 23 56.2 +0.6**
**EDM Edmonton 80.84 323** P **P** **15 23 59.9 -0.1**
**JTMT Jette 81.06 317** P **P** **15 24 01.0 -0.3**
**PRN Pahroc Range 81.27 307** P **P** **15 24 01.7 -0.9**
PRN IAmb IAmb 15 24 05.4
comp=Z,13nm,1.4s
**ELK Elko 81.48 310** LR LR 15 59 04.4
comp=Z,65nm,18.0s,baz=163,slow=35
**ELK Elko 81.48 310** P **P** **15 24 04.2 +0.3**
**R11A Troy Canyon, C 81.70 308** P **P** **15 24 05.4 +0.3**
**YKA Yellowknife Ar 82.29 332** P **P** **15 24 07.3 0.0**
comp=Z,3.3nm,1.1s,baz=95,slow=5.2,SNR=16
**BELA Belgrano 2 82.33 180** P **P** **15 24 06.7 -0.6**
BELA IAmb IAmb 15 24 14.2
comp=Z,12nm,1.2s
**PFO Pinyon Flats O 82.40 303** LR LR 15 57 09.3
comp=Z,81nm,21.3s,baz=162,slow=33
**QSM Queen of Sheba 82.72 306** P **P** **15 24 10.6 +0.4**
QSM IAmb IAmb 15 24 13.2
comp=Z,16nm,1.4s
**NEW Newport 82.98 318** LR LR 15 58 26.8
comp=Z,74nm,18.4s,baz=126,slow=34
**BMN Battle Mountai 82.99 310** P **P** **15 24 11.2 -0.5**
BMN IAmb IAmb 15 24 14.2
comp=Z,8.0nm,1.1s
**TPH Tonopah 82.99 308** P **P** **15 24 12.1 +0.3**
**BMO Blue Mountains 83.07 314** P **P** **15 24 12.1 +0.2**
BMO IAmb IAmb 15 24 15.0
comp=Z,13nm,1.4s
**LCH Last Change Ra 83.34 307** P **P** **15 24 13.6 +0.1**
LCH IAmb IAmb 15 24 16.2
comp=Z,9.6nm,1.5s
**NVAR Mina Array Bea 83.84 308** P **P** **15 24 16.6 +0.4**
comp=Z,1.3nm,1.0s,baz=104,slow=7.3,SNR=7.9
NVAR LR LR 15 57 16.6
comp=Z,93nm,21.6s,baz=152,slow=33
**LHV Little Huntoon 84.00 308** P **P** **15 24 17.0 +0.3**
**OMMB Old Mammoth Mi 84.41 307** P **P** **15 24 18.5 -0.7**
OMMB IAmb IAmb 15 24 22.0
comp=Z,7.1nm,1.4s
**PNTR Pine Nut 84.84 309** P **P** **15 24 21.3 0.0**
PNTR IAmb IAmb 15 24 34.1
comp=Z,11nm,1.2s
**F07A Phinny Hill Vi 84.91 316** P **P** **15 24 22.0 +0.8**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MOD** | **Modoc Plateau** | **85.29** | **312** | P | **P** | **15 24 23.7** | **+0.3** |
| **A36M** | **Sachs Harbour** | **86.53** | **342** | P | **P** | **15 24 28.1** | **-0.5** |
| A36M | | | | IAmb | IAmb | 15 24 30.3 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **ARU** | **Arti** | **86.87** | **34** | LR | LR | 16 01 16.6 | |
| | comp=Z,78nm,20.8s,baz=270,slow=34 | | | | | | |
| **AKTO** | **Aktyubinsk** | **86.90** | **40** | LR | LR | 16 03 09.0 | |
| | comp=Z,29nm,20.1s,baz=342,slow=36 | | | | | | |
| **UOSS** | **Minazif** | **87.00** | **65** | P | **P** | **15 24 32.0** | **0.0** |
| **YBH** | **Yreka Blue Hor** | **87.09** | **311** | LR | LR | 16 02 38.1 | |
| | comp=Z,32nm,19.1s,baz=87,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **87.78** | **52** | LR | LR | 16 07 52.2 | |
| | comp=Z,48nm,19.6s,baz=16,slow=38 | | | | | | |
| **INK** | **Inuvik** | **89.83** | **339** | LR | LR | 16 03 06.1 | |
| | comp=Z,65nm,18.4s,baz=121,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **96.00** | **337** | P | **P** | **15 25 12.0** | **-1.0** |
| | comp=Z,1.3nm,0.9s,baz=47,slow=3.0,SNR=8.0 | | | | | | |
| ILAR | | | | LR | LR | 16 05 35.8 | |
| | comp=Z,86nm,19.7s,baz=163,slow=34 | | | | | | |
| **BTO** | **Baotou** | **123.49** | **34** | *e*PKP | **PKPdf** | **15 30 39.0** | **-5.0** |
| **PZH** | **PanZhiHua** | **126.10** | **52** | PKP | **PKiKP** | **15 30 49.8** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **127.05** | **63** | PKP | **PKPdf** | **15 30 50.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **156.96** | **147** | PKP | **PKPdf** | **15 31 42.9** | **+0.3** |
| ASAR | | | | PKPab | **PKPab** | **15 32 11.4** | **-1.0** |
| | comp=Z,2.0nm,1.2s,baz=194,slow=2.1,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **160.10** | **141** | PKPab | **PKPab** | **15 32 26.2** | **+0.1** |
| | comp=Z,2.5nm,1.1s,baz=212,slow=2.4,SNR=6.1 | | | | | | |

**IDC 28 15:12:13.2±2.1,6°60S×129°95E,h0km,mb3.5/1, mb1 3.6/4,mb1mx3.4/37,mbtmp3.4/4,ML3.6/3,Error ellipse: s-maj=86.7km s-min=27.9km az=77.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **7.18** | **240** | Sn | Sn | 15 15 19.4 | -2.5 |
| | 1.9nm,0.3s,baz=29,slow=23,SNR=6.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.18** | **200** | Pn | Pn | 15 15 08.5 | +0.5 |
| | 0.2nm,0.3s,baz=25,slow=11,SNR=18 | | | | | | |
| FITZ | | | | Sn | Sn | 15 17 11.2 | -13 |
| | 0.2nm,0.3s,baz=96,slow=18,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.93** | **163** | Pn | Pn | 15 15 31.9 | -0.2 |
| | 0.4nm,0.3s,baz=345,slow=13,SNR=8.0 | | | | | | |
| WRA | | | | Sn | Sn | 15 18 00.5 | -7.2 |
| | 0.2nm,0.3s,baz=326,slow=24,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.39** | **168** | P | Pn | 15 16 17.2 | -0.2 |
| | 0.1nm,0.3s,baz=338,slow=9.0,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.86** | **327** | P | P | 15 23 13.4 | 0.0 |
| | 0.2nm,0.4s,baz=119,slow=7.9,SNR=7.6 | | | | | | |

*IDC **28** 15:16:35.4±1.2,8°.70S×148°.10E,h115km±8km,mb3.6/13, mb1 3.8/15,mb1mx3.7/32,mbtmp4.0/15,Error ellipse: s-maj=24.8km s-min=13.4km az=113.0*
*NEIC **28** 15:16:35.8±1.4,8°.66S±0°.09×148°.08E±0°.08,h112km±6km, mb4.4/38,Error ellipse: s-maj=15.6km s-min=7.1km az=138.0*
**ISC 28 15:16:35.4±0.5,8°.62S±0°.06×148°.04E±0°.09,h109km,n83, σ0s99/84,mb4.3/26,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **1.17** | **228** | P | **Pn** | **15 16 58.8** | **+0.5** |
| | 66nm,0.3s,baz=58,slow=4.7,SNR=501 | | | | | | |
| PMG | | | | S | **Sn** | **15 17 16.6** | **+1.0** |
| | 68nm,0.3s,baz=314,slow=20,SNR=16 | | | | | | |
| **PMG** | **Port Moresby** | **1.17** | **228** | | **Pn** | **15 16 59.2** | **+0.9** |
| **PMG** | **Port Moresby** | **1.17** | **228** | P | **Pn** | **15 16 59.3** | **+0.9** |
| **KRVT** | **Keravat (AS076** | **5.83** | **43** | P | **Pn** | **15 18 00.5** | **+1.0** |
| | baz=270,slow=20 | | | | | | |
| **RABL** | **Rabaul** | **6.01** | **43** | Pn | **Pn** | **15 18 02.5** | **+0.6** |
| **COEN** | **Coen** | **7.13** | **222** | | **Pn** | **15 18 18.2** | **+1.0** |
| **COEN** | **Coen** | **7.13** | **222** | P | **Pn** | **15 18 18.4** | **+1.2** |
| **MTSU** | **Mount Surprise** | **10.12** | **201** | P | **Pn** | **15 19 00.4** | **+2.6** |
| **CTA** | **Charters Tower** | **11.53** | **188** | P | **Pn** | **15 19 17.4** | **+0.7** |
| | 0.5nm,0.3s,baz=351,slow=14,SNR=6.7 | | | | | | |
| **MTN** | **Manton Dam** | **17.13** | **254** | P | **P** | **15 20 27.8** | **-0.4** |
| **WB0** | **Warramunga Arr** | **17.24** | **229** | P | **P** | **15 20 28.8** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 15 20 33.0 | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **17.25** | **228** | P | **P** | **15 20 28.7** | **-0.8** |
| **WRAB** | **Tennant Creek** | **17.38** | **228** | P | **P** | **15 20 30.2** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 15 20 34.6 | |
| | comp=Z,7.8nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **17.38** | **228** | P | **P** | **15 20 30.6** | **-0.3** |
| **WB2** | **Warramunga Arr** | **17.38** | **228** | P | **P** | **15 20 30.5** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 15 20 34.4 | |
| | comp=Z,8.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.39** | **228** | P | **P** | **15 20 30.6** | **-0.5** |
| | comp=Z,2.5nm,0.3s,baz=48,slow=11,SNR=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.39** | **228** | P | **P** | **15 20 29.8** | **-1.3** |
| **RMQ** | **Roma** | **17.78** | **178** | P | **Pn** | **15 20 37.3** | **+1.3** |
| **QLP** | **Quilpie** | **18.23** | **191** | P | **Pn** | **15 20 41.1** | **-0.2** |
| **KNRA** | **Kununurra** | **20.10** | **248** | P | **P** | **15 21 00.2** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 15 21 17.8 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **20.10** | **248** | P | **P** | **15 21 00.4** | **-0.2** |
| | comp=Z,12nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **20.17** | **220** | P | **P** | **15 21 00.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **20.18** | **220** | P | **P** | **15 21 01.0** | **-0.4** |
| | comp=Z,3.1nm,0.5s,baz=56,slow=9.2,SNR=66 | | | | | | |
| **ARMA** | **Armidale** | **21.94** | **172** | P | **P** | **15 21 20.8** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 15 21 33.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **OOD** | **Oodnadatta** | **22.36** | **210** | P | **P** | **15 21 23.6** | **-0.9** |
| **CMSA** | **Cobar Meteorol** | **22.91** | **185** | P | **P** | **15 21 28.8** | **-1.2** |
| **LCRK** | **Leigh Creek** | **23.58** | **202** | P | **P** | **15 21 35.3** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **23.72** | **244** | P | **P** | **15 21 36.8** | **-0.9** |
| | comp=Z,12nm,0.5s,baz=58,slow=9.0,SNR=57 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.72** | **244** | P | **P** | **15 21 36.5** | **-1.1** |
| FITZ | | | | IAmb | IAmb | 15 21 37.4 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.72** | **244** | P | **P** | **15 21 36.9** | **-0.7** |
| **STKA** | **Stephens Creek** | **23.90** | **194** | P | **P** | **15 21 38.2** | **-0.9** |
| | comp=Z,2.3nm,0.4s,baz=353,slow=8.4,SNR=15 | | | | | | |
| **STKA** | **Stephens Creek** | **23.90** | **194** | P | **P** | **15 21 39.1** | **0.0** |
| **WRKA** | **Warakurna** | **24.91** | **227** | P | **P** | **15 21 47.3** | **-1.2** |
| **MULG** | **Mulgathing** | **25.21** | **209** | P | **P** | **15 21 49.8** | **-1.2** |
| **HTT** | **Hallett** | **26.09** | **198** | P | **P** | **15 21 59.7** | **+0.7** |
| **NAPP** | **Napperby** | **26.10** | **199** | P | **P** | **15 22 00.0** | **+1.0** |
| **BBOO** | **Buckleboo** | **26.50** | **203** | P | **P** | **15 22 01.9** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 15 22 05.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **26.59** | **178** | P | **P** | **15 22 02.8** | **-0.7** |
| CAN | | | | IAmb | IAmb | 15 22 15.2 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **28.88** | **218** | P | **P** | **15 22 22.8** | **-1.1** |
| **FORT** | **Forrest** | **28.88** | **218** | P | **P** | **15 22 23.2** | **-0.7** |
| **MEEK** | **Meekatharra** | **33.15** | **234** | P | **P** | **15 23 01.0** | **-0.5** |
| **MOO** | **Moorlands** | **33.69** | **181** | P | **P** | **15 23 06.4** | **+0.4** |
| **MORW** | **Morawa** | **36.28** | **232** | P | **P** | **15 23 28.3** | **-0.2** |
| MORW | | | | IAmb | IAmb | 15 23 36.9 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **THZ** | **Tophouse** | **39.64** | **150** | P | **P** | **15 23 56.8** | **+0.2** |
| **RPZ** | **Rata Peaks** | **40.31** | **154** | P | **P** | **15 24 01.6** | **-0.4** |
| **KHZ** | **Kahutara** | **40.44** | **151** | P | **P** | **15 24 01.6** | **-1.5** |
| KHZ | | | | IAmb | IAmb | 15 24 17.4 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **41.54** | **320** | P | **P** | **15 24 10.6** | **-1.8** |
| **SSLB** | **Suanglung** | **41.69** | **321** | P | **P** | **15 24 13.6** | **-0.1** |
| SSLB | | | | IAmb | IAmb | 15 24 16.8 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **YHNB** | **Yeheng** | **42.09** | **322** | P | **P** | **15 24 17.9** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **45.87** | **349** | P | **P** | **15 24 45.9** | **-0.9** |
| | comp=Z,0.4nm,0.3s,baz=180,slow=9.3,SNR=4.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **45.87** | **349** | P | **P** | **15 24 46.7** | **-0.1** |
| MJAR | | | | IAmb | IAmb | 15 25 03.5 | |
| | comp=Z,3.3nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **49.55** | **339** | P | **P** | **15 25 15.4** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=157,slow=8.6,SNR=3.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **52.72** | **355** | P | **P** | **15 25 39.3** | **+0.5** |
| | comp=Z,1.4nm,0.4s,baz=207,slow=4.5,SNR=7.3 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **52.72** | **355** | P | **P** | **15 25 39.3** | **+0.5** |
| **JKA** | **Kamikawa-asahi** | **52.72** | **355** | IAmb | IAmb | 15 25 44.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.41** | **299** | P | **P** | **15 25 59.4** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=119,slow=5.8,SNR=5.6 | | | | | | |
| **KLR** | **Kul'dur** | **59.35** | **348** | P | **P** | **15 26 26.2** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=222,slow=6.8,SNR=4.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **62.04** | **7** | P | **P** | **15 26 45.1** | **+1.0** |
| | comp=Z,3.9nm,0.9s,baz=161,slow=6.6,SNR=2.6 | | | | | | |
| **PET** | **Petropavlovsk** | **62.07** | **7** | P | **P** | **15 26 45.2** | **+0.9** |
| PET | | | | IAmb | IAmb | 15 26 56.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.89** | **331** | P | **P** | **15 27 16.7** | **+0.6** |
| **SONM** | **Songino Array** | **67.18** | **331** | P | **P** | **15 27 18.8** | **+1.0** |
| | comp=Z,0.2nm,0.4s,baz=151,slow=6.2,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **67.18** | **331** | P | **P** | **15 27 18.6** | **+0.8** |
| **MK31** | **Makanchi Array** | **80.17** | **321** | P | **P** | **15 28 33.4** | **-0.2** |
| **MKAR** | **Makanchi Array** | **80.17** | **321** | P | **P** | **15 28 33.3** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=103,slow=6.9,SNR=6.4 | | | | | | |
| MKAR | | | | pP | **pP** | **15 29 03.2** | **+1.5** |
| | comp=Z,0.4nm,0.6s,baz=104,slow=6.0,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.17** | **321** | P | **P** | **15 28 33.2** | **-0.5** |
| **MAKZ** | **Makanchi** | **80.37** | **320** | P | **P** | **15 28 34.5** | **-0.3** |
| MAKZ | | | | IAmb | IAmb | 15 28 35.3 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.36** | **180** | P | **P** | **15 28 38.7** | **-1.2** |
| QSPA | | | | IAmb | IAmb | 15 28 39.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.77** | **328** | P | **P** | **15 28 40.5** | **-1.5** |
| | comp=Z,0.5nm,0.4s,baz=126,slow=7.5,SNR=4.1 | | | | | | |
| **L19K** | **White Mountain** | **83.08** | **23** | P | **P** | **15 28 48.5** | **-0.1** |
| L19K | | | | IAmb | IAmb | 15 28 53.5 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **J20K** | **Nowinta River** | **84.44** | **22** | P | **P** | **15 28 55.1** | **-0.4** |
| **SML** | **Sawmill** | **85.55** | **25** | P | **P** | **15 29 00.4** | **-0.8** |
| **IMAR** | **Indian Mountai** | **85.56** | **20** | P | **P** | **15 29 00.8** | **-0.3** |
| **RND** | **Reindeer** | **86.08** | **24** | P | **P** | **15 29 02.2** | **-1.6** |
| RND | | | | IAmb | IAmb | 15 29 04.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **86.12** | **27** | P | **P** | **15 29 02.4** | **-1.5** |
| **DHY** | **Denali Highway** | **86.53** | **24** | P | **P** | **15 29 04.8** | **-1.3** |
| DHY | | | | IAmb | IAmb | 15 29 21.0 | |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **86.60** | **25** | P | **P** | **15 29 06.4** | **+0.1** |
| **ILAR** | **Eielson Array** | **87.47** | **23** | P | **P** | **15 29 08.1** | **-2.4** |
| | comp=Z,0.8nm,0.7s,baz=252,slow=4.9,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **87.47** | **23** | P | **P** | **15 29 08.0** | **-2.4** |
| **J25K** | **Salcha River,** | **87.99** | **23** | P | **P** | **15 29 11.4** | **-1.6** |
| J25K | | | | IAmb | IAmb | 15 29 12.7 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **BARN** | **Barnard Glacie** | **88.17** | **27** | P | **P** | **15 29 13.8** | **-0.2** |
| **BCAR** | **Beaver Creek A** | **88.84** | **25** | P | **P** | **15 29 15.5** | **-1.5** |
| **TORD** | **Torodi Ar. Bea** | **146.67** | **281** | PKPbc | **PKPab** | **15 36 06.2** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=61,slow=3.0,SNR=2.1 | | | | | | |
| **BDFB** | **Brasília** | **151.12** | **147** | PKPbc | **PKPbc** | **15 36 15.4** | **-1.6** |
| | comp=Z,1.6nm,0.6s,baz=196,slow=7.4,SNR=3.3 | | | | | | |

*IDC **28** 15:16:37.4±3.2,25°.42N×123°.35E,h166km±32km,mb3.3/8, mb1 3.4/11,mb1mx3.2/42,mbtmp3.8/11,MS2.9/1, Ms1 2.9/1,ms1mx2.3/42,Error ellipse: s-maj=34.2km s-min=14.3km az=67.0*
*NEIC **28** 15:16:37.5±1.5,25°.38N±0°.09×123°.37E±0°.08, h164km±7km,mb4.0/17,Error ellipse: s-maj=13.2km s-min=10.5km az=156.0*
*JMA **28** 15:16:38.8±0.2,25°.23N×123°.37E,h160km±3km,M3.5*
**ISC 28 15:16:37.2±0.7,25°.35N±0°.07×123°.34E±0°.04,h166km±6km, n54,σ0s83/67,mb3.7/16,Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YOJ** | **Yonaguni jima** | **0.93** | **199** | P | **Pn** | **15 17 03.4** | **+0.4** |
| YOJ | | | | S | **Sn** | **15 17 22.7** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.93** | **199** | | **Pn** | **15 17 03.1** | **+0.1** |
| **JYNG** | **Yonaguni jimaku** | **0.96** | **202** | P | **Pn** | **15 17 03.6** | **+0.3** |
| JYNG | | | | S | **Sn** | **15 17 23.0** | **-0.3** |
| **IRIF** | **Iriomote-Funau** | **1.07** | **161** | P | **Pn** | **15 17 04.0** | **-0.1** |
| IRIF | | | | S | **Sn** | **15 17 23.6** | **-1.1** |
| **JISG** | **Ishigakijimahi** | **1.16** | **131** | P | **Pn** | **15 17 05.2** | **+0.4** |
| JISG | | | | S | **Sn** | **15 17 25.7** | **-0.4** |
| **JIJ** | **Ishigaki jima** | **1.22** | **143** | P | **Pn** | **15 17 05.5** | **+0.1** |
| JIJ | | | | S | **Sn** | **15 17 25.7** | **-1.4** |
| **JKRS** | **Kuro-shima** | **1.26** | **151** | P | **Pn** | **15 17 06.2** | **+0.5** |
| JKRS | | | | S | **Sn** | **15 17 27.0** | **-0.7** |
| **HATJ** | **Hateruma jima** | **1.35** | **162** | P | **Pn** | **15 17 06.9** | **+0.3** |
| HATJ | | | | S | **Sn** | **15 17 27.9** | **-1.3** |
| **JTJ** | **Tarama** | **1.42** | **119** | P | **Pn** | **15 17 08.0** | **+0.8** |
| JTJ | | | | eS | **Sn** | **15 17 30.3** | **0.0** |
| **TATO** | **Taipei** | **1.72** | **258** | | **Pn** | **15 17 11.7** | **+1.5** |
| **JIRB** | **Irabujima** | **1.74** | **107** | P | **Pn** | **15 17 11.2** | **+0.8** |
| JIRB | | | | S | **Sn** | **15 17 35.9** | **-0.2** |
| **JIKM** | **Ikemajima** | **1.78** | **103** | P | **Pn** | **15 17 12.2** | **+1.3** |
| JIKM | | | | S | **Sn** | **15 17 37.1** | **+0.3** |
| **JMJ2** | **Miyako jima3** | **1.90** | **108** | P | **Pn** | **15 17 13.5** | **+1.3** |
| JMJ2 | | | | *e*S | **Sn** | **15 17 39.8** | **+0.6** |
| **YHNB** | **Yeheng** | **1.91** | **250** | | **Pn** | **15 17 13.7** | **+1.3** |
| **JOGS** | **Gusukube** | **1.96** | **107** | P | **Pn** | **15 17 14.3** | **+1.4** |
| JOGS | | | | S | **Sn** | **15 17 41.0** | **+0.6** |
| **NACB** | **Ninganchiao** | **1.97** | **234** | | **Pn** | **15 17 12.6** | **-0.5** |
| **SSLB** | **Suanglung** | **2.67** | **235** | | **Pn** | **15 17 22.2** | **+0.9** |
| **YULB** | **Yu-li** | **2.70** | **224** | | **Pn** | **15 17 20.7** | **-0.9** |
| **TPUB** | **Ta-pu** | **3.21** | **231** | | **Pn** | **15 17 28.8** | **+1.0** |
| **JKE** | **Kume jima 2** | **3.25** | **72** | P | **Pn** | **15 17 29.1** | **+0.8** |
| JKE | | | | S | **Sn** | **15 18 08.4** | **+0.3** |
| **TWG** | **Pinlang** | **3.26** | **220** | Pn | **Pn** | **15 17 28.5** | **0.0** |
| **JOW** | **Kunigami** | **4.67** | **71** | P | **Pn** | **15 17 46.1** | **-0.5** |
| | 3.0nm,0.3s,baz=146,slow=21,SNR=18 | | | | | | |
| JOW | | | | S | **Sn** | **15 18 37.1** | **-3.8** |
| | 13nm,0.3s,baz=122,slow=25,SNR=22 | | | | | | |
| **JOW** | **Kunigami** | **4.67** | **71** | | **Pn** | **15 17 46.0** | **-0.6** |
| **JNU** | **Nakatsue** | **10.16** | **39** | P | **Pn** | **15 18 58.5** | **-0.5** |
| | 1.3nm,0.3s,baz=260,slow=1.8,SNR=1.1 | | | | | | |
| **KSRS** | **Korea Array** | **12.68** | **17** | P | **Pn** | **15 19 31.0** | **-0.7** |
| | 0.1nm,0.3s,baz=194,slow=11,SNR=1.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **20.08** | **18** | LR | LR | 15 29 45.3 | |
| | comp=Z,36nm,19.3s,baz=198,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **26.13** | **334** | P | **P** | **15 21 56.4** | **+0.5** |
| | 0.5nm,0.6s,baz=151,slow=10,SNR=5.9 | | | | | | |
| **SONM** | **Songino Array** | **26.13** | **334** | P | **P** | **15 21 56.1** | **+0.2** |
| **MK31** | **Makanchi Array** | **38.91** | **314** | P | **P** | **15 23 46.5** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 15 23 54.9 | |
| | comp=Z,2.7nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **38.91** | **314** | P | **P** | **15 23 46.5** | **-0.1** |
| | comp=Z,1.2nm,0.7s,baz=99,slow=11,SNR=18 | | | | | | |
| **MAKZ** | **Makanchi** | **39.11** | **314** | P | **P** | **15 23 48.4** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 15 23 48.8 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.37** | **325** | P | **P** | **15 23 58.0** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=119,slow=8.9,SNR=2.6 | | | | | | |
| **KNRA** | **Kununurra** | **41.12** | **172** | P | **P** | **15 24 05.2** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 15 24 12.5 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **COEN** | **Coen** | **43.59** | **151** | P | **P** | **15 24 26.0** | **+1.0** |
| COEN | | | | IAmb | IAmb | 15 24 51.0 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.11** | **165** | P | **P** | **15 24 45.3** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 15 24 49.9 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.27** | **166** | P | **P** | **15 24 46.7** | **+0.6** |
| | comp=Z,1.1nm,0.4s,baz=348,slow=8.8,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.27** | **166** | P | **P** | **15 24 45.6** | **-0.5** |
| **WB2** | **Warramunga Arr** | **46.27** | **166** | P | **P** | **15 24 46.7** | **+0.5** |
| **GAR** | **Garm** | **46.30** | **301** | P | **P** | **15 24 47.1** | **+0.7** |
| GAR | | | | IAmb | IAmb | 15 24 48.4 | |
| | comp=Z,7.9nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.33** | **165** | P | **P** | **15 24 47.1** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 15 24 48.1 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **46.35** | **306** | P | **P** | **15 24 47.4** | **+0.7** |
| **TIXI** | **Tiksi** | **46.44** | **2** | P | **P** | **15 24 46.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **49.79** | **167** | P | **P** | **15 25 14.1** | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=345,slow=7.8,SNR=5.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **54.05** | **314** | P | **P** | **15 25 44.5** | **+0.2** |
| **BBOO** | **Buckleboo** | **59.09** | **168** | P | **P** | **15 26 19.7** | **-0.3** |
| **SOCY** | **Socotra** | **66.34** | **273** | P | **P** | **15 27 07.8** | **-0.8** |
| **FINES** | **FINESS Array B** | **71.43** | **330** | P | **P** | **15 27 38.7** | **-0.4** |
| | comp=Z,1.0nm,0.7s,baz=50,slow=6.2,SNR=4.8 | | | | | | |
| **NC405** | **NORSAR Array S** | **77.86** | **333** | P | **P** | **15 28 15.8** | **-0.4** |
| **NC303** | **NORSAR Array S** | **77.95** | **333** | P | **P** | **15 28 16.4** | **-0.2** |
| **NB201** | **NORSAR Array S** | **78.07** | **333** | P | **P** | **15 28 16.9** | **-0.4** |
| NB201 | | | | IAmb | IAmb | 15 28 41.4 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **NB2** | **NORSAR Subarra** | **78.11** | **333** | P | **P** | **15 28 17.3** | **-0.2** |
| | comp=Z,0.4nm,0.5s,baz=51,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.11** | **333** | P | **P** | **15 28 16.7** | **-0.8** |
| | comp=Z,0.4nm,0.4s,baz=54,slow=5.8,SNR=5.6 | | | | | | |
| **NC204** | **NORSAR Array S** | **78.17** | **333** | P | **P** | **15 28 17.6** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **81.13** | **23** | P | **P** | **15 28 34.0** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=308,slow=5.0,SNR=8.2 | | | | | | |

*IDC **28** 15:50:23.6±1.5,7°.51S×128°.50E,h143km±16km,mb3.6/8, mb1 3.9/13,mb1mx3.6/37,mbtmp4.3/13,MS2.7/1, Ms1 2.7/1,ms1mx2.2/53,Error ellipse: s-maj=17.0km s-min=11.9km az=104.0*
*DJA **28** 15:50:24.9±0.3,8°.5S±3°.1×12°.8E±°,h119km±10km,M4.5/12, mb4.6/7,mB5.1/5,MLv4.5/12,Mw(mB)4.5/5*
*NEIC **28** 15:50:25.0±1.8,7°.47S±0°.07×128°.46E±0°.05,h149km±8km, mb4.4/24,Error ellipse: s-maj=11.8km s-min=1.8km az=143.0*
**ISC 28 15:50:24.7±0.4,7°.50S±0°.05×128°.46E±0°.05,h151km,n97, σ1s62/102,mb4.4/24,1C-1D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.85** | **100** | Pn | **Pn** | **15 51 10.6** | **+0.3** |
| **SAUI** | **Saumlaki** | **2.85** | **100** | P | **Pn** | **15 51 08.9** | **-1.4** |
| SAUI | | | | S | **Sn** | **15 51 45.2** | **-0.2** |
| **SAUI** | **Saumlaki** | **2.85** | **100** | P | **Pn** | **15 51 10.9** | **+0.6** |
| **AAI** | **Ambon** | **3.80** | **356** | P | **Pn** | **15 51 23.4** | **+0.9** |
| **MSAI** | **Masohi** | **4.16** | **6** | P | **Pn** | **15 51 28.5** | **+1.4** |
| **SOEI** | **Soe** | **4.71** | **241** | Pn | **Pn** | **15 51 34.6** | **0.0** |
| **SOEI** | **Soe** | **4.71** | **241** | P | **Pn** | **15 51 34.9** | **+0.3** |
| SOEI | | | | S | **Sn** | **15 52 25.6** | **-3.3** |
| **SOEI** | **Soe** | **4.71** | **241** | P | **Pn** | **15 51 35.3** | **+0.7** |
| **BATI** | **Baumata** | **5.45** | **240** | P | **Pn** | **15 51 44.6** | **+0.3** |
| | 66nm,0.3s,baz=134,slow=3.5,SNR=135 | | | | | | |
| BATI | | | | S | **Sn** | **15 52 46.0** | **-0.4** |
| | 44nm,0.3s,baz=129,slow=23,SNR=19 | | | | | | |
| BATI | | | | LR | LR | 15 53 36.9 | |
| | comp=Z,80nm,19.4s,baz=61,slow=35 | | | | | | |
| **BATI** | **Baumata** | **5.45** | **240** | P | **Pn** | **15 51 44.5** | **+0.3** |
| | 0.8nm2µm218nm,0.6s | | | | | | |
| **DRS** | **Darwin Rock St** | **5.45** | **154** | P | **Pn** | **15 51 43.6** | **-0.6** |
| **FAKI** | **Fak Fak** | **5.91** | **40** | Pn | **Pn** | **15 51 48.6** | **-1.7** |
| **FAKI** | **Fak Fak** | **5.91** | **40** | P | **Pn** | **15 51 48.5** | **-1.8** |
| **MTN** | **Manton Dam** | **5.92** | **154** | Pn | **Pn** | **15 51 49.5** | **-1.0** |
| **MTN** | **Manton Dam** | **5.92** | **154** | P | **Pn** | **15 51 50.0** | **-0.5** |
| **MMRI** | **Maumere** | **6.27** | **259** | Pn | **Pn** | **15 51 54.9** | **-0.2** |
| **MMRI** | **Maumere** | **6.27** | **259** | P | **Pn** | **15 51 55.7** | **+0.6** |
| | 0.2nm26nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **6.49** | **143** | P | **Pn** | **15 51 57.4** | **-0.6** |
| **SIJI** | **Sorong** | **7.16** | **23** | P | **Pn** | **15 52 06.5** | **-0.4** |
| | 11nm,0.3s,baz=47,slow=21,SNR=64 | | | | | | |
| SIJI | | | | S | **Sn** | **15 53 26.1** | **-1.1** |
| | 1.9nm,0.3s,baz=188,slow=18,SNR=4.0 | | | | | | |
| **KNRA** | **Kununurra** | **8.13** | **178** | Pn | **Pn** | **15 52 18.4** | **-1.5** |
| **KNRA** | **Kununurra** | **8.13** | **178** | P | **Pn** | **15 52 18.6** | **-1.3** |
| **BASI** | **Baing, Sumba** | **8.25** | **250** | P | **Pn** | **15 52 20.7** | **-0.8** |
| | 42nm,0.8s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **9.22** | **256** | P | **Pn** | **15 52 33.2** | **-1.3** |
| | 33nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **194** | P | **Pn** | **15 52 53.7** | **-2.8** |
| | 1.5nm,0.3s,baz=18,slow=11,SNR=62 | | | | | | |
| FITZ | | | | S | Sn | 15 54 48.0 | -8.9 |
| | 9.6nm,0.3s,baz=294,slow=18,SNR=17 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **194** | Pn | **Pn** | **15 52 53.0** | **-3.5** |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **194** | P | **Pn** | **15 52 53.5** | **-3.0** |
| **WB0** | **Warramunga Arr** | **13.48** | **155** | Pn | **Pn** | **15 53 26.3** | **-3.8** |
| **WRAB** | **Tennant Creek** | **

comp=Z,2.0nm,1.2s
**SONM Songino Array 58.45 343** P **P** **16 00 05.5 +0.7**
comp=Z,1.3nm,0.8s,baz=164,slow=8.7,SNR=12
**SONM Songino Array 58.45 343** P **P** **16 00 06.0 +1.2**
**WMQ Urumqi 62.99 328** *eP* **P** **16 00 38.0 +2.4**
**PEA0B Petropavlovsk- 65.28 19** P **P** **16 00 50.1 -0.1**
**PETK Petropavlovsk- 65.28 19** P **P** **16 00 50.3 +0.1**
comp=Z,4.4nm,0.8s,baz=173,slow=4.7,SNR=11
**PETK Petropavlovsk- 65.28 19** P **P** **16 00 50.0 -0.2**
**MK31 Makanchi Array 67.82 328** P **P** **16 01 06.3 -0.2**
**MKAR Makanchi Array 67.82 328** P **P** **16 01 06.2 -0.4**
comp=Z,0.2nm,0.3s,baz=116,slow=8.1,SNR=10
**YAK Yakutsk 69.33 1** P **P** **16 01 14.6 -0.9**
YAK IAmb IAmb 16 01 16.1
comp=Z,8.4nm,0.6s
**ZAA0 Zalesovo Array 71.37 334** P **P** **16 01 27.8 -0.2**
**ZALV Zalesovo Beam 71.37 334** P **P** **16 01 27.1 -0.9**
comp=Z,1.2nm,0.6s,baz=137,slow=3.7,SNR=5.7
**ZALV Zalesovo Beam 71.37 334** P **P** **16 01 27.4 -0.6**
**VNDA Vanda 72.14 173** P **P** **16 01 33.3 +1.0**
VNDA IAmb IAmb 16 01 35.2
comp=Z,8.9nm,1.3s
**KURK Kurchatov 72.16 329** P **P** **16 01 33.1 +0.3**
**TIXI Tiksi 78.99 0** P **P** **16 02 10.3 -1.0**
TIXI IAmb IAmb 16 02 12.0
comp=Z,1.9nm,0.5s

*IDC **28** 15:56:02.2±0.6, 17°.14S×167°.46E, h0km, mb4.6/21, mb1 4.8/23, mb1mx4.6/36, mbtmp4.7/23, ML5.6/2, MS3.9/21, Ms1 3.9/21, ms1mx3.6/61, Error ellipse: s-maj=18.5km s-min=15.3km az=140.0*
*BJI **28** 15:56:03.1±0.0, 16°.98S×167°.82E, h14km, mb4.8/40, mB4.9/25, Ms4.7/7, Ms7 4.3/6*
*NEIC **28** 15:56:04.3±1.6, 17°.27S±0°.05×167°.51E±0°.09, h10km±1km, mb4.9/55, Error ellipse: s-maj=15.0km s-min=7.4km az=253.0*
*NOU **28** 15:56:06.6, 17°.20S×167°.48E, h20km, mb5.0/35, Vanuatu Islands*
**ISC 28 15:56:05.7**±0.5, **17°.26S**±0°.04×**167°.44E**±0°.06, **h22**km±6km, **n180**, σ1**§25**/167, **mb4.9**/61, **MS3.9**/20, **4C**, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **0.85** | **123** | P | | **Pn** | **15 56 22.9** | **+0.6** |
| **RTV** | **Rentapao** | **1.08** | **120** | P | | **Pb** | **15 56 26.4** | **+0.8** |
| **SANVU** | **Saraoutou** | **1.81** | **353** | | | **Pn** | **15 56 35.2** | **-0.4** |
| **SANVU** | **Saraoutou** | **1.81** | **353** | P | | **Pn** | **15 56 35.4** | **-0.2** |
| **LIFNC** | **LIFOU** | **3.51** | **183** | Pn | | **Pn** | **15 56 57.2** | **-1.7** |
| **KOUNC** | **Koumac, New Ca** | **4.43** | **222** | P | | **Pn** | **15 57 12.6** | **+1.0** |
| **YATNC** | **Mamie plateau,** | **4.80** | **186** | P | | **Pn** | **15 57 17.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **4.88** | **191** | Pn | | **Pn** | **15 57 18.1** | **+0.2** |
| | 216nm,0.3s,baz=39,slow=9.3,SNR=2661 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **15 58 11.2** | **-2.5** |
| | 3.5nm,0.3s,baz=327,slow=23,SNR=1.1 | | | | | | | |
| DZM | | | | LR | | LR | 15 59 04.1 | |
| | comp=Z,1μm,20.0s,baz=34,slow=36 | | | | | | | |
| **DZM** | **Mont Dzumac** | **4.88** | **191** | *e*Sn | | **Sn** | **15 58 07.1** | **-6.7** |
| | 158nm,0.2s | | | | | | | |
| DZM | | | | *e*LR | | LR | 15 58 17.7 | |
| | comp=Z,2μm,23.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **4.88** | **191** | Pn | | **Pn** | **15 57 17.9** | **0.0** |
| **DZM** | **Mont Dzumac** | **4.88** | **191** | P | | **Pn** | **15 57 18.7** | **+0.8** |
| **NOUC** | **Port Laguerre** | **4.94** | **192** | P | | **Pn** | **15 57 20.2** | **+1.6** |
| **ONTNC** | **Ouen Toro** | **5.11** | **190** | Pn | | **Pn** | **15 57 21.0** | **0.0** |
| **ONTNC** | **Ouen Toro** | **5.11** | **190** | P | | **Pn** | **15 57 22.5** | **+1.6** |
| **OUENC** | **Ouen Island, N** | **5.17** | **186** | Pn | | **Pn** | **15 57 22.3** | **+0.6** |
| **OUENC** | **Ouen Island, N** | **5.17** | **186** | P | | **Pn** | **15 57 23.8** | **+2.1** |
| **PINNC** | **Pines Island,** | **5.33** | **180** | | | **Pn** | **15 57 24.2** | **+0.2** |
| **PINNC** | **Pines Island,** | **5.33** | **180** | P | | **Pn** | **15 57 26.0** | **+2.1** |
| **MSVF** | **Nonsavu** | **10.13** | **94** | LR | | LR | 16 01 47.8 | |
| | comp=Z,590nm,18.5s,baz=274,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **10.66** | **316** | Pn | | **Pn** | **15 58 36.6** | **-0.5** |
| | 42nm,0.3s,baz=188,slow=5.8,SNR=15 | | | | | | | |
| HNR | | | | LR | | LR | 16 02 01.6 | |
| | comp=Z,344nm,21.1s,baz=141,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **10.66** | **316** | Pn | | **Pn** | **15 58 38.5** | **+1.3** |
| **HNR** | **Honiara** | **10.66** | **316** | P | | **Pn** | **15 58 39.0** | **+1.8** |
| **NFK** | **Norfolk Island** | **11.74** | **178** | P | | **Pn** | **15 58 54.8** | **+2.9** |
| **EIDS** | **Eidsvold** | **17.23** | **239** | | | **Pn** | **16 00 04.0** | **-1.1** |
| EIDS | | | | | IAmb | IAmb | 16 00 29.2 | |
| | comp=Z,58nm,0.5s | | | | | | | |
| **OUZ** | **Omahuta** | **18.71** | **164** | P | | **Pn** | **16 00 25.5** | **+2.3** |
| **ARMA** | **Armidale** | **19.48** | **225** | P | | Pn | 16 00 41.8 | +9.1 |
| **CTA** | **Charters Tower** | **20.27** | **259** | P | | **P** | **16 00 40.7** | **+0.8** |
| | comp=Z,20nm,0.8s,baz=85,slow=11,SNR=21 | | | | | | | |
| CTA | | | | LR | | LR | 16 07 06.3 | |
| | comp=Z,175nm,21.8s,baz=84,slow=33 | | | | | | | |
| **CTA** | **Charters Tower** | **20.27** | **259** | P | | Pn | 16 00 42.0 | +0.1 |
| | comp=Z,25nm,0.8s | | | | | | | |
| **PMG** | **Port Moresby** | **21.21** | **289** | P | | **P** | **16 00 49.8** | **-0.2** |
| | comp=Z,11nm,0.9s,baz=193,slow=15,SNR=2.4 | | | | | | | |
| PMG | | | | LR | | LR | 16 08 16.3 | |
| | comp=Z,308nm,18.2s,baz=129,slow=35 | | | | | | | |
| **PMG** | **Port Moresby** | **21.21** | **289** | P | | **P** | **16 00 50.7** | **+0.7** |
| **URZ** | **Urewera** | **22.58** | **160** | P | | **P** | **16 01 06.1** | **+1.6** |
| | comp=Z,12nm,0.6s,baz=353,slow=2.1,SNR=11 | | | | | | | |
| URZ | | | | LR | | LR | 16 09 18.0 | |
| | comp=Z,440nm,19.1s,baz=2.5,slow=35 | | | | | | | |
| **URZ** | **Urewera** | **22.58** | **160** | P | | **P** | **16 01 02.2** | **-2.4** |
| **URZ** | **Urewera** | **22.58** | **160** | P | | **P** | **16 01 06.6** | **+2.0** |
| **QLP** | **Quilpie** | **23.41** | **243** | P | | **P** | **16 01 14.6** | **+1.3** |
| | comp=Z,49nm,1.3s | | | | | | | |
| **CNB** | **Canberra Magne** | **24.14** | **218** | P | | **P** | **16 01 22.6** | **+2.4** |
| **CMSA** | **Cobar Meteorol** | **24.32** | **230** | P | | **P** | **16 01 24.7** | **+2.9** |
| **CAN** | **Canberra** | **24.36** | **219** | P | | **P** | **16 01 23.7** | **+1.5** |
| **TUWZ** | **Tuamarina** | **24.73** | **168** | P | | **P** | **16 01 24.7** | **-0.8** |
| **MSWZ** | **Moikau Station** | **25.00** | **166** | P | | **P** | **16 01 27.7** | **-0.2** |
| **KHZ** | **Kahutara** | **25.61** | **170** | P | | **P** | **16 01 36.0** | **+2.6** |
| **QIS** | **Mount Isa** | **26.52** | **258** | P | | **P** | **16 01 44.2** | **+2.2** |
| | comp=Z,10nm,0.9s | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.55** | **174** | LR | | LR | 16 11 43.4 | |
| | comp=Z,282nm,19.5s,baz=354,slow=35 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.55** | **233** | P | | **P** | **16 01 51.6** | **+0.5** |
| | comp=Z,8.6nm,0.8s,baz=75,slow=11,SNR=12 | | | | | | | |
| STKA | | | | PcP | | **PcP** | **16 05 09.2** | **+0.4** |
| | comp=Z,4.1nm,0.8s,baz=352,slow=5.9,SNR=4.1 | | | | | | | |
| STKA | | | | LR | | LR | 16 12 46.6 | |
| | comp=Z,149nm,18.3s,baz=34,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.55** | **233** | P | | **P** | **16 01 52.1** | **+1.0** |
| **JAY** | **Jayapura** | **30.07** | **296** | LR | | LR | 16 13 57.3 | |
| | comp=Z,100nm,18.6s,baz=128,slow=36 | | | | | | | |
| **WR0** | **Warramunga Arr** | **31.27** | **260** | P | | **P** | **16 02 23.6** | **-0.6** |
| **WB0** | **Warramunga Arr** | **31.41** | **260** | P | | **P** | **16 02 25.0** | **-0.5** |
| WB0 | | | | | IAmb | IAmb | 16 02 25.9 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **WB2** | **Warramunga Arr** | **31.45** | **260** | P | | **P** | **16 02 25.2** | **-0.6** |
| **WRA** | **Warramunga Arr** | **31.46** | **260** | P | | **P** | **16 02 24.6** | **-1.3** |
| | comp=Z,1.3nm,0.4s,baz=81,slow=6.2,SNR=11 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **16 05 19.4** | **+0.4** |
| | comp=Z,3.0nm,0.9s,baz=84,slow=2.4,SNR=9.6 | | | | | | | |
| WRA | | | | LR | | LR | 16 14 08.3 | |
| | comp=Z,109nm,20.5s,baz=152,slow=34 | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.46** | **260** | P | | **P** | **16 02 24.6** | **-1.3** |
| WRA | | | | | | **PcP** | **16 05 19.1** | **+0.1** |
| **AS31** | **Alice Springs** | **32.01** | **253** | P | | **P** | **16 02 30.3** | **-0.5** |
| AS31 | | | | | IAmb | IAmb | 16 02 32.0 | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **32.01** | **253** | P | | **P** | **16 02 30.4** | **-0.3** |
| | comp=Z,15nm,0.7s,baz=77,slow=9.0,SNR=56 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **16 05 20.4** | **0.0** |
| | comp=Z,2.2nm,0.8s,baz=100,slow=2.7,SNR=7.9 | | | | | | | |
| ASAR | | | | LR | | LR | 16 15 00.7 | |
| | comp=Z,220nm,18.2s,baz=96,slow=36 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.01** | **253** | P | | **P** | **16 02 29.8** | **-1.0** |
| **BBOO** | **Buckleboo** | **32.22** | **235** | P | | **P** | **16 02 32.6** | **+0.1** |
| BBOO | | | | | IAmb | IAmb | 16 02 49.0 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **MULG** | **Mulgathing** | **33.06** | **241** | P | | **P** | **16 02 40.5** | **+0.7** |
| | comp=Z,14nm,1.1s | | | | | | | |
| **MTN** | **Manton Dam** | **35.30** | **272** | P | | **P** | **16 02 58.7** | **-0.7** |
| **KNRA** | **Kununurra** | **37.09** | **267** | P | | **P** | **16 03 13.9** | **-0.8** |
| **KNRA** | **Kununurra** | **37.09** | **267** | P | | **P** | **16 03 14.9** | **+0.2** |
| **WRKA** | **Warakurna** | **37.22** | **251** | P | | **P** | **16 03 17.1** | **+1.3** |
| **FAKI** | **Fak Fak** | **37.36** | **288** | P | | **P** | **16 03 16.5** | **-0.6** |
| **GUMO** | **Guam** | **37.90** | **323** | LR | | LR | 16 17 30.3 | |
| | comp=Z,108nm,18.6s,baz=130,slow=34 | | | | | | | |
| **FORT** | **Forrest** | **38.21** | **242** | P | | **P** | **16 03 23.9** | **-0.1** |
| FORT | | | | | IAmb | IAmb | 16 03 49.4 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **38.21** | **242** | P | | **P** | **16 03 24.7** | **+0.7** |
| | comp=Z,24nm,0.7s | | | | | | | |
| **SIJI** | **Sorong** | | | **39.13** | **291** | P | **P** | **16 03 31.7** | **-0.3** |
| | comp=Z,11nm,0.8s,baz=199,slow=20,SNR=5.1 | | | | | | | |
| SIJI | | | | | | LR | LR | 16 20 23.6 | |
| | comp=Z,135nm,18.1s,baz=82,slow=37 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | | **39.77** | **262** | P | **P** | **16 03 37.5** | **+0.2** |
| | comp=Z,24nm,0.8s,baz=102,slow=7.7,SNR=38 | | | | | | | |
| FITZ | | | | | | LR | LR | 16 19 24.3 | |
| | comp=Z,169nm,19.5s,baz=125,slow=35 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | | **39.77** | **262** | P | **P** | **16 03 37.5** | **+0.2** |
| FITZ | | | | | | IAmb | IAmb | 16 03 38.5 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | | | **39.77** | **262** | P | **P** | **16 03 38.4** | **+1.1** |
| **SOEI** | **Soe** | | | **42.56** | **274** | P | **P** | **16 04 00.3** | **-0.1** |
| SOEI | | | | | | IAmb | IAmb | 16 04 23.8 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **BATI** | **Baumata** | | | **43.02** | **273** | P | **P** | **16 04 04.3** | **+0.3** |
| | comp=Z,20nm,0.7s,baz=151,slow=4.6,SNR=13 | | | | | | | |
| **MMRI** | **Maumere** | | | **44.79** | **275** | P | **P** | **16 04 17.9** | **-0.3** |
| MMRI | | | | | | IAmb | IAmb | 16 04 44.2 | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | | | **44.96** | **257** | P | **P** | **16 04 20.6** | **+1.0** |
| PSA00 | | | | | | IAmb | IAmb | 16 04 21.1 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | | | **44.96** | **257** | P | **P** | **16 04 20.5** | **+1.0** |
| PSA00 | | | | | | IAmb | IAmb | 16 04 36.6 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **MEEK** | **Meekatharra** | | | **46.01** | **249** | P | **P** | **16 04 27.9** | **+0.1** |
| | comp=Z,31nm,1.3s | | | | | | | |
| **KLBR** | **Kellerberrin** | | | **47.06** | **243** | P | **P** | **16 04 35.8** | **-0.1** |
| **KAPI** | **Kappang** | | | **48.21** | **279** | P | **P** | **16 04 45.1** | **0.0** |
| | comp=Z,4.0nm,0.3s,baz=134,slow=8.6,SNR=4.4 | | | | | | | |
| **KAPI** | **Kappang** | | | **48.21** | **279** | IAmb | IAmb | 16 04 46.4 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | | | **48.36** | **246** | P | **P** | **16 04 46.0** | **-0.1** |
| MORW | | | | | | IAmb | IAmb | 16 05 02.5 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **MORW** | **Morawa** | | | **48.36** | **246** | P | **P** | **16 04 46.4** | **+0.3** |
| | comp=Z,16nm,1.8s | | | | | | | |
| **MPSI** | **Mapaga** | | | **49.96** | **286** | P | **P** | **16 04 58.0** | **-0.5** |
| | comp=Z,26nm,0.8s | | | | | | | |
| **HPAH** | **Hawaii Prepara** | | | **51.80** | **46** | P | **P** | **16 05 11.9** | **-0.4** |
| **LEM** | **Lembang** | | | **59.22** | **272** | P | **P** | **16 06 06.2** | **+0.3** |
| | comp=Z,8.4nm,0.4s,baz=31,slow=6.3,SNR=4.6 | | | | | | | |
| **KSM** | **Kuching** | | | **59.28** | **282** | P | **P** | **16 06 06.4** | **+0.2** |
| **JSU** | **Suzuyama** | | | **60.09** | **324** | P | **P** | **16 06 11.8** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | | | **60.22** | **333** | P | **P** | **16 06 11.5** | **-0.6** |
| | comp=Z,5.7nm,0.9s,baz=168,slow=6.4,SNR=10 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | | | **60.22** | **333** | P | **P** | | |
| **MAJO** | **Matsushiro** | | | **60.22** | **333** | P | **P** | **16 06 11.8** | **-0.4** |
| MAJO | | | | | | IAmb | IAmb | **16 06 12.0** | **-0.2** |
| | comp=Z,9.3nm,0.8s | | | | | | | 16 06 13.4 | |
| **MAT** | **Matsushiro** | | | **60.22** | **333** | P | **P** | **16 06 11.9** | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | | | **60.22** | **333** | P | **P** | **16 06 11.9** | **-0.3** |
| MJB9 | | | | | | IAmb | IAmb | 16 06 13.4 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **TPUB** | **Ta-pu** | | | **60.97** | **310** | P | **P** | **16 06 17.1** | **-0.4** |
| **CGJI** | **Cibinong** | | | **61.11** | **272** | P | **P** | **16 06 17.6** | **-1.2** |
| | comp=Z,815nmcomp=Z,35nm,0.8s | | | | | | | | |
| **YHNB** | **Yeheng** | | | **61.26** | **312** | P | **P** | **16 06 20.2** | **+0.6** |
| **KASI** | **Kota Agung** | | | **62.56** | **273** | P | **P** | 16 06 23.1 | -5.4 |
| **KSRS** | **Korea Array** | | | **65.92** | **326** | P | **P** | **16 06 48.6** | **-1.3** |
| | comp=Z,2.0nm,0.9s,baz=148,slow=7.4,SNR=4.4 | | | | | | | | |
| **NJ2** | **Nanjing** | | | **67.60** | **316** | *e*P | **P** | **16 07 02.5** | **+1.6** |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | | | **67.67** | **342** | P | **P** | **16 07 00.5** | **-0.5** |
| YSS | | | | | | IAmb | IAmb | 16 07 03.3 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **IPM** | **Ipoh** | | | **69.00** | **282** | P | **P** | **16 07 09.8** | **-0.3** |
| **UBPT** | **Khong Chiam** | | | **69.14** | **294** | P | **P** | **16 07 11.8** | **+1.1** |
| UBPT | | | | | | IAmb | IAmb | 16 07 12.5 | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | | | **69.93** | **4** | LR | LR | 16 34 40.4 | |
| | comp=Z,53nm,19.5s,baz=326,slow=33 | | | | | | | | |
| **RPSI** | **Rantau Prapat** | | | **70.38** | **279** | P | **P** | **16 07 17.9** | **-0.7** |
| RPSI | | | | | | IAmb | IAmb | 16 07 19.1 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **PET** | **Petropavlovsk** | | | **70.40** | **354** | P | **P** | **16 07 18.2** | **+0.4** |
| **PSI** | **Prapat** | | | **70.41** | **279** | P | **P** | **16 07 18.4** | **-0.6** |
| | comp=Z,2.4nm,0.4s,baz=97,slow=5.2,SNR=7.0 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | | **70.58** | **354** | P | **P** | **16 07 19.3** | **+0.4** |
| **PETK** | **Petropavlovsk-** | | | **70.58** | **354** | P | **P** | **16 07 18.3** | **-0.6** |
| | comp=Z,9.9nm,0.9s,baz=168,slow=7.6,SNR=13 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | | | **70.58** | **354** | P | **P** | **16 07 19.2** | **+0.3** |
| **GSI** | **Gunungsitoli** | | | **71.20** | **277** | P | **P** | **16 07 24.2** | **+0.6** |
| **LYN** | **LuoYang** | | | **73.37** | **315** | ⇑P | **P** | **16 07 36.5** | **+0.5** |
| LYN | | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **BJI** | **Beijing** | | | **74.33** | **322** | P | **P** | **16 07 42.0** | **+0.5** |
| BJI | | | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| **XAN** | **Xi'an** | | | **75.52** | **313** | P | **P** | **16 07 49.3** | **+0.7** |
| XAN | | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| **KMI** | **Kunming** | | | **75.78** | **302** | ⇑P | **P** | **16 07 52.0** | **+1.4** |
| KMI | | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | | | **76.13** | **295** | P | **P** | **16 07 53.5** | **+1.1** |
| CM31 | | | | | | IAmb | IAmb | 16 07 55.0 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | | **76.13** | **295** | P | **P** | **16 07 52.6** | **+0.2** |
| | comp=Z,4.1nm,0.9s,baz=126,slow=4.3,SNR=28 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | | **76.13** | **295** | P | **P** | **16 07 53.2** | **+0.7** |
| **CHTO** | **Chiang Mai** | | | **76.28** | **295** | P | **P** | **16 07 53.7** | **+0.5** |
| CHTO | | | | | | IAmb | IAmb | 16 07 55.6 | |
| | comp=Z,19nm,1.5s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | | | **76.84** | **325** | *e*P | **P** | **16 07 56.8** | **+0.8** |
| XLT | | | | | | pP | pP | 16 08 01.3 | +0.2 |
| XLT | | | | | | sP | sP | 16 08 05.0 | +2.0 |
| XLT | | | | | | PcP | **pwP** | **16 08 07.8** | **-1.6** |
| XLT | | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| XLT | | | | | | pmax | pmax | | |
| | comp=Z,75nm,4.4s | | | | | | | | |
| **PZH** | **PanZhiHua** | | | **77.20** | **303** | P | **P** | **16 08 03.0** | **+4.5** |
| PZH | | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | | | pmax | pmax | | |
| | comp=Z,90nm,5.3s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | | | **77.61** | **320** | *e*P | **P** | **16 08 02.5** | **+2.1** |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,89nm,6.3s | | | | | | | | |
| **CD2** | **Chengdu** | | | **77.68** | **308** | P | **P** | **16 08 01.5** | **+0.5** |
| CD2 | | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **MA2** | **Magadan** | | | **77.76** | **351** | LR | LR | 16 37 14.4 | |
| | comp=Z,105nm,21.3s,baz=154,slow=32 | | | | | | | | |
| **BTO** | **Baotou** | | | **78.43** | **319** | *e*P | **P** | **16 08 08.5** | **+3.5** |
| **MAW** | **Mawson** | | | **79.62** | **202** | LR | LR | 16 39 55.0 | |
| | comp=Z,100nm,18.9s,baz=226,slow=33 | | | | | | | | |
| **LZH** | **Lanzhou** | | | **80.14** | **313** | *e*P | **P** | **16 08 15.8** | **+1.3** |
| LZH | | | | | | pP | pP | 16 08 20.0 | +0.4 |
| LZH | | | | | | sP | PcP | 16 08 23.5 | +1.7 |
| LZH | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| LZH | | | | | | pmax | pmax | | |
| | comp=Z,110nm,7.8s | | | | | | | | |
| LZH | | | | | | LR | LR | | |
| | comp=Z,150nm,17.2s | | | | | | | | |
| LZH | | | | | | LR | LR | | |
| | comp=Z,120nm,17.3s | | | | | | | | |
| LZH | | | | | | LR | LR | | |
| | comp=Z,190nm,19.6s | | | | | | | | |
| **KDAK** | **Kodiak Island** | | | **81.76** | **20** | LR | LR | 16 43 31.4 | |
| | comp=Z,85nm,18.5s,baz=203,slow=35 | | | | | | | | |
| **BELA** | **Belgrano 2** | | | **84.20** | **175** | P | **P** | **16 08 35.1** | **+0.1** |
| BELA | | | | | | IAmb | IAmb | 16 08 36.4 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | | | **84.26** | **324** | P | **P** | **16 08 35.8** | **0.0** |
| ULN | | | | | | IAmb | IAmb | 16 08 37.5 | |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | | | **84.48** | **343** | P | **P** | **16 08 36.2** | **-0.1** |
| **GTA** | **Gaotai** | | | **84.53** | **314** | ⇑P | **P** | **16 08 38.0** | **+0.7** |
| GTA | | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| GTA | | | | | | pmax | pmax | | |
| | comp=Z,48nm,6.4s | | | | | | | | |
| GTA | | | | | | LR | LR | | |
| | comp=Z,77nm,16.0s | | | | | | | | |
| GTA | | | | | | LR | LR | | |
| | comp=Z,100nm,17.4s | | | | | | | | |
| GTA | | | | | | LR | LR | | |
| | comp=Z,470nm,17.8s | | | | | | | | |
| **SONM** | **Songino Array** | | | **84.62** | **324** | P | **P** | **16 08 37.3** | **-0.3** |
| | comp=Z,4.2nm,0.8s,baz=150,slow=6.5,SNR=35 | | | | | | | | |
| **SONM** | **Songino Array** | | | **84.62** | **324** | P | **P** | **16 08 37.8** | **+0.2** |
| SONM | | | | | | IAmb | IAmb | 16 08 39.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **SHL** | **Shillong** | | | **84.91** | **299** | P | **P** | **16 08 39.6** | **-0.1** |
| **BILL** | **Bilibino** | | | **85.06** | **360** | P | **P** | **16 08 39.3** | **+0.1** |
| **SYO** | **Syowa Base** | | | **86.34** | **197**⇑ | *eP* | **P** | **16 08 45.5** | **-0.2** |
| **GOMU** | **GeErMu** | | | **86.71** | **309** | P | **P** | **16 08 50.0** | **+1.4** |
| GOMU | | | | | | pP | sP | 16 08 57.0 | +1.4 |
| GOMU | | | | | | sP | pwP | 16 09 01.5 | -0.4 |
| GOMU | | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| GOMU | | | | | | pmax | pmax | | |
| | comp=Z,78nm,4.9s | | | | | | | | |
| **ORV** | **Oroville** | | | **86.97** | **47** | P | **P** | **16 08 49.3** | **0.0** |
| ORV | | | | | | IAmb | IAmb | 16 08 50.5 | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| **CMB** | **Columbia Colle** | | | **87.13** | **49** | P | **P** | **16 08 49.7** | **-0.5** |
| CMB | | | | | | IAmb | IAmb | 16 08 51.9 | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **ISA** | **Isabella, Lake** | | | **87.58** | **52** | P | **P** | **16 08 51.9** | **-0.5** |
| ISA | | | | | | IAmb | IAmb | 16 08 53.9 | |
| | comp=Z,6.1nm,0.9s | | | | | | | | |
| **MPK** | **Martis Peak** | | | **87.90** | **48** | P | **P** | **16 08 53.9** | **-0.3** |
| MPK | | | | | | IAmb | IAmb | 16 08 55.7 | |
| | comp=Z,7.8nm,1.0s | | | | | | | | |
| **BEKR** | **Beckworth** | | | **87.90** | **47** | P | **P** | **16 08 53.9** | **-0.1** |
| **PFO** | **Pinyon Flats O** | | | **88.33** | **54** | LR | LR | 16 42 08.7 | |
| | comp=Z,110nm,18.6s,baz=184,slow=31 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | | | **88.79** | **49** | P | **P** | **16 08 58.0** | **-0.3** |
| | comp=Z,3.2nm,0.8s,baz=228,slow=8.1,SNR=25 | | | | | | | | |
| **IL31** | | | | **88.87** | **18** | P | **P** | **16 08 56.9** | **-0.8** |
| **ILAR** | **Eielson Array** | | | **88.87** | **18** | P | **P** | **16 08 55.8** | **-1.9** |
| | comp=Z,1.6nm,0.7s,baz=240,slow=4.8,SNR=31 | | | | | | | | |
| ILAR | | | | | | LR | LR | 16 45 40.5 | |
| | comp=Z,78nm,19.0s,baz=208,slow=34 | | | | | | | | |
| **ILAR** | **Eielson Array** | | | **88.87** | **18** | P | **P** | **16 08 57.0** | **-0.7** |
| **BMN** | **Battle Mountai** | | | **90.33** | **48** | P | **P** | **16 09 05.1** | **-0.3** |
| BMN | | | | | | IAmb | IAmb | 16 09 07.0 | |
| | comp=Z,4.9nm,0.9s | | | | | | | | |
| **PRN** | **Pahroc Range** | | | **90.79** | **51** | P | **P** | **16 09 07.8** | **+0.3** |
| PRN | | | | | | IAmb | IAmb | 16 09 09.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | | | **91.70** | **181** | P | **P** | **16 09 10.1** | **-1.0** |
| **VNA2** | **Neumayer--Watz** | | | **91.97** | **182** | P | **P** | **16 09 11.5** | **-0.9** |
| | baz=123,slow=1.8 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | | | **92.27** | **181** | P | **P** | **16 09 12.8** | **-0.9** |
| **U15A** | **North Rim** | | | **92.53** | **53** | P | **P** | **16 09 15.7** | **-0.1** |
| U15A | | | | | | IAmb | IAmb | 16 09 17.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **WMQ** | **Urumqi** | | | **94.61** | **314** | *eP* | **P** | **16 09 25.5** | **+0.5** |
| WMQ | | | | | | pP | pP | 16 09 30.5 | +0.4 |
| WMQ | | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **INK** | **Inuvik** | | | **95.22** | **19** | LR | LR | 16 45 59.0 | |
| | comp=Z,78nm,19.7s,baz=180,slow=32 | | | | | | | | |
| **MK31** | **Makanchi Array** | | | **99.13** | **316** | P | **Pdif** | **16 09 45.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | | | **99.13** | **316** | P | **Pdif** | **16 09 44.6** | **-0.7** |
| | comp=Z,0.6nm,0.6s,baz=85,slow=6.0,SNR=11 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | | | **99.70** | **27** | P | **Pdif** | **16 09 46.6** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=252,slow=4.3,SNR=3.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | | **122.72** | **345** | PKP | **PKPdf** | **16 14 59.3** | **+0.1** |
| | comp=Z,1.6nm,0.4s,baz=82,slow=1.9,SNR=22 | | | | | | | | |
| **RAYN** | **Ar Rayn** | | | **126.52** | **287** | PKPdf | **PKPdf** | **16 15 05.9** | **-0.1** |
| **KBZ** | **Khabaz** | | | **126.58** | **312** | PKP | **PKiKP** | **16 15 07.8** | **+0.1** |
| | comp=Z,1.9nm,0.8s,baz=129,slow=6.3,SNR=5.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | | | **128.11** | **338** | PKP | **PKPdf** | **16 15 08.1** | **-1.6** |
| | comp=Z,1.5nm,0.8s,baz=111,slow=4.3,SNR=7.1 | | | | | | | | |
| **NACGM** | **Naroch** | | | **131.87** | **331** | *i* PKP | **PKPdf** | **16 15 16.2** | **-0.8** |
| **AKASG** | **Malin Array Be** | | | **132.90** | **325** | PKP | **PKPdf** | **16 15 19.6** | **+0.5** |
| | comp=Z,0.1nm,0.2s,baz=64,slow=2.0,SNR=4.5 | | | | | | | | |
| **NB2** | **NORS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AKGG** | **Akutan Green G** | **2.80** | **258** | | | Pn | 16 08 45.9 | +1.4 |
| **UNV** | **Unalaska Valle** | **3.20** | **253** | | | Pn | 16 08 51.1 | +1.2 |
| **MTBL** | **Makushin Table** | **3.25** | **256** | | | Pn | 16 08 52.3 | +1.6 |
| **MSW** | **Makushin Switc** | **3.33** | **256** | | | Pn | 16 08 52.9 | +1.2 |
| **MREP** | **Makushin Rep't** | **3.34** | **254** | | | Pn | 16 08 53.4 | +1.4 |
| **CHIR** | **Chirikof Islan** | **3.39** | **71** | | | Pn | 16 08 53.4 | +0.8 |
| **CHIR** | **Chirikof Islan** | **3.39** | **71** | IAML | | | 16 09 29.4 | |
| | comp=N,363nm,3.2s | | | | | | | |
| CHIR | | | | IAML | | | 16 09 44.7 | |
| | comp=E,371nm,3.7s | | | | | | | |
| **OKFG** | **Magazine Ridge** | **4.14** | **252** | | | Pn | 16 09 04.2 | +1.5 |
| **OKTU** | **Okmok Mt. Tuli** | **4.22** | **252** | | | Pn | 16 09 05.2 | +1.3 |
| **SII** | **Sitkinak Islan** | **4.38** | **64** | | | Pn | 16 09 06.4 | +0.4 |
| **NIKH** | **Nikolski High** | **4.84** | **250** | | | Pn | 16 09 13.6 | +1.4 |
| **OHAK** | **Old Harbor** | **5.09** | **59** | | | Pn | 16 09 15.3 | -0.2 |
| **OHAK** | **Old Harbor** | **5.09** | **59** | IAML | | | 16 10 31.2 | |
| | comp=E,124nm,4.2s | | | | | | | |
| **KDAK** | **Kodiak Island** | **5.67** | **55** | | | Pn | 16 09 23.4 | -0.2 |
| **O18K** | **Koktuh Hills** | **6.00** | **31** | Pn | | Pn | 16 09 29.8 | +1.8 |
| **CNPM** | **China Poot** | **7.20** | **45** | Pn | | Pn | 16 09 44.9 | +0.5 |
| **L19K** | **White Mountain** | **8.08** | **22** | Pn | | Pn | 16 09 57.1 | +0.7 |
| **SEW** | **Seward** | **8.27** | **46** | Pn | | Pn | 16 09 59.1 | +0.1 |
| **TTA** | **Tatalina** | **8.54** | **17** | Pn | | Pn | 16 10 03.6 | +0.9 |
| **RC01** | **Rabbit Creek A** | **8.76** | **40** | Pn | | Pn | 16 10 06.2 | +0.5 |
| **PWL** | **Port Wells** | **9.16** | **44** | Pn | | Pn | 16 10 11.2 | +0.1 |
| **K20K** | **Telida** | **9.29** | **21** | Pn | | Pn | 16 10 13.8 | +0.8 |
| **ADK** | **Adak** | **9.65** | **258** | Pn | | Pn | 16 10 18.7 | +0.8 |
| **FID** | **Port Fidalgo** | **9.86** | **47** | Pn | | Pn | 16 10 20.3 | -0.5 |
| **J20K** | **Nowinta River** | **10.02** | **18** | Pn | | Pn | 16 10 23.1 | +0.3 |
| **EYAK** | **Cordova Ski Ar** | **10.08** | **49** | Pn | | Pn | 16 10 22.9 | -0.8 |
| **SCM** | **Sheep Creek Mo** | **10.13** | **41** | Pn | | Pn | 16 10 23.2 | -1.2 |
| **KLU** | **Klutina** | **10.48** | **44** | Pn | | Pn | 16 10 28.5 | -0.7 |
| **RND** | **Reindeer** | **10.67** | **32** | Pn | | Pn | 16 10 32.0 | +0.2 |
| **M24K** | **Tolsona, Glenn** | **10.73** | **41** | Pn | | Pn | 16 10 32.3 | -0.3 |
| **BMRM** | **Bremner River** | **10.77** | **49** | Pn | | Pn | 16 10 33.0 | -0.1 |
| **N25K** | **Chitina, Valde** | **11.08** | **46** | Pn | | Pn | 16 10 36.8 | -0.6 |
| **GLB** | **Gilahina Butte** | **11.33** | **47** | Pn | | Pn | 16 10 40.5 | -0.3 |
| **VRDI** | **Verde Repeater** | **11.39** | **49** | Pn | | Pn | 16 10 40.8 | -1.0 |
| **BARN** | **Barnard Glacie** | **12.12** | **51** | Pn | | Pn | 16 10 51.7 | +0.1 |
| **TABL** | **Table Mountain** | **12.14** | **54** | Pn | | Pn | 16 10 51.5 | -0.4 |
| **SKAG** | **Skagway** | **14.78** | **61** | P | | P | 16 11 29.8 | -1.0 |
| **TOLK** | **Toolik Lake Re** | **14.85** | **17** | P | | P | 16 11 31.2 | -0.4 |
| **A36M** | **Sachs Harbour** | **22.95** | **28** | P | | P | 16 12 57.7 | -1.9 |

**IDC 28 16:25:42.6±2.6, 3°87N×95°35E, h0km, mb3.3/3, mb1 3.4/5, mb1mx3.2/50, mbtmp3.2/5, ML3.1/2, Error ellipse: s-maj=85.0km s-min=27.2km az=57.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **3.72** | **106** | Pn | Pn | 16 26 41.6 | +0.1 |
| | 2.6nm,0.3s,baz=308,slow=16,SNR=5.5 | | | | | | |
| PSI | | | | Sn | Sn | 16 27 21.4 | -4.7 |
| | 2.8nm,0.3s,baz=74,slow=23,SNR=4.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **14.92** | **13** | Pn | Pn | 16 29 16.7 | +1.7 |
| | 0.0nm,0.3s,baz=200,slow=11,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.24** | **347** | P | P | 16 33 53.1 | -0.6 |
| | 0.1nm,0.6s,baz=163,slow=10,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.02** | **123** | P | P | 16 33 59.9 | -0.5 |
| | 0.3nm,0.5s,baz=302,slow=9.1,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **46.47** | **128** | P | P | 16 34 12.3 | +0.4 |
| | 0.2nm,0.4s,baz=303,slow=7.5,SNR=7.2 | | | | | | |

*BJI **28** 16:29:40.7±0.0, 25°.15N×125°.01E, h84km, mb4.2/49, mB4.4/25, Ms3.8/8, Ms7 3.7/8*
*JMA **28** 16:29:43.4±0.1, 25°.26N×124°.79E, h87km±2km, M4.2*
*IDC **28** 16:29:43.2±0.6, 25°.28N×124°.80E, h94km±6km, mb3.9/21, mb1 4.0/25, mb1mx3.9/47, mbtmp4.2/25, MS3.3/12, Ms1 3.3/12, ms1mx3.0/93, Error ellipse: s-maj=13.3km s-min=9.5km az=76.0*
*NEIC **28** 16:29:43.6±1.7, 25°.25N±0°.09×124°.84E±0°.08, h90km±6km, mb4.7/124, Error ellipse: s-maj=14.3km s-min=8.8km az=148.0*
*NIED **28** 16:29:43.5, 25°.26N×124°.79E, h87km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10^15^Nm; Mrr1.15; Mθθ-2.96; Mφφ 1.81; Mrθ-3.26; Mθφ 1.02; Mφr-2.04; Fault plane solution: M0 4.75000×10^15^ NP1: φs243.00000°, δ82.00000°, λ58.00000°. NP2: φs140.00000°, δ33.00000°, λ165.00000°.*

**ISC 28 16:29:43.3±0.5, 25°.21N±0°.04×124°.83E±0°.04, h99km±4km, h99km:pP-P, n273, σ1s48/295, mb4.6/89, 2D, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKM** | **Ikemajima** | **0.47** | **127** | P | **Pn** | **16 29 58.3** | **-0.5** |
| JIKM | | | | S | **Sn** | **16 30 09.2** | **-1.1** |
| **JIRB** | **Irabujima** | **0.49** | **141** | P | **Pn** | **16 29 58.1** | **-0.8** |
| JIRB | | | | S | **Sn** | **16 30 09.3** | **-1.2** |
| **JMJ** | **Miyako jima 2** | **0.57** | **133** | P | **Pn** | **16 30 00.0** | **+0.5** |
| **JTJ** | **Tarama** | **0.58** | **192** | P | **Pn** | **16 29 59.0** | **-0.6** |
| JTJ | | | | S | **Sn** | **16 30 10.4** | **-1.3** |
| **JMJ2** | **Miyako jima3** | **0.65** | **136** | P | **Pn** | **16 29 59.9** | **-0.3** |
| JMJ2 | | | | S | **Sn** | **16 30 12.1** | **-0.6** |
| **JOGS** | **Gusukube** | **0.68** | **131** | P | **Pn** | **16 30 00.4** | **-0.1** |
| JOGS | | | | S | **Sn** | **16 30 13.0** | **-0.3** |
| **JISG** | **Ishigakijimahi** | **0.78** | **218** | P | **Pn** | **16 30 00.9** | **-0.5** |
| JISG | | | | *i* S | **Sn** | **16 30 13.6** | **-1.3** |
| **JIJ** | **Ishigaki jima** | **1.05** | **217** | P | **Pn** | **16 30 03.6** | **-0.6** |
| JIJ | | | | S | **Sn** | **16 30 18.2** | **-1.7** |
| **JKRS** | **Kuro-shima** | **1.22** | **218** | P | **Pn** | **16 30 05.8** | **-0.4** |
| JKRS | | | | S | **Sn** | **16 30 22.9** | **-0.5** |
| **IRIF** | **Iriomote-Funau** | **1.33** | **229** | P | **Pn** | **16 30 07.0** | **-0.4** |
| IRIF | | | | S | **Sn** | **16 30 24.8** | **-0.8** |
| **HATJ** | **Hateruma jima** | **1.48** | **219** | P | **Pn** | **16 30 08.9** | **-0.4** |
| HATJ | | | | S | **Sn** | **16 30 28.7** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **1.81** | **246** | P | **Pn** | **16 30 13.6** | **+0.1** |
| YOJ | | | | *e*S | **Sn** | **16 30 35.5** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **1.81** | **246** | | **Pn** | **16 30 13.3** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **1.81** | **246** | P | **Pn** | **16 30 13.7** | **+0.2** |
| **JYNG** | **Yonagunijimaku** | **1.87** | **247** | P | **Pn** | **16 30 14.4** | **+0.2** |
| JYNG | | | | S | **Sn** | **16 30 37.2** | **-0.6** |
| **JKE** | **Kume jima 2** | **2.08** | **57** | P | **Pn** | **16 30 16.5** | **-0.4** |
| JKE | | | | S | **Sn** | **16 30 42.0** | **-0.6** |
| **TATO** | **Taipei** | **3.04** | **266** | | **Pn** | **16 30 31.2** | **+1.6** |
| **NACB** | **Ninganchiao** | **3.12** | **251** | | **Pn** | **16 30 30.2** | **-0.5** |
| **YHNB** | **Yeheng** | **3.19** | **261** | | **Pn** | **16 30 33.1** | **+1.5** |
| **YHNB** | **Yeheng** | **3.19** | **261** | P | **Pn** | **16 30 35.7** | **+2.1** |
| **JOW** | **Kunigami** | **3.49** | **62** | P | **Pn** | **16 30 34.9** | **-0.8** |
| | 18nm,0.3s,baz=136,slow=27,SNR=37 | | | | | | |
| JOW | | | | S | **Sn** | **16 31 14.3** | **-1.8** |
| | 15nm,0.3s,baz=73,slow=25,SNR=3.5 | | | | | | |
| **JOW** | **Kunigami** | **3.49** | **62** | | **Pn** | **16 30 34.4** | **-1.3** |
| **JOW** | **Kunigami** | **3.49** | **62** | P | **Pn** | **16 30 35.0** | **-0.7** |
| **YULB** | **Yu-li** | **3.70** | **241** | | **Pn** | **16 30 36.7** | **-1.8** |
| **SSLB** | **Suanglung** | **3.81** | **249** | | **Pn** | **16 30 39.3** | **-0.7** |
| **SSLB** | **Suanglung** | **3.81** | **249** | P | **Pn** | **16 30 39.9** | **0.0** |
| **TWG** | **Pinlang** | **4.18** | **236** | | **Pn** | **16 30 42.9** | **-2.1** |
| **TPUB** | **Ta-pu** | **4.28** | **245** | | **Pn** | **16 30 46.4** | **0.0** |
| **TPUB** | **Ta-pu** | **4.28** | **245** | P | **Pn** | **16 30 46.9** | **+0.6** |
| **KNMB** | **Chin-men Tao** | **5.90** | **264** | Pn | **Pn** | **16 31 08.6** | **+0.3** |
| **JSU** | **Suzuyama** | **7.99** | **37** | Pn | **Pn** | **16 31 35.7** | **-1.0** |
| **NJ2** | **Nanjing** | **8.61** | **324** | *e*P | **Pn** | **16 31 45.0** | **0.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **12.49** | **11** | P | **Pn** | **16 32 37.5** | **+0.1** |
| | 0.3nm,0.3s,baz=195,slow=13,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 16 37 10.5 | |
| | comp=Z,46nm,19.8s,baz=195,slow=36 | | | | | | |
| **KS19** | **Wonju Array Si** | **12.53** | **11** | Pn | **Pn** | **16 32 37.5** | **-0.5** |
| **LYN** | **LuoYang** | **14.19** | **314** | *e*P | **P** | **16 33 03.8** | **-0.4** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **INU** | **Inuyama** | **14.58** | **43** | P | **P** | **16 33 09.0** | **+0.6** |
| **MAJO** | **Matsushiro** | **16.09** | **42** | Pn | **Pn** | **16 33 22.8** | **-1.0** |
| **MAT** | **Matsushiro** | **16.09** | **42** | P | **P** | **16 33 25.7** | **+0.5** |
| **MJB9** | **Matsu-Tunnel** | **16.09** | **42** | Pn | **Pn** | **16 33 22.7** | **-1.0** |
| **MJAR** | **Matsushiro Arr** | **16.09** | **42** | P | **P** | **16 33 25.1** | **-0.1** |
| | 0.2nm,0.3s,baz=220,slow=9.8,SNR=24 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **16.09** | **42** | Pn | **Pn** | **16 33 22.8** | **-0.9** |
| **XAN** | **Xi'an** | **16.38** | **306** | P | **P** | **16 33 30.0** | **+1.5** |
| XAN | | | | pP | pP | 16 33 44.3 | -2.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **BJI** | **Beijing** | **16.48** | **336** | P | **P** | **16 33 30.3** | **+0.9** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **JYT** | **Yasato** | **17.15** | **47** | P | **Pn** | **16 33 36.1** | **-0.7** |
| **DAV** | **Davao City (W)** | **18.05** | **178** | LR | LR | 16 40 50.3 | |
| | comp=Z,76nm,21.3s,baz=328,slow=37 | | | | | | |
| **JMM** | **Marumori** | **18.52** | **43** | P | **P** | **16 33 50.5** | **-1.4** |
| **CN2** | **Changchun** | **18.56** | **1** | *e*P | **P** | **16 33 52.8** | **+0.5** |
| CN2 | | | | PP | **pP** | **16 34 12.5** | **+2.0** |
| CN2 | | | | S | **S** | **16 37 13.5** | **-5.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.12** | **328** | *e*P | **Pn** | **16 34 01.0** | **+0.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,87nm,3.9s | | | | | | |
| **CD2** | **Chengdu** | **19.44** | **292** | P | **Pn** | **16 34 04.5** | **+0.3** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **BTO** | **Baotou** | **19.72** | **325** | *e*P | **Pn** | **16 34 11.5** | **+4.1** |
| **USRK** | **Ussuriysk Ar.** | **19.82** | **15** | P | **P** | **16 34 05.2** | **-0.8** |
| | baz=192,slow=9.0,SNR=8.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.82** | **15** | P | **P** | **16 34 06.2** | **+0.1** |
| **XLT** | **XiLinHaoTe** | **19.97** | **341** | *e*P | **P** | **16 34 08.3** | **+0.5** |
| XLT | | | | pP | pP | 16 34 24.3 | -2.2 |
| XLT | | | | PP | **PnPn** | **16 34 31.5** | **+2.8** |
| XLT | | | | sP | sP | 16 34 39.0 | 0.0 |
| XLT | | | | ScP | **ScP** | **16 41 45.8** | **-1.8** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,81nm,3.8s | | | | | | |
| **BNX** | **BinXian** | **20.59** | **5** | ⇓P | **P** | **16 34 14.0** | **-0.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,290nm,3.7s | | | | | | |
| **JTM** | **Tenmabayashi** | **20.60** | **37** | P | **P** | **16 34 12.4** | **-2.1** |
| JTM | | | | IAmb | IAmb | 16 34 13.4 | |
| | comp=Z,89nm,1.3s | | | | | | |
| **PZH** | **PanZhiHua** | **20.82** | **279** | P | **P** | **16 34 18.0** | **+0.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.1s | | | | | | |
| **LZH** | **Lanzhou** | **21.02** | **306** | ⇓P | **P** | **16 34 23.3** | **+4.0** |
| LZH | | | | pP | pP | 16 34 41.5 | +3.3 |
| LZH | | | | sP | sP | 16 34 54.0 | +3.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.8s | | | | | | |
| **JEW** | **Eniwo** | **22.27** | **34** | P | **P** | **16 34 32.0** | **-0.2** |
| **ERM** | **Erimo** | **22.59** | **38** | P | **P** | **16 34 34.1** | **-1.5** |
| ERM | | | | IAmb | IAmb | 16 34 51.9 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **23.77** | **33** | P | **P** | **16 34 45.2** | **-1.5** |
| | comp=Z,4.2nm,0.6s,baz=254,slow=12,SNR=5.4 | | | | | | |
| ASAJ | | | | LR | LR | 16 45 43.6 | |
| | comp=Z,61nm,18.1s,baz=180,slow=40 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **23.77** | **33** | P | **P** | **16 34 44.9** | **-1.8** |
| **KLR** | **Kul'dur** | **24.58** | **11** | P | **P** | **16 34 52.2** | **-1.8** |
| | comp=Z,2.1nm,0.7s,baz=215,slow=8.6,SNR=6.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.93** | **260** | P | **P** | **16 34 56.0** | **-1.4** |
| | comp=Z,0.3nm,0.8s,baz=60,slow=5.3,SNR=1.8 | | | | | | |
| CMAR | | | | pP | **pwP** | **16 35 20.2** | **-1.0** |
| | comp=Z,0.8nm,0.9s,baz=64,slow=8.1,SNR=3.6 | | | | | | |
| CMAR | | | | LR | LR | 16 44 37.7 | |
| | comp=Z,34nm,18.4s,baz=55,slow=36 | | | | | | |
| **GTA** | **Gaotai** | **25.34** | **310** | *e*P | **P** | **16 35 01.3** | **+0.1** |
| GTA | | | | pP | pP | 16 35 20.5 | -2.0 |
| GTA | | | | sP | sP | 16 35 33.3 | -0.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,61nm,4.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,78nm,16.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,100nm,17.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,470nm,18.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.62** | **333** | P | **P** | **16 35 11.4** | **-1.3** |
| **SIJI** | **Sorong** | **26.66** | **166** | LR | LR | 16 46 01.2 | |
| | comp=Z,30nm,19.3s,baz=26,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **26.88** | **332** | P | **P** | **16 35 13.5** | **-1.4** |
| | comp=Z,1.2nm,0.6s,baz=152,slow=9.9,SNR=11 | | | | | | |
| SONM | | | | LR | LR | 16 47 44.5 | |
| | comp=Z,40nm,18.1s,baz=59,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **26.88** | **332** | P | **P** | **16 35 14.2** | **-0.7** |
| **SANI** | **Sanana** | **27.12** | **177** | P | **P** | **16 35 13.9** | **-3.3** |
| | comp=Z,16nm,0.9s | | | | | | |
| **GOMU** | **GeErMu** | **27.93** | **300** | P | **P** | **16 35 25.0** | **+0.2** |
| GOMU | | | | pP | pP | 16 35 47.5 | +1.2 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **30.44** | **190** | LR | LR | 16 47 50.3 | |
| | comp=Z,32nm,20.5s,baz=20,slow=36 | | | | | | |
| **BATI** | **Baumata** | **35.22** | **182** | LR | LR | 16 51 52.8 | |
| | comp=Z,71nm,19.2s,baz=137,slow=38 | | | | | | |
| **WMQ** | **Urumqi** | **35.42** | **311** | *e*P | **P** | **16 36 30.3** | **+0.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **37.19** | **33** | P | **P** | **16 36 45.4** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **37.19** | **33** | P | **P** | **16 36 44.9** | **+0.2** |
| | comp=Z,2.3nm,0.6s,baz=166,slow=3.2,SNR=14 | | | | | | |
| **PET** | **Petropavlovsk** | **37.61** | **33** | P | **P** | **16 36 47.6** | **-0.6** |
| PET | | | | IAmb | IAmb | 16 36 50.6 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **39.98** | **314** | P | **P** | **16 37 08.6** | **+0.4** |
| **MKAR** | **Makanchi Array** | **39.98** | **314** | P | **P** | **16 37 08.2** | **0.0** |
| | comp=Z,3.7nm,0.5s,baz=96,slow=11,SNR=74 | | | | | | |
| MKAR | | | | pP | **pP** | **16 37 28.9** | **-1.6** |
| | comp=Z,4.1nm,0.9s,baz=91,slow=9.7,SNR=5.9 | | | | | | |
| MKAR | | | | PcP | **PcP** | **16 39 12.9** | **+1.3** |
| | comp=Z,0.6nm,0.6s,baz=91,slow=5.0,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.98** | **314** | P | **P** | **16 37 08.3** | **+0.1** |
| **MAKZ** | **Makanchi** | **40.19** | **314** | P | **P** | **16 37 10.1** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 16 37 10.9 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **40.70** | **145** | LR | LR | 16 54 09.9 | |
| | comp=Z,68nm,18.3s,baz=122,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **40.82** | **174** | P | **P** | **16 37 15.7** | **+0.4** |
| KNRA | | | | IAmb | IAmb | 16 37 17.0 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.26** | **325** | P | **P** | **16 37 18.0** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **41.26** | **325** | P | **P** | **16 37 17.5** | **-1.1** |
| | comp=Z,3.2nm,0.5s,baz=112,slow=9.2,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.26** | **325** | P | **P** | **16 37 17.8** | **-0.8** |
| **COEN** | **Coen** | **42.84** | **153** | P | **P** | **16 37 33.2** | **+1.4** |
| COEN | | | | IAmb | IAmb | 16 37 34.4 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.05** | **179** | P | **P** | **16 37 33.0** | **-0.4** |
| | comp=Z,5.7nm,0.9s,baz=359,slow=11,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.05** | **179** | P | **P** | **16 37 33.5** | **0.0** |
| FITZ | | | | IAmb | IAmb | 16 37 35.0 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **KSH** | **Kashi** | **43.16** | **302** | P | **P** | **16 37 39.0** | **+4.6** |
| KSH | | | | pP | pwP | 16 38 02.5 | +3.0 |
| KSH | | | | sP | sP | 16 38 10.5 | +2.6 |
| KSH | | | | PcP | **PcP** | **16 39 20.8** | **-1.5** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **43.49** | **318** | P | **P** | **16 37 36.4** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **43.52** | **318** | P | **P** | **16 37 37.0** | **0.0** |
| | comp=Z,1.8nm,0.5s,baz=109,slow=8.6,SNR=14 | | | | | | |
| KURBB | | | | pP | **pP** | **16 37 59.0** | **-0.4** |
| | comp=Z,4.8nm,0.8s,baz=108,slow=8.1,SNR=7.6 | | | | | | |
| **AAK** | **Ala-Archa** | **44.56** | **306** | P | **P** | **16 37 45.5** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=84,slow=5.8,SNR=6.0 | | | | | | |
| **AAK** | **Ala-Archa** | **44.56** | **306** | P | **P** | **16 37 46.6** | **+1.0** |
| **NIL** | **Nilore** | **45.32** | **293** | P | **P** | **16 37 52.3** | **+0.7** |
| **WB0** | **Warramunga Arr** | **45.66** | **167** | P | **P** | **16 37 54.8** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 16 37 56.3 | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.82** | **167** | P | **P** | **16 37 56.5** | **+0.9** |
| | comp=Z,5.5nm,0.8s,baz=352,slow=8.2,SNR=34 | | | | | | |
| WRA | | | | pP | **pP** | **16 38 18.2** | **-0.6** |
| | comp=Z,5.5nm,0.9s,baz=351,slow=8.4,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.82** | **167** | P | **P** | **16 37 55.0** | **-0.5** |
| **WB2** | **Warramunga Arr** | **45.82** | **167** | P | **P** | **16 37 56.1** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 16 37 57.5 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.88** | **167** | P | **P** | **16 37 56.8** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 16 37 58.0 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **46.53** | **2** | P | **P** | **16 37 59.1** | **-1.4** |
| **KKAR** | **Karatay Array** | **47.52** | **306** | P | **P** | **16 38 09.1** | **+0.4** |
| **GAR** | **Garm** | **47.53** | **301** | P | **P** | **16 38 09.0** | **0.0** |
| GAR | | | | IAmb | IAmb | 16 38 10.6 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **CHGR** | **Chuyangaron** | **48.44** | **300** | P | **P** | **16 38 16.3** | **+0.4** |
| CHGR | | | | IAmb | IAmb | 16 38 17.3 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **KBL** | **Kabul** | **48.74** | **295** | P | **P** | **16 38 19.1** | **+0.7** |
| KBL | | | | IAmb | IAmb | 16 38 21.2 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.02** | **319** | P | **P** | **16 38 19.2** | **-0.8** |
| | comp=Z,0.8nm,0.3s,baz=149,slow=8.5,SNR=9.2 | | | | | | |
| **BRVK** | **Borovoye** | **49.09** | **319** | P | **P** | **16 38 20.5** | **-0.1** |
| **NRIK** | **Noril'sk** | **49.32** | **344** | P | **P** | **16 38 21.8** | **-0.3** |
| | comp=Z,2.2nm,0.5s,baz=139,slow=9.3,SNR=6.4 | | | | | | |
| NRIK | | | | PcP | **PcP** | **16 39 44.5** | **+1.3** |
| | comp=Z,2.6nm,0.5s,baz=87,slow=3.7,SNR=6.2 | | | | | | |
| **NRIK** | **Noril'sk** | **49.32** | **344** | P | **P** | **16 38 21.1** | **-1.0** |
| NRIK | | | | IAmb | IAmb | 16 38 22.2 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **49.37** | **169** | P | **P** | **16 38 23.6** | **+0.6** |
| **ASAR** | **Alice Springs** | **49.37** | **169** | P | **P** | **16 38 24.4** | **+1.4** |
| | comp=Z,3.3nm,0.5s,baz=353,slow=6.9,SNR=116 | | | | | | |
| ASAR | | | | pP | **pP** | **16 38 47.0** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=352,slow=12,SNR=3.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 39 45.2** | **+1.1** |
| | comp=Z,1.0nm,0.8s,baz=343,slow=3.4,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **49.37** | **169** | P | **P** | **16 38 23.4** | **+0.4** |
| **BILL** | **Bilibino** | **49.62** | **19** | P | **P** | **16 38 22.9** | **-1.4** |
| **ABKAR** | **Akbulak array** | **55.12** | **314** | P | **P** | **16 39 05.3** | **0.0** |
| **GEYT** | **Alibeck** | **57.15** | **300** | pP | pP | 16 39 44.6 | +1.1 |
| | comp=Z,4.9nm,0.8s,baz=88,slow=10,SNR=4.3 | | | | | | |
| **GEYT** | **Alibeck** | **57.15** | **300** | P | **P** | **16 39 22.0** | **+2.0** |
| GEYT | | | | IAmb | IAmb | 16 39 47.6 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **57.15** | **300** | P | **P** | **16 39 22.0** | **+2.0** |
| GYA0B | | | | IAmb | IAmb | 16 39 47.6 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **ANM** | **Nome** | **58.86** | **28** | P | **P** | **16 39 30.4** | **-1.0** |
| ANM | | | | IAmb | IAmb | 16 39 38.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **58.98** | **163** | P | **P** | **16 39 32.5** | **-0.1** |
| | comp=Z,3.0nm,0.9s,baz=12,slow=3.1,SNR=3.9 | | | | | | |
| **CHGN** | **Chignik** | **62.14** | **38** | P | **P** | **16 39 53.2** | **-0.5** |
| **TTA** | **Tatalina** | **62.96** | **30** | P | **P** | **16 40 00.9** | **+1.6** |
| TTA | | | | IAmb | IAmb | 16 40 01.6 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **TTA** | **Tatalina** | **62.96** | **30** | P | **P** | **16 40 00.9** | **+1.6** |
| | baz=273 | | | | | | |
| **SVW2** | **Sparrevohn** | **63.27** | **32** | P | **P** | **16 40 02.1** | **+0.9** |
| **L19K** | **White Mountain** | **63.54** | **31** | P | **P** | **16 40 04.9** | **+1.9** |
| L19K | | | | IAmb | IAmb | 16 40 05.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **63.54** | **31** | P | **P** | **16 40 04.8** | **+1.7** |
| | baz=274 | | | | | | |
| **J20K** | **Nowinta River** | **63.72** | **29** | P | **P** | **16 40 06.2** | **+2.0** |
| **J20K** | **Nowinta River** | **63.72** | **29** | P | **P** | **16 40 06.1** | **+2.0** |
| | baz=274 | | | | | | |
| **IMAR** | **Indian Mountai** | **63.78** | **27** | P | **P** | **16 40 06.3** | **+1.8** |
| **K20K** | **Telida** | **63.81** | **30** | P | **P** | **16 40 06.5** | **+1.7** |
| K20K | | | | IAmb | IAmb | 16 40 08.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **K20K** | **Telida** | **63.81** | **30** | P | **P** | **16 40 06.4** | **+1.5** |
| | baz=274 | | | | | | |
| **L20K** | **Farewell, AK** | **63.97** | **31** | P | **P** | **16 40 07.9** | **+2.0** |
| | baz=275 | | | | | | |
| **H21K** | **Melozitna Rive** | **64.19** | **27** | P | **P** | **16 40 08.7** | **+1.4** |
| H21K | | | | IAmb | IAmb | 16 40 10.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **64.19** | **27** | P | **P** | **16 40 09.3** | **+2.0** |
| | baz=274 | | | | | | |
| **CHUM** | **Lake Minchumin** | **64.55** | **29** | P | **P** | **16 40 11.8** | **+2.2** |
| | baz=276,SNR=9.0 | | | | | | |
| **I21K** | **Tanana** | **64.57** | **28** | P | **P** | **16 40 11.2** | **+1.5** |
| I21K | | | | IAmb | IAmb | 16 40 13.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **I21K** | **Tanana** | **64.57** | **28** | P | **P** | **16 40 12.0** | **+2.3** |
| | baz=275 | | | | | | |
| **CAST** | **Castle Rocks** | **64.70** | **30** | P | **P** | **16 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DHY** | **Denali Highway** | **66.86** | **30** | P | **P** | **16 40 25.3** | **+0.7** |
| | baz=280 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **67.10** | **31** | P | **P** | **16 40 26.6** | **+0.4** |
| **SCM** | **Sheep Creek Mo** | **67.10** | **31** | P | **P** | **16 40 27.7** | **+1.6** |
| | baz=281 | | | | | | |
| **BMAR** | **Burnt Mountain** | **67.22** | **25** | P | **P** | **16 40 29.1** | **+2.4** |
| **KBZ** | **Khabaz** | **67.43** | **309** | P | **P** | **16 40 28.5** | **+0.2** |
| | comp=Z,2.4nm,0.9s,baz=118,slow=5.0,SNR=7.1 | | | | | | |
| **J25K** | **Salcha River,** | **67.44** | **28** | P | **P** | **16 40 27.7** | **-0.5** |
| **M24K** | **Tolsona, Glenn** | **67.59** | **31** | P | **P** | **16 40 30.0** | **+0.9** |
| **M24K** | **Tolsona, Glenn** | **67.59** | **31** | P | **P** | **16 40 31.4** | **+2.3** |
| | baz=282 | | | | | | |
| **SOCY** | **Socotra** | **67.70** | **273** | P | **P** | **16 40 30.2** | **-0.5** |
| SOCY | | | | IAmb | IAmb | 16 40 32.9 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **FID** | **Port Fidalgo** | **67.72** | **32** | P | **P** | **16 40 30.4** | **+0.5** |
| **PAX** | **Paxson** | **67.73** | **30** | P | **P** | **16 40 30.5** | **+0.5** |
| PAX | | | | IAmb | IAmb | 16 40 32.5 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **PAX** | **Paxson** | **67.73** | **30** | P | **P** | **16 40 31.4** | **+1.4** |
| | baz=282,SNR=6.1 | | | | | | |
| **KLU** | **Klutina** | **67.83** | **31** | P | **P** | **16 40 31.0** | **+0.3** |
| KLU | | | | IAmb | IAmb | 16 40 45.4 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **KLU** | **Klutina** | **67.83** | **31** | P | **P** | **16 40 32.6** | **+1.9** |
| | baz=282 | | | | | | |
| **RIDG** | **Independent Ri** | **67.85** | **29** | P | **P** | **16 40 31.2** | **+0.4** |
| RIDG | | | | IAmb | IAmb | 16 40 33.0 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **RIDG** | **Independent Ri** | **67.85** | **29** | P | **P** | **16 40 31.9** | **+1.1** |
| | baz=282 | | | | | | |
| **HARP** | **HAARP** | **67.99** | **30** | P | **P** | **16 40 34.0** | **+2.3** |
| | baz=282 | | | | | | |
| **SCRK** | **Sand Creek** | **68.17** | **28** | P | **P** | **16 40 33.2** | **+0.4** |
| SCRK | | | | IAmb | IAmb | 16 40 34.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **SCRK** | **Sand Creek** | **68.17** | **28** | P | **P** | **16 40 33.9** | **+1.1** |
| | baz=283,SNR=5.2 | | | | | | |
| **DOT** | **Dot Lake** | **68.21** | **29** | P | **P** | **16 40 33.5** | **+0.5** |
| DOT | | | | IAmb | IAmb | 16 40 34.9 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **J26L** | **Joseph Creek** | **68.23** | **28** | P | **P** | **16 40 34.0** | **+0.8** |
| | baz=283 | | | | | | |
| **MENT** | **Mentasta** | **68.52** | **29** | P | **P** | **16 40 36.5** | **+1.6** |
| MENT | | | | IAmb | IAmb | 16 40 37.9 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **BMRM** | **Bremner River** | **68.57** | **32** | P | **P** | **16 40 36.4** | **+1.1** |
| **L26K** | **Log Cabin Wild** | **68.66** | **29** | P | **P** | **16 40 37.1** | **+1.3** |
| L26K | | | | IAmb | IAmb | 16 40 39.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **L26K** | **Log Cabin Wild** | **68.66** | **29** | P | **P** | **16 40 37.5** | **+1.7** |
| | baz=284 | | | | | | |
| **GEVA** | **Gevas** | **68.69** | **303** | P | **P** | **16 40 37.6** | **+1.0** |
| **GLB** | **Gilahina Butte** | **68.83** | **31** | P | **P** | **16 40 37.8** | **+0.9** |
| GLB | | | | IAmb | IAmb | 16 40 44.7 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **M26K** | **Nabesna, AK** | **68.97** | **30** | P | **P** | **16 40 39.1** | **+1.4** |
| M26K | | | | IAmb | IAmb | 16 40 40.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **M26K** | **Nabesna, AK** | **68.97** | **30** | P | **P** | **16 40 39.4** | **+1.6** |
| | baz=284 | | | | | | |
| **VRDI** | **Verde Repeater** | **69.05** | **31** | P | **P** | **16 40 39.8** | **+1.3** |
| VRDI | | | | IAmb | IAmb | 16 40 56.8 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **69.17** | **27** | P | **P** | **16 40 39.5** | **+0.6** |
| EGAK | | | | IAmb | IAmb | 16 40 43.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **69.17** | **27** | P | **P** | **16 40 40.2** | **+1.3** |
| | baz=285,SNR=7.1 | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **69.19** | **348** | P | **P** | **16 40 38.5** | **-0.3** |
| **L27K** | **Beaver Creek,** | **69.33** | **29** | P | **P** | **16 40 41.8** | **+1.9** |
| **L27K** | **Beaver Creek,** | **69.33** | **29** | P | **P** | **16 40 41.9** | **+2.0** |
| | baz=285 | | | | | | |
| **BCAR** | **Beaver Creek A** | **69.34** | **29** | P | **P** | **16 40 42.1** | **+2.1** |
| **M27K** | **Edge Creek, AK** | **69.49** | **30** | P | **P** | **16 40 42.6** | **+1.5** |
| **M27K** | **Edge Creek, AK** | **69.49** | **30** | P | **P** | **16 40 42.8** | **+1.8** |
| | baz=285 | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.83** | **338** | pP | pP | 16 41 04.7 | -2.6 |
| | comp=Z,2.5nm,0.7s,baz=46,slow=3.5,SNR=1.9 | | | | | | |
| **BARN** | **Barnard Glacie** | **69.93** | **31** | P | **P** | **16 40 45.5** | **+1.6** |
| **DAWY** | **Dawson** | **70.10** | **28** | P | **P** | **16 40 46.1** | **+1.5** |
| DAWY | | | | IAmb | IAmb | 16 40 47.5 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **DAWY** | **Dawson** | **70.10** | **28** | P | **P** | **16 40 46.4** | **+1.7** |
| | baz=287,SNR=5.9 | | | | | | |
| **CTGM** | **Chitina Glacie** | **70.11** | **31** | P | **P** | **16 40 46.7** | **+1.8** |
| **LOGN** | **Logan Glacier** | **70.31** | **31** | P | **P** | **16 40 47.2** | **+1.1** |
| LOGN | | | | IAmb | IAmb | 16 41 07.8 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **EPYK** | **Eagle Plains** | **70.49** | **25** | P | **P** | **16 40 48.1** | **+1.2** |
| | baz=288 | | | | | | |
| **MARD** | **Mardin** | **70.70** | **303** | P | **P** | **16 40 49.5** | **+0.6** |
| MARD | | | | IAmb | IAmb | 16 40 51.3 | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **71.02** | **23** | P | **P** | **16 40 51.6** | **+1.5** |
| | baz=290 | | | | | | |
| **YUK4** | **Talbot Arm** | **71.25** | **30** | P | **P** | **16 40 54.4** | **+2.6** |
| | baz=288 | | | | | | |
| **M30M** | **Minto, Yukon** | **71.68** | **29** | P | **P** | **16 40 56.3** | **+2.1** |
| M30M | | | | IAmb | IAmb | 16 40 60.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **M30M** | **Minto, Yukon** | **71.68** | **29** | P | **P** | **16 40 56.7** | **+2.5** |
| | baz=289 | | | | | | |
| **MAYO** | **Mayo, Yukon** | **71.72** | **28** | P | **P** | **16 40 56.6** | **+2.1** |
| | baz=290 | | | | | | |
| **HYT** | **Haines Junctio** | **71.94** | **31** | P | **P** | **16 40 58.2** | **+2.3** |
| HYT | | | | IAmb | IAmb | 16 41 15.5 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **A36M** | **Sachs Harbour** | **72.15** | **18** | P | **P** | **16 40 57.5** | **+0.7** |
| A36M | | | | IAmb | IAmb | 16 40 59.0 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **A36M** | **Sachs Harbour** | **72.15** | **18** | P | **P** | **16 40 58.0** | **+1.2** |
| | baz=296 | | | | | | |
| **FIA1** | **FINESS Array S** | **72.23** | **330** | P | **P** | **16 40 57.7** | **+0.2** |
| FIA1 | | | | IAmb | IAmb | 16 41 09.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **FINES** | **FINESS Array B** | **72.23** | **330** | P | **P** | **16 40 57.5** | **0.0** |
| | comp=Z,1.5nm,0.6s,baz=68,slow=6.4,SNR=19 | | | | | | |
| **FINES** | **FINESS Array B** | **72.23** | **330** | P | **P** | **16 40 57.7** | **+0.2** |
| **N31M** | **Braeburn, Yuko** | **72.50** | **30** | P | **P** | **16 41 00.4** | **+1.2** |
| N31M | | | | IAmb | IAmb | 16 41 02.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **72.86** | **29** | P | **P** | **16 41 03.1** | **+1.9** |
| M31M | | | | IAmb | IAmb | 16 41 04.3 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **72.86** | **29** | P | **P** | **16 41 03.1** | **+1.9** |
| | baz=291 | | | | | | |
| **FARO** | **Faro, Yukon** | **73.30** | **29** | P | **P** | **16 41 06.1** | **+2.2** |
| | baz=292 | | | | | | |
| **EUNU** | **Eureka** | **73.59** | **5** | P | **P** | **16 41 06.0** | **+0.7** |
| **C36M** | **Paulatuk** | **73.72** | **20** | P | **P** | **16 41 06.4** | **+0.3** |
| C36M | | | | IAmb | IAmb | 16 41 08.0 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **C36M** | **Paulatuk** | **73.72** | **20** | P | **P** | **16 41 06.4** | **+0.3** |
| | baz=298,SNR=5.9 | | | | | | |
| **MNK** | **Minsk** | **73.73** | **323** | *i* P | P | 16 41 00.1 | -6.4 |
| | comp=E,1.0nm,0.8s | | | | | | |
| MNK | | | | *i* P | P | 16 41 00.1 | -6.4 |
| | comp=N,9.0nm,0.9s | | | | | | |
| MNK | | | | *i* P | P | 16 41 00.1 | -6.4 |
| | comp=Z,7.0nm,0.8s,baz=69 | | | | | | |
| MNK | | | | *i* pP | **PcP** | **16 41 23.3** | **+1.7** |
| MNK | | | | *i* PP | **PP** | **16 43 44.6** | **-7.1** |
| MNK | | | | *i* PPP | PPP | 16 45 29.7 | |
| MNK | | | | *i* S | **SKiKP** | **16 50 22.9** | **-3.4** |
| MNK | | | | *i* sS | **SKSac** | **16 51 03.2** | **-1.0** |
| MNK | | | | *i* SS | **SS** | **16 55 08.0** | **-6.2** |
| MNK | | | | *i* SSS | SSS | 16 58 34.5 | |
| MNK | | | | *i* LR | LR | 17 13 45.5 | |
| MNK | | | | *i* LRM | MLR | 17 16 00.3 | |
| | comp=N,177nm,24.9s | | | | | | |
| MNK | | | | *i* LRM | MLR | 17 16 04.1 | |
| | comp=Z,53nm,16.0s | | | | | | |
| MNK | | | | *i* LRM | MLR | 17 16 18.2 | |
| | comp=E,20nm,21.1s | | | | | | |
| **MMPY** | **Sheldon Lake,** | **74.04** | **28** | P | **P** | **16 41 09.9** | **+1.7** |
| | baz=294 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.30** | **319** | P | **P** | **16 41 09.6** | **-0.2** |
| | comp=E,0.2nm,0.3s,baz=56,slow=6.2,SNR=4.9 | | | | | | |
| AKASG | | | | LR | LR | 17 17 46.9 | |
| | comp=E,38nm,18.2s,baz=345,slow=39 | | | | | | |
| **P33M** | **Teslin, Yukon** | **74.32** | **30** | P | **P** | **16 41 12.4** | **+2.5** |
| | baz=293 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.22** | **307** | P | **P** | **16 41 16.4** | **+0.7** |
| | comp=E,1.1nm,0.6s,baz=87,slow=4.8,SNR=9.2 | | | | | | |
| **PABE** | **Paberze** | **75.45** | **325** | P | **P** | **16 41 17.3** | **+0.9** |
| PABE | | | | IAmb | IAmb | 16 41 17.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **TGTN** | **Hyland Airport** | **75.78** | **28** | P | **P** | **16 41 20.4** | **+2.1** |
| | baz=297 | | | | | | |
| **DLBC** | **Dease Lake** | **76.36** | **31** | P | **P** | **16 41 23.8** | **+2.2** |
| DLBC | | | | IAmb | IAmb | 16 41 53.3 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **RES** | **Resolute Bay** | **77.10** | **10** | P | **P** | **16 41 26.8** | **+1.4** |
| **CSS** | **Mathiatis** | **77.17** | **303** | P | **P** | **16 41 26.8** | **+0.2** |
| CSS | | | | IAmb | IAmb | 16 41 28.2 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **77.91** | **317** | P | **P** | **16 41 31.7** | **+1.2** |
| **BURAR** | **Bucovina Array** | **77.91** | **317** | P | **P** | **16 41 31.4** | **+0.9** |
| **MLR** | **Muntele Rosu** | **78.31** | **315** | LR | LR | 17 17 29.9 | |
| | comp=Z,25nm,18.1s,baz=55,slow=37 | | | | | | |
| **MLR** | **Muntele Rosu** | **78.31** | **315** | P | **P** | **16 41 34.2** | **+1.3** |
| **NC405** | **NORSAR Array S** | **78.61** | **333** | P | **P** | **16 41 34.4** | **+0.4** |
| NC405 | | | | IAmb | IAmb | 16 41 42.0 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **78.85** | **333** | P | **P** | **16 41 35.5** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=56,slow=5.5,SNR=4.8 | | | | | | |
| **ELL** | **Elmali** | **79.06** | **305** | P | **P** | **16 41 37.5** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **80.72** | **24** | P | **P** | **16 41 46.5** | **+1.2** |
| | comp=Z,9.9nm,0.7s,baz=304,slow=5.2,SNR=143 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.72** | **24** | P | **P** | **16 41 46.1** | **+0.8** |
| **VTS** | **Vitosha** | **81.30** | **313** | P | **P** | **16 41 50.2** | **+1.2** |
| **SUMG** | **Summit** | **81.81** | **355** | *i* P | **P** | **16 41 52.0** | **+0.5** |
| **CLL** | **Collm** | **83.21** | **324** | *eP* | **P** | **16 42 01.0** | **+2.4** |
| **EDM** | **Edmonton** | **87.06** | **31** | | **P** | **16 42 20.1** | **+2.2** |
| **DAVOX** | **Davos/Dischmat** | **87.42** | **321** | LR | LR | 17 25 52.9 | |
| | comp=Z,45nm,18.4s,baz=32,slow=39 | | | | | | |
| **FCC** | **Fort Churchill** | **90.33** | **19** | P | **P** | **16 42 33.7** | **+0.7** |
| FCC | | | | IAmb | IAmb | 16 42 36.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **FFC** | **Flin Flon** | **90.84** | **25** | | **P** | **16 42 37.1** | **+1.5** |
| FFC | | | | IAmb | IAmb | 16 42 38.6 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **HLID** | **Hailey** | **92.63** | **39** | P | **P** | **16 42 47.5** | **+3.1** |
| | baz=309 | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.40** | **45** | P | **P** | **16 42 49.1** | **+1.1** |
| | comp=Z,0.4nm,0.6s,baz=305,slow=5.2,SNR=4.0 | | | | | | |

*IDC **28** 16:39:33.0±1.8, 14˚.90N×92˚.45W, h98km±12km, mb3.5/5, mb1 3.7/7, mb1mx3.4/41, mbtmp3.7/7, Error ellipse: s-maj=32.0km s-min=7.8km az=24.0*
*NEIC **28** 16:39:32.1±1.8, 14˚.87N±0˚.07×92˚.43W±0˚.06, h100km±6km, mb4.4/55, Md4.3/28(MEX), Error ellipse: s-maj=11.1km s-min=8.0km az=202.0*
*MEX **28** 16:39:32.6±1.0, 14˚.89N×92˚.35W, h108km±9km, MD4.1*
*GCG **28** 16:39:35.3±0.7, 15˚.21N×92˚.36W, h34km±334km, MD4.0*

**ISC 28 16:39:32.3±0.7, 14˚.93N±0˚.05×92˚.44W±0˚.04, h101km±5km, n107, σ1°24/125, mb4.3/30, 1D, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **THIG** | | **0.17** | **97** | | | **Pn** | **Pn** | **16 39 46.5** | **-0.1** |
| THIG | | | | | | | **Sn** | **16 39 56.8** | **-0.4** |
| **THIG** | | **0.17** | **97** | *eP* | | **Pn** | **Pn** | **16 39 46.5** | **-0.1** |
| THIG | | | | *eS* | | | **Sn** | **16 39 56.8** | **-0.4** |
| **PATR** | **El Naranjo** | **0.28** | **47** | *eP* | | **Pn** | **Pn** | **16 39 46.4** | **-0.9** |
| PATR | | | | *eS* | | | **Sn** | **16 39 57.5** | **-0.9** |
| **PAVE** | **Pavencul** | **0.37** | **44** | *eP* | | **Pn** | **Pn** | **16 39 47.5** | **-0.2** |
| PAVE | | | | *eS* | | | **Sn** | **16 39 59.3** | **+0.1** |
| **RTAL** | **Retalhuleu** | **0.83** | **119** | | | **Pn** | **Pn** | **16 39 51.0** | **-0.1** |
| **STG3** | **Santiaguito 3,** | **0.87** | **104** | *ǁeP* | | **Pn** | **Pn** | **16 39 52.2** | **+0.4** |
| **HUEH** | **Huehuetenango** | **0.99** | **67** | | | **Pn** | **Pn** | **16 39 53.3** | **+0.3** |
| **PCIG** | | **1.07** | **316** | | | **Pn** | **Pn** | **16 39 54.4** | **+0.7** |
| PCIG | | | | | | | **Sn** | **16 40 10.8** | **+1.1** |
| **PCIG** | | **1.07** | **316** | *eP* | | **Pn** | **Pn** | **16 39 54.4** | **+0.7** |
| PCIG | | | | *eS* | | | **Sn** | **16 40 10.8** | **+1.1** |
| **CCIG** | **Comitan** | **1.38** | **12** | | | **Pn** | **Pn** | **16 39 58.7** | **+1.3** |
| CCIG | | | | | | | **Sn** | **16 40 17.9** | **+1.6** |
| **CCIG** | **Comitan** | **1.38** | **12** | *eP* | | **Pn** | **Pn** | **16 39 58.7** | **+1.3** |
| CCIG | | | | *eS* | | | **Sn** | **16 40 17.9** | **+1.6** |
| **FUG** | **Fuego 3** | **1.62** | **107** | *eP* | | **Pn** | **Pn** | **16 40 02.5** | **+2.1** |
| FUG | | | | *eS* | | | **Sn** | **16 40 23.6** | **+2.0** |
| **PCG** | **Pacaya** | **1.86** | **107** | *eP* | | Pn | Pn | 16 40 07.5 | +4.1 |
| PCG | | | | *eS* | | | **Sn** | **16 40 30.1** | **+3.1** |
| **APG** | **El Apazote** | **1.92** | **88** | P | | **Pn** | **Pn** | **16 40 04.9** | **+0.8** |
| | 45nm,0.3s,baz=285,slow=12,SNR=191 | | | | | | | | |
| APG | | | | S | | | **Sn** | **16 40 29.3** | **+1.0** |
| | 53nm,0.3s,baz=97,slow=14,SNR=28 | | | | | | | | |
| **TGIG** | | **1.95** | **341** | | | **Pn** | **Pn** | **16 40 04.4** | **-0.1** |
| TGIG | | | | | | | **Sn** | **16 40 27.0** | **-1.9** |
| **TGIG** | | **1.95** | **341** | *eP* | | **Pn** | **Pn** | **16 40 04.4** | **-0.1** |
| TGIG | | | | *eS* | | | **Sn** | **16 40 27.0** | **-1.9** |
| **NBG** | **Las Nubes** | **2.06** | **99** | *eP* | | **Pn** | **Pn** | **16 40 09.0** | **+3.0** |
| **MRL** | **Marmol** | **2.67** | **86** | *eP* | | **Pn** | **Pn** | **16 40 15.6** | **+1.6** |
| **UXUV** | **UXUV** | **2.88** | **326** | *eP* | | **Pn** | **Pn** | **16 40 17.2** | **+0.6** |
| UXUV | | | | *eS* | | | **Sn** | **16 40 50.3** | **-0.4** |
| **ESQI** | **Esquipulas** | **3.02** | **97** | | | **Pn** | **Pn** | **16 40 17.9** | **-0.6** |
| **MTO3** | **Montecristo** | **3.03** | **100** | | | **Pn** | **Pn** | **16 40 18.7** | **-0.1** |
| **PETF** | **Flores** | **3.17** | **51** | | | **Pn** | **Pn** | **16 40 21.1** | **+0.7** |
| **CMIG** | **Matias Romero** | **3.18** | **313** | P | | **Pn** | **Pn** | **16 40 21.5** | **+0.9** |
| | 4.9nm,0.3s,baz=163,slow=10.0,SNR=37 | | | | | | | | |
| CMIG | | | | S | | | **Sn** | **16 40 58.5** | **+0.7** |
| | 14nm,0.3s,baz=97,slow=19,SNR=6.8 | | | | | | | | |
| **CMIG** | **Matias Romero** | **3.18** | **313** | | | **Pn** | **Pn** | **16 40 21.2** | **+0.7** |
| CMIG | | | | | | | **Sn** | **16 40 59.6** | **+1.8** |
| **CMIG** | **Matias Romero** | **3.18** | **313** | *eP* | | **Pn** | **Pn** | **16 40 21.2** | **+0.7** |
| CMIG | | | | *eS* | | | **Sn** | **16 40 59.6** | **+1.8** |
| **HUIG** | **Huatulco** | **3.63** | **284** | | | **Pn** | **Pn** | **16 40 26.1** | **-0.6** |
| HUIG | | | | | | Sn | Sn | 16 41 01.6 | -7.0 |
| **HUIG** | **Huatulco** | **3.63** | **284** | *eP* | | **Pn** | **Pn** | **16 40 26.1** | **-0.6** |
| HUIG | | | | *e* | | | | 16 41 01.6 | |
| **PEIG** | **Puerto Escondi** | **4.66** | **284** | *e* | | **Pn** | **Pn** | **16 40 40.3** | **-0.2** |
| PEIG | | | | *e* | | | | 16 41 26.9 | |
| **YOIG** | **Yosondua** | **5.27** | **292** | *e* | | **Pn** | **Pn** | **16 40 50.6** | **+1.6** |
| YOIG | | | | *e* | | | | 16 41 43.8 | |
| **TOIG** | **Toxpalan** | **5.44** | **306** | *eP* | | **Pn** | **Pn** | **16 40 51.6** | **+0.5** |
| TOIG | | | | *eS* | | | **Sn** | **16 41 51.1** | **-1.4** |
| **HLIG** | **Huajuapan de L** | **5.90** | **300** | *e* | | **Pn** | **Pn** | **16 40 59.8** | **+2.3** |
| HLIG | | | | *e* | | | | 16 42 05.0 | |
| **FTIG** | **Fresnillo de T** | **6.21** | **299** | *e* | | **Pn** | **Pn** | **16 41 03.8** | **+2.1** |
| FTIG | | | | *e* | | | | 16 42 14.4 | |
| **TLIG** | **Tlapa** | **6.44** | **295** | Pn | | **Pn** | **Pn** | **16 41 05.8** | **+1.1** |
| **BOAB** | **BOACO BROADBAN** | **7.03** | **110** | Pn | | **Pn** | **Pn** | **16 41 11.2** | **-1.5** |
| **HZTE** | **Horizontes, Gu** | **7.88** | **121** | Pn | | **Pn** | **Pn** | **16 41 26.3** | **+2.0** |
| **ORTG** | **Ortega, Santa** | **8.19** | **123** | Pn | | **Pn** | **Pn** | **16 41 30.0** | **+1.5** |
| **DUNO** | **Dulce Nombre,** | **8.32** | **125** | Pn | | **Pn** | **Pn** | **16 41 32.1** | **+1.8** |
| **JTS** | **Las Juntas de** | **8.64** | **121** | Pn | | **Pn** | **Pn** | **16 41 36.1** | **+1.4** |
| **RIMA** | **Rio Macho** | **9.83** | **120** | | | | **Pn** | **16 41 51.6** | **+0.7** |
| **PEZE** | **Perez Zeledon,** | **10.19** | **122** | Pn | | **Pn** | **Pn** | **16 41 57.2** | **+1.5** |
| **SRBA** | **San Rafael, Bu** | **10.53** | **121** | Pn | | **Pn** | **Pn** | **16 42 01.3** | **+0.8** |
| **DRK0** | **Durika** | **10.61** | **121** | | | | **Pn** | **16 42 02.4** | **+0.8** |
| **SOR** | **Soroa** | **11.87** | **47** | Pn | | **Pn** | **Pn** | **16 42 17.0** | **-1.3** |
| **NATX** | **Nacogdoches** | **16.88** | **353** | | | | **Pn** | **16 43 21.4** | **-1.0** |
| NATX | | | | IAmb | | IAmb | IAmb | 16 43 36.3 | |
| | comp=Z,25nm,1.4s | | | | | | | | |
| **JCT** | **Junction City** | **16.89** | **338** | | | | **Pn** | **16 43 21.5** | **-1.1** |
| **TXAR** | **Lajitas Array** | **17.69** | **326** | P | | Pn | **Pn** | **16 43 34.5** | **+2.1** |
| | comp=Z,0.0nm,0.3s,baz=147,slow=10.0,SNR=4.2 | | | | | | | | |
| **250A** | **Grady** | **17.88** | **17** | P | | **P** | **P** | **16 43 33.3** | **-0.5** |
| **GOGA** | **Godfrey** | **20.12** | **22** | P | | **P** | **P** | **16 43 57.1** | **-1.1** |
| **SDDR** | **Presa de Saban** | **20.63** | **76** | P | | **P** | **P** | **16 44 02.5** | **-1.4** |
| SDDR | | | | IAmb | | IAmb | IAmb | 16 44 14.4 | |
| | comp=Z,31nm,1.5s | | | | | | | | |
| **SWET** | **Sewanee** | **21.03** | **15** | P | | **P** | **P** | **16 44 08.4** | **+0.3** |
| **LCAR** | **Lake Charles** | **21.08** | **3** | P | | **P** | **P** | **16 44 08.4** | **-0.2** |
| **NHSC** | **New Hope** | **21.25** | **29** | P | | **P** | **P** | **16 44 07.8** | **-2.6** |
| **TKL** | **Tuckaleechee C** | **22.06** | **19** | P | | **P** | **P** | **16 44 19.8** | **+0.9** |
| | comp=Z,3.0nm,0.8s,baz=201,slow=12,SNR=4.8 | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **22.30** | **14** | P | | **P** | **P** | **16 44 21.2** | **-0.3** |
| **TZTN** | **Tazewell** | **22.94** | **19** | P | | **P** | **P** | **16 44 28.1** | **+0.1** |
| TZTN | | | | IAmb | | IAmb | IAmb | 16 44 29.6 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **T50A** | **Nancy** | **23.02** | **16** | P | | **P** | **P** | **16 44 28.0** | **-0.7** |
| **V55A** | **Taylorsville** | **23.14** | **24** | P | | **P** | **P** | **16 44 30.1** | **+0.3** |
| **WCI** | **Wyandotte Cave** | **23.84** | **12** | P | | **P** | **P** | **16 44 35.9** | **-0.2** |
| WCI | | | | IAmb | | IAmb | IAmb | 16 44 38.4 | |
| | comp=Z,9.2nm,0.8s | | | | | | | | |
| **U56A** | **King** | **23.90** | **25** | P | | **P** | **P** | **16 44 36.3** | **-0.5** |
| U56A | | | | IAmb | | IAmb | IAmb | 16 44 37.5 | |
| | comp=Z,8.6nm,0.9s | | | | | | | | |
| **S51A** | **Beattyville** | **23.94** | **18** | P | | **P** | **P** | **16 44 37.2** | **+0.1** |
| S51A | | | | IAmb | | IAmb | IAmb | 16 44 38.4 | |
| | comp=Z,5.9nm,0.7s | | | | | | | | |
| **R49A** | **Shelbyville** | **24.14** | **14** | P | | **P** | **P** | **16 44 38.4** | **-0.5** |
| **R50A** | **Paris** | **24.34** | **16** | P | | **P** | **P** | **16 44 40.4** | **-0.3** |
| R50A | | | | IAmb | | IAmb | IAmb | 16 44 42.0 | |
| | comp=Z,6.4nm,0.7s | | | | | | | | |
| **S54A** | **Dingess, Beckl** | **24.82** | **21** | P | | **P** | **P** | **16 44 44.7** | **-0.5** |
| S54A | | | | IAmb | | IAmb | IAmb | 16 44 52.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | | | |
| **N41A** | **Harden Midland** | **25.72** | **3** | P | | **P** | **P** | **16 44 51.1** | **-2.1** |
| N41A | | | | IAmb | | IAmb | IAmb | 16 44 52.1 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| N41A | | | | | | **PcP** | **PcP** | **16 48 19.5** | **-1.3** |
| **Q54A** | **Coxs Mills** | **26.05** | **21** | P | | **P** | **P** | **16 44 56.0** | **-0.2** |
| Q54A | | | | IAmb | | IAmb | IAmb | 16 45 23.8 | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **JSRW** | **J. Sargeant Re** | **26.09** | **27** | P | | **P** | **P** | **16 44 56.5** | **-0.1** |
| **Q56A** | **Snyder Ridge,** | **26.70** | **23** | P | | **P** | **P** | **16 45 01.5** | **-0.6** |
| Q56A | | | | IAmb | | IAmb | IAmb | 16 45 04.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **O54A** | **Avella** | **27.28** | **20** | P | | **P** | **P** | **16 45 06.4** | **-0.9** |
| O54A | | | | IAmb | | IAmb | IAmb | 16 45 19.5 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **P57A** | **Homestead Farm** | **27.55** | **25** | P | | **P** | **P** | **16 45 09.7** | **+0.1** |
| P57A | | | | IAmb | | IAmb | IAmb | 16 45 10.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **L48A** | **N Adams** | **27.80** | **13** | P | | **P** | **P** | **16 45 10.8** | **-1.1** |
| **M53A** | **WI Miller and** | **28.32** | **19** | P | | **P** | **P** | **16 45 14.9** | **-1.6** |
| **M55A** | **Ridgway** | **28.98** | **22** | P | | **P** | **P** | **16 45 21.3** | **-1.1** |
| M55A | | | | IAmb | | IAmb | IAmb | 16 45 32.1 | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **N58A** | **Sunbury** | **29.22** | **25** | P | | **P** | **P** | **16 45 23.8** | **-0.7** |
| N58A | | | | IAmb | | IAmb | IAmb | 16 45 29.1 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **N59A** | **State Game Lan** | **29.68** | **26** | P | | **P** | **P** | **16 45 28.1** | **-0.5** |
| N59A | | | | IAmb | | IAmb | IAmb | 16 45 48.4 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| **ODNJ** | **Ogdensburg** | **30.32** | **27** | P | | **P** | **P** | **16 45 33.7** | **-0.5** |
| ODNJ | | | | IAmb | | IAmb | IAmb | 16 45 39.2 | |
| | comp=Z,10nm,1.3s | | | | | | | | |
| **BINY** | **Binghamton** | **30.66** | **24** | P | | **P** | **P** | **16 45 36.5** | **-0.8** |
| BINY | | | | IAmb | | IAmb | IAmb | 16 45 50.2 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **L59A** | **Walton** | **31.04** | **26** | P | | **P** | **P** | **16 45 40.1** | **-0.5** |
| **J56A** | **Wolcott** | **31.25** | **22** | P | | **P** | **P** | **16 45 41.3** | **-1.0** |
| **KSCT** | **Kent School, K** | **31.34** | **28** | P | | **P** | **P** | **16 45 42.3** | **-0.8** |
| **DELO** | **Deloro Mine** | **32.07** | **20** | P | | **P** | **P** | **16 45 48.9** | **-0.7** |
| DELO | | | | IAmb | | IAmb | IAmb | 16 46 13.2 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **32.68** | **321** | P | | **P** | **P** | **16 45 57.8** | **+2.5** |
| | comp=Z,1.4nm,0.6s,baz=131,slow=8.5,SNR=15 | | | | | | | | |
| **NCB** | **Newcomb** | **32.85** | **25** | P | | **P** | **P** | **16 45 55.5** | **-0.9** |
| NCB | | | | IAmb | | IAmb | IAmb | 16 46 14.7 | |
| | comp=Z,9.2nm,1.4s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **35.34** | **356** | P | | **P** | **P** | **16 46 17.8** | **0.0** |
| ULM | | | | IAmb | | IAmb | IAmb | 16 46 44.1 | |
| | comp=Z,9.1nm,1.3s | | | | | | | | |
| **PLID** | **Pearl Lake** | **36.06** | **331** | P | | **P** | **P** | **16 46 25.2** | **+0.9** |
| **LMQ** | **La Malbaie** | **37.35** | **25** | P | | **P** | **P** | **16 46 33.9** | **-1.1** |
| **D62A** | **Allapoint, All** | **37.51** | **26** | P | | **P** | **P** | **16 46 35.9** | **-0.4** |
| **TA01** | **Diego Aracena** | **41.51** | **148** | P | | **P** | **P** | **16 47 06.9** | **-2.8** |
| **SIV** | **San Ignacio** | **43.64** | **133** | P | | **P** | **P** | **16 47 27.2** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=317,slow=4.6,SNR=6.6 | | | | | | | | |
| **SCHQ** | **Schef

*NEIC **28** 17:22:16.1±1.5,51.48N±0.08×174.72W±0.05,h49km±6km, Error ellipse: s-maj=11.6km s-min=3.9km az=165.0*
*BJI **28** 17:22:19.3±0.0,51.96N×175.50W,h54km,mb4.6/37, mB4.9/15,Ms4.4/3,Ms7 4.2/3*

**ISC 28 17:22:16.6±1.2,51.50N±0.09×174.70W±0.04,h50km±9km, n180,σ1§44/172,mb4.4/53,MS3.6/20,8C-2D,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATKA** | **Atka Island** | **0.77** | **24** | | **Pn** | **17 22 30.2** | **-1.0** |
| ATKA | | | | | **Sn** | **17 22 43.5** | **+1.7** |
| **KOFP** | **Korovin Flat P** | **0.86** | **25** | | **Pn** | **17 22 32.2** | **-0.3** |
| **KOKL** | **Mount Kliuchef** | **0.88** | **20** | | **Pn** | **17 22 32.4** | **-0.4** |
| **GSIG** | **Igitkin Island** | **0.91** | **303** | | **Pn** | **17 22 32.1** | **-1.0** |
| **GSMY** | **Great Sitkin M** | **1.00** | **303** | | **Pn** | **17 22 33.5** | **-0.8** |
| **GSCK** | **Great Sitkin C** | **1.04** | **300** | | **Pn** | **17 22 34.1** | **-0.8** |
| **GSTD** | **Great Sitkin T** | **1.06** | **302** | | **Pn** | **17 22 34.4** | **-0.7** |
| **ETKA** | **Kagalaska Isla** | **1.12** | **289** | | **Pn** | **17 22 34.9** | **-1.0** |
| ETKA | | | | | **Sn** | **17 22 51.5** | **+1.2** |
| **ADAG** | **Mount Adagdak** | **1.28** | **293** | | **Pn** | **17 22 38.1** | **0.0** |
| **ADK** | **Adak** | **1.29** | **288** | P | **Pn** | **17 22 37.4** | **-0.9** |
| ADK | | | | | | 17 22 54.9 | |
| **ADK** | **Adak** | **1.29** | **288** | Pn | **Pn** | **17 22 37.4** | **-0.9** |
| ADK | | | | Sn | **Sn** | **17 22 54.9** | **+0.4** |
| **KIWB** | **Kanaga Island** | **1.57** | **284** | | **Sn** | **17 23 02.9** | **+1.8** |
| **KIKV** | **Kanaga Island** | **1.58** | **285** | | **Pn** | **17 22 41.5** | **-0.7** |
| **KIMD** | **Kanaga Island** | **1.60** | **280** | | **Pn** | **17 22 41.4** | **-1.1** |
| **KICM** | **Kanaga Island** | **1.61** | **286** | | **Pn** | **17 22 42.2** | **-0.3** |
| **TAPA** | **Tanaga Point A** | **1.96** | **280** | | **Pn** | **17 22 47.0** | **-0.4** |
| **TAFP** | **Tanaga Falls P** | **2.08** | **282** | | **Pn** | **17 22 48.9** | **-0.2** |
| TAFP | | | | | **Sn** | **17 23 16.2** | **+2.5** |
| **TASE** | **Tanaga Southea** | **2.11** | **280** | | **Pn** | **17 22 49.1** | **-0.3** |
| **GAEA** | **Gareloi East** | **2.54** | **278** | | **Pn** | **17 22 55.1** | **-0.2** |
| **GALAA** | **Gareloi Lava P** | **2.55** | **277** | | **Pn** | **17 22 55.5** | **+0.1** |
| **GANO** | **Gareloi North** | **2.58** | **279** | | **Pn** | **17 22 55.6** | **-0.2** |
| **NIKH** | **Nikolski High** | **3.88** | **65** | Pn | **Pn** | **17 23 13.5** | **-0.2** |
| **OKTU** | **Okmok Mt. Tuli** | **4.49** | **63** | | **Pn** | **17 23 22.0** | **-0.1** |
| **MSW** | **Makushin Switc** | **5.39** | **60** | | **Pn** | **17 23 34.0** | **-0.3** |
| **UNV** | **Unalaska Valle** | **5.51** | **62** | Pn | **Pn** | **17 23 38.6** | **+2.6** |
| **AKUT** | **Akutan** | **6.02** | **61** | Pn | **Pn** | **17 23 45.5** | **+2.5** |
| **SPIA** | **Saint Paul Isl** | **6.25** | **23** | Pn | **Pn** | **17 23 47.3** | **+1.2** |
| **SHEM** | **Shemya Is, Ala** | **7.01** | **284** | LR | LR | 17 26 57.5 | |
| | comp=Z,419nm,18.4s,baz=114,slow=40 | | | | | | |
| **SDPT** | **Sand Point** | **9.32** | **60** | Pn | **Pn** | **17 24 28.2** | **+0.1** |
| **OHAK** | **Old Harbor** | **13.71** | **57** | Pn | **Pn** | **17 25 24.9** | **-3.1** |
| **ANM** | **Nome** | **13.98** | **17** | P | **Pn** | **17 25 33.2** | **+1.6** |
| **ANM** | **Nome** | **13.98** | **17** | Pn | **Pn** | **17 25 33.2** | **+1.6** |
| **KDAK** | **Kodiak Island** | **14.23** | **55** | Pn | **Pn** | **17 25 31.4** | **-3.6** |
| | 0.8nm,0.3s,baz=231,slow=5.7,SNR=8.2 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.23** | **55** | Pn | **Pn** | **17 25 34.8** | **-0.2** |
| **M19K** | **Big River Lodg** | **15.19** | **39** | Pn | **Pn** | **17 25 48.0** | **+0.4** |
| **TTA** | **Tatalina** | **15.21** | **34** | P | **Pn** | **17 25 48.9** | **+1.0** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **TTA** | **Tatalina** | **15.21** | **34** | Pn | **Pn** | **17 25 48.9** | **+1.0** |
| TTA | | | | IAmb | IAmb | 17 26 08.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **CNPM** | **China Poot** | **15.46** | **50** | Pn | **Pn** | **17 25 49.8** | **-1.3** |
| **BRLK** | **Bradley Lake** | **15.71** | **49** | Pn | **Pn** | **17 25 52.4** | **-2.0** |
| BRLK | | | | IAmb | IAmb | 17 26 11.2 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **K20K** | **Telida** | **16.16** | **35** | | **P** | **17 26 00.9** | **-1.6** |
| **PET** | **Petropavlovsk** | **16.36** | **286** | *i* P | **Pn** | **17 26 03.0** | **+0.5** |
| PET | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **SEW** | **Seward** | **16.51** | **49** | Pn | **Pn** | **17 26 01.5** | **-2.9** |
| **PPLA** | **Purkeypile** | **16.59** | **38** | | **P** | **17 26 07.1** | **-0.3** |
| PPLA | | | | IAmb | IAmb | 17 26 12.2 | |
| | comp=Z,35nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **16.65** | **32** | | **Pn** | **17 26 05.7** | **-0.5** |
| **RC01** | **Rabbit Creek A** | **16.75** | **45** | Pn | **Pn** | **17 26 06.7** | **-0.7** |
| RC01 | | | | IAmb | IAmb | 17 26 26.3 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **16.92** | **286** | P | **Pn** | **17 26 06.5** | **-3.1** |
| PEA0B | | | | pmax | pmax | | |
| | comp=Z,50nm,1.2s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **16.92** | **286** | Pn | **Pn** | **17 26 06.5** | **-3.1** |
| **PETK** | **Petropavlovsk-** | **16.92** | **286** | Pn | **Pn** | **17 26 10.3** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=85,slow=3.5,SNR=11 | | | | | | |
| PETK | | | | LR | LR | 17 32 11.7 | |
| | comp=Z,144nm,19.8s,baz=99,slow=35 | | | | | | |
| **CAST** | **Castle Rocks** | **16.92** | **36** | | **P** | **17 26 11.1** | **+0.1** |
| **PWL** | **Port Wells** | **17.29** | **47** | Pn | **Pn** | **17 26 11.8** | **-2.4** |
| PWL | | | | IAmb | IAmb | 17 26 14.8 | |
| | comp=Z,48nm,1.3s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.43** | **37** | | **Pn** | **17 26 15.5** | **-0.4** |
| KTH | | | | IAmb | IAmb | 17 26 37.0 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **KNK** | **Knik Glacier** | **17.44** | **45** | Pn | **Pn** | **17 26 12.7** | **-3.3** |
| **SML** | **Sawmill** | **17.66** | **44** | Pn | **Pn** | **17 26 17.4** | **-1.3** |
| SML | | | | IAmb | IAmb | 17 26 41.4 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **H21K** | **Melozitna Rive** | **18.05** | **30** | P | **P** | **17 26 23.0** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **18.11** | **45** | P | **Pn** | **17 26 23.4** | **-0.8** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,31nm,1.4s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **18.11** | **45** | P | **Pn** | **17 26 23.4** | **-0.8** |
| SCM | | | | IAmb | IAmb | 17 26 26.4 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **18.15** | **39** | P | **Pn** | **17 26 24.0** | **-0.8** |
| RND | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **18.15** | **39** | P | **Pn** | **17 26 24.0** | **-0.8** |
| **MCK** | **McKinley** | **18.28** | **38** | P | **Pn** | **17 26 25.6** | **-0.7** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | |
| **MCK** | **McKinley** | **18.28** | **38** | P | **Pn** | **17 26 25.6** | **-0.7** |
| MCK | | | | IAmb | IAmb | 17 26 51.7 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **DHY** | **Denali Highway** | **18.59** | **41** | P | **P** | **17 26 29.1** | **-0.5** |
| DHY | | | | IAmb | IAmb | 17 26 51.3 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **KLU** | **Klutina** | **18.61** | **46** | P | **P** | **17 26 27.8** | **-1.8** |
| KLU | | | | IAmb | IAmb | 17 26 50.7 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **18.88** | **34** | P | **Pn** | **17 26 33.7** | **+0.2** |
| **WRH** | **Wood River Hil** | **18.98** | **37** | P | **Pn** | **17 26 33.4** | **-1.2** |
| WRH | | | | IAmb | IAmb | 17 26 52.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **19.00** | **338** | *d i* P | **Pn** | **17 26 35.1** | **+0.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.17** | **36** | P | **P** | **17 26 34.4** | **-1.2** |
| **N25K** | **Chitina, Valde** | **19.25** | **47** | P | **P** | **17 26 36.3** | **-0.2** |
| N25K | | | | IAmb | IAmb | 17 27 04.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **COLA** | **College** | **19.27** | **36** | *i* P | **Pn** | **17 26 40.1** | **+2.0** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **19.38** | **38** | P | **Pn** | **17 26 38.1** | **-1.3** |
| HDA | | | | IAmb | IAmb | 17 26 53.7 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **IL31** | | **19.58** | **37** | P | **Pn** | **17 26 40.2** | **-1.4** |
| **ILAR** | **Eielson Array** | **19.58** | **37** | P | **P** | **17 26 38.3** | **-1.8** |
| | comp=Z,0.8nm,0.3s,baz=223,slow=8.4,SNR=57 | | | | | | |
| **ILAR** | **Eielson Array** | **19.58** | **37** | P | **Pn** | **17 26 40.6** | **-1.2** |
| **H24K** | **Noodor Dome** | **19.78** | **33** | P | **Pn** | **17 26 43.3** | **-0.9** |
| H24K | | | | IAmb | IAmb | 17 26 59.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **19.88** | **28** | | **Pn** | **17 26 43.6** | **-1.7** |
| **RIDG** | **Independent Ri** | **19.91** | **41** | P | **P** | **17 26 43.0** | **-0.8** |
| RIDG | | | | IAmb | IAmb | 17 27 06.0 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **20.08** | **38** | P | **P** | **17 26 44.6** | **-0.9** |
| J25K | | | | IAmb | IAmb | 17 26 46.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **DOT** | **Dot Lake** | **20.19** | **41** | P | **P** | **17 26 45.0** | **-1.9** |
| DOT | | | | IAmb | IAmb | 17 27 12.5 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **20.35** | **40** | P | **P** | **17 26 47.9** | **-0.8** |
| **SEY** | **Seymchan** | **20.91** | **316** | P | **P** | **17 26 55.5** | **+1.0** |
| | comp=Z,2.8nm,0.8s,baz=102,slow=20,SNR=6.5 | | | | | | |
| SEY | | | | LR | LR | 17 35 39.5 | |
| | comp=Z,291nm,18.4s,baz=86,slow=39 | | | | | | |
| **SEY** | **Seymchan** | **20.91** | **316** | *i* P | **P** | **17 26 54.7** | **+0.2** |
| **MA2** | **Magadan** | **20.94** | **306** | P | **P** | **17 26 55.2** | **+0.3** |
| | comp=Z,1.1nm,0.4s,baz=103,slow=12,SNR=4.5 | | | | | | |
| MA2 | | | | LR | LR | 17 34 56.9 | |
| | comp=Z,143nm,18.9s,baz=106,slow=36 | | | | | | |
| **MA2** | **Magadan** | **20.94** | **306** | *i* P | Pn | 17 26 56.9 | -1.0 |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BCAR** | **Beaver Creek A** | **20.95** | **44** | P | **P** | **17 26 55.1** | **+0.1** |
| **TOLK** | **Toolik Lake Re** | **20.99** | **26** | | Pn | 17 26 56.4 | -2.1 |
| TOLK | | | | IAmb | IAmb | 17 27 16.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **21.80** | **40** | P | **P** | **17 27 03.6** | **-0.4** |
| **INK** | **Inuvik** | **25.90** | **34** | P | **P** | **17 27 41.9** | **-1.5** |
| | comp=Z,1.3nm,0.7s,baz=204,slow=9.2,SNR=5.2 | | | | | | |
| INK | | | | LR | LR | 17 39 27.7 | |
| | comp=Z,124nm,18.1s,baz=192,slow=40 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.86** | **278** | *eP* | **P** | **17 28 03.5** | **+2.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,200nm,16.0s | | | | | | |
| **BBB** | **Bella Bella** | **28.41** | **70** | LR | LR | 17 37 27.8 | |
| | comp=Z,115nm,18.8s,baz=252,slow=32 | | | | | | |
| **A36M** | **Sachs Harbour** | **29.74** | **28** | P | **P** | **17 28 18.6** | **+0.9** |
| A36M | | | | IAmb | IAmb | 17 28 36.3 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **31.27** | **311** | P | **P** | **17 28 30.8** | **-0.4** |
| | comp=Z,1.7nm,0.4s,baz=106,slow=1.3,SNR=5.4 | | | | | | |
| YAK | | | | LR | LR | 17 41 29.3 | |
| | comp=Z,131nm,19.1s,baz=88,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **31.27** | **311** | *eP* | **P** | **17 28 30.4** | **-0.8** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **31.81** | **330** | P | **P** | **17 28 35.6** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=272,slow=24,SNR=3.5 | | | | | | |
| TIXI | | | | PcP | **PcP** | **17 31 25.1** | **-0.5** |
| | comp=Z,2.8nm,0.7s,baz=272,slow=23,SNR=14 | | | | | | |
| TIXI | | | | LR | LR | 17 44 02.5 | |
| | comp=Z,50nm,18.1s,baz=177,slow=41 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.28** | **47** | P | **P** | **17 28 49.4** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=266,slow=9.7,SNR=4.1 | | | | | | |
| YKA | | | | PcP | **PcP** | **17 31 29.1** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=276,slow=2.9,SNR=7.0 | | | | | | |
| YKA | | | | LR | LR | 17 42 54.4 | |
| | comp=Z,208nm,18.4s,baz=288,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **33.60** | **288** | P | **P** | **17 28 52.0** | **+0.1** |
| | comp=Z,2.9nm,0.5s,baz=67,slow=7.6,SNR=14 | | | | | | |
| **KLR** | **Kul'dur** | **33.60** | **288** | *eP* | **P** | **17 28 50.5** | **-1.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,11nm,2.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.85** | **211** | T | T | 18 06 26.6 | |
| | baz=19,slow=76,SNR=38 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.86** | **211** | T | T | 18 06 31.5 | |
| | baz=19,slow=76,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.87** | **211** | T | T | 18 06 00.4 | |
| | baz=19,slow=76,SNR=29 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.05** | **211** | T | T | 18 08 35.9 | |
| | baz=20,slow=76,SNR=70 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.07** | **211** | T | T | 18 08 09.0 | |
| | baz=20,slow=76,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.07** | **211** | T | T | 18 08 15.8 | |
| | baz=20,slow=76,SNR=7.4 | | | | | | |
| **MJAR** | **Matsushiro Ar** | **36.34** | **264** | P | **P** | **17 29 14.4** | **-1.2** |
| | comp=Z,1.5nm,0.6s,baz=54,slow=9.4,SNR=4.8 | | | | | | |
| **NEW** | **Newport** | **36.42** | **72** | LR | LR | 17 41 16.3 | |
| | comp=Z,86nm,18.5s,baz=250,slow=32 | | | | | | |
| **EDM** | **Edmonton** | **36.49** | **63** | P | **P** | **17 29 17.8** | **+1.1** |
| EDM | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **EDM** | **Edmonton** | **36.49** | **63** | P | **P** | **17 29 17.8** | **+1.1** |
| **BNX** | **BinXian** | **37.83** | **285** | ⇓P | **P** | **17 29 27.8** | **-0.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,220nm,4.9s | | | | | | |
| **RES** | **Resolute Bay** | **38.56** | **25** | PcP | **PcP** | **17 31 45.1** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=197,slow=1.9,SNR=4.5 | | | | | | |
| RES | | | | LR | LR | 17 48 37.3 | |
| | comp=Z,107nm,18.4s,baz=335,slow=41 | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.99** | **86** | P | **P** | **17 29 54.6** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=300,slow=9.1,SNR=1.8 | | | | | | |
| **KSRS** | **Korea Array** | **42.20** | **274** | P | **P** | **17 30 06.2** | **+1.9** |
| | comp=Z,4.7nm,0.9s,baz=54,slow=7.9,SNR=8.9 | | | | | | |
| **PDAR** | **Pinedale Array** | **43.81** | **75** | P | **P** | **17 30 17.1** | **-0.5** |
| | comp=Z,1.7nm,0.9s,baz=305,slow=5.2,SNR=10 | | | | | | |
| PDAR | | | | LR | LR | 17 46 18.7 | |
| | comp=Z,44nm,19.3s,baz=240,slow=33 | | | | | | |
| **PDAR** | **Pinedale Array** | **43.81** | **75** | P | **P** | **17 30 16.8** | **-0.9** |
| **NRIK** | **Noril'sk** | **45.59** | **331** | LR | LR | 17 53 59.5 | |
| | comp=Z,34nm,18.4s,baz=40,slow=42 | | | | | | |
| **NRIK** | **Noril'sk** | **45.59** | **331** | *i* P | **P** | **17 30 29.7** | **-1.4** |
| NRIK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **XLT** | **XiLinHaoTe** | **45.60** | **289** | *eP* | **P** | **17 30 30.8** | **-0.9** |
| XLT | | | | pP | pP | 17 30 43.0 | -0.7 |
| XLT | | | | sP | sP | 17 30 47.0 | -1.9 |
| XLT | | | | PcP | **PcP** | **17 32 12.8** | **+3.5** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,90nm,4.9s | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.45** | **59** | P | **P** | **17 30 44.4** | **-1.5** |
| | comp=Z,1.3nm,0.3s,baz=32,slow=20,SNR=3.8 | | | | | | |
| ULM | | | | LR | LR | 17 52 12.2 | |
| | comp=Z,88nm,18.3s,baz=306,slow=38 | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.48** | **298** | *ceP* | **P** | **17 30 53.2** | **-1.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **48.86** | **299** | P | **P** | **17 30 57.6** | **+0.5** |
| | comp=Z,1.6nm,0.7s,baz=50,slow=8.0,SNR=16 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 32 21.9** | **+1.0** |
| | comp=Z,1.5nm,0.9s,baz=49,slow=3.8,SNR=6.5 | | | | | | |
| SONM | | | | ScP | **ScP** | **17 36 18.5** | **+7.0** |
| | comp=Z,0.6nm,0.9s,baz=72,slow=3.7,SNR=3.7 | | | | | | |
| SONM | | | | LR | LR | 17 53 05.4 | |
| | comp=Z,118nm,19.2s,baz=75,slow=38 | | | | | | |
| **ZAK** | **Zakamensk** | **49.07** | **303** | *eP* | **P** | **17 30 58.9** | **+0.4** |
| ZAK | | | | *e* | | 17 32 23.0 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.11** | **288** | *eP* | **P** | **17 31 07.0** | **+0.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,5.4s | | | | | | |
| **HNS** | **HongShan** | **50.40** | **283** | ⇑P | **P** | **17 31 10.3** | **+1.7** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,29nm,1.1s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **51.91** | **306** | *i* P | **P** | **17 31 20.5** | **+0.5** |
| **LYN** | **LuoYang** | **53.63** | **282** | *eP* | **P** | **17 31 30.3** | **-2.5** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,180nm,15.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,170nm,14.1s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **54.54** | **24** | LR | LR | 17 56 60.0 | |
| | comp=Z,42nm,20.2s,baz=319,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.78** | **315** | PcP | **PcP** | **17 32 47.4** | **+0.8** |
| | comp=Z,1.3nm,0.6s,baz=50,slow=4.6,SNR=7.3 | | | | | | |
| ZALV | | | | LR | LR | 17 57 21.0 | |
| | comp=Z,68nm,19.0s,baz=64,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.09** | **84** | P | **P** | **17 31 49.5** | **-1.2** |
| | comp=Z,0.3nm,0.7s,baz=298,slow=2.7,SNR=4.5 | | | | | | |
| **XAN** | **Xi'an** | **56.14** | **284** | P | **P** | **17 31 51.8** | **+0.8** |
| XAN | | | | pP | pP | 17 32 05.3 | +1.9 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| **LZH** | **Lanzhou** | **57.80** | **289** | *eP* | **P** | **17 32 05.3** | **+2.5** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,140nm,16.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,120nm,17.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,140nm,15.5s | | | | | | |
| **GTA** | **Gaotai** | **57.88** | **294** | *eP* | **P** | **17 32 03.8** | **+0.5** |
| GTA | | | | pP | pwP | 17 32 19.3 | -0.1 |
| GTA | | | | sP | sP | 17 32 26.0 | +4.3 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,58nm,5.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,49nm,16.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,120nm,17.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,97nm,18.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.37** | **352** | P | **P** | **17 32 04.8** | **-1.3** |
| | comp=Z,2.6nm,0.8s,baz=17,slow=8.0,SNR=8.6 | | | | | | |
| ARCES | | | | PcP | **PcP** | **17 32 55.4** | **-1.1** |
| | comp=Z,4.1nm,0.9s,baz=23,slow=6.6,SNR=3.9 | | | | | | |
| **KURK** | **Kurchatov** | **60.76** | **316** | *ceP* | **P** | **17 32 23.3** | **+0.5** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **60.76** | **316** | P | **P** | **17 32 23.4** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **60.87** | **316** | P | **P** | **17 32 23.2** | **-0.3** |
| **WMQ** | **Urumqi** | **61.40** | **305** | *eP* | **P** | **17 32 28.8** | **+1.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **61.94** | **311** | *i* P | **P** | **17 32 30.8** | **-0.1** |
| **MK31** | **Makanchi Array** | **61.94** | **311** | P | **P** | **17 32 30.7** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 17 32 31.6 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.94** | **311** | P | **P** | **17 32 31.1** | **+0.2** |
| | comp=Z,1.5nm,0.3s,baz=47,slow=6.6,SNR=95 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.94** | **311** | P | **P** | **17 32 30.8** | **-0.1** |
| **MKAR** | **Makanchi Array** | **61.94** | **311** | P | **P** | **17 32 30.8** | **-0.1** |
| **MAKZ** | **Makanchi** | **62.07** | **311** | P | **P** | **17 32 31.5** | **-0.3** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **62.07** | **311** | P | **P** | **17 32 31.5** | **-0.3** |
| MAKZ | | | | IAmb | IAmb | 17 32 32.5 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **L56A** | **Greenwood** | **62.36** | **56** | P | **P** | **17 32 34.4** | **+0.6** |
| **TKL** | **Tuckaleechee C** | **63.59** | **65** | LR | LR | 18 01 30.4 | |
| | comp=Z,36nm,18.7s,baz=303,slow=37 | | | | | | |
| **ARU** | **Arti** | **63.81** | **330** | *c i* P | **P** | **17 32 43.8** | **+0.7** |
| ARU | | | | | | 17 33 18.6 | |
| ARU | | | | S | **S** | **17 41 07.8** | **-6.3** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **PDGK** | **Podgornoye** | **65.83** | **310** | P | **P** | **17 32 56.5** | **-0.2** |
| **PZH** | **PanZhiHua** | **65.84** | **283** | P | **P** | **17 32 57.0** | **+0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **PZH** | **PanZhiHua** | **65.84** | **283** | P | **P** | **17 32 58.3** | **+1.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.4s | | | | | | |
| **FINES** | **FINESS Array B** | **66.19** | **349** | P | **P** | **17 32 58.2** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=18,slow=6.6,SNR=7.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.71** | **357** | P | **P** | **17 33 08.5** | **+0.3** |
| | comp=Z,4.0nm,0.8s,baz=5.2,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.71** | **357** | P | **P** | **17 33 08.3** | **+0.1** |
| | comp=Z,2.3nm,0.9s,baz=1.9,slow=6.4,SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **68.72** | **312** | *ceP* | **P** | **17 33 14.9** | **-0.1** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.5s | | | | | | |
| **AB31** | **Akbulak array** | **69.35** | **325** | *eP* | **P** | **17 33 19.4** | **+0.8** |
| **LSA** | **Lhasa** | **69.79** | **292** | P | **P** | **17 33 23.5** | **+1.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **KSH** | **Kashi** | **70.45** | **309** | P | P | 17 33 30.8 | +5.1 |
| KSH | | | | pP | pwP | 17 33 41.3 | -1.2 |
| KSH | | | | sP | PcP | 17 33 49.8 | +3.0 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **OBN** | **Obninsk** | **70.61** | **342** | *i* P | **P** | **17 33 29.3** | **+3.1** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.54** | **279** | P | **P** | **17 33 45.7** | **+1.4** |
| | comp=Z,1.1nm,0.8s,baz=25,slow=6.6,SNR=11 | | | | | | |
| **TAPN** | **Taplejung** | **73.55** | **293** | *eP* | **P** | **17 33 45.8** | **+1.2** |
| **GUN** | **Gumba** | **74.16** | **295** | *eP* | **P** | **17 33 49.4** | **+1.2** |
| **JIRN** | **Jiri** | **74.18** | **294** | *eP* | **P** | **17 33 49.8** | **+1.4** |
| | comp=Z,53nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **74.49** | **294** | *eP* | **P** | **17 33 51.2** | **+1.2** |
| | comp=Z,32nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **74.59** | **295** | *eP* | **P** | **17 33 51.8** | **+1.2** |
| **PKI** | **Pulchoki** | **74.69** | **295** | *eP* | **P** | **17 33 52.2** | **+0.9** |
| **PKIN** | **Phulchoki** | **74.69** | **295** | *eP* | **P** | **17 33 52.1** | **+0.9** |
| | comp=Z,33nm,1.2s | | | | | | |
| **GKN** | **Gorkha** | **74.79** | **296** | *eP* | **P** | **17 33 52.7** | **+1.0** |
| | comp=Z,23nm,0.7s | | | | | | |
| **DMN** | **Daman** | **74.83** | **295** | *eP* | **P** | **17 33 53.2** | **+1.2** |
| **DANN** | **Dangsing** | **75.02** | **297** | *eP* | **P** | **17 33 54.4** | **+1.3** |
| | comp=Z,55nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **75.56** | **296** | *eP* | **P** | **17 33 57.1** | **+1.0** |
| **PYUN** | **Piuthan** | **75.64** | **297** | *eP* | **P** | **17 33 57.6** | **+1.0** |
| | comp=Z,58nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.17** | **345** | P | **P** | **17 33 57.9** | **-1.1** |
| | comp=Z,1.1nm,0.5s,baz=18,slow=6.2,SNR=6.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.17** | **345** | *ceP* | **P** | **17 33 58.5** | **-0.4** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **CLL** | **Collm** | **77.36** | **355** | *i* P | **P** | **17 34 06.2** | **+0.5** |
| CLL | | | | pmax | pmax | | |
| | com

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PB11 | | | | IAML | | | 17 24 54.6 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **LVC** | **Limon Verde** | **1.56** | **182** | P | | **Pn** | **17 24 33.4** | **+0.2** |
| | comp=N,16nm,0.3s,baz=37,slow=10,SNR=308 | | | | | | | |
| LVC | | | | S | | **Sn** | **17 24 54.6** | **0.0** |
| | comp=N,55nm,0.3s,baz=240,slow=17,SNR=25 | | | | | | | |
| **LVC** | **Limon Verde** | **1.56** | **182** | *eP* | | **Pn** | **17 24 33.0** | **-0.3** |
| LVC | | | | *eS* | | **Sn** | **17 24 54.5** | **-0.1** |
| **LVC** | **Limon Verde** | **1.56** | **182** | *eP* | | **Pn** | **17 24 33.5** | **+0.2** |
| **PB04** | **IPOC Station P** | **1.76** | **223** | ⇑*iP* | | **Pn** | **17 24 34.7** | **-0.9** |
| PB04 | | | | *eS* | | **Sn** | **17 24 56.7** | **-2.0** |
| PB04 | | | | IAML | | | 17 24 59.1 | |
| | comp=N,867nm,0.3s | | | | | | | |
| **PB06** | **IPOC Station P** | **1.79** | **202** | ⇑*iP* | | **Pn** | **17 24 35.2** | **-0.6** |
| PB06 | | | | *eS* | | **Sn** | **17 24 57.6** | **-1.6** |
| PB06 | | | | IAML | | | 17 24 58.8 | |
| | comp=E,821nm,0.3s | | | | | | | |
| **PB15** | **IPOC Station P** | **2.23** | **195** | *eP* | | **Pn** | **17 24 40.8** | **-0.7** |
| PB15 | | | | *eS* | | **Sn** | **17 25 07.9** | **-1.3** |
| **LPAZ** | **La Paz** | **4.78** | **8** | P | | **Pn** | **17 25 17.0** | **+1.3** |
| | comp=E,1.1nm,0.3s,baz=179,slow=8,9,SNR=17 | | | | | | | |
| **LPAZ** | **La Paz** | **4.78** | **8** | *eP* | | **Pn** | **17 25 15.7** | **0.0** |
| **SIV** | **San Ignacio** | **8.93** | **57** | P | | **Pn** | **17 26 09.1** | **-2.2** |
| | comp=E,2.1nm,0.3s,baz=246,slow=9.8,SNR=43 | | | | | | | |
| SIV | | | | S | | **Sn** | **17 27 45.3** | **-4.8** |
| | baz=273,slow=6.8,SNR=3.4 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.77** | **60** | *eP* | | **Pn** | **17 26 35.2** | **-1.0** |
| **ETMB** | **Extrema** | **11.45** | **13** | *eP* | | **Pn** | **17 26 46.2** | **+0.9** |
| **VILB** | **Vilhena** | **11.54** | **47** | *eP* | | **Pn** | **17 26 46.8** | **+0.3** |
| **CPUP** | **Villa Florida** | **11.79** | **119** | *eP* | | **Pn** | **17 26 51.8** | **+2.0** |
| **AQDB** | **Aquidauana** | **12.31** | **90** | *eP* | | **Pn** | **17 26 57.3** | **+0.6** |
| **ITQB** | **Itaqui** | **13.99** | **130** | *eP* | | **Pn** | **17 27 19.2** | **+0.8** |
| **PDRB** | **Porto dos Gac** | **14.93** | **53** | *eP* | | **P** | **17 27 32.2** | **-1.1** |
| **CLDB** | **Colider** | **16.11** | **53** | *eP* | | **P** | **17 27 46.1** | **-0.2** |
| **ITAB** | **Concordia** | **16.45** | **115** | *eP* | | **P** | **17 27 50.3** | **+0.3** |
| **ARAG** | **Araguaiana, MT** | **17.02** | **75** | *eP* | | **P** | **17 27 56.5** | **+0.2** |
| **ITRB** | **Iturama** | **17.39** | **89** | *eP* | | **Pn** | **17 28 00.4** | **-0.4** |
| **SNDB** | **Serra Nova Dou** | **19.08** | **65** | *eP* | | **P** | **17 28 18.0** | **-1.0** |
| **NPGB** | **Novo Progresso** | **19.08** | **45** | *eP* | | **P** | **17 28 18.9** | **-0.1** |
| **PLCA** | **Paso Flores** | **19.68** | **184** | P | | **P** | **17 28 27.6** | **+2.2** |
| | comp=E,0.1nm,0.3s,baz=6.4,slow=14,SNR=4.8 | | | | | | | |
| **IPMB** | **Ipameri, GO** | **19.69** | **85** | *eP* | | **P** | **17 28 25.4** | **-0.2** |
| **RCLB** | **Rio Claro- Sao** | **19.85** | **98** | *eP* | | **P** | **17 28 27.1** | **-0.2** |
| **PET01** | **Itanhaem-SP** | **20.17** | **103** | *eP* | | **P** | **17 28 30.5** | **-0.2** |
| **VAO** | **Valinhos** | **20.38** | **100** | *eP* | | **P** | **17 28 32.4** | **-0.7** |
| **BDFB** | **Brasilia** | **20.49** | **78** | P | | **P** | **17 28 33.5** | **-0.9** |
| | comp=E,3.4nm,0.5s,baz=254,slow=7.4,SNR=4.7 | | | | | | | |
| **ITTB** | **Itaituba** | **20.91** | **39** | *eP* | | **P** | **17 28 37.9** | **-0.8** |
| **PTGA** | **Pitinga** | **21.97** | **24** | P | | **P** | **17 28 49.0** | **-1.1** |
| | comp=E,1.6nm,0.3s,baz=333,slow=22,SNR=2.1 | | | | | | | |
| **BSCB** | **Bom Sucesso** | **22.47** | **94** | *eP* | | **P** | **17 28 54.8** | **-0.4** |
| **PRPB** | **Parauapebas** | **23.64** | **54** | *eP* | | **P** | **17 29 06.1** | **-0.1** |
| **MALB** | **Monte Alegre** | **23.79** | **39** | *eP* | | **P** | **17 29 07.1** | **-0.5** |
| **SMTB** | **Santa Maria do** | **23.81** | **63** | *eP* | | **P** | **17 29 07.8** | **+0.1** |
| **DIAM** | **Diamantina, MG** | **23.86** | **88** | *eP* | | **P** | **17 29 08.4** | **0.0** |
| **JANB** | **Januaria** | **24.06** | **80** | *eP* | | **P** | **17 29 09.9** | **-0.2** |
| **SDBA** | **SAO DESIDERIO** | **24.46** | **73** | *eP* | | **P** | **17 29 13.1** | **-0.6** |
| **BOAV** | **Boa Vista** | **24.68** | **20** | *eP* | | **P** | **17 29 16.5** | **+0.8** |
| **SJMB** | **Sao Joao De Ma** | **26.11** | **90** | *eP* | | **P** | **17 29 28.6** | **-0.1** |
| **NAN01** | **Guarapari, ES** | **27.25** | **88** | *eP* | | **P** | **17 29 38.9** | **0.0** |
| **GUA01** | **Guaratinga, BA** | **27.83** | **86** | *eP* | | **P** | **17 29 43.9** | **-0.1** |
| **NBIT** | **Itapeh - BA** | **28.60** | **83** | *eP* | | **P** | **17 29 51.2** | **+0.3** |
| **GDU01** | **Guandu, BA** | **28.84** | **80** | *eP* | | **P** | **17 29 52.7** | **-0.3** |
| **NBPN** | **Ponto Novo - B** | **29.30** | **74** | *eP* | | **P** | **17 29 57.5** | **+0.3** |
| **NBPS** | **Pedro II - PI** | **31.34** | **62** | *eP* | | **P** | **17 30 15.8** | **+0.5** |
| **TORD** | **Torodi Ar. Bea** | **77.15** | **70** | P | | **P** | **17 35 45.7** | **-1.1** |
| | comp=E,0.3nm,0.4s,baz=254,slow=5.1,SNR=4.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.78** | **341** | pP | | pP | 17 37 26.6 | +0.8 |
| | comp=E,0.6nm,0.8s,baz=128,slow=4.5,SNR=5.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.23** | **36** | PKPbc | | **PKPbc** | **17 43 29.3** | **0.0** |
| | comp=E,0.1nm,0.7s,baz=328,slow=2.2,SNR=1.5 | | | | | | | |
| MKAR | | | | pPKPbc | pPKPbc | | 17 44 00.1 | -1.3 |
| | comp=E,0.4nm,0.7s,baz=267,slow=5.3,SNR=4.6 | | | | | | | |

*DJA **28** 17:38:44.1±0.4, 1°N±2°×12°7E±°, h103km±5km, M4.1/12, mb4.3/6, mB4.7/3, MLv4.0/12, Mw(mB)3.9/3*
*IDC **28** 17:38:45.3±4.8, 1°.28N×127°.14E, h142km±52km, mb3.2/4, mb1 3.4/6, mb1mx3.0/47, mbtmp3.6/6, Error ellipse: s-maj=66.6km s-min=22.2km az=74.0*
**ISC 28 17:38:41.9±1.0, 1°.39N±0°.07×127°.22E±0°.06, h103km, n19, σ2ˢ41/24, mb3.7/4, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **0.63** | **166** | P | | **Pn** | **17 39 01.8** | **+2.8** |
| TNTI | | | | S | | **Sn** | **17 39 07.6** | **-4.2** |
| **SGSI** | **Sangihe** | **2.84** | **324** | P | | **Pn** | **17 39 29.9** | **+4.3** |
| SGSI | | | | S | | **Sn** | **17 39 57.7** | **-1.6** |
| **KMSI** | **Cibinong** | **3.34** | **256** | P | | **Pn** | **17 39 33.8** | **+1.6** |
| KMSI | | | | S | | **Sn** | **17 40 11.2** | **+0.1** |
| **SANI** | **Sanana** | **3.63** | **200** | P | | **Pn** | **17 39 37.5** | **+1.4** |
| SANI | | | | S | | **Sn** | **17 40 16.1** | **-2.0** |
| **GTOI** | **Gorontalo** | **4.27** | **260** | P | | **Pn** | **17 39 47.4** | **+2.6** |
| GTOI | | | | S | | **Sn** | **17 40 35.4** | **+1.7** |
| **SIJI** | **Sorong** | **4.62** | **119** | P | | **Pn** | **17 39 54.1** | **+4.5** |
| | 0.7nm,0.3s,baz=330,slow=20,SNR=2.3 | | | | | | | |
| **LUWI** | **Luwuk** | **5.06** | **242** | P | | **Pn** | **17 39 58.7** | **+3.2** |
| LUWI | | | | S | | **Sn** | **17 40 54.0** | **+1.3** |
| **AAI** | **Ambon** | **5.13** | **169** | P | | **Pn** | **17 39 58.6** | **+2.1** |
| **MRSI** | **Marisa** | **5.35** | **260** | P | | **Pn** | **17 39 57.5** | **-2.0** |
| | 0.1nm31nm,1.4s | | | | | | | |
| **APSI** | **Ampana** | **6.02** | **248** | P | | **Pn** | **17 40 07.8** | **-0.7** |
| | 0.2nm24nm,0.7s | | | | | | | |
| **TTSI** | **Tana Toraja** | **8.61** | **239** | P | | **Pn** | **17 40 40.7** | **-3.0** |
| | 1um29nm,0.6s | | | | | | | |
| **BNSI** | **Bone** | **9.14** | **231** | P | | **Pn** | **17 40 52.5** | **+1.6** |
| | 12nm,0.8s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.15** | **234** | P | | **Pn** | **17 40 52.2** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **19.42** | **185** | P | | **P** | **17 43 00.3** | **+0.1** |
| | 0.3nm,0.3s,baz=22,slow=9.8,SNR=10 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.32** | **162** | P | | **P** | **17 43 29.9** | **-1.3** |
| | 2.3nm,0.4s,baz=340,slow=11,SNR=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.74** | **166** | P | | **P** | **17 44 02.2** | **-0.8** |
| | 0.4nm,0.5s,baz=345,slow=7.7,SNR=23 | | | | | | | |
| **BKNI** | **Bangkinang** | **26.20** | **268** | P | | P | 17 44 18.1 | +11 |
| **STKA** | **Stephens Creek** | **35.78** | **159** | P | | **P** | **17 45 30.3** | **-0.9** |
| | 0.7nm,0.4s,baz=349,slow=5.2,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.75** | **326** | P | | **P** | **17 48 35.3** | **-0.8** |
| | 0.2nm,0.5s,baz=119,slow=7.7,SNR=4.3 | | | | | | | |

*IDC **28** 17:41:06.3±2.7, 20°.21S×178°.51W, h573km±22km, mb3.3/11, mb1 3.5/12, mb1mx3.1/41, mbtmp4.2/12, Error ellipse: s-maj=46.8km s-min=17.9km az=139.0*
**ISC 28 17:41:09.5±1.6, 20°.0S±0°.3×178°.7W±0°.2, h602km, n14, σ1ˢ33/14, mb3.8/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.79** | **306** | P | | **P** | **17 42 30.9** | **-2.9** |
| | 24nm,0.3s,baz=109,slow=4.9,SNR=70 | | | | | | | |
| **CTA** | **Charters Tower** | **32.86** | **264** | P | | **P** | **17 46 55.9** | **+0.3** |
| | 1.0nm,0.3s,baz=88,slow=9.5,SNR=7.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.97** | **256** | P | | **P** | **17 48 24.1** | **-1.1** |
| | 3.7nm,0.7s,baz=95,slow=7.6,SNR=56 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **17 49 57.2** | **-0.1** |
| | 0.7nm,0.6s,baz=99,slow=3.9,SNR=5.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.99** | **262** | P | | **P** | **17 48 24.6** | **-0.7** |
| | 0.8nm,0.4s,baz=98,slow=8.2,SNR=5.9 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.42** | **262** | P | | **P** | **17 49 27.1** | **-0.6** |
| | 1.0nm,0.5s,baz=96,slow=3.7,SNR=8.7 | | | | | | | |
| **SIJI** | **Sorong** | **52.45** | **285** | P | | **P** | **17 49 29.7** | **+1.7** |
| | 12nm,0.7s,baz=136,slow=5.3,SNR=7.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **59.40** | **324** | P | | **P** | **17 51 18.8** | **+0.5** |
| | 0.7nm,0.5s,baz=160,slow=5.7,SNR=4.2 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.61** | **346** | P | | **P** | **17 51 53.4** | **-0.2** |
| | 3.4nm,0.9s,baz=139,slow=7.8,SNR=12 | | | | | | | |
| **MA2** | **Magadan** | **83.12** | **345** | P | | **P** | **17 52 32.8** | **0.0** |
| | 0.7nm,0.2s,baz=190,slow=4.6,SNR=4.9 | | | | | | | |
| **SEY** | **Seymchan** | **85.73** | **347** | P | | **P** | **17 52 46.3** | **+0.9** |
| | 2.6nm,0.6s,baz=172,slow=5.9,SNR=25 | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.36** | **58** | P | | **P** | **17 52 53.6** | **-0.5** |
| | 0.3nm,0.6s,baz=206,slow=8.2,SNR=4.3 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.30** | **290** | P | | **P** | **17 53 05.5** | **+2.2** |
| | 0.7nm,0.8s,baz=120,slow=2.8,SNR=8.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.24** | **331** | PKhKP | | PKPpre | 17 59 30.6 | |
| | 2.7nm,0.5s,baz=43,slow=4.4,SNR=22 | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.99** | **312** | PKPbc | | **PKPbc** | **17 59 43.4** | **+0.1** |
| | 1.2nm,0.6s,baz=139,slow=4.3,SNR=8.4 | | | | | | | |

*IDC **28** 17:41:31.0±0.8, 37°.26N×142°.09E, h0km, mb3.8/12, mb1 4.0/16, mb1mx3.8/53, mbtmp3.8/16, ML3.5/3, MS3.1/7, Ms1 3.1/7, ms1mx2.8/91, Error ellipse: s-maj=22.2km s-min=14.0km az=103.0*
*JMA **28** 17:41:35.4±0.1, 37°.36N×141°.91E, h40km±3km, M4.1*
*NIED **28** 17:41:35.5, 37°.36N×141°.91E, h40km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.47; Mθθ-0.27; Mφφ-0.21; Mrθ-1.29; Mθφ0.50; Mφr0.11; Fault plane solution: M₀1.45000×10¹⁵ NP1: φs280.00000°, δ80.00000°, λ71.00000°. NP2: φs164.00000°, δ21.00000°, λ153.00000°.*
**ISC 28 17:41:36.1±1.6, 37°.35N±0°.05×141°.93E±0°.06, h34km±4km, n36, σ1ˢ34/40, mb3.9/12, MS3.0/3, 7C-1D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JFK** | **Kawauchi** | **0.84** | **271** | ⇑P | | **Pn** | **17 41 50.7** | **-1.0** |
| JFK | | | | S | | **Sn** | **17 42 01.2** | **-1.7** |
| **JMST** | **Minamisoumatoc** | **0.91** | **294** | ⇑P | | **Pn** | **17 41 51.5** | **-1.0** |
| JMST | | | | S | | **Sn** | **17 42 02.8** | **-1.7** |
| **ONAJ** | **Iwakimizuishiy** | **0.94** | **255** | ⇓P | | **Pn** | **17 41 52.0** | **-1.0** |
| ONAJ | | | | S | | **Sn** | **17 42 03.7** | **-1.6** |
| **JIKH** | **Ishinomakikobu** | **1.02** | **339** | ⇑P | | **Pn** | **17 41 53.3** | **-0.8** |
| JIKH | | | | S | | **Sn** | **17 42 06.0** | **-1.3** |
| **JMM** | **Marumori** | **1.04** | **300** | ⇑P | | **Pn** | **17 41 53.6** | **-0.7** |
| JMM | | | | S | | **Sn** | **17 42 06.2** | **-1.5** |
| **JIO** | **Ouri** | **1.19** | **337** | ⇑P | | **Pn** | **17 41 55.9** | **-0.5** |
| JIO | | | | S | | **Sn** | **17 42 09.9** | **-1.6** |
| **JFT** | **Otama** | **1.28** | **278** | ⇑P | | **Pn** | **17 41 57.8** | **+0.1** |
| JFT | | | | S | | **Sn** | **17 42 13.8** | **+0.1** |
| **JOU** | **Okura** | **1.43** | **316** | P | | **Pn** | **17 41 59.9** | **+0.2** |
| JOU | | | | S | | **Sn** | **17 42 18.2** | **+0.9** |
| **JMK** | **Ichinoseki** | **1.69** | **341** | ⇑P | | **Pn** | **17 42 03.5** | **+0.2** |
| **JFY** | **Yanaizu** | **1.78** | **272** | P | | **Pn** | **17 42 05.2** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **3.09** | **256** | Pn | | **Pn** | **17 42 23.6** | **+1.0** |
| | 1.0nm,0.3s,baz=74,slow=13,SNR=30 | | | | | | | |
| MJAR | | | | Sn | | **Sb** | **17 43 05.6** | **-2.2** |
| | 2.4nm,0.3s,baz=147,slow=14,SNR=8.3 | | | | | | | |
| MJAR | | | | LR | | LR | 17 43 50.7 | |
| | comp=Z,256nm,20.0s,baz=76,slow=44 | | | | | | | |
| **MAT** | **Matsushiro** | **3.09** | **256** | P | | **Pn** | **17 42 24.0** | **+1.4** |
| MAT | | | | *eS* | | **Sn** | **17 43 02.9** | **+4.5** |
| **JHJ** | **Hachijo jima 2** | **4.58** | **203** | Pn | | **Pn** | **17 42 41.6** | **-1.4** |
| | 33nm,0.3s,baz=348,slow=21,SNR=22 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **17 43 33.1** | **-1.8** |
| | 64nm,0.3s,baz=129,slow=23,SNR=9.0 | | | | | | | |
| JHJ | | | | LR | | LR | 17 44 02.6 | |
| | comp=Z,68nm,19.4s,baz=78,slow=33 | | | | | | | |
| **ASAJ** | **Asahikawa** | **6.77** | **4** | Pn | | **Pn** | **17 43 13.7** | **+0.6** |
| | 1.1nm,0.3s,baz=218,slow=9.1,SNR=18 | | | | | | | |
| ASAJ | | | | Sn | | **Sn** | **17 44 29.1** | **+0.1** |
| | 1.8nm,0.3s,baz=86,slow=33,SNR=5.7 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.18** | **315** | Pn | | **Pn** | **17 44 01.5** | **+1.8** |
| | baz=137,slow=17,SNR=2.7 | | | | | | | |
| USRK | | | | LR | | LR | 17 47 43.2 | |
| | comp=Z,169nm,18.9s,baz=132,slow=36 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.20** | **30** | LR | | LR | 17 53 50.4 | |
| | comp=Z,54nm,19.5s,baz=162,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **22.96** | **12** | P | | **P** | **17 46 38.6** | **+1.3** |
| | 3.8nm,0.8s,baz=186,slow=10,SNR=14 | | | | | | | |
| MA2 | | | | LR | | LR | 17 55 43.3 | |
| | comp=Z,56nm,18.8s,baz=162,slow=37 | | | | | | | |
| **SEY** | **Seymchan** | **26.40** | **11** | P | | **P** | **17 47 10.0** | **+0.9** |
| | 2.0nm,0.6s,baz=360,slow=23,SNR=8.4 | | | | | | | |
| SEY | | | | LR | | LR | 17 57 08.2 | |
| | comp=Z,51nm,21.7s,baz=296,slow=35 | | | | | | | |
| **SONM** | **Songino Array** | **27.95** | **303** | P | | **P** | **17 47 25.3** | **+1.8** |
| | 0.5nm,0.5s,baz=103,slow=9.0,SNR=6.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.96** | **122** | T | | T | 18 16 44.1 | |
| | baz=315,slow=75,SNR=58 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.97** | **122** | T | | T | 18 16 54.6 | |
| | baz=315,slow=75,SNR=70 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.98** | **122** | T | | T | 18 16 44.1 | |
| | baz=315,slow=75,SNR=47 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.69** | **124** | T | | T | 18 17 48.4 | |
| | baz=316,slow=76,SNR=36 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.69** | **124** | T | | T | 18 17 48.9 | |
| | baz=316,slow=76,SNR=42 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.70** | **124** | T | | T | 18 17 50.1 | |
| | baz=316,slow=76,SNR=55 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.98** | **255** | P | | **P** | **17 49 24.4** | **+0.3** |
| | 0.3nm,0.5s,baz=53,slow=9.5,SNR=1.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.01** | **312** | P | | **P** | **17 49 24.0** | **0.0** |
| | 0.7nm,0.6s,baz=88,slow=9.2,SNR=4.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.30** | **302** | P | | **P** | **17 49 42.4** | **-0.3** |
| | 0.3nm,0.6s,baz=87,slow=10,SNR=4.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **49.00** | **33** | P | | **P** | **17 50 18.8** | **-0.4** |
| | 1.4nm,0.8s,baz=269,slow=6.3,SNR=12 | | | | | | | |
| **PSI** | **Prapat** | **52.31** | **239** | LR | | LR | 18 14 01.6 | |
| | comp=Z,59nm,19.7s,baz=90,slow=37 | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.44** | **188** | P | | **P** | **17 51 21.0** | **-0.6** |
| | 1.4nm,0.6s,baz=5.1,slow=7.5,SNR=16 | | | | | | | |
| **ASAR** | **Alice Springs** | **61.16** | **189** | P | | **P** | **17 51 46.5** | **-0.8** |
| | 0.8nm,0.7s,baz=15,slow=5.7,SNR=9.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.32** | **30** | P | | **P** | **17 52 01.2** | **-0.1** |
| | 0.6nm,0.9s,baz=295,slow=6.5,SNR=5.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **68.87** | **180** | P | | **P** | **17 52 37.3** | **+0.1** |
| | 0.7nm,0.3s,baz=336,slow=7.4,SNR=3.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **74.05** | **337** | P | | **P** | **17 53 08.4** | **+0.1** |
| | comp=Z,4.1nm,1.2s,baz=39,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.05** | **337** | P | | **P** | **17 53 08.3** | **0.0** |
| | comp=Z,0.9nm,1.0s,baz=38,slow=5.9,SNR=4.0 | | | | | | | |

*NAO **28** 17:55:25.4±2.0, 71°.55N×2°.57W, ML3.7*
*IDC **28** 17:55:26.2±0.9, 71°.47N×2°.44W, h0km, mb3.3/6, mb1 3.7/12, mb1mx3.4/51, mbtmp3.5/12, ML3.4/6, Error ellipse: s-maj=25.4km s-min=16.6km az=36.0*
*BER **28** 17:55:28.3±2.6, 71°.70N×2°.74W, h10km, ML3.7(NAO), Confirmed Earthquake*
**ISC 28 17:55:28.3±0.7, 71°.54N±0°.09×1°.84W±0°.09, h10km, n60, σ1ˢ56/59, mb3.2/6, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DBG** | **Daneborg** | **6.07** | **306** | Pn | | Pn | 17 56 50.9 | -7.0 |
| DBG | | | | Sn | | Sn | 17 57 51.5 | -16 |
| **DBG** | **Daneborg** | **6.07** | **306** | *e* | | Pn | 17 56 43.0 | -15 |
| | baz=95,slow=16 | | | | | | | |
| DBG | | | | *i* P | | Pn | 17 56 49.9 | -7.9 |
| DBG | | | | *i* S | | **Pn** | **17 57 00.7** | **+2.8** |
| DBG | | | | IAML | | | 17 57 04.7 | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| **DBG** | **Daneborg** | **6.07** | **306** | *eP* | | Pn | 17 56 51.0 | -6.9 |
| DBG | | | | *eS* | | Sn | 17 57 51.4 | -16 |
| **LOF** | **Lofoten** | **6.31** | **115** | *eP* | | **Pn** | **17 57 02.6** | **+1.5** |
| LOF | | | | *e* | | | 17 58 10.9 | |
| **BJO1** | **Bjornoya** | **6.76** | **54** | Pn | | **Pn** | **17 57 08.6** | **+1.2** |
| **BJO1** | **Bjornoya** | **6.76** | **54** | Pn | | **Pn** | **17 57 08.6** | **+1.2** |
| **STEI** | **Steigen** | **6.93** | **113** | *eP* | | **Pn** | **17 57 10.9** | **+1.2** |
| **DAG** | **Danmarks Havn** | **6.95** | **327** | *eP* | | Pn | 17 57 04.2 | -5.8 |
| DAG | | | | *e* | | | 17 58 09.4 | |
| **NBB30** | **Finnes** | **7.16** | **122** | *eP* | | **Pn** | **17 57 13.4** | **+0.6** |
| **TRO** | **Tromso** | **7.16** | **95** | *eP* | | **Pn** | **17 57 13.2** | **+0.3** |
| **HSPB** | **Hornsund (broa** | **7.20** | **33** | Pn | | **Pn** | **17 57 12.7** | **-0.6** |
| **HSPB** | **Hornsund (broa** | **7.20** | **33** | Pn | | **Pn** | **17 57 12.7** | **-0.6** |
| **FAUS** | **Fauske** | **7.31** | **116** | *eP* | | **Pn** | **17 57 16.2** | **+1.4** |
| FAUS | | | | *e* | | | 17 58 34.7 | |
| **NBB13** | **Alf Garage** | **7.31** | **125** | *eP* | | **Pn** | **17 57 15.1** | **+0.2** |
| **NBB17** | **Glomfjord Bŵr** | **7.34** | **122** | *eP* | | **Pn** | **17 57 16.6** | **+1.3** |
| **KONS** | **Konsvik** | **7.36** | **126** | *eP* | | **Pn** | **17 57 16.3** | **+0.8** |
| KONS | | | | *eS* | | **Sn** | **17 58 35.0** | **-3.9** |
| **JETT** | **Jettan, Norway** | **7.67** | **94** | Pn | | **Pn** | **17 57 20.7** | **+0.8** |
| **BRBA** | **Barentsburg A** | **7.75** | **25** | Pn | | **Pn** | **17 57 21.6** | **+0.7** |
| **BRBB** | **Barentsburg B** | **7.77** | **25** | Pn | | **Pn** | **17 57 22.6** | **+1.4** |
| **BRBB** | **Barentsburg B** | **7.77** | **25** | *eP* | | **Pn** | **17 57 16.7** | **-4.5** |
| **MOR8** | **Moi Rana** | **7.95** | **125** | *eP* | | **Pn** | **17 57 25.8** | **+2.1** |
| **KIF** | **Kilpisjarvi** | **8.04** | **97** | Pn | | **Pn** | **17 57 25.9** | **+1.0** |
| **KIF** | **Kilpisjarvi** | **8.04** | **97** | *eP* | | **Pn** | **17 57 24.7** | **-0.2** |
| **SPA0** | **Spitsbergen Ar** | **8.14** | **27** | Pn | | **Pn** | **17 57 26.3** | **0.0** |
| | baz=212,slow=14 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.14** | **27** | Pn | | **Pn** | **17 57 26.3** | **0.0** |
| | baz=212,slow=14 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **8.14** | **27** | Pn | | **Pn** | **17 57 25.4** | **-0.8** |
| | baz=200,slow=14,SNR=47 | | | | | | | |
| **NSS** | **Namsos** | **8.71** | **137** | *eP* | | **Pn** | **17 57 36.2** | **+2.2** |
| **KTK1** | **Kautokeino** | **8.81** | **95** | *eP* | | **Pn** | **17 57 36.0** | **+0.6** |
| **HEF** | **Hetta** | **9.25** | **97** | *eP* | | **Pn** | **17 57 41.9** | **+0.5** |
| **ARA0** | **ARCESS Array S** | **9.30** | **89** | Pn | | **Pn** | **17 57 42.7** | **+0.6** |
| | baz=290,slow=9.3 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.30** | **89** | *eP* | | **Pn** | **17 57 42.5** | **+0.4** |
| **ARCES** | **ARCESS Array B** | **9.30** | **89** | Pn | | **Pn** | **17 57 42.7** | **+0.6** |
| | baz=297,slow=12,SNR=51 | | | | | | | |
| **KEV** | **Kevo** | **9.68** | **87** | *eP* | | **Pn** | **17 57 47.6** | **+0.2** |
| **AKN** | **Aaknes** | **10.01** | **155** | Pn | | **Pn** | **17 57 53.7** | **+1.8** |
| **AKN** | **Aaknes** | **10.01** | **155** | Pn | | **Pn** | **17 57 53.7** | **+1.8** |
| **NOD** | **Norderasen** | **10.29** | **134** | *eP* | | **Pn** | **17 57 58.0** | **+2.2** |
| **DOMB** | **Dombas** | **10.43** | **151** | *eP* | | **Pn** | **17 57 59.2** | **+1.5** |
| **NC204** | **NORSAR Array S** | **11.43** | **148** | *eP* | | **Pn** | **17 58 13.6** | **+2.2** |
| **NB2** | **NORSAR Subarra** | **11.73** | **147** | Pn | | **Pn** | **17 58 17.1** | **+1.6** |
| | baz=337,slow=14 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **11.73** | **147** | Pn | | **Pn** | **17 58 17.1** | **+1.6** |
| | baz=337,slow=14 | | | | | | | |
| **NOA** | **NORSAR Array B** | **11.73** | **147** | Pn | | **Pn** | **17 58 14.6** | **-0.9** |
| | comp=Z,0.0nm,0.3s,baz=335,slow=12,SNR=7.8 | | | | | | | |
| **NC602** | **NORSAR Array S** | **12.07** | **147** | *eP* | | **Pn** | **17 58 21.9** | **+1.8** |
| **NRA0** | **NORESS Array S** | **12.07** | **147** | Pn | | **Pn** | **17 58 21.2** | **+1.1** |
| | baz=338,slow=16 | | | | | | | |
| **NRA0** | **NORESS Array S** | **12.07** | **147** | Pn | | **Pn** | **17 58 21.2** | **+1.1** |
| | baz=338,slow=16 | | | | | | | |
| **APA0** | **Apatity Array** | **12.64** | **91** | Pn | | **Pn** | **17 58 27.3** | **-0.5** |
| | baz=303,slow=12 | | | | | | | |
| **APA0** | **Apatity Array** | **12.64** | **91** | Pn | | **Pn** | **17 58 27.3** | **-0.5** |
| | baz=303,slow=12 | | | | | | | |
| **HFS** | **Hagfors** | **13.03** | **144** | Pn | | **Pn** | **17 58 32.9** | **-0.2** |
| | comp=Z,2.2nm,0.3s,baz=334,slow=9.9,SNR=60 | | | | | | | |
| **HFS** | **Hagfors** | **13.03** | **144** | Pn | | **Pn** | **17 58 34.8** | **+1.7** |
| | baz=327,slow=12 | | | | | | | |
| **HFS** | **Hagfors** | **13.03** | **144** | Pn | | **Pn** | **17 58 34.8** | **+1.7** |
| | baz=327,slow=12 | | | | | | | |
| **FIA0** | **FINESS Array S** | **14.86** | **119** | P | | **Pn** | **17 58 59.1** | **+1.0** |
| | baz=331,slow=12 | | | | | | | |
| **FIA0** | **FINESS Array S** | **14.86** | **119** | P | | **Pn** | **17 58 59.1** | **+1.0** |
| | baz=331,slow=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **14.86** | **119** | Pn | | **Pn** | **17 58 58.2** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=331,slow=12,SNR=21 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.28** | **183** | Pn | | **Pn** | **17 59 14.2** | **-2.4** |
| | baz=353,slow=12,SNR=2.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **25.16** | **130** | P | | **P** | **18 00 53.9** | **+0.7** |
| | comp=Z,2.0nm,0.8s,baz=337,slow=9.6,SNR=4.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **36.53** | **131** | P | | **P** | **18 02 35.9** | **+2.1** |
| | comp=Z,0.4nm,0.7s,baz=331,slow=8.3,SNR=3.0 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.53**

0.2nm,0.3s,baz=106,slow=7.3,SNR=9.6
**WRA Warramunga Arr 42.14 275** P P 18 10 55.8 -0.3
0.4nm,0.3s,baz=111,slow=8.1,SNR=17
**FINES FINESS Array B 145.70 338** PKPbc PKPdf 18 22 28.7 +0.6
1.0nm,0.5s,baz=27,slow=3.4,SNR=17

*NEIC* ***28*** *18:09:32.3±2.1, 71°.52N±0°.10×2°.8W±0°.1, h10km±1km, mb4.3/11, Error ellipse: s-maj=17.3km s-min=8.8km az=194.0*

*IDC* ***28*** *18:09:33.0±0.6, 71°.59N×2°.52W, h0km, mb3.8/18, mb1 4.0/23, mb1mx3.8/57, mbtmp3.8/23, ML3.2/4, MS3.8/16, Ms1 3.8/16, ms1mx3.4/94, Error ellipse: s-maj=20.3km s-min=11.0km az=37.0*

*GCMT* ***28*** *18:09:34.3±0.4, 71°.69N±0°.04×2°.3W±0°.1, h12km, MW4.7/83, Moment Tensor Solution. s9,c10; s83,c97; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr~1.30±.05; Mθθ0.67±.06; Mϕϕ0.63±.05; Mrθ0.05±.27; Mϕθ0.44±.05; Mϕr~0.25±.30; Best double couple: M₀1.21600×10¹⁶ NP1:ϕ₁234.00000°, δ42.00000°, λ-78.00000°. NP2: ϕ₂38.00000°, δ49.00000°, λ-100.00000°. Principal axes: T 1.0940, Plg3.0000°, Azm135.0000°; N 0.2410, Plg8.0000°, Azm45.0000°; P -1.3380, Plg81.0000°, Azm248.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BER* ***28*** *18:09:36.0±3.1, 71°.60N×2°.75W, h15km±67km, ML2.4, Confirmed Earthquake*

*IEPN* ***28*** *18:09:36.0, 71°.65N×2°.95W, h10km*

**ISC 28 18:09:32.8±0.5, 71°.70N±0°.05×2°.35W±0°.05, h10km, n103, σ2s21/102, mb3.9/24, MS3.7/11, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DBG** | **Daneborg** | **5.84** | **305** | *i* P | | **Pn** | **18 10 57.0** | **-2.3** |
| DBG | | | | *e*S | | Sn | 18 11 55.8 | -10 |
| **DBG** | **Daneborg** | **5.84** | **305** | *e*P | | **Pn** | **18 10 57.2** | **-2.1** |
| DBG | | | | *e*S | | Sn | 18 11 56.8 | -9.4 |
| **SCO** | **Scoresbysund** | **6.47** | **269** | *i* P | | **Pn** | **18 11 07.0** | **-0.9** |
| **SCO** | **Scoresbysund** | **6.47** | **269** | Pn | | Pn | 18 11 00.7 | -7.2 |
| **LOF** | **Lofoten** | **6.53** | **115** | *e*P | | **Pn** | **18 11 08.8** | **+0.2** |
| LOF | | | | IAML | | | 18 12 27.8 | |
| | comp=Z,6.4nm,0.7s | | | | | | | |
| **N2RO** | **R¸st** | **6.56** | **123** | *e*P | | **Pn** | **18 11 08.7** | **-0.3** |
| N2RO | | | | *e*S | | **Sn** | **18 12 16.1** | **-7.6** |
| N2RO | | | | IAML | | | 18 12 25.4 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **N2VA** | **Vr¸y** | **6.61** | **120** | *e*P | | **Pn** | **18 11 09.6** | **-0.1** |
| N2VA | | | | IAML | | | 18 12 28.5 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **DAG** | **Danmarks Havn** | **6.73** | **327** | *i* P | | **Pn** | **18 11 10.0** | **-1.4** |
| DAG | | | | *e*S | | Sn | 18 12 14.8 | -13 |
| DAG | | | | IAML | | | 18 12 24.3 | |
| | comp=Z,30nm,1.0s | | | | | | | |
| **BJO1** | **Bjornoya** | **6.80** | **56** | *e*P | | **Pn** | **18 11 14.4** | **+1.9** |
| BJO1 | | | | S | | **Sn** | **18 12 30.0** | **+0.2** |
| **STEI** | **Steigen** | **7.15** | **113** | *e*P | | **Pn** | **18 11 17.3** | **+0.2** |
| STEI | | | | *e*S | | **Sn** | **18 12 33.9** | **-4.3** |
| STEI | | | | IAML | | | 18 12 36.1 | |
| | comp=Z,6.8nm,0.4s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **7.16** | **34** | *e*P | | **Pn** | **18 11 19.3** | **+2.0** |
| **NBB30** | **Finnes** | **7.39** | **122** | *e*P | | **Pn** | **18 11 20.5** | **+0.1** |
| **NBB05** | **Inndyr** | **7.42** | **121** | IAML | | | 18 12 42.4 | |
| | comp=Z,8.6nm,0.3s | | | | | | | |
| **FAUS** | **Fauske** | **7.52** | **116** | *e*P | | **Pn** | **18 11 21.7** | **-0.6** |
| FAUS | | | | IAML | | | 18 12 47.5 | |
| | comp=Z,4.5nm,0.4s | | | | | | | |
| **NBB13** | **Alf Garage** | **7.54** | **125** | *e*P | | **Pn** | **18 11 22.7** | **+0.2** |
| **NBB40** | **Tonnes** | **7.54** | **126** | *e*P | | **Pn** | **18 11 22.9** | **+0.3** |
| **NBB17** | **Glomfjord BÝr** | **7.56** | **122** | *e*P | | **Pn** | **18 11 23.1** | **+0.2** |
| **KONS** | **Konsvik** | **7.58** | **126** | *e*P | | **Pn** | **18 11 22.8** | **-0.3** |
| KONS | | | | IAML | | | 18 12 45.4 | |
| | comp=Z,6.9nm,1.0s | | | | | | | |
| **STOK** | **Stokkvaagen** | **7.69** | **127** | *e*P | | **Pn** | **18 11 24.6** | **0.0** |
| STOK | | | | *e*S | | **Sn** | **18 12 44.1** | **-7.4** |
| **BRBB** | **Barentsburg B** | **7.70** | **26** | *e*P | | **Pn** | **18 11 27.7** | **+3.0** |
| **JETT** | **Jettan, Norway** | **7.84** | **95** | *e*P | | **Pn** | **18 11 27.6** | **+0.9** |
| **SPB2** | **Spitsbergen Ar** | **8.07** | **28** | Pn | | Pn | **18 11 31.5** | **+1.6** |
| **SPA0** | **Spitsbergen Ar** | **8.08** | **28** | *e*P | | **Pn** | **18 11 32.9** | **+3.0** |
| **SPA0** | **Spitsbergen Ar** | **8.08** | **28** | *e*P | | **Pn** | **18 11 32.3** | **+2.4** |
| SPA0 | | | | S | | **Sn** | **18 12 59.8** | **-1.3** |
| **SPITS** | **Spitsbergen Ar** | **8.08** | **28** | Pn | | **Pn** | **18 11 32.5** | **+2.7** |
| | baz=204,slow=14,SNR=106 | | | | | | | |
| SPITS | | | | Sn | | **Sn** | **18 12 58.8** | **-2.3** |
| | baz=278,slow=20,SNR=1.7 | | | | | | | |
| **KBS** | **Kingsbay** | **8.08** | **20** | *i* P | | **Pn** | **18 11 31.2** | **+1.2** |
| **KBS** | **Kingsbay** | **8.08** | **20** | Pn | | **Pn** | **18 11 29.5** | **-0.4** |
| **KBS** | **Kingsbay** | **8.08** | **20** | *e*P | | **Pn** | **18 11 31.1** | **+1.1** |
| **MOR8** | **Moi Rana** | **8.18** | **124** | *e*P | | **Pn** | **18 11 32.8** | **+1.5** |
| MOR8 | | | | IAML | | | 18 13 02.1 | |
| | comp=Z,5.4nm,0.5s | | | | | | | |
| **KIF** | **Kilpisjarvi** | **8.23** | **98** | *e*P | | **Pn** | **18 11 31.9** | **0.0** |
| **HAMF** | **Hammerfest** | **8.45** | **85** | *e*P | | **Pn** | **18 11 33.6** | **-1.4** |
| **HOPEN** | **Hopen** | **8.84** | **45** | *e*P | | **Pn** | **18 11 42.4** | **+2.1** |
| **NSS** | **Namsos** | **8.93** | **136** | *e*P | | **Pn** | **18 11 42.7** | **+1.0** |
| **KTK1** | **Kautokeino** | **8.99** | **95** | *e*P | | **Pn** | **18 11 42.7** | **+0.3** |
| **HEF** | **Hetta** | **9.43** | **98** | *e*P | | **Pn** | **18 11 48.4** | **0.0** |
| **ARA0** | **ARCESS Array S** | **9.46** | **90** | *e*P | | **Pn** | **18 11 48.9** | **0.0** |
| **ARCES** | **ARCESS Array B** | **9.46** | **90** | Pn | | **Pn** | **18 11 49.0** | **+0.1** |
| | baz=293,slow=12,SNR=89 | | | | | | | |
| ARCES | | | | Sn | | **Sn** | **18 13 32.6** | **-2.5** |
| | baz=290,slow=18,SNR=1.4 | | | | | | | |
| ARCES | | | | LR | | LR | 18 15 07.1 | |
| | comp=Z,364nm,19.5s,baz=296,slow=35 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.46** | **90** | Pn | | **Pn** | **18 11 47.8** | **-1.0** |
| **KEV** | **Kevo** | **9.84** | **87** | *e*P | | **Pn** | **18 11 53.5** | **-0.5** |
| **BORG** | **Borgarnes** | **9.86** | **235** | LR | | LR | 18 14 58.1 | |
| | comp=Z,207nm,19.3s,baz=344,slow=33 | | | | | | | |
| **AKN** | **Aaknes** | **10.22** | **155** | *e*P | | **Pn** | **18 11 59.8** | **+0.6** |
| **NOR** | **Nord** | **10.43** | **348** | *e*P | | **Pn** | **18 12 02.1** | **0.0** |
| **NOD** | **Norderasen** | **10.52** | **133** | *e*P | | **Pn** | **18 12 04.5** | **+1.2** |
| **SUMG** | **Summit** | **11.01** | **292** | Pn | | Pn | **18 12 08.3** | **-2.1** |
| **NC204** | **NORSAR Array S** | **11.66** | **147** | | | **Pn** | **18 12 17.6** | **-1.3** |
| **NOA** | **NORSAR Array B** | **11.96** | **147** | Pn | | **Pn** | **18 12 22.8** | **-0.2** |
| | comp=Z,0.0nm,0.3s,baz=338,slow=13,SNR=9.4 | | | | | | | |
| NOA | | | | LR | | LR | 18 16 49.0 | |
| | comp=Z,558nm,20.4s,baz=335,slow=37 | | | | | | | |
| **HFS** | **Hagfors** | **13.25** | **143** | Pn | | **Pn** | **18 12 40.7** | **0.0** |
| | comp=Z,1.0nm,0.3s,baz=338,slow=11,SNR=25 | | | | | | | |
| HFS | | | | LR | | LR | 18 17 29.3 | |
| | comp=Z,554nm,21.5s,baz=338,slow=36 | | | | | | | |
| **FIA1** | **FINESS Array S** | **15.08** | **118** | Pn | | **Pn** | **18 13 05.3** | **-0.2** |
| **FINES** | **FINESS Array B** | **15.08** | **118** | Pn | | **Pn** | **18 13 04.6** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=337,slow=14,SNR=18 | | | | | | | |
| FINES | | | | LR | | LR | 18 18 21.6 | |
| | comp=Z,597nm,19.5s,baz=319,slow=35 | | | | | | | |
| **FINES** | **FINESS Array B** | **15.08** | **118** | | | **Pn** | **18 13 05.0** | **-0.4** |
| **SLVR** | **Solovky** | **15.28** | **97** | *e*P | | **Pn** | **18 13 04.4** | **-3.7** |
| | comp=Z,56nm,3.0s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.43** | **182** | Pn | | **Pn** | **18 13 22.6** | **-0.5** |
| | baz=4.4,slow=10,SNR=2.5 | | | | | | | |
| EKA | | | | LR | | LR | 18 18 33.4 | |
| | comp=Z,194nm,22.0s,baz=7.5,slow=33 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **17.24** | **278** | Pn | | **Pn** | **18 13 26.9** | **-6.3** |
| SFJD | | | | IAmb | | IAmb | 18 13 32.7 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **VSU** | **Vasula** | **17.77** | **123** | *e*P | | **Pn** | **18 13 40.5** | **+0.7** |
| **TULEG** | **Thule** | **17.84** | **315** | Pn | | **Pn** | **18 13 35.9** | **-4.7** |
| TULEG | | | | IAmb | | IAmb | 18 14 02.1 | |
| | comp=Z,36nm,1.5s | | | | | | | |
| **LSH** | **Leshukonskoye** | **18.54** | **87** | *e*P | | **P** | **18 13 46.3** | **-2.8** |
| | comp=Z,30nm,1.5s | | | | | | | |
| **KLMR** | **Klimovskoe** | **19.53** | **102** | *e*P | | **P** | **18 14 00.1** | **+0.2** |
| | comp=Z,19nm,1.2s | | | | | | | |
| **KLMR** | **Klimovskoe** | **19.53** | **102** | *e*Pn | | **P** | **18 13 58.5** | **-1.4** |
| KLMR | | | | AMP | | | 18 14 02.2 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| KLMR | | | | *e*Sn | | **Sn** | **18 17 41.9** | **+2.0** |
| KLMR | | | | *e*Sn | | **Sn** | **18 17 41.9** | **+2.0** |
| **PABE** | **Paberze** | **19.71** | **132** | *e*P | | **P** | **18 14 02.9** | **+0.9** |
| **IIGN** | **Ignalina** | **20.40** | **128** | *e*P | | **P** | **18 14 10.3** | **+0.9** |
| **PRGR** | **Permogore** | **20.84** | **94** | *e*P | | **P** | **18 14 14.6** | **+0.5** |
| **SUW** | **Suwalki** | **20.90** | **135** | *e*P | | **P** | **18 14 15.7** | **+0.8** |
| **NACGM** | **Naroch** | **20.94** | **128** | *i* P | | **P** | **18 14 13.2** | **-2.1** |
| **CLL** | **Collm** | **21.59** | **153** | *e*Px | | Px | 18 14 24.0 | |
| CLL | | | | *e*S | | **S** | **18 18 24.0** | **+2.9** |
| CLL | | | | Lm | | MLR | 18 21 00.0 | |
| | comp=N,200nm,21.5s | | | | | | | |
| CLL | | | | Lm | | MLR | 18 21 00.0 | |
| | comp=E,100nm,20.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **22.15** | **152** | *e*P | | **P** | **18 14 30.7** | **+2.4** |
| BRG | | | | Amp | | | 18 14 42.8 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **OBN** | **Obninsk** | **23.40** | **115** | P | | **P** | **18 14 43.8** | **+2.6** |
| | comp=Z,1.9nm,0.4s,baz=310,slow=7.9,SNR=4.9 | | | | | | | |
| OBN | | | | LR | | LR | 18 23 21.5 | |
| | comp=Z,119nm,19.0s,baz=356,slow=35 | | | | | | | |
| **OBN** | **Obninsk** | **23.40** | **115** | P | | **P** | **18 14 41.4** | **+0.2** |
| **VRAC** | **Vranov** | **24.09** | **149** | P | | **P** | **18 14 50.6** | **+2.6** |
| | comp=Z,1.7nm,0.7s,baz=337,slow=7.7,SNR=4.1 | | | | | | | |
| VRAC | | | | LR | | LR | 18 24 32.6 | |
| | comp=Z,216nm,19.7s,baz=328,slow=37 | | | | | | | |
| **RES** | **Resolute Bay** | **24.37** | **320** | LR | | LR | 18 23 58.6 | |
| | comp=Z,286nm,21.8s,baz=70,slow=36 | | | | | | | |
| **KIRV** | **Kirov** | **24.41** | **95** | P | | **P** | **18 14 51.9** | **+1.1** |
| | comp=Z,6.1nm,0.9s,baz=337,slow=7.7,SNR=6.6 | | | | | | | |
| KIRV | | | | LR | | LR | 18 23 57.0 | |
| | comp=Z,157nm,18.6s,baz=315,slow=35 | | | | | | | |
| **FRB** | **Frobisher Bay** | **24.97** | **285** | LR | | LR | 18 24 07.0 | |
| | comp=Z,239nm,19.2s,baz=336,slow=35 | | | | | | | |
| **VYHS** | **Vyhne** | **25.26** | **146** | *e*P | | **P** | **18 14 57.3** | **-1.4** |
| **AKASG** | **Malin Array Be** | **25.39** | **129** | P | | **P** | **18 14 59.9** | **+0.1** |
| | comp=Z,2.4nm,0.8s,baz=334,slow=10,SNR=10 | | | | | | | |
| AKASG | | | | LR | | LR | 18 24 44.4 | |
| | comp=Z,366nm,18.5s,baz=346,slow=36 | | | | | | | |
| **AKASG** | **Malin Array Be** | **25.39** | **129** | P | | **P** | **18 14 58.7** | **-1.1** |
| **AKBB** | **Malin Array Si** | **25.39** | **129** | P | | **P** | **18 14 56.0** | **-3.8** |
| AKBB | | | | IAmb | | IAmb | 18 15 10.8 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **25.65** | **160** | LR | | LR | 18 26 29.2 | |
| | comp=Z,73nm,18.0s,baz=72,slow=40 | | | | | | | |
| **BELG** | **Belogornoye** | **29.04** | **105** | LR | | LR | 18 26 41.8 | |
| | comp=Z,410nm,18.8s,baz=354,slow=35 | | | | | | | |
| **ARU** | **Arti** | **29.05** | **89** | LR | | LR | 18 26 55.5 | |
| | comp=Z,209nm,19.9s,baz=286,slow=36 | | | | | | | |
| **MLR** | **Muntele Rosu** | **29.53** | **137** | LR | | LR | 18 27 48.9 | |
| | comp=Z,333nm,20.1s,baz=48,slow=37 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **33.97** | **96** | P | | **P** | **18 16 17.3** | **+1.4** |
| | comp=Z,0.6nm,0.5s,baz=346,slow=13,SNR=2.6 | | | | | | | |
| **KBZ** | **Khabaz** | **35.43** | **117** | P | | **P** | **18 16 31.4** | **+2.9** |
| | comp=Z,1.2nm,0.8s,baz=333,slow=10,SNR=3.9 | | | | | | | |
| **ABKAR** | **Akbulak array** | **35.61** | **95** | P | | **P** | **18 16 28.9** | **-1.2** |
| ABKAR | | | | IAmb | | IAmb | 18 16 38.1 | |
| | comp=Z,2.2nm,1.0s | | | | | | | |
| **BRTR** | **Keskin Array B** | **36.76** | **131** | P | | **P** | **18 16 42.8** | **+2.6** |
| | comp=Z,1.0nm,0.7s,baz=332,slow=6.7,SNR=6.2 | | | | | | | |
| **BNN** | **Bunyan** | **38.13** | **129** | P | | **P** | **18 16 50.8** | **-1.0** |
| BNN | | | | IAmb | | IAmb | 18 16 56.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **38.23** | **341** | P | | **P** | **18 16 52.9** | **+0.7** |
| TOLK | | | | IAmb | | IAmb | 18 16 57.5 | |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.30** | **316** | P | | **P** | **18 16 55.2** | **+2.4** |
| | comp=Z,1.3nm,1.0s,baz=27,slow=8.7,SNR=9.9 | | | | | | | |
| YKA | | | | PcP | | **PcP** | **18 19 07.8** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=22,slow=2.8,SNR=5.2 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.30** | **316** | P | | **P** | **18 16 50.6** | **-2.2** |
| **ILAR** | **Eielson Array** | **41.68** | **338** | P | | **P** | **18 17 22.9** | **+2.1** |
| | comp=Z,1.3nm,1.0s,baz=8.9,slow=6.7,SNR=8.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **41.68** | **338** | P | | **P** | **18 17 22.2** | **+1.4** |
| **MKAR** | **Makanchi Array** | **44.80** | **76** | P | | **P** | **18 17 49.6** | **+3.4** |
| | comp=Z,0.8nm,0.8s,baz=337,slow=6.1,SNR=11 | | | | | | | |
| **SONM** | **Songino Array** | **50.75** | **55** | P | | **P** | **18 18 34.4** | **+1.9** |
| | comp=Z,0.4nm,0.8s,baz=314,slow=6.0,SNR=3.9 | | | | | | | |
| **SONM** | **Songino Array** | **50.75** | **55** | IAmb | | IAmb | 18 18 41.0 | |
| | comp=Z,0.9nm,1.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **55.04** | **301** | P | | **P** | **18 19 05.6** | **+1.3** |
| | comp=Z,0.8nm,1.1s,baz=57,slow=3.3,SNR=2.4 | | | | | | | |
| **GTA** | **Gaotai** | **56.75** | **65** | *e*P | | P | 18 19 25.0 | +8.5 |
| GTA | | | | pP | | pwP | 18 19 29.0 | +7.3 |
| GTA | | | | sP | | sP | 18 19 31.8 | +12 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | | |
| **GOMU** | **GeErMu** | **58.27** | **71** | P | | **P** | **18 19 24.5** | **-3.0** |
| GOMU | | | | sP | | pP | 18 19 29.3 | -0.7 |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **ELK** | **Elko** | **58.43** | **305** | P | | **P** | **18 19 30.5** | **+2.0** |
| | comp=Z,0.3nm,0.3s,baz=353,slow=5.9,SNR=1.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **59.57** | **175** | P | | **P** | **18 19 32.0** | **+2.7** |
| | comp=Z,1.1nm,0.9s,baz=355,slow=6.6,SNR=4.4 | | | | | | | |
| **CN2** | **Changchun** | **59.06** | **42** | *e*P | | P | 18 19 25.5 | -6.9 |
| CN2 | | | | *e*PP | | **PP** | **18 21 37.3** | **-5.1** |
| CN2 | | | | *e*S | | S | 18 27 28.5 | -10 |
| **NVAR** | **Mina Array Bea** | **61.40** | **306** | P | | **P** | **18 19 50.0** | **+1.2** |
| | comp=Z,0.8nm,1.1s,baz=16,slow=6.7,SNR=2.6 | | | | | | | |
| **ANMO** | **Albuquerque** | **61.46** | **295** | P | | **P** | **18 19 52.0** | **+2.8** |
| | comp=Z,0.7nm,0.7s,baz=25,slow=5.6,SNR=3.6 | | | | | | | |
| **ANMO** | **Albuquerque** | **61.46** | **295** | P | | **P** | **18 19 49.1** | **-0.2** |
| ANMO | | | | IAmb | | IAmb | 18 19 55.0 | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.90** | **290** | P | | **P** | **18 20 19.4** | **+0.9** |
| | comp=Z,1.0nm,0.9s,baz=52,slow=5.8,SNR=7.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.12** | **73** | P | | **P** | **18 21 22.3** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=331,slow=7.2,SNR=6.3 | | | | | | | |

**TAP 28 18:17:16.4, 24°.26N×121°.74E, h12km, ML1.9, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ETL** | **Fush Village** | **0.14** | **227** | *e*P | | Pb | 18 17 20.6 | -0.5 |
| ETL | baz=226 | | | *e*S | | Sg | 18 17 23.5 | +1.1 |
| **NACB** | **Ninganchiao** | **0.15** | **238** | P | | Pb | 18 17 20.7 | -0.5 |
| NACB | baz=237 | | | S | | Sg | 18 17 23.9 | +1.2 |
| **ENA** | **Nanau** | **0.17** | **1** | P | | Pb | 18 17 21.2 | -0.4 |
| ENA | baz=3.0 | | | S | | Sg | 18 17 24.3 | +1.2 |
| **EWUT** | **Wuta** | **0.19** | **11** | *e*P | | Pb | 18 17 21.4 | -0.5 |
| EWUT | baz=11 | | | S | | Sg | 18 17 24.7 | +1.1 |
| **TWD** | **Chiawan** | **0.22** | **216** | P | | Pb | 18 17 21.9 | -0.4 |
| TWD | baz=214 | | | S | | Sg | 18 17 25.6 | +1.3 |
| **ETLH** | **Xiulin Townshi** | **0.24** | **258** | P | | Pb | 18 17 22.3 | -0.5 |
| ETLH | baz=257 | | | S | | Sg | 18 17 26.4 | +1.4 |
| **LATG** | **Datong** | **0.34** | **325** | P | | Pb | 18 17 24.4 | -0.1 |
| LATG | baz=325 | | | S | | Sb | 18 17 29.9 | 0.0 |
| **NNSB** | **Datong** | **0.36** | **298** | P | | Pb | 18 17 25.0 | 0.0 |
| NNSB | baz=297 | | | S | | Sb | 18 17 30.4 | -0.3 |
| **TWC** | **Suao** | **0.36** | **16** | *e*P | | Pb | 18 17 24.6 | -0.2 |
| TWC | baz=17 | | | *e*S | | Sb | 18 17 30.1 | -0.5 |
| **NDS** | **Dongshan** | **0.38** | **357** | P | | Pb | 18 17 24.8 | -0.2 |
| NDS | baz=357 | | | S | | Sb | 18 17 30.0 | -0.9 |
| **NNS** | **Nan Shan** | **0.38** | **299** | P | | Pb | 18 17 25.2 | 0.0 |
| NNS | baz=299 | | | S | | Sb | 18 17 30.8 | -0.2 |
| **NDT** | **Datong Townshi** | **0.40** | **329** | *e*P | | Pb | 18 17 25.8 | +0.3 |
| NDT | baz=329 | | | *e*S | | Sb | 18 17 31.5 | -0.1 |
| **ENTT** | **Nioudou** | **0.41** | **338** | P | | Pb | 18 17 25.6 | -0.1 |
| ENTT | baz=338 | | | S | | Sb | 18 17 31.7 | -0.2 |
| **WHF** | **Hehuan Shan** | **0.45** | **256** | P | | Pb | 18 17 26.1 | -0.4 |
| WHF | baz=255 | | | *e*S | | Sb | 18 17 32.5 | -0.7 |
| **FUSS** | **Fushou** | **0.45** | **269** | *e*P | | Pb | 18 17 26.4 | -0.1 |
| FUSS | baz=268 | | | *e*S | | Sb | 18 17 33.1 | -0.1 |
| **FUSB** | **Fushanzhiwuyua** | **0.52** | **345** | *e*P | | Pb | 18 17 27.4 | -0.1 |
| FUSB | baz=344 | | | *e*S | | Sb | 18 17 35.1 | 0.0 |
| **ESL** | **Shilin** | **0.52** | **212** | *e*P | | Pg | 18 17 27.1 | +0.4 |
| ESL | baz=211 | | | *e*S | | Sb | 18 17 35.1 | +0.1 |
| | baz=211 | | | | | | | |
| **YHNB** | **Yeheng** | **0.53** | **321** | *e*P | | Pb | 18 17 27.5 | -0.2 |
| YHNB | baz=321 | | | *e*S | | Sb | 18 17 35.4 | +0.1 |
| **NSK** | **Sanguang** | **0.54** | **320** | *e*P | | Pb | 18 17 27.8 | -0.2 |
| NSK | baz=320 | | | *e*S | | Sb | 18 17 35.6 | -0.1 |
| **CHGB** | **Renai** | **0.55** | **249** | *e*P | | Pb | 18 17 28.1 | -0.1 |
| CHGB | baz=249 | | | *e*S | | Sb | 18 17 35.8 | -0.3 |
| **NWLT** | **Wulai** | **0.56** | **338** | *e*P | | Pb | 18 17 28.2 | 0.0 |
| NWLT | baz=337 | | | *e*S | | Sb | 18 17 36.5 | +0.3 |
| **WUSB** | **Renai** | **0.62** | **245** | P | | Pb | 18 17 29.3 | -0.1 |
| WUSB | baz=245 | | | *e*S | | Sb | 18 17 37.8 | -0.3 |
| **NFF** | **Wufeng Townshi** | **0.68** | **304** | *e*P | | Pb | 18 17 30.2 | 0.0 |
| NFF | baz=303 | | | *e*S | | Sb | 18 17 40.0 | +0.4 |
| **TIPB** | **Shuangxi** | **0.72** | **6** | *e*P | | Pb | 18 17 31.0 | +0.1 |
| TIPB | baz=6.0 | | | *e*S | | Sb | 18 17 40.4 | -0.3 |
| **WHP** | **Taichung City** | **0.72** | **272** | *e*P | | Pb | 18 17 31.1 | +0.1 |
| WHP | baz=271 | | | *e*S | | Sb | 18 17 41.6 | +0.7 |
| **VWDT** | **VWDT** | **0.74** | **228** | P | | Pb | 18 17 31.4 | +0.1 |
| VWDT | baz=227 | | | S | | Sb | 18 17 42.1 | +0.8 |
| **LIOB** | **Emei** | **0.76** | **301** | *e*P | | Pb | 18 17 31.8 | +0.1 |
| LIOB | baz=300 | | | *e*S | | Sb | 18 17 43.1 | +1.1 |
| **NSTT** | **Nanjuang** | **0.77** | **299** | *e*P | | Pb | 18 17 31.6 | -0.1 |
| NSTT | baz=299 | | | *e*S | | Sb | 18 17 42.7 | +0.5 |
| **WCS** | **Beigang Elemen** | **0.78** | **255** | *e*P | | Pb | 18 17 32.0 | +0.1 |
| WCS | baz=255 | | | *e*S | | Sb | 18 17 43.4 | +0.9 |
| **NWF** | **Wu-fen Shan** | **0.81** | **3** | *e*P | | Pb | 18 17 32.8 | +0.3 |
| NWF | baz=2.0 | | | *e*S | | Sb | 18 17 44.5 | +1.0 |
| **HGSD** | **Ruisui** | **0.81** | **201** | *e*P | | Pb | 18 17 32.6 | +0.1 |
| HGSD | baz=200 | | | *e*S | | Sn | 18 17 44.7 | -1.0 |
| **EHY** | **Hungye** | **0.84** | **207** | *e*P | | Pg | 18 17 32.7 | 0.0 |
| EHY | baz=206 | | | *e*S | | Sn | 18 17 45.3 | -1.0 |
| **SMLT** | **Sun Moon Lake** | **0.85** | **244** | *e*P | | Pb | 18 17 33.1 | -0.1 |
| SMLT | baz=243 | | | *e*S | | Sb | 18 17 45.1 | +0.5 |
| **SSLB** | **Suanglung** | **0.85** | **237** | *e*P | | Pb | 18 17 33.2 | 0.0 |
| SSLB | baz=236 | | | *e*S | | Sg | 18 17 44.1 | -0.1 |
| **YM01** | **YM01** | **0.90** | **350** | *e*S | | Sb | 18 17 46.2 | +0.3 |
| **YULB** | **Yu-li** | **0.95** | **205** | *e*P | | Pb | 18 17 34.8 | 0.0 |
| YULB | baz=205 | | | *e*S | | Sn | 18 17 48.8 | -0.3 |

**JMA 28 18:17:27.9±0.5, 24°.92N×123°.74E, h3km, M1.2, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.58** | **181** | P | | Pg | 18 17 39.1 | 0.0 |
| **JISG** | **Ishigakijimahi** | **0.62** | **122** | P | | Pg | 18 17 39.9 | +0.2 |
| JISG | | | | S | | Sg | 18 17 48.5 | +0.8 |
| **JIJ** | **Ishigaki jima** | **0.66** | **146** | P | | Pg | 18 17 40.9 | +0.2 |
| JIJ | | | | S | | Sg | 18 17 49.1 | -0.2 |
| **JKRS** | **Kuro-shima** | **0.72** | **160** | P | | Pb | 18 17 42.6 | -0.5 |
| JKRS | | | | S | | Sb | 18 17 52.3 | -1.1 |
| **HATJ** | **Hateruma jima** | **0.86** | **176** | S | | Sb | 18 17 56.9 | -0.5 |

**IDC 28 18:22:49.3±35.0, 15°.76S×174°.25W, h79km±9km, mb3.4/3, mb1 3.6/3, mb1mx3.3/34, mbtmp3.7/3, Error ellipse: s-maj=662.4km s-min=129.2km az=78.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **43.15** | **240** | P | | P | 18 30 42.6 | +0.3 |
| | 1.1nm,0.8s,baz=107,slow=14,SNR=3.6 | | | | | | | |
| STKA | | | | pP | | pP | 18 31 01.8 | +0.9 |
| | 1.2nm,0.6s,baz=98,slow=14,SNR=2.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.96** | **257** | P | | P | 18 31 27.6 | -0.6 |
| | 0.1nm,0.2s,baz=97,slow=7.8,SNR=5.1 | | | | | | | |
| WRA | | | | pP | | pP | 18 31 47.5 | +0.3 |
| | 0.8nm,0.8s,baz=92,slow=6.9,SNR=4.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.22** | **252** | P | | P | 18 31 30.0 | -0.1 |
| | 1.4nm,0.5s,baz=88,slow=8.0,SNR=48 | | | | | | | |
| ASAR | | | | pP | | pP | 18 31 49.5 | +0.4 |
| | 4.5nm,0.6s,baz=89,slow=7.7,SNR=32 | | | | | | | |

*BJI* ***28*** *18:24:42.5±0.0, 71°.80N×2°.40W, h5km, mb4.5/37, mB5.0/22, Ms4.7/19, Ms7 4.5/19*

*NAO* ***28*** *18:24:42.3±1.9, 71°.61N×2°.54W, ML4.6*

*NEIC* ***28*** *18:24:45.0±2.2, 71°.64N±0°.08×2°.5W±0°.2, h10km±1km, mb4.7/32, Error ellipse: s-maj=13.4km s-min=11.1km az=198.0*

*IEPN* ***28*** *18:24:44.3, 71°.55N×2°.53W, h10km*

*IDC* ***28*** *18:24:44.2±0.4, 71°.66N×2°.45W, h0km, mb4.1/28, mb1 4.3/34, mb1mx4.2/58, mbtmp4.2/34, ML3.9/6, MS4.4/85, Ms1 4.4/85, ms1mx4.3/98, Error ellipse: s-maj=13.0km s-min=8.6km az=34.0*

*GCMT* ***28*** *18:24:45.0±0.1, 71°.69N±0°.01×2°.32W±0°.03, h12km, MW5.1/127, Moment Tensor Solution. s54,c66; s127,c222; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr~5.86±.09; Mθθ2.67±.09; Mϕϕ3.19±.08; Mrθ~1.27±.34; Mϕθ2.74±.07; Mϕr~1.87±.29; Best double couple: M₀6.19800×10¹⁶ NP1:ϕ₁225.00000°, δ34.00000°, λ-85.00000°. NP2:ϕ₂39.00000°, δ56.00000°, λ-93.00000°. Principal axes: T 6.1020, Plg11.0000°, Azm132.0000°; N 0.1920, Plg3.0000°, Azm41.0000°; P -6.2940, Plg79.0000°, Azm298.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, c

BJO1 S Sn 18 27 42.2 -1.6
**STEI Steigen 7.16 113** *e*P Pn 18 26 28.0 -1.4
STEI *e*S Sn 18 27 44.7 -6.0
**HSPB Hornsund (broa 7.24 34** Pn Pn 18 26 29.5 -1.0
**HSPB Hornsund (broa 7.24 34** *e*P Pn 18 26 29.4 -1.1
**HSPB Hornsund (broa 7.24 34** P Pn 18 26 28.9 -1.5
**TRO Tromso 7.38 95** *e*P Pn 18 26 30.2 -2.2
**NBB30 Finnes 7.39 121** *e*P Pn 18 26 31.3 -1.2
**FAUS Fauske 7.54 116** *e*P Pn 18 26 33.3 -1.3
FAUS IVMs_BB IVMs_BB 18 28 47.0
comp=Z,3µm,15.4s
**NBB13 Alf Garage 7.54 124** *e*P Pn 18 26 33.0 -1.6
**NBB40 Tonnes 7.54 125** *e*P Pn 18 26 33.6 -1.0
**NBB17 Glomfjord BVr 7.57 122** *e*P Pn 18 26 33.7 -1.3
**KONS Konsvik 7.58 125** *e*P Pn 18 26 33.7 -1.5
KONS *e*S Sn 18 27 53.7 -7.3
**STOK Stokkvaagen 7.68 126** *e*P Pn 18 26 36.6 0.0
**BRBA Barentsburg A 7.76 26** Pn Pn 18 26 37.3 -0.3
**BRBA Barentsburg A 7.76 26** Pn Pn 18 26 37.3 -0.3
**BRBB Barentsburg B 7.79 26** Pn Pn 18 26 37.4 -0.5
**BRBB Barentsburg B 7.79 26** Pn Pn 18 26 37.4 -0.5
**JETT Jettan, Norway 7.89 94** Pn Pn 18 26 37.6 -1.7
**SPA0 Spitsbergen Ar 8.16 28** Pn Pn 18 26 42.9 -0.2
baz=216,slow=14
**SPA0 Spitsbergen Ar 8.16 28** Pn Pn 18 26 42.9 -0.2
baz=216,slow=14
**SPA0 Spitsbergen Ar 8.16 28** *e*P Pn 18 26 42.7 -0.4
SPA0 *e*S Sn 18 28 11.6 -3.6
**SPB2 Spitsbergen Ar 8.16 28** Pn Pn 18 26 42.9 -0.2
**SPITS Spitsbergen Ar 8.16 28** Pn Pn 18 26 42.9 -0.2
baz=209,slow=18,SNR=123
SPITS Sn Sn 18 28 11.0 -4.2
baz=198,slow=16,SNR=1.2
SPITS LR LR 18 29 03.7
comp=Z,1µm,21.6s,baz=70,slow=32
**KBS Kingsbay 8.17 20** Pn Pn 18 26 42.2 -0.9
**KBS Kingsbay 8.17 20** *i* P Pn 18 26 43.1 0.0
KBS *e*S Sn 18 28 08.9 -6.4
**KBS Kingsbay 8.17 20** Pn Pn 18 26 42.7 -0.5
**KBS Kingsbay 8.17 20** *e*P Pn 18 26 41.8 -1.4
**KBS Kingsbay 8.17 20** *e*P Pn 18 26 40.9 -2.2
KBS *e*S Sn 18 28 09.0 -6.2
**MOR8 Moi Rana 8.18 124** *e*P Pn 18 26 43.0 -0.4
MOR8 *e*S Sn 18 28 10.0 -5.7
**KIF Kilpisjarvi 8.27 97** Pn Pn 18 26 42.8 -1.7
**KIF Kilpisjarvi 8.27 97** *e*P Pn 18 26 43.1 -1.4
**HAMF Hammerfest 8.51 84** Pn Pn 18 26 44.7 -3.1
**HAMF Hammerfest 8.51 84** *e*P Pn 18 26 44.2 -3.6
**NSS Namsos 8.92 136** *e*P Pn 18 26 53.0 -0.5
**HOPEN Hopen 8.92 44** *e*P Pn 18 26 53.8 +0.3
**KTK1 Kautokeino 9.03 94** *e*P Pn 18 26 54.1 -1.0
**HEF Hetta 9.47 97** *e*P Pn 18 26 59.3 -1.7
**ARA0 ARCESS Array S 9.51 89** Pn Pn 18 26 59.4 -2.2
baz=291,slow=11
**ARA0 ARCESS Array S 9.51 89** Pn Pn 18 26 59.4 -2.2
baz=291,slow=11
ARA0 *e*P Pn 18 27 00.1 -1.5
**ARCES ARCESS Array B 9.51 89** Pn Pn 18 26 60.0 -1.6
baz=294,slow=12,SNR=82
ARCES Sn Sn 18 28 44.1 -4.3
baz=301,slow=20,SNR=1.4
ARCES LR LR 18 30 18.5
comp=Z,2µm,19.9s,baz=298,slow=35
**ARCES ARCESS Array B 9.51 89** Pn Pn 18 27 00.1 -1.5
**TBLU Trondheim 9.71 144** *e*P Pn 18 27 03.1 -1.1
**BORG Borgarnes 10.78 235** LR LR 18 30 08.7
comp=Z,1µm,18.4s,baz=352,slow=33
**MOL Molde 9.88 152** *e*P Pn 18 27 08.0 +1.3
**KEV Kevo 9.89 87** *e*P Pn 18 27 05.7 -1.1
**AKN Aaknes 10.18 154** Pn Pn 18 27 10.1 -0.6
AKN Sn Sn 18 28 57.6 -7.1
**AKN Aaknes 10.18 154** *e*P Pn 18 27 10.5 -0.3
AKN Sn Sn 18 28 57.6 -7.1
**NOR Nord 10.49 349** Pn Pn 18 27 13.4 -1.5
**NOR Nord 10.49 349** *i* P Pn 18 27 13.0 -2.0
NOR *i* S Sn 18 28 58.5 -14
**NOR Nord 10.49 349** Pn Pn 18 27 13.4 -1.5
**FOO Floro 10.50 160** *e*P Pn 18 27 15.0 -0.1
FOO *e*S Sn 18 29 05.0 -7.4
**NOD Norderasen 10.51 133** *e*P Pn 18 27 15.5 +0.2
**DOMB Dombas 10.62 149** *e*P Pn 18 27 15.8 -1.0
**SUMG Summit 10.99 292** *i* P Pn 18 27 21.5 -0.6
**SUMG Summit 10.99 292** Pn Pn 18 27 22.3 +0.2
**SUE Sulen 11.00 161** *e*P Pn 18 27 22.3 +0.4
**HYA Hoyanger 11.05 158** *e*P Pn 18 27 23.1 +0.5
**LRW Lerwick 11.55 177** *e*P Pn 18 27 30.4 +0.8
**ASK Askoy 11.60 161** *e*P Pn 18 27 30.3 +0.1
**NC204 NORSAR Array S 11.62 147** Pn Pn 18 27 29.6 -1.0
**NC204 NORSAR Array S 11.62 147** *e*P Pn 18 27 29.9 -0.7
**BER Bergen 11.72 161** *e*P Pn 18 27 32.3 +0.5
**NC303 NORSAR Array S 11.78 145** Pn Pn 18 27 33.3 +0.7
**NC303 NORSAR Array S 11.78 145** *e*P Pn 18 27 33.2 +0.5
**SKAR Skarslia 11.80 153** *e*P Pn 18 27 32.4 -0.6
**NBO00 NORSAR Array S 11.86 147** Pn Pn 18 27 33.6 -0.1
**NBO00 NORSAR Array S 11.86 147** *e*P Pn 18 27 33.7 -0.1
**NB2 NORSAR Subarra 11.93 146** Pn Pn 18 27 35.0 +0.3
baz=332,slow=14
**NB2 NORSAR Subarra 11.93 146** Pn Pn 18 27 35.0 +0.3
baz=332,slow=14
**NOA NORSAR Array B 11.93 146** Pn Pn 18 27 34.9 +0.3
comp=Z,0.1nm,0.3s,baz=339,slow=13,SNR=26
NOA Sn Sn 18 29 38.0 -10
baz=330,slow=22,SNR=3.5
NOA LR LR 18 32 00.3
comp=Z,3µm,20.5s,baz=335,slow=36
**NB201 NORSAR Array S 11.93 146** Pn Pn 18 27 35.1 +0.3
**NB201 NORSAR Array S 11.93 146** *e*P Pn 18 27 35.0 +0.3
**NC405 NORSAR Array S 11.95 145** Pn Pn 18 27 34.8 -0.1
**NAO01 NORSAR Array S 12.05 147** *e*P Pn 18 27 36.3 0.0
**NC602 NORSAR Array S 12.27 146** Pn Pn 18 27 39.5 +0.2
**NC602 NORSAR Array S 12.27 146** *e*P Pn 18 27 39.3 0.0
**NRA0 NORESS Array S 12.27 146** Pn Pn 18 27 39.5 +0.1
baz=344,slow=12
**NRA0 NORESS Array S 12.27 146** Pn Pn 18 27 39.5 +0.1
baz=344,slow=12
**ODD1 Odda 12.32 158** *e*P Pn 18 27 40.3 +0.2
**BLS5 Blasjo 12.78 159** *e*P Pn 18 27 47.0 +0.6
**APA0 Apatity Array 12.86 91** Pn Pn 18 27 45.1 -2.2
baz=318,slow=12
**APA0 Apatity Array 12.86 91** Pn Pn 18 27 45.1 -2.2
baz=318,slow=12
**KONO Kongsberg 12.98 152** Pn Pn 18 27 47.9 -1.1
**KONO Kongsberg 12.98 152** *e*P Pn 18 27 47.8 -1.2
**BIGH Upper Bighouse 13.20 183** *e*P Pn 18 27 52.7 +0.7
**HFS Hagfors 13.23 142** Pn Pn 18 27 52.1 -0.3
comp=Z,6.5nm,0.3s,baz=332,slow=9.2,SNR=146
HFS LR LR 18 32 40.5
comp=Z,4µm,21.1s,baz=338,slow=36
**HFS Hagfors 13.23 142** Pn Pn 18 27 51.8 -0.6
baz=331,slow=14
**HFS Hagfors 13.23 142** Pn Pn 18 27 51.8 -0.6
baz=331,slow=14
**HOMB Homborsund 14.15 156** *e*P Pn 18 28 06.7 +1.6
**UPP Uppsala 14.30 135** *e*P Pn 18 28 06.1 -0.9
**ZFI2 Zemlya Franca- 14.37 30** *e*P Pn 18 28 08.5 +0.6
comp=Z,65nm,1.6s
**ZFI Zemlya Franca- 14.37 30** *e*P Pn 18 28 08.3 +0.4
comp=Z,83nm,1.6s
**FIA0 FINESS Array S 15.09 118** P Pn 18 28 16.4 -1.2
baz=330,slow=12
**FIA0 FINESS Array S 15.09 118** P Pn 18 28 16.4 -1.2
baz=330,slow=12
**FIA1 FINESS Array S 15.09 118** Pn Pn 18 28 16.2 -1.4
**FINES FINESS Array B 15.09 118** Pn Pn 18 28 16.1 -1.6
comp=Z,1.2nm,0.3s,baz=328,slow=12,SNR=51
FINES LR LR 18 33 33.0
comp=Z,4µm,19.6s,baz=322,slow=35
**FINES FINESS Array B 15.09 118** Pn Pn 18 28 15.9 -1.8
**SLVR Solovky 15.32 96** *e*P Pn 18 28 16.8 -3.9
**EKA Eskdalemuir Ar 16.36 181** Pn Pn 18 28 35.5 +1.3
baz=358,slow=13,SNR=17
EKA Sn Sn 18 31 28.5 -7.0
baz=9.1,slow=25,SNR=2.3
EKA LR LR 18 33 55.3
comp=Z,1µm,20.5s,baz=10.0,slow=34
**ESK Eskdalemuir 16.38 181** P P 18 28 36.4 -0.9
ESK IAmb IAmb 18 28 41.9
comp=Z,61nm,1.4s
**DEL Delary 16.71 147** *e*P P 18 28 42.3 +1.4
**SFJD Kangerlussuaq 17.20 278** LR LR 18 34 34.9
comp=Z,3µm,19.0s,baz=48,slow=34
**SLIT Slitere, Latvi 17.38 131** *e*P P 18 28 48.5 +0.1
**VSU Vasula 17.78 123** *e*P Pn 18 28 51.6 -0.4

**TULEG Thule 17.86 316** P Pn 18 28 50.5 -2.4
TULEG IAmb IAmb 18 28 52.5
comp=Z,139nm,1.5s
**BSD Bornholm Skovb 18.18 147** *e*P P 18 28 58.9 +1.6
**LSH Leshukonskoye 18.60 87** *e*P P 18 28 58.4 -3.3
comp=Z,89nm,2.0s
**BSEG Bad Segeberg 18.62 156** *e*P Pn 18 29 04.0 +1.8
comp=Z,46nm,1.2s,baz=351,slow=11
**PBUR Paburge 18.75 134** *e*P Pn 18 29 05.7 +1.8
**KLMR Klimovskoe 19.56 102** *e*P P 18 29 10.1 -2.2
comp=Z,68nm,2.1s
**KLMR Klimovskoe 19.56 102** *e*Pn P 18 29 03.0 -9.3
KLMR AMP 18 29 21.4
comp=Z,29nm,1.0s
KLMR *e*Sn Sn 18 32 34.9 -18
KLMR *e*Sn Sn 18 32 34.9 -18
**PABE Paberze 19.70 131** P 18 29 13.9 0.0
**PABE Paberze 19.70 131** *e*P Pn 18 29 15.8 +0.5
**EUNU Eureka 19.98 330** P Pn 18 29 18.2 -0.4
**NRDL Niedersach Rie 20.00 157** *e*P Pn 18 29 19.3 +0.5
comp=Z,68nm,1.6s,baz=351,slow=11
**FLTG Flechtingen 20.31 155** *e*P Pn 18 29 21.6 -0.8
comp=Z,68nm,1.6s,baz=351,slow=11
**IIGN Ignalina 20.40 128** *e*P Pn 18 29 24.7 +1.2
IIGN IAmb IAmb 18 29 29.4
comp=Z,9.0nm,0.7s
**ASSE Asse, Remlinge 20.43 156** *e*P Pn 18 29 23.4 -0.4
comp=Z,305nm,2.6s,baz=351,slow=11
**RUE Ruedersdorf 20.53 151** *e*P Pn 18 29 24.5 -0.5
comp=Z,188nm,1.9s,baz=351,slow=11
**IDID Didziasalis 20.56 127** *e*P Pn 18 29 25.6 +0.2
IDID IAmb IAmb 18 29 31.6
comp=Z,8.1nm,0.9s
**CLZ Clausthal 20.68 157** *e*P Pn 18 29 26.5 -0.4
comp=Z,109nm,1.6s,baz=351,slow=11
**BUG Bochum--Univer 20.73 163** *e*P Pn 18 29 26.9 -0.5
comp=Z,72nm,1.3s,baz=351,slow=11
**PRGR Permogore 20.88 94** *e*P Pn 18 29 28.6 -0.5
**SUW Suwalki 20.89 134** *e*P Pn 18 29 28.8 -0.5
SUW *e*L L 18 37 04.0
comp=Z,3µm,19.6s
**SUW Suwalki 20.89 134** P P 18 29 25.3 -1.5
**SUW Suwalki 20.89 134** *e*P Pn 18 29 28.7 -0.6
**GTTG Gottingen 20.92 158** *e*P Pn 18 29 29.3 -0.3
comp=Z,115nm,2.0s,baz=351,slow=11
**NACGM Naroch 20.94 128** *i* P Pn 18 29 28.9 -0.9
**KASTN Kahler Asten 21.08 161** *e*P P 18 29 31.2 +2.3
comp=Z,63nm,1.6s,baz=351,slow=11
**BEBN Eben Emael 21.23 166** *d*P P 18 29 32.5 +2.0
**BSTI Sart Tilman 21.43 166** *d*P P 18 29 35.4 +2.8
comp=Z,6.7nm,1.2s
**MEM Membach 21.44 165** *d*P P 18 29 34.6 +1.8
comp=Z,18nm,1.1s
**BTNL Ternell 21.48 165** *d*P P 18 29 34.0 +0.9
comp=Z,20nm,1.2s
**NEUB Neuenburg 21.48 155** *e*P P 18 29 34.6 +1.5
comp=Z,44nm,1.0s,baz=351,slow=11
**CLL Collm 21.55 153** *i* P P 18 29 35.6 +1.7
comp=Z,35nm,1.6s
CLL *i* (sP) pwP 18 29 40.0 +1.3
comp=Z,50nm,1.5s
CLL *e*PP PnPn 18 30 01.0 +6.9
CLL *e*PPP PPP 18 30 06.0
CLL *e*S S 18 33 32.0 -0.4
CLL Lm MLR 18 37 00.0
comp=N,1µm,21.9s
CLL Lm MLR 18 37 00.0
comp=E,500nm,18.2s
CLL Lmax 18 38 00.0
**CLL Collm 21.55 153** P P 18 29 34.5 +0.5
CLL IAmb IAmb 18 29 41.6
comp=Z,50nm,1.5s
**CLL Collm 21.55 153** *e*P P 18 29 34.9 +1.0
comp=Z,50nm,1.5s,baz=351,slow=11
**BCLA Clavier 21.58 166** *d*P P 18 29 34.5 +0.3
comp=Z,17nm,1.1s
BCLA *d*PnPn PnPn 18 29 52.3 -2.1
**MNK Minsk 21.58 127** *i* P P 18 29 34.3 +0.1
comp=E,4.0nm,1.2s
MNK *i* P P 18 29 34.3 +0.1
comp=N,41nm,1.2s
MNK *i* P P 18 29 34.3 +0.1
comp=Z,30nm,1.1s,baz=155
MNK *i* PP PnPn 18 29 55.0 +0.6
MNK *i* PPP PPP 18 30 02.9
MNK *i* S S 18 33 33.9 +1.0
MNK *i* SS SnSn 18 34 00.7 +4.5
MNK *i* SSS SSS 18 34 13.9
MNK *i* LQ LQ 18 35 28.9
MNK *i* LR LR 18 36 21.0
MNK *i* LRM MLR 18 38 33.4
comp=E,47nm,12.7s
MNK *i* LRM MLR 18 38 34.9
comp=N,578nm,11.2s
MNK *i* LRM MLR 18 38 37.0
comp=Z,850nm,11.2s
**BGES Gesves 21.59 167** *d*P P 18 29 36.9 +2.5
comp=Z,17nm,1.1s
**AHRW Bad Neuenahr-A 21.60 163** *e*P P 18 29 36.3 +1.9
comp=Z,53nm,1.2s,baz=351,slow=11
**UBBA Unterbreizbach 21.64 158** *e*P P 18 29 38.4 +3.7
comp=Z,155nm,2.0s,baz=351,slow=11
**BMRD Maredsous 21.65 167** *d*P P 18 29 37.7 +2.7
comp=Z,19nm,1.2s
**BHOU Houvegnez 21.70 165** *d*P P 18 29 37.7 +2.2
comp=Z,16nm,1.2s
**RCHB Rochefort 21.83 167** *d*P P 18 29 37.6 +0.7
comp=Z,8.7nm,0.9s
**DOU Dourbes 21.85 168** *d*P P 18 29 39.3 +2.2
comp=Z,11nm,1.2s
**FBE Freiberg 21.98 152** *e*P P 18 29 39.7 +1.2
comp=Z,46nm,1.3s,baz=351,slow=11
**MOX Moxa 22.01 156** *e*P P 18 29 40.5 +1.7
comp=Z,80nm,1.7s,baz=351,slow=11
**TNS Taunus Mts 22.05 161** *e*P P 18 29 42.1 +2.7
baz=351,slow=11
**BRG Berggiesshubel 22.11 152** *e*P P 18 29 42.6 +2.7
BRG Amp 18 29 49.8
comp=Z,57nm,1.6s
**BRG Berggiesshubel 22.11 152** S S 18 33 43.0 -0.3
BRG Amp 18 37 36.0
comp=Z,1.4nm,23.6s
BRG Amp 18 37 37.0
comp=E,0.6nm,21.6s
BRG Amp 18 37 42.0
comp=N,1.1nm,21.6s
**BRG Berggiesshubel 22.11 152** *e*P P 18 29 42.7 +2.7
comp=N,57nm,1.6s,baz=351,slow=11
**PLN Plauen 22.24 155** *e*P P 18 29 43.0 +1.7
comp=N,63nm,1.4s,baz=351,slow=11
**WLF Walferdange 22.39 165** P P 18 29 42.7 -0.2
WLF IAmb IAmb 18 29 48.5
comp=Z,52nm,1.4s
**WLF Walferdange 22.39 165** *e*P P 18 29 44.9 +1.9
comp=Z,58nm,1.4s,baz=351,slow=11
**WLF Walferdange 22.39 165** *d*P P 18 29 45.8 +2.9
comp=Z,12nm,1.3s
**WERN Wernitzgruen 22.46 154** *e*P P 18 29 45.3 +1.6
comp=Z,45nm,1.7s,baz=351,slow=11
**NKC Novy Kostel 22.52 154** *e*P P 18 29 47.3 +2.9
NKC AMS AMS 18 39 40.0
comp=Z,1µm,15.8s
**PVCC Panska Ves 22.55 151** AMS AMS 18 39 50.0
comp=Z,1µm,13.8s
**CHVC Chvalec 22.73 148** *e*P P 18 29 48.4 +1.9
CHVC AMS AMS 18 39 20.0
comp=Z,2µm,15.5s
**OSTC Ostas 22.78 148** *e*P P 18 29 48.9 +1.8
OSTC *e*S S 18 34 00.0 +4.2
OSTC AMS AMS 18 39 20.0
comp=Z,1µm,16.2s
**UPC Upice 22.80 148** *e*P P 18 29 49.7 +2.4
UPC *e*S S 18 33 55.1 -0.9
UPC AMS AMS 18 39 30.0
comp=Z,2µm,16.5s
**ROTZ Rotzenmuhle 22.95 155** *e*P P 18 29 48.9 +0.1
comp=Z,5.4nm,1.4s,baz=351,slow=11
**DPC Dobruska-Polom 23.00 148** *e*P P 18 29 50.9 +1.5
DPC *e*S S 18 34 04.6 +4.9
DPC AMS AMS 18 39 20.0
comp=Z,2µm,16.0s
**PRU Pruhonice 23.07 151** *e*P P 18 29 53.0 +3.0
PRU *e*S S 18 34 00.7 0.0
PRU AMS AMS 18 37 50.0
comp=Z,1µm,23.2s
**PBCC Pribram 23.28 152** *e*P P 18 29 54.2 +2.0

**OBN Obninsk 23.41 114** P P 18 29 52.7 -0.7
comp=Z,3.5nm,0.3s,baz=336,slow=2.7,SNR=6.1
OBN LR LR 18 38 32.9
comp=Z,775nm,19.0s,baz=342,slow=35
**OBN Obninsk 23.41 114** P P 18 29 54.7 +1.3
**STU Stuttgart 23.56 160** P P 18 29 56.5 +1.5
STU IAmb IAmb 18 30 03.3
comp=Z,20nm,1.2s
**WET Wettzell 23.65 154** *e*P P 18 29 56.4 +0.5
comp=Z,49nm,1.8s,baz=351,slow=11
**OJC Ojcow 23.75 143** *e*P P 18 29 59.0 +2.1
OJC *e*L L 18 39 19.6
comp=Z,3µm,19.6s
**OJC Ojcow 23.75 143** P P 18 29 57.6 +0.7
OJC IAmb IAmb 18 30 01.8
comp=Z,26nm,1.3s
**KHC Kasperske Hory 23.76 153** *e*P P 18 29 59.2 +2.2
KHC *e*S S 18 34 12.8 +0.8
KHC AMS AMS 18 39 40.0
comp=Z,1µm,18.1s
**MORC Moravsky Berou 23.76 147** ⇑P P 18 30 07.6 +11
**MORC Moravsky Berou 23.76 147** *e*P P 18 29 59.6 +2.6
**CLF Chambon-Foret 23.78 172** P P 18 30 00.0 +2.9
**OKC Ostrava-Krasne 23.81 146** *e*S S 18 34 13.6 +0.8
OKC AMS AMS 18 40 00.0
comp=Z,2µm,16.5s
**TREC Trest 23.89 150** AMS AMS 18 40 20.0
comp=Z,2µm,13.5s
**BFO Black Forest 23.91 162** P P 18 30 00.3 +1.9
BFO IAmb IAmb 18 30 03.3
comp=Z,40nm,1.2s
**BFO Black Forest 23.91 162** *e*P P 18 30 00.4 +1.9
comp=Z,47nm,1.3s,baz=351,slow=11
**VRAC Vranov 24.05 148** ⇑P P 18 30 02.0 +2.2
**VRAC Vranov 24.05 148** P P 18 30 01.3 +1.5
comp=Z,6.2nm,0.9s,baz=0.9,slow=10,SNR=9.6
VRAC LR LR 18 39 44.0
comp=Z,1µm,19.8s,baz=350,slow=37
**VRAC Vranov 24.05 148** *e*P P 18 30 01.7 +1.9
**CKRC Cesky Krumlov 24.17 152** *e*P P 18 30 03.0 +2.1
CKRC *e*S S 18 34 20.7 +2.2
**KRUC Moravsky 24.26 149** *e*P P 18 30 04.6 +2.9
**RES Resolute Bay 24.39 320** P P 18 30 04.4 +1.8
comp=Z,0.7nm,0.7s,baz=53,slow=11,SNR=3.9
RES LR LR 18 39 09.8
comp=Z,2µm,20.3s,baz=62,slow=36
**KIRV Kirov 24.45 95** P P 18 30 04.2 +1.0
comp=Z,14nm,0.9s,baz=325,slow=10,SNR=9.2
KIRV LR LR 18 39 08.7
comp=Z,947nm,19.2s,baz=319,slow=35
**JAVC Velka Javorina 24.67 147** *e*P P 18 30 10.2 +4.7
**UBR Ueberruh 24.74 159** *e*P P 18 30 08.4 +2.3
comp=Z,789nm,4.4s,baz=351,slow=11
**FRB Frobisher Bay 24.95 286** P P 18 30 09.6 +1.9
comp=Z,2.5nm,0.4s,baz=61,slow=15,SNR=4.0
FRB LR LR 18 39 19.0
comp=Z,1µm,19.6s,baz=34,slow=35
**RETA Reutte 25.01 158** *e*P P 18 30 11.9 +3.4
comp=Z,8.6nm,1.0s
**RJOB Jochberg 25.02 155** *e*P P 18 30 12.7 +4.1
comp=Z,57nm,2.0s,baz=351,slow=11
**DAVA Damuels 25.10 160** *e*P P 18 30 13.4 +3.9
comp=Z,13nm,0.9s,SNR=8.8
**MOA Molln 25.11 153** *e*P P 18 30 12.1 +2.7
comp=Z,20nm,1.4s,SNR=8.3
**VYHS Vyhne 25.23 145** *e*P P 18 30 17.6 +7.2
**WATA Walderalm 25.25 157** *e*P P 18 30 14.2 +3.4
comp=Z,20nm,1.2s,SNR=6.0
**CONA Conrad Observa 25.27 150** *e*P P 18 30 14.0 +3.0
comp=Z,18nm,1.2s,SNR=7.5
**WTTA Wattenberg 25.33 157** P P 18 30 15.6 +4.0
comp=Z,32nm,1.3s,SNR=8.9
**CRVS Cervenica-Dubn 25.34 141** *e*P P 18 30 18.1 +6.7
**AKASG Malin Array Be 25.39 129** P P 18 30 12.0 +0.2
comp=Z,7.1nm,0.8s,baz=336,slow=10,SNR=26
AKASG LR LR 18 39 55.6
comp=Z,2µm,18.7s,baz=326,slow=36
**FETA Feichten 25.46 159** *e*P P 18 30 17.7 +4.9
comp=Z,15nm,1.4s,SNR=4.8
**DAVOX Davos/Dischmat 25.60 160** P P 18 30 16.4 +2.4
comp=Z,1.9nm,0.7s,baz=340,slow=17,SNR=2.4
DAVOX LR LR 18 41 40.7
comp=Z,434nm,18.0s,baz=3.0,slow=40
**KBA Koelnbreinsper 25.73 155** *e*P P 18 30 17.4 +2.1
comp=Z,5.9nm,0.8s
**SENIN Lac Senin/Sane 25.77 164** P P 18 30 16.5 +1.0
**ARSA Arzberg 25.88 151** *e*P P 18 30 20.2 +3.8
comp=Z,9.4nm,1.1s
**PSZ Piszkesteto 25.98 144** P P 18 30 19.9 +2.6
**TRPA Tarpa 26.29 140** ⇓P P 18 30 21.4 +1.3
**TRPA Tarpa 26.29 140** P P 18 30 21.3 +1.3
**BUR08 Bucovina Ar. S 27.31 137** P P 18 30 30.8 +1.5
**BURAR Bucovina Array 27.34 137** ⇑P P 18 30 30.3 +0.7
**BURAR Bucovina Array 27.34 137** P P 18 30 30.0 +0.4
**NRIK Noril'sk 27.56 50** P P 18 30 31.7 +0.4
comp=Z,1.0nm,0.3s,baz=290,slow=4.0,SNR=2.1
NRIK LR LR 18 44 22.6
comp=Z,441nm,18.2s,baz=322,slow=43
**SORM Soroca 27.56 132** ⇑P P 18 30 31.3 -0.2
**DRGR 27.60 141** ⇓P P 18 30 33.3 +1.4
**PRAR RASCA 27.80 136** ⇓P P 18 30 34.0 +0.3
**BZS Buzias 28.52 143** ⇓P P 18 30 41.7 +1.6
**MILM Milestii Mici 28.81 132** ⇑P P 18 30 45.9 +3.3
**GZR Gura Zlata 28.95 142** ⇑P P 18 30 47.6 +3.6
**BELG Belogornoye 29.07 105** P P 18 30 45.5 +0.6
comp=Z,12nm,0.7s,baz=0.4,slow=15,SNR=4.6
BELG LR LR 18 41 53.2
comp=Z,3µm,18.4s,baz=324,slow=35
**ARU Arti 29.10 89** P P 18 30 45.7 +0.6
comp=Z,3.0nm,0.9s,baz=326,slow=9.6,SNR=6.3
ARU LR LR 18 42 06.8
comp=Z,1µm,19.6s,baz=319,slow=36
**PLOR Plostina 29.33 136** ⇓P P 18 30 47.4 +0.1
**VRI Vrincioaia 29.33 136** ⇑P P 18 30 50.8 +3.5
**ARR Arges 29.36 139** ⇓P P 18 30 49.5 +1.9
**HERR Herculane 29.38 142** ⇑P P 18 30 38.4 -9.2
**MLR Muntele Rosu 29.52 137** P P 18 30 51.9 +2.9
comp=Z,0.9nm,0.4s,baz=330,slow=8.1,SNR=2.2
MLR LR LR 18 43 00.1
comp=Z,2µm,20.6s,baz=342,slow=37
**NEHR Nehoiu 29.65 137** ⇓P P 18 30 53.5 +3.4
**CFR Carcaliu 30.30 134** ⇓P P 18 30 56.7 +0.9
**TPGR Topolog 30.67 134** ⇓P P 18 30 59.1 0.0
**SCHQ Schefferville 31.46 272** LR LR 18 42 45.6
comp=Z,1µm,19.5s,baz=81,slow=34
**VTS Vitosha 31.72 142** ⇓P P 18 31 08.3 -0.2
**A36M Sachs Harbour 32.01 330** P P 18 31 09.5 -1.1
A36M IAmb IAmb 18 31 14.2
comp=Z,7.1nm,0.8s
**ESDC Sonseca Array 32.03 182** P P 18 31 13.1 +1.9
comp=Z,1.6nm,0.8s,baz=0.1,slow=8.7,SNR=6.1
ESDC LR LR 18 43 44.6
comp=Z,434nm,19.2s,baz=0.5,slow=36
**FNA Florina 33.15 146** P P 18 31 20.1 -0.8
**TIXI Tiksi 33.58 25** LR LR 18 46 05.5
comp=Z,166nm,18.5s,baz=358,slow=38
**TIXI Tiksi 33.58 25** P P 18 31 22.2 -2.1
TIXI IAmb IAmb 18 31 41.2
comp=Z,6.2nm,1.1s
**AKTO Aktyubinsk 34.02 96** LR LR 18 45 11.3
comp=Z,1µm,18.2s,baz=339,slow=36
**VAE Valguarnera 35.32 156** LR LR 18 47 22.8
comp=Z,706nm,18.2s,baz=345,slow=38
**KBZ Khabaz 35.45 117** P P 18 31 43.2 +2.5
comp=Z,3.4nm,0.8s,baz=351,slow=4.2,SNR=11
KBZ LR LR 18 45 54.6
comp=Z,522nm,21.7s,baz=346,slow=36
**BRVK Borovoye 35.63 82** P P 18 31 41.2 -1.0
**ABKAR Akbulak array 35.65 95** P P 18 31 41.7 -0.8
**KEST Kesra 36.49 164** LR LR 18 47 25.9
comp=Z,626nm,19.8s,baz=332,slow=37
**INK Inuvik 36.58 332** P P 18 31 51.0 +0.8
comp=Z,5.9nm,0.9s,baz=18,slow=8.8,SNR=11
INK LR LR 18 47 26.2
comp=Z,487nm,20.0s,baz=28,slow=37
**INK Inuvik 36.58 332** P P 18 31 51.1 +0.8
INK IAmb IAmb 18 31 54.1
comp=Z,15nm,1.1s
**BR131 Keskin Array S 36.76 131** P P 18 31 50.6 -1.6
**BRTR Keskin Array B 36.76 131** P P 18 31 54.8 +2.6
comp=Z,2.8nm,0.7s,baz=347,slow=6.2,SNR=20
BRTR LR LR 18 47 43.6
comp=Z,646nm,20.9s,baz=356,slow=38
**BRTR Keskin Array B 36.76 131** P P 18 31 50.6 -1.6
**YKA Yellowknife Ar 38.32 316** P P 18 32 04.7 -0.3
comp=Z,1.1nm,0.7s,baz=26,slow=8.4,SNR=14

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| YKA | | | | | PcP | **PcP** | **18 34 19.1** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=21,slow=2.9,SNR=15 | | | | | | | |
| YKA | | | | | LR | LR | 18 47 15.2 | |
| | comp=Z,886nm,19.9s,baz=45,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.32** | **316** | | P | **P** | **18 32 05.0** | **0.0** |
| **ELL** | **Elmali** | **38.74** | **137** | | P | **P** | **18 32 09.6** | **+0.6** |
| **MDT** | **Midelt** | **38.89** | **183** | | LR | LR | 18 48 13.6 | |
| | comp=Z,145nm,19.2s,baz=350,slow=36 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **38.89** | **338** | | P | **P** | **18 32 10.1** | **+0.2** |
| **IDI** | **Anoyia** | **39.13** | **143** | | LR | LR | 18 49 57.6 | |
| | comp=Z,695nm,18.1s,baz=335,slow=39 | | | | | | | |
| **GNI** | **Garni** | **39.28** | **117** | | LR | LR | 18 49 04.9 | |
| | comp=Z,656nm,18.7s,baz=329,slow=37 | | | | | | | |
| **GNI** | **Garni** | **39.28** | **117** | | P | **P** | **18 32 12.9** | **-0.5** |
| GNI | | | | | IAmb | IAmb | 18 32 29.6 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.31** | **69** | | P | **P** | **18 32 14.0** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=341,slow=8.0,SNR=4.0 | | | | | | | |
| ZALV | | | | | LR | LR | 18 51 31.1 | |
| | comp=Z,352nm,20.8s,baz=326,slow=41 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **39.96** | **349** | | P | **P** | **18 32 18.4** | **-0.2** |
| RDOG | | | | | IAmb | IAmb | 18 32 23.5 | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **KURK** | **Kurchatov** | **40.26** | **76** | | P | **P** | **18 32 21.9** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **40.31** | **77** | | LR | LR | 18 49 56.8 | |
| | comp=Z,469nm,20.3s,baz=308,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **41.72** | **338** | | P | **P** | **18 32 34.3** | **+1.1** |
| | comp=Z,2.6nm,0.7s,baz=14,slow=6.6,SNR=18 | | | | | | | |
| ILAR | | | | | PcP | **PcP** | **18 34 29.6** | **+0.3** |
| | comp=Z,1.0nm,0.8s,baz=325,slow=3.5,SNR=6.0 | | | | | | | |
| ILAR | | | | | LR | LR | 18 51 12.9 | |
| | comp=Z,306nm,20.5s,baz=41,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **41.72** | **338** | | P | **P** | **18 32 34.5** | **+1.3** |
| **HDA** | **Harding Lake** | **42.08** | **338** | | P | **P** | **18 32 37.6** | **+1.5** |
| HDA | | | | | IAmb | IAmb | 18 32 49.9 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **YAK** | **Yakutsk** | **42.61** | **31** | | LR | LR | 18 51 43.3 | |
| | comp=Z,188nm,18.7s,baz=32,slow=38 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **42.70** | **334** | | P | **P** | **18 32 42.7** | **+1.4** |
| **MMAI** | **Mount Meron Ar** | **43.57** | **131** | | LR | LR | 18 53 10.5 | |
| | comp=Z,330nm,19.8s,baz=150,slow=39 | | | | | | | |
| **SADO** | **Sadowa** | **44.12** | **275** | | LR | LR | 18 50 20.2 | |
| | comp=Z,616nm,20.0s,baz=360,slow=35 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.34** | **294** | | LR | LR | 18 50 58.7 | |
| | comp=Z,790nm,19.4s,baz=23,slow=36 | | | | | | | |
| **KKAR** | **Karatay Array** | **44.48** | **89** | | P | **P** | **18 32 56.3** | **+0.6** |
| **SEY** | **Seymchan** | **44.60** | **16** | | LR | LR | 18 50 19.0 | |
| | comp=Z,218nm,19.0s,baz=309,slow=34 | | | | | | | |
| **MAKZ** | **Makanchi** | **44.75** | **76** | | P | **P** | **18 32 58.6** | **+0.7** |
| **MKAR** | **Makanchi Array** | **44.86** | **76** | | P | **P** | **18 32 59.6** | **+0.8** |
| | comp=Z,2.7nm,0.8s,baz=343,slow=4.6,SNR=16 | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **18 34 40.6** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=354,slow=2.9,SNR=3.7 | | | | | | | |
| MKAR | | | | | LR | LR | 18 55 40.2 | |
| | comp=Z,349nm,18.6s,baz=322,slow=41 | | | | | | | |
| **DLBC** | **Dease Lake** | **45.17** | **324** | | LR | LR | 18 52 01.9 | |
| | comp=Z,1µm,20.6s,baz=26,slow=36 | | | | | | | |
| **GEYT** | **Alibeck** | **45.29** | **104** | | P | **P** | **18 33 02.6** | **+0.3** |
| | comp=Z,2.4nm,0.8s,baz=303,slow=8.4,SNR=4.6 | | | | | | | |
| **AAK** | **Ala-Archa** | **46.16** | **85** | | LR | LR | 18 52 38.7 | |
| | comp=Z,477nm,18.8s,baz=330,slow=36 | | | | | | | |
| **EIL** | **Elat** | **46.67** | **133** | | LR | LR | 18 54 24.7 | |
| | comp=Z,238nm,21.9s,baz=330,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **47.76** | **18** | | LR | LR | 18 53 03.4 | |
| | comp=Z,170nm,18.4s,baz=359,slow=36 | | | | | | | |
| **KDAK** | **Kodiak Island** | **49.19** | **339** | | LR | LR | 18 54 34.7 | |
| | comp=Z,428nm,21.9s,baz=50,slow=36 | | | | | | | |
| **WMQ** | **Urumqi** | **49.19** | **73** | *eP* | | **P** | **18 33 35.3** | **+2.6** |
| WMQ | | | | | pP | pwP | 18 33 40.5 | +2.7 |
| WMQ | | | | | sP | sP | 18 33 44.0 | +7.8 |
| WMQ | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,620nm,15.5s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,580nm,19.7s | | | | | | | |
| WMQ | | | | | LR | LR | | |
| | comp=Z,430nm,18.3s | | | | | | | |
| **KSH** | **Kashi** | **49.46** | **86** | | P | **P** | **18 33 39.5** | **+4.7** |
| KSH | | | | | pP | pwP | 18 33 43.0 | +3.0 |
| KSH | | | | | sP | sP | 18 33 45.3 | +7.0 |
| KSH | | | | | S | **S** | **18 40 46.0** | **+4.2** |
| KSH | | | | | sS | sS | 18 40 54.5 | +8.6 |
| KSH | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| KSH | | | | | LR | LR | | |
| | comp=Z,250nm,16.1s | | | | | | | |
| KSH | | | | | LR | LR | | |
| | comp=Z,320nm,16.5s | | | | | | | |
| KSH | | | | | LR | LR | | |
| | comp=Z,500nm,19.6s | | | | | | | |
| **BBB** | **Bella Bella** | **50.68** | **320** | | LR | LR | 18 55 40.7 | |
| | comp=Z,860nm,18.6s,baz=40,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **50.83** | **55** | | P | **P** | **18 33 46.2** | **+1.1** |
| | comp=Z,2.1nm,0.9s,baz=322,slow=5.5,SNR=13 | | | | | | | |
| SONM | | | | | LR | LR | 18 58 12.2 | |
| | comp=Z,217nm,18.5s,baz=346,slow=40 | | | | | | | |
| **NEW** | **Newport** | **51.88** | **309** | | LR | LR | 18 55 46.6 | |
| | comp=Z,804nm,20.5s,baz=18,slow=36 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **53.87** | **275** | | P | **P** | **18 34 07.5** | **-0.2** |
| | comp=Z,3.6nm,0.9s,baz=36,slow=12,SNR=3.4 | | | | | | | |
| TKL | | | | | LR | LR | 18 56 03.8 | |
| | comp=Z,542nm,19.4s,baz=35,slow=35 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **54.78** | **14** | | LR | LR | 18 55 17.3 | |
| | comp=Z,195nm,21.4s,baz=18,slow=34 | | | | | | | |
| **PDAR** | **Pinedale Array** | **55.03** | **301** | | P | **P** | **18 34 18.4** | **+2.1** |
| | comp=Z,0.8nm,0.8s,baz=48,slow=4.0,SNR=7.4 | | | | | | | |
| PDAR | | | | | LR | LR | 18 57 44.9 | |
| | comp=Z,727nm,19.0s,baz=26,slow=36 | | | | | | | |
| **PDAR** | **Pinedale Array** | **55.03** | **301** | | P | **P** | **18 34 16.4** | **+0.1** |
| **KLR** | **Kul'dur** | **55.17** | **35** | | LR | LR | 18 59 03.9 | |
| | comp=Z,228nm,18.1s,baz=342,slow=37 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **55.92** | **2** | | LR | LR | 18 56 22.9 | |
| | comp=Z,71nm,21.2s,baz=3.5,slow=34 | | | | | | | |
| **GTA** | **Gaotai** | **56.82** | **65** | ⇑P | | **P** | **18 34 31.0** | **+2.0** |
| GTA | | | | | pP | pwP | 18 34 36.3 | +2.1 |
| GTA | | | | | sP | sP | 18 34 39.5 | +6.9 |
| GTA | | | | | S | **S** | **18 42 24.8** | **+2.8** |
| GTA | | | | | SS | **SS** | **18 46 09.8** | **+0.5** |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,130nm,5.7s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,240nm,18.9s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,160nm,18.2s | | | | | | | |
| GTA | | | | | LR | LR | | |
| | comp=Z,340nm,19.6s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **56.93** | **49** | *eP* | | **P** | **18 34 31.5** | **+1.8** |
| XLT | | | | | pP | pwP | 18 34 36.3 | +1.4 |
| XLT | | | | | sP | sP | 18 34 39.3 | +6.0 |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,120nm,6.2s | | | | | | | |
| **BNX** | **BinXian** | **57.69** | **39** | ⇓P | | **P** | **18 34 33.5** | **-1.4** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,170nm,4.9s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **58.31** | **302** | | P | **P** | **18 34 39.0** | **-0.5** |
| DUG | | | | | IAmb | IAmb | 18 34 44.0 | |
| | comp=Z,6.5nm,1.0s | | | | | | | |
| **GOMU** | **GeErMu** | **58.34** | **70** | | P | **P** | **18 34 38.0** | **-2.0** |
| GOMU | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **ELK** | **Elko** | **58.43** | **305** | | LR | LR | 18 59 35.2 | |
| | comp=Z,555nm,20.2s,baz=10,slow=36 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **58.50** | **175** | | P | **P** | **18 34 41.7** | **+0.8** |
| | comp=Z,2.7nm,0.7s,baz=354,slow=7.2,SNR=15 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **58.50** | **175** | | P | **P** | **18 34 40.9** | **0.0** |
| **BTO** | **Baotou** | **58.51** | **56** | *eP* | | **P** | **18 34 37.8** | **-3.1** |
| **HHC** | **Hu-ho-hao-te** | **58.68** | **54** | *eP* | | **P** | **18 34 42.5** | **+0.4** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,94nm,5.0s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,440nm,18.6s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,160nm,14.1s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,600nm,17.1s | | | | | | | |
| **CN2** | **Changchun** | **59.14** | **42** | *eP* | | **P** | **18 34 44.8** | **-0.3** |
| CN2 | | | | | PP | **PP** | **18 36 56.5** | **+1.3** |
| CN2 | | | | | S | **S** | **18 42 49.5** | **-2.4** |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,320nm,15.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,210nm,15.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,270nm,16.0s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **59.37** | **311** | | LR | LR | 19 00 27.9 | |
| | comp=Z,1µm,19.4s,baz=8.0,slow=36 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **60.06** | **36** | | LR | LR | 19 02 07.3 | |
| | comp=Z,183nm,18.2s,baz=336,slow=37 | | | | | | | |
| **LZH** | **Lanzhou** | **61.06** | **63** | *eP* | | **P** | **18 35 00.3** | **+1.7** |
| LZH | | | | | sP | pwP | 18 35 05.5 | +1.7 |
| LZH | | | | | S | **S** | **18 43 21.0** | **+3.8** |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,75nm,7.2s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=Z,140nm,15.4s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=Z,170nm,15.3s | | | | | | | |
| LZH | | | | | LR | LR | | |
| | comp=Z,160nm,17.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.40** | **306** | | P | **P** | **18 35 01.4** | **+0.5** |
| | comp=Z,2.6nm,1.1s,baz=31,slow=5.5,SNR=10 | | | | | | | |
| NVAR | | | | | LR | LR | 19 01 59.4 | |
| | comp=Z,550nm,19.2s,baz=12,slow=36 | | | | | | | |
| **ANMO** | **Albuquerque** | **61.45** | **295** | | P | **P** | **18 35 03.1** | **+1.9** |
| | baz=28,slow=9.4 | | | | | | | |
| ANMO | | | | | LR | LR | 19 01 42.6 | |
| | comp=Z,645nm,18.8s,baz=26,slow=36 | | | | | | | |
| **ANMO** | **Albuquerque** | **61.45** | **295** | | P | **P** | **18 35 01.4** | **+0.2** |
| ANMO | | | | | IAmb | IAmb | 18 35 08.1 | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **ASAJ** | **Asahikawa** | **61.93** | **28** | | LR | LR | 19 04 37.4 | |
| | comp=Z,181nm,18.6s,baz=343,slow=39 | | | | | | | |
| **SJG** | **San Juan** | **64.73** | **250** | | LR | LR | 18 58 58.4 | |
| | comp=Z,181nm,21.2s,baz=63,slow=32 | | | | | | | |
| **DBIC** | **Dimbokro** | **64.90** | **183** | | LR | LR | 19 03 14.6 | |
| | comp=Z,152nm,20.7s,baz=2.0,slow=36 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **65.47** | **303** | | LR | LR | 19 04 44.5 | |
| | comp=Z,245nm,21.0s,baz=3.0,slow=37 | | | | | | | |
| **KSRS** | **Korea Array** | **65.76** | **42** | | P | **P** | **18 35 28.9** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=341,slow=4.6,SNR=4.1 | | | | | | | |
| KSRS | | | | | LR | LR | 19 06 23.0 | |
| | comp=Z,201nm,18.9s,baz=350,slow=38 | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.88** | **290** | | P | **P** | **18 35 31.3** | **+0.9** |
| | comp=Z,2.9nm,0.9s,baz=39,slow=4.8,SNR=20 | | | | | | | |
| TXAR | | | | | PcP | **PcP** | **18 36 02.7** | **+1.4** |
| | comp=Z,1.5nm,0.8s,baz=52,slow=2.2,SNR=6.8 | | | | | | | |
| TXAR | | | | | LR | LR | 19 04 08.9 | |
| | comp=Z,473nm,19.5s,baz=12,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.88** | **290** | | P | **P** | **18 35 30.3** | **-0.1** |
| **ATD** | **Arif Tunnel** | **66.00** | **130** | | LR | LR | 19 05 15.6 | |
| | comp=Z,142nm,19.4s,baz=1.5,slow=37 | | | | | | | |
| **MAT** | **Matsushiro** | **68.62** | **33** | | P | **P** | **18 35 48.7** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **68.62** | **33** | | LR | LR | 19 07 37.1 | |
| | comp=Z,148nm,19.3s,baz=341,slow=38 | | | | | | | |
| **NJ2** | **Nanjing** | **68.86** | **51** | *eP* | | **P** | **18 35 48.5** | **-0.6** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **69.45** | **68** | | P | **P** | **18 35 54.3** | **+1.3** |
| PZH | | | | | S | **S** | **18 45 02.0** | **+1.8** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,110nm,5.9s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,220nm,20.8s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,110nm,19.0s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,290nm,22.1s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **72.23** | **33** | | LR | LR | 19 09 11.3 | |
| | comp=Z,106nm,19.5s,baz=55,slow=37 | | | | | | | |
| **LPIG** | **La Paz** | **72.75** | **294** | | LR | LR | 19 08 46.2 | |
| | comp=Z,718nm,18.0s,baz=30,slow=36 | | | | | | | |
| **CMIG** | **Matias Romero** | **74.67** | **278** | | LR | LR | 19 08 49.7 | |
| | comp=Z,138nm,21.5s,baz=35,slow=35 | | | | | | | |
| **SDV** | **Santo Domingo** | **74.79** | **252** | | LR | LR | 19 04 26.3 | |
| | comp=Z,202nm,21.8s,baz=54,slow=32 | | | | | | | |
| **MBAR** | **Mbarara** | **75.21** | **145** | | LR | LR | 19 12 46.0 | |
| | comp=Z,127nm,19.2s,baz=339,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.19** | **73** | | P | **P** | **18 36 33.3** | **+0.4** |
| | comp=Z,1.5nm,1.0s,baz=323,slow=6.3,SNR=12 | | | | | | | |
| CMAR | | | | | PP | **PP** | **18 39 25.9** | **+2.4** |
| | comp=Z,0.1nm,0.3s,baz=330,slow=8.4,SNR=4.4 | | | | | | | |
| CMAR | | | | | LR | LR | 19 13 55.2 | |
| | comp=Z,84nm,21.3s,baz=315,slow=39 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **76.98** | **139** | | LR | LR | 19 13 35.7 | |
| | comp=Z,120nm,18.7s,baz=55,slow=38 | | | | | | | |
| **PALK** | **Pallekele** | **81.00** | **94** | | LR | LR | 19 16 23.5 | |
| | comp=Z,202nm,19.5s,baz=83,slow=38 | | | | | | | |
| **LSZ** | **Lusaka** | **89.15** | **150** | | LR | LR | 19 21 23.8 | |
| | comp=Z,80nm,18.6s,baz=328,slow=38 | | | | | | | |
| **PSI** | **Prapat** | **90.96** | **78** | | LR | LR | 19 22 28.1 | |
| | comp=Z,126nm,21.5s,baz=309,slow=38 | | | | | | | |
| **TSUM** | **Tsumeb** | **91.64** | **161** | | LR | LR | 19 21 58.9 | |
| | comp=Z,118nm,19.5s,baz=354,slow=38 | | | | | | | |
| **GUMO** | **Guam** | **92.19** | **32** | | LR | LR | 19 19 33.7 | |
| | comp=Z,72nm,20.8s,baz=98,slow=36 | | | | | | | |
| **BDFB** | **Brasilia** | **92.29** | **223** | | LR | LR | 19 12 53.7 | |
| | comp=Z,191nm,19.6s,baz=328,slow=31 | | | | | | | |
| **ATAH** | **Atahualpa** | **92.31** | **254** | | LR | LR | 19 16 36.1 | |
| | comp=Z,90nm,21.3s,baz=24,slow=34 | | | | | | | |
| **MATP** | **Matopo** | **94.25** | **151** | | LR | LR | 19 24 17.0 | |
| | comp=Z,79nm,19.8s,baz=356,slow=38 | | | | | | | |
| **DAV** | **Davao City (W)** | **94.48** | **52** | | LR | LR | 19 24 47.6 | |
| | comp=Z,78nm,20.2s,baz=344,slow=38 | | | | | | | |
| **OPO** | **Ambohidratompo** | **96.06** | **133** | | LR | LR | 19 22 22.1 | |
| | comp=Z,58nm,20.2s,baz=206,slow=36 | | | | | | | |
| **LBTB** | **Lobatse** | **98.34** | **154** | | LR | LR | 19 25 44.5 | |
| | comp=Z,139nm,20.2s,baz=349,slow=37 | | | | | | | |
| **WRA** | **Warramunga Arr** | **122.63** | **50** | | PKP | **PKPdf** | **18 43 38.7** | **-1.4** |
| | comp=Z,0.7nm,0.9s,baz=316,slow=2.6,SNR=7.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **126.10** | **51** | | PKP | **PKPdf** | **18 43 46.1** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=1.8,slow=1.6,SNR=21 | | | | | | | |
| **ASAR** | **Alice Springs** | **126.10** | **51** | | | **PKPdf** | **18 43 46.4** | **-0.3** |

*REN* ***28*** *18:24:42.4±2.4, 41°.01N±0°.04×116°.41W±0°.03, h2km±7km, ML3.2/21, ML3.1/78(NEIC), Error ellipse: s-maj=6.1km s-min=3.2km az=169.0*

*ANF* ***28*** *18:24:42.6±1.3, 40°.98N×116°.40W, h1km, ML3.6/6, Error ellipse: s-maj=16.4km s-min=11.7km az=101.0*

*IDC* ***28*** *18:24:43.7±0.7, 40°.98N×116°.35W, h0km, mb3.0/1, mb1 3.4/7, mb1mx3.3/56, mbtmp3.1/7, ML3.2/6, MS2.9/2, Ms1 2.9/2, ms1mx2.7/17, Error ellipse: s-maj=7.9km s-min=4.8km az=173.0*

*NEIC* ***28*** *18:24:43.6±2.7, 40°.98N±0°.04×116°.39W±0°.01, h7km±7km, Error ellipse: s-maj=6.2km s-min=0.9km az=167.0*

**ISC 28 18:24:44.2±0.8, 40°.99N±0°.04×116°.42W±0°.03, h9km, n61, σ1§19/65, Nevada**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BMN** | **Battle Mountai** | **0.83** | **228** | | **Pg** | **18 24 59.0** | **-1.2** |
| **BMN** | **Battle Mountai** | **0.83** | **228** | | **Sg** | **18 25 10.7** | **-0.3** |
| **BMN** | **Battle Mountai** | **0.83** | **228** | IAML | | 18 25 13.9 | |
| | comp=E,236nm,0.5s | | | | | | |
| BMN | | | | IAML | | 18 25 14.1 | |
| | comp=N,206nm,0.7s | | | | | | |
| **ELK** | **Elko** | **0.92** | **105** | Pg | **Pg** | **18 25 00.3** | **-1.8** |
| | comp=N,80nm,0.3s,baz=301,slow=19,SNR=610 | | | | | | |
| ELK | | | | Lg | Lg | 18 25 11.6 | |
| | comp=N,61nm,0.3s,baz=178,slow=13,SNR=20 | | | | | | |
| ELK | | | | LR | LR | 18 25 11.8 | |
| | comp=N,72nm,21.3s,baz=318,slow=32 | | | | | | |
| **ELK** | **Elko** | **0.92** | **105** | | **Sg** | **18 25 12.8** | **-1.3** |
| **ELK** | **Elko** | **0.92** | **105** | IAML | | 18 25 16.0 | |
| | comp=N,563nm,0.2s | | | | | | |
| ELK | | | | IAML | | 18 25 16.5 | |
| | comp=N,351nm,0.3s | | | | | | |
| **WVOR** | **Wild Horse Val** | **2.20** | **312** | | **Pn** | **18 25 21.9** | **+0.8** |
| WVOR | | | | IAML | | 18 26 09.2 | |
| | comp=N,85nm,0.9s | | | | | | |
| **Q09A** | **Carvers** | **2.23** | **196** | | **Pn** | **18 25 21.1** | **-0.4** |
| **KVN** | **Kaiserville** | **2.33** | **214** | | **Pn** | **18 25 21.6** | **-1.3** |
| **MFID** | **Camas Ranch** | **2.46** | **10** | | **Pn** | **18 25 25.4** | **+0.7** |
| **BGU** | **Big Grassy Mou** | **2.56** | **90** | | **Pn** | **18 25 24.8** | **-1.3** |
| BGU | | | | IAML | | 18 26 08.2 | |
| | comp=N,59nm,1.0s | | | | | | |
| BGU | | | | IAML | | 18 26 09.4 | |
| | comp=E,110nm,1.2s | | | | | | |
| **PAHR** | **Pah Rah Range** | **2.60** | **242** | | **Pn** | **18 25 25.2** | **-1.5** |
| **R11A** | **Troy Canyon, C** | **2.71** | **166** | | **Pn** | **18 25 28.2** | **0.0** |
| **R11A** | **Troy Canyon, C** | **2.71** | **166** | P | **Pn** | **18 25 27.5** | **-0.6** |
| | baz=347 | | | | | | |
| R11A | | | | S | **Sn** | **18 26 01.6** | **+0.4** |
| | baz=347 | | | | | | |
| **J08A** | **Circle Bar Ran** | **2.82** | **328** | Pn | **Pn** | **18 25 27.9** | **-1.7** |
| **HVU** | **Hansel Valley** | **2.85** | **73** | | **Pn** | **18 25 28.7** | **-1.4** |
| HVU | | | | IAML | | 18 26 27.8 | |
| | comp=E,106nm,0.8s | | | | | | |
| **DUG** | **Dugway, Tooele** | **2.85** | **105** | | **Pn** | **18 25 29.1** | **-1.0** |
| **DUG** | **Dugway, Tooele** | **2.85** | **105** | P | **Pn** | **18 25 29.6** | **-0.5** |
| | baz=288 | | | | | | |
| DUG | | | | S | **Sn** | **18 26 05.2** | **+0.5** |
| | baz=288 | | | | | | |
| **RYN** | **Ryan** | **2.86** | **215** | | **Pn** | **18 25 28.9** | **-1.3** |
| RYN | | | | IAML | | 18 26 16.4 | |
| | comp=N,71nm,0.6s | | | | | | |
| RYN | | | | IAML | | 18 26 18.2 | |
| | comp=E,56nm,0.7s | | | | | | |
| **NV11** | **Mina Array Sit** | **2.88** | **208** | | **Pn** | **18 25 29.6** | **-0.9** |
| **NVAR** | **Mina Array Bea** | **2.94** | **210** | Pn | **Pn** | **18 25 30.7** | **-0.7** |
| | comp=E,2.9nm,0.3s,baz=27,slow=13,SNR=78 | | | | | | |
| NVAR | | | | Pg | **Pb** | **18 25 38.5** | **+1.5** |
| | comp=E,12nm,0.3s,baz=32,slow=17,SNR=46 | | | | | | |
| NVAR | | | | LR | LR | 18 26 16.3 | |
| | comp=E,73nm,19.0s,baz=178,slow=32 | | | | | | |
| NVAR | | | | Lg | Lg | 18 26 17.5 | |
| | comp=E,8.9nm,0.3s,baz=40,slow=22,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **2.94** | **210** | | **Pn** | **18 25 30.1** | **-1.2** |
| **YERR** | **Yerington** | **2.95** | **228** | | **Pn** | **18 25 30.0** | **-1.5** |
| YERR | | | | IAML | | 18 26 25.1 | |
| | comp=N,52nm,0.9s | | | | | | |
| YERR | | | | IAML | | 18 26 37.6 | |
| | comp=E,79nm,1.0s | | | | | | |
| **HLID** | **Hailey** | **2.97** | **29** | | **Pn** | **18 25 31.4** | **-0.4** |
| HLID | | | | IAML | | 18 26 20.3 | |
| | comp=E,58nm,1.0s | | | | | | |
| HLID | | | | IAML | | 18 26 28.6 | |
| | comp=E,52nm,0.9s | | | | | | |
| **HLID** | **Hailey** | **2.97** | **29** | P | **Pn** | **18 25 31.2** | **-0.6** |
| | baz=211 | | | | | | |
| HLID | | | | S | **Sn** | **18 26 07.8** | **+0.2** |
| | baz=211 | | | | | | |
| **VCNR** | **Virginia City** | **3.00** | **237** | Pn | **Pn** | **18 25 30.2** | **-1.9** |
| VCNR | | | | IAML | | 18 26 22.6 | |
| | comp=N,88nm,0.6s | | | | | | |
| **MOD** | **Modoc Plateau** | **3.06** | **289** | | **Pn** | **18 25 32.9** | **-0.1** |
| MOD | | | | IAML | | 18 26 30.1 | |
| | comp=E,67nm,0.6s | | | | | | |
| MOD | | | | IAML | | 18 26 38.1 | |
| | comp=N,56nm,0.9s | | | | | | |
| **PNTR** | **Pine Nut** | **3.09** | **233** | | **Pn** | **18 25 32.7** | **-0.8** |
| PNTR | | | | IAML | | 18 26 30.4 | |
| | comp=E,67nm,1.0s | | | | | | |
| **PSUT** | **Pine Spring** | **3.15** | **140** | Pn | **Pn** | **18 25 32.8** | **-1.4** |
| **LHV** | **Little Huntoon** | **3.17** | **211** | | **Pn** | **18 25 33.7** | **-0.6** |
| **BEKR** | **Beckworth** | **3.21** | **251** | | **Pn** | **18 25 34.0** | **-1.1** |
| **MPK** | **Martis Peak** | **3.25** | **240** | | **Pn** | **18 25 34.1** | **-1.5** |
| MPK | | | | IAML | | 18 26 33.8 | |
| | comp=E,66nm,1.0s | | | | | | |
| MPK | | | | IAML | | 18 26 36.2 | |
| | comp=N,48nm,0.8s | | | | | | |
| **EMB** | **Emerald Bay** | **3.47** | **236** | | **Pn** | **18 25 37.0** | **-1.7** |
| EMB | | | | IAML | | 18 26 45.4 | |
| | comp=N,28nm,0.9s | | | | | | |
| **PRN** | **Pahroc Range** | **3.73** | **163** | | **Pn** | **18 25 42.5** | **+0.3** |
| **MLAC** | **Mammoth, Mammo** | **3.84** | **210** | P | **Pn** | **18 25 43.9** | **+0.1** |
| | baz=28 | | | | | | |
| **I07A** | **Izee** | **3.84** | **325** | | **Pn** | **18 25 45.5** | **+1.8** |
| I07A | | | | IAML | | 18 26 51.8 | |
| | comp=E,28nm,1.2s | | | | | | |
| I07A | | | | IAML | | 18 27 17.9 | |
| | comp=N,22nm,4.9s | | | | | | |
| **TPNV** | **Topopah Spring** | **4.04** | **178** | | **Pn** | **18 25 46.7** | **+0.3** |
| TPNV | | | | IAML | | 18 27 00.3 | |
| | comp=N,27nm,1.0s | | | | | | |
| TPNV | | | | IAML | | 18 27 06.3 | |
| | comp=N,33nm,1.1s | | | | | | |
| **TPNV** | **Topopah Spring** | **4.04** | **178** | P | **Pn** | **18 25 46.5** | **+0.2** |
| | baz=358 | | | | | | |
| TPNV | | | | S | **Sn** | **18 26 35.3** | **+1.4** |
| | baz=358 | | | | | | |
| **GRAC** | **Grapevine Rang** | **4.05** | **191** | P | **Pn** | **18 25 45.7** | **-0.8** |
| | baz=10 | | | | | | |
| GRAC | | | | S | **Sn** | **18 26 35.4** | **+1.3** |
| | baz=10 | | | | | | |
| **MSU** | **Marysvale** | **4.10** | **126** | | **Pn** | **18 25 47.9** | **+0.7** |
| **O03E** | **Paynes Creek** | **4.16** | **262** | P | **Pn** | **18 25 47.3** | **-0.7** |
| | baz=78 | | | | | | |
| **M04C** | **Macdoel** | **4.16** | **283** | P | **Pn** | **18 25 46.9** | **-1.1** |
| | baz=99 | | | | | | |
| **CCUT** | **Cedar City** | **4.17** | **144** | | **Pn** | **18 25 49.2** | **+0.9** |
| CCUT | | | | IAML | | 18 26 59.6 | |
| | comp=N,21nm,1.0s | | | | | | |
| CCUT | | | | IAML | | 18 27 01.9 | |
| | comp=E,26nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **4.26** | **227** | | **Pn** | **18 25 46.8** | **-2.5** |
| **SZCU** | **Shurtz Canyon** | **4.26** | **142** | Pn | **Pn** | **18 25 48.2** | **-1.2** |
| SZCU | | | | IAML | | 18 27 00.5 | |
| | comp=N,20nm,1.1s | | | | | | |
| SZCU | | | | IAML | | 18 27 16.4 | |
| | comp=E,22nm,1.1s | | | | | | |
| **ICU** | **Indian Springs** | **4.29** | **152** | | **Pn** | **18 25 50.2** | **+0.3** |
| **MTPU** | **Mount Pierson** | **4.40** | **131** | | **Pn** | **18 25 50.9** | **-0.7** |
| MTPU | | | | IAML | | 18 27 19.2 | |
| | comp=N,13nm,4.0s | | | | | | |
| **Q16A** | **Castle Valley** | **4.53** | **115** | | **Pn** | **18 25 52.8** | **-0.4** |
| Q16A | | | | IAML | | 18 27 23.9 | |
| | comp=E,14nm,1.4s | | | | | | |
| Q16A | | | | IAML | | 18 27 29.5 | |
| | comp=N,13nm,1.1s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **4.65** | **33** | | **Pn** | **18 25 55.4** | **+0.6** |
| **PKCU** | **Pink Cliffs** | **4.76** | **137** | | **

| | | | | | | |
|---|---|---|---|---|---|---|
| KOUNC | Koumac, New Ca | 6.75 | 206 | P | Pn | 18 27 53.8 +2.9 |
| YATNC | Mamie plateau, | 7.58 | 183 | P | Pn | 18 28 04.7 +2.7 |
| DZM | Mont Dzumac | 7.63 | 187 | P | Pn | 18 28 03.4 +0.7 |
| | 3.0nm,0.3s,baz=339,slow=7.2,SNR=39 | | | | | |
| DZM | | | | S | Sn | 18 29 28.0 -0.3 |
| | baz=15,slow=16,SNR=1.1 | | | | | |
| DZM | Mont Dzumac | 7.63 | 187 | Pn | Pn | 18 28 03.6 +0.9 |
| NOUC | Port Laguerre | 7.68 | 188 | P | Pn | 18 28 05.4 +2.2 |
| ONTNC | Ouen Toro | 7.86 | 186 | | Pn | 18 28 04.3 -1.3 |
| ONTNC | Ouen Toro | 7.86 | 186 | P | Pn | 18 28 09.1 +3.4 |
| OUENC | Ouen Island, N | 7.94 | 184 | Pn | Pn | 18 28 05.3 -1.4 |
| PINNC | Pines Island, | 8.12 | 180 | P | Pn | 18 28 11.4 +2.4 |
| HNR | Honiara | 8.82 | 304 | P | Pn | 18 28 20.6 +2.2 |
| | 20nm,0.3s,baz=102,slow=14,SNR=3.5 | | | | | |
| HNR | | | | S | Sn | 18 29 58.3 +1.5 |
| | baz=114,slow=12,SNR=1.7 | | | | | |
| HNR | Honiara | 8.82 | 304 | Pn | Pn | 18 28 17.9 -0.5 |
| HNR | Honiara | 8.82 | 304 | P | Pn | 18 28 22.4 +4.0 |
| FUNA | Funafuti | 12.99 | 64 | P | P | 18 29 16.0 -0.8 |
| RABL | Rabaul | 18.14 | 303 | P | Pn | 18 30 15.5 -0.1 |
| RK1H | Rockhampton Ha | 18.27 | 238 | P | Pn | 18 30 17.7 +0.7 |
| EIDS | Eidsvold | 18.76 | 232 | P | P | 18 30 21.2 +0.8 |
| EIDS | | | | IAmb | IAmb | 18 30 38.3 |
| | comp=Z,22nm,0.8s | | | | | |
| AFI | Afiamalu | 20.21 | 91 | P | P | 18 30 38.2 +2.0 |
| | comp=Z,68nm,0.7s,baz=243,slow=14,SNR=3.9 | | | | | |
| PMG | Port Moresby | 20.41 | 282 | P | P | 18 30 39.3 +1.1 |
| | comp=Z,18nm,0.7s,baz=132,slow=16,SNR=9.0 | | | | | |
| PMG | Port Moresby | 20.41 | 282 | | P | 18 30 37.2 -0.9 |
| CTA | Charters Tower | 20.93 | 252 | P | P | 18 30 44.4 +0.6 |
| | comp=Z,10nm,0.8s,baz=83,slow=9.8,SNR=16 | | | | | |
| CTA | Charters Tower | 20.93 | 252 | P | P | 18 30 44.8 +1.1 |
| RMQ | Roma | 21.13 | 233 | P | P | 18 30 47.7 +1.9 |
| ARMA | Armidale | 21.51 | 220 | P | P | 18 30 50.6 +0.6 |
| ARMA | | | | IAmb | IAmb | 18 30 54.0 |
| | comp=Z,7.1nm,0.7s | | | | | |
| ARMA | Armidale | 21.51 | 220 | P | P | 18 30 51.9 +2.0 |
| MTSU | Mount Surprise | 22.43 | 257 | P | P | 18 31 00.2 +1.0 |
| PATS | Pohnpei | 22.98 | 336 | P | P | 18 31 01.3 -2.9 |
| COEN | Coen | 23.47 | 268 | P | P | 18 31 09.6 +1.0 |
| COEN | | | | IAmb | IAmb | 18 31 11.0 |
| | comp=Z,15nm,0.8s | | | | | |
| COEN | Coen | 23.47 | 268 | P | P | 18 31 09.9 +1.3 |
| MGCD | Mangrove Creek | 23.82 | 216 | P | P | 18 31 13.8 +2.2 |
| QLP | Quilpie | 24.76 | 237 | P | P | 18 31 21.6 +1.4 |
| BKZ | Black Stump Fm | 25.89 | 164 | P | P | 18 31 30.8 +0.4 |
| CMSA | Cobar Meteorol | 26.14 | 226 | P | P | 18 31 33.3 +0.7 |
| QIS | Mount Isa | 27.15 | 253 | P | P | 18 31 42.1 +0.2 |
| STKA | Stephens Creek | 29.25 | 229 | P | P | 18 32 01.5 +1.2 |
| | comp=Z,9.7nm,0.5s,baz=49,slow=8.4,SNR=50 | | | | | |
| STKA | | | | PcP | PcP | 18 35 03.3 +0.2 |
| | comp=Z,5.0nm,0.7s,baz=65,slow=4.5,SNR=7.8 | | | | | |
| STKA | Stephens Creek | 29.25 | 229 | P | P | 18 32 01.6 +1.3 |
| STKA | Stephens Creek | 29.25 | 229 | P | P | 18 32 01.8 +1.5 |
| TOO | Toolangi | 30.14 | 216 | P | P | 18 32 08.0 -0.1 |
| LCRK | Leigh Creek | 31.18 | 234 | P | P | 18 32 17.8 +0.5 |
| WR0 | Warramunga Arr | 31.81 | 255 | P | P | 18 32 21.5 -1.5 |
| WR0 | | | | IAmb | IAmb | 18 32 22.4 |
| | comp=Z,4.0nm,0.8s | | | | | |
| WB0 | Warramunga Arr | 31.93 | 256 | P | P | 18 32 23.0 -1.1 |
| HTT | Hallett | 31.98 | 229 | P | P | 18 32 25.6 +1.2 |
| WB2 | Warramunga Arr | 31.99 | 255 | P | P | 18 32 23.7 -0.9 |
| WB2 | | | | IAmb | IAmb | 18 32 24.3 |
| | comp=Z,8.2nm,1.1s | | | | | |
| WRAB | Tennant Creek | 31.99 | 255 | P | P | 18 32 22.1 -2.4 |
| WRAB | | | | IAmb | IAmb | 18 32 24.2 |
| | comp=Z,5.0nm,0.6s | | | | | |
| WRAB | Tennant Creek | 31.99 | 255 | P | P | 18 32 23.8 -0.7 |
| WRA | Warramunga Arr | 32.00 | 255 | P | P | 18 32 23.6 -1.1 |
| | comp=Z,4.4nm,0.5s,baz=86,slow=9.5,SNR=78 | | | | | |
| WRA | | | | PcP | PcP | 18 35 10.0 -0.6 |
| | comp=Z,0.7nm,0.7s,baz=88,slow=3.4,SNR=3.3 | | | | | |
| WRA | | | | S | S | 18 37 18.4 -5.4 |
| | comp=Z,1.3nm,0.9s,baz=85,slow=14,SNR=4.8 | | | | | |
| WRA | Warramunga Arr | 32.00 | 255 | P | P | 18 32 22.7 -2.0 |
| OOD | Oodnadatta | 32.30 | 241 | P | P | 18 32 28.3 +1.2 |
| AS31 | Alice Springs | 32.87 | 249 | P | P | 18 32 31.3 -0.9 |
| ASAR | Alice Springs | 32.87 | 249 | P | P | 18 32 31.4 -0.8 |
| | comp=Z,4.7nm,0.3s,baz=78,slow=9.2,SNR=88 | | | | | |
| ASAR | | | | PcP | PcP | 18 35 12.1 -0.9 |
| | comp=Z,0.8nm,0.7s,baz=83,slow=4.1,SNR=5.3 | | | | | |
| ASAR | | | | S | S | 18 37 32.3 -5.1 |
| | comp=Z,0.6nm,0.8s,baz=83,slow=15,SNR=4.9 | | | | | |
| ASAR | | | | ScP | ScP | 18 38 40.4 -0.8 |
| | comp=Z,1.1nm,1.1s,baz=94,slow=4.7,SNR=4.7 | | | | | |
| ASAR | Alice Springs | 32.87 | 249 | P | P | 18 32 31.0 -1.2 |
| BBOO | Buckleboo | 33.83 | 232 | P | P | 18 32 41.1 +0.7 |
| BBOO | | | | IAmb | IAmb | 18 32 46.0 |
| | comp=Z,12nm,1.1s | | | | | |
| BBOO | Buckleboo | 33.83 | 232 | P | P | 18 32 41.2 +0.8 |
| KDU | Kakadu | 33.96 | 269 | P | P | 18 32 41.8 +0.1 |
| MULG | Mulgathing | 34.45 | 237 | P | P | 18 32 45.6 -0.1 |
| MTN | Manton Dam | 35.24 | 268 | P | P | 18 32 53.0 +0.4 |
| MTN | | | | IAmb | IAmb | 18 32 53.6 |
| | comp=Z,7.4nm,0.9s | | | | | |
| MTN | Manton Dam | 35.24 | 268 | P | P | 18 32 53.1 +0.4 |
| DRS | Darwin Rock St | 35.52 | 269 | P | P | 18 32 55.8 +0.8 |
| KNRA | Kununurra | 37.28 | 263 | P | P | 18 33 09.5 -0.4 |
| KNRA | Kununurra | 37.28 | 263 | P | P | 18 33 09.6 -0.4 |
| WRKA | Warakurna | 38.14 | 248 | P | P | 18 33 16.8 -0.4 |
| FORT | Forrest | 39.53 | 239 | P | P | 18 33 28.4 -0.2 |
| FORT | Forrest | 39.53 | 239 | P | P | 18 33 28.6 0.0 |
| FITZ | Fitzroy Crossi | 40.17 | 259 | P | P | 18 33 33.8 -0.3 |
| | comp=Z,5.7nm,0.6s,baz=93,slow=10 | | | | | |
| FITZ | Fitzroy Crossi | 40.17 | 259 | P | P | 18 33 33.7 -0.4 |
| FITZ | | | | IAmb | IAmb | 18 33 34.9 |
| | comp=Z,5.4nm,0.7s | | | | | |
| FITZ | Fitzroy Crossi | 40.17 | 259 | P | P | 18 33 34.3 +0.2 |
| MEEK | Meekatharra | 46.99 | 247 | P | P | 18 34 28.6 +0.1 |
| TOLI2 | Tolitoli | 48.65 | 285 | P | P | 18 34 41.3 0.0 |
| MORW | Morawa | 49.48 | 244 | P | P | 18 34 47.1 -0.4 |
| MORW | Morawa | 49.48 | 244 | P | P | 18 34 47.5 0.0 |
| MJAR | Matsushiro Arr | 57.71 | 332 | P | P | 18 35 47.1 -0.1 |
| | comp=Z,3.2nm,0.5s,baz=172,slow=7.2,SNR=11 | | | | | |
| MAJO | Matsushiro | 57.71 | 332 | P | P | 18 35 47.2 +0.1 |
| MAT | Matsushiro | 57.71 | 332 | P | P | 18 35 46.8 -0.3 |
| KSRS | Korea Array | 63.57 | 326 | P | P | 18 36 27.3 +0.6 |
| | comp=Z,1.8nm,0.8s,baz=138,slow=8.6,SNR=2.8 | | | | | |
| USRK | Ussuriysk Ar. | 66.69 | 333 | P | P | 18 36 48.5 +1.9 |
| | comp=Z,1.3nm,0.5s,baz=134,slow=6.2,SNR=1.6 | | | | | |
| PETK | Petropavlovsk- | 67.80 | 354 | P | P | 18 36 54.0 +0.6 |
| | comp=Z,7.1nm,0.8s,baz=166,slow=7.6,SNR=9.1 | | | | | |
| BNX | BinXian | 69.95 | 331 | ⇓P | P | 18 37 07.3 +0.4 |
| BNX | | | | pmax | pmax | |
| | comp=Z,19nm,0.6s | | | | | |
| BNX | | | | pmax | pmax | |
| | comp=Z,470nm,3.9s | | | | | |
| XLT | XiLinHaoTe | 74.55 | 324 | *eP* | P | 18 37 34.8 +0.5 |
| XLT | | | | PcP | PcP | 18 37 49.0 +1.1 |
| XLT | | | | pP | pP | 18 38 16.3 +1.4 |
| XLT | | | | sP | sP | 18 38 32.0 -0.8 |
| XLT | | | | pmax | pmax | |
| | comp=Z,5.0nm,1.1s | | | | | |
| XLT | | | | pmax | pmax | |
| | comp=Z,80nm,5.0s | | | | | |
| CMAR | Chiang Mai Arr | 74.94 | 294 | P | P | 18 37 38.3 +1.3 |
| | comp=Z,1.2nm,0.8s,baz=121,slow=4.6,SNR=13 | | | | | |
| HHC | Hu-ho-hao-te | 75.45 | 320 | *eP* | P | 18 37 40.5 +0.9 |
| HHC | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.9s | | | | | |
| HHC | | | | pmax | pmax | |
| | comp=Z,65nm,5.2s | | | | | |
| PZH | PanZhiHua | 75.64 | 303 | P | P | 18 37 41.0 0.0 |
| PZH | | | | pmax | pmax | |
| | comp=Z,10.0nm,0.8s | | | | | |
| PZH | | | | pmax | pmax | |
| | comp=Z,100nm,5.0s | | | | | |
| ULN | Ulaanbaatar | 81.98 | 324 | | P | 18 38 15.0 -0.2 |
| BILL | Bilibino | 82.27 | 360 | P | P | 18 38 15.3 -0.7 |
| BILL | | | | IAmb | IAmb | 18 38 16.7 |
| | comp=Z,3.5nm,0.7s | | | | | |
| SONM | Songino Array | 82.34 | 324 | P | P | 18 38 17.4 +0.4 |
| | comp=Z,1.9nm,0.5s,baz=138,slow=5.0,SNR=27 | | | | | |
| GTA | Gaotai | 82.56 | 314 | *eP* | P | 18 38 19.8 +1.5 |
| GTA | | | | pP | pwP | 18 39 02.5 +0.4 |
| GTA | | | | sP | sP | 18 39 19.8 +2.4 |
| GTA | | | | pmax | pmax | |
| | comp=Z,4.0nm,1.4s | | | | | |
| GTA | | | | pmax | pmax | |
| | comp=Z,80nm,5.4s | | | | | |
| GTA | | | | LR | LR | |
| | comp=N,81nm,18.5s | | | | | |
| GTA | | | | LR | LR | |
| | comp=E,130nm,19.3s | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| CAST | Castle Rocks | 83.70 | 17 | P | P | 18 38 22.5 -1.0 |
| HDA | Harding Lake | 85.95 | 18 | P | P | 18 38 34.1 -0.6 |
| HDA | | | | IAmb | IAmb | 18 38 35.6 |
| | comp=Z,8.3nm,0.7s | | | | | |
| IL31 | | 86.23 | 18 | P | P | 18 38 35.1 -0.9 |
| IL31 | | | | IAmb | IAmb | 18 38 36.6 |
| | comp=Z,5.7nm,0.7s | | | | | |
| ILAR | Eielson Array | 86.23 | 18 | P | P | 18 38 34.8 -1.3 |
| | comp=Z,5.1nm,0.7s,baz=238,slow=4.9,SNR=42 | | | | | |
| NVAR | Mina Array Bea | 87.01 | 49 | P | P | 18 38 40.9 +0.1 |
| | comp=Z,1.4nm,0.8s,baz=234,slow=7.5,SNR=9.8 | | | | | |
| TIXI | Tiksi | 89.72 | 349 | | P | 18 38 52.6 +0.2 |
| TIXI | | | | IAmb | IAmb | 18 38 53.0 |
| | comp=Z,4.8nm,1.1s | | | | | |
| WMQ | Urumqi | 92.61 | 315 | *eP* | P | 18 39 07.0 +0.4 |
| PDAR | Pinedale Array | 94.68 | 47 | P | P | 18 39 15.6 -0.7 |
| | comp=Z,0.2nm,0.5s,baz=250,slow=4.7,SNR=2.3 | | | | | |
| TXAR | Lajitas Array | 96.05 | 61 | P | P | 18 39 22.9 +0.2 |
| | comp=Z,0.2nm,0.6s,baz=248,slow=4.8,SNR=2.6 | | | | | |
| MKAR | Makanchi Array | 97.08 | 316 | P | Pdif | 18 39 27.3 +0.3 |
| | comp=Z,2.5nm,0.7s,baz=90,slow=6.4,SNR=28 | | | | | |
| MKAR | | | | PKiKP | PKiKP | 18 44 01.5 -0.3 |
| | comp=Z,0.1nm,0.4s,baz=102,slow=1.3,SNR=5.5 | | | | | |
| ZALV | Zalesovo Beam | 97.23 | 324 | P | P | 18 39 26.4 -0.9 |
| | comp=Z,1.1nm,0.6s,baz=124,slow=3.9,SNR=7.6 | | | | | |
| YKA | Yellowknife Ar | 97.25 | 27 | P | P | 18 39 26.4 -0.8 |
| | comp=Z,1.1nm,0.6s,baz=253,slow=4.6,SNR=12 | | | | | |
| NRIK | Noril'sk | 99.85 | 339 | P | Pdif | 18 39 38.1 -0.6 |
| | comp=Z,0.8nm,0.4s,baz=121,slow=4.1,SNR=2.4 | | | | | |
| BELG | Belogornoye | 119.38 | 322 | PKP | PKPdf | 18 44 41.5 -1.6 |
| | comp=Z,8.4nm,0.6s,baz=154,slow=1.6,SNR=8.4 | | | | | |
| ARCES | ARCESS Array B | 120.01 | 345 | PKP | PKPdf | 18 44 43.3 -0.7 |
| | comp=Z,3.1nm,0.5s,baz=81,slow=2.0,SNR=57 | | | | | |
| KLMR | Klimovskoe | 120.49 | 333 | *e*PKPdf | PKPdf | 18 44 43.7 -1.3 |
| KLMR | | | | AMP | | 18 44 54.5 |
| | comp=Z,11nm,1.5s | | | | | |
| BOSA | Boshof | 123.65 | 220 | PKP | PKPdf | 18 44 51.5 -0.8 |
| | comp=Z,2.6nm,1.1s,baz=135,slow=1.4,SNR=1.7 | | | | | |
| KBZ | Khabaz | 124.64 | 313 | PKP | PKPdf | 18 44 52.7 -0.9 |
| | comp=Z,1.2nm,0.9s,baz=356,slow=4.6,SNR=2.4 | | | | | |
| FINES | FINESS Array B | 125.51 | 338 | PKP | PKPdf | 18 44 54.3 -0.3 |
| | comp=Z,4.0nm,0.9s,baz=102,slow=3.8,SNR=17 | | | | | |
| NB2 | NORSAR Subarra | 130.39 | 345 | PKPdf | PKPdf | 18 45 04.2 +0.1 |
| | comp=Z,0.2nm,0.4s,baz=31,slow=1.9 | | | | | |
| NOA | NORSAR Array B | 130.39 | 345 | PKP | PKPdf | 18 45 04.0 0.0 |
| | comp=Z,1.2nm,0.7s,baz=34,slow=2.0,SNR=9.7 | | | | | |
| NOA | | | | SKPbc | SKPbc | 18 48 11.7 0.0 |
| | comp=Z,2.0nm,0.7s,baz=33,slow=2.9,SNR=11 | | | | | |
| HFS | Hagfors | 130.49 | 343 | SKPbc | SKPab | 18 48 12.6 +0.5 |
| | comp=Z,2.3nm,0.7s,baz=122,slow=5.2,SNR=5.7 | | | | | |
| AKASG | Malin Array Be | 130.57 | 326 | PKP | PKPdf | 18 45 04.8 +0.2 |
| | comp=Z,0.8nm,0.5s,baz=52,slow=2.0,SNR=6.4 | | | | | |
| AKASG | | | | SKPbc | SKPbc | 18 48 11.9 -0.6 |
| | comp=Z,1.1nm,0.6s,baz=47,slow=4.4,SNR=13 | | | | | |
| BRTR | Keskin Array B | 132.41 | 31 | PKP | PKPdf | 18 45 08.0 -0.8 |
| | comp=Z,1.0nm,0.7s,baz=145,slow=4.7,SNR=8.2 | | | | | |
| BRTR | | | | SKPbc | SKPbc | 18 48 19.6 -0.2 |
| | comp=Z,0.5nm,0.6s,baz=92,slow=4.3,SNR=4.2 | | | | | |
| CRVS | Cervenica-Dubn | 135.71 | 328 | *e*PKP | PKiKP | 18 45 16.3 +0.3 |
| PRU | Pruhonice | 138.23 | 334 | *e*PKPDF | PKiKP | 18 45 21.3 +0.2 |
| CONA | Conrad Observa | 139.13 | 331 | *e*P | PKiKP | 18 45 23.6 +0.4 |
| | comp=Z,2.2nm,0.5s | | | | | |
| CKRC | Cesky Krumlov | 139.20 | 333 | *e*PKPDF | PKPdf | 18 45 21.4 +0.5 |
| KHC | Kasperske Hory | 139.28 | 334 | *e*PKPDF | PKiKP | 18 45 23.2 -0.2 |
| GERES | GERESS Array B | 139.45 | 333 | PKhKP | PKPpre | 18 45 14.9 |
| | comp=Z,0.3nm,0.2s,baz=34,slow=7.1,SNR=1.7 | | | | | |
| MOA | Molln | 139.93 | 332 | *i* P | PKiKP | 18 45 24.8 0.0 |
| | comp=Z,1.6nm,0.5s | | | | | |
| SOKA | Soboth | 140.42 | 330 | *e*P | PKiKP | 18 45 25.6 -0.2 |
| | comp=Z,1.1nm,0.6s | | | | | |
| KBA | Koelnbreinsper | 140.93 | 332 | *e*P | PKiKP | 18 45 27.1 +0.1 |
| | comp=Z,1.0nm,0.4s | | | | | |
| WATA | Walderalm | 141.52 | 333 | *i* P | PKiKP | 18 45 28.2 0.0 |
| | comp=Z,1.1nm,0.3s | | | | | |
| WTTA | Wattenberg | 141.55 | 333 | *e*P | PKiKP | 18 45 28.7 +0.5 |
| | comp=Z,1.4nm,0.3s | | | | | |
| DAVOX | Davos/Dischmat | 142.68 | 334 | PKP | PKPdf | 18 45 24.5 -2.9 |
| | comp=Z,3.3nm,0.4s,baz=288,slow=2.1,SNR=14 | | | | | |
| KEST | Kesra | 151.07 | 321 | PKPbc | PKPbc | 18 45 47.3 -0.3 |
| | comp=Z,25nm,1.1s,baz=171,slow=0.9,SNR=23 | | | | | |
| KEST | Kesra | 151.07 | 321 | | PKiKP | 18 45 48.3 +0.2 |
| ESDC | Sonseca Array | 153.75 | 345 | PKPbc | PKiKP | 18 45 53.7 +0.3 |
| | comp=Z,0.4nm,0.6s,baz=9.8,slow=4.8,SNR=4.8 | | | | | |
| ESDC | | | | PKPab | PKPab | 18 46 07.2 +0.5 |
| | comp=Z,2.0nm,0.9s,baz=6.5,slow=5.9,SNR=7.7 | | | | | |
| TORD | Torodi Ar. Bea | 166.04 | 266 | PKPab | PKPab | 18 47 00.2 -0.9 |
| | comp=Z,1.1nm,0.8s,baz=107,slow=5.6,SNR=5.8 | | | | | |

*NAO **28** 18:35:30.2±2.6,71°.51N×2°.71W, ML3.0*
*BER **28** 18:35:34.9±3.9,71°.70N×2°.92W, h22km±45km, ML3.0(NAO),Confirmed Earthquake*
**ISC 28 18:35:30.0±1.0,71°.7N±0°.1×2°.93W±0°.07, h10km, n32, σ2s38/32, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DBG | Daneborg | 5.72 | 306 | Pn | Pn | 18 36 56.8 | +2.0 |
| DBG | | | | Sn | Sn | 18 37 56.4 | -3.9 |
| DBG | Daneborg | 5.72 | 306 | IAML | | 18 38 01.3 | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| DBG | Daneborg | 5.72 | 306 | Pn | Pn | 18 36 56.8 | +2.0 |
| DBG | | | | Sn | Sn | 18 37 56.4 | -3.9 |
| DBG | Daneborg | 5.72 | 306 | *i* P | Pn | 18 36 56.3 | +1.5 |
| DBG | Daneborg | 5.72 | 306 | *e*S | Sn | 18 37 56.1 | -4.2 |
| SCO | Scoresbysund | 6.29 | 268 | *i* P | Pn | 18 37 05.1 | +2.4 |
| DAG | Danmarks Havn | 6.66 | 327 | IAML | | 18 38 16.7 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| DAG | Danmarks Havn | 6.66 | 327 | *i* P | Pn | 18 37 10.0 | +2.2 |
| DAG | Danmarks Havn | 6.66 | 327 | *e*S | Sn | 18 38 14.1 | -10 |
| N2RO | R st | 6.69 | 121 | *e*P | Pn | 18 37 08.9 | +0.8 |
| N2VA | Vr y | 6.75 | 119 | *e*P | Pn | 18 37 09.9 | +1.0 |
| STEI | Steigen | 7.30 | 112 | *e*P | Pn | 18 37 16.8 | +0.3 |
| STEI | | | | *e*S | Sn | 18 38 33.3 | -5.9 |
| TRO | Tromso | 7.52 | 95 | *e*P | Pn | 18 37 19.9 | +0.3 |
| NBB30 | Finnes | 7.52 | 120 | *e*P | Pn | 18 37 20.2 | +0.7 |
| NBB28 | Valnes | 7.57 | 118 | *e*P | Pn | 18 37 20.8 | +0.6 |
| FAUS | Fauske | 7.67 | 115 | *e*P | Pn | 18 37 22.1 | +0.5 |
| NBB17 | Glomfjord BY | 7.70 | 121 | *e*P | Pn | 18 37 22.9 | +1.0 |
| KONS | Konsvik | 7.71 | 124 | *e*P | Pn | 18 37 23.2 | +1.1 |
| BRBB | Barentsburg B | 7.82 | 27 | *e*P | Pn | 18 37 28.1 | +4.5 |
| JETT | Jettan, Norway | 8.02 | 94 | Pn | Pn | 18 37 26.1 | -0.4 |
| SPA0 | Spitsbergen Ar | 8.20 | 29 | Pn | Pn | 18 37 31.9 | +3.2 |
| | baz=203,slow=14 | | | | | | |
| SPA0 | Spitsbergen Ar | 8.20 | 29 | Pn | Pn | 18 37 31.9 | +3.2 |
| | baz=203,slow=14 | | | | | | |
| MOR8 | Moi Rana | 8.31 | 123 | *e*P | Pn | 18 37 32.5 | +2.2 |
| KIF | Kilpisjarvi | 8.40 | 97 | Pn | Pn | 18 37 31.5 | -0.1 |
| KIF | Kilpisjarvi | 8.40 | 97 | *e*P | Pn | 18 37 31.7 | +0.1 |
| KTK1 | Kautokeino | 9.17 | 94 | *e*P | Pn | 18 37 43.2 | +1.1 |
| ARA0 | ARCESS Array S | 9.64 | 89 | Pn | Pn | 18 37 48.5 | -0.1 |
| | baz=294,slow=12 | | | | | | |
| ARA0 | ARCESS Array S | 9.64 | 89 | Pn | Pn | 18 37 48.5 | -0.1 |
| | baz=294,slow=12 | | | | | | |
| HFS | Hagfors | 13.34 | 142 | Pn | Pn | 18 38 41.0 | +1.9 |
| | baz=338,slow=12 | | | | | | |
| HFS | Hagfors | 13.34 | 142 | Pn | Pn | 18 38 41.0 | +1.9 |
| | baz=338,slow=12 | | | | | | |
| FIA0 | FINESS Array S | 15.22 | 117 | P | Pn | 18 39 04.9 | +0.3 |
| | baz=342,slow=14 | | | | | | |
| FIA0 | FINESS Array S | 15.22 | 117 | P | Pn | 18 39 04.9 | +0.3 |
| | baz=342,slow=14 | | | | | | |

*IDC **28** 18:38:53.8±4.5,4°.25N×32°.69W, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.7/47, mbtmp3.7/7, Error ellipse: s-maj=139.5km s-min=34.9km az=4.0*
**ISC 28 18:38:56.6±4.1,4°.2N±0°.9×32°.7W±0°.2, h19km, n10, σ0s55/7, mb3.6/7, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H10N3 | ASCENSION HYDR | 21.70 | 123 | T | T | 19 06 27.6 | |
| | baz=303,slow=75,SNR=82 | | | | | | |
| H10N2 | ASCENSION HYDR | 21.70 | 123 | T | T | 19 06 28.0 | |
| | baz=303,slow=75,SNR=76 | | | | | | |
| H10N1 | ASCENSION HYDR | 21.72 | 123 | T | T | 19 06 29.2 | |
| | baz=303,slow=75,SNR=100 | | | | | | |
| TORD | Torodi Ar. Bea | 35.08 | 73 | P | P | 18 45 49.0 | +0.1 |
| | 0.9nm,0.8s,baz=267,slow=9.0,SNR=5.2 | | | | | | |
| MLR | Muntele Rosu | 65.36 | 41 | P | P | 18 49 38.8 | +0.8 |
| | 2.8nm,0.7s,baz=225,slow=8.6,SNR=4.4 | | | | | | |
| NOA | NORSAR Array B | 65.60 | 22 | P | P | 18 49 39.2 | +0.1 |
| | 0.3nm,0.8s,baz=222,slow=7.8,SNR=2.2 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| BRTR | Keskin Array B | 69.19 | 49 | P | P | 18 50 02.8 +0.3 |
| | 0.7nm,0.8s,baz=261,slow=5.7,SNR=4.6 | | | | | |
| AKASG | Malin Array Be | 69.22 | 37 | P | P | 18 50 01.5 -0.7 |
| | 0.2nm,0.4s,baz=255,slow=5.7,SNR=4.5 | | | | | |
| PDAR | Pinedale Array | 77.56 | 313 | P | P | 18 50 51.9 +0.1 |
| | 0.3nm,0.6s,baz=90,slow=6.4,SNR=2.6 | | | | | |
| YKA | Yellowknife Ar | 82.59 | 332 | P | P | 18 51 18.2 0.0 |
| | 0.3nm,0.7s,baz=97,slow=5.2,SNR=2.6 | | | | | |

**MAN 28 18:46:17.3,9°.35N×125°.48E, h33km, mb3.8, ML2.6, MS2.1, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SCPH | Surigao | 0.43 | 1 | *e*P | Pn | 18 46 28.1 | +0.8 |
| SCPH | | | | *e*S | Sn | 18 46 35.8 | +1.8 |

*IDC **28** 18:50:38.2±2.9,20°.76S×178°.89W, h576km±24km, mb3.1/10, mb1 3.4/11, mb1mx3.1/48, mbtmp4.0/11, Error ellipse: s-maj=60.7km s-min=16.0km az=152.0*
**ISC 28 18:50:40.5±1.2,20°.4S±0°.3×179°.0W±0°.2, h600km, n30, σ1s02/30, mb3.5/10, 10C-4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.85 | 314 | P | P | 18 52 03.1 | -2.0 |
| | 2.1nm,0.3s,baz=165,slow=20,SNR=6.2 | | | | | | |
| PMG | Port Moresby | 34.38 | 284 | P | P | 18 56 41.2 | +1.8 |
| | 8.5nm,0.7s,baz=83,slow=7.7,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 43.58 | 257 | P | P | 18 57 53.0 | -0.3 |
| | 1.5nm,0.5s,baz=92,slow=7.8,SNR=33 | | | | | | |
| ASAR | | | | PcP | PcP | 18 59 26.8 | -0.4 |
| | 0.5nm,0.6s,baz=105,slow=3.8,SNR=8.5 | | | | | | |
| WRA | Warramunga Arr | 43.64 | 262 | P | P | 18 57 53.0 | -0.8 |
| | 0.9nm,0.3s,baz=97,slow=7.6,SNR=32 | | | | | | |
| FITZ | Fitzroy Crossi | 52.06 | 263 | P | P | 18 58 56.4 | 0.0 |
| | 1.7nm,0.7s,baz=88,slow=4.7,SNR=9.5 | | | | | | |
| NVAR | Mina Array Bea | 81.66 | 44 | P | P | 19 01 58.4 | +0.9 |
| | 0.8nm,0.7s,baz=227,slow=8.4,SNR=6.0 | | | | | | |
| SEY | Seymchan | 86.10 | 347 | P | P | 19 02 18.7 | +0.3 |
| | 0.4nm,0.4s,baz=134,slow=6.2,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 87.85 | 58 | P | P | 19 02 28.2 | +0.6 |
| | 0.5nm,0.8s,baz=243,slow=5.5,SNR=5.2 | | | | | | |
| ILAR | Eielson Array | 88.47 | 13 | P | P | 19 02 29.9 | +0.4 |
| | 0.3nm,0.5s,baz=218,slow=4.9,SNR=6.2 | | | | | | |
| CMAR | Chiang Mai Arr | 89.17 | 290 | P | P | 19 02 36.2 | +2.4 |
| | 0.7nm,0.9s,baz=130,slow=3.4,SNR=6.0 | | | | | | |
| PDAR | Pinedale Array | 89.59 | 44 | P | P | 19 02 36.2 | +0.6 |
| | 0.4nm,0.6s,baz=204,slow=3.3,SNR=4.7 | | | | | | |
| MKAR | Makanchi Array | 110.45 | 314 | PKiKP | PKiKP | 19 08 04.2 | -1.4 |
| | 0.1nm,0.3s,baz=110,slow=1.5,SNR=5.6 | | | | | | |
| ARCES | ARCESS Array B | 128.68 | 349 | PKP | PKPdf | 19 08 39.6 | -0.2 |
| | 1.0nm,0.6s,baz=60,slow=7.4,SNR=5.5 | | | | | | |
| AKASG | Malin Array Be | 142.48 | 330 | PKhKP | PKPpre | 19 09 03.1 | |
| | 2.6nm,0.4s,baz=43,slow=4.2,SNR=35 | | | | | | |
| SORM | Soroca | 144.64 | 328 | ⇑P | PKPab | 19 09 10.6 | -0.3 |
| BRTR | Keskin Array B | 146.07 | 312 | PKPbc | PKPbc | 19 09 15.0 | +0.2 |
| | 0.9nm,0.6s,baz=140,slow=5.2,SNR=7.5 | | | | | | |
| TLCR | | 146.28 | 323 | ⇑P | PKPbc | 19 09 15.4 | +0.4 |
| GHRR | | 146.49 | 326 | ⇓P | PKiKP | 19 09 16.9 | -0.7 |
| BURAR | Bucovina Array | 146.52 | 330 | ⇓P | PKiKP | 19 09 17.2 | -0.6 |
| CFR | Carcaliu | 146.66 | 324 | ⇑P | PKPbc | 19 09 15.4 | -0.6 |
| TPGR | Topolog | 146.71 | 323 | ⇑P | PKiKP | 19 09 17.2 | -0.9 |
| MMAI | Mount Meron Ar | 146.93 | 299 | PKPbc | PKiKP | 19 09 17.9 | -1.1 |
| | 1.9nm,0.5s,baz=66,slow=6.5,SNR=4.2 | | | | | | |
| VRI | Vrincioaia | 146.98 | 326 | ⇑P | PKPbc | 19 09 15.5 | -1.4 |
| TRPA | Tarpa | 147.35 | 333 | ⇓P | PKiKP | 19 09 18.2 | -1.0 |
| DOPR | Dopca | 147.60 | 327 | ⇑P | PKiKP | 19 09 19.6 | -0.3 |
| MLR | Muntele Rosu | 147.64 | 326 | ⇑P | PKiKP | 19 09 19.2 | -0.9 |
| VOIR | | 148.13 | 327 | ⇑P | PKiKP | 19 09 20.6 | -0.6 |
| ARR | Arges | 148.39 | 327 | ⇓P | PKiKP | 19 09 21.2 | -0.4 |
| BZS | Buzias | 149.67 | 331 | ⇑P | PKPbc | 19 09 22.1 | -1.4 |
| HERR | Herculane | 149.84 | 329 | ⇑P | PKPbc | 19 09 23.5 | -0.4 |

*IDC **28** 18:50:45.5±1.0,14°.06N×56°.83E, h0km, mb3.7/13, mb1 3.8/13, mb1mx3.5/64, mbtmp3.7/13, Error ellipse: s-maj=25.0km s-min=20.4km az=156.0*
**ISC 28 18:50:47.9±1.0,14°.1N±0°.2×56°.8E±0°.1, h15km, n16, σ0s57/13, mb3.8/13, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GEYT | Alibeck | 23.80 | 3 | P | P | 18 56 00.5 | +0.3 |
| | 0.6nm,0.5s,baz=293,sl

comp=Z,0.2nm,0.3s,baz=143,slow=7.7,SNR=6.0
**ZALV Zalesovo Beam 45.38 23** P **P 19 04 01.6 +1.6**
comp=Z,2.0nm,0.8s,baz=252,slow=7.3,SNR=4.2
**MNK Minsk 46.23 337** *i* P **P 19 04 06.4 -0.3**
comp=E,1.0nm,0.8s
MNK *i* P **P 19 04 06.4 -0.3**
comp=N,14nm,0.9s
MNK *i* P **P 19 04 06.4 -0.3**
comp=Z,6.0nm,0.8s,baz=318
MNK *i* PP **PP 19 05 56.8 +1.6**
MNK *i* PPP PPP 19 06 40.3
MNK *i* S **S 19 10 55.2 +2.6**
MNK *i* SS **SS 19 14 23.4 +5.4**
MNK *i* SSS SSS 19 15 22.7
MNK *i* LQ LQ 19 19 38.2
MNK *i* LR LR 19 23 31.5
MNK *i* LRM MLR 19 26 03.3
comp=Z,48nm,17.0s
MNK *i* LRM MLR 19 26 05.0
comp=N,41nm,16.1s
MNK *i* LRM MLR 19 26 17.7
comp=E,6.0nm,16.9s
**KLMR Klimovskoe 48.34 349** *e*P **P 19 04 23.3 +0.3**
KLMR AMP 19 04 30.9
comp=Z,23nm,1.5s
KLMR *e*PcP **PcP 19 05 48.6 -0.9**
**FINES FINESS Array B 52.20 342** P **P 19 04 52.4 +0.2**
comp=Z,3.2nm,0.8s,baz=139,slow=9.4,SNR=22
**BOSA Boshof 52.37 216** P **P 19 04 53.6 -0.5**
comp=Z,2.6nm,0.8s,baz=94,slow=6.8,SNR=3.5
**SONM Songino Array 52.85 40** P **P 19 04 59.0 +1.4**
comp=Z,0.5nm,0.8s,baz=246,slow=7.1,SNR=4.7
**TORD Torodi Ar. Bea 53.56 276** P **P 19 05 02.0 -1.1**
comp=Z,0.9nm,0.8s,baz=79,slow=6.5,SNR=5.0
**NOA NORSAR Array B 57.20 336** P **P 19 05 27.3 -1.4**
comp=Z,0.5nm,0.9s,baz=120,slow=7.6,SNR=2.3
**ESDC Sonseca Array 58.76 308** P **P 19 05 37.6 -2.3**
comp=Z,1.5nm,1.1s,baz=95,slow=5.4,SNR=2.9
**H01W3 Cape Leeuwin H 72.92 134** T T 20 26 48.3
baz=302,slow=75,SNR=12
**H01W2 Cape Leeuwin H 72.93 134** T T 20 26 45.7
baz=302,slow=75,SNR=12
**H01W1 Cape Leeuwin H 72.94 134** T T 20 26 45.5
baz=302,slow=75,SNR=15
**WRA Warramunga Arr 83.31 112** P **P 19 08 08.3 -0.8**
comp=Z,0.5nm,0.6s,baz=298,slow=4.2,SNR=6.1
**ASAR Alice Springs 84.07 116** P **P 19 08 12.1 -0.9**
comp=Z,0.6nm,0.6s,baz=289,slow=4.6,SNR=12

*UCR **28** 19:01:12.1±1.2, 11°.21N×85°.87W, h84km±5km, MW4.0*
*INET **28** 19:01:12.4±0.6, 11°.21N×85°.84W, h84km±6km, MW3.3*
**ISC 28 19:01:12.5±1.7, 11°.22N±0°.04×85°.87W±0°.06, h82km±13km, n26, σ0s56/33, 2D, Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HZTE** | **Horizontes, Gu** | **0.57** | **152** | *e*P | **Pn** | **19 01 27.2** | **0.0** |
| HZTE | | | | *e*S | **Sn** | **19 01 39.2** | **+1.2** |
| **GBS3** | **Finca Las Img** | **0.60** | **137** | *i* P | **Pn** | **19 01 27.0** | **-0.5** |
| GBS3 | | | | *i* S | **Sn** | **19 01 38.7** | **+0.2** |
| **LAPC** | **Finca la Perla** | **0.62** | **136** | ↓*i* P | **Pn** | **19 01 27.3** | **-0.4** |
| LAPC | | | | *i* S | **Sn** | **19 01 39.0** | **+0.1** |
| **BUAI** | **Buenos Aires** | **0.63** | **123** | *i* P | **Pn** | **19 01 27.6** | **-0.1** |
| **VMAR** | **Armenia, Volca** | **0.84** | **119** | *e*P | **Pn** | **19 01 29.2** | **-0.7** |
| VMAR | | | | *e*S | **Sn** | **19 01 43.7** | **+0.8** |
| **PTEN** | **Parque Tenorio** | **1.00** | **120** | *i* P | **Pn** | **19 01 31.5** | **-0.3** |
| **ACAL** | **Aguas Claras** | **1.00** | **125** | ↓*i* P | **Pn** | **19 01 31.7** | **-0.2** |
| **ACON** | **Acoyapa** | **1.01** | **42** | *e*P | **Pn** | **19 01 31.5** | **-0.4** |
| ACON | | | | *e*S | **Sn** | **19 01 46.2** | **0.0** |
| **GUAI** | **GUAI** | **1.01** | **160** | *i* P | **Pn** | **19 01 31.7** | **-0.2** |
| **SAJU** | **San Juanillo,** | **1.16** | **172** | *e*P | **Pn** | **19 01 32.8** | **-0.9** |
| SAJU | | | | *e*S | **Sn** | **19 01 49.3** | **-0.2** |
| **COPN** | **Copaltepe** | **1.19** | **323** | *e*P | **Pn** | **19 01 33.9** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **.24** | **9** | *e*P | **Pn** | **19 01 34.3** | **-0.4** |
| BOAB | | | | *e*S | **Sn** | **19 01 51.0** | **-0.2** |
| **JTS** | **Las Juntas de** | **1.29** | **136** | *e*P | **Pn** | **19 01 34.3** | **-1.0** |
| **MOMN** | **Momotombo** | **1.35** | **331** | *e*P | **Pn** | **19 01 36.4** | **+0.3** |
| **CEDE** | **Laguna Cedeo** | **1.36** | **122** | *i* P | **Pn** | **19 01 36.1** | **-0.1** |
| **ARE1** | **Arenal 1** | **1.36** | **124** | *e*P | **Pn** | **19 01 36.0** | **-0.2** |
| **CASO** | **Castillo** | **1.36** | **125** | *i* P | **Pn** | **19 01 36.1** | **-0.2** |
| **COVE** | **Coope Vega, Sa** | **1.52** | **109** | *e*P | **Pn** | **19 01 37.2** | **-1.1** |
| **LAFE** | **Finca La Fe, P** | **1.69** | **146** | *e*P | **Pn** | **19 01 39.8** | **-0.6** |
| **CAO2** | **Cobano, Puntar** | **1.70** | **154** | *e*P | **Pn** | **19 01 39.9** | **-0.7** |
| **ESPN** | **Las Esperanzas** | **1.81** | **58** | *e*P | **Pn** | **19 01 41.8** | **-0.2** |
| **CRIN** | **San Cristobal** | **1.87** | **322** | *e*P | **Pn** | **19 01 42.7** | **-0.1** |
| **JACO** | **JACO, Garabito** | **1.95** | **142** | *e*P | **Pn** | **19 01 43.9** | **0.0** |
| **LCR2** | **La Lucha 2** | **2.35** | **129** | *e*P | **Pn** | **19 01 50.4** | **+1.0** |
| **RIMA** | **Rio Macho** | **2.44** | **126** | *e*P | **Pn** | **19 01 50.6** | **-0.1** |
| **CDM** | **Cerro de Muert** | **2.65** | **128** | *e*P | **Pn** | **19 01 54.4** | **+0.7** |

*IDC **28** 19:05:37.5±0.7, 13°.65S×69°.96W, h0km, mb4.4/14, mb1 4.6/17, mb1mx4.4/30, mbtmp4.4/17, ML4.5/3, MS3.8/28, Ms1 3.8/28, ms1mx3.6/66, Error ellipse: s-maj=20.0km s-min=15.2km az=48.0*
*NEIC **28** 19:05:44.6±2.6, 13°.68S±0°.06×69°.88W±0°.10, h54km±9km, mb4.5/14, ML4.9(ARE), Error ellipse: s-maj=13.5km s-min=9.2km az=88.0*
*ARE **28** 19:05:44±6.1, 13°.87S±0°.06×69°.4W±0°.1, h64km±7km, Error ellipse: s-maj=0.0km s-min=0.0km az=182.0*
*VAO **28** 19:05:46.2±0.5, 13°.65S×70°.03W, h73km, mb4.5*
**ISC 28 19:05:43.0±0.4, 13°.65S±0°.06×69°.89W±0°.06, h35km, n109, σ1s81/92, mb4.5/18, MS3.9/23, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **3.13** | **147** | Pn | **Pn** | **19 06 32.4** | **+2.0** |
| | 36nm,0.3s,baz=340,slow=10.0,SNR=669 | | | | | | |
| LPAZ | | | | Lg | Lg | 19 07 16.3 | |
| | 832nm,0.3s,baz=152,slow=16,SNR=19 | | | | | | |
| LPAZ | | | | LR | LR | 19 07 53.4 | |
| | comp=Z,1μm,22.0s,baz=333,slow=43 | | | | | | |
| **PB16** | **IPOC Station P** | **4.68** | **176** | Pn | **Pn** | **19 06 54.3** | **+2.6** |
| **PB12** | **IPOC Station P** | **4.96** | **185** | Pn | **Pn** | **19 06 56.8** | **+1.7** |
| **ETMB** | **Extrema** | **5.24** | **44** | *e*P | **Pn** | **19 07 02.2** | **+3.3** |
| **GO01** | **Chusmiza** | **6.03** | **174** | Pn | **Pn** | **19 07 12.8** | **+2.6** |
| **PB11** | **IPOC Station P** | **6.08** | **178** | Pn | **Pn** | **19 07 12.0** | **+1.3** |
| **PB08** | **IPOC Station P** | **6.50** | **174** | Pn | **Pn** | **19 07 18.2** | **+1.7** |
| **CZSB** | **Cruzeiro do Su** | **6.50** | **335** | *e*P | **Pn** | **19 07 18.0** | **+1.8** |
| **TA02** | **Huaiquique** | **6.59** | **182** | Pn | **Pn** | **19 07 18.2** | **+0.7** |
| **TA01** | **Diego Aracena** | **6.89** | **182** | Pn | **Pn** | **19 07 21.4** | **-0.1** |
| **NNA** | **Nana** | **6.98** | **283** | Pn | **Pn** | **19 07 25.9** | **+3.0** |
| | 2.5nm,0.3s,baz=137,slow=9.7,SNR=3.1 | | | | | | |
| NNA | | | | Sn | Sn | 19 08 52.6 | +12 |
| | 3.3nm,0.3s,baz=40,slow=7.9,SNR=1.6 | | | | | | |
| NNA | | | | Lg | Lg | 19 09 16.9 | |
| | 2.4nm,0.3s,baz=48,slow=19,SNR=1.8 | | | | | | |
| NNA | | | | LR | LR | 19 10 33.9 | |
| | comp=Z,288nm,19.6s,baz=118,slow=43 | | | | | | |
| **PATCX** | **Punta Patache** | **7.14** | **182** | Pn | **Pn** | **19 07 24.3** | **-0.7** |
| **PB01** | **IPOC Station P** | **7.37** | **177** | Pn | **Pn** | **19 07 29.4** | **+1.2** |
| **PB02** | **IPOC Station P** | **7.63** | **180** | Pn | **Pn** | **19 07 33.3** | **+1.5** |
| **PB07** | **IPOC Station P** | **8.04** | **180** | | **Pn** | **19 07 37.9** | **+0.4** |
| **PB09** | **IPOC Station P** | **8.13** | **176** | | **Pn** | **19 07 40.3** | **+1.6** |
| **PB04** | **IPOC Station P** | **8.64** | **182** | Pn | **Pn** | **19 07 45.8** | **0.0** |
| **SIV** | **San Ignacio** | **8.84** | **106** | Pn | **Pn** | **19 07 48.8** | **+0.4** |
| | 6.2nm,0.3s,baz=295,slow=12,SNR=91 | | | | | | |
| SIV | | | | Sn | **Sn** | **19 09 26.9** | **0.0** |
| | 18nm,0.3s,baz=2.5,slow=12,SNR=2.4 | | | | | | |
| SIV | | | | Lg | Lg | 19 10 19.4 | |
| | 30nm,0.3s,baz=190,slow=22,SNR=3.8 | | | | | | |
| **LVC** | **Limon Verde** | **8.96** | **174** | Pn | **Pn** | **19 07 50.5** | **+0.2** |
| | 1.2nm,0.3s,baz=353,slow=7.5,SNR=8.0 | | | | | | |
| LVC | | | | LR | LR | 19 11 44.6 | |
| | comp=Z,752nm,18.8s,baz=340,slow=41 | | | | | | |
| **LVC** | **Limon Verde** | **8.96** | **174** | Pn | **Pn** | **19 07 50.9** | **+0.5** |
| **PB06** | **IPOC Station P** | **9.02** | **178** | Pn | **Pn** | **19 07 50.5** | **-0.4** |
| **TBTG** | **Tabatinga, AM** | **9.40** | **360** | *e*P | **Pn** | **19 07 57.7** | **+1.6** |
| **PB15** | **IPOC Station P** | **9.52** | **178** | | **Pn** | **19 07 57.5** | **-0.3** |
| **ATAH** | **Atahualpa** | **10.57** | **307** | Pn | **Pn** | **19 08 15.6** | **+3.0** |
| | 1.7nm,0.3s,baz=24,slow=13,SNR=10 | | | | | | |
| ATAH | | | | Lg | Lg | 19 11 13.2 | |
| | 1.4nm,0.3s,baz=74,slow=22,SNR=3.7 | | | | | | |
| **AC06** | **Mina Casimiro** | **13.65** | **182** | Pn | **Pn** | **19 08 51.0** | **-3.1** |
| **PTGA** | **Pitinga** | **16.16** | **38** | Pn | **Pn** | **19 09 25.8** | **-1.8** |
| | 6.6nm,0.3s,baz=217,slow=16,SNR=32 | | | | | | |
| PTGA | | | | Sn | **Sn** | **19 12 18.5** | **-7.5** |
| | 3.9nm,0.3s,baz=124,slow=23,SNR=2.9 | | | | | | |
| PTGA | | | | Lg | Lg | 19 14 08.0 | |
| | 1.8nm,0.3s,baz=272,slow=21,SNR=2.1 | | | | | | |
| PTGA | | | | LR | LR | 19 16 12.8 | |
| | comp=Z,682nm,18.5s,baz=218,slow=39 | | | | | | |
| **FLOC** | **Florencia** | **16.17** | **339** | *e*P | **P** | **19 09 35.3** | **+4.6** |
| **GCUF** | **Volcan Galeras** | **16.52** | **333** | *e*P | **P** | **19 09 35.5** | **+0.5** |
| **GARC** | **Garzon, Huila** | **16.68** | **340** | *e*P | **Pn** | **19 09 35.0** | **+0.5** |
| **ARAG** | **Araguaiana, MT** | **17.61** | **99** | *e*P | **Pn** | **19 09 47.3** | **+1.5** |
| **SNDB** | **Serra Nova Dou** | **18.21** | **87** | *e*P | **Pn** | **19 09 54.8** | **+1.6** |
| **BOAV** | **Boa Vista** | **18.45** | **31** | *e*P | **Pn** | **19 09 57.7** | **+1.6** |
| **ROSC** | **El Rosal** | **18.89** | **346** | P | **Pn** | **19 10 04.7** | **+2.9** |
| | 1.0nm,0.3s,baz=11,slow=21,SNR=7.6 | | | | | | |
| ROSC | | | | Lg | Lg | 19 15 42.6 | |
| | 1.4nm,0.3s,baz=273,slow=21,SNR=4.8 | | | | | | |
| ROSC | | | | LR | LR | 19 18 06.1 | |
| | comp=Z,729nm,19.6s,baz=200,slow=40 | | | | | | |
| **ROC1** | **El Roble** | **19.27** | **183** | P | **P** | **19 10 02.0** | **-2.9** |
| ROC1 | | | | IAmb | IAmb | 19 10 12.4 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **MALB** | **Monte Alegre** | **19.39** | **54** | *e*P | **P** | **19 10 07.8** | **+1.6** |
| **PLMC** | **San Jos del P** | **19.49** | **341** | *e*P | **P** | **19 10 05.6** | **-1.7** |
| **GUY2C** | **Guyana, Caldas** | **19.52** | **343** | *e*P | **P** | **19 10 07.3** | **-0.7** |
| **MT02** | **Curacav** | **19.56** | **183** | P | **P** | **19 10 06.5** | **-1.3** |
| MT02 | | | | IAmb | IAmb | 19 10 25.2 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **MT09** | **Talagante** | **20.06** | **183** | P | **P** | **19 10 12.0** | **-1.5** |
| MT09 | | | | IAmb | IAmb | 19 10 31.8 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **PTGB** | **Pitanga** | **20.09** | **126** | *e*P | **P** | **19 10 15.9** | **+2.1** |
| **ITQB** | **Itaqui** | **20.13** | **145** | *e*P | **P** | **19 10 14.2** | **+0.1** |
| **BO02** | **Sierra Bellavi** | **21.07** | **182** | P | **P** | **19 10 21.3** | **-2.9** |
| BO02 | | | | IAmb | IAmb | 19 10 50.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PEXB** | **Peixe** | **21.10** | **88** | *e*P | **P** | **19 10 25.6** | **+0.9** |
| **BDFB** | **Brasilia** | **21.26** | **98** | P | **P** | **19 10 26.8** | **+0.2** |
| | comp=Z,1.6nm,0.4s,baz=277,slow=17,SNR=2.9 | | | | | | |
| BDFB | | | | S | Sn | 19 14 32.5 | +3.2 |
| | comp=Z,4.2nm,0.9s,baz=191,slow=11,SNR=1.7 | | | | | | |
| BDFB | | | | Lg | Lg | 19 16 57.3 | |
| | comp=Z,19nm,0.9s,baz=249,slow=23,SNR=4.6 | | | | | | |
| **SMTB** | **Santa Maria do** | **22.38** | **80** | *e*P | **P** | **19 10 39.6** | **+1.1** |
| **SDV** | **Santo Domingo** | **22.40** | **358** | P | **P** | **19 10 39.0** | **+0.2** |
| | comp=Z,70nm,0.9s,baz=196,slow=10,SNR=49 | | | | | | |
| SDV | | | | LR | LR | 19 20 12.2 | |
| | comp=Z,573nm,18.3s,baz=173,slow=39 | | | | | | |
| **SDV** | **Santo Domingo** | **22.40** | **358** | P | **P** | **19 10 38.4** | **-0.4** |
| **SDV** | **Santo Domingo** | **22.40** | **358** | *e*P | **P** | **19 10 38.7** | **-0.1** |
| **SDV** | **Santo Domingo** | **22.40** | **358** | *e*P | **P** | **19 10 40.2** | **+1.4** |
| **CPSB** | **Cacapava Do Su** | **22.55** | **140** | *e*P | **P** | **19 10 41.0** | **+0.8** |
| **PLTB** | **Pedras Altas** | **23.41** | **143** | P | **P** | **19 10 47.6** | **-1.4** |
| **BIRV** | **Birongo** | **24.23** | **9** | P | **P** | **19 10 57.9** | **+1.1** |
| BIRV | | | | IAmb | IAmb | 19 11 00.7 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **24.24** | **13** | P | **P** | **19 10 57.3** | **+0.5** |
| | comp=Z,18nm,1.0s,baz=196,slow=2.2,SNR=6.9 | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **24.37** | **90** | *e*P | **P** | **19 10 59.6** | **+1.4** |
| **JANB** | **Januaria** | **24.82** | **96** | *e*P | **P** | **19 11 03.3** | **+1.1** |
| **MDP** | **Montagnes des** | **25.30** | **44** | Lg | Lg | 19 18 54.9 | |
| | comp=Z,28nm,1.1s,baz=148,slow=21,SNR=2.4 | | | | | | |
| MDP | | | | LR | LR | 19 21 43.3 | |
| | comp=Z,361nm,20.0s,baz=228,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **26.99** | **181** | P | **P** | **19 11 20.5** | **-1.1** |
| | comp=Z,2.6nm,1.0s,baz=356,slow=11,SNR=7.7 | | | | | | |
| **PLCA** | **Paso Flores** | **26.99** | **181** | P | **P** | **19 11 20.6** | **-1.1** |
| **PLCA** | **Paso Flores** | **26.99** | **181** | *e*P | **P** | **19 11 20.9** | **-0.7** |
| **ROSB** | **Rosrio** | **27.61** | **70** | *e*P | **P** | **19 11 28.9** | **+1.5** |
| **RIB01** | **Linhares ES** | **28.82** | **105** | *e*P | **P** | **19 11 39.3** | **+1.2** |
| **NBPN** | **Ponto Novo - B** | **29.14** | **88** | *e*P | **P** | **19 11 42.3** | **+1.2** |
| **NBPB** | **Pedra_Branca-C** | **30.92** | **78** | *e*P | **P** | **19 11 57.5** | **+0.7** |
| **NBMA** | **Muriti-CE** | **31.21** | **82** | *e*P | **P** | **19 12 01.2** | **+1.8** |
| **SJG** | **San Juan** | **31.77** | **7** | LR | LR | 19 25 41.6 | |
| | comp=Z,83nm,19.2s,baz=220,slow=38 | | | | | | |
| **GCPR** | **Guaynabo City** | **31.98** | **7** | P | **P** | **19 12 04.1** | **-1.8** |
| **NBCL** | **Cascavel-CE** | **32.55** | **76** | *e*P | **P** | **19 12 12.7** | **+1.6** |
| **NBAN** | **Anadia - AL** | **33.14** | **87** | *e*P | **P** | **19 12 17.5** | **+1.2** |
| **RCBR** | **Riachuelo** | **34.35** | **80** | LR | LR | 19 26 53.2 | |
| | comp=Z,202nm,19.9s,baz=32,slow=37 | | | | | | |
| **RPN** | **Rapa Nui** | **39.16** | **244** | LR | LR | 19 25 34.5 | |
| | comp=Z,220nm,18.9s,baz=34,slow=31 | | | | | | |
| **CMIG** | **Matias Romero** | **39.27** | **320** | P | **P** | **19 13 09.3** | **+0.7** |
| | comp=Z,4.7nm,0.4s,baz=116,slow=9.6,SNR=7.6 | | | | | | |
| CMIG | | | | LR | LR | 19 28 33.4 | |
| | comp=Z,95nm,19.4s,baz=282,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **50.77** | **345** | LR | LR | 19 39 18.1 | |
| | comp=Z,70nm,18.4s,baz=144,slow=40 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.75** | **323** | P | **P** | **19 15 01.7** | **-0.5** |
| | comp=Z,2.6nm,1.1s,baz=150,slow=7.3,SNR=10 | | | | | | |
| **SADO** | **Sadowa** | **58.74** | **352** | LR | LR | 19 41 54.7 | |
| | comp=Z,112nm,21.1s,baz=158,slow=37 | | | | | | |
| **SDCO** | **Great Sand Dun** | **61.08** | **328** | P | **P** | **19 15 53.5** | **-0.5** |
| SDCO | | | | IAmb | IAmb | 19 15 55.3 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **F36A** | **Milaca** | **62.96** | **342** | P | **P** | **19 16 03.0** | **-3.0** |
| **PDAR** | **Pinedale Array** | **66.89** | **329** | P | **P** | **19 16 30.9** | **-1.1** |
| | comp=Z,0.7nm,0.6s,baz=120,slow=8.4,SNR=8.7 | | | | | | |
| PDAR | | | | LR | LR | 19 48 28.5 | |
| | comp=Z,58nm,18.1s,baz=144,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **66.89** | **329** | P | **P** | **19 16 30.3** | **-1.7** |
| **ULM** | **Lac du Bonnet** | **67.59** | **342** | P | **P** | **19 16 34.0** | **-1.9** |
| | comp=Z,5.5nm,0.5s,baz=144,slow=5.7,SNR=8.7 | | | | | | |
| ULM | | | | LR | LR | 19 50 32.7 | |
| | comp=Z,65nm,18.2s,baz=113,slow=40 | | | | | | |
| **DBIC** | **Dimbokro** | **67.63** | **77** | P | **P** | **19 16 36.8** | **-0.2** |
| | comp=Z,2.6nm,0.7s,baz=255,slow=4.5,SNR=3.6 | | | | | | |
| DBIC | | | | LR | LR | 19 44 31.0 | |
| | comp=Z,100nm,18.8s,baz=260,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **68.26** | **2** | LR | LR | 19 45 33.9 | |
| | comp=Z,31nm,21.4s,baz=57,slow=35 | | | | | | |
| **ELK** | **Elko** | **68.49** | **324** | LR | LR | 19 48 03.8 | |
| | comp=Z,129nm,18.0s,baz=196,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **68.80** | **321** | P | **P** | **19 16 44.5** | **+0.5** |
| | comp=Z,1.0nm,0.9s,baz=147,slow=6.3,SNR=5.8 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.49** | **322** | LR | LR | 19 51 31.6 | |
| | comp=Z,54nm,18.4s,baz=178,slow=38 | | | | | | |
| **NEW** | **Newport** | **74.54** | **329** | LR | LR | 19 55 17.6 | |
| | comp=Z,55nm,21.9s,baz=228,slow=40 | | | | | | |
| **FCC** | **Fort Churchill** | **74.81** | **347** | P | **P** | **19 17 17.4** | **-2.0** |
| FCC | | | | IAmb | IAmb | 19 17 19.5 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.75** | **72** | P | **P** | **19 17 25.6** | **-0.2** |
| | comp=Z,3.5nm,0.8s,baz=267,slow=5.5,SNR=18 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.75** | **72** | P | **P** | **19 17 25.7** | **-0.1** |
| TORD | | | | IAmb | IAmb | 19 17 26.7 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **FRB** | **Frobisher Bay** | **77.16** | **1** | LR | LR | 19 50 55.5 | |
| | comp=Z,61nm,21.6s,baz=193,slow=35 | | | | | | |
| **MDT** | **Midelt** | **77.53** | **52** | LR | LR | 19 49 26.9 | |
| | comp=Z,45nm,20.5s,baz=349,slow=34 | | | | | | |
| **ESDC** | **Sonseca Array** | **80.97** | **46** | P | **P** | **19 17 55.6** | **+1.4** |
| | comp=Z,3.3nm,0.8s,baz=252,slow=5.3,SNR=11 | | | | | | |
| ESDC | | | | LR | LR | 19 52 16.4 | |
| | comp=Z,43nm,18.3s,baz=289,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.51** | **341** | P | **P** | **19 18 05.8** | **-1.0** |
| | comp=Z,5.5nm,0.7s,baz=136,slow=5.3,SNR=81 | | | | | | |
| **BORG** | **Borgarnes** | **86.32** | **19** | LR | LR | 19 54 41.1 | |
| | comp=Z,36nm,20.2s,baz=174,slow=34 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **92.96** | **43** | LR | LR | 19 58 16.8 | |
| | comp=Z,53nm,19.9s,baz=271,slow=34 | | | | | | |
| **INK** | **Inuvik** | **93.28** | **341** | P | **P** | **19 18 52.6** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=104,slow=5.0,SNR=5.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **97.56** | **29** | LR | LR | 20 00 48.0 | |
| | comp=Z,40nm,18.4s,baz=315,slow=34 | | | | | | |
| **VRAC** | **Vranov** | **97.94** | **41** | LR | LR | 19 58 15.1 | |
| | comp=Z,32nm,20.3s,baz=249,slow=32 | | | | | | |
| **HFS** | **Hagfors** | **98.55** | **30** | LR | LR | 20 01 24.5 | |
| | comp=Z,38nm,18.1s,baz=257,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **135.12** | **21** | PKP | **PKPdf** | **19 24 58.2** | **-0.4** |
| | comp=Z,2.2nm,0.7s,baz=290,slow=3.0,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **136.22** | **212** | PKP | **PKPdf** | **19 25 00.6** | **-1.1** |
| | comp=Z,0.8nm,0.9s,baz=146,slow=2.2,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **138.98** | **216** | PKhKP | PKPpre | 19 25 02.6 | |
| | comp=Z,0.5nm,0.7s,baz=165,slow=1.6,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **139.56** | **30** | PKhKP | PKPpre | 19 24 58.8 | |
| | comp=Z,0.4nm,0.9s,baz=352,slow=2.9,SNR=2.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **144.93** | **206** | PKP | **PKPab** | **19 25 16.0** | **-0.6** |
| | comp=Z,5.2nm,0.8s,baz=156,slow=6.0,SNR=25 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **144.93** | **206** | | **PKPab** | **19 25 16.3** | **-0.3** |
| **SONM** | **Songino Array** | **145.78** | **4** | PKPbc | **PKPdf** | **19 25 17.9** | **-0.2** |
| | comp=Z,1.8nm,0.8s,baz=339,slow=3.7,SNR=13 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **146.06** | **317** | PKPbc | **PKPdf** | **19 25 19.1** | **+0.2** |
| | comp=Z,7.5nm,0.7s,baz=38,slow=2.5,SNR=13 | | | | | | |
| **KSRS** | **Korea Array** | **151.46** | **329** | PKPbc | **PKiKP** | **19 25 35.6** | **+1.5** |
| | comp=Z,0.9nm,0.8s,baz=68,slow=3.4,SNR=2.6 | | | | | | |
| **PZH** | **PanZhiHua** | **165.00** | **30** | PKP | **PKPdf** | **19 25 39.3** | **-5.1** |
| **CMAR** | **Chiang Mai Arr** | **168.25** | **65** | PKPab | **PKPab** | **19 26 55.5** | **+0.1** |
| | comp=Z,1.9nm,1.0s,baz=290,slow=5.2,SNR=14 | | | | | | |

**IDC 28 19:18:42.8±1.7, 2°.23S×140°.04E, h0km, mb3.2/3,**
**mb1 3.5/4, mb1mx3.4/31, mbtmp3.4/4, ML3.3/1, Error ellipse: s-maj=31.4km s-min=10.8km az=15.0, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **0.72** | **113** | Pg | Pg | 19 18 57.4 | +0.7 |
| | 35nm,0.3s,baz=259,slow=15,SNR=177 | | | | | | |
| JAY | | | | Lg | Lg | 19 19 06.2 | |
| | 157nm,0.3s,baz=93,slow=20,SNR=24 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.47** | **197** | P | Pn | 19 23 00.5 | 0.0 |
| | 0.1nm,0.3s,baz=20,slow=11,SNR=2.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.18** | **221** | P | P | 19 23 29.9 | 0.0 |
| | 1.8nm,1.1s,baz=45,slow=10.0,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **22.13** | **195** | P | P | 19 23 39.3 | -0.9 |
| | 0.6nm,0.7s,baz=26,slow=11,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.23** | **322** | P | P | 19 29 57.9 | +0.1 |
| | 0.2nm,0.6s,baz=106,slow=5.9,SNR=2.4 | | | | | | |

*INMG **28** 19:24:04.6±1.0, 35°.68N×3°.67W, h0km, ML2.1, Error ellipse: s-maj=4.5km s-min=2.2km az=44.0*
*CNRM **28** 19:24:04.5, 35°.77N×3°.45W, h54km, ml2.7*
*SFS **28** 19:24:04.0, 35°.70N×3°.65W, ML2.5, ALBORAN S.*
**ISC 28 19:24:02.0±0.9, 35°.69N±0°.05×3°.54W±0°.05, h14km, n12, σ1s45/19, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GOG** | **Mont Gurugu** | **0.64** | **136** | P | **Pn** | **19 24 17.5** | **+0.7** |
| GOG | | | | S | **Sn** | **19 24 27.8** | **+1.0** |
| **TAF** | **Taforalt** | **1.27** | **133** | P | **Pg** | **19 24 26.4** | **0.0** |
| TAF | | | | S | **Sg** | **19 24 43.9** | **+0.9** |
| **EMAL** | **Malaga-Limoner** | **1.29** | **327** | P | **Pg** | **19 24 27.0** | **+0.1** |
| EMAL | | | | S | **Sg** | **19 24 43.5** | **-0.3** |
| **SMIR** | **Smir Dam** | **1.50** | **270** | P | **Pg** | **19 24 30.6** | **-0.2** |
| SMIR | | | | S | **Sg** | **19 24 52.5** | **+2.2** |
| **MD31** | **MD31** | **2.99** | **200** | P | **Pb** | **19 24 52.2** | **-2.8** |
| MD31 | | | | S | **Sn** | **19 25 26.6** | **+1.9** |
| **MDT** | **Midelt** | **3.00** | **197** | P | **Pb** | **19 24 52.2** | **-3.0** |
| MDT | | | | S | **Sn** | **19 25 26.4** | **+1.4** |
| **PBAR** | **Barrancos** | **3.75** | **313** | *e*Pn | Pb | 19 25 01.9 | -6.0 |
| PBAR | | | | *e*Sn | **Sn** | **19 25 43.9** | **+0.6** |
| PBAR | | | | A | A | 19 25 46.5 | |
| | 2.3nm,0.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | *e*Pn | Pb | 19 25 02.4 | -6.0 |
| PVAQ | | | | *e*Sn | **Sn** | **19 25 44.4** | **+0.4** |
| PVAQ | | | | A | A | 19 25 47.8 | |
| | 2.8nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.77** | **298** | P | **Pn** | **19 24 59.4** | **-0.3** |
| PVAQ | | | | S | **Sn** | **19 25 43.6** | **-0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.86** | **295** | *e*Sn | **Sn** | **19 25 47.6** | **+1.3** |
| PBDV | | | | A | A | 19 25 55.2 | |
| | 5.4nm,0.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.67** | **303** | *e*Pn | Pn | 19 25 15.2 | +3.1 |
| PNCL | | | | *e*Sn | **Sn** | **19 26 06.5** | **+0.3** |
| **PMRV** | **Marv??o** | **4.83** | **322** | *e*Sn | **Sn** | **19 26 10.8** | **+0.8** |

**IDC 28 19:33:49.6±3.8, 26°.34N×142°.97E, h0km, mb3.6/4, mb1 3.7/5, mb1mx3.3/41, mbtmp3.6/5, ML3.1/1, Error ellipse: s-maj=205.8km s-min=26.2km az=85.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **10.95** | **339** | Pn | Pn | 19 36 25.7 | -1.9 |
| | 0.1nm,0.3s,baz=164,slow=10,SNR=5.7 | | |

*PDG **28** 20:26:48.7±0.2,43.15N×17.90E,h5km,ML2.4/14,Error ellipse: s-maj=0.4km s-min=0.5km az=0.0*
*BEO **28** 20:26:48.3±0.3,43.22N×17.82E,h0km,ML2.3/8*
*RHSSO **28** 20:26:48.8±0.2,43.20N×17.90E,h5km,2km,ML2.6/11*
**ISC 28 20:26:48.3±1.1,43.21N±0.02×17.88E±0.02,h4km±9km,**
**n54,σ0s83/99,5C-5D,Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STON** | **Ston** | **0.36** | **201** | *ePg* | **Pg** | **20 26 55.3** | **0.0** |
| STON | | | | *eSg* | **Sg** | **20 27 00.1** | **+0.2** |
| **STON** | **Ston** | **0.36** | **201** | *iPg* | **Pg** | **20 26 55.3** | **0.0** |
| STON | | | | *eSg* | **Sg** | **20 27 01.3** | **+1.4** |
| **STON** | **Ston** | **0.36** | **201** | *ePg* | **Pg** | **20 26 55.2** | **0.0** |
| STON | | | | Sg | **Sg** | **20 27 00.5** | **+0.6** |
| **BRY** | **Bratogost** | **0.57** | **122** | *iPg* | **Pg** | **20 26 58.8** | **-0.5** |
| BRY | | | | *eSg* | **Sg** | **20 27 07.3** | **+0.6** |
| **BRY** | **Bratogost** | **0.57** | **122** | *iPg* | **Pg** | **20 26 58.5** | **-0.8** |
| BRY | | | | *i Sg* | **Sg** | **20 27 07.0** | **+0.3** |
| **DBRK** | **Dubrovnik** | **0.57** | **160** | *ePg* | **Pg** | **20 26 58.8** | **-0.5** |
| DBRK | | | | Sg | **Sg** | **20 27 07.3** | **+0.7** |
| **TREB** | **Trebinje** | **0.60** | **144** | *ePg* | **Pg** | **20 26 59.2** | **-0.6** |
| TREB | | | | *eSg* | **Sg** | **20 27 06.9** | **-0.7** |
| **TREB** | **Trebinje** | **0.60** | **144** | *iPg* | **Pg** | **20 26 59.3** | **-0.6** |
| TREB | | | | *eSg* | **Sg** | **20 27 08.6** | **+1.0** |
| **RICI** | **Ricice** | **0.62** | **298** | *ePg* | **Pg** | **20 26 59.6** | **-0.6** |
| RICI | | | | Sg | **Sg** | **20 27 08.8** | **+0.6** |
| **MAKA** | **Makarska** | **0.63** | **278** | *ePg* | **Pg** | **20 26 59.6** | **-0.9** |
| MAKA | | | | Sg | **Sg** | **20 27 09.5** | **+0.8** |
| **UPM** | **Unac-Piva** | **0.75** | **90** | *iPg* | **Pg** | **20 27 02.3** | **-0.5** |
| UPM | | | | *eSg* | **Sg** | **20 27 12.8** | **+0.3** |
| **UPM** | **Unac-Piva** | **0.75** | **90** | *iPg* | **Pg** | **20 27 02.5** | **-0.3** |
| UPM | | | | *i Sg* | **Sb** | **20 27 14.0** | **-0.8** |
| **LSTV** | **Lastovo** | **0.84** | **239** | *ePg* | **Pg** | **20 27 03.2** | **-1.3** |
| **HCY** | **Herceg Novi** | **0.88** | **149** | *iPg* | **Pg** | **20 27 04.3** | **-1.0** |
| HCY | | | | *eSg* | **Sg** | **20 27 16.4** | **-0.3** |
| **HCY** | **Herceg Novi** | **0.88** | **149** | *ePg* | **Pg** | **20 27 03.8** | **-1.5** |
| HCY | | | | *i Sg* | **Sg** | **20 27 17.0** | **+0.3** |
| **NKME** | **Niksic** | **0.90** | **119** | *iPg* | **Pg** | **20 27 04.6** | **-1.0** |
| NKME | | | | *i Sg* | **Sb** | **20 27 18.4** | **-0.6** |
| **NKY** | **Niksic** | **0.91** | **115** | *ePg* | **Pg** | **20 27 05.0** | **-0.7** |
| NKY | | | | *i Sg* | **Sb** | **20 27 18.9** | **-0.3** |
| **CEME** | **Cevo** | **1.01** | **130** | *ePg* | **Pg** | **20 27 06.5** | **-1.2** |
| CEME | | | | *i Sg* | **Sb** | **20 27 21.6** | **-0.4** |
| **HVAR** | **Hvar** | **1.05** | **269** | *ePg* | **Pg** | **20 27 06.9** | **-1.5** |
| HVAR | | | | Sg | **Sb** | **20 27 23.4** | **+0.3** |
| **PLE** | **Pljevlja** | **1.11** | **83** | *ePg* | **Pg** | **20 27 09.1** | **-0.5** |
| PLE | | | | *i Sg* | **Sn** | **20 27 26.7** | **+0.1** |
| **BUM** | **Brajici-Budva** | **1.17** | **140** | *iPg* | **Pg** | **20 27 09.3** | **-1.5** |
| BUM | | | | *i Sg* | **Sb** | **20 27 26.9** | **+0.1** |
| **KOME** | **Kolasin** | **1.25** | **106** | *ePg* | **Pg** | **20 27 11.1** | **-1.2** |
| KOME | | | | *i Sg* | **Sn** | **20 27 30.8** | **+0.8** |
| **PDG** | **Podgorica** | **1.27** | **127** | *ePg* | **Pg** | **20 27 11.4** | **-1.3** |
| PDG | | | | *eSg* | **Sn** | **20 27 30.1** | **-0.3** |
| **PDG** | **Podgorica** | **1.27** | **127** | *ePg* | **Pg** | **20 27 11.3** | **-1.5** |
| PDG | | | | *eSg* | **Sg** | **20 27 29.0** | **-0.3** |
| **TTG** | **Podgorica** | **1.27** | **127** | *iPg* | **Pg** | **20 27 11.5** | **-1.3** |
| TTG | | | | *i Sg* | **Sn** | **20 27 30.7** | **+0.3** |
| **BBLS** | **Lazići** | **1.29** | **59** | *ePg* | **Pg** | **20 27 12.7** | **-0.4** |
| BBLS | | | | *eSg* | **Sg** | **20 27 29.7** | **-0.2** |
| **BBLS** | **Lazići** | **1.29** | **59** | *ePg* | **Pg** | **20 27 12.1** | **-1.0** |
| BBLS | | | | *eSg* | **Sg** | **20 27 29.2** | **-0.7** |
| **KLIV** | **Kijevo** | **1.34** | **307** | *ePg* | **Pg** | **20 27 12.5** | **-1.3** |
| KLIV | | | | Sg | **Sb** | **20 27 31.6** | **+0.2** |
| **MGRS** | **Mrkonjic Grad** | **1.34** | **335** | *ePg* | **Pn** | **20 27 13.1** | **-0.8** |
| MGRS | | | | *eSg* | **Sb** | **20 27 31.3** | **-0.3** |
| **DRME** | **Dracevica, Mon** | **1.40** | **136** | *ePg* | **Pn** | **20 27 13.4** | **-1.3** |
| DRME | | | | *eSg* | **Sb** | **20 27 33.0** | **-0.3** |
| **DRME** | **Dracevica, Mon** | **1.40** | **136** | *ePg* | **Pn** | **20 27 14.1** | **-0.6** |
| DRME | | | | *i Sg* | **Sn** | **20 27 34.8** | **+1.2** |
| **IVA** | **Berane** | **1.51** | **102** | *ePg* | **Pn** | **20 27 16.1** | **-0.2** |
| IVA | | | | *eSg* | **Sg** | **20 27 39.3** | **+2.3** |
| **SJES** | **Sjenica** | **1.53** | **87** | *ePn* | **Pb** | **20 27 17.5** | **+0.1** |
| SJES | | | | *eSg* | **Sg** | **20 27 39.2** | **+1.6** |
| **ULC** | **Ulcinj** | **1.60** | **140** | *ePg* | **Pn** | **20 27 17.3** | **-0.1** |
| ULC | | | | *eSg* | **Sg** | **20 27 41.1** | **+1.4** |
| **BLY** | **Banja Luka** | **1.62** | **342** | *ePn* | **Pb** | **20 27 18.9** | **+0.1** |
| BLY | | | | *eSg* | **Sn** | **20 27 39.0** | **-0.1** |
| **BLY** | **Banja Luka** | **1.62** | **342** | *ePn* | **Pn** | **20 27 18.2** | **+0.5** |
| BLY | | | | *eSn* | **Sn** | **20 27 39.7** | **+0.6** |
| **PVY** | **Plav** | **1.65** | **111** | *ePn* | **Pn** | **20 27 18.7** | **+0.5** |
| PVY | | | | *i Sn* | **Sg** | **20 27 42.8** | **+1.6** |
| **ZIRJ** | **Zirje** | **1.69** | **286** | *ePn* | **Pn** | **20 27 19.1** | **+0.5** |
| **IVAS** | **Ivanjica** | **1.70** | **77** | *ePn* | **Pn** | **20 27 19.3** | **+0.5** |
| IVAS | | | | *eSn* | **Sg** | **20 27 43.2** | **+0.3** |
| **MORI** | **Morici** | **1.71** | **293** | *ePn* | **Pn** | **20 27 18.5** | **-0.5** |
| MORI | | | | Sn | **Sg** | **20 27 43.8** | **+0.5** |
| **DIVS** | **Divibare** | **1.77** | **59** | *ePn* | **Pn** | **20 27 19.7** | **-0.2** |
| DIVS | | | | *eSn* | **Sb** | **20 27 44.1** | **0.0** |
| **DIVS** | **Divibare** | **1.77** | **59** | *ePn* | **Pn** | **20 27 19.9** | **0.0** |
| DIVS | | | | *eSn* | **Sn** | **20 27 43.0** | **0.0** |
| **MRAK** | **Mrakovica** | **1.94** | **339** | *ePn* | **Pn** | **20 27 22.2** | **0.0** |
| MRAK | | | | *eSn* | **Sn** | **20 27 47.6** | **+0.6** |
| **GRUS** | **Gruza** | **2.17** | **71** | *ePn* | **Pn** | **20 27 26.7** | **+1.4** |
| **A252A** | **Venje** | **2.23** | **359** | *ePn* | **Pn** | **20 27 25.6** | **-0.5** |
| **A251A** | **Rujevac** | **2.25** | **329** | *ePn* | **Pn** | **20 27 27.4** | **+1.1** |
| **PLIT** | **Plitvice** | **2.33** | **317** | *ePn* | **Pn** | **20 27 29.0** | **+1.5** |
| PLIT | | | | Sn | **Sb** | **20 27 56.9** | **-1.0** |
| **SELS** | **Selova** | **2.37** | **89** | *ePn* | **Pn** | **20 27 29.0** | **+1.0** |
| **FRGS** | **Fruska Gora** | **2.40** | **35** | *ePn* | **Pn** | **20 27 28.9** | **+0.5** |
| **FRGS** | **Fruska Gora** | **2.40** | **35** | *ePn* | **Pn** | **20 27 28.7** | **+0.3** |
| FRGS | | | | *eSn* | **Sn** | **20 27 58.1** | **-0.1** |
| **MOSL** | **Moslavina** | **2.54** | **342** | *ePn* | **Pn** | **20 27 30.7** | **+0.3** |
| **OZLJ** | **Ozalj** | **2.96** | **325** | *ePn* | **Pn** | **20 27 37.6** | **+1.5** |
| **MORH** | **Mrgy, Hungar** | **3.06** | **10** | *ePn* | **Pn** | **20 27 38.2** | **+0.8** |
| MORH | | | | *eSn* | **Sn** | **20 28 14.1** | **-0.4** |
| **CRES** | **Cresnjev** | **3.14** | **327** | *ePn* | **Pn** | **20 27 39.1** | **+0.5** |
| CRES | | | | *eSn* | **Sn** | **20 28 16.3** | **-0.2** |

**IDC 28 20:32:45.0±2.1,1.70N×126.19E,h0km,mb3.3/3,**
**mb1 3.5/3,mb1mx3.1/35,mbtmp3.3/3,Error ellipse:**
**s-maj=179.1km s-min=26.7km az=65.0,Northern**
**Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.95** | **160** | P | P | 20 37 51.5 | +0.4 |
| | 0.8nm,0.5s,baz=339,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **26.31** | **164** | P | P | 20 38 22.3 | -0.4 |
| | 0.2nm,0.3s,baz=346,slow=10,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.91** | **326** | P | P | 20 42 46.0 | -0.1 |
| | 0.1nm,0.3s,baz=119,slow=6.9,SNR=4.2 | | | | | | |

*TAP **28** 20:53:12.9,24.87N×122.46E,h17km,ML3.5,C*
*JMA **28** 20:53:13.1,24.89N×122.51E,h36km±2km,M3.4*
*IDC **28** 20:53:55.3±18.0,25.97N×124.36E,h460km±303km,*
*mb2.6/4,mb1 2.8/5,mb1mx2.5/53,mbtmp3.5/5,Error ellipse: s-maj=255.3km s-min=21.0km az=58.0*
**ISC 28 20:53:11.6±1.1,24.93N±0.04×122.53E±0.02,h14km±9km,**
**n87,σ0s97/105,mb3.2/4,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.49** | **279** | *eP* | **Pn** | **20 53 22.4** | **-2.0** |
| | baz=288 | | | | | | |
| TWB1 | | | | *eS* | **Sb** | **20 53 28.7** | **-0.6** |
| | baz=288 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.61** | **141** | P | **Pb** | **20 53 24.8** | **+0.7** |
| JYNG | | | | S | **Sg** | **20 53 32.8** | **+1.1** |
| **SXI1** | **Grass Mountain** | **0.61** | **286** | P | **Pn** | **20 53 25.0** | **-1.1** |
| | baz=293 | | | | | | |
| SXI1 | | | | S | **Sn** | **20 53 33.5** | **-2.3** |
| | baz=293 | | | | | | |
| **NTC** | **Toucheng** | **0.64** | **263** | P | **Pb** | **20 53 24.7** | **+0.2** |
| | baz=282 | | | | | | |
| NTC | | | | *eS* | **Sg** | **20 53 33.2** | **+0.7** |
| | baz=282 | | | | | | |
| **TIPB** | **Shuangxi** | **0.64** | **274** | *eP* | **Pn** | **20 53 25.1** | **-1.3** |
| | baz=280 | | | | | | |
| TIPB | | | | *eS* | **Sb** | **20 53 33.6** | **+0.2** |
| | baz=280 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.64** | **137** | P | **Pn** | **20 53 25.3** | **-1.0** |
| YOJ | | | | S | **Sg** | **20 53 33.8** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **0.64** | **137** | P | **Pn** | **20 53 25.3** | **-1.0** |
| | baz=119 | | | | | | |
| YOJ | | | | S | **Sg** | **20 53 34.0** | **+1.3** |
| | baz=119 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.69** | **282** | *eP* | **Pn** | **20 53 26.3** | **-0.8** |
| | baz=288 | | | | | | |
| NWF | | | | *eS* | **Sn** | **20 53 35.9** | **-1.9** |
| | baz=288 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.69** | **282** | P | **Pn** | **20 53 26.2** | **-0.8** |
| | baz=288 | | | | | | |
| WFSB | | | | *eS* | **Sn** | **20 53 36.0** | **-1.6** |
| | baz=288 | | | | | | |
| **TWC** | **Suao** | **0.69** | **243** | P | **Pg** | **20 53 24.7** | **-0.5** |
| | baz=252 | | | | | | |
| TWC | | | | *eS* | **Sg** | **20 53 32.9** | **-1.4** |
| | baz=252 | | | | | | |
| **TNOU** | **National Taiwa** | **0.72** | **288** | *eP* | **Pn** | **20 53 26.6** | **-0.8** |
| | baz=294 | | | | | | |
| **ILA** | **Ilan** | **0.73** | **257** | *eP* | **Pb** | **20 53 26.3** | **+0.2** |
| | baz=261 | | | | | | |
| **NDS** | **Dongshan** | **0.79** | **248** | *eP* | **Pg** | **20 53 26.7** | **-0.3** |
| | baz=243 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.81** | **329** | *eP* | **Pn** | **20 53 30.3** | **+1.7** |
| | baz=335 | | | | | | |
| **EWUT** | **Wuta** | **0.83** | **235** | *eP* | **Pb** | **20 53 27.5** | **-0.4** |
| | baz=236 | | | | | | |
| **TWA** | **Mucha** | **0.86** | **274** | P | **Pn** | **20 53 28.9** | **-0.5** |
| | baz=278 | | | | | | |
| TWA | | | | *eS* | **Sb** | **20 53 40.1** | **+0.4** |
| | baz=278 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.87** | **259** | *eP* | **Pn** | **20 53 28.8** | **-0.8** |
| | baz=276 | | | | | | |
| FUSB | | | | *eS* | **Sg** | **20 53 39.4** | **-0.6** |
| | baz=276 | | | | | | |
| **ENA** | **Nanau** | **0.87** | **235** | *eP* | **Pb** | **20 53 28.0** | **-0.6** |
| | baz=236 | | | | | | |
| **NHY** | **Taipei** | **0.88** | **277** | *eP* | **Pn** | **20 53 29.5** | **-0.1** |
| | baz=282 | | | | | | |
| **YM08** | **YM08** | **0.89** | **287** | *eP* | **Pn** | **20 53 30.0** | **+0.2** |
| | baz=292 | | | | | | |
| **TWY** | **Chenhua** | **0.91** | **292** | *eP* | **Pn** | **20 53 30.7** | **+0.6** |
| | baz=298 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.91** | **272** | *eP* | **Pn** | **20 53 29.9** | **-0.1** |
| | baz=276 | | | | | | |
| NHDH | | | | S | **Sb** | **20 53 41.1** | **-0.1** |
| | baz=276 | | | | | | |
| **ENTT** | **Nioudou** | **0.92** | **252** | *eP* | **Pg** | **20 53 29.5** | **+0.1** |
| | baz=244 | | | | | | |
| **TAP** | **Taipei** | **0.93** | **277** | *eP* | **Pn** | **20 53 30.8** | **+0.4** |
| | baz=281 | | | | | | |
| TAP | | | | *eS* | **Sn** | **20 53 42.4** | **-1.2** |
| | baz=281 | | | | | | |
| **NWLT** | **Wulai** | **0.94** | **261** | *eP* | **Pn** | **20 53 30.3** | **-0.2** |
| | baz=277 | | | | | | |
| NWLT | | | | *eS* | **Sb** | **20 53 41.3** | **-0.9** |
| | baz=277 | | | | | | |
| **TATO** | **Taipei** | **0.94** | **273** | *eP* | **Pn** | **20 53 30.1** | **-0.4** |
| | baz=277 | | | | | | |
| TATO | | | | S | **Sg** | **20 53 42.1** | **-0.1** |
| | baz=277 | | | | | | |
| **ANP** | **Anpu** | **0.95** | **286** | *eP* | **Pn** | **20 53 31.3** | **+0.6** |
| | baz=291 | | | | | | |
| **NDT** | **Datong Townshi** | **0.98** | **251** | *eP* | **Pn** | **20 53 30.7** | **-0.3** |
| | baz=253 | | | | | | |
| **LATG** | **Datong** | **0.99** | **247** | *eP* | **Pb** | **20 53 30.5** | **-0.2** |
| | baz=249 | | | | | | |
| LATG | | | | *eS* | **Sb** | **20 53 43.1** | **-0.5** |
| | baz=249 | | | | | | |
| **NTST** | **Danshui** | **1.00** | **284** | *eP* | **Pn** | **20 53 32.2** | **+0.9** |
| | baz=288 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.02** | **280** | *eP* | **Pn** | **20 53 31.7** | **+0.1** |
| | baz=284 | | | | | | |
| **ETL** | **Fush Village** | **1.13** | **227** | *eP* | **Pn** | **20 53 32.7** | **-0.4** |
| | baz=227 | | | | | | |
| **NACB** | **Ninganchiao** | **1.14** | **229** | *eP* | **Pn** | **20 53 32.5** | **-0.6** |
| | baz=229 | | | | | | |
| **NNSB** | **Datong** | **1.16** | **245** | *eP* | **Pn** | **20 53 33.2** | **-0.3** |
| | baz=235 | | | | | | |
| NNSB | | | | *eS* | **Sb** | **20 53 47.8** | **-0.6** |
| | baz=235 | | | | | | |
| **NNS** | **Nan Shan** | **1.16** | **245** | *eP* | **Pn** | **20 53 33.5** | **-0.1** |
| | baz=247 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.19** | **233** | *eP* | **Pn** | **20 53 33.5** | **-0.6** |
| | baz=234 | | | | | | |
| **TWD** | **Chiawan** | **1.20** | **225** | *eP* | **Pn** | **20 53 33.7** | **-0.3** |
| | baz=234 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.25** | **118** | P | **Pb** | **20 53 34.3** | **-0.6** |
| IRIF | | | | *eS* | **Sb** | **20 53 50.2** | **-0.7** |
| **NFF** | **Wufeng Townshi** | **1.31** | **257** | *eP* | **Pb** | **20 53 36.1** | **0.0** |
| | baz=259 | | | | | | |
| **ETM** | **Tongmen** | **1.35** | **225** | *eP* | **Pn** | **20 53 36.6** | **+0.6** |
| | baz=206 | | | | | | |
| **FUSS** | **Fushou** | **1.35** | **240** | *eP* | **Pb** | **20 53 36.8** | **-0.1** |
| | baz=241 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.39** | **236** | *eP* | **Pn** | **20 53 37.5** | **+0.4** |
| | baz=250 | | | | | | |
| **LIOB** | **Emei** | **1.40** | **259** | *eP* | **Pg** | **20 53 37.9** | **-0.7** |
| | baz=261 | | | | | | |
| **TDCB** | **Techi** | **1.42** | **242** | *eP* | **Pb** | **20 53 37.9** | **-0.1** |
| | baz=243 | | | | | | |
| **NSTT** | **Nanjuang** | **1.42** | **258** | *eP* | **Pb** | **20 53 38.1** | **+0.2** |
| | baz=260 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.45** | **127** | P | **Pb** | **20 53 37.8** | **-0.7** |
| **ESL** | **Shilin** | **1.49** | **222** | *eP* | **Pn** | **20 53 38.5** | **+0.4** |
| | baz=222 | | | | | | |
| **CHGB** | **Renai** | **1.51** | **235** | *eP* | **Pb** | **20 53 39.6** | **+0.1** |
| | baz=248 | | | | | | |
| CHGB | | | | *eS* | **Sn** | **20 53 57.6** | **-0.4** |
| | baz=248 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.52** | **117** | P | **Pb** | **20 53 38.4** | **-1.2** |
| JKRS | | | | *eS* | **Sn** | **20 53 57.1** | **-0.8** |
| **JIJ** | **Ishigaki jima** | **1.57** | **111** | P | **Pb** | **20 53 39.6** | **-1.0** |
| JIJ | | | | *eS* | **Sb** | **20 53 59.3** | **-1.1** |
| **WHP** | **Taichung City** | **1.58** | **246** | *eP* | **Pb** | **20 53 41.2** | **+0.5** |
| | baz=247 | | | | | | |
| **WUSB** | **Renai** | **1.59** | **234** | *eP* | **Pb** | **20 53 41.0** | **+0.1** |
| | baz=217 | | | | | | |
| **NMLH** | **Miaoli** | **1.63** | **256** | *eP* | **Pb** | **20 53 41.9** | **+0.4** |
| | baz=272 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.66** | **102** | P | **Pb** | **20 53 40.7** | **-1.3** |
| **NSY** | **Sanyi** | **1.69** | **253** | *eP* | **Pg** | **20 53 44.1** | **0.0** |
| | baz=269 | | | | | | |
| **TWQ1** | **Liyutan** | **1.70** | **250** | *eP* | **Pg** | **20 53 43.9** | **-0.4** |
| | baz=267 | | | | | | |
| **WPL** | **Puli Township** | **1.70** | **238** | *eP* | **Pb** | **20 53 43.0** | **+0.3** |
| | baz=238 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.71** | **240** | *eP* | **Pb** | **20 53 43.5** | **+0.6** |
| | baz=240 | | | | | | |
| **DPDB** | **Guoxing** | **1.71** | **239** | *eP* | **Pb** | **20 53 43.3** | **+0.4** |
| | baz=239 | | | | | | |
| **VWDT** | **VWDT** | **1.72** | **227** | *eP* | **Pn** | **20 53 42.7** | **-0.4** |
| | baz=213 | | | | | | |
| **HGSD** | **Ruisui** | **1.75** | **215** | *eP* | **Pn** | **20 53 42.1** | **+0.4** |
| | baz=201 | | | | | | |
| **EHY** | **Hungye** | **1.79** | **218** | *eP* | **Pn** | **20 53 43.6** | **+1.3** |
| | baz=217 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.81** | **235** | *eP* | **Pb** | **20 53 44.5** | **-0.2** |
| | baz=218 | | | | | | |
| **SSLB** | **Suanglung** | **1.83** | **232** | *eP* | **Pb** | **20 53 45.4** | **+0.4** |
| | baz=216 | | | | | | |
| **TYC** | **Yuchr** | **1.83** | **236** | *eP* | **Pb** | **20 53 44.9** | **-0.1** |
| | baz=219 | | | | | | |
| **TCU** | **Taichung** | **1.86** | **246** | *eP* | **Pb** | **20 53 46.2** | **+0.8** |
| | baz=247 | | | | | | |
| **YULB** | **Yu-li** | **1.90** | **217** | *eP* | **Pn** | **20 53 44.1** | **+0.4** |
| | baz=216 | | | | | | |
| **EYUL** | **Yuli** | **1.92** | **215** | *eP* | **Pn** | **20 53 45.3** | **+1.3** |
| | baz=202 | | | | | | |
| **TWF1** | **Yuli** | **1.93** | **216** | *eP* | **Pn** | **20 53 45.6** | **+1.5** |
| | baz=215 | | | | | | |
| **WJS** | **Zhushan** | **1.98** | **236** | *eP* | **Pn** | **20 53 47.5** | **+0.1** |
| | baz=237 | | | | | | |
| **WNT** | **Mingjian** | **1.98** | **238** | *eP* | **Pb** | **20 53 47.6** | **+0.1** |
| | baz=239 | | | | | | |
| **YUS** | **Yu-Shan** | **2.03** | **225** | *eP* | **Pn** | **20 53 47.4** | **+1.4** |
| | baz=208 | | | | | | |
| **FULB** | **Fuli** | **2.06** | **213** | *eP* | **Pn** | **20 53 47.3** | **+1.4** |
| | baz=198 | | | | | | |
| **ALS** | **Alishan** | **2.11** | **228** | *eP* | **Pb** | **20 53 49.0** | **-1.0** |
| | baz=212 | | | | | | |
| **WDLH** | **Douliu** | **2.20** | **236** | *eP* | **Pb** | **20 53 50.3** | **-0.9** |
| | baz=254 | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.21** | **243** | *eP* | **Pb** | **20 53 50.6** | **-0.8** |
| | baz=244 | | | | | | |
| **ELDTW** | **Lidau** | **2.22** | **219** | *eP* | **Pn** | **20 53 49.7** | **+1.6** |
| | baz=204 | | | | | | |
| **WTK** | **Tuku** | **2.31** | **238** | *eP* | **Pb** | **20 53 51.5** | **-1.6** |
| | baz=239 | | | | | | |
| **CHN4** | **Tsaushan** | **2.37** | **229** | *eP* | **Pb** | **20 53 52.9** | **-1.2** |
| | baz=213 | | | | | | |
| **TPUB** | **Ta-pu** | **2.38** | **227** | *eP* | **Pn** | **20 53 52.6** | **+2.3** |
| | baz=212 | | | | | | |
| **LONT** | **Longtian** | **2.39** | **213** | *eP* | **Pn** | **20 53 51.4** | **+1.0** |
| | baz=212 | | | | | | |
| **WTP** | **Ta-pu** | **2.42** | **227** | *eP* | **Pn** | **20 53 53.1** | **+2.2** |
| | baz=211 | | | | | | |
| **KSRS** | **Korea Array** | **13.31** | **19** | P | P | 20 56 32.5 | +2.6 |
| | 0.1nm,0.3s,baz=196,slow=11,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **26.18** | **335** | P | **P** | **20 58 49.6** | **+3.7** |
| | 0.3nm,0.7s,baz=142,slow=7.3,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.67** | **315** | P | P | 21 00 42.0 | +7.1 |
| | 0.4nm,0.8s,baz=98,slow=9.5,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.06** | **164** | P | P | 21 01 40.2 | +4.9 |
| | 1.2nm,0.8s,baz=350,slow=8.4,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **49.55** | **166** | P | P | 21 02 08.6 | +6.3 |
| | 0.2nm,0.6s,baz=349,slow=7.8,SNR=5.9 | | | | | | |

*IDC **28** 20:54:57.2±4.0,36.88N×71.20E,h73km±27km,mb3.5/11,*
*mb1 3.7/18,mb1mx3.4/65,mbtmp3.9/18,MS3.0/1,*
*Ms1 3.0/1,ms1mx2.2/73,Error ellipse: s-maj=40.5km*
*s-min=17.6km az=167.0*
**ISC 28 20:54:58.1±0.7,36.93N±0.09×71.10E±0.07,h88km,n41,**
**σ1s75/43,mb3.6/11,Afghanistan-Tajikistan border**
**region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.57** | **20** | P | **Pn** | **20 56 18.4** | **-0.4** |
| | SNR=88 | | | | | | |
| **UCH** | **Uchtor** | **5.91** | **25** | P | **Pn** | **20 56 23.2** | **-0.3** |
| | SNR=36 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.08** | **19** | P | **Pn** | **20 56 26.1** | **+0.5** |
| | SNR=30 | | | | | | |
| **AAK** | **Ala-Archa** | **6.27** | **24** | P | **Pn** | **20 56 28.7** | **+0.6** |
| | 4.6nm,0.3s,baz=221,slow=14,SNR=91 | | | | | | |
| AAK | | | | S | **Sn** | **20 57 34.3** | **-4.1** |
| | 1.9nm,0.3s,baz=157,slow=23,SNR=10.0 | | | | | | |
| **KBK** | **Karagaybulak** | **6.44** | **26** | P | **Pn** | **20 56 31.0** | **+0.6** |
| | SNR=14 | | | | | | |
| **ULHL** | **Ulahol** | **6.63** | **35** | P | **Pn** | **20 56 33.3** | **+0.2** |
| | SNR=10 | | | | | | |
| **CHMS** | **Chumysh** | **6.68** | **24** | P | **Pn** | **20 56 33.6** | **0.0** |
| | SNR=64 | | | | | | |
| **USP** | **Ospenovka** | **6.84** | **21** | P | **Pn** | **20 56 35.2** | **-0.6** |
| | SNR=26 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.91** | **29** | P | **Pn** | **20 56 36.9** | **0.0** |
| | SNR=50 | | | | | | |
| **GEYT** | **Alibeck** | **10.37** | **279** | P | **Pn** | **20 57 23.2** | **-0.8** |
| | 0.4nm,0.3s,baz=123,slow=11,SNR=6.0 | | | | | | |
| GEYT | | | | S | **Sn** | **20 59 12.1** | **-6.2** |
| | 0.6nm,0.3s,baz=102,slow=12,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.90** | **37** | P | **Pn** | **20 57 56.2** | **-1.7** |
| | 0.2nm,0.3s,baz=219,slow=15,SNR=23 | | | | | | |
| **PYUN** | **Piuthan** | **13.34** | **128** | *eP* | **Pn** | **20 58 02.5** | **-1.6** |
| | 9.2nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **13.66** | **125** | *eP* | **Pn** | **20 58 07.0** | **-1.4** |
| | 10nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **13.96** | **127** | *eP* | **Pn** | **20 58 10.0** | **-2.1** |
| | 10.0nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **14.47** | **124** | *eP* | **Pn** | **20 58 17.1** | **-1.7** |
| | 10nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.69** | **19** | P | **Pn** | **20 58 23.1** | **+1.9** |
| | 0.2nm,0.3s,baz=206,slow=10,SNR=10.0 | | | | | | |
| **KKN** | **Kakani** | **15.04** | **123** | *eP* | **Pn** | **20 58 24.4** | **-1.7** |
| **DMN** | **Daman** | **15.04** | **124** | *eP* | **Pn** | **20 58 24.8** | **-1.4** |
| **PKIN** | **Phulchoki** | **15.26** | **124** | *eP* | **Pn** | **20 58 26.8** | **-2.1** |
| | 8.6nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **15.27** | **124** | *eP* | **Pn** | **20 58 27.4** | **-1.7** |
| | 6.6nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.37** | **122** | *eP* | **Pn** | **20 58 28.3** | **-2.1** |
| | 4.7nm,0.4s | | | | | | |
| **JIRN** | **Jiri** | **15.74** | **122** | *eP* | **Pn** | **20 58 33.3** | **-1.8** |
| | 20nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.10** | **358** | P | **Pn** | **20 58 38.3** | **-0.8** |
| | 0.6nm,0.3s,baz=194,slow=16,SNR=11 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.45** | **329** | P | **P** | **20 58 44.6** | **+0.1** |
| | 1.6nm,0.3s,baz=136,slow=8.7,SNR=20 | | | | | | |
| **RAMN** | **Ramite** | **16.48** | **123** | *eP* | **Pn** | **20 58 42.4** | **-1.7** |
| | 8.2nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **16.98** | **119** | *eP* | **Pn** | **20 58 48.6** | **-1.8** |
| | 4.8nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **17.07** | **121** | *eP* | **Pn** | **20 58 50.3** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **19.49** | **25** | P | **P** | **20 59 17.1** | **-0.9** |
| | 2.9nm,0.3s,baz=211,slow=9.9,SNR=61 | | | | | | |
| **ARU** | **Arti** | **21.25** | **341** | P | **P** | **20 59 37.6** | **+0.8** |
| | 1.1nm,0.5s,baz=169,slow=7.4,SNR=7.5 | | | | | | |
| **BELG** | **Belogornoye** | **22.61** | **321** | P | **P** | **20 59 53.2** | **+2.0** |
| | 3.4nm,0.8s,baz=78,slow=0.7,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **28.03** | **56** | P | **P** | **21 00 42.0** | **+1.1** |
| | 0.6nm,0.5s,baz=267,slow=8.4,SNR=7.1 | | | | | | |
| SONM | | | | LR | LR | 21 13 21.9 | |
| | comp=Z,36nm,20.9s,baz=57,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **37.17** | **326** | P | **P** | **21 02 01.6** | **+1.5** |
| | 0.6nm,0.3s,baz=118,slow=8.3,SNR=13 | | | | | | |
| **ARCES** | **ARCES

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NDS | | | | *e*S | **Sb** | **20 57 14.8** | **-0.8** |
| | baz=251 | | | | | | | |
| **EWUT** | **Wuta** | **0.75** | **239** | P | **Pb** | **20 57 05.6** | **-0.6** |
| | baz=236 | | | | | | | |
| **ENA** | **Nanau** | **0.79** | **239** | *e*P | **Pb** | **20 57 06.2** | **-0.6** |
| | baz=236 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.82** | **265** | *e*P | **Pg** | **20 57 07.0** | **-0.2** |
| | baz=276 | | | | | | | |
| FUSB | | | | *e*S | **Sg** | **20 57 17.6** | **-0.3** |
| | baz=276 | | | | | | | |
| **TWA** | **Mucha** | **0.83** | **280** | P | **Pg** | **20 57 07.2** | **-0.1** |
| | baz=278 | | | | | | | |
| TWA | | | | S | **Sg** | **20 57 18.1** | **-0.1** |
| | baz=278 | | | | | | | |
| **NWRT** | **Kuosheng** | **0.83** | **296** | *e*P | **Pn** | **20 57 07.9** | **-0.7** |
| | baz=295 | | | | | | | |
| NWRT | | | | *e*S | **Sn** | **20 57 18.9** | **-1.8** |
| | baz=295 | | | | | | | |
| **NHY** | **Taipei** | **0.85** | **284** | *e*P | **Pn** | **20 57 07.9** | **-1.1** |
| | baz=282 | | | | | | | |
| NHY | | | | *e*S | **Sn** | **20 57 19.4** | **-1.9** |
| | baz=282 | | | | | | | |
| **ENTT** | **Nioudou** | **0.85** | **257** | P | **Pg** | **20 57 07.7** | **-0.2** |
| | baz=244 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.87** | **335** | *e*P | **Pn** | **20 57 08.9** | **-0.4** |
| | baz=336 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.88** | **278** | *e*P | **Pn** | **20 57 08.4** | **-1.0** |
| | baz=276 | | | | | | | |
| NHDH | | | | *e*S | **Sg** | **20 57 19.5** | **-0.3** |
| | baz=276 | | | | | | | |
| **YM08** | **YM08** | **0.88** | **294** | *e*P | **Pb** | **20 57 07.7** | **-0.8** |
| | baz=293 | | | | | | | |
| **NWLT** | **Wulai** | **0.89** | **266** | *e*P | **Pn** | **20 57 08.6** | **-1.0** |
| | baz=264 | | | | | | | |
| NWLT | | | | S | **Sg** | **20 57 20.1** | **-0.2** |
| | baz=264 | | | | | | | |
| **TAP** | **Taipei** | **0.91** | **283** | *e*P | **Pn** | **20 57 09.4** | **-0.3** |
| | baz=281 | | | | | | | |
| TAP | | | | *e*S | **Sn** | **20 57 20.8** | **-1.9** |
| | baz=281 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.91** | **255** | *e*P | **Pn** | **20 57 09.0** | **-0.9** |
| | baz=240 | | | | | | | |
| NDT | | | | *e*S | **Sg** | **20 57 20.9** | **0.0** |
| | baz=240 | | | | | | | |
| **TWY** | **Chenhua** | **0.91** | **299** | *e*P | **Pn** | **20 57 09.2** | **-0.6** |
| | baz=298 | | | | | | | |
| **TATO** | **Taipei** | **0.91** | **279** | *e*P | **Pb** | **20 57 08.3** | **-0.7** |
| | baz=277 | | | | | | | |
| TATO | | | | *e*S | **Sg** | **20 57 20.2** | **-0.7** |
| | baz=277 | | | | | | | |
| **LATG** | **Datong** | **0.92** | **251** | *e*P | **Pb** | **20 57 08.7** | **-0.5** |
| | baz=236 | | | | | | | |
| LATG | | | | *e*S | **Sg** | **20 57 21.2** | **0.0** |
| | baz=236 | | | | | | | |
| **ANP** | **Anpu** | **0.94** | **292** | P | **Pg** | **20 57 08.9** | **-0.6** |
| | baz=291 | | | | | | | |
| **BACT** | **New Taipei Cit** | **0.96** | **280** | *e*P | **Pn** | **20 57 10.2** | **-0.2** |
| | baz=279 | | | | | | | |
| **NTST** | **Danshui** | **0.99** | **289** | *e*P | **Pn** | **20 57 10.1** | **-0.8** |
| | baz=289 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.00** | **285** | *e*P | **Pg** | **20 57 10.1** | **-0.6** |
| | baz=285 | | | | | | | |
| **ETL** | **Fush Village** | **1.03** | **229** | *e*P | **Pg** | **20 57 11.4** | **+0.1** |
| | baz=227 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.04** | **231** | P | **Pb** | **20 57 10.5** | **-0.7** |
| | baz=239 | | | | | | | |
| NACB | | | | *e*S | **Sg** | **20 57 25.1** | **0.0** |
| | baz=239 | | | | | | | |
| **NNSB** | **Datong** | **1.08** | **248** | P | **Pb** | **20 57 11.5** | **-0.4** |
| | baz=235 | | | | | | | |
| NNSB | | | | *e*S | **Sn** | **20 57 26.1** | **-1.0** |
| | baz=235 | | | | | | | |
| **NNS** | **Nan Shan** | **1.08** | **249** | P | **Pn** | **20 57 11.7** | **-0.6** |
| | baz=235 | | | | | | | |
| NNS | | | | *e*S | **Sg** | **20 57 25.9** | **-0.5** |
| | baz=235 | | | | | | | |
| **NTY** | **Taoyuan** | **1.09** | **279** | *e*P | **Pg** | **20 57 13.8** | **+1.6** |
| | baz=278 | | | | | | | |
| **TWD** | **Chiawan** | **1.10** | **227** | *e*P | **Pn** | **20 57 12.3** | **-0.1** |
| | baz=236 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.11** | **236** | *e*P | **Pb** | **20 57 11.9** | **-0.4** |
| | baz=234 | | | | | | | |
| **HWA** | **Hwalien** | **1.17** | **223** | *e*P | **Pg** | **20 57 13.9** | **0.0** |
| | baz=221 | | | | | | | |
| **NCU** | **National Centr** | **1.18** | **277** | *e*P | **Pg** | **20 57 15.2** | **+1.1** |
| | baz=275 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.24** | **113** | P | **Pn** | **20 57 12.7** | **-1.6** |
| IRIF | | | | *e*S | **Sb** | **20 57 28.3** | **-2.2** |
| **ETM** | **Tongmen** | **1.25** | **226** | *e*P | **Pg** | **20 57 15.2** | **-0.2** |
| | baz=206 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.26** | **261** | *e*P | **Pg** | **20 57 15.3** | **-0.2** |
| | baz=260 | | | | | | | |
| **NJD** | **Zhudong** | **1.27** | **266** | *e*P | **Pg** | **20 57 16.6** | **+0.8** |
| | baz=265 | | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **243** | *e*P | **Pg** | **20 57 15.3** | **-0.5** |
| | baz=241 | | | | | | | |
| FUSS | | | | *e*S | **Sg** | **20 57 32.2** | **-0.2** |
| | baz=241 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.30** | **238** | *e*P | **Pb** | **20 57 16.0** | **0.0** |
| | baz=236 | | | | | | | |
| **HSN1** | **Hsinchu** | **1.33** | **268** | *e*P | **Pg** | **20 57 16.4** | **-0.6** |
| | baz=283 | | | | | | | |
| **TDCB** | **Techi** | **1.34** | **245** | *e*P | **Pg** | **20 57 16.8** | **-0.3** |
| | baz=234 | | | | | | | |
| **LIOB** | **Emei** | **1.35** | **262** | *e*P | **Pg** | **20 57 17.6** | **+0.4** |
| | baz=261 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.36** | **268** | *e*P | **Pg** | **20 57 17.0** | **-0.5** |
| | baz=283 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.36** | **262** | *e*P | **Pg** | **20 57 17.9** | **+0.4** |
| | baz=260 | | | | | | | |
| **ESL** | **Shilin** | **1.40** | **223** | *e*P | **Pb** | **20 57 17.2** | **-0.1** |
| | baz=204 | | | | | | | |
| **CHGB** | **Renai** | **1.42** | **237** | *e*P | **Pg** | **20 57 18.0** | **-0.7** |
| | baz=236 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.44** | **123** | P | **Pn** | **20 57 15.8** | **-1.2** |
| **WUSB** | **Renai** | **1.50** | **236** | *e*P | **Pb** | **20 57 19.2** | **0.0** |
| | baz=217 | | | | | | | |
| **WHP** | **Taichung City** | **1.50** | **249** | *e*P | **Pg** | **20 57 19.6** | **-0.7** |
| | baz=247 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.51** | **113** | P | **Pn** | **20 57 16.8** | **-1.3** |
| **NMLH** | **Miaoli** | **1.57** | **259** | *e*P | **Pg** | **20 57 21.8** | **+0.4** |
| | baz=273 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.58** | **107** | P | **Pn** | **20 57 17.5** | **-1.6** |
| JIJ | | | | *e*S | **Sn** | **20 57 36.5** | **-2.9** |
| **WPL** | **Puli Township** | **1.61** | **240** | *e*P | **Pb** | **20 57 21.3** | **+0.3** |
| | baz=238 | | | | | | | |
| **NSY** | **Sanyi** | **1.62** | **255** | *e*P | **Pg** | **20 57 23.2** | **+0.7** |
| | baz=269 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.63** | **242** | *e*P | **Pg** | **20 57 21.7** | **-0.9** |
| | baz=240 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.63** | **253** | *e*P | **Pg** | **20 57 22.7** | **+0.1** |
| | baz=268 | | | | | | | |
| **VWDT** | **VWDT** | **1.63** | **229** | *e*P | **Pb** | **20 57 20.9** | **-0.3** |
| | baz=213 | | | | | | | |
| **HGSD** | **Ruisui** | **1.65** | **216** | *e*P | **Pb** | **20 57 20.6** | **-1.0** |
| | baz=201 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.68** | **98** | P | **Pn** | **20 57 19.4** | **-1.0** |
| **EHY** | **Hungye** | **1.70** | **219** | *e*P | **Pb** | **20 57 21.5** | **-0.9** |
| | baz=217 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.73** | **237** | *e*P | **Pb** | **20 57 22.8** | **-0.2** |
| | baz=218 | | | | | | | |
| **SSLB** | **Suanglung** | **1.74** | **233** | *e*P | **Pb** | **20 57 22.5** | **-0.7** |
| | baz=216 | | | | | | | |
| **TYC** | **Yuchr** | **1.75** | **238** | *e*P | **Pb** | **20 57 23.0** | **-0.2** |
| | baz=219 | | | | | | | |
| **TCU** | **Taichung** | **1.78** | **248** | *e*P | **Pg** | **20 57 25.4** | **-0.2** |
| | baz=247 | | | | | | | |
| **YULB** | **Yu-li** | **1.80** | **217** | *e*P | **Pn** | **20 57 22.6** | **+0.5** |
| | baz=216 | | | | | | | |
| **WWF** | **Wufeng** | **1.81** | **244** | *e*P | **Pb** | **20 57 24.2** | **-0.1** |
| | baz=262 | | | | | | | |
| **EYUL** | **Yuli** | **1.82** | **216** | *e*P | **Pb** | **20 57 23.6** | **-0.9** |
| | baz=202 | | | | | | | |
| **TWF1** | **Yuli** | **1.83** | **216** | *e*P | **Pn** | **20 57 22.5** | **0.0** |
| | baz=202 | | | | | | | |
| **WNT1** | **Nantou City** | **1.89** | **241** | *e*P | **Pb** | **20 57 25.4** | **-0.2** |
| | baz=259 | | | | | | | |
| **WJS** | **Zhushan** | **1.89** | **238** | *e*P | **Pb** | **20 57 25.8** | **+0.1** |
| | baz=237 | | | | | | | |
| **WNT** | **Mingjian** | **1.90** | **240** | *e*P | **Pb** | **20 57 25.8** | **0.0** |
| | baz=239 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.91** | **247** | *e*P | **Pb** | **20 57 25.4** | **-0.6** |
| | baz=264 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.94** | **226** | *e*P | **Pb** | **20 57 25.3** | **-1.4** |
| | baz=208 | | | | | | | |
| **FULB** | **Fuli** | **1.96** | **214** | *e*P | **Pn** | **20 57 25.2** | **+0.9** |
| | baz=198 | | | | | | | |
| **ALS** | **Alishan** | **2.02** | **230** | *e*P | **Pb** | **20 57 27.0** | **-1.1** |
| | baz=212 | | | | | | | |
| **WGK** | **Gukeng** | **2.09** | **237** | *e*P | **Pb** | **20 57 27.6** | **-1.6** |
| | baz=253 | | | | | | | |
| **WDLH** | **Douliu** | **2.11** | **238** | *e*P | **Pb** | **20 57 28.9** | **-0.5** |
| | baz=254 | | | | | | | |
| **ELDTW** | **Lidau** | **2.12** | **220** | *e*P | **Pb** | **20 57 28.1** | **-1.5** |
| | baz=204 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.13** | **245** | *e*P | **Pb** | **20 57 28.3** | **-1.5** |
| | baz=244 | | | | | | | |
| **EDH** | **Donghe** | **2.15** | **210** | *e*P | **Pn** | **20 57 27.3** | **+0.5** |
| | baz=196 | | | | | | | |
| **WTK** | **Tuku** | **2.23** | **240** | *e*P | **Pb** | **20 57 29.8** | **-1.6** |
| | baz=239 | | | | | | | |
| **STYH** | **Taoyuan** | **2.28** | **224** | *e*P | **Pn** | **20 57 30.1** | **+1.5** |
| | baz=207 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.28** | **228** | *e*P | **Pb** | **20 57 30.5** | **-1.9** |
| | baz=211 | | | | | | | |
| **LONT** | **Longtian** | **2.29** | **213** | *e*P | **Pn** | **20 57 29.4** | **+0.7** |
| | baz=212 | | | | | | | |
| **STYT** | **Tauyuan** | **2.29** | **224** | *e*P | **Pb** | **20 57 30.7** | **-1.9** |
| | baz=207 | | | | | | | |
| **CHY** | **Chiayi** | **2.30** | **235** | *e*P | **Pn** | **20 57 30.0** | **+1.0** |
| | baz=251 | | | | | | | |
| **WTP** | **Ta-pu** | **2.33** | **228** | *e*P | **Pb** | **20 57 31.3** | **-1.9** |
| | baz=210 | | | | | | | |
| **LDUT** | **Ludao** | **2.34** | **203** | *e*P | **Pn** | **20 57 30.5** | **+0.9** |
| | baz=202 | | | | | | | |
| **TWGBT** | **Beinan** | **2.38** | **213** | *e*P | **Pn** | **20 57 31.6** | **+1.5** |
| | baz=212 | | | | | | | |
| **TWG** | **Pinlang** | **2.39** | **213** | *e*P | **Pn** | **20 57 31.6** | **+1.5** |
| | baz=212 | | | | | | | |
| **TWK** | **Hsinying** | **2.40** | **230** | *e*P | **Pn** | **20 57 32.0** | **+1.6** |
| | baz=213 | | | | | | | |
| **CHN1** | **Nanshi** | **2.43** | **228** | *e*P | **Pb** | **20 57 32.8** | **-2.1** |
| | baz=227 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.44** | **238** | *e*P | **Pn** | **20 57 32.4** | **+1.6** |
| | baz=253 | | | | | | | |
| **SGST** | **Jiashian** | **2.46** | **225** | *e*P | **Pn** | **20 57 32.8** | **+1.6** |
| | baz=209 | | | | | | | |
| **SLGT** | **Liugui** | **2.49** | **223** | *e*P | **Pb** | **20 57 33.8** | **-2.1** |
| | baz=222 | | | | | | | |
| **ICHU** | **Yijhu** | **2.49** | **234** | *e*P | **Pb** | **20 57 33.8** | **-2.1** |
| | baz=234 | | | | | | | |
| **MATB** | **Ma-tsu** | **2.64** | **300** | *e*P | **Pn** | **20 57 34.8** | **+1.2** |
| | baz=299 | | | | | | | |
| **SCST** | **Cishan** | **2.66** | **224** | *e*P | **Pn** | **20 57 35.2** | **+1.3** |
| | baz=223 | | | | | | | |
| **SSD** | **Sandimen** | **2.68** | **220** | *e*P | **Pb** | **20 57 36.7** | **-2.5** |
| | baz=218 | | | | | | | |
| **TSMG** | **Majia** | **2.71** | **219** | *e*P | **Pb** | **20 57 37.5** | **-2.1** |
| | baz=218 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.79** | **218** | *e*P | **Pn** | **20 57 37.6** | **+2.0** |
| | baz=205 | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.93** | **316** | *e*P | **Pn** | **20 57 38.3** | **+0.7** |
| | baz=315 | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.97** | **244** | *e*P | **Pn** | **20 57 39.2** | **+1.1** |
| | baz=244 | | | | | | | |
| **SCZT** | **Fangliau** | **2.99** | **215** | *e*P | **Pn** | **20 57 40.1** | **+1.7** |
| | baz=201 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.99** | **305** | *e*P | **Pn** | **20 57 38.8** | **+0.4** |
| | baz=304 | | | | | | | |
| **KSRS** | **Korea Array** | **13.41** | **19** | P | **P** | **21 00 14.4** | **+3.7** |
| | 0.2nm,0.3s,baz=194,slow=11,SNR=4.4 | | | | | | | |
| KSRS | | | | LR | LR | 21 05 48.7 | | |
| | comp=Z,26nm,18.5s,baz=180,slow=41 | | | | | | | |
| **SONM** | **Songino Array** | **26.25** | **335** | P | **P** | **21 02 28.2** | **+2.0** |
| | 0.6nm,0.9s,baz=133,slow=10,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.70** | **315** | P | P | 21 04 19.4 | +4.5 | |
| | 0.2nm,0.4s,baz=111,slow=8.0,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.98** | **164** | P | P | 21 05 20.1 | +5.8 | |
| | 0.9nm,0.7s,baz=348,slow=8.6,SNR=8.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.47** | **166** | P | P | 21 05 48.9 | +7.4 | |
| | 0.6nm,0.8s,baz=345,slow=6.7,SNR=6.1 | | | | | | | |

*MAN **28** 21:01:54.5, 9.°70N×124.°69E, h5km, mb5.1, ML4.0, MS4.1*
*MAN INTENSITY III - GUINDULMAN, BOHOL.*
*NEIC **28** 21:01:58.5± 1.3, 9.°83N± 0.°09×124.°82E± 0.°07, h37km± 8km, mb4.5/19, Error ellipse: s-maj=14.7km s-min=6.7km az=209.0*
*IDC **28** 21:01:59.1± 2.2, 9.°85N×124.°86E, h46km± 24km, mb3.7/18, mb1 3.9/21, mb1mx3.8/44, mbtmp4.0/21, ML4.1/3, MS3.6/26, Ms1 3.6/26, ms1mx3.4/81, Error ellipse: s-maj=26.4km s-min=14.0km az=74.0*

**ISC 28 21:01:56.0**±0.4, **9.°88N**±0.°04×**124.°74E**±0.°04, **h21**km±4km, **n89**, σ1°**14**/82, **mb4.4**/27, **MS3.6**/23, **4C-5D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **0.74** | **97** | | *e*P | **Pb** | **Pb** | **21 02 10.0** | **-0.2** |
| SCPH | | | | | *e*S | **Sn** | **Sn** | **21 02 21.7** | **-0.2** |
| **LLP** | **Lapu-Lapu** | **0.88** | **300** | ⇓ | *i*P | **Pn** | **Pn** | **21 02 12.3** | **-0.9** |
| LLP | | | | | *i* S | **Sn** | **Sn** | **21 02 26.0** | **+0.6** |
| **TBP** | **Tagbilaran** | **0.89** | **258** | | *e*P | **Pn** | **Pn** | **21 02 10.7** | **-2.5** |
| **DCPH** | **Dipolog City** | **1.88** | **227** | ⇓ | *e*P | **Pn** | **Pn** | **21 02 25.1** | **-1.8** |
| DCPH | | | | | *e*S | **Sn** | **Sn** | **21 02 47.5** | **-2.4** |
| **BIPH** | **Bislig** | **2.32** | **136** | ⇓ | *e*P | **Pn** | **Pn** | **21 02 32.2** | **-0.8** |
| BIPH | | | | | *e*S | **Sn** | **Sn** | **21 03 00.4** | **-0.5** |
| **RCP** | **Roxas** | **2.58** | **311** | ⇓ | *e*P | **Pn** | **Pn** | **21 02 38.9** | **+2.3** |
| RCP | | | | | *e*S | **Sb** | **Sb** | **21 03 11.9** | **-1.0** |
| **CTBH** | **Cotabato--PC H** | **2.68** | **191** | ⇑ | *i*P | **Pn** | **Pn** | **21 02 37.3** | **-0.6** |
| CTBH | | | | | *i* S | **Sn** | **Sn** | **21 03 11.0** | **+1.2** |
| **KCP** | **Kidapawan** | **2.87** | **173** | ⇑ | *e*P | **Pn** | **Pn** | **21 02 39.6** | **-1.0** |
| KCP | | | | | *i* S | **Sn** | **Sn** | **21 03 17.4** | **+2.9** |
| **JAP** | **San Jose, Anti** | **2.88** | **288** | ⇑ | *e*P | **Pn** | **Pn** | **21 02 44.5** | **+3.7** |
| **DAV** | **Davao City (W)** | **2.91** | **163** | | P | **Pn** | **Pn** | **21 02 42.3** | **+1.2** |
| | 50nm,0.3s,baz=358,slow=3.9,SNR=12 | | | | | | | | |
| DAV | | | | | S | | **Sn** | **21 03 15.8** | **+0.4** |
| | 75nm,0.3s,baz=110,slow=23,SNR=5.2 | | | | | | | | |
| **DAV** | **Davao City (W)** | **2.91** | **163** | | | | **Pn** | **21 02 41.9** | **+0.8** |
| DAV | | | | | Sn | | **Sn** | **21 03 13.5** | **-1.9** |
| **GSPH** | **General Santos** | **3.77** | **177** | ⇑ | *i*P | | **Pb** | **21 03 03.5** | **+1.5** |
| **LQP** | **Lukban** | **5.25** | **324** | ⇓ | *e*P | | **Pn** | **21 03 10.3** | **-3.2** |
| **MYLDM** | **Lahad Datu** | **7.75** | **233** | | Pn | | **Pn** | **21 03 49.0** | **+1.4** |
| **TNTI** | **Ternate** | **9.41** | **164** | | Pn | | **Pn** | **21 04 09.3** | **-1.2** |
| **SIJI** | **Sorong** | **12.49** | **148** | | P | | **Pn** | **21 04 52.0** | **-0.8** |
| | 1.0nm,0.3s,baz=29,slow=11,SNR=4.7 | | | | | | | | |
| SIJI | | | | | LR | | LR | 21 11 01.2 | |
| | comp=Z,142nm,18.5s,baz=295,slow=44 | | | | | | | | |
| **KAPI** | **Kappang** | **15.60** | **199** | | LR | | LR | 21 12 18.0 | |
| | comp=Z,129nm,19.2s,baz=42,slow=40 | | | | | | | | |
| **UBPT** | **Khong Chiam** | **19.55** | **288** | | P | | **Pn** | **21 06 23.9** | **-0.1** |
| UBPT | | | | | IAmb | | IAmb | 21 06 42.6 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **BATI** | **Baumata** | **19.98** | **183** | | P | | **P** | **21 06 26.4** | **-0.8** |
| | comp=Z,0.4nm,0.3s,baz=318,slow=8.0,SNR=3.7 | | | | | | | | |
| BATI | | | | | LR | | LR | 21 16 22.0 | |
| | comp=Z,119nm,18.6s,baz=338,slow=43 | | | | | | | | |
| **IPM** | **Ipoh** | **24.12** | **259** | | P | | **P** | **21 07 10.1** | **-0.6** |
| IPM | | | | | IAmb | | IAmb | 21 07 11.4 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.40** | **292** | | P | | **P** | **21 07 33.0** | **+1.7** |
| | comp=Z,0.4nm,0.3s,baz=121,slow=7.9,SNR=4.7 | | | | | | | | |
| CMAR | | | | | LR | | LR | 21 18 11.5 | |
| | comp=Z,79nm,18.4s,baz=110,slow=37 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.40** | **292** | | P | | **P** | **21 07 30.1** | **-1.2** |
| **KSRS** | **Korea Array** | **27.61** | **5** | | LR | | LR | 21 19 42.7 | |
| | comp=Z,70nm,19.7s,baz=185,slow=38 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **29.22** | **23** | | LR | | LR | 21 20 55.4 | |
| | comp=Z,90nm,18.4s,baz=214,slow=39 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.10** | **162** | | P | | **P** | **21 08 12.5** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=342,slow=9.2,SNR=3.1 | | | | | | | | |
| WRA | | | | | LR | | LR | 21 21 25.8 | |
| | comp=Z,103nm,20.0s,baz=4.5,slow=38 | | | | | | | | |
| **ASAR** | **Alice Springs** | **34.52** | **165** | | P | | **P** | **21 08 43.3** | **+0.3** |
| | comp=Z,0.6nm,0.9s,baz=349,slow=7.2,SNR=5.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **34.52** | **165** | | P | | **P** | **21 08 43.0** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **34.77** | **9** | | P | | **P** | **21 08 45.9** | **+1.0** |
| | comp=Z,3.8nm,0.9s,baz=156,slow=7.3,SNR=2.6 | | | | | | | | |
| USRK | | | | | LR | | LR | 21 22 46.8 | |
| | comp=Z,50nm,21.0s,baz=174,slow=36 | | | | | | | | |
| **CTA** | **Charters Tower** | **36.54** | **145** | | LR | | LR | 21 27 23.9 | |
| | comp=Z,65nm,18.4s,baz=50,slow=42 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **37.46** | **21** | | LR | | LR | 21 23 31.1 | |
| | comp=Z,59nm,20.2s,baz=180,slow=34 | | | | | | | | |
| **TAPN** | **Taplejung** | **38.96** | **302** | | *e*P | | **P** | **21 09 22.3** | **+1.1** |
| **ODAN** | **Odare** | **39.08** | **301** | | *e*P | | **P** | **21 09 22.9** | **+0.8** |
| **KLR** | **Kul'dur** | **39.66** | **7** | | P | | **P** | **21 09 26.6** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=178,slow=6.1,SNR=13 | | | | | | | | |
| **RAMN** | **Ramite** | **39.77** | **300** | | *e*P | | **P** | **21 09 28.9** | **+0.9** |
| **JIRN** | **Jiri** | **40.34** | **301** | | *e*P | | **P** | **21 09 33.6** | **+0.8** |
| **GUN** | **Gumba** | **40.68** | **302** | | *e*P | | **P** | **21 09 35.8** | **+0.2** |
| | comp=Z,8.2nm,0.4s | | | | | | | | |
| **SONM** | **Songino Array** | **40.88** | **341** | | P | | **P** | **21 09 37.4** | **+0.7** |
| | comp=Z,0.8nm,1.0s,baz=154,slow=8.8,SNR=4.7 | | | | | | | | |
| SONM | | | | | LR | | LR | 21 28 59.5 | |
| | comp=Z,88nm,18.2s,baz=156,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **40.88** | **341** | | P | | **P** | **21 09 36.7** | **+0.1** |
| **PKI** | **Pulchoki** | **40.97** | **301** | | *e*P | | **P** | **21 09 38.1** | **+0.1** |
| **GKN** | **Gorkha** | **41.75** | **301** | | *e*P | | **P** | **21 09 44.7** | **+0.5** |
| **KOLN** | **Koldanda** | **42.56** | **300** | | *e*P | | **P** | **21 09 52.2** | **+1.3** |
| **PYUN** | **Piuthan** | **43.17** | **301** | | *e*P | | **P** | **21 09 56.4** | **+0.6** |
| **PALK** | **Pallekele** | **43.60** | **270** | | LR | | LR | 21 30 15.0 | |
| | comp=Z,38nm,19.0s,baz=206,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | **44.54** | **159** | | P | | **P** | **21 10 06.9** | **+0.5** |
| | comp=Z,4.7nm,0.8s,baz=335,slow=10,SNR=3.7 | | | | | | | | |
| **STKA** | **Stephens Creek** | **44.54** | **159** | | P | | **P** | **21 10 05.9** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **50.62** | **25** | | P | | **P** | **21 10 53.4** | **0.0** |
| | comp=Z,2.0nm,0.6s,baz=224,slow=12,SNR=1.8 | | | | | | | | |
| PETK | | | | | LR | | LR | 21 32 07.0 | |
| | comp=Z,41nm,19.6s,baz=141,slow=36 | | | | | | | | |
| **MK31** | **Makanchi Array** | **51.44** | **324** | | P | | **P** | **21 11 00.9** | **+1.2** |
| MK31 | | | | | IAmb | | IAmb | 21 11 01.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.44** | **324** | | P | | **P** | **21 11 01.3** | **+1.6** |
| | comp=Z,4.7nm,0.8s,baz=125,slow=8.1,SNR=33 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.44** | **324** | | P | | **P** | **21 11 00.6** | **+0.9** |
| **MAKZ** | **Makanchi** | **51.63** | **323** | | P | | **P** | **21 11 02.1** | **+1.0** |
| MAKZ | | | | | IAmb | | IAmb | 21 11 03.3 | |
| | comp=Z,8.9nm,1.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **51.77** | **128** | | LR | | LR | 21 34 04.7 | |
| | comp=Z,103nm,18.1s,baz=276,slow=37 | | | | | | | | |
| **YAK** | **Yakutsk** | **52.19** | **3** | | LR | | LR | 21 35 18.4 | |
| | comp=Z,36nm,19.3s,baz=100,slow=38 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.26** | **332** | | P | | **P** | **21 11 20.0** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=94,slow=4.5,SNR=5.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.26** | **332** | | P | | **P** | **21 11 21.0** | **+0.7** |
| **AAK** | **Ala-Archa** | **54.55** | **316** | | P | | **P** | **21 11 24.0** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=162,slow=5.7,SNR=4.3 | | | | | | | | |
| AAK | | | | | LR | | LR | 21 36 18.2 | |
| | comp=Z,61nm,21.0s,baz=92,slow=38 | | | | | | | | |
| **AAK** | **Ala-Archa** | **54.55** | **316** | | P | | **P** | **21 11 22.7** | **-0.2** |
| **KURK** | **Kurchatov** | **55.55** | **326** | | P | | **P** | **21 11 30.4** | **+0.7** |
| **GAR** | **Garm** | **56.39** | **310** | | P | | **P** | **21 11 35.3** | **-0.9** |
| **CHGR** | **Chuyangaron** | **57.18** | **310** | | P | | **P** | **21 11 42.1** | **+0.4** |
| CHGR | | | | | IAmb | | IAmb | 21 11 43.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **57.46** | **315** | | P | | **P** | **21 11 44.3** | **+0.7** |
| **BRVK** | **Borovoye** | **61.21** | **326** | | P | | **P** | **21 12 10.1** | **+0.8** |
| **TIXI** | **Tiksi** | **61.78** | **1** | | P | | **P** | **21 12 12.1** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=136,slow=7.3,SNR=5.4 | | | | | | | | |
| TIXI | | | | | LR | | LR | 21 40 48.3 | |
| | comp=Z,44nm,19.4s,baz=184,slow=38 | | | | | | | | |
| **TIXI** | **Tiksi** | **61.78** | **1** | | IAmb | | IAmb | 21 12 12.4 | |
| | comp=Z,1.6nm,0.8s | | | | | | | | |
| TIXI | | | | | P | | **P** | **21 12 12.9** | **+0.2** |
| **HRA** | **Herat** | **61.83** | **304** | | P | | **P** | **21 12 14.3** | **+0.3** |
| HRA | | | | | IAmb | | IAmb | 21 12 16.1 | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **NRIK** | **Noril'sk** | **64.03** | **346** | | LR | | LR | 21 42 34.6 | |
| | comp=Z,71nm,18.9s,baz=148,slow=38 | | | | | | | | |
| **GEYT** | **Alibeck** | **65.58** | **307** | | P | | **P** | **21 12 38.8** | **+0.2** |
| | comp=Z,3.8nm,0.7s,baz=144,slow=5.3,SNR=5.9 | | | | | | | | |
| **GEYT** | **Alibeck** | **65.58** | **307** | | P | | **P** | **21 12 38.2** | **-0.3** |
| GEYT | | | | | IAmb | | IAmb | 21 12 40.5 | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **66.19** | **320** | | P | | **P** | **21 12 42.5** | **+0.2** |
| **ABKAR** | **Akbulak array** | **66.19** | **320** | | P | | **P** | **21 12 42.6** | **+0.4** |
| ABKAR | | | | | IAmb | | IAmb | 21 12 43.4 | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.67** | **321** | | LR | | LR | 21 44 56.6 | |
| | comp=Z,76nm,18.5s,baz=91,slow=38 | | | | | | | | |
| **ARU** | **Arti** | **68.73** | **327** | | LR | | LR | 21 46 27.7 | |
| | comp=Z,46nm,18.6s,baz=114,slow=39 | | | | | | | | |
| **GNI** | **Garni** | **76.08** | **309** | | LR | | LR | 21 50 52.4 | |
| | comp=Z,28nm,21.0s,baz=20,slow=38 | | | | | | | | |
| **GEVA** | **Gevas** | **77.45** | **307** | | P | | **P** | **21 13 50.2** | **-0.1** |
| GEVA | | | | | IAmb | | IAmb | 21 13 52.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **78.24** | **307** | | P | | **P** | **21 13 54.6** | **-0.1** |
| GURO | | | | | IAmb | | IAmb | 21 13 56.8 | |
| | comp=Z,9.6nm,1.1s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **79.12** | **330** | | *e*P | | **P** | **21 13 57.6** | **-1.2** |
| KLM

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,2μm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.12** | **127** | *eP* | **Pn** | **21 11 58.4** | **-0.9** |
| VA03 | | | | *eS* | **Sn** | **21 12 21.8** | **-4.5** |
| VA03 | | | | IAML | | 21 12 28.6 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **MT02** | **Curacav** | **2.13** | **146** | *i* P | **Pn** | **21 11 58.6** | **-0.6** |
| MT02 | | | | *eS* | **Sn** | **21 12 22.5** | **-3.7** |
| **MT02** | **Curacav** | **2.13** | **146** | *eP* | **Pn** | **21 11 58.7** | **-0.6** |
| MT02 | | | | IAML | | 21 12 33.1 | |
| | comp=Z,412nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **2.28** | **136⇑** | *i* P | **Pn** | **21 12 00.6** | **-0.8** |
| PEL | | | | *eS* | **Sn** | **21 12 27.1** | **-3.1** |
| PEL | | | | IAML | | 21 12 35.2 | |
| | comp=E,621nm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **2.28** | **136** | *eP* | **Pn** | **21 12 00.8** | **-0.7** |
| PEL | | | | *eS* | **Sn** | **21 12 28.3** | **-1.9** |
| **VA05** | **Santo Domingo** | **2.29** | **160** | *eP* | **Pn** | **21 12 01.2** | **-0.3** |
| VA05 | | | | IAML | | 21 12 46.2 | |
| | comp=N,1μm,0.5s | | | | | | |
| **MT05** | **Renca** | **2.44** | **141** | *eP* | **Pn** | **21 12 03.3** | **-0.3** |
| MT05 | | | | *eS* | **Sn** | **21 12 31.0** | **-2.9** |
| MT05 | | | | IAML | | 21 12 43.1 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MT05** | **Renca** | **2.44** | **141** | *eP* | **Pn** | **21 12 03.5** | **-0.1** |
| MT05 | | | | *eS* | **Sn** | **21 12 27.8** | **-6.2** |
| MT05 | | | | IAML | | 21 12 44.1 | |
| | comp=Z,471nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **2.60** | **155** | *eP* | **Pn** | **21 12 05.5** | **-0.3** |
| MT01 | | | | *eS* | **Sn** | **21 12 34.2** | **-3.7** |
| MT01 | | | | IAML | | 21 12 49.6 | |
| | comp=E,290nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **2.60** | **155** | *eP* | **Pn** | **21 12 05.5** | **-0.3** |
| MT01 | | | | *eS* | **Sn** | **21 12 34.2** | **-3.7** |
| MT01 | | | | IAML | | 21 12 52.2 | |
| | comp=Z,260nm,0.6s | | | | | | |
| **MT09** | **Talagante** | **2.63** | **150** | *eP* | **Pn** | **21 12 06.5** | **+0.2** |
| MT09 | | | | *eS* | **Sn** | **21 12 35.0** | **-3.8** |
| MT09 | | | | IAML | | 21 12 50.5 | |
| | comp=N,509nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **2.64** | **139** | *eP* | **Pn** | **21 12 06.1** | **-0.3** |
| MT03 | | | | *eS* | **Sn** | **21 12 37.1** | **-1.8** |
| MT03 | | | | IAML | | 21 12 47.5 | |
| | comp=Z,409nm,0.8s | | | | | | |
| **AUSP** | **Uspallata** | **2.80** | **106** | *eP* | **Pn** | **21 12 09.7** | **+0.9** |
| AUSP | | | | *eS* | **Sn** | **21 12 44.1** | **+0.9** |
| **LCO** | **Las Campanas** | **2.96** | **34** | *eP* | **Pn** | **21 12 11.0** | **0.0** |
| **AROD** | **Rodeo** | **2.98** | **64** | *eP* | **Pn** | **21 12 12.8** | **+1.6** |
| AROD | | | | *eS* | **Sb** | **21 12 52.8** | **-0.8** |
| **BO01** | **Tunca** | **3.14** | **157** | *eP* | **Pn** | **21 12 13.0** | **-0.2** |
| BO01 | | | | *eP* | **Pn** | **21 12 13.0** | **-0.2** |
| BO01 | | | | *eS* | **Sn** | **21 12 48.2** | **-3.0** |
| BO01 | | | | IAML | | 21 13 10.8 | |
| | comp=Z,140nm,0.7s | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.14** | **74** | *eP* | **Pn** | **21 12 15.0** | **+1.5** |
| ACCO | | | | *eS* | **Sn** | **21 12 53.3** | **+1.6** |
| **ASAL** | **Salagasta** | **3.35** | **110** | *eP* | **Pn** | **21 12 18.0** | **+1.8** |
| ASAL | | | | *eS* | **Sb** | **21 13 01.9** | **-2.3** |
| **ARCO** | **CERRO ARCO** | **3.36** | **114** | *eP* | **Pn** | **21 12 19.0** | **+2.6** |
| ARCO | | | | *eS* | **Sn** | **21 13 00.8** | **+3.9** |
| ARCO | | | | IAML | | 21 13 06.2 | |
| | comp=Z,180nm,1.2s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.45** | **97** | *eP* | **Pn** | **21 12 21.3** | **+3.7** |
| RTCV | | | | *eS* | **Sb** | **21 13 08.1** | **+1.1** |
| **RTLL** | **Cerro Villicun** | **3.50** | **88** | *eP* | **Pn** | **21 12 19.0** | **+0.8** |
| RTLL | | | | *eS* | **Sn** | **21 12 55.2** | **-5.0** |
| RTLL | | | | *eS* | **Sn** | **21 12 59.5** | **-0.7** |
| **AC04** | **Llanos de Chal** | **3.54** | **22** | *eP* | **Pn** | **21 12 18.6** | **0.0** |
| AC04 | | | | *eS* | **Sn** | **21 12 59.0** | **-1.9** |
| AC04 | | | | IAML | | 21 13 30.5 | |
| | comp=Z,109nm,1.1s | | | | | | |
| **GO05** | **Huala** | **3.54** | **171** | *eP* | **Pn** | **21 12 19.0** | **+0.3** |
| GO05 | | | | *eS* | **Sn** | **21 12 57.2** | **-3.9** |
| **AAGR** | **Agrelo** | **3.54** | **117** | *eP* | **Pn** | **21 12 21.0** | **+2.2** |
| AAGR | | | | *eS* | **Sb** | **21 13 14.5** | **+4.9** |
| **BO02** | **Sierra Bellavi** | **3.61** | **156** | *eP* | **Pn** | **21 12 20.0** | **+0.3** |
| BO02 | | | | *eS* | **Sn** | **21 13 02.0** | **-0.8** |
| BO02 | | | | IAML | | 21 13 24.3 | |
| | comp=Z,185nm,1.1s | | | | | | |
| **RFA** | **San Rafael** | **4.74** | **135** | *eP* | **Pn** | **21 12 36.0** | **+0.8** |
| **ACLC** | **CERRO LA CRUZ** | **5.27** | **68** | *eP* | **Pn** | **21 12 43.3** | **+0.6** |
| ACLC | | | | *eS* | **Sn** | **21 13 43.3** | **-0.8** |
| **APLL** | **PUNTA DE LOS L** | **5.31** | **80** | *eS* | **Sn** | **21 13 43.6** | **-1.1** |
| **AC01** | **Pan de Azucar** | **5.61** | **18** | *eP* | **Pn** | **21 12 45.8** | **-1.4** |
| **PLCA** | **Paso Flores** | **9.35** | **171** | P | **Pn** | **21 13 39.6** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=350,slow=12,SNR=10.0 | | | | | | |
| **LVC** | **Limon Verde** | **9.44** | **21** | P | Pn | 21 13 56.4 | +16 |
| | comp=Z,0.1nm,0.3s,baz=250,slow=5.2,SNR=1.2 | | | | | | |
| LVC | | | | S | Sn | 21 15 46.4 | +20 |
| | comp=Z,0.4nm,0.3s,baz=221,slow=8.8,SNR=1.9 | | | | | | |
| **CPUP** | **Villa Florida** | **14.30** | **73** | P | **Pn** | **21 14 50.6** | **+4.3** |
| | comp=Z,0.2nm,0.3s,baz=212,slow=9.5,SNR=1.8 | | | | | | |
| CPUP | | | | LR | LR | 21 20 35.2 | |
| | comp=Z,62nm,18.1s,baz=236,slow=39 | | | | | | |
| **SIV** | **San Ignacio** | **18.66** | **37** | LR | LR | 21 23 33.1 | |
| | comp=Z,35nm,20.0s,baz=253,slow=38 | | | | | | |
| **BDFB** | **Brasilia** | **27.40** | **60** | P | **P** | **21 17 09.5** | **-0.3** |
| | comp=Z,1.2nm,0.5s,baz=221,slow=11,SNR=3.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.34** | **331** | P | P | 21 22 28.2 | +8.9 |
| | comp=Z,0.1nm,0.7s,baz=153,slow=8.0,SNR=1.6 | | | | | | |
| **DBIC** | **Dimbokro** | **74.83** | **72** | P | **P** | **21 23 05.3** | **+0.4** |
| | comp=Z,2.2nm,0.5s,baz=242,slow=5.8,SNR=6.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.79** | **71** | P | **P** | **21 23 54.0** | **+0.1** |
| | comp=Z,0.9nm,0.6s,baz=252,slow=7.4,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.31** | **29** | PKPbc | **PKiKP** | **21 31 21.7** | **+1.8** |
| | comp=Z,2.1nm,0.6s,baz=311,slow=3.7,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **155.38** | **44** | PKP | **PKPdf** | **21 31 19.3** | **+1.8** |
| | comp=Z,0.2nm,0.8s,baz=316,slow=4.0,SNR=1.6 | | | | | | |

*TAP **28** 21:41:22.3,24°.88N×122°.46E,h8km±1km, ML2.7, C*
*JMA **28** 21:41:23.4±0.2,24°.79N×122°.44E,h3km±3km, M2.4*

**ISC 28 21:41:23.2±1.0,24°.84N±0°.04×122°.44E±0°.02,h10km±10km, n41,σ0°38/50,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.45** | **292** | *i* P | | **Pg** | **21 41 31.8** | **-0.1** |
| | baz=287 | | | | | | | |
| TWB1 | | | | *i* S | | **Sg** | **21 41 38.1** | **+0.3** |
| | baz=287 | | | | | | | |
| **NTC** | **Toucheng** | **0.56** | **272** | *eP* | | **Pb** | **21 41 35.0** | **0.0** |
| | baz=267 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.57** | **296** | P | | **Pb** | **21 41 35.0** | **-0.4** |
| | baz=293 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.57** | **283** | *i* P | | **Pg** | **21 41 34.6** | **+0.3** |
| | baz=279 | | | | | | | |
| TIPB | | | | S | | **Sb** | **21 41 43.2** | **-0.3** |
| | baz=279 | | | | | | | |
| **TWC** | **Suao** | **0.58** | **247** | *i* P | | **Pg** | **21 41 34.7** | **+0.2** |
| | baz=243 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.60** | **130** | P | | **Pg** | **21 41 34.8** | **0.0** |
| JYNG | | | | S | | **Sg** | **21 41 42.7** | **0.0** |
| **ILA** | **Ilan** | **0.64** | **264** | *eP* | | **Pb** | **21 41 36.2** | **-0.1** |
| | baz=259 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.64** | **126** | P | | **Pg** | **21 41 35.5** | **-0.1** |
| YOJ | | | | *eS* | | **Sg** | **21 41 43.6** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.64** | **126** | P | | **Pg** | **21 41 35.4** | **-0.1** |
| | baz=114 | | | | | | | |
| YOJ | | | | *eS* | | **Sg** | **21 41 44.2** | **+0.2** |
| | baz=114 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.64** | **291** | *i* P | | **Pb** | **21 41 36.5** | **0.0** |
| | baz=287 | | | | | | | |
| NWF | | | | *eS* | | **Sb** | **21 41 46.1** | **+0.5** |
| | baz=287 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.64** | **291** | P | | **Pb** | **21 41 36.6** | **+0.1** |
| | baz=287 | | | | | | | |
| **NDS** | **Dongshan** | **0.69** | **253** | P | | **Pg** | **21 41 36.3** | **-0.2** |
| | baz=238 | | | | | | | |
| **EWUT** | **Wuta** | **0.72** | **237** | P | | **Pg** | **21 41 37.2** | **+0.1** |
| | baz=234 | | | | | | | |
| **ENA** | **Nanau** | **0.76** | **237** | *i* P | | **Pg** | **21 41 38.0** | **+0.1** |
| | baz=224 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.78** | **264** | P | | **Pb** | **21 41 38.9** | **0.0** |
| | baz=249 | | | | | | | |
| **TWA** | **Mucha** | **0.79** | **280** | P | | **Pb** | **21 41 38.9** | **-0.2** |
| | baz=277 | | | | | | | |
| TWA | | | | *eS* | | **Sg** | **21 41 49.3** | **+0.5** |
| | baz=277 | | | | | | | |
| **ENTT** | **Nioudou** | **0.82** | **256** | *i* P | | **Pb** | **21 41 39.3** | **-0.2** |
| | baz=252 | | | | | | | |
| ENTT | | | | S | | **Sn** | **21 41 52.5** | **-0.5** |
| | baz=252 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.84** | **279** | *eP* | | **Pb** | **21 41 40.1** | **+0.3** |
| | baz=276 | | | | | | | |
| **YM08** | **YM08** | **0.85** | **294** | *eP* | | **Pg** | **21 41 39.2** | **-0.4** |
| | baz=292 | | | | | | | |
| **YM01** | **YM01** | **0.85** | **291** | P | | **Pb** | **21 41 39.7** | **-0.3** |
| | baz=289 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.85** | **337** | *eP* | | **Pb** | **21 41 40.1** | **0.0** |
| | baz=336 | | | | | | | |
| **NWLT** | **Wulai** | **0.86** | **266** | *i* P | | **Pb** | **21 41 40.4** | **+0.3** |
| | baz=263 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.88** | **255** | *i* P | | **Pg** | **21 41 40.1** | **0.0** |
| | baz=252 | | | | | | | |
| **LATG** | **Datong** | **0.89** | **250** | *eP* | | **Pb** | **21 41 40.6** | **-0.1** |
| | baz=247 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.96** | **286** | *eP* | | **Pb** | **21 41 41.9** | **-0.1** |
| | baz=283 | | | | | | | |
| **YHNB** | **Yeheng** | **0.98** | **260** | *eP* | | **Pg** | **21 41 41.3** | **-0.8** |
| | baz=270 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.02** | **230** | P | | **Pg** | **21 41 42.0** | **-0.7** |
| | baz=227 | | | | | | | |
| **NNSB** | **Datong** | **1.05** | **247** | *eP* | | **Pg** | **21 41 43.1** | **-0.3** |
| | baz=230 | | | | | | | |
| **NNS** | **Nan Shan** | **1.05** | **248** | P | | **Pg** | **21 41 43.2** | **-0.1** |
| | baz=230 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.08** | **234** | P | | **Pb** | **21 41 43.8** | **-0.1** |
| | baz=231 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.22** | **261** | *eP* | | **Pg** | **21 41 45.7** | **-0.9** |
| | baz=273 | | | | | | | |
| **FUSS** | **Fushou** | **1.24** | **242** | P | | **Pn** | **21 41 47.6** | **+0.8** |
| | baz=239 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.27** | **237** | P | | **Pg** | **21 41 47.3** | **-0.4** |
| | baz=234 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.28** | **113** | P | | **Pb** | **21 41 47.5** | **+0.2** |
| IRIF | | | | *eS* | | **Sg** | **21 42 03.3** | **-1.0** |
| **LIOB** | **Emei** | **1.31** | **262** | *eP* | | **Pg** | **21 41 48.2** | **-0.1** |
| | baz=259 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.33** | **261** | *eP* | | **Pn** | **21 41 47.4** | **-0.3** |
| | baz=259 | | | | | | | |
| **CHGB** | **Renai** | **1.39** | **236** | *eP* | | **Pg** | **21 41 49.9** | **0.0** |
| | baz=233 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.47** | **122** | *eS* | | **Sb** | **21 42 09.5** | **+0.3** |
| **WHP** | **Taichung City** | **1.47** | **248** | *eP* | | **Pn** | **21 41 50.2** | **+0.4** |
| | baz=245 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.55** | **112** | *eS* | | **Sb** | **21 42 12.0** | **+0.4** |
| **JIJ** | **Ishigaki jima** | **1.62** | **107** | P | | **Pg** | **21 41 54.0** | **-0.3** |

*JMA **28** 21:52:54.9,34°.70N×136°.99E,h347km,M2.7*
*IDC **28** 21:52:55.2±3.3,34°.70N×136°.67E,h340km±103km, mb2.6/2,mb1 2.9/3,mb1mx2.5/44,mbtmp3.2/3,Error ellipse: s-maj=230.3km s-min=30.4km az=59.0*

**ISC 28 21:52:54.6±1.1,34°.8N±0°.1×137°.0E±0°.1,h350km,n15, σ1§17/17,Western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JIE** | **Ise** | **0.48** | **208** | P | | **Pn** | **21 53 39.1** | **+0.2** |
| **JYTA** | **Yamagatataniai** | **0.80** | **345** | P | | **Pn** | **21 53 40.2** | **+0.7** |
| **JKN2** | **Miekihoku** | **0.82** | **225** | P | | **Pn** | **21 53 39.5** | **-0.2** |
| **JNY** | **Yasuok** | **0.90** | **53** | P | | **Pn** | **21 53 40.7** | **+0.7** |
| **JWT** | **Wachi** | **1.38** | **290** | P | | **Pn** | **21 53 42.0** | **0.0** |
| **MAT** | **Matsushiro** | **1.99** | **30** | P | | **Pn** | **21 53 47.0** | **+1.2** |
| **MAT** | **Matsushiro** | **1.99** | **30** | P | | **Pn** | **21 53 46.9** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **1.99** | **30** | P | | **Pn** | **21 53 47.2** | **+1.5** |
| | 0.4nm,0.3s,baz=214,slow=7.9,SNR=18 | | | | | | | |
| **JHU** | **Hanno** | **2.14** | **61** | P | | **Pn** | **21 53 48.1** | **+1.3** |
| **JAG** | **Ashikaga** | **2.57** | **51** | P | | **Pn** | **21 53 50.5** | **+0.3** |
| JAG | | | | *eS* | | **S** | **21 54 33.3** | **-1.6** |
| **BSO4** | **Boso 4** | **2.76** | **86** | *eS* | | **S** | **21 54 37.0** | **-0.6** |
| **JHO** | **Hitachi** | **3.42** | **58** | *eS* | | **S** | **21 54 47.0** | **-1.7** |
| **JFK** | **Kawauchi** | **4.05** | **50** | P | | **Pn** | **21 54 04.8** | **+0.8** |
| JFK | | | | *eS* | | **S** | **21 54 58.0** | **-2.0** |
| **MKAR** | **Makanchi Array** | **42.29** | **304** | P | | **P** | **22 00 15.0** | **+0.1** |
| | 0.2nm,0.8s,baz=87,slow=8.9,SNR=2.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.52** | **183** | P | | **P** | **22 01 48.0** | **+0.5** |
| | 0.2nm,0.3s,baz=360,slow=7.6,SNR=5.4 | | | | | | | |

**IDC 28 21:57:12.3±13.0,5°.47S×68°.34E,h0km,mb3.4/3, mb1 3.6/3,mb1mx3.3/35,mbtmp3.4/3,Error ellipse: s-maj=417.1km s-min=45.9km az=66.0,Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **MKAR** | **Makanchi Array** | **53.49** | **12** | P | | P | **22 06 34.2** | **-0.2** |
| | 0.1nm,0.6s,baz=204,slow=6.8,SNR=4.0 | | | | | | | |
| **SONM** | **Songino Array** | **62.73** | **28** | P | | P | **22 07 39.5** | **+0.1** |
| | 0.3nm,0.4s,baz=215,slow=7.2,SNR=6.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.60** | **109** | P | | P | **22 07 58.6** | **-0.1** |
| | 0.3nm,0.7s,baz=283,slow=6.2,SNR=2.6 | | | | | | | |

**NEIC 28 22:05:01.7±0.4,36°.44N±0°.02×98°.77W±0°.02,h6km±4km, mb_Lg2.5/9,Error ellipse: s-maj=2.6km s-min=1.6km az=144.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.20** | **251** | | | Pg | 22 05 05.6 | 0.0 |
| U32A | | | | | | Sg | 22 05 08.9 | +0.6 |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | | IAmb_Lg | | 22 07 15.6 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **N35A** | **Tabor** | **5.04** | **28** | | IAmb_Lg | | 22 07 55.0 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **6.14** | **58** | | IAmb_Lg | | 22 08 14.0 | |
| | comp=Z,3.9nm,0.9s | | | | | | | |

*IDC **28** 22:21:06.3±3.0,21°.10S×178°.59W,h577km±26km, mb3.2/9, mb1 3.5/10,mb1mx3.3/37,mbtmp4.1/10,Error ellipse: s-maj=61.9km s-min=16.4km az=151.0*

**ISC 28 22:21:06.6±1.1,21°.0S±0°.3×178°.6W±0°.2,h579km,n24, σ0°72/25,mb3.5/9,7C-2D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.55** | **316** | P | | **P** | **22 22 34.4** | **-0.5** |
| | 6.0nm,0.3s,baz=146,slow=15,SNR=4.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.85** | **257** | P | | **P** | **22 28 22.6** | **-0.1** |
| | 1.4nm,0.5s,baz=95,slow=7.6,SNR=20 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **22 29 55.8** | **-0.4** |
| | 0.5nm,0.6s,baz=101,slow=3.7,SNR=5.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.97** | **263** | P | | **P** | **22 28 23.1** | **-0.6** |
| | 0.5nm,0.3s,baz=97,slow=7.6,SNR=22 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **22 29 56.0** | **-0.6** |
| | 0.2nm,0.6s,baz=91,slow=2.0,SNR=1.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.40** | **263** | P | | **P** | **22 29 26.6** | **+0.3** |
| | 0.7nm,0.5s,baz=112,slow=8.8,SNR=1.9 | | | | | | | |
| **USRK** | **Usuriysk Ar.** | **79.08** | **326** | P | | **P** | **22 32 12.1** | **+0.5** |
| | 1.4nm,0.7s,baz=132,slow=2.6,SNR=4.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.80** | **44** | P | | **P** | **22 32 26.9** | **+0.7** |
| | 0.8nm,0.6s,baz=223,slow=7.7,SNR=8.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.82** | **58** | P | | **P** | **22 32 56.0** | **+0.6** |
| | 0.4nm,0.8s,baz=216,slow=6.0,SNR=4.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **88.95** | **13** | P | | **P** | **22 32 59.0** | **-0.7** |
| | 0.6nm,0.5s,baz=217,slow=5.1,SNR=10 | | | | | | | |
| **PDAR** | **Pinedale Array** | **89.73** | **43** | P | | **P** | **22 33 04.3** | **+0.1** |
| | 0.8nm,0.6s,baz=199,slow=8.4,SNR=8.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.76** | **290** | P | | **P** | **22 33 06.4** | **+1.9** |
| | 2.1nm,0.3s,baz=108,slow=2.9,SNR=4.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.14** | **313** | PKiKP | | **PKiKP** | **22 38 33.6** | **-1.4** |
| | 0.2nm,0.4s,baz=99,slow=0.5,SNR=6.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.33** | **349** | PKP | | **PKPdf** | **22 39 08.5** | **-0.7** |
| | 2.7nm,0.9s,baz=23,slow=1.7,SNR=6.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.11** | **343** | PKP | | **PKPdf** | **22 39 20.9** | **-1.2** |
| | 1.3nm,0.9s,baz=357,slow=7.6,SNR=5.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.19** | **330** | PKP | | PKPab | 22 39 32.5 | -0.8 |
| | 3.2nm,0.4s,baz=43,slow=4.3,SNR=21 | | | | | | | |
| **SORM** | **Soroca** | **145.35** | **328** | ⇑P | | **PKPbc** | **22 39 40.1** | **-0.2** |
| **BRTR** | **Keskin Array B** | **146.76** | **311** | PKPbc | | **PKPbc** | **22 39 44.2** | **-0.5** |
| | 1.0nm,0.7s,baz=136,slow=4.9,SNR=8.0 | | | | | | | |
| **TLCR** | | **147.00** | **323** | ⇑P | | **PKPbc** | **22 39 44.8** | **-0.1** |
| **BURAR** | **Bucovina Array** | **147.23** | **330** | ⇑P | | **PKPbc** | **22 39 46.1** | **+0.4** |
| **TESR** | **Tescani** | **147.30** | **327** | ⇓P | | **PKPbc** | **22 39 45.6** | **-0.2** |
| **NEHR** | **Nehoiu** | **148.21** | **326** | ⇑P | | **PKPbc** | **22 39 48.1** | **0.0** |
| **VOIR** | | **148.85** | **327** | ⇑P | | **PKPbc** | **22 39 49.7** | **-0.1** |
| **ARR** | **Arges** | **149.11** | **327** | ⇑P | | **PKiKP** | **22 39 51.5** | **+0.3** |
| **BZS** | **Buzias** | **150.38** | **331** | ⇓P | | **PKPbc** | **22 39 53.0** | **-0.3** |
| **HERR** | **Herculane** | **150.55** | **329** | ⇑P | | **PKPbc** | **22 39 53.3** | **-0.4** |

*IDC **28** 22:46:16.0±1.9,6°.91S×130°.02E,h80km±22km,mb3.1/2, mb1 3.7/7,mb1mx3.3/30,mbtmp3.8/7,Error ellipse: s-maj=29.1km s-min=14.1km az=111.0*

**ISC 28 22:46:16.5±0.8,7°.05S±0°.06×130°.1E±0°.1,h104km,n7, σ3§20/12,Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **SIJI** | **Sorong** | **6.26** | **11** | P | | **Pn** | **22 47 44.8** | **-1.6** |
| | 0.6nm,0.3s,baz=247,slow=23,SNR=2.1 | | | | | | | |
| SIJI | | | | S | | **Sn** | **22 48 53.4** | **-3.1** |
| | 4.5nm,0.3s,baz=128,slow=24,SNR=9.7 | | | | | | | |
| **BATI** | **Baumata** | **7.07** | **243** | P | | **Pn** | **22 47 57.7** | **+0.3** |
| | baz=27,slow=6.8,SNR=3.8 | | | | | | | |
| BATI | | | | S | | **Sn** | **22 49 15.8** | **-0.4** |
| | 6.7nm,0.3s,baz=280,slow=23,SNR=2.8 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.80** | **201** | P | | **Pn** | **22 49 01.9** | **+0.5** |
| | 0.8nm,0.3s,baz=30,slow=8.8,SNR=29 | | | | | | | |
| FITZ | | | | S | | **Sn** | **22 51 05.1** | **-6.1** |
| | 1.5nm,0.3s,baz=129,slow=15,SNR=8.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.47** | **163** | P | | **Pn** | **22 49 25.6** | **+2.2** |
| | 1.2nm,0.3s,baz=346,slow=12,SNR=34 | | | | | | | |
| WRA | | | | S | | **Sn** | **22 51 48.2** | **-3.5** |
| | 1.0nm,0.3s,baz=334,slow=23,SNR=7.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **16.93** | **168** | P | | **P** | **22 50 11.6** | **+4.2** |
| | 0.6nm,0.3s,baz=342,slow=9.8,SNR=29 | | | | | | | |
| ASAR | | | | S | | **Sn** | **22 53 13.1** | **-2.2** |
| | 0.2nm,0.3s,baz=341,slow=24,SNR=4.7 | | | | | | | |
| **SONM** | **Songino Array** | **58.51** | **342** | P | | **P** | **22 56 03.2** | **+1.2** |
| | 0.2nm,0.4s,baz=151,slow=8.4,SNR=2.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.31** | **327** | P | | **P** | **22 57 07.4** | **+0.9** |
| | 0.3nm,0.5s,baz=115,slow=7.9,SNR=5.7 | | | | | | | |

*NEIC **28** 23:11:03.5±0.5,10°.3N±0°.1×93°.7E±0°.2,h128km±8km, mb4.0/8,Error ellipse: s-maj=32.1km s-min=6.9km az=52.0*
*IDC **28** 23:11:04.5±6.2,10°.35N×93°.70E,h145km±59km,mb3.3/6, mb1 3.6/7,mb1mx3.1/37,mbtmp3.8/7,Error ellipse: s-maj=40.3km s-min=17.4km az=52.0*
*NDI **28** 23:11:08.7±3.0,11°.10N×94°.10E,h50km,mb4.4, mb4.0(NEIC)*

**ISC 28 23:11:04.6±0.7,10°.36N±0°.09×93°.7E±0°.1,h150km,n36, σ1§37/36,mb3.8/9,Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **PBA** | **Port Blair** | **1.57** | **325** | Pn | | **Pn** | **23 11 32.8** | **-2.1** |
| PBA | | | | Sn | | **Sn** | **23 11 54.3** | **-3.9** |
| **LHMI** | **Lhok Sumawe** | **6.05** | **147** | Pn | | **Pn** | **23 12 29.8** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **9.54** | **32** | P | | **Pn** | **23 13 18.5** | **0.0** |
| | 2.6nm,0.3s,baz=224,slow=14,SNR=6.3 | | | | | | | |
| **PALK** | **Pallekele** | **13.17** | **258** | S | | Sn | 23 16 21.2 | -11 |
| | 0.6nm,0.3s,baz=85,slow=23,SNR=9.3 | | | | | | | |
| **IMP** | **Imphal** | **14.40** | **1** | *eP* | | **Pn** | **23 14 20.2** | **-1.4** |
| IMP | | | | IAmb | | IAmb | 23 14 21.1 | |
| | comp=Z,8.4nm,0.7s | | | | | | | |
| **SHL** | **Shillong** | **15.22** | **354** | | | **Pn** | **23 14 32.8** | **+0.8** |
| SHL | | | | IAmb | | IAmb | 23 14 33.5 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **KOHI** | **KOHIMA** | **15.29** | **2** | *eP* | | **Pn** | **23 14 30.0** | **-2.7** |
| KOHI | | | | *eS* | | Sn | 23 17 12.3 | -11 |
| **TURI** | **Tura** | **15.44** | **349** | *eP* | | **Pn** | **23 14 34.1** | **-0.4** |
| **DHUB** | **DHUBRI** | **15.96** | **348** | *eP* | | **P** | **23 14 43.0** | **+1.5** |
| DHUB | | | | IAmb | | IAmb | 23 14 48.5 | |
| | comp=Z,3μm,14.1s | | | | | | | |
| **LKP** | **Lekhapani** | **17.01** | **7** | *eP* | | **Pn** | **23 14 53.9** | **+0.3** |
| LKP | | | | IAmb | | IAmb | 23 14 55.6 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **ODAN** | **Odare** | **17.45** | **341** | *eP* | | **Pn** | **23 15 00.2** | **+1.1** |
| **RAMN** | **Ramite** | **17.80** | **339** | *eP* | | **Pn** | **23 15 04.2** | **+0.9** |
| | comp=Z,7.3nm,0.4s | | | | | | | |
| **TAPN** | **Taplejung** | **17.81** | **342** | *eP* | | **P** | **23 15 03.4** | **+1.3** |
| **JIRN** | **Jiri** | **18.59** | **339** | *eP* | | **P** | **23 15 12.0** | **+1.3** |
| | comp=Z,13nm,0.3s | | | | | | | |
| **PKI** | **Pulchoki** | **18.80** | **337** | *eP* | | **P** | **23 15 14.1** | **+1.1** |
| **PKIN** | **Phulchoki** | **18.82** | **337** | *eP* | | **P** | **23 15 14.1** | **+1.1** |
| **GUN** | **Gumba** | **18.93** | **338** | *eP* | | **P** | **23 15 15.5** | **+1.1** |
| **KKN** | **Kakani** | **19.05** | **337** | *eP* | | **P** | **23 15 16.4** | **+0.8** |
| **GKN** | **Gorkha** | **19.50** | **335** | *eP* | | **P** | **23 15 21.5** | **+1.2** |
| | comp=Z,34nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **19.74** | **333** | *eP* | | **P** | **23 15 23.5** | **+0.5** |
| **PYUN** | **Piuthan** | **20.30** | **332** | *eP* | | **P** | **23 15 29.7** | **+0.7** |
| **MKAR** | **Makanchi Array** | **37.58** | **347** | P | | **P** | **23 18 05.4** | **+1.0** |
| | comp=Z,0.1nm,0.4s,baz=164,slow=8.9,SNR=6.7 | | | | | | | |
| **MAKZ** | **Makanchi** | **37.66** | **347** | P | | **P** | **23 

comp=Z,364nm,0.4s
**GRTK Grand Turk 1.56 0** *i* P **Pg** **23 34 56.6 -0.2**
GRTK *eS* **Sg** **23 35 18.4 +1.3**
GRTK IAML 23 35 23.1
comp=Z,188nm,0.7s
**LOBA2 Hotel Casa Bon 1.85 178** *i* P **Pb** **23 35 00.7 0.0**
LOBA2 IAML 23 35 36.3
comp=Z,120nm,0.8s
**LGNH Logne 1.98 224** *i* P **Pb** **23 35 02.6 -0.3**
LGNH *eS* **Sg** **23 35 30.2 -0.3**
**LOPE2 Hotel El Peder 1.98 197** *i* P **Pg** **23 35 03.7 -1.0**
**JAKH Jacmel 2.13 218** *i* P **Pb** **23 35 05.2 -0.3**
**MASC Masc 2.91 275** *eP* **Pn** **23 35 13.1 0.0**
MASC *eS* **Sn** **23 35 49.0 +0.8**
MASC *eSg* **Sg** **23 35 59.6 -0.6**
**MOAC Moa 3.65 282** *eP* **Pn** **23 35 23.2 -0.1**
MOAC *eS* **Sn** **23 36 06.1 -0.4**
**CRPR Cabo Rojo, PR 4.28 116** *i* P **Pn** **23 35 31.0 -0.9**
**RCC Rio Carpintero 4.28 272** *eP* **Pn** **23 35 30.8 -1.2**
RCC *eS* **Sn** **23 36 21.9 -0.2**
**CCCC Cccc 6.33 283** *eP* Pn 23 35 54.0 -6.1
CCCC *eS* Sn 23 36 58.3 -14

*IDC **28** 23:45:39.5±1.1, 34°.05N×26°.32E, h0km, mb3.9/6, mb1 3.7/10, mb1mx3.4/55, mbtmp3.6/10, ML3.2/4, Error ellipse: s-maj=21.8km s-min=12.2km az=25.0*
*NEIC **28** 23:45:40.9±1.2, 33°.96N±0°.04×26°.24E±0°.06, h10km±1km, mb4.4/11, Error ellipse: s-maj=9.3km s-min=7.0km az=114.0*
*ATH **28** 23:45:42.2, 34°.21N×26°.25E, h15km±5km, ML2.6/1, Error ellipse: s-maj=8.4km s-min=2.8km az=344.0*
*THE **28** 23:45:44.7, 34°.33N×26°.20E, h0km±6km, ML2.4/1, Error ellipse: s-maj=10.6km s-min=3.1km az=212.0*
**ISC 28 23:45:40.6**±0.7, **34°.11N**±0°.06×**26°.24E**±0°.04, **h10**km, **n46,** σ1§**00**/49, **mb4.1**/12, **Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FRMA** | **Ierapetra Chan** | **1.00** | **335** | P | | **Pn** | **23 46 00.5** | **-0.1** |
| **ZKR** | **Zakros** | **1.00** | **359** | P | | **Pg** | **23 45 58.8** | **-1.1** |
| ZKR | | | | S | | **Sb** | **23 46 12.9** | **-0.5** |
| | 392nm,0.5s | | | | | | | |
| **ZKR** | **Zakros** | **1.00** | **359** | P | | **Pg** | **23 45 58.7** | **-1.2** |
| ZKR | | | | S | | **Sg** | **23 46 12.6** | **-0.4** |
| ZKR | | | | AML | | AML | 23 46 17.0 | |
| | comp=E,1163μm,0.4s | | | | | | | |
| ZKR | | | | AML | | AML | 23 46 24.7 | |
| | comp=N,447μm,0.6s | | | | | | | |
| **NPS** | **Neapolis** | **1.26** | **336** | P | | **Pn** | **23 46 03.5** | **-0.8** |
| **NPS** | **Neapolis** | **1.26** | **336** | P | | **Pn** | **23 46 04.4** | **0.0** |
| **SIVA** | **Sivas** | **1.49** | **308** | P | | **Pg** | **23 46 09.6** | **+0.4** |
| **IDI** | **Anoyia** | **1.62** | **317** | Pg | | **Pg** | **23 46 11.5** | **-0.3** |
| | comp=N,3.7nm,0.3s,baz=147,slow=13,SNR=22 | | | | | | | |
| IDI | | | | Lg | | Lg | 23 46 34.0 | |
| | comp=N,4.9nm,0.3s,baz=330,slow=17,SNR=7.1 | | | | | | | |
| **IDI** | **Anoyia** | **1.62** | **317** | P | | **Pg** | **23 46 11.4** | **-0.3** |
| **IDI** | **Anoyia** | **1.62** | **317** | P | | **Pg** | **23 46 11.7** | **-0.1** |
| **KARP** | **Karpathos** | **1.62** | **28** | P | | **Pg** | **23 46 11.4** | **-0.3** |
| KARP | | | | S | | **Sb** | **23 46 31.2** | **0.0** |
| **KARP** | **Karpathos** | **1.62** | **28** | P | | **Pg** | **23 46 11.7** | **-0.1** |
| **KARP** | **Karpathos** | **1.62** | **28** | Pn | | **Pg** | **23 46 11.5** | **-0.2** |
| **VAM** | **Vamos** | **2.12** | **308** | P | | **Pb** | **23 46 18.4** | **-0.8** |
| **IMMV** | **Iera Moni Meta** | **2.30** | **307** | P | | **Pb** | **23 46 20.9** | **-1.3** |
| **ARG** | **Arkhangelos** | **2.61** | **36** | P | | **Pn** | **23 46 24.9** | **+2.1** |
| **AKAS** | **Kas** | **3.47** | **51** | Pn | | **Pn** | **23 46 35.9** | **+1.0** |
| **ELL** | **Elmali** | **3.98** | **48** | Pn | | **Pn** | **23 46 43.8** | **+1.9** |
| **ITM** | **Ithomi** | **4.66** | **312** | Pn | | **Pn** | **23 46 51.9** | **+0.8** |
| **AGG** | **Agios Georgios** | **5.83** | **328** | | | **Pn** | **23 47 09.1** | **+2.0** |
| **CSS** | **Mathiatis** | **5.91** | **80** | Pn | | **Pn** | **23 47 08.4** | **+0.1** |
| **FNA** | **Florina** | **7.70** | **331** | Pn | | **Pn** | **23 47 34.9** | **+2.0** |
| **MMAI** | **Mount Meron Ar** | **7.72** | **96** | Pn | | **Pn** | **23 47 31.6** | **-1.6** |
| | comp=N,0.4nm,0.3s,baz=283,slow=13,SNR=1.6 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **23 49 00.3** | **-0.4** |
| | comp=N,0.6nm,0.3s,baz=233,slow=26,SNR=1.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **8.15** | **44** | Pn | | **Pn** | **23 47 40.0** | **+0.9** |
| | comp=N,0.1nm,0.3s,baz=220,slow=13,SNR=3.8 | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **8.34** | **107** | Pn | | **Pn** | **23 47 42.8** | **+1.2** |
| **EIL** | **Elat** | **8.62** | **119** | Pn | | **Pn** | **23 47 44.7** | **-0.8** |
| | comp=N,0.3nm,0.3s,baz=334,slow=2.5,SNR=6.5 | | | | | | | |
| **BNN** | **Bunyan** | **9.06** | **56** | Pn | | **Pn** | **23 47 52.9** | **+1.2** |
| **RAFF** | **Raffo Rosso** | **10.15** | **291** | Pn | | **Pn** | **23 48 06.8** | **+0.4** |
| **AKASG** | **Malin Array Be** | **16.72** | **7** | Pn | | **P** | **23 49 36.5** | **-0.7** |
| | comp=N,0.4nm,0.3s,baz=194,slow=11,SNR=4.4 | | | | | | | |
| **AKBB** | **Malin Array Si** | **16.72** | **7** | Pn | | **P** | **23 49 36.3** | **-0.9** |
| **ESBB** | **Sonseca Array** | **24.72** | **292** | P | | **P** | **23 51 02.5** | **+0.4** |
| ESBB | | | | IAmb | | IAmb | 23 51 05.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **ESDC** | **Sonseca Array** | **24.72** | **292** | P | | **P** | **23 51 02.4** | **+0.3** |
| | comp=Z,0.8nm,0.5s,baz=79,slow=9.3,SNR=14 | | | | | | | |
| **ESDC** | **Sonseca Array** | **24.72** | **292** | IAmb | | IAmb | 23 51 03.8 | |
| | comp=Z,0.9nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **27.35** | **360** | P | | **P** | **23 51 26.6** | **+1.1** |
| **EKA** | **Eskdalemuir Ar** | **29.41** | **325** | P | | **P** | **23 51 43.3** | **-0.7** |
| | comp=Z,1.3nm,0.9s,baz=112,slow=9.2,SNR=2.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.53** | **233** | P | | **P** | **23 51 55.5** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=35,slow=8.5,SNR=5.9 | | | | | | | |
| **SOCY** | **Socotra** | **33.38** | **124** | P | | **P** | **23 52 17.8** | **-1.6** |
| SOCY | | | | IAmb | | IAmb | 23 52 23.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.10** | **50** | P | | **P** | **23 53 25.1** | **+0.7** |
| | comp=Z,1.3nm,0.4s,baz=273,slow=8.4,SNR=6.6 | | | | | | | |
| **MK31** | **Makanchi Array** | **43.62** | **56** | P | | **P** | **23 53 45.8** | **+0.7** |
| MK31 | | | | IAmb | | IAmb | 23 53 46.3 | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.62** | **56** | P | | **P** | **23 53 45.7** | **+0.6** |
| | comp=Z,0.8nm,0.6s,baz=268,slow=8.0,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.62** | **56** | P | | **P** | **23 53 45.9** | **+0.8** |
| **ZAA0** | **Zalesovo Array** | **45.09** | **45** | P | | **P** | **23 53 56.0** | **-0.7** |
| ZAA0 | | | | IAmb | | IAmb | 23 53 57.3 | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.09** | **45** | P | | **P** | **23 53 56.9** | **+0.1** |
| | comp=Z,2.1nm,0.5s,baz=271,slow=8.3,SNR=9.9 | | | | | | | |
| **LMQ** | **La Malbaie** | **69.74** | **314** | P | | **P** | **23 56 50.0** | **-0.7** |
| LMQ | | | | IAmb | | IAmb | 23 57 08.5 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **K62A** | **Royalston** | **73.34** | **310** | P | | **P** | **23 57 13.0** | **+0.5** |
| K62A | | | | IAmb | | IAmb | 23 57 15.6 | |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| **DHY** | **Denali Highway** | **83.01** | **357** | P | | **P** | **23 58 07.9** | **+1.9** |
| **M24K** | **Tolsona, Glenn** | **83.92** | **356** | P | | **P** | **23 58 10.9** | **+0.4** |

*IDC **28** 23:58:29.7±1.1, 13°.13N×90°.82W, h0km, mb3.9/10, mb1 4.1/11, mb1mx3.9/35, mbtmp3.9/11, ML3.9/1, MS3.6/11, Ms1 3.6/11, ms1mx3.1/68, Error ellipse: s-maj=31.2km s-min=16.5km az=50.0*
*GCG **28** 23:58:32.5±0.6, 13°.19N×91°.19W, h10km±81km, MD4.1*
*NEIC **28** 23:58:34.1±2.1, 13°.34N±0°.05×90°.82W±0°.03, h10km±1km, mb4.2/21, Md4.0(SNET), Error ellipse: s-maj=9.0km s-min=4.1km az=162.0*
**ISC 28 23:58:33.5**±2.0, **13°.26N**±0°.06×**90°.92W**±0°.04, **h11**km±13km, **n105,** σ1§**43**/94, **mb4.0**/15, **MS3.5**/11, **3C-1D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PCG** | **Pacaya** | **1.16** | **15** | *eP* | | **Pg** | **23 58 56.6** | **+0.7** |
| **FUG** | **Fuego 3** | **1.18** | **3** | *eP* | | **Pb** | **23 58 56.3** | **+0.2** |
| **NUBE** | **Las Nubes** | **1.28** | **60** | *e* | | **Pn** | **23 58 56.9** | **-0.6** |
| NUBE | | | | *eP* | | **Pn** | **23 58 56.9** | **-0.6** |
| NUBE | | | | IAML | | | 23 59 24.8 | |
| | comp=Z,525nm,0.4s | | | | | | | |
| **NUBE** | **Las Nubes** | **1.28** | **60** | *e* | | **Pn** | **23 58 56.9** | **-0.6** |
| NUBE | | | | *eP* | | **Pn** | **23 58 56.9** | **-0.6** |
| NUBE | | | | IAML | | | 23 59 24.8 | |
| | comp=Z,525nm,0.4s | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.34** | **55** | *eP* | | **Pn** | **23 58 58.0** | **-0.2** |
| SLOZ | | | | IAML | | | 23 59 37.9 | |
| | comp=Z,637nm,0.5s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.38** | **66** | *eP* | | **Pn** | **23 58 58.7** | **-0.2** |
| CEVE | | | | IAML | | | 23 59 29.4 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.38** | **66** | *eP* | | **Pn** | **23 58 58.7** | **-0.2** |
| CEVE | | | | IAML | | | 23 59 29.4 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| **SBLS** | **San Blas** | **1.38** | **65** | *eP* | | **Pn** | **23 58 58.8** | **-0.2** |
| **SBLS** | **San Blas** | **1.38** | **65** | *eP* | | **Pn** | **23 58 58.8** | **-0.2** |
| **RTR** | **El Retiro** | **1.39** | **63** | *eP* | | **Pn** | **23 58 59.1** | **+0.1** |
| **RTR** | **El Retiro** | **1.39** | **63** | *eP* | | **Pn** | **23 58 59.1** | **+0.1** |
| **SNJE** | **San Jose** | **1.41** | **64** | *eP* | | **Pn** | **23 58 59.3** | **0.0** |
| SNJE | | | | IAML | | | 23 59 35.2 | |
| | comp=Z,456nm,0.6s | | | | | | | |
| **SNJE** | **San Jose** | **1.41** | **64** | *eP* | | **Pn** | **23 58 59.3** | **0.0** |
| SNJE | | | | IAML | | | 23 59 35.2 | |
| | comp=Z,456nm,0.6s | | | | | | | |
| **NBG** | **Las Nubes** | **1.43** | **23** | *eP* | | **Pn** | **23 59 01.3** | **+1.6** |
| NBG | | | | *eS* | | **Sb** | **23 59 15.9** | **-2.8** |
| **RTAL** | **Retalhuleu** | **1.47** | **329** | Pn | | **Pn** | **23 58 59.2** | **-0.8** |
| RTAL | | | | Sn | | **Sn** | **23 59 18.8** | **-0.4** |
| **RTAL** | **Retalhuleu** | **1.47** | **329** | IAML | | | 23 59 29.5 | |
| | comp=Z,656nm,0.5s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.48** | **74** | *eP* | | **Pn** | **23 58 60.0** | **-0.3** |
| JAYA | | | | IAML | | | 23 59 23.1 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.48** | **74** | *eP* | | **Pn** | **23 58 60.0** | **-0.3** |
| JAYA | | | | IAML | | | 23 59 23.1 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **CEDA** | **San Andres** | **1.57** | **70** | IAML | | | 23 59 34.4 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **CEDA** | **San Andres** | **1.57** | **70** | IAML | | | 23 59 34.4 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **STG3** | **Santiaguito 3,** | **1.58** | **336** | *eP* | | Pn | 23 59 00.4 | -1.2 |
| **TACO** | **Tacachico** | **1.68** | **65** | *eP* | | **Pn** | **23 59 03.3** | **+0.4** |
| TACO | | | | *eS* | | **Sn** | **23 59 26.0** | **+1.7** |
| **TACO** | **Tacachico** | **1.68** | **65** | *eP* | | **Pn** | **23 59 03.3** | **+0.4** |
| TACO | | | | *eS* | | **Sn** | **23 59 26.0** | **+1.7** |
| **SNET** | **Serv Nac Est T** | **1.69** | **75** | Pn | | **Pn** | **23 59 02.4** | **-0.7** |
| **APG** | **El Apazote** | **1.79** | **14** | Pn | | **Pn** | **23 59 05.5** | **+0.9** |
| | comp=Z,65nm,0.3s,baz=162,slow=6.3,SNR=403 | | | | | | | |
| APG | | | | Sn | | **Sn** | **23 59 30.9** | **+3.5** |
| | comp=Z,66nm,0.3s,baz=54,slow=22,SNR=9.7 | | | | | | | |
| **LFRS** | **El Faro** | **1.84** | **78** | *eP* | | **Pn** | **23 59 05.5** | **+0.3** |
| **LFRS** | **El Faro** | **1.84** | **78** | *eP* | | **Pn** | **23 59 05.5** | **+0.3** |
| **MTO3** | **Montecristo** | **1.89** | **53** | Pn | | **Pn** | **23 59 05.2** | **-0.7** |
| **MTO3** | **Montecristo** | **1.89** | **53** | *eP* | | **Pn** | **23 59 06.8** | **+0.8** |
| MTO3 | | | | IAML | | | 23 59 08.4 | |
| | comp=Z,286nm,0.3s | | | | | | | |
| **MTO3** | **Montecristo** | **1.89** | **53** | *eP* | | **Pn** | **23 59 06.8** | **+0.8** |
| MTO3 | | | | IAML | | | 23 59 08.4 | |
| | comp=Z,286nm,0.3s | | | | | | | |
| **SJTE** | **Alcalda de S** | **1.89** | **79** | *eP* | | **Pn** | **23 59 06.1** | **+0.2** |
| SJTE | | | | *eS* | | **Sn** | **23 59 33.7** | **+3.9** |
| **SJTE** | **Alcalda de S** | **1.89** | **79** | *eP* | | **Pn** | **23 59 06.1** | **+0.2** |
| SJTE | | | | *eS* | | **Sn** | **23 59 33.7** | **+3.9** |
| **ESQI** | **Esquipulas** | **2.00** | **50** | Pn | | **Pn** | **23 59 06.6** | **-0.8** |
| **COEG** | **Centro de Oper** | **2.01** | **80** | *eP* | | **Pn** | **23 59 08.1** | **+0.5** |
| COEG | | | | IAML | | | 23 59 49.0 | |
| | comp=Z,727nm,0.5s | | | | | | | |
| **COEG** | **Centro de Oper** | **2.01** | **80** | *eP* | | **Pn** | **23 59 08.1** | **+0.5** |
| COEG | | | | IAML | | | 23 59 49.0 | |
| | comp=Z,727nm,0.5s | | | | | | | |
| **HUEH** | **Huehuetenango** | **2.12** | **345** | Pn | | **Pn** | **23 59 08.7** | **-0.5** |
| **MRL** | **Marmol** | **2.17** | **33** | *eP* | | **Pn** | **23 59 12.2** | **+2.4** |
| **SCLA** | **Alcaldia de Sa** | **2.17** | **78** | *eP* | | **Pn** | **23 59 10.9** | **+1.2** |
| **SCLA** | **Alcaldia de Sa** | **2.17** | **78** | *eP* | | **Pn** | **23 59 10.9** | **+1.2** |
| **COEB** | **Comit de Eme** | **2.33** | **84** | *eP* | | **Pn** | **23 59 12.1** | **+0.1** |
| **COEB** | **Comit de Eme** | **2.33** | **84** | *eP* | | **Pn** | **23 59 12.1** | **+0.1** |
| **CCIG** | **Comitan** | **3.23** | **339** | Pn | | **Pn** | **23 59 24.6** | **+0.2** |
| **PCIG** | | **3.30** | **318** | | | **Pn** | **23 59 26.1** | **+1.0** |
| **TGUH** | **Tegucigalpa,Un** | **3.63** | **77** | | | **Pn** | **23 59 29.1** | **-0.7** |
| **PETF** | **Flores** | **3.77** | **15** | Pn | | **Pn** | **23 59 30.6** | **-1.1** |
| **TGIG** | | **4.10** | **329** | | | **Pn** | **23 59 33.3** | **+4.1** |
| **MATN** | **Matagalpa** | **4.87** | **93** | Pn | | **Pn** | **23 59 44.9** | **-2.0** |
| **BOAB** | **BOACO BROADBAN** | **5.18** | **98** | Pn | | **Pn** | **23 59 54.9** | **+3.8** |
| **CMIG** | **Matias Romero** | **5.40** | **315** | Pn | | **Pn** | **23 59 53.7** | **-0.4** |
| | comp=Z,3.6nm,0.3s,baz=133,slow=9.4,SNR=14 | | | | | | | |
| CMIG | | | | Sn | | **Sn** | **00 00 58.5** | **+2.1** |
| | comp=Z,3.7nm,0.3s,baz=47,slow=11,SNR=2.3 | | | | | | | |
| **CMIG** | **Matias Romero** | **5.40** | **315** | | | **Pn** | **23 59 57.7** | **+3.6** |
| CMIG | | | | | | **Sn** | **00 00 59.6** | **+3.3** |
| **ACON** | **Acoyapa** | **5.75** | **102** | Pn | | Pn | 23 59 55.9 | -3.0 |
| **HZTE** | **Horizontes, Gu** | **5.79** | **115** | Pn | | **Pn** | **00 00 00.4** | **+0.9** |
| **ORTG** | **Ortega, Santa** | **6.07** | **118** | Pn | | **Pn** | **00 00 03.8** | **+0.5** |
| **DUNO** | **Dulce Nombre,** | **6.18** | **120** | Pn | | **Pn** | **00 00 05.0** | **+0.2** |
| **JTS** | **Las Juntas de** | **6.54** | **116** | Pn | | **Pn** | **00 00 11.4** | **+1.6** |
| **JACO** | **JACO, Garabito** | **7.10** | **120** | Pn | | **Pn** | **00 00 17.2** | **-0.2** |
| **RIMA** | **Rio Macho** | **7.73** | **116** | | | **Pn** | **00 00 28.0** | **+1.7** |
| **PEZE** | **Perez Zeledon,** | **8.08** | **118** | Pn | | **Pn** | **00 00 31.7** | **+0.7** |
| **SRBA** | **San Rafael, Bu** | **8.42** | **118** | | | **Pn** | **00 00 37.0** | **+1.2** |
| **TLIG** | **Tlapa** | **8.53** | **301** | Pn | | **Pn** | **00 00 38.9** | **+1.7** |
| **RIOS** | **Rincon, Osa** | **8.56** | **121** | Pn | | **Pn** | **00 00 38.7** | **+1.2** |
| **CDITO** | **Canoas** | **9.17** | **120** | Pn | | **Pn** | **00 00 45.3** | **-0.6** |
| **BRU2** | **Volcan** | **9.21** | **118** | Pn | | **Pn** | **00 00 45.9** | **-0.7** |
| **ZAIG** | **Zacatecas** | **14.56** | **312** | Pn | | **Pn** | **00 02 00.1** | **+0.2** |
| **833A** | **Chaparral WMA,** | **16.94** | **334** | | | **Pn** | **00 02 31.4** | **+0.8** |
| 833A | | | | IAmb | | IAmb | 00 02 43.0 | |
| | comp=Z,21nm,1.7s | | | | | | | |
| **ROSC** | **El Rosal** | **18.39** | **116** | P | | **Pn** | **00 02 48.6** | **-0.5** |
| **TX31** | **Lajitas Ar. Si** | **19.90** | **326** | P | | **P** | **00 03 05.4** | **+0.2** |
| TX31 | | | | IAmb | | IAmb | 00 03 10.4 | |
| | comp=Z,40nm,1.6s | | | | | | | |
| **TX32** | **Lajitas Array** | **19.90** | **326** | P | | **P** | **00 03 05.3** | **0.0** |
| TX32 | | | | IAmb | | IAmb | 00 03 10.4 | |
| | comp=Z,14nm,1.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **19.90** | **326** | P | | **P** | **00 03 05.5** | **+0.2** |
| | comp=Z,2.3nm,0.7s,baz=152,slow=13,SNR=18 | | | | | | | |
| **TXAR** | **Lajitas Array** | **19.90** | **326** | P | | **P** | **00 03 05.0** | **-0.3** |
| **152A** | **Waverly Hall** | **20.14** | **15** | P | | **P** | **00 03 05.8** | **-1.9** |
| **SDV** | **Santo Domingo** | **20.37** | **100** | P | | **P** | **00 03 08.1** | **-2.6** |
| | comp=Z,2.9nm,0.6s,baz=298,slow=5.9,SNR=5.6 | | | | | | | |
| SDV | | | | LR | | LR | 00 13 20.1 | |
| | comp=Z,55nm,18.6s,baz=341,slow=44 | | | | | | | |
| **SDV** | **Santo Domingo** | **20.37** | **100** | P | | **P** | **00 03 09.0** | **-1.7** |
| SDV | | | | IAmb | | IAmb | 00 03 16.8 | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.86** | **339** | P | | **P** | **00 03 14.5** | **-1.2** |
| ABTX | | | | IAmb | | IAmb | 00 03 26.8 | |
| | comp=Z,24nm,1.8s | | | | | | | |
| **GOGA** | **Godfrey** | **21.18** | **17** | P | | **P** | **00 03 17.3** | **-1.7** |
| **OXF** | **Oxford** | **21.20** | **3** | P | | **P** | **00 03 18.3** | **-0.9** |
| OXF | | | | IAmb | | IAmb | 00 03 21.9 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **MIAR** | **Mount Ida** | **21.33** | **354** | P | | **P** | **00 03 19.5** | **-1.1** |
| MIAR | | | | IAmb | | IAmb | 00 03 46.8 | |
| | comp=Z,24nm,1.9s | | | | | | | |
| **X48A** | **Hartselle** | **21.39** | **9** | P | | **P** | **00 03 21.6** | **+0.4** |
| **DR12** | **Loma Pena Alta** | **21.41** | **72** | P | | **P** | **00 03 20.3** | **-1.4** |
| **Y52A** | **Lilburn** | **21.44** | **16** | P | | **P** | **00 03 21.4** | **-0.4** |
| Y52A | | | | IAmb | | IAmb | 00 03 24.1 | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| **HATO** | **Hato, Curacao** | **21.45** | **90** | P | | P | 00 03 18.5 | -3.5 |
| **MNTX** | **Cornudas Mount** | **22.66** | **326** | P | | **P** | **00 03 33.6** | **-1.3** |
| MNTX | | | | IAmb | | IAmb | 00 03 36.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.21** | **15** | P | | **P** | **00 03 39.8** | **-0.8** |
| | comp=Z,2.7nm,0.6s,baz=188,slow=9.8,SNR=6.9 | | | | | | | |
| TKL | | | | LR | | LR | 00 13 37.9 | |
| | comp=Z,129nm,20.0s,baz=180,slow=39 | | | | | | | |
| **S39A** | **Bolivar** | **24.43** | **355** | P | | **P** | **00 03 50.4** | **-1.9** |
| S39A | | | | IAmb | | IAmb | 00 03 51.6 | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| **121A** | **Cookes Peak, D** | **24.62** | **324** | P | | **P** | **00 03 53.8** | **-0.5** |
| 121A | | | | IAmb | | IAmb | 00 04 04.5 | |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **SADO** | **Sadowa** | **32.97** | **15** | LR | | LR | 00 18 47.9 | |
| | comp=Z,98nm,20.9s,baz=180,slow=37 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.91** | **321** | P | | **P** | **00 05 26.2** | **+0.7** |
| | comp=Z,1.4nm,0.6s,baz=132,slow=8.3,SNR=18 | | | | | | | |
| NVAR | | | | PcP | | **PcP** | **00 07 57.0** | **-1.3** |
| | comp=Z,0.4nm,0.6s,baz=131,slow=4.9,SNR=3.6 | | | | | | | |
| NVAR | | | | LR | | LR | 00 21 30.0 | |
| | comp=Z,87nm,20.2s,baz=304,slow=40 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.91** | **321** | P | | **P** | **00 05 25.9** | **+0.4** |
| **LHV** | **Little Huntoon** | **34.92** | **320** | P | | P | 00 05 24.0 | -1.4 |
| LHV | | | | IAmb | | IAmb | 00 06 41.5 | |
| | comp=Z,15nm,1.7s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.11** | **355** | P | | P | 00 05 41.0 | -2.9 |
| | comp=Z,3.9nm,0.6s,baz=163,slow=6.7,SNR=4.3 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.11** | **355** | IAmb | | IAmb | 00 05 45.6 | |
| | comp=Z,22nm,1.7s | | | | | | | |
| **PB06** | **IPOC Station P** | **41.41** | **149** | P | | **P** | **00 06 19.8** | **-0.6** |
| **SIV** | **San Ignacio** | **41.42** | **134** | P | | P | 00 06 18.1 | -2.4 |
| | comp=Z,1.1nm,0.8s,baz=333,slow=11,SNR=4.5 | | | | | | | |
| **SCHQ** | **Schefferville** | **45.56** | **19** | LR | | LR | 00 26 58.4 | |
| | comp=Z,71nm,19.1s,baz=115,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.99** | **346** | P | | P | 00 07 39.7 | -2.9 |
| | comp=Z,0.4nm,0.6s,baz=146,slow=7.9,SNR=6.9 | | | | | | | |
| **FRB** | **Frobisher Bay** | **52.80** | **12** | LR | | LR | 00 31 10.6 | |
| | comp=Z,87nm,19.4s,baz=224,slow=37 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **59.90** | **17** | LR | | LR | 00 34 57.9 | |
| | comp=Z,91nm,18.6s,baz=241,slow=36 | | | | | | | |
| **ILAR** | **Eielson Array** | **63.93** | **337** | P | | P | 00 09 05.0 | -1.4 |
| | comp=Z,0.4nm,0.6s,baz=166,slow=6.0,SNR=6.0 | | | | | | | |
| **M22K** | **Willow** | **64.05** | **333** | P | | **P** | **00 09 08.0** | **+0.9** |
| **JMIC** | **Jan Mayen** | **75.08** | **20** | LR | | LR | 00 45 06.1 | |
| | comp=Z,20nm,18.1s,baz=271,slow=37 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **80.60** | **12** | LR | | LR | 00 48 14.0 | |
| | comp=Z,64nm,19.1s,baz=348,slow=37 | | | | | | | |
| **DBIC** | **Dimbokro** | **84.68** | **84** | P | | P | 00 11 05.4 | -2.8 |
| | comp=Z,2.0nm,0.5s,baz=291,slow=4.7,SNR=5.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.50** | **18** | LR | | LR | 00 51 26.6 | |
| | comp=Z,19nm,18.5s,baz=323,slow=37 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **89.52** | **77** | P | | P | 00 11 27.5 | -4.2 |
| | comp=Z,0.5nm,1.1s,baz=286,slow=3.6,SNR=1.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **90.72** | **25** | LR | | LR | 00 51 00.2 | |
| | comp=Z,21nm,19.4s,baz=335,slow=35 | | | | | | | |

*IDC **29** 00:10:07.5±2.5, 15°.90N×146°.14E, h97km±24km, mb3.4/10, mb1 3.6/11, mb1mx3.5/43, mbtmp3.8/11, MS3.4/1, Ms1 3.4/1, ms1mx2.5/42, Error ellipse: s-maj=27.0km s-min=19.9km az=97.0*
*NEIC **29** 00:10:08.4±1.2, 15°.95N±0°.09×146°.2E±0°.1, h96km±7km, mb4.3/10, Error ellipse: s-maj=18.9km s-min=13.7km az=87.0*
**ISC 29 00:10:08.8**±0.6, **15°.89N**±0°.07×**146°.1E**±0°.1, **h109**km, **n32,** σ0§**82**/27, **mb4.0**/16, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GUMO** | **Guam** | **2.60** | **208** | P | | **Pn** | **00 10 49.6** | **+0.1** |
| | 49nm,0.3s,baz=84,slow=0.8,SNR=10 | | | | | | | |
| GUMO | | | | S | | **Sn** | **00 11 19.2** | **-1.7** |
| | 67nm,0.3s,baz=350,slow=22,SNR=11 | | | | | | | |
| **GUMO** | **Guam** | **2.60** | **208** | | | **Pn** | **00 10 49.5** | **0.0** |
| GUMO | | | | Sn | | **Sn** | **00 11 20.5** | **-0.4** |
| **GUMO** | **Guam** | **2.60** | **208** | P | | **Pn** | **00 10 50.3** | **+0.8** |
| **PATS** | **Pohnpei** | **14.94** | **126** | Pn | | **Pn** | **00 13 33.8** | **-0.6** |
| **H11S3** | **WAKE ISLAND Hy** | **19.80** | **80** | T | | T | 00 35 09.3 | |
| | baz=273,slow=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.81** | **79** | T | | T | 00 35 10.6 | |
| | baz=273,slow=75 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.81** | **80** | T | | T | 00 35 23.8 | |
| | baz=273,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.11** | **76** | T | | T | 00 35 33.9 | |
| | baz=263,slow=74 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.12** | **76** | T | | T | 00 35 33.9 | |
| | baz=263,slow=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.13** | **76** | T | | T | 00 35 35.0 | |
| | baz=263,slow=74 | | | | | | | |
| **JTU** | **Tsushima** | **23.89** | **324** | P | | **P** | **00 15 10.9** | **-1.5** |
| **WB0** | **Warramunga Arr** | **37.27** | **198** | P | | **P** | **00 17 11.2** | **+0.9** |
| WB0 | | | | IAmb | | IAmb | 00 17 19.5 | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **37.45** | **198** | P | | **P** | **00 17 12.4** | **+0.6** |
| WB2 | | | | IAmb | | IAmb | 00 17 13.6 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **198** | P | | **P** | **00 17 11.8** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=28,slow=8.4,SNR=7.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **41.10** | **197** | P | | **P** | **00 17 41.9** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=17,slow=12,SNR=5.3 | | | | | | | |
| **DZM** | **Mont Dzumac** | **42.65** | **152** | P | | **P** | **00 17 55.6** | **+0.7** |
| **LEM** | **Lembang** | **44.32** | **242** | LR | | LR | 00 38 18.7 | |
| | comp=Z,39nm,18.2s,baz=156,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** |

baz=37
**SCRK Sand Creek 4.39 240** P **Pn** 00 20 37.5 -0.1
baz=52
SCRK S **Sn** 00 21 27.3 -1.5
baz=52
**DOT Dot Lake 4.62 237** Pn **Pn** 00 20 40.9 +0.2
DOT Sg **Sg** 00 21 55.7 -3.5
**BVCY Beaver Creek 4.67 214** Pn **Pn** 00 20 42.2 +0.8
**BVCY Beaver Creek 4.67 214** P **Pn** 00 20 41.9 +0.5
baz=28,SNR=9.4
BVCY Sb **Sb** 00 21 51.6 +2.6
baz=28
**L26K Log Cabin Wild 4.83 229** P **Pn** 00 20 44.0 +0.4
baz=42
**RIDG Independent Ri 4.84 241** P **Pn** 00 20 43.6 -0.1
baz=52
**M27K Edge Creek, AK 4.96 218** P **Pn** 00 20 45.4 0.0
baz=32
M27K Sb **Sb** 00 22 00.9 +3.5
baz=32
**ILAR Eielson Array 5.07 257** Pn **Pn** 00 20 47.2 +0.3
0.7nm,0.3s,baz=81,slow=10,SNR=15
ILAR Sn **Sn** 00 21 43.6 -1.8
5.2nm,0.3s,baz=60,slow=30,SNR=5.5
ILAR Lg Lg 00 22 07.2
9.0nm,0.3s,baz=54,slow=27,SNR=7.1
**H24K Noodor Dome 5.14 269** P **Pn** 00 20 47.5 -0.3
baz=78
**POKR Poker Plat Res 5.16 261** P **Pn** 00 20 48.0 0.0
baz=70
**YUK3 Moose Creek 5.16 208** Pn **Pn** 00 20 49.2 +0.8
**YUK3 Moose Creek 5.16 208** P **Pn** 00 20 48.7 +0.4
baz=23
**C36M Paulatuk 5.17 50** Pn **Pn** 00 20 48.0 -0.3
C36M Sn **Sn** 00 21 46.3 -1.6
**C36M Paulatuk 5.17 50** P **Pn** 00 20 48.9 +0.6
baz=240,SNR=44
**M26K Nabesna, AK 5.21 223** P **Pn** 00 20 49.1 +0.1
baz=36,SNR=5.8
M26K S **Sn** 00 21 49.2 +0.2
baz=36
**YUK2 White River 5.23 210** Pn **Pn** 00 20 49.0 -0.1
**YUK4 Talbot Arm 5.29 198** Pn **Pn** 00 20 49.8 -0.3
**YUK4 Talbot Arm 5.29 198** P **Pn** 00 20 49.4 -0.6
baz=14
**COLA College 5.41 259** P **Pn** 00 20 51.5 +0.1
baz=68
**YUK5 Granite Creek 5.41 193** Sg **Sg** 00 22 19.8 -4.7
**YUK8 Steele Glacier 5.50 203** Pn **Pn** 00 20 54.4 +1.3
YUK8 Sg **Sg** 00 22 24.7 -2.6
**PAX Paxson 5.55 236** P **Pn** 00 20 53.9 +0.3
baz=47
**YUK6 Outpost Mounta 5.65 195** Pn **Pn** 00 20 55.9 +0.9
YUK6 Sg **Sg** 00 22 29.6 -2.4
**HYT Haines Junctio 5.68 191** Pn **Pn** 00 20 56.8 +1.4
HYT Pg **Pg** 00 21 17.7 -1.9
HYT Sg **Sg** 00 22 30.4 -2.8
**TGTN Hyland Airport 5.79 144** Pn **Pn** 00 20 58.1 +1.3
**TGTN Hyland Airport 5.79 144** P **Pn** 00 20 57.8 +0.9
baz=330,SNR=7.2
TGTN S **Sn** 00 22 04.0 +0.8
baz=330
**TOLK Toolik Lake Re 5.91 299** P **Pn** 00 21 00.8 +2.4
baz=106
TOLK S **Sn** 00 22 06.6 +0.5
baz=106
**I23K Minto, Yukon-K 5.92 264** P **Pn** 00 20 59.0 +0.6
baz=72
**COLD Coldfoot 5.94 285** Pn **Pn** 00 21 00.3 +1.6
COLD Sn **Sn** 00 22 04.3 -2.4
**COLD Coldfoot 5.94 285** P **Pn** 00 20 59.9 +1.2
baz=91
COLD S **Sn** 00 22 05.5 -1.2
baz=91
**YUK7 Dusty Glacier 6.03 193** Pg **Pg** 00 21 23.6 -2.6
YUK7 Sg **Sg** 00 22 39.8 -4.4
**MCARA McCarthy VSAT 6.08 218** P **Pn** 00 21 01.7 +1.1
baz=30
**CTGM Chitina Glacie 6.08 209** Pn **Pn** 00 21 02.2 +1.4
**PTPK Patty Peak 6.12 214** Pn **Pn** 00 21 03.1 +1.7
PTPK Sn **Sn** 00 22 09.6 -1.8
**DHY Denali Highway 6.14 243** P **Pn** 00 21 02.5 +0.8
baz=52
**LOGN Logan Glacier 6.14 207** Pn **Pn** 00 21 04.6 +2.9
**BALM Baldy 6.22 213** Pn **Pn** 00 21 03.7 +0.9
**KIAG Kiagna River 6.33 213** Pn **Pn** 00 21 07.1 +2.8
**MLY Manley 6.51 265** S **Sn** 00 22 17.8 -3.0
baz=71
**A36M Sachs Harbour 6.65 28** Pn **Pn** 00 21 09.2 +0.8
A36M Sn **Sn** 00 22 22.1 -2.0
**A36M Sachs Harbour 6.65 28** P **Pn** 00 21 09.1 +0.8
baz=218,SNR=26
**BESE Bessie Mountai 7.86 178** Sg **Sg** 00 23 35.8 -6.9
**KUKN Kugluktuk,NWT 8.00 71** Pn **Pn** 00 21 27.1 +0.1
KUKN Sn **Sn** 00 22 53.3 -4.2
**DLBC Dease Lake 8.36 161** Pn **Pn** 00 21 33.7 +1.7
0.4nm,0.3s,baz=352,slow=11,SNR=3.1
DLBC Lg Lg 00 23 53.1
0.4nm,0.3s,baz=97,slow=27,SNR=4.1
**DLBC Dease Lake 8.36 161** Sg **Sg** 00 23 52.7 -6.1
**NBC2 NorthernBC 2 8.82 133** Pn **Pn** 00 21 40.8 +2.5
NBC2 Sn **Sn** 00 23 16.3 -1.2
**FNBB Fort Nelson 9.41 137** Pn **Pn** 00 21 47.4 +1.0
**YKA Yellowknife Ar 9.74 104** Pn **Pn** 00 21 51.0 +0.1
0.5nm,0.3s,baz=301,slow=13,SNR=24
YKA Sn **Sn** 00 23 35.5 -4.7
0.9nm,0.3s,baz=296,slow=23,SNR=4.4
YKA Lg Lg 00 24 33.2
1.0nm,0.3s,baz=58,slow=21,SNR=4.8
**RDOG Red Dog Mine 10.77 291** P **Pn** 00 22 03.5 -1.5
baz=86,SNR=6.8
**RES Resolute Bay 15.44 40** Pn **Pn** 00 23 06.5 -1.8
0.3nm,0.3s,baz=239,slow=11,SNR=9.4
RES Sn **Sn** 00 25 50.3 -8.7
0.5nm,0.3s,baz=154,slow=15,SNR=5.5
**RES Resolute Bay 15.44 40** P **Pn** 00 23 05.4 -2.9
RES S **Sn** 00 25 49.4 -10
**NEW Newport 20.51 143** LR LR 00 32 48.0
comp=Z,123nm,19.2s,baz=247,slow=39
**PDAR Pinedale Array 27.59 136** P **P** 00 25 21.2 +3.0
0.2nm,0.6s,baz=352,slow=5.5,SNR=2.1
PDAR LR LR 00 37 24.7
comp=Z,94nm,19.1s,baz=348,slow=39
**ELK Elko 28.06 146** LR LR 00 38 01.6
comp=Z,109nm,19.0s,baz=215,slow=39
**NVAR Mina Array Bea 29.66 152** P **P** 00 25 40.4 +3.7
1.4nm,1.1s,baz=329,slow=7.1,SNR=5.1
**SADO Sadowa 36.67 98** LR LR 00 43 16.9
comp=Z,62nm,19.3s,baz=340,slow=39
**NRIK Noril'sk 41.31 339** P **P** 00 27 18.2 +2.3
1.1nm,0.5s,baz=40,slow=10,SNR=4.2
**TXAR Lajitas Array 41.81 137** P **P** 00 27 24.2 +3.7
0.3nm,0.7s,baz=352,slow=5.6,SNR=4.8
**TKL Tuckaleechee C 42.68 110** LR LR 00 44 22.0
comp=Z,66nm,20.5s,baz=289,slow=35
**NOA NORSAR Array B 50.49 20** P **P** 00 28 29.7 +1.3
0.5nm,0.8s,baz=343,slow=7.7,SNR=2.8
**FINES FINESS Array B 51.72 11** P **P** 00 28 39.1 +1.6
0.9nm,0.4s,baz=12,slow=10,SNR=14
**SONM Songino Array 56.78 315** P **P** 00 29 17.9 +3.1
1.1nm,1.0s,baz=35,slow=5.3,SNR=5.0
**MKAR Makanchi Array 63.51 332** P **P** 00 30 01.8 +1.0
0.3nm,0.7s,baz=19,slow=6.1,SNR=3.4

*IDC **29** 00:30:19.7±4.5,53.°91N×159.°11E, h148km±34km, mb2.9/2, mb1 2.9/2, mb1mx2.6/34, mbtmp3.3/2, MS3.6/1, Ms1 3.6/1, ms1mx2.5/15, Error ellipse: s-maj=92.6km s-min=48.7km az=28.0*
*KRSC **29** 00:30:21.5±0.8, 53.°59N×158.°99E, h158km±8km, ML3.6*
**ISC 29 00:30:22.9±1.8, 53.°59N±0.°06×158.°99E±0.°07, h155km±11km, n35, σ0§64/44, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **SDLR** | **Sedlovina** | **0.32** | **191** | *eP* | | **Pn** | **00 30 44.3** | **+0.1** |
| **KRER** | **Koryakskii** | **0.32** | **207** | *eP* | | **Pn** | **00 30 44.7** | **+0.4** |
| **SMAR** | **Somma** | **0.34** | **199** | *eP* | | **Pn** | **00 30 44.7** | **+0.3** |
| **AVH** | **Avacha** | **0.35** | **205** | *eP* | | **Pn** | **00 30 44.5** | **+0.2** |
| **KOK** | **Koryaka** | **0.36** | **216** | *eP* | | **Pn** | **00 30 44.5** | **+0.2** |
| **UGLR** | **Uglovaya** | **0.39** | **195** | *eP* | | **Pn** | **00 30 44.6** | **+0.2** |
| **NLC** | **Nalytchevo** | **0.47** | **153** | *eP* | | **Pn** | **00 30 44.7** | **+0.1** |
| NLC | | | | | *eS* | **Sn** | **00 31 01.7** | **+0.7** |
| **KII** | **Karymskiy** | **0.53** | **31** | *eP* | | **Pn** | **00 30 45.0** | **+0.1** |
| **DALK** | **Dalny** | **0.57** | **194** | *i P* | | **Pn** | **00 30 45.1** | **0.0** |
| DALK | | | | | *eS* | **Sn** | **00 31 02.2** | **+0.2** |
| **PET** | **Petropavlovsk** | **0.60** | **200** | *eP* | | **Pn** | **00 30 45.4** | **+0.2** |
| PET | | | | | *eS* | **Sn** | **00 31 02.7** | **+0.5** |
| **GNL** | **Ganaly** | **0.63** | **280** | *eP* | | **Pn** | **00 30 44.6** | **-1.0** |
| **SPN** | **Mys Shipunski** | **0.79** | **128** | *eP* | | **Pn** | **00 30 46.2** | **-0.2** |
| SPN | | | | | *eS* | **Sn** | **00 31 04.2** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **0.91** | **239** | P | | **Pn** | **00 30 45.9** | **-1.5** |
| | 2.2nm,0.3s,baz=50,slow=6.2,SNR=90 | | | | | | | |
| PETK | | | | | S | **Sn** | **00 31 05.6** | **-0.4** |
| | 1.8nm,0.3s,baz=45,slow=20,SNR=8.0 | | | | | | | |
| **KRMR** | **Karymshinskiy** | **0.92** | **215** | *i P* | | **Pn** | **00 30 47.1** | **-0.3** |
| KRMR | | | | | *eS* | **Sn** | **00 31 06.2** | **+0.1** |
| **GRL** | **Gorelyy** | **1.17** | **208** | *eP* | | **Pn** | **00 30 50.3** | **+0.6** |
| **RUS** | **Russkaya** | **1.19** | **194** | *eP* | | **Pn** | **00 30 49.5** | **-0.2** |
| RUS | | | | | *eS* | **Sn** | **00 31 10.2** | **0.0** |
| **MTVR** | **Mutnovka** | **1.21** | **204** | *eP* | | **Pn** | **00 30 50.8** | **+0.7** |
| MTVR | | | | | *eS* | **Sn** | **00 31 12.6** | **+1.8** |
| **APC** | **Apacha** | **1.28** | **240** | *eP* | | **Pn** | **00 30 50.3** | **-0.3** |
| APC | | | | | *eS* | **Sn** | **00 31 11.7** | **-0.1** |
| **TUMR** | **Tumrok** | **1.83** | **21** | *eP* | | **Pn** | **00 30 56.6** | **+0.2** |
| TUMR | | | | | *eS* | **Sn** | **00 31 22.2** | **-0.1** |
| **KDTR** | **Khodutka, Kamc** | **1.86** | **198** | *eP* | | **Pn** | **00 30 56.1** | **-0.6** |
| KDTR | | | | | *eS* | **Sn** | **00 31 21.6** | **-1.0** |
| **MKZ** | **Mys Kozlova** | **1.89** | **58** | *eP* | | **Pn** | **00 30 56.8** | **-0.1** |
| MKZ | | | | | *eS* | **Sn** | **00 31 21.5** | **-1.6** |
| **KMNR** | **Kamenistaya** | **2.29** | **18** | *eP* | | **Pn** | **00 31 02.0** | **+0.3** |
| **KIRR** | **Kirishev** | **2.50** | **18** | *eP* | | **Pn** | **00 31 04.4** | **+0.1** |
| **PAU** | **Pauzhetka** | **2.50** | **213** | *eP* | | **Pn** | **00 31 04.7** | **+0.5** |
| **BZWR** | **Bezymyannyi-We** | **2.54** | **20** | *eP* | | **Pn** | **00 31 05.2** | **+0.4** |
| **BZGR** | **Bezymyannyi-Gr** | **2.56** | **22** | *eP* | | **Pn** | **00 31 05.2** | **+0.2** |
| **ZLN** | **Zelenaya** | **2.65** | **23** | *eP* | | **Pn** | **00 31 07.3** | **+1.2** |
| **LGNR** | **Loginova** | **2.69** | **21** | *eP* | | **Pn** | **00 31 07.2** | **+0.5** |
| **CIRR** | **Tsirk** | **2.73** | **21** | *eP* | | **Pn** | **00 31 07.6** | **+0.5** |
| **KLY** | **Klyuchi** | **2.90** | **19** | *eP* | | **Pn** | **00 31 10.0** | **+1.0** |
| **KBG** | **Krutoberegovo** | **3.43** | **37** | *eP* | | **Pn** | **00 31 15.5** | **-0.2** |
| **KBTR** | **Krutoberegovo** | **3.44** | **39** | *eP* | | **Pn** | **00 31 15.5** | **-0.3** |
| **SONM** | **Songino Array** | **33.15** | **282** | P | | P | 00 36 42.5 | -1.8 |
| | 0.3nm,0.7s,baz=69,slow=5.5,SNR=3.7 | | | | | | | |
| **JOW** | **Kunigami** | **35.07** | **233** | LR | | LR | 00 53 30.9 | |
| | comp=Z,82nm,19.0s,baz=331,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.34** | **295** | P | | P | 00 38 37.4 | -3.5 |
| | 0.4nm,0.5s,baz=54,slow=7.2,SNR=9.3 | | | | | | | |
| MKAR | | | | | PcP | PcP | 00 40 06.0 | -3.0 |
| | 0.1nm,0.7s,baz=57,slow=5.3,SNR=1.7 | | | | | | | |

*IDC **29** 01:05:11.1±1.6,2.°26S×140.°36E, h0km, mb3.9/4, mb1 4.2/5, mb1mx3.9/20, mbtmp4.0/5, ML4.0/1, MS3.6/1, Ms1 3.5/1, ms1mx2.6/61, Error ellipse: s-maj=67.6km s-min=24.2km az=95.0*
*DJA **29** 01:05:13.9±0.4, 3.°S±6.°×14.°0E±.°, h44km±4km, M3.8/5, mb4.8/5, MLv3.2/3*
**ISC 29 01:05:15.6±0.9, 2.°45S±0.°09×140.°22E±0.°05, h35km, n10, σ2§24/13, mb3.8/4, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **0.15** | **200** | P | | **Pn** | **01 05 22.4** | **+0.3** |
| GENI | | | | | S | **Sn** | **01 05 28.2** | **+1.7** |
| **JAY** | **Jayapura** | **0.49** | **98** | P | | **Pn** | **01 05 25.5** | **-0.7** |
| JAY | | | | | S | **Sn** | **01 05 33.6** | **+0.1** |
| **SMPI** | **Sarmi** | **1.58** | **287** | P | | **Pn** | **01 05 39.8** | **-1.3** |
| SMPI | | | | | S | **Sn** | **01 06 02.2** | **+1.9** |
| **AAI** | **Ambon** | **12.07** | **264** | P | | **Pn** | **01 08 03.7** | **-1.6** |
| | 37nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.31** | **198** | P | | **Pn** | **01 09 29.1** | **+2.0** |
| | 0.5nm,0.3s,baz=17,slow=12,SNR=21 | | | | | | | |
| WRA | | | | | S | **Sn** | **01 12 45.3** | **-5.3** |
| | 0.1nm,0.3s,baz=13,slow=25,SNR=4.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.96** | **196** | P | | **P** | **01 10 09.0** | **+2.4** |
| | 7.5nm,0.3s,baz=26,slow=10,SNR=22 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.30** | **178** | LR | | LR | 01 25 44.9 | |
| | comp=Z,108nm,19.7s,baz=11,slow=42 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.51** | **322** | P | | **P** | **01 16 27.7** | **+0.8** |
| | 0.8nm,0.7s,baz=114,slow=7.9,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.48** | **329** | P | | **P** | **01 16 38.6** | **0.0** |
| | 0.4nm,0.5s,baz=108,slow=4.7,SNR=2.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.97** | **24** | P | | **P** | **01 17 46.9** | **-0.2** |
| | 0.5nm,0.8s,baz=273,slow=4.4,SNR=4.8 | | | | | | | |

*DJA **29** 01:20:48.0±0.9, 3.°S±8.°×15.°6E±.°, h10km, M5.0/8, mB5.4/2, mb4.5/8, MLv5.3/1, Mw(mB)4.8/2*
*IDC **29** 01:21:22.2±4.3, 4.°53S×153.°56E, h104km±29km, mb3.8/4, mb1 4.0/6, mb1mx3.5/48, mbtmp4.2/6, MS3.3/6, Ms1 3.3/6, ms1mx2.8/62, Error ellipse: s-maj=47.1km s-min=19.8km az=93.0*
*NEIC **29** 01:21:22.7±1.6, 4.°4S±0.°1×153.°4E±0.°1, h92km±8km, mb4.2/13, Error ellipse: s-maj=21.9km s-min=17.3km az=207.0*
**ISC 29 01:21:19.5±1.0, 4.°37S±0.°10×153.°7E±0.°1, h85km, n43, σ1§29/40, mb4.2/12, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.55** | **276** | | | **Pn** | **01 21 45.7** | **0.0** |
| **RABL** | **Rabaul** | **1.55** | **276** | P | | Pn | 01 21 54.5 | +8.8 |
| **KRVT** | **Keravat (AS076** | **1.68** | **272** | P | | **Pn** | **01 21 49.0** | **+1.7** |
| | baz=270,slow=20 | | | | | | | |
| KRVT | | | | | S | **Sn** | **01 22 09.8** | **+1.2** |
| | baz=143,slow=20 | | | | | | | |
| **PMG** | **Port Moresby** | **8.21** | **232** | P | | **Pn** | **01 23 16.9** | **+1.0** |
| | 4.2nm,0.3s,baz=44,slow=9.7,SNR=11 | | | | | | | |
| PMG | | | | | S | **Sn** | **01 24 45.3** | **-1.8** |
| | 1.9nm,0.3s,baz=319,slow=21,SNR=15 | | | | | | | |
| PMG | | | | LR | | LR | 01 26 38.1 | |
| | comp=Z,109nm,20.0s,baz=76,slow=40 | | | | | | | |
| **PMG** | **Port Moresby** | **8.21** | **232** | Pn | | **Pn** | **01 23 17.5** | **+1.6** |
| **PMG** | **Port Moresby** | **8.21** | **232** | P | | **Pn** | **01 23 18.8** | **+2.9** |
| **COEN** | **Coen** | **14.10** | **227** | | | **Pn** | **01 24 37.5** | **+2.1** |
| **SMPI** | **Sarmi** | **15.16** | **278** | P | | **Pn** | **01 24 46.9** | **-2.2** |
| | 9um23nm,0.7s | | | | | | | |
| **MTSU** | **Mount Surprise** | **16.49** | **213** | P | | **P** | **01 25 07.6** | **+0.7** |
| **CTA** | **Charters Tower** | **17.23** | **204** | P | | **Pn** | **01 25 13.1** | **-1.8** |
| | 0.4nm,0.3s,baz=32,slow=9.5,SNR=1.9 | | | | | | | |
| **QIS** | **Mount Isa** | **21.15** | **219** | P | | **P** | **01 25 59.7** | **+1.8** |
| **RMQ** | **Roma** | **22.50** | **192** | P | | **P** | **01 26 13.1** | **+0.9** |
| | 29nm,0.9s | | | | | | | |
| **KDU** | **Kakadu** | **22.56** | **247** | P | | **P** | **01 26 12.8** | **0.0** |
| **MTN** | **Manton Dam** | **23.84** | **248** | P | | **P** | **01 26 23.4** | **-1.7** |
| MTN | | | | IAmb | | IAmb | 01 26 25.4 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| **QLP** | **Quilpie** | **23.88** | **201** | P | | **P** | **01 26 26.5** | **+1.2** |
| **WB0** | **Warramunga Arr** | **24.27** | **229** | P | | **P** | **01 26 28.2** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | 01 26 30.1 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **24.27** | **229** | P | | **P** | **01 26 27.6** | **-1.4** |
| WR0 | | | | IAmb | | IAmb | 01 26 30.2 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.40** | **229** | P | | **P** | **01 26 30.3** | **+0.2** |
| **WB2** | **Warramunga Arr** | **24.40** | **229** | P | | **P** | **01 26 29.8** | **-0.4** |
| WB2 | | | | IAmb | | IAmb | 01 26 31.4 | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.41** | **229** | P | | **P** | **01 26 29.1** | **-1.2** |
| | comp=Z,7.9nm,0.8s,baz=53,slow=9.9,SNR=51 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **01 30 07.4** | **-0.1** |
| | comp=Z,0.6nm,0.8s,baz=57,slow=3.1,SNR=4.0 | | | | | | | |
| WRA | | | | LR | | LR | 01 35 39.8 | |
| | comp=Z,51nm,18.9s,baz=74,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.41** | **229** | P | | **P** | **01 26 28.8** | **-1.4** |
| **ARMA** | **Armidale** | **25.99** | **184** | P | | **P** | **01 26 45.9** | **+1.3** |
| ARMA | | | | IAmb | | IAmb | 01 26 46.4 | |
| | comp=Z,9.3nm,0.9s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.07** | **29** | T | | T | 01 55 41.9 | |
| | baz=208,slow=76 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.07** | **29** | T | | T | 01 55 39.1 | |
| | baz=208,slow=76 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.09** | **29** | T | | T | 01 55 45.0 | |
| | baz=208,slow=76 | | | | | | | |
| **KNRA** | **Kununurra** | **26.98** | **244** | P | | **P** | **01 26 54.8** | **+1.4** |
| KNRA | | | | IAmb | | IAmb | 01 27 21.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **27.08** | **223** | P | | **P** | **01 26 53.2** | **-1.2** |
| | comp=Z,1.4nm,0.8s,baz=54,slow=8.5,SNR=13 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 30 14.1** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=47,slow=1.8,SNR=4.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.08** | **223** | P | | **P** | **01 26 53.0** | **-1.4** |
| **STKA** | **Stephens Creek** | **29.64** | **201** | P | | **P** | **01 27 15.4** | **-1.6** |
| | comp=Z,4.0nm,0.8s,baz=357,slow=6.4,SNR=8.1 | | | | | | | |
| STKA | | | | LR | | LR | 01 39 09.0 | |
| | comp=Z,58nm,18.7s,baz=25,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **29.64** | **201** | P | | **P** | **01 27 17.0** | **0.0** |
| **BATI** | **Baumata** | **30.35** | **257** | LR | | LR | 01 41 44.7 | |
| | comp=Z,65nm,19.9s,baz=131,slow=40 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.66** | **241** | P | | **P** | **01 27 24.6** | **-1.6** |
| FITZ | | | | IAmb | | IAmb | 01 27 25.9 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **35.70** | **220** | P | | **P** | **01 28 09.3** | **-0.6** |
| **PSI** | **Prapat** | **55.21** | **276** | LR | | LR | 01 58 43.3 | |
| | comp=Z,45nm,18.0s,baz=239,slow=41 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.52** | **295** | P | | **P** | **01 31 08.5** | **+1.0** |
| **MA2** | **Magadan** | **63.78** | **358** | LR | | LR | 01 58 48.5 | |
| | comp=Z,24nm,18.8s,baz=126,slow=35 | | | | | | | |
| **SHL** | **Shillong** | **66.88** | **300** | P | | **P** | **01 32 03.3** | **+0.1** |
| **MK31** | **Makanchi Array** | **80.60** | **319** | P | | **P** | **01 33 23.4** | **+0.5** |
| **MKAR** | **Makanchi Array** | **80.60** | **319** | P | | **P** | **01 33 23.4** | **+0.6** |
| | comp=Z,1.1nm,1.0s,baz=99,slow=4.8,SNR=7.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.60** | **319** | P | | **P** | **01 33 23.5** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **81.30** | **326** | P | | **P** | **01 33 26.0** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **151.03** | **289** | PKPbc | | **PKPbc** | **01 41 03.5** | **-0.2** |
| | comp=Z,2.2nm,0.9s,baz=46,slow=2.7,SNR=9.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.03** | **289** | | | **PKPbc** | **01 41 03.0** | **-0.7** |

*KRNET **29** 01:22:00.3±0.1, 41.°49N×76.°82E, h14km, mb3.5*
*SOME **29** 01:22:00.1, 41.°52N×76.°87E, h10km*
*KNET **29** 01:22:01.4±0.5, 41.°57N×76.°84E, h8km±3km, ml2.8, Error ellipse: s-maj=4.3km s-min=3.2km az=43.0*
*NNC **29** 01:22:01.3±0.8, 41.°50N×76.°86E, h0km, mb3.9, mpv3.6, Error ellipse: s-maj=5.1km s-min=3.7km az=177.0*
**ISC 29 01:22:01.1±1.0, 41.°51N±0.°05×76.°85E±0.°02, h10km, n77, σ1§32/129, 37C-19D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KDJ** | **Kajisay** | **0.67** | **22** | *i P* | | **Pg** | **01 22 13.6** | **-0.5** |
| | baz=24 | | | | | | | |
| KDJ | | | | | *i S* | **Sb** | **01 22 23.2** | **-1.2** |
| | baz=24 | | | | | | | |
| **ULHL** | **Ulahol** | **0.86** | **329** | *i P* | | **Pg** | **01 22 17.0** | **-0.8** |
| | 19nm,0.1s,SNR=30 | | | | | | | |
| ULHL | | | | | *i S* | **Sb** | **01 22 29.6** | **-0.5** |
| | 525nm,0.4s | | | | | | | |
| **ULHL** | **Ulahol** | **0.86** | **329** | *i P* | | **Pg** | **01 22 16.9** | **-0.9** |
| | baz=31 | | | | | | | |
| ULHL | | | | | *i S* | **Sg** | **01 22 28.8** | **-0.3** |
| | baz=31 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.19** | **326** | *i P* | | **Pn** | **01 22 22.9** | **-1.1** |
| | baz=27 | | | | | | | |
| BOOM | | | | | *i S* | **Sb** | **01 22 39.4** | **0.0** |
| | baz=27 | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.41** | **25** | *i P* | | **Pg** | **01 22 27.3** | **-0.9** |
| | baz=26 | | | | | | | |
| ANVS | | | | | *i S* | **Sg** | **01 22 46.9** | **+0.4** |
| | baz=26 | | | | | | | |
| **PRZ** | **Przheval'sk** | **1.51** | **49** | *i P* | | **Pg** | **01 22 29.0** | **-1.1** |
| | baz=49 | | | | | | | |
| PRZ | | | | | *i S* | **Sg** | **01 22 49.8** | **+0.1** |
| | baz=49 | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.53** | **3** | *eP* | | **Pb** | **01 22 29.5** | **-0.3** |
| | 30nm,0.1s | | | | | | | |
| TNSS | | | | | *eS* | **Sg** | **01 22 50.5** | **+0.2** |
| | 93nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.53** | **3** | P | | **Pb** | **01 22 29.5** | **-0.3** |
| | 30nm,0.1s | | | | | | | |
| TNSS | | | | | S | **Sg** | **01 22 50.5** | **+0.2** |
| | 93nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.53** | **3** | *eP* | | **Pb** | **01 22 29.5** | **-0.3** |
| | baz=3.0 | | | | | | | |
| TNSS | | | | | *eS* | **Sg** | **01 22 50.5** | **+0.2** |
| | baz=3.0 | | | | | | | |
| **MTBS** | **Maitube** | **1.65** | **349** | *eP* | | **Pg** | **01 22 31.7** | **-1.0** |
| | 16nm,0.4s | | | | | | | |
| MTBS | | | | | *eS* | **Sg** | **01 22 54.1** | **0.0** |
| | 356nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.65** | **349** | P | | **Pg** | **01 22 31.7** | **-1.0** |
| | 22nm,0.2s | | | | | | | |
| MTBS | | | | | S | **Sg** | **01 22 54.1** | **0.0** |
| | 356nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.65** | **349** | *eP* | | **Pg** | **01 22 31.7** | **-1.0** |
| | baz=50 | | | | | | | |
| MTBS | | | | | *eS* | **Sg** | **01 22 54.1** | **0.0** |
| | baz=50 | | | | | | | |
| **MDOK** | **Medeo** | **1.66** | **5** | *eP* | | **Pg** | **01 22 31.9** | **-1.0** |
| | 26nm,0.2s | | | | | | | |
| MDOK | | | | | *eS* | **Sg** | **01 22 54.3** | **-0.2** |
| | 126nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **1.66** | **5** | *i P* | | **Pb** | **01 22 31.7** | **-0.1** |
| | 20nm,0.4s | | | | | | | |
| MDOK | | | | | *i S* | **Sg** | **01 22 54.0** | **-0.4** |
| | 31nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **1.66** | **5** | Pg | | **Pb** | **01 22 31.8** | **-0.1** |
| | 26nm,0.2s | | | | | | | |
| MDOK | | | | | Lg | Lg | 01 22 54.1 | |
| | 126nm,0.3s | | | | | | | |
| **MDOK** | **Medeo** | **1.66** | **5** | *eP* | | **Pg** | **01 22 31.9** | **-1.0** |
| | baz=6.0 | | | | | | | |
| MDOK | | | | | *eS* | **Sg** | **01 22 54.2** | **-0.2** |
| | baz=6.0 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.69** | **327** | *i P* | | **Pb** | **01 22 32.3** | **-0.1** |
| | 14nm,0.1s,SNR=21 | | | | | | | |
| TKM2 | | | | | *i S* | **Sg** | **01 22 55.4** | **-0.1** |
| | 50nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.69** | **327** | *i P* | | **Pb** | **01 22 32.4** | **-0.1** |
| | 9.5nm,0.3s | | | | | | | |
| TKM2 | | | | | *i S* | **Sg** | **01 22 54.9** | **-0.5** |
| | 27nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.69** | **327** | *i P* | | **Pb** | **01 22 31.9** | **-0.5** |
| | baz=28 | | | | | | | |
| TKM2 | | | | | *i S* | **Sg** | **01 22 54.7** | **-0.7** |
| | baz=28 | | | | | | | |
| **AAA** | **Alma-Ata** | **1.70** | **2** | *eP* | | **Pg** | **01 22 33.5** | **-0.2** |
| | 55nm,0.2s | | | | | | | |
| AAA | | | | | *eS* | **Sg** | **01 22 57.1** | **+1.4** |
| | 185nm,0.5s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.70** | **2** | P | | **Pg** | **01 22 33.6** | **-0.2** |
| | 55nm,0.2s | | | | | | | |
| AAA | | | | | S | **Sg** | **01 22 57.1** | **+1.4** |
| | 185nm,0.5s | | | | | | | |
| **KNDC** | **Almaty** | **1.71** | **3** | *i P* | | **Pg** | **01 22 33.5** | **-0.4** |
| | 47nm,0.5s | | | | | | | |
| KNDC | | | | | *i S* | **Sg** | **01 22 56.8** | **+0.7** |
| | 316nm,0.6s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.73** | **6** | *eP* | | **Pg** | **01 22 33.5** | **-0.9** |
| | 28nm,0.2s | | | | | | | |
| KOTS | | | | | *eS* | **Sg** | **01 22 57.2** | **+0.3** |
| | 233nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.73** | **6** | P | | **Pg** | **01 22 33.5** | **-0.9** |
| | 28nm,0.2s | | |

SATY eS Sg 01 23 02.5 -0.7
109nm,0.2s
**SATY Saty** 1.93 36 Pg Pg 01 22 36.5 -1.6
22nm,0.2s
SATY Lg Lg 01 23 02.5
109nm,0.2s
**SATY Saty** 1.93 36 eP Pg 01 22 36.5 -1.6
baz=36
SATY eS Sg 01 23 02.5 -0.7
baz=36
**ZHN Zhinishke** 2.03 35 eP Pg 01 22 38.4 -1.7
31nm,0.2s
ZHN eS Sg 01 23 05.8 -0.6
153nm,0.2s
**ZHN Zhinishke** 2.03 35 Pg Pg 01 22 38.4 -1.7
31nm,0.2s
ZHN Lg Lg 01 23 05.8
153nm,0.2s
**ZHN Zhinishke** 2.03 35 eP Pg 01 22 38.4 -1.7
baz=35
ZHN eS Sg 01 23 05.8 -0.6
baz=35
**FRU1 Bishkek** 2.10 309⇑iP Pb 01 22 38.8 -0.5
baz=10.0
FRU1 ⇑iS Sb 01 23 06.6 +1.1
baz=10.0
**CHMS Chumysh** 2.15 314 ⇓P Pb 01 22 40.0 -0.2
16nm,0.2s,SNR=31
CHMS ⇑S Sg 01 23 09.5 -0.8
27nm,0.2s
**CHMS Chumysh** 2.15 314⇑iP Pb 01 22 39.1 -1.1
baz=15
CHMS ⇑iS Sb 01 23 07.4 +0.4
baz=15
**KTBS Karatobe** 2.20 357 eP Pg 01 22 42.0 -1.3
20nm,0.6s
KTBS eS Sg 01 23 11.7 -0.2
210nm,0.3s
**KTBS Karatobe** 2.20 357 Pg Pg 01 22 42.0 -1.3
20nm,0.6s
KTBS Lg Lg 01 23 11.7
210nm,0.3s
**KURS Kuram** 2.20 26 eP Pb 01 22 41.2 +0.1
16nm,0.4s
KURS eS Sg 01 23 10.5 -1.4
**KURS Kuram** 2.20 26 Pg Pb 01 22 41.2 +0.1
16nm,0.4s
KURS Lg Lg 01 23 10.5
**UZB Uzynbulak** 2.30 44 eP Pb 01 22 42.7 0.0
16nm,0.3s
UZB eS Sg 01 23 13.0 -1.9
53nm,0.4s
**UZB Uzynbulak** 2.30 44 Pg Pb 01 22 42.7 0.0
16nm,0.3s
UZB Lg Lg 01 23 13.0
53nm,0.4s
**CHKK Chushkaly** 2.34 2 eP Pb 01 22 43.9 +0.4
33nm,0.3s
CHKK eS Sg 01 23 15.4 -1.0
168nm,0.2s
**CHKK Chushkaly** 2.34 2 Pg Pb 01 22 43.9 +0.4
33nm,0.3s
CHKK Lg Lg 01 23 15.4
168nm,0.2s
**KRBS Karabastau** 2.35 339 eP Pg 01 22 44.4 -1.8
15nm,0.3s
KRBS eS Sg 01 23 15.8 -0.9
89nm,0.2s
**KRBS Karabastau** 2.35 339 Pg Pg 01 22 44.4 -1.8
15nm,0.3s
KRBS Lg Lg 01 23 15.7
89nm,0.2s
**KPKS Kokpek** 2.38 34 eP Pg 01 22 44.7 -2.1
24nm,0.2s
KPKS eS Sg 01 23 16.2 -1.4
146nm,0.5s
**KUU Kurty** 2.41 351 eP Pb 01 22 45.1 +0.5
8.3nm,0.3s
KUU eS Sg 01 23 17.1 -1.5
153nm,0.2s
**KUU Kurty** 2.41 351 Pg Pb 01 22 45.2 +0.5
8.3nm,0.3s
KUU Lg Lg 01 23 17.1
153nm,0.2s
**AML Almayashu** 2.44 286 ⇑P Pb 01 22 44.3 -1.0
33nm,0.2s,SNR=67
**USP Ospenovka** 2.47 316⇓iP Pb 01 22 43.5 -2.2
baz=17
USP ⇓iS Sb 01 23 15.1 -1.1
baz=17
**SGDS Sogindy** 2.54 321 eP Pb 01 22 47.6 +0.8
14nm,0.5s
SGDS eS Sg 01 23 21.5 -1.3
32nm,0.4s
**SGDS Sogindy** 2.54 321 Pg Pb 01 22 47.6 +0.8
14nm,0.5s
SGDS Lg Lg 01 23 21.5
32nm,0.4s
**EKS2 Erkin-Say** 2.56 298⇓eP Pb 01 22 44.7 -2.5
baz=98
EKS2 ⇓iS Sb 01 23 16.8 -2.0
baz=98
**PDGK Podgornoye** 2.67 46 Pg Pb 01 22 48.9 -0.2
5.2nm,0.3s
PDGK Lg Lg 01 23 24.0
28nm,0.5s
**PDGK Podgornoye** 2.67 46 ⇑Pg Pb 01 22 48.1 -1.0
5.5nm,0.4s
PDGK ⇓Lg Lg 01 23 24.1
45nm,0.6s
**ARXS Arharly** 2.79 15 eP Pb 01 22 51.5 +0.3
19nm,0.5s
ARXS eS Sg 01 23 29.1 -1.8
116nm,0.5s
**ARXS Arharly** 2.79 15 Pg Pb 01 22 51.5 +0.3
19nm,0.5s
ARXS Lg Lg 01 23 29.1
116nm,0.5s
**MRKS Merke** 2.96 296 eP Pg 01 22 56.0 -2.0
20nm,0.4s
MRKS eS Sg 01 23 36.0 -0.3
34nm,0.4s
**MRKS Merke** 2.96 296 Pg Pg 01 22 56.0 -2.0
20nm,0.4s
MRKS Lg Lg 01 23 36.0
34nm,0.4s
**DJR Jarkent** 3.55 36 eP Pb 01 23 04.6 +0.5
4.9nm,0.6s
DJR eS Sb 01 23 50.4 +3.1
20nm,0.4s
**DJR Jarkent** 3.55 36 Pg Pb 01 23 04.6 +0.5
4.9nm,0.6s
DJR Lg Lg 01 23 50.4
20nm,0.4s
**BTLS Baital** 4.08 331 eP Pb 01 23 14.9 +1.9
8.9nm,0.6s
BTLS eS Sg 01 24 08.3 -3.8
21nm,0.3s
**KAPS Kapalarasan** 4.19 25 eP Pb 01 23 16.6 +1.6
4.5nm,0.7s
KAPS eS Sg 01 24 10.8 -4.8
12nm,0.5s
**BTK Batken** 4.80 254⇑iP Pn 01 23 15.5 +1.9
baz=55
BTK ⇑iS Sn 01 24 10.4 +1.1
baz=55
**KK09 Karatay Array** 4.97 291 ⇑Pg Pb 01 23 31.0 +2.6
1.3nm,0.4s
KK09 ⇓Lg Lg 01 24 36.6
3.4nm,0.5s
**MAKZ Makanchi** 6.45 33 ⇓Pg Pg 01 24 00.6 -4.0
2.9nm,1.4s
MAKZ ⇑Lg Lg 01 25 29.5
3.0nm,1.2s
**MK31 Makanchi Array** 6.57 35 Pn Pn 01 23 41.2 +3.4
0.6nm,0.7s,baz=208,slow=15,SNR=5.5
MK31 ⇓Pg Pg 01 24 03.5 -3.4
0.6nm,0.6s,baz=214,slow=14,SNR=3.8
MK31 ⇑Lg Lg 01 25 30.2
0.9nm,0.7s,baz=217,slow=28
**OTUK Ortayu** 7.46 336 ⇑Lg Lg 01 25 57.1
12nm,1.1s
**KURBB Kurchatov Arra** 9.19 7 ⇓Lg Lg 01 26 53.2
8.3nm,0.8s
**KURK Kurchatov** 9.29 7 ⇑Lg Lg 01 26 58.4
2.5nm,0.7s

*TAP* **29** *01:36:14.6,24.92N×121.73E,h113km,ML4.3,B*
*JMA* **29** *01:36:14.4±0.1,24.87N×121.75E,h110km±2km,M3.7*
*NEIC* **29** *01:36:14.2±1.3,24.88N±0.03×121.77E±0.06,*
*h111km±3km,mb4.0/14,ML4.7(TAP),Error ellipse:*
*s-maj=7.3km s-min=4.9km az=88.0*
*IDC* **29** *01:36:15.3±8.1,24.88N×121.77E,h133km±77km,*
*mb3.3/10,mb1 3.4/10,mb1mx3.2/50,mbtmp3.7/10,Error*
*ellipse: s-maj=39.0km s-min=16.8km az=66.0*
**ISC 29 01:36:14.3±0.6,24.91N±0.03×121.75E±0.02,h116km±4km,**
**n166,σ0.75/267,mb3.7/18,39C-4D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIPB** | **Shuangxi** | **0.09** | **52** | ⇑*i*P | | | **Pn** | **01 36 30.4** | **+0.1** |
| | baz=53 | | | | | | | | |
| TIPB | | | | S | | | **Sn** | **01 36 41.8** | **-0.4** |
| | baz=53 | | | | | | | | |
| **NTC** | **Toucheng** | **0.10** | **127** | ⇓*i*P | | | **Pn** | **01 36 30.5** | **+0.4** |
| | baz=125 | | | | | | | | |
| NTC | | | | S | | | **Sn** | **01 36 41.6** | **-0.5** |
| | baz=125 | | | | | | | | |
| **ILA** | **Ilan** | **0.15** | **179** | ⇓*i*P | | | **Pn** | **01 36 30.7** | **+0.4** |
| | baz=173 | | | | | | | | |
| ILA | | | | *i* S | | | **Sn** | **01 36 43.2** | **+0.9** |
| | baz=173 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.16** | **12** | ⇑*i*P | | | **Pn** | **01 36 30.4** | **0.0** |
| | baz=8.0 | | | | | | | | |
| NWF | | | | *i* S | | | **Sn** | **01 36 42.1** | **-0.5** |
| | baz=8.0 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.16** | **12** | *i* P | | | **Pn** | **01 36 30.6** | **+0.2** |
| | baz=9.0 | | | | | | | | |
| WFSB | | | | *e*S | | | **Sn** | **01 36 42.5** | **+0.1** |
| | baz=9.0 | | | | | | | | |
| **TWA** | **Mucha** | **0.16** | **295** | ⇑*i*P | | | **Pn** | **01 36 30.3** | **0.0** |
| | baz=278 | | | | | | | | |
| TWA | | | | *i* S | | | **Sn** | **01 36 41.8** | **-0.6** |
| | baz=278 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.20** | **284** | ⇑*i*P | | | **Pn** | **01 36 30.4** | **0.0** |
| | baz=272 | | | | | | | | |
| NHDH | | | | S | | | **Sn** | **01 36 41.6** | **-0.9** |
| | baz=272 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.21** | **223** | ⇑*i*P | | | **Pn** | **01 36 30.3** | **-0.2** |
| | baz=232 | | | | | | | | |
| FUSB | | | | *i* S | | | **Sn** | **01 36 41.7** | **-1.0** |
| | baz=232 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.22** | **33** | P | | | **Pn** | **01 36 30.2** | **-0.4** |
| | baz=44 | | | | | | | | |
| SXI1 | | | | S | | | **Sn** | **01 36 42.4** | **-0.4** |
| | baz=44 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.24** | **6** | P | | | **Pn** | **01 36 30.4** | **-0.1** |
| | baz=358 | | | | | | | | |
| TNOU | | | | S | | | **Sn** | **01 36 42.2** | **-0.5** |
| | baz=358 | | | | | | | | |
| **TATO** | **Taipei** | **0.24** | **285** | Pn | | | **Pn** | **01 36 30.3** | **-0.2** |
| TATO | | | | Sn | | | **Sn** | **01 36 41.6** | **-1.1** |
| **TATO** | **Taipei** | **0.24** | **285** | P | | | **Pn** | **01 36 30.1** | **-0.3** |
| | baz=280 | | | | | | | | |
| TATO | | | | S | | | **Sn** | **01 36 41.1** | **-1.6** |
| | baz=280 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.24** | **67** | ⇑*i*P | | | **Pn** | **01 36 30.6** | **+0.1** |
| | baz=70 | | | | | | | | |
| TWB1 | | | | *i* S | | | **Sn** | **01 36 42.4** | **-0.3** |
| | baz=70 | | | | | | | | |
| **TAP** | **Taipei** | **0.25** | **300** | ⇑*i*P | | | **Pn** | **01 36 30.4** | **-0.1** |
| | baz=296 | | | | | | | | |
| TAP | | | | *i* S | | | **Sn** | **01 36 42.1** | **-0.6** |
| | baz=296 | | | | | | | | |
| **NWLT** | **Wulai** | **0.26** | **238** | ⇑*i*P | | | **Pn** | **01 36 30.4** | **-0.3** |
| | baz=229 | | | | | | | | |
| NWLT | | | | *i* S | | | **Sn** | **01 36 41.5** | **-1.4** |
| | baz=229 | | | | | | | | |
| **NDS** | **Dongshan** | **0.28** | **185** | ⇓P | | | **Pn** | **01 36 31.0** | **+0.3** |
| | baz=196 | | | | | | | | |
| NDS | | | | *e*S | | | **Sn** | **01 36 43.0** | **+0.1** |
| | baz=196 | | | | | | | | |
| **BACT** | **New Taipei Cit** | **0.29** | **287** | *e*P | | | **Pn** | **01 36 30.6** | **0.0** |
| | baz=283 | | | | | | | | |
| BACT | | | | *e*S | | | **Sn** | **01 36 42.6** | **-0.4** |
| | baz=283 | | | | | | | | |
| **YM08** | **YM08** | **0.31** | **333** | *e*P | | | **Pn** | **01 36 30.9** | **0.0** |
| | baz=334 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.32** | **211** | ⇑*i*P | | | **Pn** | **01 36 30.9** | **+0.1** |
| | baz=215 | | | | | | | | |
| ENTT | | | | S | | | **Sn** | **01 36 42.9** | **-0.4** |
| | baz=215 | | | | | | | | |
| **TWC** | **Suao** | **0.32** | **163** | ⇑*i*P | | | **Pn** | **01 36 31.4** | **+0.6** |
| | baz=160 | | | | | | | | |
| TWC | | | | S | | | **Sn** | **01 36 44.6** | **+1.4** |
| | baz=160 | | | | | | | | |
| **ANP** | **Anpu** | **0.34** | **323** | *e*P | | | **Pn** | **01 36 30.7** | **-0.3** |
| | baz=329 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.35** | **302** | ⇑*i*P | | | **Pn** | **01 36 31.1** | **+0.1** |
| | baz=294 | | | | | | | | |
| TWS1 | | | | S | | | **Sn** | **01 36 43.1** | **-0.4** |
| | baz=294 | | | | | | | | |
| **NTST** | **Danshui** | **0.37** | **313** | *e*P | | | **Pn** | **01 36 31.1** | **0.0** |
| | baz=317 | | | | | | | | |
| NTST | | | | *e*S | | | **Sn** | **01 36 43.6** | **+0.1** |
| | baz=317 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.37** | **214** | ⇑*i*P | | | **Pn** | **01 36 31.2** | **+0.1** |
| | baz=222 | | | | | | | | |
| NDT | | | | S | | | **Sn** | **01 36 43.0** | **-0.7** |
| | baz=222 | | | | | | | | |
| **TWY** | **Chenhua** | **0.38** | **340** | ⇑*i*P | | | **Pn** | **01 36 31.3** | **+0.2** |
| | baz=342 | | | | | | | | |
| TWY | | | | *i* S | | | **Sn** | **01 36 43.2** | **-0.5** |
| | baz=342 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.41** | **234** | Pn | | | **Pn** | **01 36 30.9** | **-0.5** |
| YHNB | | | | Sn | | | **Sn** | **01 36 42.9** | **-1.3** |
| **YHNB** | **Yeheng** | **0.41** | **234** | ⇑*i*P | | | **Pn** | **01 36 31.1** | **-0.2** |
| | baz=227 | | | | | | | | |
| YHNB | | | | *i* S | | | **Sn** | **01 36 43.1** | **-1.1** |
| | baz=227 | | | | | | | | |
| **NTY** | **Taoyuan** | **0.41** | **282** | *i* P | | | **Pn** | **01 36 31.5** | **+0.3** |
| | baz=285 | | | | | | | | |
| **LATG** | **Datong** | **0.42** | **208** | ⇑*i*P | | | **Pn** | **01 36 31.8** | **+0.3** |
| | baz=210 | | | | | | | | |
| LATG | | | | S | | | **Sn** | **01 36 44.1** | **-0.3** |
| | baz=210 | | | | | | | | |
| **EWUT** | **Wuta** | **0.47** | **176** | *e*P | | | **Pn** | **01 36 31.9** | **+0.3** |
| | baz=184 | | | | | | | | |
| EWUT | | | | *e*S | | | **Sn** | **01 36 45.5** | **+1.0** |
| | baz=184 | | | | | | | | |
| **ENA** | **Nanau** | **0.48** | **180** | ⇑P | | | **Pn** | **01 36 32.0** | **+0.3** |
| | baz=190 | | | | | | | | |
| ENA | | | | *e*S | | | **Sn** | **01 36 46.1** | **+1.4** |
| | baz=190 | | | | | | | | |
| **NCU** | **National Centr** | **0.51** | **276** | ⇑*i*P | | | **Pn** | **01 36 32.0** | **+0.2** |
| | baz=271 | | | | | | | | |
| NCU | | | | *i* S | | | **Sn** | **01 36 45.0** | **0.0** |
| | baz=271 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.51** | **276** | P | | | **Pn** | **01 36 32.0** | **+0.2** |
| | baz=271 | | | | | | | | |
| NCUH | | | | *e*S | | | **Sn** | **01 36 44.7** | **-0.3** |
| | baz=271 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.58** | **216** | ⇑*i*P | | | **Pn** | **01 36 32.6** | **+0.2** |
| | baz=215 | | | | | | | | |
| NNS | | | | S | | | **Sn** | **01 36 45.8** | **-0.3** |
| | baz=215 | | | | | | | | |
| **NNSB** | **Datong** | **0.58** | **214** | ⇑*i*P | | | **Pn** | **01 36 32.7** | **+0.2** |
| | baz=214 | | | | | | | | |
| NNSB | | | | S | | | **Sn** | **01 36 45.6** | **-0.6** |
| | baz=214 | | | | | | | | |
| **NJD** | **Zhudong** | **0.62** | **254** | *i* P | | | **Pn** | **01 36 33.0** | **+0.4** |
| | baz=253 | | | | | | | | |
| NJD | | | | *i* S | | | **Sn** | **01 36 46.3** | **-0.1** |
| | baz=253 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.64** | **244** | ⇑*i*P | | | **Pn** | **01 36 32.7** | **-0.1** |
| | baz=239 | | | | | | | | |
| NFF | | | | *i* S | | | **Sn** | **01 36 45.9** | **-0.8** |
| | baz=239 | | | | | | | | |
| **NHW** | **Xinwu Township** | **0.64** | **279** | P | | | **Pn** | **01 36 33.2** | **+0.5** |
| | baz=274 | | | | | | | | |
| **HSN1** | **Hsinchu** | **0.67** | **259** | *i* P | | | **Pn** | **01 36 33.4** | **+0.4** |
| | baz=259 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.70** | **260** | ⇑P | | | **Pn** | **01 36 33.5** | **+0.3** |
| | baz=260 | | | | | | | | |
| SBCB | | | | S | | | **Sn** | **01 36 47.2** | **-0.2** |
| | baz=260 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.71** | **261** | ⇑*i*P | | | **Pn** | **01 36 33.3** | **+0.1** |
| | baz=257 | | | | | | | | |
| HSN | | | | *i* S | | | **Sn** | **01 36 47.1** | **-0.5** |
| | baz=257 | | | | | | | | |
| **LIOB** | **Emei** | **0.71** | **248** | ⇑*i*P | | | **Pn** | **01 36 33.6** | **+0.3** |
| | baz=248 | | | | | | | | |
| LIOB | | | | S | | | **Sn** | **01 36 47.2** | **-0.5** |
| | baz=248 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.73** | **248** | ⇑*i*P | | | **Pn** | **01 36 33.7** | **+0.2** |
| | baz=243 | | | | | | | | |
| NSTT | | | | *i* S | | | **Sn** | **01 36 47.3** | **-0.6** |
| | baz=243 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.74** | **199** | P | | | **Pn** | **01 36 33.6** | **-0.1** |
| | baz=198 | | | | | | | | |
| ETLH | | | | S | | | **Sn** | **01 36 47.6** | **-0.7** |
| | baz=198 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.75** | **191** | Pn | | | **Pn** | **01 36 32.8** | **-0.8** |
| NACB | | | | Sn | | | **Sn** | **01 36 47.0** | **-1.2** |
| **NACB** | **Ninganchiao** | **0.75** | **191** | ⇑*i*P | | | **Pn** | **01 36 32.8** | **-0.8** |
| | baz=195 | | | | | | | | |
| NACB | | | | S | | | **Sn** | **01 36 47.2** | **-1.0** |
| | baz=195 | | | | | | | | |
| **ETL** | **Fush Village** | **0.76** | **188** | *e*P | | | **Pn** | **01 36 33.0** | **-0.8** |
| | baz=194 | | | | | | | | |
| ETL | | | | *e*S | | | **Sn** | **01 36 47.6** | **-0.9** |
| | baz=194 | | | | | | | | |
| **FUSS** | **Fushou** | **0.80** | **215** | ⇑*i*P | | | **Pn** | **01 36 35.2** | **+0.8** |
| | baz=208 | | | | | | | | |
| FUSS | | | | *i* S | | | **Sn** | **01 36 50.0** | **+0.5** |
| | baz=208 | | | | | | | | |
| **TWD** | **Chiawan** | **0.84** | **189** | ⇓*i*P | | | **Pn** | **01 36 33.7** | **-0.7** |
| | baz=196 | | | | | | | | |
| TWD | | | | *i* S | | | **Sn** | **01 36 48.4** | **-1.3** |
| | baz=196 | | | | | | | | |
| **TDCB** | **Techi** | **0.85** | **219** | ⇑*i*P | | | **Pn** | **01 36 35.1** | **+0.5** |
| | baz=226 | | | | | | | | |
| TDCB | | | | *i* S | | | **Sn** | **01 36 49.7** | **-0.3** |
| | baz=226 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.88** | **210** | ⇑*i*P | | | **Pn** | **01 36 35.8** | **+0.5** |
| | baz=203 | | | | | | | | |
| WHF | | | | *i* S | | | **Sn** | **01 36 51.4** | **+0.3** |
| | baz=203 | | | | | | | | |
| **HWA** | **Hwalien** | **0.94** | **188** | P | | | **Pn** | **01 36 35.1** | **-0.3** |
| | baz=194 | | | | | | | | |
| HWA | | | | S | | | **Sn** | **01 36 52.3** | **+1.0** |
| | baz=194 | | | | | | | | |
| **NMLH** | **Miaoli** | **0.94** | **247** | ⇑P | | | **Pn** | **01 36 35.7** | **+0.3** |
| | baz=247 | | | | | | | | |
| NMLH | | | | S | | | **Sn** | **01 36 51.2** | **-0.2** |
| | baz=247 | | | | | | | | |
| **WHP** | **Taichung City** | **0.96** | **229** | ⇑*i*P | | | **Pn** | **01 36 36.2** | **+0.5** |
| | baz=222 | | | | | | | | |
| WHP | | | | *i* S | | | **Sn** | **01 36 51.6** | **-0.2** |
| | baz=222 | | | | | | | | |
| **ETM** | **Tongmen** | **0.97** | **194** | *i* P | | | **Pn** | **01 36 35.2** | **-0.5** |
| | baz=193 | | | | | | | | |
| ETM | | | | *e*S | | | **Sn** | **01 36 50.9** | **-0.9** |
| | baz=193 | | | | | | | | |
| **CHGB** | **Renai** | **1.00** | **212** | ⇑*i*P | | | **Pn** | **01 36 37.0** | **+0.8** |
| | baz=219 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.05** | **238** | ⇑P | | | **Pn** | **01 36 36.6** | **+0.2** |
| | baz=238 | | | | | | | | |
| TWQ1 | | | | S | | | **Sn** | **01 36 52.9** | **-0.3** |
| | baz=238 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.05** | **187** | *i* P | | | **Pn** | **01 36 36.7** | **+0.2** |
| | baz=194 | | | | | | | | |
| **WUSB** | **Renai** | **1.08** | **212** | ⇑*i*P | | | **Pn** | **01 36 37.6** | **+0.7** |
| | baz=212 | | | | | | | | |
| WUSB | | | | S | | | **Sn** | **01 36 54.2** | **+0.2** |
| | baz=212 | | | | | | | | |
| **ESL** | **Shilin** | **1.13** | **195** | P | | | **Pn** | **01 36 36.3** | **-1.0** |
| | baz=194 | | | | | | | | |
| ESL | | | | S | | | **Sn** | **01 36 53.1** | **-1.6** |
| | baz=194 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.14** | **222** | *e*P | | | **Pn** | **01 36 37.9** | **+0.4** |
| | baz=227 | | | | | | | | |
| WCS | | | | *e*S | | | **Sn** | **01 36 54.8** | **-0.1** |
| | baz=227 | | | | | | | | |
| **WPL** | **Puli Township** | **1.15** | **219** | *i* P | | | **Pn** | **01 36 38.1** | **+0.6** |
| | baz=225 | | | | | | | | |
| WPL | | | | S | | | **Sn** | **01 36 55.1** | **+0.1** |
| | baz=225 | | | | | | | | |
| **DPDB** | **Guoxing** | **1.15** | **221** | *i* P | | | **Pn** | **01 36 38.3** | **+0.7** |
| | baz=226 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.15** | **241** | *e*P | | | **Pn** | **01 36 37.7** | **+0.2** |
| | baz=235 | | | | | | | | |
| WDJ | | | | *e*S | | | **Sn** | **01 36 56.0** | **+0.8** |
| | baz=235 | | | | | | | | |
| **JYNG** | **Yonaguniijimaku** | **1.19** | **113** | P | | | **Pn** | **01 36 37.7** | **-0.2** |
| JYNG | | | | S | | | **Sn** | **01 36 54.6** | **-1.1** |
| **TCU** | **Taichung** | **1.24** | **232** | *e*S | | | **Sn** | **01 36 57.0** | **+0.3** |
| | baz=232 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.24** | **111** | P | | | **Pn** | **01 36 38.3** | **-0.1** |
| YOJ | | | | S | | | **Sn** | **01 36 56.3** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **1.24** | **111** | Pn | | | **Pn** | **01 36 37.5** | **-0.9** |
| YOJ | | | | Sn | | | **Sn** | **01 36 55.2** | **-1.5** |
| **YOJ** | **Yonaguni jima** | **1.24** | **111** | P | | | **Pn** | **01 36 37.4** | **-0.9** |
| | baz=115 | | | | | | | | |
| YOJ | | | | S | | | **Sn** | **01 36 55.2** | **-1.5** |
| | baz=115 | | | | | | | | |
| **VWDT** | **VWDT** | **1.28** | **206** | ⇑P | | | **Pn** | **01 36 39.7** | **+0.8** |
| | baz=211 | | | | | | | | |
| VWDT | | | | S | | | **Sn** | **01 36 59.5** | **+2.0** |
| | baz=211 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.28** | **217** | ⇑*i*P | | | **Pn** | **01 36 39.6** | **+0.5** |
| | baz=217 | | | | | | | | |
| SMLT | | | | S | | | **Sn** | **01 36 58.1** | **+0.3** |
| | baz=217 | | | | | | | | |
| **WWF** | **Wufeng** | **1.29** | **228** | *e*P | | | **Pn** | **01 36 38.9** | **-0.1** |
| | baz=237 | | | | | | | | |
| **TYC** | **Yuchr** | **1.29** | **219** | ⇑*i*P | | | **Pn** | **01 36 39.5** | **+0.5** |
| | baz=227 | | | | | | | | |
| TYC | | | | *i* S | | | **Sn** | **01 36 58.1** | **+0.3** |
| | baz=227 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.33** | **213** | Pn | | | **Pn** | **01 36 39.6** | **0.0** |
| **SSLB** | **Suanglung** | **1.33** | **213** | ⇑*i*P | | | **Pn** | **01 36 40.0** | **+0.5** |
| | baz=213 | | | | | | | | |
| SSLB | | | | S | | | **Sn** | **01 36 58.6** | **-0.1** |
| | baz=213 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.36** | **233** | *e*P | | | **Pn** | **01 36 40.2** | **+0.4** |
| | baz=233 | | | | | | | | |
| WCHH | | | | *e*S | | | **Sn** | **01 36 59.4** | **+0.2** |
| | baz=233 | | | | | | | | |
| **WNT1** | **Nantou City** | **1.40** | **224** | P | | | **Pn** | **01 36 41.1** | **+0.9** |
| | baz=232 | | | | | | | | |
| WNT1 | | | | *e*S | | | **Sn** | **01 37 00.6** | **+0.7** |
| | baz=232 | | | | | | | | |
| **WNT** | **Mingjian** | **1.41** | **223** | *i* P | | | **Pn** | **01 36 41.2** | **+0.8** |
| | baz=223 | | | | | | | | |
| WNT | | | | *e*S | | | **Sn** | **01 37 00.7** | **+0.4** |
| | baz=223 | | | | | | | | |
| **WJS** | **Zhushan** | **1.43** | **221** | *e*P | | | **Pn** | **01 36 41.1** | **+0.5** |
| | baz=229 | | | | | | | | |
| WJS | | | | *e*S | | | **Sn** | **01 37 00.6** | **0.0** |
| | baz=229 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.45** | **192** | P | | | **Pn** | **01 36 41.1** | **+0.2** |
| | baz=196 | | | | | | | | |
| HGSD | | | | S | | | **Sn** | **01 37 02.0** | **+1.0** |
| | baz=196 | | | | | | | | |
| **EHY** | **Hungye** | **1.45** | **195** | *e*P | | | **Pn** | **01 36 39.9** | **-1.0** |
| | baz=189 | | | | | | | | |
| **YULB** | **Yu-li** | **1.57** | **195** | Pn | | | **Pn** | **01 36 41.0** | **-1.3** |
| **YULB** | **Yu-li** | **1.57** | **195** | *e*S | | | **Sn** | **01 37 02.5** | **-1.0** |
| | baz=187 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.59** | **207** | ⇑*i*P | | | **Pn** | **01 36 43.9** | **+0.8** |
| | baz=215 | | | | | | | | |
| YUS | | | | *i* S | | | **Sn** | **01 37 06.0** | **+1.2** |
| | baz=215 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.60** | **231** | *e*P | | | **Pn** | **01 36 42.8** | **+0.1** |
| | baz=225 | | | | | | | | |
| WRL | | | | *e*S | | | **Sn** | **01 37 03.1** | **-1.1** |
| | baz=225 | | | | | | | | |
| **EYUL** | **Yuli** | **1.61** | **194** | *e*P | | | **Pn** | **01 36 44.2** | **+1.4** |
| | baz=192 | | | | | | | | |
| **TWF1** | **Yuli** | **1.61** | **195** | *e*P | | | **Pn** | **01 36 41.7** | **-1.1** |
| | baz=191 | | | | | | | | |
| **ALS** | **Alishan** | **1.64** | **212** | ⇑*i*P | | | **Pn** | **01 36 44.0** | **+0.6** |
| | baz=211 | | | | | | | | |
| ALS | | | | *i* S | | | **Sn** | **01 37 06.1** | **+0.5** |
| | baz=211 | | | | | | | | |
| **WDLH** | **Douliu** | **1.64** | **222** | *e*P | | | **Pn** | **01 36 43.4** | **+0.3** |
| | baz=222 | | | | | | | | |
| WDLH | | | | *e*S | | | **Sn** | **01 37 05.1** | **0.0** |
| | baz=222 | | | | | | | | |
| **WTK** | **Tuku** | **1.74** | **226** | *e*P | | | **Pn** | **01 36 44.0** | **-0.3** |
| | baz=226 | | | | | | | | |
| **FULB** | **Fuli** | **1.76** | **194** | *e*P | | | **Pn** | **01 36 45.0** | **+0.4** |
| | baz=193 | | | | | | | | |
| FULB | | | | *e*S | | | **Sn** | **01 37 08.2** | **+0.6** |
| | baz=193 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.84** | **191** | P | | | **Pn** | **01 36 45.7** | **+0.2** |
| | baz=182 | | | | | | | | |
| CHKT | | | | S | | | **Sn** | **01 37 09.1** | **-0.3** |
| | baz=182 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.84** | **201** | *e*P | | | **Pn** | **01 36 46.1** | **+0.4** |
| | baz=194 | | | | | | | | |

ELDTW eS Sn 01 37 09.9 +0.3
baz=194
**CHY Chiayi 1.85 221** eP Pn 01 36 45.9 +0.1
baz=227
CHY eS Sn 01 37 10.0 +0.3
baz=227
**IRIF Iriomote-Funau 1.90 107** P Pn 01 36 45.7 -0.5
IRIF S Sn 01 37 09.1 -1.5
**TPUB Ta-pu 1.90 213** P Pn 01 36 46.3 0.0
**TPUB Ta-pu 1.90 213** eP Pn 01 36 46.4 0.0
baz=212
TPUB eS Sn 01 37 09.7 -1.1
baz=212
**STYH Taoyuan 1.95 207** eP Pn 01 36 47.5 +0.6
baz=214
STYH eS Sn 01 37 11.6 -0.2
baz=214
**WTP Ta-pu 1.96 212** P Pn 01 36 47.2 +0.2
baz=211
WTP S Sn 01 37 11.7 -0.4
baz=211
**WSL Shuilin Townsh 1.96 225** eP Pn 01 36 47.1 +0.1
baz=220
WSL eS Sn 01 37 11.4 -0.6
baz=220
**EDH Donghe 1.97 192** eP Pn 01 36 46.8 -0.5
baz=183
EDH eS Sn 01 37 11.9 -0.5
baz=183
**TWK Hsinying 2.00 215** eP Pn 01 36 47.5 -0.1
baz=215
TWK eS Sn 01 37 13.0 -0.1
baz=215
**MATB Ma-tsu 2.04 308** eP Pn 01 36 47.5 -0.5
baz=307
**ICHU Yijhu 2.04 221** eP Pn 01 36 47.9 -0.2
baz=228
ICHU eS Sn 01 37 13.1 -0.9
baz=228
**CHN1 Nanshi 2.05 213** P Pn 01 36 48.4 +0.2
baz=213
CHN1 S Sn 01 37 14.1 0.0
baz=213
**HATJ Hateruma jima 2.06 114** P Pn 01 36 48.4 +0.1
HATJ S Sn 01 37 14.1 -0.2
**MSUT Lienchiang 2.07 308** *i* P Pn 01 36 48.1 -0.2
baz=308
**LONT Longtian 2.08 196** eP Pn 01 36 48.1 -0.5
baz=186
LONT eS Sn 01 37 13.3 -1.3
baz=186
**SGST Jiashian 2.11 210** eP Pn 01 36 47.8 -1.2
baz=216
SGST eS Sn 01 37 14.7 -0.8
baz=216
**JKRS Kuro-shima 2.17 108** P Pn 01 36 49.9 +0.3
JKRS S Sn 01 37 16.7 0.0
**TWG Pinlang 2.17 197** Pn Pn 01 36 48.2 -1.5
**TWG Pinlang 2.17 197** eP Pn 01 36 48.3 -1.5
baz=187
TWG eS Sn 01 37 16.0 -0.8
baz=187
**TWGBT Beinan 2.17 196** eP Pn 01 36 48.5 -1.3
baz=188
**LDUT Ludao 2.24 187** eP Pn 01 36 49.7 -1.0
baz=192
LDUT eS Sn 01 37 16.4 -2.1
baz=192
**JIJ Ishigaki jima 2.25 104** P Pn 01 36 50.3 -0.4
JIJ S Sn 01 37 17.0 -1.6
**SHHT Tainan City 2.28 214** eS Sn 01 37 20.3 +1.1
baz=214
**SCST Cishan 2.32 210** eP Pn 01 36 52.2 +0.6
baz=210
**JISG Ishigakijimahi 2.36 97** P Pn 01 36 52.0 0.0
JISG eS Sn 01 37 21.0 0.0
**PTMZ Houxiangcun 2.38 274** eP Pn 01 36 51.8 -0.6
baz=274
PTMZ eS Sn 01 37 19.9 -1.8
baz=274
**SSD Sandimen 2.39 206** P Pn 01 36 53.1 +0.7
baz=205
SSD eS Sn 01 37 22.6 +0.8
baz=205
**TSMG Majia 2.42 205** eP Pn 01 36 52.7 -0.2
baz=196
**LYJJ Jianjiangzhen 2.42 313** eP Pn 01 36 52.4 -0.4
baz=312
**PHUB P'eng-hu 2.42 235** eP Pn 01 36 52.0 -0.9
baz=236
PHUB eS Sn 01 37 20.7 -1.9
baz=236
**XPSS Dashiqiu 2.45 325** eP Pn 01 36 52.5 -0.7
baz=324
**MASBT Mashibuluo 2.51 204** eP Pn 01 36 54.0 -0.1
baz=204
MASBT eS Sn 01 37 23.8 -0.8
baz=204
**JTJ Tarama 2.70 95** P Pn 01 36 56.9 +0.4
JTJ eS Sn 01 37 29.7 +0.7
**VCHM Qimei 2.71 232** eP Pn 01 36 56.3 -0.3
baz=237
**SCZT Fangliau 2.73 202** eP Pn 01 36 57.4 +0.5
baz=203
**SLIU Shizi 2.82 198** eP Pn 01 36 58.9 +0.8
baz=199
**LAY Lan-yu 2.87 184** eP Pn 01 36 58.1 -0.6
baz=180
**KNMB Chin-men Tao 3.08 262** Pn Pn 01 37 01.1 -0.5
**JIKM Ikemajima 3.18 89** P Pn 01 37 04.0 +1.2
JIKM eS Sn 01 37 41.2 +0.9
**JMJ2 Miyako jima3 3.26 92** P Pn 01 37 05.1 +1.2
**JOW Kunigami 6.18 71** Pn Pn 01 37 42.7 -0.5
**KLR Kul'dur 25.50 15** P P 01 41 32.0 +0.2
0.9nm,0.5s,baz=198,slow=6.4,SNR=2.5
**ULN Ulaanbaatar 25.69 337** P P 01 41 34.1 +0.5
ULN IAmb IAmb 01 41 34.7
comp=Z,2.9nm,0.6s
**SONM Songino Array 25.91 336** P P 01 41 35.6 +0.1
comp=Z,1.4nm,0.6s,baz=152,slow=11,SNR=8.4
**SONM Songino Array 25.91 336** P P 01 41 35.4 -0.1
**MK31 Makanchi Array 38.18 315** P P 01 43 22.1 -0.4
**MKAR Makanchi Array 38.18 315** P P 01 43 22.2 -0.3
comp=Z,0.6nm,0.7s,baz=98,slow=11,SNR=10
MKAR PcP PcP 01 45 33.8 -1.0
comp=Z,0.2nm,0.6s,baz=93,slow=7.5,SNR=1.9
**MAKZ Makanchi 38.38 315** P P 01 43 24.5 +0.3
MAKZ IAmb IAmb 01 43 25.2
comp=Z,1.1nm,1.0s
**PETK Petropavlovsk- 38.98 34** P P 01 43 29.4 +0.3
**ZAA0 Zalesovo Array 39.92 326** P P 01 43 37.3 +0.5
ZAA0 IAmb IAmb 01 43 38.8
comp=Z,1.3nm,0.8s
**ZALV Zalesovo Beam 39.92 326** P P 01 43 35.6 -1.2
comp=Z,1.0nm,0.5s,baz=114,slow=9.2,SNR=6.2
**ZALV Zalesovo Beam 39.92 326** P P 01 43 35.9 -0.9
**KURBB Kurchatov Arra 41.89 319** P P 01 43 52.7 -0.3
comp=Z,0.5nm,0.8s,baz=115,slow=9.3,SNR=2.6
**COEN Coen 43.93 149** P P 01 44 10.1 +0.2
COEN IAmb IAmb 01 44 10.7
comp=Z,4.5nm,1.1s
**KKAR Karatay Array 45.44 307** P P 01 44 22.8 +1.2
**WB0 Warramunga Arr 46.09 163** P P 01 44 25.6 -1.2
**WRA Warramunga Arr 46.24 164** P P 01 44 26.9 -1.1
comp=Z,0.4nm,0.7s,baz=346,slow=8.6,SNR=4.2
**WB2 Warramunga Arr 46.24 163** P P 01 44 26.5 -1.5
WB2 IAmb IAmb 01 44 46.8
comp=Z,6.3nm,1.4s
**BRVK Borovoye 47.51 320** P P 01 44 38.5 +0.9
BRVK IAmb IAmb 01 44 42.0
comp=Z,1.3nm,0.7s
**ASAR Alice Springs 49.71 165** P P 01 44 53.6 -1.1
comp=Z,0.3nm,0.7s,baz=345,slow=6.7,SNR=4.3
**ABKAR Akbulak array 53.30 314** P P 01 45 21.2 0.0
ABKAR IAmb IAmb 01 45 43.9
comp=Z,2.5nm,1.4s
**H21K Melozitna Rive 65.73 27** P P 01 46 46.6 +0.3
H21K IAmb IAmb 01 47 01.8
comp=Z,2.0nm,1.1s
**CAST Castle Rocks 66.33 29** P P 01 46 50.2 0.0
**BPAW Bear Paw Mtn. 66.71 29** P P 01 46 54.3 +1.7
**IL31 68.33 27** P P 01 47 05.3 +2.7
**ILAR Eielson Array 68.33 27** P P 01 47 05.0 +2.2
**BMAR Burnt Mountain 68.66 24** P P 01 47 05.4 +0.6
**FIA1 FINESS Array S 71.08 330** P P 01 47 18.9 -0.7
**FINES FINESS Array B 71.08 330** P P 01 47 19.2 -0.4
comp=Z,1.5nm,0.6s,baz=65,slow=5.4,SNR=15
**BRTR Keskin Array B 73.15 306** P P 01 47 32.1 -0.5
comp=Z,0.5nm,0.6s,baz=68,slow=7.4,SNR=4.2
**BRTR Keskin Array B 73.15 306** P P 01 47 32.8 +0.2
**CLL Collm 81.78 323** eP P 01 48 22.0 +1.8
CLL Lm MLR 04 11 00.0
comp=Z,200nm,21.9s
**YKA Yellowknife Ar 82.10 23** P P 01 48 20.3 -1.3
comp=Z,0.3nm,0.7s,baz=307,slow=5.8,SNR=3.1

*NAO **29** 01:39:18.7±2.0, 79°.72N×3°.42E, ML2.7*
*BER **29** 01:39:21.0±2.4, 79°.57N×3°.49E, h10km, ML2.1, ML2.7(NAO), Confirmed Earthquake*
*DNK **29** 01:39:22.8±3.3, 79°.58N×3°.67E, h36km±38km, ML1.6*
**ISC 29 01:39:18.1±1.1, 79°.56N±0°.10×3°.18E±0°.05, h12km, n25, σ2s47/42, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBS** | **Kingsbay** | **1.76** | **107** | Pn | **Pn** | **01 39 48.6** | **+0.3** |
| KBS | | | | Sn | **Sn** | **01 40 07.9** | **-2.7** |
| **KBS** | **Kingsbay** | **1.76** | **107** | *i* P | **Pn** | **01 39 48.4** | **0.0** |
| KBS | | | | eS | **Sn** | **01 40 08.3** | **-2.3** |
| **KBS** | **Kingsbay** | **1.76** | **107** | eP | **Pn** | **01 39 48.9** | **+0.6** |
| KBS | | | | eS | **Sn** | **01 40 08.3** | **-2.3** |
| KBS | | | | IAML | | 01 40 18.0 | |
| comp=Z,28nm,0.1s | | | | | | | |
| **BRBB** | **Barentsburg B** | **2.60** | **119** | Pn | **Pn** | **01 40 01.9** | **+2.1** |
| BRBB | | | | Sn | **Sn** | **01 40 31.6** | **+0.3** |
| **BRBB** | **Barentsburg B** | **2.60** | **119** | eP | **Pn** | **01 40 02.0** | **+2.2** |
| BRBB | | | | eS | **Sn** | **01 40 29.2** | **-2.1** |
| **BRBA** | **Barentsburg A** | **2.62** | **119** | Pn | **Pn** | **01 40 02.4** | **+2.3** |
| BRBA | | | | Sn | **Sn** | **01 40 31.6** | **-0.3** |
| **BRBA** | **Barentsburg A** | **2.62** | **119** | eP | **Pn** | **01 40 02.2** | **+2.0** |
| BRBA | | | | eS | **Sn** | **01 40 29.4** | **-2.5** |
| BRBA | | | | IAML | | 01 40 35.7 | |
| comp=Z,17nm,0.3s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.91** | **112** | Pn | **Pn** | **01 40 05.5** | **+1.5** |
| baz=306,slow=7.9 | | | | | | | |
| SPA0 | | | | Sn | **Sn** | **01 40 36.8** | **-2.0** |
| baz=317,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.91** | **112** | Pn | **Pn** | **01 40 05.5** | **+1.5** |
| baz=306,slow=7.9 | | | | | | | |
| SPA0 | | | | Sn | **Sn** | **01 40 36.8** | **-2.0** |
| baz=317,slow=22 | | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.59** | **129** | Pn | **Pn** | **01 40 16.0** | **+2.6** |
| HSPB | | | | Sn | **Sn** | **01 40 53.4** | **-2.2** |
| **HSPB** | **Hornsund (broa** | **3.59** | **129** | eP | **Pn** | **01 40 15.9** | **+2.5** |
| HSPB | | | | eS | **Sn** | **01 40 53.4** | **-2.2** |
| HSPB | | | | IAML | | 01 40 58.7 | |
| comp=Z,9.9nm,0.4s | | | | | | | |
| **NOR** | **Nord** | **3.84** | **312** | Pn | **Pn** | **01 40 19.0** | **+2.2** |
| **NOR** | **Nord** | **3.84** | **312** | *i* P | **Pn** | **01 40 18.0** | **+1.2** |
| **NOR** | **Nord** | **3.84** | **312** | eP | **Pn** | **01 40 18.6** | **+1.8** |
| **DAG** | **Danmarks Havn** | **5.26** | **249** | *i* P | **Pn** | **01 40 37.0** | **+0.7** |
| DAG | | | | eS | **Sn** | **01 41 32.7** | **-4.0** |
| DAG | | | | IAML | | 01 41 35.6 | |
| comp=Z,2.3nm,0.4s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.26** | **249** | eP | **Pn** | **01 40 37.6** | **+1.3** |
| DAG | | | | eS | **Sn** | **01 41 33.5** | **-3.2** |
| **HOPEN** | **Hopen** | **5.44** | **113** | Pn | **Pn** | **01 40 39.9** | **+1.1** |
| HOPEN | | | | Sn | **Sn** | **01 41 37.7** | **-3.4** |
| **HOPEN** | **Hopen** | **5.44** | **113** | IAML | | 01 41 35.8 | |
| comp=Z,11nm,0.8s | | | | | | | |
| HOPEN | | | | eS | **Sn** | **01 41 37.6** | **-3.6** |
| **DBG** | **Daneborg** | **7.40** | **237** | Pn | **Pn** | **01 41 07.5** | **+1.8** |
| DBG | | | | Sn | **Sn** | **01 42 24.5** | **-4.8** |
| **DBG** | **Daneborg** | **7.40** | **237** | *i* P | **Pn** | **01 41 07.4** | **+1.8** |
| DBG | | | | eS | **Sn** | **01 42 24.5** | **-4.8** |
| **DBG** | **Daneborg** | **7.40** | **237** | eP | **Pn** | **01 41 07.2** | **+1.6** |
| DBG | | | | eS | **Sn** | **01 42 25.0** | **-4.3** |
| **NEEM** | **North Greenlan** | **10.67** | **286** | *i* P | **Pn** | **01 41 50.6** | **0.0** |
| **ARA0** | **ARCESS Array S** | **11.55** | **138** | Pn | **Pn** | **01 42 05.3** | **+2.8** |
| baz=339,slow=14 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **11.55** | **138** | Pn | **Pn** | **01 42 05.3** | **+2.8** |
| baz=339,slow=14 | | | | | | | |
| **SUMG** | **Summit** | **11.87** | **257** | *i* P | **Pn** | **01 42 08.0** | **+0.8** |

*IDC **29** 01:39:46.4±2.2, 36°.51N×143°.22E, h0km, mb3.5/4, mb1 3.6/6, mb1mx3.4/53, mbtmp3.6/6, ML3.2/2, Error ellipse: s-maj=41.2km s-min=27.7km az=82.0*
*JMA **29** 01:39:47.6±0.2, 36°.97N×143°.22E, h53km, M3.8*
**ISC 29 01:39:48.8±1.2, 36°.89N±0°.04×143°.33E±0°.09, h35km, n21, σ2s89/37, mb3.4/4, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **2.02** | **284** | P | **Pn** | **01 40 18.6** | **-1.7** |
| JFK | | | | eS | **Sn** | **01 40 41.3** | **-3.0** |
| **ONAJ** | **Iwakimizuishiy** | **2.03** | **277** | P | **Pn** | **01 40 18.7** | **-1.9** |
| ONAJ | | | | eS | **Sn** | **01 40 42.4** | **-2.4** |
| **JIKH** | **Ishinomakikobu** | **2.05** | **314** | P | **Pn** | **01 40 18.7** | **-2.0** |
| JIKH | | | | S | **Sn** | **01 40 41.6** | **-3.4** |
| **JMST** | **Minamisoumatoc** | **2.12** | **294** | P | **Pn** | **01 40 19.8** | **-1.8** |
| JMST | | | | S | **Sn** | **01 40 44.0** | **-2.6** |
| **JIO** | **Ouri** | **2.21** | **316** | P | **Pn** | **01 40 21.2** | **-1.8** |
| JIO | | | | eS | **Sn** | **01 40 45.7** | **-3.4** |
| **JFT** | **Otama** | **2.47** | **286** | P | **Pn** | **01 40 25.7** | **-0.8** |
| JFT | | | | eS | **Sn** | **01 40 53.8** | **-1.6** |
| **JMK** | **Ichinoseki** | **2.65** | **322** | P | **Pn** | **01 40 27.3** | **-1.6** |
| JMK | | | | eS | **Sn** | **01 40 56.8** | **-3.0** |
| **JOM** | **Ohasama** | **3.04** | **329** | P | **Pn** | **01 40 32.6** | **-1.7** |
| JOM | | | | S | **Sn** | **01 41 06.4** | **-3.0** |
| **JYK** | **Kaneyama** | **3.10** | **312** | P | **Pn** | **01 40 34.2** | **-1.0** |
| JYK | | | | eS | **Sn** | **01 41 09.7** | **-1.3** |
| **JAG** | **Ashikaga** | **3.15** | **263** | P | **Pn** | **01 40 35.0** | **-0.8** |
| JAG | | | | eS | **Sn** | **01 41 09.9** | **-2.3** |
| **JANG** | **Nango** | **3.76** | **338** | P | **Pn** | **01 40 41.9** | **-2.3** |
| JANG | | | | eS | **Sn** | **01 41 22.6** | **-4.6** |
| **JOD2** | **Odawara 2** | **3.80** | **246** | P | **Pn** | **01 40 43.9** | **-0.9** |
| JOD2 | | | | eS | **Sn** | **01 41 25.4** | **-2.8** |
| **MJAR** | **Matsushiro Arr** | **4.12** | **267** | Pn | **Pn** | **01 40 49.4** | **+0.1** |
| 0.9nm,0.3s,baz=88,slow=15,SNR=13 | | | | | | | |
| MJAR | | | | Sn | **Sn** | **01 41 36.2** | **-0.1** |
| 0.2nm,0.3s,baz=124,slow=28,SNR=1.7 | | | | | | | |
| **MAT** | **Matsushiro** | **4.13** | **267** | P | **Pn** | **01 40 49.6** | **+0.3** |
| MAT | | | | S | **Sn** | **01 41 31.6** | **-4.7** |
| **JHJ2** | **Mitsune** | **4.74** | **218** | eS | **Sn** | **01 41 46.6** | **-4.9** |
| **JHJ** | **Hachijo jima 2** | **4.75** | **219** | Pn | **Pn** | **01 40 56.4** | **-1.6** |
| 5.9nm,0.3s,baz=270,slow=20,SNR=1.8 | | | | | | | |
| JHJ | | | | Sn | **Sn** | **01 41 45.8** | **-6.0** |
| 7.5nm,0.3s,baz=73,slow=19,SNR=1.1 | | | | | | | |
| **JOT** | **Ohata** | **4.82** | **339** | P | **Pn** | **01 40 57.7** | **-1.1** |
| JOT | | | | eS | **Sn** | **01 41 48.9** | **-4.5** |
| **SONM** | **Songino Array** | **29.14** | **304** | P | **P** | **01 45 48.7** | **+2.2** |
| 0.4nm,0.7s,baz=105,slow=9.1,SNR=3.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.49** | **303** | P | **P** | **01 48 09.0** | **+4.5** |
| 0.2nm,0.7s,baz=86,slow=8.9,SNR=3.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.29** | **308** | P | **P** | **01 48 23.2** | **+4.6** |
| 0.9nm,0.6s,baz=80,slow=7.8,SNR=7.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.16** | **190** | P | **P** | **01 49 31.6** | **-0.5** |
| 0.3nm,0.7s,baz=10,slow=7.5,SNR=2.6 | | | | | | | |

**IDC 29 01:43:59.5±5.2, 6°.06S×146°.00E, h0km, mb3.2/3, mb1 3.4/4, mb1mx3.3/36, mbtmp3.2/4, ML3.2/1, Error ellipse: s-maj=149.9km s-min=32.4km az=107.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **17.85** | **218** | P | P | 01 48 11.2 | +0.9 |
| 0.1nm,0.3s,baz=41,slow=11,SNR=5.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.02** | **212** | P | P | 01 48 44.9 | -0.1 |
| 0.6nm,0.8s,baz=50,slow=7.4,SNR=6.0 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.19** | **237** | P | P | 01 49 06.9 | -1.3 |
| 0.4nm,0.4s,baz=52,slow=13,SNR=6.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **76.91** | **321** | P | P | 01 55 54.4 | +0.5 |
| 0.2nm,0.4s,baz=115,slow=7.4,SNR=6.2 | | | | | | | |

*TUL **29** 01:58:31.9±0.7, 35°.66N±0°.01×97°.39W±0°.02, h7km±3km, ML3.0, mb_Lg2.6/35(NEIC), Error ellipse: s-maj=2.1km s-min=1.6km az=97.0*
**NEIC 29 01:58:32.6±0.6, 35°.667N±0°.009×97°.39W±0°.02, h5km±1km, Error ellipse: s-maj=2.9km s-min=2.2km az=128.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK009** | **Oakdale Elemen** | **0.09** | **197** | | Pg | 01 58 34.3 | -0.3 |
| OK009 | | | | Sg | Sg | 01 58 36.1 | +0.2 |
| **OKCFA** | **Oklahoma City** | **0.26** | **191** | | Pg | 01 58 37.3 | -0.3 |
| OKCFA | | | | Sg | Sg | 01 58 41.2 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **0.26** | **189** | | Pg | 01 58 37.4 | -0.4 |
| OKCSW | | | | Sg | Sg | 01 58 41.4 | +0.2 |
| **FNO** | **Franklin** | **0.41** | **181** | | Pg | 01 58 40.1 | -0.4 |
| FNO | | | | Sg | Sg | 01 58 46.0 | +0.2 |
| **X34A** | **Smith Ranch, M** | **1.12** | **199** | | Pg | 01 58 53.3 | -0.8 |
| X34A | | | | Sg | Sg | 01 59 09.0 | +0.3 |
| **TUL1** | **Leonard** | **1.32** | **79** | | Pn | 01 58 55.7 | -2.0 |
| **T35A** | **Sooner Cattle** | **1.43** | **29** | | Pn | 01 58 58.0 | -1.3 |
| **WMOK** | **Wichita Mounta** | **1.47** | **231** | | Pn | 01 58 58.5 | -1.3 |
| **U32A** | **Winter Ranch,** | **1.49** | **299** | Pg | Pn | 01 58 58.9 | -1.1 |
| **X37A** | **Clayton** | **1.97** | **122** | Pn | Pn | 01 59 06.6 | -0.1 |
| X37A | | | | IAmb_Lg | | 01 59 36.8 | |
| comp=Z,22nm,0.7s | | | | | | | |
| **Z35A** | **Perchaven, San** | **2.33** | **177** | Pn | Pn | 01 59 11.4 | -0.2 |
| **HHAR** | **Hobbs** | **2.87** | **77** | IAmb_Lg | | 02 00 06.9 | |
| comp=Z,16nm,0.8s | | | | | | | |
| **W39A** | **Magazine** | **2.98** | **98** | Pn | Pn | 01 59 20.1 | -0.5 |
| **Z38A** | **Mt. Pleasant** | **3.12** | **140** | IAmb_Lg | | 02 00 18.9 | |
| comp=Z,14nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.32** | **109** | Pn | Pn | 01 59 26.2 | +1.0 |
| **KSU1** | **Kansas State U** | **3.48** | **10** | Pn | Pn | 01 59 26.7 | -0.7 |
| KSU1 | | | | IAmb_Lg | | 02 00 29.8 | |
| comp=Z,18nm,0.8s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.56** | **212** | IAmb_Lg | | 02 00 28.2 | |
| comp=Z,12nm,0.9s | | | | | | | |
| **AMTX** | **Amarillo** | **3.60** | **259** | Pn | Pn | 01 59 29.0 | -0.1 |
| AMTX | | | | IAmb_Lg | | 02 00 28.9 | |
| comp=Z,11nm,1.0s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.66** | **330** | IAmb_Lg | | 02 00 31.0 | |
| comp=Z,17nm,0.7s | | | | | | | |
| **U40A** | **Yellville** | **3.74** | **78** | Pn | Pn | 01 59 32.0 | +1.0 |
| **S39A** | **Bolivar** | **3.84** | **57** | Pn | Pn | 01 59 33.0 | +0.6 |
| S39A | | | | IAmb_Lg | | 02 00 32.9 | |
| comp=Z,11nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **3.89** | **160** | Pn | Pn | 01 59 31.9 | -1.0 |
| **X40A** | **Basin Creek Fa** | **3.92** | **106** | Pn | Pn | 01 59 34.0 | +0.6 |
| X40A | | | | IAmb_Lg | | 02 00 37.2 | |
| comp=Z,18nm,0.8s | | | | | | | |
| **WLAR** | **White Oak Lake** | **4.04** | **118** | Pn | Pn | 01 59 34.8 | -0.3 |
| WLAR | | | | IAmb_Lg | | 02 00 51.0 | |
| comp=Z,12nm,0.9s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.18** | **94** | Pn | Pn | 01 59 36.7 | -0.3 |
| **W41B** | **Gary Mavity, V** | **4.23** | **95** | Pn | Pn | 01 59 38.6 | +0.9 |
| **FCAR** | **Ozark Folk Cen** | **4.29** | **86** | Pn | Pn | 01 59 38.4 | 0.0 |
| **MGMO** | **Mountain Grove** | **4.39** | **69** | Pn | Pn | 01 59 40.6 | +0.7 |
| MGMO | | | | IAmb_Lg | | 02 00 51.3 | |
| comp=Z,9.3nm,0.8s | | | | | | | |
| **MSTX** | **Muleshoe** | **4.74** | **251** | Pn | Pn | 01 59 44.6 | -0.3 |
| **R40A** | **Maddies Statio** | **4.87** | **56** | Pn | Pn | 01 59 47.1 | +0.7 |
| R40A | | | | IAmb_Lg | | 02 01 09.8 | |
| comp=Z,13nm,0.8s | | | | | | | |
| **435B** | **Jarrell** | **4.87** | **182** | IAmb_Lg | | 02 01 16.4 | |
| comp=Z,13nm,0.9s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.34** | **310** | IAmb_Lg | | 02 01 26.7 | |
| comp=Z,13nm,0.7s | | | | | | | |
| **JCT** | **Junction City** | **5.56** | **202** | IAmb_Lg | | 02 01 34.6 | |
| comp=Z,14nm,0.8s | | | | | | | |
| **Q24A** | **Divide** | **7.00** | **300** | IAmb_Lg | | 02 02 24.8 | |
| comp=Z,5.9nm,0.8s | | | | | | | |
| **Z47A** | **Carrollton** | **8.08** | **105** | IAmb_Lg | | 02 02 44.9 | |
| comp=Z,6.5nm,1.2s | | | | | | | |

*IDC **29** 02:52:20.6±1.4, 25°.52N×109°.66W, h0km, mb3.3/1, mb1 3.7/6, mb1mx3.5/38, mbtmp3.3/6, ML3.4/4, MS3.3/7, Ms1 3.3/7, ms1mx3.1/30, Error ellipse: s-maj=36.6km s-min=11.5km az=107.0*
*MEX **29** 02:52:22.1±0.7, 25°.83N×110°.21W, h20km, MD4.2*
**ISC 29 02:52:22.3±2.6, 25°.63N±0°.06×109°.92W±0°.07, h11km±18km, n17, σ2s00/19, MS3.3/3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TSIG** | **Topolobambo** | **0.80** | **92** | eP | **Pn** | **02 52 38.4** | **-1.0** |
| TSIG | | | | eS | **Sn** | **02 52 52.4** | **+1.1** |
| **LPIG** | **La Paz** | **1.56** | **193** | Pg | **Pn** | **02 52 49.0** | **-0.9** |
| 7.8nm,0.3s,baz=352,slow=1.8,SNR=16 | | | | | | | |
| LPIG | | | | Lg | Lg | 02 53 08.6 | |
| 36nm,0.3s,baz=165,slow=16,SNR=15 | | | | | | | |
| **LPIG** | **La Paz** | **1.56** | **193** | eP | **Pn** | **02 52 48.9** | **-0.9** |
| LPIG | | | | *i* S | **Sn** | **02 53 08.0** | **-2.1** |
| **CSIG** | **Choix** | **1.84** | **49** | eP | **Pn** | **02 52 50.8** | **-3.0** |
| CSIG | | | | *i* S | **Sn** | **02 53 13.9** | **-3.1** |
| **SLBS** | **Sierra La Lagu** | **1.93** | **181** | eP | **Pn** | **02 52 56.0** | **+0.8** |
| SLBS | | | | *i* S | **Sg** | **02 53 23.9** | **-0.6** |
| **GUYB** | **Guaymas** | **2.42** | **340** | eP | Pn | 02 52 54.1 | -7.6 |
| GUYB | | | | eS | Sn | 02 53 19.3 | -12 |
| **SSIG** | **Sanalona** | **2.65** | **107** | *i* P | **Pb** | **02 53 10.6** | **+0.9** |
| SSIG | | | | eS | **Sg** | **02 53 48.4** | **+1.1** |
| **TXAR** | **Lajitas Array** | **6.67** | **55** | Pn | **Pn** | **02 53 58.1** | **-2.2** |
| 0.3nm,0.3s,baz=229,slow=13,SNR=27 | | | | | | | |
| TXAR | | | | Sn | **Sn** | **02 55 13.7** | **-2.6** |
| 0.6nm,0.3s,baz=248,slow=14,SNR=2.2 | | | | | | | |
| TXAR | | | | Lg | Lg | 02 55 49.1 | |
| 2.3nm,0.3s,baz=251,slow=22,SNR=8.7 | | | | | | | |
| TXAR | | | | LR | LR | 02 56 48.7 | |
| comp=Z,207nm,20.9s,baz=242,slow=41 | | | | | | | |
| **ANMO** | **Albuquerque** | **9.76** | **17** | Pn | **Pn** | **02 54 42.9** | **+0.2** |
| 0.1nm,0.3s,baz=195,slow=12,SNR=2.8 | | | | | | | |
| ANMO | | | | Sn | **Sn** | **02 56 36.0** | **+3.6** |
| 0.1nm,0.3s,baz=158,slow=16,SNR=1.1 | | | | | | | |
| ANMO | | | | Lg | Lg | 02 57 22.2 | |
| 0.1nm,0.3s,baz=105,slow=20,SNR=3.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **14.60** | **333** | Pn | **P** | **02 55 54.8** | **-0.7** |
| 0.1nm,0.3s,baz=156,slow=14,SNR=6.6 | | | | | | | |
| **ELK** | **Elko** | **15.71** | **345** | Pn | **P** | **02 56 06.5** | **-1.3** |
| baz=166,slow=9.3,SNR=5.5 | | | | | | | |
| ELK | | | | LR | LR | 03 02 05.0 | |
| comp=Z,117nm,21.9s,baz=180,slow=37 | | | | | | | |
| **CMIG** | **Matias Romero** | **16.37** | **118** | LR | LR | 03 02 36.3 | |
| comp=Z,115nm,20.4s,baz=268,slow=38 | | | | | | | |
| **PDAR** | **Pinedale Array** | **17.10** | **1** | P | **P** | **02 56 23.6** | **+0.4** |
| 0.0nm,0.3s,baz=163,slow=9.4,SNR=5.2 | | | | | | | |
| PDAR | | | | LR | LR | 03 03 09.1 | |
| comp=Z,123nm,19.9s,baz=182,slow=38 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.55** | **60** | LR | LR | 03 08 26.0 | |
| comp=Z,93nm,19.4s,baz=299,slow=40 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.99** | **356** | P | **P** | **02 59 33.2** | **+1.8** |
| 0.5nm,0.9s,baz=180,slow=8.7,SNR=4.7 | | | | | | | |
| **SDV** | **Santo Domingo** | **40.85** | **107** | LR | LR | 03 18 36.9 | |
| comp=Z,67nm,19.1s,baz=260,slow=39 | | | | | | | |
| **SJG** | **San Juan** | **41.16** | **91** | LR | LR | 03 18 15.9 | |
| comp=Z,22nm,20.3s,baz=262,slow=38 | | | | | | | |

*IDC **29** 02:54:46.7±0.8, 0°.24S×129°.44E, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.9/31, mbtmp4.0/8, ML3.5/1, MS3.2/6, Ms1 3.2/6, ms1mx2.9/68, Error ellipse: s-maj=24.0km s-min=11.9km az=38.0*
*DJA **29** 02:54:49.3±1.1, 0°.5±3°×12°9E±°, h12km±8km, M4.2/9, mb4.6/3, mB4.9/3, MLv4.0/9, Mw(mB)4.2/3*
*NEIC **29** 02:54:51.9±2.1, 0°.4S±0°.1×129°.4E±0°.1, h39km±6km, mb4.0/14, Error ellipse: s-maj=20.4km s-min=9.0km az=224.0*
**ISC 29 02:54:51.3±0.7, 0°.19S±0°.06×129°.52E±0°.08, h35km, n55, σ2s18/54, mb4.2/9, MS3.3/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **1.87** | **111** | Pg | **Pn** | **02 55 22.9** | **+2.0** |
| 36nm,0.3s,baz=168,slow=23,SNR=54 | | | | | | | |
| SIJI | | | | Lg | Lg | 02 55 47.1 | |
| 26nm,0.3s,baz=218,slow=23,SNR=12 | | | | | | | |
| SIJI | | | | LR | LR | 02 55 52.3 | |
| comp=Z,176nm,19.2s,baz=296,slow=34 | | | | | | | |
| **TNTI** | **Ternate** | **2.35** | **294** | Pn | **Pn** | **02 55 27.0** | **-0.6** |
| **TNTI** | **Ternate** | **2.35** | **294** | P | **Pn** | **02 55 26.7** | **-0.8** |
| TNTI | | | | S | **Sn** | **02 55 55.3** | **0.0** |
| **TNTI** | **Ternate** | **2.35** | **294** | P | **Pn** | **02 55 28.7** | **+1.2** |
| **MSAI** | **Masohi** | **3.19** | **191** | P | **Pn** | **02 55 41.2** | **+2.2** |
| MSAI | | | | S | **Sn** | **02 56 18.3** | **+2.5** |
| **AAI** | **Ambon** | **3.71** | **201** | P | **Pn** | **02 55 47.5** | **+1.3** |
| **FAKI** | **Fak Fak** | **3.84

0.1nm263nm24nm,1.1s
**APSI Ampana 7.90 265** P **Pn 02 56 43.2 -0.6**
0.2nm504nm39nm,0.6s
**TOLI2 Tolitoli 8.83 278** Pn **Pn 02 56 56.6 0.0**
**MPSI Mapaga 9.63 273** P **Pn 02 57 04.5 -3.1**
**SPSI Sidrap Palu 10.44 249** P **Pn 02 57 20.1 +1.5**
**KAPI Kappang 10.87 244** LR LR 03 02 03.6
comp=Z,85nm,18.7s,baz=91,slow=40
**MTN Manton Dam 12.67 173** Pn **Pn 02 57 45.9 -3.3**
**MTN Manton Dam 12.67 173** P **Pn 02 57 46.9 -2.3**
**KDU Kakadu 12.75 167** P **Pn 02 57 47.1 -3.2**
**KNRA Kununurra 15.40 183** Pn **Pn 02 58 21.5 -4.6**
KNRA IAmb IAmb 02 58 22.8
comp=Z,6.0nm,0.8s
**KNRA Kununurra 15.40 183** P **Pn 02 58 22.4 -3.8**
**FITZ Fitzroy Crossi 18.20 192** P **Pn 02 58 58.4 -3.0**
comp=Z,0.1nm,0.3s,baz=32,slow=10,SNR=9.2
FITZ LR LR 03 05 27.0
comp=Z,62nm,21.4s,baz=36,slow=35
**FITZ Fitzroy Crossi 18.20 192** Pn **Pn 02 58 56.8 -4.5**
**FITZ Fitzroy Crossi 18.20 192** P **Pn 02 58 58.8 -2.5**
**COEN Coen 19.23 136** P **P 02 59 12.8 +0.1**
COEN IAmb IAmb 02 59 41.7
comp=Z,7.4nm,1.2s
**PMG Port Moresby 19.80 118** LR LR 03 08 24.2
comp=Z,154nm,18.2s,baz=198,slow=41
**WB0 Warramunga Arr 20.03 166** P **P 02 59 19.3 -2.1**
WB0 IAmb IAmb 02 59 40.5
comp=Z,5.5nm,1.0s
**WRAB Tennant Creek 20.18 167** P **P 02 59 23.2 +0.1**
**WRA Warramunga Arr 20.19 167** P **P 02 59 22.1 -1.1**
comp=Z,3.5nm,1.0s,baz=341,slow=13,SNR=18
WRA S S 03 02 54.0 -14
comp=Z,0.5nm,0.7s,baz=344,slow=24,SNR=2.5
**WRA Warramunga Arr 20.19 167** P **P 02 59 21.0 -2.1**
**WB2 Warramunga Arr 20.19 167** P **P 02 59 20.8 -2.4**
WB2 IAmb IAmb 02 59 50.2
comp=Z,5.8nm,0.9s
**AS31 Alice Springs 23.72 170** P **P 02 59 59.7 -0.6**
AS31 IAmb IAmb 03 00 08.3
comp=Z,3.3nm,0.4s
**ASAR Alice Springs 23.72 170** P **P 03 00 00.8 +0.4**
comp=Z,3.9nm,0.8s,baz=356,slow=9.9,SNR=40
ASAR S **S 03 04 20.3 +7.0**
comp=Z,0.1nm,0.3s,baz=350,slow=21,SNR=1.9
**ASAR Alice Springs 23.72 170** P **P 03 00 00.5 +0.2**
**CTA Charters Tower 25.68 141** LR LR 03 10 51.9
comp=Z,105nm,18.0s,baz=341,slow=38
**STKA Stephens Creek 33.52 161** P **P 03 01 28.6 +0.8**
comp=Z,2.4nm,0.8s,baz=334,slow=6.9,SNR=5.1
**STKA Stephens Creek 33.52 161** P **P 03 01 28.6 +0.8**
**CMAR Chiang Mai Arr 35.30 303** P **P 03 01 44.1 +0.8**
comp=Z,1.6nm,0.4s,baz=127,slow=7.1,SNR=9.3
**CMAR Chiang Mai Arr 35.30 303** P **P 03 01 45.2 +1.9**
**MJAR Matsushiro Arr 37.43 12** LR LR 03 16 44.8
comp=Z,19nm,19.3s,baz=206,slow=35
**SHL Shillong 44.45 308** P **P 03 02 58.3 -1.2**
**SONM Songino Array 51.89 340** P **P 03 03 57.4 +0.8**
comp=Z,0.9nm,0.7s,baz=146,slow=7.8,SNR=5.9
**SONM Songino Array 51.89 340** P **P 03 03 55.7 -0.9**
SONM IAmb IAmb 03 04 14.3
comp=Z,1.7nm,1.3s
**MK31 Makanchi Array 62.35 325** P **P 03 05 10.7 +0.3**
MK31 IAmb IAmb 03 05 12.1
comp=Z,2.9nm,1.2s
**MKAR Makanchi Array 62.35 325** P **P 03 05 11.2 +0.8**
comp=Z,1.4nm,0.6s,baz=118,slow=8.6,SNR=18
**MKAR Makanchi Array 62.35 325** P **P 03 05 10.4 0.0**
**MAKZ Makanchi 62.53 325** **P 03 05 11.0 -0.6**
**ZALV Zalesovo Beam 65.33 333** P **P 03 05 29.1 -0.8**
comp=Z,0.4nm,0.4s,baz=120,slow=8.5,SNR=3.5
**KURK Kurchatov 66.52 327** P **P 03 05 37.4 -0.2**
**KKAR Karatay Array 67.98 317** P **P 03 05 47.1 +0.1**
**BRVK Borovoye 72.18 327** P **P 03 06 13.0 +0.5**
BRVK IAmb IAmb 03 06 14.9
comp=Z,2.6nm,0.9s
**ABKAR Akbulak array 76.93 321** P **P 03 06 40.2 0.0**
**EIL Elat 94.07 300** LR LR 03 57 36.3
comp=Z,9.2nm,19.1s,baz=298,slow=40
**TORD Torodi Ar. Bea 126.73 286** PKP **PKiKP 03 13 52.9 +0.1**
comp=Z,0.6nm,1.0s,baz=90,slow=2.2,SNR=1.8

**IDC 29 02:59:24.9±1.9, 4.68N×127.52E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/32, mbtmp3.3/5, Error ellipse: s-maj=105.9km s-min=25.9km az=69.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **22.70** | **185** | P | P | 03 04 28.3 | -0.1 |
| | 0.5nm,0.7s,baz=13,slow=14,SNR=1.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.36** | **165** | P | P | 03 04 52.9 | -1.0 |
| | 0.4nm,0.7s,baz=345,slow=10,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **28.85** | **168** | P | P | 03 05 24.9 | -0.3 |
| | 0.1nm,0.3s,baz=354,slow=8.4,SNR=1.3 | | | | | | |
| **STKA** | **Stephens Creek** | **38.74** | **161** | P | P | 03 06 52.2 | +1.2 |
| | 0.9nm,0.7s,baz=354,slow=10,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.24** | **325** | P | P | 03 09 14.1 | -0.1 |
| | 0.1nm,0.3s,baz=107,slow=8.5,SNR=4.7 | | | | | | |

*TUL **29** 03:04:20.5±0.5, 36.839N±0.009×97.82W±0.01, h6km±2km, ML2.6, mb_Lg2.2/3(NEIC), Error ellipse: s-maj=1.3km s-min=1.0km az=152.0*

**NEIC 29 03:04:21.1±0.4, 36.830N±0.010×97.82W±0.01, h4km±2km, Error ellipse: s-maj=1.4km s-min=1.2km az=147.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T35A** | **Sooner Cattle** | **1.05** | **85** | | Pg | 03 04 40.2 | -1.0 |
| T35A | | | | Sg | Sg | 03 04 53.9 | -0.9 |
| **U32A** | **Winter Ranch,** | **1.05** | **245** | | Pg | 03 04 40.3 | -0.9 |
| U32A | | | | Sg | Sg | 03 04 54.5 | -0.4 |
| **CBKS** | **Cedar Bluff** | **2.50** | **323** | IAmb_Lg | | 03 05 39.0 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **U40A** | **Yellville** | **4.02** | **95** | IAmb_Lg | | 03 06 36.1 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **4.37** | **22** | IAmb_Lg | | 03 06 45.4 | |
| | comp=Z,12nm,0.8s | | | | | | |

**OMAN 29 03:06:57.5±0.6, 17.36N×59.91E, h42km±122km, mb4.1/1, ml3.0/6, Error ellipse: s-maj=14.2km s-min=9.8km az=318.0, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DQM** | **DQM** | **3.41** | **319** | P | Pn | 03 07 48.4 | +0.3 |
| | SNR=49 | | | | | | |
| DQM | | | | S | Sn | 03 08 27.2 | -0.1 |
| **MHTO** | **MHTO** | **4.05** | **333** | P | Pn | 03 07 58.2 | +1.2 |
| | SNR=18 | | | | | | |
| MHTO | | | | S | Sn | 03 08 44.5 | +1.3 |
| **SHAO** | **Shalim** | **4.14** | **280** | P | Pn | 03 07 58.5 | +0.2 |
| | SNR=11 | | | | | | |
| **DMTO** | **DMTO** | **4.75** | **275** | P | Pn | 03 08 06.4 | -0.2 |
| | SNR=9.9 | | | | | | |
| DMTO | | | | S | Sn | 03 08 58.4 | -2.1 |
| **JLN** | **Jalan Bani Buh** | **4.79** | **354** | P | Pn | 03 08 07.7 | +0.5 |
| JLN | | | | S | Sn | 03 09 00.7 | -0.9 |
| | SNR=16 | | | | | | |
| **JMDO** | **Jabal Madar** | **5.27** | **341** | P | Pn | 03 08 15.1 | +1.3 |
| JMDO | | | | S | Sn | 03 09 14.9 | +1.5 |
| **SMDO** | **Samad** | **5.94** | **343** | P | Pn | 03 08 23.1 | 0.0 |
| SMDO | | | | S | Sn | 03 09 29.5 | -0.4 |
| | SNR=7.1 | | | | | | |

*MOS **29** 03:21:42.8±1.2, 46.20N×141.01E, h8km, mb3.8/1, Error ellipse: s-maj=16.9km s-min=9.7km az=96.0*
*IDC **29** 03:21:43.6±0.8, 46.21N×141.05E, h0km, mb3.5/10, mb1 3.7/12, mb1mx3.6/33, mbtmp3.5/12, ML3.2/2, MS2.7/3, Ms1 2.7/3, ms1mx2.3/79, Error ellipse: s-maj=17.8km s-min=14.9km az=17.0*
*SKHL **29** 03:21:43.5±0.4, 46.20N×141.20E, h8km±2km, mb4.7/9*
*JMA **29** 03:21:44.0±0.3, 46.23N×140.91E, h8km±4km, M3.7*

**ISC 29 03:21:44.8±1.4, 46.19N±0.03×141.05E±0.06, h13km±10km, n32, σ1°53/39, mb3.6/11, 1D, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JRBN** | **Rebuntou** | **0.77** | **179** | P | **Pg** | **03 21 59.5** | **-0.2** |
| JRBN | | | | *e*S | **Sg** | **03 22 10.3** | **+0.5** |
| **JWK2** | **Keihoku** | **1.06** | **146** | P | **Pb** | **03 22 05.2** | **+0.2** |
| JWK2 | | | | *e*S | **Sn** | **03 22 20.1** | **+0.2** |
| **JRR** | **Rishiri** | **1.07** | **170** | P | **Pn** | **03 22 05.6** | **+0.1** |
| **KHLM** | **Kholmsk** | **1.10** | **38** | *i* Pg | **Pb** | **03 22 05.1** | **-0.6** |
| KHLM | | | | *e*Sg | **Sb** | **03 22 20.0** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **1.40** | **57** | *e*PN | **Pn** | **03 22 09.7** | **-0.3** |
| YSS | | | | *e* | | 03 22 29.7 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,140nm,0.3s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,2.0nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **1.40** | **57** | *e*Pg | **Pn** | **03 22 10.5** | **+0.5** |
| YSS | | | | AMB | AMB | 03 22 12.2 | |
| | comp=E,140nm,0.3s | | | | | | |
| YSS | | | | *e*Sg | **Sb** | **03 22 29.4** | **+0.9** |
| YSS | | | | A | A | 03 22 32.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| YSS | | | | A | A | 03 22 32.3 | |
| | comp=E,2μm,0.4s | | | | | | |
| **JSE** | **Soyaes** | **1.64** | **138** | P | **Pn** | **03 22 13.8** | **+0.5** |
| **JSS** | **Shosan** | **1.88** | **162** | P | **Pb** | **03 22 18.5** | **-0.5** |
| **ASAJ** | **Asahikawa** | **2.35** | **152** | Pn | **Pn** | **03 22 24.9** | **+1.8** |
| | comp=E,6.1nm,0.3s,baz=346,slow=11,SNR=30 | | | | | | |
| ASAJ | | | | Sn | **Sb** | **03 22 54.5** | **-1.4** |
| | comp=E,6.1nm,0.3s,baz=103,slow=18,SNR=4.9 | | | | | | |
| **UGL** | **Uglegorsk** | **2.97** | **13** | *e*PN | **Pn** | **03 22 32.4** | **+0.9** |
| UGL | | | | *e*S | **Sn** | **03 23 06.8** | **-0.1** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,50nm,0.7s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=E,270nm,0.7s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=N,80nm,0.5s | | | | | | |
| UGL | | | | pmax | pmax | | |
| | comp=Z,30nm,0.4s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=E,1μm,18.0s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=N,2μm,19.0s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=Z,2μm,18.0s | | | | | | |
| UGL | | | | pmax | pmax | | |
| | comp=Z,70nm,0.5s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=E,300nm,0.6s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=N,300nm,0.7s | | | | | | |
| UGL | | | | pmax | pmax | | |
| | comp=Z,60nm,0.7s | | | | | | |
| **UGL** | **Uglegorsk** | **2.97** | **13** | *e*P | **Pn** | **03 22 32.4** | **+0.9** |
| UGL | | | | AMB | AMB | 03 22 33.0 | |
| | comp=Z,50nm,0.3s | | | | | | |
| UGL | | | | *e*S | **Sn** | **03 23 06.8** | **-0.1** |
| UGL | | | | A | A | 03 23 08.1 | |
| | comp=Z,110nm,0.3s | | | | | | |
| UGL | | | | A | A | 03 23 08.1 | |
| | comp=Z,200nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.03** | **121** | *i* PN | **Pn** | **03 22 46.8** | **+0.6** |
| **ERM** | **Erimo** | **4.45** | **159** | *i* PN | **Pn** | **03 22 52.3** | **+0.5** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,48nm,0.9s | | | | | | |
| **TYV** | **Tymovskoe** | **4.79** | **12** | *e*PN | **Pn** | **03 22 58.1** | **+1.5** |
| TYV | | | | *e*S | **Sn** | **03 23 54.4** | **+2.4** |
| **TYV** | **Tymovskoe** | **4.79** | **12** | *e*P | **Pn** | **03 22 58.1** | **+1.5** |
| TYV | | | | AMB | AMB | 03 22 58.7 | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| TYV | | | | *e*S | **Sn** | **03 23 52.0** | **0.0** |
| TYV | | | | A | A | 03 23 53.6 | |
| | comp=Z,90nm,0.4s | | | | | | |
| TYV | | | | A | A | 03 23 53.6 | |
| | comp=Z,20nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **6.71** | **256** | Pg | Pb | 03 23 47.3 | +6.1 |
| | baz=58,slow=19,SNR=1.3 | | | | | | |
| USRK | | | | Lg | Lg | 03 25 15.8 | |
| | baz=49,slow=33,SNR=2.5 | | | | | | |
| USRK | | | | LR | LR | 03 25 25.0 | |
| | comp=Z,51nm,21.0s,baz=182,slow=33 | | | | | | |
| **KLR** | **Kul'dur** | **6.97** | **299** | Pn | **Pn** | **03 23 27.0** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=122,slow=15,SNR=1.4 | | | | | | |
| KLR | | | | Lg | Lg | 03 25 26.6 | |
| | comp=Z,0.3nm,0.3s,baz=354,slow=18,SNR=4.9 | | | | | | |
| KLR | | | | LR | LR | 03 26 20.6 | |
| | comp=Z,60nm,20.9s,baz=237,slow=40 | | | | | | |
| **MSHR** | **Mys Shultsa** | **7.95** | **247** | *i* PN | Pn | 03 23 34.2 | -5.8 |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,65nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **13.10** | **233** | LR | LR | 03 29 34.0 | |
| | comp=Z,30nm,18.7s,baz=80,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **17.16** | **342** | *i* P | **Pn** | **03 25 38.0** | **-6.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **23.57** | **287** | P | **P** | **03 26 56.1** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=83,slow=8.5,SNR=3.8 | | | | | | |
| **BILL** | **Bilibino** | **25.46** | **22** | *e*P | **P** | **03 27 09.9** | **-2.1** |
| BILL | | | | *e* | | 03 27 44.9 | |
| BILL | | | | *e*S | **S** | **03 31 35.1** | **-3.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.63** | **293** | P | **P** | **03 29 16.8** | **+0.9** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=8.8,SNR=3.7 | | | | | | |
| **KURK** | **Kurchatov** | **40.56** | **300** | P | **P** | **03 29 24.9** | **+1.3** |
| **KURBB** | **Kurchatov Arra** | **40.65** | **300** | P | **P** | **03 29 24.9** | **+0.6** |
| | comp=Z,0.9nm,0.9s,baz=72,slow=8.6,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **42.13** | **37** | P | **P** | **03 29 37.3** | **+0.9** |
| | comp=Z,0.7nm,0.7s,baz=280,slow=8.5,SNR=8.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.14** | **33** | P | **P** | **03 31 24.1** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=301,slow=6.6,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **60.66** | **330** | P | **P** | **03 31 55.4** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=61,slow=8.6,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.10** | **187** | P | **P** | **03 32 30.8** | **-0.7** |
| | comp=Z,0.4nm,0.9s,baz=4.6,slow=6.8,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **69.83** | **187** | P | **P** | **03 32 56.5** | **+1.6** |
| | comp=Z,0.6nm,0.7s,baz=11,slow=5.9,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **69.85** | **55** | P | **P** | **03 32 56.4** | **+1.0** |
| | comp=Z,0.4nm,0.6s,baz=292,slow=7.4,SNR=4.1 | | | | | | |
| **PDAR** | **Pinedale Array** | **71.53** | **47** | P | **P** | **03 33 06.2** | **+0.7** |
| | comp=Z,0.4nm,0.7s,baz=42,slow=2.4,SNR=4.6 | | | | | | |

**NEIC 29 03:28:24±0.5, 36.52N±0.01×98.98W±0.03, h5km±3km, mb_Lg2.0/4, Error ellipse: s-maj=3.2km s-min=1.9km az=100.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.14** | **186** | Pg | Pg | 03 28 26.8 | -0.1 |
| U32A | | | | Sg | Sg | 03 28 29.3 | +0.5 |
| **WMOK** | **Wichita Mounta** | **1.79** | **175** | Pn | Pn | 03 28 54.7 | -0.8 |
| **R32A** | **Long Quarter,** | **1.91** | **6** | Pn | Pn | 03 28 56.7 | -0.6 |
| R32A | | | | IAmb_Lg | | 03 29 26.4 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.02** | **78** | Pn | Pn | 03 28 57.3 | -1.4 |
| T35A | | | | IAmb_Lg | | 03 29 33.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.74** | **234** | Pn | Pn | 03 29 07.2 | -1.4 |
| **X37A** | **Clayton** | **3.52** | **122** | Pn | Pn | 03 29 18.7 | -0.6 |
| **S39A** | **Bolivar** | **4.67** | **74** | Pn | Pn | 03 29 33.9 | -1.2 |
| **WHAR** | **Wooly Hollow** | **5.57** | **101** | Pn | Pn | 03 29 45.6 | -1.9 |

**IDC 29 03:39:13.8±9.2, 30.75N×141.57E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.2/39, mbtmp3.4/3, Error ellipse: s-maj=662.9km s-min=32.3km az=83.0, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **50.88** | **189** | P | P | 03 48 16.4 | -0.2 |
| | 0.1nm,0.3s,baz=5.6,slow=7.6,SNR=9.8 | | | | | | |
| **ASAR** | **Alice Springs** | **54.60** | **189** | P | P | 03 48 44.2 | 0.0 |
| | 0.1nm,0.5s,baz=16,slow=13,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **74.45** | **333** | P | P | 03 50 53.6 | 0.0 |
| | 0.5nm,0.7s,baz=49,slow=8.6,SNR=4.6 | | | | | | |

**KRSC 29 03:54:21.5±1.8, 50.64N×157.44E, h86km±24km, ML4.1, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **0.84** | **273** | *e*P | Pn | 03 54 39.8 | +0.7 |
| SKR | | | | *e*S | Sn | 03 54 52.4 | +0.1 |
| **PAU** | **Pauzhetka** | **0.92** | **334** | *e*P | Pn | 03 54 41.5 | +1.6 |
| PAU | | | | *e*S | Sn | 03 54 55.3 | +1.6 |
| **KDTR** | **Khodutka, Kamc** | **1.23** | **19** | *e*P | Pn | 03 54 46.1 | +2.4 |
| KDTR | | | | *e*S | Sn | 03 55 02.7 | +2.4 |
| **MTVR** | **Mutnovka** | **1.90** | **14** | *e*P | Pn | 03 54 54.8 | +2.4 |
| MTVR | | | | *e*S | Sn | 03 55 18.4 | +2.6 |
| **RUS** | **Russkaya** | **1.91** | **20** | *e*P | Pn | 03 54 54.2 | +1.8 |
| RUS | | | | *e*S | Sn | 03 55 17.8 | +1.9 |
| **GRL** | **Gorelyy** | **1.95** | **11** | *e*P | Pn | 03 54 55.9 | +2.9 |
| GRL | | | | *e*S | Sn | 03 55 20.3 | +3.3 |
| **KRMR** | **Karymshinskiy** | **2.23** | **11** | *e*P | Pn | 03 54 58.8 | +2.2 |
| KRMR | | | | *e*S | Sn | 03 55 24.7 | +1.3 |
| **APC** | **Apacha** | **2.29** | **356** | *e*P | Pn | 03 54 59.4 | +2.0 |
| **UGLR** | **Uglovaya** | **2.71** | **18** | *e*P | Pn | 03 55 06.1 | +3.0 |
| **AVH** | **Avacha** | **2.75** | **16** | *e*P | Pn | 03 55 06.8 | +3.2 |
| **KOK** | **Koryaka** | **2.75** | **15** | *e*P | Pn | 03 55 07.0 | +3.3 |
| **SMAR** | **Somma** | **2.75** | **17** | *e*P | Pn | 03 55 06.9 | +3.1 |
| **KRER** | **Koryakskii** | **2.78** | **16** | *e*P | Pn | 03 55 07.2 | +3.0 |
| **SDLR** | **Sedlovina** | **2.79** | **18** | *e*P | Pn | 03 55 06.5 | +2.4 |
| **NLC** | **Nalytchevo** | **2.79** | **24** | *e*P | Pn | 03 55 05.3 | +1.2 |
| NLC | | | | *e*S | Sn | 03 55 36.4 | -0.4 |
| **SPN** | **Mys Shipunski** | **2.93** | **32** | *e*P | Pn | 03 55 08.3 | +2.3 |
| SPN | | | | *e*S | Sn | 03 55 41.0 | +0.8 |
| **GNL** | **Ganaly** | **3.07** | **6** | *e*P | Pn | 03 55 10.4 | +2.4 |
| **MKZ** | **Mys Kozlova** | **4.71** | **32** | *e*P | Pn | 03 55 31.4 | +1.4 |
| MKZ | | | | *e*S | Sn | 03 56 22.1 | -1.2 |
| **KBTR** | **Krutoberegovo** | **6.43** | **28** | *e*P | Pn | 03 55 56.3 | +2.8 |

*IDC **29** 03:54:40.0±0.9, 39.92N×29.79W, h0km, mb3.9/18, mb1 4.2/19, mb1mx3.9/59, mbtmp3.9/19, ML4.5/1, MS3.8/70, Ms1 3.8/70, ms1mx3.7/93, Error ellipse: s-maj=27.7km s-min=13.8km az=8.0*
*NEIC **29** 03:54:41.1±2.0, 39.7N±0.1×29.77W±0.06, h10km±1km, mb4.7/52, Error ellipse: s-maj=21.1km s-min=7.8km az=184.0*
*GCMT **29** 03:54:42.2±0.3, 40.25N±0.04×29.70W±0.04, h12km, MW4.8/85, Moment Tensor Solution. s12,c12; s85,c101; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=1.12±.06; Mθθ=0.14±.07; Mθφ=0.98±.04; Mrθ=1.57±.29; Mrφ=0.23±.05; Mφφ=0.54±.24; Best double couple: M=1.91000×10^16 NP1:φs=7.00000°, δ22.00000°, λ=-139.00000°. NP2: φs=237.00000°, δ75.00000°, λ=-73.00000°. Principal axes: T 1.6040, Plg28.0000°, Azm314.0000°; N 0.6090, Plg17.0000°, Azm53.0000°; P -2.2170, Plg56.0000°, Azm169.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*SVSA **29** 03:54:42.7±1.1, 39.94N×29.62W, h10km, ML3.5(INMG) Error ellipse: s-maj=5.5km s-min=3.4km az=41.0*

**ISC 29 03:54:40.0±1.7, 39.68N±0.07×29.66W±0.04, h6km±11km, n158, σ1°12/118, mb4.6/41, MS3.8/69, 4C, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H07N1** | **FLORES T-PHASE** | **1.12** | **271** | Pn | **Pb** | **03 55 00.7** | **-1.0** |
| **H07N1** | **FLORES T-PHASE** | **1.12** | **271** | *e*P | **Pb** | **03 55 00.8** | **-1.0** |
| **H07S1** | **FLORES T-PHASE** | **1.23** | **256** | Pn | **Pn** | **03 55 02.5** | **-1.1** |
| | SNR=50 | | | | | | |
| **H07S1** | **FLORES T-PHASE** | **1.23** | **256** | *e*P | **Pn** | **03 55 03.1** | **-0.6** |
| **PCED** | **Cedros** | **1.29** | **144** | *e*P | **Pg** | **03 55 04.6** | **-0.1** |
| PCED | | | | *e*S | **Sg** | **03 55 21.8** | **+0.3** |
| PCED | | | | A | A | 03 55 27.1 | |
| | 117nm,0.4s | | | | | | |
| **CALA** | **Caldeira** | **1.33** | **145** | *e*P | **Pg** | **03 55 05.5** | **0.0** |
| CALA | | | | *e*S | **Sg** | **03 55 22.5** | **-0.2** |
| CALA | | | | A | A | 03 55 29.9 | |
| | 300nm,0.3s | | | | | | |
| **PFCBR** | **Castelo Branco** | **1.37** | **147** | *e*P | **Pb** | **03 55 06.0** | **0.0** |
| PFCBR | | | | *e*S | **Sg** | **03 55 24.0** | **-0.1** |
| PFCBR | | | | A | A | 03 55 27.4 | |
| | 50nm,0.2s | | | | | | |
| **HOR** | **Horta** | **1.41** | **145** | *e*P | **Pb** | **03 55 06.3** | **-0.3** |
| HOR | | | | *e*S | **Sb** | **03 55 24.1** | **-0.6** |
| HOR | | | | A | A | 03 55 26.7 | |
| | 197nm,0.3s | | | | | | |
| **SRBC** | **Serra Branca** | **1.42** | **117** | *e*P | **Pn** | **03 55 04.9** | **-1.3** |
| SRBC | | | | *e*S | **Sn** | **03 55 21.9** | **-3.2** |
| SRBC | | | | A | A | 03 55 26.7 | |
| | 607nm,0.4s | | | | | | |
| **PGRA** | **Graciosa** | **1.46** | **116** | *e*P | **Pn** | **03 55 05.1** | **-1.7** |
| PGRA | | | | *e*S | **Sn** | **03 55 22.9** | **-3.3** |
| PGRA | | | | A | A | 03 55 26.3 | |
| | 128nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.47** | **131** | Pn | **Pn** | **03 55 05.8** | **-1.1** |
| **ROSA** | **Rosais** | **1.47** | **131** | *i* P | **Pn** | **03 55 05.2** | **-0.7** |
| ROSA | | | | *e*S | **Sn** | **03 55 24.8** | **-1.6** |
| ROSA | | | | A | A | 03 55 34.9 | |
| | 140nm,0.3s | | | | | | |
| **PICO** | **Pico** | **1.52** | **140** | *e*P | **Pn** | **03 55 07.9** | **+0.1** |
| PICO | | | | *e*S | **Sn** | **03 55 26.9** | **-1.0** |
| PICO | | | | A | A | 03 55 28.8 | |
| | 277nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.52** | **143** | *i* P | **Pb** | **03 55 07.9** | **-0.7** |
| PCAN | | | | *e*S | **Sn** | **03 55 26.7** | **-1.1** |
| PCAN | | | | A | A | 03 55 29.3 | |
| | 249nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.61** | **130** | *e*P | **Pn** | **03 55 08.3** | **-0.6** |
| PMAN | | | | *e*S | **Sn** | **03 55 28.2** | **-1.8** |
| PMAN | | | | A | A | 03 55 28.8 | |
| | 88nm,0.3s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.63** | **138** | *e*P | **Pn** | **03 55 09.3** | **+0.1** |
| **PAGU** | **Agualva, Azore** | **2.13** | **115** | *e*P | **Pn** | **03 55 15.0** | **-1.1** |
| PAGU | | | | *e*S | **Sn** | **03 55 39.1** | **-3.7** |
| PAGU | | | | A | A | 03 55 42.5 | |
| | 97nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **3.60** | **120** | *e*P | **Pn** | **03 55 36.0** | **-0.2** |
| **PDA** | **Ponta Delgada** | **3.68** | **120** | *e*P | **Pn** | **03 55 37.2** | **-0.1** |
| **GRON** | **Grota Negra** | **3.75** | **119** | *e*P | **Pn** | **03 55 39.7** | **+1.3** |
| **CMLA** | **Cha da Macela** | **3.76** | **119** | Pn | **Pn** | **03 55 38.3** | **-0.1** |
| **CMLA** | **Cha da Macela** | **3.76** | **119** | *i* P | **Pn** | **03 55 38.4** | **-0.1** |
| CMLA | | | | *e*S | **Sn** | **03 56 19.8** | **-3.3** |
| CMLA | | | | A | A | 03 56 27.8 | |
| | 97nm,0.2s | | | | | | |
| **PSMA** | **Santa Maria** | **4.46** | **126** | *e*P | **Pn** | **03 55 47.9** | **-0.2** |
| **PSMN** | **Pico do Norte,** | **4.50** | **125** | *e*P | **Pn** | **03 55 48.2** | **-0.4** |
| **PESTR** | **Estremoz** | **17.11** | **86** | Pn | **Pn** | **03 58 39.7** | **0.0** |
| **PVAQ** | **Vaqueiros** | **17.32** | **91** | | **P** | **03 58 43.7** | **+0.1** |
| **ESDC** | **Sonseca Array** | **19.77** | **82** | P | **Pn** | **03 59 11.8** | **-0.4** |
| | 0.3nm,0.3s,baz=283,slow=12,SNR=8.9 | | | | | | |
| ESDC | | | | LR | LR | 04 05 49.5 | |
| | comp=Z,479nm,18.4s,baz=274,slow=34 | | | | | | |
| **ESDC** | **Sonseca Array** | **19.77** | **82** | | **Pn** | **03 59 14.0** | **+1.9** |
| **MDT** | **Midelt** | **21.30** | **101** | P | **P** | **03 59 29.8** | **+2.4** |
| | 4.6nm,1.1s,baz=316,slow=11,SNR=2.7 | | | | | | |
| MDT | | | | LR | LR | 04 05 48.1 | |
| | comp=Z,231nm,21.3s,baz=344,slow=31 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.57** | **40** | P | **P** | **03 59 50.5** | **-0.6** |
| | 2.4nm,0.7s,baz=233,slow=9.3,SNR=7.1 | | | | | | |
| EKA | | | | LR | LR | 04 07 04.5 | |
| | comp=Z,208nm,19.7s,baz=246,slow=32 | | | | | | |
| **BORG** | **Borgarnes** | **25.57** | **8** | LR | LR | 04 07 27.6 | |
| | comp=Z,177nm,18.1s,baz=205,slow=30 | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **26.38** | **353** | P | **P** | **04 00 18.7** | **+2.1** |
| ANGG | | | | | IAmb | IAmb | 04 00 27.0 |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **35.94** | **56** | P | **P** | **04 01 41.6** | **+0.6** |
| OJC | | | | IAmb | IAmb | 04 01 44.5 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SADO** | **Sadowa** | **36.53** | **295** | LR | LR | 04 15 44.5 | |
| | comp=Z,363nm,19.8s,baz=112,slow=35 | | | | | | |
| **SJG** | **San Juan** | **38.13** | **246** | LR | LR | 04 13 40.4 | |
| | comp=Z,102nm,21.6s,baz=58,slow=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.22** | **125** | P | **P** | **04 02 03.0** | **+2.4** |
| | comp=Z,1.8nm,1.0s,baz=321,slow=5.3,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.22** | **125** | P | **P** | **04 02 03.6** | **+2.9** |
| **DBIC** | **Dimbokro** | **39.72** | **139** | LR | LR | 04 17 20.6 | |
| | comp=Z,95nm,18.8s,baz=336,slow=34 | | | | | | |
| **BURAR** | **Bucovina Array** | **39.76** | **60** | P | **P** | **04 02 14.6** | **+1.2** |
| **FINES** | **FINESS Array B** | **39.96** | **38** | P | **P** | **04 02 14.3** | **-0.4** |
| | comp=Z,2.9nm,0.8s,baz=222,slow=4.6,SNR=7.6 | | | | | | |
| FINES | | | | LR | LR | 04 17 18.8 | |
| | comp=Z,140nm,19.0s,baz=275,slow=34 | | | | | | |
| **FINES** | **FINESS Array B** | **39.96** | **38** | P | **P** | **04 02 14.6** | **-0.2** |
| **FIA1** | **FINESS Array S** | **39.96** | **38** | P | **P** | **04 02 14.7** | **0.0** |
| FIA1 | | | | IAmb | IAmb | 04 02 29.3 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **MDP** | **Montagnes des** | **40.19** | **217** | LR | LR | 04 15 02.3 | |
| | comp=Z,128nm,21.6s,baz=55,slow=30 | | | | | | |
| **MLR** | **Muntele Rosu** | **40.65** | **63** | P | **P** | **04 02 23.3** | **+2.4** |
| | comp=Z,6.7nm,1.1s,baz=180,slow=7.1,SNR=4.7 | | | | | | |
| MLR | | | | LR | LR | 04 19 26.4 | |
| | comp=Z,88nm,19.5s,baz=262,slow=37 | | | | | | |
| **MLR** | **Muntele Rosu** | **40.65** | **63** | P | **P** | **04 02 22.2** | **+1.4** |
| MLR | | | | IAmb | IAmb | 04 02 25.2 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.38** | **26** | LR | LR | 04 16 08.4 | |
| | comp=Z,88nm,21.8s,baz=231,slow=31 | | | | | | |
| **AKASG** | **Malin Array Be** | **41.89** | **55** | P | **P** | **04 02 30.3** | **-0.5** |
| | comp=Z,0.9nm,0.6s,baz=275,slow=8.4,SNR=6.5 | | | | | | |
| AKASG | | | | LR | LR | 04 19 23.5 | |
| | comp=Z,158nm,18.1s,baz=340,slow=36 | | | | | | |
| **TKL** | **Tuckaleechee C** | **42.48** | **282** | LR | LR | 04 17 53.9 | |
| | comp=Z,127nm,19.6s,baz=94,slow=33 | | | | | | |
| **IDI** | **Anoyia** | **42.96** | **78** | LR | LR | 04 19 16.3 | |
| | comp=Z,114nm,21.8s,baz=253,slow=34 | | | | | | |
| **EUNU** | **Eureka** | **45.58** | **348** | P | **P** | **04 03 00.8** | **+0.6** |
| **OBN** | **Obninsk** | **45.63** | **47** | LR | LR | 04 21 48.5 | |
| | comp=Z,24nm,19.3s,baz=349,slow=36 | | | | | | |
| **RCBR** | **Riachuelo** | **45.65** | **189** | LR | LR | 04 16 29.1 | |
| | comp=Z,69nm,21.9s,baz=129,slow=28 | | | | | | |
| **RES** | **Resolute Bay** | **45.65** | **340** | LR | LR | 04 18 51.6 | |
| | comp=Z,48nm,18.1s,baz=232,slow=32 | | | | | | |
| **B35A** | **Bob, Littlefor** | **45.65** | **303** | P | **P** | **04 03 01.6** | **+0.5** |
| B35A | | | | IAmb | IAmb | 04 03 12.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **KLMR** | **Klimovskoe** | **46.46** | **39** | *e*P | **P** | **04 03 06.1** | **-1.2** |
| KLMR | | | | AMP | | 04 03 13.9 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **46.57** | **306** | LR | LR | 04 21 42.6 | |
| | comp=Z,241nm,18.5s,baz=80,slow=35 | | | | | | |
| **P40A** | **Paris** | **47.17** | **291** | P | **P** | **04 03 13.2** | **+0.1** |
| P40A | | | | IAmb | IAmb | 04 03 22.6 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **SDV** | **Santo Domingo** | **47.67** | **241** | LR | LR | 04 19 42.4 | |
| | comp=Z,62nm,21.6s,baz=55,slow=32 | | | | | | |
| **BRTR** | **Keskin Array B** | **47.76** | **69** | P | **P** | **04 03 18.6** | **+0.6** |
| | comp=Z,0.9nm,0.9s,baz=282,slow=5.9,SNR=5.6 | | | | | | |
| BRTR | | | | LR | LR | 04 24 09.5 | |
| | comp=Z,60nm,18.9s,baz=287,slow=37 | | | | | | |
| **BRTR** | **Keskin Array B** | **47.76** | **69** | P | **P** | **04 03 19.0** | **+1.1** |
| **S39A** | **Bolivar** | **48.79** | **289** | P | **P** | **04 03 26.4** | **+0.7** |
| S39A | | | | IAmb | IAmb | 04 03 27.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **PTGA** | **Pitinga** | **48.84** | **222** | LR | LR | 04 20 40.8 | |
| | comp=Z,75nm,19.2s,baz=23,slow=32 | | | | | | |
| **ECSD** | **EROS Data Cent** | **48.92** | **298** | P | **P** | **04 03 27.0** | **+0.4** |
| **FFC** | **Flin Flon** | **49.15** | **313** | P | **P** | **04 03 29.4** | **+1.1** |
| **L34A** | **Svendsen Farm,** | **49.37** | **295** | P | **P** | **04 03 29.8** | **-0.2** |
| **BNN** | **Bunyan** | **49.67** | **69** | P | **P** | **04 03 32.4** | **-0.2** |
| **K31A** | **O'Neill** | **50.77** | **297** | P | **P** | **04 03 39.8** | **-1.0** |
| **BGNE** | **Belgrade** | **50.81** | **295** | P | **P** | **04 03 40.4** | **-0.7** |
| **KIRV** | **Kirov** | **51.80** | **41** | LR | LR | 04 25 31.2 | |
| | comp=Z,138nm,18.3s,baz=301,slow=36 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **51.81** | **76** | LR | LR | 04 27 07.6 | |
| | comp=Z,26nm,19.9s,baz=50,slow=38 | | | | | | |
| **BELG** | **Belogornoye** | **52.65** | **49** | LR | LR | 04 26 15.9 | |
| | comp=Z,109nm,18.2s,baz=128,slow=36 | | | | | | |
| **KBZ** | **Khabaz** | **52.72** | **60** | P | **P** | **04 03 57.3** | **+2.1** |
| | comp=Z,3.9nm,0.9s,baz=299,slow=6.1,SNR=9.0 | | | | | | |
| KBZ | | | | LR | LR | 04 26 14.0 | |
| | comp=Z,45nm,20.6s,baz=358,slow=36 | | | | | | |
| **EIL** | **Elat** | **53.05** | **80** | LR | LR | 04 29 31.8 | |
| | comp=Z,33nm,18.2s,baz=277,slow=39 | | | | | | |
| **ROSC** | **El Rosal** | **53.11** | **241** | LR | LR | 04 23 37.8 | |
| | comp=Z,202nm,21.4s,baz=32,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.49** | **325** | P | **P** | **04 03 59.7** | **-1.0** |
| | comp=Z,1.1nm,1.0s,baz=74,slow=6.8,SNR=7.1 | | | | | | |
| YKA | | | | PcP | **PcP** | **04 05 07.2** | **-0.3** |
| | comp=Z,0.8nm,0.9s,baz=70,slow=4.5,SNR=5.2 | | | | | | |
| YKA | | | | LR | LR | 04 23 36.4 | |
| | comp=Z,77nm,20.5s,baz=324,slow=33 | | | | | | |
| **MARD** | **Mardin** | **53.85** | **68** | P | **P** | **04 04 02.9** | **-1.0** |
| MARD | | | | IAmb | IAmb | 04 04 04.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **54.33** | **284** | P | **P** | **04 04 06.8** | **-0.4** |
| **PHWY** | **Pilot Hill** | **55.88** | **298** | P | **P** | **04 04 18.0** | **-0.7** |
| **K22A** | **Casper** | **56.03** | **300** | P | **P** | **04 04 18.6** | **-1.0** |
| **AMTX** | **Amarillo** | **56.09** | **290** | P | **P** | **04 04 19.7** | **-0.3** |
| AMTX | | | | IAmb | IAmb | 04 04 30.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **56.39** | **298** | P | **P** | **04 04 22.2** | **-0.2** |
| N23A | | | | IAmb | IAmb | 04 04 25.6 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **GCMT** | **Greycliff** | **56.76** | **305** | P | **P** | **04 04 24.8** | **+0.1** |
| **ARU** | **Arti** | **57.17** | **41** | LR | LR | 04 28 03.5 | |
| | comp=Z,85nm,19.0s,baz=300,slow=35 | | | | | | |
| **HRY** | **Holter Researc** | **57.73** | **306** | P | **P** | **04 04 30.6** | **-0.9** |
| **BW06** | **Boulder Array** | **57.99** | **301** | P | **P** | **04 04 33.0** | **-0.6** |
| **PD31** | **Pinedale Array** | **57.99** | **301** | P | **P** | **04 04 33.0** | **-0.6** |
| **PDAR** | **Pinedale Array** | **57.99** | **301** | P | **P** | **04 04 33.0** | **-0.6** |
| | comp=Z,2.3nm,0.8s,baz=68,slow=8.5,SNR=16 | | | | | | |
| PDAR | | | | LR | LR | 04 29 36.3 | |
| | comp=Z,204nm,18.1s,baz=78,slow=36 | | | | | | |
| **YFT** | **Old Faithful** | **58.08** | **304** | P | **P** | **04 04 34.0** | **-0.2** |
| YFT | | | | IAmb | IAmb | 04 04 41.1 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **APG** | **El Apazote** | **58.17** | **263** | LR | LR | 04 24 31.8 | |
| | comp=Z,66nm,21.1s,baz=76,slow=31 | | | | | | |
| **MOOW** | **Moose Ponds** | **58.34** | **303** | P | **P** | **04 04 35.7** | **-0.2** |
| **SNOW** | **Snow King Moun** | **58.47** | **302** | P | **P** | **04 04 35.4** | **-1.5** |
| **INK** | **Inuvik** | **58.55** | **335** | P | **P** | **04 04 35.7** | **-1.0** |
| | comp=Z,1.3nm,0.8s,baz=113,slow=1.1,SNR=4.5 | | | | | | |
| INK | | | | LR | LR | 04 27 35.1 | |
| | comp=Z,106nm,18.2s,baz=49,slow=34 | | | | | | |
| **INK** | **Inuvik** | **58.55** | **335** | P | **P** | **04 04 36.5** | **-0.2** |
| **REDW** | **Red Top Meadow** | **58.58** | **302** | P | **P** | **04 04 36.0** | **-1.6** |
| REDW | | | | IAmb | IAmb | 04 04 40.2 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **TPAW** | **Teton Pass** | **58.58** | **303** | P | **P** | **04 04 36.0** | **-1.7** |
| TPAW | | | | IAmb | IAmb | 04 04 51.0 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **RDMU** | **Red Mountain** | **59.00** | **299** | P | **P** | **04 04 39.1** | **-1.6** |
| RDMU | | | | IAmb | IAmb | 04 04 48.0 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **59.41** | **48** | LR | LR | 04 30 00.2 | |
| | comp=Z,74nm,19.3s,baz=293,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **59.50** | **292** | LR | LR | 04 29 26.7 | |
| | comp=Z,112nm,19.1s,baz=59,slow=35 | | | | | | |
| **HWUT** | **Hardware Ranch** | **59.85** | **301** | P | **P** | **04 04 46.1** | **-0.4** |
| HWUT | | | | IAmb | IAmb | 04 04 52.3 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **BNM** | **Barren Site** | **60.02** | **291** | P | **P** | **04 04 48.5** | **+0.7** |
| **NEW** | **Newport** | **60.26** | **310** | LR | LR | 04 28 54.9 | |
| | comp=Z,202nm,21.6s,baz=68,slow=34 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **60.28** | **285** | P | **P** | **04 04 49.5** | **0.0** |
| **TX32** | **Lajitas Array** | **60.28** | **285** | P | **P** | **04 04 49.8** | **+0.3** |
| **TXAR** | **Lajitas Array** | **60.28** | **285** | P | **P** | **04 04 50.0** | **+0.5** |
| | comp=Z,1.6nm,0.7s,baz=79,slow=7.0,SNR=12 | | | | | | |
| TXAR | | | | LR | LR | 04 29 15.9 | |
| | comp=Z,85nm,20.8s,baz=102,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.28** | **285** | P | **P** | **04 04 49.4** | **-0.1** |
| **CMIG** | **Matias Romero** | **60.32** | **268** | LR | LR | 04 27 31.7 | |
| | comp=Z,102nm,21.8s,baz=42,slow=33 | | | | | | |
| **TMUT** | **Trail Mountain** | **60.71** | **298** | P | **P** | **04 04 51.4** | **-1.1** |
| **PLID** | **Pearl Lake** | **61.06** | **306** | P | **P** | **04 04 54.6** | **-0.1** |
| PLID | | | | IAmb | IAmb | 04 04 57.4 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **DUG** | **Dugway, Tooele** | **61.36** | **300** | P | **P** | **04 04 56.3** | **-0.3** |
| DUG | | | | IAmb | IAmb | 04 04 59.7 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **MSU** | **Marysvale** | **61.75** | **298** | P | **P** | **04 04 59.8** | **+0.3** |
| **DLBC** | **Dease Lake** | **62.10** | **324** | LR | LR | 04 30 04.2 | |
| | comp=Z,106nm,19.6s,baz=144,slow=34 | | | | | | |
| **SIV** | **San Ignacio** | **62.66** | **214** | LR | LR | 04 28 20.3 | |
| | comp=Z,58nm,21.2s,baz=46,slow=32 | | | | | | |
| **ELK** | **Elko** | **62.69** | **302** | LR | LR | 04 32 45.8 | |
| | comp=Z,172nm,18.1s,baz=118,slow=37 | | | | | | |
| **WUAZ** | **Wupatki** | **62.70** | **295** | P | **P** | **04 05 05.9** | **+0.1** |
| WUAZ | | | | IAmb | IAmb | 04 05 10.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **CCUT** | **Cedar City** | **63.04** | **298** | P | **P** | **04 05 08.2** | **0.0** |
| CCUT | | | | IAmb | IAmb | 04 05 14.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **J08A** | **Circle Bar Ran** | **63.46** | **305** | P | **P** | **04 05 11.4** | **+0.7** |
| **PRN** | **Pahroc Range** | **64.27** | **298** | P | **P** | **04 05 17.6** | **+1.5** |
| PRN | | | | IAmb | IAmb | 04 05 19.9 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **BBB** | **Bella Bella** | **64.45** | **318** | LR | LR | 04 32 44.7 | |
| | comp=Z,110nm,18.4s,baz=90,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **64.75** | **236** | LR | LR | 04 31 03.8 | |
| | comp=Z,82nm,21.2s,baz=351,slow=34 | | | | | | |
| **SHPR** | **Sheep Range** | **64.81** | **297** | P | **P** | **04 05 19.8** | **0.0** |
| SHPR | | | | IAmb | IAmb | 04 05 23.0 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **TPH** | **Tonopah** | **65.38** | **300** | P | **P** | **04 05 23.2** | **-0.2** |
| **KVN** | **Kaiserville** | **65.45** | **301** | P | **P** | **04 05 23.1** | **-0.7** |
| KVN | | | | IAmb | IAmb | 04 05 29.3 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.92** | **301** | P | **P** | **04 05 26.6** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=66,slow=6.8,SNR=4.8 | | | | | | |
| NVAR | | | | LR | LR | 04 33 40.3 | |
| | comp=Z,189nm,19.3s,baz=44,slow=36 | | | | | | |
| **LCH** | **Last Change Ra** | **66.12** | **299** | P | **P** | **04 05 28.1** | **0.0** |
| LCH | | | | IAmb | IAmb | 04 05 31.7 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **66.98** | **306** | LR | LR | 04 33 52.4 | |
| | comp=Z,132nm,18.1s,baz=54,slow=35 | | | | | | |
| **PFO** | **Pinyon Flats O** | **67.27** | **295** | LR | LR | 04 35 05.1 | |
| | comp=Z,103nm,18.4s,baz=106,slow=36 | | | | | | |
| **NNA** | **Nana** | **67.54** | **231** | LR | LR | 04 33 05.2 | |
| | comp=Z,45nm,20.9s,baz=330,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **67.93** | **7** | LR | LR | 04 32 24.8 | |
| | comp=Z,26nm,19.8s,baz=188,slow=33 | | | | | | |
| **MBAR** | **Mbarara** | **68.01** | **110** | LR | LR | 04 33 33.4 | |
| | comp=Z,84nm,20.8s,baz=256,slow=34 | | | | | | |
| **LPIG** | **La Paz** | **68.10** | **284** | LR | LR | 04 33 40.8 | |
| | comp=Z,126nm,21.5s,baz=43,slow=34 | | | | | | |
| **KKAR** | **Karatay Array** | **70.54** | **50** | P | **P** | **04 05 55.7** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **71.10** | **35** | P | **P** | **04 05 59.1** | **+0.4** |
| | comp=Z,1.7nm,0.8s,baz=308,slow=7.3,SNR=5.6 | | | | | | |
| ZALV | | | | LR | LR | 04 36 45.7 | |
| | comp=Z,48nm,21.1s,baz=350,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.10** | **35** | P | **P** | **04 05 58.7** | **0.0** |
| **LVC** | **Limon Verde** | **71.99** | **218** | LR | LR | 04 34 34.8 | |
| | comp=Z,53nm,19.7s,baz=300,slow=33 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **73.14** | **106** | LR | LR | 04 36 42.8 | |
| | comp=Z,50nm,18.8s,baz=88,slow=34 | | | | | | |
| **AAK** | **Ala-Archa** | **73.15** | **48** | LR | LR | 04 39 40.8 | |
| | comp=Z,76nm,19.1s,baz=325,slow=37 | | | | | | |
| **TSUM** | **Tsumeb** | **73.31** | **134** | LR | LR | 04 37 06.2 | |
| | comp=Z,113nm,19.1s,baz=316,slow=35 | | | | | | |
| **MK31** | **Makanchi Array** | **74.70** | **41** | P | **P** | **04 06 20.2** | **-0.1** |
| **MKAR** | **Makanchi Array** | **74.70** | **41** | P | **P** | **04 06 20.5** | **+0.2** |
| | comp=Z,1.6nm,0.8s,baz=316,slow=5.1,SNR=9.4 | | | | | | |
| MKAR | | | | LR | LR | 04 38 58.7 | |
| | comp=Z,98nm,19.9s,baz=315,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.70** | **41** | P | **P** | **04 06 20.1** | **-0.2** |
| **LSZ** | **Lusaka** | **76.72** | **123** | LR | LR | 04 40 33.5 | |
| | comp=Z,192nm,19.3s,baz=294,slow=36 | | | | | | |
| **MA2** | **Madadan** | **81.10** | **360** | LR | LR | 04 41 33.8 | |
| | comp=Z,19nm,18.6s,baz=100,slow=35 | | | | | | |
| **LBTB** | **Lobatse** | **82.44** | **131** | LR | LR | 04 42 47.8 | |
| | comp=Z,56nm,18.9s,baz=252,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **84.51** | **28** | P | **P** | **04 07 14.3** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=298,slow=3.3,SNR=6.2 | | | | | | |
| **BOSA** | **Boshof** | **85.01** | **134** | LR | LR | 04 42 26.0 | |
| | comp=Z,139nm,19.8s,baz=214,slow=34 | | | | | | |
| **SUR** | **Sutherland** | **85.61** | **139** | LR | LR | 04 43 45.4 | |
| | comp=Z,73nm,18.4s,baz=200,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **158.83** | **46** | PKPab | **PKPab** | **04 15 14.3** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=314,slow=4.7,SNR=5.5 | | | | | | |

*TUL **29** 03:54:59.1±0.4,36°.286N±0°.010×97°.51W±0°.01,h7km±4km, ML2.8,mb_Lg2.5/30(NEIC),Error ellipse: s-maj=1.5km s-min=1.4km az=65.0*

**NEIC 29 03:54:59.7±0.4,36°.287N±0°.006×97°.51W±0°.01,h3km±4km, Error ellipse: s-maj=1.6km s-min=0.6km az=63.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKCFA** | **Oklahoma City** | **0.87** | **177** | | **Pg** | 03 55 15.4 | -0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **0.88** | **176** | Pg | Pg | 03 55 15.6 | -0.9 |
| OKCSW | | | | Sg | Sg | 03 55 27.6 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.02** | **52** | Pg | Pg | 03 55 18.6 | -0.7 |
| T35A | | | | Sg | Sg | 03 55 31.7 | -0.8 |
| **FNO** | **Franklin** | **1.03** | **175** | Pg | Pg | 03 55 18.4 | -1.1 |
| FNO | | | | Sg | Sg | 03 55 32.5 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.20** | **275** | Pg | Pg | 03 55 21.4 | -1.3 |
| **TUL1** | **Leonard** | **1.45** | **105** | | Pn | 03 55 25.0 | -1.6 |
| **X34A** | **Smith Ranch, M** | **1.70** | **189** | | Pn | 03 55 30.4 | +0.1 |
| X34A | | | | IAmb_Lg | | 03 55 57.0 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.86** | **214** | | Pn | 03 55 32.0 | -0.5 |
| **X37A** | **Clayton** | **2.44** | **133** | Pn | Pn | 03 55 40.3 | 0.0 |
| X37A | | | | IAmb_Lg | | 03 56 18.2 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.08** | **326** | IAmb_Lg | | 03 56 42.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.64** | **66** | Pn | Pn | 03 55 57.5 | +0.7 |
| S39A | | | | IAmb_Lg | | 03 56 57.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.66** | **117** | | Pn | 03 55 57.0 | -0.1 |
| MIAR | | | | IAmb_Lg | | 03 56 58.1 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.67** | **145** | IAmb_Lg | | 03 57 05.5 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.67** | **249** | Pn | Pn | 03 55 57.5 | 0.0 |
| AMTX | | | | IAmb_Lg | | 03 56 58.9 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **U40A** | **Yellville** | **3.76** | **88** | Pn | Pn | 03 55 59.0 | +0.4 |
| U40A | | | | IAmb_Lg | | 03 56 59.3 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.22** | **114** | Pn | Pn | 03 56 04.2 | -0.7 |
| **WHTX** | **Lake Whitney,** | **4.29** | **179** | Pn | Pn | 03 56 05.0 | -0.7 |
| **MGMO** | **Mountain Grove** | **4.30** | **77** | Pn | Pn | 03 56 07.1 | +1.1 |
| **WHAR** | **Wooly Hollow** | **4.36** | **102** | IAmb_Lg | | 03 57 25.2 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.38** | **94** | IAmb_Lg | | 03 57 15.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **W41B** | **Gary Mavity, V** | **4.43** | **103** | Pn | Pn | 03 56 07.5 | -0.2 |
| **237A** | **Washetta, Mont** | **4.50** | **161** | Pn | Pn | 03 56 07.8 | -0.9 |
| **R40A** | **Maddies Statio** | **4.64** | **63** | Pn | Pn | 03 56 10.9 | +0.3 |
| **KSCO** | **Kaye Shedlock'** | **4.88** | **305** | IAmb_Lg | | 03 57 46.6 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.92** | **127** | IAmb_Lg | | 03 57 40.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **69** | IAmb_Lg | | 03 57 55.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.40** | **52** | IAmb_Lg | | 03 57 57.5 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.10** | **199** | IAmb_Lg | | 03 58 18.3 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.47** | **5** | Pn | Pn | 03 56 48.8 | -0.6 |

*TAP **29** 03:57:55.8,24°.86N×122°.45E,h16km,ML2.4,C*
*JMA **29** 03:57:56.0±0.2,24°.83N×122°.45E,h4km±4km,M2.8*

**ISC 29 03:57:55.9±1.2,24°.84N±0°.06×122°.45E±0°.03,h13km±10km, n22,σ8°27/34,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.45** | **292** | P | **Pb** | **03 58 05.4** | **-0.3** |
| | baz=290 | | | | | | |
| TWB1 | | | | *e*S | **Sg** | **03 58 11.4** | **+0.5** |
| | baz=290 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.58** | **296** | P | **Pb** | **03 58 07.9** | **-0.1** |
| | baz=294 | | | | | | |
| **TIPB** | **Shuangxi** | **0.58** | **283** | *e*P | **Pb** | **03 58 07.8** | **-0.2** |
| | baz=281 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **03 58 16.1** | **-0.1** |
| | baz=281 | | | | | | |
| **TWC** | **Suao** | **0.59** | **247** | P | **Pg** | **03 58 07.4** | **-0.2** |
| | baz=245 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.60** | **131** | P | **Pg** | **03 58 07.5** | **-0.1** |
| JYNG | | | | *e*S | **Sg** | **03 58 15.6** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.64** | **127** | P | **Pg** | **03 58 08.1** | **-0.2** |
| YOJ | | | | *e*S | **Sg** | **03 58 16.3** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.64** | **127** | P | **Pg** | **03 58 08.3** | **-0.1** |
| | baz=118 | | | | | | |
| YOJ | | | | *e*S | **Sg** | **03 58 16.6** | **-0.1** |
| | baz=118 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.65** | **291** | *e*P | **Pb** | **03 58 09.3** | **+0.1** |
| | baz=289 | | | | | | |
| NWF | | | | *e*S | **Sb** | **03 58 18.3** | **+0.1** |
| | baz=289 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.65** | **291** | *e*P | **Pb** | **03 58 09.2** | **0.0** |
| | baz=289 | | | | | | |
| WFSB | | | | *e*S | **Sb** | **03 58 18.3** | **+0.2** |
| | baz=289 | | | | | | |
| **NDS** | **Dongshan** | **0.70** | **253** | *e*P | **Pg** | **03 58 09.7** | **+0.2** |
| | baz=251 | | | | | | |
| NDS | | | | *e*S | **Sn** | **03 58 21.7** | **-0.5** |
| | baz=251 | | | | | | |
| **ENA** | **Nanau** | **0.77** | **238** | *e*P | **Pg** | **03 58 10.7** | **-0.1** |
| | baz=236 | | | | | | |
| ENA | | | | *e*S | **Sb** | **03 58 21.9** | **+0.4** |
| | baz=236 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.79** | **264** | *e*P | **Pb** | **03 58 11.5** | **-0.1** |
| | baz=263 | | | | | | |
| **NWLT** | **Wulai** | **0.86** | **266** | *e*P | **Pb** | **03 58 13.0** | **+0.2** |
| | baz=264 | | | | | | |
| NWLT | | | | *e*S | **Sb** | **03 58 24.5** | **+0.2** |
| | baz=264 | | | | | | |
| **LATG** | **Datong** | **0.89** | **250** | *e*P | **Pg** | **03 58 13.2** | **0.0** |
| | baz=249 | | | | | | |
| LATG | | | | *e*S | **Sb** | **03 58 25.6** | **+0.3** |
| | baz=249 | | | | | | |
| **YHNB** | **Yeheng** | **0.99** | **260** | *e*P | **Pg** | **03 58 15.0** | **-0.1** |
| | baz=270 | | | | | | |
| **NACB** | **Ninganchiao** | **1.02** | **230** | *e*S | **Sg** | **03 58 28.9** | **-0.2** |
| | baz=239 | | | | | | |
| **NNSB** | **Datong** | **1.05** | **247** | *e*P | **Pg** | **03 58 16.1** | **-0.2** |
| | baz=246 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.09** | **235** | *e*P | **Pg** | **03 58 16.5** | **-0.4** |
| | baz=234 | | | | | | |
| **FUSS** | **Fushou** | **1.25** | **242** | P | **Pg** | **03 58 19.9** | **-0.1** |
| | baz=241 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.27** | **113** | P | **Pb** | **03 58 19.9** | **+0.2** |
| IRIF | | | | *e*S | **Sb** | **03 58 35.7** | **-0.3** |
| **WHF** | **Hehuan Shan** | **1.28** | **237** | P | **Pn** | **03 58 20.2** | **+0.3** |
| | baz=251 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.46** | **122** | P | **Pb** | **03 58 23.5** | **+0.5** |

**NOU 29 03:59:42.3,43°.51S×172°.83E,h11km,MLv4.1/8,South Island, New Zealand,South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KHZ** | **Kahutara** | **1.21** | **26** | P | Pn | 04 00 04.7 | -0.4 |
| **RPZ** | **Rata Peaks** | **1.31** | **260** | P | Pn | 04 00 05.9 | -0.6 |
| **ODZ** | **Otahua Downs** | **2.19** | **225** | P | Pn | 04 00 18.9 | +0.2 |
| **SNZO** | **South Karori** | **2.60** | **33** | P | Pn | 04 00 23.6 | -0.6 |
| **QRZ** | **Quartz Range** | **2.69** | **355** | P | Pn | 04 00 25.6 | +0.1 |
| **BFZ** | **Birch Farm** | **3.80** | **43** | P | Pn | 04 00 40.6 | -0.2 |
| **BKZ** | **Black Stump Fm** | **5.14** | **34** | P | Pn | 04 00 59.9 | +0.6 |
| | 98nm,2.5s | | | | | | |
| **HIZ** | **Hauiti** | **5.22** | **18** | P | Pn | 04 01 00.4 | +0.1 |

*IDC **29** 04:09:58.8±6.1,16°.64N×86°.29W,h0km,mb3.2/3, mb1 3.8/6,mb1mx3.5/42,mbtmp3.4/6,ML3.4/3,Error ellipse: s-maj=106.6km s-min=24.6km az=136.0*
*NEIC **29** 04:09:59.3±2.5,16°.68N±0°.07×86°.18W±0°.08,h10km±2km, mb3.9/20,Error ellipse: s-maj=12.7km s-min=11.5km az=116.0*

**ISC 29 04:09:59.7±0.8,16°.68N±0°.07×86°.22W±0°.07,h10km,n43, σ1°32/40,North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TGUH** | **Tegucigalpa,Un** | **2.80** | **201** | | **Pn** | **04 10 44.6** | **-0.2** |
| **PETF** | **Flores** | **3.50** | **274** | Pn | **Pn** | **04 10 53.7** | **-0.5** |
| **ESQI** | **Esquipulas** | **3.67** | **235** | Pn | **Pn** | **04 10 57.2** | **+0.5** |
| **MATN** | **Matagalpa** | **3.74** | **176** | Pn | **Pn** | **04 10 57.0** | **-0.6** |
| **MTO3** | **Montecristo** | **3.78** | **234** | Pn | **Pn** | **04 10 58.3** | **0.0** |
| **CRIN** | **San Cristobal** | **4.04** | **192** | Pn | **Pn** | **04 11 01.8** | **+0.1** |
| **BOAB** | **BOACO BROADBAN** | **4.24** | **173** | Pn | **Pn** | **04 11 03.1** | **-1.3** |
| **APG** | **El Apazote** | **4.41** | **248** | Pn | **Pn** | **04

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **1.79** | **212** | Pn | Pn | 04 12 18.6 | -1.1 |
| | 3.9nm,0.3s,baz=26,slow=16,SNR=30 | | | | | | |
| ZALV | | | | Lg | Lg | 04 12 44.3 | |
| | 1.9nm,0.3s,baz=31,slow=31,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **9.07** | **198** | Pn | Pn | 04 14 00.4 | +0.7 |
| | 0.0nm,0.3s,baz=15,slow=12,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 04 16 35.2 | |
| | 0.0nm,0.3s,baz=16,slow=27,SNR=4.0 | | | | | | |

*MEX **29** 04:16:46.9±0.5,31°.49N×114°.38W,h10km,MD4.1*
*ECX **29** 04:16:46.9±0.8,31°.46N×114°.46W,h18km±20km,MD2.8, ML2.8*
**ISC 29 04:16:45.3**±1.2,**31°.50N**±0°.04×**114°.43W**±0°.03,
**h27**km±14km,**n12**,σ1§**13**/20,**2C-1D**,**Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SFX** | **San Felipe** | **0.59** | **218** | *eP* | | **Pb** | **04 16 56.4** | **-0.6** |
| SFX | | | | *eS* | | **Sb** | **04 17 04.4** | **-0.6** |
| SFX | | | | IAML | | | 04 17 05.2 | |
| | comp=E,735nm,0.2s | | | | | | | |
| SFX | | | | *e* | | | 04 17 05.2 | |
| SFX | | | | ⇑*e* | | | 04 17 05.3 | |
| SFX | | | | IAML | | | 04 17 05.3 | |
| | comp=N,586nm,0.2s | | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.00** | **243** | *eP* | | **Pn** | **04 17 03.6** | **-0.2** |
| SPIG | | | | *i* S | | **Sn** | **04 17 17.3** | **0.0** |
| **SPIG** | **San Pedro Mart** | **1.00** | **243** | *eP* | | **Pb** | **04 17 04.4** | **+0.2** |
| SPIG | | | | *eS* | | **Sb** | **04 17 16.3** | **-0.8** |
| **YMD** | **Yuma Desert** | **1.05** | **354** | *eP* | | **Pb** | **04 17 05.2** | **+0.3** |
| **MBIG** | **Mexicali** | **1.12** | **324** | *eP* | | **Pb** | **04 17 06.2** | **+0.3** |
| MBIG | | | | *i* S | | **Sn** | **04 17 19.3** | **-0.3** |
| **CPBX** | **Cerro Prieto** | **1.18** | **321** | *eP* | | **Pb** | **04 17 08.2** | **+1.1** |
| CPBX | | | | IAML | | | 04 17 36.2 | |
| | comp=E,510nm,0.3s | | | | | | | |
| CPBX | | | | ⇓*e* | | | 04 17 36.2 | |
| CPBX | | | | ⇑*e* | | | 04 17 41.5 | |
| CPBX | | | | IAML | | | 04 17 41.5 | |
| | comp=N,517nm,0.5s | | | | | | | |
| **214A** | **Organ Pipe Nat** | **1.45** | **71** | *eP* | | **Pn** | **04 17 08.8** | **-0.9** |
| 214A | | | | *i* S | | **Sn** | **04 17 26.8** | **-1.1** |
| **YUH2** | **Yuha Desert** | **1.71** | **312** | *eP* | | **Pb** | **04 17 15.8** | **-0.2** |
| **LAPR** | **La Primavera** | **2.06** | **118** | *eP* | | **Pb** | **04 17 24.8** | **+2.7** |
| LAPR | | | | *i* S | | **Sb** | **04 17 47.9** | **+0.6** |
| **CBX** | **Cerro Bola** | **2.07** | **294** | *eP* | | **Pn** | **04 17 19.4** | **+1.0** |
| CBX | | | | *i* S | | **Sn** | **04 17 43.3** | **-0.1** |
| **CBX** | **Cerro Bola** | **2.07** | **294** | *eP* | | **Pn** | **04 17 20.0** | **+1.6** |
| **TUC** | **Tucson** | **3.20** | **74** | *eP* | | **Pn** | **04 17 31.9** | **-2.0** |
| TUC | | | | *i* S | | **Sn** | **04 18 11.0** | **-0.2** |

*IDC **29** 04:23:50.8±4.2,26°.98N×142°.34E,h0km,mb3.4/1, mb1 4.0/3,mb1mx3.4/37,mbtmp3.9/3,ML3.5/2,MS3.4/1, Ms1 3.4/1,ms1mx2.4/51,Error ellipse: s-maj=164.0km s-min=31.5km az=75.0*
*JMA **29** 04:24:28.2±0.1,27°.71N×140°.78E,h311km±3km,M4.0*
**ISC 29 04:24:28.7**±1.6,**27°.8N**±0°.1×**140°.7E**±0°.2,**h300**km,**n10**,
σ1§**19**/10,**Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.52** | **116** | P | | **Pn** | **04 25 12.0** | **0.0** |
| CBIJ | | | | *eS* | | **S** | **04 25 46.2** | **-0.3** |
| **JHH2** | **Haha-jima-NKT2** | **1.76** | **129** | S | | **S** | **04 25 48.9** | **-0.7** |
| **BSO1** | **Boso 1** | **6.88** | **2** | P | | **Pn** | **04 26 09.5** | **+1.6** |
| **BSO3** | **Boso 3** | **7.02** | **359** | P | | **Pn** | **04 26 11.5** | **+1.6** |
| **JAG** | **Ashikaga** | **8.70** | **354** | P | | **Pn** | **04 26 30.6** | **-0.2** |
| **JHO** | **Hitachi** | **8.82** | **360** | P | | **Pn** | **04 26 33.4** | **+1.1** |
| JHO | | | | S | | **S** | **04 28 11.9** | **-0.9** |
| **KSRS** | **Korea Array** | **14.43** | **315** | Pn | | **P** | **04 27 39.3** | **-0.1** |
| | 0.5nm,0.3s,baz=132,slow=12,SNR=12 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.82** | **339** | P | | **P** | **04 28 14.7** | **-1.6** |
| | baz=136,slow=10,SNR=5.2 | | | | | | | |
| **TIXI** | **Tiksi** | **44.42** | **355** | LR | | LR | 04 55 03.9 | |
| | comp=Z,36nm,18.5s,baz=186,slow=41 | | | | | | | |
| **WRA** | **Warramunga Arr** | **47.81** | **188** | P | | P | 04 32 26.0 | -11 |
| | 0.3nm,0.5s,baz=6.8,slow=7.8,SNR=5.2 | | | | | | | |

*TIF **29** 04:49:39.3,42°.03N×46°.11E,h36km±2km*
*MOS **29** 04:49:39.1±0.0,42°.16N×46°.02E,h27km,MPVA3.4*
*DRS **29** 04:49:40.5±0.0,42°.14N×45°.96E,h14km*
*NORS **29** 04:49:42.2±0.0,42°.38N×45°.77E,h19km,MPVA3.1*
**ISC 29 04:49:39.0**±0.8,**42°.17N**±0°.03×**45°.92E**±0°.03,**h10**km,**n23**,
σ1§**31**/43,**Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LGD** | **Lagodekhi** | **0.42** | **144** | P | | **Pg** | **04 49 47.0** | **-0.3** |
| LGD | | | | S | | **Sg** | **04 49 52.1** | **-0.6** |
| **BTLR** | **Botlikh** | **0.54** | **25** | *eP* | | **Pb** | **04 49 51.0** | **+0.4** |
| BTLR | | | | *eSg* | | **Sb** | **04 49 58.5** | **0.0** |
| **XNZR** | **Khunzakh** | **0.69** | **58** | *eP* | | **Pb** | **04 49 53.0** | **-0.3** |
| XNZR | | | | *eSg* | | **Sb** | **04 50 02.5** | **-0.4** |
| **DDFL** | **Dedoflistskaro** | **0.74** | **168** | P | | **Pn** | **04 49 56.8** | **+1.1** |
| DDFL | | | | S | | **Sn** | **04 50 10.2** | **+3.1** |
| **DVE** | **Vedeno** | **0.80** | **11** | *ePg* | | **Pn** | **04 49 55.5** | **-0.9** |
| DVE | | | | *eSg* | | **Sn** | **04 50 07.3** | **-1.1** |
| **GNBR** | **Gunib** | **0.81** | **74** | *ePg* | | Pn | 04 50 03.5 | +7.0 |
| GNBR | | | | *eSg* | | **Sn** | **04 50 14.4** | **+5.8** |
| **UNCR** | **Uncukul** | **0.84** | **50** | *ePg* | | **Pb** | **04 49 55.9** | **+0.1** |
| UNCR | | | | *eSg* | | **Sb** | **04 50 07.2** | **-0.1** |
| **KMKR** | **Kumukh** | **0.88** | **92** | *i Pg* | | **Pb** | **04 49 56.0** | **-0.5** |
| KMKR | | | | *eSg* | | **Sb** | **04 50 07.7** | **-0.7** |
| **ARKR** | **Arakani** | **0.91** | **61** | *i Pg* | | **Pn** | **04 49 57.0** | **-0.9** |
| ARKR | | | | *eSg* | | **Sb** | **04 50 09.4** | **+0.4** |
| **BTNK** | **Botanikuri** | **0.97** | **240** | P | | **Pg** | **04 49 55.1** | **-2.6** |
| BTNK | | | | S | | **Sg** | **04 50 09.5** | **-0.8** |
| **KRNR** | **Karanay** | **0.98** | **48** | *ePg* | | **Pn** | **04 49 58.5** | **-0.5** |
| KRNR | | | | *eSg* | | **Sn** | **04 50 11.7** | **-1.3** |
| **GROC** | **Groznyy** | **1.03** | **355** | *i Pg* | | **Pn** | **04 50 00.7** | **+1.1** |
| GROC | | | | *eSg* | | **Sn** | **04 50 15.6** | **+1.5** |
| **DLMR** | **Dylym** | **1.04** | **30** | *ePg* | | **Pn** | **04 49 59.6** | **-0.1** |
| DLMR | | | | *eSg* | | **Sn** | **04 50 14.0** | **-0.3** |
| **PNSH** | **Pansheti** | **1.07** | **296** | P | | **Pg** | **04 49 59.1** | **-0.5** |
| PNSH | | | | S | | **Sg** | **04 50 12.4** | **-1.1** |
| **DBC** | **Dubki** | **1.08** | **38** | *ePg* | | **Pn** | **04 50 00.7** | **+0.4** |
| DBC | | | | *eSg* | | **Sn** | **04 50 16.1** | **+0.7** |
| **BUJR** | **Buynaksk** | **1.09** | **53** | *ePg* | | **Pn** | **04 50 00.9** | **+0.5** |
| BUJR | | | | *eSg* | | **Sn** | **04 50 16.0** | **+0.3** |
| **LACR** | **Lac** | **1.36** | **299** | *ePg* | | **Pg** | **04 50 05.3** | **+0.1** |
| **TRLG** | **Trialeti** | **1.50** | **246** | P | | **Pb** | **04 50 06.9** | **-0.1** |
| TRLG | | | | S | | **Sg** | **04 50 27.9** | **+0.7** |
| **AKT** | **Akhty** | **1.52** | **117** | *ePg* | | **Pb** | **04 50 06.4** | **-1.0** |
| AKT | | | | *eSg* | | **Sb** | **04 50 25.9** | **-0.9** |
| **DMNI** | **Dmanisi** | **1.54** | **237** | P | | **Pg** | **04 50 07.5** | **-0.2** |
| DMNI | | | | S | | **Sg** | **04 50 28.3** | **-0.4** |
| **ZEI** | **Tsey** | **1.61** | **293** | *ePg* | | **Pg** | **04 50 10.5** | **+0.5** |
| **DIGR** | **Digorskoe uzhe** | **1.87** | **294** | *ePg* | | **Pg** | **04 50 15.5** | **+0.6** |
| DIGR | | | | *eSg* | | **Sg** | **04 50 39.2** | **-0.1** |
| **ONI** | **Oni** | **1.87** | **284** | P | | **Pg** | **04 50 14.1** | **-0.9** |
| ONI | | | | S | | **Sg** | **04 50 39.8** | **+0.5** |

**RSNC 29 04:52:44.1**±1.5,**6°.79N**×**73°.11W**,**h154**km±7km,**ML3.1**,
**Mw3.5**,**4C-3D**,**Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.21** | **199** | ⇑*iP* | | Pn | 04 53 04.6 | -0.6 |
| BARC | | | | IAML | | | 04 53 22.2 | |
| | comp=Z,171nm,0.4s | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **0.69** | **37** | ⇓*eP* | | Pn | 04 53 07.3 | -0.2 |
| PAMC | | | | *eS* | | Sn | 04 53 24.6 | -0.8 |
| PAMC | | | | IAML | | | 04 53 26.5 | |
| | comp=Z,179nm,0.6s | | | | | | | |
| **RUSC** | **La Rusia** | **0.89** | **178** | ⇑*iP* | | Pn | 04 53 08.4 | -0.5 |
| RUSC | | | | *eS* | | Sn | 04 53 27.9 | -0.1 |
| RUSC | | | | IAML | | | 04 53 27.9 | |
| | comp=Z,92nm,0.2s | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **1.36** | **260** | *eP* | | Pn | 04 53 11.1 | -1.4 |
| PTBC | | | | *eS* | | Sn | 04 53 33.4 | -0.9 |
| PTBC | | | | IAML | | | 04 53 36.0 | |
| | comp=Z,119nm,0.1s | | | | | | | |
| **TAMC** | **Tame, Arauca** | **1.36** | **105** | *eP* | | Pn | 04 53 12.7 | +0.1 |
| **TAMC** | **Tame, Arauca** | **1.36** | **105** | ⇓*iP* | | Pn | 04 53 12.7 | +0.2 |
| TAMC | | | | IAML | | | 04 53 33.3 | |
| | comp=Z,87nm,0.3s | | | | | | | |
| TAMC | | | | *eS* | | Sn | 04 53 33.7 | -0.6 |
| **OCAC** | **Ocana** | **1.46** | **352** | *eP* | | Pn | 04 53 12.6 | -1.1 |
| OCAC | | | | *eS* | | Sn | 04 53 35.8 | -0.6 |
| OCAC | | | | IAML | | | 04 53 39.1 | |
| | comp=Z,420nm,0.3s | | | | | | | |
| **SPBC** | **San Pablo de B** | **1.48** | **220** | ⇓*iP* | | Pn | 04 53 13.4 | -0.4 |
| SPBC | | | | *eS* | | Sn | 04 53 36.2 | -0.4 |
| SPBC | | | | IAML | | | 04 53 40.8 | |
| | comp=Z,305nm,0.4s | | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **292** | *eP* | | Pn | 04 53 16.9 | -1.0 |
| ZARC | | | | *eS* | | Sn | 04 53 43.4 | -0.6 |
| ZARC | | | | IAML | | | 04 53 49.1 | |
| | comp=Z,138nm,0.1s | | | | | | | |
| **NORC** | **Norcasia** | **2.13** | **235** | ⇑*iP* | | Pn | 04 53 20.4 | -0.6 |
| NORC | | | | *eS* | | Sn | 04 53 48.9 | -0.5 |
| NORC | | | | IAML | | | 04 53 51.8 | |
| | comp=Z,123nm,0.3s | | | | | | | |
| **CNOCA** | **NORCASIA, CALD** | **2.13** | **235** | *eP* | | Pn | 04 53 20.9 | -0.2 |
| **CHIC** | **Chingaza** | **2.23** | **196** | *eP* | | Pn | 04 53 22.4 | -0.2 |
| CHIC | | | | *eS* | | Sn | 04 53 53.3 | +1.1 |
| CHIC | | | | IAML | | | 04 53 57.3 | |
| | comp=Z,44nm,0.3s | | | | | | | |
| **ROSC** | **El Rosal** | **2.28** | **212** | *eP* | | Pn | 04 53 24.2 | +1.0 |
| ROSC | | | | *eS* | | Sn | 04 53 56.5 | +3.4 |
| ROSC | | | | IAML | | | 04 53 59.1 | |
| | comp=Z,111nm,0.5s | | | | | | | |
| **HELC** | **Santa Helena** | **2.47** | **256** | *eP* | | Pn | 04 53 24.5 | -1.0 |
| HELC | | | | *eS* | | Sn | 04 53 57.3 | +0.1 |
| HELC | | | | IAML | | | 04 54 04.8 | |
| | comp=Z,69nm,0.4s | | | | | | | |
| **URSC** | **San Jos de Ur** | **2.58** | **292** | *eP* | | Pn | 04 53 24.4 | -2.0 |
| URSC | | | | *eS* | | Sn | 04 53 56.5 | -2.7 |
| URSC | | | | IAML | | | 04 53 56.9 | |
| | comp=Z,56nm,0.4s | | | | | | | |
| **VILC** | **Villavicencio,** | **2.72** | **192** | *eP* | | Pn | 04 53 27.4 | -0.9 |
| VILC | | | | *eS* | | Sn | 04 54 04.1 | +1.7 |
| **GUY2C** | **Guyana, Caldas** | **2.73** | **235** | *eP* | | Pn | 04 53 28.1 | -0.5 |
| GUY2C | | | | *eS* | | Sn | 04 54 05.7 | +2.7 |
| GUY2C | | | | IAML | | | 04 54 11.0 | |
| | comp=Z,92nm,0.8s | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **2.75** | **159** | ⇑*iP* | | Pn | 04 53 27.4 | -1.1 |
| PTGC | | | | *eS* | | Sn | 04 54 00.8 | -2.2 |
| PTGC | | | | IAML | | | 04 54 05.5 | |
| | comp=Z,43nm,0.4s | | | | | | | |
| **LL1C** | **La Loma 1 Cana** | **2.77** | **351** | *eP* | | Pn | 04 53 29.5 | +0.7 |
| LL1C | | | | *eS* | | Sn | 04 54 05.3 | +2.0 |
| LL1C | | | | IAML | | | 04 54 12.3 | |
| | comp=Z,214nm,0.4s | | | | | | | |
| **LL6C** | **La Loma 6 Bece** | **2.93** | **357** | *eP* | | Pn | 04 53 29.0 | -1.8 |
| LL6C | | | | *eS* | | Sn | 04 53 03.6 | -3.4 |
| LL6C | | | | IAML | | | 04 54 15.2 | |
| | comp=Z,15nm,0.4s | | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **3.02** | **252** | *eP* | | Pn | 04 53 32.1 | +0.1 |
| CBOC | | | | *eS* | | Sn | 04 54 08.3 | -0.9 |
| CBOC | | | | IAML | | | 04 54 22.1 | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **MOTC** | **Monteria, Cord** | **3.21** | **308** | *eP* | | Pn | 04 53 31.7 | -2.6 |
| MOTC | | | | *eS* | | Sn | 04 54 10.5 | -2.7 |
| MOTC | | | | IAML | | | 04 54 25.0 | |
| | comp=Z,31nm,0.5s | | | | | | | |
| **SDV** | **Santo Domingo** | **3.22** | **50** | *eP* | | Pn | 04 53 33.7 | -0.9 |
| SDV | | | | *eS* | | Sn | 04 54 11.0 | -2.8 |
| SDV | | | | IAML | | | 04 54 13.2 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **ANIL** | **Santa Ana** | **3.22** | **225** | *eP* | | Pn | 04 53 35.8 | +1.0 |
| ANIL | | | | *eS* | | Sn | 04 54 16.4 | +2.4 |
| ANIL | | | | IAML | | | 04 54 25.7 | |
| | comp=Z,145nm,0.4s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **3.56** | **217** | *eP* | | Pn | 04 53 38.6 | -0.3 |
| ORTC | | | | *eS* | | Sn | 04 54 22.2 | +0.8 |
| ORTC | | | | IAML | | | 04 54 27.4 | |
| | comp=Z,44nm,0.4s | | | | | | | |
| **PLMC** | **San Jos del P** | **3.67** | **239** | *eP* | | Pn | 04 53 40.1 | -0.1 |
| PLMC | | | | *eS* | | Sn | 04 54 24.9 | +1.1 |
| PLMC | | | | IAML | | | 04 54 28.2 | |
| | comp=Z,27nm,0.4s | | | | | | | |
| **SJCC** | **San Jacinto, C** | **3.70** | **327** | *eP* | | Pn | 04 53 38.4 | -2.3 |
| SJCC | | | | *eS* | | Sn | 04 54 19.6 | -5.0 |
| SJCC | | | | IAML | | | 04 54 26.4 | |
| | comp=Z,19nm,0.6s | | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **4.21** | **3** | *eP* | | Pn | 04 53 44.7 | -2.7 |
| CRJC | | | | *eS* | | Sn | 04 54 32.5 | -4.1 |
| CRJC | | | | IAML | | | 04 54 41.0 | |
| | comp=Z,24nm,0.4s | | | | | | | |
| **GUVC** | **San Jose del G** | **4.24** | **173** | *eP* | | Pn | 04 53 45.6 | -2.1 |
| GUVC | | | | *eS* | | Sn | 04 54 32.6 | -1.0 |
| GUVC | | | | IAML | | | 04 54 39.2 | |
| | comp=Z,24nm,0.3s | | | | | | | |
| **YOTC** | **Yotoco, Valle** | **4.25** | **229** | *eP* | | Pn | 04 53 46.9 | -1.1 |
| YOTC | | | | *eS* | | Sn | 04 54 36.9 | -0.7 |
| **MACC** | **Macarena, Meta** | **4.67** | **189** | *eP* | | Pn | 04 53 51.2 | -2.1 |
| MACC | | | | *eS* | | Sn | 04 54 43.0 | -4.2 |
| MACC | | | | IAML | | | 04 54 52.1 | |
| | comp=Z,7.6nm,0.5s | | | | | | | |
| **GARC** | **Garzon, Huila** | **5.15** | **208** | *eP* | | Pn | 04 53 58.3 | -1.5 |
| GARC | | | | *eS* | | Sn | 04 54 54.9 | -4.1 |
| GARC | | | | IAML | | | 04 54 57.3 | |
| | comp=Z,15nm,0.3s | | | | | | | |

*IDC **29** 05:01:05.8±3.5,32°.59S×176°.68W,h0km,mb3.7/2, mb1 4.1/4,mb1mx3.8/40,mbtmp4.0/4,ML3.9/2,MS3.6/3, Ms1 3.6/3,ms1mx2.9/60,Error ellipse: s-maj=82.0km s-min=35.4km az=118.0*
*NEIC **29** 05:01:07.4±2.0,32°.55S±0°.08×176°.7W±0°.2,h10km±2km, mb4.4/5,Error ellipse: s-maj=25.9km s-min=13.6km az=89.0*
**ISC 29 05:01:07.1**±1.5,**32°.49S**±0°.08×**176°.8W**±0°.2,**h10**km,**n15**,
σ1§**37**/12,**mb4.3/5**,**MS3.4**/3,**South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **3.38** | **343** | Sn | | **Sn** | **05 02 37.7** | **-2.3** |
| | 345nm,0.3s,baz=21,slow=21,SNR=4.7 | | | | | | | |
| **RAO** | **Raoul Island** | **3.38** | **343** | Pn | | **Pn** | **05 02 00.8** | **+0.9** |
| **URZ** | **Urewera** | **7.63** | **219** | Pn | | **Pn** | **05 02 57.9** | **-0.4** |
| | 0.9nm,0.3s,baz=132,slow=16,SNR=7.9 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **05 04 25.0** | **+0.3** |
| | 7.3nm,0.3s,baz=268,slow=6.3,SNR=14 | | | | | | | |
| **RPZ** | **Rata Peaks** | **14.73** | **217** | Pn | | **Pn** | **05 04 35.1** | **-0.4** |
| | 1.3nm,0.3s,baz=59,slow=6.0,SNR=5.9 | | | | | | | |
| RPZ | | | | Sn | | Sn | 05 07 08.0 | -11 |
| | 1.1nm,0.3s,baz=341,slow=16,SNR=6.3 | | | | | | | |
| **PINNC** | **Pines Island,** | **17.10** | **301** | Pn | | **Pn** | **05 05 06.3** | **+0.1** |
| **STKA** | **Stephens Creek** | **35.09** | **260** | LR | | LR | 05 21 32.5 | |
| | comp=Z,72nm,19.6s,baz=38,slow=35 | | | | | | | |
| **CTA** | **Charters Tower** | **35.22** | **281** | LR | | LR | 05 21 44.8 | |
| | comp=Z,66nm,18.1s,baz=78,slow=35 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.09** | **269** | P | | **P** | **05 09 16.5** | **+0.9** |
| | 0.8nm,0.7s,baz=110,slow=7.2,SNR=7.7 | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.25** | **274** | P | | **P** | **05 09 25.2** | **+0.3** |
| WB2 | | | | IAmb | | IAmb | 05 09 54.0 | |
| | comp=Z,6.5nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.26** | **274** | P | | **P** | **05 09 25.6** | **+0.6** |
| | comp=Z,0.7nm,0.4s,baz=116,slow=7.6,SNR=8.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.26** | **274** | IAmb | | IAmb | 05 09 28.6 | |
| | comp=Z,0.3nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.30** | **274** | P | | **P** | **05 09 25.5** | **+0.2** |
| WB0 | | | | IAmb | | IAmb | 05 09 51.6 | |
| | comp=Z,5.4nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **57.63** | **180** | P | | **P** | **05 10 55.5** | **-1.7** |
| QSPA | | | | IAmb | | IAmb | 05 11 10.6 | |
| | comp=Z,7.3nm,1.3s | | | | | | | |
| **LPIG** | **La Paz** | **84.75** | **57** | LR | | LR | 05 44 05.7 | |
| | comp=Z,52nm,20.6s,baz=190,slow=30 | | | | | | | |
| **FINES** | **FINESS Array B** | **147.47** | **340** | PKPbc | | **PKPdf** | **05 20 50.5** | **+2.5** |
| | comp=Z,0.6nm,0.6s,baz=50,slow=2.2,SNR=1.7 | | | | | | | |

**IDC 29 05:09:34.9**±2.1,**1°.76N**×**126°.17E**,**h0**km,**mb3.2**/3,
**mb1 3.4**/3,**mb1mx3.1**/39,**mbtmp3.2**/3,**MS3.4**/1,**Ms1 3.4**/1,
**ms1mx2.5**/24,**Error ellipse: s-maj=186.8km s-min=26.6km az=65.0**,**Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **21.91** | **57** | LR | | LR | 05 22 34.3 | |
| | comp=Z,87nm,19.1s,baz=140,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.01** | **160** | P | | P | 05 14 40.7 | -1.0 |
| | 0.6nm,0.6s,baz=338,slow=11,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.37** | **164** | P | | P | 05 15 14.1 | +1.0 |
| | 0.2nm,0.4s,baz=345,slow=9.6,SNR=1.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.86** | **326** | P | | P | 05 19 35.5 | 0.0 |
| | 0.1nm,0.3s,baz=117,slow=7.9,SNR=5.0 | | | | | | | |

*MAN **29** 05:12:13.5,10°.99N×126°.30E,h25km,mb4.9,ML3.9, MS3.9*
*NEIC **29** 05:12:21.7±1.9,10°.93N±0°.09×125°.9E±0°.2,h87km±9km, mb4.5/20,Error ellipse: s-maj=21.7km s-min=12.2km az=81.0*
*IDC **29** 05:12:26.6±2.2,10°.66N×125°.10E,h129km±21km, mb3.9/10,mb1 3.9/11,mb1mx3.5/43,mbtmp4.3/11, MS3.5/13,Ms1 3.5/13,ms1mx3.1/83,Error ellipse: s-maj=53.4km s-min=12.7km az=76.0*
**ISC 29 05:12:18.8**±1.5,**10°.96N**±0°.07×**126°.06E**±0°.09,**h64**km±14km,
**n70**,σ1§**89**/57,**mb4.4**/19,**5C-8D**,**Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GLSP** | **General Luna,** | **1.17** | **177** | ⇓*eP* | | **Pn** | **05 12 34.7** | **-4.6** |
| GLSP | | | | *i* S | | **Sn** | **05 12 58.8** | **+4.3** |
| **SCPH** | **Surigao** | **1.30** | **206** | ⇓*eP* | | **Pn** | **05 12 38.1** | **-2.9** |
| SCPH | | | | *eS* | | **Sn** | **05 12 56.0** | **-1.5** |
| **OCLP** | **Ormoc** | **1.43** | **274** | ⇓*eP* | | **Pn** | **05 12 41.3** | **-1.4** |
| **MSLP** | **Maasin** | **1.44** | **235** | ⇓*eP* | | **Pn** | **05 12 40.7** | **-2.1** |
| MSLP | | | | *i* S | | **Sn** | **05 13 03.6** | **+2.8** |
| **BUTP** | **Butuan** | **2.02** | **192** | ⇑*eP* | | **Pn** | **05 12 50.1** | **-0.7** |
| **LLP** | **Lapu-Lapu** | **2.15** | **253** | *eP* | | **Pn** | **05 12 48.2** | **-4.3** |
| LLP | | | | *eS* | | **Sn** | **05 13 21.4** | **+3.3** |
| **TBP** | **Tagbilaran** | **2.50** | **240** | ⇓*eP* | | **Pn** | **05 12 55.9** | **-1.4** |
| TBP | | | | *i* S | | **Sn** | **05 13 29.7** | **+3.1** |
| **BUKP** | **Musuan** | **3.21** | **198** | ⇑*eP* | | **Pn** | **05 13 05.7** | **-1.3** |
| BUKP | | | | *eS* | | Sn | 05 14 03.8 | +20 |
| **RCP** | **Roxas** | **3.31** | **281** | ⇓*eP* | | **Pn** | **05 13 07.2** | **-0.9** |
| **DAV** | **Davao City (W)** | **3.89** | **187** | P | | Pn | 05 13 21.4 | +5.2 |
| | 42nm,0.3s,baz=77,slow=14,SNR=1.3 | | | | | | | |
| DAV | | | | S | | **Sn** | **05 14 03.5** | **+2.8** |
| | 50nm,0.3s,baz=252,slow=20,SNR=1.6 | | | | | | | |
| DAV | | | | LR | | LR | 05 15 13.0 | |
| | comp=Z,1µm,19.7s,baz=356,slow=46 | | | | | | | |
| **DAV** | **Davao City (W)** | **3.89** | **187** | Pn | | **Pn** | **05 13 18.4** | **+2.2** |
| **KCP** | **Kidapawan** | **4.04** | **194** | ⇑*iP* | | **Pn** | **05 13 19.7** | **+1.4** |
| KCP | | | | *i* S | | **Sn** | **05 14 05.9** | **+1.5** |
| **PAGZ** | **Pagadian** | **4.07** | **221** | ⇑*eP* | | **Pn** | **05 13 17.6** | **-1.0** |
| **CTBH** | **Cotabato--PC H** | **4.12** | **206** | ⇑*iP* | | **Pn** | **05 13 20.6** | **+1.2** |
| **LQP** | **Lukban** | **5.41** | **306** | ⇓*eP* | | Pn | 05 13 47.9 | +11 |
| **SMPP** | **San Manuel, Pa** | **7.35** | **315** | ⇓*eP* | | **Pn** | **05 14 01.8** | **-1.8** |
| **MYLDM** | **Lahad Datu** | **9.43** | **233** | Pn | | **Pn** | **05 14 29.6** | **-2.5** |
| **KKM** | **Kota Kinabalu** | **10.89** | **244** | Pn | | **Pn** | **05 14 52.2** | **+0.1** |
| **TOLI2** | **Tolitoli** | **11.10** | **209** | Pn | | **Pn** | **05 14 55.7** | **+0.8** |
| **KAPI** | **Kappang** | **17.06** | **202** | LR | | LR | 05 23 17.1 | |
| | comp=Z,94nm,18.9s,baz=56,slow=40 | | | | | | | |
| **SOEI** | **Soe** | **20.65** | **185** | P | | **P** | **05 16 52.7** | **-0.8** |
| SOEI | | | | IAmb | | IAmb | 05 17 18.8 | |
| | comp=Z,48nm,1.2s | | | | | | | |
| **BATI** | **Baumata** | **21.16** | **187** | P | | **P** | **05 16 57.9** | **-1.0** |
| | comp=Z,18nm,0.2s,baz=72,slow=3.2,SNR=1.5 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **22.65** | **212** | P | | **P** | **05 17 15.1** | **+0.3** |
| **MTN** | **Manton Dam** | **24.18** | **168** | P | | **P** | **05 17 30.1** | **+0.8** |
| MTN | | | | IAmb | | IAmb | 05 17 37.6 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **UGM** | **Wanagama** | **24.30** | **220** | P | | **P** | **05 17 29.8** | **-0.7** |
| **KSRS** | **Korea Array** | **26.44** | **3** | P | | **P** | **05 17 54.9** | **+5.2** |
| | comp=Z,3.5nm,0.9s,baz=171,slow=9.5,SNR=7.1 | | | | | | | |
| KSRS | | | | LR | | LR | 05 28 35.8 | |
| | comp=Z,42nm,20.3s,baz=175,slow=36 | | | | | | | |
| **KNRA** | **Kununurra** | **26.60** | **174** | P | | **P** | **05 17 51.1** | **-0.2** |
| KNRA | | | | IAmb | | IAmb | 05 18 07.3 | |
| | comp=Z,9.4nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.24** | **289** | LR | | LR | 05 29 26.3 | |
| | comp=Z,44nm,18.6s,baz=285,slow=39 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **27.74** | **21** | LR | | LR | 05 27 09.7 | |
| | comp=Z,89nm,21.7s,baz=206,slow=31 | | | | | | | |
| **PSI** | **Prapat** | **28.11** | **255** | LR | | LR | 05 29 33.9 | |
| | comp=Z,128nm,18.3s,baz=62,slow=38 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.87** | **181** | P | | **P** | **05 18 10.7** | **-0.9** |
| | comp=Z,2.5nm,0.7s,baz=354,slow=8.7,SNR=11 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.87** | **181** | P | | **P** | **05 18 10.1** | **-1.5** |
| **COEN** | **Coen** | **30.01** | **145** | P | | **P** | **05 18 20.7** | **-1.1** |
| COEN | | | | IAmb | | IAmb | 05 18 28.6 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **31.61** | **165** | P | | **P** | **05 18 35.2** | **-0.6** |
| **WB2** | **Warramunga Arr** | **31.77** | **165** | P | | **P** | **05 18 36.6** | **-0.6** |
| **WR0** | **Warramunga Arr** | **31.84** | **165** | P | | **P** | **05 18 37.3** | **-0.5** |
| WR0 | | | | IAmb | | IAmb | 05 18 43.7 | |
| | comp=Z,8.8nm,1.3s | | | | | | | |
| **AS31** | **Alice Springs** | **35.26** | **167** | P | | **P** | **05 19 08.0** | **+0.5** |
| AS31 | | | | IAmb | | IAmb | 05 19 13.0 | |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| **ASAR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.14** | **57** | Pg | Pg | 05 22 36.5 | -1.1 | |
| **TUL1** | **Leonard** | **1.59** | **103** | | Pn | 05 22 43.6 | -1.0 | |
| TUL1 | | | | lAmb_Lg | | 05 23 08.6 | | |
| | comp=Z,41nm,0.8s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.69** | **184** | Pn | Pn | 05 22 45.9 | -0.1 | |
| **WMOK** | **Wichita Mounta** | **1.78** | **210** | | Pn | 05 22 46.5 | -0.8 | |
| **R32A** | **Long Quarter,** | **2.27** | **340** | Pn | Pn | 05 22 54.9 | +0.8 | |
| **X37A** | **Clayton** | **2.55** | **131** | Pn | Pn | 05 22 57.6 | -0.2 | |
| X37A | | | | lAmb_Lg | | 05 23 39.4 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **KSU1** | **Kansas State U** | **2.94** | **17** | Pn | Pn | 05 23 03.5 | +0.3 | |
| **CBKS** | **Cedar Bluff** | **2.99** | **328** | Pn | Pn | 05 23 04.1 | +0.1 | |
| **HHAR** | **Hobbs** | **3.04** | **89** | Pn | Pn | 05 23 04.1 | -0.5 | |
| **W39A** | **Magazine** | **3.37** | **108** | Pn | Pn | 05 23 08.3 | -0.7 | |
| **AMTX** | **Amarillo** | **3.53** | **248** | lAmb_Lg | | 05 24 12.1 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.76** | **143** | Pn | Pn | 05 23 14.1 | -0.4 | |
| **S39A** | **Bolivar** | **3.77** | **67** | Pn | Pn | 05 23 14.3 | -0.4 | |
| S39A | | | | lAmb_Lg | | 05 24 13.9 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.79** | **116** | Pn | Pn | 05 23 14.7 | -0.2 | |
| MIAR | | | | lAmb_Lg | | 05 24 18.8 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **U40A** | **Yellville** | **3.92** | **88** | Pn | Pn | 05 23 15.9 | -0.8 | |
| **ABTX** | **Abilene, Hawle** | **3.99** | **204** | Pn | Pn | 05 23 17.6 | -0.1 | |
| **WHTX** | **Lake Whitney,** | **4.29** | **177** | Pn | Pn | 05 23 21.6 | -0.2 | |
| **X40A** | **Basin Creek Fa** | **4.37** | **113** | Pn | Pn | 05 23 22.9 | +0.1 | |
| X40A | | | | lAmb_Lg | | 05 24 44.6 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **N33A** | **J Bar K, Exete** | **4.45** | **2** | Pn | Pn | 05 23 22.3 | -1.7 | |
| N33A | | | | lAmb_Lg | | 05 24 35.0 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.51** | **101** | Pn | Pn | 05 23 24.2 | -0.6 | |
| **237A** | **Washetta, Mont** | **4.56** | **159** | Pn | Pn | 05 23 24.3 | -1.1 | |
| **W41B** | **Gary Mavity, V** | **4.58** | **102** | Pn | Pn | 05 23 24.5 | -1.1 | |
| W41B | | | | lAmb_Lg | | 05 24 51.3 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **4.58** | **123** | lAmb_Lg | | 05 24 47.8 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **P38A** | **Dawn** | **4.68** | **43** | Pn | Pn | 05 23 27.5 | +0.3 | |
| P38A | | | | lAmb_Lg | | 05 24 49.3 | | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.76** | **306** | lAmb_Lg | | 05 24 49.1 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.77** | **64** | Pn | Pn | 05 23 27.6 | -0.8 | |
| R40A | | | | lAmb_Lg | | 05 24 46.0 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **N35A** | **Tabor** | **4.84** | **19** | Pn | Pn | 05 23 29.5 | +0.2 | |
| **BGNE** | **Belgrade** | **5.12** | **356** | Pn | Pn | 05 23 32.1 | -1.2 | |
| **CCAR** | **Cane Creek** | **5.41** | **114** | Pn | Pn | 05 23 36.7 | -0.4 | |
| **CCM** | **Cathedral Cave** | **5.45** | **69** | Pn | Pn | 05 23 37.4 | -0.3 | |
| **435B** | **Jarrell** | **5.49** | **179** | lAmb_Lg | | 05 25 22.5 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **5.52** | **52** | Pn | Pn | 05 23 39.0 | +0.4 | |
| P40A | | | | lAmb_Lg | | 05 25 13.3 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **N38A** | **Joes South For** | **5.70** | **37** | Pn | Pn | 05 23 40.6 | -0.5 | |
| **OGNE** | **Ogallala** | **5.75** | **325** | lAmb_Lg | | 05 25 18.9 | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.88** | **83** | lAmb_Lg | | 05 25 23.7 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **FVM** | **French Village** | **6.05** | **72** | Pn | Pn | 05 23 44.3 | -1.7 | |
| **JCT** | **Junction City** | **6.05** | **197** | lAmb_Lg | | 05 25 37.4 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **HDBT** | **Hernando Brdge** | **6.32** | **98** | Pn | Pn | 05 23 50.1 | +0.4 | |
| **Q24A** | **Divide** | **6.48** | **297** | lAmb_Lg | | 05 25 40.9 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.48** | **6** | Pn | Pn | 05 24 05.8 | +0.2 | |
| **K22A** | **Casper** | **9.32** | **316** | lAmb_Lg | | 05 27 15.1 | | |
| | comp=Z,7.9nm,0.9s | | | | | | | |

*JMA* ***29*** *05:26:16.2±0.1, 41°.85N×142°.82E, h49km±2km, M3.4*
*JMA Felt I J1.*
*IDC* ***29*** *05:26:18.5±2.9, 41°.92N×142°.94E, h80km±26km, mb3.4/8, mb1 3.5/9, mb1mx3.3/32, mbtmp3.7/9, MS3.1/1, Ms1 3.1/1, ms1mx2.4/52, Error ellipse: s-maj=49.6km s-min=22.3km az=77.0*

**ISC 29 05:26:15.6±0.9, 41°.80N±0°.05×142°.83E±0°.05, h50km±8km, n30, σ0°91/34, mb3.6/8, 3C-4D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JEM** | **Erimo** | **0.32** | **49** | ⇑P | **Pn** | **05 26 25.2** | **+0.3** |
| JEM | | | | *eS* | **Sn** | **05 26 31.8** | **+0.3** |
| **JNBK** | **Urakawa-nobuka** | **0.48** | **353** | ⇓P | **Pn** | **05 26 26.5** | **-0.1** |
| JNBK | | | | S | **Sn** | **05 26 34.3** | **-0.2** |
| **JTHR** | **Tokachihiroo** | **0.60** | **35** | ⇑P | **Pn** | **05 26 28.2** | **+0.2** |
| JTHR | | | | *eS* | **Sn** | **05 26 37.0** | **0.0** |
| **JSHD** | **Hidakashinhida** | **0.67** | **336** | ⇓P | **Pn** | **05 26 29.0** | **+0.1** |
| **JCH** | **Churui** | **0.90** | **26** | ⇑P | **Pn** | **05 26 32.2** | **+0.2** |
| JCH | | | | *eS* | **Sn** | **05 26 43.7** | **-0.3** |
| **JBT2** | **Biratori 2** | **1.04** | **341** | P | **Pn** | **05 26 33.9** | **+0.1** |
| **JIAM** | **Iburiatsuma** | **1.06** | **321** | ⇓P | **Pn** | **05 26 35.2** | **+1.1** |
| JIAM | | | | *eS* | **Sn** | **05 26 49.6** | **+1.8** |
| **JOB** | **Onbets** | **1.33** | **34** | P | **Pn** | **05 26 39.1** | **+1.4** |
| **JKB** | **Kayabe** | **1.35** | **274** | P | **Pn** | **05 26 38.1** | **+0.1** |
| JKB | | | | *eS* | **Sn** | **05 26 54.1** | **-0.6** |
| **JARK** | **Aomorirokkasho** | **1.36** | **235** | P | **Pn** | **05 26 39.4** | **+1.3** |
| JARK | | | | S | **Sn** | **05 26 56.2** | **+1.2** |
| **JFR** | **Furan** | **1.37** | **353** | P | **Pn** | **05 26 39.0** | **+0.6** |
| **JOT** | **Ohata** | **1.40** | **253** | P | **Pn** | **05 26 39.3** | **+0.6** |
| JOT | | | | *eS* | **Sn** | **05 26 56.6** | **+0.5** |
| **JEW** | **Eniwo** | **1.46** | **316** | P | **Pn** | **05 26 40.1** | **+0.6** |
| JEW | | | | *eS* | **Sn** | **05 26 58.9** | **+1.4** |
| **JNB** | **Noboribetsu** | **1.49** | **297** | ⇓P | **Pn** | **05 26 39.4** | **-0.5** |
| JNB | | | | *eS* | **Sn** | **05 26 57.4** | **-0.8** |
| **ASAJ** | **Asahikawa** | **2.32** | **356** | P | **Pn** | **05 26 53.5** | **+2.2** |
| | 7.1nm,0.3s,baz=207,slow=12,SNR=17 | | | | | | |
| ASAJ | | | | S | **Sn** | **05 27 20.4** | **+1.8** |
| | 7.9nm,0.3s,baz=10,slow=28,SNR=7.6 | | | | | | |
| **SONM** | **Songino Array** | **26.36** | **296** | P | **P** | **05 31 47.4** | **+0.3** |
| | 0.4nm,0.6s,baz=92,slow=7.0,SNR=2.6 | | | | | | |
| **GUMO** | **Guam** | **28.16** | **176** | LR | LR | 05 42 40.1 | |
| | comp=Z,43nm,21.8s,baz=116,slow=35 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.01** | **130** | T | T | 06 03 43.7 | |
| | baz=326 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.02** | **130** | T | T | 06 03 41.9 | |
| | baz=326 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.03** | **130** | T | T | 06 03 44.3 | |
| | baz=326 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.87** | **132** | T | T | 06 04 48.6 | |
| | baz=324,slow=76,SNR=10 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.87** | **132** | T | T | 06 04 48.1 | |
| | baz=324,slow=76,SNR=8.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.89** | **132** | T | T | 06 04 48.0 | |
| | baz=324,slow=76,SNR=9.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.67** | **308** | P | **P** | **05 33 42.3** | **-0.2** |
| | 0.8nm,0.6s,baz=100,slow=6.6,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.68** | **298** | P | **P** | **05 34 07.0** | **-0.3** |
| | 0.6nm,0.5s,baz=84,slow=11,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.93** | **189** | P | **P** | **05 36 30.6** | **+0.4** |
| | 0.2nm,0.4s,baz=5.6,slow=6.9,SNR=9.6 | | | | | | |
| **FINES** | **FINESS Array B** | **65.12** | **332** | P | **P** | **05 36 49.8** | **-0.9** |
| | 2.0nm,0.8s,baz=62,slow=8.9,SNR=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.22** | **337** | P | **P** | **05 37 22.0** | **-0.9** |
| | 0.8nm,0.8s,baz=38,slow=6.1,SNR=4.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.21** | **322** | P | **P** | **05 37 28.4** | **-0.6** |
| | 0.4nm,0.4s,baz=43,slow=5.8,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.52** | **311** | P | **P** | **05 38 00.1** | **-0.4** |
| | 0.3nm,0.6s,baz=44,slow=4.4,SNR=1.7 | | | | | | |

*IDC* ***29*** *05:47:31.5±2.3, 20°.91S×68°.05E, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.7/44, mbtmp3.8/6, MS3.5/9, Ms1 3.5/9, ms1mx3.1/73, Error ellipse: s-maj=71.8km s-min=26.7km az=48.0*
*NEIC* ***29*** *05:47:33.3±1.5, 20°.95S±0°.07×68°.0E±0°.2, h10km±1km, mb4.3/8, Error ellipse: s-maj=31.7km s-min=9.5km az=258.0*

**ISC 29 05:47:33.1±1.1, 21°.05S±0°.1×68°.1E±0°.2, h10km, n26, σ0°92/15, mb4.1/10, MS3.6/9, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **13.93** | **18** | T | T | 06 04 43.0 | |
| | baz=197,slow=76,SNR=20 | | | | | | |
| **H08S2** | **Diego Garcia H** | **13.93** | **18** | T | T | 06 04 40.6 | |
| | baz=197,slow=76,SNR=49 | | | | | | |
| **H08S3** | **Diego Garcia H** | **13.95** | **18** | T | T | 06 04 47.3 | |
| | baz=197,slow=76,SNR=22 | | | | | | |
| **DGAR** | **Diego Garcia** | **14.14** | **18** | Pn | **Pn** | **05 50 55.0** | **+1.4** |
| **PALK** | **Pallekele** | **30.69** | **25** | LR | LR | 06 02 52.3 | |
| | comp=Z,51nm,19.8s,baz=302,slow=30 | | | | | | |
| **PSI** | **Prapat** | **38.34** | **56** | LR | LR | 06 06 45.4 | |
| | comp=Z,87nm,20.1s,baz=211,slow=30 | | | | | | |
| **LBTB** | **Lobatse** | **39.23** | **256** | LR | LR | 06 07 23.7 | |
| | comp=Z,97nm,19.6s,baz=162,slow=30 | | | | | | |
| **MBAR** | **Mbarara** | **41.75** | **294** | LR | LR | 06 11 20.2 | |
| | comp=Z,52nm,19.2s,baz=100,slow=34 | | | | | | |
| **SUR** | **Sutherland** | **43.45** | **245** | LR | LR | 06 12 49.9 | |
| | comp=Z,101nm,19.0s,baz=141,slow=35 | | | | | | |
| **TSUM** | **Tsumeb** | **47.34** | **263** | LR | LR | 06 13 57.3 | |
| | comp=Z,88nm,18.4s,baz=150,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.49** | **40** | P | **P** | **05 56 23.9** | **0.0** |
| | 1.2nm,0.3s,baz=236,slow=8.7,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 06 16 00.5 | |
| | comp=Z,33nm,18.6s,baz=190,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **52.50** | **80** | LR | LR | 06 17 55.4 | |
| | comp=Z,22nm,19.0s,baz=280,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.03** | **98** | P | **P** | **05 56 57.2** | **-0.9** |
| FITZ | | | | lAmb | lAmb | 05 57 13.1 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **60.42** | **106** | P | **P** | **05 57 43.8** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=265,slow=5.6,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.62** | **102** | P | **P** | **05 57 51.9** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=259,slow=6.4,SNR=13 | | | | | | |
| **WB2** | **Warramunga Arr** | **61.63** | **102** | P | **P** | **05 57 50.9** | **-0.5** |
| WB2 | | | | lAmb | lAmb | 05 58 10.5 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **61.71** | **102** | P | **P** | **05 57 50.8** | **-1.2** |
| WB0 | | | | lAmb | lAmb | 05 57 54.8 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **61.80** | **102** | P | **P** | **05 57 52.3** | **-0.3** |
| **STKA** | **Stephens Creek** | **65.58** | **116** | LR | LR | 06 22 58.9 | |
| | comp=Z,55nm,18.6s,baz=29,slow=32 | | | | | | |
| **MK31** | **Makanchi Array** | **68.68** | **10** | P | **P** | **05 58 35.0** | **-1.5** |
| **MKAR** | **Makanchi Array** | **68.68** | **10** | P | **P** | **05 58 35.7** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=202,slow=6.0,SNR=7.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.11** | **180** | P | **P** | **05 58 40.5** | **+1.1** |
| **ABKAR** | **Akbulak array** | **70.32** | **354** | P | **P** | **05 58 46.1** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **71.90** | **7** | P | **P** | **05 58 55.7** | **-0.4** |
| | comp=Z,0.6nm,0.7s,baz=200,slow=6.4,SNR=4.7 | | | | | | |
| **KURK** | **Kurchatov** | **72.00** | **7** | P | **P** | **05 58 56.6** | **-0.1** |
| KURK | | | | lAmb | lAmb | 05 59 09.7 | |
| | comp=Z,2.8nm,1.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **79.20** | **336** | P | **P** | **05 59 37.8** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=141,slow=4.8,SNR=6.4 | | | | | | |

**NNC 29 05:59:07.6±1.9, 54°.44N×86°.23E, h0km, mb3.6, mpv2.9, 5C-7D, Error ellipse: s-maj=23.5km s-min=9.3km az=159.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **0.96** | **240** | ⇑P | Pg | 05 59 25.8 | -0.3 |
| | 0.3nm,0.4s | | | | | | |
| ZAA0 | | | | ⇓S | Sb | 05 59 39.6 | -0.8 |
| | 10nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **5.95** | **234** | ⇓Pn | Pn | 06 00 39.3 | +2.4 |
| | 1.9nm,1.2s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 06 02 17.9 | |
| | 3.9nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.06** | **234** | ⇓Pn | Pn | 06 00 40.6 | +2.3 |
| | 2.2nm,0.5s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 02 17.9 | |
| | 5.5nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **8.05** | **200** | ⇓Pn | Pn | 06 01 08.0 | +2.2 |
| | 0.7nm,0.6s,baz=24,slow=12,SNR=21 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 06 02 38.0 | +0.6 |
| | 1.0nm,0.9s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 03 24.7 | |
| | 1.3nm,0.8s,baz=27,slow=28,SNR=4.1 | | | | | | |
| **MAKZ** | **Makanchi** | **8.10** | **201** | ⇓Pn | Pn | 06 01 04.1 | -2.3 |
| | 1.8nm,1.1s | | | | | | |
| MAKZ | | | | ⇓Sn | Sn | 06 02 40.0 | +1.3 |
| | 0.7nm,0.8s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 06 03 25.8 | |
| | 1.4nm,1.1s | | | | | | |

**IDC 29 06:01:25.5±3.2, 54°.12N×87°.72E, h0km, mb1 2.7/2, mb1mx2.7/40, mbtmp2.7/2, ML2.3/1, Error ellipse: s-maj=27.0km s-min=19.6km az=48.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.72** | **265** | *i* | | 06 12 36.3 | |
| | baz=87,slow=331,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.72** | **265** | Pn | Pn | 06 01 55.1 | -1.5 |
| | 1.0nm,0.3s,baz=80,slow=13,SNR=8.0 | | | | | | |
| ZALV | | | | Lg | Lg | 06 02 19.8 | |
| | 2.7nm,0.3s,baz=83,slow=25,SNR=7.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.63** | **242** | Pn | Pn | 06 03 04.7 | +0.7 |
| | baz=58,slow=14,SNR=2.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 04 56.8 | |
| | 0.0nm,0.3s,baz=45,slow=32,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.11** | **207** | Pn | Pn | 06 03 26.0 | +1.6 |
| | 0.0nm,0.3s,baz=30,slow=12,SNR=3.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 05 44.8 | |
| | 0.0nm,0.3s,baz=30,slow=32,SNR=2.7 | | | | | | |

*NAO* ***29*** *06:12:32.1±2.5, 71°.51N×2°.72W, ML3.4*
*IDC* ***29*** *06:12:34.8±1.2, 71°.53N×2°.29W, h0km, mb3.4/5, mb1 3.7/10, mb1mx3.5/43, mbtmp3.6/10, ML3.2/5, MS3.3/20, Ms1 3.3/20, ms1mx3.1/62, Error ellipse: s-maj=27.9km s-min=17.1km az=54.0*
*BER* ***29*** *06:12:36.7±3.0, 71°.71N×2°.68W, h10km, ML2.3, ML3.4(NAO), Confirmed Earthquake*
*DNK* ***29*** *06:12:43.9±5.0, 72°.06N×3°.32W, h36km±129km, ML2.1*

**ISC 29 06:12:34.6±0.7, 71°.66N±0°.06×2°.75W±0°.05, h10km, n74, σ2°66/67, mb3.3/6, MS3.3/16, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DBG** | **Daneborg** | **5.76** | **306** | Pn | **Pn** | **06 13 58.8** | **-1.2** |
| DBG | | | | Sn | **Sn** | **06 14 58.0** | **-8.0** |
| **DBG** | **Daneborg** | **5.76** | **306** | *i* P | **Pn** | **06 13 58.6** | **-1.4** |
| DBG | | | | *eS* | **Sn** | **06 14 58.1** | **-7.9** |
| DBG | | | | IAML | | 06 15 10.1 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **DBG** | **Daneborg** | **5.76** | **306** | *e*P | **Pn** | **06 13 58.8** | **-1.2** |
| DBG | | | | *e*S | **Sn** | **06 14 58.8** | **-7.3** |
| **SCO** | **Scoresbysund** | **6.35** | **269** | *i* P | **Pn** | **06 14 09.3** | **+1.3** |
| **LOF** | **Lofoten** | **6.62** | **114** | *e*P | **Pn** | **06 14 10.1** | **-1.7** |
| LOF | | | | *e*S | **Sn** | **06 15 19.1** | **-8.1** |
| LOF | | | | IAML | | 06 15 20.7 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **DAG** | **Danmarks Havn** | **6.69** | **327** | *i* P | **Pn** | **06 14 12.0** | **-0.7** |
| DAG | | | | *e*S | Sn | 06 15 16.9 | -12 |
| DAG | | | | IAML | | 06 15 26.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **DAG** | **Danmarks Havn** | **6.69** | **327** | *e*P | **Pn** | **06 14 12.2** | **-0.5** |
| DAG | | | | *e*S | Sn | 06 15 18.1 | -11 |
| **STEI** | **Steigen** | **7.25** | **112** | *e*P | **Pn** | **06 14 19.2** | **-1.1** |
| **HSPB** | **Hornsund (broa** | **7.26** | **34** | Pn | **Pn** | **06 14 20.8** | **+0.3** |
| **HSPB** | **Hornsund (broa** | **7.26** | **34** | Pn | **Pn** | **06 14 20.8** | **+0.3** |
| **TRO** | **Tromso** | **7.46** | **95** | *e*P | **Pn** | **06 14 21.1** | **-2.2** |
| **NBB30** | **Finnes** | **7.47** | **121** | *e*P | **Pn** | **06 14 22.4** | **-1.1** |
| **FAUS** | **Fauske** | **7.62** | **115** | *e*P | **Pn** | **06 14 24.4** | **-1.1** |
| **NBB13** | **Alf Garage** | **7.62** | **124** | *e*P | **Pn** | **06 14 24.3** | **-1.2** |
| **NBB17** | **Glomfjord B¥r** | **7.65** | **121** | *e*P | **Pn** | **06 14 25.0** | **-0.8** |
| **KONS** | **Konsvik** | **7.66** | **125** | *e*P | **Pn** | **06 14 25.0** | **-1.0** |
| **STOK** | **Stokkvaagen** | **7.76** | **126** | *e*P | **Pn** | **06 14 26.3** | **-1.1** |
| **BRBA** | **Barentsburg A** | **7.77** | **27** | Pn | **Pn** | **06 14 28.1** | **+0.7** |
| **BRBA** | **Barentsburg A** | **7.77** | **27** | Pn | **Pn** | **06 14 28.1** | **+0.7** |
| **BRBB** | **Barentsburg B** | **7.79** | **27** | Pn | **Pn** | **06 14 28.6** | **+0.9** |
| **BRBB** | **Barentsburg B** | **7.79** | **27** | Pn | **Pn** | **06 14 28.6** | **+0.9** |
| **JETT** | **Jettan, Norway** | **7.96** | **94** | Pn | **Pn** | **06 14 28.5** | **-1.7** |
| **KBS** | **Kingsbay** | **8.16** | **20** | Pn | **Pn** | **06 14 33.8** | **+1.0** |
| KBS | | | | Sn | **Sn** | **06 16 01.9** | **-3.0** |
| **KBS** | **Kingsbay** | **8.16** | **20** | *e*P | **Pn** | **06 14 32.9** | **0.0** |
| **KBS** | **Kingsbay** | **8.16** | **20** | *e*P | **Pn** | **06 14 32.5** | **-0.3** |
| KBS | | | | *e*S | **Sn** | **06 16 01.9** | **-3.0** |
| KBS | | | | IAML | | 06 16 02.8 | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.17** | **28** | Pn | **Pn** | **06 14 34.3** | **+1.4** |
| | baz=207,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.17** | **28** | Pn | **Pn** | **06 14 34.3** | **+1.4** |
| | baz=207,slow=16 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **8.17** | **28** | Pn | **Pn** | **06 14 34.2** | **+1.3** |
| | baz=207,slow=15,SNR=65 | | | | | | |
| **MOR8** | **Moi Rana** | **8.26** | **123** | *e*P | **Pn** | **06 14 34.4** | **+0.1** |
| MOR8 | | | | *e*S | **Sn** | **06 16 00.8** | **-6.7** |
| **KIF** | **Kilpisjarvi** | **8.34** | **97** | Pn | **Pn** | **06 14 33.8** | **-1.5** |
| **KIF** | **Kilpisjarvi** | **8.34** | **97** | *e*P | **Pn** | **06 14 33.6** | **-1.7** |
| **HAMF** | **Hammerfest** | **8.58** | **84** | Pn | **Pn** | **06 14 36.0** | **-2.6** |
| **HAMF** | **Hammerfest** | **8.58** | **84** | Pn | **Pn** | **06 14 36.0** | **-2.6** |
| **NSS** | **Namsos** | **8.99** | **135** | *e*P | **Pn** | **06 14 43.8** | **-0.5** |
| **KTK1** | **Kautokeino** | **9.11** | **94** | *e*P | **Pn** | **06 14 44.6** | **-1.3** |
| **HEF** | **Hetta** | **9.55** | **97** | *e*P | **Pn** | **06 14 50.2** | **-1.7** |
| **ARA0** | **ARCESS Array S** | **9.59** | **89** | Pn | **Pn** | **06 14 50.8** | **-1.6** |
| | baz=290,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.59** | **89** | *e*P | **Pn** | **06 14 50.7** | **-1.6** |
| ARA0 | | | | Pn | **Pn** | **06 14 50.8** | **-1.6** |
| | baz=290,slow=12 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.59** | **89** | Pn | **Pn** | **06 14 50.8** | **-1.5** |
| | baz=285,slow=12,SNR=25 | | | | | | |
| ARCES | | | | LR | LR | 06 18 08.8 | |
| | comp=Z,66nm,21.1s,baz=298,slow=35 | | | | | | |
| **NOR** | **Nord** | **10.44** | **349** | Pn | **Pn** | **06 15 04.2** | **+0.2** |
| **NOR** | **Nord** | **10.44** | **349** | *e*P | **Pn** | **06 15 02.4** | **-1.6** |
| **NOR** | **Nord** | **10.44** | **349** | Pn | **Pn** | **06 15 04.2** | **+0.2** |
| **SUMG** | **Summit** | **10.91** | **292** | *e*P | **Pn** | **06 15 13.7** | **+3.0** |
| **NOA** | **NORSAR Array B** | **11.99** | **146** | Pn | **Pn** | **06 15 25.8** | **+0.4** |
| | comp=Z,0.0nm,0.3s,baz=339,slow=13,SNR=4.1 | | | | | | |
| NOA | | | | LR | LR | 06 19 50.2 | |
| | comp=Z,119nm,20.2s,baz=340,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **12.93** | **91** | Pn | **Pn** | **06 15 36.2** | **-1.9** |
| | baz=301,slow=14 | | | | | | |
| **APA0** | **Apatity Array** | **12.93** | **91** | Pn | **Pn** | **06 15 36.2** | **-1.9** |
| | baz=301,slow=14 | | | | | | |
| **HFS** | **Hagfors** | **13.30** | **142** | Pn | **Pn** | **06 15 43.0** | **-0.1** |
| | comp=Z,1.2nm,0.3s,baz=336,slow=10,SNR=25 | | | | | | |
| HFS | | | | LR | LR | 06 20 30.0 | |
| | comp=Z,112nm,21.3s,baz=270,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **13.30** | **142** | Pn | **Pn** | **06 15 42.7** | **-0.4** |
| | baz=338,slow=11 | | | | | | |
| **HFS** | **Hagfors** | **13.30** | **142** | Pn | **Pn** | **06 15 42.7** | **-0.4** |
| | baz=338,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.17** | **118** | P | **Pn** | **06 16 07.0** | **-1.5** |
| | baz=334,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.17** | **118** | P | **Pn** | **06 16 07.0** | **-1.5** |
| | baz=334,slow=11 | | | | | | |
| **FINES** | **FINESS Array B** | **15.17** | **118** | Pn | **Pn** | **06 16 06.9** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=332,slow=11,SNR=12 | | | | | | |
| FINES | | | | LR | LR | 06 21 23.0 | |
| | comp=Z,148nm,19.1s,baz=356,slow=35 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.39** | **181** | Pn | **P** | **06 16 30.7** | **+3.5** |
| | baz=7.5,slow=12,SNR=3.7 | | | | | | |
| **VRAC** | **Vranov** | **24.12** | **148** | LR | LR | 06 28 12.4 | |
| | comp=Z,64nm,18.1s,baz=336,slow=39 | | | | | | |
| **RES** | **Resolute Bay** | **24.32** | **320** | LR | LR | 06 26 48.7 | |
| | comp=Z,36nm,21.3s,baz=84,slow=35 | | | | | | |
| **KIRV** | **Kirov** | **24.53** | **95** | LR | LR | 06 26 50.2 | |
| | comp=Z,58nm,18.6s,baz=14,slow=35 | | | | | | |
| **FRB** | **Frobisher Bay** | **24.86** | **285** | LR | LR | 06 27 00.9 | |
| | comp=Z,80nm,21.1s,baz=220,slow=35 | | | | | | |
| **AKASG** | **Malin Array Be** | **25.46** | **128** | P | **P** | **06 18 02.5** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=336,slow=10,SNR=4.8 | | | | | | |
| AKASG | | | | LR | LR | 06 27 45.7 | |
| | comp=Z,75nm,18.6s,baz=348,slow=36 | | | | | | |
| **SCHQ** | **Schefferville** | **31.38** | **272** | LR | LR | 06 30 24.4 | |
| | comp=Z,71nm,18.7s,baz=102,slow=34 | | | | | | |
| **AKTO** | **Aktyubinsk** | **34.09** | **95** | LR | LR | 06 32 43.1 | |
| | comp=Z,64nm,18.3s,baz=29,slow=36 | | | | | | |
| **INK** | **Inuvik** | **36.52** | **332** | LR | LR | 06 34 31.7 | |
| | comp=Z,31nm,19.3s,baz=106,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.24** | **316** | P | **P** | **06 19 56.2** | **+2.1** |
| | comp=Z,0.3nm,0.7s,baz=27,slow=9.7,SNR=3.3 | | | | | | |
| **IDI** | **Anoyia** | **39.20** | **143** | LR | LR | 06 36 48.3 | |
| | comp=Z,27nm,18.9s,baz=164,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.37** | **69** | LR | LR | 06 38 47.9 | |
| | comp=Z,22nm,21.5s,baz=354,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **41.66** | **338** | P | **P** | **06 20 25.8** | **+3.3** |
| | comp=Z,0.8nm,0.9s,baz=11,slow=5.0,SNR=7.6 | | | | | | |
| **ULM** | **Lac du Bonnet** | **44.26** | **293** | LR | LR | 06 38 27.4 | |
| | comp=Z,53nm,19.8s,baz=54,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.92** | **76** | P | **P** | **06 20 53.0** | **+3.9** |
| |

*mb1 3.9/5,mb1mx3.6/39,mbtmp3.6/5,ML5.1/1,Error ellipse: s-maj=73.4km s-min=24.0km az=155.0*
*NOU 29 06:34:42.4, 22°.10S × 166°.72E, h0km, MLv1.6/4, New Caledonia*
**ISC 29 06:33:18.1 ± 1.1, 18°.3S ± 0°.2 × 171°.8E ± 0°.1, h35 km, n9, σ 1§92/10, mb3.8/3, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| YATNC | **Mamie plateau,** | **5.90** | **230** | P | **Pn** | **06 34 45.7** | **+2.6** |
| MSVF | **Nonsavu** | **6.02** | **86** | Pn | **Pn** | **06 34 44.1** | **-0.6** |
| | 1.7nm,0.3s,baz=230,slow=14,SNR=4.5 | | | | | | |
| OUENC | **Ouen Island, N** | **6.17** | **228** | P | **Pn** | **06 34 48.9** | **+2.2** |
| DZM | **Mont Dzumac** | **6.24** | **232** | Pn | **Pn** | **06 34 44.9** | **-2.9** |
| | 0.3nm,0.3s,baz=66,slow=17,SNR=2.0 | | | | | | |
| DZM | | | | Sn | **Sn** | **06 35 56.8** | **-1.1** |
| | 0.4nm,0.3s,baz=134,slow=23,SNR=1.1 | | | | | | |
| DZM | **Mont Dzumac** | **6.24** | **232** | P | **Pn** | **06 34 46.6** | **-1.2** |
| NOUC | **Port Laguerre** | **6.36** | **233** | P | **Pn** | **06 34 50.5** | **+1.1** |
| WRA | **Warramunga Arr** | **35.34** | **261** | P | **P** | **06 40 10.9** | **+0.5** |
| | 0.4nm,0.5s,baz=96,slow=8.5,SNR=8.4 | | | | | | |
| ASAR | **Alice Springs** | **35.67** | **255** | P | **P** | **06 40 12.4** | **-0.8** |
| | 1.0nm,0.8s,baz=83,slow=8.8,SNR=11 | | | | | | |
| ILAR | **Eielson Array** | **88.64** | **16** | P | **P** | **06 46 07.7** | **+0.6** |
| | 0.9nm,1.1s,baz=234,slow=11,SNR=1.4 | | | | | | |

*IDC 29 07:10:40.9 ± 0.7, 2°.04N × 126°.57E, h0km, mb4.2/13, mb1 4.3/13,mb1mx4.1/33,mbtmp4.2/13,MS3.4/5, Ms1 3.4/5,ms1mx2.8/73,Error ellipse: s-maj=48.5km s-min=13.4km az=68.0*
*NEIC 29 07:10:42.3 ± 2.1, 2°.08N ± 0°.07 × 126°.8E ± 0°.1, h10km ± 1km, mb4.4/29,Error ellipse: s-maj=20.4km s-min=5.6km az=57.0*
*DJA 29 07:10:47.1 ± 0.5, 2°.1N ± 5°.5 × 12°.7E ± °, h46km ± 6km, M4.5/11, mB5.2/4, mb4.8/11, MLv4.4/10, Mw(mB)4.5/4*
**ISC 29 07:10:46.9 ± 0.5, 2°.01N ± 0°.07 × 126°.74E ± 0°.09, h47 km, n63, σ 1§22/60, mb4.3/28, MS3.3/5, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TNTI | **Ternate** | **1.38** | **153** | | **Pn** | **07 11 07.0** | **-2.7** |
| TNTI | **Ternate** | **1.38** | **153** | P | **Pn** | **07 11 10.3** | **+0.5** |
| KMSI | **Cibinong** | **3.11** | **243** | P | **Pn** | **07 11 34.6** | **+1.2** |
| GTOI | **Gorontalo** | **3.97** | **250** | P | **Pn** | **07 11 44.8** | **-0.5** |
| LUWI | **Luwuk** | **4.99** | **233** | Pn | **Pn** | **07 11 60.0** | **+0.6** |
| LUWI | **Luwuk** | **4.99** | **233** | P | **Pn** | **07 12 01.6** | **+2.2** |
| | 1.1nm195nm,0.6s | | | | | | |
| MRSI | **Marisa** | **5.04** | **252** | P | **Pn** | **07 12 02.0** | **+2.1** |
| | 0.4nm1μm113nm,0.6s | | | | | | |
| APSI | **Ampana** | **5.86** | **240** | P | **Pn** | **07 12 13.8** | **+2.6** |
| | 0.5nm1μm133nm,0.6s | | | | | | |
| TOLI2 | **Tolitoli** | **6.02** | **262** | | **Pn** | **07 12 12.4** | **-1.1** |
| MPSI | **Mapaga** | **7.04** | **256** | P | **Pn** | **07 12 29.6** | **+2.1** |
| | 0.2nm50nm,0.8s | | | | | | |
| TTSI | **Tana Toraja** | **8.55** | **234** | P | Pn | 07 12 53.9 | +5.7 |
| MYLDM | **Lahad Datu** | **8.81** | **291** | Pn | **Pn** | **07 12 50.2** | **-1.5** |
| KAPI | **Kappang** | **9.87** | **225** | Pn | **Pn** | **07 13 04.3** | **-1.9** |
| MTN | **Manton Dam** | **15.39** | **164** | Pn | **Pn** | **07 14 19.7** | **-1.4** |
| JAGI | **Jajag, Banyuwa** | **16.31** | **230** | Pn | **Pn** | **07 14 32.3** | **-0.5** |
| JAGI | | | | IAmb | IAmb | 07 14 38.8 | |
| | comp=Z,24nm,0.8s | | | | | | |
| KNRA | **Kununurra** | **17.69** | **174** | | **Pn** | **07 14 49.5** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 07 14 54.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| FITZ | **Fitzroy Crossi** | **20.01** | **183** | P | **P** | **07 15 16.4** | **+0.5** |
| | comp=Z,3.5nm,0.5s,baz=6.5,slow=7.4,SNR=19 | | | | | | |
| FITZ | **Fitzroy Crossi** | **20.01** | **183** | P | **P** | **07 15 16.3** | **+0.5** |
| COEN | **Coen** | **22.74** | **135** | P | **P** | **07 15 42.2** | **-3.0** |
| COEN | | | | IAmb | IAmb | 07 15 54.7 | |
| | comp=Z,26nm,1.5s | | | | | | |
| WB0 | **Warramunga Arr** | **22.91** | **161** | P | **P** | **07 15 46.7** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 07 15 56.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| WRAB | **Tennant Creek** | **23.05** | **161** | P | **P** | **07 15 47.8** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 07 15 51.6 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| WRA | **Warramunga Arr** | **23.06** | **161** | P | **P** | **07 15 48.3** | **-0.2** |
| | comp=Z,6.7nm,0.5s,baz=339,slow=11,SNR=42 | | | | | | |
| WRA | **Warramunga Arr** | **23.06** | **161** | P | **P** | **07 15 48.6** | **+0.2** |
| WB2 | **Warramunga Arr** | **23.06** | **161** | P | **P** | **07 15 48.5** | **0.0** |
| WB2 | | | | IAmb | IAmb | 07 15 51.7 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| WR0 | **Warramunga Arr** | **23.14** | **161** | P | **P** | **07 15 48.9** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 07 15 58.5 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| AS31 | **Alice Springs** | **26.46** | **165** | P | **P** | **07 16 18.4** | **-1.3** |
| ASAR | **Alice Springs** | **26.46** | **165** | P | **P** | **07 16 20.1** | **+0.4** |
| | comp=Z,1.3nm,0.5s,baz=344,slow=10,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 19 45.0** | **+0.8** |
| | comp=Z,0.5nm,0.7s,baz=332,slow=1.6,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 07 27 33.9 | |
| | comp=Z,75nm,18.0s,baz=261,slow=38 | | | | | | |
| ASAR | **Alice Springs** | **26.46** | **165** | P | **P** | **07 16 19.8** | **+0.1** |
| PSI | **Prapat** | **27.80** | **272** | LR | LR | 07 28 59.4 | |
| | comp=Z,52nm,18.7s,baz=51,slow=40 | | | | | | |
| CTA | **Charters Tower** | **29.13** | **140** | P | **P** | **07 16 45.8** | **+2.1** |
| | comp=Z,3.8nm,0.9s,baz=343,slow=11,SNR=2.9 | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.78** | **303** | P | **P** | **07 17 06.2** | **-0.9** |
| | comp=Z,1.7nm,0.3s,baz=123,slow=6.7,SNR=4.8 | | | | | | |
| CMAR | | | | LR | LR | 07 30 04.6 | |
| | comp=Z,26nm,21.6s,baz=100,slow=37 | | | | | | |
| MORW | **Morawa** | **32.56** | **198** | P | **P** | **07 17 14.2** | **+0.4** |
| FORT | **Forrest** | **32.63** | **178** | P | **P** | **07 17 15.0** | **+0.6** |
| PZH | **PanZhiHua** | **34.20** | **318** | P | **P** | **07 17 29.3** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,70nm,5.1s | | | | | | |
| KSRS | **Korea Array** | **35.29** | **2** | P | **P** | **07 17 38.1** | **+0.8** |
| | comp=Z,1.3nm,0.6s,baz=180,slow=9.6,SNR=2.6 | | | | | | |
| BBOO | **Buckleboo** | **35.74** | **166** | P | **P** | **07 17 40.8** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 07 17 49.4 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| XAN | **Xi'an** | **35.95** | **334** | P | **P** | **07 17 43.3** | **+0.1** |
| XAN | | | | pP | pwP | 07 17 56.5 | -1.2 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| STKA | **Stephens Creek** | **36.53** | **159** | P | **P** | **07 17 49.2** | **+1.1** |
| | comp=Z,1.3nm,0.4s,baz=338,slow=11,SNR=7.0 | | | | | | |
| STKA | **Stephens Creek** | **36.53** | **159** | P | **P** | **07 17 48.7** | **+0.7** |
| LZH | **Lanzhou** | **39.99** | **331** | eP | **P** | **07 18 18.5** | **+1.2** |
| LZH | | | | pP | pP | 07 18 24.3 | -5.0 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| SHL | **Shillong** | **40.92** | **308** | P | **P** | **07 18 23.3** | **-1.9** |
| SHL | | | | IAmb | IAmb | 07 18 25.1 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| HHC | **Hu-ho-hao-te** | **41.03** | **342** | eP | **P** | **07 18 28.0** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,170nm,7.2s | | | | | | |
| DZM | **Mont Dzumac** | **45.56** | **124** | LR | LR | 07 39 26.7 | |
| | comp=Z,88nm,18.5s,baz=16,slow=38 | | | | | | |
| SONM | **Songino Array** | **48.92** | **342** | P | **P** | **07 19 27.9** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=156,slow=8.1,SNR=5.9 | | | | | | |
| SONM | | | | LR | LR | 07 40 21.9 | |
| | comp=Z,43nm,19.8s,baz=123,slow=36 | | | | | | |
| SONM | **Songino Array** | **48.92** | **342** | IAmb | IAmb | 07 19 30.7 | |
| | comp=Z,2.9nm,1.3s | | | | | | |
| WMQ | **Urumqi** | **54.14** | **326** | eP | **P** | **07 20 08.8** | **+1.4** |
| MK31 | **Makanchi Array** | **58.97** | **326** | P | **P** | **07 20 40.8** | **-0.9** |
| MK31 | | | | IAmb | IAmb | 07 20 44.8 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| MKAR | **Makanchi Array** | **58.97** | **326** | P | **P** | **07 20 40.8** | **-0.8** |
| | comp=Z,1.7nm,0.4s,baz=122,slow=7.8,SNR=25 | | | | | | |
| TARG | **Taragay, Kyrgy** | **59.03** | **319** | P | **P** | **07 20 42.4** | **-0.3** |
| TARG | | | | IAmb | IAmb | 07 20 46.1 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| MAKZ | **Makanchi** | **59.15** | **326** | P | **P** | **07 20 42.3** | **-0.7** |
| MAKZ | | | | IAmb | IAmb | 07 20 43.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| ZALV | **Zalesovo Beam** | **62.12** | **333** | P | **P** | **07 21 02.9** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=108,slow=9.5,SNR=3.9 | | | | | | |
| GAR | **Garm** | **63.09** | **313** | P | **P** | **07 21 08.2** | **-1.7** |
| KURK | **Kurchatov** | **63.19** | **328** | P | **P** | **07 21 09.3** | **-0.9** |
| KKAR | **Karatay Array** | **64.49** | **318** | P | **P** | **07 21 18.3** | **-0.6** |
| BRVK | **Borovoye** | **68.83** | **327** | P | **P** | **07 21 45.0** | **-1.3** |
| BRVK | | | | IAmb | IAmb | 07 21 49.0 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| NRIK | **Noril'sk** | **72.09** | **346** | P | **P** | **07 22 05.8** | **-0.2** |
| | comp=Z,1.9nm,0.6s,baz=135,slow=5.7,SNR=3.5 | | | | | | |
| ABKAR | **Akbulak array** | **73.48** | **321** | P | **P** | **07 22 13.9** | **-0.7** |
| ARU | **Arti** | **76.39** | **328** | P | **P** | **07 22 30.4** | **-0.8** |
| RAYN | **Ar Rayn** | **81.17** | **293** | P | **P** | **07 22 57.9** | **-0.3** |
| RAYN | | | | IAmb | IAmb | 07 22 58.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| GEVA | **Gevas** | **83.80** | **308** | P | **P** | **07 23 12.1** | **+0.2** |
| KBZ | **Khabaz** | **84.16** | **314** | P | **P** | **07 23 14.4** | **+1.1** |
| | comp=Z,1.8nm,0.8s,baz=135,slow=4.3,SNR=4.3 | | | | | | |
| GURO | **Guroymak-BITLI** | **84.61** | **308** | P | **P** | **07 23 16.7** | **+0.8** |
| FINES | **FINESS Array B** | **93.34** | **332** | P | **P** | **07 23 56.6** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=63,slow=9.5,SNR=2.5 | | | | | | |

*IDC 29 07:23:08.1 ± 0.6, 26°.78N × 144°.14E, h0km, mb4.0/17, mb1 4.2/18,mb1mx4.1/39,mbtmp4.0/18,ML3.6/1,MS3.2/3, Ms1 3.2/3,ms1mx2.5/84,Error ellipse: s-maj=21.5km s-min=16.0km az=84.0*
*NEIC 29 07:23:10.3 ± 1.7, 26°.79N ± 0°.10 × 144°.1E ± 0°.1, h10km ± 1km, mb4.5/25, Error ellipse: s-maj=16.7km s-min=16.4km az=167.0*
*JMA 29 07:23:10.9, 27°.05N × 144°.11E, h46km, M4.4*
**ISC 29 07:23:13.8 ± 0.7, 26°.91N ± 0°.08 × 144°.07E ± 0°.08, h35 km, n69, σ 1§18/63, mb4.3/28, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CBIJ | **Chichi jima** | **1.69** | **277** | P | **Pn** | **07 23 39.2** | **-1.7** |
| CBIJ | | | | S | **Sn** | **07 24 00.0** | **-1.3** |
| JCJ | **Chichijima** | **1.69** | **277** | Pn | **Pn** | **07 23 39.5** | **-1.4** |
| JHH2 | **Haha-jima-NKT2** | **1.72** | **261** | P | **Pn** | **07 23 40.0** | **-1.2** |
| JHJ2 | **Mitsune** | **7.20** | **330** | Pn | **Pn** | **07 24 58.4** | **+1.9** |
| BSO1 | **Boso 1** | **8.17** | **342** | P | **Pn** | **07 25 07.9** | **-1.4** |
| BSO1 | | | | eS | **Sn** | **07 26 37.4** | **-2.6** |
| JOD2 | **Odawara 2** | **9.36** | **334** | P | **Pn** | **07 25 25.4** | **-0.8** |
| JHU | **Hanno** | **9.81** | **337** | eS | **Sn** | **07 27 19.5** | **-1.7** |
| JRY | **Ryogami san** | **10.09** | **335** | P | **Pn** | **07 25 34.3** | **-1.9** |
| JAG | **Ashikaga** | **10.27** | **339** | P | **Pn** | **07 25 36.3** | **-2.3** |
| MJAR | **Matsushiro Arr** | **10.82** | **334** | Pn | **Pn** | **07 25 45.8** | **-0.3** |
| | 0.5nm,0.3s,baz=160,slow=11,SNR=9.9 | | | | | | |
| MAJO | **Matsushiro** | **10.82** | **334** | | **Pn** | **07 25 46.1** | **-0.1** |
| MAT | **Matsushiro** | **10.82** | **334** | P | **Pn** | **07 25 45.1** | **-1.1** |
| MJB9 | **Matsu-Tunnel** | **10.83** | **334** | | **Pn** | **07 25 46.2** | **-0.1** |
| JWT | **Wachi** | **11.17** | **320** | Pn | **Pn** | **07 25 51.7** | **+0.8** |
| JMM | **Marumori** | **11.27** | **347** | Pn | **Pn** | **07 25 52.4** | **+0.1** |
| JEW | **Eniwo** | **16.04** | **353** | Pn | **Pn** | **07 26 54.9** | **-1.6** |
| ASAJ | **Asahikawa** | **17.21** | **356** | LR | LR | 07 32 22.2 | |
| | comp=Z,53nm,21.5s,baz=194,slow=32 | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | **22.12** | **104** | T | T | 07 50 53.6 | |
| | baz=291 | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **22.13** | **104** | T | T | 07 50 59.7 | |
| | baz=291 | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **22.14** | **104** | T | T | 07 51 04.4 | |
| | baz=291 | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **22.45** | **107** | T | T | 07 51 11.6 | |
| | baz=294,slow=74,SNR=5.9 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **22.46** | **107** | T | T | 07 51 13.4 | |
| | baz=294,slow=74,SNR=4.0 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **22.47** | **107** | T | T | 07 51 10.3 | |
| | baz=294,slow=74,SNR=4.3 | | | | | | |
| KLR | **Kul'dur** | **24.24** | **340** | P | **P** | **07 28 28.1** | **+0.8** |
| | 2.5nm,0.6s,baz=150,slow=9.7,SNR=8.1 | | | | | | |
| ULN | **Ulaanbaatar** | **35.62** | **316** | P | **P** | **07 30 09.7** | **+1.4** |
| ULN | | | | IAmb | IAmb | 07 30 10.8 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| SONM | **Songino Array** | **36.02** | **316** | P | **P** | **07 30 13.1** | **+1.5** |
| | comp=Z,3.9nm,0.7s,baz=114,slow=7.5,SNR=30 | | | | | | |
| SONM | **Songino Array** | **36.02** | **316** | P | **P** | **07 30 13.2** | **+1.5** |
| WB0 | **Warramunga Arr** | **47.34** | **192** | P | **P** | **07 31 41.9** | **-2.4** |
| WB0 | | | | IAmb | IAmb | 07 31 51.5 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| WR0 | **Warramunga Arr** | **47.50** | **192** | P | **P** | **07 31 44.0** | **-1.6** |
| WR0 | | | | IAmb | IAmb | 07 32 02.7 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| WRAB | **Tennant Creek** | **47.51** | **192** | P | **P** | **07 31 43.4** | **-2.3** |
| WRAB | | | | IAmb | IAmb | 07 31 49.5 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| WB2 | **Warramunga Arr** | **47.52** | **192** | P | **P** | **07 31 44.1** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 07 31 49.6 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| WRA | **Warramunga Arr** | **47.52** | **192** | P | **P** | **07 31 43.8** | **-1.9** |
| | comp=Z,1.2nm,0.6s,baz=16,slow=8.7,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 07 50 38.8 | |
| | comp=Z,54nm,18.9s,baz=80,slow=35 | | | | | | |
| FITZ | **Fitzroy Crossi** | **48.18** | **204** | P | **P** | **07 31 49.8** | **-1.0** |
| | comp=Z,2.7nm,0.7s,baz=28,slow=7.6 | | | | | | |
| FITZ | **Fitzroy Crossi** | **48.18** | **204** | P | **P** | **07 31 50.0** | **-0.9** |
| FITZ | | | | IAmb | IAmb | 07 31 52.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| ZAA0 | **Zalesovo Array** | **50.73** | **319** | P | **P** | **07 32 10.2** | **+0.3** |
| ZALV | **Zalesovo Beam** | **50.73** | **319** | P | **P** | **07 32 10.5** | **+0.5** |
| | comp=Z,1.9nm,0.7s,baz=97,slow=8.1,SNR=8.0 | | | | | | |
| ZALV | **Zalesovo Beam** | **50.73** | **319** | P | **P** | **07 32 09.7** | **-0.3** |
| ASAR | **Alice Springs** | **51.23** | **192** | P | **P** | **07 32 12.9** | **-1.2** |
| | comp=Z,0.2nm,0.5s,baz=12,slow=6.0,SNR=2.2 | | | | | | |
| MK31 | **Makanchi Array** | **51.89** | **310** | P | **P** | **07 32 19.7** | **+0.9** |
| MKAR | **Makanchi Array** | **51.89** | **310** | P | **P** | **07 32 19.6** | **+0.8** |
| | comp=Z,3.0nm,0.8s,baz=94,slow=9.0,SNR=27 | | | | | | |
| MKAR | | | | PcP | **PcP** | **07 33 31.4** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=92,slow=4.9,SNR=1.5 | | | | | | |
| MAKZ | **Makanchi** | **52.11** | **310** | P | **P** | **07 32 21.5** | **+1.0** |
| MAKZ | | | | IAmb | IAmb | 07 32 22.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| SVW2 | **Sparrevohn** | **52.55** | **32** | P | **P** | **07 32 22.6** | **-0.9** |
| NRIK | **Noril'sk** | **53.44** | **338** | P | **P** | **07 32 30.7** | **+0.8** |
| | comp=Z,2.6nm,0.5s,baz=110,slow=8.6,SNR=5.0 | | | | | | |
| NRIK | **Noril'sk** | **53.44** | **338** | IAmb | IAmb | 07 32 31.8 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| J20K | **Nowinta River** | **53.87** | **29** | P | **P** | **07 32 34.3** | **+1.2** |
| KURK | **Kurchatov** | **54.32** | **315** | P | **P** | **07 32 37.2** | **+0.6** |
| KURK | | | | IAmb | IAmb | 07 32 37.3 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| IMAR | **Indian Mountai** | **54.46** | **26** | P | **P** | **07 32 38.1** | **+0.7** |
| CAST | **Castle Rocks** | **54.61** | **30** | P | **P** | **07 32 39.5** | **+0.9** |
| CAST | | | | IAmb | IAmb | 07 32 47.0 | |
| | comp=Z,6.3nm,1.3s | | | | | | |
| TARG | **Taragay, Kyrgy** | **55.42** | **304** | P | **P** | **07 32 46.2** | **+0.9** |
| TARG | | | | IAmb | IAmb | 07 32 48.0 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| ILAR | **Eielson Array** | **57.07** | **28** | P | **P** | **07 32 56.6** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=261,slow=5.2,SNR=4.2 | | | | | | |
| BMRM | **Bremner River** | **57.83** | **33** | P | **P** | **07 33 00.8** | **-0.8** |
| SCRK | **Sand Creek** | **58.26** | **30** | P | **P** | **07 33 04.5** | **-0.1** |
| BMAR | **Burnt Mountain** | **58.30** | **25** | P | **P** | **07 33 06.0** | **+1.2** |
| BRVK | **Borovoye** | **59.38** | **318** | P | **P** | **07 33 13.5** | **+1.1** |
| BRVK | | | | IAmb | IAmb | 07 33 13.8 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| KKAR | **Karatay Array** | **60.56** | **306** | P | **P** | **07 33 21.5** | **+0.8** |
| CHGR | **Chuyangaron** | **62.48** | **302** | P | **P** | **07 33 35.1** | **+1.1** |
| INK | **Inuvik** | **62.50** | **25** | P | **P** | **07 33 33.6** | **+0.2** |
| | comp=Z,2.1nm,1.1s,baz=304,slow=7.3,SNR=1.7 | | | | | | |
| KBL | **Kabul** | **63.61** | **297** | P | **P** | **07 33 42.4** | **+0.8** |
| KBL | | | | IAmb | IAmb | 07 33 52.0 | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| ABKAR | **Akbulak array** | **66.43** | **315** | P | **P** | **07 33 59.7** | **+0.3** |
| YKA | **Yellowknife Ar** | **71.50** | **29** | P | **P** | **07 34 30.5** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=292,slow=6.0,SNR=11 | | | | | | |
| FINES | **FINESS Array B** | **78.85** | **334** | P | **P** | **07 35 13.1** | **+0.1** |
| | comp=Z,1.5nm,0.9s,baz=46,slow=8.0,SNR=2.8 | | | | | | |
| NVAR | **Mina Array Bea** | **79.31** | **52** | P | **P** | **07 35 16.5** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=294,slow=5.9,SNR=16 | | | | | | |
| KBZ | **Khabaz** | **79.36** | **314** | P | **P** | **07 35 17.1** | **+1.0** |
| | comp=Z,2.7nm,0.7s,baz=60,slow=5.9,SNR=8.6 | | | | | | |
| PDAR | **Pinedale Array** | **83.15** | **45** | P | **P** | **07 35 36.6** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=27,slow=3.6,SNR=4.2 | | | | | | |
| AKASG | **Malin Array Be** | **83.75** | **325** | P | **P** | **07 35 38.6** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=48,slow=5.0,SNR=6.7 | | | | | | |
| NOA | **NORSAR Array B** | **84.40** | **339** | P | **P** | **07 35 41.9** | **-0.4** |
| | comp=Z,0.9nm,0.9s,baz=39,slow=5.0,SNR=2.8 | | | | | | |
| VRAC | **Vranov** | **90.88** | **329** | LR | LR | 08 24 15.7 | |
| | comp=Z,11nm,18.8s,baz=250,slow=40 | | | | | | |
| PLCA | **Paso Flores** | **148.32** | **125** | PKPbc | **PKPbc** | **07 42 55.8** | **-0.8** |
| | comp=Z,1.3nm,1.0s,baz=278,slow=7.1,SNR=3.1 | | | | | | |
| LPAZ | **La Paz** | **148.33** | **77** | PKPbc | **PKPbc** | **07 42 58.0** | **+0.1** |
| | comp=Z,2.7nm,0.7s,baz=250,slow=1.4,SNR=11 | | | | | | |

*DJA 29 07:53:28.8 ± 1.1, 2°.1N ± 6°.9 × 6°.6E ± 1°.0, h10km, M3.8/7, mb4.3/2, mB5.4/1, MLv3.5/7, Mw(mB)4.8/1*
*IDC 29 07:53:31.6 ± 2.9, 3°.01N × 96°.56E, h0km, mb3.5/5, mb1 3.5/6, mb1mx3.3/43, mbtmp3.4/6, ML2.4/1, Error ellipse: s-maj=88.3km s-min=24.8km az=46.0*
**ISC 29 07:53:29.2 ± 1.5, 2°.09N ± 0°.10 × 96°.2E ± 0°.2, h30 km, n17, σ 0§67/11, mb3.5/5, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SNSI | **Sinabang, Aceh** | **0.33** | **14** | P | **Pb** | **07 53 35.8** | **-1.2** |
| GSI | **Gunungsitoli** | **1.54** | **120** | P | **Pn** | **07 53 54.8** | **+0.1** |
| GSI | | | | S | **Sn** | **07 54 13.7** | **0.0** |
| KCSI | **Kotacane, Aceh** | **2.08** | **47** | P | **Pn** | **07 54 03.2** | **+1.1** |
| PSI | **Prapat** | **2.77** | **75** | Pn | **Pn** | **07 54 11.7** | **0.0** |
| | 1.0nm,0.3s,baz=184,slow=14,SNR=2.4 | | | | | | |
| BKNI | **Bangkinang** | **5.10** | **110** | P | **Pn** | **07 54 44.3** | **+0.6** |
| MASI | **Maura Aman, Be** | **7.93** | **131** | P | **Pn** | **07 55 22.8** | **+0.2** |
| H08S2 | **Diego Garcia H** | **25.59** | **248** | T | T | 08 25 28.1 | |
| | baz=68,slow=75,SNR=31 | | | | | | |
| H08S3 | **Diego Garcia H** | **25.59** | **248** | T | T | 08 25 38.4 | |
| | baz=68,slow=75,SNR=19 | | | | | | |
| H08S1 | **Diego Carcia H** | **25.61** | **248** | T | T | 08 25 23.1 | |
| | baz=68,slow=75,SNR=18 | | | | | | |
| H01W3 | **Cape Leeuwin H** | **40.43** | **157** | T | T | 08 44 02.1 | |
| | baz=332,slow=76,SNR=9.4 | | | | | | |
| H01W2 | **Cape Leeuwin H** | **40.44** | **157** | T | T | 08 44 03.0 | |
| | baz=332,slow=76,SNR=9.7 | | | | | | |
| H01W1 | **Cape Leeuwin H** | **40.44** | **157** | T | T | 08 44 03.2 | |
| | baz=332,slow=76,SNR=9.6 | | | | | | |
| WRA | **Warramunga Arr** | **43.31** | **122** | P | P | 08 01 37.6 | +8.8 |
| | 0.3nm,0.9s,baz=301,slow=9.1,SNR=3.3 | | | | | | |
| MKAR | **Makanchi Array** | **46.16** | **347** | P | **P** | **08 01 51.5** | **+0.4** |
| | 0.6nm,0.7s,baz=159,slow=7.5,SNR=8.3 | | | | | | |
| SONM | **Songino Array** | **46.41** | **9** | P | **P** | **08 01 53.1** | **-0.1** |
| | 0.2nm,0.4s,baz=186,slow=12,SNR=2.4 | | | | | | |
| KURBB | **Kurchatov Arra** | **50.63** | **345** | P | **P** | **08 02 25.9** | **+0.5** |
| | 0.3nm,0.5s,baz=165,slow=6.7,SNR=2.5 | | | | | | |
| ZALV | **Zalesovo Beam** | **52.54** | **352** | P | **P** | **08 02 39.8** | **+0.2** |
| | 1.2nm,0.5s,baz=174,slow=6.8,SNR=6.3 | | | | | | |

*IDC 29 08:06:51.5 ± 1.1, 16°.75S × 177°.23E, h0km, mb3.8/6, mb1 4.0/6,mb1mx3.8/40,mbtmp3.8/6,MS3.6/2,Ms1 3.6/2, ms1mx2.9/59,Error ellipse: s-maj=28.1km s-min=18.9km az=26.0*
**ISC 29 08:06:56.5 ± 1.0, 16°.8S ± 0°.1 × 177°.2E ± 0°.1, h35 km, n9, σ 1§50/8, mb3.7/6, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **1.27** | **140** | Pn | **Pn** | **08 07 16.1** | **-1.8** |
| | 556nm,0.3s,baz=280,slow=9.9,SNR=989 | | | | | | |
| MSVF | | | | Sn | **Sn** | **08 07 35.5** | **+1.6** |
| | 561nm,0.3s,baz=40,slow=20,SNR=14 | | | | | | |
| CTA | **Charters Tower** | **29.52** | **259** | P | **P** | **08 12 56.6** | **-1.3** |
| | 4.0nm,1.0s,baz=130,slow=12,SNR=1.9 | | | | | | |
| STKA | **Stephens Creek** | **35.57** | **238** | P | **P** | **08 13 51.6** | **+0.9** |
| | 1.1nm,0.7s,baz=59,slow=11,SNR=3.7 | | | | | | |
| WRA | **Warramunga Arr** | **40.72** | **259** | P | **P** | **08 14 34.1** | **-0.1** |
| | 0.5nm,0.8s,baz=95,slow=8.9,SNR=3.4 | | | | | | |
| ASAR | **Alice Springs** | **41.08** | **253** | P | **P** | **08 14 38.4** | **+1.2** |
| | 1.2nm,0.8s,baz=83,slow=8.9,SNR=12 | | | | | | |
| BATI | **Baumata** | **52.33** | **270** | LR | LR | 08 35 55.5 | |
| | comp=Z,103nm,21.2s,baz=67,slow=33 | | | | | | |
| KSRS | **Korea Array** | **71.09** | **320** | LR | LR | 08 45 14.7 | |
| | comp=Z,26nm,21.9s,baz=140,slow=32 | | | | | | |
| NVAR | **Mina Array Bea** | **81.58** | **46** | P | **P** | **08 19 12.2** | **+1.0** |
| | 0.4nm,0.7s,baz=229,slow=8.2,SNR=3.1 | | | | | | |
| ILAR | **Eielson Array** | **85.78** | **15** | P | **P** | **08 19 31.3** | **-0.5** |
| | 0.4nm,0.8s,baz=220,slow=6.8,SNR=1.7 | | | | | | |

*IDC 29 08:09:21.6 ± 1.0, 16°.76S × 177°.28E, h0km, mb4.0/5, mb1 4.3/5,mb1mx4.0/35,mbtmp4.0/5,MS3.6/4,Ms1 3.6/4, ms1mx3.0/59,Error ellipse: s-maj=30.0km s-min=18.9km az=40.0*
**ISC 29 08:09:26.9 ± 1.0, 16°.8S ± 0°.2 × 177°.3E ± 0°.2, h35 km, n10, σ 1§70/7, mb3.9/5, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **1.23** | **142** | Pn | **Pn** | **08 09 45.6** | **-2.0** |
| | 434nm,0.3s,baz=315,slow=10.0,SNR=15 | | | | | | |
| MSVF

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **2.72** | **12** | Pn | **Pn** | **08 12 40.6** | **-1.2** |
| **JHJ** | **Hachijo jima 2** | **2.72** | **11** | Pn | **Pn** | **08 12 43.4** | **+1.6** |
| | 27nm,0.3s,baz=165,slow=5.9,SNR=4.2 | | | | | | |
| JHJ | | | | Sn | **Sb** | **08 13 19.3** | **-0.9** |
| | 36nm,0.3s,baz=64,slow=21,SNR=1.7 | | | | | | |
| JHJ | | | | LR | LR | 08 13 47.4 | |
| | comp=Z,5μm,18.4s,baz=330,slow=40 | | | | | | |
| **TTO2** | **TONANKAI O.B.S** | **3.74** | **332** | P | **Pn** | **08 12 53.9** | **-1.7** |
| **CBIJ** | **Chichi jima** | **4.27** | **141** | P | **Pn** | **08 13 01.6** | **-1.5** |
| CBIJ | | | | S | **Sn** | **08 13 50.0** | **-3.0** |
| **JCJ** | **Chichijima** | **4.27** | **141** | Pn | **Pn** | **08 13 01.8** | **-1.3** |
| **JIE** | **Ise** | **4.45** | **333** | P | **Pn** | **08 13 03.7** | **-1.8** |
| **JTNC** | **Tanabenakahech** | **4.51** | **319** | P | **Pn** | **08 13 04.2** | **-2.3** |
| JTNC | | | | *e*S | **Sn** | **08 13 54.6** | **-4.4** |
| **INU** | **Inuyama** | **5.21** | **340** | | **Pn** | **08 13 14.7** | **-1.3** |
| **JGF** | **Kuroka** | **5.36** | **344** | Pn | **Pn** | **08 13 17.8** | **-0.3** |
| **JMN** | **Monobe** | **5.55** | **308** | Pn | **Pn** | **08 13 20.0** | **-0.7** |
| **JYT** | **Yasato** | **5.83** | **8** | Pn | **Pn** | **08 13 23.9** | **-0.7** |
| **JTO** | **Tosashimizu** | **5.93** | **296** | P | **Pn** | **08 13 22.7** | **-3.2** |
| **MJAR** | **Matsushiro Arr** | **6.13** | **353** | Pn | **Pn** | **08 13 30.0** | **+1.3** |
| | 0.2nm,0.3s,baz=177,slow=11,SNR=13 | | | | | | |
| MJAR | | | | Sn | **Sn** | **08 14 36.7** | **-2.2** |
| | 0.2nm,0.3s,baz=18,slow=35,SNR=1.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.13** | **353** | Pn | **Pn** | **08 13 29.0** | **+0.3** |
| **MAJO** | **Matsushiro** | **6.13** | **353** | | **Pn** | **08 13 29.3** | **+0.6** |
| **MAT** | **Matsushiro** | **6.13** | **353** | P | **Pn** | **08 13 30.1** | **+1.4** |
| MAT | | | | S | **Sn** | **08 14 39.0** | **0.0** |
| **MJB9** | **Matsu-Tunnel** | **6.14** | **353** | | **Pn** | **08 13 26.9** | **-1.9** |
| **JMM** | **Marumori** | **7.53** | **10** | | **Pn** | **08 13 47.0** | **-0.8** |
| **JNU** | **Nakatsue** | **7.53** | **293** | Pn | **Pn** | **08 13 47.2** | **-0.8** |
| | 3.9nm,0.3s,baz=89,slow=6.7,SNR=20 | | | | | | |
| JNU | | | | Sn | **Sn** | **08 15 11.7** | **-1.9** |
| | 15nm,0.3s,baz=247,slow=15,SNR=20 | | | | | | |
| **JNU** | **Nakatsue** | **7.53** | **293** | Pn | **Pn** | **08 13 47.5** | **-0.5** |
| **JSU** | **Suzuyama** | **7.54** | **280** | Pn | **Pn** | **08 13 49.0** | **+0.8** |
| **JOW** | **Kunigami** | **10.21** | **252** | Pn | **Pn** | **08 14 22.7** | **-2.1** |
| | 14nm,0.3s,baz=115,slow=25,SNR=12 | | | | | | |
| JOW | | | | LR | LR | 08 18 13.0 | |
| | comp=Z,1μm,18.7s,baz=60,slow=37 | | | | | | |
| **JOW** | **Kunigami** | **10.21** | **252** | Pn | **Pn** | **08 14 23.7** | **-1.1** |
| **KSRS** | **Korea Array** | **11.65** | **310** | Pn | **Pn** | **08 14 44.2** | **-0.1** |
| | 0.1nm,0.3s,baz=179,slow=34,SNR=2.7 | | | | | | |
| KSRS | | | | LR | LR | 08 19 07.3 | |
| | comp=Z,404nm,19.3s,baz=125,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **13.92** | **10** | Pn | **Pn** | **08 15 15.0** | **-0.3** |
| | 0.3nm,0.3s,baz=158,slow=30,SNR=1.6 | | | | | | |
| ASAJ | | | | LR | LR | 08 21 47.9 | |
| | comp=Z,630nm,19.6s,baz=184,slow=42 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.86** | **340** | Pn | **Pn** | **08 15 28.1** | **0.0** |
| | baz=138,slow=44,SNR=3.0 | | | | | | |
| USRK | | | | LR | LR | 08 20 42.1 | |
| | comp=Z,525nm,21.9s,baz=144,slow=35 | | | | | | |
| **SSE** | **Sheshan** | **15.46** | **277** | P | **Pn** | **08 15 36.0** | **-0.3** |
| SSE | | | | S | **Sn** | **08 18 29.3** | **+1.7** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,140nm,3.9s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=N,500nm,13.3s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=E,450nm,13.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **16.03** | **335** | P | **Pn** | **08 15 43.5** | **-0.1** |
| MDJ | | | | pP | P | 08 15 47.8 | +0.8 |
| MDJ | | | | sP | pP | 08 15 50.0 | +0.7 |
| MDJ | | | | S | **Sn** | **08 18 42.3** | **+0.9** |
| MDJ | | | | sS | S | 08 18 47.8 | -7.3 |
| MDJ | | | | ScP | **ScP** | **08 24 12.8** | **-1.8** |
| MDJ | | | | PcS | **PcS** | **08 24 15.3** | **-0.3** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,12nm,1.6s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,180nm,4.6s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=N,2μm,6.8s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=E,2μm,7.0s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,1μm,12.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **16.72** | **9** | Pn | **Pn** | **08 15 51.7** | **-0.5** |
| **CN2** | **Changchun** | **17.21** | **325** | *e*P | **P** | **08 16 01.8** | **+1.8** |
| CN2 | | | | S | **S** | **08 19 20.0** | **+0.9** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.6s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,1μm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=E,1μm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,600nm,10.0s | | | | | | |
| **NJ2** | **Nanjing** | **17.44** | **280** | ⇑P | **P** | **08 16 03.8** | **+1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=N,660nm,11.4s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,680nm,13.3s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1μm,15.2s | | | | | | |
| **GUMO** | **Guam** | **17.59** | **161** | LR | LR | 08 21 32.2 | |
| | comp=Z,586nm,19.2s,baz=6.0,slow=33 | | | | | | |
| **BNX** | **BinXian** | **17.82** | **332** | ⇑P | **P** | **08 16 07.0** | **+0.2** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,100nm,1.2s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,1μm,4.9s | | | | | | |
| **KLR** | **Kul'dur** | **19.59** | **345** | P | **P** | **08 16 25.1** | **-1.0** |
| | 0.1nm,0.3s,baz=139,slow=11,SNR=4.5 | | | | | | |
| **BJT** | **Baijiatuan** | **21.02** | **303** | P | **P** | **08 16 41.4** | **-0.4** |
| BJT | | | | IAmb | IAmb | 08 16 51.2 | |
| | comp=Z,48nm,1.1s | | | | | | |
| **BJI** | **Beijing** | **21.02** | **303** | P | **P** | **08 16 45.3** | **+3.5** |
| BJI | | | | S | **S** | **08 20 35.5** | **-0.4** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,900nm,13.3s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,470nm,13.8s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,750nm,14.3s | | | | | | |
| **WHN** | **Wuhan** | **21.37** | **277** | ⇓P | **P** | **08 16 47.5** | **+1.9** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,210nm,1.8s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,4μm,14.3s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,750nm,5.4s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,2μm,11.0s | | | | | | |
| **HNS** | **HongShan** | **21.41** | **295** | ⇑P | **P** | **08 16 48.5** | **+2.5** |
| HNS | | | | PP | **PnPn** | **08 17 07.5** | **+1.6** |
| HNS | | | | S | **S** | **08 20 45.0** | **+1.5** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,24nm,1.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,430nm,14.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,860nm,15.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,730nm,16.0s | | | | | | |
| **LYN** | **LuoYang** | **22.85** | **287** | ⇑*i*P | **P** | **08 17 03.0** | **+1.5** |
| LYN | | | | pP | pwP | 08 17 07.0 | +0.7 |
| LYN | | | | S | **S** | **08 21 17.3** | **+6.3** |
| LYN | | | | LR | LR | | |
| | comp=Z,540nm,20.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,610nm,20.6s | | | | | | |
| **HIA** | **Hailar** | **23.87** | **327** | P | **P** | **08 17 10.8** | **-0.8** |
| HIA | | | | IAmb | IAmb | 08 17 19.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **24.62** | **302** | *e*P | **P** | **08 17 19.5** | **+0.8** |
| HHC | | | | S | **S** | **08 21 37.0** | **-2.9** |
| HHC | | | | sS | sS | 08 21 45.8 | +1.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,7.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,520nm,11.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,710nm,10.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,870nm,12.0s | | | | | | |
| **ENH** | **Enshi** | **25.57** | **277** | P | **P** | **08 17 27.6** | **+0.3** |
| ENH | | | | IAmb | IAmb | 08 17 28.3 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **XAN** | **Xi'an** | **25.78** | **286** | P | **P** | **08 17 28.8** | **-0.4** |
| XAN | | | | S | **S** | **08 22 01.3** | **+2.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,210nm,4.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,690nm,15.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,400nm,17.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,620nm,15.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **26.38** | **26** | LR | LR | 08 28 05.0 | |
| | comp=Z,244nm,21.3s,baz=209,slow=37 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.23** | **107** | T | T | 08 46 05.2 | |
| | baz=299,slow=75,SNR=739 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.23** | **107** | T | T | 08 46 05.6 | |
| | baz=299,slow=75,SNR=319 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.24** | **107** | T | T | 08 46 06.5 | |
| | baz=299,slow=75,SNR=599 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.66** | **109** | T | T | 08 46 34.5 | |
| | baz=301,slow=75,SNR=512 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.66** | **109** | T | T | 08 46 36.5 | |
| | baz=301,slow=75,SNR=489 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.68** | **109** | T | T | 08 46 37.7 | |
| | baz=301,slow=75,SNR=292 | | | | | | |
| **LZH** | **Lanzhou** | **29.95** | **290** | *e*P | **P** | **08 18 10.0** | **+3.4** |
| LZH | | | | pP | pwP | 08 18 16.5 | +4.8 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,510nm,12.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,770nm,13.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,790nm,16.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **30.08** | **314** | P | **P** | **08 18 09.0** | **+1.3** |
| ULN | | | | IAmb | IAmb | 08 18 22.1 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **MA2** | **Magadan** | **30.17** | **12** | LR | LR | 08 31 12.4 | |
| | comp=Z,236nm,19.7s,baz=197,slow=38 | | | | | | |
| **MA2** | **Magadan** | **30.17** | **12** | P | **P** | **08 18 08.4** | **+0.3** |
| MA2 | | | | IAmb | IAmb | 08 18 14.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **30.37** | **280** | P | **P** | **08 18 10.3** | **0.0** |
| CD2 | | | | S | **S** | **08 23 10.0** | **-0.9** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,120nm,12.7s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,690nm,12.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,610nm,14.1s | | | | | | |
| **SONM** | **Songino Array** | **30.47** | **314** | P | **P** | **08 18 13.0** | **+1.9** |
| | comp=Z,3.4nm,0.7s,baz=118,slow=9.5,SNR=5.8 | | | | | | |
| SONM | | | | LR | LR | 08 30 16.7 | |
| | comp=Z,162nm,18.1s,baz=88,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **30.47** | **314** | P | **P** | **08 18 12.3** | **+1.2** |
| **SIJI** | **Sorong** | **32.03** | **195** | LR | LR | 08 28 48.6 | |
| | comp=Z,445nm,18.7s,baz=26,slow=32 | | | | | | |
| **YAK** | **Yakutsk** | **32.20** | **352** | LR | LR | 08 31 33.3 | |
| | comp=Z,428nm,18.4s,baz=150,slow=36 | | | | | | |
| **PZH** | **PanZhiHua** | **33.02** | **273** | P | P | 08 18 39.0 | +5.2 |
| PZH | | | | S | **S** | **08 23 52.5** | **0.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.9s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,530nm,16.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,410nm,15.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,300nm,15.1s | | | | | | |
| **GTA** | **Gaotai** | **33.26** | **296** | *e*P | **P** | **08 18 33.5** | **-2.2** |
| GTA | | | | pP | pP | 08 18 38.8 | +0.6 |
| GTA | | | | sP | pwP | 08 18 41.5 | +0.8 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,49nm,6.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,510nm,13.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,340nm,16.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,370nm,14.5s | | | | | | |
| **SEY** | **Seymchan** | **33.60** | **11** | P | **P** | **08 18 38.4** | **+0.2** |
| | comp=Z,1.0nm,0.3s,baz=296,slow=1.1,SNR=13 | | | | | | |
| SEY | | | | LR | LR | 08 32 49.0 | |
| | comp=Z,280nm,19.1s,baz=200,slow=37 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **33.82** | **39** | LR | LR | 08 31 02.6 | |
| | comp=Z,85nm,20.7s,baz=325,slow=34 | | | | | | |
| **GOMU** | **GeErMu** | **37.25** | **291** | P | **P** | **08 19 10.8** | **+0.4** |
| GOMU | | | | sP | pwP | 08 19 15.5 | +0.1 |
| GOMU | | | | S | **S** | **08 24 55.3** | **-2.5** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,140nm,4.7s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,190nm,14.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,220nm,13.3s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,200nm,12.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **38.16** | **262** | P | **P** | **08 19 17.8** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **38.31** | **261** | P | **P** | **08 19 18.5** | **-0.6** |
| | comp=Z,1.2nm,0.3s,baz=56,slow=6.5,SNR=5.9 | | | | | | |
| CMAR | | | | LR | LR | 08 34 57.9 | |
| | comp=Z,216nm,21.2s,baz=70,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **39.85** | **211** | LR | LR | 08 35 43.0 | |
| | comp=Z,82nm,20.6s,baz=62,slow=36 | | | | | | |
| **BILL** | **Bilibino** | **40.86** | **15** | P | **P** | **08 19 39.2** | **-0.5** |
| **TIXI** | **Tiksi** | **41.64** | **355** | LR | LR | 08 37 50.6 | |
| | comp=Z,192nm,19.1s,baz=180,slow=37 | | | | | | |
| **TIXI** | **Tiksi** | **41.64** | **355** | P | **P** | **08 19 45.4** | **-0.6** |
| **WMQ** | **Urumqi** | **42.49** | **303** | *e*P | **P** | **08 19 54.5** | **+0.9** |
| WMQ | | | | pP | pwP | 08 20 00.8 | +2.2 |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,440nm,15.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,370nm,20.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,190nm,17.1s | | | | | | |
| **MTN** | **Manton Dam** | **43.73** | **191** | P | **P** | **08 20 03.5** | **-0.1** |
| MTN | | | | IAmb | IAmb | 08 20 11.5 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **HNR** | **Honiara** | **44.40** | **150** | LR | LR | 08 36 46.7 | |
| | comp=Z,252nm,22.0s,baz=325,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.23** | **317** | P | **P** | **08 20 15.1** | **-0.2** |
| | comp=Z,0.6nm,0.4s,baz=82,slow=11,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.23** | **317** | P | **P** | **08 20 14.2** | **-1.1** |
| **RAMN** | **Ramite** | **45.90** | **279** | *e*P | **P** | **08 20 20.3** | **-1.0** |
| **JIRN** | **Jiri** | **46.04** | **280** | *e*P | **P** | **08 20 22.8** | **+0.3** |
| | comp=Z,36nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **46.23** | **281** | *e*P | **P** | **08 20 23.8** | **-0.2** |
| | comp=Z,44nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **46.32** | **307** | P | **P** | **08 20 23.8** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 08 20 41.5 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.32** | **307** | P | **P** | **08 20 24.3** | **+0.3** |
| | comp=Z,3.4nm,0.8s,baz=93,slow=9.2,SNR=31 | | | | | | |
| MKAR | | | | LR | LR | 08 40 58.9 | |
| | comp=Z,257nm,18.5s,baz=88,slow=38 | | | | | | |
| **MAKZ** | **Makanchi** | **46.53** | **307** | P | **P** | **08 20 26.3** | **+0.6** |
| MAKZ | | | | IAmb | IAmb | 08 20 32.6 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **46.77** | **281** | *e*P | **P** | **08 20 28.2** | **+0.1** |
| **PSI** | **Papat** | **46.92** | **242** | LR | LR | 08 40 00.3 | |
| | comp=Z,64nm,18.6s,baz=37,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **46.94** | **194** | P | **P** | **08 20 29.0** | **0.0** |
| **LEM** | **Lembang** | **47.83** | **224** | LR | LR | 08 40 08.9 | |
| | comp=Z,72nm,21.3s,baz=144,slow=35 | | | | | | |
| **DANN** | **Dangsing** | **47.90** | **282** | *e*P | **P** | **08 20 37.5** | **+0.5** |
| **KOLN** | **Koldanda** | **48.20** | **281** | *e*P | **P** | **08 20 39.5** | **+0.3** |
| **ANM** | **Nome** | **48.23** | **28** | P | **P** | **08 20 39.3** | **+0.7** |
| ANM | | | | IAmb | IAmb | 08 20 45.7 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **NRIK** | **Noril'sk** | **48.57** | **338** | P | **P** | **08 20 40.5** | **-0.6** |
| | comp=Z,1.2nm,0.4s,baz=107,slow=14,SNR=3.6 | | | | | | |
| NRIK | | | | LR | LR | 08 42 30.8 | |
| | comp=Z,274nm,18.2s,baz=128,slow=38 | | | | | | |
| **NRIK** | **Noril'sk** | **48.57** | **338** | P | **P** | **08 20 40.7** | **-0.4** |
| NRIK | | | | IAmb | IAmb | 08 20 59.6 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **PYUN** | **Piuthan** | **48.62** | **282** | *e*P | **P** | **08 20 42.8** | **+0.3** |
| | comp=Z,23nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **48.76** | **313** | P | **P** | **08 20 42.5** | **-0.4** |
| KURK | | | | IAmb | IAmb | 08 20 46.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.81** | **312** | P | **P** | **08 20 43.0** | **-0.3** |
| | comp=Z,2.8nm,0.7s,baz=91,slow=8.1,SNR=19 | | | | | | |
| **GSI** | **Gunungsitoli** | **48.91** | **242** | P | **P** | **08 20 43.9** | **-0.7** |
| **TARG** | **Taragay, Kyrgy** | **49.89** | **301** | P | **P** | **08 20 51.5** | **-0.7** |
| TARG | | | | IAmb | IAmb | 08 20 59.6 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **49.99** | **197** | P | **P** | **08 20 53.4** | **+0.9** |
| **WB0** | **Warramunga Ar** | **50.13** | **186** | P | **P** | **08 20 52.9** | **-0.7** |
| **WRAB** | **Tennant Creek** | **50.30** | **186** | P | **P** | **08 20 53.9** | **-1.0** |
| WRAB | | | | IAmb | IAmb | 08 21 00.2 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **50.31** | **186** | P | **P** | **08 20 54.1** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 08 20 58.8 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **50.31** | **186** | P | **P** | **08 20 54.2** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 08 21 00.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.31** | **186** | P | **P** | **08 20 53.9** | **-1.1** |
| | comp=Z,6.0nm,0.7s,baz=4.1,slow=7.9,SNR=26 | | | | | | |
| WRA | | | | LR | LR | 08 41 26.8 | |
| | comp=Z,153nm,20.1s,baz=77,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.31** | **186** | P | **P** | **08 20 53.5** | **-1.6** |
| **CTA** | **Charters Tower** | **50.70** | **171** | LR | LR | 08 41 55.6 | |
| | comp=Z,166nm,19.3s,baz=39,slow=36 | | | | | | |
| **KSH** | **Kashi** | **51.62** | **298** | P | **P** | **08 21 09.0** | **+4.1** |
| KSH | | | | pP | pwP | 08 21 14.0 | +3.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **52.19** | **302** | LR | LR | 08 44 01.4 | |
| | comp=Z,142nm,19.5s,baz=77,slow=37 | | | | | | |
| **K20K** | **Telida** | **52.87** | **31** | P | **P** | **08 21 15.2** | **+1.4** |
| K20K | | | | IAmb | IAmb | 08 21 34.7 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **J20K** | **Nowinta River** | **52.92** | **30** | P | **P** | **08 21 14.8** | **+0.7** |
| J20K | | | | IAmb | IAmb | 08 21 26.3 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **53.30** | **28** | P | **P** | **08 21 16.9** | **0.0** |
| **KDAK** | **Kodiak Island** | **53.34** | **38** | P | **P** | **08 21 16.3** | **-0.9** |
| | comp=Z,14nm,0.8s,baz=243,slow=4.5,SNR=2.2 | | | | | | |
| **KDAK** | **Kodiak Island** | **53.34** | **38** | P | **P** | **08 21 16.6** | **-0.6** |
| **H21K** | **Melozitna Rive** | **53.65** | **29** | P | **P** | **08 21 20.5** | **+1.1** |
| H21K | | | | IAmb | IAmb | 08 21 38.6 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **53.79** | **316** | P | **P** | **08 21 19.9** | **-0.8** |
| | comp=Z,1.6nm,0.6s,baz=74,slow=15,SNR=7.3 | | | | | | |
| **BRVK** | **Borovoye** | **53.85** | **316** | P | **P** | **08 21 21.4** | **+0.3** |
| **AS31** | **Alice Springs** | **54.04** | **186** | P | **P** | **08 21 21.7** | **-1.0** |
| **ASAR** | **Alice Springs** | **54.04** | **186** | P | **P** | **08 21 21.8** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=7.2,slow=7.1,SNR=10 | | | | | | |
| ASAR | | | | LR | LR | 08 43 33.7 | |
| | comp=Z,115nm,19.8s,baz=9.0,slow=35 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **54.95** | **202** | P | **P** | **08 21 30.7** | **+1.3** |
| **KKAR** | **Karatay Array** | **55.00** | **304** | P | **P** | **08 21 29.4** | **-0.2** |
| **NIL** | **Nilore** | **55.10** | **292** | P | **P** | **08 21 29.4** | **-1.1** |
| **NEA2** | **Nenana** | **55.15** | **30** | P | **P** | **08 21 30.8** | **+0.4** |
| **TOLK** | **Toolik Lake Re** | **55.20** | **25** | P | **P** | **08 21 31.1** | **+0.4** |
| TOLK | | | | IAmb | IAmb | 08 21 42.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **55.22** | **31** | P | **P** | **08 21 30.3** | **-0.7** |
| **H24K** | **Noodor Dome** | **55.69** | **28** | P | **P** | **08 21 34.8** | **+0.5** |
| **GAR** | **Garm** | **56.02** | **299** | P | **P** | **08 21 36.4** | **-0.8** |
| **IL31** | | **56.09** | **30** | P | **P** | **08 21 35.6** | **-1.4** |
| IL31 | | | | IAmb | IAmb | 08 21 55.0 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **56.09** | **30** | P | **P** | **08 21 36.1** | **-1.0** |
| | comp=Z,1.2nm,0.9s,baz=276,slow=6.7,SNR=8.8 | | | | | | |
| **CHGR** | **Chuyangaron** | **56.98** | **299** | P | **P** | **08 21 43.4** | **-0.6** |
| **BMAR** | **Burnt Mountain** | **57.02** | **27** | P | **P** | **08 21 44.7** | **+0.9** |
| **DOT** | **Dot Lake** | **57.36** | **31** | P | **P** | **08 21 45.8** | **-0.4** |
| **SCRK** | **Sand Creek** | **57.38** | **31** | P | **P** | **08 21 46.0** | **-0.4** |
| SCRK | | | | IAmb | IAmb | 08 22 03.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **KBL** | **Kabul** | **58.19** | **294** | P | **P** | **08 21 52.9** | **+0.1** |
| KBL | | | | IAmb | IAmb | 08 21 58.4 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **58.43** | **150** | LR | LR | 08 44 22.2 | |
| | comp=Z,195nm,20.8s,baz=36,slow=33 | | | | | | |
| **BCAR** | **Beaver Creek A** | **58.43** | **32** | P | **P** | **08 21 54.3** | **+0.5** |
| **BARN** | **Barnard Glacie** | **58.71** | **34** | P | **P** | **08 21 56.5** | **+0.6** |
| **PALK** | **Pallekele** | **59.23** | **260** | LR | LR | 08 48 55.7 | |
| | comp=Z,92nm,19.5s,baz=162,slow=38 | | | | | | |
| **ARU** | **Arti** | **60.16** | **321** | P | **P** | **08 22 05.5** | **-0.2** |
| | comp=Z,2.4nm,0.2s,baz=265,slow=0.3,SNR=5.9 | | | | | | |
| ARU | | | | LR | LR | 08 49 56.8 | |
| | comp=Z,51nm,19.3s,baz=76,slow=38 | | | | | | |
| **ARU** | **Arti** | **60.16** | **321** | IAmb | IAmb | 08 22 08.3 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **EPYK** | **Eagle Plains** | **60.20** | **28** | P | **P** | **08 22 06.3** | **+0.4** |
| **M30M** | **Minto, Yukon** | **60.77** | **32** | P | **P** | **08 22 11.3** | **+1.5** |
| M30M | | | | IAmb | IAmb | 08 22 25.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.87** | **313** | P | **P** | **08 22 10.4** | **-0.3** |
| ABKAR | | | | IAmb | IAmb | 08 22 13.3 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **61.11** | **25** | P | **P** | **08 22 11.4** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=272,slow=6.4,SNR=4.1 | | | | | | |
| INK | | | | LR | LR | 08 49 16.1 | |
| | comp=Z,82nm,21.8s,baz=274,slow=37 | | | | | | |
| **INK** | **Inuvik** | **61.11** | **25** | IAmb | IAmb | 08 22 36.7 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **61.79** | **314** | P | **P** | **08 22 18.5** | **+1.6** |
| | comp=Z,2.8nm,0.7s,baz=73,slow=16,SNR=9.3 | | | | | | |
| **FORT** | **Forrest** | **61.80** | **191** | P | **P** | **08 22 18.3** | **+1.3** |
| **M31M** | **Drury Creek, Y** | **61.94** | **32** | P | **P** | **08 22 17.9** | **+0.1** |
| **STKA** | **Stephens Creek** | **62.02** | **178** | P | **P** | **08 22 19.6** | **+1.1** |
| | comp=Z,0.8nm,0.7s,baz=332,slow=3.0,SNR=3.7 | | | | | | |
| STKA | | | | LR | LR | 08 50 33.8 | |
| | comp=Z,94nm,18.0s,baz=23,slow=37 | | | | | | |
| **A36M** | **Sachs Harbour** | **63.07** | **20** | P | **P** | **08 22 25.3** | **+0.2** |
| A36M | | | | IAmb | IAmb | 08 22 46.7 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **C36M** | **Paulatuk** | **64.20** | **23** | P | **P** | **08 22 31.9** | **-0.7** |
| C36M | | | | IAmb | IAmb | 08 22 52.1 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **KIRV** | **Kirov** | **64.43** | **325**

comp=Z,49nm,18.1s,baz=60,slow=38
URZ Urewera 76.99 150 LR LR 08 54 10.9
comp=Z,86nm,20.3s,baz=360,slow=33
NACGM Naroch 77.19 327 *i* P P 08 23 53.9 +2.0
SUMG Summit 77.24 359 *i* P P 08 24 07.0 +15
RAR Rarotonga 77.97 123 LR LR 08 58 20.5
comp=Z,92nm,18.1s,baz=207,slow=36
AKASG Malin Array Be 78.35 322 P P 08 23 58.6 +0.1
comp=Z,3.0nm,0.7s,baz=51,slow=5.8,SNR=20
AKASG LR LR 09 03 13.5
comp=Z,122nm,18.1s,baz=6.0,slow=39
AKASG Malin Array Be 78.35 322 P P 08 23 59.0 +0.5
AKBB Malin Array Si 78.35 322 P P 08 23 58.4 -0.1
AKBB IAmb IAmb 08 24 00.8
comp=Z,4.3nm,0.7s
BEKR Beckworth 78.41 51 P P 08 23 59.8 +0.6
BEKR IAmb IAmb 08 24 25.6
comp=Z,7.9nm,1.3s
HFS Hagfors 79.30 335 LR LR 09 03 23.5
comp=Z,141nm,18.4s,baz=40,slow=39
RPZ Rata Peaks 79.37 157 LR LR 08 54 45.8
comp=Z,60nm,21.0s,baz=320,slow=32
NB2 NORSAR Subarra 79.51 337 P P 08 24 06.3 +1.5
comp=Z,0.7nm,0.6s,baz=43,slow=5.3
NOA NORSAR Array B 79.51 337 P P 08 24 06.0 +1.2
comp=Z,1.1nm,0.7s,baz=43,slow=5.4,SNR=5.3
NOA LR LR 09 02 57.0
comp=Z,155nm,19.4s,baz=25,slow=38
NVAR Mina Array Bea 80.51 51 P P 08 24 11.4 +0.6
comp=Z,0.9nm,0.8s,baz=320,slow=3.9,SNR=7.6
NVAR LR LR 08 52 36.9
comp=Z,108nm,20.2s,baz=278,slow=30
BRTR Keskin Array B 81.79 311 P P 08 24 18.6 +1.1
comp=Z,1.6nm,0.8s,baz=109,slow=6.0,SNR=7.7
BRTR LR LR 09 03 25.8
comp=Z,97nm,21.3s,baz=59,slow=38
SFJD Kangerlussuaq 82.58 4 LR LR 09 01 26.4
comp=Z,94nm,21.7s,baz=347,slow=36
QSM Queen of Sheba 82.78 53 P P 08 24 23.1 +0.5
QSM IAmb IAmb 08 24 37.6
comp=Z,8.7nm,1.2s
DUG Dugway, Tooele 83.14 47 P P 08 24 23.6 -1.0
DUG IAmb IAmb 08 24 39.9
comp=Z,6.3nm,1.1s
MLR Muntele Rosu 83.17 319 LR LR 09 04 00.1
comp=Z,90nm,18.1s,baz=50,slow=38
FRB Frobisher Bay 83.60 12 LR LR 09 05 45.7
comp=Z,96nm,18.7s,baz=358,slow=39
PDAR Pinedale Array 83.67 44 P P 08 24 27.8 +0.4
comp=Z,0.6nm,0.8s,baz=290,slow=4.4,SNR=5.2
BORG Borgarnes 83.90 352 LR LR 09 02 06.4
comp=Z,41nm,18.7s,baz=10,slow=36
PFO Pinyon Flats O 84.33 54 LR LR 08 59 17.8
comp=Z,86nm,20.0s,baz=290,slow=34
MSU Marysvale 84.50 48 P P 08 24 31.9 +0.2
MTPU Mount Pierson 84.77 49 P P 08 24 34.2 +1.0
MTPU IAmb IAmb 08 24 48.8
comp=Z,7.0nm,1.4s
VRAC Vranov 85.58 326 LR LR 09 07 35.0
comp=Z,69nm,19.5s,baz=42,slow=39
CLL Collm 85.83 329 *i* P P 08 24 37.3 -0.4
comp=Z,9.0nm,1.1s
CLL LmV 09 07 00.0
comp=Z,100nm,19.2s
TBI Tubuai 86.86 119 *e*LR LR 08 24 32.9
comp=Z,276nm,26.5s
EKA Eskdalemuir Ar. 88.67 340 LR LR 09 10 30.1
comp=Z,93nm,18.5s,baz=8.5,slow=40
ATD Arta Tunnel 89.59 283 LR LR 09 07 41.2
comp=Z,30nm,18.1s,baz=29,slow=37
ANMO Albuquerque 90.31 48 LR LR 09 04 34.4
comp=Z,113nm,19.0s,baz=306,slow=35
DAVOX Davos/Dischmat 90.54 328 LR LR 09 08 57.6
comp=Z,66nm,18.8s,baz=78,slow=38
SCHQ Schefferville 92.17 15 LR LR 09 10 58.0
comp=Z,80nm,19.0s,baz=58,slow=38
LPIG La Paz 94.14 59 LR LR 09 06 27.9
comp=Z,51nm,18.8s,baz=232,slow=35
TXAR Lajitas Array 95.66 51 P P 08 25 25.3 +0.8
comp=Z,0.2nm,0.5s,baz=295,slow=2.6,SNR=3.0
SADO Sadowa 97.41 26 LR LR 09 15 24.3
comp=Z,54nm,18.5s,baz=170,slow=39
KEST Kesra 99.02 321 LR LR 09 16 41.2
comp=Z,69nm,18.8s,baz=273,slow=39
H03N2 Juan Fernandez 147.66 105 T T 11 16 34.4
baz=280,slow=75,SNR=90
H03N3 Juan Fernandez 147.67 105 T T 11 16 37.2
baz=280,slow=75,SNR=113
H03N1 Juan Fernandez 147.68 105 T T 11 16 37.3
baz=280,slow=75,SNR=117
LPAZ La Paz 151.36 67 PKPbc PKPbc 08 31 53.6 +0.2
comp=Z,1.9nm,0.9s,baz=351,slow=9.8,SNR=5.0

*NEIC **29** 08:14:42.2±1.2, 19°.20S±0°.09×172°.90W±0°.04, h10km±1km, mb4.4/7, Error ellipse: s-maj=15.5km s-min=6.2km az=358.0*
*IDC **29** 08:14:44.3±1.5, 18°.90S×173°.57W, h0km, mb4.2/5, mb1 4.4/6, mb1mx4.0/33, mbtmp4.2/6, ML4.0/1, MS3.3/1, Ms1 3.3/1, ms1mx2.7/62, Error ellipse: s-maj=50.6km s-min=23.5km az=135.0*
**ISC 29 08:14:39.6±0.8, 18°.56S±0°.07×172°.68W±0°.09, h10km, n19, σ1°54/15, mb4.3/9, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NIUE | Niue | 2.66 | 102 | Pn | Pb | 08 15 26.8 | -0.5 |
| AFI | Afiamalu | 4.70 | 11 | Pn | Pb | 08 16 02.7 | +0.5 |
| | 5.5nm,0.3s,baz=99,slow=3.8,SNR=5.9 | | | | | | |
| AFI | | | | Sn | Sb | 08 16 57.6 | -1.5 |
| | 6.6nm,0.3s,baz=29,slow=18,SNR=2.2 | | | | | | |
| AFI | Afiamalu | 4.70 | 11 | | Pb | 08 16 02.5 | +0.3 |
| MSVF | Nonsavu | 8.85 | 274 | Pn | Pn | 08 16 48.0 | +0.3 |
| RAO | Raoul Island | 11.67 | 203 | Pn | Pn | 08 17 18.4 | -7.9 |
| DZM | Mont Dzumac | 19.88 | 256 | LR | LR | 08 25 22.9 | |
| | comp=Z,94nm,20.8s,baz=57,slow=34 | | | | | | |
| URZ | Urewera | 21.56 | 202 | P | P | 08 19 27.9 | -1.3 |
| | 9.0nm,0.6s,baz=247,slow=4.1,SNR=6.5 | | | | | | |
| URZ | Urewera | 21.56 | 202 | IAmb | IAmb | 08 19 32.4 | |
| | comp=Z,21nm,1.0s | | | | | | |
| CTA | Charters Tower | 38.71 | 261 | P | P | 08 22 03.3 | -0.9 |
| | comp=Z,3.6nm,0.7s,baz=97,slow=9.7,SNR=9.1 | | | | | | |
| WR0 | Warramunga Arr | 49.67 | 259 | P | P | 08 23 31.2 | -0.9 |
| WR0 | | | | IAmb | IAmb | 08 23 41.0 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| WB0 | Warramunga Arr | 49.84 | 259 | P | P | 08 23 32.1 | -1.2 |
| WB0 | | | | IAmb | IAmb | 08 23 48.3 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 49.85 | 259 | P | P | 08 23 33.0 | -0.4 |
| WB2 | | | | IAmb | IAmb | 08 23 59.2 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| AS31 | Alice Springs | 49.86 | 254 | P | P | 08 23 31.1 | -2.3 |
| AS31 | | | | IAmb | IAmb | 08 23 35.7 | |
| | comp=Z,2.1nm,1.3s | | | | | | |
| ASAR | Alice Springs | 49.86 | 254 | P | P | 08 23 32.8 | -0.7 |
| | comp=Z,3.0nm,0.9s,baz=87,slow=8.2,SNR=15 | | | | | | |
| WRA | Warramunga Arr | 49.86 | 259 | P | P | 08 23 32.2 | -1.3 |
| | comp=Z,0.8nm,0.3s,baz=97,slow=7.4,SNR=34 | | | | | | |
| WRA | Warramunga Arr | 49.86 | 259 | IAmb | IAmb | 08 23 33.4 | |
| | comp=Z,0.1nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 71.50 | 180 | P | P | 08 26 03.4 | +2.9 |
| NVAR | Mina Array Bea | 76.22 | 41 | P | P | 08 26 39.5 | +11 |
| | comp=Z,1.4nm,1.1s,baz=231,slow=6.5,SNR=3.3 | | | | | | |
| BRTR | Keskin Array B | 149.00 | 318 | PKPbc | PKPab | 08 34 34.6 | +2.1 |
| | comp=Z,1.0nm,0.7s,baz=106,slow=2.7,SNR=5.7 | | | | | | |

*TRN **29** 08:40:07.6, 10°.92N×62°.17W, h92km, MD3.9*
*FUNV **29** 08:40:10.3, 10°.94N×62°.22W, h29km, MW3.7*
**ISC 29 08:40:07.2±1.5, 10°.95N±0°.05×62°.18W±0°.05, h98km±13km, n32, σ1°30/50, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TRN | Trinidad (W) | 0.82 | 111 | *e*P | Pn | 08 40 26.4 | +0.7 |
| TRN | | | | *e*S | Sn | 08 40 38.2 | -1.3 |
| CRUV | Carupano | 1.07 | 255 | *e*P | Pn | 08 40 29.3 | +1.0 |
| CRUV | | | | *e*S | Sn | 08 40 42.0 | -2.1 |
| GRFF | Grenada Fort F | 1.18 | 22 | *e*P | Pn | 08 40 30.0 | +0.5 |
| GRFF | | | | *e*S | Sn | 08 40 46.4 | +0.1 |
| GRGR | Grenville | 1.28 | 24 | *e*P | Pn | 08 40 31.4 | +0.6 |
| GRGR | | | | *e*S | Sn | 08 40 48.8 | +0.2 |
| TOSP | Speyside | 1.66 | 78 | *e*P | Pn | 08 40 35.6 | +0.3 |
| TOSP | | | | *e*S | Sn | 08 40 55.9 | -0.7 |
| GCMP | Grenada, Carri | 1.70 | 26 | *e*P | Pn | 08 40 36.3 | +0.4 |
| GCMP | | | | *e*S | Sn | 08 40 57.3 | -0.3 |
| COAV | Cumanacoa | 1.80 | 244 | *e*P | Pn | 08 40 38.7 | +1.4 |
| COAV | | | | *e*S | Sn | 08 40 59.8 | -0.3 |
| CUMV | Cumana_UDO | 2.04 | 255 | *e*P | Pn | 08 40 42.7 | +2.4 |
| CUMV | | | | *e*S | Sn | 08 41 05.2 | -0.3 |
| SVOC | Richmond Hill, | 2.38 | 23 | *e*P | Pn | 08 40 46.4 | +1.7 |
| SVOC | | | | *e*S | Sn | 08 41 12.5 | -1.0 |
| SVB | Belmont | 2.48 | 21 | *e*P | Pn | 08 40 47.5 | +1.5 |
| SVB | | | | *e*S | Sn | 08 41 15.2 | -0.6 |
| PCRV | Puerto La Cruz | 2.53 | 253 | *e*P | Pn | 08 40 47.8 | +1.1 |
| PCRV | | | | *e*S | Sn | 08 41 15.6 | -1.5 |
| MCLT | Moule a Chique | 3.00 | 24 | *e*P | Pn | 08 40 53.1 | +0.2 |
| MCLT | | | | *e*S | Sn | 08 41 27.1 | -1.0 |
| PRGV | PARIAGUAN | 3.26 | 228 | *e*P | Pn | 08 40 58.1 | +1.7 |
| PRGV | | | | *e*S | Sn | 08 41 33.6 | -0.8 |
| SLBI | Saint Lucia, B | 3.27 | 21 | *e*P | Pn | 08 40 56.6 | 0.0 |
| SLBI | | | | *e*S | Sn | 08 41 34.0 | -0.8 |
| MPOM | Morne Pois Mar | 3.71 | 20 | *e*P | Pn | 08 41 03.5 | +1.1 |
| MPOM | | | | *e*S | Sn | 08 41 45.1 | -0.1 |
| BIM | Bigot | 3.71 | 17 | *e*P | Pn | 08 41 03.2 | +0.8 |
| BIM | | | | *e*S | Sn | 08 41 44.9 | -0.4 |
| FDF | Fort de France | 3.89 | 15 | *e*P | Pn | 08 41 05.5 | +0.5 |
| FDF | | | | *e*S | Sn | 08 41 49.0 | -0.7 |
| BIRV | Birongo | 4.04 | 264 | *e*P | Pn | 08 41 08.6 | +1.6 |
| BIRV | | | | *e*S | Sn | 08 41 51.4 | -1.9 |
| MERV | Las Mercedes | 4.39 | 248 | *e*S | Sn | 08 41 59.9 | -1.8 |
| MDN | Morne-Daniel | 4.41 | 10 | *e*P | Pn | 08 41 12.5 | +0.6 |
| MDN | Morne-Daniel | 4.41 | 10 | *e*S | Sn | 08 42 01.8 | -0.4 |
| DSLB | Salisbury | 4.52 | 9 | *e*P | Pn | 08 41 14.0 | +0.5 |
| TDBA | Terre de Bas, | 4.90 | 6 | *e*P | Pn | 08 41 18.7 | +0.2 |
| MAGL | Barre de l'ile | 5.05 | 10 | *e*P | Pn | 08 41 21.3 | +0.8 |
| CBE | Ff, Capester | 5.12 | 6 | *e*P | Pn | 08 41 22.7 | +1.1 |
| CBE | Ff, Capester | 5.12 | 6 | *e*S | Sn | 08 42 17.1 | -2.4 |
| BENV | Beln | 5.42 | 260 | *e*P | Pn | 08 41 25.6 | 0.0 |
| BENV | | | | *e*S | Sn | 08 42 23.3 | -3.4 |
| CACV | CAICARA DEL OR | 5.46 | 232 | *e*S | Sn | 08 42 15.8 | -12 |
| ABD | La Joyeuse, An | 5.53 | 7 | *e*P | Pn | 08 41 29.3 | +2.1 |
| ABD | La Joyeuse, An | 5.53 | 7 | *e*S | Sn | 08 42 27.1 | -2.3 |
| ANBD | Bethesda, Anti | 6.08 | 4 | *e*P | Pn | 08 41 36.2 | +1.7 |
| ANBD | Bethesda, Anti | 6.08 | 4 | *e*S | Sn | 08 42 41.8 | -0.8 |

*MIRAS **29** 08:45:53.0±0.0, 60°.20N×59°.99E, h0km, ML3.0/3*
*NNC **29** 08:45:58.2±12.0, 59°.78N×60°.89E, h0km, mb3.9, mpv3.7, Error ellipse: s-maj=98.1km s-min=55.7km az=151.0*
**ISC 29 08:45:49.2±2.1, 60°.4N±0°.1×60°.22E±0°.06, h10km, n8, σ2°02/32, 5C-2D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SVUR | Severouralsk | 0.19 | 219 | *i* P | Pg | 08 45 52.4 | -0.8 |
| | baz=224 | | | | | | |
| SVUR | | | | *i* P | Pg | 08 45 52.4 | -0.8 |
| | baz=224 | | | | | | |
| SVUR | | | | *i* P | Pg | 08 45 52.4 | -0.8 |
| | baz=224 | | | | | | |
| SVUR | | | | *e*S | Sg | 08 45 52.9 | -3.1 |
| | baz=224 | | | | | | |
| SVUR | | | | *e*S | Sg | 08 45 52.9 | -3.1 |
| | baz=224 | | | | | | |
| SVUR | | | | *e*S | Sg | 08 45 52.9 | -3.1 |
| | baz=224 | | | | | | |
| PR7R | Sarany | 1.95 | 203 | *e*P | Pb | 08 46 25.6 | +0.8 |
| | 188nm,0.6s,baz=201 | | | | | | |
| PR7R | | | | *e*P | Pb | 08 46 25.6 | +0.8 |
| | baz=201 | | | | | | |
| PR7R | | | | *e*P | Pb | 08 46 25.6 | +0.8 |
| | baz=201 | | | | | | |
| PR7R | | | | *e*S | Sb | 08 46 48.4 | -0.7 |
| | 187nm,0.6s,baz=201 | | | | | | |
| PR7R | | | | *e*S | Sb | 08 46 48.4 | -0.7 |
| | baz=201 | | | | | | |
| PR7R | | | | *e*S | Sb | 08 46 48.4 | -0.7 |
| | baz=201 | | | | | | |
| PR7R | | | | *i* AML | AML | 08 46 53.2 | |
| | 266nm,0.4s | | | | | | |
| PR1R | Pomanovo | 2.11 | 238 | *e*P | Pb | 08 46 27.6 | +0.1 |
| | baz=240 | | | | | | |
| PR1R | | | | *e*P | Pb | 08 46 27.6 | +0.1 |
| | 50nm,0.2s,baz=240 | | | | | | |
| PR1R | | | | *e*P | Pb | 08 46 27.6 | +0.1 |
| | baz=240 | | | | | | |
| PR1R | | | | *e*S | Sb | 08 46 52.9 | -0.8 |
| | baz=240 | | | | | | |
| PR1R | | | | *e*S | Sb | 08 46 52.9 | -0.8 |
| | 97nm,0.3s,baz=240 | | | | | | |
| PR1R | | | | *e*S | Sb | 08 46 52.9 | -0.8 |
| | baz=240 | | | | | | |
| PR1R | | | | *i* AML | AML | 08 46 55.9 | |
| | 273nm,0.2s | | | | | | |
| PR3R | Kungur | 3.36 | 211 | *e*S | Sn | 08 47 23.7 | +2.3 |
| | baz=210 | | | | | | |
| PR3R | | | | *e*S | Sn | 08 47 23.7 | +2.3 |
| | baz=210 | | | | | | |
| PR3R | | | | *e*S | Sn | 08 47 23.7 | +2.3 |
| | baz=210 | | | | | | |
| ARU | Arti | 4.03 | 193 | *e*P | Pn | 08 46 52.4 | +1.6 |
| | baz=192 | | | | | | |
| ARU | | | | *e*P | Pn | 08 46 52.4 | +1.6 |
| | baz=192 | | | | | | |
| ARU | | | | *e*P | Pn | 08 46 52.4 | +1.6 |
| | 3.6nm,0.2s,baz=192 | | | | | | |
| ARU | | | | *e*S | Sn | 08 47 41.6 | +3.6 |
| | baz=192 | | | | | | |
| ARU | | | | *e*S | Sn | 08 47 41.6 | +3.6 |
| | baz=192 | | | | | | |
| ARU | | | | *e*S | Sn | 08 47 41.6 | +3.6 |
| | 16nm,0.6s,baz=192 | | | | | | |
| ARU | | | | *i* AML | AML | 08 47 54.8 | |
| | 46nm,0.5s | | | | | | |
| BRVK | Borovoye | 9.15 | 139 | ⇓P | Pn | 08 48 02.5 | +1.3 |
| | 2.0nm,0.6s | | | | | | |
| BRVK | | | | ⇑Sn | Sn | 08 49 41.7 | -2.4 |
| | 0.9nm,0.4s | | | | | | |
| AKTO | Aktyubinsk | 10.02 | 188 | ⇑Sn | Sn | 08 50 06.0 | +0.7 |
| | 2.2nm,0.8s | | | | | | |
| AKTO | | | | ⇑Lg | Lg | 08 50 59.4 | |
| | 4.9nm,1.2s | | | | | | |
| AB31 | Akbulak array | 11.12 | 181 | ⇑P | Pn | 08 48 29.8 | +1.8 |
| | 1.0nm,0.5s,baz=16,slow=12,SNR=25 | | | | | | |
| AB31 | | | | ⇑Sn | Sn | 08 50 29.3 | -3.0 |
| | 0.4nm,0.5s | | | | | | |
| AB31 | | | | ⇓Lg | Lg | 08 51 33.6 | |
| | 2.2nm,0.7s,baz=18,slow=27,SNR=5.0 | | | | | | |

*NEIC **29** 08:50:10.6±0.4, 5°.5S±0°.1×149°.5E±0°.1, h147km±14km, mb4.0/8, Error ellipse: s-maj=22.1km s-min=11.8km az=128.0*
*IDC **29** 08:50:11.4±3.1, 5°.47S×149°.39E, h152km±32km, mb3.5/5, mb1 3.7/7, mb1mx3.3/46, mbtmp4.1/7, MS3.3/1, Ms1 3.3/1, ms1mx2.5/42, Error ellipse: s-maj=66.1km s-min=22.8km az=119.0*
**ISC 29 08:50:10.4±0.8, 5°.5S±0°.1×149°.6E±0°.1, h147km, n29, σ0°85/29, mb4.1/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RABL | Rabaul | 2.90 | 64 | Pn | Pn | 08 50 57.1 | +0.7 |
| PMG | Port Moresby | 4.55 | 211 | P | Pn | 08 51 17.8 | -0.1 |
| | 16nm,0.3s,baz=40,slow=10,SNR=36 | | | | | | |
| PMG | | | | S | Sn | 08 52 10.9 | +0.5 |
| | 11nm,0.3s,baz=175,slow=21,SNR=5.2 | | | | | | |
| PMG | Port Moresby | 4.55 | 211 | | Pn | 08 51 17.5 | -0.4 |
| PMG | Port Moresby | 4.55 | 211 | P | Pn | 08 51 19.5 | +1.7 |
| PMG | Port Moresby | 4.55 | 211 | P | Pn | 08 51 19.6 | +1.7 |
| CTA | Charters Tower | 14.85 | 192 | P | P | 08 53 35.5 | +0.2 |
| | 0.2nm,0.3s,baz=25,slow=12,SNR=4.1 | | | | | | |
| QIS | Mount Isa | 17.82 | 212 | P | P | 08 54 08.5 | +0.5 |
| SANVU | Saraoutou | 19.95 | 121 | P | P | 08 54 30.5 | -0.7 |
| WB0 | Warramunga Arr | 20.47 | 225 | P | P | 08 54 36.0 | -0.7 |
| WB0 | | | | IAmb | IAmb | 08 54 36.8 | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| WR0 | Warramunga Arr | 20.50 | 224 | P | P | 08 54 36.1 | -0.8 |
| WR0 | | | | IAmb | IAmb | 08 54 37.0 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 20.61 | 225 | P | P | 08 54 37.1 | -1.1 |
| WRAB | | | | IAmb | IAmb | 08 54 38.2 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 20.61 | 225 | P | P | 08 54 37.4 | -0.9 |
| WB2 | | | | IAmb | IAmb | 08 54 38.8 | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 20.62 | 225 | P | P | 08 54 37.6 | -0.7 |
| | comp=Z,2.4nm,0.3s,baz=48,slow=10,SNR=70 | | | | | | |
| WRA | Warramunga Arr | 20.62 | 225 | P | P | 08 54 37.4 | -1.0 |
| KNRA | Kununurra | 22.78 | 242 | P | P | 08 55 00.8 | +0.2 |
| AS31 | Alice Springs | 23.53 | 218 | P | P | 08 55 06.4 | -1.0 |
| ASAR | Alice Springs | 23.53 | 218 | P | P | 08 55 07.0 | -0.4 |
| | comp=Z,3.4nm,0.4s,baz=58,slow=8.5,SNR=125 | | | | | | |
| ASAR | Alice Springs | 23.53 | 218 | P | P | 08 55 06.4 | -1.0 |
| INKA | Innaminka | 23.66 | 200 | P | P | 08 55 08.0 | -0.4 |
| OOD | Oodnadatta | 25.80 | 209 | P | P | 08 55 27.4 | -0.5 |
| FITZ | Fitzroy Crossi | 26.51 | 240 | P | P | 08 55 33.7 | -0.7 |
| | comp=Z,1.7nm,0.3s,baz=60,slow=9.9,SNR=27 | | | | | | |
| FITZ | Fitzroy Crossi | 26.51 | 240 | P | P | 08 55 33.4 | -1.0 |
| FITZ | Fitzroy Crossi | 26.51 | 240 | P | P | 08 55 33.9 | -0.5 |
| DAV | Davao City (W) | 26.99 | 297 | LR | LR | 09 07 04.8 | |
| | comp=Z,59nm,18.8s,baz=215,slow=38 | | | | | | |
| WRKA | Warakurna | 28.17 | 224 | P | P | 08 55 48.3 | -0.9 |
| FORT | Forrest | 32.27 | 216 | P | P | 08 56 24.3 | -0.9 |
| FORT | Forrest | 32.27 | 216 | P | P | 08 56 24.2 | -0.9 |
| PETK | Petropavlovsk- | 58.79 | 6 | P | P | 08 59 53.3 | +0.3 |
| | comp=Z,2.7nm,0.9s,baz=179,slow=7.2,SNR=5.9 | | | | | | |
| MKAR | Makanchi Array | 78.75 | 320 | P | P | 09 01 56.9 | +0.2 |
| | comp=Z,0.1nm,0.5s,baz=125,slow=7.2,SNR=1.7 | | | | | | |

*IDC **29** 09:00:08.4±0.6, 55°.05N×164°.28E, h0km, mb4.2/24, mb1 4.4/28, mb1mx4.2/47, mbtmp4.3/28, ML4.6/4, MS3.4/19, Ms1 3.4/19, ms1mx3.1/95, Error ellipse: s-maj=16.3km s-min=10.8km az=171.0*
*KRSC **29** 09:00:08.5±1.6, 54°.89N×164°.33E, h49km±32km, ML4.8*
*NEIC **29** 09:00:12.5±1.6, 54°.97N±0°.07×164°.2E±0°.1, h27km±4km, mb4.5/89, Error ellipse: s-maj=10.1km s-min=9.6km az=195.0*
*MOS **29** 09:00:12.7±0.9, 54°.99N×164°.11E, h54km, mb4.6/17, Error ellipse: s-maj=5.9km s-min=4.5km az=80.2*
**ISC 29 09:00:11.6±1.8, 54°.89N±0°.03×164°.33E±0°.04, h25km±13km, n257, σ1°34/281, mb4.5/73, MS3.5/16, 10C, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BKI | Bering | 1.00 | 71 | PN | Pn | 09 00 28.6 | -1.4 |
| BKI | | | | S | Sb | 09 00 41.1 | -1.8 |
| BKI | Bering | 1.00 | 71 | *i* P | Pn | 09 00 28.6 | -1.4 |
| BKI | | | | *i* S | Sb | 09 00 41.3 | -1.6 |
| MKZ | Mys Kozlova | 1.54 | 259 | PN | Pn | 09 00 36.1 | -1.3 |
| MKZ | | | | S | Sn | 09 00 53.6 | -3.0 |
| MKZ | Mys Kozlova | 1.54 | 259 | *i* P | Pn | 09 00 36.2 | -1.2 |
| MKZ | | | | *e*S | Sn | 09 00 53.8 | -2.8 |
| KBTR | Krutoberegovo | 1.58 | 328 | PN | Pn | 09 00 34.5 | -3.5 |
| KBTR | Krutoberegovo | 1.58 | 328 | *e*P | Pn | 09 00 34.4 | -3.5 |
| KBTR | | | | *e*S | Sn | 09 00 52.2 | -5.3 |
| KBG | Krutoberegovo | 1.65 | 327 | PN | Pn | 09 00 35.7 | -3.3 |
| KBG | Krutoberegovo | 1.65 | 327 | *e*P | Pn | 09 00 35.5 | -3.5 |
| KBG | | | | *e*S | Sn | 09 00 54.1 | -5.3 |
| TUMD | Tumrok D | 2.28 | 280 | *e*P | Pn | 09 00 46.9 | -0.8 |
| TUMD | | | | *e*S | Sn | 09 01 14.6 | -0.4 |
| ZLN | Zelenaya | 2.31 | 301 | PN | Pn | 09 00 47.3 | -0.8 |
| ZLN | | | | S | Sn | 09 01 15.4 | -0.2 |
| ZLN | Zelenaya | 2.31 | 301 | *e*P | Pn | 09 00 47.4 | -0.7 |
| ZLN | | | | *e*S | Sn | 09 01 16.1 | +0.5 |
| BZGR | Bezymyannyi-Gr | 2.32 | 299 | PN | Pn | 09 00 47.8 | -0.6 |
| BZGR | | | | S | Sn | 09 01 16.8 | +0.7 |
| BZGR | Bezymyannyi-Gr | 2.32 | 299 | *e*P | Pn | 09 00 47.7 | -0.6 |
| BZGR | | | | *e*S | Sn | 09 01 15.7 | -0.4 |
| SMKR | Semkarok | 2.35 | 318 | PN | Pn | 09 00 47.2 | -1.3 |
| SMKR | | | | S | Sn | 09 01 15.6 | -1.0 |
| SMKR | Semkarok | 2.35 | 318 | *e*P | Pn | 09 00 47.3 | -1.3 |
| SMKR | | | | *e*S | Sn | 09 01 16.0 | -0.6 |
| CIRR | Tsirk | 2.38 | 303 | PN | Pn | 09 00 48.4 | -0.7 |
| CIRR | | | | S | Sn | 09 01 17.7 | +0.2 |
| CIRR | Tsirk | 2.38 | 303 | *e*P | Pn | 09 00 48.4 | -0.7 |
| CIRR | | | | *e*S | Sn | 09 01 17.4 | -0.1 |
| LGNR | Loginova | 2.39 | 302 | PN | Pn | 09 00 49.0 | -0.5 |
| LGNR | | | | S | Sn | 09 01 17.9 | -0.1 |
| LGNR | Loginova | 2.39 | 302 | *e*P | Pn | 09 00 48.9 | -0.5 |
| LGNR | | | | *e*S | Sn | 09 01 18.8 | +0.8 |
| BZWR | Bezymyannyi-We | 2.44 | 298 | PN | Pn | 09 00 49.8 | -0.2 |
| BZWR | | | | S | Sn | 09 01 19.4 | +0.4 |
| BZWR | Bezymyannyi-We | 2.44 | 298 | *e*P | Pn | 09 00 49.7 | -0.2 |
| BZWR | | | | *e*S | Sn | 09 01 19.1 | +0.1 |
| TUMR | Tumrok | 2.44 | 281 | PN | Pn | 09 00 49.5 | -0.4 |
| TUMR | | | | S | Sn | 09 01 18.5 | -0.4 |
| TUMR | Tumrok | 2.44 | 281 | *i* P | Pn | 09 00 49.4 | -0.4 |
| TUMR | | | | *e*S | Sn | 09 01 19.4 | +0.5 |
| BDR | Baidarnaya | 2.44 | 315 | PN | Pn | 09 00 49.1 | -0.8 |
| BDR | | | | S | Sn | 09 01 18.5 | -0.4 |
| BDR | Baidarnaya | 2.44 | 315 | *e*P | Pn | 09 00 49.1 | -0.8 |
| BDR | | | | *e*S | Sn | 09 01 19.2 | +0.3 |
| KMNR | Kamenistaya | 2.50 | 292 | PN | Pn | 09 00 50.2 | -0.2 |
| KMNR | | | | S | Sn | 09 01 20.9 | +0.6 |
| KMNR | Kamenistaya | 2.50 | 292 | *e*P | Pn | 09 00 50.4 | -0.2 |
| KMNR | | | | *e*S | Sn | 09 01 20.4 | +0.1 |
| KIRR | Kirishev | 2.51 | 297 | PN | Pn | 09 00 50.6 | -0.3 |
| KIRR | | | | S | Sn | 09 01 20.6 | -0.2 |
| KIRR | Kirishev | 2.51 | 297 | *e*P | Pn | 09 00 50.4 | -0.5 |
| KIRR | | | | *e*S | Sn | 09 01 20.2 | -0.6 |
| SRKR | Sorokina | 2.52 | 316 | PN | Pn | 09 00 50.2 | -0.7 |
| SRKR | | | | S | Sn | 09 01 21.0 | +0.2 |
| SRKR | Sorokina | 2.52 | 316 | *e*P | Pn | 09 00 50.3 | -0.7 |
| SRKR | | | | *e*S | Sn | 09 01 21.0 | +0.2 |
| KRSR | Krestovskiy | 2.52 | 304 | PN | Pn | 09 00 49.7 | -1.2 |
| KRSR | | | | S | Sn | 09 01 18.4 | -2.5 |
| KRSR | Krestovskiy | 2.52 | 304 | *e*P | Pn | 09 00 49.8 | -1.2 |
| KRSR | | | | *e*S | Sn | 09 01 19.1 | -1.8 |
| KLY | Klyuchi | 2.53 | 306 | PN | Pn | 09 00 48.6 | -2.5 |
| KLY | | | | S | Sn | 09 01 17.8 | -3.2 |
| KLY | Klyuchi | 2.53 | 306 | *e*P | Pn | 09 00 48.5 | -2.5 |
| KLY | | | | S | Sn | 09 01 16.7 | -4.3 |
| KPT | Kopyto | 2.58 | 296 | PN | Pn | 09 00 51.9 | +0.1 |
| KPT | | | | S | Sn | 09 01 23.0 | +0.7 |
| KPT | Kopyto | 2.58 | 296 | *e*P | Pn | 09 00 51.3 | -0.5 |
| KPT | | | | *e*S | Sn | 09 01 23.1 | +0.7 |
| KOZ | Kozyrevsk | 2.79 | 297 | PN | Pn | 09 00 54.8 | +0.1 |
| KOZ | Kozyrevsk | 2.79 | 297 | *e*P | Pn | 09 00 54.8 | +0.1 |
| KOZ | | | | *e*S | Sn | 09 01 28.3 | +0.7 |
| SPN | Mys Shipunski | 3.11 | 237 | PN | Pn | 09 00 58.1 | -0.9 |
| SPN | | | | S | Sn | 09 01 31.7 | -3.6 |
| SPN | Mys Shipunski | 3.11 | 237 | *e*P | Pn | 09 00 58.0 | -0.9 |
| SPN | | | | *e*S | Sn | 09 01 31.6 | -3.7 |
| ESO | Esso | 3.37 | 290 | *e*P | Pn | 09 01 04.9 | +2.3 |
| NLC | Nalytchevo | 3.40 | 242 | *e*P | Pn | 09 01 02.5 | -0.5 |
| NLC | | | | *e*S | Sn | 09 01 40.3 | -2.2 |
| SDLR | Sedlovina | 3.59 | 246 | PN | Pn | 09 01 05.8 | +0.1 |
| SDLR | | | | S | Sn | 09 01 44.8 | -2.5 |
| SDLR | Sedlovina | 3.59 | 246 | *e*P | Pn | 09 01 05.9 | +0.2 |
| SMAR | Somma | 3.64 | 246 | PN | Pn | 09 01 06.6 | +0.1 |
| SMAR | | | | S | Sn | 09 01 47.3 | -1.4 |
| SMAR | Somma | 3.64 | 246 | *e*P | Pn | 09 01 06.7 | +0.2 |
| SMAR | | | | *e*S | Sn | 09 01 47.3 | -1.4 |
| KRER | Koryakskii | 3.65 | 247 | PN | Pn | 09 01 07.4 | +0.8 |
| KRER | | | | S | Sn | 09 01 48.2 | -0.7 |
| KRER | Koryakskii | 3.65 | 247 | *i* P | Pn | 09 01 07.3 | +0.7 |
| KRER | | | | *e*S | Sn | 09 01 48.2 | -0.7 |
| UGLR | Uglovaya | 3.65 | 245

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PEA0B | **Petropavlovsk-** | **4.30** | **248** | | | **Pn** | **Pn** | 09 01 16.2 | **+0.9** |
| **PETK** | **Petropavlovsk-** | **4.30** | **248** | | Pn | **Pn** | **Pn** | 09 01 15.4 | **+0.1** |
| | 31nm,0.3s,baz=75,slow=16,SNR=635 | | | | | | | | |
| PETK | | | | | Sn | **Sn** | **Sn** | 09 02 03.4 | **-1.2** |
| | 12nm,0.3s,baz=103,slow=17,SNR=2.7 | | | | | | | | |
| PETK | | | | | LR | LR | LR | 09 02 25.5 | |
| | comp=Z,95nm,20.7s,baz=39,slow=32 | | | | | | | | |
| **MTVR** | **Mutnovka** | **4.37** | **239** | | PN | **Pn** | **Pn** | 09 01 16.9 | **+0.4** |
| MTVR | | | | | S | **Sn** | **Sn** | 09 02 04.6 | **-2.1** |
| **MTVR** | **Mutnovka** | **4.37** | **239** | *eP* | | **Pn** | **Pn** | 09 01 16.9 | **+0.4** |
| MTVR | | | | *eS* | | **Sn** | **Sn** | 09 02 04.7 | **-2.0** |
| **GRL** | **Gorelyy** | **4.39** | **240** | | PN | **Pn** | **Pn** | 09 01 17.5 | **+0.8** |
| GRL | | | | | S | **Sn** | **Sn** | 09 02 06.1 | **-0.9** |
| **GRL** | **Gorelyy** | **4.39** | **240** | *eP* | | **Pn** | **Pn** | 09 01 17.6 | **+0.8** |
| **OSSR** | **Ossora** | **4.43** | **352** | | PN | **Pn** | **Pn** | 09 01 15.3 | **-1.8** |
| **OSSR** | **Ossora** | **4.43** | **352** | *eP* | | **Pn** | **Pn** | 09 01 15.3 | **-1.8** |
| **APC** | **Apacha** | **4.67** | **248** | | PN | **Pn** | **Pn** | 09 01 21.8 | **+1.3** |
| **APC** | **Apacha** | **4.67** | **248** | *eP* | | **Pn** | **Pn** | 09 01 21.9 | **+1.4** |
| **KDTR** | **Khodutka, Kamc** | **4.85** | **233** | *eP* | | **Pn** | **Pn** | 09 01 22.7 | **-0.2** |
| KDTR | | | | *eS* | | **Sn** | **Sn** | 09 02 14.1 | **-4.1** |
| **TILK** | **Tilichiki** | **5.66** | **9** | | PN | **Pn** | **Pn** | 09 01 33.9 | **-0.1** |
| **TILK** | **Tilichiki** | **5.66** | **9** | *eP* | | **Pn** | **Pn** | 09 01 33.8 | **-0.2** |
| **PAU** | **Pauzhetka** | **5.67** | **236** | | PN | **Pn** | **Pn** | 09 01 35.3 | **+1.1** |
| **PAU** | **Pauzhetka** | **5.67** | **236** | *eP* | | **Pn** | **Pn** | 09 01 35.3 | **+1.1** |
| **SHEM** | **Shemya Is, Ala** | **6.18** | **106** | | LR | LR | LR | 09 04 00.6 | |
| | comp=Z,354nm,20.3s,baz=319,slow=37 | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **6.52** | **233** | *eP* | | **Pn** | **Pn** | 09 01 47.8 | **+2.0** |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,104nm,0.5s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=N,9μm,14.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=Z,2μm,14.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=E,5μm,16.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=Z,2μm,15.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=N,8μm,13.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=E,5μm,12.0s | | | | | | | | |
| **KMSK** | **Kamenskaya** | **7.67** | **7** | | PN | **Pn** | **Pn** | 09 02 01.5 | **0.0** |
| **KMSK** | **Kamenskaya** | **7.67** | **7** | *eP* | | **Pn** | **Pn** | 09 02 01.3 | **-0.2** |
| **MA2** | **Magadan** | **8.72** | **308** | | Pn | **Pn** | **Pn** | 09 02 16.8 | **+0.8** |
| | comp=E,0.5nm,0.3s,baz=115,slow=8.5,SNR=5.5 | | | | | | | | |
| MA2 | | | | | LR | LR | LR | 09 05 15.4 | |
| | comp=E,54nm,19.6s,baz=71,slow=36 | | | | | | | | |
| **MA2** | **Magadan** | **8.72** | **308** | *ce* | PN | **Pn** | **Pn** | 09 02 16.1 | **+0.1** |
| MA2 | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **SEY** | **Seymchan** | **10.14** | **327** | | Pn | **Pn** | **Pn** | 09 02 37.1 | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=135,slow=12,SNR=12 | | | | | | | | |
| **SEY** | **Seymchan** | **10.14** | **327** | *i* | PN | **Pn** | **Pn** | 09 02 36.2 | **+0.8** |
| **ADK** | **Adak** | **11.72** | **97** | | PN | **Pn** | **Pn** | 09 02 58.7 | **+1.6** |
| **ADK** | **Adak** | **11.72** | **97** | | Pn | **Pn** | **Pn** | 09 02 58.7 | **+1.6** |
| **BILL** | **Bilibino** | **13.23** | **3** | *ce* | PN | **Pn** | **Pn** | 09 03 18.8 | **+1.2** |
| BILL | | | | *eS* | | **Sn** | **Sn** | 09 05 47.9 | **+4.2** |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,18nm,2.5s | | | | | | | | |
| BILL | | | | | MLR | MLR | | | |
| | comp=Z,73nm,16.0s | | | | | | | | |
| **BILL** | **Bilibino** | **13.23** | **3** | | | **Pn** | **Pn** | 09 03 18.7 | **+1.1** |
| **TYV** | **Tymovskoe** | **13.68** | **262** | *eP* | | **Pn** | **Pn** | 09 03 25.4 | **+1.7** |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,300nm,4.8s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **15.70** | **249** | *i* | P | **Pn** | **Pn** | 09 03 51.9 | **+1.0** |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **UNV** | **Unalaska Valle** | **16.98** | **82** | | | **P** | **P** | 09 04 09.9 | **+1.1** |
| UNV | | | | | IAmb | IAmb | IAmb | 09 04 15.4 | |
| | comp=Z,66nm,1.4s | | | | | | | | |
| **AKUT** | **Akutan** | **17.32** | **80** | | | **P** | **P** | 09 04 13.0 | **+0.5** |
| **JKA** | **Kamikawa-asahi** | **17.68** | **241** | | | **Pn** | **P** | 09 04 16.1 | **+0.3** |
| JKA | | | | | IAmb | IAmb | IAmb | 09 04 27.3 | |
| | comp=Z,109nm,1.4s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **17.68** | **241** | | P | **Pn** | **Pn** | 09 04 16.0 | **+0.1** |
| | comp=Z,3.3nm,0.3s,baz=78,slow=12,SNR=17 | | | | | | | | |
| ASAJ | | | | | LR | LR | LR | 09 10 50.4 | |
| | comp=Z,130nm,20.2s,baz=337,slow=36 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **17.68** | **241** | | P | **Pn** | **Pn** | 09 04 16.0 | **+0.1** |
| **ANM** | **Nome** | **17.90** | **45** | | P | **P** | **P** | 09 04 20.0 | **+1.0** |
| ANM | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **ANM** | **Nome** | **17.90** | **45** | | | **P** | **P** | 09 04 20.0 | **+1.0** |
| **ERM** | **Erimo** | **18.95** | **236** | | P | **P** | **P** | 09 04 29.1 | **-1.6** |
| ERM | | | | | pmax | pmax | | | |
| | comp=Z,136nm,1.3s | | | | | | | | |
| **ERM** | **Erimo** | **18.95** | **236** | | | **P** | **P** | 09 04 29.1 | **-1.6** |
| **JEW** | **Eniwo** | **19.18** | **241** | | | **P** | **P** | 09 04 33.4 | **+0.3** |
| **YAK** | **Yakutsk** | **19.29** | **306** | | P | **P** | **P** | 09 04 33.2 | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=32,slow=1.2,SNR=7.1 | | | | | | | | |
| **YAK** | **Yakutsk** | **19.29** | **306** | *eP* | | **P** | **P** | 09 04 32.2 | **-1.9** |
| YAK | | | | *eS* | | **Sn** | **Sn** | 09 08 06.1 | **-4.4** |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.0s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,3.0nm,0.9s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,12nm,1.3s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,204nm,4.3s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,163nm,3.8s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=E,38nm,2.2s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=N,16nm,1.1s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=Z,123nm,21.0s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=N,159nm,19.0s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=E,56nm,17.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **19.29** | **306** | | IAmb | IAmb | IAmb | 09 04 34.1 | |
| | comp=Z,43nm,0.9s | | | | | | | | |
| **TTA** | **Tatalina** | **21.68** | **52** | | P | **P** | **P** | 09 05 00.4 | **+0.2** |
| TTA | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | | |
| **TTA** | **Tatalina** | **21.68** | **52** | | P | **P** | **P** | 09 05 00.4 | **+0.2** |
| **L19K** | **White Mountain** | **22.19** | **54** | | P | **P** | **P** | 09 05 06.0 | **+0.4** |
| L19K | | | | | IAmb | IAmb | IAmb | 09 05 08.5 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **K20K** | **Telida** | **22.58** | **51** | | P | **P** | **P** | 09 05 09.4 | **-0.4** |
| **TIXI** | **Tiksi** | **22.60** | **331** | | P | **P** | **P** | 09 05 09.2 | **-0.6** |
| | comp=Z,18nm,1.0s,baz=91,slow=24,SNR=35 | | | | | | | | |
| TIXI | | | | | LR | LR | LR | 09 14 16.2 | |
| | comp=Z,71nm,19.5s,baz=182,slow=38 | | | | | | | | |
| **TIXI** | **Tiksi** | **22.60** | **331** | *ce* | P | **P** | **P** | 09 05 08.8 | **-1.0** |
| TIXI | | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| **TIXI** | **Tiksi** | **22.60** | **331** | | P | **P** | **P** | 09 05 09.6 | **-0.2** |
| TIXI | | | | | IAmb | IAmb | IAmb | 09 05 11.3 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **J20K** | **Nowinta River** | **22.60** | **49** | | P | **P** | **P** | 09 05 09.7 | **-0.2** |
| **IMAR** | **Indian Mountai** | **22.98** | **44** | | P | **P** | **P** | 09 05 13.5 | **-0.4** |
| **Q19K** | **Cape Douglas,** | **23.01** | **63** | | P | **P** | **P** | 09 05 14.2 | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **23.34** | **256** | | LR | LR | LR | 09 15 02.1 | |
| | comp=Z,98nm,18.1s,baz=47,slow=38 | | | | | | | | |
| **JMM** | **Marumori** | **23.34** | **233** | | P | **P** | **P** | 09 05 20.8 | **+3.0** |
| **CAST** | **Castle Rocks** | **23.48** | **51** | | P | **P** | **P** | 09 05 18.9 | **0.0** |
| **KDAK** | **Kodiak Island** | **23.76** | **65** | | P | **P** | **P** | 09 05 19.9 | **-1.7** |
| | comp=Z,5.7nm,0.5s,baz=304,slow=4.5,SNR=9.8 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **23.76** | **65** | | IAmb | IAmb | IAmb | 09 05 26.9 | |
| | comp=Z,29nm,1.2s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **23.98** | **49** | | P | **P** | **P** | 09 05 24.0 | **+0.3** |
| BPAW | | | | | IAmb | IAmb | IAmb | 09 05 25.4 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **24.00** | **51** | | P | **P** | **P** | 09 05 24.8 | **+0.8** |
| KTH | | | | | IAmb | IAmb | IAmb | 09 05 26.5 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **MLY** | **Manley** | **24.13** | **47** | | P | **P** | **P** | 09 05 25.9 | **+0.7** |
| **CNPM** | **China Poot** | **24.15** | **61** | | P | **P** | **P** | 09 05 24.8 | **-0.5** |
| **TRF** | **Thorofare Moun** | **24.29** | **51** | | P | **P** | **P** | 09 05 27.6 | **+0.9** |
| **BRLK** | **Bradley Lake** | **24.29** | **60** | | P | **P** | **P** | 09 05 25.6 | **-1.0** |
| **CUT** | **Chulitna** | **24.33** | **54** | | P | **P** | **P** | 09 05 26.8 | **0.0** |
| CUT | | | | | IAmb | IAmb | IAmb | 09 05 27.8 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **COLD** | **Coldfoot** | **24.56** | **42** | | P | **P** | **P** | 09 05 29.4 | **+0.4** |
| **NEA2** | **Nenana** | **24.83** | **48** | | P | **P** | **P** | 09 05 31.5 | **+0.1** |
| **MCK** | **McKinley** | **24.89** | **50** | | P | **P** | **P** | 09 05 32.8 | **+0.8** |
| MCK | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **MCK** | **McKinley** | **24.89** | **50** | | P | **P** | **P** | 09 05 32.8 | **+0.8** |
| MCK | | | | | IAmb | IAmb | IAmb | 09 05 33.4 | |
| | comp=Z,8.5nm,1.0s | | | | | | | | |
| **PMR** | **Palmer** | **24.93** | **55** | | P | **P** | **P** | 09 05 32.5 | **+0.2** |
| PMR | | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **PMR** | **Palmer** | **24.93** | **55** | | P | **P** | **P** | 09 05 32.5 | **+0.2** |
| PMR | | | | | IAmb | IAmb | IAmb | 09 05 55.7 | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **RND** | **Reindeer** | **24.93** | **51** | | P | **P** | **P** | 09 05 31.8 | **-0.7** |
| RND | | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **RND** | **Reindeer** | **24.93** | **51** | | P | **P** | **P** | 09 05 31.8 | **-0.7** |
| RND | | | | | IAmb | IAmb | IAmb | 09 05 33.4 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **25.01** | **55** | | P | **P** | **P** | 09 05 33.4 | **+0.3** |
| GHO | | | | | IAmb | IAmb | IAmb | 09 05 42.2 | |
| | comp=Z,36nm,1.5s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **25.01** | **39** | | P | **P** | **P** | 09 05 33.0 | **-0.1** |
| TOLK | | | | | IAmb | IAmb | IAmb | 09 05 35.7 | |
| | comp=Z,6.7nm,0.8s | | | | | | | | |
| **MDM** | **Murphy Dome** | **25.19** | **47** | | P | **P** | **P** | 09 05 35.1 | **+0.4** |
| **WRH** | **Wood River Hil** | **25.25** | **49** | | P | **P** | **P** | 09 05 35.4 | **+0.2** |
| WRH | | | | | IAmb | IAmb | IAmb | 09 05 37.9 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **SML** | **Sawmill** | **25.28** | **55** | | P | **P** | **P** | 09 05 35.1 | **-0.5** |
| **COLA** | **College** | **25.35** | **48** | *i* | P | **P** | **P** | 09 05 37.1 | **+1.0** |
| COLA | | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.9s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **25.37** | **48** | | P | **P** | **P** | 09 05 35.7 | **-0.6** |
| **PWL** | **Port Wells** | **25.39** | **57** | | P | **P** | **P** | 09 05 35.9 | **-0.6** |
| **DHY** | **Denali Highway** | **25.62** | **52** | | P | **P** | **P** | 09 05 38.3 | **-0.5** |
| DHY | | | | | IAmb | IAmb | IAmb | 09 05 40.6 | |
| | comp=Z,31nm,1.5s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **25.62** | **235** | | P | **P** | **P** | 09 05 39.6 | **+0.8** |
| **MAJO** | **Matsushiro** | **25.62** | **235** | *i* | P | **P** | **P** | 09 05 39.9 | **+1.0** |
| MAJO | | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **MAJO** | **Matsushiro** | **25.62** | **235** | | P | **P** | **P** | 09 05 39.6 | **+0.8** |
| **MAT** | **Matsushiro** | **25.62** | **235** | | P | **P** | **P** | 09 05 39.7 | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **25.62** | **235** | | P | **P** | **P** | 09 05 40.6 | **+1.7** |
| | comp=Z,6.9nm,0.7s,baz=15,slow=5.7,SNR=8.7 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.62** | **235** | | IAmb | IAmb | IAmb | 09 05 46.2 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **25.75** | **55** | | P | **P** | **P** | 09 05 40.1 | **+0.2** |
| SCM | | | | | pmax | pmax | | | |
| | comp=Z,57nm,1.3s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **25.75** | **55** | | P | **P** | **P** | 09 05 40.1 | **+0.2** |
| **IL31** | | **25.77** | **48** | | IAmb | IAmb | IAmb | 09 05 53.8 | |
| | comp=Z,7.6nm,0.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **25.77** | **48** | | P | **P** | **P** | 09 05 39.4 | **-0.5** |
| | comp=Z,2.3nm,0.8s,baz=262,slow=7.6,SNR=22 | | | | | | | | |
| ILAR | | | | | LR | LR | LR | 09 15 12.9 | |
| | comp=Z,59nm,18.2s,baz=247,slow=35 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **26.26** | **54** | | P | **P** | **P** | 09 05 45.0 | **+0.4** |
| **BMAR** | **Burnt Mountain** | **26.75** | **42** | | P | **P** | **P** | 09 05 49.1 | **+0.3** |
| **N25K** | **Chitina, Valde** | **27.07** | **55** | | P | **P** | **P** | 09 05 51.9 | **0.0** |
| N25K | | | | | IAmb | IAmb | IAmb | 09 05 52.0 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **BOD** | **Bodaibo** | **27.52** | **297** | *eP* | | **P** | **P** | 09 05 52.5 | **-3.2** |
| BOD | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,2.0s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **27.70** | **53** | | P | **P** | **P** | 09 05 58.0 | **+0.6** |
| M26K | | | | | IAmb | IAmb | IAmb | 09 06 12.5 | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **28.13** | **51** | | P | **P** | **P** | 09 06 01.8 | **+0.6** |
| L27K | | | | | IAmb | IAmb | IAmb | 09 06 02.9 | |
| | comp=Z,9.3nm,1.1s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **28.15** | **51** | | P | **P** | **P** | 09 06 02.0 | **+0.6** |
| **EGAK** | **Eagle** | **28.21** | **48** | | IAmb | IAmb | IAmb | 09 06 01.9 | |
| | comp=Z,8.1nm,1.2s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **28.22** | **53** | | P | **P** | **P** | 09 06 02.6 | **+0.5** |
| M27K | | | | | IAmb | IAmb | IAmb | 09 06 05.2 | |
| | comp=Z,25nm,1.4s | | | | | | | | |
| **DAWY** | **Dawson** | **29.06** | **49** | | P | **P** | **P** | 09 06 09.4 | **-0.1** |
| **KSRS** | **Korea Array** | **30.20** | **250** | | LR | LR | LR | 09 19 26.4 | |
| | comp=Z,38nm,18.2s,baz=30,slow=38 | | | | | | | | |
| **INK** | **Inuk** | **30.90** | **40** | | P | **P** | **P** | 09 06 25.4 | **-0.2** |
| | comp=Z,1.5nm,0.5s,baz=278,slow=4.2,SNR=11 | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **32.99** | **55** | | P | **P** | **P** | 09 06 45.3 | **+1.1** |
| P33M | | | | | IAmb | IAmb | IAmb | 09 06 45.8 | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| **DLBC** | **Dease Lake** | **34.97** | **57** | | P | **P** | **P** | 09 07 03.3 | **+2.0** |
| DLBC | | | | | IAmb | IAmb | IAmb | 09 07 03.9 | |
| | comp=Z,6.2nm,0.8s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.15** | **176** | | T | T | | 09 45 10.4 | |
| | baz=359,slow=76,SNR=45 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.16** | **176** | | T | T | | 09 45 08.9 | |
| | baz=359,slow=76,SNR=33 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.17** | **176** | | T | T | | 09 45 11.8 | |
| | baz=359,slow=76,SNR=37 | | | | | | | | |
| **SONM** | **Songino Array** | **35.92** | **283** | | P | **P** | **P** | 09 07 09.4 | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=67,slow=7.4,SNR=8.8 | | | | | | | | |
| SONM | | | | | LR | LR | | 09 22 42.1 | |
| | comp=Z,75nm,18.9s,baz=56,slow=38 | | | | | | | | |
| **SONM** | **Songino Array** | **35.92** | **283** | | IAmb | IAmb | | 09 07 12.7 | |
| | comp=Z,1.9nm,1.3s | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.36** | **176** | | T | T | | 09 46 36.5 | |
| **H11S3** | **WAKE ISLAND Hy** | **36.37** | **176** | | T | T | | 09 46 36.5 | |
| **H11S2** | **WAKE ISLAND Hy** | **36.38** | **176** | | T | T | | 09 46 36.5 | |
| **EUNU** | **Eureka** | **39.59** | **15** | | P | **P** | **P** | 09 07 40.1 | **-0.1** |
| **YKA** | **Yellowknife Ar** | **40.13** | **45** | | P | **P** | **P** | 09 07 44.7 | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=298,slow=8.1,SNR=15 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.90** | **303** | | LR | LR | | 09 27 33.3 | |
| | comp=Z,48nm,18.9s,baz=347,slow=38 | | | | | | | | |
| **B08A** | **Colville Reser** | **45.64** | **65** | | P | **P** | **P** | 09 08 30.7 | **+1.0** |
| B08A | | | | | IAmb | IAmb | IAmb | 09 08 31.4 | |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| **EDM** | **Edmonton** | **45.69** | **56** | | P | **P** | **P** | 09 08 31.0 | **+1.0** |
| EDM | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **EDM** | **Edmonton** | **45.69** | **56** | | P | **P** | **P** | 09 08 31.0 | **+1.0** |
| EDM | | | | | IAmb | IAmb | IAmb | 09 08 31.9 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **45.76** | **351** | | P | **P** | **P** | 09 08 29.9 | **-0.3** |
| | comp=Z,9.7nm,0.7s,baz=70,slow=8.1,SNR=14 | | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **45.76** | **351** | | P | **P** | **P** | 09 08 29.6 | **-0.6** |
| **NEEM** | **North Greenlan** | **46.10** | **10** | *i* | P | **P** | **P** | 09 08 32.3 | **-0.9** |
| NEEM | | | | | IAmb | IAmb | IAmb | 09 08 34.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **48.60** | **1** | *i* | P | **P** | **P** | 09 08 51.0 | **-1.3** |
| DAG | | | | | IAmb | IAmb | IAmb | 09 08 52.2 | |
| | comp=Z,3.6nm,0.6s | | | | | | | | |
| **KURK** | **Kurchatov** | **48.89** | **303** | *i* | P | **P** | **P** | 09 08 52.6 | **-2.2** |
| KURK | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **KURK** | **Kurchatov** | **48.89** | **303** | | P | **P** | **P** | 09 08 54.6 | **-0.2** |
| **KURK** | **Kurchatov** | **48.89** | **303** | | IAmb | IAmb | IAmb | 09 08 54.8 | |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.99** | **303** | | P | **P** | **P** | 09 08 54.6 | **-1.0** |
| | comp=Z,7.4nm,0.4s,baz=56,slow=7.7,SNR=16 | | | | | | | | |
| **MOD** | **Modoc Plateau** | **49.31** | **72** | | IAmb | IAmb | IAmb | 09 09 01.1 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **MK31** | **Makanchi Array** | **49.61** | **297** | *i* | P | **P** | **P** | 09 08 59.0 | **-1.5** |
| **MKAR** | **Makanchi Array** | **49.61** | **297** | | P | **P** | **P** | 09 08 59.2 | **-1.2** |
| | comp=Z,2.3nm,0.6s,baz=58,slow=7.7,SNR=20 | | | | | | | | |
| **MAKZ** | **Makanchi** | **49.76** | **297** | | P | **P** | | 09 09 00.6 | **-1.0** |
| MAKZ | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **MAKZ** | **Makanchi** | **49.76** | **297** | | P | **P** | | 09 09 00.6 | **-1.0** |
| MAKZ | | | | | IAmb | IAmb | | 09 09 00.7 | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **GOMU** | **GeErMu** | **49.95** | **278** | | P | **P** | **P** | 09 09 01.8 | **-1.8** |
| GOMU | | | | | pP | pP | | 09 09 08.3 | -1.3 |
| GOMU | | | | | sP | sP | | 09 09 13.5 | +1.6 |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **DBG** | **Daneborg** | **51.05** | **2** | *i* | P | **P** | **P** | 09 09 10.0 | **-1.0** |
| **NUUG** | **Nuugaatsiaq** | **51.12** | **14** | *i* | P | **P** | **P** | 09 09 11.1 | **-0.4** |
| NUUG | | | | | IAmb | IAmb | IAmb | 09 09 13.9 | |
| | comp=Z,6.5nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **51.23** | **309** | *ce* | P | **P** | **P** | 09 09 11.6 | **-1.0** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **MPK** | **Martis Peak** | **51.24** | **75** | | IAmb | IAmb | IAmb | 09 09 16.1 | |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **51.32** | **74** | | IAmb | IAmb | IAmb | 09 09 15.8 | |
| | comp=Z,4.5nm,1.0s | | | | | | | | |
| **VCNR** | **Virginia City** | **51.45** | **74** | | IAmb | IAmb | IAmb | 09 09 16.7 | |
| | comp=Z,4.1nm,1.0s | | | | | | | | |
| **PNTR** | **Pine Nut** | **51.63** | **74** | | IAmb | IAmb | IAmb | 09 09 18.5 | |
| | comp=Z,7.2nm,0.9s | | | | | | | | |
| **SUMG** | **Summit** | **51.85** | **9** | *i* | P | **P** | **P** | 09 09 16.0 | **-1.4** |
| **YERR** | **Yerington** | **51.90** | **74** | | IAmb | IAmb | IAmb | 09 09 20.4 | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| **KVN** | **Kaiserville** | **52.49** | **73** | | P | **P** | **P** | 09 09 24.1 | **+1.7** |
| KVN | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **KVN** | **Kaiserville** | **52.49** | **73** | | P | **P** | **P** | 09 09 24.1 | **+1.7** |
| KVN | | | | | IAmb | IAmb | IAmb | 09 09 24.8 | |
| | comp=Z,3.7nm,0.9s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **52.81** | **74** | | P | **P** | **P** | 09 09 25.7 | **+0.9** |
| | comp=Z,2.8nm,0.9s,baz=300,slow=7.6,SNR=17 | | | | | | | | |
| **ARU** | **Arti** | **53.74** | **318** | | P | **P** | **P** | 09 09 30.9 | **-0.2** |
| | comp=Z,1.6nm,0.2s,baz=2.1,slow=4.2,SNR=5.3 | | | | | | | | |
| ARU | | | | | LR | LR | LR | 09 34 19.3 | |
| | comp=Z,45nm,18.9s,baz=40,slow=38 | | | | | | | | |
| **ARU** | **Arti** | **53.74** | **318** | *ce* | P | **P** | **P** | 09 09 30.0 | **-1.1** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.7s | | | | | | | | |
| **LCH** | **Last Change Ra** | **54.03** | **75** | | IAmb | IAmb | IAmb | 09 09 36.9 | |
| | comp=Z,6.3nm,1.3s | | | | | | | | |
| **PRGR** | **Permogore** | **54.23** | **329** | *eP* | | **P** | **P** | 09 09 32.3 | **-2.3** |
| PRGR | | | | | pmax | pmax | | | |
| | comp=Z,53nm,1.5s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **54.48** | **65** | | P | **P** | **P** | 09 09 37.2 | **+0.2** |
| | comp=Z,1.1nm,0.9s,baz=325,slow=2.3,SNR=8.6 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **55.01** | **74** | | IAmb | IAmb | IAmb | 09 09 43.4 | |
| | comp=Z,4.8nm,1.2s | | | | | | | | |
| **GWY** | **Greenwater Val** | **55.32** | **75** | | IAmb | IAmb | IAmb | 09 09 59.2 | |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **QSM** | **Queen of Sheba** | **55.37** | **75** | | IAmb | IAmb | IAmb | 09 09 45.7 | |
| | comp=Z,5.6nm,1.2s | | | | | | | | |
| **KIRV** | **Kirov** | **55.40** | **325** | *ce* | P | **P** | **P** | 09 09 42.2 | **-0.9** |
| **SFJD** | **Kangerlussuaq** | **55.64** | **16** | | LR | LR | LR | 09 37 01.8 | |
| | comp=Z,43nm,18.0s,baz=270,slow=40 | | | | | | | | |
| **AAK** | **Ala-Archa** | **56.49** | **298** | | P | **P** | **P** | 09 09 51.2 | **-0.2** |
| | comp=Z,1.3nm,0.4s,baz=50,slow=9.6,SNR=5.9 | | | | | | | | |
| **AAK** | **Ala-Archa** | **56.49** | **298** | *ce* | P | **P** | **P** | 09 09 49.6 | **-1.8** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **AAK** | **Ala-Archa** | **56.49** | **298** | | P | **P** | **P** | 09 09 51.4 | **0.0** |
| AAK | | | | | IAmb | IAmb | IAmb | 09 10 18.7 | |
| | comp=Z,3.3nm,1.1s | | | | | | | | |
| **KKAR** | **Karatay Array** | **58.16** | **301** | | P | **P** | **P** | 09 10 02.1 | **-0.9** |
| **KKAR** | **Karatay Array** | **58.16** | **301** | | P | **P** | **P** | 09 10 02.1 | **-0.9** |
| **AKTO** | **Aktyubinsk** | **58.42** | **314** | | P | **P** | **P** | 09 10 04.0 | **-0.7** |
| | comp=Z,1.4nm,0.5s,baz=234,slow=0.5,SNR=6.0 | | | | | | | | |
| AKTO | | | | | LR | LR | LR | 09 37 29.3 | |
| | comp=Z,50nm,18.1s,baz=32,slow=38 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.42** | **314** | | P | **P** | **P** | 09 10 04.0 | **-0.7** |
| **ABKAR** | **Akbulak array** | **58.50** | **312** | | P | **P** | **P** | 09 10 05.1 | **-0.1** |
| **FINES** | **FINESS Array B** | **59.42** | **338** | | P | **P** | **P** | 09 10 10.8 | **-0.6** |
| | comp=Z,3.3nm,0.8s,baz=42,slow=8.8,SNR=8.3 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.97** | **261** | | P | **P** | **P** | 09 10 24.9 | **+2.3** |
| | comp=Z,2.8nm,0.6s,baz=23,slow=6.6,SNR=8.7 | | | | | | | | |
| CMAR | | | | | LR | LR | LR | 09 38 42.0 | |
| | comp=Z,31nm,18.6s,baz=50,slow=38 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **2.03** | **292** | ⇑*e*P | | **Pn** | 09 20 06.2 | +0.7 |
| LVC | | | | *i* S | | **S** | 09 20 36.9 | -0.2 |
| **LVC** | **Limon Verde** | **2.03** | **292** | *e*P | | **Pn** | 09 20 06.0 | +0.5 |
| LVC | | | | *e*S | | **S** | 09 20 37.8 | +0.7 |
| **PB15** | **IPOC Station P** | **2.40** | **274** | | | **Pn** | 09 20 09.5 | +0.5 |
| **PB15** | **IPOC Station P** | **2.40** | **274** | *e*P | | **Pn** | 09 20 09.8 | +0.8 |
| PB15 | | | | *i* S | | **S** | 09 20 42.9 | -0.5 |
| **PB15** | **IPOC Station P** | **2.40** | **274** | *e*P | | **Pn** | 09 20 10.0 | +0.9 |
| PB15 | | | | *e*S | | **S** | 09 20 43.1 | -0.3 |
| PB15 | | | | IAML | | | 09 20 47.5 | |
| | comp=Z,4µm,0.2s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.58** | **285** | | | **Pn** | 09 20 11.8 | +0.8 |
| **PB06** | **IPOC Station P** | **2.58** | **285** | ⇑*i*P | | **Pn** | 09 20 11.8 | +0.8 |
| PB06 | | | | *i* S | | **S** | 09 20 46.2 | -0.7 |
| PB06 | | | | IAML | | | 09 20 46.9 | |
| | comp=N,1µm,0.2s | | | | | | | |
| **PB06** | **IPOC Station P** | **2.58** | **285** | *e*P | | **Pn** | 09 20 11.8 | +0.8 |
| PB06 | | | | *e*S | | **S** | 09 20 46.5 | -0.4 |
| PB06 | | | | IAML | | | 09 20 49.8 | |
| | comp=Z,631nm,0.2s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.71** | **306** | | | **Pn** | 09 20 13.8 | +1.3 |
| **PB09** | **IPOC Station P** | **2.71** | **306** | ⇑*i*P | | **Pn** | 09 20 13.7 | +1.3 |
| PB09 | | | | *i* S | | **S** | 09 20 49.4 | 0.0 |
| PB09 | | | | IAML | | | 09 20 52.5 | |
| | comp=E,412nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.71** | **306** | *e*P | | **Pn** | 09 20 13.0 | +0.6 |
| PB09 | | | | *e*S | | **S** | 09 20 49.9 | +0.5 |
| **FSA** | **Cafayete** | **2.83** | **163** | *e*P | | **Pn** | 09 20 13.4 | -0.2 |
| FSA | | | | *e*S | | **S** | 09 20 51.2 | -0.7 |
| **PB04** | **IPOC Station P** | **3.20** | **289** | | | **Pn** | 09 20 18.6 | +0.6 |
| **PB04** | **IPOC Station P** | **3.20** | **289** | ⇑*e*P | | **Pn** | 09 20 18.6 | +0.6 |
| PB04 | | | | *i* S | | **S** | 09 20 58.3 | -1.1 |
| PB04 | | | | IAML | | | 09 21 02.8 | |
| | comp=N,698nm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **3.20** | **289** | *e*P | | **Pn** | 09 20 18.6 | +0.6 |
| PB04 | | | | *e*S | | **S** | 09 20 58.6 | -0.9 |
| PB04 | | | | IAML | | | 09 21 03.0 | |
| | comp=Z,548nm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **3.24** | **300** | | | **Pn** | 09 20 19.1 | +0.6 |
| **PB07** | **IPOC Station P** | **3.24** | **300** | ⇑*i*P | | **Pn** | 09 20 19.1 | +0.6 |
| PB07 | | | | *i* S | | **S** | 09 20 58.7 | -1.6 |
| **PB07** | **IPOC Station P** | **3.24** | **300** | *e*P | | **Pn** | 09 20 19.1 | +0.6 |
| PB07 | | | | *e*S | | **S** | 09 20 59.4 | -1.0 |
| PB07 | | | | IAML | | | 09 20 59.5 | |
| | comp=Z,489nm,0.2s | | | | | | | |
| **PB01** | **IPOC Station P** | **3.37** | **313** | | | **Pn** | 09 20 20.5 | +0.7 |
| **PB01** | **IPOC Station P** | **3.37** | **313** | *e*P | | **Pn** | 09 20 20.6 | +0.7 |
| PB01 | | | | *i* S | | **S** | 09 21 02.2 | -0.6 |
| **PB01** | **IPOC Station P** | **3.37** | **313** | *e*P | | **Pn** | 09 20 20.4 | +0.5 |
| PB01 | | | | *e*S | | **S** | 09 21 02.2 | -0.6 |
| PB01 | | | | IAML | | | 09 21 03.9 | |
| | comp=Z,407nm,0.2s | | | | | | | |
| **PB10** | **IPOC Station P** | **3.38** | **267** | Pn | | **Pn** | 09 20 20.7 | +0.7 |
| **PB10** | **IPOC Station P** | **3.38** | **267** | *e*P | | **Pn** | 09 20 20.5 | +0.6 |
| PB10 | | | | *i* S | | **S** | 09 21 00.9 | -2.1 |
| **PB10** | **IPOC Station P** | **3.38** | **267** | *e*P | | **Pn** | 09 20 20.6 | +0.7 |
| PB10 | | | | *e*P | | **Pn** | 09 20 21.0 | +1.1 |
| PB10 | | | | *e*S | | **S** | 09 21 01.9 | -1.1 |
| PB10 | | | | IAML | | | 09 21 02.9 | |
| | comp=Z,193nm,0.8s | | | | | | | |
| **PB14** | **IPOC Station P** | **3.46** | **248** | Pn | | **Pn** | 09 20 21.0 | 0.0 |
| **PB02** | **IPOC Station P** | **3.48** | **306** | | | **Pn** | 09 20 21.8 | +0.6 |
| **PB02** | **IPOC Station P** | **3.48** | **306** | *e*P | | **Pn** | 09 20 21.6 | +0.4 |
| PB02 | | | | *i* S | | **S** | 09 21 02.9 | -2.3 |
| **PB02** | **IPOC Station P** | **3.48** | **306** | *e*P | | **Pn** | 09 20 21.8 | +0.6 |
| PB02 | | | | *e*S | | **S** | 09 21 04.2 | -1.0 |
| PB02 | | | | IAML | | | 09 21 12.2 | |
| | comp=Z,614nm,0.2s | | | | | | | |
| **AHML** | **Horco Molle** | **3.65** | **158** | *e*P | | **Pn** | 09 20 23.4 | +0.2 |
| AHML | | | | *e*S | | **S** | 09 21 08.6 | -0.4 |
| **PB08** | **IPOC Station P** | **3.87** | **326** | | | **Pn** | 09 20 27.6 | +1.5 |
| **PATCX** | **Punta Patache** | **3.98** | **309** | Pn | | **Pn** | 09 20 27.4 | +0.2 |
| **PATCX** | **Punta Patache** | **3.98** | **309** | ⇑*e*P | | **Pn** | 09 20 26.9 | -0.2 |
| PATCX | | | | *i* S | | **S** | 09 21 13.6 | -2.4 |
| **PATCX** | **Punta Patache** | **3.98** | **309** | *e*P | | **Pn** | 09 20 27.3 | +0.2 |
| PATCX | | | | *e*P | | **Pn** | 09 20 27.3 | +0.2 |
| PATCX | | | | *e*P | | **Pn** | 09 20 27.4 | +0.2 |
| PATCX | | | | *e*P | | **Pn** | 09 20 27.7 | +0.6 |
| PATCX | | | | *e*S | | **S** | 09 21 14.9 | -1.0 |
| PATCX | | | | IAML | | | 09 21 21.3 | |
| | comp=Z,152nm,0.3s | | | | | | | |
| **AC02** | **Maricunga** | **3.99** | **210** | Pn | | **Pn** | 09 20 27.9 | +0.3 |
| **AC02** | **Maricunga** | **3.99** | **210** | *e*P | | **Pn** | 09 20 28.0 | +0.3 |
| AC02 | | | | *i* S | | **S** | 09 21 17.6 | +0.6 |
| **AC02** | **Maricunga** | **3.99** | **210** | *e*P | | **Pn** | 09 20 28.1 | +0.4 |
| AC02 | | | | *e*S | | **S** | 09 21 21.0 | +4.0 |
| **TA01** | **Diego Aracena** | **4.16** | **312** | | | **Pn** | 09 20 29.9 | +0.6 |
| **TA01** | **Diego Aracena** | **4.16** | **312** | *e*P | | **Pn** | 09 20 30.1 | +0.8 |
| TA01 | | | | *i* S | | **S** | 09 21 18.3 | -1.7 |
| **HMBC** | **Humberstone** | **4.18** | **317** | *e*P | | **Pn** | 09 20 29.5 | -0.2 |
| HMBC | | | | *i* S | | **S** | 09 21 17.9 | -2.7 |
| **GO01** | **Chusmiza** | **4.29** | **329** | | | **Pn** | 09 20 32.5 | +1.1 |
| **GO01** | **Chusmiza** | **4.29** | **329** | *e*P | | **Pn** | 09 20 32.8 | +1.4 |
| GO01 | | | | *i* S | | **S** | 09 21 23.6 | 0.0 |
| **AC01** | **Pan de Azucar** | **4.36** | **230** | | | **Pn** | 09 20 30.7 | -1.0 |
| **AC01** | **Pan de Azucar** | **4.36** | **230** | *e*P | | **Pn** | 09 20 30.7 | -1.0 |
| AC01 | | | | *i* S | | **S** | 09 21 20.9 | -3.4 |
| **AC06** | **Mina Casimiro** | **5.05** | **218** | Pn | | **Pn** | 09 20 38.8 | -1.5 |
| **PB12** | **IPOC Station P** | **5.75** | **325** | Pn | | **Pn** | 09 20 48.8 | -0.5 |
| **ACO** | **Llanos de Chal** | **6.11** | **217** | Pn | | **Pn** | 09 20 51.0 | -2.6 |
| **LCO** | **Las Campanas** | **6.57** | **211** | Pn | | **Pn** | 09 20 57.7 | -2.1 |
| **LPAZ** | **La Paz** | **7.17** | **350** | P | | **Pn** | 09 21 09.3 | +1.4 |
| | comp=Z,1.7nm,0.3s,baz=159,slow=6.1,SNR=44 | | | | | | | |
| LPAZ | | | | S | | **S** | 09 22 29.4 | -0.7 |
| | baz=261,slow=24,SNR=3.0 | | | | | | | |
| **LPAZ** | **La Paz** | **7.17** | **350** | *e*P | | **Pn** | 09 21 08.9 | +0.9 |
| **LPAZ** | **La Paz** | **7.17** | **350** | *e*P | | **Pn** | 09 21 09.0 | +1.1 |
| **CO03** | **El Pedregal** | **8.16** | **204** | Pn | | **Pn** | 09 21 19.5 | -0.5 |
| **CO02** | **Combarbal** | **8.60** | **204** | Pn | | **Pn** | 09 21 24.5 | -1.3 |
| **SIV** | **San Ignacio** | **9.17** | **38** | P | | **Pn** | 09 21 31.8 | -1.4 |
| | comp=Z,2.4nm,0.3s,baz=217,slow=10,SNR=60 | | | | | | | |
| **BO02** | **Sierra Bellavi** | **11.86** | **196** | P | | **Pn** | 09 22 09.7 | +2.3 |
| **VILB** | **Vilhena** | **12.16** | **33** | *e*P | | **P** | 09 22 14.0 | -1.0 |
| **ETMB** | **Extrema** | **13.52** | **3** | *e*P | | **Pn** | 09 22 29.0 | +0.9 |
| **PDRB** | **Porto dos Gac** | **15.18** | **41** | *e*P | | **P** | 09 22 49.4 | +0.8 |
| **ITRB** | **Iturama** | **15.79** | **80** | *e*P | | **Pn** | 09 22 57.1 | +1.3 |
| **ARAG** | **Araguaiana, MT** | **16.11** | **64** | *e*P | | **Pn** | 09 23 00.1 | +0.5 |
| **CLDB** | **Colider** | **16.33** | **42** | *e*P | | **Pn** | 09 23 01.9 | -0.3 |
| **BB19B** | **Bebedouro** | **17.14** | **86** | *e*P | | **P** | 09 23 09.9 | -0.2 |
| **PLCA** | **Paso Flores** | **17.57** | **189** | P | | **Pn** | 09 23 15.9 | -0.7 |
| | comp=Z,0.2nm,0.3s,baz=0.9,slow=10,SNR=14 | | | | | | | |
| **PLCA** | **Paso Flores** | **17.57** | **189** | *e*P | | **P** | 09 23 13.6 | -0.9 |
| **RCLB** | **Rio Claro- Sao** | **17.85** | **91** | *e*P | | **P** | 09 23 17.7 | -0.1 |
| **LL04** | **Puerto Octay** | **18.08** | **194** | P | | **P** | 09 23 21.4 | +1.5 |
| LL04 | | | | IAmb | | IAmb | 09 23 22.6 | |
| | comp=Z,7.7nm,0.6s | | | | | | | |
| **IPMB** | **Ipameri, GO** | **18.27** | **76** | *e*P | | **P** | 09 23 23.9 | +1.6 |
| **VAO** | **Valinhos** | **18.31** | **93** | *e*P | | **Pn** | 09 23 24.6 | -0.9 |
| **SNDB** | **Serra Nova Dou** | **18.67** | **55** | *e*P | | **P** | 09 23 27.4 | +0.7 |
| **BDFB** | **Brasilia** | **19.36** | **70** | P | | **P** | 09 23 35.5 | +1.3 |
| | comp=Z,0.3nm,0.3s,baz=242,slow=11,SNR=6.5 | | | | | | | |
| **BDFB** | **Brasilia** | **19.36** | **70** | IAmb | | IAmb | 09 23 36.4 | |
| | comp=Z,6.1nm,0.9s | | | | | | | |
| **PARB** | **Paraibuna** | **19.51** | **94** | *e*P | | **Pn** | 09 23 38.0 | -1.7 |
| **LL02** | **Futaleuf** | **20.17** | **191** | P | | **P** | 09 23 43.6 | +1.1 |
| LL02 | | | | IAmb | | IAmb | 09 23 46.9 | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| **PEXB** | **Peixe** | **20.92** | **61** | *e*P | | **P** | 09 23 51.0 | +0.3 |
| **MACA** | **Manacapuru-AM** | **20.98** | **17** | *e*P | | **P** | 09 23 51.7 | +0.3 |
| **VAS01** | **Vassouras-RJ** | **21.62** | **92** | *e*P | | **P** | 09 23 58.0 | +0.2 |
| **ITTB** | **Itaituba** | **21.76** | **31** | *e*P | | **P** | 09 23 58.8 | -0.3 |
| **JANB** | **Januaria** | **22.84** | **73** | *e*P | | **P** | 09 24 09.5 | +0.4 |
| **CAM01** | **Campos-RJ** | **23.32** | **91** | *e*P | | **P** | 09 24 14.8 | +1.4 |
| **SMTB** | **Santa Maria do** | **23.45** | **55** | *e*P | | **P** | 09 24 15.4 | +0.8 |
| **PTGA** | **Pitinga** | **23.50** | **18** | P | | **P** | 09 24 16.1 | +1.0 |
| | comp=Z,2.1nm,0.4s,baz=182,slow=15,SNR=11 | | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **23.55** | **66** | *e*P | | **P** | 09 24 16.5 | +0.9 |
| **PRPB** | **Paraupebas** | **23.72** | **46** | *e*P | | **P** | 09 24 18.1 | +1.0 |
| **MALB** | **Monte Alegre** | **24.66** | **32** | *e*P | | **P** | 09 24 26.3 | +0.7 |
| **NAN01** | **Guarapari, ES** | **25.61** | **83** | *e*P | | **P** | 09 24 35.0 | +0.8 |
| **BOAV** | **Boa Vista** | **26.37** | **14** | *e*P | | **P** | 09 24 41.6 | +0.6 |
| **ROSB** | **Rosrio** | **30.00** | **51** | *e*P | | **P** | 09 25 13.4 | +0.3 |
| **NBAN** | **Anadia - AL** | **32.26** | **70** | *e*P | | **P** | 09 25 32.3 | -0.7 |
| **TORD** | **Torodi Ar. Bea** | **76.24** | **69** | P | | **P** | 09 30 49.1 | -0.4 |
| | comp=Z,0.3nm,0.5s,baz=248,slow=7.8,SNR=3.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.24** | **69** | IAmb | | IAmb | 09 30 57.0 | |
| | comp=Z,2.3nm,1.2s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.60** | **340** | P | | **P** | 09 32 15.3 | 0.0 |
| | comp=Z,0.1nm,0.2s,baz=119,slow=8.6,SNR=4.6 | | | | | | | |

*DJA **29** 09:21:08.5±0.6, 9°S±7°×11°E±°, h61km±7km, M3.2/8, MLv3.2/8*

**ISC 29 09:21:06.9±1.2, 8.9S±0.1°×114.65E±0.07°, h101km, n11, σ1§17/14, mb2.9/3, Bali region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGBI** | **Denpasar** | **0.49** | **85** | P | **Pn** | 09 21 22.4 | -0.3 |
| IGBI | | | | S | **Sn** | 09 21 33.1 | -1.5 |
| **JAGI** | **Jajag, Banyuwa** | **0.63** | **309** | P | **Pn** | 09 21 22.9 | -0.9 |
| JAGI | | | | S | **Sn** | 09 21 34.3 | -2.2 |
| **ABJI** | **Asem Bagus** | **1.14** | **339** | P | **Pn** | 09 21 30.0 | +1.0 |
| **GMJI** | **Gumukmas** | **1.33** | **296** | P | **Pn** | 09 21 31.0 | -0.1 |
| GMJI | | | | S | **Sn** | 09 21 49.1 | -0.4 |
| **BLJI** | **Banyuglugur** | **1.52** | **317** | P | **Pn** | 09 21 34.4 | +0.9 |
| BLJI | | | | S | **Sn** | 09 21 52.9 | -0.8 |
| **PLAI** | **Plampang** | **3.09** | **90** | P | **Pn** | 09 21 55.1 | +1.2 |
| **PCJI** | **Pacitan** | **3.50** | **281** | P | **Pn** | 09 22 00.3 | +1.0 |
| **UGM** | **Wanagama** | **4.19** | **283** | P | **Pn** | 09 22 10.0 | +1.3 |
| **WRA** | **Warramunga Arr** | **22.00** | **122** | P | **P** | 09 25 53.8 | +0.8 |
| | 0.1nm,0.4s,baz=295,slow=11,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **23.58** | **131** | P | **P** | 09 26 08.7 | 0.0 |
| | 0.3nm,0.6s,baz=307,slow=9.5,SNR=8.6 | | | | | | |
| **STKA** | **Stephens Creek** | **33.91** | **136** | P | P | 09 27 29.9 | -10 |
| | 1.3nm,0.9s,baz=320,slow=5.1,SNR=2.9 | | | | | | |

**NNC 29 09:30:34.4±1.4, 54.31N×85.93E, h0km, mb3.6, mpv2.8, 6C-2D, Error ellipse: s-maj=24.1km s-min=6.9km az=156.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **0.75** | **242** | ⇑P | Pg | 09 30 48.8 | +0.1 |
| | 0.3nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | Sg | 09 30 59.5 | +1.1 |
| | 3.1nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **5.73** | **234** | ⇑Pn | Pn | 09 32 03.4 | +2.7 |
| | 3.6nm,1.4s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 33 35.1 | |
| | 4.8nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.84** | **234** | Pn | Pn | 09 32 02.9 | +0.7 |
| | 3.3nm,0.7s | | | | | | |
| KURBB | | | | Sn | Sn | 09 33 10.3 | +0.6 |
| | 2.8nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 33 40.8 | |
| | 4.8nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.87** | **199** | ⇑Pn | Pn | 09 32 29.6 | -0.5 |
| | 0.4nm,0.5s,baz=27,slow=14,SNR=32 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 09 34 01.3 | +1.4 |
| | 0.3nm,0.5s,baz=27,slow=27,SNR=2.6 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 34 44.2 | |
| | 0.7nm,0.6s | | | | | | |

*IDC **29** 09:34:00.8±1.8, 24.84N×109.36W, h0km, mb3.7/3, mb1 4.1/8, mb1mx3.8/63, mbtmp3.8/8, ML3.7/5, MS3.4/12, Ms1 3.4/12, ms1mx3.1/77, Error ellipse: s-maj=31.5km s-min=15.5km az=135.0*

*MEX **29** 09:34:05.5±0.9, 25.06N×109.61W, h16km±12km, MD4.3*

**ISC 29 09:34:01.9±1.3, 24.99N±0.04×109.60W±0.04, h6km±10km, n34, σ2§28/38, mb3.9/3, MS3.5/7, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSIG** | **Topolobambo** | **0.79** | **39** | *e*P | **Pg** | 09 34 17.4 | +0.2 |
| TSIG | | | | *e*S | **Sg** | 09 34 26.3 | -1.2 |
| **LPIG** | **La Paz** | **1.09** | **216** | Pn | **Pg** | 09 34 23.3 | +0.5 |
| | 75nm,0.3s,baz=21,slow=3.6,SNR=52 | | | | | | |
| LPIG | | | | Sn | **Sg** | 09 34 36.0 | -1.0 |
| | 749nm,0.3s,baz=242,slow=6.7,SNR=25 | | | | | | |
| **LPIG** | **La Paz** | **1.09** | **216** | *e*P | **Pg** | 09 34 23.3 | +0.5 |
| LPIG | | | | *i* S | **Sg** | 09 34 36.6 | -0.4 |
| **SLBS** | **Sierra La Lagu** | **1.33** | **194** | *e*P | **Pn** | 09 34 26.2 | -0.9 |
| SLBS | | | | *i* S | **Sg** | 09 34 42.8 | -2.0 |
| **CSIG** | **Choix** | **2.15** | **31** | *e*P | **Pn** | 09 34 37.2 | -1.0 |
| CSIG | | | | *i* S | **Sn** | 09 35 01.7 | -3.5 |
| **SSIG** | **Sanalona** | **2.24** | **94** | *e*P | **Pn** | 09 34 38.3 | -1.2 |
| SSIG | | | | *i* S | **Sn** | 09 35 04.9 | -2.6 |
| **GUYB** | **Guaymas** | **3.12** | **339** | *i* P | **Pn** | 09 34 50.0 | -1.6 |
| **SRIG** | **Santa Rosalia** | **3.32** | **315** | *e*P | **Pn** | 09 34 53.4 | -1.0 |
| SRIG | | | | *e*S | **Sn** | 09 35 29.6 | -4.6 |
| **MAIG** | **Mazatlaan** | **3.41** | **121** | *i* P | **Pn** | 09 34 56.3 | +0.7 |
| **PDIG** | **Papasquiaro** | **3.81** | **88** | *i* P | **Pn** | 09 35 03.0 | +1.7 |
| PDIG | | | | *i* S | **Sn** | 09 35 40.2 | -6.5 |
| **HSIG** | | **4.20** | **344** | *e*P | **Pn** | 09 35 05.7 | -0.8 |
| HSIG | | | | *e*S | **Sn** | 09 35 54.7 | -1.1 |
| **BCIG** | **La Boquilla** | **4.54** | **55** | *e*P | **Pn** | 09 35 11.1 | -0.2 |
| BCIG | | | | *e*S | **Sn** | 09 36 03.1 | -1.4 |
| **NZIG** | **Nacozari, Sono** | **5.37** | **0** | *e*P | **Pn** | 09 35 21.0 | -1.7 |
| **CGIG** | | **5.55** | **15** | *e*P | **Pn** | 09 35 26.7 | +1.5 |
| CGIG | | | | *e*S | **Sn** | 09 36 28.9 | -0.5 |
| **TXAR** | **Lajitas Array** | **6.83** | **49** | Pn | **Pn** | 09 35 42.5 | -0.3 |
| | 1.4nm,0.3s,baz=226,slow=13,SNR=83 | | | | | | |
| TXAR | | | | Sn | **Sn** | 09 36 58.2 | -2.7 |
| | 4.0nm,0.3s,baz=232,slow=15,SNR=6.5 | | | | | | |
| TXAR | | | | Lg | Lg | 09 37 32.3 | |
| | 5.9nm,0.3s,baz=255,slow=28,SNR=6.3 | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.65** | **28** | *e*P | **Pn** | 09 35 53.6 | -0.3 |
| MNTX | | | | *e*S | **Sn** | 09 37 20.9 | 0.0 |
| **121A** | **Cookes Peak, D** | **7.69** | **12** | *e*P | **Pn** | 09 35 54.9 | +0.4 |
| 121A | | | | *e*S | Sn | 09 37 10.7 | -11 |
| **ANMO** | **Albuquerque** | **10.29** | **15** | Pn | **Pn** | 09 36 34.0 | +3.7 |
| | 0.2nm,0.3s,baz=198,slow=12,SNR=43 | | | | | | |
| ANMO | | | | Sn | **Sn** | 09 38 20.6 | -5.5 |
| | 2.2nm,0.3s,baz=166,slow=20,SNR=5 | | | | | | |
| ANMO | | | | LR | LR | 09 40 02.8 | |
| | comp=Z,150nm,18.6s,baz=182,slow=35 | | | | | | |
| **PFO** | **Pinyon Flats O** | **10.47** | **327** | Pn | Pn | 09 36 37.4 | +4.7 |
| | 0.0nm,0.3s,baz=121,slow=8.2,SNR=5.4 | | | | | | |
| PFO | | | | LR | LR | 09 40 22.4 | |
| | comp=Z,148nm,21.8s,baz=286,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.30** | **333** | Pn | **P** | 09 37 42.8 | -0.8 |
| | 0.0nm,0.3s,baz=148,slow=13,SNR=11 | | | | | | |
| **CMIG** | **Matias Romero** | **15.81** | **117** | LR | LR | 09 43 53.5 | |
| | comp=Z,169nm,19.8s,baz=273,slow=38 | | | | | | |
| **ELK** | **Elko** | **16.41** | **345** | Pn | **P** | 09 37 56.6 | +0.7 |
| | 0.1nm,0.3s,baz=189,slow=7.0,SNR=6.6 | | | | | | |
| ELK | | | | LR | LR | 09 44 45.4 | |
| | comp=Z,97nm,19.1s,baz=199,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **17.74** | **0** | P | **P** | 09 38 12.0 | +1.4 |
| | 0.2nm,0.3s,baz=165,slow=12,SNR=18 | | | | | | |
| PDAR | | | | LR | LR | 09 45 36.8 | |
| | comp=Z,52nm,19.9s,baz=184,slow=39 | | | | | | |
| **NEW** | **Newport** | **23.98** | **348** | P | **P** | 09 39 19.3 | +2.2 |
| | 2.4nm,0.6s,baz=151,slow=12,SNR=5.7 | | | | | | |
| NEW | | | | LR | LR | 09 49 08.3 | |
| | comp=Z,66nm,18.2s,baz=186,slow=38 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.63** | **58** | LR | LR | 09 48 56.0 | |
| | comp=Z,71nm,19.8s,baz=284,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.65** | **356** | P | **P** | 09 41 18.9 | +1.5 |
| | 2.3nm,1.0s,baz=174,slow=8.3,SNR=20 | | | | | | |
| **SJG** | **San Juan** | **40.85** | **91** | LR | LR | 10 00 41.3 | |
| | comp=Z,32nm,18.5s,baz=278,slow=39 | | | | | | |
| **INK** | **Inuvik** | **45.70** | **348** | LR | LR | 10 02 16.9 | |
| | comp=Z,76nm,19.6s,baz=54,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **46.45** | **339** | P | **P** | 09 42 31.9 | +2.5 |
| | 0.2nm,0.5s,baz=154,slow=7.1,SNR=2.2 | | | | | | |
| **MDP** | **Montagnes des** | **57.99** | **100** | LR | LR | 10 11 58.6 | |
| | comp=Z,64nm,18.3s,baz=50,slow=39 | | | | | | |
| **H03N1** | **Juan Fernandez** | **65.03** | **152** | T | T | 10 55 23.8 | |
| | baz=55,slow=74,SNR=12 | | | | | | |
| **H03N3** | **Juan Fernandez** | **65.04** | **152** | T | T | 10 55 23.0 | |
| | baz=334,slow=74,SNR=10 | | | | | | |
| **MA2** | **Magadan** | **73.48** | **328** | LR | LR | 10 18 18.1 | |
| | comp=Z,26nm,18.9s,baz=134,slow=36 | | | | | | |
| **ARU** | **Arti** | **98.29** | **7** | LR | LR | 10 36 05.1 | |
| | comp=Z,36nm,18.8s,baz=91,slow=38 | | | | | | |

*TUL **29** 09:35:05.3±0.5, 36.53N±0.02×98.98W±0.04, h7km±3km, ML3.6, mb_Lg3.3/84(NEIC), Error ellipse: s-maj=4.2km s-min=2.5km az=88.0*

**NEIC 29 09:35:06.3±0.5, 36.53N±0.02×98.97W±0.03, h6km±4km, Error ellipse: s-maj=4.1km s-min=3.5km az=112.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.15** | **189** | Pg | Pg | 09 35 08.9 | -0.3 |
| **OKCFA** | **Oklahoma City** | **1.66** | **131** | | Pn | 09 35 35.5 | -0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **1.67** | **131** | | Pn | 09 35 35.7 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.79** | **175** | | Pn | 09 35 36.8 | -1.0 |
| **FNO** | **Franklin** | **1.80** | **134** | | Pn | 09 35 37.7 | -0.1 |
| **R32A** | **Long Quarter,** | **1.91** | **6** | Pn | Pn | 09 35 39.2 | -0.1 |
| R32A | | | | IAmb_Lg | | 09 36 06.6 | |
| | comp=Z,127nm,1.1s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.02** | **78** | Pn | Pn | 09 35 40.4 | -0.5 |
| T35A | | | | IAmb_Lg | | 09 36 11.0 | |
| | comp=Z,122nm,0.9s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.13** | **154** | | Pn | 09 35 43.3 | +0.8 |
| **CBKS** | **Cedar Bluff** | **2.37** | **345** | IAmb_Lg | | 09 36 21.4 | |
| | comp=Z,100nm,0.8s | | | | | | |
| **TUL1** | **Leonard** | **2.64** | **102** | Pn | Pn | 09 35 48.8 | -0.7 |
| **AMTX** | **Amarillo** | **2.75** | **234** | IAmb_Lg | | 09 36 37.6 | |
| | comp=Z,116nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.18** | **35** | IAmb_Lg | | 09 36 54.4 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.49** | **156** | Pn | Pn | 09 36 01.2 | +0.2 |
| **X37A** | **Clayton** | **3.51** | **122** | | Pn | 09 36 00.8 | -0.6 |
| X37A | | | | IAmb_Lg | | 09 37 06.6 | |
| | comp=Z,124nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.81** | **312** | IAmb_Lg | | 09 37 09.0 | |
| | comp=Z,98nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.93** | **188** | Pn | Pn | 09 36 06.8 | -0.4 |
| **HHAR** | **Hobbs** | **4.07** | **92** | Pn | Pn | 09 36 08.7 | -0.4 |
| HHAR | | | | IAmb_Lg | | 09 37 15.4 | |
| | comp=Z,66nm,1.0s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.62** | **134** | IAmb_Lg | | 09 37 37.5 | |
| | comp=Z,77nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.66** | **74** | IAmb_Lg | | 09 37 33.7 | |
| | comp=Z,76nm,0.8s | | | | | | |
| **BGNE** | **Belgrade** | **4.92** | **7** | IAmb_Lg | | 09 37 52.6 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **U40A** | **Yellville** | **4.94** | **90** | IAmb_Lg | | 09 37 47.4 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **237A** | **Washetta, Mont** | **5.22** | **149** | IAmb_Lg | | 09 38 01.9 | |
| | comp=Z,50nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **5.29** | **53** | IAmb_Lg | | 09 38 05.0 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.40** | **110** | IAmb_Lg | | 09 38 06.4 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.41** | **81** | IAmb_Lg | | 09 37 57.1 | |
| | comp=Z,60nm,0.9s | | | | | | |
| **Q24A** | **Divide** | **5.47** | **298** | IAmb_Lg | | 09 37 57.6 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.56** | **101** | IAmb_Lg | | 09 38 06.6 | |
| | comp=Z,69nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.57** | **95** | IAmb_Lg | | 09 38 10.3 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.58** | **119** | IAmb_Lg | | 09 38 15.5 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **W41B** | **Gary Mavity, V** | **5.63** | **102** | IAmb_Lg | | 09 38 05.2 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.84** | **168** | IAmb_Lg | | 09 38 26.5 | |
| | comp=Z,54nm,1.0s | | | | | | |
| **NATX** | **Nacogdoches** | **5.95** | **142** | IAmb_Lg | | 09 38 25.2 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **6.03** | **121** | IAmb_Lg | | 09 38 30.8 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **6.07** | **187** | IAmb_Lg | | 09 38 31.2 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **K31A** | **O'Neill** | **6.09** | **2** | IAmb_Lg | | 09 38 31.1 | |
| | comp=Z,62nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.35** | **74** | IAmb_Lg | | 09 38 33.0 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.87** | **85** | IAmb_Lg | | 09 38 42.4 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **6.95** | **315** | IAmb_Lg | | 09 38 50.7 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **SCIA** | **State Center** | **6.99** | **38** | IAmb_Lg | | 09 38 59.4 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **SLM** | **Saint Louis** | **7.25** | **70** | IAmb_Lg | | 09 39 03.6 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **27.05 223** | P | **P** | **09 48 12.6** | **-1.3** |
| **ASAR** | **Alice Springs** | **27.05 223** | P | **P** | **09 48 12.9** | **-0.9** |
| | comp=Z,1.4nm,0.4s,baz=57,slow=8.9,SNR=32 | | | | | |
| ASAR | | | PcP | **PcP** | **09 51 32.9** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=56,slow=3.1,SNR=6.9 | | | | | |
| ASAR | | | S | **S** | **09 52 46.0** | **+0.3** |
| | comp=Z,0.1nm,0.4s,baz=327,slow=27,SNR=1.0 | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.00 195** | P | **P** | **09 48 23.0** | **+0.8** |
| **OOD** | **Oodnadatta** | **28.90 215** | P | **P** | **09 48 30.4** | **+0.2** |
| **STKA** | **Stephens Creek** | **29.58 201** | P | **P** | **09 48 35.9** | **-0.3** |
| | comp=Z,6.8nm,0.6s,baz=26,slow=9.9,SNR=27 | | | | | |
| STKA | | | LR | LR | 10 02 32.2 | |
| | comp=Z,44nm,18.1s,baz=31,slow=40 | | | | | |
| **STKA** | **Stephens Creek** | **29.58 201** | P | **P** | **09 48 35.7** | **-0.5** |
| **STKA** | **Stephens Creek** | **29.58 201** | P | **P** | **09 48 36.1** | **-0.1** |
| **LCRK** | **Leigh Creek** | **29.73 208** | P | **P** | **09 48 38.0** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **30.64 241** | P | **P** | **09 48 44.2** | **-1.6** |
| | comp=Z,6.3nm,0.5s,baz=62,slow=6.3,SNR=29 | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.64 241** | P | **P** | **09 48 44.4** | **-1.3** |
| FITZ | | | IAmb | IAmb | 09 48 45.9 | |
| | comp=Z,7.6nm,0.6s | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.64 241** | P | **P** | **09 48 44.5** | **-1.3** |
| **MULG** | **Mulgathing** | **31.72 214** | P | **P** | **09 48 54.2** | **-0.9** |
| **WRKA** | **Warakurna** | **31.89 228** | P | **P** | **09 48 55.3** | **-1.4** |
| **HTT** | **Hallett** | **31.99 204** | P | **P** | **09 48 57.7** | **+0.2** |
| **BBOO** | **Buckleboo** | **32.71 208** | P | **P** | **09 49 02.5** | **-1.3** |
| BBOO | | | IAmb | IAmb | 09 49 12.8 | |
| | comp=Z,9.7nm,1.2s | | | | | |
| **BBOO** | **Buckleboo** | **32.71 208** | P | **P** | **09 49 04.0** | **+0.2** |
| **KAPI** | **Kappang** | **33.86 268** | LR | LR | 10 04 26.9 | |
| | comp=Z,20nm,18.1s,baz=144,slow=39 | | | | | |
| **ARPS** | **Mount Arapiles** | **33.99 197** | P | **P** | **09 49 15.9** | **+1.1** |
| | comp=Z,22nm,0.8s | | | | | |
| **FORT** | **Forrest** | **35.66 220** | P | **P** | **09 49 28.7** | **-0.6** |
| **FORT** | **Forrest** | **35.66 220** | P | **P** | **09 49 28.8** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **37.01 240** | P | **P** | **09 49 39.5** | **-1.5** |
| **TAU** | **Tasmania Unive** | **38.74 188** | P | **P** | **09 49 55.4** | **+0.2** |
| **TAU** | **Tasmania Unive** | **38.74 188** | P | **P** | **09 49 56.8** | **+1.7** |
| | comp=Z,53nm,2.3s | | | | | |
| **MEEK** | **Meekatharra** | **40.16 233** | P | **P** | **09 50 05.8** | **-1.5** |
| **BLDU** | **Ballidu** | **43.52 229** | P | **P** | **09 50 33.1** | **-1.5** |
| **KSRS** | **Korea Array** | **48.10 332** | P | **P** | **09 51 10.8** | **+0.4** |
| | comp=Z,1.1nm,0.6s,baz=146,slow=8.8,SNR=2.7 | | | | | |
| **KULM** | **Kulim** | **53.88 280** | P | **P** | **09 51 53.1** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **58.56 295** | P | **P** | **09 52 27.6** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=111,slow=5.1,SNR=11 | | | | | |
| **MA2** | **Magadan** | **63.85 358** | P | **P** | **09 53 02.1** | **-0.4** |
| | comp=Z,0.7nm,0.3s,baz=169,slow=6.5,SNR=6.0 | | | | | |
| **MA2** | **Magadan** | **63.85 358** | IAmb | IAmb | 09 53 03.7 | |
| | comp=Z,2.7nm,0.8s | | | | | |
| **SONM** | **Songino Array** | **66.51 327** | P | **P** | **09 53 20.3** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=133,slow=6.1,SNR=3.6 | | | | | |
| **TAPN** | **Taplejung** | **71.01 301** | *e*P | **P** | **09 53 48.9** | **+0.2** |
| **ODAN** | **Odare** | **71.16 300** | *e*P | **P** | **09 53 49.4** | **-0.1** |
| **JIRN** | **Jiri** | **72.39 301** | *e*P | **P** | **09 53 56.8** | **-0.3** |
| **GUN** | **Gumba** | **72.72 301** | *e*P | **P** | **09 53 58.8** | **-0.2** |
| | comp=Z,31nm,0.7s | | | | | |
| **PKI** | **Pulchoki** | **73.04 300** | *e*P | **P** | **09 54 00.5** | **-0.4** |
| | comp=Z,8.2nm,0.5s | | | | | |
| **KKN** | **Kakani** | **73.21 301** | *e*P | **P** | **09 54 01.5** | **-0.2** |
| **DMN** | **Daman** | **73.31 300** | *e*P | **P** | **09 54 01.9** | **-0.5** |
| **GKN** | **Gorkha** | **73.81 301** | *e*P | **P** | **09 54 05.0** | **-0.2** |
| **DANN** | **Dangsing** | **74.64 301** | *e*P | **P** | **09 54 09.5** | **-0.7** |
| **KOLN** | **Koldanda** | **74.65 300** | *e*P | **P** | **09 54 09.6** | **-0.5** |
| **ANM** | **Nome** | **75.15 17** | P | **P** | **09 54 13.6** | **+1.7** |
| ANM | | | IAmb | IAmb | 09 54 17.5 | |
| | comp=Z,7.3nm,1.4s | | | | | |
| **PYUN** | **Piuthan** | **75.25 300** | *e*P | **P** | **09 54 12.7** | **-0.9** |
| | comp=Z,26nm,0.9s | | | | | |
| **MK31** | **Makanchi Array** | **80.66 319** | P | **P** | **09 54 42.8** | **-0.1** |
| **MKAR** | **Makanchi Array** | **80.66 319** | P | **P** | **09 54 41.3** | **-1.6** |
| | comp=Z,1.8nm,0.9s,baz=87,slow=7.3,SNR=12 | | | | | |
| **MKAR** | **Makanchi Array** | **80.66 319** | | **P** | **09 54 40.5** | **-2.4** |
| **MAKZ** | **Makanchi** | **80.87 319** | | **P** | **09 54 43.8** | **-0.2** |
| MAKZ | | | IAmb | IAmb | 09 54 44.8 | |
| | comp=Z,3.2nm,0.8s | | | | | |
| **ILAR** | **Eielson Array** | **81.47 22** | P | **P** | **09 54 45.6** | **-1.2** |
| | comp=Z,1.0nm,0.8s,baz=276,slow=5.1,SNR=8.7 | | | | | |
| **KSH** | **Kashi** | **83.40 310** | P | **P** | **09 54 59.8** | **+2.2** |
| KSH | | | pP | sP | 09 55 29.0 | +0.6 |
| KSH | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | |
| **KURK** | **Kurchatov** | **84.05 322** | | **P** | **09 54 59.8** | **-0.7** |
| KURK | | | IAmb | IAmb | 09 55 00.3 | |
| | comp=Z,3.6nm,0.9s | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.08 322** | P | **P** | **09 55 00.2** | **-0.4** |
| | comp=Z,1.5nm,0.9s,baz=102,slow=4.2,SNR=10 | | | | | |
| **AAK** | **Ala-Archa** | **85.09 313** | P | **P** | **09 55 06.1** | **0.0** |
| | comp=Z,3.4nm,0.7s,baz=109,slow=4.3,SNR=10 | | | | | |
| **AAK** | **Ala-Archa** | **85.09 313** | | **P** | **09 55 06.6** | **+0.5** |
| AAK | | | IAmb | IAmb | 09 55 07.2 | |
| | comp=Z,4.3nm,0.9s | | | | | |
| **BVAR** | **Borovoye Array** | **89.50 323** | P | **P** | **09 55 25.7** | **-1.2** |
| | comp=Z,1.4nm,0.7s,baz=65,slow=18,SNR=10 | | | | | |
| **PDAR** | **Pinedale Array** | **97.92 48** | LR | LR | 10 36 06.3 | |
| | comp=Z,24nm,18.4s,baz=234,slow=33 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.06 289** | PKPbc | **PKPbc** | **10 02 22.4** | **-1.1** |
| | comp=Z,4.5nm,0.7s,baz=58,slow=2.3,SNR=28 | | | | | |

*IDC* ***29*** *10:18:38.9±4.3,4°.36S×153°.21E,h121km±27km,mb3.2/3, mb1 3.5/4,mb1mx3.1/49,mbtmp3.7/4,Error ellipse: s-maj=71.2km s-min=30.5km az=118.0*

**ISC 29 10:18:38.5±2.1,4°.5S±0°.1×153°.3E±0°.2,h100km,n6, σ1s65/8,mb3.5/3,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **1.32** | **280** | P | | **Pn** | **10 19 02.9** | **+0.3** |
| | baz=180,slow=20 | | | | | | | |
| KRVT | | | | S | | **Sn** | **10 19 21.0** | **+0.2** |
| | baz=217,slow=20 | | | | | | | |
| **PMG** | **Port Moresby** | **7.80** | **231** | P | | **Pn** | **10 20 30.0** | **+0.6** |
| | 2.8nm,0.3s,baz=58,slow=8.8,SNR=4.2 | | | | | | | |
| PMG | | | | S | | **Sn** | **10 21 57.2** | **+1.1** |
| | 0.7nm,0.3s,baz=135,slow=23,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.01** | **229** | P | | **P** | **10 23 43.6** | **-0.6** |
| | 0.9nm,0.4s,baz=53,slow=9.9,SNR=20 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.70** | **223** | P | | **P** | **10 24 06.9** | **-1.7** |
| | 0.1nm,0.5s,baz=55,slow=8.8,SNR=5.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.25** | **241** | P | | **P** | **10 24 38.4** | **-1.7** |
| | 1.1nm,0.7s,baz=75,slow=7.4,SNR=2.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.73** | **289** | PKPbc | | **PKPdf** | **10 38 17.0** | **+2.4** |
| | 0.2nm,0.5s,baz=87,slow=1.7,SNR=2.0 | | | | | | | |

**NEIC 29 10:20:55.4±0.5,36°.444N±0°.008×98°.77W±0°.03,h5km±7km, ML2.1/24,Error ellipse: s-maj=3.2km s-min=1.1km az=97.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.20** | **251** | Pg | | Pg | 10 20 59.0 | -0.2 |
| U32A | | | | Sg | | Sg | 10 21 02.4 | +0.5 |
| U32A | | | | IAML | | | 10 21 02.5 | |
| | comp=N,436nm,0.3s | | | | | | | |

*IDC* ***29*** *10:28:15.6±1.4,35°.35N×137°.67E,h0km,mb3.4/2, mb1 3.7/3,mb1mx3.1/46,mbtmp3.6/3,ML3.5/1,MS3.2/1, Ms1 3.2/1,ms1mx2.4/46,Error ellipse: s-maj=33.7km s-min=12.9km az=104.0*

*JMA* ***29*** *10:28:19.5,35°.98N×139°.56E,h57km±1km,M3.0 Broadband fault plane solution: P waves. NP1: φ±59.00000°,δ18.00000°,λ90.00000°. NP2:φ±239.00000°, δ72.00000°,λ90.00000°. Principal axes: T Plg63.0000°, Azm149.0000°; N Plg0.0000°, Azm59.0000°; P Plg27.0000°, Azm329.0000°.*

**ISC 29 10:28:18.6±1.2,35°.95N±0°.04×139°.60E±0°.08,h64km±9km, n15,σ0s47/22,3C,Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JHU** | **Hanno** | **0.28** | **249** | ↑↑P | | **Pn** | **10 28 29.3** | **+0.4** |
| JHU | | | | S | | **Sn** | **10 28 36.2** | **-0.2** |
| **JAG** | **Ashikaga** | **0.48** | **346** | ↑↑P | | **Pn** | **10 28 31.0** | **+0.3** |
| JAG | | | | S | | **Sn** | **10 28 39.1** | **-0.4** |
| **JRY** | **Ryogami san** | **0.57** | **277** | ↑↑P | | **Pn** | **10 28 31.7** | **+0.1** |
| JRY | | | | S | | **Sn** | **10 28 41.2** | **+0.1** |
| **JOD2** | **Odawara 2** | **0.81** | **211** | P | | **Pn** | **10 28 34.4** | **0.0** |
| JOD2 | | | | S | | **Sn** | **10 28 45.5** | **-0.4** |
| **JKT** | **Katashina** | **0.86** | **341** | P | | **Pn** | **10 28 35.2** | **+0.1** |
| JKT | | | | S | | **Sn** | **10 28 46.8** | **-0.5** |
| **JYN** | **Shimob** | **0.97** | **242** | P | | **Pn** | **10 28 36.7** | **+0.2** |
| JYN | | | | S | | **Sn** | **10 28 49.6** | **-0.1** |
| **JFNN** | **Fujinakano** | **1.06** | **225** | S | | **Sn** | **10 28 51.6** | **-0.1** |
| **JIM2** | **Oshima 3** | **1.24** | **186** | P | | **Pn** | **10 28 39.9** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **1.27** | **298** | Pg | | **Pn** | **10 28 40.2** | **-0.1** |
| | 1.4nm,0.3s,baz=203,slow=20,SNR=39 | | | | | | | |
| MJAR | | | | Lg | | Lg | 10 28 56.0 | |
| | 1.8nm,0.3s,baz=86,slow=9.1,SNR=11 | | | | | | | |
| **MAT** | **Matsushiro** | **1.27** | **298** | P | | **Pn** | **10 28 40.5** | **+0.2** |
| MAT | | | | S | | **Sn** | **10 28 56.1** | **-0.5** |
| **MAT** | **Matsushiro** | **1.27** | **298** | P | | **Pn** | **10 28 40.5** | **+0.2** |
| **JHJ** | **Hachijo jima 2** | **2.83** | **177** | Pn | | **Pn** | **10 29 02.2** | **+0.8** |
| | 18nm,0.3s,baz=96,slow=22,SNR=5.6 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **10 29 33.0** | **-1.3** |
| | 66nm,0.3s,baz=266,slow=23,SNR=8.2 | | | | | | | |
| **JOW** | **Kunigami** | **13.27** | **230** | LR | | LR | 10 34 32.7 | |
| | comp=Z,134nm,21.3s,baz=312,slow=32 | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.81** | **186** | P | | **P** | **10 37 49.1** | **-0.2** |
| | 0.3nm,0.5s,baz=1.4,slow=7.7,SNR=7.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **59.54** | **186** | P | | **P** | **10 38 16.0** | **+0.5** |
| | 0.3nm,0.8s,baz=20,slow=5.4,SNR=2.4 | | | | | | | |

*IDC* ***29*** *10:37:27.7±2.9,6°.31S×129°.95E,h116km±38km,mb3.2/2, mb1 3.5/6,mb1mx3.2/32,mbtmp3.8/6,MS3.2/1,Ms1 3.2/1, ms1mx2.5/23,Error ellipse: s-maj=77.8km s-min=20.4km az=89.0*

**ISC 29 10:37:29.4±0.9,6°.25S±0°.07×130°.5E±0°.1,h150km,n14, σ1s95/15,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.80** | **342** | P | | **Pn** | **10 38 05.2** | **+3.0** |
| **FAKI** | **Fak Fak** | **3.76** | **29** | P | | **Pn** | **10 38 28.5** | **+1.9** |
| **SIJI** | **Sorong** | **5.40** | **9** | P | | **Pn** | **10 38 48.3** | **+0.1** |
| | 3.8nm,0.3s,baz=36,slow=22,SNR=25 | | | | | | | |
| SIJI | | | | S | | **Sn** | **10 39 45.9** | **-3.9** |
| | 16nm,0.3s,baz=229,slow=23,SNR=23 | | | | | | | |
| **SANI** | **Sanana** | **6.10** | **313** | P | | **Pn** | **10 38 58.8** | **+1.4** |
| **DRS** | **Darwin Rock St** | **6.16** | **176** | P | | **Pn** | **10 38 59.2** | **+1.0** |
| **MTN** | **Manton Dam** | **6.59** | **174** | P | | **Pn** | **10 39 04.3** | **+0.3** |
| **KDU** | **Kakadu** | **6.70** | **163** | P | | **Pn** | **10 39 06.2** | **+0.7** |
| **KNRA** | **Kununurra** | **9.52** | **190** | P | | **Pn** | **10 39 41.9** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **12.68** | **201** | P | | **Pn** | **10 40 21.4** | **-3.0** |
| | 0.5nm,0.3s,baz=21,slow=12,SNR=27 | | | | | | | |
| FITZ | | | | S | | Sn | 10 42 30.3 | -14 |
| | 0.5nm,0.3s,baz=68,slow=14,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.13** | **165** | P | | **Pn** | **10 40 42.0** | **-1.0** |
| | 0.8nm,0.3s,baz=334,slow=13,SNR=34 | | | | | | | |
| WRA | | | | S | | Sn | 10 43 09.2 | -10 |
| | 0.7nm,0.3s,baz=348,slow=21,SNR=6.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.64** | **169** | P | | **Pn** | **10 41 26.8** | **+0.9** |
| | 0.3nm,0.3s,baz=341,slow=9.4,SNR=40 | | | | | | | |
| ASAR | | | | S | | **S** | **10 44 39.6** | **-0.8** |
| | 0.2nm,0.3s,baz=339,slow=15,SNR=5.0 | | | | | | | |
| **KSRS** | **Korea Array** | **43.54** | **357** | LR | | LR | 11 03 41.1 | |
| | comp=Z,32nm,21.6s,baz=180,slow=36 | | | | | | | |
| **SONM** | **Songino Array** | **57.88** | **341** | P | | **P** | **10 47 06.1** | **+0.6** |
| | 0.1nm,0.3s,baz=165,slow=7.0,SNR=2.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.85** | **326** | P | | **P** | **10 48 12.3** | **+0.9** |
| | 0.5nm,0.4s,baz=111,slow=7.0,SNR=10 | | | | | | | |

*NEIC* ***29*** *10:40:28.9±2.0,2°.06N±0°.08×126°.69E±0°.08,h10km±1km, mb4.7/35,Error ellipse: s-maj=15.7km s-min=10.1km az=39.0*

*IDC* ***29*** *10:40:31.3±2.4,2°.13N×126°.67E,h31km±16km,mb4.1/21, mb1 4.2/23,mb1mx4.1/38,mbtmp4.3/23,ML3.7/2,MS3.4/16, Ms1 3.4/16,ms1mx3.1/75,Error ellipse: s-maj=22.5km s-min=11.0km az=75.0*

*BJI* ***29*** *10:40:33.0±0.0,2°.10N×126°.70E,h60km,mB5.0/15, mb4.5/33,Ms4.7/1,Ms7 4.3/1*

*DJA* ***29*** *10:40:34.9±0.2,2°.N±2°×12°.7E±°,h62km±3km,M4.7/24, mB5.2/10,mb4.8/24,MLv4.6/13,Mw(mB)4.7/10*

**ISC 29 10:40:33.3±0.4,2°.13N±0°.04×126°.73E±0°.05,h47km,n130, σ1s47/127,mb4.5/51,MS3.3/13,2D,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **1.49** | **155** | | | **Pn** | **10 40 56.8** | **-0.8** |
| **TNTI** | **Ternate** | **1.49** | **155** | P | | **Pn** | **10 40 57.2** | **-0.4** |
| TNTI | | | | S | | **Sn** | **10 41 19.4** | **+3.5** |
| **TNTI** | **Ternate** | **1.49** | **155** | P | | **Pn** | **10 40 57.3** | **-0.4** |
| **SGSI** | **Sangihe** | **1.96** | **322** | P | | **Pn** | **10 41 06.6** | **+2.5** |
| **KMSI** | **Cibinong** | **3.15** | **241** | P | | **Pn** | **10 41 21.2** | **+0.8** |
| KMSI | | | | S | | **Sn** | **10 41 59.2** | **+2.4** |
| **GTOI** | **Gorontalo** | **4.00** | **248** | P | | **Pn** | **10 41 31.4** | **-0.7** |
| GTOI | | | | S | | **Sn** | **10 42 22.2** | **+4.4** |
| **SANI** | **Sanana** | **4.21** | **190** | P | | **Pn** | **10 41 34.3** | **-0.7** |
| **SANI** | **Sanana** | **4.21** | **190** | P | | **Pn** | **10 41 34.3** | **-0.7** |
| **LUWI** | **Luwuk** | **5.06** | **232** | Pn | | **Pn** | **10 41 47.7** | **+1.1** |
| **LUWI** | **Luwuk** | **5.06** | **232** | P | | **Pn** | **10 41 48.2** | **+1.6** |
| | 2.0nm3μm299nm,0.7s | | | | | | | |
| **LUWI** | **Luwuk** | **5.06** | **232** | P | | **Pn** | **10 41 48.4** | **+1.8** |
| **MRSI** | **Marisa** | **5.06** | **251** | P | | **Pn** | **10 41 48.6** | **+1.9** |
| | 0.8nm2μm196nm,0.6s | | | | | | | |
| **KCP** | **Kidapawan** | **5.12** | **341** | ‖*e*P | | **Pn** | **10 41 51.4** | **+3.9** |
| **SIJI** | **Sorong** | **5.42** | **123** | Pn | | **Pn** | **10 41 52.3** | **+0.6** |
| | 1.3nm,0.3s,baz=134,slow=23,SNR=3.4 | | | | | | | |
| SIJI | | | | LR | | LR | 10 44 19.4 | |
| | comp=Z,976nm,21.5s,baz=284,slow=42 | | | | | | | |
| **APSI** | **Ampana** | **5.91** | **239** | P | | **Pn** | **10 42 00.4** | **+2.1** |
| | 0.9nm3μm284nm,0.8s | | | | | | | |
| **TOLI2** | **Tolitoli** | **6.03** | **260** | Pn | | **Pn** | **10 41 58.4** | **-1.6** |
| **TOLI2** | **Tolitoli** | **6.03** | **260** | P | | **Pn** | **10 41 59.3** | **-0.7** |
| **MPSI** | **Mapaga** | **7.06** | **256** | P | | **Pn** | **10 42 16.2** | **+2.1** |
| | 0.3nm1μm98nm,0.9s | | | | | | | |
| **TTSI** | **Tana Toraja** | **8.61** | **233** | P | | **Pn** | **10 42 36.6** | **+1.2** |
| | 1μm67nm,0.9s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.76** | **290** | Pn | | **Pn** | **10 42 38.5** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **9.22** | **229** | P | | **Pn** | **10 42 47.5** | **+3.8** |
| | 44nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **9.95** | **224** | Pn | | **Pn** | **10 42 52.8** | **-0.9** |
| | 1.0nm,0.3s,baz=43,slow=20,SNR=2.3 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **10 44 43.5** | **-0.5** |
| | 0.4nm,0.3s,baz=147,slow=22,SNR=1.4 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **11.19** | **291** | Pn | | **Pn** | **10 43 12.4** | **+1.6** |
| **KKM** | **Kota Kinabalu** | **11.19** | **291** | P | | **Pn** | **10 43 13.1** | **+2.3** |
| **BATI** | **Baumata** | **12.63** | **194** | LR | | LR | 10 48 51.9 | |
| | comp=Z,65nm,20.1s,baz=344,slow=40 | | | | | | | |
| **PLAI** | **Plampang** | **14.07** | **219** | P | | **P** | **10 43 57.5** | **+0.8** |
| | 67nm,0.9s | | | | | | | |
| **SBUM** | **Sibu** | **14.50** | **272** | | | **P** | **10 44 00.7** | **-0.8** |
| **JAY** | **Jayapura** | **14.71** | **108** | LR | | LR | 10 50 20.9 | |
| | comp=Z,146nm,19.6s,baz=320,slow=40 | | | | | | | |
| **DRS** | **Darwin Rock St** | **15.04** | **164** | P | | **Pn** | **10 44 04.1** | **+1.2** |
| **MTN** | **Manton Dam** | **15.50** | **164** | P | | **Pn** | **10 44 09.9** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **16.37** | **230** | P | | **P** | **10 44 20.9** | **-1.4** |
| JAGI | | | | | | IAmb | IAmb | 10 44 28.8 |
| | comp=Z,58nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **17.80** | **174** | P | | **Pn** | **10 44 36.4** | **-1.4** |
| KNRA | | | | | | IAmb | IAmb | 10 44 41.1 |
| | comp=Z,30nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **17.80** | **174** | P | | **P** | **10 44 39.7** | **+1.7** |
| **UGM** | **Wanagama** | **19.00** | **238** | P | | **P** | **10 44 51.1** | **-0.1** |
| | comp=Z,58nm,2.0s | | | | | | | |
| **KPJI** | **Karang Pucung** | **20.09** | **242** | P | | **P** | **10 45 02.7** | **-0.5** |
| | comp=Z,36nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.13** | **183** | P | | **P** | **10 45 03.0** | **-0.5** |
| | comp=Z,5.9nm,0.5s,baz=3.1,slow=7.7,SNR=4.2 | | | | | | | |
| FITZ | | | | PcP | | **PcP** | **10 49 17.2** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=37,slow=5.1,SNR=1.4 | | | | | | | |
| FITZ | | | | ScP | | **ScP** | **10 52 51.1** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=212,slow=7.8,SNR=2.1 | | | | | | | |
| FITZ | | | | LR | | LR | 10 53 33.0 | |
| | comp=Z,57nm,18.7s,baz=51,slow=39 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.13** | **183** | P | | **P** | **10 45 02.7** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **20.13** | **183** | P | | **P** | **10 45 03.3** | **-0.1** |
| **LEM** | **Lembang** | **21.05** | **245** | LR | | LR | 10 53 18.6 | |
| | comp=Z,101nm,18.9s,baz=54,slow=37 | | | | | | | |
| **TPUB** | **Ta-pu** | **21.86** | **345** | P | | **P** | **10 45 24.0** | **+1.8** |
| | comp=Z,37nm,1.5s | | | | | | | |
| **YHNB** | **Yeheng** | **23.00** | **347** | P | | **P** | **10 45 36.2** | **+1.9** |
| **KLSI** | | **23.00** | **253** | P | | **P** | **10 45 33.3** | **-1.0** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.02** | **161** | P | | **P** | **10 45 33.2** | **-1.2** |
| WB0 | | | | | | IAmb | IAmb | 10 45 36.6 |
| | comp=Z,24nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.16** | **162** | P | | **P** | **10 45 34.5** | **-1.3** |
| WRAB | | | | | | IAmb | IAmb | 10 45 38.1 |
| | comp=Z,19nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.16** | **162** | P | | **P** | **10 45 35.0** | **-0.9** |
| **WRA** | **Warramunga Arr** | **23.17** | **162** | P | | **P** | **10 45 34.7** | **-1.2** |
| | comp=Z,17nm,0.8s,baz=339,slow=11,SNR=23 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **10 49 23.6** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=321,slow=2.4,SNR=7.4 | | | | | | | |
| WRA | | | | S | | **S** | **10 49 41.9** | **-2.4** |
| | comp=Z,1.5nm,0.9s,baz=341,slow=18,SNR=5.9 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **10 52 59.3** | **+1.6** |
| | comp=Z,0.9nm,0.9s,baz=353,slow=2.9,SNR=4.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.17** | **162** | P | | **P** | **10 45 34.6** | **-1.4** |
| **WB2** | **Warramunga Arr** | **23.17** | **162** | P | | **P** | **10 45 34.2** | **-1.8** |
| WB2 | | | | IAmb | | IAmb | 10 45 39.8 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.25** | **161** | P | | **P** | **10 45 35.4** | **-1.3** |
| WR0 | | | | IAmb | | IAmb | 10 45 53.7 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **PMG** | **Port Moresby** | **23.36** | **120** | LR | | LR | 10 56 12.5 | |
| | comp=Z,108nm,21.1s,baz=335,slow=40 | | | | | | | |
| **KASI** | **Kota Agung** | **23.47** | **251** | P | | **P** | **10 45 39.4** | **+0.5** |
| | comp=Z,40nm,0.9s | | | | | | | |
| **MDSI** | **Maura Dua** | **23.47** | **254** | P | | **P** | **10 45 36.3** | **-2.6** |
| | comp=Z,743nmcomp=Z,9.8nm,1.2s | | | | | | | |
| **QIS** | **Mount Isa** | **25.84** | **151** | P | | **P** | **10 46 01.7** | **+1.2** |
| **AS31** | **Alice Springs** | **26.57** | **165** | P | | **P** | **10 46 06.8** | **-0.3** |
| **ASAR** | **Alice Springs** | **26.57** | **165** | P | | **P** | **10 46 06.6** | **-0.6** |
| | comp=Z,2.3nm,0.5s,baz=343,slow=8.2,SNR=15 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 49 31.0** | **+0.2** |
| | comp=Z,1.7nm,0.5s,baz=349,slow=2.1,SNR=11 | | | | | | | |
| ASAR | | | | S | | **S** | **10 50 38.8** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=350,slow=22,SNR=3.4 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **10 53 08.8** | **+1.6** |
| | comp=Z,0.8nm,0.9s,baz=349,slow=3.0,SNR=5.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.57** | **165** | P | | **P** | **10 46 07.9** | **+0.8** |
| **WRKA** | **Warakurna** | **27.05** | **177** | P | | **P** | **10 46 12.8** | **+1.4** |
| **PSI** | **Prapat** | **27.79** | **272** | LR | | LR | 10 58 49.4 | |
| | comp=Z,88nm,21.2s,baz=108,slow=40 | | | | | | | |
| **GSI** | **Gunungsitoli** | **29.15** | **269** | P | | **P** | **10 46 27.8** | **-2.5** |
| GSI | | | | IAmb | | IAmb | 10 46 30.0 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **29.23** | **140** | P | | **P** | **10 46 31.1** | **+0.2** |
| | comp=Z,2.5nm,0.8s,baz=329,slow=14,SNR=1.6 | | | | | | | |
| CTA | | | | LR | | LR | 10 59 32.2 | |
| | comp=Z,130nm,21.6s,baz=268,slow=39 | | | | | | | |
| **WHN** | **Wuhan** | **30.60** | **339** | ‖P | | **P** | **10 46 46.0** | **+3.1** |
| **NJ2** | **Nanjing** | **30.68** | **347** | *e*P | | **P** | **10 46 47.3** | **+3.8** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.71** | **303** | P | | **P** | **10 46 52.2** | **-0.6** |
| | comp=Z,1.1nm,0.5s,baz=118,slow=6.6,SNR=11 | | | | | | | |
| CMAR | | | | LR | | LR | 11 00 41.8 | |
| | comp=Z,32nm,20.4s,baz=65,slow=38 | | | | | | | |
| **CHTO** | **Chiang Mai** | **31.87** | **303** | P | | **P** | **10 46 53.3** | **-1.0** |
| CHTO | | | | IAmb | | IAmb | 10 46 54.2 | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **FORT** | **Forrest** | **32.75** | **178** | P | | **P** | **10 47 01.2** | **-0.6** |
| **JWT** | **Wachi** | **33.96** | **13** | P | | **P** | **10 47 12.5** | **+0.3** |
| **PZH** | **PanZhiHua** | **34.10** | **318** | P | | **P** | **10 47 12.8** | **-1.0** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,140nm,5.1s | | | | | | | |
| **HNR** | **Honiara** | **35.03** | **110** | LR | | LR | 11 01 24.7 | |
| | comp=Z,82nm,19.9s,baz=162,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **35.17** | **2** | P | | **P** | **10 47 22.4** | **-0.3** |
| | comp=Z,1.4nm,0.6s,baz=170,slow=9.9,SNR=2.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.85** | **16** | P | | **P** | **10 47 28.7** | **+0.1** |
| | comp=Z,3.7nm,0.9s,baz=187,slow=8.6,SNR=3.6 | | | | | | | |
| **CD2** | **Chengdu** | **35.94** | **325** | P | | **P** | **10 47 31.3** | **+1.8** |
| **STKA** | **Stephens Creek** | **36.64** | **159** | P | | **P** | **10 47 35.1** | **-0.2** |
| | comp=Z,3.1nm,0.5s,baz

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RAYN | | | | | IAmb | IAmb | 10 52 45.8 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **VNDA** | **Vanda** | **81.85** | **173** | P | | **P** | **10 52 46.6** | **-0.4** | |
| | comp=Z,4.5nm,0.8s,baz=0.0,slow=4.0,SNR=2.1 | | | | | | | | |
| **ONI** | **Oni** | **83.61** | **312** | IAmb | | IAmb | 10 53 06.8 | | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **KBZ** | **Khabaz** | **84.08** | **314** | P | | **P** | **10 52 58.9** | **-0.3** | |
| | comp=Z,4.1nm,0.9s,baz=159,slow=5.7,SNR=8.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.54** | **25** | P | | **P** | **10 53 10.7** | **-0.5** | |
| | comp=Z,0.3nm,0.6s,baz=249,slow=4.8,SNR=6.3 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **86.79** | **331** | *eP* | | **P** | **10 53 11.4** | **-1.0** | |
| KLMR | | | | AMP | | | 10 53 23.5 | | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **91.04** | **310** | P | | **P** | **10 53 32.8** | **-0.4** | |
| | comp=Z,1.6nm,0.9s,baz=112,slow=4.7,SNR=2.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **91.94** | **340** | P | | **P** | **10 53 35.8** | **-0.7** | |
| | comp=Z,4.7nm,1.0s,baz=81,slow=5.6,SNR=2.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **93.13** | **321** | P | | **P** | **10 53 41.5** | **-0.8** | |
| | comp=Z,0.2nm,0.4s,baz=69,slow=5.1,SNR=3.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | **93.24** | **332** | P | | **P** | **10 53 42.1** | **-0.5** | |
| | comp=Z,1.6nm,0.8s,baz=76,slow=8.0,SNR=6.1 | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **96.20** | **318** | IAmb | | IAmb | 10 53 58.7 | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **SCHQ** | **Schefferville** | **122.14** | **9** | PKP | | **PKiKP** | **10 59 23.1** | **0.0** | |
| | comp=Z,1.6nm,0.7s,baz=29,slow=8.7,SNR=4.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **122.57** | **53** | PKP | | **PKPdf** | **10 59 23.1** | **-1.4** | |
| | comp=Z,0.2nm,0.6s,baz=357,slow=1.8,SNR=2.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.40** | **287** | PKP | | **PKPdf** | **10 59 25.4** | **-1.0** | |
| | comp=Z,0.6nm,0.9s,baz=93,slow=2.5,SNR=2.8 | | | | | | | | |

*KRNET **29** 11:03:53.8±0.1,39.°55N×73.°72E,h8km,mb3.6*
*SOME **29** 11:03:54.2,39.°63N×73.°82E,h0km*
*NNC **29** 11:03:58.7±1.9,39.°78N×73.°79E,h0km,mb3.9,mpv3.6,*
*Error ellipse: s-maj=15.1km s-min=7.3km az=174.0*

**ISC 29 11:03:56.1±1.4,39.°33N±0.°06×73.°60E±0.°03,h31km±14km, n64,σ1§75/104,27C-20D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **1.35** | **332** | ⇑*i* | P | **Pn** | **11 04 16.9** | **-1.9** |
| OHH | baz=24 | | | ⇑*i* | S | **Sn** | **11 04 33.7** | **-2.0** |
| **DRK** | **Karamyk** | **1.40** | **277** | ⇑*i* | P | **Pb** | **11 04 21.7** | **-0.2** |
| DRK | baz=68 | | | ⇑*i* | S | **Sb** | **11 04 42.4** | **+2.9** |
| **SALK** | **Salom-Alik** | **1.56** | **6** | ⇑*e* | P | **Pn** | **11 04 19.6** | **-2.2** |
| SALK | baz=3.0 | | | ⇑*e* | S | **Sn** | **11 04 37.4** | **-3.6** |
| **BTK** | **Batken** | **2.27** | **290** | ⇑*i* | P | **Pb** | **11 04 34.8** | **-1.6** |
| BTK | baz=84 | | | ⇑*i* | S | **Sb** | **11 05 05.0** | **+0.9** |
| **GAR** | **Garm** | **2.58** | **264** | ⇑*i* | P | **Pb** | **11 04 40.6** | **-1.0** |
| GAR | baz=59 | | | ⇑*i* | S | **Sb** | **11 05 14.6** | **+1.7** |
| **ARLS** | **Aral** | **2.59** | **12** | ⇓*i* | P | **Pn** | **11 04 35.8** | **-0.1** |
| ARLS | baz=11 | | | ⇓*i* | S | **Sn** | **11 05 06.5** | **+0.1** |
| **ARK** | **Arkit** | **2.76** | **334** | ⇓*i* | P | **Pn** | **11 04 39.5** | **+1.2** |
| ARK | baz=30 | | | ⇓*i* | S | **Sn** | **11 05 12.9** | **+2.2** |
| **AML** | **Almayashu** | **2.80** | **1** | P | | **Pn** | **11 04 39.2** | **+0.1** |
| | SNR=99 | | | | | | | |
| **TRKS** | **Terek-Say** | **2.89** | **320** | ⇓*i* | P | **Pn** | **11 04 41.0** | **+0.9** |
| TRKS | baz=15 | | | ⇓*i* | S | **Sn** | **11 05 15.5** | **+1.6** |
| **UCH** | **Uchtor** | **2.98** | **13** | P | | **Pn** | **11 04 41.9** | **+0.3** |
| | SNR=53 | | | | | | | |
| **UCH** | **Uchtor** | **2.98** | **13** | ⇑*e* | P | **Pn** | **11 04 41.5** | **0.0** |
| UCH | baz=12 | | | ⇑*i* | S | **Sn** | **11 05 16.3** | **-0.1** |
| **MNAS** | **Manas** | **3.26** | **346** | ⇓*i* | P | **Pn** | **11 04 45.7** | **+0.5** |
| MNAS | baz=43 | | | ⇓*i* | S | **Sn** | **11 05 23.7** | **+0.7** |
| **EKS2** | **Erkin-Say** | **3.33** | **2** | P | | **Pn** | **11 04 48.3** | **+2.2** |
| | SNR=16 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.33** | **2** | ⇑*i* | P | **Pn** | **11 04 46.4** | **+0.3** |
| EKS2 | baz=1.0 | | | ⇑*i* | S | **Sn** | **11 05 24.9** | **+0.2** |
| **MRKS** | **Merke** | **3.42** | **355** | *eP* | | **Pb** | **11 04 53.4** | **-2.7** |
| MRKS | 30nm,0.4s | | | *eS* | | **Sb** | **11 05 36.7** | **-0.6** |
| **MRKS** | 46nm,0.5s **Merke** | **3.42** | **355** | Pg | | **Pb** | **11 04 53.4** | **-2.7** |
| MRKS | 30nm,0.4s | | | Lg | | Lg | 11 05 36.7 | |
| **KBK** | 46nm,0.5s **Karagaybulak** | **3.48** | **17** | P | | **Pn** | **11 04 49.8** | **+1.6** |
| | SNR=9.6 | | | | | | | |
| **KBK** | **Karagaybulak** | **3.48** | **17** | ⇑*e* | P | **Pn** | **11 04 48.4** | **+0.2** |
| KBK | baz=16 | | | ⇑*i* | S | **Sn** | **11 05 28.0** | **-0.3** |
| **CHGR** | **Chuyangaron** | **3.53** | **260** | ⇓*i* | P | **Pb** | **11 04 53.6** | **-4.2** |
| CHGR | baz=57 | | | ⇓*e* | S | **Sb** | **11 05 37.7** | **-2.5** |
| **ULHL** | **Ulahol** | **3.54** | **34** | P | | **Pn** | **11 04 54.4** | **-3.7** |
| | SNR=7.7 | | | | | | | |
| **ULHL** | **Ulahol** | **3.54** | **34** | ⇓*i* | P | **Pn** | **11 04 48.9** | **-0.1** |
| ULHL | baz=35 | | | ⇓*i* | S | **Sn** | **11 05 29.4** | **-0.5** |
| **FRU1** | **Bishkek** | **3.56** | **12** | ⇑*i* | P | **Pn** | **11 04 49.6** | **+0.3** |
| FRU1 | baz=11 | | | ⇑*i* | S | **Sn** | **11 05 30.3** | **0.0** |
| **BOOM** | **Boomskoye usch** | **3.62** | **29** | ⇓*i* | P | **Pn** | **11 04 50.3** | **+0.2** |
| BOOM | baz=29 | | | ⇓*i* | S | **Sn** | **11 05 31.4** | **-0.5** |
| **CHMS** | **Chumysh** | **3.77** | **13** | ⇓*e* | P | **Pn** | **11 04 52.0** | **0.0** |
| CHMS | baz=12 | | | ⇓*i* | S | **Sn** | **11 05 34.6** | **-0.7** |
| **TKM2** | **Tokmak 2** | **3.89** | **22** | ⇑Pn | | **Pn** | **11 04 54.5** | **+0.6** |
| TKM2 | 1.7nm,0.4s | | | ⇑Pg | | **Pb** | **11 05 02.8** | **-1.4** |
| TKM2 | 3.9nm,0.3s | | | ⇑Lg | | Lg | 11 05 46.9 | |
| **TKM2** | 13nm,0.7s **Tokmak 2** | **3.89** | **22** | ⇓*e* | P | **Pn** | **11 04 53.9** | **0.0** |
| TKM2 | baz=22 | | | ⇓*e* | S | **Sn** | **11 05 38.1** | **-0.5** |
| **KDJ** | **Kajisay** | **3.90** | **43** | ⇑*i* | P | **Pn** | **11 04 54.4** | **+0.4** |
| KDJ | baz=45 | | | ⇑*e* | S | **Sn** | **11 05 38.6** | **-0.2** |
| **USP** | **Ospenovka** | **3.99** | **9** | P | | **Pb** | **11 05 03.0** | **-2.7** |
| | SNR=7.7 | | | | | | | |
| **DGS** | **Degeres** | **4.24** | **22** | *eP* | | **Pb** | **11 05 08.1** | **-1.9** |
| DGS | 9.8nm,1.0s | | | *eS* | | **Sb** | **11 06 01.6** | **+0.9** |
| **DGS** | 15nm,0.4s **Degeres** | **4.24** | **22** | Pg | | **Pb** | **11 05 08.0** | **-1.9** |
| DGS | 12nm,0.6s | | | Lg | | Lg | 11 06 01.6 | |
| **IZV** | 15nm,0.4s **Izvestkoviy** | **4.34** | **31** | *eP* | | **Pb** | **11 05 10.0** | **-1.8** |
| IZV | 6.3nm,0.5s | | | *eS* | | **Sb** | **11 06 05.1** | **+1.3** |
| **IZV** | 21nm,1.0s **Izvestkoviy** | **4.34** | **31** | Pg | | **Pb** | **11 05 09.8** | **-2.0** |
| IZV | 6.3nm,0.5s | | | Lg | | Lg | 11 06 04.2 | |
| **MTBS** | 21nm,1.0s **Maitube** | **4.35** | **28** | *eP* | | **Pb** | **11 05 09.9** | **-2.0** |
| MTBS | 5.3nm,0.3s | | | *eS* | | **Sb** | **11 06 04.9** | **+0.9** |
| **MTBS** | 21nm,0.5s **Maitube** | **4.35** | **28** | Pg | | **Pb** | **11 05 09.9** | **-2.0** |
| MTBS | 7.2nm,0.3s | | | Lg | | Lg | 11 06 04.9 | |
| **KK09** | 21nm,0.5s **Karatay Array** | **4.45** | **329** | ⇑Pn | | **Pn** | **11 05 02.3** | **+0.9** |
| | 1.2nm,0.4s,baz=131,slow=12 | | | | | | | |
| KK09 | 3.4nm,0.5s | | | ⇓Pg | | **Pb** | **11 05 12.9** | **-0.6** |
| KK09 | 5.6nm,0.6s | | | ⇑Sn | | **Sn** | **11 05 53.4** | **+1.2** |
| KK09 | 6.5nm,0.5s,baz=135,slow=31 | | | ⇑Lg | | Lg | 11 06 09.8 | |
| **TNSS** | **Tian-Shan** | **4.48** | **33** | *eP* | | **Pb** | **11 05 12.6** | **-1.6** |
| TNSS | 5.2nm,0.6s | | | *eS* | | **Sb** | **11 06 09.1** | **+1.1** |
| **TNSS** | 9.3nm,0.7s **Tian-Shan** | **4.48** | **33** | Pg | | **Pb** | **11 05 11.9** | **-2.4** |
| TNSS | 6.7nm,0.3s | | | Lg | | Lg | 11 06 09.1 | |
| **MDOK** | 9.3nm,0.7s **Medeo** | **4.63** | **33** | *eP* | | **Pb** | **11 05 14.4** | **-2.2** |
| MDOK | 7.9nm,0.3s | | | *eS* | | **Sb** | **11 06 12.8** | **+0.9** |
| **MDOK** | 14nm,0.6s **Medeo** | **4.63** | **33** | Pg | | **Pb** | **11 05 14.4** | **-2.2** |
| MDOK | 7.9nm,0.3s | | | Lg | | Lg | 11 06 12.8 | |
| **KRBS** | 14nm,0.6s **Karabastau** | **4.63** | **19** | *eP* | | **Pb** | **11 05 14.5** | **-2.1** |
| KRBS | 8.0nm,0.5s | | | *eS* | | **Sb** | **11 06 12.6** | **+0.6** |
| **KRBS** | 13nm,0.8s **Karabastau** | **4.63** | **19** | Pg | | **Pb** | **11 05 14.5** | **-2.1** |
| KRBS | 8.0nm,0.5s | | | Lg | | Lg | 11 06 12.6 | |
| **BRLS** | 13nm,0.8s **Borolday** | **4.66** | **324** | *eP* | | **Pb** | **11 05 16.6** | **-0.5** |
| BRLS | 9.9nm,0.5s | | | *eS* | | **Sb** | **11 06 15.9** | **+3.1** |
| **BRLS** | 19nm,0.4s **Borolday** | **4.66** | **324** | Pg | | **Pb** | **11 05 16.6** | **-0.5** |
| BRLS | 9.9nm,0.5s | | | Lg | | Lg | 11 06 15.9 | |
| **KOTS** | 19nm,0.4s **Kotyrbulak** | **4.71** | **33** | *eP* | | **Pb** | **11 05 16.8** | **-1.3** |
| KOTS | 9.0nm,0.3s | | | *eS* | | **Sb** | **11 06 16.3** | **+1.9** |
| **KOTS** | 35nm,0.6s **Kotyrbulak** | **4.71** | **33** | Pg | | **Pb** | **11 05 16.8** | **-1.3** |
| KOTS | 9.0nm,0.3s | | | Lg | | Lg | 11 06 16.3 | |
| **KTBS** | 35nm,0.6s **Karatobe** | **4.95** | **27** | *eP* | | **Pb** | **11 05 20.3** | **-1.8** |
| KTBS | 3.8nm,0.5s | | | *eS* | | **Sb** | **11 06 22.4** | **+1.2** |
| **KTBS** | 19nm,0.4s **Karatobe** | **4.95** | **27** | Pg | | **Pb** | **11 05 20.3** | **-1.8** |
| KTBS | 3.8nm,0.5s | | | Lg | | Lg | 11 06 22.3 | |
| **KUU** | 19nm,0.4s **Kurty** | **5.00** | **23** | *eP* | | **Pb** | **11 05 20.6** | **-2.3** |
| KUU | 4.4nm,0.7s | | | *eS* | | **Sb** | **11 06 22.8** | **+0.4** |
| **KUU** | 16nm,0.5s **Kurty** | **5.00** | **23** | Pg | | **Pb** | **11 05 20.5** | **-2.3** |
| KUU | 4.4nm,0.7s | | | Lg | | Lg | 11 06 22.8 | |
| **CHKK** | 16nm,0.5s **Chushkaly** | **5.18** | **28** | *eP* | | **Pb** | **11 05 24.9** | **-1.1** |
| CHKK | 3.9nm,0.8s | | | *eS* | | **Sb** | **11 06 30.0** | **+2.3** |
| **CHKK** | 11nm,0.6s **Chushkaly** | **5.18** | **28** | Pg | | **Pb** | **11 05 24.9** | **-1.1** |
| CHKK | 3.9nm,0.8s | | | Lg | | Lg | 11 06 30.0 | |
| **SATY** | 11nm,0.6s **Saty** | **5.20** | **43** | *eP* | | **Pb** | **11 05 25.0** | **-1.2** |
| SATY | 7.1nm,0.6s | | | *eS* | | **Sb** | **11 06 30.8** | **+2.6** |
| **SATY** | 16nm,1.1s **Saty** | **5.20** | **43** | Pg | | **Pb** | **11 05 25.0** | **-1.2** |
| SATY | 7.1nm,0.6s | | | Lg | | Lg | 11 06 30.8 | |
| **ZHN** | 16nm,1.1s **Zhinishke** | **5.29** | **42** | *eP* | | **Pb** | **11 05 27.5** | **-0.4** |
| ZHN | 5.7nm,0.1s | | | *eS* | | **Sb** | **11 06 35.4** | **+4.5** |
| **ZHN** | 8.9nm,0.8s **Zhinishke** | **5.29** | **42** | Pg | | **Pb** | **11 05 27.5** | **-0.4** |
| ZHN | 5.7nm,0.1s | | | Lg | | Lg | 11 06 35.4 | |
| **UZB** | 8.9nm,0.8s **Uzynbulak** | **5.59** | **45** | *eP* | | **Pb** | **11 05 31.4** | **-1.6** |
| UZB | 4.2nm,0.3s | | | *eS* | | **Sb** | **11 06 42.0** | **+2.5** |
| **UZB** | 3.9nm,0.6s **Uzynbulak** | **5.59** | **45** | Pg | | **Pb** | **11 05 31.4** | **-1.6** |
| UZB | 4.2nm,0.3s | | | Lg | | Lg | 11 06 42.0 | |
| **KPKS** | 3.9nm,0.6s **Kokpek** | **5.63** | **41** | *eP* | | **Pb** | **11 05 32.8** | **-0.8** |
| KPKS | 5.1nm,0.2s | | | *eS* | | **Sb** | **11 06 43.7** | **+3.1** |
| **ARXS** | 14nm,0.6s **Arharly** | **5.81** | **32** | *eP* | | **Pb** | **11 05 34.5** | **-2.2** |
| ARXS | 3.4nm,0.5s | | | *eS* | | **Sb** | **11 06 46.5** | **+0.7** |
| **ARXS** | 8.1nm,0.7s **Arharly** | **5.81** | **32** | Pg | | **Pb** | **11 05 34.5** | **-2.2** |
| ARXS | 3.4nm,0.5s | | | Lg | | Lg | 11 06 46.5 | |
| **PDGK** | 8.1nm,0.7s **Podgornoye** | **5.97** | **46** | Pg | | **Pb** | **11 05 37.7** | **-1.6** |
| PDGK | 1.6nm,0.5s | | | Lg | | Lg | 11 06 52.6 | |
| **PDGK** | 4.6nm,1.0s **Podgornoye** | **5.97** | **46** | ⇑Pg | | **Pb** | **11 05 40.4** | **+1.0** |
| PDGK | 3.0nm,0.7s | | | ⇓Lg | | Lg | 11 06 53.4 | |
| **BLB** | 9.5nm,1.0s **Baldybastay** | **6.00** | **36** | *eP* | | **Pb** | **11 05 39.7** | **-0.2** |
| BLB | 7.2nm,0.4s | | | *eS* | | **Sb** | **11 06 55.5** | **+4.2** |
| **BLB** | 8.2nm,0.7s **Baldybastay** | **6.00** | **36** | Pg | | **Pb** | **11 05 39.7** | **-0.2** |
| BLB | 7.2nm,0.4s | | | Lg | | Lg | 11 06 55.5 | |
| | 8.2nm,0.7s | | | | | | | |

*IDC **29** 11:12:18.2±5.4,36.°21N×71.°03E,h219km±52km,mb3.1/5,*
*mb1 3.3/7,mb1mx2.9/48,mbtmp3.8/7,Error ellipse:*
*s-maj=49.6km s-min=23.7km az=31.0*

**ISC 29 11:12:05.7±1.2,35.°9N±0.°1×71.°0E±0.°2,h102km,n9, σ1§29/9,mb3.8/5,1C-3D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KK09** | **Karatay Array** | **7.22** | **357** | ⇓Pn | | Pn | 11 13 57.1 | +8.6 |
| | 2.1nm,0.6s,baz=179,slow=13 | | | | | | | |
| KK09 | 11nm,0.6s,baz=184,slow=24 | | | ⇓Sn | | **Sn** | **11 15 08.8** | **-0.1** |
| **AAK** | **Ala-Archa** | **7.25** | **21** | P | | Pn | 11 13 58.1 | +9.0 |
| | 3.7nm,0.3s,baz=180,slow=8.0,SNR=37 | | | | | | | |
| AAK | 0.7nm,0.3s,baz=218,slow=9.5,SNR=3.8 | | | S | | **Sn** | **11 15 08.3** | **-1.7** |
| **TKM2** | **Tokmak 2** | **7.86** | **26** | ⇑Pn | | Pn | 11 14 05.8 | +8.3 |
| | 3.9nm,0.5s | | | | | | | |
| TKM2 | 8.0nm,1.2s | | | ⇓Sn | | **Sn** | **11 15 26.8** | **+1.9** |
| **AKTO** | **Aktyubinsk** | **17.29** | **331** | P | | **Pn** | **11 16 01.9** | **+1.2** |
| | 0.3nm,0.3s,baz=151,slow=13,SNR=4.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.97** | **327** | P | | **P** | **11 19 13.0** | **-0.2** |
| | 1.2nm,0.9s,baz=97,slow=11,SNR=1.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.69** | **338** | P | | **P** | **11 19 42.6** | **-1.4** |
| | 3.3nm,0.9s,baz=110,slow=7.8,SNR=3.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.69** | **269** | P | | **P** | **11 22 39.8** | **+0.1** |
| | 0.4nm,0.3s,baz=45,slow=6.3,SNR=7.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.69** | **122** | P | | **P** | **11 24 12.8** | **-0.2** |
| | 0.2nm,0.7s,baz=328,slow=4.9,SNR=1.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **83.92** | **125** | P | | **P** | **11 24 24.7** | **+0.2** |
| | 0.5nm,1.1s,baz=318,slow=5.4,SNR=1.8 | | | | | | | |

**IDC 29 11:26:13.3±8.4,10.°43N×91.°84E,h0km,mb3.2/3, mb1 3.4/3,mb1mx3.2/58,mbtmp3.2/3,Error ellipse: s-maj=426.5km s-min=32.1km az=60.0,Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **H08S3** | **Diego Garcia H** | **26.32** | **228** | T | | T | 11 58 54.1 | |
| | baz=47,slow=76,SNR=6.6 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.33** | **228** | T | | T | 11 58 53.6 | |
| | baz=47,slow=76,SNR=6.4 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.34** | **228** | T | | T | 11 58 56.3 | |
| | baz=47,slow=76,SNR=6.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **37.14** | **349** | P | | P | 11 33 25.8 | -0.1 |
| | 0.2nm,0.6s,baz=168,slow=10,SNR=2.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.59** | **126** | P | | P | 11 35 21.9 | +0.1 |
| | 0.4nm,0.8s,baz=307,slow=8.2,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **53.29** | **130** | P | | P | 11 35 34.1 | -0.3 |
| | 0.3nm,0.8s,baz=303,slow=7.6,SNR=3.4 | | | | | | | |

*SKHL **29** 11:30:52.3±0.4,42.°90N×145.°60E,h39km±1km,mb3.9/4*
*JMA **29** 11:30:52.2±0.1,42.°92N×145.°50E,h44km±1km,M2.7*

**ISC 29 11:30:51.9±2.2,42.°9N±0.°1×145.°52E±0.°06,h43km±15km, n13,σ0§34/21,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JKHN** | **Kushirohamanak** | **0.32** | **306** | P | | **Pn** | **11 31 00.8** | **+0.1** |
| JKHN | | | | *e*S | | **Sn** | **11 31 07.0** | **+0.2** |
| **NEM2** | **Nemuro 2** | **0.50** | **19** | P | | **Pn** | **11 31 02.8** | **0.0** |
| NEM2 | | | | *e*S | | **Sn** | **11 31 10.2** | **-0.2** |
| **NMR** | **Nemuro--Hokkai** | **0.50** | **18** | *i* P | | **Pn** | **11 31 02.8** | **0.0** |
| NMR | | | | AMB | | AMB | 11 31 03.2 | |
| | 40nm,0.2s | | | | | | | |
| NMR | | | | *i* S | | **Sn** | **11 31 10.3** | **-0.2** |
| NMR | | | | A | | A | 11 31 10.8 | |
| | 170nm,0.2s | | | | | | | |
| NMR | | | | A | | A | 11 31 10.8 | |
| | 590nm,0.2s | | | | | | | |
| **AKK** | **Akkeshi** | **0.51** | **284** | *e*P | | **Pn** | **11 31 02.9** | **0.0** |
| AKK | | | | AMB | | AMB | 11 31 03.3 | |
| | 160nm,0.4s | | | | | | | |
| AKK | | | | *e*S | | **Sn** | **11 31 10.6** | **-0.1** |
| AKK | | | | A | | A | 11 31 10.8 | |
| | 210nm,0.2s | | | | | | | |
| AKK | | | | A | | A | 11 31 10.8 | |
| | 240nm,0.2s | | | | | | | |
| **JAK** | **Akkeshi** | **0.61** | **280** | P | | **Pn** | **11 31 04.2** | **0.0** |
| JAK | | | | *e*S | | **Sn** | **11 31 13.1** | **+0.1** |
| **GLVR** | **Golovnino** | **0.84** | **0** | *e*S | | **Sn** | **11 31 18.9** | **+0.3** |
| **JNK** | **Nakash** | **0.91** | **320** | P | | **Pn** | **11 31 08.1** | **-0.1** |
| JNK | | | | *e*S | | **Sn** | **11 31 19.0** | **-1.1** |
| **JNSB** | **Nemuroshibetsu** | **0.96** | **337** | P | | **Pn** | **11 31 09.2** | **+0.3** |
| **JRA** | **Rausu** | **1.08** | **345** | P | | **Pn** | **11 31 11.0** | **+0.4** |
| JRA | | | | *e*S | | **Sn** | **11 31 24.7** | **+0.3** |
| **YUK** | **Yuzh-Kuril'sk** | **1.17** | **12** | *e*P | | **Pn** | **11 31 11.7** | **-0.1** |
| YUK | | | | AMB | | AMB | 11 31 11.9 | |
| | 20nm,0.2s | | | | | | | |
| YUK | | | | *i* S | | **Sn** | **11 31 26.4** | **-0.1** |
| YUK | | | | A | | A | 11 31 27.0 | |
| | 270nm,0.2s | | | | | | | |
| YUK | | | | A | | A | 11 31 27.0 | |
| | 110nm,0.2s | | | | | | | |
| **JAR** | **Ashorobuto** | **1.34** | **288** | P | | **Pn** | **11 31 14.5** | **+0.3** |
| **SHO** | **Shikotan** | **1.37** | **44** | *e*P | | **Pn** | **11 31 14.5** | **0.0** |
| SHO | | | | AMB | | AMB | 11 31 14.9 | |
| | 20nm,0.2s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **11 31 31.3** | **-0.1** |
| SHO | | | | A | | A | 11 31 34.2 | |
| | 70nm,0.2s | | | | | | | |
| SHO | | | | A | | A | 11 31 34.2 | |
| | 50nm,0.2s | | | | | | | |
| **KUR** | **Kuril'sk** | **2.89** | **35** | *e*S | | Sn | 11 31 49.6 | -19 |

*IDC **29** 11:33:37.0±1.0,28.°64S×179.°19W,h380km±9km,mb4.2/14,*
*mb1 4.3/17,mb1mx4.0/31,mbtmp5.0/17,Error ellipse:*
*s-maj=16.0km s-min=12.8km az=167.0*
*NEIC **29** 11:33:37.8±1.7,28.°6S±0.°1×179.°1W±0.°1,h384km±5km,*
*mb4.5/38,Error ellipse: s-maj=15.6km s-min=14.5km*
*az=123.0*
*NOU **29** 11:33:39.5,28.°81S×178.°76W,h433km,mb4.8/46,*
*Kermadec Islands Region*

**ISC 29 11:33:38.2±0.3,28.°63S±0.°05×179.°01W±0.°06,h400km, n164,σ1§90/180,mb4.5/48,2C,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.14** | **123** | P | | **Pn** | **11 34 27.7** | **-2.0** |
| | 2μm,0.3s,baz=144,slow=4.2,SNR=40 | | | | | | | |
| RAO | 2μm,0.3s,baz=234,slow=23,SNR=8.4 | | | S | | **S** | **11 35 04.5** | **-6.9** |
| **RAO** | **Raoul Island** | **1.14** | **123** | | | **Pn** | **11 34 27.8** | **-1.9** |
| RAO | | | | Sn | | **S** | **11 35 08.4** | **-3.0** |
| **OUZ** | **Omahuta** | **9.09** | **222** | | | **Pn** | **11 35 46.1** | **+0.6** |
| **URZ** | **Urewera** | **10.13** | **198** | P | | **P** | **11 35 53.8** | **-3.3** |
| | 5.1nm,0.3s,baz=276,slow=4.0,SNR=52 | | | | | | | |
| URZ | 31nm,0.3s,baz=342,slow=22,SNR=23 | | | S | | **S** | **11 37 44.2** | **-7.4** |
| **URZ** | **Urewera** | **10.13** | **198** | P | | **P** | **11 35 57.2** | **+0.1** |
| **HIZ** | **Hauiti** | **11.10** | **206** | P | | **Pn** | **11 36 10.0** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **11.15** | **198** | P | | **P** | **11 36 07.1** | **-1.3** |
| **MSVF** | **Nonsavu** | **11.18** | **345** | P | | **P** | **11 36 06.5** | **-2.5** |
| | 23nm,0.3s,baz=185,slow=7.0,SNR=79 | | | | | | | |
| MSVF | baz=102,slow=17,SNR=4.4 | | | S | | **S** | **11 38 11.8** | **-1.7** |
| **MSVF** | **Nonsavu** | **11.18** | **345** | P | | **P** | **11 36 07.6** | **-1.4** |
| **NFK** | **Norfolk Island** | **11.45** | **265** | P | | **Pn** | **11 36 17.3** | **+4.3** |
| | 282nm,1.4s | | | | | | | |
| **NIUE** | **Niue** | **12.62** | **43** | P | | **P** | **11 36 24.1** | **-0.7** |
| **NIUE** | **Niue** | **12.62** | **43** | P | | **P** | **11 36 25.0** | **+0.1** |
| **PINNC** | **Pines Island,** | **13.60** | **293** | P | | **P** | **11 36 35.6** | **+0.1** |
| **QRZ** | **Quartz Range** | **14.00** | **207** | P | | **P** | **11 36 38.7** | **-1.0** |
| **OUENC** | **Ouen Island, N** | **14.19** | **293** | P | | **P** | **11 36 46.1** | **+4.2** |
| **YATNC** | **Mamie plateau,** | **14.32** | **294** | P | | **P** | **11 36 46.6** | **+3.2** |
| **ONTNC** | **Ouen Toro** | **14.55** | **292** | P | | **P** | **11 36 48.4** | **+2.5** |
| **DZM** | **Mont Dzumac** | **14.68** | **293** | P | | **P** | **11 36 47.0** | **-0.3** |
| | 3.2nm,0.3s,baz=117,slow=17,SNR=47 | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.68** | **293** | P | | **P** | **11 36 47.8** | **+0.4** |
| **DZM** | **Mont Dzumac** | **14.68** | **293** | P | | **P** | **11 36 49.6** | **+2.3** |
| **LIFNC** | **LIFOU** | **14.73** | **299** | P | | **P** | **11 36 47.7** | **-0.2** |
| **LIFNC** | **LIFOU** | **14.73** | **299** | P | | **P** | **11 36 50.5** | **+2.7** |
| **NOUC** | **Port Laguerre** | **14.78** | **293** | P | | **P** | **11 36 50.6** | **+2.3** |
| **KHZ** | **Kahutara** | **15.02** | **202** | P | | **P** | **11 36 49.9** | **-0.8** |
| **AFI** | **Afiamalu** | **16.12** | **26** | P | | **P** | **11 37 00.8** | **-2.1** |
| | 11nm,0.3s,baz=195,slow=3.8,SNR=12 | | | | | | | |
| AFI | 20nm,0.3s,baz=53,slow=23,SNR=9.7 | | | S | | **S** | **11 39 44.7** | **-7.7** |
| **AFI** | **Afiamalu** | **16.12** | **26** | P | | **P** | **11 37 01.5** | **-1.4** |
| **AFI** | **Afiamalu** | **16.12** | **26** | P | | **P** | **11 37 03.7** | **+0.8** |
| **RPZ** | **Rata Peaks** | **17.03** | **205** | P | | **P** | **11 37 08.1** | **-4.2** |
| | 0.8nm,0.3s,baz=274,slow=23,SNR=1.8 | | | | | | | |
| RPZ | 1.6nm,0.3s,baz=357,slow=18,SNR=9.5 | | | S | | **S** | **11 40 08.5** | **-1.0** |
| **RPZ** | **Rata Peaks** | **17.03** | **205** | P | | **P** | **11 37 10.0** | **-2.3** |
| **KOUNC** | **Koumac, New Ca** | **17.18** | **294** | P | | **P** | **11 37 16.0** | **+1.9** |
| **SANVU** | **Saraoutou** | **18.29** | **313** | P | | **P** | **11 37 25.1** | **-0.8** |
| SANVU | comp=Z,47nm,0.7s | | | IAmb | | IAmb | 11 37 28.9 | |
| **SANVU** | **Saraoutou** | **18.29** | **313** | P | | **P** | **11 37 30.8** | **+4.9** |
| **ARMA** | **Armidale** | **25.58** | **259** | P | | **P** | **11 38 33.9** | **+0.7** |
| ARMA | comp=Z,17nm,1.2s | | | IAmb | | IAmb | 11 38 41.1 | |
| **EIDS** | **Eidsvold** | **26.81** | **270** | P | | **P** | **11 38 44.5** | **+0.5** |
| EIDS | comp=Z,32nm,1.4s | | | IAmb | | IAmb | 11 38 52.4 | |
| **RK1H** | **Rockhampton Ha** | **27.86** | **274** | P | | **P** | **11 38 54.6** | **+1.4** |
| | comp=Z,53nm,0.9s | | | | | | | |
| **CAN** | **Canberra** | **27.86** | **248** | P | | **P** | **11 38 54.5** | **+1.3** |
| CAN | comp=Z,18nm,1.2s | | | IAmb | | IAmb | 11 38 55.7 | |
| **RMQ** | **Roma** | **28.61** | **267** | P | | **P** | **11 39 03.4** | **+3.5** |
| **TARA** | **Tarawa** | **30.80** | **344** | P | | **P** | **11 39 10.3** | **-0.7** |
| **TOO** | **Toolangi** | **30.90** | **244** | P | | **P** | **11 39 20.2** | **+0.5** |
| TOO | comp=Z,23nm,1.5s | | | IAmb | | IAmb | 11 39 47.8 | |
| **BRAT** | **Ballarat** | **32.13** | **244** | P | | **P** | **11 39 33.0** | **+2.7** |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **QLP** | **Quilpie** | **32.55** | **265** | P | | **P** | **11 39 35.0** | **+0.9** |
| **CTA** | **Charters Tower** | **32.67** | **277** | P | | **P** | **11 39 34.8** | **-0.5** |
| | com

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **XMAS** | **Kiritimati** | **36.86** | **38** | P | | **P** | **11 40 12.6** | **+2.0** | |
| **LCRK** | **Leigh Creek** | **37.10** | **256** | P | | **P** | **11 40 12.0** | **-0.4** | |
| **COEN** | **Coen** | **37.96** | **285** | P | | **P** | **11 40 19.7** | **-0.1** | |
| COEN | | | | IAmb | | IAmb | 11 40 21.0 | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **COEN** | **Coen** | **37.96** | **285** | P | | **P** | **11 40 20.5** | **+0.8** | |
| **QIS** | **Mount Isa** | **38.33** | **273** | P | | **P** | **11 40 22.7** | **-0.1** | |
| **BBOO** | **Buckleboo** | **38.63** | **252** | P | | **P** | **11 40 24.4** | **-0.7** | |
| **OOD** | **Oodnadatta** | **39.74** | **260** | P | | **P** | **11 40 34.0** | **-0.2** | |
| **MULG** | **Mulgathing** | **40.67** | **256** | P | | **P** | **11 40 40.7** | **-1.0** | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **41.47** | **69** | P | | **P** | **11 40 47.3** | **-1.1** | |
| **MANU** | **Manus Island** | **41.55** | **303** | P | | **P** | **11 40 48.3** | **-0.6** | |
| MANU | | | | IAmb | | IAmb | 11 40 49.7 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **AS31** | **Alice Springs** | **42.34** | **265** | P | | **P** | **11 40 54.6** | **-0.6** | |
| **ASAR** | **Alice Springs** | **42.34** | **265** | P | | **P** | **11 40 54.2** | **-1.0** | |
| | comp=Z,7.5nm,0.8s,baz=93,slow=6.4,SNR=127 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **11 42 40.0** | **-0.2** | |
| | comp=Z,1.7nm,0.7s,baz=105,slow=5.5,SNR=5.2 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **11 45 54.1** | **+2.1** | |
| | comp=Z,1.6nm,0.8s,baz=107,slow=3.9,SNR=7.4 | | | | | | | | |
| ASAR | | | | S | | **S** | **11 46 40.2** | **-5.9** | |
| | comp=Z,0.4nm,0.8s,baz=97,slow=14,SNR=3.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.34** | **265** | P | | **P** | **11 40 53.9** | **-1.3** | |
| **WR0** | **Warramunga Arr** | **42.99** | **271** | P | | **P** | **11 40 59.5** | **-0.8** | |
| **WB2** | **Warramunga Arr** | **43.16** | **271** | P | | **P** | **11 41 00.9** | **-0.8** | |
| WB2 | | | | IAmb | | IAmb | 11 41 02.5 | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.16** | **271** | P | | **P** | **11 41 01.1** | **-0.7** | |
| WRAB | | | | IAmb | | IAmb | 11 41 02.4 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.16** | **271** | P | | **P** | **11 41 01.4** | **-0.3** | |
| **WRA** | **Warramunga Arr** | **43.17** | **271** | P | | **P** | **11 41 00.5** | **-1.3** | |
| | comp=Z,8.7nm,0.5s,baz=109,slow=6.2,SNR=139 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **11 42 42.8** | **-0.2** | |
| | comp=Z,2.8nm,0.6s,baz=120,slow=3.5,SNR=5.0 | | | | | | | | |
| WRA | | | | ScP | | **ScP** | **11 45 58.8** | **+3.4** | |
| | comp=Z,1.5nm,0.8s,baz=104,slow=4.3,SNR=5.0 | | | | | | | | |
| WRA | | | | S | | **S** | **11 46 52.9** | **-5.2** | |
| | comp=Z,6.1nm,0.9s,baz=106,slow=13,SNR=9.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.17** | **271** | P | | **P** | **11 41 01.0** | **-0.8** | |
| **WB0** | **Warramunga Arr** | **43.19** | **271** | P | | **P** | **11 41 01.1** | **-0.8** | |
| WB0 | | | | IAmb | | IAmb | 11 41 02.6 | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| **FORT** | **Forrest** | **45.67** | **254** | P | | **P** | **11 41 20.0** | **-1.1** | |
| FORT | | | | IAmb | | IAmb | 11 41 20.3 | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **JAY** | **Jayapura** | **46.31** | **297** | P | | **P** | **11 41 25.4** | **-0.9** | |
| | comp=Z,27nm,0.8s,baz=146,slow=6.0,SNR=4.6 | | | | | | | | |
| **WRKA** | **Warakurna** | **46.85** | **261** | P | | **P** | **11 41 29.0** | **-1.3** | |
| **KDU** | **Kakadu** | **47.76** | **279** | P | | **P** | **11 41 36.7** | **-0.5** | |
| **MTN** | **Manton Dam** | **48.85** | **278** | P | | **P** | **11 41 45.1** | **-0.4** | |
| MTN | | | | IAmb | | IAmb | 11 41 45.9 | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **278** | P | | **P** | **11 41 47.0** | **+1.5** | |
| **DRS** | **Darwin Rock St** | **49.24** | **278** | P | | **P** | **11 41 48.1** | **-0.3** | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **KNRA** | **Kununurra** | **49.71** | **273** | P | | **P** | **11 41 51.5** | **-0.3** | |
| KNRA | | | | IAmb | | IAmb | 11 41 52.8 | | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **KNRA** | **Kununurra** | **49.71** | **273** | P | | **P** | **11 41 51.6** | **-0.3** | |
| **FITZ** | **Fitzroy Crossi** | **51.49** | **269** | P | | **P** | **11 42 04.3** | **-0.8** | |
| **FITZ** | **Fitzroy Crossi** | **51.49** | **269** | P | | **P** | **11 42 05.1** | **+0.1** | |
| **FAKI** | **Fak Fak** | **52.91** | **290** | P | | **P** | **11 42 13.8** | **-1.6** | |
| FAKI | | | | IAmb | | IAmb | 11 42 15.4 | | |
| | comp=Z,25nm,1.2s | | | | | | | | |
| **MORW** | **Morawa** | **56.20** | **253** | P | | **P** | **11 42 37.5** | **-1.1** | |
| **SOEI** | **Soe** | **56.24** | **278** | P | | **P** | **11 42 39.3** | **+0.1** | |
| SOEI | | | | IAmb | | IAmb | 11 42 55.9 | | |
| | comp=Z,42nm,1.0s | | | | | | | | |
| **SOEI** | **Soe** | **56.24** | **278** | P | | **P** | **11 42 37.1** | **-2.0** | |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **SOEI** | **Soe** | **56.24** | **278** | P | | **P** | **11 42 40.0** | **+0.9** | |
| **CASY** | **Casey** | **56.29** | **207** | P | | **P** | **11 42 38.3** | **-0.3** | |
| CASY | | | | IAmb | | IAmb | 11 42 44.1 | | |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **BATI** | **Baumata** | **56.56** | **277** | P | | **P** | **11 42 41.4** | **+0.2** | |
| | comp=Z,26nm,0.6s,baz=98,slow=8.3,SNR=3.5 | | | | | | | | |
| **SANI** | **Sanana** | **58.61** | **286** | P | | **P** | **11 42 54.2** | **-1.1** | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| **SANI** | **Sanana** | **58.61** | **286** | P | | **P** | **11 42 54.3** | **-1.1** | |
| | comp=Z,31nm,0.7s | | | | | | | | |
| **GIRL** | **Giralia** | **59.80** | **259** | P | | **P** | **11 43 03.8** | **+0.5** | |
| **QSPA** | **South Pole Qui** | **61.47** | **180** | P | | **P** | **11 43 16.9** | **+3.0** | |
| **PLAI** | **Plampang** | **62.34** | **275** | P | | **P** | **11 43 19.8** | **-0.4** | |
| | comp=Z,57nm,0.9s | | | | | | | | |
| **PLAI** | **Plampang** | **62.34** | **275** | P | | **P** | **11 43 19.8** | **-0.4** | |
| | comp=Z,57nm,0.9s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **65.68** | **274** | P | | **P** | **11 43 39.7** | **-2.0** | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **65.68** | **274** | P | | **P** | **11 43 41.4** | **-0.3** | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **UGM** | **Wanagama** | **69.12** | **272** | P | | **P** | **11 44 02.2** | **-0.8** | |
| **BELA** | **Belgrano 2** | **71.65** | **173** | P | | **P** | **11 44 18.5** | **+1.4** | |
| **KSM** | **Kuching** | **73.83** | **281** | P | | **P** | **11 44 30.9** | **+0.1** | |
| KSM | | | | IAmb | | IAmb | 11 44 48.9 | | |
| | comp=Z,33nm,1.2s | | | | | | | | |
| **MDSI** | **Maura Dua** | **76.29** | **272** | P | | **P** | **11 44 43.4** | **-1.3** | |
| | comp=Z,739nmcomp=Z,23nm,0.8s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **76.29** | **326** | P | | **P** | **11 44 44.0** | **-0.2** | |
| | comp=Z,15nm,0.9s,baz=162,slow=5.3,SNR=14 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **76.29** | **326** | P | | **P** | **11 44 44.3** | **+0.1** | |
| MJAR | | | | IAmb | | IAmb | 11 44 44.9 | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **MAT** | **Matsushiro** | **76.29** | **326** | P | | **P** | **11 44 43.7** | **-0.5** | |
| **TPUB** | **Ta-pu** | **77.75** | **305** | P | | **P** | **11 44 51.0** | **-1.6** | |
| **JHS** | **Saijyo** | **77.77** | **321** | P | | **P** | **11 44 52.9** | **+0.5** | |
| **SNAA** | **Sanae** | **79.94** | **179** | P | | **P** | **11 45 04.5** | **+0.9** | |
| **SNAA** | **Sanae** | **79.94** | **179** | P | | **P** | **11 45 05.0** | **+1.4** | |
| SNAA | | | | IAmb | | IAmb | 11 45 20.7 | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **80.12** | **177** | P | | **P** | **11 45 05.9** | **+1.4** | |
| **VNA2** | **Neumayer--Watz** | **80.55** | **177** | P | | **P** | **11 45 08.6** | **+1.9** | |
| | baz=141,slow=2.0 | | | | | | | | |
| **KSRS** | **Korea Array** | **82.43** | **320** | P | | **P** | **11 45 17.7** | **+0.8** | |
| | comp=Z,6.1nm,0.9s,baz=136,slow=5.4,SNR=9.9 | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **83.89** | **346** | P | | **P** | **11 45 24.7** | **+0.8** | |
| **PETK** | **Petropavlovsk-** | **83.89** | **346** | P | | **P** | **11 45 24.1** | **+0.2** | |
| | comp=Z,7.8nm,0.6s,baz=137,slow=7.3,SNR=19 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **83.89** | **346** | P | | **P** | **11 45 24.3** | **+0.4** | |
| **PLCA** | **Paso Flores** | **84.36** | **134** | P | | **P** | **11 45 29.5** | **+2.7** | |
| | comp=Z,4.6nm,1.1s,baz=236,slow=5.5,SNR=7.0 | | | | | | | | |
| **PLCA** | **Paso Flores** | **84.36** | **134** | P | | **P** | **11 45 29.8** | **+2.9** | |
| PLCA | | | | IAmb | | IAmb | 11 45 31.0 | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **LPIG** | **La Paz** | **84.36** | **59** | P | | **P** | **11 45 29.3** | **+2.4** | |
| | comp=Z,13nm,0.3s,baz=28,slow=4.6,SNR=4.4 | | | | | | | | |
| **GSI** | **Gunungsitoli** | **84.83** | **274** | P | | **P** | **11 45 29.4** | **-0.2** | |
| **USRK** | **Ussuriysk Ar.** | **85.20** | **327** | P | | **P** | **11 45 32.1** | **+1.5** | |
| | comp=Z,4.0nm,0.7s,baz=196,slow=5.6,SNR=6.1 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **85.20** | **327** | P | | **P** | **11 45 32.8** | **+2.2** | |
| **NVAR** | **Mina Array Bea** | **87.55** | **43** | P | | **P** | **11 45 44.6** | **+2.3** | |
| | comp=Z,0.8nm,0.8s,baz=224,slow=8.0,SNR=6.5 | | | | | | | | |
| **HNS** | **HongShan** | **90.38** | **313** | ⇑P | | **P** | **11 45 57.0** | **+1.8** | |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.98** | **290** | P | | **P** | **11 46 04.3** | **+1.2** | |
| | comp=Z,1.5nm,0.6s,baz=149,slow=3.4,SNR=11 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.98** | **290** | P | | **P** | **11 46 03.3** | **+0.3** | |
| **TXAR** | **Lajitas Array** | **92.19** | **58** | P | | **P** | **11 46 05.6** | **+1.7** | |
| | comp=Z,0.2nm,0.6s,baz=219,slow=7.6,SNR=3.6 | | | | | | | | |
| **KMI** | **Kunming** | **92.23** | **297** | ⇑P | | **P** | **11 46 06.3** | **+1.9** | |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **XAN** | **Xi'an** | **92.34** | **308** | P | | **P** | **11 46 05.3** | **+0.9** | |
| XAN | | | | pP | | PcP | 11 46 15.5 | +11 | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| **PZH** | **PanZhiHua** | **93.70** | **298** | P | | **P** | **11 46 12.8** | **+1.8** | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,150nm,5.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **94.37** | **315** | *e*P | | **P** | **11 46 15.8** | **+2.2** | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,250nm,5.1s | | | | | | | | |
| **LZH** | **Lanzhou** | **96.96** | **307** | *e*P | | P | 11 46 30.8 | +5.3 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **SONM** | **Songino Array** | **101.24** | **319** | P | | **Pdif** | **11 46 44.8** | **+0.6** | |
| | comp=Z,0.6nm,0.7s,baz=127,slow=3.8,SNR=3.0 | | | | | | | | |
| SONM | | | | PP | | **PP** | **11 51 00.4** | **+0.8** | |
| | comp=Z,0.8nm,0.9s,baz=120,slow=8.5,SNR=2.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **115.96** | **311** | PKP | | **PKPdf** | **11 51 33.4** | **-0.6** | |
| | comp=Z,0.9nm,0.7s,baz=92,slow=1.4,SNR=9.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **115.96** | **311** | | | **PKPdf** | **11 51 33.7** | **-0.3** | |
| **ZALV** | **Zalesovo Beam** | **116.13** | **319** | PKP | | **PKPdf** | **11 51 32.8** | **-1.2** | |
| | comp=Z,0.8nm,0.7s,baz=267,slow=2.8,SNR=4.3 | | | | | | | | |
| **KURK** | **Kurchatov** | **119.19** | **315** | PKPdf | | **PKPdf** | **11 51 39.7** | **-0.3** | |
| **KKAR** | **Karatay Array** | **123.35** | **305** | PKPdf | | **PKiKP** | **11 51 48.5** | **-0.1** | |
| **ARU** | **Arti** | **131.16** | **321** | PKP | | **PKPdf** | **11 52 03.1** | **+0.4** | |
| | comp=Z,0.7nm,0.3s,baz=30,slow=5.7,SNR=4.2 | | | | | | | | |
| ARU | | | | SKPbc | | **SKPab** | **11 54 51.5** | **+1.4** | |
| | comp=Z,2.1nm,0.7s,baz=129,slow=1.3,SNR=8.1 | | | | | | | | |
| **KLMR** | **Klimovskoe** | **138.79** | **332** | *e*PKPdf | | **PKPdf** | **11 52 12.3** | **-4.5** | |
| KLMR | | | | AMP | | | 11 52 17.4 | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| KLMR | | | | *es*PKPdf | | **sPKPdf** | **11 54 28.3** | **-5.7** | |
| **FINES** | **FINESS Array B** | **143.19** | **340** | PKP | | PKPbc | 11 52 22.6 | +0.2 | |
| | comp=Z,4.2nm,0.3s,baz=58,slow=3.6,SNR=45 | | | | | | | | |
| **KBZ** | **Khabaz** | **143.38** | **306** | PKP | | PKPbc | 11 52 23.9 | +0.4 | |
| | comp=Z,5.0nm,0.9s,baz=107,slow=3.6,SNR=9.6 | | | | | | | | |
| **VSU** | **Vasula** | **145.26** | **336** | *e*P | | **PKPab** | **11 52 30.2** | **+0.5** | |
| **MTSE** | **Matsula** | **146.04** | **339** | *e*P | | **PKPbc** | **11 52 32.0** | **+0.7** | |
| **NC303** | **NORSAR Array S** | **146.67** | **351** | | | **PKPbc** | **11 52 33.3** | **+0.3** | |
| **UPP** | **Uppsala** | **146.78** | **345** | *e*P | | **PKPbc** | **11 52 33.4** | **+0.1** | |
| **NOA** | **NORSAR Array B** | **146.87** | **351** | PKPbc | | **PKPbc** | **11 52 33.9** | **+0.2** | |
| | comp=Z,9.7nm,0.7s,baz=16,slow=4.5,SNR=28 | | | | | | | | |
| **HFS** | **Hagfors** | **147.34** | **348** | PKPbc | | **PKPbc** | **11 52 34.8** | **-0.1** | |
| | comp=Z,15nm,0.7s,baz=191,slow=2.3,SNR=30 | | | | | | | | |
| **IDID** | **Didziasalis** | **147.54** | **332** | *e*P | | **PKPbc** | **11 52 35.8** | **+0.3** | |
| **ISAL** | **Salakas** | **147.60** | **333** | *e*P | | **PKiKP** | **11 52 37.2** | **-0.2** | |
| **IGN** | **Ignalina** | **147.72** | **333** | *e*P | | **PKiKP** | **11 52 37.3** | **-0.4** | |
| **VIKU** | **Vikbolandet** | **148.21** | **344** | *e*P | | **PKPbc** | **11 52 37.5** | **+0.4** | |
| **KONO** | **Kongsberg** | **148.43** | **352** | | | **PKPbc** | **11 52 38.2** | **+0.5** | |
| **PABE** | **Paberze** | **148.48** | **335** | | | **PKPbc** | **11 52 38.4** | **+0.5** | |
| **PABE** | **Paberze** | **148.48** | **335** | *e*P | | **PKiKP** | **11 52 38.8** | **-0.3** | |
| **AKASG** | **Malin Array Be** | **149.36** | **324** | PKPbc | | **PKPbc** | **11 52 40.5** | **+0.3** | |
| | comp=Z,16nm,0.6s,baz=46,slow=3.0,SNR=73 | | | | | | | | |
| **DEL** | **Delary** | **150.71** | **345** | *e*P | | **PKiKP** | **11 52 44.5** | **+0.8** | |
| **BRTR** | **Keskin Array B** | **150.96** | **301** | PKPbc | | **PKPbc** | **11 52 44.7** | **+0.1** | |
| | comp=Z,3.5nm,0.8s,baz=127,slow=3.3,SNR=14 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.96** | **301** | PKPdf | | **PKPdf** | **11 52 37.3** | **-1.1** | |
| BRTR | | | | | | **PKPbc** | **11 52 44.7** | **+0.1** | |
| BRTR | | | | PKPab | | **PKPab** | **11 52 54.2** | **+0.5** | |
| **BSD** | **Bornholm Skovb** | **151.69** | **343** | *e*P | | **PKiKP** | **11 52 45.7** | **-0.1** | |
| **CRVS** | **Cervenica-Dubn** | **154.37** | **328** | *e*PKP | | **PKPab** | **11 53 09.2** | **+1.5** | |
| **CLL** | **Collm** | **155.61** | **342** | *i* PKPab | | **PKPab** | **11 53 13.1** | **+0.2** | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| CLL | | | | *ep*PKPab | | **pPKPab** | **11 54 46.0** | **-0.1** | |
| **BRG** | **Berggiesshubel** | **155.73** | **340** | *e*PKP | | **PKPab** | **11 53 14.2** | **+0.7** | |
| BRG | | | | Amp | | | 11 53 14.9 | | |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| **GERES** | **GERESS Array B** | **157.57** | **338** | PKPab | | **PKPab** | **11 53 22.0** | **+0.4** | |
| | comp=Z,1.1nm,0.6s,baz=8.6,slow=9.9,SNR=3.7 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **160.59** | **341** | PKPab | | **PKPab** | **11 53 35.1** | **+0.1** | |
| | comp=Z,6.0nm,0.6s,baz=4.5,slow=6.3,SNR=12 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.58** | **183** | PKPab | | **PKPab** | **11 53 52.6** | **-0.3** | |
| | comp=Z,1.4nm,0.6s,baz=176,slow=3.1,SNR=9.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.58** | **183** | PKPdf | | **PKPdf** | **11 52 56.7** | **+1.2** | |
| TORD | | | | | | **PKPab** | **11 53 54.3** | **+1.5** | |

*NAO **29** 11:49:51.1±2.5, 71.˚53N×2.˚74W, ML3.8*
*IDC **29** 11:49:52.4±0.7, 71.˚64N×2.˚20W, h0km, mb3.6/8, mb1 3.9/13, mb1mx3.7/51, mbtmp3.7/13, ML3.6/5, MS3.3/28, Ms1 3.3/28, ms1mx3.1/83, Error ellipse: s-maj=22.8km s-min=14.7km az=43.0*
*BER **29** 11:49:54.8±2.5, 71.˚64N×2.˚83W, h10km, ML3.0, MW3.0, ML3.8(NAO), Confirmed Earthquake*
**ISC 29 11:49:53.3±0.6, 71.˚63N±0.˚06×2.˚12W±0.˚06, h10km, n91, σ2s08/83, mb3.6/8, MS3.3/21, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JMIC** | **Jan Mayen** | **2.16** | **256** | LR | LR | | 11 51 08.4 | |
| | comp=Z,38nm,19.2s,baz=76,slow=36 | | | | | | | |
| **DBG** | **Daneborg** | **5.95** | **305** | Pn | **Pn** | | **11 51 17.4** | **-3.7** |
| DBG | | | | Sn | Sn | | 11 52 17.5 | -12 |
| **DBG** | **Daneborg** | **5.95** | **305** | *e*P | **Pn** | | **11 51 17.4** | **-3.7** |
| DBG | | | | *e*S | Sn | | 11 52 16.2 | -13 |
| **DBG** | **Daneborg** | **5.95** | **305** | *e*P | **Pn** | | **11 51 17.3** | **-3.9** |
| DBG | | | | *e*S | Sn | | 11 52 16.8 | -12 |
| **LOF** | **Lofoten** | **6.43** | **115** | *e*P | **Pn** | | **11 51 28.8** | **+0.9** |
| LOF | | | | *e*S | **Sn** | | **11 52 38.7** | **-2.5** |
| LOF | | | | IAML | | | 11 52 42.1 | |
| | comp=Z,12nm,0.3s | | | | | | | |
| **N2RO** | **R_st** | **6.46** | **123** | *e*P | **Pn** | | **11 51 29.6** | **+1.4** |
| N2RO | | | | *e*S | **Sn** | | **11 52 38.5** | **-3.3** |
| **N2VA** | **Vr_y** | **6.51** | **120** | *e*P | **Pn** | | **11 51 30.0** | **+1.1** |
| **SCO** | **Scoresbysund** | **6.55** | **269** | *i* P | **Pn** | | **11 51 27.4** | **-2.0** |
| **DAG** | **Danmarks Havn** | **6.83** | **327** | *i* P | **Pn** | | **11 51 30.0** | **-3.3** |
| DAG | | | | *i* S | Sn | | 11 52 35.4 | -16 |
| DAG | | | | IAML | | | 11 52 44.9 | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **DAG** | **Danmarks Havn** | **6.83** | **327** | *e*P | **Pn** | | **11 51 30.8** | **-2.5** |
| DAG | | | | *e*S | Sn | | 11 52 36.6 | -14 |
| **STEI** | **Steigen** | **7.05** | **113** | *e*P | **Pn** | | **11 51 37.8** | **+1.4** |
| STEI | | | | *e*S | **Sn** | | **11 52 54.5** | **-1.9** |
| STEI | | | | IAML | | | 11 52 55.1 | |
| | comp=Z,29nm,0.5s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **7.17** | **33** | Pn | **Pn** | | **11 51 38.9** | **+0.8** |
| **HSPB** | **Hornsund (broa** | **7.17** | **33** | *e*P | **Pn** | | **11 51 38.8** | **+0.8** |
| **NBB08** | **Skaug oppvekst** | **7.24** | **118** | *e*P | **Pn** | | **11 51 40.3** | **+1.4** |
| **TRO** | **Tromso** | **7.26** | **96** | *e*P | **Pn** | | **11 51 40.1** | **+0.9** |
| TRO | | | | *e*S | **Sn** | | **11 52 57.0** | **-4.5** |
| **NBB30** | **Finnes** | **7.29** | **122** | *e*P | **Pn** | | **11 51 40.7** | **+1.1** |
| NBB30 | | | | *e*S | **Sn** | | **11 52 58.0** | **-4.2** |
| **NBB05** | **Inndyr** | **7.32** | **121** | *e*P | **Pn** | | **11 51 41.1** | **+1.0** |
| **NBB28** | **Valnes** | **7.33** | **119** | *e*P | **Pn** | | **11 51 41.0** | **+0.8** |
| **FAUS** | **Fauske** | **7.43** | **116** | *e*P | **Pn** | | **11 51 42.7** | **+1.2** |
| FAUS | | | | *e*S | **Sn** | | **11 53 01.3** | **-4.3** |
| FAUS | | | | IAML | | | 11 53 05.7 | |
| | comp=Z,14nm,0.3s | | | | | | | |
| **NBB40** | **Tonnes** | **7.44** | **126** | *e*P | **Pn** | | **11 51 43.2** | **+1.5** |
| NBB40 | | | | *e*S | **Sn** | | **11 53 01.6** | **-4.4** |
| **KONS** | **Konsvik** | **7.48** | **126** | *e*P | **Pn** | | **11 51 43.7** | **+1.5** |
| KONS | | | | *e*S | **Sn** | | **11 53 02.5** | **-4.4** |
| KONS | | | | IAML | | | 11 53 04.5 | |
| | comp=Z,21nm,0.3s | | | | | | | |
| **N2ST** | **Straumen** | **7.54** | **116** | *e*P | **Pn** | | **11 51 44.7** | **+1.7** |
| **STOK** | **Stokkvaagen** | **7.58** | **127** | *e*P | **Pn** | | **11 51 45.0** | **+1.3** |
| **BRBB** | **Barentsburg B** | **7.73** | **26** | Pn | **Pn** | | **11 51 48.6** | **+2.9** |
| **BRBB** | **Barentsburg B** | **7.73** | **26** | *e*P | **Pn** | | **11 51 46.9** | **+1.2** |
| **JETT** | **Jettan, Norway** | **7.76** | **95** | Pn | **Pn** | | **11 51 47.2** | **+1.0** |
| JETT | | | | Sn | **Sn** | | **11 53 11.2** | **-2.8** |
| **MOR8** | **Moi Rana** | **8.08** | **124** | *e*P | **Pn** | | **11 51 52.6** | **+2.2** |
| MOR8 | | | | *e*S | **Sn** | | **11 53 18.3** | **-3.4** |
| MOR8 | | | | IAML | | | 11 53 23.0 | |
| | comp=Z,28nm,0.3s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.10** | **28** | Pn | **Pn** | | **11 51 52.8** | **+2.0** |
| | baz=212,slow=14 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **8.10** | **28** | Pn | **Pn** | | **11 51 52.8** | **+2.0** |
| | baz=212,slow=14 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **8.10** | **28** | Pn | **Pn** | | **11 51 52.8** | **+2.0** |
| | baz=207,slow=15,SNR=88 | | | | | | | |
| **KBS** | **Kingsbay** | **8.12** | **19** | Pn | **Pn** | | **11 51 52.0** | **+1.0** |
| KBS | | | | Sn | **Sn** | | **11 53 20.2** | **-2.5** |
| **KBS** | **Kingsbay** | **8.12** | **19** | *e*P | **Pn** | | **11 51 51.6** | **+0.6** |
| **KIF** | **Kilpisjarvi** | **8.14** | **98** | Pn | **Pn** | | **11 51 52.5** | **+1.2** |
| KIF | | | | Sn | **Sn** | | **11 53 20.5** | **-2.7** |
| **KIF** | **Kilpisjarvi** | **8.14** | **98** | *e*P | **Pn** | | **11 51 52.4** | **+1.1** |
| **SALU** | **Saltoluokta** | **8.36** | **110** | *e*P | **Pn** | | **11 51 56.2** | **+1.8** |
| SALU | | | | *e*S | **Sn** | | **11 53 24.8** | **-3.9** |
| **HAMF** | **Hammerfest** | **8.39** | **84** | *e*P | **Pn** | | **11 51 54.9** | **+0.3** |
| **NSS** | **Namsos** | **8.83** | **137** | *e*P | **Pn** | | **11 52 02.5** | **+1.7** |
| NSS | | | | IAML | | | 11 53 45.5 | |
| | comp=Z,8.4nm,0.5s | | | | | | | |
| **KTK1** | **Kautokeino** | **8.91** | **95** | *e*P | **Pn** | | **11 52 02.8** | **+1.0** |
| **HEF** | **Hetta** | **9.35** | **98** | *e*P | **Pn** | | **11 52 08.6** | **+0.7** |
| HEF | | | | *e*S | **Sn** | | **11 53 49.2** | **-3.6** |
| **ARA0** | **ARCESS Array S** | **9.38** | **90** | Pn | **Pn** | | **11 52 09.5** | **+1.1** |
| | baz=291,slow=11 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.38** | **90** | *e*P | **Pn** | | **11 52 09.4** | **+1.1** |
| ARA0 | | | | Pn | Pn | | 11 52 09.5 | +1.1 |
| | baz=291,slow=11 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.38** | **90** | Pn | **Pn** | | **11 52 09.4** | **+1.0** |
| | baz=293,slow=11,SNR=40 | | | | | | | |
| ARCES | | | | LR | LR | | 11 55 27.0 | |
| | comp=Z,62nm,20.7s,baz=240,slow=36 | | | | | | | |
| **KEV** | **Kevo** | **9.77** | **87** | *e*P | **Pn** | | **11 52 14.6** | **+1.1** |
| **NOR** | **Nord** | **10.51** | **348** | Pn | **Pn** | | **11 52 22.8** | **-1.0** |
| **NOR** | **Nord** | **10.51** | **348** | *e*P | **Pn** | | **11 52 21.4** | **-2.3** |
| **DOMB** | **Dombas** | **10.56** | **150** | *e*P | **Pn** | | **11 52 23.7** | **-0.7** |
| **SUMG** | **Summit** | **11.10** | **292** | *e*P | **Pn** | | **11 52 31.2** | **-1.0** |
| **ASK** | **Askoy** | **11.56** | **162** | *e*P | Pn | | 11 52 34.9 | -3.3 |
| **SKAR** | **Skarslia** | **11.74** | **154** | *e*P | Pn | | 11 52 36.5 | -4.2 |
| **NB2** | **NORSAR Subarra** | **11.86** | **147** | PKPa | Pn | | 11 52 33.6 | -8.6 |
| | comp=Z,5.1nm,0.6s,baz=13,slow=2.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **11.86** | **147** | Pn | | **Pn** | **11 52 43.5** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=339,slow=13,SNR=4.4 | | | | | | | |
| NOA | | | | LR | | LR | 11 57 08.7 | |
| | comp=Z,124nm,20.1s,baz=335,slow=37 | | | | | | | |
| **APA0** | **Apatity Array** | **12.73** | **91** | Pn | | **Pn** | **11 52 55.3** | **+1.2** |
| | baz=311,slow=12 | | | | | | | |
| **APA0** | **Apatity Array** | **12.73** | **91** | Pn | | **Pn** | **11 52 55.3** | **+1.2** |
| | baz=311,slow=12 | | | | | | | |
| **BLS5** | **Blasjo** | **12.74** | **160** | *e*P | | **Pn** | **11 52 53.8** | **-0.4** |
| **HFS** | **Hagfors** | **13.15** | **143** | Pn | | **Pn** | **11 53 01.2** | **+1.3** |
| | comp=Z,1.5nm,0.3s,baz=340,slow=11,SNR=15 | | | | | | | |
| HFS | | | | LR | | LR | 11 57 48.7 | |
| | comp=Z,126nm,20.1s,baz=300,slow=36 | | | | | | | |
| **HFS** | **Hagfors** | **13.15** | **143** | Pn | | **Pn** | **11 53 02.3** | **+2.5** |
| | baz=338,slow=11 | | | | | | | |
| **HFS** | **Hagfors** | **13.15** | **143** | Pn | | **Pn** | **11 53 02.3** | **+2.5** |
| | baz=338,slow=11 | | | | | | | |
| **FIA0** | **FINESS Array S** | **14.98** | **119** | P | | **Pn** | **11 53 25.8** | **+1.1** |
| | baz=328,slow=12 | | | | | | | |
| **FIA0** | **FINESS Array S** | **14.98** | **119** | P | | **Pn** | **11 53 25.8** | **+1.1** |
| | baz=328,slow=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **14.98** | **119** | Pn | | **Pn** | **11 53 25.3** | **+0.7** |
| | comp=Z,0.6nm,0.3s,baz=329,slow=12,SNR=16 | | | | | | | |
| FINES | | | | LR | | LR | 11 58 41.3 | |
| | comp=Z,112nm,19.7s,baz=304,slow=35 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.36** | **182** | Pn | | **Pn** | **11 53 42.3** | **-0.5** |
| | baz=1.8,slow=12,SNR=1.8 | | | | | | | |
| EKA | | | | LR | | LR | 11 58 52.3 | |
| | comp=Z,68nm,18.9s,baz=12,slow=33 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **17.32** | **279** | L

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| COEN | | | | | IAmb | IAmb | 11 58 51.0 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **26.50** | **155** | P | **P** | | **11 58 47.0** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=337,slow=11,SNR=26 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **12 02 07.4** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=347,slow=2.1,SNR=18 | | | | | | | |
| ASAR | | | | ScP | **ScP** | | **12 05 27.4** | **-2.9** |
| | comp=Z,0.3nm,0.9s,baz=330,slow=4.1,SNR=2.0 | | | | | | | |
| ASAR | | | | LR | LR | | 12 09 59.7 | |
| | comp=Z,35nm,19.7s,baz=89,slow=38 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.00** | **152** | P | **P** | | **12 00 17.7** | **-1.2** |
| | comp=Z,1.0nm,0.5s,baz=331,slow=10.0,SNR=5.8 | | | | | | | |
| **STKA** | **Stephens Creek** | **37.00** | **152** | P | **P** | | **12 00 18.3** | **-0.6** |
| **CAN** | **Canberra** | **43.48** | **148** | P | **P** | | **12 01 13.1** | **+1.0** |
| **SONM** | **Songino Array** | **49.20** | **346** | P | **P** | | **12 01 58.0** | **+1.4** |
| | comp=Z,1.0nm,0.6s,baz=167,slow=9.5,SNR=7.2 | | | | | | | |
| **SONM** | **Songino Array** | **49.20** | **346** | P | **P** | | **12 01 58.2** | **+1.6** |
| **MK31** | **Makanchi Array** | **57.83** | **329** | P | **P** | | **12 03 00.5** | **+1.3** |
| MK31 | | | | | IAmb | IAmb | 12 03 23.7 | |
| | comp=Z,2.4nm,1.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.83** | **329** | P | **P** | | **12 03 00.3** | **+1.1** |
| | comp=Z,0.7nm,0.4s,baz=129,slow=8.6,SNR=19 | | | | | | | |
| **MQZ** | **McQueen's Vale** | **62.84** | **141** | P | **P** | | **12 03 31.6** | **-1.6** |
| **QSPA** | **South Pole Qui** | **90.31** | **180** | P | **P** | | **12 06 06.2** | **-0.6** |

*IDC **29** 12:05:33.2±1.4, 7.80S×118.94E, h0km, mb3.7/4, mb1 3.9/8, mb1mx3.5/58, mbtmp3.8/8, ML3.6/4, MS3.0/1, Ms1 3.0/1, ms1mx2.3/73, Error ellipse: s-maj=44.6km s-min=17.5km az=64.0*

*DJA **29** 12:05:36.5±1.2, 8˚S±2˚×11˚9E±˚, h20km±11km, M3.8/9, MLv3.8/9*

*NEIC **29** 12:05:38.8±1.9, 7.82S±0.07×118.99E±0.08, h42km±9km, mb4.0/13, Error ellipse: s-maj=12.8km s-min=7.7km az=54.0*

**ISC 29 12:05:37.7**±0.6, **7.81S**±0.04×**119.01E**±0.05, **h34**km, **n51, σ1§04/56, mb4.1/8, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.59** | **230** | P | **Pn** | **12 06 03.3** | **-0.2** |
| PLAI | | | | S | **Sn** | **12 06 22.2** | **-0.6** |
| **PLAI** | **Plampang** | **1.59** | **230** | P | **Pn** | **12 06 04.4** | **+0.9** |
| **WBSI** | **Waikabubak, Su** | **1.86** | **168** | P | **Pn** | **12 06 08.2** | **+1.0** |
| WBSI | | | | S | **Sn** | **12 06 31.4** | **+1.8** |
| **BSSI** | **Bau Bau, Buton** | **2.21** | **42** | P | **Pn** | **12 06 12.3** | **+0.2** |
| **BKSI** | **Bulukumba** | **2.71** | **24** | P | **Pn** | **12 06 19.1** | **+0.2** |
| **BASI** | **Baing, Sumba** | **2.85** | **147** | P | **Pn** | **12 06 21.9** | **+1.1** |
| **KAPI** | **Kappang** | **2.87** | **15** | Pn | **Pn** | **12 06 21.3** | **+0.1** |
| | 3.7nm,0.3s,baz=231,slow=5.7,SNR=12 | | | | | | | |
| KAPI | | | | S | **Sn** | **12 06 54.8** | **+0.3** |
| | 13nm,0.3s,baz=59,slow=18,SNR=7.1 | | | | | | | |
| **KAPI** | **Kappang** | **2.87** | **15** | | **Pn** | **12 06 21.6** | **+0.5** |
| **KAPI** | **Kappang** | **2.87** | **15** | P | **Pn** | **12 06 21.4** | **+0.2** |
| **MMRI** | **Maumere** | **3.30** | **105** | | **Pn** | **12 06 27.6** | **+0.6** |
| **MMRI** | **Maumere** | **3.30** | **105** | P | **Pn** | **12 06 27.9** | **+0.9** |
| **BNSI** | **Bone** | **3.56** | **18** | P | **Pn** | **12 06 31.2** | **+0.6** |
| **SPSI** | **Sidrap Palu** | **3.89** | **11** | P | **Pn** | **12 06 35.7** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **4.86** | **262** | Pn | **Pn** | **12 06 48.8** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **4.86** | **262** | P | **Pn** | **12 06 47.8** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **4.86** | **262** | P | **Pn** | **12 06 49.6** | **+1.1** |
| **BATI** | **Baumata** | **5.17** | **118** | Pn | **Pn** | **12 06 52.9** | **+0.1** |
| | 2.1nm,0.3s,baz=210,slow=17,SNR=1.8 | | | | | | | |
| BATI | | | | LR | LR | 12 09 25.0 | | |
| | comp=Z,143nm,18.9s,baz=130,slow=44 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.09** | **148** | Pn | **Pn** | **12 08 27.4** | **-0.3** |
| | 0.1nm,0.3s,baz=75,slow=10,SNR=1.6 | | | | | | | |
| FITZ | | | | Sn | **Sn** | **12 10 35.7** | **-5.7** |
| | 0.3nm,0.3s,baz=185,slow=19,SNR=7.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.09** | **148** | | **Pn** | **12 08 26.3** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **12.09** | **148** | P | **Pn** | **12 08 27.6** | **-0.1** |
| **KNRA** | **Kununurra** | **12.33** | **130** | Pn | **Pn** | **12 08 30.6** | **-0.4** |
| **KNRA** | **Kununurra** | **12.33** | **130** | P | **Pn** | **12 08 30.8** | **-0.2** |
| **MTN** | **Manton Dam** | **12.93** | **114** | Pn | **Pn** | **12 08 38.2** | **-1.0** |
| **XMIS** | **Christmas Isla** | **13.46** | **258** | Pn | **Pn** | **12 08 46.2** | **-0.2** |
| **MEEK** | **Meekatharra** | **18.73** | **181** | P | **Pn** | **12 09 54.8** | **+0.5** |
| **WB0** | **Warramunga Arr** | **19.07** | **130** | P | **P** | **12 09 58.1** | **+0.7** |
| WB0 | | | | IAmb | IAmb | 12 10 01.2 | | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.13** | **131** | P | **P** | **12 09 58.3** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=303,slow=13,SNR=34 | | | | | | | |
| WRA | | | | S | Sn | 12 13 21.0 | -12 | |
| | comp=Z,0.1nm,0.3s,baz=312,slow=24,SNR=1.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.13** | **131** | P | **P** | **12 09 57.9** | **-0.2** |
| **WRAB** | **Tennant Creek** | **19.13** | **131** | P | **P** | **12 09 58.8** | **+0.6** |
| WRAB | | | | IAmb | IAmb | 12 10 01.4 | | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **19.13** | **131** | P | **P** | **12 09 58.8** | **+0.6** |
| **WB2** | **Warramunga Arr** | **19.14** | **131** | P | **P** | **12 09 58.3** | **+0.1** |
| **WRKA** | **Warakurna** | **19.29** | **154** | P | **P** | **12 10 00.5** | **+0.6** |
| **WR0** | **Warramunga Arr** | **19.29** | **130** | P | **P** | **12 10 00.6** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 12 10 01.5 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **21.27** | **139** | P | **P** | **12 10 21.9** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 12 10 25.8 | | |
| | comp=Z,2.9nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **21.27** | **140** | P | **P** | **12 10 22.4** | **+1.0** |
| | comp=Z,4.5nm,0.6s,baz=316,slow=8.9,SNR=38 | | | | | | | |
| ASAR | | | | S | **S** | **12 14 15.6** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=318,slow=23,SNR=5.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.27** | **140** | P | **P** | **12 10 22.1** | **+0.7** |
| **BLDU** | **Ballidu** | **22.79** | **185** | P | **P** | **12 10 38.4** | **+0.9** |
| **QIS** | **Mount Isa** | **23.61** | **125** | P | **P** | **12 10 47.0** | **+1.2** |
| **FORT** | **Forrest** | **24.37** | **161** | P | **P** | **12 10 52.1** | **-0.7** |
| **COEN** | **Coen** | **24.49** | **107** | P | **P** | **12 10 54.7** | **+0.7** |
| COEN | | | | IAmb | IAmb | 12 10 55.9 | | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **24.49** | **107** | P | **P** | **12 10 55.0** | **+0.9** |
| **BBOO** | **Buckleboo** | **29.48** | **150** | P | **P** | **12 11 39.1** | **+0.4** |
| **STKA** | **Stephens Creek** | **31.86** | **142** | P | **P** | **12 12 00.7** | **+0.9** |
| | comp=Z,0.9nm,0.4s,baz=320,slow=7.4,SNR=5.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **31.86** | **142** | P | **P** | **12 12 00.1** | **+0.3** |
| **MKAR** | **Makanchi Array** | **63.41** | **333** | P | **P** | **12 16 03.9** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=156,slow=7.6,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.41** | **333** | P | **P** | **12 16 04.0** | **0.0** |
| **MAKZ** | **Makanchi** | **63.56** | **332** | P | **P** | **12 16 04.6** | **-0.3** |
| MAKZ | | | | IAmb | IAmb | 12 16 29.8 | | |
| | comp=Z,2.2nm,1.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.92** | **333** | P | **P** | **12 16 33.8** | **+0.9** |
| | comp=Z,0.4nm,0.8s,baz=151,slow=3.2,SNR=2.1 | | | | | | | |
| **ABKAR** | **Akbulak array** | **76.60** | **325** | P | **P** | **12 17 24.3** | **-0.5** |
| **QSPA** | **South Pole Qui** | **82.18** | **180** | P | **P** | **12 17 55.1** | **0.0** |
| QSPA | | | | IAmb | IAmb | 12 18 14.0 | | |
| | comp=Z,3.3nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **92.14** | **196** | P | **P** | **12 18 43.8** | **+0.3** |

*IDC **29** 12:09:07.9±3.7, 4.77S×105.38E, h64km±21km, mb3.3/3, mb1 3.5/4, mb1mx3.0/65, mbtmp3.6/4, Error ellipse: s-maj=140.4km s-min=27.7km az=39.0*

*DJA **29** 12:09:09.5±0.4, 6˚S±6˚×10˚5E±˚, h10km, M3.1/7, MLv3.1/7*

**ISC 29 12:09:09.2**±0.9, **6.14S**±0.07×**105.35E**±0.07, **h10**km, **n15, σ1§64/16, mb3.3/3, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **0.58** | **144** | P | **Pg** | **12 09 19.9** | **-0.5** |
| **BLSI** | **Bandar Lampung** | **0.78** | **352** | P | **Pg** | **12 09 22.6** | **-1.5** |
| **KASI** | **Kota Agung** | **1.05** | **306** | P | **Pg** | **12 09 29.8** | **+0.4** |
| **KLI** | **Kotabumi** | **1.36** | **339** | P | **Pb** | **12 09 35.2** | **+0.4** |
| **DBJI** | **Dramaga** | **1.45** | **107** | P | **Pn** | **12 09 34.7** | **-0.7** |
| **SKJI** | **Sukabumi** | **1.47** | **126** | P | **Pn** | **12 09 35.6** | **-0.2** |
| **CBJI** | **Citeko** | **1.51** | **101** | P | **Pg** | **12 09 38.7** | **+0.5** |
| **LWLI** | **Liwa** | **1.70** | **311** | P | Pg | 12 09 52.2 | +10 |
| **MDSI** | **Maura Dua** | **2.02** | **324** | P | **Pn** | **12 09 44.6** | **+1.3** |
| **CNJI** | **Cibinong** | **2.11** | **123** | P | **Pn** | **12 09 45.0** | **+0.4** |
| **LEM** | **Lembang** | **2.35** | **107** | P | **Pg** | **12 09 53.7** | **-0.6** |
| | 8.3nm,0.3s,baz=317,slow=19,SNR=7.6 | | | | | | | |
| LEM | | | | S | **Sg** | **12 10 29.1** | **+4.3** |
| | 3.4nm,0.3s,baz=180,slow=23,SNR=1.6 | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **10.83** | **62** | P | Pn | 12 11 32.3 | -12 | |
| **WRA** | **Warramunga Arr** | **31.32** | **119** | P | **P** | **12 15 27.6** | **-2.4** |
| | 0.2nm,0.5s,baz=294,slow=10.0,SNR=3.4 | | | | | | | |
| WRA | | | | S | **S** | **12 20 35.6** | **-1.6** |
| | 0.3nm,0.7s,baz=301,slow=13,SNR=1.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.52** | **125** | P | **P** | **12 15 39.7** | **-0.8** |
| | 0.2nm,0.5s,baz=298,slow=8.1,SNR=7.3 | | | | | | | |
| ASAR | | | | S | **S** | **12 20 57.1** | **+1.2** |
| | 0.1nm,0.5s,baz=322,slow=13,SNR=1.9 | | | | | | | |
| **STKA** | **Stephens Creek** | **42.43** | **132** | P | **P** | **12 17 03.9** | **-0.4** |
| | 1.0nm,0.4s,baz=330,slow=7.3,SNR=6.2 | | | | | | | |

**IDC 29 12:22:33.5**±7.1, **25.95N**×**143.68E**, **h0**km, **mb3.6**/5, **mb1 3.8**/5, **mb1mx3.5**/54, **mbtmp3.6**/5, **MS3.2**/2, **Ms1 3.2**/2, **ms1mx2.5**/72, **Error ellipse: s-maj=255.2km s-min=25.3km az=73.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H11S3** | **WAKE ISLAND Hy** | **22.53** | **105** | T | T | 12 50 41.4 | |
| | baz=294 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.54** | **105** | T | T | 12 50 40.2 | |
| | baz=294 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.55** | **105** | T | T | 12 50 40.2 | |
| | baz=294 | | | | | | |
| **SONM** | **Songino Array** | **36.46** | **317** | P | P | 12 29 40.1 | -0.2 |
| | 0.3nm,0.7s,baz=107,slow=7.7,SNR=2.6 | | | | | | |
| **TIXI** | **Tiksi** | | **46.48 354** | LR | LR | 13 00 07.8 | |
| | comp=Z,11nm,18.4s,baz=346,slow=48 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.52** | **192** | P | P | 12 31 02.8 | 0.0 |
| | 1.5nm,0.7s,baz=12,slow=8.4,SNR=14 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **47.17** | **204** | P | P | 12 31 08.3 | +0.4 |
| | 1.1nm,0.7s,baz=18,slow=8.2,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **50.23** | **192** | P | P | 12 31 30.9 | -0.5 |
| | 0.2nm,0.5s,baz=11,slow=6.3,SNR=9.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.23** | **310** | P | P | 12 31 46.5 | 0.0 |
| | 0.3nm,0.5s,baz=94,slow=9.1,SNR=3.2 | | | | | | |
| **ULM** | **Lac du Bonnet** | **87.66** | **34** | LR | LR | 13 14 51.9 | |
| | comp=Z,27nm,19.2s,baz=309,slow=36 | | | | | | |

*IDC **29** 12:28:58.9±1.9, 2.32N×127.12E, h0km, mb3.9/5, mb1 4.1/5, mb1mx3.8/58, mbtmp3.9/5, MS3.0/2, Ms1 3.0/2, ms1mx2.5/74, Error ellipse: s-maj=96.5km s-min=27.3km az=89.0*

*NEIC **29** 12:29:02.8±2.2, 2.5N±0.1×127.0E±0.1, h36km±10km, mb4.2/17, Error ellipse: s-maj=21.6km s-min=10.2km az=224.0*

**ISC 29 12:29:05.0**±0.8, **2.4N**±0.1×**127.0E**±0.1, **h53**km, **n29, σ1§16/28, mb4.2/11, 1D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.63** | **165** | Pn | **Pn** | **12 29 29.8** | **-1.6** |
| **SIJI** | **Sorong** | **5.38** | **127** | LR | LR | 12 32 43.2 | |
| | comp=Z,282nm,20.4s,baz=312,slow=43 | | | | | | |
| **TOLI2** | **Tolitoli** | **6.29** | **259** | Pn | **Pn** | **12 30 36.5** | **+1.3** |
| **FAKI** | **Fak Fak** | **7.46** | **135** | Pn | **Pn** | **12 30 51.4** | **+0.1** |
| **MYLDM** | **Lahad Datu** | **8.88** | **289** | Pn | **Pn** | **12 31 08.0** | **-2.7** |
| **KAPI** | **Kappang** | **10.26** | **224** | LR | LR | 12 35 53.2 | |
| | comp=Z,54nm,21.8s,baz=64,slow=40 | | | | | | |
| **LQP** | **Lukban** | **12.84** | **336** | *i*eP | **P** | **12 32 14.9** | **+0.5** |
| **MTN** | **Manton Dam** | **15.67** | **165** | Pn | **Pn** | **12 32 42.4** | **0.0** |
| MTN | | | | IAmb | IAmb | 12 32 46.9 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **18.01** | **174** | P | **P** | **12 33 11.0** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 12 33 12.1 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.37** | **184** | P | **P** | **12 33 37.0** | **-0.4** |
| | comp=Z,1.9nm,0.7s,baz=18,slow=13,SNR=9.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.37** | **184** | P | **P** | **12 33 37.0** | **-0.4** |
| **COEN** | **Coen** | **22.84** | **136** | P | **P** | **12 34 02.9** | **-1.1** |
| COEN | | | | IAmb | IAmb | 12 34 19.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.18** | **162** | P | **P** | **12 34 06.1** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 12 34 07.8 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.32** | **162** | P | **P** | **12 34 07.6** | **-1.0** |
| WRAB | | | | IAmb | IAmb | 12 34 16.4 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.32** | **162** | P | **P** | **12 34 07.3** | **-1.3** |
| | comp=Z,4.2nm,0.6s,baz=341,slow=10,SNR=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.32** | **162** | P | **P** | **12 34 06.9** | **-1.8** |
| **WB2** | **Warramunga Arr** | **23.33** | **162** | P | **P** | **12 34 07.7** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 12 34 16.5 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.40** | **162** | P | **P** | **12 34 08.5** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 12 34 26.4 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **26.74** | **166** | P | **P** | **12 34 39.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **26.74** | **166** | P | **P** | **12 34 39.5** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=346,slow=7.6,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 38 03.6** | **+1.4** |
| | comp=Z,0.7nm,0.3s,baz=357,slow=1.9,SNR=6.7 | | | | | | |
| **MORW** | **Morawa** | **32.95** | **198** | P | **P** | **12 35 36.6** | **+1.8** |
| MORW | | | | IAmb | IAmb | 12 35 43.7 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **FORT** | **Forrest** | **32.97** | **178** | P | **P** | **12 35 35.8** | **+0.9** |
| **BBOO** | **Buckleboo** | **36.03** | **167** | P | **P** | **12 36 01.5** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 12 36 04.0 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **36.15** | **141** | P | **P** | **12 36 01.8** | **-0.7** |
| **STKA** | **Stephens Creek** | **36.78** | **159** | P | **P** | **12 36 07.9** | **+0.2** |
| | comp=Z,4.3nm,0.7s,baz=342,slow=10.0,SNR=11 | | | | | | |
| **STKA** | **Stephens Creek** | **36.78** | **159** | P | **P** | **12 36 08.2** | **+0.4** |
| **ARMA** | **Armidale** | **40.22** | **146** | P | **P** | **12 36 36.8** | **+0.1** |
| **SOCY** | **Socotra** | **72.85** | **282** | P | **P** | **12 40 27.8** | **-1.2** |
| **ILAR** | **Eielson Array** | **86.24** | **25** | P | **P** | **12 41 42.1** | **+1.5** |
| | comp=Z,0.3nm,0.6s,baz=251,slow=5.1,SNR=5.3 | | | | | | |

*IDC **29** 12:29:53.7±0.7, 4.28N×124.64E, h324km±7km, mb3.9/24, mb1 4.0/29, mb1mx3.8/68, mbtmp4.7/29, Error ellipse: s-maj=14.4km s-min=7.6km az=85.0*

*DJA **29** 12:29:53.9±0.3, 4˚N±3˚×12˚5E±˚, h314km±3km, M4.5/30, mB5.0/13, mb4.6/30, MLv4.8/12, Mw(mB)4.3/13*

*NEIC **29** 12:29:54.4±2.0, 4.24N±0.02×124.74E±0.08, h320km±7km, mb4.5/55, Error ellipse: s-maj=11.8km s-min=2.7km az=83.0*

*MAN **29** 12:29:54.7, 4.34N×124.91E, h319km, mb5.0, ML3.9, MS4.0*

**ISC 29 12:29:54.4**±0.5, **4.27N**±0.04×**124.83E**±0.06, **h326**km±5km, **n217, σ1§32/242, mb4.3/74, 7C-6D, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.81** | **4** | *i*eP | **Pn** | **12 30 42.1** | **-0.2** |
| GSPH | | | | *e*S | **S** | **12 31 21.6** | **+0.9** |
| **DDMP** | **Don Marcelino,** | **2.02** | **26** | *i*eP | **Pn** | **12 30 41.6** | **-2.1** |
| DDMP | | | | *i* S | **S** | **12 31 21.2** | **-1.9** |
| **KCP** | **Kidapawan** | **2.73** | **5** | *i*P | **Pn** | **12 30 49.3** | **-0.3** |
| KCP | | | | *i* S | **S** | **12 31 31.6** | **-2.3** |
| **DAV** | **Davao City (W)** | **2.88** | **15** | P | **Pn** | **12 30 51.1** | **+0.2** |
| | 137nm,0.3s,baz=89,slow=1.6,SNR=15 | | | | | | |
| DAV | | | | S | **S** | **12 31 36.0** | **-0.2** |
| | 136nm,0.3s,baz=100,slow=22,SNR=8.8 | | | | | | |
| **DAV** | **Davao City (W)** | **2.88** | **15** | | **Pn** | **12 30 51.4** | **+0.5** |
| **CTBH** | **Cotabato--PC H** | **2.99** | **349** | *i*P | **Pn** | **12 30 51.7** | **-0.2** |
| **MATI** | **Mati** | **3.01** | **28** | *i*eP | **Pn** | **12 30 52.2** | **+0.1** |
| MATI | | | | *e*S | **S** | **12 31 37.9** | **-0.6** |
| **KMSI** | **Cibinong** | **3.77** | **193** | P | **Pn** | **12 30 59.1** | **-0.6** |
| **PAGZ** | **Pagadian** | **3.83** | **338** | *i*eP | **Pn** | **12 31 01.3** | **+1.0** |
| **GTOI** | **Gorontalo** | **4.04** | **207** | P | **Pn** | **12 31 00.7** | **-1.8** |
| **BIPH** | **Bislig** | **4.17** | **21** | *i*eP | **Pn** | **12 31 03.3** | **-0.6** |
| BIPH | | | | *e*S | **S** | **12 31 57.1** | **-2.7** |
| **TNTI** | **Ternate** | **4.30** | **144** | Pn | **Pn** | **12 31 03.4** | **-1.9** |
| **TNTI** | **Ternate** | **4.30** | **144** | P | **Pn** | **12 31 03.7** | **-1.6** |
| **TNTI** | **Ternate** | **4.30** | **144** | P | **Pn** | **12 31 03.7** | **-1.6** |
| **BUTP** | **Butuan** | **4.73** | **9** | *i*eP | **Pn** | **12 31 11.5** | **+1.5** |
| **MRSI** | **Marisa** | **4.75** | **218** | P | **Pn** | **12 31 09.8** | **-0.4** |
| **TOLI2** | **Tolitoli** | **5.12** | **232** | | **Pn** | **12 31 13.4** | **-0.9** |
| **TOLI2** | **Tolitoli** | **5.12** | **232** | P | **Pn** | **12 31 13.5** | **-0.9** |
| **GLSP** | **General Luna,** | **5.62** | **13** | *i*eP | **Pn** | **12 31 20.0** | **-0.1** |
| GLSP | | | | *i* S | **S** | **12 32 25.8** | **-3.6** |
| **LUWI** | **Luwuk** | **5.67** | **201** | Pn | **Pn** | **12 31 19.0** | **-1.6** |
| **LUWI** | **Luwuk** | **5.67** | **201** | P | **Pn** | **12 31 19.5** | **-1.1** |
| | 1.3nm3µm221nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **5.67** | **201** | P | **Pn** | **12 31 20.0** | **-0.6** |
| **MPSI** | **Mapaga** | **6.29** | **232** | P | **Pn** | **12 31 27.4** | **-0.5** |
| | 0.2nm1µm57nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **6.38** | **170** | P | **Pn** | **12 31 25.4** | **-3.6** |
| | 2.0nm26µm270nm,1.0s | | | | | | |
| **RCP** | **Roxas** | **7.53** | **344** | *i*eP | **Pn** | **12 31 43.0** | **+0.4** |
| **SIJI** | **Sorong** | **8.21** | **128** | P | **Pn** | **12 31 51.6** | **+0.8** |
| | 1.8nm,0.3s,baz=301,slow=3.5,SNR=3.6 | | | | | | |
| **AAI** | **Ambon** | **8.59** | **157** | P | **Pn** | **12 31 54.1** | **-1.3** |
| | 1µm119nm,0.7s | | | | | | |
| **MSAI** | **Masohi** | **8.60** | **152** | P | **Pn** | **12 31 55.5** | **-0.1** |
| | 2µm28nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.76** | **282** | Pn | **Pn** | **12 31 56.6** | **-1.0** |
| **KKM** | **Kota Kinabalu** | **8.76** | **282** | P | **Pn** | **12 31 57.6** | **0.0** |
| **TTSI** | **Tana Toraja** | **8.83** | **215** | P | **Pn** | **12 31 56.7** | **-1.6** |
| | 74nm,0.8s | | | | | | |
| **SMKI** | **Samarinda** | **8.94** | **239** | P | **Pn** | **12 32 00.8** | **+1.1** |
| | 364nm,0.9s | | | | | | |

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|---|---|---|---|---|---|---|---|---|
| **SPSI** | **Sidrap Palu** | **9.62** | **212** | P | **Pn** | **12 32 06.1** | **-1.8** |
| | 19nm,1.1s | | | | | | | |
| **BNSI** | **Bone** | **9.82** | **209** | P | **Pn** | **12 32 11.0** | **+0.7** |
| | 48nm,1.0s | | | | | | | |
| **BNDI** | **Bandanaira** | **10.10** | **150** | P | **Pn** | **12 32 14.7** | **+1.0** |
| **FAKI** | **Fak Fak** | **10.29** | **134** | Pn | **Pn** | **12 32 15.9** | **-0.1** |
| **FAKI** | **Fak Fak** | **10.29** | **134** | P | **Pn** | **12 32 15.8** | **-0.2** |
| | 55nm,1.2s | | | | | | | |
| **FAKI** | **Fak Fak** | **10.29** | **134** | P | **Pn** | **12 32 16.5** | **+0.5** |
| **TGY** | **Tagaytay City** | **10.50** | **339** | P | **Pn** | **12 32 18.2** | **-0.3** |
| | 20nm,0.3s,baz=160,slow=11,SNR=5.1 | | | | | | | |
| **KAPI** | **Kappang** | **10.53** | **209** | P | **Pn** | **12 32 18.3** | **-0.6** |
| | 1.8nm,0.3s,baz=66,slow=10,SNR=4.7 | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **11.20** | **243** | P | **Pn** | **12 32 26.4** | **-0.6** |
| | 4µm69nm,0.8s | | | | | | | |
| **KBKI** | **Kotaburu** | **11.47** | **229** | P | **Pn** | **12 32 29.1** | **-1.1** |
| | 1µm116nm,0.8s | | | | | | | |
| **SBUM** | **Sibu** | **12.72** | **262** | | **Pn** | **12 32 45.9** | **+0.7** |
| **SAUI** | **Saumlaki** | **13.78** | **152** | P | **P** | **12 32 56.7** | **-0.1** |
| **SAUI** | **Saumlaki** | **13.78** | **152** | P | **P** | **12 32 57.4** | **+0.6** |
| | 4µm76nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | **13.95** | **182** | | **P** | **12 32 58.0** | **-0.8** |
| **SOEI** | **Soe** | **13.95** | **182** | P | **P** | **12 32 59.0** | **+0.2** |
| | 45nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **13.95** | **182** | P | **P** | **12 33 00.5** | **+1.7** |
| **STKI** | **Sintang** | **13.98** | **253** | P | **P** | **12 33 00.9** | **+1.8** |
| **BATI** | **Baumata** | **14.43** | **185** | P | **P** | **12 33 04.8** | **+0.9** |
| | 7.1nm,0.3s,baz=300,slow=2.1,SNR=9.6 | | | | | | | |
| BATI | | | | S | **S** | **12 35 43.3** | **+1.9** |
| | 2.9nm,0.3s,baz=103,slow=23,SNR=7.2 | | | | | | | |
| **BATI** | **Baumata** | **14.43** | **185** | P | **P** | **12 33 04.0** | **0.0** |
| | 40nm,0.7s | | | | | | | |
| **KSM** | **Kuching** | **14.77** | **260** | | **P** | **12 33 07.4** | **-0.4** |
| **KSM** | **Kuching** | **14.77** | **260** | P | **P** | **12 33 09.5** | **+1.8** |
| **PLAI** | **Plampang** | **14.79** | **208** | P | **P** | **12 33 07.8** | **-0.2** |
| | 1µm100nm,0.8s | | | | | | | |
| **PLAI** | **Plampang** | **14.79** | **208** | P | **P** | **12 33 08.2** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **14.85** | **201** | P | **P** | **12 33 09.1** | **+0.5** |
| | 31nm,0.7s | | | | | | | |
| **PBKI** | **Pangkalan Bun** | **14.87** | **242** | P | **P** | **12 33 10.5** | **+1.7** |
| | 4µm449nm,0.7s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.54** | **220** | | **P** | **12 33 27.2** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **16.54** | **220** | P | **P** | **12 33 29.4** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** | **16.54** | **220** | P | **P** | **12 33 28.8** | **+1.7** |
| | 71nm,0.9s | | | | | | | |
| **GMJI** | **Gumukmas** | **16.86** | **222** | P | **Pn** | **12 33 35.2** | **+1.5** |
| **DRS** | **Darwin Rock St** | **17.66** | **160** | P | **P** | **12 33 40.6** | **+1.6** |
| **PWJI** | **Pagerwojo** | **17.83** | **227** | P | **P** | **12 33 44.3** | **+3.4** |
| **MTN** | **Manton Dam** | **18.12** | **160** | P | **P** | **12 33 45.3** | **+1.3** |
| MTN | | | | IAmb | IAmb | 12 33 57.1 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **KDU** | **Kakadu** | **18.48** | **156** | P | **P** | **12 33 49.5** | **+1.7** |
| **UGM** | **Wanagama** | **18.72** | **230** | P | **P** | **12 33 51.1** | **+0.7** |
| **UGM** | **Wanagama** | **18.72** | **230** | P | **P** | **12 33 52.5** | **+2.1** |
| **TWG** | **Pinlang** | **18.80** | **349** | P | **P** | **12 33 50.0** | **-1.0** |
| **TPUB** | **Ta-pu** | **19.35** | **348** | P | **P** | **12 33 57.3** | **+0.3** |
| **KPJI** | **Karang Pucung** | **19.61** | **234** | P | **P** | **12 33 58.6** | **-1.3** |
| | comp=Z,69nm,0.8s | | | | | | | |
| **SSLB** | **Suanglung** | **19.76** | **349** | P | **P** | **12 34 00.3** | **-1.1** |
| **SSLB** | **Suanglung** | **19.76** | **349** | P | **P** |

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|---|---|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **34.39** | **19** | P | | **P** | **12 36 11.8** | **+0.1** | |
| **MAJO** | **Matsushiro** | **34.39** | **19** | P | | **P** | **12 36 11.8** | **+0.1** | |
| MAJO | | | | IAmb | | IAmb | 12 36 22.3 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **MAJO** | **Matsushiro** | **34.39** | **19** | P | | **P** | **12 36 11.9** | **+0.2** | |
| | comp=Z,37nm,2.2s | | | | | | | | |
| **MAT** | **Matsushiro** | **34.39** | **19** | P | | **P** | **12 36 11.4** | **-0.3** | |
| **MJB9** | **Matsu-Tunnel** | **34.39** | **19** | P | | **P** | **12 36 11.8** | **+0.1** | |
| MJB9 | | | | IAmb | | IAmb | 12 36 22.3 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **FORT** | **Forrest** | **34.99** | **175** | P | | **P** | **12 36 16.2** | **-0.6** | |
| **FORT** | **Forrest** | **34.99** | **175** | P | | **P** | **12 36 17.4** | **+0.6** | |
| **MULG** | **Mulgathing** | **35.48** | **166** | P | | **P** | **12 36 21.2** | **+0.3** | |
| **BLDU** | **Ballidu** | **35.55** | **192** | P | | **P** | **12 36 20.6** | **-0.9** | |
| **KLBR** | **Kellerberrin** | **36.30** | **190** | P | | **P** | **12 36 27.3** | **-0.5** | |
| **BJT** | **Baijiatuan** | **36.44** | **349** | P | | **P** | **12 36 29.4** | **+0.5** | |
| BJT | | | | IAmb | | IAmb | 12 36 30.5 | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **BJI** | **Beijing** | **36.46** | **349** | P | | **P** | **12 36 29.5** | **+0.5** | |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **LCRK** | **Leigh Creek** | **36.82** | **161** | P | | **P** | **12 36 35.1** | **+2.9** | |
| **MUN** | **Mundaring** | **36.97** | **192** | P | | **P** | **12 36 32.7** | **-0.8** | |
| **LZH** | **Lanzhou** | **37.10** | **331** | ⇓P | | **P** | **12 36 35.8** | **+1.1** | |
| LZH | | | | sP | | sP | 12 38 16.3 | +2.0 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,100nm,5.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **38.32** | **344** | *eP* | | **P** | **12 36 48.8** | **+4.1** | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,330nm,6.7s | | | | | | | | |
| **BBOO** | **Buckleboo** | **38.39** | **165** | | | **P** | **12 36 45.6** | **+0.3** | |
| BBOO | | | | IAmb | | IAmb | 12 36 46.1 | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **BBOO** | **Buckleboo** | **38.39** | **165** | P | | **P** | **12 36 46.0** | **+0.8** | |
| **JTM** | **Tenmabayashi** | **39.18** | **20** | P | | **P** | **12 36 52.3** | **+0.7** | |
| **STKA** | **Stephens Creek** | **39.33** | **157** | P | | **P** | **12 36 53.6** | **+0.6** | |
| | comp=Z,5.8nm,0.5s,baz=324,slow=9.1,SNR=8.4 | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.33** | **157** | P | | **P** | **12 36 53.3** | **+0.3** | |
| **STKA** | **Stephens Creek** | **39.33** | **157** | P | | **P** | **12 36 53.6** | **+0.6** | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **HTT** | **Hallett** | **39.80** | **161** | P | | **P** | **12 36 58.8** | **+1.9** | |
| **XLT** | **XiLinHaoTe** | **40.22** | **350** | *eP* | | **P** | **12 36 59.5** | **-0.7** | |
| XLT | | | | pP | | pP | 12 38 08.0 | +2.8 | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,350nm,5.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **40.26** | **8** | P | | **P** | **12 37 01.3** | **+0.9** | |
| | comp=Z,5.5nm,0.6s,baz=187,slow=7.0,SNR=6.1 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **40.26** | **8** | P | | **P** | **12 37 02.1** | **+1.7** | |
| **MDJ** | **Mudanjiang** | **40.40** | **5** | P | | **P** | **12 37 02.5** | **+1.0** | |
| MDJ | | | | pP | | pP | 12 38 05.8 | -0.7 | |
| MDJ | | | | S | | S | 12 42 50.5 | +5.7 | |
| MDJ | | | | sS | | sS | 12 44 44.5 | +5.5 | |
| MDJ | | | | ScS | | **ScS** | **12 46 30.3** | **0.0** | |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,670nm,4.7s | | | | | | | | |
| **TWOA** | **Tennyson Woods** | **41.18** | **163** | P | | **P** | **12 37 08.7** | **+0.7** | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| **GTA** | **Gaotai** | **41.68** | **330** | *eP* | | **P** | **12 37 12.0** | **-0.2** | |
| GTA | | | | pP | | pwP | 12 38 22.5 | +0.8 | |
| GTA | | | | sP | | sP | 12 38 52.5 | -0.2 | |
| GTA | | | | PcP | | **PcP** | **12 39 02.8** | **+0.8** | |
| GTA | | | | ScP | | **ScP** | **12 42 21.0** | **+0.3** | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **GOMU** | **GeErMu** | **42.10** | **323** | P | | **P** | **12 37 16.5** | **+0.6** | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| **TAPN** | **Taplejung** | **42.18** | **307** | *eP* | | **P** | **12 37 16.6** | **0.0** | |
| **ODAN** | **Odare** | **42.22** | **306** | *eP* | | **P** | **12 37 16.8** | **0.0** | |
| | comp=Z,26nm,0.7s | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **42.66** | **19** | P | | **P** | **12 37 21.5** | **+1.7** | |
| JKA | | | | IAmb | | IAmb | 12 37 23.5 | | |
| | comp=Z,48nm,1.2s | | | | | | | | |
| **RAMN** | **Ramite** | **42.90** | **306** | *eP* | | **P** | **12 37 22.8** | **+0.6** | |
| | comp=Z,18nm,0.6s | | | | | | | | |
| **JIRN** | **Jiri** | **43.53** | **306** | *eP* | | **P** | **12 37 27.5** | **+0.1** | |
| | comp=Z,26nm,0.5s | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **43.81** | **160** | P | | **P** | **12 37 29.5** | **+0.5** | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **GUN** | **Gumba** | **43.88** | **307** | *eP* | | **P** | **12 37 30.1** | **-0.1** | |
| | comp=Z,50nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **44.12** | **306** | *eP* | | **P** | **12 37 32.1** | **+0.1** | |
| **PKIN** | **Phulchoki** | **44.13** | **306** | *eP* | | **P** | **12 37 32.1** | **+0.1** | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **KKN** | **Kakani** | **44.31** | **306** | *eP* | | **P** | **12 37 33.3** | **-0.1** | |
| | comp=Z,16nm,0.4s | | | | | | | | |
| **DMN** | **Daman** | **44.38** | **306** | *eP* | | **P** | **12 37 34.5** | **+0.5** | |
| **GKN** | **Gorkha** | **44.92** | **306** | *eP* | | **P** | **12 37 37.9** | **-0.2** | |
| | comp=Z,15nm,0.5s | | | | | | | | |
| **CAN** | **Canberra** | **45.46** | **152** | P | | **P** | **12 37 43.9** | **+1.9** | |
| **CAN** | **Canberra** | **45.46** | **152** | P | | **P** | **12 37 44.1** | **+2.1** | |
| **KOLN** | **Koldanda** | **45.66** | **305** | *eP* | | **P** | **12 37 43.8** | **-0.2** | |
| | comp=Z,27nm,0.7s | | | | | | | | |
| **DANN** | **Dangsing** | **45.77** | **306** | *eP* | | **P** | **12 37 44.5** | **-0.3** | |
| | comp=Z,39nm,0.5s | | | | | | | | |
| **TOO** | **Toolangi** | **45.85** | **157** | P | | **P** | **12 37 47.0** | **+2.0** | |
| TOO | | | | IAmb | | IAmb | 12 38 04.9 | | |
| | comp=Z,29nm,1.4s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.04** | **343** | P | | **P** | **12 37 47.7** | **+1.2** | |
| ULN | | | | IAmb | | IAmb | 12 37 48.1 | | |
| | comp=Z,22nm,1.2s | | | | | | | | |
| **SONM** | **Songino Array** | **46.20** | **343** | P | | **P** | **12 37 46.2** | **-1.5** | |
| | comp=Z,12nm,1.0s,baz=160,slow=7.8,SNR=50 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | **12 39 17.4** | **0.0** | |
| | comp=Z,1.8nm,0.7s,baz=169,slow=3.7,SNR=4.9 | | | | | | | | |
| SONM | | | | ScP | | **ScP** | **12 42 38.0** | **-1.0** | |
| | comp=Z,0.9nm,0.9s,baz=167,slow=2.0,SNR=4.1 | | | | | | | | |
| **SONM** | **Songino Array** | **46.20** | **343** | P | | **P** | **12 37 48.1** | **+0.4** | |
| **PYUN** | **Piuthan** | **46.29** | **305** | *eP* | | **P** | **12 37 48.7** | **-0.1** | |
| **WMQ** | **Urumqi** | **51.21** | **326** | *eP* | | **P** | **12 38 26.3** | **+0.8** | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **55.66** | **23** | P | | **P** | **12 38 58.3** | **+1.0** | |
| **PETK** | **Petropavlovsk-** | **55.66** | **23** | P | | **P** | **12 38 58.3** | **+1.0** | |
| | comp=Z,12nm,1.0s,baz=197,slow=3.5,SNR=8.7 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.66** | **23** | P | | **P** | **12 38 58.8** | **+1.4** | |
| **MK31** | **Makanchi Array** | **56.04** | **326** | P | | **P** | **12 38 59.4** | **-0.8** | |
| **MKAR** | **Makanchi Array** | **56.04** | **326** | P | | **P** | **12 38 59.2** | **-1.0** | |
| | comp=Z,4.5nm,0.5s,baz=121,slow=8.1,SNR=104 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **12 39 53.2** | **-0.9** | |
| | comp=Z,2.5nm,0.6s,baz=117,slow=4.4,SNR=7.4 | | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **12 43 20.4** | **-1.0** | |
| | comp=Z,2.2nm,0.6s,baz=116,slow=5.0,SNR=11 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.04** | **326** | P | | **P** | **12 38 59.4** | **-0.8** | |
| **TARG** | **Taragay, Kyrgy** | **56.09** | **319** | P | | **P** | **12 39 01.5** | **+0.5** | |
| **MAKZ** | **Makanchi** | **56.23** | **326** | P | | **P** | **12 39 01.1** | **-0.3** | |
| MAKZ | | | | IAmb | | IAmb | 12 39 02.2 | | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **KSH** | **Kashi** | **56.33** | **316** | P | | **P** | **12 39 03.5** | **+1.1** | |
| KSH | | | | ScP | | **ScP** | **12 43 24.0** | **+1.0** | |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **MA2** | **Magadan** | **58.66** | **15** | P | | **P** | **12 39 19.6** | **+1.6** | |
| **ZALV** | **Zalesovo Beam** | **59.26** | **334** | P | | **P** | **12 39 19.6** | **-2.6** | |
| | comp=Z,1.8nm,0.6s,baz=121,slow=6.5,SNR=9.4 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.26** | **334** | P | | **P** | **12 39 21.7** | **-0.5** | |
| **GAR** | **Garm** | **60.17** | **313** | P | | **P** | **12 39 28.8** | **-0.1** | |
| GAR | | | | IAmb | | IAmb | 12 39 29.4 | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.27** | **328** | P | | **P** | **12 39 28.1** | **-1.0** | |
| | baz=132,slow=6.3 | | | | | | | | |
| **KURK** | **Kurchatov** | **60.28** | **328** | P | | **P** | **12 39 28.5** | **-0.6** | |
| KURK | | | | IAmb | | IAmb | 12 39 30.3 | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.84** | **327** | P | | **P** | **12 40 03.6** | **-1.8** | |
| | comp=Z,1.4nm,0.5s,baz=92,slow=14,SNR=10 | | | | | | | | |
| **BRVK** | **Borovoye** | **65.91** | **327** | P | | **P** | **12 40 05.4** | **-0.4** | |
| **TIXI** | **Tiksi** | **67.34** | **1** | P | | **P** | **12 40 13.9** | **-0.6** | |
| | comp=Z,6.1nm,0.4s | | | | | | | | |
| **TIXI** | **Tiksi** | **67.34** | **1** | P | | **P** | **12 40 14.2** | **-0.2** | |
| TIXI | | | | IAmb | | IAmb | 12 40 14.7 | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **NIUE** | **Niue** | **68.22** | **112** | P | | **P** | **12 40 22.4** | **+1.5** | |
| **NRIK** | **Noril'sk** | **69.46** | **347** | P | | **P** | **12 40 27.1** | **-0.4** | |
| | comp=Z,7.8nm,0.5s,baz=127,slow=6.4,SNR=18 | | | | | | | | |
| **NRIK** | **Noril'sk** | **69.46** | **347** | P | | **P** | **12 40 27.4** | **-0.1** | |
| NRIK | | | | IAmb | | IAmb | 12 40 27.9 | | |
| | comp=Z,9.3nm,0.6s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **70.54** | **321** | P | | **P** | **12 40 33.6** | **-0.8** | |
| ABKAR | | | | IAmb | | IAmb | 12 40 35.1 | | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **72.06** | **322** | P | | **P** | **12 40 41.3** | **-2.2** | |
| | comp=Z,8.4nm,0.6s,baz=100,slow=9.7,SNR=21 | | | | | | | | |
| **ARU** | **Arti** | **73.47** | **328** | P | | **P** | **12 40 49.3** | **-2.3** | |
| | comp=Z,2.0nm,0.5s,baz=132,slow=2.3,SNR=12 | | | | | | | | |
| **ARU** | **Arti** | **73.47** | **328** | P | | **P** | **12 40 50.7** | **-0.9** | |
| ARU | | | | IAmb | | IAmb | 12 40 51.9 | | |
| | comp=Z,6.5nm,0.7s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **83.63** | **26** | P | | **P** | **12 41 47.6** | **+1.1** | |
| BPAW | | | | IAmb | | IAmb | 12 41 58.4 | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **84.44** | **22** | P | | **P** | **12 41 52.2** | **+1.7** | |
| TOLK | | | | IAmb | | IAmb | 12 41 53.2 | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.43** | **25** | P | | **P** | **12 41 54.8** | **-0.6** | |
| | comp=Z,0.4nm,0.4s,baz=246,slow=4.9,SNR=12 | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.43** | **25** | P | | **P** | **12 41 55.0** | **-0.4** | |
| **BMAR** | **Burnt Mountain** | **86.31** | **23** | P | | **P** | **12 42 00.6** | **+0.8** | |
| **BCAR** | **Beaver Creek A** | **87.76** | **27** | P | | **P** | **12 42 07.5** | **+0.8** | |
| **ARCES** | **ARCESS Array B** | **89.29** | **340** | P | | **P** | **12 42 14.7** | **+1.0** | |
| | comp=Z,2.6nm,0.7s,baz=90,slow=5.5,SNR=1.6 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **89.58** | **349** | P | | **P** | **12 42 14.0** | **-0.9** | |
| | comp=Z,14nm,1.0s,baz=90,slow=8.7,SNR=6.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **90.46** | **332** | P | | **P** | **12 42 17.3** | **-1.9** | |
| | comp=Z,1.2nm,0.5s,baz=39,slow=3.5,SNR=7.3 | | | | | | | | |
| **MNK** | **Minsk** | **90.59** | **325** | *i* P | | **P** | **12 42 17.6** | **-2.4** | |
| | comp=E,2.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | **P** | **12 42 17.6** | **-2.4** | |
| | comp=N,9.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* P | | **P** | **12 42 17.6** | **-2.4** | |
| | comp=Z,12nm,0.8s,baz=82 | | | | | | | | |
| MNK | | | | *i* PP | | PP | 12 45 33.3 | -27 | |
| MNK | | | | *i* PPP | | PPP | 12 47 32.5 | | |
| MNK | | | | *i* S | | **SKSac** | **12 52 15.9** | **-3.7** | |
| MNK | | | | *i* SS | | **SS** | **12 58 53.4** | **-3.0** | |
| MNK | | | | *i* SSS | | SSS | 13 02 23.9 | | |
| **NOR** | **Nord** | **92.39** | **355** | *i* P | | **P** | **12 42 27.1** | **-0.7** | |
| NOR | | | | IAmb | | IAmb | 12 42 28.1 | | |
| | comp=Z,5.4nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **94.17** | **180** | | | **P** | **12 42 37.4** | **+1.0** | |
| QSPA | | | | IAmb | | IAmb | 12 43 03.7 | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **96.47** | **352** | *i* P | | **P** | **12 42 45.2** | **-1.2** | |
| DAG | | | | IAmb | | IAmb | 12 42 46.3 | | |
| | comp=Z,8.3nm,1.0s | | | | | | | | |
| **HFS** | **Hagfors** | **96.66** | **332** | P | | **P** | **12 42 45.1** | **-2.5** | |
| | comp=Z,1.8nm,0.9s,baz=151,slow=3.4,SNR=4.3 | | | | | | | | |
| **NEEM** | **North Greenlan** | **98.36** | **359** | *i* P | | **P** | **12 42 55.7** | **+0.4** | |
| NEEM | | | | IAmb | | IAmb | 12 42 56.2 | | |
| | comp=Z,5.3nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **122.75** | **51** | PKP | | **PKPdf** | **12 48 13.0** | **+0.5** | |
| | comp=Z,0.4nm,0.7s,baz=246,slow=0.6,SNR=5.8 | | | | | | | | |
| **JCT** | **Junction City** | **125.12** | **48** | | | **PKPdf** | **12 48 17.9** | **+1.0** | |

**KRSZO 29 12:30:57.9, 47.23N×18.28E, h0km, Explosion. locality : Iszkaszentgyrgy GT info : GT2 explosion, Hungary**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CSKK** | **Cskako** | **0.13** | **353** | Pg | Pg | 12 31 00.1 | -0.4 |
| CSKK | | | | Lg | Lg | 12 31 03.1 | |
| **CSKK** | **Cskako** | **0.13** | **353** | PG | Pg | 12 31 00.1 | -0.4 |
| CSKK | | | | LG | Lg | 12 31 03.1 | |
| **A268A** | **Rede** | **0.32** | **310** | Lg | Lg | 12 31 10.3 | |

*SOME **29** 12:38:49.1, 43.65N×69.70E*
*KRNET **29** 12:38:50.0±0.1, 43.81N×69.36E, mb3.1*
*NNC **29** 12:38:49.1±2.0, 43.37N×69.44E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=10.4km s-min=7.4km az=105.0, Suspected Mining explosion.*

**ISC 29 12:38:53.9±2.6, 43.50N±0.09×69.38E±0.1, h0km, n14, σ1s29/21, 9C-5D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK09** | **Karatay Array** | **0.66** | **124** | ⇓P | **Pg** | **12 39 05.0** | **-1.5** |
| | 4.0nm,0.6s,baz=288,slow=13 | | | | | | |
| KK09 | | | | ⇑S | **Sb** | **12 39 16.3** | **-1.8** |
| | 99nm,0.8s,baz=287,slow=30 | | | | | | |
| **TRKS** | **Terek-Say** | **2.22** | **152** | ⇑*i* P | **Pb** | **12 39 33.6** | **-1.3** |
| | baz=50 | | | | | | |
| TRKS | | | | ⇑*i* S | **Sg** | **12 40 05.3** | **+0.2** |
| | baz=50 | | | | | | |
| **MNAS** | **Manas** | **2.26** | **116** | ⇑*i* P | **Pn** | **12 39 32.8** | **+0.2** |
| | baz=19 | | | | | | |
| MNAS | | | | ⇑*i* S | **Sb** | **12 40 04.3** | **+0.2** |
| | baz=19 | | | | | | |
| **ARK** | **Arkit** | **2.35** | **135** | ⇑*i* P | **Pn** | **12 39 34.8** | **+0.9** |
| | baz=35 | | | | | | |
| ARK | | | | ⇑*i* S | **Sb** | **12 40 07.6** | **+0.7** |
| | baz=35 | | | | | | |
| **MRKS** | **Merke** | **2.65** | **105** | Pg | **Pb** | **12 39 40.7** | **-1.6** |
| | 6.1nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 12 40 17.7 | |
| | 14nm,0.5s | | | | | | |
| **EKS2** | **Erkin-Say** | **3.07** | **104** | ⇓*e*P | **Pn** | **12 39 43.9** | **+0.2** |
| | baz=8.0 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sn** | **12 40 23.0** | **+1.9** |
| | baz=8.0 | | | | | | |
| **BTK** | **Batken** | **3.53** | **167** | ⇓*e*P | **Pn** | **12 39 50.4** | **+0.4** |
| | baz=63 | | | | | | |
| BTK | | | | ⇓*e*S | **Sn** | **12 40 34.7** | **+2.3** |
| | baz=63 | | | | | | |
| **ARLS** | **Aral** | **3.75** | **114** | ⇑*e*P | **Pn** | **12 39 53.6** | **+0.5** |
| | baz=16 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sn** | **12 40 40.1** | **+2.1** |
| | baz=16 | | | | | | |
| **KRBS** | **Karabastau** | **4.31** | **85** | Pg | **Pb** | **12 40 08.9** | **-1.6** |
| | 4.6nm,0.6s | | | | | | |
| KRBS | | | | Lg | Lg | 12 41 06.2 | |
| | 6.8nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.40** | **91** | Pg | **Pb** | **12 40 11.2** | **-0.9** |
| | 3.6nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 12 41 10.2 | |
| | 7.1nm,0.8s | | | | | | |
| **KUU** | **Kurty** | **4.79** | **83** | Pg | **Pb** | **12 40 18.5** | **-0.3** |
| | 2.1nm,0.1s | | | | | | |
| KUU | | | | Lg | Lg | 12 41 22.5 | |
| | 9.5nm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **5.04** | **85** | Pg | **Pb** | **12 40 22.5** | **-0.4** |
| | 1.6nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 12 41 29.4 | |
| | 8.9nm,1.0s | | | | | | |
| **CHKK** | **Chushkaly** | **5.26** | **84** | Pg | **Pb** | **12 40 27.0** | **+0.3** |
| | 2.0nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 12 41 37.5 | |
| | 7.1nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.28** | **93** | Pg | **Pb** | **12 40 28.2** | **+1.0** |
| | 1.7nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 12 41 38.8 | |
| | 3.3nm,0.5s | | | | | | |

*IDC **29** 12:42:50.5±0.7, 7.22N×127.26E, h0km, mb3.9/10, mb1 4.0/10, mb1mx3.7/51, mbtmp3.9/10, MS2.9/3, Ms1 2.9/3, ms1mx2.6/74, Error ellipse: s-maj=16.7km s-min=13.5km az=17.0*
*MAN **29** 12:42:55.5, 7.11N×126.98E, h9km, mb4.8, ML3.7, MS3.7*
*NEIC **29** 12:43:01.8±1.4, 7.00N±0.09×126.7E±0.1, h82km±6km, mb4.2/23, Error ellipse: s-maj=16.5km s-min=12.7km az=82.0*

**ISC 29 12:42:58.0±1.4, 7.02N±0.05×127.0E±0.1, h51km±13km, n57, σ1s46/60, mb4.1/23, 4C-5D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MATI** | **Mati** | **0.69** | **264** | ⇓*e*P | **Pn** | **12 43 09.7** | **-1.9** |
| MATI | | | | *e*S | **Sn** | **12 43 20.0** | **-1.5** |
| **BIPH** | **Bislig** | **1.30** | **333** | ⇑*i*P | **Pn** | **12 43 18.5** | **-1.2** |
| BIPH | | | | *i* S | **Sn** | **12 43 35.6** | **-0.4** |
| **DAV** | **Davao City (W)** | **1.36** | **272** | Pg | **Pn** | **12 43 21.6** | **+1.0** |
| | 170nm,0.3s,baz=99,slow=2.6,SNR=22 | | | | | | |
| DAV | | | | Lg | Lg | 12 43 44.3 | |
| | 132nm,0.3s,baz=260,slow=21,SNR=6.3 | | | | | | |
| **DAV** | **Davao City (W)** | **1.36** | **272** | | **Pn** | **12 43 22.2** | **+1.6** |
| **DDMP** | **Don Marcelino,** | **1.53** | **234** | ⇓*e*P | **Pn** | **12 43 23.2** | **+0.3** |
| DDMP | | | | *i* S | **Sn** | **12 43 43.8** | **+2.2** |
| **KCP** | **Kidapawan** | **1.84** | **270** | ⇑*i*P | **Pn** | **12 43 28.4** | **+1.2** |
| KCP | | | | *i* S | Sn | 12 43 59.0 | +10 |
| **GSPH** | **General Santos** | **2.19** | **245** | ⇑*i*P | **Pn** | **12 43 32.6** | **+0.5** |
| **CTBH** | **Cotabato--PC H** | **2.69** | **275** | ⇑*i*P | **Pn** | **12 43 40.8** | **+2.0** |
| **GLSP** | **General Luna,** | **2.87** | **344** | ⇓*e*P | **Pn** | **12 43 40.3** | **-0.9** |
| GLSP | | | | *i* S | **Sn** | **12 44 20.7** | **+6.1** |
| **PAGZ** | **Pagadian** | **3.63** | **283** | ⇓*e*P | **Pn** | **12 43 53.9** | **+2.1** |
| **TBP** | **Tagbilaran** | **4.05** | **311** | *e*P | **Pn** | **12 43 57.6** | **+0.2** |
| TBP | | | | *i* S | Sn | 12 44 50.6 | +7.0 |
| **TOLI2** | **Tolitoli** | **8.50** | **227** | Pn | **Pn** | **12 44 59.0** | **+0.5** |
| **LQP** | **Lukban** | **8.83** | **323** | ⇓*e*P | **Pn** | **12 45 05.2** | **+1.9** |
| **SIJI** | **Sorong** | **8.94** | **151** | LR | LR | 12 49 55.0 | |
| | comp=Z,54nm,18.3s,baz=331,slow=47 | | | | | | |
| **GUMO** | **Guam** | **18.79** | **68** | LR | LR | 12 53 49.6 | |
| | comp=Z,54nm,18.6s,baz=196,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **22.62** | **175** | P | **P** | **12 47 55.6** | **+0.9** |
| KNRA | | | | IAmb | IAmb | 12 47 57.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.99** | **183** | P | **P** | **12 48 18.2** | **+1.1** |
| | comp=Z,2.0nm,0.6s,baz=16,slow=8.2,SNR=5.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.99** | **183** | P | **P** | **12 48 18.9** | **+1.8** |
| **COEN** | **Coen** | **26.34** | **142** | P | **P** | **12 48 28.9** | **-0.5** |
| COEN | | | | IAmb | IAmb | 12 48 32.6 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **27.61** | **165** | P | **P** | **12 48 41.1** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 12 49 05.8 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **27.75** | **165** | P | **P** | **12 48 43.8** | **+1.7** |
| WRAB | | | | IAmb | IAmb | 12 49 03.4 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.76** | **165** | P | **P** | **12 48 41.7** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=339,slow=11,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.76** | **165** | P | **P** | **12 48 43.6** | **+1.4** |
| **WB2** | **Warramunga Arr** | **27.76** | **165** | P | **P** | **12 48 41.2** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 12 48 56.2 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **QIS** | **Mount Isa** | **30.09** | **156** | P | **P** | **12 49 05.4** | **+2.5** |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **30.31** | **2** | LR | LR | 13 03 57.6 | |
| | comp=Z,14nm,19.3s,baz=195,slow=42 | | | | | | |
| **AS31** | **Alice Springs** | **31.24** | **168** | P | **P** | **12 49 13.8** | **+0.8** |
| **ASAR** | **Alice Springs** | **31.24** | **168** | P | **P** | **12 49 12.7** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=344,slow=7.1,SNR=29 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 52 07.2** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=349,slow=2.1,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **31.24** | **168** | P | **P** | **12 49 12.3** | **-0.7** |
| **FORT** | **Forrest** | **37.59** | **178** | P | **P** | **12 50 07.3** | **-0.5** |
| **BBOO** | **Buckleboo** | **40.54** | **168** | P | **P** | **12 50 32.5** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 12 51 01.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **41.12** | **161** | P | **P** | **12 50 37.7** | **+0.5** |
| | comp=Z,2.1nm,0.9s,baz=1.9,slow=3.2,SNR=3.8 | | | | | | |
| **STKA** | **Stephens Creek** | **41.12** | **161** | P | **P** | **12 50 37.4** | **+0.2** |
| **SONM** | **Songino Array** | **44.29** | **340** | PcP | **PcP** | **12 52 46.1** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=134,slow=4.2,SNR=2.9 | | | | | | |
| **LIFNC** | **LIFOU** | **48.27** | **126** | P | **P** | **12 51 36.0** | **+1.8** |
| **MK31** | **Makanchi Array** | **55.02** | **324** | P | **P** | **12 52 23.2** | **-1.3** |
| **MKAR** | **Makanchi Array** | **55.02** | **324** | P | **P** | **12 52 23.8** | **-0.6** |
| | comp=Z,1.2nm,0.7s,baz=125,slow=8.2,SNR=17 | | | | | | |
| MKAR | | | | PcP | **PcP** | **12 53 24.2** | **-1.4** |
| | comp=Z,0.6nm,0.8s,baz=114,slow=4.6,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.02** | **324** | P | **P** | **12 52 23.6** | **-0.8** |
| **MAKZ** | **Makanchi** | **55.21** | **324** | P | **P** | **12 52 25.0** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 12 52 48.0 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **MA2** | **Magadan** | **55.49** | **14** | P | **P** | **12 52 28.1** | **+0.6** |
| MA2 | | | | IAmb | IAmb | 12 52 29.3 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **NIL** | **Nilore** | **56.14** | **306** | P | **P** | **12 52 31.0** | **-1.8** |
| **KURK** | **Kurchatov** | **59.12** | **326** | P | **P** | **12 52 53.0** | **-0.2** |
| KURK | | | | IAmb | IAmb | 12 53 09.6 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.12** | **326** | P | **P** | **12 52 52.6** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=126,slow=6.3,SNR=8.3 | | | | | | |
| **ABKAR** | **Akbulak array** | **69.77** | **320** | P | **P** | **12 54 01.7** | **-1.3** |
| **ARU** | **Arti** | **72.30** | **327** | P | **P** | **12 54 16.4** | **-1.7** |
| | comp=Z,0.8nm,0.5s,baz=86,slow=3.4,SNR=3.7 | | | | | | |
| **ARU** | **Arti** | **72.30** | **327** | P | **P** | **12 54 16.6** | **-1.5** |
| ARU | | | | IAmb | IAmb | 12 54 19.3 | |
| | comp=Z,6.7nm,1.4s | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LUWI** | **Luwuk** | **9.18** | **331** | P | | **Pn** | **12 54 52.6** | **+2.1** |
| | 2µm50nm,1.1s | | | | | | | |
| **PLAI** | **Plampang** | **9.37** | **271** | P | | **Pn** | **12 54 54.1** | **+0.9** |
| | 528nm60nm,0.7s | | | | | | | |
| **PLAI** | **Plampang** | **9.37** | **271** | P | | **Pn** | **12 54 54.7** | **+1.5** |
| | 62nm,0.7s | | | | | | | |
| **APSI** | **Ampana** | **9.88** | **325** | P | | **Pn** | **12 55 02.2** | **+2.1** |
| | 36nm,0.9s | | | | | | | |
| **GTOI** | **Gorontalo** | **10.57** | **336** | P | | Pn | 12 55 14.1 | +4.5 |
| | 12nm,1.0s | | | | | | | |
| **MRSI** | **Marisa** | **10.90** | **331** | P | | **Pn** | **12 55 16.3** | **+2.1** |
| | 21nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **12.76** | **148** | Pn | | **Pn** | **12 55 38.5** | **-1.2** |
| | 4.1nm,0.3s,baz=320,slow=14,SNR=155 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **12 57 56.6** | **-3.9** |
| | 3.8nm,0.3s,baz=323,slow=24,SNR=18 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **12.96** | **272** | Pn | | **Pn** | **12 55 41.8** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **14.29** | **209** | Pn | | **Pn** | **12 56 00.2** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **14.29** | **209** | P | | **Pn** | **12 56 01.2** | **+0.7** |
| **PWJI** | **Pagerwojo** | **15.32** | **273** | P | | **P** | **12 56 20.7** | **+2.0** |
| **AS31** | **Alice Springs** | **15.81** | **157** | Pn | | **Pn** | **12 56 20.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **15.81** | **157** | Pn | | **Pn** | **12 56 18.2** | **-2.5** |
| | 1.5nm,0.3s,baz=330,slow=10,SNR=136 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **12 59 08.6** | **-6.3** |
| | 1.3nm,0.3s,baz=319,slow=18,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **15.81** | **157** | Pn | | **Pn** | **12 56 20.8** | **+0.2** |
| **COEN** | **Coen** | **16.32** | **109** | Pn | | **Pn** | **12 56 27.2** | **0.0** |
| **QIS** | **Mount Isa** | **16.48** | **135** | P | | **P** | **12 56 32.4** | **+0.8** |
| **MTSU** | **Mount Surprise** | **18.84** | **120** | P | | **Pn** | **12 57 01.5** | **+3.1** |
| **LEM** | **Lembang** | **19.58** | **275** | P | | **P** | **12 57 05.3** | **-0.6** |
| | 3.0nm,0.3s,baz=49,slow=5.3,SNR=4.9 | | | | | | | |
| **PMG** | **Port Moresby** | **19.65** | **92** | P | | **Pn** | **12 57 12.4** | **+4.3** |
| | 0.1nm,0.3s,baz=177,slow=23,SNR=2.2 | | | | | | | |
| PMG | | | | LR | | LR | 13 06 07.5 | |
| | comp=Z,150nm,18.1s,baz=188,slow=42 | | | | | | | |
| **OOD** | **Oodnadatta** | **20.21** | **158** | P | | Pn | 12 57 15.6 | +1.0 |
| **CBJI** | **Citeko** | **20.39** | **276** | P | | **P** | **12 57 13.4** | **-1.2** |
| **XMI** | **Christmas Isla** | **21.29** | **265** | P | | **P** | **12 57 25.4** | **+1.0** |
| **XMIS** | **Christmas Isla** | **21.33** | **265** | P | | **P** | **12 57 24.4** | **-0.4** |
| **XMIS** | **Christmas Isla** | **21.33** | **265** | P | | **P** | **12 57 24.9** | **+0.1** |
| **CTA** | **Charters Tower** | **21.35** | **123** | P | | **P** | **12 57 24.2** | **-0.8** |
| | 3.0nm,1.0s,baz=193,slow=11,SNR=2.3 | | | | | | | |
| CTA | | | | LR | | LR | 13 06 02.6 | |
| | comp=Z,104nm,20.3s,baz=260,slow=38 | | | | | | | |
| **FORT** | **Forrest** | **21.57** | **178** | P | | **P** | **12 57 30.1** | **+3.0** |
| FORT | | | | IAmb | | IAmb | 12 57 55.7 | |
| | comp=Z,36nm,1.0s | | | | | | | |
| **FORT** | **Forrest** | **21.57** | **178** | P | | **P** | **12 57 30.2** | **+3.0** |
| **MULG** | **Mulgathing** | **22.00** | **164** | P | | **P** | **12 57 35.3** | **+3.5** |
| **MORW** | **Morawa** | **22.47** | **206** | P | | **P** | **12 57 37.5** | **+0.6** |
| MORW | | | | IAmb | | IAmb | 12 57 55.9 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **INKA** | **Innaminka** | **22.48** | **147** | P | | **P** | **12 57 40.6** | **+3.6** |
| **LCRK** | **Leigh Creek** | **23.57** | **156** | P | | **P** | **12 57 50.9** | **+2.9** |
| **QLP** | **Quilpie** | **23.68** | **139** | P | | **P** | **12 57 52.8** | **+3.7** |
| **BBOO** | **Buckleboo** | **24.95** | **162** | P | | **P** | **12 58 04.3** | **+3.6** |
| **STKA** | **Stephens Creek** | **26.27** | **152** | P | | **P** | **12 58 14.6** | **+1.9** |
| | comp=Z,4.1nm,0.9s,baz=320,slow=6.0,SNR=7.6 | | | | | | | |
| STKA | | | | LR | | LR | 13 09 06.1 | |
| | comp=Z,85nm,20.1s,baz=217,slow=38 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.27** | **152** | P | | **P** | **12 58 13.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **26.27** | **152** | P | | **P** | **12 58 16.0** | **+3.2** |
| **PSI** | **Prapat** | **30.62** | **291** | LR | | LR | 13 13 34.7 | |
| | comp=Z,81nm,18.1s,baz=123,slow=41 | | | | | | | |
| **TOO** | **Toolangi** | **32.77** | **153** | P | | **P** | **12 59 10.5** | **0.0** |
| **CM31** | **Chiang Mai Arr** | **39.13** | **314** | P | | **P** | **13 00 03.8** | **-1.2** |
| CM31 | | | | IAmb | | IAmb | 13 00 05.5 | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.13** | **314** | P | | **P** | **13 00 04.4** | **-0.6** |
| | comp=Z,5.2nm,0.8s,baz=143,slow=6.7,SNR=45 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.13** | **314** | P | | **P** | **13 00 03.6** | **-1.5** |
| **CHTO** | **Chiang Mai** | **39.37** | **315** | P | | **P** | **13 00 05.8** | **-1.2** |
| CHTO | | | | IAmb | | IAmb | 13 00 06.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **39.76** | **114** | LR | | LR | 13 16 35.9 | |
| | comp=Z,70nm,19.4s,baz=68,slow=36 | | | | | | | |
| **NJ2** | **Nanjing** | **41.71** | **349** | *eP* | | **P** | **13 00 27.0** | **+0.8** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **43.21** | **326** | P | | **P** | **13 00 37.8** | **-0.8** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | | |
| **LZH** | **Lanzhou** | **50.08** | **335** | *eP* | | **P** | **13 01 30.5** | **-1.8** |
| LZH | | | | pP | | sP | 13 01 44.5 | -1.8 |
| LZH | | | | sP | | pP | 13 01 50.3 | +8.0 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **51.78** | **345** | *eP* | | **P** | **13 01 45.5** | **+0.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,300nm,6.5s | | | | | | | |
| **GTA** | **Gaotai** | **54.59** | **334** | *eP* | | **P** | **13 02 04.8** | **-0.9** |
| GTA | | | | pP | | sP | 13 02 19.8 | 0.0 |
| GTA | | | | sP | | pP | 13 02 27.5 | +12 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **59.64** | **344** | P | | **P** | **13 02 40.0** | **-1.2** |
| | comp=Z,0.8nm,0.7s,baz=142,slow=6.0,SNR=6.2 | | | | | | | |
| **SONM** | **Songino Array** | **59.64** | **344** | P | | **P** | **13 02 40.4** | **-0.9** |
| **WMQ** | **Urumqi** | **63.74** | **329** | *eP* | | **P** | **13 03 10.3** | **+1.4** |
| **NIL** | **Nilore** | **66.59** | **313** | P | | **P** | **13 03 26.0** | **-1.6** |
| NIL | | | | IAmb | | IAmb | 13 03 36.2 | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **67.19** | **19** | P | | **P** | **13 03 29.4** | **-1.5** |
| **PETK** | **Petropavlovsk-** | **67.19** | **19** | P | | **P** | **13 03 29.7** | **-1.2** |
| | comp=Z,4.0nm,0.8s,baz=210,slow=13,SNR=4.3 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **67.19** | **19** | P | | **P** | **13 03 30.5** | **-0.4** |
| **MK31** | **Makanchi Array** | **68.55** | **329** | P | | **P** | **13 03 38.8** | **-0.9** |
| **MKAR** | **Makanchi Array** | **68.55** | **329** | P | | **P** | **13 03 38.6** | **-1.1** |
| | comp=Z,2.4nm,0.9s,baz=131,slow=7.7,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.55** | **329** | P | | **P** | **13 03 38.5** | **-1.2** |
| **MAKZ** | **Makanchi** | **68.72** | **328** | P | | **P** | **13 03 39.7** | **-1.1** |
| MAKZ | | | | IAmb | | IAmb | 13 03 40.9 | |
| | comp=Z,6.7nm,1.5s | | | | | | | |
| **YAK** | **Yakutsk** | **70.95** | **1** | P | | **P** | **13 03 53.2** | **-0.8** |
| **MA2** | **Magadan** | **71.01** | **12** | P | | **P** | **13 03 53.9** | **-0.6** |
| MA2 | | | | IAmb | | IAmb | 13 03 55.6 | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **72.31** | **335** | P | | **P** | **13 04 00.7** | **-1.8** |
| ZAA0 | | | | IAmb | | IAmb | 13 04 01.3 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.31** | **335** | P | | **P** | **13 04 00.7** | **-1.8** |
| | comp=Z,5.9nm,0.7s,baz=123,slow=4.3,SNR=25 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.31** | **335** | P | | **P** | **13 04 00.3** | **-2.1** |
| **KURK** | **Kurchatov** | **72.94** | **330** | P | | **P** | **13 04 05.1** | **-1.2** |
| KURK | | | | IAmb | | IAmb | 13 04 06.5 | |
| | comp=Z,9.5nm,1.0s | | | | | | | |
| **KKAR** | **Karatay Array** | **73.17** | **320** | P | | **P** | **13 04 06.3** | **-1.6** |
| **SOCY** | **Socotra** | **75.82** | **285** | P | | **P** | **13 04 21.8** | **-2.1** |
| **BRVK** | **Borovoye** | **78.50** | **329** | P | | **P** | **13 04 36.9** | **-1.1** |
| BRVK | | | | IAmb | | IAmb | 13 04 39.1 | |
| | comp=Z,6.4nm,1.2s | | | | | | | |
| **TIXI** | **Tiksi** | **80.59** | **1** | P | | **P** | **13 04 47.6** | **-1.4** |
| TIXI | | | | IAmb | | IAmb | 13 04 49.4 | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **80.88** | **180** | P | | **P** | **13 04 52.9** | **+2.0** |
| QSPA | | | | IAmb | | IAmb | 13 05 03.3 | |
| | comp=Z,7.6nm,1.3s | | | | | | | |
| **ABKAR** | **Akbulak array** | **82.49** | **322** | P | | **P** | **13 04 58.8** | **-0.7** |
| **SNAA** | **Sanae** | **92.98** | **194** | P | | **P** | **13 05 49.0** | **-1.1** |
| **TORD** | **Torodi Ar. Bea** | **126.51** | **280** | PKP | | **PKiKP** | **13 11 42.6** | **+1.2** |
| | comp=Z,0.6nm,0.7s,baz=65,slow=2.1,SNR=3.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **126.51** | **280** | | | **PKPdf** | **13 11 38.4** | **-2.6** |
| **LPAZ** | **La Paz** | **150.52** | **149** | PKPbc | | **PKiKP** | **13 12 32.5** | **+1.3** |
| | comp=Z,3.0nm,0.8s,baz=137,slow=1.3,SNR=8.1 | | | | | | | |
| **LPAZ** | **La Paz** | **150.52** | **149** | PKPdf | | **PKPdf** | **13 12 21.7** | **-3.4** |
| LPAZ | | | | PKPbc | | **PKPbc** | **13 12 27.0** | **-3.4** |
| LPAZ | | | | | | **PKiKP** | **13 12 33.2** | **+2.1** |

**NNC 29 13:40:11.0±12.0, 37°22N×70°30E, h0 km, mb4.2, mpv3.9, 5C, Error ellipse: s-maj=101.5km s-min=67.0km az=0.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KK09** | **Karatay Array** | **5.90** | **1** | ⇑P | | Pn | 13 41 37.6 | -2.0 |
| | 7.9nm,0.5s,baz=170,slow=12 | | | | | | | |
| KK09 | | | | ⇑S | | Sn | 13 42 49.4 | +1.4 |
| | 23nm,0.7s,baz=178,slow=27 | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.99** | **34** | ⇑P | | Pn | 13 41 57.5 | +2.7 |
| | 3.4nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑S | | Sn | 13 43 17.4 | +2.3 |
| | 4.1nm,0.6s | | | | | | | |
| **AB31** | **Akbulak array** | **14.19** | **331** | ⇑P | | Pn | 13 43 31.1 | -1.9 |
| | 1.3nm,0.5s,baz=135,slow=12,SNR=47 | | | | | | | |
| AB31 | | | | S | | Sn | 13 45 56.5 | -15 |
| | 1.3nm,0.6s,baz=151,slow=23,SNR=3.5 | | | | | | | |

**IDC 29 13:47:01.7±1.7, 43°13N×104°25E, h0 km, mb3.4/2, mb1 3.3/5, mb1mx3.2/49, mbtmp3.2/5, ML2.9/3, MS3.4/3, Ms1 3.4/3, ms1mx2.6/62, Error ellipse: s-maj=29.7km s-min=21.0km az=104.0, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **4.95** | **17** | Pn | | Pn | 13 48 17.9 | +0.5 |
| | 1.4nm,0.3s,baz=198,slow=15,SNR=45 | | | | | | | |
| SONM | | | | Pg | | Pb | 13 48 31.6 | +2.3 |
| | 3.2nm,0.3s,baz=200,slow=16,SNR=9.4 | | | | | | | |
| SONM | | | | Sn | | Sn | 13 49 17.2 | +1.8 |
| | 2.4nm,0.3s,baz=206,slow=27,SNR=5.6 | | | | | | | |
| SONM | | | | Lg | | Lg | 13 49 38.0 | |
| | 9.1nm,0.3s,baz=205,slow=30,SNR=30 | | | | | | | |
| **MKAR** | **Makanchi Array** | **15.96** | **291** | Pn | | Pn | 13 50 47.7 | +0.2 |
| | 0.0nm,0.3s,baz=92,slow=16,SNR=2.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **19.05** | **302** | P | | Pn | 13 51 26.2 | +0.3 |
| | 0.0nm,0.3s,baz=107,slow=10,SNR=2.6 | | | | | | | |
| **BVAR** | **Borovoye Array** | **24.48** | **306** | P | | P | 13 52 22.3 | -0.1 |
| | 0.7nm,0.5s,baz=202,slow=19,SNR=4.8 | | | | | | | |
| **JOW** | **Kunigami** | **25.40** | **122** | LR | | LR | 14 04 43.1 | |
| | comp=Z,91nm,20.1s,baz=358,slow=42 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **53.74** | **284** | LR | | LR | 14 25 02.8 | |
| | comp=Z,19nm,18.6s,baz=51,slow=42 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **64.02** | **157** | LR | | LR | 14 30 30.1 | |
| | comp=Z,35nm,18.8s,baz=170,slow=41 | | | | | | | |
| **ASAR** | **Alice Springs** | **71.85** | **151** | P | | P | 13 58 26.0 | -0.4 |
| | 0.5nm,1.0s,baz=344,slow=6.3,SNR=3.1 | | | | | | | |

*JSN **29** 13:51:37.9±0.9, 18°08N×76°66W, h0 km±8 km, MD2.5*
*SSNC **29** 13:51:38.7±1.8, 18°27N×76°68W, h0 km±16 km, MD2.7, MW2.2*

**ISC 29 13:51:36.3±1.5, 18°3N±0°1×76°72W±0°08, h7 km±20 km, n8, σ 0°73/12, 4D, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GWJ** | **Greenwich** | **0.19** | **181** | ⇓*i* P | | **Pg** | **13 51 39.7** | **-0.5** |
| **STH** | **Stony Hill** | **0.20** | **204** | ⇓*i* P | | **Pg** | **13 51 40.8** | **+0.4** |
| STH | | | | *i* S | | **Sg** | **13 51 43.2** | **0.0** |
| **HOJ** | **Hope** | **0.26** | **186** | ⇓*i* P | | **Pg** | **13 51 40.2** | **-1.3** |
| **CMJ** | **Castle Mountai** | **0.36** | **110** | *i* P | | **Pg** | **13 51 43.5** | **+0.2** |
| **MTDJ** | **Mount Denham** | **0.77** | **268** | *eP* | | **Pb** | **13 51 53.0** | **+0.8** |
| MTDJ | | | | *eS* | | **Sn** | **13 52 05.2** | **-0.4** |
| **MCJ** | **Malvern** | **0.98** | **250** | ⇓*i* P | | **Pn** | **13 51 56.8** | **+0.3** |
| **LMGC** | **Las Mercedes** | **1.81** | **352** | *eP* | | **Pn** | **13 52 07.5** | **-0.5** |
| LMGC | | | | *eS* | | **Sn** | **13 52 30.1** | **-1.0** |
| **RCC** | **Rio Carpintero** | **1.98** | **29** | *eP* | | **Pn** | **13 52 10.5** | **+0.3** |
| RCC | | | | *eS* | | **Sn** | **13 52 35.3** | **0.0** |

*IDC **29** 14:10:50.7±0.8, 1°39S×120°71E, h0 km, mb3.8/7, mb1 3.9/10, mb1mx3.8/35, mbtmp3.8/10, ML3.5/3, MS2.9/3, Ms1 2.9/3, ms1mx2.6/75, Error ellipse: s-maj=55.2km s-min=14.6km az=65.0*
*NEIC **29** 14:10:52.7±1.6, 1°49S±0°05×120°52E±0°07, h10 km±1 km, mb4.1/18, Error ellipse: s-maj=12.7km s-min=7.7km az=92.0*
*DJA **29** 14:10:53.6±0.9, 1°S±2°×120°0E±°, h13 km±7 km, M4.5/18, mb4.7/8, mB4.9/2, MLv4.5/18, Mw(mB)4.2/2*

**ISC 29 14:10:54.4±1.4, 1°49S±0°04×120°45E±0°05, h25 km±12 km, n58, σ 1°42/61, mb4.2/14, MS2.8/3, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **APSI** | **Ampana** | **1.33** | **65** | P | | **Pb** | **14 11 18.6** | **-0.1** |
| APSI | | | | S | | **Sb** | **14 11 38.4** | **+3.0** |
| **TTSI** | **Tana Toraja** | **1.67** | **202** | P | | **Pn** | **14 11 21.9** | **-0.3** |
| TTSI | | | | S | | **Sb** | **14 11 44.6** | **-0.6** |
| **MPSI** | **Mapaga** | **1.89** | **343** | P | | **Pn** | **14 11 23.7** | **-1.5** |
| MPSI | | | | S | | **Sn** | **14 11 48.2** | **-0.1** |
| **LUWI** | **Luwuk** | **2.37** | **79** | | | **Pn** | **14 11 32.1** | **+0.4** |
| **LUWI** | **Luwuk** | **2.37** | **79** | P | | **Pn** | **14 11 32.3** | **+0.6** |
| LUWI | | | | S | | **Sb** | **14 12 03.8** | **-1.4** |
| **MRSI** | **Marisa** | **2.46** | **37** | P | | **Pn** | **14 11 32.6** | **-0.3** |
| MRSI | | | | S | | **Sb** | **14 12 05.1** | **-2.7** |
| **SPSI** | **Sidrap Palu** | **2.55** | **195** | P | | **Pn** | **14 11 35.4** | **+1.1** |
| **TOLI2** | **Tolitoli** | **2.60** | **7** | | | **Pn** | **14 11 35.7** | **+0.8** |
| **BNSI** | **Bone** | **2.92** | **187** | P | | **Pn** | **14 11 41.6** | **+2.3** |
| **GTOI** | **Gorontalo** | **3.32** | **51** | P | | **Pn** | **14 11 46.3** | **+1.5** |
| **KAPI** | **Kappang** | **3.57** | **191** | Pn | | **Pn** | **14 11 50.0** | **+1.7** |
| | 13nm,0.3s,baz=6.3,slow=6.3,SNR=35 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **14 12 30.4** | **+0.6** |
| | 7.2nm,0.3s,baz=186,slow=19,SNR=4.0 | | | | | | | |
| **KAPI** | **Kappang** | **3.57** | **191** | | | **Pn** | **14 11 48.7** | **+0.3** |
| **BKSI** | **Bulukumba** | **3.83** | **185** | P | | **Pn** | **14 11 51.4** | **-0.4** |
| **KMSI** | **Cibinong** | **4.08** | **60** | P | | **Pn** | **14 11 59.0** | **+3.7** |
| **BBSI** | **Bau Bau** | **4.50** | **152** | P | | **Pn** | **14 12 01.6** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.63** | **179** | P | | **Pn** | **14 12 04.8** | **+2.0** |
| **KBKI** | **Kotabaru** | **4.64** | **247** | P | | **Pn** | **14 12 02.5** | **-0.5** |
| **SANI** | **Sanana** | **5.57** | **96** | P | | **Pn** | **14 12 14.7** | **-1.1** |
| **MTKI** | **Muara Teweh, K** | **5.58** | **275** | P | | **Pn** | **14 12 15.9** | **0.0** |
| | 0.3nm70nm,0.6s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **6.90** | **344** | | | **Pn** | **14 12 35.2** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **8.59** | **331** | Pn | | **Pn** | **14 12 58.4** | **+1.0** |
| **SOEI** | **Soe** | **9.05** | **155** | | | **Pn** | **14 13 02.3** | **-1.4** |
| **SOEI** | **Soe** | **9.05** | **155** | P | | **Pn** | **14 13 05.3** | **+1.6** |
| | 25nm,0.9s | | | | | | | |
| **BATI** | **Baumata** | **9.23** | **160** | Pn | | **Pn** | **14 13 05.8** | **-0.4** |
| | 1.3nm,0.3s,baz=146,slow=6.2,SNR=1.5 | | | | | | | |
| **BATI** | **Baumata** | **9.23** | **160** | P | | Pn | 14 13 16.8 | +11 |
| **SMRI** | **Semarang** | **11.40** | **241** | Pn | | **Pn** | **14 13 36.0** | **+0.1** |
| **MTN** | **Manton Dam** | **15.47** | **137** | P | | **P** | **14 14 34.6** | **-0.9** |
| MTN | | | | IAmb | | IAmb | 14 14 39.7 | |
| | comp=Z,9.2nm,1.2s | | | | | | | |
| **KNRA** | **Kununurra** | **16.31** | **150** | Pn | | **Pn** | **14 14 41.5** | **-0.5** |
| KNRA | | | | IAmb | | IAmb | 14 14 50.9 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.28** | **163** | P | | **Pn** | **14 14 52.7** | **-1.4** |
| | comp=Z,0.0nm,0.3s,baz=354,slow=14,SNR=2.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.28** | **163** | P | | **Pn** | **14 14 52.6** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **19.98** | **182** | P | | **P** | **14 15 22.9** | **-2.2** |
| PSA00 | | | | IAmb | | IAmb | 14 15 26.2 | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| **KULM** | **Kulim** | **20.89** | **289** | P | | **P** | **14 15 35.9** | **+0.7** |
| KULM | | | | IAmb | | IAmb | 14 15 41.5 | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.72** | **144** | P | | **P** | **14 15 54.2** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 14 16 05.6 | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.83** | **144** | P | | **P** | **14 15 54.1** | **-1.7** |
| WRAB | | | | IAmb | | IAmb | 14 16 06.9 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.83** | **144** | P | | **P** | **14 15 55.1** | **-0.7** |
| | comp=Z,2.2nm,0.9s,baz=314,slow=13,SNR=14 | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.83** | **144** | P | | **P** | **14 15 54.3** | **-1.6** |
| **WB2** | **Warramunga Arr** | **22.84** | **144** | P | | **P** | **14 15 54.9** | **-1.1** |
| **WR0** | **Warramunga Arr** | **22.96** | **144** | P | | **P** | **14 15 56.4** | **-0.8** |
| WR0 | | | | IAmb | | IAmb | 14 16 07.2 | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **YULB** | **Yu-li** | **24.74** | **2** | P | | **P** | **14 16 15.5** | **+1.3** |
| **AS31** | **Alice Springs** | **25.62** | **150** | P | | **P** | **14 16 21.5** | **-0.6** |
| **ASAR** | **Alice Springs** | **25.62** | **150** | P | | **P** | **14 16 21.9** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=329,slow=8.9,SNR=18 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **14 19 53.1** | **+0.3** |
| | comp=Z,0.3nm,0.8s,baz=330,slow=2.7,SNR=2.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.99** | **314** | P | | **P** | **14 16 53.3** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=144,slow=7.8,SNR=2.0 | | | | | | | |
| CMAR | | | | LR | | LR | 14 31 23.5 | |
| | comp=Z,28nm,18.2s,baz=125,slow=42 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.22** | **149** | P | | **P** | **14 17 54.4** | **-1.1** |
| | comp=Z,1.8nm,0.6s,baz=328,slow=11,SNR=4.1 | | | | | | | |
| **KSRS** | **Korea Array** | **39.36** | **9** | LR | | LR | 14 34 52.6 | |
| | comp=Z,13nm,21.1s,baz=55,slow=37 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.29** | **22** | LR | | LR | 14 37 41.4 | |
| | comp=Z,11nm,18.1s,baz=5.5,slow=39 | | | | | | | |
| **GTA** | **Gaotai** | **44.89** | **337** | *eP* | | P | 14 19 13.0 | +5.8 |
| GTA | | | | pP | | sP | 14 19 18.5 | +0.1 |
| GTA | | | | sP | | pP | 14 19 21.3 | +6.1 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **46.64** | **11** | P | | **P** | **14 19 19.1** | **-1.7** |
| **USRK** | **Ussuriysk Ar.** | **46.64** | **11** | P | | **P** | **14 19 19.3** | **-1.5** |
| **SONM** | **Songino Array** | **50.63** | **348** | P | | **P** | **14 19 51.0** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=167,slow=8.2,SNR=3.0 | | | | | | | |
| **SONM** | **Songino Array** | **50.63** | **348** | P | | **P** | **14 19 51.2** | **-0.4** |
| SONM | | | | IAmb | | IAmb | 14 19 58.0 | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **57.62** | **320** | P | | **P** | **14 20 47.0** | **+4.2** |
| KSH | | | | pP | | pP | 14 20 51.8 | +0.9 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **58.58** | **330** | P | | **P** | **14 20 48.9** | **-0.3** |
| MK31 | | | | IAmb | | IAmb | 14 20 55.9 | |
| | comp=Z,2.5nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.58** | **330** | P | | **P** | **14 20 49.0** | **-0.2** |
| | comp=Z,2.1nm,0.7s,baz=140,slow=6.2,SNR=14 | | | | | | | |
| **MAKZ** | **Makanchi** | **58.74** | **330** | P | | **P** | **14 20 50.2** | **-0.1** |
| MAKZ | | | | IAmb | | IAmb | 14 21 02.2 | |
| | comp=Z,5.4nm,1.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.64** | **337** | P | | **P** | **14 21 18.0** | **+1.3** |
| | comp=Z,1.9nm,0.7s,baz=134,slow=6.1,SNR=8.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.64** | **337** | P | | **P** | **14 21 16.6** | **-0.1** |
| **ABKAR** | **Akbulak array** | **72.36** | **323** | P | | **P** | **14 22 17.4** | **-0.9** |
| **VNDA** | **Vanda** | **79.15** | **172** | P | | **P** | **14 22 58.9** | **+2.3** |

*NEIC **29** 14:16:48.8±3.4, 17°56N±0°05×101°45W±0°04, h34 km±9 km, Error ellipse: s-maj=8.2km s-min=4.9km az=206.0*
*MEX **29** 14:16:49.1±1.4, 17°65N×101°53W, h44 km±11 km, MD4.1*

**ISC 29 14:16:48.8±1.3, 17°61N±0°04×101°48W±0°03, h39 km±7 km, n58, σ 1°73/91, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ZIIG** | **Zihuatanejo** | **0.01** | **85** | | | **Pn** | **14 16 54.6** | **-0.4** |
| ZIIG | | | | *i* P | | **Sn** | **14 16 59.2** | **-0.1** |
| **ZIIG** | **Zihuatanejo** | **0.01** | **85** | *i* P | | **Pn** | **14 16 54.6** | **-0.4** |
| ZIIG | | | | *i* S | | **Sn** | **14 16 59.2** | **-0.1** |
| **UON** | **La Union** | **0.48** | **319** | *eP* | | **Pn** | **14 16 58.2** | **-1.0** |
| UON | | | | *eS* | | **Sn** | **14 17 05.3** | **-1.2** |
| **ATYC** | **Atoyac** | **1.07** | **111** | *eP* | | **Pn** | **14 17 07.0** | **-0.3** |
| ATYC | | | | *i* S | | **Sn** | **14 17 20.7** | **-0.3** |
| **ARIG** | **Puente Sto Nin** | **1.27** | **58** | | | **Pn** | **14 17 08.4** | **-1.6** |
| ARIG | | | | | | **Sn** | **14 17 23.5** | **-2.3** |
| **ARIG** | **Puente Sto Nin** | **1.27** | **58** | *eP* | | **Pn** | **14 17 08.4** | **-1.6** |
| ARIG | | | | *eS* | | **Sn** | **14 17 23.5** | **-2.3** |
| **CAIG** | **El Cayaco** | **1.28** | **115** | | | **Pn** | **14 17 09.8** | **-0.3** |
| CAIG | | | | | | **Sn** | **14 17 26.1** | **-0.1** |
| **CAIG** | **El Cayaco** | **1.28** | **115** | *eP* | | **Pn** | **14 17 09.8** | **-0.3** |
| CAIG | | | | *i* S | | **Sn** | **14 17 26.1** | **-0.1** |
| **MEIG** | **Mezcala** | **1.80** | **80** | | | **Pn** | **14 17 14.1** | **-3.3** |
| MEIG | | | | | | **Sn** | **14 17 39.6** | **+0.6** |
| **MEIG** | **Mezcala** | **1.80** | **80** | *eP* | | **Pn** | **14 17 14.1** | **-3.3** |
| MEIG | | | | *eS* | | **Sn** | **14 17 39.6** | **+0.6** |
| **TEJU** | **Tejupilco** | **1.80** | **44** | *eP* | | **Pn** | **14 17 17.2** | **-0.2** |
| TEJU | | | | *i* S | | **Sn** | **14 17 38.9** | **-0.2** |
| **DAIG** | **Los Arroyos** | **1.84** | **108** | | | **Pn** | **14 17 19.0** | **+1.1** |
| DAIG | | | | | | **Sn** | **14 17 37.8** | **-2.1** |
| **DAIG** | **Los Arroyos** | **1.84** | **108** | *eP* | | **Pn** | **14 17 19.0** | **+1.1** |
| DAIG | | | | *eS* | | **Sn** | **14 17 37.8** | **-2.1** |
| **MMIG** | **Aquila** | **1.90** | **291** | | | **Pn** | **14 17 18.8** | **+0.1** |
| MMIG | | | | | | **Sn** | **14 17 42.4** | **+0.9** |
| **MMIG** | **

*NEIC* ***29*** *14:52:10.7±2.4,25°.0S×0°.1×177°.2W×0°.2,h130km±6km, mb4.6/26,Error ellipse: s-maj=20.2km s-min=14.3km az=106.0*

*IDC* ***29*** *14:52:14.8±3.8,25°.12S×177°.51W,h165km×31km,mb3.5/9, mb1 3.8/11,mb1mx3.5/35,mbtmp4.0/11,Error ellipse: s-maj=29.6km s-min=18.0km az=136.0*

*NOU* ***29*** *14:52:22.5,24°.80S×176°.24W,h337km,mb4.3/17,South of Fiji Islands*

**ISC 29 14:52:12.2±0.5,25°.03S±0°.08×177°.18W±0°.09,h150km, n71,σ1°51/66,mb4.3/27,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.51** | **328** | P | | **Pn** | **14 54 14.9** | **+2.4** |
| | 0.7nm,0.3s,baz=155,slow=12,SNR=4.4 | | | | | | | |
| **MSVF** | **Nonsavu** | **8.51** | **328** | | | Pn | 14 54 16.9 | +4.4 |
| **NIUE** | **Niue** | **8.96** | **50** | Pn | | **Pn** | **14 54 17.7** | **-0.9** |
| **NIUE** | **Niue** | **8.96** | **50** | P | | **Pn** | **14 54 18.3** | **-0.2** |
| | 203nm,1.8s | | | | | | | |
| **AFI** | **Afiamalu** | **12.18** | **26** | P | | **Pn** | **14 54 57.2** | **-3.7** |
| | 2.8nm,0.3s,baz=344,slow=4.2,SNR=4.3 | | | | | | | |
| AFI | | | | S | | Sn | 14 57 02.9 | -13 |
| | 2.0nm,0.3s,baz=110,slow=13,SNR=1.7 | | | | | | | |
| **AFI** | **Afiamalu** | **12.18** | **26** | Pn | | **Pn** | **14 54 57.7** | **-3.3** |
| **URZ** | **Urewera** | **14.05** | **199** | P | | **Pn** | **14 55 23.2** | **-1.4** |
| | 0.3nm,0.3s,baz=179,slow=22,SNR=1.2 | | | | | | | |
| URZ | | | | S | | Sn | 14 57 42.4 | -18 |
| | 1.0nm,0.3s,baz=115,slow=23,SNR=7.8 | | | | | | | |
| **URZ** | **Urewera** | **14.05** | **199** | Pn | | **Pn** | **14 55 24.3** | **-0.4** |
| **PINNC** | **Pines Island,** | **14.27** | **277** | P | | P | 14 55 39.9 | +10 |
| | 73nm,1.6s | | | | | | | |
| **YATNC** | **Mamie plateau,** | **14.90** | **278** | P | | P | 14 55 47.0 | +10 |
| | 25nm,1.1s | | | | | | | |
| **LIFNC** | **LIFOU** | **14.96** | **283** | P | | **P** | **14 55 36.7** | **-1.3** |
| **HIZ** | **Hauiti** | **15.04** | **205** | | | **P** | **14 55 39.2** | **+0.4** |
| **DZM** | **Mont Dzumac** | **15.30** | **278** | P | | **P** | **14 55 46.7** | **+4.8** |
| | 0.5nm,0.3s,baz=111,slow=19,SNR=3.9 | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.30** | **278** | P | | P | 14 55 48.0 | +6.1 |
| **LTZ** | **Lake Taylor** | **19.72** | **204** | P | | **Pn** | **14 56 30.7** | **-2.4** |
| LTZ | | | | IAmb | | IAmb | 14 56 51.0 | |
| | comp=Z,33nm,1.3s | | | | | | | |
| **NTLS** | **Newcastle Soft** | **28.21** | **247** | P | | P | 14 57 54.9 | +4.0 |
| **SYDH** | **Sydney Hard Ro** | **29.18** | **245** | P | | **P** | **14 58 00.8** | **+1.3** |
| | comp=Z,13nm,1.4s | | | | | | | |
| **CNB** | **Canberra Magne** | **30.56** | **242** | P | | **P** | **14 58 13.5** | **+1.7** |
| | comp=Z,18nm,1.6s | | | | | | | |
| **CAN** | **Canberra** | **30.85** | **243** | P | | **P** | **14 58 16.1** | **+1.8** |
| CAN | | | | IAmb | | IAmb | 14 58 42.4 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **TOO** | **Toolangi** | **34.04** | **239** | P | | **P** | **14 58 44.0** | **+1.9** |
| TOO | | | | IAmb | | IAmb | 14 59 02.7 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **CTA** | **Charters Tower** | **34.05** | **271** | P | | **P** | **14 58 43.3** | **+1.0** |
| | comp=Z,10nm,1.1s | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.36** | **273** | P | | **P** | **14 59 03.5** | **+1.4** |
| | comp=Z,12nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.71** | **250** | P | | **P** | **14 59 04.1** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=111,slow=11,SNR=3.4 | | | | | | | |
| STKA | | | | PcP | | **PcP** | **15 01 24.9** | **+0.5** |
| | comp=Z,1.7nm,0.7s,baz=95,slow=7.0,SNR=5.8 | | | | | | | |
| **PMG** | **Port Moresby** | **37.28** | **288** | P | | **P** | **14 59 10.7** | **+0.7** |
| PMG | | | | IAmb | | IAmb | 14 59 11.2 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **37.28** | **288** | P | | **P** | **14 59 09.0** | **-1.0** |
| | comp=Z,17nm,0.9s | | | | | | | |
| **PMG** | **Port Moresby** | **37.28** | **288** | P | | **P** | **14 59 08.9** | **-1.0** |
| | comp=Z,17nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **38.83** | **279** | P | | **P** | **14 59 23.8** | **+0.9** |
| COEN | | | | IAmb | | IAmb | 14 59 25.9 | |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| **COEN** | **Coen** | **38.83** | **279** | P | | **P** | **14 59 23.7** | **+0.8** |
| | comp=Z,9.2nm,1.7s | | | | | | | |
| **HTT** | **Hallett** | **38.98** | **247** | P | | **P** | **14 59 23.2** | **-0.8** |
| **LCRK** | **Leigh Creek** | **39.65** | **252** | P | | **P** | **14 59 31.1** | **+1.6** |
| | comp=Z,13nm,2.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **41.38** | **248** | P | | **P** | **14 59 42.2** | **-1.6** |
| BBOO | | | | IAmb | | IAmb | 14 59 59.9 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **41.38** | **248** | P | | **P** | **14 59 41.9** | **-1.9** |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **44.39** | **261** | P | | **P** | **15 00 07.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.39** | **261** | P | | **P** | **15 00 06.5** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=93,slow=7.5,SNR=37 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15 01 49.6** | **+0.2** |
| | comp=Z,0.3nm,0.5s,baz=94,slow=5.9,SNR=2.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.39** | **261** | P | | **P** | **15 00 07.5** | **-0.7** |
| **WR0** | **Warramunga Arr** | **44.71** | **266** | P | | **P** | **15 00 10.2** | **-0.4** |
| **WB2** | **Warramunga Arr** | **44.88** | **266** | P | | **P** | **15 00 11.6** | **-0.4** |
| **WB0** | **Warramunga Arr** | **44.89** | **267** | P | | **P** | **15 00 10.7** | **-1.4** |
| **WRA** | **Warramunga Arr** | **44.89** | **266** | P | | **P** | **15 00 10.2** | **-1.9** |
| | comp=Z,1.0nm,0.4s,baz=99,slow=6.8,SNR=9.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **266** | P | | **P** | **15 00 11.6** | **-0.6** |
| **FORT** | **Forrest** | **48.33** | **250** | P | | **P** | **15 00 37.3** | **-1.4** |
| **MTN** | **Manton Dam** | **50.10** | **274** | P | | **P** | **15 00 52.6** | **+0.3** |
| MTN | | | | IAmb | | IAmb | 15 00 54.1 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **51.25** | **270** | P | | **P** | **15 00 59.5** | **-1.4** |
| KNRA | | | | IAmb | | IAmb | 15 01 02.0 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.30** | **265** | P | | **P** | **15 01 15.2** | **-0.8** |
| FITZ | | | | IAmb | | IAmb | 15 01 20.6 | |
| | comp=Z,8.7nm,1.5s | | | | | | | |
| **FAKI** | **Fak Fak** | **53.36** | **286** | P | | **P** | **15 01 16.0** | **-0.6** |
| **MORW** | **Morawa** | **58.90** | **250** | P | | **P** | **15 01 54.5** | **-1.3** |
| MORW | | | | IAmb | | IAmb | 15 02 09.8 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **CASY** | **Casey** | **60.23** | **206** | P | | **P** | **15 02 04.0** | **-0.1** |
| **QSPA** | **South Pole Qui** | **65.06** | **180** | P | | **P** | **15 02 37.3** | **+0.9** |
| QSPA | | | | IAmb | | IAmb | 15 02 54.2 | |
| | comp=Z,5.2nm,1.5s | | | | | | | |
| **BELA** | **Belgrano 2** | **74.99** | **172** | P | | **P** | **15 03 37.2** | **+0.7** |
| BELA | | | | IAmb | | IAmb | 15 03 44.3 | |
| | comp=Z,6.5nm,1.5s | | | | | | | |
| **ADK** | **Adak** | **76.58** | **0** | P | | **P** | **15 03 45.2** | **-0.5** |
| **NACB** | **Ninganchiao** | **76.85** | **305** | P | | **P** | **15 03 47.4** | **-0.4** |
| **PET** | **Petropavlovsk** | **80.52** | **345** | P | | **P** | **15 04 09.2** | **+2.0** |
| PET | | | | IAmb | | IAmb | 15 04 34.6 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **80.82** | **345** | P | | **P** | **15 04 11.0** | **+2.2** |
| PEA0B | | | | IAmb | | IAmb | 15 04 13.1 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.82** | **345** | P | | **P** | **15 04 09.6** | **+0.7** |
| | comp=Z,4.5nm,0.7s,baz=160,slow=4.6,SNR=12 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.82** | **345** | P | | **P** | **15 04 10.4** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **83.81** | **43** | P | | P | 15 04 28.2 | +3.1 |
| | comp=Z,0.7nm,0.7s,baz=223,slow=7.6,SNR=6.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **88.87** | **57** | P | | **P** | **15 04 50.3** | **+0.5** |
| | comp=Z,0.1nm,0.5s,baz=260,slow=4.5,SNR=2.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.74** | **43** | P | | **P** | **15 05 04.3** | **+1.3** |
| | comp=Z,0.6nm,0.7s,baz=220,slow=4.6,SNR=4.8 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.32** | **289** | P | | **P** | **15 05 04.1** | **-1.8** |
| | comp=Z,0.5nm,0.6s,baz=146,slow=6.6,SNR=0.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **92.55** | **12** | P | | **P** | **15 05 07.6** | **+1.7** |
| | comp=Z,0.3nm,0.5s,baz=233,slow=5.1,SNR=6.7 | | | | | | | |
| **ILAR** | **Eielson Array** | **92.55** | **12** | P | | **P** | **15 05 06.8** | **+0.9** |
| **SONM** | **Songino Array** | **99.64** | **318** | P | | **Pdif** | **15 05 36.3** | **-2.4** |
| | comp=Z,0.2nm,0.4s,baz=95,slow=3.5,SNR=1.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **114.81** | **312** | PKiKP | | **PKiKP** | **15 10 34.7** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=223,slow=0.4,SNR=10 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.49** | **349** | PKP | | **PKiKP** | **15 11 10.6** | **-0.6** |
| | comp=Z,3.0nm,0.9s,baz=162,slow=0.4,SNR=8.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **140.31** | **343** | PKhKP | | PKPpre | 15 11 16.5 | |
| | comp=Z,0.4nm,0.5s,baz=69,slow=6.3,SNR=4.7 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.55** | **353** | PKPa | | **PKPdf** | **15 11 27.6** | **-1.0** |
| | comp=Z,0.9nm,0.7s,baz=16,slow=3.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **143.55** | **353** | PKP | | **PKPdf** | **15 11 27.5** | **-1.0** |
| | comp=Z,0.5nm,0.7s,baz=49,slow=2.0,SNR=4.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **147.29** | **328** | PKPbc | | **PKiKP** | **15 11 38.4** | **-1.5** |
| | comp=Z,1.8nm,0.4s,baz=44,slow=4.0,SNR=16 | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.30** | **307** | PKPbc | | **PKiKP** | **15 11 46.4** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=135,slow=3.9,SNR=5.1 | | | | | | | |
| **CLL** | **Collm** | **152.62** | **346** | ePKPab | | **PKPab** | **15 12 03.0** | **+1.2** |
| **TORD** | **Torodi Ar. Bea** | **168.13** | **175** | PKPab | | **PKPab** | **15 13 11.0** | **+0.9** |
| | comp=Z,0.4nm,0.6s,baz=221,slow=3.0,SNR=3.9 | | | | | | | |

*DJA* ***29*** *14:55:50.7±1.9,2°.1N×97°.6E±1°.5,h12km±5km,M4.0/6, mb4.3/2,MLv3.8/6*

*IDC* ***29*** *14:56:04.3±7.6,2°.79N×97°.26E,h119km±50km,mb3.4/4, mb1 3.5/5,mb1mx3.0/40,mbtmp3.7/5,MS3.0/1,Ms1 3.2/1, ms1mx2.5/40,Error ellipse: s-maj=137.7km s-min=19.9km az=59.0*

**ISC 29 14:55:50.8±1.5,2°.13N±0°.08×96°.2E±0°.2,h27km,n17,σ0°87/12,mb3.8/4,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **0.31** | **25** | P | | **Pb** | **14 55 58.2** | **+0.1** |
| SNSI | | | | S | | **Sn** | **14 56 04.0** | **-1.1** |
| **GSI** | **Gunungsitoli** | **1.60** | **121** | P | | **Pn** | **14 56 17.5** | **+0.1** |
| GSI | | | | S | | **Sn** | **14 56 37.2** | **0.0** |
| **KCSI** | **Kotacane, Aceh** | **2.10** | **49** | P | | **Pn** | **14 56 24.9** | **+0.8** |
| **TSI** | **Tuntungan** | **2.73** | **60** | P | | **Pn** | **14 56 34.5** | **+1.7** |
| **PSI** | **Prapat** | **2.81** | **76** | P | | **Pn** | **14 56 33.6** | **-0.4** |
| | 1.1nm,0.3s,baz=272,slow=10,SNR=5.8 | | | | | | | |
| PSI | | | | LR | | LR | 14 57 23.7 | |
| | comp=Z,75nm,19.3s,baz=18,slow=48 | | | | | | | |
| **PPI** | **Padang Panjang** | **4.92** | **121** | P | | Pb | 14 57 25.5 | +9.2 |
| **CMAR** | **Chiang Mai Arr** | **16.45** | **9** | P | | **Pn** | **14 59 38.6** | **-1.3** |
| | 0.3nm,0.3s,baz=199,slow=12,SNR=7.6 | | | | | | | |
| CMAR | | | | LR | | LR | 15 06 42.6 | |
| | comp=Z,50nm,18.4s,baz=275,slow=41 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.56** | **247** | T | | T | 15 27 51.8 | |
| | baz=68,slow=75,SNR=110 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.56** | **247** | T | | T | 15 27 51.8 | |
| | baz=68,slow=75,SNR=122 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.58** | **247** | T | | T | 15 27 51.3 | |
| | baz=68,slow=75,SNR=142 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.48** | **157** | T | | T | 15 46 34.5 | |
| | baz=333,slow=76,SNR=52 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.50** | **157** | T | | T | 15 46 34.8 | |
| | baz=333,slow=76,SNR=47 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.50** | **157** | T | | T | 15 46 35.6 | |
| | baz=333,slow=76,SNR=48 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.38** | **122** | P | | **P** | **15 03 51.0** | **-0.3** |
| | 0.5nm,1.0s,baz=304,slow=8.8,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.75** | **127** | P | | **P** | **15 04 02.4** | **+0.1** |
| | 0.4nm,0.9s,baz=297,slow=8.0,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.11** | **347** | P | | **P** | **15 04 12.9** | **+0.3** |
| | 1.9nm,0.7s,baz=160,slow=7.3,SNR=19 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.49** | **352** | P | | **P** | **15 05 01.8** | **+0.5** |
| | 1.9nm,0.5s,baz=184,slow=8.0,SNR=12 | | | | | | | |

*NEIC* ***29*** *15:07:55.6±1.3,12°.59N±0°.08×88°.49W±0°.07,h48km±6km, mb4.5/46,Md4.7(SNET),Error ellipse: s-maj=13.8km s-min=7.2km az=219.0*

*SNET* ***29*** *15:07:55.4±1.2,12°.62N×88°.60W,h20km±5km,ML4.4*

*IDC* ***29*** *15:07:56.9±3.5,12°.87N×88°.23W,h73km±26km,mb3.5/8, mb1 3.9/11,mb1mx3.7/39,mbtmp3.9/11,MS3.3/7, Ms1 3.3/7,ms1mx2.9/44,Error ellipse: s-maj=38.7km s-min=26.8km az=24.0*

*UCR* ***29*** *15:07:56.2±1.5,12°.66N×88°.52W,h56km±24km,ML4.4, mb4.5(NEIC)*

*INET* ***29*** *15:07:57.4±1.0,12°.77N×88°.40W,h49km±16km,ML5.2*

**ISC 29 15:07:56.5±0.9,12°.69N±0°.05×88°.49W±0°.04,h63km±8km, n227,σ0°96/236,mb4.4/30,16C-2D,Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JUCU** | **Jucuarįn** | **0.61** | **23** | *eP* | | **Pn** | **15 08 08.8** | **-1.2** |
| JUCU | | | | IAML | | | 15 08 21.1 | |
| | comp=Z,15µm,0.2s | | | | | | | |
| **JUCU** | **Jucuarįn** | **0.61** | **23** | *eP* | | **Pn** | **15 08 08.8** | **-1.2** |
| **JUCU** | **Jucuarįn** | **0.61** | **23** | *eP* | | **Pn** | **15 08 08.8** | **-1.2** |
| JUCU | | | | IAML | | | 15 08 21.1 | |
| | comp=Z,15µm,0.2s | | | | | | | |
| **ALJI** | **Alcalda de J** | **0.64** | **353** | *eP* | | **Pn** | **15 08 09.7** | **-0.5** |
| **ALJI** | **Alcalda de J** | **0.64** | **353** | *eP* | | **Pn** | **15 08 09.7** | **-0.5** |
| **LCY** | **Lacayo** | **0.76** | **15** | *eP* | | **Pn** | **15 08 11.1** | **-0.6** |
| LCY | | | | *eS* | | **Sn** | **15 08 24.9** | **+2.1** |
| **LCY** | **Lacayo** | **0.76** | **15** | *eP* | | **Pn** | **15 08 11.1** | **-0.6** |
| LCY | | | | *eS* | | **Sn** | **15 08 24.9** | **+2.1** |
| **VSM** | **San Miguel** | **0.77** | **16** | *eP* | | **Pn** | **15 08 11.4** | **-0.6** |
| VSM | | | | *eS* | | **Sn** | **15 08 25.2** | **+1.9** |
| **VSM** | **San Miguel** | **0.77** | **16** | *eP* | | **Pn** | **15 08 11.4** | **-0.6** |
| VSM | | | | *eS* | | **Sn** | **15 08 25.2** | **+1.9** |
| **RANC** | **El Ranchito** | **0.77** | **15** | *eP* | | **Pn** | **15 08 11.2** | **-0.7** |
| **RANC** | **El Ranchito** | **0.77** | **15** | *eP* | | **Pn** | **15 08 11.2** | **-0.7** |
| **PACA** | **Pacayal** | **0.80** | **12** | *eP* | | **Pn** | **15 08 11.9** | **-0.3** |
| **PACA** | **Pacayal** | **0.80** | **12** | *eP* | | **Pn** | **15 08 11.9** | **-0.3** |
| **COEB** | **Comit de Eme** | **0.81** | **357** | *eP* | | **Pn** | **15 08 11.6** | **-0.7** |
| **COEB** | **Comit de Eme** | **0.81** | **357** | *eP* | | **Pn** | **15 08 11.7** | **-0.7** |
| **COEB** | **Comit de Eme** | **0.81** | **357** | *eP* | | **Pn** | **15 08 11.6** | **-0.7** |
| **CNRM** | **Centro Naciona** | **0.84** | **22** | *eP* | | **Pn** | **15 08 12.0** | **-0.6** |
| **CNRM** | **Centro Naciona** | **0.84** | **22** | *eP* | | **Pn** | **15 08 12.0** | **-0.6** |
| **LCND** | **La Caada** | **0.85** | **43** | *eP* | | **Pn** | **15 08 12.6** | **-0.1** |
| LCND | | | | IAML | | | 15 08 13.3 | |
| | comp=Z,16µm,0.4s | | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.89** | **342** | *eP* | | **Pn** | **15 08 12.5** | **-0.8** |
| **TECO** | **Alcaldia de Te** | **0.89** | **342** | *eP* | | **Pn** | **15 08 12.5** | **-0.8** |
| **PQSS** | **Presa 15 de Se** | **0.94** | **356** | *eP* | | **Pn** | **15 08 13.3** | **-0.5** |
| PQSS | | | | IAML | | | 15 08 27.9 | |
| | comp=Z,15µm,0.2s | | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.94** | **356** | *eP* | | **Pn** | **15 08 13.3** | **-0.5** |
| PQSS | | | | IAML | | | 15 08 27.9 | |
| | comp=Z,15µm,0.2s | | | | | | | |
| **CSGN** | **Cosiguina Volc** | **0.95** | **72** | *eP* | | **Pn** | **15 08 12.7** | **-1.4** |
| **SNVI** | **San Vicente** | **0.98** | **340** | *eP* | | **Pn** | **15 08 14.1** | **-0.5** |
| **SNVI** | **San Vicente** | **0.98** | **340** | *eP* | | **Pn** | **15 08 14.1** | **-0.5** |
| **UESV** | **Universidad de** | **0.99** | **343** | *eP* | | **Pn** | **15 08 14.0** | **-0.5** |
| **UESV** | **Universidad de** | **0.99** | **343** | *eP* | | **Pn** | **15 08 14.0** | **-0.5** |
| **SCLA** | **Alcaldia de Sa** | **1.04** | **347** | *eP* | | **Pn** | **15 08 15.1** | **-0.1** |
| **SCLA** | **Alcaldia de Sa** | **1.04** | **347** | *eP* | | **Pn** | **15 08 15.1** | **-0.1** |
| **LFRS** | **El Faro** | **1.08** | **329** | *eP* | | **Pn** | **15 08 15.3** | **-0.6** |
| **LFRS** | **El Faro** | **1.08** | **329** | *eP* | | **Pn** | **15 08 15.3** | **-0.6** |
| **PAVA** | **Las Pavas** | **1.11** | **337** | *eP* | | **Pn** | **15 08 16.0** | **-0.2** |
| PAVA | | | | IAML | | | 15 08 38.3 | |
| | comp=Z,8µm,0.4s | | | | | | | |
| **PAVA** | **Las Pavas** | **1.11** | **337** | *eP* | | **Pn** | **15 08 16.0** | **-0.2** |
| PAVA | | | | IAML | | | 15 08 38.3 | |
| | comp=Z,8µm,0.4s | | | | | | | |
| **LALI** | **Alcalda de L** | **1.14** | **315** | *eP* | | **Pn** | **15 08 15.6** | **-0.7** |
| **LALI** | **Alcalda de L** | **1.14** | **315** | *eP* | | **Pn** | **15 08 15.6** | **-0.7** |
| **LBRS** | **Las Brisas** | **1.18** | **333** | *eP* | | **Pn** | **15 08 17.2** | **+0.2** |
| **LBRS** | **Las Brisas** | **1.18** | **333** | *eP* | | **Pn** | **15 08 17.2** | **+0.2** |
| **UDBS** | **Universidad Do** | **1.21** | **328** | *eP* | | **Pn** | **15 08 17.2** | **-0.2** |
| UDBS | | | | IAML | | | 15 08 19.5 | |
| | comp=Z,9µm,0.3s | | | | | | | |
| **UDBS** | **Universidad Do** | **1.21** | **328** | *eP* | | **Pn** | **15 08 17.2** | **-0.2** |
| UDBS | | | | IAML | | | 15 08 19.5 | |
| | comp=Z,9µm,0.3s | | | | | | | |
| **LFU** | **La Fuente** | **1.22** | **330** | *eP* | | **Pn** | **15 08 17.4** | **-0.1** |
| LFU | | | | *eS* | | **Sn** | **15 08 33.3** | **0.0** |
| **LFU** | **La Fuente** | **1.22** | **330** | *eP* | | **Pn** | **15 08 17.4** | **-0.1** |
| LFU | | | | *eS* | | **Sn** | **15 08 33.3** | **0.0** |
| **UTEC** | **Universidad Te** | **1.22** | **326** | *eP* | | **Pn** | **15 08 17.6** | **0.0** |
| **UTEC** | **Universidad Te** | **1.22** | **326** | *eP* | | **Pn** | **15 08 17.6** | **0.0** |
| **SNET** | **Serv Nac Est T** | **1.23** | **324** | | | **Pn** | **15 08 17.0** | **-0.7** |
| **SNET** | **Serv Nac Est T** | **1.23** | **324** | *eP* | | **Pn** | **15 08 17.1** | **-0.6** |
| **SNET** | **Serv Nac Est T** | **1.23** | **324** | *eP* | | **Pn** | **15 08 17.1** | **-0.6** |
| **OPAM** | **Oficina de Pla** | **1.23** | **326** | *eP* | | **Pn** | **15 08 17.4** | **-0.3** |
| **OPAM** | **Oficina de Pla** | **1.23** | **326** | *eP* | | **Pn** | **15 08 17.4** | **-0.3** |
| **SEMO** | **Seminario San** | **1.24** | **325** | *eP* | | **Pn** | **15 08 17.4** | **-0.4** |
| SEMO | | | | *eP* | | **Pn** | **15 08 17.6** | **-0.3** |
| **UESS** | **Universidad de** | **1.24** | **326** | *eP* | | **Pn** | **15 08 17.6** | **-0.2** |
| **UESS** | **Universidad de** | **1.24** | **326** | *eP* | | **Pn** | **15 08 17.6** | **-0.2** |
| **ITCA** | **Escuela Especi** | **1.25** | **322** | *eP* | | **Pn** | **15 08 17.6** | **-0.4** |
| **ITCA** | **Escuela Especi** | **1.25** | **322** | *eP* | | **Pn** | **15 08 17.6** | **-0.4** |
| **UEES** | **Universidad Ev** | **1.26** | **325** | *eP* | | **Pn** | **15 08 17.7** | **-0.4** |
| UEES | | | | IAML | | | 15 08 19.0 | |
| | comp=Z,6µm,0.6s | | | | | | | |
| **UEES** | **Universidad Ev** | **1.26** | **325** | *eP* | | **Pn** | **15 08 17.7** | **-0.4** |
| UEES | | | | IAML | | | 15 08 19.0 | |
| | comp=Z,6µm,0.6s | | | | | | | |
| **MAGS** | **Ministerio de** | **1.26** | **322** | *eP* | | **Pn** | **15 08 17.6** | **-0.5** |
| **BOQS** | **Boqueron** | **1.29** | **324** | *eP* | | **Pn** | **15 08 18.6** | **-0.1** |
| **BOQS** | **Boqueron** | **1.29** | **324** | *eP* | | **Pn** | **15 08 18.6** | **-0.1** |
| **PMON** | **Piamonte** | **1.30** | **322** | *eP* | | **Pn** | **15 08 18.4** | **-0.3** |
| **PMON** | **Piamonte** | **1.30** | **322** | *eP* | | **Pn** | **15 08 18.4** | **-0.3** |
| **JAYA** | **Jayaque - finc** | **1.34** | **316** | *eP* | | **Pn** | **15 08 18.6** | **-0.7** |
| JAYA | | | | IAML | | | 15 08 38.4 | |
| | comp=Z,8µm,0.2s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.34** | **316** | *eP* | | **Pn** | **15 08 18.6** | **-0.7** |
| JAYA | | | | IAML | | | 15 08 38.4 | |
| | comp=Z,8µm,0.2s | | | | | | | |
| **CRIN** | **San Cristobal** | **1.41** | **89** | | | **Pn** | **15 08 19.2** | **-0.8** |
| **CRIN** | **San Cristobal** | **1.41** | **89** | *eP* | | **Pn** | **15 08 19.6** | **-0.5** |
| CRIN | | | | *eS* | | **Sn** | **15 08 37.4** | **-0.3** |
| **CEDA** | **San Andres** | **1.42** | **322** | *eP* | | **Pn** | **15 08 19.8** | **-0.3** |
| CEDA | | | | IAML | | | 15 08 55.2 | |
| | comp=Z,4µm,0.5s | | | | | | | |
| **CEDA** | **San Andres** | **1.42** | **322** | *eP* | | **Pn** | **15 08 20.0** | **-0.2** |
| **CEDA** | **San Andres** | **1.42** | **322** | *eP* | | **Pn** | **15 08 19.8** | **-0.3** |
| CEDA | | | | IAML | | | 15 08 55.2 | |
| | comp=Z,4µm,0.5s | | | | | | | |
| **TACO** | **Tacachico** | **1.53** | **327** | *eP* | | **Pn** | **15 08 21.5** | **-0.1** |
| **TACO** | **Tacachico** | **1.53** | **327** | *eP* | | **Pn** | **15 08 21.5** | **-0.1** |
| **LLGN** | **La Laguna** | **1.53** | **343** | *eP* | | **Pn** | **15 08 21.4** | **-0.4** |
| **LLGN** | **La Laguna** | **1.53** | **343** | *eP* | | **Pn** | **15 08 21.4** | **-0.4** |
| **CEVE** | **Cerro Verde** | **1.58** | **316** | *eP* | | **Pn** | **15 08 22.5** | **-0.1** |
| CEVE | | | | IAML | | | 15 08 46.6 | |
| | comp=Z,6µm,0.5s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.58** | **316** | *eP* | | **Pn** | **15 08 22.5** | **-0.1** |
| CEVE | | | | IAML | | | 15 08 46.6 | |
| | comp=Z,6µm,0.5s | | | | | | | |
| **SBLS** | **San Blas** | **1.59** | **316** | *eP* | | **Pn** | **15 08 22.6** | **-0.1** |
| **SBLS** | **San Blas** | **1.59** | **316** | *eP* | | **Pn** | **15 08 22.6** | **-0.1** |
| **SNJE** | **San Jose** | **1.60** | **317** | *eP* | | **Pn** | **15 08 22.6** | **-0.2** |
| **SNJE** | **San Jose** | **1.60** | **317** | *eP* | | **Pn** | **15 08 22.6** | **-0.2** |
| **RTR** | **El Retiro** | **1.65** | **317** | *eP* | | **Pn** | **15 08 23.9** | **+0.5** |
| **RTR** | **El Retiro** | **1.65** | **317** | *eP* | | **Pn** | **15 08 23.9** | **+0.5** |
| **UNIC** | **Universidad Ca** | **1.65** | **321** | *eP* | | **Pn** | **15 08 23.8** | **+0.5** |
| **UNIC** | **Universidad Ca** | **1.65** | **321** | *eP* | | **Pn** | **15 08 23.8** | **+0.5** |
| **NUBE** | **Las Nubes** | **1.74** | **314** | *eP* | | **Pn** | **15 08 24.5** | **-0.1** |
| NUBE | | | | IAML | | | 15 08 49.6 | |
| | comp=Z,3µm,0.3s | | | | | | | |
| **NUBE** | **Las Nubes** | **1.74** | **314** | *eP* | | **Pn** | **15 08 24.5** | **-0.1** |
| NUBE | | | | IAML | | | 15 08 49.6 | |
| | comp=Z,3µm,0.3s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.76** | **96** | | | **Pn** | **15 08 23.1** | **-1.6** |
| **CNGN** | **Cerro Negro** | **1.76** | **96** | *eP* | | **Pn** | **15 08 23.6** | **-1.1** |
| CNGN | | | | IAML | | | 15 08 51.6 | |
| | comp=N,5µm,0.3s | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **1.81** | **41** | Pn | | **Pn** | **15 08 24.9** | **-0.6** |
| **TGUH** | **Tegucigalpa,Un** | **1.81** | **41** | *eP* | | **Pn** | **15 08 24.9** | **-0.6** |
| **TGUH** | **Tegucigalpa,Un** | **1.81** | **41** | *eP* | | **Pn** | **15 08 24.9** | **-0.6** |
| **LOAL** | **Lomas de Alarc** | **1.81** | **316** | *eP* | | **Pn** | **15 08 25.6** | **+0.1** |
| **LOAL** | **Lomas de Alarc** | **1.81** | **316** | *eP* | | **Pn** | **15 08 25.6** | **+0.1** |
| **SLOZ** | **Alcaldia de Sa** | **1.83** | **317** | *eP* | | **Pn** | **15 08 25.9** | **+0.1** |
| **MTO3** | **Montecristo** | **1.90** | **334** | | | **Pn** | **15 08 26.7** | **-0.1** |
| **MTO3** | **Montecristo** | **1.90** | **334** | *eP* | | **Pn** | **15 08 26.9** | **0.0** |
| **MTO3** | **Montecristo** | **1.90** | **334** | *eP* | | **Pn** | **15 08 26.9** | **0.0** |
| **MOMN** | **Momotombo** | **1.92** | **98** | *eP* | | **Pn** | **15 08 25.8** | **-1.2** |
| **ESQI** | **Esquipulas** | **2.04** | **336** | | | **Pn** | **15 08 28.9** | **+0.3** |
| **ESQI** | **Esquipulas** | **2.04** | **336** | *eP* | | **Pn** | **15 08 29.1** | **+0.5** |
| **BRAN** | **Las Pilas** | **2.09** | **89** | *eP* | | **Pn** | **15 08 29.0** | **-0.2** |
| **APYN** | **Apoyeque** | **2.14** | **102** | *eP* | | **Pn** | **15 08

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **35.09** | **333** | P | **P** | **15 14 43.1** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=133,slow=11,SNR=6.0 | | | | | | |
| **REDW** | **Red Top Meadow** | **36.15** | **332** | P | **P** | **15 14 53.1** | **+0.1** |
| REDW | | | | IAmb | IAmb | 15 14 54.9 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **SNOW** | **Snow King Moun** | **36.18** | **332** | P | **P** | **15 14 53.9** | **+0.6** |
| **LOHW** | **Long Hollow** | **36.23** | **332** | P | **P** | **15 14 54.2** | **+0.6** |
| LOHW | | | | IAmb | IAmb | 15 15 12.3 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **TPAW** | **Teton Pass** | **36.29** | **332** | P | **P** | **15 14 54.8** | **+0.6** |
| TPAW | | | | IAmb | IAmb | 15 15 14.1 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **MOOW** | **Moose Ponds** | **36.40** | **332** | P | **P** | **15 14 55.3** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **36.86** | **319** | P | **P** | **15 14 59.3** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=134,slow=8.0,SNR=4.4 | | | | | | |
| NVAR | | | | PcP | **PcP** | **15 17 19.4** | **-0.4** |
| | comp=Z,0.6nm,0.7s,baz=134,slow=4.5,SNR=4.5 | | | | | | |
| **YMR** | **Madison River** | **37.22** | **333** | P | **P** | **15 15 02.3** | **+0.2** |
| YMR | | | | IAmb | IAmb | 15 15 04.9 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **BCYI** | **Bear Canyon** | **38.06** | **331** | P | **P** | **15 15 10.3** | **+1.0** |
| **MCMT** | **McKenzie Canyo** | **38.19** | **332** | P | **P** | **15 15 11.0** | **+0.7** |
| **BOZ** | **Bozeman (W)** | **38.24** | **334** | P | **P** | **15 15 11.0** | **+0.4** |
| BOZ | | | | IAmb | IAmb | 15 15 30.2 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **PB06** | **IPOC Station P** | **39.76** | **152** | P | **P** | **15 15 22.9** | **-0.7** |
| PB06 | | | | IAmb | IAmb | 15 15 32.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **41.52** | **321** | LR | LR | 15 33 39.3 | |
| | comp=Z,80nm,18.0s,baz=151,slow=37 | | | | | | |
| **NEW** | **Newport** | | **42.72** | **332** | LR | LR | 15 39 16.1 |
| | comp=Z,59nm,18.0s,baz=212,slow=44 | | | | | | |
| **FFC** | **Flin Flon** | **43.26** | **349** | P | **P** | **15 15 51.0** | **-0.6** |
| **EDM** | **Edmonton** | **45.02** | **339** | P | **P** | **15 16 07.2** | **+1.4** |
| EDM | | | | IAmb | IAmb | 15 16 22.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **45.35** | **17** | P | P | 15 16 03.6 | -4.7 |
| | comp=Z,2.1nm,0.8s,baz=225,slow=14,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.12** | **345** | P | **P** | **15 17 05.6** | **-1.8** |
| | comp=Z,0.5nm,0.5s,baz=140,slow=7.6,SNR=8.6 | | | | | | |
| **RCBR** | **Riachuelo** | **55.40** | **106** | LR | LR | 15 42 20.5 | |
| | comp=Z,31nm,18.3s,baz=75,slow=37 | | | | | | |
| **VRDI** | **Verde Repeater** | **62.48** | **333** | P | **P** | **15 18 15.1** | **+1.7** |
| **BCAR** | **Beaver Creek A** | **62.62** | **336** | P | **P** | **15 18 15.6** | **+1.5** |
| **L27K** | **Beaver Creek,** | **62.63** | **336** | P | **P** | **15 18 16.1** | **+1.9** |
| L27K | | | | IAmb | IAmb | 15 18 43.2 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **A36M** | **Sachs Harbour** | **63.22** | **348** | P | **P** | **15 18 19.3** | **+1.5** |
| A36M | | | | IAmb | IAmb | 15 18 40.8 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **FID** | **Port Fidalgo** | **63.63** | **332** | P | **P** | **15 18 21.7** | **+0.9** |
| **DOT** | **Dot Lake** | **63.80** | **336** | P | **P** | **15 18 23.1** | **+1.2** |
| **SCRK** | **Sand Creek** | **63.92** | **336** | P | **P** | **15 18 24.5** | **+1.7** |
| SCRK | | | | IAmb | IAmb | 15 18 33.9 | |
| | comp=Z,4.2nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **65.40** | **336** | P | **P** | **15 18 30.2** | **-2.0** |
| | comp=Z,0.7nm,1.0s,baz=173,slow=4.9,SNR=6.6 | | | | | | |
| **ILAR** | **Eielson Array** | **65.40** | **336** | P | **P** | **15 18 32.2** | **0.0** |
| **RND** | **Reindeer** | **65.67** | **335** | P | **P** | **15 18 35.9** | **+1.8** |
| RND | | | | IAmb | IAmb | 15 18 59.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **65.70** | **339** | P | **P** | **15 18 33.8** | **-0.4** |
| **CCB** | **Clear Creek Bu** | **65.71** | **336** | P | **P** | **15 18 35.0** | **+0.8** |
| CCB | | | | IAmb | IAmb | 15 18 59.6 | |
| | comp=Z,5.3nm,1.4s | | | | | | |
| **BWN** | **Browne** | **66.20** | **335** | P | **P** | **15 18 38.2** | **+0.8** |
| **H24K** | **Noodor Dome** | **66.21** | **337** | P | **P** | **15 18 38.5** | **+1.1** |
| **TRF** | **Thorofare Moun** | **66.28** | **334** | P | **P** | **15 18 38.5** | **+0.3** |
| TRF | | | | IAmb | IAmb | 15 18 41.6 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **66.51** | **336** | P | **P** | **15 18 40.4** | **+1.0** |
| I23K | | | | IAmb | IAmb | 15 18 56.0 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **66.79** | **326** | P | **P** | **15 18 41.6** | **+0.4** |
| **PPLA** | **Purkeypile** | **66.92** | **333** | P | **P** | **15 18 42.1** | **0.0** |
| **CAST** | **Castle Rocks** | **67.04** | **334** | P | **P** | **15 18 43.3** | **+0.5** |
| CAST | | | | IAmb | IAmb | 15 19 05.2 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **P18K** | **Big Mountain,** | **67.38** | **329** | P | **P** | **15 18 46.0** | **+1.0** |
| **EUNU** | **Eureka** | **67.39** | **0** | P | **P** | **15 18 46.5** | **+1.7** |
| **UNV** | **Unalaska Valle** | **72.79** | **323** | P | **P** | **15 19 17.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **138.41** | **249** | PKP | **PKPdf** | **15 27 15.8** | **+0.1** |
| | comp=Z,0.2nm,0.7s,baz=93,slow=1.9,SNR=2.5 | | | | | | |
| **PZH** | **PanZhiHua** | **139.79** | **346** | PKP | **PKPdf** | **15 27 18.0** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **146.69** | **256** | PKPbc | **PKPdf** | **15 27 29.8** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=284,slow=14,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **148.20** | **347** | PKPbc | **PKPbc** | **15 27 35.2** | **-1.1** |
| | comp=Z,0.5nm,0.6s,baz=338,slow=3.3,SNR=4.7 | | | | | | |

**NEIC 29 15:16:01.5±0.4, 36°293N±0°.010×97°.53W±0°.01, h4km±7km, mb_Lg2.5/18, Error ellipse: s-maj=1.9km s-min=0.7km az=223.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T35A** | **Sooner Cattle** | **1.03** | **53** | Pg | Pg | 15 16 21.0 | -0.3 |
| **FNO** | **Franklin** | **1.04** | **174** | | Pg | 15 16 21.2 | -0.3 |
| **U32A** | **Winter Ranch,** | **1.19** | **275** | Pg | Pg | 15 16 24.1 | -0.2 |
| **TUL1** | **Leonard** | **1.46** | **105** | | Pn | 15 16 28.0 | -0.7 |
| TUL1 | | | | IAmb_Lg | | 15 16 50.3 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.71** | **188** | | Pn | 15 16 32.0 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.85** | **214** | Pn | Pn | 15 16 34.6 | +0.4 |
| **HHAR** | **Hobbs** | **2.90** | **89** | Pn | Pn | 15 16 48.4 | -0.2 |
| HHAR | | | | IAmb_Lg | | 15 17 37.6 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **W39A** | **Magazine** | **3.24** | **109** | IAmb_Lg | | 15 17 49.6 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **S39A** | **Bolivar** | **3.65** | **66** | Pn | Pn | 15 16 59.3 | +0.5 |
| S39A | | | | IAmb_Lg | | 15 18 00.1 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **U40A** | **Yellville** | **3.78** | **88** | IAmb_Lg | | 15 18 03.1 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.24** | **114** | IAmb_Lg | | 15 18 21.2 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.32** | **77** | IAmb_Lg | | 15 18 17.6 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **4.80** | **17** | IAmb_Lg | | 15 18 37.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.62** | **36** | IAmb_Lg | | 15 18 56.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.74** | **83** | IAmb_Lg | | 15 19 05.1 | |
| | comp=Z,8.0nm,0.8s | | | | | | |

**DJA 29 15:22:04.0±0.3, 1°S±2°×12°0E±°, h10km, M3.6/10, MLv3.6/10, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MPSI** | **Mapaga** | **1.41** | **351** | P | Pn | 15 22 27.6 | -2.2 |
| MPSI | | | | S | Sg | 15 22 49.7 | +0.1 |
| **APSI** | **Ampana** | **1.55** | **84** | P | Pn | 15 22 30.0 | -1.6 |
| **TTSI** | **Tana Toraja** | **1.98** | **188** | P | Pn | 15 22 36.8 | -0.8 |
| **MRSI** | **Marisa** | **2.39** | **50** | P | Pn | 15 22 43.2 | 0.0 |
| **LUWI** | **Luwuk** | **2.66** | **89** | P | Pn | 15 22 48.0 | +1.0 |
| **SPSI** | **Sidrap Palu** | **2.90** | **187** | P | Pn | 15 22 50.6 | +0.4 |
| **BNSI** | **Bone** | **3.31** | **180** | P | Pn | 15 22 56.5 | +0.6 |
| **GTOI** | **Gorontalo** | **3.36** | **60** | P | Pn | 15 22 56.7 | +0.1 |
| GTOI | | | | S | Sb | 15 23 44.6 | 0.0 |
| **BKSI** | **Bulukumba** | **4.22** | **180** | P | Pn | 15 23 08.8 | +0.3 |
| **SANI** | **Sanana** | **5.96** | **99** | P | Pn | 15 23 23.8 | -8.5 |
| **SANI** | **Sanana** | **5.96** | **99** | P | Pn | 15 23 23.9 | -8.4 |
| **MSAI** | **Masohi** | **9.10** | **105** | P | Pn | 15 24 23.9 | +8.4 |
| **SKJI** | **Sukabumi** | **14.74** | **246** | P | Pn | 15 25 35.3 | +2.5 |
| **SNSI** | **Sinabang, Aceh** | **24.03** | **278** | P | P | 15 27 14.3 | -5.1 |

*IDC **29** 15:25:27.2±3.4, 17°.57S×176°.94W, h350km±53km, mb3.3/5, mb1 3.4/6, mb1mx3.2/35, mbtmp4.0/6, Error ellipse: s-maj=116.5km s-min=46.5km az=157.0*

**ISC 29 15:25:27.0±1.6, 17°3S±0°.8×177°.0W±0°.4, h350km, n6, σ1°35/8, mb3.3/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.03** | **57** | P | **Pn** | **15 27 00.0** | **+1.7** |
| | 3.0nm,0.3s,baz=348,slow=21,SNR=4.8 | | | | | | |
| AFI | | | | S | **S** | **15 28 10.2** | **-2.1** |
| | 0.3nm,0.3s,baz=280,slow=22,SNR=1.5 | | | | | | |
| **CTA** | **Charters Tower** | **34.90** | **260** | P | **P** | **15 31 47.0** | **+0.1** |
| | 4.0nm,0.9s,baz=80,slow=11,SNR=3.1 | | | | | | |
| **STKA** | **Stephens Creek** | **40.13** | **241** | P | **P** | **15 32 29.7** | **-0.5** |
| | 1.5nm,0.8s,baz=77,slow=9.1,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.09** | **259** | P | **P** | **15 33 17.1** | **-0.6** |
| | 0.4nm,0.3s,baz=95,slow=7.5,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **46.28** | **254** | P | **P** | **15 33 18.9** | **-0.2** |
| | 3.1nm,0.5s,baz=89,slow=8.6,SNR=162 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 34 47.6** | **-0.5** |
| | 0.4nm,1.0s,baz=99,slow=3.9,SNR=2.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.48** | **260** | P | **P** | **15 34 20.8** | **+0.8** |
| | 0.6nm,0.6s,baz=109,slow=9.8,SNR=5.4 | | | | | | |

*IDC **29** 15:27:34.2±47.0, 38°.25N×19°.59E, h0km, mb3.6/3, mb1 3.7/3, mb1mx3.3/36, mbtmp3.7/3, MS2.9/2, Ms1 3.0/2, ms1mx2.2/92, Error ellipse: s-maj=877.3km s-min=67.7km az=46.0*

*ATH **29** 15:27:41.8, 38°.54N×20°.55E, h15km±2km, ML3.1/3, Error ellipse: s-maj=2.7km s-min=1.1km az=297.0*

*THE **29** 15:27:42.6, 38°.53N×20°.52E, h6km±2km, ML2.9/5, Error ellipse: s-maj=2.2km s-min=0.6km az=286.0*

**ISC 29 15:27:41.3±0.9, 38°.55N±0°.02×20°.49E±0°.04, h13km±5km, n42, σ0°62/56, mb3.6/3, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.11** | **149** | P | **Pg** | **15 27 44.3** | **0.0** |
| FSK | | | | S | **Sg** | **15 27 46.2** | **-0.3** |
| | 23μm,0.5s | | | | | | |
| **FSK** | **Fiskardo** | **0.11** | **149** | P | **Pg** | **15 27 44.3** | **0.0** |
| FSK | | | | S | **Sg** | **15 27 46.5** | **-0.1** |
| FSK | | | | AML | AML | 15 27 46.9 | |
| | comp=N,49117μm,0.6s | | | | | | |
| FSK | | | | AML | AML | 15 27 47.7 | |
| | comp=E,44056μm,0.5s | | | | | | |
| **EVGI** | **Lefkada island** | **0.15** | **62** | P | **Pg** | **15 27 45.1** | **+0.2** |
| EVGI | | | | S | **Sg** | **15 27 47.9** | **+0.5** |
| **EVGI** | **Lefkada island** | **0.15** | **62** | P | **Pg** | **15 27 45.2** | **+0.2** |
| EVGI | | | | S | **Sg** | **15 27 48.0** | **+0.5** |
| **DRAG** | **Dragano-Lefkad** | **0.15** | **26** | P | **Pb** | **15 27 45.5** | **-0.5** |
| DRAG | | | | S | **Sb** | **15 27 48.5** | **-0.6** |
| **NYDR** | **Nydri-Lefkada** | **0.23** | **45** | P | **Pb** | **15 27 46.7** | **-0.6** |
| NYDR | | | | S | **Sb** | **15 27 50.9** | **-0.5** |
| **LKD2** | **Lefkada island** | **0.27** | **29** | P | **Pb** | **15 27 47.7** | **-0.4** |
| LKD2 | | | | S | **Sb** | **15 27 52.4** | **-0.2** |
| | comp=E,3μm,0.6s | | | | | | |
| **LKD2** | **Lefkada island** | **0.27** | **29** | P | **Pb** | **15 27 47.7** | **-0.4** |
| LKD2 | | | | AML | AML | 15 27 53.0 | |
| | comp=N,7071μm,0.6s | | | | | | |
| LKD2 | | | | AML | AML | 15 27 55.4 | |
| | comp=E,4894μm,0.5s | | | | | | |
| **KEF4** | **Livadi, Kephal** | **0.30** | **190** | P | **Pb** | **15 27 47.8** | **-0.7** |
| KEF4 | | | | S | **Sb** | **15 27 53.2** | **-0.1** |
| **KEF4** | **Livadi, Kephal** | **0.30** | **190** | P | **Pb** | **15 27 47.8** | **-0.7** |
| **DMLN** | **Damoulianata-K** | **0.33** | **197** | P | **Pb** | **15 27 48.5** | **-0.5** |
| DMLN | | | | S | **Sb** | **15 27 54.1** | **0.0** |
| **LXRA** | **Lixouri, Kepha** | **0.35** | **187** | P | **Pb** | **15 27 49.4** | **-0.1** |
| LXRA | | | | S | **Sb** | **15 27 55.1** | **+0.2** |
| **KEF3** | **Kipouria, Keph** | **0.36** | **198** | P | **Pg** | **15 27 48.6** | **-0.1** |
| KEF3 | | | | S | **Sb** | **15 27 54.9** | **-0.3** |
| **KEF3** | **Kipouria, Keph** | **0.36** | **198** | P | **Pg** | **15 27 48.4** | **-0.3** |
| **ARGA** | **Argostoli. Kep** | **0.37** | **181** | P | **Pb** | **15 27 50.0** | **+0.2** |
| **VLS** | **Valsamata** | **0.38** | **168** | P | **Pg** | **15 27 48.9** | **-0.1** |
| VLS | | | | S | **Sg** | **15 27 55.3** | **+1.2** |
| | comp=E,3μm,0.3s | | | | | | |
| **VLS** | **Valsamata** | **0.38** | **168** | P | **Pg** | **15 27 48.7** | **-0.3** |
| VLS | | | | S | **Sg** | **15 27 55.3** | **+1.2** |
| VLS | | | | AML | AML | 15 27 55.5 | |
| | comp=N,9178μm,0.4s | | | | | | |
| VLS | | | | AML | AML | 15 27 55.6 | |
| | comp=E,4540μm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.44** | **170** | P | **Pg** | **15 27 50.2** | **+0.1** |
| PSDA | | | | S | **Sb** | **15 27 57.2** | **-0.3** |
| | comp=E,512nm,0.4s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.44** | **170** | P | **Pg** | **15 27 50.1** | **+0.1** |
| PSDA | | | | S | **Sb** | **15 27 57.2** | **-0.3** |
| **LTHK** | **Lithakia** | **0.88** | **162** | P | **Pb** | **15 27 57.5** | **-1.0** |
| **LTHK** | **Lithakia** | **0.88** | **162** | P | **Pb** | **15 27 58.0** | **-0.5** |
| **RLS** | **Riolos of Patr** | **0.91** | **122** | P | **Pb** | **15 27 58.9** | **-0.1** |
| **RLS** | **Riolos of Patr** | **0.91** | **122** | P | **Pb** | **15 27 58.6** | **-0.4** |
| **IGT** | **Igoumenitsa** | **0.99** | **353** | P | **Pn** | **15 28 01.9** | **+1.0** |
| **IGT** | **Igoumenitsa** | **0.99** | **353** | P | **Pn** | **15 28 01.3** | **+0.5** |
| **EFP** | **Efpalio** | **1.12** | **96** | P | **Pn** | **15 28 01.9** | **-0.8** |
| **EFP** | **Efpalio** | **1.12** | **96** | P | **Pn** | **15 28 01.8** | **-0.8** |
| **ANX** | **Ano Chora** | **1.12** | **87** | P | **Pn** | **15 28 02.3** | **-0.4** |
| **ANX** | **Ano Chora** | **1.12** | **87** | P | **Pn** | **15 28 02.4** | **-0.4** |
| **DRO** | **Drossia** | **1.13** | **122** | P | **Pb** | **15 28 02.8** | **+0.1** |
| DRO | | | | S | **Sg** | **15 28 20.2** | **+2.4** |
| | comp=E,868nm,0.4s | | | | | | |
| **DRO** | **Drossia** | **1.13** | **122** | P | **Pb** | **15 28 02.8** | **+0.1** |
| **LAKA** | **Lakka** | **1.21** | **104** | P | **Pn** | **15 28 03.4** | **-0.6** |
| **MAKR** | **Makrakomi, Fth** | **1.36** | **70** | P | **Pg** | **15 28 07.7** | **+0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.36** | **70** | P | **Pg** | **15 28 07.4** | **-0.1** |
| **KLV** | **Kalavryta, Ach** | **1.40** | **111** | P | **Pn** | **15 28 06.6** | **0.0** |
| **AGG** | **Agios Georgios** | **1.51** | **71** | P | **Pg** | **15 28 09.8** | **-0.6** |
| **AGG** | **Agios Georgios** | **1.51** | **71** | P | **Pb** | **15 28 09.3** | **+0.1** |
| **IDI** | **Anoyia** | **4.80** | **131** | LR | LR | 15 31 16.0 | |
| | comp=E,56nm,18.7s,baz=164,slow=43 | | | | | | |
| **FINES** | **FINESS Array B** | **23.18** | **7** | P | **P** | **15 32 46.0** | **-1.4** |
| | comp=E,1.5nm,0.8s,baz=171,slow=9.6,SNR=5.3 | | | | | | |
| **DBIC** | **Dimbokro** | **39.15** | **222** | LR | LR | 15 52 43.6 | |
| | comp=E,38nm,18.3s,baz=280,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.13** | **59** | P | **P** | **15 35 58.1** | **+0.8** |
| | comp=E,0.4nm,0.7s,baz=276,slow=6.2,SNR=4.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.46** | **48** | P | **P** | **15 36 00.4** | **+0.6** |
| | comp=E,1.3nm,0.6s,baz=272,slow=9.4,SNR=6.6 | | | | | | |

*GUC **29** 15:32:58.1±0.7, 20°.30S×70°.69W, h30km±5km, ML3.4*

*NEIC **29** 15:32:58.3±2.3, 20°.43S±0°.04×70°.67W±0°.08, h30km±2km, mb4.1/2, ML3.4(GUC), Error ellipse: s-maj=10.7km s-min=5.9km az=83.0*

*IDC **29** 15:33:03.6±3.8, 20°.44S×70°.40W, h74km±28km, mb3.7/3, mb1 3.8/6, mb1mx3.5/30, mbtmp3.9/6, MS2.3/2, Ms1 2.3/2, ms1mx2.3/58, Error ellipse: s-maj=54.9km s-min=17.3km az=85.0*

**ISC 29 15:32:56.8±1.3, 20°37S±0°.03×70°72W±0°.07, h22km±9km, n56, σ0°82/57, mb4.0/3, 4C-7D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TA01** | **Diego Aracena** | **0.54** | **111** | Pn | **Pb** | **15 33 07.8** | **+0.1** |
| TA01 | | | | | **Sb** | **15 33 15.0** | **-0.1** |
| **TA01** | **Diego Aracena** | **0.54** | **111** | ↓*i* P | **Pb** | **15 33 07.9** | **+0.1** |
| TA01 | | | | *i* S | **Sb** | **15 33 15.3** | **+0.2** |
| TA01 | | | | IAML | | 15 33 16.1 | |
| | comp=N,3μm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **0.56** | **80** | Pn | **Pb** | **15 33 07.5** | **-0.5** |
| **TA02** | **Huaiquique** | **0.56** | **80** | ↓*i* P | **Pb** | **15 33 07.7** | **-0.3** |
| TA02 | | | | *i* S | **Sb** | **15 33 15.2** | **-0.4** |
| TA02 | | | | IAML | | 15 33 17.2 | |
| | comp=N,9μm,0.1s | | | | | | |
| **PATCX** | **Punta Patache** | **0.70** | **130** | Pn | **Pb** | **15 33 10.6** | **+0.3** |
| PATCX | | | | Sn | **Sb** | **15 33 18.9** | **-0.7** |
| **PATCX** | **Punta Patache** | **0.70** | **130** | ↓*i* P | **Pb** | **15 33 10.7** | **+0.3** |
| PATCX | | | | *i* S | **Sn** | **15 33 20.7** | **-0.9** |
| PATCX | | | | IAML | | 15 33 23.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **0.79** | **84** | ↓*i* P | **Pn** | **15 33 11.4** | **-1.3** |
| HMBC | | | | IAML | | 15 33 25.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| **PB11** | **IPOC Station P** | **1.17** | **59** | Pn | **Pn** | **15 33 16.7** | **-1.3** |
| **PB02** | **IPOC Station P** | **1.22** | **141** | Pn | **Pb** | **15 33 19.1** | **-0.1** |
| **PB02** | **IPOC Station P** | **1.22** | **141** | ↓*i* P | **Pb** | **15 33 19.2** | **-0.1** |
| PB02 | | | | *i* S | **Sb** | **15 33 35.4** | **+0.7** |
| PB02 | | | | IAML | | 15 33 37.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **1.33** | **120** | Pn | **Pn** | **15 33 20.4** | **+0.3** |
| **PB01** | **IPOC Station P** | **1.33** | **120** | ↓*i* P | **Pn** | **15 33 20.5** | **+0.3** |
| PB01 | | | | *i* S | **Sb** | **15 33 37.4** | **-0.6** |
| PB01 | | | | IAML | | 15 33 40.2 | |
| | comp=N,1μm,0.4s | | | | | | |
| **PB08** | **IPOC Station P** | **1.49** | **82** | Pn | **Pn** | **15 33 22.7** | **+0.2** |
| **PB08** | **IPOC Station P** | **1.49** | **82** | ↓*i* P | **Pn** | **15 33 23.0** | **+0.4** |
| PB08 | | | | *i* S | **Sb** | **15 33 42.4** | **-0.2** |
| PB08 | | | | IAML | | 15 33 43.9 | |
| | comp=E,966nm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **1.56** | **150** | Pn | **Pn** | **15 33 23.9** | **+0.5** |
| **PB07** | **IPOC Station P** | **1.56** | **150** | ↑*i* P | **Pn** | **15 33 24.1** | **+0.7** |
| PB07 | | | | *i* S | **Sb** | **15 33 45.5** | **+1.0** |
| PB07 | | | | IAML | | 15 34 02.2 | |
| | comp=E,525nm,0.5s | | | | | | |
| **GO01** | **Chusmiza** | **1.59** | **64** | Pn | **Pn** | **15 33 24.3** | **+0.2** |
| GO01 | | | | ↑*i* P | **Pn** | **15 33 24.3** | **+0.2** |
| GO01 | | | | *i* S | **Sn** | **15 33 44.6** | **+0.4** |
| GO01 | | | | IAML | | 15 33 46.1 | |
| | comp=N,1μm,0.3s | | | | | | |
| **PB12** | **IPOC Station P** | **1.78** | **12** | Pn | **Pn** | **15 33 26.3** | **-0.1** |
| **PB12** | **IPOC Station P** | **1.78** | **12** | ↑*i* P | **Pn** | **15 33 25.7** | **-0.7** |
| PB12 | | | | *i* S | **Sn** | **15 33 49.1** | **+0.6** |
| PB12 | | | | IAML | | 15 33 54.0 | |
| | comp=E,589nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **1.98** | **136** | ↑*i* P | **Pb** | **15 33 31.4** | **-0.9** |
| PB09 | | | | IAML | | 15 34 06.9 | |
| | comp=E,577nm,0.6s | | | | | | |
| **AP01** | **Chacalluta** | **2.02** | **10** | Pn | **Pn** | **15 33 30.8** | **+1.3** |
| **AP01** | **Chacalluta** | **2.02** | **10** | *e*P | **Pn** | **15 33 30.3** | **+0.7** |
| AP01 | | | | IAML | | 15 34 05.8 | |
| | comp=N,1μm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **2.03** | **165** | Pn | **Pn** | **15 33 30.3** | **+0.5** |
| **PB04** | **IPOC Station P** | **2.03** | **165** | *e*P | **Pn** | **15 33 30.3** | **+0.5** |
| PB04 | | | | IAML | | 15 34 09.8 | |
| | comp=E,400nm,0.4s | | | | | | |
| **PB16** | **IPOC Station P** | **2.32** | **30** | Pn | **Pn** | **15 33 35.9** | **+1.6** |
| **PB16** | **IPOC Station P** | **2.32** | **30** | *e*P | **Pn** | **15 33 34.6** | **+0.3** |
| PB16 | | | | *i* S | **Sn** | **15 34 03.1** | **+0.7** |
| PB16 | | | | IAML | | 15 34 07.5 | |
| | comp=N,259nm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **2.56** | **156** | Pn | **Pn** | **15 33 37.4** | **+0.2** |
| **PB06** | **IPOC Station P** | **2.56** | **156** | *e*P | **Pn** | **15 33 37.6** | **+0.4** |
| PB06 | | | | IAML | | 15 34 28.0 | |
| | comp=E,206nm,0.1s | | | | | | |
| **LVC** | **Limon Verde** | **2.80** | **143** | P | **Pn** | **15 33 43.0** | **+2.4** |
| | comp=E,3.3nm,0.3s,baz=326,slow=13,SNR=46 | | | | | | |
| LVC | | | | S | **Sn** | **15 34 14.4** | **+0.6** |
| | comp=E,11nm,0.3s,baz=152,slow=4.3,SNR=3.8 | | | | | | |
| **LVC** | **Limon Verde** | **2.80** | **143** | | **Pn** | **15 33 42.6** | **+2.0** |
| **PB15** | **IPOC Station P** | **3.06** | **158** | Pn | **Pn** | **15 33 44.3** | **+0.2** |
| **PB15** | **IPOC Station P** | **3.06** | **158** | *e*P | **Pn** | **15 33 44.2** | **+0.2** |
| **PB10** | **IPOC Station P** | **3.13** | **177** | Pn | **Pn** | **15 33 44.4** | **-0.5** |
| **PB10** | **IPOC Station P** | **3.13** | **177** | *e*P | **Pn** | **15 33 44.0** | **-0.9** |
| **PB14** | **IPOC Station P** | **4.25** | **176** | | **Pn** | **15 33 59.3** | **-1.2** |
| **LPAZ** | **La Paz** | **4.74** | **32** | P | Pn | 15 34 13.4 | +5.8 |
| | comp=E,1.0nm,0.3s,baz=212,slow=7.7,SNR=22 | | | | | | |
| LPAZ | | | | LR | LR | 15 35 33.1 | |
| | comp=E,20nm,21.6s,baz=222,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **4.74** | **32** | | Pn | 15 34 13.2 | +5.6 |
| **AC01** | **Pan de Azucar** | **5.75** | **179** | Pn | **Pn** | **15 34 19.6** | **-1.3** |
| **AC02** | **Maricunga** | **6.60** | **168** | Pn | **Pn** | **15 34 33.2** | **+0.2** |
| **SIV** | **San Ignacio** | **10.15** | **66** | P | **Pn** | **15 35 23.0** | **+1.7** |
| | comp=E,1.4nm,0.3s,baz=256,slow=9.7,SNR=26 | | | | | | |
| SIV | | | | LR | LR | 15 39 39.8 | |
| | comp=E,32nm,20.5s,baz=264,slow=40 | | | | | | |
| **H03N1** | **Juan Fernandez** | **14.92** | **208** | T | T | 15 51 57.9 | |
| | baz=33,slow=72,SNR=137 | | | | | | |
| **H03N2** | **Juan Fernandez** | **14.93** | **208** | T | T | 15 51 56.9 | |
| | baz=33,slow=72,SNR=60 | | | | | | |
| **H03N3** | **Juan Fernandez** | **14.94** | **208** | T | T | 15 51 54.9 | |
| | baz=33,slow=72,SNR=77 | | | | | | |
| **PTGA** | **Pitinga** | **22.17** | **30** | P | **P** | **15 37 51.6** | **+0.1** |
| | comp=E,1.3nm,0.2s,baz=195,slow=20,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.58** | **71** | P | **P** | **15 44 55.9** | **-1.3** |
| | comp=E,0.9nm,0.8s,baz=261,slow=4.9,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.58** | **71** | IAmb | IAmb | 15 44 57.0 | |
| | comp=Z,2.2nm,1.2s | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.57** | **341** | P | **P** | **15 45 52.2** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=137,slow=4.6,SNR=4.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.05** | **278** | T | T | 18 10 59.5 | |
| | baz=103,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.06** | **278** | T | T | 18 11 06.3 | |
| | baz=103,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.07** | **278** | T | T | 18 11 02.9 | |
| | baz=103 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.11** | **280** | T | T | 18 11 09.3 | |
| | baz=98 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.12** | **280** | T | T | 18 11 09.3 | |
| | baz=98 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.12** | **280** | T | T | 18 11 08.2 | |
| | baz=98 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.67** | **34** | PKPbc | **PKPab** | **15 52 34.4** | **+0.2** |
| | comp=Z,0.8nm,0.8s,baz=328,slow=3.5,SNR=8.2 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VAE** | **Valguarnera** | **33.58** | **82** | LR | LR | 17 30 02.5 | | |
| | comp=Z,64nm,18.5s,baz=318,slow=35 | | | | | | | |
| **SADO** | **Sadowa** | **36.13** | **292** | LR | LR | 17 31 25.4 | | |
| | comp=Z,66nm,18.9s,baz=163,slow=35 | | | | | | | |
| **FINES** | **FINESS Array B** | **38.23** | **40** | P | **P** | **17 17 47.0** | **+0.3** | |
| | 2.7nm,1.0s,baz=325,slow=12,SNR=2.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.03** | **128** | P | **P** | **17 17 53.3** | **-0.6** | |
| | 0.5nm,0.8s,baz=309,slow=7.3,SNR=2.8 | | | | | | | |
| **MLR** | **Muntele Rosu** | **39.47** | **65** | LR | LR | 17 34 00.7 | | |
| | comp=Z,48nm,18.7s,baz=290,slow=36 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.49** | **27** | LR | LR | 17 31 07.3 | | |
| | comp=Z,23nm,21.9s,baz=252,slow=32 | | | | | | | |
| **AKASG** | **Malin Array Be** | **40.49** | **57** | P | **P** | **17 18 06.2** | **+0.5** | |
| | 0.1nm,0.3s,baz=275,slow=9.3,SNR=2.4 | | | | | | | |
| AKASG | | | | LR | LR | 17 34 40.9 | | |
| | comp=Z,68nm,18.1s,baz=340,slow=36 | | | | | | | |
| **DBIC** | **Dimbokro** | **40.94** | **141** | LR | LR | 17 33 11.9 | | |
| | comp=Z,43nm,20.6s,baz=298,slow=33 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **42.48** | **281** | LR | LR | 17 36 36.0 | | |
| | comp=Z,38nm,18.1s,baz=107,slow=37 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.78** | **305** | LR | LR | 17 36 04.8 | | |
| | comp=Z,69nm,19.8s,baz=54,slow=34 | | | | | | | |
| **BRTR** | **Keskin Array B** | **46.73** | **70** | LR | LR | 17 37 43.6 | | |
| | comp=Z,29nm,19.9s,baz=268,slow=35 | | | | | | | |
| **KIRV** | **Kirov** | **50.11** | **42** | LR | LR | 17 39 41.2 | | |
| | comp=Z,35nm,18.5s,baz=265,slow=35 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.16** | **324** | P | **P** | **17 19 37.3** | **+0.1** | |
| | 0.1nm,0.5s,baz=66,slow=7.5,SNR=2.0 | | | | | | | |
| **PDAR** | **Pinedale Array** | **57.35** | **300** | P | **P** | **17 20 14.8** | **-0.6** | |
| | 0.5nm,0.3s,baz=38,slow=10,SNR=5.0 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **57.85** | **49** | LR | LR | 17 44 25.2 | | |
| | comp=Z,23nm,20.0s,baz=337,slow=35 | | | | | | | |
| **ANMO** | **Albuquerque** | **59.17** | **291** | LR | LR | 17 44 35.8 | | |
| | comp=Z,33nm,19.0s,baz=132,slow=35 | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.18** | **284** | P | **P** | **17 20 35.0** | **-0.2** | |
| | 0.4nm,0.7s,baz=80,slow=9.1,SNR=6.5 | | | | | | | |
| **CMIG** | **Matias Romero** | **60.79** | **267** | LR | LR | 17 45 46.5 | | |
| | comp=Z,33nm,18.8s,baz=152,slow=35 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **66.81** | **295** | LR | LR | 17 49 18.3 | | |
| | comp=Z,80nm,19.2s,baz=62,slow=35 | | | | | | | |
| **LPAZ** | **La Paz** | **67.94** | **221** | LR | LR | 17 49 27.2 | | |
| | comp=Z,36nm,19.0s,baz=353,slow=34 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **68.61** | **41** | P | **P** | **17 21 29.6** | **-0.3** | |
| | 0.6nm,0.9s,baz=313,slow=6.4,SNR=5.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.31** | **35** | LR | LR | 17 52 18.6 | | |
| | comp=Z,23nm,18.1s,baz=61,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **73.01** | **42** | P | **P** | **17 21 55.1** | **-1.7** | |
| | 0.4nm,0.7s,baz=266,slow=8.5,SNR=3.2 | | | | | | | |
| **LVC** | **Limon Verde** | **73.74** | **218** | P | **P** | **17 22 02.5** | **+0.9** | |
| | 118nm,1.0s,baz=101,slow=9.1,SNR=4.1 | | | | | | | |
| **SONM** | **Songino Array** | **82.64** | **28** | P | **P** | **17 22 51.4** | **+0.9** | |
| | 0.6nm,0.9s,baz=343,slow=1.5,SNR=2.4 | | | | | | | |
| **BOSA** | **Boshof** | **86.06** | **134** | LR | LR | 17 59 03.1 | | |
| | comp=Z,29nm,20.1s,baz=188,slow=34 | | | | | | | |

*SJA **29** 17:16:56.1±0.6,31°.54S×72°.79W,h10km,ML4.6,MW4.6*
*NEIC **29** 17:17:01.7±1.9,31°.546S±0°.006×72°.24W±0°.08, h10km±1km, mb4.6/9, Mwr4.2/41, ML4.1(GUC), Error ellipse: s-maj=12.2km s-min=2.9km az=269.0*
*IDC **29** 17:17:01.2±0.9,31°.57S×72°.06W,h0km,mb4.3/9, mb1 4.4/14,mb1mx4.2/32,mbtmp4.2/14,ML4.0/5,MS3.4/9, Ms1 3.5/9,ms1mx3.2/54,Error ellipse: s-maj=27.3km s-min=20.1km az=89.0*
*NEIC **29** 17:17:01.8,31°.555S×72°.22W,h12km,Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.58; $M_{\theta\theta}$0.05; $M_{\phi\phi}$-2.63; $M_{r\theta}$0.42; $M_{r\phi}$-0.06; $M_{\theta\phi}$-0.83; Fault plane solution: $M_0$2.77000×$10^{15}$ NP1:$\phi_s$172.16000°, $\delta$54.47000°,$\lambda$79.20000°. NP2:$\phi_s$10.33000°,$\delta$36.93000°, $\lambda$104.71000°. Principal axes: T 2.7761, Plg77.0000°, Azm45.0000°; N -0.0184, Plg9.0000°, Azm178.0000°; P -2.7576, Plg9.0000°, Azm270.0000°;*
*GUC **29** 17:17:02.2±0.8,31°.61S×72°.24W,h16km±5km, ML4.1*
*VAO **29** 17:17:03.9±0.5,31°.51S×71°.99W,h13km,mb4.5*

**ISC 29 17:17:00.1**±1.9,**31°.59S**±0°.02×**72°.27W**±0°.05,**h0**km±11km, **n138,** σ1§**35**/156,**mb4.4**/8,**MS3.5**/5,**Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **1.06** | **31** | | **Pb** | **17 17 20.9** | **-0.5** |
| **CO06** | **Fray Jorge** | **1.06** | **31** | *eP* | **Pb** | **17 17 21.0** | **-0.5** |
| CO06 | | | | *i* S | **Sg** | **17 17 36.5** | **+2.2** |
| CO06 | | | | IAML | | 17 17 40.6 | |
| | comp=E,5μm,0.5s | | | | | | |
| **CO02** | **Combarbal** | **1.15** | **71** | | **Pb** | **17 17 22.7** | **-0.3** |
| **CO02** | **Combarbal** | **1.15** | **71** | *eP* | **Pb** | **17 17 22.7** | **-0.3** |
| CO02 | | | | *i* S | **Sn** | **17 17 38.3** | **-1.8** |
| CO02 | | | | IAML | | 17 17 43.7 | |
| | comp=N,15μm,0.6s | | | | | | |
| **VA06** | **Catapilco** | **1.27** | **140** | | **Pb** | **17 17 25.6** | **+0.6** |
| **VA06** | **Catapilco** | **1.27** | **140** | *eP* | **Pb** | **17 17 25.4** | **+0.5** |
| VA06 | | | | *i* S | **Sg** | **17 17 42.0** | **+1.0** |
| VA06 | | | | IAML | | 17 17 48.2 | |
| | comp=E,7μm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **1.52** | **160** | Pn | **Pn** | **17 17 29.0** | **+0.4** |
| **VA01** | **Torpederas** | **1.52** | **160** | *eP* | **Pn** | **17 17 28.7** | **+0.1** |
| VA01 | | | | *i* S | **Sb** | **17 17 48.6** | **-0.4** |
| **CO03** | **El Pedregal** | **1.55** | **61** | | **Pn** | **17 17 29.0** | **-0.1** |
| **CO03** | **El Pedregal** | **1.55** | **61** | *eP* | **Pn** | **17 17 28.9** | **-0.1** |
| CO03 | | | | *i* S | **Sb** | **17 17 49.4** | **-0.5** |
| CO03 | | | | IAML | | 17 17 55.2 | |
| | comp=N,5μm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **1.74** | **143** | *eP* | **Pb** | **17 17 32.6** | **-0.5** |
| ROCH | | | | *eP* | **Pn** | **17 17 30.9** | **-1.0** |
| ROCH | | | | *i* S | **Sb** | **17 17 54.8** | **-0.8** |
| ROCH | | | | *i* S | **Sn** | **17 17 55.0** | **+0.2** |
| ROCH | | | | IAML | | 17 18 01.4 | |
| | comp=N,3μm,0.5s | | | | | | |
| **ROC1** | **El Roble** | **1.74** | **143** | | **Pn** | **17 17 30.9** | **-0.9** |
| **ROC1** | **El Roble** | **1.74** | **143** | *eP* | **Pn** | **17 17 31.4** | **-0.5** |
| ROC1 | | | | *eS* | **Sb** | **17 17 54.5** | **-1.2** |
| **VA03** | **San Esteban** | **1.87** | **129** | | **Pb** | **17 17 34.4** | **-0.8** |
| **VA03** | **San Esteban** | **1.87** | **129** | *eP* | **Pn** | **17 17 34.0** | **+0.5** |
| VA03 | | | | *i* S | **Sb** | **17 17 57.4** | **-1.8** |
| VA03 | | | | IAML | | 17 18 08.6 | |
| | comp=E,5μm,0.7s | | | | | | |
| **CO05** | **La Serena** | **1.89** | **28** | | **Pn** | **17 17 33.0** | **-0.6** |
| **CO05** | **La Serena** | **1.89** | **28** | *eP* | **Pn** | **17 17 33.0** | **-0.6** |
| CO05 | | | | *i* S | **Sb** | **17 17 59.0** | **-0.6** |
| CO05 | | | | IAML | | 17 18 07.8 | |
| | comp=N,3μm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **1.90** | **42** | | **Pn** | **17 17 33.6** | **-0.4** |
| **GO04** | **Tololo Observa** | **1.90** | **42** | *eP* | **Pn** | **17 17 33.1** | **-0.8** |
| GO04 | | | | *i* S | **Sb** | **17 18 00.3** | **+0.2** |
| **GO04** | **Tololo Observa** | **1.90** | **42** | *eP* | **Pb** | **17 17 35.4** | **-0.4** |
| GO04 | | | | *eS* | **Sb** | **17 18 00.5** | **+0.4** |
| **MT02** | **Curacav** | **1.92** | **150** | | **Pn** | **17 17 34.8** | **+0.7** |
| **MT02** | **Curacav** | **1.92** | **150** | *eP* | **Pn** | **17 17 34.9** | **+0.8** |
| MT02 | | | | *i* S | **Sn** | **17 17 57.9** | **-1.0** |
| **PEL** | **Peldehue** | **2.05** | **139** | | **Pn** | **17 17 37.0** | **+1.1** |
| **PEL** | **Peldehue** | **2.05** | **139** | *eP* | **Pn** | **17 17 36.9** | **+1.0** |
| PEL | | | | *i* S | **Sb** | **17 18 03.2** | **-1.1** |
| PEL | | | | IAML | | 17 18 16.3 | |
| | comp=E,2μm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **2.05** | **139** | *eP* | **Pb** | **17 17 37.5** | **-0.7** |
| PEL | | | | *eS* | **Sg** | **17 18 06.4** | **+0.4** |
| **VA05** | **Santo Domingo** | **2.13** | **165** | Pn | **Pn** | **17 17 37.6** | **+0.6** |
| **VA05** | **Santo Domingo** | **2.13** | **165** | *eP* | **Pn** | **17 17 37.8** | **+0.8** |
| VA05 | | | | IAML | | 17 18 22.5 | |
| | comp=N,2μm,0.4s | | | | | | |
| **MT05** | **Renca** | **2.21** | **145** | | **Pn** | **17 17 39.3** | **+1.1** |
| **MT05** | **Renca** | **2.21** | **145** | *eP* | **Pn** | **17 17 39.5** | **+1.3** |
| MT05 | | | | *i* S | **Sb** | **17 18 07.5** | **-1.6** |
| MT05 | | | | IAML | | 17 18 19.7 | |
| | comp=E,2μm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **2.41** | **142** | | **Pn** | **17 17 42.4** | **+1.4** |
| **MT01** | **Popeta** | **2.42** | **159** | | **Pn** | **17 17 41.7** | **+0.7** |
| **MT01** | **Popeta** | **2.42** | **159** | *eP* | **Pn** | **17 17 41.9** | **+0.9** |
| **MT09** | **Talagante** | **2.43** | **154** | | **Pn** | **17 17 42.6** | **+1.4** |
| **MT09** | **Talagante** | **2.43** | **154** | *eP* | **Pn** | **17 17 42.8** | **+1.6** |
| MT09 | | | | *i* S | **Sb** | **17 18 13.6** | **-1.9** |
| MT09 | | | | IAML | | 17 18 30.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **2.53** | **105** | *eP* | **Pb** | **17 17 46.2** | **-0.4** |
| AUSP | | | | *eS* | **Sg** | **17 18 23.3** | **+1.8** |
| **BO04** | **La Punta** | **2.77** | **150** | | **Pn** | **17 17 47.5** | **+1.7** |
| **BO04** | **La Punta** | **2.77** | **150** | *eP* | **Pn** | **17 17 47.5** | **+1.7** |
| BO04 | | | | *i* S | **Sb** | **17 18 22.0** | **-3.1** |
| BO04 | | | | IAML | | 17 18 37.2 | |
| | comp=E,883nm,0.7s | | | | | | |
| **AROD** | **Rodeo** | **2.79** | **60** | *eP* | **Pb** | **17 17 49.1** | **-2.0** |
| AROD | | | | *eS* | **Sb** | **17 18 27.5** | **+1.5** |
| **LMEL** | **Las Melosas** | **2.85** | **143** | | **Pn** | **17 17 48.0** | **+1.1** |
| **LMEL** | **Las Melosas** | **2.85** | **143** | *eP* | **Pn** | **17 17 48.7** | **+1.8** |
| LMEL | | | | IAML | | 17 18 42.7 | |
| | comp=E,622nm,0.3s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.93** | **71** | *eP* | **Pb** | **17 17 52.0** | **-1.4** |
| ACCO | | | | *eS* | **Sg** | **17 18 33.3** | **-0.9** |
| ACCO | | | | IAML | | 17 18 41.5 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **BO01** | **Tunca** | **2.97** | **161** | | **Pn** | **17 17 49.5** | **+1.1** |
| **ASAL** | **Salagasta** | **3.08** | **110** | *eP* | **Pb** | **17 17 55.1** | **-0.8** |
| ASAL | | | | *eS* | **Sg** | **17 18 39.5** | **+0.3** |
| ASAL | | | | IAML | | 17 18 51.4 | |
| | comp=Z,669nm,1.4s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.09** | **115** | *eP* | **Pb** | **17 17 56.0** | **-0.1** |
| ARCO | | | | IAML | | 17 18 55.2 | |
| | comp=Z,615nm,0.9s | | | | | | |
| **AAGR** | **Agrelo** | **3.27** | **118** | *eP* | **Pb** | **17 17 56.8** | **-2.3** |
| AAGR | | | | *eS* | **Sb** | **17 18 41.0** | **+1.4** |
| AAGR | | | | IAML | | 17 18 55.7 | |
| | comp=Z,1μm,1.5s | | | | | | |
| **GO05** | **Huala** | **3.42** | **175** | | **Pn** | **17 17 55.3** | **+0.5** |
| **BO02** | **Sierra Bellavi** | **3.43** | **159** | | **Pn** | **17 17 54.4** | **-0.5** |
| **AC04** | **Lanos de Chal** | **3.53** | **17** | Pn | **Pn** | **17 17 54.8** | **-1.5** |
| **AVIZ** | **Vizcacheras** | **3.69** | **122** | *eP* | **Pb** | **17 18 07.8** | **+1.6** |
| AVIZ | | | | *eS* | **Sb** | **17 18 51.2** | **-0.2** |
| **AC06** | **Mina Casimiro** | **4.54** | **22** | Pn | **Pn** | **17 18 08.8** | **-1.3** |
| **APLL** | **PUNTA DE LOS L** | **5.07** | **78** | *eP* | **Pn** | **17 18 19.4** | **+1.9** |
| APLL | | | | *eS* | **Sb** | **17 19 24.8** | **-6.5** |
| APLL | | | | IAML | | 17 19 43.8 | |
| | comp=Z,522nm,0.9s | | | | | | |
| **BI05** | **Punta Hualpn** | **5.20** | **188** | Pn | **Pn** | **17 18 19.2** | **+0.1** |
| **AC02** | **Maricunga** | **5.48** | **31** | Pn | **Pn** | **17 18 22.3** | **-1.1** |
| **AC01** | **Pan de Azucar** | **5.62** | **16** | | **Pn** | **17 18 22.1** | **-2.8** |
| **H03N1** | **Juan Fernandez** | **5.91** | **250** | Pn | **Pn** | **17 18 25.9** | **-2.6** |
| | baz=72,slow=72,SNR=49 | | | | | | |
| H03N1 | | | | T | T | 17 25 22.5 | |
| | baz=78,slow=72,SNR=300 | | | | | | |
| **H03N3** | **Juan Fernandez** | **5.92** | **250** | Pn | **Pn** | **17 18 25.8** | **-3.0** |
| | baz=72,slow=72,SNR=52 | | | | | | |
| H03N3 | | | | T | T | 17 25 19.0 | |
| | baz=78,slow=72,SNR=444 | | | | | | |
| **H03N2** | **Juan Fernandez** | **5.92** | **250** | Pn | **Pn** | **17 18 26.0** | **-2.8** |
| | baz=72,slow=72,SNR=33 | | | | | | |
| H03N2 | | | | T | T | 17 25 20.3 | |
| | baz=78,slow=72,SNR=194 | | | | | | |
| **PB14** | **IPOC Station P** | **7.13** | **14** | | **Pn** | **17 18 41.8** | **-4.2** |
| **LC01** | **Cunco** | **7.30** | **178** | Pn | **Pn** | **17 18 48.6** | **+0.6** |
| **PLCA** | **Paso Flores** | **9.23** | **172** | Pn | **Pn** | **17 19 16.8** | **+2.3** |
| | comp=Z,0.4nm,0.3s,baz=328,slow=11,SNR=8.8 | | | | | | |
| PLCA | | | | Sn | **Sn** | **17 20 56.7** | **-2.4** |
| | baz=16,slow=16,SNR=3.1 | | | | | | |
| **PLCA** | **Paso Flores** | **9.23** | **172** | Pn | **Pn** | **17 19 15.6** | **+1.1** |
| **PLCA** | **Paso Flores** | **9.23** | **172** | *eP* | **Pn** | **17 19 17.1** | **+2.6** |
| **LVC** | **Limon Verde** | **9.43** | **19** | Pn | **Pn** | **17 19 16.2** | **-1.4** |
| | comp=Z,0.4nm,0.3s,baz=217,slow=12,SNR=1.6 | | | | | | |
| LVC | | | | Sn | **Sn** | **17 21 07.2** | **+2.7** |
| | comp=Z,1.3nm,0.3s,baz=154,slow=14,SNR=1.7 | | | | | | |
| LVC | | | | LR | LR | 17 22 48.3 | |
| | comp=Z,199nm,18.9s,baz=190,slow=37 | | | | | | |
| **CPUP** | **Villa Florida** | **14.09** | **72** | Pn | **Pn** | **17 20 21.5** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=249,slow=14,SNR=1.9 | | | | | | |
| CPUP | | | | LR | LR | 17 26 11.1 | |
| | comp=Z,238nm,18.8s,baz=226,slow=40 | | | | | | |
| **LPAZ** | **La Paz** | **15.70** | **15** | Pn | **Pn** | **17 20 43.5** | **+0.3** |
| | comp=Z,0.4nm,0.3s,baz=186,slow=7.0,SNR=25 | | | | | | |
| **LPAZ** | **La Paz** | **15.70** | **15** | Pn | **Pn** | **17 20 43.8** | **+0.6** |
| **LPAZ** | **La Paz** | **15.70** | **15** | *eP* | **Pn** | **17 20 44.4** | **+1.1** |
| **CPSB** | **Cacapava Do Su** | **16.19** | **91** | *eP* | **Pn** | **17 20 48.7** | **-0.3** |
| **AQDB** | **Aquidauana** | **18.53** | **57** | | **P** | **17 21 16.2** | **-2.0** |
| AQDB | | | | IAmb | IAmb | 17 21 26.8 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **AQDB** | **Aquidauana** | **18.53** | **57** | *eP* | **P** | **17 21 17.3** | **-0.9** |
| **SIV** | **San Ignacio** | **18.58** | **36** | P | **P** | **17 21 18.4** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=213,slow=9.9,SNR=20 | | | | | | |
| SIV | | | | LR | LR | 17 29 56.6 | |
| | comp=Z,131nm,18.1s,baz=231,slow=42 | | | | | | |
| **PTGB** | **Pitanga** | **19.07** | **74** | *eP* | **Pn** | **17 21 25.1** | **+0.1** |
| **NNA** | **Nana** | **19.96** | **347** | LR | LR | 17 26 57.6 | |
| | comp=Z,49nm,19.8s,baz=154,slow=30 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **20.05** | **40** | *eP* | **P** | **17 21 34.4** | **-0.5** |
| **TER01** | **Tubaro-SC** | **20.25** | **87** | *eP* | **P** | **17 21 36.8** | **-0.3** |
| **PCMB** | **Pacaembu** | **21.22** | **67** | *eP* | **P** | **17 21 46.6** | **-1.0** |
| **VILB** | **Vilhena** | **21.62** | **34** | *eP* | **P** | **17 21 51.6** | **-0.3** |
| **SALV** | **Santo Antonio** | **21.73** | **48** | *eP* | **P** | **17 21 51.7** | **-1.4** |
| **ETMB** | **Extrema** | **22.39** | **16** | *eP* | **P** | **17 22 00.9** | **+0.8** |
| **ITRB** | **Iturama** | **22.98** | **64** | *eP* | **P** | **17 22 05.3** | **-1.1** |
| **PET01** | **Itanhaem-SP** | **23.22** | **78** | *eP* | **P** | **17 22 08.7** | **-0.1** |
| **BB19B** | **Bebedouro** | **23.67** | **69** | *eP* | **P** | **17 22 13.6** | **+0.1** |
| **CZSB** | **Cruzeiro do Su** | **23.74** | **359** | *eP* | **P** | **17 22 17.2** | **+3.1** |
| **RCLB** | **Rio Claro- Sao** | **23.82** | **74** | *eP* | **P** | **17 22 13.5** | **-1.4** |
| **VAO** | **Valinhos** | **24.02** | **75** | *eP* | **P** | **17 22 16.0** | **-0.9** |
| **ARAG** | **Araguaiana, MT** | **24.45** | **54** | *eP* | **P** | **17 22 20.6** | **-0.2** |
| **PDRB** | **Porto dos Gac** | **24.52** | **39** | *eP* | **P** | **17 22 20.7** | **-0.7** |
| **IPMB** | **Ipameri, GO** | **25.63** | **64** | *eP* | **P** | **17 22 30.8** | **-0.7** |
| **CLDB** | **Colider** | **25.64** | **40** | *eP* | **P** | **17 22 30.8** | **-0.8** |
| **BSCB** | **Bom Sucesso** | **26.75** | **73** | *eP* | **P** | **17 22 41.2** | **-0.5** |
| **BDFB** | **Brasilia** | **27.22** | **60** | P | **P** | **17 22 44.9** | **-1.1** |
| | comp=Z,12nm,0.8s,baz=239,slow=8.4,SNR=12 | | | | | | |
| **BDFB** | **Brasilia** | **27.22** | **60** | P | **P** | **17 22 44.5** | **-1.5** |
| BDFB | | | | IAmb | IAmb | 17 22 46.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **SNDB** | **Serra Nova Dou** | **27.48** | **49** | *eP* | **P** | **17 22 47.9** | **-0.3** |
| **DIAM** | **Diamantina, MG** | **29.01** | **70** | *eP* | **P** | **17 23 02.2** | **+0.2** |
| **NPGB** | **Novo Progresso** | **29.09** | **36** | *eP* | **P** | **17 23 01.4** | **-1.1** |
| **PEXB** | **Peixe** | **29.39** | **54** | *eP* | **P** | **17 23 05.2** | **-0.1** |
| **JANB** | **Januaria** | **30.37** | **64** | *eP* | **P** | **17 23 13.3** | **-0.6** |
| **SJMB** | **Sao Joao De Ma** | **30.81** | **73** | *eP* | **P** | **17 23 16.8** | **-1.0** |
| **ITTB** | **Itaituba** | **31.22** | **33** | *eP* | **P** | **17 23 20.7** | **-0.7** |
| **SDBA** | **SAO DESIDERIO** | **31.61** | **59** | *eP* | **P** | **17 23 23.2** | **-1.6** |
| **SMTB** | **Santa Maria do** | **32.22** | **51** | *eP* | **P** | **17 23 30.4** | **+0.2** |
| **PTGA** | **Pitinga** | **32.83** | **23** | P | **P** | **17 23 35.3** | **-0.2** |
| | comp=Z,1.8nm,0.3s,baz=206,slow=10,SNR=5.7 | | | | | | |
| **PRPB** | **Parauapebas** | **32.88** | **44** | *eP* | **P** | **17 23 35.3** | **-0.7** |
| **GUA01** | **Guaratinga, BA** | **33.04** | **71** | *eP* | **P** | **17 23 37.2** | **-0.2** |
| **CMC01** | **Camacan, BA** | **33.94** | **69** | *eP* | **P** | **17 23 45.4** | **+0.2** |
| **MALB** | **Monte Alegre** | **34.12** | **33** | *eP* | **P** | **17 23 44.9** | **-1.8** |
| **NBIT** | **Itapeh - BA** | **34.25** | **69** | *eP* | **P** | **17 23 48.3** | **+0.4** |
| **BOAV** | **Boa Vista** | **35.60** | **20** | *eP* | **P** | **17 23 59.6** | **+0.1** |
| **NBPN** | **Ponto Novo - B** | **36.11** | **62** | *eP* | **P** | **17 24 03.5** | **-0.6** |
| **MCPB** | **Macapa, AP** | **36.48** | **36** | *eP* | **P** | **17 24 06.7** | **-0.4** |
| **NBLA** | **Lagarto - SE** | **37.87** | **65** | *eP* | **P** | **17 24 17.7** | **-1.3** |
| **NBMA** | **Muriti-CE** | **39.45** | **60** | *eP* | **P** | **17 24 31.9** | **-0.4** |
| **NBPS** | **Pedra II - PI** | **39.61** | **53** | *eP* | **P** | **17 24 33.3** | **-0.4** |
| **NBPB** | **Pedra_Branca-C** | **40.10** | **57** | *eP* | **P** | **17 24 37.7** | **+0.1** |
| **SDV** | **Santo Domingo** | **40.28** | **3** | P | **P** | **17 24 40.0** | **+0.8** |
| | comp=Z,2.1nm,0.4s,baz=239,slow=5.9,SNR=2.4 | | | | | | |
| **MDP** | **Montagnes des** | **41.01** | **31** | LR | LR | 17 43 18.3 | |
| | comp=Z,63nm,19.5s,baz=166,slow=39 | | | | | | |
| **RCBR** | **Riachuelo** | **42.59** | **61** | LR | LR | 17 42 34.7 | |
| | comp=Z,51nm,18.9s,baz=14,slow=36 | | | | | | |
| **NBPV** | **Pedro Velho** | **42.66** | **62** | *eP* | **P** | **17 24 59.1** | **+0.4** |
| **MCLT** | **Moule a Chique** | **46.34** | **15** | P | **P** | **17 25 26.1** | **-1.9** |
| **SNAA** | **Sanae** | **53.89** | **158** | P | **P** | **17 26 24.0** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=298,slow=16,SNR=1.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.54** | **331** | P | **P** | **17 27 59.8** | **+1.4** |
| | comp=Z,0.4nm,0.5s,baz=155,slow=8.2,SNR=6.5 | | | | | | |
| **DBIC** | **Dimbokro** | **74.61** | **72** | P | **P** | **17 28 41.8** | **+0.3** |
| | comp=Z,12nm,0.7s,baz=246,slow=6.2,SNR=17 | | | | | | |
| DBIC | | | | LR | LR | 17 57 47.7 | |
| | comp=Z,31nm,21.3s,baz=176,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | **74.61** | **72** | P | **P** | **17 28 41.7** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **81.80** | **325** | P | **P** | **17 29 23.2** | **+2.2** |
| | comp=Z,0.3nm,0.6s,baz=157,slow=4.7,SNR=2.2 | | | | | | |
| **LBTB** | **Lobatse** | **83.50** | **115** | LR | LR | 18 04 19.7 | |
| | comp=Z,34nm,20.0s,baz=184,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.58** | **70** | P | **P** | **17 29 30.8** | **+0.2** |
| | comp=Z,6.5nm,0.7s,baz=263,slow=4.7,SNR=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.58** | **70** | P | **P** | **17 29 30.5** | **-0.1** |
| TORD | | | | IAmb | IAmb | 17 29 31.8 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **95.05** | **46** | LR | LR | 18 13 38.1 | |
| | comp=Z,16nm,18.3s,baz=172,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.73** | **342** | P | **Pdif** | **17 30 44.9** | **-0.3** |
| | comp=Z,0.1nm,0.4s,baz=122,slow=8.9,SNR=2.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.57** | **271** | T | T | 19 54 59.2 | |
| | baz=116,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.58** | **271** | T | T | 19 55 06.3 | |
| | baz=116 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.59** | **271** | T | T | 19 54 54.6 | |
| | baz=116,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **25.92** | **272** | T | T | 19 55 23.4 | |
| | baz=118 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **25.94** | **272** | T | T | 19 55 24.2 | |
| | baz=156 | | | | | | |
| **BVAR** | **Borovoye Array** | **145.62** | **40** | PKPbc | **PKPab** | **17 36 41.5** | **+1.0** |
| | comp=Z,6.2nm,0.6s,baz=34,slow=11,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **151.21** | **40** | PKPbc | **PKiKP** | **17 36 56.0** | **+0.5** |
| | comp=Z,4.3nm,0.7s,baz=304,slow=3.1,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.27** | **30** | PKPbc | **PKiKP** | **17 36 58.1** | **+0.5** |
| | comp=Z,8.8nm,0.6s,baz=293,slow=3.2,SNR=20 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.27** | **30** | PKPbc | **PKiKP** | **17 36 57.5** | **-0.1** |

*IDC **29** 17:22:10.9±2.5,0°.43N×124°.45E,h137km±23km,mb4.0/19, mb1 4.0/21,mb1mx3.7/50,mbtmp4.3/21,MS2.7/1, Ms1 2.7/1,ms1mx2.2/71,Error ellipse: s-maj=21.6km s-min=10.7km az=73.0*
*NEIC **29** 17:22:12.0±1.8,0°.45N±0°.08×124°.66E±0°.07,h136km±8km, mb4.4/20,Error ellipse: s-maj=11.8km s-min=10.2km az=170.0*
*DJA **29** 17:22:12.3±0.3,0°N±4°×12°5E±°,h120km±5km,M4.2/16, mb4.2/7,mb4.4/1,MLv4.3/16,Mw(mB)3.5/1*

**ISC 29 17:22:12.8**±0.4,**0°.39N**±0°.05×**124°.61E**±0°.05,**h150**km,**n80,** σ1§**63**/81,**mb4.3**/28,**Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.66** | **287** | P | **Pn** | **17 22 32.8** | **-2.2** |
| KMSI | | | | S | **Sn** | **17 22 48.5** | **-3.4** |
| **GTOI** | **Gorontalo** | **1.62** | **279** | P | **Pn** | **17 22 44.3** | **+0.7** |
| **LUWI** | **Luwuk** | **2.32** | **232** | Pn | **Pn** | **17 22 50.6** | **-1.2** |
| **LUWI** | **Luwuk** | **2.32** | **232** | P | **Pn** | **17 22 50.6** | **-1.2** |
| LUWI | | | | S | **Sn** | **17 23 18.5** | **-3.2** |
| **LUWI** | **Luwuk** | **2.32** | **232** | P | **Pn** | **17 22 52.4** | **+0.6** |
| **MRSI** | **Marisa** | **2.67** | **272** | P | **Pn** | **17 22 54.0** | **-1.7** |
| **SANI** | **Sanana** | **2.78** | **150** | P | **Pn** | **17 22 54.5** | **-3.0** |
| **SANI** | **Sanana** | **2.78** | **150** | P | **Pn** | **17 22 54.4** | **-3.0** |
| **TNTI** | **Ternate** | **2.78** | **82** | | **Pn** | **17 22 54.8** | **-2.7** |
| **TNTI** | **Ternate** | **2.78** | **82** | P | **Pn** | **17 22 54.9** | **-2.6** |
| **TNTI** | **Ternate** | **2.78** | **82** | P | **Pn** | **17 22 55.1** | **-2.4** |
| **APSI** | **Ampana** | **3.23** | **247** | P | **Pn** | **17 23 02.8** | **-0.3** |
| **TOLI2** | **Tolitoli** | **3.90** | **281** | Pn | **Pn** | **17 23 10.8** | **-0.9** |
| **MPSI** | **Mapaga** | **4.71** | **269** | P | **Pn** | **17 23 22.5** | **+0.1** |
| **MSAI** | **Masohi** | **5.69** | **131** | P | **Pn** | **17 23 35.0** | **-0.4** |
| | 0.3nm404nm16nm,0.4s | | | | | | |
| **TTSI** | **Tana Toraja** | **5.88** | **235** | P | **Pn** | **17 23 38.1** | **+0.2** |
| | 0.2nm21nm,0.5s | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.49** | **228** | P | **Pn** | **17 23 46.9** | **+0.9** |
| | 0.2nm29nm,0.6s | | | | | | |
| **BNSI** | **Bone** | **6.54** | **223** | P | **Pn** | **17 23 47.0** | **+0.2** |
| | 0.1nm21nm,1.3s | | | | | | |
| **SIJI** | **Sorong** | **

comp=Z,0.3nm,0.4s,baz=46,slow=12,SNR=1.7
**BRTR Keskin Array B 90.50 310** P **P 17 34 56.3 -1.9**
comp=Z,0.2nm,0.4s,baz=35,slow=3.5,SNR=1.3
**ARCES ARCESS Array B 92.83 340** P **P 17 35 07.1 -1.0**
comp=Z,2.1nm,0.9s,baz=79,slow=4.7,SNR=1.1
**FINES FINESS Array B 93.75 332** P **P 17 35 11.2 -1.2**
comp=Z,1.5nm,0.9s,baz=115,slow=9.4,SNR=2.0
**BOSA Boshof 98.40 241** P Pdif 17 35 34.2 -0.3
comp=Z,1.3nm,0.6s,baz=359,slow=2.8,SNR=3.7

*IDC **29** 17:29:22.4±1.9,42˚.20N×71˚.53E,h0km,mb1 3.8/6, mb1mx3.4/46,mbtmp3.8/6,ML3.7/6,Error ellipse: s-maj=19.3km s-min=13.5km az=22.0*
*KRNET **29** 17:29:24.8±0.1,42˚.20N×71˚.57E,h19km,mb3.9*
*NNC **29** 17:29:24.2±0.7,42˚.23N×71˚.57E,h0km,mb4.7,mpv4.5, Error ellipse: s-maj=6.6km s-min=3.0km az=6.0*
*SOME **29** 17:29:25.8,42˚.27N×71˚.68E,h10km*
**ISC 29 17:29:24.5±1.0,42˚.20N±0˚.02×71˚.60E±0˚.02,h13km±8km, n88,σ2ş51/129,39C-19D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ARK** | **Arkit** | **0.48** | **145** | ⇑*iP* | | **Pg** | **17 29 34.8** | **+0.7** |
| ARK | baz=43 | | | ⇑*iS* | | **Sg** | **17 29 41.6** | **+1.0** |
| **DZA** | **Taraz** | **0.72** | **344** | ⇓*eP* | | **Pg** | **17 29 39.0** | **+0.4** |
| DZA | 719nm,0.2s | | | *e*S | | **Sb** | **17 29 48.4** | **-0.4** |
| **TRKS** | **Terek-Say** | **0.75** | **207** | ⇑*iP* | | **Pg** | **17 29 39.8** | **+0.7** |
| TRKS | 3μm,0.2s baz=2.0 | | | ⇑*iS* | | **Sn** | **17 29 50.4** | **-1.8** |
| **KK09** | **Karatay Array** | **1.23** | **319** | ⇓P | | **Pb** | **17 29 47.4** | **-0.3** |
| KK09 | 178nm,0.3s,baz=145,slow=16 baz=141,slow=30 | | | S | | **Sb** | **17 30 02.5** | **-0.9** |
| **MRKS** | **Merke** | **1.32** | **65** | *eP* | | **Pg** | **17 29 50.2** | **+0.2** |
| MRKS | 103nm,0.2s 302nm,0.0s | | | *e*S | | **Sg** | **17 30 07.5** | **+0.3** |
| **CHM** | **Chimkent** | **1.48** | **275** | *eP* | | **Pg** | **17 29 54.5** | **+1.4** |
| CHM | 172nm,0.2s 2μm,0.6s | | | *e*S | | **Sg** | **17 30 15.0** | **+2.7** |
| **BRLS** | **Borolday** | **1.54** | **303** | *eP* | | **Pb** | **17 29 53.4** | **+0.4** |
| BRLS | 76nm,0.3s 683nm,0.5s | | | *e*S | | **Sg** | **17 30 13.5** | **-0.8** |
| **AML** | **Almayashu** | **1.56** | **92** | P | | **Pb** | **17 29 53.2** | **-0.3** |
| **EKS2** | SNR=399 **Erkin-Say** | **1.68** | **73** | P | | **Pb** | **17 29 55.6** | **+0.2** |
| **EKS2** | SNR=228 **Erkin-Say** | **1.68** | **73** | ⇑*iP* | | **Pb** | **17 29 55.7** | **+0.3** |
| EKS2 | baz=73 baz=73 | | | ⇑*iS* | | **Sg** | **17 30 18.9** | **+0.3** |
| **OHH** | **Osh** | **1.90** | **151** | ⇓*iP* | | **Pb** | **17 29 59.1** | **+0.1** |
| OHH | baz=51 baz=51 | | | ⇓*iS* | | **Sb** | **17 30 24.2** | **+1.6** |
| **TAS** | **Tashkent** | **1.93** | **244** | ⇑*iP* | | **Pb** | **17 29 59.6** | **0.0** |
| TAS | baz=44 baz=44 | | | ⇑*iS* | | **Sg** | **17 30 24.5** | **-2.1** |
| **ARLS** | **Aral** | **2.06** | **98** | ⇑*iP* | | **Pb** | **17 30 01.8** | **0.0** |
| ARLS | baz=98 baz=98 | | | ⇑*iS* | | **Sb** | **17 30 29.0** | **+1.6** |
| **UCH** | **Uchtor** | **2.17** | **88** | P | | **Pb** | **17 30 04.1** | **+0.3** |
| **UCH** | SNR=124 **Uchtor** | **2.17** | **88** | ⇑*iP* | | **Pb** | **17 30 03.4** | **-0.5** |
| UCH | baz=88 baz=88 | | | ⇑*iS* | | **Sb** | **17 30 31.6** | **+0.8** |
| **AAK** | **Ala-Archa** | **2.19** | **77** | Pn | | **Pb** | **17 30 04.2** | **+0.2** |
| AAK | 196nm,0.3s,baz=249,slow=0.9,SNR=2865 56nm,0.3s,baz=26,slow=21,SNR=21 | | | Lg | | Lg | 17 30 33.7 | |
| **BTK** | **Batken** | **2.22** | **196** | ⇑*iP* | | **Pb** | **17 30 03.3** | **-1.2** |
| BTK | baz=95 baz=95 | | | ⇑*iS* | | **Sb** | **17 30 31.4** | **-0.5** |
| **FRU1** | **Bishkek** | **2.33** | **74** | ⇑*iP* | | **Pb** | **17 30 05.2** | **-1.1** |
| FRU1 | baz=73 baz=73 | | | ⇑*iS* | | **Sb** | **17 30 34.9** | **-0.1** |
| **USP** | **Ospenovka** | **2.39** | **62** | P | | **Pb** | **17 30 06.1** | **-1.3** |
| **USP** | SNR=207 **Ospenovka** | **2.39** | **62** | ⇓*iP* | | **Pb** | **17 30 06.3** | **-1.1** |
| USP | baz=63 baz=63 | | | ⇓*iS* | | **Sb** | **17 30 36.6** | **-0.3** |
| **CHMS** | **Chumysh** | **2.46** | **70** | P | | **Pb** | **17 30 07.5** | **-1.2** |
| **CHMS** | SNR=122 **Chumysh** | **2.46** | **70** | ⇓*iP* | | **Pb** | **17 30 07.2** | **-1.5** |
| CHMS | baz=70 baz=70 | | | ⇓*iS* | | **Sb** | **17 30 38.0** | **-0.9** |
| **KBK** | **Karagaybulak** | **2.52** | **78** | P | | **Pb** | **17 30 09.5** | **-0.3** |
| **KBK** | SNR=141 **Karagaybulak** | **2.52** | **78** | ⇑*iP* | | **Pb** | **17 30 08.2** | **-1.6** |
| KBK | baz=78 baz=78 | | | ⇑*iS* | | **Sb** | **17 30 40.0** | **-0.8** |
| **SGDS** | **Sogindy** | **2.56** | **60** | *eP* | | **Pb** | **17 30 10.6** | **+0.3** |
| SGDS | 143nm,0.2s 311nm,0.3s | | | *e*S | | **Sb** | **17 30 43.6** | **+1.9** |
| **SGDS** | **Sogindy** | **2.56** | **60** | Pg | | **Pb** | **17 30 10.6** | **+0.3** |
| SGDS | 143nm,0.2s 311nm,0.3s | | | Lg | | Lg | 17 30 43.0 | |
| **DRK** | **Karamyk** | **2.72** | **177** | ⇓*iP* | | **Pb** | **17 30 10.6** | **-2.6** |
| DRK | baz=76 baz=76 | | | ⇓*iS* | | **Sb** | **17 30 44.3** | **-2.2** |
| **TKM2** | **Tokmak 2** | **3.04** | **75** | P | | **Pb** | **17 30 15.8** | **-2.8** |
| **TKM2** | SNR=28 **Tokmak 2** | **3.04** | **75** | ⇑Pn | | **Pn** | **17 30 15.4** | **+2.9** |
| TKM2 | 26nm,0.3s 58nm,0.3s | | | ⇑Lg | | Lg | 17 31 01.9 | |
| **TKM2** | **Tokmak 2** | **3.04** | **75** | ⇑*iP* | | **Pn** | **17 30 15.4** | **+2.9** |
| TKM2 | baz=75 baz=75 | | | ⇑*iS* | | **Sb** | **17 30 52.5** | **-3.3** |
| **BOOM** | **Boomskoye usch** | **3.23** | **83** | ⇑*iP* | | **Pn** | **17 30 18.1** | **+3.0** |
| BOOM | baz=83 baz=83 | | | ⇑*iS* | | **Sn** | **17 30 56.4** | **+2.9** |
| **DGS** | **Degeres** | **3.25** | **70** | *eP* | | **Pb** | **17 30 23.5** | **+1.4** |
| DGS | 36nm,0.3s 113nm,0.3s | | | *e*S | | **Sb** | **17 31 04.7** | **+3.1** |
| **DGS** | **Degeres** | **3.25** | **70** | Pg | | **Pb** | **17 30 23.5** | **+1.4** |
| DGS | 36nm,0.3s 113nm,0.3s | | | Lg | | Lg | 17 31 04.7 | |
| **KRBS** | **Karabastau** | **3.35** | **62** | *eP* | | **Pb** | **17 30 25.2** | **+1.5** |
| KRBS | 84nm,0.3s 113nm,0.6s | | | *e*S | | **Sb** | **17 31 07.6** | **+3.2** |
| **KRBS** | **Karabastau** | **3.35** | **62** | Pg | | **Pb** | **17 30 25.2** | **+1.5** |
| KRBS | 84nm,0.3s 113nm,0.6s | | | Lg | | Lg | 17 31 07.6 | |
| **BTLS** | **Baital** | **3.35** | **31** | *eP* | | **Pb** | **17 30 24.8** | **+1.0** |
| BTLS | 23nm,0.2s 15nm,0.4s | | | *e*S | | **Sb** | **17 31 07.5** | **+3.0** |
| **BTLS** | **Baital** | **3.35** | **31** | Pg | | **Pb** | **17 30 24.8** | **+1.0** |
| BTLS | 23nm,0.2s 15nm,0.4s | | | Lg | | Lg | 17 31 07.5 | |
| **ULHL** | **Ulahol** | **3.45** | **88** | P | | **Pb** | **17 30 22.7** | **-2.9** |
| **ULHL** | SNR=9.6 **Ulahol** | **3.45** | **88** | ⇑*iP* | | **Pn** | **17 30 21.1** | **+3.0** |
| ULHL | baz=88 baz=88 | | | ⇑*iS* | | **Sn** | **17 31 01.8** | **+2.8** |
| **MTBS** | **Maitube** | **3.68** | **74** | *eP* | | **Pb** | **17 30 31.1** | **+1.6** |
| MTBS | 29nm,0.3s 124nm,0.6s | | | *e*S | | **Sb** | **17 31 18.1** | **+4.0** |
| **MTBS** | **Maitube** | **3.68** | **74** | Pg | | **Pb** | **17 30 31.1** | **+1.6** |
| MTBS | 29nm,0.3s 124nm,0.6s | | | Lg | | Lg | 17 31 18.1 | |
| **KUU** | **Kurty** | **3.87** | **62** | *eP* | | **Pb** | **17 30 34.6** | **+2.0** |
| KUU | 134nm,0.5s 72nm,0.5s | | | *e*S | | **Sb** | **17 31 23.7** | **+4.4** |
| **KUU** | **Kurty** | **3.87** | **62** | Pg | | **Pb** | **17 30 34.6** | **+2.0** |
| KUU | 134nm,0.5s 72nm,0.5s | | | Lg | | Lg | 17 31 23.7 | |
| **KTBS** | **Karatobe** | **4.03** | **66** | *eP* | | **Pb** | **17 30 37.9** | **+2.6** |
| KTBS | 85nm,0.5s 148nm,0.5s | | | *e*S | | **Sb** | **17 31 29.4** | **+5.4** |
| **KTBS** | **Karatobe** | **4.03** | **66** | Pg | | **Pb** | **17 30 37.9** | **+2.6** |
| KTBS | 85nm,0.5s 148nm,0.5s | | | Lg | | Lg | 17 31 29.4 | |
| **TNSS** | **Tian-Shan** | **4.04** | **76** | *eP* | | **Pb** | **17 30 38.4** | **+2.7** |
| TNSS | 116nm,0.6s 66nm,0.6s | | | *e*S | | **Sb** | **17 31 29.8** | **+5.2** |
| **TNSS** | **Tian-Shan** | **4.04** | **76** | Pg | | **Pb** | **17 30 38.4** | **+2.7** |
| TNSS | 116nm,0.6s 66nm,0.6s | | | Lg | | Lg | 17 31 29.8 | |
| **AAA** | **Alma-Ata** | **4.05** | **74** | *eP* | | **Pb** | **17 30 39.1** | **+3.4** |
| AAA | 215nm,0.3s 30nm,0.4s | | | *e*S | | **Sg** | **17 31 31.4** | **-3.0** |
| **AAA** | **Alma-Ata** | **4.05** | **74** | Pg | | **Pb** | **17 30 39.1** | **+3.4** |
| AAA | 215nm,0.3s 30nm,0.4s | | | Lg | | Lg | 17 31 31.4 | |
| **KNDC** | **Almaty** | **4.09** | **74** | ⇑Pg | | **Pg** | **17 30 40.4** | **-2.4** |
| KNDC | 336nm,0.9s 142nm,0.6s | | | ⇑Lg | | Lg | 17 31 36.6 | |
| **MDOK** | **Medeo** | **4.13** | **75** | *eP* | | **Pb** | **17 30 40.1** | **+2.9** |
| MDOK | 122nm,0.5s 74nm,0.6s | | | *e*S | | **Sg** | **17 31 33.4** | **-3.8** |
| **MDOK** | **Medeo** | **4.13** | **75** | ⇓Pg | | **Pg** | **17 30 40.9** | **-2.8** |
| MDOK | 192nm,1.0s 100nm,0.8s | | | ⇓Lg | | Lg | 17 31 36.6 | |
| **MDOK** | **Medeo** | **4.13** | **75** | Pg | | **Pb** | **17 30 40.1** | **+2.9** |
| MDOK | 122nm,0.5s 74nm,0.6s | | | Lg | | Lg | 17 31 33.4 | |
| **KDJ** | **Kajisay** | **4.15** | **89** | ⇓*iP* | | **Pn** | **17 30 30.4** | **+2.7** |
| KDJ | baz=89 baz=89 | | | ⇓*iS* | | **Sn** | **17 31 19.2** | **+3.0** |
| **KOTS** | **Kotyrbulak** | **4.19** | **74** | *eP* | | **Pg** | **17 30 42.2** | **-2.7** |
| KOTS | 132nm,0.4s 149nm,0.5s | | | *e*S | | **Sg** | **17 31 36.6** | **-2.6** |
| **KOTS** | **Kotyrbulak** | **4.19** | **74** | Pg | | **Pg** | **17 30 42.2** | **-2.7** |
| KOTS | 132nm,0.4s 149nm,0.5s | | | Lg | | Lg | 17 31 36.6 | |
| **KSH** | **Kashi** | **4.26** | **127** | Pn | | **Pb** | **17 30 41.3** | **+1.9** |
| KSH | | | | Sn | | **Sb** | **17 31 36.3** | **+5.5** |
| KSH | comp=Z,8.0nm,0.6s | | | pmax | | pmax | | |
| KSH | comp=N,48nm,0.8s | | | smax | | smax | | |
| KSH | comp=E,33nm,0.7s | | | smax | | smax | | |
| **CHKK** | **Chushkaly** | **4.29** | **65** | *eP* | | **Pb** | **17 30 41.8** | **+2.1** |
| CHKK | comp=E,31nm,0.4s comp=E,74nm,0.4s | | | *e*S | | **Sb** | **17 31 36.7** | **+5.4** |
| **CHKK** | **Chushkaly** | **4.29** | **65** | Pg | | **Pb** | **17 30 41.8** | **+2.1** |
| CHKK | comp=E,31nm,0.4s comp=E,74nm,0.4s | | | Lg | | Lg | 17 31 36.7 | |
| **ANVS** | **Anan'yevo** | **4.53** | **81** | ⇑*iP* | | **Pn** | **17 30 36.4** | **+3.5** |
| ANVS | baz=80 baz=80 | | | ⇑*iS* | | **Sn** | **17 31 28.2** | **+2.7** |
| **KURS** | **Kuram** | **5.00** | **73** | *eP* | | **Pg** | **17 30 56.7** | **-3.6** |
| KURS | comp=E,16nm,0.5s comp=E,27nm,1.0s | | | *e*S | | **Sg** | **17 32 01.6** | **-3.5** |
| **KURS** | **Kuram** | **5.00** | **73** | Pg | | **Pg** | **17 30 56.7** | **-3.6** |
| KURS | comp=E,16nm,0.5s comp=E,27nm,1.0s | | | Lg | | Lg | 17 32 01.6 | |
| **SATY** | **Saty** | **5.10** | **78** | *eP* | | **Pg** | **17 30 58.6** | **-3.6** |
| SATY | comp=E,21nm,0.4s comp=E,39nm,0.4s | | | *e*S | | **Sg** | **17 32 04.9** | **-3.2** |
| **SATY** | **Saty** | **5.10** | **78** | Pg | | **Pg** | **17 30 58.6** | **-3.6** |
| SATY | comp=E,21nm,0.4s comp=E,39nm,0.4s | | | Lg | | Lg | 17 32 04.9 | |
| **ZHN** | **Zhinishke** | **5.13** | **77** | *eP* | | **Pg** | **17 30 59.6** | **-3.2** |
| ZHN | comp=E,27nm,0.2s comp=E,47nm,0.4s | | | *e*S | | **Sg** | **17 32 06.8** | **-2.5** |
| **ZHN** | **Zhinishke** | **5.13** | **77** | Pg | | **Pg** | **17 30 59.6** | **-3.2** |
| ZHN | comp=E,27nm,0.2s comp=E,47nm,0.4s | | | Lg | | Lg | 17 32 06.8 | |
| **KPKS** | **Kokpek** | **5.36** | **74** | *eP* | | Pb | 17 31 03.1 | +5.0 |
| KPKS | comp=E,17nm,0.5s comp=E,71nm,0.5s | | | *e*S | | **Sg** | **17 32 12.8** | **-3.9** |
| **UZB** | **Uzynbulak** | **5.56** | **78** | *eP* | | Pg | 17 31 06.6 | -4.3 |
| UZB | comp=E,16nm,0.5s comp=E,44nm,0.7s | | | *e*S | | **Sg** | **17 32 18.8** | **-4.0** |
| **UZB** | **Uzynbulak** | **5.56** | **78** | Pg | | Pg | 17 31 06.6 | -4.3 |
| UZB | comp=E,16nm,0.5s comp=E,44nm,0.7s | | | Lg | | Lg | 17 32 18.8 | |
| **SHLS** | **Shalkode** | **5.88** | **78** | *eP* | | **Pg** | **17 31 18.1** | **+1.0** |
| SHLS | comp=E,6.3nm,0.3s comp=E,39nm,0.7s | | | *e*S | | **Sg** | **17 32 38.4** | **+5.3** |
| **SHLS** | **Shalkode** | **5.88** | **78** | Pg | | **Pg** | **17 31 18.1** | **+1.0** |
| SHLS | comp=E,6.3nm,0.3s comp=E,39nm,0.7s | | | Lg | | Lg | 17 32 38.4 | |
| **PDGK** | **Podgornoye** | **5.92** | **76** | Pg | | Pb | 17 31 12.1 | +4.5 |
| PDGK | comp=E,28nm,0.5s comp=E,15nm,0.9s | | | Lg | | Lg | 17 32 27.7 | |
| **OTUK** | **Ortayu** | **6.07** | **5** | ⇓Pn | | **Pn** | **17 30 54.8** | **+0.9** |
| OTUK | comp=E,3.3nm,0.4s comp=E,27nm,0.6s | | | ⇑Lg | | Lg | 17 32 37.6 | |
| **DJR** | **Jarkent** | **6.35** | **68** | *eP* | | Pb | 17 31 20.7 | +5.8 |
| DJR | comp=E,14nm,0.5s comp=E,22nm,0.6s | | | *e*S | | **Sg** | **17 32 43.1** | **-5.2** |
| **DJR** | **Jarkent** | **6.35** | **68** | Pg | | Pb | 17 31 20.7 | +5.8 |
| DJR | comp=E,14nm,0.5s comp=E,22nm,0.6s | | | Lg | | Lg | 17 32 43.1 | |
| **KAPS** | **Kapalarasan** | **6.41** | **59** | *eP* | | Pg | 17 31 22.2 | -5.1 |
| KAPS | comp=E,7.3nm,0.5s comp=E,32nm,0.6s | | | *e*S | | **Sg** | **17 32 45.3** | **-5.0** |
| **KAPS** | **Kapalarasan** | **6.41** | **59** | Pg | | Pg | 17 31 22.2 | -5.1 |
| KAPS | comp=E,7.3nm,0.5s comp=E,32nm,0.6s | | | Lg | | Lg | 17 32 45.3 | |
| **MAKZ** | **Makanchi** | **8.73** | **55** | ⇑Pn | | **Pn** | **17 31 31.2** | **+0.7** |
| MAKZ | comp=E,3.1nm,0.5s comp=E,6.0nm,0.6s | | | ⇓Lg | | Lg | 17 34 02.7 | |
| **MKAR** | **Makanchi Array** | **8.91** | **55** | Pn | | **Pn** | **17 31 34.1** | **+1.1** |
| MKAR | comp=E,3.5nm,0.3s,baz=237,slow=14,SNR=240 comp=E,0.4nm,0.3s,baz=237,slow=24,SNR=2.1 | | | Sn | | **Sn** | **17 33 13.5** | **+0.3** |
| MKAR | comp=E,1.0nm,0.3s,baz=245,slow=29,SNR=5.8 | | | Lg | | Lg | 17 34 07.9 | |
| **MK31** | **Makanchi Array** | **8.92** | **55** | ⇑Pn | | **Pn** | **17 31 34.6** | **+1.7** |
| MK31 | comp=E,3.7nm,0.4s,baz=241,slow=15,SNR=216 comp=E,5.6nm,0.6s | | | ⇑Lg | | Lg | 17 34 08.0 | |
| **KURBB** | **Kurchatov Arra** | **9.69** | **27** | Pn | | **Pn** | **17 31 42.5** | **-1.0** |
| KURBB | comp=E,0.1nm,0.3s,baz=215,slow=13,SNR=5.9 | | | Sn | | **Sn** | **17 33 28.2** | **-3.8** |
| KURBB | comp=E,0.2nm,0.3s,baz=206,slow=16,SNR=2.2 | | | ⇑Pn | | **Pn** | **17 31 42.9** | **-0.6** |
| **KURBB** | **Kurchatov Arra** | **9.69** | **27** | ⇑Sn | | **Sn** | **17 33 34.5** | **+2.4** |
| KURBB | comp=E,1.4nm,0.4s | | | ⇓Lg | | Lg | 17 34 32.3 | |
| **KURK** | comp=E,5.7nm,0.5s **Kurchatov** | **9.80** | **27** | ⇓Lg | | Lg | 17 34 34.5 | |
| **AB31** | comp=E,40nm,0.7s **Akbulak array** | **10.77** | **315** | ⇑Pn | | **Pn** | **17 31 57.4** | **-0.9** |
| **BVAR** | comp=E,31nm,0.8s **Borovoye Array** | **10.87** | **356** | Pn | | **Pn** | **17 31 57.9** | **-1.7** |
| BVAR | comp=E,0.5nm,0.3s,baz=116,slow=15,SNR=33 comp=E,0.4nm,0.3s,baz=181,slow=16,SNR=9.4 | | | Sn | | **Sn** | **17 33 57.9** | **-3.1** |
| **BRVK** | comp=E,0.7nm,0.3s,baz=149,slow=43,SNR=4.0 **Borovoye** | **10.90** | **356** | ⇑Pn | | **Pn** | **17 31 59.7** | **-0.4** |
| BRVK | comp=E,2.7nm,0.9s comp=E,3.7nm,0.7s | | | ⇓Sn | | **Sn** | **17 34 04.9** | **+3.0** |
| BRVK | comp=E,23nm,1.3s | | | ⇑Lg | | Lg | 17 35 11.9 | |
| **GEYT** | **Alibeck** | **11.17** | **252** | Pn | | **Pn** | **17 32 02.9** | **-1.0** |
| GEYT | comp=E,0.4nm,0.3s,baz=108,slow=7.7,SNR=1.7 comp=E,0.5nm,0.3s,baz=31,slow=24,SNR=1.5 | | | Sn | | **Sn** | **17 34 06.5** | **-2.2** |
| **ZALV** | **Zalesovo Beam** | **14.68** | **32** | Pn | | **Pn** | **17 32 49.3** | **-2.4** |
| | comp=E,0.4nm,0.3s,baz=229,slow=14,SNR=6.2 | | | | | | | |

*IDC **29** 17:43:25.8±0.7,5˚.75S×149˚.58E,h86km±5km,mb3.8/13, mb1 4.0/17,mb1mx3.9/34,mbtmp4.2/17,MS3.2/10, Ms1 3.2/10,ms1mx2.9/59,Error ellipse: s-maj=16.1km s-min=8.1km az=115.0*
*NEIC **29** 17:43:26.5±1.2,5˚.71S±0˚.06×149˚.57E±0˚.07,h87km±9km, mb4.4/14,Error ellipse: s-maj=10.6km s-min=8.7km az=92.0*
*DJA **29** 17:43:27.2±0.5,6˚S±4˚×15˚0E±˚,h92km±6km,M4.6/10, mB4.8/2,mb4.5/10,MLv4.6/3,Mw(mB)4.1/2*
**ISC 29 17:43:26.6±0.5,5˚.78S±0˚.06×149˚.60E±0˚.07,h100km,n59, σ1ş67/64,mb4.3/21,1C-1D,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KRVT** | **Keravat (AS076** | **2.83** | **59** | P | | **Pn** | **17 44 09.5** | **-0.6** |
| **RABL** | baz=127,slow=20 **Rabaul** | **3.00** | **58** | Pn | | **Pn** | **17 44 12.8** | **+0.4** |
| **MANU** | **Manus Island** | **4.33** | **329** | Pn | | **Pn** | **17 44 28.5** | **-1.8** |
| **PMG** | **Port Moresby** | **4.34** | **214** | P | | **Pn** | **17 44 30.5** | **0.0** |
| PMG | 62nm,0.3s,baz=9.2,slow=4.7,SNR=206 84nm,0.3s,baz=41,slow=20,SNR=6.8 | | | S | | **Sn** | **17 45 20.8** | **+0.8** |
| PMG | comp=Z,75nm,19.5s,baz=12,slow=29 | | | LR | | LR | 17 45 33.4 | |
| **PMG** | **Port Moresby** | **4.34** | **214** | Pn | | **Pn** | **17 44 30.2** | **-0.3** |
| **PMG** | **Port Moresby** | **4.34** | **214** | P | | **Pn** | **17 44 30.0** | **-0.5** |
| **PMG** | **Port Moresby** | **4.34** | **214** | P | | **Pn** | **17 44 31.1** | **+0.6** |
| **JAY** | **Jayapura** | **9.45** | **290** | P | | **Pn** | **17 45 39.7** | **-0.2** |
| **COEN** | 0.4nm,0.3s,baz=121,slow=12,SNR=2.3 **Coen** | **10.30** | **217** | Pn | | **Pn** | **17 45 50.0** | **-1.5** |
| **HNR** | **Honiara** | **10.88** | **110** | P | | **Pn** | **17 45 58.9** | **-0.5** |
| **CTA** | 1.8nm,0.3s,baz=249,slow=9.5,SNR=2.6 **Charters Tower** | **14.59** | **193** | P | | **Pn** | **17 46 48.0** | **-0.3** |
| CTA | 0.2nm,0.3s,baz=17,slow=19,SNR=0.9 comp=Z,67nm,19.2s,baz=87,slow=34 | | | LR | | LR | 17 51 45.3 | |
| **QIS** | **Mount Isa** | **17.61** | **213** | P | | **Pn** | **17 47 27.1** | **+1.4** |
| **KDU** | **Kakadu** | **18.24** | **247** | P | | **Pn** | **17 47 33.2** | **-0.1** |
| **SAUI** | **Saumlaki** | **18.30** | **262** | P | | **P** | **17 47 32.1** | **-0.9** |
| **MTN** | **Manton Dam** | **19.52** | **248** | P | | **Pn** | **17 47 46.9** | **-1.6** |
| **MTN** | **Manton Dam** | **19.52** | **248** | P | | **Pn** | **17 47 47.4** | **-1.1** |
| **EIDS** | **Eidsvold** | **19.53** | **176** | P | | **Pn** | **17 47 47.6** | **-1.0** |
| **DRS** | **Darwin Rock St** | **19.60** | **249** | P | | **Pn** | **17 47 48.5** | **-1.0** |
| **GUMO** | **Guam** | **19.81** | **346** | LR | | LR | 17 54 28.2 | |
| **WB0** | comp=Z,35nm,18.3s,baz=154,slow=34 **Warramunga Arr** | **20.30** | **225** | P | | **P** | **17 47 55.1** | **+0.3** |
| WB0 | comp=Z,11nm,0.6s | | | IAmb | | IAmb | 17 47 59.6 | |
| **WR0** | **Warramunga Arr** | **20.32** | **225** | P | | **P** | **17 47 55.5** | **+0.5** |
| **WRAB** | **Tennant Creek** | **20.44** | **225** | P | | **P** | **17 47 56.6** | **+0.4** |
| WRAB | comp=Z,21nm,1.2s | | | IAmb | | IAmb | 17 48 01.2 | |
| **WRAB** | **Tennant Creek** | **20.44** | **225** | P | | Pn | 17 47 57.4 | -1.8 |
| **WB2** | **Warramunga Arr** | **20.45** | **225** | P | | **P** | **17 47 56.4** | **+0.1** |
| WB2 | comp=Z,14nm,0.4s | | | IAmb | | IAmb | 17 47 58.2 | |
| **WRA** | **Warramunga Arr** | **20.45** | **225** | P | | **P** | **17 47 56.6** | **+0.2** |
| WRA | comp=Z,7.0nm,0.3s,baz=51,slow=11,SNR=216 comp=Z,4.8nm,0.7s,baz=52,slow=10,SNR=4.7 | | | pP | | **pP** | **17 48 14.3** | **+0.1** |
| WRA | comp=Z,1.1nm,0.9s,baz=43,slow=20,SNR=6.8 | | | S | | **S** | **17 51 37.2** | **-2.8** |
| WRA | comp=Z,0.4nm,1.0s,baz=58,slow=3.1,SNR=5.3 | | | ScP | | **ScP** | **17 55 35.0** | **+2.5** |
| WRA | comp=Z,51nm,19.5s,baz=13,slow=40 | | | LR | | LR | 17 57 13.9 | |
| **WRA** | **Warramunga Arr** | **20.45** | **225** | P | | **P** | **17 47 55.5** | **-0.8** |
| **KNRA** | **Kununurra** | **22.69** | **243** | P | | **P** | **17 48 19.2** | **-0.8** |
| KNRA | comp=Z,28nm,1.0s | | | IAmb | | IAmb | 17 48 22.8 | |
| **KNRA** | **Kununurra** | **22.69** | **243** | P | | **P** | **17 48 19.9** | **-0.2** |
| **DZM** | **Mont Dzumac** | **22.97** | **136** | P | | **P** | **17 48 23.0** | **+0.1** |
| DZM | comp=Z,4.3nm,0.4s,baz=347,slow=14,SNR=9.6 comp=Z,160nm,19.6s,baz=20,slow=31 | | | LR | | LR | 17 55 24.7 | |
| **DZM** | **Mont Dzumac** | **22.97** | **136** | P | | **P** | **17 48 21.3** | **-1.6** |
| DZM | comp=Z,16nm,1.1s | | | IAmb | | IAmb | 17 48 25.4 | |
| **AS31** | **Alice Springs** | **23.34** | **219** | P | | **P** | **17 48 26.8** | **+0.5** |
| **ASAR** | **Alice Springs** | **23.34** | **219** | P | | **P** | **17 48 26.6** | **+0.2** |
| ASAR | comp=Z,2.5nm,0.3s,baz=53,slow=9.1,SNR=93 comp=Z,5.4nm,0.8s,baz=43,slow=9.7,SNR=7.5 | | | pP | | **pP** | **17 48 46.3** | **+0.8** |
| ASAR | comp=Z,1.1nm,1.0s,baz=40,slow=18,SNR=4.6 | | | S | | **S** | **17 52 37.3** | **+5.8** |
| ASAR | comp=Z,0.4nm,1.0s,baz=40,slow=3.3,SNR=4.1 | | | ScP | | **ScP** | **17 55 42.5** | **+2.8** |
| **ASAR** | **Alice Springs** | **23.34** | **219** | P | | **P** | **17 48 27.0** | **+0.7** |
| **ARMA** | **Armidale** | **24.59** | **176** | P | | **P** | **17 48 38.3** | **+0.7** |
| ARMA | comp=Z,16nm,1.2s | | | IAmb | | IAmb | 17 48 53.0 | |
| **BATI** | **Baumata** | **26.05** | **259** | LR | | LR | 18 00 16.3 | |
| **FITZ** | comp=Z,38nm,20.7s,baz=121,slow=39 **Fitzroy Crossi** | **26.40** | **240** | P | | **P** | **17 48 54.3** | **+0.2** |
| FITZ | comp=Z,11nm,0.8s,baz=53,slow=6.3,SNR=35 comp=Z,11nm,0.8s,baz=50,slow=4.6,SNR=5.5 | | | pP | | **pP** | **17 49 13.5** | **-2.7** |
| FITZ | comp=Z,49nm,19.1s,baz=44,slow=38 | | | LR | | LR | 18 00 19.8 | |
| **FITZ** | **Fitzroy Crossi** | **26.40** | **240** | P | | **P** | **17 48 54.6** | **+0.5** |
| FITZ | comp=Z,13nm,0.8s | | | IAmb | | IAmb | 17 48 58.0 | |
| **FITZ** | **Fitzroy Crossi** | **26.40** | **240** | P | | **P** | **17 48 54.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **27.02** | **195** | P | | **P** | **17 48 59.5** | **0.0** |
| STKA | comp=Z,5.1nm,0.7s,baz=31,slow=8.8,SNR=6.5 comp=Z,2.4nm,0.6s,baz=289,slow=2.2,SNR=3.3 | | | pP | | **pP** | **17 49 19.8** | **-0.8** |
| **STKA** | **Stephens Creek** | **27.02** | **195** | P | | **P** | **17 49 00.5** | **+1.0** |
| **RPZ** | **Rata Peaks** | **42.24** | **157** | LR | | LR | 18 08 13.4 | |
| **KSRS** | comp=Z,83nm,19.6s,baz=18,slow=35 **Korea Array** | **47.53** | **337** | P | | **P** | **17 51 51.2** | **-0.7** |
| **USRK** | comp=Z,2.2nm,0.8s,baz=153,slow=7.7,SNR=5.4 **Ussuriysk Ar.** | **52.22** | **344** | P | | **P** | **17 52 26.0** | **-1.3** |
| **HNS** | comp=Z,2.8nm,0.7s,baz=166,slow=17,SNR=2.2 **HongShan** | **53.88** | **326** | ⇑P | | **P** | **17 52 42.5** | **+2.8** |
| HNS | comp=Z,9.0nm,0.9s | | | pmax | | pmax | | |
| **BNX** | **BinXian** | **54.99** | **341** | ⇓P | | P | 17 52 51.5 | +4.0 |
| BNX | comp=Z,58nm,1.4s | | | pmax | | pmax | | |
| BNX | comp=Z,1μm,4.4s | | | pmax | | pmax | | |
| **CMAR** | **Chiang Mai Arr** | **55.44** | **297** | P | | **P** | **17 52 50.8** | **-0.5** |
| CMAR | comp=Z,0.2nm,0.4s,baz=108,slow=6.0,SNR=2.5 comp=Z,10nm,19.6s,baz=30,slow=37 | | | LR | | LR | 18 17 23.2 | |
| **PZH** | **PanZhiHua** | **56.37** | **307** | P | | P | 17 53 02.0 | +4.0 |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | | pmax | | |
| PZH | comp=Z,100nm,4.9s | | | pmax | | pmax | | |
| **HHC** | **Hu-ho-hao-te** | **58.04** | **327** | *eP* | | **P** | **17 53 12.8** | **+3.4** |
| HHC | comp=Z,11nm,0.8s | | | pmax | | pmax | | |
| HHC | | | | AMB | | AMB | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,130nm,6.6s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.06** | **6** | P | | **P** | **17 53 16.2** | **+0.1** |
| | comp=Z,3.4nm,0.5s,baz=162,slow=7.4,SNR=4.8 | | | | | | | | |
| PETK | | | | LR | | LR | 18 13 21.9 | | |
| | comp=Z,48nm,21.8s,baz=126,slow=30 | | | | | | | | |
| **LZH** | **Lanzhou** | **59.76** | **318** | *eP* | | **P** | **17 53 23.5** | **+2.0** |
| LZH | | | | pP | | pP | 17 53 39.5 | -6.6 |
| LZH | | | | sP | | sP | 17 53 48.0 | -9.2 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **GTA** | **Gaotai** | **64.25** | **319** | *eP* | | **P** | **17 53 53.8** | **+2.3** |
| GTA | | | | pP | | pP | 17 54 13.5 | -2.9 |
| GTA | | | | sP | | PcP | 17 54 22.5 | -3.0 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.3s | | | | | | | | |
| **SONM** | **Songino Array** | **65.50** | **330** | P | | **P** | **17 54 01.1** | **+1.7** |
| | comp=Z,1.4nm,0.6s,baz=149,slow=5.5,SNR=9.7 | | | | | | | | |
| SONM | | | | pP | | **pP** | **17 54 23.0** | **-1.3** |
| | comp=Z,3.4nm,1.1s,baz=132,slow=5.0,SNR=6.7 | | | | | | | | |
| **SONM** | **Songino Array** | **65.50** | **330** | P | | **P** | **17 54 00.1** | **+0.7** |
| SONM | | | | IAmb | | IAmb | 17 54 25.0 | | |
| | comp=Z,6.8nm,1.4s | | | | | | | | |
| **WMQ** | **Urumqi** | **74.33** | **318** | *eP* | | **P** | **17 54 57.0** | **+3.5** |
| **MKAR** | **Makanchi Array** | **78.99** | **320** | P | | **P** | **17 55 20.9** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=92,slow=9.5,SNR=10.0 | | | | | | | | |
| MKAR | | | | pP | | **pP** | **17 55 41.0** | **-4.4** |
| | comp=Z,0.6nm,1.0s,baz=96,slow=11,SNR=2.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.22** | **327** | P | | **P** | **17 55 27.1** | **+1.0** |
| | comp=Z,1.1nm,0.6s,baz=107,slow=4.5,SNR=6.5 | | | | | | | | |
| ZALV | | | | pP | | **pP** | **17 55 48.8** | **-3.1** |
| | comp=Z,0.5nm,0.6s,baz=127,slow=9.2,SNR=2.3 | | | | | | | | |
| **KSH** | **Kashi** | **81.17** | **311** | P | | P | 17 55 35.8 | +4.2 |
| KSH | | | | pP | | pP | 17 56 00.8 | +3.2 |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.27** | **23** | P | | **P** | **17 55 46.0** | **-0.9** |
| | comp=Z,0.8nm,0.7s,baz=248,slow=5.2,SNR=14 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.53** | **285** | PKPbc | | **PKPab** | **18 03 01.6** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=88,slow=2.8,SNR=8.0 | | | | | | | | |

*TUL **29** 17:54:52.4±0.3,36°.53N±0°.02×98°.692W±0°.007, h6km±1km, ML2.6, mb_Lg2.4/6(NEIC), Error ellipse: s-maj=2.7km s-min=0.7km az=170.0*

**NEIC 29 17:54:53.0±0.2, 36°.52N±0°.02×98°.69W±0°.01, h4km±2km, Error ellipse: s-maj=2.3km s-min=1.1km az=157.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **U32A** | **Winter Ranch,** | **0.29** | **241** | Pg | Pg | 17 54 58.4 | -0.2 |
| U32A | | | | Sg | Sg | 17 55 02.8 | +0.5 |
| **FNO** | **Franklin** | **1.64** | **140** | Pn | Pn | 17 55 21.6 | -1.1 |
| **WMOK** | **Wichita Mounta** | **1.78** | **182** | Pn | Pn | 17 55 23.7 | -0.9 |
| **WMOK** | **Wichita Mounta** | **1.78** | **182** | IAmb_Lg | | 17 55 47.9 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.79** | **77** | Pn | Pn | 17 55 24.7 | -0.1 |
| **R32A** | **Long Quarter,** | **1.90** | **359** | IAmb_Lg | | 17 55 55.7 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **310** | IAmb_Lg | | 17 57 08.1 | |
| | comp=Z,16nm,1.0s | | | | | | |

**KRSC 29 18:12:02.2±1.4, 52°.09N×159°.84E, h30km±20km, ML3.8, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUS** | **Russkaya** | **0.89** | **293** | *eP* | Pb | 18 12 19.0 | 0.0 |
| RUS | | | | *eS* | Sn | 18 12 29.9 | -0.4 |
| **SPN** | **Mys Shipunski** | **1.01** | **6** | P | Pb | 18 12 22.2 | +1.1 |
| SPN | | | | S | Sb | 18 12 36.1 | +2.0 |
| **MTVR** | **Mutnovka** | **1.09** | **292** | *eP* | Pb | 18 12 22.5 | 0.0 |
| MTVR | | | | S | Sb | 18 12 36.5 | 0.0 |
| **NLC** | **Nalytchevo** | **1.12** | **345** | *eP* | Pn | 18 12 22.3 | +0.5 |
| **KDTR** | **Khodutka, Kamc** | **1.13** | **256** | *eP* | Pb | 18 12 23.3 | +0.2 |
| KDTR | | | | *eS* | Sb | 18 12 37.8 | +0.4 |
| **DALK** | **Dalny** | **1.15** | **325** | *eP* | Pb | 18 12 22.9 | -0.5 |
| DALK | | | | S | Sn | 18 12 37.4 | +0.5 |
| **GRL** | **Gorelyy** | **1.18** | **294** | *eP* | Pb | 18 12 24.3 | +0.3 |
| **PET** | **Petropavlovsk** | **1.18** | **323** | *eP* | Pb | 18 12 23.5 | -0.4 |
| PET | | | | *eS* | Sb | 18 12 38.5 | -0.4 |
| **UGLR** | **Uglovaya** | **1.28** | **331** | P | Pb | 18 12 25.4 | -0.3 |
| **KRMR** | **Karymshinskiy** | **1.28** | **306** | *eP* | Pb | 18 12 25.0 | -0.6 |
| **SDLR** | **Sedlovina** | **1.32** | **334** | *eP* | Pb | 18 12 25.6 | -0.8 |
| **SMAR** | **Somma** | **1.33** | **332** | P | Pn | 18 12 25.7 | +0.8 |
| **AVH** | **Avacha** | **1.35** | **331** | *eP* | Pb | 18 12 26.4 | -0.5 |
| **KRER** | **Koryakskii** | **1.38** | **332** | P | Pb | 18 12 26.9 | -0.6 |
| **KOK** | **Koryaka** | **1.41** | **329** | P | Pb | 18 12 27.2 | -0.6 |
| **APC** | **Apacha** | **1.84** | **298** | *eP* | Pb | 18 12 34.2 | -0.9 |
| APC | | | | S | Sb | 18 12 57.0 | -0.7 |
| **GNL** | **Ganaly** | **1.97** | **325** | P | Pb | 18 12 36.9 | -0.6 |
| GNL | | | | S | Sb | 18 13 01.5 | -0.2 |
| **PAU** | **Pauzhetka** | **1.98** | **253** | *eP* | Pb | 18 12 37.3 | -0.3 |
| **MKZ** | **Mys Kozlova** | **2.71** | **24** | P | Pn | 18 12 45.4 | +1.7 |
| MKZ | | | | S | Sn | 18 13 16.1 | +0.7 |
| **SKR** | **Severo-Kuril's** | **2.73** | **240** | P | Pn | 18 12 46.8 | +2.9 |
| SKR | | | | S | Sn | 18 13 18.8 | +3.0 |
| **TUMD** | **Tumrok D** | **3.13** | **6** | P | Pb | 18 12 53.5 | -3.6 |
| **TUMR** | **Tumrok** | **3.20** | **3** | P | Pn | 18 12 53.9 | +3.4 |
| **KMNR** | **Kamenistaya** | **3.68** | **3** | P | Pb | 18 13 02.5 | -3.9 |
| **BZGR** | **Bezymyannyi-Gr** | **3.89** | **7** | P | Pb | 18 13 05.0 | -5.0 |
| **CIRR** | **Tsirk** | **4.07** | **7** | *eP* | Pb | 18 13 08.8 | -4.3 |
| **KBTR** | **Krutoberegovo** | **4.48** | **22** | *eP* | Pn | 18 13 10.8 | +2.9 |

*IDC **29** 18:12:26.9±3.4, 28°.47S×136°.61E, h0km, mb1 2.8/3, mb1mx2.7/42, mbtmp2.6/3, ML2.3/2, Error ellipse: s-maj=77.6km s-min=18.3km az=51.0*
*AUST **29** 18:12:29.8±3.3, 28°.27S×136°.66E, h10km±30km, Error ellipse: s-maj=19.9km s-min=12.4km az=9.0*

**ISC 29 18:12:28.0±0.8, 28°.29S±0°.05×136°.79E±0°.05, h10km, n11, σ2°.08/19, South Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OOD** | **Oodnadatta** | **1.09** | **296** | P | **Pg** | **18 12 49.3** | **+0.3** |
| | baz=1.0 | | | | | | |
| OOD | | | | S | **Sg** | **18 13 02.5** | **-0.7** |
| | baz=1.0 | | | | | | |
| **LCRK** | **Leigh Creek** | **2.49** | **150** | P | **Pb** | **18 13 12.2** | **-0.7** |
| | baz=2.6 | | | | | | |
| LCRK | | | | S | **Sb** | **18 13 44.9** | **+1.3** |
| | baz=2.6 | | | | | | |
| **MULG** | **Mulgathing** | **3.11** | **230** | P | **Pn** | **18 13 18.0** | **+0.9** |
| | baz=3.0 | | | | | | |
| MULG | | | | S | **Sn** | **18 13 54.5** | **+0.2** |
| | baz=3.0 | | | | | | |
| **INKA** | **Innaminka** | **3.54** | **82** | P | **Pn** | **18 13 25.2** | **+2.2** |
| | baz=3.6 | | | | | | |
| **BBOO** | **Buckleboo** | **4.55** | **188** | P | **Pn** | **18 13 37.7** | **+0.7** |
| | baz=4.6 | | | | | | |
| BBOO | | | | S | **Sn** | **18 14 27.8** | **-2.2** |
| | baz=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **5.28** | **330** | Pn | **Pn** | **18 13 49.0** | **+1.9** |
| | 0.1nm,0.3s,baz=150,slow=13,SNR=3.1 | | | | | | |
| ASAR | | | | Sn | **Sn** | **18 14 45.5** | **-2.6** |
| | 0.1nm,0.3s,baz=151,slow=20,SNR=4.0 | | | | | | |
| ASAR | | | | Lg | Lg | 18 15 17.6 | |
| | 0.3nm,0.3s,baz=155,slow=27,SNR=2.9 | | | | | | |
| **HTT** | **Hallett** | **5.45** | **161** | P | **Pn** | **18 13 52.4** | **+3.0** |
| | baz=5.5 | | | | | | |
| HTT | | | | S | **Sn** | **18 14 49.5** | **-2.6** |
| | baz=5.5 | | | | | | |
| **STKA** | **Stephens Creek** | **5.49** | **132** | Pn | **Pn** | **18 13 50.0** | **+0.2** |
| | baz=304,slow=11,SNR=1.4 | | | | | | |
| STKA | | | | Sn | **Sn** | **18 14 49.6** | **-3.6** |
| | 0.4nm,0.3s,baz=306,slow=14,SNR=5.6 | | | | | | |
| STKA | | | | Lg | Lg | 18 15 21.5 | |
| | 0.3nm,0.3s,baz=311,slow=20,SNR=1.7 | | | | | | |
| **STKA** | **Stephens Creek** | **5.49** | **132** | P | **Pn** | **18 13 51.9** | **+2.0** |
| | baz=5.6 | | | | | | |
| **WB2** | **Warramunga Arr** | **8.60** | **344** | P | **Pn** | **18 14 34.6** | **+2.0** |
| | baz=8.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **8.60** | **344** | Pn | **Pn** | **18 14 33.9** | **+1.3** |
| | 0.0nm,0.3s,baz=169,slow=14,SNR=1.3 | | | | | | |
| WRA | | | | Sn | **Sn** | **18 16 07.1** | **-2.7** |
| | 0.0nm,0.3s,baz=168,slow=24,SNR=1.6 | | | | | | |

**IDC 29 18:19:24.6±999.0, 53°.59N×3°.44E, h0km, Error ellipse: s-maj=478.7km s-min=163.0km az=111.0, North Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I26DE** | **FREYUNG INFRAS** | **8.00** | **122** | *i* | | 19 13 23.4 | |
| | baz=309,slow=327,SNR=1.2 | | | | | | |
| **I43RU** | **DUBNA INFRASONI** | **9.43** | **67** | *i* | | 20 21 20.0 | |
| | baz=271,slow=319,SNR=0.6 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **33.07** | **73** | *i* | | 21 40 00.0 | |
| | baz=299,slow=320,SNR=1.3 | | | | | | |

*IDC **29** 18:20:18.4±1.4, 37°.50N×144°.34E, h0km, mb3.2/3, mb1 3.5/5, mb1mx3.2/51, mbtmp3.3/5, ML3.3/2, Error ellipse: s-maj=38.9km s-min=27.6km az=100.0*
*JMA **29** 18:20:24.3±0.2, 37°.54N×143°.90E, h50km, M3.4*

**ISC 29 18:20:23.6±1.2, 37°.55N±0°.06×144°.07E±0°.09, h35km, n17, σ1°19/27, mb3.3/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **2.20** | **291** | P | **Pn** | **18 20 57.8** | **+0.2** |
| JIKH | | | | S | **Sn** | **18 21 22.3** | **-1.2** |
| **JIO** | **Ouri** | **2.33** | **294** | P | **Pn** | **18 20 59.7** | **+0.2** |
| JIO | | | | S | **Sn** | **18 21 26.0** | **-0.9** |
| **JKMT** | **Kesennumamotoy** | **2.41** | **302** | P | **Pn** | **18 21 00.7** | **+0.3** |
| JKMT | | | | S | **Sn** | **18 21 27.7** | **-0.9** |
| **OFUJ** | **Ofunato** | **2.43** | **310** | P | **Pn** | **18 21 01.2** | **+0.4** |
| OFUJ | | | | *eS* | **Sn** | **18 21 28.2** | **-1.1** |
| **JMK** | **Ichinoseki** | **2.65** | **303** | P | **Pn** | **18 21 04.4** | **+0.6** |
| JMK | | | | *eS* | **Sn** | **18 21 34.2** | **-0.4** |
| **JOM** | **Ohasama** | **2.91** | **312** | P | **Pn** | **18 21 08.4** | **+1.1** |
| JOM | | | | S | **Sn** | **18 21 40.8** | **-0.2** |
| **JFT** | **Otama** | **2.97** | **271** | P | **Pn** | **18 21 09.1** | **+0.8** |
| JFT | | | | S | **Sn** | **18 21 41.8** | **-0.9** |
| **JYK** | **Kaneyama** | **3.23** | **296** | P | **Pn** | **18 21 13.0** | **+1.2** |
| **JANG** | **Nango** | **3.45** | **326** | *eS* | **Sn** | **18 21 53.9** | **-0.7** |
| **BSO1** | **Boso 1** | **3.83** | **222** | *eS* | **Sn** | **18 22 01.6** | **-1.4** |
| **JRY** | **Ryogami san** | **4.42** | **251** | P | **Pn** | **18 21 28.1** | **-0.2** |
| JRY | | | | S | **Sn** | **18 22 15.1** | **-3.5** |
| **MJAR** | **Matsushiro Arr** | **4.80** | **260** | Pn | **Pn** | **18 21 34.1** | **+0.8** |
| | 0.2nm,0.3s,baz=89,slow=16,SNR=7.1 | | | | | | |
| MJAR | | | | Sn | **Sn** | **18 22 27.9** | **+0.2** |
| | 0.1nm,0.3s,baz=90,slow=30,SNR=1.2 | | | | | | |
| **JTKR** | **Abashiri--Toko** | **6.42** | **359** | P | **Pn** | **18 21 55.7** | **+0.2** |
| **ASAJ** | **Asahikawa** | **6.66** | **351** | Pn | **Pn** | **18 21 58.2** | **-0.6** |
| | 1.2nm,0.3s,baz=197,slow=15,SNR=13 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **18 23 10.8** | **-2.6** |
| | 0.8nm,0.3s,baz=208,slow=13,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.64** | **302** | P | **P** | **18 28 42.1** | **+1.5** |
| | 0.2nm,0.8s,baz=72,slow=9.3,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.91** | **191** | P | **P** | **18 30 12.1** | **-0.1** |
| | 0.4nm,0.5s,baz=13,slow=7.4,SNR=8.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **62.29** | **31** | P | **P** | **18 30 41.5** | **-0.2** |
| | 0.1nm,0.4s,baz=288,slow=6.6,SNR=1.8 | | | | | | |

*IDC **29** 18:21:35.1±1.1, 3°.56N×126°.35E, h0km, mb3.5/7, mb1 3.7/7, mb1mx3.3/48, mbtmp3.5/7, MS2.7/1, Ms1 2.9/1, ms1mx2.3/47, Error ellipse: s-maj=76.2km s-min=15.2km az=66.0*

**ISC 29 18:21:36.3±0.9, 3°.7N±0°.1×126°.4E±0°.4, h10km, n9, σ1°63/13, mb3.6/7, 1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KCP** | **Kidapawan** | **3.58** | **338** | *eP* | **Pg** | **18 12 49** | **-2.0** |
| KCP | | | | *i* S | **Sg** | **18 23 32.3** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **21.64** | **182** | P | **P** | **18 26 25.6** | **-1.4** |
| | 0.8nm,0.9s,baz=90,slow=16,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.72** | **162** | P | **P** | **18 26 56.1** | **-1.9** |
| | 1.2nm,0.7s,baz=345,slow=11,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 30 35.0** | **-0.1** |
| | 0.1nm,0.4s,baz=346,slow=2.5,SNR=1.1 | | | | | | |
| WRA | | | | S | **S** | **18 31 23.3** | **+3.2** |
| | 0.4nm,0.7s,baz=9.3,slow=7.1,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **28.13** | **165** | P | **P** | **18 27 27.9** | **-0.9** |
| | 0.3nm,0.4s,baz=336,slow=9.8,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 30 43.0** | **-0.1** |
| | 0.2nm,0.4s,baz=355,slow=2.5,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.64** | **301** | P | **P** | **18 27 51.3** | **+0.1** |
| | 0.2nm,0.5s,baz=152,slow=8.2,SNR=1.5 | | | | | | |
| CMAR | | | | LR | LR | 18 41 13.1 | |
| | comp=Z,12nm,18.0s,baz=210,slow=38 | | | | | | |
| **STKA** | **Stephens Creek** | **38.18** | **159** | P | **P** | **18 28 55.8** | **-0.4** |
| | 1.2nm,0.7s,baz=330,slow=12,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | **47.26** | **342** | P | **P** | **18 30 10.9** | **+1.0** |
| | 0.3nm,0.5s,baz=145,slow=5.2,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.43** | **325** | P | **P** | **18 31 27.2** | **+1.8** |
| | 0.3nm,0.4s,baz=112,slow=7.2,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.65** | **288** | PKP | **PKiKP** | **18 40 33.3** | **-0.4** |
| | 0.3nm,0.8s,baz=60,slow=1.6,SNR=1.5 | | | | | | |

**IDC 29 18:26:44.8±999.0, 53°.74N×3°.49E, h0km, Error ellipse: s-maj=462.0km s-min=167.7km az=110.0, North Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I26DE** | **FREYUNG INFRAS** | **8.06** | **123** | *i* | | 19 20 10.0 | |
| | baz=310,slow=327,SNR=1.3 | | | | | | |
| **I43RU** | **DUBNA INFRASONI** | **9.35** | **68** | *i* | | 20 28 40.0 | |
| | baz=272,slow=328,SNR=1.0 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **33.00** | **73** | *i* | | 21 46 36.0 | |
| | baz=300,slow=321,SNR=3.3 | | | | | | |

*MOS **29** 18:35:45.1±1.3, 37°.21N×78°.09E, h15km, mb4.1/7, Error ellipse: s-maj=10.4km s-min=6.3km az=90.8*
*NEIC **29** 18:35:46.2±1.9, 37°.34N±0°.06×78°.13E±0°.07, h10km±1km, mb4.0/18, ML4.3(BJI), Error ellipse: s-maj=11.9km s-min=8.4km az=212.0*
*BJI **29** 18:35:47.6±0.0, 37°.37N×78°.15E, h10km, mb3.7/8, mB4.2/5, ML4.3/2*
*IDC **29** 18:35:53.9±3.0, 37°.40N×78°.14E, h74km±27km, mb3.4/16, mb1 3.6/20, mb1mx3.5/45, mbtmp3.8/20, MS3.6/5, Ms1 3.6/5, ms1mx2.9/52, Error ellipse: s-maj=19.7km s-min=14.3km az=18.0*

**ISC 29 18:35:46.9±0.5, 37°.29N±0°.06×78°.09E±0°.05, h17km, n97, σ1°83/96, mb3.8/22, MS3.5/5, 1C-2D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSH** | **Kashi** | **2.78** | **324** | Pn | **Pn** | **18 36 31.5** | **+0.8** |
| KSH | | | | Sn | **Sn** | **18 37 04.8** | **+0.9** |
| KSH | | | | smax | smax | | |
| | comp=N,740nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,1μm,0.8s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **4.44** | **357** | | **Pn** | **18 36 54.6** | **+0.7** |
| **ULHL** | **Ulahol** | **5.15** | **345** | P | **Pn** | **18 37 05.4** | **+1.9** |
| | SNR=8.5 | | | | | | |
| **NIL** | **Nilore** | **5.36** | **229** | P | **Pn** | **18 37 06.4** | **+0.2** |
| **NIL** | **Nilore** | **5.36** | **229** | | **Pn** | **18 37 06.4** | **+0.2** |
| **UCH** | **Uchtor** | **5.65** | **332** | P | **Pn** | **18 37 12.1** | **+1.6** |
| | SNR=46 | | | | | | |
| **KBK** | **Karagaybulak** | **5.88** | **337** | P | **Pn** | **18 37 15.2** | **+1.8** |
| | SNR=12 | | | | | | |
| **AML** | **Almayashu** | **5.90** | **326** | P | **Pn** | **18 37 15.6** | **+1.6** |
| | SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.01** | **334** | P | **Pn** | **18 37 17.2** | **+2.0** |
| | 4.0nm,0.3s,baz=154,slow=8.4,SNR=95 | | | | | | |
| **AAK** | **Ala-Archa** | **6.01** | **334** | Pn | **Pn** | **18 37 16.8** | **+1.5** |
| **CHMS** | **Chumysh** | **6.25** | **337** | P | **Pn** | **18 37 20.1** | **+1.8** |
| | SNR=7.5 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.30** | **330** | P | **Pn** | **18 37 21.9** | **+2.7** |
| | SNR=25 | | | | | | |
| **GAR** | **Garm** | **6.36** | **288** | Pn | **Pn** | **18 37 20.6** | **+0.7** |
| **CHGR** | **Chuyangaron** | **7.18** | **284** | Pn | **Pn** | **18 37 31.6** | **+0.3** |
| **KBL** | **Kabul** | **7.83** | **252** | P | **Pn** | **18 37 42.7** | **+2.5** |
| **KBL** | **Kabul** | **7.83** | **252** | Pn | **Pn** | **18 37 42.7** | **+2.5** |
| **KKAR** | **Karatay Array** | **8.20** | **317** | P | **Pn** | **18 37 44.6** | **-0.5** |
| **KKAR** | **Karatay Array** | **8.20** | **317** | Pn | **Pn** | **18 37 44.6** | **-0.5** |
| **WMQ** | **Urumqi** | **9.80** | **45** | *eP* | **Pn** | **18 38 06.0** | **-1.0** |
| WMQ | | | | S | **Sn** | **18 39 58.0** | **+1.4** |
| WMQ | | | | smax | smax | | |
| | comp=N,340nm,0.7s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,240nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **9.94** | **16** | P | **Pn** | **18 38 13.1** | **+4.1** |
| **MAKZ** | **Makanchi** | **9.94** | **16** | Pn | **Pn** | **18 38 13.1** | **+4.1** |
| **MAKZ** | **Makanchi** | **9.94** | **16** | ||Pn | **Pn** | **18 38 13.3** | **+4.3** |
| | 18nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **10.00** | **17** | P | **Pn** | **18 38 13.7** | **+4.0** |
| **MK31** | **Makanchi Array** | **10.00** | **17** | *e*PN | **Pn** | **18 38 13.6** | **+3.8** |
| **MK31** | **Makanchi Array** | **10.00** | **17** | Pn | **Pn** | **18 38 13.7** | **+4.0** |
| **MK31** | **Makanchi Array** | **10.00** | **17** | ||Pn | **Pn** | **18 38 13.7** | **+4.0** |
| | 34nm,0.3s,baz=200,slow=13,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.00** | **17** | P | **Pn** | **18 38 14.1** | **+4.4** |
| | 43nm,0.3s,baz=194,slow=13,SNR=181 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.00** | **17** | Pn | **Pn** | **18 38 13.7** | **+4.0** |
| **PYUN** | **Piuthan** | **10.05** | **154** | *eP* | **Pn** | **18 38 11.2** | **+0.5** |
| | 12nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **10.11** | **150** | *eP* | **Pn** | **18 38 11.9** | **+0.3** |
| | 9.7nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **10.57** | **152** | *eP* | **Pn** | **18 38 18.1** | **+0.3** |
| **GKN** | **Gorkha** | **10.78** | **147** | *eP* | **Pn** | **18 38 20.8** | **+0.2** |
| | 37nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **11.24** | **145** | *eP* | **Pn** | **18 38 27.1** | **+0.1** |
| | 11nm,0.5s | | | | | | |
| **DMN** | **Daman** | **11.32** | **146** | *eP* | **Pn** | **18 38 28.3** | **+0.2** |
| | 9.7nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **11.42** | **143** | *eP* | **Pn** | **18 38 30.3** | **+0.7** |
| | 14nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **11.48** | **145** | *eP* | **Pn** | **18 38 30.3** | **0.0** |
| | 15nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **11.49** | **145** | *eP* | **Pn** | **18 38 30.3** | **-0.2** |
| | 18nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **11.78** | **142** | *eP* | **Pn** | **18 38 35.0** | **+0.4** |
| | 23nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **12.57** | **143** | *eP* | **Pn** | **18 38 44.5** | **-0.8** |
| | 21nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **12.81** | **138** | *eP* | **Pn** | **18 38 47.5** | **-1.1** |
| **ODAN** | **Odarc** | **13.04** | **140** | *eP* | **Pn** | **18 38 50.7** | **-0.9** |
| | 4.9nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **13.43** | **1** | Pn | **Pn** | **18 38 55.1** | **-1.5** |
| **GEYT** | **Alibeck** | **15.84** | **278** | P | **P** | **18 39 34.0** | **+1.2** |
| | 1.9nm,0.3s,baz=94,slow=12,SNR=14 | | | | | | |
| **GEYT** | **Alibeck** | **15.84** | **278** | Pn | **Pn** | **18 39 28.4** | **-0.7** |
| **GYA0B** | **ALIBECK ARRAY** | **15.84** | **278** | Pn | **Pn** | **18 39 28.5** | **-0.6** |
| **BVAR** | **Borovoye Array** | **16.63** | **344** | P | **P** | **18 39 41.9** | **+0.5** |
| | 1.5nm,0.3s,baz=172,slow=10,SNR=36 | | | | | | |
| **BRVK** | **Borovoye** | **16.68** | **343** | P | **P** | **18 39 42.6** | **+0.6** |
| **BRVK** | **Borovoye** | **16.68** | **343** | Pn | **Pn** | **18 39 38.1** | **-1.7** |
| BRVK | | | | | **P** | **18 39 42.6** | **+0.6** |
| **GTA** | **Gaotai** | **17.17** | **76** | *eP* | **Pn** | **18 39 46.5** | **+0.3** |
| GTA | | | | pP | P | 18 39 49.8 | +2.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,73nm,6.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **17.30** | **13** | Pn | **Pn** | **18 39 43.6** | **-3.9** |
| **ZALV** | **Zalesovo Beam** | **17.30** | **13** | Pn | **Pn** | **18 39 43.4** | **-4.0** |
| **AB31** | **Akbulak array** | **17.77** | **318** | *eP* | **P** | **18 39 54.2** | **+0.2** |
| **ABKAR** | **Akbulak array** | **17.77** | **318** | P | **Pn** | **18 39 50.5** | **-2.7** |
| **ABKAR** | **Akbulak array** | **17.77** | **318** | Pn | **Pn** | **18 39 50.8** | **-2.5** |
| **KNGR** | **Kungurtug, Tuv** | **19.23** | **40** | *i* P | **P** | **18 40 10.7** | **+0.4** |
| **AKTO** | **Aktyubinsk** | **19.47** | **319** | P | **Pn** | **18 40 13.6** | **-0.4** |
| | 0.3nm,0.3s,baz=117,slow=13,SNR=4.7 | | | | | | |
| **ZAK** | **Zakamensk** | **22.27** | **46** | *eP* | **P** | **18 40 43.6** | **+0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **ARU** | **Arti** | **23.19** | **332** | P | **P** | **18 40 53.2** | **+0.6** |
| | comp=Z,0.5nm,0.4s,baz=112,slow=5.4,SNR=1.7 | | | | | | |
| **ARU** | **Arti** | **23.19** | **332** | *i* P | **P** | **18 40 57.2** | **+4.6** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **ARU** | **Arti** | **23.19** | **332** | P | **P** | **18 40 52.7** | **+0.1** |
| ARU | | | | IAmb | IAmb | 18 41 06.0 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **23.24** | **54** | P | **P** | **18 40 53.1** | **-0.3** |
| | comp=Z,2.4nm,0.7s,baz=250,slow=10,SNR=23 | | | | | | |
| **SONM** | **Songino Array** | **23.24** | **54** | P | **P** | **18 40 51.3** | **-2.1** |
| **ULN** | **Ulaanbaatar** | **23.68** | **54** | *ce*P | **P** | **18 40 56.1** | **-1.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **23.68** | **54** | P | **P** | **18 40 57.1** | **-0.6** |
| ULN | | | | IAmb | IAmb | 18 41 04.6 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **BELG** | **Belogornoye** | **26.11** | **315** | *i* P | **P** | **18 41 22.8** | **+3.2** |
| BELG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.20** | **130** | P | **P** | **18 41 22.6** | **+1.8** |
| | comp=Z,0.3nm,0.5s,baz=309,slow=10,SNR=5.7 | | | | | | |
| **BR131** | **Keskin Array S** | **34.60** | **288** | P | **P** | **18 42 34.0** | **-1.1** |
| BR131 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **BR131** | **Keskin Array S** | **34.60** | **288** | P | **P** | **18 42 34.0** | **-1.1** |
| **BRTR** | **Keskin Array B** | **34.60** | **288** | P | **P** | **18 42 36.3** | **+1.2** |
| | comp=Z,0.8nm,0.8s,baz=97,slow=9.1,SNR=5.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.94** | **307** | P | **P** | **18 42 54.9** | **0.0** |
| | comp=Z,2.2nm,0.3s,baz=76,slow=9.0,SNR=2.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.94** | **307** | P | **P** | **18 42 54.6** | **-0.2** |
| **KSAR** | **Wonju Array Be** | **39.20** | **74** | P | **P** | **18 43 13.4** | **-0.7** |
| **KSAR** | **Wonju Array Be** | **39.20** | **74** | P | **P** | **18 43 13.4** | **-0.7** |
| **KSRS** | **Korea Array** | **39.23** | **74** | LR | LR | 19 02 39.9 | |
| | com

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SHLS** | **Shalkode** | **0.73** | **277** | *e* | P | | Pb | 18 37 20.1 | -5.5 |
| | 4μm,0.2s | | | | | | | | |
| SHLS | | | | *e* | S | | Sb | 18 37 26.0 | -9.1 |
| | 34μm,0.3s | | | | | | | | |
| **SHLS** | **Shalkode** | **0.73** | **277** | *e* | P | | Pb | 18 37 20.1 | -5.5 |
| | baz=70 | | | | | | | | |
| SHLS | | | | *e* | S | | Sb | 18 37 26.0 | -9.1 |
| | baz=70 | | | | | | | | |
| **PDGK** | **Podgornoye** | **0.74** | **291** | | PG | | **Pb** | **18 37 25.2** | **-0.7** |
| PDGK | | | | | S | | **Sb** | **18 37 35.2** | **-0.5** |
| **PDGK** | **Podgornoye** | **0.74** | **291** | ⇓ | P | | **Pb** | **18 37 25.2** | **-0.7** |
| | 887nm,0.3s | | | | | | | | |
| PDGK | | | | ⇑ | S | | **Sb** | **18 37 35.2** | **-0.5** |
| | 4μm,0.3s | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.04** | **275** | *d* | *i* PG | | **Pb** | **18 37 30.3** | **-0.7** |
| **UZB** | **Uzynbulak** | **1.04** | **275** | ⇓ | *e* P | | **Pb** | **18 37 30.3** | **-0.7** |
| | 661nm,0.1s | | | | | | | | |
| UZB | | | | *e* | S | | **Sb** | **18 37 44.0** | **-0.3** |
| | 14μm,0.6s | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.04** | **275** | | P | | **Pb** | **18 37 30.1** | **-0.9** |
| UZB | | | | | S | | **Sb** | **18 37 43.1** | **-1.2** |
| **UZB** | **Uzynbulak** | **1.04** | **275** | ⇓ | *e* P | | **Pb** | **18 37 30.3** | **-0.7** |
| | baz=70 | | | | | | | | |
| UZB | | | | ⇓ | *e* S | | **Sb** | **18 37 44.0** | **-0.3** |
| | baz=70 | | | | | | | | |
| **KPKS** | **Kokpek** | **1.35** | **288** | *d* | *i* PG | | **Pb** | **18 37 35.4** | **-0.6** |
| **KPKS** | **Kokpek** | **1.35** | **288** | *e* | P | | **Pb** | **18 37 35.5** | **-0.6** |
| | 1μm,0.3s | | | | | | | | |
| KPKS | | | | *e* | S | | **Sb** | **18 37 53.0** | **0.0** |
| | 17μm,0.4s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.35** | **288** | ⇓ | *i* P | | **Pb** | **18 37 35.5** | **-0.6** |
| | baz=283 | | | | | | | | |
| **KPKS** | **Kokpek** | **1.35** | **288** | *e* | P | | **Pb** | **18 37 35.5** | **-0.6** |
| | baz=84 | | | | | | | | |
| KPKS | | | | *e* | S | | **Sb** | **18 37 53.0** | **0.0** |
| | baz=84 | | | | | | | | |
| **DJR** | **Jarkent** | **1.35** | **340** | *e* | P | | **Pb** | **18 37 36.2** | **+0.1** |
| | 923nm,0.3s | | | | | | | | |
| DJR | | | | *e* | S | | **Sb** | **18 37 54.2** | **+1.2** |
| | 3μm,0.2s | | | | | | | | |
| **DJR** | **Jarkent** | **1.35** | **340** | | P | | **Pb** | **18 37 35.9** | **-0.2** |
| | 923nm,0.3s | | | | | | | | |
| DJR | | | | | S | | **Sb** | **18 37 52.9** | **-0.1** |
| | 3μm,0.2s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.48** | **274** | *i* | PN | | **Pb** | **18 37 37.7** | **-0.6** |
| **ZHN** | **Zhinishke** | **1.48** | **274** | *e* | P | | **Pb** | **18 37 38.1** | **-0.2** |
| | 2μm,0.1s | | | | | | | | |
| ZHN | | | | *e* | S | | **Sb** | **18 37 57.0** | **+0.3** |
| | 8μm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.48** | **274** | *i* | P | | **Pb** | **18 37 37.7** | **-0.6** |
| | baz=271 | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.48** | **274** | | P | | **Pb** | **18 37 38.1** | **-0.2** |
| ZHN | | | | | S | | **Sb** | **18 37 56.8** | **+0.2** |
| **ZHN** | **Zhinishke** | **1.48** | **274** | *e* | P | | **Pb** | **18 37 38.1** | **-0.2** |
| | baz=71 | | | | | | | | |
| ZHN | | | | *e* | S | | **Sb** | **18 37 56.9** | **+0.3** |
| | baz=71 | | | | | | | | |
| **SATY** | **Saty** | **1.50** | **270** | *i* | PN | | **Pb** | **18 37 37.9** | **-0.7** |
| **SATY** | **Saty** | **1.50** | **270** | *e* | P | | **Pb** | **18 37 39.0** | **+0.3** |
| | 2μm,0.4s | | | | | | | | |
| SATY | | | | *e* | S | | **Sb** | **18 37 58.7** | **+1.5** |
| | 5μm,0.4s | | | | | | | | |
| **SATY** | **Saty** | **1.50** | **270** | *i* | P | | **Pb** | **18 37 38.0** | **-0.7** |
| | baz=267 | | | | | | | | |
| **SATY** | **Saty** | **1.50** | **270** | | P | | **Pb** | **18 37 39.0** | **+0.3** |
| | 2μm,0.4s | | | | | | | | |
| SATY | | | | | S | | **Sb** | **18 37 58.7** | **+1.5** |
| | 8μm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **1.50** | **270** | *e* | P | | **Pb** | **18 37 39.0** | **+0.3** |
| | baz=67 | | | | | | | | |
| SATY | | | | *e* | S | | **Sb** | **18 37 58.8** | **+1.5** |
| | baz=67 | | | | | | | | |
| **KNOS** | **Konyrlen** | **1.58** | **325** | *e* | P | | **Pb** | **18 37 40.2** | **0.0** |
| | 1μm,0.5s | | | | | | | | |
| KNOS | | | | *e* | S | | **Sb** | **18 38 00.6** | **+0.8** |
| | 32nm,0.3s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **1.62** | **249** | ⇑ | *i* P | | **Pb** | **18 37 40.4** | **-0.3** |
| | baz=47 | | | | | | | | |
| PRZ | | | | ⇑ | *i* S | | **Sb** | **18 38 02.9** | **+2.1** |
| | baz=47 | | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **285** | *e* | P | | **Pb** | **18 37 42.2** | **-0.1** |
| | 430nm,0.4s | | | | | | | | |
| KURS | | | | *e* | S | | **Sb** | **18 38 04.7** | **+1.2** |
| | 3μm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **285** | | P | | **Pb** | **18 37 42.0** | **-0.3** |
| | 430nm,0.4s | | | | | | | | |
| KURS | | | | | S | | **Sb** | **18 38 03.8** | **+0.3** |
| | 3μm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **285** | *e* | P | | **Pb** | **18 37 42.2** | **-0.1** |
| | baz=82 | | | | | | | | |
| KURS | | | | *e* | S | | **Sb** | **18 38 04.7** | **+1.2** |
| | baz=82 | | | | | | | | |
| **BLB** | **Baldybastay** | **1.76** | **306** | *e* | P | | **Pb** | **18 37 42.6** | **-0.5** |
| | 3μm,0.3s | | | | | | | | |
| BLB | | | | *e* | S | | **Sb** | **18 38 04.7** | **-0.2** |
| | 9μm,0.4s | | | | | | | | |
| **BLB** | **Baldybastay** | **1.76** | **306** | | P | | **Pb** | **18 37 42.6** | **-0.5** |
| | 3μm,0.3s | | | | | | | | |
| BLB | | | | | S | | **Sb** | **18 38 04.7** | **-0.2** |
| | 9μm,0.4s | | | | | | | | |
| **ANVS** | **Anan'yevo** | **2.06** | **263** | ⇑ | *i* P | | **Pb** | **18 37 47.1** | **-1.2** |
| | baz=61 | | | | | | | | |
| ANVS | | | | ⇑ | *e* S | | **Sb** | **18 38 13.4** | **-0.2** |
| | baz=61 | | | | | | | | |
| **ARXS** | **Arharly** | **2.22** | **302** | *e* | PN | | **Pb** | **18 37 48.9** | **-2.0** |
| **ARXS** | **Arharly** | **2.22** | **302** | *e* | P | | **Pb** | **18 37 50.2** | **-0.7** |
| | 810nm,0.5s | | | | | | | | |
| ARXS | | | | *e* | S | | **Sb** | **18 38 17.6** | **-0.3** |
| | 6μm,0.7s | | | | | | | | |
| **ARXS** | **Arharly** | **2.22** | **302** | | Pg | | **Pb** | **18 37 50.2** | **-0.7** |
| | 810nm,0.5s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 18 38 17.6 | |
| | 6μm,0.7s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **2.35** | **341** | *e* | P | | **Pb** | **18 37 52.8** | **-0.4** |
| | 608nm,0.2s | | | | | | | | |
| KAPS | | | | *e* | S | | **Sb** | **18 38 21.8** | **0.0** |
| | 3μm,0.4s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **2.35** | **341** | | Pg | | **Pb** | **18 37 52.8** | **-0.4** |
| | 608nm,0.2s | | | | | | | | |
| KAPS | | | | | Lg | | Lg | 18 38 21.8 | |
| | 3μm,0.4s | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.37** | **236** | | | | **Pb** | **18 37 53.2** | **-0.5** |
| TARG | | | | | | | **Sb** | **18 38 22.4** | **-0.4** |
| **TARG** | **Taragay, Kyrgy** | **2.37** | **236** | ⇓ | *i* P | | **Pb** | **18 37 52.4** | **-1.3** |
| | baz=34 | | | | | | | | |
| TARG | | | | ⇓ | *i* S | | **Sb** | **18 38 22.3** | **-0.4** |
| | baz=34 | | | | | | | | |
| **MDOK** | **Medeo** | **2.49** | **273** | *e* | PN | | **Pn** | **18 37 51.9** | **+1.3** |
| **MDOK** | **Medeo** | **2.49** | **273** | *e* | P | | **Pb** | **18 37 55.8** | **+0.2** |
| | 121nm,0.2s | | | | | | | | |
| MDOK | | | | *e* | S | | **Sb** | **18 38 27.4** | **+1.6** |
| | 2μm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **2.49** | **273** | *e* | Pn | | **Pn** | **18 37 52.0** | **+1.3** |
| | baz=271 | | | | | | | | |
| **MDOK** | **Medeo** | **2.49** | **273** | ⇑ | Pn | | **Pn** | **18 37 53.0** | **+2.3** |
| | 365nm,0.7s | | | | | | | | |
| MDOK | | | | ⇓ | Lg | | Lg | 18 38 27.1 | |
| | 1μm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **2.49** | **273** | | Pg | | **Pb** | **18 37 55.8** | **+0.2** |
| | 121nm,0.2s | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 18 38 27.4 | |
| | 2μm,0.4s | | | | | | | | |
| **KNDC** | **Almaty** | **2.55** | **274** | | PN | | **Pn** | **18 37 53.8** | **+2.4** |
| KNDC | | | | | | | | 18 38 29.2 | |
| **KNDC** | **Almaty** | **2.55** | **274** | ⇓ | Pn | | **Pn** | **18 37 53.9** | **+2.4** |
| | 935nm,0.6s | | | | | | | | |
| KNDC | | | | ⇑ | Lg | | Lg | 18 38 29.3 | |
| | 7μm,0.8s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.59** | **274** | *e* | P | | **Pb** | **18 37 57.7** | **+0.5** |
| | 468nm,0.3s | | | | | | | | |
| AAA | | | | *e* | S | | **Sb** | **18 38 30.4** | **+1.8** |
| | 5μm,0.5s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.59** | **274** | | Pg | | **Pb** | **18 37 57.7** | **+0.5** |
| | 468nm,0.3s | | | | | | | | |
| AAA | | | | | Lg | | Lg | 18 38 30.4 | |
| | 5μm,0.5s | | | | | | | | |
| **KDJ** | **Kajisay** | **2.59** | **250** | ⇑ | *i* P | | **Pn** | **18 37 54.7** | **+2.7** |
| | baz=48 | | | | | | | | |
| KDJ | | | | ⇑ | *i* S | | **Sb** | **18 38 26.5** | **-2.2** |
| | baz=48 | | | | | | | | |
| **CHKK** | **Chushkaly** | **2.64** | **288** | *e* | P | | **Pb** | **18 37 58.1** | **+0.1** |
| | 135nm,0.3s | | | | | | | | |
| CHKK | | | | *e* | S | | **Sb** | **18 38 31.0** | **+1.0** |
| | 2μm,0.4s | | | | | | | | |
| **CHKK** | **Chushkaly** | **2.64** | **288** | *e* | Pn | | **Pn** | **18 37 53.3** | **+0.7** |
| | baz=286 | | | | | | | | |
| CHKK | | | | *e* | Pg | | **Pb** | **18 37 59.8** | **+1.8** |
| | baz=286 | | | | | | | | |
| **CHKK** | **Chushkaly** | **2.64** | **288** | | Pg | | **Pb** | **18 37 58.1** | **+0.1** |
| | 135nm,0.3s | | | | | | | | |
| CHKK | | | | | Lg | | Lg | 18 38 31.0 | |
| | 2μm,0.4s | | | | | | | | |
| **KTBS** | **Karatobe** | **2.82** | **284** | *e* | P | | **Pb** | **18 38 01.5** | **+0.4** |
| | 180nm,0.4s | | | | | | | | |
| KTBS | | | | *e* | S | | **Sb** | **18 38 36.9** | **+1.7** |
| | 3μm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **2.82** | **284** | | Pg | | **Pb** | **18 38 01.5** | **+0.4** |
| | 180nm,0.4s | | | | | | | | |
| KTBS | | | | | Lg | | Lg | 18 38 36.9 | |
| | 3μm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **2.94** | **273** | *e* | P | | **Pb** | **18 38 02.4** | **-0.9** |
| | 90nm,0.2s | | | | | | | | |
| MTBS | | | | *e* | S | | **Sb** | **18 38 38.5** | **-0.3** |
| | 2μm,0.7s | | | | | | | | |
| **MTBS** | **Maitube** | **2.94** | **273** | | Pg | | **Pb** | **18 38 02.4** | **-0.9** |
| | 90nm,0.2s | | | | | | | | |
| MTBS | | | | | Lg | | Lg | 18 38 38.6 | |
| | 2μm,0.7s | | | | | | | | |
| **KUU** | **Kurty** | **3.10** | **287** | *e* | PN | | **Pn** | **18 38 00.5** | **+1.6** |
| **KUU** | **Kurty** | **3.10** | **287** | *e* | P | | **Pb** | **18 38 05.8** | **-0.1** |
| | 132nm,0.4s | | | | | | | | |
| KUU | | | | *e* | S | | **Sb** | **18 38 44.5** | **+1.2** |
| | 1μm,0.8s | | | | | | | | |
| **KUU** | **Kurty** | **3.10** | **287** | *e* | Pn | | **Pn** | **18 38 00.5** | **+1.6** |
| | baz=285 | | | | | | | | |
| **KUU** | **Kurty** | **3.10** | **287** | | Pg | | **Pb** | **18 38 05.8** | **-0.1** |
| | 132nm,0.4s | | | | | | | | |
| KUU | | | | | Lg | | Lg | 18 38 44.5 | |
| | 1μm,0.8s | | | | | | | | |
| **ULHL** | **Ulahol** | **3.21** | **257** | ⇑ | *e* P | | **Pn** | **18 38 03.1** | **+2.5** |
| | baz=55 | | | | | | | | |
| ULHL | | | | ⇑ | *i* S | | **Sn** | **18 38 41.3** | **+3.1** |
| | baz=55 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.37** | **262** | ⇑ | *i* P | | **Pn** | **18 38 05.0** | **+2.3** |
| | baz=60 | | | | | | | | |
| BOOM | | | | ⇑ | *i* S | | **Sn** | **18 38 44.8** | **+2.8** |
| | baz=60 | | | | | | | | |
| **DGS** | **Degeres** | **3.42** | **274** | *e* | P | | **Pb** | **18 38 12.7** | **+1.2** |
| | 143nm,0.6s | | | | | | | | |
| DGS | | | | *e* | S | | **Sb** | **18 38 56.3** | **+3.6** |
| | 1μm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **3.42** | **274** | | Pg | | **Pb** | **18 38 12.7** | **+1.2** |
| | 143nm,0.6s | | | | | | | | |
| DGS | | | | | Lg | | Lg | 18 38 56.3 | |
| | 1μm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.53** | **282** | *e* | P | | **Pb** | **18 38 13.9** | **+0.6** |
| | 113nm,0.5s | | | | | | | | |
| KRBS | | | | *e* | S | | **Sb** | **18 38 58.5** | **+2.6** |
| | 665nm,0.8s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.53** | **282** | | Pg | | **Pb** | **18 38 13.9** | **+0.6** |
| | 113nm,0.5s | | | | | | | | |
| KRBS | | | | | Lg | | Lg | 18 38 58.5 | |
| | 665nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.56** | **269** | | PN | | **Pn** | **18 38 08.1** | **+2.7** |
| TKM2 | | | | | | | | 18 39 00.7 | |
| **TKM2** | **Tokmak 2** | **3.56** | **269** | ⇑ | Pn | | **Pn** | **18 38 08.1** | **+2.7** |
| | 20nm,0.3s | | | | | | | | |
| TKM2 | | | | ⇑ | Pg | | **Pb** | **18 38 16.5** | **+2.6** |
| | 107nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑ | Lg | | Lg | 18 39 03.4 | |
| | 458nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.56** | **269** | ⇑ | *i* P | | **Pn** | **18 38 07.4** | **+2.0** |
| | baz=68 | | | | | | | | |
| TKM2 | | | | ⇑ | *i* S | | **Sn** | **18 38 49.1** | **+2.2** |
| | baz=68 | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.89** | **16** | | Pn | | **Pn** | **18 38 08.0** | **-1.8** |
| **MAKZ** | **Makanchi** | **3.89** | **16** | ⇑ | Pg | | **Pb** | **18 38 21.6** | **+2.2** |
| | 51nm,0.5s | | | | | | | | |
| MAKZ | | | | ⇑ | Sn | | **Sn** | **18 38 58.4** | **+3.7** |
| | 163nm,0.5s | | | | | | | | |
| MAKZ | | | | ⇑ | Lg | | Lg | 18 39 09.8 | |
| | 417nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.95** | **19** | | | | **Pn** | **18 38 08.7** | **-1.9** |
| **MK31** | **Makanchi Array** | **3.95** | **19** | ⇑ | Pg | | **Pb** | **18 38 22.1** | **+1.7** |
| | 38nm,0.3s,baz=201,slow=18,SNR=12 | | | | | | | | |
| MK31 | | | | ⇓ | Sn | | **Sn** | **18 38 58.8** | **+2.7** |
| | 112nm,0.4s | | | | | | | | |
| MK31 | | | | ⇑ | Lg | | Lg | 18 39 12.6 | |
| | 285nm,0.6s,baz=205,slow=30,SNR=8.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **3.95** | **19** | | Pn | | **Pn** | **18 38 09.4** | **-1.2** |
| | 3.0nm,0.3s,baz=198,slow=13,SNR=228 | | | | | | | | |
| MKAR | | | | | Sn | | **Sn** | **18 38 59.1** | **+3.0** |
| | 54nm,0.3s,baz=201,slow=29,SNR=7.7 | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 18 39 12.7 | |
| | 91nm,0.3s,baz=200,slow=28,SNR=11 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **3.95** | **19** | | Pn | | **Pn** | **18 38 08.9** | **-1.6** |
| **KBK** | **Karagaybulak** | **4.06** | **266** | ⇑ | *e* P | | **Pn** | **18 38 14.5** | **+2.2** |
| | baz=65 | | | | | | | | |
| KBK | | | | ⇑ | *i* S | | **Sn** | **18 39 01.5** | **+2.3** |
| | baz=65 | | | | | | | | |
| **SGDS** | **Sogindy** | **4.26** | **277** | *e* | PN | | **Pb** | **18 38 27.6** | **+1.8** |
| **SGDS** | **Sogindy** | **4.26** | **277** | *e* | P | | **Pb** | **18 38 26.9** | **+1.1** |
| | 41nm,0.5s | | | | | | | | |
| SGDS | | | | *e* | S | | **Sb** | **18 39 21.0** | **+4.2** |
| | 428nm,0.7s | | | | | | | | |
| **SGDS** | **Sogindy** | **4.26** | **277** | *e* | Pn | | **Pn** | **18 38 16.4** | **+1.4** |
| | baz=276 | | | | | | | | |
| SGDS | | | | *e* | Pg | | **Pb** | **18 38 29.0** | **+3.2** |
| | baz=276 | | | | | | | | |
| **SGDS** | **Sogindy** | **4.26** | **277** | | Pg | | **Pb** | **18 38 26.9** | **+1.1** |
| | 41nm,0.5s | | | | | | | | |
| SGDS | | | | | Lg | | Lg | 18 39 21.0 | |
| | 428nm,0.7s | | | | | | | | |
| **FRU1** | **Bishkek** | **4.28** | **268** | ⇓ | *i* P | | **Pn** | **18 38 17.4** | **+2.2** |
| | baz=68 | | | | | | | | |
| FRU1 | | | | ⇓ | *i* S | | **Sn** | **18 39 06.7** | **+2.4** |
| | baz=68 | | | | | | | | |
| **USP** | **Ospenovka** | **4.35** | **275** | | P | | **Pn** | **18 38 18.0** | **+1.9** |
| | SNR=8.1 | | | | | | | | |
| **USP** | **Ospenovka** | **4.35** | **275** | ⇑ | *i* P | | **Pn** | **18 38 18.2** | **+2.0** |
| | baz=73 | | | | | | | | |
| USP | | | | ⇑ | *i* S | | **Sn** | **18 39 07.9** | **+1.7** |
| | baz=73 | | | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **266** | | Lg | | Lg | 18 39 28.2 | |
| | 41nm,0.3s,baz=300,slow=20,SNR=6.5 | | | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **266** | | Pn | | **Pn** | **18 38 16.4** | **-0.5** |
| **AAK** | **Ala-Archa** | **4.40** | **266** | | Pn | | **Pn** | **18 38 16.4** | **-0.5** |
| **UCH** | **Uchtor** | **4.46** | **261** | ⇑ | *e* P | | **Pn** | **18 38 20.2** | **+2.2** |
| | baz=60 | | | | | | | | |
| UCH | | | | ⇑ | *i* S | | **Sn** | **18 39 11.0** | **+1.7** |
| | baz=60 | | | | | | | | |
| **ARLS** | **Aral** | **4.69** | **257** | ⇓ | *i* P | | **Pn** | **18 38 23.6** | **+2.7** |
| | baz=56 | | | | | | | | |
| ARLS | | | | ⇓ | *i* S | | **Sn** | **18 39 16.6** | **+2.0** |
| | baz=56 | | | | | | | | |
| **KSH** | **Kashi** | **4.89** | **225** | | Pg | | Pb | 18 38 41.8 | +5.3 |
| KSH | | | | | smax | | smax | | |
| | comp=N,1μm,0.6s | | | | | | | | |
| KSH | | | | | smax | | smax | | |
| | comp=E,2μm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **5.01** | **295** | *e* | PN | | **Pn** | **18 38 26.8** | **+1.6** |
| **BTLS** | **Baital** | **5.01** | **295** | *e* | P | | **Pb** | **18 38 41.2** | **+2.7** |
| | 64nm,0.6s | | | | | | | | |
| BTLS | | | | *e* | S | | **Sb** | **18 39 45.3** | **+7.0** |
| | 51nm,0.9s | | | | | | | | |
| **BTLS** | **Baital** | **5.01** | **295** | *e* | Pn | | **Pn** | **18 38 26.8** | **+1.6** |
| | baz=294 | | | | | | | | |
| **BTLS** | **Baital** | **5.01** | **295** | | Pg | | **Pb** | **18 38 41.2** | **+2.7** |
| | 64nm,0.6s | | | | | | | | |
| BTLS | | | | | Lg | | Lg | 18 39 45.3 | |
| | 51nm,0.9s | | | | | | | | |
| **MRKS** | **Merke** | **5.31** | **269** | *e* | P | | **Pb** | **18 38 47.9** | **+4.2** |
| | 57nm,0.8s | | | | | | | | |
| MRKS | | | | *e* | S | | Sb | 18 39 56.6 | +10 |
| | 282nm,0.7s | | | | | | | | |
| **WMQ** | **Urumqi** | **5.33** | **79** | *e* | Pn | | **Pn** | **18 38 32.5** | **+2.9** |
| WMQ | | | | | Sn | | **Sn** | **18 39 34.8** | **+4.5** |
| WMQ | | | | | smax | | smax | | |
| | comp=N,340nm,0.7s | | | | | | | | |
| WMQ | | | | | smax | | smax | | |
| | comp=E,240nm,1.1s | | | | | | | | |
| **DZA** | **Taraz** | **6.69** | **272** | *e* | Pg | | Pb | 18 39 15.5 | +8.5 |
| | baz=271 | | | | | | | | |
| **KKAR** | **Karatay Array** | **7.27** | **274** | | P | | **Pn** | **18 38 56.0** | **-0.2** |
| **KKAR** | **Karatay Array** | **7.27** | **274** | | Pn | | **Pn** | **18 38 56.0** | **-0.2** |
| **KK09** | **Karatay Array** | **7.28** | **274** | ⇑ | Pg | | Pb | 18 39 25.2 | +8.1 |
| | 21nm,0.6s | | | | | | | | |
| KK09 | | | | ⇓ | Lg | | Lg | 18 41 03.3 | |
| | 99nm,0.6s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **7.34** | **359** | *e* | P | | **Pn** | **18 38 55.7** | **-1.6** |
| SEM | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **7.34** | **359** | *e* | P | | **Pn** | **18 38 55.7** | **-1.6** |
| | comp=Z,1.0nm,0.7s,baz=358 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.67** | **351** | | Pn | | **Pn** | **18 39 01.4** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=192,slow=9.7,SNR=49 | | | | | | | | |
| KURBB | | | | | Sn | | **Sn** | **18 40 26.0** | **-1.7** |
| | comp=Z,2.3nm,0.3s,baz=227,slow=11,SNR=2.1 | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 18 41 12.3 | |
| | comp=Z,3.9nm,0.3s,baz=101,slow=20,SNR=3.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.67** | **351** | | P | | **Pn** | **18 39 01.7** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **7.67** | **351** | ⇑ | Pn | | **Pn** | **18 39 01.7** | **+0.1** |
| | comp=Z,21nm,0.5s | | | | | | | | |
| KURBB | | | | ⇓ | Lg | | Lg | 18 41 11.8 | |
| | comp=Z,527nm,0.8s | | | | | | | | |
| **OTUK** | **Ortayu** | **7.68** | **315** | | P | | **Pn** | **18 39 02.7** | **+0.9** |
| **OTUK** | **Ortayu** | **7.68** | **315** | ⇓ | Pn | | **Pn** | **18 39 02.7** | **+0.9** |
| | comp=Z,11nm,0.4s | | | | | | | | |
| OTUK | | | | ⇓ | Sn | | **Sn** | **18 40 31.5** | **+3.5** |
| | comp=Z,98nm,0.7s | | | | | | | | |
| OTUK | | | | ⇓ | Lg | | Lg | 18 41 10.9 | |
| | comp=Z,233nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **7.75** | **351** | *i* | P | | **Pn** | **18 39 02.4** | **-0.3** |
| **KURK** | **Kurchatov** | **7.75** | **351** | | | | **Sn** | **18 40 26.0** | **-3.7** |
| **KURK** | **Kurchatov** | **7.75** | **351** | | Pn | | **Pn** | **18 39 02.4** | **-0.3** |
| **KURK** | **Kurchatov** | **7.75** | **351** | ⇑ | Pn | | **Pn** | **18 39 03.0** | **+0.3** |
| | comp=Z,24nm,0.4s | | | | | | | | |
| KURK | | | | ⇑ | Sn | | **Sn** | **18 40 31.9** | **+2.2** |
| | comp=Z,82nm,0.8s | | | | | | | | |
| KURK | | | | ⇓ | Lg | | Lg | 18 41 14.6 | |
| | comp=Z,346nm,0.9s | | | | | | | | |
| **BRLS** | **Boroldaу** | **7.77** | **273** | *e* | P | | **Pn** | **18 39 06.6** | **+3.5** |
| BRLS | | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **BRLS** | **Boroldaу** | **7.77** | **273** | *e* | P | | **Pn** | **18 39 06.6** | **+3.5** |
| | comp=Z,1.5nm,0.7s,baz=271 | | | | | | | | |
| **BRZS** | **Berezniki** | **8.74** | **325** | *e* | P | | **Pn** | **18 39 17.0** | **+0.7** |
| BRZS | | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **BRZS** | **Berezniki** | **8.74** | **325** | *e* | P | | **Pn** | **18 39 17.0** | **+0.7** |
| | comp=Z,2.2nm,0.8s,baz=324 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **11.26** | **13** | | | | **Pn** | **18 39 49.3** | **-1.5** |
| **ZALV** | **Zalesovo Beam** | **11.26** | **13** | | Pn | | **Pn** | **18 39 49.2** | **-1.6** |
| | comp=Z,2.0nm,0.3s,baz=198,slow=11,SNR=22 | | | | | | | | |
| ZALV | | | | | Sn | | **Sn** | **18 41 50.4** | **-5.4** |
| | comp=Z,4.9nm,0.3s,baz=212,slow=29,SNR=7.6 | | | | | | | | |
| ZALV | | | | | LR | | LR | 18 44 28.4 | |
| | comp=Z,301nm,18.1s,baz=208,slow=39 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **11.26** | **13** | | Pn | | **Pn** | **18 39 50.3** | **-0.5** |
| **BVAR** | **Borovoye Array** | **12.01** | **330** | | Pn | | **Pn** | **18 40 00.7** | **-0.3** |
| | comp=Z,1.1nm,0.3s,baz=168,slow=16,SNR=12 | | | | | | | | |
| BVAR | | | | | Sn | | **Sn** | **18 42 10.2** | **-3.8** |
| | comp=Z,3.0nm,0.3s,baz=144,slow=50,SNR=3.3 | | | | | | | | |
| BVAR | | | | | Lg | | Lg | 18 43 29.6 | |
| | comp=Z,2.0nm,0.3s,baz=17,slow=16,SNR=2.4 | | | | | | | | |
| **BRVK** | **Borovoye** | **12.07** | **329** | | P | | **Pn** | **18 40 01.4** | **-0.5** |
| **BRVK** | **Borovoye** | **12.07** | **329** | | Pn | | **Pn** | **18 40 01.4** | **-0.5** |
| **BRVK** | **Borovoye** | **12.07** | **329** | ⇑ | Pn | | **Pn** | **18 40 00.9** | **-1.0** |
| | comp=Z,27nm,1.5s | | | | | | | | |
| BRVK | | | | ⇓ | Sn | | **Sn** | **18 42 18.9** | **+3.3** |
| | comp=Z,29nm,0.8s | | | | | | | | |
| BRVK | | | | ⇓ | Lg | | Lg | 18 43 30.9 | |
| | comp=Z,220nm,1.2s | | | | | | | | |
| **GOMU** | **GeErMu** | **13.02** | **117** | | P | | **Pn** | **18 40 14.3** | **-1.0** |
| **GTA** | **Gaotai** | **15.02** | **98** | *e* | P | | **P** | **18 40 47.0** | **-0.5** |
| GTA | | | | | pP | | pP | 18 40 52.3 | -2.2 |
| GTA | | | | | sP | | sP | 18 40 55.5 | -2.4 |
| GTA | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| GTA | | | | | pmax | | pmax | | |
| | comp=Z,130nm,4.9s | | | | | | | | |
| GTA | | | | | LR | | LR | | |
| | comp=Z,160nm,12.4s | | | | | | | | |
| GTA | | | | | LR | | LR | | |
| | comp=Z,220nm,14.3s | | | | | | | | |
| GTA | | | | | LR | | LR | | |
| | comp=Z,170nm,15.3s | | | | | | | | |
| **AB31** | **Akbulak array** | **15.47** | **301** | ⇑ | Pn | | **P** | **18 40 50.8** | **-1.5** |
| | comp=Z,4.1nm,0.5s,baz=109,slow=10,SNR=22 | | | | | | | | |
| AB31 | | | | ⇓ | Lg | | Lg | 18 45 19.0 | |
| | comp=Z,18nm,0.8s,baz=96,slow=27,SNR=3.7 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **15.47** | **301** | | Pn | | **Pn** | **18 40 46.8** | **-1.2** |
| ABKAR | | | | | P | | **P** | **18 40 53.3** | **+1.0** |
| **LSA** | **Lhasa** | **15.87** | **144** | | P | | **P** | **18 41 00.5** | **+3.2** |
| LSA | | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | | | |
| **MOY** | **Mondy** | **16.32** | **51** | *e* | P | | **P** | **18 41 03.4** | **+1.6** |
| **AKTO** | **Aktyubinsk** | **17.00** | **303** | | P | | **Pn** | **18 41 07.4** | **-0.1** |
| | comp=Z,0.5nm,0.3s,baz=112,slow=16,SNR=7.2 | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **18 44 08.3** | **-7.4** |
| | comp=Z,0.1nm,0.3s,baz=183,slow=23,SNR=1.7 | | | | | | | | |
| **ZAK** | **Zakamensk** | **17.24** | **57** | *e* | P | | **P** | **18 41 13.2** | **+1.3** |
| ZAK | | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | | | |
| ZAK | | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| **GEYT** | **Alibeck** | **17.72** | **261** | | P | | **Pn** | **18 41 15.4** | **-1.2** |
| | comp=Z,0.4nm,0.3s,baz=244,slow=16,SNR=2.8 | | | | | | | | |
| **GEYT** | **Alibeck** | **17.72** | **261** | | P | | **Pn** | **18 41 14.7** | **-1.9** |
| **GYA0B** | **ALIBECK ARRAY** | **17.72** | **261** | | P | | **Pn** | **18 41 14.9** | **-1.7** |
| **SVE** | **Sverdlovs

YAK IAmb IAmb 18 43 56.8
comp=Z,10.0nm,0.5s
**BR131 Keskin Array S 34.92 281** P P **18 44 00.2 -1.2**
BR131 pmax pmax
comp=Z,3.0nm,0.7s
**BR131 Keskin Array S 34.92 281** P P **18 44 00.2 -1.2**
**BRTR Keskin Array B 34.92 281** P P **18 44 00.8 -0.6**
comp=Z,1.2nm,0.5s,baz=108,slow=7.8,SNR=11
**BRTR Keskin Array B 34.92 281** P P **18 44 00.1 -1.3**
**BRTR Keskin Array B 34.92 281** P P **18 44 00.1 -1.3**
**AKASG Malin Array Be 35.21 301** P P **18 44 03.3 -0.3**
comp=Z,0.9nm,0.4s,baz=70,slow=8.4,SNR=4.1
**KLR Kul'dur 35.49 62** P P **18 44 05.2 -0.8**
comp=Z,2.9nm,0.8s,baz=288,slow=9.1,SNR=6.8
**KLR Kul'dur 35.49 62** *ce*P P **18 44 05.4 -0.6**
KLR pmax pmax
comp=Z,30nm,2.8s
**PALK Pallekele 35.65 180** LR LR 19 00 04.0
comp=Z,64nm,19.2s,baz=131,slow=39
**KSRS Korea Array 36.27 82** P P **18 44 11.9 -0.8**
comp=Z,1.4nm,0.6s,baz=282,slow=7.2,SNR=6.9
**KSRS Korea Array 36.27 82** P P **18 44 12.0 -0.8**
**FINES FINESS Array B 36.69 319** P P **18 44 15.4 -0.7**
comp=Z,1.9nm,0.7s,baz=88,slow=9.7,SNR=4.7
**FINES FINESS Array B 36.69 319** P P **18 44 14.7 -1.4**
**FINES FINESS Array B 36.69 319** P P **18 44 14.7 -1.4**
**TIXI Tiksi 36.92 23** P P **18 44 17.9 -0.1**
comp=Z,4.4nm,0.6s,baz=289,slow=15,SNR=21
TIXI LR LR 19 00 03.2
comp=Z,70nm,18.7s,baz=208,slow=37
**TIXI Tiksi 36.92 23** *ce*P P **18 44 18.4 +0.5**
TIXI pmax pmax
comp=Z,2.0nm,0.5s
**TIXI Tiksi 36.92 23** P P **18 44 17.7 -0.3**
**ARA0 ARCESS Array S 38.28 332** *e*P P **18 44 30.5 +1.0**
**ARCES ARCESS Array B 38.28 332** P P **18 44 29.6 +0.1**
comp=Z,2.6nm,0.5s,baz=93,slow=7.7,SNR=18
**BURAR Bucovina Array 38.39 296** P P **18 44 31.6 +0.8**
**BUR08 Bucovina Ar. S 38.39 297** P P **18 44 30.9 0.0**
**KTK1 Kautokeino 38.95 331** *e*P P **18 44 36.4 +1.3**
**HAMF Hammerfest 39.16 334** *e*P P **18 44 38.6 +1.8**
**JETT Jettan, Norway 40.03 332** *e*P P **18 44 46.2 +2.1**
**TRO Tromso 40.56 332** *e*P P **18 44 49.4 +1.0**
**FAUS Fauske 41.71 328** *e*P P **18 44 58.7 +0.8**
**STEI Steigen 41.74 329** *e*P P **18 44 58.8 +0.7**
**MOR8 Moi Rana 42.03 326** *e*P P **18 45 00.2 -0.3**
**LOF Lofoten 42.39 329** *e*P P **18 45 03.7 +0.2**
**NSS Namsos 43.13 324** *e*P P **18 45 09.6 0.0**
**PSI Prapat 43.34 153** LR LR 19 08 16.3
comp=Z,38nm,18.0s,baz=6.0,slow=43
**NC405 NORSAR Array S 43.62 319** P P **18 45 12.9 -0.7**
NC405 IAmb IAmb 18 45 27.7
comp=Z,23nm,0.9s
**NC602 NORSAR Array S 43.76 318** P P **18 45 14.5 -0.1**
NC602 IAmb IAmb 18 45 31.5
comp=Z,26nm,1.2s
**NC602 NORSAR Array S 43.76 318** *e*P P **18 45 15.0 +0.3**
**NC303 NORSAR Array S 43.77 319** P P **18 45 15.3 +0.6**
NC303 IAmb IAmb 18 45 28.8
comp=Z,11nm,0.9s
**NB201 NORSAR Array S 43.83 319** P P **18 45 15.8 +0.5**
NB201 IAmb IAmb 18 45 16.6
comp=Z,38nm,1.5s
**NB2 NORSAR Subarra 43.87 319** P P **18 45 15.6 0.0**
comp=Z,3.1nm,0.5s,baz=82,slow=8.6
**NB2 NORSAR Subarra 43.87 319** P P **18 45 15.6 0.0**
baz=82,slow=8.6
**NOA NORSAR Array B 43.87 319** P P **18 45 15.7 0.0**
comp=Z,3.2nm,0.6s,baz=81,slow=8.0,SNR=16
**NC204 NORSAR Array S 44.05 319** P P **18 45 17.5 +0.4**
**NAO01 NORSAR Array S 44.06 319** P P **18 45 16.4 -0.7**
NAO01 IAmb IAmb 18 45 27.3
comp=Z,12nm,1.1s
**NBO00 NORSAR Array S 44.08 319** P P **18 45 15.3 -2.0**
**MA2 Magadan 44.66 43** *i* P P **18 45 20.8 -1.1**
MA2 pmax pmax
comp=Z,12nm,2.7s
**MA2 Magadan 44.66 43** P P **18 45 21.8 -0.1**
**DOMB Dombas 44.73 321** *e*P P **18 45 22.7 +0.3**
**CLL Collm 45.08 305** P P **18 45 25.3 0.0**
CLL pmax pmax
comp=Z,6.0nm,0.7s
**CLL Collm 45.08 305** *i* P P **18 45 25.8 +0.5**
comp=Z,7.0nm,0.7s
CLL *i* x x 18 45 37.1
**CLL Collm 45.08 305** P P **18 45 25.3 0.0**
**SKAR Skarslia 45.34 319** *e*P P **18 45 28.7 +1.4**
**GERES GERESS Array B 45.41 302** P P **18 45 29.1 +0.9**
comp=Z,0.3nm,0.5s,baz=56,slow=18,SNR=3.5
**HOMB Homborsund 45.76 315** *e*P P **18 45 29.1 -1.5**
**GRA1 Grafenberg Arr 46.67 303** P P **18 45 37.0 -0.9**
**GRF Grafenberg Arr 46.67 303** P P **18 45 37.0 -0.9**
GRF pmax pmax
comp=Z,12nm,0.7s
**GRFO Grafenberg 46.67 303** P P **18 45 37.0 -0.9**
GRFO pmax pmax
comp=Z,11nm,0.8s
**GRFO Grafenberg 46.67 303** P P **18 45 37.0 -0.9**
GRFO IAmb IAmb 18 45 40.3
comp=Z,11nm,0.8s
**WTTA Wattenberg 47.26 300** *i* P P **18 45 43.7 +0.9**
comp=Z,5.9nm,0.6s
**WATA Walderalm 47.27 300** *i* P P **18 45 43.7 +0.9**
comp=Z,11nm,1.2s
**MOTA Moosalm 47.57 300** *i* P P **18 45 45.9 +0.8**
comp=Z,12nm,1.4s
**RETA Reutte 47.73 301** *i* P P **18 45 47.5 +1.2**
comp=Z,4.7nm,0.5s
**FETA Feichten 47.93 300** *e*P P **18 45 48.6 +0.6**
comp=Z,2.8nm,0.7s
**DAVA Damuels 48.36 301** *e*P P **18 45 52.1 +0.8**
comp=Z,12nm,1.3s
**TUE Stuetta 49.02 300** P P **18 45 55.9 -0.5**
TUE IAmb IAmb 18 46 09.2
comp=Z,9.4nm,1.1s
**BILL Bilibino 49.42 30** P P **18 45 59.7 +0.8**
**PETK Petropavlovsk- 50.18 50** P P **18 46 05.0 +0.1**
comp=Z,2.3nm,0.9s,baz=306,slow=4.6,SNR=2.6
**BNI Bardonecchia 51.30 299** P P **18 46 13.1 -0.6**
BNI pmax pmax
comp=Z,13nm,0.9s
**BNI Bardonecchia 51.30 299** P P **18 46 13.1 -0.6**
BNI IAmb IAmb 18 46 15.4
comp=Z,13nm,0.9s
**KEST Kesra 53.93 288** P P **18 46 33.1 -0.1**
comp=Z,3.0nm,0.8s,baz=56,slow=3.6,SNR=1.7
**TNA Tin City 59.58 27** P P **18 47 13.9 +1.3**
TNA IAmb IAmb 18 47 22.8
comp=Z,8.3nm,1.0s
**ESBB Sonseca Array 60.80 298** P P **18 47 21.5 0.0**
ESBB IAmb IAmb 18 47 40.5
comp=Z,18nm,1.5s
**ESDC Sonseca Array 60.80 298** P P **18 47 22.0 +0.4**
comp=Z,3.0nm,0.8s,baz=52,slow=7.0,SNR=12
**ESDC Sonseca Array 60.80 298** P P **18 47 21.6 0.0**
**ANM Nome 61.05 27** P P **18 47 24.2 +1.4**
ANM pmax pmax
comp=Z,6.0nm,0.7s
**ANM Nome 61.05 27** P P **18 47 24.2 +1.4**
ANM IAmb IAmb 18 47 25.2
comp=Z,6.0nm,0.7s
**TOLK Toolik Lake Re 62.57 18** P P **18 47 33.4 +0.4**
TOLK IAmb IAmb 18 47 34.9
comp=Z,6.8nm,0.8s
**COLD Coldfoot 63.52 20** P P **18 47 39.8 +0.5**
**IMAR Indian Mountai 63.55 22** P P **18 47 39.5 0.0**
**A36M Sachs Harbour 63.82 9** P P **18 47 41.2 +0.1**
A36M IAmb IAmb 18 47 42.4
comp=Z,7.1nm,0.8s
**H21K Melozitna Rive 64.06 22** P P **18 47 42.9 +0.1**
H21K IAmb IAmb 18 47 44.3
comp=Z,4.7nm,0.9s
**BMAR Burnt Mountain 64.67 18** P P **18 47 47.7 +0.8**
**J20K Nowinta River 64.80 23** P P **18 47 48.5 +0.8**
J20K IAmb IAmb 18 47 57.1
comp=Z,13nm,1.2s
**MLY Manley 65.09 21** P P **18 47 49.1 -0.5**
MLY IAmb IAmb 18 47 51.3
comp=Z,6.3nm,1.0s
**H24K Noodor Dome 65.19 20** P P **18 47 51.3 +1.0**
H24K IAmb IAmb 18 47 52.1
comp=Z,4.4nm,0.8s
**K20K Telida 65.44 24** P P **18 47 52.3 +0.4**
K20K IAmb IAmb 18 47 53.9
comp=Z,5.4nm,0.7s
**BPAW Bear Paw Mtn. 65.75 22** P P **18 47 54.1 +0.2**
BPAW IAmb IAmb 18 48 02.7
comp=Z,5.7nm,0.9s
**MDM Murphy Dome 65.81 21** P P **18 47 54.6 +0.3**
MDM IAmb IAmb 18 47 55.7
comp=Z,4.2nm,0.8s
**NEA2 Nenana 65.88 21** P P **18 47 54.7 0.0**
NEA2 IAmb IAmb 18 47 56.5
comp=Z,5.5nm,0.8s
**POKR Poker Plat Res 65.88 20** P P **18 47 53.7 -1.0**
POKR IAmb IAmb 18 47 56.5
comp=Z,8.9nm,0.8s
**TCOL CIGO, UAF Yank 65.97 20** P P **18 47 55.2 0.0**
**COLA College 65.97 20** P P **18 47 54.4 -0.8**
COLA pmax pmax
comp=Z,11nm,0.7s
**COLA College 65.97 20** P P **18 47 54.4 -0.8**
**CAST Castle Rocks 65.97 23** P P **18 47 56.0 +0.6**
CAST IAmb IAmb 18 47 57.1
comp=Z,6.8nm,0.8s
**INK Inuvik 66.06 13** P P **18 47 56.4 +0.6**
comp=Z,4.5nm,0.8s,baz=342,slow=6.8,SNR=11
**INK Inuvik 66.06 13** P P **18 47 55.5 -0.3**
INK pmax pmax
comp=Z,4.0nm,0.7s
**INK Inuvik 66.06 13** P P **18 47 55.5 -0.3**
INK IAmb IAmb 18 47 56.9
comp=Z,4.4nm,0.7s
**L19K White Mountain 66.09 25** P P **18 47 56.5 +0.3**
**BWN Browne 66.11 22** P P **18 47 56.7 +0.5**
**CCB Clear Creek Bu 66.17 21** P P **18 47 56.5 0.0**
CCB IAmb IAmb 18 47 57.5
comp=Z,9.7nm,1.3s
**KTH Kantishna Hill 66.20 22** P P **18 47 57.0 +0.2**
**IL31 66.30 20** P P **18 47 56.9 -0.4**
IL31 IAmb IAmb 18 47 58.3
comp=Z,5.9nm,0.8s
**ILAR Eielson Array 66.30 20** P P **18 47 57.5 +0.1**
comp=Z,5.2nm,0.7s,baz=319,slow=5.4,SNR=43
ILAR LR LR 19 20 53.1
comp=Z,92nm,19.0s,baz=216,slow=40
**ILAR Eielson Array 66.30 20** P P **18 47 56.9 -0.5**
**ILAR Eielson Array 66.30 20** P P **18 47 56.9 -0.5**
**PPLA Purkeypile 66.35 23** P P **18 47 57.9 0.0**
**C36M Paulatuk 66.44 9** P P **18 47 57.6 -0.6**
C36M IAmb IAmb 18 47 58.8
comp=Z,8.5nm,0.8s
**MCK McKinley 66.60 22** P P **18 47 59.3 -0.1**
MCK pmax pmax
comp=Z,3.0nm,0.7s
**MCK McKinley 66.60 22** P P **18 47 59.3 -0.1**
MCK IAmb IAmb 18 48 00.9
comp=Z,3.2nm,0.7s
**SVW2 Sparrevohn 66.68 26** P P **18 47 60.0 +0.1**
**RND Reindeer 66.89 22** P P **18 48 01.3 0.0**
RND pmax pmax
comp=Z,12nm,1.3s
**RND Reindeer 66.89 22** P P **18 48 01.3 0.0**
RND IAmb IAmb 18 48 06.3
comp=Z,12nm,1.3s
**DHY Denali Highway 67.55 21** P P **18 48 05.8 +0.2**
**RIDG Independent Ri 67.66 20** P P **18 48 05.9 -0.3**
**SCRK Sand Creek 67.68 20** P P **18 48 06.4 +0.1**
SCRK IAmb IAmb 18 48 07.4
comp=Z,6.3nm,0.8s
**DOT Dot Lake 67.93 20** P P **18 48 07.3 -0.5**
**PAX Paxson 68.14 21** P P **18 48 08.5 -0.7**
PAX pmax pmax
comp=Z,5.0nm,1.0s
**PAX Paxson 68.14 21** P P **18 48 08.5 -0.7**
PAX IAmb IAmb 18 48 10.1
comp=Z,4.8nm,1.0s
**SML Sawmill 68.32 23** P P **18 48 10.1 -0.2**
**SCM Sheep Creek Mo 68.58 22** P P **18 48 11.5 -0.4**
SCM pmax pmax
comp=Z,19nm,0.8s
**SCM Sheep Creek Mo 68.58 22** P P **18 48 11.5 -0.4**
**M24K Tolsona, Glenn 68.67 22** P P **18 48 12.9 +0.5**
**L27K Beaver Creek, 68.97 19** P P **18 48 14.8 +0.5**
**BCAR Beaver Creek A 68.98 19** P P **18 48 15.0 +0.6**
**CNPM China Post 69.28 25** P P **18 48 16.8 +0.5**
**M27K Edge Creek, AK 69.56 20** P P **18 48 19.2 +1.1**
M27K IAmb IAmb 18 48 24.3
comp=Z,14nm,1.4s
**VRDI Verde Repeater 70.12 21** P P **18 48 22.2 +0.6**
VRDI IAmb IAmb 18 48 23.4
comp=Z,7.8nm,0.8s
**KDAK Kodiak Island 70.22 27** P P **18 48 22.5 +0.5**
KDAK pmax pmax
comp=Z,69nm,1.3s
**KDAK Kodiak Island 70.22 27** P P **18 48 22.5 +0.5**
**WAX Waxell Ridge 70.94 21** P P **18 48 27.4 +1.0**
**N31M Braeburn, Yuko 71.74 17** P P **18 48 31.8 +0.5**
**HYT Haines Junctio 71.94 18** P P **18 48 32.8 +0.2**
**TORD Torodi Ar. Bea 72.96 272** P P **18 48 38.6 -0.6**
comp=Z,5.7nm,0.6s,baz=40,slow=5.2,SNR=32
**TORD Torodi Ar. Bea 72.96 272** P P **18 48 38.5 -0.7**
TORD IAmb IAmb 18 48 39.3
comp=Z,5.6nm,0.7s
**P33M Teslin, Yukon 73.53 17** P P **18 48 42.1 +0.2**
P33M IAmb IAmb 18 48 50.6
comp=Z,9.0nm,1.4s
**FITZ Fitzroy Crossi 73.68 135** P P **18 48 43.1 0.0**
**PSA00 Pilbara Seismi 73.84 142** P P **18 48 43.3 -0.8**
**YKA Yellowknife Ar 74.09 7** P P **18 48 45.3 +0.2**
comp=Z,4.2nm,0.7s,baz=343,slow=5.7,SNR=35
**YKA Yellowknife Ar 74.09 7** P P **18 48 44.6 -0.5**
**YKA Yellowknife Ar 74.09 7** P Pg **18 48 44.6 -0.5**
**FCC Fort Churchill 78.43 357** P P **18 49 09.1 -0.6**
FCC pmax pmax
comp=Z,9.0nm,1.4s
**FCC Fort Churchill 78.43 357** P **18 49 09.1 -0.6**
FCC IAmb IAmb 18 49 12.1
comp=Z,9.0nm,1.4s
**SCHQ Schefferville 78.56 341** P P **18 49 10.4 -0.2**
comp=Z,1.7nm,0.7s,baz=351,slow=6.7,SNR=5.1
**SCHQ Schefferville 78.56 341** P P **18 49 10.4 -0.2**
SCHQ IAmb IAmb 18 49 31.2
comp=Z,10.0nm,1.2s
**WRA Warramunga Arr 79.89 129** P P **18 49 17.7 -0.6**
comp=Z,1.7nm,0.8s,baz=330,slow=5.3,SNR=12
**DBIC Dimbokro 82.06 272** P P **18 49 29.6 -0.5**
comp=Z,4.6nm,0.9s,baz=51,slow=9.4,SNR=4.3
**FFC Flin Flon 82.56 1** P P **18 49 31.5 -0.5**
FFC pmax pmax
comp=Z,6.0nm,0.7s
**FFC Flin Flon 82.56 1** P P **18 49 31.4 -0.5**
FFC IAmb IAmb 18 49 32.6
comp=Z,5.9nm,0.7s
**ASAR Alice Springs 82.62 132** P P **18 49 32.0 -0.7**
comp=Z,1.6nm,0.7s,baz=326,slow=5.0,SNR=18
**PDAR Pinedale Array 94.08 7** P P **18 50 27.5 -0.5**
comp=Z,0.4nm,0.6s,baz=55,slow=4.5,SNR=4.2
**NVAR Mina Array Bea 97.11 15** P P **18 50 41.9 -0.1**
comp=Z,0.2nm,0.5s,baz=324,slow=4.5,SNR=0.7

*NEIC* ***29*** *18:37:58.5±1.3, 37.58N±0.09×77.94E±0.06, h10km±1km, mb4.3/8, ML4.1(BJI), Error ellipse: s-maj=14.9km s-min=8.1km az=182.0*
*IDC* ***29*** *18:38:01.0±4.3, 37.27N×78.13E, h57km±40km, mb3.6/13, mb1 3.8/15, mb1mx3.6/44, mbtmp3.9/15, ML4.6/2, MS3.4/2, Ms1 3.4/2, ms1mx2.6/75, Error ellipse: s-maj=25.4km s-min=16.9km az=22.0*
**ISC 29 18:37:57.4±0.5, 37.44N±0.06×78.03E±0.08, h17km, n45, σ1ˢ48/41, mb4.0/15, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **4.29** | **358** | Sn | **Sn** | **18 39 50.1** | **-1.9** |
| **NIL** | **Nilore** | **5.43** | **227** | Pn | **Pn** | **18 39 20.7** | **+3.1** |
| **AAK** | **Ala-Archa** | **5.86** | **333** | Pn | **Pn** | **18 39 24.2** | **+0.6** |
| **CHGR** | **Chuyangaron** | **7.11** | **283** | Pn | **Pn** | **18 39 40.7** | **0.0** |
| **KBL** | **Kabul** | **7.84** | **251** | Pn | **Pn** | **18 39 50.7** | **-0.1** |
| **WMQ** | **Urumqi** | **9.72** | **46** | *e*P | **Pn** | **18 40 17.3** | **+0.8** |
| WMQ | | | | smax | smax | | |
| | comp=N,63nm,0.9s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,63nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **9.86** | **17** | P | **Pn** | **18 40 22.2** | **+3.8** |
| | baz=204,slow=15,SNR=0.7 | | | | | | |
| **GEYT** | **Alibeck** | **15.78** | **278** | P | **P** | **18 41 42.8** | **+0.2** |
| | comp=E,3.1nm,0.3s,baz=104,slow=11,SNR=14 | | | | | | |
| **GEYT** | **Alibeck** | **15.78** | **278** | IAmb | IAmb | 18 41 48.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **GYA0B** | **ALIBECK ARRAY** | **15.78** | **278** | P | **P** | **18 41 43.5** | **+0.9** |
| **BVAR** | **Borovoye Array** | **16.47** | **344** | P | **P** | **18 41 51.1** | **+1.0** |
| | comp=Z,1.6nm,0.3s,baz=157,slow=12,SNR=2.4 | | | | | | |
| **SRSP** | **Sriramsagar** | **18.45** | **179** | *e*P | **P** | **18 42 10.5** | **-1.7** |
| **KLRI** | **Killari** | **19.34** | **184** | *e*P | **Pn** | **18 42 23.3** | **+0.1** |
| **HYBB** | **Hyderabad (bro** | **19.95** | **179** | *e*P | **P** | **18 42 28.1** | **-0.6** |
| **CUPL** | **Choutuppal** | **20.09** | **178** | *e*P | **P** | **18 42 29.5** | **-0.6** |
| **MYLAV** | **Mylavaram** | **20.74** | **173** | *e*P | **P** | **18 42 37.5** | **+0.2** |
| **NJS** | **Nagarjunasagar** | **20.84** | **177** | *e*P | **P** | **18 42 37.1** | **-1.1** |
| **ADKI** | **Addanki** | **21.58** | **175** | *e*P | **P** | **18 42 45.8** | **-0.4** |
| **RCLA** | **Cancherla** | **21.91** | **178** | *e*P | **P** | **18 42 48.4** | **-1.4** |
| **URV** | **Uravakonda** | **22.41** | **182** | *e*P | **P** | **18 42 53.6** | **-1.7** |
| **SONM** | **Songino Array** | **23.18** | **54** | P | **P** | **18 43 02.6** | **-0.7** |
| | comp=Z,3.7nm,0.8s,baz=247,slow=9.8,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **23.18** | **54** | P | **P** | **18 43 02.7** | **-0.5** |
| **GNI** | **Garni** | **26.00** | **286** | LR | LR | 18 54 36.2 | |
| | comp=Z,45nm,18.9s,baz=109,slow=38 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **26.33** | **130** | P | **P** | **18 43 36.4** | **+4.0** |
| CM31 | | | | IAmb | IAmb | 18 43 41.0 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.33** | **130** | P | **P** | **18 43 28.9** | **-3.5** |
| | comp=Z,0.8nm,0.7s,baz=331,slow=9.2,SNR=4.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.33** | **130** | P | **P** | **18 43 34.8** | **+2.3** |
| **BR131** | **Keskin Array S** | **34.52** | **288** | P | **P** | **18 44 45.1** | **+0.3** |
| BR131 | | | | IAmb | IAmb | 18 44 46.4 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **34.52** | **288** | P | **P** | **18 44 44.6** | **-0.2** |
| | comp=Z,1.6nm,0.8s,baz=69,slow=7.0,SNR=4.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **34.52** | **288** | P | **P** | **18 44 45.6** | **+0.8** |
| **AKASG** | **Malin Array Be** | **36.82** | **307** | P | **P** | **18 45 04.0** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=76,slow=7.9,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.82** | **307** | P | **P** | **18 45 04.5** | **+0.2** |
| **AKBB** | **Malin Array Si** | **36.82** | **307** | P | **P** | **18 45 04.7** | **+0.5** |
| **FIA1** | **FINESS Array S** | **39.95** | **324** | P | **P** | **18 45 31.3** | **+0.8** |
| FIA1 | | | | IAmb | IAmb | 18 45 43.3 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **39.95** | **324** | P | **P** | **18 45 30.9** | **+0.5** |
| | comp=Z,0.6nm,0.4s,baz=97,slow=7.9,SNR=1.2 | | | | | | |
| **FINES** | **FINESS Array B** | **39.95** | **324** | P | **P** | **18 45 31.0** | **+0.5** |
| **KLR** | **Kul'dur** | **40.01** | **55** | P | **P** | **18 45 31.0** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=257,slow=6.2,SNR=1.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **42.52** | **336** | P | **P** | **18 45 52.1** | **+0.5** |
| | comp=Z,2.7nm,0.8s,baz=102,slow=8.0,SNR=9.9 | | | | | | |
| **NB2** | **NORSAR Subarra** | **47.05** | **322** | P | P | 18 46 33.0 | +5.2 |
| | comp=Z,4.2nm,0.8s,baz=88,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **47.05** | **322** | P | **P** | **18 46 28.1** | **+0.3** |
| | comp=Z,0.4nm,0.5s,baz=90,slow=7.7,SNR=2.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **61.94** | **300** | P | **P** | **18 48 15.5** | **-0.8** |
| | comp=Z,0.7nm,1.0s,baz=63,slow=6.9,SNR=1.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.34** | **272** | P | **P** | **18 49 15.3** | **-1.2** |
| | comp=Z,2.2nm,0.5s,baz=45,slow=5.3,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **77.87** | **127** | P | **P** | **18 49 52.9** | **-1.4** |
| | comp=Z,0.5nm,0.6s,baz=329,slow=5.5,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.89** | **6** | P | **P** | **18 50 04.3** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=344,slow=5.6,SNR=1.0 | | | | | | |
| **TSUM** | **Tsumeb** | **80.03** | **237** | LR | LR | 19 29 44.4 | |
| | comp=Z,40nm,20.4s,baz=150,slow=39 | | | | | | |
| **BOSA** | **Boshof** | **82.25** | **225** | P | **P** | **18 50 16.6** | **-1.3** |
| | comp=Z,1.0nm,0.4s,baz=66,slow=3.5,SNR=5.1 | | | | | | |

**IDC 29 18:44:39.0±740.0, 56.01N×2.87W, h0km, Error ellipse: s-maj=269.2km s-min=193.0km az=49.0, United Kingdom**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I26DE** | **FREYUNG INFRAS** | **12.38** | **118** | *i* | | 19 58 44.7 | |
| | baz=314,slow=328,SNR=1.9 | | | | | | |
| **I37NO** | **I37NO** | **16.28** | **28** | *i* | | 20 24 30.0 | |
| | baz=226,slow=315,SNR=0.6 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **22.00** | **71** | *i* | | 21 00 40.0 | |
| | baz=288,slow=308,SNR=2.2 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **31.08** | **337** | *i* | | 22 20 38.6 | |
| | baz=100,slow=323,SNR=10 | | | | | | |

**IDC 29 18:55:53.5±893.0, 54.18N×5.33E, h0km, Error ellipse: s-maj=388.6km s-min=153.5km az=121.0, North Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I26DE** | **FREYUNG INFRAS** | **7.47** | **132** | *i* | | 19 46 10.0 | |
| | baz=318,slow=321,SNR=0.7 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **18.18** | **69** | *i* | | 20 51 10.0 | |
| | baz=270,slow=310,SNR=1.3 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **31.83** | **75** | *i* | | 22 08 00.0 | |
| | baz=302,slow=319,SNR=1.4 | | | | | | |

*DJA* ***29*** *19:20:38.4±0.4, 8°S±3°×11°E±°, h12km±3km, M3.1/8, MLv3.1/8*
*IDC* ***29*** *19:20:42.8±5.5, 8.92S×114.13E, h0km, mb3.3/3, mb1 3.5/4, mb1mx3.1/42, mbtmp3.4/4, ML2.8/1, Error ellipse: s-maj=132.3km s-min=76.6km az=37.0*
**ISC 29 19:20:38.3±0.9, 8.03S±0.06×114.32E±0.06, h10km, n11, σ2ˢ49/13, mb3.2/3, Bali region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABJI** | **Asem Bagus** | **0.24** | **340** | P | **Pg** | **19 20 42.7** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **0.47** | **200** | P | **Pb** | **19 20 49.5** | **+0.8** |
| JAGI | | | | S | **Sb** | **19 20 57.6** | **+1.9** |
| **BLJI** | **Banyuglugur** | **0.77** | **291** | P | **Pg** | **19 20 52.1** | **-1.0** |
| **GMJI** | **Gumukmas** | **0.90** | **254** | P | **Pg** | **19 20 54.4** | **-1.2** |
| **IGBI** | **Denpasar** | **1.14** | **134** | P | **Pn** | **19 21 01.1** | **+0.8** |
| **PWJI** | **Pagerwojo** | **2.49** | **270** | P | **Pn** | **19 21 18.4** | **-0.4** |
| **PCJI** | **Pacitan** | **3.11** | **267** | Pg | **Pg** | **19 21 37.1** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **14.89** | **133** | Pn | **Pn** | **19 24 06.7** | **-2.3** |
| | 0.0nm,0.3s,baz=305,slow=16,SNR=1.2 | | | | | | |
| FITZ | | | | Sn | **Sn** | **19 26 48.3** | **-5.8** |
| | 0.0nm,0.3s,baz=300,slow=17,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.72** | **123** | P | **P** | **19 25 43.0** | **+2.3** |
| | 0.3nm,0.4s,baz=296,slow=12,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **24.38** | **132** | P | **P** | **19 25 58.7** | **+1.8** |
| | 0.3nm,0.4s,baz=307,slow=8.8,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **34.74** | **137** | P | **P** | **19 27 31.3** | **+2.5** |
| | 0.5nm,0.5s,baz=325,slow=14,SNR=2.9 | | | | | | |

*TUL* ***29*** *19:32:31.2±0.4, 36.44N±0.01×98.781W±0.004, h7km±1km, ML2.8, mb_Lg2.5/11(NEIC), Error ellipse: s-maj=2.0km s-min=0.5km az=178.0*
**NEIC 29 19:32:31.7±0.4, 36.44N±0.01×98.78W±0.01, h7km±1km, Error ellipse: s-maj=2.0km s-min=1.5km az=153.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **U32A** | **Winter Ranch,** | **0.19** | **251** | Pg | Pg | 19 32 35.4 | -0.1 |
| U32A | | | | Sg | Sg | 19 32 38.6 | +0.6 |
| **WMOK** | **Wichita Mounta** | **1.70** | **180** | Pn | Pn | 19 33 01.2 | -0.6 |
| **CBKS** | **Cedar Bluff** | **2.49** | **343** | IAmb_Lg | | 19 33 53.6 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.17** | **32** | IAmb_Lg | | 19 34 14.4 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **HHAR** | **Hobbs** | **3.91** | **91** | IAmb_Lg | | 19 34 43.1 | |
| | comp=Z,12nm,1.2s | | | | | | |

*IDC* ***29*** *19:47:34.8±0.4, 24.02N×123.38E, h0km, mb4.7/31, mb1 4.8/35, mb1mx4.7/45, mbtmp4.7/35, ML3.8/3, MS4.5/81, Ms1 4.5/81, ms1mx4.5/92, Error ellipse: s-maj=13.6km s-min=10.8km az=81.0*
*BJI* ***29*** *19:47:34.8±0.0, 23.72N×123.65E, h31km, mb4.7/70, mB5.0/57, ML5.0/5, Ms5.0/82, Ms7 4.9/74*
*MOS* ***29*** *19:47:37.8±1.2, 23.95N×123.35E, h33km, mb5.1/38, MS4.7/16, Error ellipse: s-maj=7.6km s-min=4.1km az=119.6*
*JMA* ***29*** *19:47:38.1±0.2, 23.82N×123.37E, h31km±2km, M5.3 JMA Felt II J1.*
*NEIC* ***29*** *19:47:38.5±2.1, 23.92N±0.06×123.42E±0.06, h23km±4km, mb5.1/159, Error ellipse: s-maj=9.0km s-min=8.1km az=124.0*
*NIED* ***29*** *19:47:38.2, 23.82N×123.37E, h31km, MW5.1, Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁶Nm; Mrr2.86; Mθθ-3.90; Mφφ 1.05; Mrθ2.93; Mθφ-1.93; Mφr2.74; Fault plane solution: M₀5.59000×10¹⁶ NP1:φs49.00000°, δ71.00000°, λ,68.00000°. NP2:φs280.00000°, δ29.00000°, λ138.00000°.*
*GCMT* ***29*** *19:47:40.5±0.1, 23.78N±0.01×123.35E±0.01, h29km,*

*MW5.2/125,Moment Tensor Solution. s103,c156; s125,c205; Duration: 1ˢ0 Moment tensor: Scale 10¹⁷ Nm; Mrr0.63±.02; Mθθ-0.54±.01; Mφφ-0.08±.01; Mrθ0.42±.02; Mθφ-0.21±.01; Mφr0.44±.02; Best double couple: M₀0.87300×10¹⁷ NP1:φs262.00000°,δ26.00000°, λ117.00000°. NP2:φs52.00000°,δ67.00000°,λ78.00000°. Principal axes: T 0.9010, Plg66.0000°, Azm301.0000°; N -0.0560, Plg11.0000°, Azm57.0000°; P -0.8450, Plg21.0000°, Azm152.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR **29** 19:47:51.7±0.0,26.44N×122.72E,h33ᵏᵐ,mb4.7*

**ISC 29 19:47:37.3±0.5,23.91N±0.03×123.40E±0.03,h19ᵏᵐ±1ᵏᵐ, h17ᵏᵐ:pP-P,n794,σ1§51/806,mb5.0/217,MS4.7/104, 41C-34D,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HATJ** | **Hateruma jima** | **0.40** | **68** | P | **Pn** | **19 47 47.8** | **-0.3** |
| HATJ | | | | S | **Sn** | **19 47 54.6** | **-0.5** |
| **IRIF** | **Iriomote-Funau** | **0.52** | **35** | P | **Pn** | **19 47 49.7** | **-0.1** |
| IRIF | | | | S | **Sn** | **19 47 58.5** | **+0.3** |
| **JKRS** | **Kuro-shima** | **0.65** | **59** | P | **Pn** | **19 47 52.0** | **+0.5** |
| JKRS | | | | S | **Sn** | **19 48 02.3** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **0.66** | **327** | P | **Pn** | **19 47 51.8** | **+0.1** |
| YOJ | | | | *e*S | **Sn** | **19 48 01.7** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.66** | **327** | P | **Pn** | **19 47 51.8** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.66** | **327** | | **Pn** | **19 47 51.8** | **+0.1** |
| **JYNG** | **Yonagunijimaku** | **0.68** | **323** | P | **Pn** | **19 47 52.0** | **0.0** |
| JYNG | | | | S | **Sn** | **19 48 02.1** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **0.82** | **56** | P | **Pn** | **19 47 54.2** | **+0.4** |
| JIJ | | | | S | **Sn** | **19 48 06.3** | **+0.9** |
| **JISG** | **Ishigakijimahi** | **1.07** | **51** | P | **Pg** | **19 47 58.2** | **+0.1** |
| JISG | | | | S | **Sn** | **19 48 13.0** | **+1.3** |
| **JTJ** | **Tarama** | **1.39** | **58** | P | **Pg** | **19 48 03.4** | **-0.8** |
| JTJ | | | | *e*S | **Sg** | **19 48 21.4** | **-1.0** |
| **NACB** | **Ninganchiao** | **1.67** | **280** | | **Pn** | **19 48 05.8** | **+0.2** |
| **YULB** | **Yu-li** | **2.00** | **256** | | **Pn** | **19 48 09.5** | **-0.6** |
| **YHNB** | **Yeheng** | **2.00** | **293** | Pn | **Pb** | **19 48 11.8** | **-1.3** |
| **TATO** | **Taipei** | **2.04** | **302** | | **Pb** | **19 48 12.4** | **-1.4** |
| **TATO** | **Taipei** | **2.04** | **302** | P | **Pb** | **19 48 12.5** | **-1.4** |
| **SSLB** | **Suanglung** | **2.24** | **267** | Pn | **Pn** | **19 48 13.8** | **+0.3** |
| **TWG** | **Pinlang** | **2.40** | **244** | | **Pn** | **19 48 15.4** | **-0.2** |
| **TPUB** | **Ta-pu** | **2.61** | **257** | Pn | **Pn** | **19 48 20.0** | **+1.4** |
| **QZH** | **Quanzhou** | **4.50** | **284** | Pn | **Pn** | **19 48 45.3** | **+0.7** |
| QZH | | | | Sn | **Sn** | **19 49 34.8** | **-1.7** |
| QZH | | | | smax | smax | | |
| | comp=N,370nm,0.6s | | | | | | |
| QZH | | | | smax | smax | | |
| | comp=E,290nm,0.9s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=E,10μm,15.9s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,12μm,14.9s | | | | | | |
| **KNMB** | **Chin-men Tao** | **4.61** | **278** | Pn | **Pn** | **19 48 46.5** | **+0.4** |
| **JOW** | **Kunigami** | **5.28** | **56** | Pn | **Pn** | **19 48 55.4** | **+0.1** |
| | 6.8nm,0.3s,baz=313,slow=18,SNR=2.1 | | | | | | |
| JOW | | | | Sn | **Sn** | **19 49 56.7** | **+0.9** |
| | 6.3nm,0.3s,baz=331,slow=28,SNR=1.4 | | | | | | |
| **JOW** | **Kunigami** | **5.28** | **56** | | **Pn** | **19 48 55.2** | **-0.1** |
| **CVP** | **Callao Caves** | **6.35** | **194** | *e*P | **Pn** | **19 49 09.7** | **-0.3** |
| CVP | | | | *i* S | **Sn** | **19 50 17.0** | **-5.0** |
| **SSE** | **Sheshan** | **7.43** | **345** | Pn | **Pn** | **19 49 27.3** | **+2.6** |
| SSE | | | | Sn | **Sn** | **19 50 52.3** | **+3.8** |
| SSE | | | | LR | LR | | |
| | comp=N,3μm,13.2s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=E,2μm,13.2s | | | | | | |
| **PCPH** | **Palayan** | **8.58** | **195** | ‖*e*P | **Pn** | **19 49 43.4** | **+2.8** |
| **HKPS** | **Hong Kong Po S** | **8.68** | **261** | Pn | **Pn** | **19 49 43.5** | **+1.6** |
| **NJ2** | **Nanjing** | **9.05** | **335** | *e*P | **Pn** | **19 49 48.3** | **+1.3** |
| NJ2 | | | | pP | | 19 49 55.5 | |
| NJ2 | | | | S | **Sn** | **19 51 31.0** | **+2.5** |
| NJ2 | | | | sS | | 19 51 40.0 | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,580nm,3.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=N,7μm,14.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,2μm,10.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,7μm,12.3s | | | | | | |
| **TGY** | **Tagaytay City** | **10.03** | **194** | Pn | **Pn** | **19 50 00.6** | **+0.1** |
| | 39nm,0.3s,baz=17,slow=16,SNR=1.6 | | | | | | |
| **CNSH** | **ChangSha** | **10.33** | **297** | ⇑P | Pn | 19 49 51.5 | -13 |
| CNSH | | | | S | Sn | 19 51 36.5 | -23 |
| CNSH | | | | smax | smax | | |
| | comp=N,250nm,1.1s | | | | | | |
| CNSH | | | | smax | smax | | |
| | comp=E,180nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **10.42** | **311** | ⇑P | **Pn** | **19 50 08.5** | **+2.8** |
| WHN | | | | S | **Sn** | **19 52 10.8** | **+8.8** |
| WHN | | | | LR | LR | | |
| | comp=E,8μm,11.7s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,11μm,13.7s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,14μm,14.3s | | | | | | |
| **JNU** | **Nakatsue** | **11.29** | **34** | Pn | **Pn** | **19 50 18.2** | **+0.5** |
| | comp=E,0.8nm,0.3s,baz=246,slow=7.8,SNR=2.5 | | | | | | |
| **TIA** | **Tai'an** | **13.41** | **338** | *e*P | **P** | **19 50 51.3** | **-4.7** |
| TIA | | | | S | Sn | 19 53 26.0 | +11 |
| TIA | | | | pmax | pmax | | |
| | comp=E,26nm,1.0s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=E,760nm,6.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,4μm,13.9s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,2μm,11.6s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,6μm,16.2s | | | | | | |
| **ENH** | **Enshi** | **13.92** | **300** | Pn | **P** | **19 50 57.8** | **-3.9** |
| **KSAR** | **Wonju Array Be** | **14.03** | **15** | P | **P** | **19 51 00.5** | **-2.4** |
| **KSAR** | **Wonju Array Be** | **14.03** | **15** | P | **P** | **19 51 00.5** | **-2.4** |
| **KSRS** | **Korea Array** | **14.05** | **15** | Pn | **Pn** | **19 50 58.7** | **+3.3** |
| | comp=E,0.3nm,0.3s,baz=194,slow=13,SNR=24 | | | | | | |
| KSRS | | | | LR | LR | 19 56 56.6 | |
| | comp=E,2μm,19.1s,baz=200,slow=40 | | | | | | |
| **KS19** | **Wonju Array Si** | **14.08** | **15** | | **Pn** | **19 50 55.8** | **0.0** |
| **TBP** | **Tagbilaran** | **14.14** | **178** | ‖*e*P | **Pn** | **19 50 57.7** | **+0.9** |
| **LYN** | **LuoYang** | **14.26** | **321** | ⇑*i*P | **Pn** | **19 51 00.3** | **+2.0** |
| LYN | | | | S | Sn | 19 53 45.0 | +9.1 |
| LYN | | | | pmax | pmax | | |
| | comp=E,80nm,0.7s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=E,360nm,6.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,7μm,12.2s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,7μm,13.1s | | | | | | |
| **DL2** | **Dalian** | **15.03** | **355** | P | **Pn** | **19 51 10.3** | **+1.6** |
| DL2 | | | | S | **Sn** | **19 53 59.3** | **+4.6** |
| DL2 | | | | pmax | pmax | | |
| | comp=E,36nm,1.3s | | | | | | |
| DL2 | | | | pmax | pmax | | |
| | comp=E,540nm,5.8s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=E,2μm,18.7s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=E,3μm,15.5s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=E,3μm,13.4s | | | | | | |
| **GYA** | **Guiyang** | **15.37** | **283** | ⇑P | **P** | **19 51 15.8** | **-2.1** |
| GYA | | | | pP | pP | 19 51 21.0 | -1.8 |
| GYA | | | | S | **Sn** | **19 54 01.3** | **-1.9** |
| GYA | | | | pmax | pmax | | |
| | comp=E,12nm,0.7s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=E,240nm,3.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,2μm,13.0s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,6μm,15.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,8μm,15.8s | | | | | | |
| **HNS** | **HongShan** | **15.38** | **333** | ⇑P | **P** | **19 51 19.5** | **+1.7** |
| HNS | | | | pP | **pwP** | **19 51 27.0** | **+4.2** |
| HNS | | | | pmax | pmax | | |
| | comp=E,38nm,0.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,3μm,15.0s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,3μm,14.8s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,4μm,15.5s | | | | | | |
| **XAN** | **Xi'an** | **16.18** | **312** | P | **P** | **19 51 26.8** | **-0.1** |
| XAN | | | | S | **S** | **19 54 32.8** | **-3.1** |
| XAN | | | | pmax | pmax | | |
| | comp=E,34nm,0.9s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=E,580nm,12.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,2μm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,5μm,15.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,6μm,14.7s | | | | | | |
| **TIY** | **Taiyuan** | **16.66** | **328** | P | **P** | **19 51 34.8** | **+2.6** |
| TIY | | | | SS | S | 19 55 00.5 | +15 |
| TIY | | | | pmax | pmax | | |
| | comp=E,51nm,0.7s | | | | | | |
| TIY | | | | pmax | pmax | | |
| | comp=E,670nm,5.4s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=E,3μm,13.7s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=E,2μm,17.3s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=E,4μm,15.5s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **17.06** | **54** | LR | LR | 19 57 50.0 | |
| | comp=E,682nm,21.0s,baz=350,slow=36 | | | | | | |
| **BJT** | **Baijiatuan** | **17.18** | **341** | P | **Pn** | **19 51 35.6** | **-0.8** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **BJT** | **Baijiatuan** | **17.18** | **341** | | **Pn** | **19 51 35.6** | **-0.8** |
| **BJI** | **Beijing** | **17.20** | **341** | P | **P** | **19 51 38.8** | **+0.7** |
| BJI | | | | S | **S** | **19 54 53.3** | **-3.1** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,410nm,6.5s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,3μm,14.0s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,1μm,14.1s | | | | | | |
| **SNY** | **Shenyang** | **17.87** | **0** | ⇓P | **P** | **19 51 47.0** | **+1.6** |
| SNY | | | | S | **S** | **19 55 10.5** | **+0.5** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,380nm,4.3s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,2μm,15.5s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,2μm,13.1s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,4μm,16.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.92** | **42** | Pn | **P** | **19 51 46.0** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=214,slow=10,SNR=6.2 | | | | | | |
| MJAR | | | | LR | LR | 19 58 50.6 | |
| | comp=Z,1μm,21.6s,baz=217,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.92** | **42** | P | **Pn** | **19 51 45.2** | **-0.4** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.92** | **42** | P | **Pn** | **19 51 45.2** | **-0.4** |
| **CD2** | **Chengdu** | **18.77** | **296** | ⇑P | **Pn** | **19 51 56.3** | **+0.3** |
| CD2 | | | | S | **Sn** | **19 55 25.0** | **-0.7** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,150nm,0.8s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,610nm,7.1s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,5μm,15.5s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,4μm,15.7s | | | | | | |
| **KMI** | **Kunming** | **18.84** | **278** | ⇑P | **Pn** | **19 51 58.8** | **+1.7** |
| KMI | | | | pP | sP | 19 52 08.3 | +5.3 |
| KMI | | | | sP | pP | 19 52 13.5 | +12 |
| KMI | | | | S | **S** | **19 55 33.0** | **+2.7** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,620nm,5.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,530nm,11.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,4μm,13.6s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,5μm,15.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.60** | **332** | *e*P | **Pn** | **19 52 06.0** | **+0.1** |
| HHC | | | | sP | pwP | 19 52 18.0 | +8.5 |
| HHC | | | | S | **S** | **19 55 40.8** | **-4.3** |
| HHC | | | | sS | sS | 19 55 53.5 | +0.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,720nm,5.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,3μm,14.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,2μm,14.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,4μm,14.6s | | | | | | |
| **PZH** | **PanZhiHua** | **19.77** | **282** | P | **Pn** | **19 52 08.5** | **+0.4** |
| PZH | | | | sP | sP | 19 52 19.8 | +6.8 |
| PZH | | | | S | **S** | **19 55 43.0** | **-5.8** |
| PZH | | | | SS | **SnSn** | **19 56 10.0** | **+5.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,50nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,550nm,9.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,3μm,18.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,4μm,17.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,6μm,16.1s | | | | | | |
| **CN2** | **Changchun** | **19.92** | **4** | *e*P | **Pn** | **19 52 09.3** | **-0.3** |
| CN2 | | | | *e*S | **S** | **19 55 50.0** | **-1.2** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,300nm,8.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,3μm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,2μm,15.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,3μm,16.0s | | | | | | |
| **BTO** | **Baotou** | **20.09** | **329** | *e*P | Pn | 19 52 13.0 | +1.2 |
| BTO | | | | S | Sn | 19 56 02.5 | +5.1 |
| BTO | | | | LR | LR | | |
| | comp=Z,12μm,15.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,5μm,19.2s | | | | | | |
| **LZH** | **Lanzhou** | **20.79** | **310** | ⇑P | Pn | 19 52 19.3 | -0.8 |
| LZH | | | | pP | pwP | 19 52 28.0 | +2.7 |
| LZH | | | | sP | sP | 19 52 33.5 | +10 |
| LZH | | | | *e*S | **S** | **19 56 11.5** | **+2.4** |
| LZH | | | | sS | pS | 19 56 21.0 | +0.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,51nm,1.0s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,280nm,4.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,12.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,3μm,12.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,5μm,14.9s | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.83** | **345** | *e*P | Pn | 19 52 20.8 | +0.4 |
| XLT | | | | pP | pwP | 19 52 30.3 | +7.4 |
| XLT | | | | sP | sP | 19 52 34.5 | +10 |
| XLT | | | | S | **S** | **19 56 10.3** | **+0.7** |
| XLT | | | | SS | **SnSn** | **19 56 36.0** | **+5.8** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,440nm,4.2s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,420nm,14.5s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,2μm,16.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,6μm,15.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **21.27** | **12** | P | **P** | **19 52 22.0** | **-0.5** |
| MDJ | | | | sP | pwP | 19 52 34.5 | +6.9 |
| MDJ | | | | S | **S** | **19 56 21.5** | **+3.4** |
| MDJ | | | | PcS | **PcS** | **20 00 00.0** | **-4.9** |
| MDJ | | | | ScS | **ScS** | **20 03 40.8** | **-6.0** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,490nm,3.8s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,2μm,17.9s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,2μm,13.4s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,4μm,17.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.43** | **17** | P | **P** | **19 52 24.3** | **0.0** |
| | comp=Z,6.4nm,0.7s,baz=204,slow=10,SNR=7.8 | | | | | | |
| USRK | | | | LR | LR | 20 01 41.8 | |
| | comp=Z,2μm,18.4s,baz=184,slow=40 | | | | | | |
| **BNX** | **BinXian** | **22.02** | **7** | ⇑P | **P** | **19 52 29.5** | **-1.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,600nm,6.9s | | | | | | |
| **GUMO** | **Guam** | **22.74** | **113** | LR | LR | 20 01 22.6 | |
| | comp=Z,1μm,19.5s,baz=307,slow=36 | | | | | | |
| **TNTI** | **Ternate** | **23.32** | **170** | P | **P** | **19 52 43.7** | **-0.7** |
| TNTI | | | | IAmb | IAmb | 19 53 13.2 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **23.32** | **262** | P | **P** | **19 52 44.8** | **+0.3** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **23.32** | **262** | P | **P** | **19 52 44.8** | **+0.3** |
| **CHTO** | **Chiang Mai** | **23.32** | **262** | P | **P** | **19 52 45.8** | **+1.2** |
| CHTO | | | | S | **S** | **19 57 02.6** | **+6.1** |
| **CM31** | **Chiang Mai Arr** | **23.43** | **261** | P | **P** | **19 52 46.6** | **+1.0** |
| **CM31** | **Chiang Mai Arr** | **23.43** | **261** | P | **P** | **19 52 48.5** | **+2.9** |
| | SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.43** | **261** | P | **P** | **19 52 46.9** | **+1.3** |
| | comp=Z,5.1nm,0.9s,baz=60,slow=8.4,SNR=34 | | | | | | |
| CMAR | | | | PcP | **PcP** | **19 56 32.0** | **+0.2** |
| | comp=Z,1.3nm,0.6s,baz=9.1,slow=1.1,SNR=7.3 | | | | | | |
| CMAR | | | | LR | LR | 20 03 09.5 | |
| | comp=Z,712nm,20.7s,baz=70,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.43** | **261** | P | **P** | **19 52 45.4** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **23.43** | **261** | P | **P** | **19 52 45.4** | **-0.2** |
| **SBUM** | **Sibu** | **23.92** | **209** | P | **P** | **19 52 48.8** | **-1.5** |
| **GTA** | **Gaotai** | **25.23** | **313** | ⇑P | **P** | **19 53 01.5** | **-0.8** |
| GTA | | | | pP | pwP | 19 53 10.0 | 0.0 |
| GTA | | | | sP | sP | 19 53 14.3 | +5.0 |
| GTA | | | | PcP | **PcP** | **19 56 36.8** | **+1.3** |
| GTA | | | | sS | sS | 19 57 44.5 | +10 |
| GTA | | | | SS | **SnSn** | **19 58 29.5** | **+11** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,110nm,5.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,1μm,12.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,13.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,14.9s | | | | | | |
| **HIA** | **Hailar** | **25.48** | **354** | P | **P** | **19 53 03.4** | **-0.8** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **HIA** | **Hailar** | **25.48** | **354** | P | **P** | **19 53 03.4** | **-0.8** |
| **ASAJ** | **Asahikawa** | **25.57** | **33** | P | **P** | **19 53 04.8** | **-0.3** |
| | comp=Z,5.9nm,0.6s,baz=206,slow=12,SNR=6.5 | | | | | | |
| ASAJ | | | | LR | LR | 20 03 20.4 | |
| | comp=Z,2μm,21.2s,baz=236,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.57** | **33** | P | **P** | **19 53 04.8** | **-0.3** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,79nm,1.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **25.57** | **33** | P | **P** | **19 53 04.8** | **-0.3** |
| **JKA** | **Kamikawa-asahi** | **25.57** | **33** | IAmb | IAmb | 19 53 33.1 | |
| | comp=Z,79nm,1.4s | | | | | | |
| **SIJI** | **Sorong** | **25.79** | **162** | P | **P** | **19 53 08.7** | **+1.3** |
| | comp=Z,7.7nm,0.8s,baz=8.1,slow=17,SNR=4.6 | | | | | | |
| SIJI | | | | LR | LR | 20 01 49.1 | |
| | comp=Z,872nm,19.8s,baz=358,slow=33 | | | | | | |
| **SANI** | **Sanana** | **25.92** | **174** | P | **P** | **19 53 08.5** | **0.0** |
| | comp=Z,2μmcomp=Z,101nm,0.8s | | | | | | |
| **MTKI** | **Muara Teweh, K** | **26.05** | **200** | P | P | 19 53 21.1 | +11 |
| **KLR** | **Kul'dur** | **26.11** | **12** | P | **P** | **19 53 09.0** | **-1.0** |
| | comp=Z,4.1nm,0.6s,baz=220,slow=5.0,SNR=15 | | | | | | |
| KLR | | | | PcP | **PcP** | **19 56 37.6** | **+0.5** |
| | comp=Z,2.7nm,0.7s,baz=187,slow=3.7,SNR=3.6 | | | | | | |
| KLR | | | | LR | LR | 20 04 49.6 | |
| | comp=Z,2μm,18.7s,baz=191,slow=40 | | | | | | |
| **KLR** | **Kul'dur** | **26.11** | **12** | *i* P | **P** | **19 53 08.0** | **-2.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,43nm,3.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.22** | **336** | *ce*P | **P** | **19 53 19.2** | **-1.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.22** | **336** | P | **P** | **19 53 19.1** | **-1.1** |
| **ULN** | **Ulaanbaatar** | **27.22** | **336** | P | **P** | **19 53 19.8** | **-0.4** |
| ULN | | | | S | **S** | **19 58 01.4** | **+3.1** |
| **SONM** | **Songino Array** | **27.45** | **335** | P | **P** | **19 53 21.2** | **-1.0** |
| | comp=Z,14nm,1.0s,baz=136,slow=6.2,SNR=67 | | | | | | |
| SONM | | | | LR | LR | 20 05 27.4 | |
| | comp=Z,2μm,19.7s,baz=169,slow=39 | | | | | | |
| **GOMU** | **GeErMu** | **27.50** | **303** | P | **P** | **19 53 23.5** | **+0.4** |
| GOMU | | | | PcP | **PcP** | **19 56 42.5** | **+1.3** |
| GOMU | | | | S | **S** | **19 58 06.0** | **+2.5** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,740nm,13.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,1μm,16.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,1μm,15.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.74** | **29** | *e*P | **P** | **19 53 26.5** | **+1.9** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,2μm,16.0s | | | | | | |
| **SHL** | **Shillong** | **28.64** | **280** | P | **P** | **19 53 32.4** | **-0.8** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **SHL** | **Shillong** | **28.64** | **280** | P | **P** | **19 53 32.4** | **-0.8** |
| SHL | | | | IAmb | IAmb | 19 53 57.6 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **28.96** | **188** | LR | LR | 20 05 55.6 | |
| | comp=Z,677nm,18.8s,baz=18,slow=38 | | | | | | |
| **LSA** | **Lhasa** | **29.30** | **288** | P | **P** | **19 53 40.1** | **+0.8** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **29.30** | **288** | P | **P** | **19 53 40.0** | **+0.8** |
| **LSA** | **Lhasa** | **29.30** | **288** | pmax | pmax | 19 53 42.5 | |
| **LSA** | **Lhasa** | **29.30** | **288** | *i* P | **P** | **19 53 40.9** | **+1.6** |
| | SNR=23 | | | | | | |
| **ZEA** | **Zeya** | **29.93** | **5** | *e*P | **P** | **19 53 43.5** | **-0.5** |
| ZEA | | | | *e*S | **S** | **19 58 32.4** | **-8.1** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=E,700nm,15.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=N,700nm,16.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,800nm,18.0s | | | | | | |
| **ZAK** | **Zakamensk** | **30.71** | **334** | *e*P | **P** | **19 53 48.4** | **-2.8** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **JAY** | **Jayapura** | **31.20** | **145** | LR | LR | 20 04 24.4 | |
| | comp=Z,2μm,20.3s,baz=336,slow=32 | | | | | | |
| **PSI** | **Prapat** | **31.62** | **232** | LR | LR | 20 06 24.5 | |
| | comp=Z,532nm,20.1s,baz=36,slow=36 | | | | | | |
| **TAPN** | **Taplejung** | **32.30** | **284** | *e*P | **P** | **19 54 07.1** | **+1.5** |
| | comp=Z,36nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **32.60** | **283** | *e*P | **P** | **19 54 09.4** | **+1.2** |
| | comp=Z,54nm,0.7s | | | | | | |
| **MOY** | **Mondy** | **32.62** | **334** | *e*P | **P** | **19 54 06.7** | **-1.2** |
| **RAMN** | **Ramite** | **33.30** | **283** | *e*P | **P** | **19 54 15.5** | **+1.2** |
| | comp=Z,16nm,0.5s | | | | | | |
| **JIRN** | **Jiri** | **33.63** | **284** | *e*P | **P** | **19 54 18.6** | **+1.2** |
| | comp=Z,39nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **33.90** | **285** | *e*P | **P** | **19 54 20.7** | **+1.0** |
| | comp=Z,43nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **33.91** | **180** | LR | LR | 20 10 15.8 | |
| | comp=Z,460nm,19.7s,baz=328,slow=40 | | | | | | |
| **PKI** | **Pulchoki** | **34.33** | **284** | *e*P | **P** | **19 54 23.8** | **+0.4** |
| | comp=Z,22nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **34.34** | **284** | *e*P | **P** | **19 54 23.9** | **+0.5** |

comp=Z,18nm,0.7s
**KKN Kakani 34.44 285** *e*P **P 19 54 24.8 +0.6**
comp=Z,39nm,0.8s
**BOD Bodaibo 34.55 351** *e*P **P 19 54 22.5 -2.0**
BOD pmax pmax
comp=Z,9.0nm,2.0s
**DMN Daman 34.60 284** *e*P **P 19 54 26.1 +0.5**
comp=Z,32nm,0.8s
**GKN Gorkha 34.99 285** *e*P **P 19 54 29.3 +0.4**
comp=Z,17nm,0.4s
**WMQ Urumqi 35.32 313** *e*P **P 19 54 31.5 +0.1**
WMQ pP pwP 19 54 38.8 -0.3
WMQ PcP **PcP 19 57 02.0 +0.4**
WMQ pmax pmax
comp=Z,11nm,0.9s
WMQ pmax pmax
comp=Z,260nm,5.9s
WMQ LR LR
comp=Z,1µm,14.5s
WMQ LR LR
comp=Z,1µm,13.5s
WMQ LR LR
comp=Z,540nm,19.3s
**DANN Dangsing 35.76 286** *e*P **P 19 54 36.5 +0.9**
comp=Z,66nm,0.8s
**KOLN Koldanda 35.92 285** *e*P **P 19 54 37.7 +0.7**
comp=Z,53nm,0.8s
**PYUN Piuthan 36.44 285** *e*P **P 19 54 42.4 +1.0**
comp=Z,51nm,0.7s
**CHLP Challavanipeta 36.99 269** *e*P **P 19 54 48.2 +2.3**
**YAK Yakutsk 38.35 5** P **P 19 54 54.9 -1.8**
comp=Z,24nm,0.8s,baz=211,slow=3.5,SNR=30
YAK LR LR 20 12 58.0
comp=Z,629nm,22.0s,baz=188,slow=40
**YAK Yakutsk 38.35 5** *e*P **P 19 54 54.2 -2.6**
YAK *e**PP **pwP 19 55 03.7 -1.2**
YAK *e* 19 56 24.6
YAK *e* 19 57 07.7
YAK *e*S **S 20 00 49.3 -0.9**
YAK *e**SS **ScP 20 01 06.4 +9.1**
YAK *e* 20 05 08.1
YAK pmax pmax
comp=Z,33nm,0.8s
YAK pmax pmax
comp=N,6.0nm,1.0s
YAK pmax pmax
comp=E,2.0nm,0.9s
YAK pmax pmax
comp=Z,150nm,4.4s
YAK pmax pmax
comp=E,142nm,5.1s
YAK pmax pmax
comp=N,149nm,4.6s
YAK smax smax
comp=N,104nm,3.8s
YAK smax smax
comp=E,206nm,4.3s
YAK MLR MLR
comp=Z,1µm,14.0s
YAK MLR MLR
comp=N,1µm,15.0s
YAK MLR MLR
comp=E,549nm,14.0s
**YAK Yakutsk 38.35 5** P **P 19 54 55.0 -1.8**
YAK lAmb lAmb 19 54 57.1
comp=Z,41nm,0.8s
**ZSN Zaisan 38.57 317** *e*P **P 19 54 57.6 -1.4**
**ZSN Zaisan 38.57 317** *e*P **P 19 54 57.6 -1.4**
baz=317
ZSN *i*S **S 20 00 51.5 -2.6**
baz=317
**PETK Petropavlovsk- 38.98 33** P **P 19 55 01.9 -0.4**
comp=Z,2.7nm,0.7s,baz=219,slow=2.1,SNR=6.1
PETK LR LR 20 10 46.6
comp=Z,603nm,21.0s,baz=233,slow=36
**PET Petropavlovsk 39.41 33** *e*P **P 19 55 05.2 -0.6**
PET *e*S **S 20 01 03.9 -2.6**
PET pmax pmax
comp=Z,20nm,1.3s
PET pmax pmax
comp=Z,200nm,11.2s
PET MLR MLR
comp=Z,800nm,17.0s
PET MLR MLR
comp=Z,1µm,20.0s
**PET Petropavlovsk 39.41 33** P **P 19 55 04.4 -1.5**
**PVM Polavaram 39.56 268** *e*P **P 19 55 09.2 +1.7**
**MK31 Makanchi Array 39.95 315** *i*P **P 19 55 09.7 -0.8**
MK31 pmax pmax
comp=Z,5.0nm,0.5s
**MK31 Makanchi Array 39.95 315** P **P 19 55 09.0 -1.6**
**MKAR Makanchi Array 39.95 315** P **P 19 55 10.2 -0.3**
comp=Z,5.9nm,0.5s,baz=99,slow=10,SNR=107
MKAR PcP **PcP 19 57 15.9 +0.2**
comp=Z,3.4nm,0.7s,baz=93,slow=4.6,SNR=5.8
MKAR LR LR 20 13 03.1
comp=Z,924nm,19.6s,baz=96,slow=38
**MKAR Makanchi Array 39.95 315** P **P 19 55 09.4 -1.1**
**MAKZ Makanchi 40.16 315** P **P 19 55 11.0 -1.3**
MAKZ pmax pmax
comp=Z,11nm,0.9s
**MAKZ Makanchi 40.16 315** P **P 19 55 11.0 -1.3**
**PMG Port Moresby 40.44 142** LR LR 20 11 28.6
comp=Z,937nm,19.4s,baz=310,slow=35
**H11N1 WAKE ISLAND Hy 40.48 87** T T 20 38 04.4
baz=283,slow=74,SNR=8.4
**H11N2 WAKE ISLAND Hy 40.48 87** T T 20 38 03.5
baz=283,slow=74,SNR=8.8
**MA2 Magadan 40.49 21** LR LR 20 12 23.2
comp=Z,781nm,20.3s,baz=218,slow=37
**MA2 Magadan 40.49 21** P **P 19 55 15.7 +1.0**
MA2 pmax pmax
comp=Z,3.0nm,0.6s
**MA2 Magadan 40.49 21** P **P 19 55 15.7 +1.0**
**H11N3 WAKE ISLAND Hy 40.49 87** T T 20 38 04.0
baz=283,slow=74,SNR=8.6
**H11S3 WAKE ISLAND Hy 40.60 89** T T 20 38 49.6
baz=288,slow=74,SNR=14
**H11S1 WAKE ISLAND Hy 40.61 89** T T 20 38 49.6
baz=288,SNR=9.1
**MYLAV Mylavaram 40.61 268** *e*P **P 19 55 17.8 +1.5**
**H11S2 WAKE ISLAND Hy 40.62 89** T T 20 38 51.1
baz=288,slow=74,SNR=8.5
**SHLS Shalkode 40.81 309** *e*P **P 19 55 14.7 -3.1**
**SHLS Shalkode 40.81 309** *e*P **P 19 55 14.8 -3.1**
baz=309
**PDGK Podgornoye 40.83 309** P **P 19 55 17.6 -0.4**
**UZB Uzynbulak 41.12 309** *e*P **P 19 55 19.3 -1.1**
**UZB Uzynbulak 41.12 309** *e*P **P 19 55 19.3 -1.1**
baz=309
**RPR Rampur 41.26 272** *e*P **P 19 55 23.1 +1.5**
**KPKS Kokpek 41.43 309** *e*P **P 19 55 22.8 -0.1**
**KPKS Kokpek 41.43 309** *e*P **P 19 55 22.8 -0.1**
baz=309
KPKS *i*S **S 20 01 34.0 -3.3**
baz=309
**ADKI Addanki 41.49 267** *e*P **P 19 55 24.1 +0.5**
**SATY Saty 41.54 309** *e*P **P 19 55 23.4 -0.4**
**SATY Saty 41.54 309** *e*P **P 19 55 23.5 -0.4**
baz=308
**ZHN Zhinishke 41.54 309** *e*P **P 19 55 23.6 -0.2**
**ZHN Zhinishke 41.54 309** *e*P **P 19 55 23.7 -0.2**
baz=308
**ZAA0 Zalesovo Array 41.59 326** P **P 19 55 22.2 -1.7**
**ZALV Zalesovo Beam 41.59 326** P **P 19 55 22.7 -1.2**
comp=Z,15nm,0.6s,baz=115,slow=7.8,SNR=62
ZALV PcP **PcP 19 57 20.0 -0.8**
comp=Z,2.4nm,0.7s,baz=108,slow=5.7,SNR=2.5
ZALV LR LR 20 13 58.2
comp=Z,2µm,18.4s,baz=121,slow=38
**ZALV Zalesovo Beam 41.59 326** *i*P **P 19 55 22.3 -1.6**
ZALV pmax pmax
comp=Z,15nm,0.6s
**ZALV Zalesovo Beam 41.59 326** P **P 19 55 21.3 -2.5**
**FITZ Fitzroy Crossi 41.81 177** LR LR 20 13 43.9
comp=Z,107nm,21.8s,baz=354,slow=37
**NJS Nagarjunasagar 41.88 268** *e*P **P 19 55 27.5 +0.7**
**CUPL Choutuppal 42.02 270** *e*P **P 19 55 28.8 +0.9**
**SRSP Sriramsagar 42.11 272** *e*P **P 19 55 29.2 +0.6**
**COEN Coen 42.31 151** P **P 19 55 31.1 +0.9**
COEN lAmb lAmb 19 55 32.2
comp=Z,25nm,0.7s
**SKHT Srikalahasti 42.42 264** *e*P **P 19 55 33.4 +2.2**
**SEM Semipalatinsk 42.53 320** *e*P **P 19 55 30.5 -1.4**
SEM pmax pmax
comp=Z,9.0nm,0.7s
**SEM Semipalatinsk 42.53 320** *e*P **P 19 55 30.6 -1.4**
comp=Z,9.0nm,0.7s,baz=319
**MDOK Medeo 42.53 308** *e*P **P 19 55 32.2 +0.3**
**MDOK Medeo 42.53 308** *e*P **P 19 55 32.2 +0.3**
baz=308
**RCLA Racherla 42.54 267** *e*P **P 19 55 31.8 -0.4**
**TNSS Tian-Shan 42.58 308** *e*P **P 19 55 33.1 +0.5**
baz=308
**AAA Alma-Ata 42.64 308** *e*P **P 19 55 32.3 -0.4**
**AAA Alma-Ata 42.64 308** *e*P **P 19 55 32.3 -0.4**
baz=308
**CHKK Chushkaly 42.72 309** *e*P **P 19 55 33.2 -0.1**
baz=309
**KSH Kashi 42.75 303** P **P 19 55 37.8 +4.1**
KSH pP sP 19 55 46.3 +5.6
KSH sP pP 19 55 52.3 +13
KSH PcP **PcP 19 57 27.8 +2.7**
KSH S **S 20 01 58.8 +2.0**
KSH sS sS 20 02 16.8 +12
KSH ScS **ScS 20 05 33.0 -1.3**
KSH pmax pmax
comp=Z,19nm,0.9s
KSH LR LR
comp=Z,1µm,17.0s
KSH LR LR
comp=Z,1µm,17.5s
KSH LR LR
comp=Z,2µm,17.5s
**ULHL Ulahol 42.95 307** P **P 19 55 36.6 +1.2**
SNR=14
**KUU Kurty 43.19 309** *e*P **P 19 55 36.7 -0.4**
KUU pmax pmax
comp=Z,11nm,0.7s
**KUU Kurty 43.19 309** *e*P **P 19 55 36.7 -0.4**
comp=Z,11nm,0.7s,baz=309
**TKM2 Tokmak 2 43.53 308** P **P 19 55 41.1 +1.0**
SNR=8.5
**TKM2 Tokmak 2 43.53 308** *i*P **P 19 55 40.8 +0.7**
TKM2 pmax pmax
comp=Z,17nm,0.7s
**SEY Seymchan 43.56 19** LR LR 20 14 13.8
comp=Z,702nm,21.0s,baz=213,slow=37
**KURK Kurchatov 43.61 320** *ce*P **P 19 55 39.5 -0.8**
KURK pmax pmax
comp=Z,13nm,0.8s
**KURK Kurchatov 43.61 320** P **P 19 55 39.6 -0.8**
**KURK Kurchatov 43.61 320** P **P 19 55 40.0 -0.3**
**KURBB Kurchatov Arra 43.63 319** P **P 19 55 39.6 -0.9**
comp=Z,9.6nm,0.8s,baz=112,slow=8.3,SNR=23
KURBB LR LR 20 17 03.7
comp=Z,383nm,18.7s,baz=91,slow=41
**KURBB Kurchatov Arra 43.63 319** P **P 19 55 39.4 -1.1**
**KLRI Killari 43.93 272** *e*P **P 19 55 44.7 +1.3**
**KBK Karagaybulak 43.96 307** P **P 19 55 44.3 +0.8**
SNR=13
**PALK Pallekele 44.12 255** PcP **PcP 19 57 31.5 +1.5**
comp=Z,11nm,0.8s,baz=30,slow=8.1,SNR=4.1
PALK LR LR 20 16 18.2
comp=Z,253nm,18.7s,baz=168,slow=39
**CHMS Chumysh 44.16 308** P **P 19 55 45.4 +0.5**
SNR=10.0
**UCH Uchtor 44.21 307** P **P 19 55 47.3 +1.4**
SNR=25
**URV Uravakonda 44.26 267** *e*P **P 19 55 47.5 +1.4**
**AAK Ala-Archa 44.29 307** P **P 19 55 45.4 -0.7**
comp=Z,4.0nm,0.7s,baz=123,slow=4.3,SNR=26
AAK PcP **PcP 19 57 30.8 +0.5**
comp=Z,4.4nm,0.7s,baz=143,slow=7.4,SNR=6.1
AAK LR LR 20 17 03.9
comp=Z,966nm,19.7s,baz=98,slow=40
**AAK Ala-Archa 44.29 307** *ce*P **P 19 55 47.1 +1.0**
AAK pmax pmax
comp=Z,4.0nm,0.7s
**AAK Ala-Archa 44.29 307** P **P 19 55 46.8 +0.6**
**AAK Ala-Archa 44.29 307** P **P 19 55 47.1 +1.0**
**AAK Ala-Archa 44.29 307** *i*P **P 19 55 46.9 +0.7**
SNR=9.0
**SGDS Sogindy 44.32 308** *e*P **P 19 55 45.8 -0.5**
baz=308
**USP Ospenovka 44.38 308** P **P 19 55 47.5 +0.7**
SNR=5.4
**NIL Nilore 44.65 294** P **P 19 55 48.2 -0.8**
NIL pmax pmax
comp=Z,25nm,1.0s
**NIL Nilore 44.65 294** P **P 19 55 48.2 -0.8**
NIL lAmb lAmb 19 55 50.8
comp=Z,25nm,0.9s
**WB0 Warramunga Arr 44.71 165** P **P 19 55 49.2 -0.2**
**AML Almayashu 44.80 306** P **P 19 55 51.6 +1.1**
SNR=11
**AML Almayashu 44.80 306** P **P 19 55 51.3 +0.8**
**AML Almayashu 44.80 306** *i*P **P 19 55 51.6 +1.1**
SNR=11
**EKS2 Erin-Say 44.81 307** P **P 19 55 50.8 +0.5**
SNR=6.2
**WRAB Tennant Creek 44.86 165** *e*P **P 19 55 47.4 -3.3**
WRAB pmax pmax
comp=Z,12nm,0.9s
**WRA Warramunga Arr 44.87 165** P **P 19 55 50.9 +0.1**
comp=Z,7.8nm,0.7s,baz=347,slow=8.8,SNR=71
WRA LR LR 20 14 25.0
comp=Z,193nm,21.7s,baz=2.5,slow=36
**WRA Warramunga Arr 44.87 165** *i*P **P 19 55 49.5 -1.2**
WRA pmax pmax
comp=Z,8.0nm,0.7s
**WRA Warramunga Arr 44.87 165** P **P 19 55 49.8 -0.9**
**WB2 Warramunga Arr 44.87 165** P **P 19 55 50.3 -0.4**
WB2 lAmb lAmb 19 55 51.8
comp=Z,11nm,0.8s
**WR0 Warramunga Arr 44.93 165** P **P 19 55 50.6 -0.6**
WR0 lAmb lAmb 19 55 52.6
comp=Z,13nm,0.7s
**BTLS Baital 45.02 310** *e*P **P 19 55 51.3 -0.4**
**BTLS Baital 45.02 310** *e*P **P 19 55 51.4 -0.4**
baz=310
**PSA00 Pilbara Seismi 45.34 185** P **P 19 55 53.3 -1.1**
PSA00 lAmb lAmb 19 56 20.1
comp=Z,14nm,0.9s
**PSA00 Pilbara Seismi 45.34 185** P **P 19 55 52.4 -2.0**
PSA00 lAmb lAmb 19 56 08.1
comp=Z,12nm,1.3s
**DZA Taraz 46.63 307** *e*P **P 19 56 04.2 -0.3**
**DZA Taraz 46.63 307** *e*P **P 19 56 04.2 -0.3**
baz=307
**OTUK Ortayu 46.83 315** P **P 19 56 05.9 -0.1**
**BRZS Berezniki 47.02 317** *e*P **P 19 56 06.7 -0.7**
**BRZS Berezniki 47.02 317** *e*P **P 19 56 06.8 -0.7**
baz=317
**GAR Garm 47.09 302** P **P 19 56 08.5 +0.2**
GAR lAmb lAmb 19 56 10.5
comp=Z,28nm,0.9s
**KKAR Karatay Array 47.25 307** P **P 19 56 08.4 -1.0**
**KKAR Karatay Array 47.25 307** P **P 19 56 08.4 -1.0**
**SHEM Shemya Is, Ala 47.74 39** LR LR 20 15 42.4
comp=Z,126nm,21.6s,baz=270,slow=35
**TIXI Tiksi 47.87 2** P **P 19 56 12.0 -1.7**
comp=Z,12nm,0.8s,baz=170,slow=6.1,SNR=68
TIXI LR LR 20 19 01.7
comp=Z,2µm,18.6s,baz=181,slow=40
**TIXI Tiksi 47.87 2** *i*P **P 19 56 10.5 -3.2**
TIXI pmax pmax
comp=Z,11nm,0.8s
**TIXI Tiksi 47.87 2** P **P 19 56 10.8 -2.9**
TIXI lAmb lAmb 19 56 13.7
comp=Z,13nm,0.8s
**CHGR Chuyangaron 47.98 301** P **P 19 56 15.2 0.0**
CHGR lAmb lAmb 19 56 17.5
comp=Z,25nm,0.8s
**KBL Kabul 48.11 296** P **P 19 56 17.1 +0.7**
KBL pmax pmax
comp=Z,25nm,0.9s
**KBL Kabul 48.11 296** P **P 19 56 17.1 +0.7**
KBL lAmb lAmb 19 56 19.2
comp=Z,25nm,0.9s
**KBL Kabul 48.11 296** P **P 19 56 18.2 +1.7**
SNR=23
**AS31 Alice Springs 48.38 167** P **P 19 56 18.3 +0.1**
**ASAR Alice Springs 48.38 167** P **P 19 56 19.0 +0.8**
comp=Z,5.9nm,0.7s,baz=5.8,slow=6.4,SNR=68
ASAR LR LR 20 16 49.2
comp=Z,210nm,21.6s,baz=330,slow=36
**ASAR Alice Springs 48.38 167** P **P 19 56 17.8 -0.4**
**ASAR Alice Springs 48.38 167** P **P 19 56 17.8 -0.4**
**HNR Honiara 48.71 129** LR LR 20 15 58.2
comp=Z,525nm,19.8s,baz=284,slow=35
**CTA Charters Tower 49.07 151** LR LR 20 14 55.2
comp=Z,803nm,21.6s,baz=340,slow=33
**BVAR Borovoye Array 49.17 320** P **P 19 56 23.5 -0.5**
comp=Z,1.5nm,0.3s,baz=82,slow=21,SNR=13
BVAR PcP **PcP 19 57 47.5 +0.4**
comp=Z,2.8nm,0.7s,baz=119,slow=4.2,SNR=3.1
**BRVK Borovoye 49.24 320** *i*P **P 19 56 23.8 -0.8**
BRVK pmax pmax
comp=Z,17nm,1.0s
**BRVK Borovoye 49.24 320** P **P 19 56 24.0 -0.6**
BRVK lAmb lAmb 19 56 26.1
comp=Z,14nm,0.9s
**NRIK Noril'sk 50.21 344** P **P 19 56 29.9 -1.7**
comp=Z,9.2nm,0.8s,baz=128,slow=8.4,SNR=17
NRIK PcP **PcP 19 57 51.2 +0.7**
comp=Z,8.5nm,0.8s,baz=133,slow=5.2,SNR=5.0
NRIK LR LR 20 20 14.6
comp=Z,1µm,18.4s,baz=140,slow=39
**NRIK Noril'sk 50.21 344** *ce*P **P 19 56 29.7 -1.9**
NRIK pmax pmax
comp=Z,10.0nm,0.8s
**NRIK Noril'sk 50.21 344** P **P 19 56 30.1 -1.5**
**HMDM Hanimaadhoo 51.04 259** P **P 19 56 40.9 +2.2**
**BILL Bilibino 51.27 19** ‖ *e*P **P 19 56 36.5 -3.2**
BILL *e* 19 58 34.2
BILL *e*S **S 20 04 03.3 +6.0**
BILL pmax pmax
comp=Z,4.0nm,0.8s
BILL MLR MLR
comp=Z,666nm,20.0s
**BILL Bilibino 51.27 19** P **P 19 56 38.6 -1.1**
**AB31 Akbulak array 55.08 314** P **P 19 57 07.7 -0.3**
**ABKAR Akbulak array 55.08 314** P **P 19 57 06.9 -1.1**
**ABKAR Akbulak array 55.08 314** P **P 19 57 07.6 -0.4**
ABKAR lAmb lAmb 19 57 10.6
comp=Z,13nm,0.7s
**SVE Sverdlovsk 55.47 324** *e*P **P 19 57 10.4 -0.3**
SVE pmax pmax
comp=Z,21nm,1.0s
SVE MLR MLR
comp=Z,1µm,17.0s
**AKTO Aktyubinsk 56.39 316** LR LR 20 22 54.0
comp=Z,546nm,18.8s,baz=104,slow=38
**AKTO Aktyubinsk 56.39 316** P **P 19 57 17.7 +0.3**
**ARU Arti 56.55 323** LR LR 20 25 02.7
comp=Z,323nm,18.0s,baz=91,slow=40
**ARU Arti 56.55 323** *c i*P **P 19 57 17.4 -1.0**
ARU *PP **pwP 19 57 26.4 +0.3**
ARU 19 59 19.5
ARU S **S 20 05 08.3 -0.7**
ARU SS **SS 20 08 51.7 -4.5**
ARU pmax pmax
comp=Z,32nm,1.2s
ARU MLR MLR
comp=Z,494nm,15.0s
**ARU Arti 56.55 323** P **P 19 57 17.4 -1.0**
ARU lAmb lAmb 19 57 20.0
comp=Z,20nm,0.6s
**GEYT Alibeck 56.68 301** P **P 19 57 20.9 +1.1**
comp=Z,14nm,0.8s,baz=104,slow=4.1,SNR=28
GEYT LR LR 20 25 49.0
comp=Z,963nm,19.2s,baz=114,slow=40
**GEYT Alibeck 56.68 301** P **P 19 57 20.5 +0.7**
GEYT lAmb lAmb 19 57 23.1
comp=Z,14nm,0.8s
**GYA0B ALIBECK ARRAY 56.68 301** P **P 19 57 19.7 -0.1**
GYA0B lAmb lAmb 19 57 22.7
comp=Z,16nm,0.8s
**BBOO Buckleboo 57.68 167** P **P 19 57 26.2 -0.4**
BBOO lAmb lAmb 19 57 28.3
comp=Z,11nm,0.8s
**GAMB Gambell 57.76 28** P **P 19 57 26.5 -0.3**
GAMB lAmb lAmb 19 57 29.5
comp=Z,10.0nm,0.7s
**GAMB Gambell 57.76 28** P **P 19 57 27.6 +0.8**
baz=258
**NIKH Nikolski High 57.96 41** P **P 19 57 28.7 +0.3**
baz=268
**STKA Stephens Creek 58.13 162** P **P 19 57 30.7 +0.9**
comp=Z,9.0nm,0.6s,baz=339,slow=7.3,SNR=48
STKA LR LR 20 24 13.8
comp=Z,507nm,19.1s,baz=6.2,slow=38
**STKA Stephens Creek 58.13 162** P **P 19 57 30.3 +0.5**
STKA pmax pmax
comp=Z,2.0nm,0.7s
**STKA Stephens Creek 58.13 162** P **P 19 57 30.3 +0.5**
**WBK Wadi Bani Khal 58.73 283** P **P 19 57 36.1 +1.7**
**BIDO Bidbid 59.25 284** P **P 19 57 39.6 +1.7**
**SMDO Samad 59.44 284** P **P 19 57 40.7 +1.4**
**TNA Tin City 59.67 27** P **P 19 57 40.7 +0.6**
**TNA Tin City 59.67 27** P **P 19 57 40.8 +0.6**
baz=261
**MHTO MHTO 60.06 281** P **P 19 57 43.8 +0.3**
**BANOM Banah 60.27 287** P **P 19 57 46.9 +1.9**
**MSFE Esma-Masafi 60.53 287** P **P 19 57 48.6 +1.9**
**ANM Nome 60.62 28** P **P 19 57 47.9 +1.3**
baz=264
**HATD Hatta, Dubai 60.69 286** P **P 19 57 49.6 +1.8**
**ASHO Ashiyiah 60.79 286** P **P 19 57 49.9 +1.4**
**FAQ Al Faqa, Dubai 61.18 286** P **P 19 57 52.2 +1.1**
**ALNE Al Ain 61.22 285** P **P 19 57 52.7 +1.3**
**ASUD Al Ashush, Dub 61.44 286** P **P 19 57 54.6 +1.7**
**KIRV Kirov 61.61 325** LR LR 20 27 00.3
comp=Z,2µm,18.3s,baz=91,slow=38
**KIRV Kirov 61.61 325** *ce*P **P 19 57 52.3 -1.1**
**RDOG Red Dog Mine 61.96 24** P **P 19 57 56.6 +0.9**
baz=264
**DZM Mont Dzumac 61.97 134** LR LR 20 20 29.7
comp=Z,526nm,21.6s,baz=284,slow=32
**DZM Mont Dzumac 61.97 134** *e*S **S 20 06 27.7 +7.5**
comp=Z,474nm,26.4s
DZM *e*LR LR 20 16 25.5
comp=Z,2µm,25.1s
**UMZA Um Al Zommool 62.10 284** P **P 19 57 57.4 +0.4**
**BELG Belogornoye 62.85 318** LR LR 20 28 24.7
comp=Z,349nm,20.3s,baz=129,slow=39
**BELG Belogornoye 62.85 318** *i*P **P 19 58 01.6 -0.3**
BELG pmax pmax
comp=Z,3.0nm,1.0s
**SHAO Shalim 63.05 279** P **P 19 58 04.9 +1.2**
**PRGR Permogore 63.47 329** *e*P **P 19 58 04.6 -1.2**
PRGR pmax pmax
comp=Z,50nm,0.8s
**MZR Muzera 63.51 285** P **P 19 58 07.5 +0.8**
**MAK Makhachkala 64.06 308** *e*P **P 19 58 08.3 -1.8**
MAK *e*S **S 20 06 43.4 -2.4**
MAK pmax pmax
comp=Z,28nm,0.6s
MAK MLR MLR
comp=Z,335nm,14.0s
**RBK Rabkut 64.49 279** P **P 19 58 14.4 +1.1**
SNR=7.0
**TTA Tatalina 64.73 30** P **P 19 58 15.0 +0.7**
baz=273
**WHFO Wadi Hawf 64.75 279** P **P 19 58 15.3 +0.2**
SNR=5.5
**L19K White Mountain 65.32 31** P **P 19 58 17.5 -0.5**
L19K lAmb lAmb 19 58 20.5
comp=Z,14nm,0.9s
**L19K White Mountain 65.32 31** P **P 19 58 18.7 +0.7**
baz=275,SNR=5.0
**P18K Big Mountain, 65.39 34** P **P 19 58 19.1 +0.6**
baz=276
**J20K Nowinta River 65.48 29** P **P 19 58 20.1 +1.1**
baz=274
**IMAR Indian Mountai 65.52 26** P **P 19 58 19.7 +0.5**
**M19K Big River Lodg 65.56 31** P **P 19 58 20.7 +1.1**
baz=275
**K20K Telida 65.58 29** P **P 19 58 21.4 +1.7**
K20K lAmb lAmb 19 58 23.1
comp=Z,19nm,0.8s
**K20K Telida 65.58 29** P **P 19 58 20.6 +0.9**
baz=275,SNR=11
**N19K Bonanza Creek 65.62 32** P **P 19 58 20.9 +0.9**
baz=276
**L20K Farewell, AK 65.75 30** P **P 19 58 21.8 +1.1**
baz=275
**O19K Port Alsworth 65.76 33** P **P 19 58 21.5 +0.7**
baz=276
**H21K Melozitna Rive 65.94 27** P **P 19 58 23.4 +1.4**
**H21K Melozitna Rive 65.94 27** P **P 19 58 23.3 +1.4**
baz=275
**Q19K Cape Douglas, 66.25 34** P **P 19 58 24.5 +0.5**
baz=277
**CHUM Lake Minchumin 66.31 29** P **P 19 58 25.2 +0.9**
baz=276
**I21K Tanana 66.32 27** P **P 19 58 25.6 +1.3**

baz=276
**CAST Castle Rocks 66.47 29 P P 19 58 26.7 +1.3**
CAST IAmb IAmb 19 58 28.8
comp=Z,19nm,0.7s
**CAST Castle Rocks 66.47 29 P P 19 58 26.3 +0.9**
baz=276,SNR=20
**SOCY Socotra 66.47 273 P P 19 58 25.7 -0.6**
SOCY IAmb IAmb 19 58 30.5
comp=Z,18nm,0.8s
**PPLA Purkeypile 66.48 30 P P 19 58 27.1 +1.5**
PPLA IAmb IAmb 19 58 40.2
comp=Z,33nm,1.3s
**PPLA Purkeypile 66.48 30 P P 19 58 26.0 +0.4**
baz=277
**RSO Redoubt South 66.51 32 P P 19 58 25.6 -0.2**
**GNI Garni 66.62 305** LR LR 20 32 43.5
comp=Z,391nm,18.4s,baz=108,slow=41
**VRH Novokhopyorsk 66.64 317** *eP* **P 19 58 23.9 -2.7**
VRH pmax pmax
comp=Z,10.0nm,0.9s
**SPCR Spurr Chakacha 66.68 32 P P 19 58 27.7 +0.9**
baz=277
**ZEI Tsey 66.70 308** *eP* **P 19 58 27.1 -0.4**
ZEI pmax pmax
comp=Z,21nm,0.9s
**NCK Nalchik 66.78 309** *i* P **P 19 58 27.7 0.0**
NCK pmax pmax
comp=Z,6.0nm,0.8s
**COLD Coldfoot 66.82 25 P P 19 58 29.4 +1.8**
**COLD Coldfoot 66.82 25 P P 19 58 28.6 +1.1**
baz=276
**BPAW Bear Paw Mtn. 66.87 28 P P 19 58 29.0 +1.0**
BPAW IAmb IAmb 19 58 30.8
comp=Z,14nm,0.8s
**BPAW Bear Paw Mtn. 66.87 28 P P 19 58 29.0 +1.0**
baz=277,SNR=11
**TOLK Toolik Lake Re 66.90 23 P P 19 58 29.5 +1.4**
**TOLK Toolik Lake Re 66.90 23 P P 19 58 29.1 +1.0**
baz=276
**KDAK Kodiak Island 66.96 35** LR LR 20 28 57.9
comp=Z,133nm,20.3s,baz=267,slow=37
**KTH Kantishna Hill 66.97 29 P P 19 58 30.0 +1.4**
KTH IAmb IAmb 19 58 40.1
comp=Z,12nm,0.8s
**ONI Oni 67.07 308 P P 19 58 29.6 0.0**
ONI pmax pmax
comp=Z,17nm,0.9s
**ONI Oni 67.07 308 P P 19 58 29.6 0.0**
ONI IAmb IAmb 19 58 33.2
comp=Z,17nm,0.9s
**KBZ Khabaz 67.23 309 P P 19 58 30.9 +0.4**
comp=Z,16nm,0.8s,baz=94,slow=3.0,SNR=43
KBZ LR LR 20 31 30.8
comp=Z,450nm,19.4s,baz=70,slow=39
**KBZ Khabaz 67.23 309** *ce* **P P 19 58 30.5 0.0**
KBZ pmax pmax
comp=Z,18nm,0.9s
**TRF Thorofare Moun 67.27 29 P P 19 58 31.6 +1.0**
TRF IAmb IAmb 19 58 34.2
comp=Z,8.8nm,0.9s
**TRF Thorofare Moun 67.27 29 P P 19 58 31.5 +0.8**
baz=278
**KIV Kislovodsk 67.33 309** *eP* **P 19 58 31.8 +0.5**
KIV *eS* **S 20 07 25.0 -1.0**
KIV *eSS* **SS 20 11 46.5 +1.0**
KIV pmax pmax
comp=Z,26nm,1.0s
KIV MLR MLR
comp=Z,386nm,17.0s
**KIV Kislovodsk 67.33 309** P **P 19 58 31.3 0.0**
KIV IAmb IAmb 19 58 34.1
comp=Z,19nm,0.8s
**KIV Kislovodsk 67.33 309** P **P 19 58 32.3 +1.0**
**KIV Kislovodsk 67.33 309** *i* P **P 19 58 32.2 +0.9**
SNR=11
**CUT Chulitna 67.42 30 P P 19 58 32.1 +0.7**
baz=278
**I23K Minto, Yukon-K 67.43 27 P P 19 58 33.2 +1.8**
I23K IAmb IAmb 19 58 41.8
comp=Z,9.5nm,0.8s
**I23K Minto, Yukon-K 67.43 27 P P 19 58 32.1 +0.7**
baz=278,SNR=5.3
**NEY Neytrino 67.45 309** *i* P **P 19 58 31.2 -1.0**
NEY pmax pmax
comp=Z,4.0nm,0.8s
**MSVF Nonsavu 67.50 123** LR LR 20 25 18.3
comp=Z,279nm,19.5s,baz=215,slow=34
**M22K Willow 67.59 31 P P 19 58 32.2 -0.3**
**M22K Willow 67.59 31 P P 19 58 32.7 +0.2**
baz=279
**NEA2 Nenana 67.63 28 P P 19 58 33.5 +0.8**
**NEA2 Nenana 67.63 28 P P 19 58 33.2 +0.4**
baz=279,SNR=20
**KARS Kars 67.76 306 P P 19 58 34.8 +0.6**
KARS pmax pmax
comp=Z,56nm,0.8s
**KARS Kars 67.76 306 P P 19 58 34.8 +0.6**
**MCK McKinley 67.82 29 P P 19 58 34.9 +0.9**
MCK pmax pmax
comp=Z,13nm,0.8s
**MCK McKinley 67.82 29 P P 19 58 34.9 +0.9**
MCK IAmb IAmb 19 58 43.7
comp=Z,12nm,0.8s
**MCK McKinley 67.82 29 P P 19 58 34.0 +0.1**
baz=279,SNR=6.4
**RND Reindeer 67.91 29 P P 19 58 34.4 -0.2**
RND pmax pmax
comp=Z,29nm,0.8s
**RND Reindeer 67.91 29 P P 19 58 34.4 -0.2**
**MDM Murphy Dome 67.93 27 P P 19 58 35.4 +0.8**
**H24K Noodor Dome 67.93 26 P P 19 58 35.2 +0.5**
baz=279
**WRH Wood River Hil 68.07 28 P P 19 58 36.8 +1.4**
WRH IAmb IAmb 19 58 38.4
comp=Z,8.0nm,0.7s
**PMR Palmer 68.08 31 P P 19 58 36.2 +0.7**
baz=280
**LPSR Galich'ya Gora 68.09 319** *eP* **P 19 58 34.9 -0.9**
LPSR pmax pmax
comp=Z,20nm,0.7s
**TCOL CIGO, UAF Yank 68.10 27 P P 19 58 33.9 -1.7**
TCOL IAmb IAmb 19 58 39.2
comp=Z,16nm,0.8s
**TCOL CIGO, UAF Yank 68.10 27 P P 19 58 36.3 +0.7**
baz=280
**VORR Voronezh 68.10 318** *eP* **P 19 58 34.3 -1.6**
VORR pmax pmax
comp=Z,20nm,0.4s
**COLA College 68.10 27 P P 19 58 34.1 -1.5**
COLA pmax pmax
comp=Z,16nm,0.8s
**COLA College 68.10 27 P P 19 58 34.1 -1.5**
COLA IAmb IAmb 19 58 39.2
comp=Z,16nm,0.8s
**COLA College 68.10 27 P P 19 58 36.2 +0.6**
baz=280
**APA Apatity 68.15 336** ⇓ *i* P P 19 58 41.9 +6.0
APA pmax pmax
comp=Z,12nm,0.7s
APA MLR MLR
comp=Z,400nm,13.0s
**CCB Clear Creek Bu 68.16 28 P P 19 58 36.9 +0.8**
**VSR Storozhevoye 68.22 318** *eP* **P 19 58 34.0 -2.6**
VSR pmax pmax
comp=Z,20nm,1.2s
**POKR Poker Plat Res 68.24 27 P P 19 58 36.8 +0.3**
**POKR Poker Plat Res 68.24 27 P P 19 58 37.2 +0.6**
baz=280,SNR=9.0
**GEVA Gevas 68.31 303 P P 19 58 37.6 -0.1**
**SML Sawmill 68.42 31 P P 19 58 38.1 +0.3**
baz=280
**KNK Knik Glacier 68.43 31 P P 19 58 37.9 +0.1**
baz=280
**IL31 68.53 27 P P 19 58 37.6 -0.6**
**ILAR Eielson Array 68.53 27 P P 19 58 37.9 -0.4**
comp=Z,2.1nm,0.7s,baz=270,slow=4.9,SNR=38
ILAR LR LR 20 31 24.0
comp=Z,273nm,18.2s,baz=310,slow=38
**WAT6 Susitna Watana 68.55 30 P P 19 58 39.0 +0.3**
baz=281,SNR=5.7
**HDA Harding Lake 68.57 28 P P 19 58 38.3 -0.3**
HDA IAmb IAmb 19 58 40.0
comp=Z,14nm,0.8s
**HDA Harding Lake 68.57 28 P P 19 58 38.2 -0.4**
baz=280,SNR=9.9
**PWL Port Wells 68.59 32 P P 19 58 39.0 +0.2**
baz=281
**DHY Denali Highway 68.63 29 P P 19 58 39.1 -0.1**
DHY IAmb IAmb 19 58 48.0
comp=Z,9.4nm,0.7s
**DHY Denali Highway 68.63 29 P P 19 58 39.4 +0.3**
baz=281
**FYU Fort Yukon 68.86 25 P P 19 58 41.8 +1.4**
FYU IAmb IAmb 19 58 43.8
comp=Z,9.2nm,0.8s
**SCM Sheep Creek Mo 68.88 31 P P 19 58 41.8 +1.1**
SCM pmax pmax
comp=Z,29nm,1.0s
**SCM Sheep Creek Mo 68.88 31 P P 19 58 41.8 +1.1**
**SCM Sheep Creek Mo 68.88 31 P P 19 58 41.0 +0.3**
baz=281
**BMAR Burnt Mountain 68.94 24 P P 19 58 42.0 +1.1**
**PRP Porcupine Dome 68.95 27 P P 19 58 41.5 +0.3**
baz=281
**OBN Obninsk 68.97 322** LR LR 20 31 54.7
comp=Z,127nm,19.4s,baz=39,slow=39
**OBN Obninsk 68.97 322** *ce* **P P 19 58 40.9 -0.3**
OBN *eS* **S 20 07 49.0 +4.2**
OBN pmax pmax
comp=Z,8.0nm,0.6s
OBN MLR MLR
comp=Z,458nm,19.0s
**GURO Guroymak-BITLI 69.03 304 P P 19 58 42.8 +0.6**
GURO IAmb IAmb 19 58 45.3
comp=Z,13nm,0.8s
**M24K Tolsona, Glenn 69.36 30 P P 19 58 43.8 +0.1**
baz=282
**PAX Paxson 69.50 29 P P 19 58 45.0 +0.5**
PAX pmax pmax
comp=Z,13nm,1.2s
**PAX Paxson 69.50 29 P P 19 58 45.0 +0.5**
PAX IAmb IAmb 19 58 45.7
comp=Z,13nm,1.2s
**PAX Paxson 69.50 29 P P 19 58 44.5 0.0**
baz=282
**SOC Sochi 69.51 310** *eP* **P 19 58 42.0 -2.8**
SOC *e* 20 01 14.9
SOC *ePPP* PPP 20 02 57.5
SOC *eS* **S 20 07 46.0 -5.7**
SOC pmax pmax
comp=Z,14nm,0.6s
SOC MLR MLR
comp=Z,356nm,16.0s
**RIDG Independent Ri 69.61 28 P P 19 58 44.9 -0.2**
RIDG IAmb IAmb 19 59 13.5
comp=Z,20nm,1.3s
**RIDG Independent Ri 69.61 28 P P 19 58 45.6 +0.4**
baz=283
**KLU Klutina 69.61 31 P P 19 58 46.1 +0.9**
KLU IAmb IAmb 19 59 10.7
comp=Z,26nm,1.2s
**KLU Klutina 69.61 31 P P 19 58 45.3 +0.1**
baz=282
**DIV Divide 69.76 31 P P 19 58 47.3 +1.2**
DIV IAmb IAmb 19 59 03.6
comp=Z,25nm,1.0s
**HARP HAARP 69.77 30 P P 19 58 46.3 +0.2**
baz=283
**KOPT Kop Dagi 69.82 306 P P 19 58 48.2 +1.0**
**SCRK Sand Creek 69.92 28 P P 19 58 47.4 +0.2**
SCRK IAmb IAmb 19 58 49.1
comp=Z,8.9nm,0.8s
**SCRK Sand Creek 69.92 28 P P 19 58 47.3 +0.1**
baz=283,SNR=9.0
**DOT Dot Lake 69.97 28 P P 19 58 47.1 -0.2**
DOT IAmb IAmb 19 58 49.0
comp=Z,12nm,0.8s
**J26L Joseph Creek 69.98 27 P P 19 58 47.5 0.0**
baz=283
**SPB2 Spitsbergen Ar 70.18 348 P P 19 58 49.0 +0.7**
**SPA0 Spitsbergen Ar 70.18 348** *eP* **P 19 58 48.7 +0.3**
**SPITS Spitsbergen Ar 70.18 348** LR LR 20 33 17.2
comp=Z,504nm,20.0s,baz=254,slow=39
**N25K Chitina, Valde 70.20 31 P P 19 58 49.0 +0.1**
N25K IAmb IAmb 19 59 03.3
comp=Z,17nm,1.2s
**N25K Chitina, Valde 70.20 31 P P 19 58 49.0 +0.1**
baz=284
**MENT Mentasta 70.29 29 P P 19 58 49.5 +0.2**
MENT IAmb IAmb 19 58 53.7
comp=Z,14nm,0.9s
**MARD Mardin 70.31 303 P P 19 58 50.3 +0.3**
**RAYN Ar Rayn 70.36 288 P P 19 58 50.6 +0.1**
RAYN pmax pmax
comp=Z,8.0nm,1.1s
**RAYN Ar Rayn 70.36 288 P P 19 58 50.5 +0.1**
**RAYN Ar Rayn 70.36 288 P P 19 58 50.8 +0.4**
**RAYN Ar Rayn 70.36 288** *i* P **P 19 58 50.9 +0.4**
SNR=8.3
**L26K Log Cabin Wild 70.43 29 P P 19 58 51.3 +1.2**
L26K IAmb IAmb 19 58 52.3
comp=Z,9.6nm,0.8s
**L26K Log Cabin Wild 70.43 29 P P 19 58 50.3 +0.2**
baz=284
**ARA0 ARCESS Array S 70.55 338** *eP* **P 19 58 50.5 -0.2**
**ARCES ARCESS Array B 70.55 338** P **P 19 58 50.5 -0.2**
comp=Z,3.5nm,0.7s,baz=53,slow=4.7,SNR=11
ARCES LR LR 20 32 56.5
comp=Z,386nm,21.3s,baz=76,slow=39
**ARCES ARCESS Array B 70.55 338** P **P 19 58 50.5 -0.2**
ARCES pmax pmax
comp=Z,20nm,1.5s
**ARCES ARCESS Array B 70.55 338** IAmb IAmb 19 58 55.0
comp=Z,20nm,1.4s
**GLB Gilahina Butte 70.61 31 P P 19 58 51.8 +0.5**
GLB IAmb IAmb 19 58 59.9
comp=Z,21nm,1.2s
**M26K Nabesna, AK 70.74 29 P P 19 58 53.1 +1.0**
baz=285
**HSPB Hornsund (broa 70.80 347** *eP* **P 19 58 52.8 +0.7**
**ANN Anapa 70.80 311** *eP* **P 19 58 52.6 -0.1**
ANN *eS* **S 20 08 07.5 +0.7**
ANN pmax pmax
comp=Z,52nm,0.8s
**HAMF Hammerfest 70.83 340** *eP* **P 19 58 52.5 +0.1**
**VRDI Verde Repeater 70.83 31** P **P 19 58 53.6 +0.8**
VRDI IAmb IAmb 19 59 16.8
comp=Z,10nm,0.9s
**EGAK Eagle 70.92 27 P P 19 58 53.6 +0.5**
baz=285
**MCARA McCarthy VSAT 70.99 31 P P 19 58 54.1 +0.6**
baz=285
**L27K Beaver Creek, 71.09 29 P P 19 58 55.4 +1.2**
baz=285
**BCAR Beaver Creek A 71.11 29 P P 19 58 54.9 +0.6**
**M27K Edge Creek, AK 71.26 29 P P 19 58 55.8 +0.5**
baz=286
**KTK1 Kautokeino 71.47 338** *eP* **P 19 58 55.5 -0.8**
**BVCY Beaver Creek 71.70 29 P P 19 58 58.6 +0.8**
baz=286
**MESA MESA 71.82 32 P P 19 58 58.9 +0.1**
baz=286
**DAWY Dawson 71.85 27 P P 19 58 59.4 +0.6**
DAWY IAmb IAmb 19 59 08.9
comp=Z,17nm,1.1s
**DAWY Dawson 71.85 27 P P 19 58 59.5 +0.6**
baz=287,SNR=10
**CTG Chitna Glacier 71.89 31 P P 19 58 59.6 +0.4**
baz=286
**CTGM Chitina Glacier 71.89 31 P P 19 59 00.7 +1.5**
CTGM IAmb IAmb 19 59 23.7
comp=Z,15nm,0.9s
**I29M Ogilvie Camp, 71.91 26 P P 19 58 58.8 -0.3**
I29M IAmb IAmb 19 59 09.2
comp=Z,9.5nm,0.8s
**I29M Ogilvie Camp, 71.91 26 P P 19 58 59.7 +0.6**
baz=288,SNR=6.8
**YUK3 Moose Creek 72.06 30 P P 19 59 00.7 +0.4**
baz=287
**J29M Klondike Camp 72.23 27 P P 19 59 02.0 +0.9**
baz=288,SNR=12
**JETT Jettan, Norway 72.24 339** *eP* **P 19 59 02.1 +1.1**
**KIF Kilpisjarvi 72.31 338** *eP* **P 19 59 01.1 -0.2**
**FIA1 FINESS Array S 72.70 330** P **P 19 59 03.4 -0.4**
FIA1 IAmb IAmb 19 59 05.2
comp=Z,23nm,0.8s
**FINES FINESS Array B 72.70 330** P **P 19 59 03.5 -0.3**
comp=Z,18nm,0.7s,baz=73,slow=6.6,SNR=53
FINES LR LR 20 34 28.0
comp=Z,1μm,19.5s,baz=82,slow=39
**FINES FINESS Array B 72.70 330** *i* P **P 19 59 03.7 -0.1**
FINES pmax pmax
comp=Z,18nm,0.7s
**INK Inuvik 72.72 22** LR LR 20 34 43.0
comp=Z,312nm,19.3s,baz=280,slow=39
**INK Inuvik 72.72 22** P **P 19 59 03.5 -0.3**
INK pmax pmax
comp=Z,21nm,0.7s
**INK Inuvik 72.72 22** P **P 19 59 03.5 -0.3**
INK IAmb IAmb 19 59 05.9
comp=Z,21nm,0.7s
**INK Inuvik 72.72 22** P **P 19 59 04.2 +0.4**
baz=291,SNR=25
**NOR Nord 72.82 354** *i* P **P 19 59 02.5 -1.7**
NOR IAmb IAmb 19 59 05.2
comp=Z,6.2nm,0.9s
**YUK4 Talbot Arm 73.02 30 P P 19 59 06.8 +0.8**
baz=289
**SIM Simferopol' 73.03 312** *eP* **P 19 59 05.5 -0.6**
SIM S **S 20 08 30.0 -2.4**
SIM pmax pmax
comp=Z,36nm,0.8s
**PNL Peninsula 73.20 32 P P 19 59 07.9 +1.1**
baz=288
**YUK6 Outpost Mounta 73.28 30 P P 19 59 08.2 +0.6**
baz=289
**VSU Vasula 73.32 327** *eP* **P 19 59 07.8 +0.3**
**M30M Minto, Yukon 73.44 28 P P 19 59 09.6 +1.4**
**M30M Minto, Yukon 73.44 28 P P 19 59 09.2 +0.9**
baz=290
**MAYO Mayo, Yukon 73.47 27 P P 19 59 09.6 +1.2**
baz=290
**BNN Bunyan 73.61 306 P P 19 59 10.4 +0.6**
**AFI Afiamalu 73.63 114** LR LR 20 27 13.4
comp=Z,403nm,18.8s,baz=302,slow=32
**A36M Sachs Harbour 73.78 18 P P 19 59 10.1 +0.1**
**A36M Sachs Harbour 73.78 18 P P 19 59 10.0 +0.1**
baz=297,SNR=19
**MNK Minsk 73.98 323** *i* P **P 19 59 09.4 -2.1**
MNK *i* 19 59 24.4
MNK *i* 20 01 54.1
MNK *i* PPP PPP 20 03 39.3
MNK *i* S **SKiKP 20 08 39.2 +0.1**
MNK pmax pmax
comp=E,2.0nm,0.9s
MNK pmax pmax
comp=Z,17nm,0.9s
MNK pmax pmax
comp=N,3.0nm,0.9s
MNK MLR MLR
comp=Z,453nm,19.0s
MNK MLR MLR
comp=N,235nm,19.0s
MNK MLR MLR
comp=E,52nm,19.0s
**MNK Minsk 73.98 323** *i* P **P 19 59 09.4 -2.1**
comp=E,2.0nm,0.9s
MNK *i* P **P 19 59 09.4 -2.1**
comp=N,3.0nm,0.9s
MNK *i* P **P 19 59 09.4 -2.1**
comp=Z,17nm,0.9s,baz=71
MNK *i* PcP **PcP 19 59 24.4 -2.3**
MNK *i* PP **PP 20 01 54.1 -2.2**
MNK *i* PPP PPP 20 03 39.3
MNK *i* S **SKiKP 20 08 39.2 +0.1**
MNK *i* SSS SSS 20 16 09.0
MNK *i* LQ LQ 20 26 44.2
MNK *i* LR LR 20 31 10.8
MNK *i* LRM MLR 20 35 15.1
comp=Z,453nm,19.0s
MNK *i* LRM MLR 20 35 15.4
comp=E,52nm,19.0s
MNK *i* LRM MLR 20 35 15.4
comp=N,235nm,19.0s
**N31M Braeburn, Yuko 74.27 29 P P 19 59 14.5 +1.4**
N31M IAmb IAmb 19 59 38.1
comp=Z,12nm,0.9s
**N31M Braeburn, Yuko 74.27 29 P P 19 59 14.4 +1.3**
baz=291
**IDID Didziasalis 74.34 324** *eP* **P 19 59 14.7 +1.1**
**AKASG Malin Array Be 74.42 319** P **P 19 59 13.2 -0.9**
comp=Z,18nm,0.8s,baz=58,slow=6.0,SNR=61
**AKASG Malin Array Be 74.42 319** P **P 19 59 13.3 -0.8**
AKASG pmax pmax
comp=Z,19nm,0.8s
**AKASG Malin Array Be 74.42 319** P **P 19 59 13.3 -0.8**
AKASG IAmb IAmb 19 59 15.4
comp=Z,19nm,0.8s
**AKBB Malin Array Si 74.42 319** P **P 19 59 13.4 -0.7**
AKBB pmax pmax
comp=Z,15nm,0.8s
**AKBB Malin Array Si 74.42 319** P **P 19 59 13.4 -0.7**
AKBB IAmb IAmb 19 59 15.2
comp=Z,15nm,0.8s
**NACGM Naroch 74.45 323** *i* P **P 19 59 13.8 -0.4**
**ILGA Ilgaz 74.49 308** *eP* **P 19 59 15.6 +0.5**
**ISAL Salakas 74.58 324** *eP* **P 19 59 15.6 +0.7**
**IIGN Ignalina 74.61 324** *eP* **P 19 59 15.9 +0.8**
**STEI Steigen 74.61 338** *eP* **P 19 59 14.7 -0.2**
**M31M Drury Creek, Y 74.62 28 P P 19 59 16.0 +0.8**
**M31M Drury Creek, Y 74.62 28 P P 19 59 16.0 +0.8**
baz=292
**MTSE Matsula 74.68 328** *eP* **P 19 59 15.8 +0.4**
**FAUS Fauske 74.84 338** *eP* **P 19 59 15.6 -0.6**
**BR131 Keskin Array S 74.96 307 P P 19 59 17.9 +0.2**
BR131 pmax pmax
comp=Z,49nm,0.8s
**BR131 Keskin Array S 74.96 307 P P 19 59 17.9 +0.2**
**BR131 Keskin Array S 74.96 307 P P 19 59 18.3 +0.6**
SNR=22
**BRTR Keskin Array B 74.96 307 P P 19 59 17.9 +0.2**
comp=Z,29nm,0.7s,baz=82,slow=5.7,SNR=139
BRTR LR LR 20 37 57.4
comp=Z,285nm,18.7s,baz=80,slow=40
**BRTR Keskin Array B 74.96 307** *i* P **P 19 59 18.2 +0.5**
BRTR pmax pmax
comp=Z,29nm,0.7s
**BRTR Keskin Array B 74.96 307 P P 19 59 17.6 -0.1**
**EUNU Eureka 75.00 5 P P 19 59 17.2 +0.1**
**FARO Faro, Yukon 75.06 28 P P 19 59 18.3 +0.6**
baz=293
**LOF Lofoten 75.10 339** *eP* **P 19 59 18.3 +0.5**
**C36M Paulatuk 75.38 20 P P 19 59 18.7 -0.7**
**C36M Paulatuk 75.38 20 P P 19 59 18.8 -0.5**
baz=299,SNR=33
**ANTO Ankara 75.53 307 P P 19 59 20.5 -0.4**
ANTO pmax pmax
comp=Z,51nm,0.7s
**ANTO Ankara 75.53 307 P P 19 59 20.5 -0.4**
**BR231 Keskin MP Arra 75.56 307 P P 19 59 21.4 +0.4**
**MOR8 Moi Rana 75.68 337** *eP* **P 19 59 20.5 -0.7**
**PABE Paberze 75.75 325 P P 19 59 21.6 -0.1**
**PABE Paberze 75.75 325** *eP* **P 19 59 22.1 +0.4**
**MMPY Sheldon Lake, 75.79 27 P P 19 59 22.3 +0.3**
baz=294
**MMAI Mount Meron Ar 75.80 300** LR LR 20 38 50.0
comp=Z,312nm,20.7s,baz=220,slow=41
**SLIT Slitere, Latvi 75.83 327** *eP* **P 19 59 21.9 -0.2**
**KONS Konsvik 76.00 337** *eP* **P 19 59 23.2 +0.3**
**P33M Teslin, Yukon 76.10 30 P P 19 59 24.9 +1.1**
**P33M Teslin, Yukon 76.10 30 P P 19 59 23.9 +0.2**
baz=294
**SIT Sitka 76.13 34 P P 19 59 24.0 +0.2**
baz=292
**LEOM Leova 76.44 315** ⇓ P **P 19 59 26.4 +0.6**
**MDUB Mudurnu 76.49 308 P P 19 59 26.2 -0.2**
**TLCR 76.52 314** ⇓ P **P 19 59 26.9 +0.7**
**JURR Jurilovca 76.62 313** ⇑ P **P 19 59 27.8 +1.0**
**PBUR Paburge 76.63 326** *eP* **P 19 59 27.4 +0.7**
**SUW Suwalki 76.73 323** *eP* **P 19 59 26.9 -0.4**
**SUW Suwalki 76.73 323 P P 19 59 27.0 -0.3**
SUW pmax pmax
comp=Z,95nm,0.8s
**SUW Suwalki 76.73 323 P P 19 59 27.0 -0.3**
**SUW Suwalki 76.73 323** *eP* **P 19 59 27.4 +0.1**
**CSS Mathiatis 76.77 302 P P 19 59 27.6 -0.3**
**VLDR Vladesti 76.77 314** ⇑ P **P 19 59 28.7 +1.0**
**ATD Arta Tunnel 76.87 277** LR LR 20 34 57.4
comp=Z,87nm,18.2s,baz=82,slow=37
**TPGR Topolog 76.89 313** ⇓ P **P 19 59 29.2 +0.7**
**VARL Varlezi 76.90 314** ⇑ P **P 19 59 29.4 +1.0**
**BIR Birlad 76.92 315** ⇓ P **P 19 59 29.7 +1.2**
**DAG Danmarks Havn 76.94 352** *i* P **P 19 59 27.0 -1.1**
DAG IAmb IAmb 19 59 28.8
comp=Z,4.2nm,0.7s
**CFR Carcaliu 76.97 314** ⇓ P **P 19 59 29.2 +0.4**
**UPP Uppsala 77.15 330** *eP* **P 19 59 29.4 -0.1**

**BORA Eskisehir 77.22 308** P **P** **19 59 30.1 -0.4**
**HARR Harsova 77.28 313** ⇑P **P** **19 59 31.5 +0.9**
**RAO Raoul Island 77.30 130** LR LR 20 29 58.0
comp=Z,312nm,18.1s,baz=12,slow=33
**NSS Namsos 77.36 336** *e*P **P** **19 59 30.6 0.0**
**PANC Panciu 77.37 315** ⇓P **P** **19 59 32.7 +1.6**
**TESR Tescani 77.46 315** ⇓P **P** **19 59 32.0 +0.4**
**ODBI Odobesti 77.47 315** ⇑P **P** **19 59 33.7 +2.0**
**TGTN Hyland Airport 77.54 28** P **P** **19 59 32.0 +0.2**
baz=297
**ICOR Ion Corvin 77.57 313** ⇓P **P** **19 59 33.3 +1.1**
**VRI Vrincioaia 77.65 315** ⇑P **P** **19 59 34.1 +1.4**
**GRER 77.66 314** ⇑P **P** **19 59 34.8 +2.1**
**PLOR Plostina 77.70 315** ⇑P **P** **19 59 34.3 +1.3**
**BISRR Bisoca 77.77 314** ⇓P **P** **19 59 35.0 +1.6**
**BUR08 Bucovina Ar. S 77.96 317** P **P** **19 59 34.6 +0.1**
BUR08 IAmb IAmb 19 59 36.1
comp=Z,9.2nm,0.8s
**BURAR Bucovina Array 77.96 317** ⇓P **P** **19 59 34.5 0.0**
**BURAR Bucovina Array 77.96 317** P **P** **19 59 34.2 -0.3**
BURAR IAmb IAmb 19 59 36.4
comp=Z,14nm,0.7s
**ISR Istrita 78.04 314** ⇑P **P** **19 59 36.3 +1.4**
**LEHL Lehliu 78.10 313** ⇑P **P** **19 59 36.3 +1.2**
**DLBC Dease Lake 78.14 31** LR LR 20 35 24.5
comp=Z,209nm,20.8s,baz=301,slow=37
**DLBC Dease Lake 78.14 31** P **P** **19 59 36.1 +0.8**
**OZUR 78.17 315** ⇑P **P** **19 59 36.3 +0.7**
**VIKU Vikbolandet 78.18 329** *e*P **P** **19 59 35.5 +0.2**
**MLR Muntele Rosu 78.30 315** ⇑P **P** **19 59 37.5 +1.1**
**MLR Muntele Rosu 78.30 315** LR LR 20 38 13.4
comp=Z,416nm,21.0s,baz=58,slow=39
**MLR Muntele Rosu 78.30 315** P **P** **19 59 36.6 +0.2**
MLR pmax pmax
comp=Z,24nm,0.7s
**MLR Muntele Rosu 78.30 315** P **P** **19 59 36.6 +0.2**
**SECR 78.39 314** ⇑P **P** **19 59 38.3 +1.5**
**DOPR Dopca 78.47 315** ⇓P **P** **19 59 38.2 +0.9**
**RES Resolute Bay 78.60 10** LR LR 20 35 45.7
comp=Z,275nm,21.2s,baz=296,slow=37
**RES Resolute Bay 78.60 10** P **P** **19 59 36.8 -0.6**
RES pmax pmax
comp=Z,7.0nm,0.7s
**RES Resolute Bay 78.60 10** P **P** **19 59 36.8 -0.6**
**RAZG Razgrad 78.64 313** ⇓P **P** **19 59 39.0 +0.8**
**ARCR ARCALIA 78.71 317** ⇑P **P** **19 59 40.2 +1.8**
**ELL Elmali 78.74 305** P **P** **19 59 39.0 0.0**
ELL pmax pmax
comp=Z,116nm,0.7s
**ELL Elmali 78.74 305** P **P** **19 59 39.0 0.0**
**HFS Hagfors 78.79 331** LR LR 20 38 07.3
comp=Z,2µm,18.5s,baz=56,slow=38
**NEEM North Greenlan 78.82 359** *i* P **P** **19 59 38.4 -0.6**
NEEM IAmb IAmb 19 59 41.0
comp=Z,43nm,0.8s
**VOIR 78.90 315** ⇑P **P** **19 59 39.5 -0.1**
**BMR Baia Mare 79.01 317** ⇑P **P** **19 59 41.7 +1.6**
**NC405 NORSAR Array S 79.16 333** P **P** **19 59 40.2 -0.5**
**ARR Arges 79.19 315** ⇓P **P** **19 59 42.3 +1.0**
**DBG Daneborg 79.21 351** *i* P **P** **19 59 40.4 -0.3**
DBG IAmb IAmb 19 59 43.2
comp=Z,25nm,1.4s
**NC303 NORSAR Array S 79.25 333** P **P** **19 59 40.4 -0.7**
NC303 IAmb IAmb 19 59 43.5
comp=Z,20nm,1.0s
**HUMR Humele 79.30 314** ⇓P **P** **19 59 41.9 +0.1**
**UZH Uzhgorod 79.36 319** *e*P **P** **19 59 41.6 -0.4**
UZH *e* 19 59 48.1
UZH *i* 19 59 51.1
**NB201 NORSAR Array S 79.37 333** P **P** **19 59 40.8 -1.1**
**NB2 NORSAR Subarra 79.41 333** P **P** **19 59 41.3 -0.8**
comp=Z,8.7nm,0.6s,baz=59,slow=5.6
**NB2 NORSAR Subarra 79.41 333** P **P** **19 59 41.3 -0.8**
baz=59,slow=5.6
**NOA NORSAR Array B 79.41 333** P **P** **19 59 41.2 -0.9**
comp=Z,9.6nm,0.7s,baz=56,slow=5.7,SNR=55
NOA LR LR 20 38 35.8
comp=Z,1µm,18.5s,baz=75,slow=39
**TRPA Tarpa 79.42 318** ⇓P **P** **19 59 43.4 +1.1**
**TRPA Tarpa 79.42 318** P **P** **19 59 42.9 +0.6**
**NC602 NORSAR Array S 79.42 332** P **P** **19 59 40.2 -2.0**
**NC602 NORSAR Array S 79.42 332** *e*P **P** **19 59 41.6 -0.5**
**NC204 NORSAR Array S 79.48 333** P **P** **19 59 42.0 -0.5**
NC204 IAmb IAmb 19 59 59.0
comp=Z,33nm,1.1s
**JMIC Jan Mayen 79.61 346** LR LR 20 40 10.1
comp=Z,314nm,18.2s,baz=78,slow=40
**URZ Urewera 79.75 140** LR LR 20 35 06.2
comp=Z,431nm,18.5s,baz=324,slow=36
**CRVS Cervenica-Dubn 79.75 319** *e*P **P** **19 59 46.0 +1.8**
**CRVS Cervenica-Dubn 79.75 319** *e*P **P** **19 59 46.0 +1.8**
**DOMB Dombas 79.77 334** *e*P **P** **19 59 43.9 -0.2**
**DRGR 79.86 317** ⇑P **P** **19 59 45.2 +0.3**
**VLAD Vladila 79.88 314** ⇑P **P** **19 59 45.8 +0.9**
**ALN Alexandroupoli 79.98 310** P **P** **19 59 45.3 -0.3**
ALN pmax pmax
comp=Z,12nm,1.0s
**ALN Alexandroupoli 79.98 310** P **P** **19 59 45.3 -0.3**
ALN IAmb IAmb 19 59 47.8
comp=Z,12nm,1.0s
**MOL Molde 80.08 335** *e*P **P** **19 59 46.0 +0.4**
**OJC Ojcow 80.18 321** *e*P **P** **19 59 46.8 +0.3**
**OJC Ojcow 80.18 321** P **P** **19 59 46.3 -0.2**
OJC pmax pmax
comp=Z,18nm,0.7s
**OJC Ojcow 80.18 321** P **P** **19 59 46.3 -0.2**
OJC IAmb IAmb 19 59 48.2
comp=Z,18nm,0.7s
**OSL Oslo 80.18 332** *e*P **P** **19 59 45.9 -0.3**
**NIE Niedzica 80.23 320** *e*P **P** **19 59 48.3 +1.5**
**RPZ Rata Peaks 80.24 147** LR LR 20 36 10.8
comp=Z,253nm,18.5s,baz=330,slow=36
**GZR Gura Zlata 80.38 315** ⇑P **P** **19 59 48.8 +1.1**
**SRE Strehaia 80.41 315** ⇑P **P** **19 59 48.3 +0.5**
**DEL Delary 80.48 328** *e*P **P** **19 59 48.2 +0.3**
**BSD Bornholm Skovb 80.61 326** *e*P **P** **19 59 47.2 -1.4**
**PUNG Punghina 80.74 314** ⇓P **P** **19 59 50.8 +1.2**
**SKAR Skarslia 80.81 333** *e*P **P** **19 59 50.4 +0.7**
**HERR Herculane 80.83 315** ⇓P **P** **19 59 50.6 +0.5**
**LANS Liptovska Anna 80.84 320** *e*P **P** **19 59 51.6 +1.5**
**LANS Liptovska Anna 80.84 320** *e*P **P** **19 59 51.6 +1.5**
**IZAB Izabela 80.94 319** *e*P **P** **19 59 51.7 +1.1**
IZAB pmax pmax
comp=Z,15nm,1.0s
**BZS Buzias 81.03 316** ⇓P **P** **19 59 51.3 +0.2**
**PSZ Piszkesteto 81.12 319** P **P** **19 59 51.5 -0.1**
PSZ pmax pmax
comp=Z,11nm,1.0s
**PSZ Piszkesteto 81.12 319** P **P** **19 59 51.5 -0.1**
**PSZ Piszkesteto 81.12 319** P **P** **19 59 51.3 -0.3**
**BSZH Besenyszg 81.16 318** ⇑P **P** **19 59 53.6 +1.8**
**BSZH Besenyszg 81.16 318** P **P** **19 59 52.8 +1.1**
**VTS Vitosha 81.22 313** ⇓P **P** **19 59 53.6 +1.3**
**VTS Vitosha 81.22 313** P **P** **19 59 52.8 +0.4**
VTS pmax pmax
comp=Z,41nm,0.8s
**VTS Vitosha 81.22 313** P **P** **19 59 52.8 +0.4**
**HYA Hoyanger 81.40 334** *e*P **P** **19 59 53.3 +0.6**
**VYHS Vyhne 81.50 319** *e*P **P** **19 59 54.2 +0.6**
VYHS pmax pmax
comp=Z,13nm,0.8s
**VYHS Vyhne 81.50 319** *e*P **P** **19 59 54.2 +0.6**
**MORC Moravsky Berou 81.68 321** ⇑P **P** **19 59 55.1 +0.6**
**MORC Moravsky Berou 81.68 321** P **P** **19 59 54.3 -0.2**
MORC pmax pmax
comp=Z,6.0nm,0.8s
**MORC Moravsky Berou 81.68 321** P **P** **19 59 54.3 -0.2**
**MORC Moravsky Berou 81.68 321** *e*P **P** **19 59 54.6 +0.1**
**KOLL Kolacno 81.72 320** *e*P **P** **19 59 55.9 +1.2**
**KSP Ksiaz 81.90 322** *e*P **P** **19 59 56.0 +0.4**
**JAVC Velka Javorina 82.03 320** *e*P **P** **19 59 57.7 +1.3**
**OSTC Ostas 82.08 322** *e*P **P** **20 00 00.7 +4.1**
OSTC AMS AMS 20 39 40.0
comp=Z,500nm,14.4s
**DPC Dobruska-Polom 82.11 322** *e*P **P** **19 59 57.0 +0.2**
DPC *e* 20 00 05.9
DPC MLR MLR
comp=Z,600nm,16.2s
**DPC Dobruska-Polom 82.11 322** *e*P **P** **19 59 57.0 +0.2**
DPC *ep*P **sP** **20 00 05.9 +2.0**
DPC AMS AMS 20 40 00.0
comp=Z,600nm,16.2s
**CHVC Chvalec 82.15 322** *e*P **P** **19 59 57.5 +0.5**

**ASK Askoy 82.19 334** *e*P **P** **19 59 58.2 +1.3**
**UPC Upice 82.21 322** *e*P **P** **19 59 58.2 +0.9**
**UPC Upice 82.21 322** *e*P **P** **19 59 58.2 +0.9**
**SMOL Smolenice 82.33 320** *e*P **P** **19 59 59.6 +1.7**
**SMOL Smolenice 82.33 320** *e*P **P** **19 59 59.6 +1.7**
**CSKK Cskako 82.36 319** P **P** **19 59 58.4 +0.3**
**YKA Yellowknife Ar 82.43 23** P **P** **19 59 58.5 +0.4**
comp=Z,8.4nm,0.6s,baz=304,slow=5.2,SNR=138
YKA LR LR 20 40 38.1
comp=Z,193nm,18.5s,baz=304,slow=39
**YKA Yellowknife Ar 82.43 23** P **P** **19 59 57.9 -0.2**
**YKA Yellowknife Ar 82.43 23** P **P** **19 59 57.9 -0.2**
**VRAC Vranov 82.45 321** ⇓P **P** **19 59 59.6 +1.1**
**VRAC Vranov 82.45 321** LR LR 20 39 29.1
comp=Z,300nm,19.6s,baz=64,slow=38
**VRAC Vranov 82.45 321** *e*P **P** **19 59 58.9 +0.4**
**MORH Mrgy, Hungar 82.64 317** ⇑P **P** **19 59 59.9 +0.4**
**MORH Mrgy, Hungar 82.64 317** P **P** **20 00 00.1 +0.5**
**KRUC Moravsky 82.68 321** *e*P **P** **19 59 59.8 +0.1**
**DIVS Divibare 82.73 315** P **P** **19 59 60.0 -0.2**
DIVS IAmb IAmb 20 00 01.9
comp=Z,14nm,0.8s
**LIT Litokhoron 82.78 311** P **P** **19 59 58.0 -2.5**
LIT pmax pmax
comp=Z,20nm,0.7s
**LIT Litokhoron 82.78 311** P **P** **19 59 58.0 -2.5**
**MPLH Magyarpolny 82.88 319** P **P** **20 00 01.4 +0.6**
**SUMG Summit 82.98 355** P **P** **20 00 01.0 -0.3**
SUMG pmax pmax
comp=Z,21nm,0.8s
**SUMG Summit 82.98 355** *i* P **P** **20 00 01.0 -0.3**
SUMG IAmb IAmb 20 00 03.2
comp=Z,20nm,0.8s
**SUMG Summit 82.98 355** P **P** **20 00 01.0 -0.3**
SUMG IAmb IAmb 20 00 03.2
comp=Z,22nm,0.8s
**KOVH Kovagotottos 83.03 317** P **P** **20 00 02.1 +0.5**
**IDI Anoyia 83.05 305** LR LR 20 43 58.9
comp=Z,57nm,21.2s,baz=82,slow=41
**BRG Berggiesshubel 83.19 323** *e*P **P** **20 00 02.5 +0.2**
BRG Amp 20 00 07.8
comp=Z,8.0nm,0.8s
BRG Amp 20 40 45.0
comp=Z,0.6nm,15.7s
BRG Amp 20 40 49.0
comp=N,0.3nm,15.8s
BRG Amp 20 40 49.0
comp=E,0.5nm,15.8s
**BRG Berggiesshubel 83.19 323** *e*P **P** **20 00 02.5 +0.2**
BRG pmax pmax
comp=Z,8.0nm,0.9s
BRG MLR MLR
comp=Z,635nm,15.7s
BRG MLR MLR
comp=N,312nm,15.8s
BRG MLR MLR
comp=E,490nm,15.8s
**BRG Berggiesshubel 83.19 323** *e*P **P** **20 00 03.0 +0.6**
comp=E,5.9nm,0.8s,baz=57,slow=5.2
**FNA Florina 83.26 312** P **P** **20 00 02.5 -0.4**
FNA pmax pmax
comp=Z,14nm,1.2s
**FNA Florina 83.26 312** P **P** **20 00 02.5 -0.4**
FNA IAmb IAmb 20 00 09.0
comp=Z,14nm,1.2s
**PRU Pruhonice 83.29 322** *e*P **P** **20 00 02.9 0.0**
PRU *e* 20 00 11.2
PRU MLR MLR
comp=Z,600nm,16.7s
**PRU Pruhonice 83.29 322** *e*P **P** **20 00 02.9 0.0**
PRU *ep*P **sP** **20 00 11.2 +1.2**
PRU AMS AMS 20 40 40.0
comp=Z,600nm,16.7s
**AGG Agios Georgios 83.35 310** P **P** **20 00 02.6 -0.8**
AGG pmax pmax
comp=Z,28nm,0.9s
**AGG Agios Georgios 83.35 310** P **P** **20 00 02.6 -0.8**
**CLL Collm 83.48 324** *i* P **P** **20 00 03.8 0.0**
CLL *e**PP **sP** **20 00 13.0 +2.1**
CLL *eS* **S** **20 10 22.0 -2.5**
CLL pmax pmax
comp=Z,8.0nm,1.0s
CLL MLR MLR
comp=Z,500nm,18.3s
**CLL Collm 83.48 324** *i* P **P** **20 00 03.8 0.0**
comp=Z,8.0nm,1.0s
CLL *i* PcP **pP** **20 00 07.0 -2.5**
CLL *ep*P **sP** **20 00 13.0 +2.1**
CLL *e*PP PP 20 03 24.0 +8.4
CLL *ex* x 20 04 42.0
CLL *e*PPP PPP 20 05 18.0
CLL *eS* **S** **20 10 22.0 -2.5**
CLL *e*PPS PPS 20 11 36.0
CLL *e*SS SS 20 16 12.0 +22
CLL *ex* x 20 20 30.0
CLL LmH 20 41 00.0
comp=N,400nm,18.5s
CLL LmH 20 41 00.0
comp=E,400nm,18.5s
CLL LmV 20 41 00.0
comp=Z,500nm,18.3s
**CLL Collm 83.48 324** P **P** **20 00 03.4 -0.4**
CLL IAmb IAmb 20 00 08.4
comp=Z,8.5nm,0.7s
**CLL Collm 83.48 324** *e*P **P** **20 00 04.2 +0.3**
comp=Z,7.9nm,0.7s,baz=57,slow=5.2
**FBE Freiberg 83.49 323** *e*P **P** **20 00 04.2 +0.4**
comp=Z,8.0nm,0.8s,baz=57,slow=5.2
**BSEG Bad Segeberg 83.52 327** *e*P **P** **20 00 05.0 +1.1**
comp=Z,9.3nm,0.8s,baz=57,slow=5.2
**CONA Conrad Observa 83.53 320** *i* P **P** **20 00 04.6 +0.4**
comp=Z,7.6nm,0.9s
**KBN Korca 83.73 312** P **P** **20 00 04.3 -1.1**
KBN pmax pmax
comp=Z,20nm,0.8s
**KBN Korca 83.73 312** P **P** **20 00 04.3 -1.1**
**FLTG Flechtingen 83.90 325** *e*P **P** **20 00 05.6 -0.3**
comp=Z,6.1nm,0.8s,baz=57,slow=5.2
**CKRC Cesky Krumlov 84.00 321** *e*P **P** **20 00 07.2 +0.6**
**ARSA Arzberg 84.05 319** *e*P **P** **20 00 06.9 0.0**
comp=Z,7.1nm,1.1s
**TANN Tannenbergstha 84.23 323** *e*P **P** **20 00 08.2 +0.4**
comp=Z,2.3nm,0.8s,baz=57,slow=5.2
**KHC Kasperske Hory 84.26 322** *e*P **P** **20 00 08.0 +0.1**
KHC MLR MLR
comp=Z,600nm,18.2s
**KHC Kasperske Hory 84.26 322** *e*P **P** **20 00 08.0 +0.1**
KHC AMS AMS 20 41 20.0
comp=Z,600nm,18.2s
**KHC Kasperske Hory 84.26 322** P **P** **20 00 07.9 +0.1**
**GUNZ Gunzen 84.33 323** *e*P **P** **20 00 08.7 +0.5**
comp=Z,6.0nm,0.8s,baz=57,slow=5.2
**GERES GERESS Array B 84.33 321** P **P** **20 00 08.3 0.0**
comp=Z,8.7nm,0.8s,baz=44,slow=8.5,SNR=39
**NKC Novy Kostel 84.33 323** *e*P **P** **20 00 09.0 +0.8**
**NKC Novy Kostel 84.33 323** *e*P **P** **20 00 09.0 +0.8**
**WERN Wernitzgruen 84.35 323** *e*P **P** **20 00 09.1 +0.8**
comp=Z,5.7nm,0.8s,baz=57,slow=5.2
**NRDL Niedersach Rie 84.40 326** *e*P **P** **20 00 09.6 +1.2**
comp=Z,4.9nm,0.9s,baz=57,slow=5.2
**ITM Ithomi 84.43 308** P **P** **20 00 07.9 -1.1**
**MOA Molln 84.50 320** *e*P **P** **20 00 10.4 +1.3**
comp=Z,16nm,0.8s
**MOX Moxa 84.58 324** *e*P **P** **20 00 09.2 -0.2**
comp=Z,2.7nm,0.8s,baz=57,slow=5.2
**CLZ Clausthal 84.61 325** *e*P **P** **20 00 11.0 +1.4**
comp=Z,9.1nm,0.9s,baz=57,slow=5.2
**SOKA Soboth 84.63 319** *e*P **P** **20 00 09.6 -0.2**
comp=Z,8.0nm,0.7s,SNR=14
**MANZ Manzenberg 84.65 323** *e*P **P** **20 00 10.5 +0.6**
comp=Z,0.9nm,0.9s,baz=57,slow=5.2
**WET Wettzell 84.65 322** *e*P **P** **20 00 10.4 +0.5**
comp=Z,2.1nm,0.8s,baz=57,slow=5.2
**ROTZ Rotzenmuhle 84.71 323** *e*P **P** **20 00 10.8 +0.6**
comp=Z,1.0nm,0.8s,baz=57,slow=5.2
**GTTG Gottingen 84.98 325** *e*P **P** **20 00 12.3 +0.8**
comp=Z,5.8nm,0.8s,baz=57,slow=5.2
**OBKA Obir 85.00 319** *e*P **P** **20 00 11.3 -0.5**
comp=Z,8.4nm,0.7s,SNR=6.4
**GRF Grafenberg Arr 85.29 323** *e*P **P** **20 00 14.6 +1.6**
comp=Z,8.3nm,0.9s,baz=57,slow=5.2
**UBBA Unterbreizbach 85.36 324** *e*P **P** **20 00 14.2 +1.0**
comp=Z,4.7nm,1.1s,baz=57,slow=5.2
**RJOB Jochberg 85.42 321** *e*P **P** **20 00 14.5 +0.7**
comp=Z,9.4nm,0.8s,baz=57,slow=5.2

**KBA Koelnbreinsper 85.43 320** *e*P **P** **20 00 14.4 +0.4**
comp=Z,11nm,0.8s
**MYKA Terra Mystica 85.48 319** *e*P **P** **20 00 15.4 +1.2**
comp=Z,11nm,1.0s
**IBBN Ibbenburen 85.71 326** *e*P **P** **20 00 15.4 +0.4**
comp=Z,12nm,0.7s,baz=57,slow=5.2
**KASTN Kahler Asten 85.98 325** *e*P **P** **20 00 16.7 +0.2**
comp=Z,3.2nm,0.8s,baz=57,slow=5.2
**FUR Furstenfeldbru 86.07 322** *e*P **P** **20 00 18.5 +1.6**
comp=Z,19nm,0.8s,baz=57,slow=5.2
**ABTA Abfaltersbach 86.09 320** *i* P **P** **20 00 16.8 -0.4**
comp=Z,7.7nm,0.9s
**WATA Walderalm 86.33 321** *e*P **P** **20 00 18.9 +0.4**
comp=Z,5.5nm,0.9s
**WTTA Wattenberg 86.33 321** *e*P **P** **20 00 20.2 +1.7**
comp=Z,8.9nm,0.8s
**BUG Bochum-Univer 86.45 326** *e*P **P** **20 00 18.3 -0.4**
comp=Z,9.1nm,0.9s,baz=57,slow=5.2
**ICESG Greenland Ices 86.45 354** *i* P **P** **20 00 18.2 -0.6**
ICESG IAmb IAmb 20 00 20.2
comp=Z,16nm,0.8s
**TNS Taunus Mts 86.51 324** *e*P **P** **20 00 20.0 +0.8**
comp=Z,4.8nm,0.8s,baz=57,slow=5.2
**MOTA Moosalm 86.60 321** *e*P **P** **20 00 21.2 +1.4**
comp=Z,6.7nm,1.0s
**KIBK Kibwezi 86.69 266** P **P** **20 00 20.7 0.0**
**RETA Reutte 86.72 321** *i* P **P** **20 00 21.0 +0.8**
comp=Z,3.4nm,0.8s
**KMBO Kilima Mbogo 86.93 267** P **P** **20 00 22.9 +0.9**
comp=Z,2.3nm,0.9s,baz=44,slow=8.2,SNR=8.2
KMBO LR LR 20 39 22.3
comp=Z,62nm,21.1s,baz=94,slow=36
**KMBO Kilima Mbogo 86.93 267** P **P** **20 00 22.8 +0.7**
KMBO pmax pmax
comp=Z,5.0nm,1.2s
**KMBO Kilima Mbogo 86.93 267** P **P** **20 00 22.8 +0.7**
**KMBO Kilima Mbogo 86.93 267** P **P** **20 00 23.5 +1.4**
**FETA Feichten 86.99 321** *i* P **P** **20 00 22.7 +1.1**
comp=Z,6.1nm,0.9s
**UBR Ueberruh 86.99 322** *e*P **P** **20 00 22.8 +1.2**
comp=Z,6.0nm,0.8s,baz=57,slow=5.2
**RAR Rarotonga 87.15 115** LR LR 20 33 30.7
comp=Z,227nm,20.3s,baz=282,slow=32
**TEOL Teolo 87.31 319** P **P** **20 00 23.5 +0.4**
**DAVA Damuels 87.33 321** *e*P **P** **20 00 24.5 +1.1**
comp=Z,5.8nm,0.9s
**BORG Borgarnes 87.51 346** LR LR 20 44 47.8
comp=Z,362nm,18.2s,baz=30,slow=39
**BTNL Ternell 87.53 325** *d*PcP **PcP** **20 00 26.2 +0.2**
**MEM Membach 87.58 326** *d*PcP **PcP** **20 00 25.5 -0.7**
**DAVOX Davos/Dischmat 87.61 321** LR LR 20 44 15.6
comp=Z,466nm,18.1s,baz=69,slow=39
**BHOU Houvegnez 87.73 325** *d*P **P** **20 00 24.7 -0.3**
**WLF Walferdange 88.05 325** P **P** **20 00 27.8 +1.3**
WLF pmax pmax
comp=Z,13nm,0.8s
**WLF Walferdange 88.05 325** P **P** **20 00 27.8 +1.3**
WLF IAmb IAmb 20 00 31.5
comp=Z,13nm,0.8s
**WLF Walferdange 88.05 325** *e*P **P** **20 00 28.2 +1.7**
comp=Z,14nm,0.9s,baz=57,slow=5.2
**WLF Walferdange 88.05 325** *d*PcP **PcP** **20 00 28.0 -0.3**
**BCLA Clavier 88.05 326** *d*PcP **PcP** **20 00 29.5 +1.3**
**TUE Stuetta 88.08 321** P **P** **20 00 25.9 -1.1**
TUE IAmb IAmb 20 00 29.6
comp=Z,11nm,0.8s
**RCHB Rochefort 88.25 325** *d*P **P** **20 00 26.9 -0.5**
RCHB *d*PcP **PcP** **20 00 30.0 +0.9**
**BMRD Maredsous 88.40 326** *d*PcP **PcP** **20 00 30.8 +1.0**
**DOU Dourbes 88.61 326** *d*PcP **PcP** **20 00 30.2 -0.5**
**B08A Colville Reser 88.82 36** P **P** **20 00 31.3 +1.0**
B08A IAmb IAmb 20 00 39.2
comp=Z,8.4nm,0.9s
**EDM Edmonton 88.84 30** P **P** **20 00 31.2 +1.0**
EDM pmax pmax
comp=Z,17nm,0.9s
**EDM Edmonton 88.84 30** P **P** **20 00 31.2 +1.0**
**EKA Eskdalemuir Ar 88.90 333** LR LR 20 44 13.0
comp=Z,392nm,18.8s,baz=54,slow=38
**SENIN Lac Senin/Sane 89.32 322** P **P** **20 00 33.1 +0.2**
SENIN IAmb IAmb 20 00 33.6
comp=Z,6.0nm,0.8s
**VAE Valguarnera 89.59 311** LR LR 20 45 57.0
comp=Z,111nm,18.4s,baz=100,slow=39
**C09A Chrisman Ranch 89.72 36** P **P** **20 00 33.2 -1.3**
C09A IAmb IAmb 20 00 43.7
comp=Z,13nm,1.2s
**NEW Newport 90.06 36** P **P** **20 00 37.6 +1.5**
NEW pmax pmax
comp=Z,6.0nm,0.8s
**NEW Newport 90.06 36** P **P** **20 00 37.6 +1.5**
NEW IAmb IAmb 20 00 39.1
comp=Z,6.0nm,0.8s
**NEW Newport 90.06 36** P **P** **20 00 36.3 +0.3**
baz=307
**L04D Klamath Falls 90.57 43** P **P** **20 00 38.7 0.0**
baz=304
**YBH Yreka Blue Hor 90.58 43** LR LR 20 33 24.9
comp=Z,109nm,21.1s,baz=304,slow=30
**FCC Fort Churchill 91.98 19** P **P** **20 00 44.1 -0.5**
FCC pmax pmax
comp=Z,7.0nm,0.9s
**FCC Fort Churchill 91.98 19** P **P** **20 00 44.1 -0.5**
FCC IAmb IAmb 20 00 59.8
comp=Z,6.8nm,0.8s
**MOD Modoc Plateau 91.98 42** P **P** **20 00 42.9 -2.3**
MOD IAmb IAmb 20 00 55.1
comp=Z,10nm,1.1s
**BMO Blue Mountains 92.02 38** P **P** **20 00 45.0 -0.3**
BMO pmax pmax
comp=Z,7.0nm,1.2s
**BMO Blue Mountains 92.02 38** P **P** **20 00 45.0 -0.3**
BMO IAmb IAmb 20 00 54.9
comp=Z,6.7nm,1.1s
**FRB Frobisher Bay 92.14 5** LR LR 20 45 12.1
comp=Z,333nm,20.6s,baz=357,slow=38
**FFC Flin Flon 92.56 24** P **P** **20 00 47.3 -0.1**
FFC pmax pmax
comp=Z,15nm,1.1s
**FFC Flin Flon 92.56 24** P **P** **20 00 47.3 -0.1**
FFC IAmb IAmb 20 00 55.5
comp=Z,15nm,1.1s
**MBAR Mbarara 92.68 271** LR LR 20 43 24.7
comp=Z,111nm,20.8s,baz=50,slow=36
**KEST Kesra 93.97 312** P **P** **20 00 55.4 +1.0**
comp=Z,7.3nm,0.8s,baz=45,slow=1.4,SNR=3.7
KEST LR LR 20 47 56.7
comp=Z,165nm,19.0s,baz=336,slow=39
**PPT Papeete 94.33 107** LR LR 20 35 05.8
comp=Z,337nm,19.9s,baz=229,slow=30
**PPT2 Papeete2 94.34 107** *e*LR LR 20 31 29.5
comp=Z,750nm,23.2s
**HLID Hailey 94.45 38** P **P** **20 00 56.0 -0.7**
baz=309
**NVAR Mina Array Bea 95.24 44** P **P** **20 01 02.0 +1.6**
comp=Z,1.0nm,0.7s,baz=307,slow=4.6,SNR=8.6
NVAR LR LR 20 37 14.7
comp=Z,130nm,20.1s,baz=264,slow=31
**ELK Elko 95.73 41** LR LR 20 48 56.1
comp=Z,62nm,18.2s,baz=288,slow=38
**TBI Tubuai 96.71 112** *e*LR LR 20 32 28.8
comp=Z,337nm,24.0s
**ULM Lac du Bonnet 98.39 24** LR LR 20 51 18.6
comp=Z,196nm,18.5s,baz=336,slow=39
**PFO Pinyon Flats O 99.29 47** LR LR 20 39 18.6
comp=Z,120nm,21.4s,baz=305,slow=31
**ESDC Sonseca Array 99.93 321** LR LR 20 51 53.6
comp=Z,431nm,18.0s,baz=30,slow=39
**TORD Torodi Ar. Bea 112.18 296** PKiKP **PKiKP** **20 06 12.2 -0.4**
comp=Z,0.4nm,0.8s,baz=21,slow=2.9,SNR=2.1
TORD PP 20 06 44.8 -12
comp=Z,1.0nm,0.9s,baz=35,slow=7.1,SNR=3.5
**SDV Santo Domingo 144.64 24** *e*P **PKPab** **20 07 10.1 -2.4**
**BARC Barichara 145.63 30** *e*P PKiKP 20 07 28.0 +8.2
**NORC Norcasia 145.71 34** *e*P **PKPdf** **20 07 15.4 -0.3**
**GUY2C Guyana, Caldas 145.75 35** *e*P **PKPab** **20 07 17.1 +0.2**
**SPBC San Pablo de B 146.03 32** *e*P **PKPbc** **20 07 17.1 +0.1**
**YOTC Yotoco, Valle 146.26 37** *e*P **PKPdf** **20 07 17.1 +0.5**
**RUSC La Rusia 146.30 31** *e*P PKiKP 20 07 32.9 +11
**ROSC El Rosal 146.61 33** PKPbc **PKPab** **20 07 20.8 +0.8**
comp=Z,11nm,0.4s,baz=4.0,slow=9.4,SNR=3.6
**ROSC El Rosal 146.61 33** PKP2 **PKPdf** **20 07 17.7 +0.1**
**ROSC El Rosal 146.61 33** **PKPdf** **20 07 17.7 +0.1**
**CHIC Chingaza 147.08 33** *e*P PKiKP 20 07 36.4 +13
**POPC Popayan, Colom 147.25 39** *e*P **PKPbc** **20 07 20.6 -0.1**
**VILC Villavicencio, 147.55 33** *e*P **PKiKP** **20 07 24.1 +0.5**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BETC** | **Betania** | **147.83** | **37** | *eP* | **PKPbc** | **20 07 22.4** | **+0.3** |
| **GARC** | **Garzon, Huila** | **148.21** | **38** | *eP* | **PKPbc** | **20 07 24.1** | **+0.8** |
| **PLCA** | **Paso Flores** | **159.54** | **148** | PKPab | **PKPab** | **20 08 14.6** | **+1.5** |
| | comp=Z,0.8nm,0.7s,baz=291,slow=8.6,SNR=1.9 | | | | | | |
| **LPAZ** | **La Paz** | **166.78** | **57** | PKP | **PKPdf** | **20 07 43.0** | **-0.3** |
| | comp=Z,1.1nm,0.7s,baz=254,slow=1.6,SNR=4.0 | | | | | | |
| LPAZ | | | | PKPab | **sPKPab** | **20 08 51.8** | **-1.3** |
| | comp=Z,0.8nm,0.6s,baz=243,slow=4.5,SNR=1.5 | | | | | | |
| **LPAZ** | **La Paz** | **166.78** | **57** | *eP* | **PKPdf** | **20 07 46.9** | **+3.6** |
| **BDFB** | **Brasilia** | **168.48** | **314** | PKPab | **PKPab** | **20 08 53.0** | **0.0** |
| | comp=Z,2.2nm,0.5s,baz=71,slow=6.3,SNR=3.8 | | | | | | |

*NEIC* ***29*** *19:51:16.5±1.6,0.42°N±0.09°×122.5°E±0.1,h160km±7km, mb4.1/14,Error ellipse: s-maj=21.2km s-min=10.1km az=64.0*

*IDC* ***29*** *19:51:18.2±2.4,0.34°N×122.64°E,h187km±26km,mb3.4/7, mb1 3.6/10,mb1mx3.3/47,mbtmp4.0/10,Error ellipse: s-maj=27.0km s-min=16.8km az=56.0*

*DJA* ***29*** *19:51:18.8±0.4,0°N±3°×12°2E±°,h148km±4km,M4.2/13, mb4.6/1,mB4.5/1,MLv4.0/13,Mw(mB)3.6/1*

**ISC 29 19:51:16.6±0.7,0.34°N±0.05°×122.43°E±0.07°,h167km±6km, n56,σ1ˢ12/60,mb4.0/19,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.51** | **286** | P | **Pn** | **19 51 39.8** | **-0.1** |
| MRSI | | | | S | **Sn** | **19 51 57.3** | **-0.4** |
| **GTOI** | **Gorontalo** | **0.65** | **63** | P | **Pn** | **19 51 42.1** | **+1.4** |
| GTOI | | | | S | **Sn** | **19 52 00.4** | **+1.3** |
| **LUWI** | **Luwuk** | **1.41** | **166** | Pn | **Pn** | **19 51 46.9** | **+0.3** |
| LUWI | | | | Sn | **Sn** | **19 52 07.4** | **-2.5** |
| **LUWI** | **Luwuk** | **1.41** | **166** | P | **Pn** | **19 51 47.6** | **+0.9** |
| LUWI | | | | S | **Sn** | **19 52 09.5** | **-0.4** |
| **APSI** | **Ampana** | **1.46** | **212** | P | **Pn** | **19 51 48.0** | **+0.8** |
| APSI | | | | S | **Sn** | **19 52 10.3** | **-0.4** |
| **KMSI** | **Cibinong** | **1.57** | **81** | P | Pn | 19 51 50.9 | +2.7 |
| **TOLI2** | **Tolitoli** | **1.82** | **295** | | **Pn** | **19 51 50.1** | **-0.7** |
| **MPSI** | **Mapaga** | **2.53** | **270** | P | **Pn** | **19 51 59.1** | **+0.2** |
| **TTSI** | **Tana Toraja** | **4.25** | **218** | P | **Pn** | **19 52 21.8** | **+1.2** |
| **SGKI** | **Sangatta, Kali** | **4.90** | **260** | P | **Pn** | **19 52 28.2** | **-0.9** |
| **TNTI** | **Ternate** | **4.96** | **85** | P | Pn | 19 52 42.8 | +13 |
| **SPSI** | **Sidrap Palu** | **5.03** | **212** | P | **Pn** | **19 52 31.8** | **+1.0** |
| **BNSI** | **Bone** | **5.25** | **206** | P | **Pn** | **19 52 35.1** | **+1.5** |
| **KAPI** | **Kappang** | **5.95** | **207** | P | **Pn** | **19 52 44.0** | **+1.2** |
| | 5.3nm,0.3s,baz=31,slow=4.7,SNR=31 | | | | | | |
| **KAPI** | **Kappang** | **5.95** | **207** | Pn | **Pn** | **19 52 43.9** | **+1.0** |
| **BKSI** | **Bulukumba** | **6.08** | **202** | P | **Pn** | **19 52 46.9** | **+2.4** |
| **DAV** | **Davao City (W)** | **7.39** | **25** | Pn | Pn | 19 52 56.1 | -5.8 |
| **SIJI** | **Sorong** | **8.92** | **98** | P | **Pn** | **19 53 22.6** | **+0.3** |
| | 0.6nm,0.3s,baz=240,slow=20,SNR=4.2 | | | | | | |
| **MTN** | **Manton Dam** | **15.69** | **147** | | **Pn** | **19 54 46.7** | **-2.1** |
| MTN | | | | IAmb | IAmb | 19 55 15.8 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **17.10** | **159** | P | **P** | **19 55 05.2** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **18.59** | **170** | P | **P** | **19 55 21.2** | **0.0** |
| | comp=Z,0.7nm,0.3s,baz=9.8,slow=8.3,SNR=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.59** | **170** | P | **P** | **19 55 20.8** | **-0.4** |
| FITZ | | | | IAmb | IAmb | 19 55 27.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.29** | **151** | P | **P** | **19 56 09.2** | **-0.4** |
| | comp=Z,3.0nm,0.6s,baz=347,slow=8.9,SNR=4.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 59 51.3** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=337,slow=2.0,SNR=1.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **156** | PcP | **PcP** | **19 59 58.1** | **-0.8** |
| | comp=Z,0.6nm,0.3s,baz=349,slow=2.2,SNR=8.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.26** | **309** | P | **P** | **19 57 05.3** | **+2.0** |
| | comp=Z,0.9nm,0.8s,baz=128,slow=7.3,SNR=5.0 | | | | | | |
| **CHTO** | **Chiang Mai** | **29.47** | **310** | | **P** | **19 57 05.4** | **+0.3** |
| CHTO | | | | IAmb | IAmb | 19 57 08.4 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **41.72** | **317** | P | **P** | **19 58 51.8** | **+2.0** |
| **LSA** | **Lhasa** | **41.72** | **317** | P | **P** | **19 58 52.0** | **+2.2** |
| **LSA** | **Lhasa** | **41.72** | **317** | P | **P** | **19 58 51.8** | **+2.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **42.77** | **311** | *eP* | **P** | **19 58 59.4** | **+1.2** |
| **TAPN** | **Taplejung** | **42.80** | **312** | *eP* | **P** | **19 58 59.3** | **+0.9** |
| **RAMN** | **Ramife** | **43.42** | **311** | *eP* | **P** | **19 59 04.7** | **+1.3** |
| | comp=Z,12nm,0.5s | | | | | | |
| **GTA** | **Gaotai** | **44.04** | **335** | *eP* | **P** | **19 59 09.5** | **+1.5** |
| GTA | | | | pP | pP | 19 59 13.8 | -31 |
| GTA | | | | sP | pwP | 19 59 17.0 | -27 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **JIRN** | **Jiri** | **44.10** | **311** | *eP* | **P** | **19 59 09.9** | **+0.9** |
| **GUN** | **Gumba** | **44.47** | **311** | *eP* | **P** | **19 59 12.5** | **+0.7** |
| | comp=Z,18nm,0.6s | | | | | | |
| **PKI** | **Pulchoki** | **44.65** | **310** | *eP* | **P** | **19 59 13.5** | **+0.3** |
| **PKIN** | **Phulchoki** | **44.66** | **310** | *eP* | **P** | **19 59 13.6** | **+0.3** |
| **KKN** | **Kakani** | **44.86** | **311** | *eP* | **P** | **19 59 15.6** | **+0.8** |
| **DMN** | **Daman** | **44.90** | **310** | *eP* | **P** | **19 59 16.1** | **+1.0** |
| **GKN** | **Gorkha** | **45.45** | **311** | *eP* | **P** | **19 59 19.8** | **+0.4** |
| | comp=Z,9.5nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **46.13** | **310** | *eP* | **P** | **19 59 25.5** | **+0.7** |
| **DANN** | **Dangsing** | **46.30** | **310** | *eP* | **P** | **19 59 26.7** | **+0.5** |
| **PYUN** | **Piuthan** | **46.76** | **310** | *eP* | **P** | **19 59 30.3** | **+0.6** |
| | comp=Z,23nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **49.32** | **346** | P | **P** | **19 59 49.7** | **+0.9** |
| SONM | | | | PcP | **PcP** | **20 01 07.9** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=160,slow=9.1,SNR=7.7 | | | | | | |
| | comp=Z,0.4nm,0.6s,baz=174,slow=4.1,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **49.32** | **346** | P | **P** | **19 59 49.2** | **+0.3** |
| **MK31** | **Makanchi Array** | **58.03** | **329** | P | **P** | **20 00 52.4** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 20 00 55.5 | |
| | comp=Z,1.7nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.03** | **329** | P | **P** | **20 00 52.1** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=131,slow=8.5,SNR=17 | | | | | | |
| MKAR | | | | PcP | **PcP** | **20 01 40.1** | **-2.0** |
| | comp=Z,0.9nm,0.6s,baz=139,slow=5.0,SNR=6.7 | | | | | | |
| **MAKZ** | **Makanchi** | **58.20** | **328** | P | **P** | **20 00 53.3** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 20 00 57.5 | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **60.11** | **321** | P | **P** | **20 01 06.9** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=166,slow=4.2,SNR=4.8 | | | | | | |
| **AAK** | **Ala-Archa** | **60.11** | **321** | IAmb | IAmb | 20 01 08.3 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **KBL** | **Kabul** | **60.29** | **310** | P | **P** | **20 01 08.6** | **+0.5** |
| **GAR** | **Garm** | **61.17** | **315** | P | **P** | **20 01 13.5** | **-0.4** |
| GAR | | | | IAmb | IAmb | 20 01 15.6 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.39** | **330** | P | **P** | **20 01 21.1** | **-0.5** |
| | comp=Z,0.5nm,0.3s,baz=144,slow=6.0,SNR=2.2 | | | | | | |
| **KURK** | **Kurchatov** | **62.40** | **330** | P | **P** | **20 01 21.3** | **-0.3** |
| KURK | | | | IAmb | IAmb | 20 01 21.7 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **71.32** | **2** | P | **P** | **20 02 16.6** | **-1.0** |
| TIXI | | | | IAmb | IAmb | 20 02 17.9 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **89.99** | **25** | P | **P** | **20 03 55.5** | **-1.4** |
| | comp=Z,0.3nm,0.5s,baz=261,slow=5.0,SNR=4.6 | | | | | | |

*KRNET* ***29*** *20:00:52.7±0.1,43.28°N×80.45°E,mb2.7*

*NNC* ***29*** *20:00:53.8±0.9,43.11°N×80.41°E,h0km,mb2.9,mpv3.1, Error ellipse: s-maj=6.5km s-min=3.5km az=159.0*

*SOME* ***29*** *20:00:55.0,43.08°N×80.40°E,h25km*

**ISC 29 20:00:54.5±1.9,43.13°N±0.04°×80.37°E±0.06°,h2km±11km, n43,σ1ˢ13/75,18C-1D,Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHLS** | **Shalkode** | **0.67** | **273** | *eP* | Pg | 20 01 03.0 | -4.4 |
| | 17nm,0.1s | | | | | | |
| SHLS | | | | *eS* | **Sg** | **20 01 09.0** | **-7.0** |
| | 143nm,0.1s | | | | | | |
| **PDGK** | **Podgornoye** | **0.68** | **288** | P | **Pg** | **20 01 08.1** | **+0.6** |
| | 9.2nm,0.1s | | | | | | |
| PDGK | | | | S | **Sg** | **20 01 17.5** | **+1.3** |
| | 43nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **0.68** | **288** | ⇑P | **Pg** | **20 01 07.9** | **+0.4** |
| | 4.1nm,0.5s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **20 01 18.0** | **-1.0** |
| | 34nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **0.99** | **272** | *eP* | **Pg** | **20 01 13.7** | **+0.2** |
| | 7.4nm,0.1s | | | | | | |
| UZB | | | | *eS* | **Sg** | **20 01 27.0** | **+0.7** |
| | 70nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **0.99** | **272** | P | **Pg** | **20 01 13.5** | **0.0** |
| | 7.4nm,0.1s | | | | | | |
| UZB | | | | S | **Sg** | **20 01 27.0** | **+0.7** |
| | 70nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.28** | **341** | *eP* | **Pn** | **20 01 19.2** | **-0.3** |
| | 7.8nm,0.1s | | | | | | |
| DJR | | | | *eS* | **Sn** | **20 01 36.9** | **-0.5** |
| | 23nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.28** | **341** | P | **Pn** | **20 01 19.2** | **-0.3** |
| | 7.8nm,0.1s | | | | | | |
| DJR | | | | S | **Sn** | **20 01 36.9** | **-0.5** |
| | 23nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **1.28** | **286** | *eP* | **Pn** | **20 01 18.9** | **-0.7** |
| | 24nm,0.2s | | | | | | |
| KPKS | | | | *eS* | **Sg** | **20 01 36.1** | **+0.5** |
| | 84nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **1.42** | **272** | *eP* | **Pn** | **20 01 21.0** | **-0.5** |
| | 16nm,0.1s | | | | | | |
| ZHN | | | | *eS* | **Sb** | **20 01 39.8** | **-0.6** |
| **ZHN** | **Zhinishke** | **1.42** | **272** | P | **Pn** | **20 01 21.0** | **-0.5** |
| | 16nm,0.1s | | | | | | |
| ZHN | | | | S | **Sb** | **20 01 39.8** | **-0.6** |
| **SATY** | **Saty** | **1.44** | **268** | *eP* | **Pb** | **20 01 22.0** | **-0.2** |
| | 9.4nm,0.7s | | | | | | |
| SATY | | | | *eS* | **Sg** | **20 01 41.4** | **+0.6** |
| | 99nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.44** | **268** | P | **Pb** | **20 01 22.0** | **-0.2** |
| | 9.4nm,0.7s | | | | | | |
| SATY | | | | S | **Sg** | **20 01 41.4** | **+0.6** |
| | 99nm,0.2s | | | | | | |
| **KNOS** | **Konyrlen** | **1.50** | **325** | *eP* | **Pb** | **20 01 23.0** | **-0.3** |
| | 19nm,0.3s | | | | | | |
| KNOS | | | | *eS* | **Sb** | **20 01 43.2** | **+0.2** |
| | 3.4nm,0.4s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.59** | **247** | ⇑*iP* | **Pb** | **20 01 24.2** | **-0.5** |
| | baz=43 | | | | | | |
| PRZ | | | | ⇑*iS* | **Sg** | **20 01 46.4** | **+0.9** |
| | baz=43 | | | | | | |
| **KURS** | **Kuram** | **1.65** | **283** | *eP* | **Pg** | **20 01 26.2** | **+0.1** |
| | 1.7nm,0.1s | | | | | | |
| KURS | | | | *eS* | **Sg** | **20 01 48.7** | **+1.2** |
| | 24nm,0.6s | | | | | | |
| **BLB** | **Baldybastay** | **1.68** | **306** | *eP* | **Pb** | **20 01 26.3** | **0.0** |
| | 18nm,0.1s | | | | | | |
| BLB | | | | *eS* | **Sg** | **20 01 48.7** | **+0.1** |
| | 74nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **1.68** | **306** | P | **Pb** | **20 01 26.3** | **0.0** |
| | 18nm,0.1s | | | | | | |
| BLB | | | | S | **Sg** | **20 01 48.7** | **+0.1** |
| | 74nm,0.3s | | | | | | |
| **ANVS** | **Anan'yevo** | **2.02** | **261** | ⇑*eP* | **Pn** | **20 01 29.9** | **+0.1** |
| | baz=57 | | | | | | |
| ANVS | | | | ⇑*iS* | **Sb** | **20 01 57.6** | **0.0** |
| | baz=57 | | | | | | |
| **ARXS** | **Arharly** | **2.14** | **301** | *eP* | **Pb** | **20 01 33.1** | **-1.0** |
| | 2.5nm,0.1s | | | | | | |
| ARXS | | | | *eS* | **Sb** | **20 02 00.5** | **-0.7** |
| | 26nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.28** | **342** | *eP* | **Pb** | **20 01 36.0** | **-0.4** |
| | 5.9nm,0.1s | | | | | | |
| KAPS | | | | *eS* | **Sb** | **20 02 05.3** | **+0.2** |
| | 20nm,0.4s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.28** | **342** | Pg | **Pb** | **20 01 36.0** | **-0.4** |
| | 5.9nm,0.1s | | | | | | |
| KAPS | | | | Lg | Lg | 20 02 05.3 | |
| | 20nm,0.4s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.36** | **235** | ⇑*iP* | **Pn** | **20 01 35.5** | **+0.8** |
| | baz=33 | | | | | | |
| TARG | | | | ⇑*iS* | **Sb** | **20 02 07.2** | **-0.5** |
| | baz=33 | | | | | | |
| **MDOK** | **Medeo** | **2.43** | **272** | *eP* | **Pb** | **20 01 38.3** | **-0.8** |
| | 1.6nm,0.2s | | | | | | |
| MDOK | | | | *eS* | **Sb** | **20 02 09.8** | **+0.2** |
| | 9.5nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.43** | **272** | Pg | **Pb** | **20 01 38.3** | **-0.8** |
| | 1.6nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 20 02 09.8 | |
| | 9.5nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.51** | **269** | *eP* | **Pb** | **20 01 39.9** | **-0.7** |
| | 1.7nm,0.2s | | | | | | |
| TNSS | | | | *eS* | **Sb** | **20 02 12.3** | **+0.2** |
| | 6.1nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.51** | **269** | Pg | **Pb** | **20 01 39.9** | **-0.7** |
| | 1.7nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 20 02 12.3 | |
| | 6.1nm,0.3s | | | | | | |
| **KDJ** | **Kajisay** | **2.56** | **248** | ⇑*eP* | **Pn** | **20 01 37.1** | **-0.1** |
| | baz=46 | | | | | | |
| KDJ | | | | ⇑*iS* | **Sb** | **20 02 10.8** | **-2.4** |
| | baz=46 | | | | | | |
| **CHKK** | **Chushkaly** | **2.57** | **288** | *eP* | **Pb** | **20 01 41.1** | **-0.2** |
| | 1.0nm,0.1s | | | | | | |
| CHKK | | | | *eS* | **Sb** | **20 02 14.1** | **+0.8** |
| | 9.5nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **2.57** | **288** | Pg | **Pb** | **20 01 41.1** | **-0.2** |
| | 1.0nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 20 02 14.1 | |
| | 9.5nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **2.75** | **284** | *eP* | **Pb** | **20 01 43.5** | **-1.0** |
| | 0.8nm,0.2s | | | | | | |
| KTBS | | | | *eS* | **Sb** | **20 02 18.1** | **-0.6** |
| | 13nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **2.75** | **284** | Pg | **Pb** | **20 01 43.5** | **-1.0** |
| | 0.8nm,0.2s | | | | | | |
| KTBS | | | | Lg | Lg | 20 02 18.1 | |
| | 13nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **2.89** | **271** | *eP* | **Pb** | **20 01 46.6** | **-0.2** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | *eS* | **Sb** | **20 02 23.5** | **+0.9** |
| | 11nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **2.89** | **271** | Pg | **Pb** | **20 01 46.6** | **-0.2** |
| | 0.7nm,0.1s | | | | | | |
| MTBS | | | | Lg | Lg | 20 02 23.5 | |
| | 11nm,0.4s | | | | | | |
| **KUU** | **Kurty** | **3.03** | **286** | *eP* | **Pb** | **20 01 48.7** | **-0.6** |
| | 0.7nm,0.2s | | | | | | |
| KUU | | | | *eS* | **Sb** | **20 02 27.2** | **+0.4** |
| | 7.4nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.03** | **286** | Pg | **Pb** | **20 01 48.7** | **-0.6** |
| | 0.7nm,0.2s | | | | | | |
| KUU | | | | Lg | Lg | 20 02 27.2 | |
| | 7.4nm,0.5s | | | | | | |
| **ULHL** | **Ulahol** | **3.17** | **255** | ⇑*iP* | **Pn** | **20 01 46.0** | **+0.3** |
| | baz=53 | | | | | | |
| ULHL | | | | ⇑*iS* | **Sn** | **20 02 24.7** | **+0.5** |
| | baz=53 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.32** | **260** | ⇑*iP* | **Pn** | **20 01 48.0** | **+0.3** |
| | baz=58 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sn** | **20 02 28.8** | **+0.9** |
| | baz=58 | | | | | | |
| **DGS** | **Degeres** | **3.37** | **274** | *eP* | **Pb** | **20 01 55.5** | **+0.5** |
| | 0.7nm,0.4s | | | | | | |
| DGS | | | | *eS* | **Sb** | **20 02 38.9** | **+2.5** |
| | 7.0nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.37** | **274** | Pg | **Pb** | **20 01 55.5** | **+0.5** |
| | 0.7nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 20 02 38.9 | |
| | 7.0nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.47** | **281** | *eP* | **Pb** | **20 01 57.1** | **+0.4** |
| | 0.3nm,0.1s | | | | | | |
| KRBS | | | | *eS* | **Sb** | **20 02 41.8** | **+2.5** |
| | 4.7nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **3.47** | **281** | Pg | **Pb** | **20 01 57.1** | **+0.4** |
| | 0.3nm,0.1s | | | | | | |
| KRBS | | | | Lg | Lg | 20 02 41.8 | |
| | 4.7nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **3.85** | **17** | ⇑Sn | **Sn** | **20 02 39.5** | **-1.2** |
| | 0.4nm,0.4s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 20 02 54.7 | |
| | 0.9nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **3.91** | **20** | ⇑Pn | **Pn** | **20 01 56.7** | **+1.0** |
| | 0.1nm,0.2s,baz=201,slow=12,SNR=6.4 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **20 02 42.4** | **+0.2** |
| | 1.2nm,0.5s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 20 02 55.6 | |
| | 0.3nm,0.2s,baz=199,slow=28,SNR=3.5 | | | | | | |

*IDC* ***29*** *20:01:16.6±5.5,40.85°N×142.10°E,h57km±61km,mb3.2/4, mb1 3.3/5,mb1mx3.0/64,mbtmp3.4/5,ML2.9/1,Error ellipse: s-maj=69.4km s-min=30.6km az=76.0*

*JMA* ***29*** *20:01:16.2±0.1,40.91°N×142.15°E,h49km±2km,M3.2*

**ISC 29 20:01:16.6±1.2,40.89°N±0.04°×142.07°E±0.08°,h54km±11km, n18,σ0ˢ60/28,mb3.4/4,1C-3D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JARK** | **Aomorirokkasho** | **0.54** | **282** | ⇓P | **Pn** | **20 01 28.6** | **+0.1** |
| JARK | | | | S | **Sn** | **20 01 37.3** | **+0.1** |
| **JAHD** | **Aomorihigashid** | **0.66** | **304** | P | **Pn** | **20 01 30.1** | **+0.1** |
| **JANG** | **Nango** | **0.67** | **219** | ⇓P | **Pn** | **20 01 30.2** | **+0.1** |
| JANG | | | | S | **Sn** | **20 01 39.9** | **0.0** |
| **JKEN** | **Kujiedanarisaw** | **0.74** | **202** | ⇑P | **Pn** | **20 01 30.9** | **-0.1** |
| JKEN | | | | S | **Sn** | **20 01 41.6** | **+0.2** |
| **JTM** | **Tenmabayashi** | **0.76** | **262** | ⇓P | **Pn** | **20 01 31.5** | **+0.2** |
| JTM | | | | S | **Sn** | **20 01 42.3** | **+0.3** |
| **JOT** | **Ohata** | **0.91** | **303** | P | **Pn** | **20 01 33.2** | **0.0** |
| JOT | | | | S | **Sn** | **20 01 45.4** | **0.0** |
| **JKB** | **Kayabe** | **1.26** | **322** | P | **Pn** | **20 01 37.8** | **-0.1** |
| JKB | | | | S | **Sn** | **20 01 53.3** | **-0.5** |
| **JAH** | **Hinai** | **1.30** | **238** | P | **Pn** | **20 01 39.1** | **+0.7** |
| JAH | | | | S | **Sn** | **20 01 55.9** | **+1.2** |
| **JSR** | **Shiriuchi** | **1.40** | **298** | P | **Pn** | **20 01 40.3** | **+0.6** |
| **JOM** | **Ohasama** | **1.54** | **203** | P | **Pn** | **20 01 42.3** | **+0.6** |
| JOM | | | | S | **Sn** | **20 02 00.7** | **+0.2** |
| **JIW** | **Iwasaki** | **1.59** | **260** | P | **Pn** | **20 01 43.4** | **+1.0** |
| **JNB** | **Noboribetsu** | **1.75** | **334** | P | **Pn** | **20 01 44.6** | **0.0** |
| JNB | | | | S | **Sn** | **20 02 05.5** | **-0.2** |
| **JYM2** | **Yakumo 2** | **1.77** | **314** | P | **Pn** | **20 01 45.5** | **+0.8** |
| **ASAJ** | **Asahikawa** | **3.25** | **7** | P | **Pn** | **20 02 05.8** | **+0.8** |
| | 0.9nm,0.3s,baz=201,slow=12,SNR=11 | | | | | | |
| ASAJ | | | | S | **Sn** | **20 02 43.9** | **+1.5** |
| | 0.3nm,0.3s,baz=352,slow=24,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.60** | **299** | P | **P** | **20 09 07.3** | **-0.1** |
| | 0.1nm,0.4s,baz=83,slow=9.4,SNR=6.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.12** | **305** | P | **P** | **20 09 19.1** | **-0.3** |
| | 0.5nm,1.0s,baz=86,slow=7.1,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.95** | **188** | P | **P** | **20 11 23.3** | **-0.8** |
| | 0.4nm,0.8s,baz=6.5,slow=7.2,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **65.65** | **332** | P | **P** | **20 11 54.7** | **-0.1** |
| | 0.6nm,0.5s,baz=45,slow=8.4,SNR=3.7 | | | | | | |

**IDC 29 20:04:26.6±2.6,20.19S×177.26W,h0km,mb3.6/3, mb1 3.9/4,mb1mx3.6/29,mbtmp3.8/4,ML4.0/1,Error ellipse: s-maj=60.5km s-min=49.4km az=125.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **18.66** | **194** | P | P | 20 08 46.1 | +0.1 |
| | 0.4nm,0.3s,baz=18,slow=9.4,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **38.55** | **244** | P | P | 20 11 50.3 | -0.9 |
| | 0.7nm,0.5s,baz=53,slow=10,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **45.27** | **256** | P | P | 20 12 46.2 | -0.1 |
| | 0.8nm,0.8s,baz=98,slow=8.0,SNR=12 | | | | | | |
| **WRA** | **Warrnngga Arr** | **45.34** | **262** | P | P | 20 12 47.1 | +0.3 |
| | 0.5nm,0.8s,baz=96,slow=6.7,SNR=6.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.74** | **350** | PKP | PKPdf | 20 23 35.1 | -0.2 |
| | 1.3nm,0.8s,baz=75,slow=1.4,SNR=3.7 | | | | | | |

**JMA 29 20:17:56.7±0.1,24.06N×123.68E,h25km±1km,M1.6, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HATJ** | **Hateruma jima** | **0.11** | **92** | P | Pb | 20 18 01.3 | -0.2 |
| HATJ | | | | S | Sb | 20 18 04.1 | -0.6 |
| **IRIF** | **Iriomote-Funau** | **0.28** | **9** | P | Pb | 20 18 03.2 | -0.2 |
| IRIF | | | | S | Sb | 20 18 07.8 | -0.2 |
| **JKRS** | **Kuro-shima** | **0.35** | **59** | P | Pb | 20 18 04.4 | -0.1 |
| JKRS | | | | S | Sb | 20 18 09.6 | -0.2 |
| **JIJ** | **Ishigaki jima** | **0.52** | **54** | P | Pb | 20 18 06.8 | -0.5 |
| JIJ | | | | S | Sb | 20 18 14.1 | -0.3 |
| **JISG** | **Ishigakijimahi** | **0.78** | **48** | P | Pb | 20 18 11.1 | -0.5 |
| JISG | | | | S | Sb | 20 18 21.6 | -0.2 |
| **JTJ** | **Tarama** | **1.10** | **58** | P | Pb | 20 18 16.8 | -0.2 |
| JTJ | | | | *eS* | Sb | 20 18 31.4 | +0.5 |

**TAP 29 20:18:15.2,24.14N×121.80E,h26km,ML1.4,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NACB** | **Ninganchiao** | **0.19** | **279** | *eP* | Pb | 20 18 21.2 | +0.4 |
| | baz=279 | | | | | | |
| NACB | | | | *eS* | Sb | 20 18 25.7 | +1.0 |
| | baz=279 | | | | | | |
| **TWD** | **Chiawan** | **0.20** | **252** | *eP* | Pb | 20 18 21.3 | +0.4 |
| | baz=251 | | | | | | |
| TWD | | | | *eS* | Sb | 20 18 25.6 | +0.9 |
| | baz=251 | | | | | | |
| **ENA** | **Nanau** | **0.29** | **349** | *eP* | Pb | 20 18 22.7 | +0.6 |
| | baz=350 | | | | | | |
| ENA | | | | *eS* | Sn | 20 18 28.1 | -1.2 |
| | baz=350 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.30** | **282** | P | Pb | 20 18 22.8 | +0.5 |
| | baz=282 | | | | | | |
| ETLH | | | | S | Sb | 20 18 28.4 | +1.2 |
| | baz=282 | | | | | | |
| **EWUT** | **Wuta** | **0.30** | **356** | *eP* | Pb | 20 18 22.3 | 0.0 |
| | baz=355 | | | | | | |
| EWUT | | | | *eS* | Sb | 20 18 27.7 | +0.6 |
| | baz=355 | | | | | | |
| **LATG** | **Datong** | **0.47** | **327** | *eP* | Pn | 20 18 25.7 | -0.6 |
| | baz=327 | | | | | | |
| LATG | | | | *eS* | Sn | 20 18 33.1 | -0.7 |
| | baz=327 | | | | | | |
| **ESL** | **Shilin** | **0.47** | **226** | *eP* | Pn | 20 18 25.6 | -0.7 |
| | baz=225 | | | | | | |
| ESL | | | | *eS* | Sn | 20 18 33.0 | -0.7 |
| | baz=225 | | | | | | |
| **NNSB** | **Datong** | **0.48** | **307** | *eP* | Pb | 20 18 25.6 | +0.5 |
| | baz=306 | | | | | | |
| NNSB | | | | *eS* | Sn | 20 18 33.6 | -0.5 |
| | baz=306 | | | | | | |
| **NNS** | **Nan Shan** | **0.49** | **307** | *eP* | Pb | 20 18 25.6 | +0.2 |
| | baz=307 | | | | | | |
| NNS | | | | *eS* | Sb | 20 18 33.1 | +0.8 |
| | baz=307 | | | | | | |
| **FUSS** | **Fushou** | **0.52** | **282** | *eP* | Pb | 20 18 26.4 | +0.4 |
| | baz=281 | | | | | | |
| FUSS | | | | *eS* | Sn | 20 18 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BNSI | Bone | 6.92 | 321 | P | Pn | 20 26 05.7 | +2.6 |
| | 0.1nm26nm,1.2s | | | | | | |
| SAUI | Saumlaki | 6.99 | 75 | P | Pn | 20 26 12.2 | +8.2 |
| | 0.3nm59nm,0.9s | | | | | | |
| KNRA | Kununurra | 7.16 | 145 | P | Pn | 20 26 12.9 | +6.5 |
| MTN | Manton Dam | 7.18 | 115 | P | Pn | 20 26 14.5 | +7.8 |
| FITZ | Fitzroy Crossi | 8.30 | 172 | P | Pn | 20 26 25.6 | +3.6 |
| | 1.0nm,0.3s,baz=4.0,slow=9.3,SNR=54 | | | | | | |
| FITZ | | | | S | Sn | 20 27 53.9 | -0.8 |
| | 4.6nm,0.3s,baz=295,slow=19,SNR=10 | | | | | | |
| FITZ | Fitzroy Crossi | 8.30 | 172 | P | Pn | 20 26 26.1 | +4.0 |
| KDU | Kakadu | 8.34 | 111 | P | Pn | 20 26 30.8 | +8.2 |
| | 8.2nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 13.85 | 138 | P | Pn | 20 27 40.6 | +2.5 |
| | 0.7nm,0.3s,baz=316,slow=14,SNR=26 | | | | | | |
| WRA | | | | S | Sn | 20 30 08.1 | -2.6 |
| | 2.2nm,0.3s,baz=308,slow=22,SNR=13 | | | | | | |
| ASAR | Alice Springs | 16.45 | 148 | P | P | 20 28 15.2 | +0.4 |
| | 0.9nm,0.3s,baz=320,slow=12,SNR=61 | | | | | | |
| ASAR | | | | S | Sn | 20 31 11.6 | -2.4 |
| | 0.5nm,0.3s,baz=314,slow=21,SNR=8.5 | | | | | | |
| KRJI | Kerinci | 24.13 | 287 | P | P | 20 29 34.8 | -2.3 |
| CMAR | Chiang Mai Arr | 37.75 | 318 | P | P | 20 31 36.4 | -0.5 |
| | 0.4nm,0.3s,baz=149,slow=7.0,SNR=4.6 | | | | | | |
| ODAN | Odare | 51.24 | 316 | *eP* | P | 20 33 24.3 | -0.6 |
| | 6.2nm,0.4s | | | | | | |
| TAPN | Taplejung | 51.34 | 317 | *eP* | P | 20 33 24.4 | -1.3 |
| RAMN | Ramite | 51.83 | 316 | *eP* | P | 20 33 28.5 | -0.8 |
| JIRN | Jiri | 52.57 | 316 | *eP* | P | 20 33 33.7 | -1.2 |
| | 4.2nm,0.6s | | | | | | |
| GUN | Gumba | 52.94 | 316 | *eP* | P | 20 33 36.6 | -1.0 |
| PKI | Pulchoki | 53.05 | 316 | *eP* | P | 20 33 36.7 | -1.7 |
| | 7.4nm,0.5s | | | | | | |
| PKIN | Phulchoki | 53.06 | 316 | *eP* | P | 20 33 36.6 | -1.8 |
| | 5.6nm,0.4s | | | | | | |
| GKN | Gorkha | 53.85 | 315 | *eP* | P | 20 33 42.6 | -1.5 |
| | 7.4nm,0.5s | | | | | | |
| KOLN | Koldanda | 54.43 | 315 | *eP* | P | 20 33 46.8 | -1.6 |
| DANN | Dangsing | 54.67 | 315 | *eP* | P | 20 33 48.7 | -1.6 |
| | 12nm,0.5s | | | | | | |
| PYUN | Piuthan | 55.06 | 314 | *eP* | P | 20 33 51.4 | -1.6 |
| | 3.9nm,0.4s | | | | | | |
| SONM | Songino Array | 59.61 | 346 | P | P | 20 34 25.2 | +0.6 |
| | 0.4nm,0.6s,baz=160,slow=6.4,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 67.76 | 330 | P | P | 20 35 18.1 | -0.1 |
| | 0.5nm,0.5s,baz=133,slow=6.9,SNR=13 | | | | | | |
| ZALV | Zalesovo Beam | 71.84 | 337 | P | P | 20 35 42.6 | -0.5 |
| | 0.5nm,0.4s,baz=138,slow=6.9,SNR=2.8 | | | | | | |
| PLCA | Paso Flores | 127.81 | 166 | PKP | PKPdf | 20 43 24.9 | -1.7 |
| | 0.6nm,0.5s,baz=271,slow=6.5,SNR=3.4 | | | | | | |

*SOF* ***29*** *20:28:10.5,41′.97N×23′.26E,h4km,MD2.7*
*ATH* ***29*** *20:28:11.3,41′.90N×23′.23E,h23km±4km,ML2.5/3,Error ellipse: s-maj=5.5km s-min=2.1km az=162.0*
*BEO* ***29*** *20:28:12.1±0.7,41′.97N×23′.18E,h0km,ML2.3/4*
*THE* ***29*** *20:28:12.3,41′.86N×23′.23E,h0km±3km,ML2.4/6,Error ellipse: s-maj=3.4km s-min=1.0km az=342.0*

**ISC 29 20:28:10.7±0.9, 41°90′N±0′.02×23°12′E±0′.02, h10km±7km, n45, σ1°35/67, 10C-6D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KKB | Krupnik | 0.04 | 223 | *i* Pg | Pg | 20 28 13.9 | +1.2 |
| MMB | Musomiste | 0.55 | 124 | *i* Pg | Pg | 20 28 21.6 | +0.2 |
| VAY | Valandovo | 0.71 | 216 | *e*Pg | Pn | 20 28 26.4 | -0.5 |
| VAY | | | | *e*Sg | Sn | 20 28 37.0 | -0.9 |
| VAY | Valandovo | 0.71 | 216 | *i* Pg | Pn | 20 28 26.4 | -0.5 |
| VAY | | | | *i* Sg | Sn | 20 28 37.1 | -0.9 |
| VAY | | | | *e*Lg | Lg | 20 28 37.3 | |
| | comp=E,128nm,0.6s | | | | | | |
| VTS | Vitosha | 0.72 | 7 | ⇑P | Pg | 20 28 23.4 | -1.4 |
| VTS | | | | ⇑S | Sg | 20 28 32.2 | -2.0 |
| VTS | Vitosha | 0.72 | 7 | *e*Pg | Pg | 20 28 23.4 | -1.4 |
| VTS | | | | *e*Sg | Sg | 20 28 31.6 | -2.6 |
| VTS | Vitosha | 0.72 | 7 | ⇑*i* Pg | Pg | 20 28 23.4 | -1.4 |
| VTS | | | | *i* Sg | Sg | 20 28 32.1 | -2.1 |
| VTS | Vitosha | 0.72 | 7 | *i* Pg | Pg | 20 28 23.3 | -1.4 |
| STIP | Stip | 0.73 | 254 | *i* Pg | Pg | 20 28 22.1 | -2.7 |
| STIP | | | | *i* Sg | Sg | 20 28 30.5 | -3.9 |
| KNT | Kendrikon | 0.76 | 193 | P | Pb | 20 28 26.4 | +0.4 |
| KNT | | | | S | Sb | 20 28 36.9 | +0.5 |
| | comp=E,145nm,0.1s | | | | | | |
| KNT | Kendrikon | 0.76 | 193 | P | Pb | 20 28 26.4 | +0.4 |
| KNT | | | | S | Sb | 20 28 36.9 | +0.5 |
| BOSS | Bosilegrad | 0.76 | 321 | *e*Pg | Pg | 20 28 25.5 | 0.0 |
| BOSS | | | | *e*Sg | Sg | 20 28 36.0 | +0.5 |
| NVR | Nevrokopi | 0.78 | 135 | P | Pg | 20 28 25.4 | -0.4 |
| NVR | | | | S | Sg | 20 28 35.3 | -0.6 |
| | comp=E,495nm,0.1s | | | | | | |
| NVR | Nevrokopi | 0.78 | 135 | P | Pg | 20 28 25.4 | -0.4 |
| NVR | | | | S | Sg | 20 28 35.5 | -0.4 |
| NVR | | | | AML | AML | 20 28 35.7 | |
| | comp=E,1298μm,0.2s | | | | | | |
| NVR | | | | AML | AML | 20 28 35.9 | |
| | comp=N,641μm,0.2s | | | | | | |
| SRS | Serrai | 0.86 | 156 | P | Pg | 20 28 27.2 | 0.0 |
| SRS | | | | S | Sb | 20 28 39.6 | +0.3 |
| | comp=N,228nm,0.2s | | | | | | |
| SRS | Serrai | 0.86 | 156 | P | Pg | 20 28 27.5 | +0.2 |
| SRS | | | | S | Sb | 20 28 39.6 | +0.3 |
| SRS | | | | AML | AML | 20 28 40.1 | |
| | comp=N,505μm,0.2s | | | | | | |
| SRS | | | | AML | AML | 20 28 41.8 | |
| | comp=E,400μm,0.1s | | | | | | |
| PGB | Panagyurishte | 1.01 | 50 | *i* P | Pg | 20 28 27.8 | -2.4 |
| GRG | Griva | 1.09 | 210 | P | Pn | 20 28 32.7 | +0.6 |
| GRG | | | | S | Sn | 20 28 48.9 | +1.7 |
| SOH | Sokhos | 1.09 | 171 | P | Pn | 20 28 32.1 | 0.0 |
| SOH | | | | S | Sn | 20 28 47.3 | 0.0 |
| | comp=E,190nm,0.6s | | | | | | |
| SOH | Sokhos | 1.09 | 171 | P | Pn | 20 28 32.2 | 0.0 |
| SOH | | | | S | Sn | 20 28 47.7 | +0.4 |
| SOH | | | | AML | AML | 20 28 48.1 | |
| | comp=E,422μm,0.7s | | | | | | |
| SOH | | | | AML | AML | 20 28 49.3 | |
| | comp=N,535μm,0.5s | | | | | | |
| PLD | Plovdiv | 1.20 | 80 | ⇑*i* Pg | Pg | 20 28 33.8 | +0.2 |
| PLD | Plovdiv | 1.20 | 80 | *i* P | Pb | 20 28 32.9 | -0.6 |
| RZN | Rozhen | 1.21 | 100 | *i* P | Pb | 20 28 33.3 | -0.5 |
| KOKK | Kokkinochori, | 1.27 | 148 | P | Pb | 20 28 34.7 | 0.0 |
| KOKK | | | | S | Sb | 20 28 51.2 | +0.2 |
| | comp=N,222nm,0.2s | | | | | | |
| KOKK | Kokkinochori, | 1.27 | 148 | P | Pn | 20 28 34.5 | 0.0 |
| THE | Thessaloniki | 1.27 | 185 | P | Pg | 20 28 35.9 | +0.8 |
| BARS | Barje | 1.33 | 314 | *e*Pg | Pg | 20 28 36.3 | 0.0 |
| BARS | | | | *e*Sg | Sg | 20 28 53.9 | +0.2 |
| BARS | Barje | 1.33 | 314 | *i* Pg | Pg | 20 28 36.3 | 0.0 |
| KVLA | Kavala | 1.35 | 135 | P | Pb | 20 28 36.0 | -0.1 |
| KAVA | Kavala | 1.38 | 130 | P | Pb | 20 28 36.4 | -0.2 |
| MPEP | Malo Peshtene | 1.52 | 17 | *i* P | Pn | 20 28 38.4 | +0.3 |
| KDZ | Kurdzhali | 1.73 | 98 | *i* P | Pn | 20 28 39.8 | -1.2 |
| BLKB | Belogradchik | 1.75 | 349 | ⇓S | Sb | 20 29 05.5 | +0.3 |
| THAS | Thassos island | 1.77 | 137 | P | Pn | 20 28 41.8 | +0.4 |
| DIM | Dimitrovgrad | 1.80 | 84 | *i* P | Pg | 20 28 44.7 | -0.6 |
| RDO | Rodhopi | 1.96 | 112 | P | Pn | 20 28 44.4 | +0.3 |
| RDO | | | | S | Sb | 20 29 11.7 | +0.6 |
| | comp=N,160nm,0.2s | | | | | | |
| PAIG | Paliouri | 2.02 | 168 | P | Pn | 20 28 45.5 | +0.7 |
| BAIL | Bailesti | 2.13 | 4 | ⇑P | Pg | 20 28 52.1 | +0.7 |
| BAIL | | | | ⇑S | Sg | 20 29 18.5 | -0.5 |
| GZR | Gura Zlata | 3.50 | 356 | ⇑P | Pn | 20 29 08.0 | +2.7 |
| GZR | | | | ⇓S | Sn | 20 29 48.1 | +1.2 |
| VOIR | | 3.80 | 21 | ⇓P | Pn | 20 29 10.0 | +0.5 |
| BZS | Buzias | 3.87 | 344 | ⇑P | Pn | 20 29 10.1 | -0.2 |
| BZS | | | | ⇓S | Sb | 20 30 10.1 | +4.1 |
| MLR | Muntele Rosu | 4.13 | 29 | ⇓P | Pn | 20 29 17.5 | +3.4 |
| SIRR | Siria | 4.49 | 347 | ⇓S | Sg | 20 30 31.7 | -3.2 |
| PLOR | Plostina | 4.70 | 32 | ⇑P | Pn | 20 29 22.6 | +0.9 |
| VRI | Vrincioaia | 4.74 | 32 | ⇑P | Pn | 20 29 23.8 | +1.5 |

**TEH 29 20:33:16.3,31°95N×56°39E,h8km,ML3.6,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IBAF | Bafgh | 0.79 | 243 | *e*Pg | Pg | 20 33 31.4 | 0.0 |
| TPRV | Parvadeh(Tabas | 1.10 | 13 | *e*Pg | Pn | 20 33 38.4 | +0.3 |
| TPRV | | | | *e* | | 20 34 05.1 | |
| | comp=Z,13μm,0.5s | | | | | | |
| KHGB | Koh Gabri | 1.58 | 177 | *e*Pg | Pg | 20 33 46.9 | +0.4 |
| KHGB | | | | *e* | | 20 34 17.3 | |
| | comp=Z,5μm,0.5s | | | | | | |
| YZKH | Yazd | 1.58 | 286 | *e*Pg | Pg | 20 33 46.5 | -0.2 |
| IMEH | Mehriz | 1.61 | 250 | *e*Pg | Pg | 20 33 47.4 | +0.2 |
| ICHK | Chekchek | 1.70 | 280 | *e*Pn | Pb | 20 33 48.5 | +0.5 |
| ICHK | | | | *e* | | 20 33 49.7 | |
| | comp=Z,13μm,0.4s | | | | | | |
| TKDS | Koohdasht(Taba | 1.77 | 20 | *e*Pg | Pb | 20 33 49.0 | -0.1 |
| TKDS | | | | *e* | | 20 34 24.6 | |
| | comp=Z,4μm,0.5s | | | | | | |
| TABS | Tabas | 1.80 | 20 | *e*Pg | Pb | 20 33 49.2 | -0.4 |
| TVBK | TV Kerman | 1.99 | 171 | *e*Pg | Pg | 20 33 53.7 | -0.7 |
| KRBR | Kerman | 1.99 | 171 | *e*Pn | Pb | 20 33 53.6 | +0.6 |
| TNSJ | Nastanj | 2.01 | 5 | *e*Pn | Pb | 20 33 53.1 | -0.1 |
| ITEG | Tejag | 2.21 | 64 | *e*Pn | Pb | 20 33 55.3 | -1.3 |
| ITEG | | | | *e* | | 20 34 35.5 | |
| | comp=Z,6μm,0.4s | | | | | | |
| IKOO | Kooshah | 2.27 | 77 | *e*Pn | Pb | 20 33 56.3 | -1.4 |
| ISAD | Sadrabad | 2.30 | 270 | *e*Pn | Pb | 20 33 56.9 | -1.2 |
| ISAD | | | | *e* | | 20 34 34.8 | |
| | comp=Z,2μm,0.5s | | | | | | |
| CHMN | Cheshme madani | 2.31 | 154 | *e*Pn | Pb | 20 33 57.1 | -1.3 |
| CHMN | | | | *e* | | 20 34 34.9 | |
| | comp=Z,3μm,0.4s | | | | | | |
| NGRK | Negar Kerman | 2.32 | 173 | *e*Pn | Pb | 20 33 57.4 | -1.2 |
| NGRK | | | | *e* | | 20 34 36.8 | |
| | comp=Z,5μm,0.6s | | | | | | |
| BSRN | Basiran | 2.33 | 89 | *e*Pn | Pn | 20 33 56.5 | +1.4 |
| ANAR | Anarak | 2.56 | 299 | *e*Pn | Pn | 20 33 59.6 | +1.4 |
| ANAR | | | | *e* | | 20 34 41.4 | |
| | comp=Z,2μm,0.8s | | | | | | |
| AFRZ | Afriz | 2.66 | 56 | *e*Pn | Pn | 20 34 01.0 | +1.4 |
| AFRZ | | | | *e* | | 20 34 50.7 | |
| | comp=Z,2μm,0.4s | | | | | | |
| IMON | Monand | 3.03 | 65 | *e*Pn | Pn | 20 34 07.2 | +2.4 |
| IDAH | Dahanechah | 3.05 | 74 | *e*Pn | Pb | 20 34 08.1 | -2.9 |
| IDAH | | | | *e* | | 20 35 04.2 | |
| | comp=Z,1μm,0.5s | | | | | | |
| NASN | Na'in | 3.14 | 287 | *e*Pn | Pn | 20 34 08.6 | +2.2 |
| NHDN | Nehbandan | 3.17 | 99 | *e*Pn | Pn | 20 34 08.6 | +1.9 |
| KBAM | BAM | 3.33 | 147 | *e*Pn | Pn | 20 34 11.2 | +2.5 |
| KBAM | | | | *e* | | 20 35 09.9 | |
| | comp=Z,2μm,0.6s | | | | | | |
| IRAM | Rameshesh | 3.41 | 269 | *e*Pn | Pn | 20 34 11.6 | +1.6 |
| IZEF | Zefreh | 3.56 | 286 | *e*Pn | Pn | 20 34 14.5 | +2.4 |
| SHRT | Shahrakht | 3.70 | 62 | *e*Pn | Pn | 20 34 15.4 | +1.6 |
| SHRO | Shahrood | 4.04 | 356 | *e*Pn | Pn | 20 34 20.6 | +2.1 |
| KRSH | Karshahi | 4.10 | 300 | *e*Pn | Pn | 20 34 21.4 | +2.0 |
| KLNJ | Kolanjah | 4.20 | 258 | *e*Pn | Pn | 20 34 23.5 | +2.5 |
| ISFB | Sefidab | 4.22 | 306 | *e*Pn | Pn | 20 34 23.0 | +2.0 |
| IKLH | Kolahrood | 4.28 | 290 | *e*Pn | Pn | 20 34 24.1 | +2.1 |
| TBJM | Torbat-e-JAM | 4.66 | 44 | *e*Pn | Pn | 20 34 29.6 | +2.4 |
| TBJM | | | | *e* | | 20 34 46.9 | |
| | comp=Z,524nm,0.3s | | | | | | |
| IPIR | Pirpir | 4.71 | 280 | *e*Pn | Pn | 20 34 30.3 | +2.4 |
| MRVT | Maraveh tapeh | 5.70 | 358 | *e*Pn | Pn | 20 34 44.4 | +3.1 |
| BJRD | Bojnurd | 5.79 | 8 | *e*Pn | Pn | 20 34 45.1 | +2.4 |
| ASAO | Ashtian | 5.92 | 298 | *e*Pn | Pn | 20 34 47.0 | +2.4 |

*MDD* ***29*** *20:50:29.0±0.6,35′.41N×3′.80W,h2km±4km,mb_Lg2.8/7, Error ellipse: s-maj=4.7km s-min=2.7km az=164.0*
*INMG* ***29*** *20:50:30.4±1.6,35′.43N×3′.78W,h17km±6km,ML2.3, Error ellipse: s-maj=4.1km s-min=3.9km az=14.0*
*SFS* ***29*** *20:50:31.0,35′.32N×3′.82W,h34km,ML3.1,ALHUCEMAS (MARRUECOS)*
*CNRM* ***29*** *20:50:33.1,35′.21N×3′.64W,h34km,ml2.6*

**ISC 29 20:50:30.1±1.1, 35°40′N±0′.02×3°75′W±0′.02, h31km±12km, n42, σ1°44/71, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GOG | Mont Gurugu | 0.64 | 106 | P | Pn | 20 50 44.0 | +0.9 |
| GOG | Mont Gurugu | 0.64 | 106 | P | Pb | 20 50 42.7 | -0.2 |
| GOG | | | | S | Sb | 20 50 50.4 | -1.2 |
| EMEL | Melilla | 0.65 | 99 | Pg | Pb | 20 50 42.9 | -0.1 |
| EMEL | | | | Sg | Sb | 20 50 51.8 | -0.1 |
| EALB | Alboran | 0.79 | 47 | Pg | Pn | 20 50 44.1 | -1.0 |
| EALB | | | | Sg | Sn | 20 50 55.9 | 0.0 |
| EALB | | | | *i* Vmb_Lg | | 20 50 56.5 | |
| TAF | Taforalt | 1.24 | 118 | P | Pn | 20 50 52.0 | +0.6 |
| TAF | Taforalt | 1.24 | 118 | P | Pn | 20 50 51.5 | +0.2 |
| TAF | | | | S | Sn | 20 51 06.2 | -0.9 |
| CHEFC | Chefchaouen | 1.34 | 258 | P | Pb | 20 50 56.0 | +1.4 |
| CHEFC | Chefchaouen | 1.34 | 258 | P | Pn | 20 50 53.3 | +0.6 |
| CHEFC | | | | S | Sn | 20 51 08.2 | -1.3 |
| SMIR | Smir Dam | 1.36 | 282 | P | Pb | 20 50 58.0 | +3.0 |
| SMIR | Smir Dam | 1.36 | 282 | P | Pb | 20 50 57.2 | +2.2 |
| SMIR | | | | S | Sn | 20 51 09.9 | -0.1 |
| CEU | Ceuta | 1.41 | 291 | P | Pn | 20 50 51.3 | -2.4 |
| CEU | | | | S | Sn | 20 51 04.7 | -6.6 |
| EMIJ | Mijas | 1.43 | 325 | Pn | Pn | 20 50 53.6 | -0.3 |
| EMIJ | | | | Sn | Sn | 20 51 12.2 | +0.5 |
| ELGU | Los Guajares, | 1.47 | 4 | Pn | Pn | 20 50 55.0 | +0.5 |
| ELGU | | | | Sn | Sn | 20 51 13.5 | +0.8 |
| ELGU | | | | *i* Vmb_Lg | | 20 51 15.8 | |
| EMAL | Malaga-Limoner | 1.47 | 338 | P | Pb | 20 50 56.3 | -0.4 |
| EMAL | | | | S | Sn | 20 51 12.9 | +0.4 |
| EGOR | Sierra Gorda, | 1.73 | 350 | Pn | Pn | 20 50 58.9 | +0.8 |
| EGOR | | | | Sn | Sb | 20 51 21.7 | -1.0 |
| EGOR | | | | *i* Vmb_Lg | | 20 52 15.9 | |
| EJIF | Jimena Fronter | 1.75 | 307 | Pn | Pn | 20 50 59.3 | +1.0 |
| SICH | Sidi Chahed | 1.83 | 225 | P | Pb | 20 51 01.8 | -1.1 |
| SICH | | | | S | Sn | 20 51 21.8 | +0.3 |
| LCRM | LCR | 1.94 | 209 | P | Pb | 20 51 04.0 | -0.9 |
| LCRM | LCR | 1.94 | 209 | P | Pb | 20 51 03.5 | -1.4 |
| LCRM | | | | S | Sb | 20 51 27.9 | -0.9 |
| ENIJ | Nijar | 2.00 | 38 | Pn | Pn | 20 51 01.0 | -0.8 |
| ENIJ | | | | Sn | Sn | 20 51 25.3 | -0.5 |
| ENIJ | | | | *i* Vmb_Lg | | 20 51 26.0 | |
| CZD | Col de Zad | 2.60 | 205 | P | Pn | 20 51 11.4 | +1.2 |
| CZD | | | | S | Sn | 20 51 40.4 | -0.4 |
| MD31 | MD31 | 2.66 | 199 | P | Pn | 20 51 13.2 | +2.3 |
| MD31 | | | | S | Sn | 20 51 41.5 | -0.7 |
| MDT | Midelt | 2.68 | 196 | P | Pn | 20 51 12.3 | +1.2 |
| MDT | | | | S | Sn | 20 51 42.9 | +0.3 |
| ECAB | El Cabril | 2.99 | 334 | Pn | Pn | 20 51 17.3 | +1.9 |
| ECAB | | | | Sn | Sn | 20 51 49.8 | -0.4 |
| ECAB | | | | *i* Vmb_Lg | | 20 52 05.7 | |
| ZHG | ZHG | 3.09 | 232 | P | Pn | 20 51 18.0 | +1.2 |
| ZHG | | | | S | Sn | 20 51 53.1 | +0.4 |
| ETOB | Tobarra | 3.68 | 28 | Pn | Pn | 20 51 27.5 | +2.5 |
| ETOB | | | | Sn | Sn | 20 52 01.4 | +2.3 |
| EGRO | El Granado | 3.69 | 306 | Pn | Pn | 20 51 25.4 | +0.5 |
| EGRO | | | | Sn | Sn | 20 52 05.6 | -1.7 |
| EGRO | | | | *i* Vmb_Lg | | 20 52 13.0 | |
| PVAQ | Vaqueiros | 3.77 | 303 | *e*Pn | Pn | 20 51 26.3 | +0.2 |
| PVAQ | | | | *e*Sn | Sn | 20 52 08.3 | -1.2 |
| PVAQ | | | | A | A | 20 52 14.9 | |
| | 6.1nm,0.7s | | | | | | |
| PVAQ | Vaqueiros | 3.77 | 303 | P | Pn | 20 51 27.4 | +1.2 |
| PVAQ | | | | S | Sn | 20 52 07.2 | -2.3 |
| PBAR | Barrancos | 3.83 | 317 | *e*Sn | Sn | 20 52 10.6 | -0.2 |
| PBAR | | | | A | A | 20 52 19.9 | |
| | 2.9nm,0.5s | | | | | | |
| PBDV | Barranco-do-Ve | 3.85 | 300 | *e*Pn | Pn | 20 51 27.4 | +0.2 |
| PBDV | | | | *e*Sn | Sn | 20 52 09.7 | -1.6 |
| PBDV | | | | A | A | 20 52 14.6 | |
| | 3.8nm,0.3s | | | | | | |
| PCVE | Castro Verde | 4.11 | 304 | *e*Sn | Sn | 20 52 17.6 | -0.2 |
| PCVE | | | | A | A | 20 52 22.8 | |
| | 3.6nm,0.2s | | | | | | |
| EBAD | Badajoz | 4.25 | 323 | Pn | Pn | 20 51 33.3 | +0.6 |
| EBAD | | | | Sn | Sn | 20 52 20.6 | -0.5 |
| EBAD | | | | *i* Vmb_Lg | | 20 52 25.3 | |
| PTEO | Sao Teotonio | 4.55 | 300 | *e*Sn | Sn | 20 52 28.3 | -0.2 |
| PESTR | Estremoz | 4.62 | 320 | *e*Sn | Sn | 20 52 29.4 | -1.1 |
| PESTR | | | | A | A | 20 52 35.2 | |
| | 3.0nm,0.5s | | | | | | |
| EVO | Evora | 4.63 | 314 | P | Pn | 20 51 38.6 | +0.8 |
| EVO | | | | S | Sn | 20 52 28.7 | -1.8 |
| EVO | Evora | 4.63 | 314 | *e*Pn | Pn | 20 51 39.5 | +1.6 |
| EVO | | | | *e*Sn | Sn | 20 52 29.5 | -1.1 |
| EVO | | | | A | A | 20 52 33.2 | |
| | 3.6nm,0.4s | | | | | | |
| PNCL | Nicolau / Gran | 4.70 | 307 | *e*Pn | Pn | 20 51 39.5 | +0.7 |
| PNCL | | | | *e*Sn | Sn | 20 52 30.7 | -1.5 |
| PNCL | | | | A | A | 20 52 36.4 | |
| | 2.8nm,0.8s | | | | | | |
| PMRV | Marv??o | 4.96 | 325 | *e*Sn | Sn | 20 52 38.2 | -0.5 |
| PMRV | | | | A | A | 20 52 50.2 | |
| | 2.4nm,0.5s | | | | | | |
| PMTG | Montargil | 5.12 | 317 | *e*Pn | Pn | 20 51 46.0 | +1.4 |
| OUZM | OUZ | 5.14 | 210 | P | Pn | 20 51 46.7 | +1.6 |
| OUZM | | | | S | Sn | 20 52 43.4 | -0.1 |
| OUK | Oukaimeden | 5.42 | 221 | P | Pn | 20 51 49.6 | +0.5 |

*IDC* ***29*** *20:53:45.9±3.7,23′.89N×123′.40E,h0km,mb3.8/9, mb1 3.9/9,mb1mx3.5/59,mbtmp3.8/9,Error ellipse: s-maj=99.4km s-min=39.3km az=5.0*
*NEIC* ***29*** *20:53:49.6±1.5,23′.88N±0′.03×123′.4E±0′.1,h24km±8km, mb4.0/4,Error ellipse: s-maj=18.9km s-min=3.3km az=97.0*
*NIED* ***29*** *20:53:50.0,23′.85N×123′.38E,h29km,MW3.9,Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁴Nm; Mrr3.58; Mθθ-3.98; Mφφ0.40; Mrθ3.96; Mθφ-2.23; Mφr3.60; Fault plane solution: M₀6.88000×10¹⁴ NP1:φ=50.00000°, δ72.00000°,λ75.00000°. NP2:φ=270.00000°,δ23.00000°, λ128.00000°.*
*JMA* ***29*** *20:53:50.0±0.1,23′.85N×123′.38E,h29km±2km,M3.6*

**ISC 29 20:53:50.1±1.4, 23°89N±0′.07×123°40E±0′.03, h27km±9km, n29, σ0°69/36, mb3.8/10, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HATJ | Hateruma jima | 0.40 | 66 | P | Pb | 20 53 59.2 | +0.3 |
| HATJ | | | | S | Sn | 20 54 05.8 | -1.0 |
| IRIF | Iriomote-Funau | 0.53 | 34 | P | Pn | 20 54 01.3 | -0.7 |
| IRIF | | | | S | Sn | 20 54 09.5 | -0.6 |
| JKRS | Kuro-shima | 0.65 | 58 | P | Pn | 20 54 03.5 | -0.1 |
| JKRS | | | | S | Sn | 20 54 13.2 | +0.2 |
| YOJ | Yonaguni jima | 0.67 | 328 | P | Pn | 20 54 03.5 | -0.4 |
| YOJ | | | | *e*S | Sn | 20 54 12.9 | -0.6 |
| YOJ | Yonaguni jima | 0.67 | 328 | Pn | Pb | 20 54 03.3 | 0.0 |
| JYNG | Yonagunijimaku | 0.70 | 323 | P | Pb | 20 54 03.6 | -0.1 |
| JYNG | | | | *e*S | Sb | 20 54 12.7 | -0.3 |
| JIJ | Ishigaki jima | 0.82 | 55 | P | Pb | 20 54 05.7 | -0.2 |
| JIJ | | | | S | Sn | 20 54 17.0 | -0.2 |
| JISG | Ishigakijimahi | 1.08 | 50 | P | Pn | 20 54 09.6 | +0.1 |
| JISG | | | | *e*S | Sn | 20 54 25.2 | +1.6 |
| JTJ | Tarama | 1.40 | 58 | P | Pb | 20 54 14.7 | -0.9 |
| JTJ | | | | S | Sb | 20 54 33.5 | +0.4 |
| NACB | Ninganchiao | 1.68 | 280 | Pn | Pn | 20 54 17.4 | -0.3 |
| YULB | Yu-li | 1.99 | 256 | Pn | Pn | 20 54 21.5 | -0.6 |
| TATO | Taipei | 2.05 | 302 | Pn | Pn | 20 54 23.2 | +0.4 |
| SSLB | Suanglung | 2.25 | 268 | | Pn | 20 54 26.1 | +0.5 |
| TWG | Pinlang | 2.39 | 244 | Pn | Pn | 20 54 26.4 | -1.2 |
| TPUB | Ta-pu | 2.61 | 258 | | Pn | 20 54 31.6 | +1.0 |
| SONM | Songino Array | 27.46 | 335 | P | P | 20 59 35.2 | +1.2 |
| | 0.3nm,0.6s,baz=148,slow=9.8,SNR=2.6 | | | | | | |
| MKAR | Makanchi Array | 39.97 | 315 | P | P | 21 01 22.0 | -0.3 |
| | 0.3nm,0.5s,baz=98,slow=9.7,SNR=9.6 | | | | | | |
| MKAR | Makanchi Array | 39.97 | 315 | P | P | 21 01 21.8 | -0.4 |
| ZALV | Zalesovo Beam | 41.60 | 326 | P | P | 21 01 34.1 | -1.5 |
| | 0.6nm,0.5s,baz=116,slow=4.8,SNR=3.9 | | | | | | |
| KURK | Kurchatov | 43.62 | 320 | P | P | 21 01 51.5 | -0.6 |
| KURK | | | | IAmb | IAmb | 21 02 07.4 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| KURBB | Kurchatov Arra | 43.64 | 319 | P | P | 21 01 51.8 | -0.4 |
| | comp=Z,0.3nm,0.2s,baz=115,slow=8.7,SNR=2.4 | | | | | | |
| ABKAR | Akbulak array | 55.09 | 314 | P | P | 21 03 20.0 | +0.2 |
| ABKAR | Akbulak array | 55.09 | 314 | P | P | 21 03 19.8 | +0.1 |
| FINES | FINESS Array B | 72.72 | 330 | P | P | 21 05 15.2 | -0.3 |
| | comp=Z,2.3nm,0.9s,baz=63,slow=5.9,SNR=4.3 | | | | | | |
| INK | Inuvik | 72.73 | 22 | P | P | 21 05 15.4 | 0.0 |
| | comp=Z,1.0nm,0.6s,baz=296,slow=5.9,SNR=4.1 | | | | | | |
| INK | Inuvik | 72.73 | 22 | IAmb | IAmb | 21 05 24.3 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| BRTR | Keskin Array B | 74.97 | 307 | P | P | 21 05 30.1 | +0.7 |
| | comp=Z,1.2nm,0.7s,baz=88,slow=5.3,SNR=6.0 | | | | | | |
| NOA | NORSAR Array B | 79.42 | 333 | P | P | 21 05 53.3 | -0.4 |
| | comp=Z,0.8nm,0.7s,baz=56,slow=5.8,SNR=3.5 | | | | | | |
| YKA | Yellowknife Ar | 82.44 | 23 | P | P | 21 06 10.1 | +0.4 |
| | comp=Z,0.4nm,0.6s,baz=303,slow=5.2,SNR=7.4 | | | | | | |

*IDC* ***29*** *21:05:56.2±3.1,17′.87N×146′.26E,h98km±29km,mb3.3/11, mb1 3.6/12,mb1mx3.3/55,mbtmp3.7/12,Error ellipse: s-maj=28.0km s-min=16.4km az=107.0*
*NEIC* ***29*** *21:05:56.7±0.9,17′.81N±0′.10×146′.3E±0′.1,h96km±4km, mb4.1/43,Error ellipse: s-maj=19.9km s-min=13.1km az=107.0*

**ISC 29 21:05:56.4±0.6, 17°84N±0′.07×146°3E±0′.1, h100km, n66, σ0°84/61, mb4.1/33, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GUMO | Guam | 4.44 | 198 | P | Pn | 21 07 02.8 | +1.2 |
| | 13nm,0.3s,baz=17,slow=8.8,SNR=2.3 | | | | | | |
| GUMO | | | | S | Sn | 21 07 52.5 | +0.3 |
| | 9.3nm,0.3s,baz=295,slow=23,SNR=1.4 | | | | | | |
| GUMO | Guam | 4.44 | 198 | Pn | Pn | 21 07 01.7 | +0.1 |
| H11S3 | WAKE ISLAND Hy | 19.39 | 85 | T | T | 21 31 12.1 | |
| | baz=274,slow=74,SNR=5.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 19.41 | 85 | T | T | 21 31 08.6 | |
| | baz=274,slow=74,SNR=6.2 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 19.41 | 85 | T | T | 21 31 09.8 | |
| | baz=274,slow=74,SNR=5.5 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 19.59 | 81 | T | T | 21 31 14.4 | |
| | baz=267,slow=74,SNR=13 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 19.60 | 81 | T | T | 21 31 15.8 | |
| | baz=267,slow=74,SNR=7.6 | | | | | | |
| H11N3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RND | | | | IAmb | IAmb | 21 16 38.2 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **63.24** | **25** | P | **P** | **21 16 15.4** | **+1.5** |
| I23K | | | | IAmb | IAmb | 21 16 15.5 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **63.31** | **29** | P | **P** | **21 16 14.6** | **0.0** |
| **WRH** | **Wood River Hil** | **63.59** | **26** | P | **P** | **21 16 16.1** | **-0.2** |
| WRH | | | | IAmb | IAmb | 21 16 17.1 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **63.66** | **26** | P | **P** | **21 16 18.1** | **+1.4** |
| **H24K** | **Noodor Dome** | **64.02** | **25** | P | **P** | **21 16 19.6** | **+0.4** |
| H24K | | | | IAmb | IAmb | 21 16 45.8 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **64.17** | **26** | P | **P** | **21 16 18.9** | **-1.2** |
| | comp=Z,0.8nm,0.8s,baz=245,slow=5.8,SNR=6.4 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **64.18** | **21** | P | **P** | **21 16 21.0** | **+0.9** |
| TOLK | | | | IAmb | IAmb | 21 16 41.3 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **PAX** | **Paxson** | **64.39** | **28** | P | **P** | **21 16 22.3** | **+0.6** |
| PAX | | | | IAmb | IAmb | 21 16 35.9 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **RIDG** | **Independent Ri** | **64.82** | **27** | P | **P** | **21 16 24.5** | **+0.1** |
| RIDG | | | | IAmb | IAmb | 21 16 48.6 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **VRDI** | **Verde Repeater** | **65.03** | **30** | P | **P** | **21 16 26.5** | **+0.5** |
| VRDI | | | | IAmb | IAmb | 21 16 48.4 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **DOT** | **Dot Lake** | **65.15** | **27** | P | **P** | **21 16 26.5** | **0.0** |
| DOT | | | | IAmb | IAmb | 21 16 27.4 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **65.26** | **30** | P | **P** | **21 16 27.2** | **0.0** |
| **BMAR** | **Burnt Mountain** | **65.68** | **23** | P | **P** | **21 16 30.8** | **+0.9** |
| **M27K** | **Edge Creek, AK** | **65.93** | **29** | P | **P** | **21 16 32.4** | **+0.7** |
| M27K | | | | IAmb | IAmb | 21 16 56.5 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **66.05** | **28** | P | **P** | **21 16 33.0** | **+0.7** |
| **BCAR** | **Beaver Creek A** | **66.07** | **28** | P | **P** | **21 16 33.1** | **+0.7** |
| **HYT** | **Haines Junctio** | **67.87** | **31** | P | **P** | **21 16 45.7** | **+1.7** |
| HYT | | | | IAmb | IAmb | 21 16 46.5 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **69.41** | **29** | P | **P** | **21 16 54.3** | **+0.8** |
| M31M | | | | IAmb | IAmb | 21 17 04.9 | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **DLBC** | **Dease Lake** | **71.69** | **33** | P | **P** | **21 17 08.3** | **+0.9** |
| **YKA** | **Yellowknife Ar** | **78.48** | **28** | P | **P** | **21 17 46.1** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=287,slow=5.3,SNR=3.2 | | | | | | |
| **PINE** | **Pine Mountain** | **79.83** | **47** | P | **P** | **21 17 55.9** | **+1.7** |
| PINE | | | | IAmb | IAmb | 21 17 56.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **K05A** | **Summer Lake** | **80.13** | **48** | P | **P** | **21 17 57.6** | **+1.7** |
| **NVAR** | **Mina Array Bea** | **83.22** | **52** | P | **P** | **21 18 13.4** | **+1.1** |
| | comp=Z,0.9nm,0.6s,baz=258,slow=6.8,SNR=7.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.22** | **52** | P | **P** | **21 18 12.3** | **0.0** |
| **TX31** | **Lajitas Ar. Si** | **97.85** | **56** | P | **P** | **21 19 20.8** | **-0.5** |
| **TX32** | **Lajitas Array** | **97.85** | **56** | P | **P** | **21 19 20.9** | **-0.4** |

*DJA **29** 21:16:52.9±0.6,3˚S±5˚×12˚9E±˚, h10km,M3.8/6,MLv3.8/6*
*IDC **29** 21:16:57.7±1.2,2˚91S×129˚44E, h0km, mb3.9/4, mb1 4.2/7,mb1mx3.8/35,mbtmp4.0/7,ML3.9/3,Error ellipse: s-maj=36.8km s-min=21.6km az=77.0*
**ISC 29 21:17:00.7±0.8,3˚00S±0˚06×129˚43E±0˚07,h28km,n13, σ1°76/15,mb3.9/3,Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.61** | **236** | P | **Pb** | **21 17 09.8** | **-3.1** |
| MSAI | | | | S | **Sn** | **21 17 23.6** | **+1.1** |
| **AAI** | **Ambon** | **1.41** | **241** | P | **Pn** | **21 17 23.1** | **-1.5** |
| **SIJI** | **Sorong** | **2.80** | **41** | Pn | **Pn** | **21 17 42.9** | **-0.8** |
| | 64nm,0.3s,baz=248,slow=22,SNR=80 | | | | | | |
| SIJI | | | | Sn | **Sn** | **21 18 14.8** | **-1.8** |
| | 30nm,0.3s,baz=224,slow=13,SNR=11 | | | | | | |
| **SANI** | **Sanana** | **3.57** | **285** | P | Pn | 21 17 47.4 | -6.9 |
| **APSI** | **Ampana** | **8.05** | **285** | P | **Pn** | **21 18 57.4** | **+1.5** |
| **MRSI** | **Marisa** | **8.25** | **295** | P | **Pn** | **21 18 59.5** | **+0.9** |
| **MPSI** | **Mapaga** | **10.09** | **289** | P | Pn | 21 19 30.4 | +6.5 |
| **FITZ** | **Fitzroy Crossi** | **15.46** | **194** | Pn | **P** | **21 20 39.7** | **-1.5** |
| | 0.2nm,0.3s,baz=38,slow=12,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.51** | **164** | P | **Pn** | **21 21 03.3** | **+0.3** |
| | 0.5nm,0.3s,baz=341,slow=13,SNR=14 | | | | | | |
| WRA | | | | S | **Sn** | **21 24 19.5** | **+2.3** |
| | 0.1nm,0.3s,baz=353,slow=24,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **21.00** | **168** | P | **P** | **21 21 44.2** | **+2.1** |
| | 8.4nm,0.7s,baz=351,slow=11,SNR=63 | | | | | | |
| ASAR | | | | S | **S** | **21 25 34.1** | **-0.7** |
| | 0.9nm,1.0s,baz=350,slow=20,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.83** | **307** | P | **P** | **21 24 08.8** | **+2.1** |
| | 0.4nm,0.3s,baz=144,slow=7.8,SNR=5.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.60** | **326** | P | **P** | **21 27 36.2** | **+0.6** |
| | 0.6nm,0.6s,baz=120,slow=8.5,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.77** | **333** | P | **P** | **21 27 55.4** | **-0.4** |
| | 0.5nm,0.4s,baz=123,slow=5.3,SNR=3.6 | | | | | | |

*IDC **29** 21:21:21.5±1.2,27˚24N×103˚77E, h0km,mb3.4/5, mb1 3.7/6,mb1mx3.4/50,mbtmp3.4/6,ML3.6/1,MS3.3/2, Ms1 3.4/2,ms1mx2.6/89,Error ellipse: s-maj=36.2km s-min=24.1km az=75.0*
**ISC 29 21:21:26.5±1.0,27˚2N±0˚1×103˚7E±0˚2,h35km,n8, σ1°86/7,mb3.6/6,Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **9.75** | **208** | Pn | **Pn** | **21 23 43.5** | **-0.8** |
| | 0.2nm,0.3s,baz=20,slow=12,SNR=5.3 | | | | | | |
| CMAR | | | | LR | LR | 21 27 39.8 | |
| | comp=Z,64nm,21.7s,baz=20,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **22.81** | **57** | P | **P** | **21 26 23.5** | **-2.7** |
| | 0.8nm,0.8s,baz=259,slow=9.1,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **25.83** | **325** | P | **P** | **21 26 53.8** | **-0.7** |
| | 0.2nm,0.6s,baz=134,slow=8.3,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.47** | **144** | P | **P** | **21 30 57.7** | **-0.3** |
| | 1.0nm,0.7s,baz=332,slow=8.5,SNR=19 | | | | | | |
| **PMG** | **Port Moresby** | **55.66** | **125** | P | **P** | **21 31 00.5** | **+1.1** |
| | 8.4nm,0.4s,baz=297,slow=6.8,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **58.38** | **147** | P | **P** | **21 31 18.9** | **+0.3** |
| | 0.4nm,0.5s,baz=331,slow=7.1,SNR=9.9 | | | | | | |
| **OPO** | **Ambohidratompo** | **71.21** | **237** | LR | LR | 22 03 02.0 | |
| | comp=Z,58nm,18.6s,baz=322,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.51** | **17** | P | **P** | **21 34 02.5** | **+2.0** |
| | 0.1nm,0.4s,baz=332,slow=5.9,SNR=2.8 | | | | | | |

*MOS **29** 21:33:48.8±2.1,18˚09S×175˚15W,h83km,mb4.9/6,Error ellipse: s-maj=13.2km s-min=9.2km az=67.5*
*BJI **29** 21:33:48.2±0.0,18˚26S×174˚22W,h106km,mb4.7/19, mB5.3/12*
*IDC **29** 21:33:48.9±1.8,18˚56S×174˚65W,h97km±15km,mb4.4/26, mb1 4.5/28,mb1mx4.4/38,mbtmp4.7/28,MS3.6/10, Ms1 3.6/10,ms1mx3.2/61,Error ellipse: s-maj=14.1km s-min=10.1km az=132.0*
*NEIC **29** 21:33:48.1±2.0,18˚53S±0˚06×174˚61W±0˚08,h90km±4km, mb5.2/70,Error ellipse: s-maj=11.5km s-min=8.5km az=117.0*
*NOU **29** 21:33:52.4,18˚47S×173˚97W,h180km,mb5.0/48,Tonga Islands*
*BGR **29** 21:33:53.4±0.0,19˚11S×174˚83W,h139km±7km*
*GCMT **29** 21:33:54.1±0.3,18˚55S±0˚02×174˚24W±0˚03, h159km±3km,MW5.0/106,Moment Tensor Solution. s28,c30; s106,c136; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=2.80±.11; Mθθ3.26±.16; Mφφ=0.45±.13; Mrθ 1.67±.11; Mrφ0.17±.15; Mθφ0.58±.09; Best double couple: M=3.51800×10^16^ NP1:φ=98.00000°,δ31.00000°, λ=-73.00000°. NP2:φ=258.00000°,δ60.00000°, λ=-100.00000°. Principal axes: T 3.7130, Plg15.0000°, Azm356.0000°; N -0.3830, Plg9.0000°, Azm263.0000°; P -3.3230, Plg73.0000°, Azm143.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 29 21:33:48.2±0.2,18˚58S±0˚05×174˚53W±0˚04,h100km, n521,σ1°29/512,mb5.1/99,34C-42D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.39** | **97** | P | **Pn** | **21 34 54.6** | **+2.0** |
| | baz=4.2,SNR=33 | | | | | | |
| NIUE | | | | S | **Sn** | **21 35 39.8** | **-2.9** |
| | baz=4.2 | | | | | | |
| **NIUE** | **Niue** | **4.39** | **97** | Pn | **Pn** | **21 34 54.4** | **+1.8** |
| **AFI** | **Afiamalu** | **5.34** | **30** | P | **Pn** | **21 35 05.8** | **+0.1** |
| | 123nm,0.3s,baz=212,slow=2.2,SNR=51 | | | | | | |
| AFI | | | | S | **Sn** | **21 35 59.0** | **-7.0** |
| | 276nm,0.3s,baz=98,slow=23,SNR=15 | | | | | | |
| **AFI** | **Afiamalu** | **5.34** | **30** | P | **Pn** | **21 35 05.3** | **-0.4** |
| **AFI** | **Afiamalu** | **5.34** | **30** | Pn | **Pn** | **21 35 05.3** | **-0.4** |
| **AFI** | **Afiamalu** | **5.34** | **30** | P | **Pn** | **21 35 06.1** | **+0.4** |
| **MSVF** | **Nonsavu** | **7.10** | **276** | Pn | Pn | 21 35 38.8 | +9.2 |
| | 3.3nm,0.3s,baz=115,slow=16,SNR=30 | | | | | | |
| **MSVF** | **Nonsavu** | **7.10** | **276** | *i* P | Pn | 21 35 38.6 | +9.0 |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,215nm,1.1s | | | | | | |
| **MSVF** | **Nonsavu** | **7.10** | **276** | Pn | Pn | 21 35 39.3 | +10 |
| **MSVF** | **Nonsavu** | **7.10** | **276** | P | Pn | 21 35 39.3 | +10 |
| **RAO** | **Raoul Island** | **11.06** | **196** | P | **Pn** | **21 36 24.3** | **+1.0** |
| | comp=Z,61nm,0.3s,baz=288,slow=23,SNR=1.9 | | | | | | |
| RAO | | | | S | **Sn** | **21 38 22.1** | **-3.0** |
| | comp=Z,177nm,0.3s,baz=341,slow=22,SNR=5.6 | | | | | | |
| RAO | | | | LR | LR | 21 39 06.6 | |
| | comp=Z,122nm,21.5s,baz=64,slow=29 | | | | | | |
| **RAO** | **Raoul Island** | **11.06** | **196** | P | **Pn** | **21 36 23.4** | **+0.1** |
| **RAO** | **Raoul Island** | **11.06** | **196** | Pn | **Pn** | **21 36 23.4** | **+0.1** |
| **RAR** | **Rarotonga** | **14.13** | **103** | P | **P** | **21 37 07.7** | **-0.6** |
| | comp=Z,5.0nm,0.3s,baz=297,slow=11,SNR=2.9 | | | | | | |
| RAR | | | | S | **Sn** | **21 39 35.7** | **-3.8** |
| | comp=Z,1.2nm,0.3s,baz=30,slow=15,SNR=1.5 | | | | | | |
| **RAR** | **Rarotonga** | **14.13** | **103** | P | **P** | **21 37 08.0** | **-0.3** |
| **RAR** | **Rarotonga** | **14.13** | **103** | | **P** | **21 37 08.0** | **-0.3** |
| **DVP** | **Devils Point** | **16.45** | **270** | P | **P** | **21 37 39.5** | **+5.4** |
| **PINNC** | **Pines Island,** | **17.34** | **254** | | **Pn** | **21 37 45.9** | **+1.9** |
| PINNC | | | | IAmb | IAmb | 21 38 05.2 | |
| | comp=Z,149nm,1.2s | | | | | | |
| **SANVU** | **Saraoutou** | **17.74** | **277** | P | **Pn** | **21 37 48.8** | **-0.1** |
| **OUENC** | **Ouen Island, N** | **17.86** | **255** | P | **Pn** | **21 37 52.4** | **+2.1** |
| **OUENC** | **Ouen Island, N** | **17.86** | **255** | P | **Pn** | **21 37 53.0** | **+2.7** |
| **DZM** | **Mont Dzumac** | **18.18** | **256** | P | **Pn** | **21 37 57.1** | **+2.9** |
| | comp=Z,0.7nm,0.3s,baz=95,slow=14,SNR=16 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.18** | **256** | *e*P | **Pn** | **21 37 56.7** | **+2.5** |
| | comp=Z,79nm,1.1s | | | | | | |
| DZM | | | | *e*LR | LR | 21 42 16.0 | |
| | comp=Z,148nm,26.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.18** | **256** | Pn | **Pn** | **21 37 54.4** | **+0.1** |
| **DZM** | **Mont Dzumac** | **18.18** | **256** | P | **Pn** | **21 37 57.9** | **+3.7** |
| **ONTNC** | **Ouen Toro** | **18.20** | **255** | P | **Pn** | **21 37 59.1** | **+4.7** |
| **NOUC** | **Port Laguerre** | **18.31** | **256** | P | **Pn** | **21 37 59.2** | **+3.5** |
| **OUZ** | **Omahuta** | **19.64** | **210** | Pn | **Pn** | **21 38 11.4** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **20.06** | **261** | P | **Pn** | **21 38 18.8** | **+2.5** |
| **URZ** | **Urewera** | **20.92** | **199** | P | **P** | **21 38 23.5** | **+0.8** |
| | comp=Z,55nm,0.5s,baz=12,slow=3.9,SNR=63 | | | | | | |
| URZ | | | | S | **S** | **21 42 01.2** | **-9.1** |
| | comp=Z,6.8nm,0.4s,baz=94,slow=17,SNR=2.9 | | | | | | |
| **URZ** | **Urewera** | **20.92** | **199** | P | **P** | **21 38 23.7** | **+1.0** |
| **PAE** | **Paea** | **23.73** | **92** | *e*T | T | 22 03 15.1 | |
| | comp=Z,8.6nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **23.87** | **106** | *e*T | T | 22 03 18.8 | |
| | comp=Z,15nm,0.3s | | | | | | |
| **QRZ** | **Quartz Range** | **24.80** | **204** | P | **P** | **21 39 01.8** | **+1.0** |
| **KHZ** | **Kahutara** | **25.83** | **201** | P | **P** | **21 39 10.6** | **+0.5** |
| **HNR** | **Honiara** | **26.35** | **287** | P | **P** | **21 39 16.0** | **+0.8** |
| | comp=Z,28nm,0.5s,baz=90,slow=15,SNR=1.3 | | | | | | |
| **RPZ** | **Rata Peaks** | **27.84** | **203** | P | **P** | **21 39 30.6** | **+2.4** |
| | comp=Z,21nm,0.6s,baz=12,slow=1.4,SNR=10 | | | | | | |
| **FOZ** | **Fox Glacier** | **28.16** | **205** | P | **P** | **21 39 31.9** | **+0.9** |
| **MLZ** | **Mavora Lakes** | **30.36** | **205** | | **P** | **21 39 50.4** | **-0.1** |
| **EIDS** | **Eidsvold** | **32.53** | **252** | P | **P** | **21 40 09.5** | **-0.3** |
| | baz=33,SNR=4.5 | | | | | | |
| **EIDS** | **Eidsvold** | **32.53** | **252** | P | **P** | **21 40 09.5** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 21 40 53.7 | |
| | comp=Z,45nm,1.6s | | | | | | |
| **ARMA** | **Armidale** | **32.85** | **242** | P | **P** | **21 40 11.8** | **-0.8** |
| **TAOE** | **Nuku Hiva Isla** | **34.71** | **79** | *e*T | T | 22 17 04.8 | |
| | comp=Z,82nm,0.4s | | | | | | |
| **RMQ** | **Roma** | **34.72** | **250** | P | **P** | **21 40 29.2** | **+0.4** |
| | baz=35,SNR=9.2 | | | | | | |
| **RMQ** | **Roma** | **34.72** | **250** | P | **P** | **21 40 29.2** | **+0.4** |
| | comp=Z,25nm,0.8s | | | | | | |
| **CNB** | **Canberra Magne** | **36.00** | **235** | P | **P** | **21 40 39.8** | **0.0** |
| | baz=36,SNR=5.5 | | | | | | |
| **CTA** | **Charters Tower** | **36.98** | **261** | P | **P** | **21 40 48.2** | **0.0** |
| | comp=Z,44nm,0.7s,baz=96,slow=9.2 | | | | | | |
| **CTA** | **Charters Tower** | **36.98** | **261** | P | **P** | **21 40 48.0** | **-0.2** |
| **CMSA** | **Cobar Meteorol** | **38.07** | **242** | P | **P** | **21 40 56.9** | **-0.4** |
| | baz=38,SNR=6.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **38.07** | **242** | P | **P** | **21 40 56.8** | **-0.4** |
| **PMG** | **Port Moresby** | **38.20** | **278** | *ce*P | **P** | **21 40 59.5** | **+0.9** |
| | comp=Z,27nm,0.8s,baz=94,slow=5.7,SNR=12 | | | | | | |
| **PMG** | **Port Moresby** | **38.20** | **278** | *ce*P | **P** | **21 40 58.8** | **+0.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **38.20** | **278** | P | **P** | **21 40 59.1** | **+0.6** |
| PMG | | | | IAmb | IAmb | 21 41 02.0 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **38.20** | **278** | P | **P** | **21 41 00.4** | **+1.9** |
| **PMG** | **Port Moresby** | **38.20** | **278** | P | **P** | **21 41 00.2** | **+1.7** |
| **QLP** | **Quilpie** | **38.76** | **251** | P | **P** | **21 41 02.7** | **-0.4** |
| | baz=39,SNR=5.0 | | | | | | |
| **QLP** | **Quilpie** | **38.76** | **251** | P | **P** | **21 41 02.8** | **-0.4** |
| **MTSU** | **Mount Surprise** | **39.00** | **264** | P | **P** | **21 41 04.8** | **-0.5** |
| | baz=39,SNR=5.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **39.00** | **264** | P | **P** | **21 41 04.7** | **-0.5** |
| **TOO** | **Toolangi** | **39.66** | **233** | P | **P** | **21 41 10.9** | **+0.4** |
| | baz=40,SNR=4.6 | | | | | | |
| **TOO** | **Toolangi** | **39.66** | **233** | P | **P** | **21 41 10.5** | **0.0** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **39.66** | **233** | P | **P** | **21 41 10.5** | **0.0** |
| **COEN** | **Coen** | **40.79** | **270** | P | **P** | **21 41 20.0** | **-0.1** |
| COEN | | | | IAmb | IAmb | 21 41 22.8 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **COEN** | **Coen** | **40.79** | **270** | P | **P** | **21 41 20.1** | **0.0** |
| **BRAT** | **Ballarat** | **40.84** | **234** | P | **P** | **21 41 21.4** | **+1.2** |
| **STKA** | **Stephens Creek** | **41.57** | **243** | P | **P** | **21 41 25.6** | **-0.6** |
| | comp=Z,14nm,1.0s,baz=86,slow=9.4,SNR=20 | | | | | | |
| **STKA** | **Stephens Creek** | **41.57** | **243** | P | **P** | **21 41 25.7** | **-0.6** |
| | baz=42,SNR=16 | | | | | | |
| **STKA** | **Stephens Creek** | **41.57** | **243** | P | **P** | **21 41 25.8** | **-0.4** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **41.57** | **243** | P | **P** | **21 41 25.8** | **-0.4** |
| **STKA** | **Stephens Creek** | **41.57** | **243** | P | **P** | **21 41 25.9** | **-0.3** |
| **INKA** | **Innaminka** | **41.93** | **249** | P | **P** | **21 41 30.7** | **+1.5** |
| **QIS** | **Mount Isa** | **43.15** | **260** | P | **P** | **21 41 38.4** | **-0.8** |
| | baz=43,SNR=4.9 | | | | | | |
| **HTT** | **Hallett** | **44.01** | **241** | P | **P** | **21 41 45.2** | **-0.8** |
| | baz=44,SNR=8.2 | | | | | | |
| **HTT** | **Hallett** | **44.01** | **241** | P | **P** | **21 41 45.9** | **-0.1** |
| **LCRK** | **Leigh Creek** | **44.30** | **245** | P | **P** | **21 41 48.0** | **-0.3** |
| | comp=Z,42nn,2.0s | | | | | | |
| **NAPP** | **Napperby** | **44.62** | **241** | P | **P** | **21 41 51.4** | **+0.6** |
| | comp=Z,17nm,0.9s | | | | | | |
| **WHYH** | **Whyalla** | **45.08** | **242** | P | **P** | **21 41 54.1** | **-0.3** |
| | comp=Z,22nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **46.33** | **242** | P | **P** | **21 42 03.2** | **-1.1** |
| | baz=47,SNR=25 | | | | | | |
| **BBOO** | **Buckleboo** | **46.33** | **242** | P | **P** | **21 42 03.3** | **-1.1** |
| BBOO | | | | IAmb | IAmb | 21 42 04.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **46.33** | **242** | P | **P** | **21 42 03.4** | **-0.9** |
| | comp=Z,37nm,1.2s | | | | | | |
| **OOD** | **Oodnadatta** | **46.41** | **249** | P | **P** | **21 42 05.4** | **+0.4** |
| | comp=Z,49nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **47.10** | **284** | P | **P** | **21 42 11.7** | **+1.2** |
| | comp=Z,69nm,1.0s | | | | | | |
| **MULG** | **Mulgathing** | **47.88** | **246** | P | **P** | **21 42 15.4** | **-1.0** |
| | comp=Z,57nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.95** | **260** | P | **P** | **21 42 15.7** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 21 42 18.1 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **WB0** | **Warramunga Ar** | **48.11** | **260** | P | **P** | **21 42 17.0** | **-1.3** |
| WB0 | | | | IAmb | IAmb | 21 42 18.1 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **WB2** | **Warramunga Ar** | **48.12** | **260** | P | **P** | **21 42 16.9** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 21 42 18.3 | |
| | comp=Z,69nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.13** | **260** | *ce*P | **P** | **21 42 16.2** | **-2.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.13** | **260** | P | **P** | **21 42 17.1** | **-1.3** |
| WRAB | | | | IAmb | IAmb | 21 42 18.3 | |
| | comp=Z,57nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.13** | **260** | P | **P** | **21 42 17.2** | **-1.2** |
| | comp=Z,39nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.13** | **260** | P | **P** | **21 42 17.2** | **-1.3** |
| | comp=Z,9.6nm,0.3s,baz=98,slow=5.9,SNR=422 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 43 44.8** | **+0.1** |
| | comp=Z,1.6nm,0.6s,baz=102,slow=3.1,SNR=2.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **21 47 30.5** | **+0.3** |
| | comp=Z,2.0nm,1.1s,baz=89,slow=4.7,SNR=4.7 | | | | | | |
| WRA | | | | S | **S** | **21 49 03.6** | **-6.5** |
| | comp=Z,1.6nm,0.8s,baz=92,slow=14,SNR=8.1 | | | | | | |
| WRA | | | | LR | LR | 22 00 52.6 | |
| | comp=Z,36nm,19.5s,baz=27,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.13** | **260** | P | **P** | **21 42 16.8** | **-1.7** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.13** | **260** | P | **P** | **21 42 16.8** | **-1.7** |
| **AS31** | **Alice Springs** | **48.16** | **255** | P | **P** | **21 42 17.9** | **-0.8** |
| **ASAR** | **Alice Springs** | **48.16** | **255** | P | **P** | **21 42 17.9** | **-0.7** |
| | comp=Z,46nm,0.9s,baz=86,slow=8.6,SNR=256 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 43 44.8** | **+0.1** |
| | comp=Z,4.8nm,0.6s,baz=103,slow=4.3,SNR=5.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 47 31.0** | **+0.7** |
| | comp=Z,0.9nm,0.9s,baz=113,slow=3.3,SNR=4.7 | | | | | | |
| ASAR | | | | S | **S** | **21 49 03.2** | **-7.3** |
| | comp=Z,0.7nm,0.8s,baz=88,slow=18,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **48.16** | **255** | P | **P** | **21 42 18.0** | **-0.7** |
| **KDU** | **Kakadu** | **51.23** | **268** | P | **P** | **21 42 41.4** | **-0.6** |
| | baz=51,SNR=20 | | | | | | |
| **KDU** | **Kakadu** | **51.23** | **268** | P | **P** | **21 42 41.2** | **-0.8** |
| | comp=Z,74nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **52.46** | **268** | P | **P** | **21 42 50.2** | **-1.0** |
| | baz=53,SNR=38 | | | | | | |
| **MTN** | **Manton Dam** | **52.46** | **268** | P | **P** | **21 42 50.0** | **-1.2** |
| **MTN** | **Manton Dam** | **52.46** | **268** | P | **P** | **21 42 50.0** | **-1.2** |
| | comp=Z,127nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **52.78** | **268** | P | **P** | **21 42 52.6** | **-0.9** |
| | comp=Z,36nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **53.06** | **245** | P | **P** | **21 42 54.3** | **-1.1** |
| | baz=53,SNR=15 | | | | | | |
| **FORT** | **Forrest** | **53.06** | **245** | P | **P** | **21 42 54.0** | **-1.4** |
| **FORT** | **Forrest** | **53.06** | **245** | P | **P** | **21 42 54.5** | **-0.9** |
| | comp=Z,99nm,1.0s | | | | | | |
| **WRKA** | **Warakurna** | **53.15** | **252** | P | **P** | **21 42 55.3** | **-0.9** |
| | baz=53,SNR=67 | | | | | | |
| **WRKA** | **Warakurna** | **53.15** | **252** | P | **P** | **21 42 55.3** | **-0.9** |
| | comp=Z,44nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **54.08** | **264** | P | **P** | **21 43 02.5** | **-0.5** |
| | baz=54,SNR=20 | | | | | | |
| **KNRA** | **Kununurra** | **54.08** | **264** | P | **P** | **21 43 02.2** | **-0.9** |
| **KNRA** | **Kununurra** | **54.08** | **264** | P | **P** | **21 43 02.3** | **-0.7** |
| | comp=Z,112nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.55** | **260** | LR | LR | 22 07 16.5 | |
| | comp=Z,39nm,18.8s,baz=112,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.55** | **260** | P | **P** | **21 43 20.6** | **-0.2** |
| | baz=57,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.55** | **260** | P | **P** | **21 43 20.2** | **-0.5** |
| FITZ | | | | IAmb | IAmb | 21 43 57.3 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.55** | **260** | P | **P** | **21 43 20.5** | **-0.2** |
| | comp=Z,15nm,1.5s | | | | | | |
| **MSAI** | **Masohi** | **57.29** | **278** | P | **P** | **21 43 26.5** | **+0.5** |
| | comp=Z,566nmcomp=Z,14nm,0.6s | | | | | | |
| **AAI** | **Ambon** | **57.86** | **277** | P | **P** | **21 43 30.8** | **+0.8** |
| | comp=Z,65nm,0.5s | | | | | | |
| **SBA** | **Scott Base** | **60.01** | **184** | P | **P** | **21 43 46.9** | **+3.0** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,664nm,1.9s | | | | | | |
| **SBA** | **Scott Base** | **60.01** | **184** | P | **P** | **21 43 46.9** | **+3.0** |
| **RPN** | **Rapa Nui** | **60.12** | **111** | LR | LR | 22 03 41.8 | |
| | comp=Z,84nm,19.4s,baz=296,slow=30 | | | | | | |
| **VNDA** | **Vanda** | **60.12** | **186** | P | **P** | **21 43 46.9** | **+2.3** |
| | comp=Z,8.6nm,0.6s,baz=357,slow=5.8,SNR=12 | | | | | | |
| **VNDA** | **Vanda** | **60.12** | **186** | P | **P** | **21 43 47.2** | **+2.6** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,139nm,1.9s | | | | | | |
| **VNDA** | **Vanda** | **60.12** | **186** | P | **P** | **21 43 47.2** | **+2.6** |
| **TNTI** | **Ternate** | **60.20** | **282** | P | **P** | **21 43 46.0** | **-0.2** |
| **TNTI** | **Ternate** | **60.20** | **282** | P | **P** | **21 43 47.4** | **+1.2** |
| | comp=Z,63nm,0.9s | | | | | | |
| **BATI** | **Baumata** | **60.20** | **269** | P | **P** | **21 43 47.5** | **+1.2** |
| | comp=Z,398nmcomp=Z,38nm,0.7s | | | | | | |
| **SANI** | **Sanana** | **60.49** | **278** | P | **P** | **21 43 47.7** | **-0.4** |
| | comp=Z,94nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **60.49** | **278** | P | **P** | **21 43 47.7** | **-0.4** |
| | comp=Z,95nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.30** | **255** | P | **P** | **21 43 52.4** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 21 43 53.5 | |
| | comp=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BELC | **Belle Mtn. Jos** | 76.41 | 47 | P | | P | | 21 45 28.4 | +1.3 |
| | baz=236 | | | | | | | | |
| KSM | **Kuching** | 76.42 | 276 | P | | P | | 21 45 28.6 | +1.2 |
| KSM | | | | IAmb | | IAmb | | 21 47 17.9 | |
| | comp=Z,49nm,1.3s | | | | | | | | |
| MPMC | **Manual Prospec** | 76.56 | 44 | P | | P | | 21 45 29.6 | +1.6 |
| | baz=235 | | | | | | | | |
| BC3 | **Big Chuckawall** | 76.59 | 47 | P | | P | | 21 45 29.8 | +1.7 |
| | baz=237 | | | | | | | | |
| HEC | **Hector,Ludlow** | 76.64 | 46 | P | | P | | 21 45 29.8 | +1.5 |
| | baz=236 | | | | | | | | |
| YBH | **Yreka Blue Hor** | 76.77 | 37 | P | | P | | 21 45 30.7 | +1.8 |
| | comp=Z,2.2nm,0.7s,baz=252,slow=3.2,SNR=5.6 | | | | | | | | |
| YBH | **Yreka Blue Hor** | 76.77 | 37 | P | | P | | 21 45 31.1 | +2.2 |
| YBH | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| YBH | **Yreka Blue Hor** | 76.77 | 37 | P | | P | | 21 45 31.1 | +2.2 |
| IRM | **Iron Mountain** | 77.08 | 47 | P | | P | | 21 45 32.6 | +1.8 |
| | baz=237 | | | | | | | | |
| GRAC | **Grapevine Rang** | 77.17 | 44 | P | | P | | 21 45 32.7 | +1.5 |
| | baz=235 | | | | | | | | |
| NVAR | **Mina Array Bea** | 77.40 | 42 | P | | P | | 21 45 34.5 | +1.8 |
| | comp=Z,1.1nm,0.6s,baz=223,slow=11,SNR=9.4 | | | | | | | | |
| NVAR | **Mina Array Bea** | 77.40 | 42 | P | | P | | 21 45 33.9 | +1.3 |
| 214A | **Organ Pipe Nat** | 77.57 | 50 | P | | P | | 21 45 35.0 | +1.4 |
| | baz=239 | | | | | | | | |
| KSRS | **Korea Array** | 77.69 | 317 | P | | P | | 21 45 35.6 | +1.7 |
| | comp=Z,4.0nm,0.9s,baz=139,slow=6.3,SNR=8.5 | | | | | | | | |
| I02E | **Swisshome, OR** | 77.69 | 35 | P | | P | | 21 45 34.6 | +0.8 |
| | baz=229 | | | | | | | | |
| PDMCI | **Parker Dam,Lak** | 77.86 | 47 | P | | P | | 21 45 36.3 | +1.3 |
| | baz=238 | | | | | | | | |
| TPH | **Tonopah** | 77.89 | 43 | P | | P | | 21 45 35.1 | -0.2 |
| TPH | | | | pmax | | pmax | | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| TPH | **Tonopah** | 77.89 | 43 | P | | P | | 21 45 35.1 | -0.2 |
| TPH | | | | IAmb | | IAmb | | 21 46 12.6 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| J05D | **Fort Rock, OR** | 78.60 | 37 | P | | P | | 21 45 40.8 | +1.7 |
| | baz=231 | | | | | | | | |
| SMAI | **San Martin Ant** | 79.21 | 159 | P | | P | | 21 45 42.7 | +0.8 |
| 319A | **Douglas** | 79.89 | 52 | P | | P | | 21 45 47.4 | +1.0 |
| O19K | **Port Alsworth** | 80.19 | 10 | P | | P | | 21 45 48.4 | +1.3 |
| | baz=200 | | | | | | | | |
| HPIG | | 80.64 | 58 | P | | P | | 21 45 51.0 | +0.4 |
| HPIG | | | | IAmb | | IAmb | | 21 48 10.8 | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| ELK | **Elko** | 80.67 | 41 | P | | P | | 21 45 51.8 | +1.3 |
| | comp=Z,1.4nm,0.8s,baz=266,slow=3.4,SNR=4.0 | | | | | | | | |
| ELK | **Elko** | 80.67 | 41 | P | | P | | 21 45 50.6 | +0.1 |
| ELK | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| ELK | **Elko** | 80.67 | 41 | P | | P | | 21 45 50.6 | +0.1 |
| RSO | **Redoubt South** | 80.72 | 11 | P | | P | | 21 45 50.8 | +0.6 |
| BELA | **Belgrano 2** | 81.02 | 172 | P | | P | | 21 45 50.6 | -0.8 |
| BELA | | | | IAmb | | IAmb | | 21 45 53.1 | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| NJ2 | **Nanjing** | 81.23 | 308 | *e*P | | P | | 21 45 56.0 | +2.7 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | | |
| PMSA | **Palmer Station** | 81.72 | 156 | LR | | LR | | 22 22 34.0 | |
| | comp=Z,41nm,18.2s,baz=188,slow=36 | | | | | | | | |
| KNK | **Knik Glacier** | 82.41 | 12 | P | | P | | 21 45 59.2 | +0.4 |
| KNK | | | | IAmb | | IAmb | | 21 46 27.4 | |
| | comp=Z,60nm,1.6s | | | | | | | | |
| TTA | **Tatalina** | 82.54 | 8 | P | | P | | 21 46 00.3 | +0.7 |
| TTA | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.8s | | | | | | | | |
| TTA | **Tatalina** | 82.54 | 8 | P | | P | | 21 46 00.3 | +0.7 |
| TTA | | | | IAmb | | IAmb | | 21 47 04.2 | |
| | comp=Z,40nm,1.8s | | | | | | | | |
| KLR | **Kul'dur** | 82.60 | 328 | LR | | LR | | 22 17 06.4 | |
| | comp=Z,29nm,20.0s,baz=151,slow=32 | | | | | | | | |
| SML | **Sawmill** | 82.79 | 12 | P | | P | | 21 46 02.5 | +1.6 |
| | baz=205 | | | | | | | | |
| CN2 | **Changchun** | 82.83 | 321 | *e*P | | P | | 21 46 00.3 | -1.1 |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,180nm,4.9s | | | | | | | | |
| BMRM | **Bremner River** | 82.85 | 14 | P | | P | | 21 46 00.9 | -0.3 |
| BMRM | **Bremner River** | 82.85 | 14 | P | | P | | 21 46 02.3 | +1.1 |
| | baz=208 | | | | | | | | |
| MA2 | **Magadan** | 82.86 | 343 | P | | P | | 21 46 02.3 | +1.1 |
| | comp=Z,0.6nm,0.3s,baz=114,slow=7.0,SNR=3.8 | | | | | | | | |
| MA2 | | | | LR | | LR | | 22 19 11.2 | |
| | comp=Z,23nm,20.0s,baz=120,slow=33 | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.02 | 13 | P | | P | | 21 46 02.6 | +0.5 |
| SCM | | | | pmax | | pmax | | | |
| | comp=Z,90nm,1.8s | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.02 | 13 | P | | P | | 21 46 02.5 | +0.5 |
| SCM | | | | IAmb | | IAmb | | 21 48 41.5 | |
| | comp=Z,90nm,1.8s | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.02 | 13 | P | | P | | 21 46 03.5 | +1.4 |
| | baz=206 | | | | | | | | |
| PNL | **Peninsula** | 83.06 | 17 | P | | P | | 21 46 03.2 | +0.9 |
| | baz=213 | | | | | | | | |
| ANM | **Nome** | 83.18 | 4 | P | | P | | 21 46 04.1 | +1.4 |
| | baz=189 | | | | | | | | |
| K20K | **Telida** | 83.23 | 9 | P | | P | | 21 46 04.5 | +1.5 |
| | baz=200 | | | | | | | | |
| TX31 | **Lajitas Ar. Si** | 83.27 | 56 | P | | P | | 21 46 06.3 | +2.2 |
| TX31 | | | | IAmb | | IAmb | | 21 46 08.0 | |
| | comp=Z,41nm,1.5s | | | | | | | | |
| TXAR | **Lajitas Array** | 83.27 | 56 | P | | P | | 21 46 06.7 | +2.5 |
| | comp=Z,2.7nm,0.7s,baz=219,slow=8.7,SNR=37 | | | | | | | | |
| TXAR | **Lajitas Array** | 83.27 | 56 | P | | P | | 21 46 06.2 | +2.0 |
| TXAR | **Lajitas Array** | 83.27 | 56 | P | | P | | 21 46 06.2 | +2.0 |
| N25K | **Chitina, Valde** | 83.41 | 14 | P | | P | | 21 46 05.2 | +1.1 |
| | baz=208 | | | | | | | | |
| CAST | **Castle Rocks** | 83.60 | 10 | P | | P | | 21 46 04.9 | 0.0 |
| | baz=201 | | | | | | | | |
| WAT6 | **Susitna Watana** | 83.61 | 12 | P | | P | | 21 46 05.8 | +0.5 |
| | baz=206 | | | | | | | | |
| CTG | **Chitna Glacier** | 83.64 | 16 | P | | P | | 21 46 05.8 | +0.4 |
| | baz=212 | | | | | | | | |
| ANMO | **Albuquerque** | 83.66 | 50 | *ce*P | | P | | 21 46 07.9 | +1.7 |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,11nm,2.5s | | | | | | | | |
| TRF | **Thorofare Moun** | 83.93 | 11 | P | | P | | 21 46 07.1 | +0.3 |
| TRF | | | | IAmb | | IAmb | | 21 47 22.7 | |
| | comp=Z,64nm,2.0s | | | | | | | | |
| TRF | **Thorofare Moun** | 83.93 | 11 | P | | P | | 21 46 07.4 | +0.5 |
| | baz=203 | | | | | | | | |
| J20K | **Nowinta River** | 83.99 | 9 | P | | P | | 21 46 08.1 | +1.2 |
| | baz=199 | | | | | | | | |
| TNA | **Tin City** | 84.03 | 3 | P | | P | | 21 46 08.0 | +0.9 |
| | baz=186 | | | | | | | | |
| DHY | **Denali Highway** | 84.13 | 12 | P | | P | | 21 46 08.5 | +0.7 |
| | baz=206 | | | | | | | | |
| RND | **Reindeer** | 84.15 | 11 | P | | P | | 21 46 08.9 | +1.0 |
| RND | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | | |
| RND | **Reindeer** | 84.15 | 11 | P | | P | | 21 46 08.9 | +1.0 |
| H03S2 | **Juan Fernandez** | 84.35 | 124 | T | | T | | 23 19 12.8 | |
| | baz=250,SNR=122 | | | | | | | | |
| H03S1 | **Juan Fernandez** | 84.36 | 124 | T | | T | | 23 19 13.2 | |
| | baz=250,SNR=106 | | | | | | | | |
| H03S3 | **Juan Fernandez** | 84.37 | 124 | T | | T | | 23 19 11.2 | |
| | baz=250,SNR=99 | | | | | | | | |
| MCK | **McKinley** | 84.43 | 11 | P | | P | | 21 46 09.0 | -0.2 |
| | baz=204 | | | | | | | | |
| MAW | **Mawson** | 84.45 | 199 | P | | P | | 21 46 10.1 | +0.7 |
| | comp=Z,22nm,0.7s,baz=112,slow=7.1,SNR=2.0 | | | | | | | | |
| H03N2 | **Juan Fernandez** | 84.47 | 123 | T | | T | | 23 18 50.8 | |
| | baz=257,slow=71,SNR=67 | | | | | | | | |
| H03N3 | **Juan Fernandez** | 84.47 | 123 | T | | T | | 23 18 52.1 | |
| | baz=257,slow=71,SNR=72 | | | | | | | | |
| M26K | **Nabesna, AK** | 84.48 | 14 | P | | P | | 21 46 10.9 | +1.4 |
| | baz=210 | | | | | | | | |
| H03N1 | **Juan Fernandez** | 84.49 | 123 | T | | T | | 23 18 51.5 | |
| | baz=257,slow=71,SNR=88 | | | | | | | | |
| M27K | **Edge Creek, AK** | 84.70 | 15 | P | | P | | 21 46 12.7 | +2.0 |
| | baz=211 | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 84.71 | 47 | P | | P | | 21 46 12.0 | +0.4 |
| | baz=242 | | | | | | | | |
| NEA2 | **Nenana** | 85.20 | 11 | P | | P | | 21 46 13.6 | +0.7 |
| NEA2 | **Nenana** | 85.20 | 11 | P | | P | | 21 46 13.2 | +0.2 |
| | baz=204 | | | | | | | | |
| RIDG | **Independent Ri** | 85.25 | 13 | P | | P | | 21 46 14.1 | +0.8 |
| | baz=208 | | | | | | | | |
| I21K | **Tanana** | 85.26 | 9 | P | | P | | 21 46 14.0 | +0.7 |
| | baz=202 | | | | | | | | |
| WRH | **Wood River Hil** | 85.26 | 11 | P | | P | | 21 46 13.7 | +0.5 |
| SEY | **Seymchan** | 85.30 | 345 | P | | P | | 21 46 13.6 | +0.1 |
| | comp=Z,1.1nm,0.4s,baz=147,slow=7.0,SNR=9.8 | | | | | | | | |
| SEY | **Seymchan** | 85.30 | 345 | *i* P | | P | | 21 46 11.7 | -1.8 |
| COYC | **Coyhaique** | 85.31 | 137 | P | | P | | 21 46 15.6 | +1.4 |
| COYC | | | | IAmb | | IAmb | | 21 46 17.8 | |
| | comp=Z,46nm,1.4s | | | | | | | | |
| MLY | **Manley** | 85.32 | 10 | P | | P | | 21 46 13.5 | -0.1 |
| | baz=203 | | | | | | | | |
| L27K | **Beaver Creek,** | 85.32 | 14 | P | | P | | 21 46 14.9 | +1.2 |
| | baz=211 | | | | | | | | |
| PDAR | **Pinedale Array** | 85.34 | 42 | P | | P | | 21 46 15.3 | +0.8 |
| | comp=Z,1.2nm,0.9s,baz=186,slow=4.4,SNR=7.0 | | | | | | | | |
| PDAR | | | | PKKPbc | | PKKPbc | | 22 04 18.9 | -1.9 |
| | comp=Z,0.3nm,0.6s,baz=93,slow=4.5,SNR=3.8 | | | | | | | | |
| HDA | **Harding Lake** | 85.42 | 12 | P | | P | | 21 46 14.9 | +0.8 |
| HDA | | | | IAmb | | IAmb | | 21 46 15.5 | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| HDA | **Harding Lake** | 85.42 | 12 | P | | P | | 21 46 14.9 | +0.8 |
| | baz=206 | | | | | | | | |
| P33M | **Teslin, Yukon** | 85.46 | 19 | P | | P | | 21 46 15.9 | +1.4 |
| | baz=219 | | | | | | | | |
| H17A | **Grant Village** | 85.54 | 40 | P | | P | | 21 46 17.2 | +1.7 |
| | baz=239 | | | | | | | | |
| N31M | **Braeburn, Yuko** | 85.58 | 18 | P | | P | | 21 46 16.0 | +1.0 |
| | baz=217 | | | | | | | | |
| H21K | **Melozitna Rive** | 85.58 | 9 | P | | P | | 21 46 16.0 | +1.1 |
| | baz=201 | | | | | | | | |
| SCRK | **Sand Creek** | 85.64 | 13 | P | | P | | 21 46 16.3 | +1.0 |
| | baz=209 | | | | | | | | |
| I23K | **Minto, Yukon-K** | 85.66 | 10 | P | | P | | 21 46 16.1 | +0.9 |
| | baz=204 | | | | | | | | |
| TCOL | **CIGO, UAF Yank** | 85.67 | 11 | P | | P | | 21 46 16.0 | +0.7 |
| | baz=205 | | | | | | | | |
| COLA | **College** | 85.67 | 11 | *d* *i* P | | P | | 21 46 15.3 | 0.0 |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| COLA | **College** | 85.67 | 11 | P | | P | | 21 46 14.8 | -0.5 |
| COLA | | | | IAmb | | IAmb | | 21 46 19.0 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| MDM | **Murphy Dome** | 85.68 | 11 | P | | P | | 21 46 15.5 | +0.1 |
| MDM | | | | IAmb | | IAmb | | 21 46 52.5 | |
| | comp=Z,29nm,1.5s | | | | | | | | |
| IL31 | | 85.76 | 12 | P | | P | | 21 46 16.2 | +0.5 |
| IL31 | | | | IAmb | | IAmb | | 21 46 52.3 | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| ILAR | **Eielson Array** | 85.76 | 12 | P | | P | | 21 46 16.1 | +0.4 |
| | comp=Z,3.2nm,0.5s,baz=227,slow=6.1,SNR=102 | | | | | | | | |
| ILAR | | | | LR | | LR | | 22 20 12.8 | |
| | comp=Z,42nm,18.0s,baz=156,slow=32 | | | | | | | | |
| ILAR | **Eielson Array** | 85.76 | 12 | P | | P | | 21 46 16.4 | +0.6 |
| ILAR | **Eielson Array** | 85.76 | 12 | P | | P | | 21 46 16.4 | +0.6 |
| CMIG | **Matias Romero** | 85.96 | 71 | P | | P | | 21 46 18.5 | +0.7 |
| | comp=Z,3.8nm,0.9s,baz=214,slow=11,SNR=3.8 | | | | | | | | |
| POKR | **Poker Plat Res** | 85.97 | 11 | P | | P | | 21 46 16.7 | -0.1 |
| | baz=206 | | | | | | | | |
| IPM | **Ipoh** | 86.16 | 276 | P | | P | | 21 46 19.6 | +0.7 |
| IPM | | | | IAmb | | IAmb | | 21 46 20.8 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| M30M | **Minto, Yukon** | 86.18 | 16 | P | | P | | 21 46 18.5 | +0.6 |
| | baz=216 | | | | | | | | |
| J26L | **Joseph Creek** | 86.19 | 13 | P | | P | | 21 46 19.6 | +1.6 |
| | baz=209 | | | | | | | | |
| 833A | **Chaparral WMA,** | 86.27 | 59 | P | | P | | 21 46 21.0 | +1.8 |
| | baz=247 | | | | | | | | |
| LL02 | **Futaleuf** | 86.35 | 134 | P | | P | | 21 46 20.4 | +1.0 |
| LL02 | | | | IAmb | | IAmb | | 21 46 22.3 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| H24K | **Noodor Dome** | 86.54 | 11 | P | | P | | 21 46 22.9 | +3.3 |
| | baz=205 | | | | | | | | |
| M31M | **Drury Creek, Y** | 86.55 | 18 | P | | P | | 21 46 20.2 | +0.4 |
| | baz=218 | | | | | | | | |
| DAWY | **Dawson** | 86.75 | 15 | P | | P | | 21 46 21.8 | +1.0 |
| DAWY | **Dawson** | 86.75 | 15 | P | | P | | 21 46 22.0 | +1.3 |
| | baz=213 | | | | | | | | |
| COLD | **Coldfoot** | 87.44 | 9 | P | | P | | 21 46 26.0 | +2.1 |
| | baz=203 | | | | | | | | |
| BILL | **Bilibino** | 87.51 | 353 | ‖ *e*P | | P | | 21 46 24.5 | +0.3 |
| BILL | | | | *e* | | | | 21 49 47.8 | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.7s | | | | | | | | |
| RPSI | **Rantau Prapat** | 87.58 | 274 | P | | P | | 21 46 25.6 | -0.2 |
| RPSI | | | | IAmb | | IAmb | | 21 46 26.8 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| PSI | **Prapat** | 87.61 | 274 | P | | P | | 21 46 25.6 | -0.5 |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| ABTX | **Abilene, Hawle** | 87.78 | 55 | P | | P | | 21 46 26.9 | +0.5 |
| | baz=246 | | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.10 | 14 | P | | P | | 21 46 27.9 | +0.8 |
| | baz=214 | | | | | | | | |
| PLCA | **Paso Flores** | 88.18 | 132 | P | | P | | 21 46 29.5 | +1.2 |
| | comp=Z,2.1nm,0.6s,baz=274,slow=6.4,SNR=9.1 | | | | | | | | |
| XLT | **XiLinHaoTe** | 88.71 | 317 | *e*P | | P | | 21 46 28.3 | -2.3 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,190nm,5.1s | | | | | | | | |
| SRIT | **Nakonsritamara** | 88.82 | 279 | P | | P | | 21 46 32.8 | +1.1 |
| TOLK | **Toolik Lake Re** | 88.84 | 9 | P | | P | | 21 46 31.7 | +1.1 |
| | baz=204 | | | | | | | | |
| SYO | **Syowa Base** | 89.28 | 192 | ‖ *e*X | | P | | 21 46 30.4 | -2.4 |
| SNAA | **Sanae** | 89.80 | 177 | P | | P | | 21 46 35.5 | +0.3 |
| SNAA | **Sanae** | 89.80 | 177 | P | | P | | 21 46 35.2 | -0.1 |
| SNAA | | | | pmax | | pmax | | | |
| | comp=Z,58nm,1.8s | | | | | | | | |
| SNAA | **Sanae** | 89.80 | 177 | P | | P | | 21 46 35.2 | -0.1 |
| VNA3 | **Neumayer Olymp** | 89.80 | 175 | P | | P | | 21 46 35.8 | +0.6 |
| VNA2 | **Neumayer--Watz** | 90.28 | 176 | P | | P | | 21 46 38.4 | +1.0 |
| | baz=195,slow=4.2 | | | | | | | | |
| MT01 | **Popeta** | 90.32 | 126 | P | | P | | 21 46 38.7 | +0.3 |
| HHC | **Hu-ho-hao-te** | 90.39 | 313 | *e*P | | P | | 21 46 39.8 | +1.2 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,180nm,4.7s | | | | | | | | |
| VNA1 | **Neumayer--Stat** | 90.49 | 175 | P | | P | | 21 46 39.3 | +0.9 |
| INK | **Inuvik** | 91.60 | 14 | P | | P | | 21 46 44.0 | +0.7 |
| | baz=219,slow=5.9 | | | | | | | | |
| INK | **Inuvik** | 91.60 | 14 | P | | P | | 21 46 43.4 | +0.1 |
| | baz=219 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | 92.58 | 288 | P | | P | | 21 46 50.3 | +1.3 |
| | comp=Z,3.8nm,0.9s,baz=107,slow=3.0,SNR=18 | | | | | | | | |
| CHTO | **Chiang Mai** | 92.70 | 289 | P | | P | | 21 46 49.3 | -0.3 |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| CHTO | **Chiang Mai** | 92.70 | 289 | P | | P | | 21 46 49.3 | -0.3 |
| CHTO | | | | IAmb | | IAmb | | 21 46 52.1 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| PZH | **PanZhiHua** | 92.73 | 297 | P | | P | | 21 46 50.0 | +0.2 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,150nm,4.6s | | | | | | | | |
| YKA | **Yellowknife Ar** | 93.43 | 24 | P | | P | | 21 46 52.1 | +0.2 |
| | comp=Z,1.5nm,1.0s,baz=234,slow=4.6,SNR=7.3 | | | | | | | | |
| YKA | | | | PKKPbc | | PKKPdf | | 22 03 57.6 | -1.9 |
| | comp=Z,0.1nm,0.4s,baz=48,slow=2.1,SNR=4.7 | | | | | | | | |
| LZH | **Lanzhou** | 94.23 | 307 | *e*P | | P | | 21 46 57.5 | +1.0 |
| LZH | | | | pP | | pP | | 21 47 21.0 | -1.4 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| MGMO | **Mountain Grove** | 95.07 | 53 | P | | P | | 21 46 59.4 | -0.7 |
| MGMO | | | | IAmb | | IAmb | | 21 47 02.5 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| A36M | **Sachs Harbour** | 96.23 | 14 | P | | P | | 21 47 05.0 | +0.5 |
| A36M | | | | IAmb | | IAmb | | 21 47 06.9 | |
| | comp=Z,7.3nm,0.7s | | | | | | | | |
| A36M | **Sachs Harbour** | 96.23 | 14 | P | | P | | 21 47 05.3 | +0.8 |
| | baz=226 | | | | | | | | |
| SONM | **Songino Array** | 96.48 | 318 | P | | P | | 21 47 08.6 | +2.2 |
| | comp=Z,0.2nm,0.5s,baz=120,slow=6.7,SNR=2.1 | | | | | | | | |
| GTA | **Gaotai** | 98.31 | 309 | *e*P | | Pdif | | 21 47 18.5 | +3.6 |
| GTA | | | | pP | | pwP | | 21 47 44.3 | +1.4 |
| GTA | | | | sP | | sP | | 21 47 56.0 | +4.8 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| ZALV | **Zalesovo Beam** | 111.04 | 322 | PKiKP | | PKiKP | | 21 52 09.2 | -0.4 |
| | comp=Z,2.3nm,0.6s,baz=120,slow=2.1,SNR=13 | | | | | | | | |
| ZALV | **Zalesovo Beam** | 111.04 | 322 | *i* PKiKP | | PKiKP | | 21 52 08.8 | -0.9 |
| ZALV | **Zalesovo Beam** | 111.04 | 322 | PKiKP | | PKiKP | | 21 52 08.8 | -0.9 |
| MKAR | **Makanchi Array** | 112.25 | 314 | PKiKP | | PKiKP | | 21 52 11.8 | -0.5 |
| | comp=Z,2.0nm,0.5s,baz=115,slow=0.4,SNR=40 | | | | | | | | |
| MKAR | | | | PKKPbc | | PKKPbc | | 22 03 03.7 | -0.7 |
| | comp=Z,0.8nm,0.7s,baz=280,slow=4.0,SNR=9.9 | | | | | | | | |
| MKAR | **Makanchi Array** | 112.25 | 314 | | | PKiKP | | 21 52 11.4 | -0.8 |
| KURK | **Kurchatov** | 114.79 | 318 | *c* *i* PKiKP | | PKPdf | | 21 52 15.9 | -1.0 |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,2.5s | | | | | | | | |
| KSH | **Kashi** | 116.46 | 305 | PKP | | PKiKP | | 21 52 22.0 | +1.3 |
| AAK | **Ala-Archa** | 117.67 | 309 | *i* PKiKP | | PKPdf | | 21 52 22.5 | -0.5 |
| BRVK | **Borovoye** | 119.75 | 321 | *c* *i* PKiKP | | PKPdf | | 21 52 25.6 | -0.8 |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| BRVK | **Borovoye** | 119.75 | 321 | | | PKPdf | | 21 52 25.9 | -0.5 |
| GAR | **Garm** | 120.84 | 305 | PKPdf | | PKPdf | | 21 52 28.7 | -0.4 |
| KBL | **Kabul** | 121.82 | 300 | PKiKP | | PKPdf | | 21 52 30.9 | -0.4 |
| KBL | **Kabul** | 121.82 | 300 | PKPdf | | PKPdf | | 21 52 30.9 | -0.4 |
| SVE | **Sverdlovsk** | 124.22 | 327 | *e*PKiKP | | PKiKP | | 21 52 35.3 | +0.1 |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| ARU | **Arti** | 125.44 | 327 | *c* *i* PKiKP | | PKPdf | | 21 52 36.8 | -0.4 |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.7s | | | | | | | | |
| ARU | **Arti** | 125.44 | 327 | PKPdf | | PKiKP | | 21 52 37.7 | +0.1 |
| ABKAR | **Akbulak array** | 126.90 | 318 | PKPdf | | PKiKP | | 21 52 40.2 | -0.5 |
| ARCES | **ARCESS Array B** | 127.58 | 351 | PKP | | PKiKP | | 21 52 41.1 | -0.4 |
| | comp=Z,1.8nm,0.4s,baz=23,slow=1.4,SNR=28 | | | | | | | | |
| ARCES | **ARCESS Array B** | 127.58 | 351 | PKiKP | | PKPdf | | 21 52 40.9 | -0.1 |
| ARCES | **ARCESS Array B** | 127.58 | 351 | | | PKPdf | | 21 52 40.9 | -0.1 |
| KIRV | **Kirov** | 128.87 | 332 | *i* PKiKP | | PKiKP | | 21 52 43.8 | -0.5 |
| BOSA | **Boshof** | 129.33 | 203 | PKP | | PKiKP | | 21 52 46.5 | -0.1 |
| | comp=Z,3.1nm,0.8s,baz=164,slow=0.6,SNR=7.1 | | | | | | | | |
| BOSA | **Boshof** | 129.33 | 203 | PKiKP | | PKiKP | | 21 52 46.7 | +0.2 |
| BOSA | **Boshof** | 129.33 | 203 | | | PKiKP | | 21 52 46.7 | +0.2 |
| FINES | **FINESS Array B** | 134.78 | 346 | PKP | | PKPdf | | 21 52 54.5 | -0.2 |
| | comp=Z,2.2nm,0.6s,baz=50,slow=2.2,SNR=20 | | | | | | | | |
| OBN | **Obninsk** | 136.54 | 334 | *e*PKiKP | | PKPdf | | 21 52 55.7 | -2.5 |
| OBN | | | | *e* | | | | 21 55 38.4 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| NB2 | **NORSAR Subarra** | 137.39 | 356 | PKPa | | PKiKP | | 21 53 01.5 | -0.1 |
| | comp=Z,0.4nm,0.5s,baz=11,slow=4.1 | | | | | | | | |
| KIV | **Kislovodsk** | 139.87 | 317 | *e*PKiKP | | PKPdf | | 21 53 05.1 | +0.2 |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| GURO | **Guroymak-BITLI** | 142.55 | 310 | | | PKPpre | | 21 53 04.9 | |
| EKA | **Eskdalemuir Ar** | 142.73 | 8 | PKhKP | | PKPpre | | 21 53 05.4 | |
| | comp=Z,1.8nm,0.7s,baz=323,slow=3.4,SNR=4.4 | | | | | | | | |
| AKASG | **Malin Array Be** | 142.80 | 335 | PKhKP | | PKPpre | | 21 53 05.8 | |
| | comp=Z,2.7nm,0.6s,baz=40,slow=4.0,SNR=17 | | | | | | | | |
| AKBB | **Malin Array Si** | 142.80 | 335 | PKHKP | | PKPpre | | 21 53 04.2 | |
| AKBB | **Malin Array Si** | 142.80 | 335 | | | PKPpre | | 21 53 04.2 | |
| KMBO | **Kilima Mbogo** | 143.12 | 241 | PKhKP | | PKPpre | | 21 53 09.1 | |
| | comp=Z,3.2nm,0.9s,baz=79,slow=3.1,SNR=9.4 | | | | | | | | |
| KMBO | **Kilima Mbogo** | 143.12 | 241 | PKHKP | | PKPpre | | 21 53 08.7 | |
| KMBO | **Kilima Mbogo** | 143.12 | 241 | | | PKPbc | | 21 53 08.7 | -0.2 |
| MARD | **Mardin** | 143.93 | 308 | | | PKPbc | | 21 53 10.9 | +0.5 |
| BSEG | **Bad Segeberg** | 144.51 | 355 | *e*PKPbc | | PKPdf | | 21 53 12.3 | -0.4 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| SORM | **Soroca** | 145.14 | 333 | ‖ P | | PKPdf | | 21 53 13.7 | -0.2 |
| SORM | **Soroca** | 145.14 | 333 | ‖ PKiKP | | PKPdf | | 21 53 13.7 | -0.2 |
| LVV | **L'vov** | 145.46 | 339 | *e*PKiKP | | PKPab | | 21 53 14.6 | -0.3 |
| RUE | **Ruedersdorf** | 145.55 | 351 | *e*PKPbc | | PKPab | | 21 53 15.5 | +0.4 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| MILM | **Milestii Mici** | 145.85 | 331 | ↑P | | PKPab | | 21 53 16.2 | -0.3 |
| MILM | **Milestii Mici** | 145.85 | 331 | *e*PKP | | PKPab | | 21 53 16.0 | -0.5 |
| | comp=Z,20nm,1.0s | | | | | | | | |
| MILM | **Milestii Mici** | 145.85 | 331 | ↑PKP2 | | PKPab | | 21 53 16.2 | -0.3 |
| NRDL | **Niedersach Rie** | 145.96 | 355 | *e*PKPbc | | PKPab | | 21 53 17.3 | +0.7 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| NRDL | | | | *ep*PKPbc | | sPKPdf | | 21 53 52.2 | -0.2 |
| FLTG | **Flechtingen** | 146.02 | 354 | *e*PKPbc | | PKPab | | 21 53 17.1 | +0.2 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| IBBN | **Ibbenburen** | 146.30 | 357 | *e*PKPbc | | PKPab | | 21 53 18.3 | +0.4 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| IBBN | | | | *ep*PKPbc | | sPKPab | | 21 53 55.0 | +0.2 |
| VASR | **Vaslui** | 146.52 | 332 | ‖ P | | PKPab | | 21 53 19.0 | -0.1 |
| CLZ | **Clausthal** | 146.59 | 354 | *e*PKPbc | | PKPab | | 21 53 19.3 | +0.1 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| KSP | **Ksiaz** | 146.68 | 347 | *e*PKP | | PKPab | | 21 53 19.6 | +0.1 |
| CLL | **Collm** | 146.80 | 351 | *i* PKiKP | | PKPbc | | 21 53 18.4 | -0.2 |
| CLL | | | | *i* | | | | 21 53 21.5 | |
| CLL | | | | *e* | | | | 21 53 52.0 | |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| CLL | **Collm** | 146.80 | 351 | *i* PKPbc | | PKPbc | | 21 53 18.4 | -0.2 |
| | comp=Z,23nm,0.9s | | | | | | | | |
| CLL | | | | *i* PKPab | | PKiKP | | 21 53 21.5 | +0.3 |
| CLL | | | | *e*(pPKPbc) | | | | 21 53 52.0 | |
| CLL | **Collm** | 146.80 | 351 | | | PKPdf | | 21 53 17.2 | +0.5 |
| CLL | **Collm** | 146.80 | 351 | *e*PKPbc | | PKPab | | 21 53 19.5 | -0.4 |
| | baz=9.5,slow=2.8 | | | | | | | | |
| BNN | **Bunyan** | 146.81 | 314 | | | PKPbc | | 21 53 19.3 | +0.1 |
| BUR08 | **Bucovina Ar. S** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **VRAC** | **Vranov** | **148.06 346** | ⇑P | **PKiKP** | **21 53 23.4** | **-0.5** |
| **VRAC** | **Vranov** | **148.06 346** | ⇑PKP2 | **PKiKP** | **21 53 23.4** | **-0.5** |
| **VRAC** | **Vranov** | **148.06 346** | *e*PKP | **PKiKP** | **21 53 23.2** | **-0.7** |
| **BTNL** | **Ternell** | **148.06 359** | *d*PKP | **PKPbc** | **21 53 22.7** | **+0.6** |
| **BSTI** | **Sart Tilman** | **148.07 360** | *d*PKP | **PKiKP** | **21 53 23.2** | **-0.6** |
| **AHRW** | **Bad Neuenahr-A** baz=9.5,slow=2.8 | **148.09 358** | *e*PKPbc | **PKPab** | **21 53 24.3** | **-0.8** |
| **DOPR** | **Dopca** | **148.10 333** | ⇓P | **PKiKP** | **21 53 23.6** | **-0.5** |
| **NEHR** | **Nehoiu** | **148.12 332** | ⇓P | **PKiKP** | **21 53 23.6** | **-0.6** |
| **MANZ** | **Manzenberg** baz=9.5,slow=2.8 | **148.22 352** | *e*PKPbc | **PKiKP** | **21 53 23.9** | **-0.3** |
| **CJR** | **Cluj-Napoca** | **148.22 336** | ⇑P | **PKiKP** | **21 53 24.1** | **-0.2** |
| **CJR** | **Cluj-Napoca** | **148.22 336** | ⇑PKP2 | **PKiKP** | **21 53 24.1** | **-0.2** |
| **JAVC** | **Velka Javorina** | **148.22 345** | *e*PKP | **PKiKP** | **21 53 24.4** | **+0.1** |
| **MLR** | **Muntele Rosu** | **148.23 332** | ⇓P | **PKiKP** | **21 53 24.1** | **-0.4** |
| **MLR** | **Muntele Rosu** | **148.23 332** | ⇓PKP2 | **PKiKP** | **21 53 24.1** | **-0.4** |
| **BCLA** | **Clavier** | **148.23 0** | *d*PKPab | **PKPab** | **21 53 25.8** | **+0.1** |
| **VYHS** | **Vyhne** | **148.25 343** | *e*PKP2 | **PKiKP** | **21 53 23.9** | **-0.4** |
| **VYHS** | **Vyhne** | **148.25 343** | *e*PKP | **PKiKP** | **21 53 23.9** | **-0.4** |
| **BGES** | **Gesves** | **148.27 0** | *d*PKPab | **PKPab** | **21 53 26.3** | **+0.5** |
| **KOLL** | **Kolacno** | **148.29 344** | *e*PKP | **PKiKP** | **21 53 24.2** | **-0.1** |
| **TREC** | **Trest** | **148.31 347** | *e*PKP2 | **PKiKP** | **21 53 23.5** | **-0.9** |
| **TREC** | **Trest** | **148.31 347** | *e*PKP | **PKiKP** | **21 53 23.5** | **-0.9** |
| **KRUC** | **Moravsky** | **148.34 346** | *e*PKP | **PKiKP** | **21 53 23.4** | **-1.0** |
| **TNS** | **Taunus Mts** baz=9.5,slow=2.8 | **148.34 356** | *e*PKPbc | **PKiKP** | **21 53 23.9** | **-0.5** |
| TNS | | | *ep*PKPbc | **sPKPab** | **21 54 01.5** | **-1.5** |
| **BMRD** | **Maredsous** | **148.35 1** | *d*PKP | **PKiKP** | **21 53 23.9** | **-0.5** |
| **ROTZ** | **Rotzenmuhle** baz=9.5,slow=2.8 | **148.42 352** | *e*PKPbc | **PKiKP** | **21 53 24.4** | **-0.2** |
| ROTZ | | | *ep*PKPbc | **sPKPab** | **21 54 01.5** | **-1.8** |
| **PSZ** | **Piszkesteto** | **148.46 341** | ⇑P | **PKiKP** | **21 53 24.3** | **-0.5** |
| **PSZ** | **Piszkesteto** | **148.46 341** | ⇑PKP2 | **PKiKP** | **21 53 24.3** | **-0.5** |
| **DRGR** | | **148.49 337** | ⇓P | **PKiKP** | **21 53 23.9** | **-1.0** |
| **DRGR** | | **148.49 337** | ⇓PKP2 | **PKiKP** | **21 53 23.9** | **-1.0** |
| **SECR** | | **148.53 331** | ⇓P | **PKiKP** | **21 53 24.4** | **-0.5** |
| **DOU** | **Dourbes** | **148.55 1** | *d*PKP | **PKiKP** | **21 53 24.1** | **-0.7** |
| DOU | | | *d*PKPab | **PKPab** | **21 53 27.2** | **+0.2** |
| **SMOL** | **Smolenice** | **148.60 345** | *e*PKP2 | **PKiKP** | **21 53 25.2** | **+0.2** |
| **SMOL** | **Smolenice** | **148.60 345** | *e*PKP | **PKiKP** | **21 53 25.2** | **+0.2** |
| **GRF** | **Grafenberg Arr** baz=9.5,slow=2.8 | **148.62 353** | *e*PKPbc | **PKiKP** | **21 53 24.7** | **-0.3** |
| **VOIR** | | **148.66 333** | ⇓P | **PKiKP** | **21 53 25.2** | **-0.1** |
| **VOIR** | | **148.66 333** | ⇓PKP2 | **PKiKP** | **21 53 25.2** | **-0.1** |
| **MBAR** | **Mbarara** | **148.69 235** | PKIKP | **PKPbc** | **21 53 24.1** | **-0.9** |
| **MBAR** | **Mbarara** | **148.69 235** | PKPbc | **PKPbc** | **21 53 24.1** | **-0.9** |
| **KHC** | **Kasperske Hory** | **148.83 350** | PKIKP | **PKPbc** | **21 53 24.4** | **+0.2** |
| **KHC** | **Kasperske Hory** | **148.83 350** | *e*PKP | **PKiKP** | **21 53 25.1** | **-0.4** |
| **KHC** | **Kasperske Hory** | **148.83 350** | PKPbc | **PKPbc** | **21 53 24.4** | **+0.2** |
| **ARR** | **Arges** | **148.90 333** | ⇓P | **PKPdf** | **21 53 21.3** | **+0.9** |
| **WET** | **Wettzell** baz=9.5,slow=2.8 | **148.93 351** | *e*PKPbc | **PKiKP** | **21 53 25.4** | **-0.3** |
| **WLF** | **Walferdange** | **148.99 359** | PKIKP | **PKPbc** | **21 53 23.9** | **-0.5** |
| **WLF** | **Walferdange** | **148.99 359** | | **PKPbc** | **21 53 23.9** | **-0.5** |
| **WLF** | **Walferdange** baz=9.5,slow=2.8 | **148.99 359** | *e*PKPbc | **PKiKP** | **21 53 26.3** | **+0.6** |
| **WLF** | **Walferdange** | **148.99 359** | *d*PKiKP | **PKiKP** | **21 53 26.1** | **+0.3** |
| **CKRC** | **Cesky Krumlov** | **149.00 349** | *e*PKP | **PKPdf** | **21 53 21.4** | **+1.0** |
| CKRC | | | *ex* | x | 21 53 25.4 | |
| **GERES** | **GERESS Array B** comp=Z,3.1nm,0.5s,baz=349,slow=4.1,SNR=20 | **149.08 349** | PKPbc | **PKiKP** | **21 53 25.6** | **-0.5** |
| **CONA** | **Conrad Observa** comp=Z,20nm,1.2s,SNR=7.6 | **149.52 346** | *i* P | **PKiKP** | **21 53 27.1** | **+0.1** |
| **GZR** | **Gura Zlata** | **149.63 335** | ⇑P | **PKPbc** | **21 53 26.2** | **-0.1** |
| **GZR** | **Gura Zlata** | **149.63 335** | ⇑PKHKP | PKPpre | 21 53 26.2 | |
| **STU** | **Stuttgart** baz=9.5,slow=2.8 | **149.73 355** | *e*PKPbc | **PKiKP** | **21 53 27.5** | **+0.2** |
| **BORA** | **Eskisehir** | **149.75 320** | PKPbc | **PKPbc** | **21 53 25.1** | **-1.7** |
| **BZS** | **Buzias** | **149.89 337** | ⇓P | **PKiKP** | **21 53 27.6** | **-0.1** |
| **BZS** | **Buzias** | **149.89 337** | ⇓PKP2 | **PKiKP** | **21 53 27.6** | **-0.1** |
| **MOA** | **Molln** comp=Z,4.3nm,0.6s | **149.94 348** | *i* P | **PKiKP** | **21 53 27.4** | **-0.4** |
| **FUR** | **Furstenfeldbru** baz=9.5,slow=2.8 | **150.11 352** | *e*PKPbc | **PKiKP** | **21 53 28.4** | **+0.2** |
| **HERR** | **Herculane** | **150.20 335** | ⇑P | **PKiKP** | **21 53 27.8** | **-0.5** |
| **BFO** | **Black Forest** | **150.24 356** | PKHKP | PKPpre | 21 53 27.3 | |
| **BFO** | **Black Forest** | **150.24 356** | PKPbc | **PKPbc** | **21 53 27.3** | **-0.3** |
| **BFO** | **Black Forest** baz=9.5,slow=2.8 | **150.24 356** | *e*PKPbc | **PKiKP** | **21 53 28.8** | **+0.4** |
| **ARSA** | **Arzberg** comp=Z,5.9nm,0.9s | **150.24 346** | *i* P | **PKiKP** | **21 53 28.3** | **-0.1** |
| **MORH** | **Mrgy, Hungar** | **150.37 341** | ⇓P | **PKiKP** | **21 53 28.5** | **-0.2** |
| **CSS** | **Mathiatis** | **150.39 309** | PKPbc | **PKPbc** | **21 53 26.5** | **-1.9** |
| **LEF** | **Lefka** | **150.64 310** | ⇑P | **PKPbc** | **21 53 28.9** | **-0.1** |
| **UBR** | **Ueberruh** baz=9.5,slow=2.8 | **150.73 354** | *e*PKPbc | **PKiKP** | **21 53 29.7** | **+0.2** |
| **RETA** | **Reutte** comp=Z,7.2nm,0.6s | **150.84 353** | *e*P | **PKiKP** | **21 53 29.7** | **0.0** |
| **KBA** | **Koelnbreinsper** comp=Z,1.1nm,0.5s | **150.85 349** | *i* P | **PKPbc** | **21 53 29.2** | **-0.1** |
| **WATA** | **Walderalm** comp=Z,1nm,0.5s,SNR=5.5 | **150.89 351** | *i* P | **PKiKP** | **21 53 29.7** | **-0.2** |
| **SOKA** | **Soboth** comp=Z,8.6nm,0.9s | **150.89 346** | *i* P | **PKiKP** | **21 53 29.4** | **-0.5** |
| **FRGS** | **Fruska Gora** | **150.93 339** | ⇓P | **PKPbc** | **21 53 29.0** | **-0.4** |
| **MOTA** | **Moosalm** comp=Z,16nm,0.9s | **150.94 352** | *i* P | **PKiKP** | **21 53 29.8** | **-0.2** |
| **WTTA** | **Wattenberg** comp=Z,30nm,0.4s,SNR=13 | **150.95 351** | *i* P | **PKiKP** | **21 53 30.2** | **+0.1** |
| **DAVA** | **Damuels** comp=Z,25nm,1.1s | **151.14 354** | *e*P | **PKiKP** | **21 53 30.9** | **+0.4** |
| **OBKA** | **Obir** comp=Z,6.1nm,0.7s | **151.16 347** | *i* P | **PKPbc** | **21 53 29.8** | **-0.1** |
| **MYKA** | **Terra Mystica** comp=Z,11nm,0.5s | **151.23 348** | *i* P | **PKPbc** | **21 53 29.8** | **-0.2** |
| **FETA** | **Feichten** comp=Z,12nm,0.7s | **151.31 352** | *i* P | **PKiKP** | **21 53 31.0** | **+0.1** |
| **ABTA** | **Abfaltersbach** comp=Z,21nm,0.5s,SNR=7.4 | **151.32 350** | *i* P | **PKiKP** | **21 53 30.3** | **-0.5** |
| **CRNS** | **Crni Vrh** | **151.63 347** | *i* PKPbc | **PKiKP** | **21 53 31.1** | **-0.3** |
| **DAVOX** | **Davos/Dischmat** comp=Z,17nm,0.4s,baz=255,slow=2.8,SNR=43 | **151.64 354** | PKPbc | **PKiKP** | **21 53 32.0** | **+0.5** |
| **VTS** | **Vitosha** | **151.69 332** | ⇓P | **PKiKP** | **21 53 32.1** | **+0.4** |
| **VTS** | **Vitosha** | **151.69 332** | ⇓PKIKP | **PKiKP** | **21 53 32.1** | **+0.4** |
| **VTS** | **Vitosha** | **151.69 332** | PKPbc | **PKPbc** | **21 53 30.1** | **-1.3** |
| **GBAS** | **Gorenja Brezov** | **151.73 347** | *i* PKPbc | **PKiKP** | **21 53 31.5** | **0.0** |
| **STAL** | **STALIGIAL** | **151.75 349** | PKPbc | **PKPbc** | **21 53 30.7** | **-0.5** |
| **DIVS** | **Divibare** | **151.79 338** | PKPbc | **PKPbc** | **21 53 31.0** | **-0.4** |
| **ELL** | **Elmali** | **151.92 315** | PKIKP | **PKPbc** | **21 53 31.2** | **-0.8** |
| **ELL** | **Elmali** | **151.92 315** | PKPbc | **PKPbc** | **21 53 31.2** | **-0.8** |
| **CTI** | **Castel Tesino** | **152.13 351** | PKIKP | **PKPbc** | **21 53 31.7** | **-0.5** |
| **CTI** | **Castel Tesino** | **152.13 351** | PKPbc | **PKPbc** | **21 53 31.7** | **-0.5** |
| **ESDC** | **Sonseca Array** comp=Z,1.1nm,0.9s,baz=319,slow=3.1,SNR=4.9 | **157.45 19** | PKPbc | **PKPab** | **21 54 06.4** | **+1.6** |
| **TORD** | **Torodi Ar. Bea** comp=Z,2.3nm,0.8s,baz=350,slow=1.5,SNR=14 | **173.49 146** | PKP | **PKPdf** | **21 53 45.3** | **-1.4** |
| TORD | | | PKPab | **PKPab** | **21 55 16.6** | **+0.8** |
| TORD | | | PP | **PP** | **21 59 11.0** | **+4.2** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.8nm,0.7s,baz=231,slow=4.3,SNR=4.5 | **173.49 146** | | **PKPdf** | **21 53 45.3** | **-1.4** |
| TORD | | | PKPab | **PKPab** | **21 55 15.8** | **-0.1** |

**PRU 29 21:52:59.7±0.0, 50.24N×18.97E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MORC** | **Moravsky Berou** | **1.03** | **244** | *e*PG | Pg | 21 53 19.3 | -0.1 |
| MORC | | | | *e*SG | Sg | 21 53 33.2 | +0.4 |
| **LANS** | **Liptovska Anna** | **1.14** | **163** | *e*PG | Pg | 21 53 21.2 | -0.3 |
| LANS | | | | *e*SG | Sg | 21 53 35.9 | -0.3 |
| LANS | | | | *e*LG | Lg | 21 53 39.6 | |
| **DPC** | **Dobruska-Polom** | **1.70** | **275** | *e*PG | Pn | 21 53 30.0 | -0.7 |
| DPC | | | | *e*SG | Sg | 21 53 54.1 | -0.2 |
| **VYHS** | **Vyhne** | **1.75** | **183** | *e*SN | Sn | 21 53 52.8 | -1.5 |
| **OSTC** | **Ostas** | **1.79** | **281** | *e*SG | Sg | 21 53 58.0 | +0.8 |
| **VRAC** | **Vranov** | **1.80** | **240** | *e*SG | Sb | 21 53 56.2 | -0.5 |
| **CHVC** | **Chvalec** | **1.90** | **282** | *e*SG | Sb | 21 53 59.9 | +0.5 |

*IDC **29** 22:02:14.8±1.7,2.2°95S×129.4°40E, h0km, mb3.4/2, mb1 3.6/4, mb1mx3.4/31, mbtmp3.4/4, ML3.4/2, Error ellipse: s-maj=48.8km s-min=26.6km az=88.0*
*DJA **29** 22:02:17.1±0.6, 3.2°S±6.4°×12.2°E±2.1°, h10km, M3.2/6, MLv3.2/6*
**ISC 29 22:02:18.4±1.0, 2.88S±0.09×129.42E±0.09, h28km, n7, σ1s32/8, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.67** | **226** | P | **Pn** | **22 02 32.5** | **+0.5** |
| **AAI** | **Ambon** | **1.46** | **237** | P | **Pb** | **22 02 45.4** | **+0.5** |
| **SIJI** | **Sorong** | **2.72** | **43** | Pn | **Pn** | **22 03 00.1** | **-0.2** |
| | 12nm,0.3s,baz=256,slow=23,SNR=26 | | | | | | |
| SIJI | | | | Sn | **Sn** | **22 03 32.5** | **+0.1** |
| | 7.1nm,0.3s,baz=242,slow=23,SNR=9.5 | | | | | | |
| **SANI** | **Sanana** | **3.52** | **283** | P | **Pn** | **22 03 09.9** | **-1.4** |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=343,slow=13,SNR=2.6 | **17.63** | **165** | P | **Pn** | **22 06 20.0** | **-2.1** |
| **ASAR** | **Alice Springs** 1.3nm,0.6s,baz=349,slow=11,SNR=13 | **21.11** | **169** | P | **P** | **22 07 01.2** | **+0.2** |
| **MKAR** | **Makanchi Array** 0.2nm,0.5s,baz=121,slow=7.4,SNR=2.0 | **64.49** | **326** | P | **P** | **22 12 54.0** | **+1.3** |

*INMG **29** 22:21:01.9±1.0, 35.95N×7.66W, h24km±19km, ML1.3, Error ellipse: s-maj=9.4km s-min=7.0km az=41.0*
**CNRM 29 22:20:56.5, 35.71N×7.84W, h30km, ml2.5, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBDV** | **Barranco-do-Ve** | **1.53** | **357** | *e*P | Pn | 22 21 23.0 | +1.2 |
| PBDV | | | | *e*S | Sn | 22 21 38.6 | -2.1 |
| **PVAQ** | **Vaqueiros** | **1.69** | **3** | *e*P | Pn | 22 21 25.4 | +1.4 |
| PVAQ | | | | *e*S | Sn | 22 21 42.4 | -2.2 |
| **PVAQ** | **Vaqueiros** | **1.69** | **3** | P | Pn | 22 21 24.5 | +0.5 |
| PVAQ | | | | S | Sn | 22 21 43.8 | -0.8 |
| **MORF** | **Marmelete** | **1.72** | **338** | *e*P | Pb | 22 21 26.7 | -0.8 |
| **PCVE** | **Castro Verde** | **1.92** | **355** | *e*Pn | Pn | 22 21 28.8 | +1.6 |
| PCVE | | | | *e*Sn | Sn | 22 21 48.4 | -2.0 |
| PCVE | | | | A | A | 22 21 49.7 | |
| | 1.7nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.46** | **347** | *e*Pn | Pn | 22 21 36.1 | +1.6 |
| PNCL | | | | *e*Sn | Sn | 22 22 02.4 | -1.2 |
| **PBAR** | **Barrancos** | **2.54** | **14** | *e*Sn | Sn | 22 22 03.1 | -2.5 |
| **PMTG** | **Montargil** | **3.36** | **355** | *e*Sn | Sn | 22 22 23.3 | -2.6 |
| **PMRV** | **Marv??o** | **3.73** | **5** | *e*Sn | Sn | 22 22 31.8 | -3.1 |
| **MD31** | **MD31** | **3.81** | **137** | P | Pn | 22 21 53.9 | +0.6 |
| MD31 | | | | S | Sn | 22 22 38.8 | +1.6 |
| **MDT** | **Midelt** | **3.94** | **136** | P | Pn | 22 21 56.6 | +1.6 |
| MDT | | | | S | Sn | 22 22 38.8 | -1.5 |
| **OUK** | **Oukaimeden** | **4.49** | **180** | P | Pn | 22 22 06.2 | +3.3 |
| OUK | | | | S | Sn | 22 22 55.6 | +1.3 |
| **TTIG** | **Tnine Tigouga,** | **5.18** | **186** | P | Pn | 22 22 12.5 | +0.4 |
| TTIG | | | | S | Sn | 22 23 08.9 | -1.9 |

**IDC 29 22:28:20.9±3.2, 5.21S×133.96E, h0km, mb3.5/1, mb1 4.0/5, mb1mx3.5/26, mbtmp3.8/5, ML3.8/4, Error ellipse: s-maj=118.5km s-min=26.2km az=80.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.08** | **328** | Pn | Pn | 22 29 39.4 | +1.1 |
| | 1.4nm,0.3s,baz=231,slow=22,SNR=2.0 | | | | | | |
| SIJI | | | | Sn | Sn | 22 30 30.1 | -7.6 |
| | 2.4nm,0.3s,baz=229,slow=23,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=356,slow=13,SNR=12 | **14.65** | **179** | Pn | Pn | 22 31 48.1 | -1.6 |
| WRA | | | | Sn | Sn | 22 34 24.3 | -8.6 |
| | 0.2nm,0.3s,baz=356,slow=23,SNR=4.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** 0.6nm,0.3s,baz=32,slow=12,SNR=14 | **15.17** | **212** | Pn | Pn | 22 31 56.1 | -0.5 |
| FITZ | | | | Sn | Sn | 22 34 35.0 | -11 |
| | 0.9nm,0.3s,baz=194,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** 0.8nm,0.3s,baz=6.7,slow=12,SNR=43 | **18.36** | **180** | P | P | 22 32 38.2 | +1.0 |
| ASAR | | | | S | Sn | 22 35 50.3 | -13 |
| | 0.0nm,0.3s,baz=356,slow=27,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=117,slow=8.0,SNR=5.0 | **68.97** | **325** | P | P | 22 39 27.7 | -0.3 |

**IDC 29 22:41:16.6±5.3, 6.22S×147.79E, h135km±57km, mb3.7/3, mb1 3.8/5, mb1mx3.2/40, mbtmp4.0/5, Error ellipse: s-maj=84.2km s-min=28.1km az=138.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** 13nm,0.3s,baz=39,slow=10.0,SNR=11 | **3.23** | **191** | P | Pn | 22 42 06.4 | 0.0 |
| PMG | | | | S | Sn | 22 42 45.3 | +0.4 |
| | 14nm,0.3s,baz=30,slow=21,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** 0.4nm,0.3s,baz=46,slow=11,SNR=26 | **18.89** | **223** | P | P | 22 45 26.4 | -0.4 |
| **ASAR** | **Alice Springs** 3.0nm,0.8s,baz=55,slow=9.3,SNR=31 | **21.90** | **216** | P | P | 22 45 59.9 | +0.8 |
| **FITZ** | **Fitzroy Crossi** 8.2nm,0.5s,baz=68,slow=6.2,SNR=49 | **24.63** | **239** | P | P | 22 46 24.3 | -0.4 |
| **ILAR** | **Eielson Array** 0.4nm,0.6s,baz=261,slow=5.3,SNR=5.7 | **85.37** | **23** | P | P | 22 53 38.5 | +0.1 |

*IDC **29** 22:46:29.7±2.0, 26.36S×179.19E, h509km±23km, mb3.7/8, mb1 3.8/11, mb1mx3.5/41, mbtmp4.6/11, Error ellipse: s-maj=24.1km s-min=18.7km az=150.0*
*NEIC **29** 22:46:31.6±2.1, 26.4S±0.1×179.0E±0.2, h507km±14km, mb4.3/20, Error ellipse: s-maj=20.7km s-min=18.1km az=81.0*
**ISC 29 22:46:30.2±0.7, 26.43S±0.08×179.03E±0.10, h500km, n46, σ1s18/45, mb4.4/19, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** 3.1nm,0.3s,baz=219,slow=14,SNR=9.8 | **8.70** | **354** | P | **P** | **22 48 32.5** | **-1.7** |
| **MSVF** | **Nonsavu** | **8.70** | **354** | | **P** | **22 48 32.0** | **-2.1** |
| **MXZ** | **Matakaoa Point** | **11.12** | **183** | P | **P** | **22 48 59.9** | **+0.6** |
| **URZ** | **Urewera** 8.9nm,0.3s,baz=8.7,slow=3.5,SNR=15 | **11.91** | **187** | P | **P** | **22 49 08.0** | **+0.4** |
| URZ | | | | S | **S** | **22 51 15.9** | **-1.5** |
| | 1.7nm,0.3s,baz=70,slow=23,SNR=8.4 | | | | | | |
| **URZ** | **Urewera** | **11.91** | **187** | P | **P** | **22 49 08.2** | **+0.6** |
| **DZM** | **Mont Dzumac** 0.2nm,0.3s,baz=97,slow=20,SNR=4.0 | **12.27** | **288** | P | **P** | **22 49 14.1** | **+2.2** |
| **NIUE** | **Niue** | **12.53** | **57** | P | **P** | **22 49 17.7** | **+3.1** |
| **BKZ** | **Black Stump Fm** | **12.88** | **189** | | **P** | **22 49 17.1** | **-0.9** |
| **BFZ** | **Birch Farm** | **14.41** | **189** | P | **P** | **22 49 34.9** | **+0.9** |
| **QRZ** | **Quartz Range** | **15.34** | **199** | | **P** | **22 49 45.6** | **+1.8** |
| **TUWZ** | **Tuamarina** | **15.54** | **194** | | **P** | **22 49 47.1** | **+1.2** |
| **KHZ** | **Kahutara** | **16.58** | **194** | P | **P** | **22 49 57.0** | **+0.4** |
| **ARMA** | **Armidale** | **24.40** | **254** | P | **P** | **22 51 09.5** | **+0.9** |
| **EIDS** | **Eidsvold** | **25.15** | **266** | P | **P** | **22 51 15.8** | **+0.7** |
| EIDS | | | | IAmb | IAmb | 22 51 16.6 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **30.39** | **240** | P | **P** | **22 52 02.5** | **+1.6** |
| TOO | | | | IAmb | IAmb | 22 52 03.4 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** comp=Z,9.9nm,0.4s,baz=99,slow=10,SNR=26 | **30.71** | **275** | P | **P** | **22 52 04.5** | **+0.6** |
| **STKA** | **Stephens Creek** comp=Z,3.8nm,0.5s,baz=94,slow=10,SNR=16 | **33.03** | **252** | P | **P** | **22 52 24.3** | **+0.7** |
| **STKA** | **Stephens Creek** | **33.03** | **252** | P | **P** | **22 52 24.1** | **+0.5** |
| **COEN** | **Coen** | **35.74** | **283** | P | **P** | **22 52 46.1** | **-0.4** |
| COEN | | | | IAmb | IAmb | 22 52 47.4 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **37.70** | **250** | P | **P** | **22 53 02.2** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 22 53 02.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **40.82** | **264** | P | **P** | **22 53 27.8** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 22 53 29.0 | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** comp=Z,8.5nm,0.5s,baz=93,slow=7.7,SNR=148 | **40.82** | **264** | P | **P** | **22 53 27.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **40.82** | **264** | P | **P** | **22 53 27.7** | **-0.3** |
| **WB2** | **Warramunga Arr** | **41.42** | **269** | P | **P** | **22 53 32.0** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 22 53 32.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **41.42** | **269** | P | **P** | **22 53 31.5** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 22 53 32.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** comp=Z,6.7nm,0.4s,baz=104,slow=7.7,SNR=128 | **41.43** | **269** | P | **P** | **22 53 32.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **41.43** | **269** | P | **P** | **22 53 31.7** | **-1.1** |
| **WB0** | **Warramunga Arr** | **41.44** | **270** | P | **P** | **22 53 31.8** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 22 53 32.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **44.66** | **252** | P | **P** | **22 53 57.0** | **-0.9** |
| **MTN** | **Manton Dam** | **46.84** | **277** | P | **P** | **22 54 14.7** | **0.0** |
| MTN | | | | IAmb | IAmb | 22 54 14.8 | |
| | comp=Z,4.6nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **47.86** | **272** | P | **P** | **22 54 22.1** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** comp=Z,7.5nm,0.7s,baz=98,slow=6.5,SNR=31 | **49.81** | **268** | P | **P** | **22 54 36.8** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **49.81** | **268** | P | **P** | **22 54 36.4** | **-0.5** |
| FITZ | | | | IAmb | IAmb | 22 54 37.6 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **SIJI** | **Sorong** comp=Z,12nm,0.5s,baz=132,slow=4.4,SNR=6.4 | **52.46** | **291** | P | **P** | **22 54 55.1** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **53.89** | **262** | P | **P** | **22 55 04.8** | **-1.6** |
| **MORW** | **Morawa** | **55.22** | **252** | P | **P** | **22 55 14.6** | **-1.0** |
| **GIRL** | **Giralia** | **58.52** | **259** | P | **P** | **22 55 38.2** | **-0.2** |
| **NVAR** | **Mina Array Bea** comp=Z,0.3nm,0.4s,baz=208,slow=7.1,SNR=2.4 | **87.17** | **44** | P | **P** | **22 58 21.4** | **-1.6** |
| **PZH** | **PanZhiHua** | **91.13** | **299** | P | **P** | **22 58 43.0** | **+1.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.59** | **315** | *e*P | **P** | **22 58 44.8** | **+1.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,240nm,5.7s | | | | | | |
| **TXAR** | **Lajitas Array** comp=Z,0.2nm,0.7s,baz=224,slow=6.3,SNR=2.7 | **92.50** | **58** | P | **P** | **22 58 46.5** | **-1.3** |
| **NB2** | **NORSAR Subarra** | **144.42** | **350** | PKPa | PKPbc | 23 05 05.8 | -2.6 |
| | comp=Z,1.2nm,0.6s,baz=23,slow=4.1 | | | | | | |
| **NOA** | **NORSAR Array B** comp=Z,0.9nm,0.6s,baz=27,slow=2.5,SNR=5.8 | **144.42** | **350** | PKP | PKPbc | 23 05 05.5 | -2.9 |
| **BRTR** | **Keskin Array B** comp=Z,0.6nm,0.8s,baz=48,slow=2.1,SNR=3.0 | **148.32** | **303** | PKPbc | **PKPbc** | **23 05 18.5** | **-1.6** |
| **BRTR** | **Keskin Array B** | **148.32** | **303** | PKPbc | **PKPbc** | **23 05 19.4** | **-0.7** |
| **BURAR** | **Bucovina Array** | **150.50** | **323** | PKPbc | **PKPbc** | **23 05 24.9** | **-0.1** |

*UPA **29** 22:48:35.6±1.6, 8.35N×82.80W, h18km±4km, MW4.3*
*UCR **29** 22:48:35.6±2.6, 8.33N×82.83W, h18km±7km, MW3.9*
**ISC 29 22:48:33.7±1.2, 8.38N±0.03×82.79W±0.02, h14km±10km, n28, σ1s23/48, 2C-6D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTPM** | **Petroterminale** | **0.19** | **207** | ⇑*i*P | **Pb** | **22 48 39.6** | **+0.5** |
| PTPM | | | | *e*S | **Sb** | **22 48 44.2** | **+1.5** |
| **CDITO** | **Canoas** | **0.21** | **337** | *e*P | **Pb** | **22 48 41.4** | **+2.0** |
| **DVD** | **David** | **0.34** | **80** | ⇑*i*P | **Pb** | **22 48 43.1** | **+1.5** |
| DVD | | | | *e*S | **Sn** | **22 48 49.8** | **-1.3** |
| **LOMA3** | **Las Lomas, Chi** | **0.40** | **83** | ⇓*i*P | **Pb** | **22 48 44.0** | **+1.3** |
| LOMA3 | | | | *e*S | **Sn** | **22 48 52.9** | **+0.4** |
| **MLIR3** | **Monte Lirio, C** | **0.41** | **355** | *e*P | **Pn** | **22 48 45.0** | **-0.5** |
| MLIR3 | | | | *e*S | **Sn** | **22 48 52.7** | **-0.3** |
| **BRU2** | **Volcan** | **0.42** | **13** | ⇓*i*P | **Pn** | **22 48 45.0** | **-0.6** |
| BRU2 | | | | *e*S | **Sn** | **22 48 52.9** | **-0.4** |
| **BCO2** | **Palmira** | **0.42** | **38** | ⇓*i*P | **Pn** | **22 48 45.0** | **-0.6** |
| BCO2 | | | | *e*S | **Sn** | **22 48 53.6** | **+0.2** |
| **CHIR3** | **Chiriqui UPA,** | **0.46** | **88** | ⇓*i*P | **Pb** | **22 48 44.7** | **+1.1** |
| CHIR3 | | | | *e*S | **Sn** | **22 48 52.6** | **-1.3** |
| **BC3P** | **Paso Ancho** | **0.47** | **22** | ⇓*i*P | **Pn** | **22 48 46.7** | **+0.4** |
| BC3P | | | | *e*S | **Sn** | **22 48 55.3** | **+0.7** |
| **EDSV** | **San Vito** | **0.47** | **338** | *e*P | **Pn** | **22 48 45.4** | **-0.9** |
| EDSV | | | | *e*S | **Sn** | **22 48 53.7** | **-0.9** |
| **PIRO** | **Carate, Puerto** | **0.54** | **273** | *e*P | **Pg** | **22 48 44.6** | **+0.2** |
| **PIRO** | **Carate, Puerto** | **0.54** | **273** | ⇓P | **Pg** | **22 48 44.6** | **+0.2** |
| PIRO | | | | *e*S | **Sn** | **22 48 55.9** | **-0.1** |
| **CHGR2** | **Aguacate** | **0.85** | **49** | *e*P | **Pb** | **22 48 50.3** | **0.0** |
| CHGR2 | | | | *e*S | **Sn** | **22 49 02.7** | **-0.9** |
| **EDPN** | **Palmar Norte** | **0.88** | **311** | *e*P | **Pg** | **22 48 51.0** | **+0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MKAR | **Makanchi Array** 0.1nm,0.4s,baz=124,slow=7.5,SNR=4.1 | **57.38** | **325** | P | | P | 23 35 37.5 | -0.5 |

**IDC 29 23:30:43.6±1.9, 4°12'N×126°72'E, h0km, mb3.4/5, mb1 3.6/5, mb1mx3.3/43, mbtmp3.4/5, MS3.2/1, Ms1 3.2/1, ms1mx2.3/42, Error ellipse: s-maj=111.4km s-min=27.2km az=68.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FITZ | **Fitzroy Crossi** 1.3nm,0.9s,baz=241,slow=3.9,SNR=3.5 | **22.11** | **183** | P | P | 23 35 41.7 | +1.0 |
| WRA | **Warramunga Arr** 1.5nm,0.6s,baz=340,slow=11,SNR=9.3 | **25.06** | **163** | P | P | 23 36 09.0 | -0.9 |
| ASAR | **Alice Springs** 0.3nm,0.5s,baz=335,slow=6.1,SNR=1.9 | **28.50** | **166** | P | P | 23 36 40.5 | -0.3 |
| STKA | **Stephens Creek** 1.8nm,1.0s,baz=334,slow=15,SNR=3.5 | **38.50** | **159** | P | P | 23 38 08.0 | +0.3 |
| PALK | **Pallekele** comp=Z,24nm,18.2s,baz=276,slow=40 | **45.89** | **276** | LR | LR | 00 01 18.4 | |
| MKAR | **Makanchi Array** 0.2nm,0.5s,baz=104,slow=7.7,SNR=2.5 | **57.23** | **325** | P | P | 23 40 32.9 | +0.1 |

*TAP **29** 23:34:37.1, 23°.98N×122°.68E, h45km, ML3.2, C*
*JMA **29** 23:34:37.8±0.1, 24°.03N×122°.61E, h36km, M2.8*
**ISC 29 23:34:35.9±1.2, 23°.94N±0°.03×122°.66E±0°.02, h19km±3km, n83, σ0s89/157, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JYNG | **Yonagunijimaku** | **0.57** | **27** | P | Pn | **23 34 48.5** | **-0.6** |
| JYNG | | | | eS | Sb | **23 34 55.9** | **+0.9** |
| YOJ | **Yonaguni jima** | **0.61** | **32** | P | Pn | **23 34 49.1** | **-0.5** |
| YOJ | | | | eS | Sb | **23 34 56.9** | **+0.7** |
| YOJ | **Yonaguni jima** baz=31 | **0.61** | **32** | P | Pn | **23 34 49.2** | **-0.4** |
| YOJ | | | | S | Sn | **23 34 58.0** | **-1.0** |
| EWUT | **Wuta** baz=300 | **0.95** | **302** | P | Pg | **23 34 54.2** | **-0.2** |
| EWUT | | | | S | Sn | **23 35 07.1** | **-0.1** |
| ENA | **Nanau** baz=299 | **0.97** | **300** | P | Pb | **23 34 54.5** | **+0.3** |
| ENA | | | | S | Sg | **23 35 07.6** | **0.0** |
| ETL | **Fush Village** baz=269 | **0.97** | **283** | eP | Pb | **23 34 54.7** | **+0.5** |
| ETL | | | | eS | Sb | **23 35 07.4** | **+0.8** |
| TWD | **Chiawan** baz=277 | **0.98** | **278** | eP | Pb | **23 34 54.7** | **+0.4** |
| TWD | | | | eS | Sb | **23 35 07.3** | **+0.5** |
| TWC | **Suao** baz=311 | **0.99** | **312** | P | Pg | **23 34 54.8** | **-0.4** |
| TWC | | | | S | Sg | **23 35 07.8** | **-0.6** |
| NACB | **Ninganchiao** baz=271 | **1.00** | **284** | eP | Pb | **23 34 54.4** | **-0.2** |
| NACB | | | | eS | Sb | **23 35 08.0** | **+0.6** |
| IRIF | **Iriomote-Funau** | **1.06** | **68** | P | Pg | **23 34 56.9** | **+0.4** |
| IRIF | | | | eS | Sn | **23 35 11.1** | **+1.1** |
| HATJ | **Hateruma jima** | **1.06** | **84** | P | Pg | **23 34 56.8** | **+0.3** |
| HATJ | | | | eS | Sn | **23 35 11.3** | **+1.3** |
| NDS | **Dongshan** baz=308 | **1.10** | **309** | eP | Pn | **23 34 56.7** | **+0.3** |
| NDS | | | | eS | Sn | **23 35 10.9** | **-0.2** |
| ETLH | **Xiulin Townshi** baz=283 | **1.11** | **284** | eP | Pb | **23 34 56.1** | **-0.5** |
| ETLH | | | | eS | Sn | **23 35 11.5** | **+0.1** |
| ESL | **Shilin** baz=262 | **1.13** | **264** | eP | Pn | **23 34 56.5** | **-0.2** |
| ESL | | | | eS | Sb | **23 35 11.4** | **+0.2** |
| NTC | **Toucheng** baz=320 | **1.18** | **321** | eP | Pb | **23 34 57.6** | **-0.2** |
| NTC | | | | eS | Sg | **23 35 13.4** | **-0.9** |
| LATG | **Datong** baz=299 | **1.19** | **300** | P | Pn | **23 34 57.9** | **+0.1** |
| LATG | | | | eS | Sb | **23 35 13.0** | **0.0** |
| ENTT | **Nioudou** baz=304 | **1.21** | **305** | P | Pb | **23 34 58.4** | **+0.1** |
| ENTT | | | | S | Sb | **23 35 13.6** | **-0.1** |
| HGSD | **Ruisui** baz=247 | **1.22** | **249** | eP | Pn | **23 34 56.9** | **-1.1** |
| HGSD | | | | eS | Sb | **23 35 12.6** | **-1.1** |
| TWB1 | **Santiao Chiao** baz=330 | **1.23** | **330** | eP | Pn | **23 34 57.9** | **-0.2** |
| TWB1 | | | | eS | Sb | **23 35 13.1** | **-0.9** |
| NDT | **Datong Townshi** baz=291 | **1.23** | **302** | eP | Pn | **23 34 58.6** | **+0.3** |
| NDT | | | | eS | Sn | **23 35 14.7** | **+0.3** |
| NNSB | **Datong** baz=292 | **1.26** | **293** | P | Pn | **23 34 58.7** | **0.0** |
| NNSB | | | | eS | Sb | **23 35 14.9** | **-0.2** |
| FUSB | **Fushanzhiwuyua** baz=298 | **1.27** | **310** | P | Pb | **23 34 59.6** | **+0.3** |
| FUSB | | | | eS | Sb | **23 35 15.3** | **0.0** |
| JKRS | **Kuro-shima** | **1.27** | **76** | P | Pg | **23 35 00.4** | **-0.1** |
| JKRS | | | | S | Sg | **23 35 17.9** | **+0.7** |
| NNS | **Nan Shan** baz=292 | **1.27** | **293** | eP | Pn | **23 34 58.9** | **+0.1** |
| NNS | | | | eS | Sb | **23 35 14.9** | **-0.6** |
| TIPB | **Shuangxi** baz=323 | **1.28** | **324** | eP | Pn | **23 34 58.8** | **0.0** |
| TIPB | | | | eS | Sb | **23 35 14.6** | **-0.9** |
| WHF | **Hehuan Shan** baz=278 | **1.29** | **279** | P | Pn | **23 34 59.2** | **-0.2** |
| WHF | | | | eS | Sb | **23 35 15.7** | **-0.5** |
| EHY | **Hungye** baz=249 | **1.30** | **251** | eP | Pn | **23 34 58.5** | **-0.6** |
| EHY | | | | eS | Sn | **23 35 14.4** | **-1.5** |
| FUSS | **Fushou** baz=283 | **1.33** | **284** | eP | Pn | **23 34 59.9** | **+0.2** |
| FUSS | | | | eS | Sn | **23 35 16.6** | **-0.5** |
| NWLT | **Wulai** baz=308 | **1.34** | **309** | eP | Pn | **23 35 00.1** | **+0.3** |
| NWLT | | | | eS | Sn | **23 35 17.1** | **0.0** |
| SXI1 | **Grass Mountain** baz=339 | **1.35** | **328** | P | Pn | **23 35 00.1** | **+0.2** |
| SXI1 | | | | S | Sb | **23 35 17.2** | **-0.5** |
| CHGB | **Renai** baz=274 | **1.36** | **275** | eP | Pn | **23 34 59.9** | **-0.3** |
| CHGB | | | | eS | Sn | **23 35 17.1** | **-0.7** |
| YULB | **Yu-li** baz=237 | **1.36** | **247** | eP | Pn | **23 34 59.6** | **-0.4** |
| YULB | | | | eS | Sn | **23 35 16.6** | **-0.9** |
| EYUL | **Yuli** baz=235 | **1.36** | **245** | eP | Pn | **23 35 01.0** | **+1.1** |
| EYUL | | | | eS | Sn | **23 35 18.2** | **+0.7** |
| YHNB | **Yeheng** baz=302 | **1.38** | **302** | P | Pn | **23 35 00.7** | **+0.4** |
| YHNB | | | | eS | Sn | **23 35 17.7** | **-0.3** |
| NWF | **Wu-fen Shan** baz=325 | **1.38** | **325** | eP | Pb | **23 35 00.8** | **-0.5** |
| NWF | | | | eS | Sb | **23 35 18.0** | **-0.5** |
| VWDT | **VWDT** baz=262 | **1.40** | **263** | eP | Pn | **23 35 00.7** | **+0.2** |
| VWDT | | | | eS | Sn | **23 35 18.1** | **-0.4** |
| TDCB | **Techi** baz=282 | **1.40** | **283** | eP | Pn | **23 35 01.1** | **+0.4** |
| TDCB | | | | eS | Sn | **23 35 18.5** | **-0.3** |
| WUSB | **Renai** baz=282 | **1.41** | **272** | P | Pn | **23 35 00.9** | **+0.2** |
| WUSB | | | | S | Sn | **23 35 18.7** | **-0.2** |
| JIJ | **Ishigaki jima** | **1.42** | **72** | P | Pb | **23 35 01.8** | **-0.1** |
| JIJ | | | | eS | Sb | **23 35 19.7** | **+0.1** |
| TWA | **Mucha** baz=331 | **1.42** | **317** | eP | Pn | **23 35 01.3** | **+0.5** |
| TWA | | | | eS | Sn | **23 35 19.2** | **+0.1** |
| NHDH | **Xindian Distri** baz=328 | **1.45** | **315** | eP | Pb | **23 35 01.8** | **-0.6** |
| NHDH | | | | eS | Sn | **23 35 19.6** | **0.0** |
| CHKT | **Chengkung** baz=225 | **1.45** | **235** | eS | Sn | **23 35 18.7** | **-1.0** |
| FULB | **Fuli** baz=229 | **1.45** | **240** | eP | Pn | **23 35 00.2** | **-1.1** |
| FULB | | | | eS | Sn | **23 35 20.4** | **+0.6** |
| YM01 | **YM01** baz=321 | **1.56** | **321** | eS | Sb | **23 35 22.9** | **-0.7** |
| NFF | **Wufeng Townshi** baz=296 | **1.56** | **296** | eP | Pn | **23 35 03.6** | **+0.7** |
| NFF | | | | eS | Sn | **23 35 22.8** | **+0.2** |
| SSLB | **Suanglung** baz=264 | **1.57** | **265** | eP | Pn | **23 35 03.8** | **+1.0** |
| SSLB | | | | eS | Sn | **23 35 22.3** | **-0.4** |
| EDH | **Donghe** baz=225 | **1.57** | **232** | eP | Pn | **23 35 02.0** | **-0.8** |
| EDH | | | | eS | Sn | **23 35 20.4** | **-2.3** |
| WHP | **Taichung City** baz=282 | **1.60** | **282** | eP | Pn | **23 35 04.2** | **+0.8** |
| WHP | | | | eS | Sn | **23 35 23.1** | **-0.4** |
| WCS | **Beigang Elemen** baz=274 | **1.60** | **274** | eP | Pn | **23 35 03.8** | **+0.6** |
| WCS | | | | eS | Sn | **23 35 23.7** | **+0.2** |
| SMLT | **Sun Moon Lake** baz=267 | **1.61** | **268** | eP | Pn | **23 35 04.4** | **+0.9** |
| SMLT | | | | eS | Sn | **23 35 23.7** | **-0.1** |
| YUS | **Yu-Shan** baz=253 | **1.63** | **254** | eP | Pn | **23 35 04.1** | **+0.1** |
| YUS | | | | eS | Sn | **23 35 24.1** | **-0.6** |
| JISG | **Ishigakijimahi** | **1.64** | **67** | P | Pn | **23 35 03.3** | **-0.5** |
| JISG | | | | eS | Sn | **23 35 24.9** | **+0.5** |
| TYC | **Yuchr** baz=268 | **1.65** | **269** | eP | Pn | **23 35 04.6** | **+0.7** |
| TYC | | | | eS | Sn | **23 35 24.8** | **+0.2** |
| LIOB | **Emei** baz=295 | **1.65** | **295** | eP | Pb | **23 35 05.5** | **-0.4** |
| LIOB | | | | eS | Sn | **23 35 24.7** | **-0.1** |
| NSTT | **Nanjuang** baz=294 | **1.66** | **295** | eP | Pn | **23 35 04.6** | **+0.5** |
| NSTT | | | | eS | Sn | **23 35 24.7** | **-0.2** |
| LDUT | **Ludao** baz=220 | **1.67** | **221** | eP | Pn | **23 35 03.6** | **-0.5** |
| LDUT | | | | eS | Sn | **23 35 22.7** | **-2.4** |
| ELDTW | **Lidau** baz=242 | **1.68** | **244** | eP | Pn | **23 35 04.2** | **-0.3** |
| ELDTW | | | | eS | Sn | **23 35 24.0** | **-1.6** |
| LONT | **Longtian** baz=227 | **1.74** | **234** | eP | Pn | **23 35 05.0** | **-0.2** |
| LONT | | | | eS | Sn | **23 35 25.9** | **-0.9** |
| ALS | **Alishan** baz=255 | **1.75** | **256** | eP | Pn | **23 35 05.8** | **+0.2** |
| ALS | | | | eS | Sn | **23 35 27.6** | **0.0** |
| TWQ1 | **Liyutan** baz=283 | **1.77** | **284** | eP | Pn | **23 35 06.5** | **+1.0** |
| TWQ1 | | | | eS | Sn | **23 35 29.0** | **+1.4** |
| WJS | **Zhushan** baz=266 | **1.77** | **267** | eS | Sb | **23 35 30.6** | **+0.9** |
| TWGBT | **Beinan** baz=225 | **1.83** | **233** | eP | Pn | **23 35 07.4** | **+1.0** |
| TWGBT | | | | eS | Sn | **23 35 29.8** | **+0.7** |
| STYH | **Taoyuan** baz=240 | **1.89** | **246** | eP | Pn | **23 35 08.3** | **+1.1** |
| STYH | | | | eS | Sn | **23 35 31.1** | **+0.6** |
| WDLH | **Douliu** baz=262 | **1.96** | **263** | eS | Sn | **23 35 32.5** | **+0.3** |
| TPUB | **Ta-pu** baz=242 | **1.96** | **251** | eP | Pn | **23 35 09.6** | **+1.3** |
| TPUB | | | | eS | Sn | **23 35 32.6** | **+0.1** |
| JTJ | **Tarama** | **1.99** | **69** | P | Pb | **23 35 10.6** | **-1.0** |
| WTP | **Ta-pu** baz=241 | **2.00** | **250** | eP | Pn | **23 35 09.6** | **+0.8** |
| WTP | | | | eS | Sn | **23 35 34.0** | **+0.6** |
| ECL | **Taimali** baz=238 | **2.06** | **230** | eP | Pn | **23 35 09.1** | **-0.5** |
| ECL | | | | eS | Sn | **23 35 33.3** | **-1.5** |
| WRL | **Guolierlin Hig** baz=281 | **2.09** | **269** | eS | Sn | **23 35 37.7** | **+2.3** |
| WTK | **Tuku** baz=263 | **2.09** | **264** | eS | Sn | **23 35 36.2** | **+0.7** |
| CHN1 | **Nanshi** baz=242 | **2.09** | **249** | eP | Pn | **23 35 11.9** | **+1.8** |
| CHN1 | | | | eS | Sn | **23 35 37.7** | **+2.1** |
| TWK | **Hsinying** baz=250 | **2.10** | **252** | eP | Pn | **23 35 11.6** | **+1.4** |
| TWK | | | | eS | Sn | **23 35 36.1** | **+0.2** |
| LYUB | **Lan-yu** baz=206 | **2.17** | **207** | eP | Pn | **23 35 10.2** | **-0.9** |
| LYUB | | | | eS | Sn | **23 35 35.2** | **-2.2** |
| SSD | **Sandimen** baz=233 | **2.21** | **238** | eP | Pn | **23 35 13.1** | **+1.5** |
| SSD | | | | eS | Sn | **23 35 39.7** | **+1.3** |
| TSMG | **Majia** baz=232 | **2.22** | **237** | eP | Pn | **23 35 11.9** | **+0.1** |
| TSMG | | | | eS | Sn | **23 35 37.5** | **-1.2** |
| SCST | **Cishan** baz=232 | **2.25** | **243** | eP | Pn | **23 35 14.5** | **+2.3** |
| SCST | | | | eS | Sn | **23 35 42.4** | **+3.0** |
| EAST | **Anshuo** baz=233 | **2.27** | **227** | eP | Pn | **23 35 12.2** | **-0.4** |
| EAST | | | | eS | Sn | **23 35 38.5** | **-1.7** |
| MASBT | **Mashibuluo** baz=230 | **2.28** | **235** | eP | Pn | **23 35 14.1** | **+1.5** |
| MASBT | | | | eS | Sn | **23 35 41.7** | **+1.4** |
| SLIU | **Shizi** baz=223 | **2.42** | **225** | eP | Pn | **23 35 16.7** | **+2.1** |
| SLIU | | | | eS | Sn | **23 35 45.4** | **+1.6** |
| SCZT | **Fangliau** baz=224 | **2.44** | **231** | eP | Pn | **23 35 16.6** | **+1.8** |
| SCZT | | | | eS | Sn | **23 35 45.1** | **+1.0** |
| PHUB | **P'eng-hu** baz=276 | **2.86** | **262** | eP | Pn | **23 35 21.4** | **+0.9** |
| PHUB | | | | eS | Sn | **23 35 54.5** | **0.0** |
| PNG | **Penghu** baz=277 | **2.87** | **263** | eS | Sn | **23 35 54.9** | **+0.2** |
| PTMZ | **Houxiangcun** baz=290 | **3.40** | **289** | eS | Sn | **23 36 07.2** | **-0.7** |

*IDC **29** 23:42:13.2±3.1, 16°.88S×173°.59W, h39km±27km, mb4.5/13, mb1 4.7/16, mb1mx4.5/32, mbtmp4.7/16, ML4.5/3, MS3.6/12, Ms1 3.6/12, ms1mx3.3/62, Error ellipse: s-maj=23.8km s-min=12.7km az=143.0*
*NEIC **29** 23:42:15.9±1.8, 16°.87S±0°.07×173°.5W±0°.1, h56km±6km, mb4.8/174, Error ellipse: s-maj=14.1km s-min=9.9km az=80.0*
**ISC 29 23:42:14.6±0.3, 16°.88S±0°.05×173°.46W±0°.05, h52km, n402, σ1s10/377, mb4.8/105, MS3.7/14, 1D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | **Afiamalu** 144nm,0.3s,baz=332,slow=2.8,SNR=53 | **3.37** | **29** | Pn | Pn | **23 43 04.9** | **0.0** |
| AFI | | | | Sn | Sn | **23 43 40.0** | **-3.7** |
| AFI | 710nm,0.3s,baz=66,slow=22,SNR=23 | | | LR | LR | 23 43 52.5 | |
| AFI | comp=Z,164nm,20.6s,baz=261,slow=29 **Afiamalu** | **3.37** | **29** | Pn | Pn | **23 43 05.2** | **+0.3** |
| AFI | | | | Sn | Sn | **23 43 40.9** | **-2.8** |
| NIUE | **Niue** baz=4.1,SNR=265 | **4.01** | **123** | P | Pn | **23 43 14.3** | **+0.7** |
| NIUE | **Niue** | **4.01** | **123** | | Pn | **23 43 14.6** | **+1.0** |
| NIUE | | | | Sn | Sn | **23 43 55.4** | **-4.0** |
| MSVF | **Nonsavu** | **8.15** | **263** | P | Pn | 23 44 20.1 | +10 |
| RAR | **Rarotonga** 6.8nm,0.3s,baz=266,slow=9.5,SNR=6.5 | **13.64** | **111** | Pn | Pn | **23 45 25.2** | **-0.2** |
| SANVU | **Saraoutou** | **18.63** | **272** | P | P | **23 46 28.0** | **-0.1** |
| LIFNC | **LIFOU** | **18.67** | **255** | P | P | **23 46 28.2** | **-0.3** |
| LIFNC | **LIFOU** | **18.67** | **255** | P | Pn | **23 46 33.2** | **+3.9** |
| PINNC | **Pines Island,** comp=Z,55nm,1.0s | **18.84** | **249** | P | P | **23 46 30.7** | **+0.3** |
| PINNC | | | | IAmb | IAmb | 23 46 44.4 | |
| YATNC | **Mamie plateau,** | **19.22** | **251** | P | Pn | **23 46 39.8** | **+3.9** |
| OUENC | **Ouen Island, N** | **19.34** | **250** | P | P | **23 46 36.1** | **+0.2** |
| DZM | **Mont Dzumac** comp=Z,1.2nm,0.3s,baz=86,slow=18,SNR=11 | **19.63** | **252** | P | P | **23 46 38.3** | **-0.8** |
| DZM | **Mont Dzumac** comp=Z,74nm,1.1s | **19.63** | **252** | eP | P | **23 46 38.1** | **-1.0** |
| DZM | comp=Z,639nm,28.1s | | | eLR | LR | 23 51 06.0 | |
| DZM | **Mont Dzumac** | **19.63** | **252** | P | P | **23 46 39.7** | **+0.5** |
| DZM | **Mont Dzumac** | **19.63** | **252** | P | Pn | **23 46 44.1** | **+3.2** |
| ONTNC | **Ouen Toro** | **19.67** | **251** | P | P | **23 46 39.9** | **+0.4** |
| ONTNC | comp=Z,53nm,0.8s | | | IAmb | IAmb | 23 46 45.5 | |
| NOUC | **Port Laguerre** | **19.76** | **252** | P | Pn | **23 46 45.4** | **+3.0** |
| OUZ | **Omahuta** comp=Z,62nm,1.1s | **21.61** | **210** | P | P | **23 47 01.3** | **+1.0** |
| OUZ | | | | IAmb | IAmb | 23 47 05.7 | |
| OUZ | **Omahuta** | **21.61** | **210** | P | P | **23 47 04.1** | **+3.8** |
| MXZ | **Matakaoa Point** comp=Z,42nm,0.7s | **21.84** | **198** | P | P | **23 47 05.7** | **+3.0** |
| MXZ | | | | IAmb | IAmb | 23 47 18.1 | |
| PAE | **Paea** comp=Z,3.3nm,0.3s | **22.82** | **95** | eT | T | 00 10 51.4 | |
| PPT2 | **Papeete2** comp=Z,515nm,29.8s | **22.82** | **95** | eLR | LR | 23 52 29.5 | |
| PPT | **Papeete** comp=Z,141nm,19.0s,baz=112,slow=32 | **22.82** | **95** | LR | LR | 23 54 40.0 | |
| URZ | **Urewera** comp=Z,67nm,0.4s,baz=340,slow=1.2,SNR=70 | **22.85** | **199** | P | P | **23 47 13.0** | **-0.5** |
| URZ | comp=Z,5.5nm,0.5s,baz=343,slow=20,SNR=2.0 | | | S | S | **23 51 15.5** | **-3.6** |
| URZ | **Urewera** | **22.85** | **199** | P | P | **23 47 13.7** | **+0.3** |
| URZ | **Urewera** | **22.85** | **199** | P | P | **23 47 13.2** | **-0.3** |
| TBI | **Tubuai** comp=Z,365nm,33.0s | **23.42** | **110** | eLR | LR | 23 52 50.6 | |
| TBI | **Tubuai** comp=Z,13nm,0.4s | **23.42** | **110** | eT | T | 00 11 25.5 | |
| HIZ | **Hauiti** | **23.86** | **203** | P | P | **23 47 24.6** | **+1.4** |
| HIZ | **Hauiti** | **23.86** | **203** | P | P | **23 47 24.0** | **+0.8** |
| BKZ | **Black Stump Fm** | **23.87** | **200** | P | P | **23 47 23.2** | **-0.2** |
| BKZ | comp=Z,25nm,0.5s | | | IAmb | IAmb | 23 47 32.4 | |
| BKZ | **Black Stump Fm** | **23.87** | **200** | P | P | **23 47 22.5** | **-0.9** |
| BFZ | **Birch Farm** | **25.33** | **199** | P | P | **23 47 36.9** | **+0.3** |
| BFZ | **Birch Farm** | **25.33** | **199** | P | P | **23 47 36.1** | **-0.5** |
| SNZO | **South Karori** | **26.39** | **200** | P | P | **23 47 47.2** | **+1.0** |
| BHW | **Baring Head** | **26.43** | **200** | P | P | **23 47 47.8** | **+1.4** |
| PLWZ | **Palliser** | **26.45** | **199** | P | P | **23 47 48.1** | **+1.4** |
| QRZ | **Quartz Range** | **26.75** | **204** | P | P | **23 47 53.0** | **+3.6** |
| QRZ | **Quartz Range** | **26.75** | **204** | P | P | **23 47 50.1** | **+0.6** |
| TUWZ | **Tuamarina** | **26.76** | **201** | P | P | **23 47 51.5** | **+2.0** |
| NNZ | **Nelson** | **26.77** | **202** | P | P | **23 47 51.0** | **+1.5** |
| HNR | **Honiara** comp=Z,180nm,0.4s | **26.91** | **283** | P | P | 23 47 42.8 | -8.3 |
| BSWZ | **Blackbirch Sta** | **27.04** | **201** | P | P | **23 47 56.3** | **+4.3** |
| THZ | **Tophouse** | **27.42** | **203** | P | P | **23 47 56.0** | **+0.5** |
| THZ | comp=Z,28nm,0.8s | | | IAmb | IAmb | 23 48 04.2 | |
| KHZ | **Kahutara** | **27.77** | **201** | P | P | **23 48 00.2** | **+1.7** |
| KHZ | comp=Z,29nm,0.7s | | | IAmb | IAmb | 23 48 06.8 | |
| KHZ | **Kahutara** | **27.77** | **201** | P | P | **23 47 58.3** | **-0.2** |
| LTZ | **Lake Taylor** | **28.54** | **202** | P | P | **23 48 07.0** | **+1.5** |
| OXZ | **Oxford** | **29.10** | **202** | P | P | **23 48 13.2** | **+2.8** |
| RPZ | **Rata Peaks** comp=Z,11nm,0.4s,baz=117,slow=2.3,SNR=3.1 | **29.80** | **203** | P | P | **23 48 17.1** | **+0.6** |
| RPZ | comp=Z,126nm,18.8s,baz=24,slow=35 | | | LR | LR | 23 59 27.3 | |
| RPZ | **Rata Peaks** | **29.80** | **203** | P | P | **23 48 18.8** | **+2.2** |
| RPZ | **Rata Peaks** | **29.80** | **203** | P | P | **23 48 16.2** | **-0.3** |
| FOZ | **Fox Glacier** | **30.12** | **205** | P | P | **23 48 20.1** | **+0.7** |
| LBZ | **Lake Benmore** comp=Z,46nm,1.3s | **30.69** | **203** | P | P | **23 48 23.7** | **-0.7** |
| LBZ | | | | IAmb | IAmb | 23 48 26.9 | |
| ODZ | **Otahua Downs** comp=Z,31nm,1.3s | **31.09** | **202** | P | P | **23 48 29.2** | **+1.3** |
| ODZ | | | | IAmb | IAmb | 23 48 31.2 | |
| WKZ | **Wanaka** | **31.52** | **204** | P | P | **23 48 32.7** | **+1.0** |
| MLZ | **Mavora Lakes** | **32.32** | **205** | P | P | **23 48 39.6** | **+0.8** |
| DCZ | **Deep Cove** | **32.79** | **206** | P | P | **23 48 43.6** | **+0.8** |
| WHZ | **Wether Hill Ro** | **32.82** | **204** | P | P | **23 48 44.5** | **+1.4** |
| TAOE | **Nuku Hiva Isla** comp=Z,239nm,32.6s | **33.40** | **80** | eLR | LR | 23 57 14.3 | |
| TAOE | **Nuku Hiva Isla** comp=Z,50nm,0.4s | **33.40** | **80** | eT | T | 00 23 44.3 | |
| EIDS | **Eidsvold** baz=34,SNR=4.6 | **34.05** | **250** | P | P | **23 48 52.6** | **-1.5** |
| EIDS | **Eidsvold** comp=Z,18nm,1.2s | **34.05** | **250** | P | P | **23 48 52.6** | **-1.5** |
| EIDS | | | | IAmb | IAmb | 23 49 05.6 | |
| ARMA | **Armidale** baz=34,SNR=31 | **34.55** | **241** | P | P | **23 48 57.7** | **-0.8** |
| ARMA | **Armidale** | **34.55** | **241** | P | P | **23 48 58.1** | **-0.4** |
| ARMA | **Armidale** | **34.55** | **241** | P | P | **23 48 58.1** | **-0.4** |
| MGCD | **Mangrove Creek** baz=36,SNR=4.9 | **35.77** | **236** | P | P | **23 49 08.0** | **-0.8** |
| MGCD | **Mangrove Creek** | **35.77** | **236** | P | P | **23 49 09.2** | **+0.4** |
| RMQ | **Roma** baz=36,SNR=10.0 | **36.27** | **248** | P | P | **23 49 12.1** | **-1.1** |
| CNB | **Canberra Magne** baz=38,SNR=11 | **37.81** | **234** | P | P | **23 49 25.1** | **-1.2** |
| CNB | **Canberra Magne** | **37.81** | **234** | P | P | **23 49 25.3** | **-1.0** |
| CAN | **Canberra** comp=Z,13nm,0.8s | **38.10** | **234** | P | P | **23 49 27.8** | **-0.8** |
| CAN | | | | IAmb | IAmb | 23 49 28.0 | |
| CTA | **Charters Tower** comp=Z,11nm,0.7s,baz=83,slow=9.7,SNR=12 | **38.27** | **259** | P | P | **23 49 28.2** | **-2.1** |
| CTA | | | | LR | LR | 00 02 51.6 | |
| PMG | **Port Moresby** comp=Z,124nm,18.2s,baz=60,slow=32 | **39.00** | **276** | LR | LR | 00 03 02.8 | |
| CMSA | **Cobar Meteorol** baz=40,SNR=38 | **39.77** | **241** | P | P | **23 49 41.3** | **-1.3** |
| CMSA | **Cobar Meteorol** | **39.77** | **241** | P | P | **23 49 41.7** | **-0.9** |
| MTSU | **Mount Surprise** baz=40,SNR=4.8 | **40.22** | **262** | P | P | **23 49 44.8** | **-1.8** |
| QLP | **Quilpie** baz=40,SNR=3.9 | **40.31** | **249** | P | P | **23 49 45.8** | **-1.3** |
| QLP | **Quilpie** | **40.31** | **249** | P | P | **23 49 45.9** | **-1.3** |
| TOO | **Toolangi** baz=42,SNR=15 | **41.50** | **232** | P | P | **23 49 55.7** | **-1.2** |
| TOO | **Toolangi** comp=Z,17nm,0.7s | **41.50** | **232** | P | P | **23 49 55.7** | **-1.2** |
| TOO | | | | IAmb | IAmb | 23 49 56.2 | |
| TOO | **Toolangi** | **41.50** | **232** | P | P | **23 49 55.6** | **-1.2** |
| COEN | **Coen** | **41.84** | **268** | P | P | **23 49 59.2** | **-0.7** |
| COEN | comp=Z,9.0nm,0.7s | | | IAmb | IAmb | 23 50 00.7 | |
| STKA | **Stephens Creek** comp=Z,20nm,0.5s,baz=90,slow=10,SNR=79 | **43.26** | **241** | P | P | **23 50 10.0** | **-1.2** |
| STKA | **Stephens Creek** baz=43,SNR=71 | **43.26** | **241** | P | P | **23 50 10.2** | **-0.9** |
| STKA | **Stephens Creek** | **43.26** | **241** | P | P | **23 50 10.5** | **-0.7** |
| STKA | **Stephens Creek** | **43.26** | **241** | P | P | **23 50 10.3** | **-0.9** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ARPS | Mount Arapiles | 44.07 | 234 | P | | P | 23 50 16.2 | -1.5 | |
| | baz=44,SNR=11 | | | | | | | | |
| ARPS | Mount Arapiles | 44.07 | 234 | P | | P | 23 50 16.2 | -1.5 | |
| HTT | Hallett | 45.73 | 240 | P | | P | 23 50 29.9 | -1.1 | |
| | baz=46,SNR=12 | | | | | | | | |
| HTT | Hallett | 45.73 | 240 | P | | P | 23 50 29.8 | -1.2 | |
| LCRK | Leigh Creek | 45.95 | 244 | P | | P | 23 50 31.8 | -0.9 | |
| NAPP | Napperby | 46.34 | 240 | P | | P | 23 50 35.4 | -0.3 | |
| BBOO | Buckleboo | 48.03 | 241 | P | | P | 23 50 47.3 | -1.5 | |
| | baz=48,SNR=78 | | | | | | | | |
| BBOO | Buckleboo | 48.03 | 241 | P | | P | 23 50 47.6 | -1.3 | |
| BBOO | Buckleboo | 48.03 | 241 | P | | P | 23 50 47.4 | -1.5 | |
| WR0 | Warramunga Arr | 49.27 | 258 | P | | P | 23 50 56.9 | -1.7 | |
| WR0 | | | | IAmb | | IAmb | 23 50 59.7 | | |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| WB0 | Warramunga Arr | 49.43 | 258 | P | | P | 23 50 57.7 | -2.1 | |
| WB0 | | | | IAmb | | IAmb | 23 50 58.3 | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| WB2 | Warramunga Arr | 49.45 | 258 | P | | P | 23 50 58.1 | -1.9 | |
| WRA | Warramunga Arr | 49.46 | 258 | P | | P | 23 50 57.8 | -2.3 | |
| | comp=Z,7.3nm,0.5s,baz=96,slow=7.0,SNR=194 | | | | | | | | |
| WRA | | | | PcP | | PcP | 23 52 21.1 | -0.5 | |
| | comp=Z,1.4nm,0.8s,baz=93,slow=3.9,SNR=2.2 | | | | | | | | |
| WRA | | | | LR | | LR | 00 10 15.5 | | |
| | comp=Z,80nm,19.7s,baz=145,slow=34 | | | | | | | | |
| WRA | Warramunga Arr | 49.46 | 258 | P | | P | 23 50 57.9 | -2.1 | |
| MULG | Mulgathing | 49.52 | 244 | P | | P | 23 50 58.7 | -1.6 | |
| AS31 | Alice Springs | 49.61 | 253 | P | | P | 23 50 59.7 | -1.5 | |
| ASAR | Alice Springs | 49.61 | 253 | P | | P | 23 50 59.5 | -1.6 | |
| | comp=Z,128nm,0.6s,baz=88,slow=8.6,SNR=1665 | | | | | | | | |
| ASAR | | | | PcP | | PcP | 23 52 21.9 | -0.3 | |
| | comp=Z,2.1nm,0.8s,baz=106,slow=3.9,SNR=1.2 | | | | | | | | |
| ASAR | | | | S | | S | 23 57 56.5 | -10 | |
| | comp=Z,0.8nm,0.9s,baz=86,slow=16,SNR=5.4 | | | | | | | | |
| ASAR | | | | LR | | LR | 00 09 56.5 | | |
| | comp=Z,75nm,20.6s,baz=96,slow=34 | | | | | | | | |
| ASAR | Alice Springs | 49.61 | 253 | P | | P | 23 50 59.7 | -1.5 | |
| KDU | Kakadu | 52.31 | 267 | P | | P | 23 51 20.1 | -1.4 | |
| | baz=52,SNR=7.9 | | | | | | | | |
| WRKA | Warakurna | 54.65 | 251 | P | | P | 23 51 37.0 | -1.6 | |
| | baz=55,SNR=210 | | | | | | | | |
| FORT | Forrest | 54.70 | 244 | P | | P | 23 51 37.0 | -1.9 | |
| | baz=55,SNR=11 | | | | | | | | |
| FORT | Forrest | 54.70 | 244 | P | | P | 23 51 37.3 | -1.6 | |
| KNRA | Kununurra | 55.30 | 262 | P | | P | 23 51 42.3 | -1.1 | |
| | baz=55,SNR=8.5 | | | | | | | | |
| FITZ | Fitzroy Crossi | 57.86 | 259 | P | | P | 23 52 00.2 | -1.3 | |
| | baz=58,SNR=6.0 | | | | | | | | |
| BATI | Baumata | 61.28 | 267 | LR | | LR | 00 17 13.0 | | |
| | comp=Z,59nm,20.1s,baz=126,slow=34 | | | | | | | | |
| BATI | Baumata | 61.28 | 267 | P | | P | 23 52 25.4 | +0.2 | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| PSA00 | Pilbara Seismi | 62.73 | 254 | P | | P | 23 52 33.6 | -1.2 | |
| PSA00 | Pilbara Seismi | 62.73 | 254 | P | | P | 23 52 33.1 | -1.7 | |
| PSA00 | | | | IAmb | | IAmb | 23 52 34.2 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| MEEK | Meekatharra | 63.20 | 248 | P | | P | 23 52 36.1 | -1.9 | |
| | baz=63,SNR=12 | | | | | | | | |
| KLBR | Kellerberrin | 63.50 | 243 | P | | P | 23 52 38.7 | -1.1 | |
| | baz=63,SNR=7.0 | | | | | | | | |
| BLDU | Balliduu | 64.48 | 244 | P | | P | 23 52 44.9 | -1.3 | |
| | baz=64,SNR=16 | | | | | | | | |
| MUN | Mundaring | 64.78 | 242 | P | | P | 23 52 47.7 | -0.5 | |
| | baz=65,SNR=4.8 | | | | | | | | |
| MORW | Morawa | 65.21 | 245 | P | | P | 23 52 49.3 | -1.7 | |
| MORW | | | | IAmb | | IAmb | 23 52 57.5 | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| WBSI | Waikabubak, Su | 65.50 | 267 | P | | P | 23 52 52.4 | -0.7 | |
| | comp=Z,44nm,0.8s | | | | | | | | |
| TOLI2 | Tolitoli | 67.20 | 279 | P | | P | 23 53 04.1 | +0.1 | |
| TOLI2 | | | | IAmb | | IAmb | 23 53 04.2 | | |
| | comp=Z,7.9nm,0.8s | | | | | | | | |
| PLAI | Plampang | 67.24 | 267 | P | | P | 23 53 03.1 | -1.2 | |
| | comp=Z,58nm,0.9s | | | | | | | | |
| GIRL | Giralia | 67.71 | 252 | P | | P | 23 53 06.2 | -0.8 | |
| | baz=68,SNR=3.2 | | | | | | | | |
| GIRL | Giralia | 67.71 | 252 | P | | P | 23 53 07.4 | +0.3 | |
| MPSI | Mapaga | 67.79 | 277 | P | | P | 23 53 07.2 | -0.5 | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| UNV | Unalaska Valle | 70.69 | 4 | P | | P | 23 53 24.6 | -0.1 | |
| JAGI | Jajag, Banyuwa | 70.80 | 267 | P | | P | 23 53 24.7 | -1.7 | |
| JMN | Monobe | 71.07 | 316 | P | | P | 23 53 28.0 | +0.5 | |
| JHS | Saijyo | 72.33 | 316 | P | | P | 23 53 35.3 | +0.2 | |
| CIS | Catalina Islan | 72.50 | 46 | P | | P | 23 53 36.6 | +0.4 | |
| | baz=235 | | | | | | | | |
| SMMC | Simmler | 72.54 | 44 | P | | P | 23 53 36.7 | +0.4 | |
| | baz=234 | | | | | | | | |
| KKM | Kota Kinabalu | 73.12 | 282 | P | | P | 23 53 39.7 | -0.6 | |
| KKM | | | | IAmb | | IAmb | 23 53 48.0 | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| CBX | Cerro Bola | 73.12 | 48 | P | | P | 23 53 40.8 | +0.8 | |
| QSPA | South Pole Qui | 73.17 | 180 | P | | P | 23 53 41.1 | +1.4 | |
| KMRM | Mail Ridge | 73.26 | 38 | P | | P | 23 53 41.7 | +1.1 | |
| ELS | Elsinore Mount | 73.32 | 46 | P | | P | 23 53 40.7 | -0.4 | |
| ELS | | | | IAmb | | IAmb | 23 53 42.4 | | |
| | comp=Z,8.2nm,0.9s | | | | | | | | |
| MURC | Murrieta | 73.45 | 46 | P | | P | 23 53 42.0 | +0.2 | |
| | baz=236 | | | | | | | | |
| MONP2 | Monument Peak | 73.61 | 47 | P | | P | 23 53 43.4 | +0.5 | |
| | baz=237,SNR=5.3 | | | | | | | | |
| EDW2 | Edwards Air Fo | 73.63 | 45 | P | | P | 23 53 43.1 | +0.3 | |
| | baz=235,SNR=9.7 | | | | | | | | |
| IKP | In-Ko-Pah, Jac | 73.69 | 48 | P | | P | 23 53 43.8 | +0.5 | |
| | baz=237 | | | | | | | | |
| ISA | Isabella, Lake | 73.75 | 44 | P | | P | 23 53 44.4 | +0.9 | |
| | baz=235 | | | | | | | | |
| O02D | Mt. Diablo Mer | 73.78 | 38 | P | | P | 23 53 43.9 | +0.3 | |
| O02D | Mt. Diablo Mer | 73.78 | 38 | P | | P | 23 53 44.8 | +1.2 | |
| | baz=230 | | | | | | | | |
| PFO | Pinyon Flats O | 73.97 | 47 | P | | P | 23 53 45.6 | +0.6 | |
| PFO | Pinyon Flats O | 73.97 | 47 | P | | P | 23 53 45.6 | +0.6 | |
| | baz=237 | | | | | | | | |
| SLBS | Sierra La Lagu | 73.97 | 59 | P | | P | 23 53 45.4 | +0.3 | |
| SLBS | | | | IAmb | | IAmb | 23 53 52.6 | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| TPFO | Pinon Flats | 73.97 | 47 | P | | P | 23 53 45.2 | +0.3 | |
| | baz=237 | | | | | | | | |
| CHGN | Chignik | 73.99 | 9 | P | | P | 23 53 46.4 | +2.0 | |
| | baz=195 | | | | | | | | |
| PETK | Petropavlovsk- | 74.02 | 342 | P | | P | 23 53 44.8 | +0.2 | |
| | comp=Z,3.0nm,0.8s,baz=140,slow=15,SNR=3.5 | | | | | | | | |
| LRMC | Laurel Mtn Rad | 74.18 | 45 | P | | P | 23 53 46.5 | +0.4 | |
| | baz=235,SNR=7.3 | | | | | | | | |
| N02D | Trinity Center | 74.33 | 38 | P | | P | 23 53 47.8 | +0.9 | |
| N02D | | | | IAmb | | IAmb | 23 53 50.9 | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| N02D | Trinity Center | 74.33 | 38 | P | | P | 23 53 47.5 | +0.7 | |
| | baz=230 | | | | | | | | |
| UGM | Wanagama | 74.41 | 266 | P | | P | 23 53 47.4 | -0.4 | |
| O03E | Paynes Creek | 74.44 | 39 | P | | P | 23 53 48.5 | +1.1 | |
| | baz=231 | | | | | | | | |
| CWC | Cottonwood Cre | 74.46 | 44 | P | | P | 23 53 48.1 | +0.3 | |
| | baz=235 | | | | | | | | |
| BELC | Belle Mtn. Jos | 74.51 | 47 | P | | P | 23 53 48.4 | +0.3 | |
| | baz=237,SNR=7.0 | | | | | | | | |
| M02C | Callahan | 74.51 | 37 | P | | P | 23 53 48.8 | +1.0 | |
| | baz=230 | | | | | | | | |
| OMMB | Old Mammoth Mi | 74.54 | 42 | P | | P | 23 53 48.8 | +0.3 | |
| JTU | Tsushima | 74.57 | 314 | P | | P | 23 53 48.2 | 0.0 | |
| L02E | Cave Junction | 74.58 | 36 | P | | P | 23 53 49.0 | +0.8 | |
| | baz=229 | | | | | | | | |
| MPMC | Manual Prospec | 74.63 | 44 | P | | P | 23 53 49.3 | +0.5 | |
| | baz=235,SNR=22 | | | | | | | | |
| GSC | Goldstone, Bar | 74.67 | 45 | IAmb | | IAmb | 23 53 50.3 | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| GSC | Goldstone, Bar | 74.67 | 45 | P | | P | 23 53 49.2 | +0.3 | |
| | baz=236,SNR=8.3 | | | | | | | | |
| BC3 | Big Chuckawall | 74.70 | 47 | P | | P | 23 53 49.7 | +0.6 | |
| | baz=237 | | | | | | | | |
| TIN | Tinemaha, Big | 74.72 | 43 | P | | P | 23 53 49.6 | +0.4 | |
| | baz=234 | | | | | | | | |
| HEC | Hector,Ludlow | 74.73 | 46 | P | | P | 23 53 49.4 | +0.1 | |
| | baz=236,SNR=9.7 | | | | | | | | |
| YBH | Yreka Blue Hor | 74.81 | 37 | P | | P | 23 53 50.3 | +0.7 | |
| GLA | Glamis | 74.82 | 48 | P | | P | 23 53 50.2 | +0.4 | |
| | baz=238 | | | | | | | | |
| MPK | Martis Peak | 74.90 | 40 | P | | P | 23 53 50.5 | +0.1 | |
| MPK | | | | IAmb | | IAmb | 23 53 52.8 | | |
| | comp=Z,22nm,1.2s | | | | | | | | |
| QSM | Queen of Sheba | 75.00 | 45 | IAmb | | IAmb | 23 53 52.0 | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| BEKR | Beckworth | 75.04 | 40 | IAmb | | IAmb | 23 53 52.8 | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| GMRC | Granite Mounta | 75.17 | 46 | P | | P | 23 53 52.0 | +0.2 | |
| | baz=237 | | | | | | | | |
| IRM | Iron Mountain | 75.19 | 47 | P | | P | 23 53 52.2 | +0.4 | |
| | baz=237,SNR=10 | | | | | | | | |
| LCH | Last Change Ra | 75.20 | 43 | P | | P | 23 53 52.5 | +0.4 | |
| YERR | Yerington | 75.20 | 41 | IAmb | | IAmb | 23 53 53.7 | | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| HUMO | Hull Mountain | 75.23 | 36 | P | | P | 23 53 53.0 | +1.1 | |
| HUMO | | | | IAmb | | IAmb | 23 53 53.9 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| GRAC | Grapevine Rang | 75.25 | 43 | P | | P | 23 53 53.1 | +1.0 | |
| GRAC | Grapevine Rang | 75.25 | 43 | P | | P | 23 53 52.7 | +0.5 | |
| | baz=235,SNR=6.8 | | | | | | | | |
| GWY | Greenwater Val | 75.25 | 44 | P | | P | 23 53 52.6 | +0.2 | |
| FURC | Furnace Creek, | 75.28 | 44 | P | | P | 23 53 53.0 | +0.7 | |
| | baz=236 | | | | | | | | |
| TUQ | Turquoise Moun | 75.34 | 45 | P | | P | 23 53 53.1 | +0.2 | |
| | baz=236,SNR=7.3 | | | | | | | | |
| M04C | Macdoel | 75.35 | 37 | P | | P | 23 53 53.3 | +0.6 | |
| | baz=231 | | | | | | | | |
| L04D | Klamath Falls | 75.36 | 37 | P | | P | 23 53 53.5 | +0.7 | |
| L04D | | | | IAmb | | IAmb | 23 53 54.5 | | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| L04D | Klamath Falls | 75.36 | 37 | P | | P | 23 53 53.5 | +0.7 | |
| | baz=230 | | | | | | | | |
| NVAR | Mina Array Bea | 75.47 | 42 | P | | P | 23 53 54.2 | +0.5 | |
| | comp=Z,7.7nm,0.9s,baz=228,slow=9.1,SNR=34 | | | | | | | | |
| NVAR | | | | LR | | LR | 00 20 44.4 | | |
| | comp=Z,60nm,20.6s,baz=161,slow=31 | | | | | | | | |
| NVAR | Mina Array Bea | 75.47 | 42 | P | | P | 23 53 54.5 | +0.9 | |
| NV11 | Mina Array Sit | 75.56 | 42 | P | | P | 23 53 54.4 | +0.3 | |
| NV11 | | | | IAmb | | IAmb | 23 53 55.8 | | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| 214A | Organ Pipe Nat | 75.71 | 50 | P | | P | 23 53 55.2 | +0.3 | |
| | baz=239 | | | | | | | | |
| KVN | Kaiserville | 75.96 | 41 | P | | P | 23 53 56.5 | +0.1 | |
| KVN | | | | IAmb | | IAmb | 23 53 57.8 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| TPNV | Topopah Spring | 75.96 | 44 | P | | P | 23 53 56.8 | +0.4 | |
| | baz=236,SNR=9.0 | | | | | | | | |
| PDMCI | Parker Dam,Lak | 75.97 | 47 | P | | P | 23 53 56.8 | +0.5 | |
| | baz=238 | | | | | | | | |
| J04D | Umpqua Nationa | 76.12 | 36 | P | | P | 23 53 57.9 | +0.7 | |
| | baz=230 | | | | | | | | |
| I04A | Tendick Farm, | 76.30 | 35 | P | | P | 23 53 58.8 | +0.8 | |
| | baz=230 | | | | | | | | |
| MOD | Modoc Plateau | 76.32 | 38 | P | | P | 23 53 59.1 | +0.8 | |
| MOD | | | | IAmb | | IAmb | 23 53 59.9 | | |
| | comp=Z,9.3nm,0.8s | | | | | | | | |
| SHPR | Sheep Range | 76.45 | 45 | IAmb | | IAmb | 23 54 00.9 | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| K05A | Summer Lake | 76.49 | 37 | P | | P | 23 53 59.9 | +0.6 | |
| K05A | | | | IAmb | | IAmb | 23 54 01.2 | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| Y14A | Wickenburg | 76.58 | 48 | P | | P | 23 54 00.8 | +0.9 | |
| Y14A | | | | IAmb | | IAmb | 23 54 01.2 | | |
| | comp=Z,8.1nm,0.8s | | | | | | | | |
| J05D | Fort Rock, OR | 76.64 | 36 | P | | P | 23 54 01.0 | +0.9 | |
| | baz=231,SNR=7.8 | | | | | | | | |
| S11A | Rachel | 76.68 | 44 | IAmb | | IAmb | 23 54 01.8 | | |
| | comp=Z,10nm,0.7s | | | | | | | | |
| G03D | McMinnville, O | 76.76 | 34 | P | | P | 23 54 01.9 | +1.4 | |
| | baz=229 | | | | | | | | |
| PRN | Pahroc Range | 77.01 | 44 | P | | P | 23 54 02.9 | +0.6 | |
| PRN | | | | IAmb | | IAmb | 23 54 04.3 | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| PINE | Pine Mountain | 77.12 | 36 | P | | P | 23 54 03.8 | +0.9 | |
| PINE | | | | IAmb | | IAmb | 23 54 04.8 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| KSRS | Korea Array | 77.17 | 316 | P | | P | 23 54 03.5 | +0.6 | |
| | comp=Z,1.3nm,0.7s,baz=126,slow=6.2,SNR=4.3 | | | | | | | | |
| KSRS | | | | LR | | LR | 00 20 32.4 | | |
| | comp=Z,29nm,20.3s,baz=105,slow=30 | | | | | | | | |
| R11A | Troy Canyon, C | 77.18 | 43 | P | | P | 23 54 03.5 | +0.2 | |
| | baz=236,SNR=9.9 | | | | | | | | |
| I05D | Terrebonne, OR | 77.25 | 36 | P | | P | 23 54 03.9 | +0.5 | |
| | baz=231 | | | | | | | | |
| BMN | Battle Mountai | 77.31 | 41 | P | | P | 23 54 04.3 | +0.3 | |
| BMN | | | | IAmb | | IAmb | 23 54 05.4 | | |
| | comp=Z,7.9nm,0.8s | | | | | | | | |
| TUC | Tucson | 77.37 | 50 | P | | P | 23 54 05.3 | +0.8 | |
| TUC | Tucson | 77.37 | 50 | P | | P | 23 54 05.2 | +0.8 | |
| | baz=241 | | | | | | | | |
| WVOR | Wild Horse Val | 77.63 | 38 | P | | P | 23 54 06.4 | +0.8 | |
| WVOR | | | | IAmb | | IAmb | 23 54 07.2 | | |
| | comp=Z,9.5nm,1.0s | | | | | | | | |
| G05D | Wamic, OR | 77.83 | 35 | P | | P | 23 54 07.9 | +1.3 | |
| | baz=231 | | | | | | | | |
| X16A | Lo Mia Camp, P | 77.94 | 48 | IAmb | | IAmb | 23 54 09.5 | | |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| E04D | Cinebar | 78.00 | 33 | P | | P | 23 54 08.8 | +1.4 | |
| | baz=229 | | | | | | | | |
| LCMT | Little Creek M | 78.02 | 45 | P | | P | 23 54 08.4 | +0.4 | |
| LCMT | | | | IAmb | | IAmb | 23 54 09.6 | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| 319A | Douglas | 78.05 | 52 | P | | P | 23 54 06.7 | -1.5 | |
| 319A | | | | IAmb | | IAmb | 23 54 10.1 | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| I07A | Izee | 78.12 | 37 | P | | P | 23 54 09.1 | +0.8 | |
| CCUT | Cedar City | 78.22 | 45 | P | | P | 23 54 10.2 | +1.0 | |
| CCUT | | | | IAmb | | IAmb | 23 54 11.2 | | |
| | comp=Z,8.8nm,1.0s | | | | | | | | |
| CNPM | China Poot | 78.26 | 11 | P | | P | 23 54 08.8 | +0.1 | |
| KNB | Kanab | 78.31 | 45 | IAmb | | IAmb | 23 54 11.5 | | |
| | comp=Z,8.2nm,0.8s | | | | | | | | |
| PSUT | Pine Spring | 78.42 | 44 | IAmb | | IAmb | 23 54 11.6 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| WUAZ | Wupatki | 78.54 | 47 | P | | P | 23 54 11.7 | +0.8 | |
| | baz=240 | | | | | | | | |
| ELK | Elko | 78.73 | 41 | LR | | LR | 00 22 07.2 | | |
| | comp=Z,50nm,20.1s,baz=220,slow=30 | | | | | | | | |
| ELK | Elko | 78.73 | 41 | P | | P | 23 54 12.3 | +0.4 | |
| G08A | Pilot Rock | 79.16 | 36 | P | | P | 23 54 14.4 | +0.3 | |
| G08A | | | | IAmb | | IAmb | 23 54 15.4 | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| 121A | Cookes Peak, D | 79.71 | 51 | P | | P | 23 54 18.3 | +0.9 | |
| 121A | | | | IAmb | | IAmb | 23 54 19.4 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| 121A | Cookes Peak, D | 79.71 | 51 | P | | P | 23 54 18.3 | +0.9 | |
| | baz=242 | | | | | | | | |
| BMO | Blue Mountains | 79.84 | 37 | P | | P | 23 54 18.1 | +0.4 | |
| DUG | Dugway, Tooele | 79.98 | 43 | P | | P | 23 54 19.3 | +0.6 | |
| DUG | Dugway, Tooele | 79.98 | 43 | P | | P | 23 54 19.0 | +0.3 | |
| | baz=238 | | | | | | | | |
| PWL | Port Wells | 80.06 | 12 | P | | P | 23 54 17.9 | -0.5 | |
| GLI | Glacier Island | 80.34 | 13 | P | | P | 23 54 21.6 | +1.8 | |
| | baz=206 | | | | | | | | |
| KNK | Knik Glacier | 80.54 | 12 | P | | P | 23 54 20.8 | -0.2 | |
| KNK | | | | IAmb | | IAmb | 23 54 24.7 | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| F10A | Beach Ranch, E | 80.55 | 36 | P | | P | 23 54 21.4 | 0.0 | |
| F10A | | | | IAmb | | IAmb | 23 54 22.2 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| TTA | Tatalina | 80.72 | 8 | P | | P | 23 54 22.2 | +0.2 | |
| WRAK | Wrangell Islan | 80.74 | 22 | P | | P | 23 54 24.5 | +2.4 | |
| | baz=220 | | | | | | | | |
| GHO | Glory Hole Cre | 80.78 | 12 | P | | P | 23 54 21.9 | -0.4 | |
| GHO | | | | IAmb | | IAmb | 23 54 23.0 | | |
| | comp=Z,8.8nm,0.8s | | | | | | | | |
| HLID | Hailey | 80.81 | 39 | IAmb | | IAmb | 23 54 24.7 | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| HLID | Hailey | 80.81 | 39 | P | | P | 23 54 23.8 | +0.7 | |
| | baz=236 | | | | | | | | |
| DIV | Divide | 80.85 | 13 | P | | P | 23 54 22.4 | -0.3 | |
| DIV | | | | IAmb | | IAmb | 23 54 31.1 | | |
| | comp=Z,10nm,1.0s | | | | | | | | |
| HVU | Hansel Valley | 80.85 | 41 | P | | P | 23 54 23.4 | +0.1 | |
| WAX | Waxell Ridge | 80.92 | 15 | P | | P | 23 54 23.5 | +0.4 | |
| SML | Sawmill | 80.93 | 12 | P | | P | 23 54 24.9 | +1.8 | |
| | baz=204 | | | | | | | | |
| SRU | San Rafael Swe | 80.94 | 45 | P | | P | 23 54 24.0 | +0.1 | |
| P17A | Butcher Ranch, | 80.97 | 44 | P | | P | 23 54 24.8 | +0.7 | |
| NJ2 | Nanjing | 81.01 | 307 | eP | | P | 23 54 26.0 | +1.9 | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| LENM | Lemitar | 81.06 | 50 | P | | P | 23 54 25.3 | +0.7 | |
| SCM | Sheep Creek Mo | 81.15 | 12 | P | | P | 23 54 24.0 | -0.3 | |
| SCM | Sheep Creek Mo | 81.15 | 12 | P | | P | 23 54 24.0 | -0.3 | |
| | baz=205 | | | | | | | | |
| MNTX | Cornudas Mount | 81.16 | 53 | P | | P | 23 54 25.2 | +0.2 | |
| MNTX | | | | IAmb | | IAmb | 23 54 26.5 | | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| MNTX | Cornudas Mount | 81.16 | 53 | P | | P | 23 54 25.7 | +0.8 | |
| | baz=244 | | | | | | | | |
| BNM | Barren Site | 81.31 | 50 | P | | P | 23 54 26.7 | +0.7 | |
| TABL | Table Mountain | 81.34 | 16 | P | | P | 23 54 25.2 | -0.3 | |
| TABL | | | | IAmb | | IAmb | 23 54 38.7 | | |
| | comp=Z,28nm,1.4s | | | | | | | | |
| MVCO | Mesa Verde | 81.39 | 47 | P | | P | 23 54 26.8 | +0.5 | |
| | baz=241 | | | | | | | | |
| MVCO | Mesa Verde | 81.39 | 47 | P | | P | 23 54 26.3 | -0.1 | |
| K20K | Telida | 81.40 | 9 | P | | P | 23 54 25.6 | +0.1 | |
| K20K | | | | IAmb | | IAmb | 23 54 27.1 | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| VRDI | Verde Repeater | 81.46 | 14 | P | | P | 23 54 25.7 | -0.4 | |
| TX32 | Lajitas Array | 81.49 | 56 | IAmb | | IAmb | 23 54 28.9 | | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| TXAR | Lajitas Array | 81.49 | 56 | P | | P | 23 54 27.5 | +0.7 | |
| | comp=Z,4.4nm,1.0s,baz=219,slow=6.4,SNR=26 | | | | | | | | |
| N25K | Chitina, Valde | 81.53 | 13 | P | | P | 23 54 26.5 | +0.2 | |
| N25K | Chitina, Valde | 81.53 | 13 | P | | P | 23 54 26.2 | -0.1 | |
| | baz=208 | | | | | | | | |
| GLB | Gilahina Butte | 81.56 | 14 | P | | P | 23 54 26.0 | -0.5 | |
| PV10 | Paradox Valley | 81.58 | 46 | P | | P | 23 54 27.6 | +0.2 | |
| PV10 | | | | IAmb | | IAmb | 23 54 28.1 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| PV13 | Radium Mtn., P | 81.62 | 46 | IAmb | | IAmb | 23 54 28.4 | | |
| | comp=Z,9.3nm,1.1s | | | | | | | | |
| PV23 | Carpenter Ridg | 81.64 | 46 | IAmb | | IAmb | 23 54 29.3 | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| M24K | Tolsona, Glenn | 81.64 | 13 | P | | P | 23 54 27.6 | +0.8 | |
| | baz=206 | | | | | | | | |
| CTG | Chitna Glacier | 81.74 | 15 | P | | P | 23 54 27.8 | +0.2 | |
| | baz=211 | | | | | | | | |
| BARN | Barnard Glacie | 81.75 | 15 | P | | P | 23 54 27.9 | +0.3 | |
| BARN | | | | IAmb | | IAmb | 23 54 30.5 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| CTGM | Chitina Glacie | 81.75 | 15 | P | | P | 23 54 27.6 | +0.1 | |
| CTGM | | | | IAmb | | IAmb | 23 54 28.3 | | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| WAT6 | Susitna Watana | 81.75 | 12 | P | | P | 23 54 27.3 | -0.3 | |
| | baz=205 | | | | | | | | |
| CAST | Castle Rocks | 81.76 | 10 | P | | P | 23 54 26.2 | -1.2 | |
| ANMO | Albuquerque | 81.80 | 50 | P | | P | 23 54 29.2 | +0.6 | |
| ANMO | | | | IAmb | | IAmb | 23 54 29.7 | | |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| ANMO | Albuquerque | 81.80 | 50 | P | | P | 23 54 29.1 | +0.6 | |
| | baz=243 | | | | | | | | |
| NEW | Newport | 81.96 | 34 | P | | P | 23 54 28.4 | -0.4 | |
| | baz=234 | | | | | | | | |
| TRF | Thorofare Moun | 82.08 | 10 | P | | P | 23 54 28.8 | -0.5 | |
| TRF | Thorofare Moun | 82.08 | 10 | P | | P | 23 54 28.5 | -0.8 | |
| | baz=202 | | | | | | | | |
| CHUM | Lake Minchumin | 82.16 | 9 | P | | P | 23 54 29.0 | -0.4 | |
| | baz=200 | | | | | | | | |
| J20K | Nowinta River | 82.17 | 8 | P | | P | 23 54 30.5 | +1.0 | |
| J20K | | | | IAmb | | IAmb | 23 54 30.6 | | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| DHY | Denali Highway | 82.27 | 12 | P | | P | 23 54 29.7 | -0.6 | |
| DHY | | | | IAmb | | IAmb | 23 54 41.8 | | |
| | comp=Z,15nm,1.3s | | | | | | | | |
| DHY | Denali Highway | 82.27 | 12 | P | | P | 23 54 29.9 | -0.4 | |
| | baz=205 | | | | | | | | |
| RND | Reindeer | 82.30 | 11 | P | | P | 23 54 30.5 | +0.2 | |
| RND | | | | IAmb | | IAmb | 23 54 35.4 | | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| TNA | Tin City | 82.30 | 2 | P | | P | 23 54 30.6 | +0.5 | |
| | baz=185 | | | | | | | | |
| BPAW | Bear Paw Mtn. | 82.57 | 10 | P | | P | 23 54 31.0 | -0.7 | |
| MCK | McKinley | 82.58 | 11 | IAmb | | IAmb | 23 54 32.6 | | |
| | comp=Z,7.4nm,0.7s | | | | | | | | |
| MCK | McKinley | 82.58 | 11 | P | | P | 23 54 31.4 | -0.4 | |
| | baz=204 | | | | | | | | |
| M26K | Nabesna, AK | 82.59 | 14 | P | | P | 23 54 32.3 | +0.5 | |
| M26K | Nabesna, AK | 82.59 | 14 | P | | P | 23 54 31.0 | -0.9 | |
| | baz=209 | | | | | | | | |
| HYT | Haines Junctio | 82.64 | 17 | P | | P | 23 54 31.7 | -0.5 | |
| | baz=214 | | | | | | | | |
| YUK3 | Moose Creek | 82.66 | 15 | P | | P | 23 54 31.7 | -0.7 | |
| | baz=212 | | | | | | | | |
| YUK4 | Talbot Arm | 82.76 | 16 | P | | P | 23 54 33.6 | +0.7 | |
| | baz=214 | | | | | | | | |
| M27K | Edge Creek, AK | 82.81 | 14 | P | | P | 23 54 34.2 | +1.1 | |
| M27K | | | | IAmb | | IAmb | 23 54 40.6 | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| M27K | Edge Creek, AK | 82.81 | 14 | P | | P | 23 54 33.5 | +0.4 | |
| | baz=210 | | | | | | | | |
| S22A | 4UR Ranch, Cre | 82.81 | 47 | P | | P | 23 54 34.8 | +0.9 | |
| | baz=242 | | | | | | | | |
| BWN | Browne | 82.89 | 10 | P | | P | 23 54 33.2 | -0.1 | |
| BWN | | | | IAmb | | IAmb | 23 54 40.8 | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| MSO | Missoula | 82.90 | 37 | P | | P | 23 54 33.5 | -0.4 | |
| | baz=236 | | | | | | | | |
| O20A | White River Ci | 82.97 | 45 | P | | P | 23 54 34.5 | 0.0 | |
| O20A | | | | IAmb | | IAmb | 23 54 35.9 | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| O20A | White River Ci | 82.97 | 45 | P | | P | 23 54 34.7 | +0.1 | |
| | baz=241 | | | | | | | | |
| SNOW | Snow King Moun | 83.00 | 41 | P | | P | 23 54 34.2 | -0.4 | |
| SNOW | | | | IAmb | | IAmb | 23 54 36.1 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| BVCY | Beaver Creek | 83.11 | 15 | P | | P | 23 54 35.4 | +0.9 | |
| | baz=211 | | | | | | | | |
| LOHW | Long Hollow | 83.17 | 41 | P | | P | 23 54 35.3 | -0.2 | |
| LRM | Limekiln Ridge | 83.22 | 38 | P | | P | 23 54 35.8 | +0.1 | |
| JTMT | Jette | 83.22 | 36 | P | | P | 23 54 35.4 | -0.2 | |
| QLMT | Earthquake Lak | 83.30 | 39 | P | | P | 23 54 36.8 | +0.6 | |
| NEA2 | Nenana | 83.35 | 10 | P | | P | 23 54 35.8 | +0.1 | |
| | baz=203 | | | | | | | | |
| FLWY | Flagg Ranch | 83.36 | 40 | P | | P | 23 54 36.6 | +0.2 | |
| FLWY | | | | IAmb | | IAmb | 23 54 38.2 | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| RIDG | Independent Ri | 83.37 | 12 | P | | P | 23 54 35.6 | -0.3 | |
| | baz=208 | | | | | | | | |
| BW06 | Boulder Array | 83.41 | 42 | P | | P | 23 54 36.4 | -0.4 | |
| BW06 | | | | IAmb | | IAmb | 23 54 37.4 | |

baz=253
**H03S3 Juan Fernandez** 84.45 124 T T 01 28 07.0
baz=253
**H03N2 Juan Fernandez** 84.55 123 T T 01 28 06.2
baz=252
**Q24A Divide** 84.55 47 P **P** **23 54 42.8 0.0**
baz=243
**H03N3 Juan Fernandez** 84.55 123 T T 01 28 16.7
baz=252
**H03N1 Juan Fernandez** 84.56 123 T T 01 28 08.4
baz=252
**H24K Noodor Dome** 84.70 10 P **P** **23 54 41.3 -1.2**
**PRP Porcupine Dome** 84.83 11 P **P** **23 54 43.1 -0.3**
**PRP Porcupine Dome** 84.83 11 P **P** **23 54 43.2 -0.1**
baz=207
**DAWY Dawson** 84.86 14 P **P** **23 54 43.5 +0.1**
DAWY IAmb IAmb 23 54 44.6
comp=Z,9.2nm,1.1s
**DAWY Dawson** 84.86 14 P **P** **23 54 43.5 +0.1**
baz=213
**N23A Red Feather La** 84.88 45 P **P** **23 54 44.4 +0.1**
baz=243
**FARO Faro, Yukon** 84.95 18 P **P** **23 54 44.1 +0.2**
baz=218
**EGAK Eagle** 85.07 13 P **P** **23 54 44.4 +0.1**
baz=211
**AMTX Amarillo** 85.31 52 P **P** **23 54 46.3 -0.1**
baz=246
**J29M Klondike Camp** 85.47 15 P **P** **23 54 47.2 +0.8**
baz=214
**COLD Coldfoot** 85.61 9 P **P** **23 54 47.6 +0.6**
baz=202
**MMPY Sheldon Lake,** 85.87 18 P **P** **23 54 48.7 +0.3**
baz=220
**EGMT Eagleton** 85.94 37 P **P** **23 54 49.0 -0.2**
baz=239
**ABTX Abilene, Hawle** 85.97 54 P **P** **23 54 49.9 +0.2**
baz=247
**TGTN Hyland Airport** 85.98 20 P **P** **23 54 49.5 +0.4**
baz=223
**I29M Ogilvie Camp,** 86.21 14 P **P** **23 54 50.4 +0.3**
baz=214
**EDM Edmonton** 86.78 31 P **P** **23 54 52.7 -0.5**
EDM IAmb IAmb 23 54 53.0
comp=Z,6.5nm,0.6s
**TOLK Toolik Lake Re** 87.01 9 P **P** **23 54 54.8 +0.9**
baz=203
**DGMT Dagmar** 89.42 38 P **P** **23 55 06.1 +0.3**
baz=244
**INK Inuvik** 89.71 14 P **P** **23 55 06.6 -0.1**
baz=218
**HHC Hu-ho-hao-te** 89.98 313 *e*P **P** **23 55 09.5 +0.8**
HHC pmax pmax
comp=Z,12nm,0.9s
HHC pmax pmax
comp=Z,180nm,6.7s
**MT01 Popeta** 90.48 126 P **P** **23 55 12.3 +1.0**
**SYO Syowa Base** 91.14 191 *e*PcP **PcP** **23 55 16.0 +1.5**
**YKA Yellowknife Ar** 91.47 23 P **P** **23 55 14.7 -0.3**
comp=Z,0.3nm,0.5s,baz=230,slow=4.4,SNR=7.6
**U40A Yellville** 92.54 53 P **P** **23 55 21.1 +0.6**
baz=251
**W41B Gary Mavity, V** 92.62 54 P **P** **23 55 21.1 +0.2**
baz=251
**C36M Paulatuk** 92.80 16 P **P** **23 55 22.0 +1.1**
baz=227
**PZH PanZhiHua** 92.88 297 P P 23 55 27.3 +4.8
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.0s
**CMAR Chiang Mai Arr** 93.02 288 P **P** **23 55 23.8 +0.6**
comp=Z,3.0nm,0.7s,baz=111,slow=2.4,SNR=22
**LZH Lanzhou** 94.05 306 *e*P **P** **23 55 26.5 -1.2**
LZH pP pP 23 55 43.0 +0.6
LZH sP sP 23 55 51.0 +3.0
LZH pmax pmax
comp=Z,15nm,1.4s
**A36M Sachs Harbour** 94.35 13 P **P** **23 55 29.0 +0.9**
baz=226
**ULM Lac du Bonnet** 95.12 39 LR LR 00 31 36.3
comp=Z,53nm,18.5s,baz=32,slow=31
**GTA Gaotai** 98.05 309 *e*P Pdif 23 55 46.5 +0.6
GTA pP pP 23 55 54.3 -6.2
GTA sP sP 23 55 58.5 -7.6
GTA pmax pmax
comp=Z,2.0nm,0.9s
**MKAR Makanchi Array** 111.81 314 PKiKP **PKiKP** **00 00 42.8 -1.0**
comp=Z,0.7nm,0.5s,baz=136,slow=1.9,SNR=16
**ARCES ARCESS Array B** 126.06 352 PKP **PKPdf** **00 01 10.2 -0.2**
comp=Z,9.2nm,1.2s,baz=29,slow=2.1,SNR=1.3
**FINES FINESS Array B** 133.37 347 PKP **PKiKP** **00 01 25.2 -0.6**
comp=Z,1.9nm,1.0s,baz=20,slow=1.6,SNR=3.7
**KMBO Kilima Mbogo** 144.82 242 PKP PKPbc 00 01 46.6 +0.4
comp=Z,6.1nm,0.8s,baz=64,slow=5.3,SNR=24
**CLL Collm** 145.27 353 *i* PKPbc **PKPdf** **00 01 46.4 -0.1**
comp=Z,23nm,1.8s
CLL *i* PKiKP **PKiKP** **00 01 51.1 +0.7**
comp=Z,10.0nm,1.1s
**CHVC Chvalec** 145.52 349 *e*PKP **PKiKP** **00 01 50.0 -1.0**
**OSTC Ostas** 145.52 349 *e*PKP **PKPdf** **00 01 46.5 -0.5**
OSTC *ex* x 00 01 52.6
**UPC Upice** 145.60 349 *e*PKP **PKiKP** **00 01 52.2 +1.1**
**DPC Dobruska-Polom** 145.70 349 *e*PKP **PKPab** **00 01 48.3 +0.2**
DPC *ex* x 00 01 52.2
**MORC Moravsky Berou** 146.00 347 *e*PKP **PKPab** **00 01 50.2 +1.0**
**PRU Pruhonice** 146.35 351 *e*PKP **PKiKP** **00 01 54.2 +1.5**
**NKC Novy Kostel** 146.39 353 *e*PKP **PKiKP** **00 01 54.5 +1.7**
**JAVC Velka Javorina** 146.84 347 *e*PKP **PKiKP** **00 01 53.7 -0.1**
**KRUC Moravsky** 146.92 348 *e*PKP **PKiKP** **00 01 56.2 +2.3**
**BRTR Keskin Array B** 147.25 319 PKPbc **PKPbc** **00 01 52.9 +0.1**
comp=Z,3.6nm,0.9s,baz=143,slow=3.0,SNR=16
**KHC Kasperske Hory** 147.33 351 *e*PKP **PKPab** **00 01 53.8 -0.6**
KHC *ex* x 00 02 20.4
**CKRC Cesky Krumlov** 147.52 350 *e*PKP **PKPab** **00 01 54.2 -0.9**
**GERES GERESS Array B** 147.59 351 PKPbc **PKPbc** **00 01 53.7 +0.4**
comp=Z,0.6nm,0.6s,baz=309,slow=4.7,SNR=5.7
**CONA Conrad Observa** 148.10 348 *e*P **PKiKP** **00 01 56.9 +0.4**
comp=Z,4.6nm,0.8s
CONA *e*S **sPKPab** **00 02 20.2 +2.3**
comp=Z,5.1nm,0.9s
**MOA Molln** 148.47 350 *e*P **PKPab** **00 01 59.7 +0.7**
comp=Z,5.1nm,1.2s
MOA *e*S **sPKPab** **00 02 22.0 +2.8**
comp=Z,5.4nm,1.2s
**RETA Reutte** 149.28 354 *i* P **PKPab** **00 02 02.9 +0.6**
comp=Z,5.3nm,1.0s
RETA *e*S **sPKPab** **00 02 24.1 +1.5**
comp=Z,9.2nm,1.0s
**WATA Walderalm** 149.35 353 *i* S sPKPab 00 02 24.2 +1.2
comp=Z,10.0nm,1.2s
**MOTA Moosalm** 149.39 354 *e*P **PKPab** **00 02 03.5 +0.6**
comp=Z,7.4nm,1.1s
MOTA *i* S **sPKPab** **00 02 23.4 +0.3**
comp=Z,11nm,1.3s
**WTTA Wattenberg** 149.41 353 *e*P **PKPab** **00 02 03.3 +0.3**
comp=Z,5.7nm,0.5s
WTTA *e*S **sPKPab** **00 02 23.2 -0.1**
comp=Z,7.2nm,0.8s
**SOKA Soboth** 149.46 348 *e*P **PKPab** **00 02 03.3 +0.2**
comp=Z,6.3nm,1.2s
SOKA *i* S **sPKPab** **00 02 23.0 -0.4**
comp=Z,6.1nm,1.2s
**DAVA Damuels** 149.56 356 *i* S sPKPab 00 02 23.7 -0.1
comp=Z,7.1nm,0.8s
**FETA Feichten** 149.75 354 *e*P **PKiKP** **00 02 01.8 +1.9**
comp=Z,4.3nm,0.8s
FETA *e*S **sPKPab** **00 02 23.3 -1.3**
comp=Z,8.8nm,0.9s
**ABTA Abfaltersbach** 149.81 352 *e*P **PKPab** **00 02 04.3 -0.2**
comp=Z,9.0nm,1.1s
ABTA *e*S **sPKPab** **00 02 24.0 -0.8**
comp=Z,10nm,0.9s
**ESDC Sonseca Array** 155.52 20 PKPab **PKPab** **00 02 28.6 -0.1**
comp=Z,0.6nm,0.8s,baz=327,slow=3.1,SNR=5.6
**TORD Torodi Ar. Bea** 174.03 128 PKPab **PKPab** **00 03 50.4 -0.2**
comp=Z,3.1nm,0.8s,baz=252,slow=3.2,SNR=14

*IDC **29** 23:50:37.2±0.9, 28°.93S×12°.84W, h0km, mb4.2/12, mb1 4.2/12, mb1mx4.0/30, mbtmp4.2/12, MS3.8/39, Ms1 3.8/39, ms1mx3.7/60, Error ellipse: s-maj=28.7km s-min=17.1km az=175.0*
*NEIC **29** 23:50:40.3±1.8, 28°.83S±0°.04×12°.7W±0°.1, h10km±1km, mb4.7/17, Error ellipse: s-maj=20.3km s-min=7.0km az=85.0*
*GCMT **29** 23:50:43.3±0.4, 28°.97S±0°.03×12°.74W±0°.02, h17km±2km, MW4.8/78, Moment Tensor Solution. s14,c15; s78,c94; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=0.22±.11; Mθθ=0.99±.11; Mφφ 1.21±.11; Mrθ=0.24±.24; Mθφ 1.61±.08; Mrφ=0.09±.26; Best double couple: M0 1.96800×10^16 NP1:φs163.00000°, δ82.00000°, λ=-179.00000°. NP2: φs73.00000°, δ89.00000°, λ=-8.00000°. Principal axes: T 2.0750, Plg5.0000°, Azm118.0000°; N -0.2160, Plg82.0000°, Azm247.0000°; P -1.8610, Plg6.0000°, Azm28.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 29 23:50:39.5±0.6, 28°.8S±0°.1×12°.78W±0°.09, h10km, n63, σ0s99/32, mb4.5/21, MS3.8/39, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H09N1** | **TRISTAN DA CUN** | **8.26** | **177** | T | T | 00 01 01.2 | |
| | SNR=36 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **8.29** | **178** | T | T | 00 01 00.8 | |
| | SNR=27 | | | | | | |
| **SHEL** | **Horse Pasture** | **14.33** | **28** | P | **P** | **23 54 09.2** | **-0.6** |
| **SUR** | **Sutherland** | **29.07** | **106** | LR | LR | 00 05 26.1 | |
| | comp=Z,371nm,22.0s,baz=262,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **29.27** | **78** | P | **P** | **23 56 41.9** | **-0.3** |
| | 2.9nm,0.8s,baz=245,slow=8.1,SNR=4.5 | | | | | | |
| TSUM | | | | LR | LR | 00 05 51.9 | |
| | comp=Z,103nm,18.9s,baz=222,slow=31 | | | | | | |
| **RCBR** | **Riachuelo** | **31.64** | **312** | LR | LR | 00 06 33.1 | |
| | comp=Z,234nm,21.0s,baz=281,slow=30 | | | | | | |
| **BOSA** | **Boshof** | **33.27** | **99** | P | **P** | **23 57 15.5** | **-1.9** |
| | 2.2nm,0.7s,baz=252,slow=6.3,SNR=4.5 | | | | | | |
| BOSA | | | | LR | LR | 00 08 48.5 | |
| | comp=Z,300nm,18.3s,baz=258,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **34.33** | **93** | LR | LR | 00 09 06.7 | |
| | comp=Z,127nm,21.1s,baz=249,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **34.33** | **93** | P | **P** | **23 57 26.3** | **-0.3** |
| LBTB | | | | IAmb | IAmb | 23 57 26.4 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **ITAB** | **Concordia** | **34.67** | **263** | P | **P** | **23 57 30.5** | **+1.1** |
| ITAB | | | | IAmb | IAmb | 23 57 32.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **35.01** | **284** | P | **P** | **23 57 29.7** | **-2.9** |
| | comp=Z,2.7nm,0.5s,baz=126,slow=7.1,SNR=6.4 | | | | | | |
| BDFB | | | | LR | LR | 00 09 10.1 | |
| | comp=Z,204nm,19.3s,baz=138,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **35.01** | **284** | P | **P** | **23 57 33.0** | **+0.5** |
| BDFB | | | | IAmb | IAmb | 23 57 48.2 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **PLTB** | **Pedras Altas** | **35.24** | **255** | P | **P** | **23 57 34.8** | **+0.5** |
| PLTB | | | | IAmb | IAmb | 23 57 39.3 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **LIC** | **Lamto** | **35.61** | **13** | *e*P | **P** | **23 57 37.9** | **+0.4** |
| | comp=Z,44nm,1.1s | | | | | | |
| **KIC** | **Kosan Boka** | **35.80** | **14** | *e*P | **P** | **23 57 39.5** | **+0.3** |
| | comp=Z,12nm,0.6s | | | | | | |
| **TIC** | **Toumodi** | **36.02** | **13** | *e*P | **P** | **23 57 41.3** | **+0.2** |
| **DBIC** | **Dimbokro** | **36.08** | **13** | P | **P** | **23 57 41.5** | **0.0** |
| | comp=Z,7.4nm,0.7s,baz=202,slow=9.1,SNR=12 | | | | | | |
| DBIC | | | | LR | LR | 00 09 09.9 | |
| | comp=Z,68nm,18.4s,baz=189,slow=31 | | | | | | |
| **DBIC** | **Dimbokro** | **36.08** | **13** | P | **P** | **23 57 41.8** | **+0.2** |
| DBIC | | | | IAmb | IAmb | 23 57 42.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **MATP** | **Matopo** | **38.29** | **87** | P | **P** | **23 57 59.3** | **-1.2** |
| | comp=Z,4.4nm,1.0s,baz=244,slow=14,SNR=5.8 | | | | | | |
| MATP | | | | LR | LR | 00 11 54.5 | |
| | comp=Z,98nm,19.7s,baz=250,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **39.40** | **263** | LR | LR | 00 11 28.8 | |
| | comp=Z,109nm,21.5s,baz=110,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **40.09** | **79** | P | **P** | **23 58 16.1** | **+0.5** |
| | comp=Z,3.4nm,0.7s,baz=235,slow=7.2,SNR=12 | | | | | | |
| LSZ | | | | LR | LR | 00 12 24.6 | |
| | comp=Z,107nm,20.3s,baz=264,slow=33 | | | | | | |
| **KOWA** | **Kowa** | **43.87** | **12** | P | **P** | **23 58 46.7** | **+0.5** |
| KOWA | | | | IAmb | IAmb | 23 58 52.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **43.98** | **21** | P | **P** | **23 58 46.9** | **-0.3** |
| | comp=Z,3.7nm,0.7s,baz=197,slow=8.8,SNR=21 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **43.98** | **21** | P | **P** | **23 58 46.5** | **-0.6** |
| **SIV** | **San Ignacio** | **46.15** | **275** | P | **P** | **23 59 03.2** | **-1.3** |
| | comp=Z,0.9nm,0.5s,baz=103,slow=3.3,SNR=5.2 | | | | | | |
| SIV | | | | LR | LR | 00 16 56.5 | |
| | comp=Z,167nm,18.5s,baz=108,slow=34 | | | | | | |
| **PLCA** | **Paso Flores** | **48.15** | **240** | P | **P** | **23 59 19.4** | **-0.6** |
| | comp=Z,1.0nm,0.8s,baz=70,slow=16,SNR=1.9 | | | | | | |
| PLCA | | | | LR | LR | 00 15 26.7 | |
| | comp=Z,54nm,21.3s,baz=80,slow=31 | | | | | | |
| **ROC1** | **El Roble** | **49.61** | **250** | P | **P** | **23 59 31.0** | **-0.5** |
| ROC1 | | | | IAmb | IAmb | 23 59 38.1 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **MBAR** | **Mbarara** | **50.10** | **64** | LR | LR | 00 19 09.5 | |
| | comp=Z,65nm,20.2s,baz=215,slow=34 | | | | | | |
| **BELA** | **Belgrano 2** | **50.16** | **186** | P | **P** | **23 59 34.8** | **+0.1** |
| **LVC** | **Limon Verde** | **50.57** | **263** | LR | LR | 00 19 44.2 | |
| | comp=Z,61nm,18.8s,baz=174,slow=35 | | | | | | |
| **AC01** | **Pan de Azucar** | **50.94** | **258** | P | **P** | **23 59 43.3** | **+1.9** |
| AC01 | | | | IAmb | IAmb | 23 59 56.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MDP** | **Montagnes des** | **51.04** | **305** | LR | LR | 00 18 40.1 | |
| | comp=Z,200nm,21.7s,baz=118,slow=33 | | | | | | |
| **PB10** | **IPOC Station P** | **51.70** | **262** | P | **P** | **23 59 47.5** | **+0.4** |
| **PB07** | **IPOC Station P** | **51.72** | **264** | P | **P** | **23 59 48.1** | **+0.7** |
| PB07 | | | | IAmb | IAmb | 23 59 51.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **52.21** | **271** | LR | LR | 00 19 28.1 | |
| | comp=Z,64nm,20.7s,baz=114,slow=33 | | | | | | |
| **PTGA** | **Pitinga** | **52.95** | **293** | LR | LR | 00 19 44.3 | |
| | comp=Z,250nm,21.4s,baz=112,slow=33 | | | | | | |
| **MAW** | **Mawson** | **58.26** | **154** | LR | LR | 00 21 23.4 | |
| | comp=Z,156nm,18.0s,baz=240,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **61.43** | **180** | P | **P** | **00 00 57.0** | **+1.2** |
| **NNA** | **Nana** | **61.67** | **272** | LR | LR | 00 26 48.2 | |
| | comp=Z,54nm,20.9s,baz=110,slow=35 | | | | | | |
| **MDT** | **Midelt** | **61.76** | **8** | LR | LR | 00 25 46.3 | |
| | comp=Z,57nm,18.2s,baz=200,slow=34 | | | | | | |
| **ATD** | **Arta Tunnel** | **67.02** | **61** | LR | LR | 00 29 18.1 | |
| | comp=Z,45nm,19.1s,baz=14,slow=35 | | | | | | |
| **SDV** | **Santo Domingo** | **67.17** | **295** | LR | LR | 00 29 42.9 | |
| | comp=Z,133nm,18.1s,baz=108,slow=35 | | | | | | |
| **SDV** | **Santo Domingo** | **67.17** | **295** | P | **P** | **00 01 33.5** | **-0.8** |
| **KEST** | **Kesra** | **67.49** | **19** | P | **P** | **00 01 36.8** | **+1.1** |
| | comp=Z,5.6nm,0.8s,baz=120,slow=4.3,SNR=5.2 | | | | | | |
| KEST | | | | LR | LR | 00 28 09.3 | |
| | comp=Z,163nm,20.9s,baz=221,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **67.88** | **289** | LR | LR | 00 30 22.6 | |
| | comp=Z,175nm,19.2s,baz=176,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **68.61** | **7** | P | **P** | **00 01 43.1** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=177,slow=6.4,SNR=2.2 | | | | | | |
| ESDC | | | | LR | LR | 00 29 48.7 | |
| | comp=Z,48nm,18.1s,baz=184,slow=34 | | | | | | |
| **SJG** | **San Juan** | **69.52** | **305** | LR | LR | 00 31 45.1 | |
| | comp=Z,76nm,19.8s,baz=110,slow=36 | | | | | | |
| **VAE** | **Valguarnera** | **70.69** | **23** | LR | LR | 00 30 53.4 | |
| | comp=Z,57nm,19.2s,baz=152,slow=34 | | | | | | |
| **IDI** | **Anoyia** | **72.98** | **32** | LR | LR | 00 33 51.4 | |
| | comp=Z,31nm,18.9s,baz=302,slow=36 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **76.60** | **40** | LR | LR | 00 34 24.4 | |
| | comp=Z,35nm,20.0s,baz=6.0,slow=34 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **77.97** | **16** | LR | LR | 00 35 26.4 | |
| | comp=Z,48nm,18.6s,baz=203,slow=34 | | | | | | |
| **MLR** | **Muntele Rosu** | **81.89** | **26** | LR | LR | 00 38 44.7 | |
| | comp=Z,44nm,19.8s,baz=178,slow=35 | | | | | | |
| **VRAC** | **Vranov** | **82.05** | **19** | LR | LR | 00 38 23.0 | |
| | comp=Z,88nm,18.9s,baz=214,slow=35 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **84.19** | **6** | LR | LR | 00 41 13.4 | |
| | comp=Z,40nm,18.0s,baz=201,slow=36 | | | | | | |
| **GNI** | **Garni** | **86.94** | **40** | LR | LR | 00 43 14.5 | |
| | comp=Z,18nm,18.7s,baz=167,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.43** | **25** | P | **P** | **00 03 28.0** | **+1.3** |
| | comp=Z,0.5nm,0.5s,baz=222,slow=4.7,SNR=1.7 | | | | | | |
| **HFS** | **Hagfors** | **91.24** | **13** | LR | LR | 00 43 11.0 | |
| | comp=Z,45nm,19.6s,baz=221,slow=34 | | | | | | |
| **NOA** | **NORSAR Array B** | **91.63** | **11** | LR | LR | 00 43 02.8 | |
| | comp=Z,19nm,20.3s,baz=60,slow=34 | | | | | | |
| **OBN** | **Obninsk** | **93.66** | **26** | LR | LR | 00 46 12.3 | |
| | comp=Z,9.4nm,19.7s,baz=358,slow=36 | | | | | | |
| **GEYT** | **Allbeck** | **93.80** | **48** | LR | LR | 00 44 57.4 | |
| | comp=Z,26nm,20.2s,baz=102,slow=35 | | | | | | |
| **PALK** | **Pallekele** | **96.50** | **85** | LR | LR | 00 41 06.3 | |
| | comp=Z,51nm,19.2s,baz=306,slow=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **120.53** | **328** | PKP | **PKiKP** | **00 09 30.9** | **+0.2** |
| | comp=Z,0.1nm,0.5s,baz=108,slow=2.1,SNR=1.8 | | | | | | |
| **KSRS** | **Korea Array** | **146.17** | **65** | PKPbc | **PKPdf** | **00 10 19.3** | **+0.2** |
| | comp=Z,3.3nm,0.7s,baz=286,slow=3.5,SNR=5.3 | | | | | | |

*IDC **29** 23:52:38.3±0.8, 16°.40S×177°.89E, h0km, mb4.1/8, mb1 4.4/8, mb1mx4.1/28, mbtmp4.1/8, MS3.3/4, Ms1 3.3/4, ms1mx2.9/57, Error ellipse: s-maj=25.1km s-min=17.1km az=121.0*
*NEIC **29** 23:52:40.8±1.5, 16°.54S±0°.06×178°.0E±0°.1, h10km±1km, mb4.5/43, Error ellipse: s-maj=17.2km s-min=10.5km az=93.0*
**ISC 29 23:52:42.0±0.6, 16°.49S±0°.06×177°.95E±0°.10, h21km, n62, σ0s94/55, mb4.3/28, MS3.4/3, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.24** | **176** | Pn | **Pb** | **23 53 04.1** | **-0.5** |
| | 101nm,0.3s,baz=184,slow=22,SNR=118 | | | | | | |
| MSVF | | | | Sn | **Sb** | **23 53 23.8** | **+3.6** |
| | 282nm,0.3s,baz=252,slow=20,SNR=10.0 | | | | | | |
| **FUNA** | **Funafuti** | **8.01** | **9** | Pn | **Pn** | **23 54 38.1** | **+0.9** |
| **AFI** | **Afiamalu** | **10.24** | **77** | LR | LR | 23 58 01.7 | |
| | comp=Z,153nm,20.0s,baz=236,slow=32 | | | | | | |
| **SANVU** | **Saraoutou** | **10.39** | **274** | Pn | **Pn** | **23 55 11.2** | **+1.4** |
| **DZM** | **Mont Dzumac** | **12.20** | **241** | *e*Pn | P | 23 55 51.9 | +4.8 |
| | 34nm,1.2s | | | | | | |
| DZM | | | | *e*LR | LR | 23 58 51.5 | |
| | comp=Z,237nm,24.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **12.20** | **241** | Pn | **Pn** | **23 55 33.0** | **-1.7** |
| **KNTN** | **Kanton** | **17.00** | **38** | | **P** | **23 56 40.2** | **-0.2** |
| KNTN | | | | IAmb | IAmb | 23 56 48.9 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **HNR** | **Honiara** | **18.89** | **290** | LR | LR | 00 03 13.4 | |
| | comp=Z,65nm,21.6s,baz=132,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **21.59** | **106** | LR | LR | 00 04 09.2 | |
| | comp=Z,57nm,18.4s,baz=232,slow=32 | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.62** | **183** | P | **P** | **23 57 40.3** | **-1.3** |
| BKZ | | | | IAmb | IAmb | 23 57 43.0 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **BFZ** | **Birch Farm** | **24.15** | **183** | P | **P** | **23 57 54.6** | **-1.9** |
| **BSWZ** | **Blackbirch Sta** | **25.38** | **187** | P | **P** | **23 58 07.2** | **-0.6** |
| **MLZ** | **Mavora Lakes** | **29.95** | **194** | P | **P** | **23 58 49.0** | **+0.3** |
| **PPT2** | **Papeete2** | **31.05** | **97** | *e*LR | LR | 00 07 02.5 | |
| | comp=Z,208nm,27.5s | | | | | | |
| **STKA** | **Stephens Creek** | **36.33** | **238** | P | **P** | **23 59 44.3** | **-0.2** |
| | comp=Z,3.7nm,0.8s,baz=78,slow=9.0,SNR=9.7 | | | | | | |
| **STKA** | **Stephens Creek** | **36.33** | **238** | IAmb | IAmb | 23 59 48.5 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **41.10** | **239** | P | **P** | **00 00 24.6** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 00 00 34.1 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.44** | **259** | P | **P** | **00 00 26.9** | **-0.6** |
| **WRA** | **Warramunga Arr** | **41.48** | **258** | P | **P** | **00 00 26.5** | **-1.4** |
| | comp=Z,2.6nm,1.1s,baz=88,slow=8.6,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.48** | **258** | IAmb | IAmb | 00 00 29.7 | |
| | comp=Z,0.3nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **41.85** | **253** | P | **P** | **00 00 31.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **41.85** | **253** | P | **P** | **00 00 30.7** | **-0.2** |
| | comp=Z,5.7nm,0.9s,baz=82,slow=8.7,SNR=29 | | | | | | |
| **GUMO** | **Guam** | **44.30** | **311** | LR | LR | 00 17 51.5 | |
| | comp=Z,49nm,19.0s,baz=122,slow=34 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **49.84** | **260** | P | **P** | **00 01 34.5** | **+0.6** |
| **JOW** | **Kunigami** | **64.66** | **311** | P | **P** | **00 03 18.0** | **-0.5** |
| **JHS** | **Saijyo** | **66.58** | **321** | P | **P** | **00 03 32.4** | **+1.5** |
| **ORV** | **Oroville** | **79.30** | **43** | P | **P** | **00 04 46.4** | **+0.4** |
| ORV | | | | IAmb | IAmb | 00 04 53.8 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **79.68** | **41** | P | **P** | **00 04 48.8** | **+0.5** |
| | comp=Z,3.6nm,1.1s,baz=207,slow=6.8,SNR=3.1 | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **79.99** | **46** | P | **P** | **00 04 49.9** | **-0.4** |
| OMMB | | | | IAmb | IAmb | 00 04 51.1 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **LHV** | **Little Huntoon** | **80.65** | **46** | P | **P** | **00 04 53.6** | **+0.3** |
| LHV | | | | IAmb | IAmb | 00 04 55.0 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **QSM** | **Queen of Sheba** | **80.69** | **48** | P | **P** | **00 04 53.8** | **+0.1** |
| **LCH** | **Last Change Ra** | **80.75** | **47** | P | **P** | **00 04 53.7** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **80.87** | **46** | P | **P** | **00 04 54.9** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=226,slow=9.4,SNR=8.0 | | | | | | |
| **GWY** | **Greenwater Val** | **80.94** | **48** | P | **P** | **00 04 55.1** | **-0.1** |
| **NV11** | **Mina Array Sit** | **80.97** | **46** | P | **P** | **00 04 55.9** | **+0.5** |
| **L19K** | **White Mountain** | **81.31** | **13** | P | **P** | **00 04 55.9** | **-0.5** |
| L19K | | | | IAmb | IAmb | 00 05 06.5 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **KVN** | **Kaiserville** | **81.31** | **45** | P | **P** | **00 04 56.6** | **-0.6** |
| KVN | | | | IAmb | IAmb | 00 05 04.7 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **TPH** | **Tonopah** | **81.44** | **46** | P | **P** | **00 04 57.8** | **-0.1** |
| **BMN** | **Battle Mountai** | **82.58** | **44** | P | **P** | **00 05 03.7** | **-0.1** |
| BMN | | | | IAmb | IAmb | 00 05 11.6 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **PRN** | **Pahroc Range** | **82.66** | **48** | P | **P** | **00 05 04.6** | **+0.4** |
| PRN | | | | IAmb | IAmb | 00 05 05.9 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **TUC** | **Tucson** | **83.64** | **54** | P | **P** | **00 05 09.8** | **+0.4** |
| TUC | | | | IAmb | IAmb | 00 05 17.6 | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **83.72** | **14** | P | **P** | **00 05 08.3** | **-0.7** |
| **DHY** | **Denali Highway** | **83.80** | **15** | P | **P** | **00 05 10.0** | **+0.5** |
| DHY | | | | IAmb | IAmb | 00 05 11.5 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **83.83** | **13** | P | **P** | **00 05 10.5** | **+1.0** |
| **G08A** | **Pilot Rock** | **83.88** | **39** | | **P** | **00 05 10.7** | **+0.4** |
| G08A | | | | IAmb | IAmb | 00 05 18.9 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **LTY** | **Liberty** | **83.89** | **37** | P | **P** | **00 05 09.7** | **-0.6** |
| **CCUT** | **Cedar City** | **83.92** | **48** | P | **P** | **00 05 10.2** | **-0.7** |
| CCUT | | | | IAmb | IAmb | 00 05 19.7 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **84.00** | **52** | P | **P** | **00 05 11.3** | **0.0** |
| X16A | | | | IAmb | IAmb | 00 05 20.0 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **PSUT** | **Pine Spring** | **84.00** | **47** | P | **P** | **00 05 11.4** | **+0.1** |
| PSUT | | | | IAmb | IAmb | 00 05 21.5 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **ELK** | **Elko** | **84.06** | **45** | P | **P** | **00 05 11.7** | **+0.3** |
| ELK | | | | IAmb | IAmb | 00 05 19.1 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **KNB** | **Kanab** | **84.08** | **49** | P | **P** | **00 05 12.1** | **+0.5** |
| KNB | | | | IAmb | IAmb | 00 05 13.3 | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **U15A** | **North Rim** | **84.21** | **50** | P | **P** | **00 05 13.0** | **+0.6** |
| **319A** | **Douglas** | **84.44** | **55** | P | **P** | **00 05 12.8** | **-0.7** |
| **PKCU** | **Pink Cliffs** | **84.63** | **49** | P | **P** | **00 05 14.6** | **0.0** |
| **NEA2** | **Nenana** | **84.69** | **14** | P | **P** | **00 05 14.8** | **+1.0** |
| **M27K** | **Edge Creek, AK** | **84.70** | **18** | P | **P** | **00 05 15.7** | **+1.6** |
| M27K | | | | IAmb | IAmb | 00 05 22.3 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **84.81** | **14** | P | **P** | **00 05 13.2** | **-1.2** |
| WRH | | | | IAmb | IAmb | 00 05 23.1 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **MFID** | **Camas Ranch** | **84.92** | **42

# ISC Computed Locations for February 2016

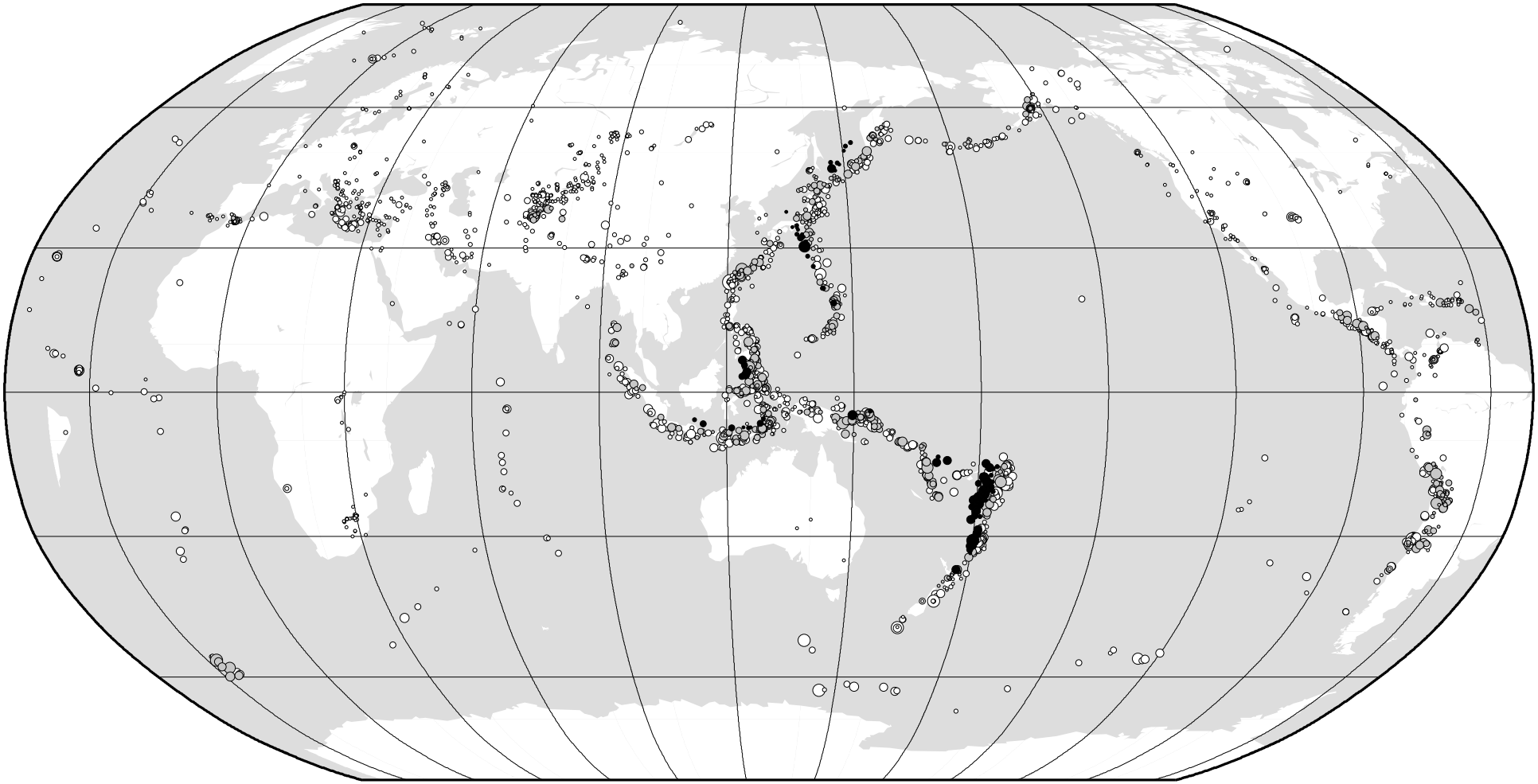

| Depth (km) | 0-70 | 70-300 | >300 |
|---|---|---|---|
| M=8 | ○ | ○ | ● |
| M=6.5 | ○ | ○ | ● |
| M=4 | ○ | ○ | ● |

Robinson Projection, centred on 0˚N,130˚E

2962 Events